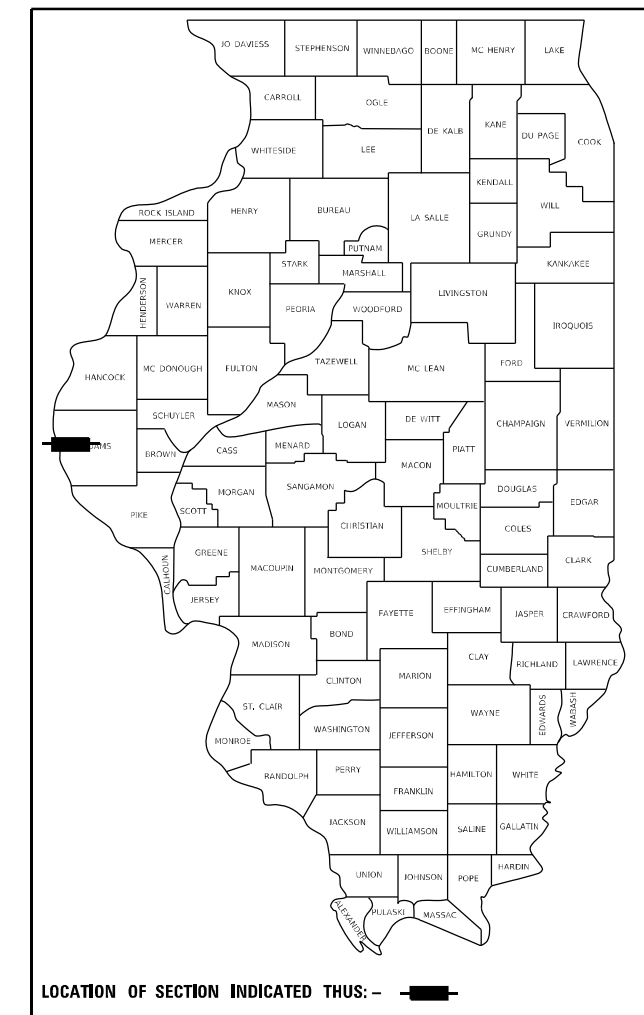


STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BRR,BDR,BJR)	ADAMS	15*	1
		ILLINOIS	CONTRACT NO. 72731	

\*15 + 1 = 16 TOTAL SHEETS

D-96-022-24

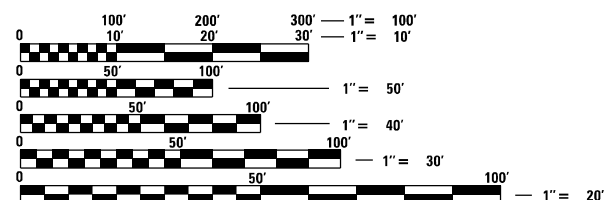


FOR INDEX OF SHEETS, SEE SHEET NO. 2

# PROPOSED CONTRACT MAINTENANCE

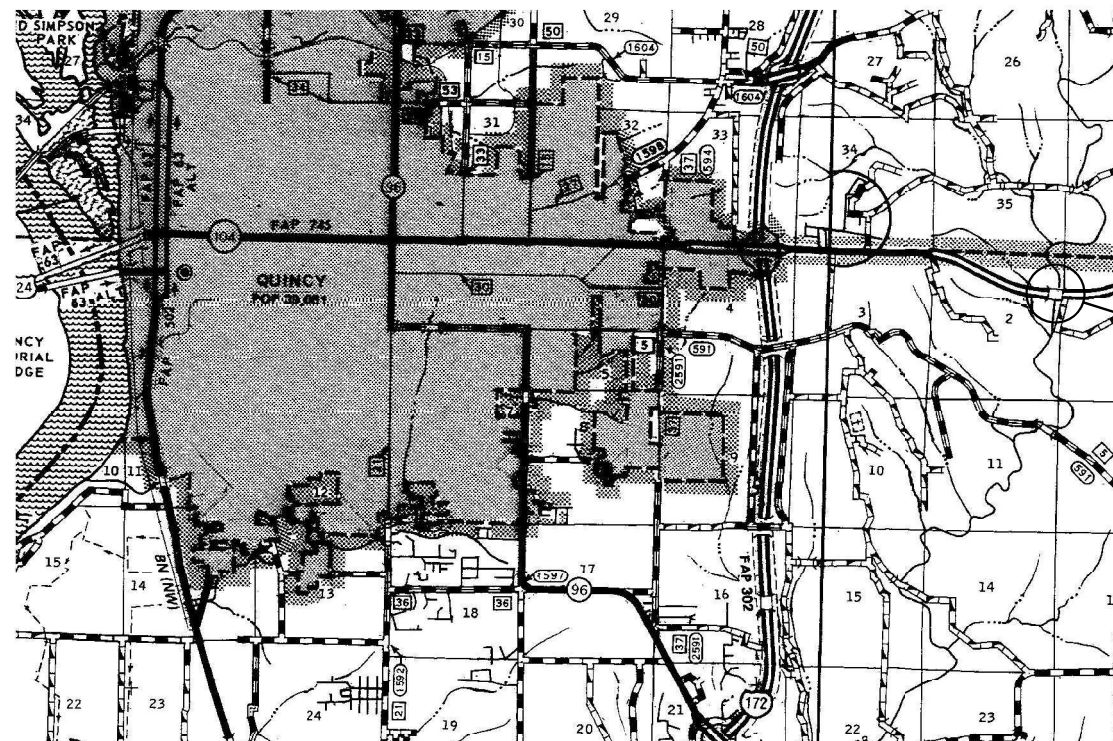
FAP ROUTE 745 (IL 104)  
SECTION 103B-1(BRR,BDR,BJR)  
PROJECT (STATE)  
BRIDGE DECK REPAIRS  
ADAMS COUNTY

C-96-038-24



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



PROJECT LOCATION  
SN 001-0070  
IL 104 EB OVER MILL CREEK  
2.3 MI E I-172

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

GROSS LENGTH = 252 FT. = 0.05 MILE  
NET LENGTH = 252 FT. = 0.05 MILE

CONTRACT NO. 72731

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUBMITTED December 12, 2023

*Jeff P. Meyer*  
REGIONAL ENGINEER

February 2, 2024  
*Scott A. Etkin*  
ENGINEER OF DESIGN AND ENVIRONMENT

February 2, 2024  
*Stephen M. Smith*  
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY  
OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX, STANDARDS, SIGNATURES, & GENERAL NOTES
- 3-4 SUMMARY OF QUANTITIES
- 5 TYPICAL SECTIONS
- 6 ROADWAY PLAN
- 7 PAVEMENT PATCHING DETAIL
- 8 EXISTING JOINT DETAILS
- 9 STAGING PLAN
- 10-11 TRAFFIC CONTROL PLAN
- 12-15A BRIDGE PLANS

STANDARDS

- 000001-08
- 001001-02
- 001006
- 420001-10
- 442001-04
- 701101-05
- 701106-02
- 701400-12
- 701401-13
- 701402-12
- 701426-09
- 701901-09
- 704001-08
- 780001-05
- 782006-01


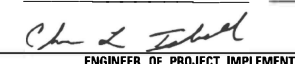

GENERAL NOTES:

AREAS OF DECK REPAIRS SHOWN ARE ESTIMATED. THE ENGINEER SHALL SHOW ACTUAL LOCATIONS ON AS-BUILT PLANS.

FULL DEPTH PATCHES SHALL BE COVERED WITH STEEL PLATES WHEN WORKERS ARE NOT PRESENT.

ALL TEMPORARY MARKING TAPE THAT IS TO REMAIN IN PLACE LONGER THAN 14 DAYS SHALL BE TYPE III OR TYPE IV TAPE. TYPE I TEMPORARY PAVEMENT MARKING TAPE MAY BE USED FOR APPLICATIONS 14 DAYS OR LESS.

MIX TABLE		
MIXTURE USE	BASE COURSE (LOWER LIFTS)	BASE COURSE (TOP LIFT)
PG	PG 64-22	PG 64-22
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50
MIXTURE COMPACTION	IL-19.0	IL-9.5
FRICTION AGGREGATE	N/A	MIX "C"
QUALITY MANAGEMENT	QC/QA	QC/QA
SUBLOT SIZE	N/A	N/A
MTD REQUIRED	NO	NO

<b>STATE OF ILLINOIS</b>	
<b>DEPARTMENT OF TRANSPORTATION</b>	
<b>DIVISION OF HIGHWAYS</b>	
<b>DISTRICT 6</b>	
EXAMINED	November, 23 20 23
	
<b>ENGINEER OF OPERATIONS</b>	
EXAMINED	November, 22 20 23
	
<b>ENGINEER OF PROJECT IMPLEMENTATION</b>	
EXAMINED	December, 11 20 23
	
<b>ENGINEER OF PROGRAM DEVELOPMENT</b>	

REV. - MS

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SCALE:		SHEET		OF		SHEETS		STA.		TO		STA.		ILLINOIS   FED. AID PROJECT											

0-02178-6028  
 SN 001-0070  
 100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE/RURAL
				0047 ADAMS
20200100	EARTH EXCAVATION	CU YD	11	11
35650300	BASE COURSE WIDENING 8"	SQ YD	752	752
44004250	PAVED SHOULDER REMOVAL	SQ YD	752	752
44213200	SAW CUTS	FOOT	210	210
48102100	AGGREGATE WEDGE SHOULDER, TYPE B	TON	30	30
50300225	CONCRETE STRUCTURES	CU YD	7.4	7.4
50300300	PROTECTIVE COAT	SQ YD	576	576
50301350	CONCRETE SUPERSTRUCTURE ( APPROACH SLAB)	CU YD	22.2	22.2
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	9280	9280
50800515	BAR SPLICERS	EACH	112	112
67100100	MOBILIZATION	L SUM	1	1
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	1	1
70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1	1
70107025	CHANGEABLE MESSAGE SIGNS	CAL DAY	7	7
70400100	TEMPORARY CONCRETE BARRIER	FOOT	550	550

REV. - MS

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PLOT DATE = 12/14/2023	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUMMARY OF QUANTITIES**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	1038-1(BRR,BDR,BJR)	ADAMS	15	3
			CONTRACT NO. 72731	
		ILLINOIS	FED. AID PROJECT	

0-02178-6028  
 SN 001-0070  
 100% STATE

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	BRIDGE/RURAL
				0047 ADAMS
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	550	550
70600251	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1
70600352	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1
* 78009005	MODIFIED URETHANE PAVEMENT MARKING - LINE 5"	FOOT	1600	1600
78300201	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	542	542
X4420634	CLASS A PATCHES, TYPE IV, 15 INCH (SPECIAL)	SQ YD	100	100
X5200101	REMOVE EXISTING JOINT	FOOT	24	24
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1	1
Z0001800	APPROACH SLAB REPAIR (PARTIAL DEPTH)	SQ YD	26	26
Z0004552	APPROACH SLAB REMOVAL	SQ YD	53.3	53.3
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	5	5
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	65	65
Z0032500	JOINT SEALING (PATCHES)	FOOT	960	960
Z0073346	SLEEPER SLAB	SQ YD	27	27

\* SPECIALTY ITEM

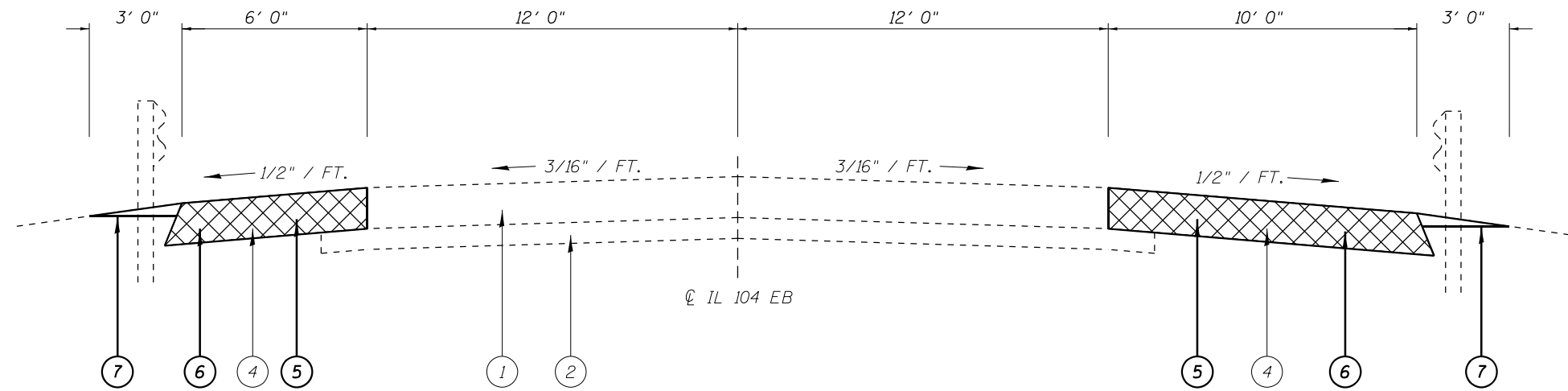
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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

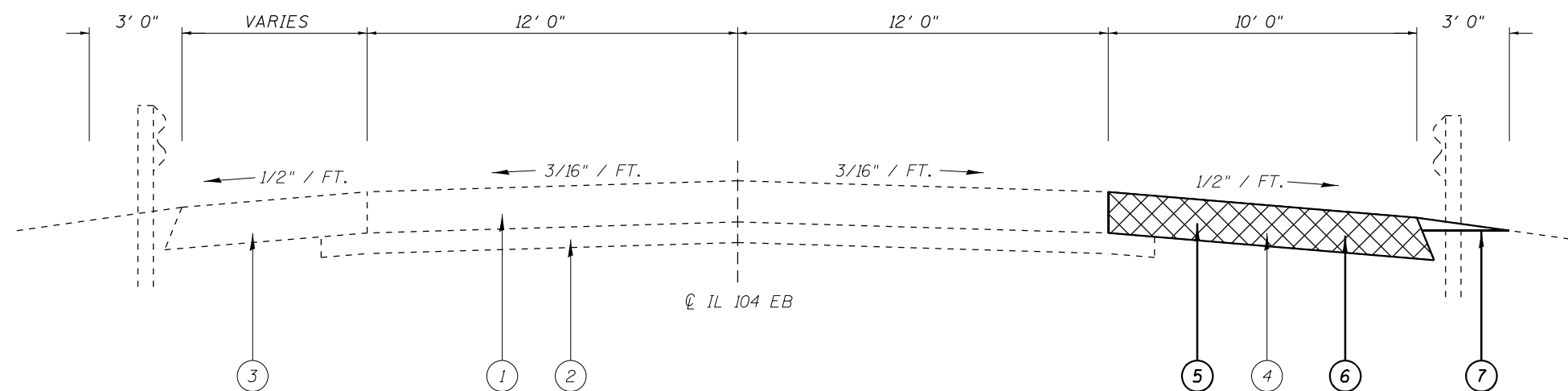
SUMMARY OF QUANTITIES			
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CONTRACT NO. 72731				
ILLINOIS FED. AID PROJECT				



IL 104 EB  
STA 237+22 TO STA 240+43

- ① EXIST. CRC PCC PAVT. 8"
- ② EXIST. STAB. SUB-BASE 4"
- ③ EXIST. HMA PAVT.
- ④ EXIST. HMA SHLDRS. 8"
- ⑤ PROP. PAVED SHLDR. REM.
- ⑥ PROP. BASE CSE. WIDENING 8"
- ⑦ PROP. AGG. WEDGE SHLDR. TY. B



IL 104 EB  
STA 242+37 TO STA 244+00

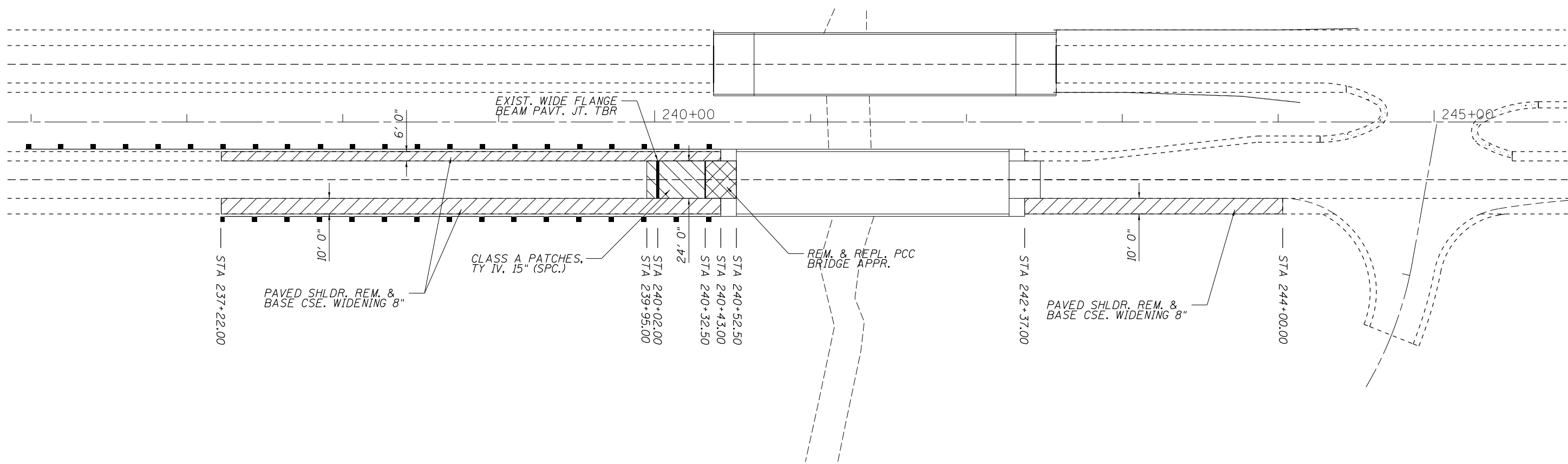
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PLOT DATE = 12/14/2023	CHECKED -	REVISED -
	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>TYPICAL SECTIONS</b>				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 72731			ILLINOIS FED. AID PROJECT	



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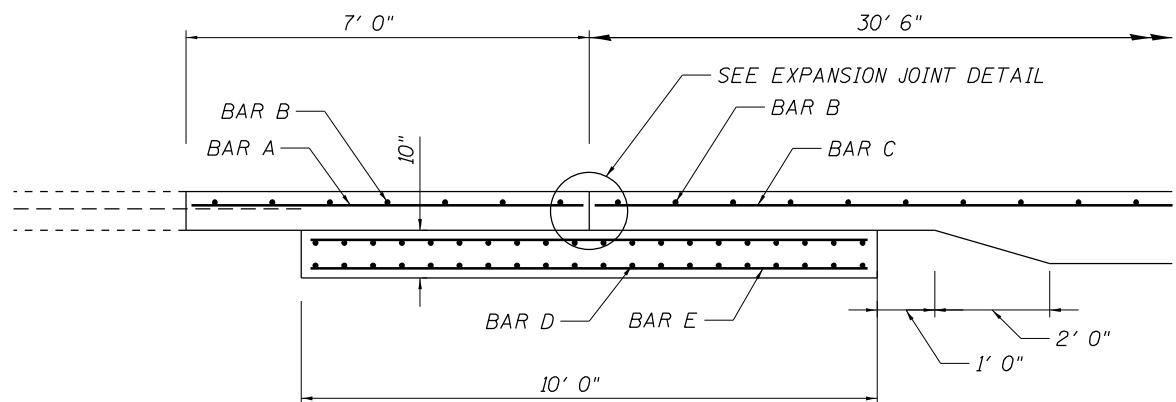
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	DRAWN -	REVISED -
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PLOT DATE = 12/14/2023	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**ROADWAY PLAN**

SCALE: SHEET OF SHEETS STA. TO STA.

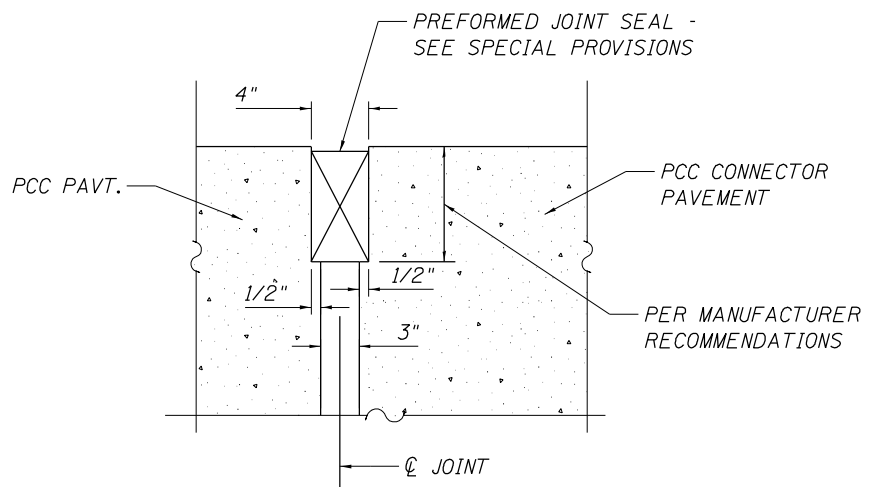
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BRR,BDR,BJR)	ADAMS	15	6
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72731	



**SLEEPER SLAB AND REINFORCING DETAIL**

**REINFORCING BAR INFORMATION**

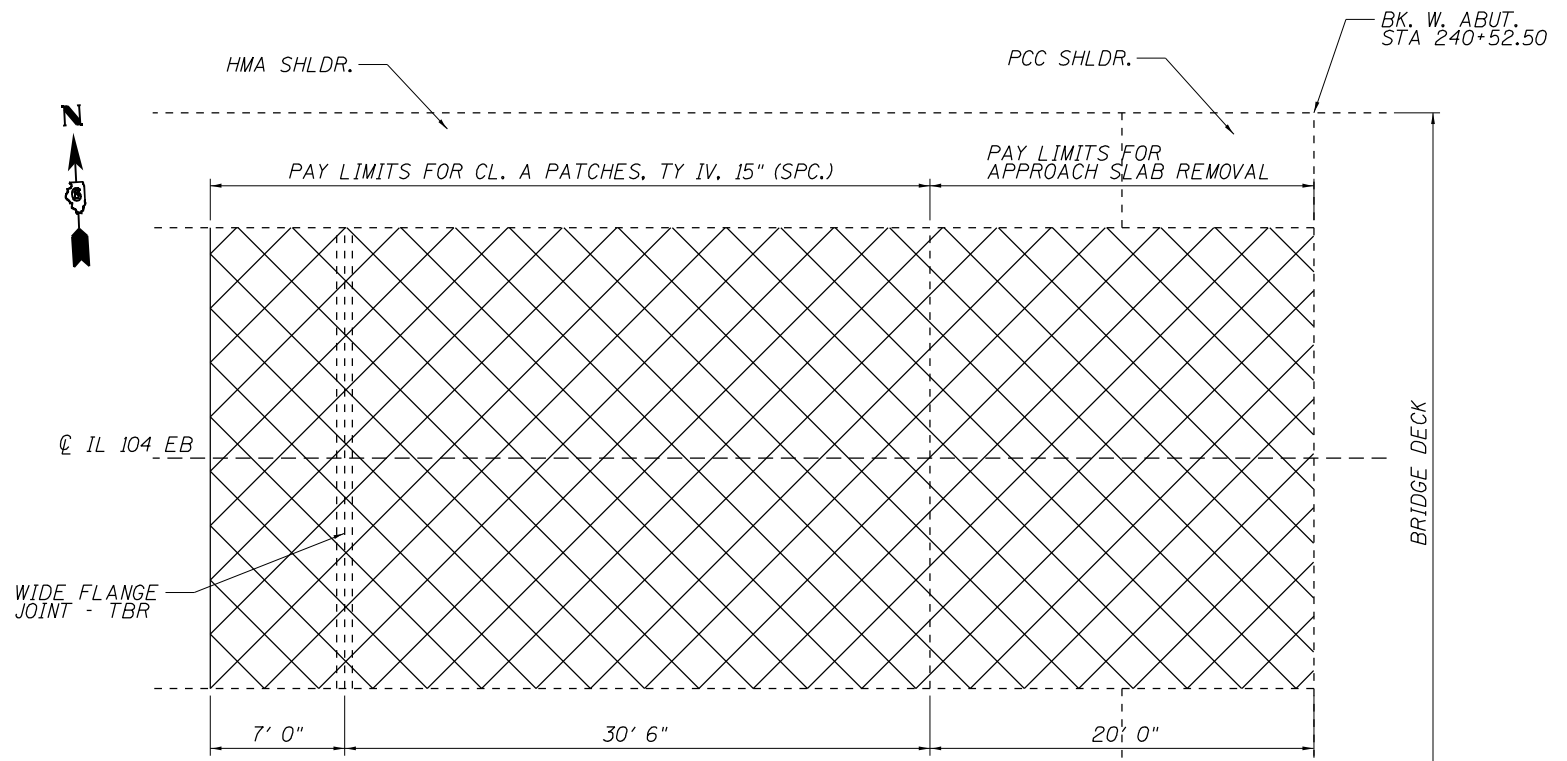
- BAR A - #6 BARS MATCHING CRC PAVT. SPACING (22 BARS PER LANE)
- BAR B - #6 BARS @ 12" CTS.
- BAR C - #6 BARS @ 6-1/2" CTS.
- BAR D - #5 BARS @ 6" CTS.
- BAR E - #4 BARS @ 12" CTS.



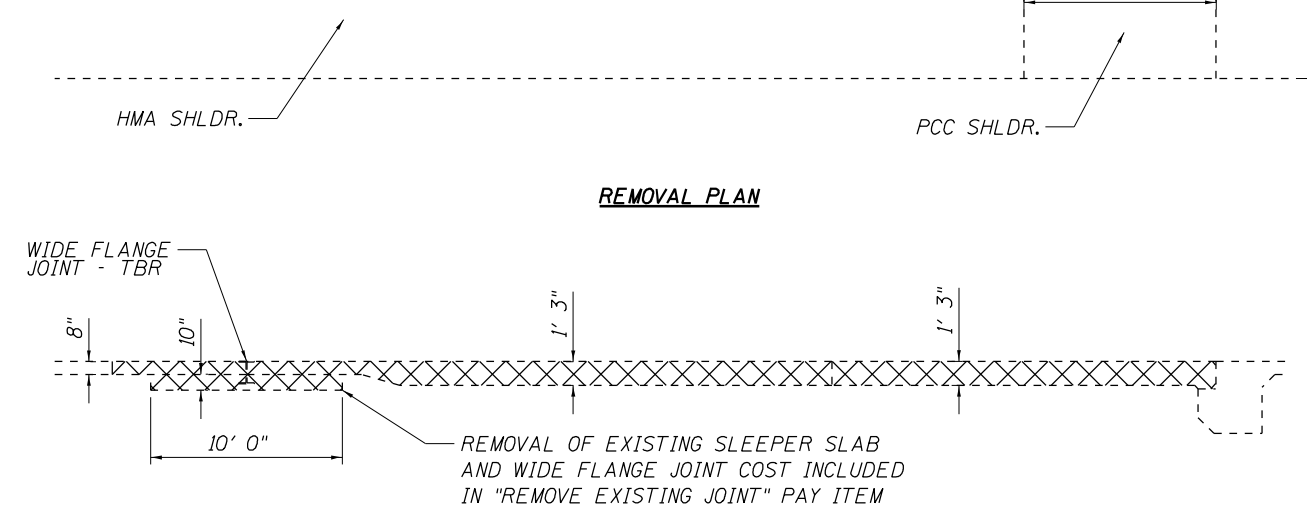
**EXPANSION JOINT DETAIL**

**NOTES:**

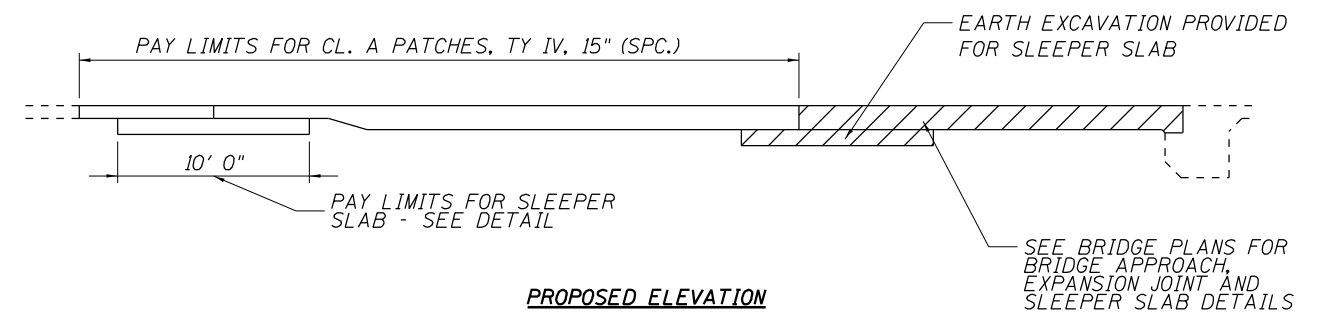
- ANY BUMPS OR DIPS IN THE EXISTING PROFILE GRADE SHALL BE CORRECTED IN THE PROPOSED PROFILE GRADE.
- A MINIMUM 1-1/2" CLEARANCE SHALL BE PROVIDED BETWEEN ALL REINFORCING AND ADJACENT CONCRETE FACES.



**REMOVAL PLAN**



**REMOVAL ELEVATION**



**PROPOSED ELEVATION**

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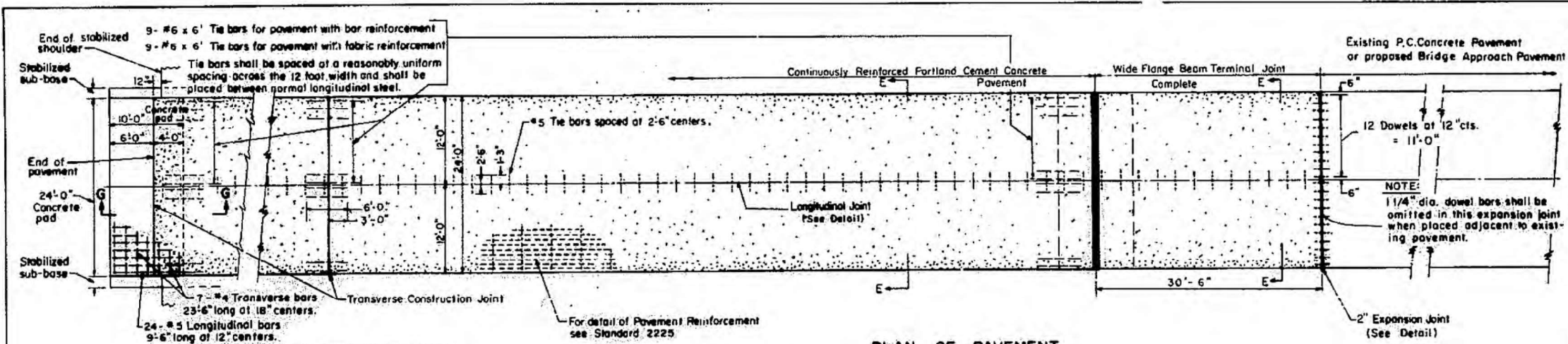
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DRAWN -	REVISIONS -	
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PLOT DATE = 12/14/2023	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT PATCHING DETAIL**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BRR,BDR,BJR)	ADAMS	15	7
CONTRACT NO. 72731				
ILLINOIS FED. AID PROJECT				



**MATERIALS REQUIRED FOR (1) ONE WIDE FLANGE BEAM TERMINAL JOINT COMPLETE**

Bar	No.	Size	Length	Shape
a	24	#4	19'-0"	
b	29	#5	23'-8"	
c	48	#6	8'-6"	

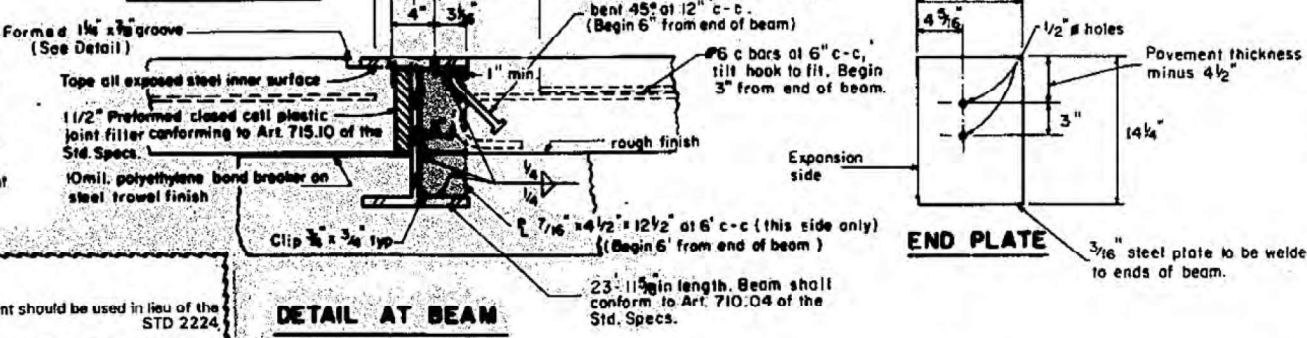
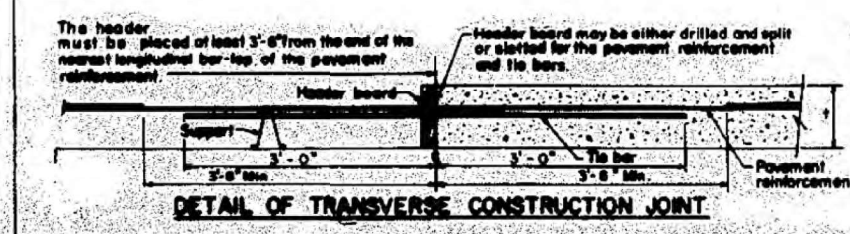
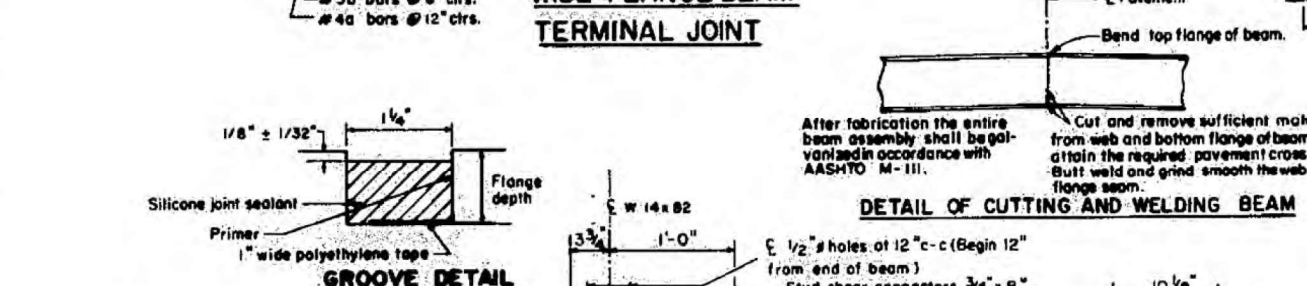
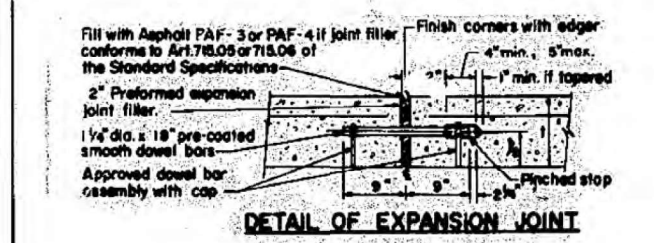
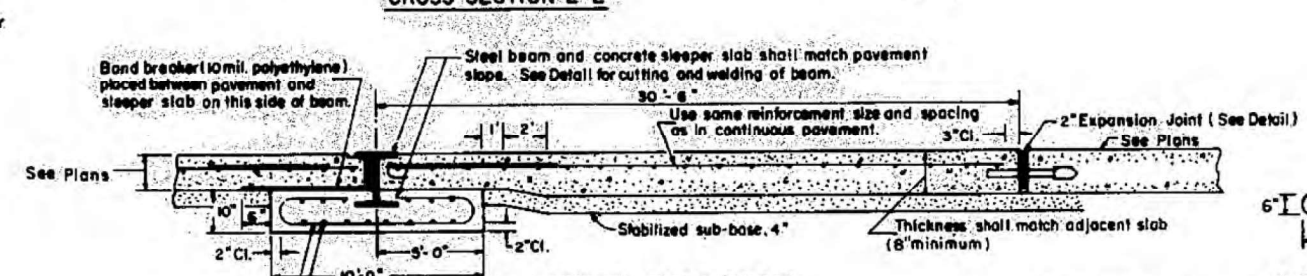
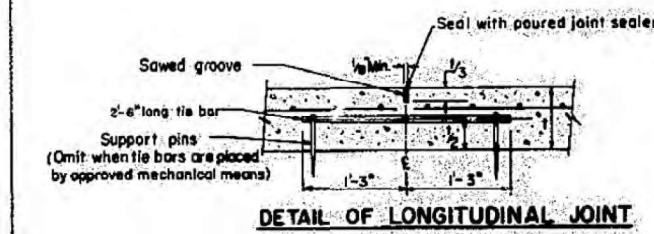
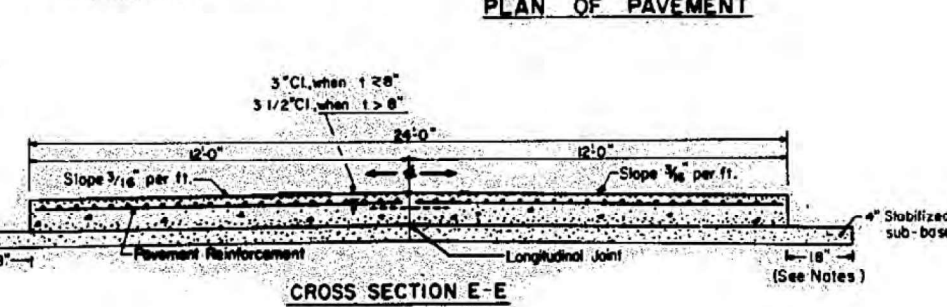
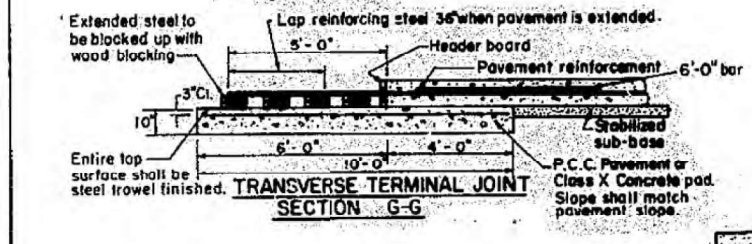
P.C. Pavt. or Class X Concrete, Cu.Yds. 7.4  
 Reinforcement Bars, Lbs. 1630  
 Structural Steel, Lbs. 2030

\*Weight includes beam, end plates, stiffener plates and studs.

Pavement, Sq. Yds. 81.3  
 Pavt. Reinforcement, Sq. Yds. 81.3  
 4" Stabilized Sub-base, Sq. Yds. 76.5

**MATERIALS REQUIRED FOR (1) ONE TRANSVERSE TERMINAL JOINT COMPLETE**

P.C. Pavt. or Class X Concrete, Cu.Yds.	7.4
Reinforcement Bars, Lbs.	348
Pavt. Reinforcement Sq.Yds.	13.3



**GENERAL NOTES**

When a slip form paver is used, the Stabilized Sub-base shall be constructed to a width 6 inches wider than the width from outside to outside of the slip form paver's tracks. When this results in a width greater than shown on the plans, such extended width will not be measured for payment, but shall be included in the unit price bid for STABILIZED SUB-BASE.

Details shown in Section G-G shall apply only at the end of the construction section. The 10-inch reinforced concrete pad, header board, wood blocking and the 5 feet of extended pavement reinforcement shall be included in the unit price bid for the TRANSVERSE TERMINAL JOINT COMPLETE.

Expansion joints and extra reinforcement in the pavement over concrete pads, sleeper slabs and at transverse construction joints shall be included in the price bid for C.R.P.C.C. PAVEMENT.

The concrete pavement on the expansion side of the wide flange beam shall be carefully finished at both the surface expansion joint trough and at the welded side plates to facilitate unrestrained pavement expansion.

When the Contractor places the reinforcement using a method which requires the tie bars for the longitudinal joint to be placed above the longitudinal reinforcement bars, the first three longitudinal bars on either side of the joint shall be placed such that the tie bars will be at the neutral axis.

#4 steel tie bars may be used when the pavement is less than 9 inches thick.

Concrete for the Wide Flange Beam Terminal Joint sleeper slab and Transverse Terminal Joint concrete pad shall be either Class X or Portland Cement Concrete Pavement. It shall be placed in trench to the next lines shown. Forms will not be permitted. The concrete in the sleeper slab and concrete pad shall be cured in accordance with the methods specified for footings in Section B25 of the Standard Specifications, except that membrane curing will not be permitted for the sleeper slab.

The groove at the Wide Flange Beam Terminal Joint shall be sealed in accordance with the details shown. Sealant components shall be as follows or approved equals. Sealant shall be Dow Corning 888 Silicone Highway Joint Sealant. Tape shall be Polyethylene Tape No. 40. Primer, used on the metal only, shall be Dow Corning 1200.

The groove adjacent to the beam shall extend to the edge of the shoulder and shall be approximately the same width and depth as the one in the pavement.

Illinois Department of Transportation

DESIGNED BY: [Signature]

DRAWN BY: [Signature]

CHECKED BY: [Signature]

DATE: 12/14/2023

**DESIGN NOTES**

When the slab length is less than 1500', a 2" expansion joint should be used in lieu of the Wide Flange Beam Terminal Joint.

Design Notes will not appear in the contract plans.

**DETAIL AT BEAM**

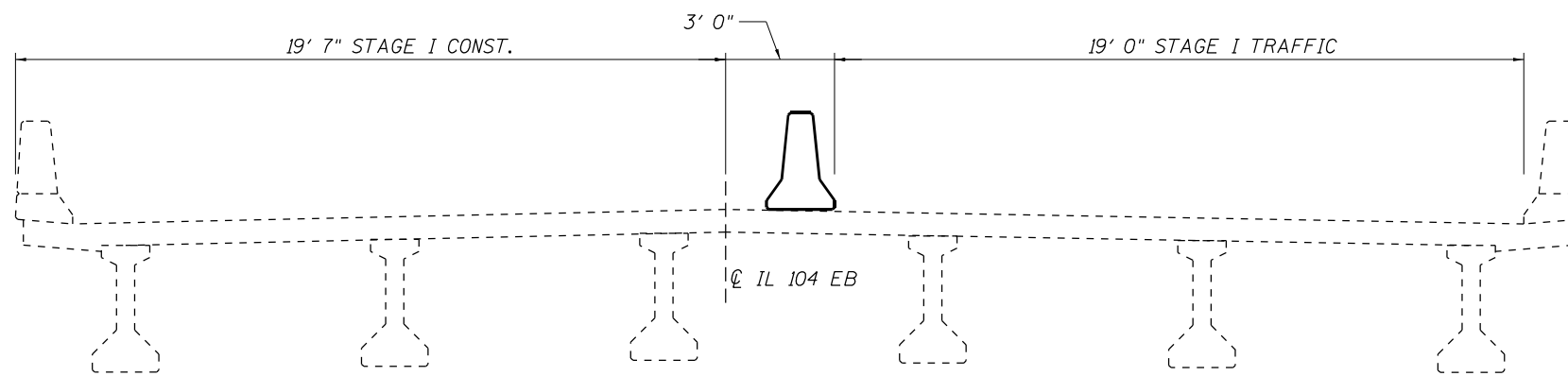
23-11 1/2" length beam shall conform to Art. 710.04 of the Std. Specs.

**24 FT.-CONTINUOUSLY REINFORCED PORTLAND CEMENT CONCRETE PAVEMENT**

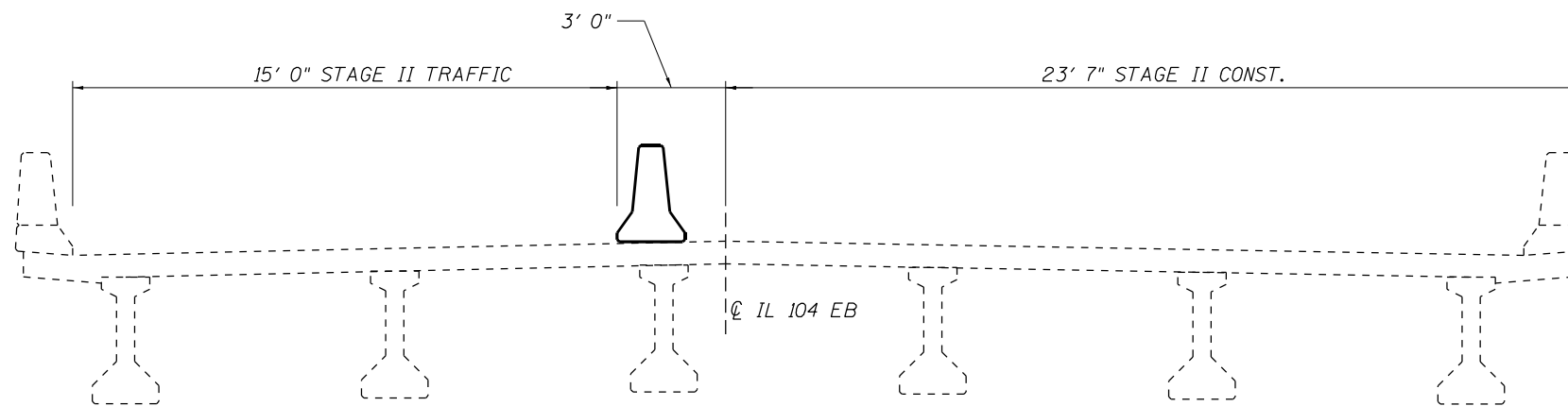
**STANDARD 2224-14**  
(Full Size) DWG

USER NAME = Brandon.Dudley	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING JOINT DETAILS (FOR INFORMATION ONLY)	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
PLOT SCALE = 100,000' / in.	DRAWN -	REVISED -			745	1038-1(BRR,BDR,BJR)	ADAMS	15	8	
PLOT DATE = 12/14/2023	CHECKED -	REVISED -			CONTRACT NO. 72731					
	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					





**STAGE I CROSS SECTION - LOOKING EAST**



**STAGE II CROSS SECTION - LOOKING EAST**

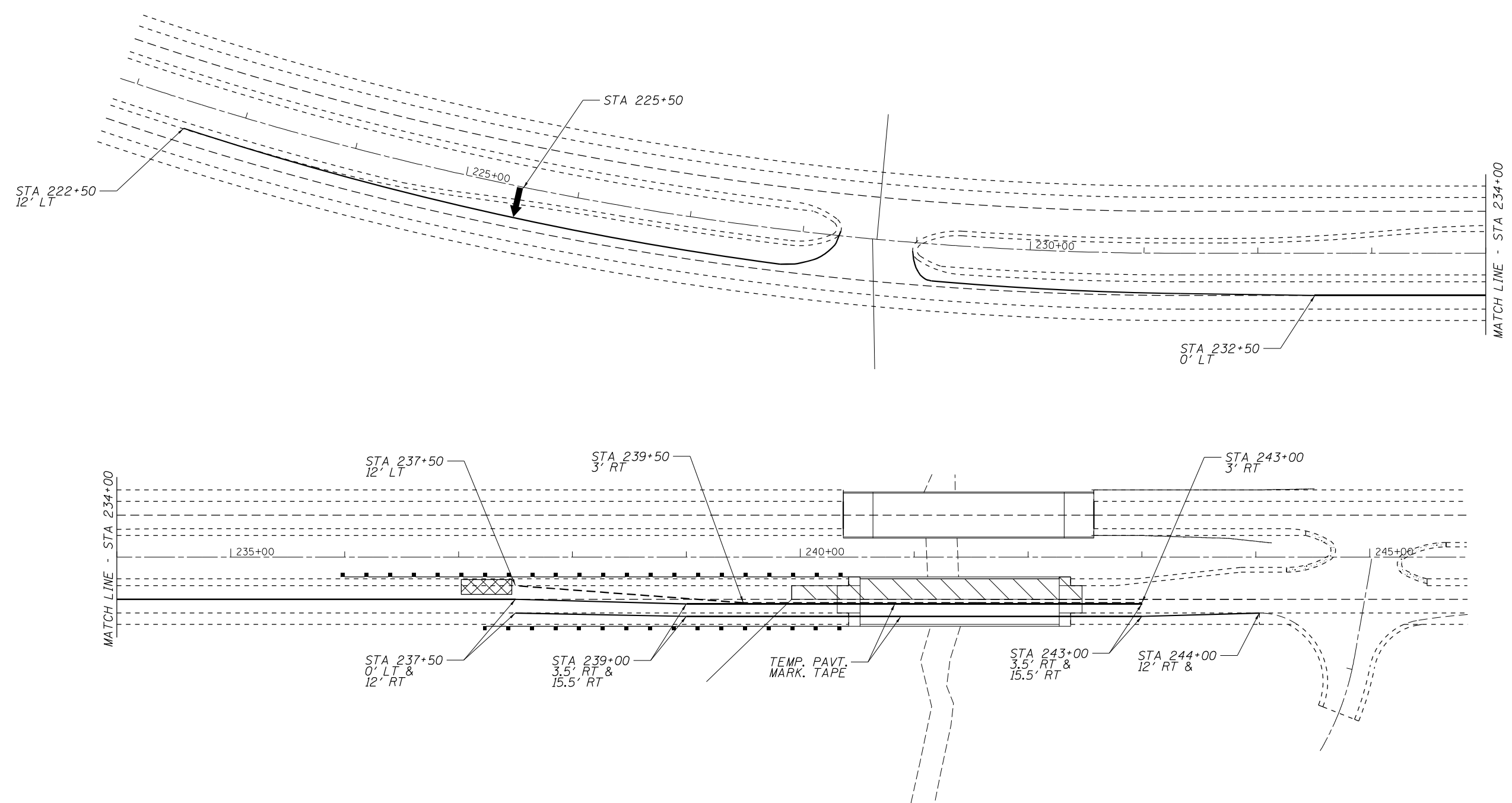
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PLOT DATE = 12/14/2023	DATE -	REVISED -

**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**


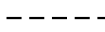


<b>TRAFFIC STAGING PLAN</b>				
SCALE:	SHEET	OF	SHEETS	STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BRR,BDR,BJR)	ADAMS	15	9
CONTRACT NO. 72731			ILLINOIS FED. AID PROJECT	



**STAGE I TRAFFIC CONTROL PLAN**

**SYMBOLS**

-  WORK AREA
-  TEMPORARY CONCRETE BARRIER
-  IMPACT ATTENUATOR
-  ARROW BOARD

**TRAFFIC CONTROL NOTES:**

1. TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL BE PER STANDARD 701402. DEVICES AND TEMPORARY PAVEMENT MARKINGS SHOWN IN THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701402. IMPACT ATTENUATORS, AND TEMPORARY CONCRETE BARRIER SHALL BE PAID SEPARATELY.
2. LEFT AND RIGHT OFFSETS SHOWN SHALL REFER TO DISTANCES FROM THE CENTERLINE OF THE EASTBOUND TRAFFIC LANES, NOT THE IL 104 CENTERLINE.
3. TEMPORARY CONCRETE BARRIER OFFSETS GIVEN IN THIS DETAIL REFER TO THE EDGE OF THE BARRIER NEAREST TO LIVE TRAFFIC. BARRIER WALL TAPERS SHALL BE 12:1 UNLESS OTHERWISE NOTED.

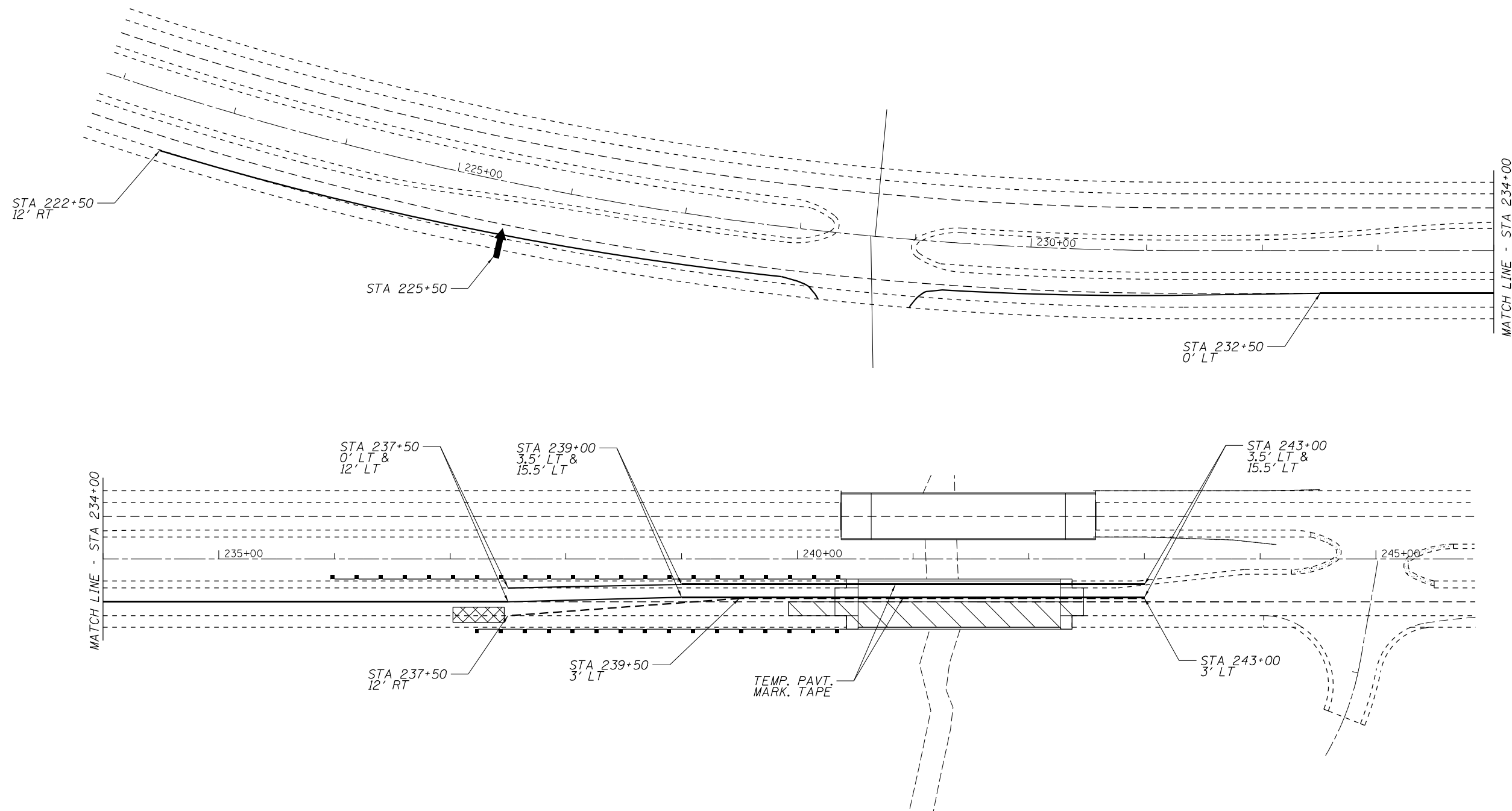
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PLOT DATE = 12/14/2023	DATE -	REVISION -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**


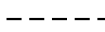


<b>STAGE I TRAFFIC CONTROL PLAN</b>	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BRR,BDR,BJR)	ADAMS	15	10
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72731	



**STAGE II TRAFFIC CONTROL PLAN**

**SYMBOLS**

-  WORK AREA
-  TEMPORARY CONCRETE BARRIER
-  IMPACT ATTENUATOR
-  ARROW BOARD

**TRAFFIC CONTROL NOTES:**

1. TRAFFIC CONTROL DEVICES NOT SHOWN IN THIS DETAIL SHALL BE PER STANDARD 701402. DEVICES AND TEMPORARY PAVEMENT MARKINGS SHOWN IN THIS DETAIL SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, STANDARD 701402. IMPACT ATTENUATORS, AND TEMPORARY CONCRETE BARRIER SHALL BE PAID SEPARATELY.
2. LEFT AND RIGHT OFFSETS SHOWN SHALL REFER TO DISTANCES FROM THE CENTERLINE OF THE EASTBOUND TRAFFIC LANES, NOT THE IL 104 CENTERLINE.
3. TEMPORARY CONCRETE BARRIER OFFSETS GIVEN IN THIS DETAIL REFER TO THE EDGE OF THE BARRIER NEAREST TO LIVE TRAFFIC. BARRIER WALL TAPERS SHALL BE 12:1 UNLESS OTHERWISE NOTED.

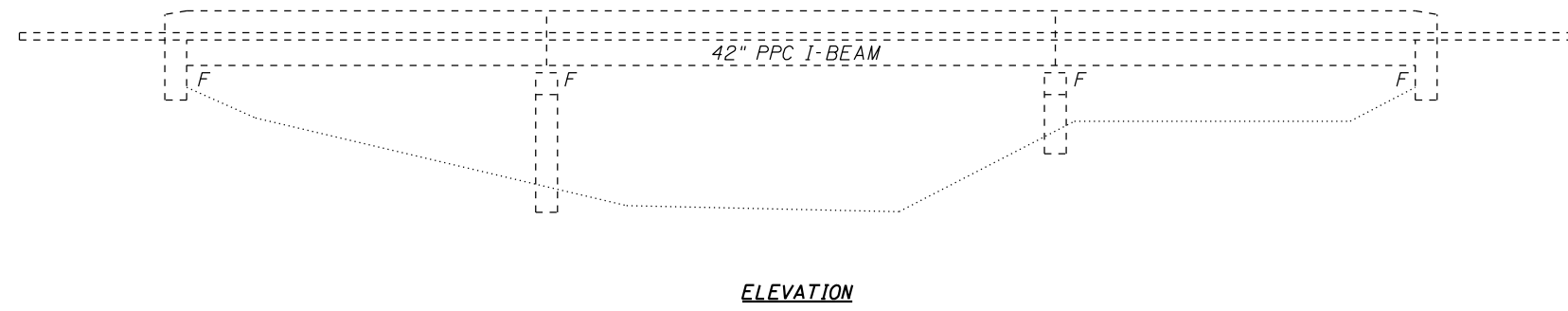
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	DRAWN -	REVISED -
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PLOT DATE = 12/14/2023	DATE -	REVISED -

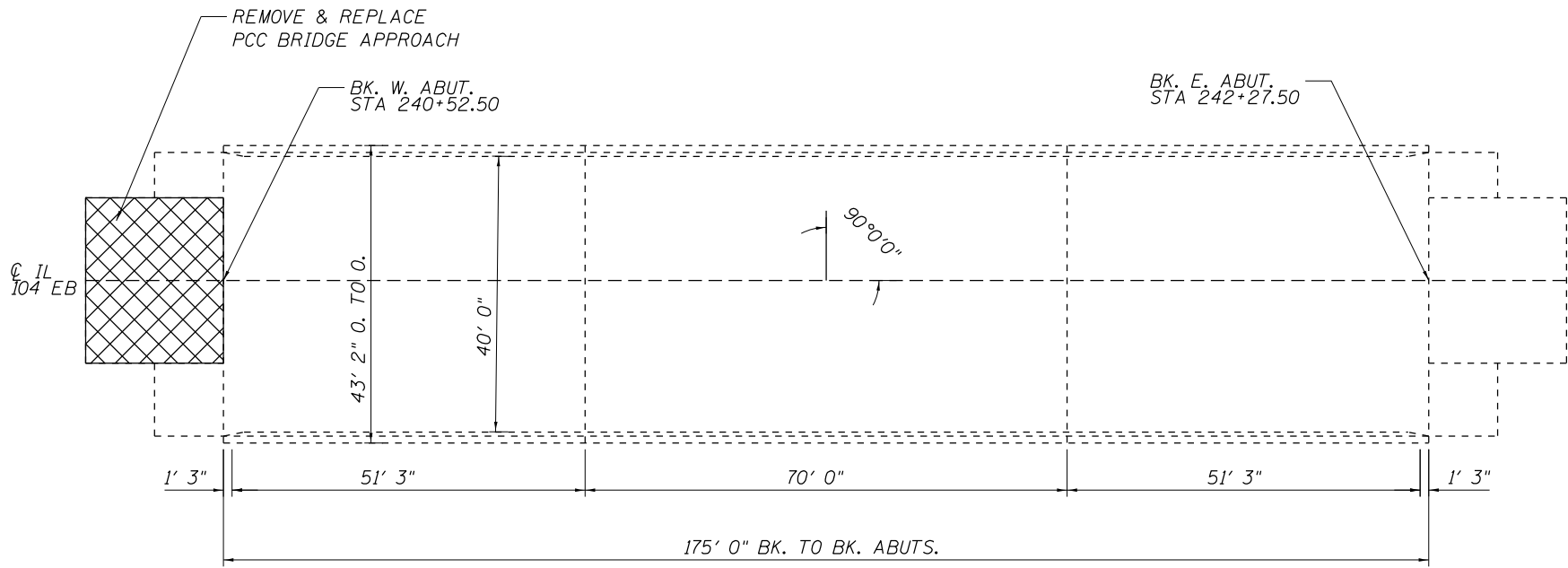
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>STAGE II TRAFFIC CONTROL PLAN</b>	
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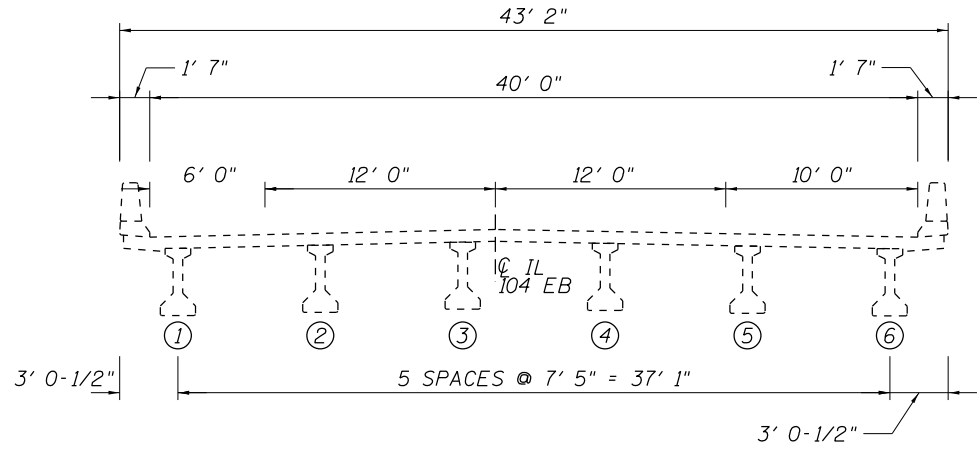
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745	103B-1(BRR,BDR,BJR)	ADAMS	15	11
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72731	



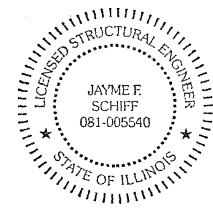
**ELEVATION**



**PLAN**



**CROSS SECTION - LOOKING EAST**



EXPIRES 11-30-2024  
*Jayme F. Schiff*

**TOTAL BILL OF MATERIAL (SN 001-0070)**

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Sq. Yd.	65
Approach Slab Repair (Partial Depth)	Sq. Yd.	26
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	5*
Joint Sealing (Patches)	Foot	960
Protective Coat	Sq. Yd.	576
Approach Slab Removal	Sq. Yd.	53.3
Reinforcement Bars, Epoxy Coated	Pound	9280
Concrete Superstructure (Approach Slab)	Cu. Yd.	22.2
Concrete Structures	Cu. Yd.	7.4
Bar Splicers	Each	112

\* No FD patches anticipated, nominal quantity included

**STRUCTURE GENERAL NOTES:**

PRIOR TO POURING THE NEW CONCRETE PATCHES, 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.

PROTECTIVE COAT SHALL BE APPLIED TO NEW CONCRETE ONLY.

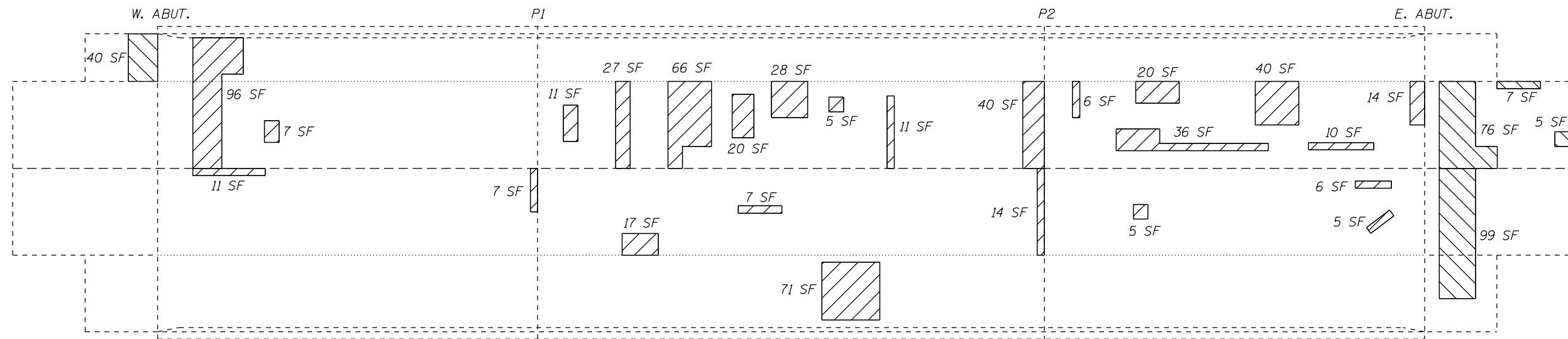
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DRAWN - BRANDON DUDLEY	CHECKED - _____	REVISED - _____
PLOT SCALE = 100,0000' / in.	DATE - 11/17/2023	REVISED - _____
PLOT DATE = 2/2/2024		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>BRIDGE PLAN &amp; ELEVATION</b>	
<b>SN 001-0070</b>	
SCALE: _____	SHEET 1 OF 4 SHEETS STA. _____ TO STA. _____

F.A.P. RTE. 745	SECTION 103B-1(BRR,BDR,BJR)	COUNTY ADAMS	TOTAL SHEETS 15	SHEET NO. 12
ILLINOIS FED. AID PROJECT			CONTRACT NO. 72731	



**PLAN**

**PATCHING BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Deck Slab Repair (Partial)	Sq. Yd.	65
Approach Slab Repair (Partial Depth)	Sq. Yd.	26
Deck Slab Repair (Full Depth, Type II) *	Sq. Yd.	5*
Joint Sealing (Patches)	Foot	960

\* No FD patches anticipated, nominal quantity included



APPROACH SLAB REPAIR (PARTIAL DEPTH)



DECK SLAB REPAIR (PARTIAL)

**NOTES:**

IDENTIFIED PATCHING LOCATIONS ARE ESTIMATED FROM A DECK SURVEY PERFORMED ON 1/27/2023. 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.

IF FULL DEPTH PATCHES ARE DISCOVERED, THEY SHALL BE COVERED WITH STEEL PLATES DURING NON-WORK HOURS.

JOINT SEALING (PATCHES) SHALL BE APPLIED IN LOCATIONS AS DIRECTED IN THE SPECIAL PROVISIONS, ALONG THE ENTIRE LENGTH OF ANY EXISTING STAGE CONSTRUCTION LINES, AND ALONG THE CONSTRUCTION JOINTS BETWEEN THE ABUTMENT AND APPROACHES.

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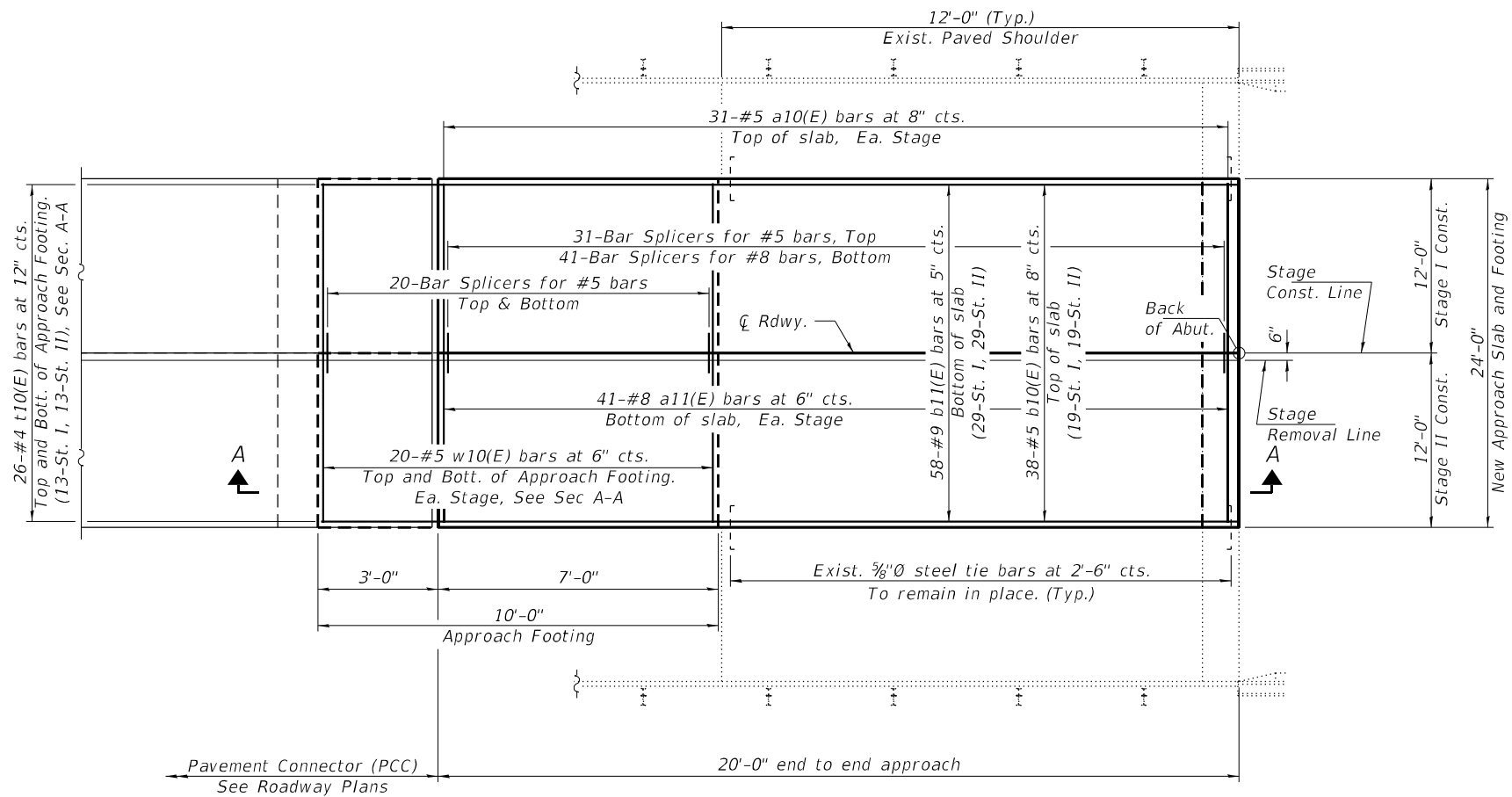
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PLOT SCALE = 100,0000' / in.	DRAWN -	REVISOR -
PLOT DATE = 12/14/2023	CHECKED -	REVISOR -
	DATE -	REVISOR -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

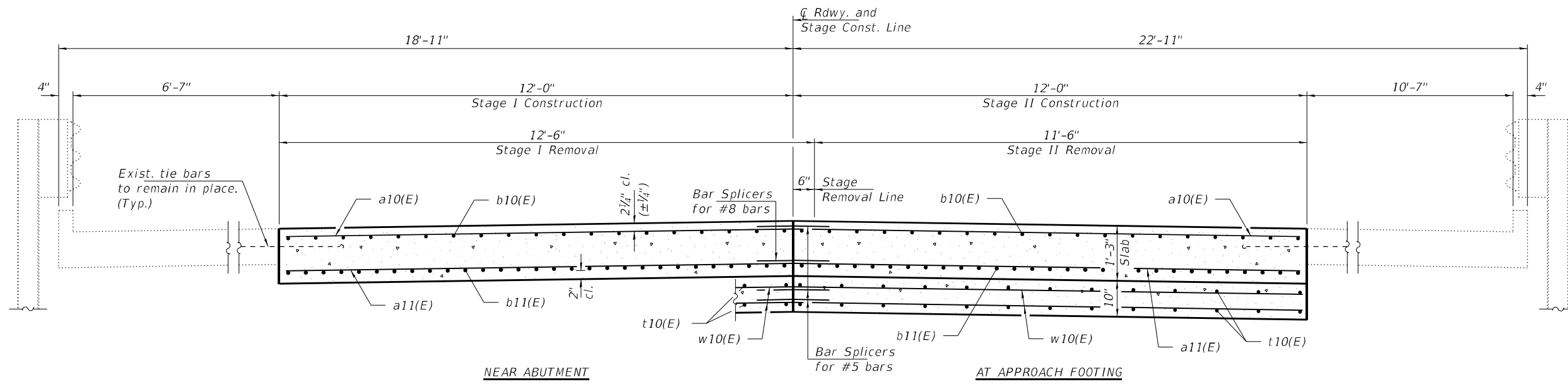
**DECK PATCHING PLAN  
SN 001-0070**

SCALE: SHEET 2 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BRR,BDR,BJR)	ADAMS	15	13
			CONTRACT NO. 72731	
ILLINOIS FED. AID PROJECT				



**PLAN**  
(West Approach)



**CROSS SECTION**  
(Looking East)

DESIGNED - JSB  
 CHECKED - JSF  
 DRAWN - daburdell  
 CHECKED - JSB JSF

EXAMINED  
 PASSED  
 ENGINEER OF STRUCTURAL SERVICES  
 ENGINEER OF BRIDGES AND STRUCTURES

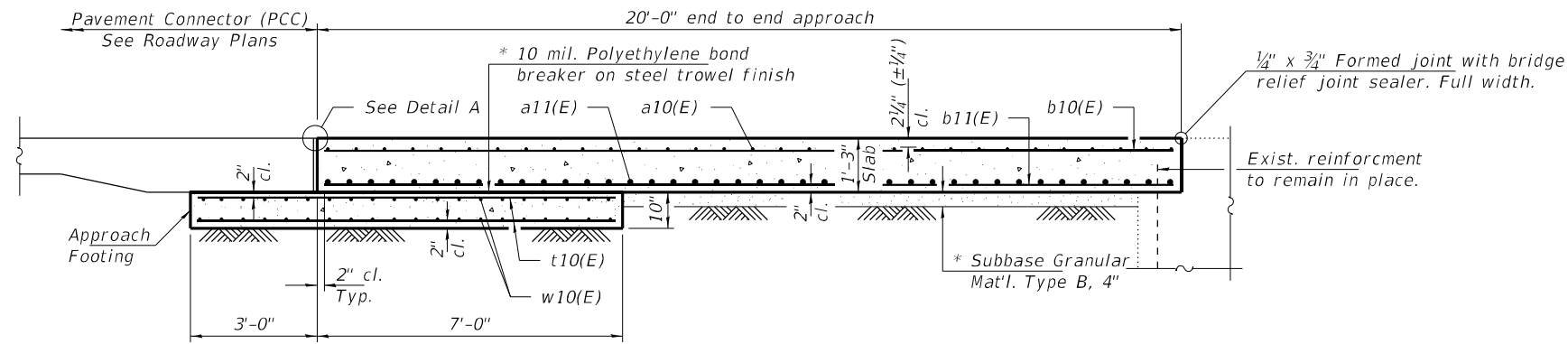
DATE - FEBRUARY 2, 2024  
 REVISED -  
 REVISED -

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

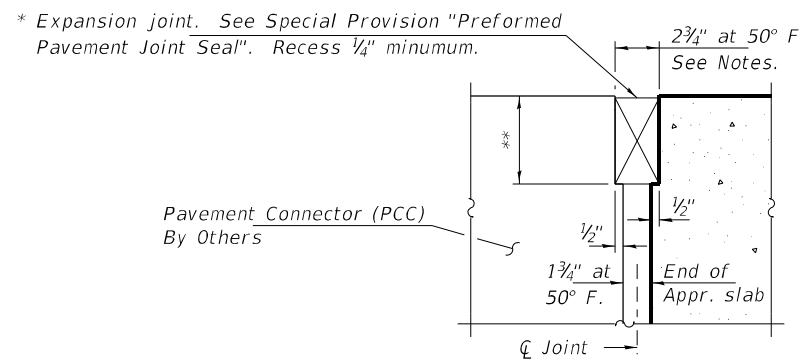
BRIDGE APPROACH SLAB DETAILS  
 SN 001-0070

SHEET NO. 3 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BDR,BJR)	ADAMS	15	14
CONTRACT NO. 72731				
ILLINOIS FED. AID PROJECT				



**SECTION A-A**



**DETAIL A**

\* Cost included with Concrete Superstructure (Approach Slab).

\*\* Per manufacturer recommendations.

**Notes:**

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

**BILL OF MATERIAL  
WEST APPROACH**

Bar	No.	Size	Length	Shape
a10(E)	62	#5	11'-8"	—
a11(E)	82	#8	11'-8"	—
b10(E)	38	#5	19'-8"	—
b11(E)	58	#9	19'-8"	—
t10(E)	52	#4	9'-8"	—
w10(E)	80	#5	11'-8"	—
Concrete Superstructure (Approach Slab)			Cu. Yd.	22.2
Concrete Structures			Cu. Yd.	7.4
Reinforcement Bars, Epoxy Coated			Pound	9280
Bar Splicers			Each	112

DESIGNED - JSB  
CHECKED - JSF  
DRAWN - daburdell  
CHECKED - JSB JSF

EXAMINED  
PASSED  
ENGINEER OF STRUCTURAL SERVICES  
ENGINEER OF BRIDGES AND STRUCTURES

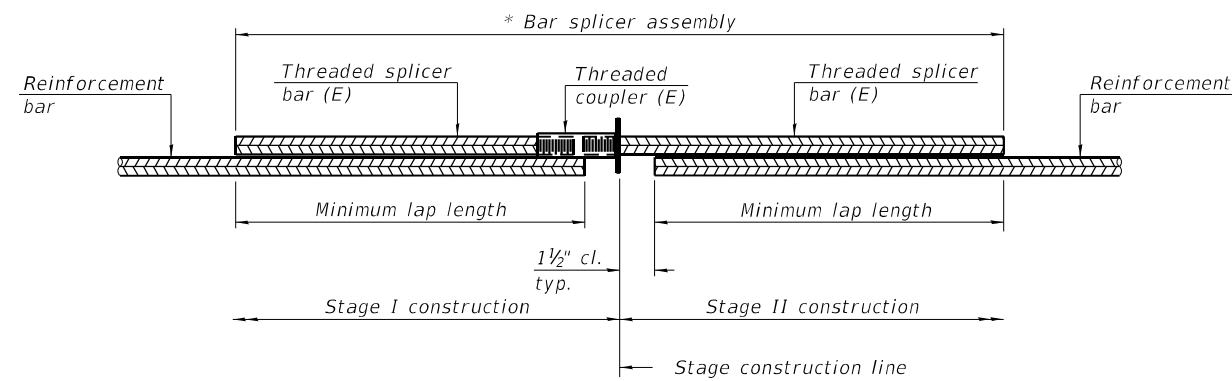
DATE - FEBRUARY 2, 2024  
REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
SN 001-0070**

SHEET NO. 4 OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BDR,BJR)	ADAMS	15	15
CONTRACT NO. 72731				
ILLINOIS FED. AID PROJECT				



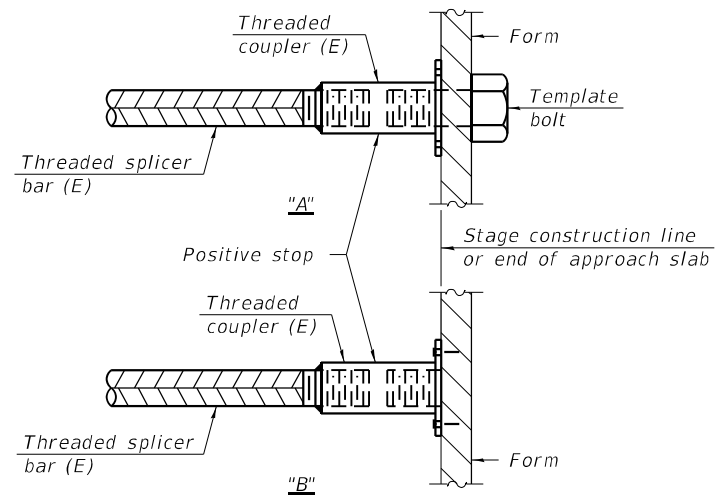
**STANDARD BAR SPLICER ASSEMBLY PLAN**

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

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

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

Location	Bar size	No. assemblies required	Minimum lap length
Slab (Top)	#5	31	3'-4"
Slab (Bott.)	#8	41	5'-11"
Footing (Top)	#5	20	3'-0"
Footing (Bott.)	#5	20	3'-0"

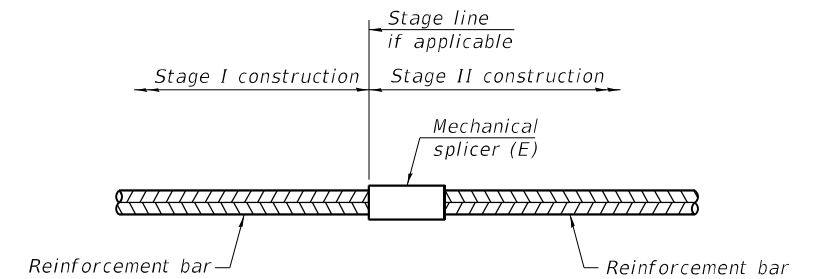


**INSTALLATION AND SETTING METHODS**

"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

2-1-2023

DESIGNED - JSB
CHECKED - JSF
DRAWN - daburdell
CHECKED - JSB JSF

EXAMINED	DATE - FEBRUARY 2, 2024
PASSED	REVISER -
	REVISER -

ENGINEER OF STRUCTURAL SERVICES  
*James F. Joffe*  
 ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 SN 001-0070

SHEET NO. 4A OF 4 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
745	103B-1(BDR,BJR)	ADAMS	15	15A
CONTRACT NO. 72731				
ILLINOIS FED. AID PROJECT				