01-19-2024 LETTING ITEM 109

ADT 2000 (YEAR 2021)

FOR INDEX OF SHEETS, SEE SHEET NO. 2

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# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

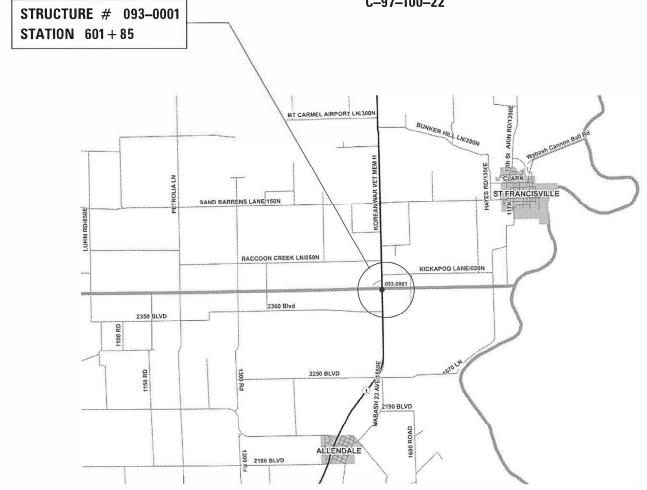
332 D7 BRIDGE REPAIRS 2024-6 WABASH 23 1 ILLINOIS CONTRACT NO. 74B32

D-97-053-22

# **PROPOSED** HIGHWAY PLANS

FAP ROUTE 332 (IL 1) **SECTION D7 BRIDGE REPAIRS 2024-6** PROJECT NHPP-MIC5(135) **BRIDGE REPAIRS WABASH COUNTY** 

C-97-100-22



GROSS LENGTH = 898 FT. = 0.17 MILE NET LENGTH = 190-1" FT. = 0.035 MILE

CONTRACT NO. 74B32

1-800-892-0123 OR 811

ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT

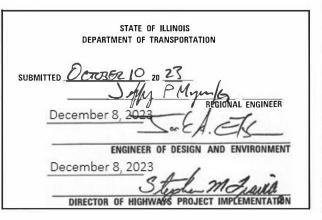
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS

PROJECT ENGINEER: BRIAN LEWIS

PROJECT MANAGER: MYRA OLTMAN

CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

LOCATION OF SECTION INDICATED THUS: - -



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REV. - MS

### **GENERAL NOTES**

THE WORK INCLUDED IN THIS SECTION CONSISTS OF BRIDGE REPAIRS ON #093-0001, ON FAP ROUTE 332 (IL ROUTE 1) INCLUDING REMOVAL OF EXISTING JOINTS, CONSTRUCTING STRIP SEAL EXPANSION JOINT, BRIDGE DECK SCARIFICATION - 3/4", DECK PATCHING, BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/2", AND DIAMOND GRINDING AND HOT-MIX ASPHALT SURFACE COURSE. CONSTRUCTION OF BASE COURSE WIDENING WILL BE REQUIRED AND ANY OTHER WORK REQUIRED TO COMPLETE THE CONSTRUCTION. STAGE CONSTRUCTION WILL BE UTILIZED.

THE TOTAL QUANTITY OF PAINT PAVEMENT MARKING - LINE 4" CALCULATED CONSISTS OF 180 FEET OF YELLOW AND 1796 FEET OF WHITE.

### INDEX OF SHEETS

### SHEET NO. TITLE

- 1 COVER SHEET
- 2 GENERAL NOTES, INDEX OF SHEETS
- 3-4 SUMMARY OF QUANTITIES
- 5 SCHEDULE OF QUANTITIES
- 6 TRANSITION DETAIL
- 7-11 STAGE CONSTRUCTION DETAILS
- 12-19 BRIDGE REPAIR PLANS
- 20-23 PAVEMENT MARKING DETAILS

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

- 000001-08 STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
- 001001-02 AREAS OF REINFORCEMENT BARS
- 001006 DECIMAL OF AN INCH AND OF A FOOT
- 420001-10 PAVEMENT JOINTS
- 701001-02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' AWAY
- 701006-05 OFF-ROAD OPERATIONS, 2L, 2W, 15' TO 24" FROM PAVEMENT EDGE
- 701201-05 LANE CLOSURE, 2L, 2W, DAY ONLY FOR SPEEDS  $\geq$  45 MPH
- 701301-04 LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
- 701311-03 LANE CLOSURE, 2L, 2W, SLOW MOVING OPERATIONS DAY ONLY
- 701321-18 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
- 701326-04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
- 701901-09 TRAFFIC CONTROL DEVICES
- 704001-08 TEMPORARY CONCRETE BARRIER
- 780001-05 TYPICAL PAVEMENT MARKINGS
- 782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

	THE FOLLOWING MIXTU	JRE REQUIF	REMENTS ARE	APPLICABLE 1	O THIS PROJ	ECT:			
LOCATION(S) MIXTURE USE(S)		PG	DESIGN AIR VOIDS	MIXTURE COMPOSITIO N	FRICTION AGGREGAT E	MIXTURE VEIGHT	QUALITY MANAGEMEN T PROGRAM	SUBLOT SIZE	MATERIAL TRANSFER DEVICE (REQUIRED?)
MAINLINE	HMA SURFACE COURSE, IL-9.5, MIX "C", N70 (1.75")	PG 64-22	4.0% @ N=70	IL -9.5	MIXTURE C	N70	QC/QA	3000	N/A
VIDENING HMA BINDER COURSE, IL-19.0, N70		PG 64-22	4.0% @ N=70	IL -19.0	N/A	N70	QC/QA	3000	N/A

REV. - MS

USER NAME = jessica.hille	DESIGNED	REVISED -	1	GENERAL NOTES, INDEX OF SHEETS		FT C	F.A.P.	SECTION	COUNTY	TOTAL SHEET		
	DRAWN	REVISED -	STATE OF ILLINOIS		•		D7 BRIDGE REPAIRS 2024-6	WABASH	23 2			
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION	HIGHWAY STANDARDS				CONTRACT	Г NO. <b>7</b> 4В32			
PLOT DATE = 10/11/2023	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED. AID	PROJECT	

80% FED 20% STATE CONSTRUCTION TYPE CODE SUMMARY OF QUANTITIES TOTAL ITEM UNIT CODE NO QUANTITIES SQ YD 35650500 BASE COURSE WIDENING 10" 412 412 40600290 BITUMINOUS MATERIALS (TACK COAT) POUND 288 288 HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT | SO YD 40600982 400 400 40600990 TEMPORARY RAMP SQ YD 27 27 40604052 HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX 54 54 "C", N70 44004250 PAVED SHOULDER REMOVAL SQ YD 142 142 50102400 | CONCRETE REMOVAL CU YD 10 10 50300255 | CONCRETE SUPERSTRUCTURE CU YD 10.3 10.3 50300300 PROTECTIVE COAT SQ YD 763 763 50800205 REINFORCEMENT BARS, EPOXY COATED POUND 1300 1300 EACH 50800515 BAR SPLICERS 24 24 52000110 PREFORMED JOINT STRIP SEAL FOOT 76 76 67000400 ENGINEER'S FIELD OFFICE, TYPE A CAL MO 5 5 67100100 | MOBILIZATION L SUM

			20% STATE			
	SUMMARY OF QUANTITIES				TRUCTION TYPE	CODE
CODE NO	ITEM	UNIT	TOTAL QUANTITIES	0059		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD	EACH	1	1		
	701321					
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1		
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1		
	701326					
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	F00T	1059	1059		
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	79	79		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	467	467		
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	1976	1976		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	512.5	512.5		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	500	500		
	THE STATE TERM STATE CONTINUES DANNIER	. 501	300	300		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-	EACH	2	2		
10800230		LACH	2	2		
	REDIRECTIVE), TEST LEVEL 3					
70600350	IMPACT ATTENUATORS, RELOCATE (NON-	EACH	2	2		
	REDIRECTIVE), TEST LEVEL 3					
		<u> </u>	<u> </u>		<u> </u>	
						REV MS

80% FED

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
PLOT DATE = 10/11/2023	DATE -	REVISED -

					F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHE
	SUMMAR	Y UF QU	ANIIIIES		332	D7 BRIDGE REPAIRS 2024-6	WABASH	23	3
							CONTRACT	NO. 74	4B32
SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		

80% FED 20% STATE

		20% STATE	CON	STRUCTION TYPE CODE	SUMMARY OF QUANTITIES							CONSTRUCTION TYPE CODE		
	SUMMARY OF QUANTITIES		TOTAL	0059			SUMMARY	OF	QUANTITIES		TOTAL	0059		
CODE NO	ITEM	UNIT	QUANTITIES			CODE NO		ITEM		UNIT	QUANTITIES			
• 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1976	1976										
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SO YD	502	502										
	Bridge Blok Grooting (Lone) against	34 .5	301	301										
70001000	ADDRAGU CLAR DERAID (DADTIAL DEDTU)	CO VD												
20001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SO YD	1	1										
Z0001905	STRUCTURAL STEEL REPAIR	POUND	90	90										
Z0012111	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE	SO YD	735	735										
	OVERLAY, 2 1/2"													
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	735	735										
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	11	11										
70016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SO YD	16	16										
20010002	BEEK SEAB KEI AIK (1 BEE BEI III, 1 II E 117	30 10	10	10										
7000000		60.40	222											
20029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	669	669										

USER NAME = jessica hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED -	REVISED -
PLOT DATE = 10/11/2023	DATE -	REVISED -

			F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS				
		SUMMARY	OF QU	ANTITIES		332	D7 BRIDGE REPAIRS 2024	-6 WABASH	23	4
								CONTRACT	Γ NO. 7	4B32
SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		ILLINOIS FEI	. AID PROJECT		

		TRAFF	IC CONTRO	L SCHEDUI	LE		×	
	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE) TEST LEVEL 3	RELOCATE IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	TEMPORARY CONCRETE BARRIER	RELOCATE TEMPORARY CONCRETE BARRIER	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	TEMPORARY BRIDGE TRAFFIC SIGNALS	PAVEMENT MARKING BLACKOUT TAPE, 5"
	EACH	EACH	FOOT	FOOT	EACH	EACH	EACH	FEET
STRUCTURE 093-0001					1	1	1	
STAGE 1	2		512.5					661
STAGE 2		2		500.0				398
TOTALS	2	2	512.5	500.0	1	1	1	1059

Type:				
PAVEMENT MAR	KING SC	HEDULE	SCHED	ULE
	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL	PAINT PAVEMENT MARKING - LINE 4"
	FOOT	FOOT	SQ FT	FOOT
STRUCTURE 093-0001	1976	79	467	1976
TOTALS	1976	79	467	1976

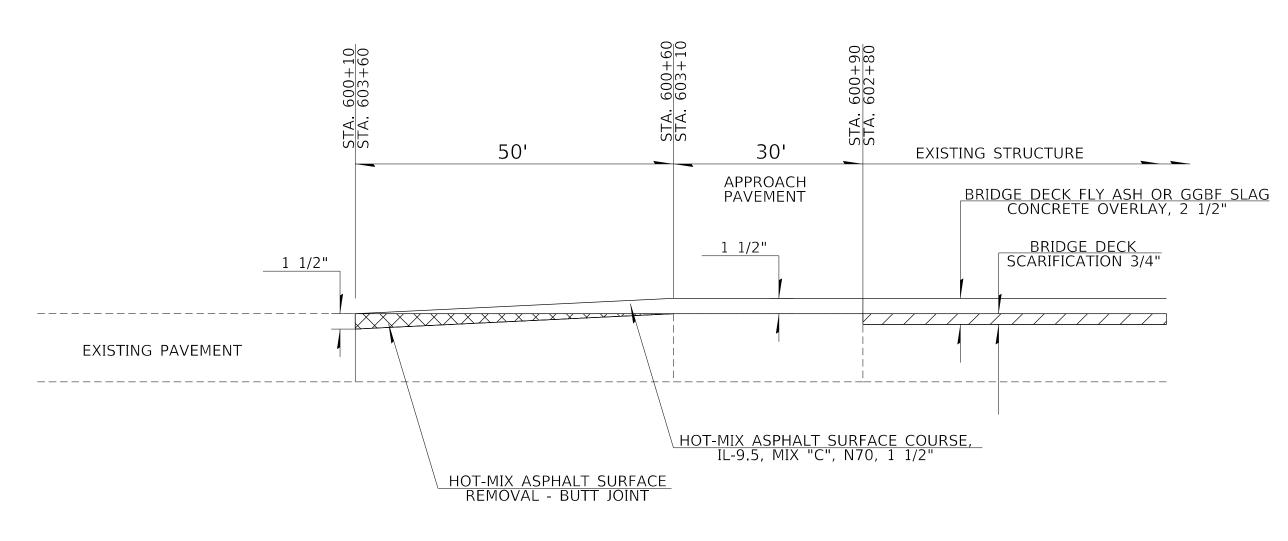
		RES	SURFACIN	G SCHED	ULE		
				HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE COURSE, IL- 9.5, MIX "C", N70	TEMPORARY RAMP
SOUTH END							
LOCATION	STATION	TO	STATION	SQ YD	POUND	TONS	SQ YD
IL ROUTE 1	600+10		600+90		144	27	13
	600+10		600+60	200			5
NORTH END							
IL Route 1	602+80		603+60		144	27	13
	600+10		600+60	200			
			TOTAL	400	288	54	27

		PAVED	SHOULDER	REMOVAL	<u>u</u>	
	STATION	ТО	STATION	LENGTH	WIDTH	SQ YD
LT	599+16		599+71	55	1.0	6.2
LT	599+71		600+60	89	3.0	29.7
RT	599+16	3	599+99	83	1.0	9.3
RT	599+99		600+60	61	3.0	20.4
LT	603+10		603+99	89	3.0	29.7
LT	603+99		604+75	76	1.0	8.5
RT	603+10		603+99	89	3.0	29.7
RT	603+99		604+75	76	1.0	8.5
					TOTAL	142.0

BASE COURSE WIDENING 10"											
	STATION TO STATION LENGTH WIDTH SQ YD										
LT	599+16		600+60	144	6.0	96					
RT	599+16		600+60	144	6.0	96					
LT	603+10		604+75	165	6.0	110					
RT	603+10		604+75	165	6.0	110					
					TOTAL	412					

SCALE:

USER NAME = jessica.hille	DESIGNED	REVISED _
	DRAWN	REVISED _
PLOT SCALE = 100.0000 * / in.	CHECKED	REVISED -
PLOT DATE = 10/11/2023	DATE	REVISED +

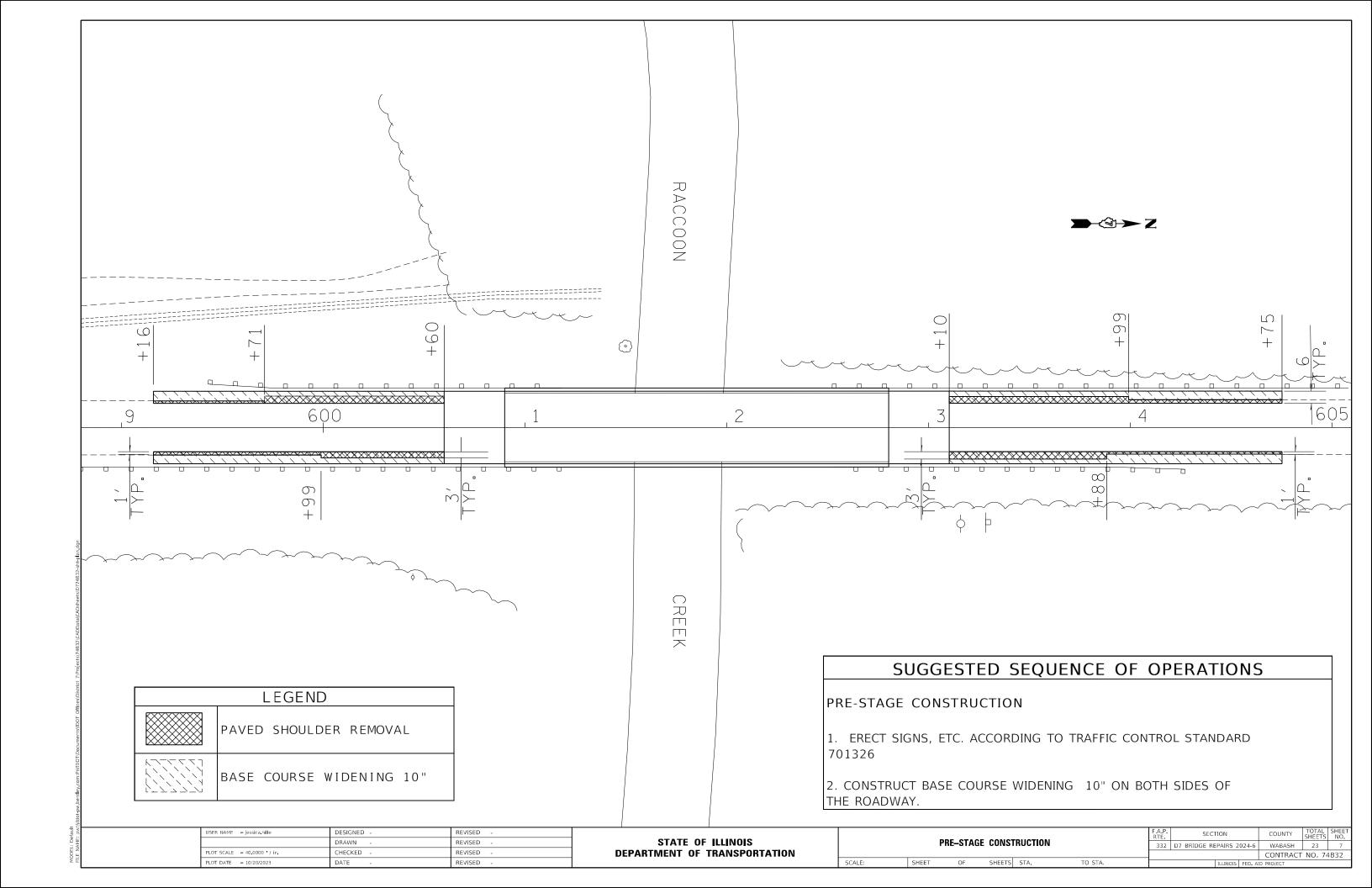


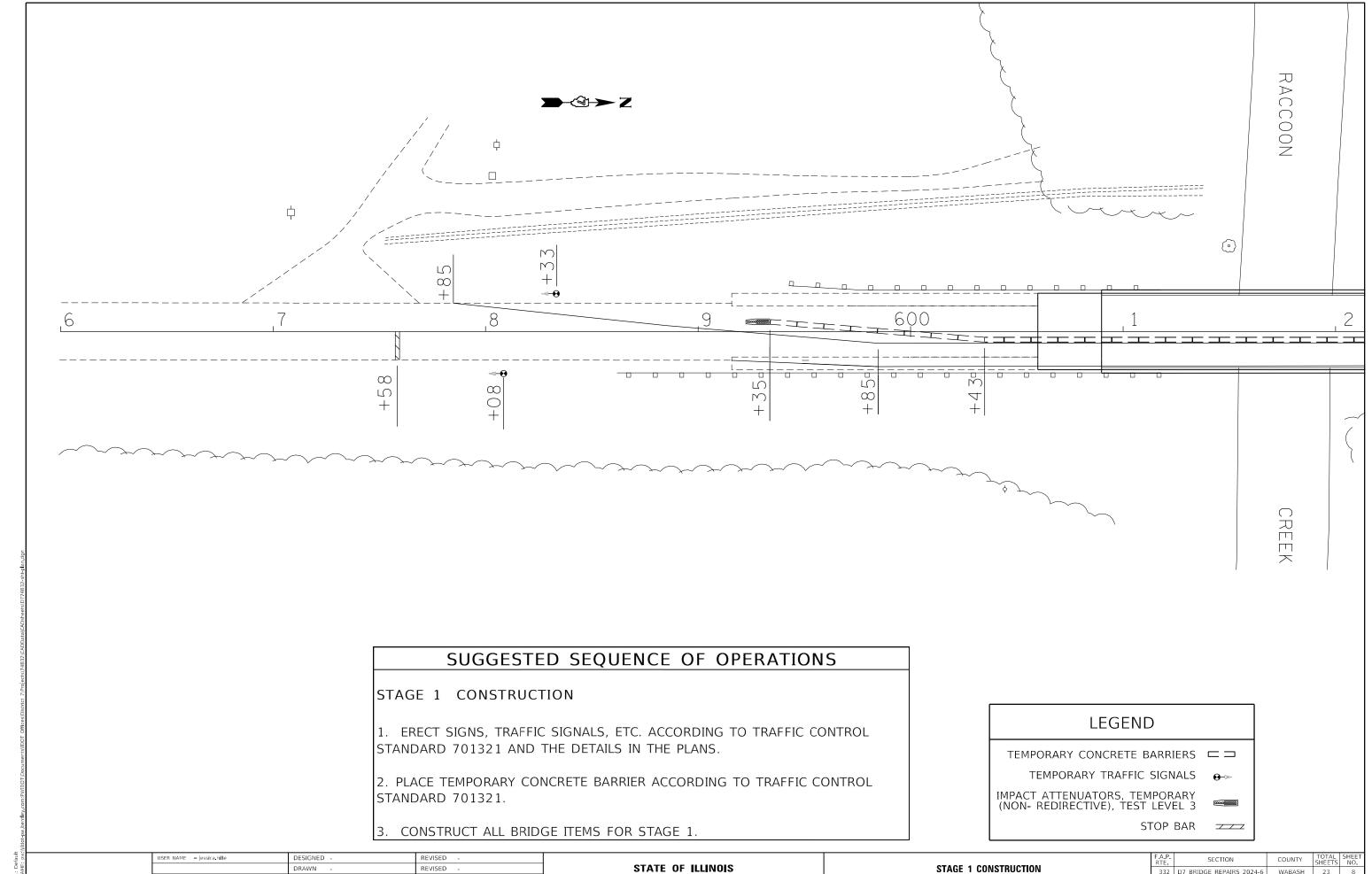
## TRANSITION DETAIL

STATION 600+10 TO STATION 600+90 STATION 602+80 TO STATION 603+60

> NOTE: SEE SPECIAL PROVISIONS FOR TREATMENT OF JOINT AT THE END OF APPROACH PAVEMENT.

USER NAME = jessica hille	DESIGNED -	REVISED -							F.A.P.	SECTION	COUNTY	TOTAL SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS			TRAN	STION DETAIL		332	D7 BRIDGE REPAIRS 2024-6	WABASH	23 6
PLOT SCALE = 40.0000 / in.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION								CONTRAC	T NO. 74B32
PLOT DATE = 10/11/2023	DATE -	REVISED -		SCALE:	SHEET	OF	SHEETS STA.	TO STA.		ILLINOIS FED.	AID PROJECT	



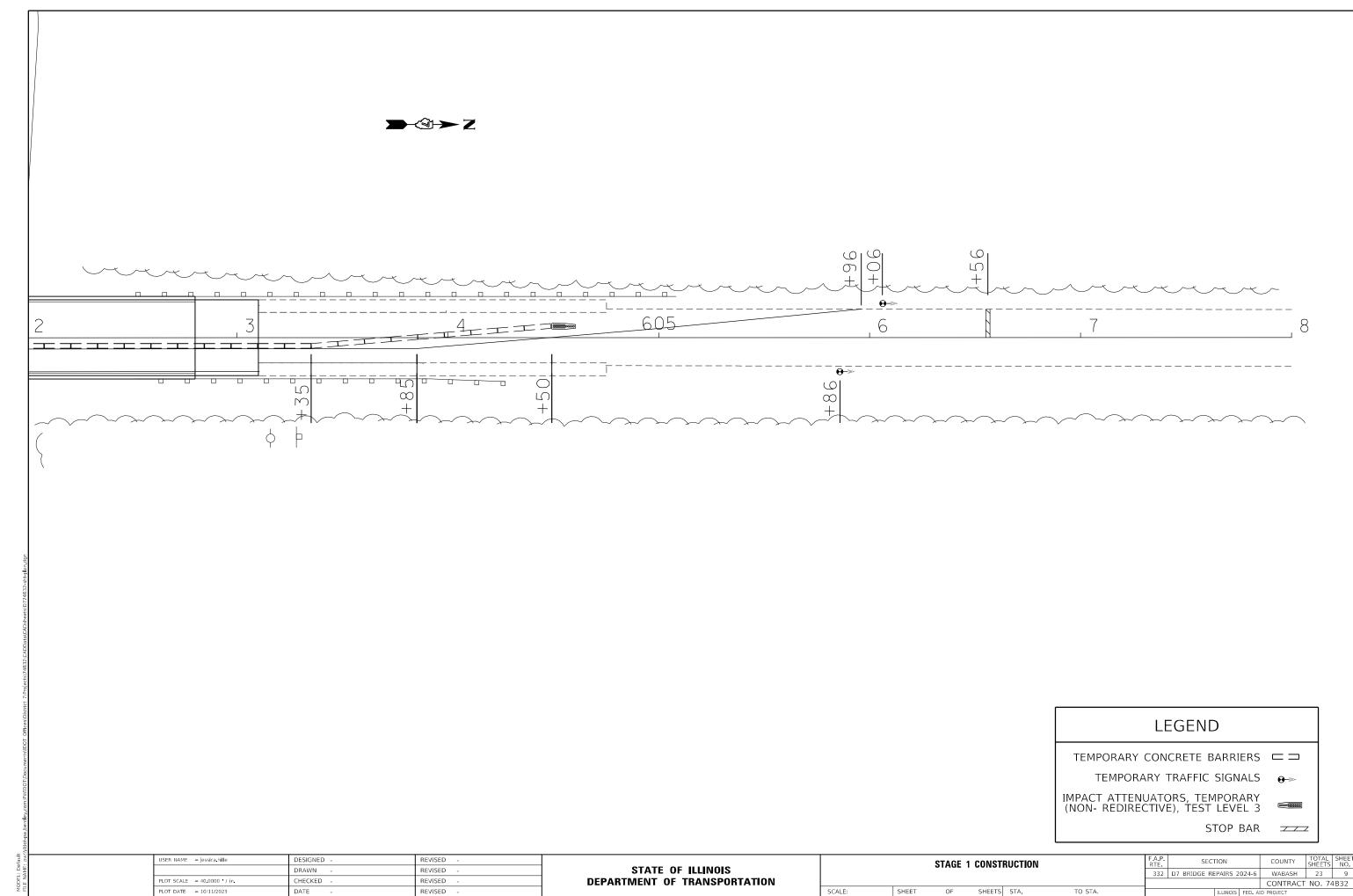


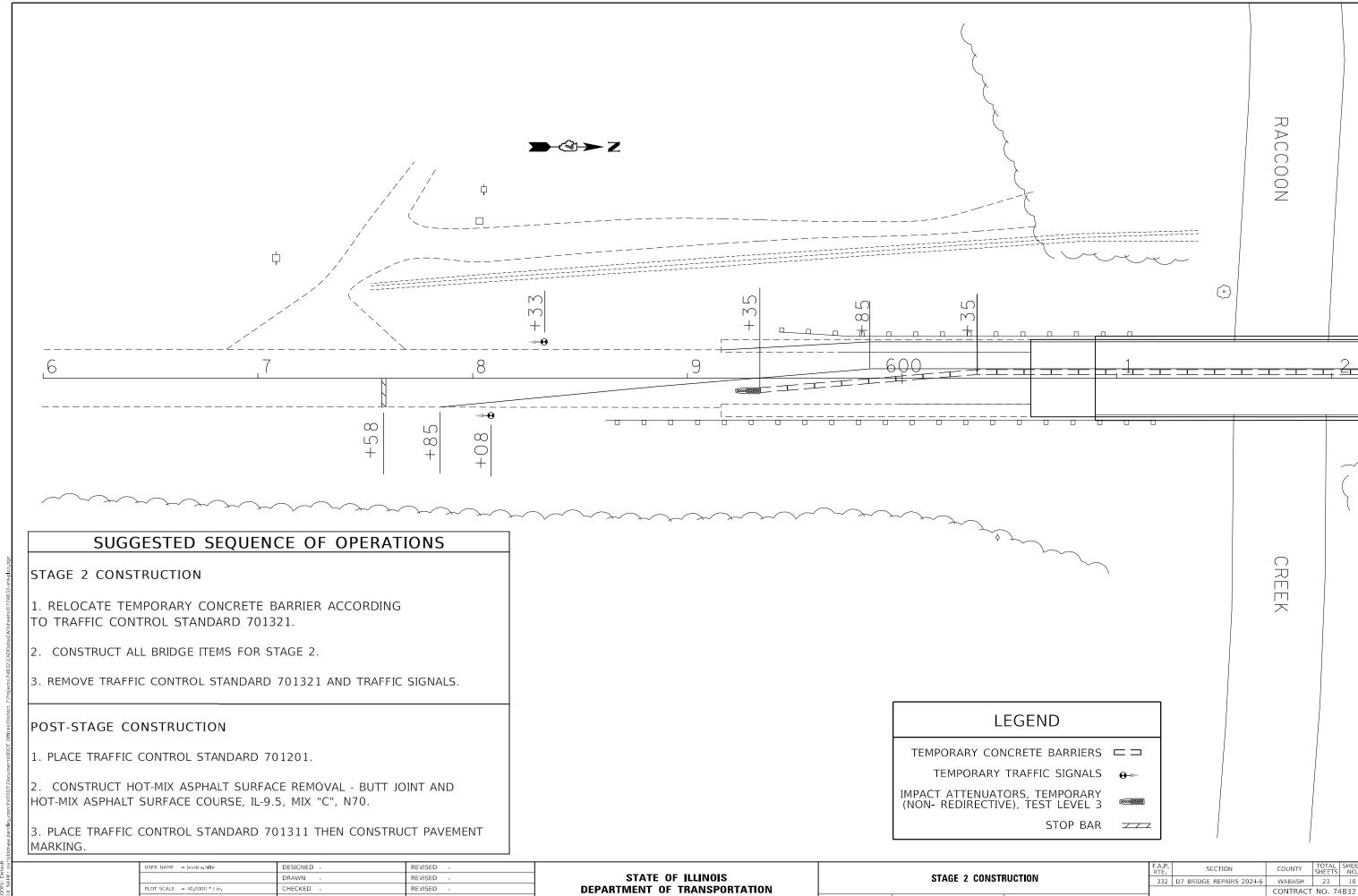
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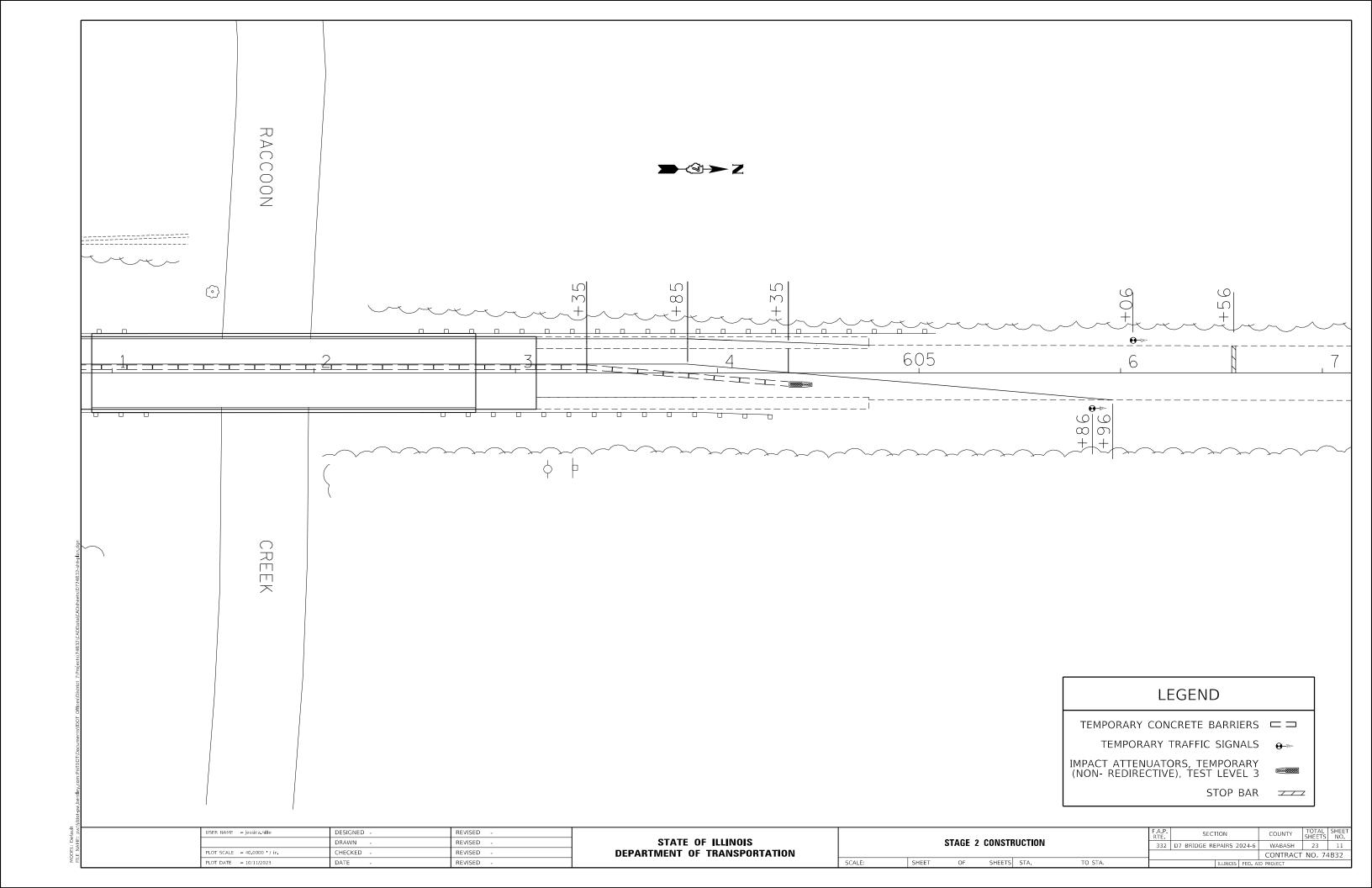
**DEPARTMENT OF TRANSPORTATION** 

STAGE 1 CONSTRUCTION WABASH CONTRACT NO. 74B32 OF SHEETS STA.





OF SHEETS STA.



EXISTING STRUCTURE: SN 093-0001 carries ILL 1 over Raccoon Creek. The three span, steel beam structure was built in 1956. The proposed project consists of replacement of the expansion joints with new strip seals, structural steel repair, full depth deck patching, scarification & concrete overlay. 36 WF 160 ELEVATION **→**③→ Z 190'-1" Bk. to Bk. Abutments 60'-7<sup>1</sup>/2" 60'-7<sup>1</sup>/<sub>2</sub>" 68'-10"  $\bigcirc$  $B \rightarrow$ Bk. North Abut. <u>Ç Pier 1</u> Sta. 601+50.58 <u>© Pier 2</u> Sta. 602+19.42 Sta. 602+80.04 € ILL 1 Bk. South Abut. Sta. 600+89.96  $B \rightarrow S$ Ç Brg. € Brg. PLAN(A) - Remove Existing Joints and Construct Strip Seal Expansion Joint (B) – Bridge Deck Scarification  $\frac{3}{4}$ ", Deck Patching, & Bridge Deck Fly Ash or GGBF Slag Concrete Overlay 2½", Diamond Grinding (Bridge Section) © - Structural Steel Repair SER NAME = jesska hille DESIGNED -REVISED SECTION **GENERAL PLAN & ELEVATION** STATE OF ILLINOIS DRAWN T. Walk REVISED 332 D7 BRIDGE REPAIRS 2024-6 WABASH 23 12 S.N. 093-0001 CHECKED REVISED **DEPARTMENT OF TRANSPORTATION** CONTRACT NO. 74B32 SHEET 1 OF 8 SHEETS STA. TO STA.

\* Overlay thickness prior to  $V_4$ " grinding (Typ.)

# STAGE CONSTRUCTION DETAIL Looking North

### GENERAL NOTES

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of 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.

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.

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".

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

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.

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

Full depth deck slab repairs performed in the exterior bays of the bridge deck (between the parapet walls and the first interior beams) shall be limited to individual lengths no greater than 10°. In these portions of the deck, repair areas longer than 10° shall be divided into segments not greater than 10° in length, and the segments shall be poured in alternating sequence. Subsequent segments repaired in sequence shall not be removed until 72 hours shall have elapsed from the end of the previous, adjacent pour, and the adjacent pour shall have attained a minimum modulus of rupture of 650psi.

### TOTAL BILL OF MATERIAL

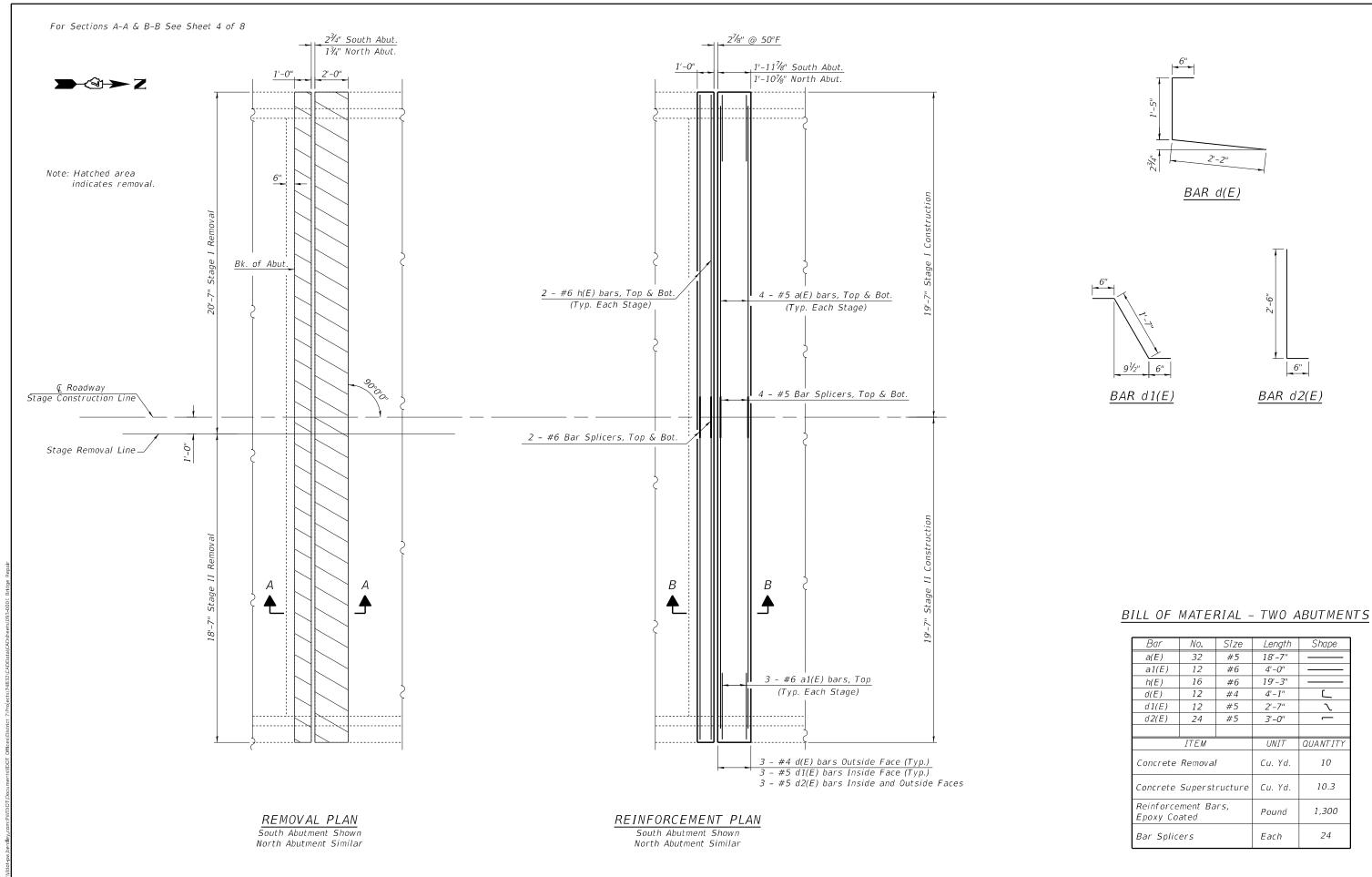
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	10
Concrete Superstructure	Cu. Yd.	10.3
Reinforcement Bars, Epoxy Coated	Pound	1,300
Bar Splicers	Each	24
Bridge Deck Scarification, ¾"	Sq. Yd.	735
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2½"	Sq. Yd.	735
Diamond Grinding (Bridge Section)	Sq. Yd.	669
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	502
Preformed Joint Strip Seal	Foot	76
Protective Coat	Sq. Yd.	763
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	11.0
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	16.0
Approach Slab Repair (Partial Depth)	Sq. Yd.	1.0
Structural Steel Repair	Pound	90

USER NAME = jessica hille	DESIGNED	-	T. Walk	REVISED -
	DRAWN	-	T. Walk	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Macklin	REVISED -
PLOT DATE = 10/11/2023	DATE	-	November 2022	REVISED -

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

STAGE CONSTRUCTION, GENERAL NOTES, &	F.A.P RTE. SECTION		COUNTY	TOTAL SHEETS	SHEET NO.
BILL OF MATERIALS S.N. 093-0001	332	D7 BRIDGE REPAIRS 2024-6	WABASH	23	13
DILL OF WATERIALS S.W. 055-0001			CONTRACT	NO. 74	IB32
SHEET 2 OF 8 SHEETS STA. TO STA.		ILLINOIS FED. A	D PROJECT		



JSER NAME = jessica.hille DESIGNED - T. Walk REVISED DRAWN -T. Walk REVISED CHECKED -D. Mack**l**in REVISED PLOT DATE = 10/11/2023 REVISED DATE November 2022

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

EXPANSION			REPLA 093-00		DETAILS
SHEET 3	OF	8	SHEETS	STA.	TO STA.

SCALE:

F.A.P RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
332	D7 BRIDGE REPAIRS 20:	24-6	WABASH	23	14
			CONTRACT	NO. 74	1B32
	ILLINOIS F	FED. AI	D PROJECT		

Shape

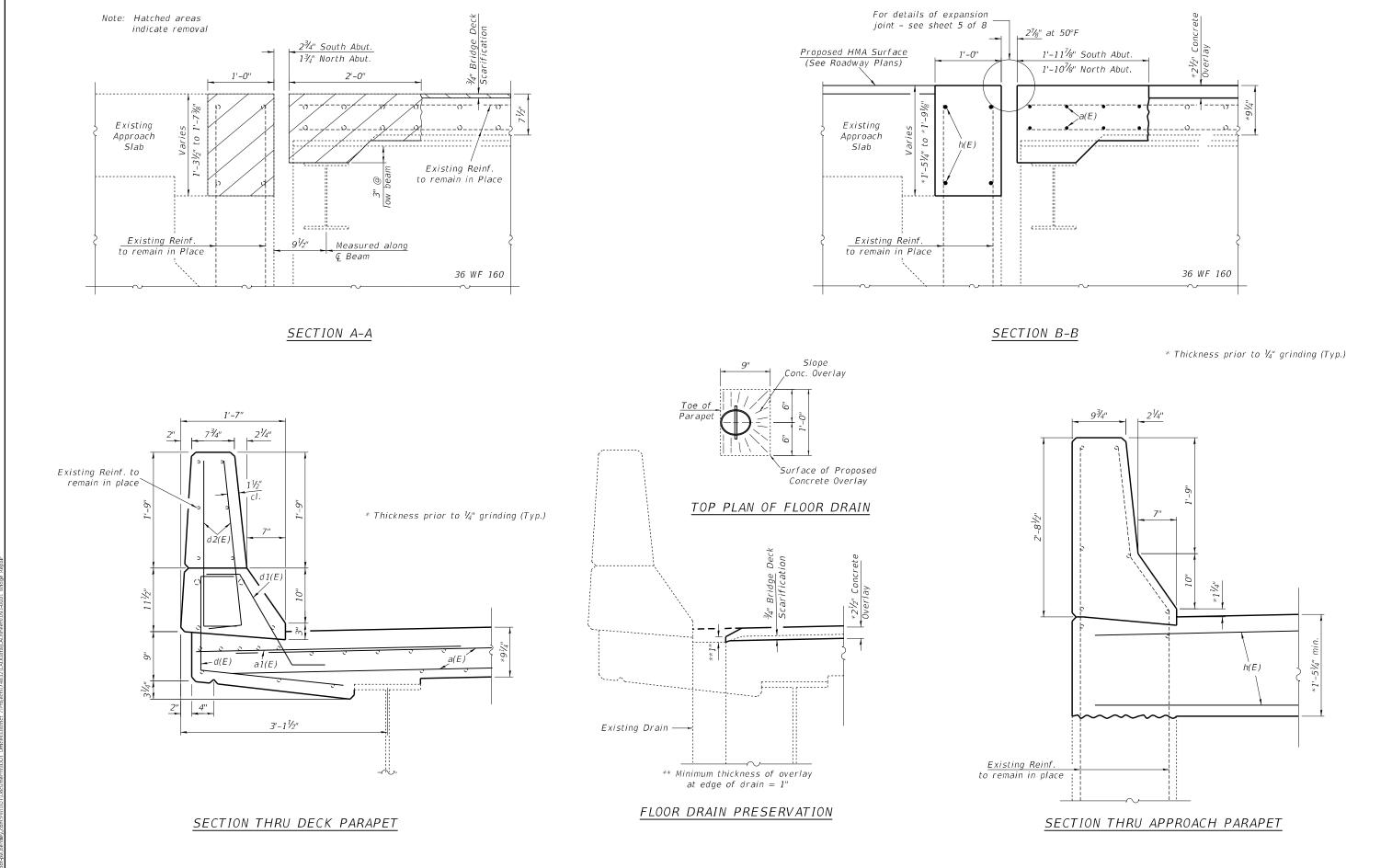
QUANTITY

10

10.3

1,300

24



STATE OF ILLINOIS

**DEPARTMENT OF TRANSPORTATION** 

SECTION

**EXPANSION JOINT REPLACEMENT DETAILS** 

S.N. 093-0001

OF 8 SHEETS STA.

TO STA.

SCALE:

SHEET 4

COUNTY

CONTRACT NO. 74B32

332 D7 BRIDGE REPAIRS 2024-6 WABASH 23 15

MODEL: Default

JSER NAME = jessica hille

PLOT DATE = 10/11/2023

LOT SCALE = 100.0000 / in.

DESIGNED -

DRAWN

DATE

CHECKED

T. Walk

T. Walk

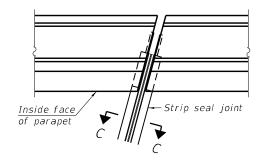
November 2022

REVISED

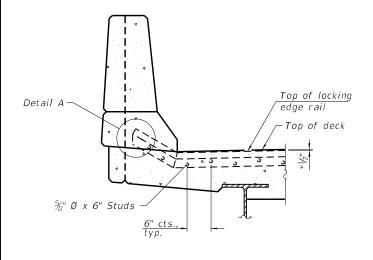
REVISED

REVISED

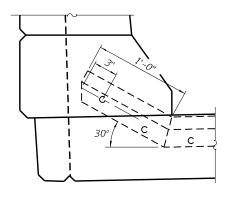
REVISED



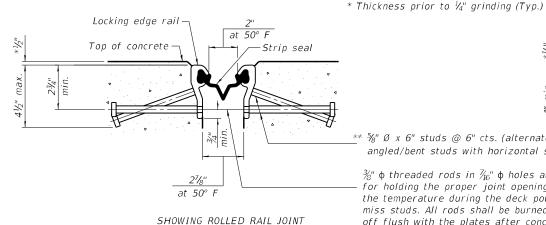
PLAN AT PARAPET







DETAIL A

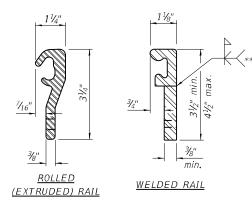


Locking edge railat 50° F Top of concrete — Strip seal \*\*  $\frac{1}{8}$ " Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  $\frac{3}{6}$ "  $\phi$  threaded rods in  $\frac{7}{16}$ "  $\phi$  holes at  $\pm 4$ '-0" cts. at 50° for holding the proper joint opening based on -

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.

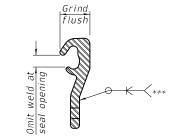
### SECTION C-C

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



### LOCKING EDGE RAILS

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



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

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

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

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.

according to the manufacturer's recommendation. The manufacturer's recommended installation methods

rated movement of 4 inches.

shall be followed.

rail splice detail.

### 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	76

JSER NAME = jessica hille DESIGNED -T. Walk REVISED DRAWN T. Walk REVISED HECKED REVISED PLOT DATE = 10/11/2023 REVISED November 2022

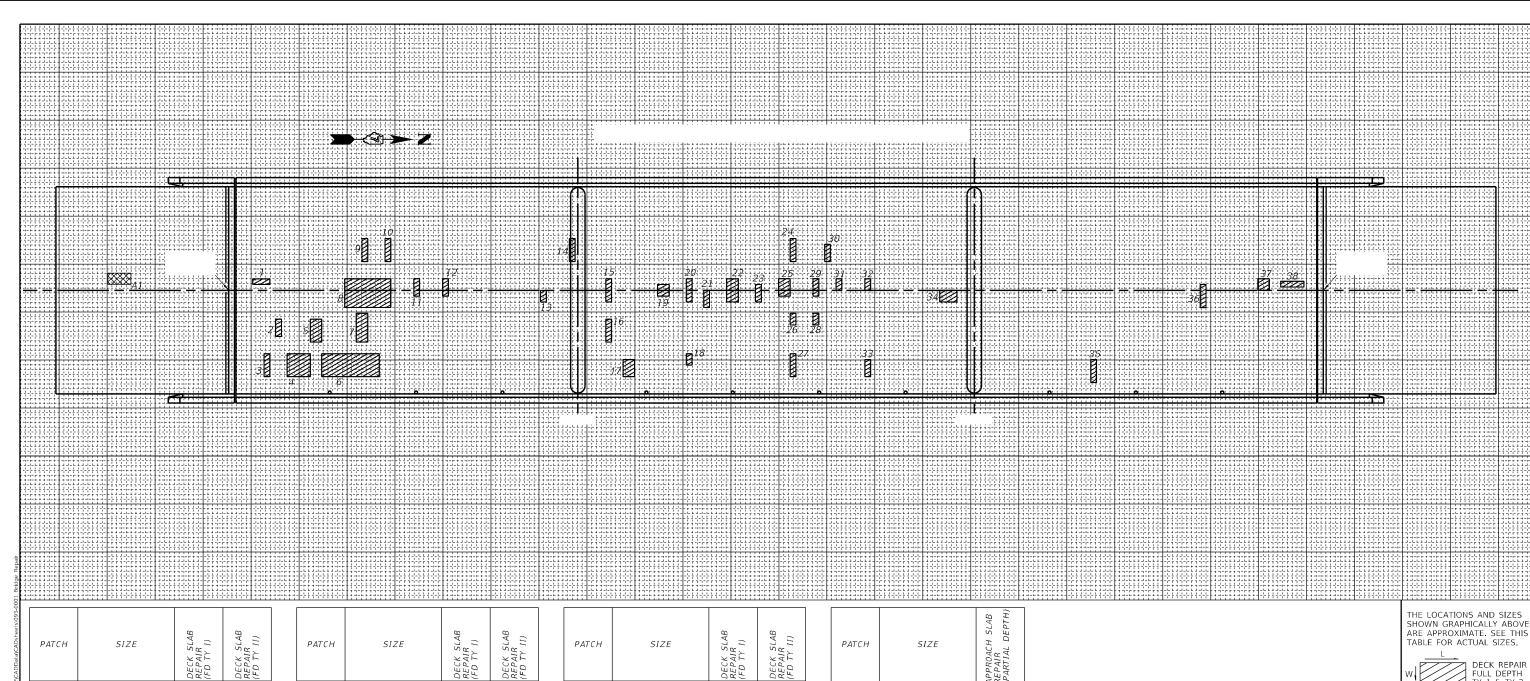
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SHOWING WELDED RAIL JOINT

PREFORMED JOINT STRIP SEAL DETAIL S.N. 093-0001

332 D7 BRIDGE REPAIRS 2024-6 WABASH 23 16 CONTRACT NO. 74B32

OF 8 SHEETS STA. SHEET 5 TO STA.



PATCH	SI	ZE	DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
1	3.0	1.0	0.3	
2	1.0	3.0	0.3	
3	1.0	4.0	0.4	
4	4.0	4.0		1.8
5	2.0	4.0		0.9
6	10.0	4.0		4.4
7	2.0	5.0		1.1
8	8.0	5.0		4.4
9	1.0	4.0	0.4	
10	1.0	4.0	0.4	
11	1.0	3.0	0.3	
12	1.0	3.0	0.3	
13	1.0	2.0	0.2	
14	1.0	4.0	0.4	
15	1.0	4.0	0.4	
16	1.0	4.0	0.4	

PATCH	SIZE		DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
17	2.0	3.0		0.7
18	1.0	2.0	0.2	
19	2.0	2.0	0.4	
20	1.0	4.0	0.4	
21	1.0	3.0	0.3	
22	2.0	4.0		0.9
23	1.0	3.0	0.3	
24	1.0	4.0	0.4	
25	2.0	3.0		0.7
26	1.0	2.0	0.2	
27	1.0	4.0	0.4	
28	1.0	2.0	0.2	
29	1.0	3.0	0.3	
30	1.0	3.0	0.3	
31	1.0	2.0	0.2	
32	1.0	2.0	0.2	

PATCH	SI	ZE	DECK SLAB REPAIR (FD TY I)	DECK SLAB REPAIR (FD TY II)
NO.	LENGTH	WIDTH	SQ YD	SQ YD
33	1.0	3.0	0.3	
34	3.0	2.0		0.7
35	1.0	4.0	0.4	
36	1.0	4.0	0.4	
37	2.0	2.0	0.4	
38	4.0	1.0	0.4	
ТОТ	AL ROUNDS	TO:	11.0	16.0
			-	

PATCH	SI	APPROACH SLAB REPAIR (PARTIAL DEPTH)	
NO.	LENGTH	SQ YD	
A1	4.0	2.0	0.9
ТОТ	1.0		

ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.





DATE OF SURVEY: 10-19-22 SURVEY BY: DPM & TMW METHOD OF SURVEY: VISUAL

DECK SLAB REPAIR (FULL DEPTH TYPE I) 11.0 SQ YD

DECK SLAB REPAIR (FULL DEPTH TYPE II) 16.0 SQ YD

APPROACH SLAB REPAIR (PARITIAL DEPTH) 1.0 SQ YD

COUNTY

JSER NAME = jessica hille DESIGNED -T. Walk REVISED DRAWN T. Walk REVISED CHECKED D. Mack**l**in REVISED REVISED PLOT DATE = 10/11/2023 DATE

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**  BRIDGE DECK PATCHING & APPROACH REPAIR SN. 093-0001 SHEET 6 OF 8 SHEETS STA. TO STA.

SECTION 332 D7 BRIDGE REPAIRS 2024-6 WABASH 23 17 CONTRACT NO. 74B32

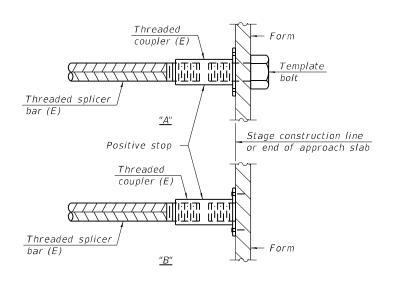
### STANDARD BAR SPLICER ASSEMBLY PLAN

(All components shall be provided from one supplier)

Threaded splicer bar length = min. lap length +  $1\frac{1}{2}$ " + thread length

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

Location	Bar size	No. assemblies required	Minimum Iap length
Deck	#5	16	3'-2"
Approach	#6	8	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.

Stage line if applicable Stage I construction | Stage II construction Mechanical splicer (E) Reinforcement bar-└ Reinforcement bar

### 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

USER NAME = jessica hille	DESIGNED	-	T. Walk	REVISED -
	DRAWN	-	T. Walk	REVISED -
PLOT SCALE = 100.0000 / in.	CHECKED	-	D. Mack <b>l</b> in	REVISED -
PLOT DATE = 10/11/2023	DATE	-	November 2022	REVISED -

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS S.N. 093-0001 SHEET 7 OF 8 SHEETS STA. TO STA.

SECTION COUNTY 332 D7 BRIDGE REPAIRS 2024-6 WABASH 23 18 CONTRACT NO. 74B32

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

### NOTES

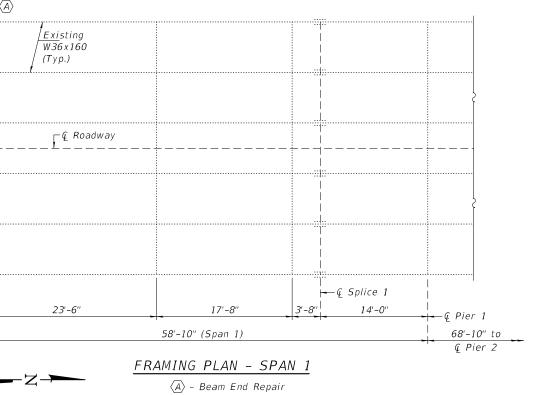
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.

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.

Fasteners shall be high strength bolts. Bolts  $\frac{3}{4}$ "0, open holes  $\frac{13}{16}$ "0, unless otherwise noted.

All structural steel, connection bolts, nuts and washers shall be hot dip galvanized according to Special Provision "Hot Dip Glavanizing for Structural Steel". Cost included with Structural Steel Repair.

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".



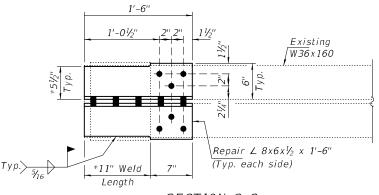
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3)-

**(4)**-

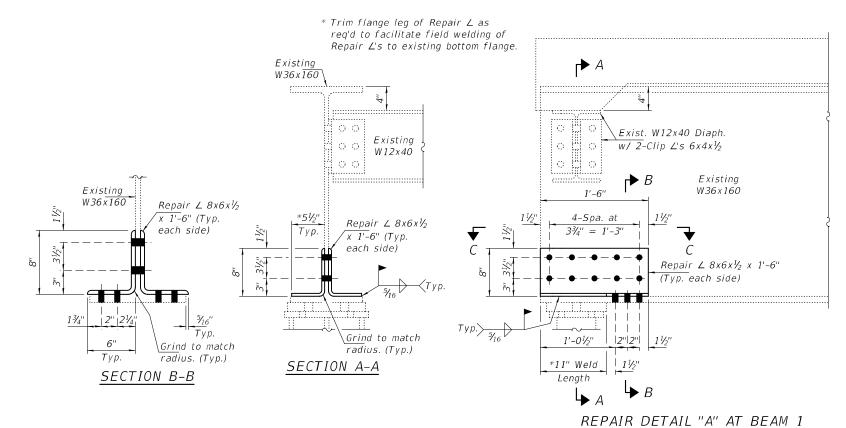
(5)-

⊈ Brg. S. Abut



### SECTION C-C

(Looking West)



### BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	90

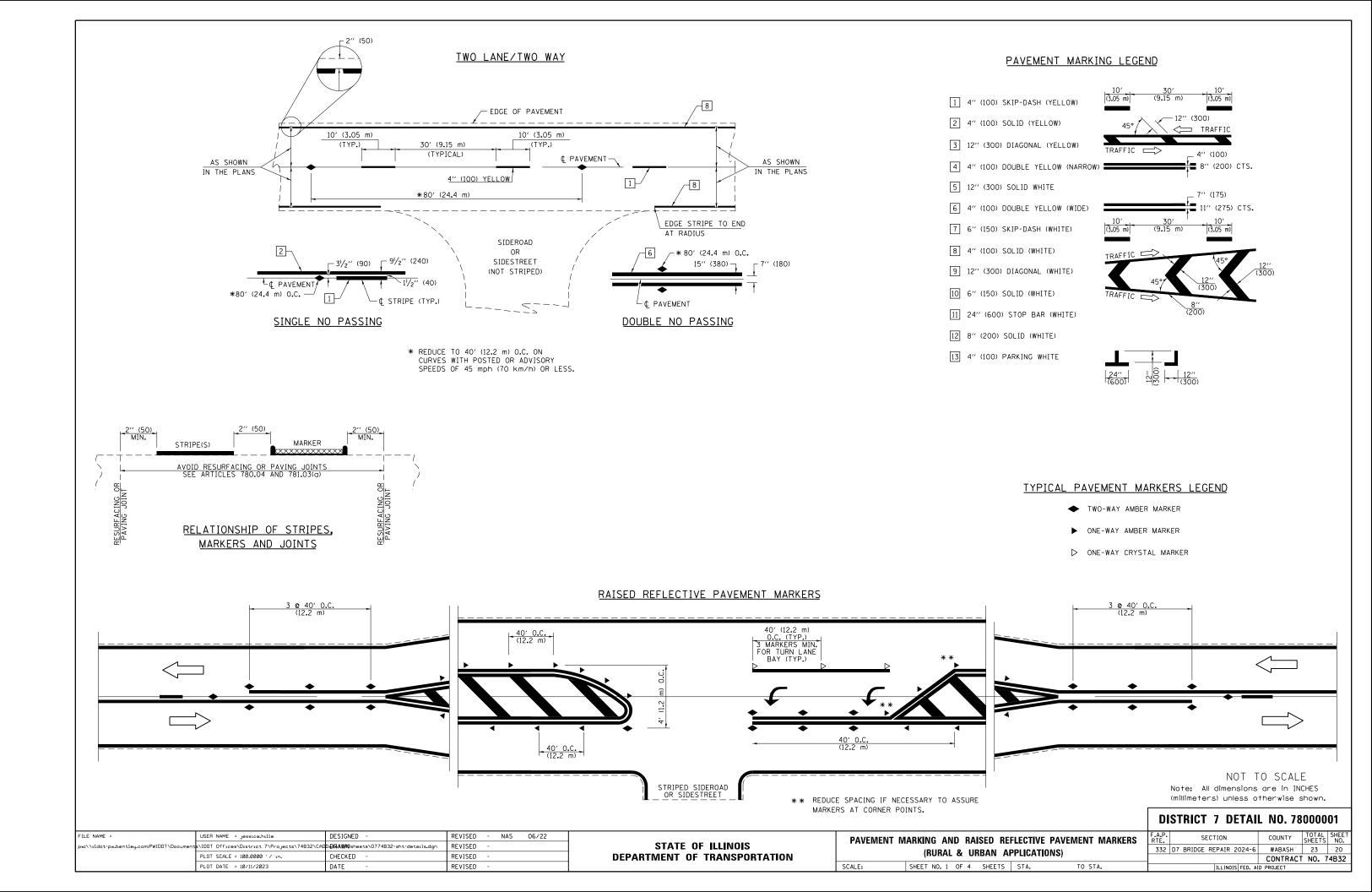
DESIGNED -	Adrian T. Halloway	EXAMINED		DATE -	DECEMBER 6, 2023
CHECKED -	Jeffrey S. Burke		ENGINEER OF STRUCTURAL SERVICES		
DRAWN -	STEFFEN	PASSED	Jayne F. Jehlfs	REVISED	-
CHECKED -	ATH ISB	1	ENCINEED OF REPORTS AND STRUCTURES	REVISED	_

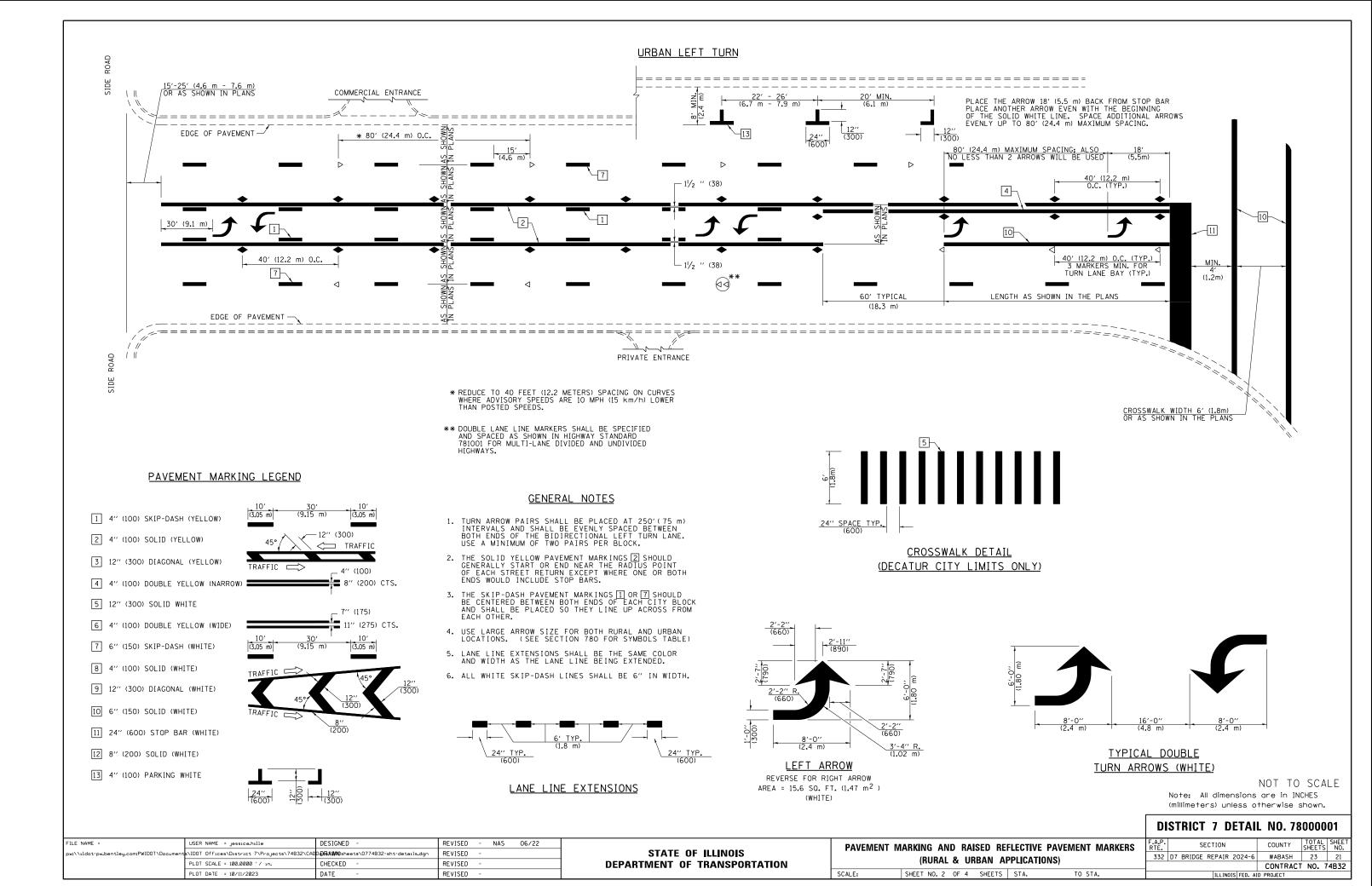
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

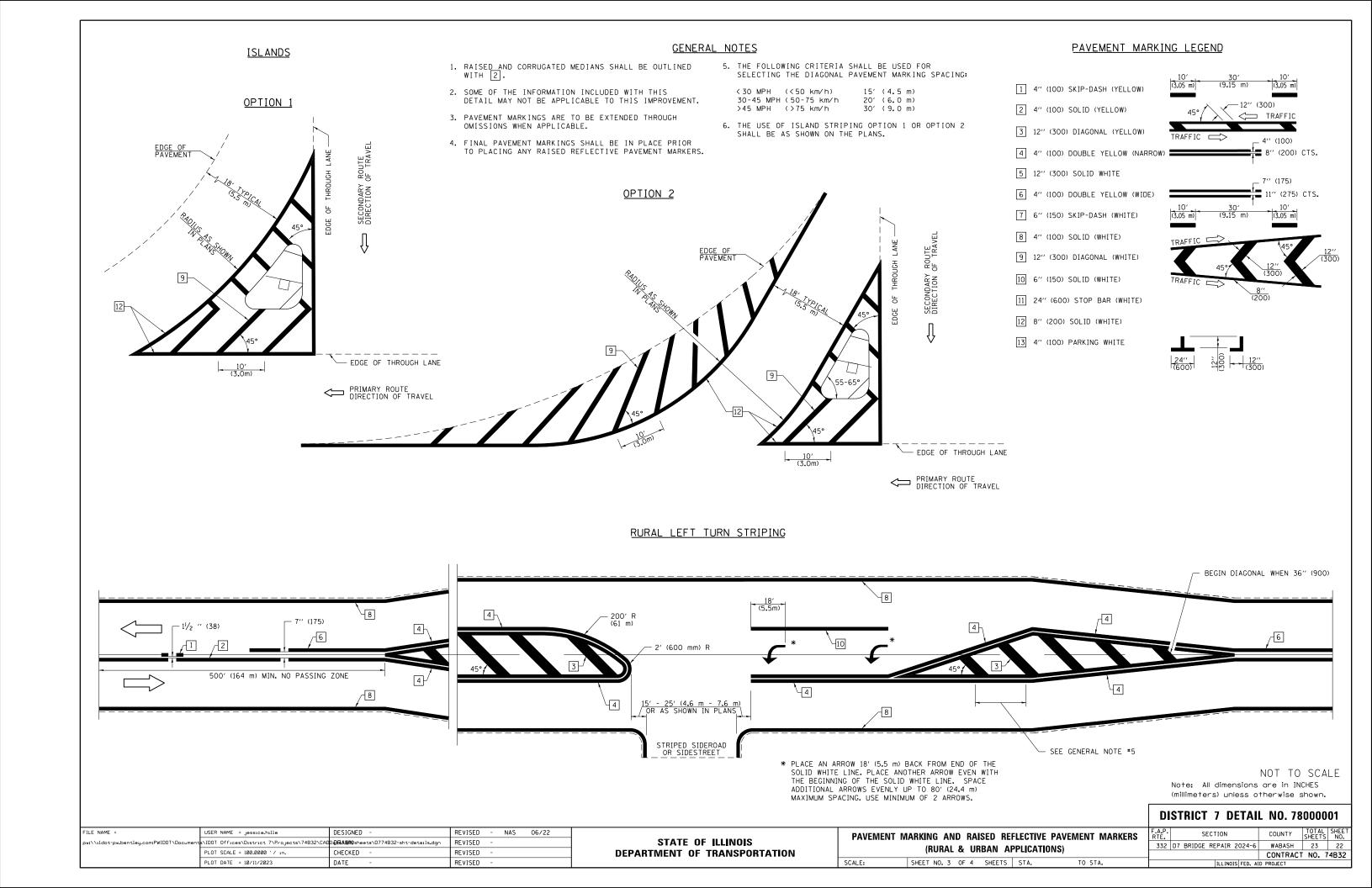
SPAN 1 FRAMING PLAN & BEAM 1 REPAIR DETAILS ILLINOIS 1 OVER RACCOON CREEK SN 093-0001

SHEET NO. 8 OF 8 SHEETS

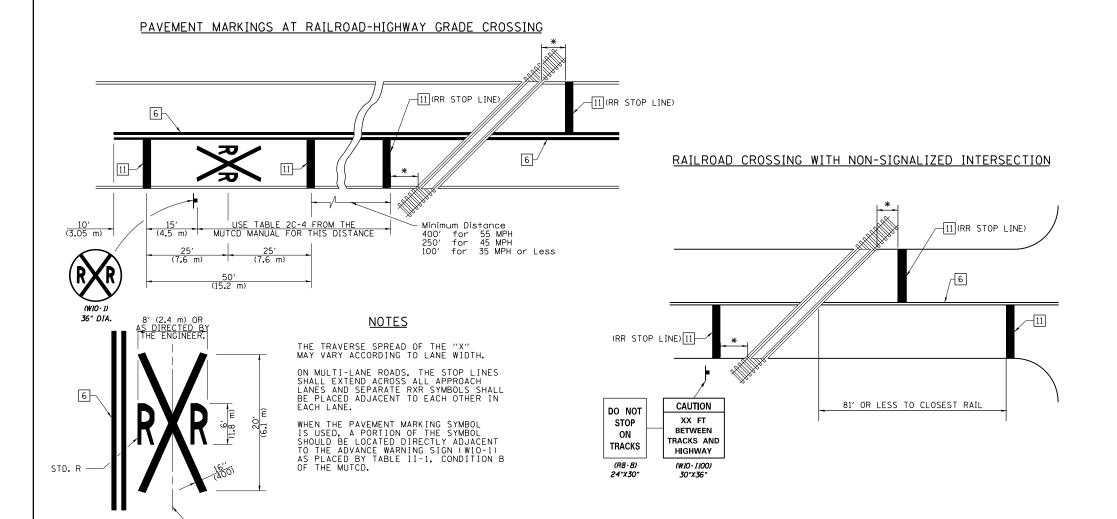
F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEE NO.
332	D7 BRIDGE REPAIRS 2024-6	WABASH	23	19
		CONTRACT	NO. 74	B32
	ILLINOIS FED. A	ID PROJECT		



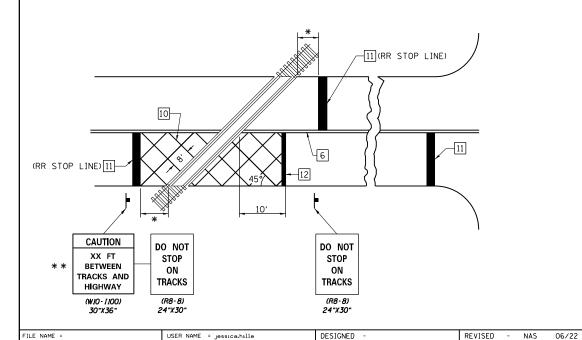




### SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING



### RAILROAD CROSSING WITH INTERCONNECT ONLY



PLOT SCALE = 100.0000 '/ 10.

PLOT DATE = 10/11/2023

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CHECKED

DATE

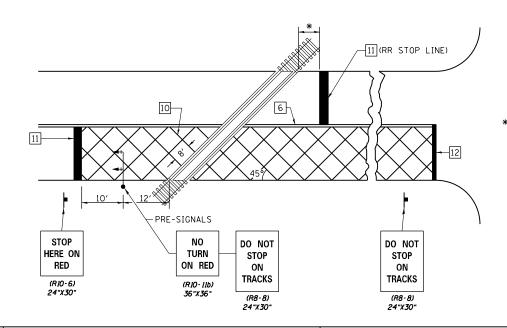
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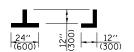
### PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
  2 4" (100) SOLID (YELLOW)
  3 12" (300) DIAGONAL (YELLOW)
  45° TRAFFIC

  TRAFFIC

  4" (100)
  4" (100) DOUBLE YELLOW (NARROW)

  8" (200) CTS.
- 5 12" (300) SOLID WHITE
- 6 4" (100) DOUBLE YELLOW (WIDE)
- 7 6" (150) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)
- 11 24" (600) STOP BAR (WHITE)
- 12 8" (200) SOLID (WHITE)
- 13 4" (100) PARKING WHITE



### GENERAL NOTES

- SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
- 2. EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE PRE-SIGNALS ARE USED.
- 3. WHEN PEDESTRIAN SIGNALS ARE PRESENT WITH INTERCONNECTED SIGNALS, WARNING SIGN WIO-IIOI (18"X24") SHALL BE PLACED NEAR EACH PEDESTRIAN SIGNAL HEAD. COUNTDOWN PEDESTRIAN SIGNAL HEADS SHALL NOT BE UTILIZED ALONG WITH INTERCONNECTED SIGNALS.

CAUTION

WALK TIME
SHORTENED
WHEN TRAIN
APPROACHES

7" (175)

(WIO- I IOI) 18"X24"

- 4. PLEASE REFER TO THE IDOT BUREAU OF OPERATION MEMO OPS T-06 DATED DECEMBER 1, 2020 FOR ADDITIONAL INFORMATION
- 15' FROM NEAR RAIL OR 8' FROM AND PARALLEL TO GATE IF PRESENT
- \*\* WARNING SIGN WIO-IIOO SHALL BE USED AS AN INTERIM MEASURE AT INTERCONNECTED SIGNAL LOCATIONS WHERE PRE-SIGNALS ARE TO BE INSTALLED IN THE FUTURE. THIS SIGN SHALL BE REMOVED WHEN THE PRE-SIGNALS ARE INSTALLED AND THE PAVEMENT MARKINGS ARE EXTENDED TO THE INTERSECTION.

NOT TO SCALE

Note: All dimensions are in INCHES
(millimeters) upless otherwise shown.

DISTRICT	7	<b>DETAIL</b>	NO.	78000001
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### STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS
(RURAL & URBAN APPLICATIONS)

SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.