

#88862

#35 7-30-99 F.A.I. RTE. 474 Peoria Co. SEC. (72-1,2,3,4)RS I. & R Copy #35

35

95%
5-19-2001

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-1,2,3,4)RS	PEORIA	254	1
FED. ROAD DIST. NO.		ILLINOIS	FED. AID PROJECT	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

F.A.I. ROUTE 474 (I-474)
SECTION: (72-1,2,3,4)RS
PEORIA COUNTY PROJ. ACIM-474(100)87
PROJECT
C-94-001-98

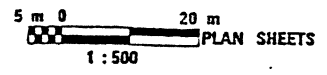
LIST OF STANDARDS

- 420001-01 631021-01
- 421001 631026-01
- 421101-01 631031-01
- 424001-01 664001-01
- 442001-01 701006-01
- 442101-01 701101
- 482006 -01 701326
- 482101 -01 701401
- 601001 701406-01
- 601101 701411 -01
- 602301 701426
- 604001 701601-02
- 606001-01 702001
- 606006 720011
- 606301-02 704001
- 609001 01 780001-01
- 610001-01 781001-02
- 630001-01 000001-02
- 631011 -01

DESIGN DESIGNATION

- I-474 ADT(1995) = 29,000
- % TRUCKS(1996) 12.4%MU /5.9%SU
- MAXWELL ROAD ADT = 8,500
- % TRUCKS (N/A)
- AIRPORT ROAD ADT = 13,000
- % TRUCKS 2.8%
- US 24 ADT = 24,900
- % TRUCKS 5.2%MU /3.25SU

METRIC RATIOS



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES, IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123

CATALOG NO. 031805-01D
CONTRACT NO. 88862

BEGIN ROADWAY A
STA 0+000
END ROADWAY A
STA 1+341.059

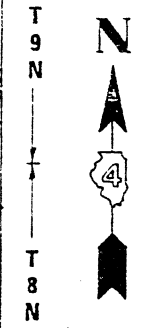
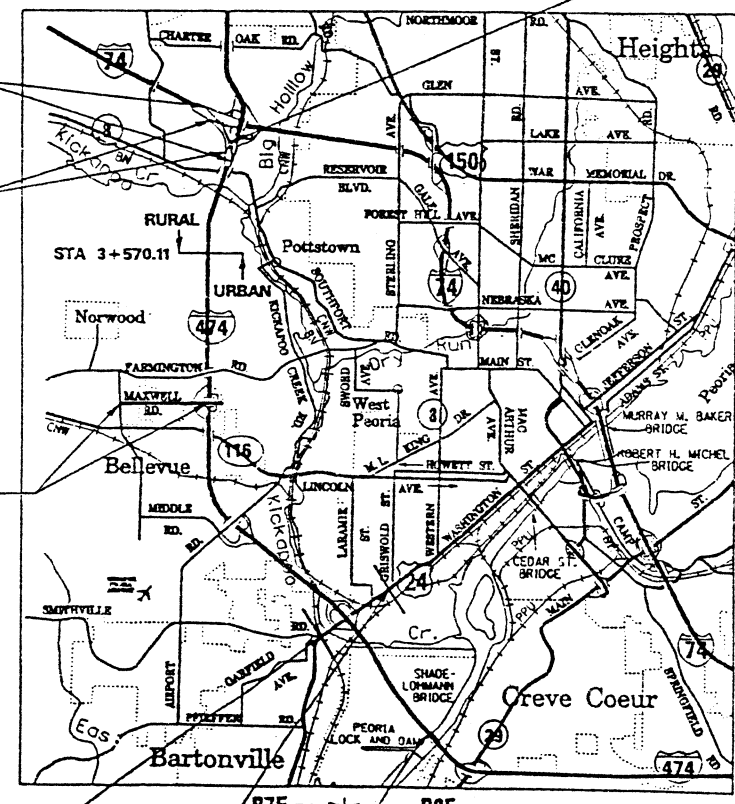
BEGIN ROADWAY B
STA 1+105.725
END ROADWAY B
STA 2+269.5

MAXWELL ROAD CONNECTOR
BEGIN CONSTRUCTION
STA 0+598.725
END CONSTRUCTION
STA 2+157.000
@ BRIDGE

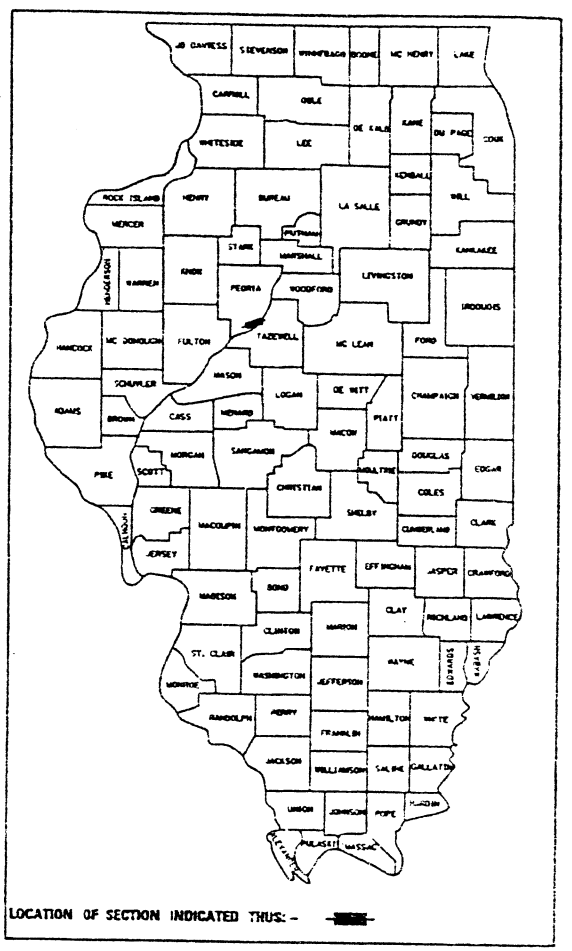
US ROUTE 24
BEGIN CONSTRUCTION
STA 26+292.759

US ROUTE 24
END CONSTRUCTION
STA 27+084.858

BEGIN PROJECT
STA EB 0+691.882
STA WB 0+682.738



**BITUMINOUS SUPERPAVE
Qc/Qa BITUMINOUS**



RESURFACING OF I-474 TO ILLINOIS RIVER BRIDGE. PROJECT INCLUDES PATCHING AND A 85mm BITUMINOUS OVERLAY ON THE MAINLINE PAVEMENT AND INTERCHANGE RAMPS, DRAINAGE AND EROSION CONTROL IMPROVEMENTS, GUARDRAIL UPGRADING AND BRIDGE IMPROVEMENTS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED 5/12/99
D. E. Chang DISTRICT ENGINEER

ENGINEER OF PROJECT DEVELOPMENT AND IMPLEMENTATION
June 25, 1999
Bill Jankle
ENGINEER OF DESIGN AND ENVIRONMENT

June 25, 1999
James P. Stiles
DIRECTOR, DIVISION OF HIGHWAYS

4-218
PRINTED BY THE AUTHORITY OF THE
STATE OF ILLINOIS

GROSS LENGTH OF IMPROVEMENT 12,452 m = 12.452 KILOMETERS
NET LENGTH OF IMPROVEMENT 12,452 m = 12.452 KILOMETERS

072-0121 & 0122

PROJECT ENGINEER: ROGER MILLER (309)671-3455
DESIGN BY: J. PETERSON / C. MAUSHARD (309) 671-3464

072-0121(EB) 0122(WB) NB

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F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS NO.	SHEET NO.
474	172-123.0RS	PEORIA	251	2
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

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15	TYPICAL SECTIONS US ROUTE 24
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*omitted - sheets 176-177-178

COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

NO COMMITMENTS HAVE BEEN MADE FOR THIS PROJECT.

SUBMITTED	5/12/99	<i>[Signature]</i> DIST. ENGR. OF PROGRAM DEVELOPMENT
EXAMINED	5/12/99	<i>[Signature]</i> DIST. ENGR. OF PROJECT IMPLEMENTATION
EXAMINED	5/12/99	<i>[Signature]</i> DIST. ENGR. OF OPERATIONS
REVIEWED FOR CORRELATION WITH APPROVED DESIGN REPORT, POLICIES, AND ENVIRONMENTAL ASSESSMENT		
DATE	5/12/99	<i>[Signature]</i> Dist. Engineer & Plans Engineer

ILLINOIS DEPARTMENT OF TRANSPORTATION

**INDEX OF SHEETS,
COMMITMENTS,
SIGNATURES**

1 REVISED 9/29/1999 A.Y.V.

GENERAL NOTES

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-1,2,3,4)RS	PEORIA	23	3
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

PROPERTY OWNER ACCESS REQUIREMENT

Access must be maintained to all existing properties during construction per Article 107.09 unless arrangements are made in writing by the Contractor with the property owners with a copy to the Engineer for short-term closures.

TREE REMOVAL

The District Four Tree Committee should be contacted and prior approval obtained for any tree removal beyond the limits/locations included in the plans.

EARTH EXCAVATION - INCIDENTAL TO CURB, GUTTER & DRIVEWAY

Earth excavation and backfill for proposed curb and gutters and driveway pavements shall be included in the unit cost of the various items.

ENVIRONMENTAL REVIEWS

Prior to the use of any proposed borrow areas, use areas (temporary access roads, detours, run-arounds, etc) and/or waste areas, the Contractor shall file the required environmental resource request surveys according to Section 107.22 of the Standard Specifications. These surveys are required in order for the Department to conduct cultural and biological resource surveys for the proposed site.

Prior to any waste materials being removed from the construction site the required environmental resource surveys will need to be obtained and filed by the Contractor. Excess waste products removed from the construction site shall be disposed of as required in Section 202.03 of the Standard Specifications.

Any protruding metal bars shall be removed prior to the disposal of broken concrete at approved disposal sites.

The required environmental resource documentation shall include the following:

- BDE Form 2289 (Environmental Survey Request)
- A location map showing the size limits and location of the use area
- Signed property owner agreement form
- Color photographs depicting the use area

Please note that a minimum of two weeks shall be allowed for the District to obtain the required environmental clearances.

PAVEMENT STATION NUMBERS & PLACEMENT

The Contractor shall provide labor and materials required to imprint pavement station numbers in the finished surface of the pavement and/or overlay. The numbers shall be approximately 20mm (3/4 inch) wide, 125mm (5 inches) high and 15mm (1/2 inch) deep.

The pavement station numbers shall be installed as specified herein:

Interval - 100 meters (metric stationing) or 200 feet (English stationing)

Bottom of Numbers - 150mm (6 inches) from the inside edge of the pavement marking

Location:

- 2, 3, & 5 Lane Pavements - right edge of pavement in direction of increasing stations
- Multi-Lane Divided Roadways - outside edge of pavement in both directions
- Ramps - along baseline edge of pavement

Position - stations shall be placed so they can be read from the adjacent shoulder

Format - Metric (English) pavement stations shall use this format (XX+X00" (XXX)'), where X represents the pavement station

This work will not be paid for separately, but will be considered included in the cost of the associated pavement and/or overlay pay items.

JOB SPECIFIC GENERAL NOTES

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 scope of the work, however, the contractor will be paid for the quantity actually furnished at the unit price bid for the work.

MINIMUM VERTICAL CLEARANCE

The Contractor shall verify the existing structure vertical clearance prior to placing bituminous overlay under any structure. A minimum (5.133m) vertical clearance shall be maintained under all structures.

BUTT JOINT CUTTING TIME RESTRICTION

Butt joints shall not be milled more than three (3) days prior to placement of the bituminous surface course.

PAVING SURFACE COURSE, CL I CONTINUOUS

Continuous paving operations on the main roadway shall be maintained at all times during the construction of the bituminous surface. No interruptions for side roads, entrances, turn lanes, etc. will be allowed.

REFLECTIVE CRACK CONTROL PLACEMENT

Reflective crack control treatment shall be placed on the binder course.

ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

The Contractor shall consult with the Engineer in regard to the exact length of the box/pipe culverts, storm sewers, and/or pipe drains required prior to ordering these items.

EXISTING DRAINAGE PIPES CONNECTED TO NEW STRUCTURES

In accordance with Section 602 of the Standard Specifications, the connecting of existing drain files, pipe culverts, or storm sewers to the proposed drainage system structures will not be paid for separately but shall be considered as included in the pay items provided.

SIGN POST HOLES

Vertical holes shall be constructed in the island pavement and/or concrete median of the type specified or concrete median surface 100mm (4 inches). The holes shall be 600mm (24 inches) in diameter or 600mm (24 inches) square and they shall be free of any obstruction, except earth, for a depth of 1.5m (5 feet) at the locations shown on the plans or as directed by the Engineer. Any holes not used for the placement of signs shall be filled and compacted flush with the top of the island pavement, concrete median of the types specified, or concrete median surface 100mm (4 inches). The top 75mm (3 inches) of said compacted fill shall consist of a bituminous concrete mixture. All holes in which the sign posts are installed at the time of this contract shall be similarly filled.

This work, including any required pavement removal necessary to construct the sign post holes, will not be paid for separately but shall be included in the contract unit price per square meter (square foot) for ISLAND PAVEMENT and/or CONCRETE MEDIAN of the type specified, or CONCRETE MEDIAN SURFACE, 100mm (4 inches).

MIXTURE REQUIREMENTS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT.

MIXTURE USE(S):	BIT CONC SUPERPAVE SURFACE
AC/PG:	SBS 70-22 OR SBR 70-22
RAP % (MAX)**:	0%
DESIGN AIR VOIDS:	4% @ NDESIGN = 90
MIXTURE COMPOSITION (GRADATION MIXTURE):	MIXTURE E
VOLUMETRIC REQUIREMENTS:	TYPE 1
FRICTION AGGREGATE:	E
FIELD DENSITY:	92.0% TO 96.0%

MIXTURE USE(S):	BIT CONC SUPERPAVE BINDER
AC/PG:	SBS 70-22 OR SBR 70-22
RAP % (MAX)**:	0%
DESIGN AIR VOIDS:	4% @ NDESIGN = 90
MIXTURE COMPOSITION (GRADATION MIXTURE):	MIXTURE B
VOLUMETRIC REQUIREMENTS:	TYPE 1
FRICTION AGGREGATE:	-
FIELD DENSITY:	92.0% TO 96.0%

MIXTURE USE(S):	BITUMINOUS CONCRETE SURFACE COURSE, MIX E, CL I, TY 2
AC/PG:	AC-20 (USE AC-10 WITH RAP)
RAP % (MAX)**:	15%
DESIGN AIR VOIDS:	4.2%

MIXTURE USE(S):	CENTER JOINT REPAIR SYSTEM BITUMINOUS BASE COURSE 230mm BITUMINOUS BASE COURSE 200mm CLASS D PATCHES, TY 1, 225mm SPL.
AC/PG:	AC-20
RAP % (MAX)**:	0%
DESIGN AIR VOIDS:	4.7%

MIXTURE USE(S):	LEVELING BINDER (MACHINE METHOD), MIX C, TY 1
AC/PG:	AC-20
RAP % (MAX)**:	0%
DESIGN AIR VOIDS:	4.7%

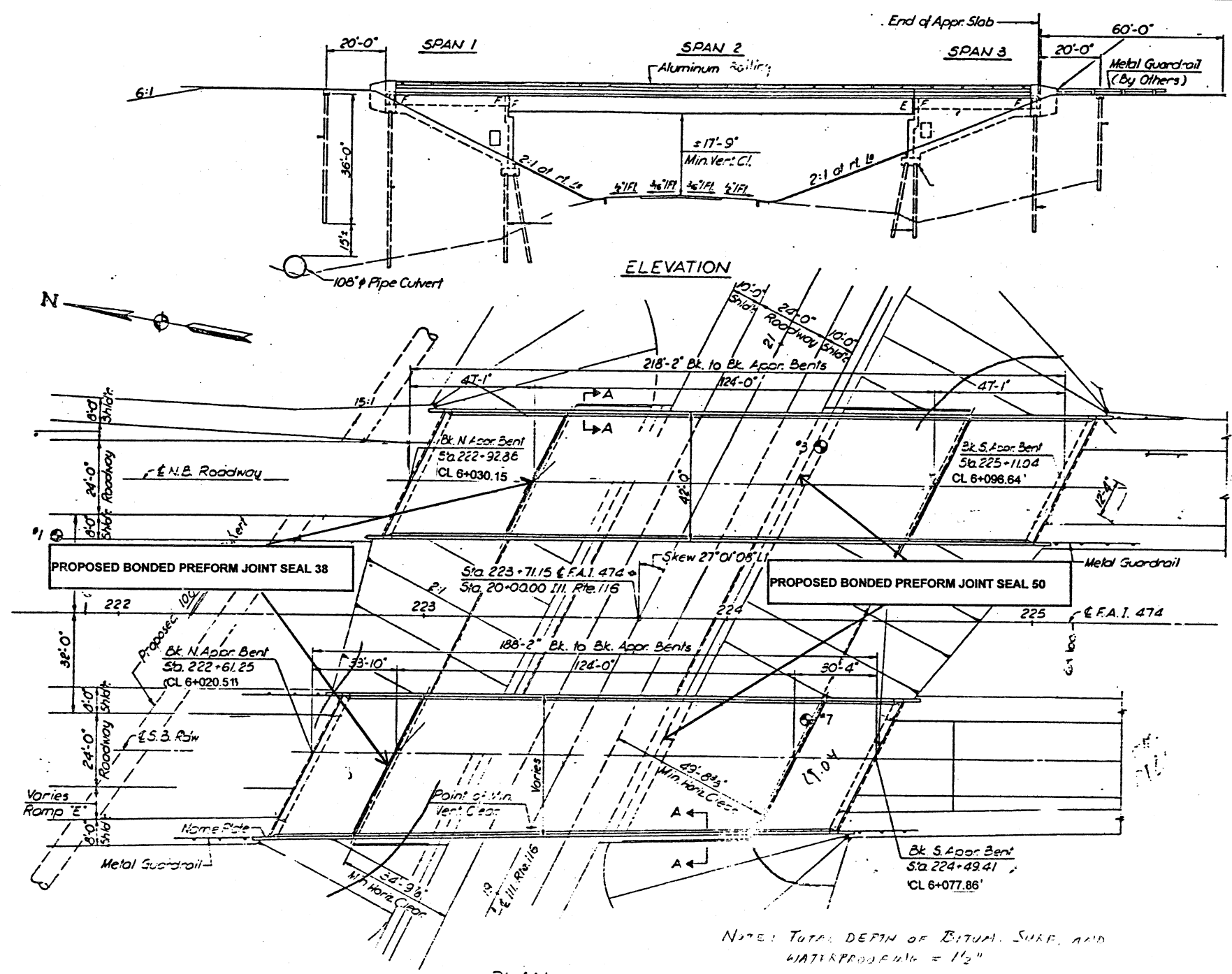
MIXTURE USE(S):	BITUMINOUS SHOULDERS
AC/PG:	AC-10
RAP % (MAX)**:	50%
DESIGN AIR VOIDS:	2.2%

*TOP LIFT SHALL BE BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE

ILLINOIS DEPARTMENT OF TRANSPORTATION

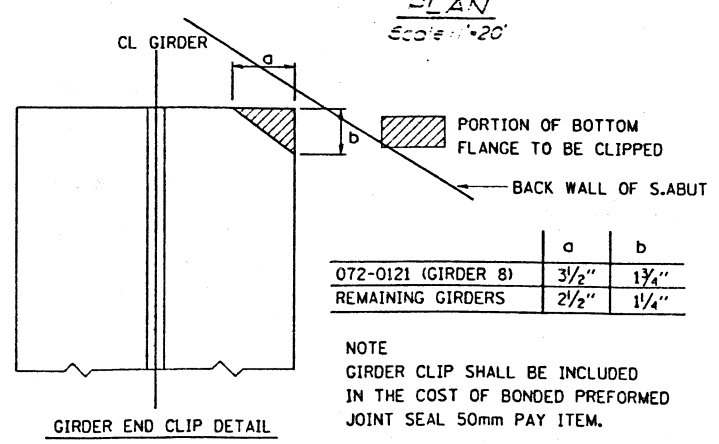
GENERAL NOTES

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1474	(72-1,2,3,4)RS	PEORIA	259	163
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		



TOTAL BILL OF MATERIALS

PLUG EXISTING DECK DRAINS		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	8
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	8
• PLUG ALL DRAINS WITHIN 3 METERS OF ABUTMENT		16 EACH
BONDED PREFORMED JOINT SEAL 38mm		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	15.4 N.ABUT
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	13.8 N.ABUT
SEE DETAIL SHEET NO. 202		29.2 M
BONDED PREFORMED JOINT SEAL 50mm		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	14.7 S.ABUT
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	13.8 S.ABUT
SEE DETAIL SHEET NO. 202		28.5 M
BITUMINOUS CONCRETE SURFACE COURSE SUPERPAVE		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	67.1
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	68.0
		135.1 M. TONS
DECK SLAB REPAIR (PARTIAL)		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	2.8
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	1.1
SEE DETAIL SHEET NO. 164-165		3.9 SQ.M
DECK SLAB REPAIR (FULL DEPTH, TYPE II)		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	2.3 SQ.M
SEE DETAIL SHEET NO. 164-165		
DECK SLAB REPAIR (FULL DEPTH, TYPE I)		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	0.6 SQ.M
SEE DETAIL SHEET NO. 164-165		
WATERPROOFING MEMBRANE SYSTEM		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	739.5
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	749.4
SEE DETAIL SHEET NO. 210		1488.9 SQ. M.
BITUMINOUS CONCRETE REMOVAL (DECK)		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	739.5
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	749.4
		1488.9 SQ. M.
ADJUST ROCKER AND SOLE PLATE		
LOCATION 10	I-474 (EB) OVER IL-116 (PLANK RD)	6
LOCATION 11	I-474 (WB) OVER IL-116 (PLANK RD)	6
SEE DETAIL SHEET NO. 208		12 EACH



NOTE: TOTAL DEPTH OF BITUM. SURF. AND WATERPROOFING = 1 1/2"

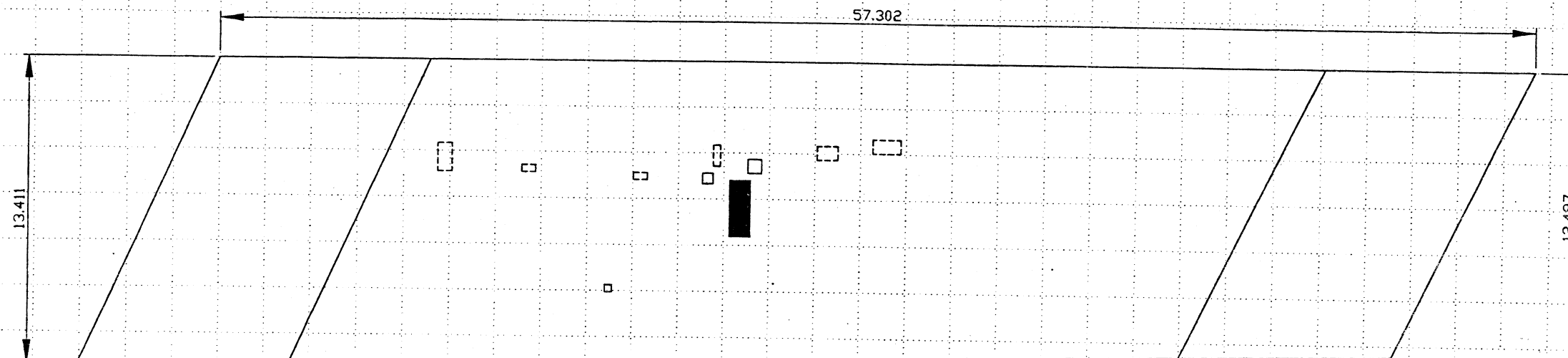
GENERAL NOTES

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 CONTRACTORS 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 WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHOULD TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
DATE 01-18-99		STRUCTURE #10 & 11 I-474 (EB) & (WB) OVER IL RT 116 S.N. 072-0121 & 072-0122
DRAWN BY TLS		CHECKED BY JHP

F.A.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
			239	164
STA.		TO STA.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



RECOMMENDED REPAIR AREAS

Note: AREA OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS - BUILT PLANS.

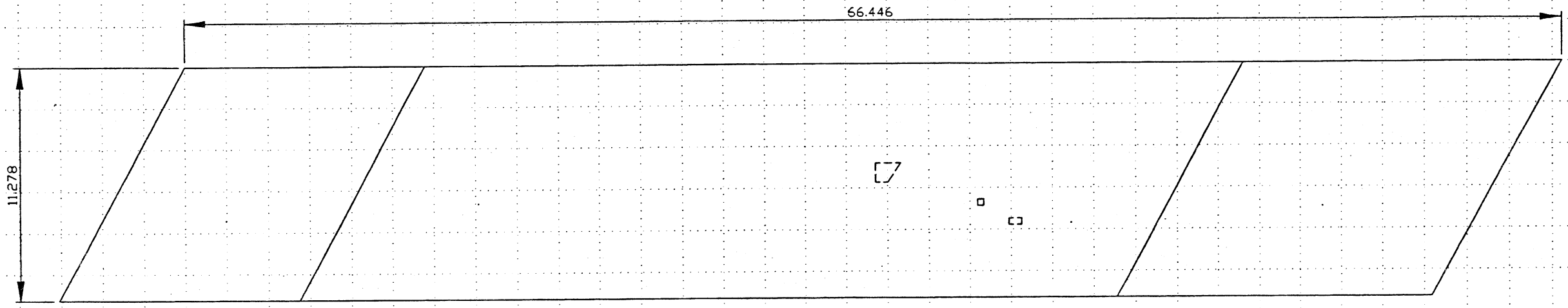
TRAFFIC FLOW →



STRUCTURE #10

LEGEND RECOMMENDED REPAIR AREAS PARTIAL DEPTH FULL DEPTH TYPE I FULL DEPTH TYPE II		% OF DECK INVESTIGATED IR 100% GPR 35%		TOTAL AREA INVESTIGATED DEBOND DELAMINATION PARTIAL DEPTH FULL DEPTH TYPE I FULL DEPTH TYPE II FULL DEPTH TOTALS TOTAL SUBSURFACE DELAMINATION	ft ² 7959.517 234.772 30.000 6.253 24.003 30.256 60.256	m ² 739.463 21.811 2.787 0.581 2.230 2.811 5.598	% 2.95% 0.38% 0.08% 0.30% 0.38% 0.76%	INFRARED DIAGNOSTICS, INC. 17408 EMILY WAY CT. ST. LOUIS, MO. 63005 PROJECT: 1961-9 IR/VISUAL INVESTIGATION: 6/98 GPR/CORE INVESTIGATION: 7/98	ILLINOIS DEPARTMENT OF TRANSPORTATION I-474 (EB) OVER IL-116 (PLANK ROAD) PEGRIA COUNTY S.N. 072-0121 RECOMMENDED REPAIR AREAS
		OVERLAY ASPHALT							
 SCALE: 1 = 100		DRAWN BY: JCP CHECKED BY: WRB							

F.A.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO
			259	165
STA.		TO STA.		
FED. ROAD DIST. NO		ILLINOIS	FED. AID PROJECT	







RECOMMENDED REPAIR AREAS

Note: AREA OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS - BUILT PLANS.

← TRAFFIC FLOW

STRUCTURE #11

<p>LEGEND</p> <p>RECOMMENDED REPAIR AREAS</p> <p>PARTIAL DEPTH </p> <p>FULL DEPTH TYPE I </p> <p>FULL DEPTH TYPE II </p> <p>SCALE: 1 = 100 </p>	<table border="1"> <tr> <th colspan="2">% OF DECK INVESTIGATED</th> </tr> <tr> <td>IR</td> <td>100%</td> </tr> <tr> <td>GPR</td> <td>27%</td> </tr> </table>	% OF DECK INVESTIGATED		IR	100%	GPR	27%	<table border="1"> <tr> <td>TOTAL AREA INVESTIGATED</td> <td>8066.004</td> <td>749.356</td> <td></td> </tr> <tr> <td>DEBOND</td> <td>271.638</td> <td>25.236</td> <td>3.368%</td> </tr> <tr> <td>DELAMINATION</td> <td></td> <td></td> <td></td> </tr> <tr> <td>PARTIAL DEPTH</td> <td>11.991</td> <td>1.114</td> <td>0.14%</td> </tr> <tr> <td>FULL DEPTH TYPE I</td> <td>0.0</td> <td>0.0</td> <td>0.0%</td> </tr> <tr> <td>FULL DEPTH TYPE II</td> <td>0.0</td> <td>0.0</td> <td>0.0%</td> </tr> <tr> <td>FULL DEPTH TOTALS</td> <td>0.0</td> <td>0.0</td> <td>0.0%</td> </tr> <tr> <td>TOTAL SUBSURFACE DELAMINATION</td> <td>11.991</td> <td>1.114</td> <td>0.14%</td> </tr> </table>	TOTAL AREA INVESTIGATED	8066.004	749.356		DEBOND	271.638	25.236	3.368%	DELAMINATION				PARTIAL DEPTH	11.991	1.114	0.14%	FULL DEPTH TYPE I	0.0	0.0	0.0%	FULL DEPTH TYPE II	0.0	0.0	0.0%	FULL DEPTH TOTALS	0.0	0.0	0.0%	TOTAL SUBSURFACE DELAMINATION	11.991	1.114	0.14%	<p>INFRA RED DIAGNOSTICS, INC. 17408 EMILY WAY CT. ST. LOUIS, MO. 63005</p> <p>PROJECT: 1961-9</p> <p>IR/VISUAL INVESTIGATION: 6/98 GPR/CORE INVESTIGATION: 7/98</p>	<p>ILLINOIS DEPARTMENT OF TRANSPORTATION</p> <p>I-474 (WB) OVER IL-116 (PLANK ROAD) PEORIA COUNTY</p> <p>S.N. 072-0122</p> <p>RECOMMENDED REPAIR AREAS</p>
	% OF DECK INVESTIGATED																																									
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<table border="1"> <tr> <td>OVERLAY</td> <td>ASPHALT</td> </tr> </table>	OVERLAY	ASPHALT	<table border="1"> <tr> <td>INSPECTED BY: R.J.G.</td> <td>CHECKED BY: CGM</td> </tr> <tr> <td>DRAWN BY: J.C.R.</td> <td>CHECKED BY: WRB</td> </tr> </table>	INSPECTED BY: R.J.G.	CHECKED BY: CGM	DRAWN BY: J.C.R.	CHECKED BY: WRB																																			
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STRUCTURE REHABILITATION SUMMARY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1474	072-1.2.3.0RS	PEORIA	257	194
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

LOC. NO.	BRIDGE	STRUCTURE NUMBER	BITUMINOUS CONCRETE REMOVAL (DECK) sq m	DECK SLAB REPAIR (PARTIAL) sq m	DECK SLAB REPAIR (FULL DEPTH-TYPE I) sq m	DECK SLAB REPAIR (FULL DEPTH-TYPE II) sq m	WATERPROOFING MEMBRANE SYSTEM sq m	BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE* m. ton	CONCRETE BRIDGE DECK SCARIFICATION (25mm) sq m	BRIDGE DECK LATEX CONCRETE OVERLAY sq m	BRIDGE DECK GROOVING sq m	PROTECTIVE COAT sq m	CONCRETE REMOVAL sq m	CONCRETE STRUCTURE cu m	REINFORCEMENT BARS, EPOXY COATED kg	BAR SPLICERS each	POLYMER CONCRETE cu m	DECK DRAIN EXTENSIONS each	PLUG EXISTING DECK DRAINS each	KEY WAY REPAIR meter	ADJUST ROCKER AND SOLE PLATE each	DIAPHRAGM REMOVAL AND REPLACEMENT each	BEARING PAD ADJUSTMENT each	JACK AND REMOVE EXISTING BEARINGS each	SAWED EXPANSION JOINT meter	ELASTOMERIC BEARING ASSEMBLY TYPE I each	POLYMER MODIFIED PORTLAND CEMENT MORTAR	FURNISH AND ERECT STRUCTURAL STEEL kg	JACKING AND CRIBBING each	CONCRETE BECK BEAM REPAIR sq m	CONCRETE SUPER STRUCTURE cu m	REINFORCED NEOPRENE EXPANSION JOINT TREATMENT		
1.	I-474 (EB) OVER IL-8	072-0112	1232.90	0.6	2.7	0.6	1232.90	111.9	—	—	—	—	7.1	7.1	395	24	—	5	12	—	16	—	—	—	—	—	2.8	698.7	76	—	—	—	—	
2.	I-474 (WB) OVER IL-8	072-0113	1077.90	1.4	1.8	1.3	1077.90	97.9	—	—	—	—	6.2	6.2	340	24	—	8	16	—	16	—	—	—	—	—	2.3	62.3	16	—	—	—	—	
3.	I-474 (EB) OVER BN RR & KICKAPOO CK	072-0114	3792.39	5.1	1.8	0.7	3792.39	344.3	—	—	—	—	5.6	5.1	468.5	24	0.51	2	78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
4.	I-474 (WB) OVER BN RR & KICKAPOO CK	072-0115	3857.52	8.9	3.6	1.9	3857.52	350.3	—	—	—	—	5.5	5.1	462.5	24	0.51	2	78	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
5.	I-474 (EB) OVER POTTSTOWN RD (TR 173)	072-0116	452.90	0.5	0.1	—	452.90	41.1	—	—	—	—	3.2	3.2	342.0	12	—	5	15	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
6.	I-474 (WB) OVER POTTSTOWN RD (TR 173)	072-0117	398.55	0.6	—	—	398.55	36.2	—	—	—	—	3.2	3.2	342.0	12	—	4	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
	RURAL SUB-TOTAL		10811.76	17.1	10.0	4.7	10811.76	981.7	—	—	—	—	31.0 CUM	30.1 CUM	2752 kg	120.0 EACH	1.0 CUM	106	212	—	32 EACH	—	—	—	—	—	5.1	2973.2	32	—	—	—	—	
7.	FARMINGTON RD OVER I-474	072-0118	—	45.2	4.4	131.6	—	1053.52	1053.52	1053.52	1053.52	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
9.	MAXWELL RD SPUR (EB) OVER I-474	072-0119	1277.74	1.3	2.5	9.9	1277.74	111.8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
8.	MAXWELL RD SPUR (WB) OVER I-474	072-0120	1231.00	4.4	2.9	—	1231.00	116.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
10.	I-474 (EB) OVER IL-116 (PLANK RD)	072-0121	739.46	2.8	0.6	2.2	739.46	67.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
11.	I-474 (WB) OVER IL-116 (PLANK RD)	072-0122	749.36	1.1	—	—	749.36	68.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12.	I-474 (EB) OVER C & NW RR	072-0124	637.87	0.5	1.5	1.0	637.87	57.9	—	—	—	—	3.20	3.20	349.6	12	—	6	12	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
13.	I-474 (WB) OVER C & NW RR	072-0125	643.62	1.8	1.1	—	643.62	58.4	—	—	—	—	3.20	3.20	349.6	12	—	3	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
14.	FAU 6578 (AIRPORT RD) OVER I-474	072-0126	2160.80	28.7	10.8	25.2	2160.80	196.2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
16.	I-474 (WB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0127	—	—	—	—	—	—	—	—	—	—	7.8	7.2	1530	16	0.26	72	101	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
15.	I-474 (EB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0128	—	—	—	—	—	—	—	—	—	—	5.5	5.5	477.2	12	1.53	64	95	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
17.	I-474 (EB) OVER US-24 (ADAMS ST)	072-0129	959.81	1.6	3.0	—	959.81	87.2	—	—	—	—	5.5	5.5	418.7	12	—	13	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
18.	I-474 (WB) OVER US-24 (ADAMS ST)	072-0130	837.06	3.1	4.8	1.1	837.06	76.0	—	—	—	—	4.6	4.6	375.7	12	—	13	7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
19.	I-474 (EB) OVER CRI & P RR AND KICKAPOO CK	072-0131	3870.37	17.7	7.5	2.2	3870.37	351.4	—	—	—	—	5.4	5.4	450.5	12	0.52	117	129	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
20.	I-474 (WB) OVER CRI & P RR AND KICKAPOO CK	072-0132	4348.60	9.0	8.4	0.1	4348.60	394.8	—	—	—	—	7.3	7.3	610	18	0.95	66	87	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
21.	US-24 (ADAMS ST) OVER KICKAPOO CK	072-0134	4741.95	1.5	0.5	13.3	4741.95	430.6	—	—	—	—	9.0	9.0	843.9	24	1.09	16	96	1116	—	—	72	—	—	—	—	—	—	—	—	—	—	—
	URBAN SUB-TOTAL		22197.64	118.7	48.0	186.6	22197.64	2019.4	1053.52	1053.52	1053.52	1053.52	82.7 CUM	81.0 CUM	8160 kg	250 EACH	4.8 CUM	476 EACH	770 EACH	1116 METER	91 EACH	10 EACH	72 EACH	12 EACH	— METER	12 EACH	5.1 SO. M.	7882.3 kg	12 each	5.0 sq m	9.4 CUM	—	—	
	GRAND TOTAL		53,009.40 SO. M.	135.8 SO. M.	58.0 SO. M.	198.3 SO. M.	33009 M. TONS	2997.1 SO. M.	1053.52 SO. M.	1053.52 SO. M.	1053.52 SO. M.	1053.52 SO. M.	82.7 CUM	81.0 CUM	8160 kg	250 EACH	4.8 CUM	476 EACH	770 EACH	1116 METER	91 EACH	10 EACH	72 EACH	12 EACH	— METER	12 EACH	5.1 SO. M.	7882.3 kg	12 each	5.0 sq m	9.4 CUM	—	—	

* FOR SUPERPAVE MIXTURE REQUIREMENTS SEE SN. 3.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STRUCTURE REHABILITATION SUMMARY

STRUCTURE REHABILITATION SUMMARY

P.A. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1474	072-123,085	PEORIA	237	125
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

LOC. NO.	BRIDGE	STRUCTURE NUMBER	BONDED PREFORMED JOINT SEAL						NEOPRENE EXPANSION JOINT			SILICONE JOINT SEALER				STRIP SEAL EXPANSION JOINT ASSEMBLY
			25mm	38mm	50mm	64mm	102mm	50(2')	65(2')	100(4')	17	25	50	64	76	
1	I-474 EBI OVER IL-8	072-0112	-	-	-	-	-	22.2	-	-	25	-	-	-	-	-
2	I-474 (NB) OVER IL-8	072-0113	19.7	-	-	-	-	22.2	-	-	-	-	-	-	-	-
3	I-474 EBI OVER BN RR & KICKAPOO CK	072-0114	-	-	-	-	-	-	22	22	-	-	-	-	-	-
4	I-474 (NB) OVER BN RR & KICKAPOO CK	072-0115	-	-	-	-	-	-	22	22	-	-	-	-	-	-
5	I-474 EBI OVER POTTSTOWN RD (TR 173)	072-0116	-	98.2	-	-	-	-	-	-	-	-	-	-	-	-
6	I-474 (NB) OVER POTTSTOWN RD (TR 173)	072-0117	-	98.2	-	-	-	-	-	-	-	-	-	-	-	-
	RURAL SUB-TOTAL		19.7	100.4	-	-	-	44.7	82	22	25	25.7	-	-	-	-
7	FARMINGTON RD OVER I-474	072-0118	-	-	28.00	-	-	-	-	-	-	-	-	-	-	-
8	MAXWELL RD SPUR EBI OVER I-474	072-0119	-	22.7	-	-	-	-	-	-	-	-	-	-	-	-
9	MAXWELL RD SPUR (NB) OVER I-474	072-0120	-	22.4	-	-	-	-	-	-	-	-	-	-	-	-
10	I-474 EBI OVER IL-116 PLANK RD	072-0121	-	15.4	14.7	-	-	-	-	-	-	-	-	-	-	-
11	I-474 (NB) OVER IL-116 PLANK RD	072-0122	-	13.8	13.9	-	-	-	-	-	-	-	-	-	-	-
12	I-474 EBI OVER C & NW RR	072-0124	-	13.1	-	12	-	-	-	-	-	-	-	-	-	-
13	I-474 (NB) OVER C & NW RR	072-0125	-	13.1	-	12	-	-	-	-	-	-	-	-	-	-
14	FAJ 6578 (AIRPORT RD) OVER I-474	072-0126	-	51.0	-	-	-	-	-	-	-	8.6	-	-	-	-
16	I-474 (NB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0127	-	-	-	-	-	-	22	68.7	-	-	-	22.7	-	-
15	I-474 EBI OVER KICKAPOO CK AND KICKAPOO CK RD	072-0128	-	-	-	-	-	-	4.3	24.8	-	-	33.4	-	22.5	-
17	I-474 EBI OVER US-24 (ADAMS ST)	072-0129	-	-	-	-	22.1	-	-	-	-	-	-	-	-	-
18	I-474 (NB) OVER US-24 (ADAMS ST)	072-0130	-	-	-	-	28.8	-	-	-	-	-	-	-	-	-
19	I-474 EBI OVER CRE & P RR AND KICKAPOO CK	072-0131	-	-	-	-	-	21.7	-	-	-	-	22.5	-	-	25.4
20	I-474 (NB) OVER CRE & P RR AND KICKAPOO CK	072-0132	-	-	-	-	-	-	-	-	-	-	42.7	42.5	-	-
21	US-24 (ADAMS ST) OVER KICKAPOO CK	072-0134	-	33.2	-	-	-	40.3	-	-	-	27.0	-	-	33.2	-
	URBAN SUB-TOTAL		-	29.7	26.5	86.3	-	62.0	86.4	120.5	-	23.4	112.4	86.2	84.7	23.4
	GRAND TOTAL		19.7	381	26.5	86.3	-	107.0	134.8	153.3	-	21.9	209.0	196.4	94.2	25.4

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURE REHABILITATION SUMMARY

1 REVISED 9/29/1999 A.Y. V.

STRUCTURAL JOINT REHABILITATION SUMMARY

F.A.L. RYE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	172-1.2.3.4.RS	PEORIA	24	198
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

LOC. NO.	BRIDGE	NEOPRENE EXP. JOINT 50mm (M)	NEOPRENE EXP. JOINT 64mm (M)	NEOPRENE EXP. JOINT 100mm (M)	STRIP SEAL EXPANSION JOINT ASSEMBLY	SILICONE JOINT SEALER 17mm (M)	SILICONE JOINT SEALER 25mm (M)	SILICONE JOINT SEALER 38mm (M)	SILICONE JOINT SEALER 50mm (M)	SILICONE JOINT SEALER 64mm (M)	SILICONE JOINT SEALER 76mm (M)	BONDED PREFORMED JOINT SEAL 25mm (M)	BONDED PREFORMED JOINT SEAL 38mm (M)	BONDED PREFORMED JOINT SEAL 50mm (M)	BONDED PREFORMED JOINT SEAL 64mm (M)	BONDED PREFORMED JOINT SEAL 102mm (M)	CONCRETE REMOVAL (CU.M)	CONCRETE STRUCTURES (CU.M)	REINFORCEMENT BARS (EPOXY COATED) (KG)	BAR SPLICERS (EA)	POLYMER CONCRETE (CU.M)	FURNISHING AND ERECTING STRUCTURAL STEEL (KG)	SEE DETAIL A SHEET	SEE DETAIL B SHEET	SEE DETAIL C SHEET	SEE DETAIL D SHEET	
		15	I-474 OEB OVER KIC. CR. ROAD																								
	N. ABUTMENT			26																							
	PIER 3		24.1																								
	PIER 4		17.2																								
	PIER 6										21.5											6					
	PIER 8			26.8																							
	S. ABUTMENT								33.4								1.5	1.5	477	12	6			X			
16	I-474 OEB OVER KIC. CR. ROAD																										
	N. ABUTMENT			25.0													1.9	1.9	18	6				X			
	PIER 3		24.1																								
	PIER 4									17.7												6					
	PIER 6			22.0																							
	S. ABUTMENT			23.7													4	1.7	333	6				X			
17	I-474 OEB OVER US 24																										
	N. ABUTMENT																2.9	2.9	23	6					X		
	S. ABUTMENT																2.6	2.6	200	6					X		
18	I-474 OEB OVER US 24																										
	N. ABUTMENT																2.6	2.6	205	6					X		
	S. ABUTMENT																2.0	2.0	171	6					X		
19	I-474 OEB OVER CR. & P. RR AND KIC. CR.																										
	N. ABUTMENT									13.2							2.1	2.1	177	6	0.3			X			
	PIER 4		21.7																								
	PIER 5				25.4																	1.0				X	
	S. ABUTMENT									20.1							3.3	3.3	274	6	0.2			X			
	PAGE TOTAL	21.7	63.4	120.5	25.4				66.7	17.7	21.5				59.1		29.0	28.2	2408	60	2.7	1913					

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
STRUCTURE REHABILITATION SUMMARY

1 REVISED 9/29/1999 A.Y.V.

STRUCTURAL JOINT REHABILITATION SUMMARY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1474	(72-1,2,3,4)RS	PEORIA	254	197
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

LOC. NO.	BRIDGE	NEOPRENE EXP. JOINT 50mm (M)	NEOPRENE EXP. JOINT 64mm (M)	NEOPRENE EXP. JOINT 100mm (M)	SILICONE JOINT SEALER 17mm (M)	SILICONE JOINT SEALER 25mm (M)	SILICONE JOINT SEALER 38mm (M)	SILICONE JOINT SEALER 50mm (M)	SILICONE JOINT SEALER 64mm (M)	SILICONE JOINT SEALER 76mm (M)	BONDED PREFORMED JOINT SEAL 25mm (M)	BONDED PREFORMED JOINT SEAL 38mm (M)	BONDED PREFORMED JOINT SEAL 50mm (M)	BONDED PREFORMED JOINT SEAL 64mm (M)	BONDED PREFORMED JOINT SEAL 102mm (M)	CONCRETE REMOVAL (CU.M)	CONCRETE STRUCTURES (CU.M)	REINFORCEMENT BARS (EPOXY COATED) (KG)	BAR SPLICERS (EA)	POLYMER CONCRETE (CU.M)	FURNISHING AND ERECTING STRUCTURAL STEEL (KG)	SEE DETAIL A SHEET	SEE DETAIL B SHEET	SEE DETAIL C SHEET		
7	FARMINGTON ROAD																									
	E. ABUTMENT												14.0								213					
	W. ABUTMENT											14.0									213					
9	MAXWELL RD (EB)																									
	E. ABUTMENT											16.8												X		
	W. ABUTMENT											15.9												X		
8	MAXWELL ROAD (WB)																									
	E. ABUTMENT											15.8													X	
	W. ABUTMENT											16.6													X	
10	I-474 (EB) OVER IL 116																									
	N. ABUTMENT											15.4													X	
	S. ABUTMENT											14.7													X	
11	I-474 (WB) OVER IL 116																									
	N. ABUTMENT											13.8													X	
	S. ABUTMENT											13.8													X	
12	I-474 (EB) OVER C & NW RR																									
	N. ABUTMENT												13.1			1.6	1.6	175	6		421				X	
	S. ABUTMENT											13.1				1.6	1.6	175	6		421				X	
13	I-474 (WB) OVER C & NW RR																									
	N. ABUTMENT												13.1			1.6	1.6	175	6		421				X	
	S. ABUTMENT											13.1				1.6	1.6	175	6		421				X	
14	AIRPORT ROAD																									
	E. ABUTMENT											28.5													X	
	W. ABUTMENT											28.5													X	
	LONGITUDINAL JOINT					80.0																			X	
	PAGE TOTAL					80.0						177.5	56.5	26.2		6.4	6.4	700	24		2110					

SEE DETAIL SHEET 159A
SEE DETAIL SHEET 159A

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STRUCTURE
REHABILITATION
SUMMARY

STRUCTURAL JOINT REHABILITATION SUMMARY

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-1,2,3,4)RS	PEORIA	198	198
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

LOC. NO.	BRIDGE	NEOPRENE EXP. JOINT 50mm (M)	NEOPRENE EXP. JOINT 64mm (M)	NEOPRENE EXP. JOINT 100mm (M)	SILICONE JOINT SEALER 17mm (M)	SILICONE JOINT SEALER 25mm (M)	SILICONE JOINT SEALER 38mm (M)	SILICONE JOINT SEALER 50mm (M)	SILICONE JOINT SEALER 64mm (M)	SILICONE JOINT SEALER 76mm (M)	BONDED PREFORMED JOINT SEAL 25mm (M)	BONDED PREFORMED JOINT SEAL 38mm (M)	BONDED PREFORMED JOINT SEAL 50mm (M)	BONDED PREFORMED JOINT SEAL 64mm (M)	BONDED PREFORMED JOINT SEAL 102mm (M)	CONCRETE REMOVAL (CU.M)	CONCRETE STRUCTURES (CU.M)	REINFORCEMENT BARS (EPOXY COATED) (KG)	BAR SPLICERS (EA)	POLYMER CONCRETE (CU.M)	FURNISHING AND ERECTING STRUCTURAL STEEL (KG)	SEE DETAIL A SHEET	SEE DETAIL B SHEET	SEE DETAIL C SHEET
15	I-474 (EB) OVER KIC. CR. ROAD																							
	N. ABUTMENT			25.0																				
	PIER 3		24.1																					X
	PIER 4		17.2																					X
	PIER 6									21.5										0.6				X
	PIER 8			26.8																				X
	S. ABUTMENT							33.4								5.5	5.5	477	12	0.3		X		X
16	I-474 (WB) OVER KIC. CR. ROAD																							
	N. ABUTMENT			25.0												3.9	3.5	352	6			X		
	PIER 3		24.1																					X
	PIER 4								17.7											0.3				X
	PIER 6			20.0																				
	S. ABUTMENT			23.7												4.1	3.7	333	6			X		
17	I-474 (EB) OVER US 24																							
	N. ABUTMENT												16.2			2.9	2.9	219	6		526			X
	S. ABUTMENT												14.9			2.6	2.6	200	6		482			X
18	I-474 (WB) OVER US 24																							
	N. ABUTMENT												15.2			2.6	2.6	205	6		493			X
	S. ABUTMENT												12.8			2.0	2.0	171	6		412			X
19	I-474 (EB) OVER CRI & P RR AND KIC. CR.																							
	N. ABUTMENT							13.2								2.1	2.1	177	6	0.3		X		
	PIER 4	21.7																						X
	PIER 5		24.9																					X
	S. ABUTMENT							20.1								3.3	3.3	274	6	0.2		X		
	PAGE TOTAL	21.7	65.4	145.4				66.7	17.7	21.5						29.0	28.2	2408	60	1.7	1913			

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

STRUCTURE
REHABILITATION
SUMMARY

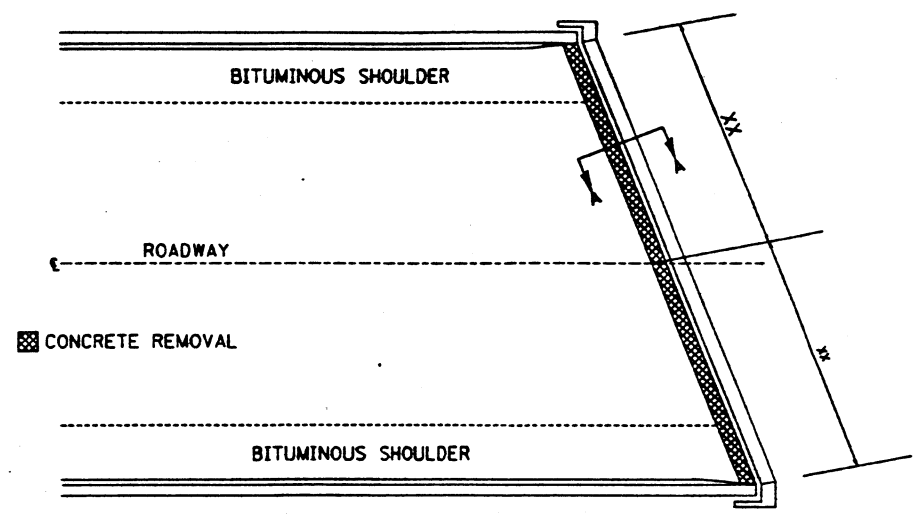
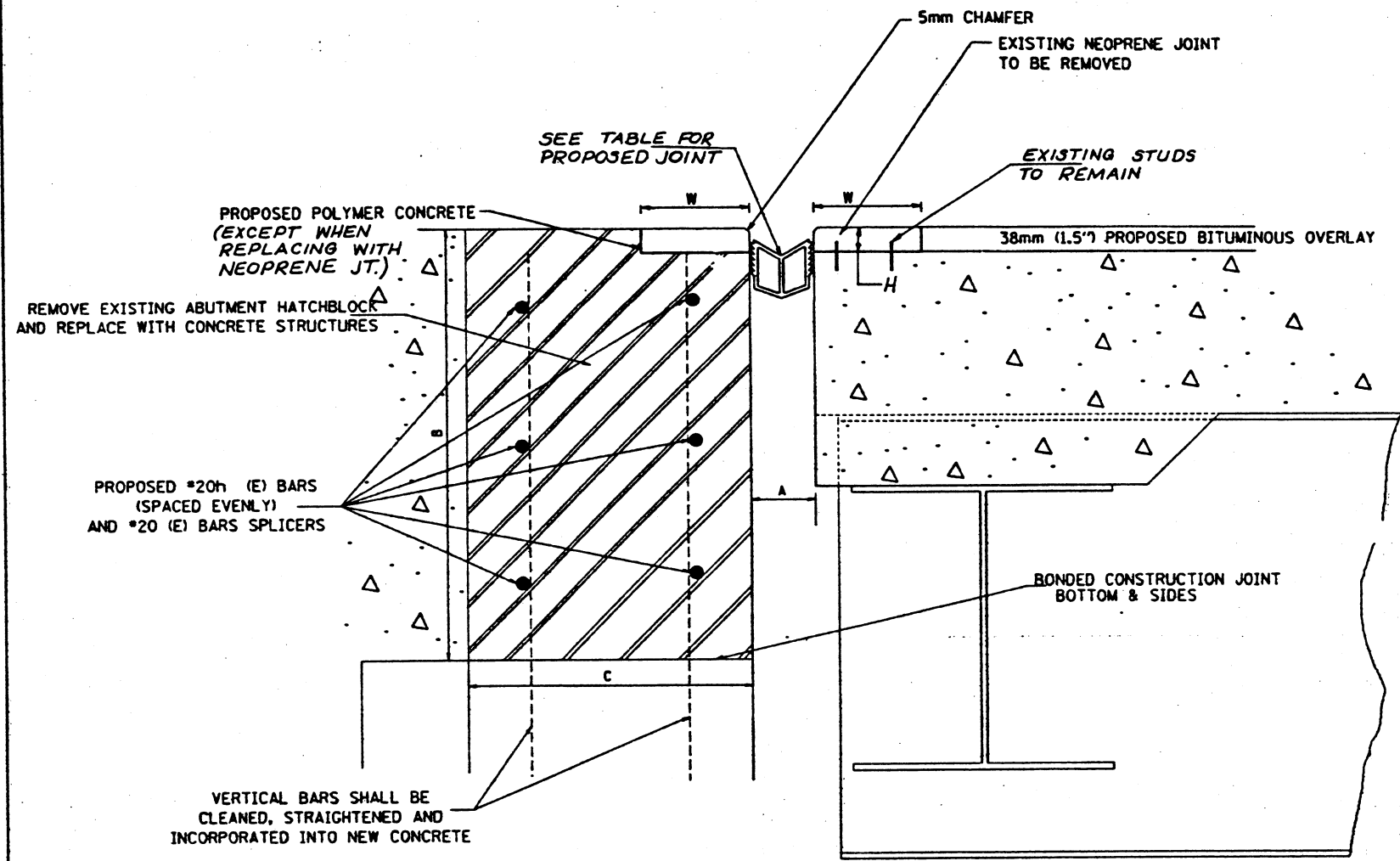
STRUCTURAL JOINT REHABILITATION SUMMARY

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1474	(72-1,2,3,4)RS	PEORIA	257	199
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		

LOC. NO.	BRIDGE	NEOPRENE EXP. JOINT 50mm (M)	NEOPRENE EXP. JOINT 64mm (M)	NEOPRENE EXP. JOINT 100mm (M)	SILICONE JOINT SEALER 17mm (M)	SILICONE JOINT SEALER 25mm (M)	SILICONE JOINT SEALER 50mm (M)	SILICONE JOINT SEALER 64mm (M)	SILICONE JOINT SEALER 76mm (M)	BONDED PREFORMED JOINT SEAL 30mm (M)	BONDED PREFORMED JOINT SEAL 50mm (M)	BONDED PREFORMED JOINT SEAL 64mm (M)	CONCRETE REMOVAL (CU.M)	CONCRETE STRUCTURES (CU.M)	REINFORCEMENT BARS (EPOXY COATED) (KG)	BAR SPLICERS (EA)	POLYMER CONCRETE (CU.M)	FURNISHING AND ERECTING STRUCTURAL STEEL (KG)	SEE DETAIL A SHEET	SEE DETAIL B SHEET	SEE DETAIL C SHEET
20	I-474 (WB) OVER CRI & P RR AND KIC. CR.																				
	N. ABUTMENT						28.9						4.7	4.7	195.1	12	0.2		X		
	PIER 2							22.3									0.3				X
	PIER 4							20.2									0.3				X
	S. ABUTMENT						15.8						2.6	2.6	209	6	0.2		X		
21	US 24 OVER KICKAPOO CREEK																				
	E. ABUTMENT	40.3											5.6	5.6	477	12	0.5		X		
	PIER 2								33.2								8.4				X
	W. ABUTMENT									33.2			3.4	3.4	367	12		887		X	
	LONGITUDINAL JOINT					129.0															X
	PAGE TOTAL	40.3				129.0	44.7	42.5	33.2				16.1	16.1	1248	42	1.9	887			
	RURAL TOTAL	44.7	69.2	32.8	21.9			34.0		100.4			31.0	30.1	2752	120	1.0	2975			
	URBAN TOTAL	62.0	65.4	125.4		80.0	111.4	60.2	54.7	210.7	56.5	85.3	51.7	50.9	4356	126	3.8	4910			
	GRAND TOTAL	107.0	134.6	158.2	21.9	80.0	111.4	94.2	54.7	311.1	56.5	85.3	82.7	81.0	7108	246	4.8	7885			

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		STRUCTURE REHABILITATION SUMMARY

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-1,2,3,4)RS	PEORIA	259	200
STA. TO STA.		FED. ROAD DIST. NO. 4 ILLINOIS FED. AID PROJECT		



PROPOSED EXPANSION JOINT DETAIL

NOTE:
THE REMOVAL OF EXISTING NEOPRENE JOINT ON PREFORMED ELASTOMERIC JOINT SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL

SECTION A-A

LOC. NO.	BRIDGE	STRUCTURE NO.	REPAIR LOCATION	JOINT WIDTH			CONCRETE REMOVAL		CONCRETE STRUCTURE	POLYMER CONCRETE	PROPOSED JOINT		
				"A"	"B"	"C"	CU M	CU M			CU M	W	
				mm	METER	METER	CU M	CU M	CU M				
*1	I-474 (EB) OVER IL-8	072-0112	N. ABUT	50	.549	.305	3.7	3.7		.150	.050	Neoprene 50 mm	
*2	I-474 (WB) OVER IL-8	072-0113	N. ABUT	50	.549	.305	3.4	3.4		.150	.050	Neoprene 50 mm	
*3	I-474 (EB) OVER BN RR & KICKAPOO CREEK	072-0114	N. ABUT	64	.549	.305	2.9	2.6		.300	.050	Neoprene 65 mm	
			S. ABUT	64	.549	.305	2.7	2.5		.300	.050	Neoprene 65 mm	
*4	I-474 (WB) OVER BN RR & KICKAPOO CREEK	072-0115	N. ABUT	64	.549	.305	2.8	2.6		.300	.050	Neoprene 65 mm	
			S. ABUT	64	.549	.305	2.7	2.5		.300	.050	Neoprene 65 mm	
*15	I-474 (EB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0128	S. ABUT	50	.549	.305	5.5	5.5	0.3	.113	.044	Silicone Joint Sealer 50 mm *	
*16	I-474 (WB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0127	N. ABUT	89	.549	.305	4.1	3.7				Neoprene 100 mm	
			S. ABUT	89	.549	.305	3.9	3.5				Neoprene 100 mm	
*19	I-474 (EB) OVER CRI & P RR AND KICKAPOO CK	072-0131	S. ABUT	50	.549	.305	2.1	2.1	0.3	.113	.044	Silicone Joint Sealer 50 mm *	
			N. ABUT	50	.549	.305	3.3	3.3	.2	.113	.044	Silicone Joint Sealer 50 mm *	
*20	I-474 (WB) OVER CRI & P RR AND KICKAPOO CK	072-0132	S. ABUT	50	.549	.305	4.7	4.7	.2	.113	0.50	Silicone Joint Sealer 50 mm *	
			N. ABUT	50	.549	.305	2.6	2.6	.2	.113	0.50	Silicone Joint Sealer 50 mm *	
*21	US-24 (ADAMS ST) OVER KICKAPOO CK	072-0134	E. ABUT	50	.549	.305	5.6	5.6		.150	0.50	Neoprene 50 mm	

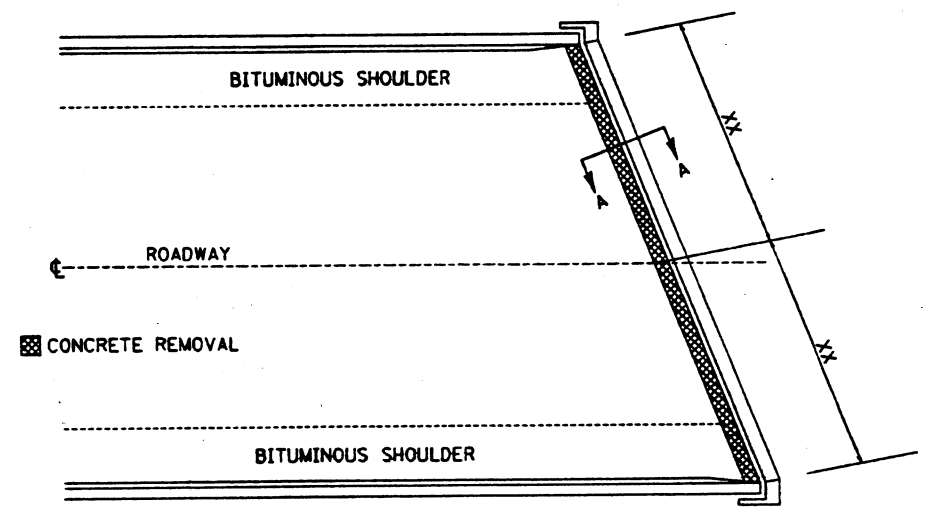
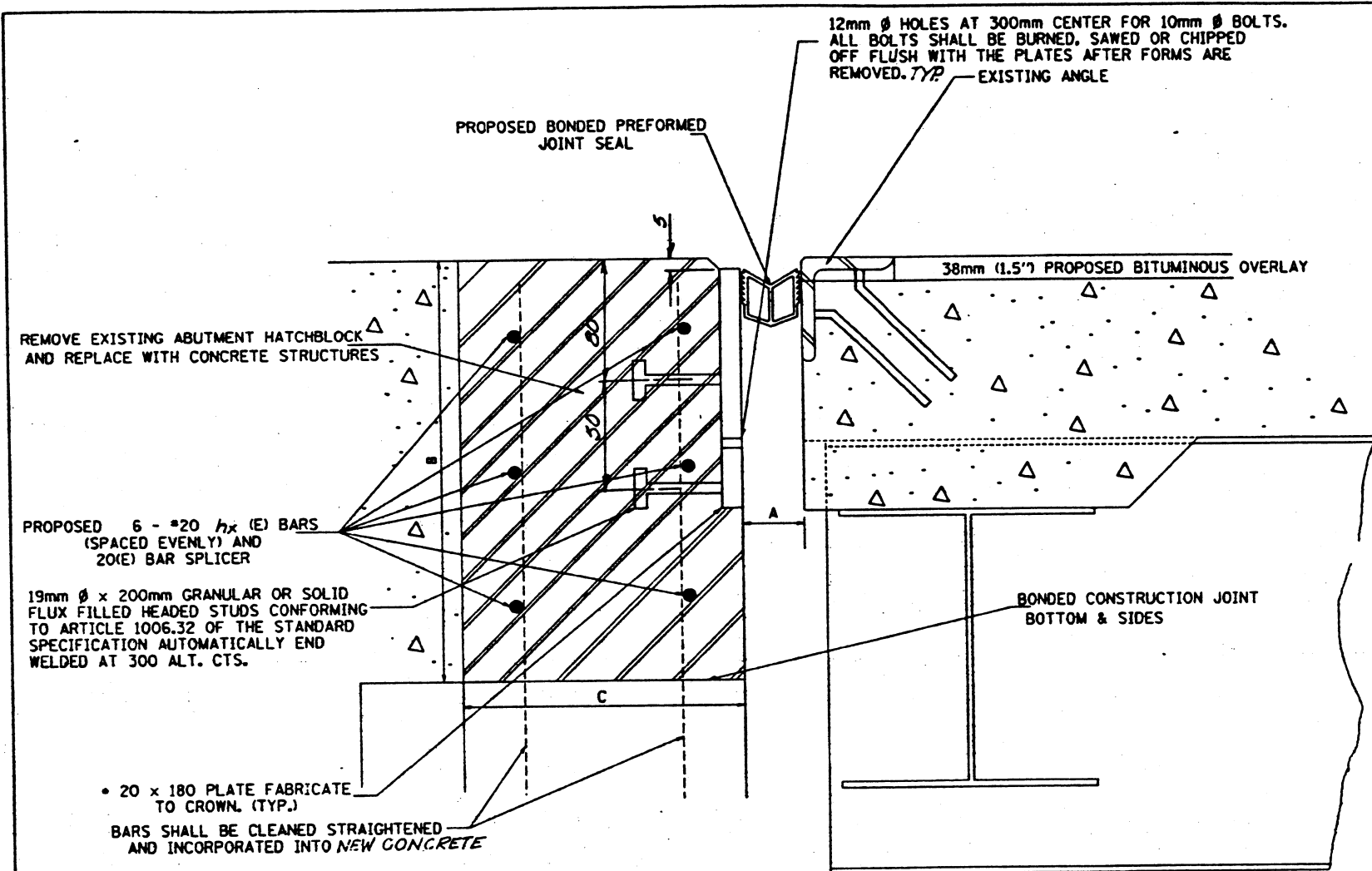
NOTE: JOINTS IN POLYMER CONCRETE SHALL BE A CONTINUATION OF JOINTS IN THE ADJACENT PAVEMENT. JOINTS SHALL BE CONSTRUCTED TO REQUIREMENTS OF ARTICLE 420.10(d) AND SEALED TO REQUIREMENTS OF ARTICLE 420.14(c) POURED JOINT SEAL

* See Sheet 202 for Silicone Joint Sealer Detail.

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
EXPANSION JOINT
DETAIL "A"
HATCHBLOCK
REMOVAL AND REPLACEMENT

F.A.L. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	172-1.2.3.4/RS	PEORIA	259	201
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		



PROPOSED EXPANSION JOINT DETAIL

- FURNISH IN SEGMENTS OF 6m MAXIMUM LENGTH. MAXIMUM SPACE BETWEEN INSTALLED SEGMENT SHALL BE 5mm. SEAL SPACE WITH SILICONE SEALANT SUITABLE FOR STRUCTURAL STEEL.

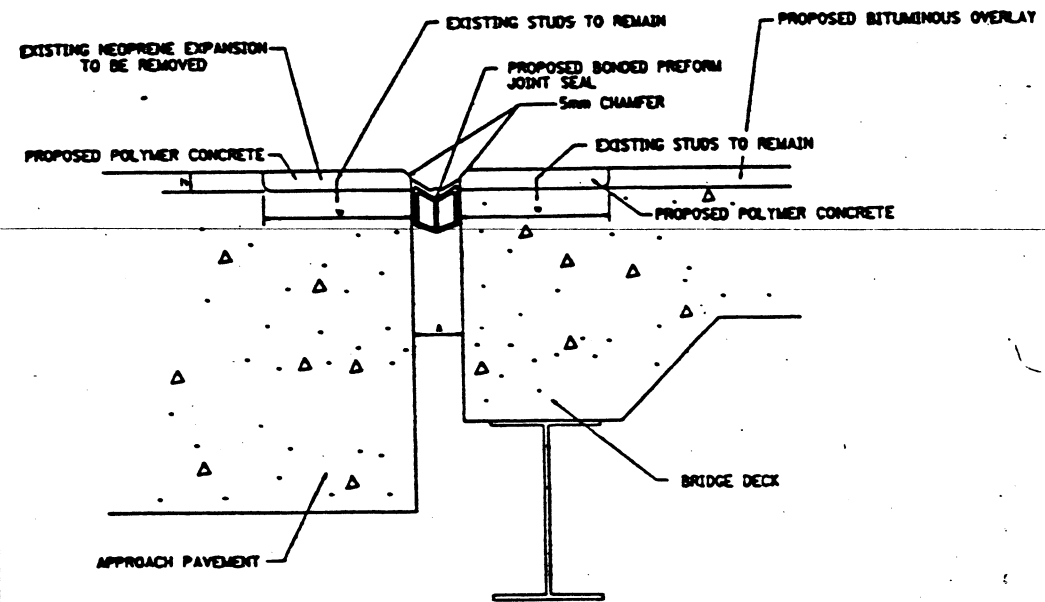
NOTE:
THE REMOVAL OF EXISTING PREFORMED ELASTOMERIC JOINT SHALL BE INCLUDED IN THE COST OF CONCRETE REMOVAL

SECTION A-A

LOC. NO.	BRIDGE	STRUCTURE NO.	REPAIR LOCATION	JOINT WIDTH			CONCRETE REMOVAL		CONCRETE STRUCTURE	FURNISH & ERECTING STRUCTURAL STEEL
				"A" mm	"B" METER	"C" METER	CU M	CU M		
*1	I-474 (EB) OVER IL 8	072-0112	S. ABUT	17	.549	.305	3.4	3.4	637.7	
*2	I-474 (WB) OVER IL 8	072-0113	S. ABUT	31	.549	.305	3.0	3.0	626.3	
*5	I-474 (EB) OVER POTTSTOWN RD (TR 173)	072-0116	N. ABUT	44	.419	.305	1.6	1.6	411.8	
			S. ABUT	44	.419	.305	1.6	1.6	411.8	
*6	I-474 (WB) OVER POTTSTOWN RD (TR 173)	072-0117	N. ABUT	44	.419	.305	1.6	1.6	411.8	
			S. ABUT	44	.419	.305	1.6	1.6	411.8	
*12	I-474 (EB) OVER C & NW RR	072-0124	N. ABUT	70	.419	.305	1.6	1.6	421.2	
			S. ABUT	44	.419	.305	1.6	1.6	421.2	
*13	I-474 (WB) OVER C & NW RR	072-0125	N. ABUT	70	.419	.305	1.6	1.6	421.2	
			S. ABUT	44	.419	.305	1.6	1.6	421.2	
*17	I-474 (EB) OVER US 24 (ADAMS ST)	072-0129	N. ABUT	69	.605	.305	2.9	2.9	526.1	
			S. ABUT	69	.588	.305	2.6	2.6	482.1	
*18	I-474 (WB) OVER US 24 (ADAMS ST)	072-0130	N. ABUT	9	.584	.305	2.6	2.6	492.6	
			S. ABUT	9	.549	.305	2.0	2.0	412.3	
*21	US 24 (ADAMS ST) OVER KICKAPOO CREEK	072-0134	W. ABUT	44	.605	.305	3.4	3.4	886.3	

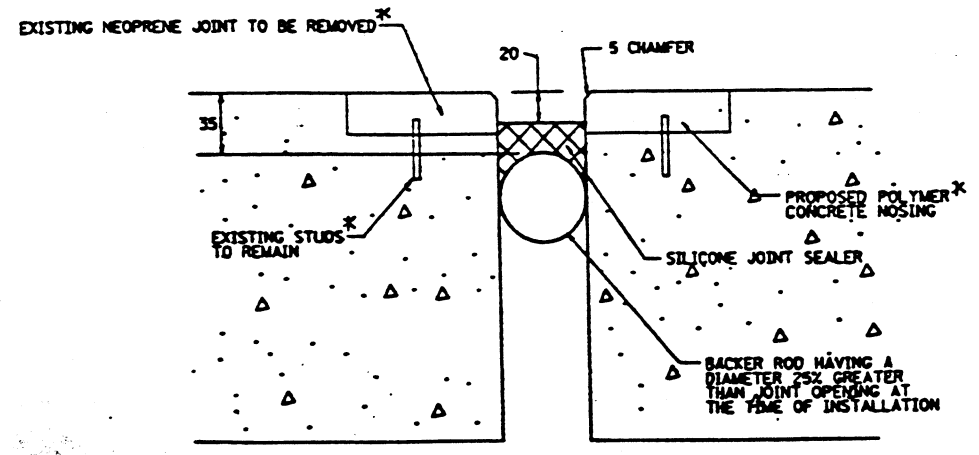
Silicone Joint Sealers 17mm - Use section A-A detailed above except, replace Bonded Preformed Joint Seal with Silicone Joint Sealer & backer rod as detailed on sheet 202.

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION EXPANSION JOINT DETAIL "B" HATCHBLOCK REMOVE AND REPLACE STRUCTURAL STEEL
NAME	DATE	



BONDED PREFORMED JOINT SEAL REPLACEMENT

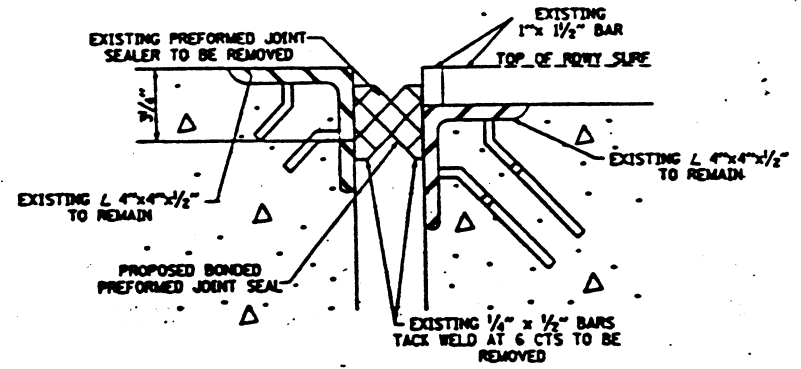
- PROCEDURAL NOTES**
1. REMOVE EXISTING NEOPRENE EXPANSION DEVICE.
 2. CLEAN EXISTING JOINT BLOCKOUTS AND FILL WITH POLYMER CONCRETE AS PER MANUFACTURER'S INSTRUCTIONS.
 3. PREPARE JOINT SURFACES AND PLACE JOINT SEALS AS PER MANUFACTURER'S INSTRUCTIONS.
 4. JOINTS IN POLYMER CONCRETE SHALL BE A CONTINUATION OF JOINTS IN THE ADJACENT PAVEMENT. JOINTS SHALL BE CONSTRUCTED TO REQUIREMENTS OF ARTICLE 420.106J AND SEALED TO THE REQUIREMENT OF ARTICLE 420.146J POURED JOINT SEAL.



SILICONE JOINT SEALER REPLACEMENT

* THESE ITEMS DO NOT APPLY TO LONGITUDINAL JT.

LOC. NO.	BRIDGE	STRUCTURE NO.	REPAIR LOCATION	BONDED PREFORMED JOINT SEAL	SILICONE JOINT SEALER	NEOPRENE EXPANSION JOINT (IN KIND REPLACEMENT)	POLYMER CONCRETE DIMENSIONS			JOINT WIDTH	
							FT	IN	CU YD		
*3	I-474 (EB) OVER BN RR & KICKAPOO CREEK	072-0114	PIER #3		X		50	300	0.5	64	
			PIER #4								76
*4	I-474 (WB) OVER BN RR & KICKAPOO CREEK	072-0115	PIER #3		X		50	300	0.5	64	
			PIER #4			X					89
*5	I-474 (EB) OVER POTTSTOWN RD (TR 173)	072-0116	PIER #1	X						44	
			PIER #2	X							44
*6	I-474 (WB) OVER POTTSTOWN RD (TR 173)	072-0117	PIER #1	X						44	
			PIER #2	X							44
*7	MAXWELL RD SPUR (EB) OVER I-474	072-0119	E. ABUT	X						44	
			W. ABUT	X							44
*8	MAXWELL RD SPUR (WB) OVER I-474	072-0120	E. ABUT	X						44	
			W. ABUT	X							44
*10	I-474 (EB) OVER IL 116 (PLANK RD)	072-0121	N. ABUT	X						44	
			S. ABUT	X							51
*11	I-474 (WB) OVER IL 116 (PLANK RD)	072-0122	N. ABUT	X						44	
			S. ABUT	X							51
*14	FAU 6578 (AIRPORT RD) OVER I-474	072-0126	E. ABUT	X						44	
			W. ABUT	X							44
*15	I-474 (EB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0128	N. ABUT			X				89	
			PIER #3			X					89
			PIER #4			X					64
			PIER #6		X		59	235	0.6		76
*16	I-474 (WB) OVER KICKAPOO CK AND KICKAPOO CK RD	072-0127	PIER #3			X				64	
			PIER #4		X		51				64
*19	I-474 (EB) OVER CRI & P RR AND KICKAPOO CK	072-0131	PIER #4			X				50	
*20	I-474 (WB) OVER KICKAPOO CK	072-0132	PIER #2		X		50			64	
			PIER #4		X		50	146	0.3		64
*21	US-24 (ADAMS ST) OVER KICKAPOO CK	072-0134	PIER #2		X		50	150	0.4	76	
			LONG. JT.		X						25
*14		072-0115	LONG. JT.		X					25	
				TOTAL							



PREFORMED JOINT SEALER REMOVAL

COST OF JOINT SEALER REMOVAL SHALL BE INCLUDED IN THE COST OF THE ASSOCIATED JOINT REPLACEMENT

REVISIONS	
NAME	DATE

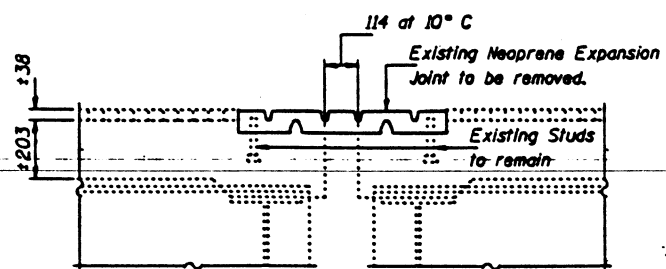
ILLINOIS DEPARTMENT OF TRANSPORTATION
EXPANSION JOINT
DETAIL "C" JOINT
REMOVAL AND POLYMER
CONCRETE REPLACEMENT

REVISED 9/29/1999 A.Y.V.

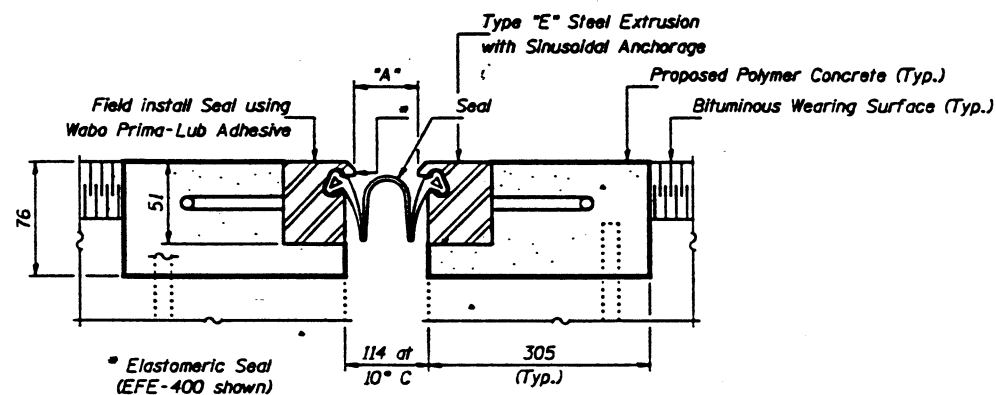
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROJECT NO.	DISTRICT	COUNTY	SECTION	SHEET NO.
F.A.L. 474	#	PEORIA	259	202A
SHEET NO. 1 1 SHEETS				

* (72-12.3.4)RS



EXISTING EXPANSION JOINT AT PIER 5



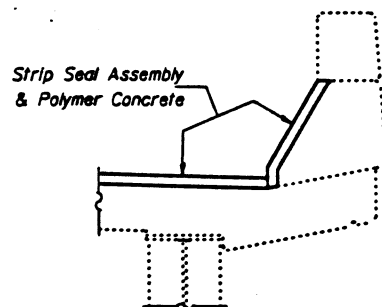
WABO STEEL STRIP SEAL SYSTEM AT PIER 5

All dimensions are in millimeters (mm) except as noted.

SEAL DIMENSION CHART

MODEL	"A" at Min.	"A" at Mid.	"A" at Max.	TOTAL MOVEMENT
SE-800	13	114	216	203

LOC. NO.	BRIDGE	STR. NO.	REPAIR LOCATION	STRIP SEAL	POLYMER CONC.			JOINT WIDTH
					"h"	"w"	CU M	
*19	I-474 (EB) Over CRI & P RR and Kickapoo Creek	072-0131	PIER #5	X	76	305	LO	114



STRIP SEAL ASSEMBLY END TREATMENT

DESIGNED	A.Y.V.
CHECKED	
BY	John F. Schneller Jr.
CHECKED	A.Y.V.

**EXPANSION JOINT
DETAIL "D" JOINT
REPLACE NEOPRENE JOINT
WITH STRIP SEAL SYSTEM**

1 Added Sheet 9/29/1999 A.Y.V.

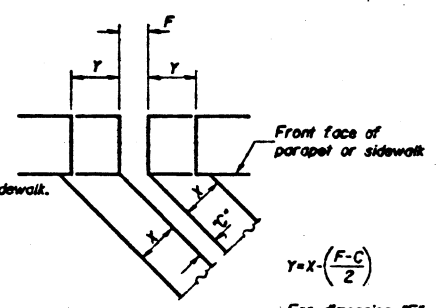
SECTION	COUNTY	TEN	NO.
771	CHICAGO	257	203
STA.	TO STA.		
FILE NO. PROJ.	DATE	FILE NO. PROJ.	

Joint Size	"C" at 10 °C	"D" at 10 °C
50	50	40 Min.
65	65	45 Min.
100	75	65 Min.

INSTALLATION NOTES

- ① Install continuous seal in roadway, parapet, curb, and sidewalk.
- ② Install anchor blocks as indicated.

NOTE A: Maximum spacing of anchor bolts shall be 300 centers.



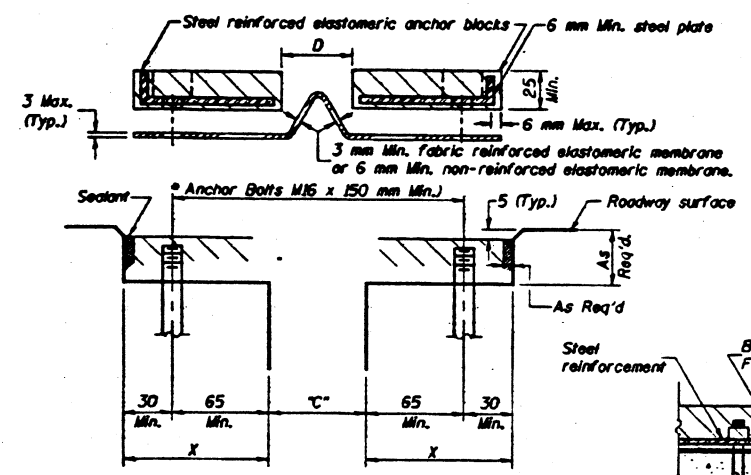
$$Y = X \cdot \left(\frac{F - C}{2} \right)$$

For dimension "F" see sheet #

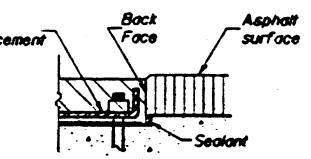
FORMING BLOCKOUT SKETCH

SKREW LIMITATIONS

The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews. For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed according to dimension "D", might require modifications to insure a minimum clearance of 40 mm from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±300 cts.



CROSS SECTION

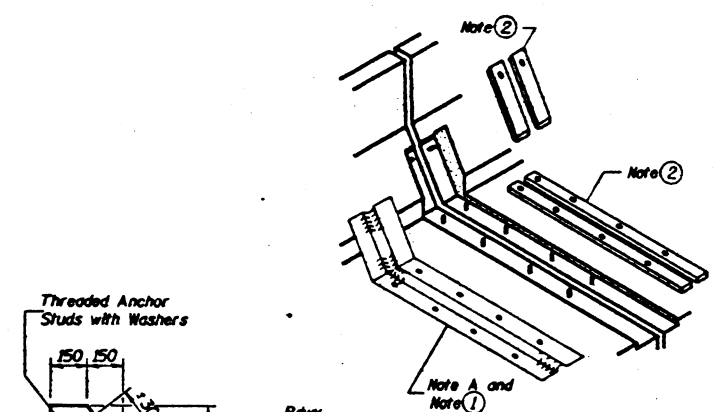


ANCHOR BLOCK WITH ASPHALT SURFACE

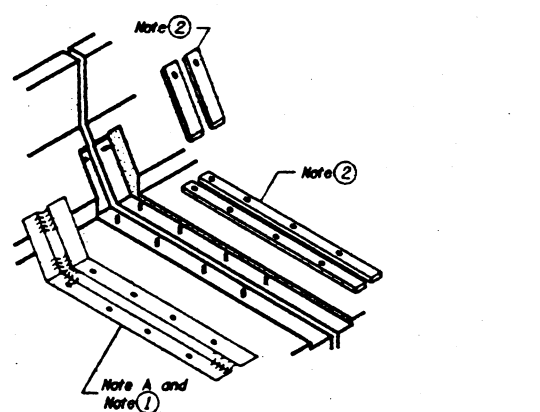
GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure. The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed. The parapet and roadway membrane shall be made continuous by an approved vulcanizing process. Lapping will not be permitted. All dimensions are in millimeters (mm) except as noted.

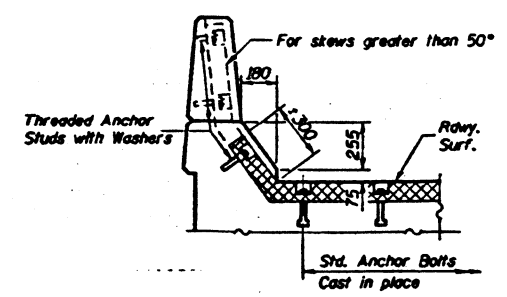
* Epoxy grout 3/8" # threaded studs in accordance with Article 584 of the Standard Specifications. Space to miss existing studs.



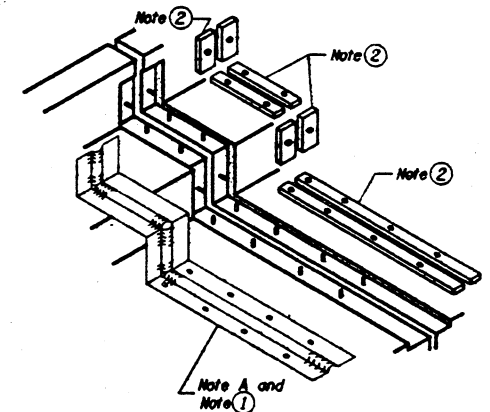
AT CURB



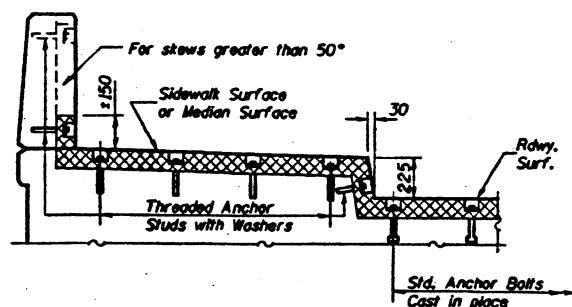
AT PARAPET



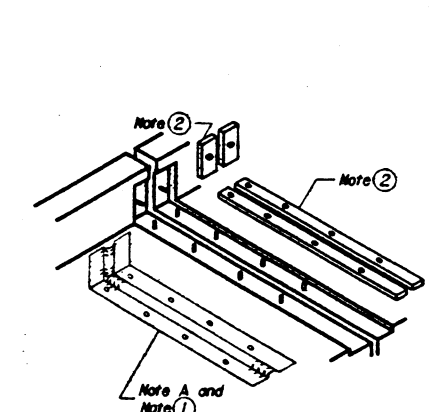
AT PARAPET



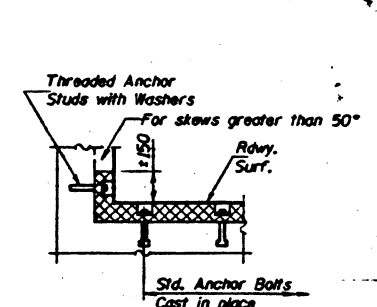
AT SIDEWALK OR MEDIAN



AT SIDEWALK OR MEDIAN TYPICAL END TREATMENTS



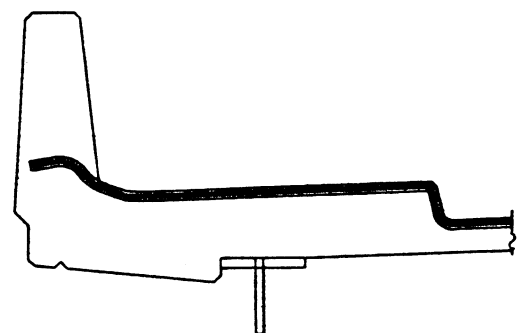
AT WALL



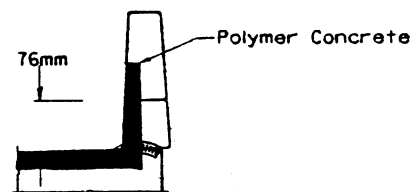
AT WALL

EJ-CS (M) 4-30-97

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION CONTINUOUS SEAL TYPE NEOPRENE EXPANSION JOINTS For 50, 65 and 100 Movement FOR INKIND REPLACEMENT
NAME	DATE	
		DATE 05/18/99 CHECKED BY JP/CAOD

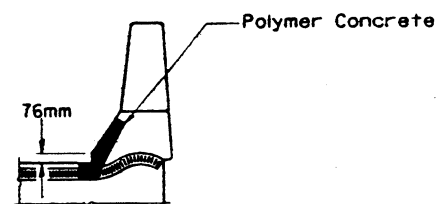


TYPICAL SEAL TREATMENT AT SIDEWALK



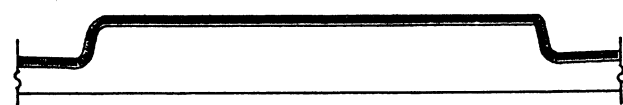
Typical End of Seal Treatment

- Replacing Neoprene Joint with Silicone Joint Seal or Bonded Preformed Joint Seal.
- When existing Joint is not Neoprene, use detail excluding the Polymer Concrete.

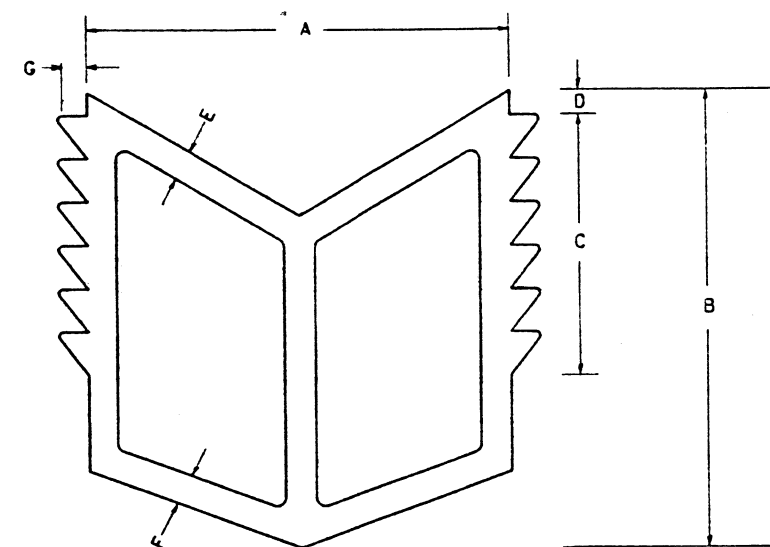


Typical End of Seal Treatment

- Replacing Neoprene Joint with Silicone Joint Seal or Bonded Preformed Joint Seal.
- When existing Joint is not Neoprene, use detail excluding the Polymer Concrete.



TYPICAL SEAL TREATMENT AT MEDIAN

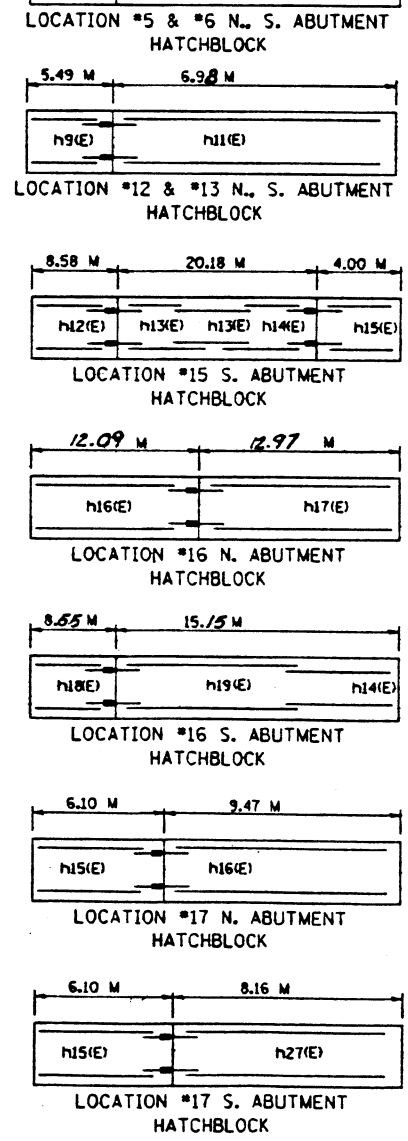
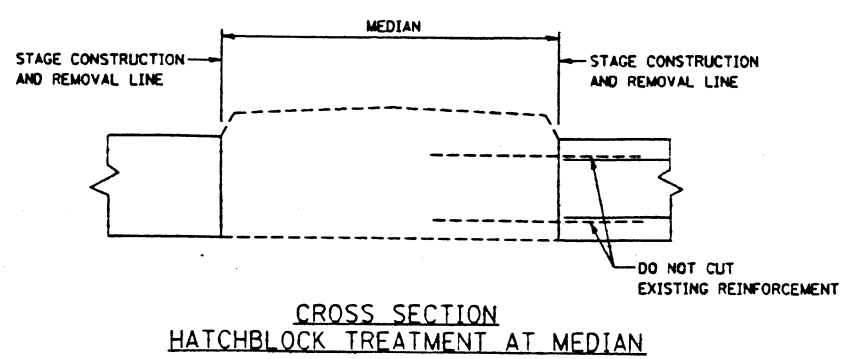
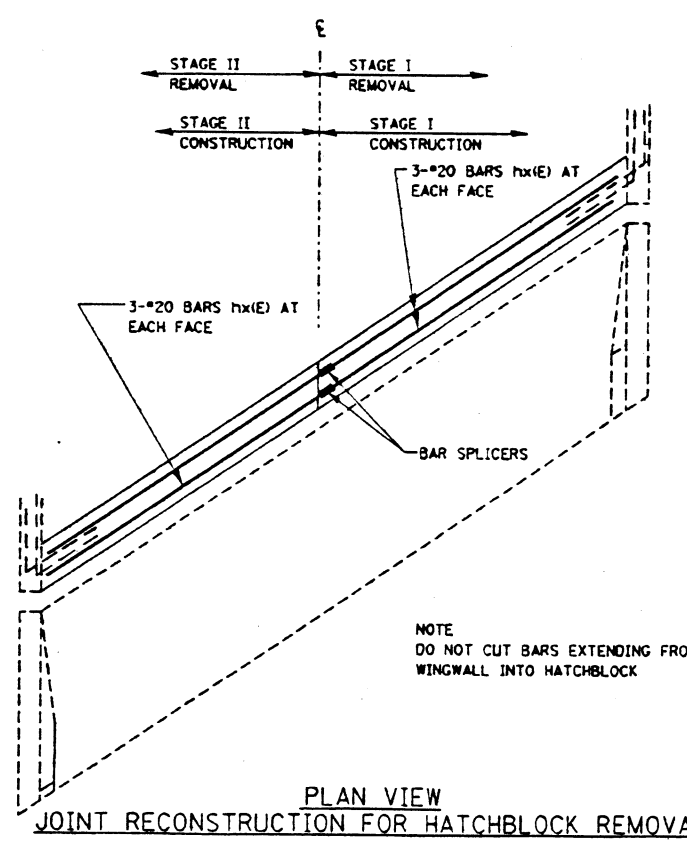
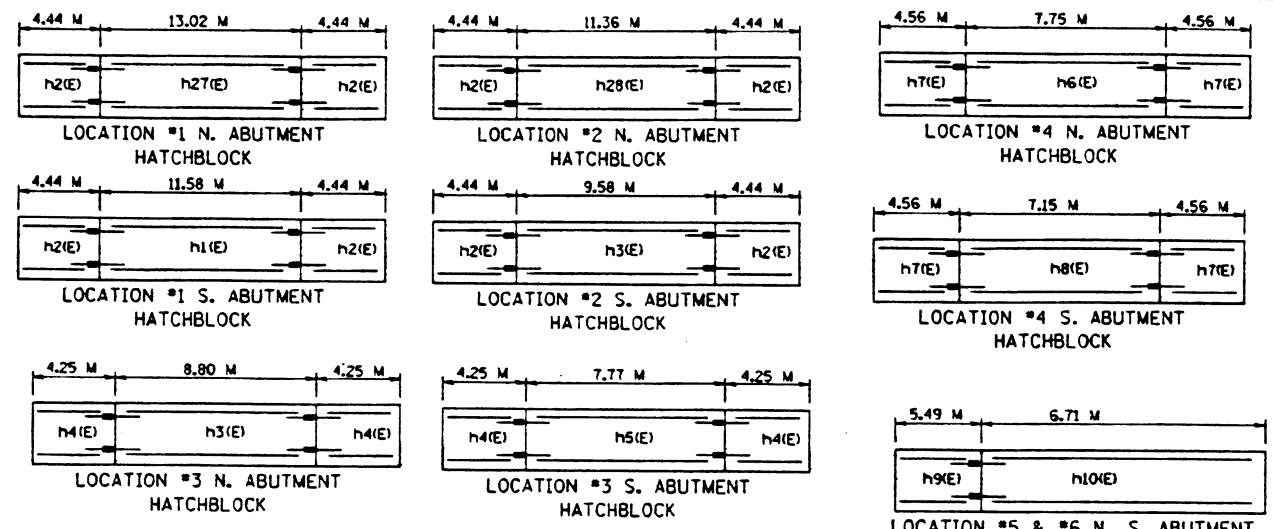


BONDED PREFORMED JOINT SEAL

JOINT SIZE @ 10° C	EXPANSION LENGTH	MAX MOVEMENT	DIMENSIONS mm (Inch)						
			A	B	C	D	E	F	G
25 (1)	0m - 18m	32	25	34	13	6	3	2	2
38 (1 1/2)	18m - 27m	41	38	51	19	10	5	3	3
50 (2)	27m - 46m	60	51	68	25	13	6	4	4
64 (2 1/2)	46m - 61m	76	64	85	32	16	8	5	5
75 (3)	61m - 85m	102	76	102	38	19	10	6	6
102 (4)	85m - 110m	127	102	120	74	13	5	5	5

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		BONDED PREFORMED JOINT SEAL

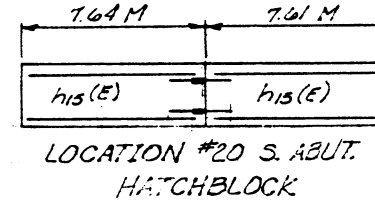
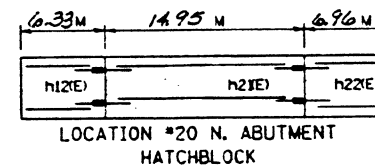
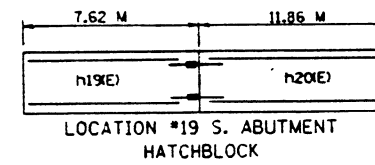
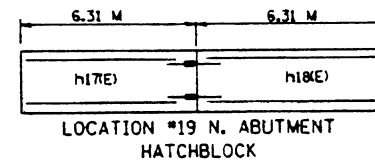
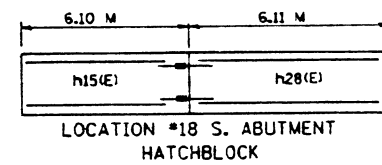
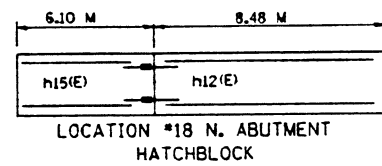
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1474	(72-1,2,3,4)	PEORIA	259	205
STA.		TO STA.		
FED. ROAD DIST. NO. 4		ILLINOIS FED. AID PROJECT		



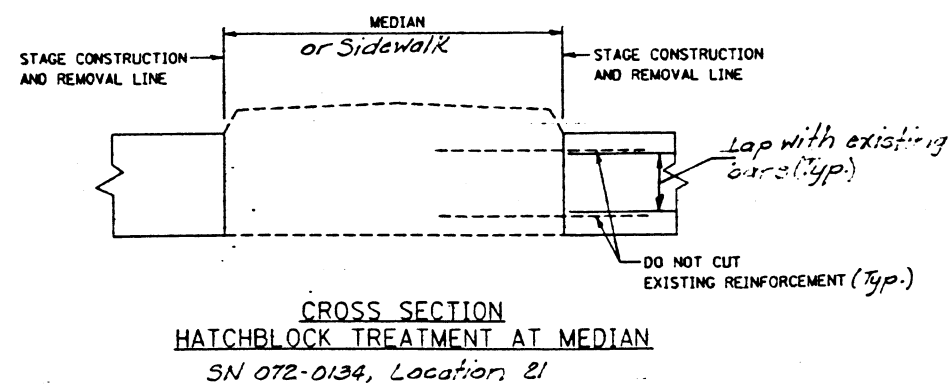
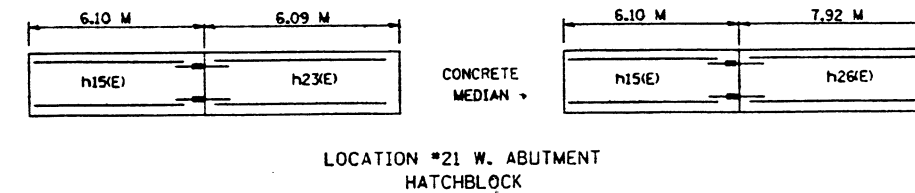
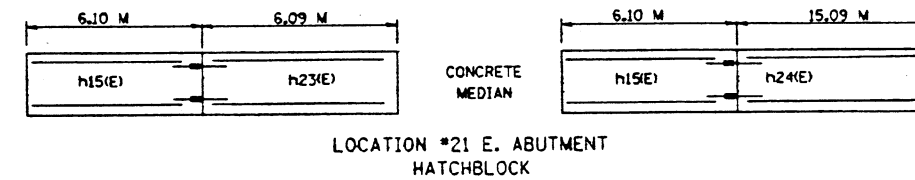
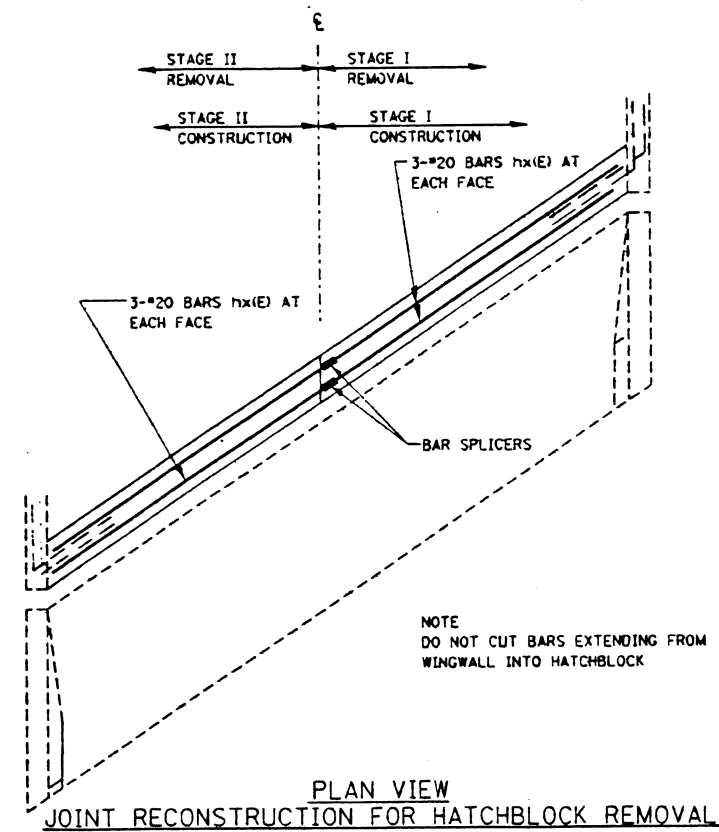
Min. Lap #20 bar = 790mm

LOCATION	STAGE	SIZE	NUMBER (EA.)	LENGTH (M)	WEIGHT (KG)	SHAPE	NO.
1 I-474 (EB) OVER IL-8 N. ABUT	I	#20	6	12.81	181.0	h27(E)	
	II	#20	6	4.44	62.7	h2(E)	
	III	#20	6	4.44	62.7	h2(E)	
1 I-474 (EB) OVER IL-8 S. ABUT	I	#20	6	11.55	163.3	h1(E)	
	II	#20	6	4.44	62.7	h2(E)	
	III	#20	6	4.44	62.7	h2(E)	
2 I-474 (WB) OVER IL-8 N. ABUT	I	#20	6	11.16	157.7	h28(E)	
	II	#20	6	4.44	62.7	h2(E)	
	III	#20	6	4.44	62.7	h2(E)	
2 I-474 (WB) OVER IL-8 S. ABUT	I	#20	6	9.37	132.4	h3(E)	
	II	#20	6	4.44	62.7	h2(E)	
	III	#20	6	4.44	62.7	h2(E)	
3 I-474 (EB) OVER BN RR & KICKAPOO CK N. ABUTMENT	I	#20	6	8.60	121.5	h3(E)	
	II	#20	6	4.25	60.0	h4(E)	
	III	#20	6	4.25	60.0	h4(E)	
3 S. ABUTMENT	I	#20	6	7.57	107.0	h5(E)	
	II	#20	6	4.25	60.0	h4(E)	
	III	#20	6	4.25	60.0	h4(E)	
4 I-474 (WB) OVER BN RR & KICKAPOO CK N. ABUTMENT	I	#20	6	7.55	106.7	h6(E)	
	II	#20	6	4.56	64.4	h7(E)	
	III	#20	6	4.56	64.4	h7(E)	
S. ABUTMENT	I	#20	6	6.95	98.2	h8(E)	
	II	#20	6	4.56	64.4	h7(E)	
	III	#20	6	4.56	64.4	h7(E)	
5 I-474 (EB) OVER POTTSTOWN RD (TR 173) N. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.71	94.8	h10(E)	
	III	#20	6	4.56	64.4	h7(E)	
S. ABUTMENT	I	#20	6	5.35	76.2	h9(E)	
	II	#20	6	6.71	94.8	h10(E)	
	III	#20	6	4.56	64.4	h7(E)	
6 I-474 (WB) OVER POTTSTOWN RD (TR 173) N. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.71	94.8	h10(E)	
	III	#20	6	4.56	64.4	h7(E)	
S. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.71	94.8	h10(E)	
	III	#20	6	4.56	64.4	h7(E)	
12 I-474 (EB) OVER C & NW RR N. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.98	98.6	h11(E)	
	III	#20	6	6.98	98.6	h11(E)	
S. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.98	98.6	h11(E)	
	III	#20	6	6.98	98.6	h11(E)	
13 I-474 (WB) OVER C & NW RR N. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.98	98.6	h11(E)	
	III	#20	6	6.98	98.6	h11(E)	
S. ABUTMENT	I	#20	6	5.39	76.2	h9(E)	
	II	#20	6	6.98	98.6	h11(E)	
	III	#20	6	6.98	98.6	h11(E)	
15 I-474 (EB) OVER KICKAPOO CREEK RD. S. ABUTMENT	I	#20	6	8.48	119.8	h12(E)	
	II	#20	12	7.70	215.3	h13(E)	
	III	#20	6	6.22	85.6	h14(E)	
RAMP D	I	#20	6	4.00	56.5	h15(E)	
	II	#20	6	4.00	56.5	h15(E)	
	III	#20	6	4.00	56.5	h15(E)	
16 I-474 (WB) OVER KICKAPOO CREEK RD. N. ABUTMENT	I	#20	6	11.99	164.8	h16(E)	
	II	#20	6	12.87	187.1	h17(E)	
	III	#20	6	8.45	116.1	h18(E)	
S. ABUTMENT	I	#20	6	9.32	131.7	h19(E)	
	II	#20	6	6.85	85.6	h14(E)	
	III	#20	6	6.85	85.6	h14(E)	
17 I-474 (EB) OVER US 24 N. ABUTMENT	I	#20	6	6.00	84.9	h15(E)	
	II	#20	6	9.47	133.8	h16(E)	
	III	#20	6	6.00	84.9	h15(E)	
S. ABUTMENT	I	#20	6	6.00	84.9	h15(E)	
	II	#20	6	8.16	115.3	h27(E)	
	III	#20	6	8.16	115.3	h27(E)	

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION REINFORCEMENT BAR SCHEDULE AND DETAILS
NAME	DATE	
		DRAWN BY
		DATE
		CHECKED BY



	LOCATION	STAGE	SIZE	NUMBER (EA.)	LENGTH (M)	WEIGHT (KG)	SHAPE	NO.
18	I-474 (WB) OVER US 24 N. ABUTMENT	I	*20	6	6.00	84.9	—	h15(E)
		II	*20	6	8.48	119.8	—	h12(E)
		I	*20	6	6.00	84.9	—	h15(E)
19	I-474 (EB) OVER KICK. CR. & C & NN RR N. ABUTMENT	I	*20	6	6.21	87.4	—	h17(E)
		II	*20	6	6.31	89.2	—	h18(E)
19	I-474 (EB) OVER KICK. CR. & C & NN RR S. ABUTMENT	I	*20	6	7.52	106.3	—	h19(E)
		II	*20	6	11.86	167.6	—	h20(E)
20	I-474 (WB) OVER KICK. CR. & C & NN RR N. ABUTMENT	I	*20	6	6.21	87.4	—	h12(E)
		II	*20	6	14.85	119.0	—	h21(E)
21	US 24 OVER KICKAPOO CREEK RAMP	III	*20	6	6.86	70.1	—	h22(E)
		I	*20	6	6.00	84.8	—	h15(E)
21	US 24 OVER KICKAPOO CREEK E. ABUTMENT (WB)	I	*20	6	6.09	86.1	—	h23(E)
		II	*20	6	14.99	84.8	—	h24(E)
		I	*20	6	6.10	86.2	—	h15(E)
21	US 24 OVER KICKAPOO CREEK W. ABUTMENT (WB)	I	*20	6	6.00	84.3	—	h15(E)
		II	*20	6	6.09	86.1	—	h23(E)
		I	*20	6	7.82	84.8	—	h26(E)
		II	*20	6	6.00	111.9	—	h15(E)
20	I-474 (WB) OVER Kick. CR. & C & NN RR S. Abutment	I	*20	6	7.51	102.1	—	h15(E)
		II	*20	6	7.51	102.1	—	h15(E)



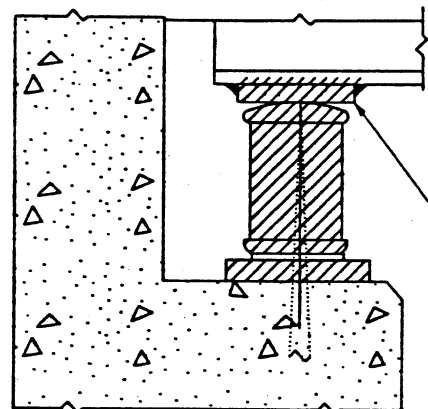
REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION

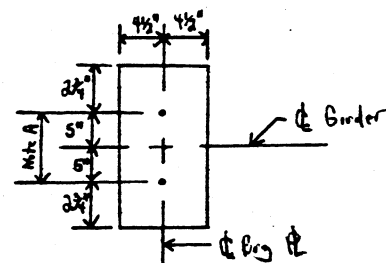
REINFORCEMENT BAR SCHEDULE AND DETAILS

DATE _____ DRAWN BY _____ CHECKED BY _____

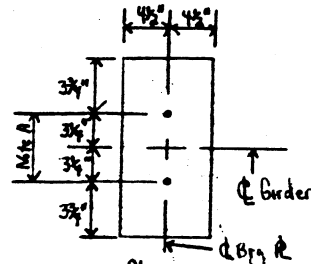
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	172-1.2.3.4RS	PEORIA	257	208
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			



EXISTING ϕ TO BE REMOVED USING THE AIR-ARC METHOD AND GRIND SMOOTH ALL WELD MATERIAL REMAINING ON THE BOTTOM FLANGE.



Plan
Top ϕ at S. Abut
(072-0121 #2)

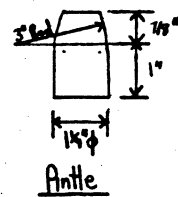


Plan
Top ϕ at Abuts
(072-0112 #113)

Note A
1 1/2" ϕ Holes - 1" deep in top ϕ for pinholes. Thread or press fit pinholes in bottom ϕ .

EXISTING BEARING ADJUSTMENT DETAIL

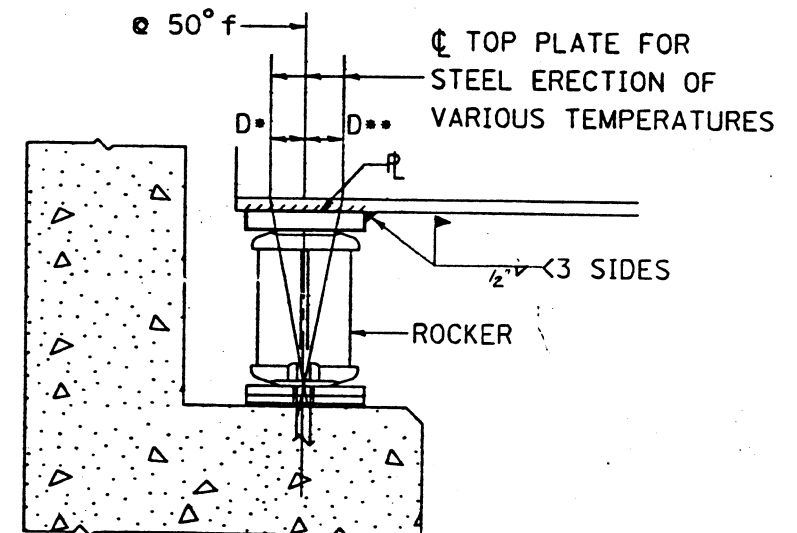
- D = 1/8" / 100 FT OF EXP. FOR EVERY 15° ABOVE THE NORMAL TEMP. OF 50° F
- D = 1/8" / 100 FT OF EXP. FOR EVERY 15° BELOW THE NORMAL TEMP. OF 50° F



Girder Reaction SN's 072-0112 #D113

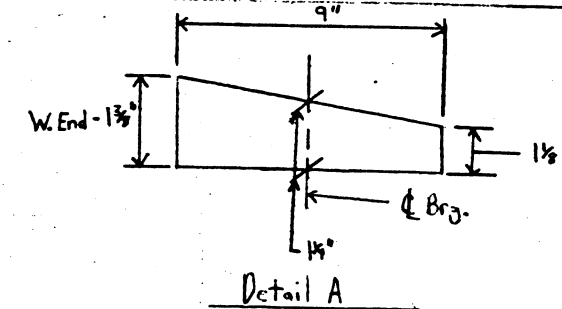
	W. Abut	E. Abut
R _ϕ (K)	27.8	19.3
R _W (K)	47.8	45.3
R _{IMP} (K)	12.9	13.4
R _{Total} (K)	88.5	78.0

Min Jack Capacity
W. Abut = 45 Tons
E. Abut = 40 Tons



Top Plate Thickness

SN's 072-0121 #D122 P-1 1/2" x 9" x 1'-3 1/2"
SN's 072-0112 #D113 P-1 1/4" x 9" x 1'-2" (See Detail A)

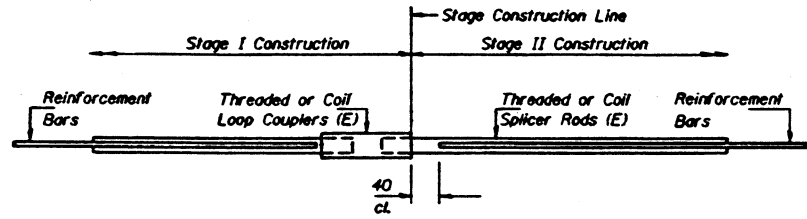


Girder Reaction SN's 072-0121 (EB) #D122 (WB)

	S. Abut (EB)	S. Abut (WB)
R _ϕ (K)	100.4	93.0
R _W (K)	51.7	45.6
R _{IMP} (K)	12.4	≈ 9.3
R _{Total} (K)	162.5	147.9

Min Jack Capacity
E.B. = 100 Tons
W.B. = 100 Tons

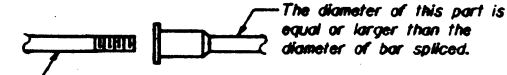
ADJUST ROCKER AND SOLE PLATE



BAR SPLICER ASSEMBLY DETAIL

Bar Size	No. Assemblies Required	Location

The diameter of this part is equal or larger than the diameter of bar spliced.



ROLLED THREAD DOWEL BAR



ONE PIECE



WIRE CONNECTOR

WELDED SECTIONS

BAR SPLICER ASSEMBLY ALTERNATIVES

** Heavy Hex Nuts conforming to ASTM A 563M, Grade C, D or DH may be used.

NOTES

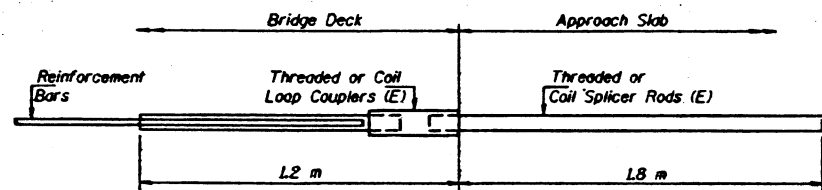
Bar splicer assemblies shall be of an approved type and shall develop in tension at least 125 percent of the yield strength of the lapped reinforcement bars. Splicer rods shall be of minimum 400 MPa yield strength, threaded or coiled full length. All reinforcement bars shall be lapped and tied to the splicer rods or dowel bars. Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. Other systems of similar design may be submitted to the Engineer for approval. Approval shall be based on certified test results from an approved testing laboratory that the proposed bar splicer assembly satisfies the following requirements:

- Minimum Capacity (Tension in kN) = $L25 \times 10^{-3} \times f_y \times A_s$
- Minimum Pull-out Strength (Tension in kN) = $L25 \times 10^{-3} \times f_{s_{allow}} \times A_s$

Where f_y = Yield strength of lapped reinforcement bars in MPa.
 $f_{s_{allow}}$ = Allowable tensile stress in lapped reinforcement bars in MPa (Service Load)
 A_s = Tensile stress area of lapped reinforcement bars (mm²)
 * = 28 day concrete

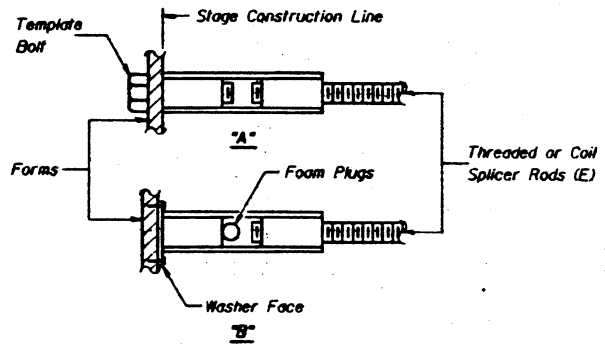
Bar Size to be Spliced	Splicer Rod or Dowel Bar Length	Strength Requirements	
		Min. Capacity kN - tension	Min. Pull-Out Strength kN - tension
#15	610 mm	100	40
#20	790 mm	150	60
#25	104 m	250	100
#30	137 m	350	140

Bar splicer assemblies shall be according to Section 508 of the Standard Specifications, except as noted. The furnishing and installation of bar splicer assemblies will be measured and paid for at the contract unit price each for "BAR SPLICERS." All dimensions are in millimeters (mm) except as noted.



INTEGRAL ABUTMENT BAR SPLICER ASSEMBLY DETAIL FOR #15 BAR

Min. Capacity = 100 kN - tension
Min. Pull-out Strength = 40 kN - tension
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.

BAR SPLICER ASSEMBLY DETAILS

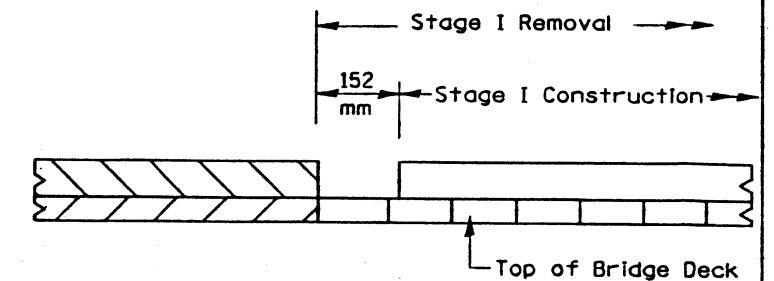
REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	

DRAWN BY
CHECKED BY

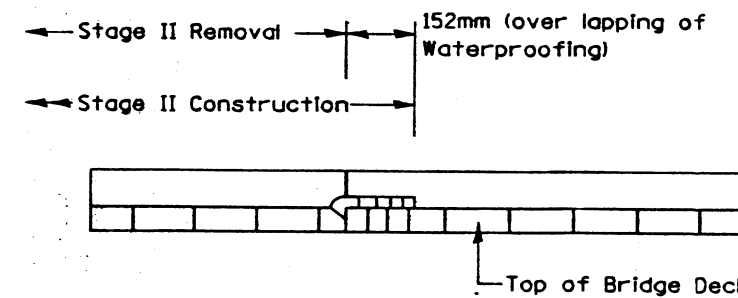
DATE

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-1,2,3,4)RS	PEORIA	25	210
STA.	TO STA.			
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

EXAMPLE OF WATERPROOFING TREATMENT @ STAGE LINE



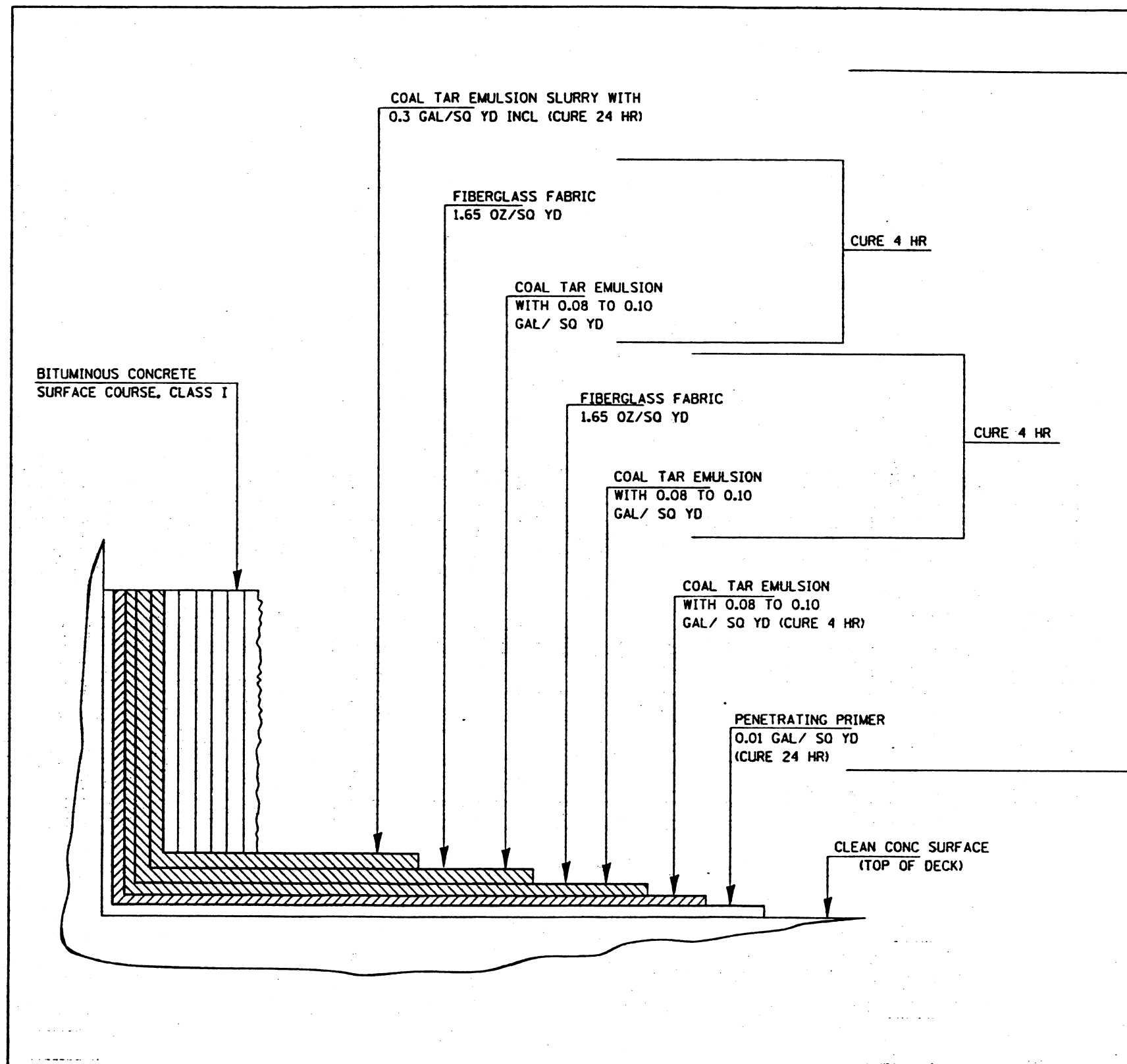
- Stage I Removal
 - Bituminous & Waterproofing
- Stage I Construction
 - Place Waterproofing to Stage Removal line
 - Place Bituminous to Stage Construction line



- LEGEND
- EX BITUMINOUS
 - EX WATERPROOF
 - NEW WATERPROOF
 - NEW BITUMINOUS

REVISIONS	
NAME	DATE

ILLINOIS DEPARTMENT OF TRANSPORTATION
 DETAIL OF
 WATERPROOF MEMBRANE
 SYSTEM

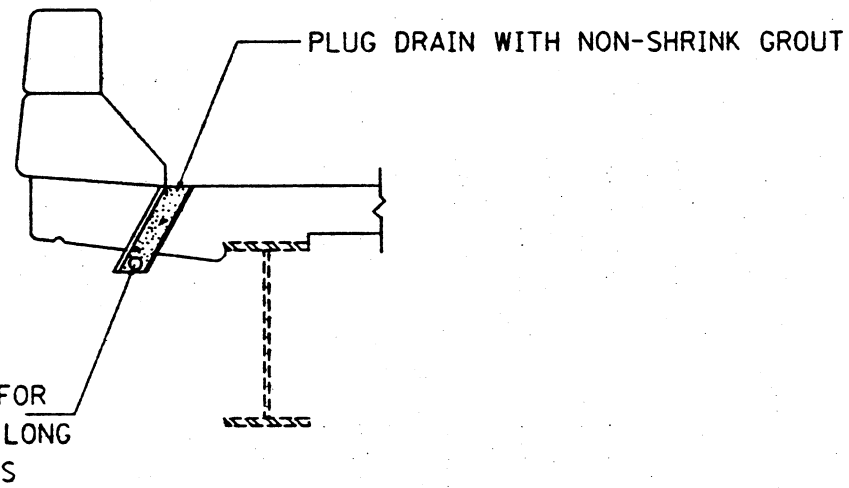


TO BE PAID FOR AS WATERPROOF MEMBRANE SYSTEM

DECK SURFACING DETAIL

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
474	(72-1.2.3.4)RS	PEORIA	259	211
STA.		TO STA.		
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT		

DRAIN PLUG DETAIL

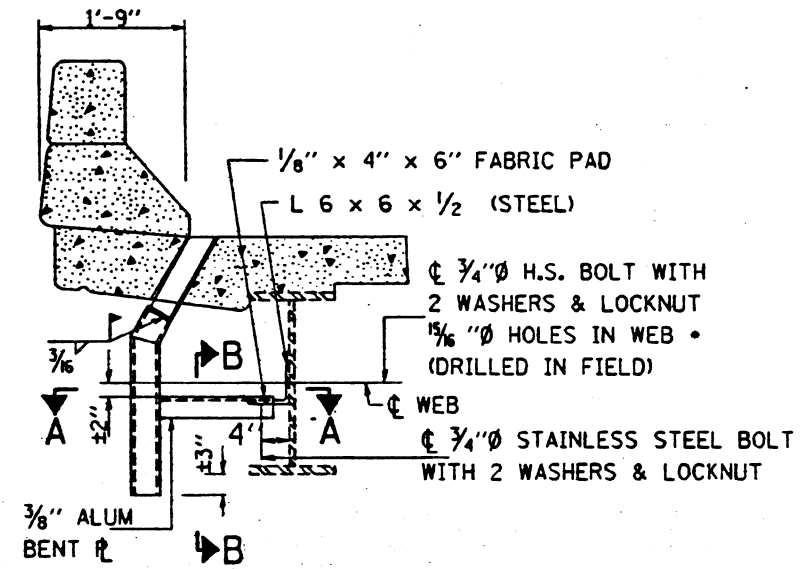


SECTION AT DRAIN

NOTE: ALL FLOOR DRAINS WITH IN 3m OF ABUTMENT AND PIERS SHALL BE PLUGGED WITH NON-SHRINK GROUT

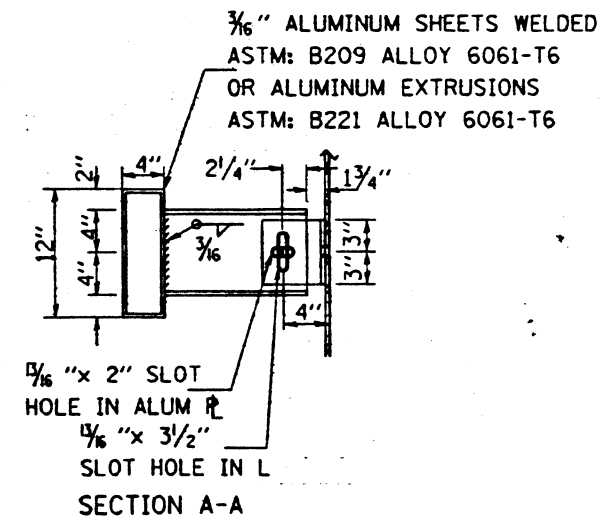
STRUTURE *21 US 24 OVER KICKAPOO CREEK
 EVERY OTHER DRAIN ACROSS DECK SHALL BE PLUGGED

DRAIN EXTENSION DETAIL

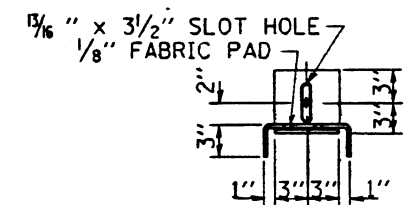


SECTION AT DRAIN

- CONCRETE BEANS
 ⌀ 3/4" Ø H.S. BOLT WITH 2 WASHERS AND EXPANSION ANCHOR (DRILLED IN FIELD)



SECTION A-A



SECTION B-B

REVISIONS		ILLINOIS DEPARTMENT OF TRANSPORTATION
NAME	DATE	
		DRAIN EXTENSION DETAIL & DRAIN PLUG DETAIL

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

**PLANS FOR PROPOSED
FEDERAL AID HIGHWAY**

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
1	COVER SHEET, LIST OF STANDARDS, SUMMARY OF QUANTITIES
2-3	REPAIR LOCATIONS AND DETAILS, QUANTITIES NOT OTHERWISE SHOWN
4	NEOPRENE EXPANSION JOINT DETAIL
5	TRAFFIC CONTROL DETAIL

LIST OF STANDARDS

2298-7	2304-7	2419
2299-10	2307-6	
2300-3	2315-6	
	2316-10	
	U-3	

SUMMARY OF QUANTITIES

CODE NUMBER	PAY ITEM	UNIT	QUANTITY
64800455	TRAF CONT & PROT 2304	L.SUM	1
Z0035000	NEOPRENE EXPAN JOINT 2"	LIN FT	480
Z0035100	NEOPRENE EXPAN JT 2 1/2"	LIN FT	251
Z0035200	NEOPRENE EXPAN JOINT 4"	LIN FT	410
40601300	BIT CONC SURF CSE MIX D CL I'	TON	23
50102400	CONCRETE REMOVAL	CU YD	110
50400300	CLASS X CONCRETE	CU YD	110
51200100	REINFORCEMENT BARS	POUND	9597
64800800	TRAF CONT & PROT 2316	L.SUM	1
65000100	MOBILIZATION	L.SUM	1
Z0062200	SAWED EXPANSION JOINT 4"	LIN FT	64
XZ172600	SAWED EXPANSION JOINT 9"	LIN FT	1547
64801630	TRAF CONT & PROT U-3	L.SUM	1
64800700	TRAF CONT PROT 2315	L.SUM	1

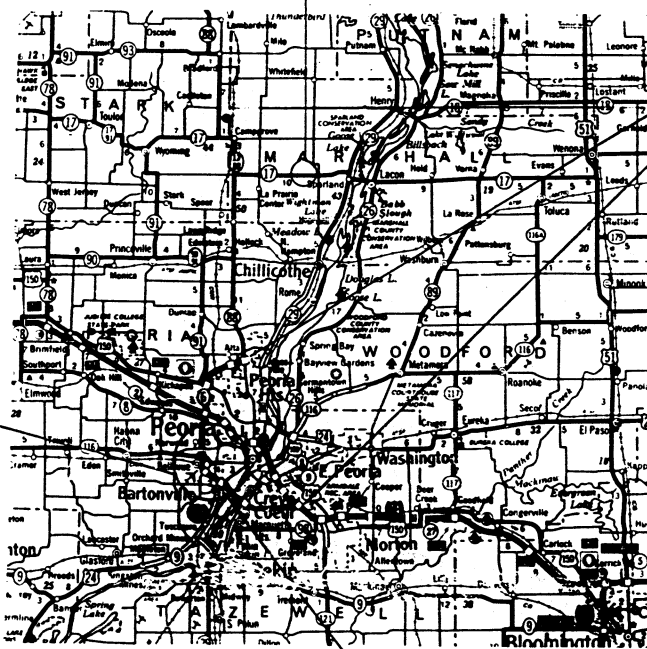
I-474 STRUCTURES

- 072-0112 OVER ILL. 8
- 072-0113 OVER BN RR AND KICKAPOO CREEK
- 072-0114 OVER C&NW RR
- 072-0128 OVER C&NW RR, KICKAPOO CR. AND KICKAPOO CR. RD.

**VARIOUS ROUTES
DISTRICT 4 JOINT REPAIR 1987-1
VARIOUS COUNTIES
C-94-335-86**

SN 062-0016

CARRYING ILL. 17 OVER SENACHWINE CREEK
3 1/2 MILES WEST OF SPARLAND



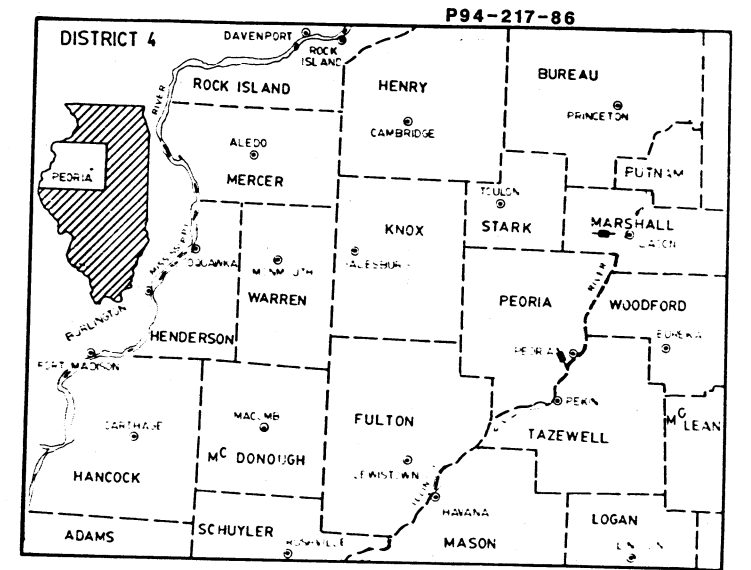
**VARIOUS STRUCTURES ON
ILL 6 AND I-474 FROM
MOSSVILLE TO MORTON
(SEE SHEET #3)**

072-0134

U.S. 24 OVER KICKAPOO CREEK
IN BARTONVILLE

FA RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
VARIOUS		VARIOUS	5	1

*DIST. 4 JOINT REPAIR 87-1



LOCATION OF SECTION INDICATED THIS: —

SUBMITTED August 25, 1986
 EXAMINED August 26, 1986
 EXAMINED August 26, 1986
 EXAMINED August 29, 1986
 DATE 2-2-87

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS**

SUBMITTED 2-2-87
 EXAMINED 2-25-87
 PASSED 2-29-87
 APPROVED 2-25-87

**FOR UTILITY INFORMATION
CALL J.U.L.I.E.
PHONE 800-892-0123**

DESIGNED BY: MAUREEN KELLY, LEROY WILLIAMS

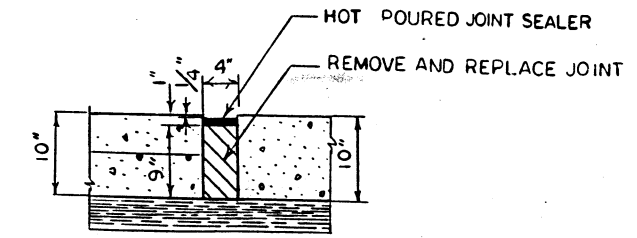
CONTRACT NO. 42446

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
VAR.	*	VAR	5	3
ILLINOIS PROJECT				

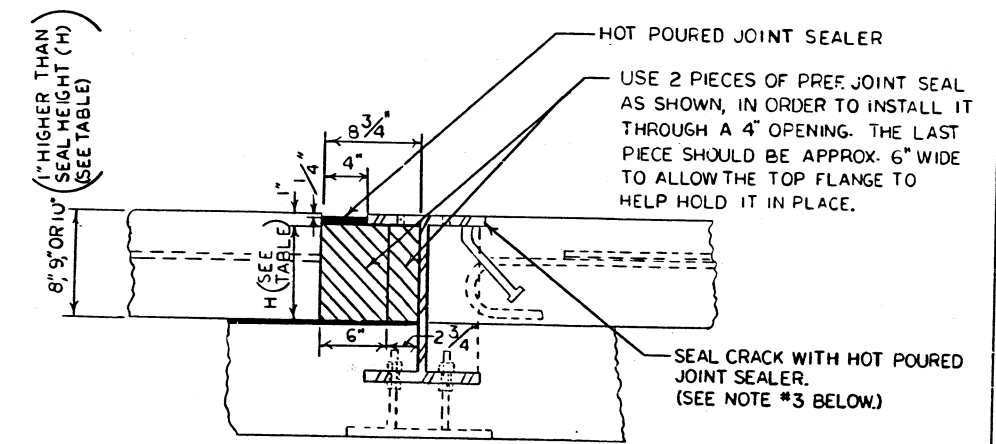
* DIST. 4 JOINT REPAIR 87-1

*STATION EQUATION
 220+37.64 = 474
 =399+37.64 NB 474
 =500+00.00 SB 474

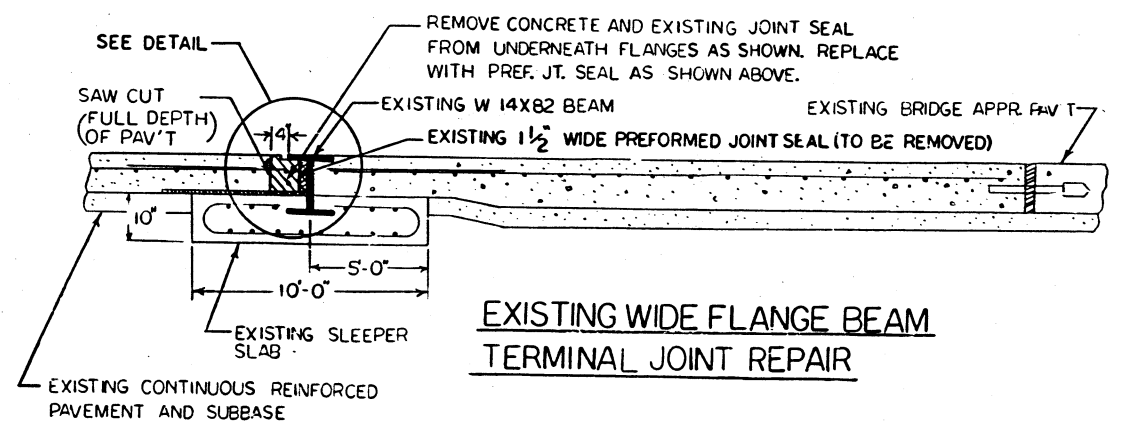
STRUCTURE NO.	STRUCTURE STA.	LOCATION	REPAIR LOCATION NO.	JOINT LOCATION		SAWED EXPAN JOINT 9"		SAWED EXPAN JOINT 4"		PREF JT SEAL HEIGHT (IN.)
				STA. SB(EB)	STA. NB(WB)	LN. FT. SB(EB)	LN. FT. NB(WB)	LN. FT. SB(EB)	LN. FT. NB(WB)	
072-0149	(IL 29 SPUR) 27+69.41	IL 29 SPUR OVER IL 6	16 & 17 18 & 19	(IL 29 SPUR) 25+16.55	(IL 29 SPUR) 25+32.89			16	16	9
072-0145	982+04.60	IL 6 (NB) OVER CH 15 (RADNOR RD.)	20 21	(IL 29 SPUR) 30+21.54	(IL 29 SPUR) 30+21.54			16	16	9
072-0144	982+04.60	IL 6 (SB) OVER CH 15 (RADNOR RD.)	22 23	980+48±	980+43±	24	24			9
072-0142	67+87	IL 6 (SB) OVER HOERR'S POND	24 25	56+19.74	982+61±	24	24			9
072-0141	57+87	IL 6 (NB) OVER HOERR'S POND	26 27	59+54.33	56+19.74	24	24			9
072-0139	169+02	IL 6 (SB) OVER CHARTER OAK RD.	28 29	167+08.55	59+54.33	24	24			7
072-0138	169+02	IL 6 (NB) OVER CHARTER OAK RD.	30 31	170+96.14	167+00.34	24	24			7
072-0106	215+44.31	I-474 (EB) OVER I-74 (WB)	32	213+05.12	170+99.93	42.94	24			7
072-0107	215+44.31	I-474 (WB) OVER I-74 (WB)	33		213+33.08		29.87			7
072-0108	218+48.5*	I-474 (EB) OVER I-74 (C3)	34	(SB 474) 500+39.39*		36.88				7
072-0109	218+48.5*	I-474 (WB) OVER I-74 (EB)	35		(NB 474) 399+55.82*	44.66				7
072-0110	(RDWY 'A') 134+33.5	I-474 RAMP (RDWY 'A') OVER I-74 (EB)	36 37		(RDWY 'A') 131+62.49	24	24			8
072-0111	(SB 474) 512+56.47	I-474 (EB) OVER I-474 RAMP (RDWY 'A')	38 39	(SB 474) 509+59.54	(RDWY 'A') 136+77.70	24	24			8
072-0112	57+77.61	I-474 (EB) OVER IL 8	40 41	(SB 474) 515+13.36	(ON RDWY 'B')	24	24			8
072-0113	57+77.61	I-474 (WB) OVER IL 8	42	55+57.46 (ON SB 474)	55+23.38	24	50.80			8
072-0114	67+98.63	I-474 (EB) OVER BN RR & KICKAPOO CR.	43	72+49.64		36				8
072-0015	67+98.63	I-474 (WB) OVER BN RR & KICKAPOO CR.	44		72+70.06	36				8
072-0016	114+78	I-474 (EB) OVER TR 173	45 46	112+81.65		24				8
072-0117	114+78	I-474 (WB) OVER TR 173	47 48	116+70.66	112+92.37	24	24			8
072-0121	223+71.15	I-474 (EB) OVER IL 116	49 50	221+31.14	116+66.13	24	24			8
072-0122	223+71.15	I-474 (WB) OVER IL 116	51 52	225+79.52	221+62.77	34.95	26.70			8
072-0124	252+62.17	I-474 (EB) OVER C & NW RR	53 54	250+26.80	225+95.30	24	24			8
072-0125	252+62.17	I-474 (WB) OVER C & NW RR	55 56	254+71.39		24				8
072-0127	355+00	I-474 (WB) OVER C & NW RR, KICKAPOO CR., AND KICKAPOO CR. RD.	57 58	250+43.39	254+92.44	24	24			8
072-0128	355+00	I-474 (EB) OVER C & NW RR, KICKAPOO CR., AND KICKAPOO CR. RD.	59 60	348+97.45	361+42.46	24	24			8
072-0129	378+49.7	I-474 (EB) OVER U.S. 24	61	362+27.96	376+07.19	24	41.68			8
072-0130	378+49.7	I-474 (WB) OVER U.S. 24	62		376+07.19		42.79			8
072-0131	390+67.76	I-474 (EB) OVER CR&P RR, P&PU RR, AND KICKAPOO CR.	63	393+95.57		35.99				8
072-0132	390+67.76	I-474 (WB) OVER CR&P RR, P&PU RR, AND KICKAPOO CR.	64		394+61.54	24				8
090-0109	83+94	I-474 (WB) OVER ILLINOIS RIVER (SHADE LOHMANN)	65 66	61+33.08	98+77.76	24	24			8
090-0108	83+94	I-474 (EB) OVER ILLINOIS RIVER (SHADE LOHMANN)	67 68	61+48.08	98+75.62	24	24			8
090-0107	115+10	I-474 (WB) OVER IL 29	69 70		113+81.02	24	31.78			8
090-0106	114+87	I-474 (EB) OVER IL 29	71 72	113+54.37	119+92.19	24	41.31			7
090-0118	(RDWY 'C') 33+35.04	I-474 (EB) RAMP (RDWY 'C') OVER I-474 (WB)	73	(RDWY 'C') 30+05.41		24				8
090-0102	(RDWY 'B') 23+40.90	I-474 (WB) RAMP (RDWY 'B') OVER I-74 (EB)	74 75		(RDWY 'B') 20+32.82	24				8
					(RDWY 'B') 26+45.24	24				8
					SUBTOTALS	759.14	787.77	32	32	
					TOTALS	1546.91	64			



DETAIL OF SAWED EXPAN. JOINT 4"



DETAIL OF SAWED EXPAN. JOINT 9"



EXISTING WIDE FLANGE BEAM TERMINAL JOINT REPAIR

- NOTES:
1. ALL PREFORMED JOINT SEALS SHALL BE A FLEXIBLE FOAM EXPANSION JOINT FILLER MEETING THE REQUIREMENTS AS STATED IN THE SPECIAL PROVISIONS.
 2. THE HOT POURED JOINT SEALER SHALL CONFORM TO THE REQUIREMENTS OF ARTICLE 716.04 OF THE STANDARD SPECIFICATIONS.
 3. ALL SHOULDER CRACKS ADJACENT TO THE JOINTS AND ALL CRACKS ALONG THE OPPOSITE SIDE OF THE BEAM FLANGES SHALL BE SEALED WITH THE HOT POURED JOINT SEALER. THE WORK INVOLVED IN SEALING THESE CRACKS WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED INCIDENTAL TO THIS CONTRACT.

DISTRICT NO. 4 PEORIA
 DESIGNED L. WILLIAMS
 DRAWN M. KENNY
 CHECKED M.K.
 DATE 12-86
 SCALE N.T.S.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
*	*	Various	5	4
SHEETS				

DIST. 4 JOINT REPAIR 87-1

GENERAL NOTES

Continuous Seal Neoprene Expansion Joint shall consist of molded anchor blocks of elastomer and steel, field assembled over continuous lengths of elastomeric membrane. See Special Provisions.

The elastomeric membrane shall be premolded with a single or a double upward convolution that will have a "memory" to return to its molded position upon joint closure.

The steel reinforcement must extend up the back face of anchor blocks when asphalt surfaces are used but is optional in concrete blockout.

The convolution length shall be such that the extended length will not be greater than the manufactured length when the joint is fully expanded in its design range and will not protrude above the anchor blocks when the joint is fully compressed.

Joint openings shall be adjusted in accordance with Article 50307(c) of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

The parapet and sidewalk flaps may be furnished factory vulcanized to the roadway membrane provided the centerline of the convolution is maintained and the process and method meet the approval of the Engineer.

Joint Size	"C" at 50°F	"D" at 50°F
2	2"	1½" min.
2½	2½"	1¾" min.
4	3"	2½" min.

INSTALLATION NOTES

Use anchor blocks and continuous seal as anchor bolt location templates.

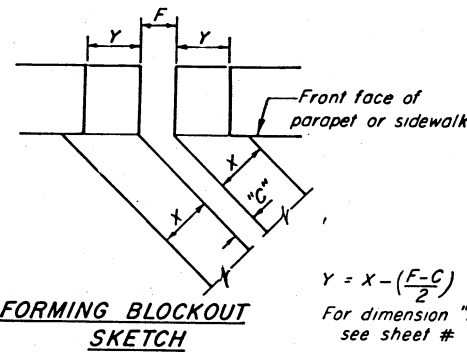
- 1 Install sponge mandrels into positions shown to form flap convolution.
- 2 Install parapet or sidewalk piece (trim roadway flap to fit before applying epoxy).
- 3 Install continuous seal in roadway.
- 4 Install anchor blocks as indicated.

NOTE A - Maximum spacing of anchor bolts shall be 12" centers

SKEW LIMITATIONS

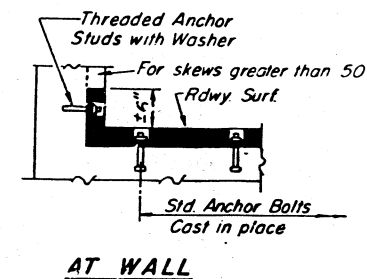
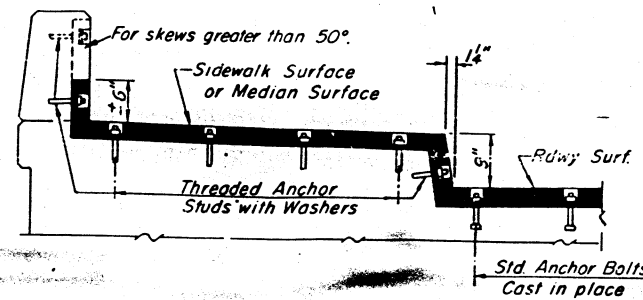
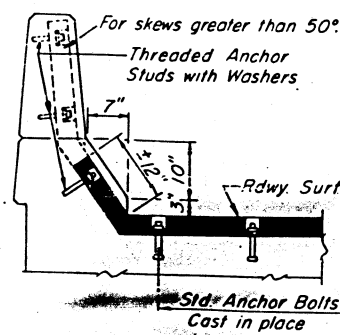
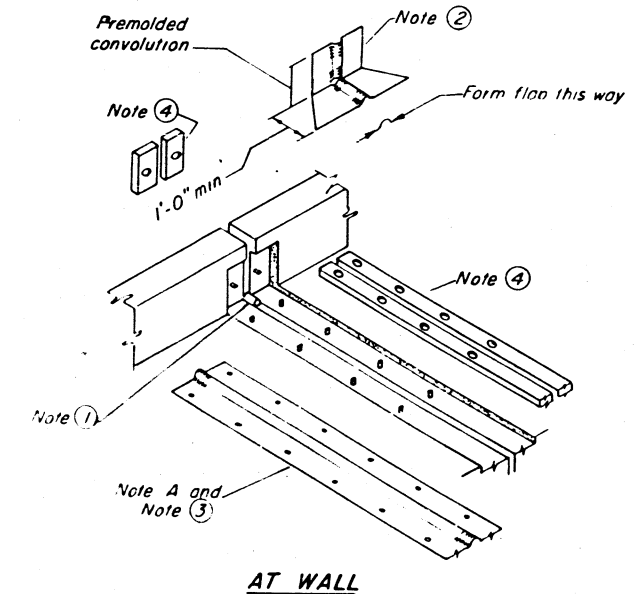
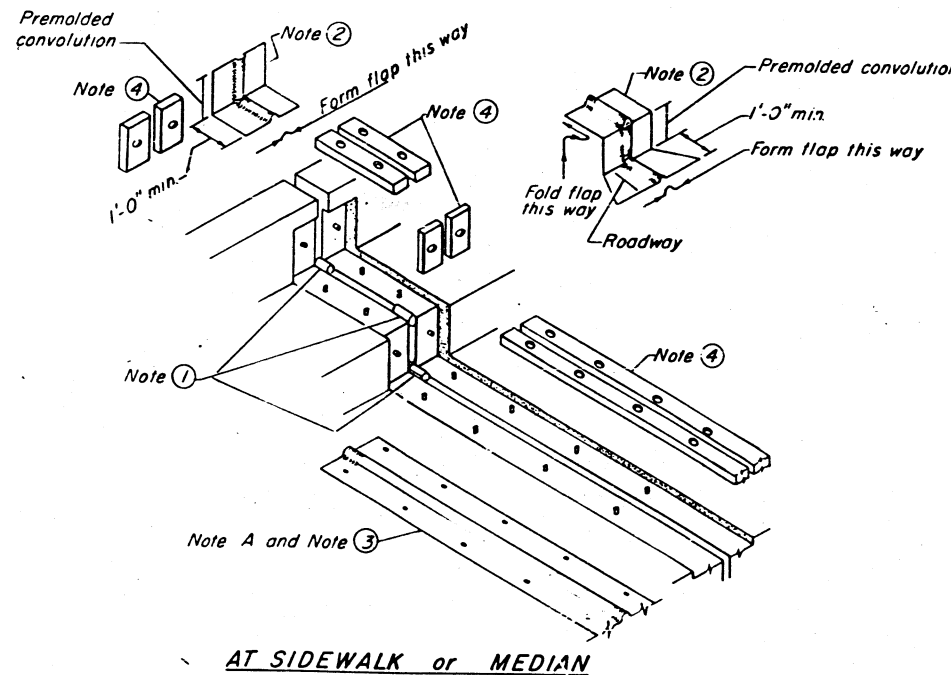
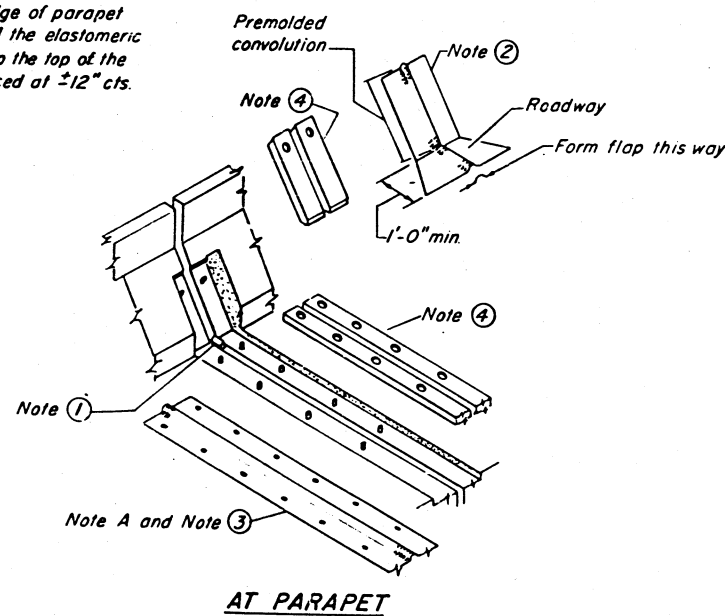
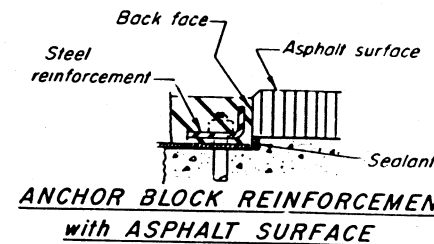
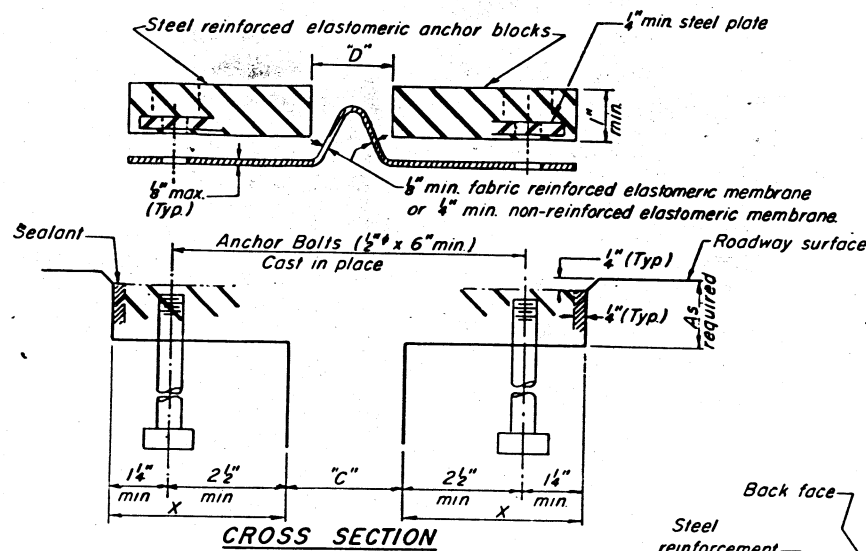
The details of the anchor blocks and the elastomeric membrane in the parapet, as shown, are for up to 50° skews.

For skews greater than 50°, the anchor blocks and the elastomeric membrane, installed in accordance with dimension "D", might require modifications to insure a minimum clearance of 1/8" from centerline of anchor studs to edge of parapet opening. The anchor blocks and the elastomeric membrane shall also be installed to the top of the parapet with the anchor studs spaced at ±12" cts.



$$Y = X - \left(\frac{F-C}{2}\right)$$

For dimension "F" see sheet #



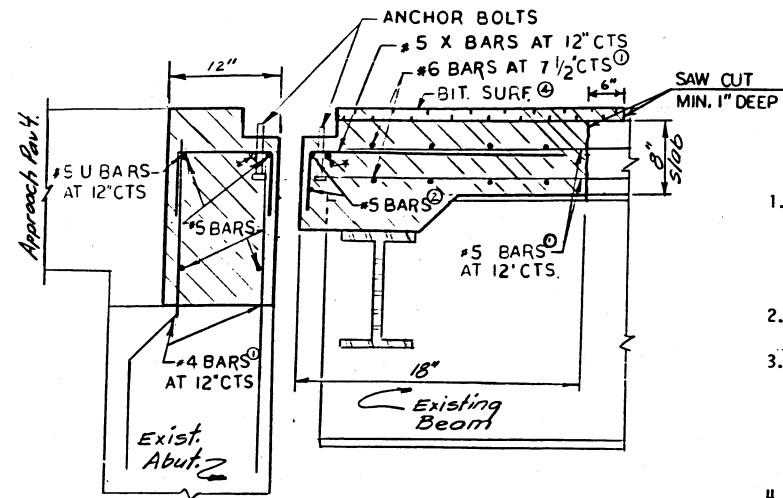
TYPICAL END TREATMENTS

CONTINUOUS SEAL TYPE
NEOPRENE EXPANSION JOINTS
For 2", 2½" and 4" Movement

DESIGNED	19
CHECKED	ENGINEER OF BRIDGE DESIGN
DRAWN	ENGINEER OF BRIDGES AND STRUCTURES
CHECKED	DIRECTOR OF HIGHWAYS

ROUTE NO.	SEC.	COUNTY	TOTAL SHEETS	SHEET NO.
Various		Various	5	2
ILLINOIS PROJECT				

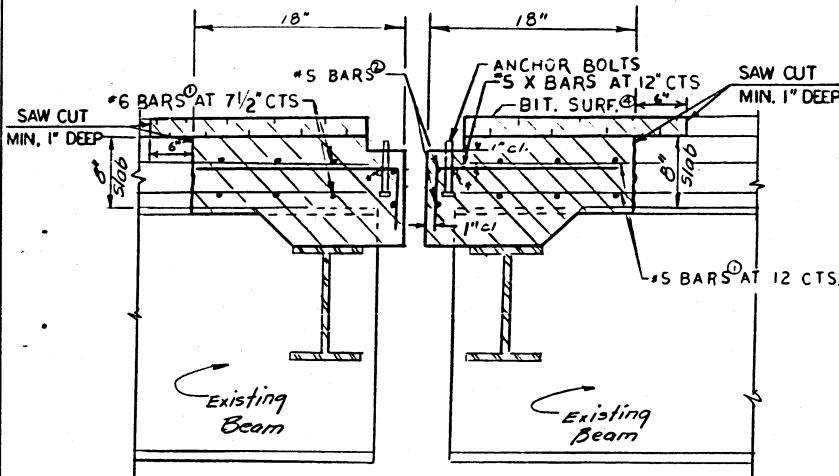
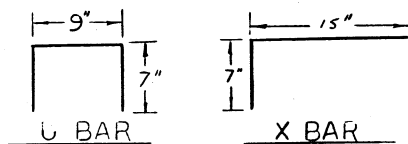
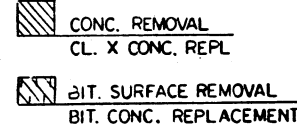
DIST. 4 JOINT REPAIR 87-1



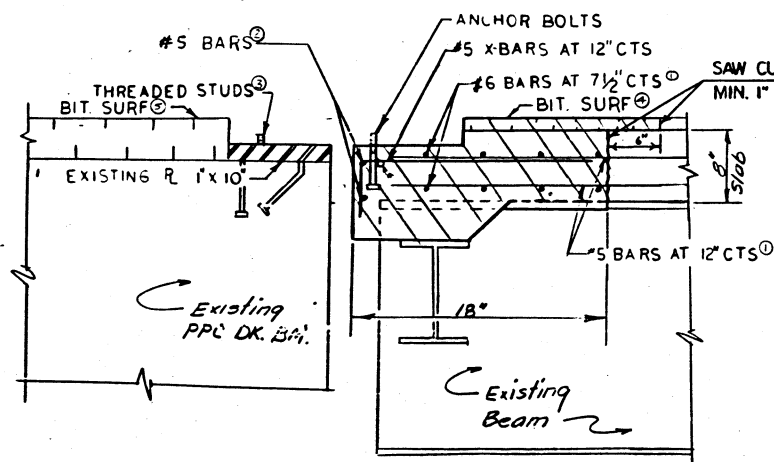
SECTION A
LOC. NO. 2,3,4,7, 8, 13, 14

- EXISTING REINFORCEMENT BAR. REBAR SHALL BE CLEANED AND REUSED. CLEANING REBAR SHALL BE INCIDENTAL TO CONCRETE REMOVAL. BROKEN OR DAMAGED REBAR SHALL BE REPLACED AT CONTRACTOR'S EXPENSE.
- THE #5 BARS SHALL BE PLACED PARALLEL TO THE JOINT.
- THE EXISTING THREADED STUDS SHALL BE REMOVED AND NEW THREADED STUDS SHALL BE WELDED AT THE REQUIRED SPACING. REMOVAL AND REPLACEMENT OF THE STUDS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR NEOPRENE EXPANSION JOINT.
- THE VOLUME OF BITUMINOUS SURFACE REMOVAL WILL NOT BE MEASURED OR PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCIDENTAL TO CONCRETE REMOVAL.
- ALL LOOSE BITUMINOUS CONCRETE ADJACENT TO THE JOINT SHALL BE REMOVED AND REPLACED, AND JOINTS FINISHED WITH A NEAT APPEARANCE. CARE SHOULD BE TAKEN AS NOT TO DAMAGE THE WATERPROOFING SYSTEM THAT IS TO REMAIN IN PLACE.

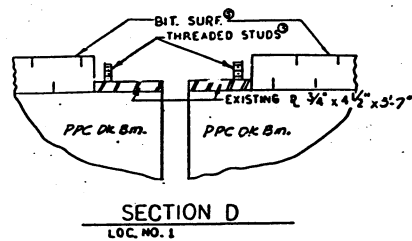
*PLACE BARS IN BACK OF ANCHOR BOLTS AS SHOWN IF REQUIRED TO MAINTAIN 1" CL. (+0-1/8"). ANCHOR BOLTS SHOULD BE TIED TO BARS.



SECTION B
LOC. NO. 5,6, 9,10,11,12



SECTION C
LOC. NO. 15



SECTION D
LOC. NO. 1

STRUCTURE NUMBER	LOCATION	REPAIR LOC. NO.	SKEW	NEOPRENE EXPAN. JOINT			CONC. REM. AND REPL.	REINFORCEMENT BARS
				2"	2 1/2"	4"		
062-0016	SECT 105 BR (IL 17 OVER SENACHWINE CR) PIER 2	1	35°	41 LIN.FT				
072-0112	FAI 474 SECT 72-2HB (1 474 (EB) OVER IL RTE 8) NORTH ABUT	2	17°	72 LIN.FT			8.6 CU. YD.	736 LB
072-0113	FAI 474 SECT 72-2HB (1 474 (WB) OVER IL RTE 8) NORTH ABUT	3	17°	63 LIN.FT			7.5 CU. YD.	642 LB
072-0114	FAI 474 SECT 72-2BVB (1 474 (EB) OVER BN RR AND KICKAPOO CR) EAST ABUT PIER 3 PIER 4 WEST ABUT	4	20°		58 LIN.FT		6.5 CU. YD.	590 LB
		5	20°		58 LIN.FT		5.6 CU. YD.	463 LB
		6	17°			55 LIN.FT	5.3 CU. YD.	440 LB
		7	17°			55 LIN.FT	5.8 CU. YD.	559 LB
		8	45°	109 LIN.FT			10.2 CU. YD.	1108 LB
		9	45°		89 LIN.FT		8.6 CU. YD.	711 LB
		10	45°		72 LIN.FT		6.9 CU. YD.	576 LB
072-0128	FAI 474 SECT. 72-4HVB (1 474 (EB) OVER C6NW RR, KICKAPOO CR, KICKAPOO CR RD.) EAST ABUT PIER 8 PIER 6 PIER 4 PIER 3 WEST ABUT	11	45°	58 LIN.FT		5.6 CU. YD.	464 LB	
		12	60°		80 LIN.FT		7.8 CU. YD.	639 LB
		13	60°		81 LIN.FT		7.7 CU. YD.	824 LB
072-0134	FAI 474 SECT. 48B (US. 24 OVER KICKAPOO CR IN BARTONVILLE) EAST ABUT PIER 2	14	90°	137 LIN.FT		18.5 CU. YD.	1394 LB	
		15	90°		113 LIN.FT		5.4 CU. YD.	451 LB
TOTALS				480 LIN.FT	251 LIN.FT	410 LIN.FT	110.0 CU. YD.	9597 LB

GENERAL NOTES:

CONCRETE REMOVAL AND REPLACEMENT, AS SHOWN IN SECTIONS A,B,C, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER CUBIC YARD AS CONCRETE REMOVAL AND CLASS X CONCRETE.

THE ADDITIONAL REINFORCEMENT BARS SHOWN IN SECTIONS A,B,C, SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER POUND FOR REINFORCEMENT BARS. WEARING SURFACE REPLACEMENT SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE MIX D CLASS I.

PRIOR TO REPLACING THE WEARING SURFACE, THE CONCRETE SHALL BE PRIMED AS SPECIFIED IN ARTICLE 406.06 OF THE STANDARD SPECIFICATIONS. THE WORK, EQUIPMENT, AND MATERIAL INVOLVED IN APPLYING THE PRIME COAT WILL NOT BE MEASURED SEPARATELY FOR PAYMENT, BUT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT UNIT PRICE PER TON FOR BITUMINOUS CONCRETE SURFACE COURSE MIX D CLASS I. ALL DEBRIS SHALL BE REMOVED FROM THE TOP OF THE ABUTMENTS AND PIERS AT THE REPAIR LOCATIONS.

Structure Numbers	LOCATION	Repair Location No.	No. of #5 U-bars	No. of #5 L-bars	No. of #5 Transvers	Length
072-0112	FAI 474 Sec 72-2HB (E.B.) South Abut.	2	73	73	12	37'-0"
072-0113	FAI 474 Sec 72-2HB (N.B.) South Abut.	3	63	64	12	32'-6"
072-0114	FAI 474 Sec 72-2BVB (E.B.) East Abut. Pier 3 Pier 4 West Abut.	4	58	58	12	30'-0"
		5	116		8	30'-0"
		6	110		8	28'-6"
		7	55	55	12	28'-6"
072-0128	FAI 474 Sec 72-4HVB (E.B.) East Abut. Pier 8 Pier 6 Pier 4 Pier 3 West Abut.	8	109	109	18	37'-8"
		9	178		12	30'-0"
		10	144		8	37'-0"
		11	116		8	30'-0"
		12	160		12	28'-0"
		13	81	81	18	28'-4"
072-0134	FAI 474 Sec 48B (US 24) East Abut. Pier 2	14	137	137	24	35'-9"
		15	113		8	29'-9"
TOTALS			1513	577		

QUANTITIES NOT OTHERWISE SHOWN

PAY ITEM	UNIT	QUANTITY
BIT CONC SURF CSE MIX D CL 1	TON	23
MOBILIZATION	L. SUM	1
TRAF CONT AND PROT STD 2316	L. SUM	1
TRAF CONT AND PROT STD 2304	L. SUM	1
TRAF CONT AND PROT U-3	L. SUM	1
TRAF CONT AND PROT STD 2315	L. SUM	1

THE CONTRACTOR SHALL CLEAR THE WORK AREAS OF ALL OBJECTS AND MATERIALS AT THE END OF EACH DAY'S OPERATIONS. ONE INCH THICK STEEL PLATES SHALL BE PLACED OVER ALL THE EXCAVATED HOLES DURING NON-WORK HOURS IN ORDER TO ELIMINATE TRAFFIC HAZARDS. THIS WORK WILL NOT BE MEASURED SEPARATELY FOR PAYMENT BUT SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE PER LINEAL FOOT FOR NEOPRENE EXPANSION JOINT. ANY REUSABLE PIECES OF THE EXISTING NEOPRENE EXPANSION JOINT MATERIAL SHALL, AT THE DISCRETION OF THE ENGINEER, BECOME THE PROPERTY OF THE STATE.

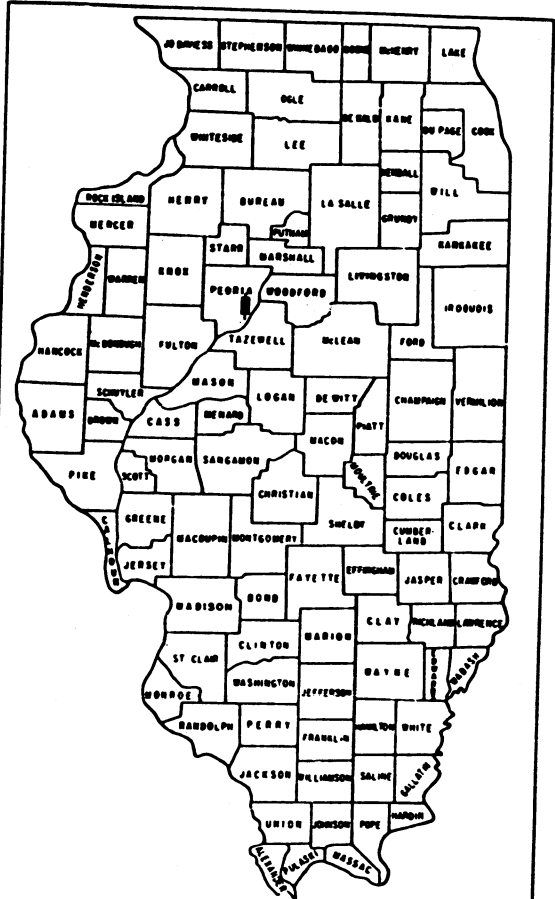
DISTRICT NO. 4 PEORIA
DESIGNED M. Kelly
DRAWN M.K.
CHECKED L.W.
DATE 6/86
SCALE NTS

Revised: Added Re-bar location table, 2-13-87; RAB

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
DIVISION OF HIGHWAYS
PLANS FOR PROPOSED
FEDERAL AID HIGHWAY

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-2	PEORIA	4	1
FED. ROAD DIV NO. 7	ILLINOIS	PROJECT I-474-7(98)		

P-94-017-00



LOCATION OF SECTION INDICATED THIS:

FOR INDEX
SEE SHEET NO. 3

SCALES { PLAN 1 INCH = 100 FT.
 PROFILE HOR. 1 INCH = 100 FT.
 PROFILE VERT. 1 INCH = 10 FT.
 CROSS-SECTIONS AS SHOWN

F.A.I. ROUTE 474
 SECTION 72-3HB-2
 PROJECT I-474-7(48)91
 PEORIA COUNTY
 C-94-007-71
 R.7.E.

SUBMITTED July 16, 1971
Elio Swan
 DIST. DESIGN ENGR.
 EXAMINED July 19, 1971
G. B. [unclear]
 DIST. CONST. ENGR.
 EXAMINED July 7, 1971
H.C. Bankie
 DIST. MAINT. ENGR.
 EXAMINED 7/16/71
[unclear]
 DIST. TRAFFIC ENGR.
 Entire section inspected and approved as to policy.
 DATE 7-19-71 *[unclear]*
 DISTRICT ENGINEER

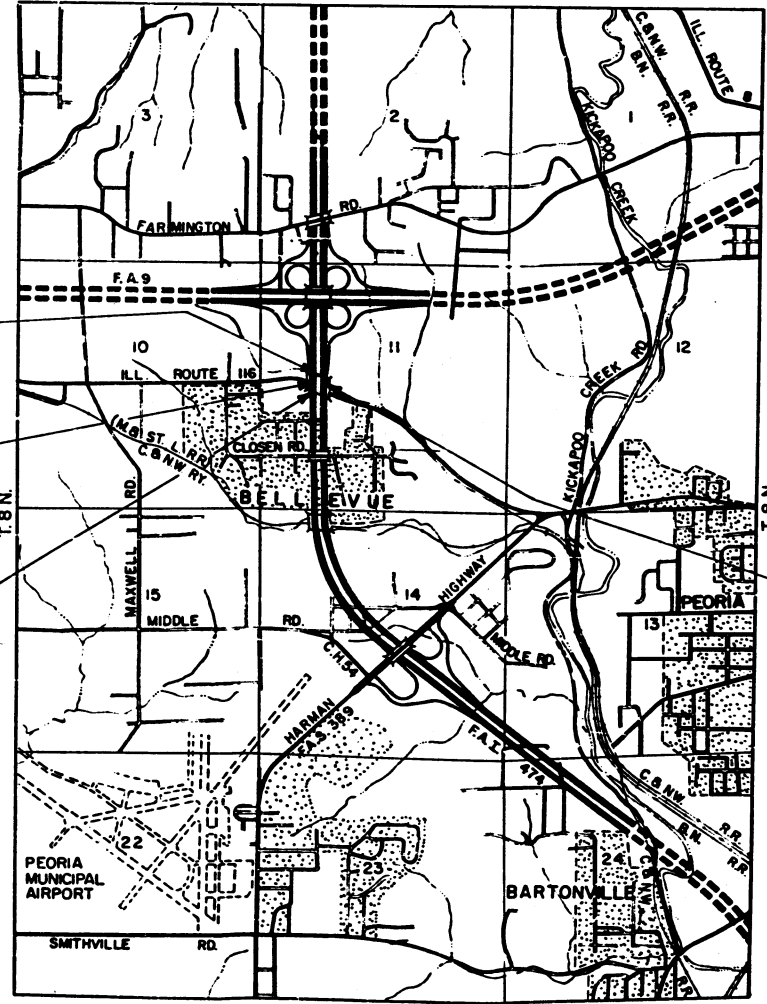
APPROVED
 FOR STRUCTURAL ADEQUACY ONLY
[Signature]
 Engineer of Bridge & Traffic Structures

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS AND BUILDINGS
 DIVISION OF HIGHWAYS
 SUBMITTED 7-19-71
[Signature]
 EXAMINED 8-3-71
[Signature]
 APPROVED 8-3-71
[Signature]
 APPROVED 7-3-71
[Signature]

BEGIN PROJECT
 STA. 222 + 92.88 N.B.
 STA. 222 + 61.25 S.B.

F.A.I. ROUTE 474
 SECTION 72-3HB-2
 STA. 223 + 71.15 F.A.I. 474
 = STA. 20 + 00.00 @ ILL. RTE. 116

END PROJECT
 STA. 225 + 11.04 N.B.
 STA. 224 + 49.41 S.B.



SECTION 72-3HB-2 INCLUDES
 TWO (2) PARALLEL 1 SPAN (124'-0")
 CONTINUOUS WELDED STEEL PLATE GIRDER
 STRUCTURES (CARRYING F.A.I. RTE. 474 OVER
 ILL. RTE. 116) ON P.C.C. VAULTED ABUTMENTS.

THIS SECTION ALSO INCLUDES THE
 CONSTRUCTION OF THE STRUCTURE
 CONES AND ALL APPURTENT WORK
 AS SHOWN ON THE PLANS.

DESIGN DESIGNATION
 F.A.I. 474 3190(92) • TRUNK • 10.77 (P.C.-20)

CONTRACT NO. 28718

LENGTH OF PROPOSED PROJECT
 • 218.16 N.B. FEET = 0.041 N.B. MILES
 188.16 S.B. FEET = 0.036 S.B. MILES

DEPARTMENT OF TRANSPORTATION
 FEDERAL HIGHWAY ADMINISTRATION
 APPROVED
 DIVISION ENGINEER DATE

REEL 4-94

CHRISTIAN-ROGE AND ASSOC., INC.

FEDERAL-AID ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 474	72-3HB-2	PEORIA	41	3
FED. ROAD DIV.	NO. 4	ILLINOIS	PROJECT	

SUMMARY OF QUANTITIES

SECTION		72-3HB-2			
LOCATION STATION		STA.223+7.15			
CONSTRUCTION TYPE CODE		X 271 Y005			
CODE NO.	ITEM	UNIT	TOTAL QUANTITY		
201005	TREE REMOVAL, ACRES	ACRES	109	109	
202001	EARTH EXCAVATION	CU YD	120,246	120,246	
202002	ROCK EXCAVATION	CU YD	10,000	10,000	
X26002	TOP SOIL PLACEMENT	SQ YD	13,501	13,501	
426008	BITUMINOUS CONCRETE SURFACE COURSE, CLASS I	TON	153	153	
521026	EXPANSION BOLTS 3/4 INCH	EACH	4	4	
X5000V	STRUCTURE EXCAVATION	CU YD	50	50	
503004	PROTECTIVE COAT	SQ YD	318	318	
504003	CLASS X CONCRETE	CU YD	1,140.6	1,140.6	
505008	FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 36 IN.	LIN FT	588	588	
507030	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1	1	
507025	STUD SHEAR CONNECTORS	EACH	2,271	2,271	
508005	ALUMINUM RAILING	LIN FT	791	791	
511004	PIPE CULVERTS, TYPE I CSCP 24"	LIN FT	238	238	
511044	PIPE CULVERTS, TYPE 7 CSCP 36"	LIN FT	70	70	
511788	METAL END SECTIONS 24"	EACH	1	1	
512001	REINFORCEMENT BARS	POUND	187,005	187,005	
513005	FURNISHING CREOSOTED PILES 20-1 TO 38 FEET	LIN FT	432	432	
513006	FURNISHING CREOSOTED PILES OVER 38 FEET	LIN FT	405	405	
513013	FURNISHING STEEL PILES 108P42	LIN FT	4,357	4,357	
513022	DRIVING TIMBER PILES	LIN FT	837	837	
513026	DRIVING STEEL PILES	LIN FT	4,357	4,357	
513033	TEST PILE STEEL 108P42	EACH	5	5	
514001	NAME PLATES	EACH	2	2	
602009	CORRUGATED STEEL PLATE PIPE CULVERTS 108"	LIN FT	465	465	
616225	PAVED DITCH, TYPE A-6	LIN FT	408	408	408
616229	PAVED DITCH, TYPE A-12	LIN FT	76	76	76
618001	SLOPE WALL 4 INCH	SQ YD	1,546	1,546	
629003	CHAIN LINK FENCE, 6'	LIN FT	1,305	1,305	
630029	BARRED WIRE FENCE, TWO STRAND	LIN FT	260	260	
639001	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	9	9	
642001	SEEDING, CLASS I	ACRES	4.8	4.8	4.8
642003	SEEDING, CLASS III	ACRES	2.8	2.8	2.8
546001	ENGINEER'S FIELD OFFICE, TYPE A	EACH	1	1	
210037	BUILDING REMOVAL NO. 1	L SUM	1	1	
210178	COAL TAR INTERLAYER PROTECTIVE COAT	SQ YD	1,811	1,811	
X20234	PREFORMED JOINT SEALER	LIN FT	199	199	
X21000	TRAINERS	HOUR	3,000	3,000	**

* CONSTRUCTION TYPE CODE C558
** CONSTRUCTION TYPE CODE Y080

SEEDING CLASS I AND CLASS III

ITEM	RATE
NITROGEN FERTILIZER NUTRIENT	120#/ACRE
PHOSPHOROUS FERTILIZER NUTRIENT	72#/ACRE
POTASSIUM FERTILIZER NUTRIENT	48#/ACRE
AGRICULTURE GROUND LIMESTONE	2 TON/ACRE
ASPHALT COATED MULCH	2 TON/ACRE
EMULSIFIED ASPHALT	100 GAL/TON MULCH

INDEX OF SHEETS

SHEET NO.	TITLE
1	TITLE SHEET
2	TYPICAL CROSS SECTIONS F.A.I. 474 SECTION 72-3
3	INDEX OF SHEETS, SUMMARY OF QUANTITIES, GENERAL NOTES
4	PLAN AND PROFILE F.A.I. ROUTE 474 STATION 190+00 TO STATION 220+00
5	PLAN AND PROFILE F.A.I. ROUTE 474 STATION 220+00 TO STATION 250+00
6-28	BRIDGE PLANS
29	DETAIL OF EXTENSION COLLAR, DITCH CHECK AND OUTLET 223+30
30-41	CROSS SECTIONS, F.A.I. ROUTE 474 STATION 213+98 TO STATION 229+00

- STANDARD 1686-3,
- STANDARD 1744-2
- STANDARD 2113-1
- STANDARD 2138-8
- STANDARD 2153-8
- STANDARD 2168-5
- STANDARD 2228-1
- STANDARD 2258-1
- STANDARD 2300
- STANDARD 2303-3
- STANDARD 2298-3
- STANDARD 2299-3

SCHEDULE OF CLASS X CONCRETE AND REINFORCEMENT BARS

LOCATION	CLASS X CONCRETE CU. YDS.	REINFORCEMENT BARS LBS.	ITEM
F.A.I. 474 STA. 223+7.15	1,138.2	186,920	BRIDGE
ILLINOIS ROUTE 116 STA. 18+23	0.4	25	CULVERT EXTENSION COLLAR
TOTAL	1,138.6	186,945	

GENERAL NOTES

ALL ELEVATIONS REFER TO U.S.C. & G.S. MEAN SEA LEVEL DATUM.
THE PROFILE GRADE LINE REFERS TO THE GRADE ELEVATION AT THE POINT SHOWN ON THE TYPICAL SECTION AND PLANS.
WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKS AND MONUMENTS UNTIL THE OWNER, AN AUTHORIZED SURVEYOR, OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.
THE STANDARDS WITH THE REVISION NUMBERS LISTED IN THE INDEX OF SHEETS, SHALL APPLY TO THIS SECTION.
TWO SIGNS CONFORMING TO STANDARD 2153 SHALL BE ERECTED AT LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
THE FOLLOWING UTILITY COMPANIES HAVE FACILITIES WITHIN THE LIMITS OF CONSTRUCTION:

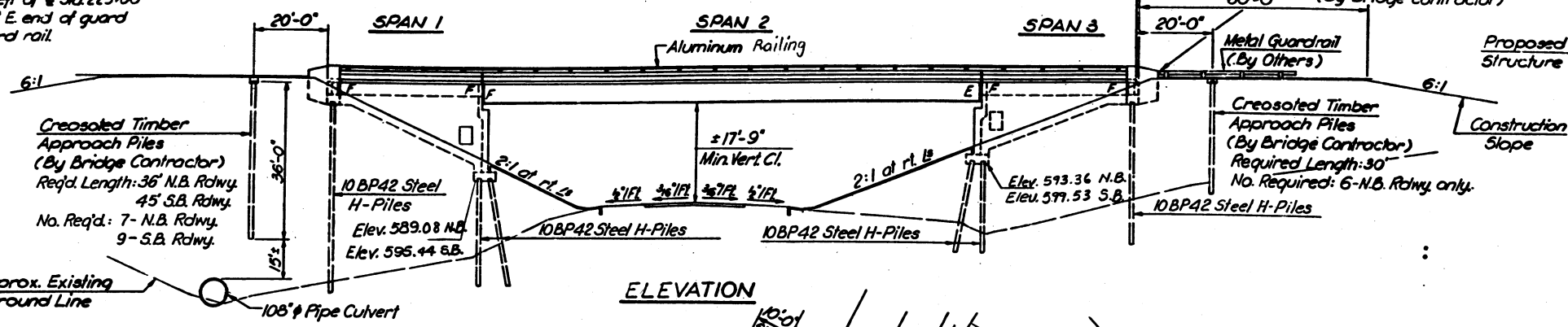
CENTRAL ILLINOIS LIGHT COMPANY
300 LIBERTY
PEORIA, ILLINOIS 61602
ILLINOIS BELL TELEPHONE COMPANY
411 HAMILTON BOULEVARD
PEORIA, ILLINOIS 61602

F.A.I. ROUTE 474
SECTION 72-3HB-2
INDEX OF SHEETS
SUMMARY OF QUANTITIES
GENERAL NOTES

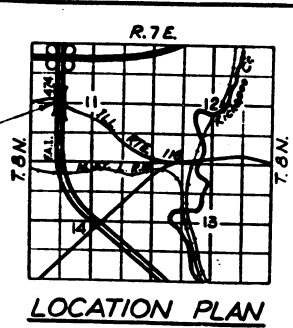
REV. 01-77 G.M.
1-27-77 G.M.

B.M. F-10 - El 568.323; A 5'x5' concrete monument with copperweld disc stamped F-10 located 340' left of Sta. 225+00 on N. side of Hwy. 116 at E. end of guard rail 4' N. of end of guard rail.

620
610
600
590
580
570
560



ELEVATION



LOCATION PLAN

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-2	PEORIA	41	6
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	

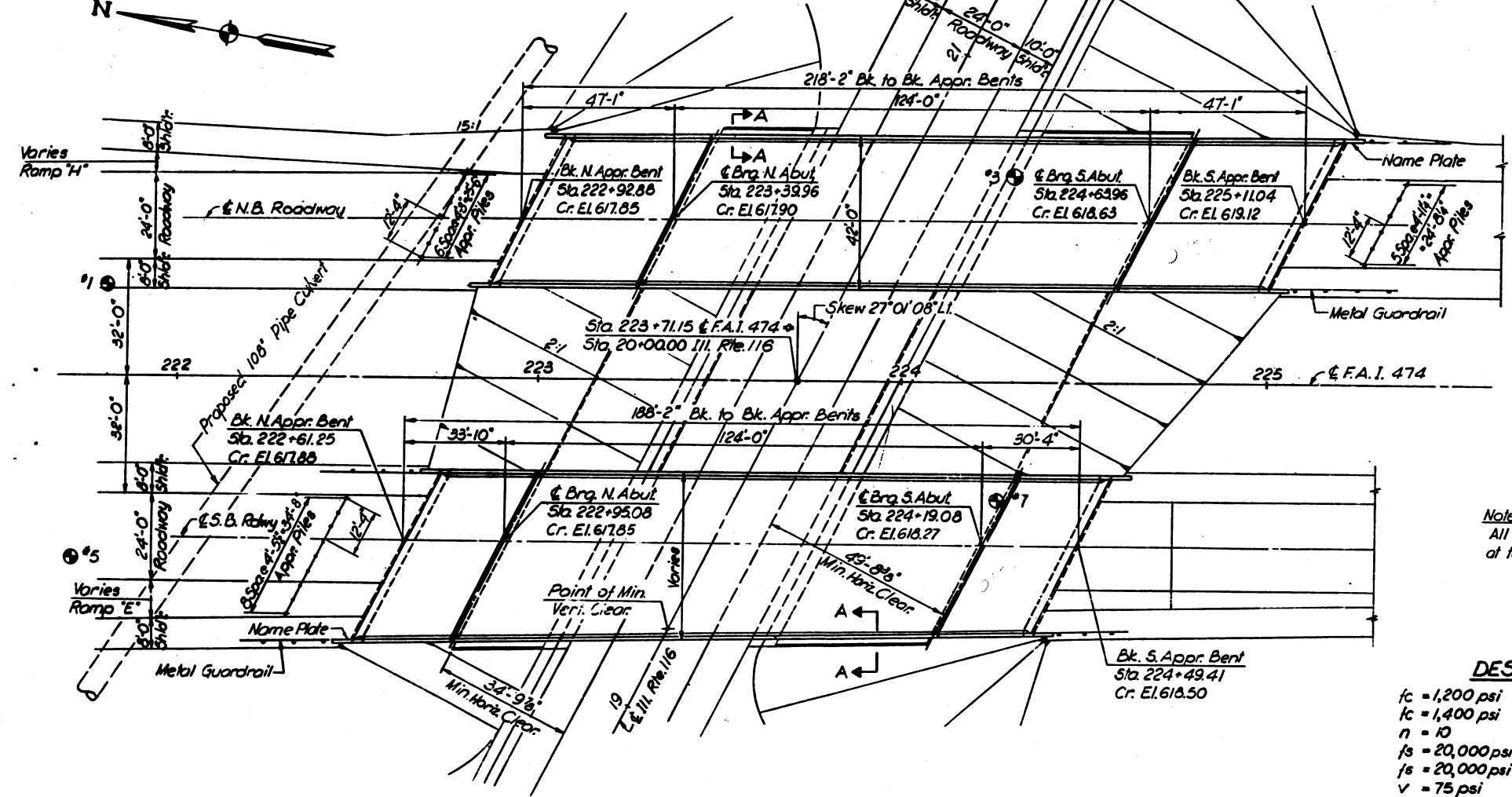
GENERAL NOTES

All reinforcement bars shall be lapped 24-diameters unless otherwise shown.
Fasteners shall be high strength bolts. Bolts 3/4"; open holes 13/16", unless otherwise noted.
Calculated weight of Structural Steel = 469,050 Lbs.
The Basic Lead Silico Chromate paint system shall be used for shop and field painting of structural steel.
SLOPEWALL EXCAVATION IN EXISTING GROUND AND EMBANKMENT AREAS SHALL BE INCIDENTAL TO STRUCTURE EXCAVATION
Anchor bolts shall be set before bolting cross frames over supports.
Slope wall shall be reinforced with welded wire fabric 6" x 6" mesh, weighting 58# per 100 sq. ft..
The Contractor shall drive one Steel Test Pile in a permanent location at the N.45. Appr. Bent, S. Abut. of the N.B. Roadway, N. Abut. and S. Appr. Bent of the S.B. Roadway as directed by the Engineer before ordering the remainder of piles.

An alternate strand pattern using Extra High Strength Prestressing strand (270 K.S.I.) is permitted.
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.
Protective Coat shall not be applied to surfaces to which Coal Tar Interlayer Protective Coat is applied.
FIELD WELDING OF CONSTRUCTION ACCESSORIES TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 1' OF THE SLAB EACH WAY FROM PIER SUPPORTS ON THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

STATION 223+71.15
BUILT 197 BY
STATE OF ILLINOIS
F.A.I. RT. 474 SEC. 72-3HB-2
F.A. PROJ. I-474-7489W
LOADING HS20 & ALT.

NAME PLATE
See Std. 2113-1



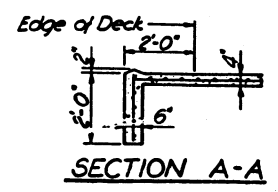
PLAN
Scale: 1"=20'

Note:
All Elevations shown on Plan are at top of 1/2" Wearing Surface.

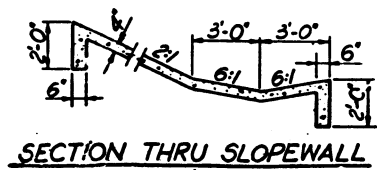
DESIGN STRESSES

$f_c = 1,200$ psi Deck Slab
 $f_c = 1,400$ psi Substructure, Curb & Parapet
 $n = 10$
 $f_s = 20,000$ psi Structural Steel
 $f_s = 20,000$ psi Reinforcement
 $v = 75$ psi Footings
L.L. Deflection: $\frac{L}{1,440}$

Precast Prestressed Concrete I-Beams
 $f_c = 5,000$ psi
 $f_{ci} = 4,000$ psi
 $f_s = 248,000$ psi (Strands)
 $f_{si} = 173,600$ psi (Strands)



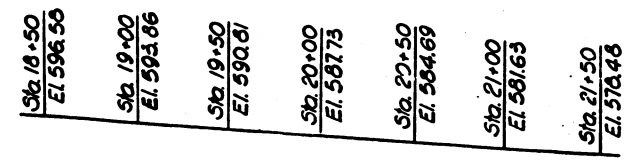
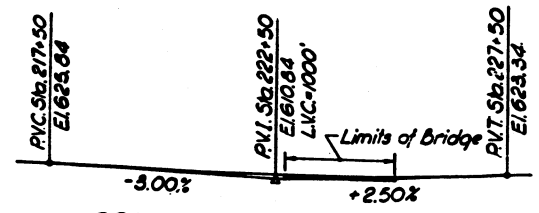
SECTION A-A



SECTION THRU SLOPEWALL

PROFILE OF F.A.I. 474
Top 1/2" Wearing Surface

PROFILE OF ILL. RTE. 116

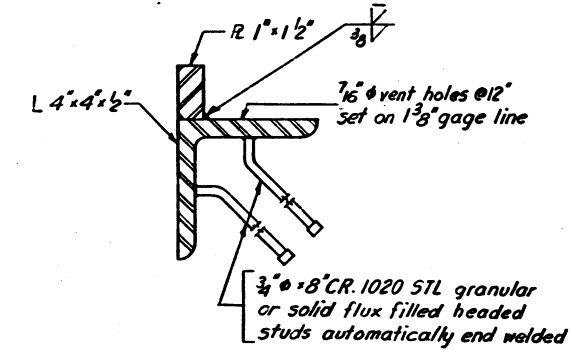
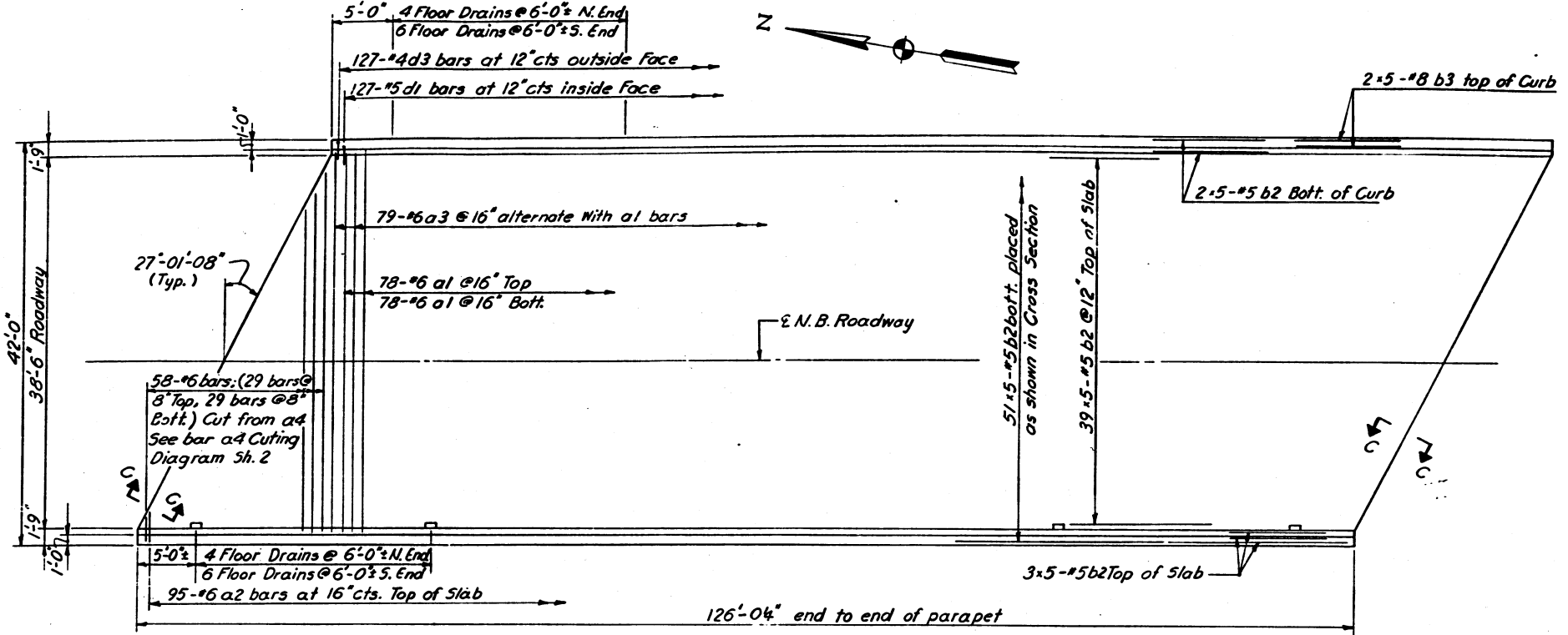


TOTAL BILL OF MATERIAL

Item	Unit	Superstr.	Substr.	Total
Coal Tar Interlayer Protective Coat	Sq. Yd.	1,811	—	1,811
Preformed Joint Sealer	Lin. Ft.	199	—	199
Bituminous Conc. Surface Course, Class I	Ton	153	—	153
Structure Excavation	Cu. Yd.	—	50	50
Class X Concrete	Cu. Yd.	608.3	529.9	1,138.2
F. & E. PP Concrete I-36	Lin. Ft.	588	—	588
F. & E. Structural Steel	Lump Sum	1	—	1
Stud Shear Connectors 3/4"φ	Each	2,271	—	2,271
Aluminum Railing	Lin. Ft.	791	—	791
Reinforcement Bars	Lb.	135,620	51,300	186,920
Creosoted Piles 20.1 to 38 Ft.	Lin. Ft.	—	432	432
Creosoted Piles over 38 Ft.	Lin. Ft.	—	405	405
Steel Piles 10BP42	Lin. Ft.	—	4,357	4,357
Test Pile Steel 10BP42	Each	—	5	5
Name Plate	Each	—	2	2
Slope Wall 4'	Sq. Yd.	—	1,546	1,546
Protective Coat	Sq. Yd.	290	28	318

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
GENERAL PLAN
F.A.I. ROUTE 474
OVER
ILLINOIS ROUTE 116
STA. 223+71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

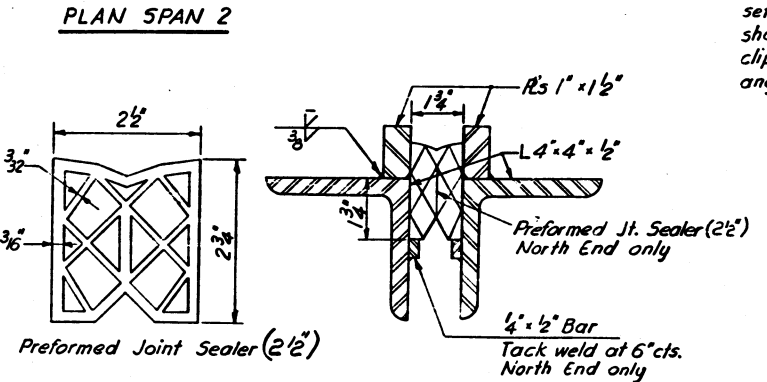
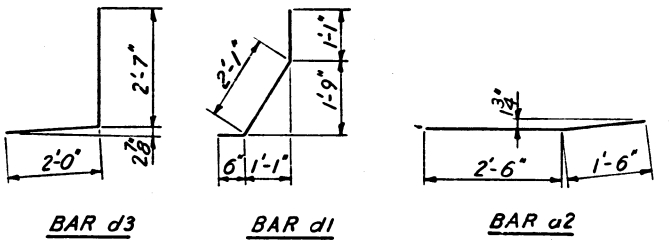
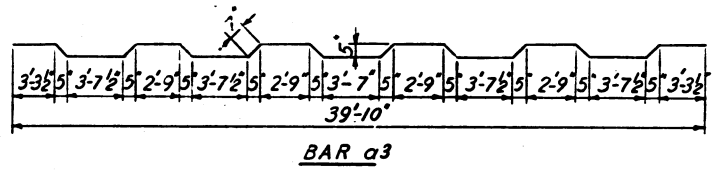
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-7HB-2	PEORIA	41	8
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	



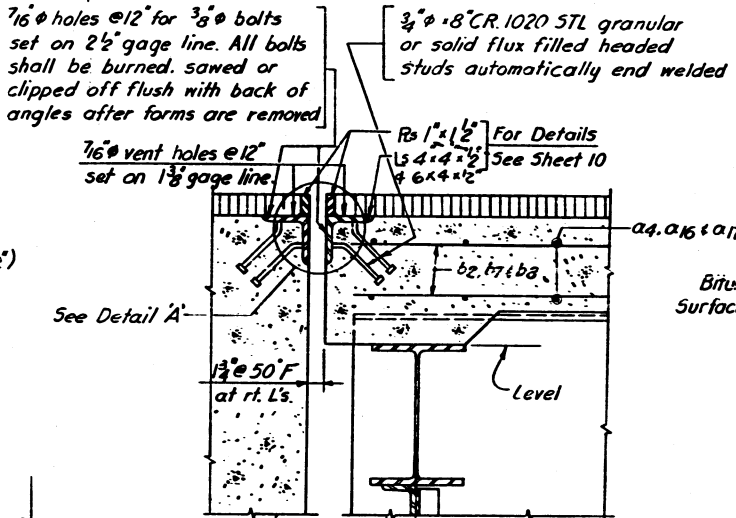
BILL OF MATERIAL

Bar No.	Size	Length	Shape
a1	156	#6	39'-5"
a2	190	#6	4'-0"
a3	79	#6	41'-6"
a4	58	#6	38'-8"
b2	500	#5	26'-3"
b3	20	#8	26'-10"
d1	254	#5	3'-8"
d3	254	#4	4'-7"
Pref. Joint Sealer			Lin. Ft. 96
Protective Coat			Sq. Yd. 92
Reinforcement Bars			Lb 35540
Class 'X' Concrete			Cu. Yd. 156.0
Coal Tar Interlayer Prot. Coat			Sq. Yd. 543
Structural Steel			Lb 226,760
Stud Shear Connector			Ea. 1,134
Bit. Concr. Surface Course Class I			Ton 46.0

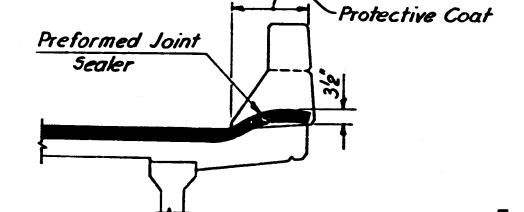
DETAIL B
For additional Details see Sh. 10



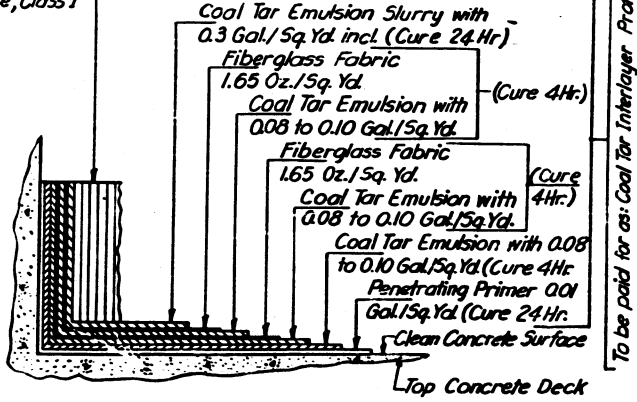
DETAIL A
North Abutment
for So. Abut. See Sh. 10



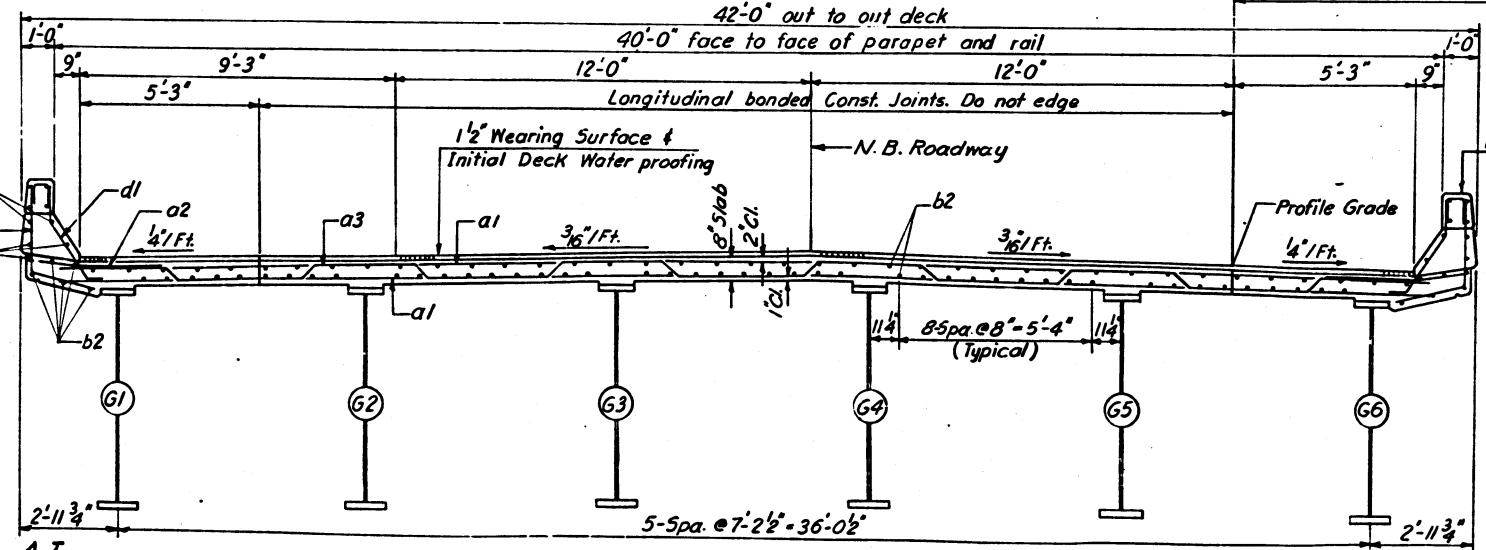
SECTION C-C



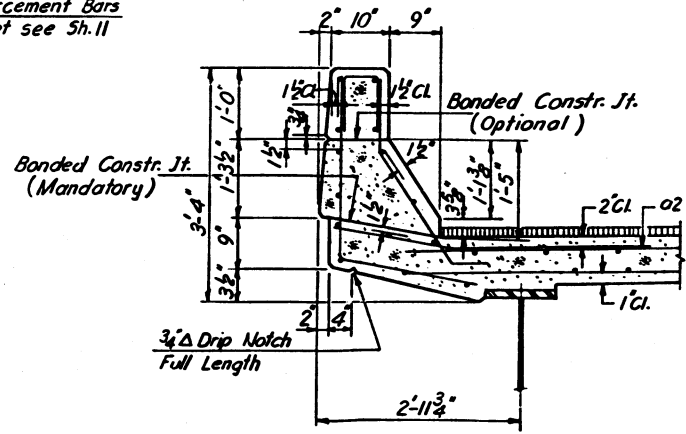
TYPICAL END OF SEALER TREATMENT
& Limits of Protective Coat



DECK SURFACING DETAIL



CROSS SECTION
Looking South



CURB SECTION

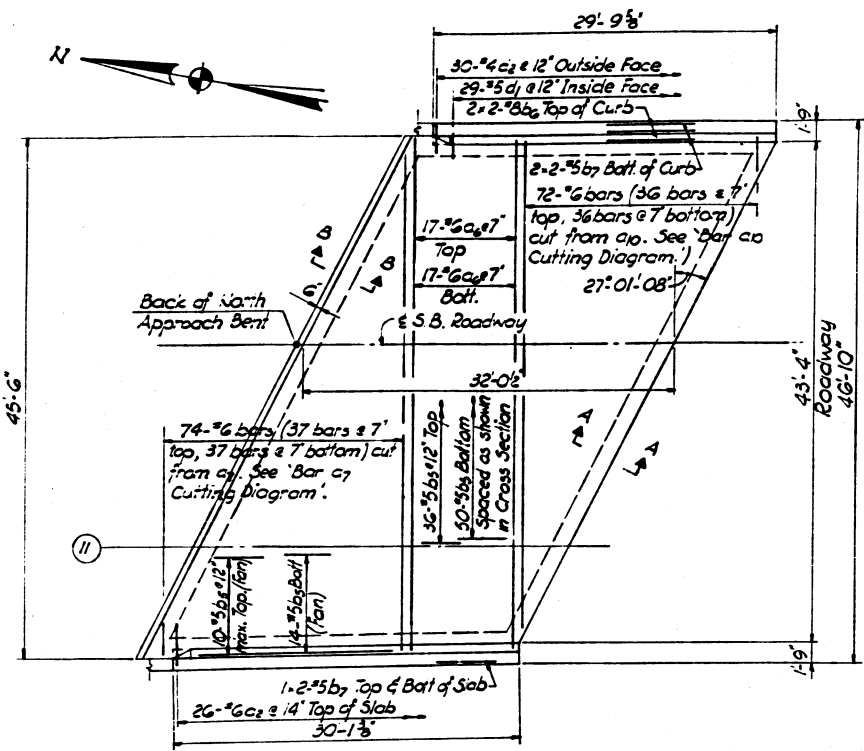
DESIGNED BY: A.T.
DRAWN BY: J.V.
CHECKED BY: A.T.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
SUPERSTRUCTURE SPAN 2
NORTHBOUND ROADWAY
F.A.I. ROUTE 474 OVER
ILLINOIS ROUTE 116
STA. 223 + 71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

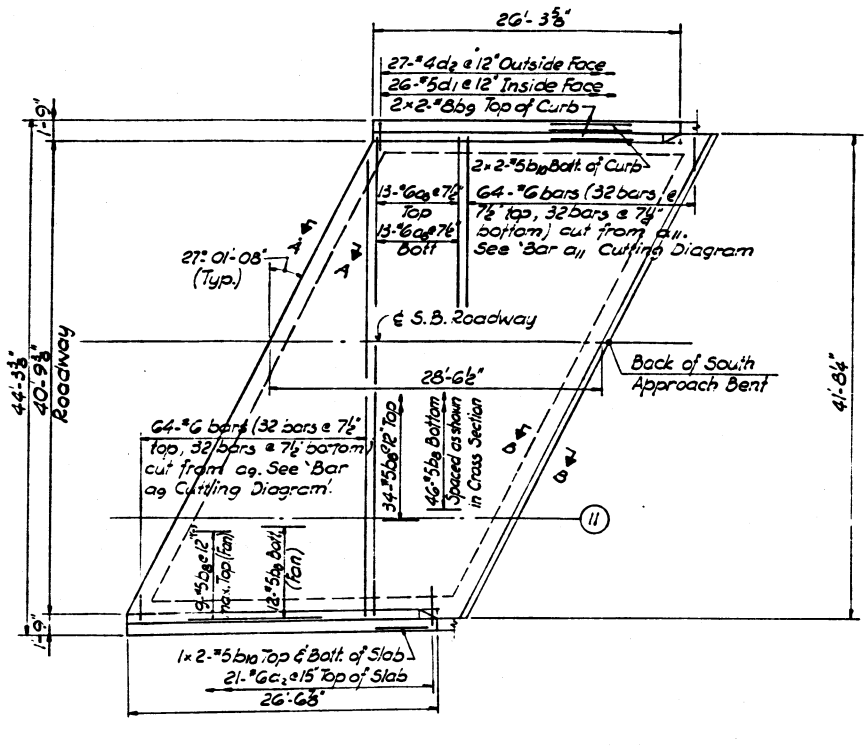
SHEET
3 of 23

To be paid for as: Coal Tar Interlayer Protective Coat

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-5HB-2	PEORIA	41	9
FED. ROAD DIV. NO. 7		ILLINOIS PROJECT		



PLAN SPAN 1 -



PLAN SPAN 3

BILL OF MATERIAL, SPAN 1

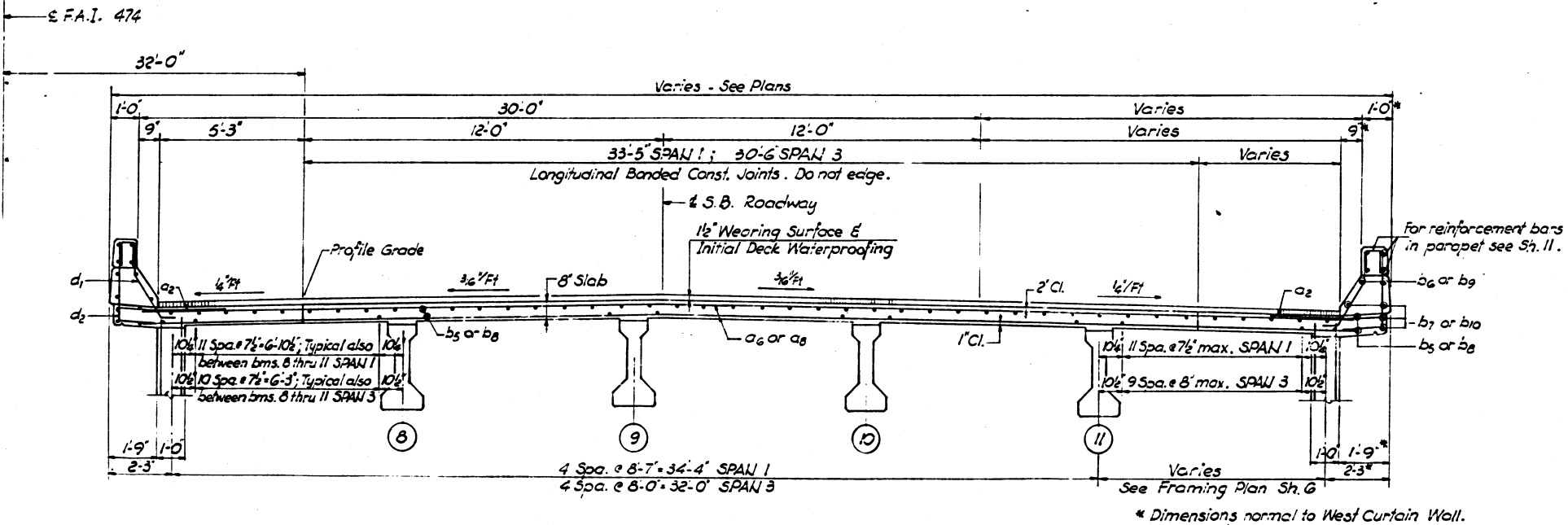
Bar	Number	Size	Length	Shape
a ₂	52	#6	4'-0"	—
a ₆	34	#6	44'-6"	—
a ₇	37	#6	46'-10"	—
a ₁₀	36	#6	46'-0"	—
b ₅	110	#5	31'-9"	—
b ₆	8	#8	15'-11"	—
b ₇	16	#5	15'-7"	—
d ₁	58	#5	3'-8"	L
d ₂	60	#4	4'-0"	L
m ₄	6	#5	24'-2"	—
m ₅	10	#4	7'-8"	—
m ₆	10	#4	6'-10"	—
m ₇	18	#4	8'-8"	—
m ₉	10	#5	7'-6"	—
m ₁₁	6	#5	26'-9"	—
m ₁₂	2	#4	8'-0"	—
s	35	#4	7'-9"	U
s ₁	35	#4	8'-11"	U
s ₂	30	#4	7'-0"	U

Class 'X' Concrete	Cu. Yds	63.0
Reinforcement Bars	Lbs	13,460
Coal Tar Interlayer Prot. Coat	Sq. Yds	156
Bituminous Concrete Surface Course, Class I	Tons	13
Protective Coat	Sq. Yds	23

BILL OF MATERIAL, SPAN 3

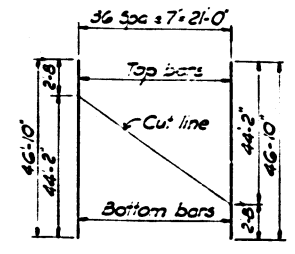
Bar	Number	Size	Length	Shape
a ₂	42	#6	4'-0"	—
a ₆	26	#6	41'-1"	—
a ₉	32	#6	42'-7"	—
a ₁₁	32	#6	44'-1"	—
b ₆	101	#5	28'-3"	—
b ₉	8	#8	14'-2"	—
b ₁₀	16	#5	13'-10"	—
d ₁	52	#5	3'-8"	L
d ₂	54	#4	4'-0"	L
m ₂	6	#5	24'-2"	—
m ₃	13	#4	8'-1"	—
m ₁₀	9	#5	7'-0"	—
m ₁₁	6	#5	26'-9"	—
m ₁	2	#4	6'-7"	—
m ₂	1	#5	6'-6"	—
s	30	#4	7'-9"	U
s ₁	30	#4	8'-11"	U

Class 'X' Concrete	Cu. Yds	51.9
Reinforcement Bars	Lbs	10,680
Coal Tar Interlayer Prot. Coat	Sq. Yds	129
Bituminous Concrete Surface Course, Class I	Tons	11
Protective Coat	Sq. Yds	21

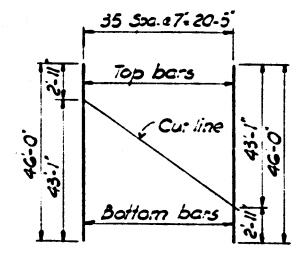


DECK CROSS SECTION Looking South

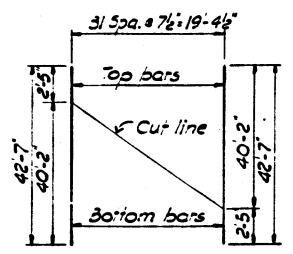
Notes:
For Section A-A, Section B-B, Curb Section and details of bars c₁, d₂ and a₂ see Sh. 2.
For details of expansion guards see Section C-C Sh. 3.
For placement and details of bars m₁ thru m₁₂ and s thru s₂ see Sh. 6.
For Deck Surfacing Detail see Sh. 3.



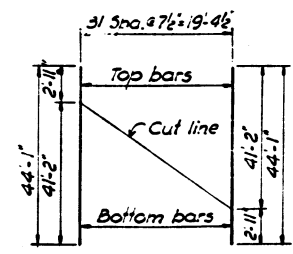
BAR a₇ Cutting Diagram



BAR a₁₀ Cutting Diagram



BAR a₉ Cutting Diagram



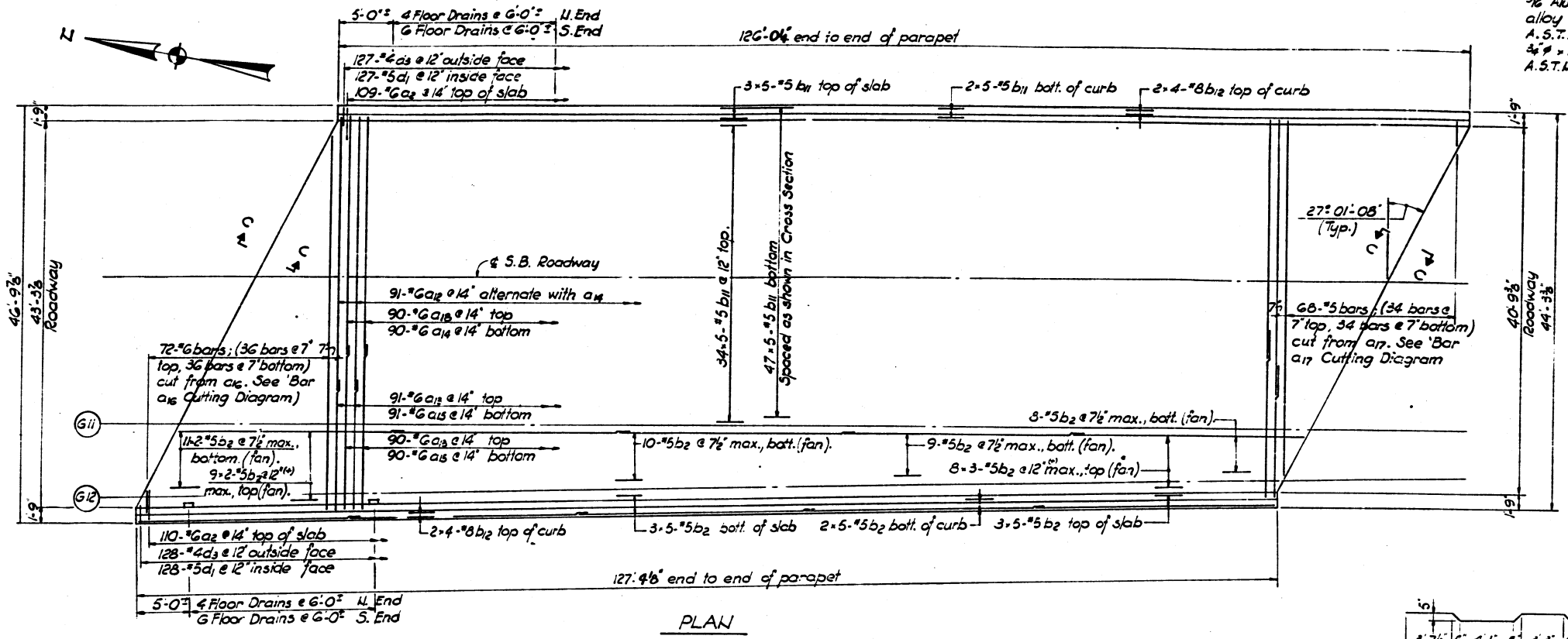
BAR a₁₁ Cutting Diagram

DESIGNED BY A.T.
DRAWN BY E.C.
CHECKED BY S.K.

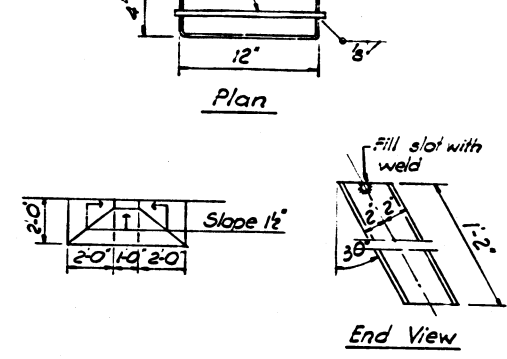
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
SUPERSTRUCTURE SPANS 1 & 3
SOUTHBOUND ROADWAY
F.A.I. ROUTE 474 OVER
ILLINOIS ROUTE 116
STA. 223 + 71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
4 of 23

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. - 474	72-3HB-2	PEORIA	41	10
FED. ROAD DIV. NO. 7	ILLINOIS PROJECT			

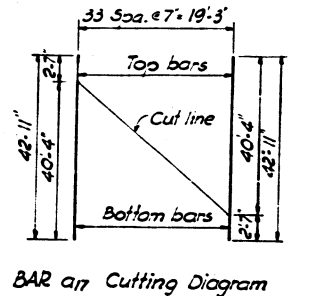
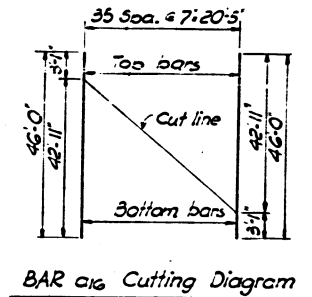
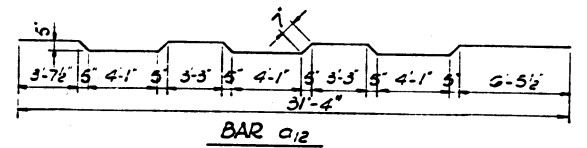


3/8" Aluminum Sheets Welded A.S.T.M. B209 alloy GOGI-T6 or Aluminum Extrusions A.S.T.M. B221 alloy GOGI-T6.
1/2" x 1'-1" Aluminum Bar A.S.T.M. 3 211 alloy GOGI-T6

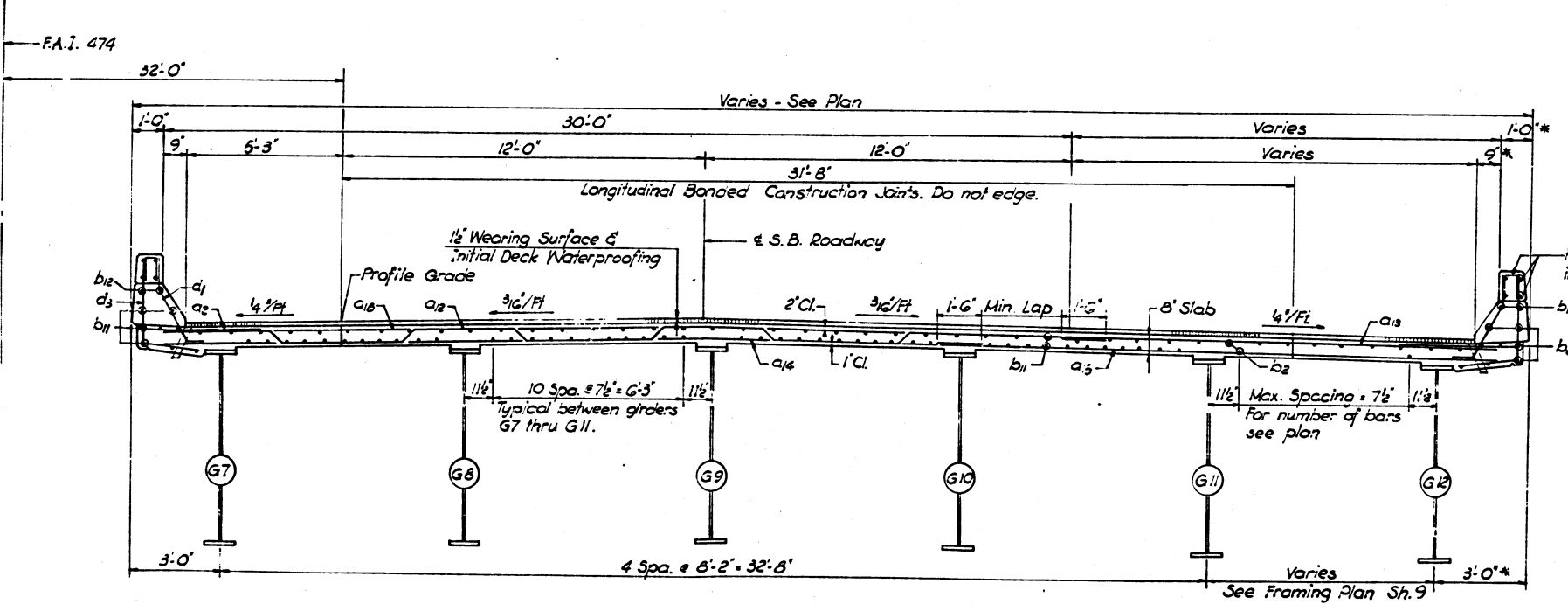


BILL OF MATERIAL

Bar	Number	Size	Length	Shape
a ₂	219	#6	4'-0"	—
a ₃	91	#6	32'-4"	—
a ₁₃	181	#6	14'-6"	—
a ₁₄	90	#6	27'-3"	—
a ₁₅	181	#6	18'-7"	—
a ₁₆	36	#6	46'-0"	—
a ₁₇	34	#6	42'-11"	—
a ₁₈	90	#6	31'-4"	—
b ₂	131	#5	26'-3"	—
b ₁₁	430	#5	26'-2"	—
b ₁₂	16	#8	33'-4"	—
d ₁	255	#5	3'-8"	—
d ₃	255	#4	4'-7"	—
Reinforcement Bars		Lbs.	25,860	
Class 'X' Concrete		Cu. Yds	167.2	
Pref. Joint Sealer		Lin. Ft.	103	
Coal Tar Interlayer Prot. Coat		Sq. Yds	593	
Structural Steel		Lbs.	242,290	
Shear Stud Connectors		Ea.	1,137	
Bituminous Concrete Surface Course, Class 1		Tons	51	
Protective Coat		Sq. Yds	92	

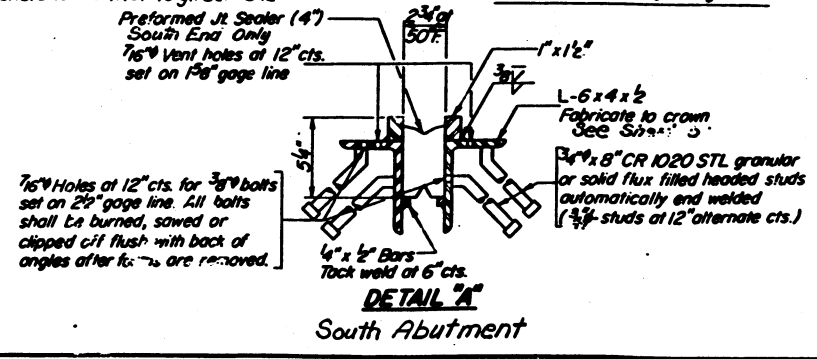
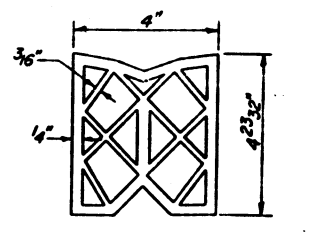


Notes:
For Section C-C, Curb Section, Deck Surfacing Detail, and details of bars a₂, d₁ and d₃ see Sh. 3.



DECK CROSS SECTION Looking South

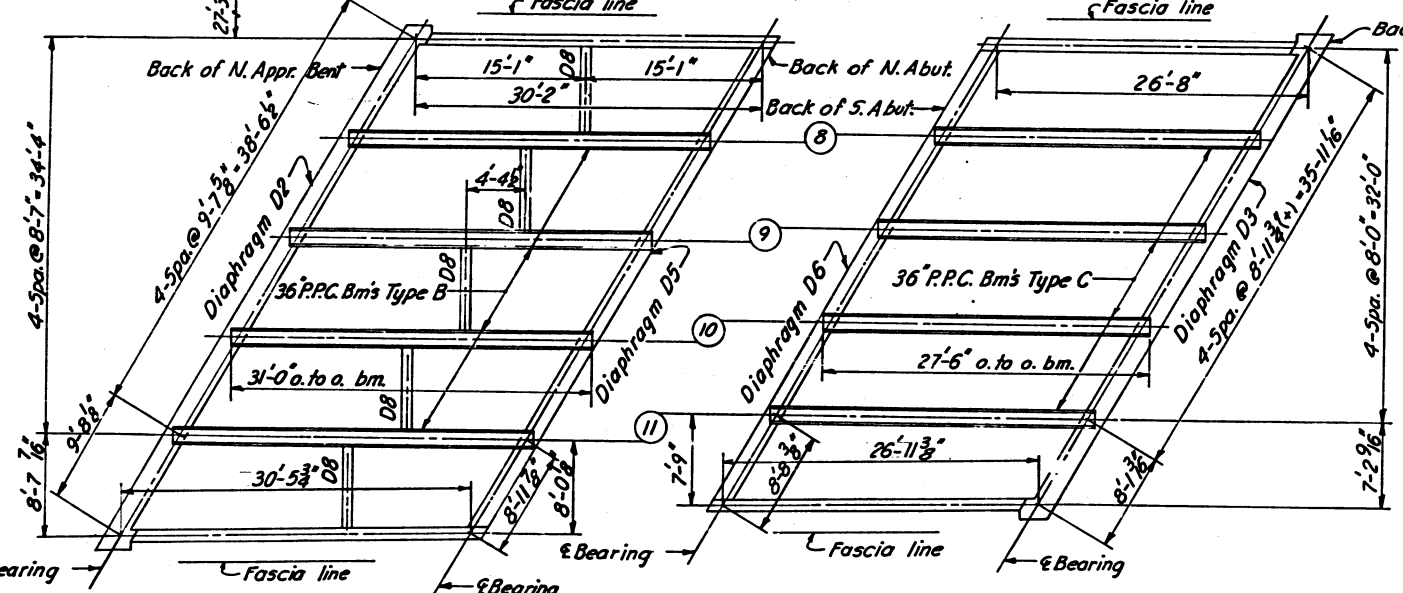
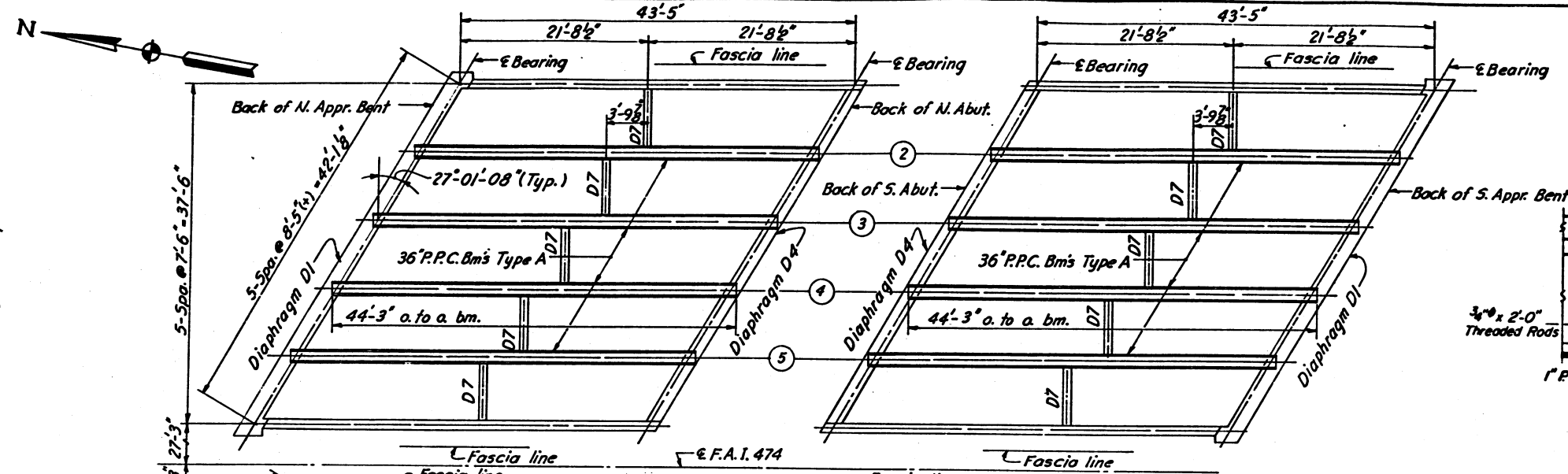
* Dimensions normal to girder G12



DESIGNED BY A.T.
DRAWN BY E.C.
CHECKED BY S.K.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
SUPERSTRUCTURE SPAN 2
SOUTHBOUND ROADWAY
F.A.I. ROUTE 474 OVER ILLINOIS ROUTE 116
STA. 223 + 71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROSE AND ASSOC. ENGINEERS
CHICAGO, ILLINOIS

SHEET 5 of 23

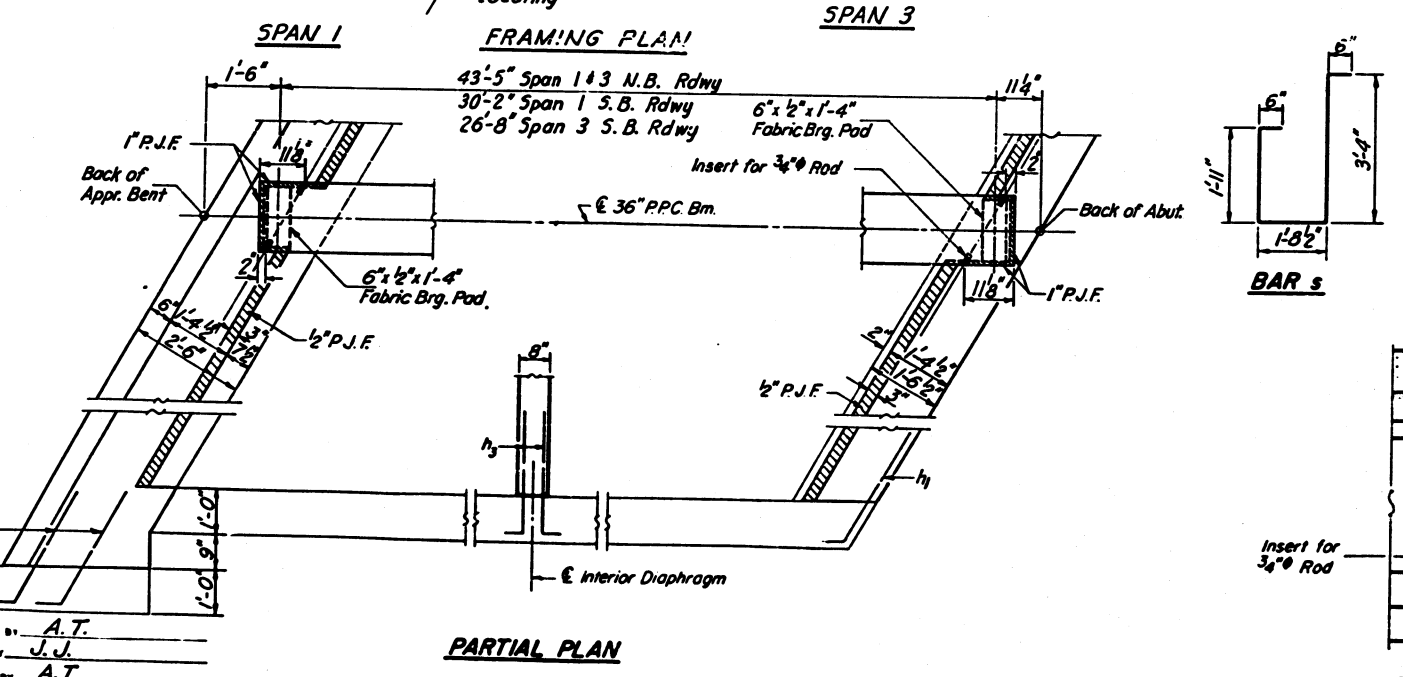
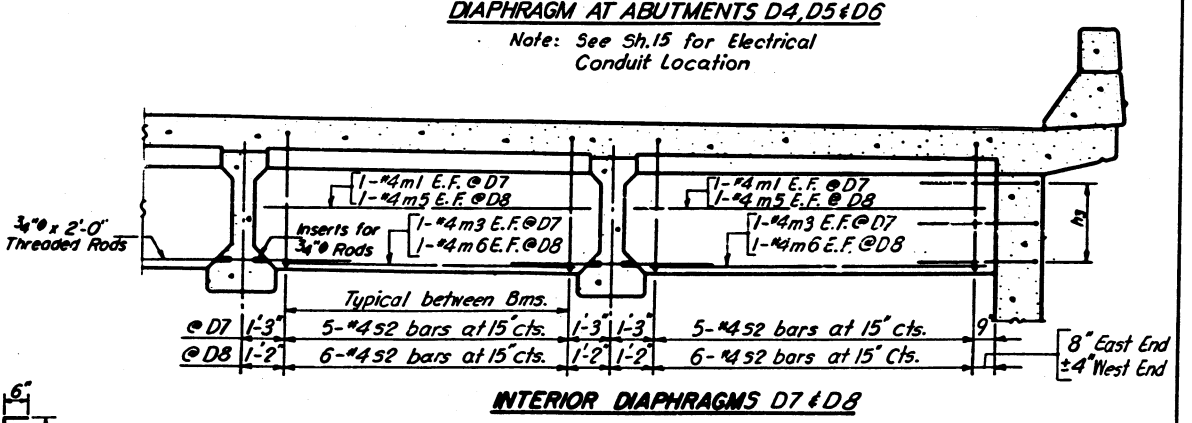
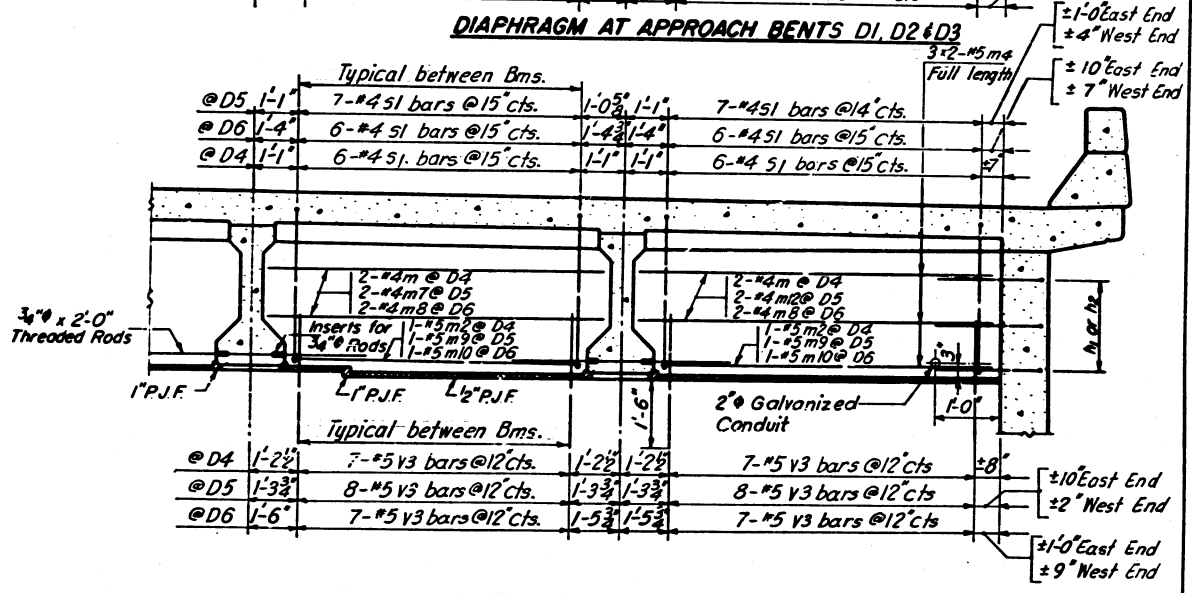
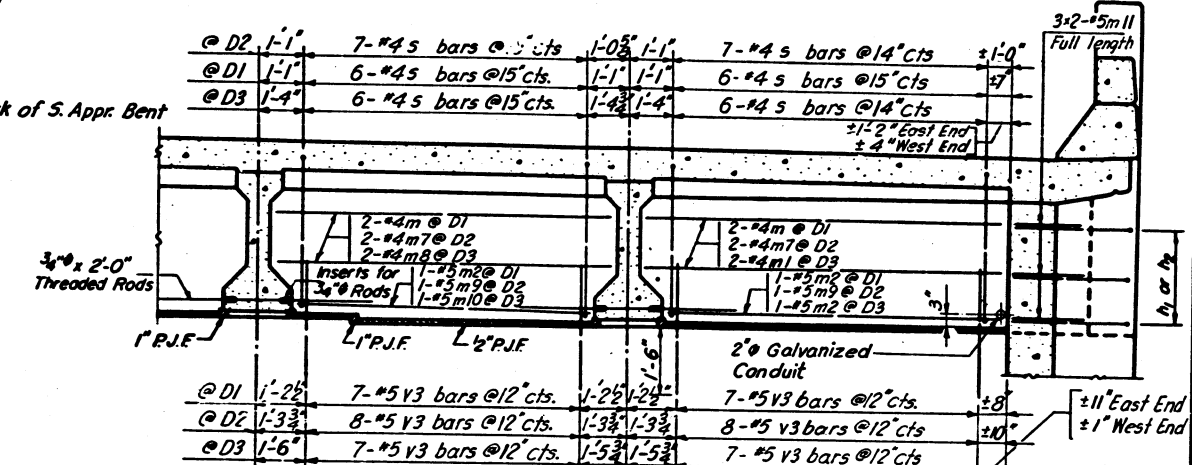


TOP OF BEAM ELEVATIONS

Beam	Brig. N. App. Bent	Brig. N. Abutment	Brig. S. Abutment	Brig. S. App. Bent
2	616.74	616.80	617.60	618.08
3	616.86	616.92	617.69	618.18
4	616.92	616.92	617.69	618.16
5	616.81	616.84	617.56	618.01
8	616.89	616.86	617.32	617.53
9	617.02	616.99	617.42	617.62
10	616.89	616.85	617.29	617.49
11	616.74	616.69	617.12	617.31

TABLE OF MOMENTS & SHEARS

unit	Span 1 1/3 N.B. Rdwy	Span 1 5/8 Rdwy	Span 3 5/8 Rdwy
D.L. k/h	1.14	1.26	1.12
Diaph k	1.8	2.1	—
M.d.L. ik	288.7	160.0	107.0
S.d.L. k/h	-420	-462	-432
M.s.d.L. ik	100.0	53.0	39.0
M.L.L. ik	350.0	248.0	201.0
M Imp. ik	93.0	75.0	60.0
R.d.L. k	24.8	19.0	16.1
R.s.d.L. k	9.1	6.9	5.8
R.L.L. k	38.6	39.2	34.2
R Imp. k	10.5	11.7	10.3



NOTES:

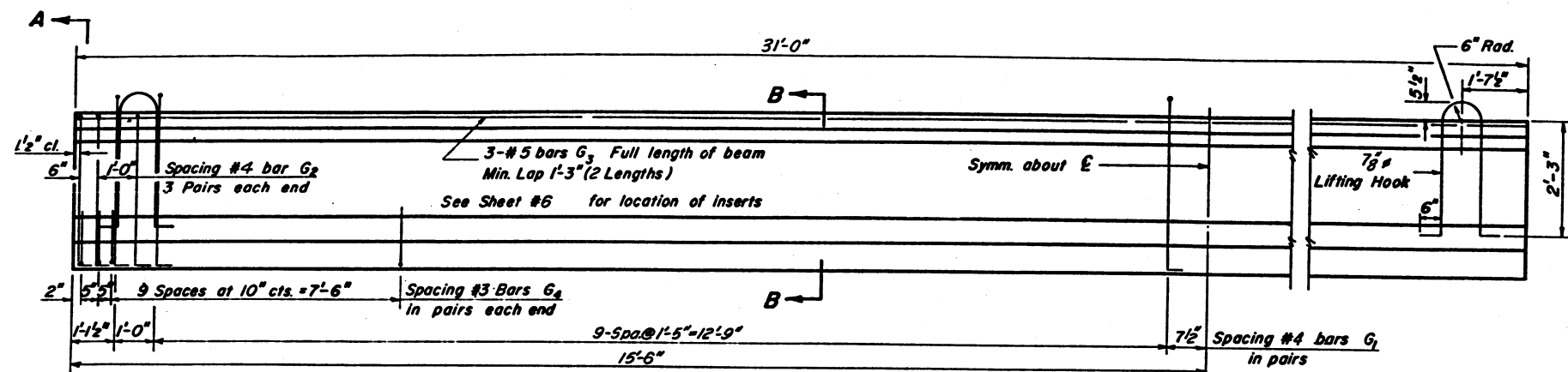
Bars s thru s₂ and m thru m₂ are billed with Approach Slab Bill of Material on sheet # 2 & 4

Bars h₁, h₂, h₃ & v₃ are billed with Abutment Bill of Material on sheet # 14, 15, 18 & 20

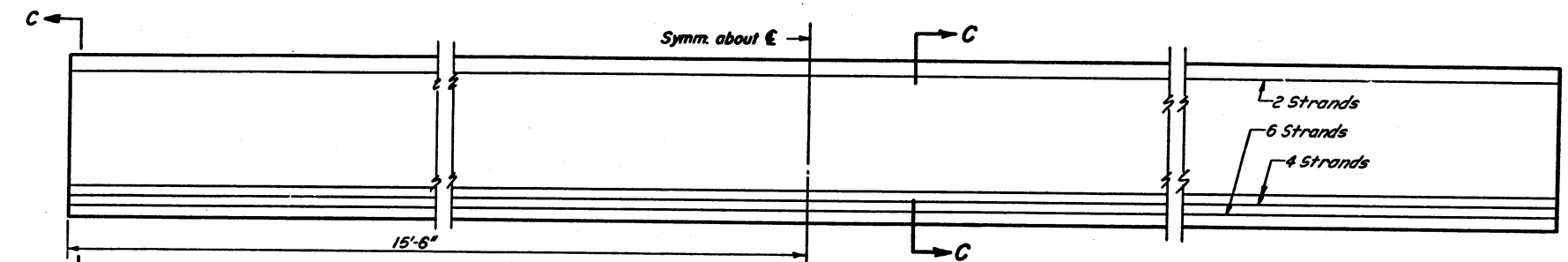
See sheet # 14, 16, 18 & 20 for sections thru abutment and approach bent diaphragms.

DESIGNED BY A.T.
DRAWN BY J.J.
CHECKED BY A.T.

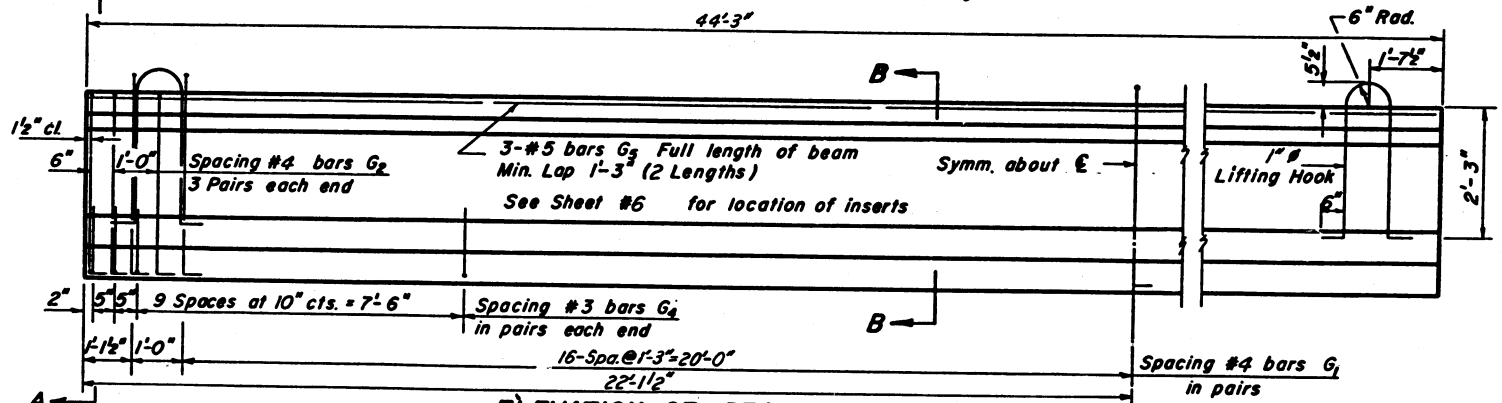
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-2	PEORIA	41	12
FED ROAD DIV NO 7	ILLINOIS PROJECT			



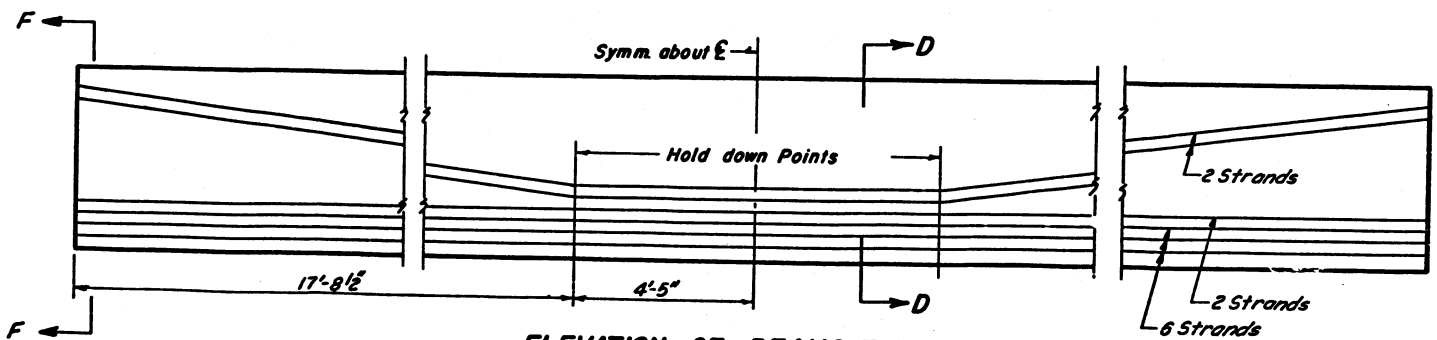
ELEVATION OF BEAMS TYPE B
Showing Reinforcement & Dimensions



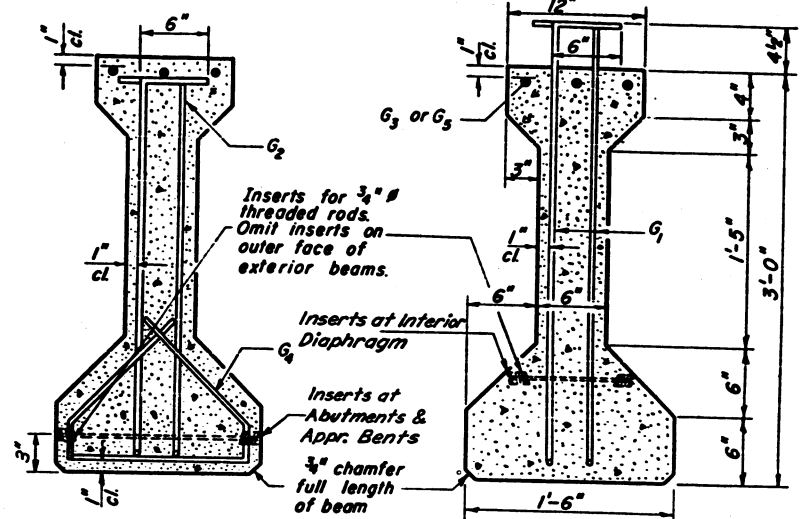
ELEVATION OF BEAMS TYPE B
Showing Prestressing Steel



ELEVATION OF BEAMS TYPE A
Showing Reinforcement & Dimensions

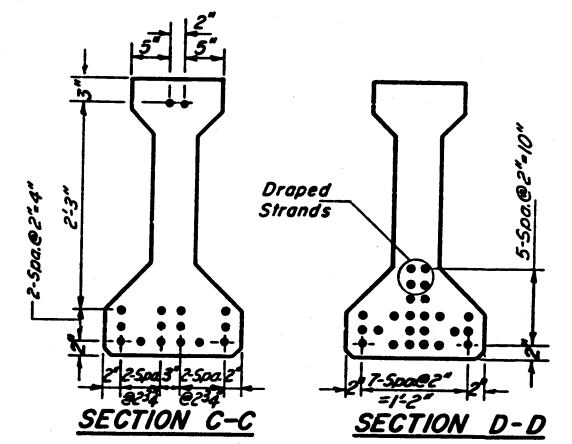


ELEVATION OF BEAMS TYPE A
Showing Prestressing Steel



SECTION A-A

SECTION B-B



SECTION C-C

SECTION D-D

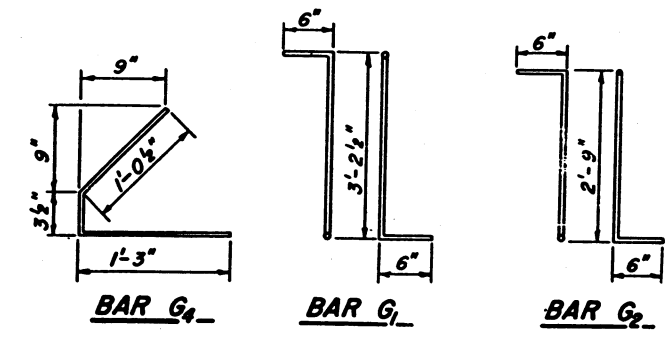
***BAR LIST**

Bar	No.	Size	Length	Shape
G1	72	#4	4'-2 1/2"	TL
G2	12	#4	3'-9"	TL
G3	6	#5	16'-1"	—
G4	48	#3	2'-7"	L
G5	6	#5	22'-8"	—

* For one beam only.

BILL OF MATERIAL

Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 36"	Lin. Ft.	478



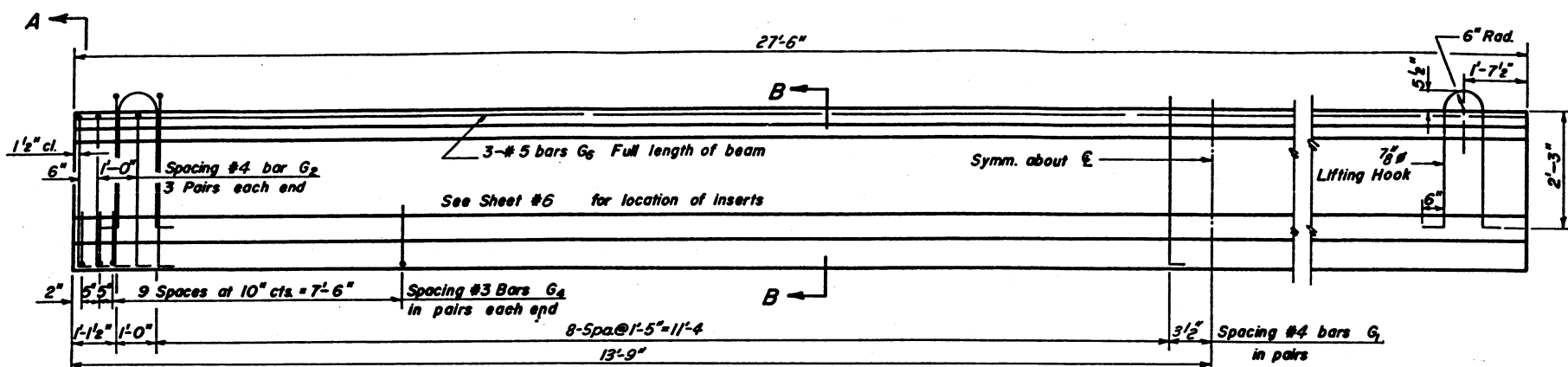
NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per linear foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 36 in." Prestressing Steel shall have a nominal diameter of 1/16". Inserts for 3/4" threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams. Steel for lifting hooks shall be A.S.T.M. A-306 Grade 70-80. Ends of beams to be encased with cast in place concrete shall not be coated with asphalt paint.

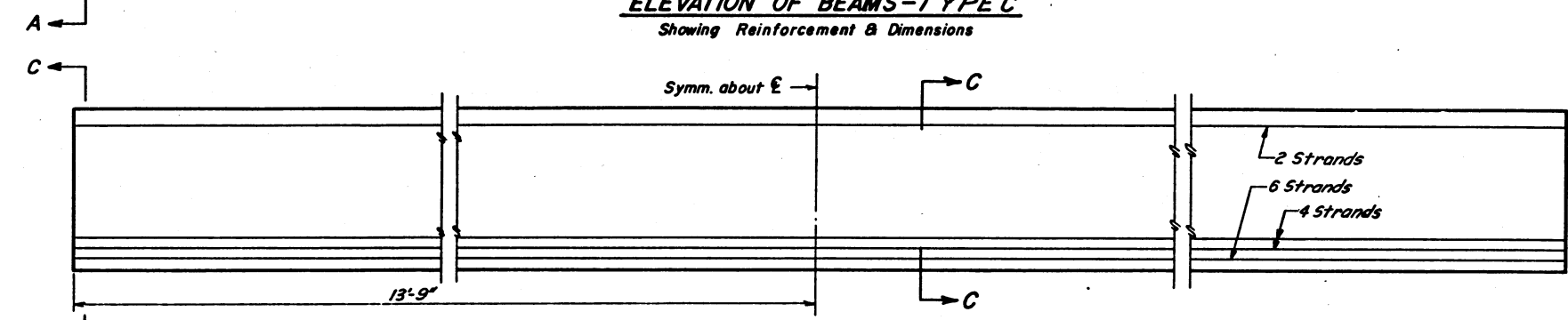
DESIGNED BY A.T.
DRAWN BY W.E.
CHECKED BY A.T.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
PRESTRESSED BEAM DETAILS
F.A.I. ROUTE 474
OVER
ILLINOIS ROUTE 116
STA. 223 + 71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

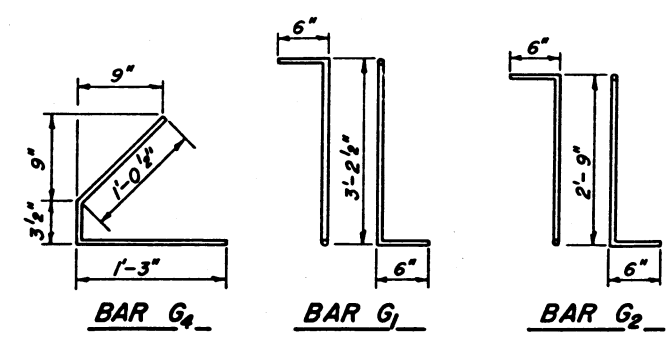
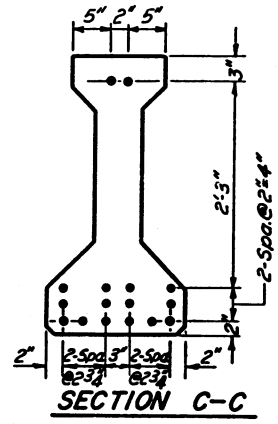
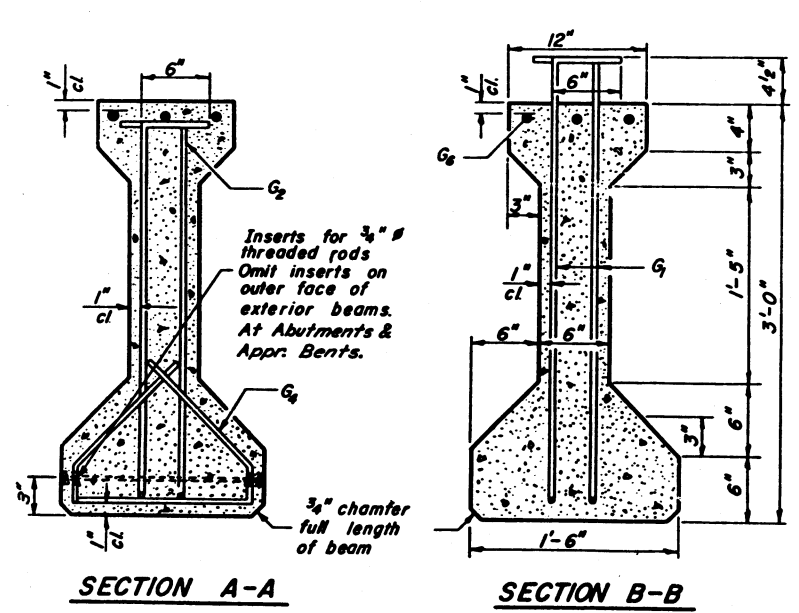
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-2	PEORIA	41	13
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	



ELEVATION OF BEAMS-TYPE C
Showing Reinforcement & Dimensions



ELEVATION OF BEAMS-TYPE C
Showing Prestressing Steel



*** BAR LIST**

Bar	No.	Size	Length	Shape
G1	40	#4	4'-2 1/2"	7L
G2	12	#4	3'-9"	7L
G4	48	#3	2'-7"	L
G5	3	#5	27'-4"	—

* For one beam only

BILL OF MATERIAL

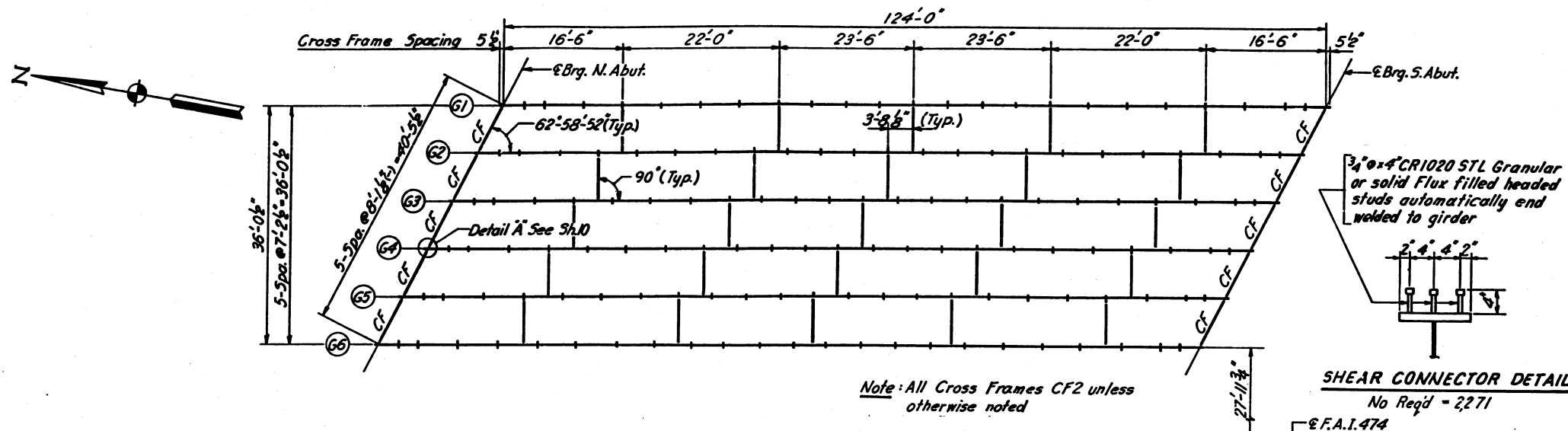
Item	Unit	Total
Furnishing & Erecting Precast Prestressed Concrete I-Beams, 36"	Lin. Ft.	110

NOTES

All inserts and threaded rods for inserts, reinforcing and Prestressing Steel, and other items which are cast into the Precast Concrete I-Beams shall be included in the contract unit price per lineal foot of "Furnishing And Erecting Precast Prestressed Concrete I-Beams, 36 In." Prestressing Steel shall have a nominal diameter of 7/16". Inserts for 3/4" threaded rods are to be two strut, coil type for interior I-Beams and single coil, flared loop type for exterior I-Beams. Steel for lifting hooks shall be A.S.T.M. A-306 Grade 70-80. Ends of beams to be encased with cast in place concrete shall not be coated with asphalt paint.

DESIGNED BY A.T.
CHECKED BY W.E.
BY A.T.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
PRESTRESSED BEAM DETAILS
F.A.I. ROUTE 474
OVER
ILLINOIS ROUTE 116
STA. 223+71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

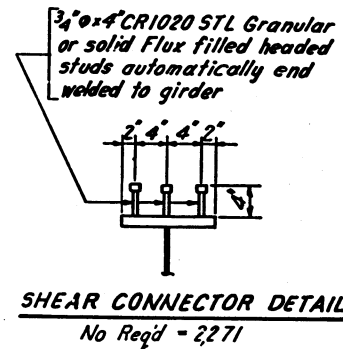


INTERIOR GIRDER MOMENT TABLE

	.5 Span S. B.	.5 Span N. B.
Is (in ⁴)	80,788	74,173
Ic (in ⁴)	183,160	166,598
Ss (in ³)	2,630	2,370
Sc (in ³)	3,370	3,064
Q (k/ft)	1.177	1.083
Me (ik)	2,262.1	2,081.4
fs (ksi)	10.4	10.5
SE (k/ft)	-4.45	-4.19
Mse (ik)	855.2	805.3
Mk (ik)	14,430	12,750
Mtmp (ik)	296.2	260.2
Total (ik)	2,594.4	2,340.5
fs + Sp (ksi)	9.2	9.2
fs total (ksi)	19.6	19.7
VR (k)	59.3	52.3

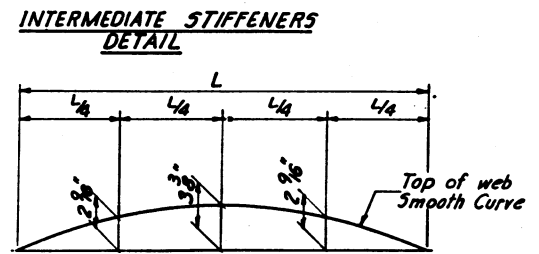
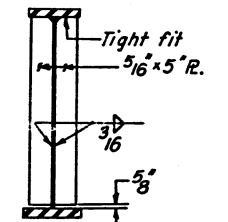
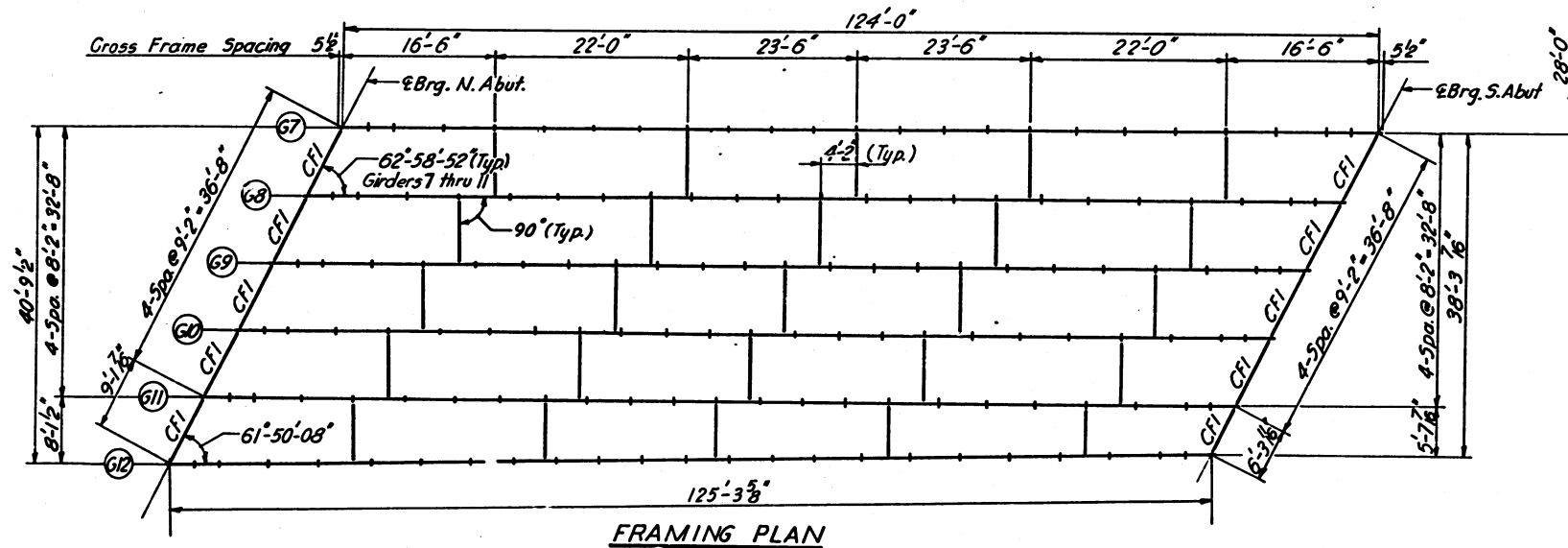
INTERIOR GIRDER REACTION TABLE

	N.S. Abut. S.B. Rdwy	N.S. Abut. N.B. Rdwy
R @ (k)	100.4	93.0
R k (k)	51.7	45.6
imp. (k)	10.4	9.3
R total	162.5	147.9

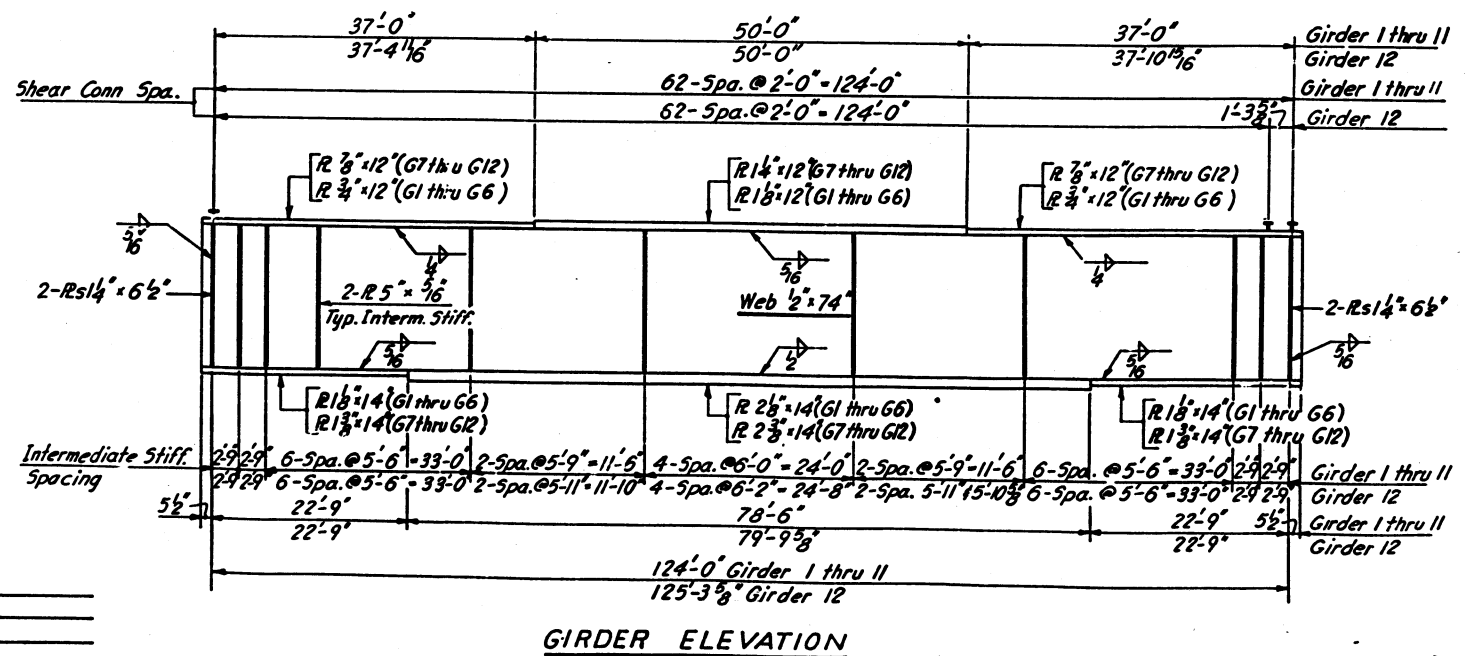


TOP OF WEB ELEVATIONS FOR FABRICATION

Girder	E Brg. N. Abut.	E Brg. S. Abut.
G1	616.65	617.32
G2	616.79	617.46
G3	616.90	617.57
G4	616.95	617.62
G5	616.83	617.50
G6	616.69	617.36
G7	616.65	617.01
G8	616.79	617.15
G9	616.91	617.27
G10	616.78	617.14
G11	616.63	616.99
G12	616.47	616.83

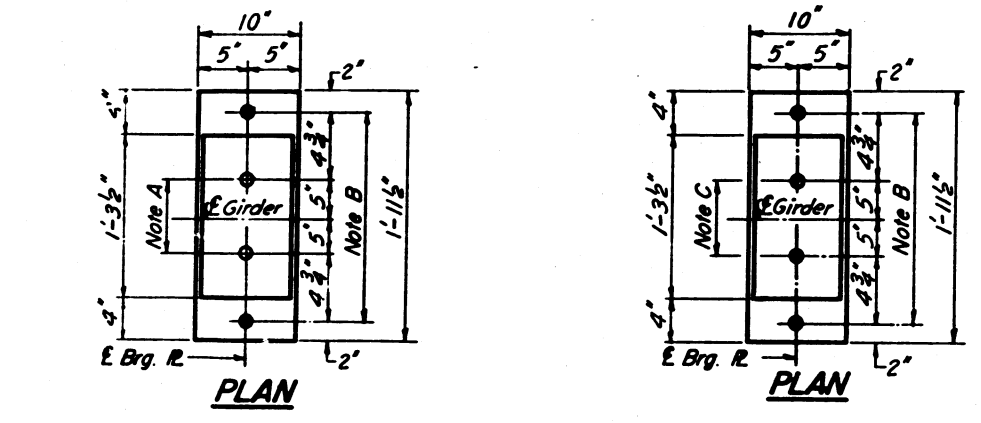
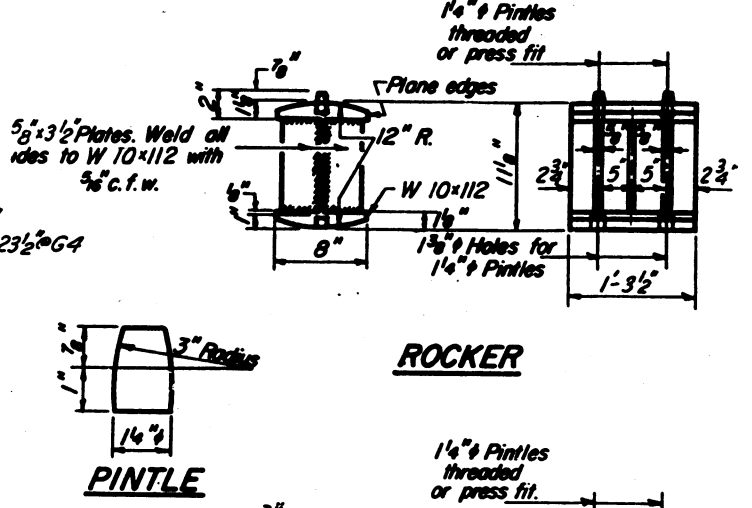
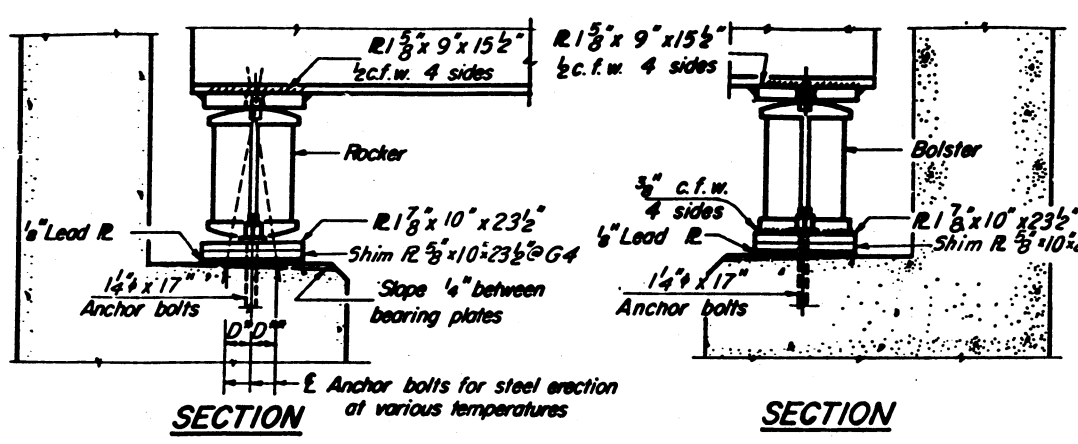


CAMBERING DIAGRAM
For fabrication of structural steel. Includes allowance for deflection due to weight of concrete.



DESIGNED BY: J.J.
DRAWN BY: J.J.
CHECKED BY: A.T.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-2	PEORIA	41	15
FED. ROAD DIV. NO. 7		ILLINOIS PROJECT		



AT S. ABUTMENT

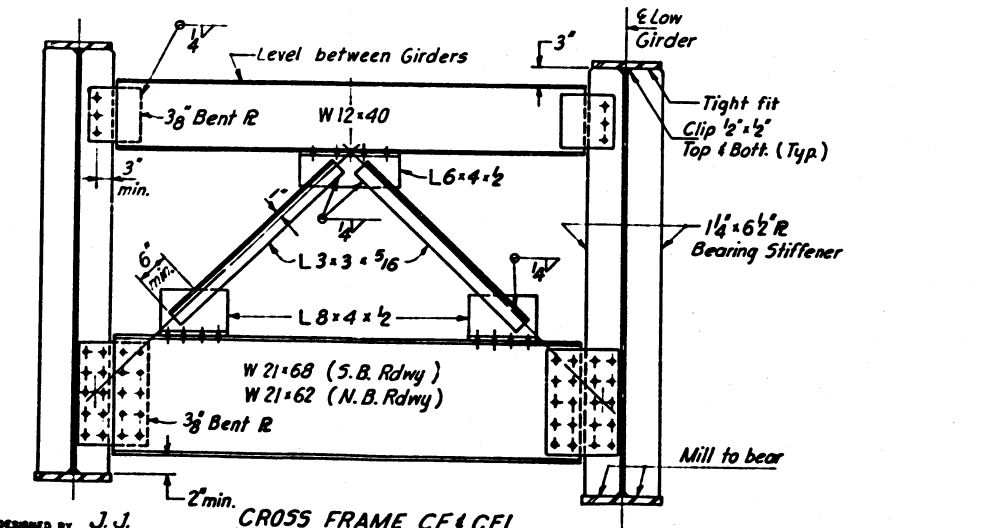
AT N. ABUTMENT

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

NOTE B
1 3/8" Holes for 1 1/4" anchor bolts. 5/16" x 2 1/2" x 2 1/2" R. Washers under nut.

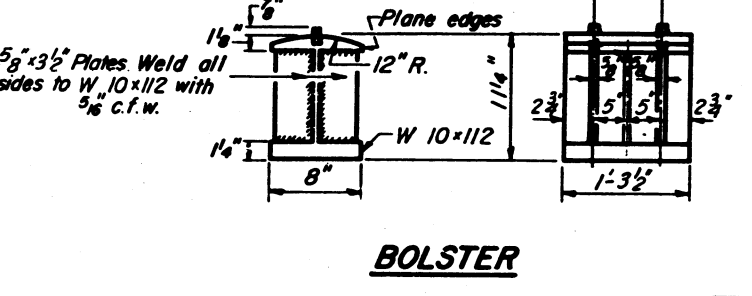
NOTE C
1 3/8" Holes 1" deep in top R only for 1 1/4" pintles.

BEARING ASSEMBLY DETAILS



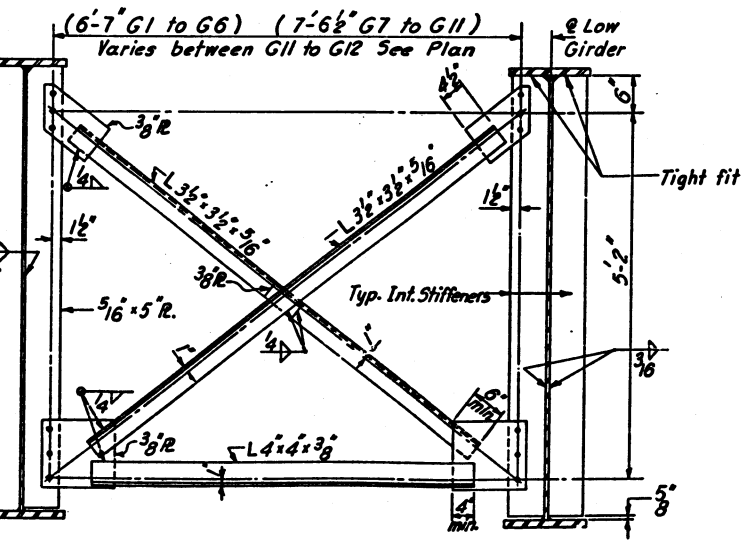
DESIGNED BY J.J.
DRAWN BY J.J.
CHECKED BY A.T.

CROSS FRAME CF1 & CF2
20 Required
All Bearing Stiffener to be vertical



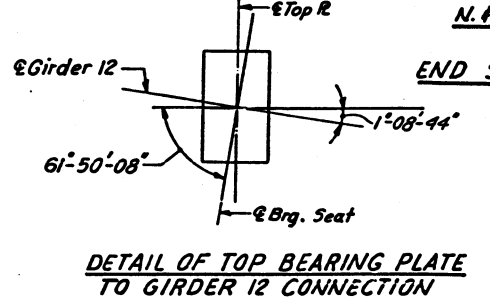
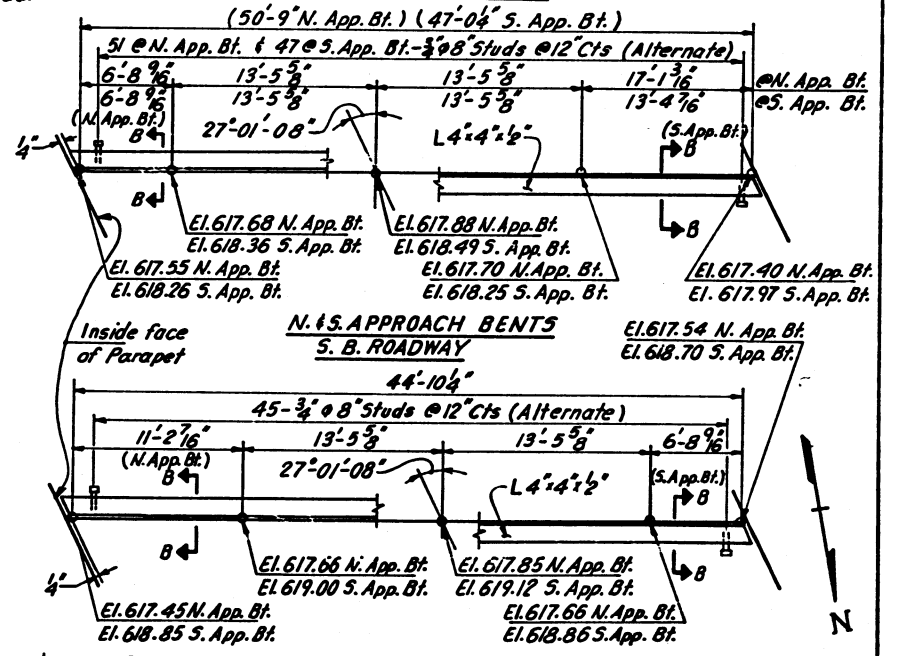
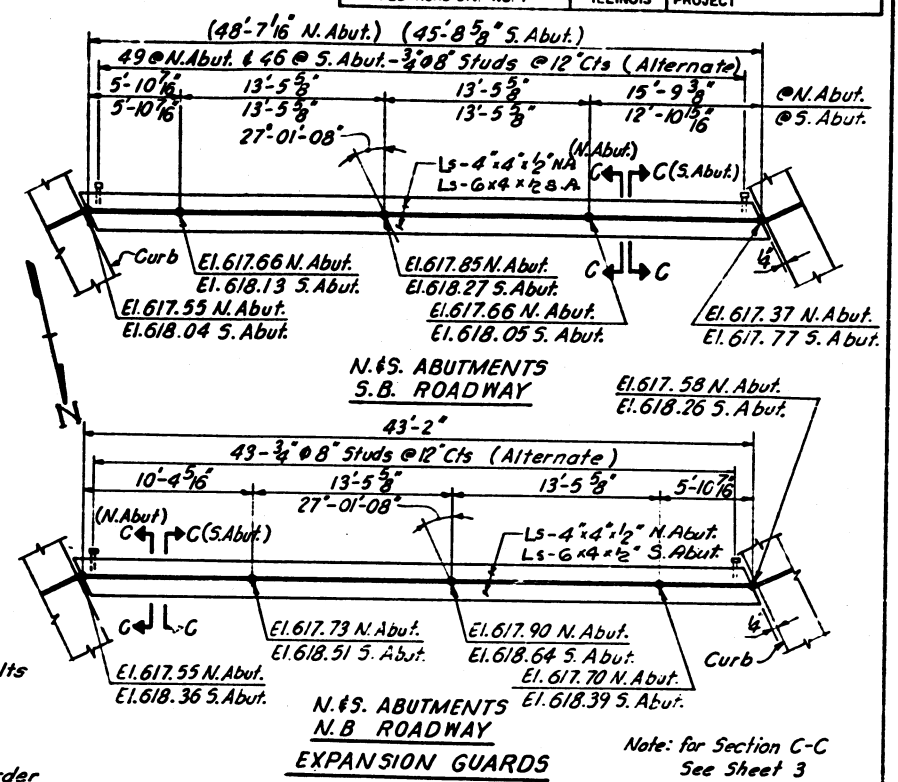
NOTES ON SETTING OF ANCHOR BOLTS AT EXP. BRGS.

- 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.
- After Girders 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.



CROSS FRAME CF2
50 Required

Note: All elevation shown are at top of wearing surface



DETAIL OF TOP BEARING PLATE TO GIRDER 12 CONNECTION

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
STRUCTURAL STEEL
F.A.I. ROUTE 474
OVER
ILLINOIS ROUTE 116
STA. 223+71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
10 of 23

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection	LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection
BK N APP	22903.461	-20.750	617.477	617.477	BK N APP	22299.696	-13.250	617.632	617.632
Q BRG N APP	22904.961	-20.750	617.353	617.353	Q BRG N APP	22301.136	-13.250	617.308	617.308
A	22914.961	-20.750	617.361	617.361	A	22311.136	-13.250	617.513	617.528
B	22924.961	-20.750	617.375	617.375	B	22321.136	-13.250	617.525	617.549
C	22934.961	-20.750	617.394	617.394	C	22331.136	-13.250	617.542	617.560
D	22944.961	-20.750	617.418	617.418	D	22341.136	-13.250	617.564	617.569
Q N BRG N A	22948.377	-20.750	617.428	617.428	Q N BRG N A	22344.559	-13.250	617.573	617.573
Q S BRG N A	22950.169	-20.020	617.448	617.448	Q S BRG N A	22346.493	-12.812	617.587	617.587
E	22960.169	-20.020	617.481	617.521	E	22356.493	-12.812	617.618	617.659
F	22970.169	-20.020	617.519	617.600	F	22366.493	-12.812	617.655	617.735
G	22980.169	-20.020	617.563	617.684	G	22376.493	-12.812	617.696	617.817
H	22990.169	-20.020	617.513	617.750	H	22386.493	-12.812	617.744	617.881
J	22400.169	-20.020	617.557	617.818	J	22396.493	-12.812	617.797	617.947
K	22410.169	-20.020	617.728	617.892	K	22406.493	-12.812	617.855	618.019
L	22420.169	-20.020	617.754	617.949	L	22416.493	-12.812	617.919	618.075
M	22430.169	-20.020	617.855	618.007	M	22426.493	-12.812	617.988	618.130
N	22440.169	-20.020	617.942	618.071	N	22436.493	-12.812	618.053	618.192
O	22450.169	-20.020	618.024	618.122	O	22446.493	-12.812	618.115	618.240
P	22460.169	-20.020	618.112	618.158	P	22456.493	-12.812	618.229	618.285
Q	22470.169	-20.020	618.203	618.221	Q	22466.493	-12.812	618.320	618.336
Q N BRG S A	22474.169	-20.020	618.244	618.244	Q N BRG S A	22470.493	-12.812	618.358	618.358
Q S BRG S A	22476.711	-20.750	618.254	618.254	Q S BRG S A	22472.886	-13.250	618.372	618.372
R	22486.711	-20.750	618.357	618.357	R	22482.886	-13.250	618.473	618.487
S	22496.711	-20.750	618.465	618.465	S	22492.886	-13.250	618.579	618.603
T	22506.711	-20.750	618.578	618.578	T	22502.886	-13.250	618.690	618.708
U	22516.711	-20.750	618.697	618.697	U	22512.886	-13.250	618.807	618.812
Q BRG S APP	22520.128	-20.750	618.739	618.739	Q BRG S APP	22516.309	-13.250	618.848	618.848
BK S APP	22521.628	-20.750	618.882	618.882	BK S APP	22517.803	-13.250	618.991	618.991

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection	LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection
BK N APP	22288.163	9.250	617.702	617.702	BK N APP	22284.338	16.750	617.562	617.562
Q BRG N APP	22289.663	9.250	617.577	617.577	Q BRG N APP	22285.838	16.750	617.435	617.436
A	22299.663	9.250	617.376	617.591	A	22295.838	16.750	617.434	617.434
B	22309.663	9.250	617.581	617.606	B	22305.838	16.750	617.437	617.437
C	22319.663	9.250	617.592	617.612	C	22315.838	16.750	617.443	617.443
D	22329.663	9.250	617.608	617.613	D	22325.838	16.750	617.459	617.459
Q N BRG N A	22333.079	9.250	617.615	617.615	Q N BRG N A	22329.255	16.750	617.465	617.465
Q S BRG N A	22335.466	8.812	617.627	617.627	Q S BRG N A	22331.790	16.020	617.485	617.485
E	22345.466	8.812	617.651	617.692	E	22341.790	16.020	617.508	617.548
F	22355.466	8.812	617.682	617.762	F	22351.790	16.020	617.535	617.617
G	22365.466	8.812	617.717	617.838	G	22361.790	16.020	617.570	617.691
H	22375.466	8.812	617.759	617.896	H	22371.790	16.020	617.609	617.746
J	22385.466	8.812	617.805	617.956	J	22381.790	16.020	617.654	617.805
K	22395.466	8.812	617.858	618.022	K	22391.790	16.020	617.704	617.868
L	22405.466	8.812	617.915	618.071	L	22401.790	16.020	617.760	617.926
M	22415.466	8.812	618.079	618.121	M	22411.790	16.020	617.821	617.964
N	22425.466	8.812	618.077	618.176	N	22421.790	16.020	617.885	618.017
O	22435.466	8.812	618.122	618.218	O	22431.790	16.020	617.965	618.057
P	22445.466	8.812	618.221	618.258	P	22441.790	16.020	618.038	618.094
Q	22455.466	8.812	618.247	618.303	Q	22451.790	16.020	618.121	618.137
Q N BRG S A	22459.466	8.812	618.322	618.322	Q N BRG S A	22455.790	16.020	618.156	618.156
Q S BRG S A	22461.413	9.250	618.333	618.333	Q S BRG S A	22457.588	16.750	618.157	618.157
R	22471.413	9.250	618.427	618.442	R	22467.588	16.750	618.249	618.249
S	22481.413	9.250	618.527	618.551	S	22477.588	16.750	618.346	618.346
T	22491.413	9.250	618.632	618.650	T	22487.588	16.750	618.449	618.449
U	22501.413	9.250	618.742	618.747	U	22497.588	16.750	618.557	618.557
Q BRG S APP	22504.829	9.250	618.781	618.781	Q BRG S APP	22501.005	16.750	618.596	618.596
BK S APP	22506.329	9.250	618.924	618.924	BK S APP	22502.505	16.750	618.738	618.738

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection	LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection
BK N APP	22295.812	-5.750	617.755	617.755	BK N APP	22292.880	0.000	617.845	617.845
Q BRG N APP	22297.312	-5.750	617.630	617.630	Q BRG N APP	22294.380	0.000	617.720	617.720
A	22307.312	-5.750	617.634	617.649	A	22304.380	0.000	617.722	617.737
B	22317.312	-5.750	617.643	617.668	B	22314.380	0.000	617.730	617.754
C	22327.312	-5.750	617.658	617.676	C	22324.380	0.000	617.743	617.761
D	22337.312	-5.750	617.679	617.689	D	22334.380	0.000	617.762	617.767
Q N BRG N A	22340.728	-5.750	617.687	617.687	Q N BRG N A	22337.796	0.000	617.769	617.769
Q S BRG N A	22342.817	-5.604	617.694	617.694	Q S BRG N A	22339.960	-0.000	617.775	617.775
E	22352.817	-5.604	617.723	617.763	E	22349.960	-0.000	617.802	617.842
F	22362.817	-5.604	617.757	617.838	F	22359.960	-0.000	617.835	617.915
G	22372.817	-5.604	617.797	617.918	G	22369.960	-0.000	617.873	617.994
H	22382.817	-5.604	617.843	617.980	H	22379.960	-0.000	617.917	618.054
J	22392.817	-5.604	617.893	618.044	J	22389.960	-0.000	617.966	618.116
K	22402.817	-5.604	617.950	618.114	K	22399.960	-0.000	618.021	618.184
L	22412.817	-5.604	618.021	618.167	L	22409.960	-0.000	618.081	618.237
M	22422.817	-5.604	618.079	618.221	M	22419.960	-0.000	618.146	618.289
N	22432.817	-5.604	618.152	618.281	N	22429.960	-0.000	618.218	618.347
O	22442.817	-5.604	618.230	618.327	O	22439.960	-0.000	618.294	618.391
P	22452.817	-5.604	618.314	618.370	P	22449.960	-0.000	618.377	618.433
Q	22462.817	-5.604	618.403	618.419	Q	22459.960	-0.000	618.464	618.481
Q N BRG S A	22466.817	-5.604	618.440	618.440	Q N BRG S A	22463.960	-0.000	618.501	618.501
Q S BRG S A	22469.062	-5.750	618.459	618.459	Q S BRG S A	22466.130	0.000	618.521	618.521
R	22479.062	-5.750	618.557	618.572	R	22476.130	0.000	618.618	618.632
S	22489.062	-5.750	618.661	618.686	S	22486.130	0.000	618.720	618.744
T	22499.062	-5.750	618.770	618.789	T	22496.130	0.000	618.828	618.846
U	22509.062	-5.750	618.885	618.893	U	22506.130	0.000	618.941	618.948
Q BRG S APP	22512.478	-5.750	618.926	618.926	Q BRG S APP	22509.546	0.000	618.961	618.961
BK S APP	22513.978	-5.750	619.069	619.069	BK S APP	22511.046	0.000	619.123	619.123

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection	LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elev. Adj. For Dead Load Deflection
BK N APP	22291.987	1.750	617.818	617.818	BK N APP	22291.987	1.750	617.818	617.818
Q BRG N APP	22293.487	1.750	617.693	617.693	Q BRG N APP	22293.487	1.750	617.693	617.693
A	22303.487	1.750	617.695	617.709	A	22303.487	1.750	617.695	617.709
B	22313.487	1.750	617.702	617.726	B	22313.487	1.750	617.702	617.726
C	22323.487	1.750	617.714	617.733	C	22323.487	1.750	617.714	617.733
D	22333.487	1.750	617.733	617.738	D	22333.487	1.750	617.733	617.738
Q N BRG N A	22336.904	1.750	617.740	617.740	Q N BRG N A	22336.904	1.750	617.740	617.740

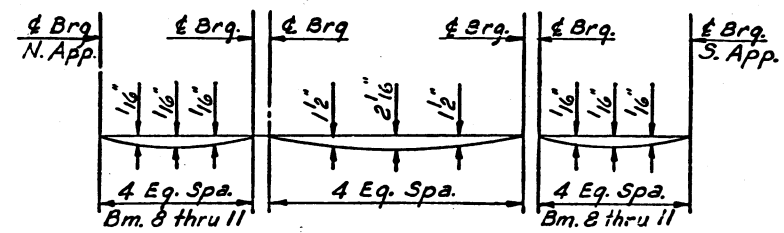
LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elevs. Adj. For Dead Load Deflection
BK N APP	22269.791	-16.750	617.977	617.977
G BRG N APP	22271.291	-16.750	617.450	617.450
A	22281.291	-16.750	617.439	617.439
B	22291.291	-16.750	617.434	617.434
G N BRG N A	22301.458	-16.750	617.435	617.435
G S BRG N A	22309.239	-16.000	617.451	617.451
C	22313.239	-16.000	617.458	617.499
D	22323.239	-16.000	617.471	617.551
E	22333.239	-16.000	617.489	617.610
F	22343.239	-16.000	617.512	617.651
G	22353.239	-16.000	617.541	617.695
H	22363.239	-16.000	617.576	617.745
J	22373.239	-16.000	617.615	617.776
K	22383.239	-16.000	617.661	617.806
L	22393.239	-16.000	617.712	617.862
M	22403.239	-16.000	617.769	617.866
N	22413.239	-16.000	617.831	617.887
O	22423.239	-16.000	617.899	617.915
G N BRG S A	22427.239	-16.000	617.927	617.927
Q S BRG S A	22429.791	-16.750	617.930	617.930
P	22439.791	-16.750	618.007	618.007
Q	22449.791	-16.750	618.089	618.089
Q BRG S APP	22456.458	-16.750	618.147	618.147
BK S APP	22457.958	-16.750	618.285	618.285

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elevs. Adj. For Dead Load Deflection
BK N APP	22252.283	17.542	617.593	617.593
G BRG N APP	22253.783	17.582	617.464	617.464
A	22263.783	17.582	617.444	617.449
B	22273.783	17.582	617.429	617.435
G N BRG N A	22283.950	17.582	617.420	617.420
G S BRG N A	22286.381	16.666	617.438	617.438
C	22296.381	16.666	617.436	617.476
D	22306.381	16.666	617.439	617.520
E	22316.381	16.666	617.448	617.569
F	22326.381	16.666	617.462	617.601
G	22336.381	16.666	617.482	617.636
H	22346.381	16.666	617.508	617.676
J	22356.381	16.666	617.538	617.698
K	22366.381	16.666	617.575	617.719
L	22376.381	16.666	617.617	617.766
M	22386.381	16.666	617.664	617.781
N	22396.381	16.666	617.717	617.773
O	22406.381	16.666	617.775	617.791
G N BRG S A	22410.381	16.666	617.800	617.800
Q S BRG S A	22413.473	15.250	617.848	617.848
P	22423.473	15.250	617.916	617.921
Q	22433.473	15.250	617.989	617.994
Q BRG S APP	22440.140	15.250	618.041	618.041
BK S APP	22441.640	15.250	618.178	618.178

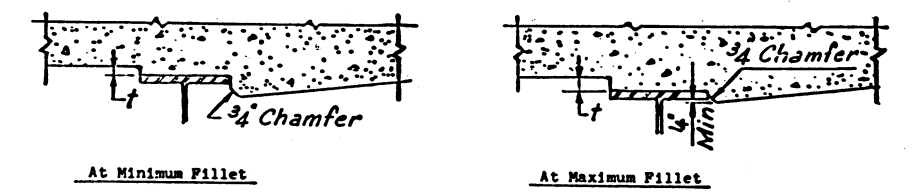
LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elevs. Adj. For Dead Load Deflection
BK N APP	22261.250	-0.000	617.877	617.877
G BRG N APP	22262.750	-0.000	617.750	617.750
A	22272.750	-0.000	617.734	617.740
B	22282.750	-0.000	617.725	617.730
G N BRG N A	22292.916	-0.000	617.720	617.720
G S BRG N A	22295.080	-0.000	617.720	617.720
C	22305.080	-0.000	617.723	617.763
D	22315.080	-0.000	617.731	617.811
E	22325.080	-0.000	617.744	617.865
F	22335.080	-0.000	617.765	617.902
G	22345.080	-0.000	617.788	617.942
H	22355.080	-0.000	617.818	617.987
J	22365.080	-0.000	617.853	618.015
K	22375.080	-0.000	617.895	618.039
L	22385.080	-0.000	617.941	618.071
M	22395.080	-0.000	617.993	618.090
N	22405.080	-0.000	618.051	618.107
O	22415.080	-0.000	618.114	618.130
G N BRG S A	22419.080	-0.000	618.140	618.140
Q S BRG S A	22421.250	0.000	618.155	618.155
P	22431.250	0.000	618.227	618.233
Q	22441.250	0.000	618.305	618.310
Q BRG S APP	22447.916	0.000	618.359	618.359
BK S APP	22449.416	0.000	618.497	618.497

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elevs. Adj. For Dead Load Deflection
BK N APP	22261.037	0.416	617.871	617.871
G BRG N APP	22262.537	0.416	617.743	617.743
A	22272.537	0.416	617.728	617.733
B	22282.537	0.416	617.718	617.724
G N BRG N A	22292.704	0.416	617.714	617.714
G S BRG N A	22294.909	0.333	617.715	617.715
C	22304.909	0.333	617.717	617.758
D	22314.909	0.333	617.725	617.806
E	22324.909	0.333	617.739	617.860
F	22334.909	0.333	617.758	617.896
G	22344.909	0.333	617.782	617.936
H	22354.909	0.333	617.812	617.981
J	22364.909	0.333	617.848	618.007
K	22374.909	0.333	617.889	618.033
L	22384.909	0.333	617.935	618.065
M	22394.909	0.333	617.987	618.084
N	22404.909	0.333	618.044	618.101
O	22414.909	0.333	618.107	618.124
G N BRG S A	22418.909	0.333	618.134	618.134
Q S BRG S A	22421.632	-0.750	618.146	618.146
P	22431.632	-0.750	618.218	618.224
Q	22441.632	-0.750	618.296	618.301
Q BRG S APP	22448.299	-0.750	618.351	618.351
BK S APP	22449.799	-0.750	618.489	618.429

LOCATION	STATION	OFFSET	Theoretical Grade Elevations	Theo. Grade Elevs. Adj. For Dead Load Deflection
BK N APP	22256.660	8.999	617.766	617.766
G BRG N APP	22258.160	8.999	617.618	617.618
A	22268.160	8.999	617.600	617.605
B	22278.160	8.999	617.588	617.593
G N BRG N A	22288.327	8.999	617.581	617.581
G S BRG N A	22290.745	8.500	617.588	617.588
C	22300.745	8.500	617.588	617.628
D	22310.745	8.500	617.594	617.674
E	22320.745	8.500	617.605	617.726
F	22330.745	8.500	617.622	617.780
G	22340.745	8.500	617.644	617.790
H	22350.745	8.500	617.671	617.840
J	22360.745	8.500	617.705	617.864
K	22370.745	8.500	617.743	617.888
L	22380.745	8.500	617.787	617.917
M	22390.745	8.500	617.837	617.934
N	22400.745	8.500	617.892	617.949
O	22410.745	8.500	617.953	617.969
G N BRG S A	22414.745	8.500	617.979	617.979
Q S BRG S A	22417.553	7.250	618.017	618.017
P	22427.553	7.250	618.087	618.092
Q	22437.553	7.250	618.162	618.167
Q BRG S APP	22444.219	7.250	618.216	618.216
BK S APP	22445.719	7.250	618.353	618.353



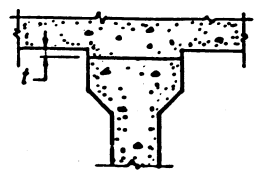
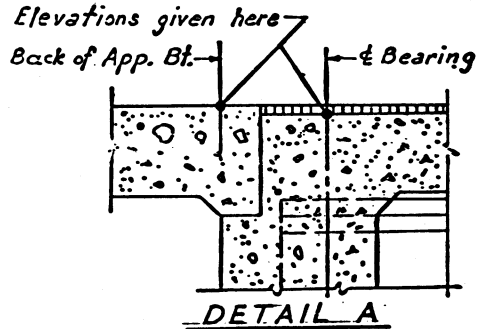
DEAD LOAD DEFLECTION DIAGRAM
(Includes weight of concrete only)
 Note: The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown above.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown above minus slab thickness, equals the fillet height "t" above top flange of beams.

FILLET HEIGHTS

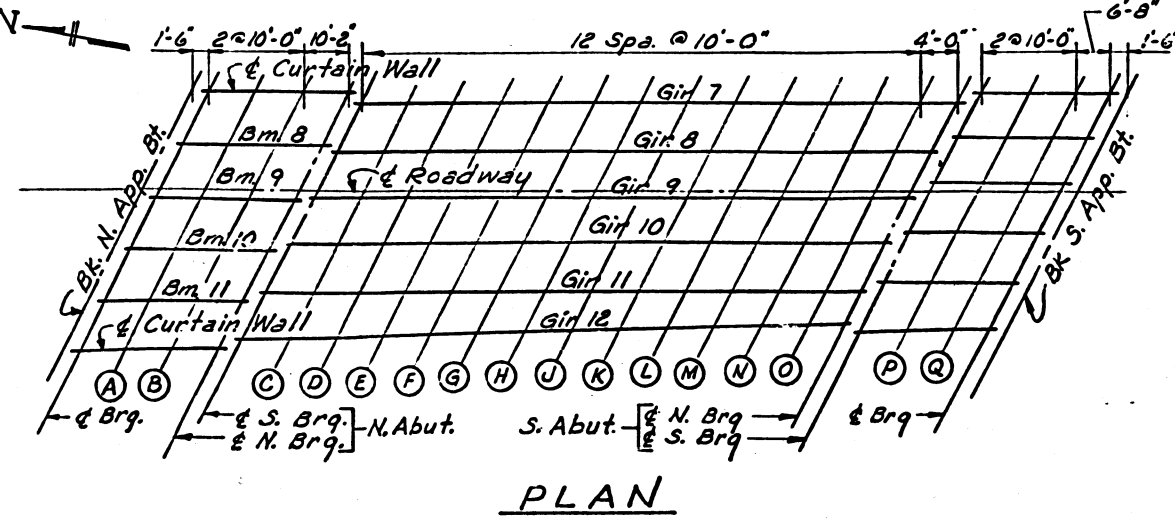
Note: All elevations in the Tables are given at the top of the concrete deck as shown in Detail A.



FILLET HEIGHTS

To determine "t": After all precast prestressed beams have been erected, elevations of the top flanges of the beams shall be taken at intervals shown above. These elevations subtracted algebraically from the "Theoretical Grade Elevations Adjusted for Dead Load Deflections" shown above, minus slab thickness, equals the fillet height "t". A positive value of "t" equals the fillet height above the top of the beam. A negative value of "t", not to exceed 1/2", equals the embedment of the beam above the theoretical bottom of slab elevation.

DESIGNED BY: A.J.C.
 DRAWN BY: A.J.C.
 CHECKED BY: A.T.



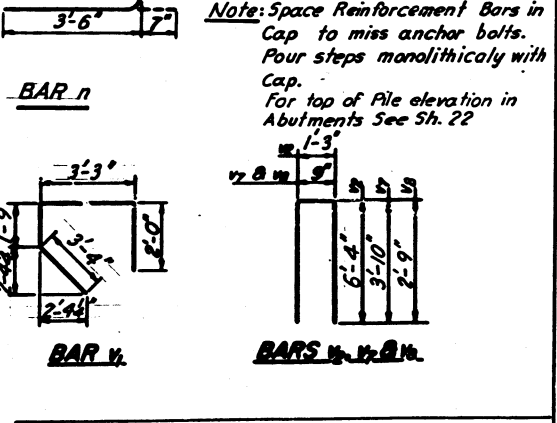
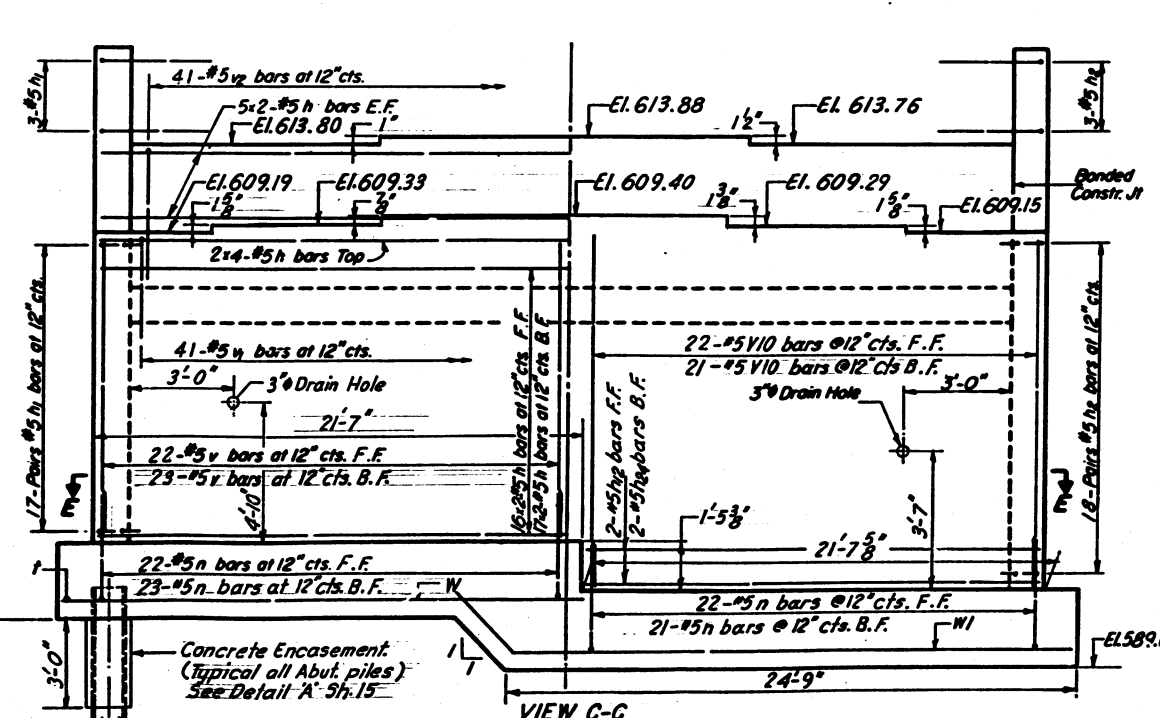
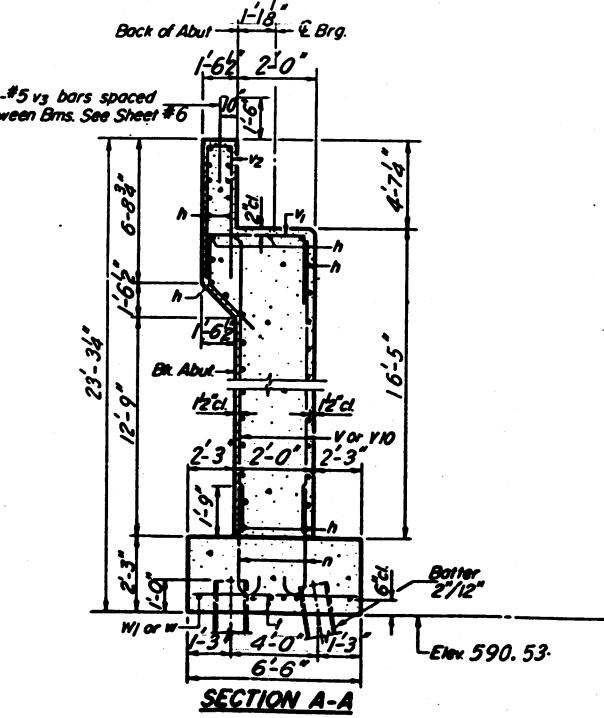
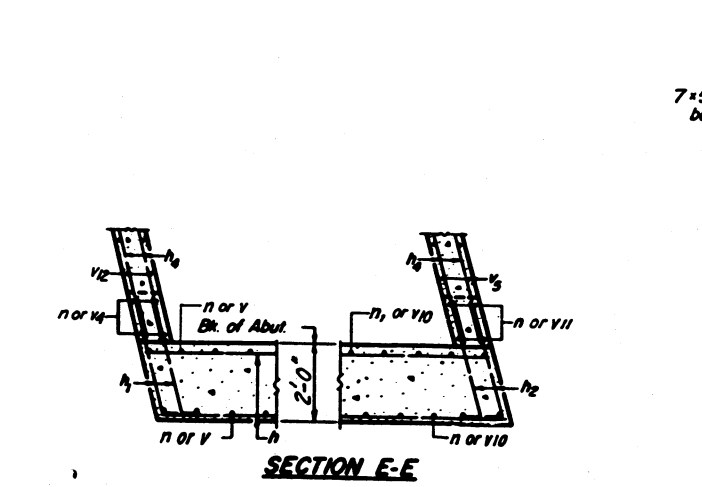
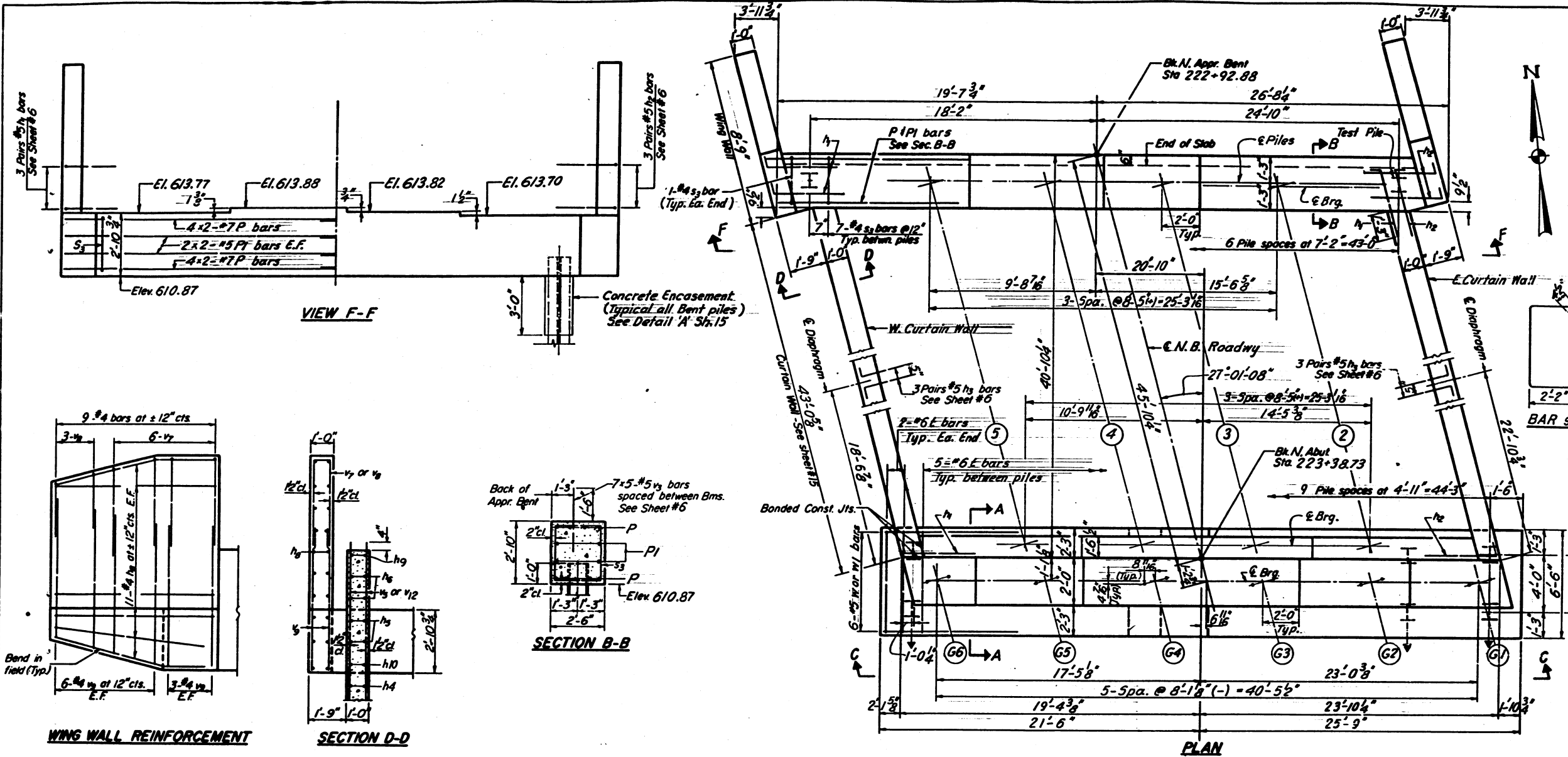
PLAN

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
ELEVATIONS
 SOUTHBOUND ROADWAY
 F.A.I. ROUTE 474 OVER
 ILLINOIS ROUTE #16
 STA. 223 + 71.15
 F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
 CHRISTIAN-ROGE AND ASSOC.
 ENGINEERS
 CHICAGO, ILLINOIS

BILL OF MATERIAL

Bar	No	Size	Length	Shape
n	94	#5	22'-1"	
n	49	#5	3'-7"	
h	51	#5	3'-7"	
h	12	#5	3'-0"	
h	31	#5	40'-2"	
h	16	#5	22'-4"	
h	16	#5	23'-0"	
h	8	#10	42'-0"	
h	44	#4	8'-5"	
h	4	#8	44'-8"	
h10	4	#5	30'-0"	
h11	8	#10	16'-8"	
h12	2	#5	21'-4"	
h24	2	#5	20'-3"	
n	100	#5	4'-1"	
p	16	#7	24'-0"	
p1	8	#5	23'-8"	
s3	44	#4	10'-1"	
t	49	#6	6'-2"	
v	45	#5	16'-1"	
v	41	#5	10'-4"	
v	41	#5	13'-11"	
v	78	#5	3'-0"	
v	6	#5	24'-0"	
v	36	#5	28'-0"	
v	28	#5	5'-11"	
v	12	#4	8'-5"	
v	6	#4	6'-3"	
v	36	#4	7'-2"	
v10	43	#5	17'-6"	
v12	6	#5	25'-6"	
v12	36	#5	26'-2"	
w	6	#5	24'-6"	
w1	6	#5	28'-5"	
Reinforcement Bars		Lbs.	15710	
Class X Concrete		Cu.Yd.	160.4	
Steel H Piles 10BP42		Lin.Ft.	1234	
Test Pile		Ea.	1	
Protective Coat		Sq.Yd.	7	

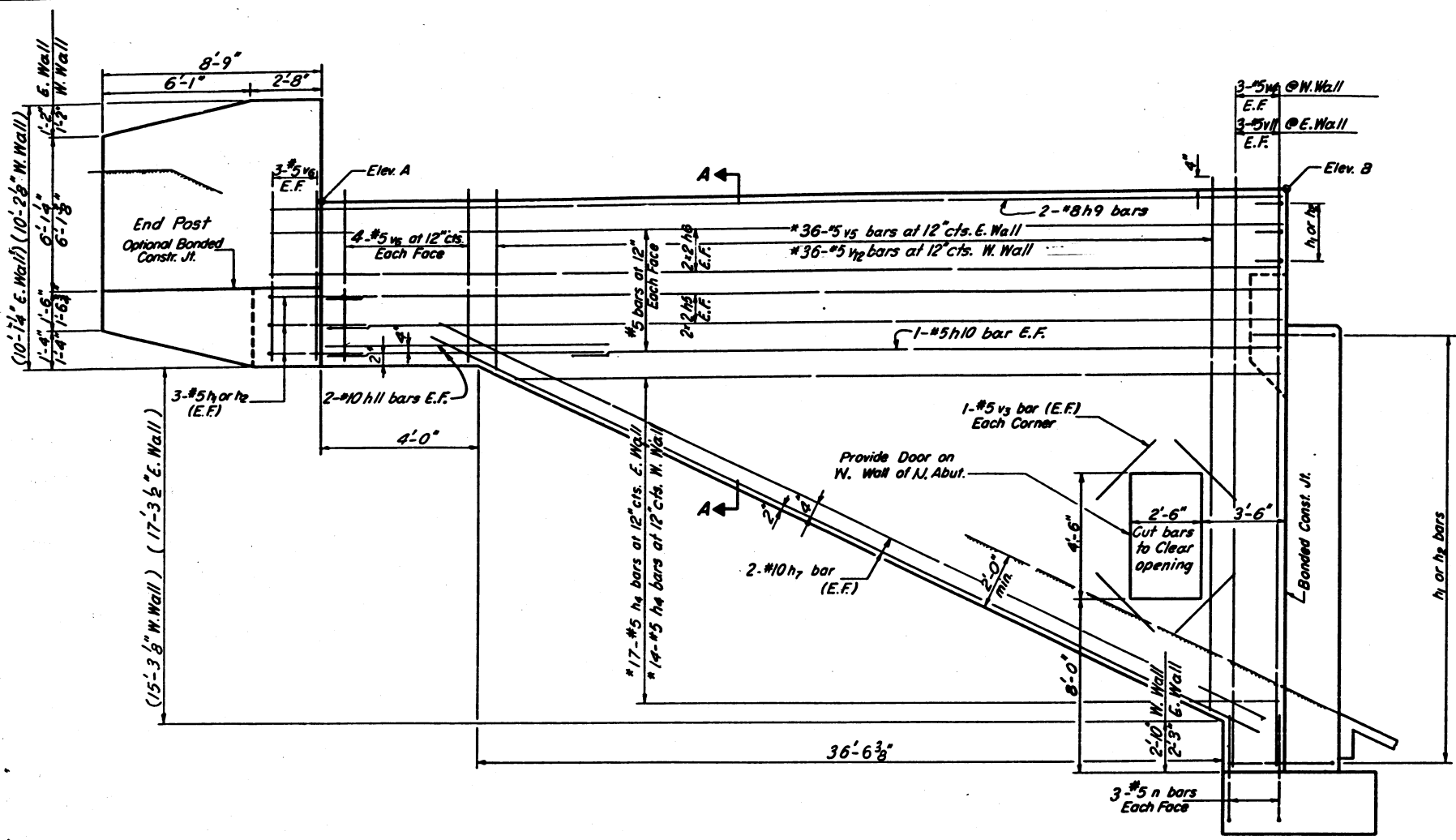
Note: Space Reinforcement Bars in Cap to miss anchor bolts. Pour steps monolithically with Cap. For top of Pile elevation in Abutments See Sh. 22



DESIGNED BY A.T.
DRAWN BY J.V.
CHECKED BY A.T.

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
NORTH ABUTMENT & APPROACH BENT
NORTHBOUND ROADWAY
F.A.I. ROUTE 474 OVER
ILLINOIS ROUTE 116
STA. 223 + 71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 14 of 23

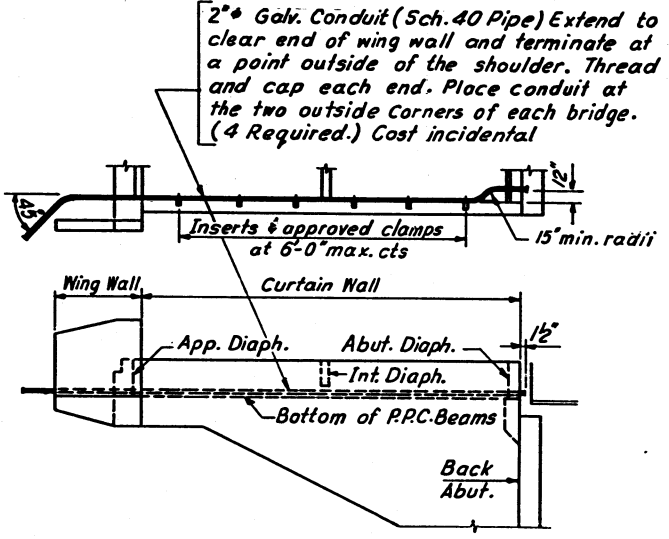
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-2	PEORIA	41	20
FED. ROAD DIV. NO. 7		ILLINOIS	PROJECT	



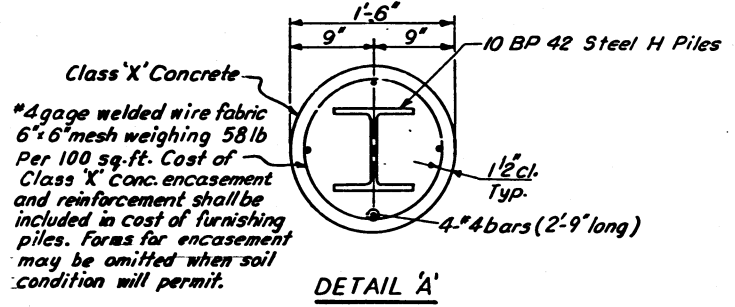
SIDE ELEVATION

TOP OF CURTAIN WALL ELEVATIONS

Location	Elev. A	Elev. B
E. Wall N. Abut.	616.43	616.50
W. Wall N. Abut.	616.51	616.54



ELECTRICAL CONDUIT LOCATION



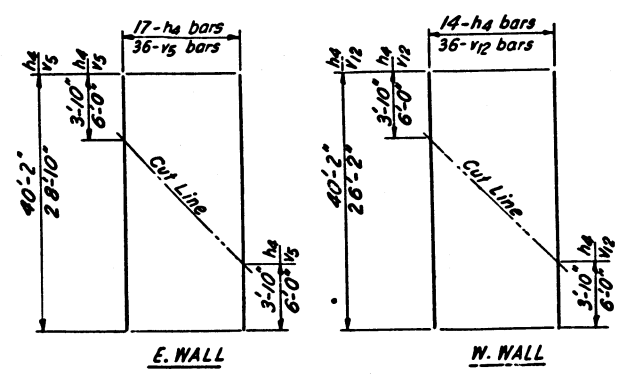
DETAIL A'

APPR. BENT - PILE DATA

Type-10BP42 Steel H Piles
Capacity-Drive to refusal
Est. Length-59'
No. Req'd.-6
Test Pile-1

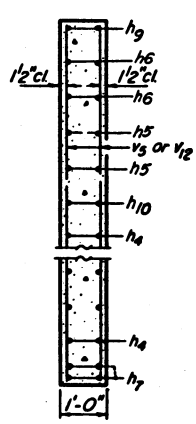
ABUT.- PILE DATA

Type-10BP42 Steel H Piles
Capacity-Drive to refusal
Est. Length-44'
No. Req'd.-20

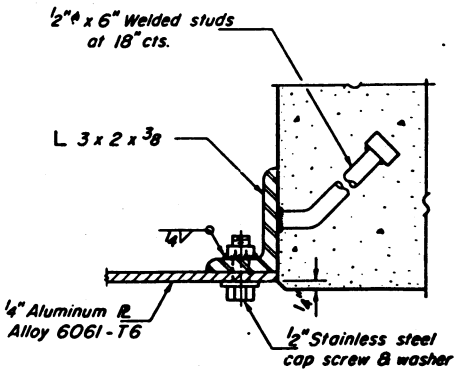


FIELD CUTTING DIAGRAM

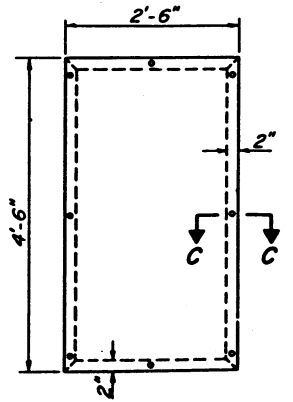
* Order h6, v5 & h7 bars full length.
Cut to fit as shown and use remainder of bars in other face.



SECTION A-A



SECTION C-C



DOOR ELEVATION

(Cost of door and frame are incidental)

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
NORTH END CURTAIN WALLS & WING WALLS
NORTHBOUND ROADWAY
F.A.I. ROUTE 474 OVER
ILLINOIS ROUTE 116
STA. 223+71.15
F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

SHEET
15 of 23

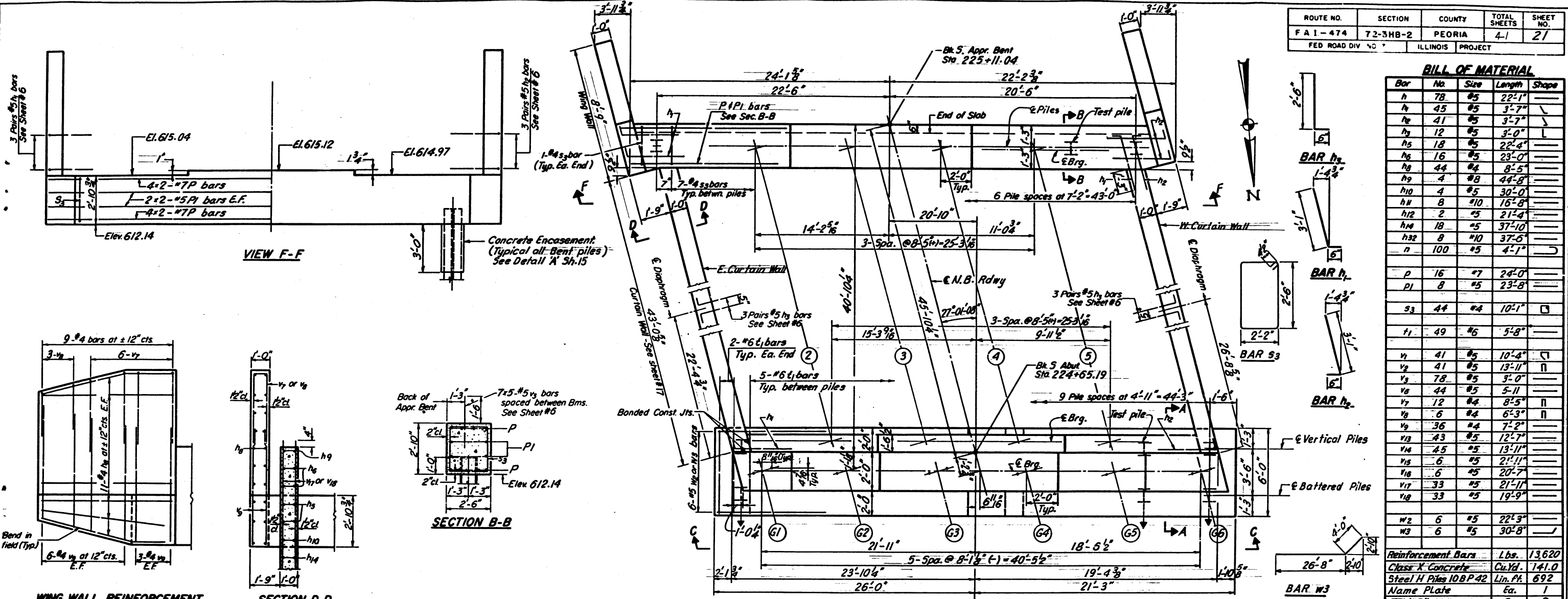
DESIGNED BY: A. T.
DRAWN BY: J. J.
CHECKED BY: A. T.

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAI-474	72-3HB-2	PEORIA	4-1	21
FED ROAD DIV NO 7		ILLINOIS PROJECT		

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	78	#5	22'-1"	
h	45	#5	3'-7"	
h	41	#5	3'-7"	
h	12	#5	3'-0"	
h	18	#5	22'-4"	
h	16	#5	23'-0"	
h	44	#4	8'-5"	
h	4	#8	44'-8"	
h	4	#5	30'-0"	
h	8	#10	16'-8"	
h	2	#5	21'-4"	
h	18	#5	37'-10"	
h	8	#10	37'-6"	
n	100	#5	4'-1"	
p	16	#7	24'-0"	
p	8	#5	23'-8"	
s	44	#4	10'-1"	
t	49	#6	5'-8"	
v	41	#5	10'-4"	
v	41	#5	13'-11"	
v	78	#5	3'-0"	
v	44	#5	5'-11"	
v	12	#4	8'-5"	
v	6	#4	6'-3"	
v	36	#4	7'-2"	
v	43	#5	12'-7"	
v	45	#5	13'-11"	
v	6	#5	21'-11"	
v	6	#5	20'-7"	
v	33	#5	21'-11"	
v	33	#5	19'-9"	
w	6	#5	22'-3"	
w	6	#5	30'-8"	
Reinforcement Bars			Lbs.	13,620
Class X Concrete			Cu.Yd.	141.0
Steel H Piles 10BP42			Lin.Ft.	692
Name Plate			Ea.	1
Test Pile			Ea.	2
Protective Coat			Sq.Yd.	7

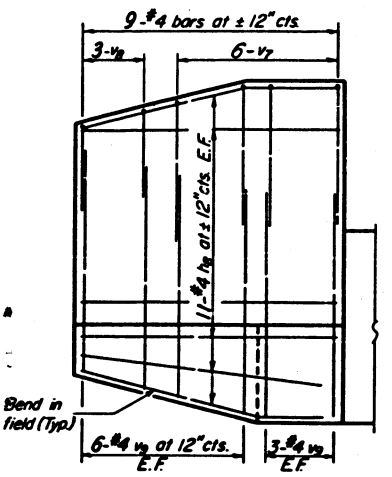
For Note see Sheet 14



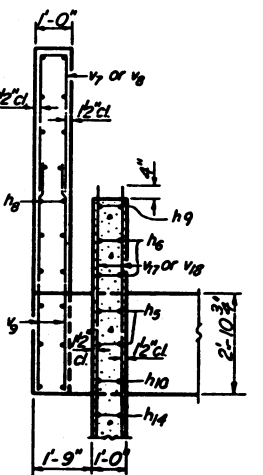
VIEW F-F

SECTION B-B

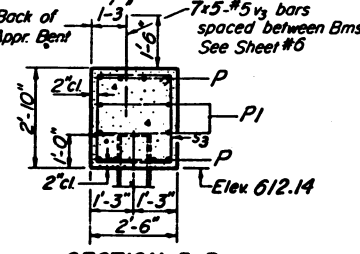
PLAN



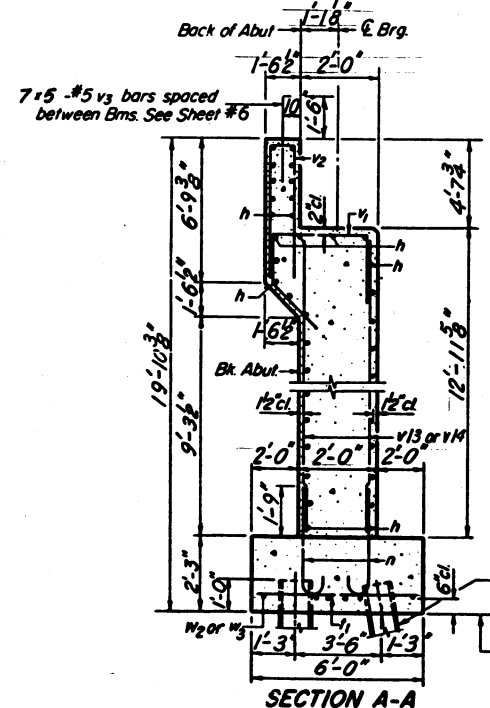
WING WALL REINFORCEMENT



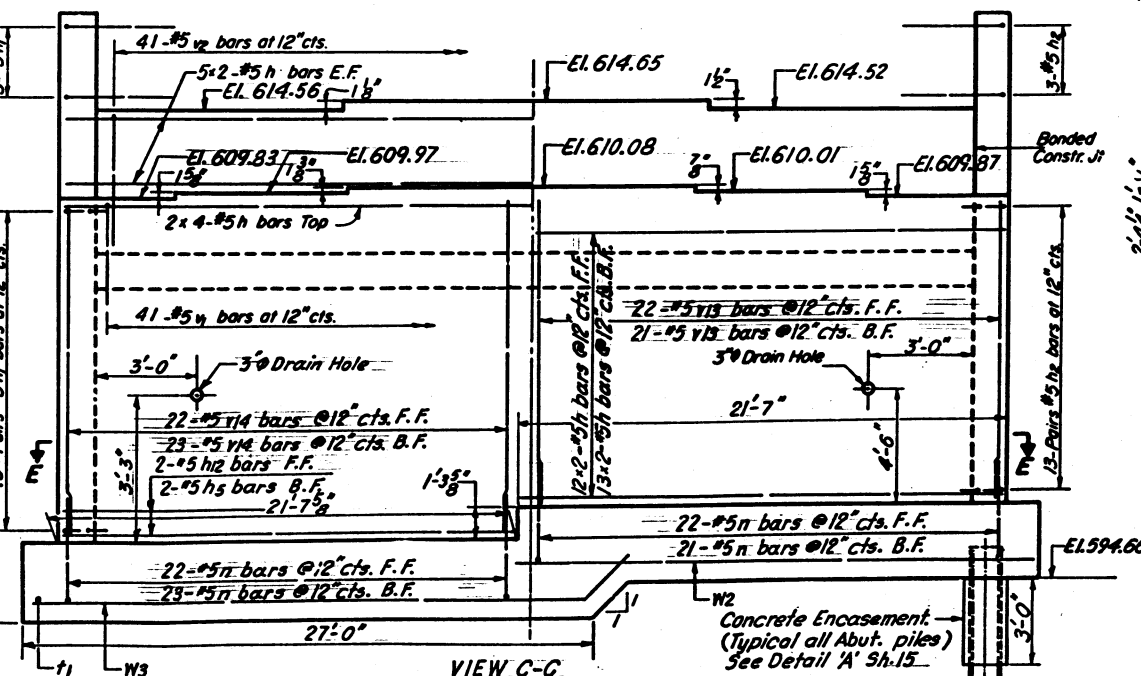
SECTION D-D



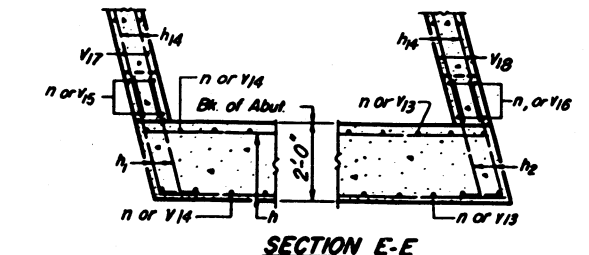
SECTION B-B



SECTION A-A

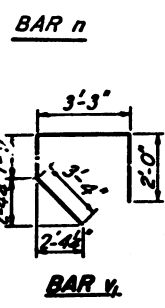


VIEW C-C



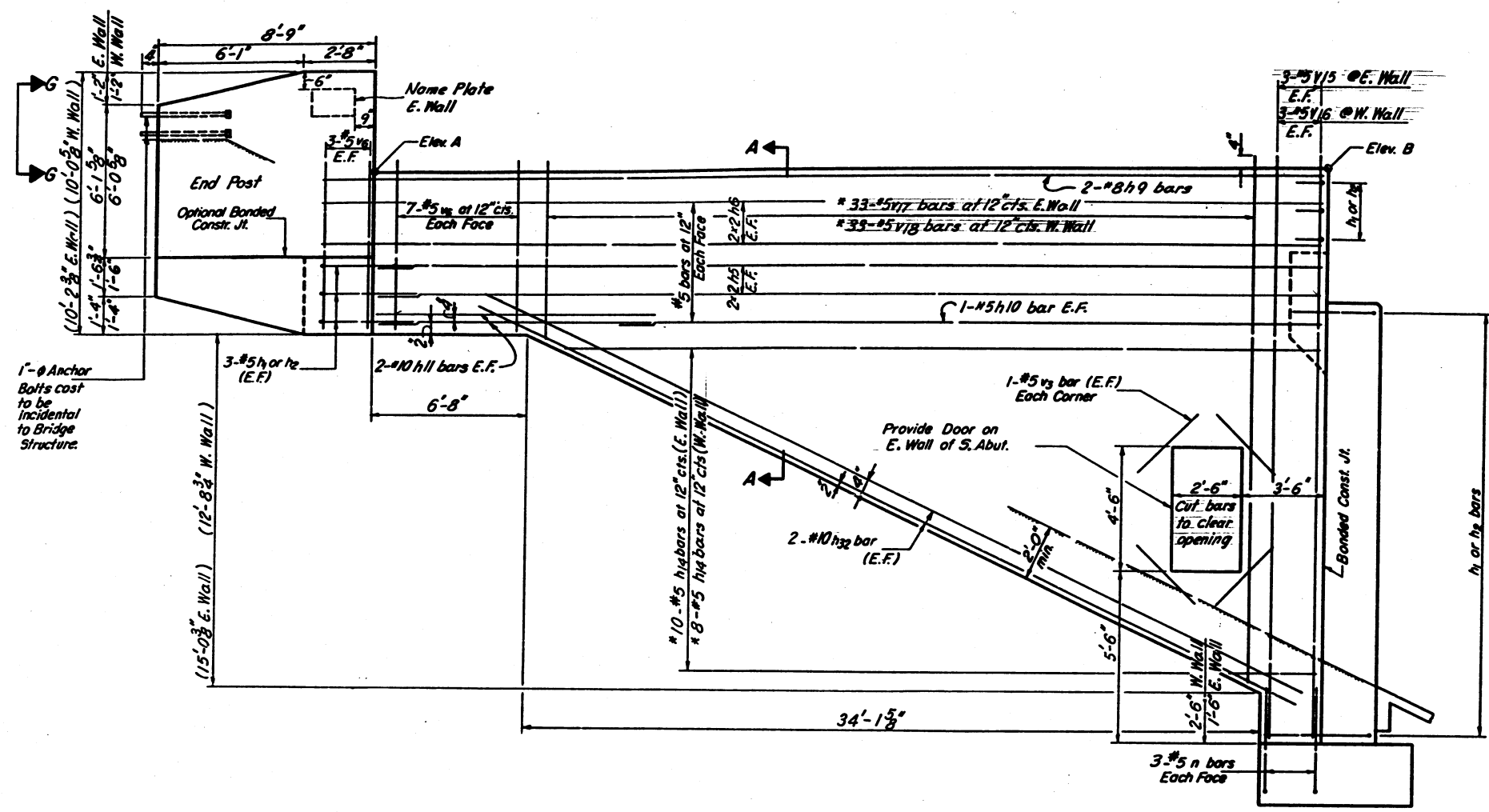
SECTION E-E

DESIGNED BY A.T.
DRAWN BY J.J.
CHECKED BY A.T.



STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
SOUTH ABUTMENT & APPROACH BENT
NORTHBOUND ROADWAY
FA.I. ROUTE 474 OVER
ILLINOIS ROUTE 116
STA. 223+71.15
FA.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS

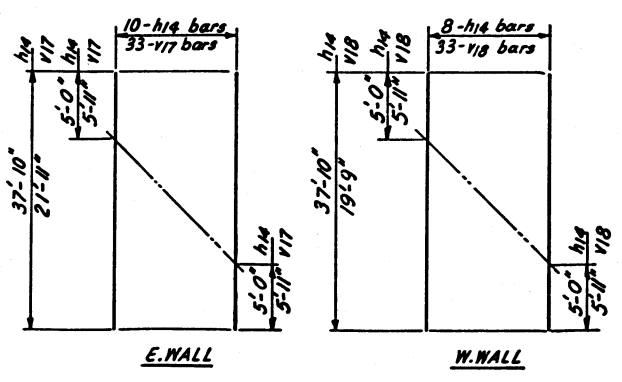
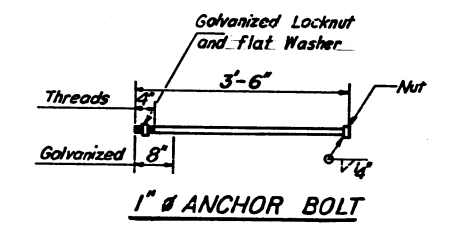
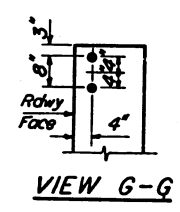
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F. A. I. - 474	72-3HB-2	PEORIA	41	22
FED. ROAD DIV. NO. 7		ILLINOIS PROJECT		



SIDE ELEVATION

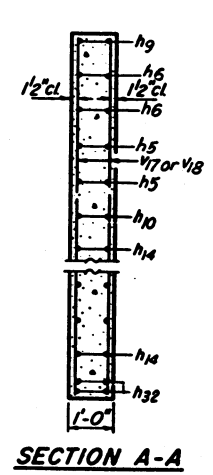
TOP OF CURTAIN WALL ELEVATIONS

Location	Elev. A	Elev. B
E. Wall S. Abut.	617.80	617.32
W. Wall S. Abut.	617.65	617.22

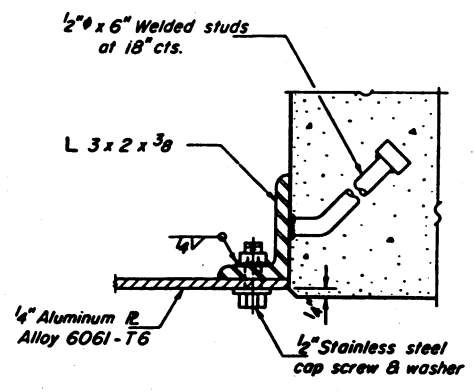


FIELD CUTTING DIAGRAM

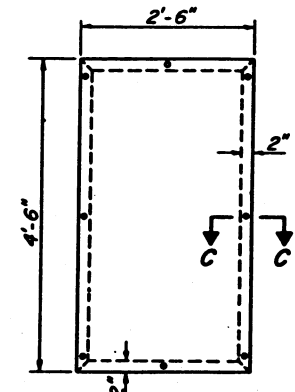
* Order #14 #17 bars full length. Cut to fit as shown and use remainder of bars in other face.



SECTION A-A



SECTION C-C



DOOR ELEVATION
(Cost of door and frame are incidental)

APPR. BENT-PILE DATA
 Type-10BP42 Steel H Piles
 Capacity-Drive to refusal
 Est. Length-33'
 No. Req'd.-6
 Test Pile-1

ABUT.-PILE DATA
 Type-10BP42 Steel H Piles
 Capacity-Drive to refusal
 Est. Length-26'
 No. Req'd.-19
 Test Pile-1

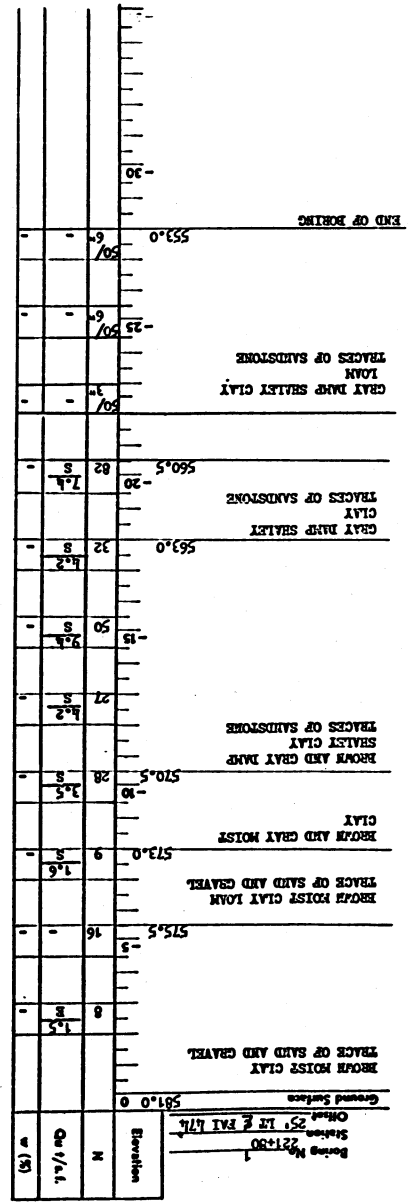
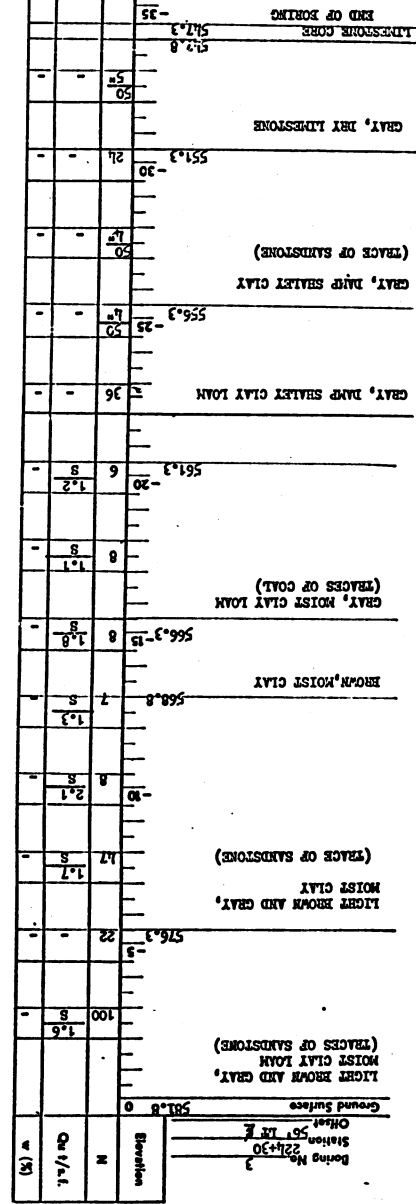
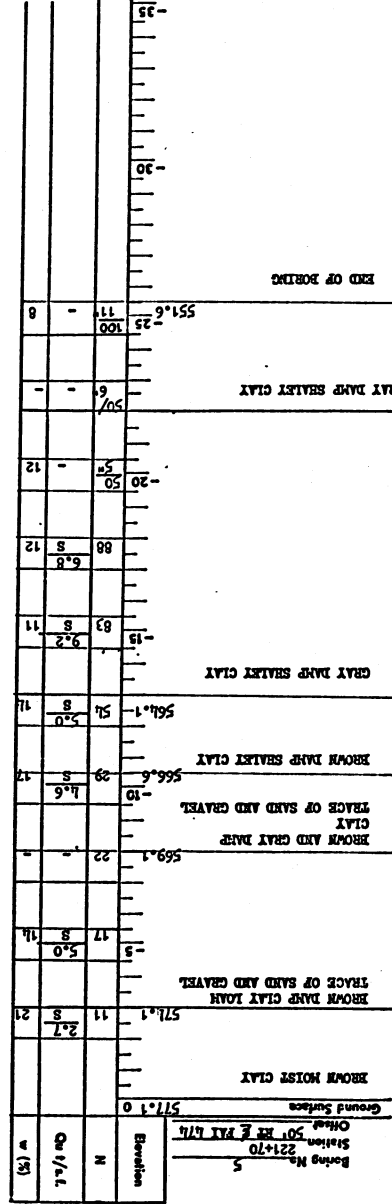
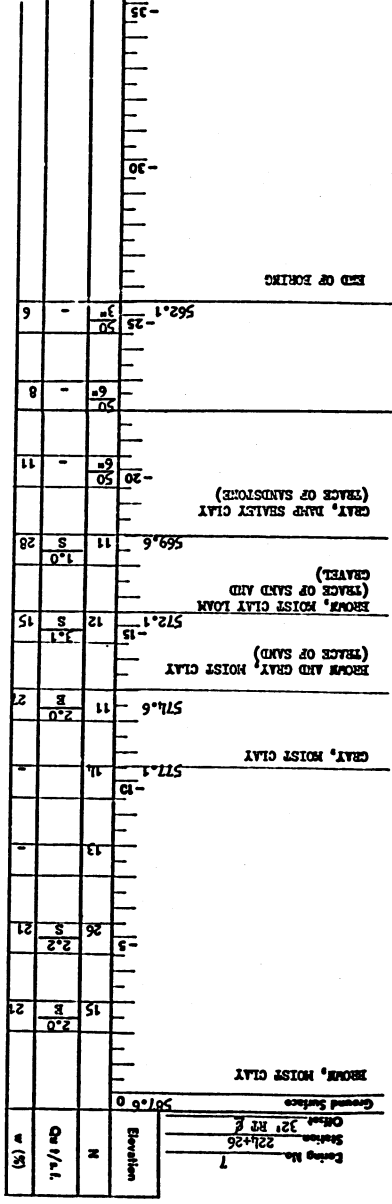
DESIGNED BY: A.T.
 DRAWN BY: J.J.
 CHECKED BY: A.T.

STATE OF ILLINOIS
 DEPARTMENT OF PUBLIC WORKS & BLDGS.
 DIVISION OF HIGHWAYS
 SOUTH END CURTAIN WALLS & WING WALLS
 NORTHBOUND ROADWAY
 F.A.I. ROUTE 474 OVER
 ILLINOIS ROUTE 116
 STA. 223+71.15
 F.A.I. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
 CHRISTIAN-ROGE AND ASSOC.
 ENGINEERS
 CHICAGO, ILLINOIS

SHEET
 17 of 23

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I.-474	72-3HB-2	PEORIA	41	28
FED. ROAD DIV. NO. 7 ILLINOIS PROJECT				

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BLDGS.
DIVISION OF HIGHWAYS
BORING LOGS
OVER
ILLINOIS ROUTE 116
STA. 223+71.5
FAI. RT. 474 PEORIA COUNTY SECTION 72-3HB-2
CHRISTIAN-ROGE AND ASSOC.
ENGINEERS
CHICAGO, ILLINOIS
SHEET 28 OF 29



N - Standard Penetration Test - Blows per foot to drive "X" O.D. Split Spoon Sampler 12" with 140# hammer falling 30".
 Qu - Unconfined Compressive Strength - 1/4"
 w - Water Content - percentage of oven dry weight - X.
 E - Estimated Value
 S - Shear Failure
 B - Bulge Failure
 Type failure:
 P - Penetrometer

CHICAGO, ILLINOIS
A.T.
A.T.