

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37*	1
ILLINOIS			CONTRACT NO. 74C54	

* 37+1 = 38 TOTAL SHEETS
D-97-100-23

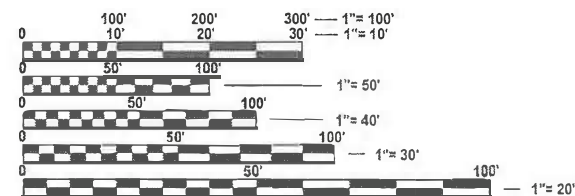
FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT (2021) = 8,950

PROPOSED HIGHWAY PLANS

FAI ROUTE 72 (I 72)
SECTION D7 BRIDGE REPAIRS 2025-5
PROJECT NHPP-WCJD(503)
BRIDGE DECK OVERLAY AND JOINT REPAIR
MACON COUNTY

C-97-131-23



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: BRIAN BIERMAN
PROJECT MANAGER: JACQUELYN SEALS

CONTRACT NO. 74C54

GROSS LENGTH = 2,310 FT. = 0.438 MILE
NET LENGTH = 1,437 FT. = 0.272 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED July 1 2024
Jeffrey P. Myrland REGIONAL ENGINEER

August 16, 2024
Scott A. Elk
ENGINEER OF DESIGN AND ENVIRONMENT

August 16, 2024
James J. [Signature]
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

GENERAL NOTES

THIS DECATUR BRIDGE REPAIR CONTRACT IS LOCATED AT STRUCTURES 050-0066 AND 050-0067 ON EB I-72 OVER THE WB SPUR AND SB US 51 IN MACON COUNTY. PROJECT WORK ITEMS CONSIST OF PCC SHOULDERS, BRIDGE JOINT REPAIR/REPLACEMENT, BRIDGE DECK REPAIRS AND OVERLAYS AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION.

WHEN APPLYING SHORT TERM PAVEMENT MARKINGS, TEMPORARY TAPE SHALL BE USED ON THE SURFACE COURSE AND PAINT SHALL BE USED ON MILLED SURFACES.

THE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGE I & II OF STANDARD 701402 SHALL BE COVERED WITH PAVEMENT MARKING BLACKOUT TAPE, 5".

THE LOCATIONS AND/OR DEPTHS OF UNDERGROUND UTILITIES SHOWN HAVE BEEN TAKEN FROM INFORMATION FURNISHED BY THE UTILITY OWNERS AND MUST BE CONSIDERED APPROXIMATE. FIELD MARKINGS OF FACILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF FORTY-EIGHT (48) HOURS ADVANCE NOTICE THROUGH THE J.U.L.I.E. SYSTEM BY CALLING 800-892-0123.

ALL ELEVATIONS REFER TO U.S.G.S. MEAN SEA LEVEL DATUM.

THE ENGINEER SHALL BE THE SOLE JUDGE REGARDING THE CURING TIMES FOR ALL HOT-MIX ASPHALT.

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURES HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIAL. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

LOCATION(S)	MIXTURE USE(S)	PG	DESIGN AIR VOIDS	MIXTURE COMPOSITION	FRICTION AGGREGATE	MIXTURE WEIGHT	QUALITY MANAGEMENT PROGRAM	SUBLOT SIZE
MAINLINE	POLY HMA SURF COURSE, IL-9.5, MIX "D", N90 (1 1/2")	SBS PG 70-22	4.0% @ N=90	IL - 9.5	MIXTURE D	N90	QC/QA	3000

INDEX OF SHEETS

SHEET NO. ITEM

1	COVER SHEET
2	GENERAL NOTES, INDEX OF SHEETS & LIST OF STANDARDS
3-4 5	SUMMARY OF QUANTITIES
6	SCHEDULE OF QUANTITIES
7-10	TYPICAL SECTION
11-20	STAGE CONSTRUCTION SHEETS
21-37A	STRUCTURE REPAIR PLANS 050-0066 STRUCTURE REPAIR PLANS 050-0067

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS.

STANDARD NO. DESCRIPTION

000001-02	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420001-10	PAVEMENT JOINTS
430001-06	PCC SHOULDER
642001-03	SHOULDER RUMBLE STRIPS, 16 INCH
701101-05	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT
701106-02	EDGE OFF-ROAD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-12	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701401-13	LANE CLOSURE, FREEWAY/EXPRESSWAY
701402-12	LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER
701406-13	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701901-09	TRAFFIC CONTROL DEVICES
704001-04	TEMPORARY CONCRETE BARRIER
720001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS
782006-01	GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL NOTES, INDEX OF SHEETS
AND HIGHWAY STANDARDS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	2
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

90% FED
10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				BRIDGE	
				0013	URBAN
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	12	12	
31101000	SUBBASE GRANULAR MATERIAL, TYPE B	TON	25	25	
40604164	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N90	TON	98	98	
40800029	BITUMINOUS MATERIALS (TACK COAT)	POUND	523	523	
42001300	PROTECTIVE COAT	SQ YD	2025	2025	
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	1163	1163	
44004250	PAVED SHOULDER REMOVAL	SQ YD	1688	1688	
48300500	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SQ YD	1688	1688	
50102400	CONCRETE REMOVAL	CU YD	76.1	76.1	
50104650	SLOPE WALL REMOVAL	SQ YD	70	70	
50157300	PROTECTIVE SHIELD	SQ YD	1014	1014	
50300100	FLOOR DRAINS	EACH	20	20	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	75.7	75.7	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1550	1550	

90% FED
10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				BRIDGE	
				0013	URBAN
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	11120	11120	
50800515	BAR SPLICERS	EACH	84	84	
51100300	SLOPE WALL 6 INCH	SQ YD	70	70	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	278	278	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	6	6	
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	6	6	
52100520	ANCHOR BOLTS, 1"	EACH	24	24	
64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	1872	1872	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	4	4	
67100100	MOBILIZATION	L SUM	1	1	
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	3	3	
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	2	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1	
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	500	500	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56	56	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	3
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

90% FED
10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				BRIDGE	
				0013	URBAN
70300100	SHORT TERM PAVEMENT MARKING	FOOT	2353	2353	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	951	951	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	989	989	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	963	963	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2	
* 78000400	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	FOOT	6644	6644	
* 78003131	PERFORMED PLASTIC PAVEMENT MARKING, TYPE B - STANDARD - LINE 6"	FOOT	988	988	
* 78004230	PERFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6"	FOOT	831	831	
* 78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	7632	7632	
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	12	12	
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	3	3	
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	784	784	
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	1186	1186	

* SPECIALTY ITEM

90% FED
10% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				BRIDGE	
				0013	URBAN
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	12	12	
Z0001905	STRUCTURAL STEEL REPAIR	POUND	60	60	
Z0012111	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/2"	SQ YD	1735	1735	
Z0012142	BRIDGE DECK SCARIFICATION 2 1/4"	SQ YD	1735	1735	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	29	29	
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	9	9	
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	25	25	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	52	52	
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	1723	1723	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-6	MACON	37	4
ILLINOIS FED. AID PROJECT			CONTRACT NO. 74C54	

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PAVING SCHEDULE											
			LENGTH	ELEMENT WIDTH	PORTLAND CEMENT CONCRETE SHOULDERS 10"	SHOULDER RUMBLE STRIPS, 16 INCH	PAVED SHOULDER REMOVAL	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "D", N9C	BITUMINOUS MATERIALS (TACK COAT)	
			FEET	FEET	SQ YD	FOOT	SQ YD	SQ YD	TON	POUND	
MAINLINE PAVING											
STA	472+76	TO	STA	474+13	137	24	-	-	365	31	164
SN 058-0066 OMISSION											
STA	476+40	TO	STA	477+38	98	24	-	-	261	22	118
STA	488+81	TO	STA	489+88	107	24	-	-	285	24	128
SN 058-0067 OMISSION											
STA	492+01	TO	STA	492+95	94	24	-	-	251	21	113
MAINLINE TOTALS:											
			-	-	0	0	0	1163	98	523	
SHOULDER PAVING											
LT STA	471+14	TO	LT STA	473+89	275	6	183	275	183	0	0
RT STA	470+50	TO	RT STA	474+40	390	10	433	390	433	0	0
SN 058-0066 OMISSION											
LT STA	476+18	TO	LT STA	477+81	163	6	109	163	109	0	0
RT STA	476+63	TO	RT STA	477+68	105	10	117	105	117	0	0
LT STA	486+61	TO	LT STA	490+06	345	6	230	345	230	0	0
RT STA	486+54	TO	RT STA	489+68	314	10	349	314	349	0	0
SN 058-0067 OMISSION											
LT STA	492+22	TO	LT STA	493+20	98	6	65	98	65	0	0
RT STA	491+78	TO	RT STA	493+60	182	10	202	182	202	0	0
SHOULDER TOTALS:											
			-	-	1688	1872	1688	0	0	0	0
TOTALS:			-	-	1688	1872	1688	1163	98	523	

BARRIER WALL SCHEDULE							
			TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	
			FOOT	FOOT	EACH	EACH	
STAGE I							
STA	471+47	TO	STA	473+59	213	-	1
STA	473+59	TO	STA	476+47	288	-	-
STA	487+51	TO	STA	489+63	213	-	1
STA	489+63	TO	STA	492+38	275	-	-
STAGE II							
STA	471+90	TO	STA	473+88	-	200	1
STA	473+88	TO	STA	476+70	-	288	-
STA	487+38	TO	STA	489+36	-	200	1
STA	489+36	TO	STA	492+11	-	275	-
TOTALS:			989	963	2	2	

STRIPING SCHEDULE													
			LENGTH	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - STANDARD - LINE 6"	PREFORMED PLASTIC PAVEMENT MARKING, TYPE B - INLAID - LINE 6"	THERMOPLASTIC PAVEMENT MARKING - LINE 6"	GROOVING FOR RECESSED PAVEMENT MARKING 7"	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	PAVEMENT MARKING BLACKOUT TAPE, 5"	PAVEMENT MARKING REMOVAL - GRINDING	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER
			FEET	FOOT	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	SQ FT	EACH	EACH
STAGE I													
STA	455+99	TO	STA	465+99	1000	-	-	-	-	83	250	-	-
STA	470+99	TO	STA	474+33	334	-	-	-	334	111	-	111	-
STA	474+33	TO	STA	476+57	224	-	-	-	224	75	-	75	-
STA	476+57	TO	STA	477+18	61	-	-	-	61	20	-	20	-
STA	487+03	TO	STA	489+74	271	-	-	-	271	90	-	90	-
STA	489+74	TO	STA	491+85	211	-	-	-	211	70	-	70	-
STA	491+85	TO	STA	493+10	125	-	-	-	125	42	-	42	-
STAGE II													
STA	456+64	TO	STA	466+64	1000	-	-	-	-	83	250	-	-
STA	471+63	TO	STA	473+94	231	-	-	-	231	77	-	77	-
STA	473+94	TO	STA	476+23	229	-	-	-	229	76	-	76	-
STA	476+23	TO	STA	477+31	108	-	-	-	108	36	-	36	-
STA	487+11	TO	STA	490+02	291	-	-	-	291	97	-	97	-
STA	490+02	TO	STA	492+18	216	-	-	-	216	72	-	72	-
STA	492+18	TO	STA	492+70	52	-	-	-	52	17	-	17	-
POST STAGE CONSTRUCTION													
STA	455+99	TO	STA	474+13	1814	-	454	3628	3628	-	-	-	4
STA	474+13	TO	STA	476+40	227	511	-	511	-	-	-	3	-
STA	476+40	TO	STA	489+88	1348	-	337	2696	2696	-	-	-	6
STA	489+88	TO	STA	492+00	212	477	-	477	-	-	-	-	-
STA	492+00	TO	STA	493+60	160	-	40	320	320	-	-	-	2
TOTALS:					988	831	6644	7632	2353	951	500	784	3

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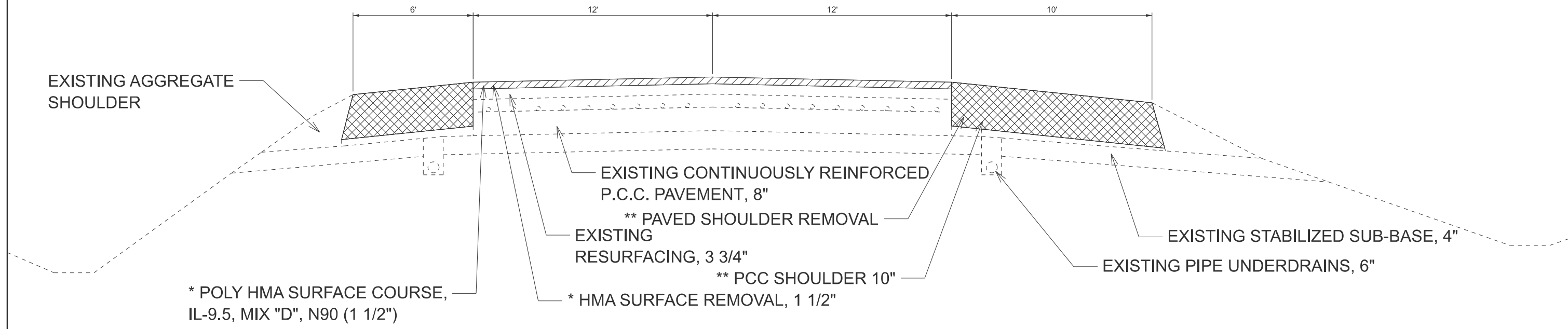
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

SCHEDULES

SCALE: SHEET OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	5
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

TYPICAL SECTION



* NOTE: STA 472+76 TO STA 474+13
 STA 476+40 TO STA 477+38
 STA 488+81 TO STA 489+88
 STA 492+01 TO STA 492+95

** NOTE: LT STA 471+14 TO LT STA 473+89
 LT STA 476+18 TO LT STA 477+81
 LT STA 486+61 TO LT STA 490+06
 LT STA 492+22 TO LT STA 493+20
 RT STA 470+50 TO RT STA 474+40
 RT STA 476+25 TO RT STA 477+68
 RT STA 486+54 TO RT STA 489+68
 RT STA 491+78 TO RT STA 493+60

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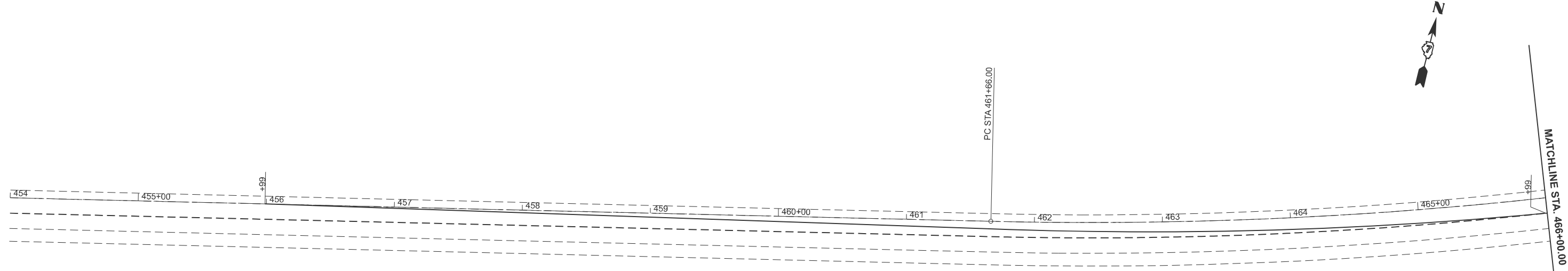
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PLOT DATE = 7/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

TYPICAL SECTION

SCALE: SHEET OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	6
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

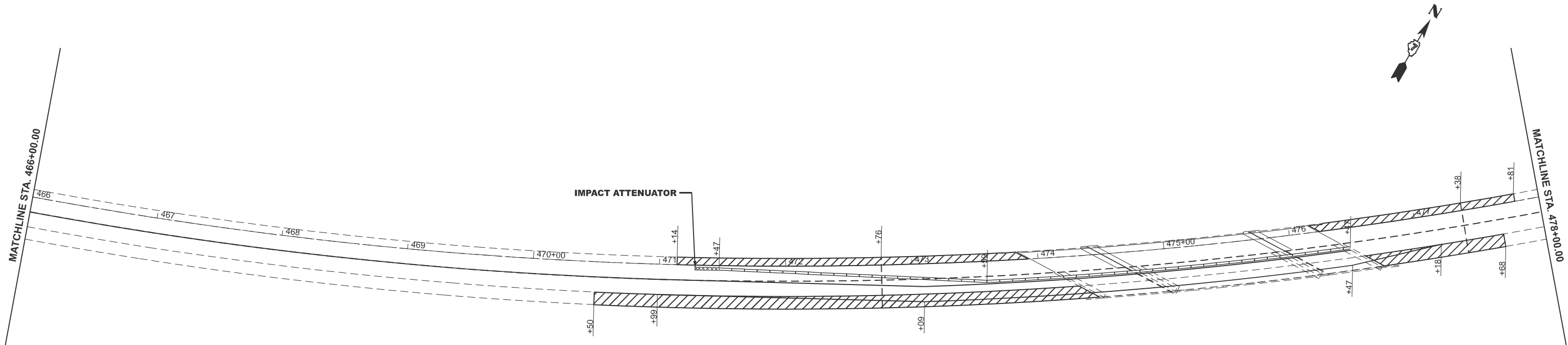


PRE-STAGE I SEQUENCE OF OPERATIONS:

1. ERECT TRAFFIC CONTROL STANDARD 701400 AND 701401.
2. REMOVE THE STAGE I PORTION OF THE EXISTING SHOULDERS AND CONSTRUCT THE PROPOSED STAGE I PORTION OF THE PROPOSED PCC SHOULDERS.

STAGE I SEQUENCE OF OPERATIONS

1. ERECT SIGNS, TEMPORARY CONCRETE BARRIERS, ETC. ACCORDING TO TRAFFIC CONTROL STANDARDS 701400 AND 701402 AS WELL AS DETAILS IN THE PLANS.
2. CONSTRUCT THE STAGE I BRIDGE ITEMS IN THE PLANS.
3. CONSTRUCT THE PROPOSED PCC SHOULDERS FOR STAGE II TRAFFIC.



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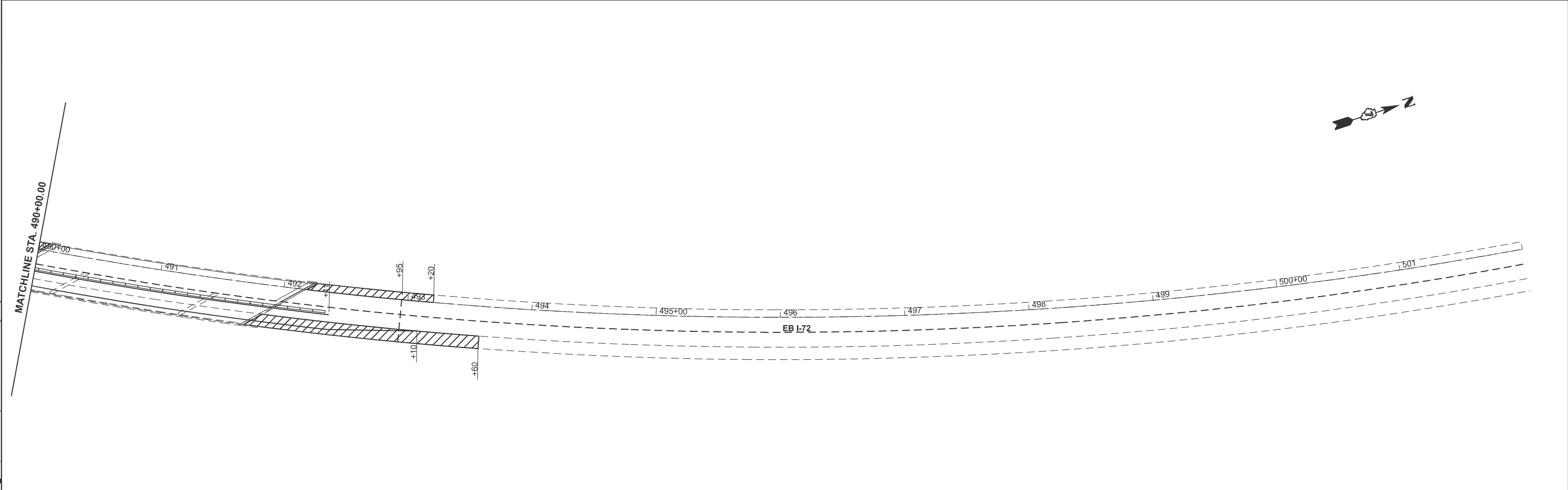
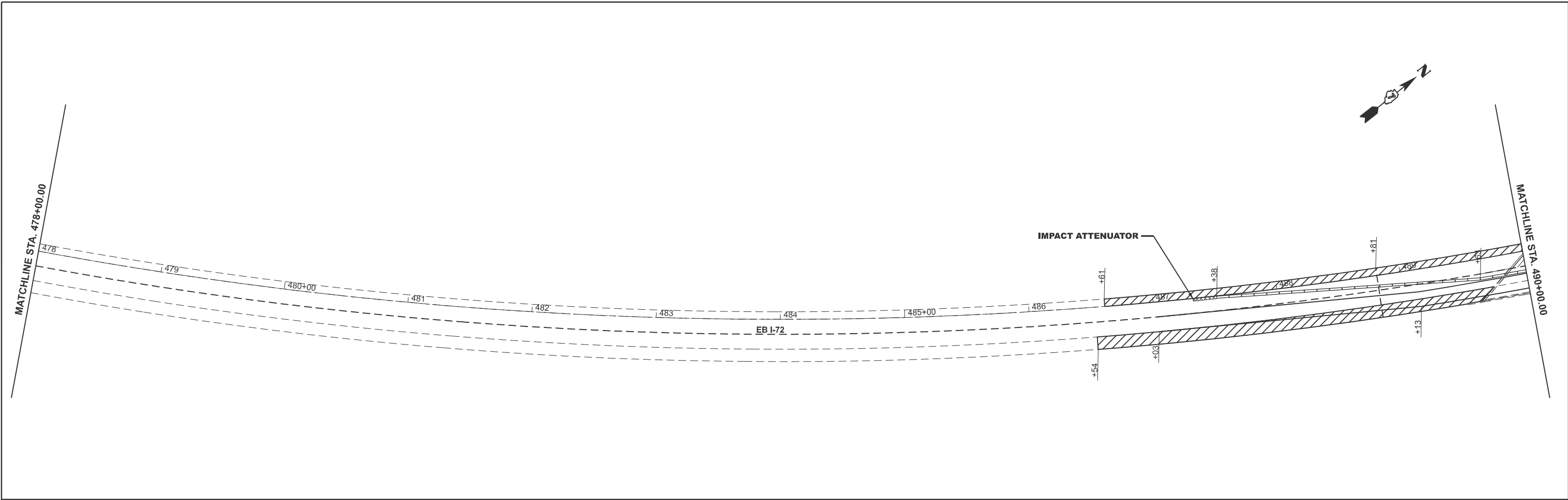
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

STAGE I CONSTRUCTION

SCALE: 1"=40' SHEET OF 2 SHEETS STA. 454+00.00 TO STA. 478+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	7
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				



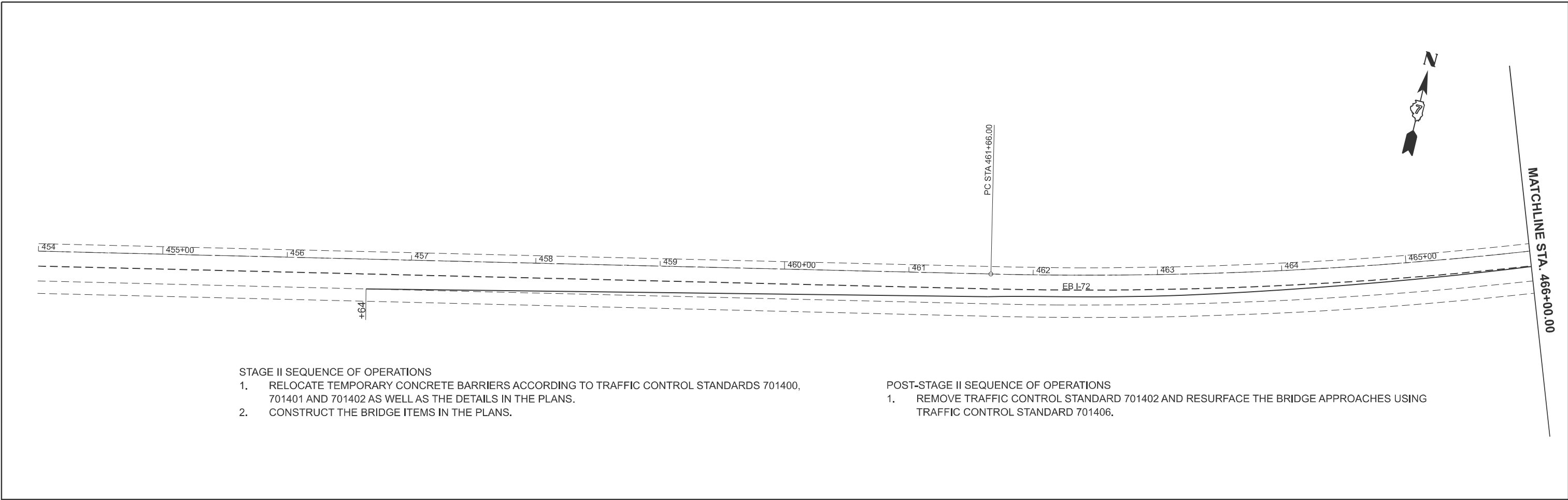
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PLOT DATE = 7/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I CONSTRUCTION
 SCALE: 1"=40' SHEET OF SHEETS STA. 478+00.00 TO STA. 502+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	8
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

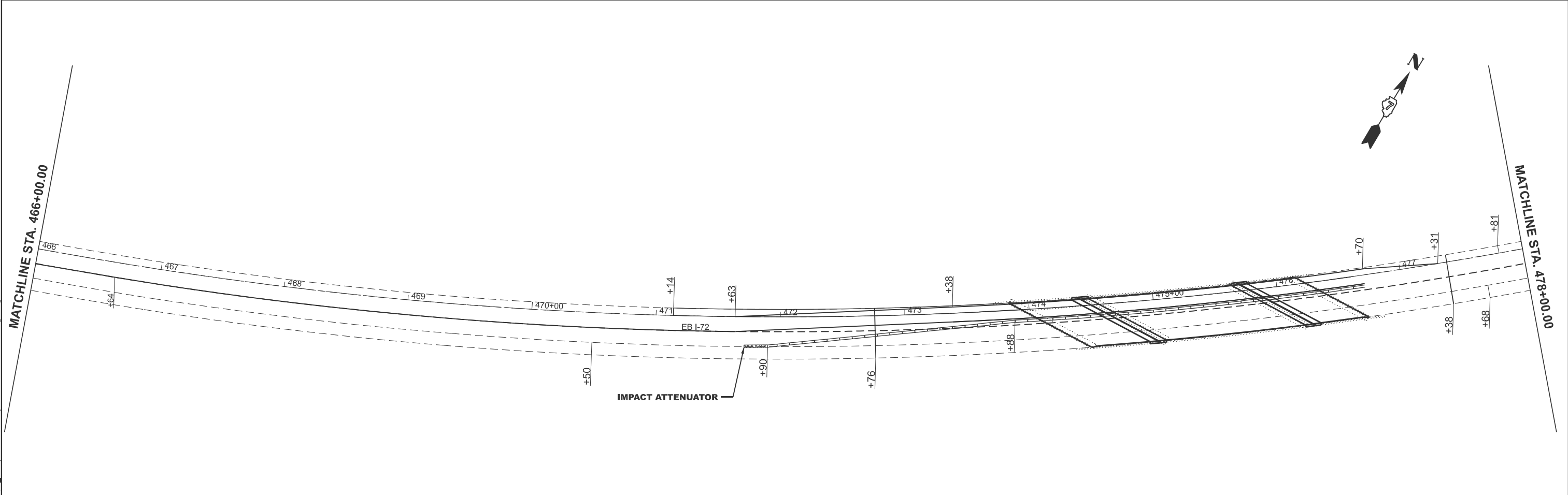


STAGE II SEQUENCE OF OPERATIONS

1. RELOCATE TEMPORARY CONCRETE BARRIERS ACCORDING TO TRAFFIC CONTROL STANDARDS 701400, 701401 AND 701402 AS WELL AS THE DETAILS IN THE PLANS.
2. CONSTRUCT THE BRIDGE ITEMS IN THE PLANS.

POST-STAGE II SEQUENCE OF OPERATIONS

1. REMOVE TRAFFIC CONTROL STANDARD 701402 AND RESURFACE THE BRIDGE APPROACHES USING TRAFFIC CONTROL STANDARD 701406.



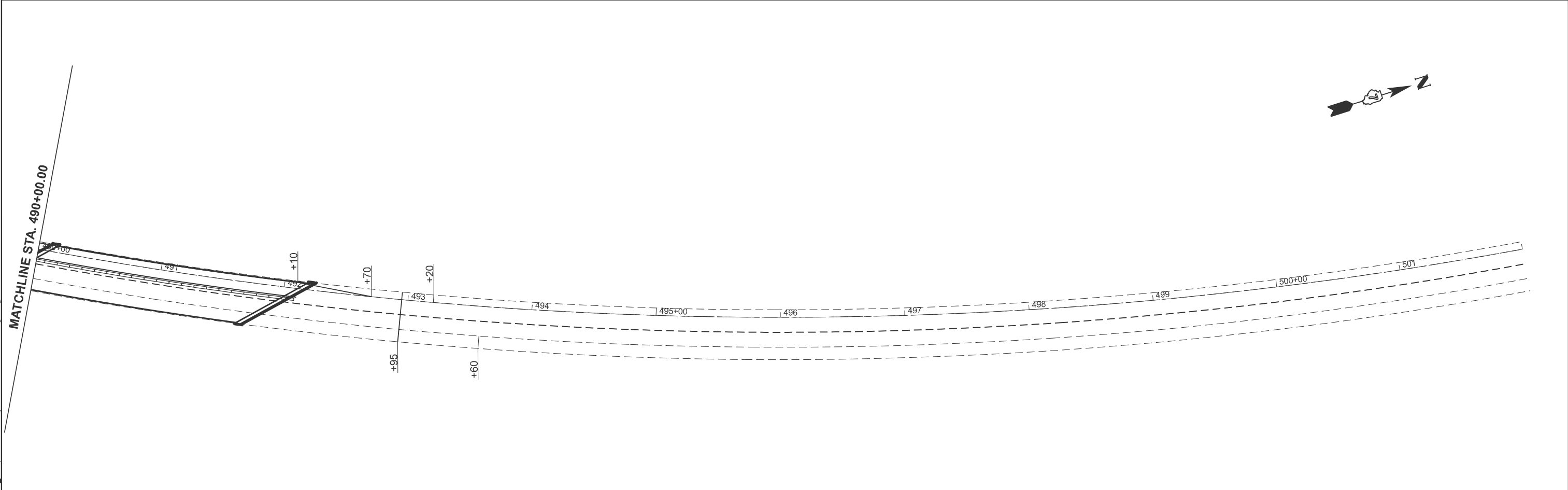
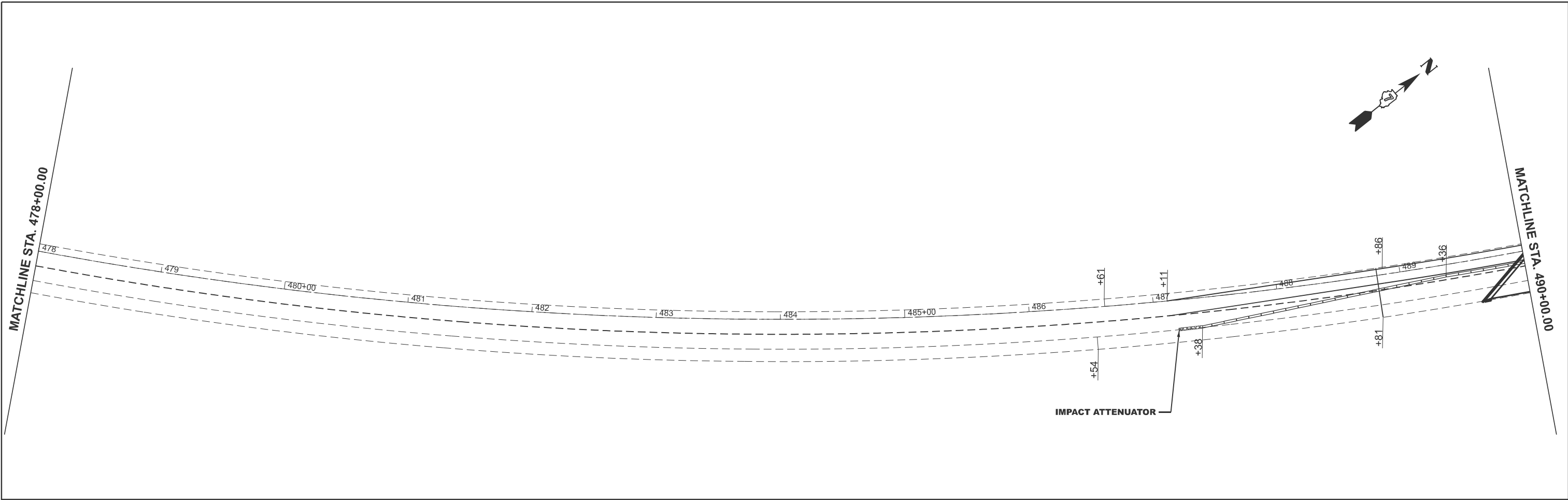
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 7/1/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE II CONSTRUCTION
 SCALE: 1"=40' SHEET OF SHEETS STA. 454+00.00 TO STA. 478+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-6	MACON	37	9
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				



MODEL: EXCL5 - Plan 3 [Sheet]
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	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 7/1/2024	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

STAGE II CONSTRUCTION

SCALE: 1"=40' SHEET OF 4 SHEETS STA. 478+00.00 TO STA. 502+00.00

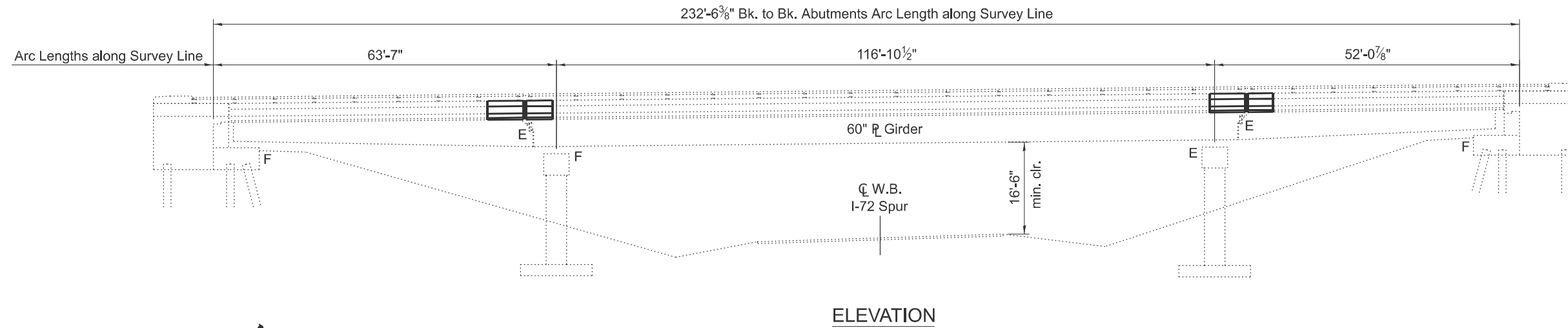
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	10
CONTRACT NO. 74C54				

ILLINOIS FED. AID PROJECT

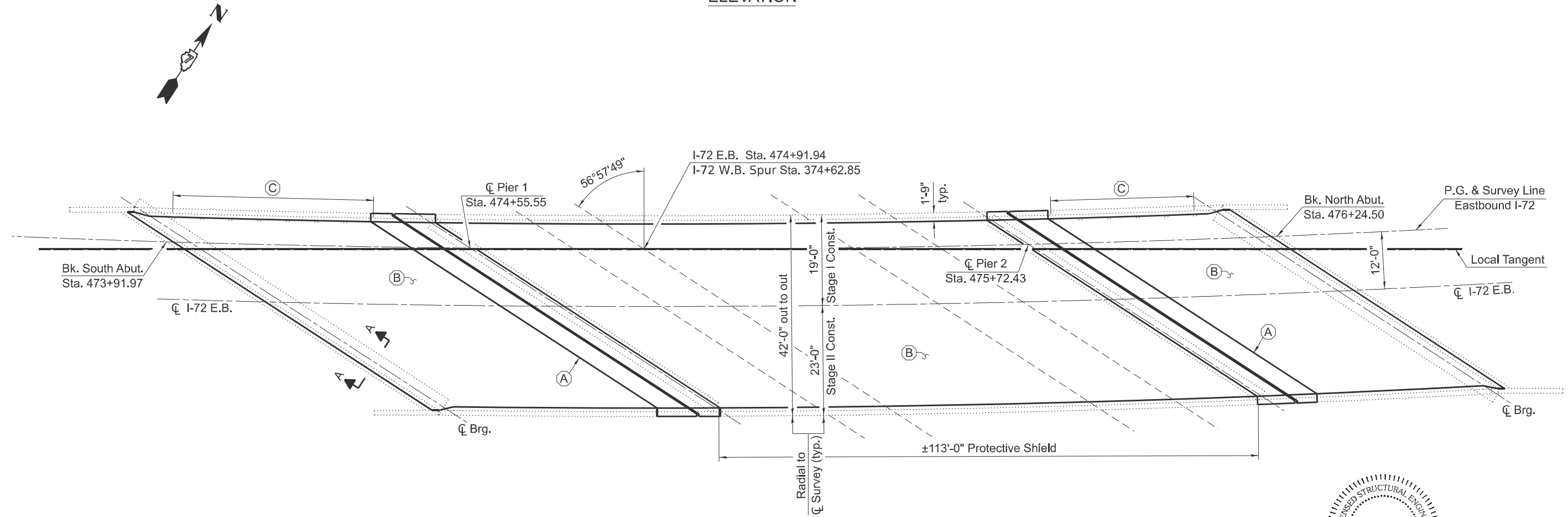
EXISTING STRUCTURE: SN 058-0066 carries FAI 72 E.B. over I-72 Westbound Spur. The three span, steel multi-girder structure was built in 1976. The proposed project consists of replacement of the expansion joints with new strip seals, full depth deck patching, scarification, concrete overlay, & deck drain replacement.

DESIGN SPECIFICATIONS
2002 AASHTO Standard Specifications
for Highway Bridges

DESIGN STRESSES
 $f_y = 60,000$ psi (Reinforcement)

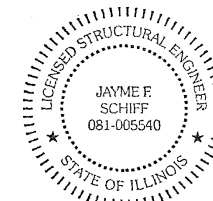


ELEVATION



PLAN

- (A) - Remove Existing Joint and Construct Strip Seal Expansion Joint
- (B) - Bridge Deck Scarification 2 1/4", Deck Patching, Bridge Deck Fly Ash or GGBF Slag Concrete Overlay 2 1/2", Diamond Grinding (Bridge Section), & Bridge Deck Grooving (Longitudinal)
- (C) - Remove and Replace Existing Floor Drains



EXPIRES 11-30-2024

Jayme F. Schiff

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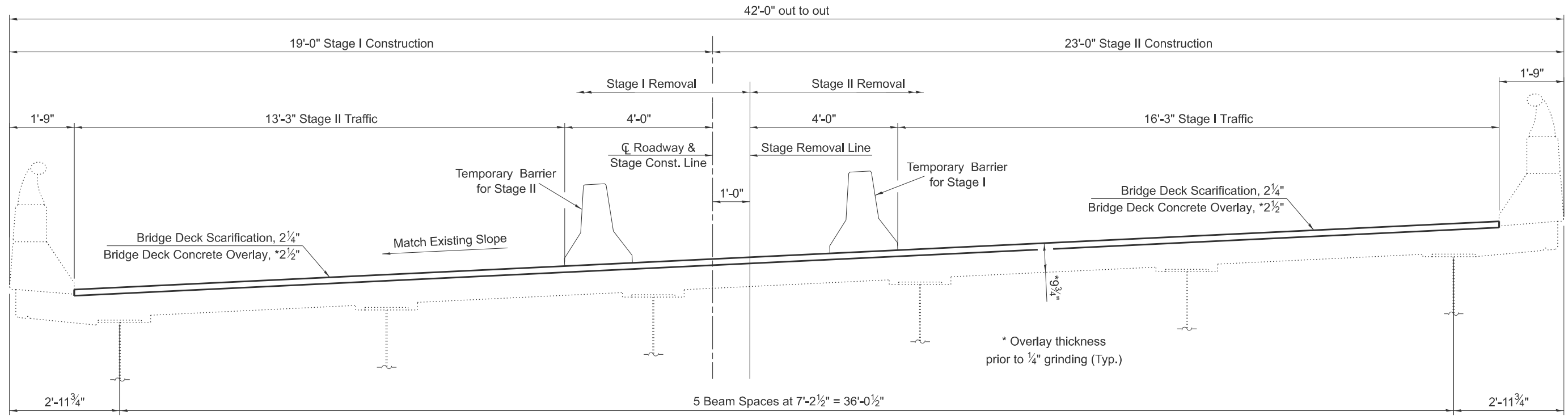
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	DRAWN - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - D. Macklin	REVISED -
PLOT DATE = 7/2/2024	DATE - October 2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**GENERAL PLAN & ELEVATION
S.N. 058-0066**

SCALE: SHEET 1 OF 10 SHEETS STA. TO STA.

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	11
CONTRACT NO. 74C54				
		ILLINOIS	FED. AID PROJECT	



CROSS SECTION
Looking North

GENERAL NOTES

Plan dimensions and details relative to the existing structure have been taken from existing plans and 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.

Reinforcement Bars designated (E) shall be epoxy coated.

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 operations shall be replaced with an approved bar splicer or anchorage system. Cost included with CONCRETE REMOVAL.

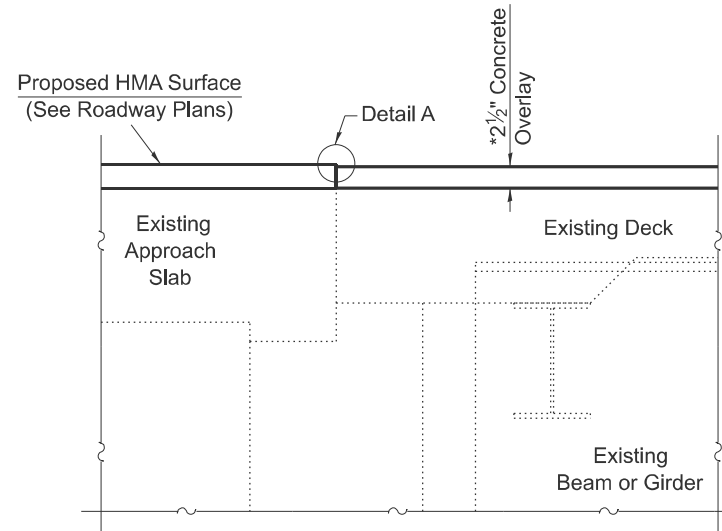
Removal and reinstallation of the handrail sections and support posts will be necessary for construction of the expansion joints. The existing handrail sections and support posts shall be reused. New bolts, shim plates and post support anchor assemblies, as detailed in the plans, are to be provided and installed for the replacement of the handrail sections. This work and all materials shall be included in the contract unit price for CONCRETE SUPERSTRUCTURE.

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 °F.

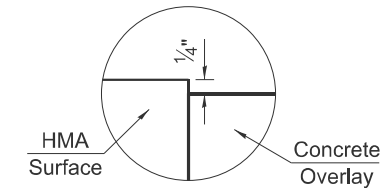
Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

Protective Coat to be applied to areas of new concrete only, including bridge deck concrete overlay.

Areas of deck repairs shown are estimated. The Engineer shall show actual locations of deck repairs on as-built plans.



SECTION A-A



DETAIL A

TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	43.6
Concrete Superstructure	Cu. Yd.	43.9
Reinforcement Bars, Epoxy Coated	Pound	6,490
Bar Splicers	Each	48
Preformed Joint Strip Seal	Foot	144
Bridge Deck Scarification 2 1/4"	Sq. Yd.	870
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2 1/2"	Sq. Yd.	870
Diamond Grinding (Bridge Section)	Sq. Yd.	892
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	620
Protective Coat	Sq. Yd.	1,016
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	7.0
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	3.0
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	11.5
Structural Repair of Concrete (Depth > 5")	Sq. Ft.	9.0
Protective Shield	Sq. Yd.	528
Floor Drains	Each	10

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	DRAWN - T. Walk	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - D. Macklin	REVISED -
PLOT DATE = 7/2/2024	DATE - October 2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

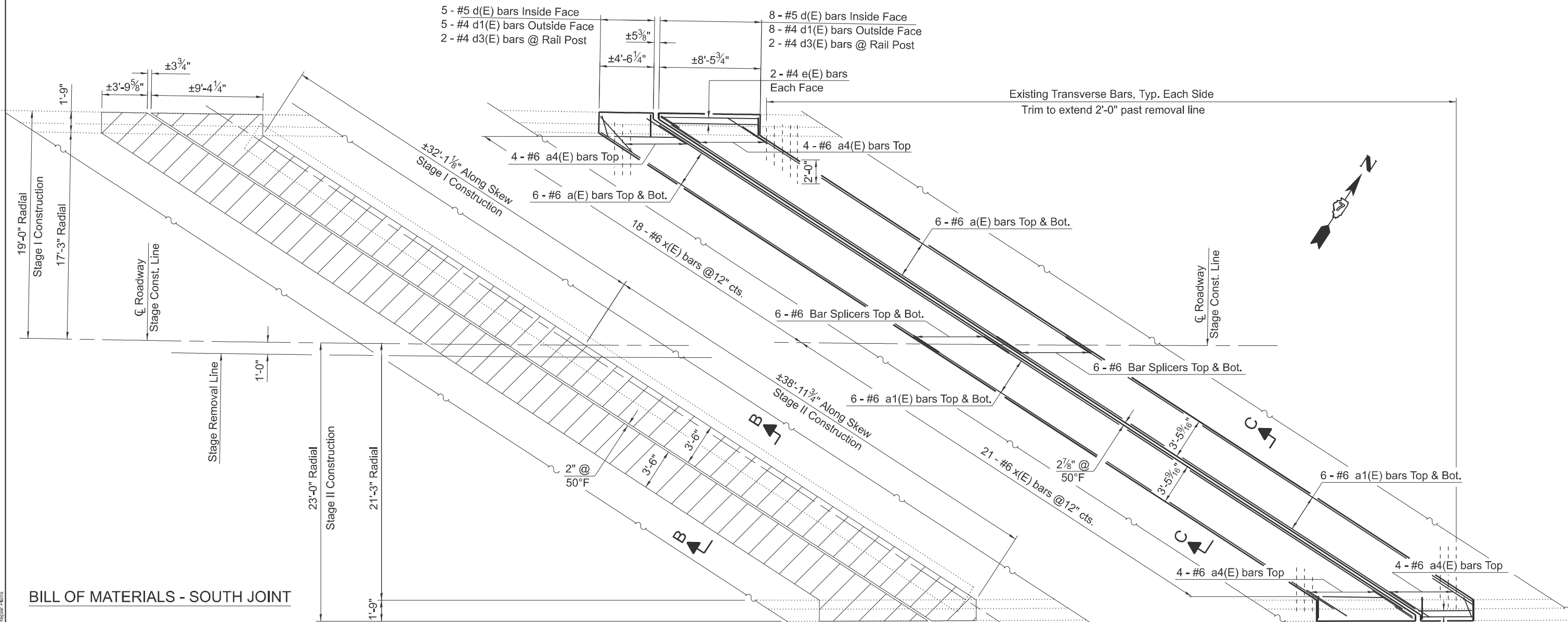
STAGE CONSTRUCTION, GENERAL NOTES, &
BILL OF MATERIALS S.N. 058-0066

SCALE: SHEET 2 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	12
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

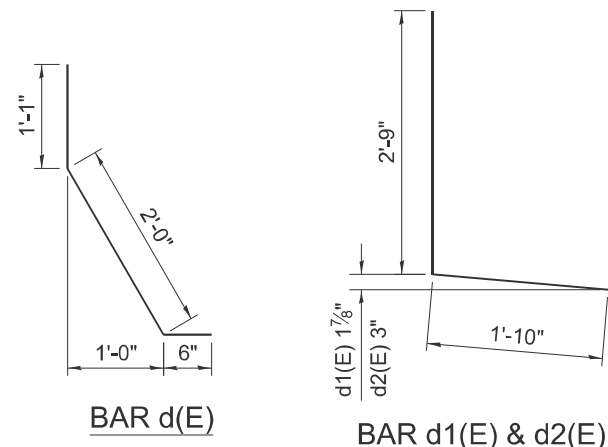
Note: Hatched area indicates removal.

For Sections B-B & C-C
See Sheet 5 of 10

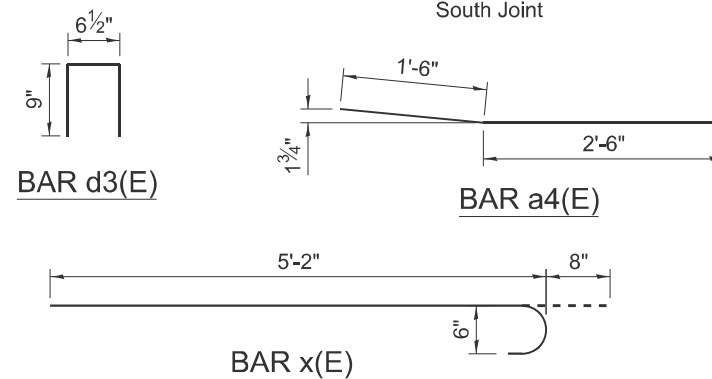


BILL OF MATERIALS - SOUTH JOINT

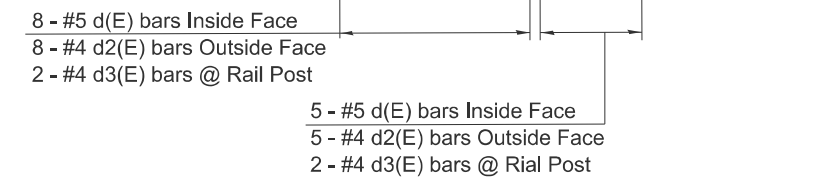
Bar	No.	Size	Length	Shape
a(E)	24	#6	33'-5"	—
a1(E)	24	#6	40'-4"	—
a4(E)	16	#6	4'-0"	—
d(E)	26	#5	3'-7"	┌
d1(E)	13	#4	4'-7"	┌
d2(E)	13	#4	4'-7"	┌
d3(E)	8	#4	2'-1"	n
x(E)	39	#6	5'-10"	J
e(E)	4	#4	8'-2"	—
e1(E)	4	#4	4'-2"	—
ITEM	UNIT	QUANTITY		
Concrete Removal	Cu. Yd.	22.4		
Concrete Superstructure	Cu. Yd.	22.5		
Reinforcement Bars, Epoxy Coated	Pound	3,320		
Bar Splicers	Each	24		



REMOVAL PLAN
South Joint



REINFORCEMENT PLAN
South Joint



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 PROJECT: ...
 DRAWING: ...

USER NAME = Jessica.Hille	DESIGNED - T. Walk	REVISED -
PLOT SCALE = \$SCALES	DRAWN - T. Walk	REVISED -
PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - October 2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

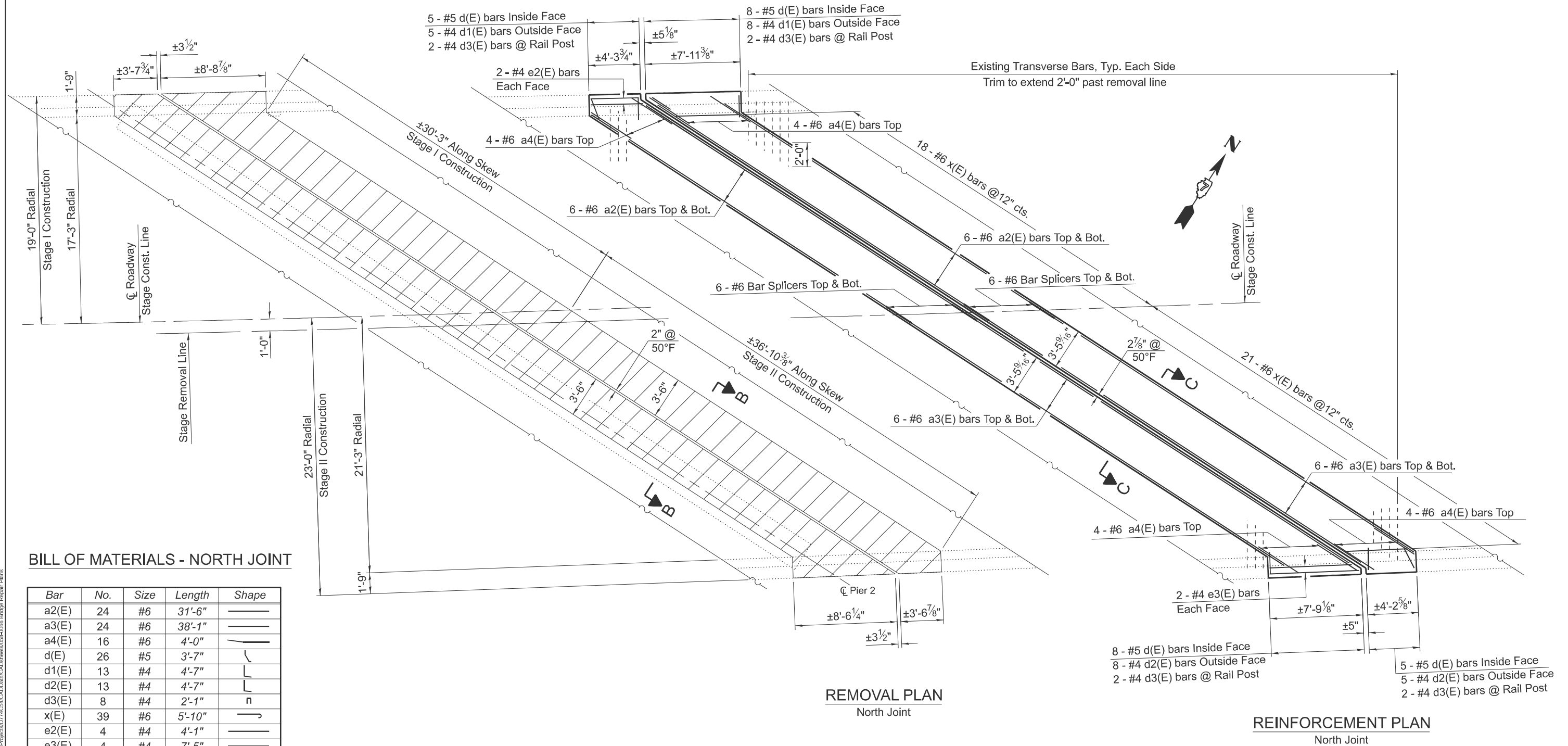
EXPANSION JOINT REPLACEMENT DETAIL
SOUTH JOINT S.N. 058-0066

SCALE: SHEET 3 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	13
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

Note: Hatched area indicates removal.

For Sections B-B & C-C
See Sheet 5 of 10



BILL OF MATERIALS - NORTH JOINT

Bar	No.	Size	Length	Shape
a2(E)	24	#6	31'-6"	—
a3(E)	24	#6	38'-1"	—
a4(E)	16	#6	4'-0"	—
d(E)	26	#5	3'-7"	⌋
d1(E)	13	#4	4'-7"	⌋
d2(E)	13	#4	4'-7"	⌋
d3(E)	8	#4	2'-1"	n
x(E)	39	#6	5'-10"	⌋
e2(E)	4	#4	4'-1"	—
e3(E)	4	#4	7'-5"	—

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	21.2
Concrete Superstructure	Cu. Yd.	21.3
Reinforcement Bars, Epoxy Coated	Pound	3,170
Bar Splicers	Each	24

REMOVAL PLAN
North Joint

REINFORCEMENT PLAN
North Joint

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 PROJECT: ...
 DRAWING: ...
 SHEET: ...

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PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - October 2023	REVISED -

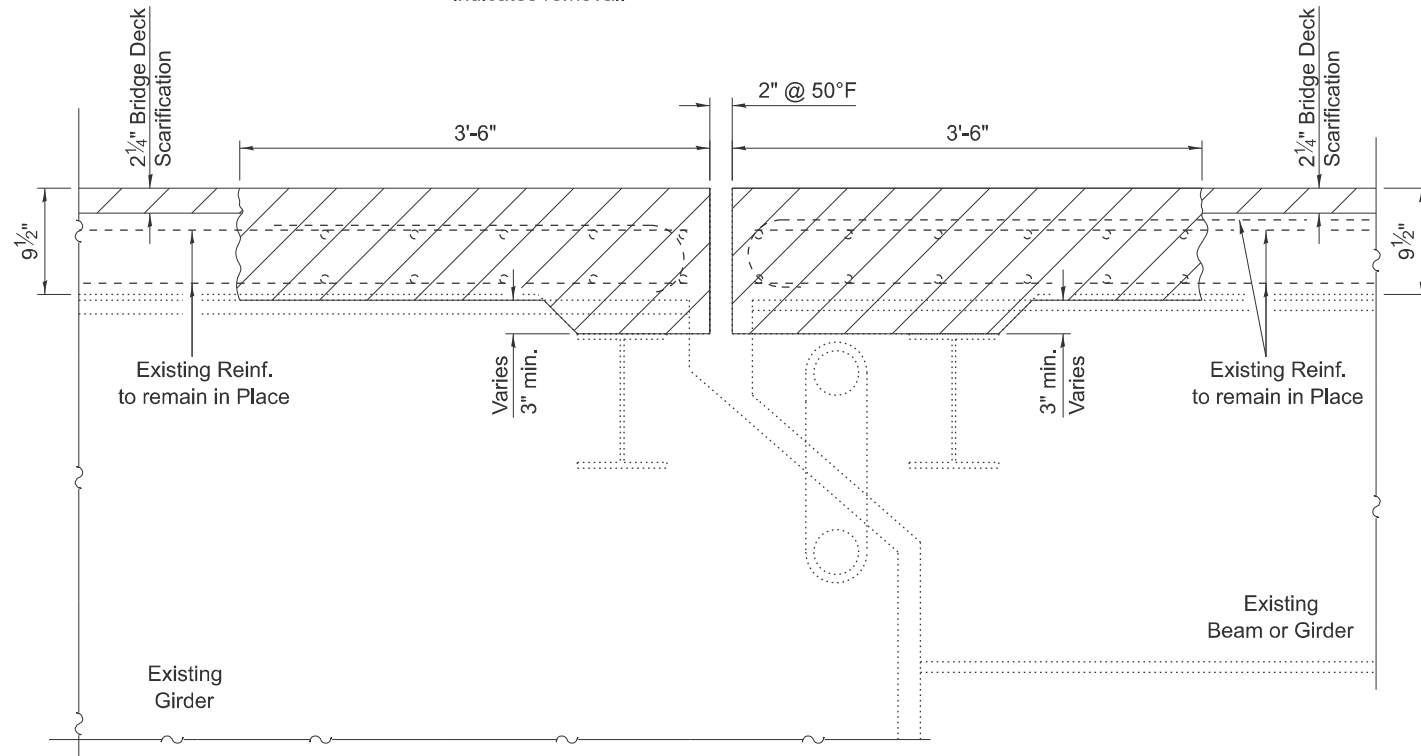
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAIL
NORTH JOINT S.N. 058-0066

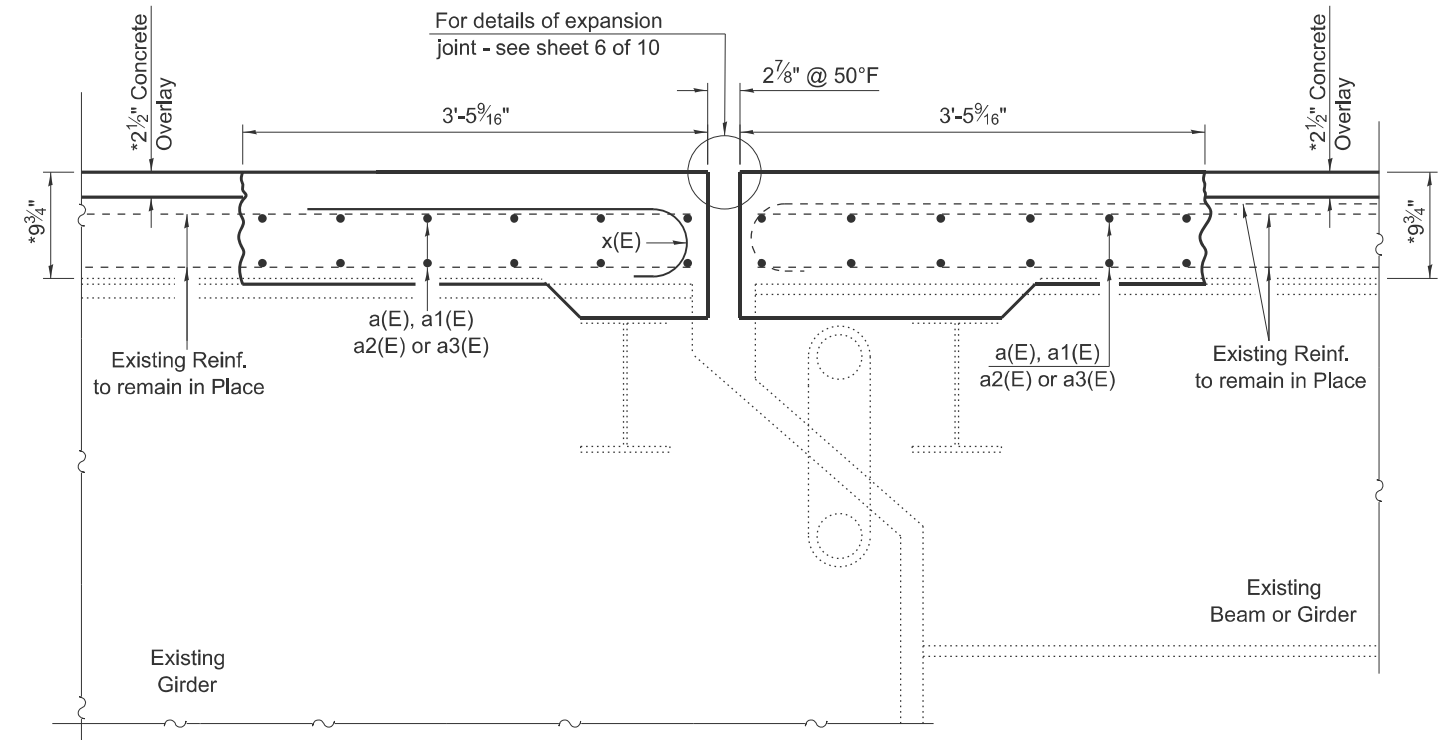
SCALE: SHEET 4 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	14
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

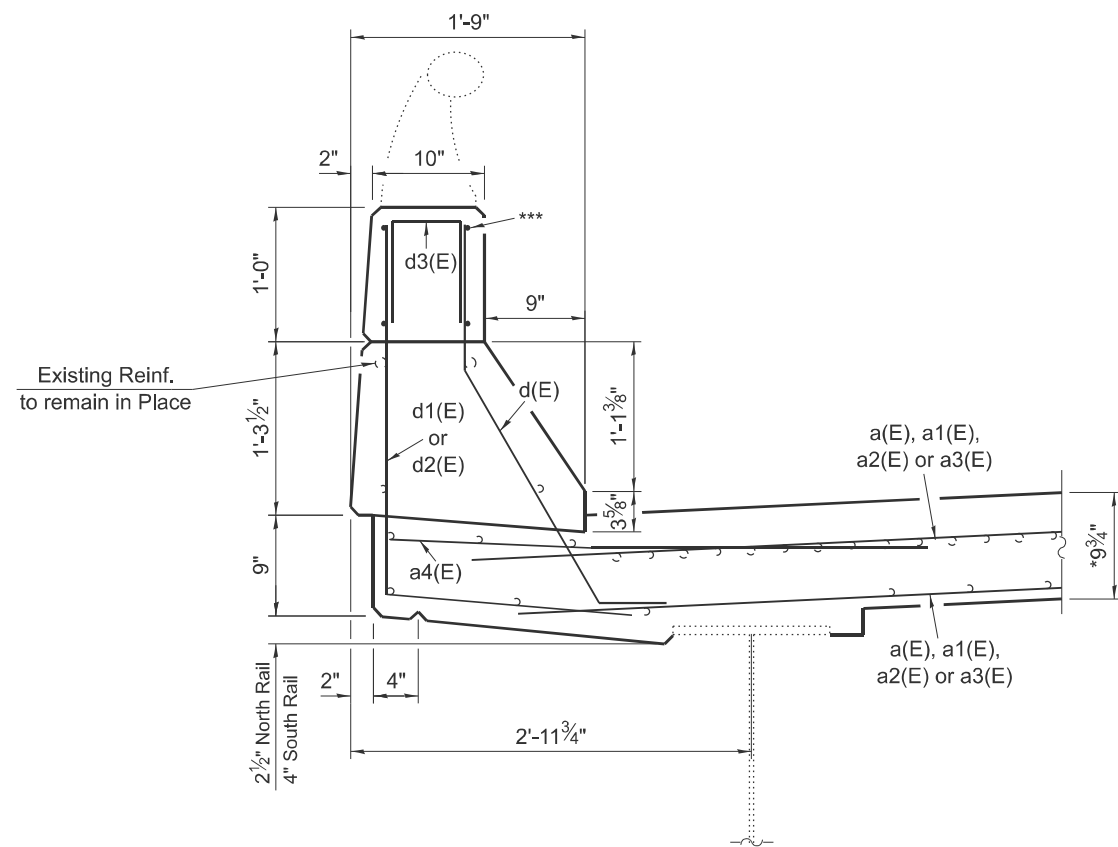
Note: Hatched area indicates removal.



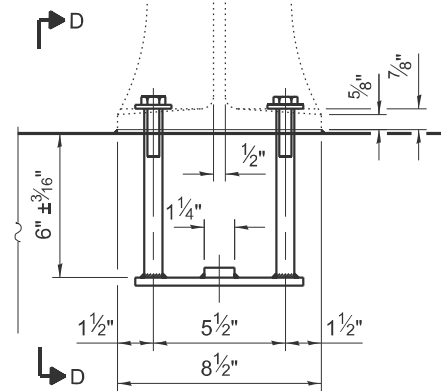
SECTION B-B



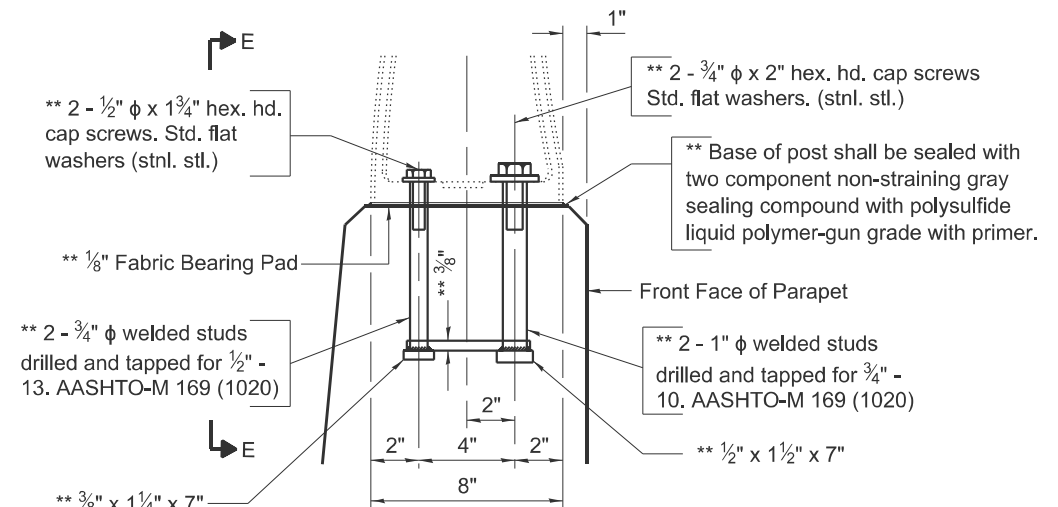
SECTION C-C



SECTION THRU DECK PARAPET



VIEW E-E



SECTION D-D

RAIL POST DETAILS

8 Locations Required

- * Overlay thickness prior to 1/4" grinding (Typ.)
- *** Only in Span 2 for e(E), e1(E), e2(E), & e3(E) bar. Span 1 & 3 have Existing Reinforcement to remain in Place

** New Rail Post anchorage devices will be required at each location where posts are connected to new construction. Cost shall be included with Concrete Superstructure. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

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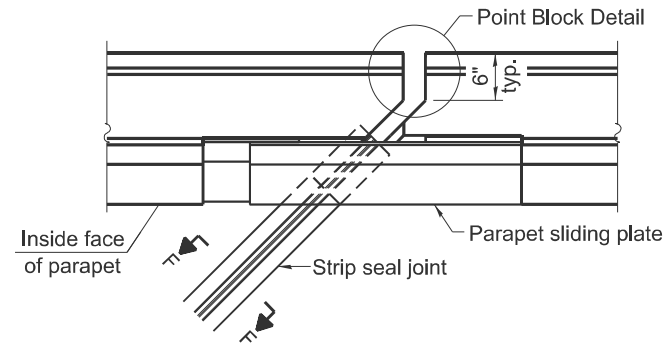
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PLOT SCALE = \$SCALE\$	DRAWN - T. Walk	REVISED -
PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - October 2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

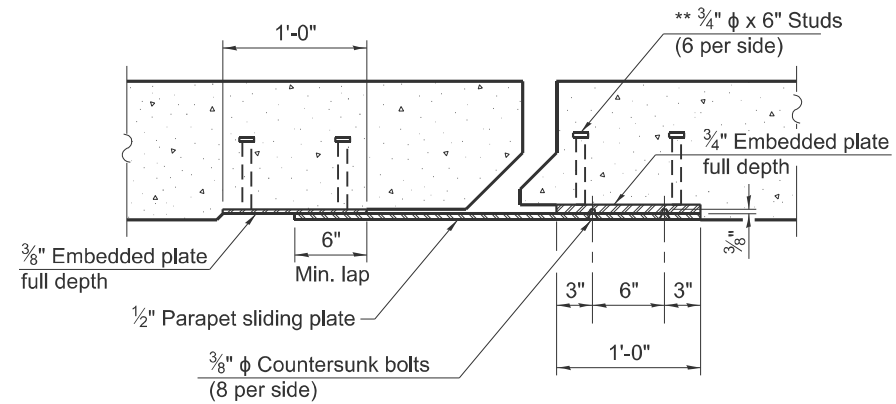
**EXPANSION JOINT REPLACEMENT DETAIL
S.N. 058-0066**

SCALE: SHEET 5 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	15
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

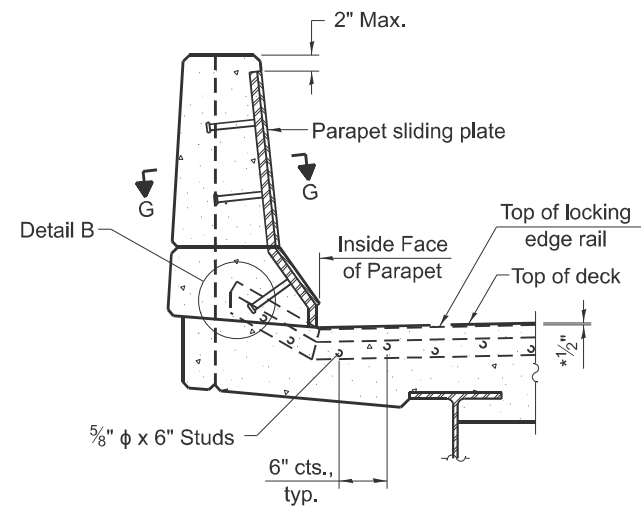


PLAN AT PARAPET

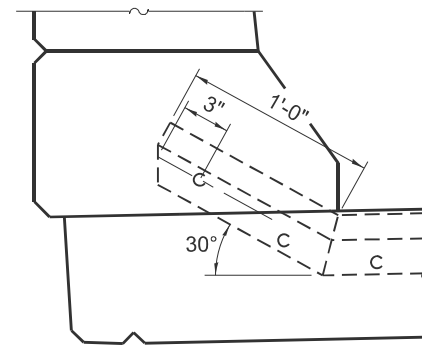


SECTION G-G

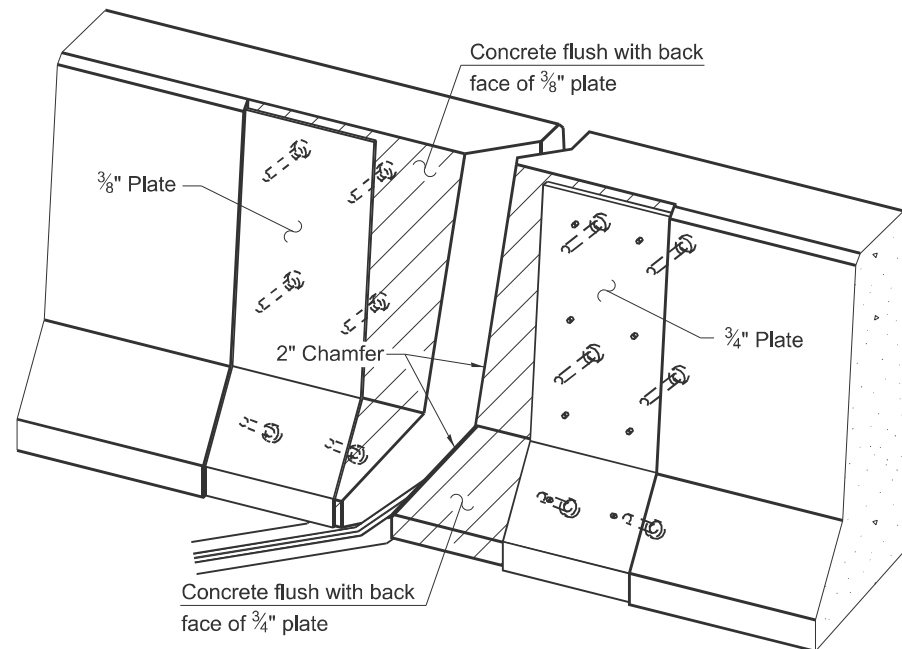
GENERAL NOTES
 The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.
 The locking edge rails depicted are 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 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 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.
 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.
 Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.



ELEVATION AT PARAPET

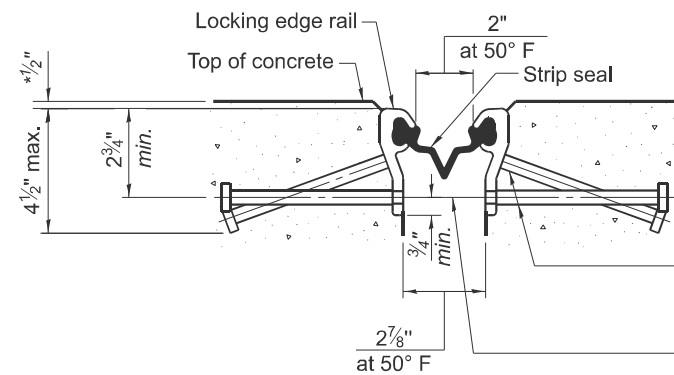


DETAIL B



TRIMETRIC VIEW
 (Showing embedded plates only)

* Overlay thickness prior to 1/4" grinding (Typ.)

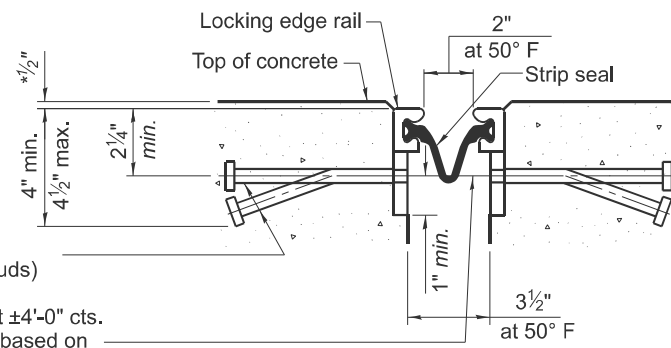


SHOWING ROLLED RAIL JOINT

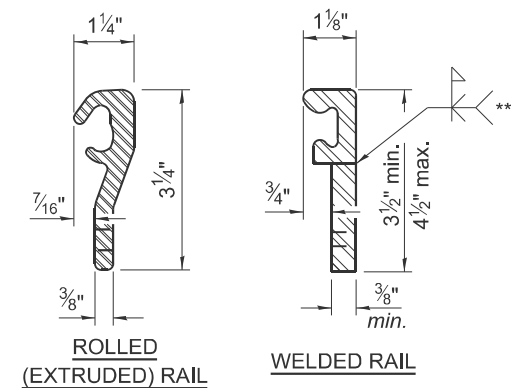
** 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)
 3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION F-F

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

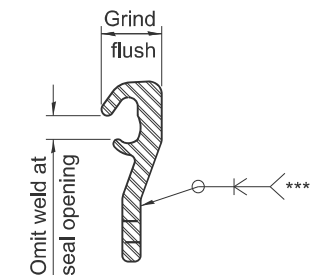


SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	144

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PLOT SCALE = \$SCALE\$	DRAWN - T. Walk	REVISED -
PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - October 2023	REVISED -

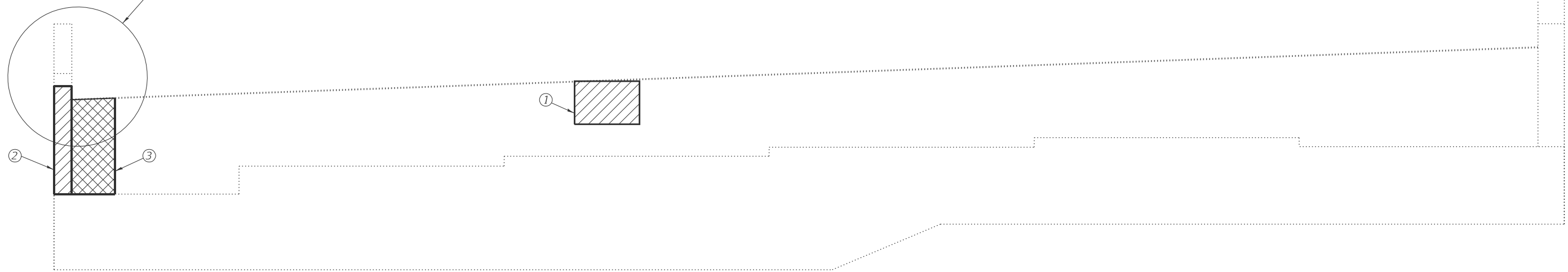
STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
 S.N. 058-0066

SCALE: SHEET 6 OF 10 SHEETS STA. TO STA.

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	16
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

Detail C



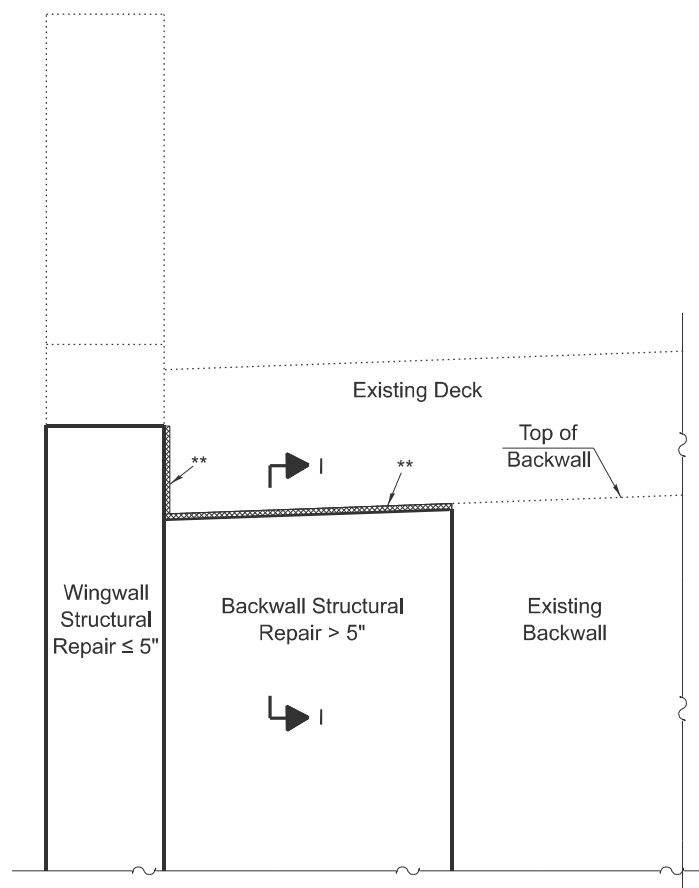
NORTH ABUTMENT



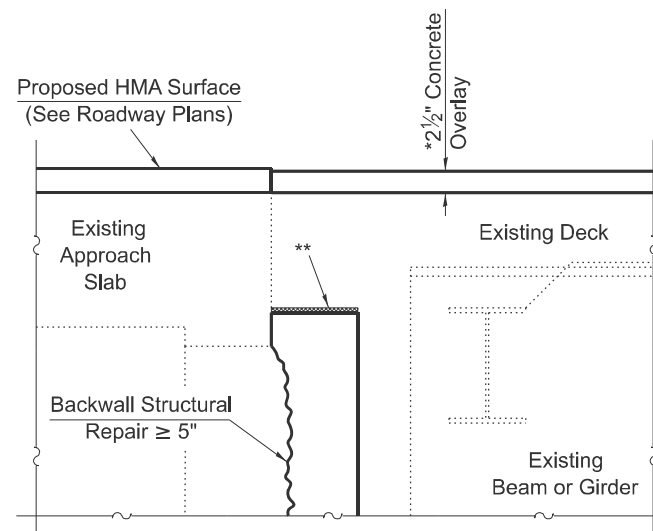
Structural Repair of Concrete (Depth ≤ 5'')



Structural Repair of Concrete (Depth > 5'')



DETAIL C



SECTION I-I

- * Overlay thickness prior to 1/4" grinding (Typ.)
- ** 1/2" Preformed Expansion Joint Filler according to Article 1051.09 of the Standard Specifications. Cost included with Structural Repair of Concrete.

STRUCTURE REPAIR OF CONCRETE

Patch No.	Depth ≤ 5"	Depth > 5"
	SqFt	SqFt
1	6.0	
2	5.5	
3		9.0
Total	11.5	9.0

NOTES

Quantities and locations are approximated. Actual quantities and locations to be determined in the field by the Engineer.

This work is intended to repair only areas of severe deterioration. Some minor deteriorated areas may be left unrepaired.

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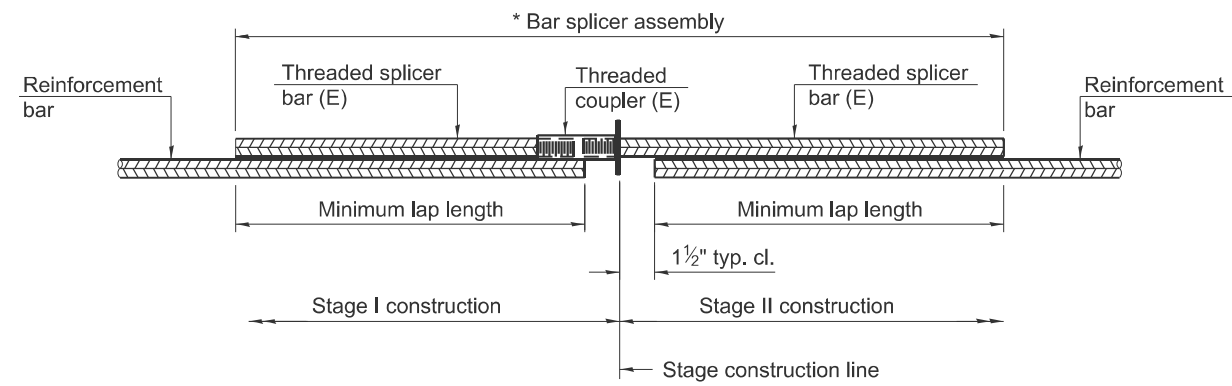
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	DRAWN - T. Walk	REVISED -
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PLOT DATE = 7/2/2024	DATE - October 2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL REPAIR OF CONCRETE, NORTH ABUTMENT
S.N. 058-0066**

SCALE: SHEET 9 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	19
CONTRACT NO. 74C54				
ILLINOIS		FED. AID PROJECT		



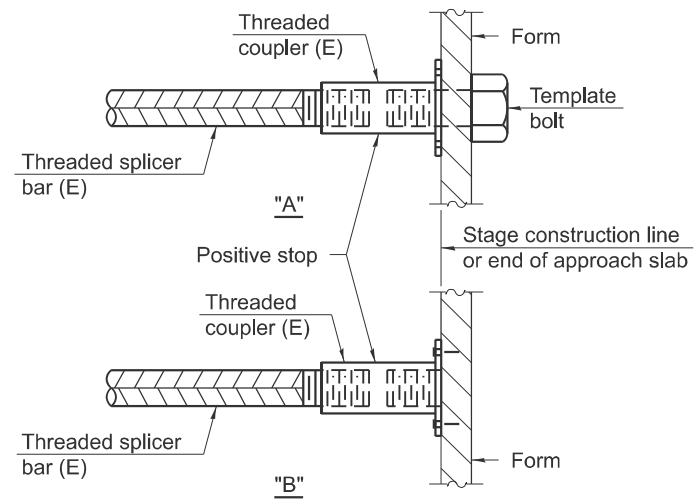
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

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
South Joint	#6	24	4'-0"
North Joint	#6	24	4'-0"

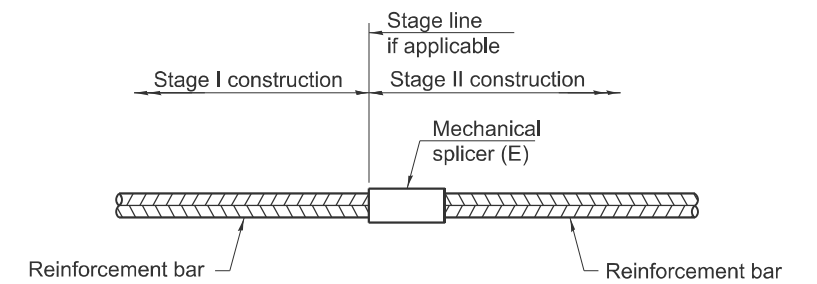


INSTALLATION AND SETTING METHODS

"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

5-15-2023

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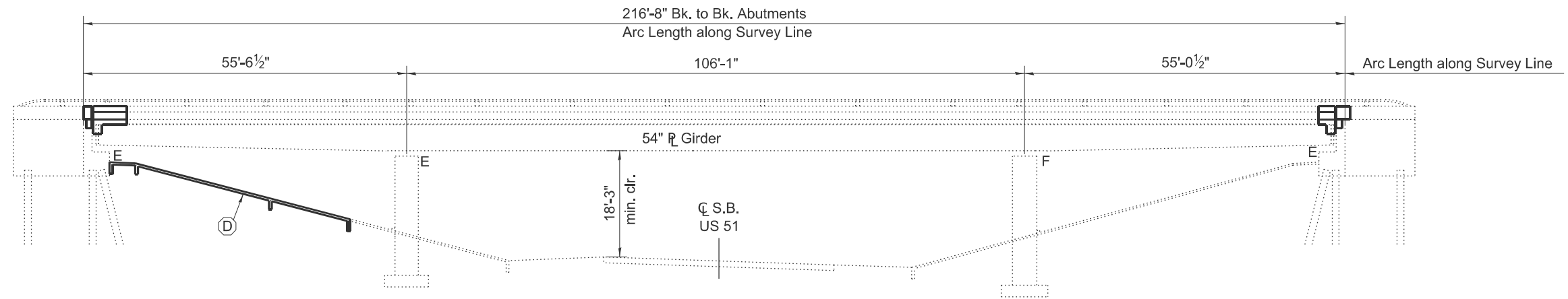
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
S.N. 058-0066

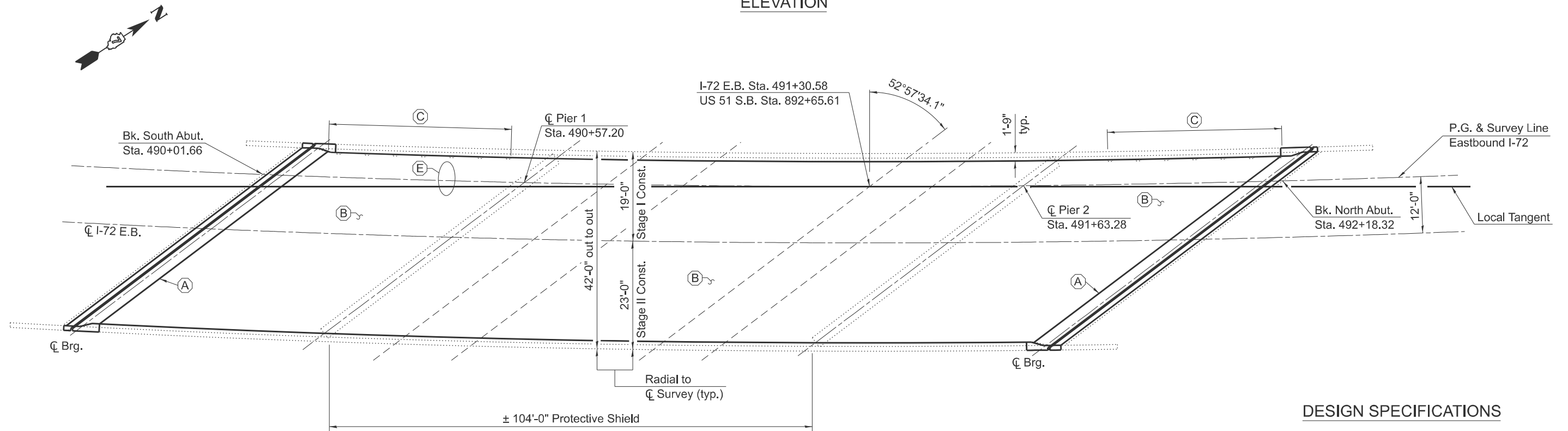
SCALE: SHEET 10 OF 10 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	20
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

EXISTING STRUCTURE: SN 058-0067 carries FAI 72 Eastbound over US 51 Southbound. The three span, steel multi-girder structure was built in 1976. The proposed project consists of replacement of the expansion joints with new strip seals, full depth deck patching, scarification, concrete overlay, deck drain replacement, slope wall repair, bearing replacement, structural steel repair, and abutment repair.



ELEVATION



PLAN

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

DESIGN STRESSES

$f_y = 60,000$ psi (Reinforcement)

- (A) - Remove Existing Joint, Construct Strip Seal Expansion Joint & Bearing Replacement
- (B) - Bridge Deck Scarification $2\frac{1}{4}$ " , Deck Patching, Bridge Deck Fly Ash or GGBF Slag Concrete Overlay $2\frac{1}{2}$ " , Diamond Grinding (Bridge Section), & Bridge Deck Grooving (Longitudinal)
- (C) - Remove and Replace Existing Floor Drains
- (D) - Slope Wall Repair
- (E) - Repair 2nd Cross Frame from South Abutment between Girder 1 and 2



EXPIRES 11-30-2024

Jayme F. Schiff

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

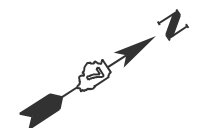
GENERAL PLAN & ELEVATION
S.N. 058-0067

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SCALE: SHEET 1 OF 15 SHEETS STA. TO STA.

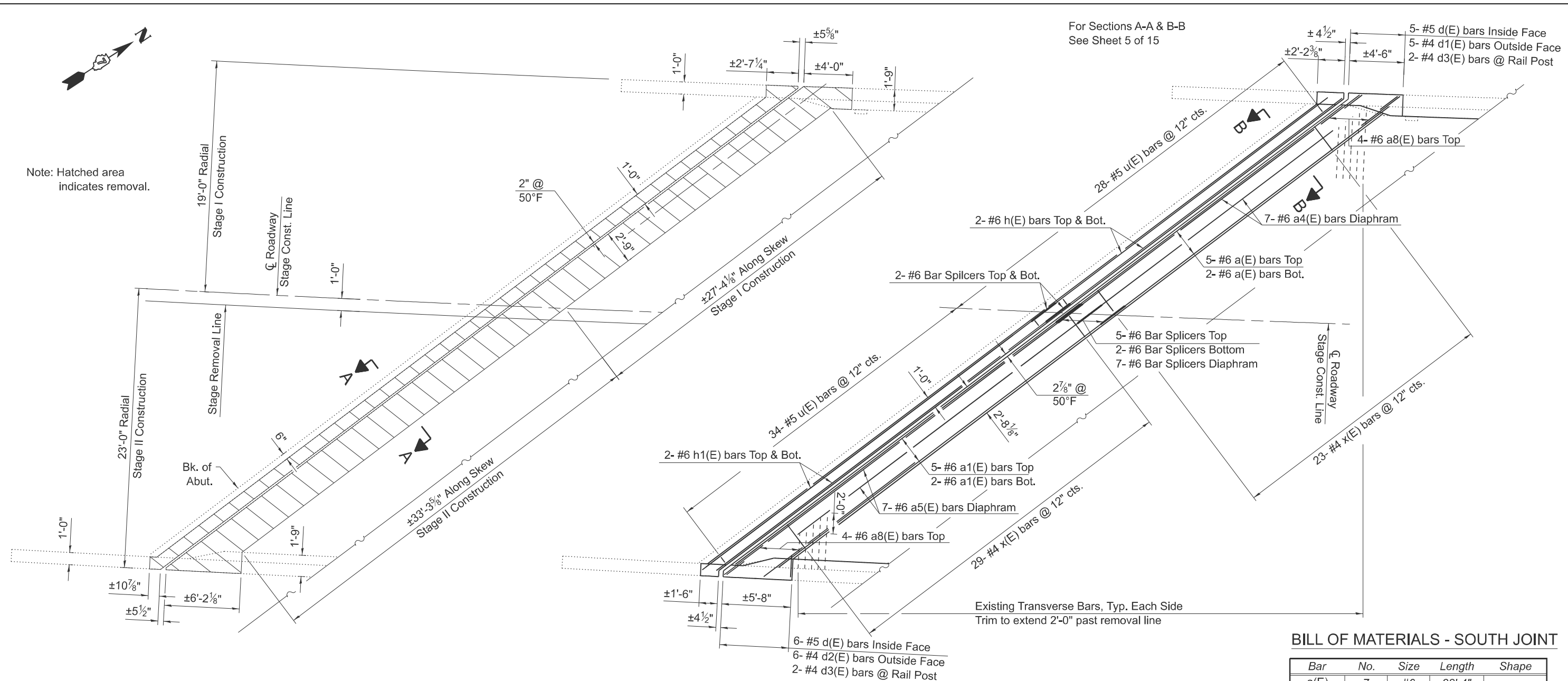
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72	D7 BRIDGE REPAIRS 2025-5	MACON	37	21
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

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Note: Hatched area indicates removal.

For Sections A-A & B-B
See Sheet 5 of 15

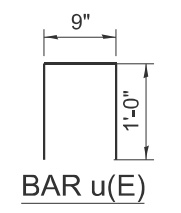
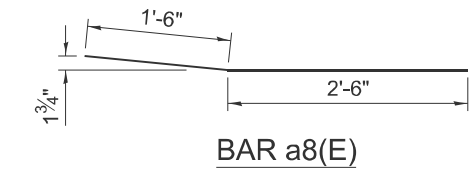
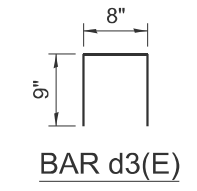
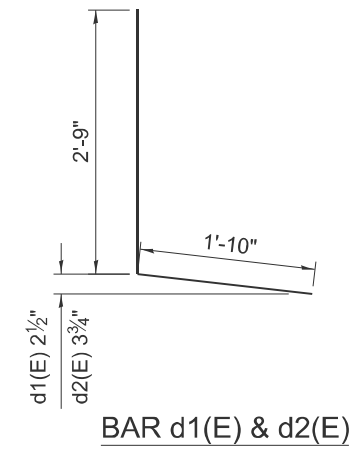
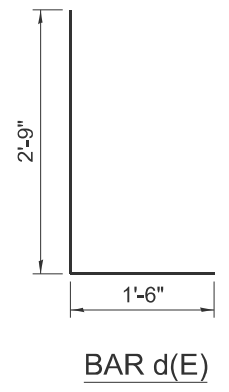
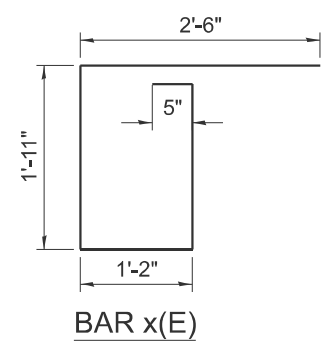


REMOVAL PLAN
South Joint

REINFORCEMENT PLAN
South Joint

BILL OF MATERIALS - SOUTH JOINT

Bar	No.	Size	Length	Shape
a(E)	7	#6	28'-4"	—
a1(E)	7	#6	34'-4"	—
a4(E)	7	#6	25'-0"	—
a5(E)	7	#6	31'-1"	—
a8(E)	8	#6	4'-0"	—
d(E)	11	#5	4'-3"	L
d1(E)	5	#4	4'-7"	L
d2(E)	6	#4	4'-7"	L
d3(E)	4	#4	2'-2"	□
h(E)	4	#6	29'-2"	—
h1(E)	4	#6	35'-1"	—
u(E)	62	#5	2'-9"	□
x(E)	52	#4	7'-11"	□
ITEM		UNIT	QUANTITY	
Concrete Removal		Cu. Yd.	15.6	
Concrete Superstructure		Cu. Yd.	15.3	
Reinforcement Bars, Epoxy Coated		Pound	2,230	
Bar Splicers		Each	18	



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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

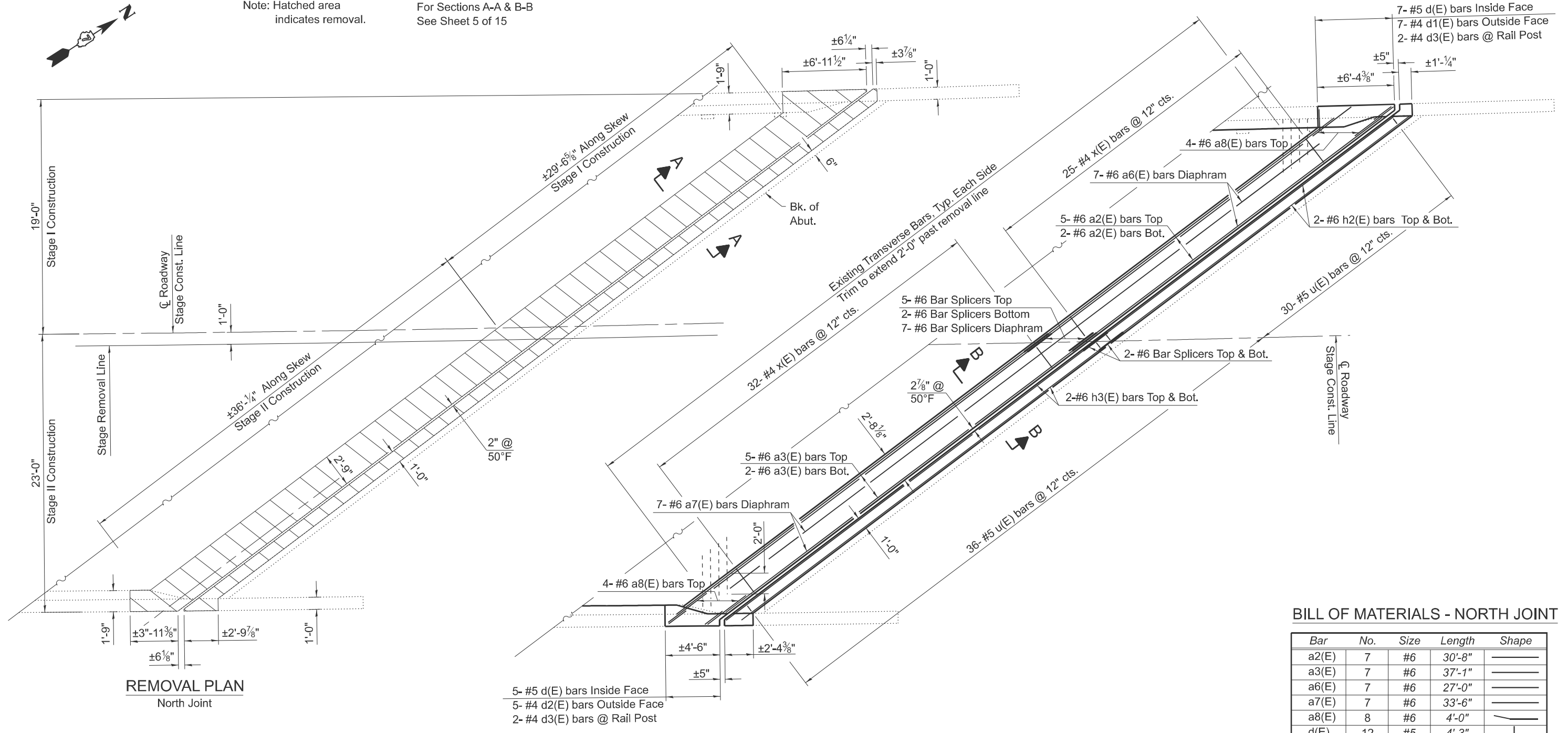
EXPANSION JOINT REPLACEMENT DETAIL
SOUTH JOINT S.N. 058-0067

SCALE: SHEET 3 OF 15 SHEETS STA. TO STA.

FAI RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	23
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

Note: Hatched area indicates removal.

For Sections A-A & B-B See Sheet 5 of 15



REMOVAL PLAN
North Joint

REINFORCEMENT PLAN
North Joint

BILL OF MATERIALS - NORTH JOINT

Bar	No.	Size	Length	Shape
a2(E)	7	#6	30'-8"	—
a3(E)	7	#6	37'-1"	—
a6(E)	7	#6	27'-0"	—
a7(E)	7	#6	33'-6"	—
a8(E)	8	#6	4'-0"	—
d(E)	12	#5	4'-3"	L
d1(E)	7	#4	4'-7"	L
d2(E)	5	#4	4'-7"	L
d3(E)	4	#4	2'-2"	□
h2(E)	4	#6	30'-10"	—
h3(E)	4	#6	38'-2"	—
u(E)	66	#5	2'-9"	□
x(E)	57	#4	7'-11"	□
ITEM		UNIT	QUANTITY	
Concrete Removal		Cu. Yd.	16.9	
Concrete Superstructure		Cu. Yd.	16.5	
Reinforcement Bars, Epoxy Coated		Pound	2,400	
Bar Splicers		Each	18	

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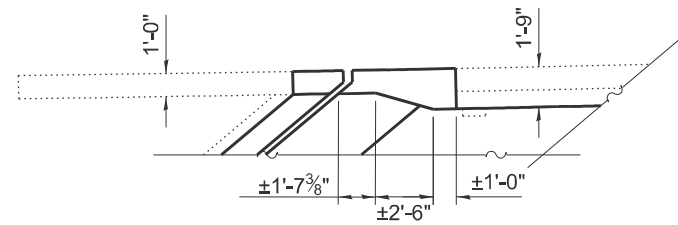
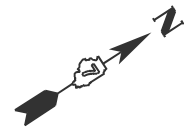
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	DATE - November 2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

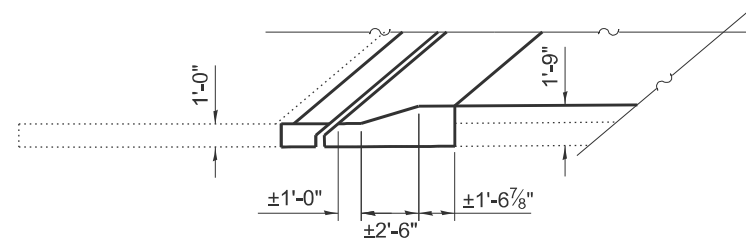
**EXPANSION JOINT REPLACEMENT DETAIL
NORTH JOINT S.N. 058-0067**

SCALE: SHEET 4 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	24
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

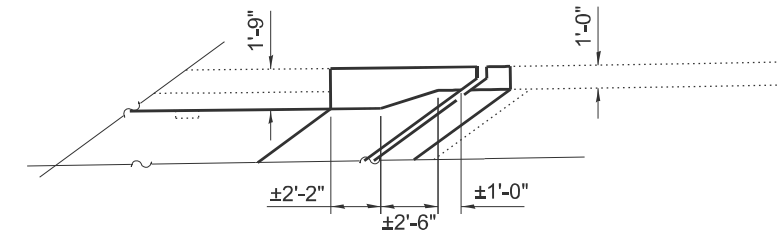


West Parapet

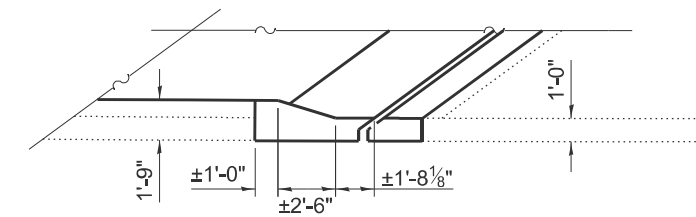


East Parapet

PARAPET NOSE DETAIL
South Joint

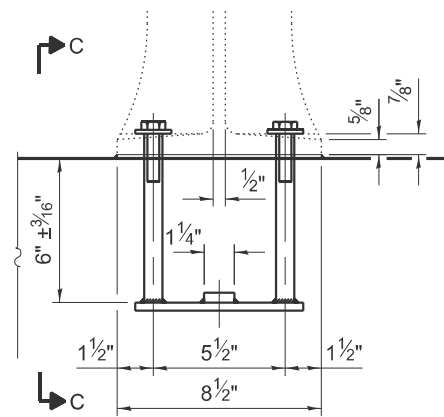


West Parapet

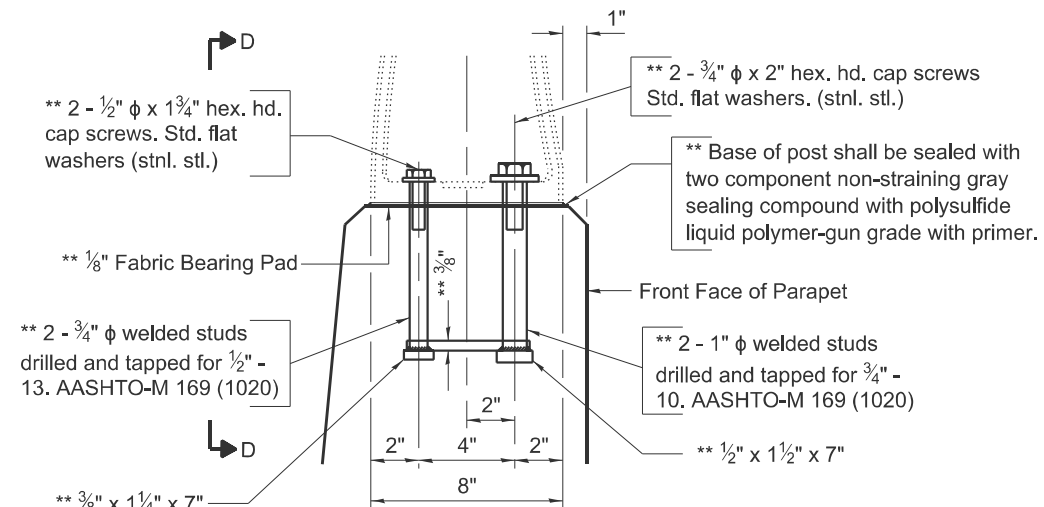


East Parapet

PARAPET NOSE DETAIL
North Joint



VIEW D-D



SECTION C-C

RAIL POST DETAILS
4 Locations Required

** New Rail Post anchorage devices will be required at each location where posts are connected to new construction. Cost shall be included with Concrete Superstructure. In lieu of the cast-in-place anchor device shown, the Contractor has the option of drilling and setting stainless steel anchor rods of the same diameter and grade as the specified cap screws according to Article 509.06 of the Standard Specifications. Embedment shall be according to the manufacturer's specifications.

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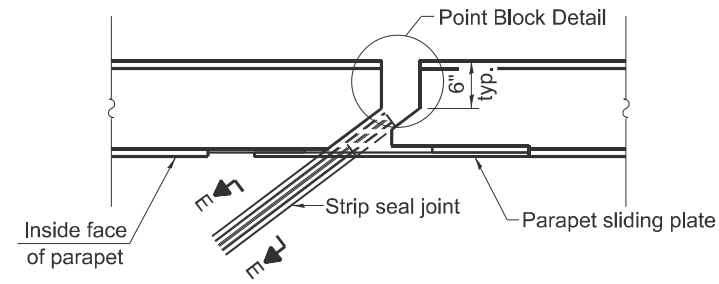
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STATE OF ILLINOIS
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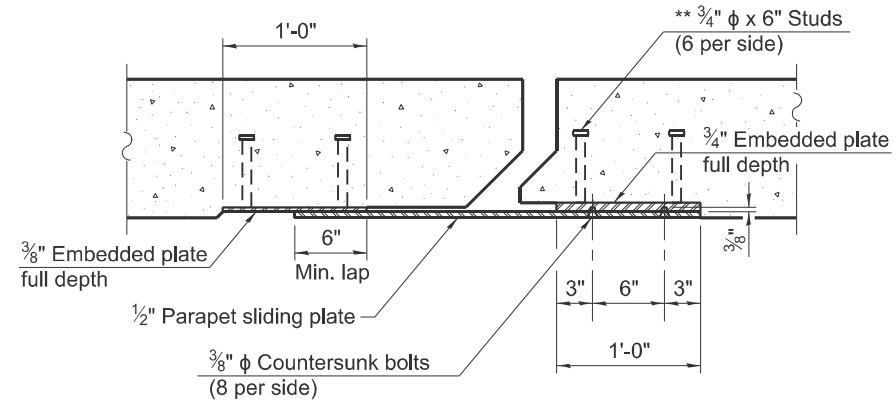
EXPANSION JOINT REPLACEMENT DETAIL
S.N. 058-0067

SCALE: SHEET 6 OF 15 SHEETS STA. TO STA.

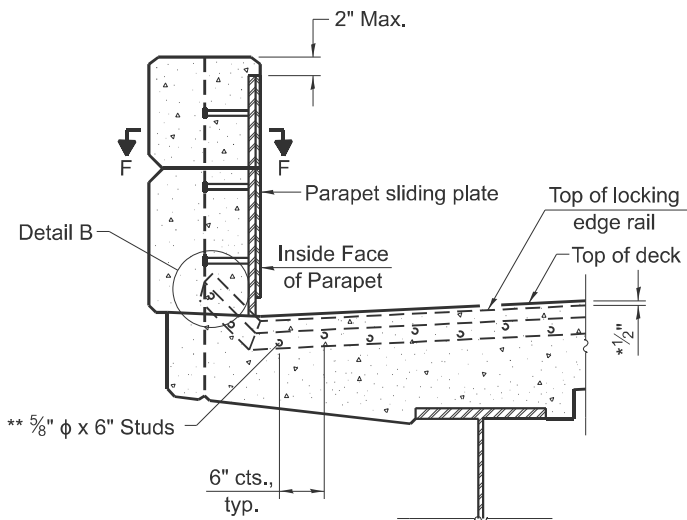
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CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				



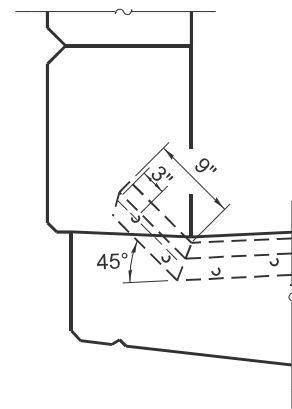
PLAN AT PARAPET



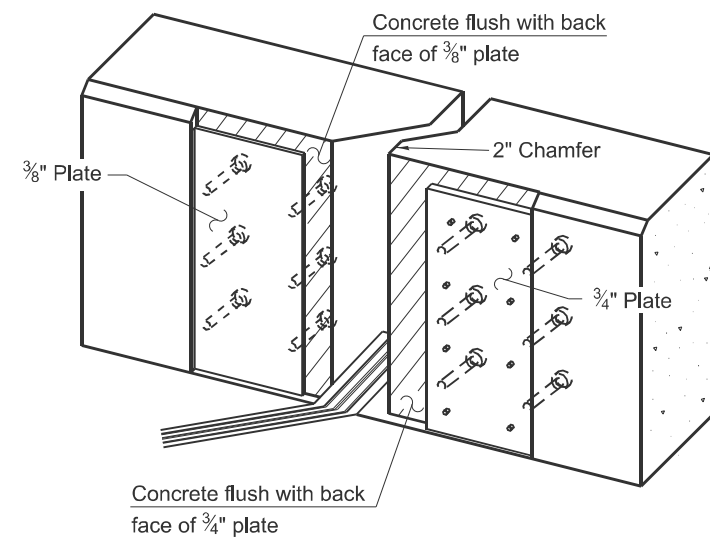
SECTION F-F



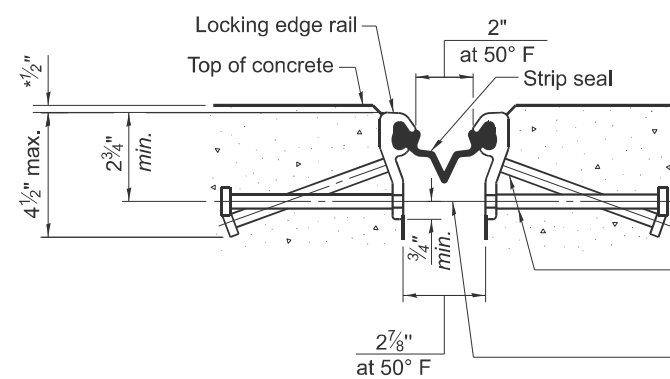
ELEVATION AT PARAPET



DETAIL B



TRIMETRIC VIEW
(Showing embedded plates only)



SHOWING ROLLED RAIL JOINT

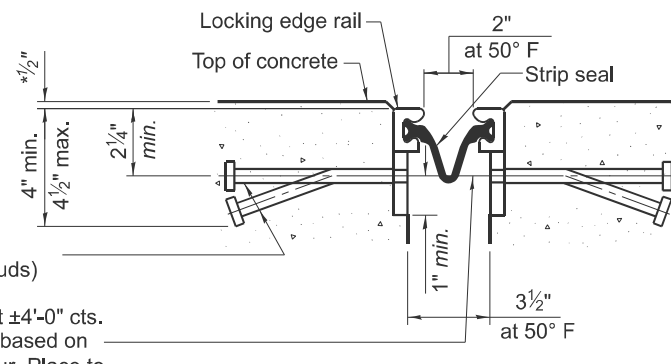
* Overlay thickness prior to 1/4" grinding (Typ.)

** 5/8" ϕ x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

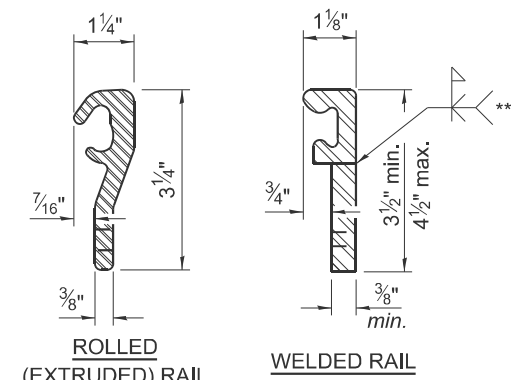
3/8" ϕ threaded rods in 7/16" ϕ holes at $\pm 4'-0"$ cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION E-E

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



SHOWING WELDED RAIL JOINT



LOCKING EDGE RAILS

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

GENERAL NOTES

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the locking edge rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement of 4 inches.

The locking edge rails depicted are 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 1/2" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

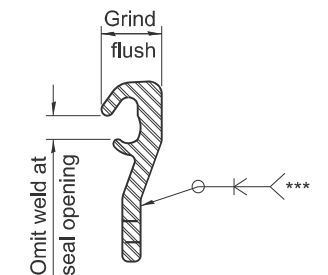
The manufacturer's recommended installation methods shall be followed.

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 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.

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.

Cost of parapet sliding plates, embedded plates, and anchorage studs included with Preformed Joint Strip Seal.



LOCKING EDGE RAIL SPLICE

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

74C54

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	134

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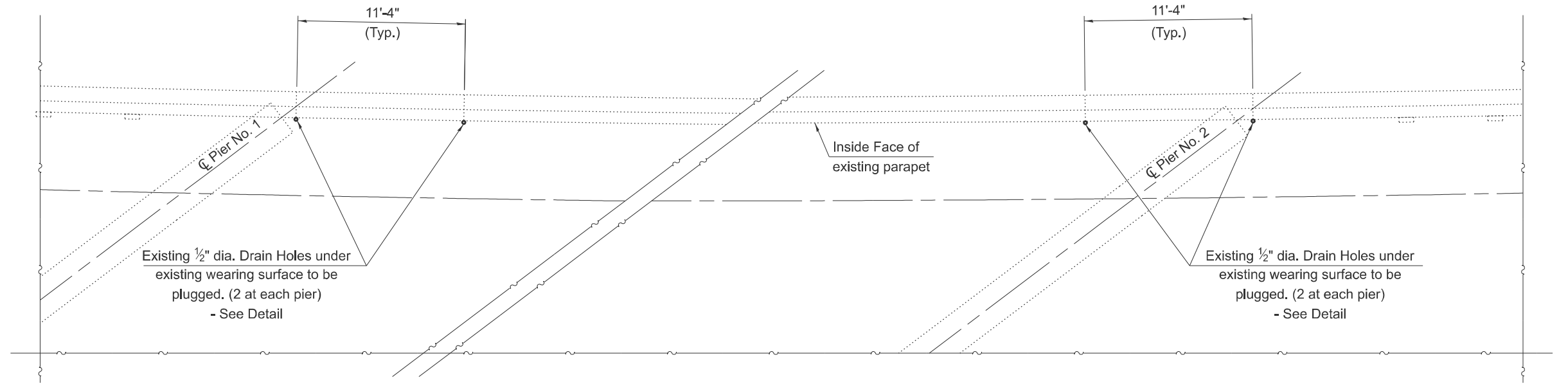
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	DATE - November 2023	REVISED -

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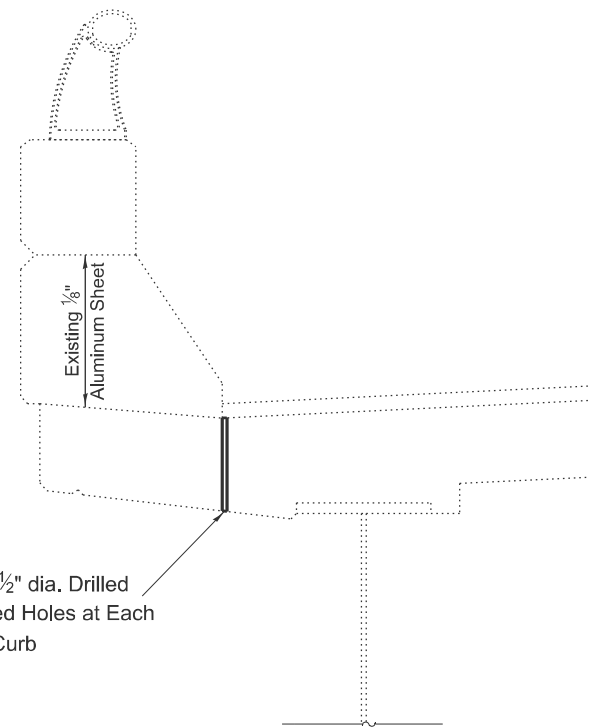
PREFORMED JOINT STRIP SEAL
S.N. 058-0067

SCALE: SHEET 7 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	27
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				



PARAPET DRAIN HOLE LOCATIONS
(West Parapet Only)



DETAIL OF DRAIN HOLES AT CURB JOINTS

(To be plugged) - See notes this sheet

NOTES

All (qty. 4) 1/2" dia. drain holes at curb joints shall be filled with a two component non-staining gray sealing compound with polysulfide liquid polymers - gun grade with primer. Cost to be included with Bridge Deck Concrete Overlay.

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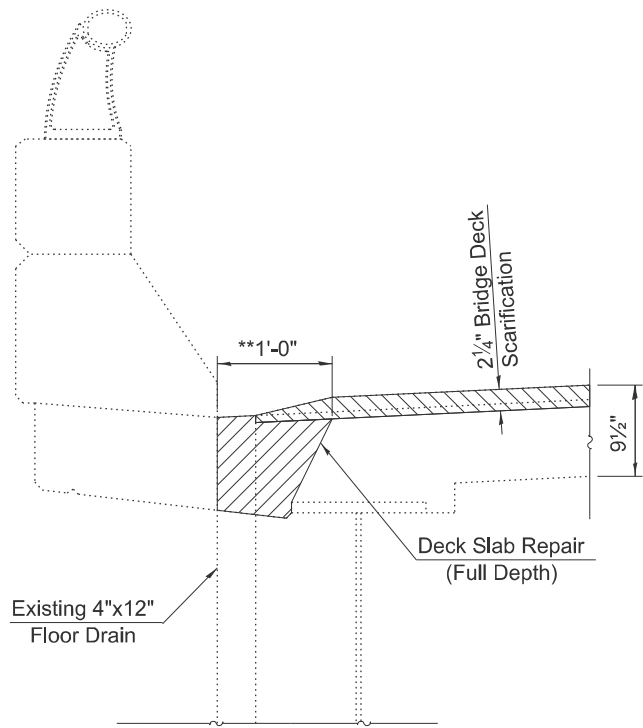
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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**PLUGGING PARAPET DRAIN
S.N. 058-0067**

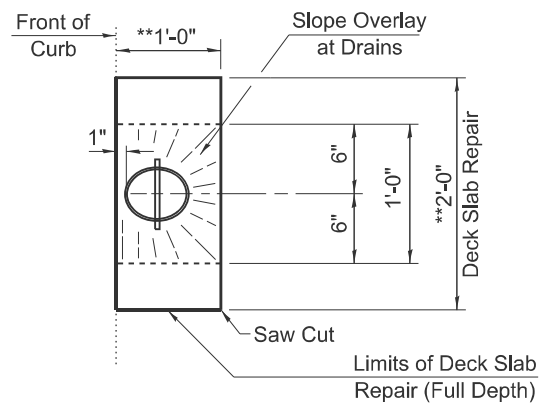
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CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

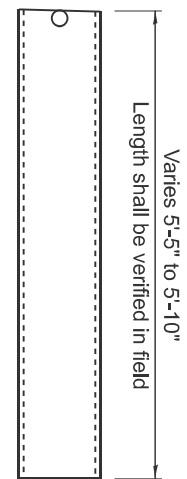


SECTION THRU EXISTING FLOOR DRAIN

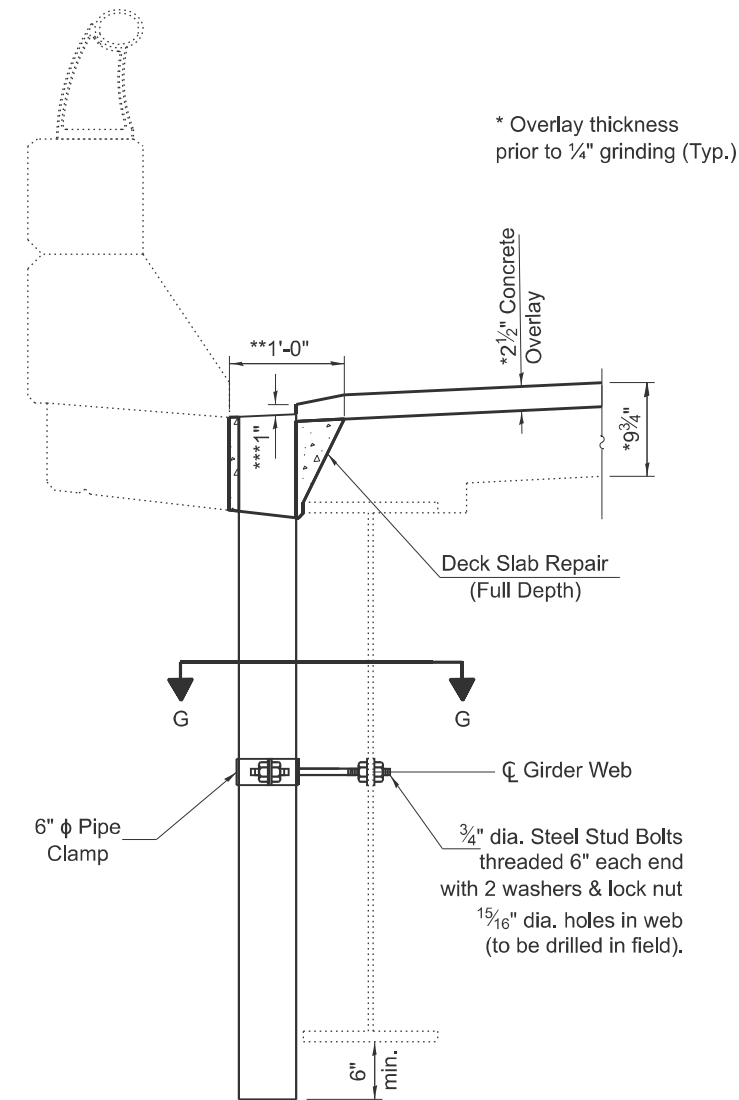
** Actual dimensions of Deck Slab Repair shall be determined by the Engineer



TOP PLAN DECK REPAIR AT PROPOSED DRAINS

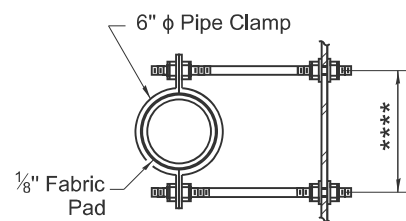


DRAIN DETAIL
10 Required



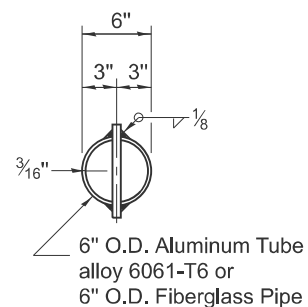
DRAIN REPLACEMENT DETAIL

*** Minimum thickness of overlay at edge of drain = 1"

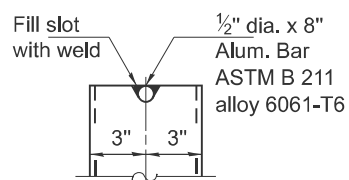


**** Dimension as required by Pipe Clamp

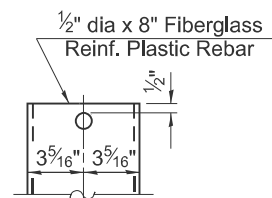
SECTION G-G



TOP PLAN



ALUMINUM PIPE



FIBERGLASS PIPE

NOTES

Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

Concrete removal and replacement quantities and locations for drains are included in Deck Slab Repair (Full Depth, Type I) as shown on "Bridge Deck Patching" see sheets 10-12 of 15.

The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coatings' Spec. SSPC-SP1 prior to painting.

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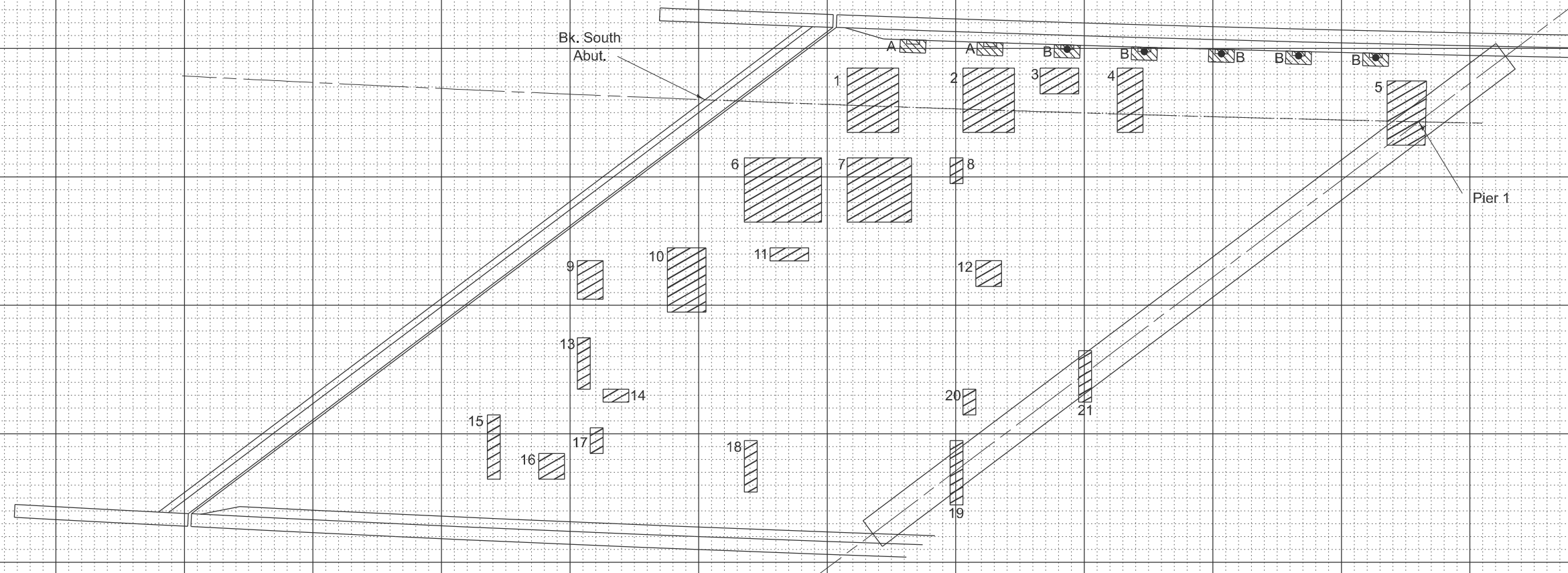
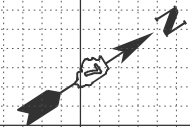
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DECK DRAIN REPLACEMENT DETAILS
S.N. 058-0067

SCALE: SHEET 9 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	29
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

058-0067 Bridge Deck Patching



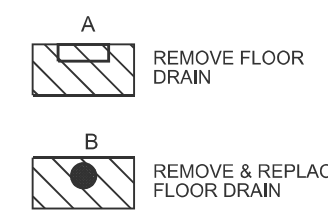
PATCH NO.	SIZE		DECK SLAB REPAIR (FD TYPE I)	DECK SLAB REPAIR (FD TYPE II)
	LENGTH	WIDTH	SQ YD	SQ YD
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2	4.0	5.0		2.2
3	3.0	2.0		0.7
4	2.0	5.0		1.1
5	3.0	5.0		1.7
6	6.0	5.0		3.3
7	5.0	5.0		2.8
8	1.0	2.0	0.2	
9	2.0	3.0		0.7
10	3.0	5.0		1.7
11	3.0	1.0	0.3	
12	2.0	2.0	0.4	
13	1.0	4.0	0.4	
14	2.0	1.0	0.2	
15	1.0	5.0		0.6
16	2.0	2.0	0.4	
17	1.0	2.0	0.2	
18	1.0	4.0	0.4	

PATCH NO.	SIZE		DECK SLAB REPAIR (FD TYPE I)	DECK SLAB REPAIR (FD TYPE II)
	LENGTH	WIDTH	SQ YD	SQ YD
19	1.0	5.0		0.6
20	1.0	2.0	0.2	
21	1.0	4.0	0.4	
A-Remove Drain, 2 each			0.4	
B-Replace Drain, 5 each			1.1	
TOTAL ROUNDS TO:			5.0	17.0

Notes: Full depth deck slab repair is required at all existing drains, including previously plugged drains.

Cost to remove existing floor drains included with Deck Slab Repair.

A & B = Deck Slab Repair (Full Depth, Type I)
2ft² = 0.22yd² Each



THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 9-21-23
SURVEY BY: DPM, TMW & DRL
METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES:

DECK SLAB REPAIR (FULL DEPTH TYPE I)	5.0 SQ YD
DECK SLAB REPAIR (FULL DEPTH TYPE II)	17 SQ YD
FLOOR DRAINS	5 EACH

MODEL: Default
FILE NAME: p:\z\jld\p\w\benley.com\FV\DOT\Documents\DOT_0_ces\Brlct 7\012 Projects\074\54\CAD\Bria\058-0067 Bridge Repair Plans.dgn

USER NAME = Jessica.Hille	DESIGNED - D. Lane	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - D. Lane	REVISED -
PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - November 2023	REVISED -

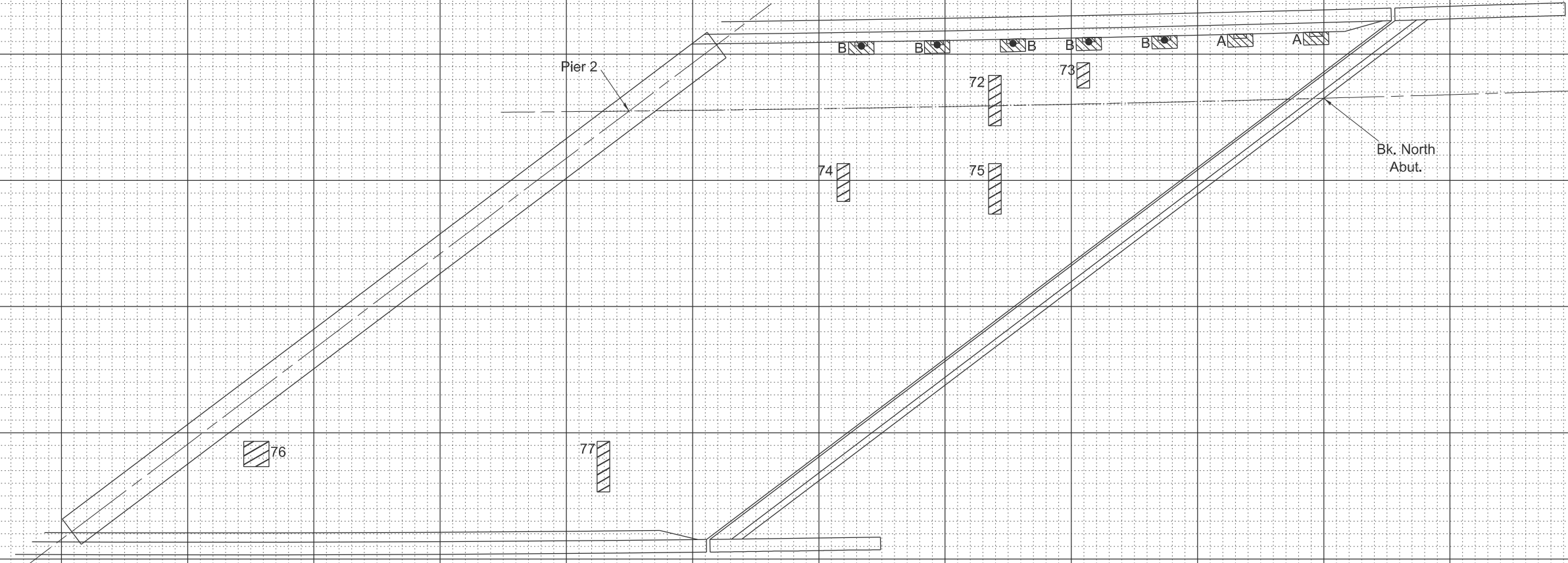
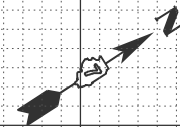
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK PATCHING
SN. 058-0067

SCALE: SHEET 10 OF 15 SHEETS STA. TO STA.

F.A.J. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	30
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

058-0067 Bridge Deck Patching

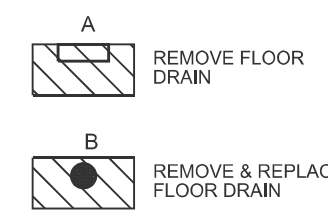


PATCH NO.	SIZE		DECK SLAB REPAIR (FD TYPE I)	DECK SLAB REPAIR (FD TYPE II)
	LENGTH	WIDTH	SQ YD	SQ YD
72	1.0	4.0	0.4	
73	1.0	2.0	0.2	
74	1.0	3.0	0.3	
75	1.0	4.0	0.4	
76	2.0	2.0	0.4	
77	1.0	4.0	0.4	
A-Remove Drain, 2 each			0.4	
B-Replace Drain, 5 each			1.1	
TOTAL ROUNDS TO:			4.0	0.0

Notes: Full depth deck slab repair is required at all existing drains, including previously plugged drains.

Cost to remove existing floor drains included with Deck Slab Repair.

A & B = Deck Slab Repair (Full Depth, Type I)
2ft² = 0.22yd² Each



THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.



DATE OF SURVEY: 9-21-23
SURVEY BY: DPM, TMW & DRL
METHOD OF SURVEY: VISUAL

ESTIMATED PAY QUANTITIES:

DECK SLAB REPAIR (FULL DEPTH TYPE I)	4.0 SQ YD
DECK SLAB REPAIR (FULL DEPTH TYPE II)	0.0 SQ YD
FLOOR DRAINS	5 EACH

MODEL: Default
FILE NAME: p:\11010-pw\benleyz.com\FV\DOT\Documents\DOT_0_ces\District_7\0102_projects\074C54\CAD\Draws\CAD\Draws\058-0067_Bridge_Repair_TPlans.dgn

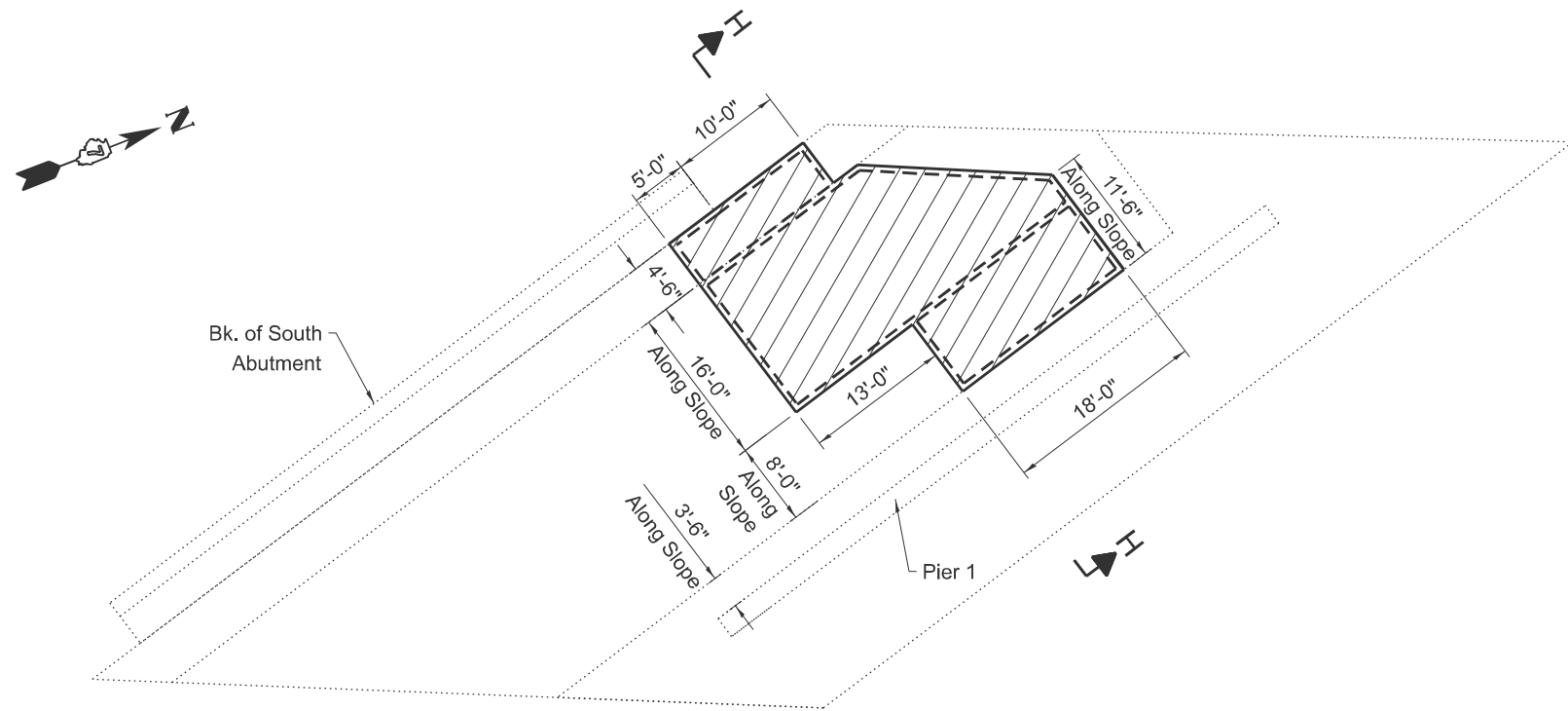
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PLOT SCALE = \$SCALE\$	DRAWN - D. Lane	REVISED -
PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - November 2023	REVISED -


STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK PATCHING
SN. 058-0067

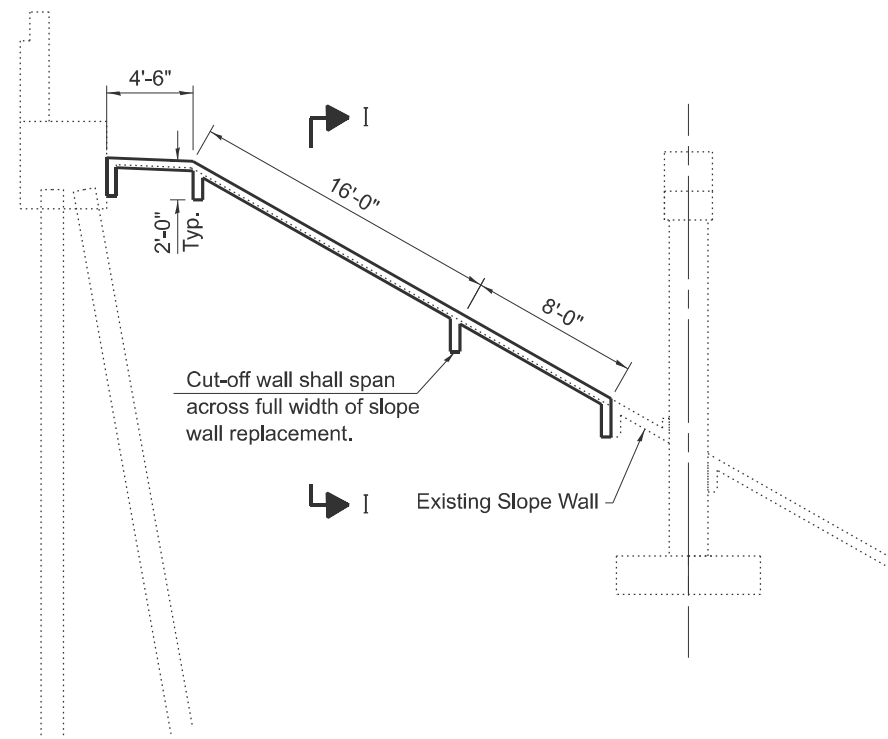
SCALE: SHEET 12 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	32
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

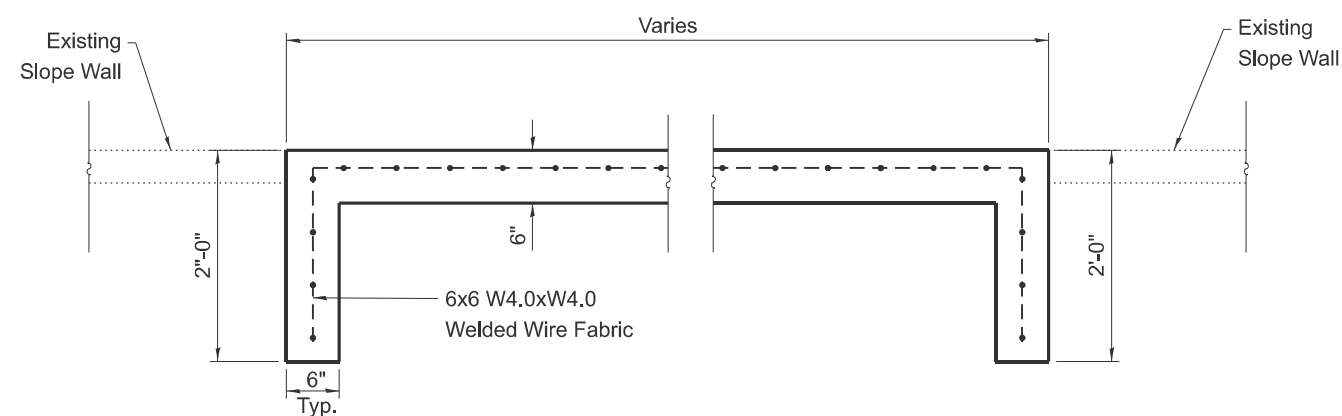


 - Concrete slope wall removal and replacement

PLAN VIEW SLOPE WALL



ELEVATION VIEW SOUTH SLOPE WALL
SECTION H-H



SECTION I-I

NOTES

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

Existing unsuitable embankment material shall be removed as directed by the Engineer. The removal shall be paid for as Removal & Disposal of Unsuitable Materials.

In areas of voids under the existing slope wall and areas where unsuitable materials are removed, the embankment shall be reconstructed with Subbase Granular Material, Type B. The Subbase Granular Material shall be gradation CA6 unless otherwise specified by the Engineer.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Slope Wall Removal	Sq. Yd.	70
Slope Wall 6 Inch	Sq. Yd.	70
Protective Coat	Sq. Yd.	70
Removal & Disposal of Unsuitable Material	Cu. Yd.	12
Subbase Granular Material, Type B	Ton	25

MODEL: D:\info\... FILE NAME: ... PROJECT: ...

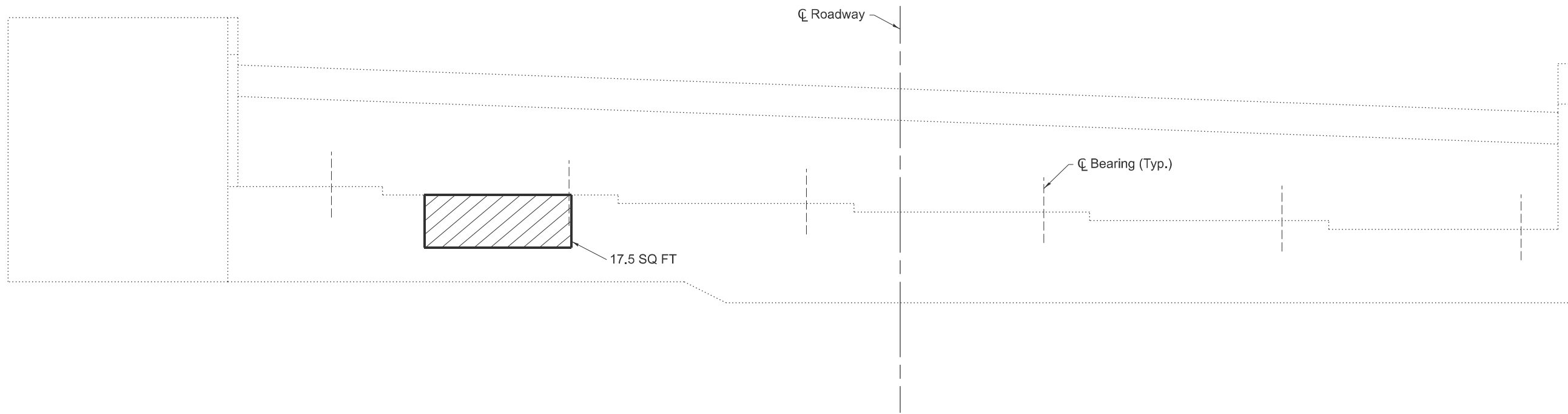
USER NAME = Jessica.Hille	DESIGNED - D. Lane	REVISED -
PLOT SCALE = \$SCALE\$	DRAWN - D. Lane	REVISED -
PLOT DATE = 7/2/2024	CHECKED - D. Macklin	REVISED -
	DATE - November 2023	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLOPE WALL DETAILS
S.N. 058-0067 (SOUTH SIDE)

SCALE: SHEET 13 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	33
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				



SOUTH ABUTMENT

 Structural Repair of Concrete (Depth ≤ 5")

NOTES

Quantities and locations are approximated. Actual quantities and locations to be determined in the field by the Engineer.

This work is intended to repair only areas of severe deterioration. Some minor deteriorated areas may be left unrepaired.

Do not disturb existing bearings.

BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Structural Repair of Concrete ≤ 5 inches	SQ FT	17.5

MODEL: D:\info\...
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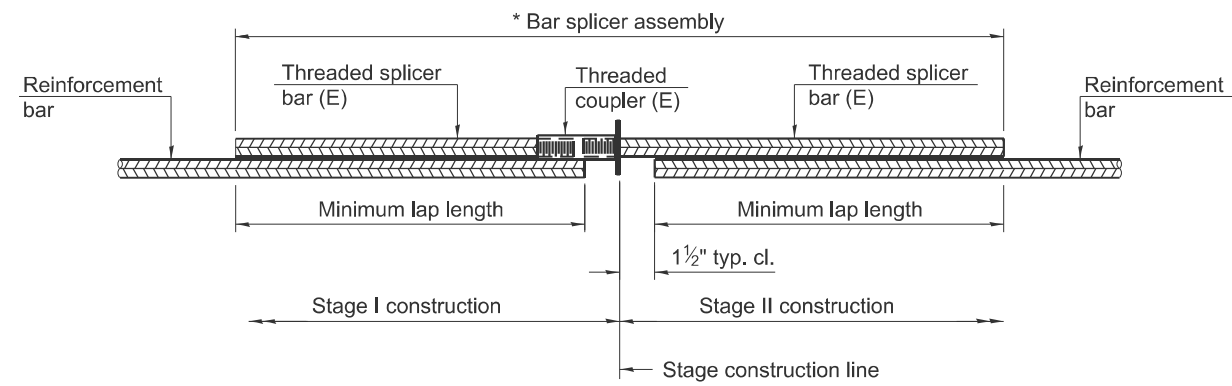
USER NAME = Jessica.Hille	DESIGNED - D. Lane	REVISED -
	DRAWN - D. Lane	REVISED -
PLOT SCALE = \$SCALE\$	CHECKED - D. Macklin	REVISED -
PLOT DATE = 7/2/2024	DATE - November 2023	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STRUCTURAL REPAIR OF CONCRETE-SOUTH ABUTMENT
S.N. 058-0067**

SCALE: SHEET 14 OF 15 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	34
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				



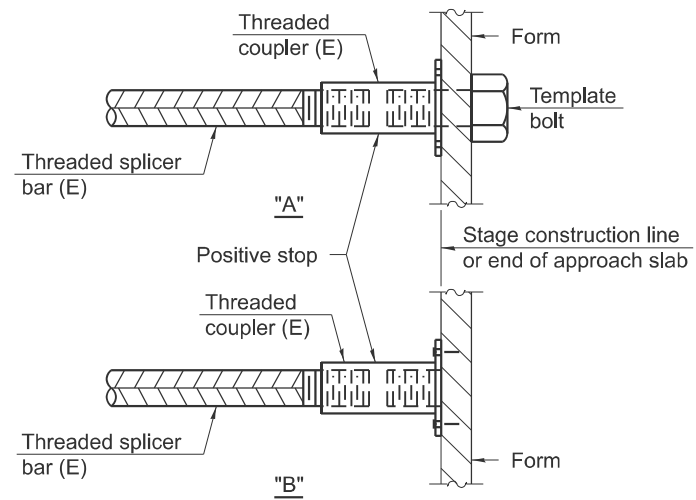
STANDARD BAR SPLICER ASSEMBLY PLAN

Only bar splicer assemblies as presented on the approved QPL list may be used.

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
South Joint	#6	18	4'-0"
North Joint	#6	18	4'-0"

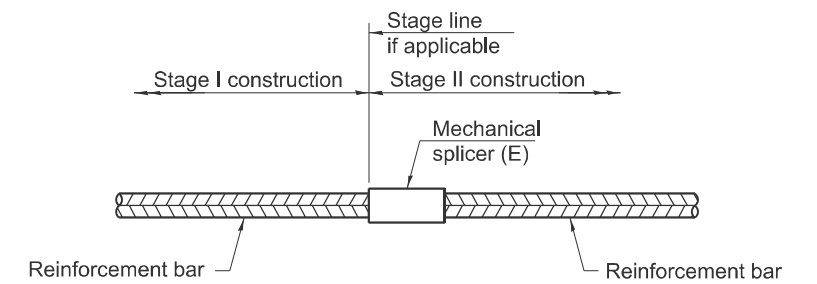


INSTALLATION AND SETTING METHODS

"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

5-15-2023

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

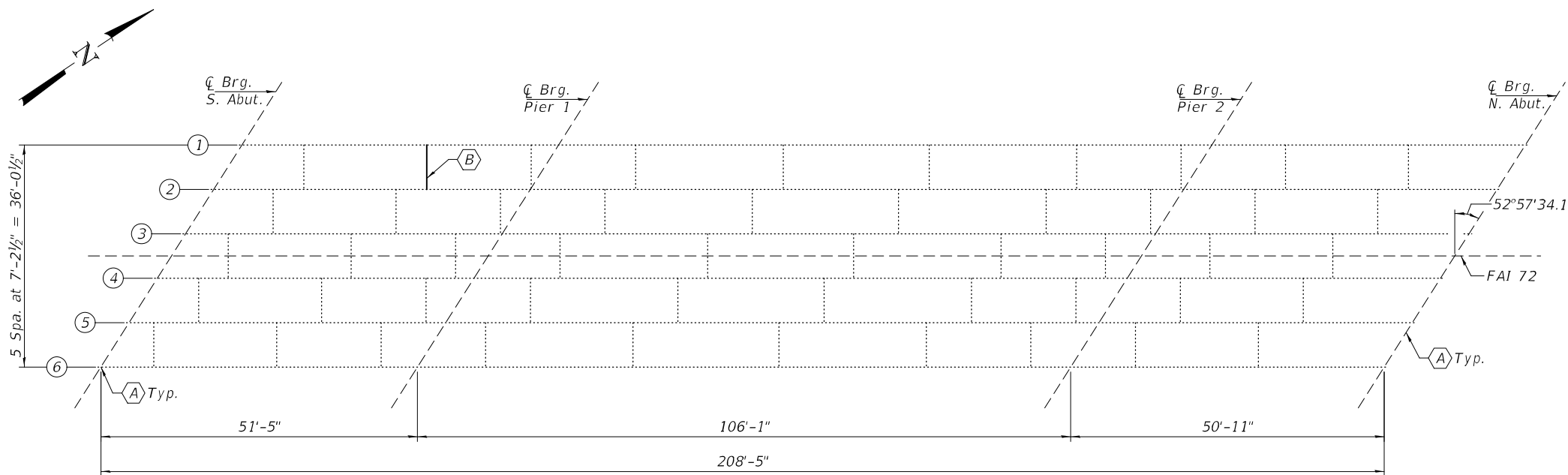
BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 S.N. 058-0067

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	35
CONTRACT NO. 74C54				
ILLINOIS FED. AID PROJECT				

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

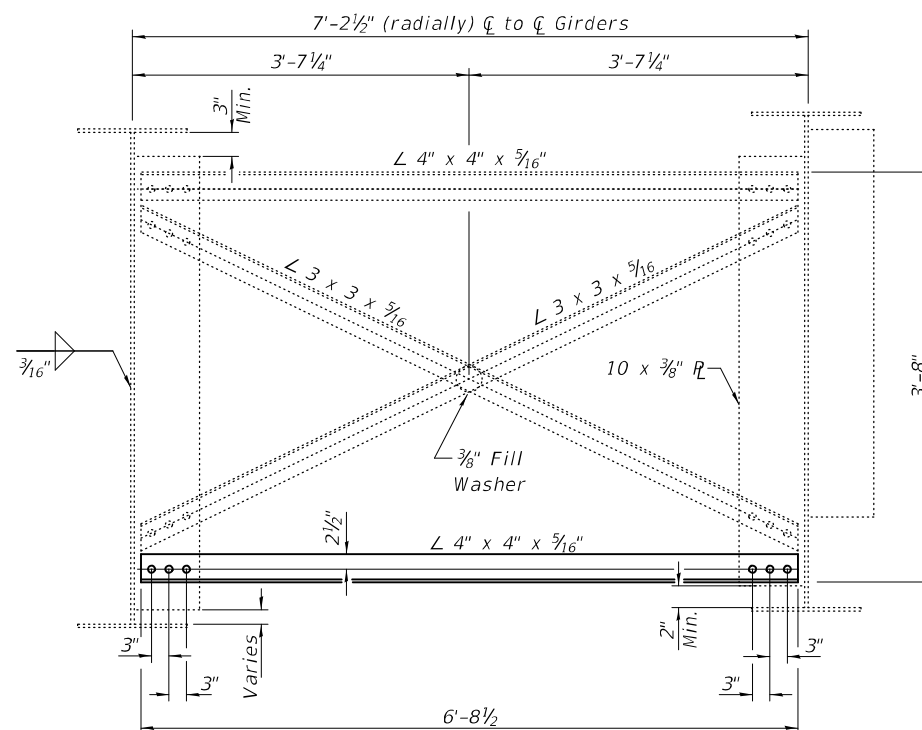
MODEL: D:\info\...
 FILE NAME: ...
 PROJECT: ...
 DRAWN BY: ...
 CHECKED BY: ...
 DATE: ...

74C54



FRAMING PLAN

- (A) - Bearing Removal and Replacement.
- (B) - Cross Frame Repair and Replacement.



Note:
Straighten connection plate as required.

REPAIR - B

GENERAL NOTES

All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.
 Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.
 Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts. Bolts 3/4"φ, holes 13/16"φ, unless otherwise noted.
 Plan dimensions and details relative to the existing structure have been taken from existing plans and 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.
 The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.
 Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures", and the Standard Specifications.
 All new structural steel and bearing assemblies shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	60

DESIGNED - Joshua S. Flaig
 CHECKED - Adrian T. Hallaway
 DRAWN - Venkat Ramana Reddy
 CHECKED - JSF ATH

EXAMINED
 ENGINEER OF STRUCTURAL SERVICES
 PASSED
 ENGINEER OF BRIDGES AND STRUCTURES

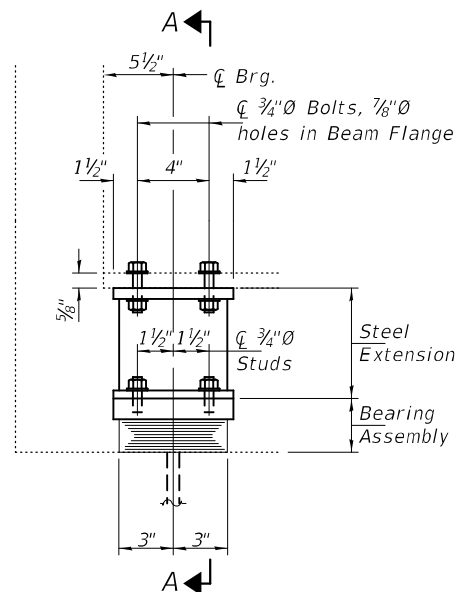
DATE - AUGUST 13, 2024
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
 I 72 (EB) OVER US 51 (SB)
 SN 058-0067

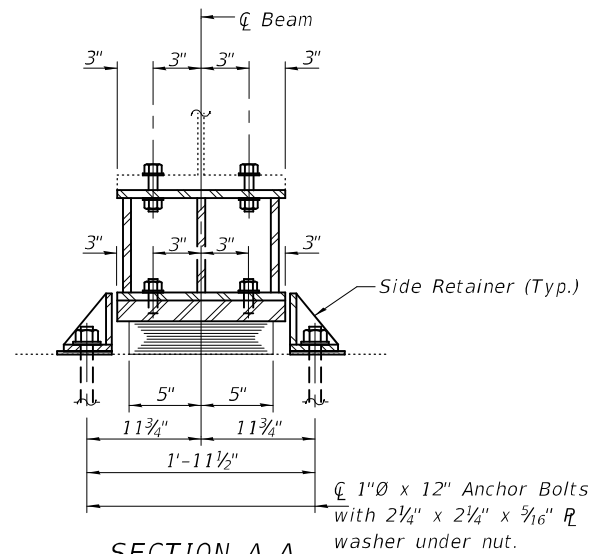
SHEET NO. 1 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	36
CONTRACT NO. 74C54				
ILLINOIS		FED. AID PROJECT		



ELEVATION AT ABUTMENT

TYPE I ELASTOMERIC EXP. BRG.



SECTION A-A

1"Ø x 12" Anchor Bolts with 2 1/4" x 2 1/4" x 5/16" R washer under nut.

BEAM REACTIONS

	N. Abut.
R _∅	(K) 13.5
R _L	(K) 41.7
Imp.	(K) 11.8
R (Total)	(K) 67.1

Notes:

Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).

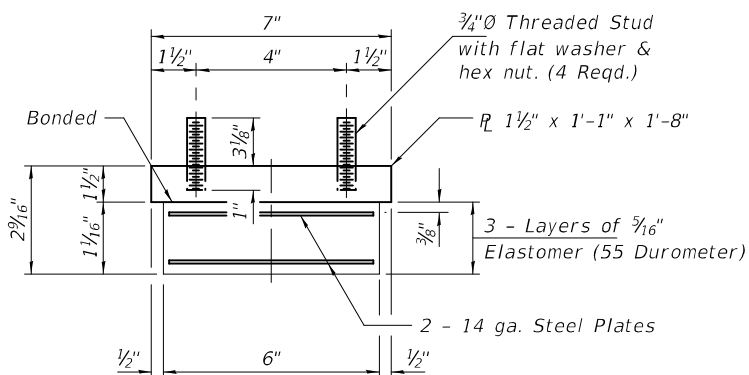
Min. jack capacity = 30 Tons.

Anchor bolts shall be ASTM F1554 Grade 55 all-thread.

The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

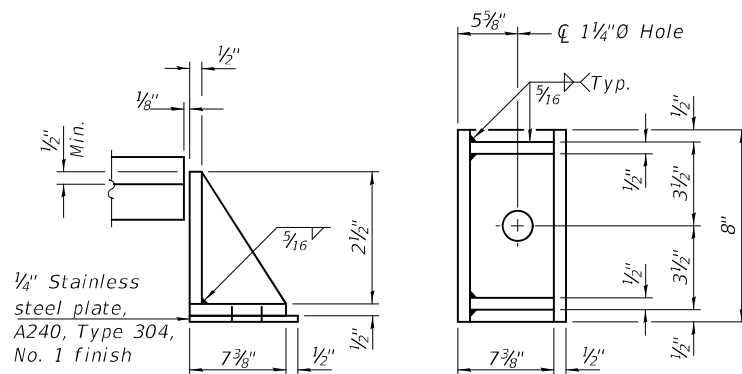
Cost of Side retainers and Stainless Steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.



BEARING ASSEMBLY

Note:

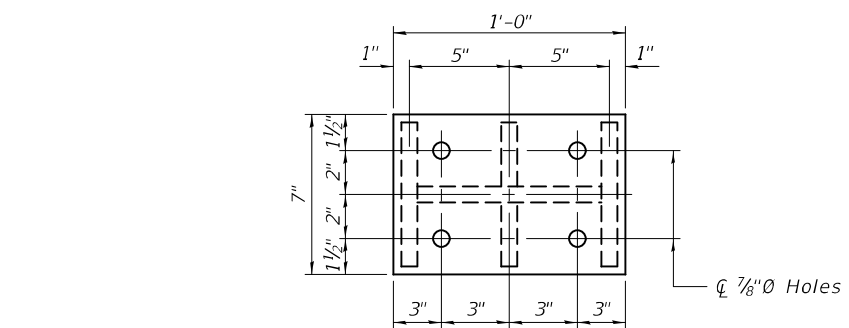
Shim plates shall not be placed under Bearing Assembly.



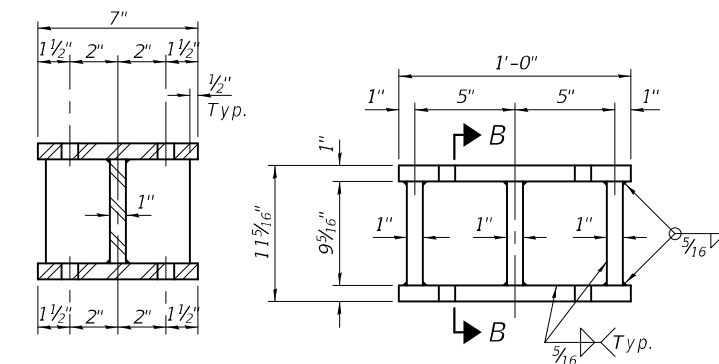
SIDE RETAINER

(12 Required)

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

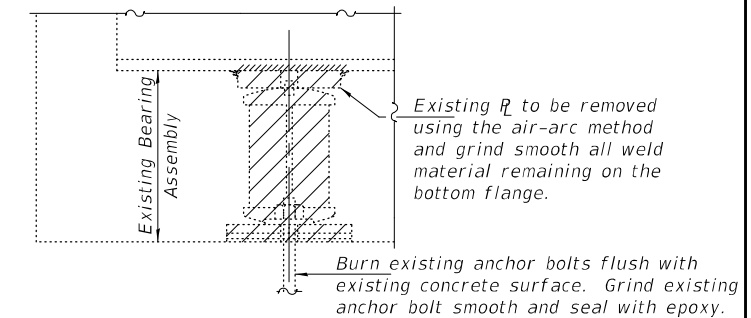


PLAN TOP AND BOTTOM PLATE



SECTION B-B

STEEL EXTENSION DETAIL



EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type I	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	730
Anchor Bolts 1"Ø	Each	12

TYI/REPS 5-17-2018

DESIGNED - JSF
CHECKED - ATH
DRAWN - Venkat Ramana Reddy
CHECKED - JSF ATH

EXAMINED	DATE - AUGUST 13, 2024
PASSED	REVISD -
	REVISD -

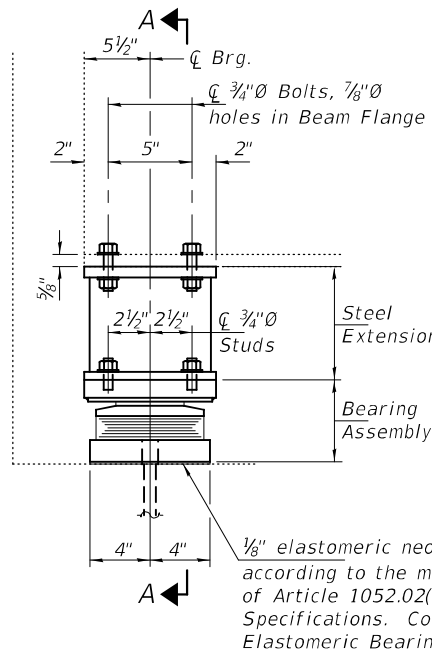
ENGINEER OF STRUCTURAL SERVICES
ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS - N. ABUT.
SN 058 - 0067

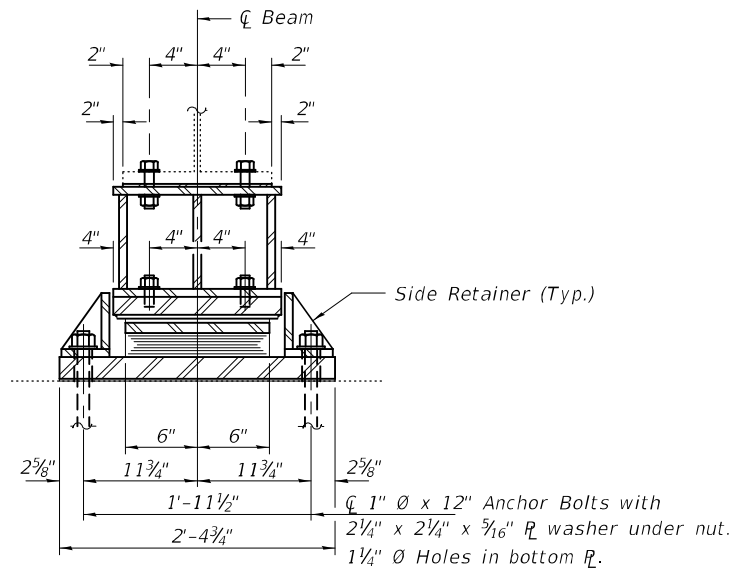
SHEET NO. 2 OF 3 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
72	D7 BRIDGE REPAIRS 2025-5	MACON	37	37
ILLINOIS			CONTRACT NO. 74C54	
FED. AID PROJECT				



ELEVATION AT ABUTMENT

TYPE II TFE ELASTOMERIC EXP. BRG.

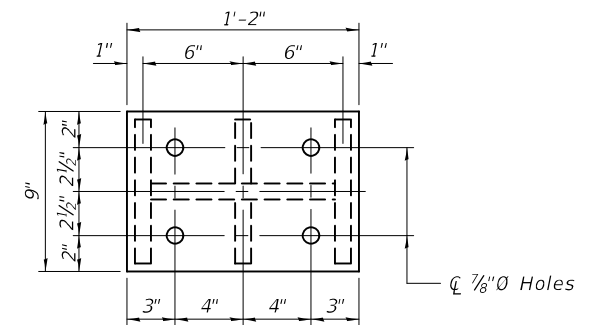


SECTION A-A

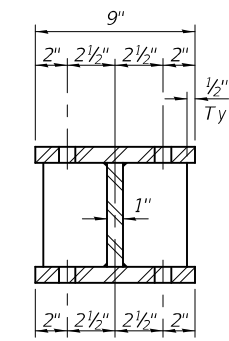
BEAM REACTIONS

	S. Abut.
R _p	(K) 14.5
R _t	(K) 42.3
Imp.	(K) 12.0
R (Total)	(K) 68.8

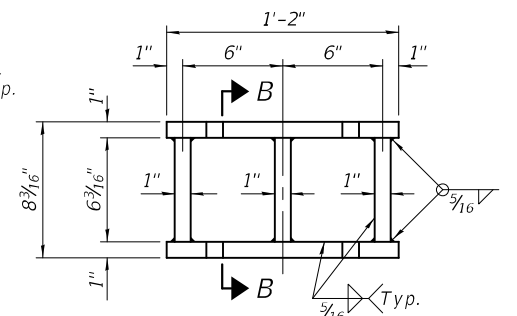
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Adjustment must account for deck heave due to pack rust (if present).
 Min. jack capacity = 30 Tons.
 Anchor bolts shall be ASTM F1554 Grade 55 all-thread. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts at fixed bearings may be either cast in place or installed in holes drilled after the supported member is in place.
 Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



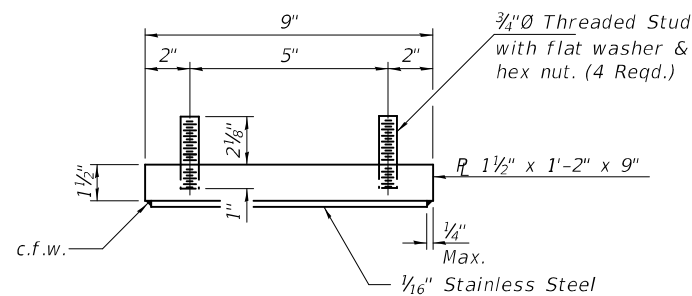
PLAN TOP AND BOTTOM PLATE



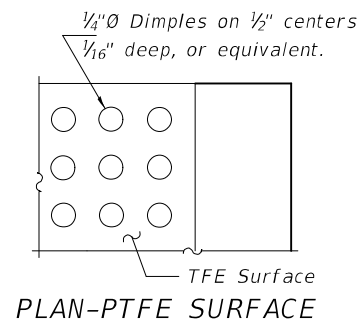
SECTION B-B



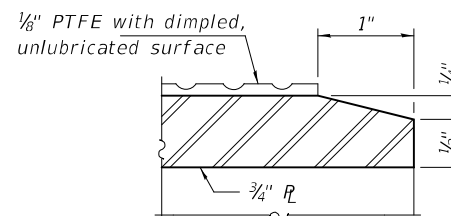
STEEL EXTENSION DETAIL



TOP BEARING ASSEMBLY

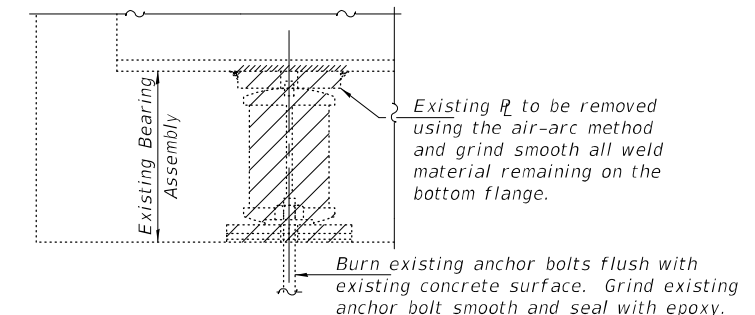


PLAN-PTFE SURFACE



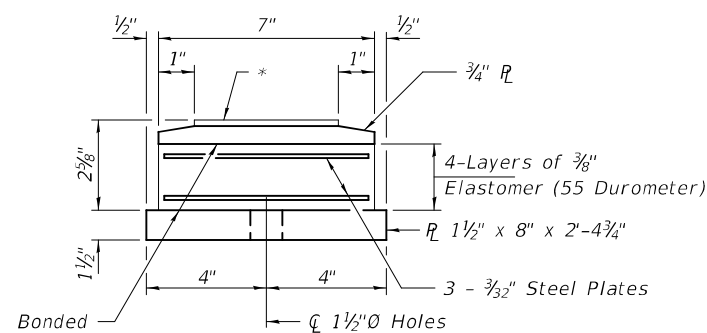
SECTION THRU PTFE

(Move bott. brg. away from fixed brg.)



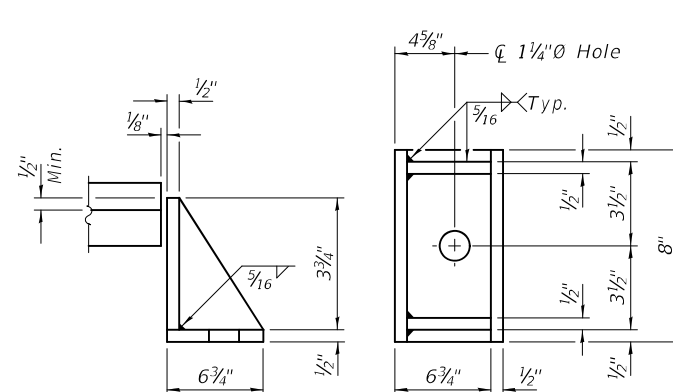
EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.



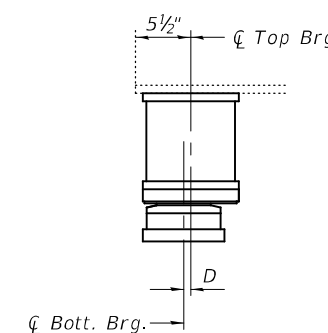
BOTTOM BEARING ASSEMBLY

* 1/8" PTFE dimpled, unlubricated

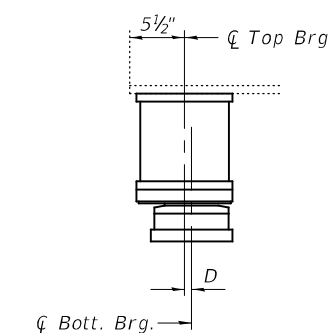


SIDE RETAINER

(12 Required)
 Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



BELOW 50° F.



ABOVE 50° F.
 (Move bott. brg. toward fixed brg.)

SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL - S. ABUT.

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	820
Anchor Bolts, 1"Ø	Each	12

TYII/REPS 08-08-2018

DESIGNED - JSF
 CHECKED - ATH
 DRAWN - Venkat Ramana Reddy
 CHECKED - JSF ATH

EXAMINED
 ENGINEER OF STRUCTURAL SERVICES
 PASSED
 ENGINEER OF BRIDGES AND STRUCTURES

DATE - AUGUST 13, 2024
 REVISED -
 REVISED -

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BEARING REPLACEMENT DETAILS - S. ABUT.
 SN 058 - 0067

SHEET NO. 3 OF 3 SHEETS

F.A.I. RTE. SECTION COUNTY TOTAL SHEETS SHEET NO.
 72 D7 BRIDGE REPAIRS 2025-5 MACON 37 37A
 CONTRACT NO. 74C54
 ILLINOIS FED. AID PROJECT