**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**  ILLINOIS CONTRACT NO. 72187

\* 17 + 1 = 18 TOTAL SHEETS

D-96-009-25

LOCATION OF SECTION INDICATED THUS: -

# STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

October 17 SUBMITTED\_

PRINTED BY THE AUTHORITY

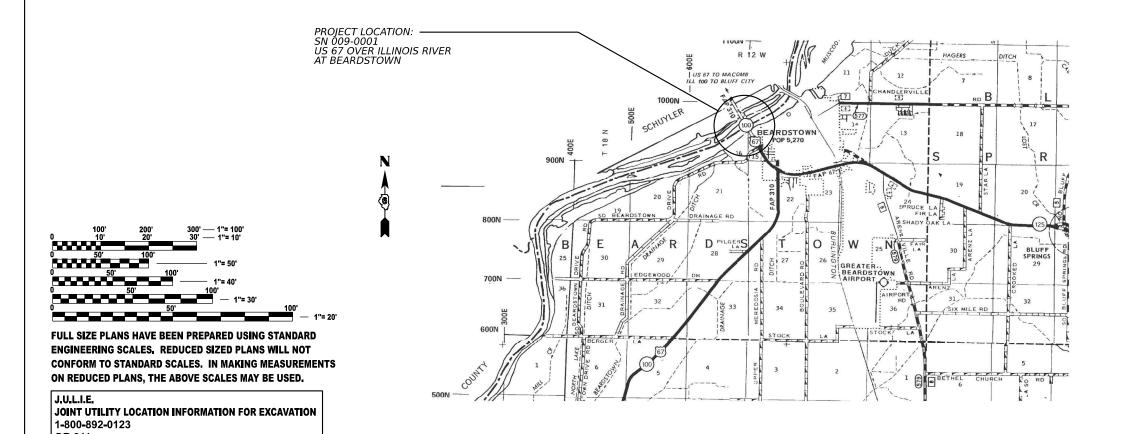
# OF THE STATE OF ILLINOIS

**PROPOSED** FOR INDEX OF SHEETS, SEE SHEET NO. 2

**HIGHWAY PLANS** 

FAP ROUTE 310 (US 67, IL 100) SECTION 86B(BDR,BJR,BRR) PROJECT (STATE ONLY) BRIDGE DECK REPAIRS **CASS COUNTY** 

C-96-031-25



**PROJECT ENGINEER: BRANDON DUDLEY (217-785-9290) PROJECT MANAGER** 

GROSS LENGTH = 3655 FT. = 0.69 MILE NET LENGTH = 3655 FT. = 0.69 MILE

**CONTRACT NO. 72187** 

 $\bigcirc$ 

**REV - MS** 

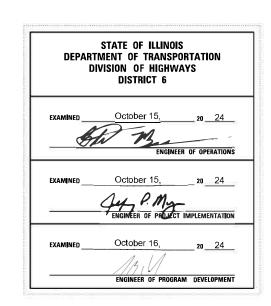
INDEX OF SHEETS HIGHWAY STANDARDS

1 COVER SHEET 2 INDEX, STANDARDS, GENERAL NOTES, & SIGNATURES 3-4 SUMMARY OF QUANTITIES 5-9 TRAFFIC CONTROL DETAILS 10-17 BRIDGE PLANS, SN 009-0001	000001-08 001001-02 001006 701001-02 701006-05 701201-05 701301-04 701321-19 701901-10
	704001-08 704001-08 782006-01

#### GENERAL NOTES:

IMPACT ATTENUATORS TO BE PLACED ON THE BRIDGE DECK SHALL BE OF A TYPE WHICH DOES NOT REQUIRE FASTENING TO THE DECK SLAB.

IF SAND BARRELS ARE USED FOR IMPACT ATTENUATORS, THE CONTRACTOR SHALL KEEP SPARE BARRELS AND SAND ON THE JOB SITE FOR REPLACING ANY BARRELS THAT ARE DAMAGED DURING THE JOB.



REV - MS

			157												
USER NAME = brandon.dudley	DESIGNED -	REVISED -			INDEX OF SHEETS, HIGHWAI STANDARDS		F.A.P	SECTION	COUNTY	TOTAL S	HEET				
	DRAWN -	REVISED -	J.	STATE OF ILLINOIS			310	86B(BDR,BJR)	CASS	17	2				
	CHECKED -	REVISED -	1	DEPARTMENT OF TRANSPORTATION					CONTRAC	T NO. 7218	7				
PLOT DATE = 8/8/2024	DATE =	REVISED -	ij					ILLINOIS FED. A	D PROJECT						

6-00236-0400 SN 009-0001 100% STATE

				BRIDGE
CODE			TOTAL	0013
NO.	ITEM	UNIT	QUANTITY	URBAN
50102400	CONCRETE REMOVAL	CU YD	33.7	33.7
50157300	PROTECTIVE SHIELD	SQ YD	212	212
50300255	CONCRETE SUPERSTRUCTURE	CU YD	32.8	32.8
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	6080	6080
50800515	BAR SPLICERS	EACH	164	164
52000110	PREFORMED JOINT STRIP SEAL	FOOT	270	270
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	12	12
67100100	MOBILIZATION	L SUM	1	1
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	2	2
70107025	CHANGEABLE MESSAGE SIGN	CAL DAY	300	300
70400100	TEMPORARY CONCRETE BARRIER	FOOT	300	300
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	900	900
70600240	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 2	EACH	2	2

E: c:\pw\_work\pwidot\dudleybm\d1023364\72187 plansheet.d

USER NAME = brandon.dudley	DESIGNED -	REVISED -
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	CHECKED -	REVISED -
PLOT DATE = 8/8/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCALE:

SHEET

SUMMARY OF QUANTITIES		F.A.P RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.			
					310	86B(BDR,BJR)		CASS	17	3
								CONTRAC	T NO. 72	187
	OF 2	SHEETS	STA.	TO STA.		ILLINOIS	FED AL	D PROJECT		

6-00236-0400 SN 009-0001 100% STATE

6655			TOTAL	BRIDGE
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	0013 URBAN
		0	20.07111	57157 IIV
70600340	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 2	EACH	6	6
V7010202	TRAFFIC CONTROL AND PROTECTION CTANDARD 701331 (CRECIAL)	FACU	2	2
X7010202	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	2	2
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
Z0001905	STRUCTURAL STEEL REPAIR	POUND	6,400	6,400
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	150	150
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	150	150
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	2700	2700
Z0021907	SILICONE JOINT SEALER, 1.75"	FOOT	390	390
Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	2000	2000
			1	

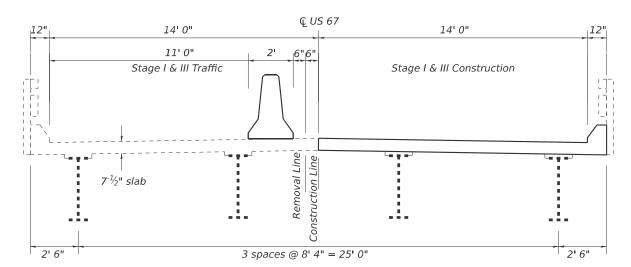
Ø 0042

REV - MS

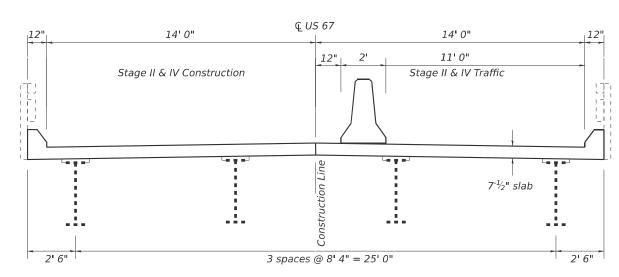
USER NAME = brandon.dudley	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 8/8/2024	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

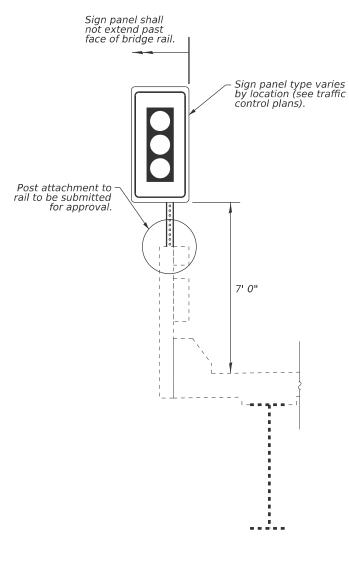
SUMMARY OF QUANTITIES		SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
1		86B(BDR,BJR)	CASS	17	4
	l)		CONTRACT	NO. 721	87
SHEET OF 2 SHEETS STA. TO STA.	LILLINOIS LEED AID PROJECT				



STAGE I & III TRAFFIC STAGING CROSS SECTION (LOOKING SOUTH)



STAGE II & IV TRAFFIC STAGING CROSS SECTION (LOOKING SOUTH)



BRIDGE MOUNTED SIGN PANEL ELEVATION

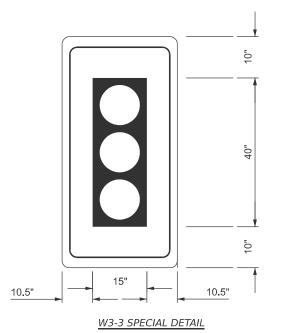
SCALE:

#### NOTES:

This detail shall be applied in all locations where sign panels are called to be placed on the bridge. Locations shall be as shown in the traffic control plans.

The contractor shall submit a plan for attaching the sign posts to the existing bridge rail to the engineer for approval prior to sign placement. No drilling into the bridge rail or rail posts will be allowed.

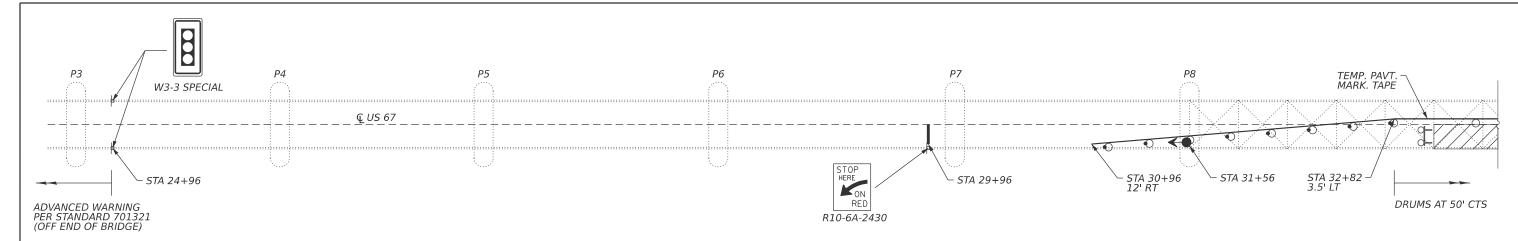
All attachments shall be made to the existing bridge rail. No attachments to the bridge members will be allowed.



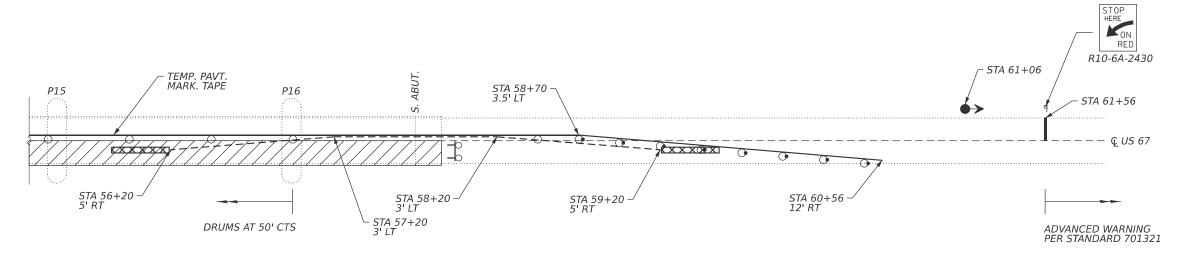
36"  $\times$  60" Sign panel, 2.25" radius, 1.0" border, 0.75" indent, black on fluorescent orange, SIGNAL AHEAD

USER NAME = brandon.dudiey	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 8/8/2024	DATE -	REVISED -	

TRAFFIC STAGING DETAILS				F.A.P RTE.	SECTION		COUNTY	TOTAL SHEETS	SHEET NO.		
						310	86B(BDR,BJF	?)	CASS	17	5
									CONTRACT	NO. 72	187
SHEET	OF	5	SHEETS	STA.	TO STA.		ILLIN	IS FED. A	ID PROJECT		



#### STAGE I - PARTIAL PLAN



STAGE I - PARTIAL PLAN

# **SYMBOLS**



WORK AREA

• DRUM WITH STEADY BURN BI-DIRECTIONAL LIGHT

O DRUM



TRAFFIC SIGNAL



TYPE III BARRICADE WITH FLASHING LIGHTS



TEMPORARY CONCRETE BARRIER



IMPACT ATTENUATOR

#### TRAFFIC CONTROL NOTES:

- 1. Traffic control devices not shown in this detail shall be per standard 701321. Devices and temporary pavement markings shown in this detail shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL). Impact attenuators temporary rumble strips, temporary concrete barrier, and temporary traffic signals shall be paid separtely.
- 2. Temporary concrete barrier offsets given in this detail refer to the edge of the barrier nearest to live traffic.
- 3. The upper signal head on traffic signal cart(s) inside the truss shall be mounted horizontally to improve visibility. Signal heads shall be reversed as necessary when signal cart placement dictates.

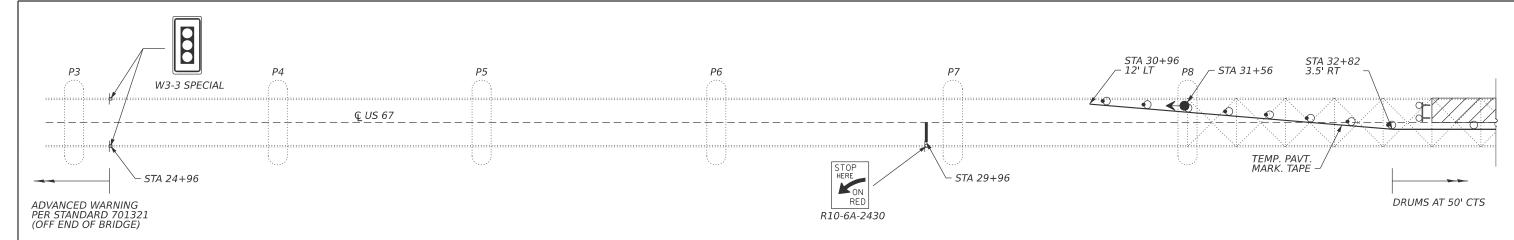
SCALE:

USER NAME = brandon.dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/8/2024	DATE -	REVISED -

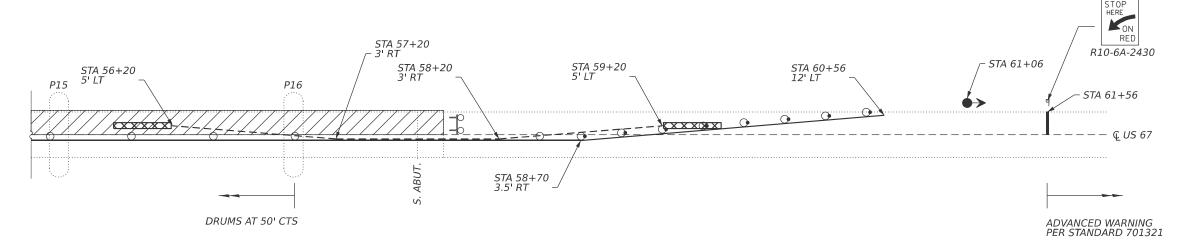
STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION

MODEL: TC-2 [Sheet]

maualeypma 102330477 2187 plan



#### STAGE II - PARTIAL PLAN



STAGE II - PARTIAL PLAN

# **SYMBOLS**



WORK AREA

• DRUM WITH STEADY BURN BI-DIRECTIONAL LIGHT

O DRUM



TRAFFIC SIGNAL



TYPE III BARRICADE WITH FLASHING LIGHTS



TEMPORARY CONCRETE BARRIER



IMPACT ATTENUATOR

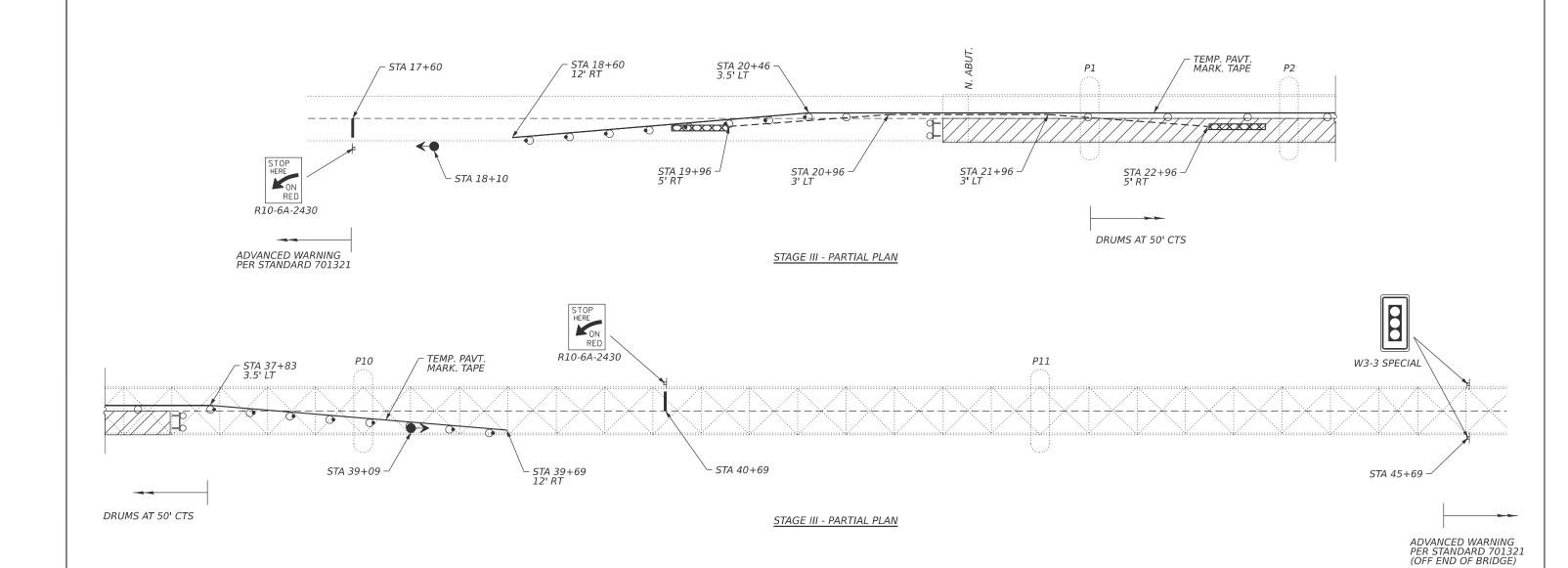
#### TRAFFIC CONTROL NOTES:

- 1. Traffic control devices not shown in this detail shall be per standard 701321. Devices and temporary pavement markings shown in this detail shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL). Impact attenuators temporary rumble strips, temporary concrete barrier, and temporary traffic signals shall be paid separtely.
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- 3. The upper signal head on traffic signal cart(s) inside the truss shall be mounted horizontally to improve visibility. Signal heads shall be reversed as necessary when signal cart placement dictates.

USER NAME = brandon.dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/8/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAG	E II TR	AF	FIC COI	NTROL P	LAN	F.A.P RTE. SECTION			COUNTY	TOTAL SHEETS	SHEET NO.
						310	86B(BDR,BJR)	CASS	17	7	
									CONTRACT	NO. 72	187
SHEET	OF 5	5	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT					



# **SYMBOLS**

WORK AREA

• DRUM WITH STEADY BURN BI-DIRECTIONAL LIGHT

O DRUM



TRAFFIC SIGNAL

TYPE III BARRICADE WITH FLASHING LIGHTS

TEMPORARY CONCRETE BARRIER

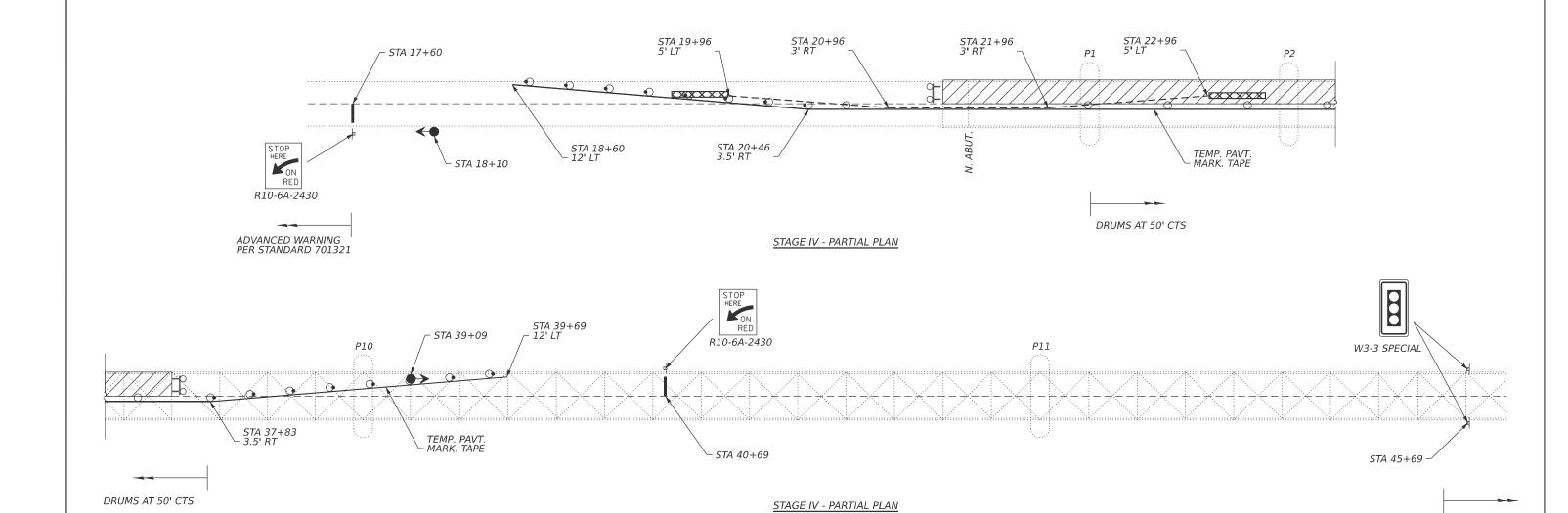


IMPACT ATTENUATOR

# TRAFFIC CONTROL NOTES:

- 1. Traffic control devices not shown in this detail shall be per standard 701321. Devices and temporary pavement markings shown in this detail shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL). Impact attenuators temporary rumble strips, temporary concrete barrier, and temporary traffic signals shall be paid separtely.
- 2. Temporary concrete barrier offsets given in this detail refer to the edge of the barrier nearest to live traffic.
- 3. The upper signal head on traffic signal cart(s) inside the truss shall be mounted horizontally to improve visibility. Signal heads shall be reversed as necessary when signal cart placement dictates.

USER NAME = brandon.dudley	DESIGNED -	REVISED -		STAGE III TRAFFIC CONTROL PLAN					F.A.P RTF	SECTION	COUNTY	TOTAL	SHEET	
	DRAWN -	REVISED -	STATE OF ILLINOIS		OIAGI	- 111 1110/41	110 00	MINOL I LA	•	310	86B(BDR,BJR)	CASS	17	8
	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION								, ,	CONTRAC	T NO. 72	187
PLOT DATE = 8/8/2024	DATE -	REVISED -		SCALE:	SHEET	OF 5	SHEETS	STA.	TO STA.		ILLINOIS FED. AI	D PROJECT		



# **SYMBOLS**

WORK AREA

DRUM WITH STEADY BURN BI-DIRECTIONAL LIGHT

DRUM

TRAFFIC SIGNAL

TYPE III BARRICADE WITH FLASHING LIGHTS

TEMPORARY CONCRETE BARRIER

IMPACT ATTENUATOR

# TRAFFIC CONTROL NOTES:

- 1. Traffic control devices not shown in this detail shall be per standard 701321. Devices and temporary pavement markings shown in this detail shall be included in the cost of TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL). Impact attenuators temporary rumble strips, temporary concrete barrier, and temporary traffic signals shall be paid separtely.
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USER NAME = brandon.dudley	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	STAT
	CHECKED -	REVISED -	DEPARTMENT
PLOT DATE = 8/8/2024	DATE -	REVISED -	

STAGE IV TRAFFIC CONTROL PLAN SHEET OF 5 SHEETS STA.

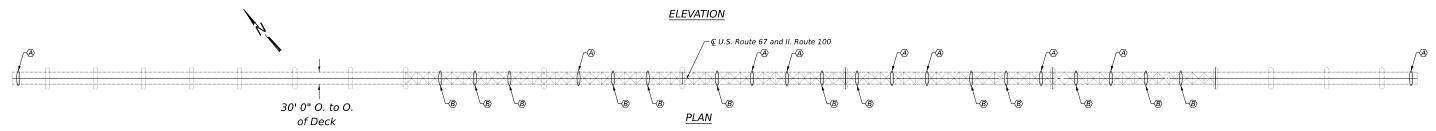
SCALE:

SECTION COUNTY SHEETS NO. 86B(BDR,BJR) CASS CONTRACT NO. 72187

TO STA.

ADVANCED WARNING PER STANDARD 701321 (OFF END OF BRIDGE)

TE OF ILLINOIS IT OF TRANSPORTATION 3655'-0" c. to c. of Approach Bents



 $\widehat{raket}$  REPLACE DECK JOINT WITH STRIP SEAL JOINT & INSTALL REPAIR PLATE ON TOP OF FLOOR BEAM

SCALE:

 $\langle \overline{{\sf B}} 
angle$  RESEAL EXISTING DECK JOINT WITH SILICONE JOINT SEALER

## **GENERAL NOTES**

Reinforcement bars designated (E) shall be epoxy coated.

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

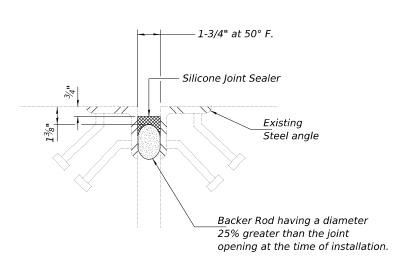
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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

Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

Typical protective shield application shall consist of a 4'  $\times$  34' area under each side of truss deflection joints to be replaced. Abutment joints do not need protective shield.



SILICONE JOINT SEALER DETAIL



# Jayn 1 - Arny

## TOTAL BILL OF MATERIAL

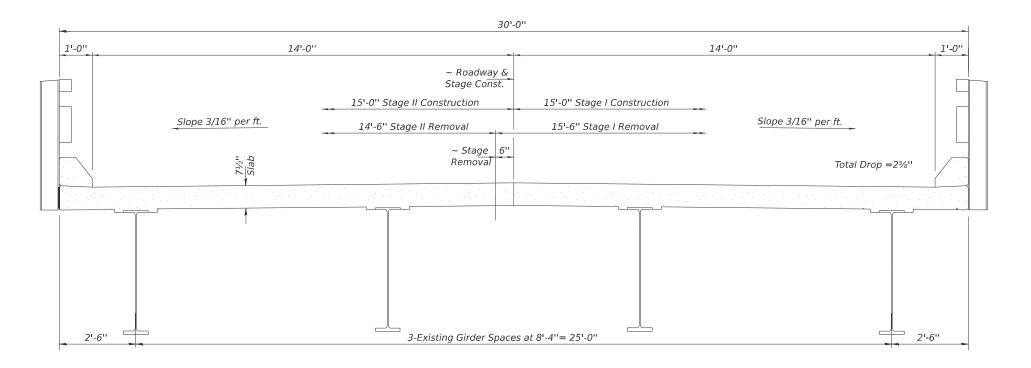
ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	33.7
Concrete Superstructure	Cu. Yd.	32.8
Bar Splicers	Each	164
Reinforcement Bars, Epoxy Coated	Pound	6080
Preformed Joint Strip Seal	Foot	270
Deck Slab Repair (Partial)	Sq. Yd.	2700
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	150
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	150
Silicone Joint Sealer, 1.75"	Foot	390
Protective Shield	Sq. Yd.	212
Structural Steel Repair	Pound	6400

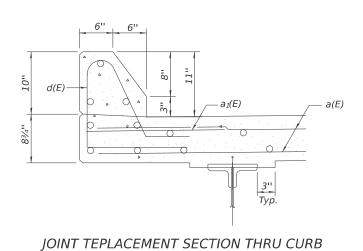
\* Quantity is estimated. Location and size of patches to be determined in the field by the Engineer.

USER NAME = brandon.dudley	DESIGNED	-	BRANDON DUDLEY	REVISED	-	
	DRAWN	-	BRANDON DUDLEY	REVISED	-	
	CHECKED	-		REVISED	-	
PLOT DATE = 12/6/2024	DATE	-		REVISED	-	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

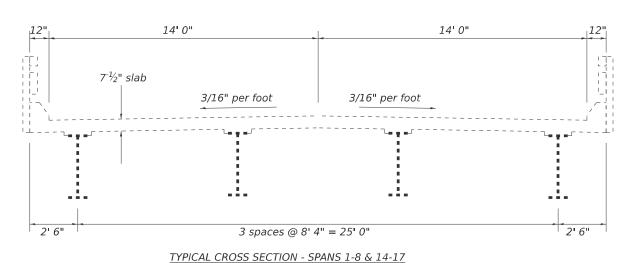
BF	RIDGE PL	AN & EL	EVATION		F.A.P RTE.	SECT	ΓΙΟΝ		COUNTY	TOTAL SHEETS	SHEET NO.	
BRIDGE PLAN & ELEVATION SN 009-0001					310	86B(BD	R,BJR)		CASS	17	10	
									CONTRAC	T NO. 72	187	
SHEET 1	OF 8	SHEETS	STA.	TO STA.			ILLINOIS	FED AID	PROJECT			

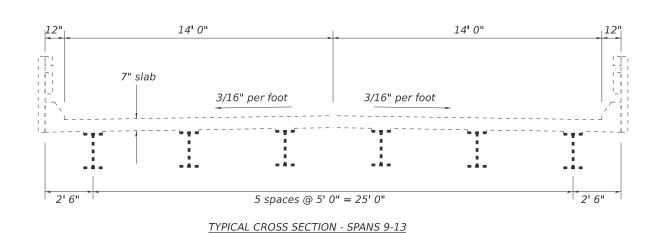




# JOINT REPLACEMENT CROSS SECTION

(Looking South)



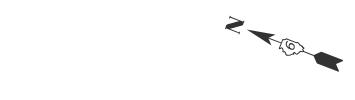


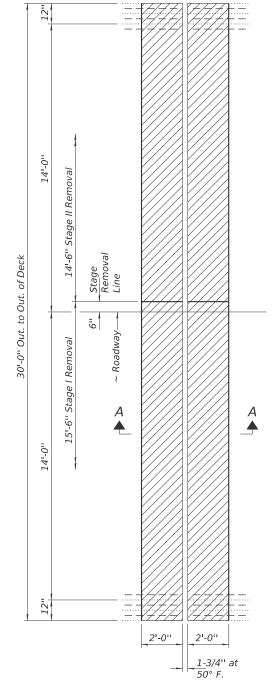
TYPICAL CRUSS SECTION - SPANS 1-8 & 14-17

USER NAME = brandon.dudley	DESIGNED -	REVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 8/8/2024	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

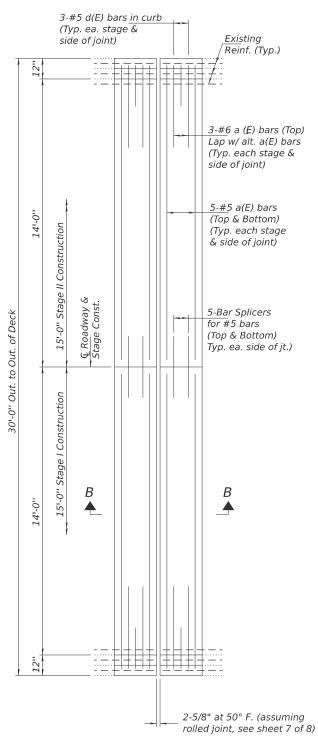
	BRIDG	E C	ROSS SI	CTIONS	S	F.A.P SECTION COUNTY				SHEET NO.
SN 009-0001						310	86B(BDR,BJR)	CASS	17	11
		014	003-000	′'				CONTRACT	ΓNO. 72	187
HEET 2	OF	8	SHEETS	STA.	TO STA.	ILLINOIS FED. AID PROJECT				



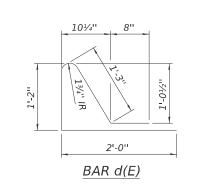


TYPICAL CONCRETE REMOVAL

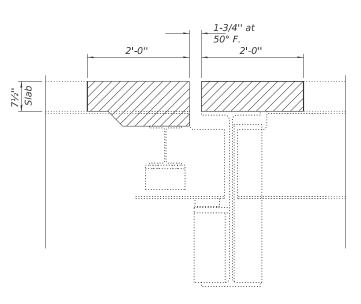




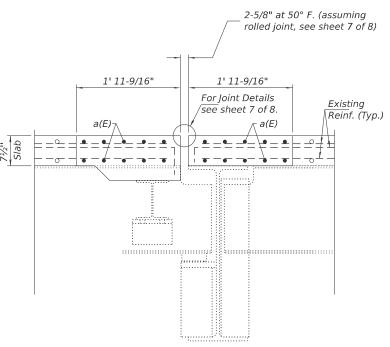
TYPICAL CONCRETE REPLACEMENT



SCALE:



# SECTION A-A



# SECTION B-B

## BILL OF MATERIAL (7 JOINTS)

No. 120 36	Size #5 #6	Length 14'-8'' 4'-0''	Shape ———
36	#6	4'-0"	
		7 -0	
36	#5	5'-2''	
Concrete Removal		Cu. Yd.	25.9
Concrete Superstructure		Cu. Yd.	25.2
Bar Splicers		Each	140
Reinforcement Bars,			5250
Epoxy Coated		rounds	5230
	emoval uperstru s nent Bar	emoval uperstructure s eent Bars,	emoval Cu. Yd. uperstructure Cu. Yd. s Each eent Bars, Pounds

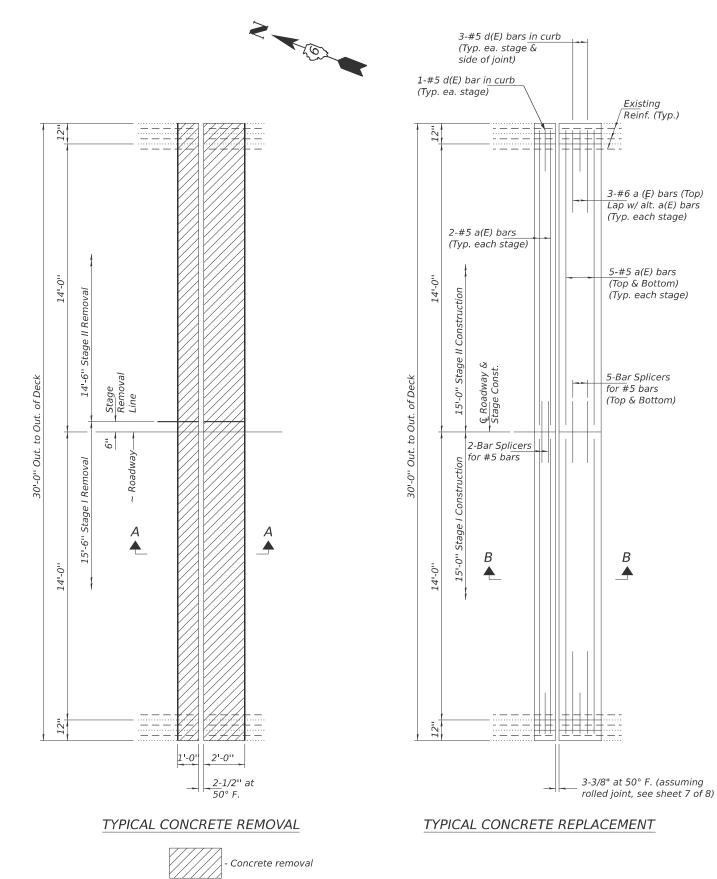
 USER NAME
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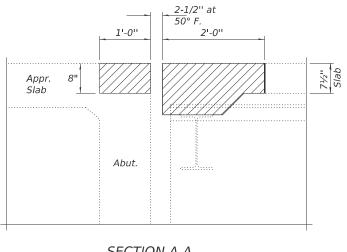
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 CHECKED
 REVISED

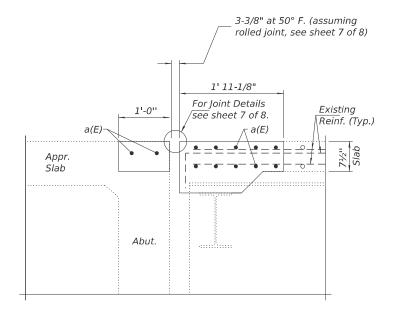
 PLOT DATE
 = 8/8/2024
 DATE
 REVISED

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

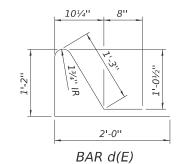




## SECTION A-A



## SECTION B-B



#### BILL OF MATERIAL (2 JOINTS)

<u> </u>						
Bar	Length	Shape				
a(E)	120	#5	14'-8''			
a <sub>1</sub> (E)	36	#6	4'-0''			
d(E)	36	#5	5'-2''			
Concrete	Removal	Cu. Yd.	7.8			
Concrete Superstructure			Cu. Yd.	7.6		
Bar Splicers			Each	24		
Reinforcement Bars, Epoxy Coated			Pounds	830		

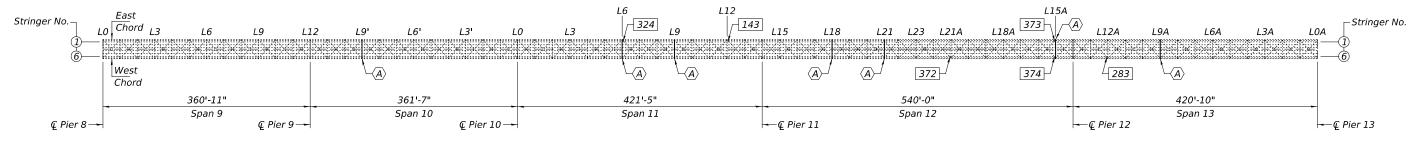
Note: North abutment joint shown, south abutment joint similar.

USER NAME = brandon.dudley	DESIGNED -	KEVISED -	
	DRAWN -	REVISED -	
	CHECKED -	REVISED -	
PLOT DATE = 8/8/2024	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ABUTMENT JOINT DETAILS					F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
SN 009-0001				310	86B(BDR,BJR)	CASS	17	13		
314 000-0001							CONTRAC	ΓNO. 72	187	
SHEET 4	OF	8	SHEETS	STA.	TO STA.		ILLINOIS FED. A	ID PROJECT		

### **ELEVATION - TRUSS SPANS 9 THRU 13**



# PLAN - TRUSS SPANS 9 THRU 13

- (A) Floorbeam Top Flange to be Strengthened. (7-Locations.)
- 000 NBIS Item # to be repaired.

#### NOTES

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

Plan dimensions and details relative to the existing structure have been taken from existing plans and are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts.

Bolts  $\frac{3}{4}$ "Ø, holes  $\frac{13}{16}$ "Ø for all stringer repair locations.

Fasteners shall be ASTM F 3125 Grade A325 Type 1, mechanically galvanized bolts.

Bolts  $\frac{7}{8}$ "Ø, holes  $\frac{15}{16}$ "Ø for Floorbeam Top Flange strengthening locations. The existing structural steel coating contains lead. The Contractor shall take

appropriate precautions to deal with the presence of lead on this project.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the Special Provision "Cleaning and Painting Contact Surface Areas of Existing Steel Structures", and the Standard Specifications. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repairs.

# BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	6400

DESIGNED - Chi-Cheung Chau

CHECKED - Jeffrey S. Burke

DRAWN - STEFFEN

CHECKED - CCC JSB

EXAMINED

ENGINEER OF STRUCTURAL SERVICES

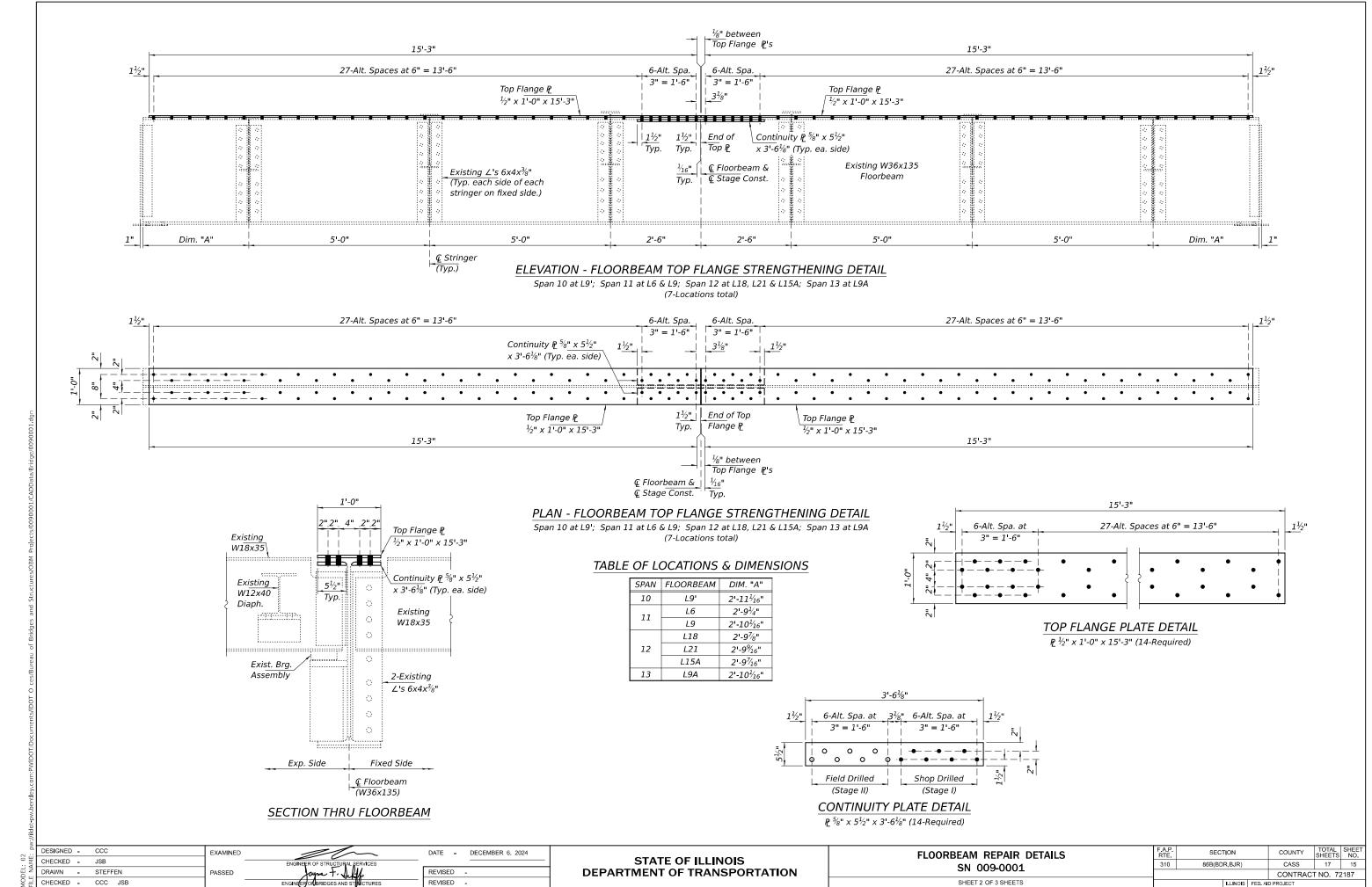
OUT - DECEMBER 6, 2024

ENGINEER OF STRUCTURAL SERVICES

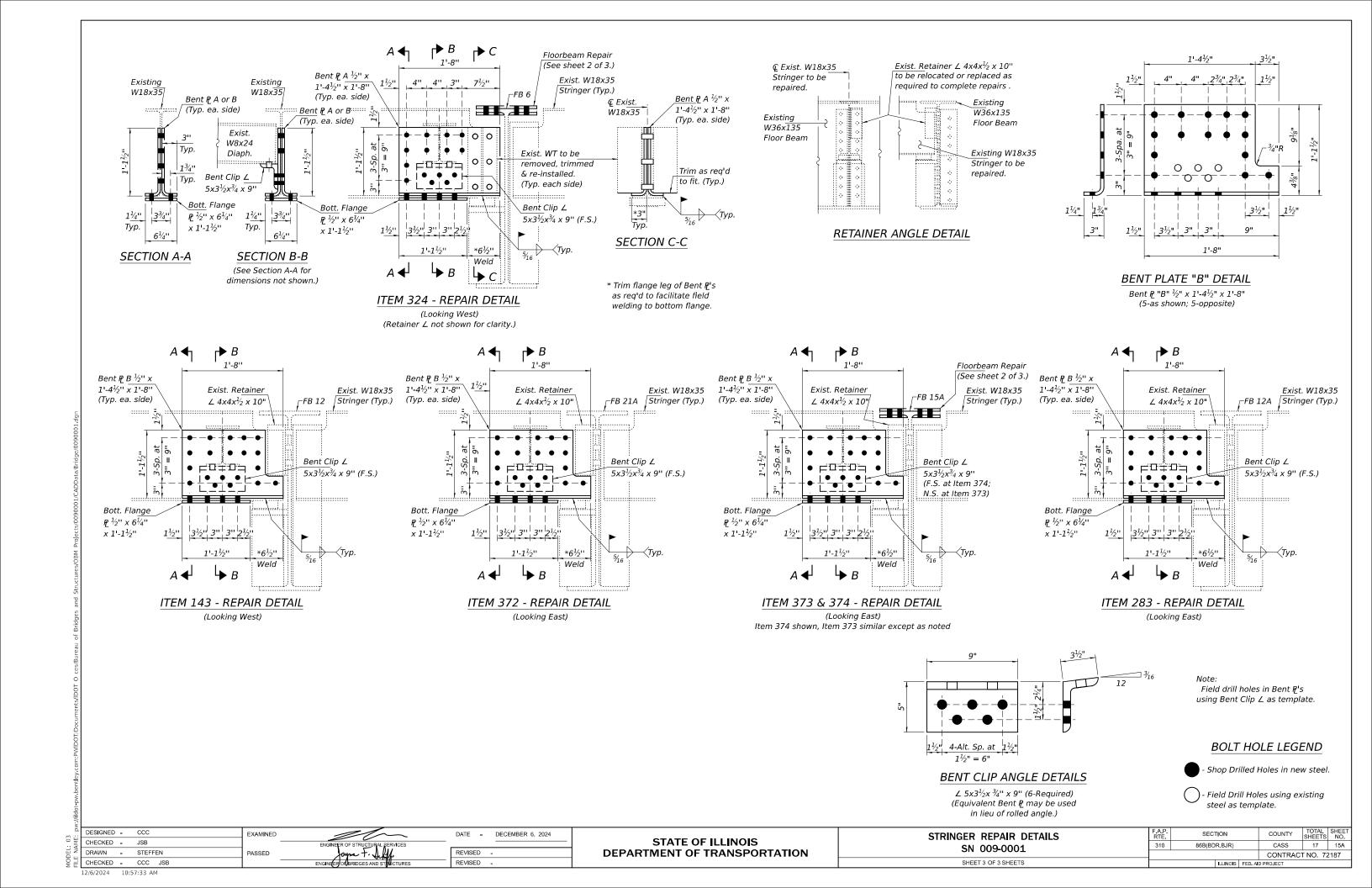
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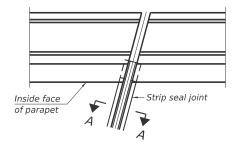
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION (TRUSS SPANS)
U.S. 67 / IL 100 OVER THE ILLINOIS RIVER (BEARDSTOWN)
SN 009-0001
SHEET 1 OF 3 SHEETS

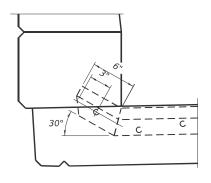


12/6/2024 10:57:11 AM

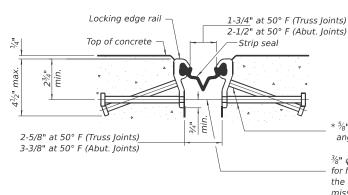




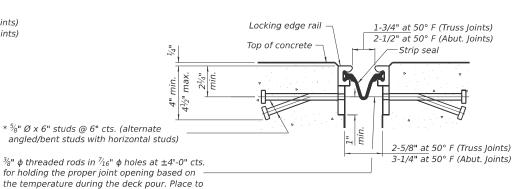
FOR SKEWS ≤ 30° PLAN AT PARAPET



**ELEVATION AT PARAPET** (Skews ≤ 30°)



SHOWING ROLLED RAIL JOINT



#### miss studs. All rods shall be burned, or sawed SHOWING WELDED RAIL JOINT off flush with the plates after concrete is set.

#### SECTION A-A

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

# Notes:

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

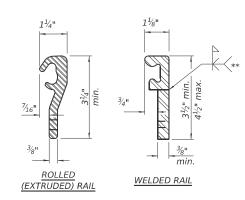
The locking edge rails depicted are configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

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

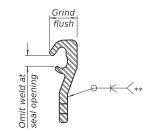
The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.

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.



#### LOCKING EDGE RAILS

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



## LOCKING EDGE RAIL SPLICE

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

#### BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	270

EJ-SS1 LT30/REPS

2-25-20

USER NAME = brandon.dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/8/2024	DATE -	REVISED -

**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION** 

PREFORMED JOINT STRIP SEAL
SN 009-0001

SECTION COUNTY 17 16 86B(BDR,BJR) CASS CONTRACT NO. 72187

OF 8 SHEETS STA.

SHEET 7

SCALE:

TO STA.

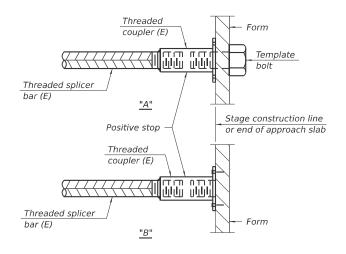
#### STANDARD BAR SPLICER ASSEMBLY PLAN

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
Joints	#5	164	3' 6"

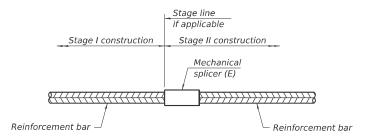


#### INSTALLATION AND SETTING METHODS

SCALE:

"A": Set bar splicer assembly by means of a template bolt.
"B": Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E): Indicates epoxy coating.



## STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
		·

Notes

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

5-15-2023

USER NAME = brandon.dudley	DESIGNED -	REVISED -
	DRAWN -	REVISED -
	CHECKED -	REVISED -
PLOT DATE = 8/8/2024	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FILE NAME: c:\pw\_work\pwidot\dudleybm\d10233