

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

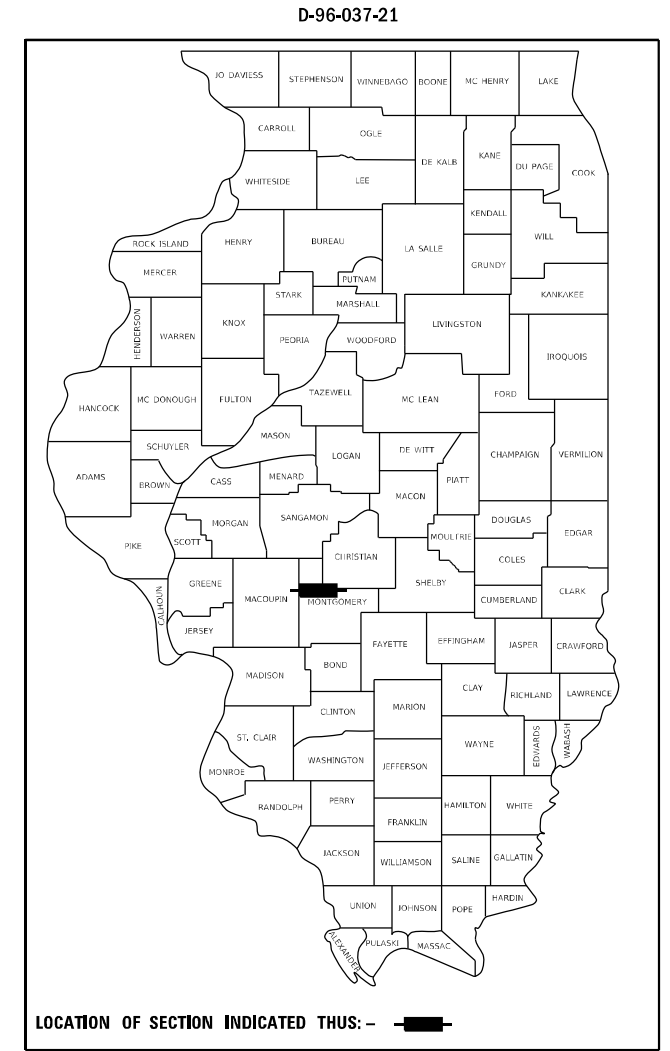
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	101 BDR, BJR	MONTGOMERY	12	1
		ILLINOIS	CONTRACT NO. 72M86	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

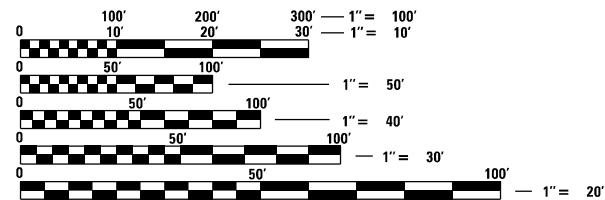
# PROPOSED CONTRACT MAINTENANCE

FAP ROUTE 42 (IL 48 /127)  
SECTION 101 BDR, BJR  
PROJECT (STATE)  
BRIDGE DECK REPAIRS  
MONTGOMERY COUNTY

C-96-108-21

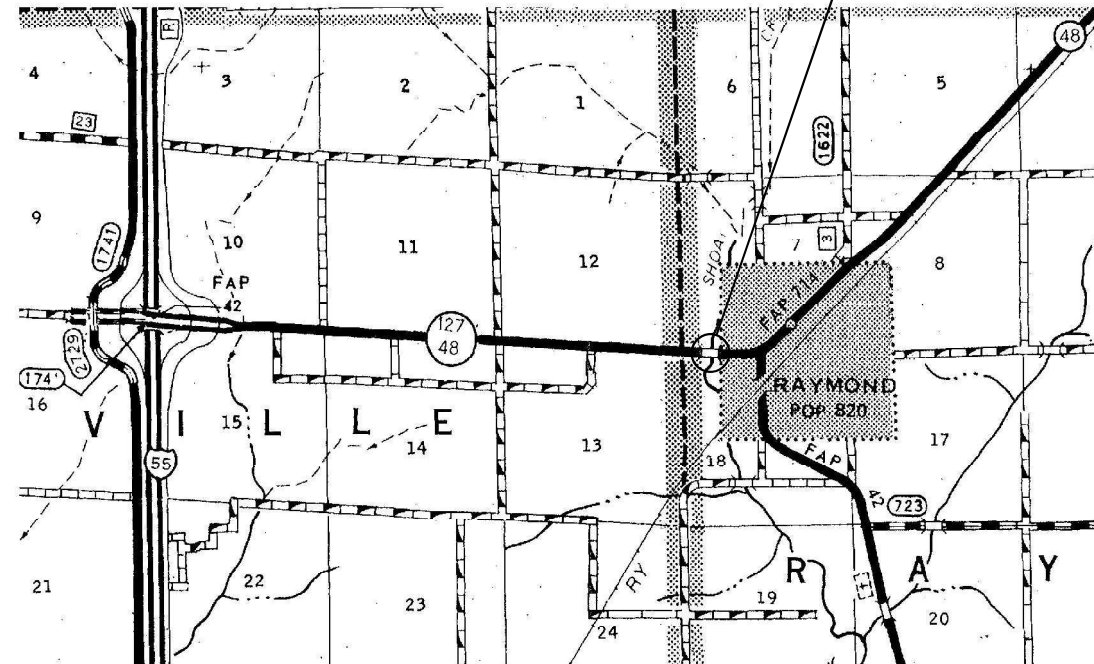


PROJECT LOCATION  
SN 068-0018  
IL 48/127 OVER  
WEST FORK SHOAL CREEK  
WEST EDGE OF RAYMOND



FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES, REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS  
1-800-892-0123  
OR 811



BRIDGE MAINTENANCE ENGINEER: BRANDON DUDLEY - (217) 785-9290

GROSS LENGTH = 130 FT. = 0.02 MILE  
NET LENGTH = 130 FT. = 0.02 MILE

CONTRACT NO. 72M86

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED March 24, 20 21

*Jeff P. Meyer*  
REGIONAL ENGINEER

May 7, 2021  
*Scott A. Elk*  
ENGINEER OF DESIGN AND ENVIRONMENT

May 7, 2021  
*James J. Jan*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS




- 1 COVER SHEET
- 2 INDEX, STANDARDS, SIGNATURES, GENERAL NOTES, & SCHEDULES
- 4 STAGING PLAN
- 5 TRAFFIC CONTROL PLAN
- 6-12 SN 068-0018 BRIDGE PLANS

GENERAL NOTES:

STANDARDS

- 000001-08
- 001001-02
- 001006
- 701001-02
- 701006-05
- 701201-05
- 701301-04
- 701321-18
- 701901-08
- 704001-08
- 780001-05
- 782006-01

PAVEMENT MARKING REMOVAL SCHEDULE					
STA	TO	STA	LOC.	LINE TYPE	PAVT MARK REM (SQ FT)
STAGE I					
968+03	-	970+13	℄	SKIP DASH	22
970+19	-	973+83	RT	SOLID	152
973+88	-	975+99	℄	SKIP DASH	22
STAGE II					
970+19	-	973+83	LT	SOLID	152
TOTAL					348

STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION DIVISION OF HIGHWAYS DISTRICT 6	
EXAMINED	March 15 20 21
	
ENGINEER OF OPERATIONS	
EXAMINED	March 15 20 21
	
ENGINEER OF PROJECT IMPLEMENTATION	
EXAMINED	March 22 20 21
	
ENGINEER OF PROGRAM DEVELOPMENT	

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	USER NAME = dudleybm	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, GENERAL NOTES, STANDARDS, SCHEDULES, &amp; SIGNATURES</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
		DRAWN -	REVISED -			42	101 BDR, BJR	MONTGOMERY	12	2	
	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -			CONTRACT NO. 72M86					
	PLOT DATE = 3/23/2021	DATE -	REVISED -			SCALE:		SHEET OF SHEETS		STA. TO STA.	

0-02176-6006  
SN 068-0018  
100% STATE

0-02176-6006  
SN 068-0018  
100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE/RURAL
				0047 MONTGOMERY
50102400	CONCRETE REMOVAL	CU YD	8.8	8.8
50300255	CONCRETE SUPERSTRUCTURE	CU YD	8.7	8.7
50300300	PROTECTIVE COAT	SQ YD	90	90
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1350	1350
50800515	BAR SPLICERS	EACH	24	24
52000110	PREFORMED JOINT STRIP SEAL	FOOT	68	68
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
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106800	CHANGEABLE MESSAGE SIGN	CAL DAY	135	135
70400100	TEMPORARY CONCRETE BARRIER	FOOT	375	375
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	375	375
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2

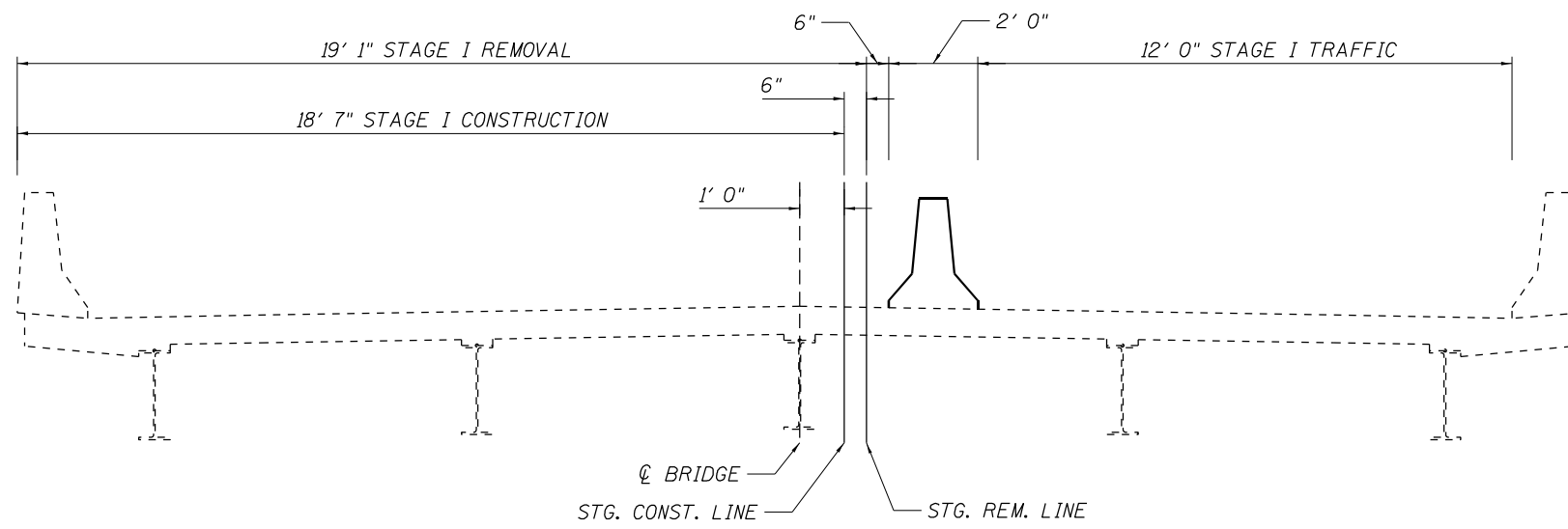
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE/RURAL
				0047 MONTGOMERY
70600352	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	2
*78001120	PAINT PAVEMENT MARKING - LINE 5"	FOOT	900	900
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	350	350
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	6	6
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	176	176
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	5	5
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	28	28
Z0032500	JOINT SEALING (PATCHES)	FOOT	800	800

\* SPECIALTY ITEM

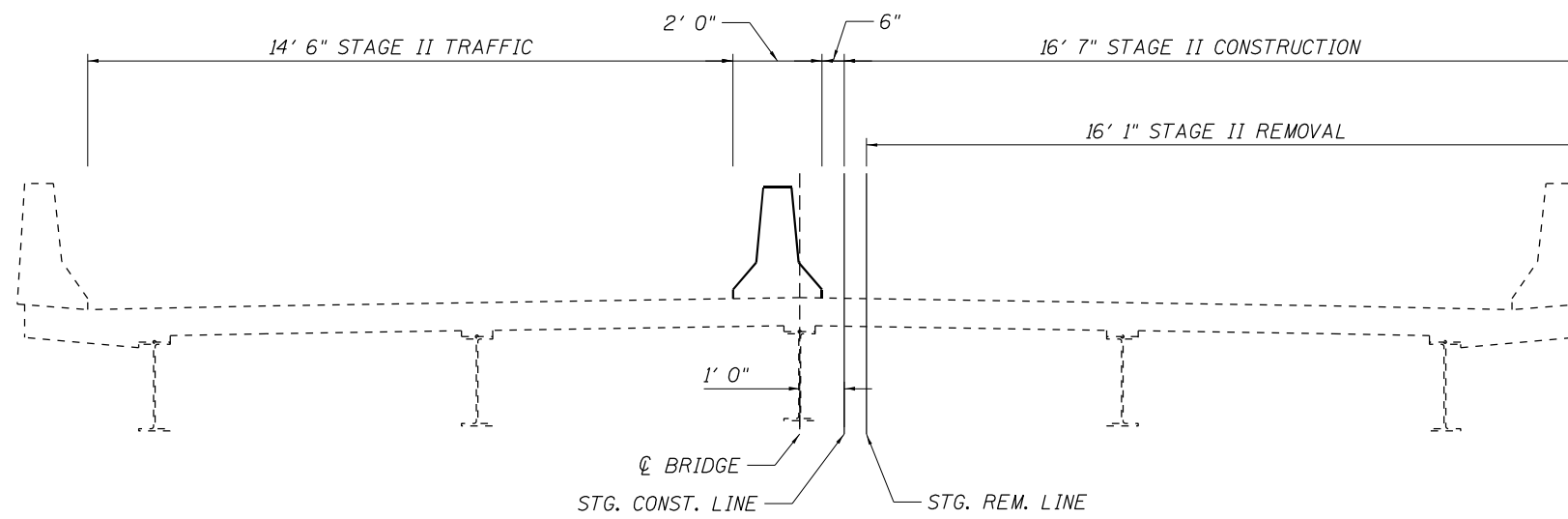
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REV. - MS

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PLOT DATE = 3/23/2021	DATE -	REVISIED -		ILLINOIS FED. AID PROJECT								



**STAGE I TRAFFIC, LOOKING EAST**



**STAGE II TRAFFIC, LOOKING EAST**

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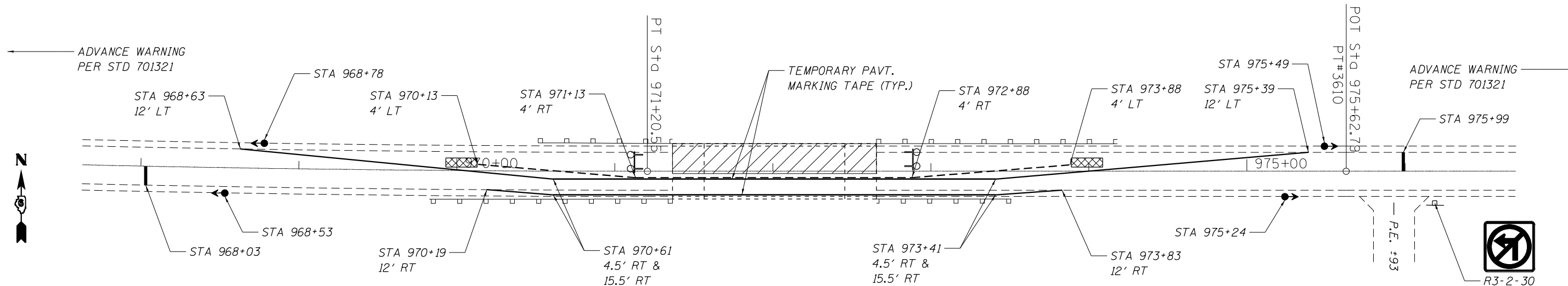
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

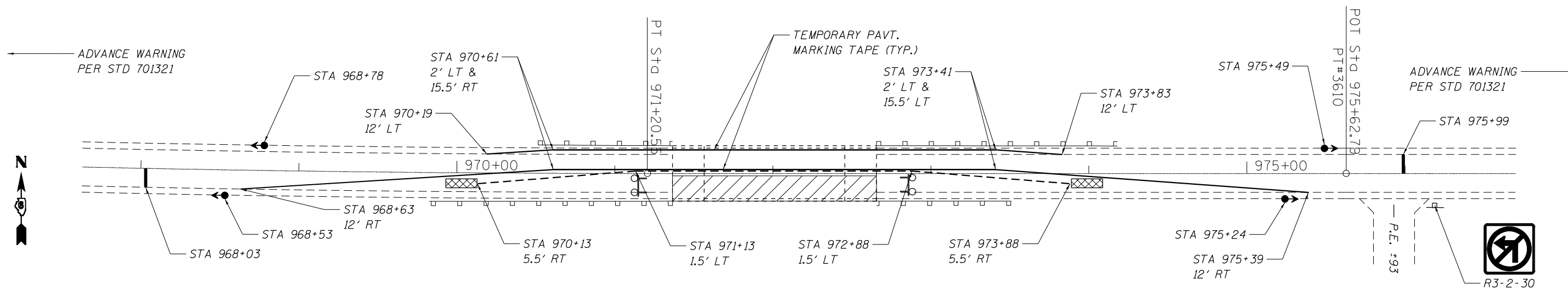
**TRAFFIC STAGING PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	101 BDR, BJR	MONTGOMERY	12	4
			CONTRACT NO. 72M86	
ILLINOIS FED. AID PROJECT				








STAGE I TRAFFIC CONTROL



STAGE II TRAFFIC CONTROL

**SYMBOLS**

-  WORK AREA
-  TEMPORARY CONCRETE BARRIER
-  IMPACT ATTENUATOR
-  TRAFFIC SIGNAL
-  TYPE III BARRICADE WITH FLASHING LIGHTS

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. IMPACT ATTENUATORS, TEMPORARY RUMBLE STRIPS, AND TEMPORARY CONCRETE BARRIER SHALL BE PAID SEPARATELY.
2. TEMPORARY CONCRETE BARRIER OFFSETS GIVEN IN THIS DETAIL REFER TO THE EDGE OF THE BARRIER NEAREST TO LIVE TRAFFIC.
3. RUMBLE STRIPS SHOWN IN STANDARD 701321 WILL NOT BE REQUIRED.
4. BARRIER WALL TAPERS SHALL BE 12:1 UNLESS OTHERWISE SPECIFIED.

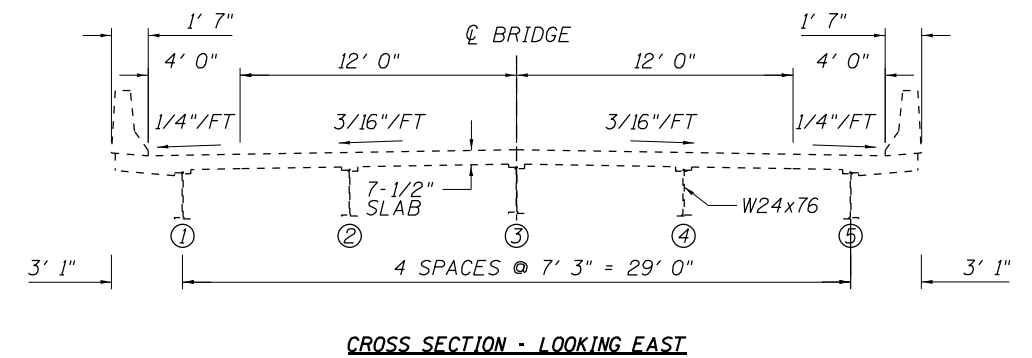
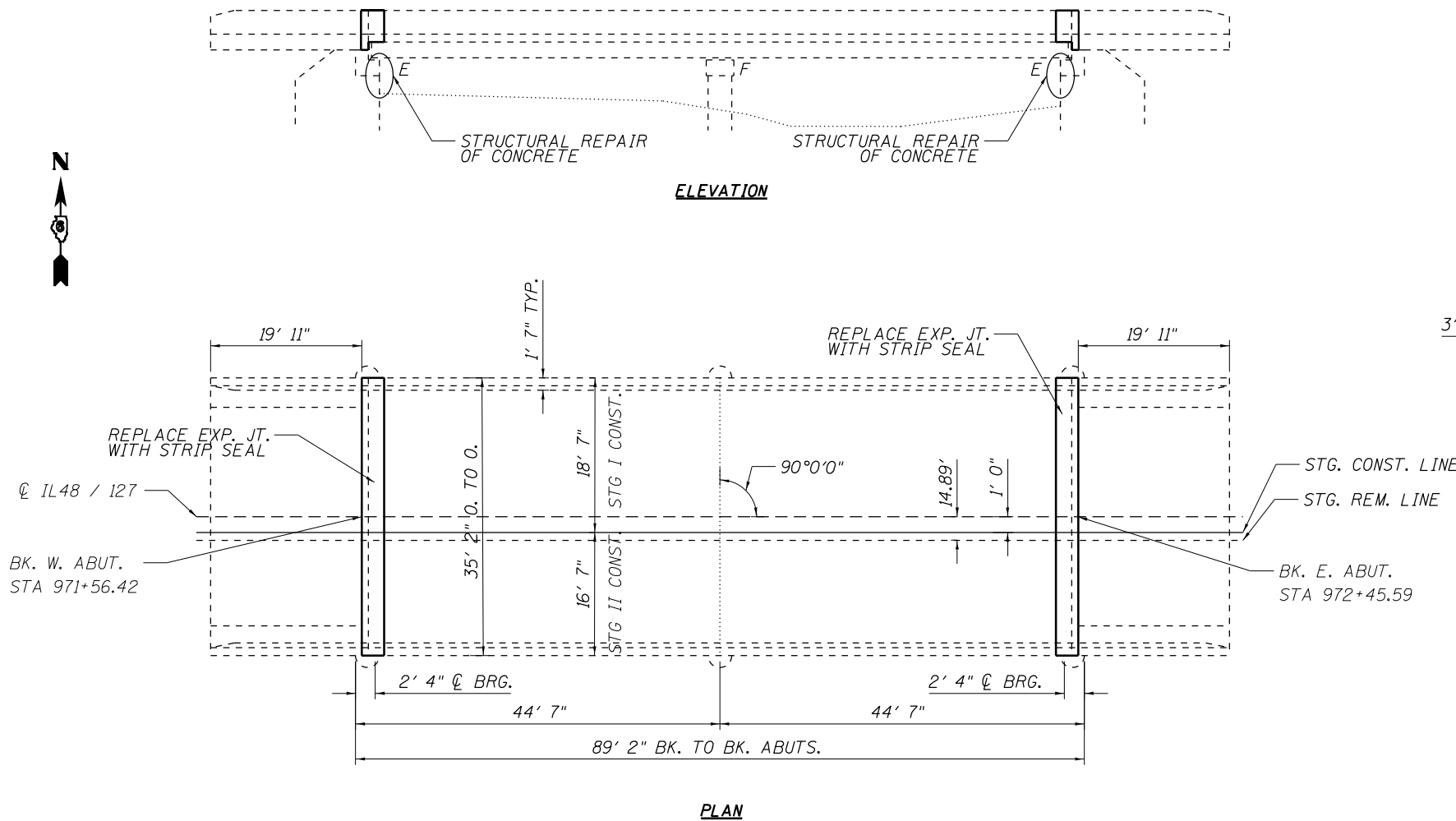
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PLOT DATE = 3/23/2021	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TRAFFIC CONTROL PLAN</b>				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	101 BDR, BJR	MONTGOMERY	12	5
CONTRACT NO. 72M86				
		ILLINOIS	FED. AID PROJECT	



Expires 11-30-2022  
*David Carl Puzey*  
 04/28/2021

**TOTAL BILL OF MATERIAL (068-0018)**

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	8.8
Concrete Superstructure	Cu. Yd.	8.7
Reinforcement Bars, Epoxy Coated	Pound	1350
Bar Splicers	Each	24
Preformed Joint Strip Seal	Foot	68
Protective Coat	Sq. Yd.	90
Approach Slab Repair (Partial Depth)	Sq. Yd.	6
Deck Slab Repair (Partial)	Sq. Yd.	28
Deck Slab Repair (Full Depth, Type II) *	Sq. Yd.	5
Structural Repair of Concrete (Depth Equal to or Less Than 5")	Sq. Ft.	176
Joint Sealing (Patches)	Foot	800
* No full depth repairs anticipated. Nominal quantity included.		

**STRUCTURE GENERAL NOTES:**

ALL STRUCTURAL STEEL SHALL BE AASHTO M-270 GRADE 36, UNLESS OTHERWISE NOTED.

REINFORCEMENT BARS DESIGNATED (E) SHALL BE EPOXY COATED.

PRIOR TO POURING THE NEW CONCRETE DECK, ALL HEAVY OR LOOSE 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 CONCRETE REMOVAL.

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 THE SCOPE OF WORK, HOWEVER, THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

EXISTING REINFORCEMENT BARS EXTENDING INTO THE REMOVAL AREA SHALL BE CLEANED, STRAIGHTENED, AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY REINFORCEMENT BARS THAT ARE DAMAGED DURING CONCRETE REMOVAL SHALL BE REPLACED WITH AN APPROVED BAR SPLICER OR ANCHORAGE SYSTEM. COST INCLUDED WITH CONCRETE REMOVAL.

JOINT OPENINGS SHALL BE ADJUSTED ACCORDING TO ARTICLE 520.04 OF THE STANDARD SPECIFICATIONS WHEN THE DECK IS POURED AT AN AMBIENT TEMPERATURE OTHER THAN 50°F.

THE ABUTMENT AND DECK SURFACES IN THE AREAS OF EXPANSION JOINT REPLACEMENT SHALL HAVE A TINED FINISH AS PER ARTICLE 420.09(e)(1) OF THE STANDARD SPECIFICATIONS, COST INCLUDED WITH CONCRETE SUPERSTRUCTURE.

PROTECTIVE COAT SHALL ONLY BE APPLIED TO THE NEW CONCRETE DECK AND PARAPET SURFACES ADJACENT TO THE PROPOSED EXPANSION JOINTS AND TO DECK PATCHES.

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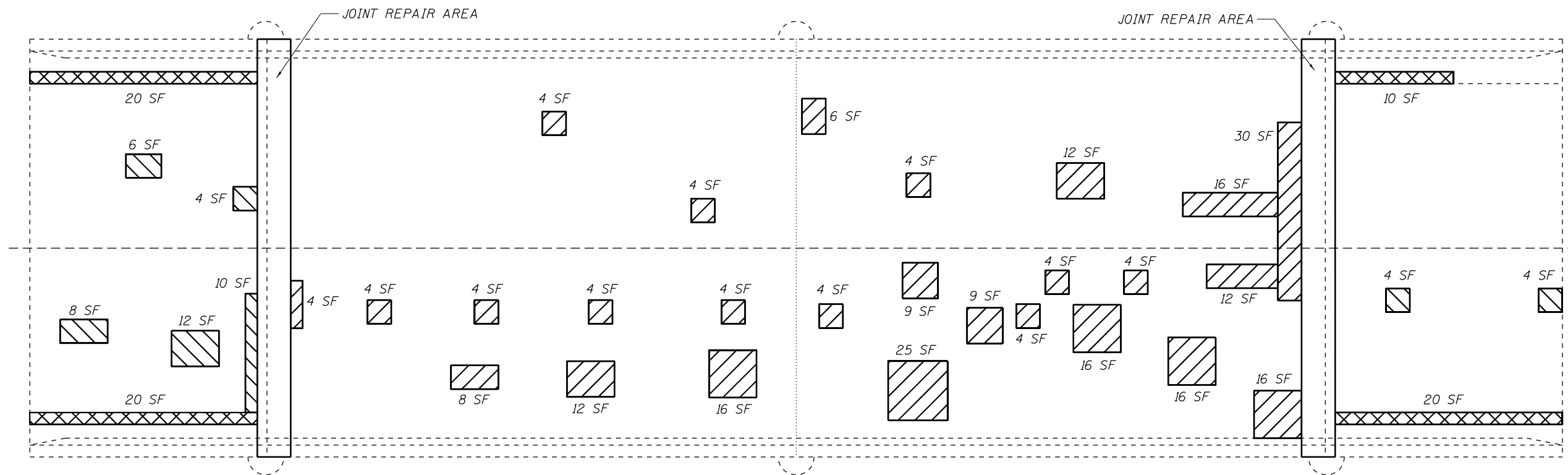
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PLOT DATE = 3/23/2021	DATE - 3/3/2021	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**




**BRIDGE PLAN & ELEVATION  
 SN 068-0018**

SCALE: SHEET 1 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 42	SECTION 101 BDR, BJR	COUNTY MONTGOMERY	TOTAL SHEETS 12	SHEET NO. 6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72M86	



PLAN

-  APPROACH SLAB REPAIR (PARTIAL DEPTH)
-  DECK SLAB REPAIR (PARTIAL)
-  STRUCTURAL REPAIR OF CONCRETE

NOTES:

IDENTIFIED PATCHING LOCATIONS ARE ESTIMATED FROM A DECK SURVEY PERFORMED ON 9/1/2020. THE PATCHING SURVEY IS INCLUDED FOR INFORMATION ONLY. THE ENGINEER SHALL LAY OUT ACTUAL PATCH LOCATIONS IN THE FIELD.

THE ENGINEER SHALL SHOW ACTUAL LOCATIONS OF DECK REPAIRS ON AS-BUILT PLANS.

JOINT SEALING (PATCHES) SHALL BE APPLIED IN LOCATIONS AS DIRECTED IN THE SPECIAL PROVISIONS AND ALONG THE ENTIRE LENGTH OF THE EXISTING STAGE CONSTRUCTION LINE.

SLAB REPAIR BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Approach Slab Repair (Partial Depth)	Sq. Yd.	6
Deck Slab Repair (Partial)	Sq. Yd.	28
Deck Slab Repair (Full Depth, Type II) *	Sq. Yd.	5
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	70
Joint Sealing (Patches)	Foot	800

\* No full depth repairs anticipated. Nominal quantity included.

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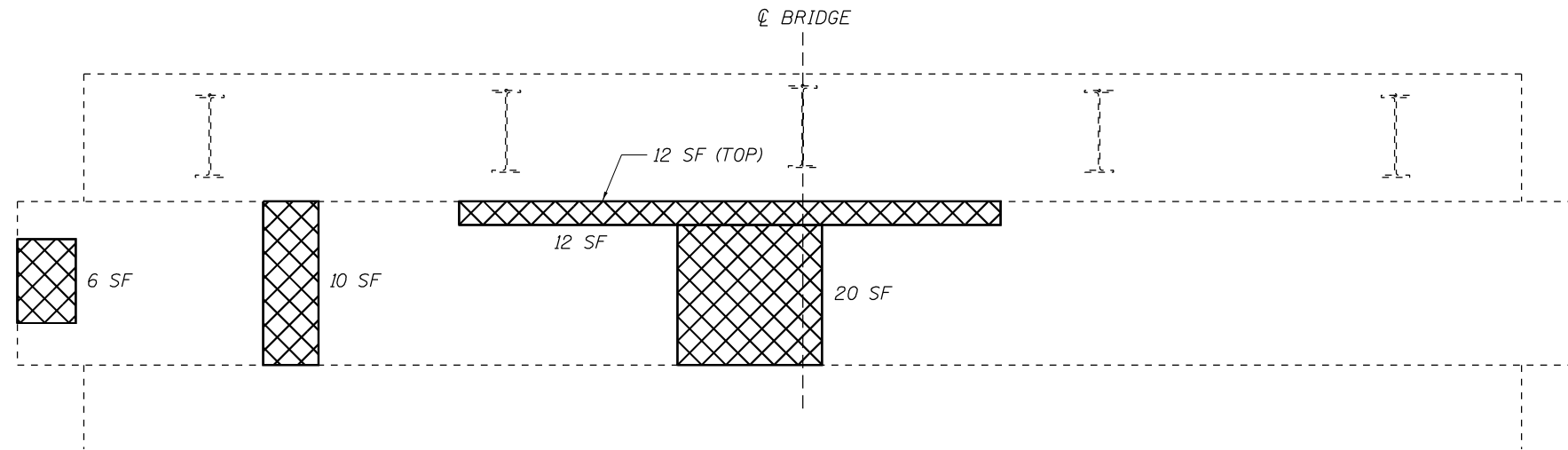
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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

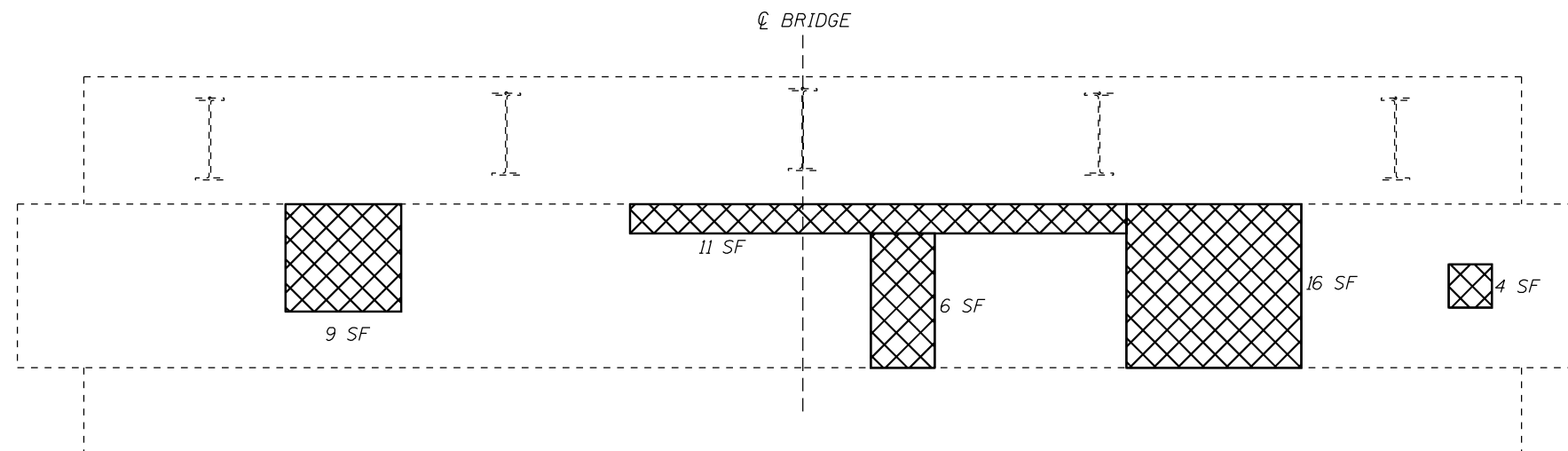
SLAB REPAIR PLAN  
SN 068-0018

SCALE: SHEET 2 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	101 BDR, BJR	MONTGOMERY	12	7
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72M86	



**EAST ABUTMENT FACE**



**WEST ABUTMENT FACE**



STRUCTURAL REPAIR OF CONCRETE

**SUBSTRUCTURE REPAIR BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less Than 5 Inches)	Sq. Ft.	106

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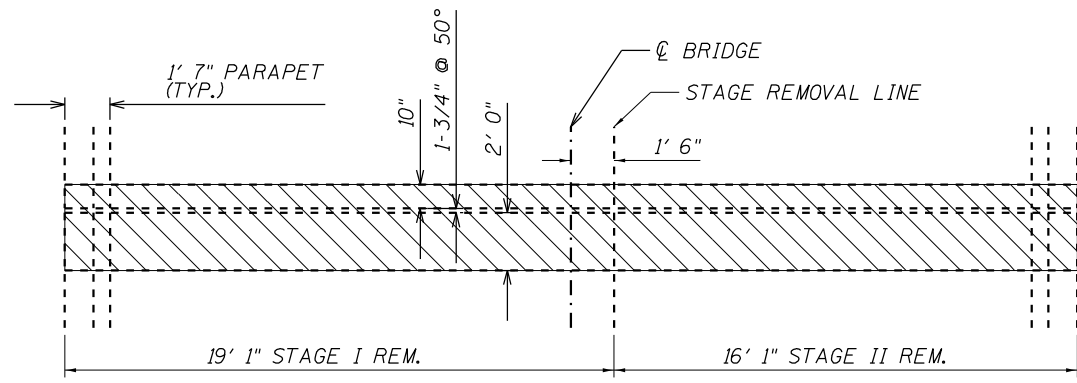
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**SUBSTRUCTURE REPAIR PLAN  
SN 068-0018**

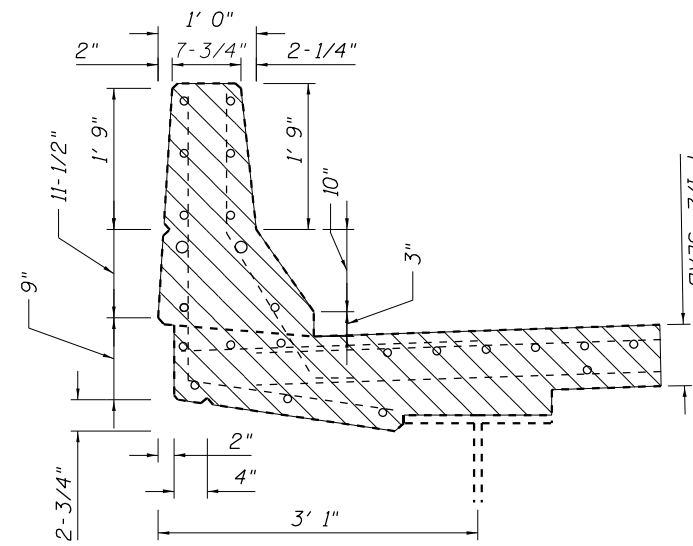
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 72M86			ILLINOIS FED. AID PROJECT	

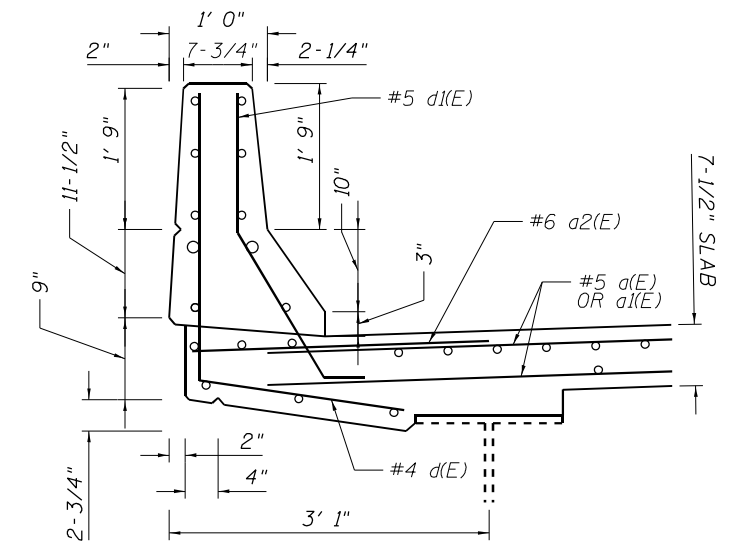




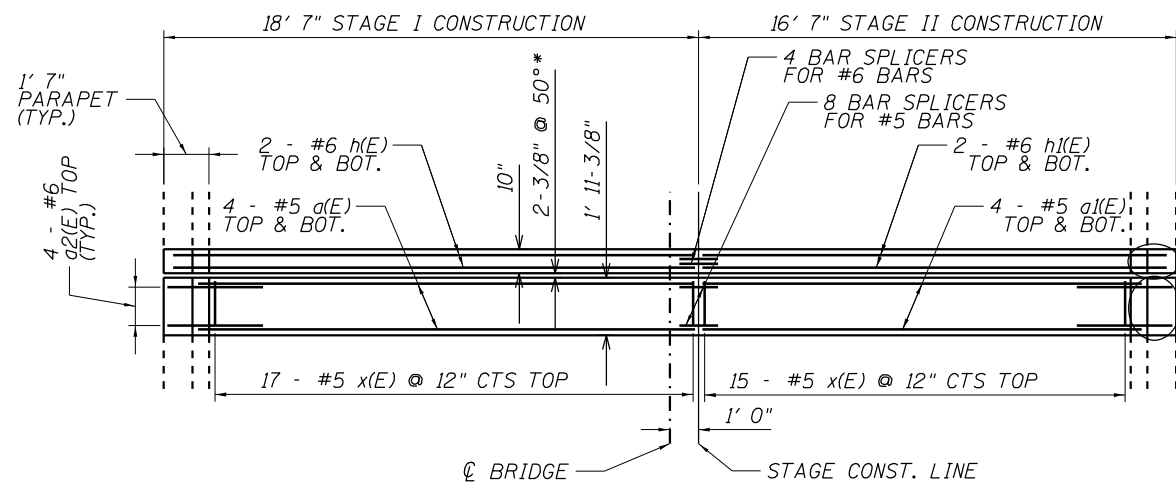
TYPICAL JOINT REMOVAL PLAN  
(EAST JOINT SHOWN)



PARAPET REMOVAL CROSS SECTION

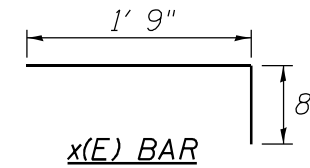


PARAPET CROSS SECTION

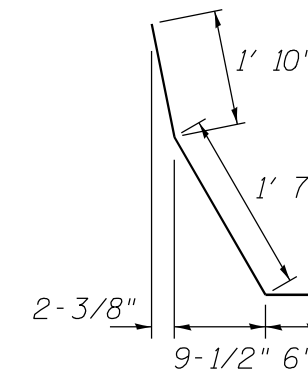


TYPICAL JOINT PLAN  
(EAST JOINT SHOWN)

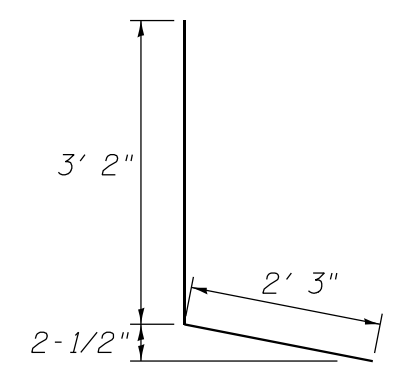
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SEE PARAPET CROSS SEC.  
3 - #4 d(E) & #5 d1(E) (TYP.)  
SEE PARAPET CROSS SEC.



x(E) BAR

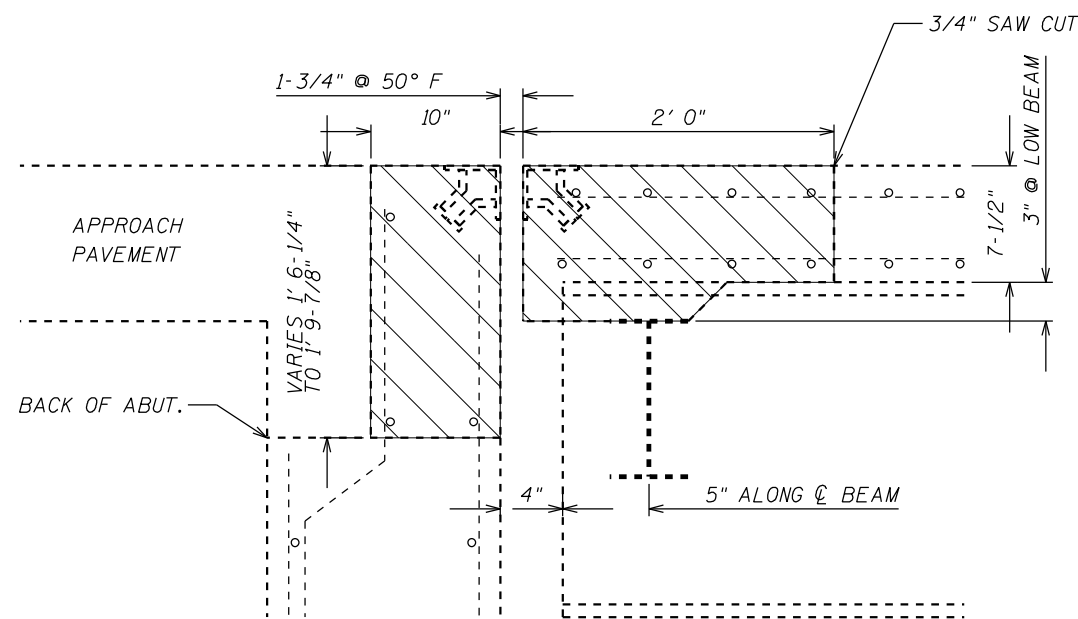


d1(E) BAR

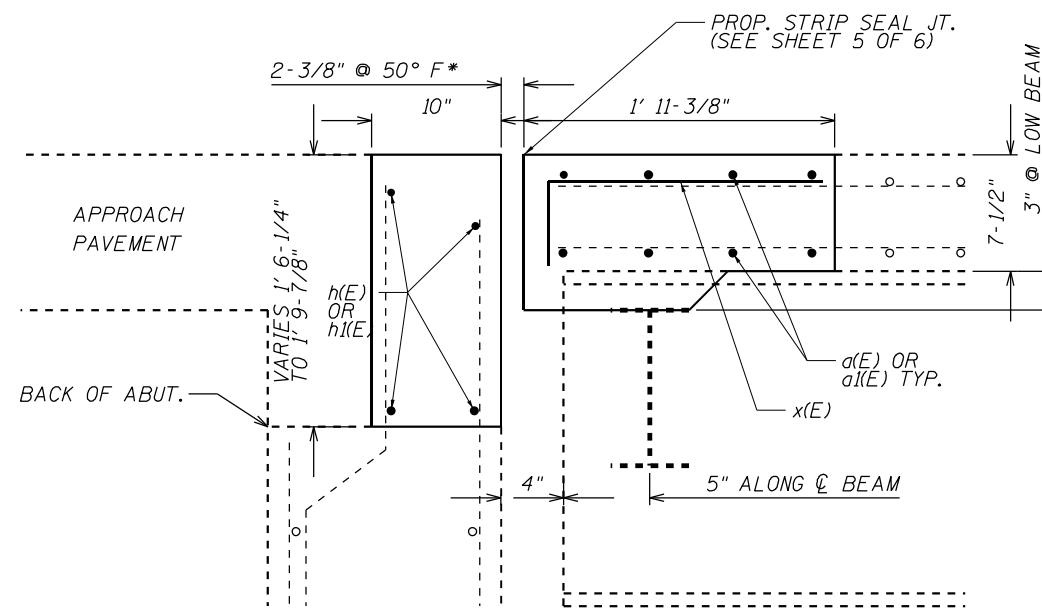


d(E) BAR

\* DIMENSION BASED ON ROLLED RAIL JOINT (SEE SHEET 5 OF 6)



TYPICAL JOINT REMOVAL CROSS SECTION



TYPICAL JOINT CROSS SECTION

BILL OF MATERIAL - 2 JOINTS				
BAR	#	SIZE	LENGTH	SHAPE
a(E)	16	#5	17' 8"	—
a1(E)	16	#5	15' 8"	—
a2(E)	16	#6	4' 0"	—
d(E)	16	#4	5' 5"	L
d1(E)	16	#5	3' 11"	L
h(E)	8	#6	18' 0"	—
h1(E)	8	#6	16' 0"	—
x(E)	64	#5	2' 5"	┘
REINFORCEMENT BARS (EPOXY COATED)		POUND	1350	
CONC. SUPERSTRUCTURE		CU YD	8.7	
CONC. REMOVAL		CU YD	8.8	
BAR SPLICERS		EACH	24	

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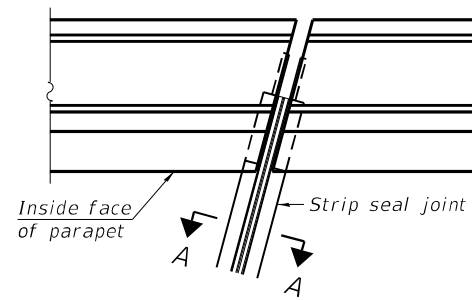
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	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

JOINT REPAIR DETAIL  
SN 068-0018

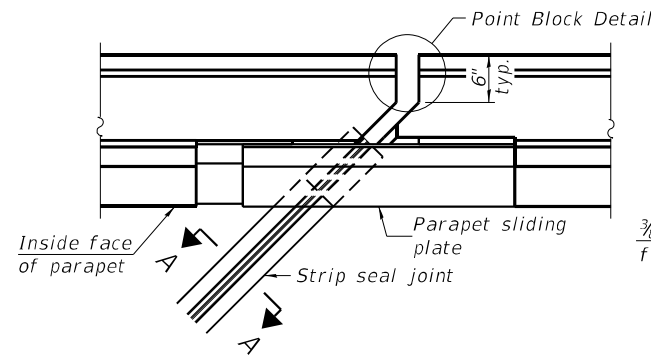
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F.A.P. RTE. 42	SECTION 101 BDR, BJR	COUNTY MONTGOMERY	TOTAL SHEETS 12	SHEET NO. 9
			CONTRACT NO. 72M86	
		ILLINOIS FED. AID PROJECT		

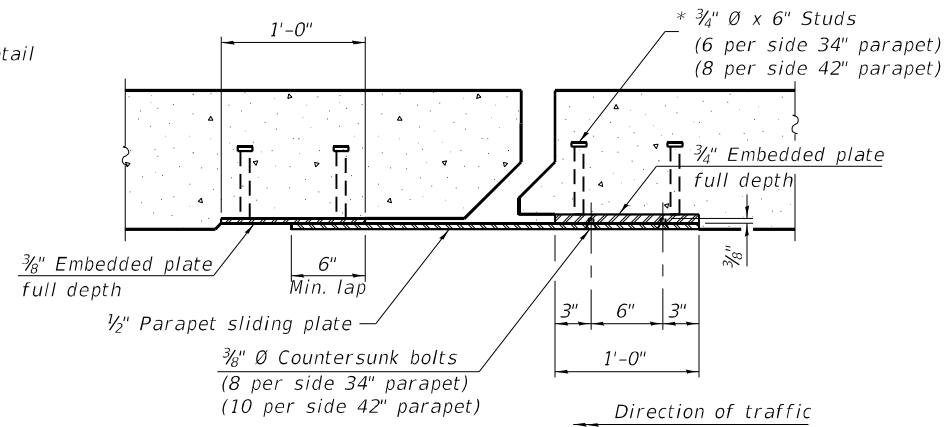


FOR SKEWS  $\leq 30^\circ$

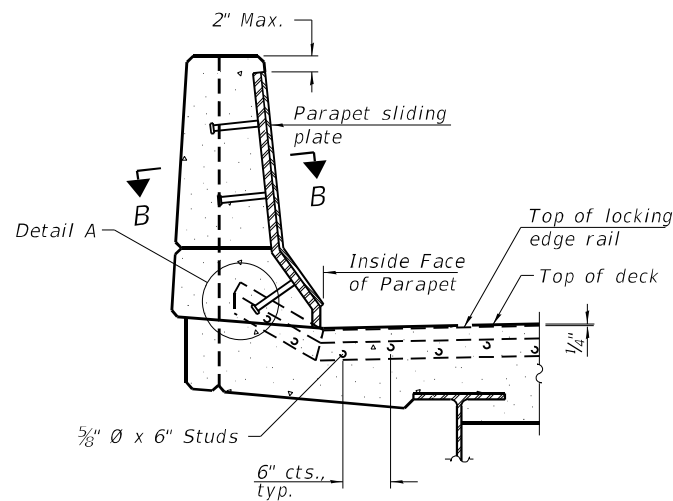
PLAN AT PARAPET



FOR SKEWS  $> 30^\circ$

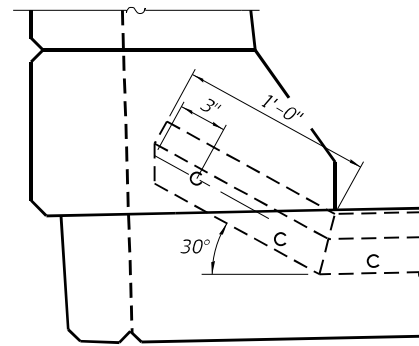


SECTION B-B

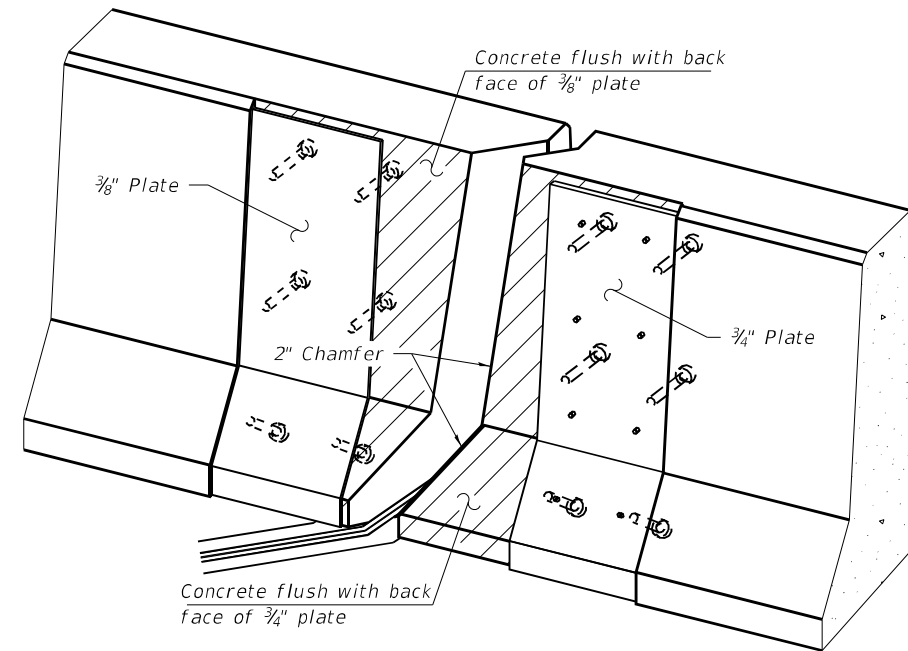


ELEVATION AT PARAPET

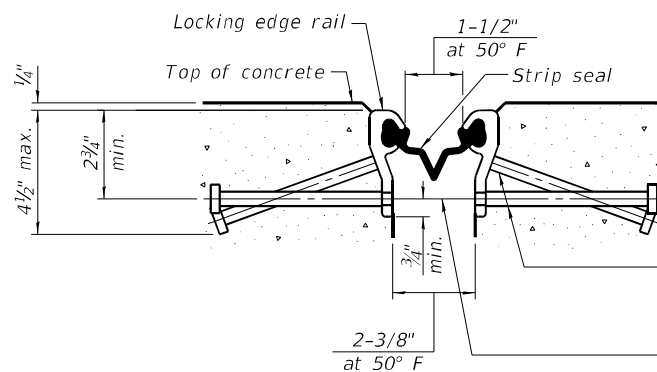
(Skews  $> 30^\circ$  shown. Skews  $\leq 30^\circ$  similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW  
(Showing embedded plates only)



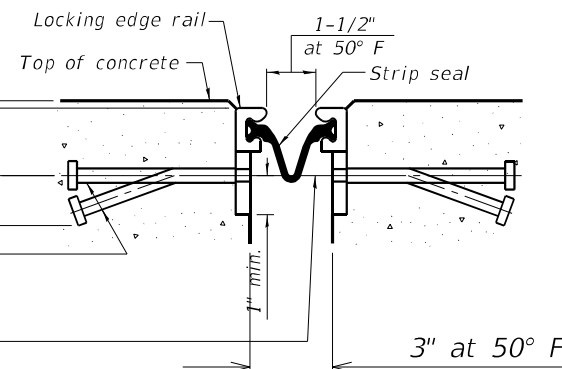
SHOWING ROLLED RAIL JOINT

\*  $3/8"$   $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

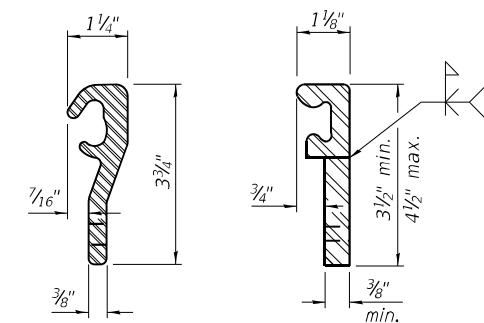
$3/8"$   $\phi$  threaded rods in  $1/16"$   $\phi$  holes at  $\pm 4"$ -0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



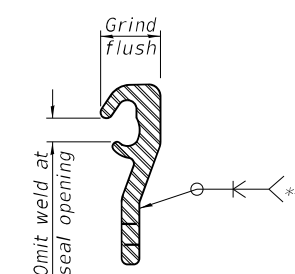
SHOWING WELDED RAIL JOINT



ROLLED (EXTRUDED) RAIL  
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.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	68

Notes:

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

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

The manufacturer's recommended installation methods shall be followed.

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

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

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

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

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EJ-SS

8-11-17

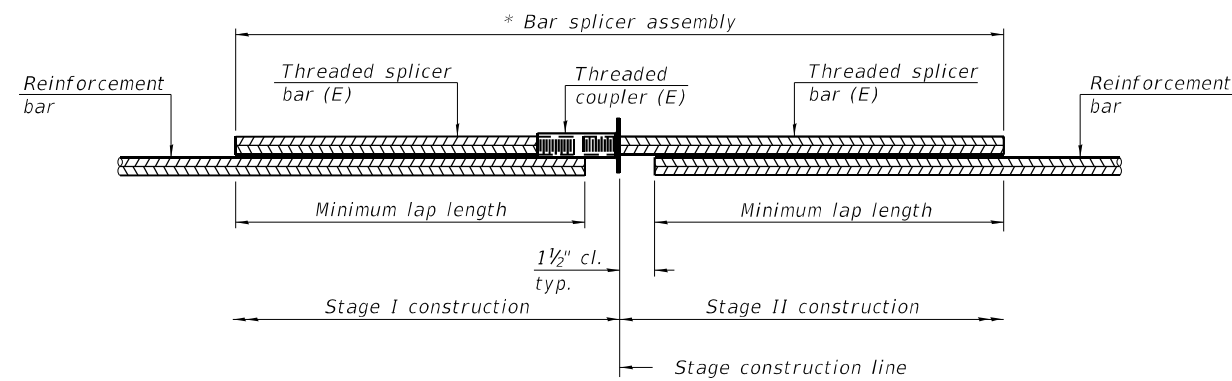
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PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/23/2021	CHECKED -	REVISED -
	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 068-0018

SCALE: SHEET 5 OF 7 SHEETS STA. TO STA.

F.A.P. RTE. 42	SECTION 101 BDR, BJR	COUNTY MONTGOMERY	TOTAL SHEETS 12	SHEET NO. 10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72M86	

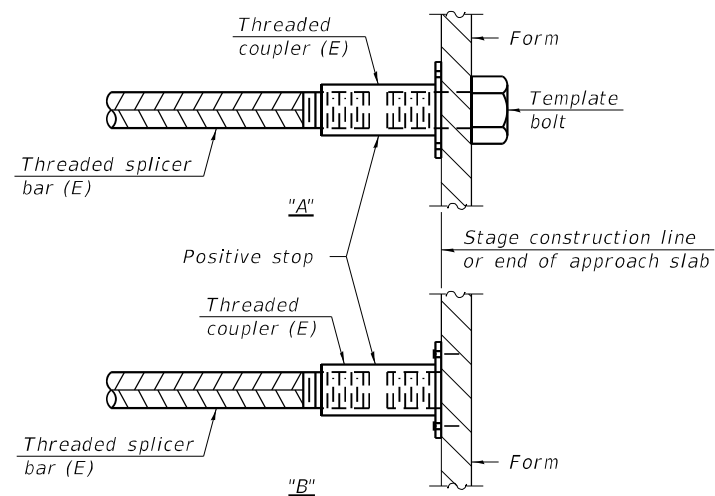


**STANDARD BAR SPLICER ASSEMBLY PLAN**  
 (All components shall be provided from one supplier)

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

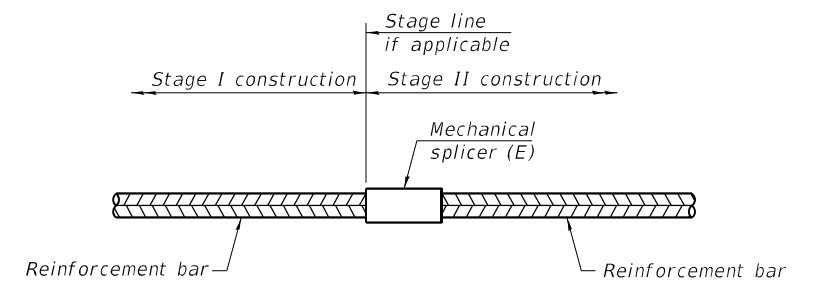
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Joints (Deck Side)	#5	16	3' 6"
Joints (Appr. Side)	#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.



**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

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 068-0018

USER NAME = dudleybm	DESIGNED -	REVISED -
PLOT SCALE = 100,0000' / in.	DRAWN -	REVISED -
PLOT DATE = 3/23/2021	CHECKED -	REVISED -
	DATE -	REVISED -

SCALE: SHEET 6 OF 7 SHEETS STA. TO STA.

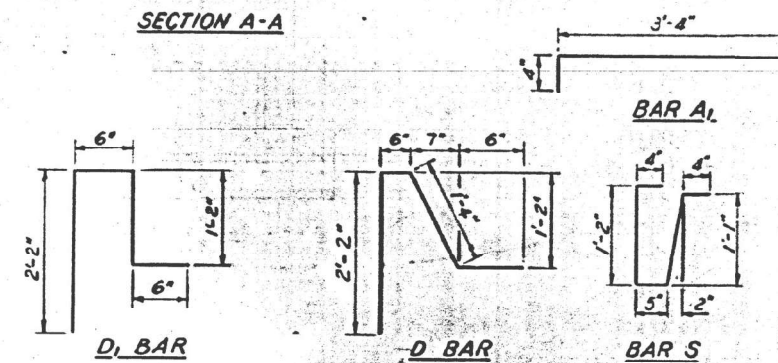
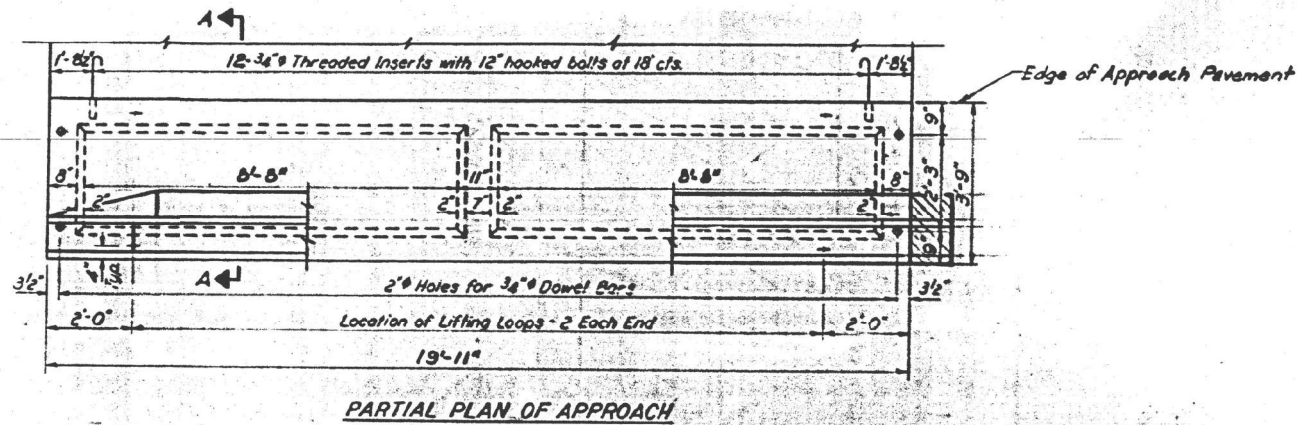
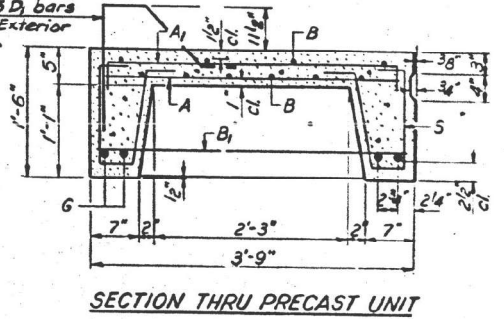
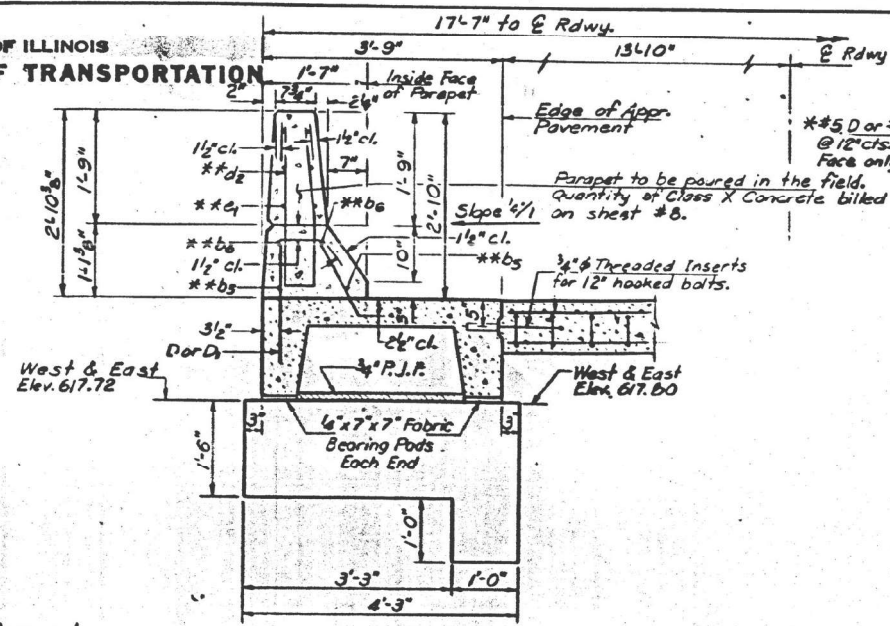
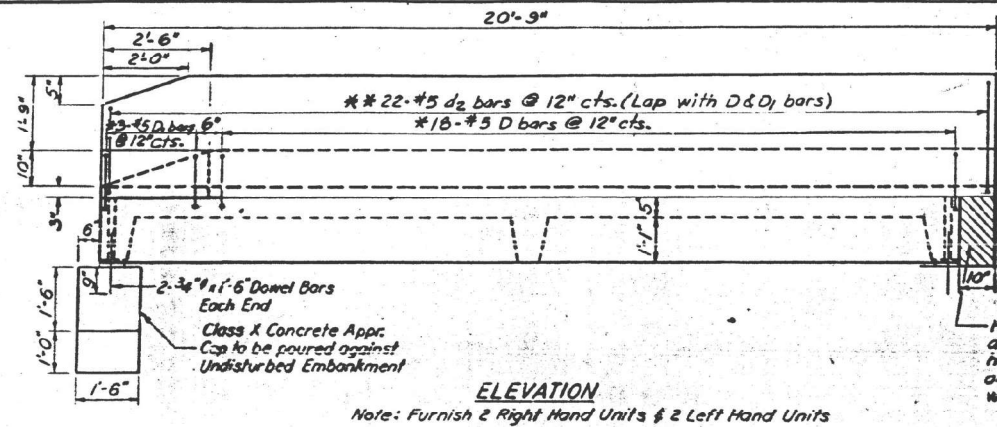
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42	101 BDR, BJR	MONTGOMERY	12	11
			CONTRACT NO. 72M86	
			ILLINOIS FED. AID PROJECT	

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STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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P.A. & L.				
FED. ROAD DIST. NO. 7	ALPHABET	FED. AID PROJECT		

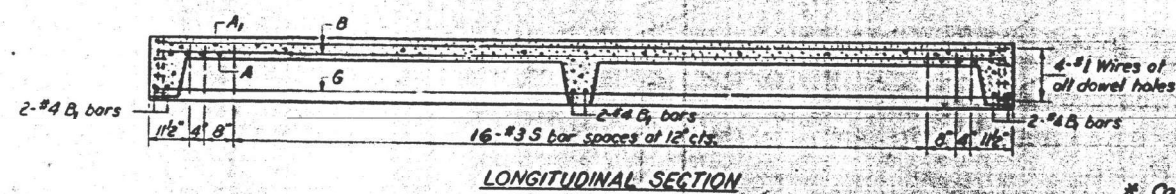
SHEET NO. 6  
15 SHEETS



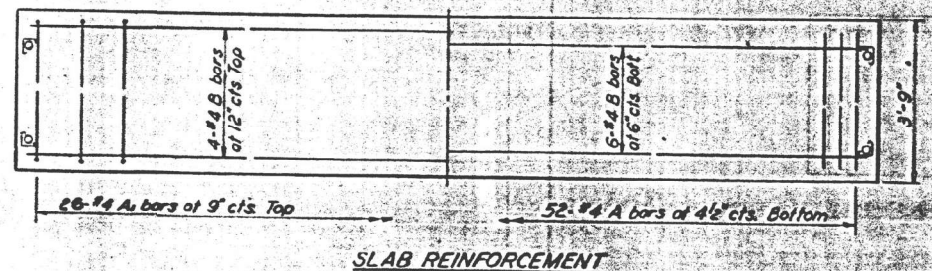
**BAR LIST - ONE UNIT**

Reinforcement to be cast into slab

Bar	No	Size	Length	Shape
A	52	#4	3'-3"	—
A <sub>1</sub>	20	#4	4'-0"	—
B	10	#4	19'-6"	—
B <sub>1</sub>	6	#4	3'-6"	—
D	18	#5	4'-6"	—
D <sub>1</sub>	3	#5	6'-4"	—
G	4	#10	19'-6"	—
S	42	#3	3'-2"	—



\* Cast bars into Precast Unit.  
\*\* Reinforcement bars not cast into Precast Unit billed on Sheet #B.

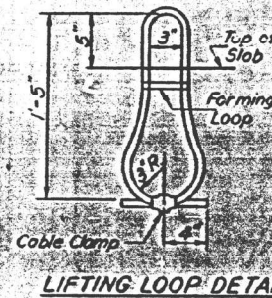


**NOTES**

Unless otherwise approved by the Engineer, lifting loops shall be 1/2" 6 x 19 class wire rope with fiber core and shall have a minimum ultimate strength of 18,700 lbs. Loops shall be burned off after slab has been erected. Holes shall be drilled and anchor dowels grouted in place. Cost of reinforcement and accessories cast into the slab unit, bearing pods, furnishing, drilling for, placing and grouting anchor dowels and 3/4" hooked bolts is included in Unit bid price for "Precast Concrete Bridge Slab." The Precast Concrete Bridge Slab shall be erected and aligned as shown in Sec. A-A after the Bridge Deck is poured. A Calcium Nitrite Corrosion Inhibitor, as covered in the Special Provisions, shall be used in the Concrete for Precast Concrete Bridge Slab.

**BILL OF MATERIAL**

Item	Unit	Quantity
Precast Concrete Bridge Slab	Sq Ft	299
Class X Concrete	Cu Yds	1.6



**STRESSES**

$f_c = 4,500$  psi  
 $f_s = 1,800$  psi  
 $f_s = 27,000$  psi  
 $n = 8$

LOADING HS-20

**APPROACH DETAILS**  
F.A.P. RTE 42 SECTION 101 BR  
MONTGOMERY COUNTY  
STA. 972+01.00

DESIGNED *John R. Oberdi*  
CHECKED R. F. ROYER  
DRAWN E. V. Taylor  
CHECKED RFR S.M.A.  
August 15 1983  
EXAMINED *James J. Kuybun*  
PASSED  
APPROVED  
DIRECTOR OF HIGHWAYS

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

EXISTING APPROACH SHOULDER PLANS  
(FOR INFORMATION ONLY)

USER NAME = dudleybm  
PLOT SCALE = 100,0000' / in.  
PLOT DATE = 3/23/2021

DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED -  
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SCALE: SHEET 7 OF 7 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
42	101 BDR, BJR	MONTGOMERY	12	12
				CONTRACT NO. 72M86
ILLINOIS FED. AID PROJECT				