

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	1
		ILLINOIS	CONTRACT NO. 76K21	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA
2018 ADT = 4600
2038 ADT = 5900
SU = 10.1% MU = 5.1%

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 817 (IL 4 / IL 15)
SECTION 421BDR-2

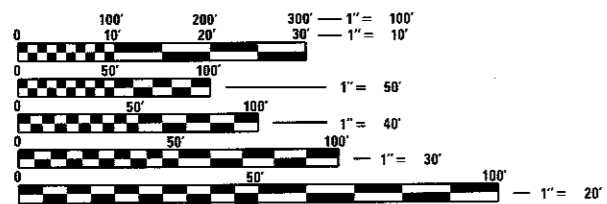
BRIDGE REPAIR
ST. CLAIR COUNTY

C-98-133-18

D-98-039-17

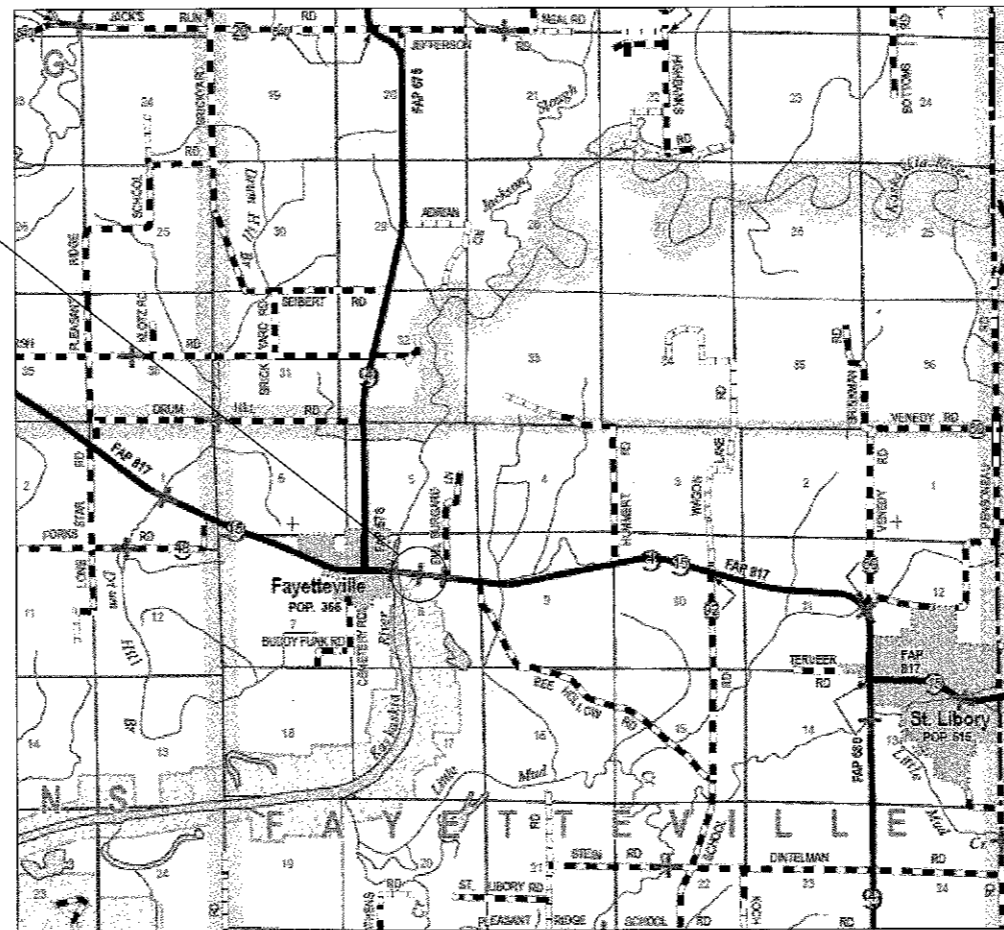


PROJECT LOCATION
IL 4/IL 15 OVER KASKASKIA
OVERFLOW EAST OF
FAYETTEVILLE
SN 082-0078
STA. 142+30
LATITUDE: 38.37682
LONGITUDE: -89.78805



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 EXCAVATION
1-800-892-0123
OR 811



NOT TO SCALE

GROSS LENGTH = 499.84 FT. = 0.095 MILE
NET LENGTH = 499.84 FT. = 0.095 MILE

PROJECT ENGINEER: HERVE GELIN (618) 346-3179
PROJECT MANAGER: CECIL DOWNING (618) 346-3186

CONTRACT NO. 76K21

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED *Sept 1 20 17*
Jeffrey Z. Kern
REGIONAL ENGINEER

Oct 13 20 17
Maureen M. Addis
ENGINEER OF DESIGN AND ENVIRONMENT

Oct 13 20 17
Amelia [Signature]
DIRECTOR OF PROGRAM DEVELOPMENT

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OF THE STATE OF ILLINOIS

INDEX OF SHEETS

- 1 COVER SHEET
- 2 INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES, COMMITMENTS AND LOCATION MAP
- 3-4 SUMMARY OF QUANTITIES
- 5 SCHEDULE OF QUANTITIES
- 6 TYPICAL SECTIONS
- 7 WIDE LOAD SIGNING
- 8-10 STAGING PLANS
- 11 REMOVAL DETAIL
- 12-21 STRUCTURE PLANS

HIGHWAY STANDARDS

- 000001-06
- 001001-02
- 001006
- 701311-03
- 701321-16
- 701326-04
- 701901-06
- 704001-08
- 780001-05

GENERAL NOTES

1. ILLINOIS STATE LAW REQUIRES A 48-HOUR NOTICE BE GIVEN TO ALL UTILITIES WITHIN THE PROJECT AREA BEFORE DIGGING. FIELD MARKING OF FACILITIES MAY BE OBTAINED BY CONTACTING J.U.L.I.E. OR FOR NON-MEMBERS, THE UTILITY COMPANY DIRECTLY. AGENCIES KNOWN TO HAVE FACILITIES WITHIN THE PROJECT AREA ARE AS FOLLOWS:

	AERIAL	BURIED
* AMEREN ILLINOIS (GAS & ELECTRIC)	X	X
* AT&T ILLINOIS (COMMUNICATIONS)	X	X
* CLEARWAVE COMMUNICATIONS (COMMUNICATIONS)	X	X
* FRONTIER COMMUNICATIONS (COMMUNICATIONS)	X	X

MEMBERS OF J.U.L.I.E. CALL TOLL FREE (800) 892-0123 OR 811 AND ARE INDICATED BY *. NON- J.U.L.I.E. MEMBERS MUST BE NOTIFIED INDIVIDUALLY.

2. THE CONTRACTOR AND THE ENGINEER SHALL BE AWARE THAT NO SURVEY WAS PERFORMED FOR THIS PROJECT. THE STATIONING, TOPOGRAPHY, AND QUANTITIES SHOWN IN THE PLANS WERE CREATED USING MICROFILM AND FIELD MEASUREMENTS. ALL SHALL BE ASSUMED TO BE APPROXIMATE. THE CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS IN THE FIELD PRIOR TO CONSTRUCTION AND ORDERING OF MATERIALS.
3. OVERNIGHT DROP-OFFS WILL NOT BE PERMITTED NEXT TO AN OPEN LANE OF TRAFFIC.
4. THE PROPOSED PAVEMENT MARKING SHALL MATCH THE LOCATIONS OF THE EXISTING PAVEMENT MARKING, AS DIRECTED BY THE ENGINEER.
5. THE DEPARTMENT STRONGLY ENCOURAGES THE PRIME CONTRACTOR AND THEIR APPROVED SUB-CONTRACTORS TO HIRE MINORITY, WOMEN AND DISADVANTAGED INDIVIDUALS FROM ITS FEDERALLY FUNDED HIGHWAY CONSTRUCTION CAREERS TRAINING PROGRAM (HCCTP) TO HELP MEET WORKFORCE AND TRAINEE GOALS. THIS PROGRAM IS TRAINING MINORITIES, WOMEN AND DISADVANTAGED INDIVIDUALS IN HIGHWAY CONSTRUCTION-RELATED SKILLS, E.G., MATH FOR THE TRADES, JOB READINESS, TECHNICAL SKILLS COURSEWORK (CARPENTRY, CONCRETE FLATWORK, BLUEPRINT READING, SITE PLANS, SITE WORK, TOOLS USE, ETC.) AND OSHA 10 HOUR CERTIFICATION, TO PREPARE THEM FOR A CAREER IN THE HIGHWAY CONSTRUCTION TRADES. GRADUATES ARE WELL-TRAINED AND READY TO BECOME PRODUCTIVE ENTRY-LEVEL CONSTRUCTION WORKERS. CONTACT THE DISTRICT 8 EEO OFFICE AT 618-346-3360 AND/OR THE HCCTP COORDINATOR AT 618-874-6528 TO LEARN MORE ABOUT THE PROGRAM AND FOR ASSISTANCE IN MEETING WORKFORCE AND TRAINEE GOALS.
6. ALL TURF AREAS DISTURBED BY THE CONTRACTOR SHALL BE SEEDED WITH THE APPROPRIATE EROSION CONTROL, AS DIRECTED BY THE ENGINEER, AT THE CONTRACTOR'S EXPENSE.
7. ALL CONSTRUCTION SIGNS SHALL BE 48"X 48" FLUORESCENT ORANGE.
8. THE LOCATIONS OF THE REPAIR AREAS AS SHOWN IN THE PLANS ARE APPROXIMATE LOCATIONS. THE EXACT LOCATIONS SHALL BE DETERMINED BY THE ENGINEER.
9. FLAGGERS SHALL BE PRESENT DURING ALL NON-SIGNALIZED CLOSURE HOURS INCLUDING LUNCH HOUR AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

COMMITMENTS: NONE

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

MIXTURE USE	BASE COURSE
AC/PG	PG 64-22
RAP % (MAX)	SEE SPECIAL PROVISION
DESIGN AIR VOIDS	4.0% @ Ndes=70
MIX COMPOSITION (Gradation)	1L 19.0
Friction AGG	MIXTURE "B"
QUALITY MGMT PROGRAM	QC/QA

PLAN QUANTITIES FOR BITUMINOUS CONCRETE SURFACE COURSE ITEMS ARE CALCULATED USING A UNIT WEIGHT OF 112 LBS/SQ YD/IN (59.8 KG/SQ M/25 MM THICKNESS).

NOT TO SCALE



PROJECT LOCATION
SN 082-0078

DETAILED LOCATION MAP

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL
NOTES, COMMITMENTS AND LOCATION MAP

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	2
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE RURAL BRIDGE 0013 082-0078
35501324	HOT-MIX ASPHALT BASE COURSE, 10"	SQ YD	398	398
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	180	180
44004250	PAVED SHOULDER REMOVAL	SQ YD	286	286
50102400	CONCRETE REMOVAL	CU YD	15.6	15.6
50300255	CONCRETE SUPERSTRUCTURE	CU YD	15.6	15.6
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1640	1640
50800515	BAR SPLICERS	EACH	40	40
52000110	PREFORMED JOINT STRIP SEAL	FOOT	99	99
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	3	3
67100100	MOBILIZATION	LSUM	1	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	LSUM	1	1
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1
70106700	TEMPORARY RUMBLE STRIPS	EACH	6	6
70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	2518	2518

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE RURAL BRIDGE 0013 082-0078
70300100	SHORT TERM PAVEMENT MARKING	FOOT	109	109
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	1085	1085
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2704	2704
70400100	TEMPORARY CONCRETE BARRIER	FOOT	837.5	837.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	612.5	612.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2
70500260	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1	1
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	1	1
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2704	2704
* 78100300	REPLACEMENT REFLECTOR	EACH	8	8
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	8	8
X5870015	BRIDGE DECK CONCRETE SEALER	SQ FT	18316	18316
X7010202	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL)	EACH	1	1
X7030005	TEMPORARY PAVEMENT MARKING REMOVAL	SQ FT	902	902
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	81	81

14
* SPECIALTY ITEM

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	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

SCALE: SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.P. RTE. 817	SECTION 421BDR-2	COUNTY ST. CLAIR	TOTAL SHEETS 21	SHEET NO. 3
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				100% STATE RURAL BRIDGE 0013 082-0078
X7200200	WIDE LOAD SIGNING	LSUM	1	1
Z0001905	STRUCTURAL STEEL REPAIR	POUND	3890	3890
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	10	10
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	30	30

4

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PLOT DATE = 9/8/2017		

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	4
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				

WIDENING FOR STAGING SCHEDULE											
LOCATION		PAVED SHOULDER REMOVAL				HOT-MIX ASPHALT BASE COURSE, 10"					
		LEFT SHLD		RIGHT SHLD		LEFT SHLD		RIGHT SHLD		BIT. MATERIALS	
STATION TO	STATION	LENGTH	WIDTH	AREA	WIDTH	AREA	WIDTH	AREA	WIDTH	AREA	(TACK COAT)
FOOT	FOOT	FOOT	FOOT	SQ YD	FOOT	SQ YD	FOOT	SQ YD	FOOT	SQ YD	POUND
NW QUADRANT											
137+88	TO 138+20	32	5	18			5	18			8
138+20	TO 139+60.08	140.08	2.5	39			5	78			35
139+60.08	TO 139+69.08	9	4	4			4	4			2
NE QUADRANT											
144+90.92	TO 144+99.92	9	4	4			4	4			2
144+99.92	TO 146+47	147	5	82			5	82			37
146+47	TO 146+71	24	2.5	7			5	13			6
SW QUADRANT											
137+88	TO 138+60	72			5	40			5	40	18
138+60	TO 139+60.08	100.08			2.5	28			5	56	25
139+60.08	TO 139+69.08	9			4	4			4	4	2
SE QUADRANT											
144+90.92	TO 144+99.92	9			4	4			4	4	2
144+99.92	TO 146+71	171.08			2.5	48			5	95	43
ENTRANCE	145+90	28			2.5	8					
SUBTOTAL =				154		132		199		199	180
TOTAL =				286				398			180

PAVEMENT MARKING SCHEDULE										
LOCATION		PAINT PAVEMENT MARKING - LINE 4"			SHORT TERM PAVEMENT MARKING	SHORT TERM PAVEMENT MARKING REMOVAL*	TEMPORARY PAVEMENT MARKING - LINE 4"			TEMPORARY PAVEMENT MARKING REMOVAL
		CENTERLINE SKIP - DASH YELLOW	EDGE LINE WHITE	RIGHT			CENTERLINE SKIP - DASH YELLOW	EDGE LINE WHITE	RIGHT	
STA TO	STA	FOOT	FOOT	FOOT	FOOT	SQ FT	FOOT	FOOT	FOOT	SQ FT
136+45.08	TO 148+46.92	300	1202	1202	109	36	300	1202	1202	902
TOTAL =			2704		109	36		2704		902

* AN ADDITIONAL QUANTITY OF SHORT TERM PAVEMENT MARKING REMOVAL IS INCLUDED IN THE STAGING SCHEDULE

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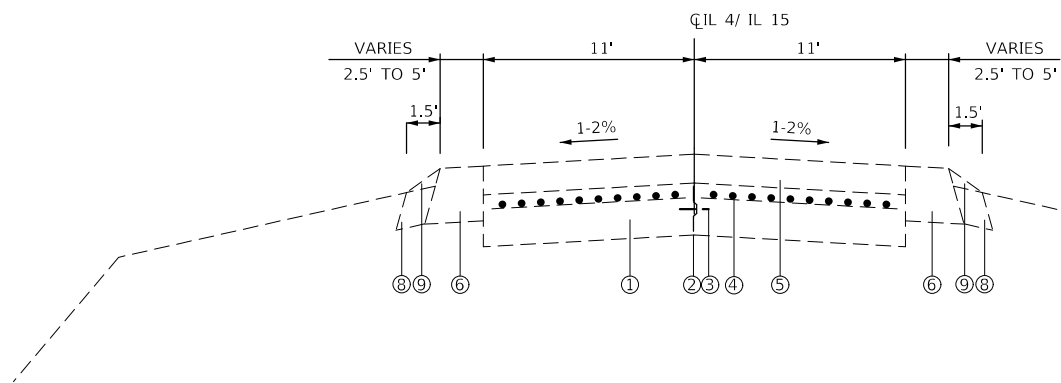
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

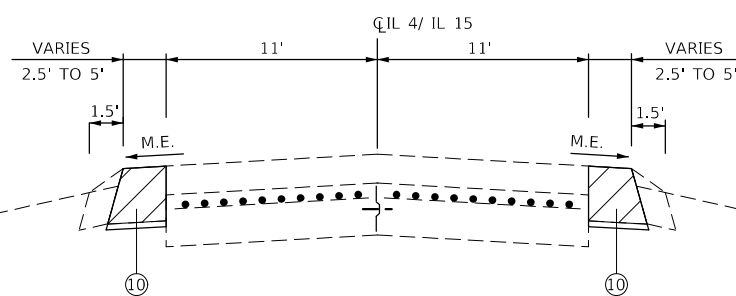
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817	421BDR-2	ST. CLAIR	21	5
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	



EXISTING TYPICAL SECTION

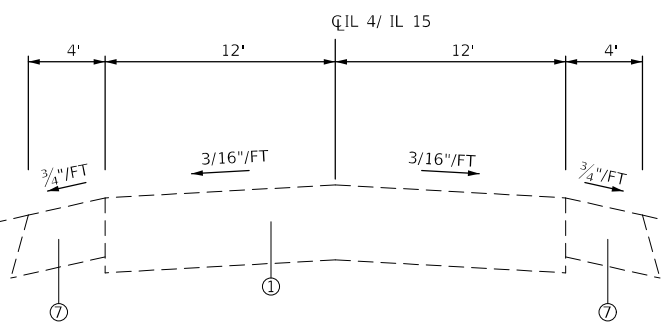
STA 137+88 TO STA 139+60.08
STA 144+99.92 TO STA 146+71



PROPOSED TYPICAL SECTION

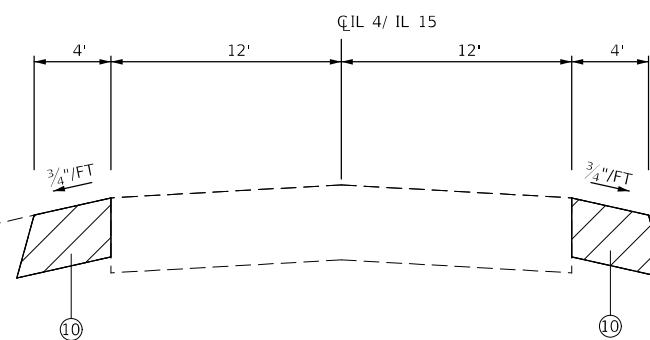
STA 137+88 TO STA 139+60.08
STA 144+99.92 TO STA 146+71

- ① EXISTING PCC PAVEMENT
 - ② EXISTING LONGITUDINAL METAL JOINT
 - ③ EXISTING #4 DEFORMED BAR
 - ④ EXISTING PAVEMENT FABRIC
 - ⑤ EXISTING RESURFACING VAR 5" TO 6"
 - ⑥ EXISTING BITUMINOUS SHOULDER 6" TO 9"
 - ⑦ EXISTING BITUMINOUS BRIDGE APPROACH SHOULDER 10"
 - ⑧ EXISTING AGGREGATE SHOULDER, TYPE A 6"
 - ⑨ EXISTING AGGREGATE SHOULDER, (WEDGE)
 - ⑩ PROPOSED HMA BASE COURSE WIDENING 10"
- ▨ PAVED SHOULDER REMOVAL



**EXISTING TYPICAL SECTION
BRIDGE APPROACH PAVEMENT**

STA 139+60.08 TO STA 139+69.08
STA 144+90.92 TO STA 144+99.92



**PROPOSED TYPICAL SECTION
BRIDGE APPROACH PAVEMENT**

STA 139+60.08 TO STA 139+69.08
STA 144+90.92 TO STA 144+99.92

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

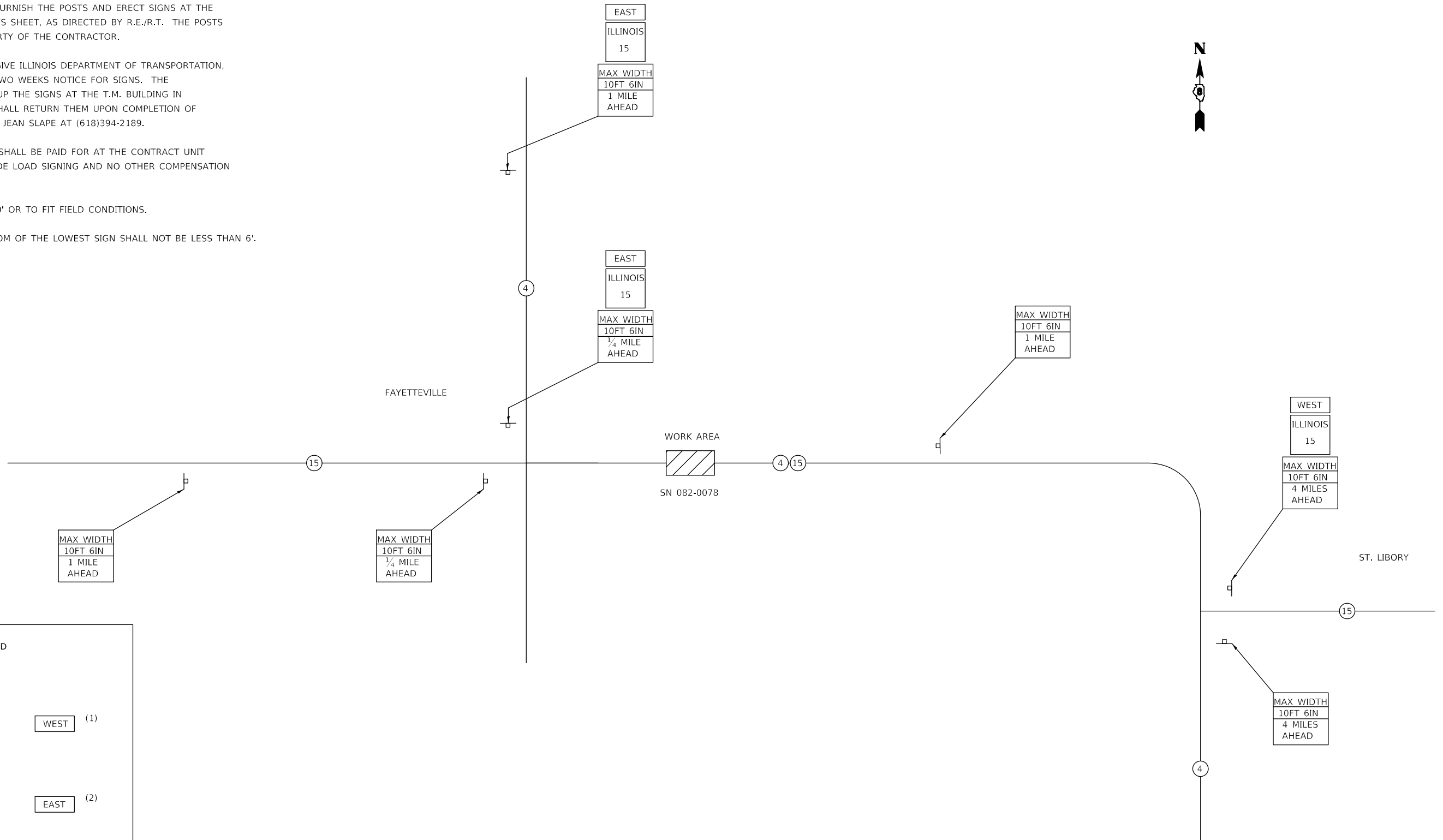
TYPICAL SECTIONS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	6
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				

NOTES:

1. ALL SIGNS REQUIRED ON THIS SHEET WILL BE SUPPLIED TO THE CONTRACTOR BY I.D.O.T.
2. THE CONTRACTOR SHALL FURNISH THE POSTS AND ERECT SIGNS AT THE LOCATIONS SHOWN ON THIS SHEET, AS DIRECTED BY R.E./R.T. THE POSTS SHALL REMAIN THE PROPERTY OF THE CONTRACTOR.
3. THE CONTRACTOR SHALL GIVE ILLINOIS DEPARTMENT OF TRANSPORTATION, BUREAU OF OPERATIONS TWO WEEKS NOTICE FOR SIGNS. THE CONTRACTOR SHALL PICK UP THE SIGNS AT THE T.M. BUILDING IN FAIRVIEW HEIGHTS, AND SHALL RETURN THEM UPON COMPLETION OF THE CONTRACT. CONTACT JEAN SLAPE AT (618)394-2189.
4. THE ABOVE NOTED WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE, LUMP SUM, FOR WIDE LOAD SIGNING AND NO OTHER COMPENSATION WILL BE ALLOWED.
5. SIGN SPACING WILL BE 400' OR TO FIT FIELD CONDITIONS.
6. THE HEIGHT TO THE BOTTOM OF THE LOWEST SIGN SHALL NOT BE LESS THAN 6'.



SIGNS REQUIRED

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**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

WIDE LOAD SIGNING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	7
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	

SUGGESTED SEQUENCE OF CONSTRUCTION

PRE-STAGE I:

REMOVE EXISTING HMA SHOULDERS/HMA BASE COURSE.

CONSTRUCT HMA BASE COURSE 10".

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH TRAFFIC CONTROL AND PROTECTION, STANDARD 701326.

WIDE LOAD SIGNING SHALL BE ERECTED PRIOR TO STAGE I CONSTRUCTION.

STAGE I:

SETUP TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL).

SEE STANDARD 701321 FOR DETAILS NOT SHOWN ON PLANS.

PERFORM ALL STRUCTURAL WORK FOR STAGE I. SEE STRUCTURE PLANS.

PERFORM ANY ADDITIONAL/NECESSARY WORK FOR STAGE I CONSTRUCTION.

STAGE II:

RELOCATE TRAFFIC CONTROL AND PROTECTION, STANDARD 701321 (SPECIAL).

SEE STANDARD 701321 FOR DETAILS NOT SHOWN ON PLANS.

PERFORM ALL STRUCTURAL WORK FOR STAGE II. SEE STRUCTURE PLANS.

PERFORM ANY ADDITIONAL/NECESSARY WORK FOR STAGE II CONSTRUCTION.

POST STAGE II:

APPLY PAVEMENT MARKINGS UTILIZING TRAFFIC CONTROL AND PROTECTION, STANDARD 701311.

PERFORM ANY ADDITIONAL WORK REQUIRED.

FOR STAGING TYPICAL, SEE SHEET NUMBER 13 OF 21.

STAGING SCHEDULE

LOCATION	TEMPORARY CONCRETE BARRIER (TCB)	RELOCATE TEMPORARY CONCRETE BARRIER	IMPACT ATTENUATORS, TEMPORARY (FULLY REDIRECTIVE, NARROW), TEST LEVEL 3	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	PINNING TEMPORARY CONCRETE BARRIER	TEMPORARY RUMBLE STRIP	TEMPORARY BRIDGE TRAFFIC SIGNALS	PAVEMENT MARKING BLACKOUT TAPE, 5"	SHORT TERM PAVEMENT MARKING REMOVAL*
	FOOT	FOOT	EACH		EACH	EACH	EACH	EACH	FOOT	SQ FT
STAGE I	587.5									
TCB TAPER WEST	75			1						
TCB TAPER EAST	175			1						
STAGE II		562.5	1							
TCB TAPER WEST		50			1					
STAGE I & II							6	1	2518	1049
TOTAL =	837.5	612.5	1	2	1	81	6	1	2518	1049

* AN ADDITIONAL QUANTITY OF SHORT TERM PAVEMENT MARKING REMOVAL IS INCLUDED IN THE PAVEMENT MARKING SCHEDULE

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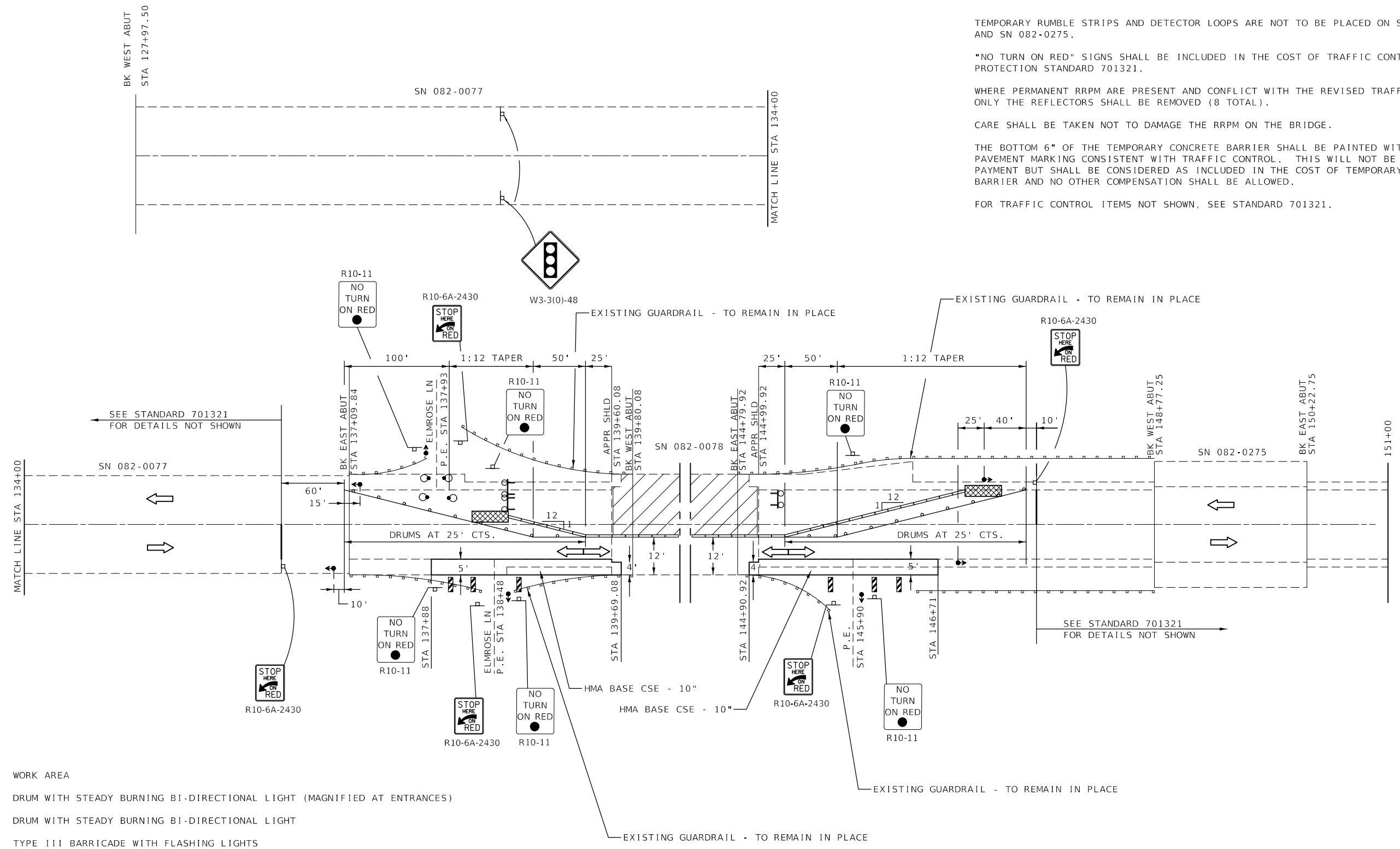
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PLOT DATE = 10/2/2017	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED STAGING SEQUENCE
AND STAGING SCHEDULE

SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	8
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	



TEMPORARY RUMBLE STRIPS AND DETECTOR LOOPS ARE NOT TO BE PLACED ON SN 082-0077 AND SN 082-0275.

"NO TURN ON RED" SIGNS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

WHERE PERMANENT RRPM ARE PRESENT AND CONFLICT WITH THE REVISED TRAFFIC PATTERNS, ONLY THE REFLECTORS SHALL BE REMOVED (8 TOTAL).

CARE SHALL BE TAKEN NOT TO DAMAGE THE RRPM ON THE BRIDGE.

THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER SHALL BE PAINTED WITH TEMPORARY PAVEMENT MARKING CONSISTENT WITH TRAFFIC CONTROL. THIS WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF TEMPORARY CONCRETE BARRIER AND NO OTHER COMPENSATION SHALL BE ALLOWED.

FOR TRAFFIC CONTROL ITEMS NOT SHOWN, SEE STANDARD 701321.

- WORK AREA
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT (MAGNIFIED AT ENTRANCES)
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- TEMPORARY IMPACT ATTENUATORS (SEE STAGING SCHEDULE)
- TEMPORARY CONCRETE BARRIER
- SIGN
- TRAFFIC SIGNAL
- DOUBLE VERTICAL PANEL AT 25' CTS.
- DIRECTION OF TRAFFIC

NOT TO SCALE

MODEL: Default
 FILE: \\nas01c.psu.edu\B84E8D8D\ITC\Illinois\gov\PIWDOT\Documents\10DOT_Offices\Director\Projects\0876K21\CADD\DATA\CAD\Sheet\0876K21_rfb-5a10m.dgn

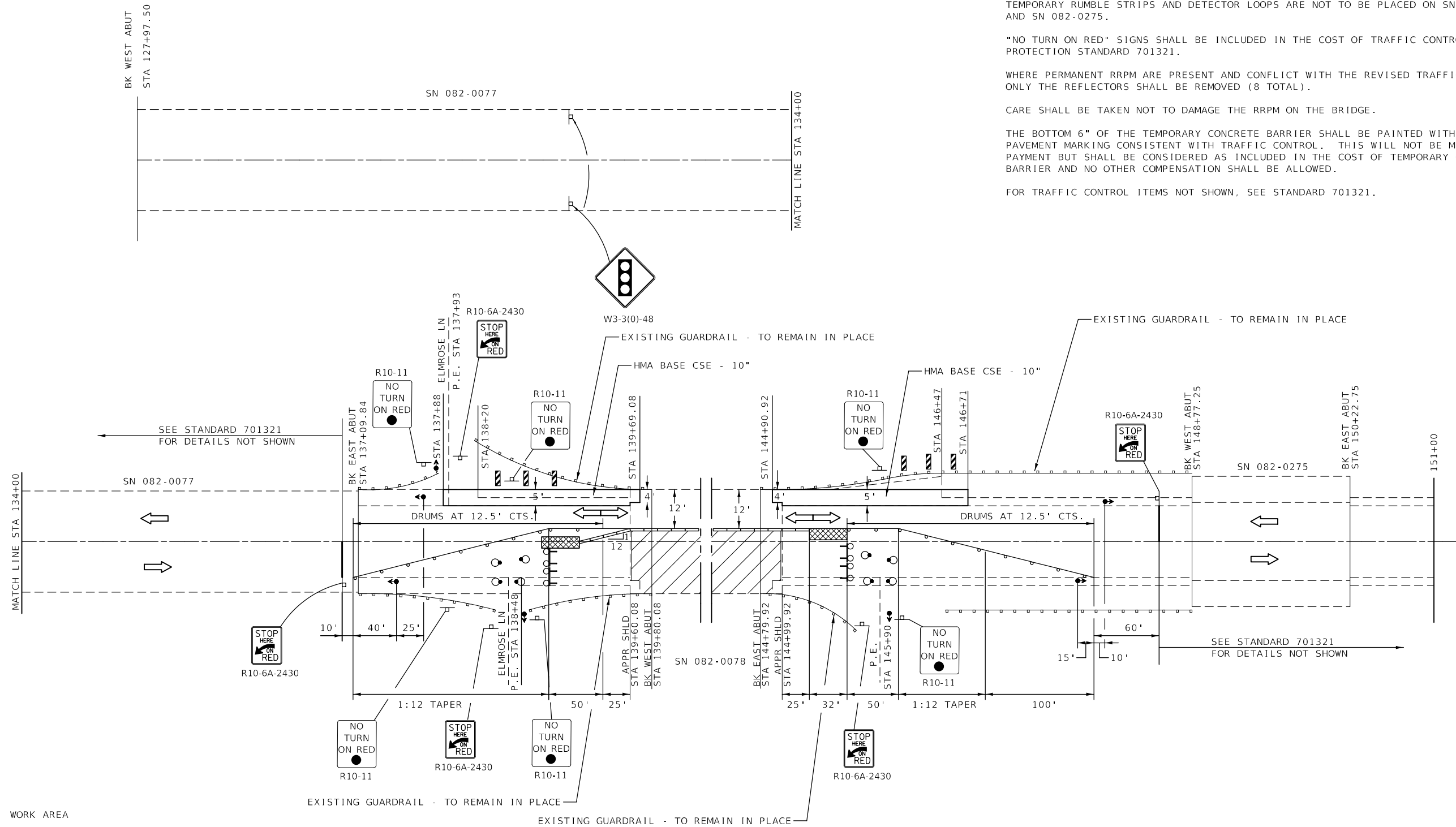
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	DRAWN -	REVISED -
PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -
PLOT DATE = 10/2/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

SUGGESTED STAGE I CONSTRUCTION

SCALE: SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	9
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				



TEMPORARY RUMBLE STRIPS AND DETECTOR LOOPS ARE NOT TO BE PLACED ON SN 082-0077 AND SN 082-0275.

"NO TURN ON RED" SIGNS SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION STANDARD 701321.

WHERE PERMANENT RRPM ARE PRESENT AND CONFLICT WITH THE REVISED TRAFFIC PATTERNS, ONLY THE REFLECTORS SHALL BE REMOVED (8 TOTAL).

CARE SHALL BE TAKEN NOT TO DAMAGE THE RRPM ON THE BRIDGE.

THE BOTTOM 6" OF THE TEMPORARY CONCRETE BARRIER SHALL BE PAINTED WITH TEMPORARY PAVEMENT MARKING CONSISTENT WITH TRAFFIC CONTROL. THIS WILL NOT BE MEASURED FOR PAYMENT BUT SHALL BE CONSIDERED AS INCLUDED IN THE COST OF TEMPORARY CONCRETE BARRIER AND NO OTHER COMPENSATION SHALL BE ALLOWED.

FOR TRAFFIC CONTROL ITEMS NOT SHOWN, SEE STANDARD 701321.

- WORK AREA
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT (MAGNIFIED AT ENTRANCES)
- DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- TEMPORARY IMPACT ATTENUATORS (SEE STAGING SCHEDULE)
- TEMPORARY CONCRETE BARRIER
- SIGN
- TRAFFIC SIGNAL
- DOUBLE VERTICAL PANEL AT 25' CTS.
- DIRECTION OF TRAFFIC

NOT TO SCALE

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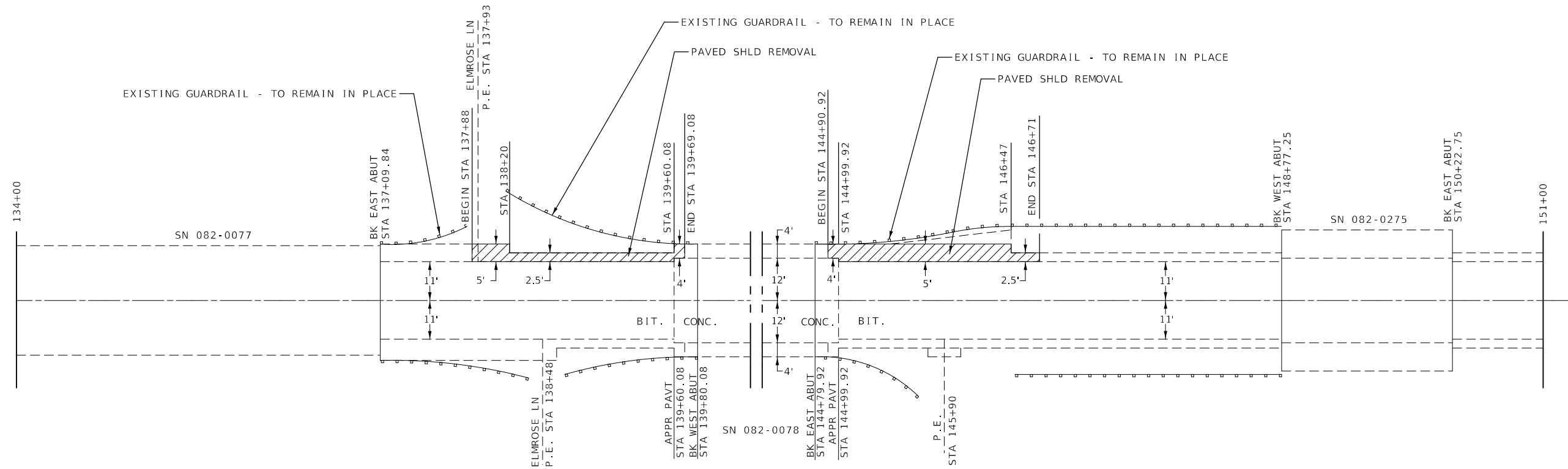
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	DRAWN -	REVISED -
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PLOT DATE = 10/2/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

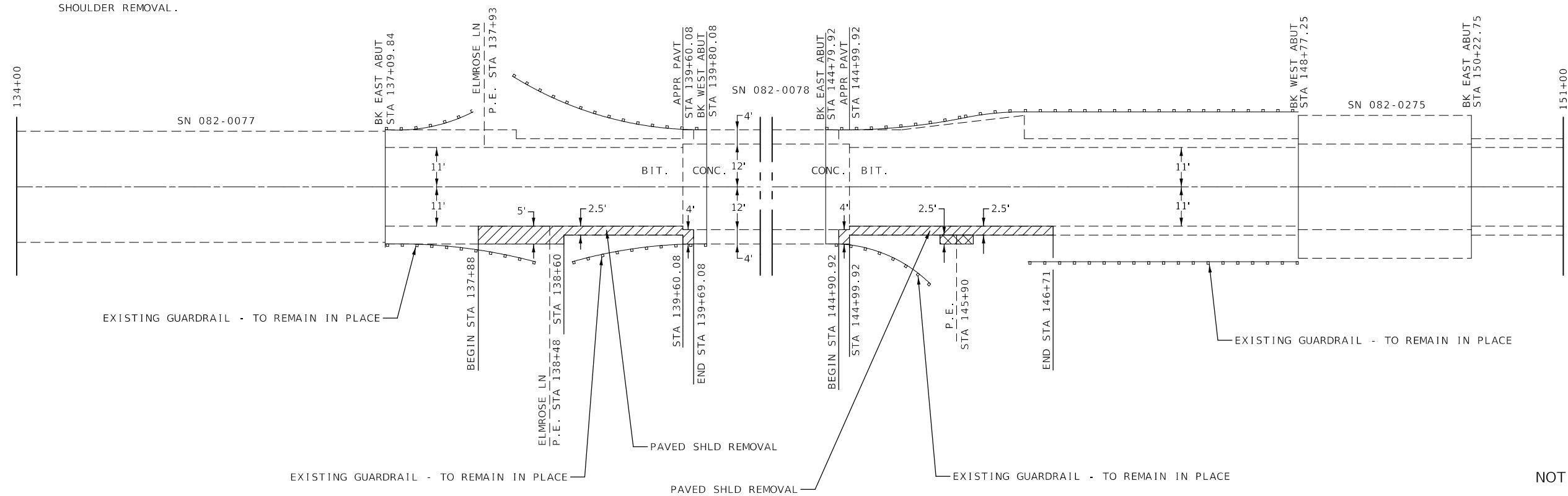
SUGGESTED STAGE II CONSTRUCTION

SCALE: SHEET 3 OF 3 SHEETS STA. TO STA.

F.A.P RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	10
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				



- PAVED SHOULDER REMOVAL
 - PAVED SHOULDER REMOVAL AT P.E. STA 145+90 RT
- THE REMOVAL OF THE EXISTING BITUMINOUS SURFACING 2" AT P.E. STA 145+90 SHALL BE PAID AS PAVED SHOULDER REMOVAL.



NOT TO SCALE

MODEL: Default
FILE: \\nas01\pub\B&E\BID\NTEC\Illinois\gov\PI\DOT\Documents\DOT_Offices\Director\Projects\0876621\CADD\DATA\CAD\Sheet\0876621_rfb-removal.dgn

USER NAME = smithma	DESIGNED -	REVISED -
	DRAWN -	REVISED -
PLOT SCALE = 100.0000' / in.	CHECKED -	REVISED -
PLOT DATE = 10/2/2017	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

REMOVAL DETAIL

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	11
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				

GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

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 new deck surface adjacent to the joints shall have its final finish tined according to Article 420.09(e)(1) of the Standard Specifications. Cost included with Concrete Superstructures.

Bridge deck concrete sealer shall be placed on top/inside faces of curbs (full length) and on top of new concrete at joints. In addition, place sealer on bridge deck (full length).

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.

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

Existing reinforcement bars extending into 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.

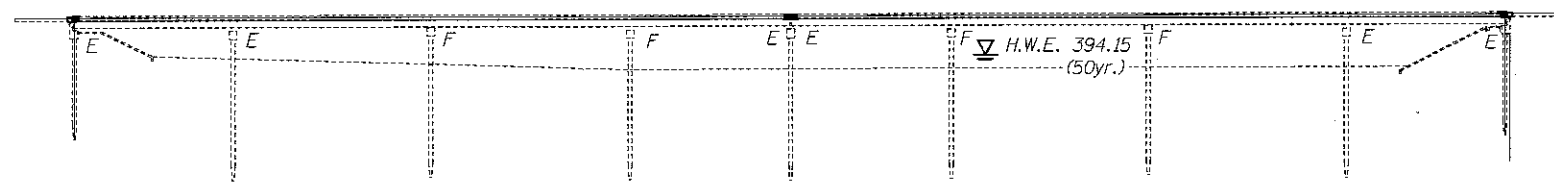
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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

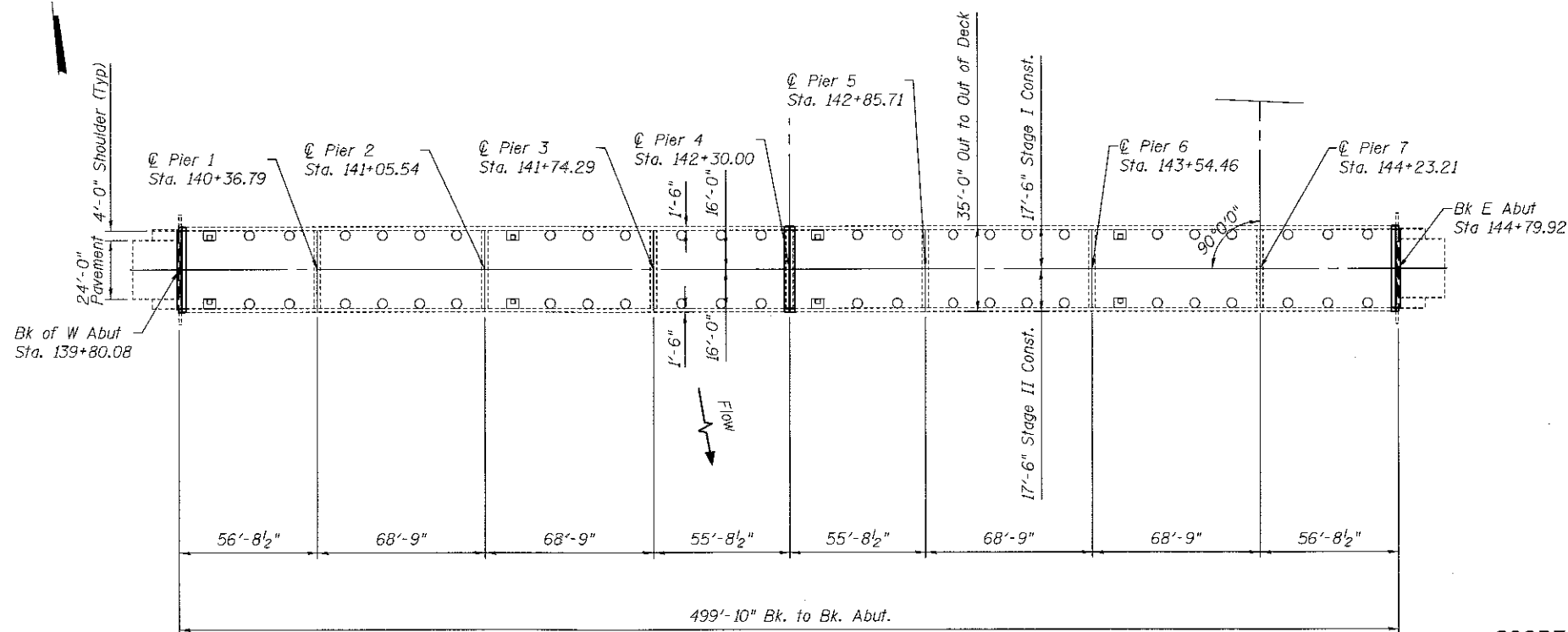
Fasteners shall be high strength bolts. Bolts 7/8"φ, open holes 15/16"φ, unless otherwise noted.

Existing structural steel that will be in contact with new structural steel shall be cleaned and painted prior to erection as required by the GBSP "Cleaning and Painting Contact Surface Areas of Existing Steel Structure".

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type I. Cost included with Structural Steel Repair.



ELEVATION



PLAN

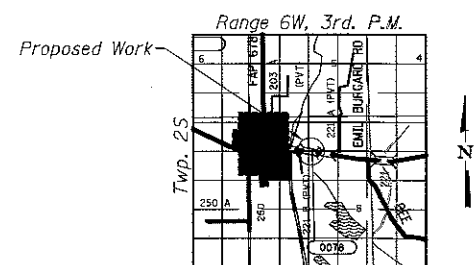
SCOPE OF WORK

- Replace deck and pavement ends at abutments and replace deck ends at pier 4.
- Install Preformed Joint Strip Seats
- Beam End Repair
- Deck Slab Repair

- Existing Drains to Remain (46 Req'd)
- Existing Scupper to Remain (8 Req'd)

INDEX OF SHEETS

1. General Plan & Elevation
2. Deck Cross Section
3. Appr Cross Section Removal
4. Appr Cross Section Replacement
5. Joint Removal & Replacement
6. Joint Details
7. Structural Steel
8. Strip Seal Details
9. Temporary Concrete Barrier
10. Bar Splicers



LOCATION SKETCH

TOTAL BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	15.6
Concrete Superstructure	Cu. Yd.	15.6
Bar Splicers	Each	40
Preformed Joint Strip Seal	Foot	99
Reinforcement Bars, Epoxy Coated	Pound	1640
Bridge Deck Concrete Sealer	Sq. Ft.	18316
*Deck Slab Repair (Partial)	Sq. Yd.	30
*Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	10
Structural Steel Repair	Pound	3890

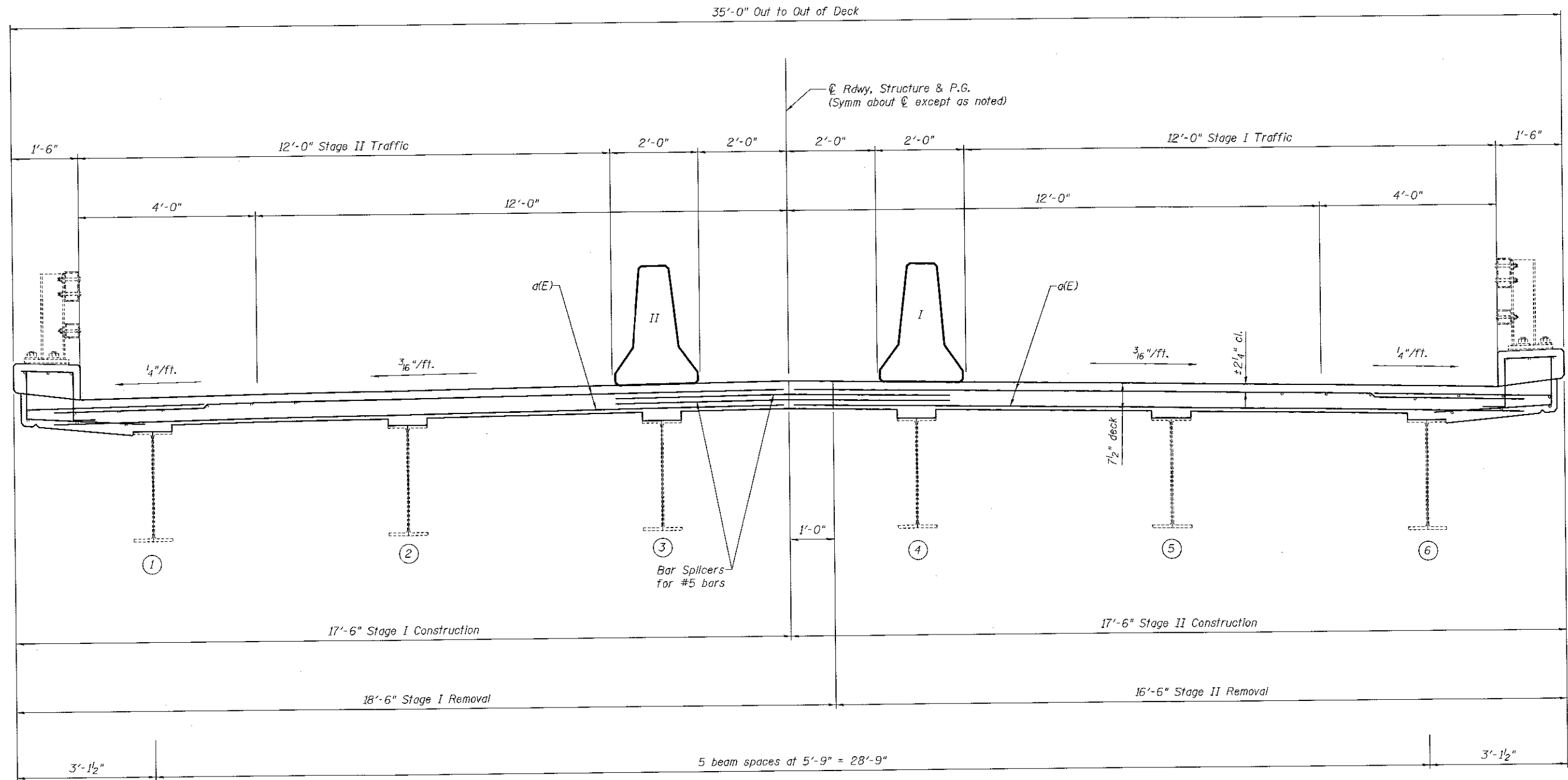
*The quantity of deck slab repair is estimated. The engineer in the field shall determine the actual quantity and locations.



Expires 11/30/18

8/25/2017 8:12:41 AM

DESIGNED - AYY	DATE -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION (IL 4 / 15 over KASKASKIA OVERFLOW)	F.A.P. RTE. 817	SECTION 421BDR-2	COUNTY ST. CLAIR	TOTAL SHEETS 21	SHEET NO. 12
CHECKED - VHV	REVISOR		SN 082-0078					
DRAWN - AYY	REVISION		SHEET NO. 1 OF 10					
CHECKED - VHV								



CROSS SECTION

Looking East @ Joint Location

8/25/2017 8:12:41 AM

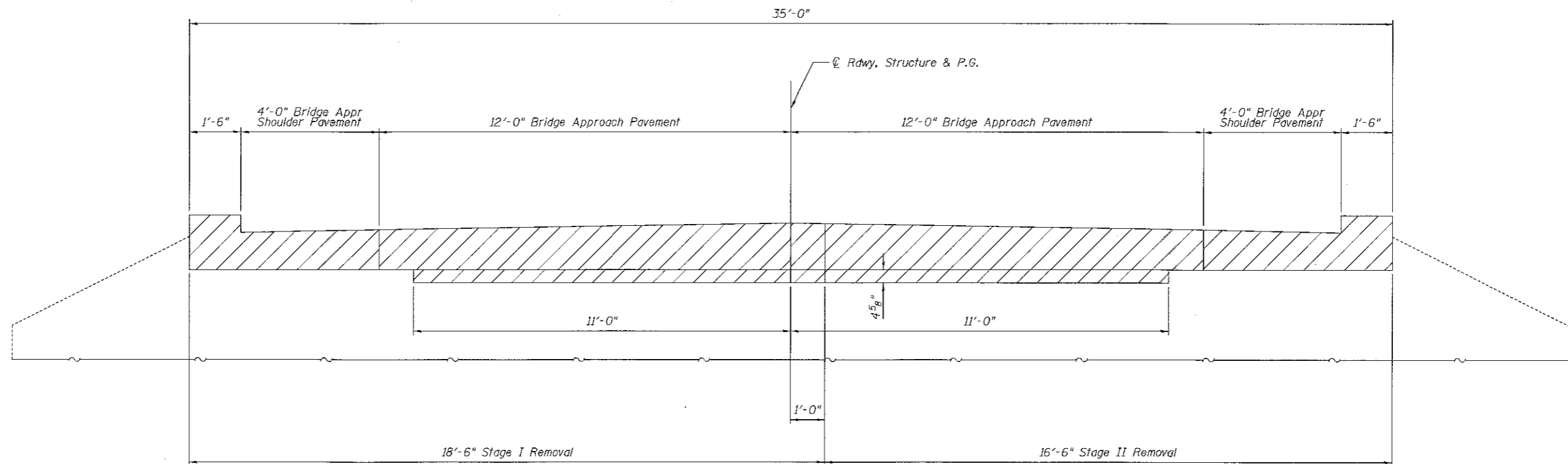
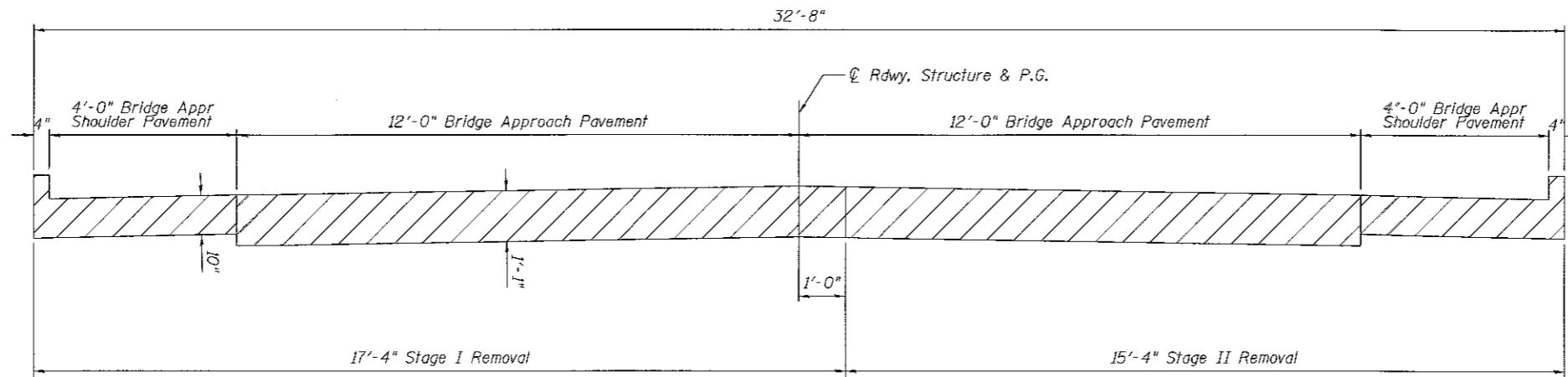
DESIGNED - AYW		DATE -	
CHECKED -		REVISED	
DRAWN - AYW	PASSED	REVISOR	
CHECKED -	ENGINEER OF BRIDGES AND STRUCTURES	REVISOR	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**DECK CROSS SECTION
SN 082-0078**

SHEET NO. 2 OF 10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST CLAIR	21	13
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				



8/25/2017 8:12:42 AM

DESIGNED -	AYV
CHECKED -	
DRAWN -	AYV
CHECKED -	

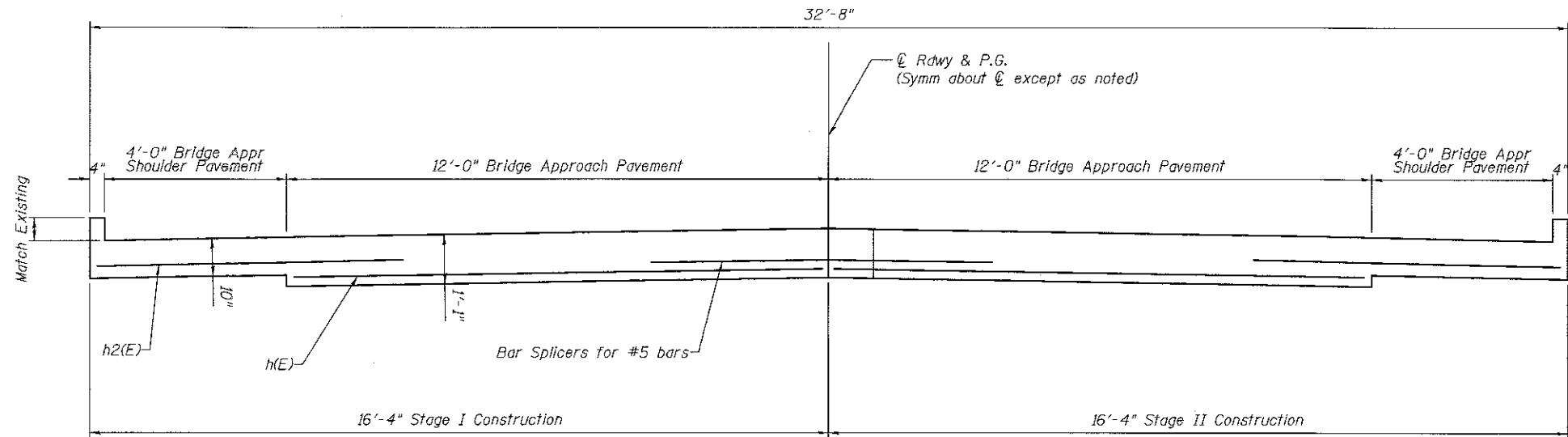
PASSED	_____
ENGINEER OF BRIDGES AND STRUCTURES	_____

DATE -	_____
REVISED	_____
REVISED	_____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

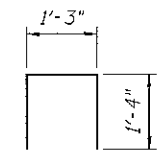
APPROACH CROSS SECTIONS REMOVAL
SN 082-0078
SHEET NO. 3 OF 10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	14
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	

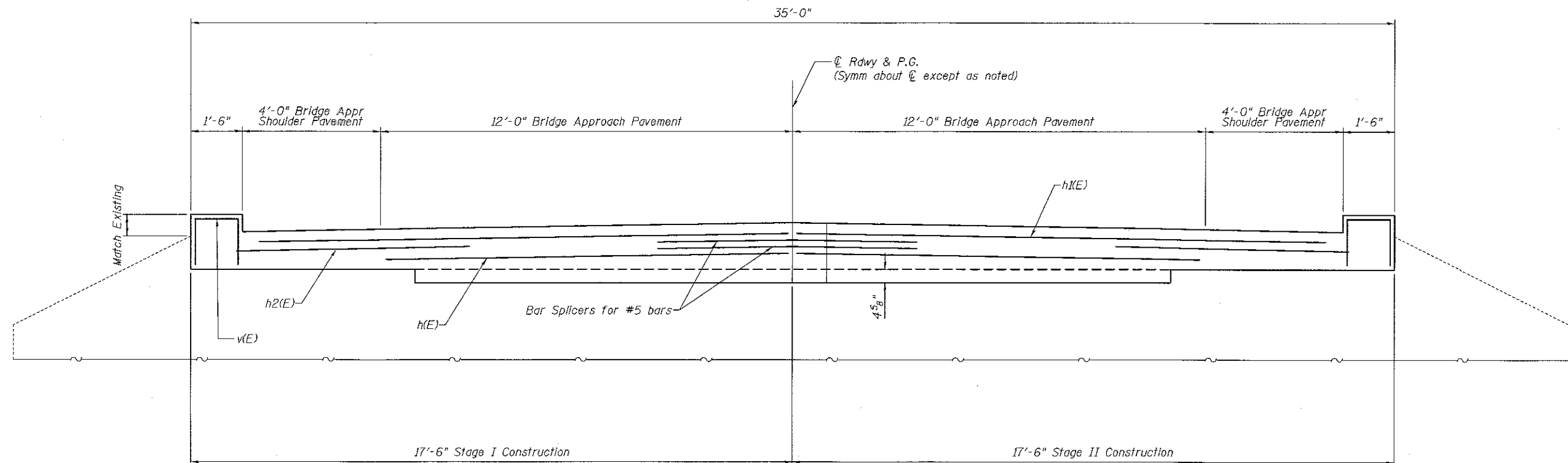


SECTION G-G

W Abut shown, E Abut similar
(Looking East)



BAR V(E)



SECTION H-H

W Abut shown, E Abut similar
(Looking East)

8/25/2017 8:12:42 AM

DESIGNED -	AYV
CHECKED -	
DRAWN -	AYV
CHECKED -	

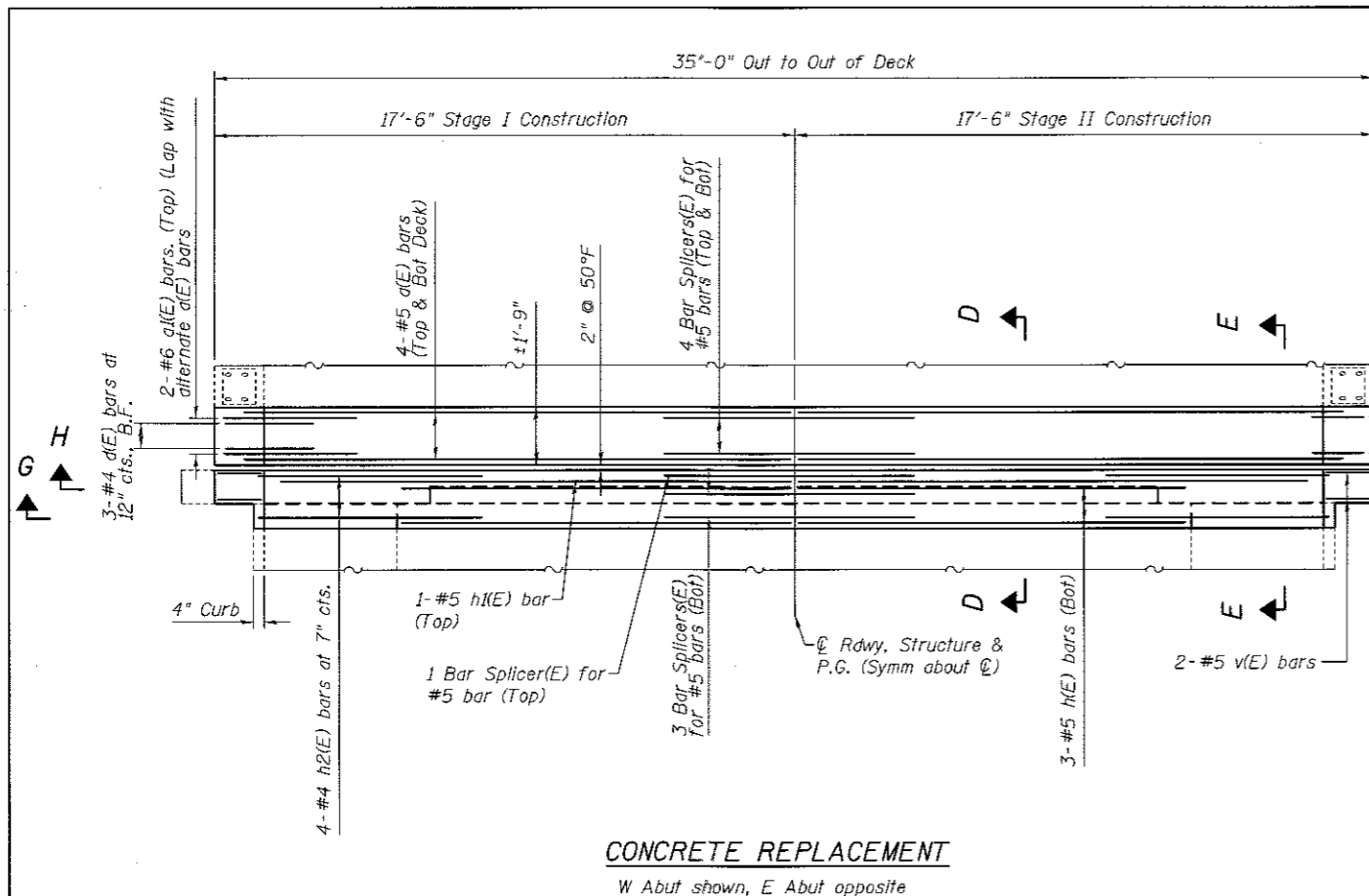
PASSED	DATE -
ENGINEER OF BRIDGES AND STRUCTURES	REVISED
	REVISED

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

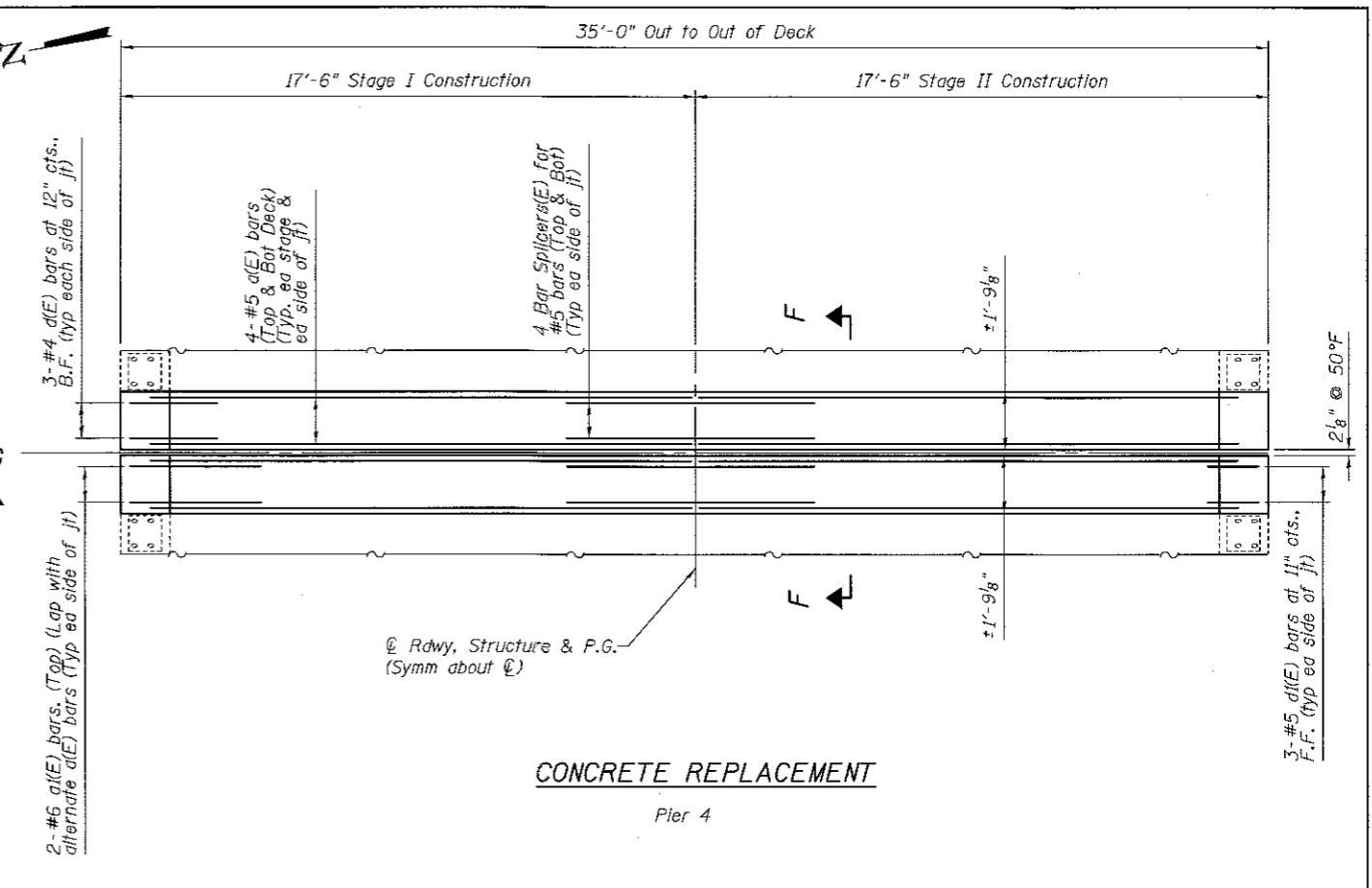
**APPROACH CROSS SECTIONS REPLACEMENT
SN 082-0078**

SHEET NO. 4 OF 10 SHEETS

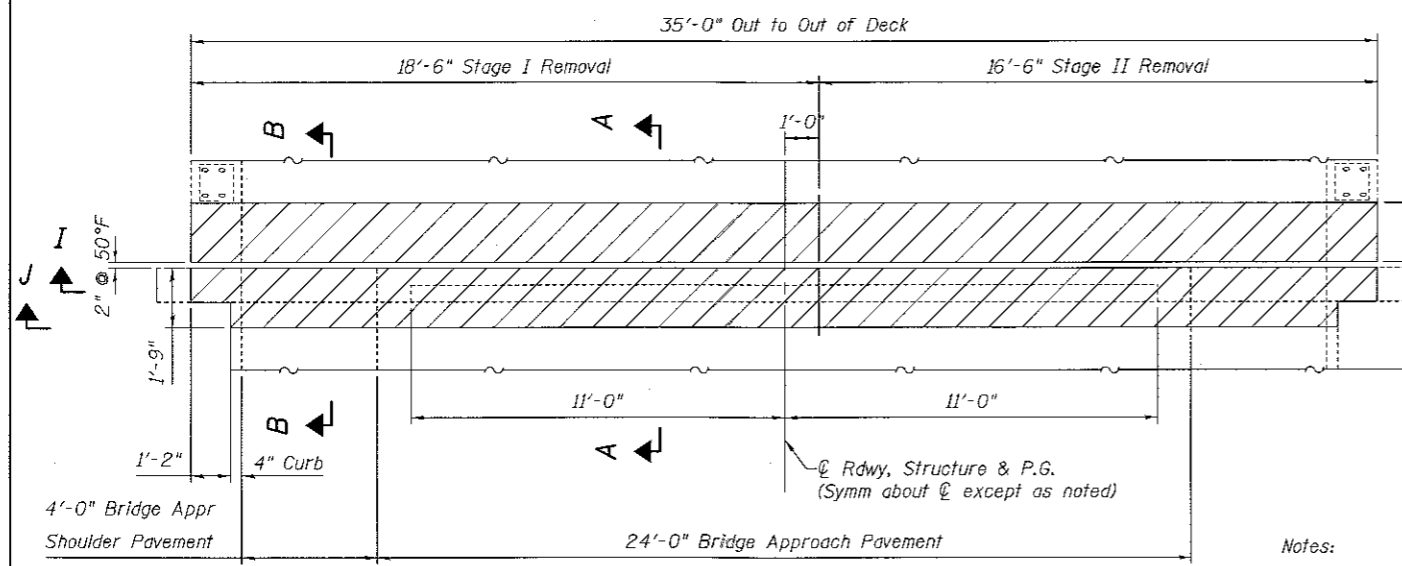
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	15
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	



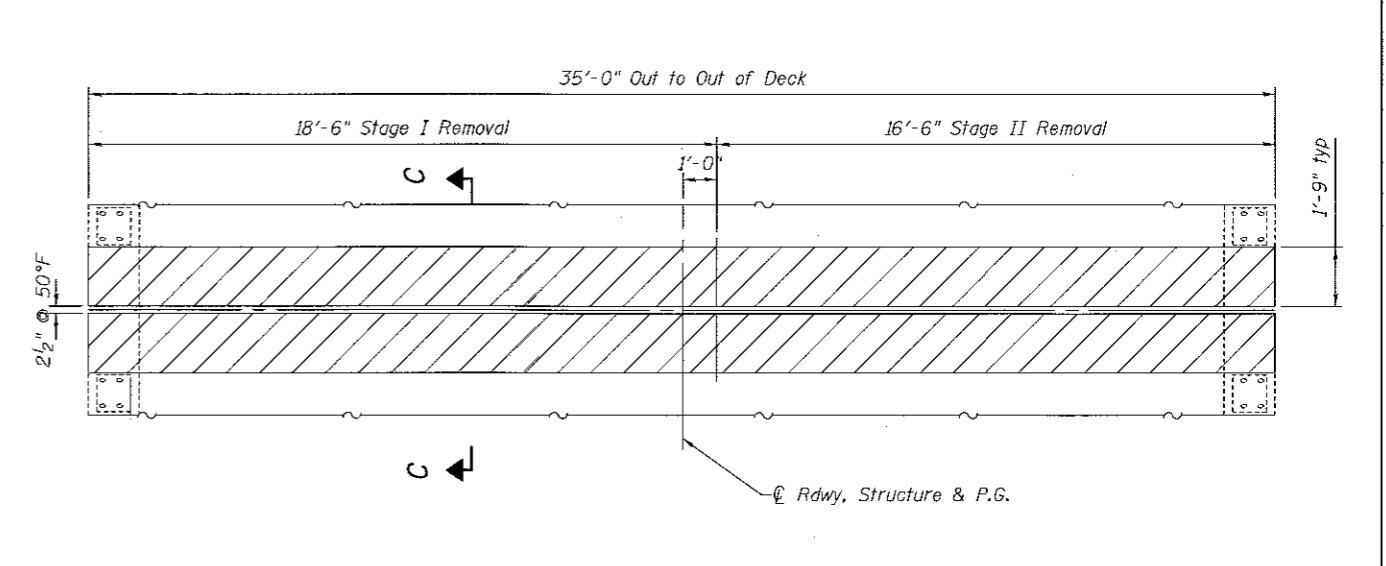
CONCRETE REPLACEMENT
W Abut shown, E Abut opposite



CONCRETE REPLACEMENT
Pier 4



CONCRETE REMOVAL
W Abut shown, E Abut opposite



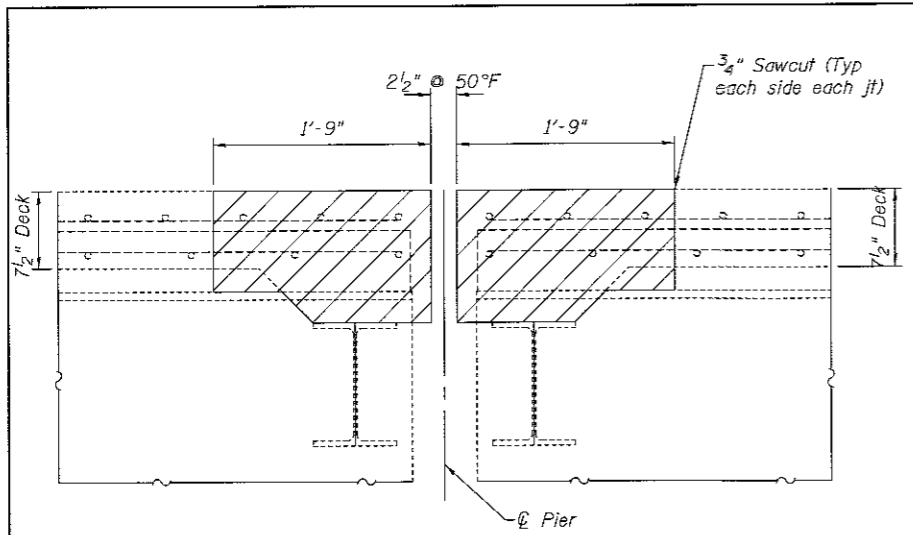
CONCRETE REMOVAL
Pier 4

Notes:
See sheet 6 of 10 for Sections A-A, B-B, C-C, D-D, E-E & F-F.
See sheet 4 of 10 for Sections G-G & H-H
See sheet 3 of 10 for Sections I-I & J-J

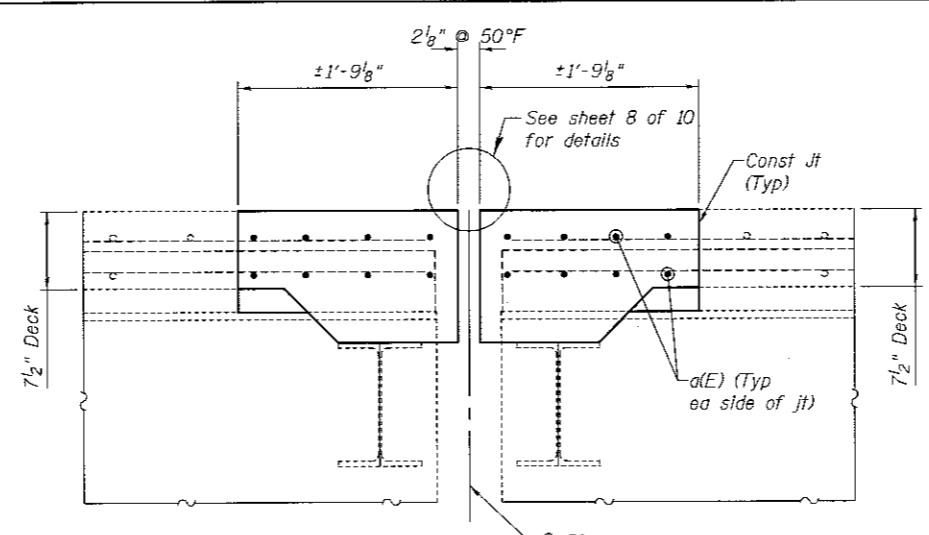
Concrete Removal (Will include removal of the Bridge Approach Pavement and the Bridge Approach Shoulder Pavement to the limits shown)

8/25/2017 8:12:42 AM

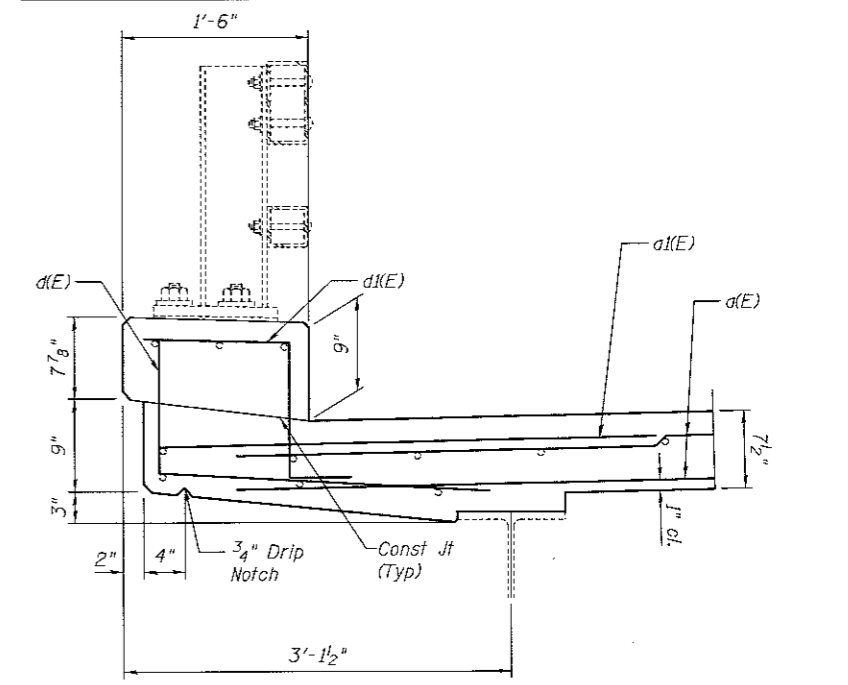
DESIGNED - AYY	DATE -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT REMOVAL & REPLACEMENT SN 082-0078		F.A.P. RTE. B17	SECTION 421BDR-2	COUNTY ST. CLAIR	TOTAL SHEETS 21	SHEET NO. 16
CHECKED -	PASSED		SHEET NO. 5 OF 10 SHEETS		CONTRACT NO. 76K21				
DRAWN - AYY	ENGINEER OF BRIDGES AND STRUCTURES		ILLINOIS FED. AID PROJECT						
CHECKED -	REVISOR		ILLINOIS FED. AID PROJECT						



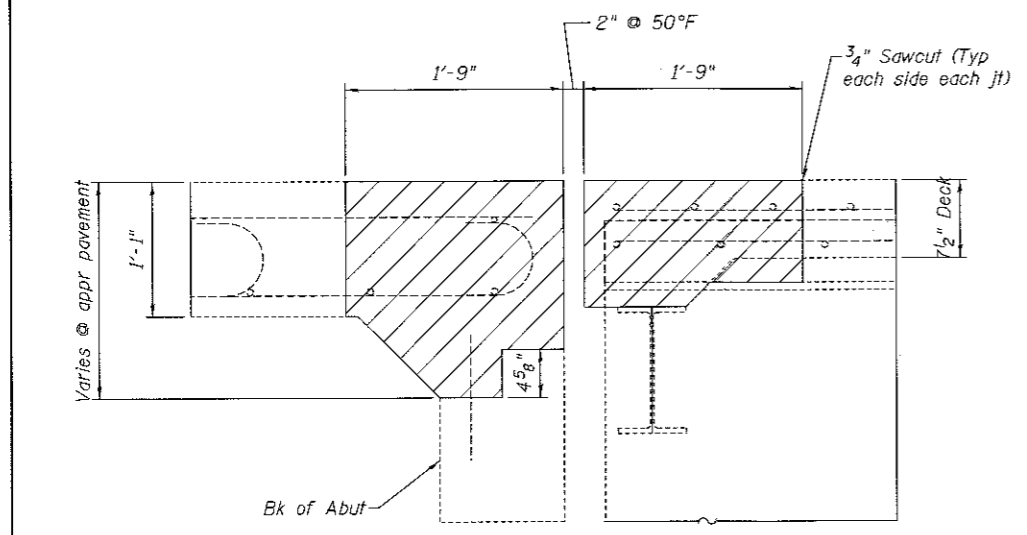
SECTION C-C



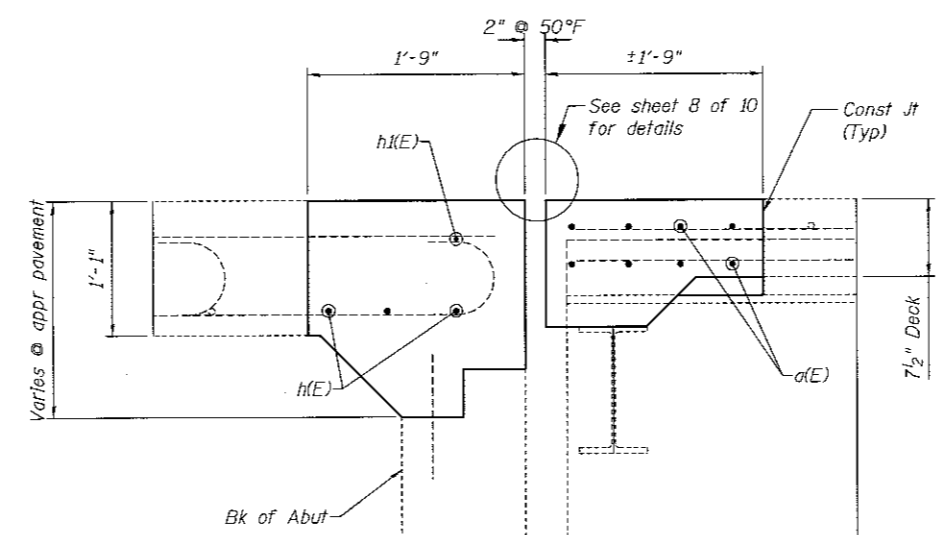
SECTION F-F



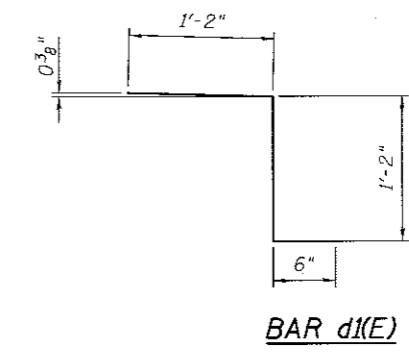
CURB SECTION



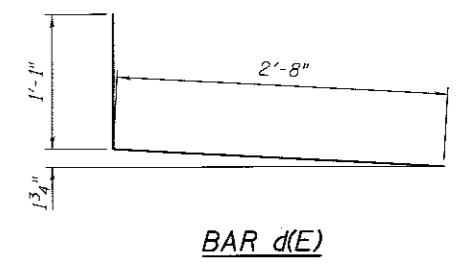
SECTION A-A



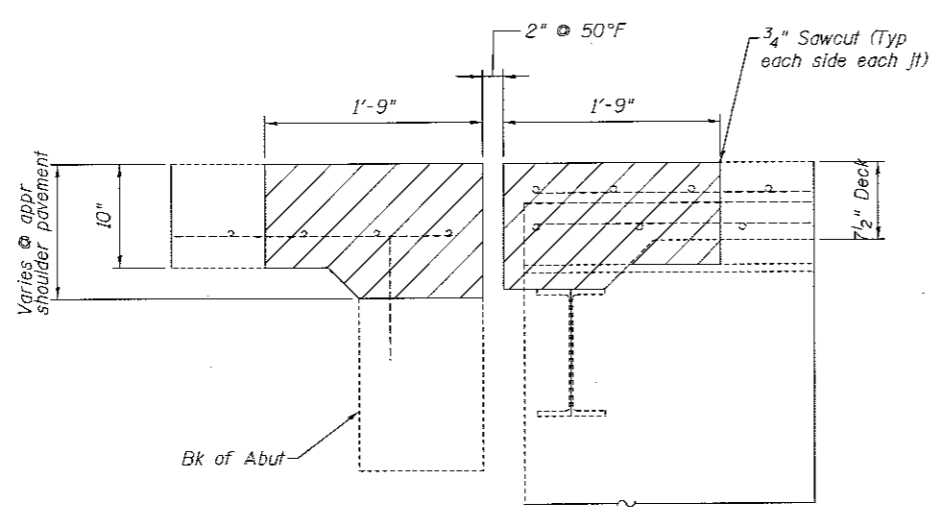
SECTION D-D



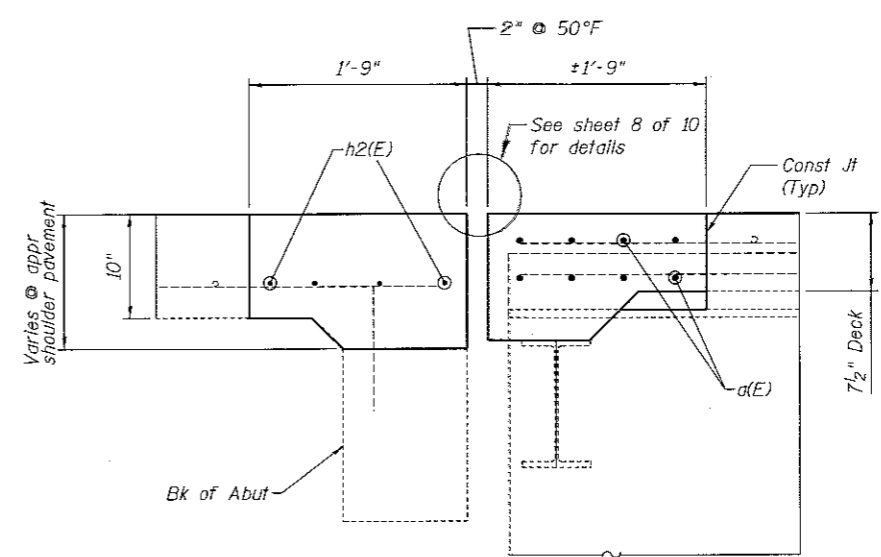
BAR d(E)



BAR d(E)



SECTION B-B



SECTION E-E

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
d(E)	64	#5	16'-5"	—
d(E)	16	#6	4'-0"	—
d(E)	24	#4	3'-9"	┌
d(E)	24	#5	2'-10"	┌
h(E)	12	#5	11'-9"	—
h(E)	4	#5	15'-5"	—
h2(E)	16	#4	6'-9"	—
v(E)	8	#5	3'-11"	π
Reinforcement Bars, Epoxy Coated		Pound	1640	
Bridge Deck Concrete Sealer		Sq. Ft.	18316	
Concrete Superstructure		Cu. Yds.	15.6	
Concrete Removal		Cu. Yds.	15.6	
Deck Slab Repair (Partial)		Sq. Yd.	30	
Deck Slab Repair (Full Depth, Type II)		Sq. Yd.	10	

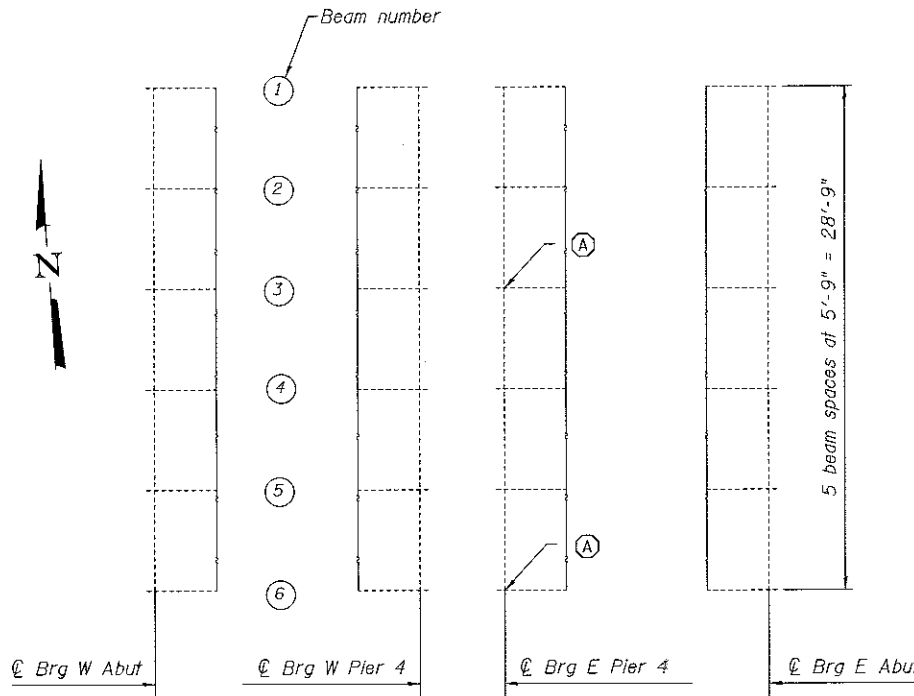
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CHECKED -	REVISED -
DRAWN - AYW	REVISED -
CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

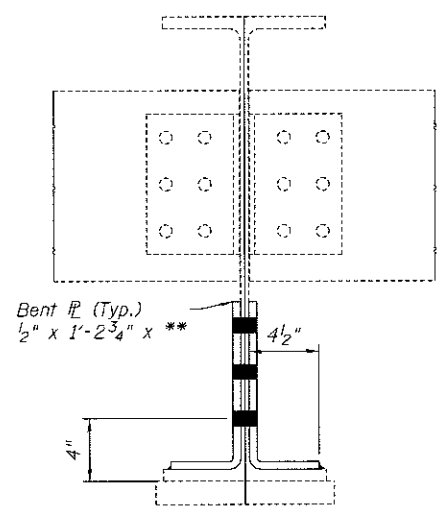
JOINT DETAILS
SN 082-0078
SHEET NO. 6 OF 10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	17
CONTRACT NO. 76K21				
ILLINOIS FED. AID PROJECT				

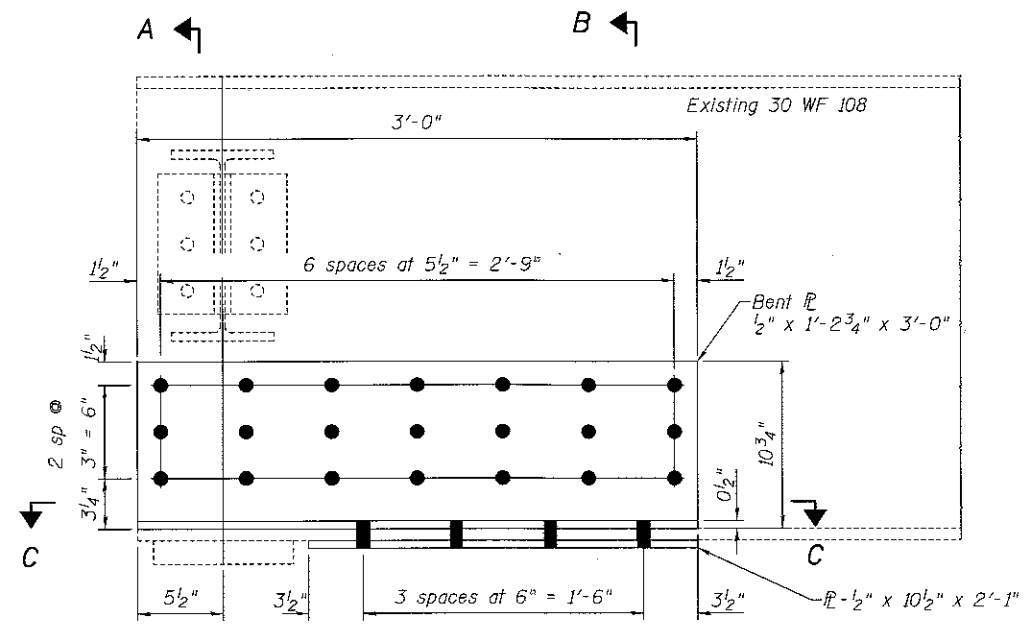


PARTIAL LOCATION PLAN

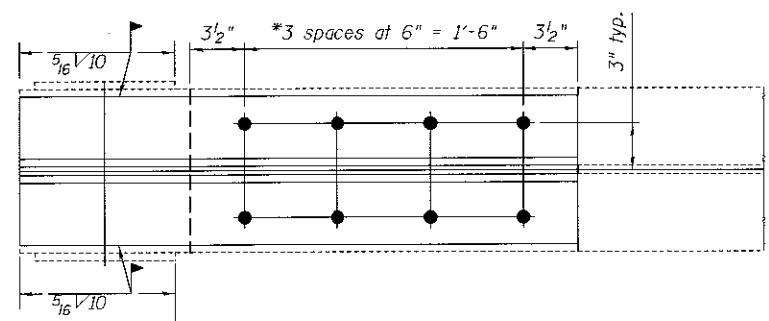
- (A) - Beam End Repair, Beam (3 & 6) E Pier 4
- (B) - Beam End Repair, the remaining beam ends at W. Abut, W Pier 4, E Pier 4 & E Abut that's not labeled Repair "A"



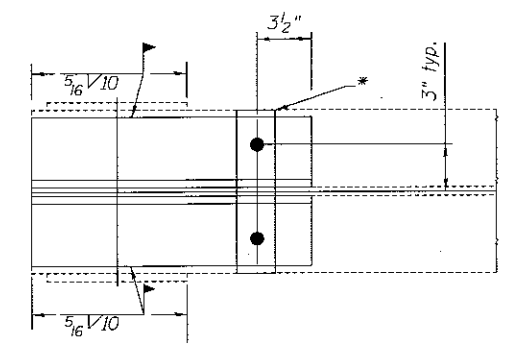
SECTION A-A



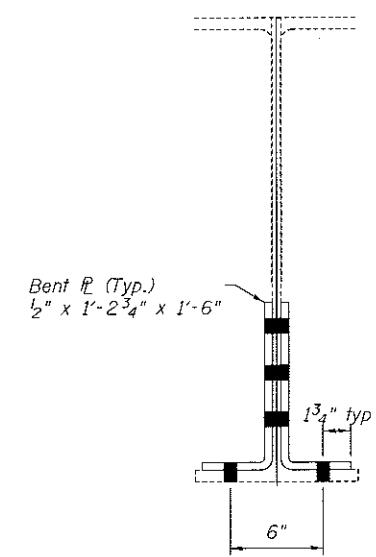
END ELEVATION REPAIR A



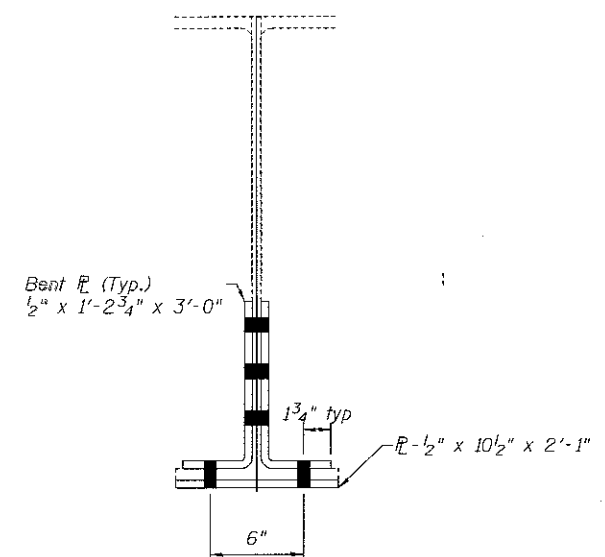
SECTION C-C



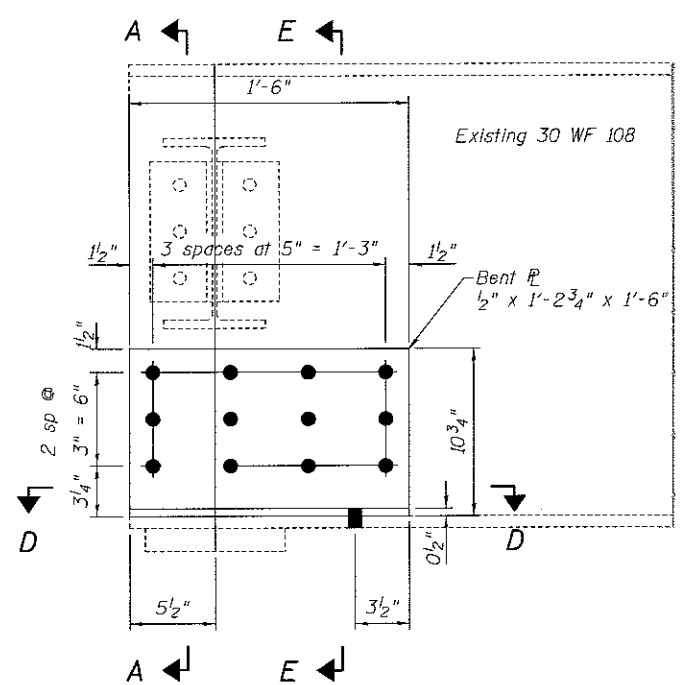
SECTION D-D



SECTION E-E



SECTION B-B



END ELEVATION REPAIR B

● -Field drill holes in existing beam using holes in new plates as a template

* Use 3/4"φ bolts & 13/16"φ holes
 ** 3'-0" Repair A
 1'-6" Repair B

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	3890

8/25/2017 8:12:43 AM

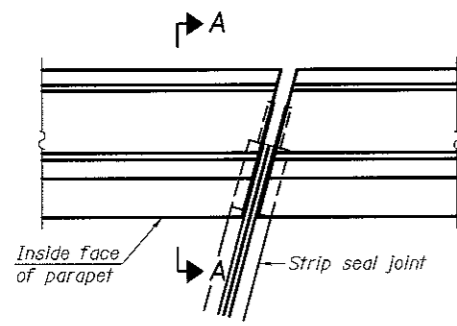
DESIGNED - AYW	DATE -
CHECKED -	REVISD
DRAWN - AYW	REVISD
CHECKED -	

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

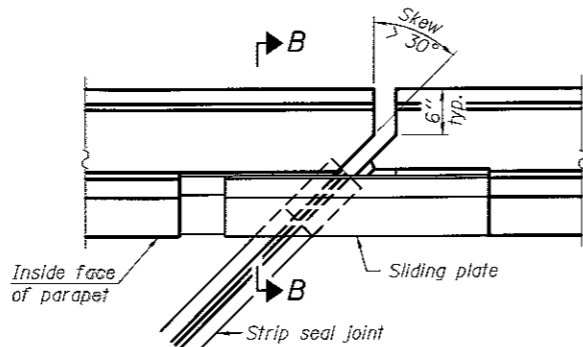
**STRUCTURAL STEEL
SN 082-0078**

SHEET NO. 7 OF 10 SHEETS

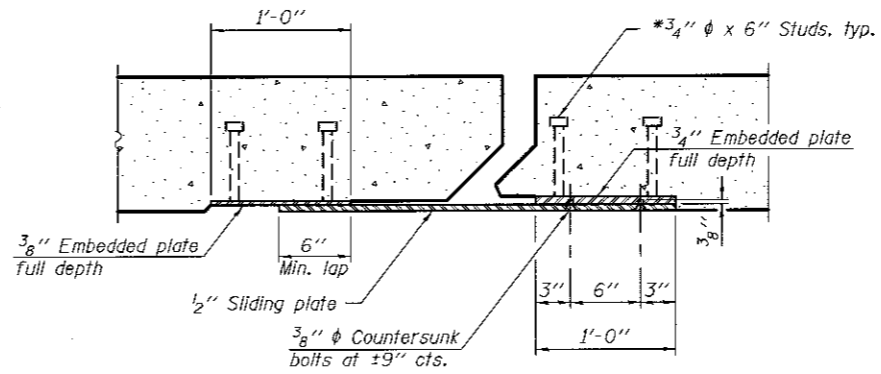
F.A.P. RTE. 817	SECTION 421BDR-2	COUNTY ST CLAIR	TOTAL SHEETS 21	SHEET NO. 18
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	



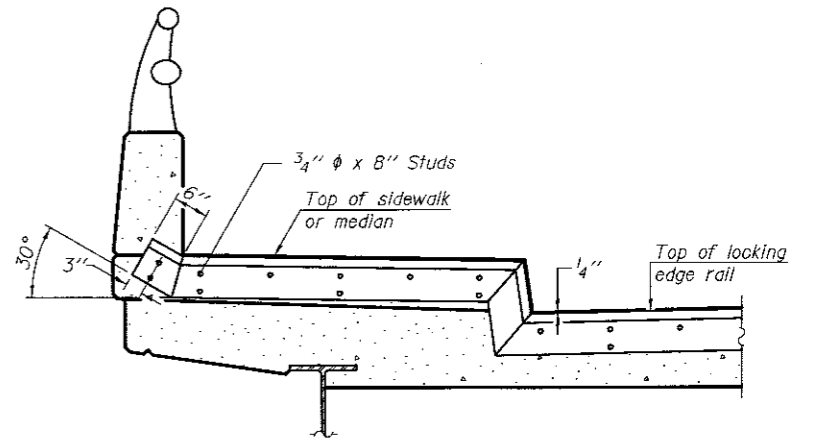
PLAN
(For skews $\leq 30^\circ$)



PLAN
(For skews $> 30^\circ$)
Showing point block

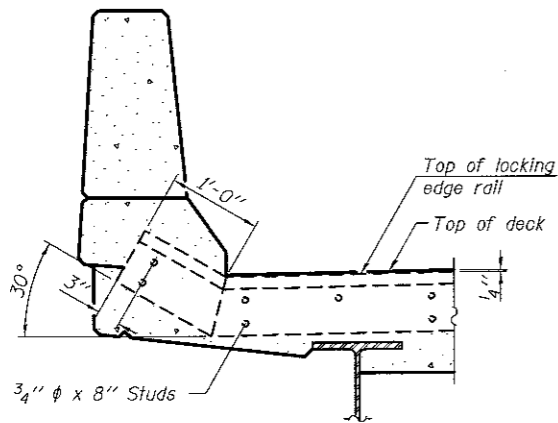


SECTION C-C

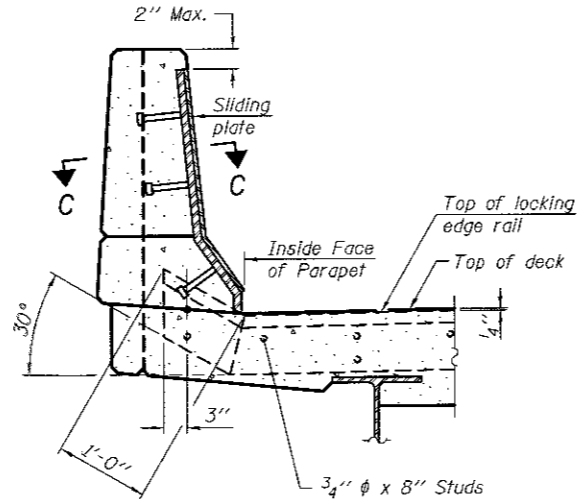


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

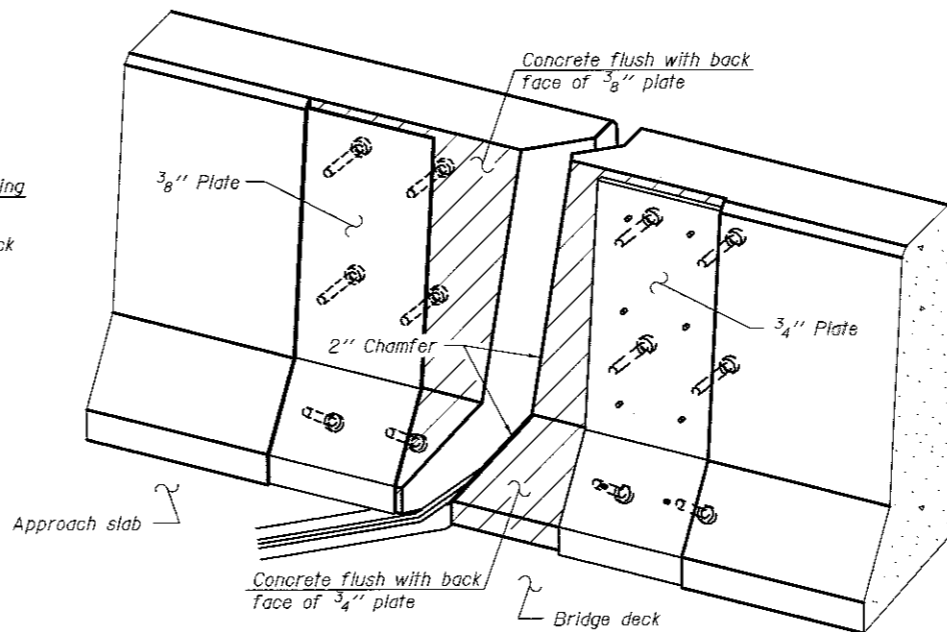
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



SECTION A-A



SECTION B-B



TRIMETRIC VIEW
(Showing back plates only)

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 conceptual only, except for the minimum dimensions shown. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed. Locking Edge Rails may be spliced at slope discontinuities.

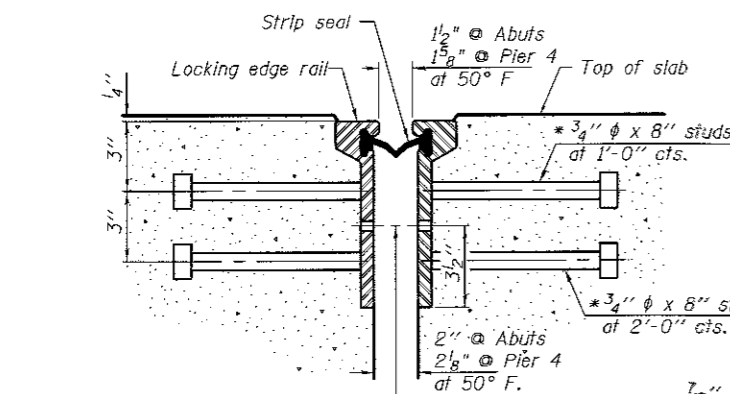
The manufacturer's recommended installation methods shall be followed.

The joint opening and deck dimensions detailed on the superstructure are based on a rolled rail expansion joint. If the Contractor elects to use the welded rail expansion joint, the opening and deck dimensions shall be modified according to the dimensions detailed on this sheet. Required modifications shall be made at no additional cost to the State.

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

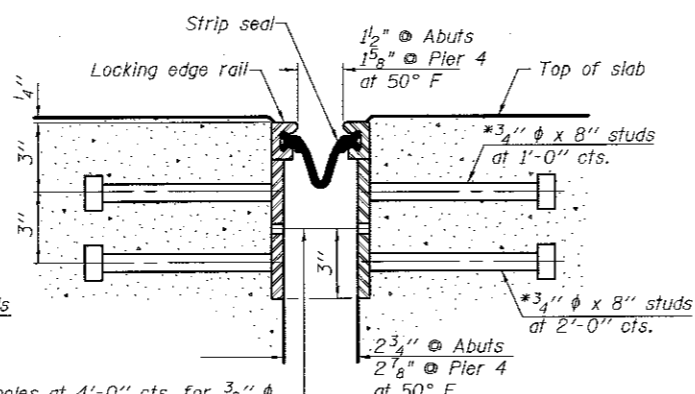
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews $> 30^\circ$ included in the cost of Preformed Joint Strip Seal.



SECTION THRU ROLLED RAIL JOINT

7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

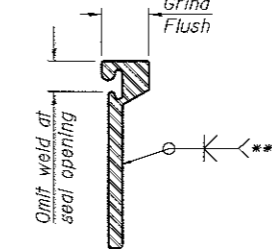
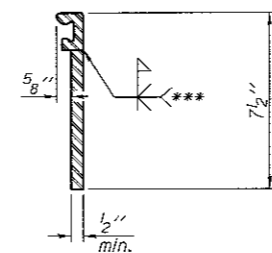
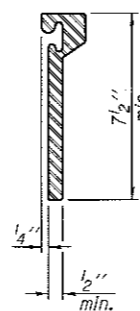


SECTION THRU WELDED RAIL JOINT

7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

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

ROLLED EXTRUDED RAIL WELDED RAIL



*** 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.

LOCKING EDGE RAILS

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	99

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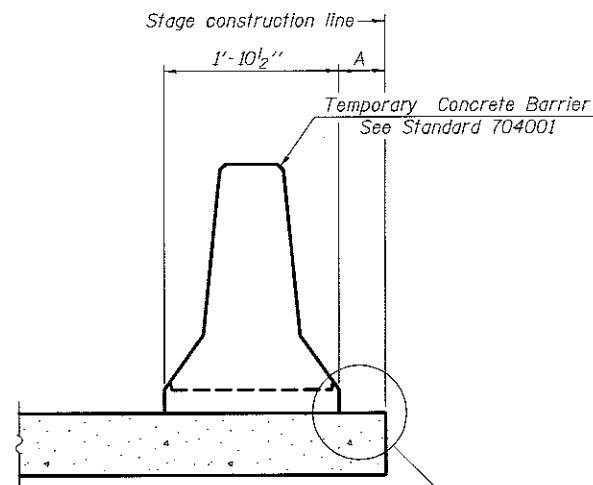
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PASSED				ENGINEER OF BRIDGES AND STRUCTURES		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 082-0078

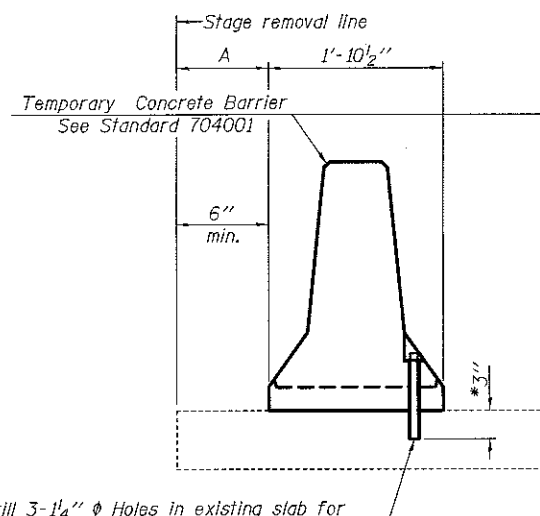
SHEET NO. 8 OF 10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
017	421BDR-2	ST. CLAIR	21	19
				CONTRACT NO. 76K21
ILLINOIS FED. AID PROJECT				



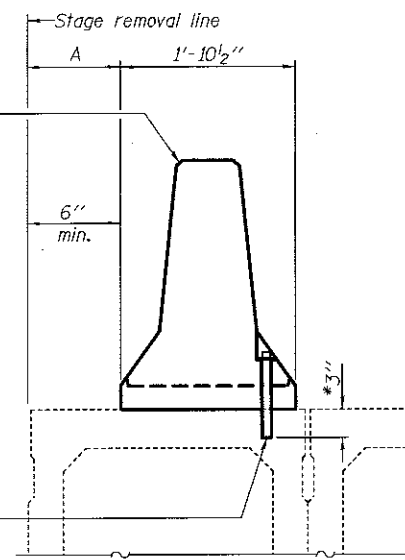
When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

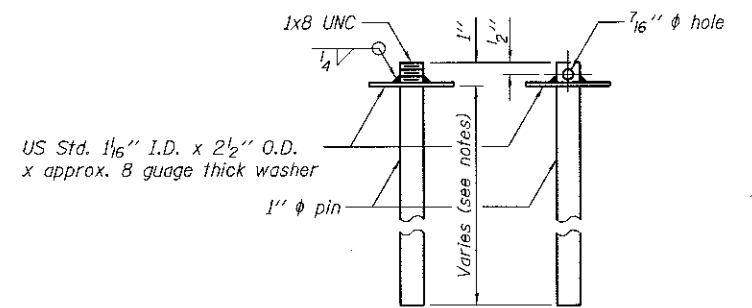
EXISTING SLAB



* When hot-mix asphalt wearing surface is present, embedment shall be 3" plus the wearing surface depth.

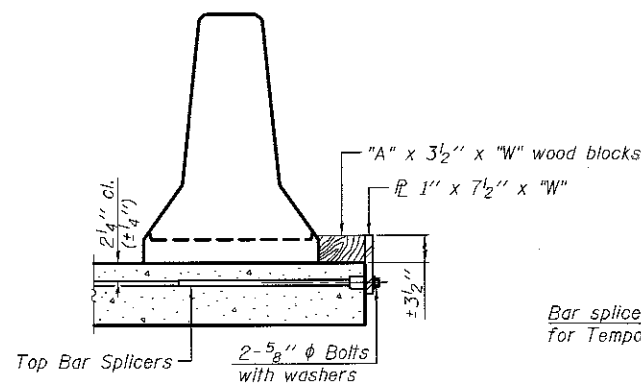
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

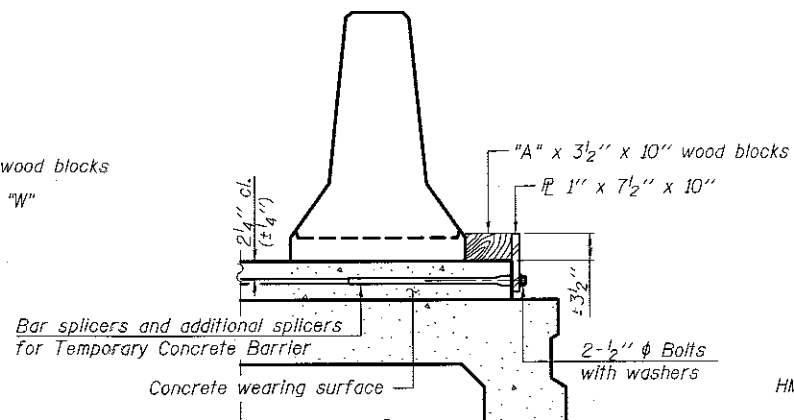


US Std. 1/16" I.D. x 2 1/2" O.D. x approx. 8 gauge thick washer

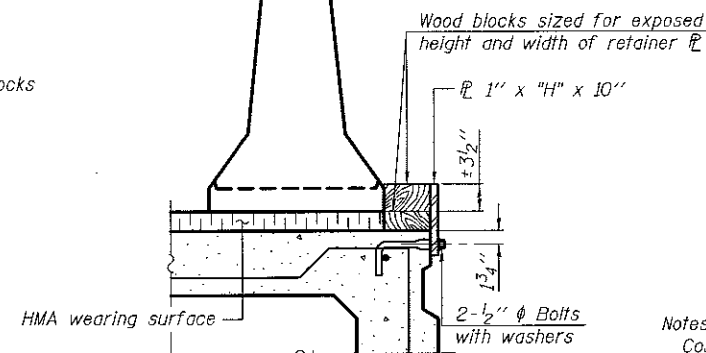
RESTRAINING PIN



DETAIL I



DETAIL II



DETAIL III

BAR SPLICER FOR #4 BAR - DETAIL III

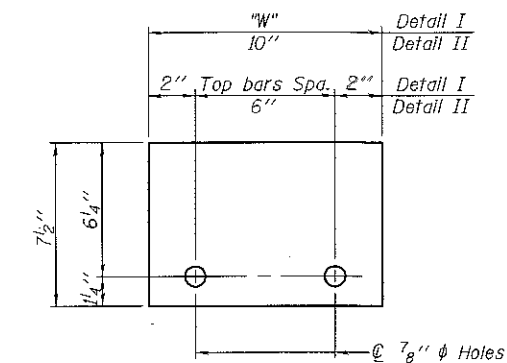
Notes:

- Cost of retainer assembly is included with Temporary Concrete Barrier.
- A retainer assembly shall be located at the approximate ϕ of each temporary concrete barrier.
- The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.
- When the 'A' dimension is less than 1 1/2", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate.
- For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

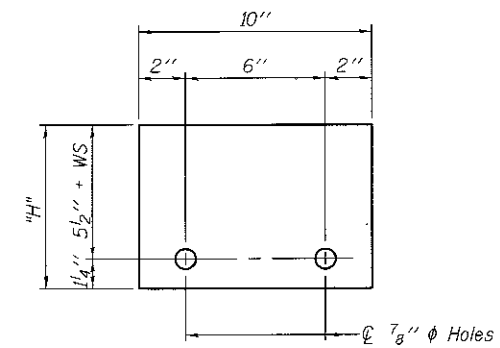
Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.



STEEL RETAINER 1" x 7 1/2" x "W"
(Detail I and II)



STEEL RETAINER 1" x "H" x 10"
(Detail III)

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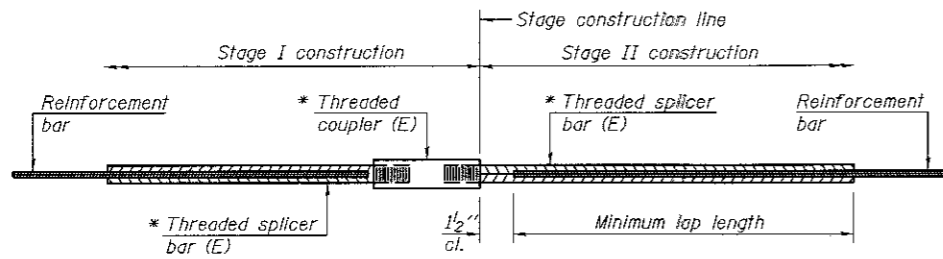
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CHECKED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION
STRUCTURE NO. 082-0078

SHEET NO. 9 OF 10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
B1T	421BDR-2	ST. CLAIR	21	20
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	

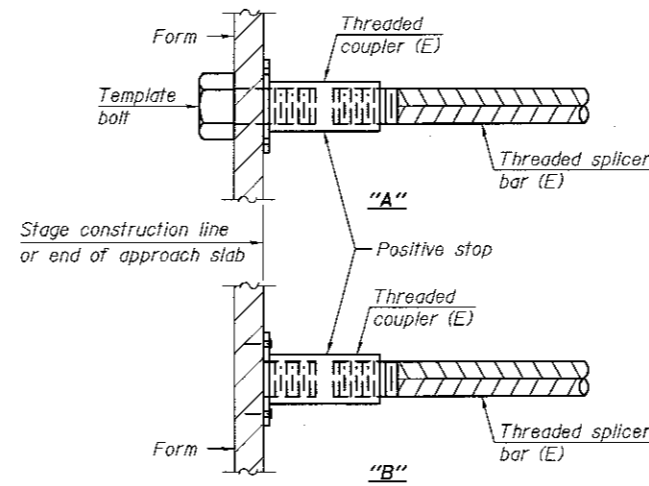


STANDARD BAR SPLICER ASSEMBLY

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

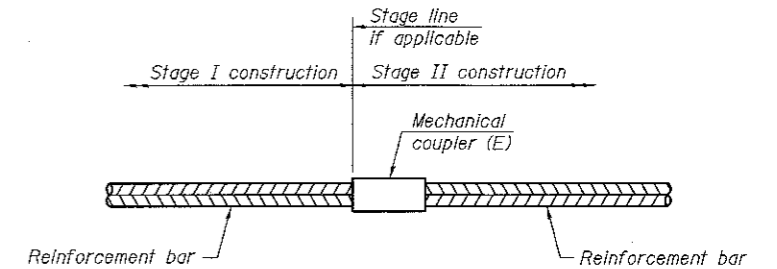
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
W Appr Pavement	#5	4	3'-6"
W Abut Deck	#5	8	3'-6"
Pier 4	#5	16	3'-6"
E Abut Deck	#5	8	3'-6"
E Appr Pavement	#5	4	3'-6"



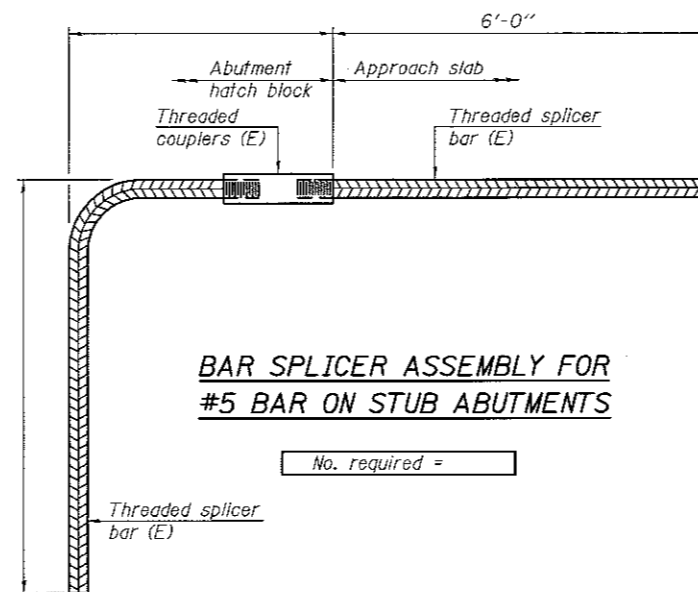
INSTALLATION AND SETTING METHODS

"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.

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STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
 STRUCTURE NO. 082-0078

SHEET NO. 10 OF 10 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
817	421BDR-2	ST. CLAIR	21	21
CONTRACT NO. 76K21			ILLINOIS FED. AID PROJECT	