

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	119B(BR)BJR,P	TAZEWELL	17	1
		ILLINOIS	CONTRACT NO. 68H16	

INDEX OF SHEETS

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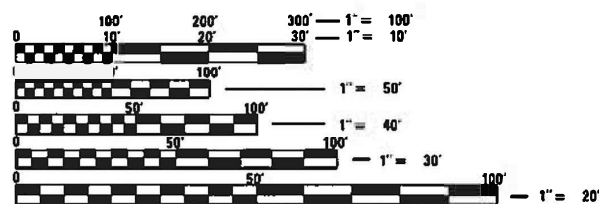
HIGHWAY STANDARDS

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 701321-18 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH
- 701901-08 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

DISTRICT STANDARDS

- 780001-04 TYPICAL PAVEMENT MARKINGS

FUNCTIONAL CLASSIFICATION  
MINOR ARTERIAL  
2019 ADT: 3250  
PV: 88.5% SU + MU: 11.5%



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  
OR 811

PROJECT ENGINEER: BEN TELLEFSON (309) 671-4477  
PROJECT MANAGER: MARK ECKHOFF (309) 671-4463

CONTRACT NO. 68H16  
CATALOG NO. 036331-00D



PROPOSED  
HIGHWAY PLANS

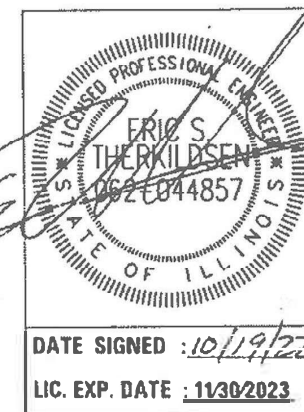
FAP ROUTE 693 (IL ROUTE 9)  
SECTION 119B(BR)BJR,P  
PROJECT STATE 0-02177-40147  
BRIDGE JOINT REPLACEMENT/REPAIR  
TAZEWELL COUNTY

C-94-054-22

R2W R3W

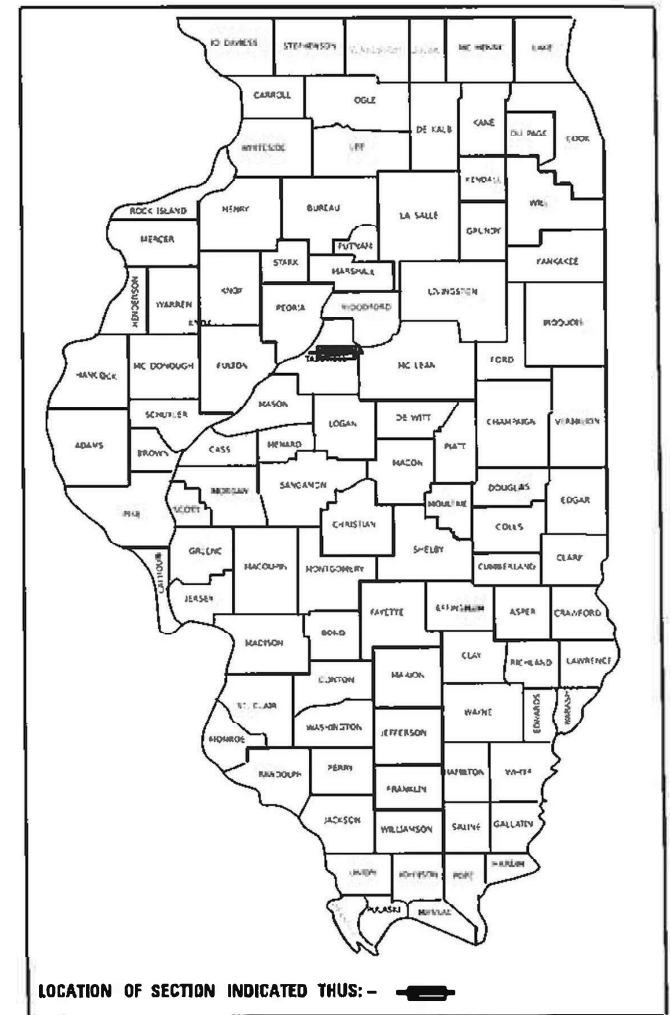


SN 090-0063  
IL 9 OVER  
MACKINAW RIVER  
STA. 701+51.23 TO  
STA. 709+40.81



GROSS LENGTH = 501 FT. = 0.094 MILE  
NET LENGTH = 737.5 FT. = 0.134 MILE

D-94-037-22



DESCRIPTION OF PROJECT:

THIS PROJECT CONSISTS OF AGGREGATE SHOULDER REPLACEMENT WITH HOT-MIX ASPHALT SHOULDERS, BRIDGE JOINT, DECK DRAIN CLEANING AND SEALING, AND DECK PATCHING AT SN 090-0063 CARRYING IL ROUTE 9 OVER THE MACKINAW RIVER.

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 12, 2022  
[Signature]  
REGIONAL ENGINEER

February 3, 2023  
[Signature]  
ENGINEER OF DESIGN AND ENVIRONMENT

February 3, 2023  
[Signature]  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

**GENERAL NOTES**

- 1. THE CONSTRUCTION SHALL BE GOVERNED BY THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" 2022 EDITION AND "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS", CURRENT EDITION.
- 2. ALL ELEVATIONS, STATIONS AND OFFSETS SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- 3. ALL ELEVATIONS SHOWN ON THE PLANS ARE ESTABLISHED FROM U.S.G.S. MEAN SEA LEVEL DATUM.
- 4. TEN FEET (10 FT.) TRANSITIONS SHALL BE USED TO MATCH PROPOSED ITEMS OF WORK TO EXISTING ITEMS IN THE FIELD UNLESS OTHERWISE SHOWN. THE TRANSITION SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PROPOSED ITEM OF WORK SPECIFIED.
- 5. POLYMERIZED BITUMINOUS MATERIALS (TACK COAT) RATES

SURFACE TYPE	RESIDUAL RATE
MILLED (HMA OR PCC)	0.08 LB/SF
EXISTING PAVEMENT	0.08 LB/SF
FOG COAT (BETWEEN LIFTS)	0.08 LB/SF

- 6. HOT-MIX ASPHALT MIXTURE REQUIREMENTS

LOCATIONS:	SHOULDERS
MIXTURE USES:	HMA BINDER COURSE 8"
PG:	PG 64-22 OR PG 70-22
DESIGN AIR VOIDS:	4% @ N50
MIXTURE COMPOSITION:	IL-9.5
FRICTION AGGREGATE:	N.A.
QUALITY MANAGEMENT:	QC/QA

**NOTES:**

- 1) INDIVIDUAL LIFT THICKNESSES OF EACH MIX WILL BE NO LESS THAN (3) TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN FIVE (5) TIMES NOMINAL AGGREGATE MAXIMUM SIZE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.
- 2) FOR DESIGN PURPOSES, MIXTURE WEIGHT FOR ALL MIXES IS DETERMINED TO BE 112.0 lb./s.y./in., UNLESS OTHERWISE NOTED.
- 3) SUBLOT SIZES FOR PFP AND QCP MIXES WILL BE 1,000 TONS, UNLET OTHERWISE AGREED TO BY THE ENGINEER AND THE PAVING CONTRACTOR

- 7. 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.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (BORROW SITE REVIEW)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM D4 PI0101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL 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.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

- 8. PROPERTY OWNER ACCESS REQUIREMENT

ACCESS MUST BE MAINTAINED TO ALL EXISTING PROPERTIES DURING THE 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.

**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.

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PLOT DATE = 10/21/2022	CHECKED - BKR	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES**

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	2
CONTRACT NO.			68H16	
ILLINOIS   FED. AID PROJECT				

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				BRIDGE
				47
				090-0063
20200500	EARTH EXCAVATION (WIDENING)	CU YD	111	111
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	999	999
440000100	PAVEMENT REMOVAL	SQ YD	207	207
48203029	HOT MIX ASPHALT SHOULDERS, 8"	SQ YD	722	722
50102400	CONCRETE REMOVAL	CU YD	8.6	8.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.6	8.6
50300300	PROTECTIVE COAT	SQ YD	26	26
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1200	1200
50800515	BAR SPLICERS	EACH	12	12
52000110	PREFORMED JOINT STRIP SEAL	FOOT	90	90
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1

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 DATE -

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 REVISED -  
 REVISED -  
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**  
 SCALE: SHEET 1 OF 2 SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	3
CONTRACT NO.			68H16	
ILLINOIS FED. AID PROJECT				

ITEM NO.	DESCRIPTION	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE
				BRIDGE
				47
				090-0063
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
70400100	TEMPORARY CONCRETE BARRIER	FOOT	762.5	762.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	762.5	762.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	6096	6096
78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	2032	2032
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	53	53
X0326394	FLOOR DRAINS TO BE CLEANED	EACH	134	134

\*= SPECIALTY ITEM

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PAVEMENT SCHEDULE						
	20200500	40600290	440000100	48203029	78001110	78300202
	EARTH EXCAVATION (WIDENING)	BITUMINOUS MATERIALS (TACK COAT)	PAVEMENT REMOVAL	HOT-MIX ASPHALT SHOULDERS, 8"	PAINT PAVEMENT MARKING -LINE 4"	PAVEMENT MARKING REMOVAL -WATER BLASTING
STATION TO STATION	CU YD	POUND	SQ YD	SQ YD	FOOT	SQ FT
698+90 TO 702+84	38.7	351.3	72.2	252.8	1576.0	525.3
702+84 TO 707+97					2052.0	684.0
707+97 TO 714+14	71.5	646.8	133.9	468.6	2468.0	822.7
<b>SUBTOTAL</b>	<b>110.2</b>	<b>998.1</b>	<b>206.1</b>	<b>721.4</b>	<b>6096.0</b>	<b>2032</b>
<b>TOTAL</b>	<b>111</b>	<b>999</b>	<b>207</b>	<b>722</b>	<b>6096</b>	<b>2032</b>

TRAFFIC CONTROL SCHEDULE										
	67100100	70100405	70100500	70106500	70106700	70107025	70400100	70400200	70600250	70600350
	MOBILIZATION	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	TRAFFIC CONTROL AND PROTECTION STANDARD 701326	TEMPORARY BRIDGE TRAFFIC SIGNALS	TEMPORARY RUMBLE STRIPS	CHANGEABLE MESSAGE SIGN	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3
STATION TO STATION	L SUM	EACH	L SUM	EACH	EACH	CAL DA	FOOT	FOOT	EACH	EACH
702+90.22 TO 702+94.22				0.5	3		137.5	137.5	1	1
702+94.22 TO 707+86.85							487.5	487.5		
707+86.85 TO 707+90.85				0.5	3		137.5	137.5	1	1
700+00.00 TO 709+00.00	1	1	1			28				
<b>SUBTOTAL</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>28</b>	<b>762.5</b>	<b>762.5</b>	<b>2</b>	<b>2</b>
<b>TOTAL</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>28</b>	<b>762.5</b>	<b>762.5</b>	<b>2</b>	<b>2</b>

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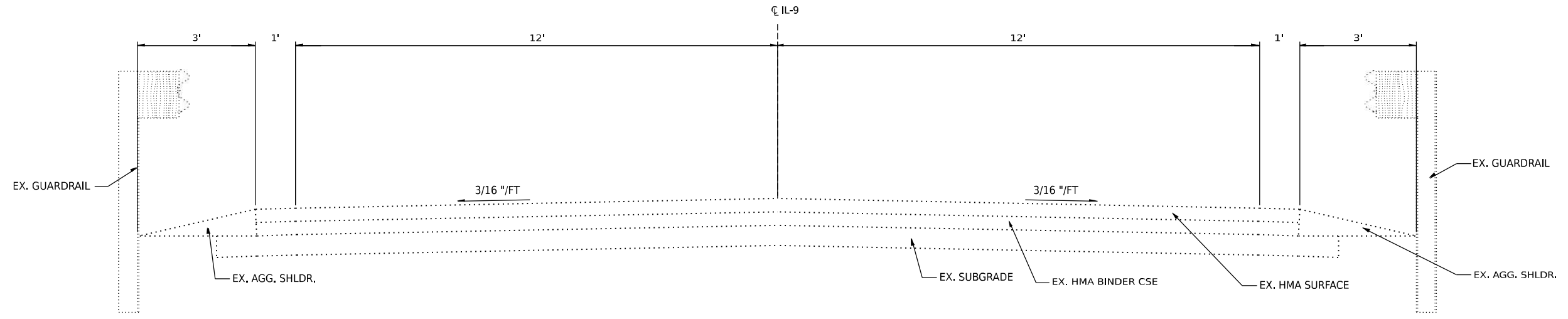
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

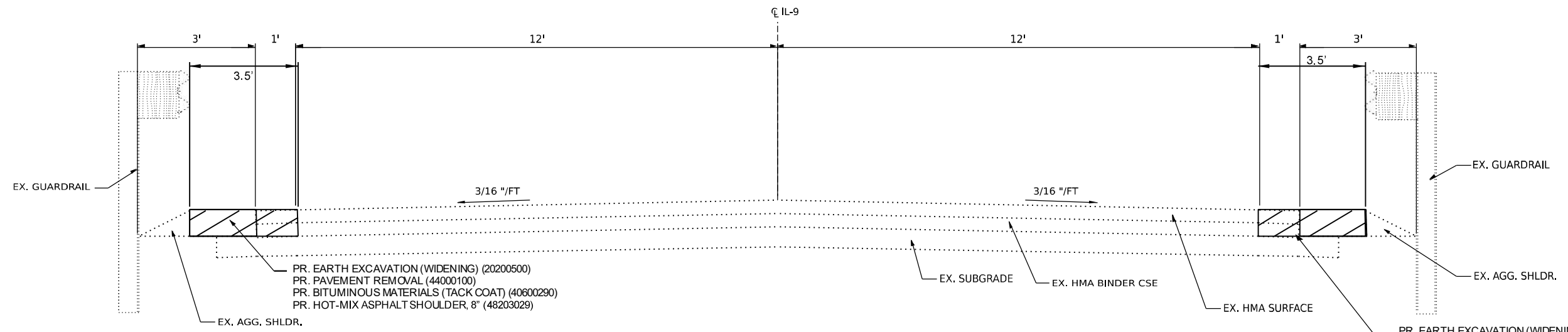
**SCHEDULE OF QUANTITIES**

SCALE: SHEET 1 OF 1 SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEVELL	17	5
CONTRACT NO.			68H16	
ILLINOIS		FED. AID PROJECT		



**EXISTING TYPICAL SECTION**  
 STA. 699+34 TO 702+84  
 STA. 707+97 TO 714+14



PR. EARTH EXCAVATION (WIDENING) (20200500)  
 PR. PAVEMENT REMOVAL (44000100)  
 PR. BITUMINOUS MATERIALS (TACK COAT) (40600290)  
 PR. HOT-MIX ASPHALT SHOULDER, 8" (48203029)

PR. EARTH EXCAVATION (WIDENING) (20200500)  
 PR. PAVEMENT REMOVAL (44000100)  
 PR. BITUMINOUS MATERIALS (TACK COAT) (40600290)  
 PR. HOT-MIX ASPHALT SHOULDER, 8" (48203029)

**PROPOSED TYPICAL SECTION**  
 STA. 699+34 TO 702+84  
 STA. 707+97 TO 714+14

NOTE:  
 TRAFFIC CONTROL FOR HMA SHOULDER WIDENING SHALL BE  
 IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION,  
 STANDARD 701326.

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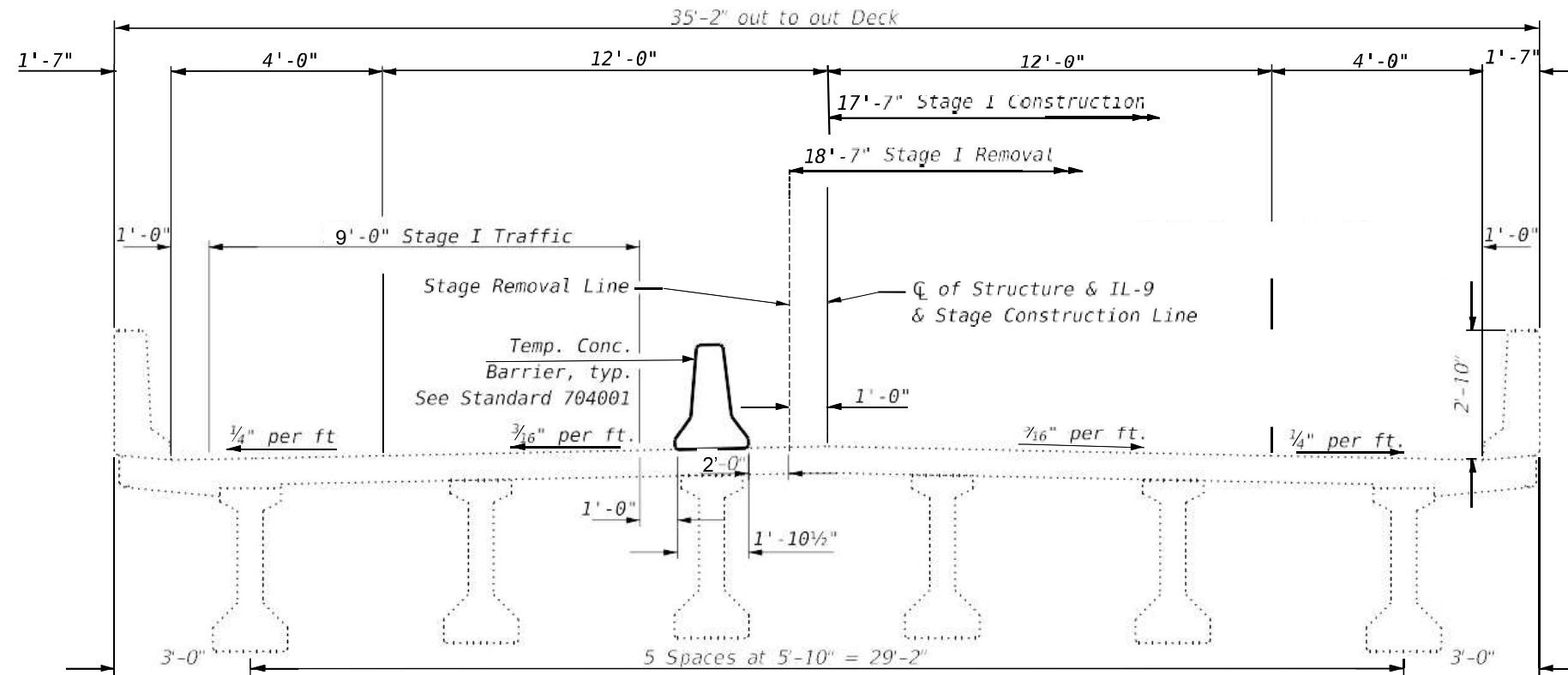
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

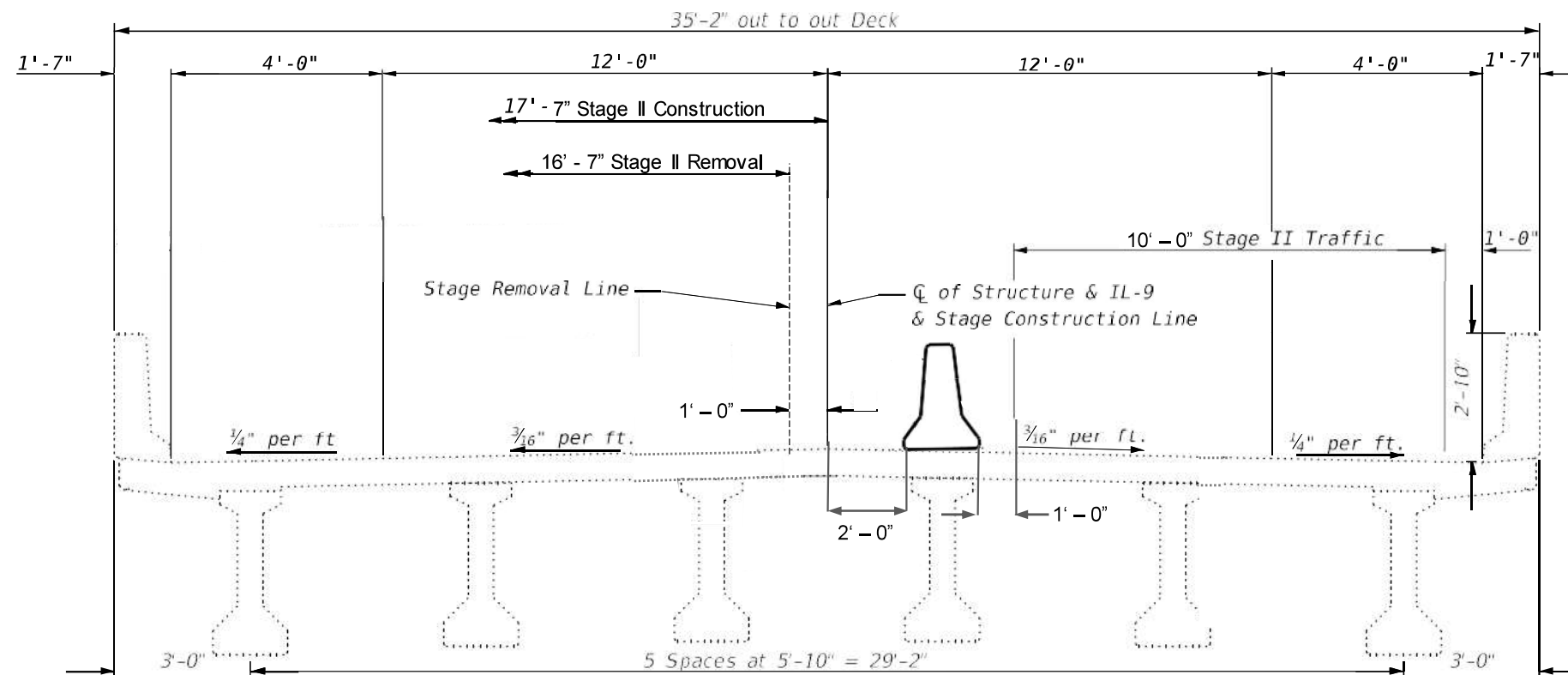
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SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	6
CONTRACT NO			68H16	
ILLINOIS FED. AID PROJECT				



**CROSS SECTION**  
(Looking East)  
**STAGE ONE**



**CROSS SECTION**  
(Looking East)  
**STAGE TWO**

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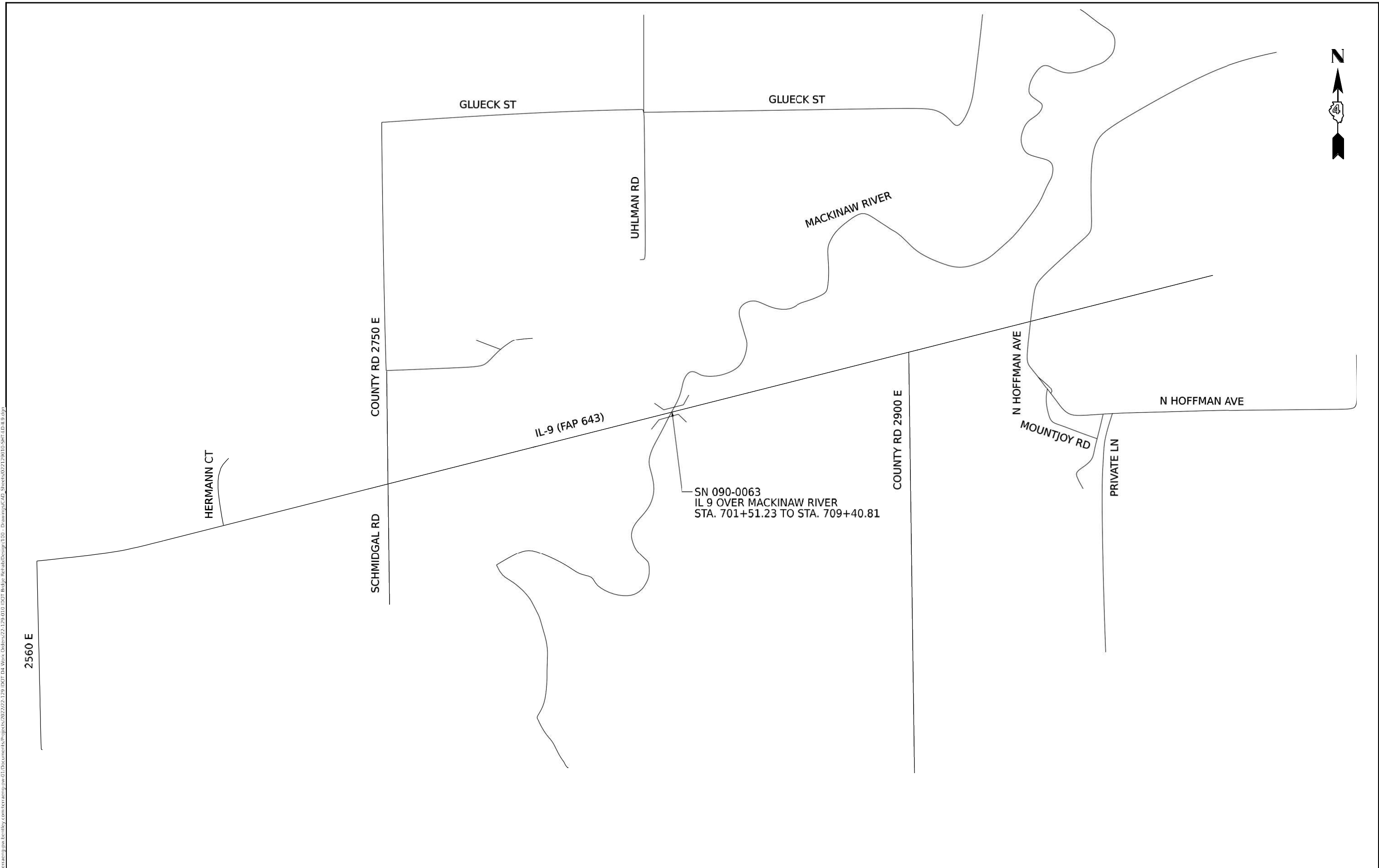
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PLOT DATE	= 10/21/2022	DATE	-	REVISED	-

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGING TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	7
CONTRACT NO			68H16	
ILLINOIS FED. AID PROJECT				



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USER NAME	= brentnar
PLOT SCALE	= 2,000' / in.
PLOT DATE	= 10/21/2022

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**




**LINE DIAGRAM**

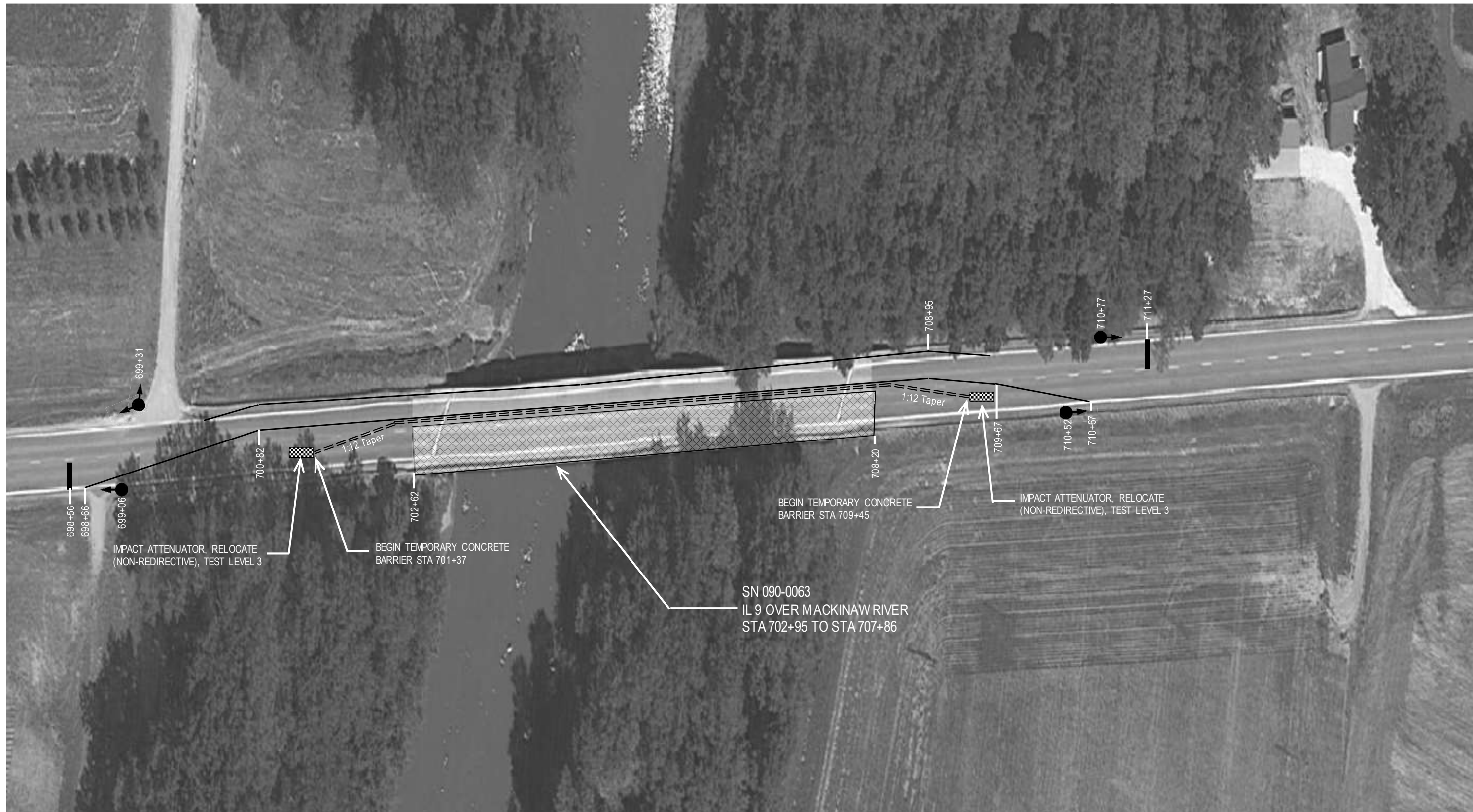
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	8
CONTRACT NO.			68H16	
ILLINOIS FED. AID PROJECT				





-  WORK AREA
-  TRAFFIC SIGNAL
-  STOP BAR



NOT TO SCALE

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USER NAME = brennar	DESIGNED -	REVISED -
DRAWN - CM	REVISIONS -	
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DATE -	REVISIONS -	

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

STAGE I

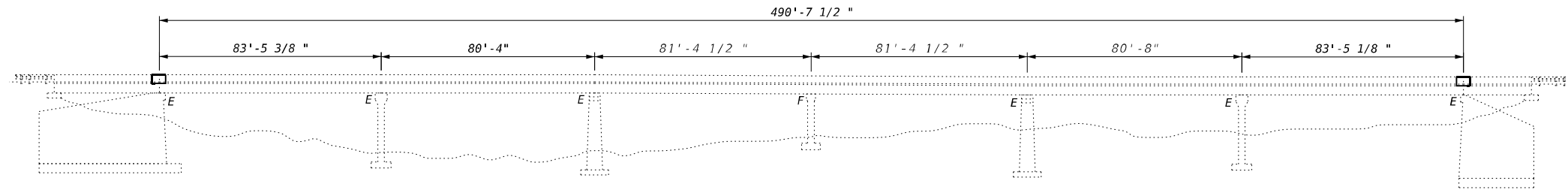
SCALE: SHEET 1 OF 1 SHEETS STA TO STA

F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	10
CONTRACT NO. 68H16			ILLINOIS FED. AID PROJECT	



Existing Structure: S.N. 090-0063 was originally constructed in 1929 as SBI Rte. 164 as Section 119 B&C and repaired as Section 119CB-I, and was reconstructed as Route FA-693, Section 119B-BR at Station 705+40.38 in 1982. The existing structure consists of 6 spans. The beams are 42" PPC I-beams with a 7½" R.C. deck, with different skews in each span. The back to back abutment measures 490'-7½" and 35'-2" out to out of deck. The structure is to have the expansion joints removed and replaced, approach pavement and deck repaired, and deck drains cleaned and sealed. Traffic is to remain open with stage construction.

Salvage: None



**ELEVATION**

**INDEX OF SHEETS**

1. General Plan and Elevation
2. Joint Details - West Abutment
3. Joint Details - East Abutment
4. Preformed Joint Strip Seal
5. Bar Splicer Assembly & Mechanical Splicer Details
6. Floor Drains To Be Cleaned

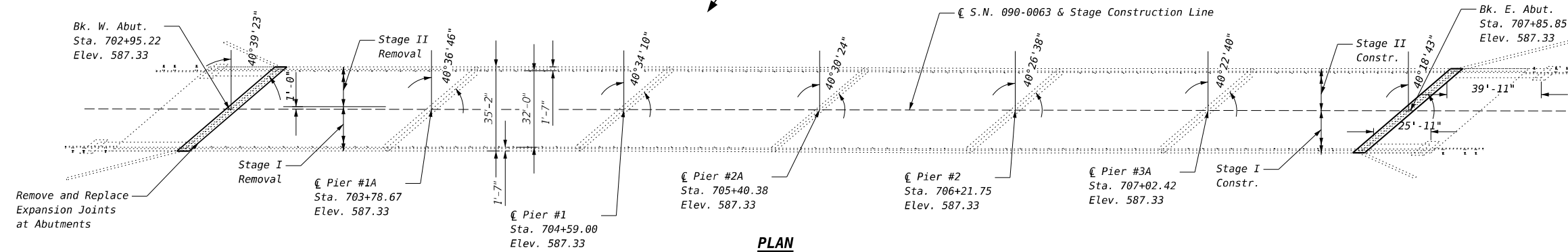
**SCOPE OF WORK**

1. Setup Traffic Control.
2. Remove and replace expansion joints at abutments.
3. Clean and seal deck drains.
4. Bridge deck repair.
5. Switch stages and repeat.

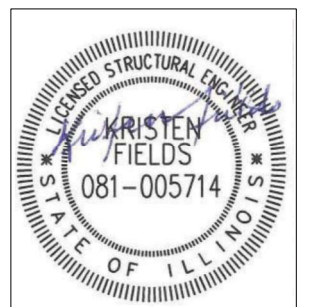
**TOTAL BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	8.6
Concrete Superstructure	Cu. Yd.	8.6
Protective Coat	Sq. Yd.	26
Reinforcement Bars, Epoxy Coated	Pounds	1,200
Bar Splicers	Each	12
Preformed Joint Strip Seal	Foot	90
Deck Slab Repair (Partial)	Sq. Yd.	53
Floor Drains to be Cleaned	Each	134

\*Apply to new concrete only.



**PLAN**

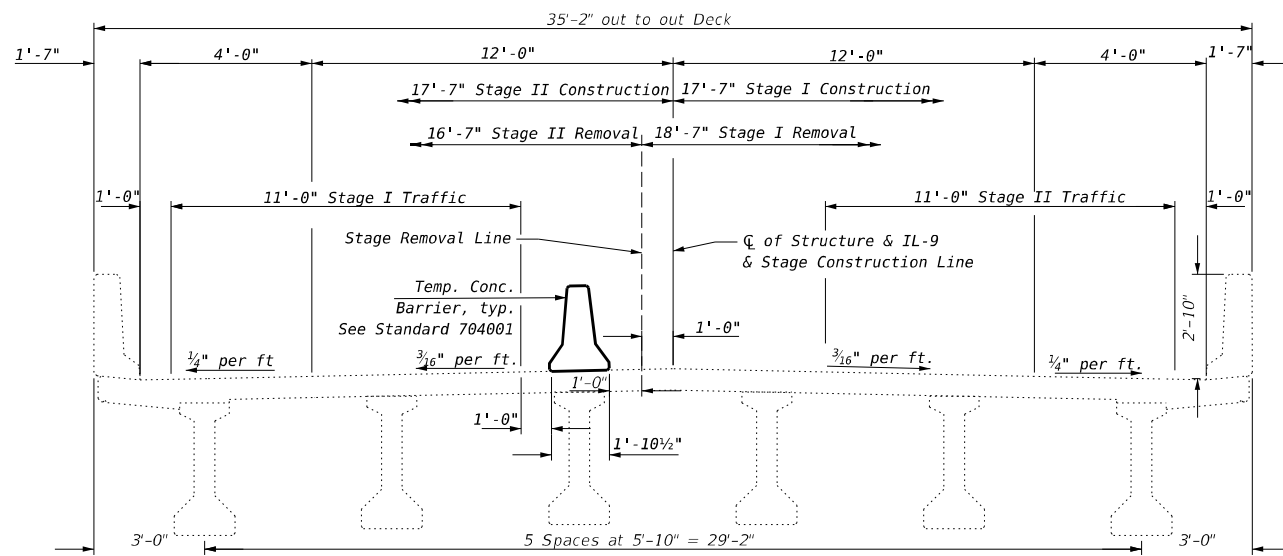


DATE SIGNED : 02/03/2023

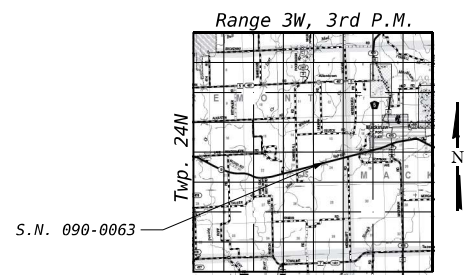
LIC. EXP. DATE : 11/30/2024

**GENERAL NOTES**

- All structural steel shall be AASHTO M 270 Grade 36 unless otherwise noted.
- Reinforcement bars designated (E) shall be epoxy coated.
- Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.
- Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.
- Existing reinforcement bars extending into the removal area shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars that are damaged during Concrete Removal shall be replaced with an approved bar splicer or anchorage system. Cost included with Concrete Removal.
- Joint openings shall be adjusted according to article 520.04 of the standard specifications when the deck is poured at an ambient temperature other than 50° Fahrenheit.
- Deck slab and approach slab total repair area is an estimated quantity made at the time of plan preparation. Actual areas to be repaired shall be determined by the Engineer in the field at the time of construction and shown on the As-Built plans.
- The deck surface shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructure.
- The Contractor shall use extreme care during Concrete Removal so as not to damage the PPC I-Beams on the Deck side and the Precast Concrete Approach Beams at the Abutment corners.



**CROSS SECTION**  
(Looking East)



**LOCATION SKETCH**

**GENERAL PLAN & ELEVATION  
ILL 9 OVER MACKINAW RIVER  
IL 9 (FAP-693) - SECTION 119B-BR  
TAZEWELL COUNTY  
STATION 705+40.38  
STRUCTURE NO. 090-0063**

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PLOT DATE = 2/3/2023	DRAWN BKR	REVISED -
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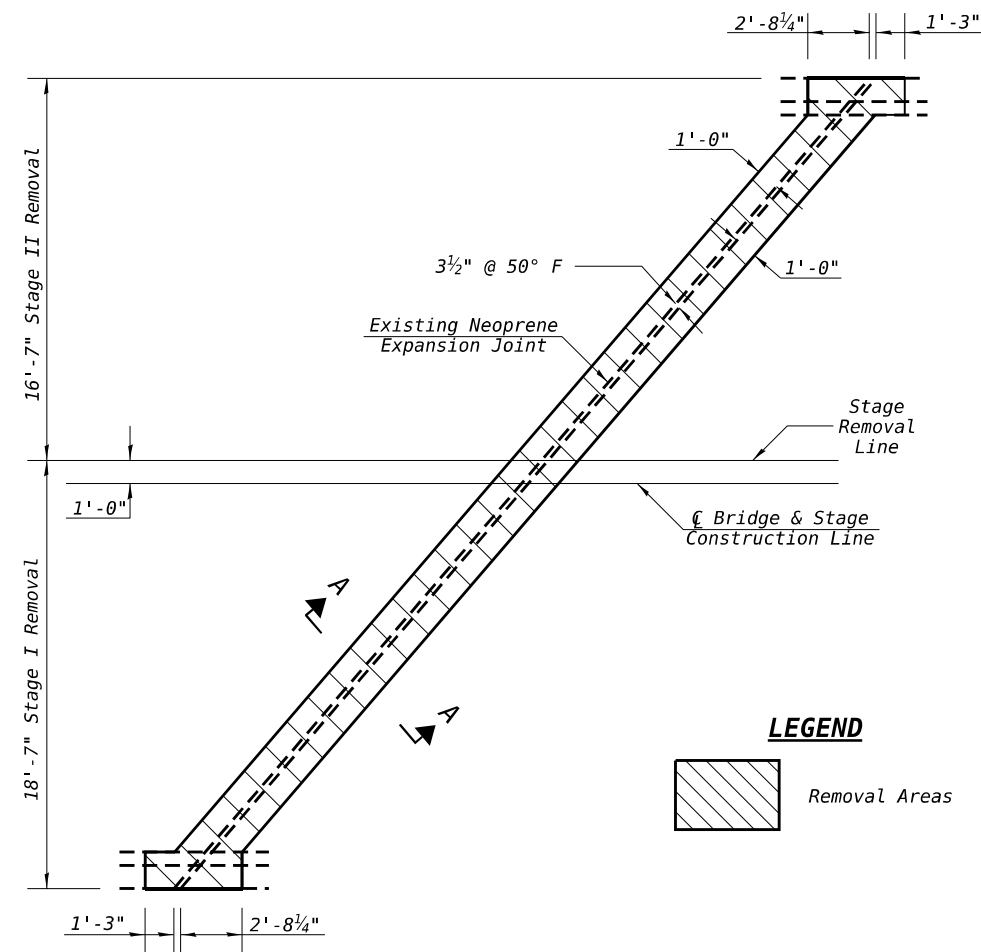
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN AND ELEVATION  
STRUCTURE NO. 090-0063**

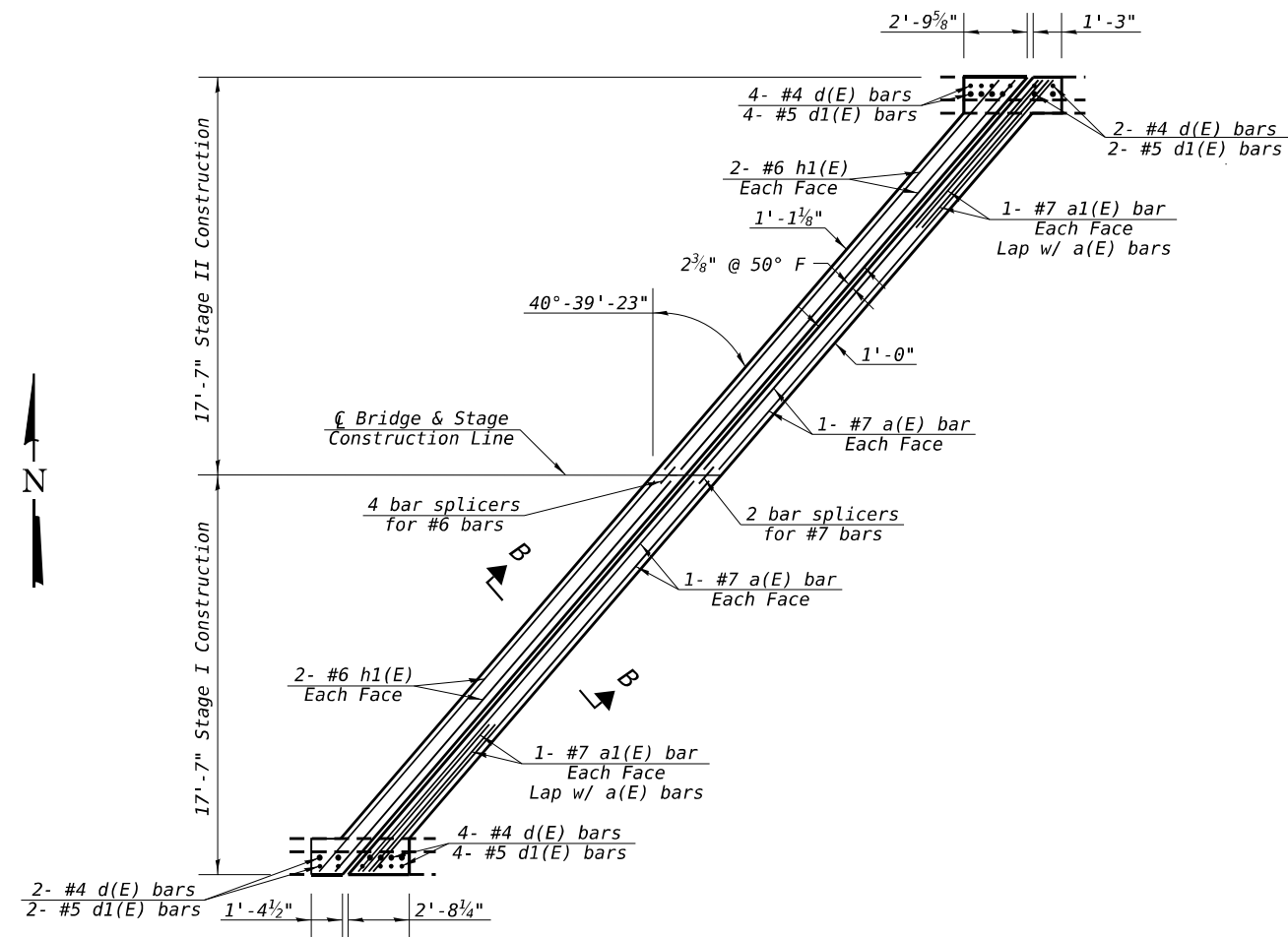
SHEET 1 OF 6 SHEETS

F.A.P. RTE. 693	SECTION (119B)BR	COUNTY TAZEWELL	TOTAL SHEETS 17	SHEET NO. 12
ILLINOIS FED. AID PROJECT			CONTRACT NO. 68H16	

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**JOINT REMOVAL PLAN**

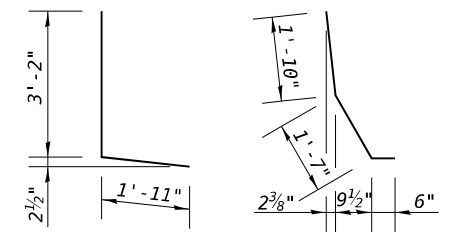


**JOINT REPLACEMENT PLAN**

**BILL OF MATERIAL  
(WEST JOINT)**

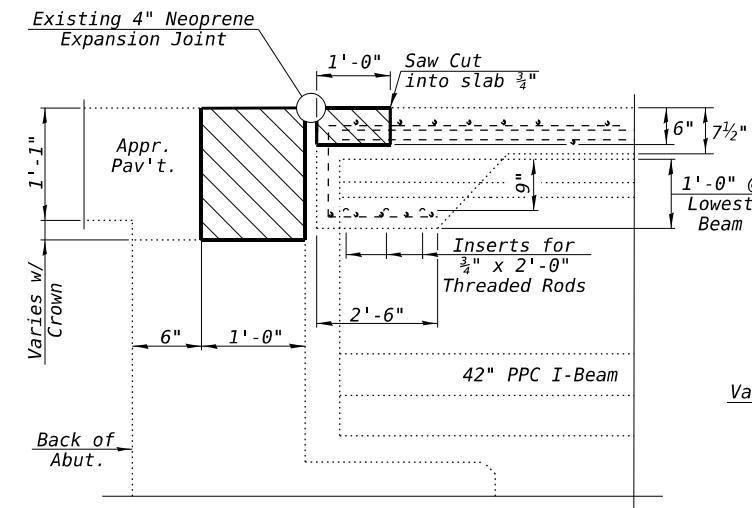
Bar	No.	Size	Length	Shape
a(E)	4	#7	22'-7"	—
a1(E)	4	#7	6'-6"	—
d(E)	12	#4	5'-1"	L
d1(E)	12	#5	3'-11"	U
h1(E)	8	#6	22'-10"	—
Reinforcement Bars, Epoxy Coated		Lbs.	600	
Concrete Superstructure		Cu. Yd.	4.3	
Concrete Removal		Cu. Yd.	4.3	

Notes:  
 Removal of existing expansion joint shall be included in the cost of Concrete Removal.  
 In parapet/joint removal areas, existing reinforcement bars shown are to be cleaned and incorporated into new construction.

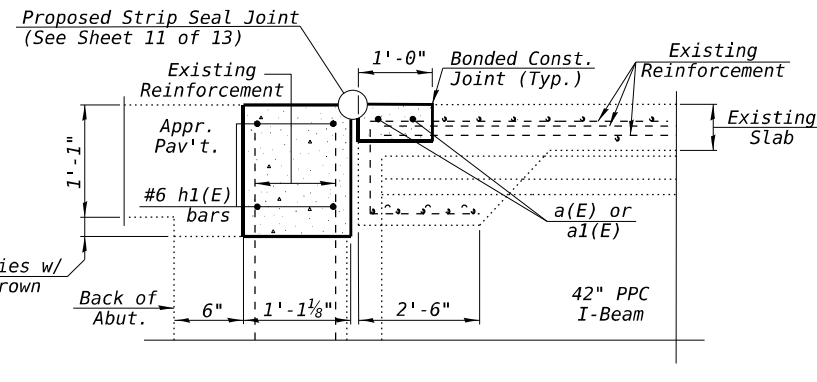


**BAR d(E)**

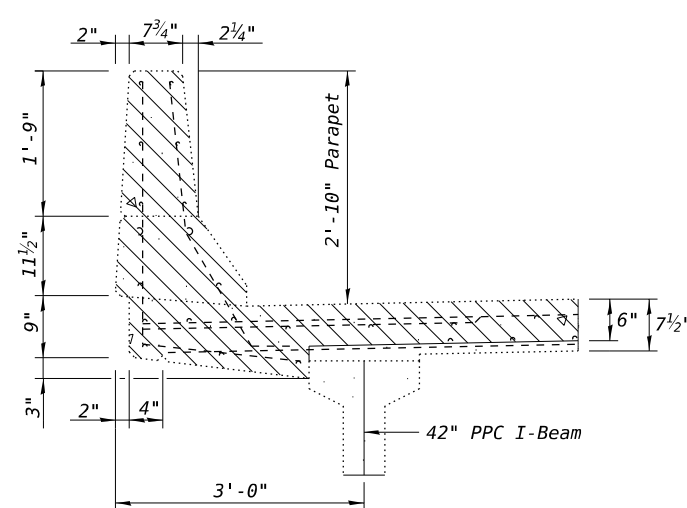
**BAR d1(E)**



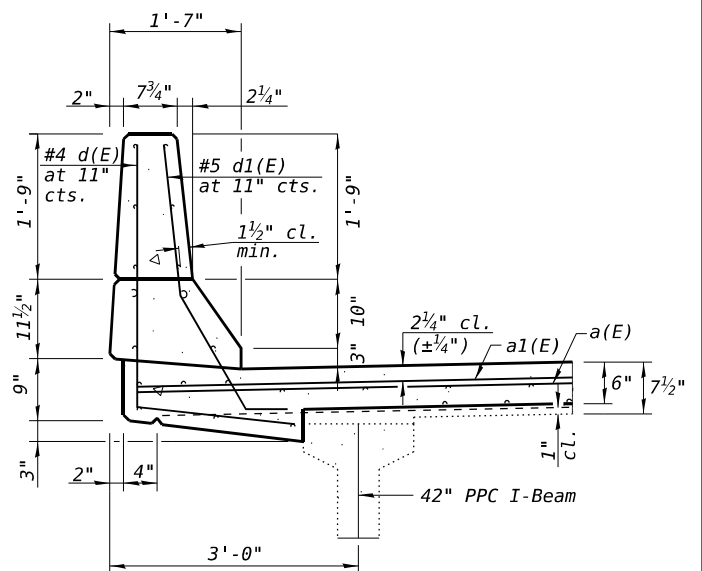
**JOINT REMOVAL SECTION A-A**



**JOINT SECTION B-B**



**PARAPET REMOVAL CROSS SECTION**



**PARAPET REPLACEMENT CROSS SECTION**



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PLOT DATE = 2/3/2023	DRAWN AF	REVISED -
	CHECKED KF	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**JOINT DETAILS - WEST ABUTMENT  
STRUCTURE NO. 090-0063**

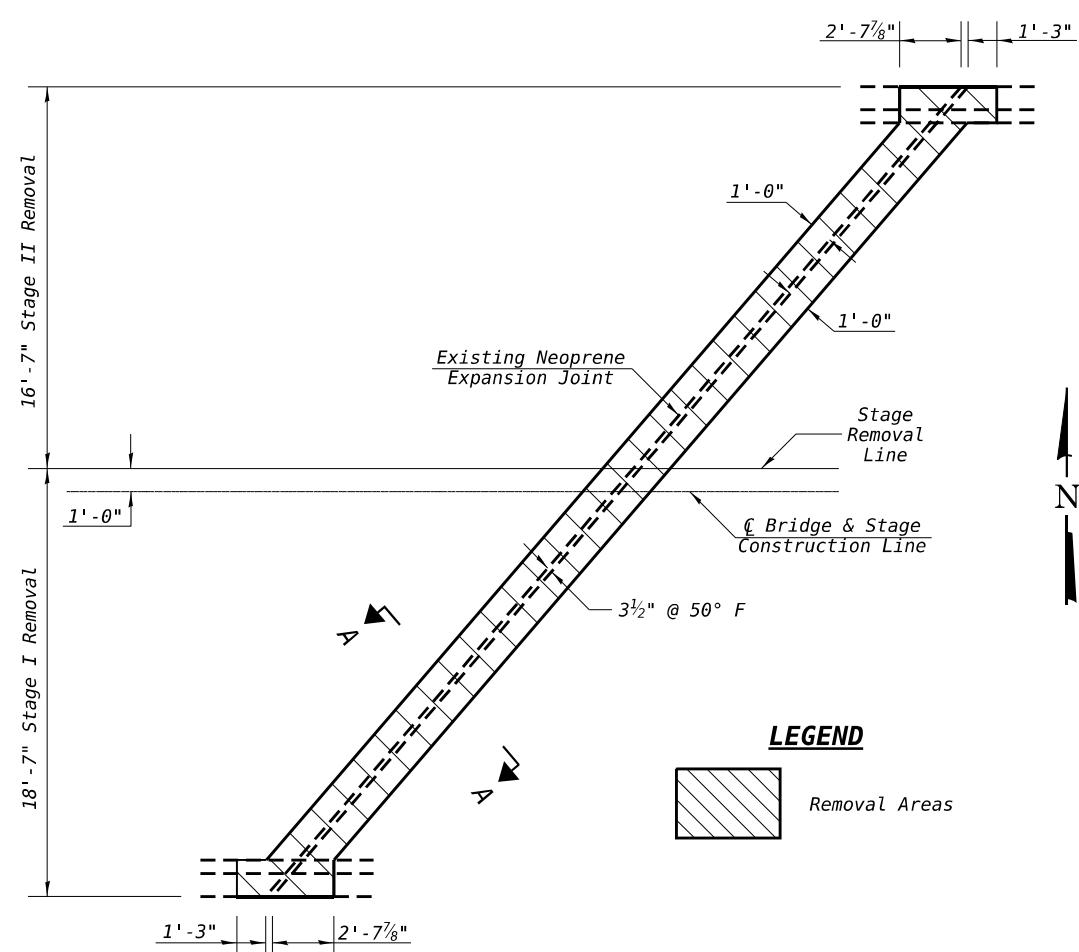
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CONTRACT NO. 68H16				

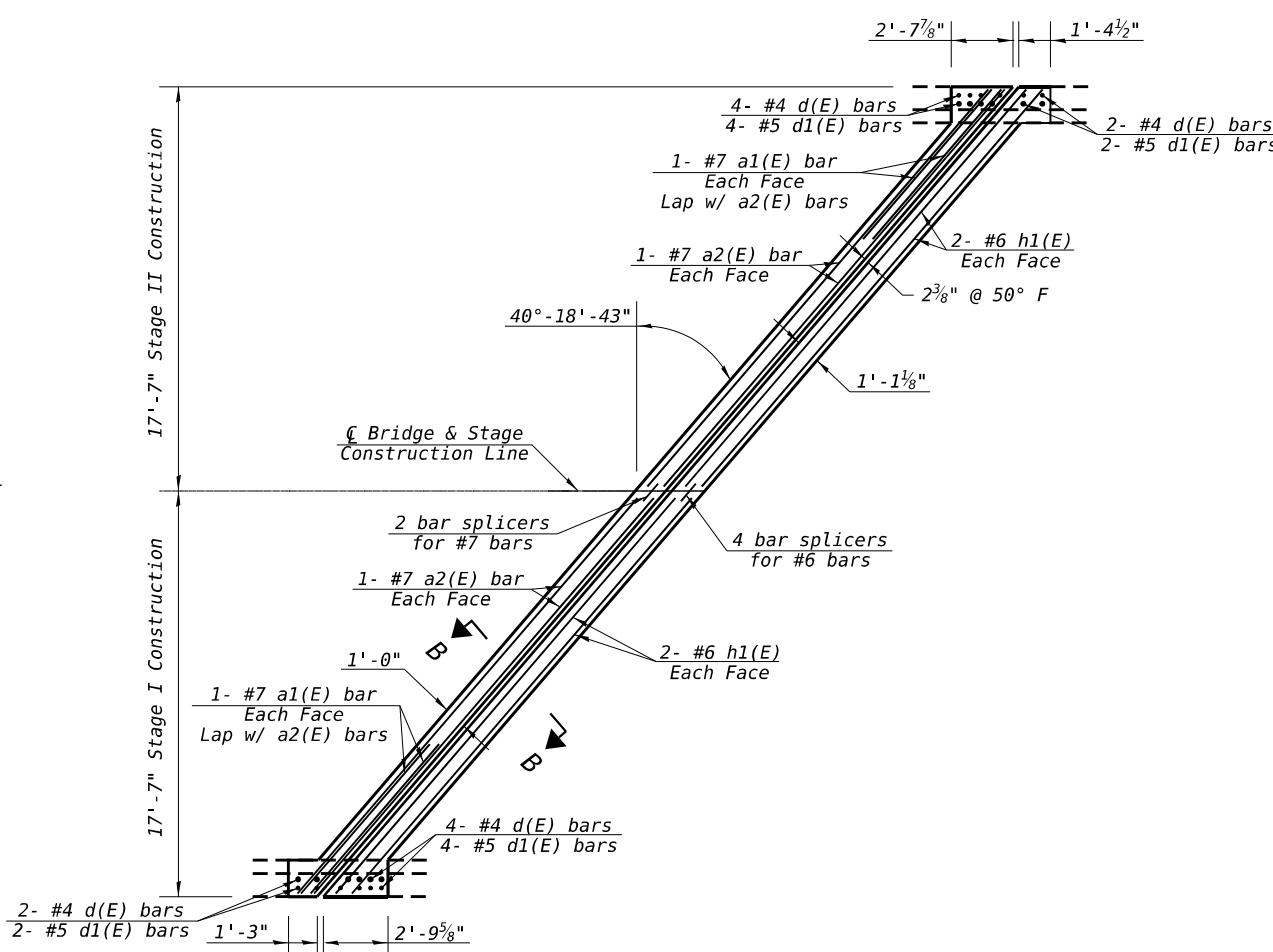
ILLINOIS FED. AID PROJECT

2022/10/21

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**JOINT REMOVAL PLAN**

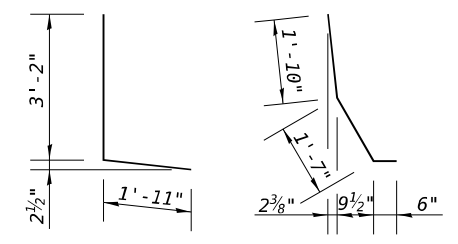


**JOINT REPLACEMENT PLAN**

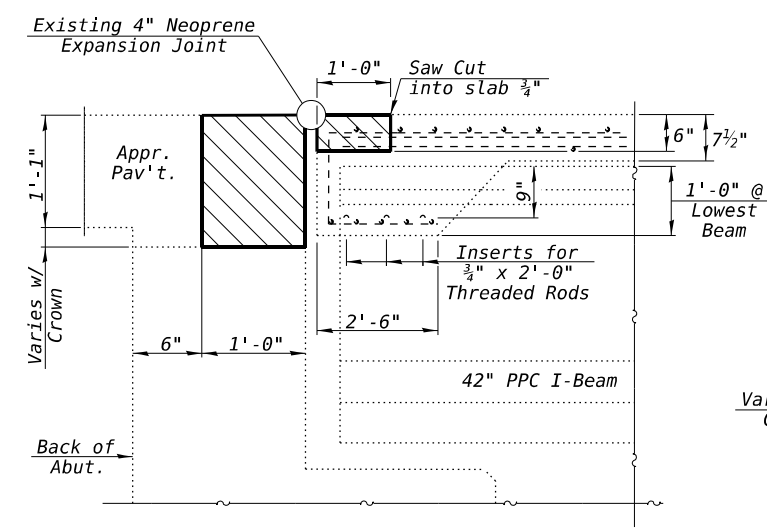
**BILL OF MATERIAL (EAST JOINT)**

Bar	No.	Size	Length	Shape	
a1(E)	4	#7	6'-6"	—	
a2(E)	4	#7	22'-6"	—	
d(E)	12	#4	5'-1"	L	
d1(E)	12	#5	3'-11"	U	
h1(E)	8	#6	22'-10"	—	
Reinforcement Bars, Epoxy Coated				Lbs.	600
Concrete Superstructure				Cu. Yd.	4.3
Concrete Removal				Cu. Yd.	4.3

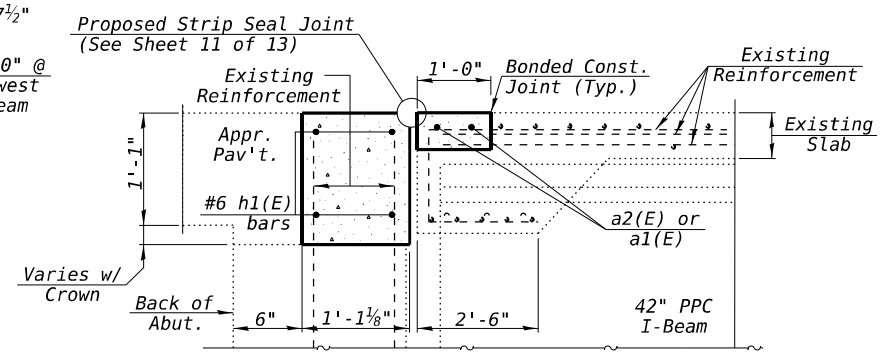
Notes:  
 Removal of existing expansion joint shall be included in the cost of Concrete Removal.  
 In parapet/joint removal areas, existing reinforcement bars shown are to be cleaned and incorporated into new construction.



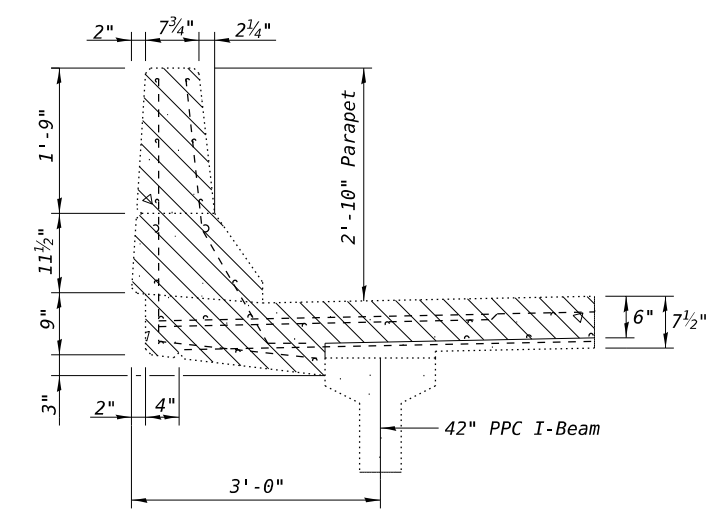
**BAR d(E)**      **BAR d1(E)**



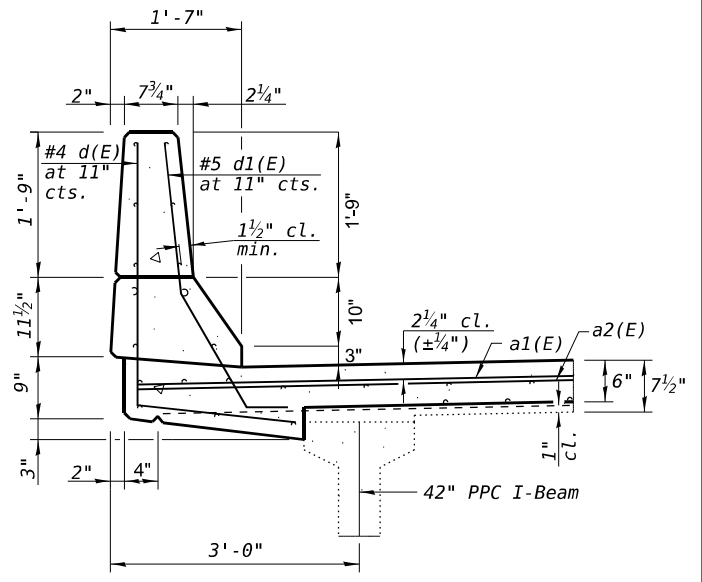
**JOINT REMOVAL SECTION A-A**



**JOINT SECTION B-B**



**PARAPET REMOVAL CROSS SECTION**



**PARAPET REPLACEMENT CROSS SECTION**



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PLOT DATE = 2/3/2023	DRAWN AF	REVISED -
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**JOINT DETAILS - EAST ABUTMENT  
 STRUCTURE NO. 090-0063**

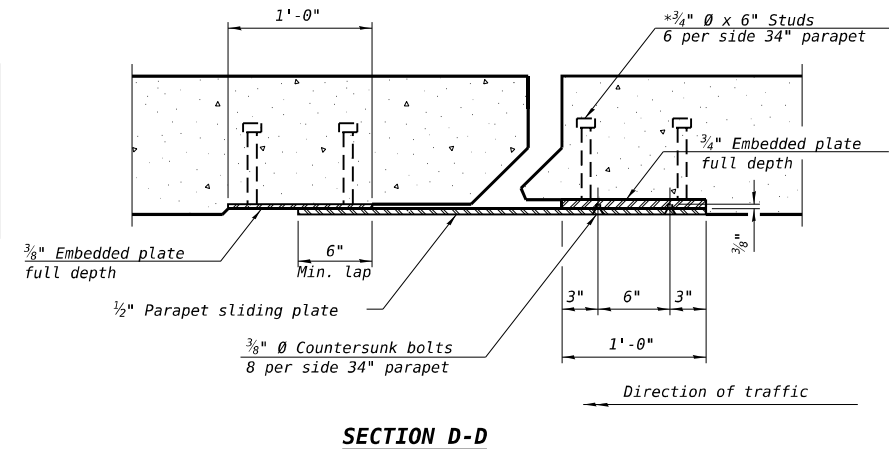
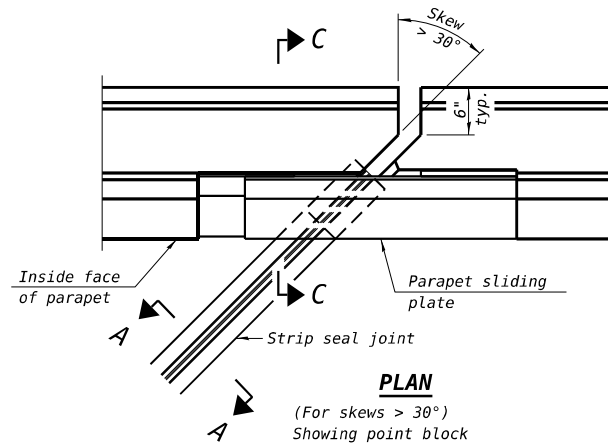
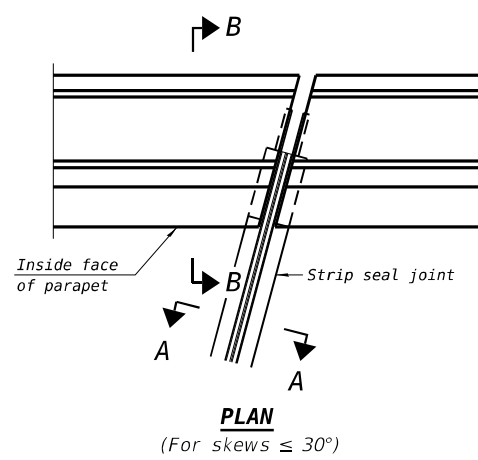
SHEET 3 OF 6 SHEETS

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CONTRACT NO. 68H16				

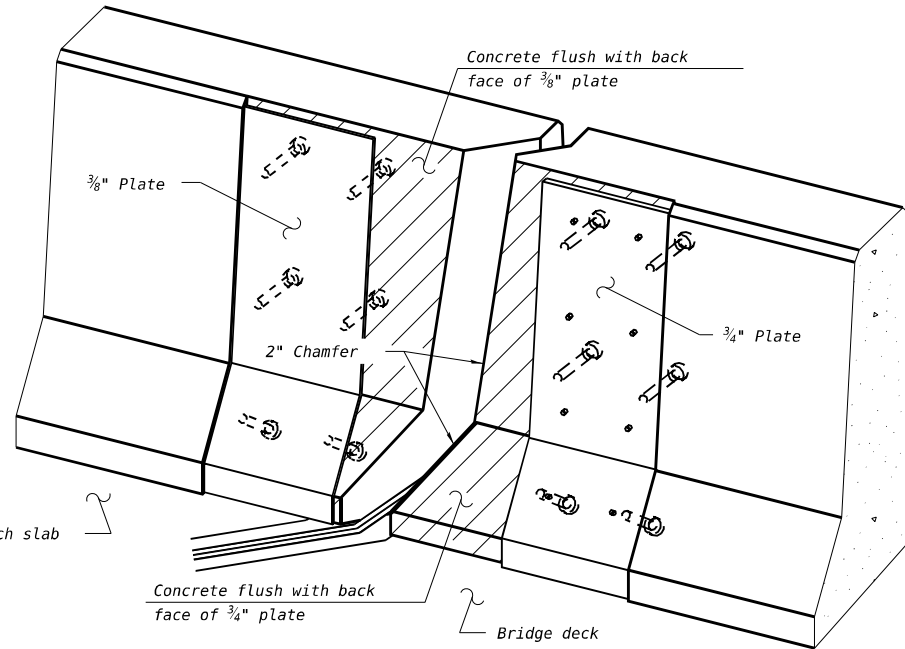
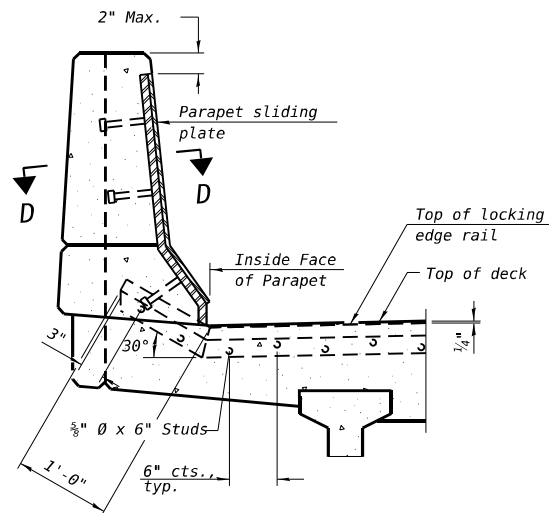
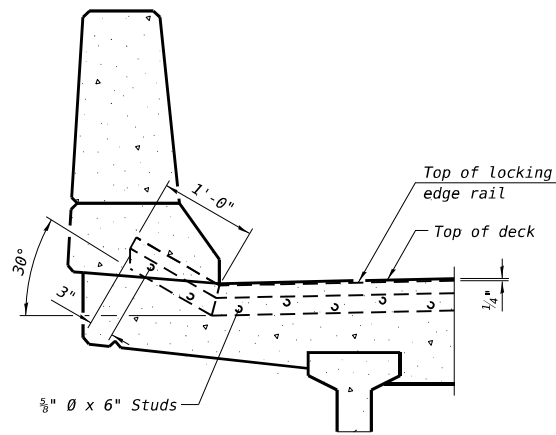
ILLINOIS FED. AID PROJECT

2022/10/21

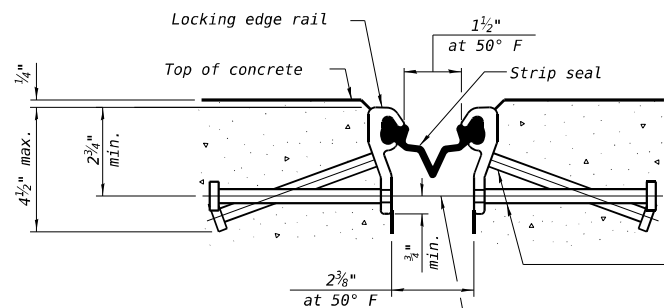
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**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.  
 The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.  
 The manufacturer's recommended installation methods shall be followed.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.  
 The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

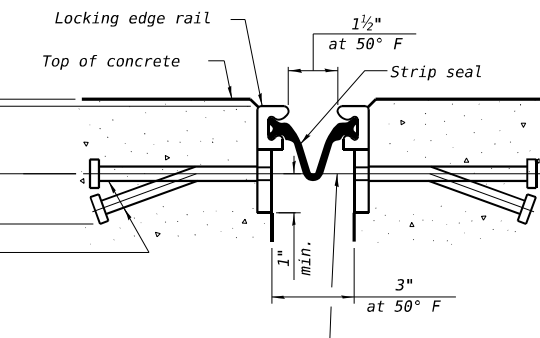


Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.  
 34" F-shape barrier shown, 42" F-shape similar as noted.  
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.



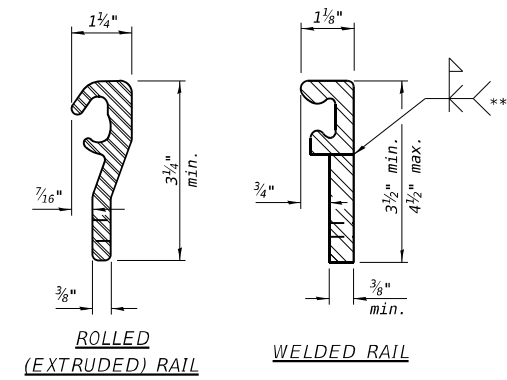
\*  $\frac{5}{8}$ "  $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

$\frac{3}{8}$ "  $\phi$  threaded rods in  $\frac{1}{16}$ "  $\phi$  holes at  $\pm 4'-0"$  cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

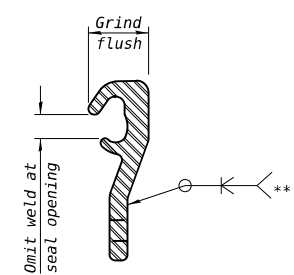


**SECTION A-A**

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



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



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

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	90



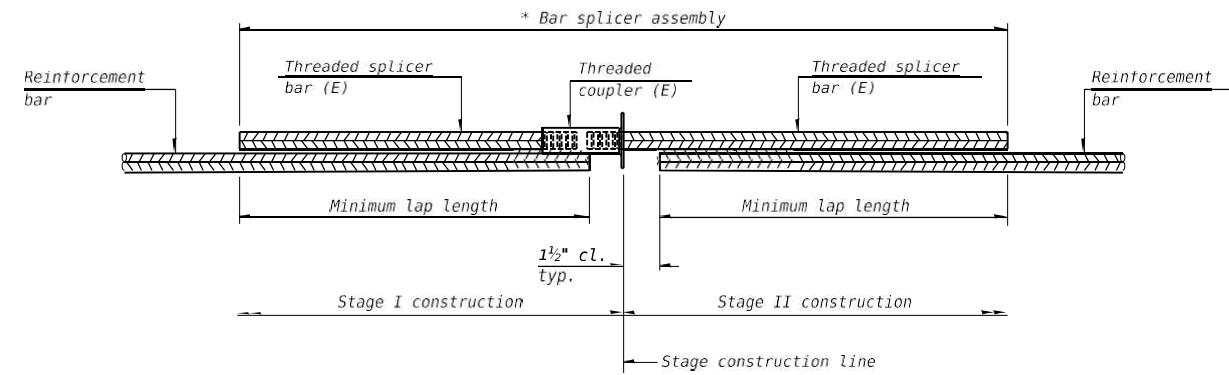
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PLOT DATE = 2/3/2023	DRAWN AF	REVISED -
	CHECKED KF	REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
 STRUCTURE NO. 090-0063

SHEET 4 OF 6 SHEETS

F.A.P. RTE. 693	SECTION (119B)BR	COUNTY TAZEWELL	TOTAL SHEETS 17	SHEET NO. 15
CONTRACT NO. 68H16				
ILLINOIS FED. AID PROJECT				

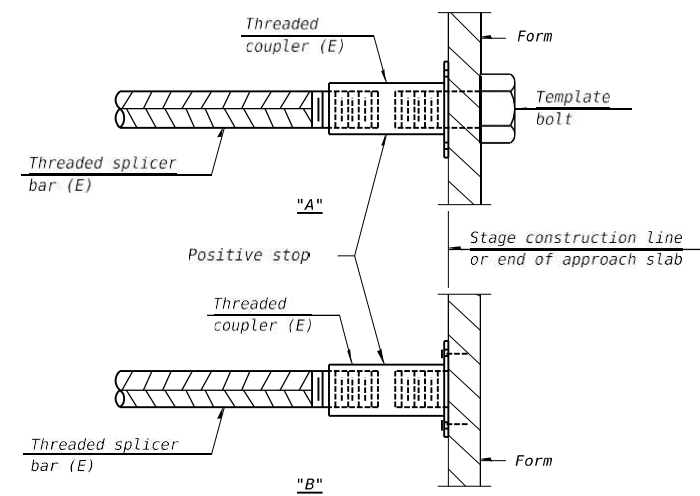


**STANDARD BAR SPLICER ASSEMBLY PLAN**  
 (All components shall be provided from one supplier)

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

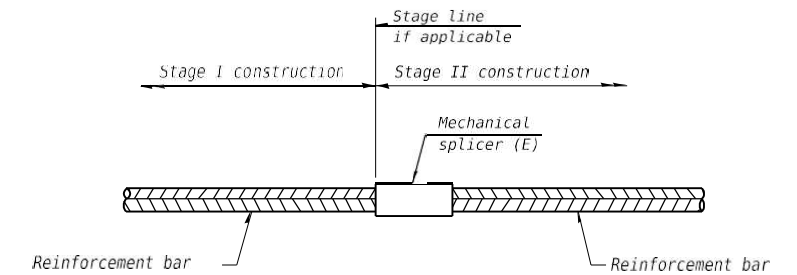
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
West Abutment	#6	4	5'-11"
West Abutment	#7	2	6'-10"
East Abutment	#6	4	5'-11"
East Abutment	#7	2	6'-10"



**INSTALLATION AND SETTING METHODS**

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



**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required

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

BSD-1

1-1-2020

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PLOT SCALE = 0.167' / in.	DRAWN AF	REVISED -
PLOT DATE = 10/21/2022	CHECKED KF	REVISED -

STATE OF ILLINOIS  
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BAR SPLICER ASSEMBLY & MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 090-0063

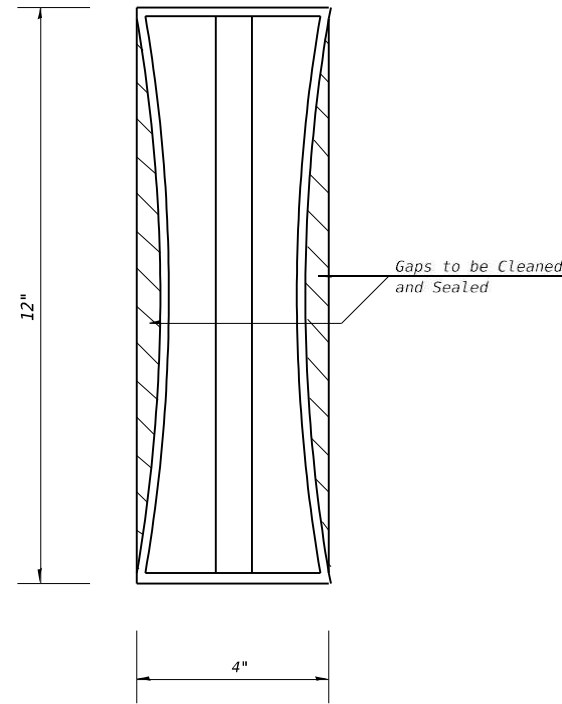
SHEET 5 OF 6 SHEETS

F.A.P. RTE. 693	SECTION (119B)BR	COUNTY TAZEWELL	TOTAL SHEETS 17	SHEET NO. 16
CONTRACT NO. 68H16				

ILLINOIS FED. AID PROJECT



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**TYPICAL "HOUR-GLASSED" FLOOR DRAIN**

Note:  
 See Special Provision "Floor Drains to be Cleaned"

**BILL OF MATERIAL**

Item	Unit	Total
Floor Drains to be Cleaned	Each	134



USER NAME = brennar	DESIGNED AF	REVISED -
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PLOT SCALE = 0.167' / in.	DRAWN AF	REVISED -
PLOT DATE = 10/21/2022	CHECKED KF	REVISED -

STATE OF ILLINOIS  
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FLOOR DRAINS TO BE CLEANED  
 STRUCTURE NO. 090-0063

SHEET 6 OF 6 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
693	(119B)BR	TAZEWELL	17	17
CONTRACT NO.			68H16	
ILLINOIS		FED. AID PROJECT		