

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

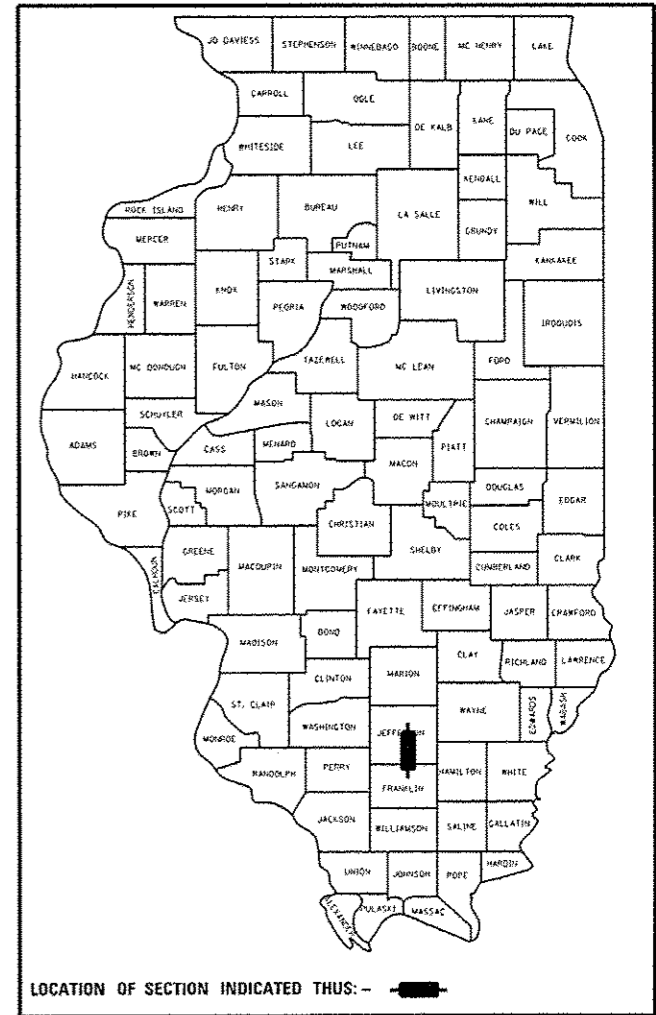
FAS 2826 (IL 37)
OVER DODDS CREEK
D9 CM BRIDGE REPAIR 2017-2
JEFFERSON COUNTY

C-99-033-16

F.A.S. RTE. 2826	SECTION *	COUNTY JEFFERSON	TOTAL SHEETS 13	SHEET NO. 1
		ILLINOIS	CONTRACT NO. 78531	

*D9 CM BRIDGE REPAIR 2017-2

D-99-033-016



FOR INDEX OF SHEETS, SEE SHEET NO. 2

TRAFFIC DATA

IL 37 TRAFFIC DATA

2015 ADT = 3,850
11 % TRUCKS

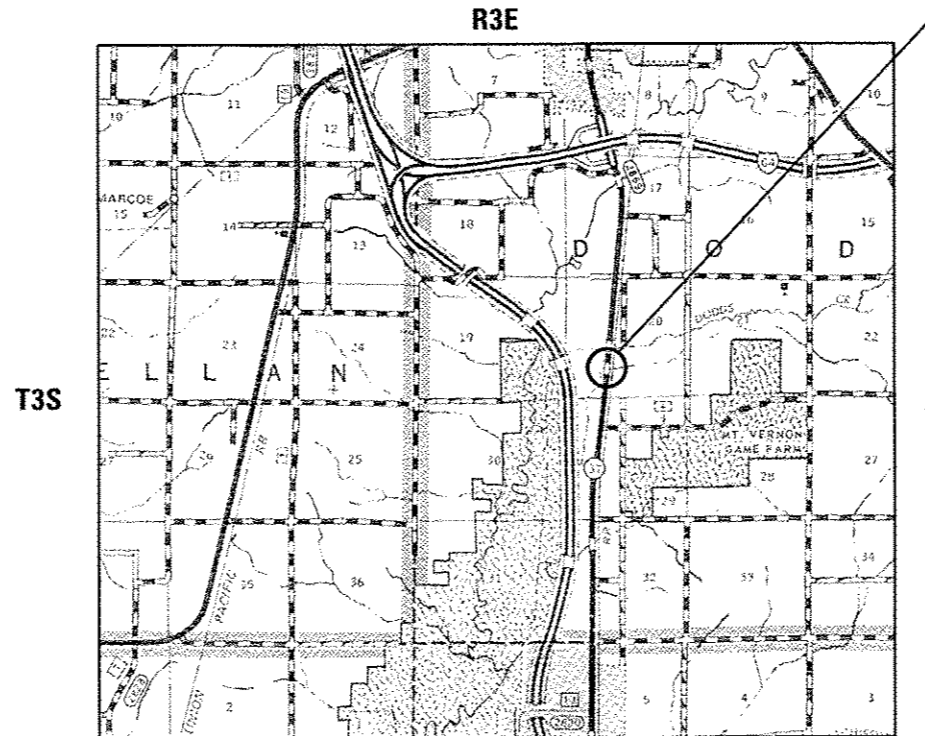
TOWNSHIP:

DODDS

POSTED SPEED LIMIT

55 MPH

PROJECT LOCATION
SN 041-0097



GROSS LENGTH = 237.5 FT.

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

PROJECT ENGINEER: DAVID PICHE
PROJECT DESIGNER: T. WAYNE HALSTEAD

CONTRACT NO. 78531

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED June 14 2016
Jeffrey L Keen
REGION FIVE ENGINEER
Aug 12 2016
Matthew M. Addis, PE
actg ENGINEER OF DESIGN AND ENVIRONMENT
Aug 12 2016
Amel Alkhalaf 2
DIRECTOR OF PROGRAM DEVELOPMENT

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OF THE STATE OF ILLINOIS

GENERAL NOTES

- 1) THE THICKNESS OF HOT-MIX ASPHALT MIXTURE SHOWN ON THE PLANS IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE OR BASE ON WHICH THE HOT-MIX ASPHALT MIXTURE IS PLACED.
- 2) FACTORS USED FOR ESTIMATING PLAN QUANTITIES ARE AS FOLLOWS AND SHALL NOT BE USED FOR THE BASIS OF FINAL QUANTITIES:

ALL HOT MIX ASPHALT	2.016 TONS/CU YD
BITUMINOUS MATERIALS: (TACK COAT) ON PAVEMENT	0.05 POUND/50 FT
- 3) THE ADVANCE DETECTOR LOOPS ARE TYPICALLY LOCATED 275 FEET IN ADVANCE OF THE STOP BAR. THE BUREAU OF OPERATIONS SHOULD APPROVE THE LOOP LOCATIONS PRIOR TO INSTALLATION.
- 4) IN ADDITION TO THE REQUIREMENTS OF ARTICLE 107.16 THE CONTRACTOR SHALL PROTECT THE SURFACE OF ALL BRIDGE DECKS AND BRIDGE APPROACH PAVEMENTS IN A MANNER SATISFACTORY TO THE ENGINEER BEFORE ANY EQUIPMENT IS ALLOWED TO CROSS THE STRUCTURE. PROTECTION SHALL BE PROVIDED FOR ALL EQUIPMENT AS DEFINED IN ARTICLE 101.16 REGARDLESS IF TRACK MOUNTED OR WHEELED.
- 5) TRIM EDGES OF EXISTING HOT MIX ASPHALT SURFACE FLUSH WITH EXISTING PAVEMENT PRIOR TO CONSTRUCTING NEW BASE COURSE WIDENING.
- 6) IF THE CONTRACTOR ELECTS TO USE P.C.C. BASE COURSE WIDENING, SUCH WIDENING SHALL BE PRIMED ACCORDING TO ARTICLE 406.02. EXCEPT THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE INCLUDED IN THE COST OF THE WIDENING.
- 7) THE CENTERLINE PAVEMENT MARKING SHOULD BE REMOVED FROM THE STOP BAR TO THE SAND ATTENUATORS OR DRUMS. EDGE LINE PAVEMENT MARKING SHOULD BE REMOVED IF A 10 FOOT LANE WIDTH CANNOT BE MAINTAINED. TEMPORARY EDGE LINES SHOULD BE INSTALLED WHEN THE EDGE LINES ARE REMOVED.
- 8) ANY TIME THE CONCRETE BARRIER IS NOT IN THE PROPER POSITION, FLAGGERS SHALL BE IN PLACE TO CONTROL TRAFFIC. THE TEMPORARY TRAFFIC SIGNALS SHALL BE SET TO FLASH ALL RED.
- 9) COMMITMENTS: NONE AS OF JUNE 24, 2016.

MIXTURE REQUIREMENTS

Location(s):	Base Course Widening
Mixture Use(s):	Hot-Mix Asphalt Binder Course, N70, IL-19.0
AC/PG:	PG64-22
ABR % (Max):	See Special Provision
Design Air Voids:	4.0 %, 70 Gyration Design
Mixture Composition: (Gradation Mixture)	IL-19.0mm
Friction Aggregate:	None
Quality Management Program:	QCQA

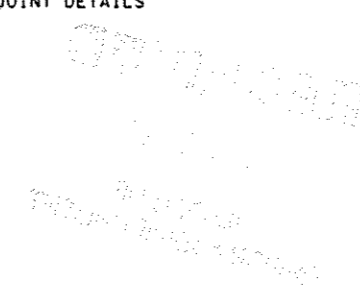
Location(s):	Hot-Mix Asphalt Surface Course
Mixture Use(s):	Hot-Mix Asphalt Surface Course, Mix C, N70 Fine Graded
AC/PG:	PG64-22
ABR % (Max):	See Special Provision
Design Air Voids:	4.0 %, 70 Gyration Design
Mixture Composition: (Gradation Mixture)	IL-9.5mm Fine Graded
Friction Aggregate:	C Surface
Quality Management Program:	QCQA

STANDARDS

000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701001-02	OFF-ROAD, 2L2W MORE THAN 15' FROM PAVEMENT EDGE
701006-05	OFF-ROAD, 2L2W 15' TO 24" FROM PAVEMENT EDGE
701201-04	LANE CLOSURE, 2L2W DAY ONLY, FOR SPEEDS ≥ 45 MPH
701321-15	LANE CLOSURE, 2L2W BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L2W PAVEMENT WIDENING, FOR SPEEDS ≥ 45 MPH
701901-05	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS

INDEX OF SHEETS

1	COVER SHEET
2	INDEX OF SHEETS; GENERAL NOTES; STANDARDS
3-5	SUMMARY OF QUANTITIES
6	GENERAL PLAN AND ELEVATION
7	STAGING TYPICAL SECTION
8	STAGING DETAILS
9	JOINT REPAIR DETAILS
10	PREFORMED JOINT STRIP SEAL
11	BAR SPLICER ASSEMBLY BSD-1
12	TEMP. CONCRETE BARRIER (R-27)
13	BUTT JOINT DETAILS



Prepared By:	<i>[Signature]</i> DISTRICT STUDIES & PLANS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT LAND ACQUISITION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROGRAM DEVELOPMENT ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT OPERATIONS ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT PROJECT IMPLEMENTATION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT CONSTRUCTION ENGINEER
Examined By:	<i>[Signature]</i> DISTRICT MATERIALS ENGINEER

*09 CM BRIDGE REPAIR 2017-2

SUMMARY OF QUANTITIES

100% STATE
RURAL
FAS 2826
IL 37

CODE NUMBER	ITEM DESCRIPTION	UNIT	CONSTR. CODE 0014
35650500	BASE COURSE WIDENING 10"	SO YD	257
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	170
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SO YD	222
40600990	TEMPORARY RAMP	SO YD	43
50102400	CONCRETE REMOVAL	CU YD	9.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	10.4
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	1280
50800515	BAR SPLICERS	EACH	24
52000110	PREFORMED JOINT STRIP SEAL	FOOT	75
58100200	WATERPROOFING MEMBRANE SYSTEM	SO YD	470
67100100	MOBILIZATION	L SUM	1
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1

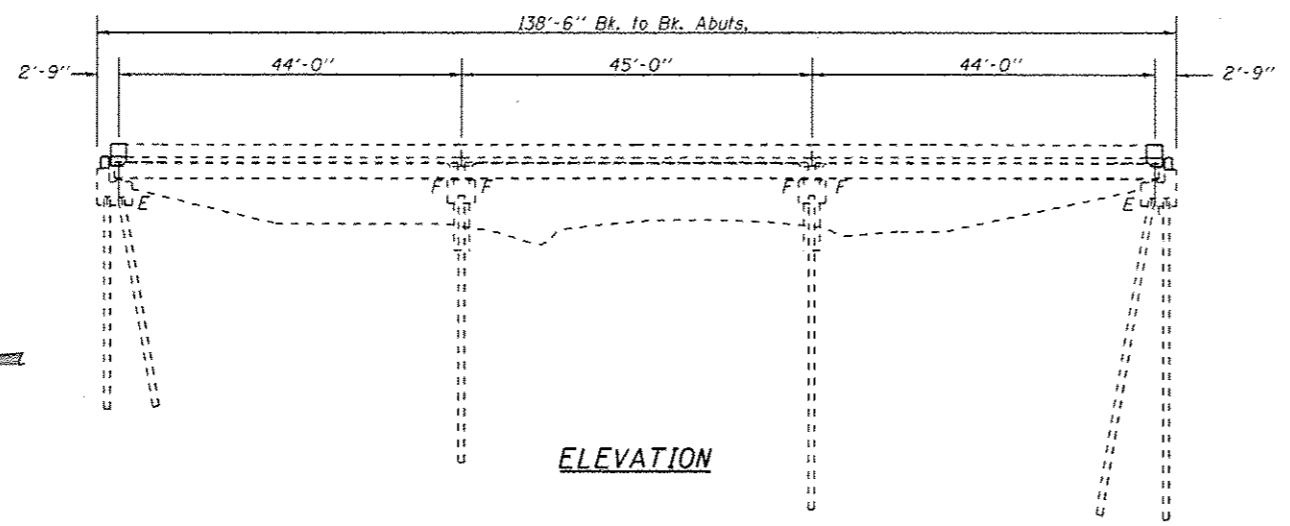
12

SUMMARY OF QUANTITIES - CONT

100% STATE
RURAL
FAS 2826
IL 37

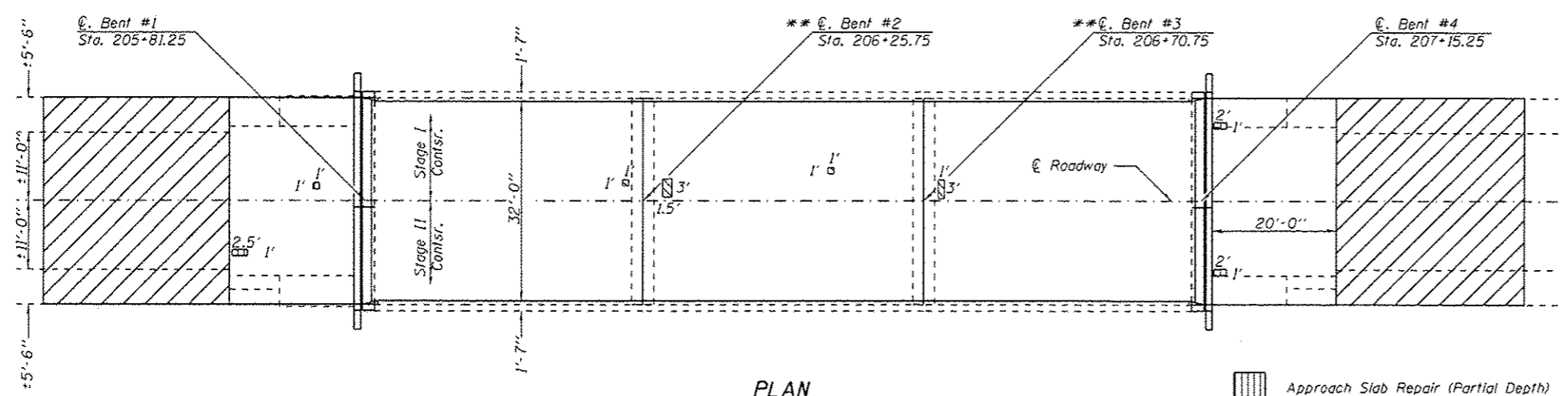
CODE NUMBER	ITEM DESCRIPTION	UNIT	CONSTR. CODE 0014
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD 701326	L SUM	1
70103B15	TRAFFIC CONTROL SURVEILLANCE	CAL DA	4
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1
70106800	CHANGEABLE MESSAGE SIGN	CAL MO	1
70300100	SHORT TERM PAVEMENT MARKING	FOOT	71
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SO FT	24
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	922
70400100	TEMPORARY CONCRETE BARRIER	FOOT	387.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	337.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	922

* SPECIALTY ITEM



ELEVATION

** Existing Preformed Elastomeric Joint Seal to be removed and filled with an Expansion Board Filler as approved by the Engineer. Sawcut a 1/4" x 3/4" joint into the new HMA Surface and seal with a Elastic Jt. Sealer (Full Width). Cost to be included in Waterproofing Membrane System.



PLAN

GENERAL NOTES

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.

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

Prior to pouring the new concrete deck section, 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.

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

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.

Reinforcement bars designated (E) shall be epoxy coated.

No field welding is permitted except as specified in the contract documents.

TOTAL BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Hot-Mix Asphalt Surface Course, IL-9.5FG, N70	Ton	33
Waterproofing Membrane System	Sq. Yd.	470
Reinforcement Bars, Epoxy Coated	Pound	1280
Bar Splicers	Each	24
Preformed Joint Strip Seal	Foot	75
Deck Slab Repair (Partial)	Sq. Yd.	1.1
Concrete Removal	Cu. Yd.	9.4
Concrete Superstructure	Cu. Yd.	10.4
Approach Slab Repair (Partial Depth)	Sq. Yd.	0.9

- Approach Slab Repair (Partial Depth)
- Deck Slab Repair (Partial)
- Hot-Mix Asphalt Surface Removal-Butt Joint

Design Stresses

FIELD UNITS (New Construction)
 f'c = 3,500 psi
 fy = 60,000 psi (reinforcement)

FIELD UNITS (Existing Construction)
 f'c = 3,500 psi
 fy = 50,000 psi (structural steel)
 fy = 60,000 psi (reinforcement)
 n = 9



David Carl Puzey 8/1/16
 Expires 11/30/16

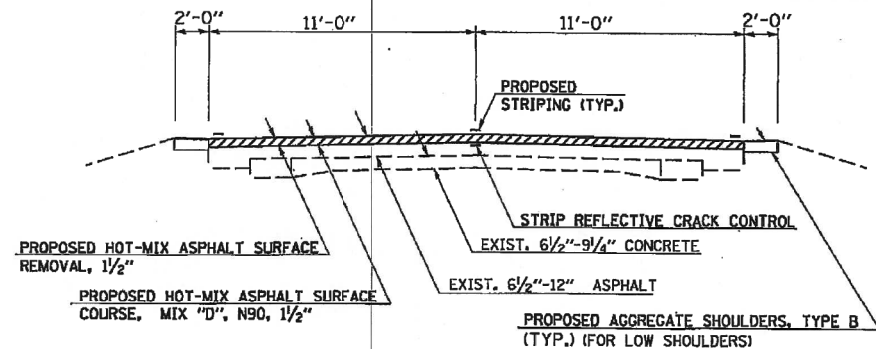
Scope of Work

- Setup Traffic Control with barrier
- Perform work of joints and patching
- Lay WMS and HMA overlay
- Switch stages and repeat

FILE NAME :	USER NAME : halsteadtw	DESIGNED - TWH	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BRIDGE REPAIRS		F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
PROJECT :	PROJECT NO. :	CHECKED - MAS	REVISED -				2826	*	JEFFERSON	13	6
SCALE :	PLOT DATE : 6/22/2016	DATE - 3/25/2016	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.		CONTRACT NO. 78531		ILLINOIS FED. AID PROJECT		
*D9 CM BRIDGE REPAIR 2017-2											

BRIDGE REPAIR
 IL 37 (FAS 2826) OVER DODDS CREEK
 JEFFERSON COUNTY
 D9 CM BRIDGE REPAIR 2017-2
 STA. 206+48.25
 SN 041-0097

TYPICAL SECTION
IL 37 (FAP 724/FAS 2869)
NOT TO SCALE



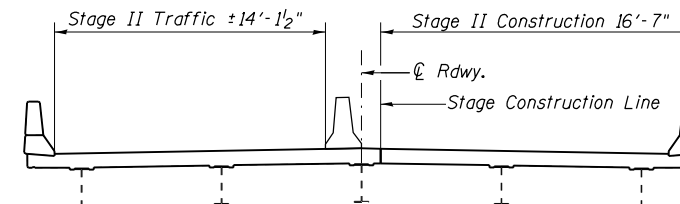
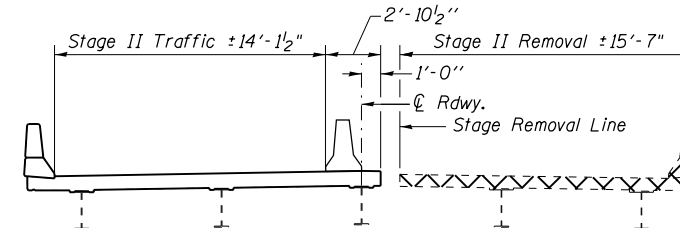
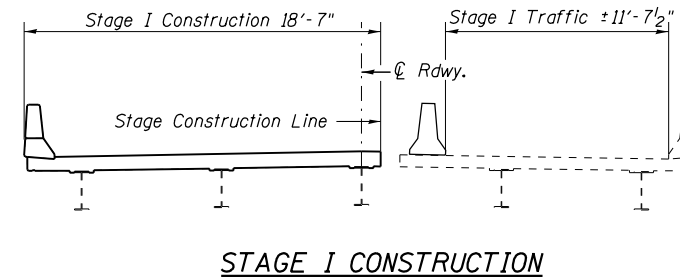
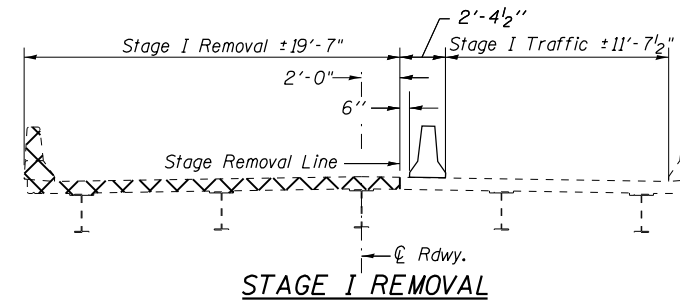
TO BE USED:

- STA. 124+92.16 TO 136+43.29 BK
- STA. 137+39.62 AH TO STA. 197+30
- STA. 198+44 TO STA. 205+56
- STA. 206+91 TO 362+76.86 BK
- STA. 362+64.47 AH TO STA. 372+37
- STA. 379+57 TO STA. 542+50
- STA. 568+94 TO STA. 619+05
- STA. 642+54 TO STA. 652+50

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USER NAME = hanson

IL 37 (FAP 724/FAS 2869)
41-8-4-2RS-111,4RS-32RS-4
CONTRACT NO. 78108
JEFFERSON COUNTY
SHEET 14 OF 72

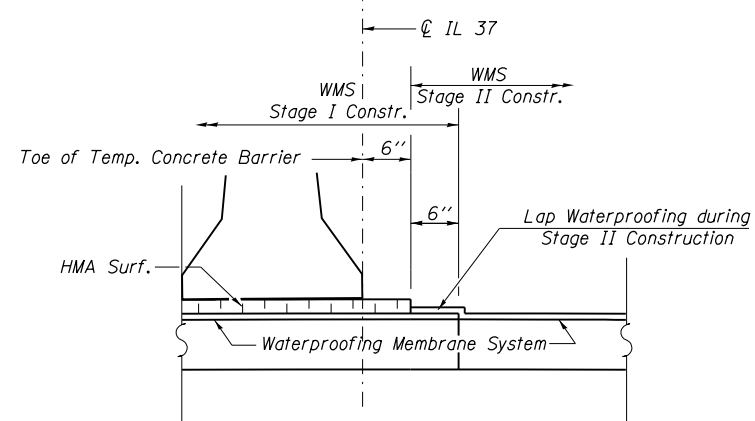
EXISTING ROADWAY TYPICAL



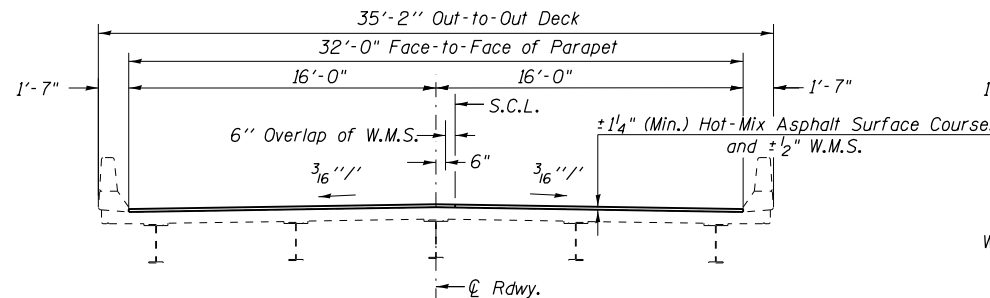
Concrete Removal (at Joint Locations)

NOTES:
All Sections looking South.

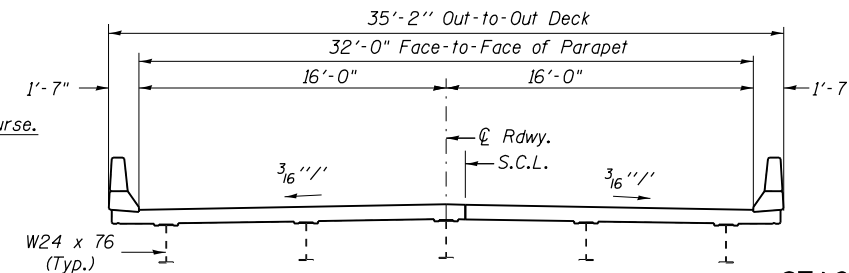
STAGING DETAILS AND TYPICAL SECTION



WATERPROOFING TREATMENT AT STAGE CONSTRUCTION



TYPICAL BRIDGE SECTION



SECTION THROUGH JOINT

STAGING DETAILS AND TYPICAL SECTION SN 041-0097

*D9 CM BRIDGE REPAIR 2017-2

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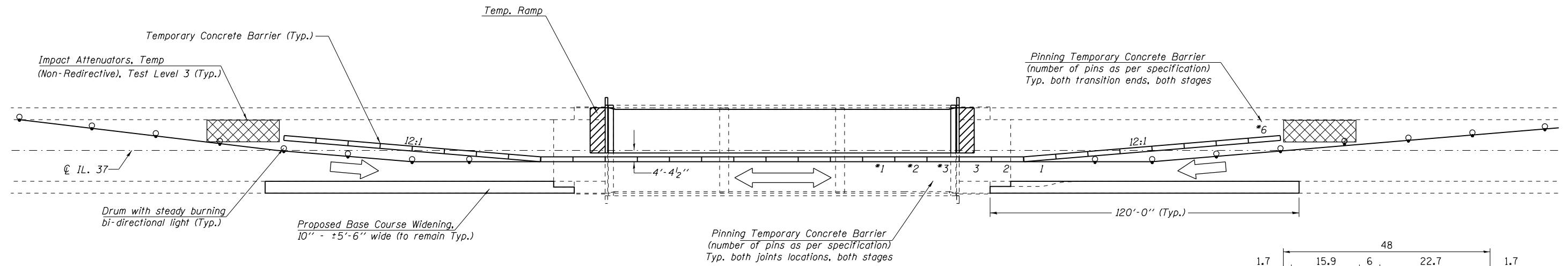
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS AND STAGING
SN 041-0097

SCALE: SHEET 2 OF 8 SHEETS STA. TO STA.

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2826	.	JEFFERSON	13	7
				CONTRACT NO. 78531

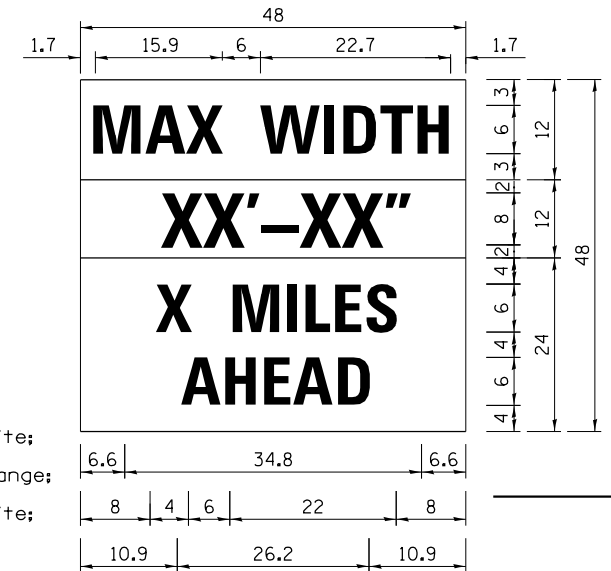
ILLINOIS FED. AID PROJECT



STAGE I TRAFFIC

Notes:

See Standard 701321 for additional details.
 * These Pins to be included in the cost of Temporary Concrete Barrier.

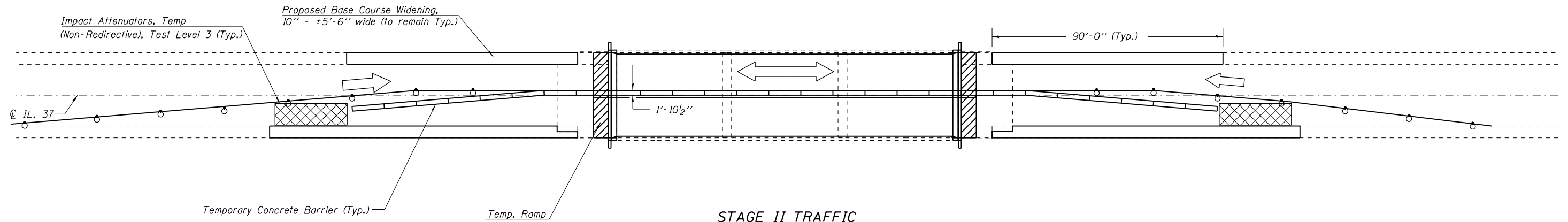


W12-1103

W12-1103 (width is 8D);
 No border, Black on White;
 "MAX WIDTH" D;
 No border, Black on Orange;
 "XX'-XX'" D;
 No border, Black on White;
 "X MILES" D; "AHEAD" D

NOTE: THIS SIGN SHALL BE LOCATED AS DIRECTED BY THE ENGINEER. ONE SIGN SHALL BE PROVIDED FOR EACH APPROACH DURING EACH STAGE TO THE SITE.
 ADVANCE WIDTH RESTRICTION WARNING SHALL BE INCLUDED IN THE COST OF STANDARD 701321.

THE DIMENSION SHOWN ON THE WIDTH RESTRICTION SIGN (W12-1102(O)-48) SHOWN ON STANDARD 701321 AND ON THE ADVANCE WARNING SIGN (W12-1103) SHOWN ON THIS SHEET SHALL BE 10'-1/2" FOR STAGE I TRAFFIC AND 12'-7/2" FOR STAGE II TRAFFIC.



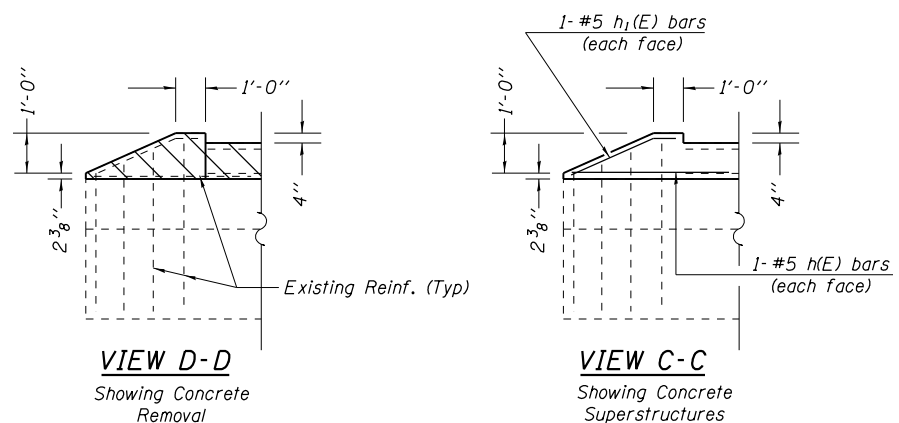
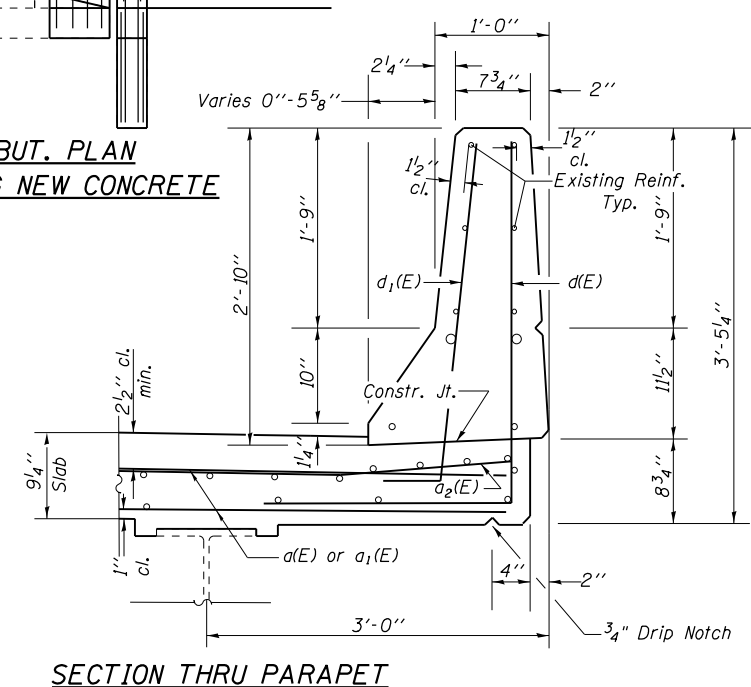
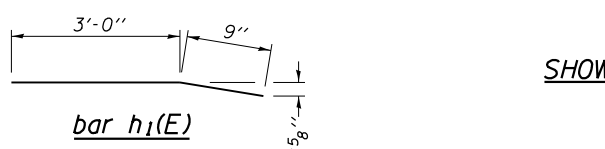
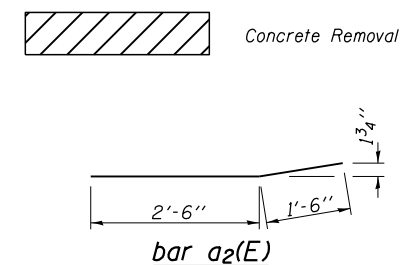
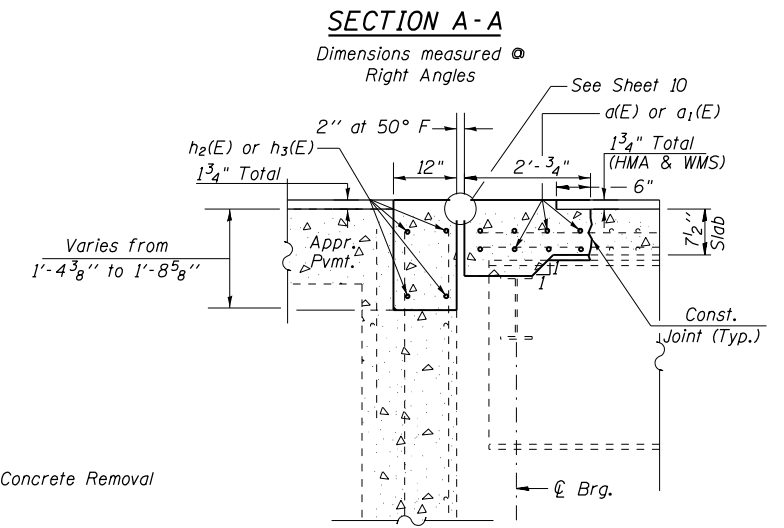
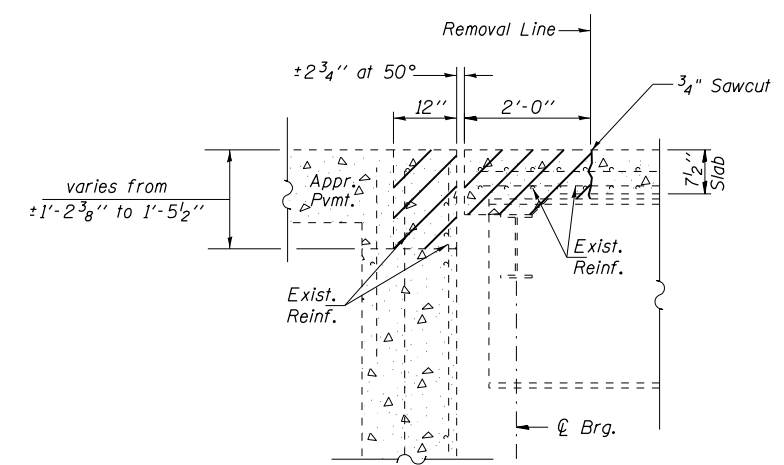
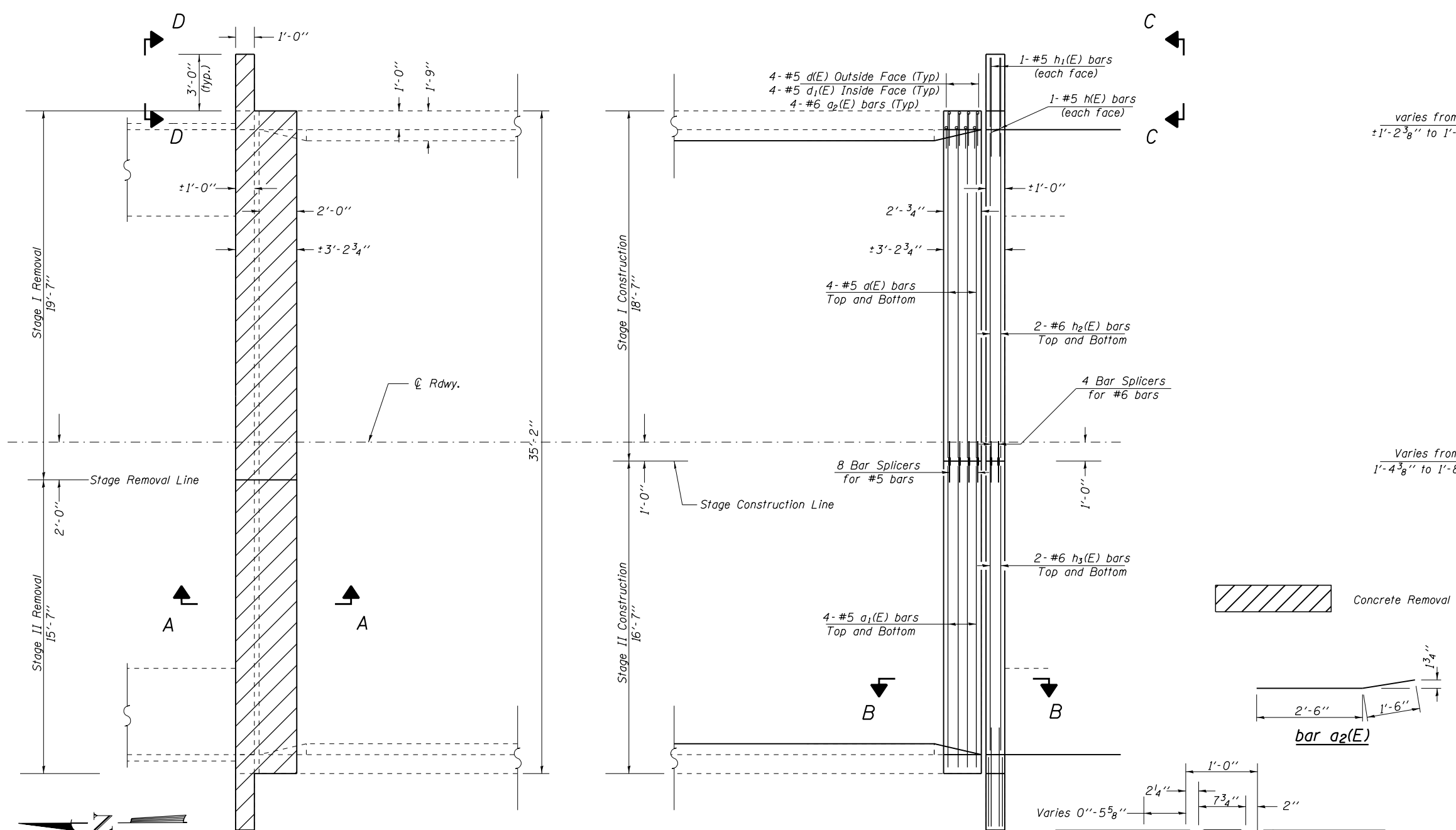
STAGE II TRAFFIC

Notes:

See Standard 701321 for additional details.

* D9 CM BRIDGE REPAIR 2017-2

FILE NAME =	USER NAME = halsteadtw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STAGING DETAILS			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
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Default		DATE -	REVISED -					CONTRACT NO. 78531			ILLINOIS FED. AID PROJECT		



BILL OF MATERIAL (2 ABUTMENTS)

Bar	No.	Size	Length	Shape
a(E)	16	#5	18'-0"	—
a1(E)	16	#5	16'-0"	—
a2(E)	16	#6	4'-0"	—
d(E)	16	#5	5'-2"	J
d1(E)	16	#5	3'-9"	J
h(E)	8	#5	5'-3"	—
h1(E)	8	#5	3'-9"	—
h2(E)	8	#6	17'-3"	—
h3(E)	8	#6	15'-3"	—
Bar Splicers		Each	24	
Concrete Superstructure		Cu Yd	10.4	
Concrete Removal		Cu Yd	9.4	
Reinforcement Bars, Epoxy Coated		Pound	1280	

**ABUTMENT JOINTS
REPLACEMENT DETAILS
SN 041-0097
IL 37 OVER DODDS CREEK
JEFFERSON COUNTY**

* D9 CM BRIDGE REPAIR 2017-2

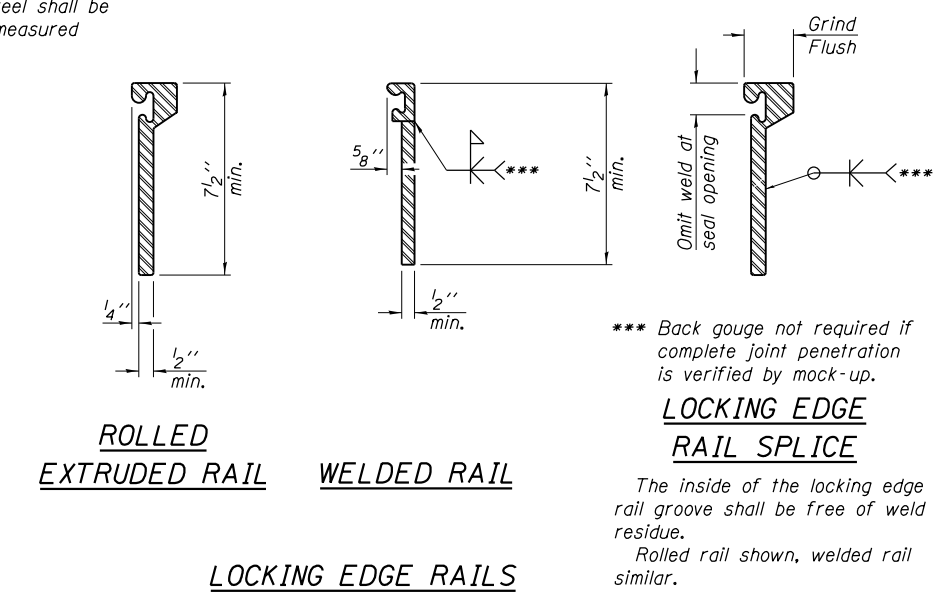
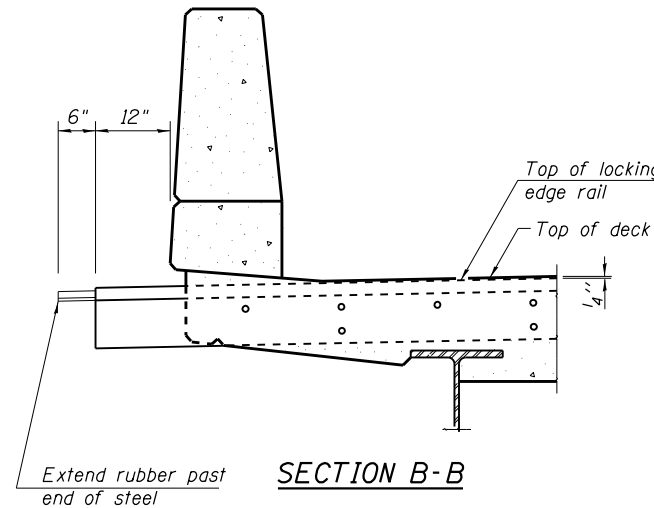
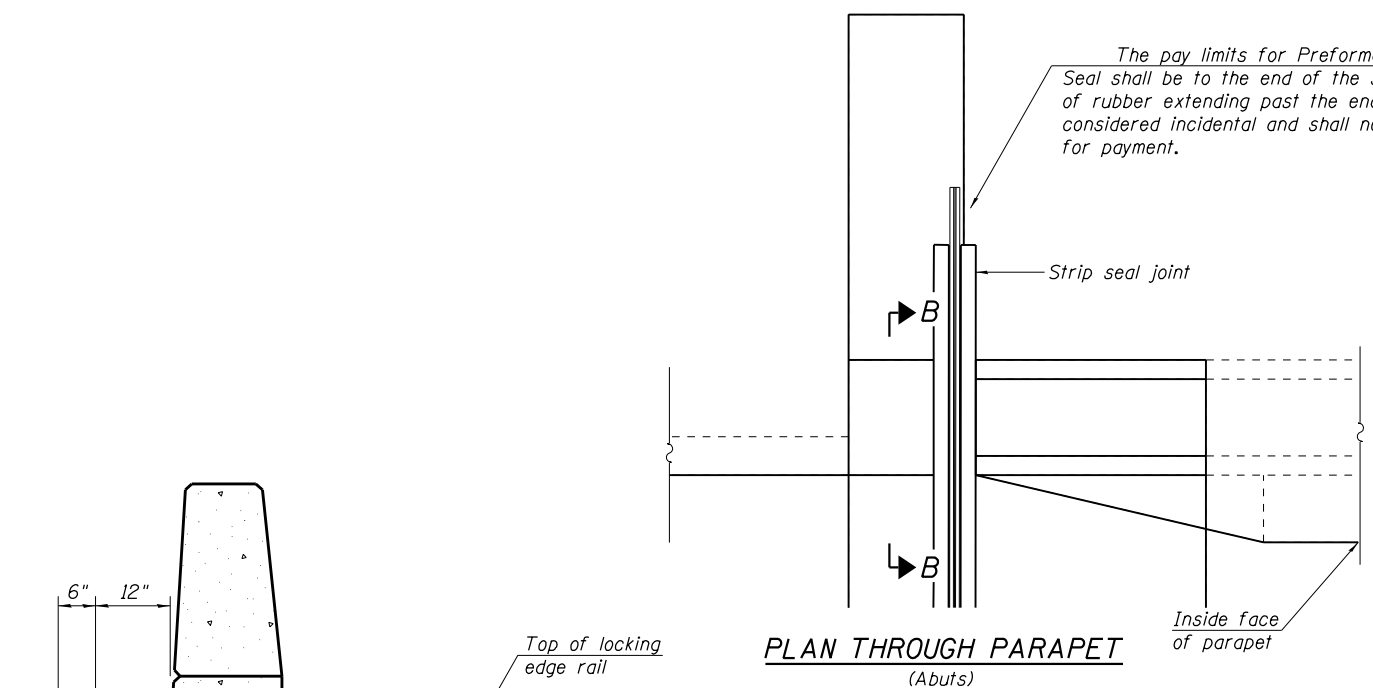
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PLOT DATE = 6/22/2016			

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**ABUTMENT JOINT DETAILS
SN 041-0097**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2826	.	JEFFERSON	13	9
			CONTRACT NO. 78531	
ILLINOIS FED. AID PROJECT				

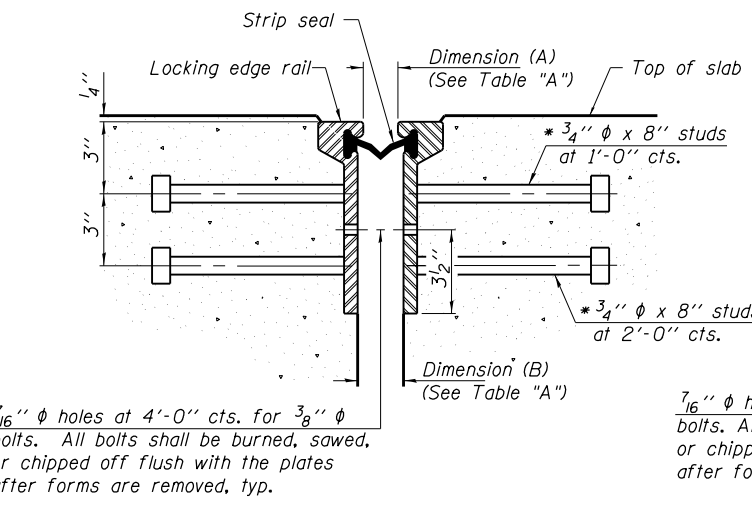


*** Back gouge not required if complete joint penetration is verified by mock-up.

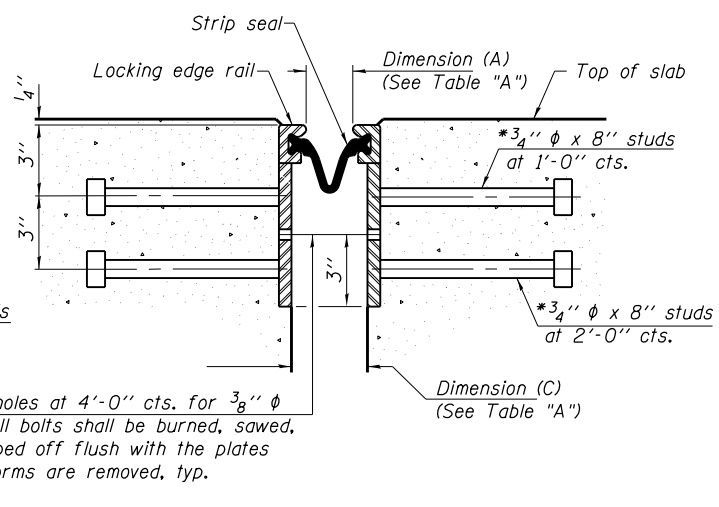
LOCKING EDGE RAIL SPLICE

The inside of the locking edge rail groove shall be free of weld residue.

Rolled rail shown, welded rail similar.



SECTION THRU ROLLED RAIL JOINT



SECTION THRU WELDED RAIL JOINT

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

TABLE "A"
(All dimensions @ 50° F)

Joint	A	B	C
Abuts.	1 1/2"	2"	2 3/4"

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.

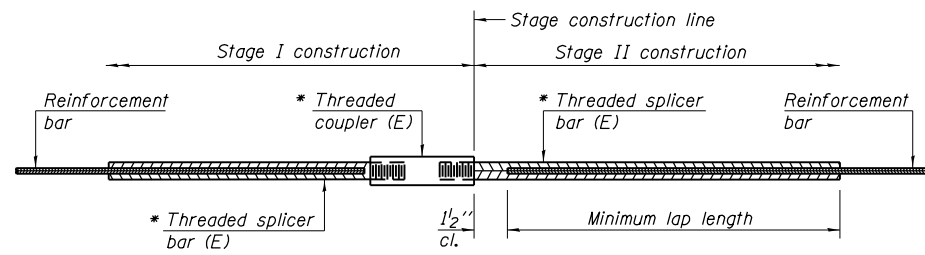
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

Parapet plates and anchorage studs for skews > 30° included in the cost of Preformed Joint Strip Seal.

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	75

**PREFORMED JOINT STRIP SEAL
JEFFERSON COUNTY
STRUCTURE NO. 041-0097**

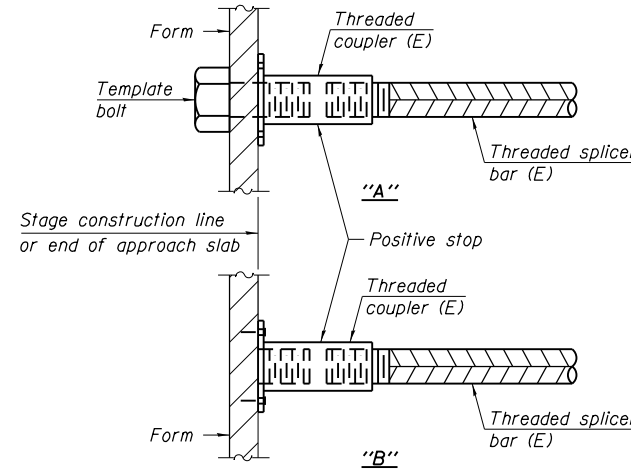


STANDARD BAR SPLICER ASSEMBLY

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
Abutments (deck)	#5	16	3'-6"
Hatch Block	#6	8	4'-0"

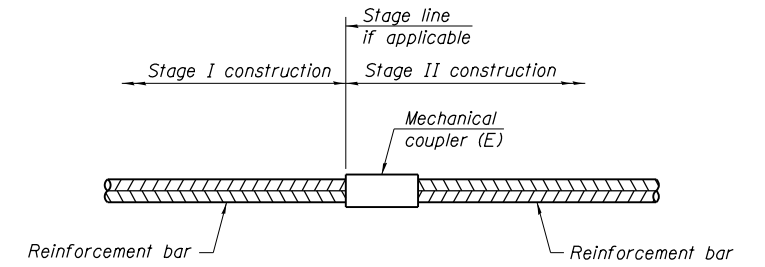


INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.

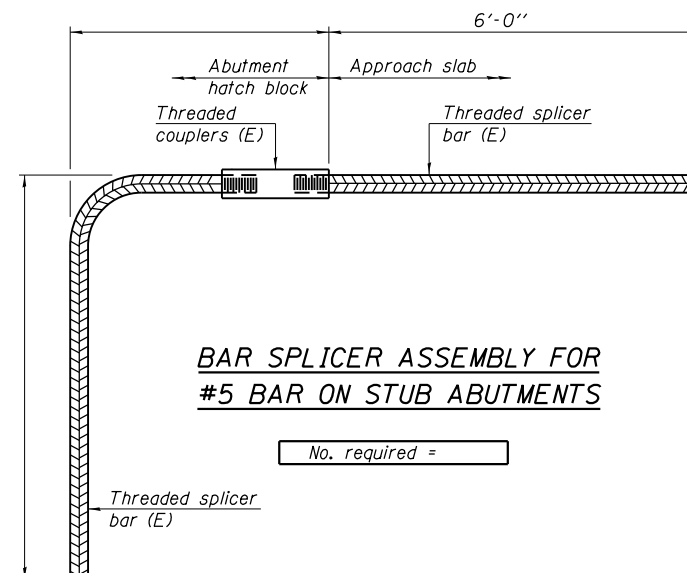
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.

(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. 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

6-8-15

* D9 CM BRIDGE REPAIR 2017-2

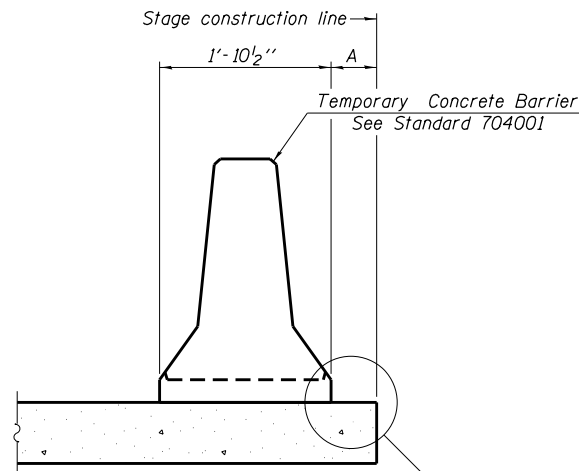
FILE NAME =	USER NAME = halsteadtw	DESIGNED -	REVISED -
p:\11\084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 9\Projects\7851\Drawings\Design\DXxxxx-Design.dgn		CHECKED -	REVISED -
		DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO.**

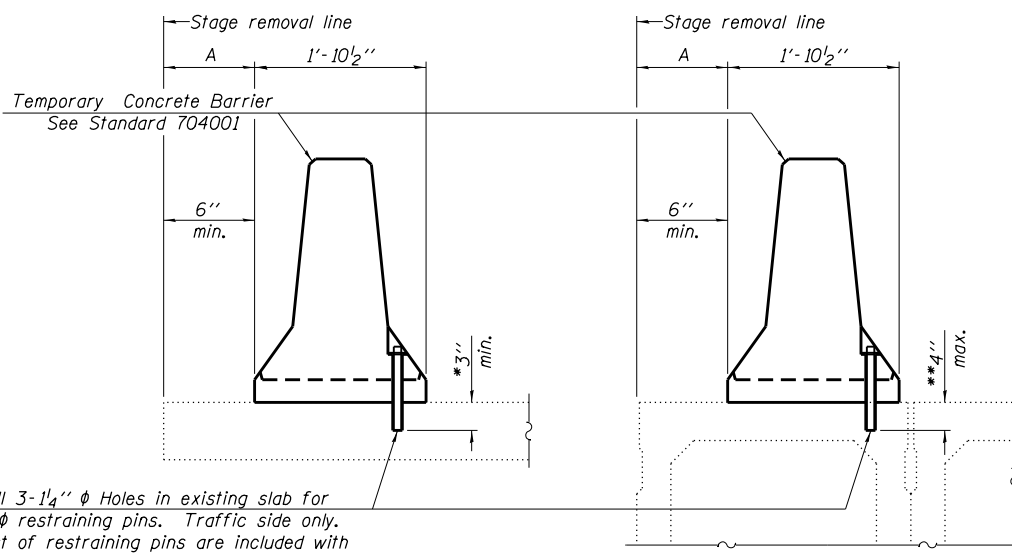
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
2826	*	JEFFERSON	13	11
CONTRACT NO. 78531				
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 or Detail II. No restraint is required when "A" is greater than 3'-1".

NEW SLAB



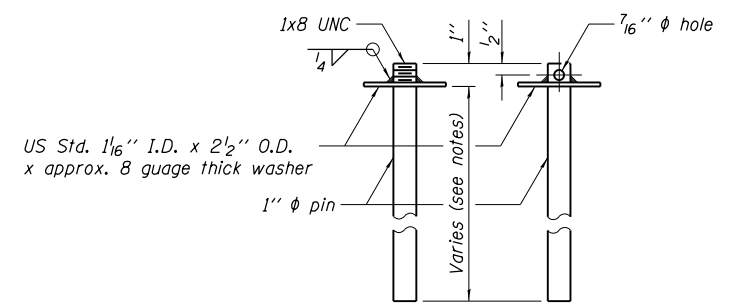
Drill 3-1/4" ϕ Holes in existing slab for 1" ϕ restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

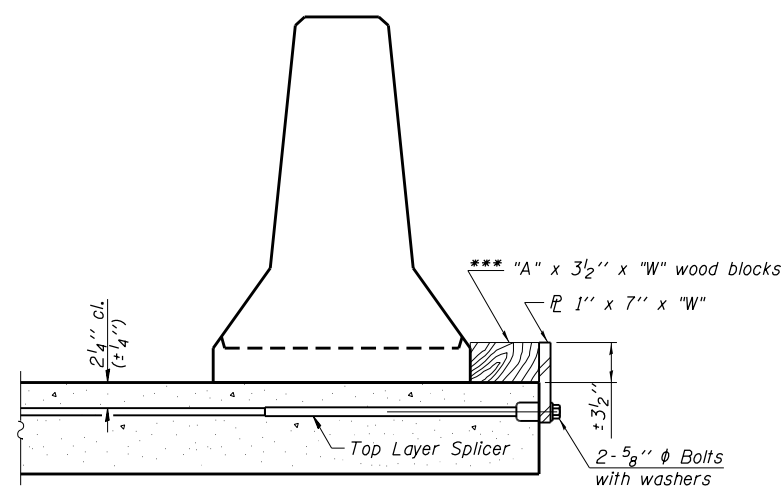
EXISTING DECK BEAM

SECTIONS THRU SLAB OR DECK BEAM

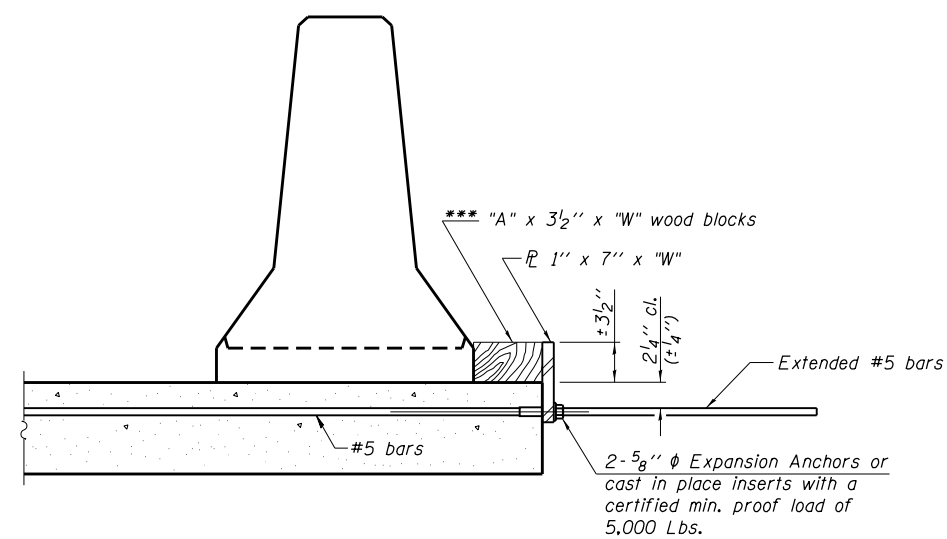
* Dimension shown is minimum required embedment into concrete. If hot-mix asphalt wearing surface is present, minimum embedment shall be in addition to wearing surface depth.
 ** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



RESTRAINING PIN



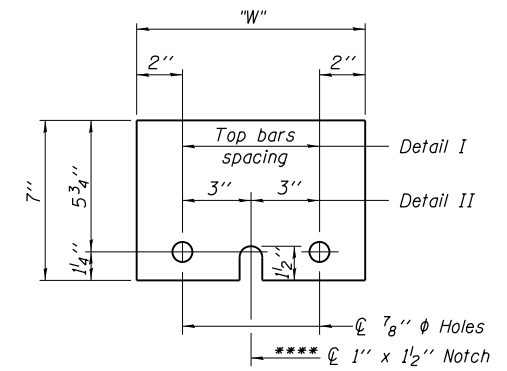
DETAIL I



DETAIL II

RETAINER ASSEMBLY

*** Wood blocks may be omitted when required to provide minimum stage traffic lane width. When the wood blocks are omitted, the concrete barrier shall be in direct contact with the steel retainer plate.



STEEL RETAINER 1" x 7" x "W"
 **** Required only with Detail II

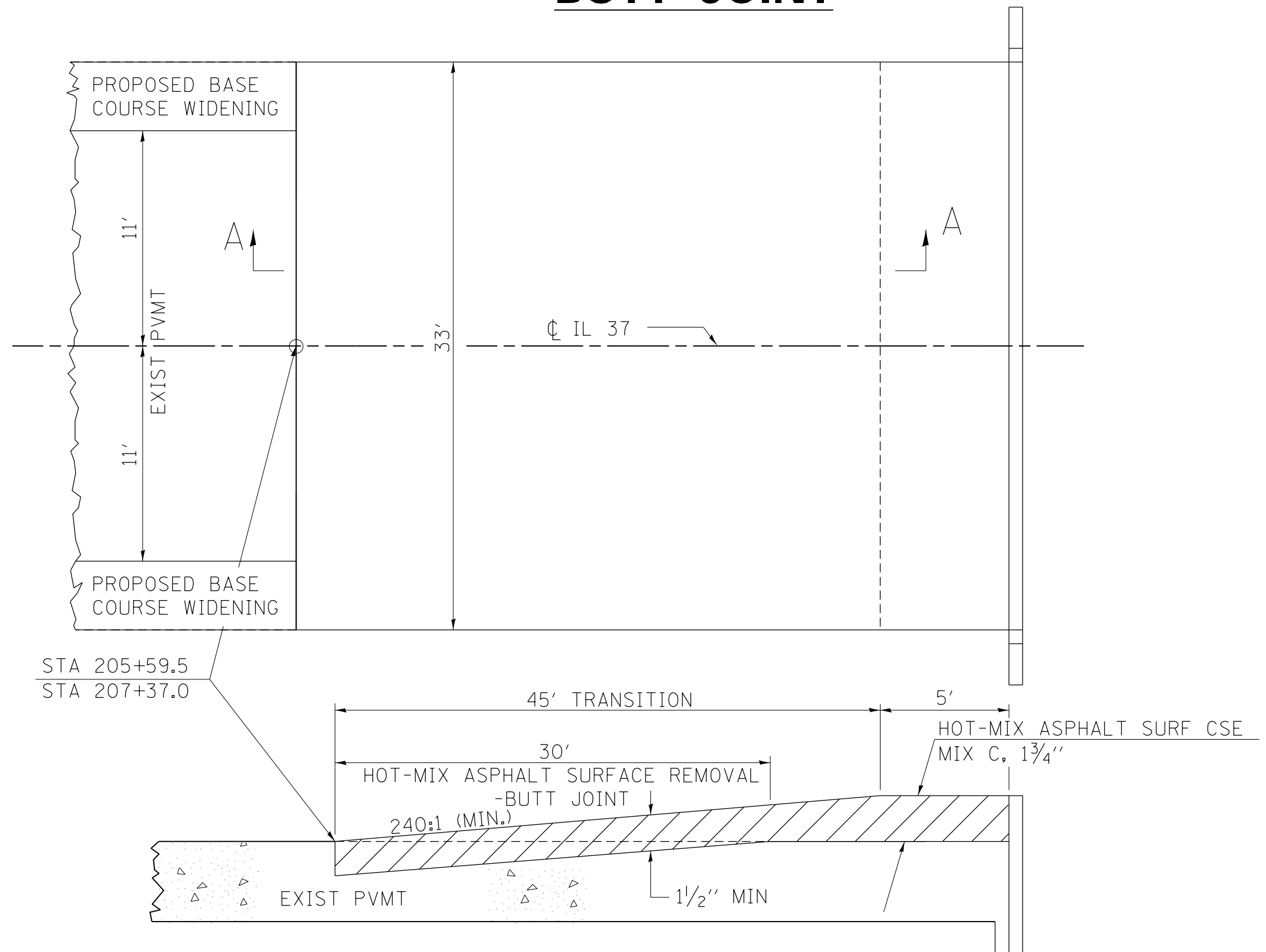
NOTES

Detail I - With Bar Splicer or Couplers:
 Connect one (1) 1" x 7" x "W" steel \mathcal{R} to the top layer of couplers with 2-5/8" ϕ bolts screwed to coupler at approximate \mathcal{C} of each barrier panel.
 Detail II - With Extended Reinforcement Bars:
 Connect one (1) 1" x 7" x "W" steel \mathcal{R} to the concrete slab or concrete wearing surface with 2-5/8" ϕ Expansion Anchors or cast in place inserts spaced between the top layer of reinforcement at approximate \mathcal{C} of each barrier panel.
 Cost of retainer assembly is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

R-27 2-19-16

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PLOT SCALE = 6.4000' / in.		DATE -	REVISED -		CONTRACT NO. 78531								
PLOT DATE = 6/22/2016					ILLINOIS FED. AID PROJECT								

BUTT JOINT



STA 205+59.5
STA 207+37.0

SECTION A-A

REVISIONS	
DRAWN	10-17-90
REVISED	01-11-07
REVISED	3-25-08
REVISED	5-17-13

STD. 9-86

* D9 CM BRIDGE REPAIR 2017-2

FILE NAME =	USER NAME = halsteadw	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BUTT JOINT DETAIL			F.A.S. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
pw:\IL\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\IDOT Offices\District 9\Projects\7851\Drawings\Design\DXxxxx-Design.dgn			REVISED -						*	JEFFERSON	13	13	
Default	PLOT SCALE = 50.0000' / in.	CHECKED -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.	CONTRACT NO. 78531
	PLOT DATE = 6/22/2016	DATE -	REVISED -										ILLINOIS FED. AID PROJECT