

06-14-13 LETTING ITEM 167

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

**PROPOSED
HIGHWAY PLANS**

FAP ROUTE 320 (IL 121)
SECTION D7 BRIDGE REPAIRS 2014-2

MACON COUNTY

FOR INDEX OF SHEETS, SEE SHEET NO. 2

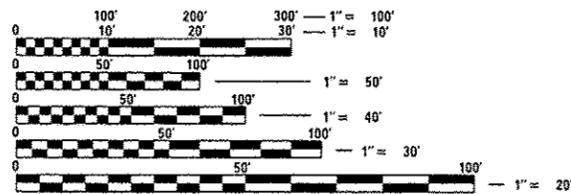
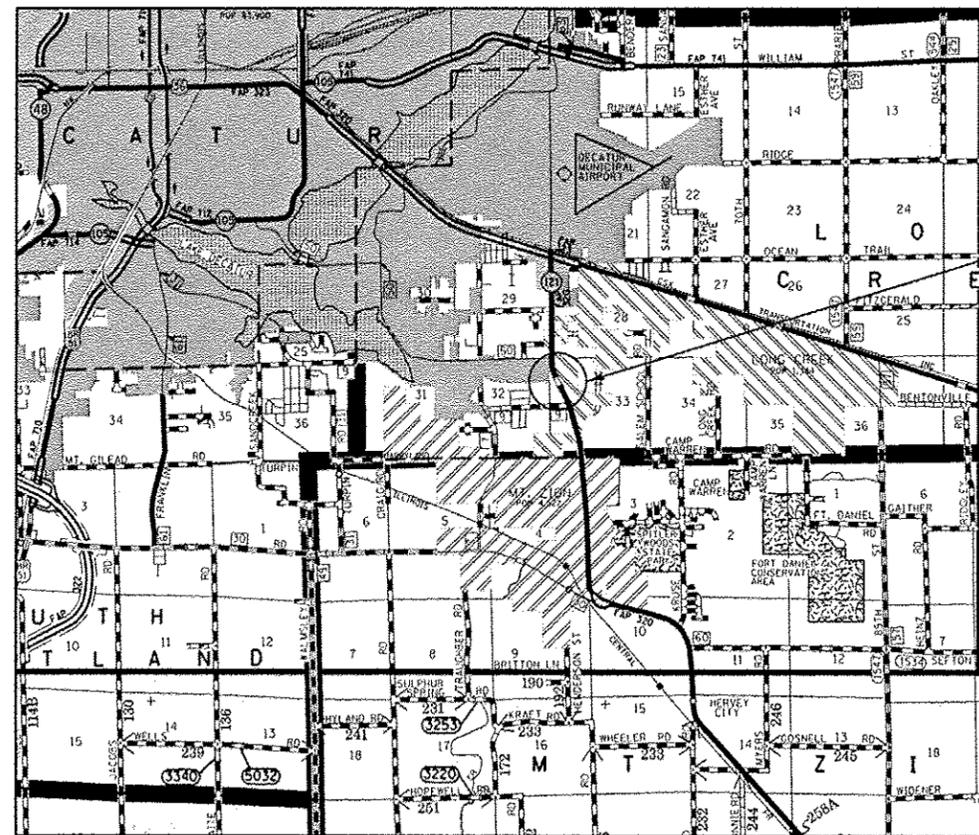
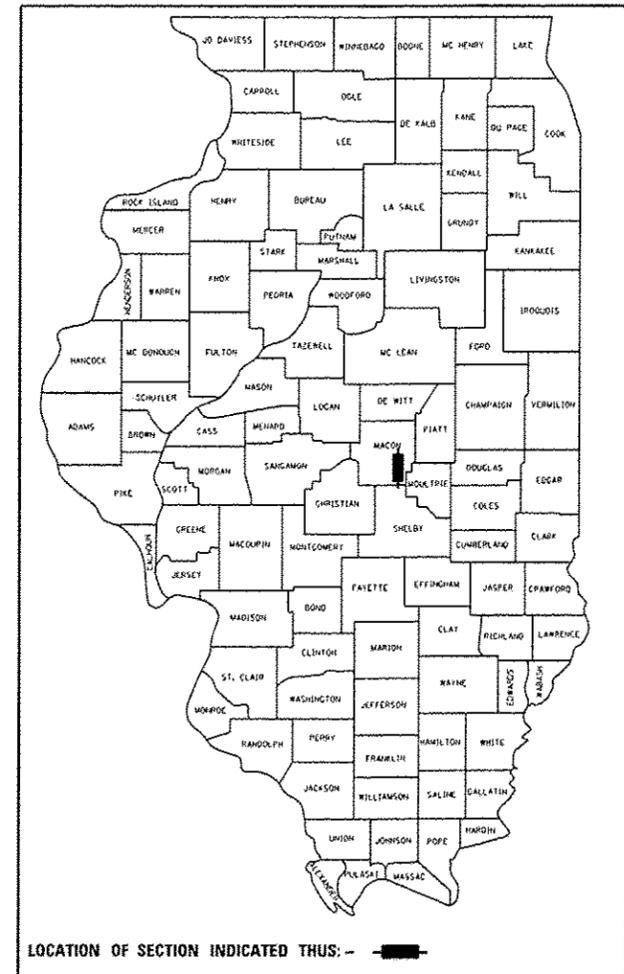
ADT = 17,150 (2013)

C-97-132-12

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	1
		ILLINOIS	CONTRACT NO. 74601	

D7 Bridge Repairs 2014-2

D-97-019-12



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

PROJECT ENGINEER: MARK DAUGHERTY
PROJECT MANAGER: JOYCE HEMMEN

CONTRACT NO. 74601

GROSS LENGTH = 228 FT. = 0.043 MILE
NET LENGTH = 228 FT. = 0.043 MILE

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

SUBMITTED April 5 2013
Roy L. Drishell, P.E.
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 10 2013
John D. Baramello, P.E.
acting ENGINEER OF DESIGN AND ENVIRONMENT

May 10 2013
Omer Osman, P.E.
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

**PRINTED BY THE AUTHORITY
OF THE STATE OF ILLINOIS**

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS, THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", ADOPTED JANUARY 1, 2001; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" INDICATED ON THE CHECK SHEET, AND "THE SPECIAL PROVISIONS" INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN THIS SECTION CONSISTS OF EXPANSION JOINT REPLACEMENT, LONGITUDINAL JOINT REPLACEMENT, BEARING REPLACEMENT BRIDGE DECK PATCHING, BRIDGE DECK OVERLAY AND OTHER WORK NECESSARY TO COMPLETE THE PROJECT.

WET REFLECTIVE TEMPORARY TAPE SHALL BE USED DURING STAGE 1 & 2. PAINT PAVEMENT MARKINGS SHALL BE APPLIED TO THE WESTBOUND LANES BEFORE RESTORING TRAFFIC TO THE NORMAL PATTERN AFTER STAGE 2 IS COMPLETE. PAINT PAVEMENT MARKINGS SHALL BE APPLIED TO THE EASTBOUND LANES IMMEDIATELY THEREAFTER.

FIELD MARKINGS OF UNDERGROUND UTILITIES IN CRITICAL AREAS MAY BE OBTAINED BY PROVIDING A MINIMUM OF 96 HOURS ADVANCE NOTICE THROUGH THE J. U. L. I. E. SYSTEM BY CALLING 800-892-0123.

INDEX OF SHEETS

SHEET NO.	TITLE
1	COVER SHEET
2	INDEX OF SHEETS AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	SCHEDULES
6-10	STAGE 1 TRAFFIC CONTROL PLANS
11-15	STAGE 2 TRAFFIC CONTROL PLANS
16-29	STRUCTURE PLANS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED FOLLOWING THE LAST NUMBERED SHEET OF THE PLANS:

000001-06	STANDARD SYMBOLS, ABBREVIATIONS, AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF INCH AND OF A FOOT
701101-03	OFF-ROAD OPERATIONS, MULTILANE, 15' TO 24' FROM PAVEMENT EDGE
701426-05	LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPERATIONS FOR SPEEDS >= 45 MPH
701431-08	LANE CLOSURE, MULTILANE, UNDIV. WITH CROSSOVER, FOR SPEEDS >= 45 MPH TO 55 MPH
701901-02	TRAFFIC CONTROL DEVICES
704001-07	TEMPORARY CONCRETE BARRIER
780001-03	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS

FILE NAME :	USER NAME :	DESIGNED :	REVISED :	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES & INDEX OF SHEETS	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\teasleych\0312934\07	teasleych	DRAWN :	REVISED :			320	*	MACON	29	2	
		CHECKED :	REVISED :			* 07 Bridge Repairs 2014-2 CONTRACT NO. 74601					
Default		DATE :	REVISED :			ILLINOIS FED. AID PROJECT					
				SCALE:	SHEET	OF	SHEETS	STA.	TO STA.		

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		100% STATE 0014		
50102400	CONCRETE REMOVAL	CU YD	43.1	43.1		
50300100	FLOOR DRAINS	EACH	34	34		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	43.7	43.7		
50300260	BRIDGE DECK GROOVING	SQ YD	1598	1598		
50300300	PROTECTIVE COAT	SQ YD	195	195		
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	3600	3600		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	8610	8610		
50800515	BAR SPLICERS	EACH	24	24		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	168	168		
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12	12		
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12	12		
52100520	ANCHOR BOLTS, 1"	EACH	48	48		
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4		
67100100	MOBILIZATION	L SUM	1	1		

SUMMARY OF QUANTITIES			URBAN TOTAL QUANTITIES	CONSTRUCTION TYPE CODE		
CODE NO	ITEM	UNIT		100% STATE 0014		
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	4194	4194		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	563	563		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	475	475		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
70600350	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3	EACH	2	2		
78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2072	2072		
78100300	REPLACEMENT REFLECTOR	EACH	52	52		
78300100	PAVEMENT MARKING REMOVAL	SQ FT	691	691		
X7010214	TRAFFIC CONTROL AND PROTECTION, STANDARD 701431 (SPECIAL)	EACH	1	1		
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
*X7030030	WET REFLECTIVE TEMPORARY TAPE TYPE III, 4 INCH	FOOT	12581	12581		
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	52	52		

*SPECIALTY ITEM

FILE NAME: c:\pwork\pwork\teasleyck\0312934\074081-shl-soq.dgn	USER NAME: teasleyck	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES	F.A.P. RTE. 320	SECTION -	COUNTY MACON	TOTAL SHEETS 29	SHEET NO. 3	
PLOT SCALE: 1/8" = 1'-0"	PLOT DATE: 4/8/2013	DRAWN -	REVISED -			* 07 Bridge Repairs 2014-2		CONTRACT NO. 74601		ILLINOIS FED. AID PROJECT	
CHECKED -	DATE -	REVISIONS	REVISIONS			SCALE:	SHEET OF SHEETS	STA. TO STA.			
Default											

PAINT PAVEMENT MARKING - LINE 4"

Stage 1				
Location		Quantity		
Station	to	Station	Foot	
416+10	to	418+18	208	
418+37	to	425+57	702	
425+86	to	429+00	314	
426+86	to	429+00	214	
Total			1438	
Stage 2				
Station	to	Station		
416+81	to	418+55	174	
418+75	to	420+00	125	
423+38	to	425+03	165	
425+30	to	427+27	170	
Total			634	
Grand Total			2072	

PAVEMENT MARKING REMOVAL

Stage 1				
Location		Length	Quantity	
Station	to	Foot	Sq Ft	
416+10	to	418+18	208	69
418+37	to	425+57	720	234
425+86	to	429+00	314	105
426+86	to	429+00	214	71
Total			479	
Stage 2				
Station	to	Station		
416+81	to	418+55	174	58
418+75	to	420+00	125	42
423+38	to	425+03	165	55
425+30	to	427+27	197	57
Total			212	
Grand Total			Grand Total	691

RAISED REFLECTIVE PAVEMENT MARKER REMOVAL

Stage 1				
Location		Length	Quantity	
Station	to	Foot	Each	
416+10	to	418+18	208	5
418+37	to	425+57	720	18
425+86	to	429+00	314	8
426+86	to	429+00	214	5
Total			36	
Stage 2				
Location		Length	Quantity	
Station	to	Station	Foot	Sq Ft
416+81	to	418+55	174	4
418+75	to	420+00	125	3
423+38	to	425+03	165	4
425+30	to	427+27	197	4
Total			16	
Grand Total			52	

REPLACEMENT REFLECTOR

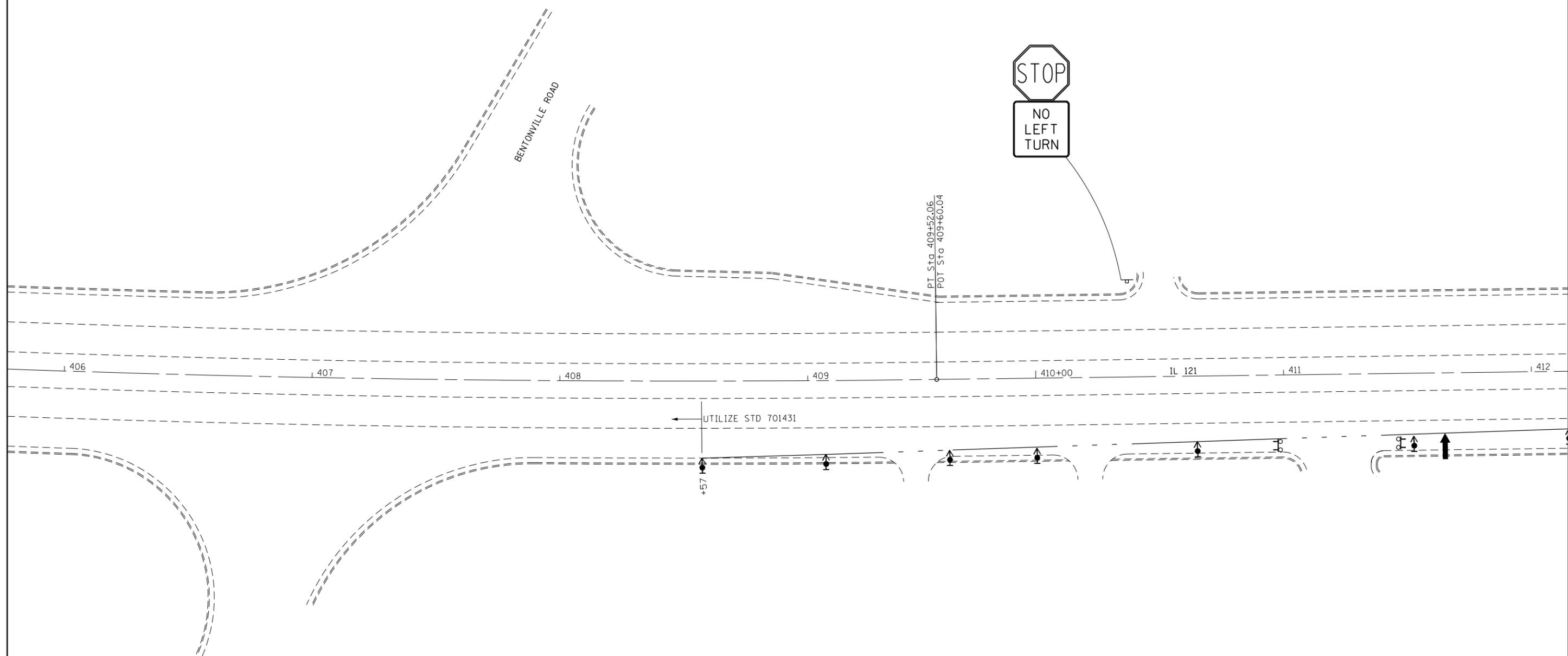
Stage 1				
Location		Length	Quantity	
Station	to	Foot	Each	
416+10	to	418+18	208	5
418+37	to	425+57	720	18
425+86	to	429+00	314	8
426+86	to	429+00	214	5
Total			36	
Stage 2				
Station	to	Station		
416+81	to	418+55	174	4
418+75	to	420+00	125	3
423+38	to	425+03	165	4
425+30	to	427+27	197	4
Total			15	
Grand Total			51	

WET REFLECTIVE TEMPORARY TAPE

Stage 1			
Station	to	Station	Quantity
408+57	to	429+00	2043
414+15	to	434+47	4064
Total			6107
Stage 2			
Station	to	Station	Quantity
413+00	to	434+94	2194
409+60	to	431+00	4280
Total			6474
Grand Total			12581

WORK ZONE PAVEMENT MARKING REMOVAL

Stage 1				
Location		Length	Quantity	
Station	to	Foot	Sq Ft	
408+57	to	429+00	2043	681
414+15	to	434+47	4064	1355
Total			6107	2036
Stage 2				
Location		Length	Quantity	
Station	to	Station	Foot	Sq Ft
413+00	to	434+94	2194	731
409+60	to	431+00	4280	1427
Total			6474	2158
Grand Total			4194	



LEGEND

-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
-  TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
-  SIGN
-  ARROW BOARD

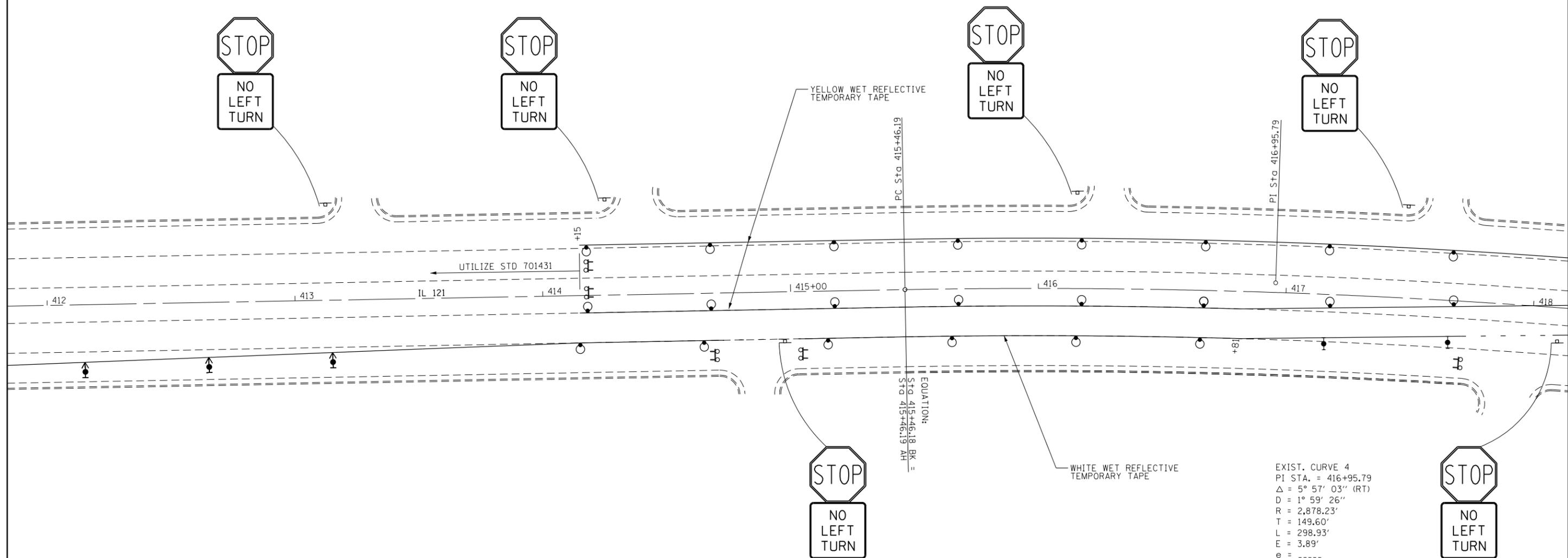
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE I TRAFFIC CONTROL
STA 406+00 TO STA 412+00**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	6
• D7 Bridge Repairs 2014-2		CONTRACT NO.	74601	
ILLINOIS FED. AID PROJECT				



EXIST. CURVE 4
 PI STA. = 416+95.79
 Δ = 5° 57' 03" (RT)
 D = 1° 59' 26"
 R = 2,878.23'
 T = 149.60'
 L = 298.93'
 E = 3.89'
 e = ----
 T.R. = ----
 S.E. RUN = ----
 P.C. STA. = 415+46.19
 P.T. STA. = 418+45.12

- LEGEND**
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
 - TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
 - DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
 - TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
 - SIGN

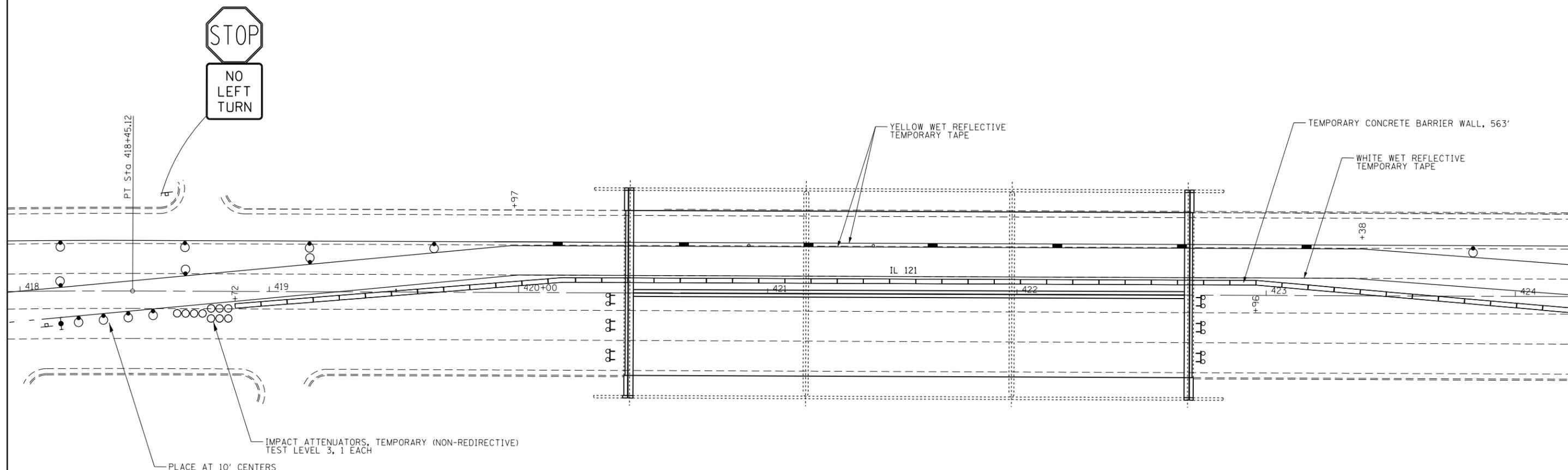
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STAGE I TRAFFIC CONTROL
 STA 412+00 TO STA 418+00**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	28	7
• D7 Bridge Repairs 2014-2		CONTRACT NO. 74601		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



LEGEND

- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS) (UNLESS NOTED OTHERWISE)
- ⦿ TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
- ⦿ TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
- ⦿ SIGN
- FLEXIBLE DELINEATOR (PLACE AT 50' CENTERS)

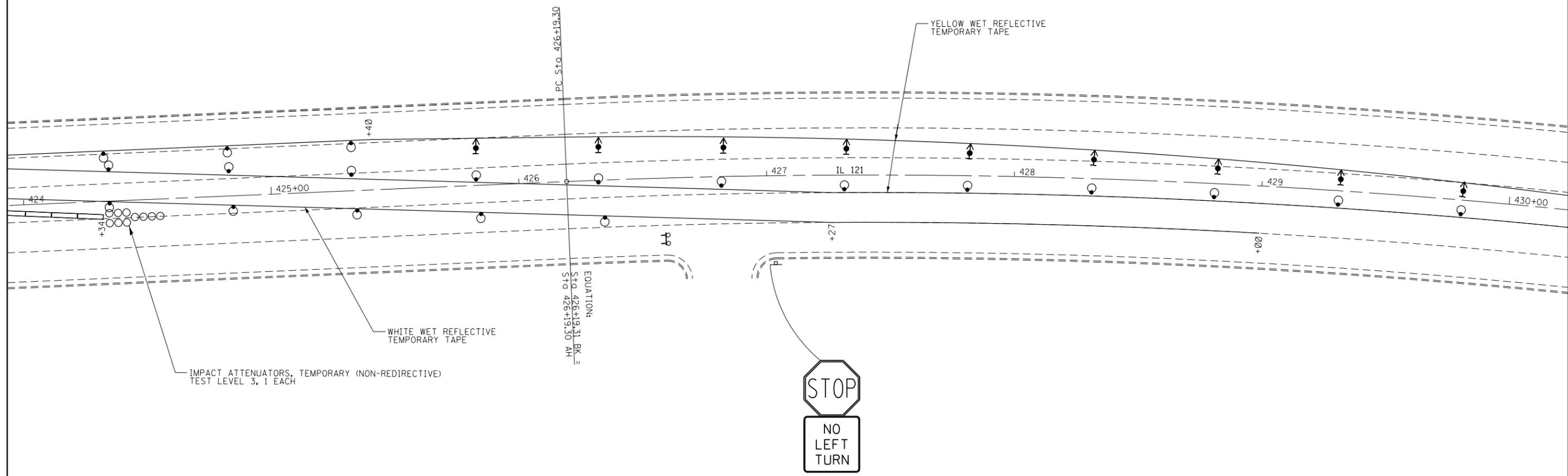
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE I TRAFFIC CONTROL
STA 418+00 TO STA 424+00**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	8
• D7 Bridge Repairs 2014-2		CONTRACT NO. 74601		
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE)
TEST LEVEL 3, 1 EACH

WHITE WET REFLECTIVE
TEMPORARY TAPE

PC STA 426+19.30
STATIONING EQUATION:
STA 426+19.31 BK =
STA 426+19.30 AH

YELLOW WET REFLECTIVE
TEMPORARY TAPE



LEGEND

- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
(PLACE AT 50' CENTERS)
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN
MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
- TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
- SIGN

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	PLOT DATE = 4/8/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I TRAFFIC CONTROL
STA 424+00 TO STA 430+00

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	9
D7 Bridge Repairs 2014-2		CONTRACT NO. 74601		
ILLINOIS FED. AID PROJECT				



LOST BRIDGE ROAD

PI Sta 431+90.27

YELLOW WET REFLECTIVE
TEMPORARY TAPE

UTILIZE STD 701431

UTILIZE STD 701431

ARROW BOARD

EXIST. CURVE 5
 PI STA. = 431+90.27
 $\Delta = 22^\circ 37' 30''$ (RT)
 D = 2° 00' 27"
 R = 2,854.15'
 T = 570.97'
 L = 1,127.06'
 E = 56.55'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 426+19.30
 P.T. STA. = 437+46.36



LEGEND

- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
(PLACE AT 50' CENTERS)
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN
MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
- TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
- SIGN

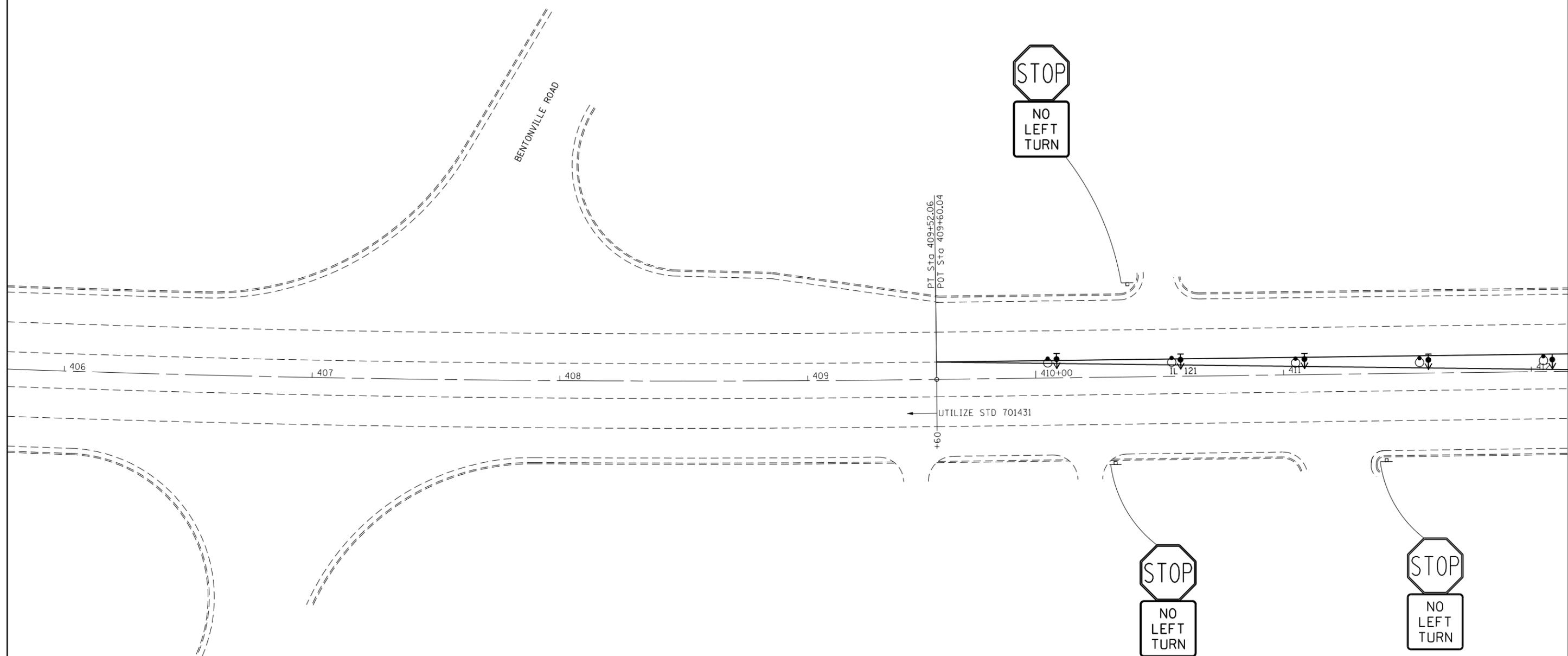
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE I TRAFFIC CONTROL
STA 430+00 TO STA 436+00

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	10
D7 Bridge Repairs 2014-2			CONTRACT NO. 74601	
ILLINOIS FED. AID PROJECT				



LEGEND

-  DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)

 SIGN

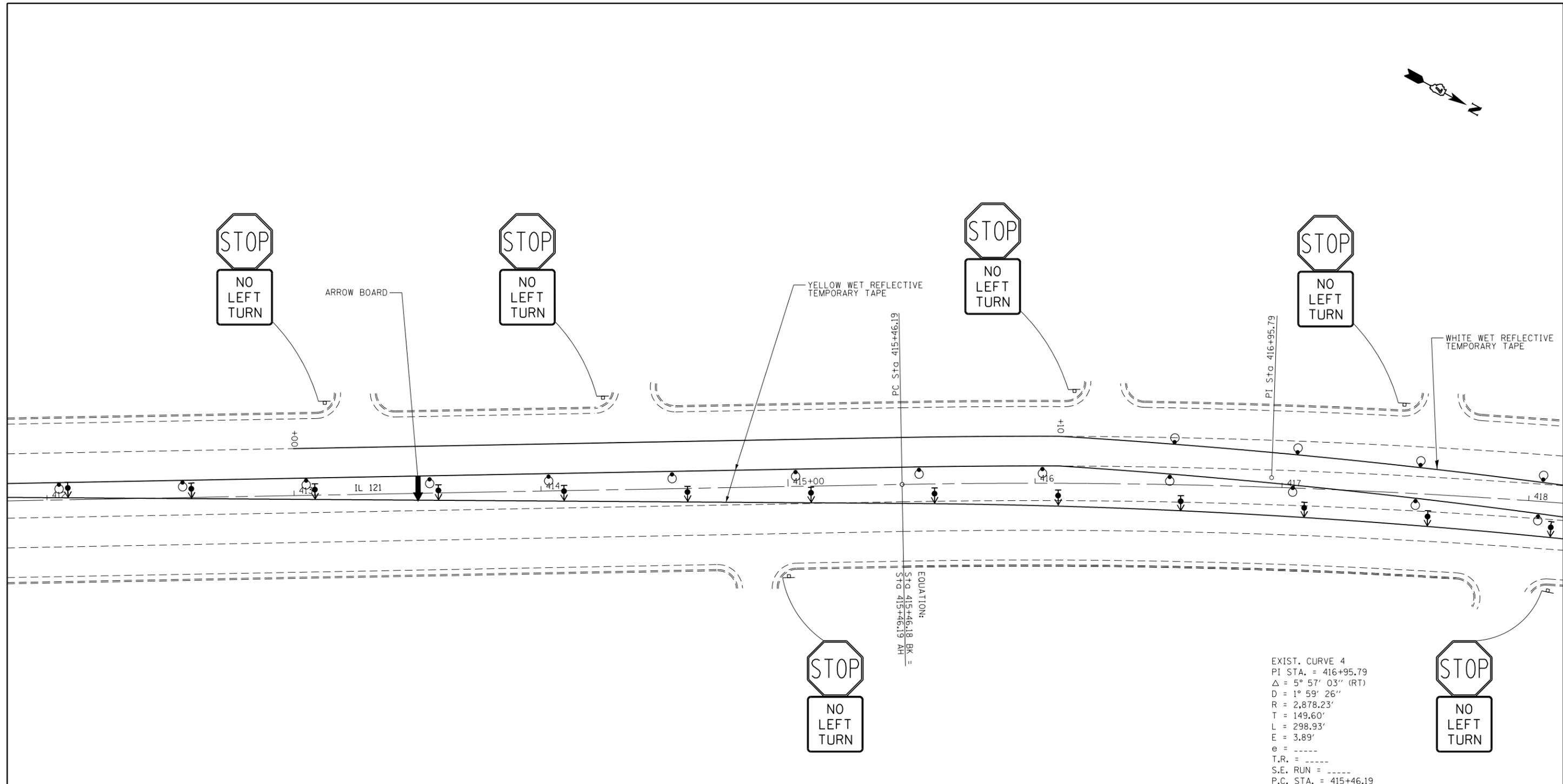
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE 2 TRAFFIC CONTROL
STA 406+00 TO STA 412+00**

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	11
• D7 Bridge Repairs 2014-2		CONTRACT NO.	74601	
ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



LEGEND

-  DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
-  TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
-  SIGN

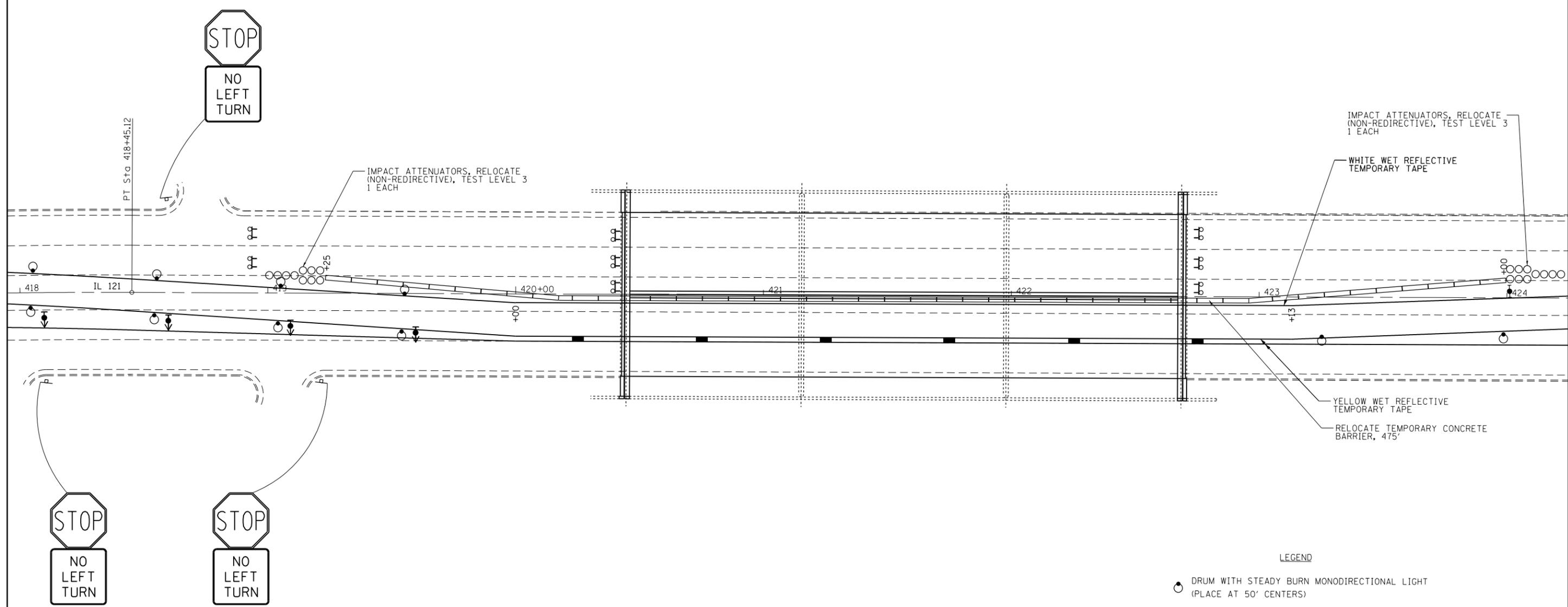
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE 2 TRAFFIC CONTROL
STA 412+00 TO STA 418+00**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	12
D7 Bridge Repairs 2014-2		CONTRACT NO.	74601	
ILLINOIS FED. AID PROJECT				



LEGEND

- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
- ▲ DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
- ⊥ TYPE II BARRICADE, DRUM, OR VERTICAL BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
- ⊥ TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
- ⊥ SIGN
- FLEXIBLE DELINEATORS (PLACE AT 50' CENTERS)

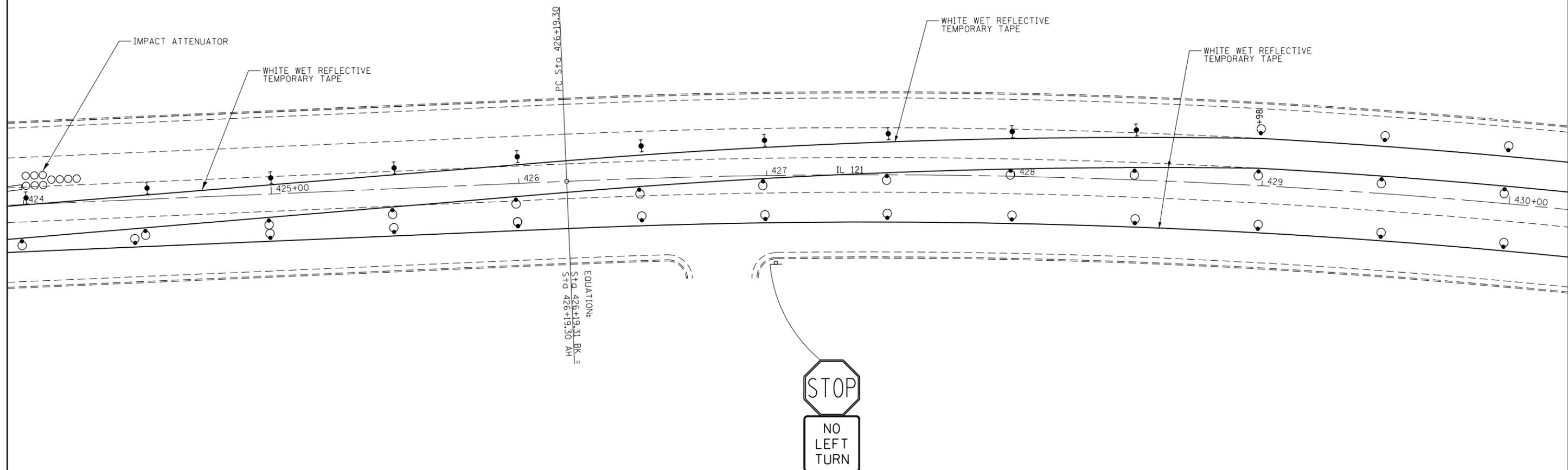
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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 TRAFFIC CONTROL
STA 418+00 TO STA 424+00

SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.
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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	13
• D7 Bridge Repairs 2014-2		CONTRACT NO.	74601	
ILLINOIS FED. AID PROJECT				



LEGEND

-  DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
-  TYPE II BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
-  DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
-  TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
-  SIGN

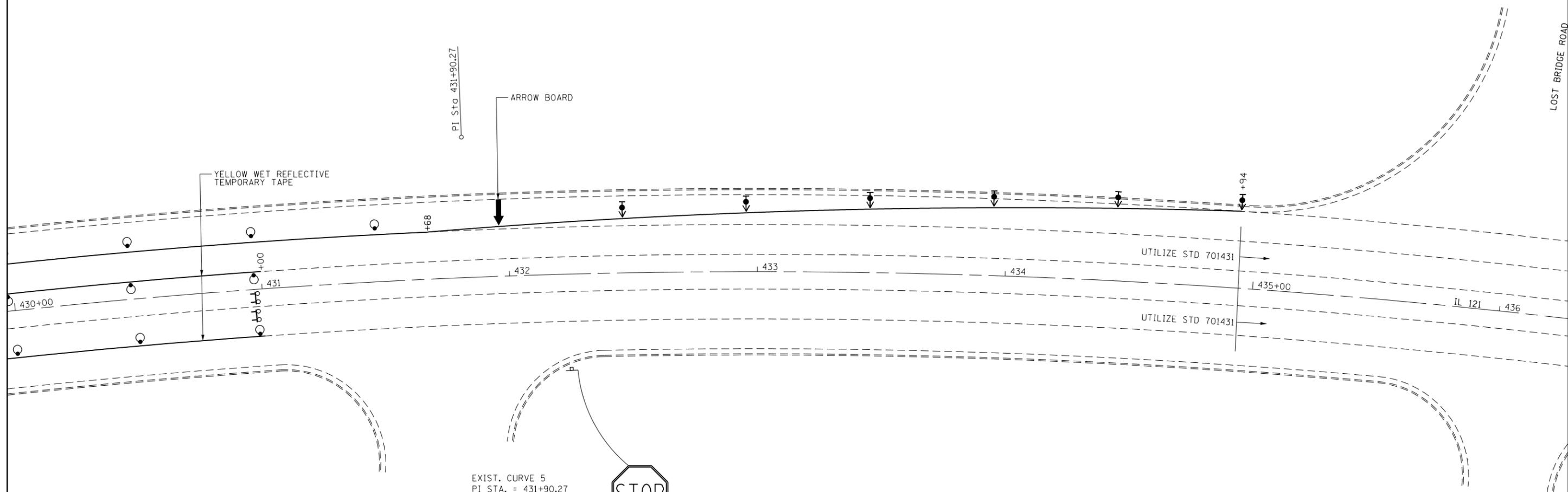
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	PLOT DATE = 4/8/2013	DATE -	REVISED -

**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**STAGE 2 TRAFFIC CONTROL
STA 424+00 TO STA 430+00**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	14
• D7 Bridge Repairs 2014-2		CONTRACT NO. 74601		
ILLINOIS FED. AID PROJECT				



EXIST. CURVE 5
 PI STA. = 431+90.27
 $\Delta = 22^\circ 37' 30''$ (RT)
 D = 2° 00' 27"
 R = 2,854.15'
 T = 570.97'
 L = 1,127.06'
 E = 56.55'
 e = -----
 T.R. = -----
 S.E. RUN = -----
 P.C. STA. = 426+19.30
 P.T. STA. = 437+46.36



LEGEND

- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT (PLACE AT 50' CENTERS)
- DIRECTION INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT. (PLACE AT 50' CENTERS)
- TYPE III BARRICADE, WITH FLASHING MONODIRECTIONAL LIGHTS
- SIGN
- ARROW BOARD

FILE NAME =	USER NAME = teasleyck	DESIGNED -	REVISED -
ci:\pw\work\p\idot\teasleyck\d0312934\074601-sht-stage2.dgn		DRAWN -	REVISED -
Default	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 4/8/2013	DATE -	REVISED -

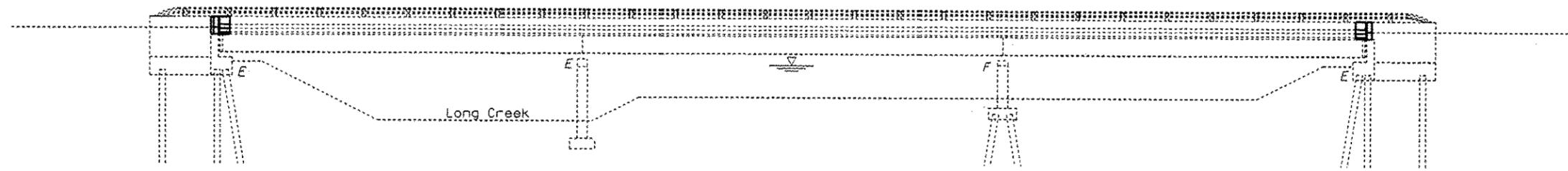
**STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION**

**STAGE 2 TRAFFIC CONTROL
 STA 430+00 TO STA 436+00**

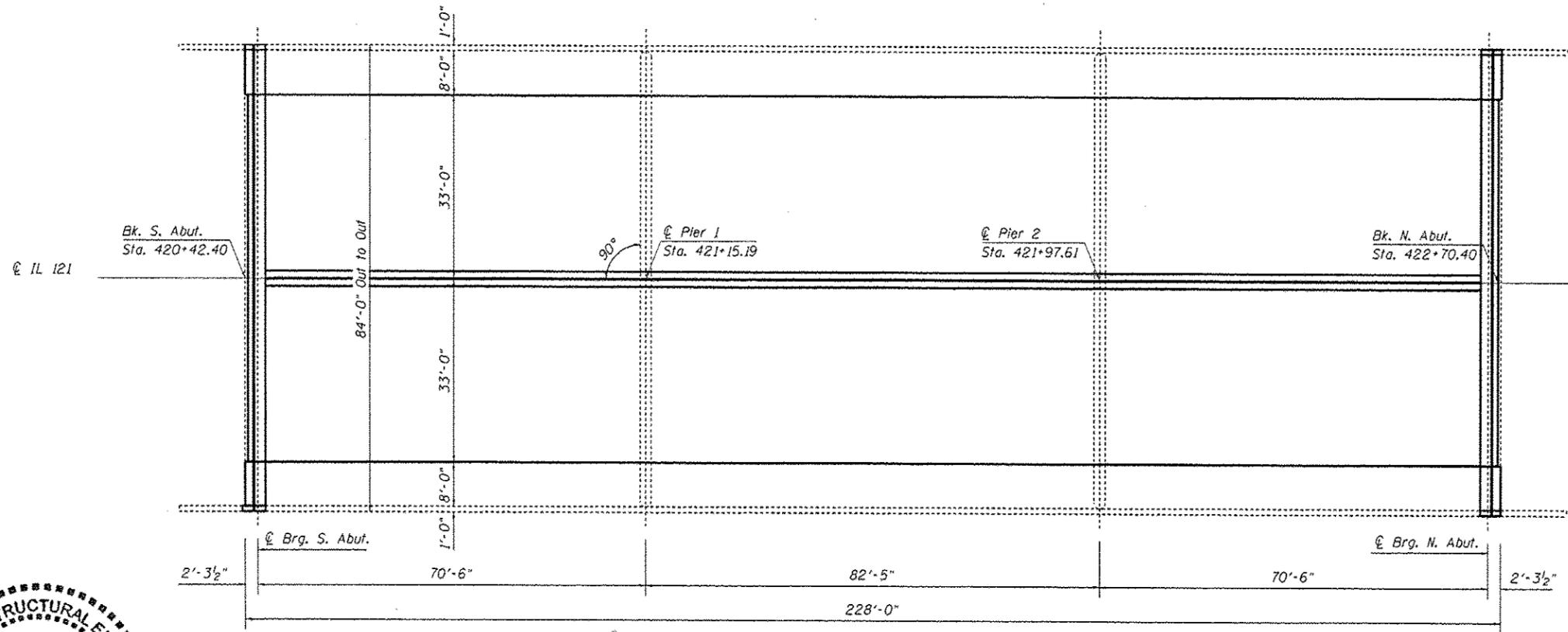
SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320		MACON	29	15
• D7 Bridge Repairs 2014-2		CONTRACT NO. 74601		
ILLINOIS FED. AID PROJECT				

The existing three span steel beam structure was constructed in 1975 as FA-33 section 101BR at Sta. 421+56.40. The proposed project consists of new expansion joints, closure of longitudinal joint, new elastomeric bearings, new deck drains, full depth deck repair and a new wearing surface.



ELEVATION



PLAN



David Carl Puzey 5/8/13
Expires 11/30/14

EXISTING DESIGN STRESSES

- $f'_c = 1,200$ psi (Deck Slab)
- $f'_c = 1,400$ psi (Curb, Parapet, Sub)
- $f'_s = 20,000$ psi (Reinf)
- $f'_s = 20,000$ psi (Struct)
- $V_c = 75$ psi (Flgs)
- $n = 10$

FILE NAME :	USER NAME : teasleyck	DESIGNED - DFZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL PLAN & ELEVATION SN. 058-0055			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
cr:\pwork\pwidot\teasleyck\td0312934\07	4681-shr\trp\trp.f.dgn	DRAWN - DFZ	REVISED -		320	97 Bridge Repairs 2014-2	MACON	29	16			
Default	PLOT SCALE = 48.0000" = 1" in.	CHECKED - MJM	REVISED -		CONTRACT NO. 74601							
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -		ILLINOIS FED. AID PROJECT							
				SCALE:	SHEET 1	OF 14 SHEETS	STA.	TO STA.				

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 work, however, the Contractor will be paid for the quantity actually furnished based upon the unit price bid for the work.

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

Reinforcement Bars designated (E) shall be epoxy coated.

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 operations shall be replaced using an approved bar splicer or anchorage system. Cost included in CONCRETE REMOVAL.

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

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

Removal and reinstallation of the name plate attached to the structure will be necessary for construction of the expansion joints. This work and all materials shall be included in the contract unit price for CONCRETE SUPERSTRUCTURE.

Prior to pouring the new concrete deck, all heavy and 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.

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

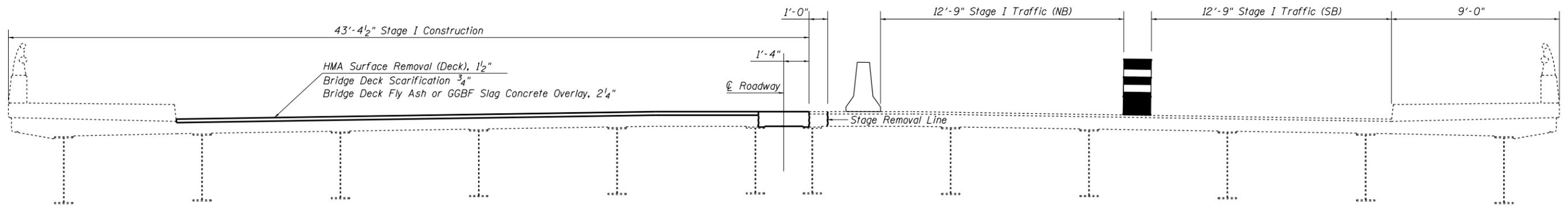
Removal and replacement of a portion of the sidewalk will be necessary to remove or replace the existing deck drains. This work and all materials shall be included in the contract unit price for Deck Slab Repair (Full Depth).

It is anticipated that full depth deck slab repair will be necessary at every location of deck drains to be eliminated. Removal and disposal of the existing deck drains shall be included in the contract unit price for DECK SLAB REPAIR (FULL DEPTH).

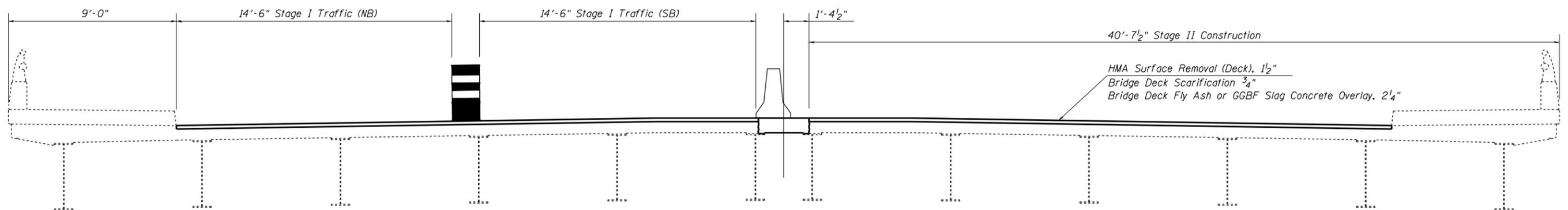
TOTAL BILL OF MATERIALS

ITEM	UNIT	QUANTITY
Concrete Removal	Cu. Yd.	43.1
Concrete Superstructure	Cu. Yd.	43.7
Reinforcement Bars, Epoxy Coated	Pound	8610
Bar Splicers	Each	24
Preformed Joint Strip Seal	Foot	168
HMA Surface Removal (Deck)	Sq Yd	1550
Bridge Deck Scarification, 3/4"	Sq Yd	1550
Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, 2 1/4"	Sq Yd	1550
Bridge Deck Grooving	Sq Yd	1598
Protective Coat	Sq Yd	195
Deck Slab Repair (Full Depth, Type I)	Sq Yd	1
Deck Slab Repair (Full Depth, Type II)	Sq Yd	67
Floor Drains	Each	34
Elastomeric Bearing Assembly, Type I	Each	12
Elastomeric Bearing Assembly, Type II	Each	12
Jack and Remove Existing Bearings	Each	24
Furnishing and Erecting Structural Steel	Pound	3600
Anchor Bolts, 1"φ	Each	48

* Apply to new concrete only

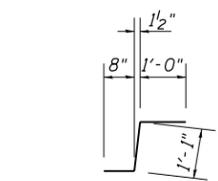


STAGE I LOOKING SOUTH

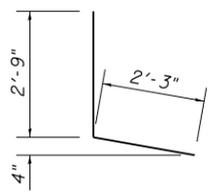


STAGE II LOOKING SOUTH

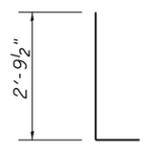
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ci:\pw\work\pwidot\teasleyck\d0312934\07	4601-sht-brgennote.dgn	DRAWN - DFZ	REVISED -			320	07 Bridge Repairs 2014-2	MACON	29	17	
Default	PLOT SCALE = 40.0000' / in.	CHECKED - MJM	REVISED -			CONTRACT NO. 74601					
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -			ILLINOIS FED. AID PROJECT					



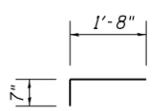
Bar c(E)



Bar d(E)



Bar d1(E)

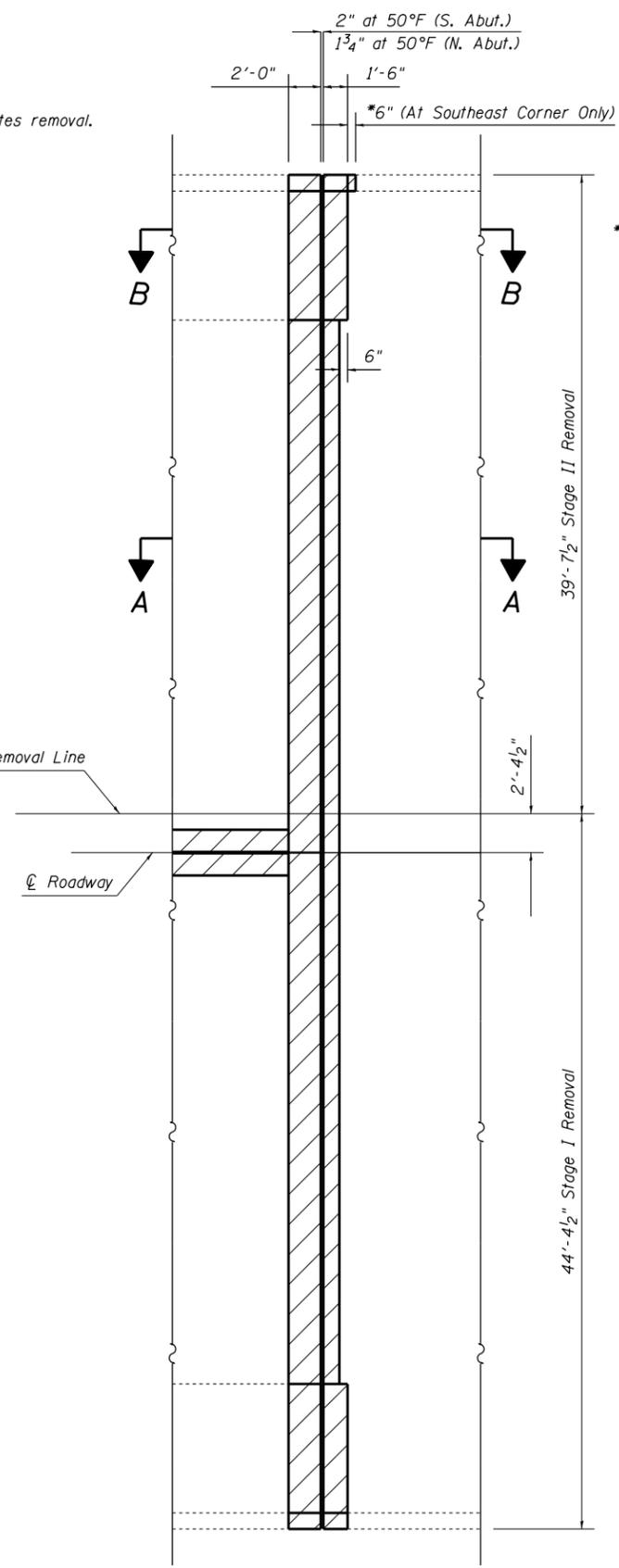


Bar x(E)

BILL OF MATERIAL
PER ABUTMENT

BAR	NUMBER OF BARS		TOTAL	SIZE	LENGTH	SHAPE
	STAGE I	STAGE II				
a (E)	8		8	#6	42'-10"	—
a1(E)		8	8	#6	40'-1"	—
c (E)	3	3	6	#5	2'-9"	J
c1(E)	3	3	6	#5	8'-7"	—
d (E)	3	3	6	#5	5'-0"	L
d1(E)	3	3	6	#5	3'-9"	L
h (E)	4		4	#6	34'-2"	—
h1(E)		4	4	#6	31'-5"	—
h2(E)	6		6	#5	7'-7"	—
x (E)	44	41	83	#5	2'-3"	—
REINFORCEMENT BARS (EPOXY COATED)					POUND	1800
CONCRETE REMOVAL					CU YD	13.2
CONCRETE SUPERSTRUCTURE					CU YD	13.2

Hatching indicates removal.

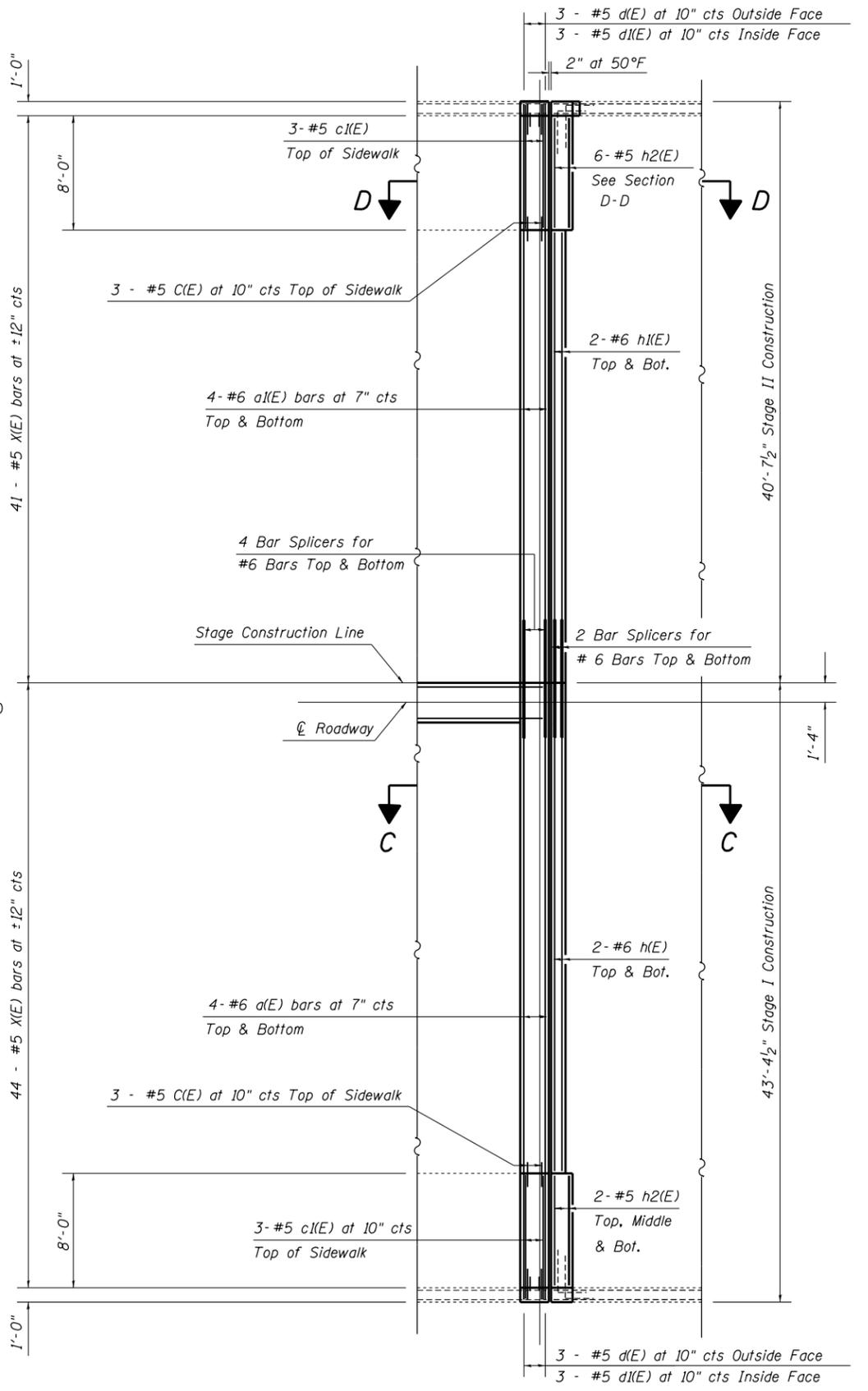


EXISTING PARTIAL PLAN
(North Abutment shown; South Abutment similar unless noted otherwise)



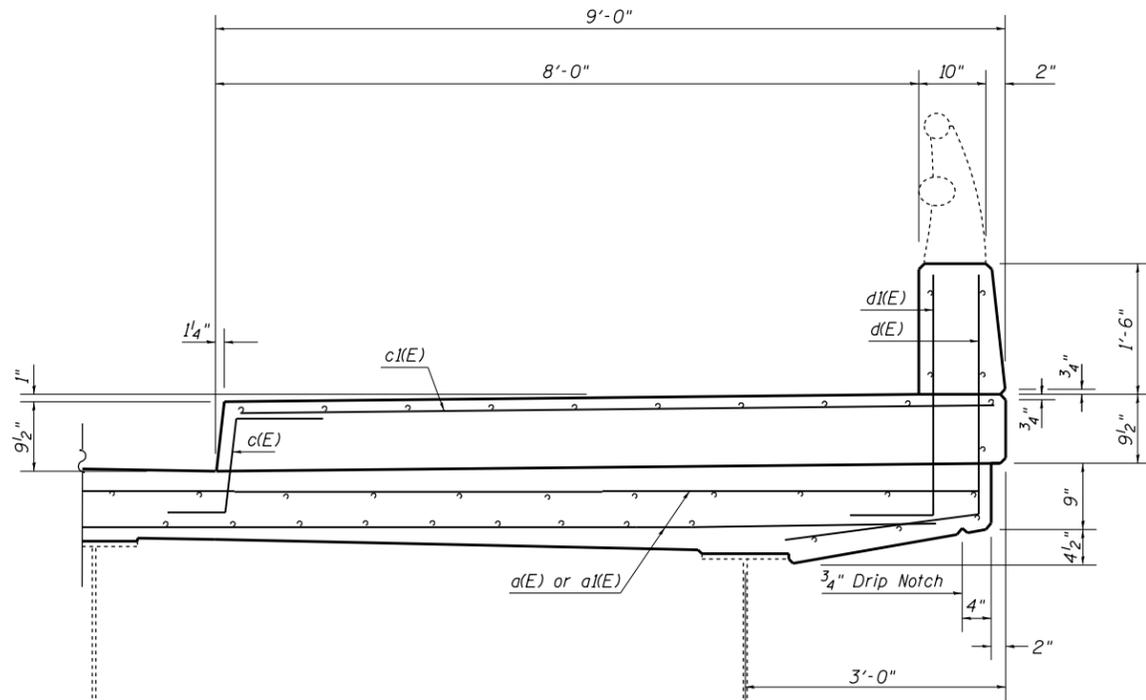
* The 6" removal at the southeast corner is due to current location of name plate.

For Sections A-A to D-D See sheet 4 of 14.

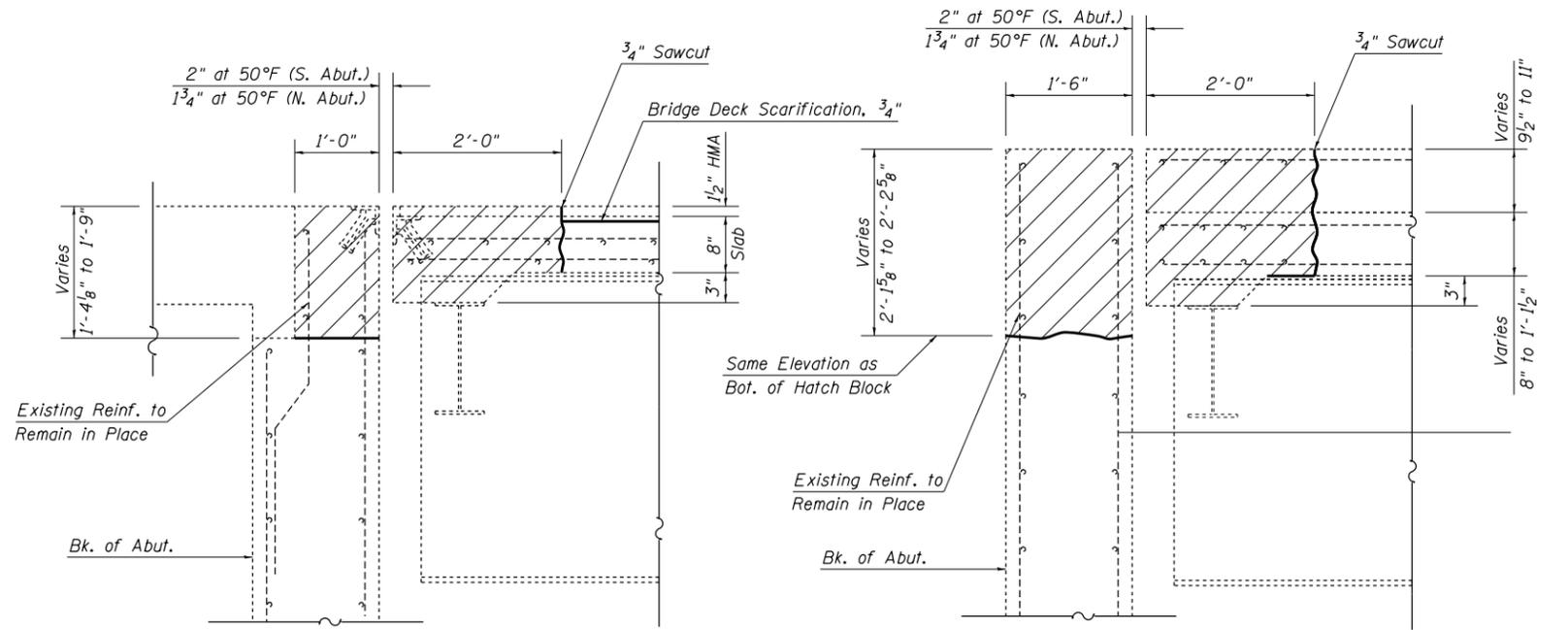


PROPOSED PARTIAL PLAN
(North Abutment shown; South Abutment similar unless noted otherwise)

Hatching indicates removal.



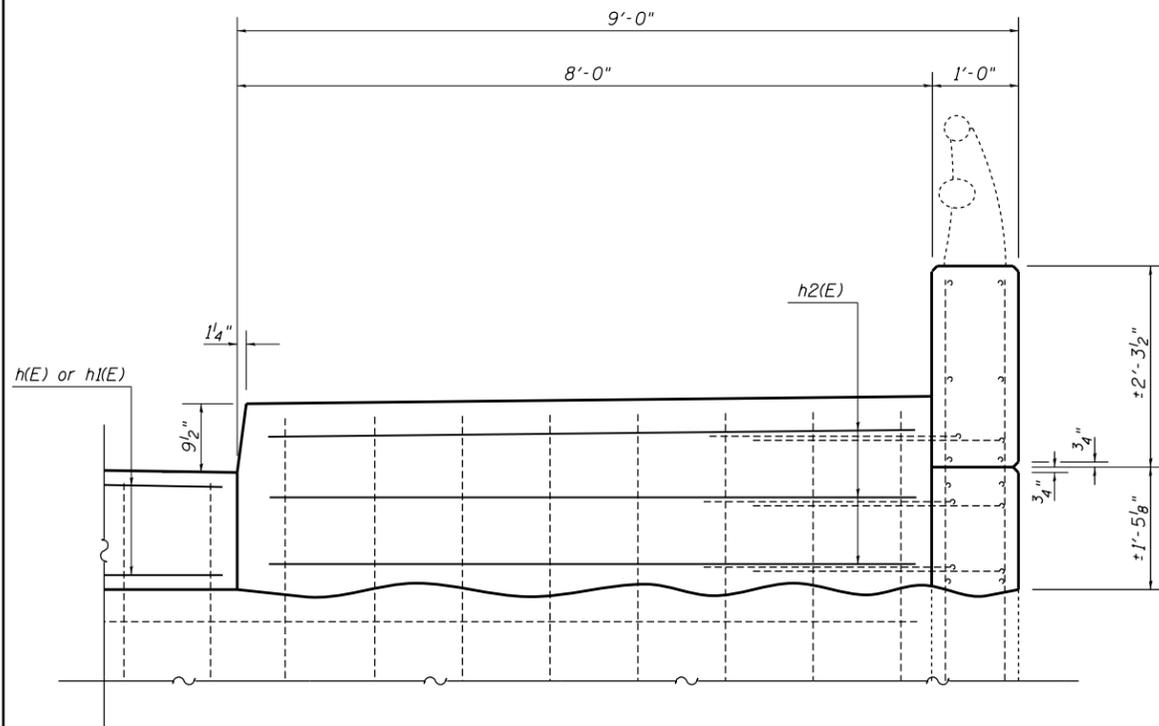
SECTION THRU DECK SIDEWALK



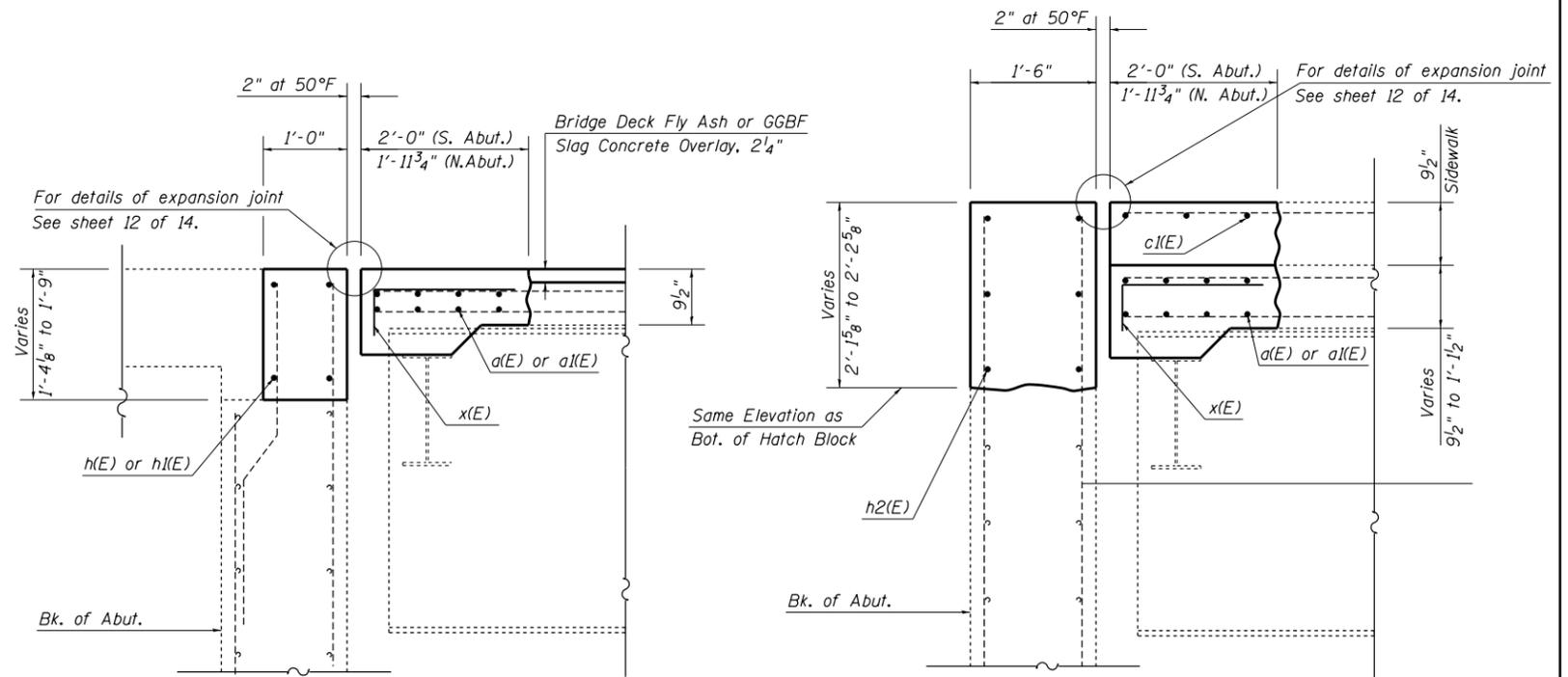
SECTION A-A

SECTION B-B

○ Existing Reinforcement
● Proposed Reinforcement



SECTION THRU APPROACH SIDEWALK



SECTION C-C

SECTION D-D

FILE NAME =	USER NAME = teasleyck	DESIGNED - DFZ	REVISED -
ei:\pw\work\p\dtd\teasleyck\d0312934\074601-sht-brdetails.dgn		DRAWN - DFZ	REVISED -
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	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -

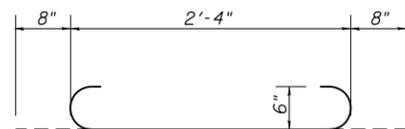
**STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION**

**EXPANSION JOINT REPLACEMENT DETAILS
SN. 058-0055**

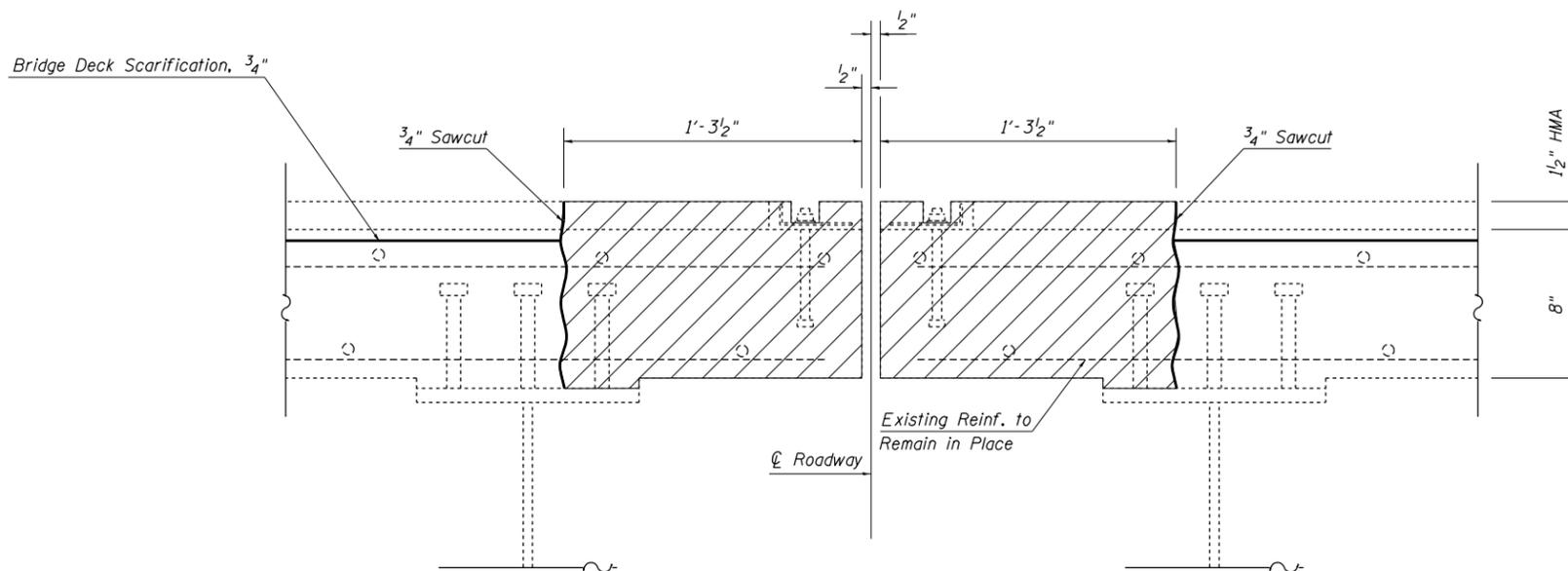
SCALE: SHEET 4 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07 Bridge Repairs 2014-2	MACON	29	19
CONTRACT NO. 74601			ILLINOIS FED. AID PROJECT	

Hatching indicates removal.



Bar a3(E)



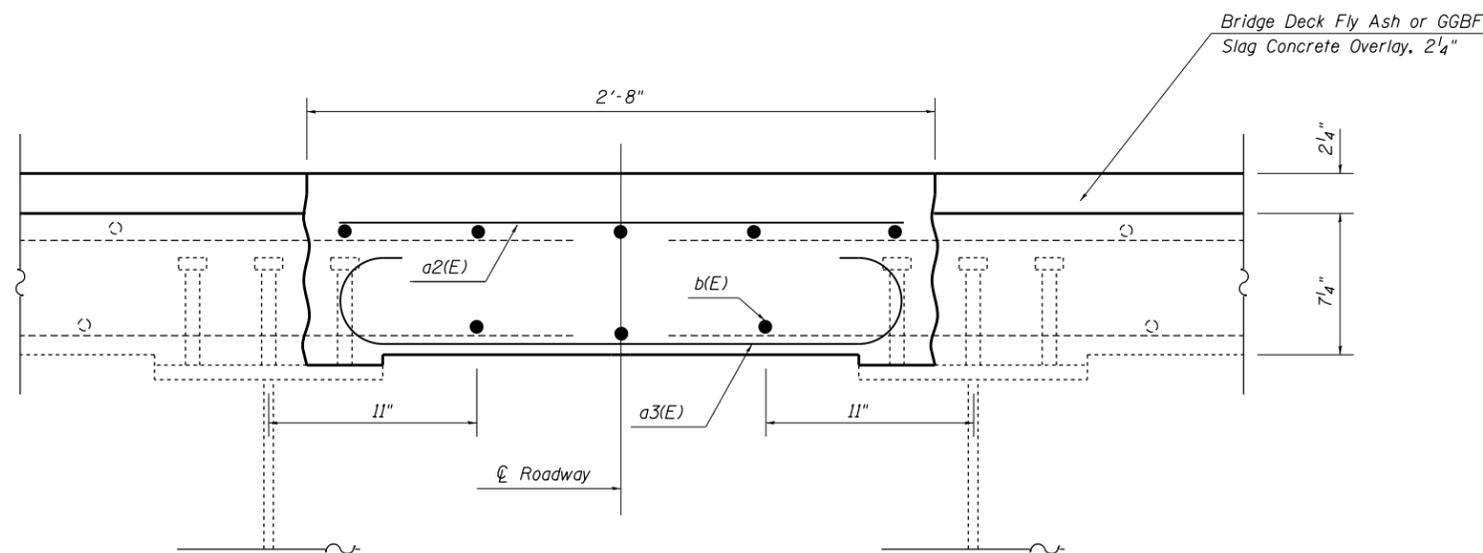
SECTION E-E

○ Existing Reinforcement
● Proposed Reinforcement

BILL OF MATERIAL

Longitudinal Joint

BAR	TOTAL	SIZE	LENGTH	SHAPE
a2(E)	333	#6	2'-4"	—
a3(E)	167	#6	3'-8"	⌋
b(E)	56	#6	34'-9"	—
REINFORCEMENT BARS (EPOXY COATED)			POUND	5010
CONCRETE REMOVAL			CU YD	16.7
CONCRETE SUPERSTRUCTURE			CU YD	17.3



SECTION F-F

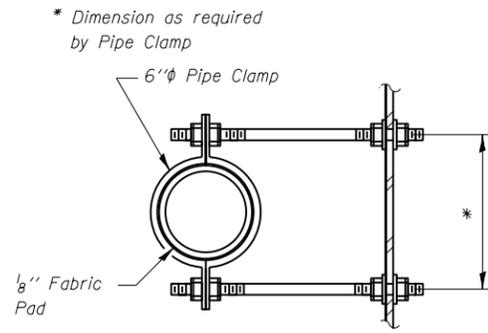
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Default	PLOT SCALE = 40.0000' / in.	CHECKED - MJM	REVISED -
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

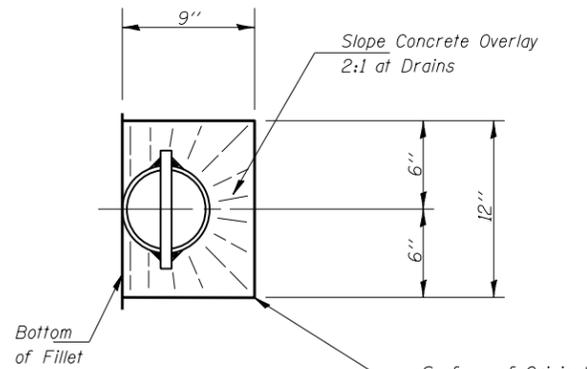
LONGITUDINAL JOINT REPLACEMENT DETAILS
SN. 058-0055

SCALE: SHEET 6 OF 14 SHEETS STA. TO STA.

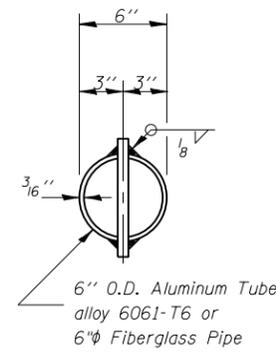
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	D7 Bridge Repairs 2014-2	MACON	29	21
CONTRACT NO. 74601			ILLINOIS FED. AID PROJECT	



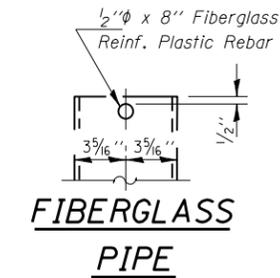
SECTION G-G



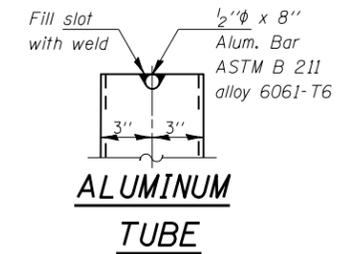
DRAIN DETAIL TOP PLAN



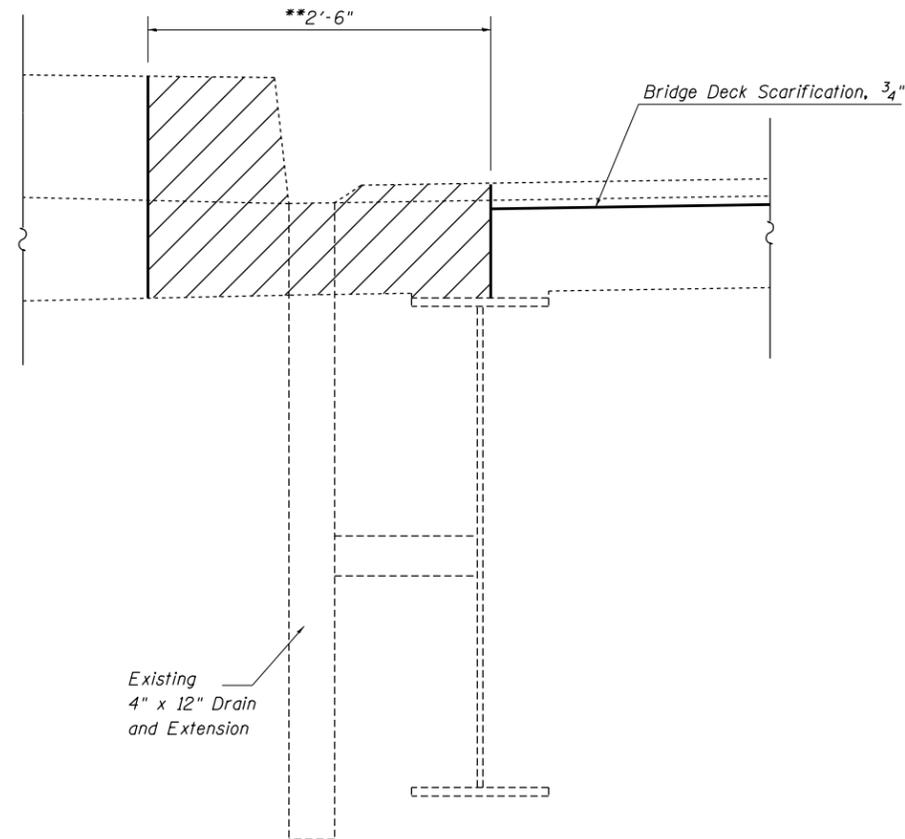
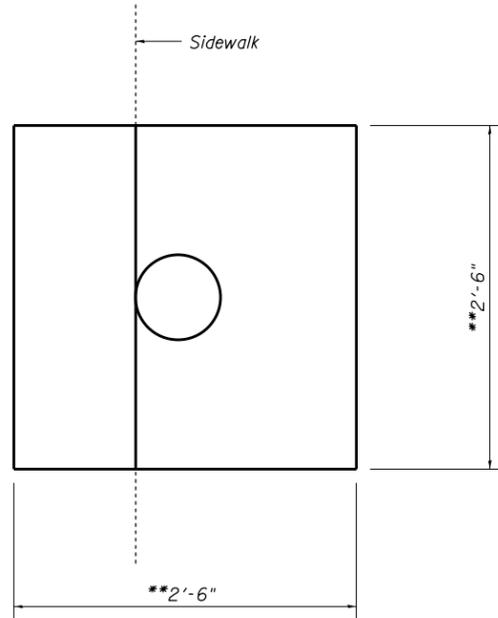
TOP PLAN
(Showing Aluminum Tube)



FIBERGLASS PIPE



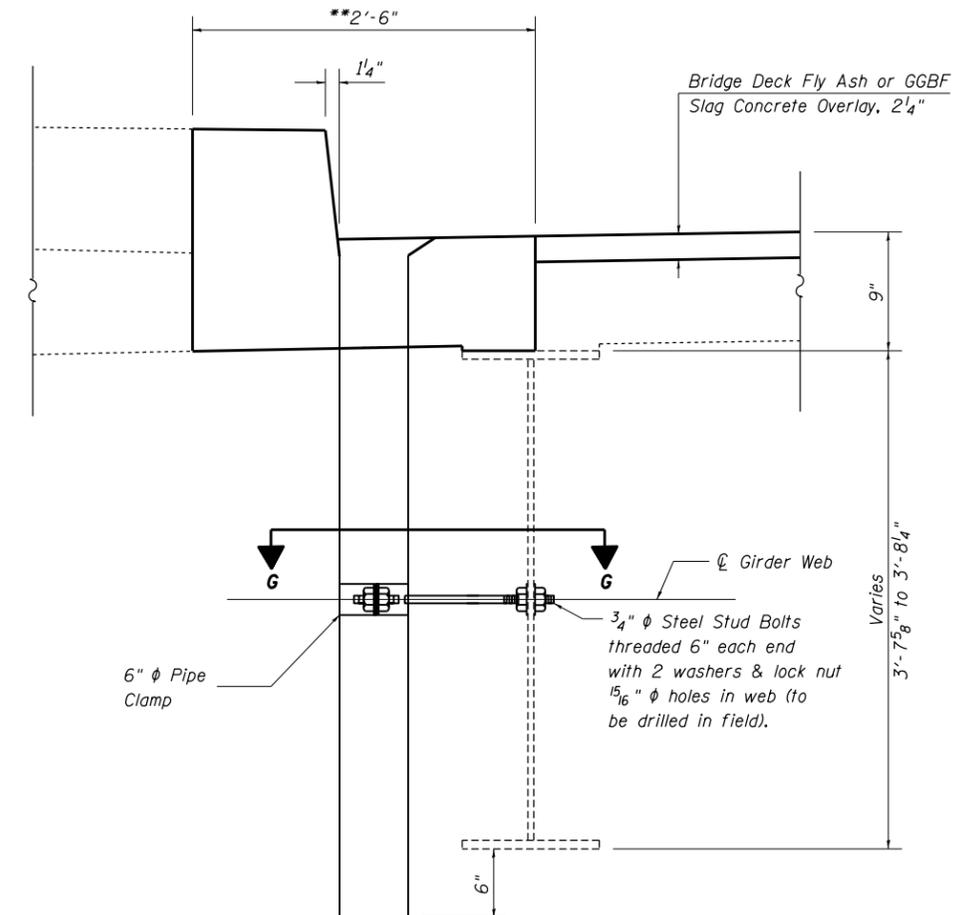
ALUMINUM TUBE



SECTION THRU EXISTING FLOOR DRAIN

Hatched area indicates concrete removal at floor drain replacement.

Note: Concrete removal and replacement quantities for drains are included in Deck Slab Repair as shown on "Bridge Deck Patching" plan sheets.



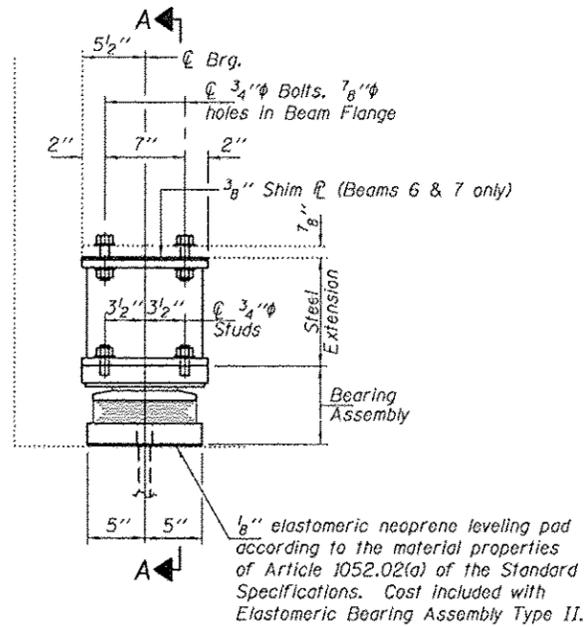
DRAIN REPLACEMENT DETAIL

Note: See "Bridge Deck Patching" plan sheets for Floor Drain replacement location and Floor Drain Removal locations. See "Total Bill of Materials" for quantities.

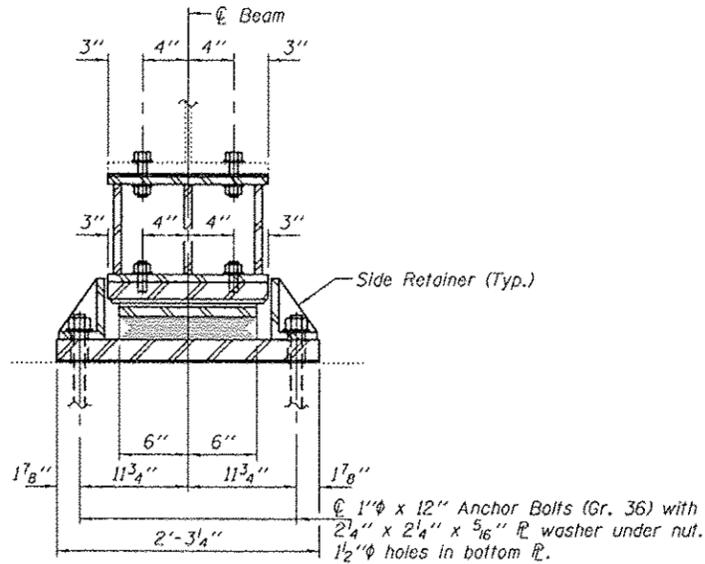
Notes: The floor drains shall be painted to match the outside of the fascia beams. The exterior surfaces of the drains shall be cleaned according to Society of Protective Coatings Specification SSPC-SP1 prior to painting. Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum. Galvanize clamping device according to AASHTO M232. Cost of clamping device and galvanizing is included with Floor Drains.

** Concrete removal and replacement dimensions shall be determined by the Engineer based on the extent of deck deterioration at each drain.

FILE NAME =	USER NAME = teasleyck	DESIGNED - DFZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DECK DRAIN DETAILS SN. 058-0055	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\p\dot\teasleyck\d0312934\0774601-sht-brdetails.dgn	DRAWN - DFZ	REVISIED -	320			DT Bridge Repairs 2014-2	MACON	29	22	
Default	PLOT SCALE = 40.0000' / in.	CHECKED - MJM	REVISIED -			CONTRACT NO. 74601				
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISIED -			ILLINOIS FED. AID PROJECT				
						SCALE:	SHEET 7	OF 14 SHEETS	STA.	TO STA.



ELEVATION AT ABUTMENT



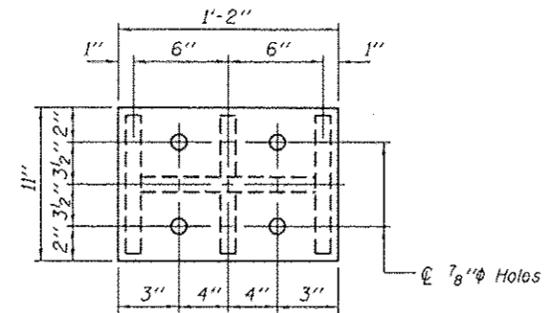
SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

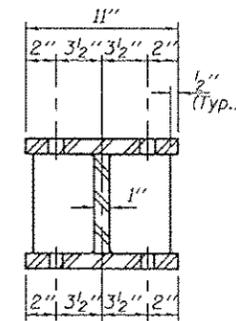
BEAM REACTIONS

RP	(K)	39.2
RL	(K)	41.6
Imp.	(K)	10.4
R (Total)	(K)	91.2

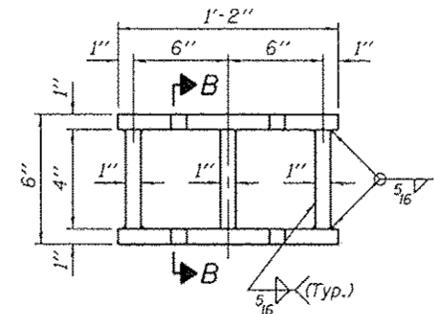
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. jack capacity = 50 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.
 The 1/8" PTFE sheet shall be bonded directly to the top steel plate with a two-component, medium viscosity epoxy resin, conforming to the requirements of the Federal Specification MMM-A-134, Type I. The bond agent shall be applied on the full area of the contact surfaces.
 Bonding of 1/8" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



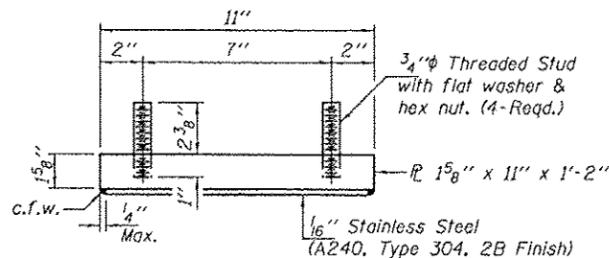
PLAN TOP AND BOTTOM PLATE



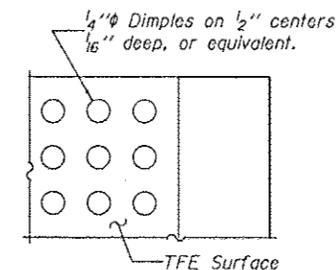
SECTION B-B



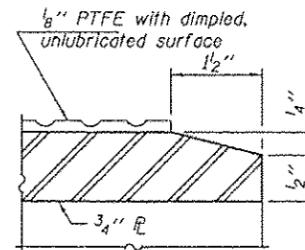
STEEL EXTENSION DETAIL



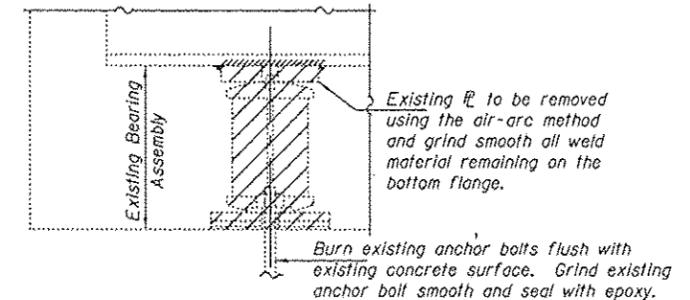
TOP BEARING ASSEMBLY
(Looking North)



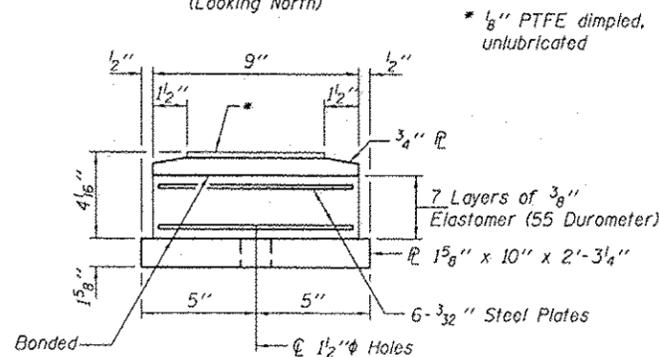
PLAN-TFE SURFACE



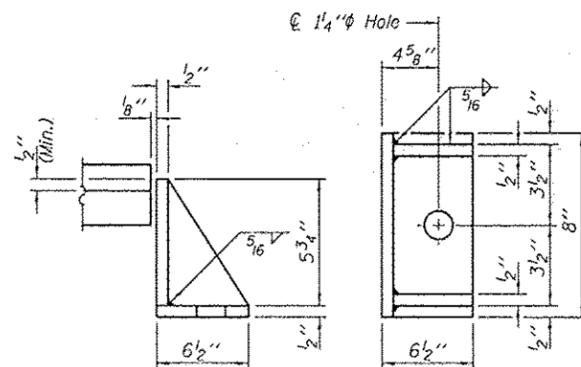
SECTION THRU TFE



EXISTING BEARING REMOVAL DETAIL
Cost included with Jack and Remove Existing Bearings.

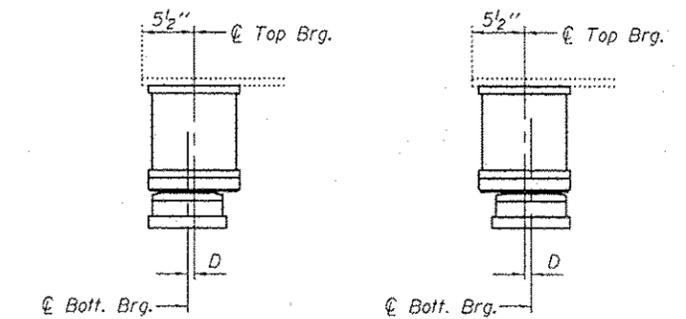


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



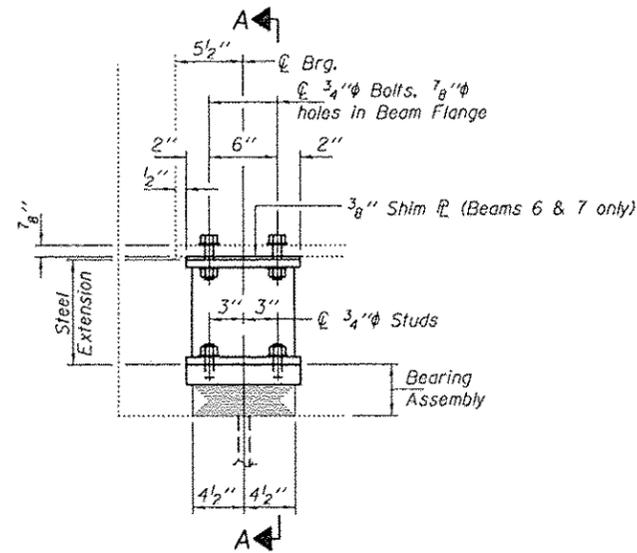
SETTING ANCHOR BOLTS AT EXP. BRG.

D = 1/8" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

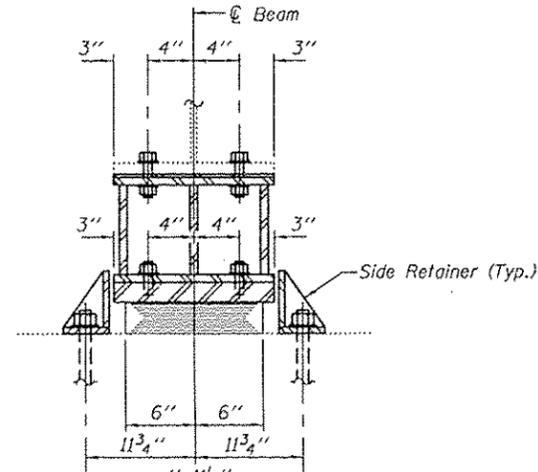
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type II	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1650
Anchor Bolts 1"φ	Each	24

TYII/REPS 12-03-2008



ELEVATION AT ABUTMENT



SECTION A-A

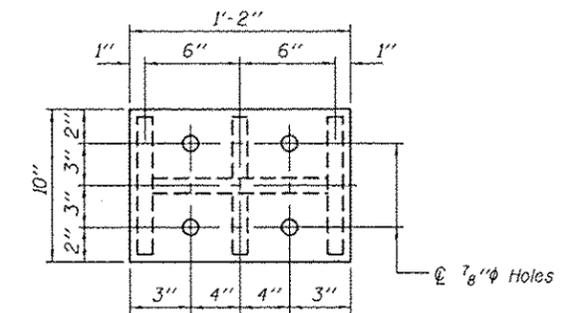
1" x 12" Anchor Bolts (Gr. 36) with 2 1/4" x 2 1/4" x 5/16" Washer under nut.

TYPE I ELASTOMERIC EXP. BRG.

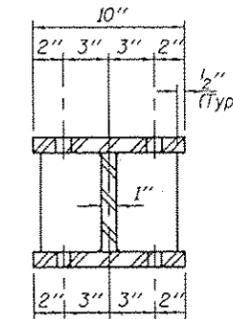
BEAM REACTIONS

RP	(K)	39.2
RL	(K)	41.6
Imp.	(K)	10.4
R (Total)	(K)	91.2

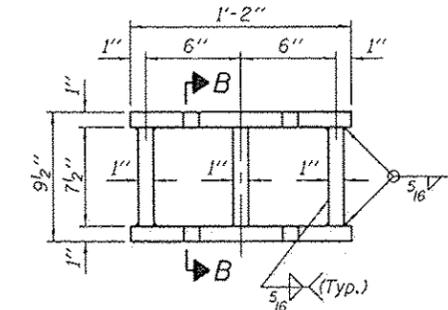
Notes:
 Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.
 New steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.
 Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Min. Jack capacity = 50 Tons.
 Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.
 Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.
 Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.



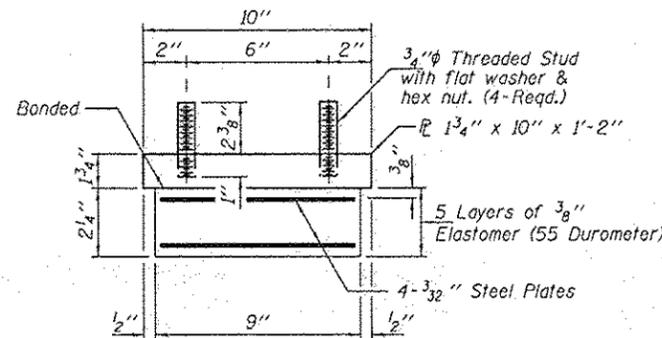
PLAN TOP AND BOTTOM PLATE



SECTION B-B

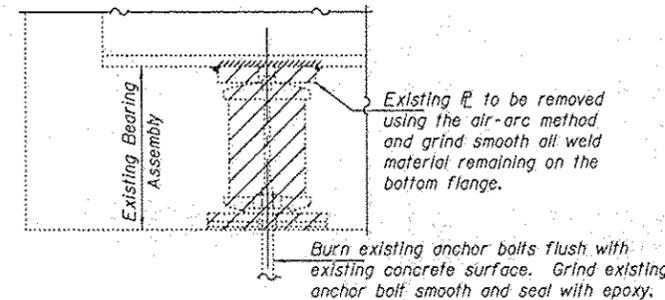


STEEL EXTENSION DETAIL



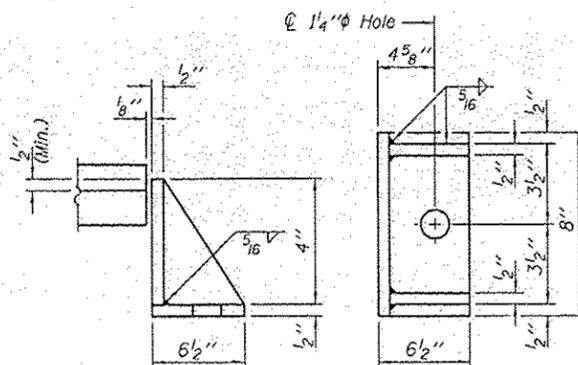
BEARING ASSEMBLY

Note:
 Shim plates shall not be placed under Bearing Assembly.



EXISTING BEARING REMOVAL DETAIL

Cost Included with Jack and Remove Existing Bearings.



SIDE RETAINER

Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly Type I	Each	12
Jack and Remove Existing Bearings	Each	12
Furnishing and Erecting Structural Steel	Pound	1950
Anchor Bolts 1" x 12"	Each	24

TYI/REPS 12-03-2008

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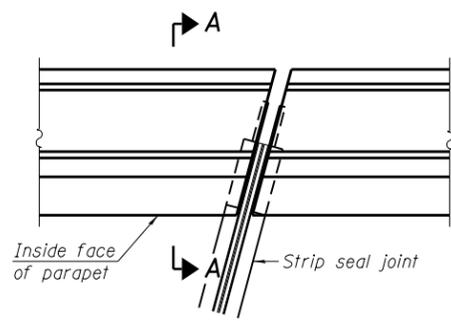
EXAMINED Timothy A. Anich DATE - MAY 6, 2013
 ACTING ENGINEER OF STRUCTURAL SERVICES
 PASSED Carl Perry
 ACTING ENGINEER OF BRIDGES AND STRUCTURES

STATE OF ILLINOIS
 DEPARTMENT OF TRANSPORTATION

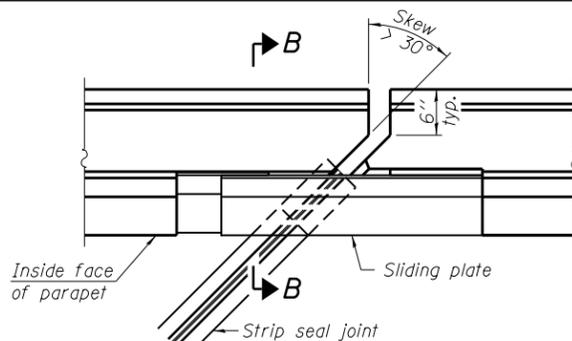
N. ABUTMENT BEARING REPLACEMENT DETAILS
 SN 058-0055

SHEET NO. 11 OF 14 SHEETS

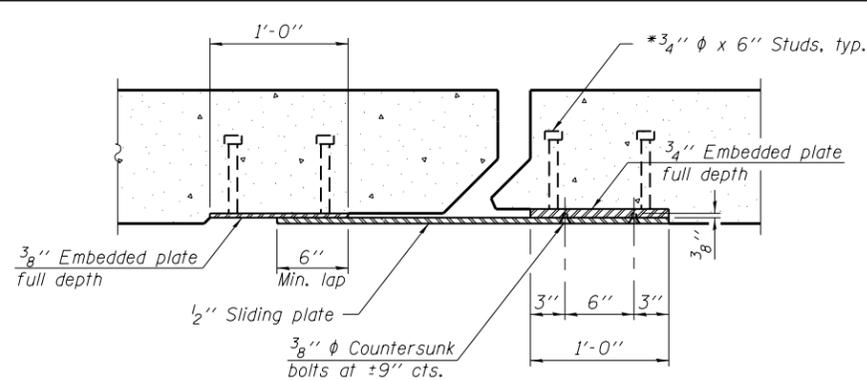
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07 Bridge Repairs 2014-2	MACON	29	26
			CONTRACT NO. 74601	
ILLINOIS FED. AID PROJECT				



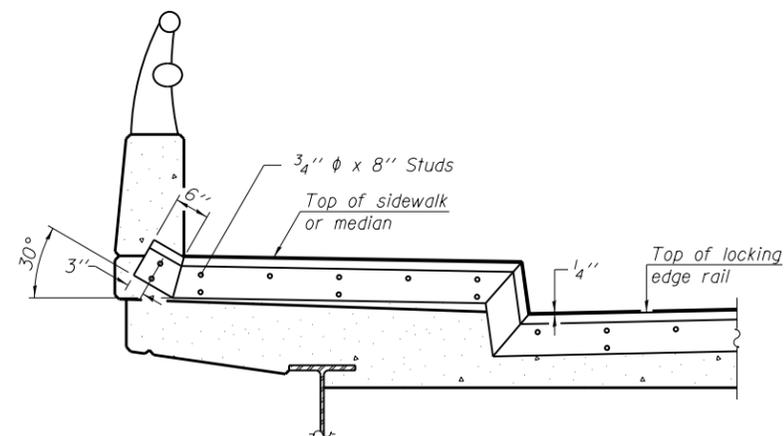
PLAN
(For skews $\leq 30^\circ$)



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

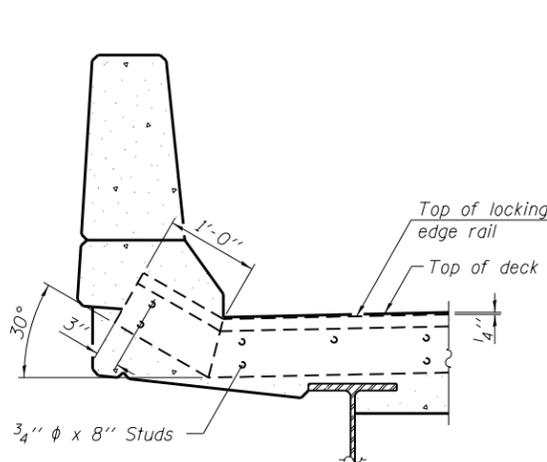


SECTION C-C

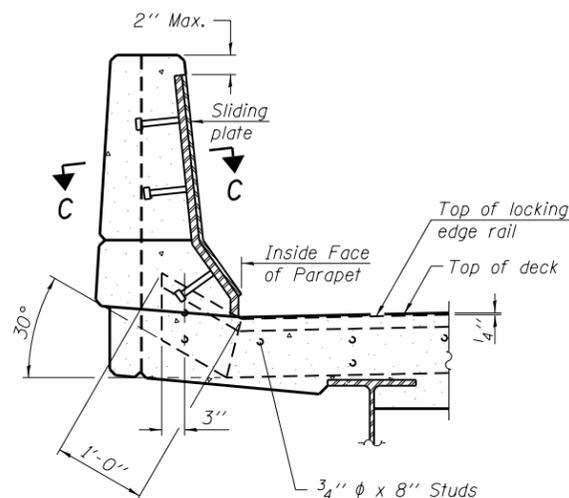


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

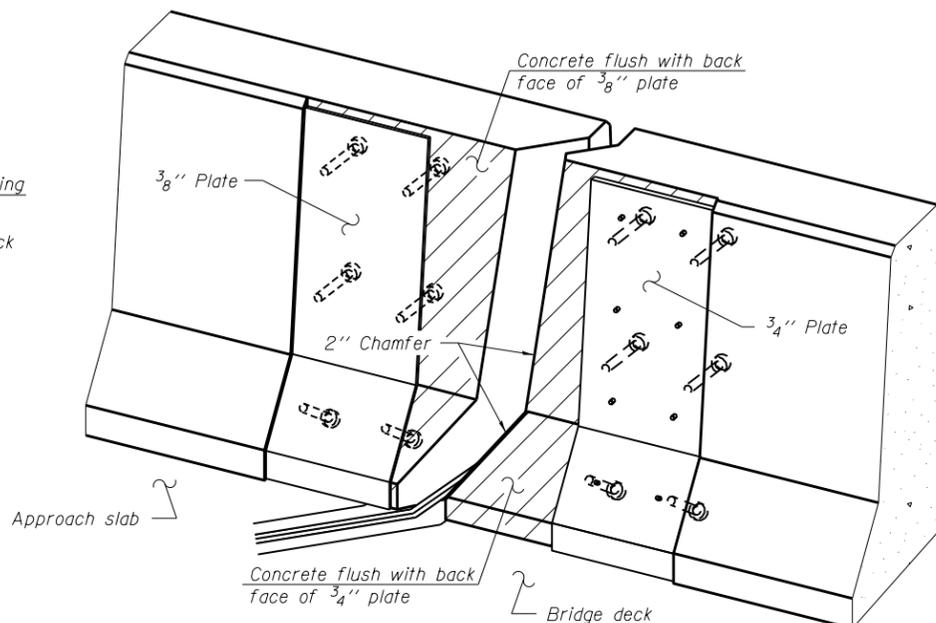
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



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.

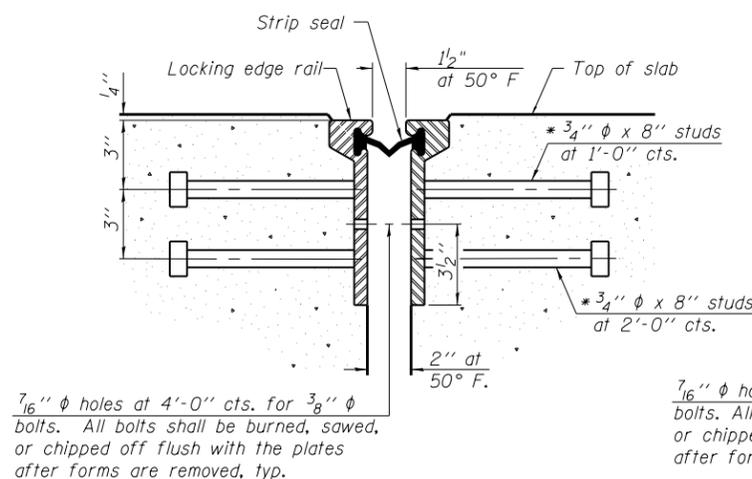
The manufacturer's recommended installation methods shall be followed.

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.

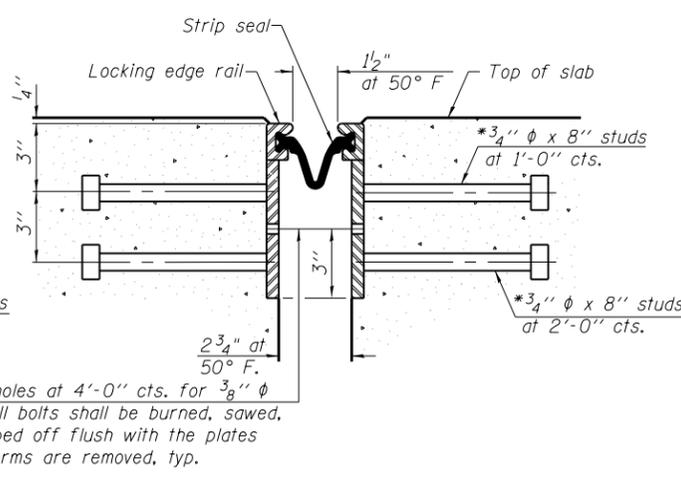
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

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

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	168

EJ-SSJ

1-27-12

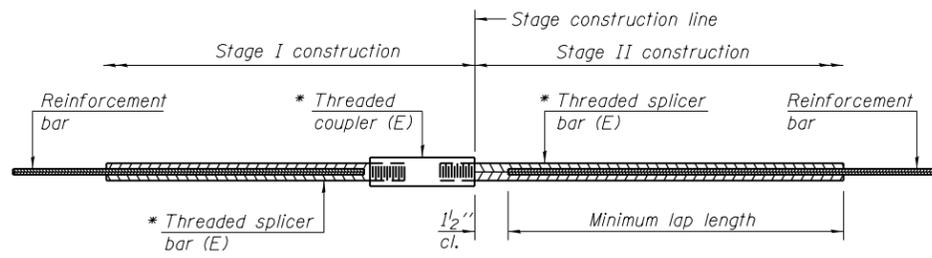
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ei:\pwwork\pwwork\teasleyck\d0312934\074601-sht-brdetails.dgn		DRAWN - DFZ	REVISED -
Default	PLOT SCALE = 48.0000' / in.	CHECKED - MJM	REVISED -
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PREFORMED JOINT STRIP SEAL
STRUCTURE NO. 058-0055

SCALE: SHEET 12 OF 14 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
320	07 Bridge Repairs 2014-2	MACON	29	27
CONTRACT NO. 74601			ILLINOIS FED. AID PROJECT	



STANDARD BAR SPLICER ASSEMBLY

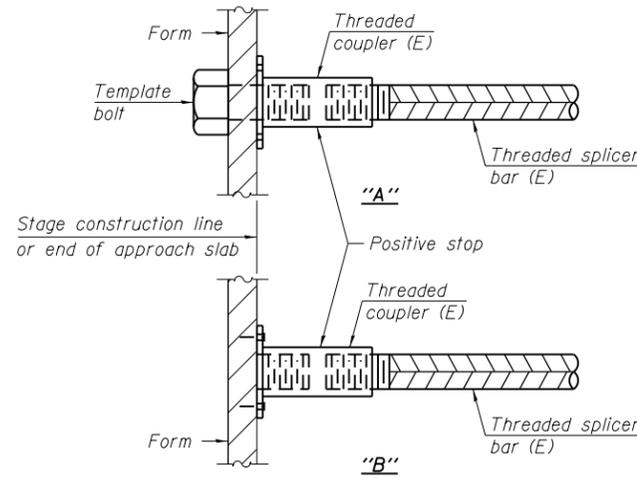
Bar size to be spliced	Minimum Lap Lengths					
	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"	6'-5"	6'-10"	7'-9"	8'-7"	9'-8"

- Table 1: Black bar, 0.8 Class C
- Table 2: Black bar, Top bar lap, 0.8 Class C
- Table 3: Epoxy bar, 0.8 Class C
- Table 4: Epoxy bar, Top bar lap, 0.8 Class C
- Table 5: Epoxy bar, Class C
- Table 6: Epoxy bar, Top bar top, Class C

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

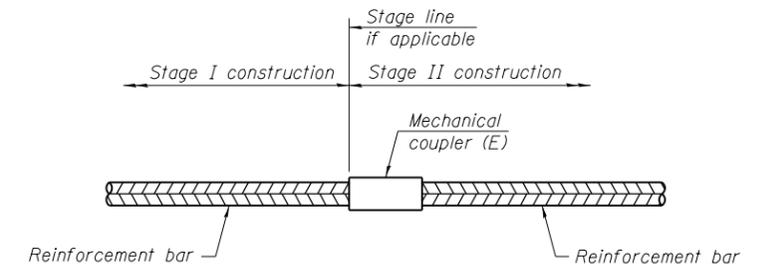
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
058-0055	#6	24	Table 3



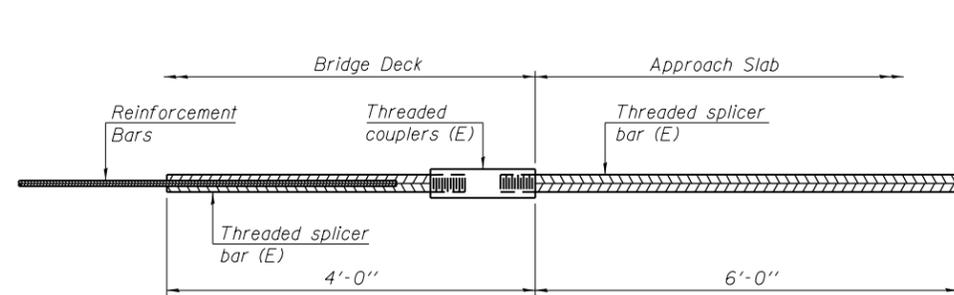
INSTALLATION AND SETTING METHODS

- "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.



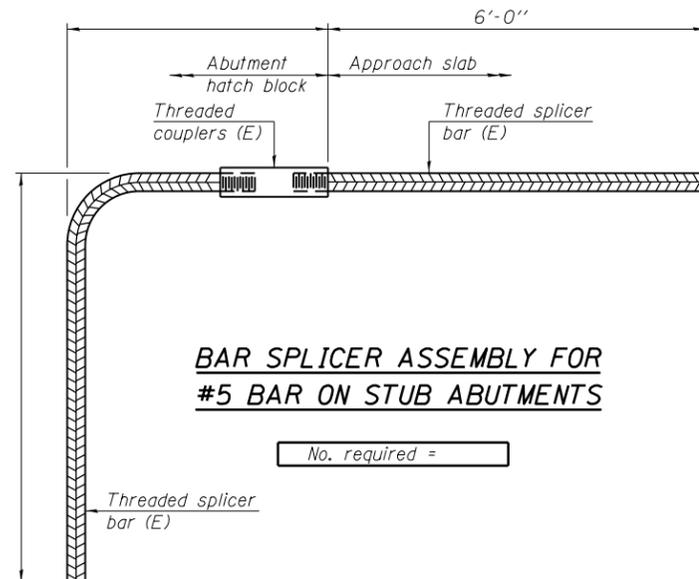
STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required



BAR SPLICER ASSEMBLY FOR #5 BAR ON INTEGRAL OR SEMI-INTEGRAL ABUTMENTS

No. required =



BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS

No. required =

NOTES

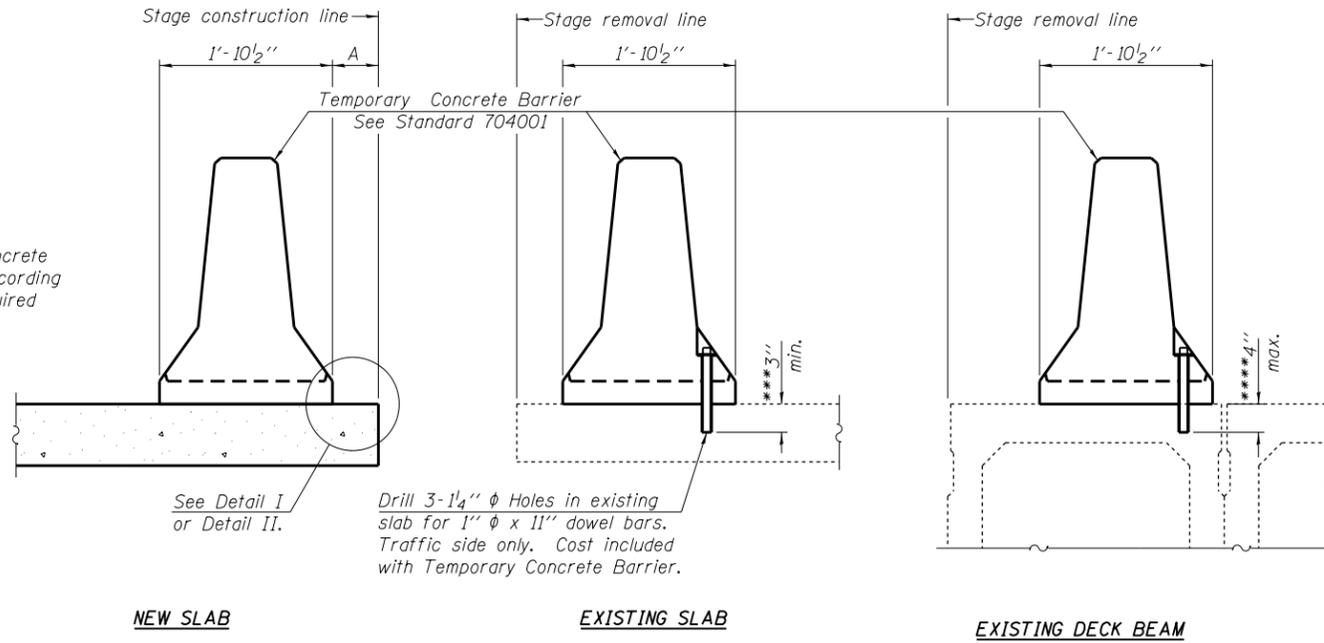
- Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.
- All reinforcement shall be lapped and tied to the splicer bars.
- Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1

1-27-12

FILE NAME =	USER NAME = teasleyck	DESIGNED - DFZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS STRUCTURE NO. 058-0055	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\p\idot\teasleyck\d0312934\07	4601-sht-brdetails.dgn	DRAWN - DFZ	REVISED -			320	07 Bridge Repairs 2014-2	MACON	29	28
Default	PLOT SCALE = 48.0000' / in.	CHECKED - MJM	REVISED -			CONTRACT NO. 74601			ILLINOIS FED. AID PROJECT	
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -			SCALE:	SHEET 13	OF 14 SHEETS	STA.	TO STA.

When "A" is 3'-6" or less, the temporary concrete barrier shall be anchored to the new slab according to Detail I or Detail II. No anchorage is required when "A" is greater than 3'-6".



SECTIONS THRU SLAB OR DECK BEAM

NOTES

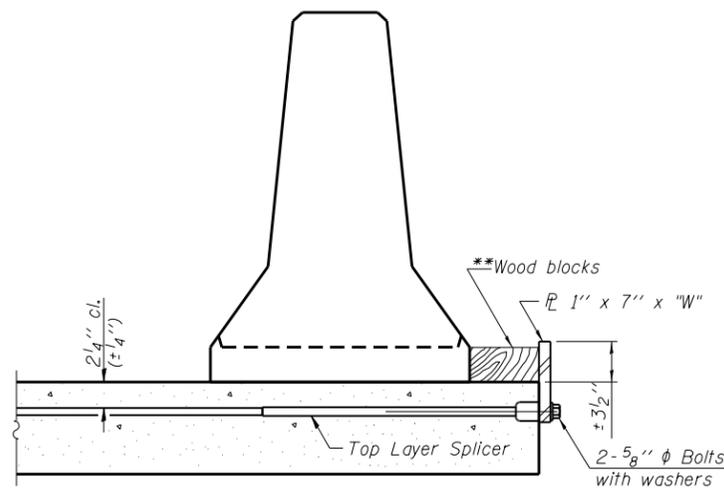
Detail I - With Bar Splicer or Couplers:
Connect one (1) 1" x 7" x "W" steel PL to the top layer of couplers with 2-5/8" φ bolts screwed to coupler at approximate C of each barrier panel.

Detail II - With Extended Reinforcement Bars:
Connect one (1) 1" x 7" x "W" steel PL 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 C of each barrier panel.

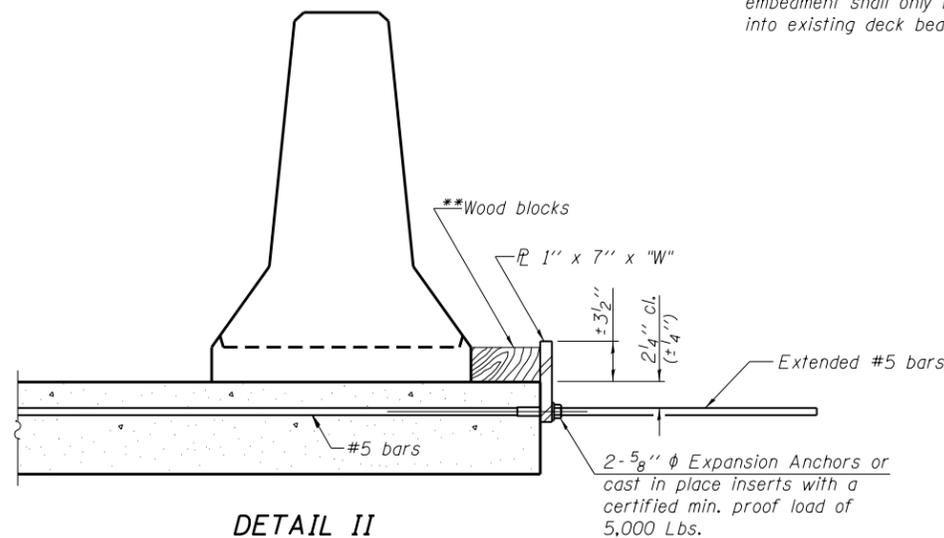
Cost of anchorage is included with Temporary Concrete Barrier. The 1" x 7" x "W" plate shall not be removed until stage II construction forms and all reinforcement bars are in place and the concrete is ready to be placed.

*** 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.

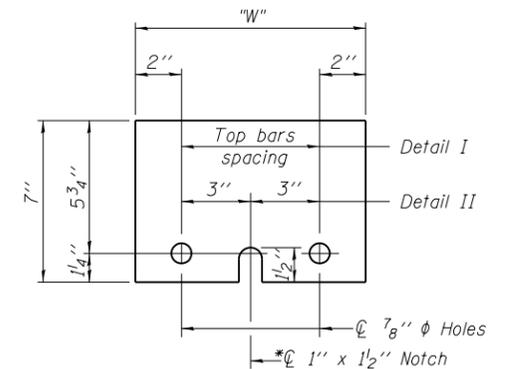
**** If existing deck beam is to remain in place after stage construction, embedment shall only be into wearing surface and not into existing deck beam concrete.



DETAIL I



DETAIL II



STEEL RETAINER PL 1" x 7" x "W"

* Required only with Detail II

** 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.

"W" = Top bars spacing + 4"

R-27 7-1-10

FILE NAME =	USER NAME = teasleyck	DESIGNED - DFZ	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 058-0055	F.A.P. RE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ci:\pw\work\p\dot\teasleyck\d0312934\0774601-sht-brdetails.dgn	DRAWN - DFZ	REVISED -	320			07 Bridge Repairs 2014-2	MACON	29	29	
Default	PLOT SCALE = 48.0000' / in.	CHECKED - MJM	REVISED -			CONTRACT NO. 74601				
	PLOT DATE = 4/8/2013	DATE - 2/20/2013	REVISED -			ILLINOIS FED. AID PROJECT				