

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
116	(18-47HB-1)BR	CUMBERLAND	20	1
FED. ROAD DIST. NO.	ILLINOIS	CONTRACT NO. 74346		

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS**

**PROPOSED  
HIGHWAY PLANS**

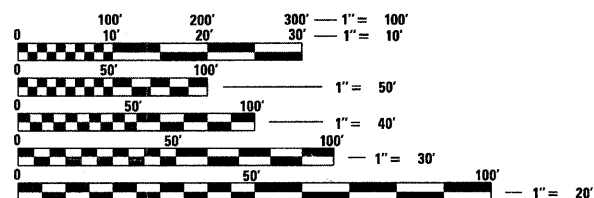
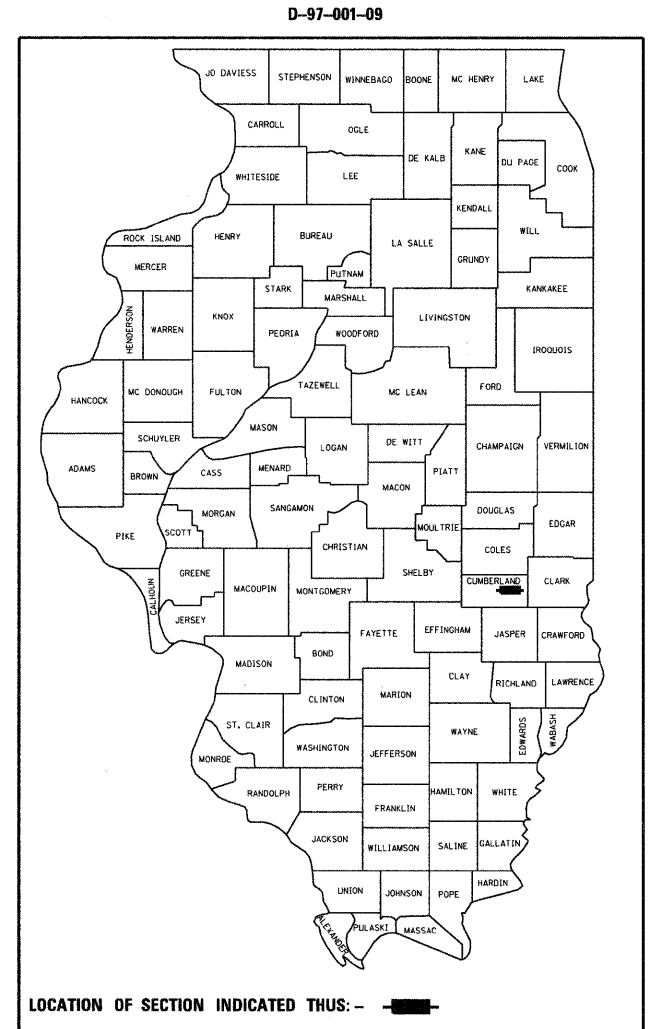
**FAP ROUTE 116 (IL 130)  
SECTION (18-47HB-1)BR**

**BRIDGE DECK REPAIRS & OVERLAY  
CUMBERLAND COUNTY**

FOR INDEX OF SHEETS, SEE SHEET NO. 2

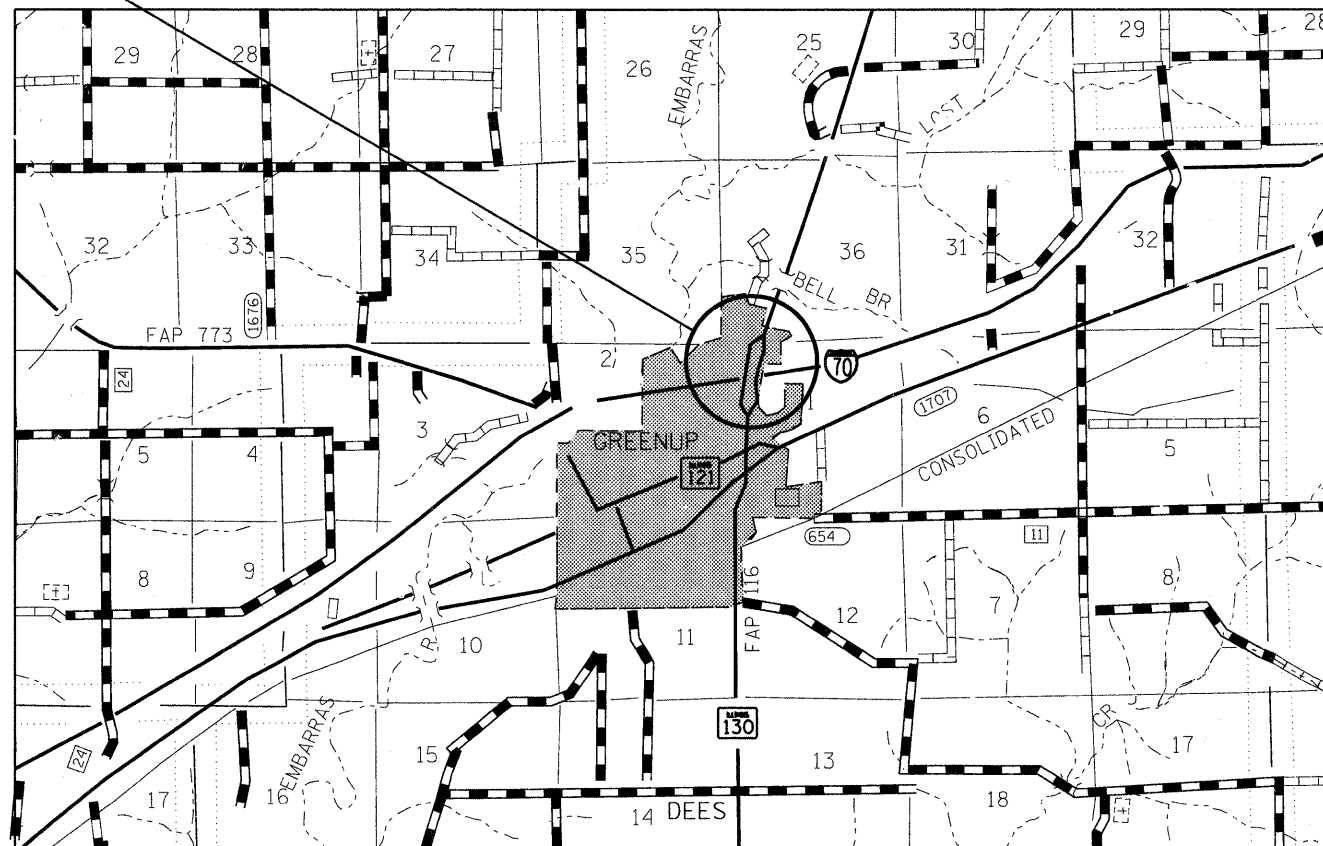
STRUCTURE NO. 018-0025  
BEGINING STA. 842+54.50  
FOUR SPAN STRUCTURE  
W33X118 STEEL I BEAMS  
WITH REINFORCED CONCRETE DECK  
BK. TO BK. ABUTMENT = 238'-0"  
SKEW = 14°-18'-07"  
END STA. 857+52.50

C-97-001-09



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



GROSS LENGTH = 1498.0 FT. (0.3 MILES)  
NET LENGTH = 1498.0 FT. (0.3 MILES)

PROJECT ENGINEER - KAREN BIERMAN  
PROJECT MANAGER - MIKE ALLEN

CONTRACT NO. 74346

ADT (2007) = 4050

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

SUBMITTED March 19 2010  
Roger J. Driskoll  
DEPUTY DIRECTOR OF HIGHWAYS, REGION ENGINEER

May 7 2010  
Scott E. Stitt P.E.  
Acting ENGINEER OF DESIGN AND ENVIRONMENT

May 7 2010  
Christine M. Gooden  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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

**INDEX OF SHEETS**

SHEET NO.	DESCRIPTION
1	COVER SHEET
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3	SUMMARY OF QUANTITIES
4	SCHEDULE OF QUANTITIES
5-7	STAGE I CONSTRUCTION DETAILS
8-10	STAGE II CONSTRUCTION DETAILS
11	BRIDGE GENERAL NOTES & BILL OF MATERIALS
12	PLAN & ELEVATION VIEW
13-15	EXPANSION JOINT & REBAR DETAILS
16	BRIDGE DECK PATCHING
17	EXISTING DECK DRAINS TO BE PLUGGED
18	FLOOR DRAIN DETAIL
19	RAIL SUPPORT ANCHOR DETAILS
20	PREFORMED JOINT STRIP SEAL
21	BAR SPLICER ASSEMBLY
22-23	BEARING DETAIL
24-27	PAVEMENT MARKING DETAILS
28	PAVEMENT MARKING & PRISMATIC REFLECTOR DETAILS

**LIST OF HIGHWAY STANDARDS**

000001-05	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
001001-02	AREAS OF REINFORCEMENT BARS
001006	DECIMAL OF AN INCH AND OF A FOOT
606001-04	CONCRETE CURB TYPE B AND COMBINATION CONCRETE CURB AND GUTTER
606301-04	PC CONCRETE ISLANDS AND MEDIANS
701006-03	OFF-ROAD OPERATIONS, 2L, 2W, 15' (4.5M) TO 24" (600 MM) FROM PAVEMENT EDGE
701011-02	OFF-ROAD MOVING OPERATIONS, 2L, 2W, DAY ONLY
701201-03	LANE CLOSURE, 2L, 2W, DAY ONLY, FOR SPEEDS > 45 MPH
701301-03	LANE CLOSURE, 2L, 2W, SHORT TIME OPERATIONS
701311-03	LANE CLOSURE, 2L, 2W, MOVING OPERATIONS - DAY ONLY
701316-04	LANE CLOSURE, 2L, 2W, BRIDGE REPAIR, FOR SPEEDS > 45 MPH
701400-04	APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY
701406-05	LANE CLOSURE, FREEWAY/EXPRESSWAY, DAY OPERATIONS ONLY
701411-06	LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS > 45 MPH
701901-01	TRAFFIC CONTROL DEVICES
720001-01	SIGN PANEL MOUNTING DETAILS
720006-02	SIGN PANEL ERECTION DETAILS
780001-02	TYPICAL PAVEMENT MARKINGS
781001-03	TYPICAL APPLICATIONS RAISED REFLECTIVE PAVEMENT MARKERS
886001-01	DETECTOR LOOP INSTALLATIONS
886006-01	TYPICAL LAYOUT FOR DETECTION LOOPS

**GENERAL NOTES**

THIS SECTION SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE PLANS AND STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, ADOPTED JANUARY 1, 2007, THE SUPPLEMENTAL SPECIFICATIONS AND RECURRING SPECIAL PROVISIONS ADOPTED JANUARY 1, 2010, AND THE SPECIAL PROVISIONS INCLUDED IN THE PROPSAL.

THIS PROJECT IS LOCATED ON IL-130 AT THE IL-130/I-70 INTERCHANGE AT GREENUP IN CUMBERLAND COUNTY. THIS WORK INCLUDES THE FOLLOWING REPAIRS TO STRUCTURE 018-0025 CARRYING IL-130 OVER I-70: REMOVAL OF THE EXISTING ASBESTOS HOT-MIX ASPHALT WEARING SURFACE, PARTIAL AND FULL DEPTH DECK REPAIR, NEW EXPANSION JOINTS, NEW FLOOR DRAINS, NEW WATERPROOFING MEMBRANE SYSTEM, NEW HOT-MIX ASPHALT WEARING SURFACE, AND ALL OTHER WORK NECESSARY TO COMPLETE THIS PROJECT.

THE TOTAL QUANTITY OF PAINT PAVEMENT MARKING - LINE 4" CONSISTS OF 2057 FEET OF YELLOW.

THE TOTAL QUANTITY OF PAINT PAVEMENT MARKING - LINE 6" CONSISTS OF 430 FEET OF WHITE.

THE TOTAL QUANTITY OF REFLECTOR REPLACEMENTS IS 6 ONE-WAY CRYSTAL.

THE TOTAL QUANTITY OF PRISMATIC CURB REFLECTORS IS 10 AMBER.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING UTILITY PROPERTY FROM CONSTRUCTION OPERATION AS OUTLINED IN ARTICLE 107.31 OF THE STANDARD SPECIFICATIONS. THE J.U.L.I.E. NUMBER IS 800-892-0123. A MINIMUM OF 96 HOURS ADVANCE NOTICE IS REQUESTED.

THE REFLECTIVE LENS OF ALL RAISED REFLECTIVE MARKERS LOCATED IN CONFLICT WITH THE STAGE TRAFFIC CONTROL SHALL BE REMOVED PRIOR TO STAGE I CONSTRUCTION. THIS WORK SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFLECTOR REMOVAL. REPLACEMENT OF THE REFLECTORS AT THE COMPLETION OF STAGE II WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR REFLECTOR REPLACEMENT.

FOR STABILIZATION, ALL TYPE III BARRICADES SHALL REQUIRE A MINIMUM OF FOUR SANDBAGS PER BARRICADE.

FILE NAME =	USER NAME = #USER#	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>INDEX OF SHEETS, STANDARDS, AND GENERAL NOTES S.N. 018-0025</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
#FILEL#		DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	2	
	PLOT SCALE = #SCALE#	CHECKED -	REVISED -			CONTRACT NO. 74346					
	PLOT DATE = #DATE#	DATE -	REVISED -			SCALE:	SHEET NO. OF SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT

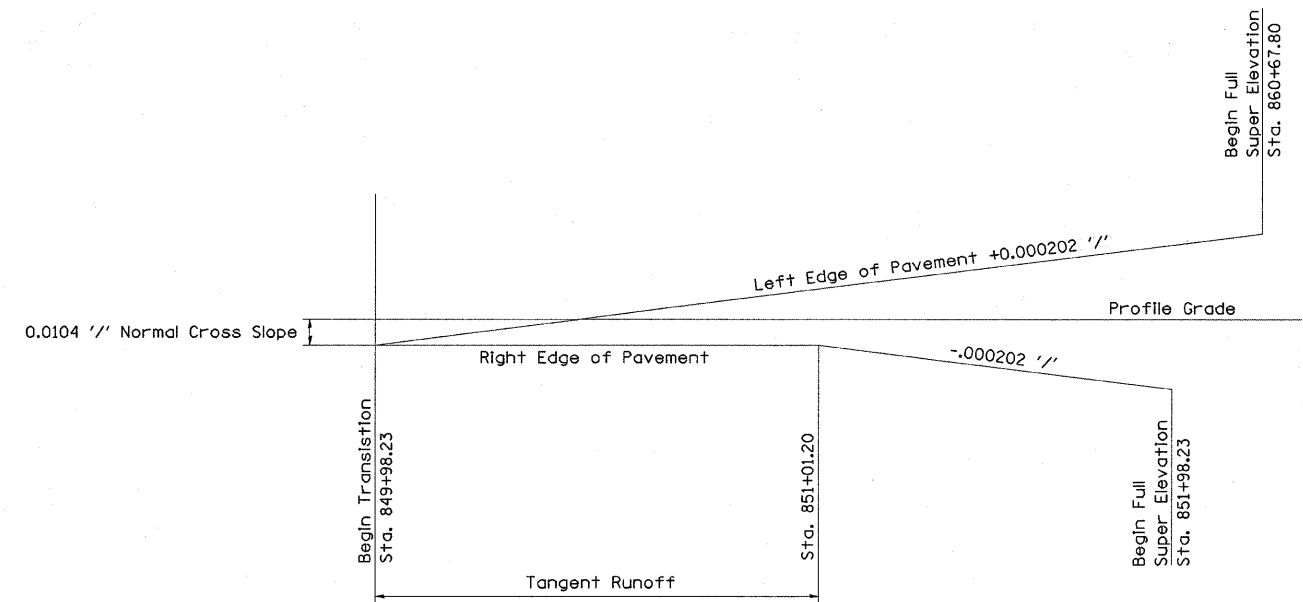
# SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES			100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		018-0025 SFTY-2A	
35300400	PORTLAND CEMENT CONCRETE BASE COURSE 9"	SQ YD	74	74	
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	199	199	
44001114	HOT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS)	SQ YD	978	978	
44002020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	379	379	
50102400	CONCRETE REMOVAL	CU YD	22.3	22.3	
50157300	PROTECTIVE SHIELD	SQ YD	529	529	
50300100	FLOOR DRAINS	EACH	17	17	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	24.7	24.7	
50300260	BRIDGE DECK GROOVING	SQ YD	873	873	
50300300	PROTECTIVE COAT	SQ YD	960	960	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1920	1920	
50500715	JACK AND REMOVE EXISTING BEARINGS	EACH	18	18	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2890	2890	
50800515	BAR SPLICERS	EACH	26	26	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	119	119	
52100020	ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	18	18	
52100520	ANCHOR BOLTS, 1"	EACH	36	36	
60621900	CONCRETE MEDIAN, TYPE SM (SPECIAL)	SQ FT	662	662	
67000500	ENGINEER'S FIELD OFFICE, TYPE B	CAL MO	4	4	
67100100	MOBILIZATION	L SUM	1	1	
70100100	TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	EACH	1	1	
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	2	2	
70100450	TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	L SUM	1	1	
70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	5	5	
70106500	TEMPORARY BRIDGE TRAFFIC SIGNALS	EACH	1	1	
70300100	SHORT-TERM PAVEMENT MARKING	FOOT	3623	3623	
70300210	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	63	63	
70300220	TEMPORARY PAVEMENT MARKING - LINE 4"	FOOT	2057	2057	
70300240	TEMPORARY PAVEMENT MARKING - LINE 6"	FOOT	430	430	

SUMMARY OF QUANTITIES			100% STATE TOTAL QUANTITIES	CONSTRUCTION TYPE CODE	
CODE NO	ITEM	UNIT		018-0025 SFTY-2A	
70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	1208	1208	
* 78001100	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	63	63	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	2057	2057	
* 78001130	PAINT PAVEMENT MARKING - LINE 6"	FOOT	430	430	
* 78100300	REPLACEMENT REFLECTOR	EACH	6	6	
78200300	PRISMATIC CURB REFLECTOR	EACH	10	10	
78300100	PAVEMENT MARKING REMOVAL	SQ FT	725	725	
X0321468	PLUG EXISTING DECK DRAINS	EACH	7	7	
X0322050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	6	6	
X4403300	CONCRETE MEDIAN REMOVAL	SQ FT	72	72	
X7240600	REMOVE AND RE-ERECT EXISTING SIGN	EACH	2	2	
XZ191208	BRIDGE DECK MICROSILICA CONCRETE OVERLAY 3 1/4"	SQ YD	960	960	
Z0006204	BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ YD	960	960	
<del>Z0012750</del>	<del>CONCRETE MEDIAN REPAIR</del>	<del>SQ FT</del>	<del>47</del>	<del>47</del>	
Z0016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	3	3	
Z0016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	134	134	
X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	47	47	
*SPECIALTY ITEMS					

PAVEMENT MARKING SCHEDULE






STATION TO STATION	LENGTH	PAINT PAVEMENT MARKING - LINE 4"	TEMPORARY PAVEMENT MARKING - LINE 4"	PAINT PAVEMENT MARKING - LINE 6"	TEMPORARY PAVEMENT MARKING - LINE 6"	PAINT PAVEMENT MARKING - LETTERS AND SYMBOLS	TEMPORARY PAVEMENT MARKING - LETTERS AND SYMBOLS
		FEET	FT	FT	FT	SQ FT	SQ FT
843+55.00 TO 856+40.00	1285	2057	2057	430	430	63	63
TOTALS	1285	2057	2057	430	430	63	63



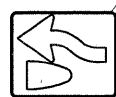
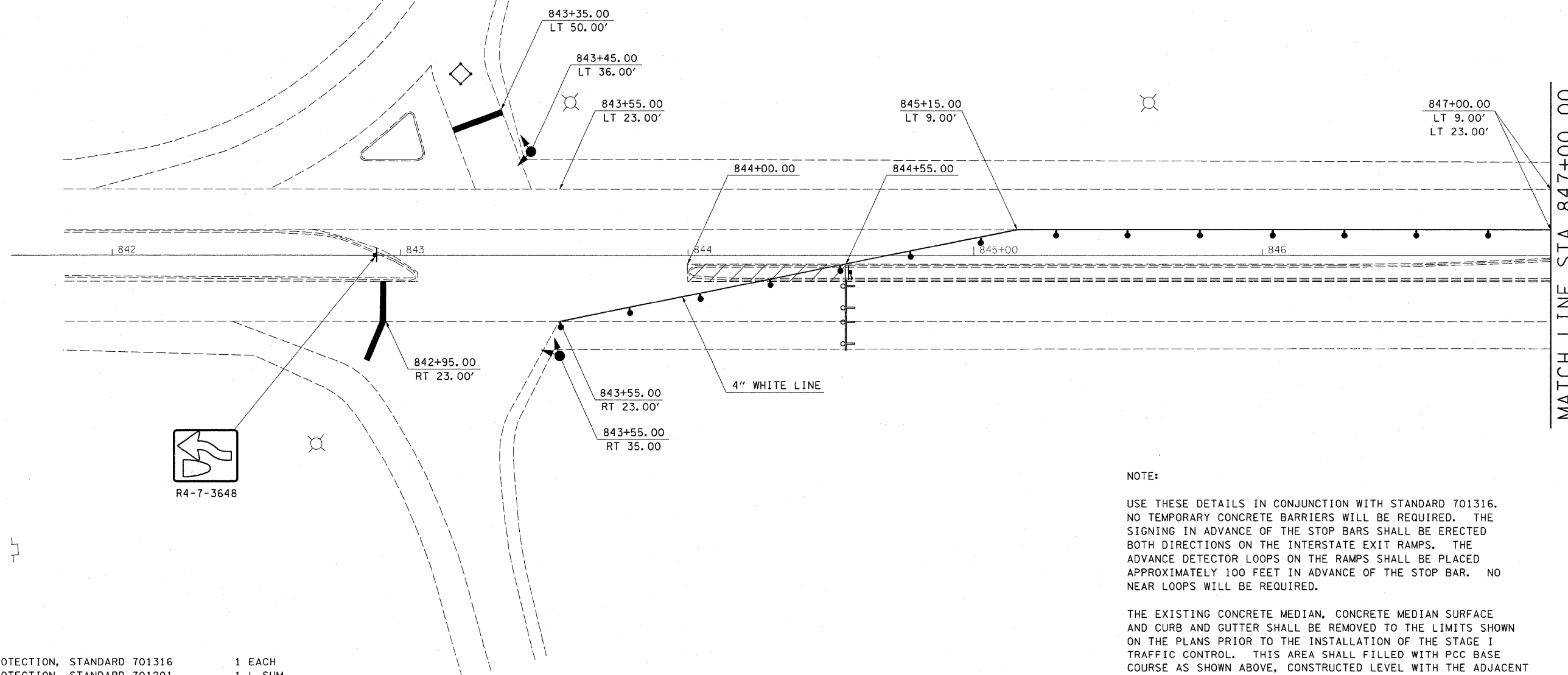
CROSS SLOPE TRANSITION DIAGRAM

FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SCHEDULE OF QUANTITIES</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\p\1001\SWARTZRW\des\53588\107	74346-sht-schedule.dgn	DRAWN -	REVISED -					116	(18-47HB-1)BR	CUMBERLAND	28	4
	PLOT SCALE = 20,0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 74346			ILLINOIS FED. AID PROJECT				
	PLOT DATE = 3/19/2010	DATE -	REVISED -		SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.					



-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH STEADY BURNING LIGHT
-  PCC BASE COURSE, 9"
-  TEMPORARY BRIDGE TRAFFIC SIGNAL
-  DETECTOR LOOP

SEE STANDARD 701316-04  
FOR TRAFFIC CONTROL IN  
ADVANCE OF STOP BARS.



R4-7-3648

TRAFFIC CONTROL AND PROTECTION, STANDARD 701316	1 EACH
TRAFFIC CONTROL AND PROTECTION, STANDARD 701201	1 L SUM
TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	1 L SUM
TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	2 EACH
TEMPORARY BRIDGE TRAFFIC SIGNALS	1 EACH
RAISED REFLECTOR PAVEMENT MARKER REFLECTOR REMOVAL	6 EACH

**NOTE:**

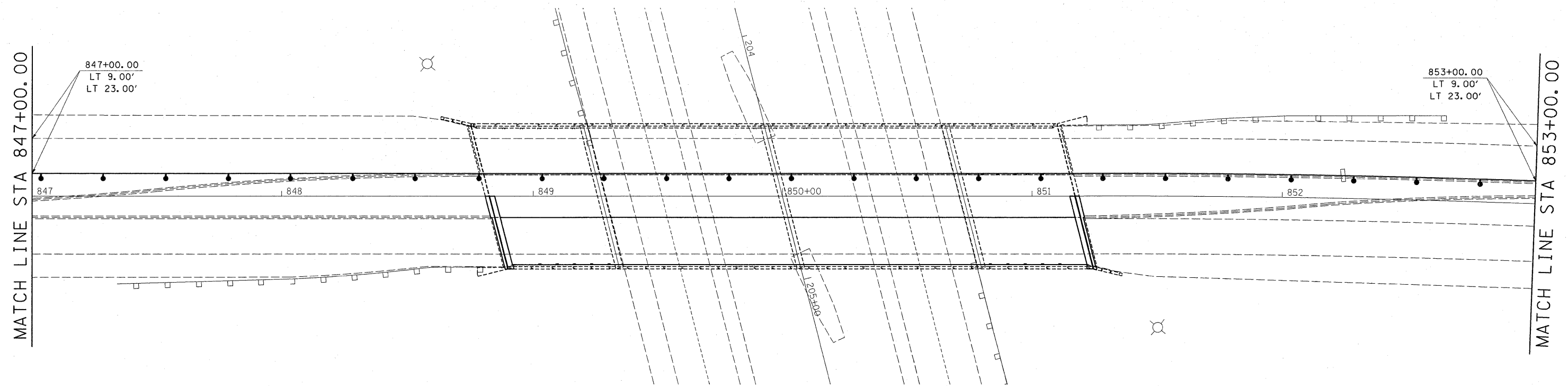
USE THESE DETAILS IN CONJUNCTION WITH STANDARD 701316. NO TEMPORARY CONCRETE BARRIERS WILL BE REQUIRED. THE SIGNING IN ADVANCE OF THE STOP BARS SHALL BE ERRECTED BOTH DIRECTIONS ON THE INTERSTATE EXIT RAMP. THE ADVANCE DETECTOR LOOPS ON THE RAMP SHALL BE PLACED APPROXIMATELY 100 FEET IN ADVANCE OF THE STOP BAR. NO NEAR LOOPS WILL BE REQUIRED.






THE EXISTING CONCRETE MEDIAN, CONCRETE MEDIAN SURFACE AND CURB AND GUTTER SHALL BE REMOVED TO THE LIMITS SHOWN ON THE PLANS PRIOR TO THE INSTALLATION OF THE STAGE I TRAFFIC CONTROL. THIS AREA SHALL FILLED WITH PCC BASE COURSE AS SHOWN ABOVE, CONSTRUCTED LEVEL WITH THE ADJACENT PAVEMENT. AT THE CONCLUSION OF THE BRIDGE DECK REPAIR OPERATIONS, CONCRETE MEDIAN, TYPE SM (SPECIAL) SHALL BE CONSTRUCTED TO REPLACE THE MEDIAN. MEDIAN WORK SHALL BE PERFORMED UNDER STANDARD 701201.

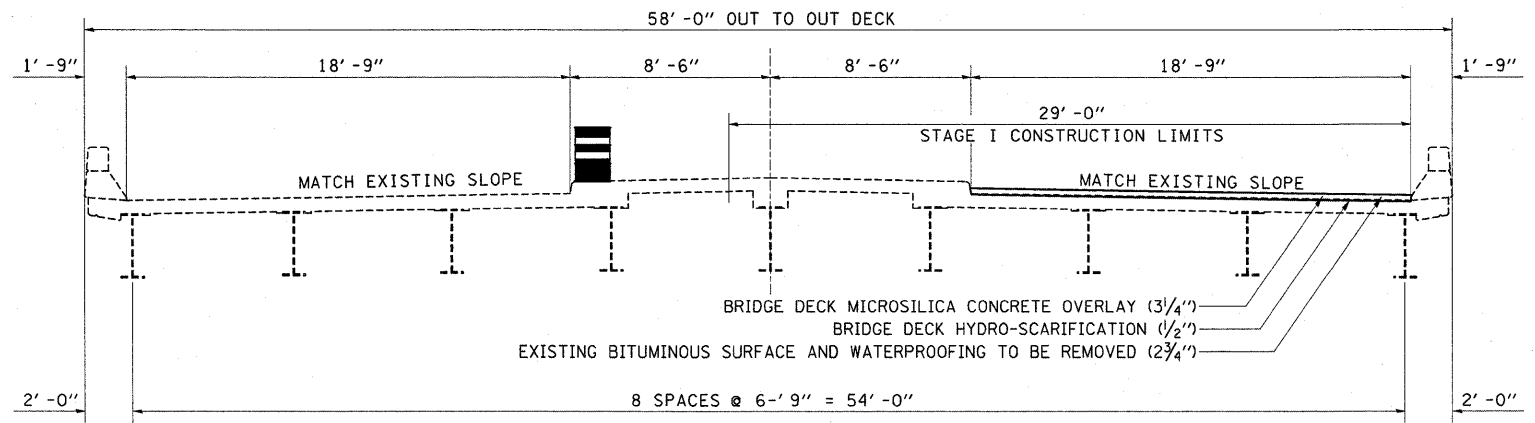
NO POSTED WIDTH RESTRICTION SHALL BE NECESSARY. VERTICAL PANELS ON THE STRUCTURE MAY BE ELIMINATED.

MATCH LINE STA 847+00.00

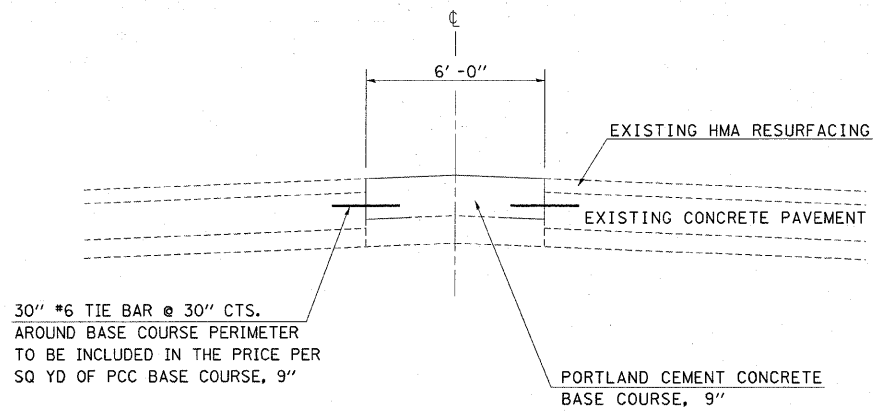
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PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -	REVISED -		CONTRACT NO. 74346			FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		
PLOT DATE = 3/19/2018	DATE -	REVISED -	REVISED -		SCALE: 20	SHEET NO. 1 OF 3 SHEETS	STA.	TO STA.				



-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH STEADY BURNING LIGHT
-  PCC BASE COURSE, 9"
-  TEMPORARY BRIDGE TRAFFIC SIGNAL
-  DETECTOR LOOP



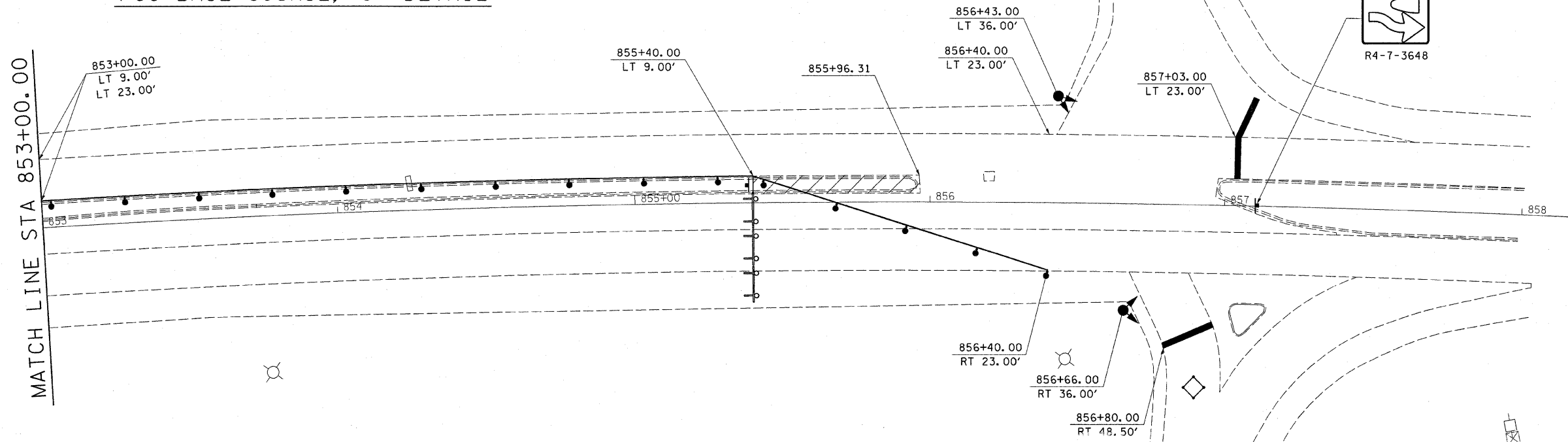
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	PLOT SCALE = 20,0000 ' / IN.	CHECKED -	REVISED -									
	PLOT DATE = 3/19/2010	DATE -	REVISED -									
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT												



**PCC BASE COURSE, 9" DETAIL**

- TYPE III BARRICADE WITH FLASHING LIGHTS
- DRUM WITH STEADY BURNING LIGHT
- PCC BASE COURSE, 9"
- TEMPORARY BRIDGE TRAFFIC SIGNAL
- DETECTOR LOOP

SEE STANDARD 701316-04  
FOR TRAFFIC CONTROL IN  
ADVANCE OF STOP BARS.



**PAVEMENT MARKING REMOVAL**

STA. 844+00.00 TO STA. 846+15.00	6" WHITE AT LEFT TURN LANE	108 SQ FT
STA. 848+50.00 TO STA. 855+40.00	4" YELLOW MEDIAN STRIPE	230 SQ FT
STA. 844+00.00 TO STA. 844+55.00	4" YELLOW AT MEDIAN REMOVAL	37 SQ FT
STA. 855+40.00 TO STA. 855+97.00	4" YELLOW AT MEDIAN REMOVAL	38 SQ FT
STA. 844+00.00 TO STA. 845+15.00	LEFT TURN ARROWS	31 SQ FT
<b>TOTAL</b>		<b>444 SQ FT</b>

**COMBINATION CURB & GUTTER REMOVAL**

STA. 844+06.00 TO STA. 845+55.00	98 FT
STA. 855+40.00 TO STA. 855+90.00	101 FT
<b>TOTAL</b>	<b>199 FT</b>

**CONCRETE MEDIAN REMOVAL**

STA. 844+00.00 TO STA. 844+06.00	36 SQ FT
STA. 855+90.00 TO STA. 855+96.31	36 SQ FT
<b>TOTAL</b>	<b>72 SQ FT</b>

**SHORT TERM PAVEMENT MARKING**

STA. 843+55.00 TO STA. 856+40.00	1294 FT
STOP BARS	797 FT
<b>TOTAL</b>	<b>2091 FT</b>

**CONCRETE MEDIAN SURFACE REMOVAL**

STA. 844+06.00 TO STA. 845+55.00	185 SQ FT
STA. 855+40.00 TO STA. 855+90.00	194 SQ FT
<b>TOTAL</b>	<b>379 SQ FT</b>

**REMOVE AND RE-ERECT EXISTING SIGN**

STA. 844+00.00	1 EACH
STA. 855+96.31	1 EACH
<b>TOTAL</b>	<b>2 EACH</b>

**WORK ZONE PAVEMENT MARKING REMOVAL**

STA. 843+55.00 TO STA. 845+40.00	431 SQ FT
<b>TOTAL</b>	<b>431 SQ FT</b>

**PORTLAND CEMENT CONCRETE BASE COURSE 9"**






STA. 844+00.00 TO STA. 845+55.00	37.0 SQ YD
STA. 855+40.00 TO STA. 855+96.31	37.0 SQ YD
<b>TOTAL</b>	<b>74.0 SQ YD</b>

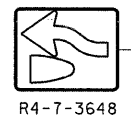
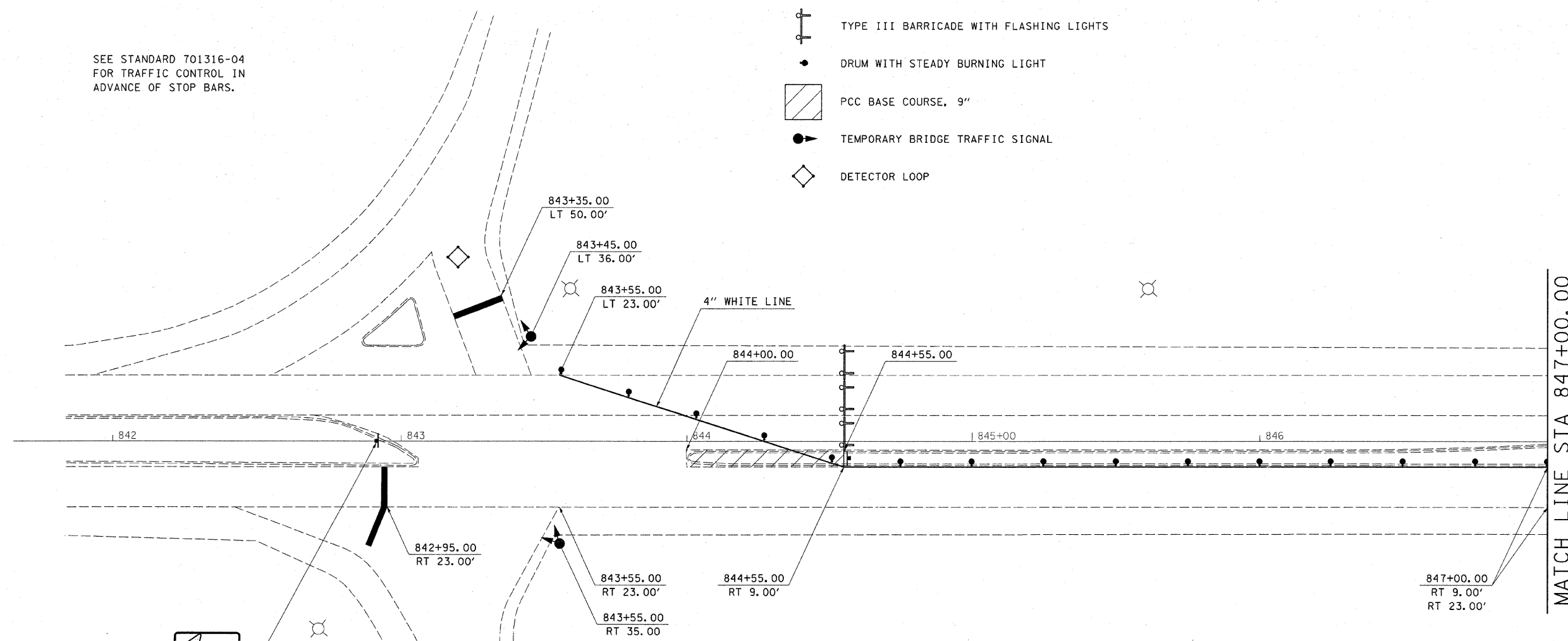
**PROTECTIVE SHIELD**

OVER I-70 EASTBOUND	2370 FT
OVER I-70 WESTBOUND	2390 FT
<b>TOTAL</b>	<b>4760 FT</b>



SEE STANDARD 701316-04  
FOR TRAFFIC CONTROL IN  
ADVANCE OF STOP BARS.

-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH STEADY BURNING LIGHT
-  PCC BASE COURSE, 9"
-  TEMPORARY BRIDGE TRAFFIC SIGNAL
-  DETECTOR LOOP



NOTE:

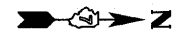
USE THESE DETAILS IN CONJUNCTION WITH STANDARD 701316. NO TEMPORARY CONCRETE BARRIERS WILL BE REQUIRED. THE SIGNING IN ADVANCE OF THE STOP BARS SHALL BE ERECTED BOTH DIRECTIONS ON THE INTERSTATE EXIT RAMP. THE ADVANCE DETECTOR LOOPS ON THE RAMP SHALL BE PLACED APPROXIMATELY 100 FEET IN ADVANCE OF THE STOP BAR. NO NEAR LOOPS WILL BE REQUIRED.

THE EXISTING CONCRETE MEDIAN, CONCRETE MEDIAN SURFACE AND CURB AND GUTTER SHALL BE REMOVED TO THE LIMITS SHOWN ON THE PLANS PRIOR TO THE INSTALLATION OF THE STAGE I TRAFFIC CONTROL. THIS AREA SHALL FILLED WITH PCC BASE COURSE AS SHOWN ABOVE, CONSTRUCTED LEVEL WITH THE ADJACENT PAVEMENT. AT THE CONCLUSION OF THE BRIDGE DECK REPAIR OPERATIONS, CONCRETE MEDIAN, TYPE SM (SPECIAL) SHALL BE CONSTRUCTED TO REPLACE THE MEDIAN. MEDIAN WORK SHALL BE PERFORMED UNDER STANDARD 701201.

NO POSTED WIDTH RESTRICTION SHALL BE NECESSARY. VERTICAL PANELS ON THE STRUCTURE MAY BE ELIMINATED.

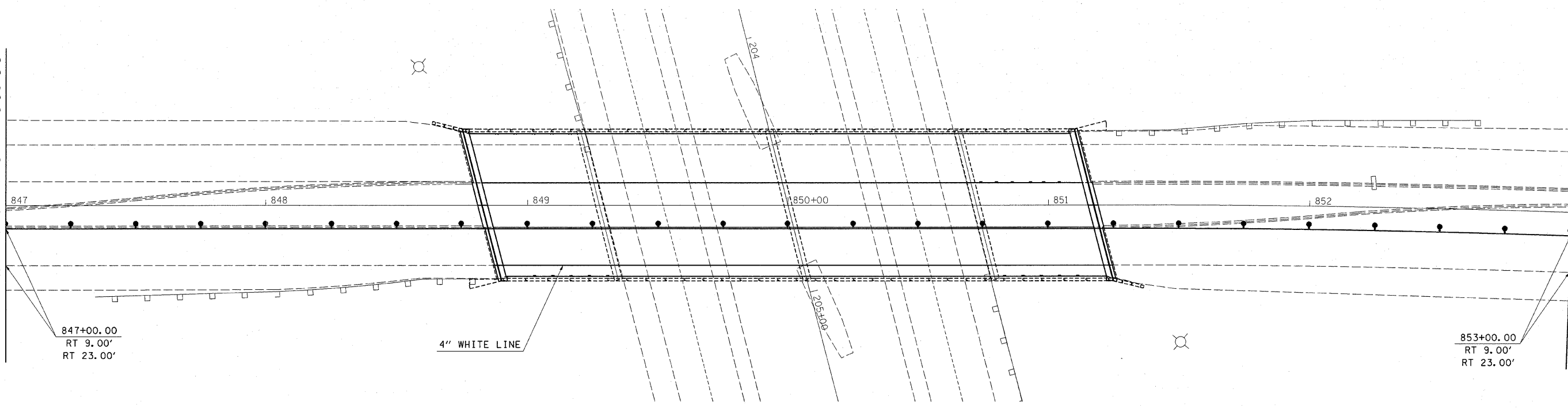
FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE II TRAFFIC CONTROL S.N. 018-0025</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\pwork\swartzw\dms33580\d77	346-sht-staging2.dgn	DRAWN -	REVISED -		116	(18-47HB-1)BR	CUMBERLAND	28	8			
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -		CONTRACT NO. 74346							
	PLOT DATE = 3/19/2010	DATE -	REVISED -		SCALE: 20	SHEET NO. 1 OF 3 SHEETS	STA. TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			










MATCH LINE STA 847+00.00

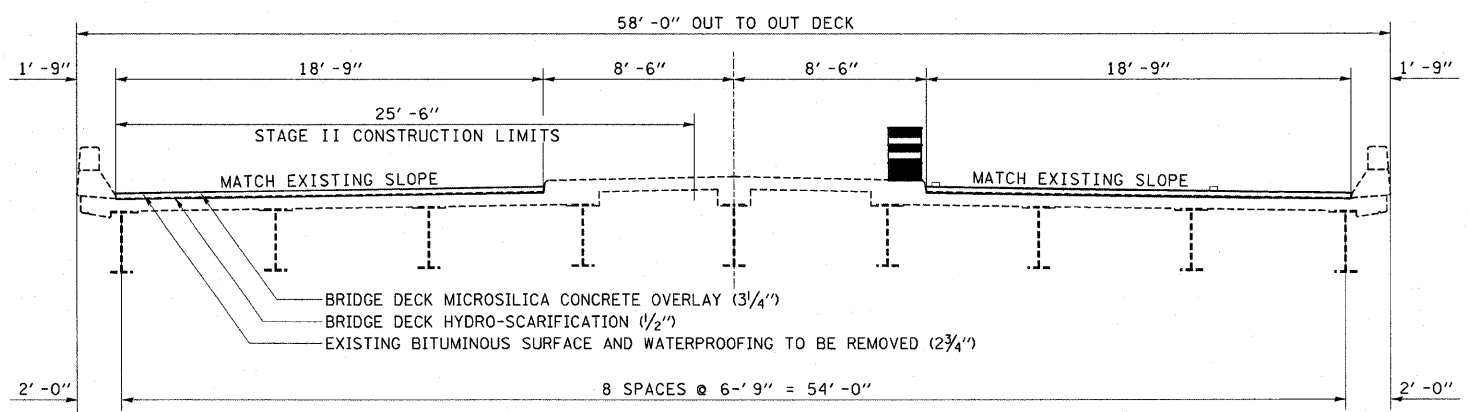
MATCH LINE STA 853+00.00



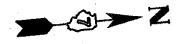
847+00.00  
RT 9.00'  
RT 23.00'






853+00.00  
RT 9.00'  
RT 23.00'

-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH STEADY BURNING LIGHT
-  PCC BASE COURSE, 9"
-  TEMPORARY BRIDGE TRAFFIC SIGNAL
-  DETECTOR LOOP

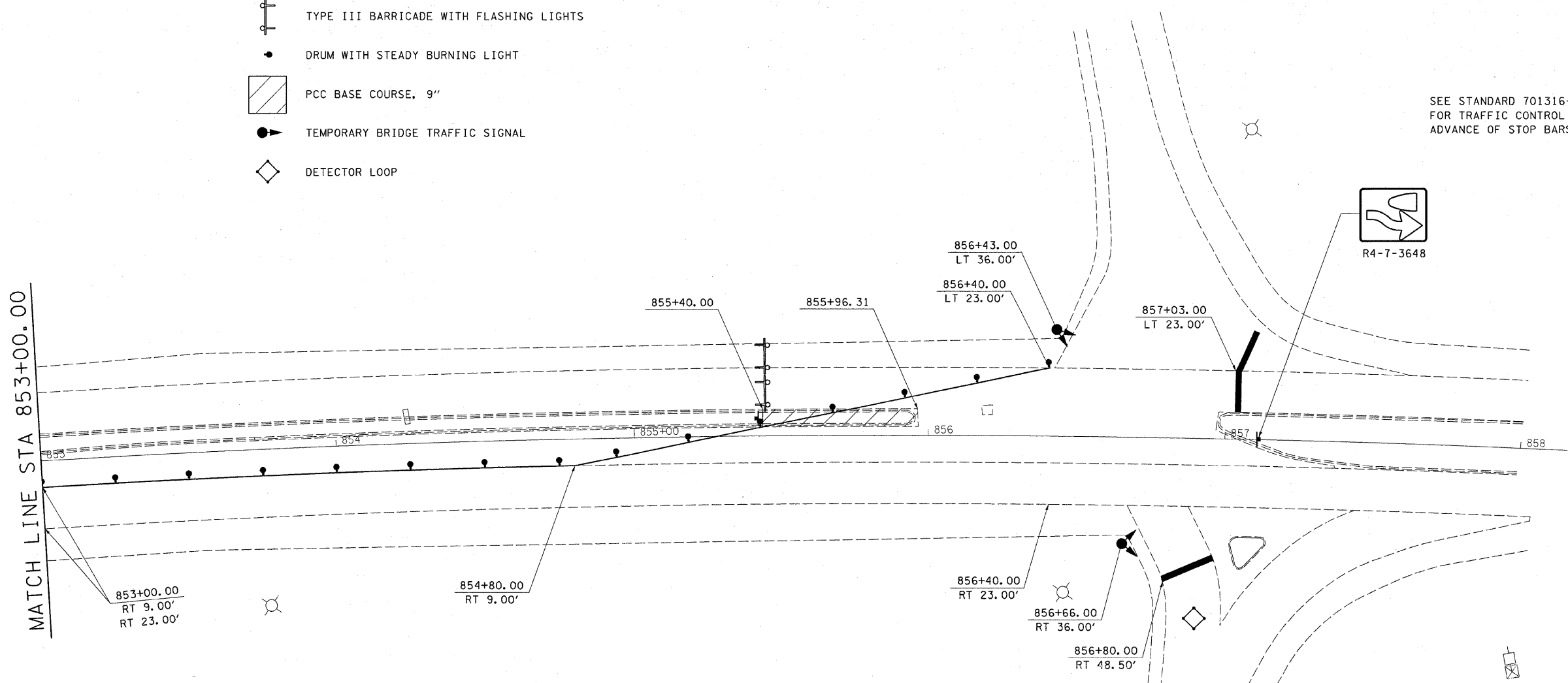
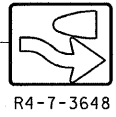


FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE II TRAFFIC CONTROL S.N. 018-0025</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ci:\pw_work\pwidot\swartzw\dms53588\d77	346-shr-staging2.dgn	DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	9	
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74346					
	PLOT DATE = 3/19/2018	DATE -	REVISED -			SCALE: 20	SHEET NO. 2 OF 3 SHEETS	STA.	TO STA.	FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT



-  TYPE III BARRICADE WITH FLASHING LIGHTS
-  DRUM WITH STEADY BURNING LIGHT
-  PCC BASE COURSE, 9"
-  TEMPORARY BRIDGE TRAFFIC SIGNAL
-  DETECTOR LOOP

SEE STANDARD 701316-04  
FOR TRAFFIC CONTROL IN  
ADVANCE OF STOP BARS.



PAVEMENT MARKING REMOVAL

STA. 853+82.00 TO STA. 855+96.00	107 SQ FT
6" WHITE AT LEFT TURN LANE	
STA. 844+55.00 TO STA. 848+84.00	143 SQ FT
4" YELLOW MEDIAN STRIPE	
STA. 854+80.00 TO STA. 855+97.00	31 SQ FT
LEFT TURN ARROWS	
<b>TOTAL</b>	<b>281 SQ FT</b>

SHORT TERM PAVEMENT MARKING

STA. 843+55.00 TO STA. 856+40.00	1294 FT
STA. 848+87.00 TO STA. 851+25.00	238 FT
<b>TOTAL</b>	<b>1532 FT</b>

WORK ZONE PAVEMENT MARKING REMOVAL

STA. 843+55.00 TO STA. 856+40.00	431 SQ FT
STA. 848+87.00 TO STA. 851+25.00	79 SQ FT
STOP BARS	266 SQ FT
<b>TOTAL</b>	<b>776 SQ FT</b>

CONCRETE MEDIAN, TYPE SM (SPECIAL)

STA. 844+00.00 TO STA. 845+55.00	331 SQ FT
STA. 855+40.00 TO STA. 855+96.31	331 SQ FT
<b>TOTAL</b>	<b>662 SQ FT</b>

PRISMATIC CURB REFLECTOR

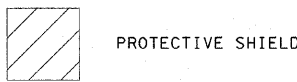
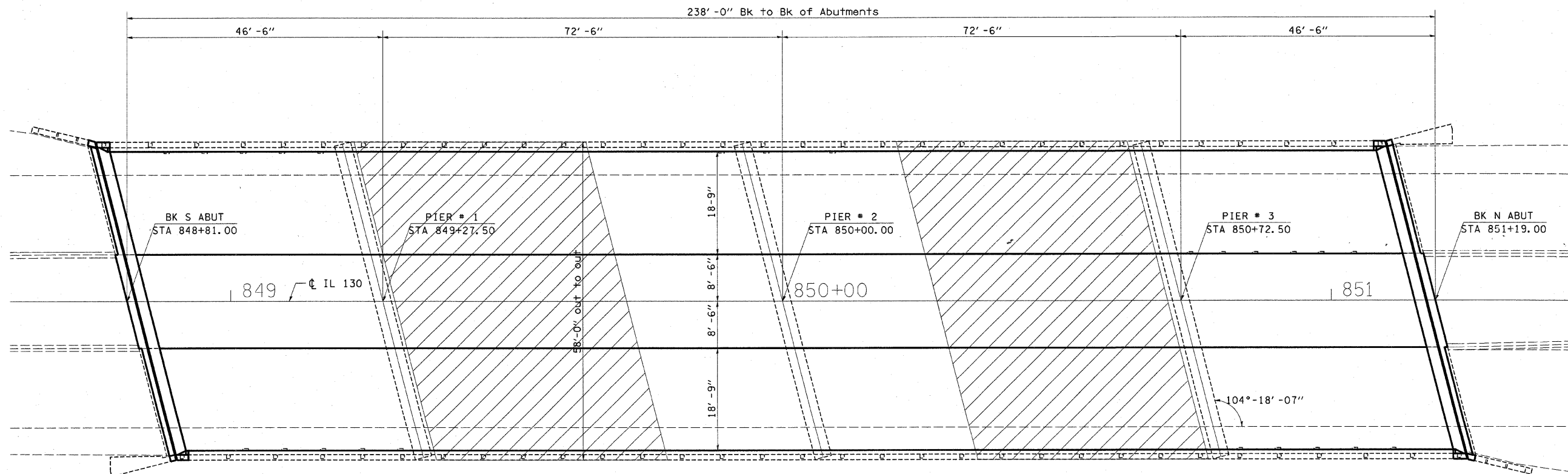
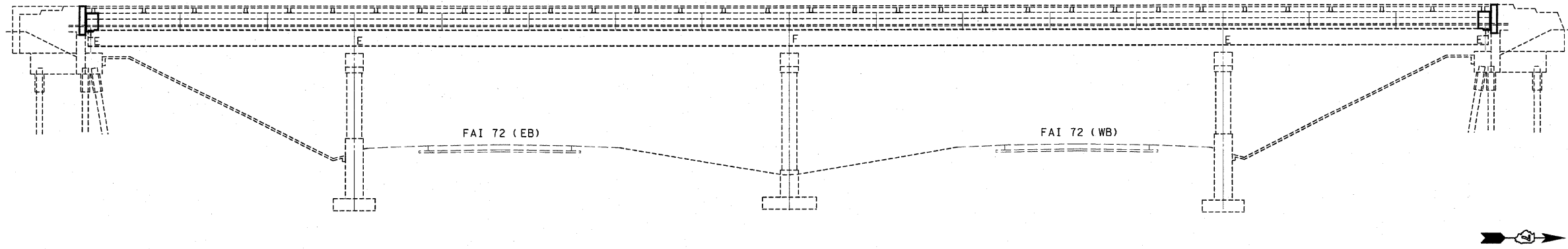
STA. 844+00.00 TO STA. 844+55.00	5 EACH
STA. 855+40.00 TO STA. 855+96.31	5 EACH
<b>TOTAL</b>	<b>10 EACH</b>

REFLECTOR REPLACEMENT

	6 EACH
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FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>STAGE II TRAFFIC CONTROL S.N. 018-0025</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pwork\puidot\swartzrw\dms53580\d77	346-shit-staging2.dgn	DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	10
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74346				
	PLOT DATE = 3/19/2018	DATE -	REVISED -			SCALE: 20	SHEET NO. 3 OF 3 SHEETS	STA. TO STA.	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

The existing four span reinforced concrete deck on continuous steel I-beam structure was constructed in 1969 as FAI-70 section 18-47HB-1 at sta. 204+65.76. SN 018-0025 carries FAP-116 (IL-130). The proposed project consists of new expansion joints, partial and full depth deck repair, concrete median repair and microsilica concrete overlay and bearing replacement.



Expires Nov 30, 2010

FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>GENERAL PLAN &amp; ELEVATION SN. 018-0025</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\PIWIDOT\SWARTZRW\dms53588\d774346-sht\plnpr.f.dgn	4346-sht\plnpr.f.dgn	DRAWN -	REVISED -		SCALE: N/A	SHEET NO. 1 OF 12 SHEETS	STA.	116	(18-47HB-1)BR	CUMBERLAND	28	11
	PLOT SCALE = 20.000000 1/ IN.	CHECKED -	REVISED -				TO STA.					
	PLOT DATE = 3/19/2010	DATE -	REVISED -					CONTRACT NO. 74346				
							ILLINOIS FED. AID PROJECT					

## GENERAL NOTES

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 CONTRACTOR'S RESPONSIBILITY, TO VERIFY DIMENSIONS AND DETAILS IN THE FIELD, TO MAKE NECESSARY APPROVED ADJUSTMENTS PRIOR TO CONSTRUCTION OR MATERIAL ACQUISITION. SUCH VARIATIONS SHALL NOT BE CAUSE FOR ADDITIONAL COMPENSATION OR CHANGE IN THE SCOPE OF WORK. THE CONTRACTOR WILL BE PAID FOR THE QUANTITY ACTUALLY FURNISHED AT THE UNIT BID PRICE FOR THE WORK.

REINFORCEMENT BARS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A 706 GRADE 60. SEE SPECIAL PROVISIONS.

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.

THE EXISTING HOT-MIX ASPHALT WEARING SURFACE IS KNOWN TO CONTAIN ASBESTOS.

REMOVAL AND REPLACEMENT OF HANDRAIL SECTIONS AND SUPPORT POSTS AT BOTH ABUTMENTS AND FLOOR DRAIN REPLACEMENT LOCATIONS WILL BE NECESSARY FOR CONSTRUCTION OF THE EXPANSION JOINTS AND FLOOR DRAIN REPLACEMENTS. THE EXISTING HANDRAIL SECTIONS AND SUPPORT POSTS SHALL BE REUSED. NEW BOLTS, SHIM PLATES, AND POST SUPPORT ANCHOR ASSEMBLIES AS DETAILED IN THE PLANS ARE TO BE PROVIDED AND INSTALLED FOR THE REPLACEMENT OF THE HANDRAIL AND SUPPORTS. THIS WORK AND ALL MATERIALS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR CONCRETE SUPERSTRUCTURE.

MEDIAN WORK NECESSARY TO REPLACE EXISTING FLOOR DRAINS SHALL NOT BE PAID FOR SEPERATELY BUT SHALL BE INCLUDED IN THE PRICE PER SQUARE YARD OF DECK SLAB REPAIR (FULL DEPTH)

ALL EXISTING RAISED PAVEMENT MARKERS AND PAVEMENT MARKINGS REMOVED WITHIN THE LIMITS OF THE HOT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS) OR THE CONCRETE MEDIAN REPAIR SHALL NOT BE PAID FOR SEPERATELY BUT INCLUDED IN THE UNIT PRICE FOR THOSE ITEMS. REPLACEMENT OF THE RAISED PAVEMENT MARKERS AT THE COMPLETION OF THE CONCRETE MEDIAN REPAIR WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR RAISED REFLECTIVE PAVEMENT MARKER (BRIDGE).

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.

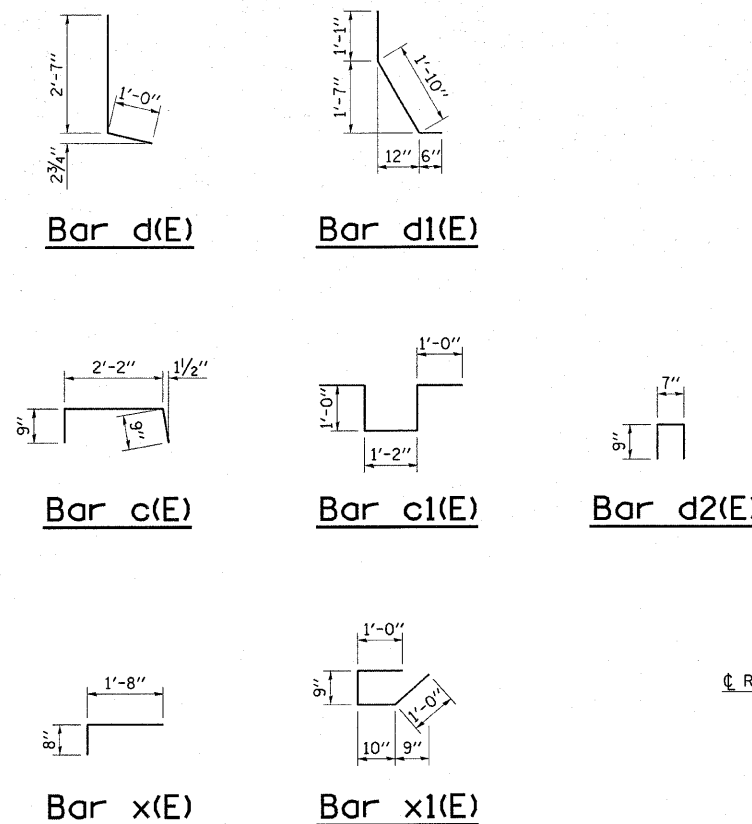
THE EXISTING STRUCTURAL STEEL COATING CONTAINS LEAD. THE CONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS TO DEAL WITH THE PRESENCE OF LEAD ON THIS PROJECT.

## TOTAL BILL OF MATERIALS

DESCRIPTION		QUANTITY
CONCRETE REMOVAL	CU YD	22.3
CONCRETE SUPERSTRUCTURE	CU YD	24.7
REINFORCEMENT BARS, EPOXY COATED	POUND	2890
BAR SPLICERS	EACH	26
PREFORMED JOINT STRIP SEAL	FOOT	119.0
FURNISHING & ERECTING STRUCTURAL STEEL	POUND	1920
ANCHOR BOLTS, 1"Ø	EACH	36
ELASTOMERIC BEARING ASSEMBLY, TYPE II	EACH	18
JACK AND REMOVE EXISTING BEARINGS	EACH	18
HOT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS)	SQ YD	978
BRIDGE DECK HYDRO-SCARIFICATION 1/2"	SQ YD	960
BRIDGE DECK MICROSILICA CONC OVERLAY, 3 1/4"	SQ YD	960
BRIDGE DECK GROOVING	SQ YD	873
PROTECTIVE COAT	SQ YD	960
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	3
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	134
CONCRETE MEDIAN REPAIR	SQ FT	47
FLOOR DRAINS	EACH	17
PLUG EXISTING DECK DRAINS	EACH	7
PROTECTIVE SHIELD	SQ YD	<del>529</del>

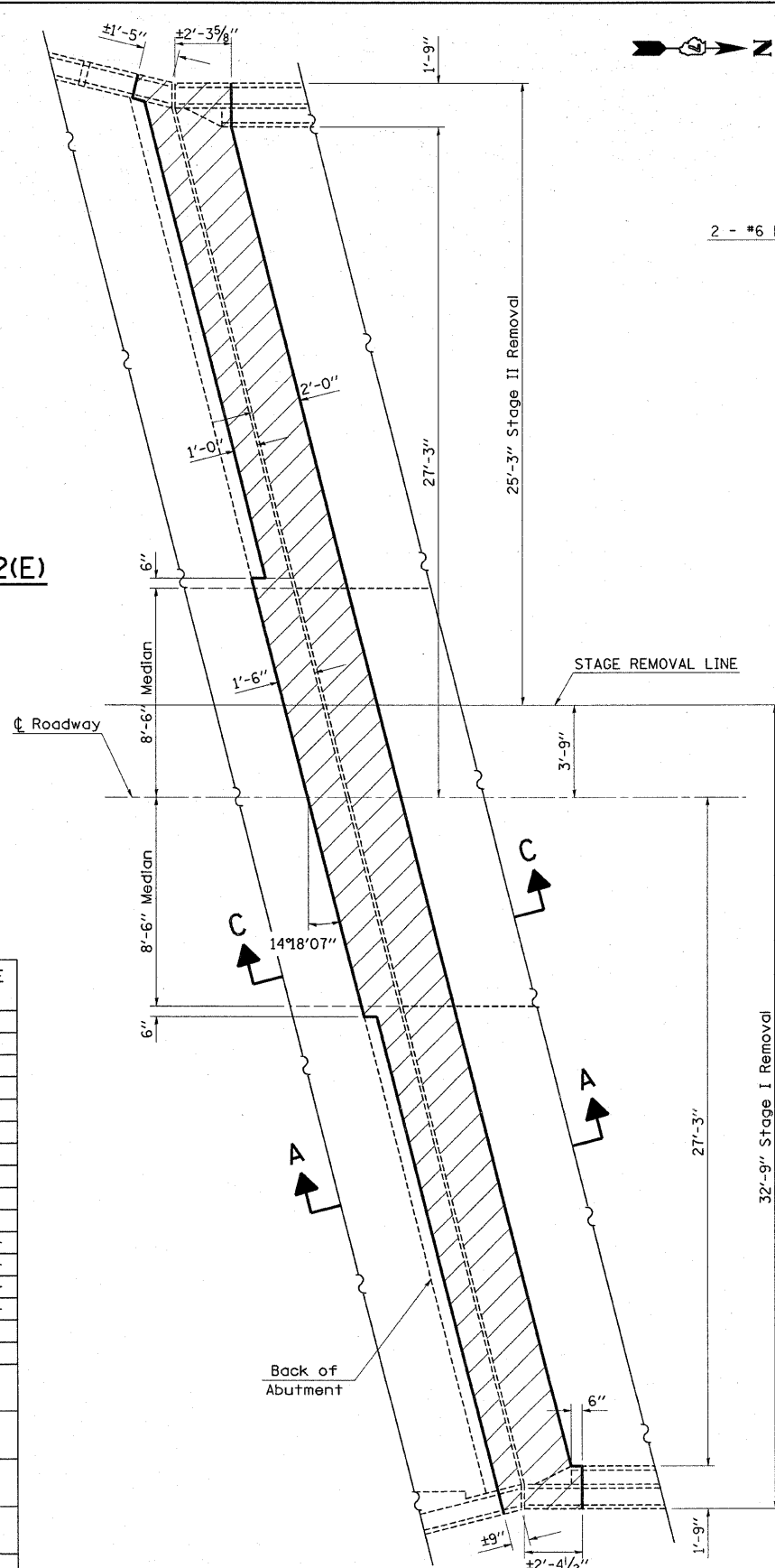
FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BRIDGE GENERAL NOTES &amp; BILL OF MATERIALS S.N. 018-0025</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
at:\pw\work\PW\DOT\SWARTZRW\dms53588\07	74346-shr-bgenote.dgn	DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	12	
	PLOT SCALE = 20.0000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74346					
	PLOT DATE = 3/19/2010	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					
					SCALE: NA	SHEET NO. OF SHEETS STA.		TO STA.			

Note: Trim existing longitudinal reinforcement to accommodate the new joint opening. (Typ.)

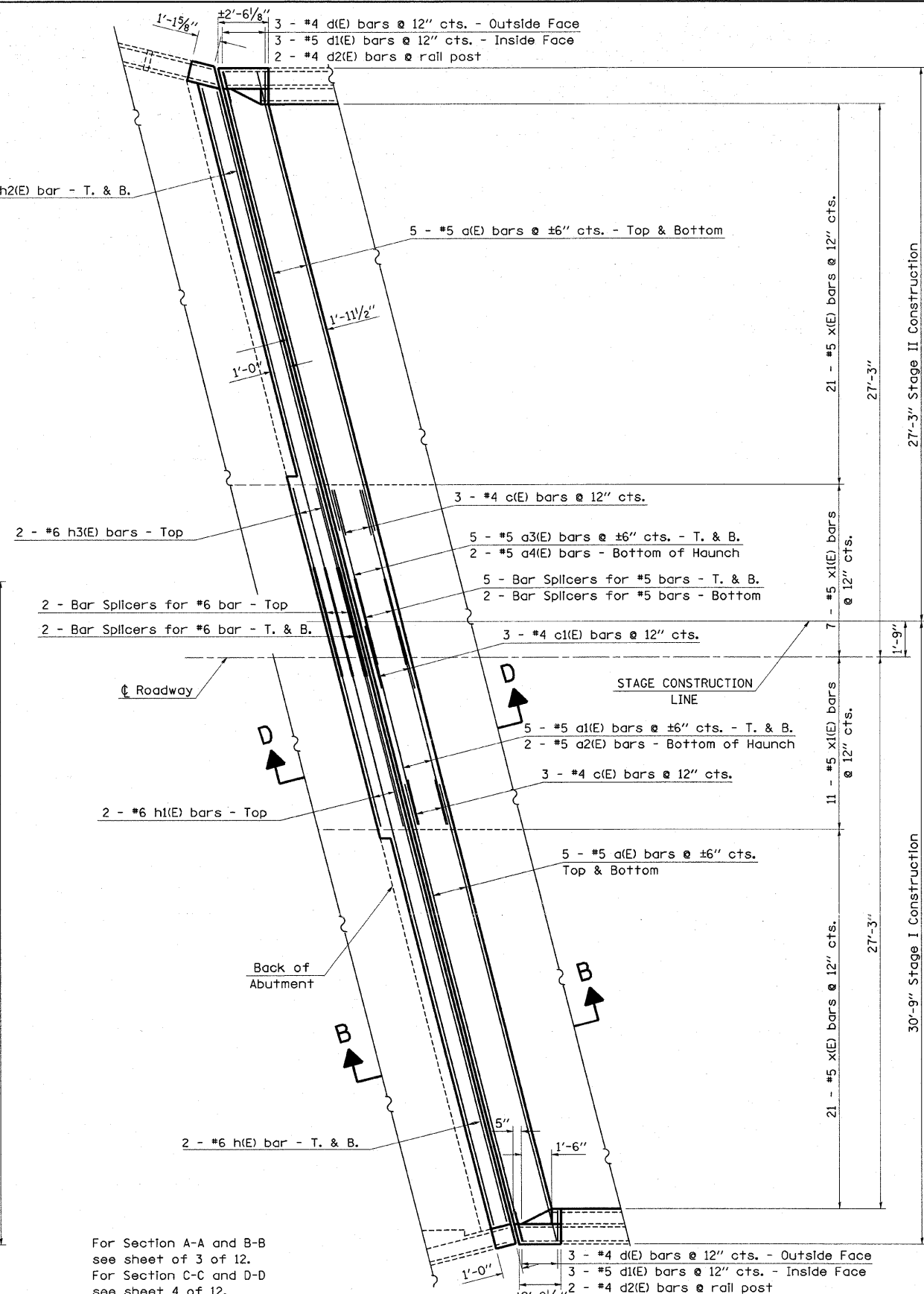


**BILL OF MATERIAL**  
PER ABUTMENT

BAR	NUMBER OF BARS		TOTAL	SIZE	LENGTH	SHAPE
	STAGE I	STAGE II				
a (E)	10	10	20	#5	23' - 1"	—
a1(E)	10		10	#5	10' - 2"	—
a2(E)	2		2	#5	10' - 2"	—
a3(E)		10	10	#5	6' - 7"	—
a4(E)		2	2	#5	6' - 7"	—
d (E)	3	3	6	#4	3' - 7"	L
d1(E)	3	3	6	#5	3' - 5"	—
d2(E)	2	2	4	#4	1' - 4"	—
c (E)	3	3	6	#4	3' - 8"	—
c1(E)	3		3	#4	5' - 2"	—
h (E)	4		4	#6	30' - 9"	—
h1(E)	2		2	#6	10' - 2"	—
h2(E)		4	4	#6	26' - 9"	—
h3(E)		2	2	#6	6' - 7"	—
x (E)	21	21	42	#5	2' - 4"	—
x1(E)	11	7	18	#5	3' - 7"	—
REINFORCEMENT BARS (EPOXY COATED)				POUND	1330	
CONCRETE REMOVAL (SOUTH ABUTMENT)				CU YD	9.3	
CONCRETE REMOVAL (NORTH ABUTMENT)				CU YD	10.8	
CONCRETE SUPERSTRUCTURE (SOUTH ABUT.)				CU YD	10.5	
CONCRETE SUPERSTRUCTURE (NORTH ABUT.)				CU YD	12.0	



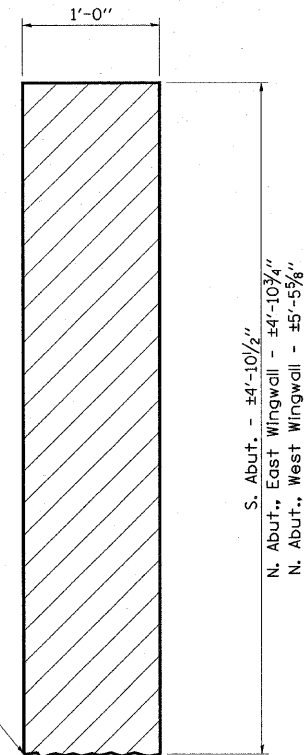
**EXISTING PARTIAL PLAN**  
(South Abutment shown; North Abutment similar)



**PROPOSED PARTIAL PLAN**  
(South Abutment shown; North Abutment similar)

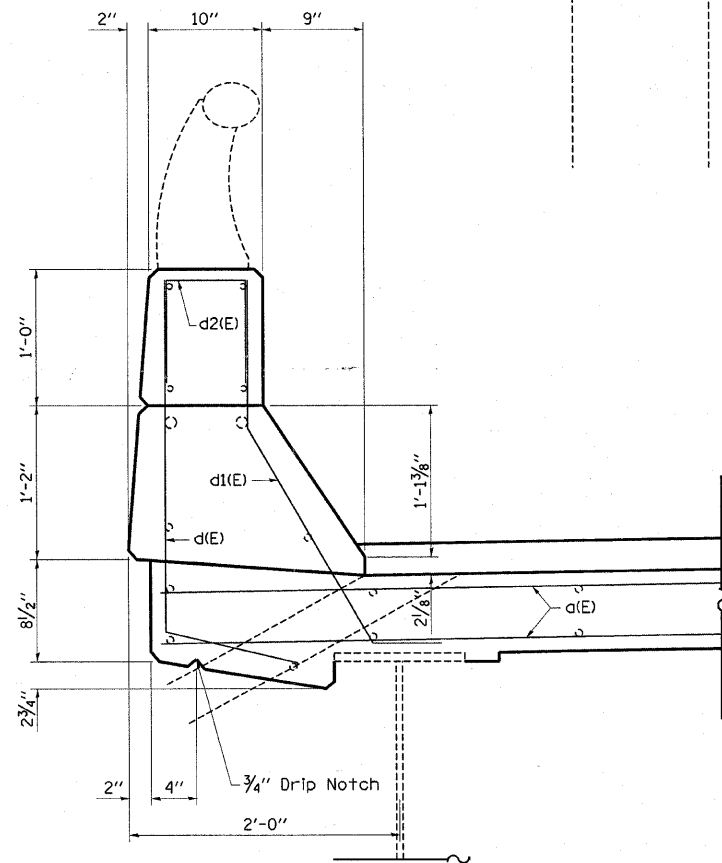
For Section A-A and B-B see sheet of 3 of 12.  
For Section C-C and D-D see sheet 4 of 12.

**TYPICAL WINGWALL  
REMOVAL/REPLACEMENT**

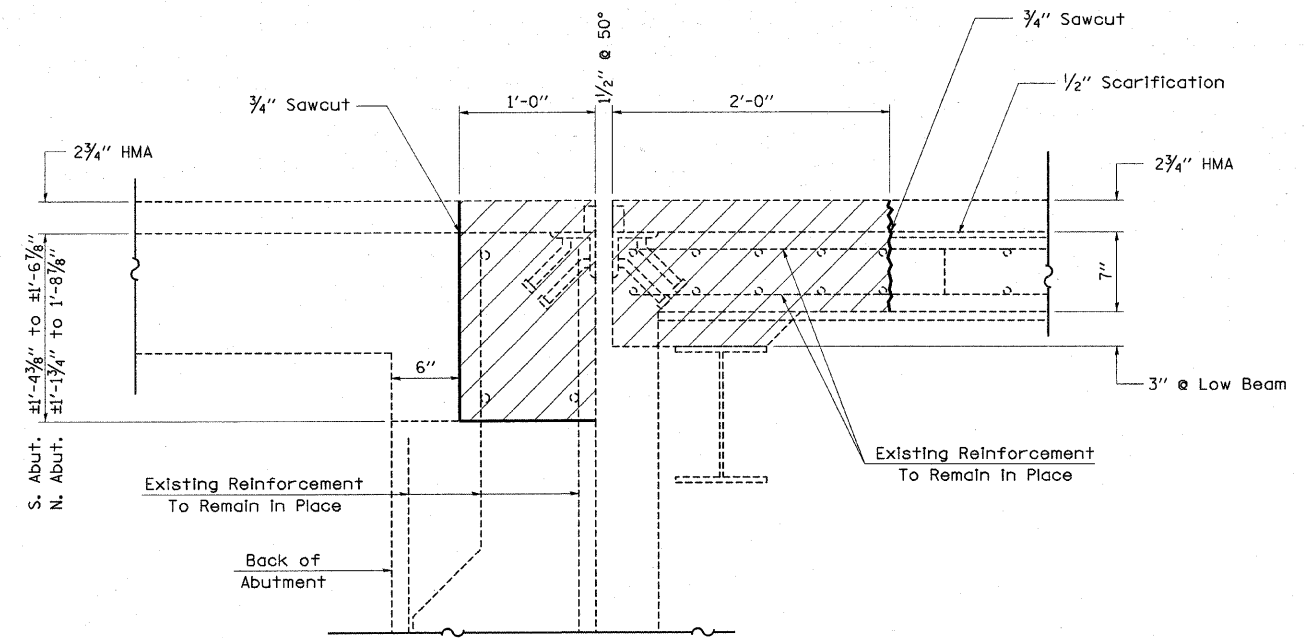


S. Abut. - ±4'-10 1/2"  
N. Abut., East Wingwall - ±4'-10 3/4"  
N. Abut., West Wingwall - ±5'-5 5/8"

Note: Rotate d(E) and d1(E) bars in parapet to fit horizontal legs in concrete pour.



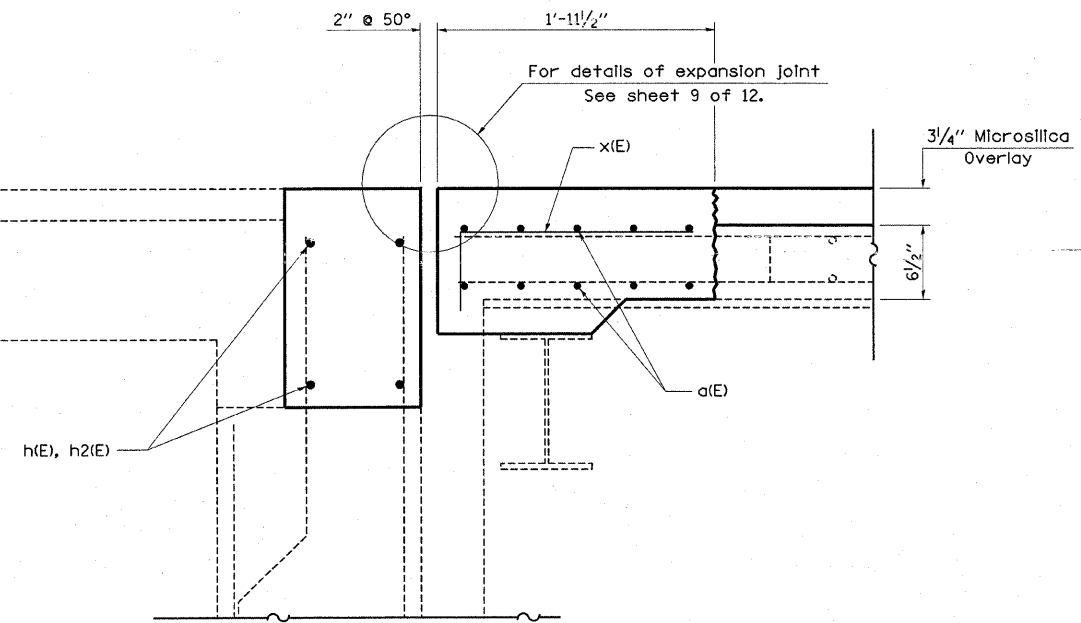
**SECTION THRU PARAPET**



**SECTION A-A**  
(Dimensions at RT L's to end of deck)

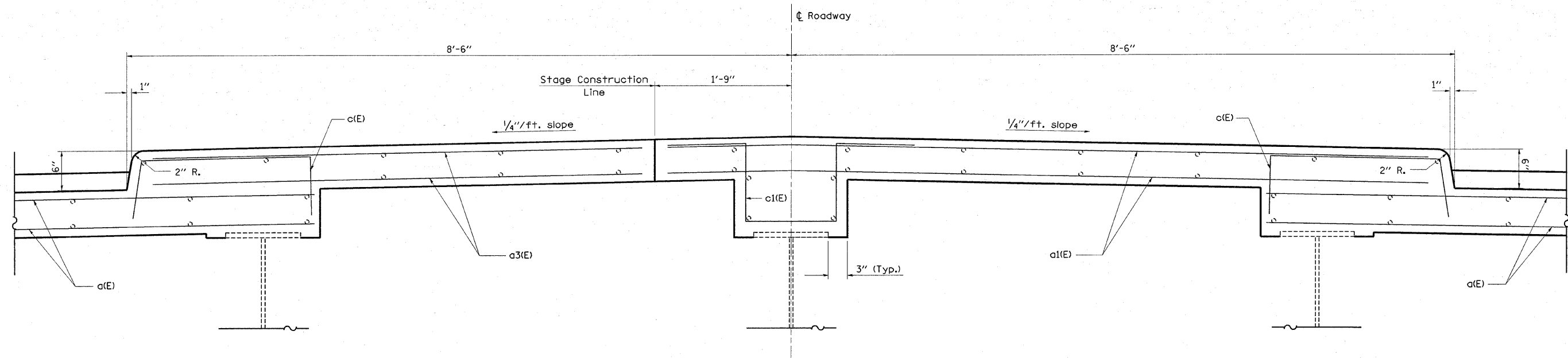
Note: Dimensions are based on a Rolled Roll Strip Seal Joint. If the Contractor elects to use the Welded Roll Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet EU-SSJ.

○ Existing Reinforcement  
● Proposed Reinforcement

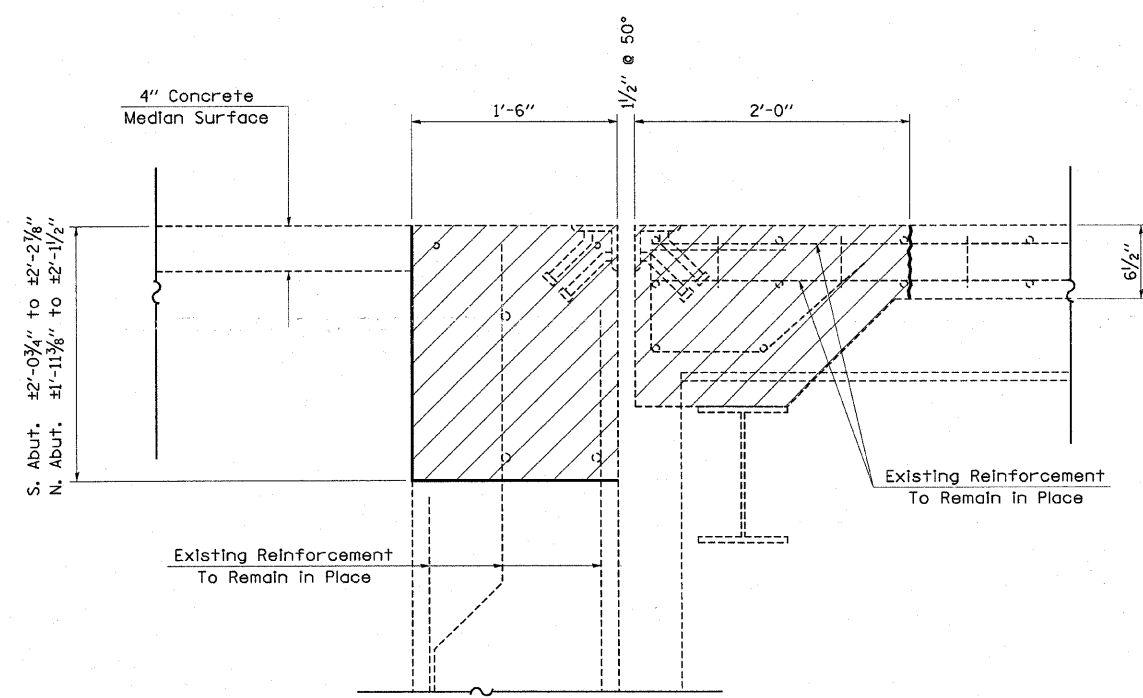


**SECTION B-B**  
(Dimensions at RT L's to end of deck)

FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXPANSION JOINT REPLACEMENT DETAILS</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
c:\pw_work\pwwork\swartzw\dms53580\d77	346-shr-detail.dgn	DRAWN -	REVISED -		<b>SN 018-0025</b>		116	(18-47HB-1)BR	CUMBERLAND	28	14
	PLOT SCALE = 28.00000 1/ IN.	CHECKED -	REVISED -		SCALE:	SHEET NO. 3 OF 12 SHEETS	STA.	ILLINOIS FED. AID PROJECT		CONTRACT NO. 74346	
	PLOT DATE = 3/19/2010	DATE -	REVISED -								

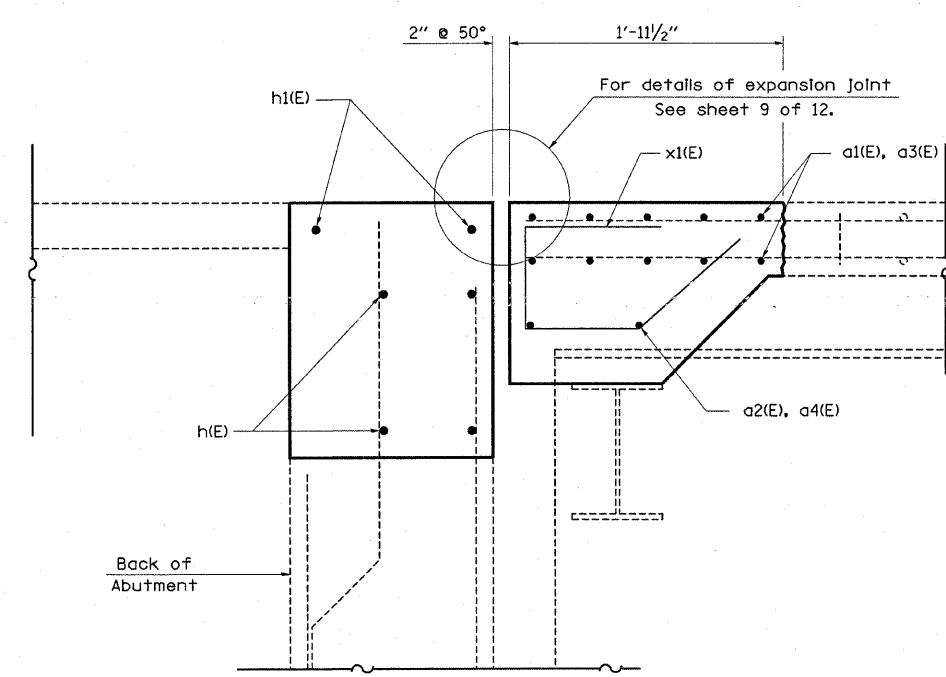


**SECTION THRU MEDIAN**  
(Looking North)



**SECTION C-C**  
(Dimensions at RT L's to end of deck)

○ Existing Reinforcement  
● Proposed Reinforcement

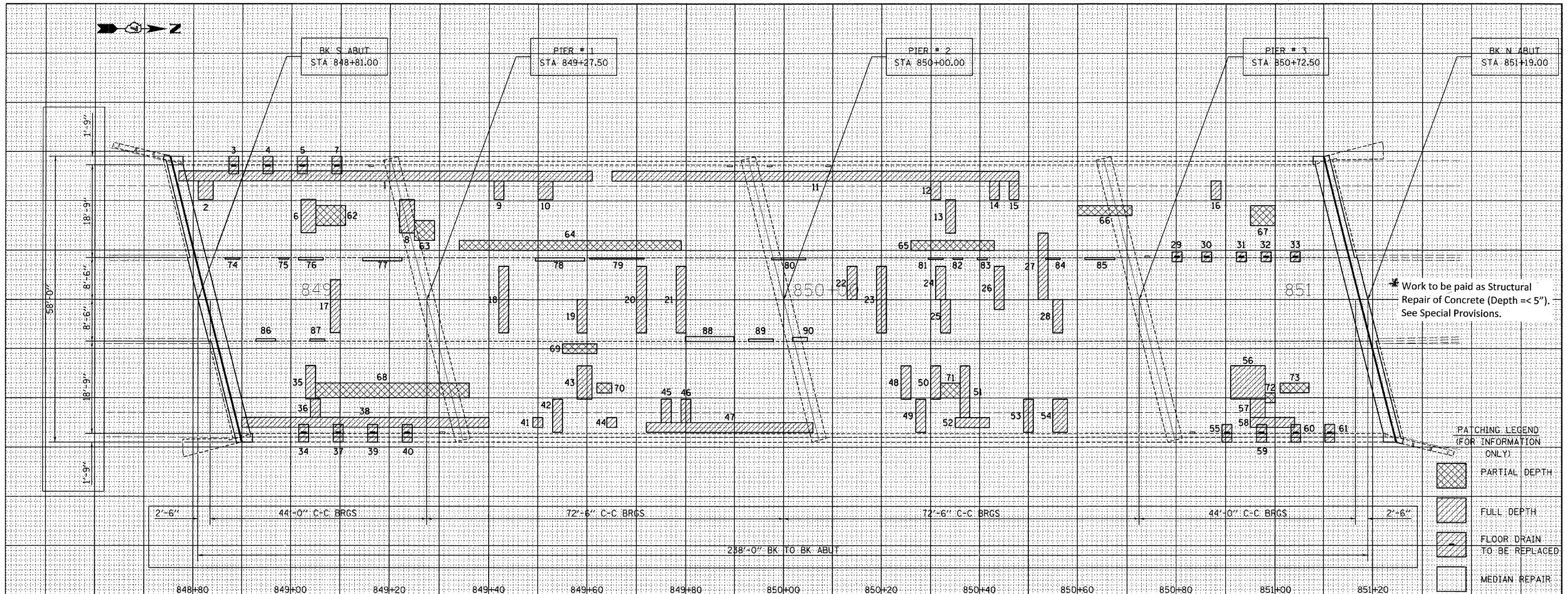


**SECTION D-D**

Note: Dimensions are based on a Rolled Rail Strip Seal Joint.  
If the Contractor elects to use the Welded Rail Strip Seal Joint, deck dimensions may require adjustments to satisfy the details on Base Sheet EJ-SSJ.

FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXPANSION JOINT REPLACEMENT DETAILS SN 018-0025</b>			F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw_work\pwidot\swartzw\dms53580\d77	346-aht-details.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO. 4 OF 12 SHEETS	STA.	TO STA.	116	(18-47HB-1)BR	CUMBERLAND	28	15
	PLOT SCALE = 20.00000 ' / IN.	CHECKED -	REVISED -					CONTRACT NO. 74346					
	PLOT DATE = 3/19/2010	DATE -	REVISED -					ILLINOIS FED. AID PROJECT					





PATCHING LEGEND (FOR INFORMATION ONLY)

	PARTIAL DEPTH
	FULL DEPTH
	FLOOR DRAIN TO BE REPLACED
	MEDIAN REPAIR

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH)		
		SO YD	SO YD	SO YD
1	84.0' X 2.0'			18.7
2	3.0' X 3.8'			1.3
3	2.0' X 3.4'			0.8
4	2.0' X 3.4'			0.8
5	2.0' X 3.4'			0.8
6	3.0' X 6.8'			2.3
7	2.0' X 3.4'			0.8
8	3.0' X 6.8'			2.3
9	2.0' X 3.8'			0.8
10	3.0' X 3.8'			1.3
11	83.0' X 2.0'			18.4
12	2.0' X 3.8'			0.8
13	2.0' X 6.8'			1.5
14	2.0' X 3.8'			0.8
15	2.0' X 3.8'			0.8
16	2.0' X 3.8'			0.8
17	2.0' X 10.8'			2.4
18	2.0' X 13.5'			3.0

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH)		
		SO YD	SO YD	SO YD
19	2.0' X 6.8'			1.5
20	2.0' X 13.5'			3.0
21	2.0' X 13.5'			3.0
22	2.0' X 6.8'			1.5
23	2.0' X 13.5'			3.0
24	2.0' X 6.8'			1.5
25	2.0' X 6.8'			1.5
26	2.0' X 8.8'			1.9
27	2.0' X 13.5'			3.0
28	2.0' X 6.8'			1.5
29	2.0' X 2.0'	0.4		
30	2.0' X 2.0'	0.4		
31	2.0' X 2.0'	0.4		
32	2.0' X 2.0'	0.4		
33	2.0' X 2.0'	0.4		
34	2.0' X 3.4'			0.8
35	2.0' X 6.8'			1.5
36	2.0' X 3.8'			0.8

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH)		
		SO YD	SO YD	SO YD
37	2.0' X 3.4'			0.8
38	50.0' X 2.0'			11.1
39	2.0' X 3.4'			0.8
40	2.0' X 3.4'			0.8
41	2.0' X 2.0'	0.4		
42	2.0' X 6.8'			1.5
43	3.0' X 6.8'			2.3
44	2.0' X 2.0'	0.4		
45	2.0' X 4.8'			1.1
46	2.0' X 4.8'			1.1
47	34.0' X 2.0'			7.6
48	2.0' X 6.8'			1.5
49	2.0' X 6.8'			1.5
50	2.0' X 6.8'			1.5
51	2.0' X 10.5'			2.3
52	7.0' X 2.0'			1.6
53	2.0' X 6.8'			1.5
54	3.0' X 6.8'			2.3

PATCH NO.	SIZE	DECK SLAB REPAIR (PART DEPTH)		
		SO YD	SO YD	SO YD
55	2.0' X 3.4'			0.8
56	7.0' X 6.8'			5.3
57	3.0' X 3.8'			1.3
58	9.0' X 2.0'			2.0
59	2.0' X 3.4'			0.8
60	2.0' X 3.4'			0.8
61	2.0' X 3.4'			0.8
62	6.0' X 4.0'	2.7		
63	4.0' X 4.0'	1.8		
64	45.0' X 2.0'	10.0		
65	17.0' X 2.0'	3.8		
66	11.0' X 2.0'	2.4		
67	5.0' X 4.0'	2.2		
68	31.0' X 3.0'	10.3		
69	7.0' X 2.0'	1.6		
70	3.0' X 2.0'	0.7		
71	4.0' X 3.0'	1.3		
72	2.0' X 2.0'	0.4		

MEDIAN REPAIR NO.	SIZE	DECK SLAB REPAIR (PART DEPTH)			CONCRETE MEDIAN REPAIR
		SO YD	SO YD	SO YD	
73	6.0' X 2.0'	1.3			
74	3.0' X 0.33'				1.0
75	2.0' X 0.33'				0.7
76	5.0' X 0.50'				2.5
77	8.0' X 0.67'				5.3
78	10.0' X 0.67'				6.7
79	11.0' X 0.25'				2.8
80	7.0' X 0.42'				2.9
81	3.0' X 0.33'				1.0
82	2.0' X 0.33'				0.7
83	2.0' X 0.42'				0.8
84	3.0' X 0.33'				1.0
85	6.0' X 0.42'				2.5
86	4.0' X 0.50'				2.0
87	3.0' X 0.42'				1.3
88	10.0' X 1.0'				10.0
89	5.0' X 0.50'				2.5
90	3.0' X 0.83'				2.5

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

PARTIAL DEPTH  
TOTAL = 38.5 SQ YD (FOR INFORMATION ONLY)

FULL DEPTH, TYPE I  
TOTAL = 2.8 SQ YD  
USE 3 SQ YD

FULL DEPTH, TYPE II  
TOTAL = 134.0 SQ YD  
USE 134 SQ YD

\* MEDIAN REPAIR  
TOTAL = 46.2 SQ FT  
USE 47 SQ FT

DATE OF SURVEY: AUGUST 2008  
SURVEY BY: M. ALLEN & K. BRADY  
METHOD OF SURVEY: VISUAL

BRIDGE DECK PATCHING & MEDIAN REPAIR  
CUMBERLAND COUNTY  
FAP-116 (IL-130)  
FEATURE CROSSED I-70 GREENUP INTERCHANGE  
SN 018-0025

FILE NAME = c:\pwork\PWIDOT\SWARTZRW\dms93588\g77-346-aht-pnprf.dgn  
PLOT SCALE = 20.000000 ' / IN.  
PLOT DATE = 3/19/2010

USER NAME = swartzrw  
DESIGNED -  
DRAWN -  
CHECKED -  
DATE -

REVISED -  
REVISED -  
REVISED -  
REVISED -

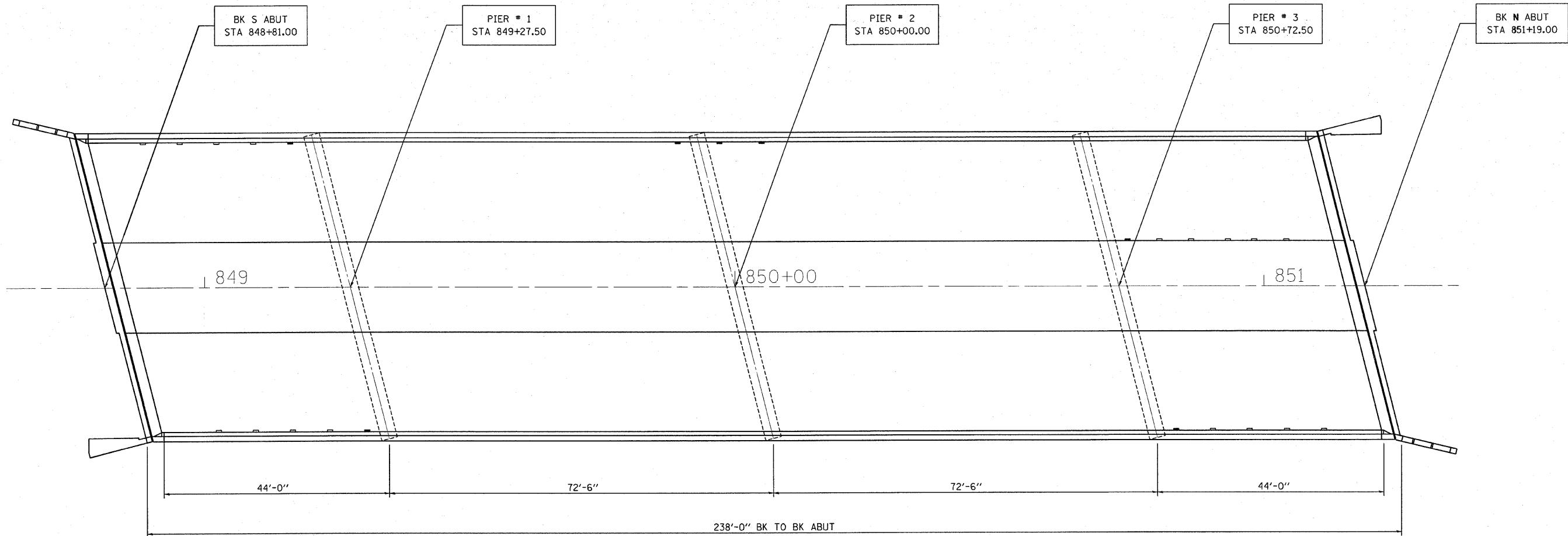
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

DECK SLAB & MEDIAN REPAIR  
SN 018-0025

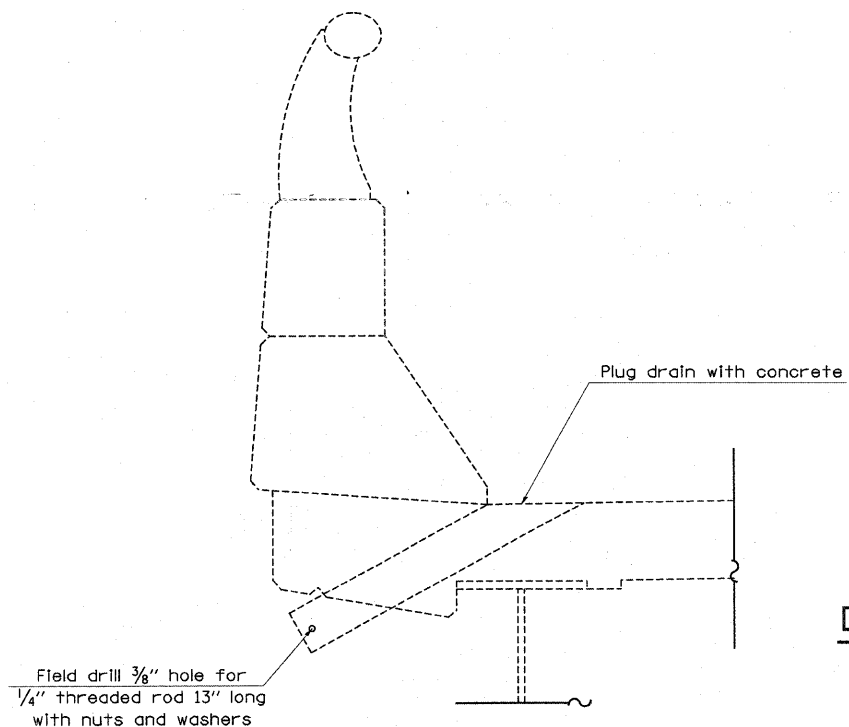
SCALE: SHEET NO. 5 OF 12 SHEETS STA. TO STA.

F.A.P. RTE. 116	SECTION (18-47HB-1)BR	COUNTY CUMBERLAND	TOTAL SHEETS 28	SHEET NO. 16
CONTRACT NO. 74346				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

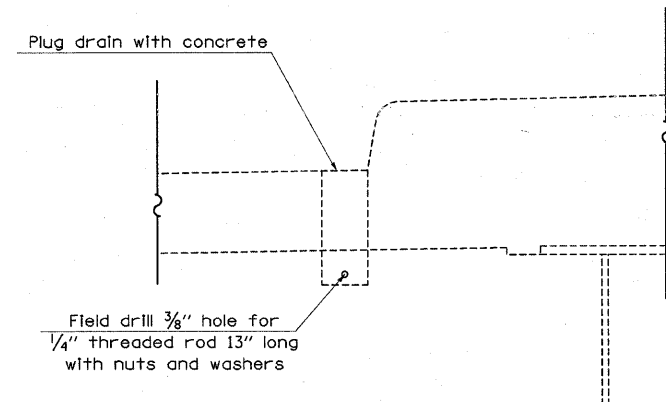




- Existing Drain to Be Replaced (See Sheet 7 of 12 for Details)
- Existing Drain to be Plugged

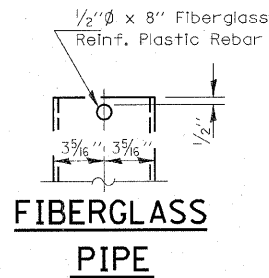


**DRAINS TO BE PLUGGED DETAIL AT PARAPET**



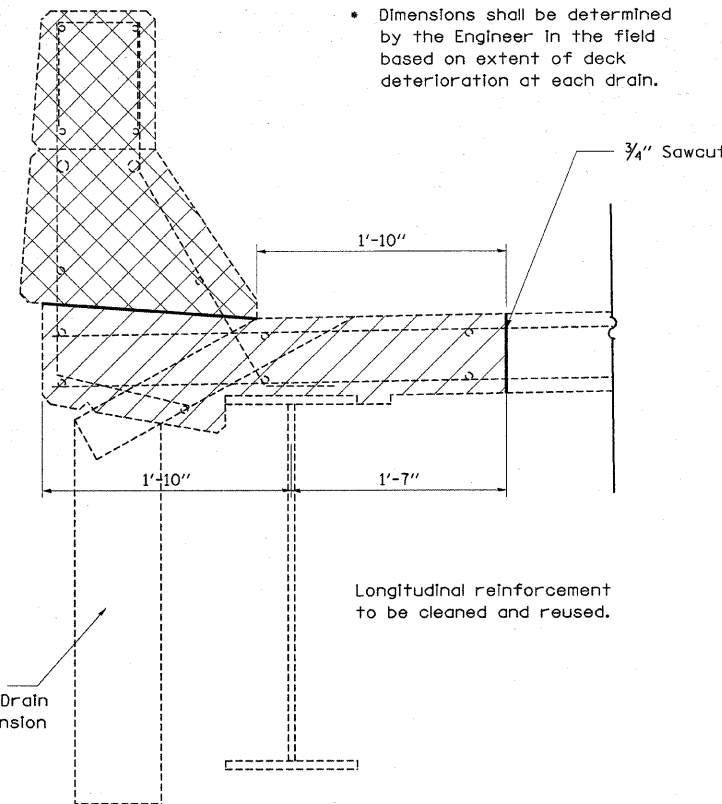
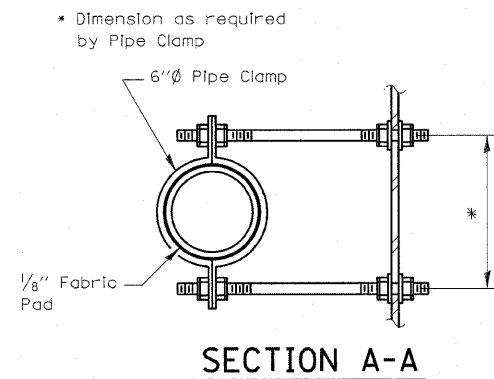
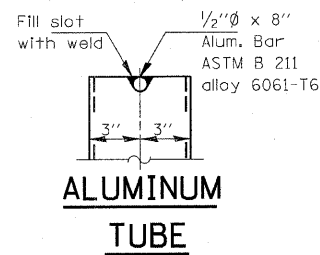
**DRAINS TO BE PLUGGED DETAIL AT MEDIAN**

FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>EXISTING DECK DRAINS TO BE REPLACED</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
ca:\pv_work\pwsdot\swartzrw\dms53580\d77	346-shr-detail1.s.dgn	DRAWN -	REVISED -		SCALE:	SHEET NO. 6 OF 12 SHEETS	STA.	116	(18-47HB-1BR)	CUMBERLAND	28	17
	PLOT SCALE = 20.00000' / IN.	CHECKED -	REVISED -		TO STA.			CONTRACT NO. 74346				
	PLOT DATE = 3/19/2010	DATE -	REVISED -					ILLINOIS FED. AID PROJECT				

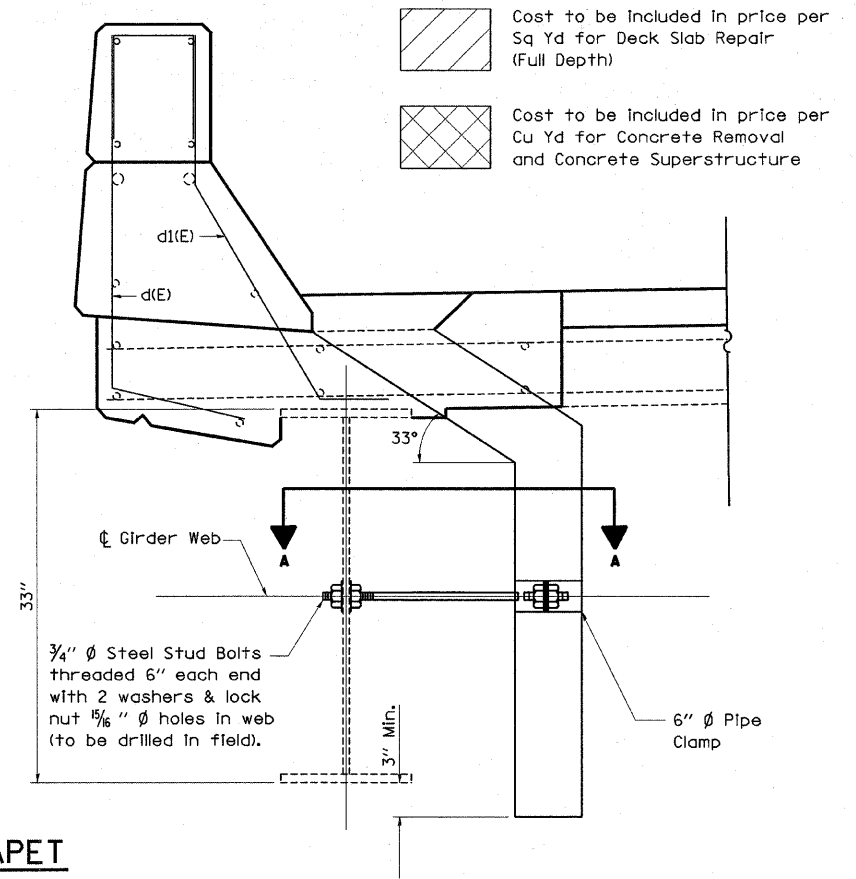


**BILL OF MATERIAL**

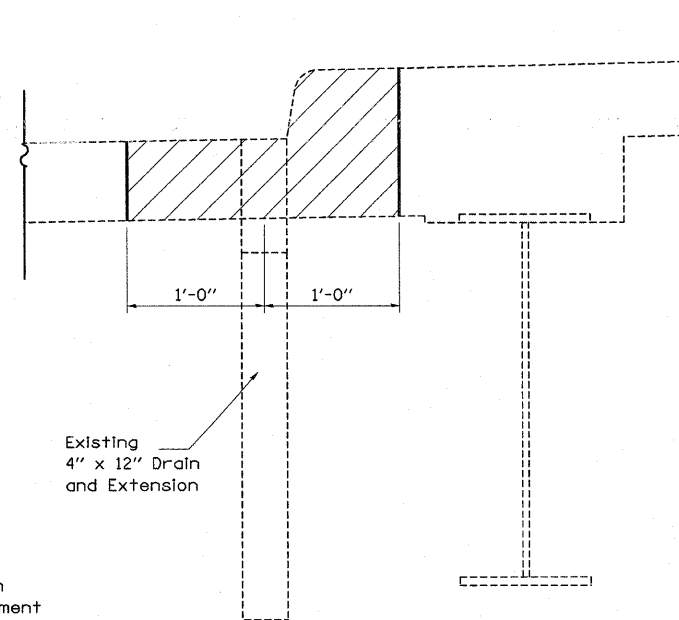
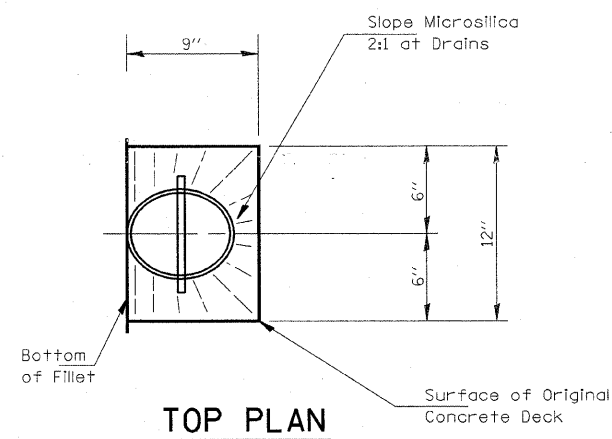
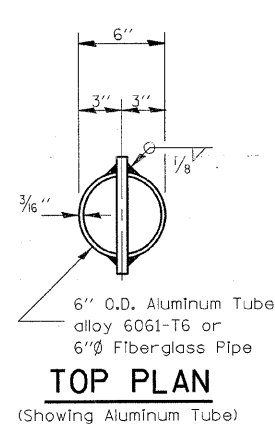
BAR	NUMBER OF BARS		TOTAL	SIZE	LENGTH	SHAPE
	STAGE I	STAGE II				
d (E)	24	12	36	#4	3' - 7"	L
d1(E)	24	12	36	#5	3' - 5"	L
d2(E)	6	4	10	#4	1' - 4"	U
REINFORCEMENT BARS (EPOXY COATED)			POUND	230		
CONCRETE REMOVAL			CU YD	2.2		
CONCRETE SUPERSTRUCTURE			CU YD	2.2		
FLOOR DRAINS			EACH	17		



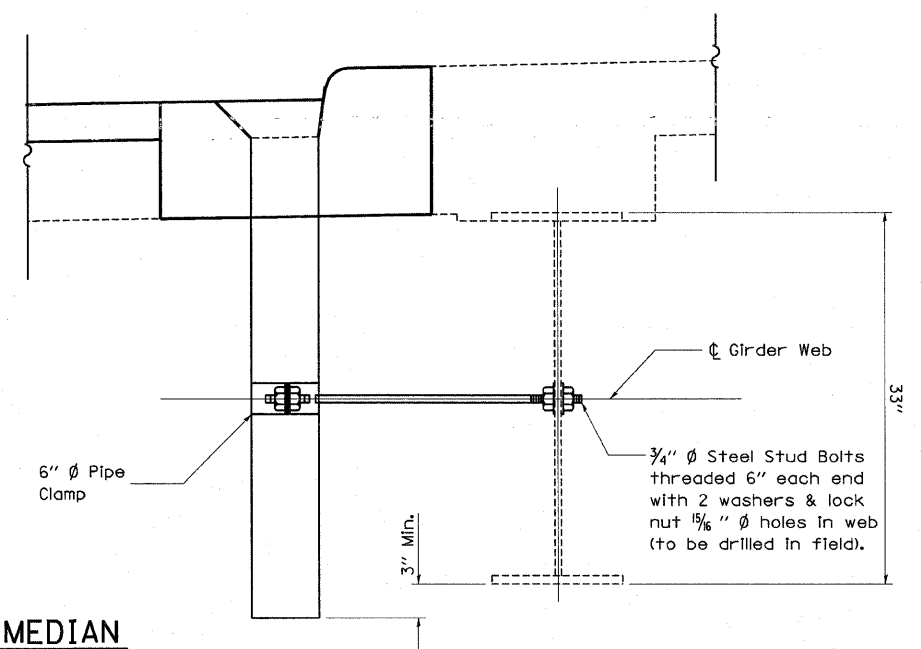
**SECTION THRU EXISTING FLOOR DRAIN**



**AT PARAPET**



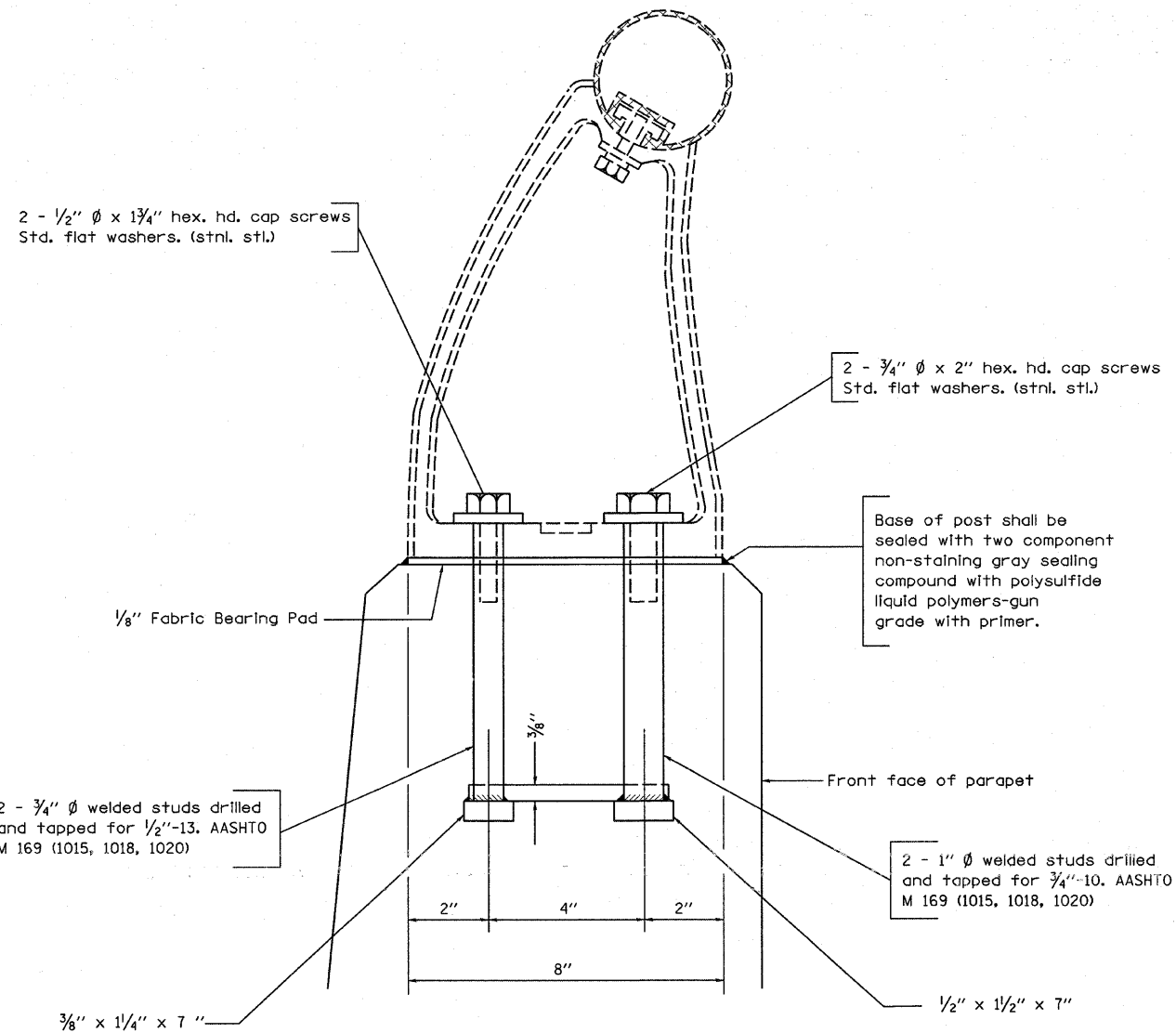
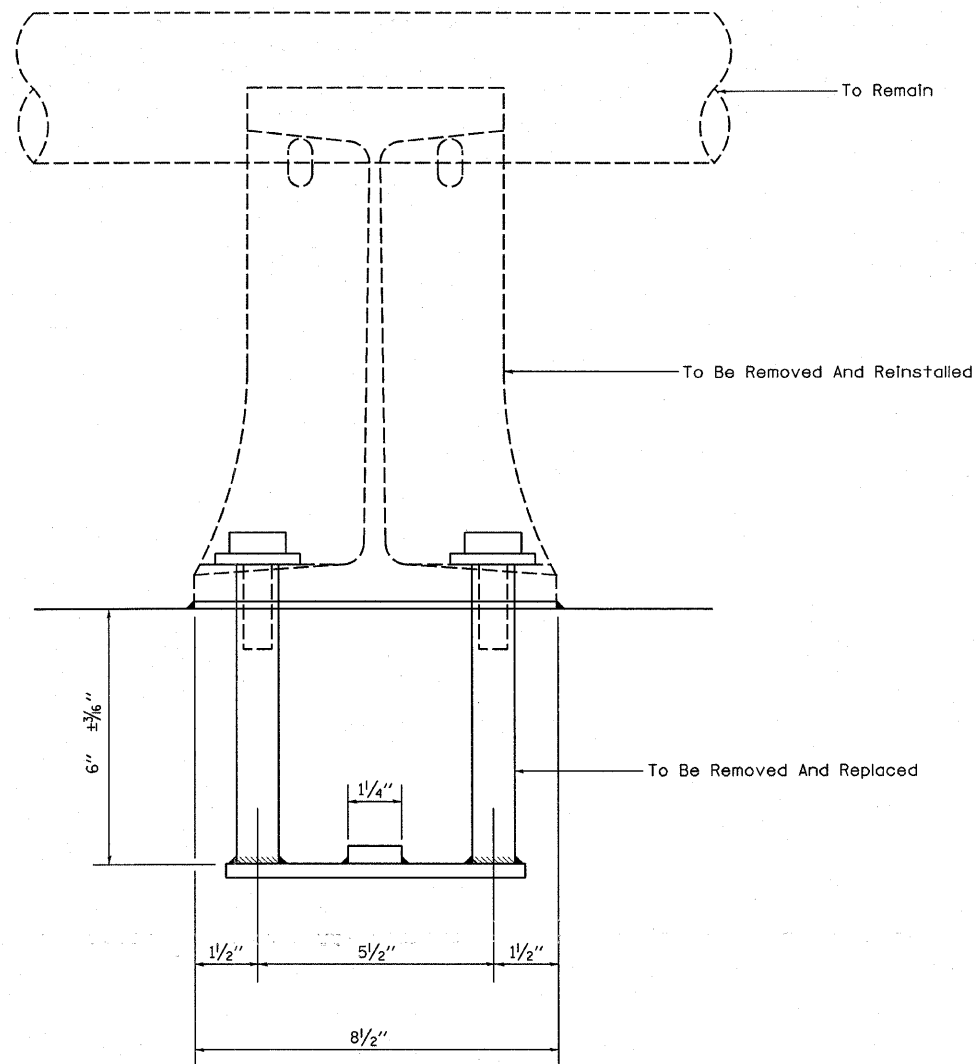
**DRAIN REPLACEMENT DETAIL**



**AT MEDIAN**

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

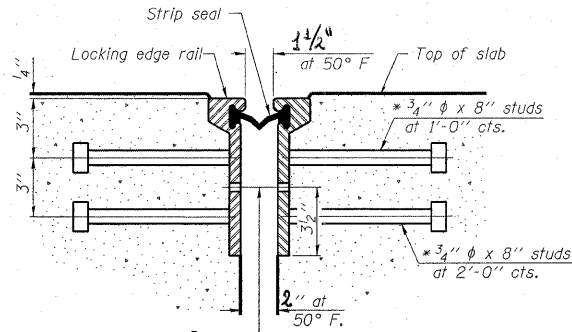
Note: Fiberglass pipe shall conform to ASTM D 2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.



Note: New Rail Post anchorage devices will be required at each location where posts are connected to new construction. Cost shall be included with Concrete Superstructure.

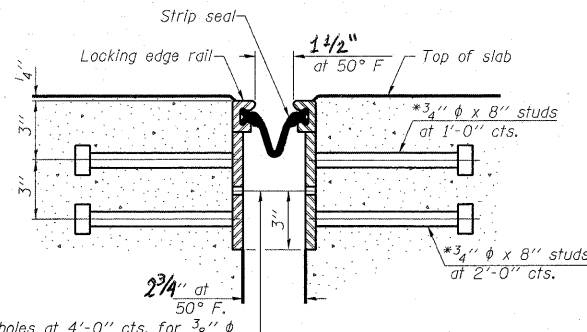
FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>RAIL SUPPORT ANCHOR DETAILS SN. 018-0025</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pwork\pwork\swartzrw\dms53580\d77	346-shr-details.dgn	DRAWN -	REVISED -		116	(18-47HB-1BR)	CUMBERLAND	28	19		
PLOT SCALE = 28.00000 ' / IN.	CHECKED -	REVISED -	CONTRACT NO. 74346								
PLOT DATE = 3/19/2010	DATE -	REVISED -	FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT						
			SCALE: N/A		SHEET NO. 8 OF 12 SHEETS	STA.	TO STA.				

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



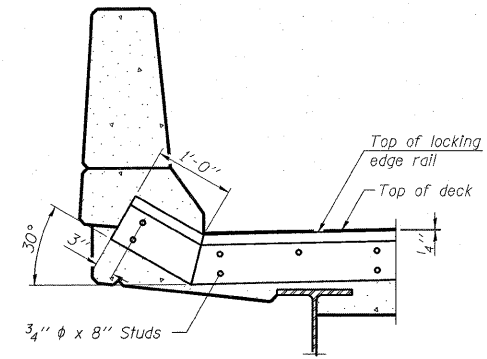
7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

**SECTION THRU ROLLED RAIL JOINT**

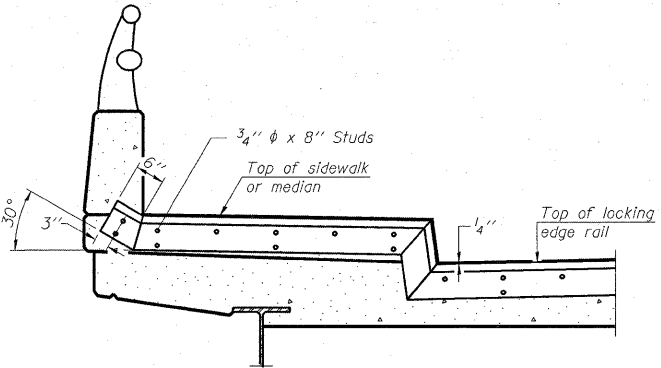


7/16"  $\phi$  holes at 4'-0" cts. for 3/8"  $\phi$  bolts. All bolts shall be burned, sawed, or chipped off flush with the plates after forms are removed, typ.

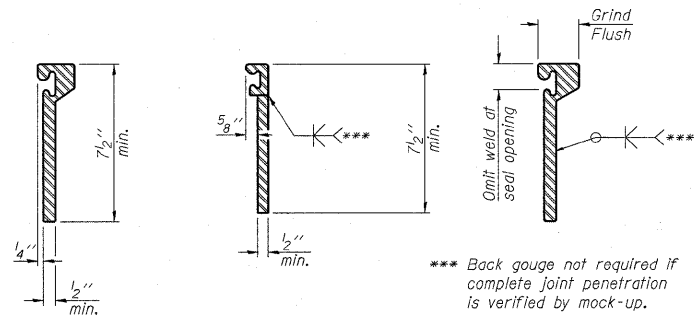
**SECTION THRU WELDED RAIL JOINT**



**AT PARAPET**  
See Section A-A for end treatment of skews > 30°.

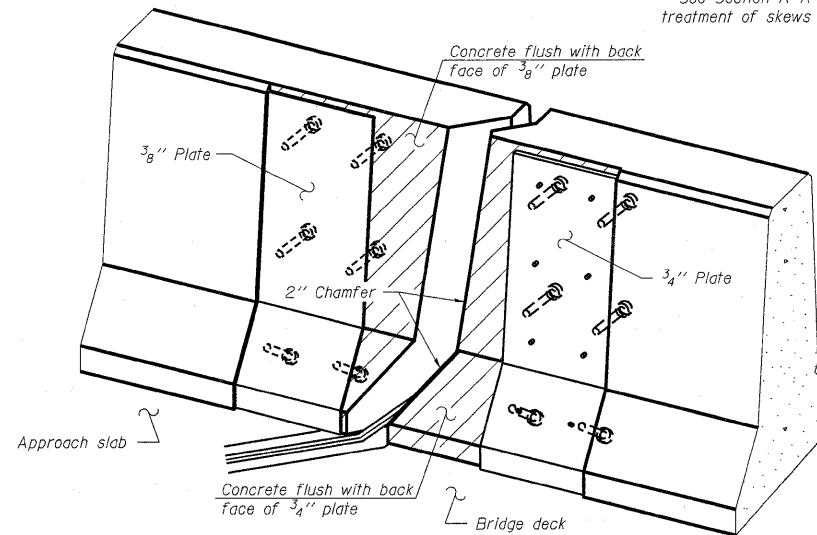


**AT SIDEWALK OR MEDIAN**  
Shorter plates with a single row of studs at 12" cts. may be necessary on medians which are shallower than 9". See manufacturer's recommendation.



**ROLLLED EXTRUDED RAIL**      **WELDED RAIL**

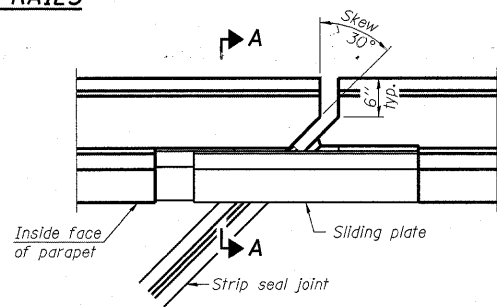
**LOCKING EDGE RAIL SPLICE**  
The inside of the locking edge rail groove shall be free of weld residue.  
Rolled rail shown, welded rail similar.



**TYPICAL END TREATMENTS**

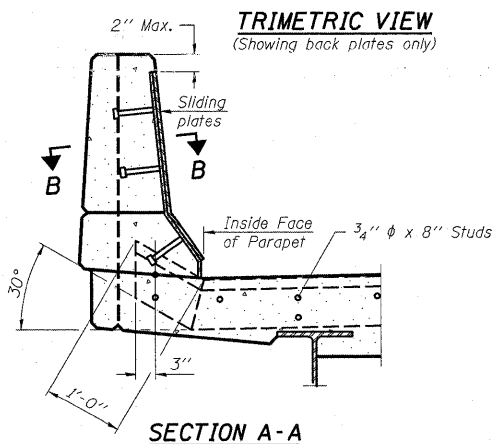
Notes:  
The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails. Open or "webbed" strip seal gland configurations are not permitted. The gland shall be sized for a maximum rated movement 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 at stage lines shall be 3/16", sealed with a suitable sealant.

**LOCKING EDGE RAILS**



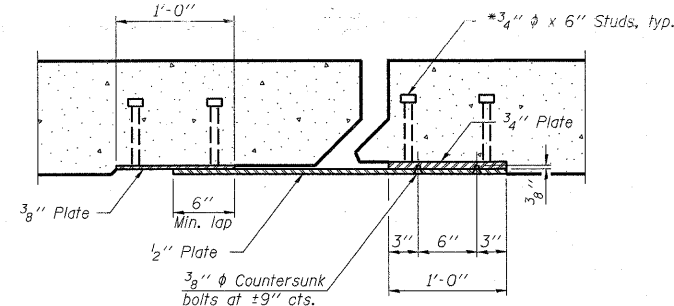
Skew = 14°-18'-07" < 30°  
Therefore, sliding plates are not required.

**PLAN**



**SECTION A-A**

**POINT BLOCK DETAILS**  
(For skews > 30°)



**SECTION B-B**

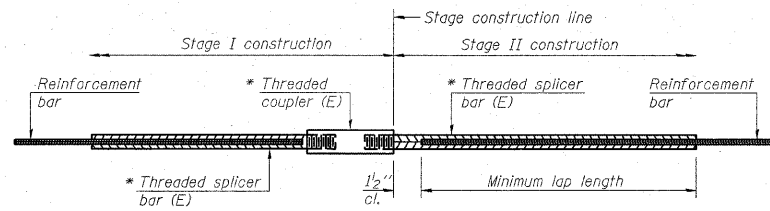
**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	118.6

**PREFORMED JOINT STRIP SEAL**  
**STRUCTURE NO. 018-0025**

EJ-SSJ

11-1-09



**STANDARD BAR SPLICER ASSEMBLY**

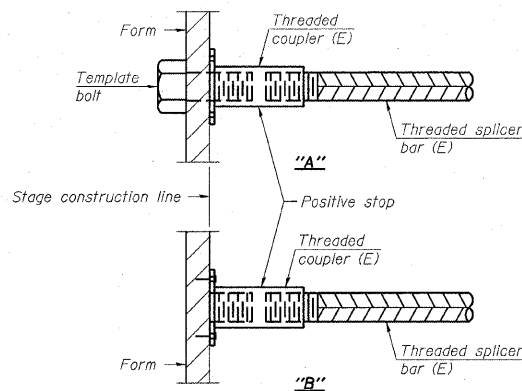
Bar size to be spliced	Minimum Lap Lengths			
	Table 1	Table 2	Table 3	Table 4
3, 4	1'-5"	1'-11"	2'-1"	2'-4"
5	1'-9"	2'-5"	2'-7"	2'-11"
6	2'-1"	2'-11"	3'-1"	3'-6"
7	2'-9"	3'-10"	4'-2"	4'-8"
8	3'-8"	5'-1"	5'-5"	6'-2"
9	4'-7"	6'-5"	6'-10"	7'-9"

- 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

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

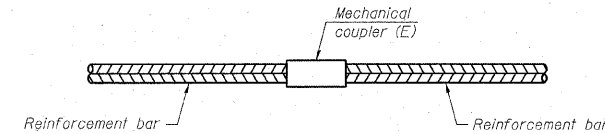
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
081-0025	#5	14	Table 3
081-0025	#6	12	Table 3



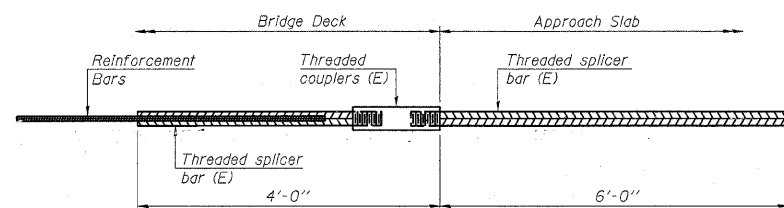
**INSTALLATION AND SETTING METHODS**

- "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.



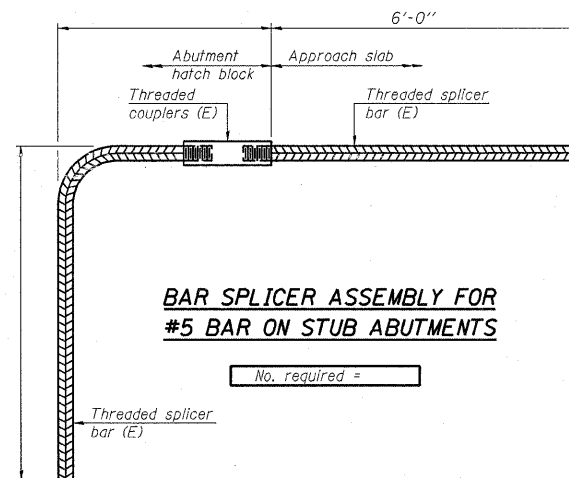
**STANDARD MECHANICAL SPLICER**

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 special provision for Mechanical Splicers.
- See approved list of bar splicer assemblies and mechanical splicers for alternatives.

**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
STRUCTURE NO. 018-0025**

BSD-1

11-1-09

FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>BAR SPLICER ASSEMBLY DETAILS STRUCTURE NO. 018-0025</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
cd:\pwork\pwork\swartzrw\dms53580\d77	346-shr-details.dgn	DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	21	
PLOT SCALE = 20.00000 ' / IN.	CHECKED -	REVISED -	SCALE: N/A			SHEET NO. 10 OF 12 SHEETS	STA.	TO STA.	CONTRACT NO. 74346		
PLOT DATE = 3/19/2010	DATE -	REVISED -				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**NOTES**

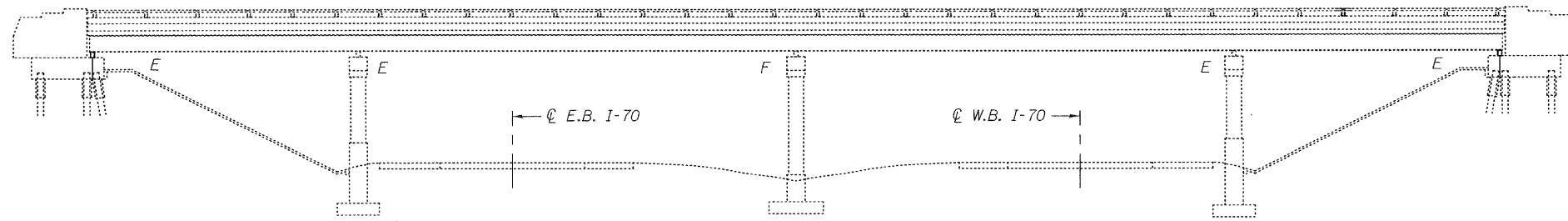
All structural steel shall conform to AASHTO Classification M-270 Gr. 36, unless otherwise noted.  
Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make 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.

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.

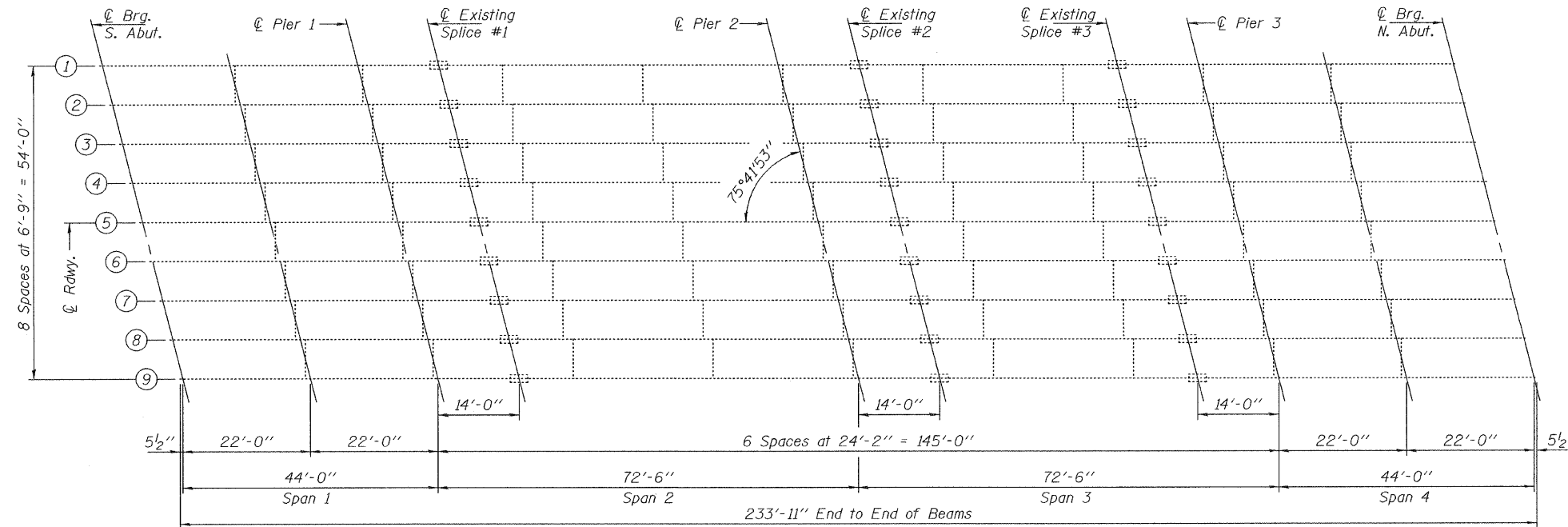
The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

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

All structural steel shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Furnishing and Erecting Structural Steel.



**ELEVATION**



**FRAMING PLAN**

Remove and Replace Bearings at Abutments

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Furnishing & Erecting Structural Steel	Pound	1920
Anchor Bolts, 1"φ	Each	36
Elastomeric Bearing Assembly, Type II	Each	18
Jack and Remove Existing Bearings	Each	18

**BEARING REPLACEMENT**

**PLAN & ELEVATION**

**IL ROUTE 130**

**SN 018-0025**

DESIGNED	VHV
CHECKED	AJB
DRAWN	Kyle M. Steffen
CHECKED	VHV AJB

APRIL 30, 2010  
 EXAMINED *Carl Perry*  
 ENGINEER OF STRUCTURAL SERVICES  
 PASSED *Ralph E. Anderson*  
 ENGINEER OF BRIDGES AND STRUCTURES

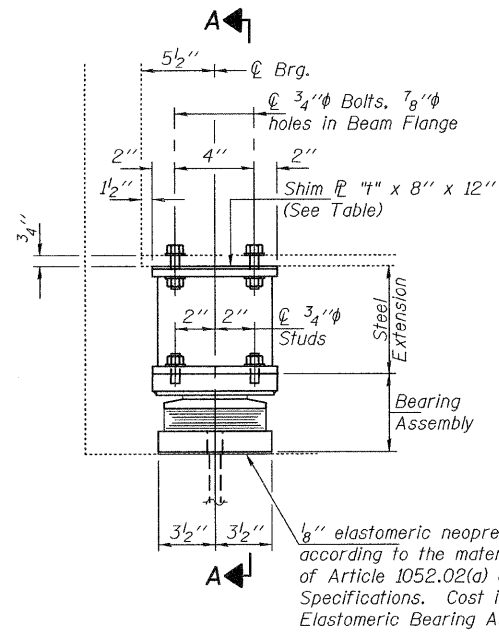
SHEET NO. 1	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
	116	(18-47HB-1)BR	CUMBERLAND	28	22
2 SHEETS		CONTRACT NO. 74346			
FED. ROAD DIST. NO.		ILLINOIS FED. AID PROJECT			

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

**BEAM REACTIONS**

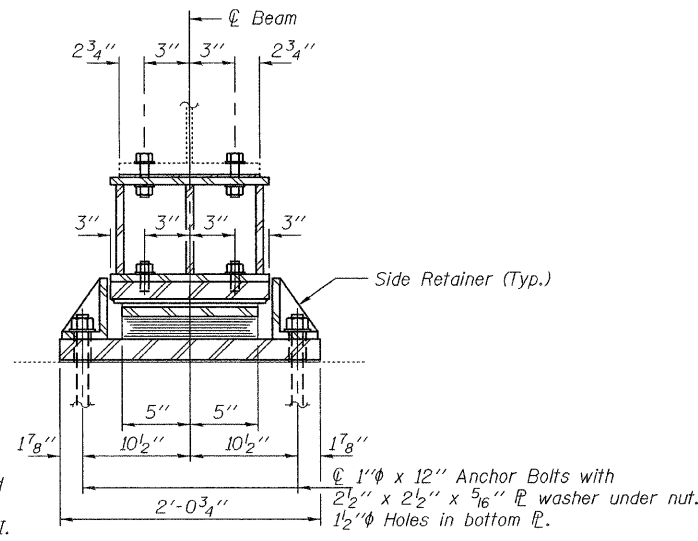
RP	(K)	10.4
SP	(K)	3.8
RL	(K)	33.3
Imp.	(K)	10.0
R (Total)	(K)	57.5

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 = 30 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.

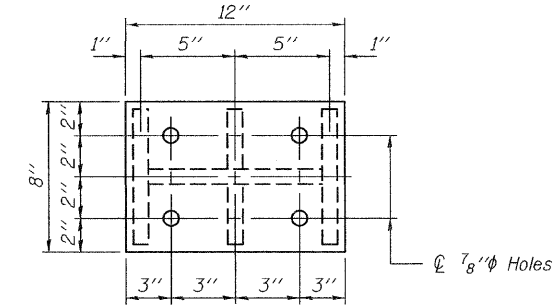


**ELEVATION AT ABUTMENT**

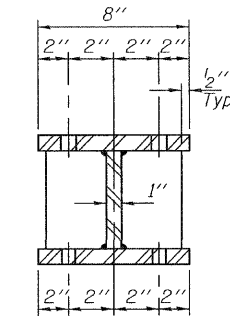
**TYPE II TFE ELASTOMERIC EXP. BRG.**



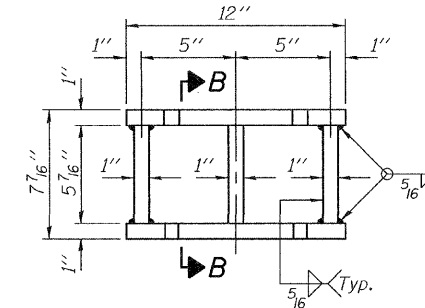
**SECTION A-A**



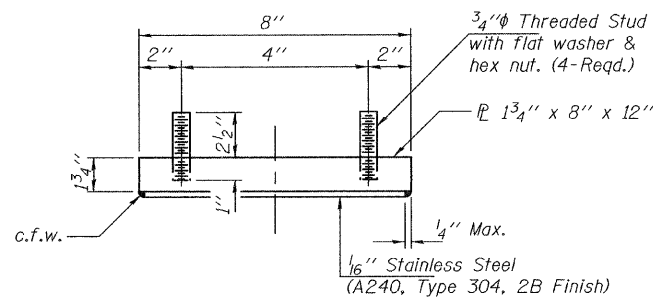
**PLAN TOP AND BOTTOM PLATE**



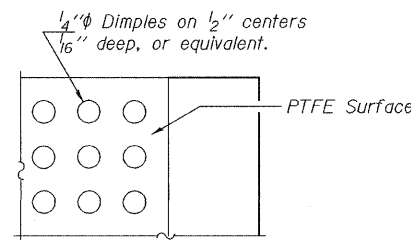
**SECTION B-B**



**STEEL EXTENSION DETAIL**



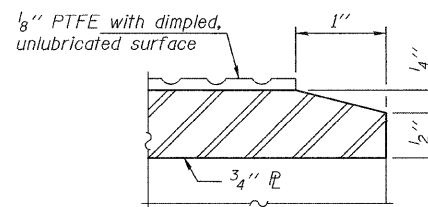
**TOP BEARING ASSEMBLY**



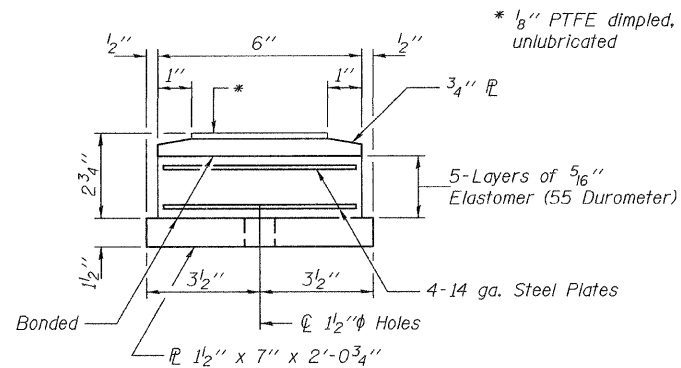
**PLAN-PTFE SURFACE**

**SHIM PLATES**

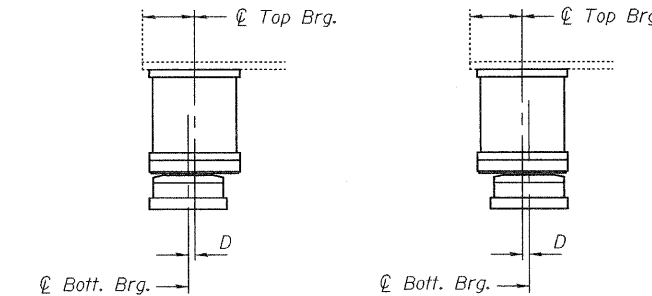
Abut.	Beam	4"
South	4, 5, 6	5/8"
North	4	3/8"
North	5	1/8"



**SECTION THRU PTFE**



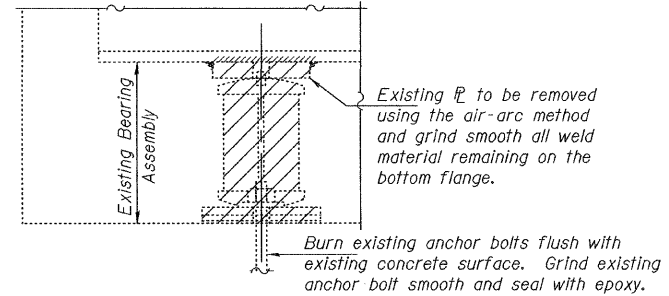
**BOTTOM BEARING ASSEMBLY**



BELOW 50° F. (Move bott. brg. away from fixed brg.) ABOVE 50° F. (Move bott. brg. toward fixed brg.)

**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.



**EXISTING BEARING REMOVAL DETAIL**

Cost included with Jack and Remove Existing Bearings.

**BILL OF MATERIAL**

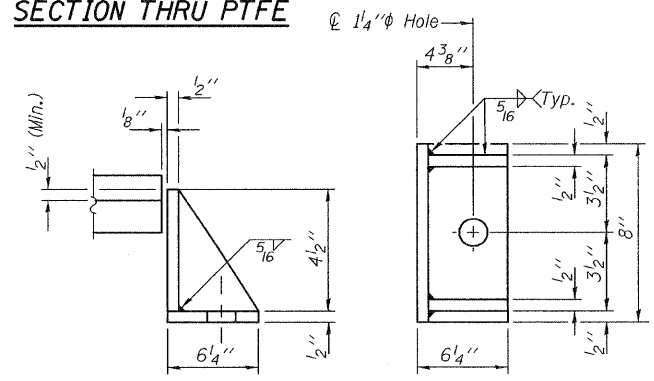
Item	Unit	Total
Elastomeric Bearing Assembly, Type II	Each	18
Jack and Remove Existing Bearings	Each	18
Furnishing and Erecting Structural Steel	Pound	1920
Anchor Bolts, 1"φ	Each	36

**BEARING REPLACEMENT DETAILS**

**IL ROUTE 130  
SN 018-0025**

DESIGNED	VHV
CHECKED	AJB
DRAWN	Kyle M. Steffen
CHECKED	VHV AJB

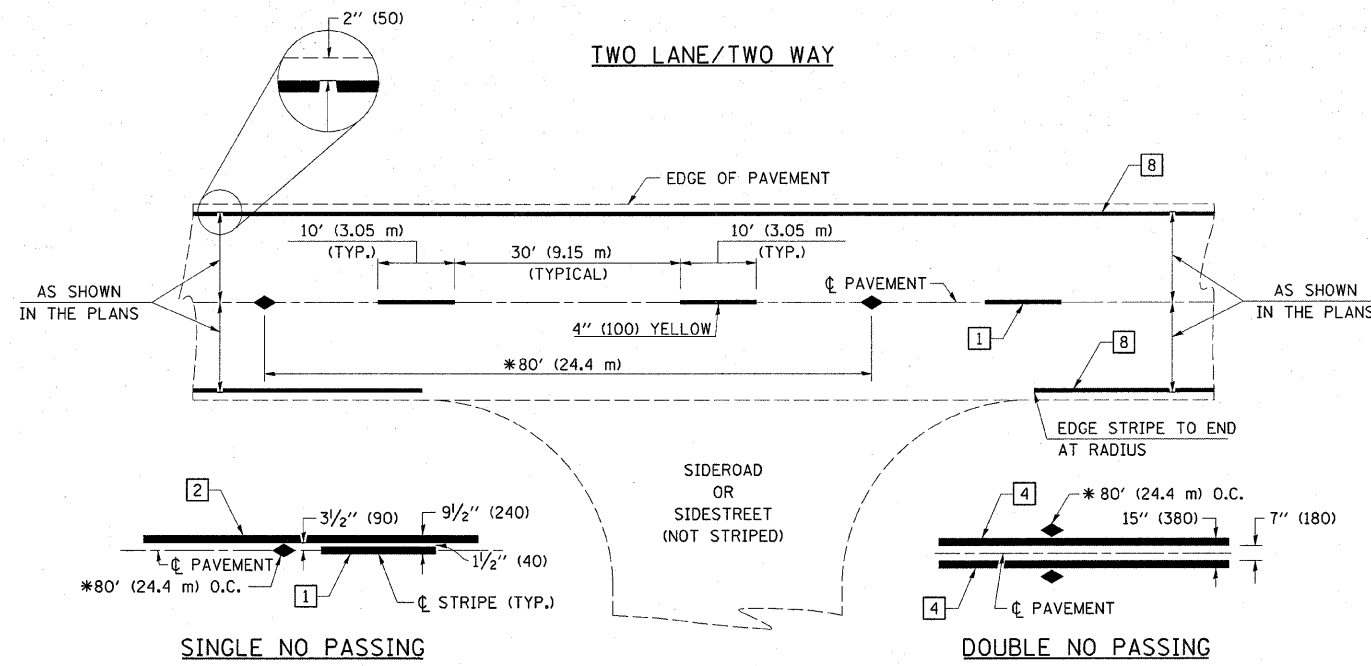
APRIL 30, 2010  
EXAMINED *A. Carl P... ENGINEER OF STRUCTURAL SERVICES*  
PASSED *Ralph E. Anderson ENGINEER OF BRIDGES AND STRUCTURES*



**SIDE RETAINER**

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

SHEET NO. 2	F.A.P. RTE. 116	SECTION (18-47HB-1)BR	COUNTY CUMBERLAND	TOTAL SHEETS 28	SHEET NO. 23
2 SHEETS	CONTRACT NO. 74346		ILLINOIS FED. AID PROJECT		



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

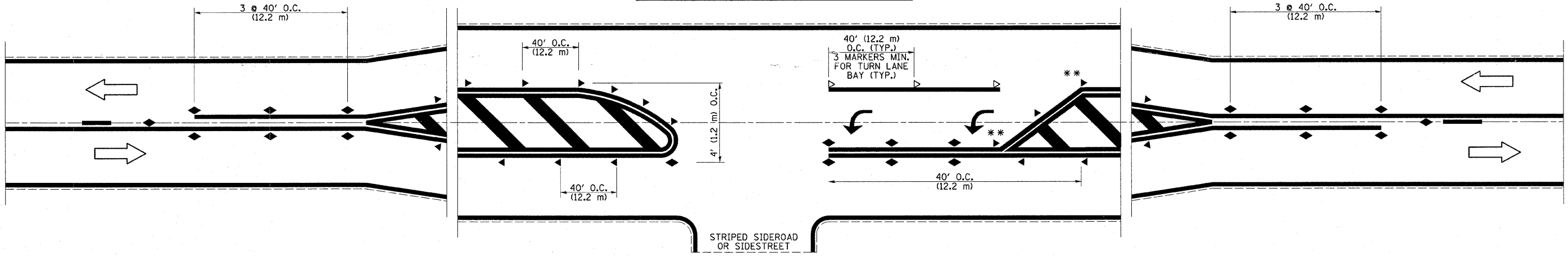
PAVEMENT MARKING LEGEND

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 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 6" (100) LANE LINE EXTENSIONS (WHITE)
- 14 4" (100) PARKING WHITE

TYPICAL PAVEMENT MARKERS LEGEND

- ◆ TWO-WAY AMBER MARKER
- ▶ ONE-WAY AMBER MARKER
- ▷ ONE-WAY CRYSTAL MARKER

RAISED REFLECTIVE PAVEMENT MARKERS

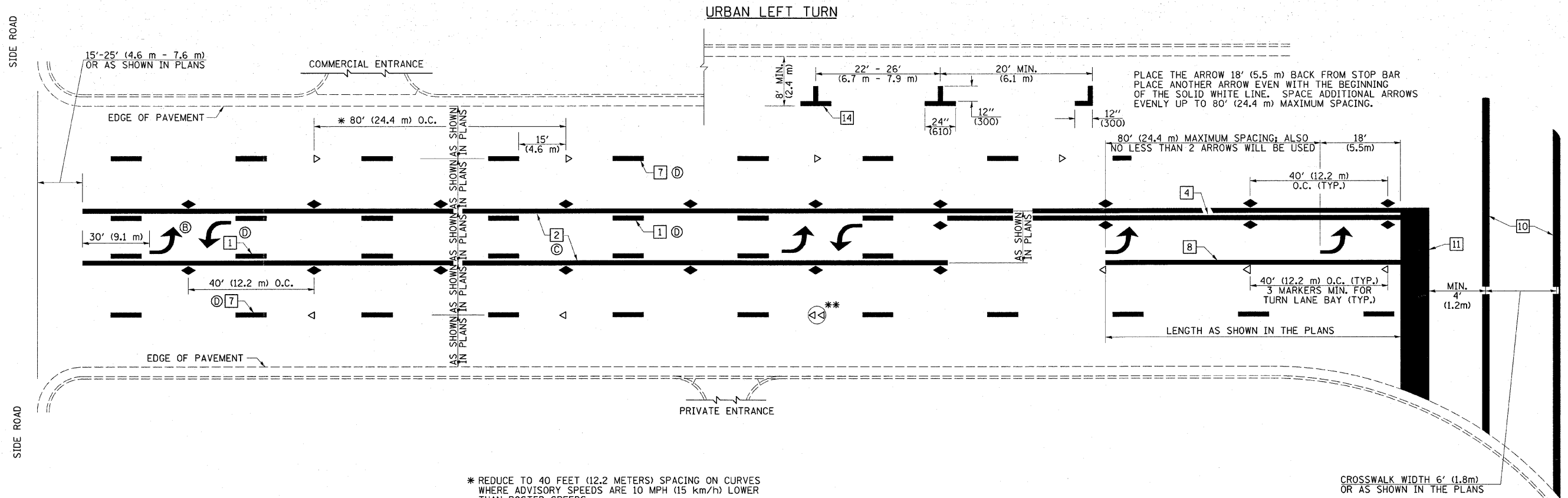


\*\* REDUCE SPACING IF NECESSARY TO ASSURE MARKERS AT CORNER POINTS.

NOT TO SCALE  
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pw_work\pwi\dot\swartzrw\dms53580\d77	346-shr-details.dgn	DRAWN -	REVISED -			116	(18-47HB-DBR)	CUMBERLAND	28	24	
	PLOT SCALE = 20.00000' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74346					
	PLOT DATE = 3/19/2018	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

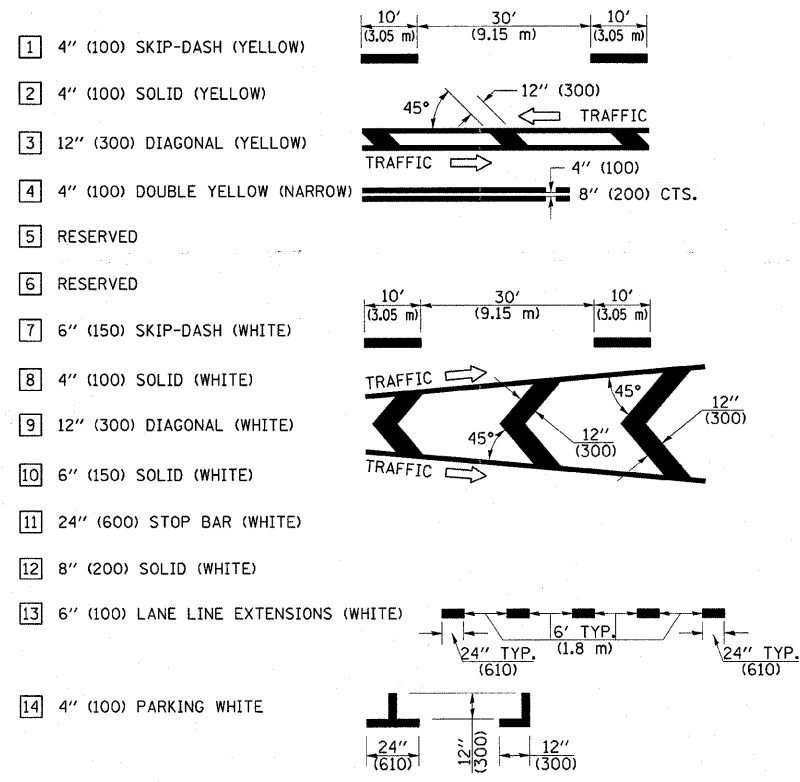




\* REDUCE TO 40 FEET (12.2 METERS) SPACING ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

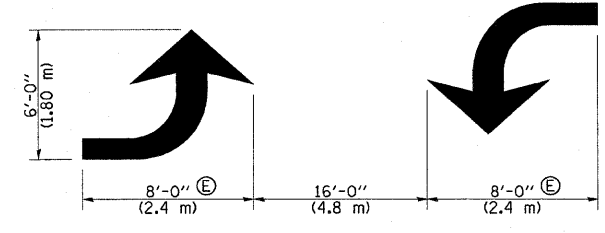
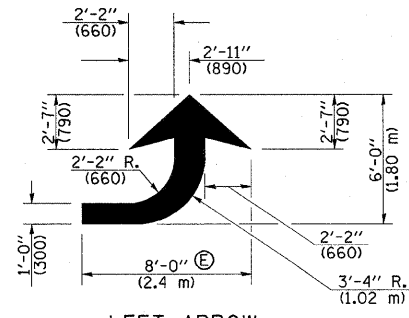
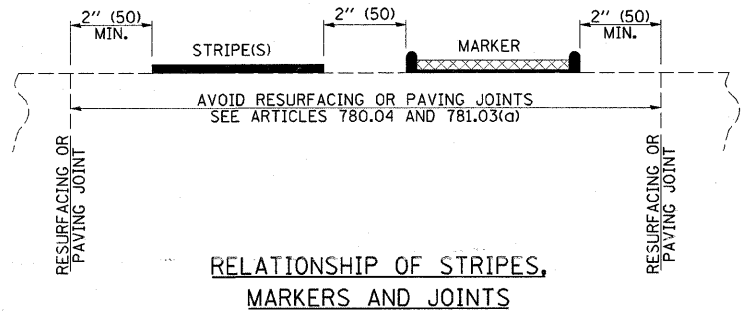
\*\* DOUBLE LANE LINE MARKERS SHALL BE SPECIFIED AND SPACED AS SHOWN IN HIGHWAY STANDARD 781001 FOR MULTI-LANE DIVIDED AND UNDIVIDED HIGHWAYS.

**PAVEMENT MARKING LEGEND**



**GENERAL NOTES**

- (B) 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.
- (C) 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.
- (D) 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.
- (E) USE LARGE ARROW SIZE FOR BOTH RURAL AND URBAN LOCATIONS. (SEE LAST PAGE OF SECTION 780x FOR SYMBOLS TABLE)

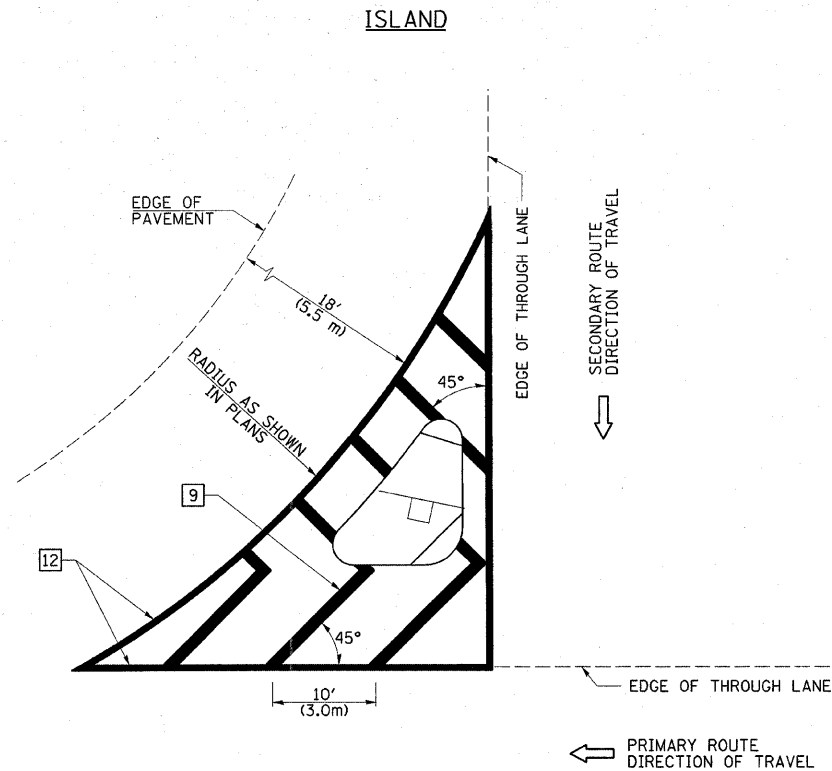


NOT TO SCALE

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

**DISTRICT 7 DETAIL NO. 7800001**

FILE NAME = c:\pwwork\pwi\dot\swartzrw\dms53580\177346-sht-details.dgn	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>		F.A.P. RTE. 116	SECTION (18-47HB-1BR)	COUNTY CUMBERLAND	TOTAL SHEETS 28	SHEET NO. 25	
	PLOT SCALE = 20.00000' / IN.	DRAWN -	REVISED -		SCALE: NA	SHEET NO. 2 OF 4 SHEETS	STA. TO STA.	CONTRACT NO. 74346				
	PLOT DATE = 3/19/2010	CHECKED -	REVISED -		ILLINOIS FED. AID PROJECT							
		DATE -	REVISED -									

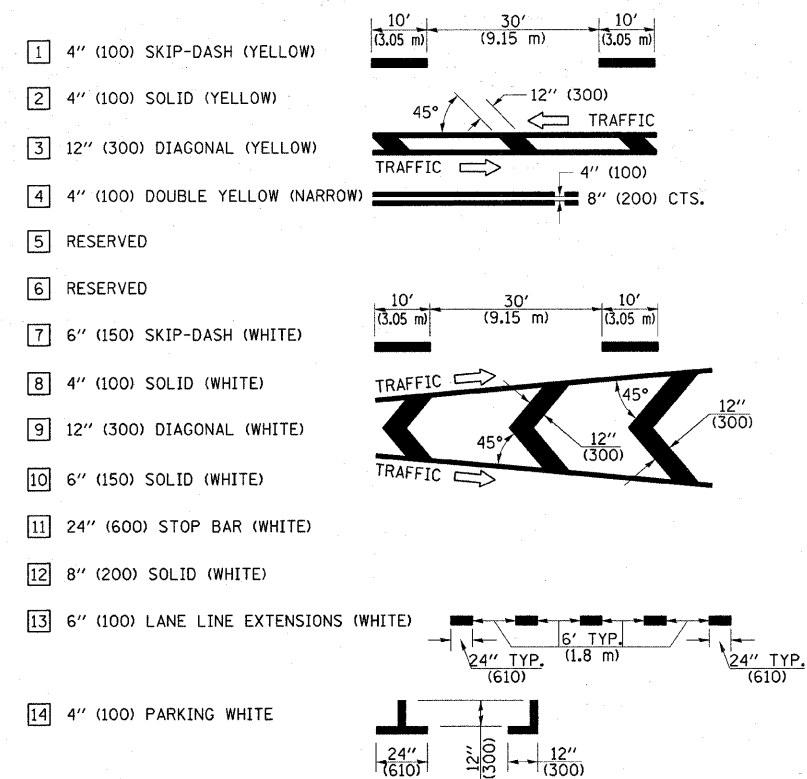


**GENERAL NOTES**

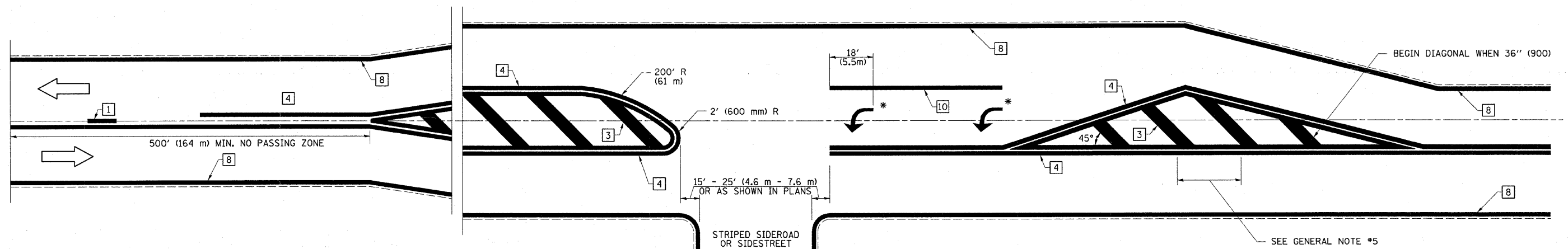
1. RAISED AND CORRUGATED MEDIANS SHALL BE OUTLINED WITH [2] IF PRESENT.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING 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**



**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

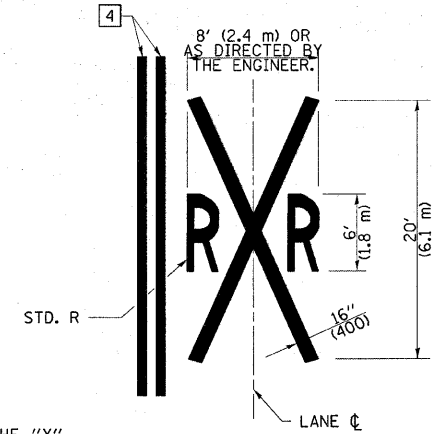
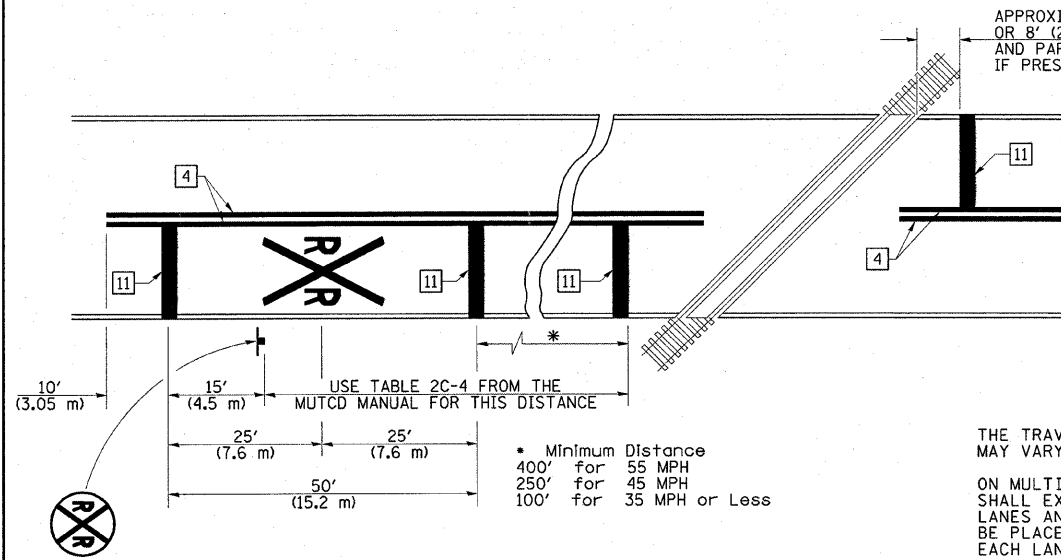
Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 7 DETAIL NO. 7800001**

FILE NAME =	USER NAME = swartzrw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwwork\pwwork\swartzrw\dms93580\d77	346-shr-details.dgn	DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	26	
	PLOT SCALE = 20.000000 "/td> <td>CHECKED -</td> <td>REVISED -</td> <td colspan="6" style="text-align: center;">CONTRACT NO. 74346</td>	CHECKED -	REVISED -			CONTRACT NO. 74346					
	PLOT DATE = 3/19/2010	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

PAVEMENT MARKING LEGEND



NOTES

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

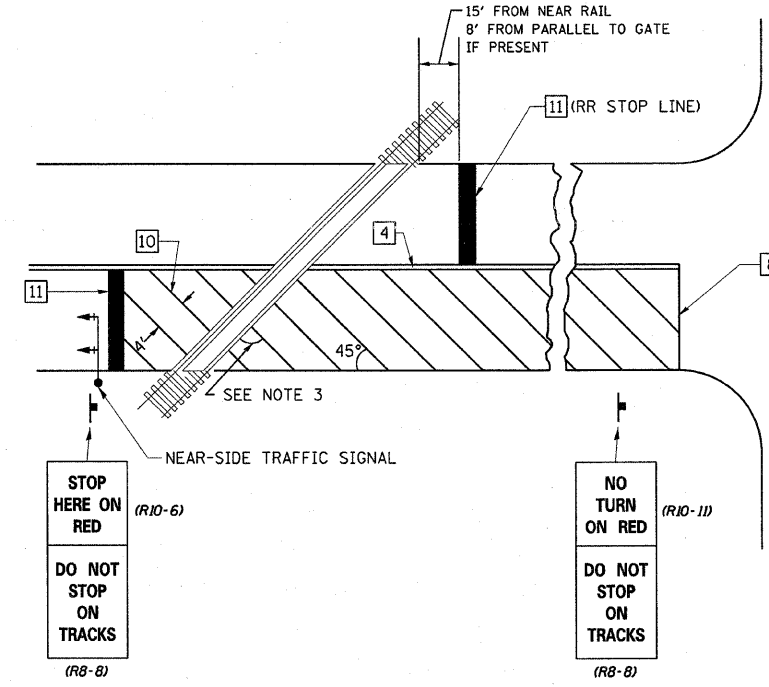
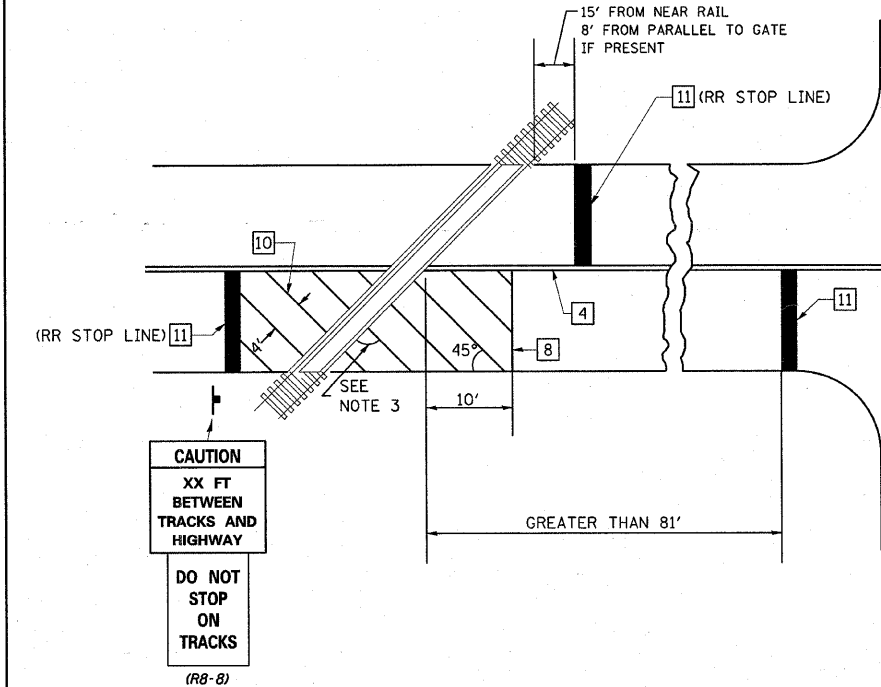
ON MULTI-LANE ROADS, THE STOP LINES SHALL EXTEND ACROSS ALL APPROACH LANES AND SEPARATE RXR SYMBOLS SHALL BE PLACED ADJACENT TO EACH OTHER IN EACH LANE.

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.

- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 RESERVED
- 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 6" (100) LANE LINE EXTENSIONS (WHITE)
- 14 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

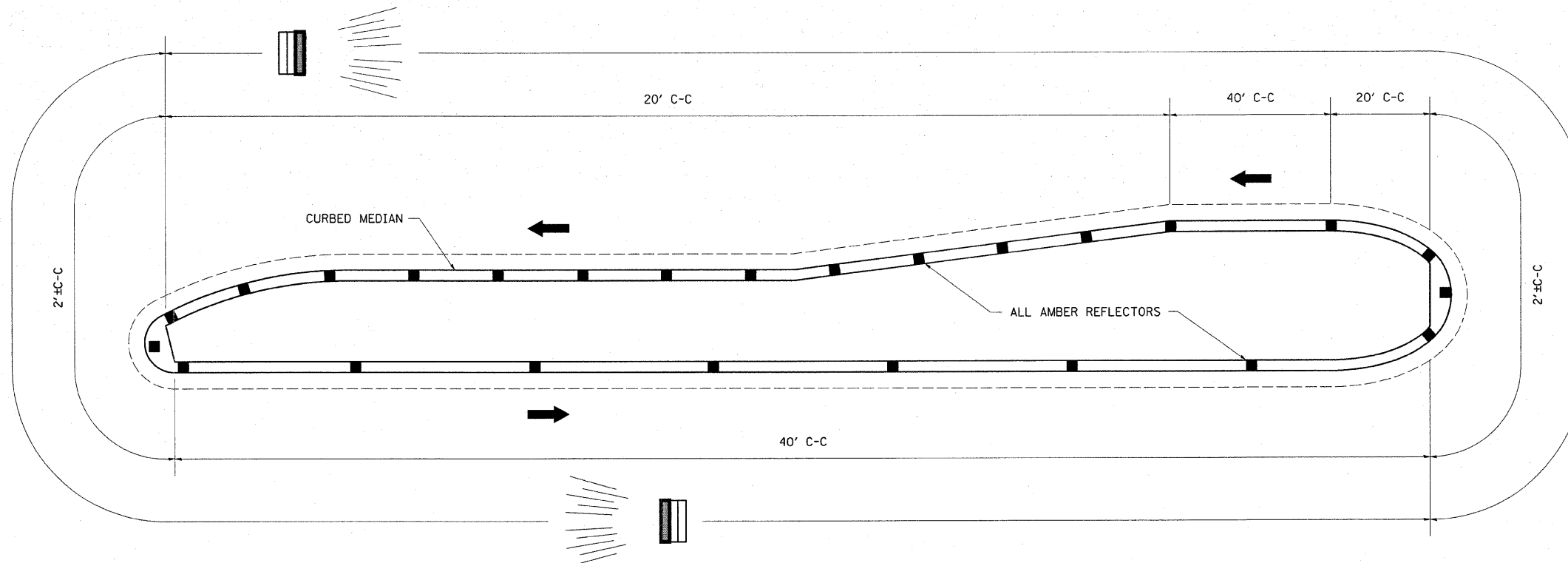
NOT TO SCALE

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

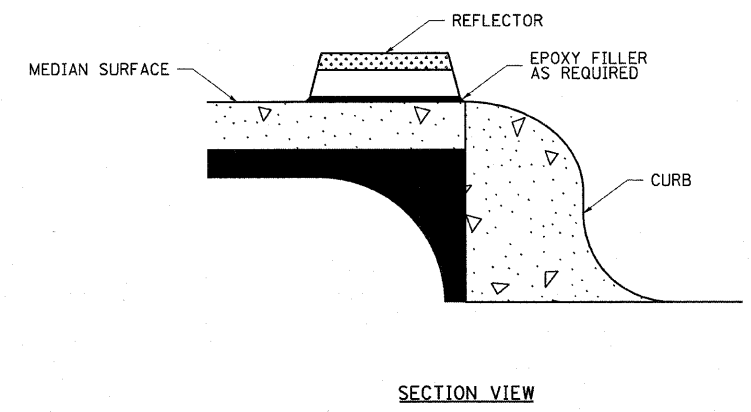
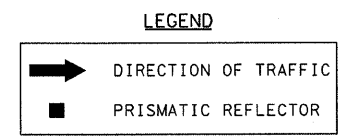
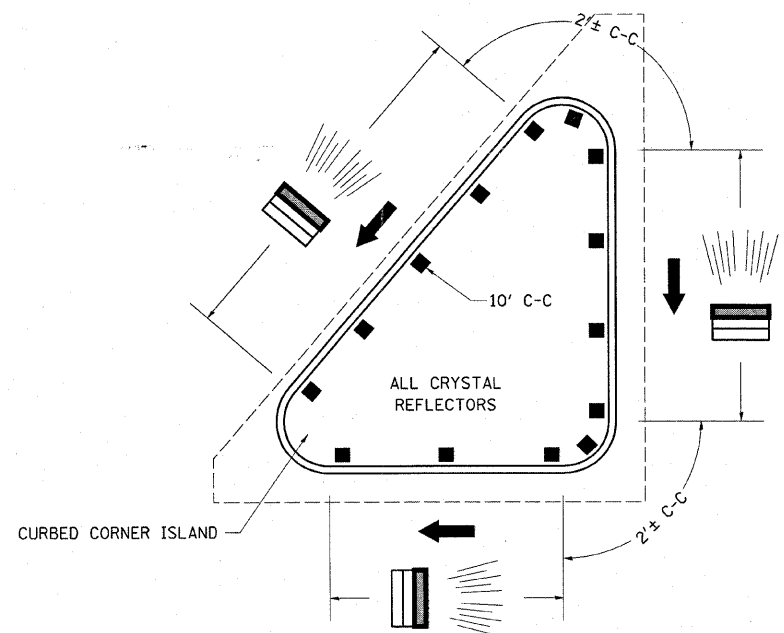
DISTRICT 7 DETAIL NO. 7800001

FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND RAISED REFLECTIVE PAVEMENT MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
c:\pwork\pwork\swartzw\dms53580\1d77	346-shd-details.dgn	DRAWN -	REVISED -			116	(18-47HB-1)BR	CUMBERLAND	28	27	
	PLOT SCALE = 20,000:00' / IN.	CHECKED -	REVISED -			CONTRACT NO. 74346					
	PLOT DATE = 3/19/2018	DATE -	REVISED -			ILLINOIS FED. AID PROJECT					

TYPICAL PLACEMENT OF PRISMATIC CURB REFLECTORS



1. PRISMATIC REFLECTORS SHALL BE MONO-DIRECTIONAL AND POSITIONED SO THAT THE REFLECTIVE FACE IS FACING THE APPROACHING TRAFFIC.
2. PRISMATIC REFLECTORS SHALL BE SECURED IN PLACE WITH AN EPOXY ADHESIVE.
3. PRISMATIC REFLECTORS SHALL BE EITHER AMBER OR CRYSTAL IN COLOR.
4. REFER TO SCHEDULES FOR PRISMATIC REFLECTOR QUANTITIES.
5. USE A MINIMUM OF 3 REFLECTORS ON ISLAND NOSES.



NOT TO SCALE

DISTRICT 7 DETAIL NO. 78200300

FILE NAME =	USER NAME = swartzw	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PRISMATIC CURB REFLECTOR</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ca\pw_work\pwwdot\swartzw\dms53580\d77	346-shr-details.dgn	DRAWN -	REVISED -				116	(18-47HB-1)BR	CUMBERLAND	28	28
	PLOT SCALE = 20.000000' / IN.	CHECKED -	REVISED -				CONTRACT NO. 74346				
	PLOT DATE = 3/19/2010	DATE -	REVISED -				FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			
				SCALE: NA	SHEET NO. 1 OF 1 SHEETS	STA. TO STA.					