11-07-2025 LETTING ITEM 063

# STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION**

823 D7 BRIDGE REPAIRS 2026-1 WAYNE ILLINOIS CONTRACT NO. 74878

D-97-022-23

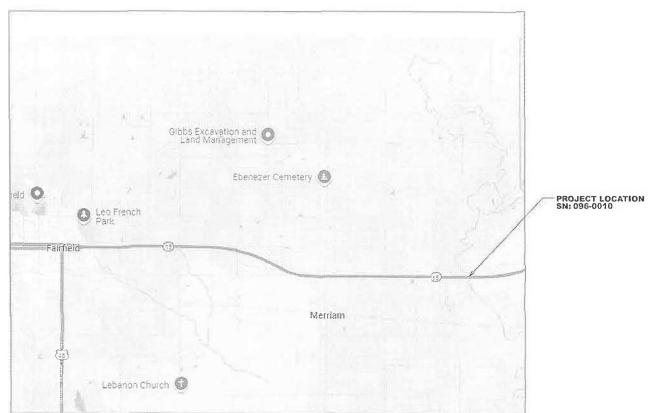
FOR INDEX OF SHEETS, SEE SHEET NO. 2

ADT = 2,750 (2023)

# **PROPOSED HIGHWAY PLANS**

FAP ROUTE 823 (ILL 15) SECTION: D7 BRIDGE REPAIRS 2026-1 **PROJECT: NHPP-5J54(306)** BRIDGE DECK OVERLAY, BRIDGE JOINT RÉPLACE/REPAIR, **BRIDGE DECK REPAIRS WAYNE COUNTY** 

C-97-024-23



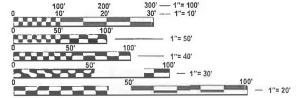
LENGTH = 1,156.44 FT. = 0.21 MILE

STATE OF ILLINOIS

LOCATION OF SECTION INDICATED THUS: -

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

**REV - MS** 



ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION 1-800-892-0123

**PROJECT ENGINEER: BEN DETERS** PROJECT MANAGER: KYLE PRICE

CONTRACT NO. 74B78

0

#### **INDEX OF SHEETS**

- PLAN SHEET
- 2 GENERAL NOTES, INDEX, STANDARDS
- 3-4 SUMMARY OF QUANTITIES
- 5 TYPICAL SECTION
- 6-7 SCHEDULE OF QUANTITES
- 8-9 PCC BASE COURSE WIDENING
- 10-11 APPROACH PAVEMENT
- 12-19 STAGE PLAN VIEWS
- 20-53 BRIDGE REPAIR PLANS
- 54-57 PAVEMENT MARKING DETAILS (D7 DETAIL No. 78000001)

#### STD. NO. DESCRIPTION

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

420406 PAVEMENT CONNECTOR (HMA) FOR BRIDGE APPROACH SLAB 701001 - 02 OFF-ROAD OPERATIONS, 2L, 2W, MORE THAN 15' (4.5 M) AWAY

701006 - 05 OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5 M) TO 24" (600 MM) FROM PAVEMENT EDGE

701011 - 04 OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY

701201 - 05 LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH

701311 - 03 LANE CLOSURE 2L, 2W MOVING OPERATIONS-DAY ONLY

701321 - 19 LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER

701326 - 04 LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS > 45 MPH

701901 - 10 TRAFFIC CONTROL DEVICES

704001 - 08 TEMPORARY CONCRETE BARRIER

780001 - 05 TYPICAL PAVEMENT MARKINGS

782006 - 01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

#### **GENERAL NOTES**

THIS PROJECT IS LOCATED ON FAP ROUTE 823 (ILL 15) IN WAYNE COUNTY, AT LITTLE WABASH RIVER 0.3 MILE EAST OF COUNTY ROAD 2500 EAST. THE WORK INCLUDED IN SECTION D7 BRIDGE REPAIRS 2026-1 CONSISTS OF BRIDGE DECK OVERLAY, BRIDGE DECK REPAIRS, APPROACH SLAB REPLACEMENT AND ANY OTHER WORK NECESSARY TO COMPLETE THE SECTION.

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTORS 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.

THE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGE I & II OF STANDARD 701321 SHALL BE COVERED WITH PAVEMENT MARKING BLACKOUT TAPE, 5".

	THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE TO THIS PROJECT:											
LOCATION(S)	MIXTURE USE(S)	PG	DESIGN AIR VOIDS	MIXTURE COMPOSITIO N	FRICTION AGGREGATE	MIXTURE WEIGHT	QUALITY MANAGEMENT PROGRAM	SUBLOT SIZE	MATERIAL TRANSFER DEVICE (REQUIRED?)			
PAVEMENT CONNECTOR	HMA SURFACE COURSE, IL-9.5, MIX "C", N70 (TOP LIFT)	PG 64-22	4.0% @ N=70	IL - 9.5	MIXTURE C	N70	QCQA	3000	N/A			

											_
USER NAME = jessica.hille	DESIGNED -	REVISED -			GENERAL NOTES, INDEX OF SHEET	9	F.A.P RTE	SECTION	COUNTY	TOTAL SHEF	Æ.
	DRAWN -	REVISED -	STATE OF ILLINOIS		STANDARDS. & MIX DESIGN	•	823	D7 BRIDGE REPAIRS 2026-1	WAYNE	57 2	Η.
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION		o initiality of the project				CONTRAC	Γ NO. 74B78	1
PLOT DATE = 8/18/2025	DATE -	REVISED -		SCALE:	SHEET 1 OF 1 SHEETS STA	TO STA	-	LILINOIS FED AIR	OPPOJECT		-1

80% FED 20% STATE

CONSTR. CODE

CODE			TOTAL	BRIDGE 0047
NO.	ITEM	UNIT	QUANTITY	RURAL
35400300	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	SQ YD	186	186
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	180	180
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	400	400
40600990	TEMPORARY RAMP	SQ YD	33.4	33.4
40604052	HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "C", N70	TON	39.2	39.2
44004250	PAVED SHOULDER REMOVAL	SQ YD	186	186
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	8.5	8.5
50102400	CONCRETE REMOVAL	CU YD	41.2	41.2
50300225	CONCRETE STRUCTURES	CU YD	8.6	8.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	45.9	45.9
50300300	PROTECTIVE COAT	SQ YD	4132	4132
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	7250	7250
50800515	BAR SPLICERS	EACH	134	134
52000110	PREFORMED JOINT STRIP SEAL	FOOT	241	241

80% FED 20% STATE
CONSTR. CODE

		1		BRIDGE
CODE			TOTAL	0047
NO.	ITEM	UNIT	QUANTITY	RURAL
67100100	MOBILIZATION	L SUM	1	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	3138	3138
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	28	28
70300100	SHORT TERM PAVEMENT MARKING	FOOT	668	668
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1530	1530
70400100	TEMPORARY CONCRETE BARRIER	FOOT	1800	1800
			1	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	1800	1800
. 5 . 5 5 5 5 5 5			1.000	
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
, 5000230	IN ACTATION OF THE STORY (NON- NEBIREOTIVE), TEST ELVELS	1 2/3011	-	
7000055	IMPACT ATTENUATORS DELOCATE ANON DESCRIPTION TO THE STATE OF THE STATE	FAGU		
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2

	0
Sheet]	work\pwidot\h
SOQ - 1 [	F. C.\nw
10DEL: §	II F NAME

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/18/2025	DATE -	REVISED -

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

SCALE:

						F.A.P. RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	SUMMARY OF QUANTITIES				823	D7 BRIDGE REPAIRS 2026-1	WAYNE	57	3	
					3			CONTRACT	NO. 74	378
	SHEET 1	OF 2	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

80% FED 20% STATE

CONS	TR.	CODE

		<del>                                     </del>	_	BRIDGE
CODE			TOTAL	
CODE	ITEM	UNIT	TOTAL	0047
NO.	ITEM	UNIT	QUANTITY	RURAL
		<u> </u>		
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2877	2877
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	4	4
X5030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	3058	3058
X5230172	DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	56	56
Z0012111	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/2"	SQ YD	3986	3986
Z0012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	3986	3986
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	84	84
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	38	38
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	20	20
Z0029090	DIAMOND GRINDING (BRIDGE SECTION)	SQ YD	3598	3598

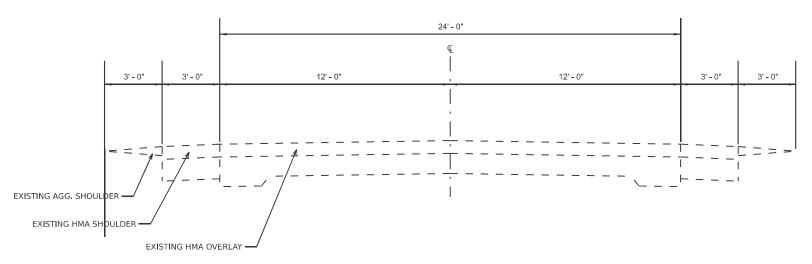
<sup>\*</sup> SPECIALTY ITEM

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/18/2025	DATE -	REVISED -

SCALE:

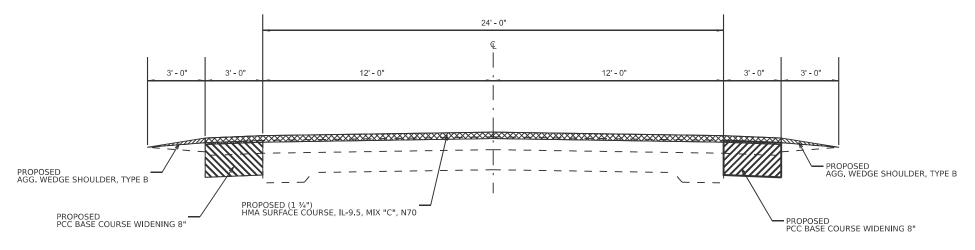
					F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
	SUMMARY OF QUANTITIES					823	D7 BRIDGE REPAIRS 2026-1	WAYNE	57	4
SUMMART OF QUANTITIES						CONTRAC	T NO. 746	378		
	SHEET 2	OF 2	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				

### **EXISTING CROSS-SECTION**



STATION 484+39.88 TO 484+99.88 BRIDGE OMMITTED STATION 496+56.24 TO 497+22.76

#### PROPOSED CROSS-SECTION



STATION 484+39.88 TO 484+99.88 BRIDGE OMMITTED STATION 496+56.24 TO 497+22.76

USER NAME = jessica.hille	DESIGNED -	REVISED -				Υ.	SECTION	J		F.A.P	SECTION	COUNTY	TOTAL	SHEET
	DRAWN -	REVISED -	STATE OF ILLINOIS			Λ-	0001101	•		823	D7 BRIDGE REPAIRS 2026-1	WAYNE	57	5
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION									CONTRACT	NO. 74E	78
PLOT DATE = 8/18/2025	DATE -	REVISED -		SCALE:	SHEET 1	OF 1	SHEETS	STA.	TO STA.		ILLINOIS FED. AID	PROJECT		

# TEMP. CONCRETE BARRIER

STATION	то	STATION	LOCATION	TEMPORARY CONCRETE BARRIER 70400100	RELOCATE TEMPORARY CONCRETE BARRIER 70400200	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3 70600250	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3 70600350	NOTES
				FT	FT	EACH	EACH	
482+52		496+56	CL	1562.5	1562.5	1	1	STAGE 1 & 2 (110 PCS)
STA EQ. 4	196+5	6.48 BK = 496+6	63.00 AH					·
496+63		499+01	CL	237.5	237.5	1	1	STAGE 1 & 2 (19 PCS)
	-	TOTA	ALS	1800.0	1800.0	2	2	

## PAVEMENT MARKINGS

STATION	то	STATION	LOCATION	PAVEMENT MARKING BLACKOUT TAPE, 5" 70107005	SHORT TERM PAVEMENT MARKING REMOVAL 70300150	SHORT TERM PAVEMENT MARKING 70300100	PAINT PAVEMENT MARKING - LINE 4" 78001110	TEMPORARY RUMBLE STRIPS 70106700	TEMPORARY BRIDGE TRAFFIC SIGNALS 70106500	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL 78300200	NOTES
	+			FT	SQ FT	FT	FT	EACH	EACH	EACH	-
481+31	+	483+58	CENTERLINE	60	25			2.011	2.011	27(011	SKIPS
498+05	+ +	500+38	CENTERLINE	60	25						SKIPS
483+27	+	498+36	EOP LT	1509	629	_		+			STAGE 1
483+27		498+36	EOP RT	1509	629	_					STAGE 2
484+39.88		496+56.48	CENTERLINE		81	243	304			2	SKIPS
STA EQ	. 496	+56.48 BK = 496	+63.00 AH								
496+63.00		497+22.76	CENTERLINE		5	16	20			2	SKIPS
484+39.88		496+56.48	EOP RT		65	195	1217			_	EDGE
STA EQ	. 496	+56.48 BK = 496	+63.00 AH			-				-	
496+63.00		497+22.76	EOP RT	_	3	10	60				EDGE
484+39.88		496+56.48	EOP LT		65	195	1217				EDGE
STA EQ	496	+56.48 BK = 496	+63.00 AH								
496+63.00		497+22.76	EOP LT	_	3	10	60				EDGE
			EAST END					3			
			WESTEND					3			
									1		
			TOTALS	3138	1530	668	2877	6	1	4	

MODEL: Schedule Qtys - 1 [Sheet] FILE NAME: c:\pw work\pwidot\hilleia\d1035693\D774

USER NAME = jessica.hille	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/18/2025	DATE -	REVISED -

,	SCHEDI	JLE	OF QUA	NTITIE	S	F.A.P RTE.	SECTION	COUNTY	COUNTY TOTAL SHEET SHEETS NO.	
						823	D7 BRIDGE REPAIRS 2026-1	WAYNE	57	6
								CONTRACT	NO. 74	378
SHEET 1	OF	2	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

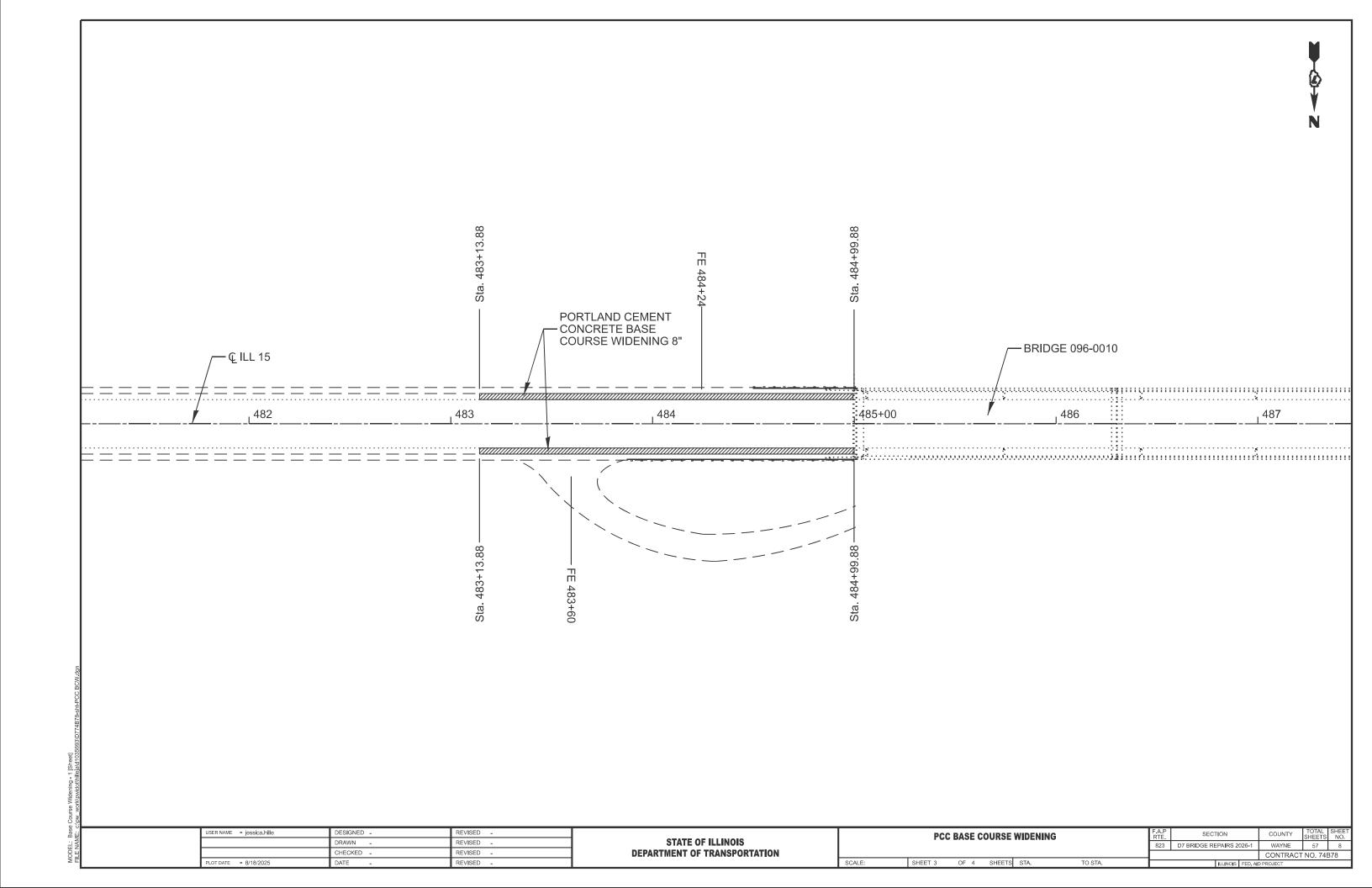
# BASE COURSE WIDENING / BUTT JOINT

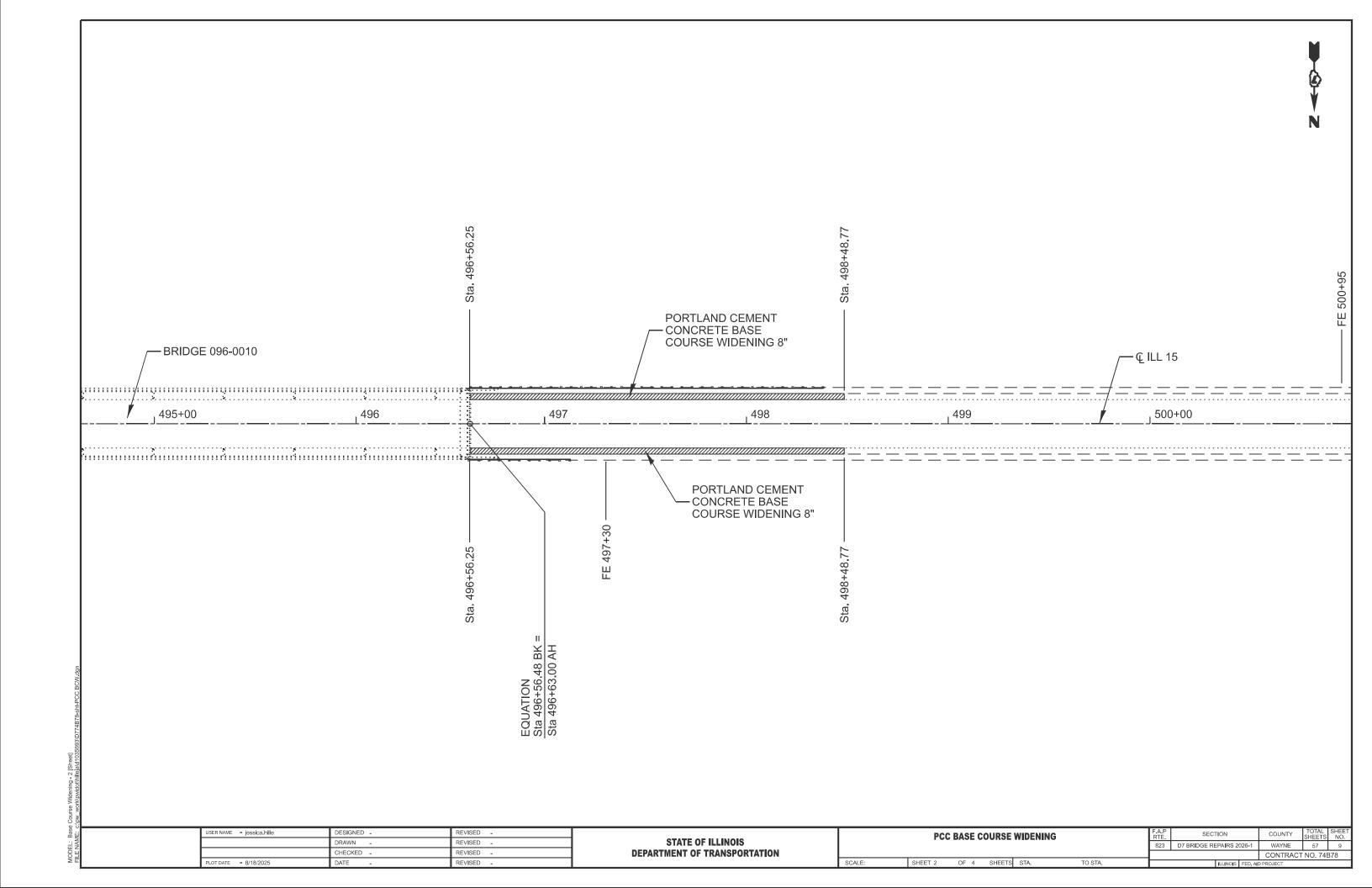
STATION	то	STATION	LOCATION	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 8"	PAVED SHOULDER REMOVAL	BITUMINOUS MATERIALS (TACK COAT)	HOT-MIX ASPHALT SURFACE REMOVAL- BUTT JOINT	HOT-MIX ASPHALT SURFACE COURSE, IL 9.5, MIX "C" N70 (1.75" LIFT)	TEMPORARY RAMP	AGGREGATE WEDGE SHOULDER, TYPE B	NOTES
		_		35400300	44004250	40600290	40600982	40604052	40600990	48102100	
				SQ YD	SQ YD	POUND	SQ YD	TON	SQ YD	TON	
483+13.88		484+99.88	LT SHOULDER	62.0	62.0						
483+13.88		484+99.88	RT SHOULDER	62.0	62.0						
496+56.25		496+56.48	LT SHOULDER	0.1	0.1						
	Q. 496	+56.48 BK = 490	6+63.00 AH								
496+63.00		498+48.77	LT SHOULDER	61.9	61.9						
496+56.25		496+56.48	RT SHOULDER	0.1	0.1						
STA EQ	Q. 496	+56.48 BK = 490	6+63.00 AH							_	
496+63.00		498+48.77	RT SHOULDER	61.9	61.9						
484+39.88	+	484+99.88	BOTH LANES			90.0	200.0	19.6			PAVEMENT WIDTH 30 FT
496+56.24		496+56.48	BOTH LANES			0.4	0.8	0.1		-	
	Q. 496	+56.48 BK = 490	6+63.00 AH	-							PAVEMENT WIDTH 30 FT
496+63.00		497+22.76	BOTH LANES			89.6	199.2	19.5			PAVEMENT WIDTH 30 FT
484+39.88		484+99.88	LT SHOULDER							2.1	
496+56.24	+	496+56.48	LT SHOULDER			-				0.0	-
	). 496	+56.48 BK = 490								0.0	
496+63.00		497+22.76	LT SHOULDER							2.1	
484+39.88		484+99.88	RT SHOULDER							2.1	
496+56.24	+	496+56.48	RT SHOULDER							0.0	
	1496	+56.48 BK = 490								0.0	
496+63.00		497+22.76	RT SHOULDER							2.1	
404+04-02	$\Box$	404+00-00	BOTH AND						40.7		
484+94.88	+	484+99.88	BOTH LANES	_		_			16.7		
496+56.24	1400	496+56.48 +56.48 BK = 496	BOTH LANES						0.8		
496+63.00	4. 496	496+67.76	BOTH LANES						15.9	-	
.30103.00	+		20111211120	<del>-</del>			1	-	15.5		
			TOTALS	248.0	248.0	180.0	400.0	39.2	33.4	8.5	

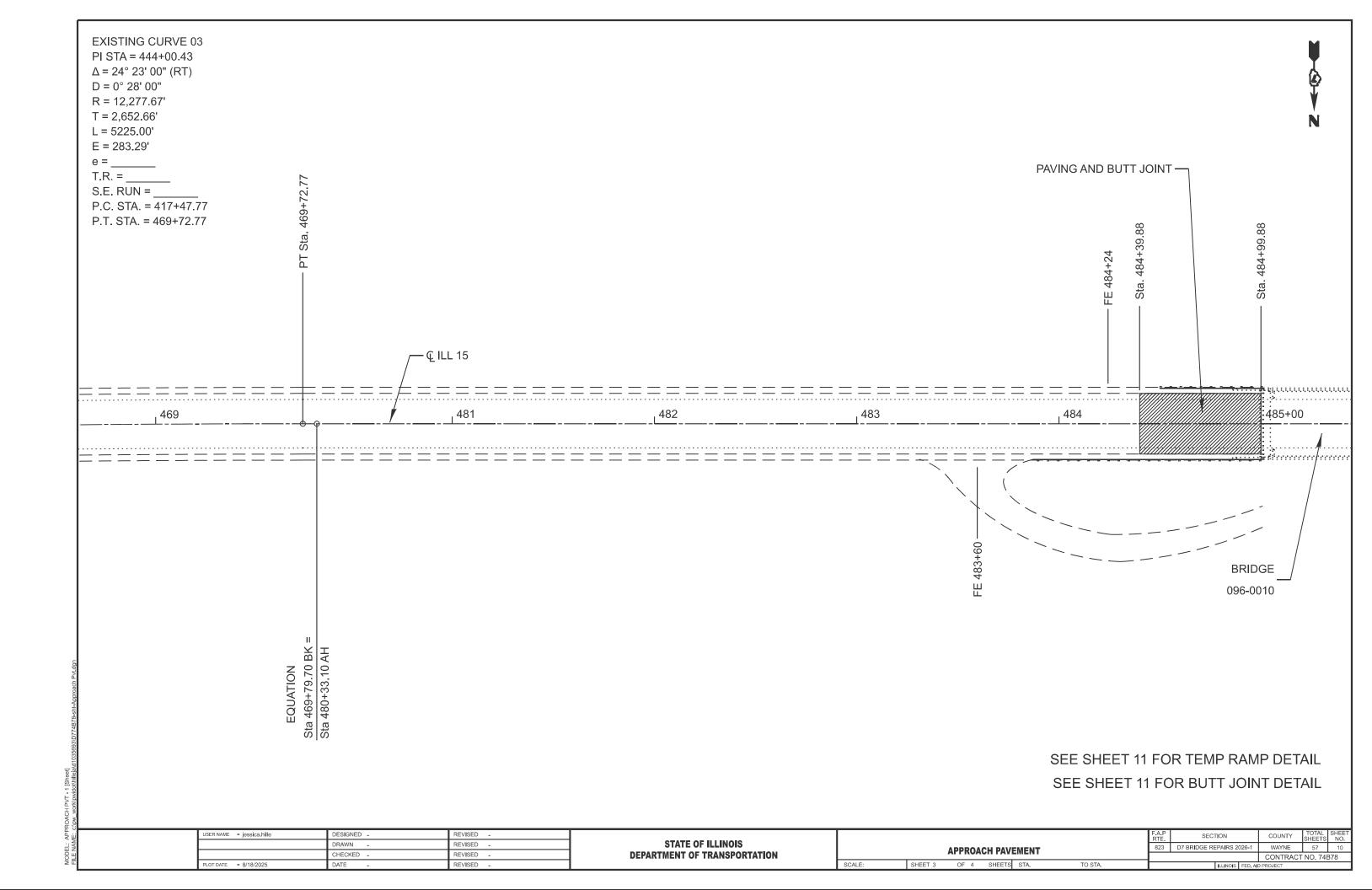
USER NAME = jessica.hille	DESIGNED -
	DRAWN -
	CHECKED -
PLOT DATE = 8/18/2025	DATE -

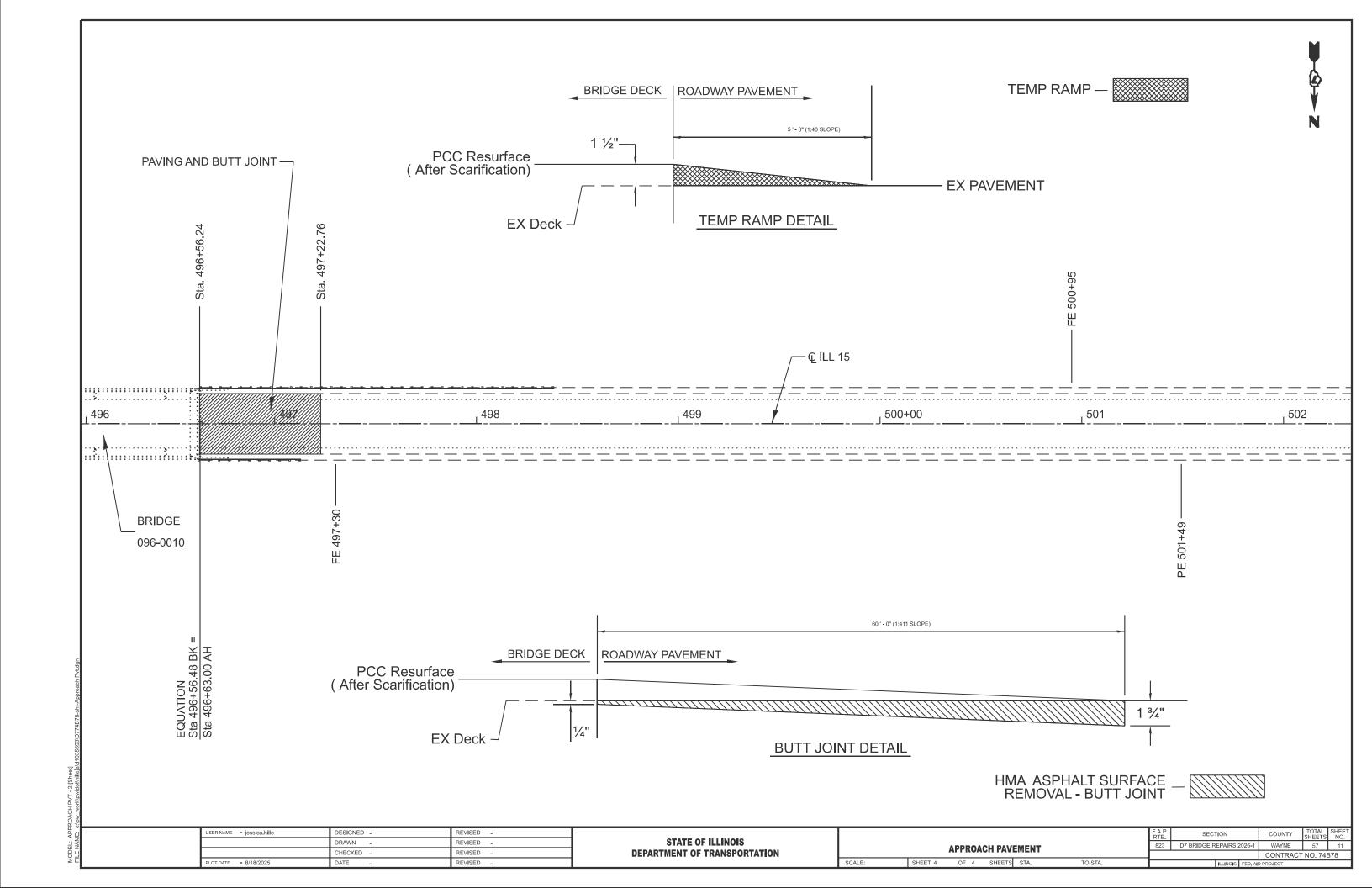
REVISED -

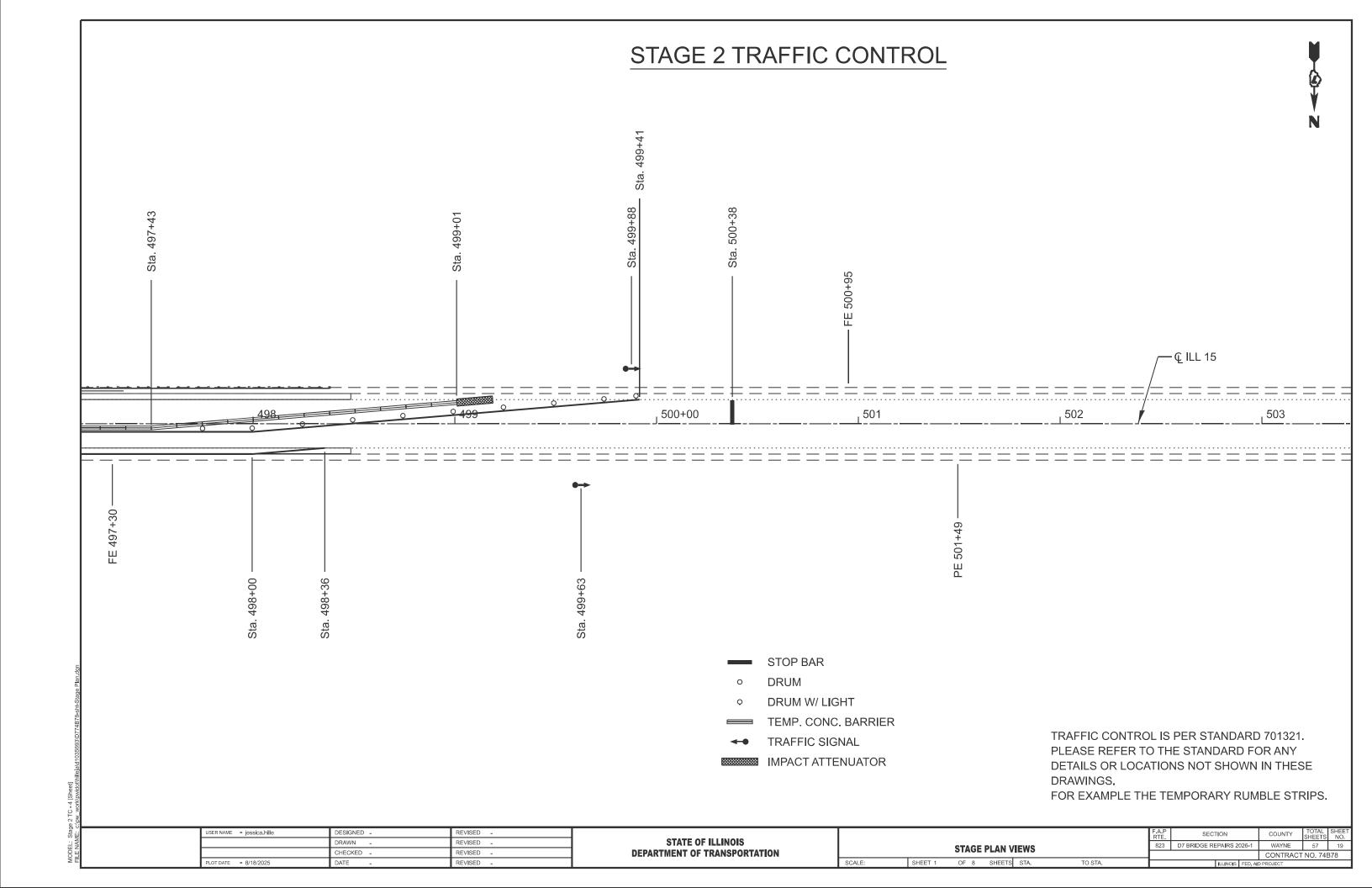
SCHEDULE OF QUANTITIES							SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
						823	D7 BRIDGE REPAIRS 2026-1	WAYNE	57	7
						$\neg$		CONTRAC	T NO. 74	378
HEET 2	OF	2	SHEETS	STA.	TO STA.		ILLINOIS FED.	AID PROJECT		

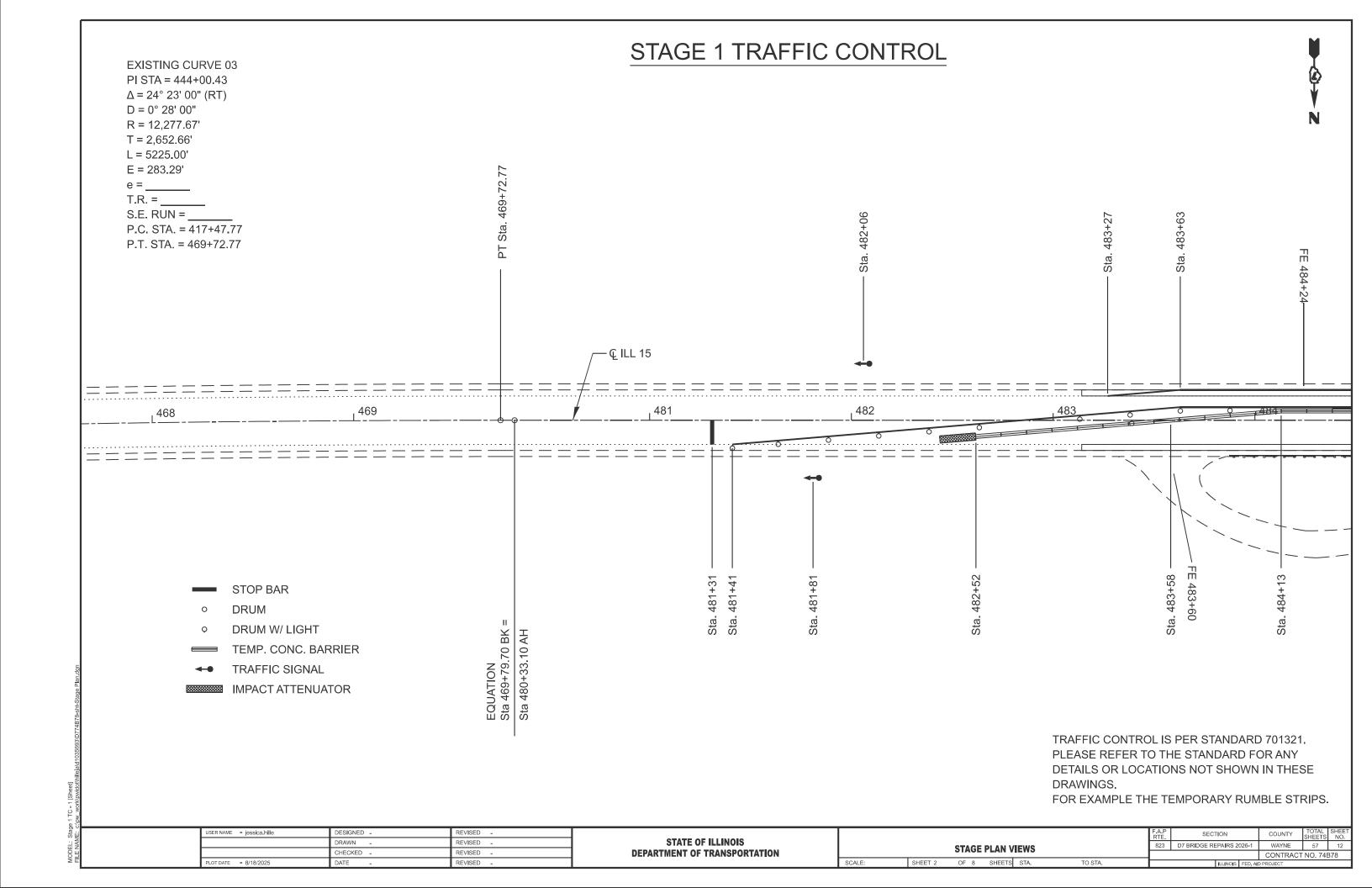


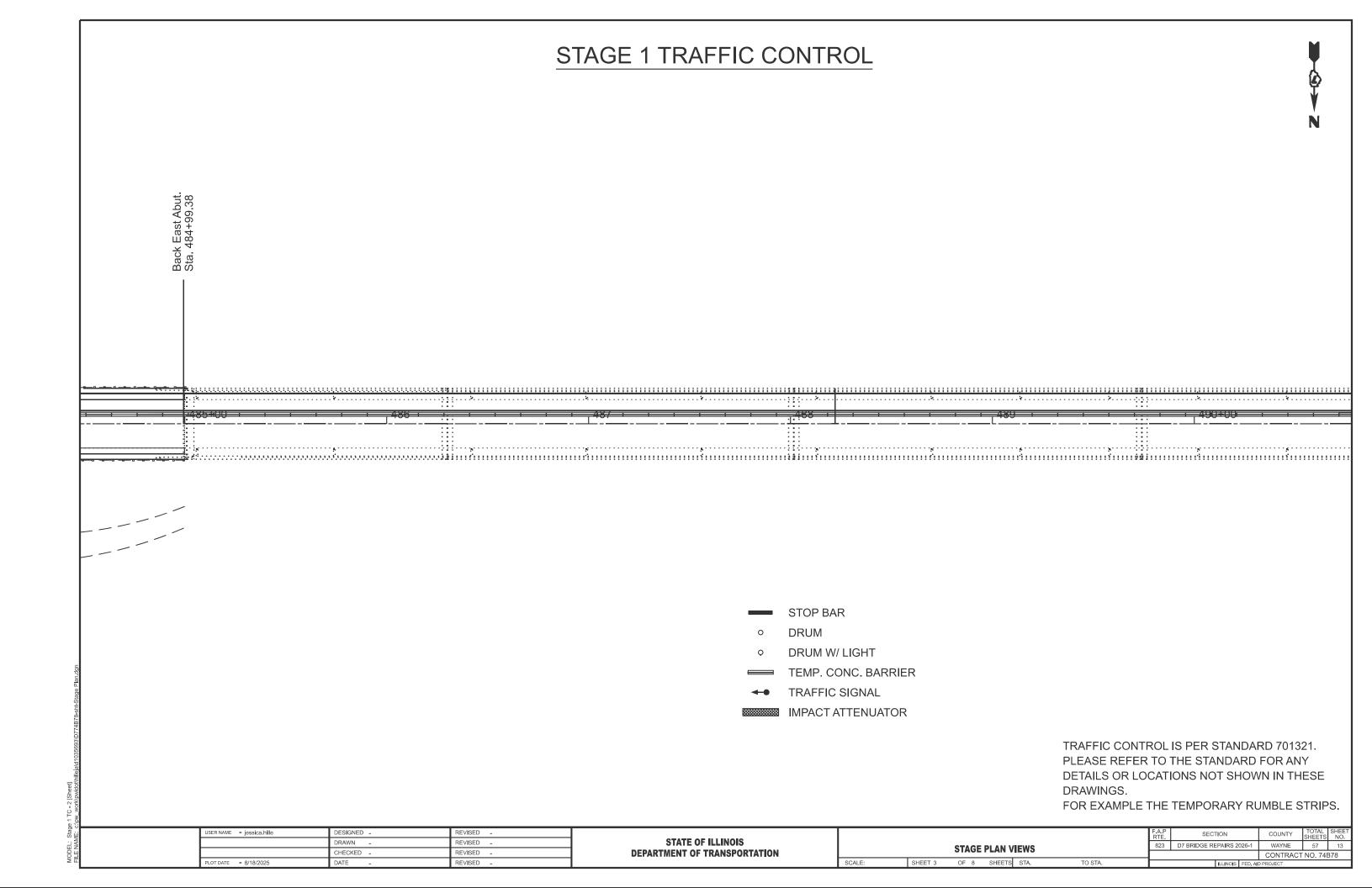


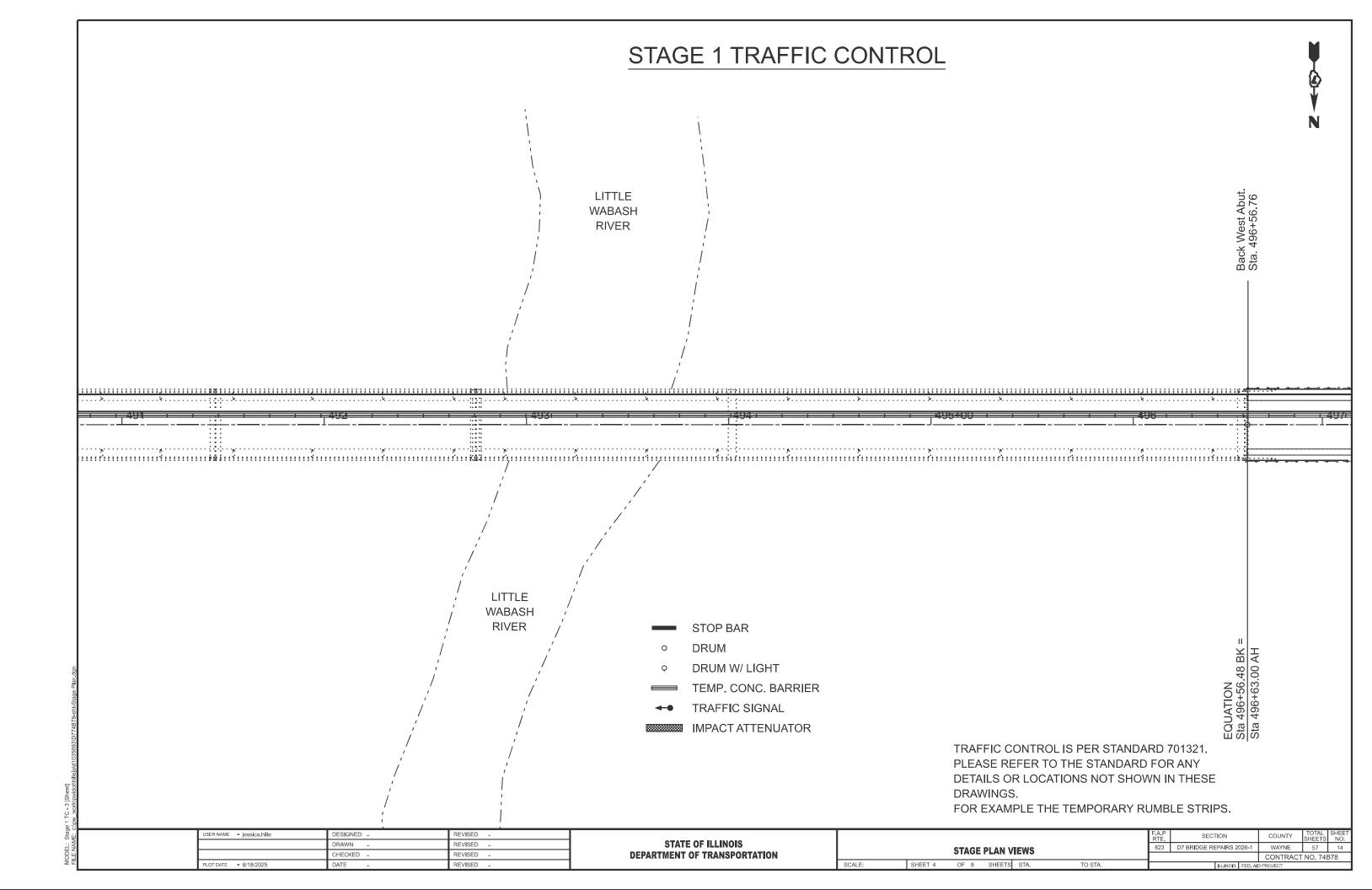


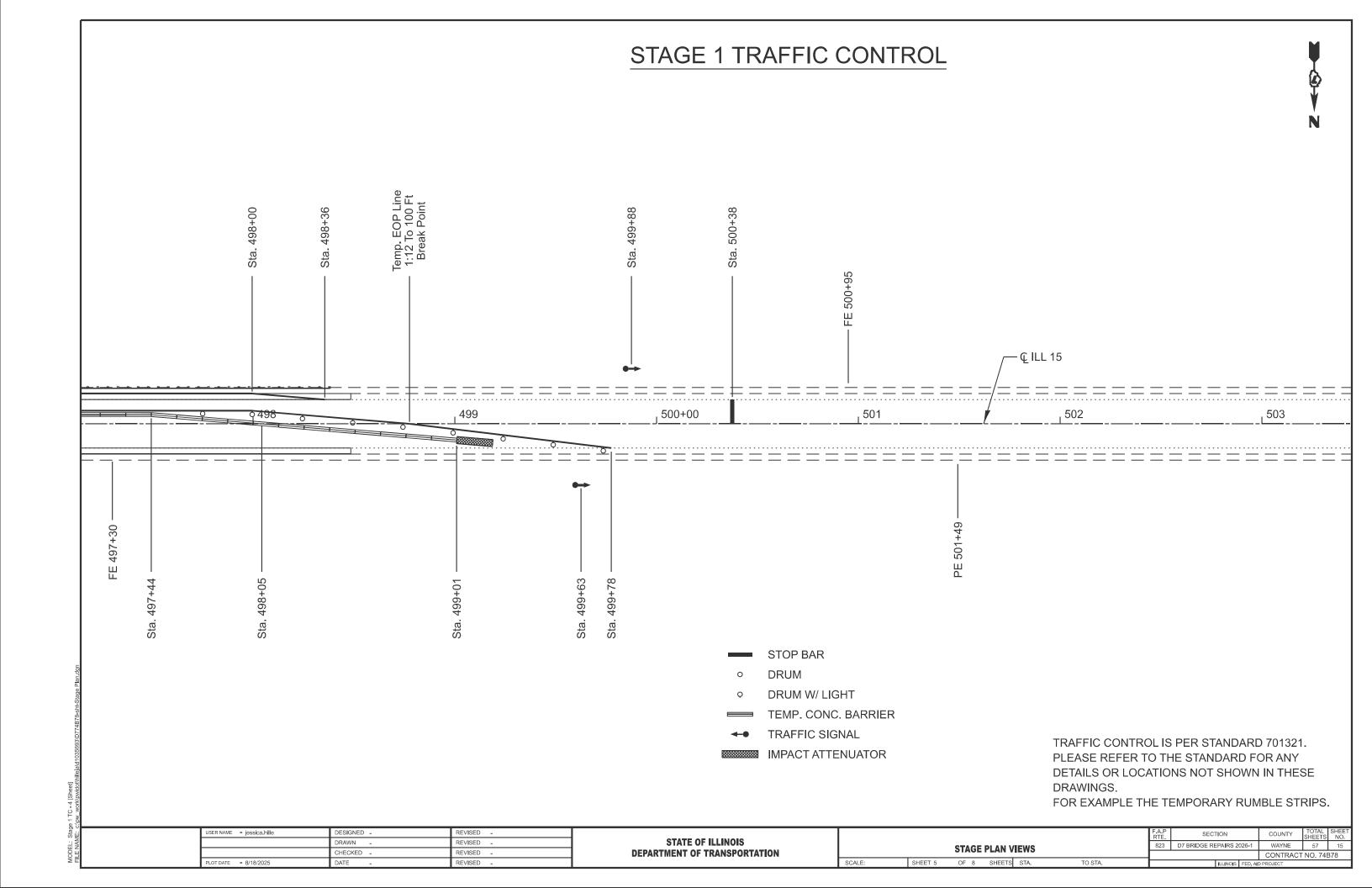


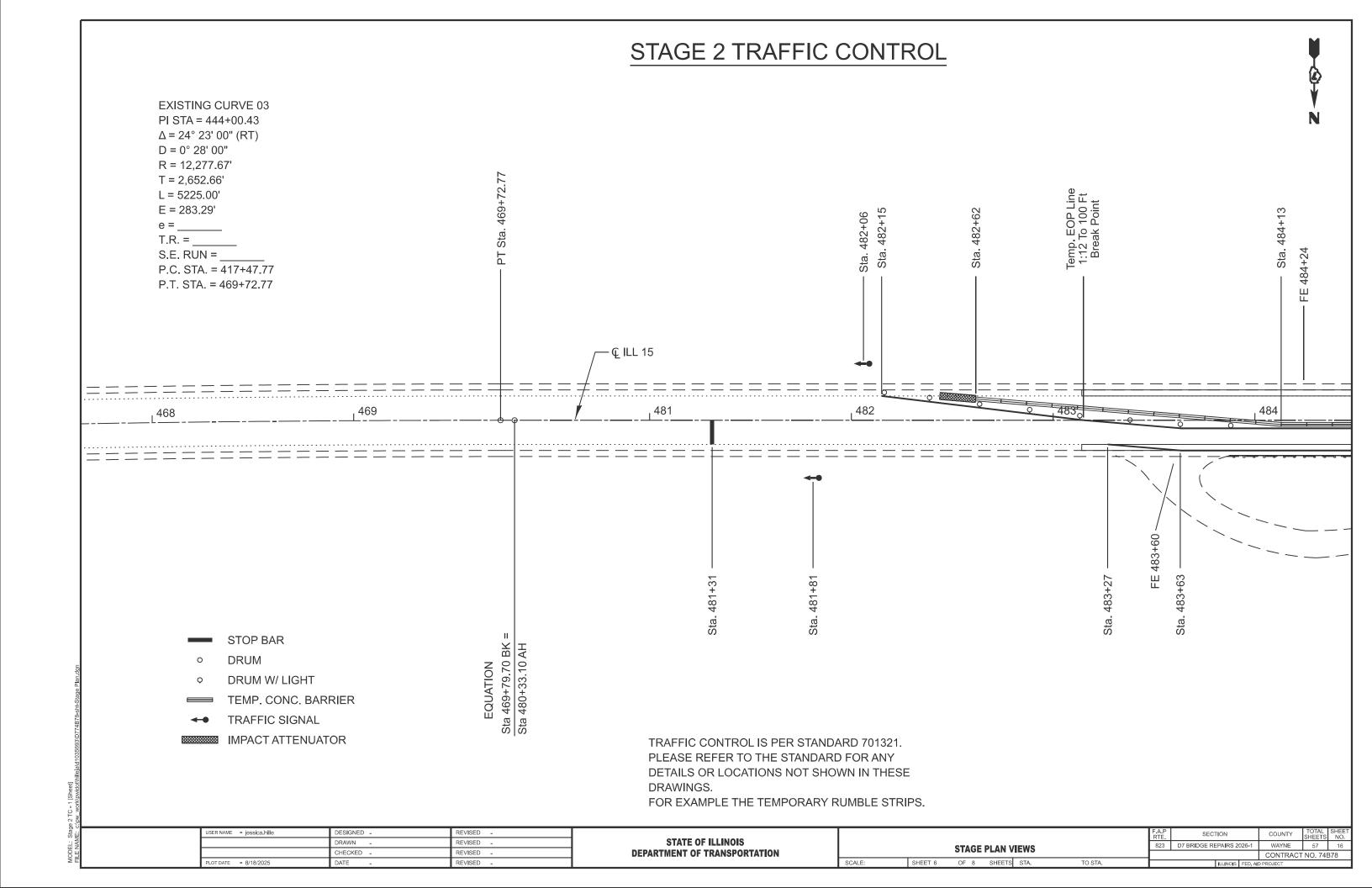


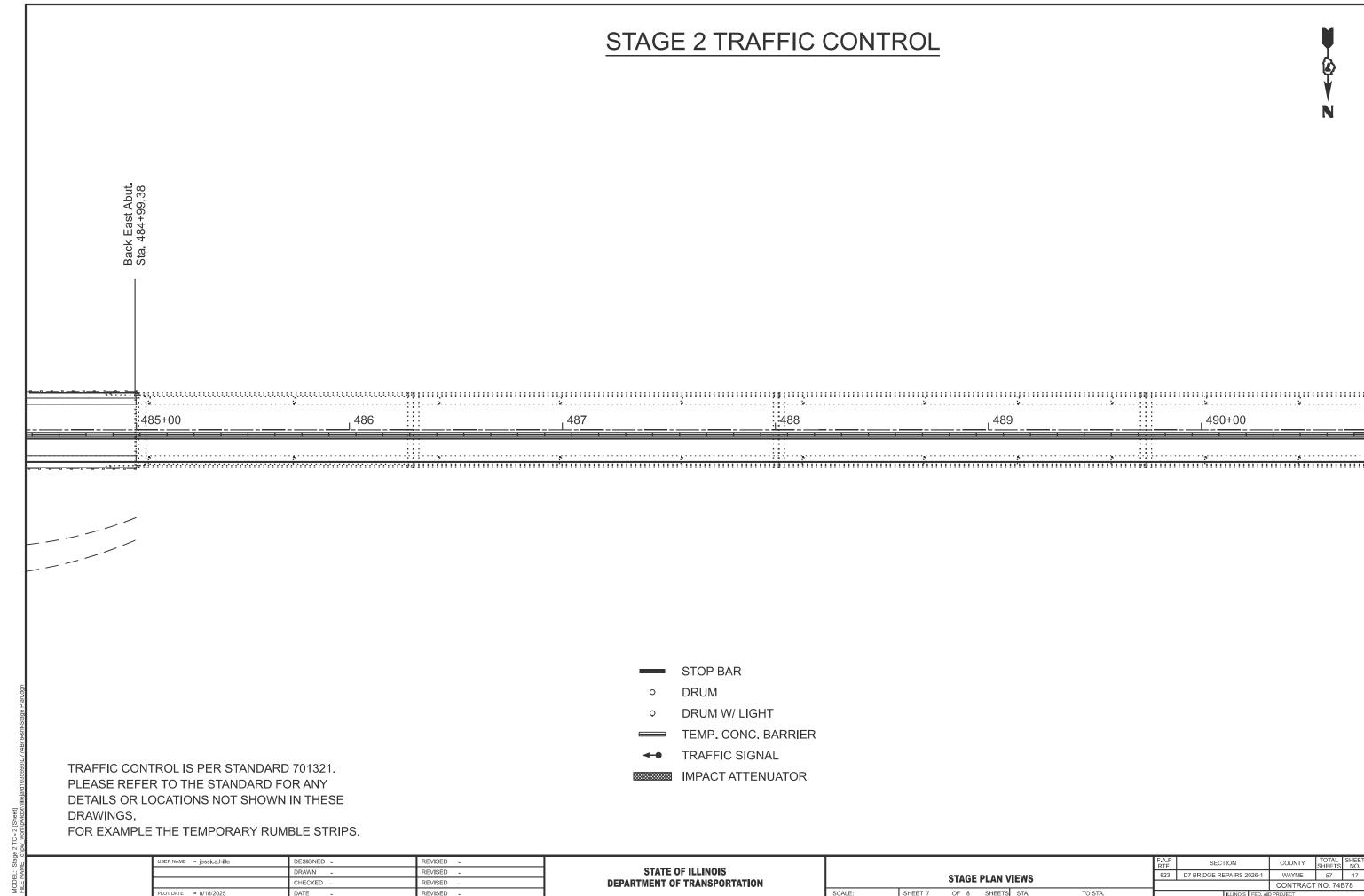




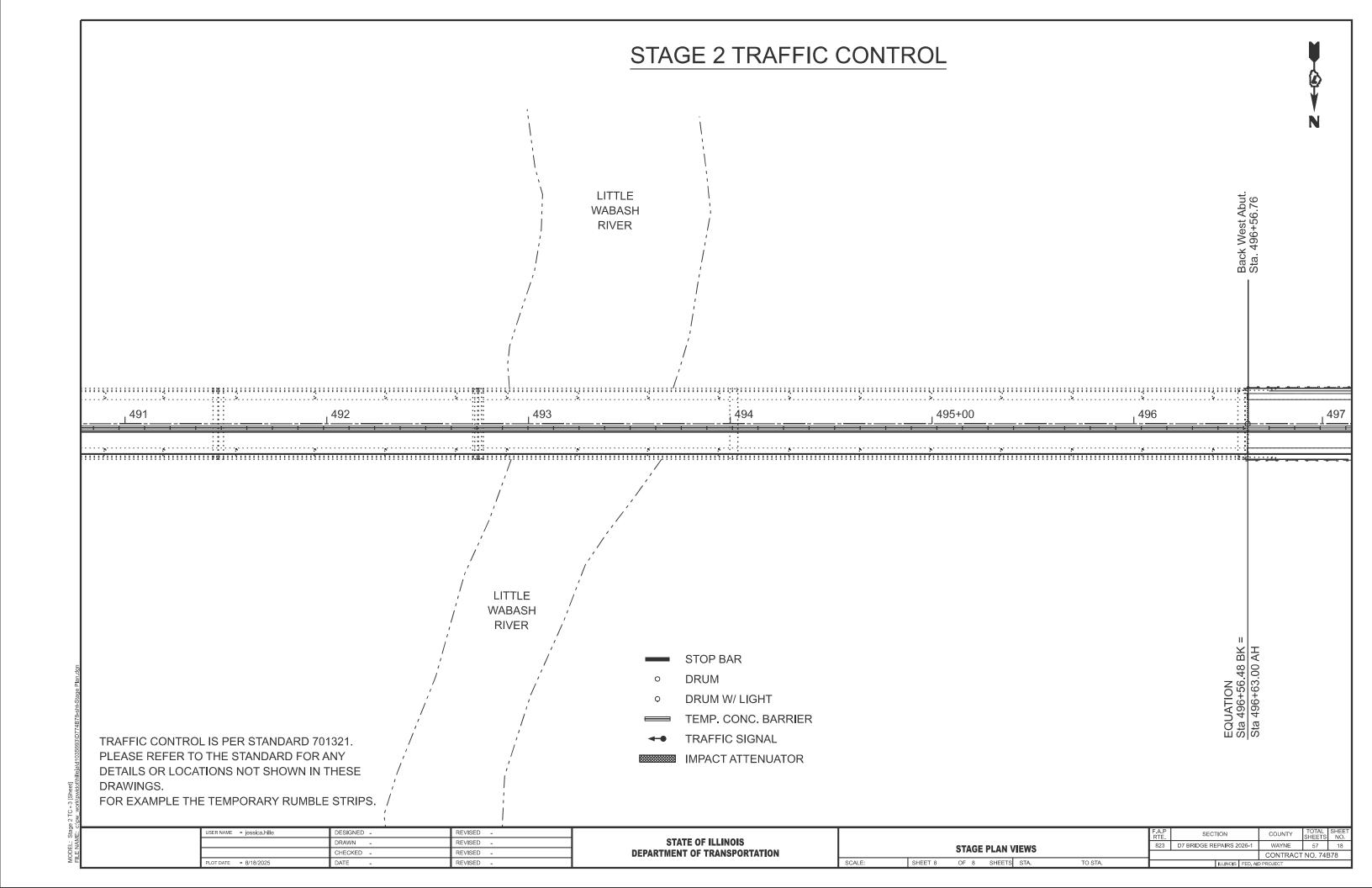








OF 8 SHEETS STA.



Structure 096-0010 carries ILL 15 over Little Wabash River. The twenty-one span was originally built in 1924 and reconstructed in 1955. In 1980, the structure was reconstructed again into its current configuration of a twenty-one span, steel multi-beam structure. The proposed project consists of replacement of the expansion joints with new strip seals, full depth deck patching, scarification, concrete overlay, pier repair, and pile encasement.



#### **DESIGN SPECIFICATIONS**

2002 AASHTO Standard Specifications for Highway Bridges

#### **DESIGN STRESSES**

**New Construction** 

f'c = 3,500 psi (Substructure Concrete)

f'c = 4,000 psi (Superstructure Concrete)

fy = 60,000 psi (Reinforcement)

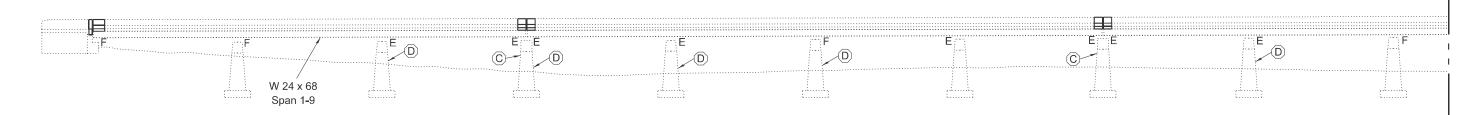
 $f_V = 36,000 \text{ psi}$ 

**Existing Construction** 

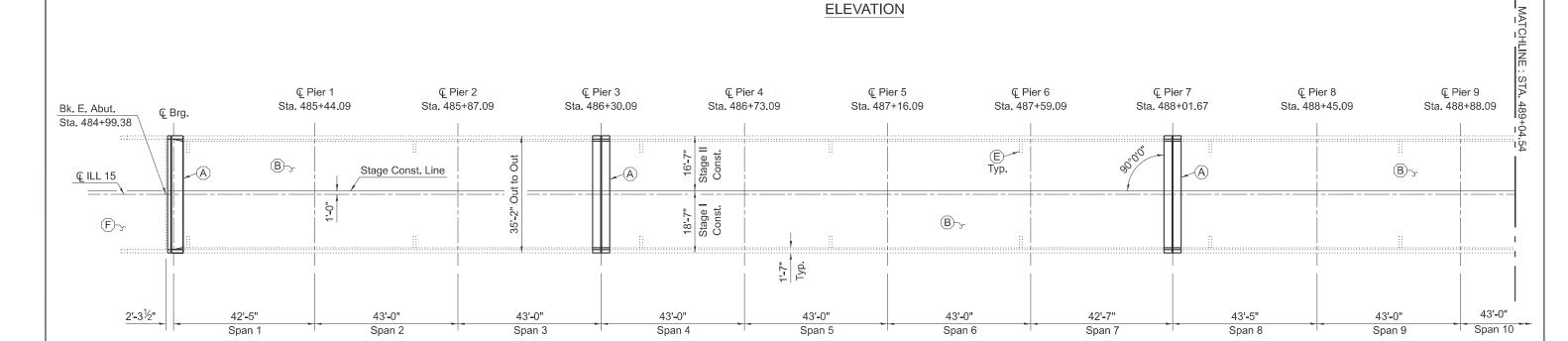
f'c = 3,500 psi

f<sub>y</sub> = 60,000 psi (Reinforcement)

 $f_y = 36,000 \text{ psi}$ 



#### **ELEVATION**



Note:

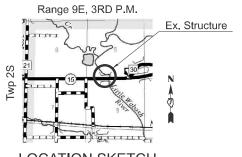
Bk. to Bk. Abutments = 1157'-4\%"



EXPIRES 11-30-2026

#### **PLAN**

- (A) Remove Existing Joint & Construct Strip Seal Expansion Joint
- (B) Bridge Deck Scarification  $^3\!4$ ", Deck Patching, Bridge Deck Fly Ash or GGBF Slag Concrete Overlay  $2^{1\!\!2}$ ", Diamond Grinding (Bridge Section), & Bridge Deck Grooving (Longitudinal)
- (C) Pier Repair
- (D) Pile Encasement
- (E) Adjust Scupper Drains
- (F) Proposed HMA Overlay (See Roadway Plans)

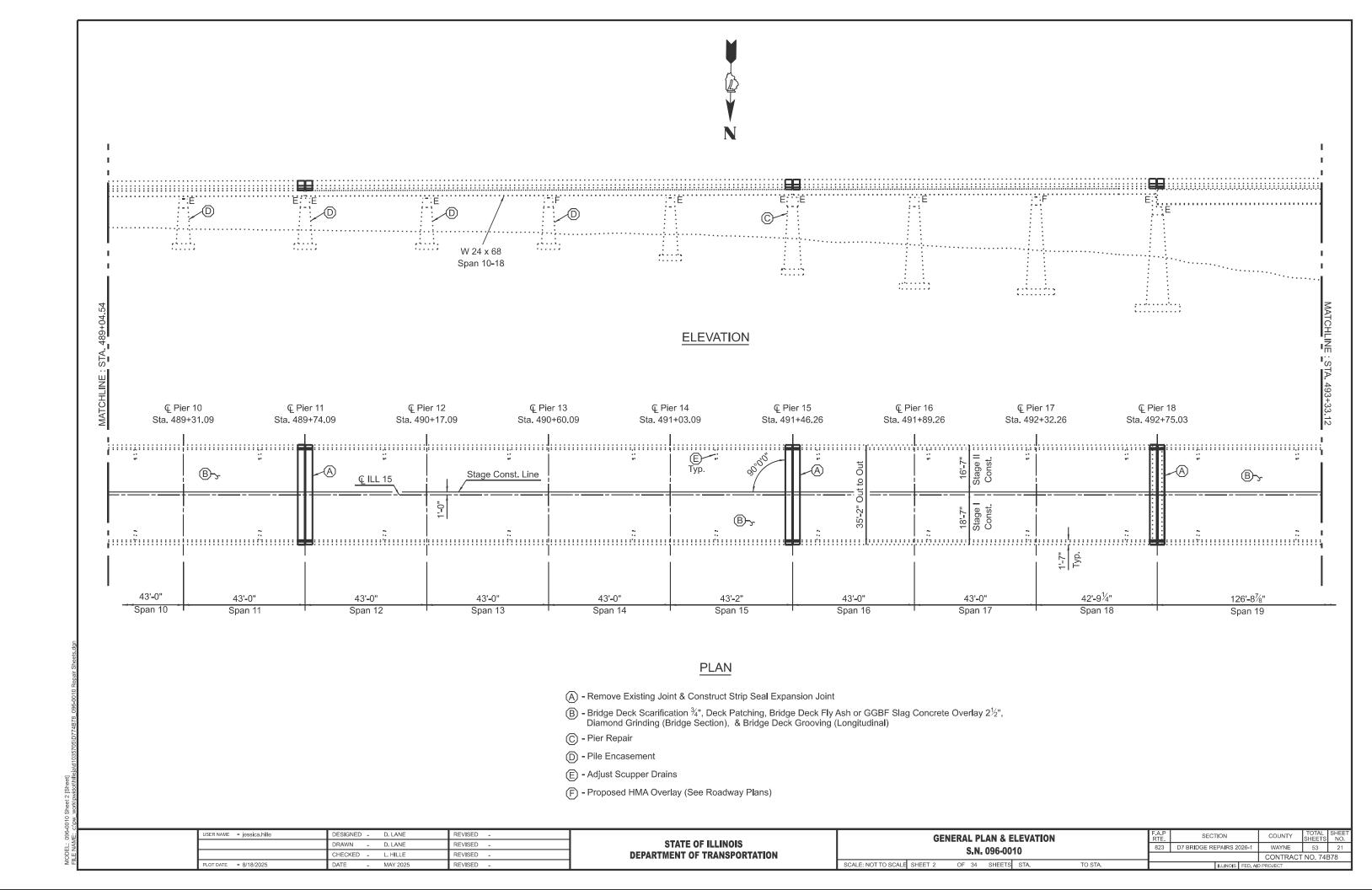


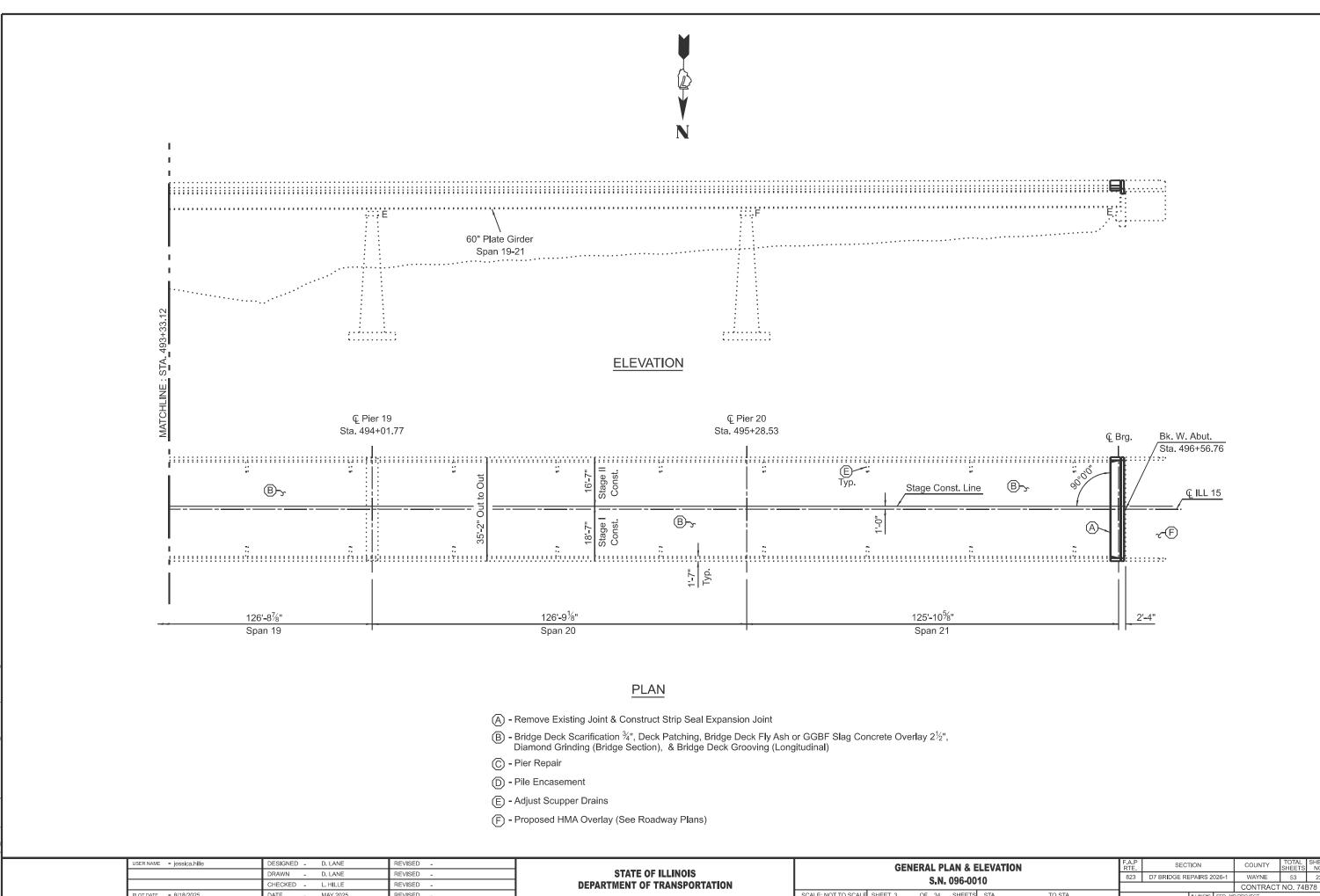
**LOCATION SKETCH** 

USER NAME = jessica.hille	DESIGNED	-	D. LANE	REVISED	-
	DRAWN	-	D. LANE	REVISED	-
	CHECKED	-	L. HILLE	REVISED	-
PLOT DATE = 8/18/2025	DATE	-	MAY 2025	REVISED	-

STATE OF ILLINOIS	
DEPARTMENT OF TRANSPORTATION	

GENERAL PLAN & E	LEVATION		F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.N. 096-00	10		823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	20
5:N: 030-00	10				CONTRACT	ΓNO. 741	B78
SCALE: NOT TO SCALE SHEET 1 OF 34 SHEETS		ILLINOIS FED.	AID PROJECT				





MODEL: 096-0010 Sheet 3 [Sheet] FILE NAME: c:\bw work\bwidot\hilleia\d1035705\D774B78 (

#### **CROSS SECTION**

Looking West (Sta. Ahead)

#### **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.

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.

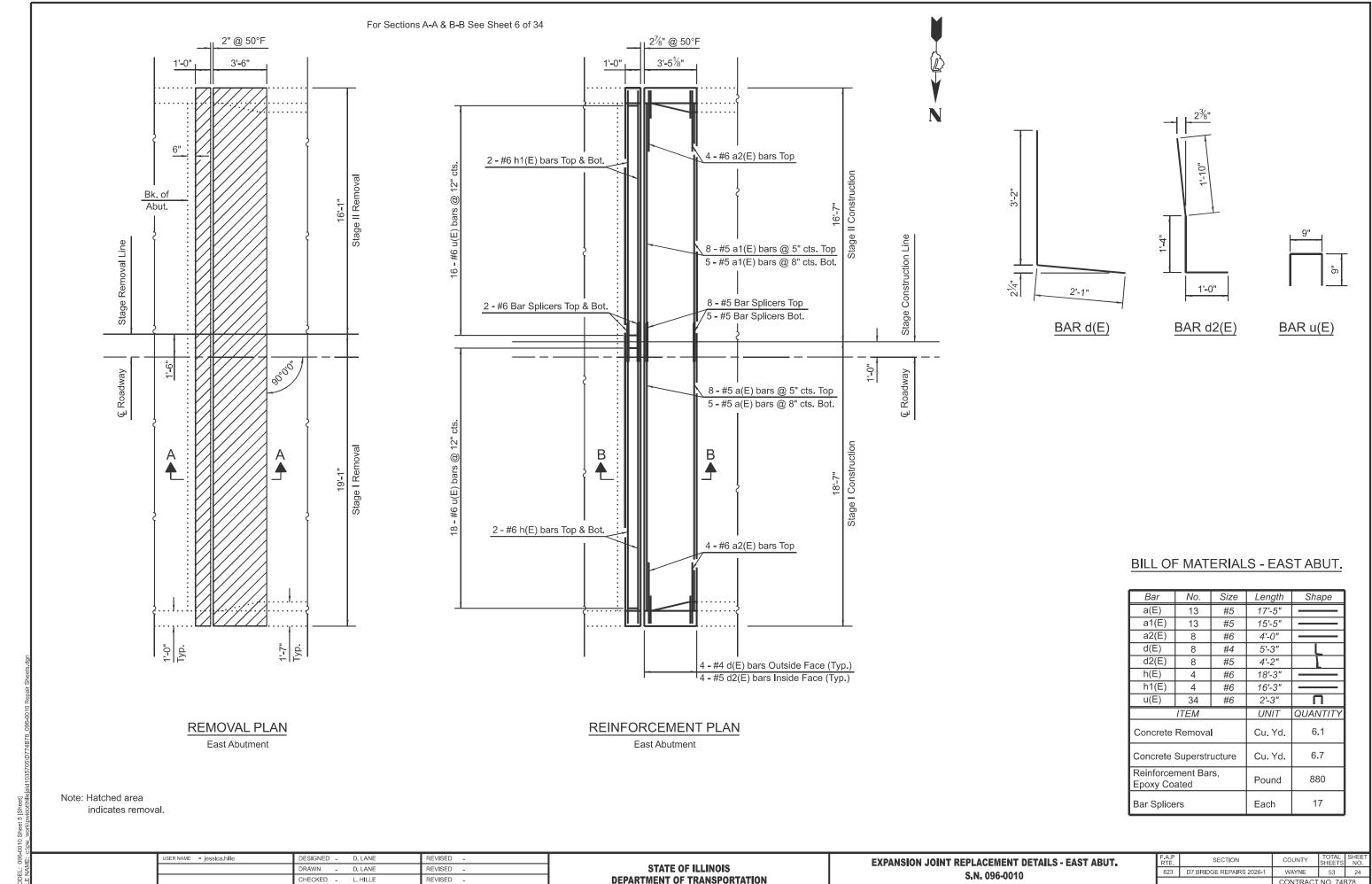
Full depth deck slab repairs performed in the exterior bays of the bridge deck (between the parapet walls and the first interior beams) shall be limited to individual lengths no greater than 10'. In these portions of the deck, repair areas longer than 10' shall be divided into segments not greater than 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 MATERIALS

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	41.2
Concrete Superstructure	Cu. Yd.	45.9
Concrete Structures	Cu. Yd.	8.6
Reinforcement Bars, Epoxy Coated	Pound	7,250
Bar Splicers	Each	134
Preformed Joint Strip Seal	Foot	241
Bridge Deck Scarification 3/4"	Sq. Yd.	3,986
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 21/2"	Sq. Yd.	3,986
Diamond Grinding (Bridge Section)	Sq. Yd.	3,598
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	3,058
Protective Coat	Sq. Yd.	4,132
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	38
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	20
Structural Repair of Concrete (Depth ≤ 5")	Sq. Ft.	84
Drainage Scuppers to be Adjusted	Each	56

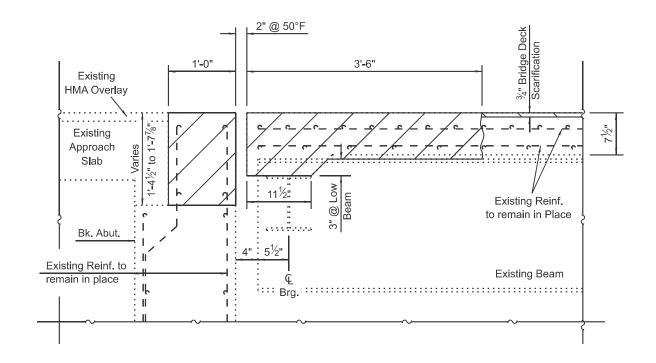
USER NAME = jessica.hille	DESIGNED	-	D. LANE	REVISED	-
	DRAWN	-	D. LANE	REVISED	-
	CHECKED	-	L. HILLE	REVISED	-
PLOT DATE = 8/18/2025	DATE	-	MAY 2025	REVISED	-

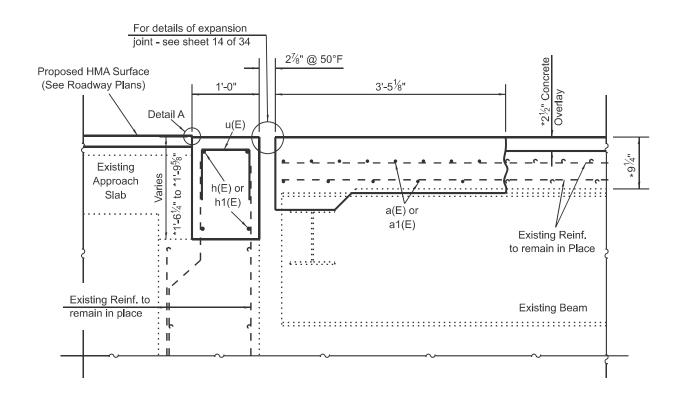
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION



PLOT DATE = 8/18/2025

S.N. 096-0010 SCALE: NOT TO SCALE SHEET 5 OF 34 SHEETS STA. TO STA. CONTRACT NO. 74B78

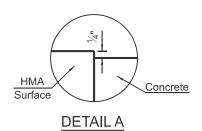




SECTION A-A

\* Thickness prior to ½" grinding (Typ.)

SECTION B-B

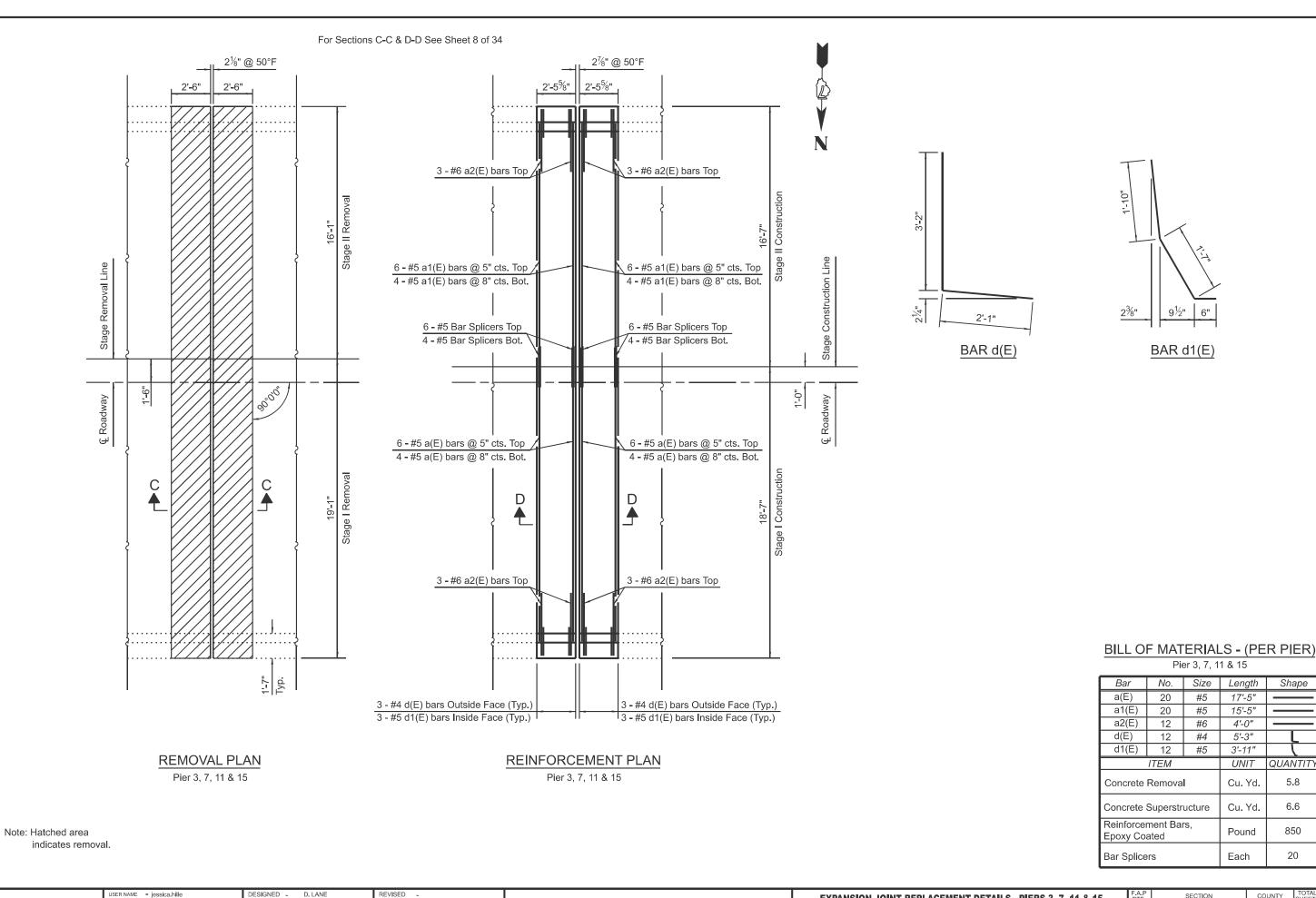


Note: Hatched area indicates removal.

				_
USER NAME = jessica.hille	DESIGNED -	D. LANE	REVISED -	Γ
	DRAWN -	D. LANE	REVISED -	
	CHECKED -	L. HILLE	REVISED -	
PLOT DATE = 8/18/2025	DATE -	MAY 2025	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

1	EXPANSION JOINT REPLACEMENT DETAILS - EAST ABUT.	F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ı	S.N. 096-0010	823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	25
ı	O[11] 030-00 TO	$\Box$		CONTRACT	NO. 74E	378
ı	SCALE: NOT TO SCALE SHEET 6 OF 34 SHEETS STA. TO STA.		ILLINOIS FED, AID PROJECT			



- D. LANE DRAWN REVISED L. HILLE REVISED PLOT DATE = 8/18/2025

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

**EXPANSION JOINT REPLACEMENT DETAILS - PIERS 3, 7, 11 & 15** S.N. 096-0010 SCALE: NOT TO SCALE SHEET 7 OF 34 SHEETS STA.

A.P TE.	SECT	ION		COUNTY	TOTAL SHEETS	SHEET NO.			
323	D7 BRIDGE REPAIRS 2026-1		WAYNE	53	26				
			CONTRACT	NO. 74	378				
	ILLINOIS EED AID PROJECT								

17'-5"

15'-5"

4'-0"

5'-3"

3'-11"

UNIT

Cu. Yd.

Cu. Yd.

Pound

Each

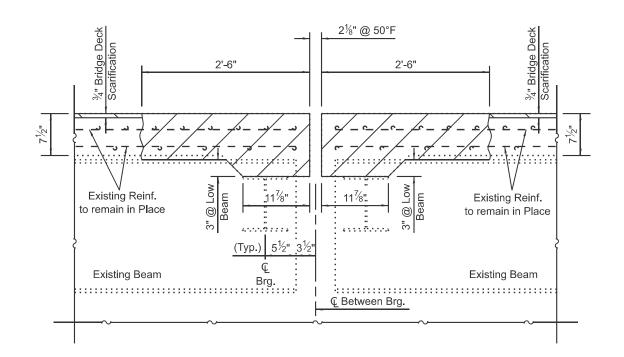
Shape

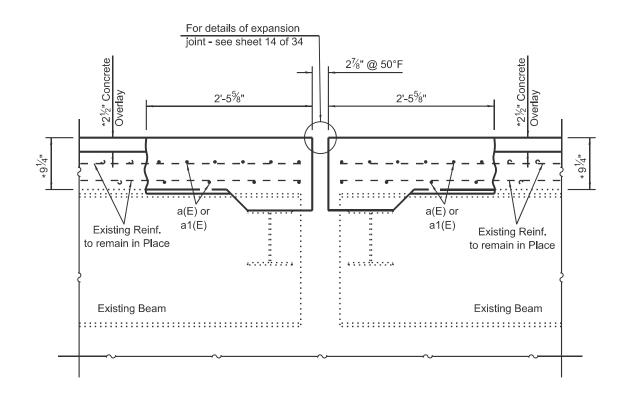
QUANTITY

5.8

6.6

850





SECTION C-C

SECTION D-D

\* Thickness prior to ½" grinding (Typ.)

Note: Hatched area indicates removal.

 USER NAME
 = jessica.hille
 DESIGNED
 D. LANE
 REVISED

 DRAWN
 D. LANE
 REVISED

 CHECKED
 L. HILLE
 REVISED

 PLOT DATE
 =
 8/18/2025
 DATE
 MAY 2025
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS - PIERS 3, 7, 11 & 15

S.N. 096-0010

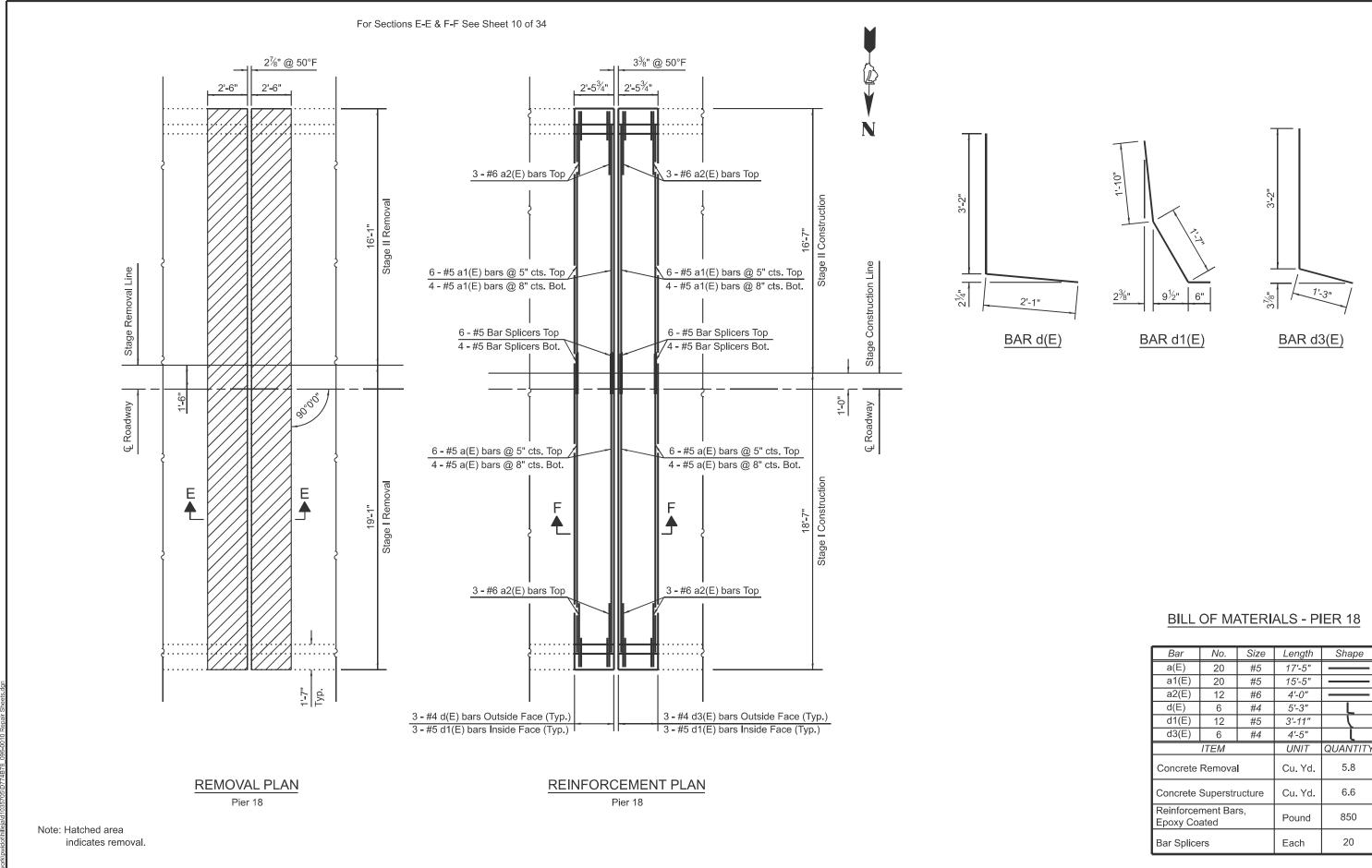
SCALE: NOT TO SCALE SHEET 8 OF 34 SHEETS STA. TO STA.

 
 F.A.P RTE.
 SECTION
 COUNTY
 TOTAL SHEETS
 NO.

 823
 D7 BRIDGE REPAIRS 2026-1
 WAYNE
 53
 27

 CONTRACT NO. 74B78

 ILLINOIS
 FED. AID PROJECT



MODEL: 096-0010 Sheet 9 [Sheet]
FILE NAMF: c:\text{low workhwidthilleia\d1035705\D774B}

 USER NAME
 # jessica.hille
 DESIGNED
 D. LANE
 REVISED

 DRAWN
 D. LANE
 REVISED

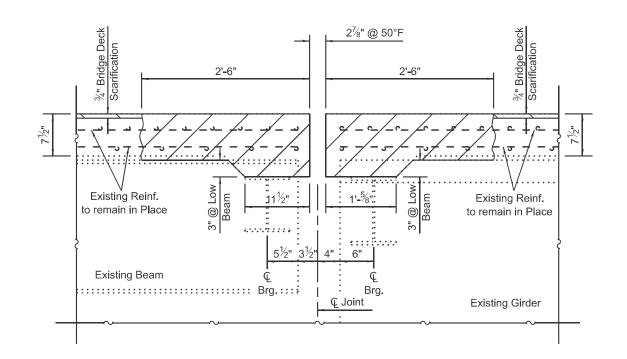
 CHECKED
 L. HILLE
 REVISED

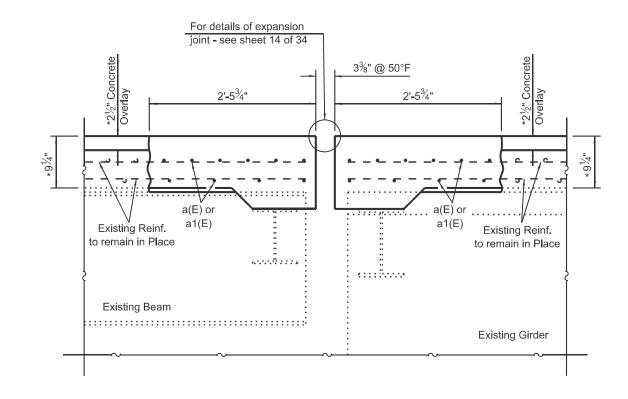
 PLOT DATE
 = 8/18/2025
 DATE
 MAY 2025
 REVISED

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS - PIER 18
S.N. 096-0010

SCALE: NOT TO SCALE SHEET 9 OF 34 SHEETS STA. TO STA.





SECTION E-E

SECTION F-F

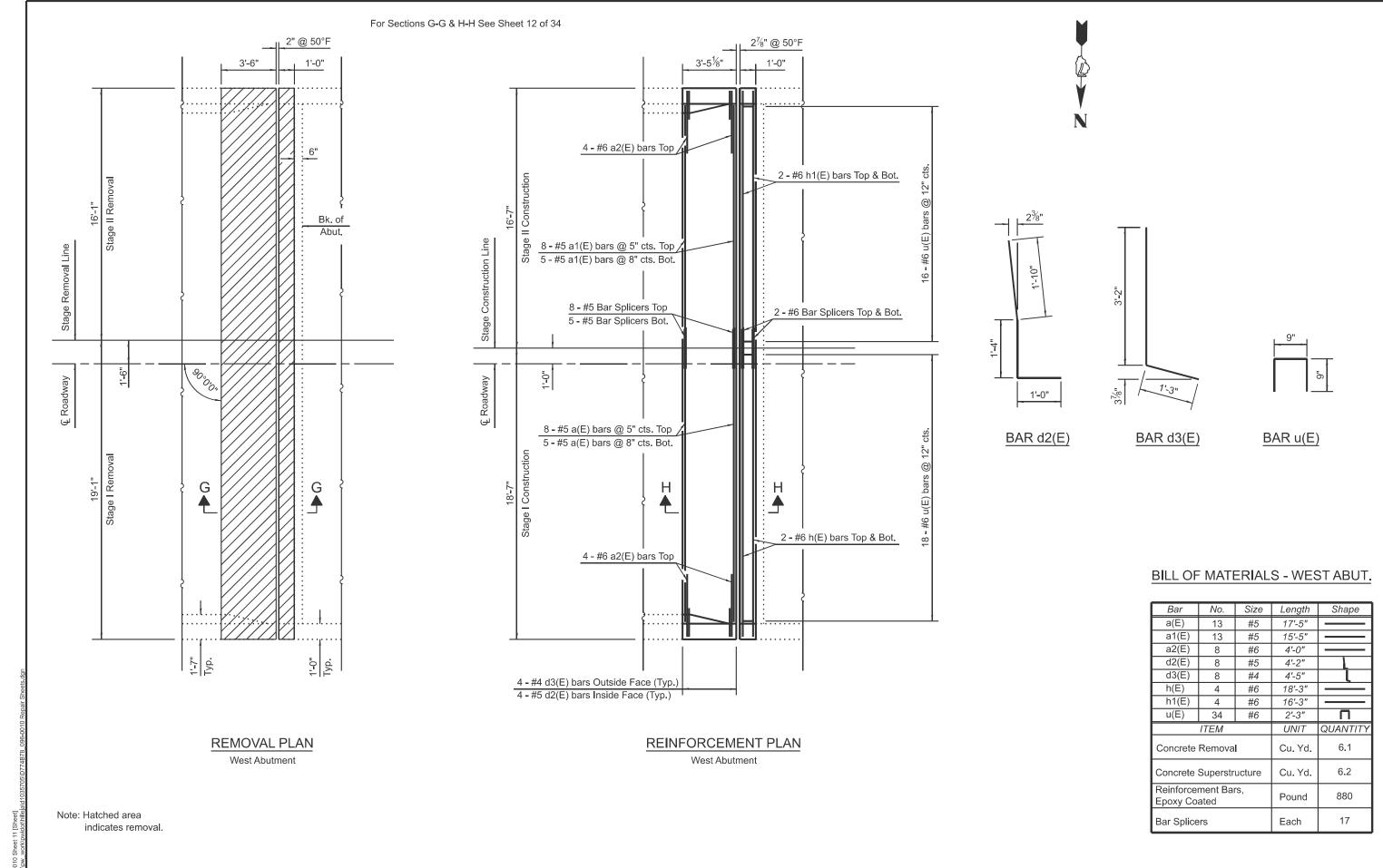
\* Thickness prior to ½" grinding (Typ.)

Note: Hatched area indicates removal.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXPANSION JOINT REPLACEMENT DETAILS - PIER 18
S.N. 096-0010

SCALE: NOT TO SCALE SHEET 10 OF 34 SHEETS STA. TO STA.



STATE OF ILLINOIS

JSER NAME = jessica.hille

PLOT DATE = 8/18/2025

DESIGNED - D. LANE

D. LANE

L. HILLE

DRAWN

CHECKED -

REVISED

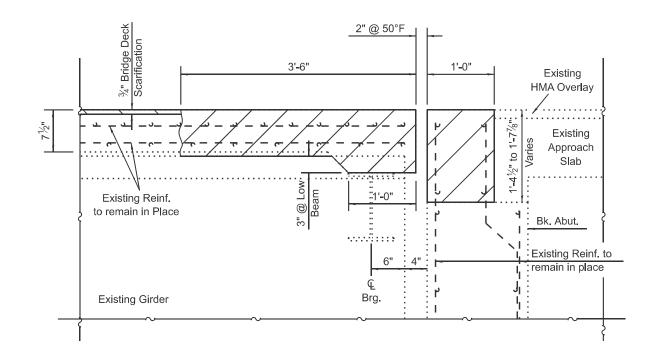
REVISED

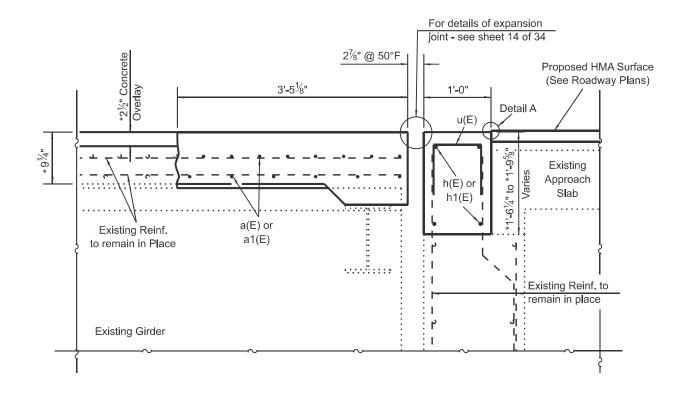
REVISED .

**DEPARTMENT OF TRANSPORTATION** 

**EXPANSION JOINT REPLACEMENT DETAILS - WEST ABUT.** S.N. 096-0010 SCALE: NOT TO SCALE SHEET 11 OF 34 SHEETS STA. TO STA.

SECTION 823 D7 BRIDGE REPAIRS 2026-1 WAYNE 53 CONTRACT NO. 74B78

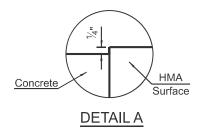




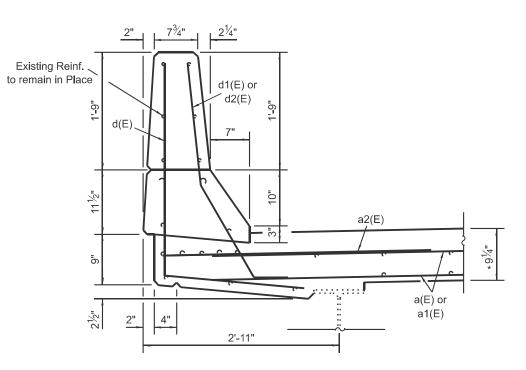
SECTION G-G

SECTION H-H

\* Thickness prior to ½" grinding (Typ.)

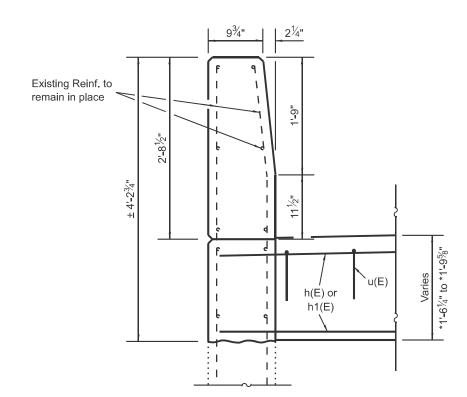


USER NAME = jessica.hille	DESIGNED - D. LANE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXPANSION JOINT REPLACEMENT DETAILS - WEST ABUT.		SECTION	COUNTY	TOTAL S	3HEET
	DRAWN - D. LANE	REVISED -			823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	31
	CHECKED - L. HILLE	REVISED -		S.N. 096-0010	┵		CONTRAC	T NO. 74B	78
PLOT DATE = 8/18/2025	DATE - MAY 2025	REVISED -		SCALE: NOT TO SCALE SHEET 12 OF 34 SHEETS STA. TO STA.		ILLINOIS FED, AI	D PROJECT		$\neg$



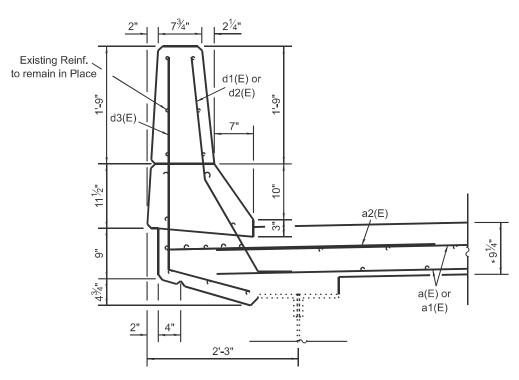
#### SECTION THRU DECK PARAPET

Spans 1 Thru 18



#### SECTION THRU APPROACH PARAPET

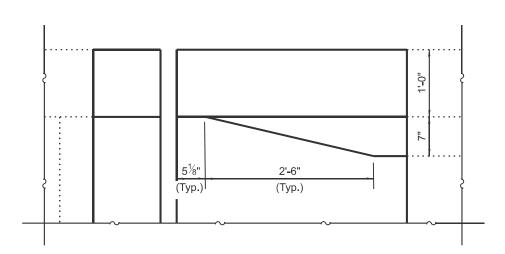
East & West Abut.



#### SECTION THRU DECK PARAPET

Spans 19 Thru 21

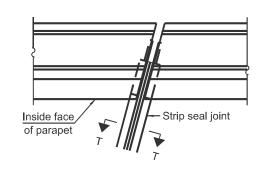
\* Thickness prior to  $\frac{1}{4}$ " grinding (Typ.)



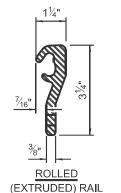
#### DECK PARAPET NOSE DETAIL

East & West Abut.

USER NAME = jessica.hille	DESIGNED - D. LANE	REVISED -		EXPANSION JOINT REPLACEMENT DETAILS - PARAPETS	F.A.P RTE	SECTION	COUNTY	TOTAL	SHEET
	DRAWN - D. LANE	REVISED -	STATE OF ILLINOIS		823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	32
	CHECKED - L. HILLE	REVISED -	DEPARTMENT OF TRANSPORTATION	S.N. 096-0010	J		CONTRACT NO. 7		78
PLOT DATE = 8/18/2025	DATE - MAY 2025	REVISED -		SCALE: NOT TO SCALE SHEET 13 OF 34 SHEETS STA. TO STA.		ILLINOIS FED AL	D PROJECT		$\neg$



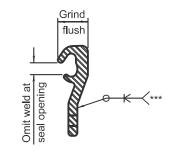
#### PLAN AT PARAPET



# WELDED RAIL

#### 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.

#### **GENERAL NOTES**

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

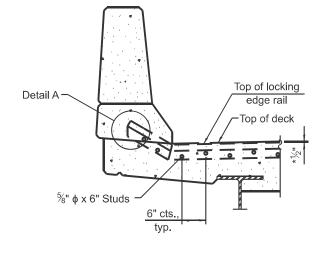
The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

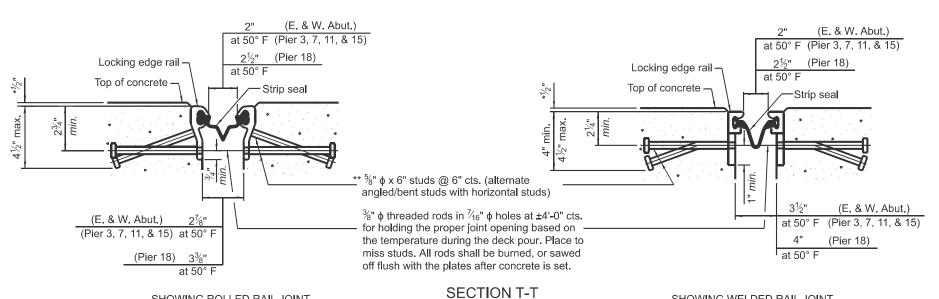
The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to 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.



#### **ELEVATION AT PARAPET**

#### **DETAIL A**

\* Thickness prior to ½" grinding (Typ.)



#### SHOWING ROLLED RAIL JOINT

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

SHOWING WELDED RAIL JOINT

#### **BILL OF MATERIAL**

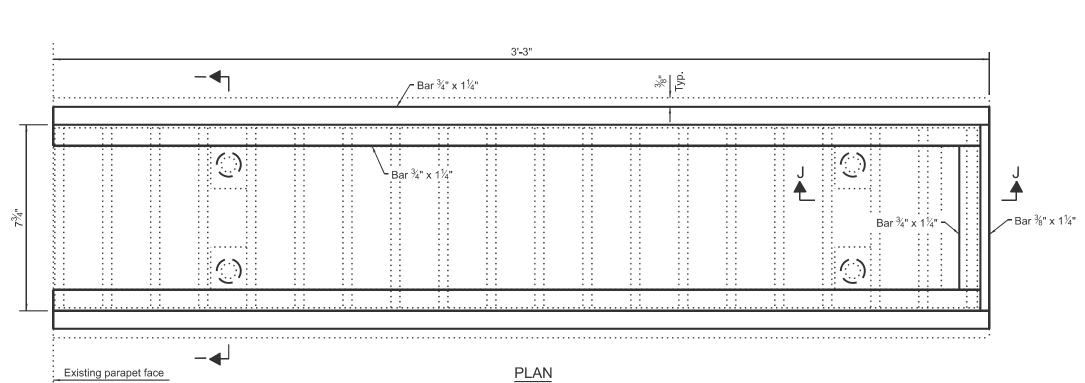
Item	Unit	Total
Preformed Joint Strip Seal	Foot	241

SER NAME = jessica.hille DESIGNED - D. LANE REVISED -DRAWN D. LANE REVISED L. HILLE REVISED PLOT DATE = 8/18/2025 MAY 2025

PREFORMED JOINT STRIP SEAL DETAILS S.N. 096-0010 SCALE: NOT TO SCALE SHEET 14 OF 34 SHEETS STA. TO STA.

SECTION COUNTY 823 D7 BRIDGE REPAIRS 2026-1 WAYNE 53 CONTRACT NO. 74B78

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 



 $\frac{1}{4}$ " grinding (Typ.)

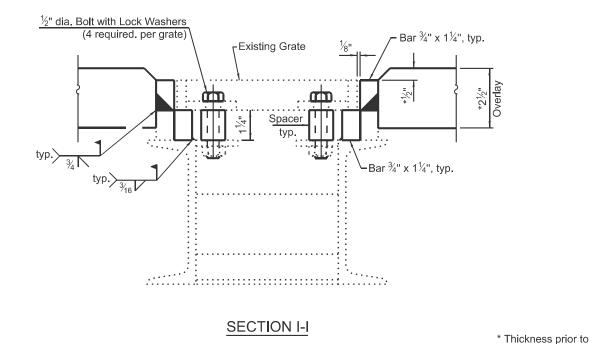
#### **GENERAL NOTES**

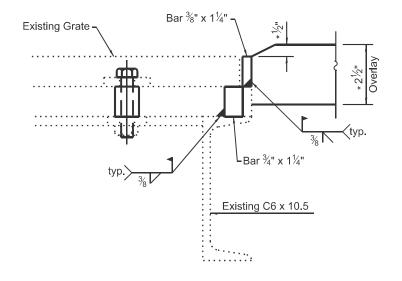
All structural steel shall conform to AASHTO Classification M-270 Gr. 36. The adjusting ring shall be galvanized according to AASHTO M111.

The contractor shall ensure no damage is done to existing grates to be reused.

Shop plans for proposed adjusting ring shall be submitted for approval prior to fabrication.

Cost of all labor and materials necessary to remove existing grates, clean existing scuppers, install adjusting scupper rings, and reinstalling grates is included in the cost per unit each for Drainage Scupper To Be Adjusted.



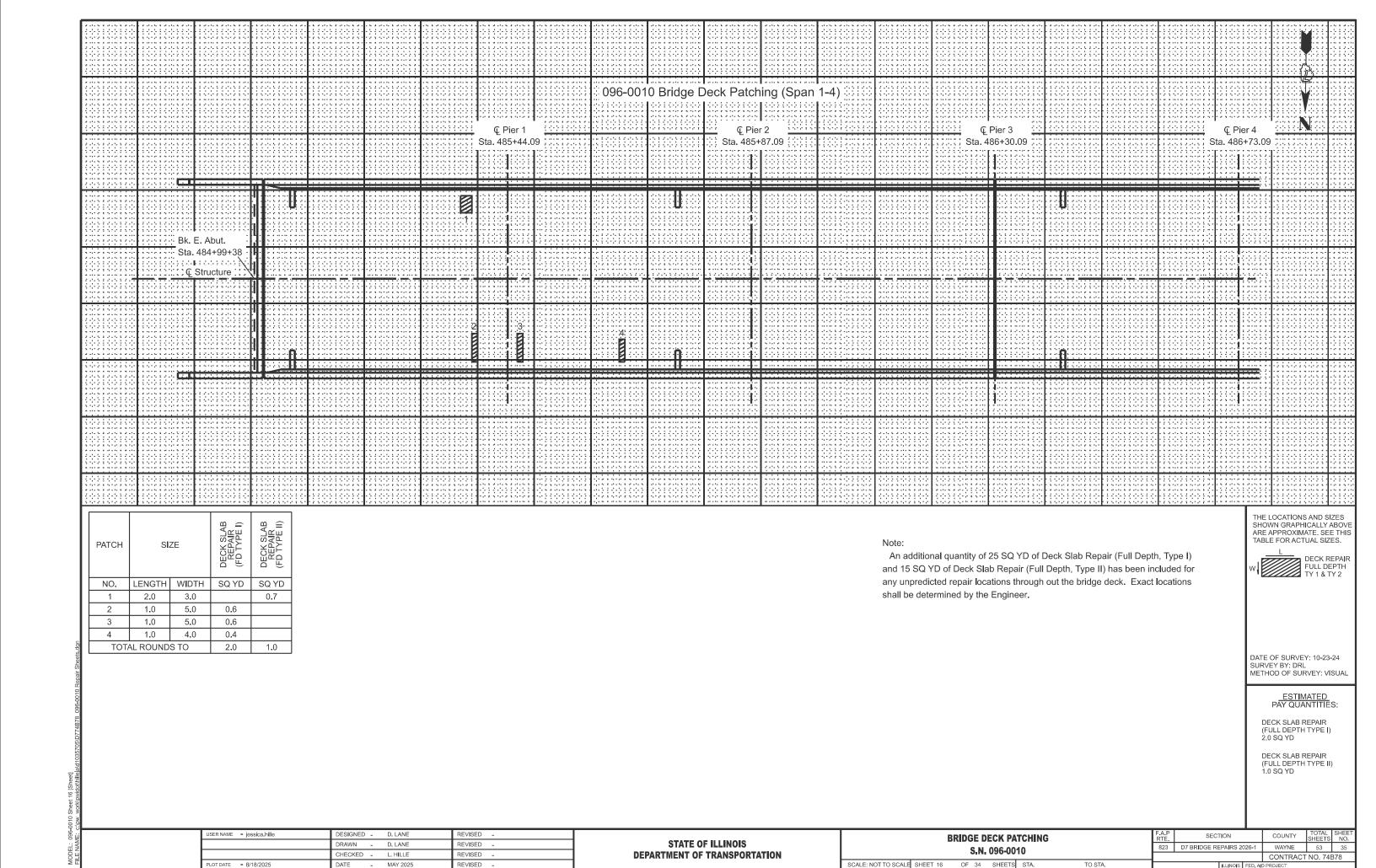


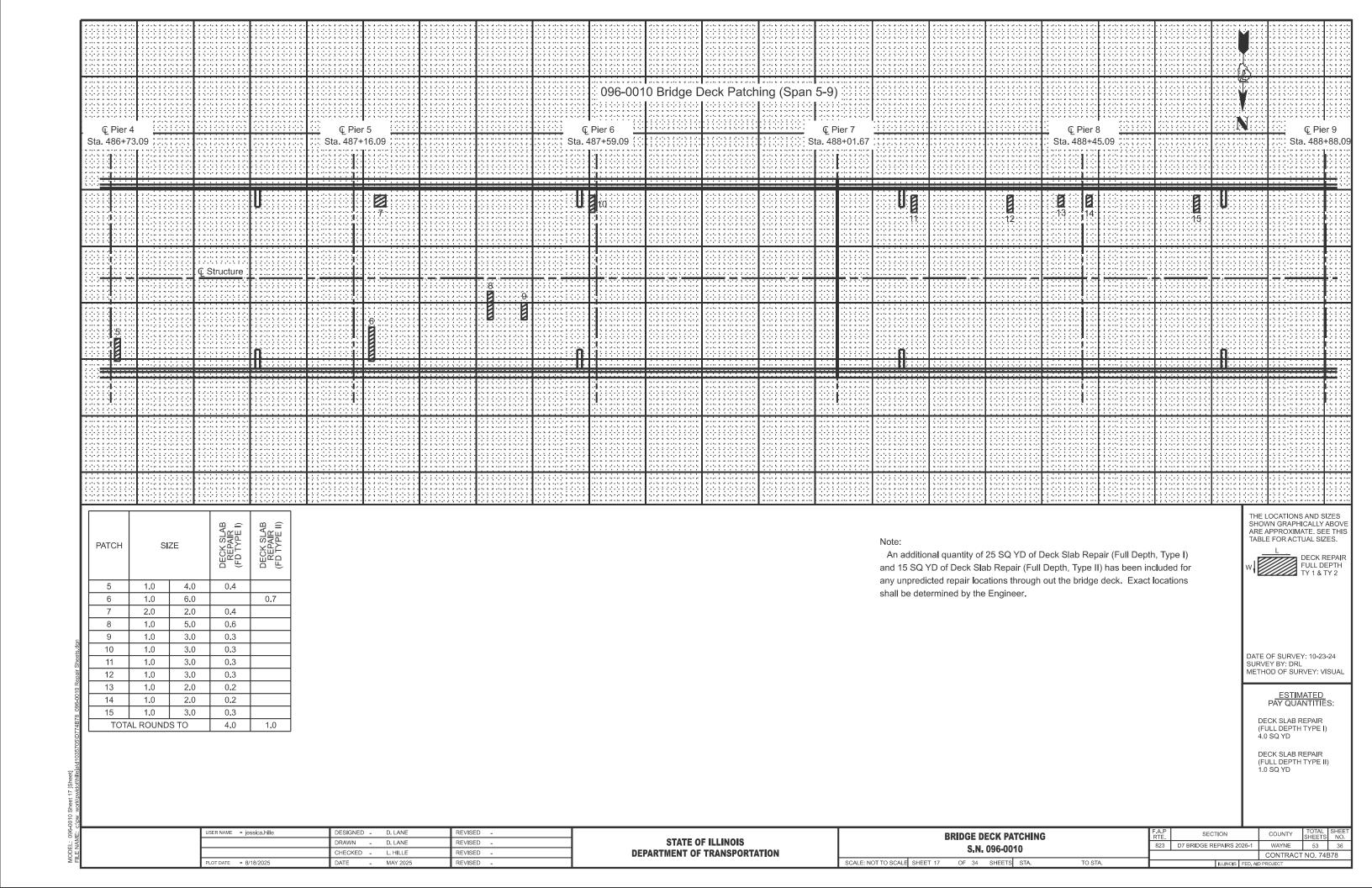
#### SECTION J-J

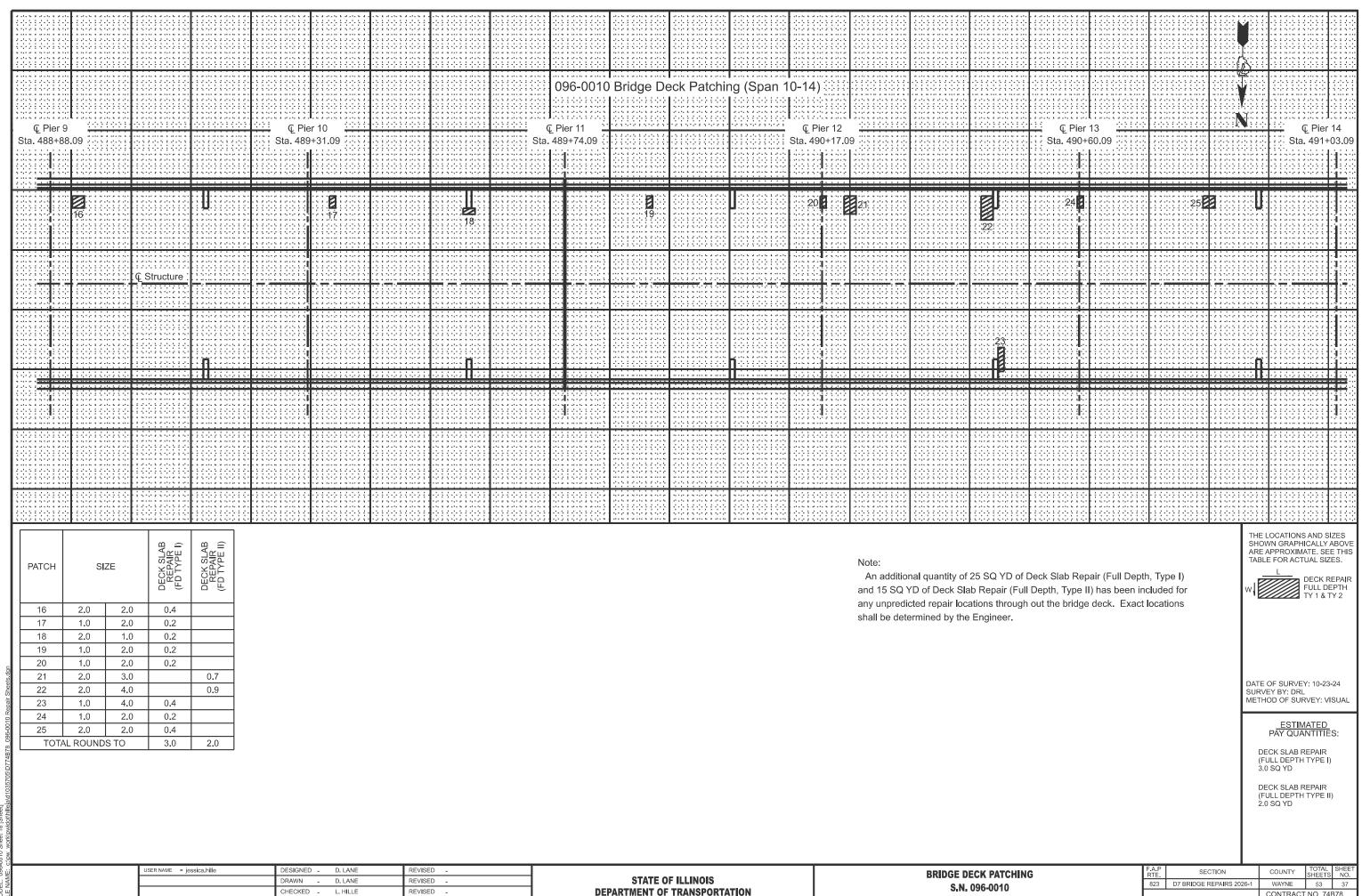
#### BILL OF MATERIAL

Item	Unit	Total
Drainage Scuppers To Be Adjusted	Each	56

USER NAME = jessica.hille	DESIGNED - D. LANE	REVISED -		ADJUSTING EXISTING SCUPPER DRAIN	F.A.P RTE	SECTION	COUNTY	TOTAL S	SHEET
	DRAWN - D. LANE	REVISED -	STATE OF ILLINOIS S. N. ODE 0040		D7 BRIDGE REPAIRS 2026-1	WAYNE	53	34	
	CHECKED - L. HILLE	REVISED -	DEPARTMENT OF TRANSPORTATION	5.N. 096-0010			CONTRACT	NO. 74B7	78
PLOT DATE = 8/18/2025	DATE - MAY 2025	REVISED -		SCALE: NOT TO SCALE SHEET 15 OF 34 SHEETS STA. TO STA.	$\vdash$	ILLINOIS FED, AID	PROJECT		$\dashv$







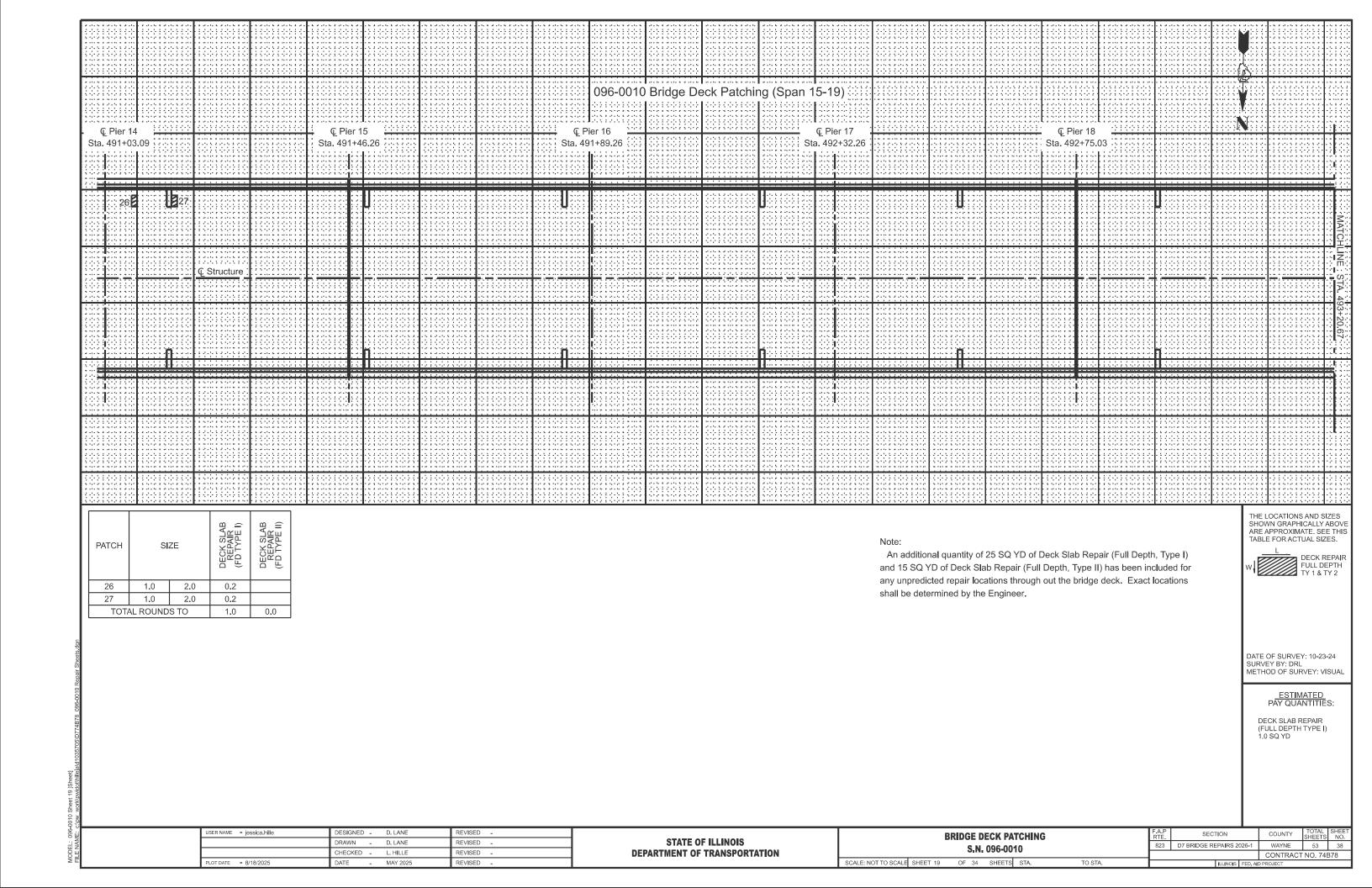
PLOT DATE = 8/18/2025

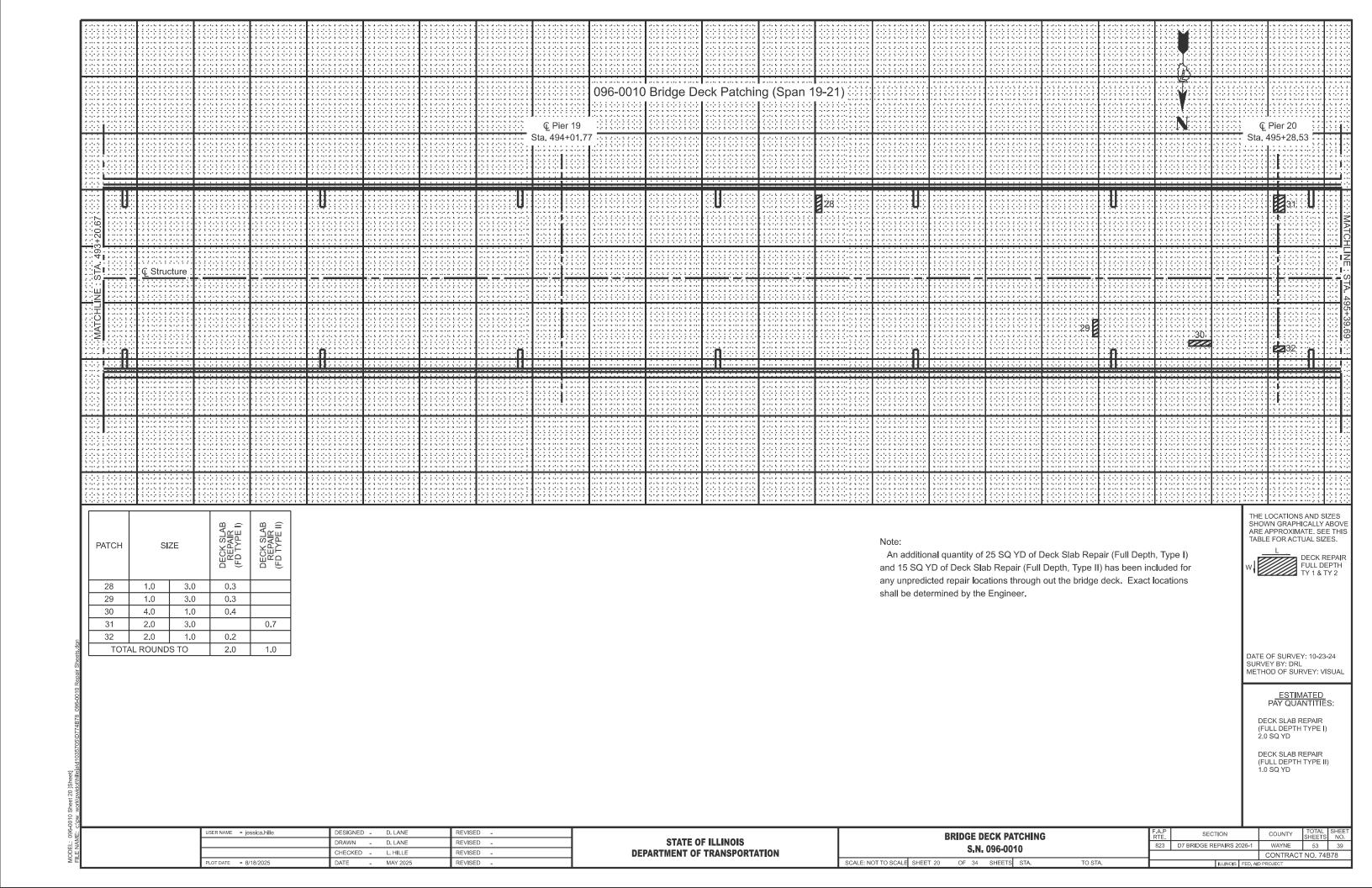
**DEPARTMENT OF TRANSPORTATION** 

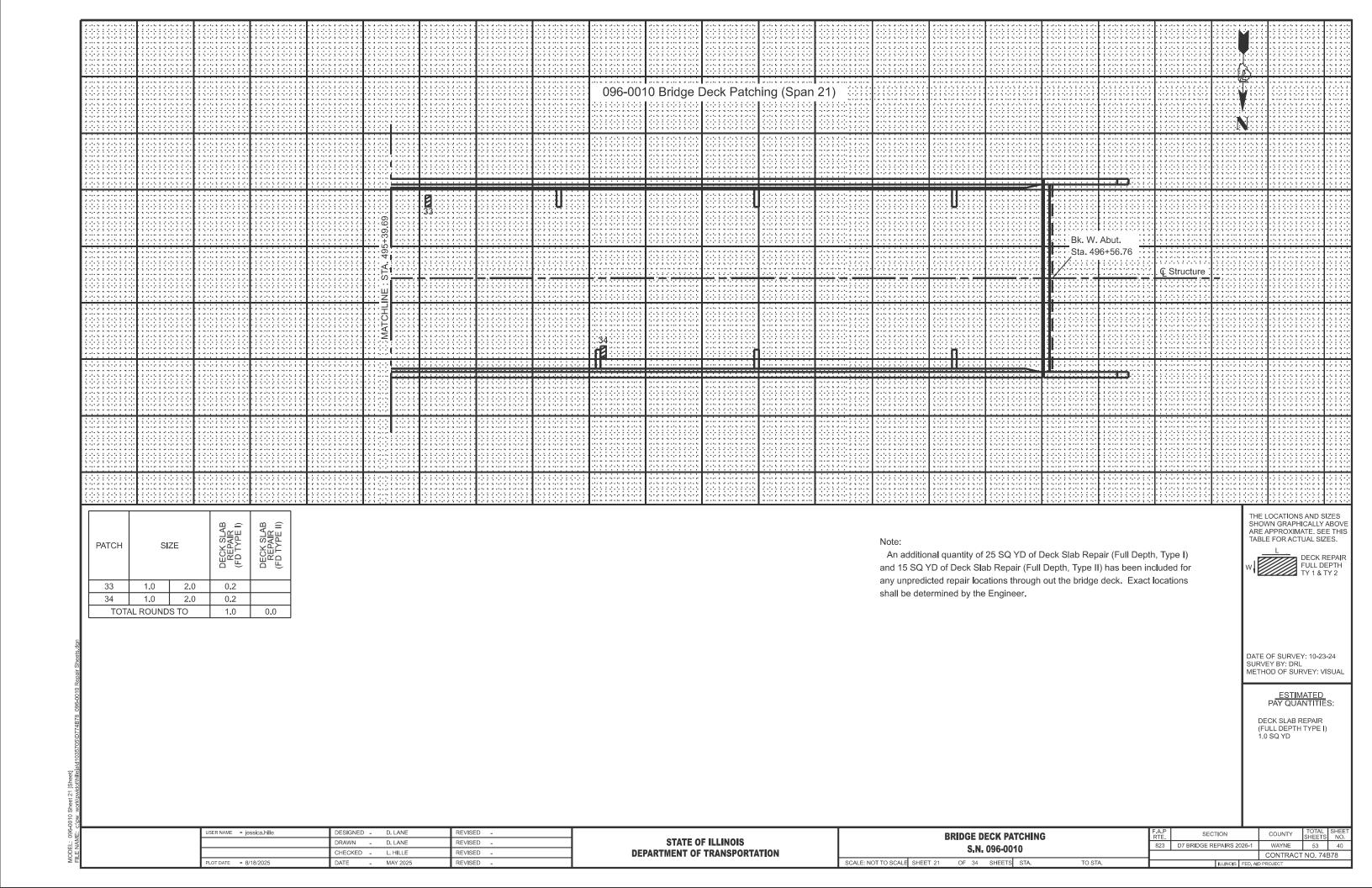
S.N. 096-0010 SCALE: NOT TO SCALE SHEET 18 OF 34 SHEETS STA.

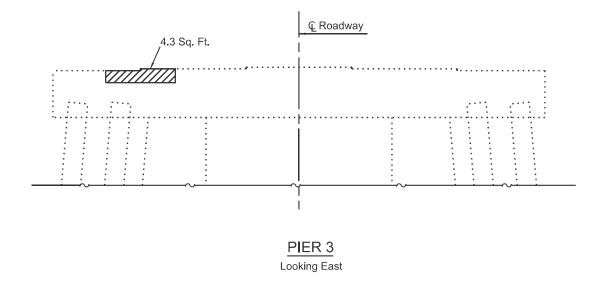
TO STA.

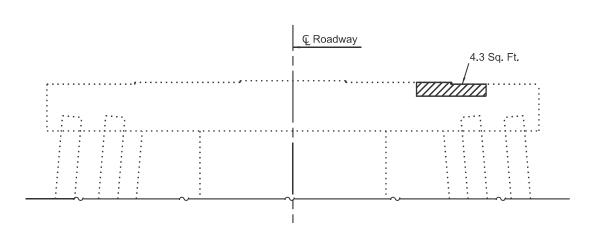
CONTRACT NO. 74B78











PIER 3 Looking West



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

Ex. Bearings

PIER 3 - PLAN VIEW

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

Do not disturb existing bearings.

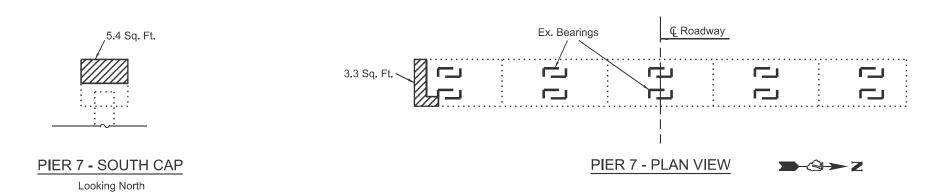
### BILL OF MATERIAL - PIER 3

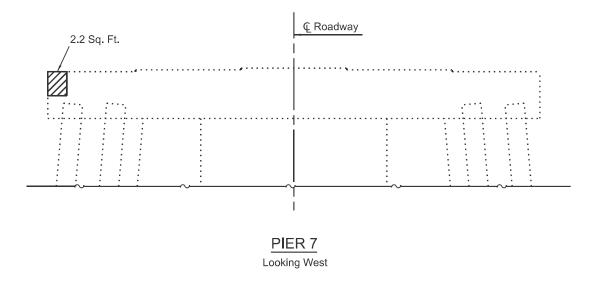
13.5 Sq. Ft.

Item	Unit	Total
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	23

Structural Repair of Concrete (Depth ≤ 5")

USER NAME = jessica.hille	DESIGNED - D. LANE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER REPAIR	F.A.P RTE.	SECTION	COUNTY	TOTAL	SHEET NO.
	DRAWN - D. LANE	REVISED -			823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	41
	CHECKED - L. HILLE	REVISED -		S.N. 096-0010			CONTRAC	T NO. 74E	378
PLOT DATE = 8/18/2025	DATE - MAY 2025	REVISED -		SCALE: NOT TO SCALE SHEET 22 OF 34 SHEETS STA. TO STA.	$\vdash$	ILLINOIS FED. AI	PROJECT		





### 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.

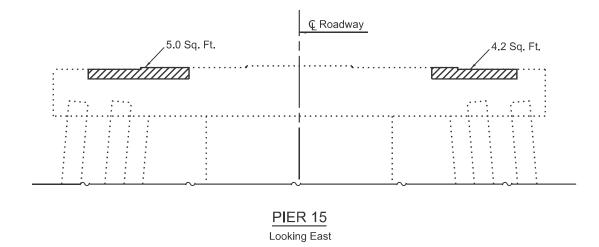
Do not disturb existing bearings.

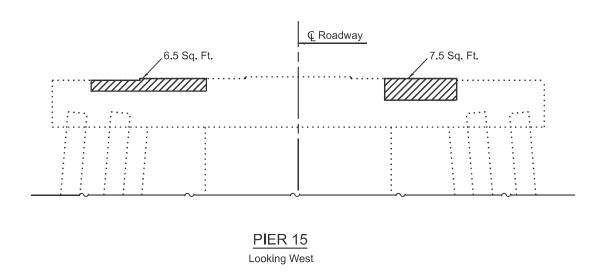
### BILL OF MATERIAL - PIER 7

Item	Unit	Total
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	11

Structural Repair of Concrete (Depth ≤ 5")

USER NAME = jessica.hille	DESIGNED - D. LANE	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER REPAIR	F.A.P RTE	SECTION	COUNTY	TOTAL	HEET
	DRAWN - D. LANE	REVISED -		S,N, 096-0010	823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	42
	CHECKED - L. HILLE	REVISED -		2'พ' กลอ-กกุก			CONTRACT	NO 74B	/8
PLOT DATE = 8/18/2025	DATE - MAY 2025	REVISED -		SCALE: NOT TO SCALE SHEET 23 OF 34 SHEETS STA. TO STA.		ILLINOIS FED. AID	O PROJECT		$\neg$

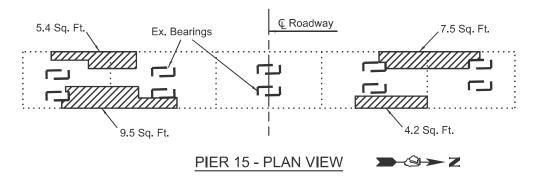




DRAWN - D. LANE

PLOT DATE = 8/18/2025

L. HILLE



### 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 MATERIAL - PIER 15

Item	Unit	Total
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	50

Structural Repair of Concrete (Depth ≤ 5")

STATE OF ILLINOIS

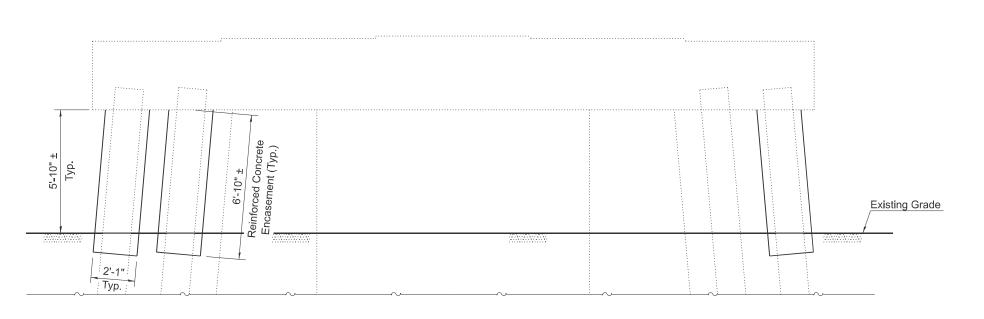
**DEPARTMENT OF TRANSPORTATION** 

			_
≡ iessica hille	DESIGNED - DIANE	REVISED -	

REVISED -

REVISED

Г	PIER REPAIR					SECTION	COUNTY	COUNTY TOTAL SHEE SHEETS NO	
П	S.N. 096-0010				823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	43
L							CONTRACT	Γ NO. 74	378
	SCALE: NOT TO SCALE SHEET 24	OF 34 SHEETS	STA.	TO STA.	ILLINOIS FED, AID PROJECT				



at 12" ± cts. for h2(E) bars **Existing Grade** 1'-0" ±

[0]

### PILE ENCASEMENT DETAIL

€ PC Pile

(T yp. at 3 Piles)

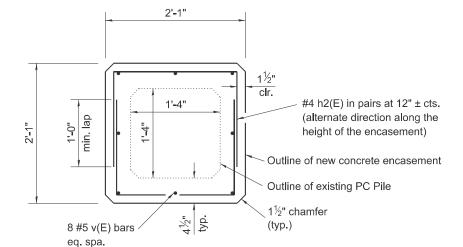
Note: See Section K-K for location of v(E) bars.

### PIER 2 - ELEVATION

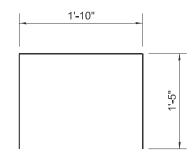
East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.



SECTION K-K



BAR h2(E)

### BILL OF MATERIAL - PIER 2

3 Encasements

Bar	Bar No. Size			Shape
h2(E)	42	#4	4'-8"	
v(E)	24	#5	5'-10"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	Cu. Yd.	2.0	
Reinforce Epoxy Co		Pound	280	

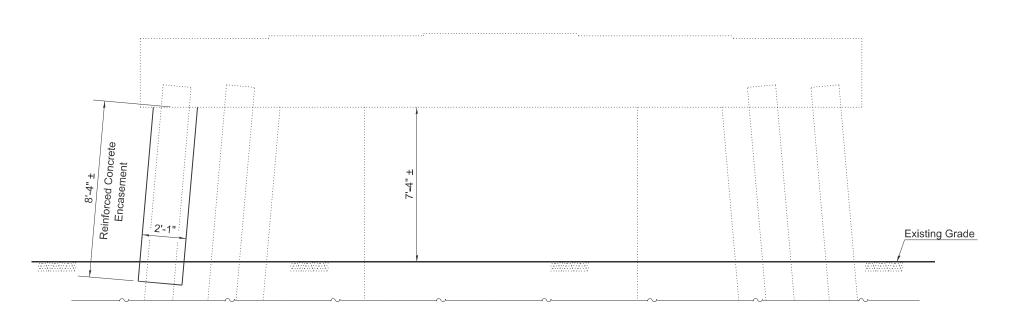
JSER NAME = jessica.hille DESIGNED - D. LANE REVISED DRAWN - D. LANE REVISED REVISED PLOT DATE = 8/18/2025 DATE - MAY 2025 REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PC PILE ENCASEMENT S.N. 096-0010 SCALE: NOT TO SCALE SHEET 25 OF 34 SHEETS STA. TO STA.

SECTION COUNTY COUNTY SHEETS NO.

WAYNE 53 44 823 D7 BRIDGE REPAIRS 2026-1 CONTRACT NO. 74B78

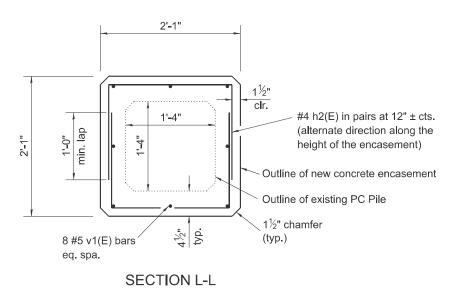


### PIER 3 - ELEVATION

East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.



# 1'-10" BAR h2(E)

### BILL OF MATERIAL - PIER 3

PILE ENCASEMENT DETAIL

(T yp. at 1 Pile)

€ PC Pile

1½" clr.

[0]

7 spa. at 12" ± cts. for h2(E) bars

Existing Grade

1 Encasement

Bar	No.	Size	Length	Shape
h2(E)	16	#4	4'-8"	
v1(E)	8	#5	7'-4"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	Cu. Yd.	0.8	
Reinforcement Bars, Epoxy Coated			Pound	120

JSER NAME = jessica.hille DESIGNED - D. LANE REVISED DRAWN - D. LANE REVISED REVISED PLOT DATE = 8/18/2025 DATE - MAY 2025 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

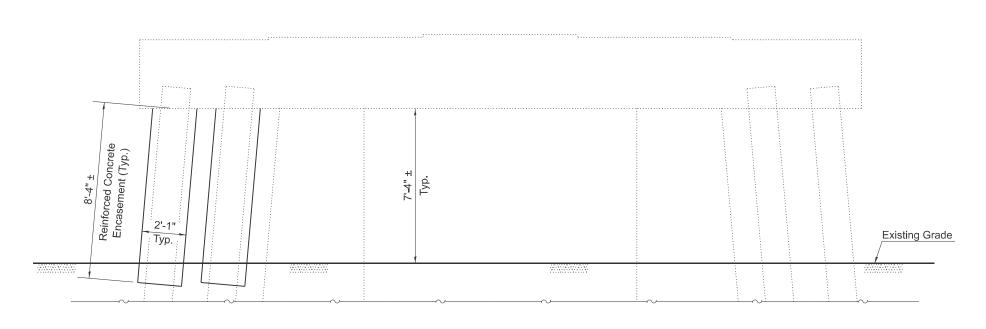
SECTION PC PILE ENCASEMENT S.N. 096-0010 SCALE: NOT TO SCALE SHEET 26 OF 34 SHEETS STA. TO STA.

COUNTY COUNTY SHEETS NO.

WAYNE 53 45 823 D7 BRIDGE REPAIRS 2026-1 CONTRACT NO. 74B78

Note: See Section L-L for

location of v1(E) bars.



€ PC Pile .0 7 spa. at 12" ± cts. for h2(E) bars Μ 1½" clr. Existing Grade

### PILE ENCASEMENT DETAIL

(T yp. at 2 Piles)

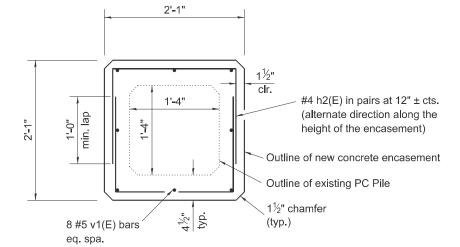
Note: See Section M-M for location of v1(E) bars.

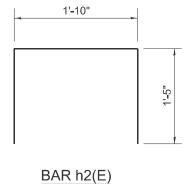
### PIER 4 - ELEVATION

East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.





BILL OF MATERIAL - PIER 4 2 Encasement

Bar	Bar No. Size			Shape
h2(E)	32 #4		4'-8"	
v1(E)	16	#5	7'-4"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	Cu. Yd.	1.6	
Reinforce Epoxy Co		Pound	230	

USER NAME = jessica.hille	DESIGNED	-	D. LANE	REVISED	-
	DRAWN	-	D. LANE	REVISED	-
	CHECKED	-	L. HILLE	REVISED	-
PLOT DATE = 8/18/2025	DATE	-	MAY 2025	REVISED	-

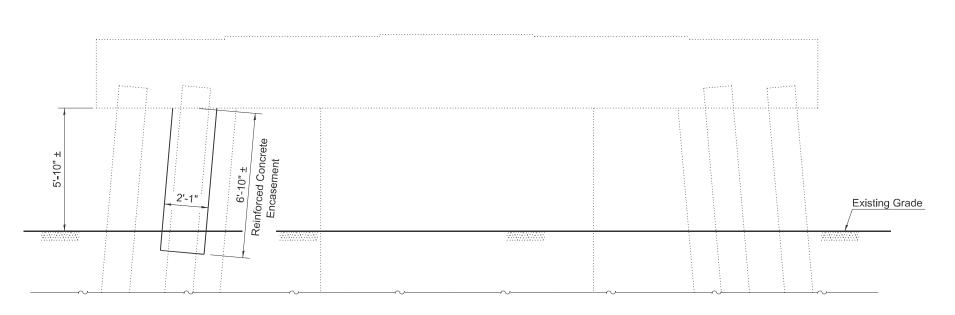
SECTION M-M

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

Ī	PC PILE ENCASEMENT							SEC.	SECTION		
ı	S.N. 096-0010						823	D7 BRIDGE RI	EPAIRS 2	026-1	
Į	2:14: 030-00 10										
I	SCALE: NOT TO SCALE	SHEET 27	OF 3	34 SHEETS	STA.	TO STA.			ILLINOIS	FED. AID	5

COUNTY TOTAL SHEET NO.

WAYNE 53 46 CONTRACT NO. 74B78

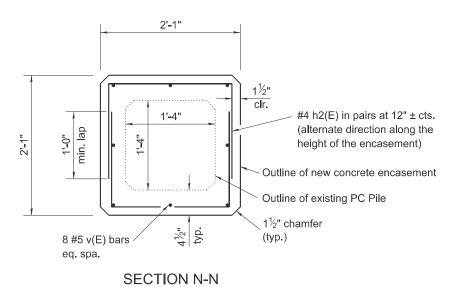


### PIER 5 - ELEVATION

East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.



# 1'-10"

### PILE ENCASEMENT DETAIL (T yp. at 1 Pile)

1'-0" ±

€ PC Pile

9

at 12" ± cts. for h2(E) bars

**Existing Grade** 

Note: See Section N-N for location of v(E) bars.

### BILL OF MATERIAL - PIER 5

1 Encasement

Bar	No. Size		Length	Shape
h2(E)	14	#4	4'-8"	
v(E)	8	#5	5'-10"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	es	Cu. Yd.	0.7
Reinforcei Epoxy Coa		Pound	100	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PC PILE ENCASEMENT
S.N. 096-0010

SCALE: NOT TO SCALE SHEET 28 OF 34 SHEETS STA. TO STA.

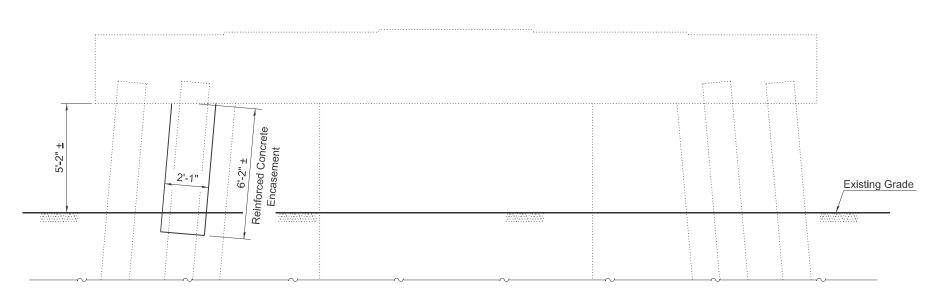
 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.
 SHEETS NO.

 823
 D7 BRIDGE REPAIRS 2026-1
 WAYNE
 53
 47

 CONTRACT NO. 74B78

ILE NAME: c:\pw\_work\pwidot\nilleja\d1035705\D774B78\_096-0010 Repa

EL: 096-0010 Sheet 28 [Sh NAMF: c:\nw work\nwidet\



# Existing Grade 6" 6" 6" Cor h2(E) bars O ✓ 1'0" Cir. O ✓ 1'-0" T = 0'-2" F = 0'-2" F = 0'-1 Cir.

### PILE ENCASEMENT DETAIL

(T yp. at 1 Pile)

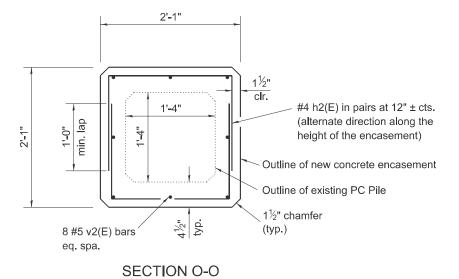
Note: See Section O-O for location of v2(E) bars.

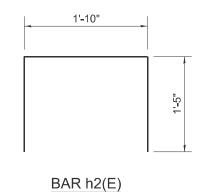
### PIER 8 - ELEVATION

East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.





### BILL OF MATERIAL - PIER 8

1 Encasement

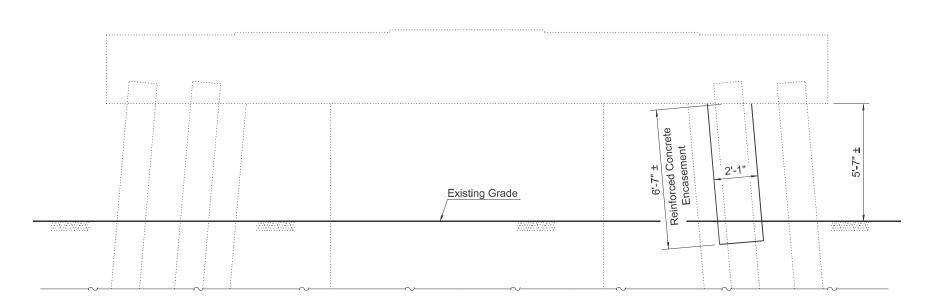
Bar	No. Size		Length	Shape
h2(E)	12	#4	4'-8"	
v2(E)	8	#5	5'-2"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	es	Cu. Yd.	0.6
Reinforce Epoxy Co		S,	Pound	90

USER NAME = jessica.hille	DESIGNED	-	D. LANE	REVISED	-
	DRAWN	-	D. LANE	REVISED	-
	CHECKED	-	L. HILLE	REVISED	-
PLOT DATE = 8/18/2025	DATE	-	MAY 2025	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

I		F.A.P RTE.	F.A.P RTE. SECTION		TOTAL SHEETS	SHEET NO.			
ı		S.N. 096-00	823	D7 BRIDGE REPAIRS 2026-1	WAYNE	53	48		
l				CONTRACT	ΓNO. 74	378			
ı	SCALE: NOT TO SCALE SHEET 29	OF 34 SHEETS	STA.	TO STA.	ILLINOIS FED, AID PROJECT				

.ME: c:\pw\_work\pwidot\hilleja\d1035705\D774B78\_096-0010 Repair St

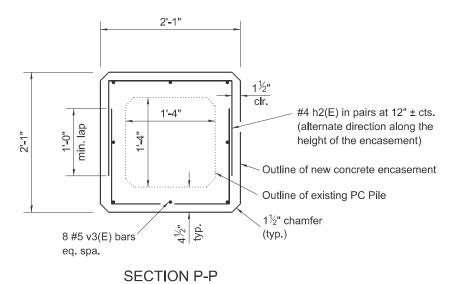


### PIER 10 - ELEVATION

East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.



### 1'-10" BAR h2(E)

# € PC Pile clr Existing Grade 1,-0,1

### PILE ENCASEMENT DETAIL

(T yp. at 1 Pile)

Note: See Section P-P for location of v3(E) bars.

### BILL OF MATERIAL - PIER 10

1 Encasement

Bar	No. Size		Length	Shape
h2(E)	12	#4	4'-8"	
v3(E)	8 #5		5'-7"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	es	Cu. Yd.	0.6
Reinforcei Epoxy Co		S,	Pound	90

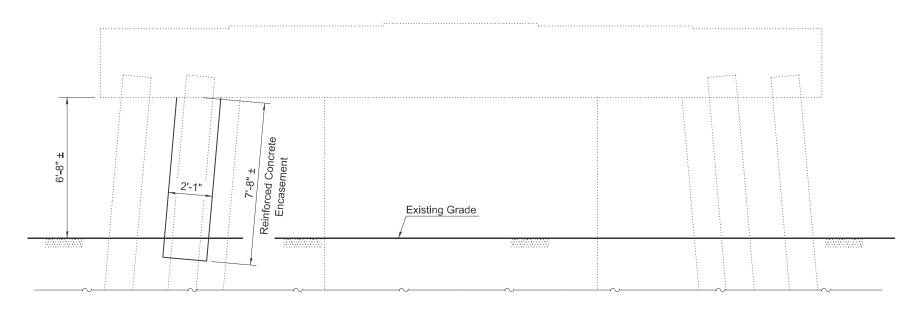
JSER NAME = jessica.hille DESIGNED - D. LANE REVISED DRAWN - D. LANE REVISED REVISED PLOT DATE = 8/18/2025 DATE - MAY 2025 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

SECTION PC PILE ENCASEMENT 823 D7 BRIDGE REPAIRS 2026-1 S.N. 096-0010 SCALE: NOT TO SCALE SHEET 30 OF 34 SHEETS STA. TO STA.

COUNTY TOTAL SHEET NO.

WAYNE 53 49 CONTRACT NO. 74B78

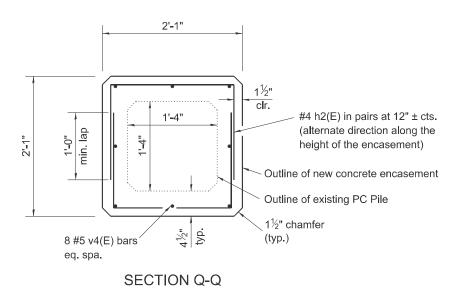


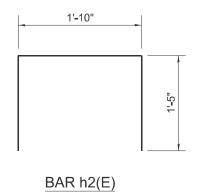
PIER 11 - ELEVATION

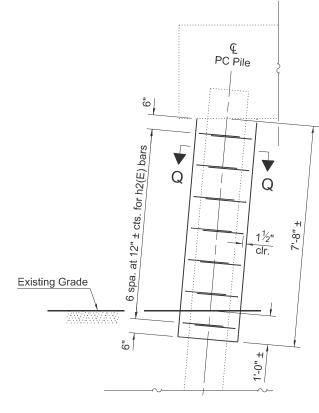
East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.







### PILE ENCASEMENT DETAIL

(T yp. at 1 Pile)

Note: See Section Q-Q for location of v4(E) bars.

### BILL OF MATERIAL - PIER 11

1 Encasement

Bar	No. Size		Length	Shape
h2(E)	14	#4	4'-8"	
v4(E)	8 #5		6'-8"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	Cu. Yd.	0.7	
Reinforce Epoxy Co		S,	Pound	100

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

 PC PILE ENCASEMENT

 S.N. 096-0010
 8

 SCALE: NOT TO SCALE
 SHEET 31
 OF 34
 SHEETS
 STA.
 TO STA.

 F.A.P. RTE.
 SECTION
 COUNTY SHEETS NO.

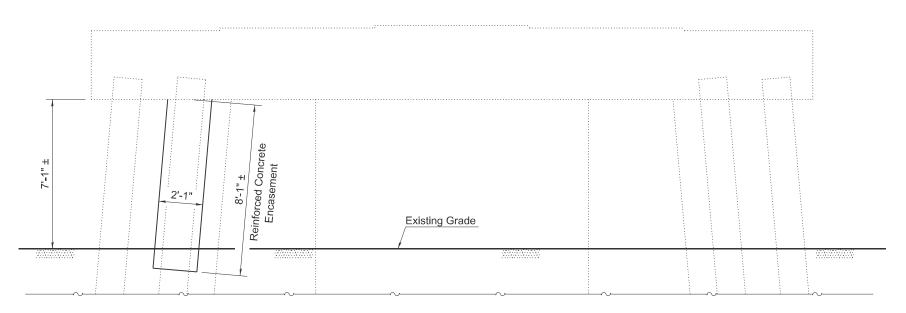
 823
 D7 BRIDGE REPAIRS 2026-1
 WAYNE
 53
 50

 CONTRACT NO. 74B78

 ILLINOIS | FED. AID PROJECT

NAME: c:\pw\_work\pwidot\hilleja\d1035705\D774B78\_096-0010 Repair

396-0010 Sheet 31 [Sheet E: c:\pw work\pwidot\hille

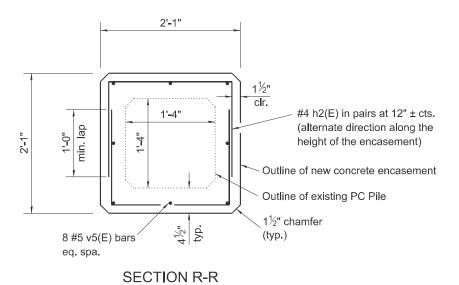


### PIER 12 - ELEVATION

East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.



# 1'-10" BAR h2(E)

### (T yp. at 1 Pile)

PILE ENCASEMENT DETAIL

spa. at 12" ± cts. for h2(E) bars

Existing Grade

€ PC Pile

R

1'-0" ±

Note: See Section R-R for location of v5(E) bars.

### BILL OF MATERIAL - PIER 12

1 Encasement

Bar	No. Size		Length	Shape
h2(E)	16	#4	4'-8"	
v5(E)	8	#5	7'-1"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	Cu. Yd.	0.8	
Reinforce Epoxy Co		rs,	Pound	110

JSER NAME = jessica.hille DESIGNED - D. LANE REVISED DRAWN - D. LANE REVISED REVISED PLOT DATE = 8/18/2025 DATE - MAY 2025 REVISED -

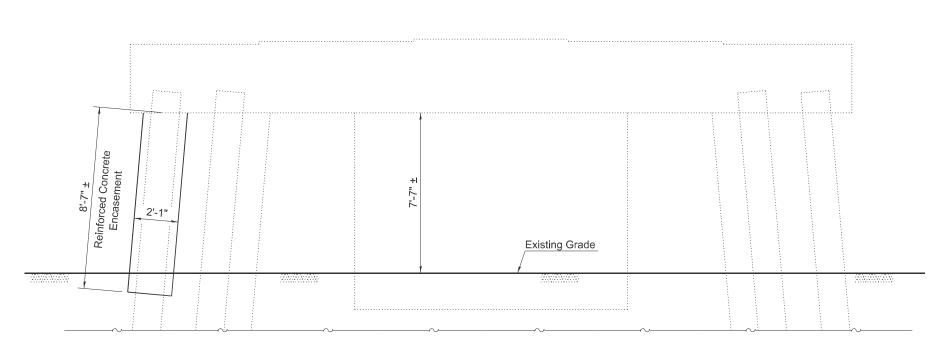
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

PC PILE ENCASEMENT S.N. 096-0010 SCALE: NOT TO SCALE SHEET 32 OF 34 SHEETS STA. TO STA.

SECTION COUNTY COUNTY SHEETS NO.

WAYNE 53 51 RTE. SECTION

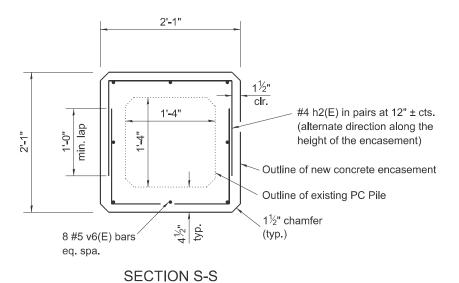
823 D7 BRIDGE REPAIRS 2026-1 CONTRACT NO. 74B78



PIER 13 - ELEVATION East Face

Note: All unsound concrete on piles to be encased shall be removed pior to pile encasement. Cost included in Concrete Strucutres.

> Any excavation required to perform the work shall be included in the cost of Concrete Structures.



1'-10" BAR h2(E)

€ PC Pile at 12" ± cts. for h2(E) bars Existing Grade PILE ENCASEMENT DETAIL

(T yp. at 1 Pile)

Note: See Section S-S for location of v6(E) bars.

### BILL OF MATERIAL - PIER 13

1 Encasement

Bar	No. Size		Length	Shape
h2(E)	16	#4	4'-8"	
v6(E)	8 #5		7'-7"	
	ITEM	UNIT	QUANTITY	
Concrete	Structure	Cu. Yd.	0.8	
Reinforce Epoxy Co		Pound	120	

JSER NAME = jessica.hille DESIGNED - D. LANE REVISED DRAWN - D. LANE REVISED REVISED PLOT DATE = 8/18/2025 DATE - MAY 2025 REVISED -

STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

PC PILE ENCASEMENT S.N. 096-0010 SCALE: NOT TO SCALE SHEET 33 OF 34 SHEETS STA. TO STA.

COUNTY TOTAL SHEET NO.

WAYNE 53 52 SECTION 823 D7 BRIDGE REPAIRS 2026-1 CONTRACT NO. 74B78

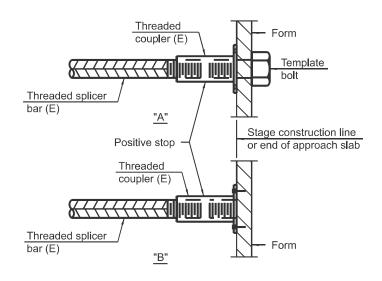
### STANDARD BAR SPLICER ASSEMBLY PLAN

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

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

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

Location	Bar Size	No. assemblies required	Minimum lap length
E. Abut. Hatch Block	#6	4	4'-5"
E. Abut. Deck	#5	13	3'-10"
Pier 3	#5	20	3'-10"
Pier 7	#5	20	3'-10"
Pier 11	#5	20	3'-10"
Pier 15	#5	20	3'-10"
Pier 18	#5	20	3'-10"
W. Abut. Deck	#5	13	3'-10"
W. Abut. Hatch Block	#6	4	4'-5"

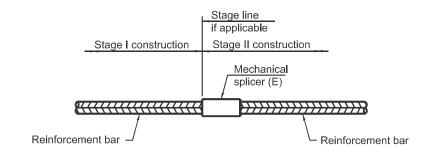


### INSTALLATION AND SETTING METHODS

"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

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

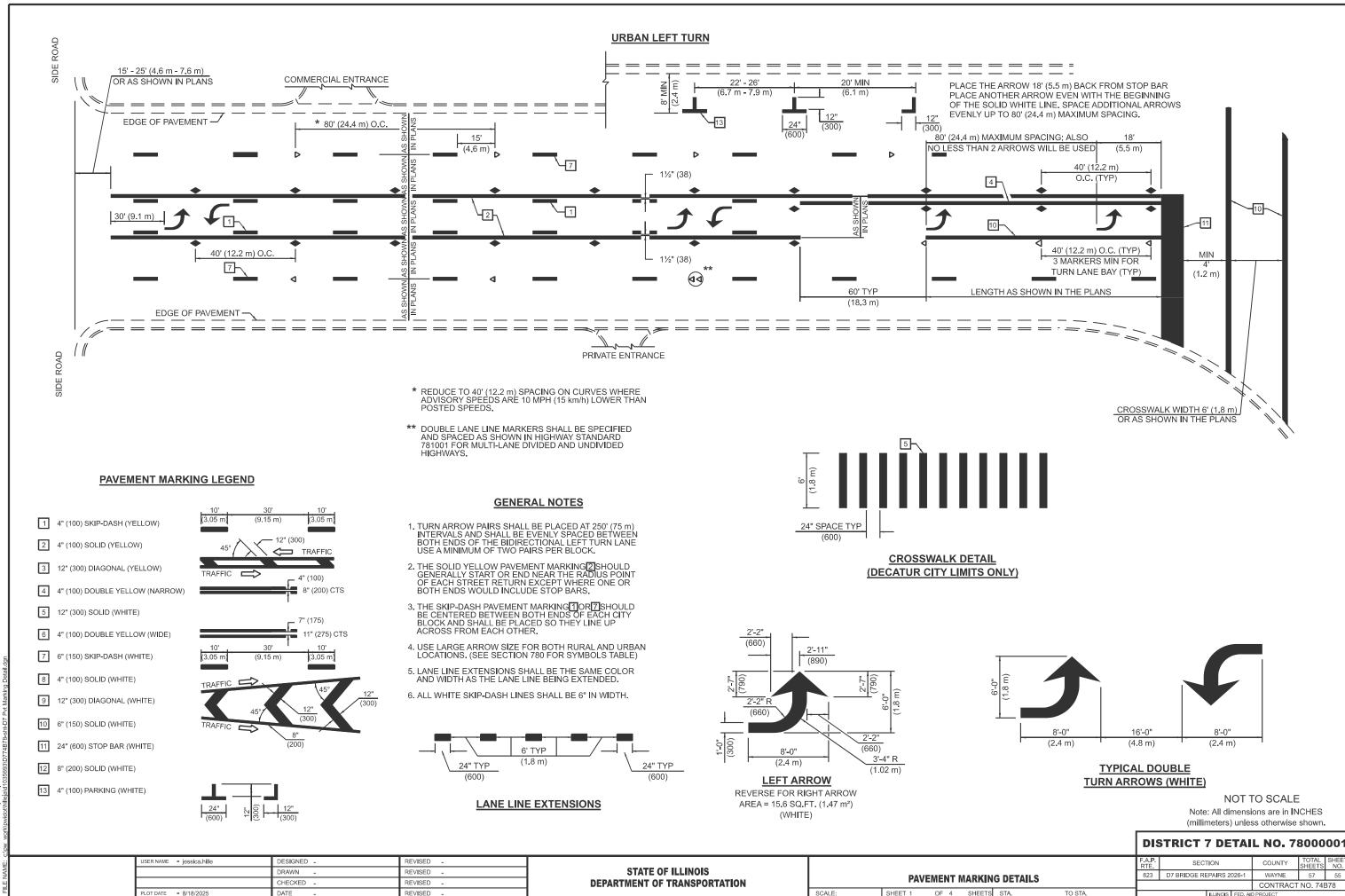
USER NAME = jessica.hille	DESIGNED	-	D. LANE	REVISED -
	DRAWN	-	D. LANE	REVISED -
	CHECKED	-	L. HILLE	REVISED -
PLOT DATE = 8/18/2025	DATE	_	MAY 2025	REVISED -

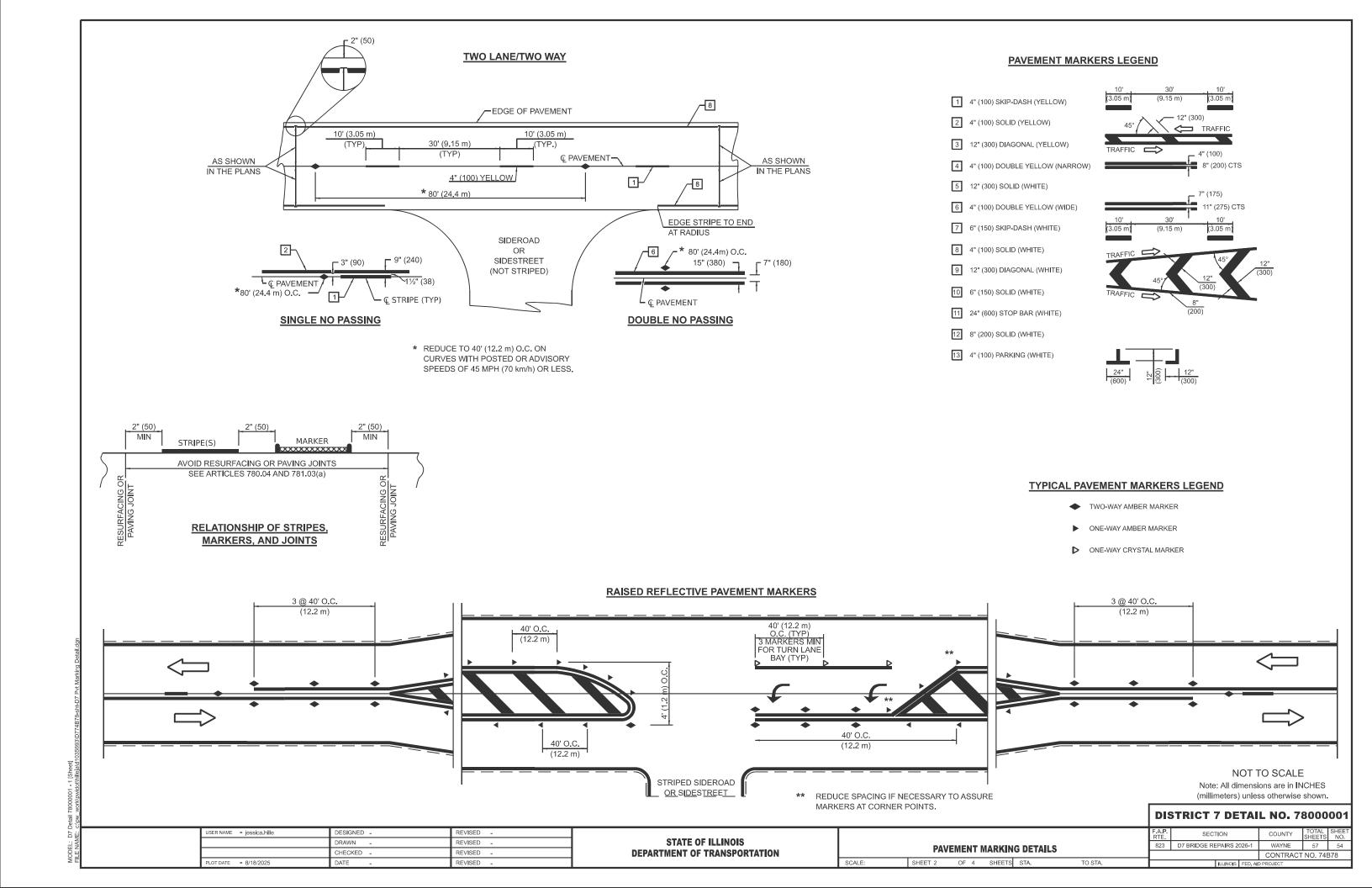
STATE OF ILLINOIS **DEPARTMENT OF TRANSPORTATION** 

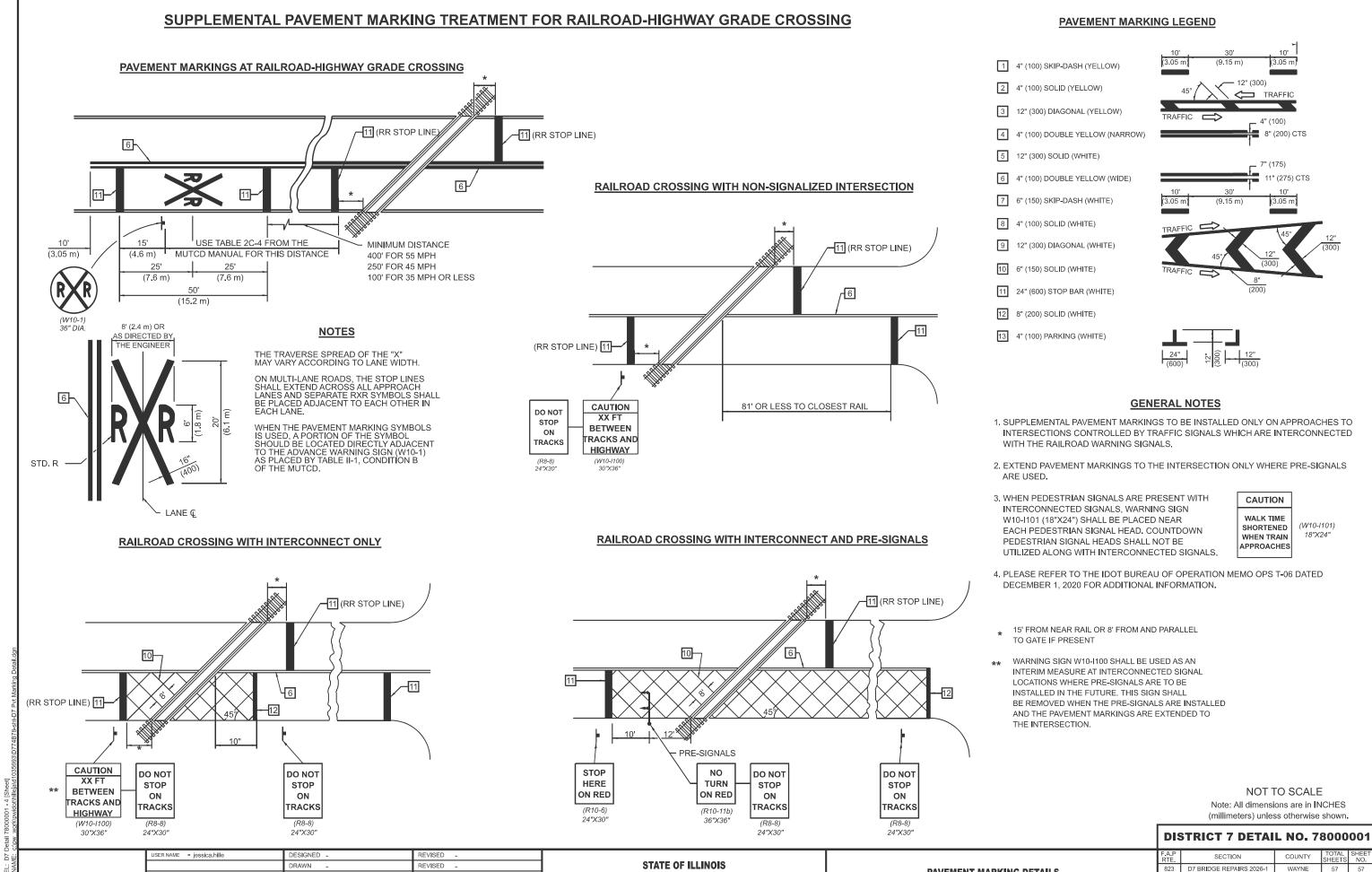
BAR SPLIC	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS								TION		C
	S.N. 096-0010							D7 BRIDGE RE	PAIRS 20	26-1	V
											CC
SCALE: NOT TO SCALE	SHEET 34	OF	34	SHEETS	STA.	TO STA.			ILLINOIS	FED. AID	PROJ

CONTRACT NO. 74B78

WAYNE 53







**DEPARTMENT OF TRANSPORTATION** 

**PAVEMENT MARKING DETAILS** 

TO STA.

OF 4 SHEETS STA.

CONTRACT NO. 74B78

CHECKED

DATE

PLOT DATE = 8/18/2025

REVISED

