11-04-2016 LETTING ITEM 063

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	07 BRIDGE REPAIRS 2017-2	RICHLAND	28	1
	ILLINOIS	CONTRACT NO. 74708		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

D-97-013-15

FOR INDEX OF SHEETS, SEE SHEET NO. 2

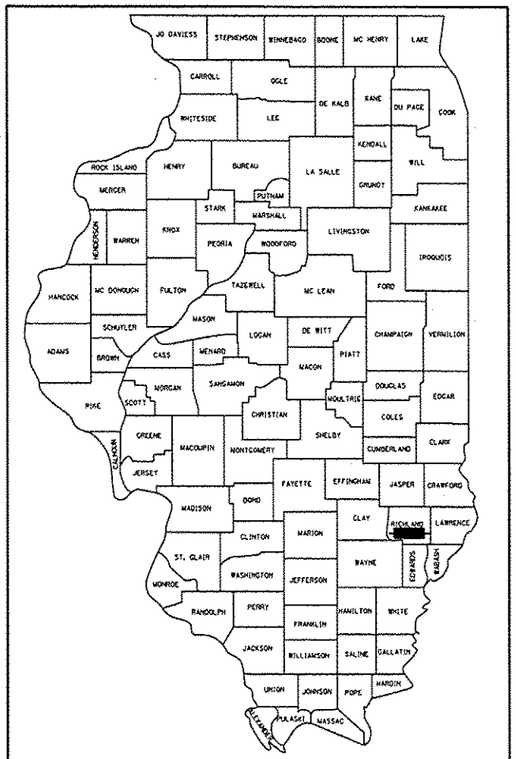
ADT = 4750 VEH /DAY (2015)

PROPOSED
HIGHWAY PLANS

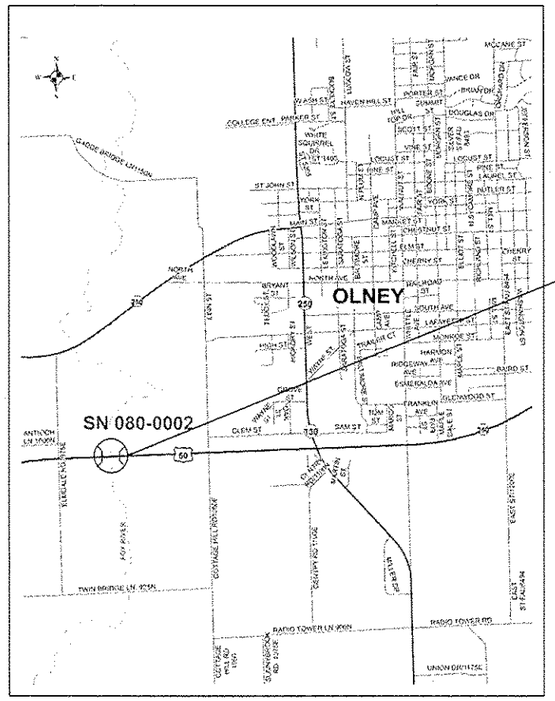
FAP ROUTE 327 (US 50)
SECTION D7 BRIDGE REPAIRS 2017-2

BRIDGE REPAIR
RICHLAND COUNTY

C-97-019-15



LOCATION OF SECTION INDICATED THUS: –



GROSS LENGTH = 1000 FT. = 0.19 MILE
NET LENGTH = 1000 FT. = 0.19 MILE

100' 200' 300' — 1" = 100'
0 10' 20' 30' — 1" = 10'
0 50' 100' — 1" = 50'
0 50' 100' — 1" = 40'
0 50' 100' — 1" = 30'
0 50' 100' — 1" = 20'

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: TOM RONAN
PROJECT MANAGER: ROSS BIERMAN

CONTRACT NO. 74708

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED August 17 20 16
Jeffrey M South/COS
REGIONAL ENGINEER
Sept 30 20 16
Maureen M. Addis, P.E. for
acting ENGINEER OF DESIGN AND ENVIRONMENT
Sept 30 20 16
DIRECTOR OF PROGRAM DEVELOPMENT

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

INDEX OF SHEETS

SHEET NO.	ITEM
1	COVER SHEET
2	INDEX OF SHEETS AND GENERAL NOTES
3-4	SUMMARY OF QUANTITIES
5	CORE INFORMATION
6	SCHEDULE OF QUANTITIES
7	TYPICAL CROSS SECTIONS
8	STAGE I TRAFFIC CONTROL
9	STAGE II TRAFFIC CONTROL
10-24	STRUCTURE REPAIR PLANS
25-28	PAVEMENT MARKING DETAILS

THE FOLLOWING STANDARDS ARE A PART OF THESE PLANS AND ARE INCLUDED AFTER SHEET NO. 28:

STD. NO.	DESCRIPTION
000001-06	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
420701-03	PAVEMENT WELDED WIRE REINFORCEMENT
701001-02	OFF-ROAD OPERATIONS, 2L2W, 15' MINIMUM AWAY FROM PAVEMENT EDGE
701006-05	OFF-ROAD OPERATIONS, 2L2W, 15' AWAY TO EDGE OF PAVEMENT
701011-04	OFF-ROAD MOVING OPERATION, 2L2W, DAY ONLY
701201-04	LANE CLOSURE, 2L2W, DAY ONLY
701301-04	LANE CLOSURE, 2L2W, SHORT TIME OPERATIONS
701901-05	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER
780001-05	TYPICAL PAVEMENT MARKINGS
781001-04	TYPICAL APPLICATION RAISED REFLECTIVE PAVEMENT MARKERS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701321-15	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR WITH BARRIER
701326-04	LANE CLOSURE, 2L, 2W, PAVEMENT WIDENING, FOR SPEEDS GREATER THAN OR EQUAL TO 45 MPH

GENERAL NOTES

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS; THE "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" ADOPTED APRIL 1, 2016; THE "SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS" ADOPTED APRIL 1, 2016; AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPOSAL.

THE WORK INCLUDED IN SECTION D7 BRIDGE REPAIRS 2017-2 CONSISTS OF THE REMOVAL AND REPLACEMENT OF EXISTING EXPANSION JOINTS, PCC WEARING SURFACE, BEARINGS, NEW ABUTMENT BACKWALL, DECK DRAINS, PAVMENT MARKINGS, TRAFFIC CONTROL, AND ANY OTHER WORK NECESSARY TO COMPLETE THIS SECTION. THE WORK SHALL BE COMPLETED UTILIZING STAGE CONCTRUCTION WITH TEMPORARY TRAFFIC SIGNALS. STRUCTURE NUMBER 080-0002, CARRIES US ROUTE 50 OVER THE FOX RIVER AND IS LOCATED APPROXIMATELY 1 MILE WEST OF ILLINOIS ROUTE 130 IN RICHLAND COUNTY.

PLAN DIMENSIONS AND DETAILS RELATIVE TO THE EXISTING STRUCTURE HAVE BEEN TAKEN FROM EXISTING PLANS AND ARE SUBJECT TO NOMINAL CONSTRUCTION VARIATIONS. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO VERIFY DIMENSIONS AND DETAILS IN THE FIELD AND MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR ORDERING OF MATERIAL. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION FOR A CHANGE IN THE SCOPE OF THE WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY FURNISHED AT THE UNIT PRICE BID FOR THE WORK.

GENERAL NOTES (CONT' D)

THE EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH STAGE I & II OF STANDARD 701321 SHALL BE REMOVED. THE REMOVED MARKINGS WILL BE PAID FOR AS PAVEMENT MARKING REMOVAL.

PAINT PAVEMENT MARKING LINE - 4" SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS, AS SHOWN IN THE PLANS, AND AS DETERMINED BY THE ENGINEER. THE TOTAL QUANTITY CALCULATED CONSISTS OF 368 FEET OF YELLOW AND 1288 FEET OF WHITE.

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 781 OF THE STANDARD SPECIFICATIONS. THE TOTAL QUANTITY OF RAISED REFLECTIVE PAVEMENT MARKERS CONSISTS OF 10 TWO-WAY AMBER MARKERS.

THE CONTRACTOR SHALL PROVIDE INTERNET ACCESSIBILITY TO THE HOT-MIX ASPHALT PLANT QUALITY CONTROL LAB SO THAT HOT-MIX ASPHALT PLANT REPORTS CAN BE E-MAILED TO THE DISTRICT HEADQUARTERS. THIS WORK SHALL BE INCLUDED IN THE COST OF ALL HOT-MIX ASPHALT ITEMS.

THE BITUMINOUS MATERIALS (TACK COAT)SHALL BE DONE IN ACCORDANCE WITH SECTION 406 OF THE STANDARD SPECIFICATIONS. THE COST TO DO THIS WORK SHALL BE INCLUDED IN THE PRICE OF THE HMA SURFACE COURSE.

A UNIFORMLY STRAIGHT SAW CUT SHALL BE MADE AT LOCATIONS WHERE PROPOSED NEW CONSTRUCTION WILL ABUT EXISTING HOT-MIX ASPHALT SURFACES. THE SAW CUT SHALL BE MADE FULL DEPTH THROUGH THE EXISTING SURFACE. THIS WORK WILL BE CONSIDERED INCLUDED IN THE COST OF THE CONTRACT ITEMS INVOLVED AND NO EXTRA COMPENSATION WILL BE ALLOWED.

THE PAY ITEM TEMPORARY RAMP HAS BEEN INCLUDED FOR THE CONSTRUCTION OF TEMPORARY RAMPS IN ACCORDANCE WITH ARTICLE 406.08 OF THE STANDARD SPECIFICATIONS. THE COST SHALL INCLUDE BOTH THE INSTALLATION AND THE REMOVAL OF THE TEMPORARY RAMPS.

THE EXISTING PAVED SHOULDER THAT WILL BE REMOVED HAS BEEN CORED FOR THICKNESS AND THE RESULTSARE ON PAGE 5.

SYTHETIC FIBERS SHALL BE ADDED TO THE BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY. SEE SPECIAL PROVISIONS

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT:

SURFACE COURSE (1.5")

APPLICATION:	HOT-MIX ASPHALT SURFACE COURSE, MIX "D" N90
PG GRADE:	PG 64-22
DESIGN AIR VOIDS:	4.0% @ NDESIGN = 90
MIXTURE COMPOSITION:	IL-9.5
FRICTION AGGREGATE:	MIXTURE D

THE FOLLOWING RATES OF APPLICATION HAVE BEEN USED IN THE CALCULATING PLAN QUANTITIES:

AGGREGATE SHOULDERS	2.05 TONS/CU. YD.
BITUMINOUS MATERIALS (TACK COAT)	0.05 LBS./SQ. FT.
HOT-MIX ASPHALT	112 LBS./SQ. YD/INCH

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS AND GENERAL NOTES

SCALE: N/A | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	-	RICHLAND	28	2
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			

100% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0014		
20300100	CHANNEL EXCAVATION	CU YD	520	520		
20700110	POROUS GRANULAR EMBANKMENT	TON	64.4	64.4		
28100809	STONE DUMPED RIPRAP, CLASS A5	TON	780	780		
35400500	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING 10"	SQ YD	232	232		
40600990	TEMPORARY RAMP	SQ YD	70	70		
40603345	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90	TON	10	10		
42000060	WELDED WIRE REINFORCEMENT	SQ YD	232	232		
44000155	HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2"	SQ YD	100	100		
44004250	PAVED SHOULDER REMOVAL	SQ YD	232	232		
50102400	CONCRETE REMOVAL	CU YD	34.1	34.1		
50200100	STRUCTURE EXCAVATION	CU YD	31.4	31.4		
50300100	FLOOR DRAINS	EACH	42	42		
50300225	CONCRETE STRUCTURES	CU YD	10	10		

100% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0014		
50300255	CONCRETE SUPERSTRUCTURE	CU YD	24.9	24.9		
50300260	BRIDGE DECK GROOVING	SQ YD	844	844		
50300300	PROTECTIVE COAT	SQ YD	25	25		
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	2930	2930		
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	5680	5680		
50800515	BAR SPLICERS	EACH	58	58		
50800530	MECHANICAL SPLICERS	EACH	84	84		
52000110	PREFORMED JOINT STRIP SEAL	FOOT	75	75		
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	12	12		
52100520	ANCHOR BOLTS, 1"	EACH	24	24		
52200010	TEMPORARY SHEET PILING	SQ FT	110	110		
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4		
67100100	MOBILIZATION	L SUM	1	1		
70100405	TRAFFIC CONTROL AND PROTECTION, STANDARD 701321	EACH	1	1		

13

19

*D7 BRIDGE REPAIRS 2017-2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	*	RICHLAND	28	3
		CONTRACT NO. 74708		
	ILLINOIS	FED. AID PROJECT		

100% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0014		
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD	L SUM	1	1		
	701201					
70100500	TRAFFIC CONTROL AND PROTECTION, STANDARD	LSUM	1	1		
	701326					
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5		
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1		
70300100	SHORT TERM PAVEMENT MARKING	FOOT	110	110		
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	37	37		
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2475	2475		
70400100	TEMPORARY CONCRETE BARRIER	FOOT	562.5	562.5		
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	562.5	562.5		
70600250	IMPACT ATTENUATORS, TEMPORARY (NON-	EACH	2	2		
	REDIRECTIVE), TEST LEVEL 3					
70600350	IMPACT ATTENUATORS, RELOCATE (NON-	EACH	2	2		
	REDIRECTIVE), TEST LEVEL 3					
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2475	2475		

100% STATE

SUMMARY OF QUANTITIES

CODE NO	ITEM	UNIT	TOTAL QUANTITIES	CONSTRUCTION TYPE CODE 0014		
* 78100105	RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE)	EACH	5	5		
X0327979	PAVEMENT MARKING REMOVAL - GRINDING	SQ FT	825	825		
X7015005	CHANGEABLE MESSAGE SIGN	CAL DA	28	28		
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	6	6		
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	12	12		
Z0001903	STRUCTURAL STEEL REMOVAL	POUND	1400	1400		
Z0005010	HOT-MIX ASPHALT FOR PATCHING POTHOLES (COLD MIX)	TON	1	1		
Z0012110	BRIDGE DECK FLY ASH OR GGBF SLAG CONCRETE OVERLAY, 2 1/4"	SQ YD	889	889		
Z0012142	BRIDGE DECK SCARIFICATION 2 1/4"	SQ YD	889	889		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	383	383		
Z0015802	PLUG EXISTING DECK DRAINS	EACH	12	12		
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	18	18		
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	31	31		

12

15

* SPECIALTY ITEM

*D7 BRIDGE REPAIRS 2017-2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	*	RICHLAND	28	4
		CONTRACT NO. 74708		
		ILLINOIS FED. AID PROJECT		

SHOULDER CORES - FOR INFORMATION ONLY

Illinois Department of Transportation

Core Drill Report
Investigative Cores for Highway design

Sheet of sheets

District 7

County: Richland

Section: D7 Bridge Repairs 2017-2

Route: US 50

District: 7
Contract No.:74708
Job No.:

Project : US 50 over Fox River

Customer: _____

Dates _____ to _____

City _____ Route or Street location US 50 over Fox River

Core	Date Cored	Station/Description	Offset	Thickness of Core Material Type Encountered	Core Physical Condition
1	4/14	190' E of E Abut WB	13.5' N	6" Asphalt	Good
2	4/14	60' E of E Abut WB	13' N	2" Asphalt 8.5" Conc	Good
3	4/14	143' W of W Abut	12.5' N	2.5" Asphalt 8" Conc	Good
4	4/14	192' W of WAbut	13' S	6 ½" Asphalt	Good
5	4/14	87' W of W Abut	13' S	2 ¾" Asphalt 7 ½"Conc	Good
6	4/14	72' E of EAbut	13' S	3.5" Asphalt 8" Conc	Good

Core Drill Operator/Supervisor: Eric Sandschafer

S: drill rig/coring/investigative core drill report.doc

*D7 BRIDGE REPAIRS 2017-2

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		DRAWN -	REVISED -					327	*	RICHLAND	28	5
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PAVING SCHEDULE

	STATION	TO	STATION	HOTMIX ASPHALT SURFACE COURSE, MIX C, N50 TON	HOT MIX ASPHALT SURFACE REMOVAL 1 1/2" SQ YD	TEMPORARY RAMP SQ YD
	STA 827+87	TO	STA 828+02	4.5	50.0	33.3
	STA 830+87	TO	STA 831+02	4.5	50.0	33.3
			TOTAL:	9	100	68

PAVEMENT MARKING SCHEDULE

STATION	TO	STATION	PAINT PAVEMENT MARKING - LINE 4" FOOT	PAVEMENT MARKING REMOVAL SQ FT	TEMPORARY PAVEMENT MARKING LINE 4" FOOT	SHORT TERM PAVEMENT MARKING FOOT	SHORT TERM PAVEMENT MARKING REMOVAL SQ FT
S.N. 080-0002			2475	825	2475	110	37
824+00	TO	835+00					

WIDENING SCHEDULE

STATION	TO	STATION	LOCATION CORNER	PORTLAND CEMENT CONCRETE BASE COURSE WIDENING, 10" SQ YD	WELDED WIRE REINFORCEMENT SQ YD	PAVED SHOULDER REMOVAL SQ YD
S.N. 080-0002						
830+87	TO	832+66	NE	59.7	59.7	59.7
826+44	TO	828+13	NW	56.3	56.3	56.3
830+87	TO	832+60	SE	59.7	59.7	59.7
826+44	TO	828+13	SW	56.3	56.3	56.3
		TOTAL:		232	232	232

TRAFFIC CONTROL DEVICES

LOCATION	TEMPORARY CONCRETE BARRIER FOOT	RELOCATE TEMPORARY CONCRETE BARRIER FOOT	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 EACH	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3 EACH
S.N. 080-0002				
826+63 TO 832+19	562.5	562.5	2.0	2.0

•D7 BRIDGE REPAIRS 2017-2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

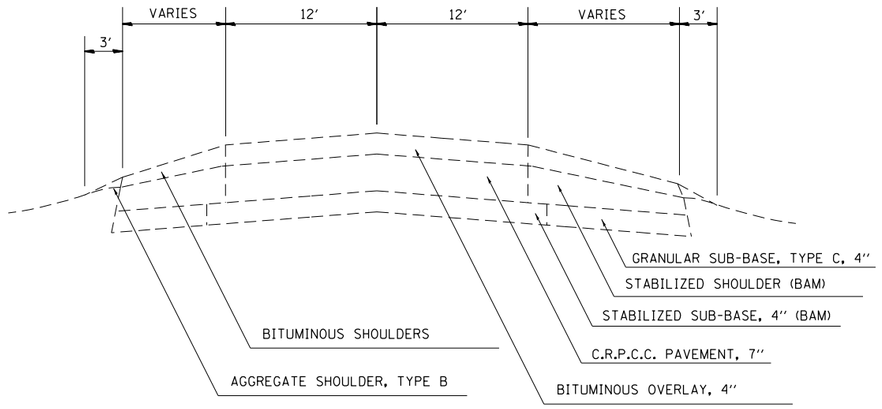
SCHEDULE OF QUANTITIES

SCALE: N/A | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	•	RICHLAND	28	6
		CONTRACT NO. 74708		
		ILLINOIS FED. AID PROJECT		

EXISTING TYPICAL CROSS SECTION

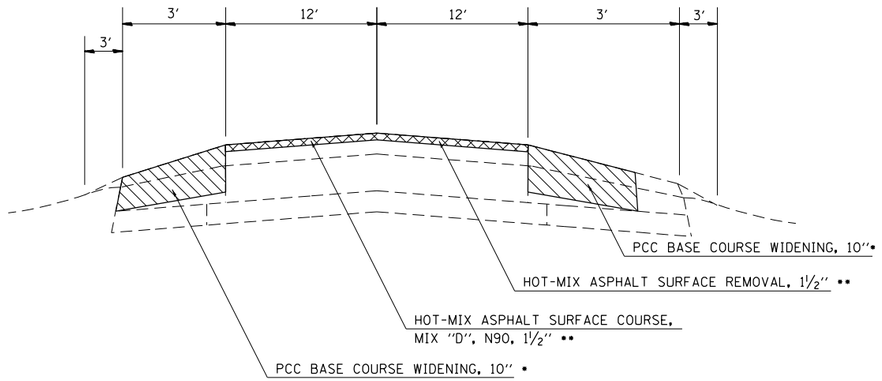
U.S. ROUTE 50
STA 824+85 TO STA 828+13
BRIDGE OMISSION STA. 828+13 TO STA. 830+87
STA 830+87 TO STA 834+77



NOTE: NOT TO SCALE

PROPOSED TYPICAL CROSS SECTION

U.S. ROUTE 50
STA 824+85 TO STA 828+13
BRIDGE OMISSION STA. 828+13 TO STA. 830+87
STA 830+87 TO STA 834+77



••HOT-MIX ASPHALT SURFACE REMOVAL, 1 1/2″
HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N90, 1 1/2″
STA 827+87 TO STA 828+02
STA 830+87 TO STA 831+02

•PCC BASE COURSE WIDENING, 10″
STA 826+44 TO STA 828+13
STA 830+87 TO STA 832+66

NOTE: NOT TO SCALE

•D7 BRIDGE REPAIRS 2017-2

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

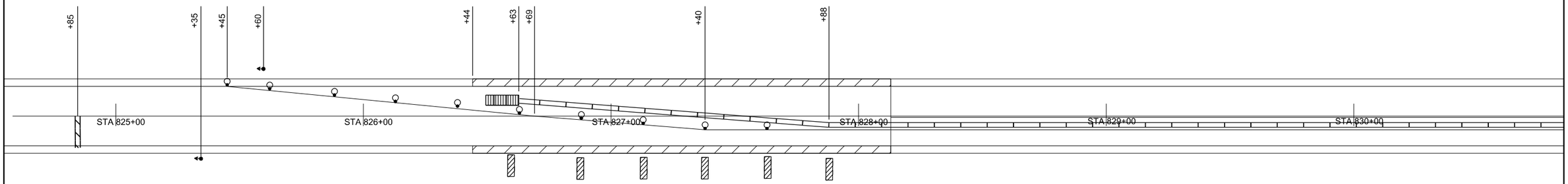
TYPICAL CROSS SECTIONS

SCALE: N/A | SHEET 1 OF 1 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	•	RICHLAND	28	7

CONTRACT NO. 74708

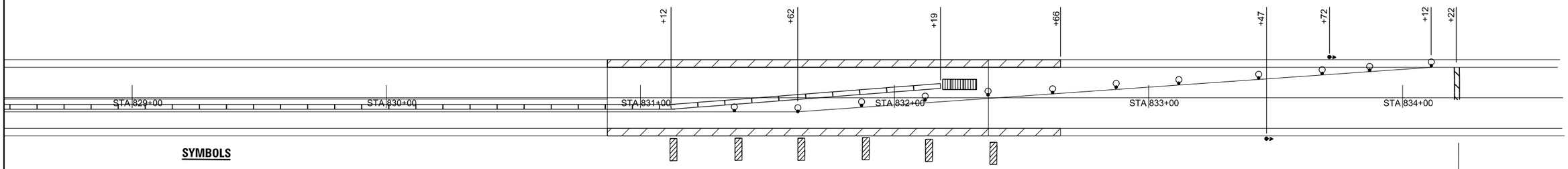
ILLINOIS FED. AID PROJECT



SET TRAFFIC CONTROL ACCORDING

TO STANDARD 701321

•TEMPORARY CONCRETE BARRIER WALL SHALL BE PINNED ON TRAFFIC SIDE AT EACH APPROACH OF BRIDGE



SYMBOLS

- BASE COURSE WIDENING
- Type III barricade
- Traffic signal
- Drum with steady burning bi-directional light
- Impact attenuator
- Temporary concrete barrier
- Double vertical panel

SET TRAFFIC CONTROL ACCORDING

TO STANDARD 701321

•D7 BRIDGE REPAIRS 2017-2

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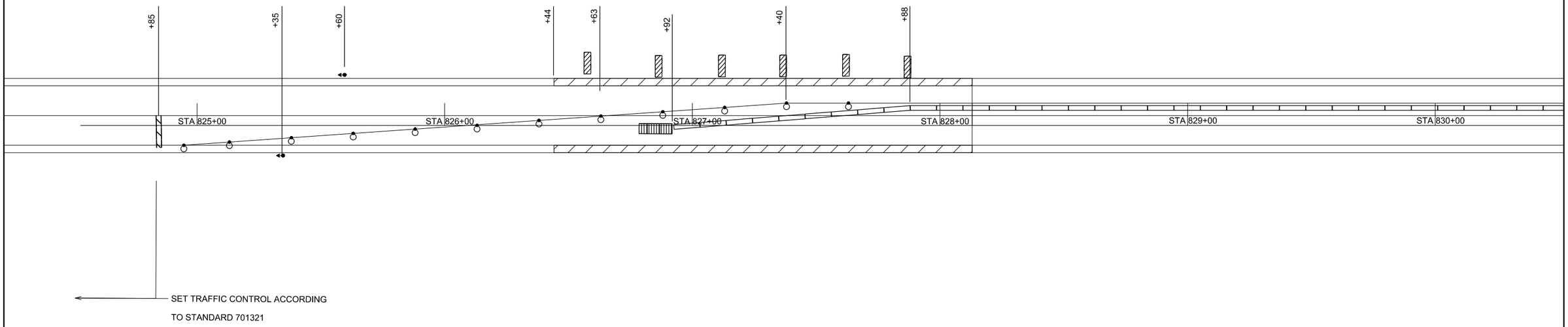
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

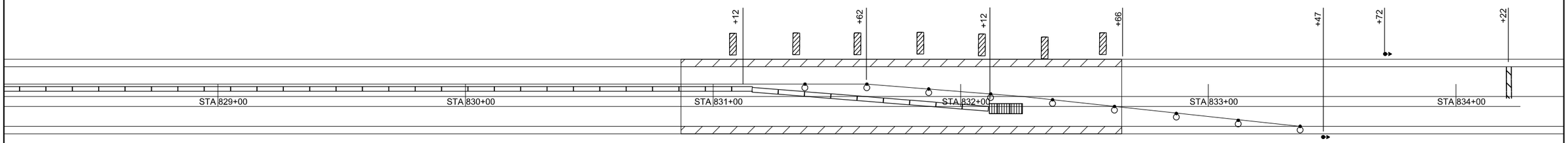
STAGE 1 TRAFFIC CONTROL

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	•	RICHLAND	28	8
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			



•TEMPORARY CONCRETE BARRIER WALL SHALL BE PINNED ON TRAFFIC SIDE AT EACH APPROACH OF BRIDGE



SYMBOLS

- BASE COURSE WIDENING
- Type III barricade
- Traffic signal
- Drum with steady burning bi-directional light
- Impact attenuator
- Temporary concrete barrier
- Double vertical panel

SET TRAFFIC CONTROL ACCORDING TO STANDARD 701321

•D7 BRIDGE REPAIRS 2017-2

FILE NAME = pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 7\Projects\74708\Drawings\CADsheets\D774708-sht-plan.dgn Default	USER NAME = steffenmk	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = 40.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/24/2016	DATE -	REVISED -

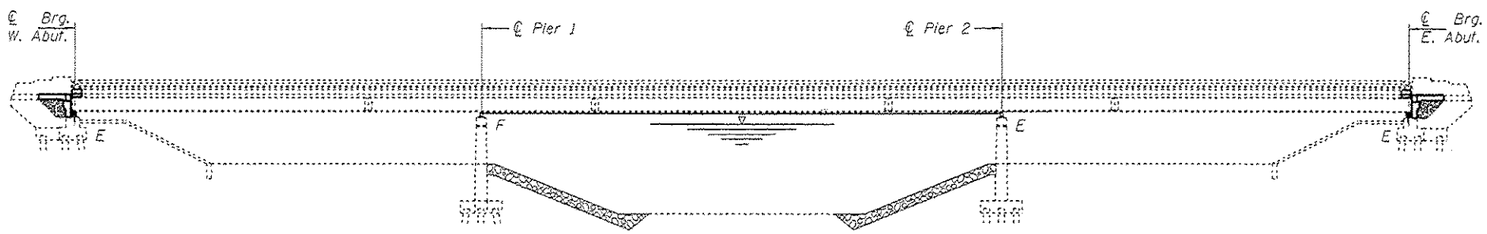
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STAGE 2 TRAFFIC CONTROL

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

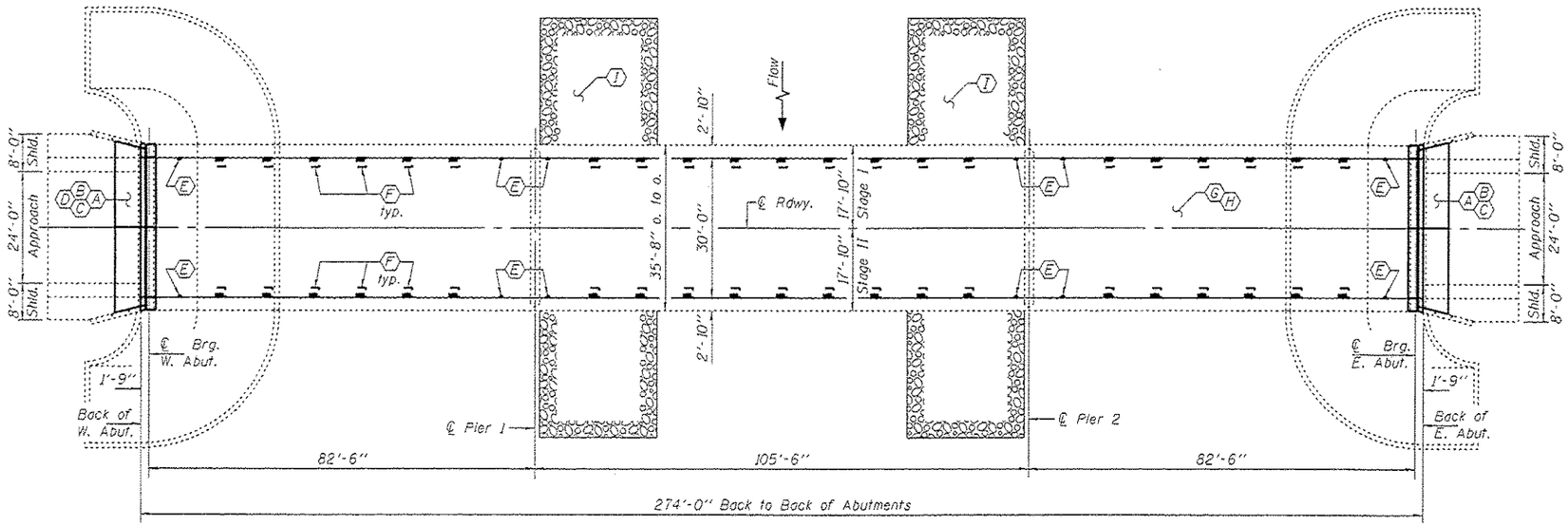
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	•	RICHLAND	28	9
		CONTRACT NO. 74708		
		ILLINOIS FED. AID PROJECT		

The existing three span WF steel girder structure was constructed in 1960 as FA Route 13 Section 6-2B-4 at Sta. 829+50. S.N. 080-0002 carries FAP 327 (US Route 50) over the Fox River. The proposed project consists of new expansion joints, new abutment backwalls and approaches, new bearings, new west abutment end diaphragms, new floor drains, bridge deck scarification, a new concrete overlay, bridge deck repair, and rip rap placement on channel banks.



ELEVATION

N



PLAN

Ⓐ - Remove Existing Expansion Joint and Install Preformed Joint Strip Seal.

Ⓑ - Remove & Replace Abutment Backwall and part of Approach. (See sheets 5, 6 & 7 of 15).

Ⓒ - Remove & Replace Abutment Bearings

Ⓓ - Remove and Replace End Diaphragms at W. Abut. (For locations and details see Sheet 4 of 15).

Ⓔ - Eliminate Floor Drain (See sheet 11 of 15).

Ⓕ - Remove Existing Floor Drains and Install New 6"Φ Floor Drains. (See Sheet 11 of 15).

Ⓖ - Scarify deck to remove existing $1\frac{3}{4}$" Latex Concrete Overlay and an additional $\frac{1}{2}$" of existing deck.

Ⓗ - Install Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, $2\frac{1}{4}$" min.

Ⓘ - Place Stone Dumped Riprap, Class A5 on Channel Banks (See Sheet 3 of 15)

LICENSED STRUCTURAL ENGINEER
DAVID CARL PUZEY
081-005470
SPRINGFIELD ILLINOIS
STATE OF ILLINOIS

Expires 11/30/18

EXISTING DESIGN STRESSES

fc = 1,400 psi Superstructure
fc = 1,400 psi Substructure
fs = 18,000 psi Superstructure
fs = 20,000 psi Reinforcing
n = 10

DESIGNED - D. Macklin	PASSED	DATE - MARCH 22, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - ---			
DRAWN - S. Kassel	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	GENERAL PLAN & ELEVATION U.S. ROUTE 50 OVER THE FOX RIVER SN 080-0002
CHECKED - --- --- ccc		REVISED	SHEET NO. 1 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	OT Bridge Repairs 2017-2	RICHLAND	28	10
		CONTRACT NO. 74708		
		ILLINOIS FED. AID PROJECT		

GENERAL NOTES

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

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.

Reinforcement bars designated (E) shall be epoxy coated.

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.

Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Furnishing and Erecting Structural Steel.

The Inorganic Zinc Rich Primer / Acrylic / Acrylic Paint System shall be used for shop and field painting of new structural steel except where otherwise noted. The color of the final finish coat shall be Interstate Green, Munsell No. 7.5G 4/8.

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

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 Structures".

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.

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

Diaphragm connection holes shall be $^{15}/_{16}$"ϕ for $^{3}/_{4}$"ϕ bolts. Two hardened washers shall be required at diaphragm connections.

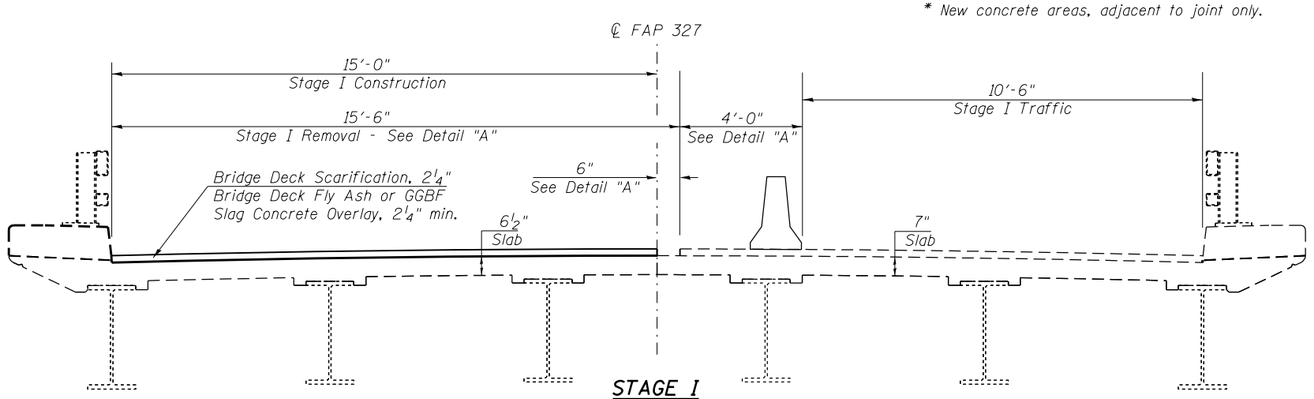
Joint openings shall be adjusted according to Article 520.04 of the Std. Specs. when the deck is poured at an ambient temperature other than 50° F.

If the analysis submitted to the Contractor for the jacking/temporary support system to be used shows temporary stiffeners are required to prevent web crippling or buckling, the stiffeners shall be steel and bolted to the web. If stiffeners are not required, hardwood timbers shall be installed tightly between the top and bottom flange to prevent flange rotation.

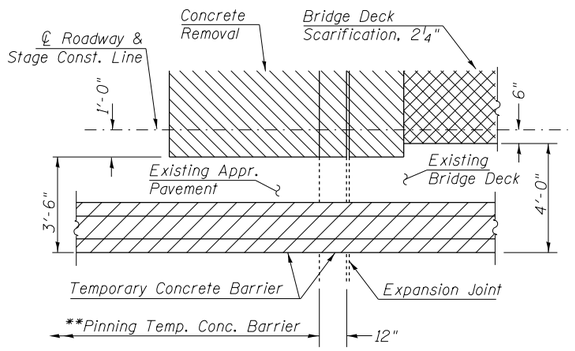
TOTAL BILL OF MATERIAL

	ITEM	UNIT	QUANTITY
	Concrete Removal	Cu. Yd.	34.1
	Concrete Structures	Cu. Yd.	10.0
	Concrete Superstructure	Cu. Yd.	24.9
	Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	382.4
	Structural Steel Removal	Pound	1400
	Furnishing & Erecting Structural Steel	Pound	2930
	Reinforcement Bars, Epoxy Coated	Pound	5680
	Bar Splicers	Each	58
	Preformed Joint Strip Seal	Foot	75
	Jack and Remove Existing Bearings	Each	12
	Elastomeric Bearing Assembly, Type II	Each	12
	Anchor Bolts, 1"ϕ	Each	24
	Floor Drains	Each	42
	Plug Existing Deck Drains	Each	12
	Mechanical Splicers	Each	84
	Bridge Deck Fly Ash or GGBF Slag Concrete Overlay, $2^{1}/_{4}$"	Sq. Yd.	888.3
	Bridge Deck Scarification, $2^{1}/_{4}$"	Sq. Yd.	888.3
	Temporary Sheet Piling	Sq. Ft.	110
	Structure Excavation	Cu. Yd.	31.4
	Porous Granular Embankment	Ton	64.4
	Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	18
	Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	31
	Bridge Deck Grooving	Sq. Yd.	844
*	Protective Coat	Sq. Yd.	25
	Stone Dumped Riprap, Class A5	Ton	780
	Channel Excavation	Cu. Yd.	520

* New concrete areas, adjacent to joint only.

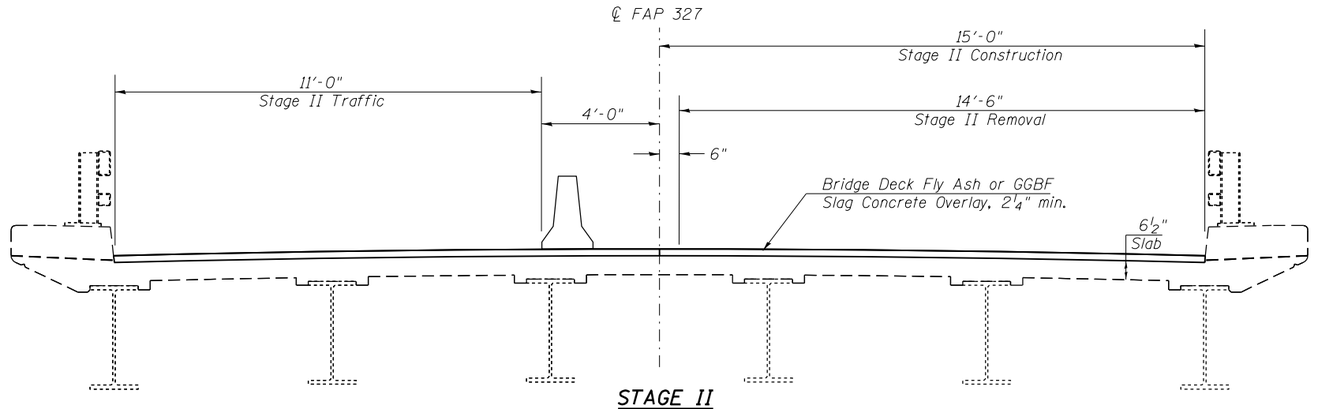


STAGE I
Looking East



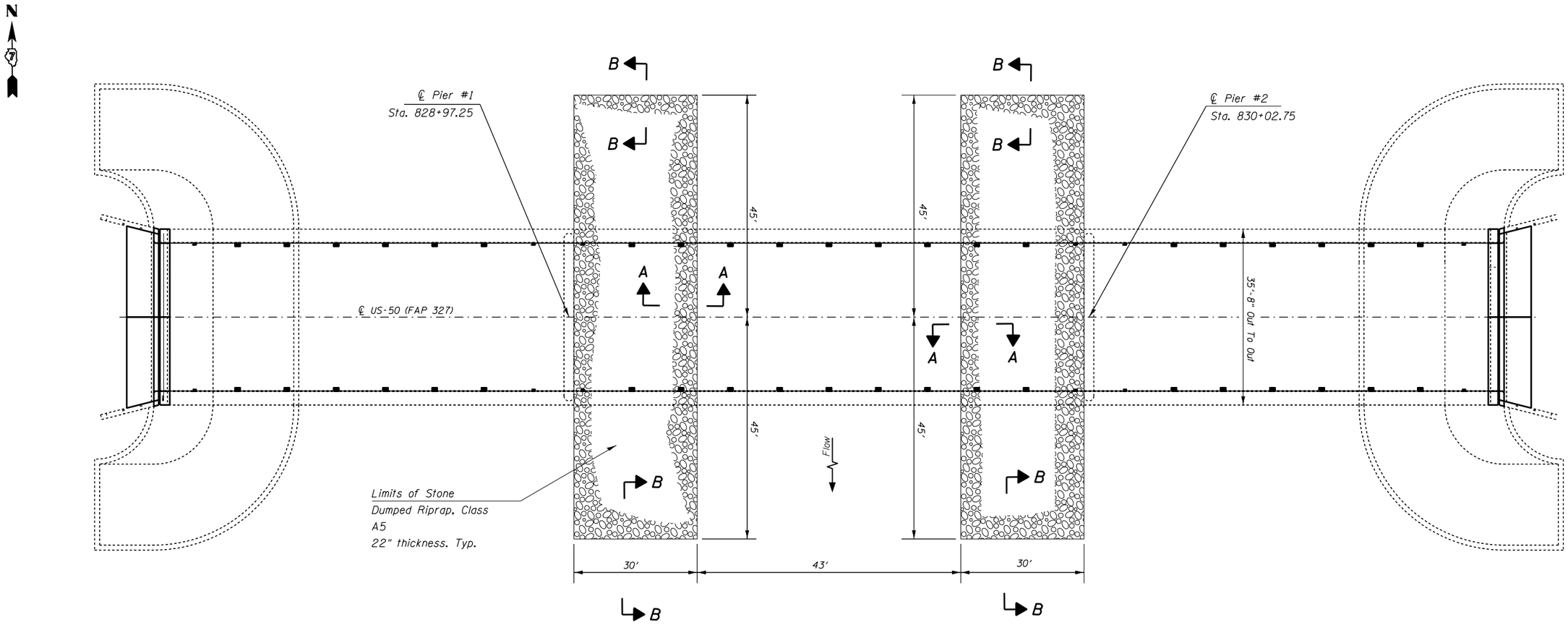
Detail "A"
Plan View Showing Stage I Removal Limits Near Abutment
West Abutment Shown, East Abutment Similar

** Temporary Concrete Barriers To Be Pinned on Approaches.
Pinning Not Permitted On Bridge Deck.

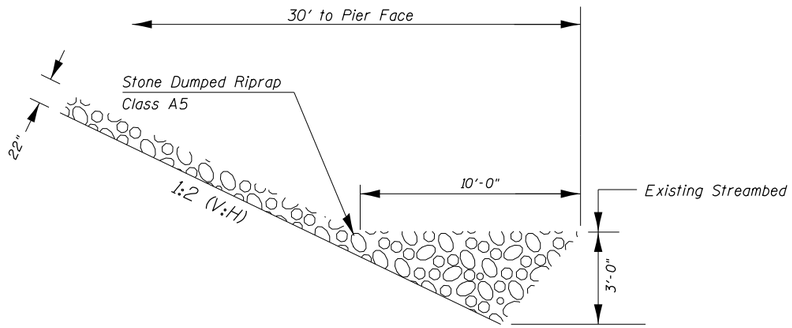


STAGE II
Looking East

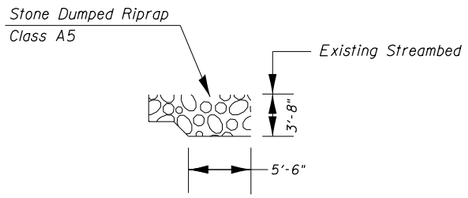
DESIGNED - D. Macklin		DATE - MARCH 22, 2016	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**GENERAL NOTES, STAGE DETAILS AND BILL OF MATERIALS U.S. ROUTE 50 OVER THE FOX RIVER SN 080-0002**	F.A.P. RTE.	SECTION	COUNTY / TOTAL SHEETS / SHEET NO.
CHECKED - ---					327	D7 Bridge Repairs 2017-2	RICHLAND / 28 / 11
DRAWN - S. Kassel	PASSED	REVISED					CONTRACT NO. 74708
CHECKED - D. Macklin	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 2 OF 15 SHEETS			ILLINOIS FED. AID PROJECT



PLAN



SECTION A-A



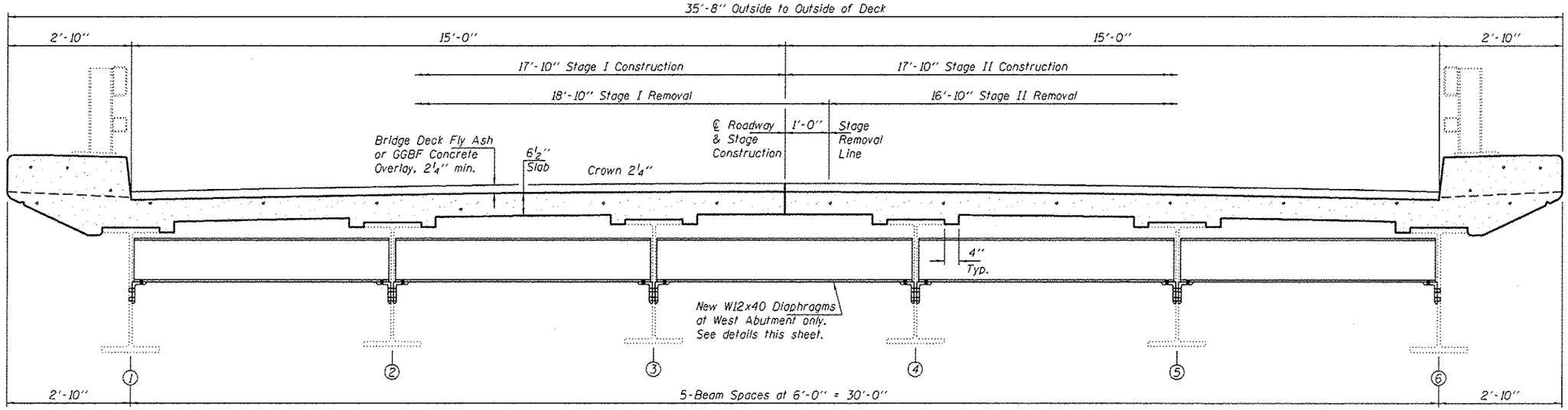
SECTION B-B

BILL OF MATERIAL - CHANNEL IMPROVEMENTS

ITEM	UNIT	QUANTITY
Stone Dumped Riprap, Class A5	Ton	780
Channel Excavation	Cu. Yd.	520

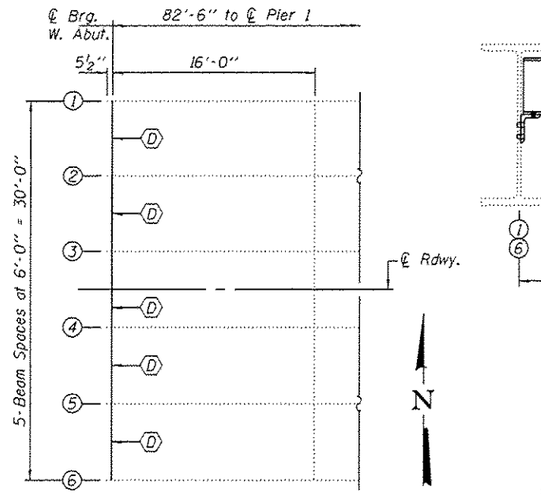
DESIGNED - D. Macklin	DATE - MARCH 22, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CHANNEL IMPROVEMENTS U.S. ROUTE 50 OVER THE FOX RIVER SN 080-0002
CHECKED - ---			
DRAWN - S. Kassel	PASSED	REVISED	SHEET NO. 3 OF 15 SHEETS
CHECKED - --- ---	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	D7 Bridge Repairs 2017-2	RICHLAND	28	12
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			



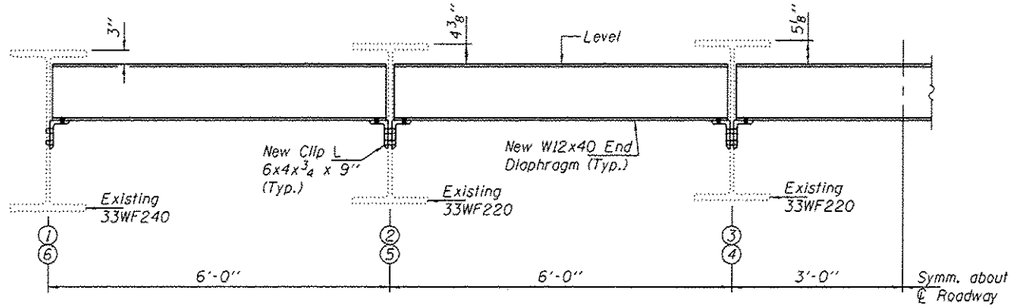
CROSS SECTION NEAR WEST ABUTMENT

(Looking East)
(Similar near East Abutment except as noted.)



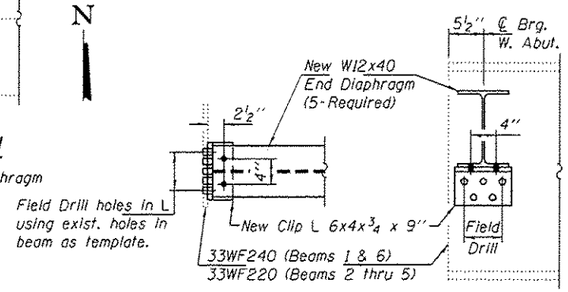
PARTIAL FRAMING PLAN

(D) - Replace existing 12WF40 diaphragm & L6x4x¾x 9 clip L's



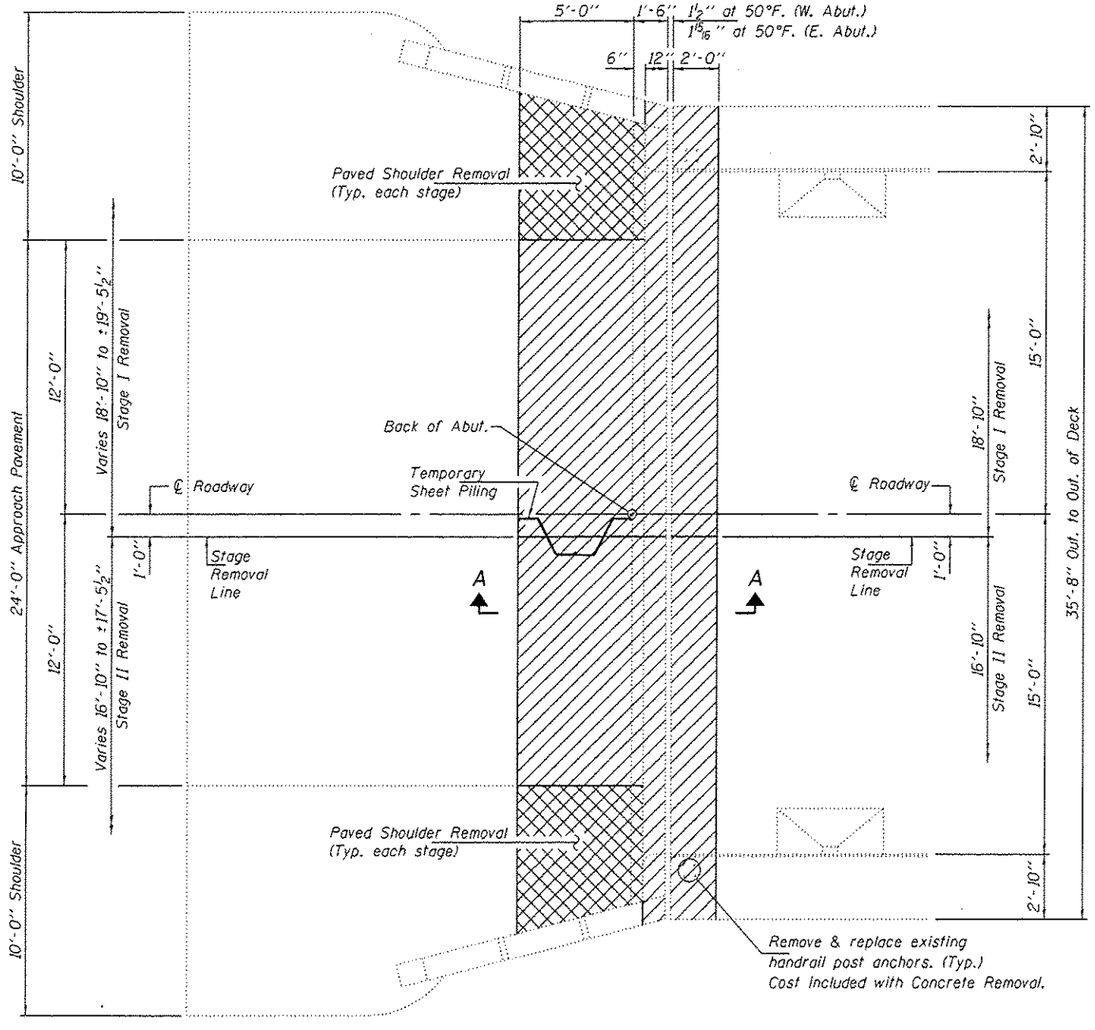
END DIAPHRAGM REPLACEMENT DETAILS

(West Abutment Only)



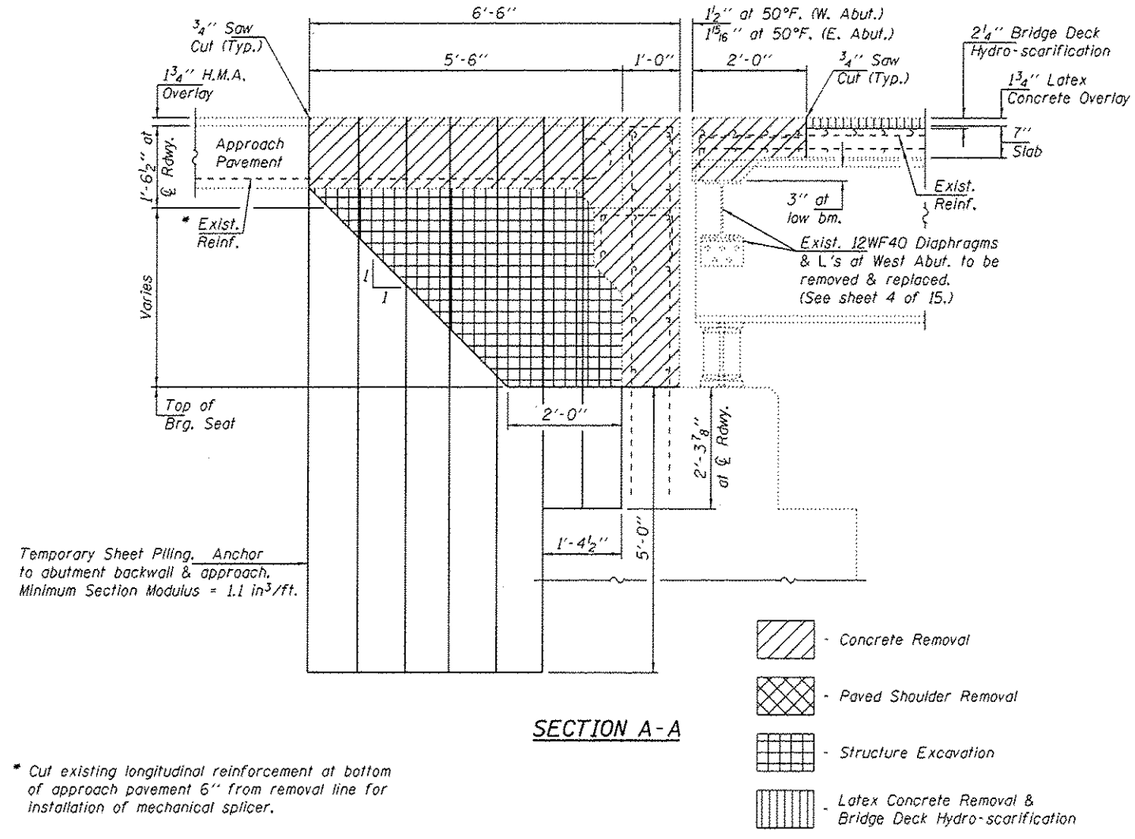
DIAPHRAGM CONNECTION DETAILS

DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	REPAIR DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	D7 Bridge Repairs 2017-2	RICHLAND	28	13
DRAWN - Kyle M. Staffan	PASSED	REVISED						CONTRACT NO. 74708	
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 4 OF 15 SHEETS			ILLINOIS	FED. AID PROJECT	



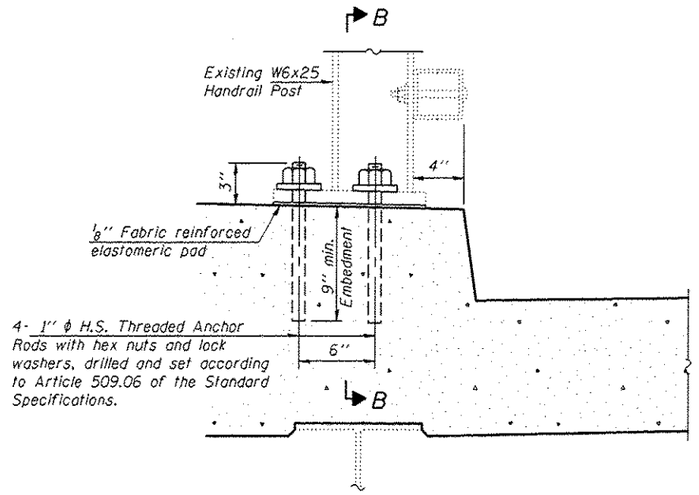
CONCRETE REMOVAL PLAN

West Abutment shown, East Abutment similiar by rotation except as noted.

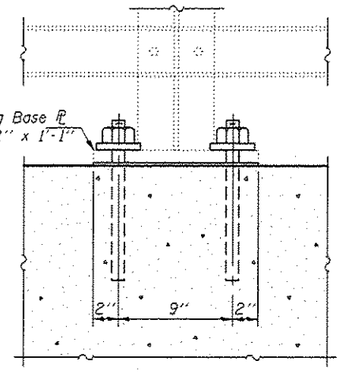


SECTION A-A

* Cut existing longitudinal reinforcement at bottom of approach pavement 6" from removal line for installation of mechanical splicer.

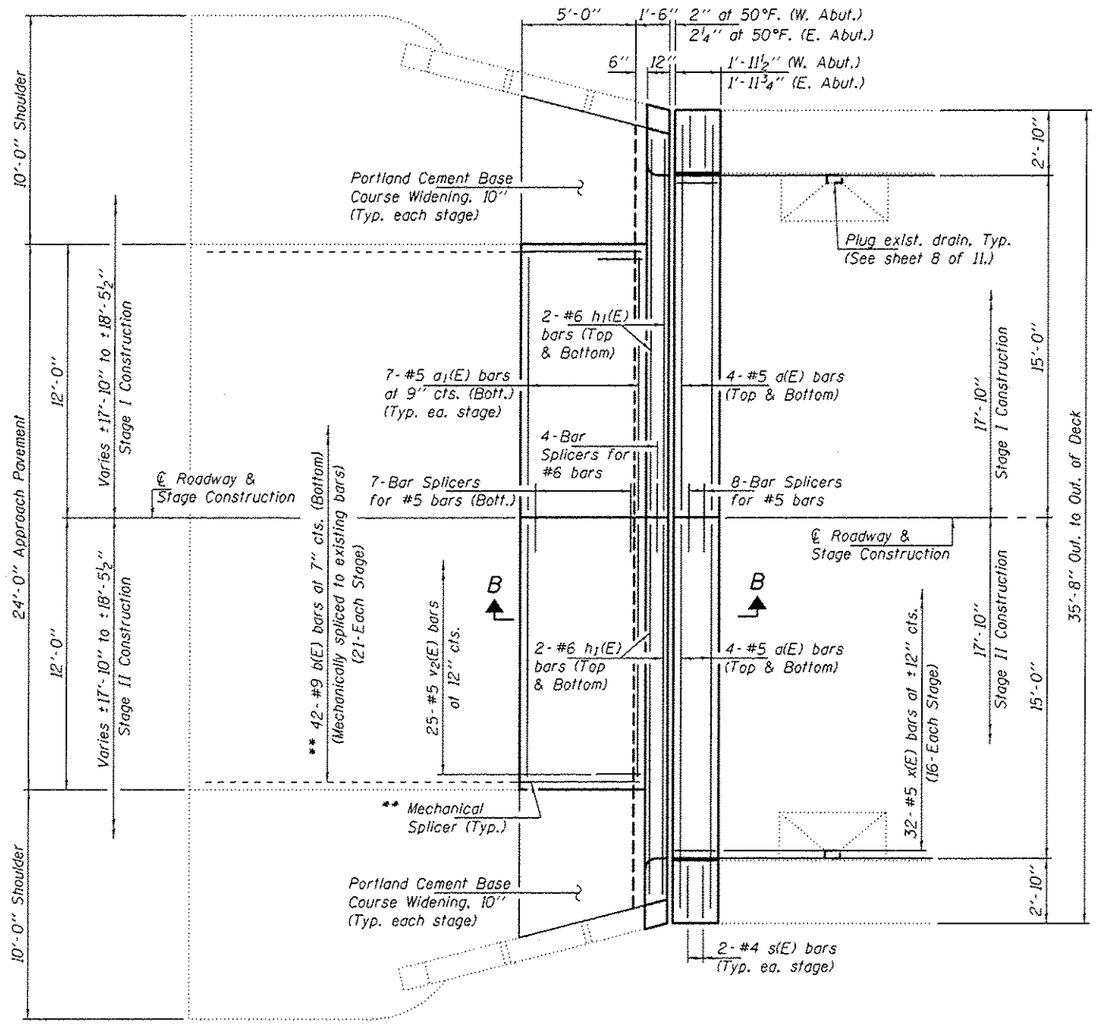


SECTION AT RAIL POST



SECTION B-B

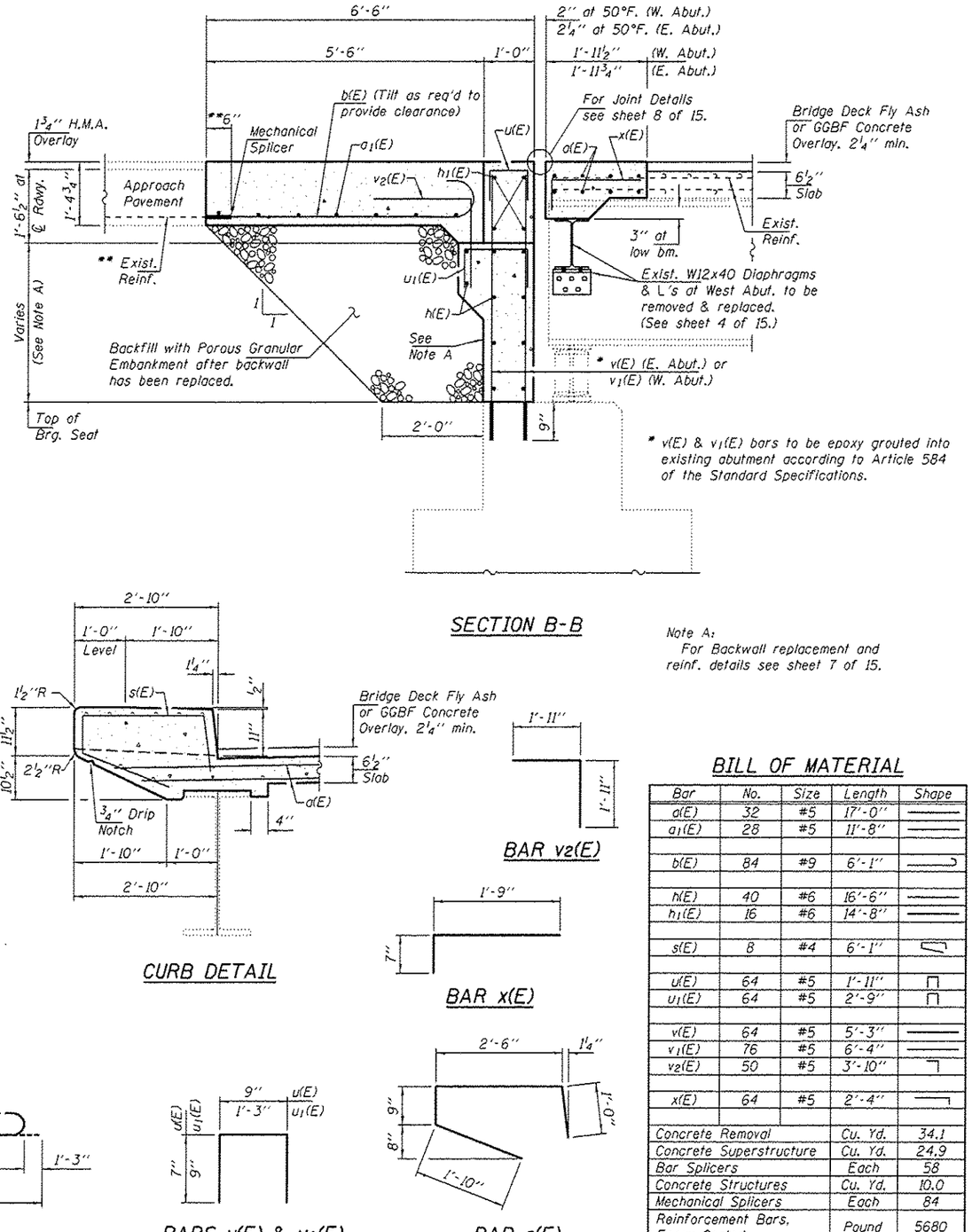
DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	JOINT REMOVAL DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	07 Bridge Repairs 2017-2	RICHLAND	28	14
DRAWN - Kyle M. Steffen	PASSED	REVISED					CONTRACT NO. 74708		
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 5 OF 15 SHEETS			ILLINOIS FED. AID PROJECT		



CONCRETE REPLACEMENT PLAN

West Abutment shown, East Abutment similiar by rotation except as noted.

** Cut existing longitudinal reinforcement at bottom of approach pavement 6" from removal line for installation of mechanical splicer, Typ.



* v(E) & v1(E) bars to be epoxy grouted into existing abutment according to Article 584 of the Standard Specifications.

SECTION B-B

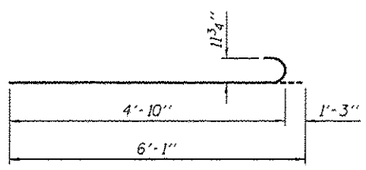
Note A:
For Backwall replacement and reinf. details see sheet 7 of 15.

CURB DETAIL

BAR v2(E)

BAR x(E)

BAR s(E)



BAR b(E)

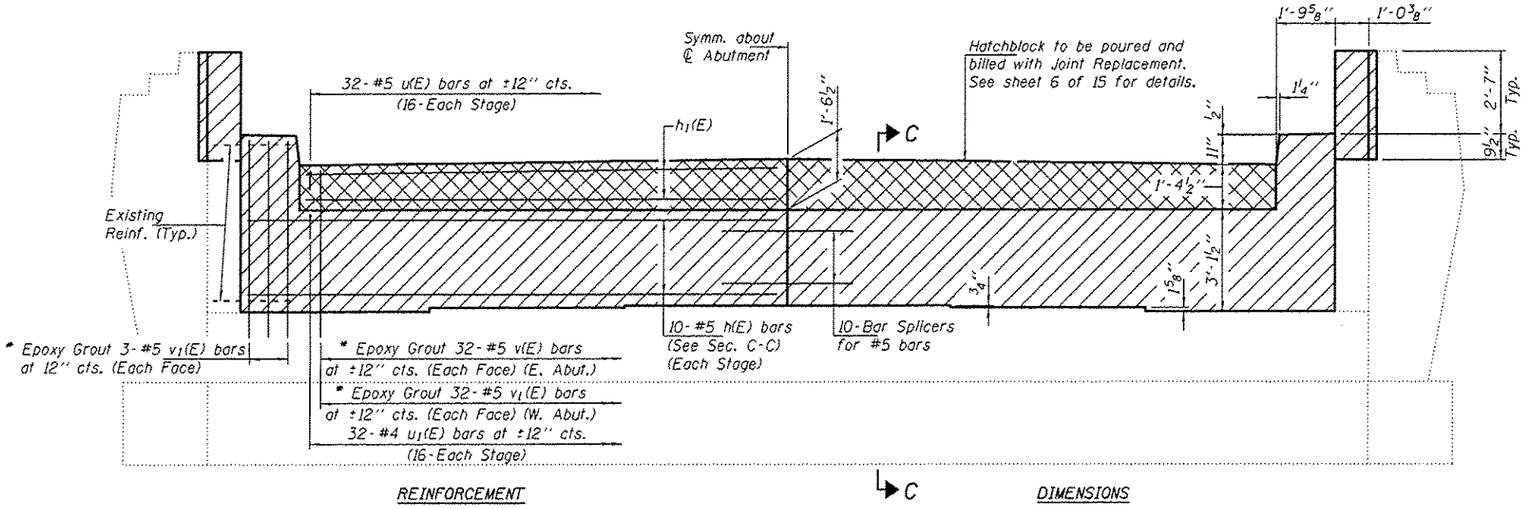
BARS u(E) & u1(E)

BILL OF MATERIAL

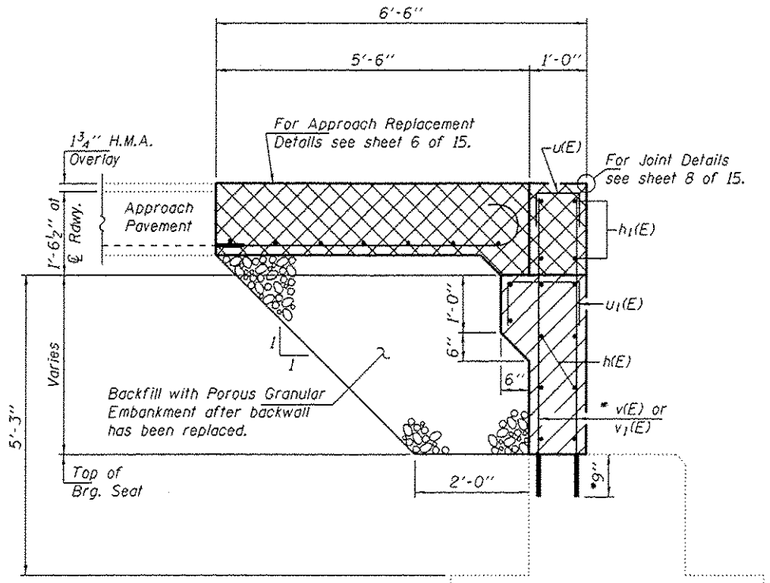
Bar	No.	Size	Length	Shape
d(E)	32	#5	17'-0"	
a1(E)	28	#5	11'-8"	
b(E)	84	#9	6'-1"	
h(E)	40	#6	16'-6"	
h1(E)	16	#6	14'-8"	
s(E)	8	#4	6'-1"	
u(E)	64	#5	1'-11"	
u1(E)	64	#5	2'-9"	
v(E)	64	#5	5'-3"	
v1(E)	76	#5	6'-4"	
v2(E)	50	#5	3'-10"	
x(E)	64	#5	2'-4"	
Concrete Removal			Cu. Yd.	34.1
Concrete Superstructure			Cu. Yd.	24.9
Bar Splicers			Each	58
Concrete Structures			Cu. Yd.	10.0
Mechanical Splicers			Each	84
Reinforcement Bars, Epoxy Coated			Pound	5680

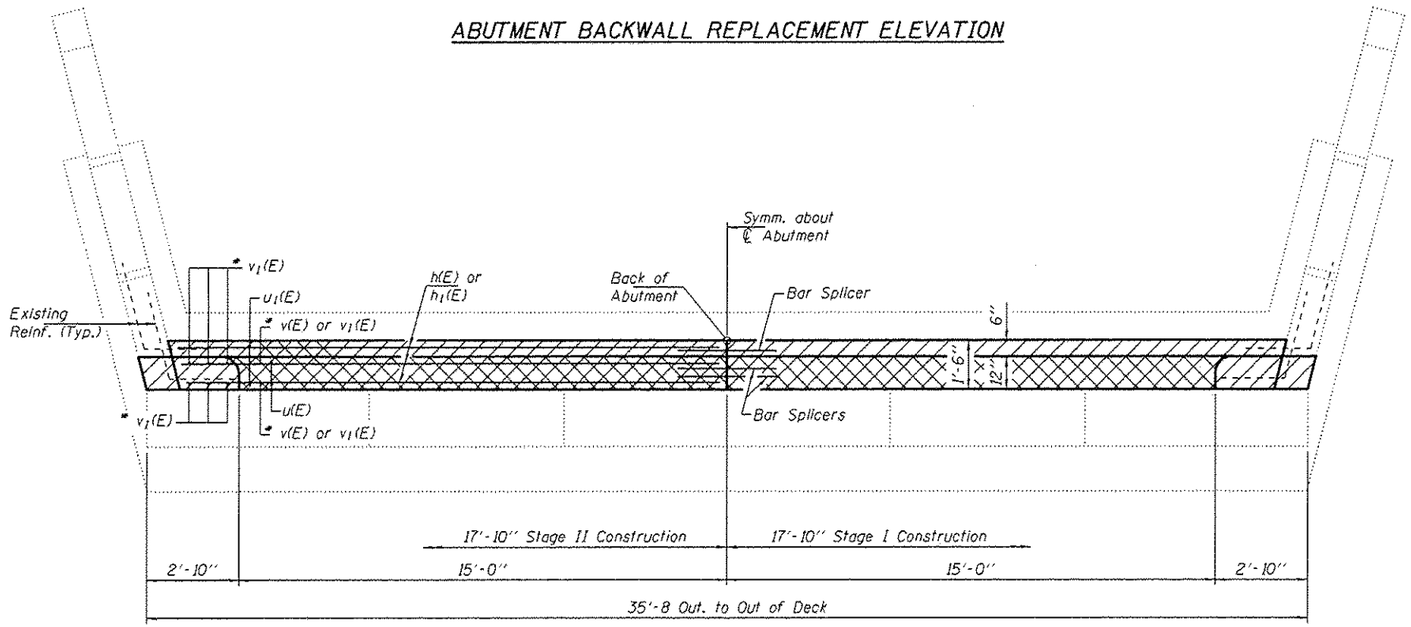
DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - JGY	PASSED	REVISED	JOINT REPLACEMENT DETAILS – EAST & WEST ABUTMENTS SN 080-0002
DRAWN - Kyle M. Stoffan	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	SHEET NO. 6 OF 15 SHEETS
CHECKED - CCC JGY			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	07 Bridge Repairs 2017-2	RICHLAND	28	15
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			



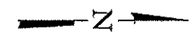
ABUTMENT BACKWALL REPLACEMENT ELEVATION





ABUTMENT BACKWALL REPLACEMENT PLAN

(West Abutment Shown, East Abutment similar by rotation.)



SECTION C-C

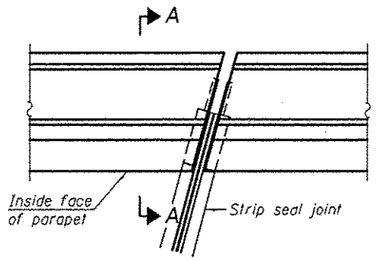
Bridge Deck not shown for clarity.

* Epoxy grout bars in 9" min. holes according to Article 584 of the Standard Specifications.

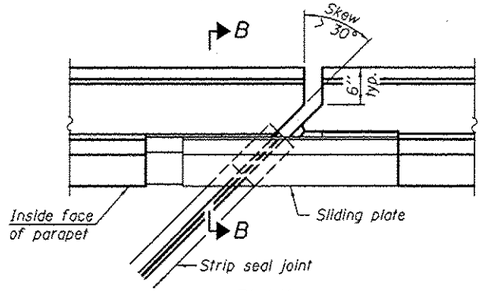
Notes:
For Bill of Material see sheet 6 of 15.

- Concrete Structures
- Concrete Superstructure

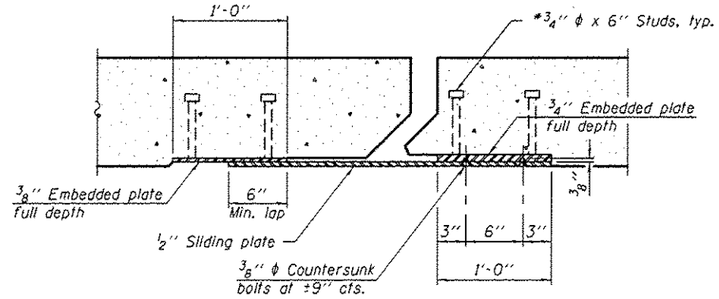
DESIGNED - CCC	PASSED	DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ABUTMENT BACKWALL REPAIR DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	07 Bridge Repairs 2017-2	RICHLAND	28	16
DRAWN - Kyle M. Steffen								CONTRACT NO. 74708	
CHECKED - CCC JGY		REVISED		SHEET NO. 7 OF 15 SHEETS			ILLINOIS FED. AID PROJECT		
	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED							



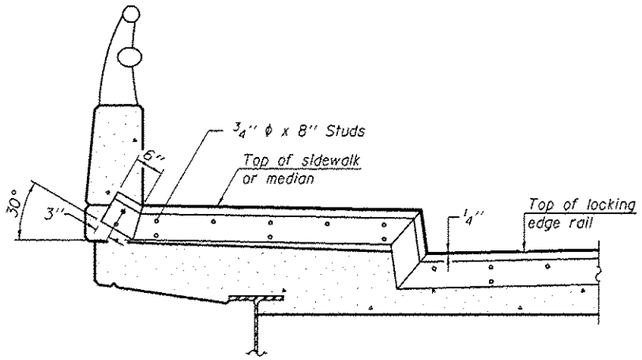
PLAN
(For skews ≤ 30°)



PLAN
(For skews > 30°)
Showing point block

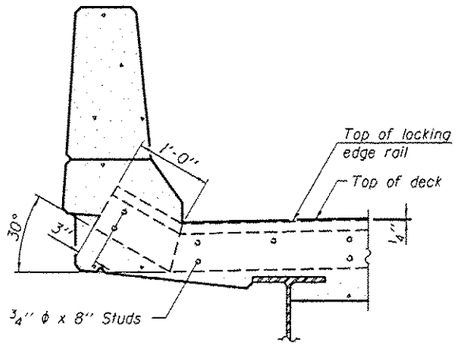


SECTION C-C

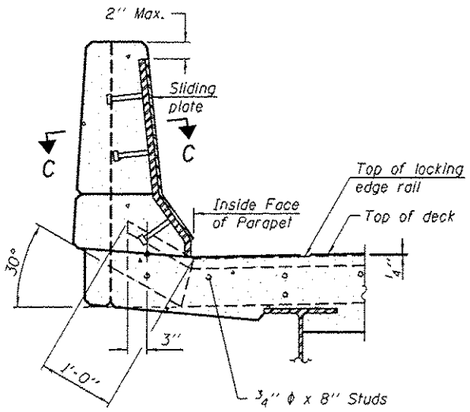


TYPICAL END TREATMENT AT SIDEWALK OR MEDIAN

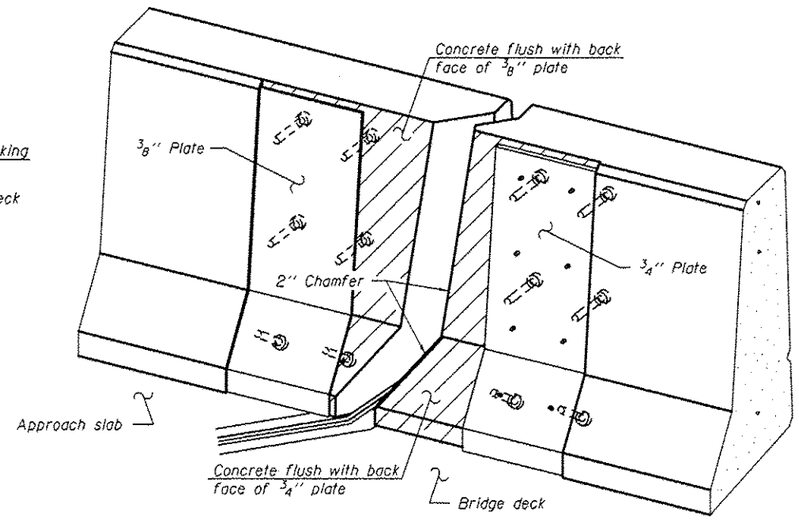
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



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.

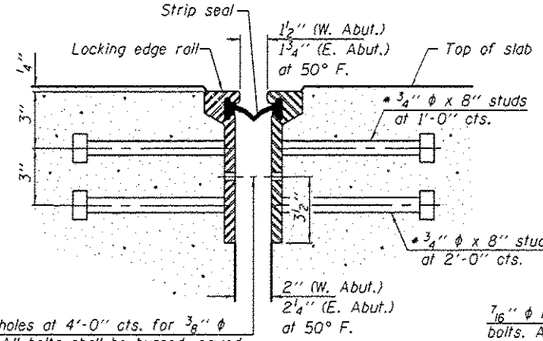
The manufacturer's recommended installation methods shall be followed.

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.

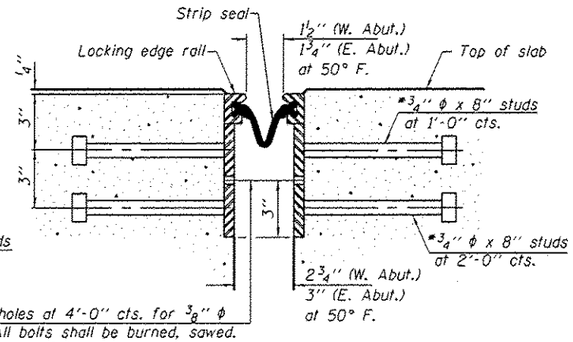
Maximum space between rail segments shall be 3/16", sealed with a suitable sealant. Joints in rails within 10 ft. of curbs shall be welded.

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



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.

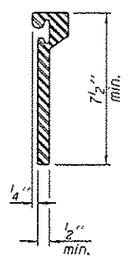
SECTION THRU ROLLED RAIL JOINT



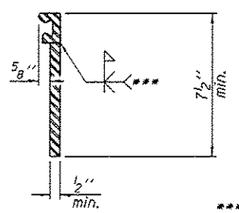
7/16" ϕ holes at 4'-0" cts. for 3/8" ϕ bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

SECTION THRU WELDED RAIL JOINT

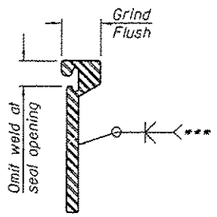
* Granular or solid flux filled headed studs conforming to Article 1006.32 of the Std. Specs., automatically end welded.



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.

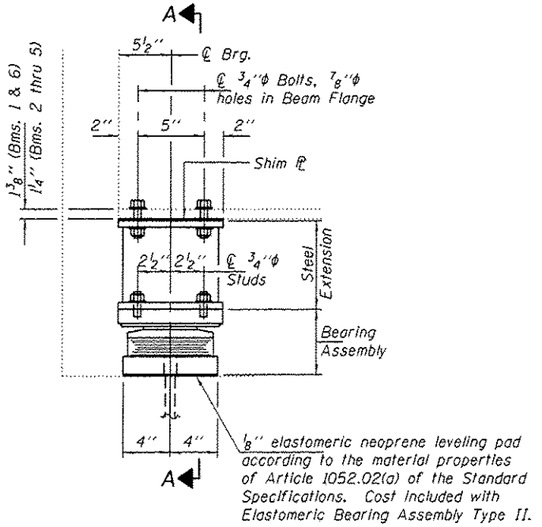
LOCKING EDGE RAILS

BILL OF MATERIAL

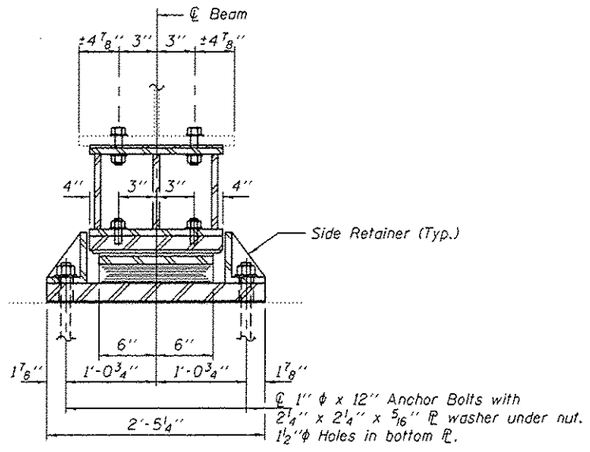
Item	Unit	Total
Preformed Joint Strip Seal	Foot	75

EJ-SSJ 1-27-12

DESIGNED - CCC	PASSED	DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PREFORMED JOINT STRIP SEAL DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	07 Bridge Repairs 2017-2	RICHLAND	28	17
DRAWN - Kyle M. Staffen		REVISED					CONTRACT NO. 74708		
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 8 OF 15 SHEETS			ILLINOIS FED. AID PROJECT		



ELEVATION AT EAST ABUTMENT



SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

BEAM REACTIONS

RL	(K)	32.0
RR	(K)	33.8
Imp.	(K)	8.1
R (Total)	(K)	73.9

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.

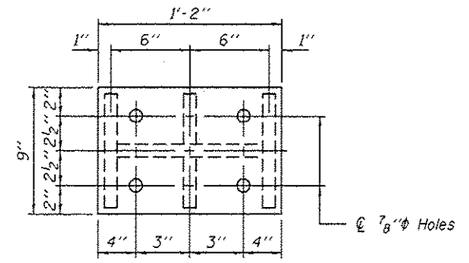
Anchor bolts for Type II bearings shall be placed in holes drilled through the bottom bearing plate after members are in place. Side retainers shall be placed after bolts are installed.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

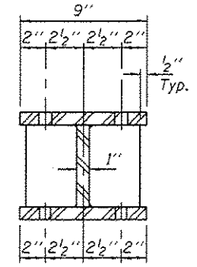
Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type II.

The ⅛" 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.

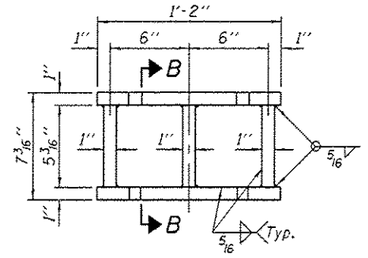
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



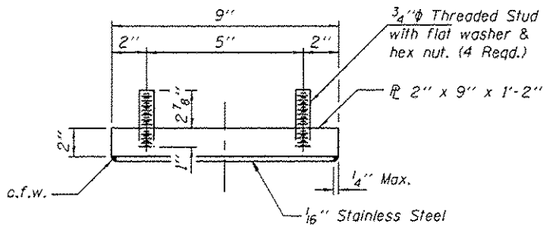
PLAN TOP AND BOTTOM PLATE



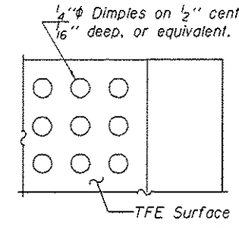
SECTION B-B



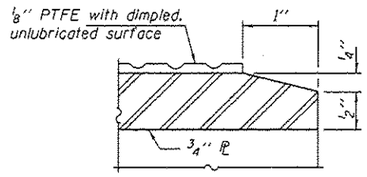
STEEL EXTENSION DETAIL



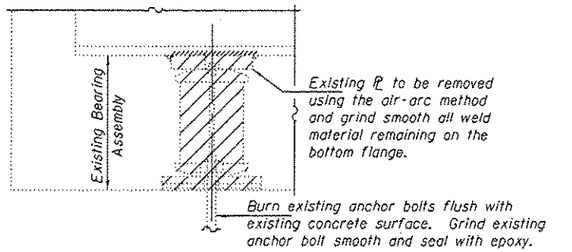
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

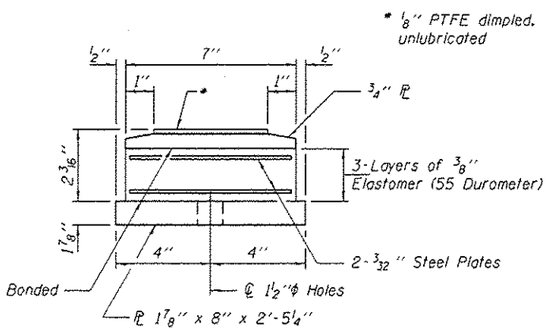


SECTION THRU PTFE

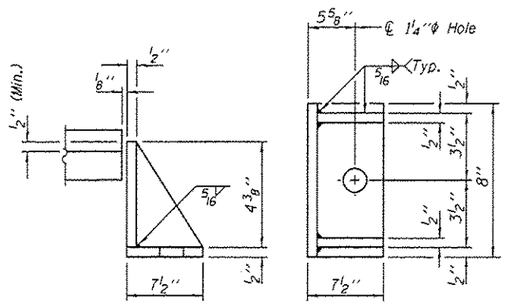


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

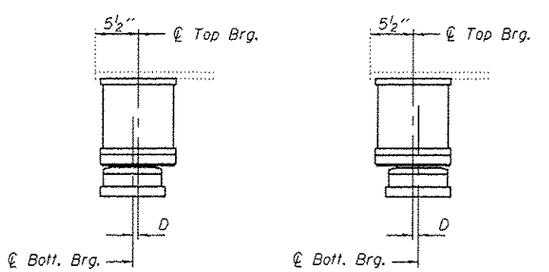


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

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



SETTING ANCHOR BOLTS AT EXP. BRG.

D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

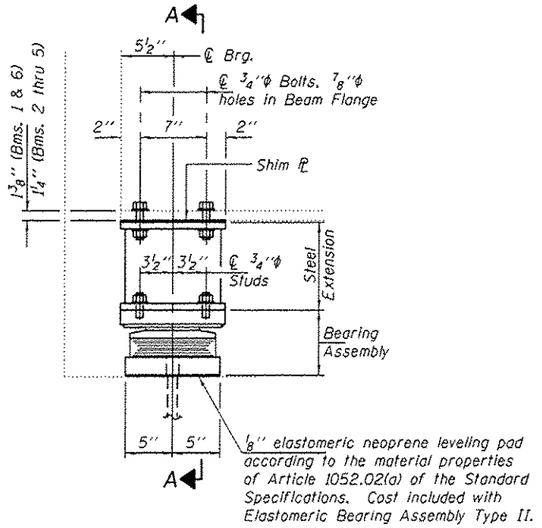
BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	740
Anchor Bolts 1"ϕ	Each	12

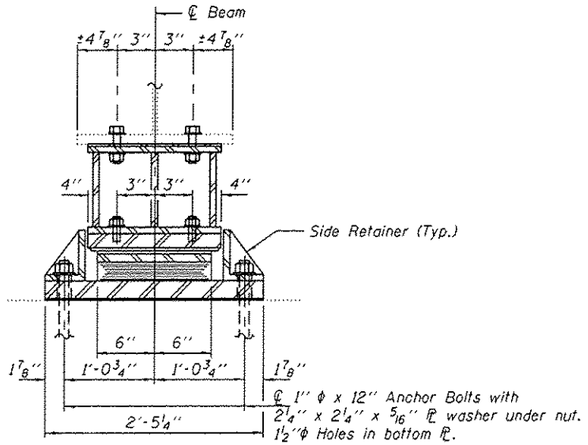
TYII/REPS 12-03-2008

DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - JGY	PASSED	REVISED	WEST ABUTMENT ELASTOMERIC BEARING REPLACEMENT DETAILS SN 080-0002
DRAWN - Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	SHEET NO. 9 OF 15 SHEETS
CHECKED - CCC JGY			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	07 Bridge Repairs 2017-2	RICHLAND	28	18
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			



ELEVATION AT EAST ABUTMENT



SECTION A-A

TYPE II TFE ELASTOMERIC EXP. BRG.

BEAM REACTIONS

R℄	(K)	32.0
R℄	(K)	33.8
Imp.	(K)	8.1
R (Total)	(K)	73.9

Notes:

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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.

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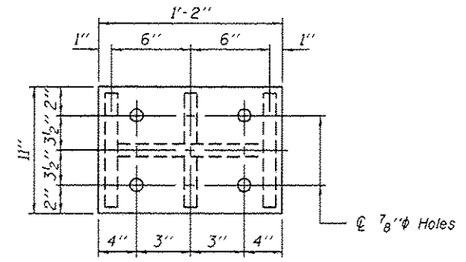
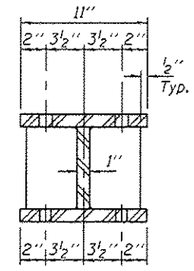
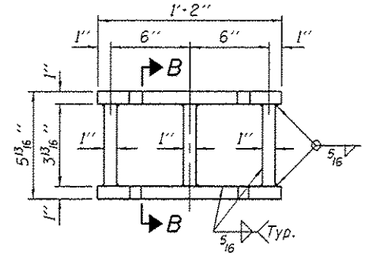
Bonding of ⅛" PTFE sheet during vulcanizing process will be permitted provided the process and method of adjusting assembly height is approved by the Engineer.



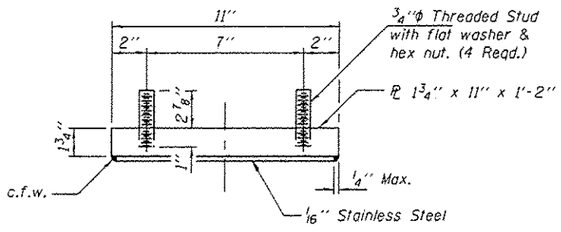
PLAN TOP AND BOTTOM PLATE



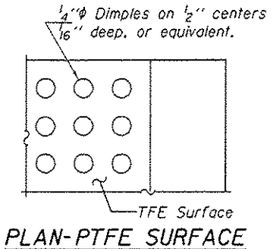
SECTION B-B



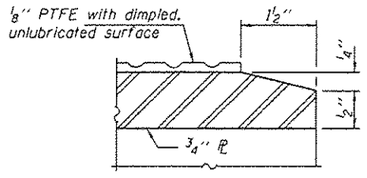
STEEL EXTENSION DETAIL



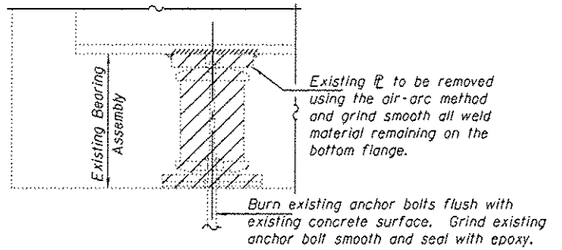
TOP BEARING ASSEMBLY



PLAN-PTFE SURFACE

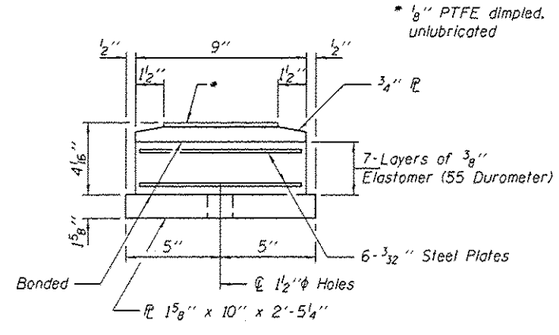


SECTION THRU PTFE

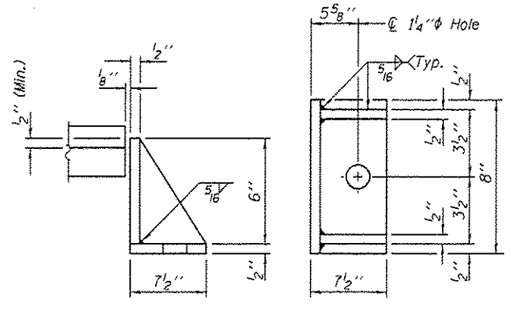


EXISTING BEARING REMOVAL DETAIL

Cost included with Jack and Remove Existing Bearings.

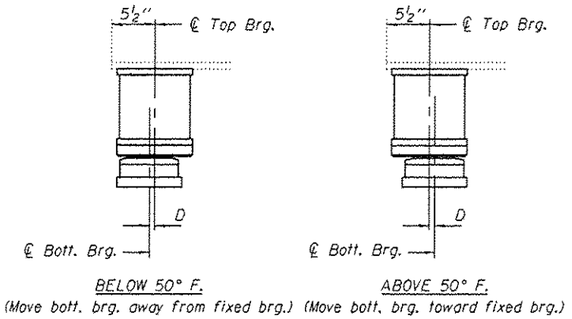


BOTTOM BEARING ASSEMBLY



SIDE RETAINER

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



SETTING ANCHOR BOLTS AT EXP. BRG.

D = ⅛" per each 100' of expansion for every 15° temp. change from the normal temp. of 50°F.

BILL OF MATERIAL

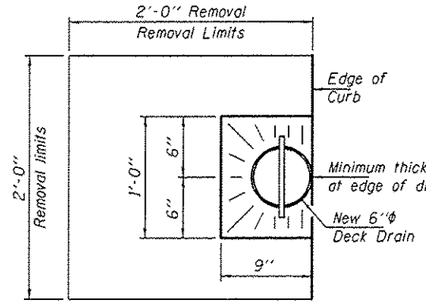
Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	6
Jack and Remove Existing Bearings	Each	6
Furnishing and Erecting Structural Steel	Pound	790
Anchor Bolts 1"ϕ	Each	12

TYII/REPS 12-03-2008

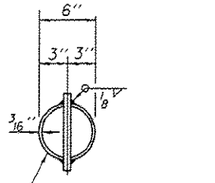
DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
CHECKED - JGY	PASSED	REVISED	EAST ABUTMENT ELASTOMERIC BEARING REPLACEMENT DETAILS SN 080-0002
DRAWN - Kyle M. Steffen	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED	SHEET NO. 10 OF 15 SHEETS
CHECKED - CCC JGY			

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	07 Bridge Repairs 2017-2	RICHLAND	28	19
		CONTRACT NO. 74708		
		ILLINOIS FED. AID PROJECT		

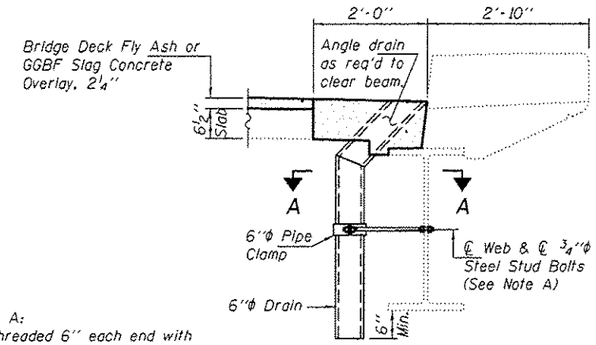
Notes:
Drains shall be located clear of all diaphragms.
The exterior surfaces of the floor drains shall be painted with the finish coat as specified in the special provisions for Cleaning and Painting New Metal Structures. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. 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 inserts is included with Floor Drains.



CONCRETE TREATMENT AT DRAINS

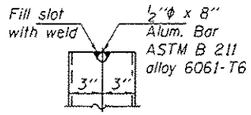


TOP PLAN
(Showing Aluminum Tube)

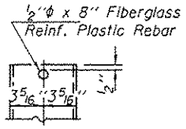


Note A:
Threaded 6" each end with 2 washers and locknuts. Field drill 15/16"ϕ holes in web.

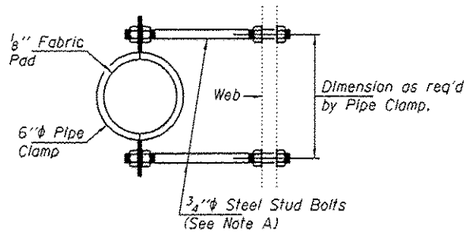
DRAIN DETAIL AT CURB
Removal included with Deck Slab Repair (Full Depth Type I).



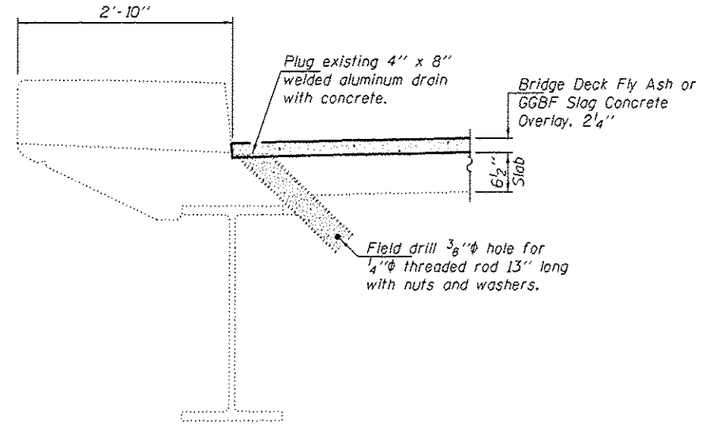
ALUMINUM TUBE



FIBERGLASS PIPE

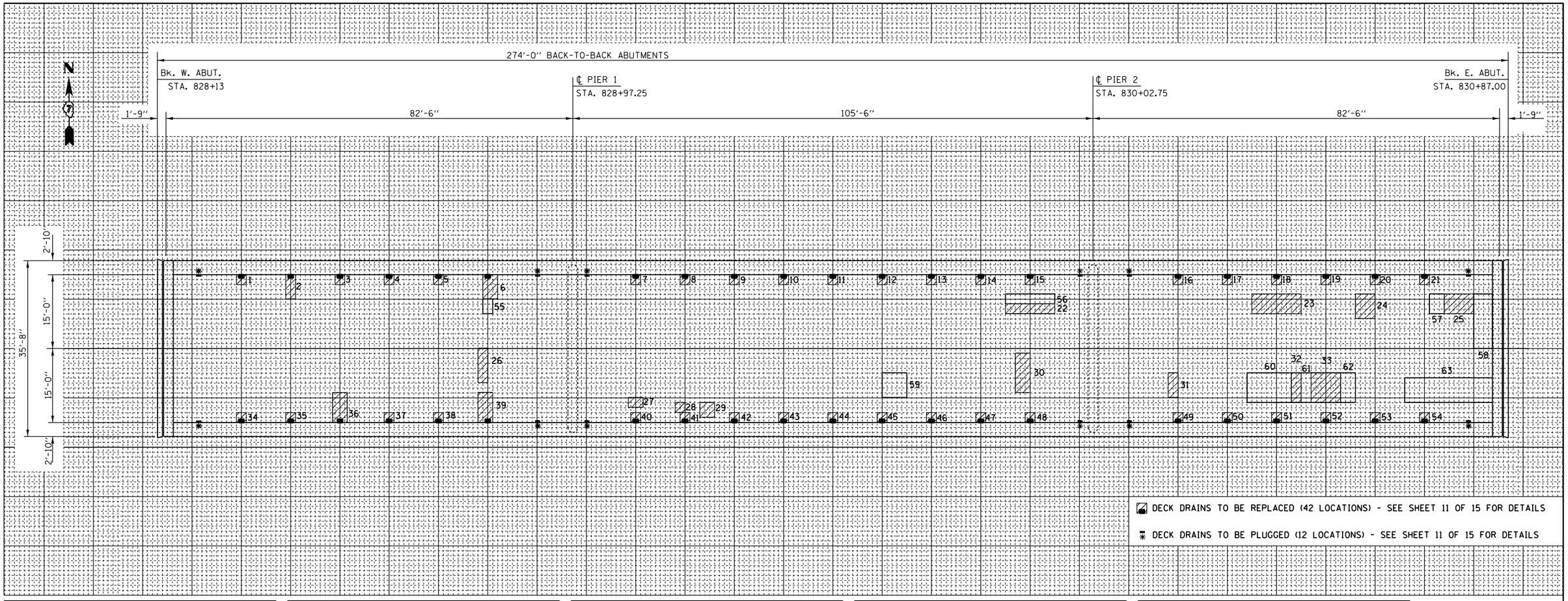


SECTION A-A



DRAIN ELIMINATION DETAIL
(12 - Locations)

DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	DRAIN ELIMINATION AND REPLACEMENT DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	07 Bridge Repairs 2017-2	RICHLAND	28	20
DRAWN - Kyle M. Staffan	PASSED	REVISED					CONTRACT NO. 74708		
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 11 OF 15 SHEETS			ILLINOIS FED. AID PROJECT		



PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH) SQ YD	DECK SLAB REPAIR (FD TY 1) SQ YD	DECK SLAB REPAIR (FD TY 2) SQ YD	
1	2.0 x 2.0		0.44		
2	5.0 x 2.0			1.11	
3	2.0 x 2.0		0.44		
4	2.0 x 2.0		0.44		
5	2.0 x 2.0		0.44		
6	5.0 x 3.0			1.67	
7	2.0 x 2.0		0.44		
8	2.0 x 2.0		0.44		
9	2.0 x 2.0		0.44		
10	2.0 x 2.0		0.44		
11	2.0 x 2.0		0.44		
12	2.0 x 2.0		0.44		
13	2.0 x 2.0		0.44		
14	2.0 x 2.0		0.44		
15	2.0 x 2.0		0.44		
16	2.0 x 2.0		0.44		
17	2.0 x 2.0		0.44		
18	2.0 x 2.0		0.44		

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH) SQ YD	DECK SLAB REPAIR (FD TY 1) SQ YD	DECK SLAB REPAIR (FD TY 2) SQ YD	
19	2.0 x 2.0		0.44		
20	2.0 x 2.0		0.44		
21	2.0 x 2.0		0.44		
22	2.0 x 10.0			2.22	
23	4.0 x 10.0			4.44	
24	5.0 x 4.0			2.22	
25	4.0 x 6.0			2.67	
26	7.0 x 2.0			1.56	
27	2.0 x 3.0			0.67	
28	2.0 x 2.0		0.44		
29	3.0 x 3.0			1.00	
30	8.0 x 3.0			2.67	
31	5.0 x 2.0			1.11	
32	6.0 x 2.0			1.33	
33	6.0 x 6.0			4.00	
34	2.0 x 2.0		0.44		
35	2.0 x 2.0		0.44		
36	6.0 x 3.0			2.00	

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH) SQ YD	DECK SLAB REPAIR (FD TY 1) SQ YD	DECK SLAB REPAIR (FD TY 2) SQ YD	
37	2.0 x 2.0		0.44		
38	2.0 x 2.0		0.44		
39	6.0 x 3.0			2.00	
40	2.0 x 2.0		0.44		
41	2.0 x 2.0		0.44		
42	2.0 x 2.0		0.44		
43	2.0 x 2.0		0.44		
44	2.0 x 2.0		0.44		
45	2.0 x 2.0		0.44		
46	2.0 x 2.0		0.44		
47	2.0 x 2.0		0.44		
48	2.0 x 2.0		0.44		
49	2.0 x 2.0		0.44		
50	2.0 x 2.0		0.44		
51	2.0 x 2.0		0.44		
52	2.0 x 2.0		0.44		
53	2.0 x 2.0		0.44		
54	2.0 x 2.0		0.44		

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH) SQ YD	DECK SLAB REPAIR (FD TY 1) SQ YD	DECK SLAB REPAIR (FD TY 2) SQ YD	
55	3.0 x 2.0	0.67			
56	2.0 x 10.0	2.22			
57	4.0 x 3.0	1.33			
58	11.0 x 4.0	4.89			
59	5.0 x 5.0	2.78			
60	6.0 x 9.0	6.00			
61	6.0 x 2.0	1.33			
62	6.0 x 3.0	2.00			
63	5.0 x 18.0	10.00			
	TOTAL	31.2	17.3	30.7	

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH) SQ YD	DECK SLAB REPAIR (FD TY 1) SQ YD	DECK SLAB REPAIR (FD TY 2) SQ YD	
TOTAL PARTIAL DEPTH = 31.2					
	USE 31 SQ YD				
	FOR INFORMATION ONLY				
TOTAL FULL DEPTH, TYPE I = 17.3					
	USE 18 SQ YD				
TOTAL FULL DEPTH, TYPE II = 30.7					
	USE 31 SQ YD				

THE LOCATIONS AND SIZES SHOWN GRAPHICALLY ABOVE ARE APPROXIMATE. SEE THIS TABLE FOR ACTUAL SIZES.

PATCHING LEGEND
(FOR INFORMATION ONLY)

PARTIAL DEPTH (FOR INFORMATION ONLY)

FULL DEPTH

DATE OF SURVEY: DECEMBER 2015
SURVEY BY: D. MACKLIN
METHOD OF SURVEY: VISUAL

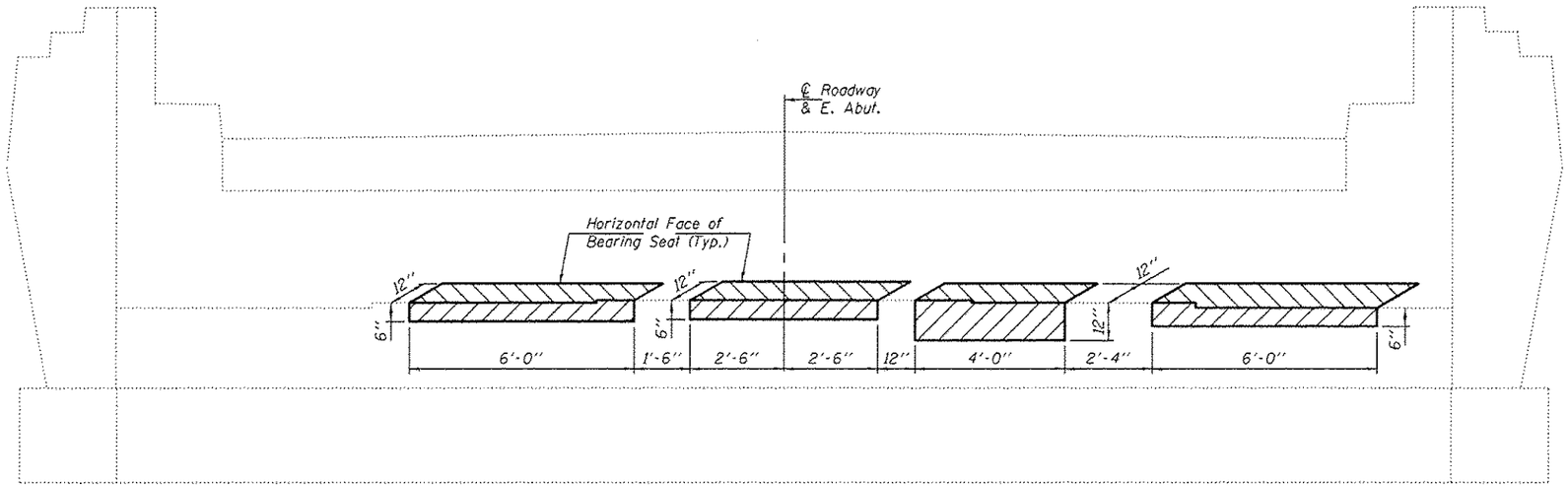
BRIDGE DECK PATCHING
RICHLAND COUNTY
LOCATION
SN 080 - 0002

DESIGNED	S. KASSEL	REVISED	D. MACKLIN
DRAWN	S. KASSEL	REVISED	-
CHECKED	D. MACKLIN	REVISED	-
DATE	3/23/2016	REVISED	-

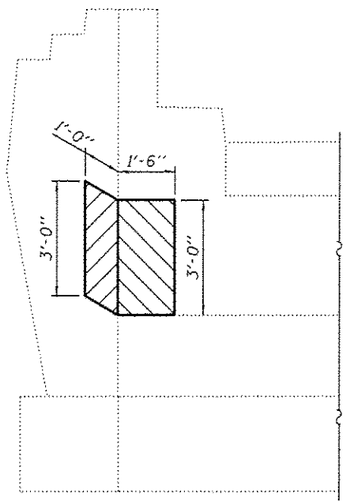
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK PATCHING
SN 080-0002
SHEET NO. 12 OF 15 SHEETS

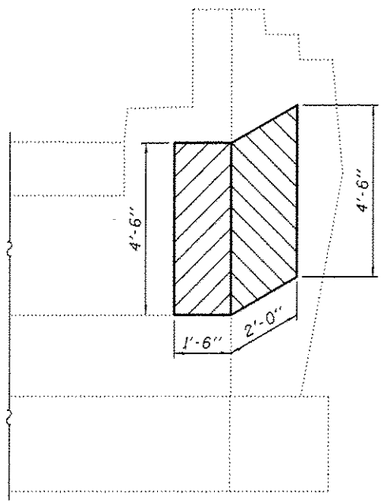
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	D-7 BRIDGE REPAIR 2017-2	RICHLAND	28	21
		CONTRACT NO. 74708		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		



EAST ABUTMENT BEARING SEAT REPAIRS



WEST ABUTMENT SOUTH WINGWALL REPAIR



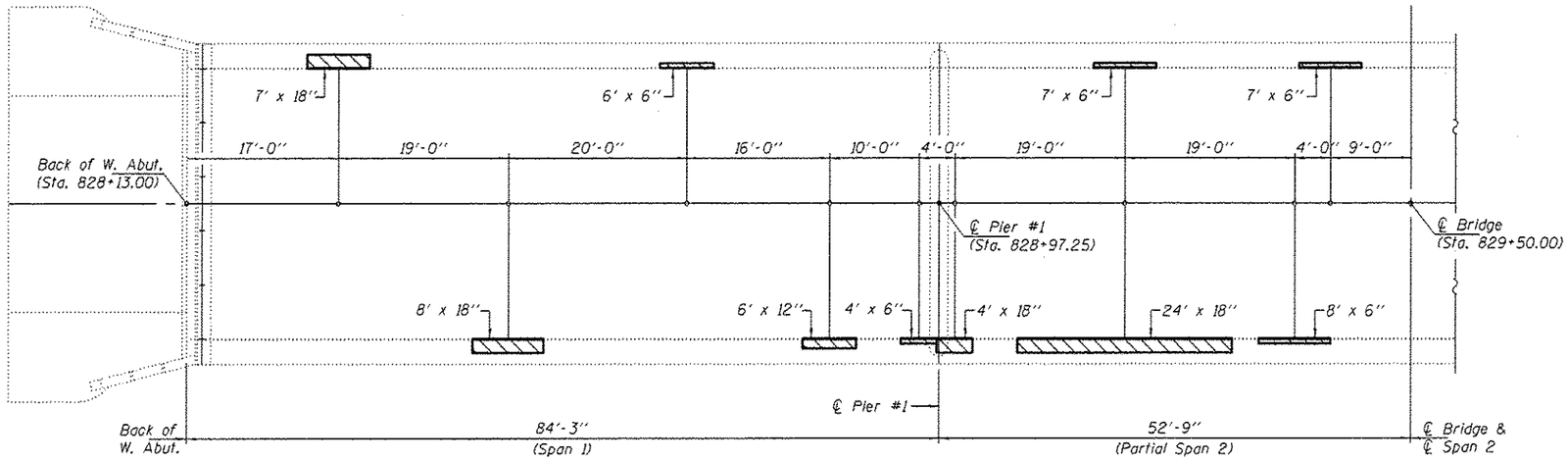
EAST ABUTMENT SOUTH WINGWALL REPAIR

- Structural Repair of Concrete ≤ 5 inches

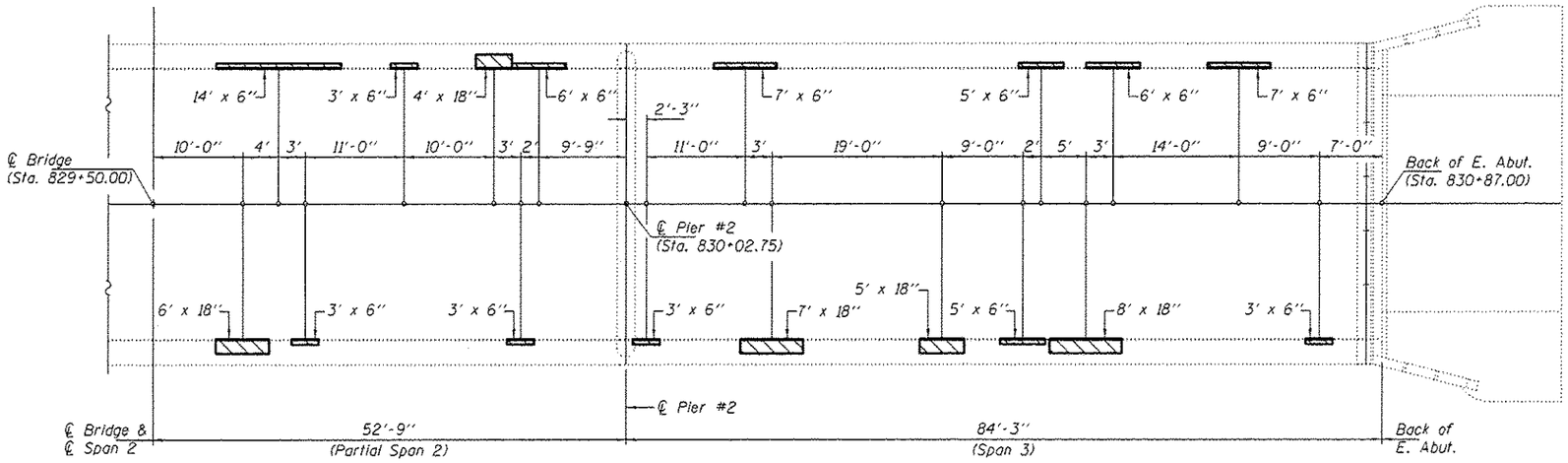
BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	57

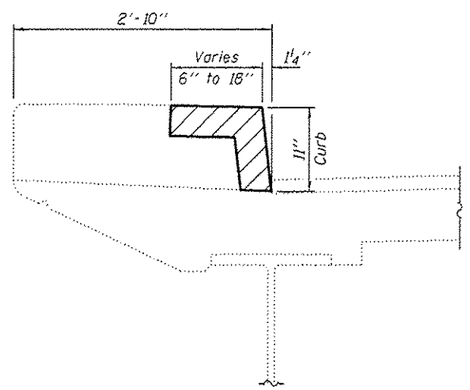
DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL REPAIR OF CONCRETE DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	07 Bridge Repairs 2017-2	RICHLAND	28	22
DRAWN - Kyle M. Steffan	PASSED	REVISED		SHEET NO. 13 OF 15 SHEETS			CONTRACT NO. 74708		
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED					ILLINOIS FED. AID PROJECT		



PARTIAL PLAN - SPANS 1 & 2



PARTIAL PLAN - SPANS 2 & 3



TYPICAL CURB REPAIR DETAIL

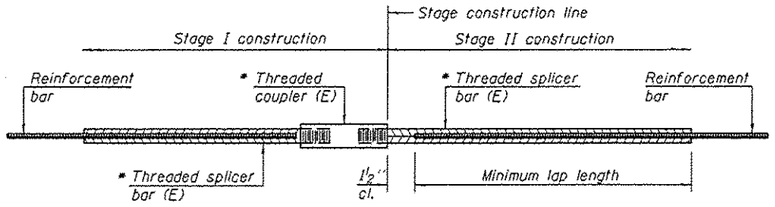
(See Plan for repair lengths and locations.)

· Structural Repair of Concrete ≤ 5 inches

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete ≤ 5 inches	Sq. Ft.	325.4

DESIGNED - CCC	PASSED	DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	STRUCTURAL REPAIR OF CONCRETE DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	07 Bridge Repairs 2017-2	RICHLAND	28	23
DRAWN - Kyle M. Staffan		REVISED					CONTRACT NO. 74708		
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 14 OF 15 SHEETS			ILLINOIS FED. AID PROJECT		

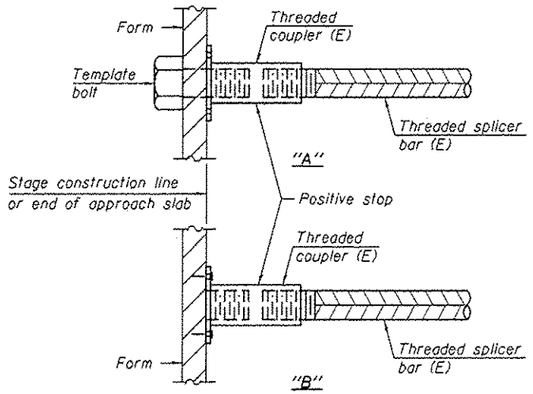


STANDARD BAR SPLICER ASSEMBLY

Threaded splicer bar length = min. lap length + 1½" + thread length

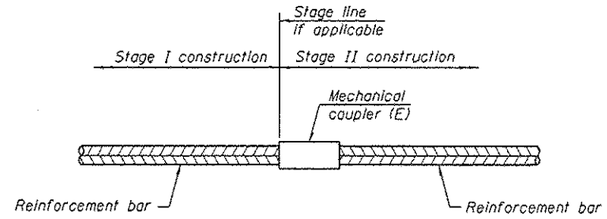
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
Deck	#5	16	3'-6"
Hatch Block	#6	8	4'-0"
Backwall	#6	20	4'-4"
Approach	#5	14	3'-0"



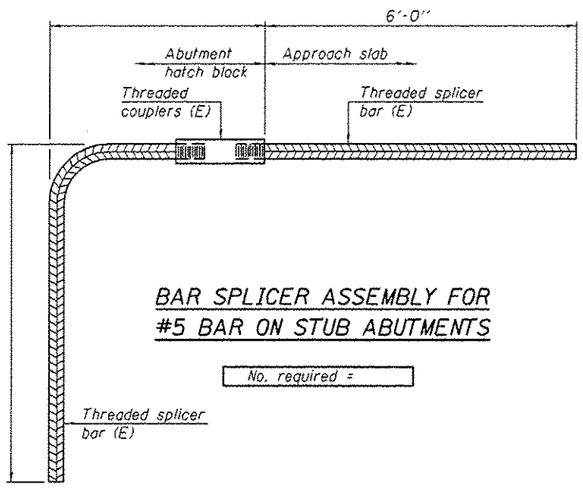
INSTALLATION AND SETTING METHODS

"A" : Set bar splicer assembly by means of a template bolt.
"B" : Set bar splicer assembly by nailing to wood forms or cementing to steel forms.
(E) : Indicates epoxy coating.



STANDARD MECHANICAL SPLICER

Location	Bar size	No. assemblies required
Approach Slab	#9	84



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.

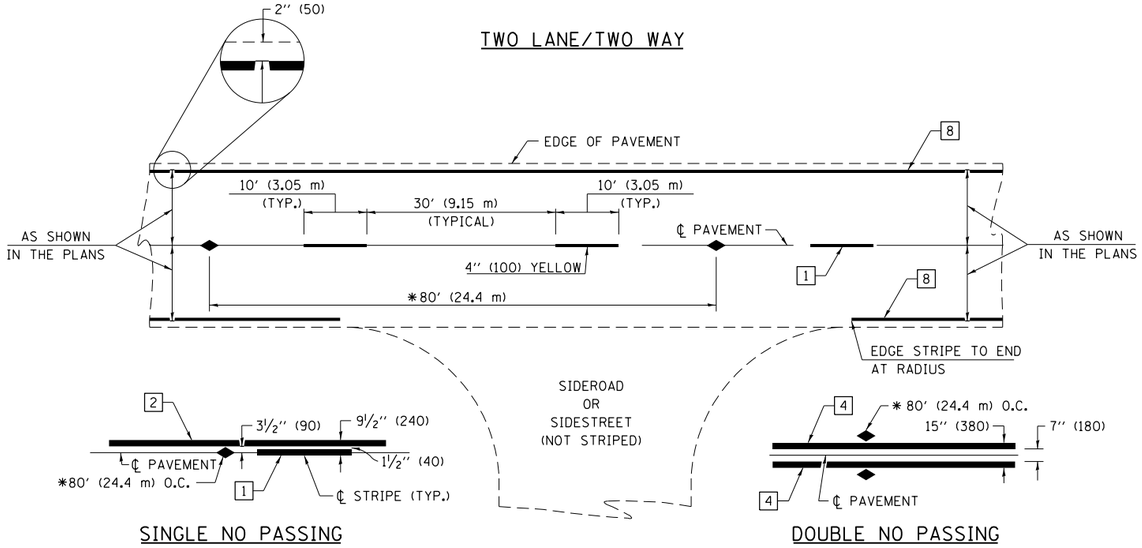
Bar splicer assemblies shall be epoxy coated according to the requirements for reinforcement bars. See Section 508 of the Standard Specifications.

See approved list of bar splicer assemblies and mechanical splicers for alternatives.

BSD-1 6-8-15

DESIGNED - CCC		DATE - SEPTEMBER 20, 2016	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS SN 080-0002	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
CHECKED - JGY					327	D7 Bridge Repairs 2017-2	RICHLAND	28	24
DRAWN - Kyle M. Steffen	PASSED	REVISED					CONTRACT NO. 74708		
CHECKED - CCC JGY	ACTING ENGINEER OF BRIDGES AND STRUCTURES	REVISED		SHEET NO. 15 OF 15 SHEETS			ILLINOIS FED. AID PROJECT		

TWO LANE/TWO WAY



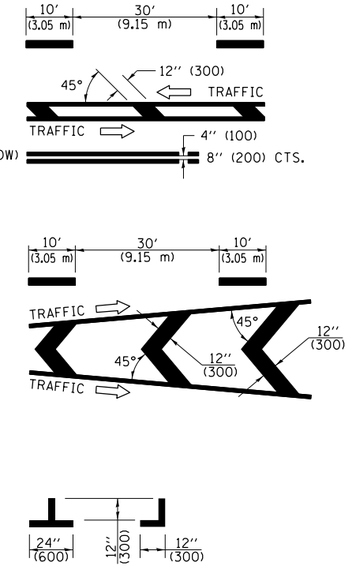
SINGLE NO PASSING

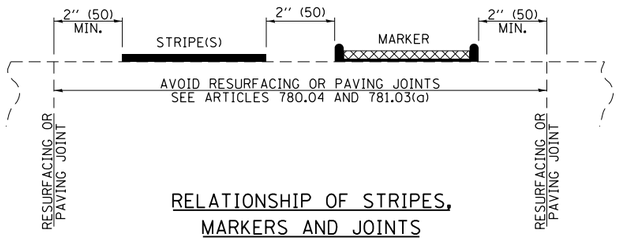
DOUBLE NO PASSING

∗ REDUCE TO 40' (12.2 m) O.C. ON CURVES WITH POSTED OR ADVISORY SPEEDS OF 45 mph (70 km/h) OR LESS.

PAVEMENT MARKING LEGEND

1. 4" (100) SKIP-DASH (YELLOW)
2. 4" (100) SOLID (YELLOW)
3. 12" (300) DIAGONAL (YELLOW)
4. 4" (100) DOUBLE YELLOW (NARROW)
5. 12" (300) SOLID WHITE
6. RESERVED
7. 6" (150) SKIP-DASH (WHITE)
8. 4" (100) SOLID (WHITE)
9. 12" (300) DIAGONAL (WHITE)
10. 6" (150) SOLID (WHITE)
11. 24" (600) STOP BAR (WHITE)
12. 8" (200) SOLID (WHITE)
13. 4" (100) PARKING WHITE



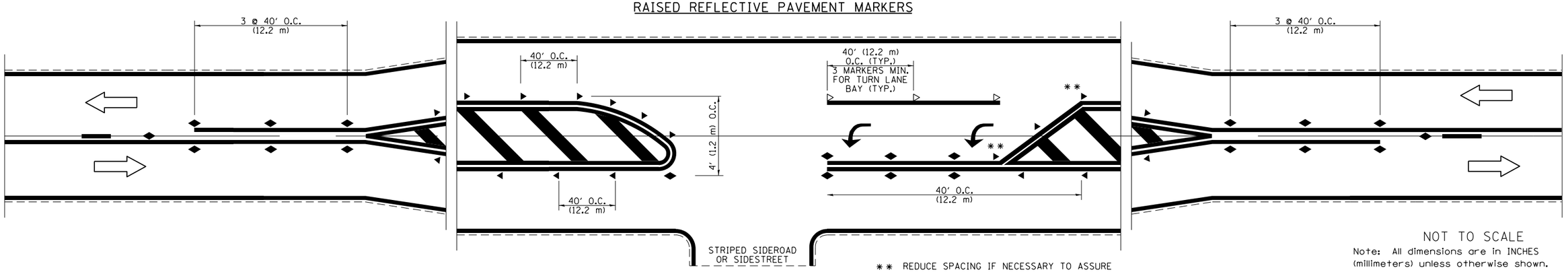


RELATIONSHIP OF STRIPES, MARKERS AND JOINTS

TYPICAL PAVEMENT MARKERS LEGEND

- TWO-WAY AMBER MARKER
- ONE-WAY AMBER MARKER
- ONE-WAY CRYSTAL MARKER

RAISED REFLECTIVE PAVEMENT MARKERS



∗∗ REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. 78000001

FILE NAME =	USER NAME = steffenmk	DESIGNED -	REVISED -
pw:\\IL084EBIDINTEG.illinois.gov:PWIDOT\Documents\IDOT Offices\District 7\Projects\74708\Data\CABsheets\D774708-sht-details.dgn		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/24/2016	DATE -	REVISED -

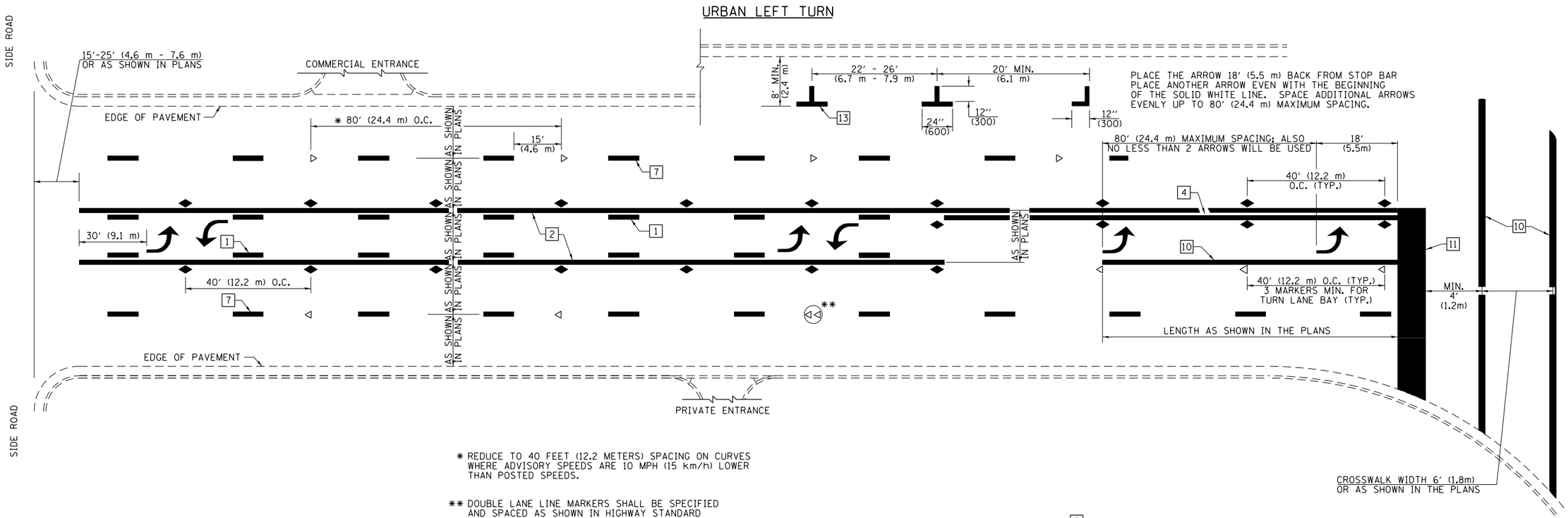
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS)

SCALE: N/A | SHEET NO. 1 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	D7 Bridge Repairs 2017-2	RICHLAND	28	25
		CONTRACT NO. 74708		
		ILLINOIS FED. AID PROJECT		

URBAN LEFT TURN

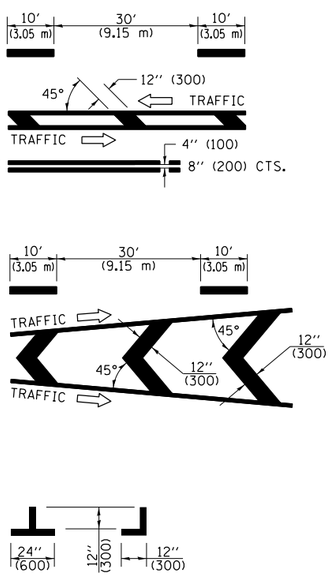


* REDUCE TO 40 FEET (12.2 METERS) SPACING ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

** DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

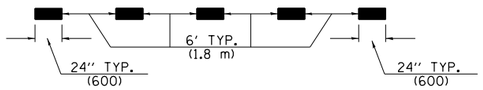
PAVEMENT MARKING LEGEND

1. 4" (100) SKIP-DASH (YELLOW)
2. 4" (100) SOLID (YELLOW)
3. 12" (300) DIAGONAL (YELLOW)
4. 4" (100) DOUBLE YELLOW (NARROW)
5. 12" (300) SOLID WHITE
6. RESERVED
7. 6" (150) SKIP-DASH (WHITE)
8. 4" (100) SOLID (WHITE)
9. 12" (300) DIAGONAL (WHITE)
10. 6" (150) SOLID (WHITE)
11. 24" (600) STOP BAR (WHITE)
12. 8" (200) SOLID (WHITE)
13. 4" (100) PARKING WHITE

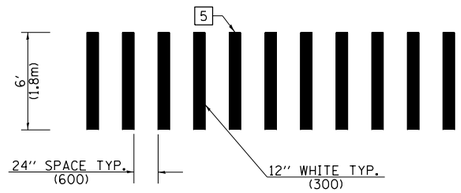


GENERAL NOTES

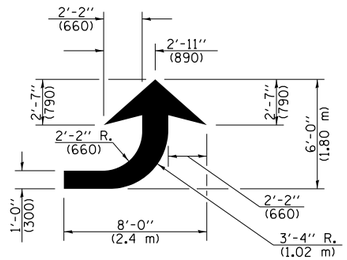
1. TURN ARROW PAIRS SHALL BE PLACED AT 250'(75 m) INTERVALS AND SHALL BE EVENLY SPACED BETWEEN BOTH ENDS OF THE BIDIRECTIONAL LEFT TURN LANE. USE A MINIMUM OF TWO PAIRS PER BLOCK.
2. THE SOLID YELLOW PAVEMENT MARKINGS [2] SHOULD GENERALLY START OR END NEAR THE RADIUS POINT OF EACH STREET RETURN EXCEPT WHERE ONE OR BOTH ENDS WOULD INCLUDE STOP BARS.
3. THE SKIP-DASH PAVEMENT MARKINGS [1] OR [7] SHOULD BE CENTERED BETWEEN BOTH ENDS OF EACH CITY BLOCK AND SHALL BE PLACED SO THEY LINE UP ACROSS FROM EACH OTHER.
4. USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)
5. LANE LINE EXTENSIONS SHALL BE THE SAME COLOR AND WIDTH AS THE LANE LINE BEING EXTENDED.



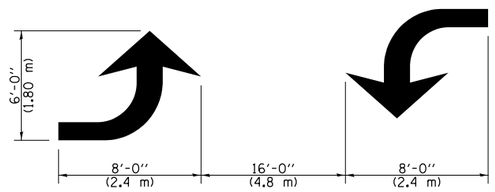
LANE LINE EXTENSIONS



CROSSWALK DETAIL
(DECATUR CITY LIMITS ONLY)



LEFT ARROW
REVERSE FOR RIGHT ARROW
AREA = 15.6 SQ. FT. (1.47 m^2)
(WHITE)



TYPICAL DOUBLE
TURN ARROWS (WHITE)

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. 78000001

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ' / in.	CHECKED -	REVISED -
	PLOT DATE = 8/24/2016	DATE -	REVISED -

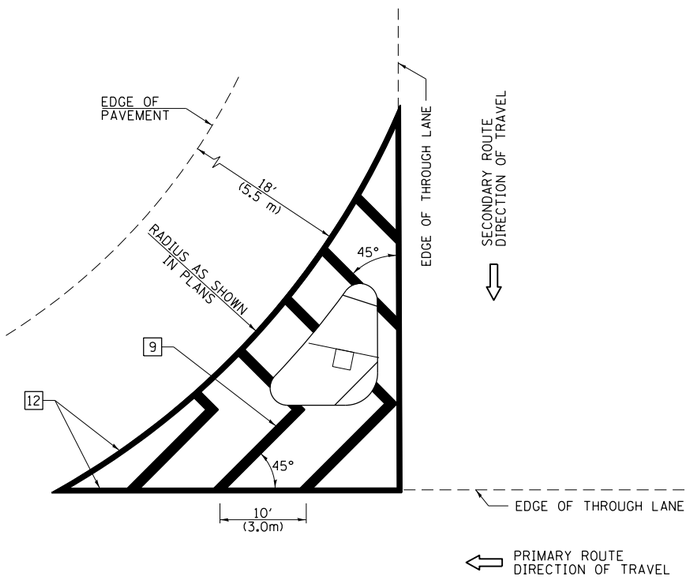
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS)

SCALE: N/A | SHEET NO. 2 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	D7 Bridge Repairs 2017-2	RICHLAND	28	26
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			

ISLAND

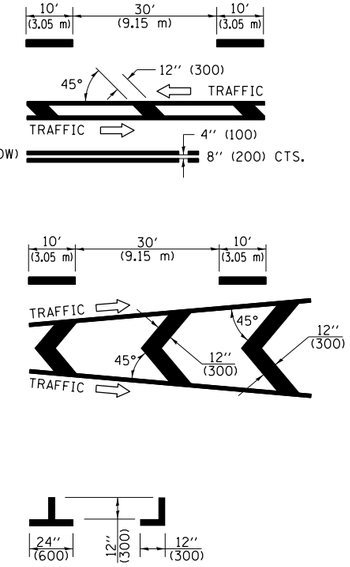


GENERAL NOTES

1. RAISED AND CORRUGATED MEDIANS SHALL BE OUTLINED WITH [2] IF PRESENT.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
5. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING:

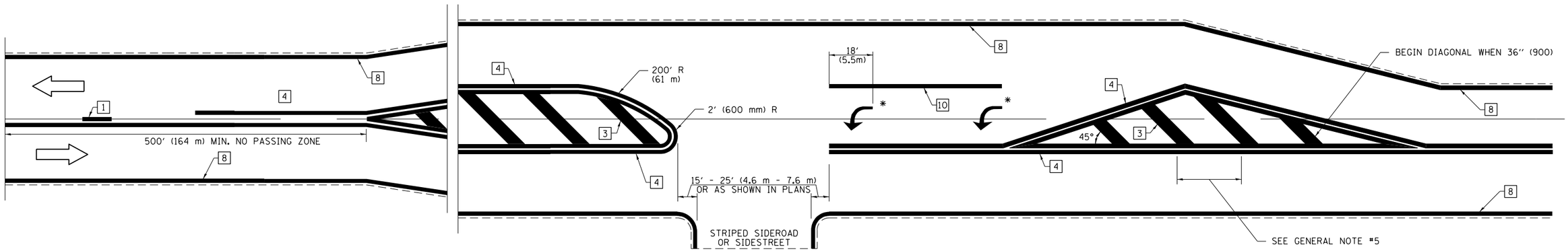
< 30 MPH	(< 50 km/h)	15′ (4.5 m)
30-45 MPH	(50-75 km/h	20′ (6.0 m)
>45 MPH	(> 75 km/h	30′ (9.0 m)

PAVEMENT MARKING LEGEND



[1] 4″ (100) SKIP-DASH (YELLOW)
[2] 4″ (100) SOLID (YELLOW)
[3] 12″ (300) DIAGONAL (YELLOW)
[4] 4″ (100) DOUBLE YELLOW (NARROW)
[5] 12″ (300) SOLID WHITE
[6] RESERVED
[7] 6″ (150) SKIP-DASH (WHITE)
[8] 4″ (100) SOLID (WHITE)
[9] 12″ (300) DIAGONAL (WHITE)
[10] 6″ (150) SOLID (WHITE)
[11] 24″ (600) STOP BAR (WHITE)
[12] 8″ (200) SOLID (WHITE)
[13] 4″ (100) PARKING WHITE

RURAL LEFT TURN STRIPING



* PLACE AN ARROW 18′ (5.5 m) BACK FROM STOP BAR. PLACE ANOTHER ARROW EVEN WITH THE BEGINNING OF THE SOLID WHITE LINE. SPACE ADDITIONAL ARROWS EVENLY UP TO 80′ (24.4 m) MAXIMUM SPACING. USE MINIMUM OF 2 ARROWS.

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

DISTRICT 7 DETAIL NO. 78000001

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		DRAWN -	REVISED -
	PLOT SCALE = 100.0000 ′ / in.	CHECKED -	REVISED -
	PLOT DATE = 8/24/2016	DATE -	REVISED -

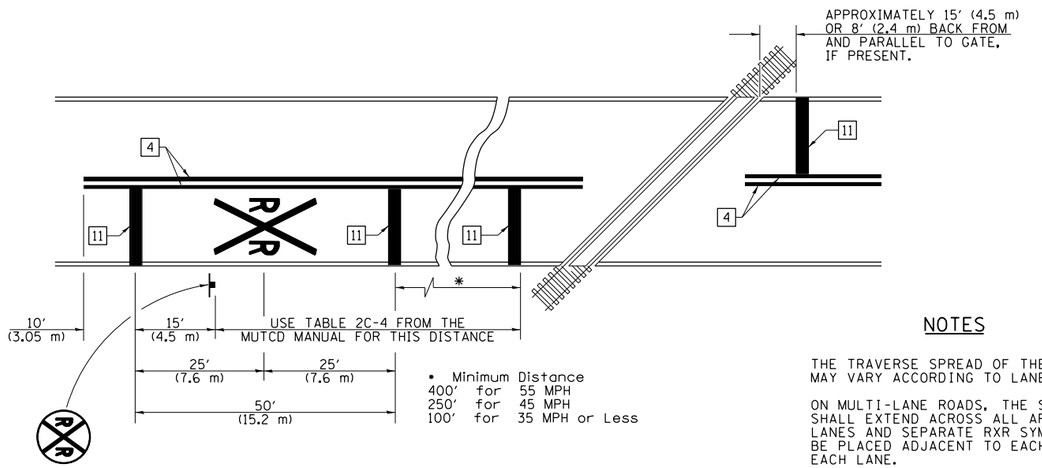
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

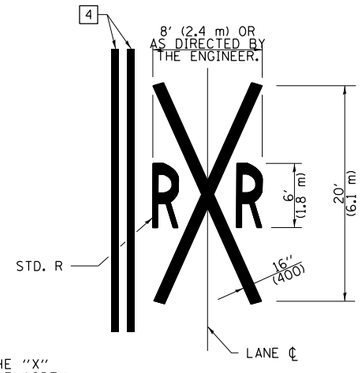
PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS)

SCALE: N/A | SHEET NO. 3 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	D7 Bridge Repairs 2017-2	RICHLAND	28	27
		CONTRACT NO. 74708		
	ILLINOIS FED. AID PROJECT			

PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING





NOTES

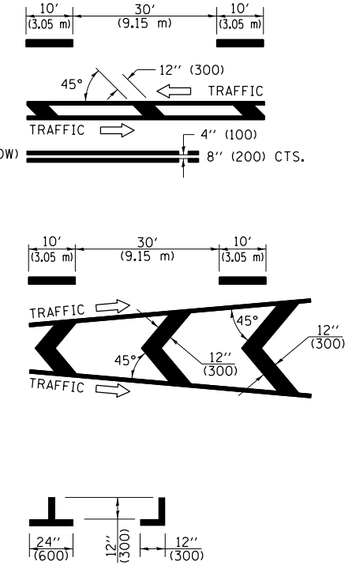
THE TRAVERSE SPREAD OF THE "X" MAY VARY ACCORDING TO LANE WIDTH.

ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

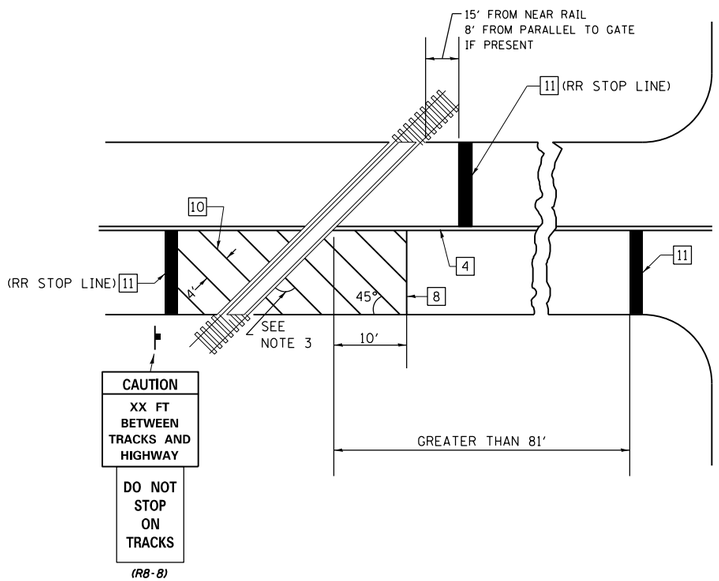
WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.

PAVEMENT MARKING LEGEND

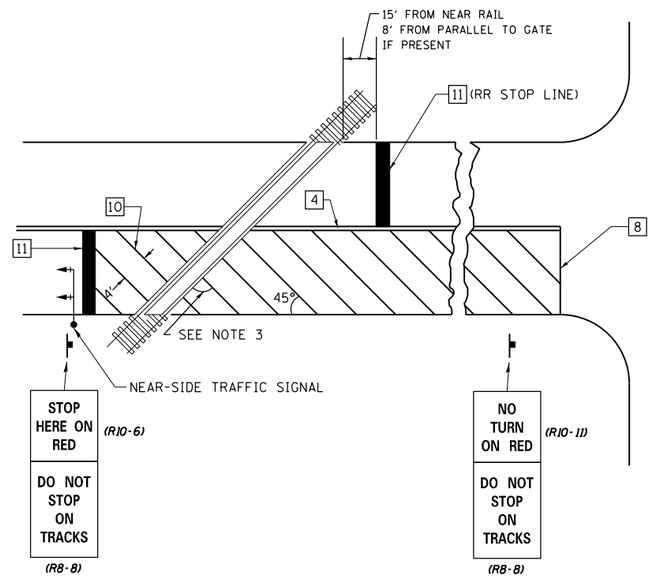
1. 4" (100) SKIP-DASH (YELLOW)
2. 4" (100) SOLID (YELLOW)
3. 12" (300) DIAGONAL (YELLOW)
4. 4" (100) DOUBLE YELLOW (NARROW)
5. 12" (300) SOLID WHITE
6. RESERVED
7. 6" (150) SKIP-DASH (WHITE)
8. 4" (100) SOLID (WHITE)
9. 12" (300) DIAGONAL (WHITE)
10. 6" (150) SOLID (WHITE)
11. 24" (600) STOP BAR (WHITE)
12. 8" (200) SOLID (WHITE)
13. 4" (100) PARKING WHITE



RAILROAD CROSSING WITH INTERCONNECT ONLY



RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



GENERAL NOTES

1. SUPPLEMENTAL PAVEMENT MARKINGS TO BE INSTALLED ONLY ON APPROACHES TO INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS WHICH ARE INTERCONNECTED WITH THE RAILROAD WARNING SIGNALS.
2. EXTEND PAVEMENT MARKINGS TO THE INTERSECTION ONLY WHERE NEAR-SIDE TRAFFIC SIGNALS ARE USED.
3. WHERE THE ANGLE BETWEEN THE DIAGONAL PAVEMENT MARKINGS AND THE TRACK WOULD BE LESS THAN 20°, THE PAVEMENT MARKINGS SHOULD BE PLACED IN THE OPPOSITE DIRECTION FROM THAT SHOWN.

SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

NOT TO SCALE

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

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STATE OF ILLINOIS
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PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL & URBAN APPLICATIONS)

SCALE: N/A | SHEET NO. 4 OF 4 SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
327	D7 Bridge Repairs 2017-2	RICHLAND	28	28
		CONTRACT NO. 74708		
	ILLINOIS	FED. AID PROJECT		