

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION  
 DIVISION OF HIGHWAYS  
**PROPOSED  
 HIGHWAY PLANS**

F.A.I. ROUTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	110-6)BDR	CHAMPAIGN	51	1

D-95-027-19

FOR INDEX OF SHEETS, SEE SHEET NO. 2  
 FOR SUMMARY OF QUANTITIES, SEE SHEETS 3 TO 7

DESIGN DESIGNATION: INTERSTATE

CURRENT TRAFFIC DATA  
 SPEED LIMIT: 70 MPH

ADT:

I-74 (EB) = I-74 (WB) =  
 2021: 17,500 2021: 17,200  
 2041: 19,600 2041: 19,300

IL-130 SPUR TO I-74 (WB) =  
 2021: 4,400  
 2041: 5,600

I-74 (WB) TO IL-130 SPUR =  
 2021: 2,400  
 2041: 2,950

I-74 (EB) TO IL-130 SPUR  
 2021: 4,900  
 2041: 6,500

IL-130 SPUR TO I-74 (EB) =  
 2021: 2,150  
 2041: 2,600



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.L.E.  
 JOINT UTILITY LOCATION INFORMATION FOR EXCAVATORS  
 1-800-892-0123  
 OR 811 CUNNINGHAM TOWNSHIP

PROJECT ENGINEER - RYAN T. CARROLL, P.E.  
 (217) 465-4181

CONTRACT NO. 70D69

F.A.I. ROUTE 74 (I-74)  
 SECTION (10-6)BDR  
 PROJECT NHPP-A61S(987)  
 BRIDGE DECK OVERLAY  
 CHAMPAIGN COUNTY  
 C-95-032-19  
 RAMPS OVER I-74 AT ECL OF URBANA



END IMPROVEMENT  
 STA 51 + 15.79

T20N  
 T19N

STRUCTURE  
 S.N. 010-0033  
 URBANA SPR  
 STA. 49 + 99.40 =  
 I-74 STA. 1399 + 74.53

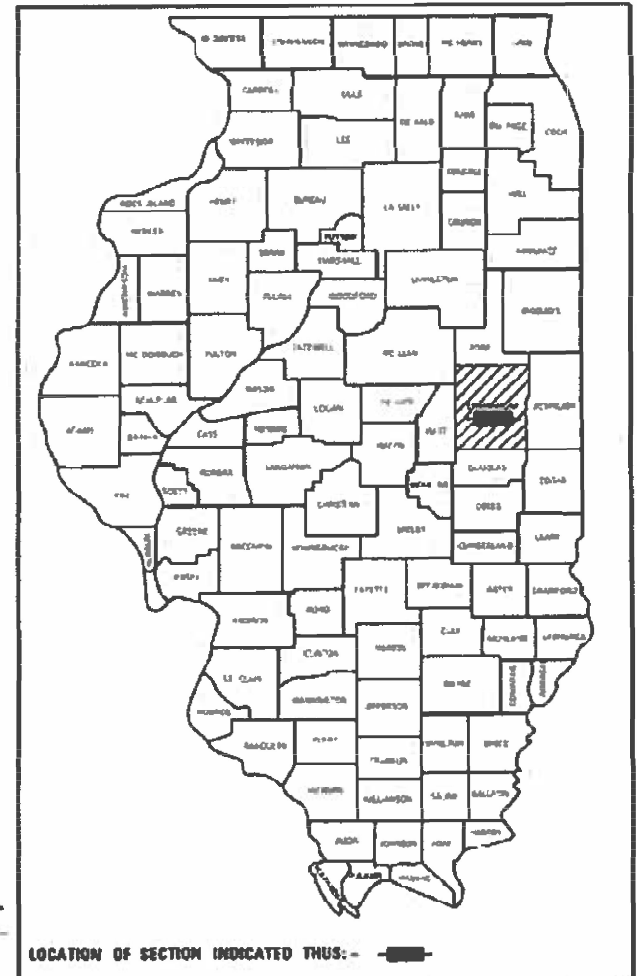
BEGIN IMPROVEMENT  
 STA 48 + 97.01

R8E 2ND P.M. | R9E 2ND P.M.

LOCATION MAP



GROSS LENGTH = 218.79 FT. = 0.041 MILE  
 NET LENGTH = 218.79 FT. = 0.041 MILE



STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

SUBMITTED 3/21 20 23  
Kenneth A. Hammett SWN REGIONAL ENGINEER  
 May 12, 2023  
Steph A. Etkin ENGINEER OF DESIGN AND ENVIRONMENT  
 May 12, 2023  
Stephen McLaughlin DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION



Zachary D. Leach Signature  
 03/17/2023 Date  
 Printed or Typed Name License Number 062-065588  
 My license renewal date is November 30, 2023

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**INDEX OF SHEETS**

1 COVER SHEET  
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 50 TEMPORARY RUMBLE STRIPS (SPECIAL) DETAIL  
 51 DISTRICT 5 DETAIL NO. 7800BBB

**HIGHWAY STANDARDS**

000001-08 STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS  
 001001-02 AREAS OF REINFORCEMENT BARS  
 001006 DECIMAL OF AN INCH AND OF A FOOT  
 606301-04 PC CONCRETE ISLANDS AND MEDIANS  
 631031-18 TRAFFIC BARRIER TERMINAL, TYPE 6  
 701101-05 OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE  
 701106-02 OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY  
 701400-11 APPROACH TO LANE CLOSURE, FREEWAY/EXPRESSWAY  
 701401-13 LANE CLOSURE, FREEWAY/EXPRESSWAY  
 701402-12 LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH BARRIER  
 701411-09 LANE CLOSURE, MULTILANE, AT ENTRANCE OR EXIT RAMP, FOR SPEEDS ≥ 45 MPH  
 701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH  
 701428-01 TRAFFIC CONTROL, SETUP AND REMOVAL, FREEWAY/EXPRESSWAY  
 701451-05 RAMP CLOSURE FREEWAY/EXPRESSWAY  
 701601-09 URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRAVERSABLE MEDIAN  
 701901-08 TRAFFIC CONTROL DEVICES  
 704001-08 TEMPORARY CONCRETE BARRIER  
 780001-05 TYPICAL PAVEMENT MARKINGS  
 782006-01 GUARDRAIL AND BARRIER WALL REFLECTOR MOUNTING DETAILS

**COMMITMENTS**

COMMITMENTS: (NONE)

**APPLICATION RATES:**

THE FOLLOWING APPLICATION RATES HAVE BEEN ASSUMED IN CALCULATING PLAN QUANTITIES.

HOT-MIX ASPHALT = 112 LBS/SQ YD/IN  
 BITUMINOUS MATERIALS (TACK COAT) = 0.05 LBS/SQ FT

**HMA RESURFACING**

STA. 48+39.57 TO STA. 48+69.57, LT (URBANA SPUR WB)  
 STA. 48+47.85 TO STA. 48+77.85, RT (URBANA SPUR EB)  
 STA. 51+32.86 TO STA. 51+62.86, LT (URBANA SPUR WB)  
 STA. 51+40.90 TO STA. 51+70.90, RT (URBANA SPUR EB)

**PAVING OMISSIONS**

S.N. 010-0033:  
 STA. 48+69.57 TO STA. 51+32.86 (LT)  
 STA. 48+77.85 TO STA. 51+40.90 (RT)

**GENERAL NOTES**

G.N.-100A  
 ELECTRONIC FILES AND/OR ELECTRONIC SURVEY INFORMATION INCLUDING CADD FILES WILL NOT BE AVAILABLE TO THE CONTRACTOR.

G.N.-105.09A  
 ALL ELEVATIONS SHOWN IN THE PLANS ARE BASED ON NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

G.N.-406H  
 MIXTURE REQUIREMENTS: THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICABLE FOR THIS PROJECT

LOCATION	URBANA SPUR
MIXTURE USE	MAINLINE & SHOULDER
AC/PG	SBS PG 70-22
DESIGN AIR VOIDS	4.0% @ NDES=90
MIX COMP (GRADATION)	IL 9.5
FRICTION AGGREGATE	MIX E
MIXTURE WEIGHT	112
QUALITY MANAGEMENT PROGRAM	QC/QA
SUBLOT SIZE	N.A.
MATERIAL TRANSFER DEVICE (REQUIRED?)	NO

G.N.-440B  
 THE EXISTING TIE BARS BETWEEN THE EXISTING PAVEMENT AND EXISTING MEDIANS, GUTTERS AND/OR COMBINATION CURB AND GUTTERS THAT ARE FOUND SUITABLE FOR REUSE SHALL BE CLEANED, STRAIGHTENED AND INCORPORATED INTO THE NEW CONSTRUCTION. ANY EXISTING TIE BARS THAT ARE FOUND UNSUITABLE TO BE INCORPORATED INTO THE PROPOSED CONSTRUCTION DUE TO EXCESSIVE RUSTING OR DISTRESS SHALL BE REMOVED FLUSH WITH THE FACE OF THE EXISTING CONCRETE AND DISPOSED OF OUTSIDE THE LIMITS OF THE RIGHT-OF-WAY IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.

THIS WORK WILL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE VARIOUS REMOVAL PAY ITEMS AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.

G.N.-703A  
 SHORT TERM PAVEMENT MARKING SHALL BE APPLIED TO THE PAVEMENT AFTER ANY OF THE FOLLOWING: COLD MILLING AND/OR PLACING BITUMINOUS MATERIALS (TACK COAT), LEVELING BINDER (MACHINE METHOD), BINDER AND SURFACE COURSES. SHORT TERM PAVEMENT MARKING PLACED ON THE SURFACE SHALL COINCIDE WITH THE FINAL PAVEMENT STRIPING. SHORT TERM PAVEMENT MARKING PLACED PRIOR TO THE SURFACE SHALL COINCIDE WITH THE EXISTING PAVEMENT MARKINGS. USE 4 FEET PER 40 FEET (OR 10% PER STATION).

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
 INDEX OF SHEETS, HIGHWAY STANDARDS, GENERAL NOTES & COMMITMENTS**

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

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	2
			CONTRACT NO. 70D69	
		ILLINOIS	FED. AID PROJECT	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE
				I-74 - CHAMPAIGN COUNTY 90% FED. 10% STATE - URBAN BRIDGE 0059 S.N. 010-0033
40600290	BITUMINOUS MATERIALS (TACK COAT)	POUND	162	162
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	327	327
40604174	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N90	TON	35	35
44003100	MEDIAN REMOVAL	SQ FT	458	458
50102400	CONCRETE REMOVAL	CY YD	10.5	10.5
50157300	PROTECTIVE SHIELD	SQ YD	582	582
50300255	CONCRETE SUPERSTRUCTURE	CY YD	12.2	12.2
50300300	PROTECTIVE COAT	SQ YD	1392	1392
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2930	2930
52000110	PREFORMED JOINT STRIP SEAL	FOOT	179	179
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	40	40
52100520	ANCHOR BOLTS, 1"	EACH	8	8
58700300	CONCRETE SEALER	SQ FT	1476	1476
60622400	CONCRETE MEDIAN, TYPE SM-6.06	SQ FT	458	458

\* DENOTES SPECIALTY ITEM  
SP DENOTES SPECIAL PROVISION

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA
SUMMARY OF QUANTITIES
SCALE: 1 SHEET 1 OF 5 SHEETS S/A TO S/A

SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
(106)EDR	CHAMPAIGN	5	13
CONTRACT NO. 70D69			

ILLINOIS FEDERAL AID PROJECT			
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CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTR. CODE	
				I-74 - CHAMPAIGN COUNTY 90% FED. 10% STATE - URBAN	
				BRIDGE	
				0059	
				S.N. 010-0033	
63301235	REMOVE AND REERECT STEEL PLATE BEAM GUARDRAIL, ATTACHED TO STRUCTURES	FOOT	40	40	
67000500	ENGINEER'S AELD OFACE, TYPE B	CAL MD	5	5	
67100100	MOBILIZATION	L SUM	1	1	
70100205	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	EACH	2	2	
70100207	TRAFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	2	2	
70100420	TRAFFIC CONTROL AND PROTECTION, STANDARD 701411	EACH	1	1	
70100820	TRAFFIC CONTROL AND PROTECTION, STANDARD 701451	L SUM	1	1	
70102630	TRAFFIC CONTROL AND PROTECTION, STANDARD 701601	L SUM	1	1	
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	10	10	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	21	21	
70200100	NIGHTTIME WORK ZONE LIGHTING	L SUM	1	1	
70300100	SHORT TERM PAVEMENT MARKING	FOOT	64	64	
70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	21	21	
70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	9181	9181	

\* DENOTES SPECIALTY ITEM  
SP DENOTES SPECIAL PROVISION

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA  
SUMMARY OF QUANTITIES**

SCALE: 1 SHEET 2 OF 5 SHEETS SIA TO SIA

FBI	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
# I	(106)EDR	I CHAMPAIGN I 9 I 4		
		I CONTRACT NO. 70D69		
ILLINOIS I FED. AID PROJECT				

CONSTR. CODE	
I-74 - CHAMPAIGN COUNTY	
90% FED. 10% STATE - URBAN	
BRIDGE	
0059	
S.N. 010-0033	

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	837.5	837.5
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	837.5	837.5
70600250	IMPACT ATTENUATORS, TEMPORARY (NON- REDIRECTNE), TEST LEVEL 3	EACH	2	2
70600350	IMPACT ATTENUATORS, RELOCATE (NON- REDIRECTIVE), TEST LEVEL 3	EACH	2	2
* 78008330	POLYUREA PAVEMENT MARKING TYPE II - LINE 6"	FOOT	1293	1293
* 78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	240	240
* 78200011	BARRIER WALL REFLECTORS, TYPE C	EACH	68	68
78300202	PAVEMENT MARKING REMOVAL -WATER BLASTING	SQ FT	3060	3060
SP X0325748	ACRYLIC COATING	SQ YD	56.8	56.8
SP X0325749	FIBER WRAP	SQ FT	255.4	255.4
* SP X0327640	REAL-TIME TRAFFIC CONTROL CENTRAL BASE UNIT	CAL MD	4	4
* SP X0328005	REAL-TIME TRAFFIC MONITORING SENSOR UNIT	CAL MD	64	64
* SP X0328006	REAL-TIME TRAFFIC CONTROL WARNING SIGN	CAL MD	32	32
SP X0931400	INLET BOXES TO BE ADJUSTED (SPECIAL)	EACH	4	4

\* DENOTES SPECIALTY ITEM  
 SP DENOTES SPECIAL PROVISION

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA  
 SUMMARY OF QUANTITIES**

SCALE: 1 SHEET 3 OF 5 SHEETS SIA TO SIA

FBI	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
# I	(106)EDR	I CHAMPAIGN I 9 I 5		
I CONTRACT NO 70D69			ILLINOIS I FED. AID PROJECT	

CONSTR. CODE  
 I-74 - CHAMPAIGN COUNTY  
 90% FED. 10% STATE - URBAN  
 BRIDGE  
 0059  
 5.N. 010-0033

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	
SP X2700001	TEMPORARY RUMBLE STRIPS (SPECIAL)	EACH	16	16
SP XS030250	BRIDGE DECK GROOVING (LONGITUDINAL)	SQ YD	879	879
SP XS060700	CLEANING AND PAINTING BEARINGS	EACH	20	20
SP X7010238	CHANGEABLE MESSAGE SIGN (SPECIAL)	CAL MD	8	8
SP 20001899	JACK AND REMOVE EXISTING BEARINGS	EACH	26	26
SP 20003802	REMOVAL OF EXISTING BEARINGS	EACH	14	14
SP 20006014	BRIDGE DECK LATEX CONCRETE OVERLAY, 2 1/2 INCHES	SQ YD	1348	1348
SP 20012130	BRIDGE DECK SCARIFICATION 3/4"	SQ YD	1348	1348
SP 20012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	1577	1577
SP 20013798	CONSTRUCTION LAYOUT	L SUM	1	1
SP 20016001	DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	13.5	13.5
SP 20016002	DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	40.4	40.4
SP 20016702	DETOUR SIGNING	L SUM	1	1
SP 20018051	DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	8	8

\* DENOTES SPECIALTY ITEM  
 SP DENOTES SPECIAL PROVISION

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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA**  
**SUMMARY OF QUANTITIES**  
 SCALE: 1 SHEET 4 OF 5 SHEETS SIA TO SIA

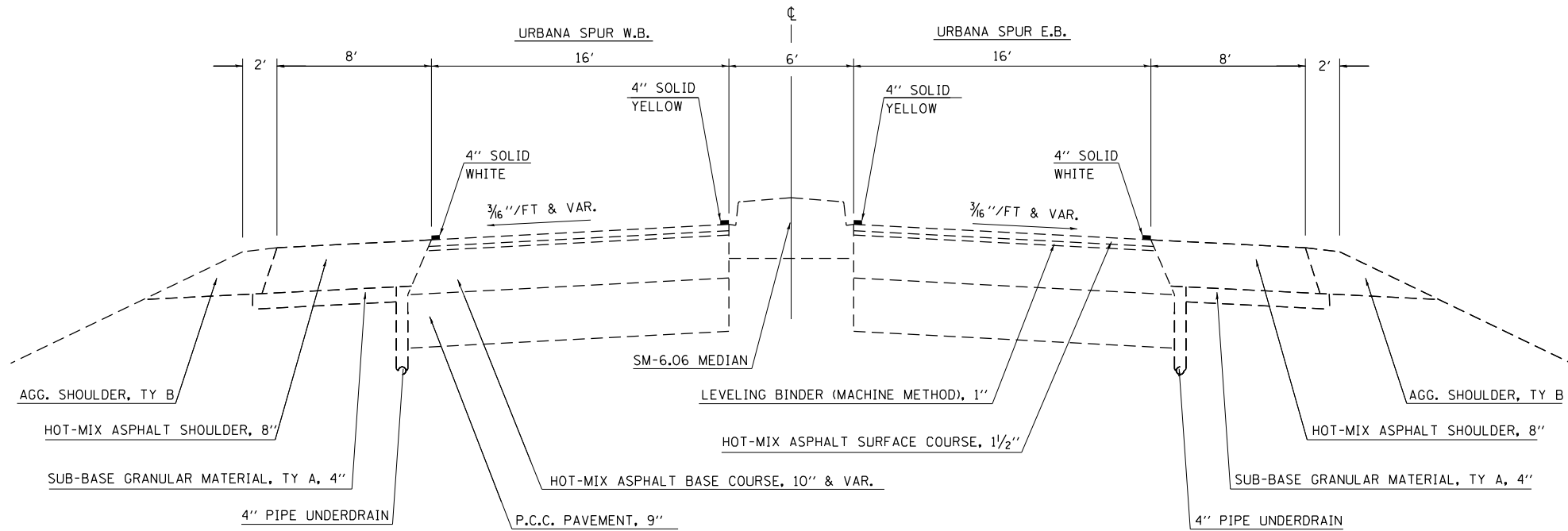
FAC RTE	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
4	(10-6)BCR	I CHAMPAIGN	51	6
ILLINOIS I FED. AID PROJECT			CONTRACT NO. 70D69	



# (A) EXISTING TYPICAL CROSS SECTION – URBANA SPUR

STATION TO STATION  
48+00.00 TO 52+00.00

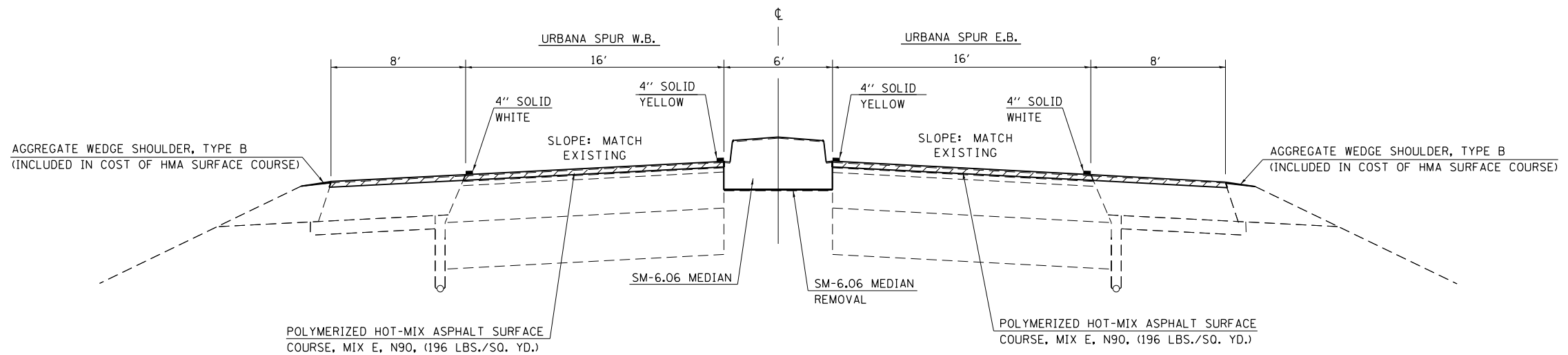
STRUCTURE OMISSIONS:  
S. N. 010-0033  
RT STA. 48+77.85 TO STA. 51+40.90  
LT STA. 48+69.57 TO STA. 51+32.86



# (1) PROPOSED TYPICAL CROSS SECTION – URBANA SPUR

STATION TO STATION  
48+39.57 LT TO 48+69.57 LT  
48+47.85 RT TO 48+77.85 RT  
51+32.86 LT TO 51+62.86 LT  
51+40.90 RT TO 51+70.90 RT

STRUCTURE OMISSIONS:  
S. N. 010-0033  
RT STA. 48+77.85 TO STA. 51+40.90  
LT STA. 48+69.57 TO STA. 51+32.86



HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT

MEDIAN REMOVAL & REPLACEMENT:  
48+39.57 TO 48+77.85  
51+32.86 TO 51+70.90

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
TYPICAL CROSS SECTIONS**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	8
			CONTRACT NO. 70D69	
ILLINOIS FED. AID PROJECT				



**SCHEDULES OF QUANTITIES**

PAVING SCHEDULE						
STATION	STATION	LOCATION	BITUMINOUS MATERIALS (TACK COAT) 40600290 POUND	POLYMERIZED HMA SURF. CSE., IL-9.5, MIX "E", N90 40604174 TON	AGG. WEDGE SHOULDER, TYPE B TON	CONCRETE MEDIAN, TYPE SM-6.06 60622400 SQ FT
URBANA SPUR						
48+39.57	TO 48+73.29	LT BUTT JOINT & SHOULDER	39.2	8.5	0.1	
48+47.85	TO 48+91.83	RT BUTT JOINT & SHOULDER	41.4	9.0	0.1	
51+19.36	TO 51+62.86	LT BUTT JOINT & SHOULDER	42.9	9.4	0.1	
51+36.73	TO 51+70.90	RT BUTT JOINT & SHOULDER	38.5	8.4	0.1	
48+39.57	TO 48+77.85	CENTERLINE				225.4
51+32.86	TO 51+70.90	CENTERLINE				233.0
TOTALS:			162.0	35.3	0.4	458.4
ROUND TO:			162	35	1	458

NOTE:  
AGGREGATE WEDGE SHOULDER WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR HMA SURFACE COURSE. AGGREGATE WEDGE SHOULDER SHALL COMPLY WITH SECTION 481 OF THE STANDARD SPECIFICATIONS.

TEMPORARY CONCRETE BARRIER						
STATION	STATION	TEMPORARY CONCRETE BARRIER 70400100 FOOT	RELOCATE TEMPORARY CONCRETE BARRIER 70400200 FOOT	BARRIER WALL REFLECTORS, TYPE C 78200011 EACH	IMPACT ATTENUATORS, TEMPORARY (NON-REDIRECTIVE), TEST LEVEL 3 70600250 EACH	IMPACT ATTENUATORS, RELOCATE (NON-REDIRECTIVE), TEST LEVEL 3 70600350 EACH
174 STAGE I						
174 EB (UNDER SN 010-0033)						
1396+75.9	TO 1400+98.3	425.0	-	17.0	-	-
1396+75.9		-	-	-	1	-
174 WB (UNDER SN 010-0033)						
1398+73.1	TO 1402+87.6	412.5	-	17.0	-	-
1402+87.6		-	-	-	1	-
174 STAGE II						
174 EB (UNDER SN 010-0033)						
1397+01.2	TO 1400+98.1	-	400.0	16.0	-	-
1397+01.2		-	-	-	-	1
174 WB (UNDER SN 010-0033)						
1398+72.9	TO 1403+13.3	-	437.5	18.0	-	-
1403+13.3		-	-	-	-	1
TOTAL:			837.5	837.5	68.0	2
ROUND TO:			837.5	837.5	68.0	2

CHANGEABLE MESSAGE SIGN			
LOCATION	DESCRIPTION	CHANGEABLE MESSAGE SIGN 70107025 CAL DA	CHANGEABLE MESSAGE SIGN (SPECIAL) X7010238 CAL MO
174 EB (SN 010-0033)	7 DAYS PRIOR TO CONSTRUCTION	7	
174 WB (SN 010 0033)	7 DAYS PRIOR TO CONSTRUCTION	7	
URBANA SPUR EB/IL RTE 130 (SN 010-0033)	7 DAYS PRIOR TO CONSTRUCTION	7	
174 WB RAMP D CLOSURE (SN 010-0033)	DURATION OF PROJECT		4
URBANA SPUR EB/IL RTE 130 (SN 010-0033)	DURATION OF PROJECT		4
TOTAL:		21	8

REAL-TIME TRAFFIC CONTROL SYSTEM				
LOCATION	REAL-TIME TRAFFIC CONTROL CENTRAL BASE UNIT X0327640 CAL MO	REAL-TIME TRAFFIC MONITORING SENSOR UNIT X0328005 CAL MO	REAL-TIME TRAFFIC CONTROL WARNING SIGN X0328006 CAL MO	
I-74 EB				
-	TO -	4.0	32.0	16.0
I-74 WB				
-	TO -	-	32.0	16.0
TOTALS:		4.0	64.0	32.0
ROUND TO:		4	64	32

REMOVAL SCHEDULE			
STATION	STATION	HMA SURFACE REMOVAL - BUTT JOINT 40600982 SQ YD	MEDIAN REMOVAL 44003100 SQ FT
URBANA SPUR			
48+39.57, LT	TO 48+69.57, LT	84.0	
48+47.85, RT	TO 48+77.85, RT	78.9	
51+32.86, LT	TO 51+62.86, LT	82.6	
51+40.90, RT	TO 51+70.90, RT	81.9	
48+39.57, CL	TO 48+77.85, CL		225.4
51+32.86, CL	TO 51+70.90, CL		233.0
TOTALS:		327.4	458.4
ROUND TO:		327	458

MODEL: Plan1  
FILE NAME: \\sbs301b1\011901\_PFB\_193-025\_D5\_Varibus\_Phase\_HilWork\_Order\_5\Drawings\CADD\_Sheets\057006-epf-schedule.dgn

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	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA  
SCHEDULES OF QUANTITIES**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	9
CONTRACT NO. 70D69			ILLINOIS FED. AID PROJECT	

**SCHEDULES OF QUANTITIES**

PERMANENT PAVEMENT MARKING					
STATION		STATION	NOTES	POLYUREA PAVEMENT MARKING TYPE II LINE 6" 78008330 FOOT	GROOVING FOR RECESSED PAVEMENT MARKING 7" 78011035 FOOT
URBANA SPUR (SN 010-0033)					
WB LANE					
48+39.57	TO	51+62.86	SOLID WHITE	323.3	
48+39.57	TO	51+62.86	SOLID YELLOW	323.3	
48+39.57	TO	48+69.57	WHITE STRIPE		30.0
48+39.57	TO	48+69.57	YELLOW STRIPE		30.0
51+32.86	TO	51+62.86	WHITE STRIPE		30.0
51+32.86	TO	51+62.86	YELLOW STRIPE		30.0
EB LANE					
48+47.85	TO	51+70.90	SOLID YELLOW	323.1	
48+47.85	TO	51+70.90	SOLID WHITE	323.1	
48+47.85	TO	48+77.85	WHITE STRIPE		30.0
48+47.85	TO	48+77.85	YELLOW STRIPE		30.0
51+40.90	TO	51+70.90	WHITE STRIPE		30.0
51+40.90	TO	51+70.90	YELLOW STRIPE		30.0
TOTALS:				1,292.8	240.0
ROUND TO:				1,293	240

NOTE: GROOVING SHALL NOT BE PERFORMED ON THE BRIDGE OR APPROACH PAVEMENT.

SHORT TERM PAVEMENT MARKING					
STATION		STATION	NOTES	SHORT TERM PAVEMENT MARKING 70300100 FOOT	SHORT TERM PAVEMENT REMOVAL MARKING 70300150 SQ FT
URBANA SPUR (SN 010-0033)					
48+39.57, LT	TO	51+62.86, LT	OUTSIDE EDGE	32.0	10.7
48+47.85, RT	TO	51+70.90, RT	OUTSIDE EDGE	32.0	10.7
TOTALS:				64.0	21.4
ROUND TO:				64	21

NOTE:

- SHORT TERM PAVEMENT MARKING WIDTH IS 4".

TEMPORARY PAVEMENT MARKING					
STATION		STATION	NOTES	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT 70300221 FOOT	PAVEMENT MARKING REMOVAL - WATER BLASTING 78300202 SQ FT
I-74 STAGE I					
1383+00.0	TO	1402+00.0	EB SOLID YELLOW	1,910.6	636.9
1397+70.0	TO	1416+75.0	WB SOLID YELLOW	1,894.0	631.3
I-74 STAGE II					
1373+00.0	TO	1385+00.0	EB SOLID WHITE	1,208.3	402.8
1386+00.0	TO	1387+23.0	INSIDE EDGE LINE RAMP A	124.7	41.6
1386+00.0	TO	1402+00.0	EB SOLID WHITE	1,609.8	536.6
1397+70.0	TO	1416+75.0	WB SOLID WHITE	1,891.5	630.5
URBANA SPUR STAGE I					
28+20.00	TO	33+60.00	EB SOLID YELLOW	541.8	180.6
TOTALS:				9,180.7	3,060.3
ROUND TO:				9,181	3,060

TEMPORARY RUMBLE STRIPS		
LOCATION	DESCRIPTION	TEMPORARY RUMBLE STRIPS (SPECIAL) X2700001 EACH
174 EB (SN 010-0033)	DRIVING LANE	4
174 EB (SN 010-0033)	PASSING LANE	4
174 WB (SN 010-0033)	DRIVING LANE	4
174 WB (SN 010-0033)	PASSING LANE	4
TOTAL:		16

MODEL: P1002; FILE: I:\BIDS\30181\011901\_PFB\_193-025\_D5\_Voribus\_Phase\_HillWork\_Order\_5\Drawings\CADD\_Sheets\0570069-epf-h-schedule.dgn

EXIST. CURVE I74WEST\_14  
 PI STA. = 1299+49.05  
 $\Delta = 13^\circ 02' 43''$  (RT)  
 D = 0° 29' 05"  
 R = 11,820.52'  
 T = 1,351.52'  
 L = 2,691.36'  
 E = 77.01'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 1285+97.53  
 P.T. STA. = 1312+88.88

EXIST. CURVE I74WEST\_15  
 PI STA. = 1318+84.36  
 $\Delta = 5^\circ 41' 52''$  (RT)  
 D = 0° 28' 44"  
 R = 11,966.19'  
 T = 595.47'  
 L = 1,189.97'  
 E = 14.81'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 1312+88.88  
 P.T. STA. = 1324+78.85

EXIST. CURVE I74WEST\_16  
 PI STA. = 1330+86.86  
 $\Delta = 6^\circ 06' 11''$  (RT)  
 D = 0° 30' 08"  
 R = 11,405.33'  
 T = 608.01'  
 L = 1,214.88'  
 E = 16.19'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 1324+78.85  
 P.T. STA. = 1336+93.73

EXIST. CURVE I74WEST\_17  
 PI STA. = 1347+72.46  
 $\Delta = 26^\circ 05' 13''$  (RT)  
 D = 1° 13' 50"  
 R = 4,656.37'  
 T = 1,078.73'  
 L = 2,120.07'  
 E = 123.32'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 1336+93.73  
 P.T. STA. = 1358+13.79

EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 D = 1° 07' 57"  
 R = 5,059.20'  
 T = 2,393.41'  
 L = 4,471.13'  
 E = 537.58'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 1375+27.44  
 P.T. STA. = 1419+98.58

EXIST. CURVE RAMPC\_1  
 PI STA. = 53+70.59  
 $\Delta = 16^\circ 54' 07''$  (RT)  
 D = 8° 27' 46"  
 R = 677.02'  
 T = 100.59'  
 L = 199.72'  
 E = 7.43'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 52+70.00  
 P.T. STA. = 54+69.72

EXIST. CURVE RAMPC\_2  
 PI STA. = 58+18.64  
 $\Delta = 78^\circ 06' 52''$  (RT)  
 D = 13° 19' 28"  
 R = 430.00'  
 T = 348.92'  
 L = 586.24'  
 E = 123.76'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 54+69.72  
 P.T. STA. = 60+55.96

EXIST. CURVE RAMPC\_3  
 PI STA. = 66+49.26  
 $\Delta = 137^\circ 39' 47''$  (RT)  
 D = 24° 56' 19"  
 R = 229.75'  
 T = 593.29'  
 L = 552.01'  
 E = 406.48'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 60+55.96  
 P.T. STA. = 66+07.97

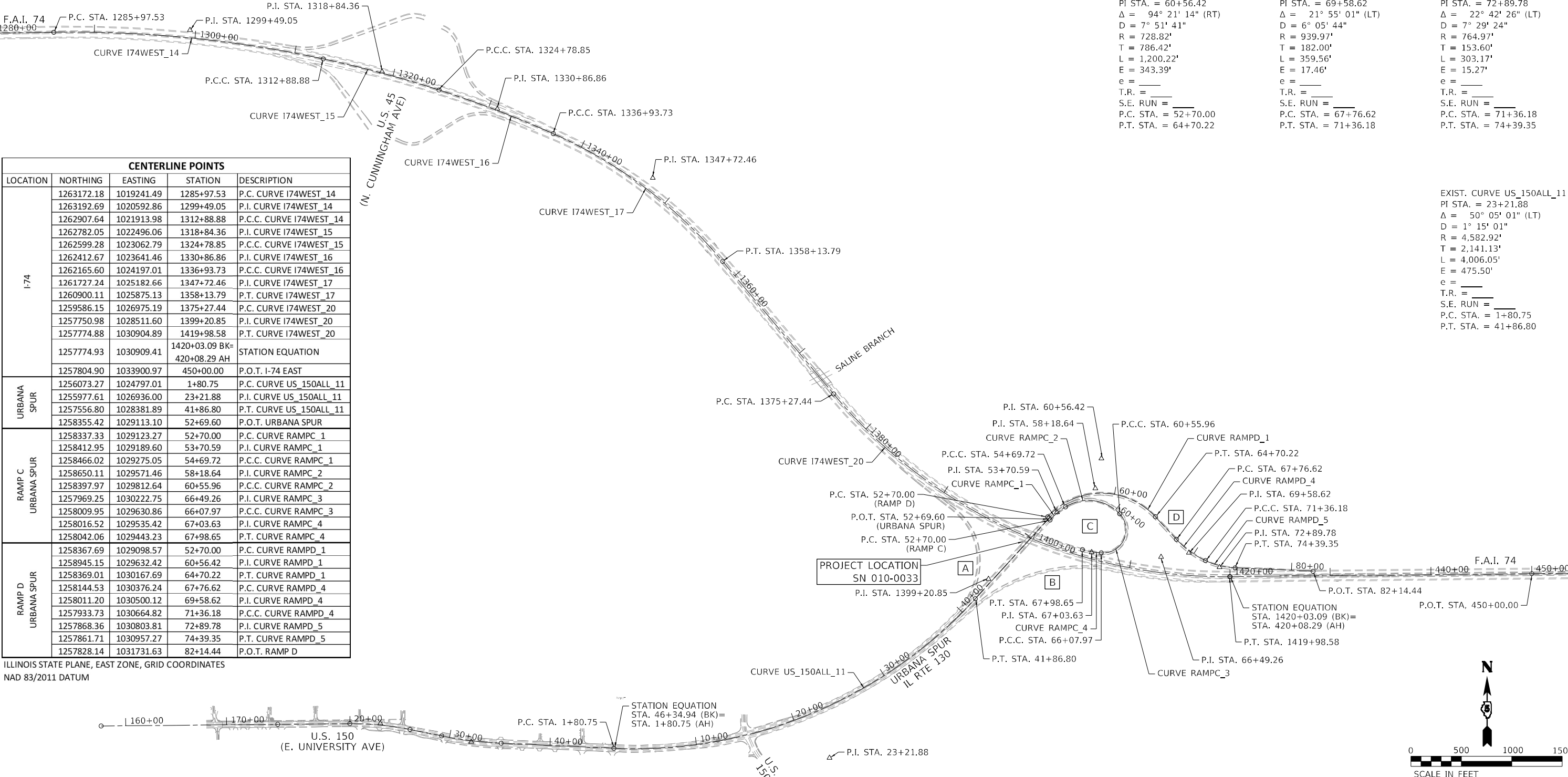
EXIST. CURVE RAMPC\_4  
 PI STA. = 67+03.63  
 $\Delta = 11^\circ 32' 55''$  (RT)  
 D = 6° 03' 25"  
 R = 945.96'  
 T = 95.66'  
 L = 190.67'  
 E = 4.82'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 66+07.97  
 P.T. STA. = 67+98.65

EXIST. CURVE RAMPD\_1  
 PI STA. = 60+56.42  
 $\Delta = 94^\circ 21' 14''$  (RT)  
 D = 7° 51' 41"  
 R = 728.82'  
 T = 786.42'  
 L = 1,200.22'  
 E = 343.39'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 52+70.00  
 P.T. STA. = 64+70.22

EXIST. CURVE RAMPD\_4  
 PI STA. = 69+58.62  
 $\Delta = 21^\circ 55' 01''$  (LT)  
 D = 6° 05' 44"  
 R = 939.97'  
 T = 182.00'  
 L = 359.56'  
 E = 17.46'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 67+76.62  
 P.T. STA. = 71+36.18

EXIST. CURVE RAMPD\_5  
 PI STA. = 72+89.78  
 $\Delta = 22^\circ 42' 26''$  (LT)  
 D = 7° 29' 24"  
 R = 764.97'  
 T = 153.60'  
 L = 303.17'  
 E = 15.27'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 71+36.18  
 P.T. STA. = 74+39.35

EXIST. CURVE US\_150ALL\_11  
 PI STA. = 23+21.88  
 $\Delta = 50^\circ 05' 01''$  (LT)  
 D = 1° 15' 01"  
 R = 4,582.92'  
 T = 2,141.13'  
 L = 4,006.05'  
 E = 475.50'  
 e = \_\_\_\_\_  
 T.R. = \_\_\_\_\_  
 S.E. RUN = \_\_\_\_\_  
 P.C. STA. = 1+80.75  
 P.T. STA. = 41+86.80



CENTERLINE POINTS				
LOCATION	NORTHING	EASTING	STATION	DESCRIPTION
I-74	1263172.18	1019241.49	1285+97.53	P.C. CURVE I74WEST_14
	1263192.69	1020592.86	1299+49.05	P.I. CURVE I74WEST_14
	1262907.64	1021913.98	1312+88.88	P.C.C. CURVE I74WEST_14
	1262782.05	1022496.06	1318+84.36	P.I. CURVE I74WEST_15
	1262598.28	1023062.79	1324+78.85	P.C.C. CURVE I74WEST_15
	1262412.67	1023641.46	1330+86.86	P.I. CURVE I74WEST_16
	1262165.60	1024197.01	1336+93.73	P.C.C. CURVE I74WEST_16
	1261727.24	1025182.66	1347+72.46	P.I. CURVE I74WEST_17
	1260900.11	1025875.13	1358+13.79	P.T. CURVE I74WEST_17
	1259586.15	1026975.19	1375+27.44	P.C. CURVE I74WEST_20
	1257750.98	1028511.60	1399+20.85	P.I. CURVE I74WEST_20
	1257774.88	1030904.89	1419+98.58	P.T. CURVE I74WEST_20
1257774.93	1030909.41	1420+03.09 BK=420+08.29 AH	STATION EQUATION	
1257804.90	1033900.97	450+00.00	P.O.T. I-74 EAST	
URBANA SPUR	1256073.27	1024797.01	1+80.75	P.C. CURVE US_150ALL_11
	1255977.61	1026936.00	23+21.88	P.I. CURVE US_150ALL_11
	1257556.80	1028381.89	41+86.80	P.T. CURVE US_150ALL_11
	1258355.42	1029113.10	52+69.60	P.O.T. URBANA SPUR
RAMP C URBANA SPUR	1258337.33	1029123.27	52+70.00	P.C. CURVE RAMPC_1
	1258412.95	1029189.60	53+70.59	P.I. CURVE RAMPC_1
	1258466.02	1029275.05	54+69.72	P.C.C. CURVE RAMPC_1
	1258650.11	1029571.46	58+18.64	P.I. CURVE RAMPC_2
	1258397.97	1029812.64	60+55.96	P.C.C. CURVE RAMPC_2
	1257969.25	1030222.75	66+49.26	P.I. CURVE RAMPC_3
	1258009.95	1029630.86	66+07.97	P.C.C. CURVE RAMPC_3
	1258016.52	1029535.42	67+03.63	P.I. CURVE RAMPC_4
RAMP D URBANA SPUR	1258042.06	1029443.23	67+98.65	P.T. CURVE RAMPC_4
	1258367.69	1029098.57	52+70.00	P.C. CURVE RAMPD_1
	1258945.15	1029632.42	60+56.42	P.I. CURVE RAMPD_1
	1258369.01	1030167.69	64+70.22	P.T. CURVE RAMPD_1
	1258144.53	1030376.24	67+76.62	P.C. CURVE RAMPD_4
	1258011.20	1030500.12	69+58.62	P.I. CURVE RAMPD_4
	1257933.73	1030664.82	71+36.18	P.C.C. CURVE RAMPD_4
	1257868.36	1030803.81	72+89.78	P.I. CURVE RAMPD_5
1257861.71	1030957.27	74+39.35	P.T. CURVE RAMPD_5	
1257828.14	1031731.63	82+14.44	P.O.T. RAMP D	

ILLINOIS STATE PLANE, EAST ZONE, GRID COORDINATES  
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STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA  
 ALIGNMENTS, TIES & BENCHMARKS

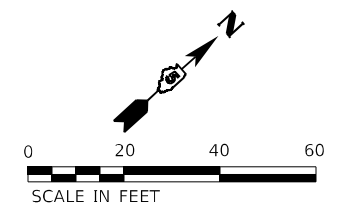
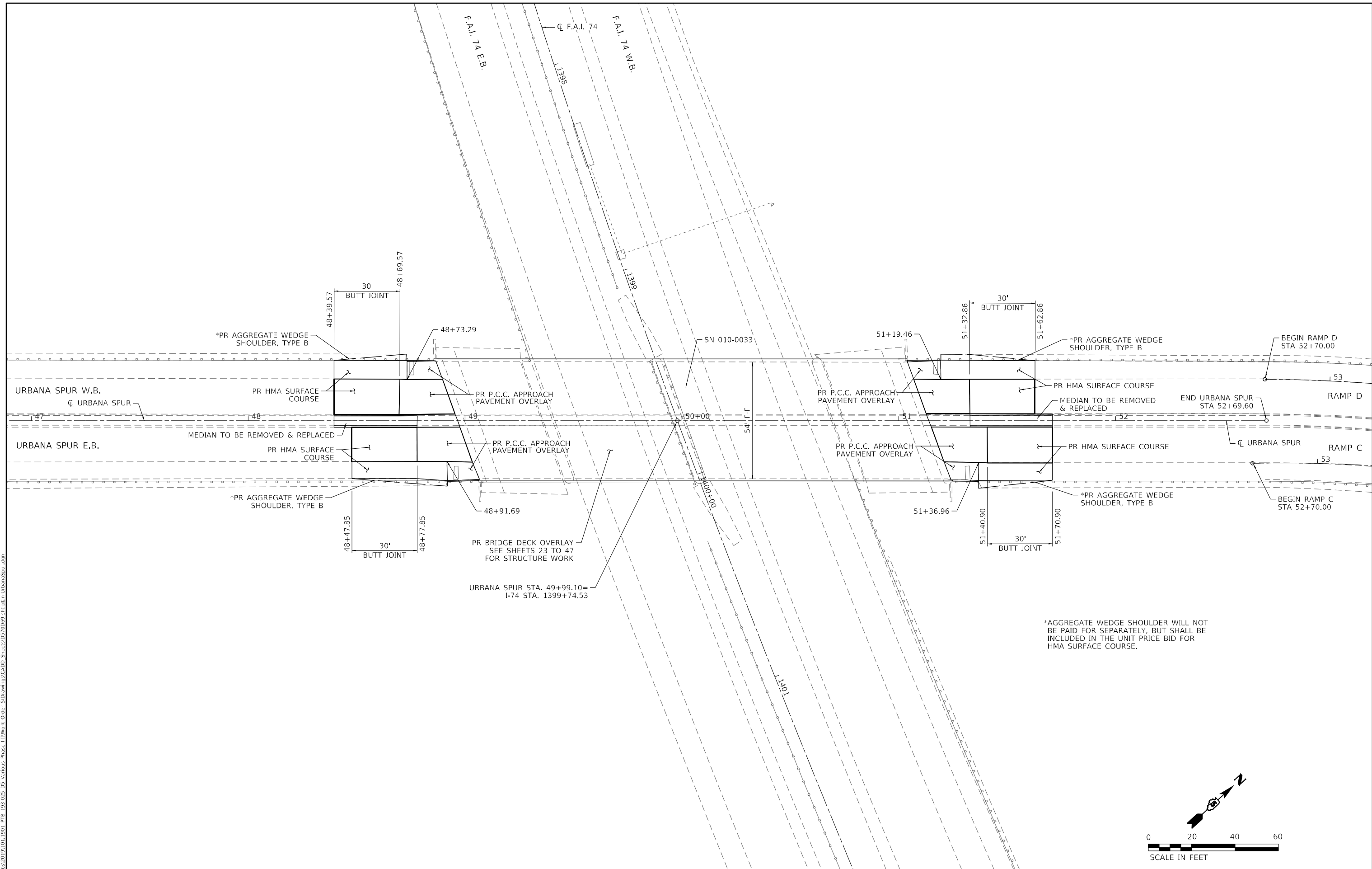
SCALE: 1" = 500' SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	11

CONTRACT NO. 70D69  
 ILLINOIS FED. AID PROJECT

MODEL: A75  
 FILE: NAME: Riches30181011901\_PFB\_193-025\_DS\_Varibus\_Phase\_HitWork\_Order\_5(Drawing)CADD\_Sheets\0570D69-11-ATB.dgn

MODEL: Urbana Spur Phase 1  
 FILE NAME: \\bls03\bls03\B101\1901\_PFB\_193-025\_D5\_Voribus\_Phase\_HillWork\_Order\_5\Drawings\CADD\_Sheets\05700695-ft-clan-UrbanaSpur.dgn



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA**  
**PLAN SHEET: URBANA SPUR**

SCALE: 1" = 20'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	12
			CONTRACT NO. 70D69	
		ILLINOIS	FED. AID PROJECT	

**PRESTAGE OVERVIEW**

URBANA SPUR & I-74:  
SET UP DETOUR SIGNING PRIOR TO CLOSURE OF RAMP C AND D.

**STAGE I OVERVIEW**

URBANA SPUR:  
CLOSE SN 010-0033 TO TRAFFIC FOR THE DURATION OF THE STAGE I BRIDGE WORK. ROUTE ALL EASTBOUND URBANA SPUR TRAFFIC ONTO RAMP B. MAINTAIN FREE FLOW OF TRAFFIC FROM RAMP A ONTO WESTBOUND URBANA SPUR. ONLY PERFORM STRUCTURAL REPAIR WORK ON SN 010-0033 WHICH IS ABOVE THE CLOSED LANES OF I-74.

I-74:  
CLOSE THE I-74 INSIDE LANES TO TRAFFIC AT SN 010-0033 FOR THE DURATION OF STAGE I. MAINTAIN ONE LANE OF TRAFFIC PER DIRECTION. CLOSE RAMP C AND RAMP D TO TRAFFIC FOR THE DURATION OF THE SN 010-0033 WORK. INSTALL TEMPORARY CONCRETE BARRIER AT SN 010-0033. PERFORM BRIDGE STRUCTURAL REPAIR WORK ABOVE THE CLOSED INSIDE LANES.

**STAGE II OVERVIEW**

URBANA SPUR:  
MAINTAIN CLOSURE OF SN 010-0033 FOR THE DURATION OF THE STAGE II BRIDGE WORK. ONLY PERFORM STRUCTURAL REPAIR WORK ON SN 010-0033 WHICH IS ABOVE THE CLOSED LANES ON I-74. PERFORM APPROACH PAVEMENT WORK.

I-74:  
CLOSE THE I-74 OUTSIDE LANES TO TRAFFIC FOR THE REMAINDER OF STAGE II. MAINTAIN ONE LANE OF TRAFFIC PER DIRECTION. MAINTAIN CLOSURE OF RAMP C AND RAMP D. RELOCATE AND INTALL TEMPORARLY CONCRETE BARRIER AT SN 010-0033. ONLY PERFORM STRUCTURAL REPAIR WORK ON SN 010-0033 WHICH IS ABOVE THE CLOSED LANES OF I-74.

**STAGE III OVERVIEW**

URBANA SPUR:  
MAINTAIN CLOSURE OF SN 010-0033 FOR THE DURATION OF STAGE III. PERFORM NON-STRUCTURAL WORK INCLUDING, BUT NOT LIMITED TO, APPROACH PAVEMENT, BUTT JOINTS, MEDIAN, BRIDGE DECK OVERLAY, HMA PLACEMENT, GUARDRAIL AND PAVEMENT MARKING.

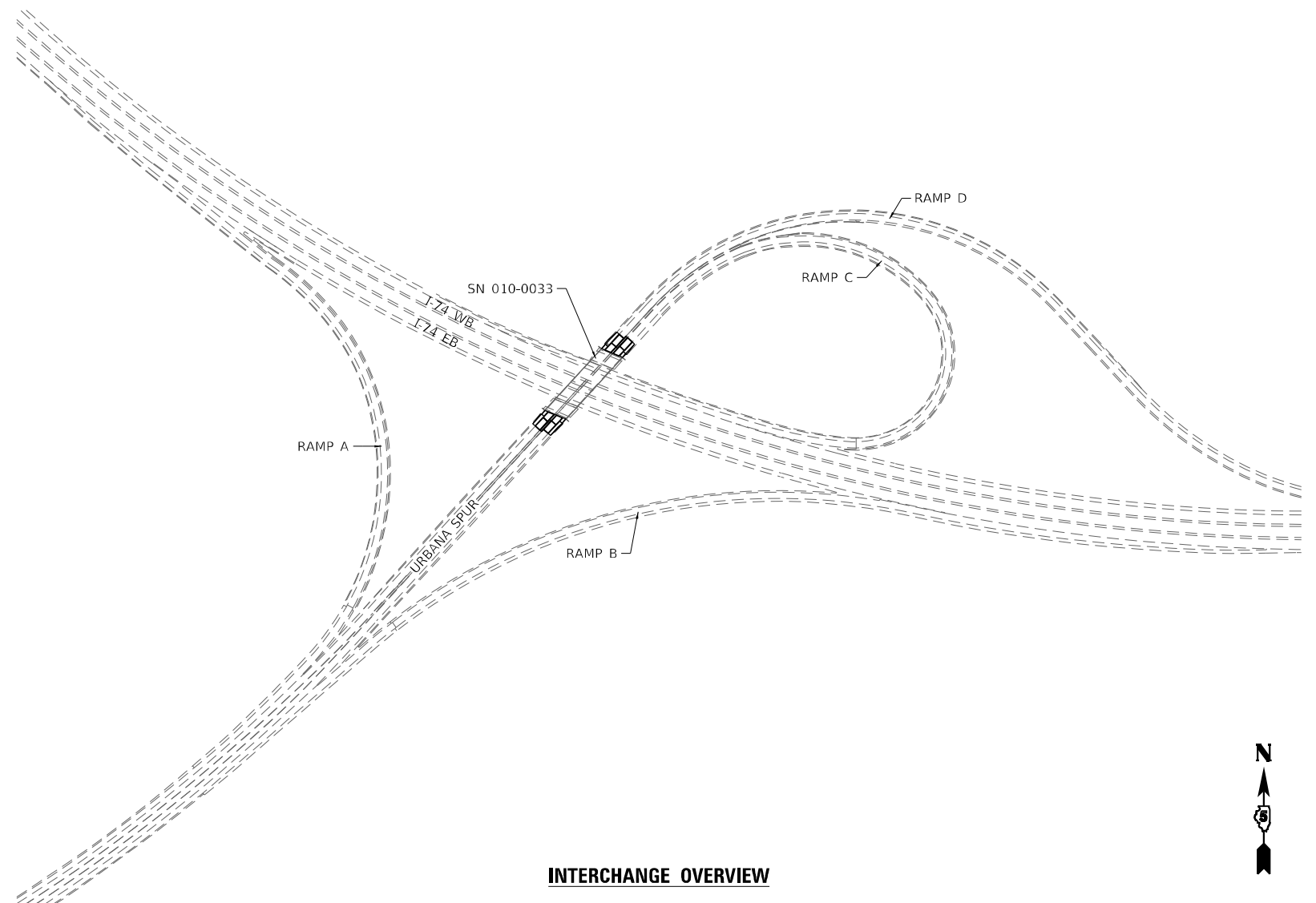
I-74:  
MAINTAIN CLOSURE OF RAMP C AND RAMP D. OPEN I-74 THRU LANES TO TRAFFIC.

**STAGE IV OVERVIEW**

URBANA SPUR & I-74:  
OPEN RAMP C, RAMP D AND URBANA SPUR TO TRAFFIC. PERFORM CLEANUP OPERATIONS AS DIRECTED BY THE RESIDENT ENGINEER.

**NOTES:**

1. THIS IS A SUGGESTED STAGING PLAN. THE CONTRACTOR SHALL SUBMIT ANY PROPOSED CHANGES TO THIS PLAN TO THE ENGINEER, IN WRITING, FOR CONSIDERATION. NO CHANGES SHALL BE MADE TO THE PROPOSED STAGING WITHOUT WRITTEN APPROVAL FROM THE ENGINEER. THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY ADDITIONAL COSTS ASSOCIATED WITH CHANGES TO STAGING REQUESTED BY THE CONTRACTOR.
2. ALL WORK REQUIRING LANE CLOSURES ON I-74 WITHOUT A BARRIER SHALL BE RESTRICTED TO NIGHTTIME LANE CLOSURES. THIS INCLUDES, BUT IS NOT LIMITED TO, SETTING TEMPORARY CONCRETE BARRIER, RELOCATING TEMPORARY CONCRETE BARRIER, SHOULDER WORK, STRIPING AND GUARDRAIL WORK. THIS WORK SHALL BE LIMITED TO SUNDAY, MONDAY, TUESDAY, WEDNESDAY OR THURSDAY BETWEEN 10:00 P.M. TO 6:00 A.M. ALL DEVICES AND THE FIRST TWO WARNING SIGNS SHALL HAVE LIGHTS AS SPECIFIED IN STANDARD 701401.
3. TEMPORARY CONCRETE BARRIER SHALL BE SECURED TO THE PAVEMENT ACCORDING TO SAFETY ENGINEERING POLICY MEMORANDUM 4-21 AND THE STANDARD SPECIFICATIONS.
4. ALL TEMPORARY AND PERMANENT SIGNAGE SHALL BE POSITIONED IN ACCORDANCE WITH THE GUIDELINES IN THE MOST RECENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL AND DEVICES UNLESS OTHERWISE DIRECTED BY THE ENGINEER.



**INTERCHANGE OVERVIEW**

MODEL: Staging Overview.dwg  
FILE NAME: \\sbs301\B1\01\1901\_PFB\_193-025\_D5\_Voribus\_Phase\_HillWork\_Order\_3\Drawings\CADD\_Sheets\0570069-ef-staging-GenNotes.dgn

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
STAGING OVERVIEW**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	13
			CONTRACT NO. 70D69	
		ILLINOIS	FED. AID PROJECT	



1



2



3



4

MODEL: Detour Route 01  
FILE NAME: \\sbs301\01\1901\_PFB\_193-2025\_D5\_Varibus\_Phase\_HitWork\_Order\_5\Drawings\CADD\_Sheets\0570D69-Phase-Hit-Stationing-DetourRoute.dgn

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PLOT DATE = 3/17/2023

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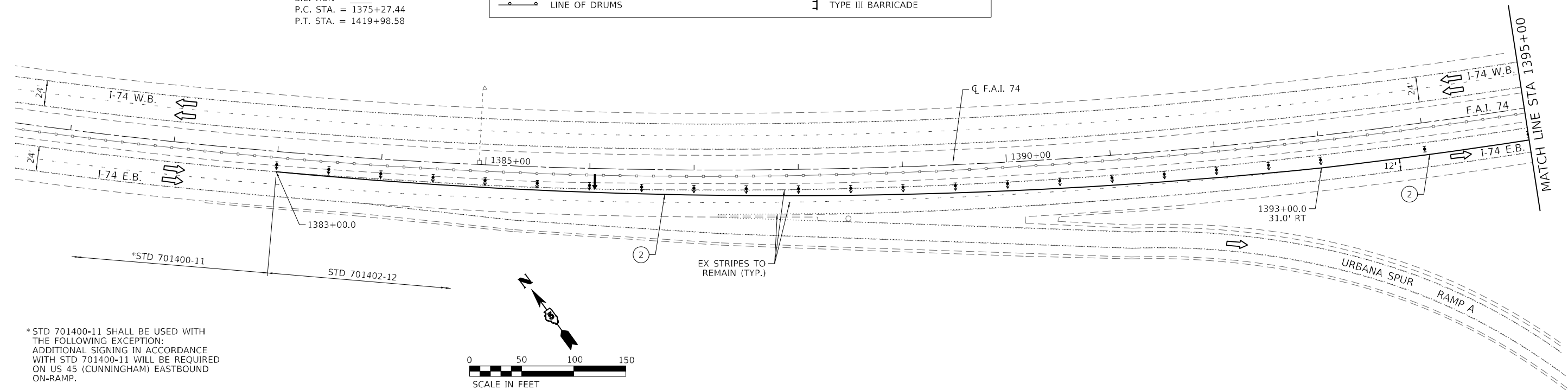
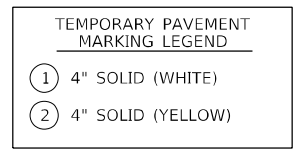
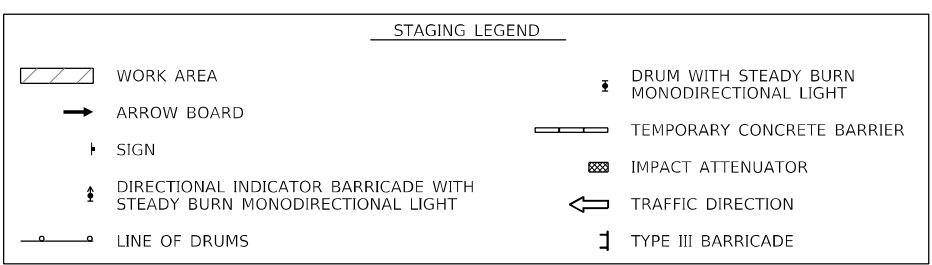
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DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
DETOUR ROUTE SIGNING PLAN**

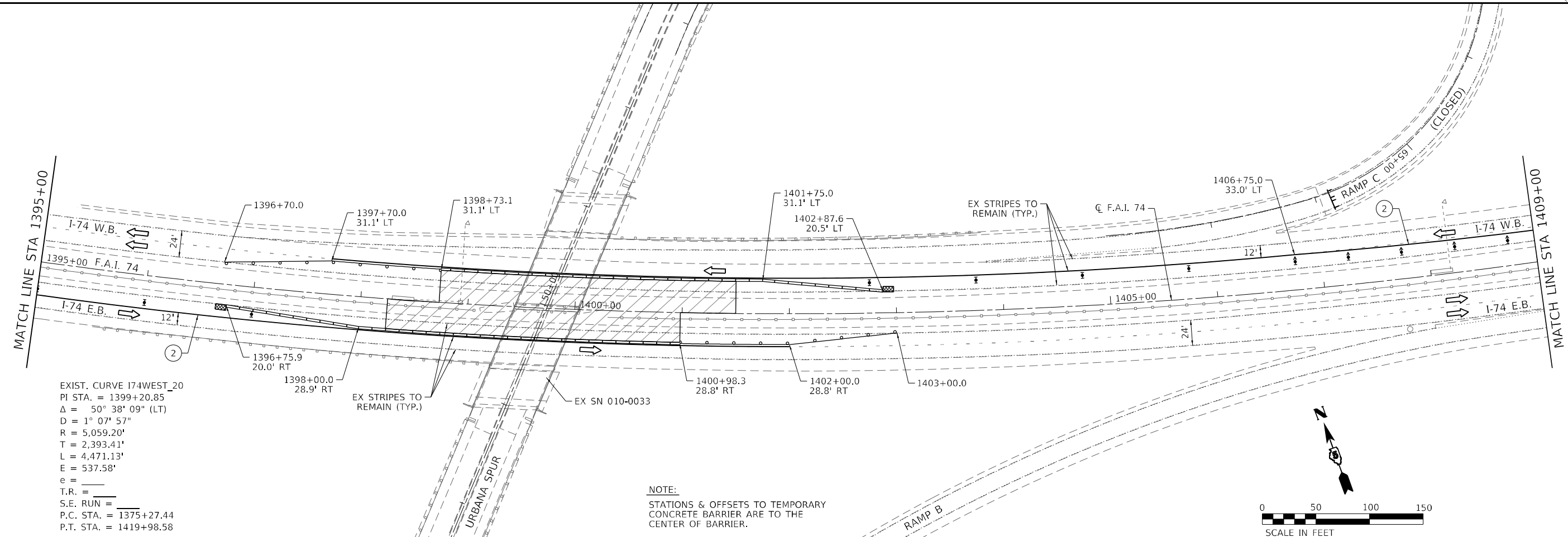
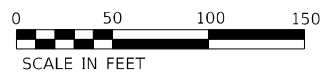
SCALE: N.T.S. SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	14
			CONTRACT NO. 70D69	
		ILLINOIS	FED. AID PROJECT	

EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 $D = 1^\circ 07' 57''$   
 $R = 5,059.20'$   
 $T = 2,393.41'$   
 $L = 4,471.13'$   
 $E = 537.58'$   
 $e =$   
 $T.R. =$   
 $S.E. RUN =$   
 P.C. STA. = 1375+27.44  
 P.T. STA. = 1419+98.58

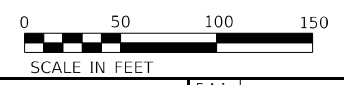


\*STD 701400-11 SHALL BE USED WITH THE FOLLOWING EXCEPTION: ADDITIONAL SIGNING IN ACCORDANCE WITH STD 701400-11 WILL BE REQUIRED ON US 45 (CUNNINGHAM) EASTBOUND ON-RAMP.



EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 $D = 1^\circ 07' 57''$   
 $R = 5,059.20'$   
 $T = 2,393.41'$   
 $L = 4,471.13'$   
 $E = 537.58'$   
 $e =$   
 $T.R. =$   
 $S.E. RUN =$   
 P.C. STA. = 1375+27.44  
 P.T. STA. = 1419+98.58

**NOTE:**  
 STATIONS & OFFSETS TO TEMPORARY CONCRETE BARRIER ARE TO THE CENTER OF BARRIER.



MODEL I-74 Stage 1 Sheet 1  
 FILE NAME: \\sbs301\01\1901\_PFB\_193-025\_D5\_Varibus\_Phase\_HillWork\_Order\_5\Drawings\CADD\_Sheets\0570D69-ef-h-staging-I-74-Stage1.dgn

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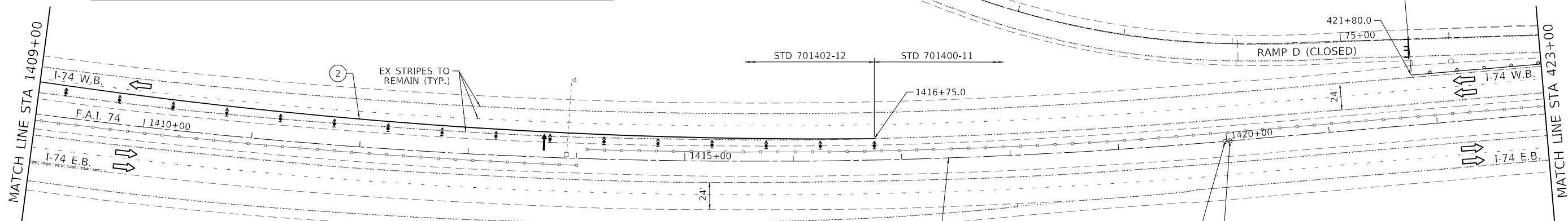
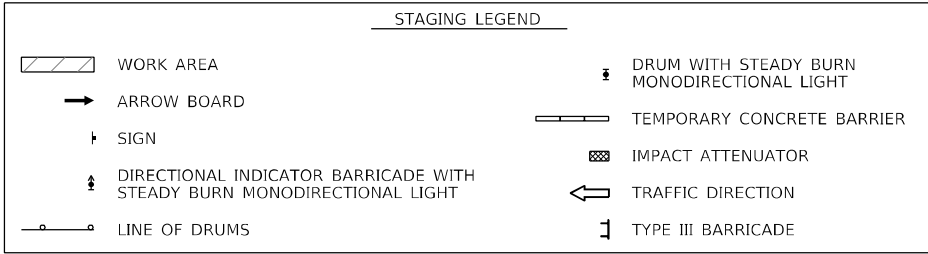
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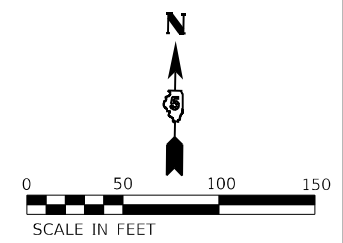
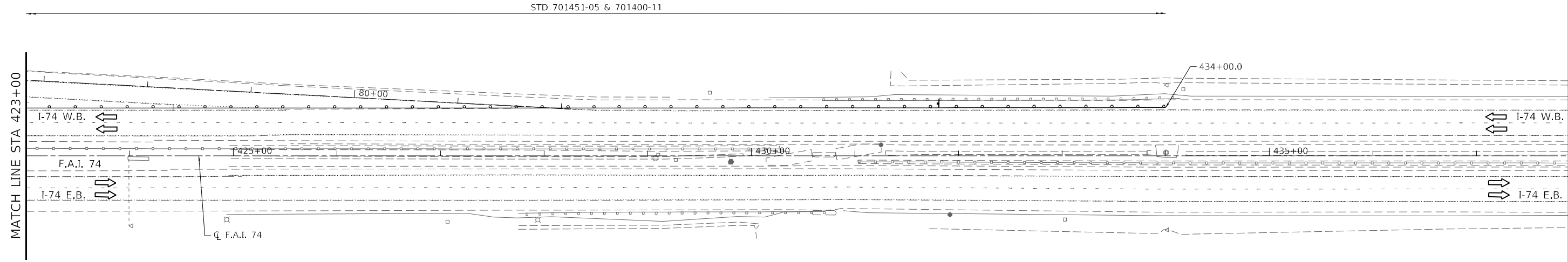
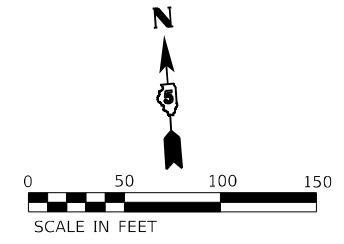
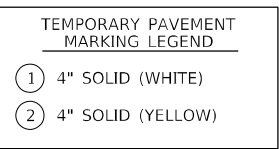
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 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA  
 STAGE I: I-74**  
 SCALE: 1" = 50' SHEET 1 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	15
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70D69	



EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 $D = 1^\circ 07' 57''$   
 $R = 5,059.20'$   
 $T = 2,393.41'$   
 $L = 4,471.13'$   
 $E = 537.58'$   
 $e =$   
 $T.R. =$   
 $S.E. RUN =$   
 $P.C. STA. = 1375+27.44$   
 $P.T. STA. = 1419+98.58$



MODEL: I-74 Stage 1 Sheet 2  
 FILE NAME: \\sbs301\B1011901\_PFB\_193-025\_D5\_Varibus\_Phase\_3\Drawings\CADD\_Sheets\0570069-efh-scanning\74-Stage1.dgn

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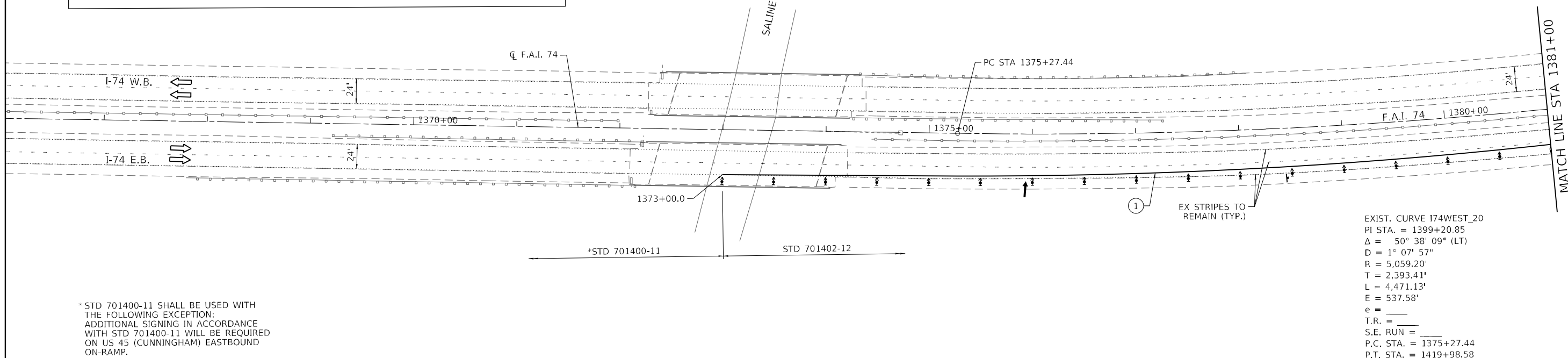
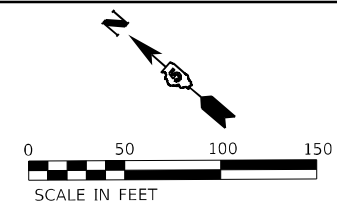
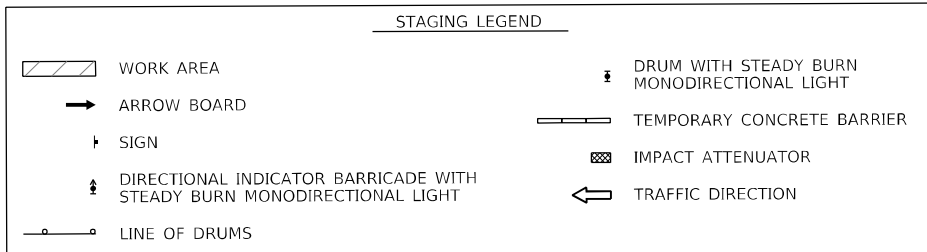
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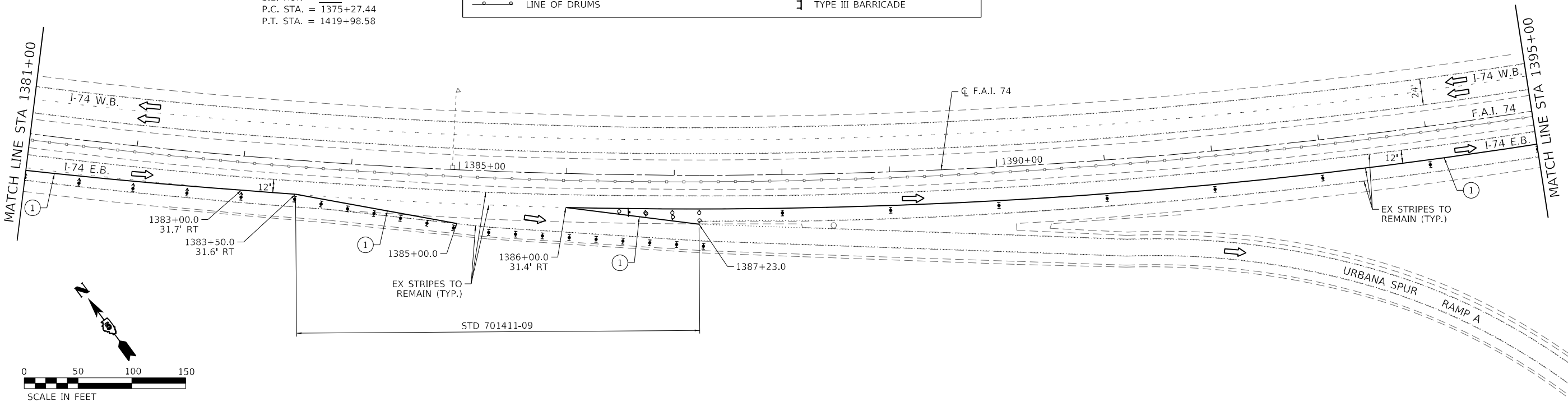
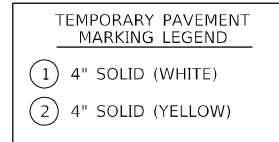
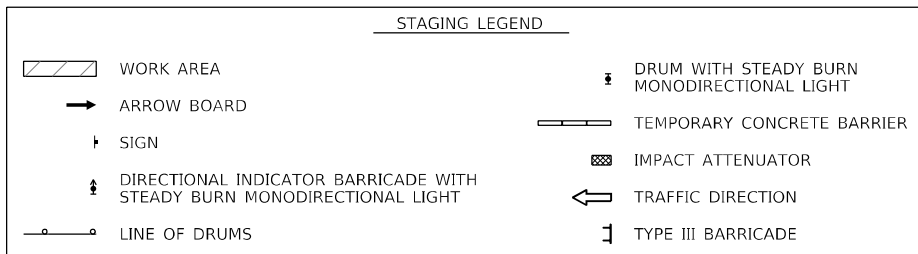
**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA**  
**STAGE I: I-74**  
 SCALE: 1" = 50' SHEET 2 OF 2 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	16
			CONTRACT NO. 70D69	
			ILLINOIS FED. AID PROJECT	





EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 $D = 1^\circ 07' 57''$   
 $R = 5,059.20'$   
 $T = 2,393.41'$   
 $L = 4,471.13'$   
 $E = 537.58'$   
 $e =$   
 $T.R. =$   
 $S.E. RUN =$   
 $P.C. STA. = 1375+27.44$   
 $P.T. STA. = 1419+98.58$



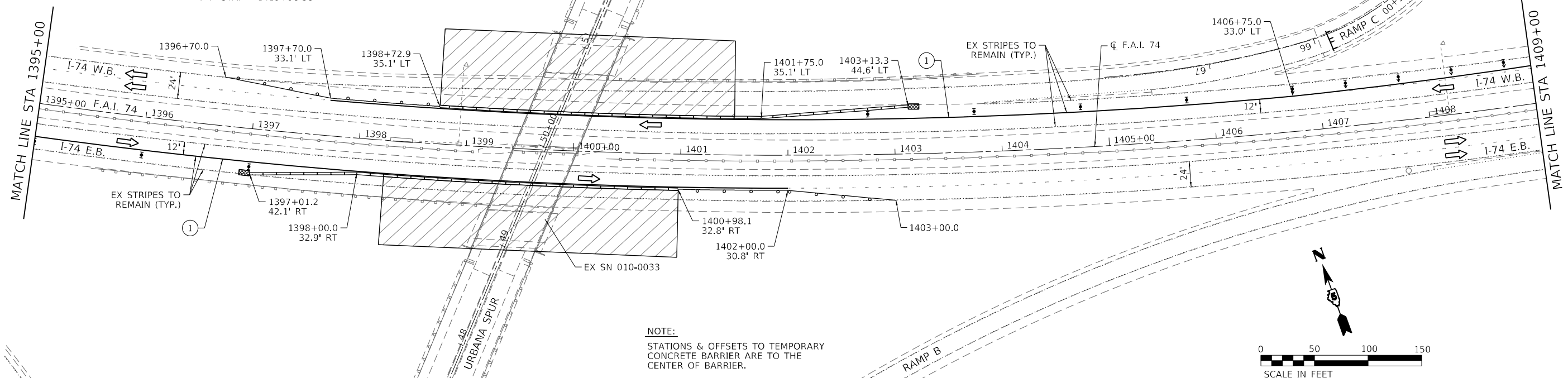
MODEL I74 Stage 2 Sheet 1  
 FILE NAME: I:\Projects\70D69\Drawings\CADD\_Sheets\0570D69\st-stdstanc\74-Stage2.dwg  
 PLOT DATE: 3/17/2023

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	PLOT SCALE = 100,0000' / in.	CHECKED -	REVISED -					SCALE: 1" = 50'	SHEET 1	OF 3 SHEETS	STA. TO STA.	CONTRACT NO. 70D69
PLOT DATE = 3/17/2023	DATE -	REVISED -						ILLINOIS FED. AID PROJECT				

EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 $D = 1^\circ 07' 57''$   
 $R = 5,059.20'$   
 $T = 2,393.41'$   
 $L = 4,471.13'$   
 $E = 537.58'$   
 $e =$   
 T.R. =  
 S.E. RUN =  
 P.C. STA. = 1375+27.44  
 P.T. STA. = 1419+98.58

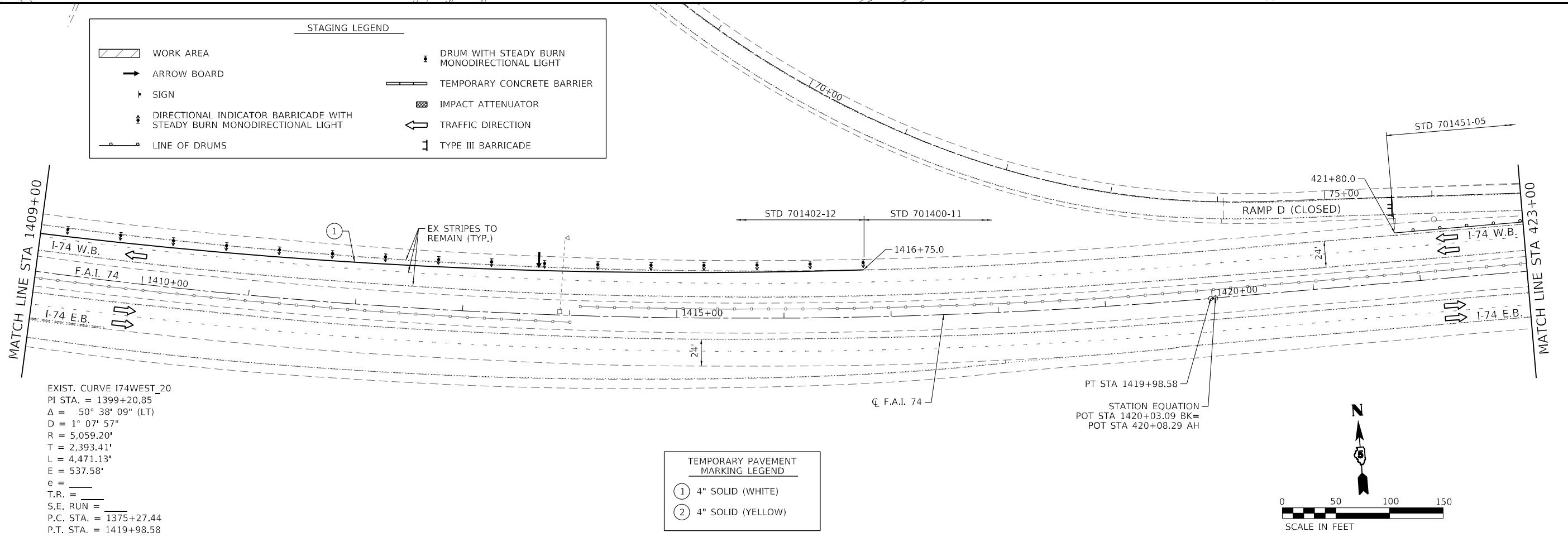
TEMPORARY PAVEMENT MARKING LEGEND  
 ① 4" SOLID (WHITE)  
 ② 4" SOLID (YELLOW)

STAGING LEGEND  
 WORK AREA  
 ARROW BOARD  
 SIGN  
 DIRECTIONAL INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT  
 LINE OF DRUMS  
 DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT  
 TEMPORARY CONCRETE BARRIER  
 IMPACT ATTENUATOR  
 TRAFFIC DIRECTION



NOTE:  
 STATIONS & OFFSETS TO TEMPORARY CONCRETE BARRIER ARE TO THE CENTER OF BARRIER.

STAGING LEGEND  
 WORK AREA  
 ARROW BOARD  
 SIGN  
 DIRECTIONAL INDICATOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT  
 LINE OF DRUMS  
 DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT  
 TEMPORARY CONCRETE BARRIER  
 IMPACT ATTENUATOR  
 TRAFFIC DIRECTION  
 TYPE III BARRICADE



EXIST. CURVE I74WEST\_20  
 PI STA. = 1399+20.85  
 $\Delta = 50^\circ 38' 09''$  (LT)  
 $D = 1^\circ 07' 57''$   
 $R = 5,059.20'$   
 $T = 2,393.41'$   
 $L = 4,471.13'$   
 $E = 537.58'$   
 $e =$   
 T.R. =  
 S.E. RUN =  
 P.C. STA. = 1375+27.44  
 P.T. STA. = 1419+98.58

TEMPORARY PAVEMENT MARKING LEGEND  
 ① 4" SOLID (WHITE)  
 ② 4" SOLID (YELLOW)

PT STA 1419+98.58  
 STATION EQUATION  
 POT STA 1420+03.09 BK=  
 POT STA 420+08.29 AH

MODEL I74 Stage 2 Sheet 2  
 FILE NAME: I:\Projects\2023\193-025\_D5\_Veribus\_Phase\_III\Work\_Order\_5\Drawings\CADD\_Sheets\0570606-ef-h-staging-I74-Stage2.dwg  
 PLOT DATE: 3/17/2023

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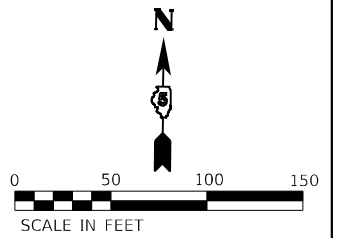
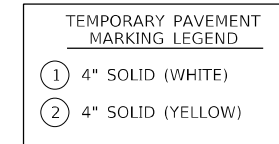
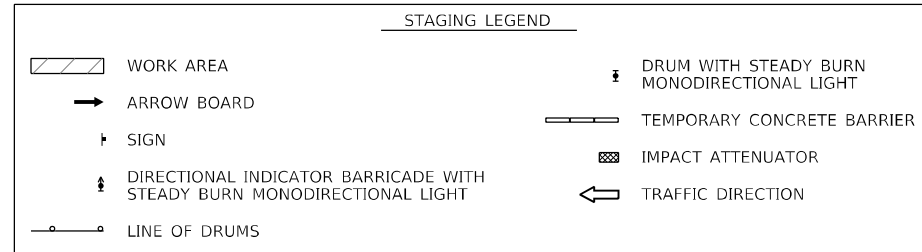
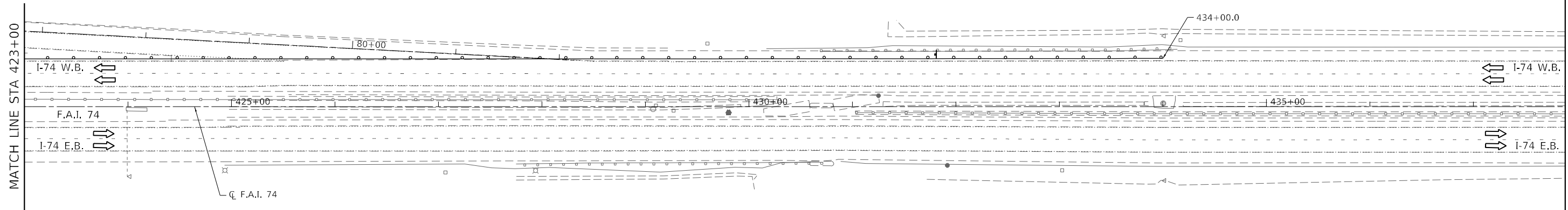
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 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY - RAMPS OVER I-74 AT ECL OF URBANA**  
**STAGE II: I-74**  
 SCALE: 1" = 50' SHEET 2 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	18
CONTRACT NO. 70D69			ILLINOIS FED. AID PROJECT	

STD 701451-05 & 701400-11



MODEL I-74 Stage 2 Sheet 3  
 FILE NAME: \\sbs301\B1011901\_PFB\_193-025\_D5\_Voribus\_Phase\_HilWork\_Order\_3\Drawings\CADD\_Sheets\0570066-rt-staging-I-74-Stage2.dgn

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DATE -	REVISD -

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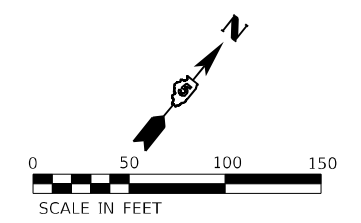
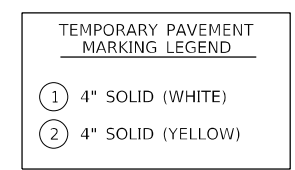
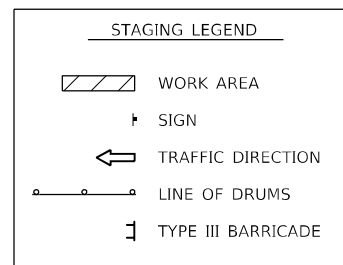
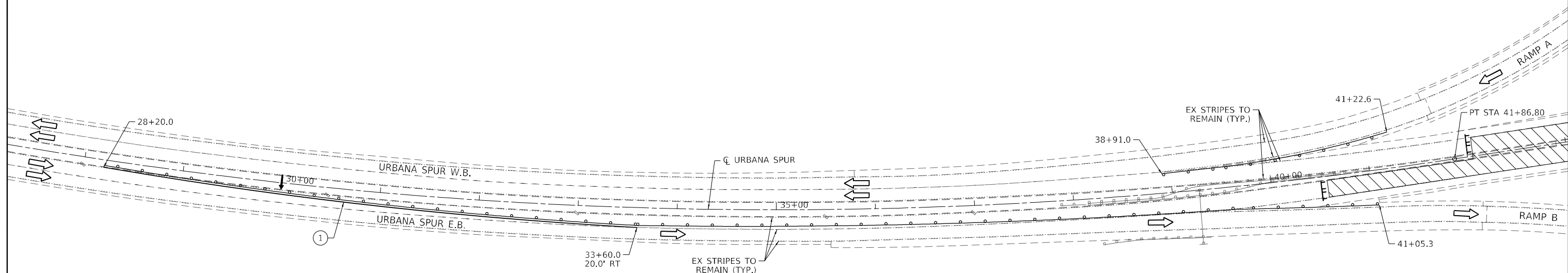
**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
 STAGE II: I-74**

SCALE: 1" = 50'    SHEET 3    OF 3    SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	19
				CONTRACT NO. 70D69
		ILLINOIS	FED. AID PROJECT	

EXIST. CURVE US\_150ALL\_11  
 PI STA. = 23+21.88  
 $\Delta = 50^\circ 05' 01''$  (LT)  
 $D = 1^\circ 15' 01''$   
 $R = 4,582.92'$   
 $T = 2,141.13'$   
 $L = 4,006.05'$   
 $E = 475.50'$   
 $e =$   
 T.R. =  
 S.E. RUN =  
 P.C. STA. = 1+80.75  
 P.T. STA. = 41+86.80

NOTE:  
 TRAFFIC CONTROL ON THIS SHEET SHALL  
 FOLLOW STANDARD 701601-09.



MODEL: Urbana Spur Stage 1  
 FILE NAME: \\bls03\30101\1901\_PFB\_193-025\_D5\_Voribus\_Phase\_HillWork\_Order\_3\Drawings\CADD\_Sheets\0570069-rt-staging-UrbanaSpur.dgn

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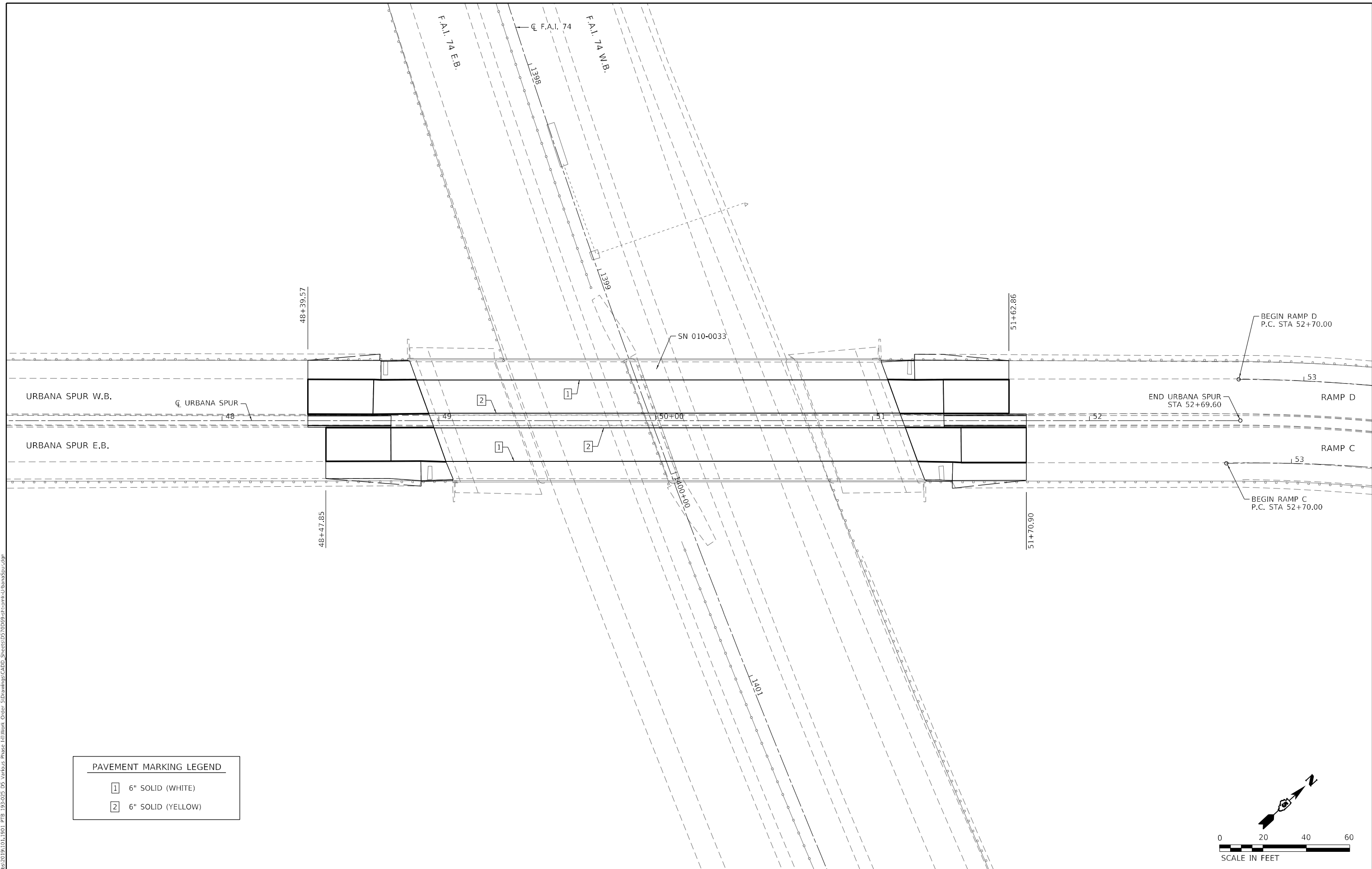
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
 STAGE I: URBANA SPUR**

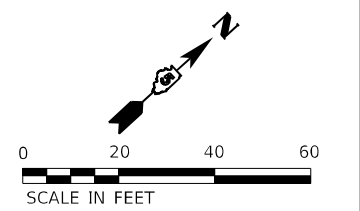
SCALE: 1" = 50'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	20
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

MODEL: Plan01  
 FILE NAME: \\sbs301b1011901\_PFB\_193-2025\_D5\_Voribus\_Phase\_HillWork\_Order\_5\Drawings\CADD\_Sheets\0570D69-6-10-2023-UrbanaSpur.dgn



PAVEMENT MARKING LEGEND	
1	6" SOLID (WHITE)
2	6" SOLID (YELLOW)



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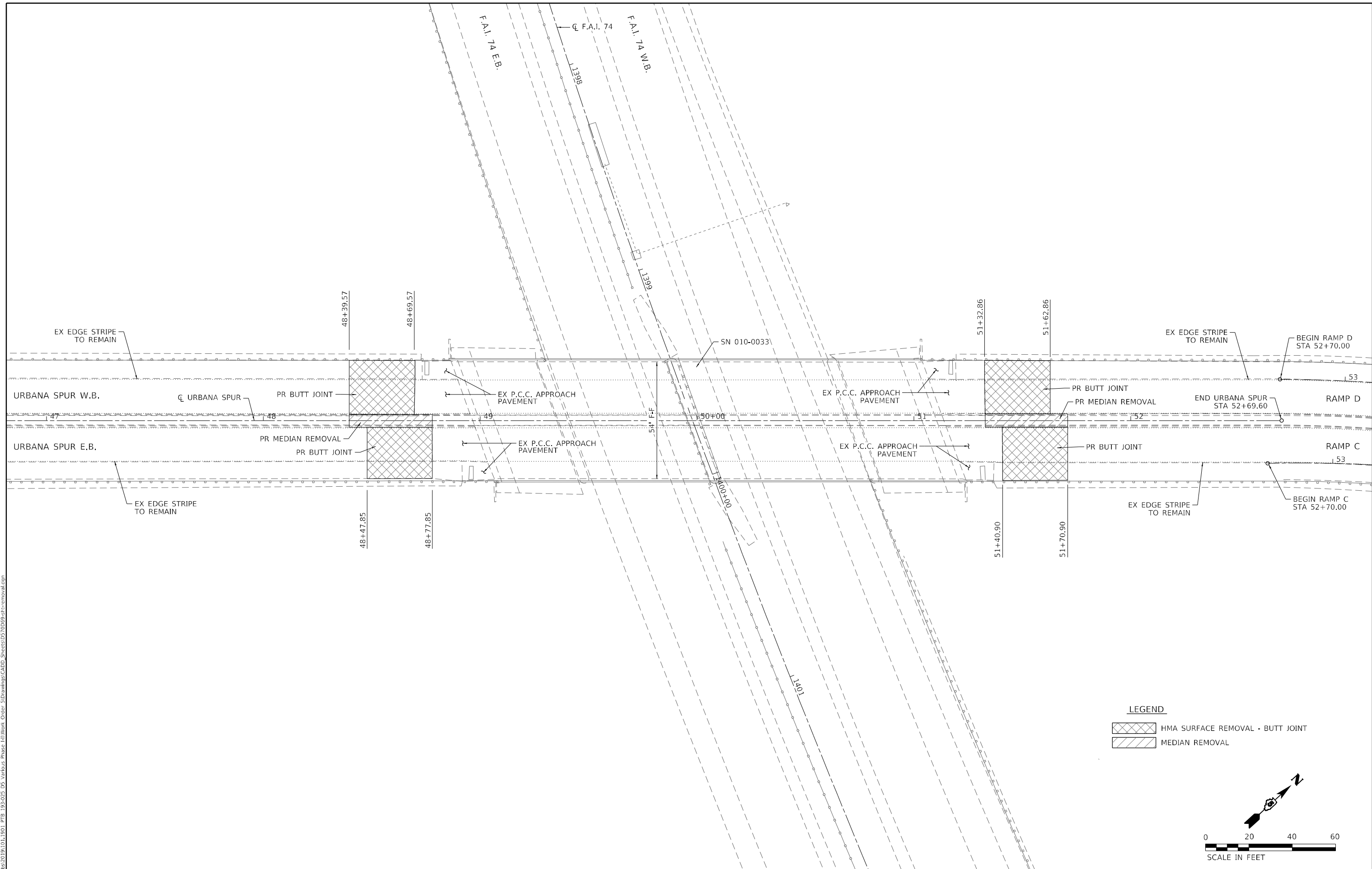
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
 PAVEMENT MARKING: URBANA SPUR**

SCALE: 1" = 20'    SHEET 1 OF 1 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	21
			CONTRACT NO. 70D69	
		ILLINOIS	FED. AID PROJECT	

MODEL: 01\_Urbana\_Spur  
 FILE NAME: \\richie\301\B1\01\_1901\_PFB\_193-2025\_D5\_Varibus\_Phase\_HillWork\_Order\_5\Drawings\CADD\_Sheets\0570065-ft-removal.dgn



**LEGEND**

- HMA SURFACE REMOVAL - BUTT JOINT
- MEDIAN REMOVAL

SCALE IN FEET

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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA**  
**REMOVAL PLAN: URBANA SPUR**

SCALE: 1" = 20'    SHEET 1 OF 2 SHEETS    STA.    TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	22
			CONTRACT NO. 70D69	
		ILLINOIS	FED. AID PROJECT	

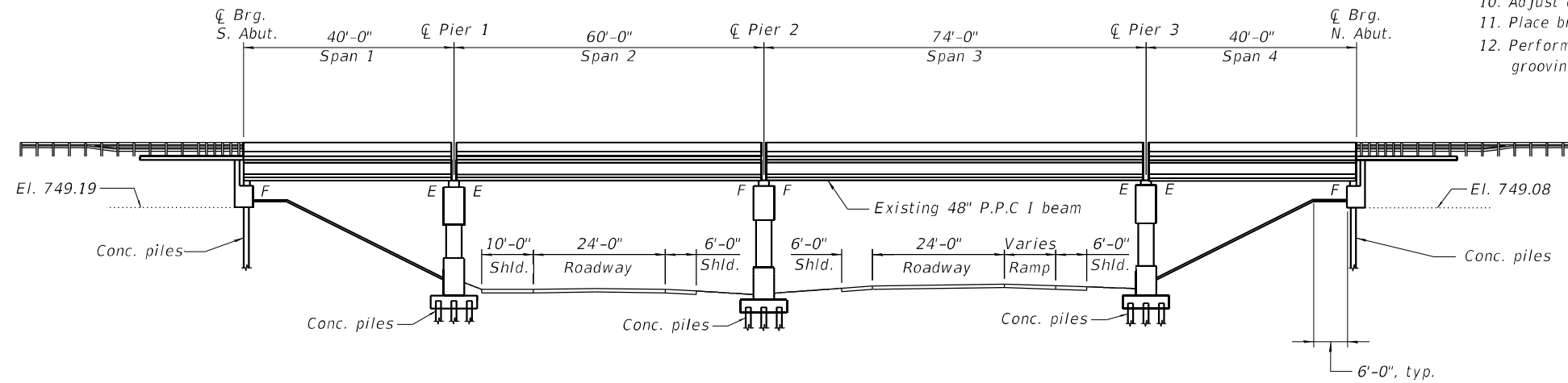
Existing structure No. 010-0033 was built in 1959. The structure was widened and raised in 1992 and consists of a four simple span concrete superstructure supported by P.P.C. I-beams (two end spans of 40'-0" and two interior spans of 60'-0" and 74'-0"). The overall width of the structure is 57'-2". The substructure consists of integral abutments and framed columns piers.

**SCOPE OF WORK**

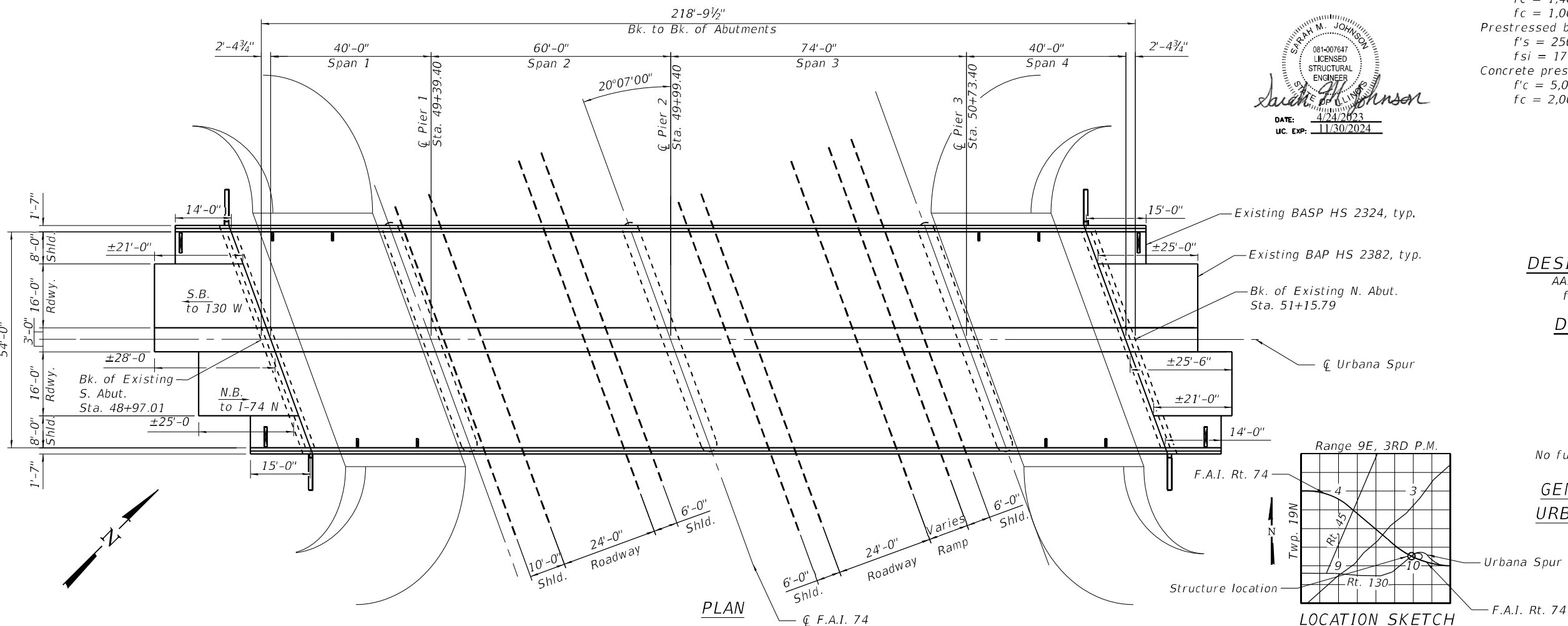
1. Perform bridge scarification.
2. Perform full-depth deck patching, removal of deck ends, parapets, and hatch blocks.
3. Perform structural repair of concrete at abutments.
4. Perform structural repair of concrete on piers.
5. Repair concrete beams & diaphragms.
6. Replace bearings at Piers 1 and 3.
7. Clean and paint bearings at Pier 2.
8. Cast deck ends, parapet ends and hatch blocks.
9. Place preformed joint strip seal at Pier joints.
10. Adjust drains and scuppers.
11. Place bridge deck latex concrete overlay, 2 1/2".
12. Perform diamond grinding 1/4" and bridge deck grooving (longitudinal).

**DESIGN CRITERIA (EXIST.)**

1992 Rehab.: AASHTO 1989 Standard Specifications for Highway Bridges Loading  
 Live Load - HS 20-44  
 Allow 25 p.s.f. for future surface  
 Original: 1953 Edition & B.P.R. criteria for "Prestressed Concrete Bridges, 1954."  
 Design load - H20-S16-44



**ELEVATION**



**PLAN**



**DESIGN STRESSES (EXIST.)**

Concrete (1992 Rehab.)  
 $f'_c = 3500$  psi - Superstructure  
 $f'_c = 1400$  psi - Substructure  
 $f'_c = 1000$  psi - With Earth pressure  
 $f_v = 56$  psi  
 Reinforcing steel (1992 Rehab.)  
 $f_y = 60,000$  psi  
 Structural steel (M183) (1992 Rehab.)  
 $f_y = 36,000$  psi  
 P.P.C. I beams (1992 Rehab.)  
 $f'_c = 5000$  psi  
 $f'_{ci} = 4000$  psi - Concrete strengths  
 $f'_s = 270,000$  psi - Prestressed steel 1/2" strands  
 $f'_{si} = 189,000$  psi - Prestressed steel 1/2" strands  
 Steel conventional (Original)  
 $f_s = 18,000$  psi - structural steel  
 $f_s = 20,000$  psi - reinforcing steel  
 Concrete (Original)  
 $f'_c = 5,500$  psi - ultimate compression  
 $f_c = 1,400$  psi - allow. compr. (no Earth pressure)  
 $f_c = 1,000$  psi - allow. compr. (with Earth pressure)  
 Prestressed beams (Original)  
 $f'_s = 250,000$  psi - ultimate tensile  
 $f_{si} = 175,000$  psi - allowable initial prestress  
 Concrete prestress (Original)  
 $f'_c = 5,000$  psi - ult.  
 $f_c = 2,000$  psi - allow.

**DESIGN SPECIFICATIONS (PROP.)**

AASHTO 2002 Standard Specifications for Highway Bridges, 17th Edition

**DESIGN STRESSES (PROP.)**

**FIELD UNITS**

$f'_c = 3,500$  psi  
 $f'_c = 4,000$  psi (Superstructure)  
 $f_y = 60,000$  psi (Reinforcement)  
 $f_y = 50,000$  psi (M270 Grade 50)

**LOADING HS20-44**

No future wearing surface allowance remaining.

**GENERAL PLAN AND ELEVATION  
 URBANA SPUR OVER F.A.I. RT. 74**

**SECTION (10-6)BDR**

**CHAMPAIGN COUNTY**

**STA. 49+99.40**

**SN. 010-0033**

STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION  
 STRUCTURE NO. 010-0033

SHEET 1 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	23
CONTRACT NO. 70D69				

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**GENERAL NOTES**

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

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. Cost included with Concrete Removal and Concrete Superstructure.

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

Concrete Sealer shall be applied to areas of repaired concrete on all piers.

Up to 1/4 inch may be ground off the bridge deck and the bridge approach slabs.

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.

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

All new structural steel and bearing assembly shall be hot-dip galvanized. See Special Provisions for "Hot Dip Galvanizing for Structural Steel".

Contractor to coordinate all work with staging of interstate traffic below, see Roadway Plans.

For Temporary Shoring and Cribbing design, use beam reactions on the bearing details sheet, sheet 16 of 25.

Acrylic coating shall be placed over Fiber Wrap repairs. Two coats shall be applied. Quantity includes two coats.

Synthetic Fibers shall be included in the bridge deck concrete overlay specified. See Special Provisions.

Protective Coat shall be applied to all new concrete superstructure and all new concrete overlays as specified in Article 503.19 of the Standard Specifications. (D5 preferred)

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".

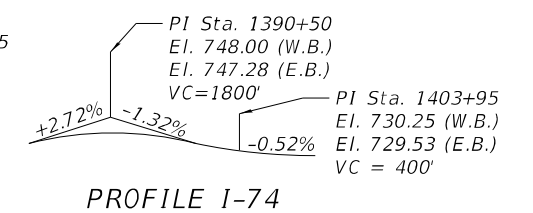
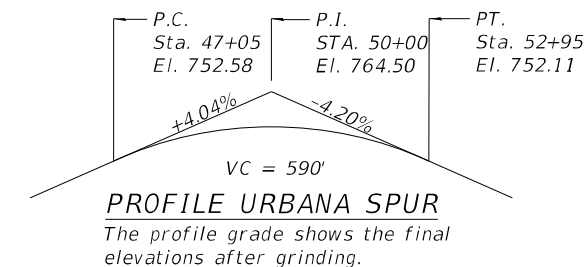
**INDEX OF SHEETS**

1. General Plan and Elevation
2. General Data
- 3-4. Typical Sections
5. Deck Repair Plan
6. Deck Repair Plan - Reflected Soffit
7. Abutment Joint Repairs
- 8-9. Pier Joint Replacement Details
10. Prefomed Joint Strip Seal
- 11-15. Beam Repair Details
16. Bearing Details
17. Abutment Repairs
- 18-19. Pier Repair Details - Pier 1
- 20-21 Pier Repair Details - Pier 2
- 22-23 Pier Repair Details - Pier 3
24. Drainage Scupper Adjustment Ring Detail
25. Inlet Box to be Adjusted

**TOTAL BILL OF MATERIAL**

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	10.5	-	10.5
Protective Shield	Sq. Yd.	582	-	582
Concrete Superstructure	Cu. Yd.	12.2	-	12.2
* Bridge Deck Grooving (Longitudinal)	Sq. Yd.	879	-	879
Reinforcement Bars, Epoxy Coated	Pound	2,930	-	2,930
Prefomed Joint Strip Seal	Foot	179	-	179
Elastomeric Bearing Assembly Type I	Each	40	-	40
Anchor Bolts 1"	Each	-	8	8
Concrete Sealer	Sq. Ft.	-	1,476	1,476
Remove and Re-erect Steel Plate Beam Guardrail, Attached to Structure	Foot	40	-	40
* Cleaning and Painting Bearings	Each	20	-	20
* Inlet Boxes to be Adjusted (Special)	Each	4	-	4
* Jack and Remove Existing Bearings	Each	26	-	26
* Bridge Deck Latex Concrete Overlay 2 1/2"	Sq. Yd.	1,348	-	1,348
* Bridge Deck Scarification 3/4"	Sq. Yd.	1,348	-	1,348
* Structural Repair of Concrete Depth <=5"	Sq. Ft.	-	1,577	1,577
* Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	13.5	-	13.5
* Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	40.4	-	40.4
* Drainage Scuppers to be Adjusted	Each	8	-	8
* Diamond Grinding (Bridge Section)	Sq. Yd.	1,150	-	1,150
* Fiber Wrap	Sq. Ft.	197.7	57.7	255.4
Protective Coat	Sq. Yd.	1,392	-	1,392
* Acrylic Coating	Sq. Yd.	44.0	12.8	56.8
* Removal of Existing Bearings	Each	14	-	14
* Precast Prestressed Concrete I-Beam Repair	Sq. Ft.	58.6	-	58.6
* Temporary Shoring and Cribbing	Each	19	-	19

\* Special Provision



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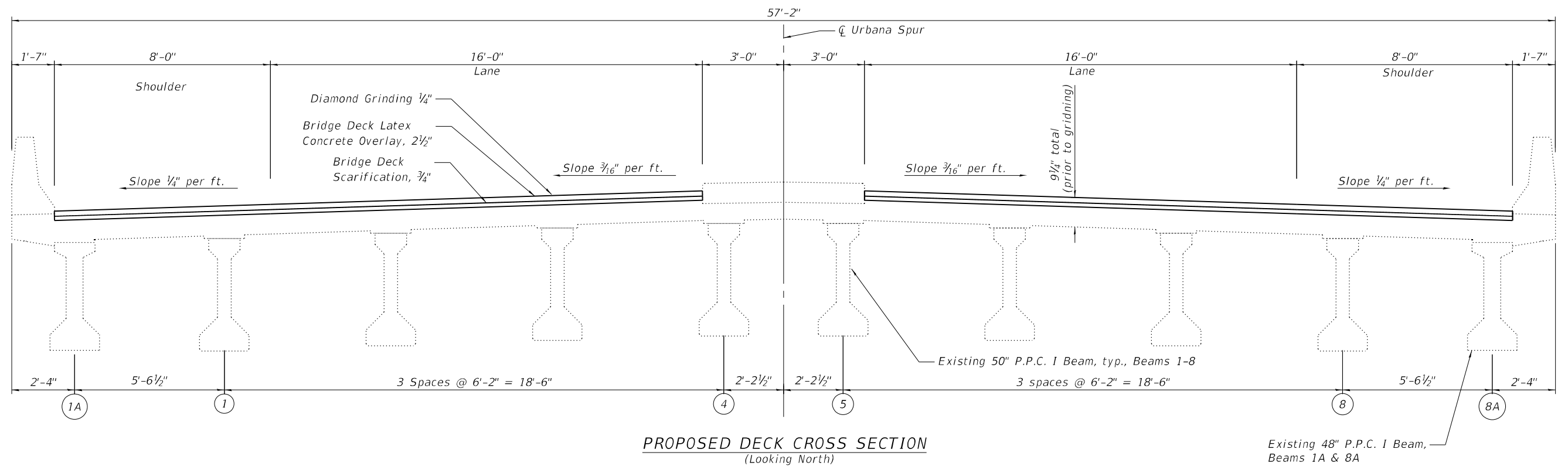
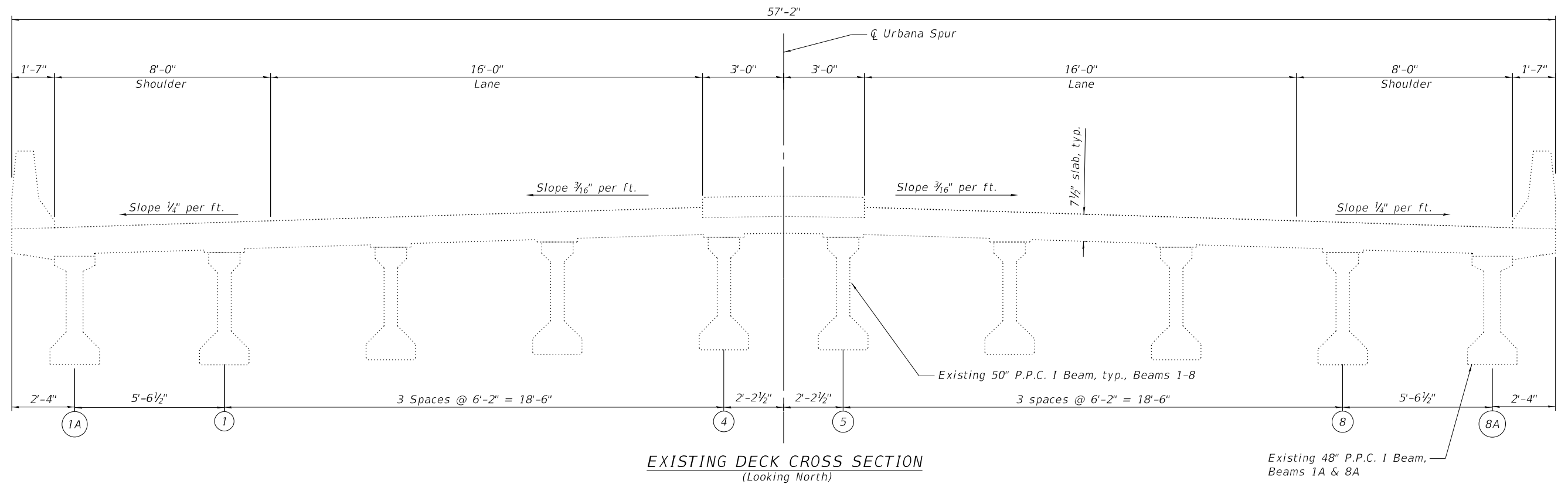
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STRUCTURE NO. 010-0033**

SHEET 2 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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CONTRACT NO. 70D69				
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(Sheet 1 of 2)

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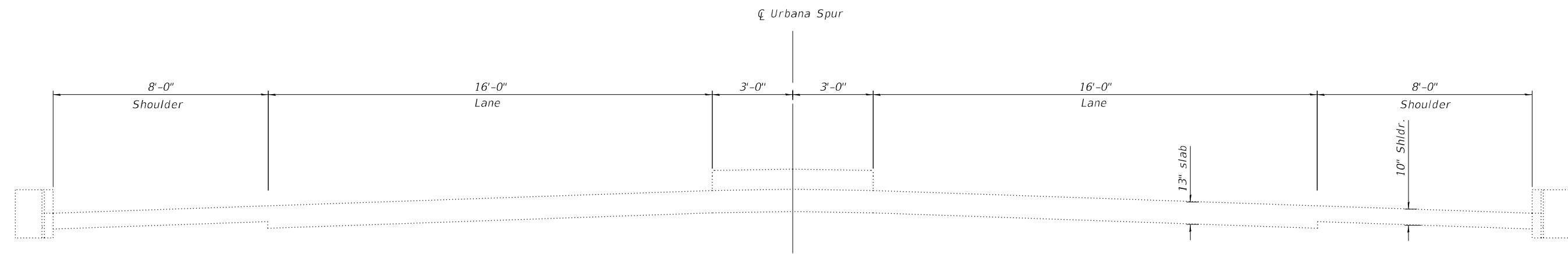
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**TYPICAL SECTIONS**  
**STRUCTURE NO. 010-0033**

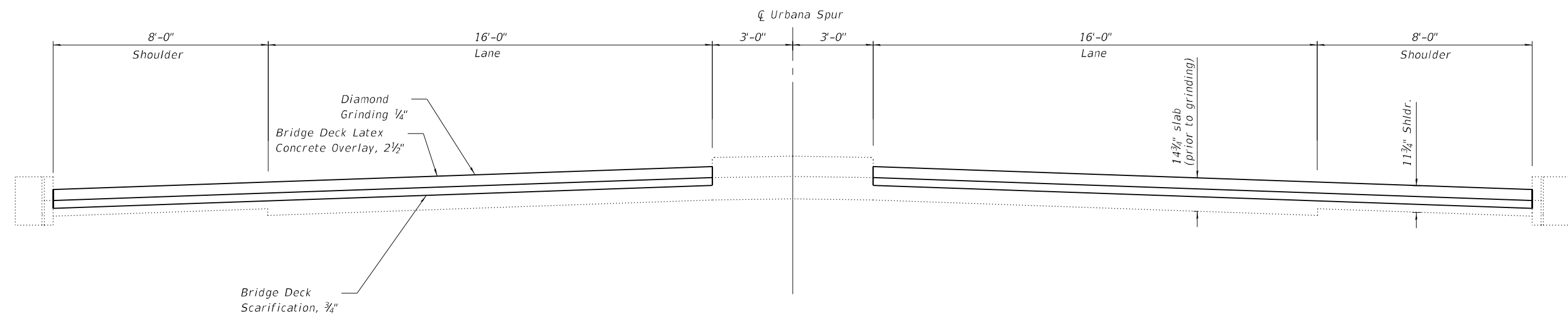
SHEET 3 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	25
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**EXISTING APPROACH SLAB CROSS SECTION**  
 (Looking North)



**PROPOSED APPROACH SLAB CROSS SECTION**  
 (Looking North)

(Sheet 2 of 2)

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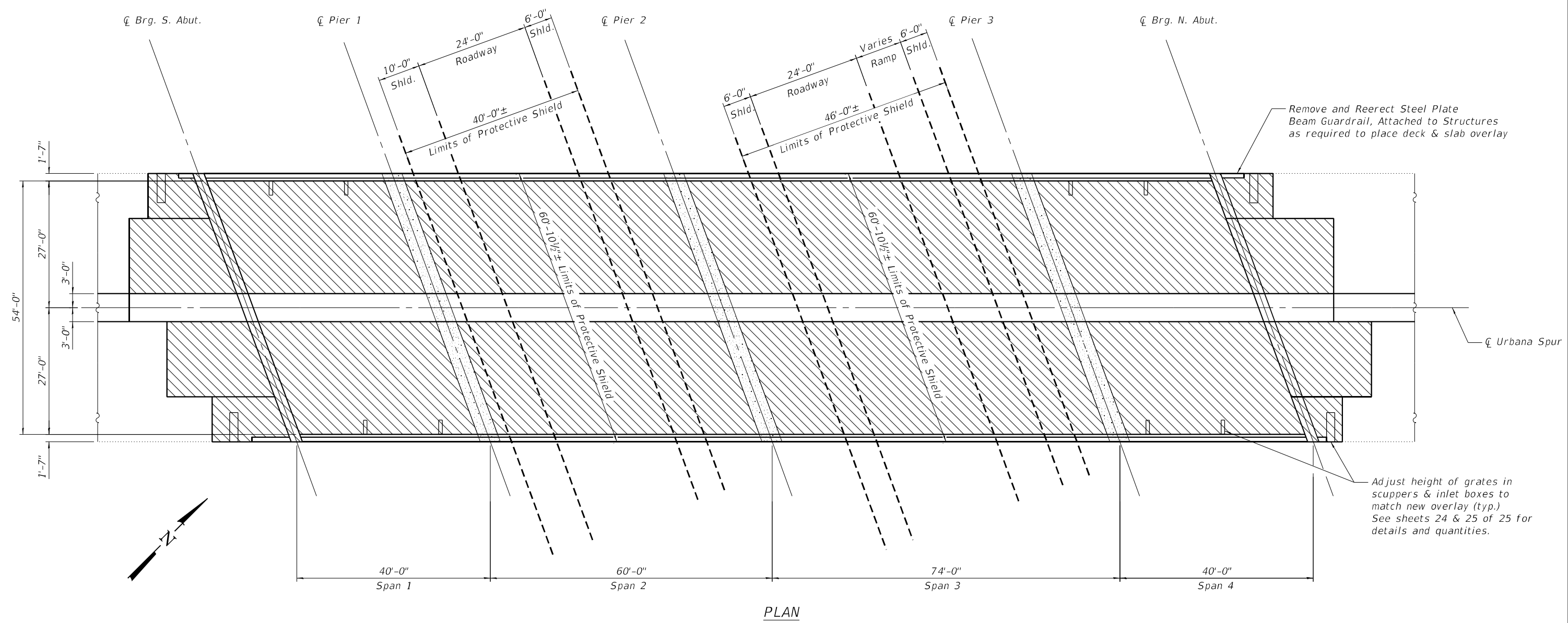
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**TYPICAL SECTIONS**  
**STRUCTURE NO. 010-0033**  
 SHEET 4 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	26
CONTRACT NO. 70D69				
ILLINOIS			FED. AID PROJECT	

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**LEGEND**

- Bridge deck & approach slab overlay:  
 Bridge Deck Scarification 3/4",  
 Bridge Deck Latex Concrete overlay 2 1/2",  
 Diamond Grinding 1/4", Bridge Deck Grooving
- Pier Joint Replacement  
 See sheets 8 & 9 of 25.

**Notes:**

For anticipated deck repair locations, see sheet 6 of 25.

**BILL OF MATERIAL**

ITEM	UNIT	QUANTITY
Bridge Deck Latex Concrete Overlay 2 1/2"	Sq. Yd.	1348
Bridge Deck Scarification 3/4"	Sq. Yd.	1348
Diamond Grinding (Bridge Section)	Sq. Yd.	1150
Protective Shield	Sq. Yd.	582
Bridge Deck Grooving (Longitudinal)	Sq. Yd.	879
Protective Coat	Sq. Yd.	1392
Remove and Reerect Steel Plate Beam Guardrail, Attached to Structures	Foot	40

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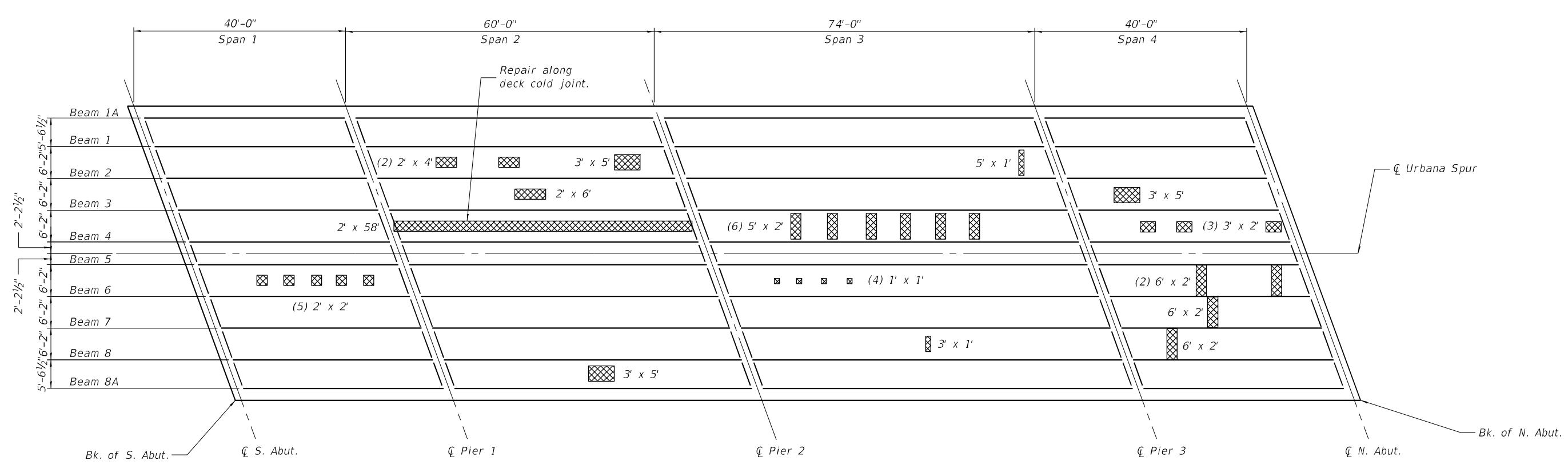
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**DECK REPAIR PLAN  
 STRUCTURE NO. 010-0033**

SHEET 5 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	27
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

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PLAN

LEGEND

Soffit spall locations and anticipated full depth slab repairs exposed by hydroscarification.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Deck Slab Repair (Full Depth, Type I)	Sq. Yd.	13.5
Deck Slab Repair (Full Depth, Type II)	Sq. Yd.	40.4

Notes:

Areas of deck repairs are estimated at 4% of the deck and approach slab areas receiving scarification and overlay (estimated as 1% Type I repairs and 3% Type II repairs). The Engineer shall show actual locations of the repairs on as-built plans.

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DECK REPAIR PLAN - REFLECTED SOFFIT  
 STRUCTURE NO. 010-0033

SHEET 6 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	28
CONTRACT NO. 70D69				
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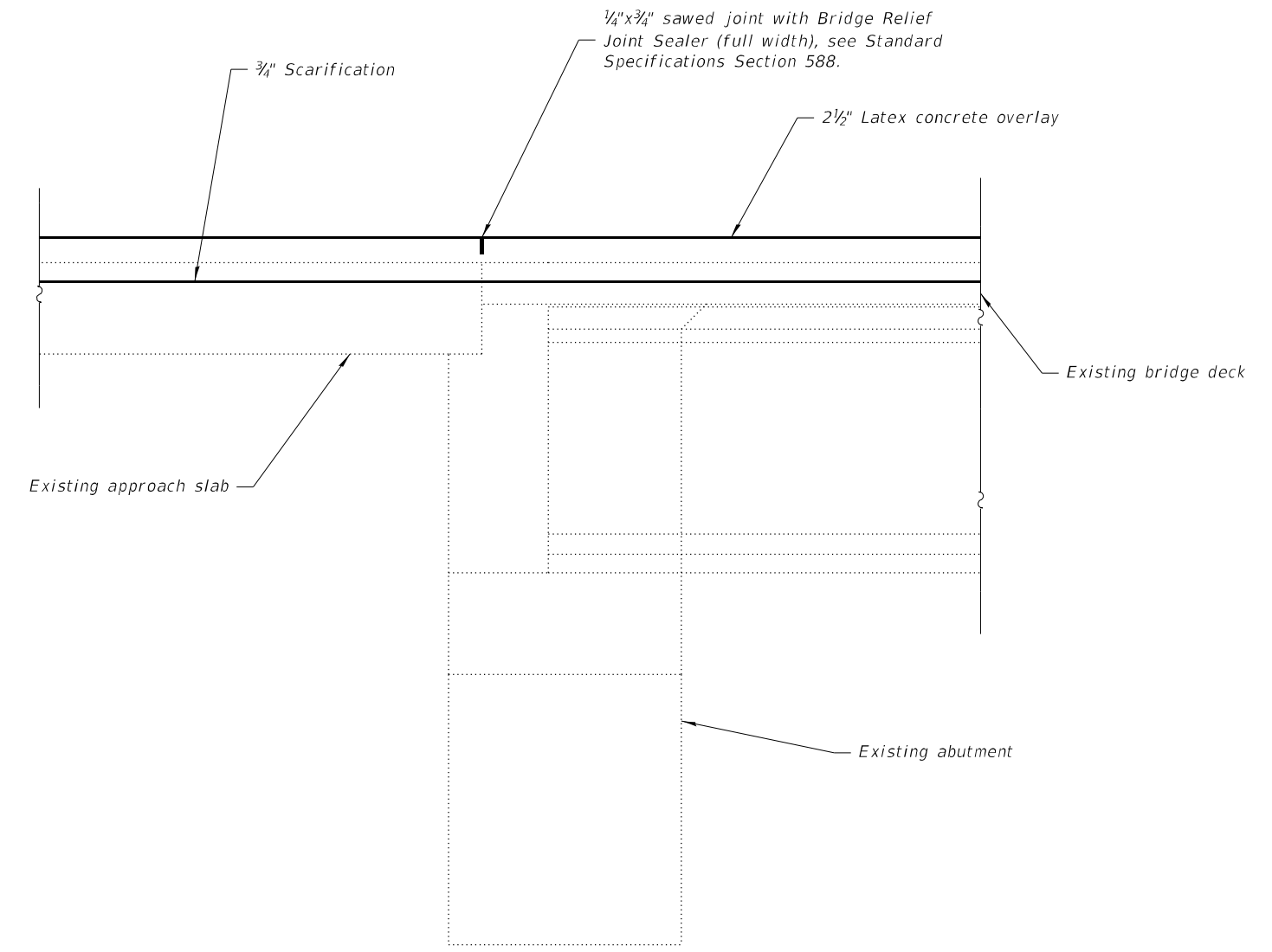
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**ABUTMENT JOINT REPAIRS  
 STRUCTURE NO. 010-0033**

SHEET 7 OF 25 SHEETS

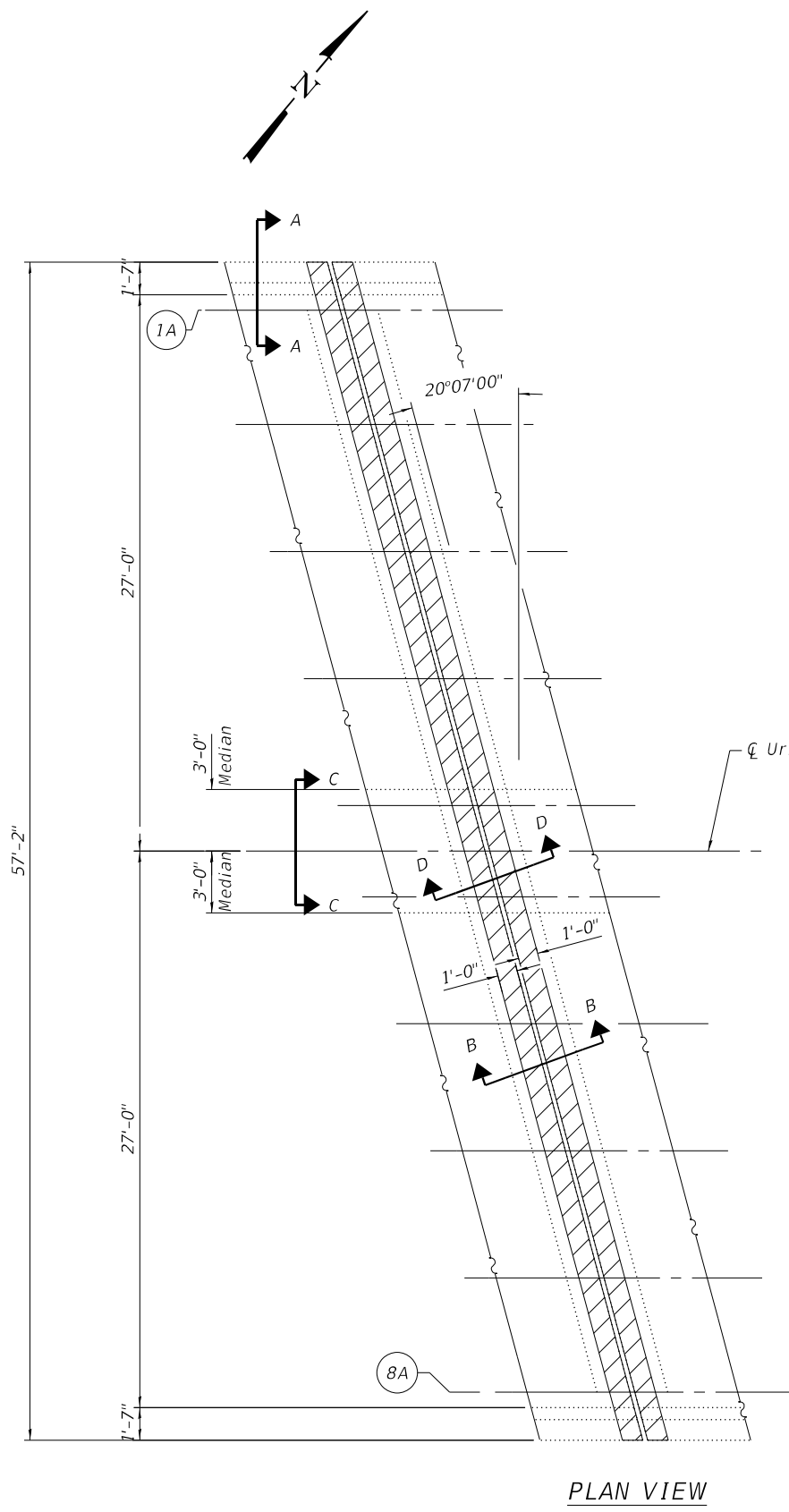
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CONTRACT NO. 70D69				
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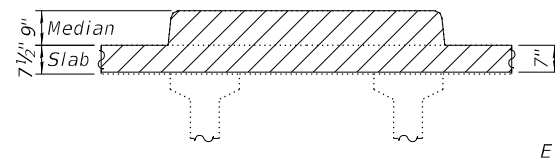
TYPICAL ABUTMENT SECTION

*Note:*  
 Cost of sawed joint and Bridge Relief Joint Sealer included with Bridge Deck Latex Concrete Overlay 2 1/2".

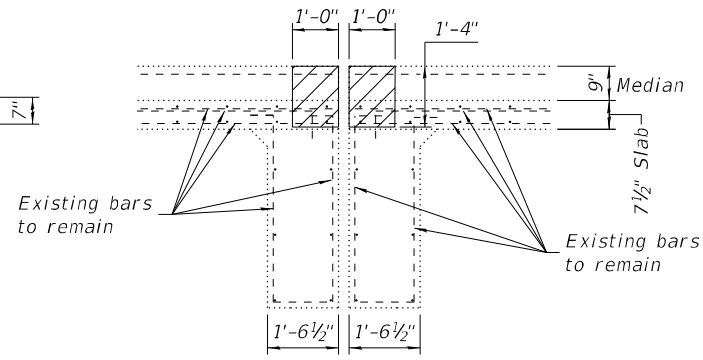
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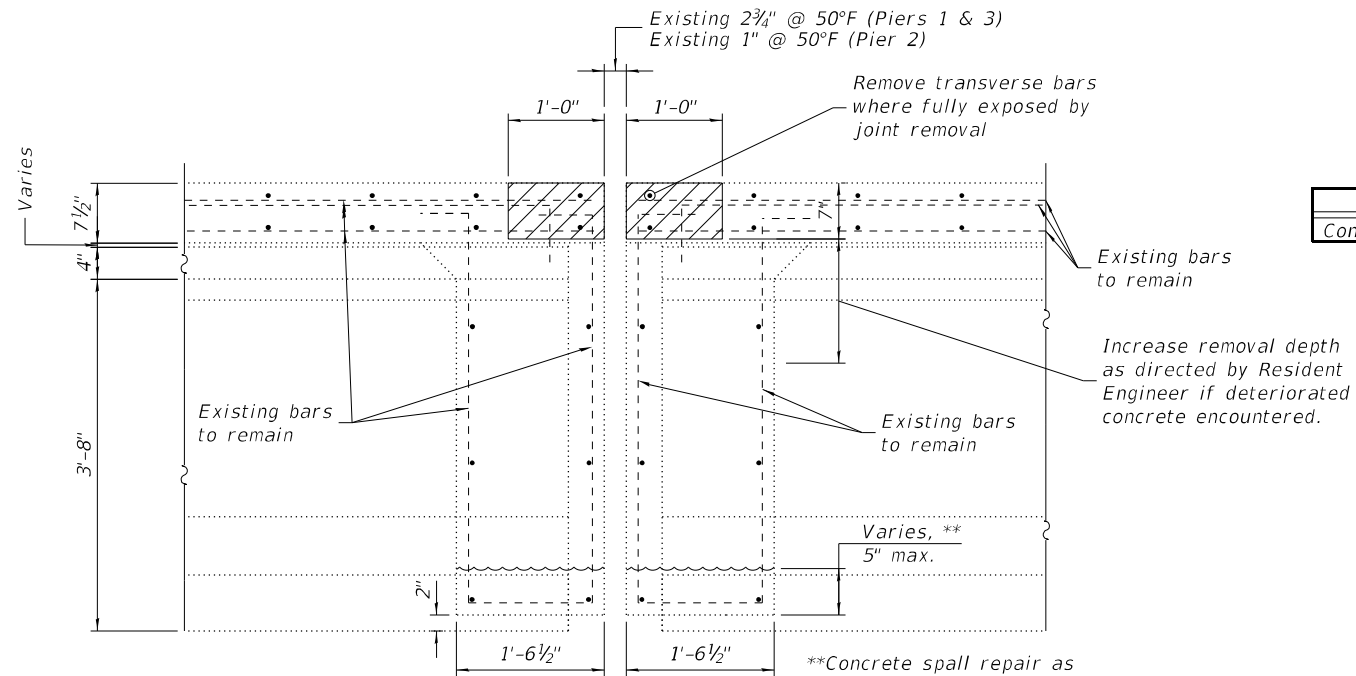
PLAN VIEW



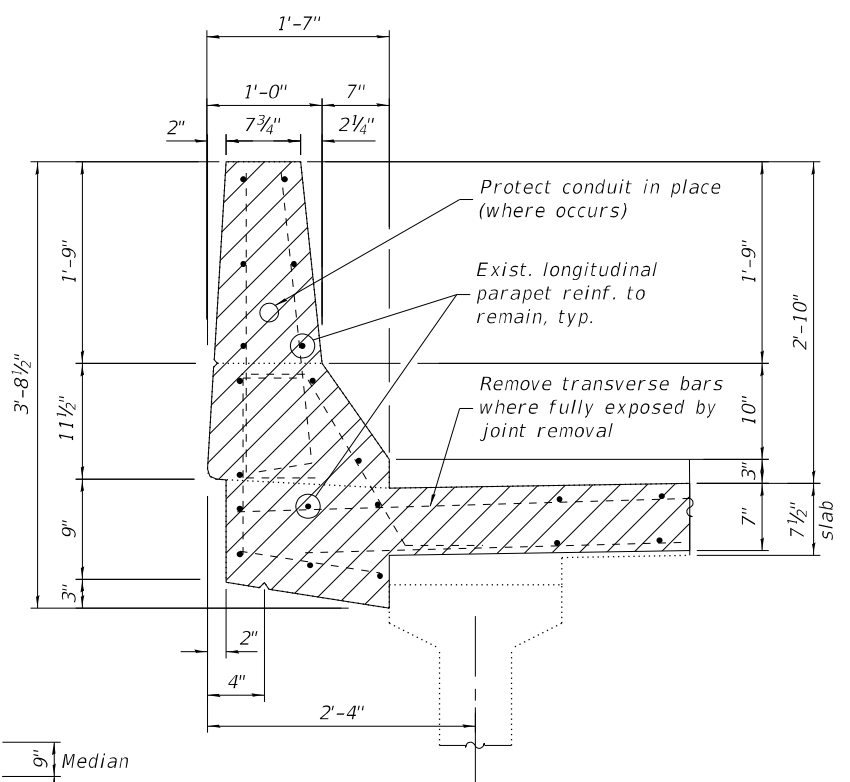
SECTION C-C



SECTION D-D



SECTION B-B  
(Pier joints - typ.)



SECTION A-A

LEGEND



BILL OF MATERIAL

(Total for all 3 Piers)

Item	Unit	Quantity
Concrete Removal	Cu. Yd.	10.5

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.

The Contractor shall use extreme care during concrete removal so as not to damage the PPC I-Beam.

For locations of Pier Joint Replacements, see sheet 5 of 25.

\*\*Concrete spall repair as directed by Resident Engineer, see sheet 11 of 25 for anticipated locations.

(Sheet 1 of 2)

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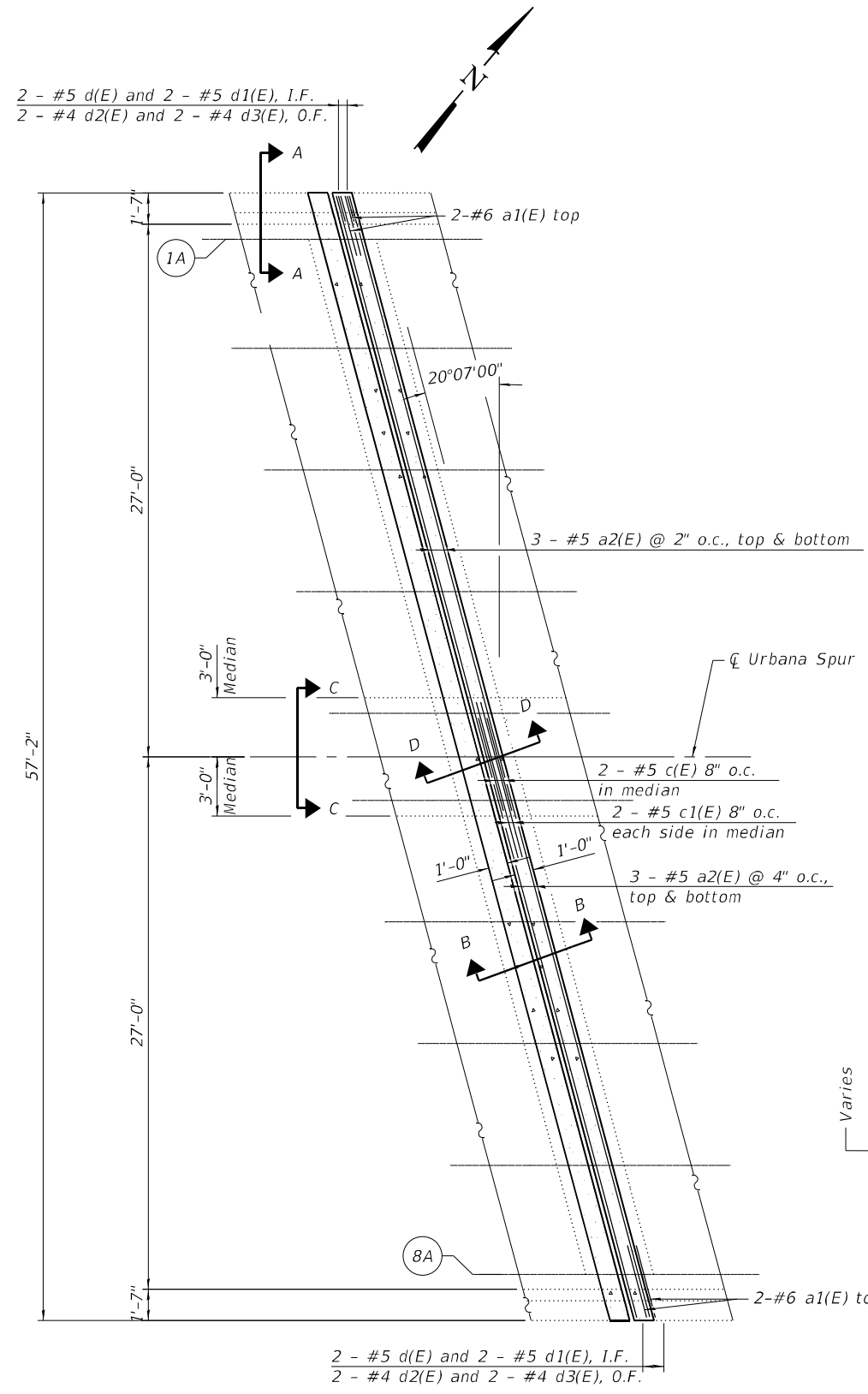
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PIER JOINT REPLACEMENT DETAILS  
 STRUCTURE NO. 010-0033

SHEET 8 OF 25 SHEETS

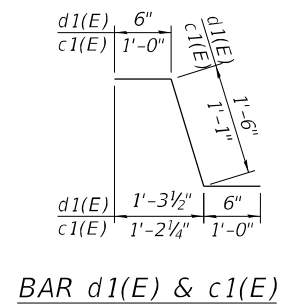
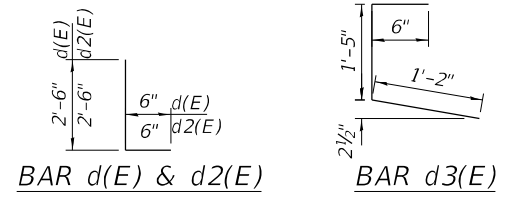
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74	(10-6)BDR	CHAMPAIGN	51	30
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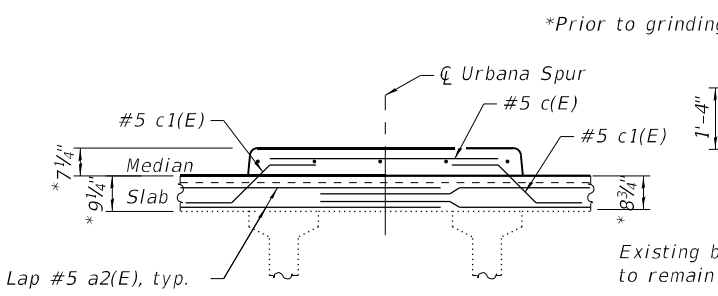


**PLAN VIEW**  
 Reinf. shown for one side of joint. Similar for the opposite side.

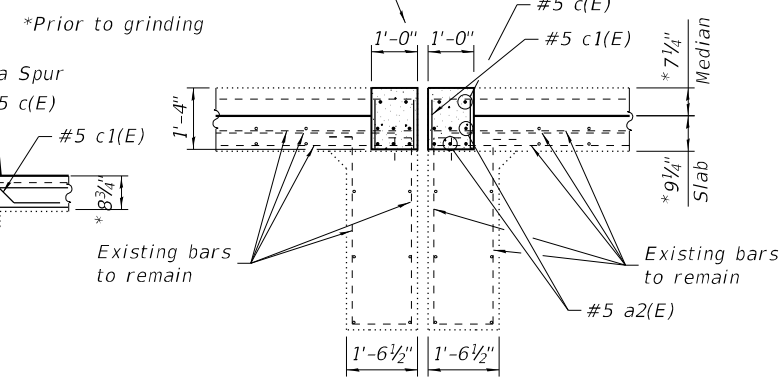
**MINIMUM BAR LAP**  
 #5 Bar = 3'-6"



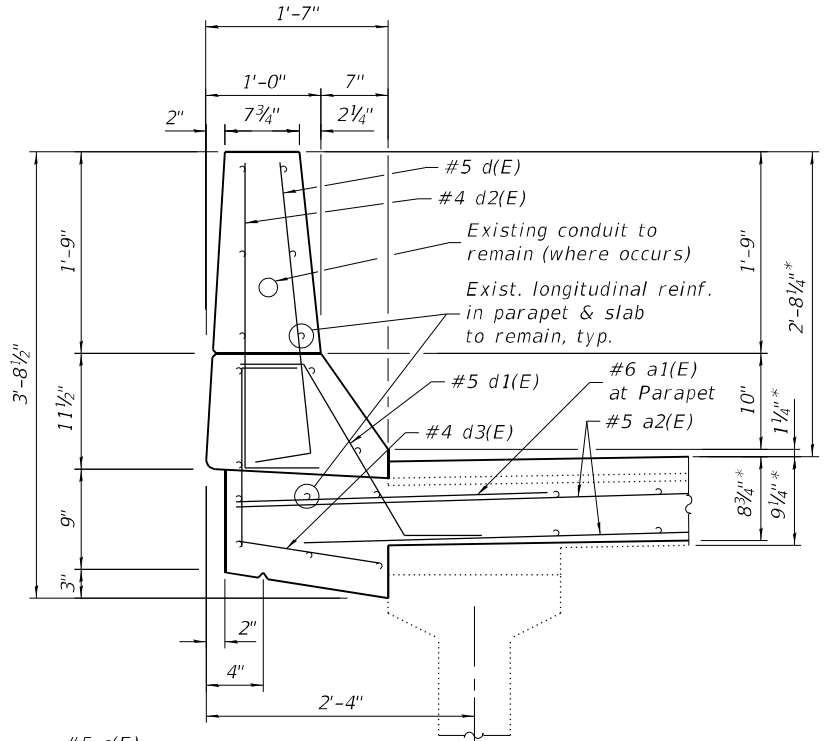
See detail C-C on Preformed Joint Strip Seal sheet (10 of 25) for median details and dimensions at the joint.



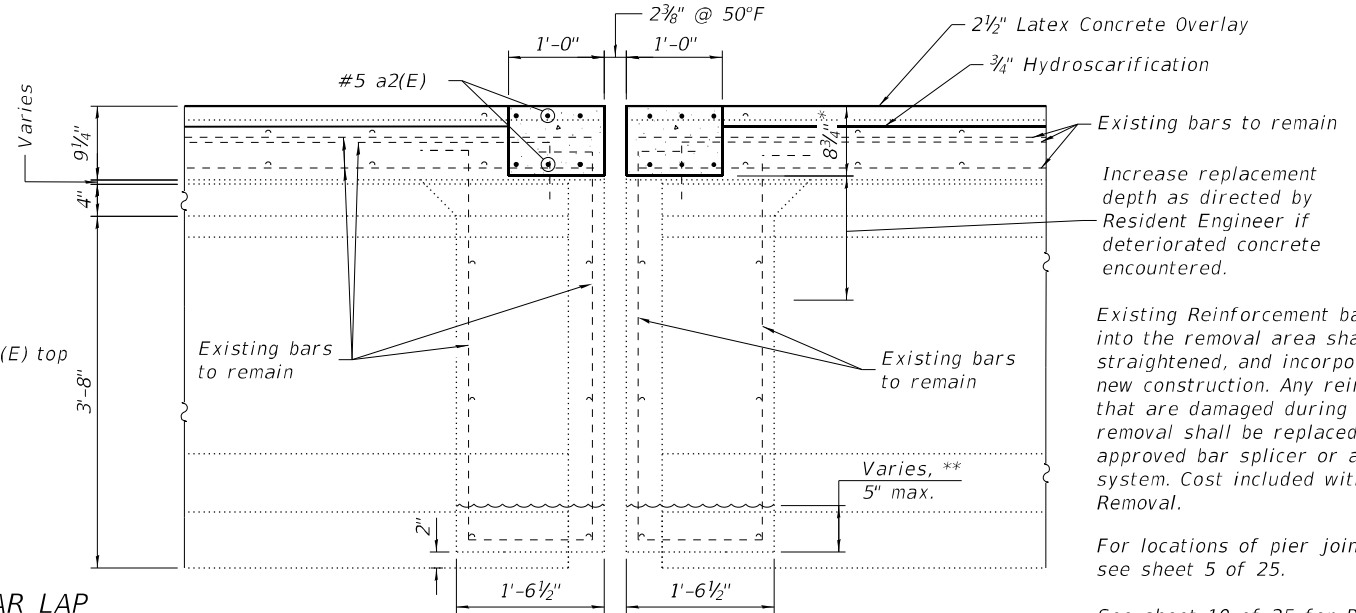
**SECTION C-C**



**SECTION D-D**



**SECTION A-A**



**SECTION B-B**  
 (Pier joints - typ.)

\*\*Concrete spall repair as directed by Resident Engineer, see sheet 11 of 25 for anticipated locations.

**LEGEND**



Concrete Superstructure

**BILL OF MATERIAL**

(Total for pier joint replacements at Piers 1-3)

Bar	No.	Size	Length	Shape
a1(E)	24	#6	4'-0"	—
a2(E)	72	#5	32'-0"	—
c(E)	12	#5	5'-6"	—
c1(E)	24	#5	3'-1"	—
d(E)	24	#5	3'-0"	┌
d1(E)	24	#5	2'-6"	┌
d2(E)	24	#4	3'-0"	┌
d3(E)	24	#4	3'-1"	┌
Reinforcement Bars, Epoxy Coated		Lbs.	2,930	
Concrete Superstructure		Cu. Yds.	12.2	

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.

For locations of pier joint replacements, see sheet 5 of 25.

See sheet 10 of 25 for Preformed Joint Strip Seal details.

(Sheet 2 of 2)

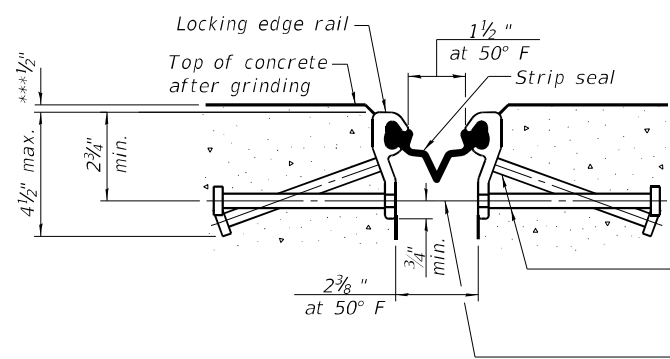
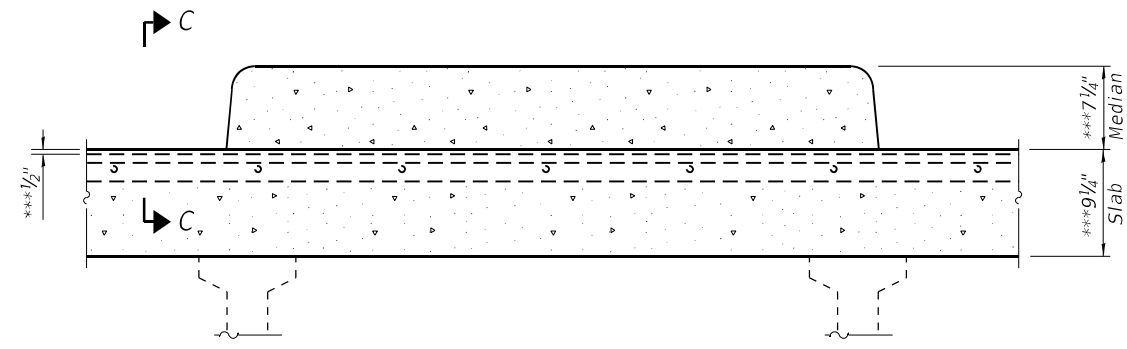
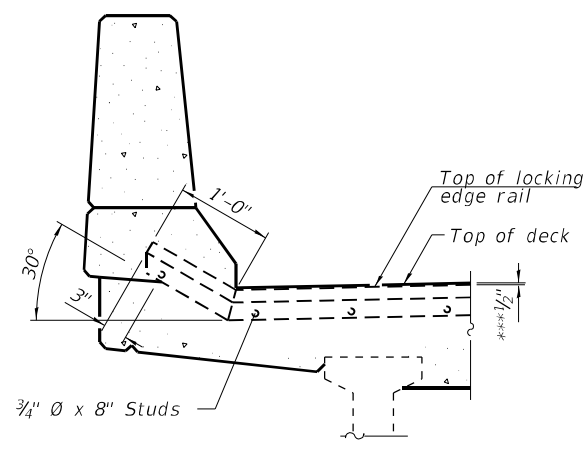
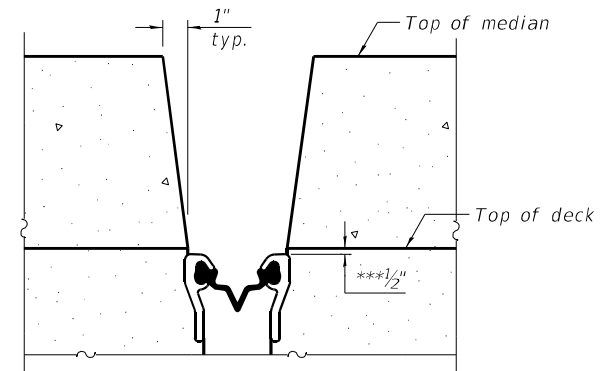
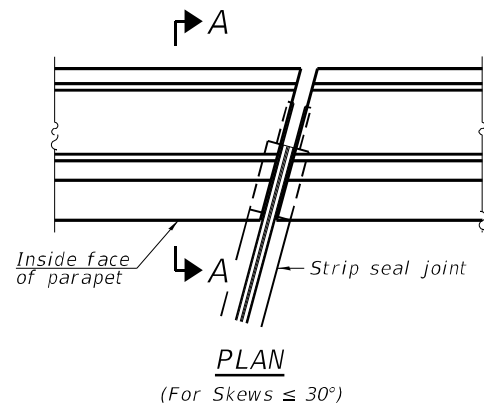
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**DEPARTMENT OF TRANSPORTATION**

**PIER JOINT REPLACEMENT DETAILS**  
**STRUCTURE NO. 010-0033**

SHEET 9 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	31
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

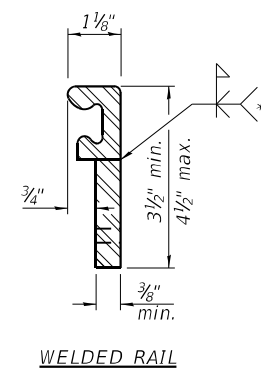
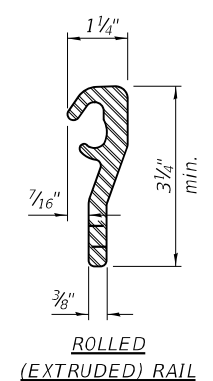
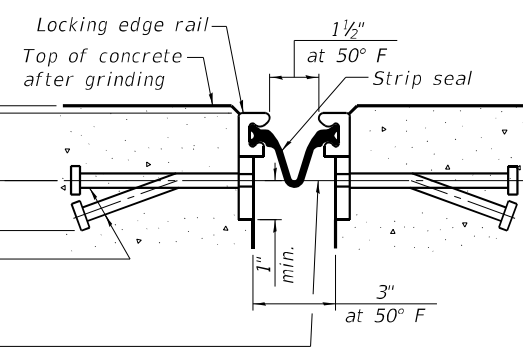
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 5/11/2023 12:06:16 PM



\*  $\frac{3}{8}$ "  $\phi$  x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)  
 $\frac{3}{8}$ "  $\phi$  threaded rods in  $\frac{1}{16}$ "  $\phi$  holes at  $\pm 4$ "-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

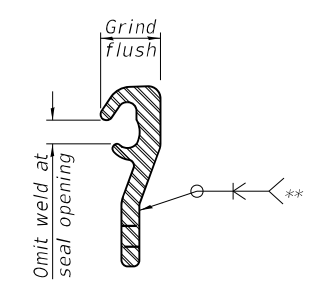
**SECTION B-B**

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



**LOCKING EDGE RAILS**

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



The inside of the locking edge rail groove shall be free of weld residue.  
 Rolled rail shown, welded rail similar.

**BILL OF MATERIAL**

Item	Unit	Total
Prefomed Joint Strip Seal	Foot	179

**Notes:**  
 The strip seal shall be made continuous and shall have a minimum thickness of  $\frac{1}{4}$ ". 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 configured for typical applications and are conceptual only. The actual configuration of the locking edge rails and matching strip seal may vary from manufacturer to manufacturer provided they fit the application and meet the minimum anchorage shown. Flanged edge rails, however, will not be allowed. Locking edge rails may exceed the  $4\frac{1}{2}$ " maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.  
 The manufacturer's recommended installation methods shall be followed.  
 All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.  
 The Maximum space between locking edge rail segments shall be  $\frac{3}{16}$ " and sealed with a suitable sealant; however, any rail joint within 10' measured perpendicular to the face of the curb or parapet shall be welded as shown in the locking edge rail splice detail.  
 Cost of parapet sliding plates, embedded plates, and anchorage studs included with Prefomed Joint Strip Seal.  
 The concrete opening below the strip seal will vary based on the locking edge rail chosen by the Contractor. Deck and parapet lengths shown elsewhere in the plans are dimensioned to the concrete opening, not the joint opening, and are based on the rolled locking edge rail. If the Contractor elects to use a different locking edge rail, dimensional adjustments may be required. One exception to this would be the strip seal joint at the end of the precast bridge approach slab. For these cases the pavement connector length shall be adjusted, not the length of the bridge approach slab.  
 The strip seal shall remain continuous through the slab under the concrete median barrier.

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**PREFORMED JOINT STRIP SEAL**  
**STRUCTURE NO.**

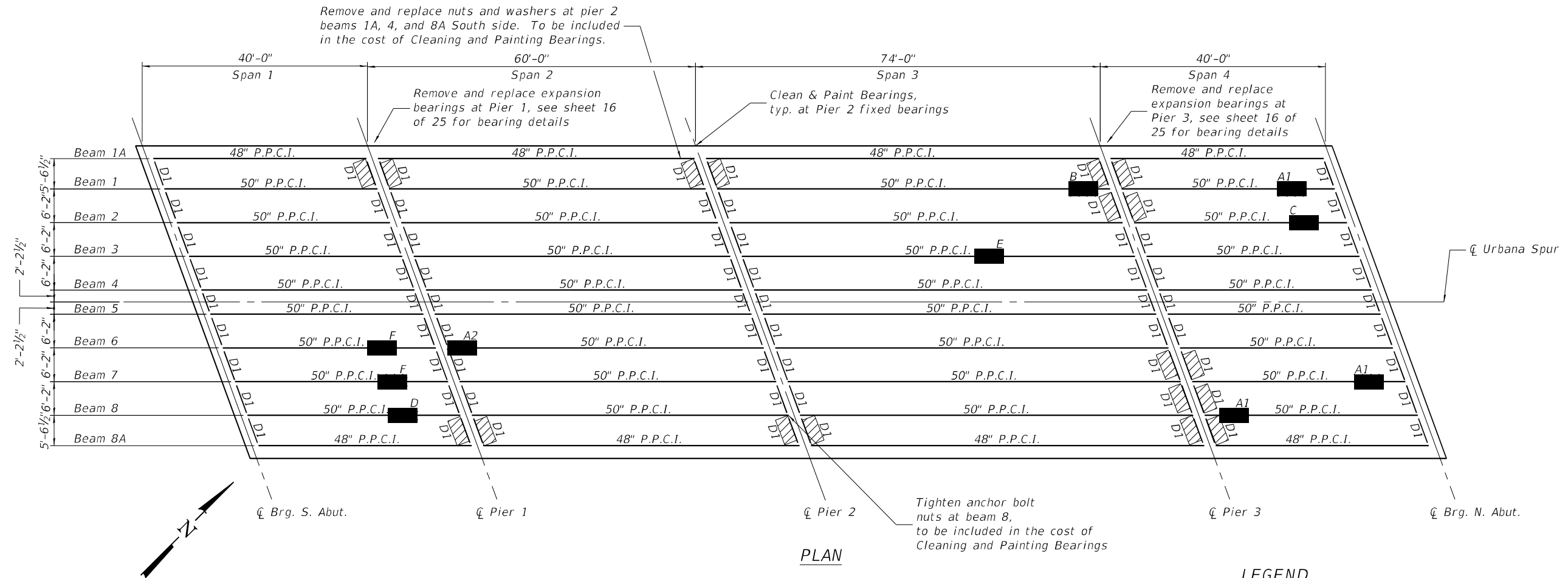
SHEET 10 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	32
CONTRACT NO. 70D69				
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PLOT DATE =	DRAWN - RNH & JLM	REVISED -
	CHECKED - SMJ	REVISED -





**LEGEND**

- Repair spall in beam (See following sheets for details of each repair type.)
  - Anticipated diaphragm repair locations. Actual locations to be determined by the Engineer and shall be documented on As-Built plans. Diaphragm repairs to be performed concurrently with joint replacement, and include increased depth of Concrete Removal and Concrete Superstructure where deteriorated concrete is encountered from above, and Structural Repair of Concrete (depth  $\leq 5"$ ) where deteriorated concrete is encountered from below. See details on joint replacement sheets 8-9 of 25. Structural Repair of Concrete (depth  $\leq 5"$ ) quantity has been estimated as half the total length of all diaphragms marked for repair in plan.
- D1 = Cast-in-Place Concrete Diaphragm (see details)

**BILL OF MATERIAL**

Item Description	Unit	Quantity
Structural Repair of Concrete, Depth $\leq 5"$	Sq. Ft.	52.5
Precast Prestressed Concrete I-Beam Repair	Sq. Ft.	58.6
Cleaning and Painting Bearings	Each	20
Fiber Wrap	Sq. Ft.	197.7
Acrylic Coating	Sq. Yd.	44.0

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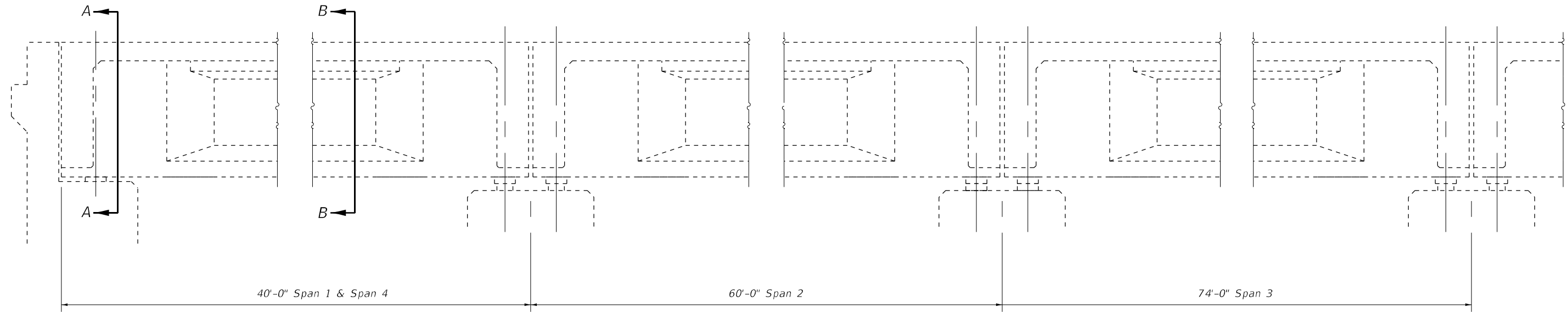
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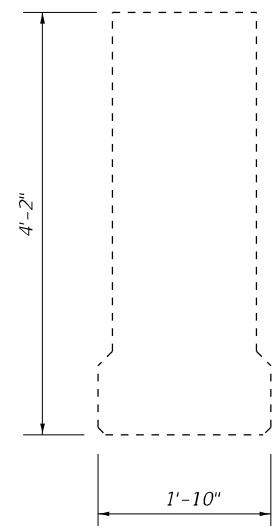
**BEAM REPAIR DETAILS  
STRUCTURE NO. 010-0033**

SHEET 11 OF 25 SHEETS

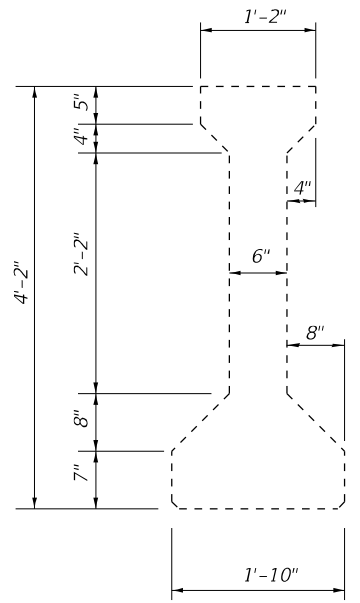
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	33
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				



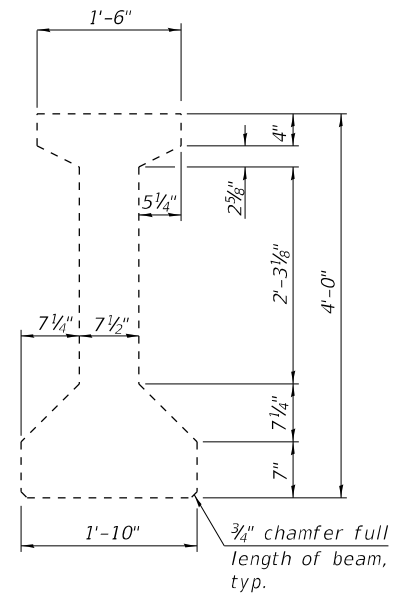
TYPICAL PART LONGITUDINAL SECTION



SECTION A-A  
1959 Beams



SECTION B-B  
1959 Beams



CROSS-SECTION  
Outside Beams, 1992 Construction  
(for reference only)

Note:  
Beam sections provided for reference.  
See sheets 13-15 of 25 for beam repairs

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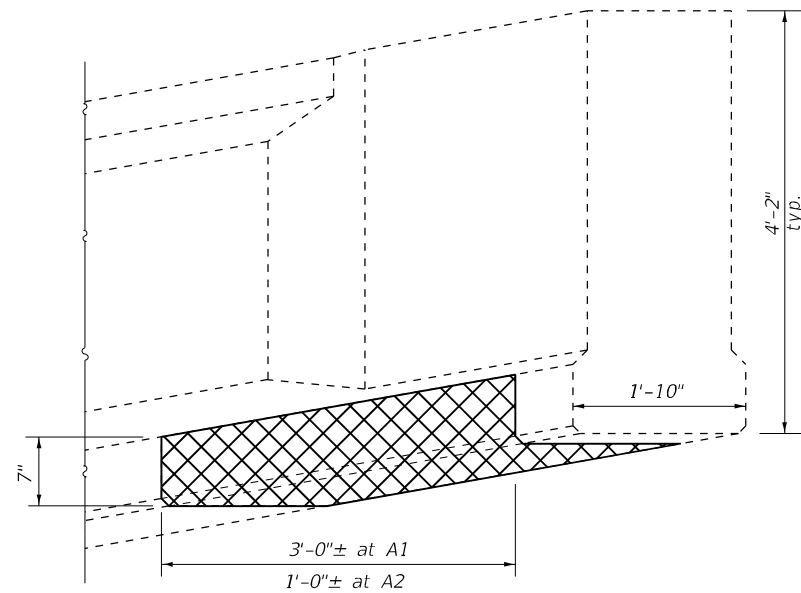
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**BEAM REPAIR DETAILS**  
**STRUCTURE NO. 010-0033**  
SHEET 12 OF 25 SHEETS

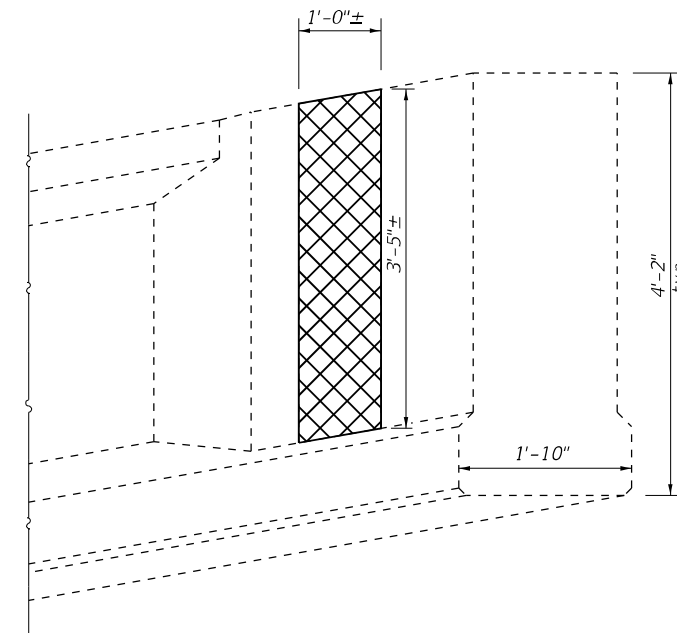
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74	(10-6)BDR	CHAMPAIGN	51	34
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

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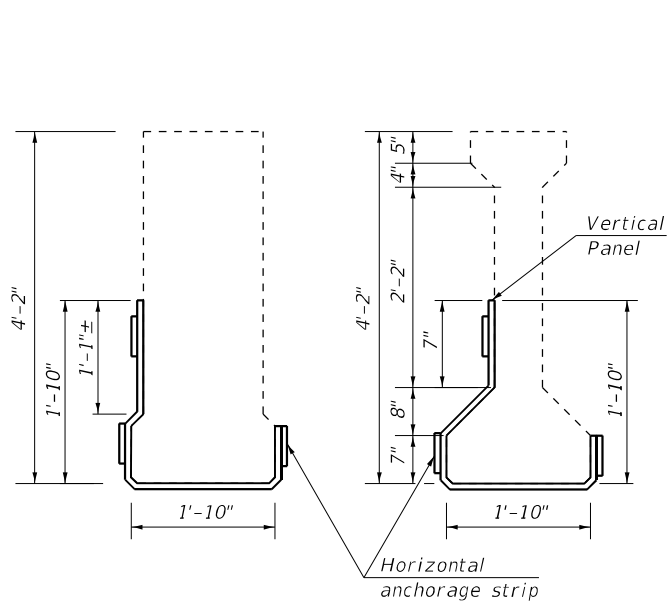


**DAMAGE AT BEAM END - A1 & A2**  
 1959 Beams

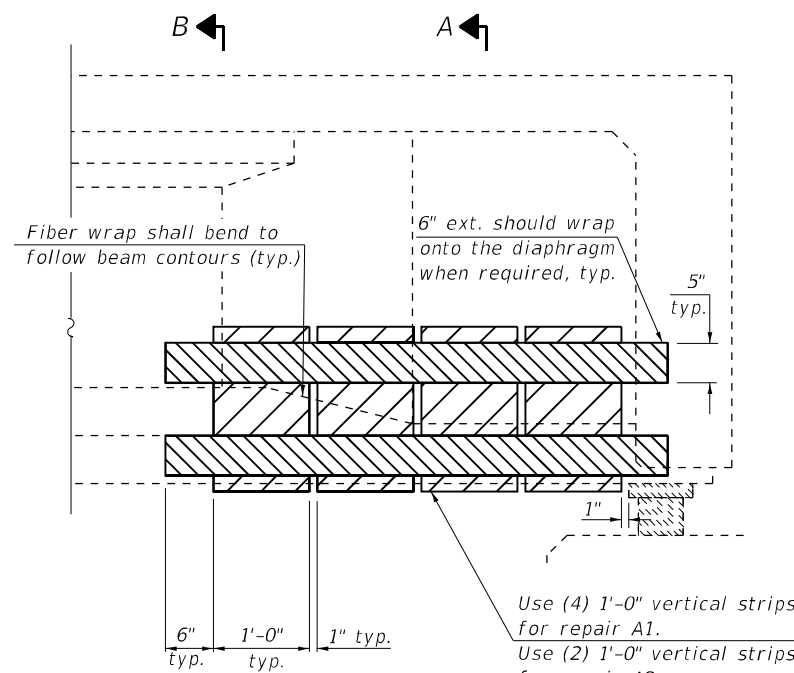
Note:  
 Vertical FRP panels may be trimmed to fit around diaphragms. The minimum width of the trimmed legs must be 5". The FRP panel may terminate at the base of the diaphragm if the minimum width cannot be met. The horizontal anchorage strips must wrap 6" onto the diaphragm face if the strip is broken due to the diaphragm location.



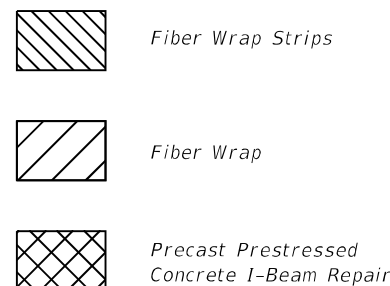
**DAMAGE AT BEAM END - B**  
 1959 Beams



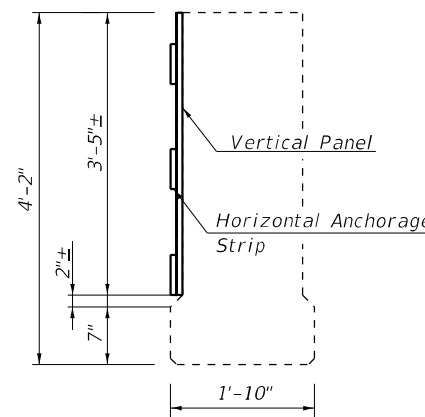
**SECTION A-A**      **SECTION B-B**



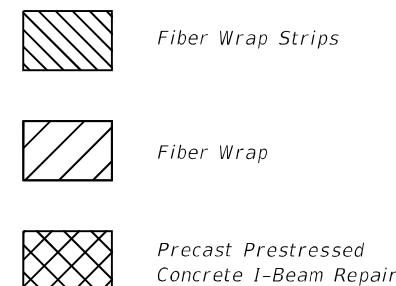
**BEAM END ELEVATION  
 REPAIR A1 & A2**  
 (1959 BEAMS,  
 3 LOCATIONS-A1  
 1 LOCATION-A2)



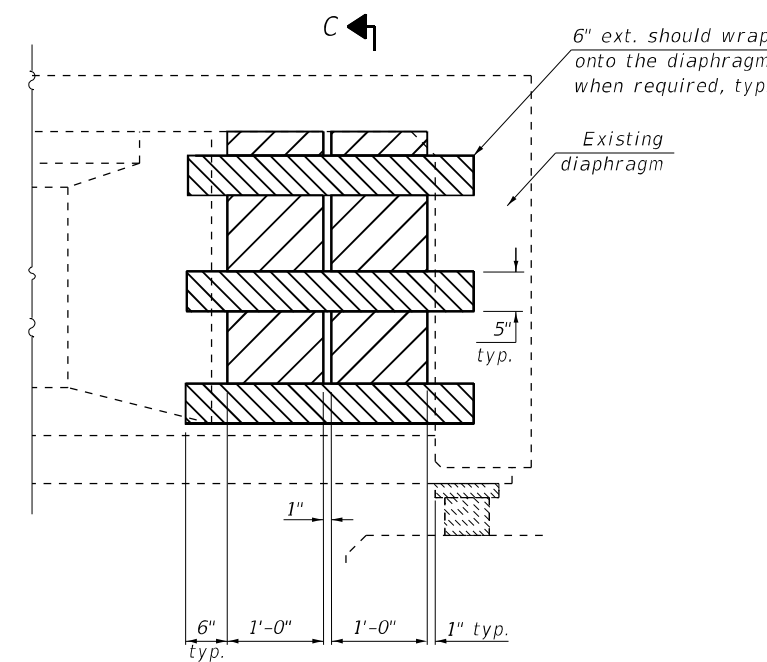
Note:  
 Wrap Horizontal FRP strips onto diaphragm.  
 Wrap Vertical FRP strip around bottom of beam.  
 Elastomeric bearing shown. Similar at fixed bearings.



**SECTION C-C**



Note:  
 Wrap Horizontal FRP strips onto diaphragm.



**BEAM END ELEVATION  
 REPAIR B**  
 (1959 BEAMS, 1 LOCATION)

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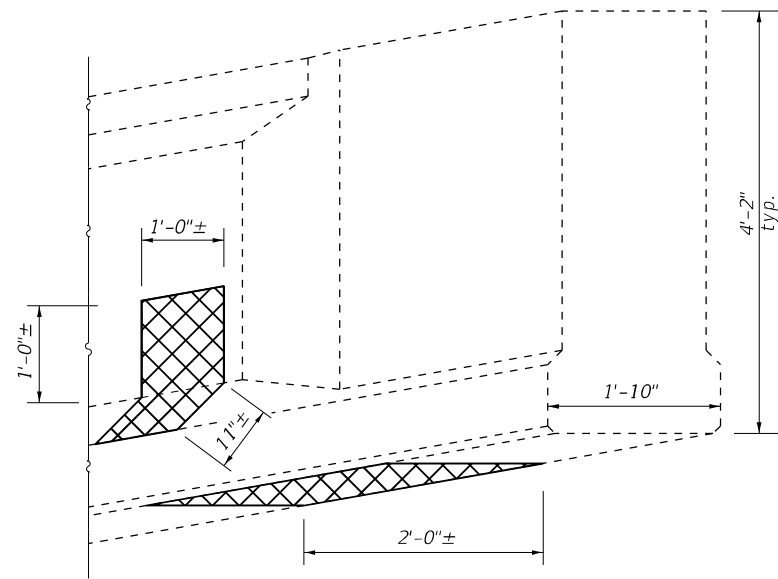
BEAM REPAIR DETAILS  
 STRUCTURE NO. 010-0033

SHEET 13 OF 25 SHEETS

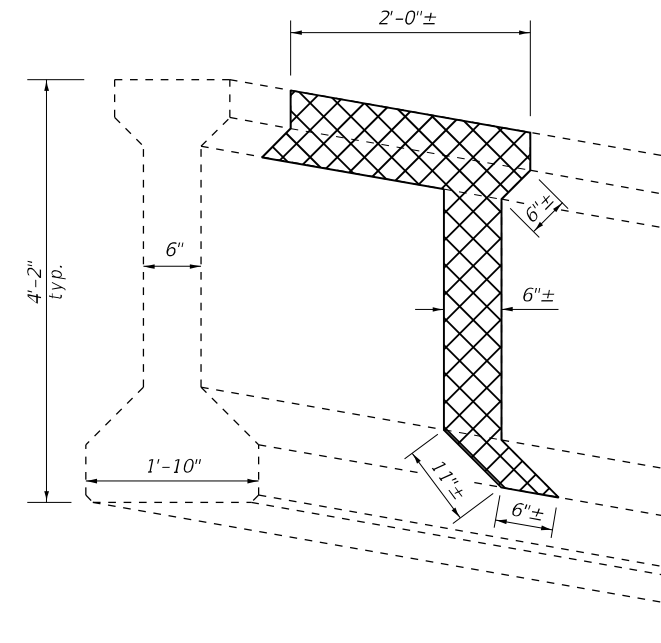
F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	35
CONTRACT NO. 70D69				

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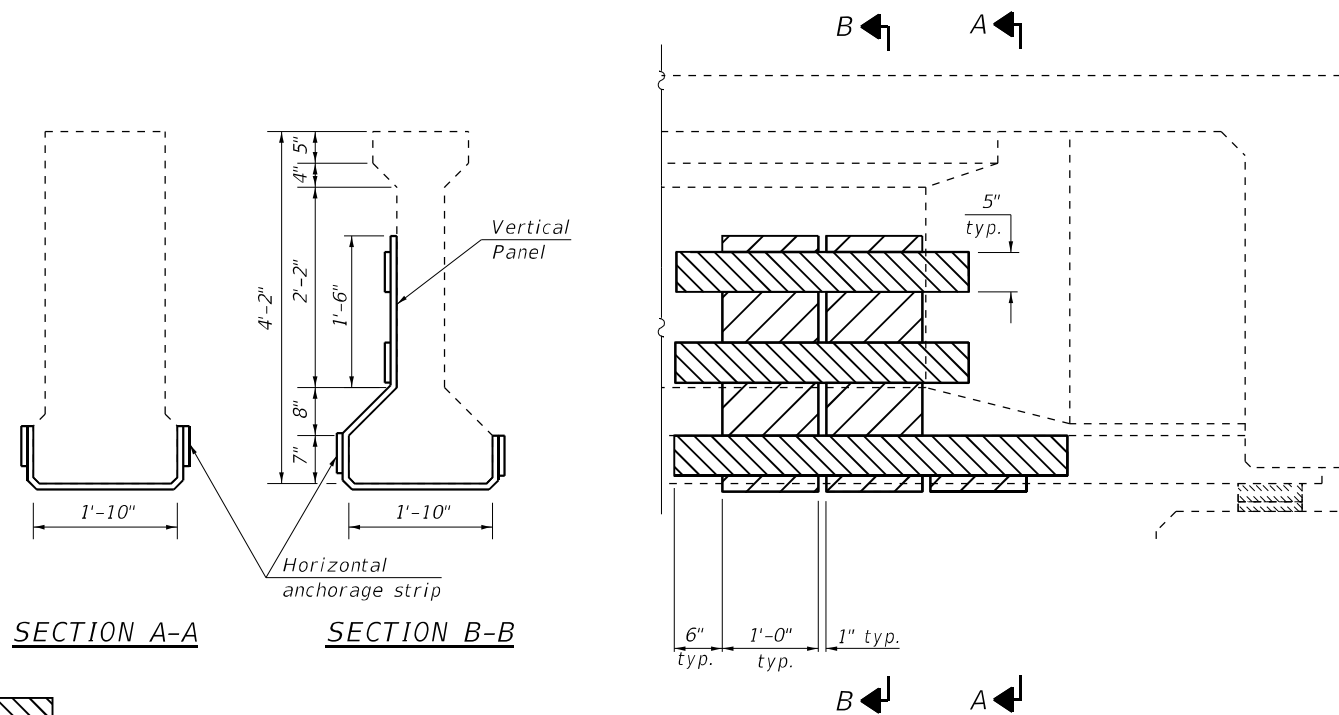


**DAMAGE AT BEAM END - C**  
 1959 Beams

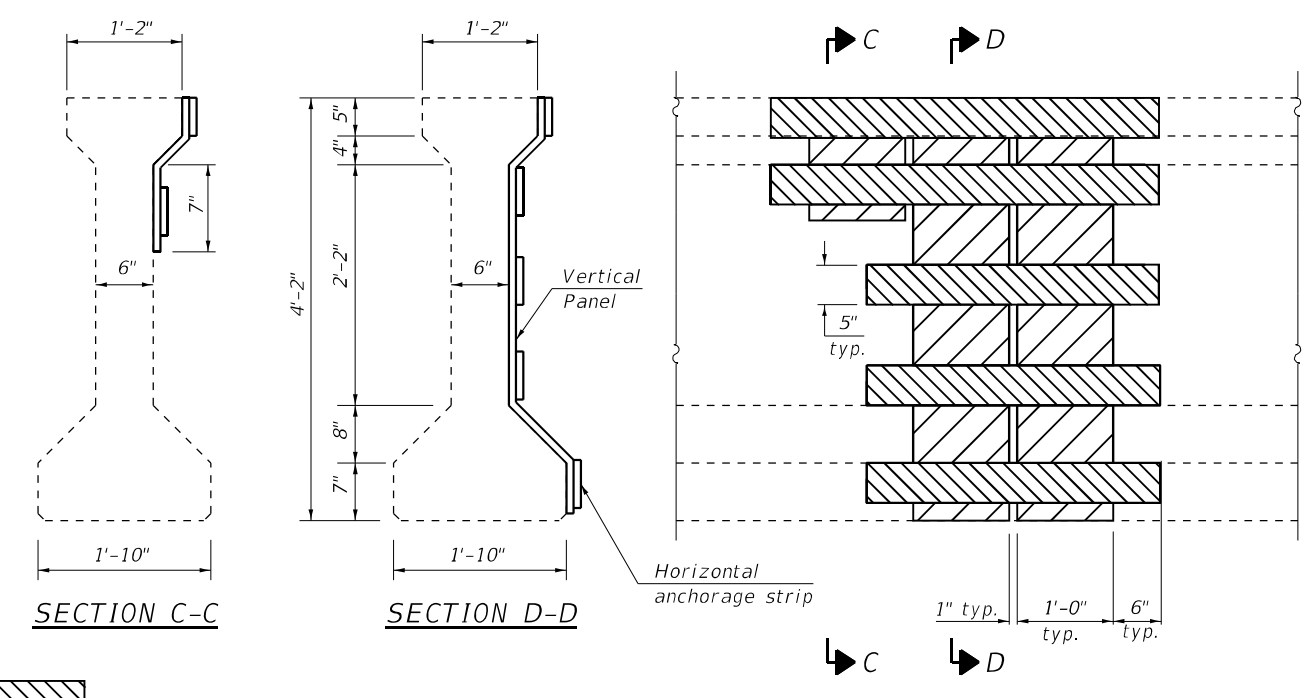


**DAMAGE AT MID-BEAM - D**  
 1959 Beams

Note:  
 Vertical FRP panels may be trimmed to fit around diaphragms. The minimum width of the trimmed legs must be 5". The FRP panel may terminate at the base of the diaphragm if the minimum width cannot be met. The horizontal anchorage strips must wrap 6" onto the diaphragm face if the strip is broken due to the diaphragm location.



**BEAM END ELEVATION REPAIR C**  
 (1959 BEAMS, 1 LOCATION)



**MID-BEAM ELEVATION REPAIR D**  
 (1959 BEAMS, 1 LOCATION)

- Fiber Wrap Strips
- Fiber Wrap
- Precast Prestressed Concrete I-Beam Repair

Note:  
 FRP strips to follow beam contours.  
 Wrap Vertical FRP strip around bottom of beam.

- Fiber Wrap Strips
- Fiber Wrap
- Precast Prestressed Concrete I-Beam Repair

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BEAM REPAIR DETAILS  
 STRUCTURE NO. 010-0033

SHEET 14 OF 25 SHEETS

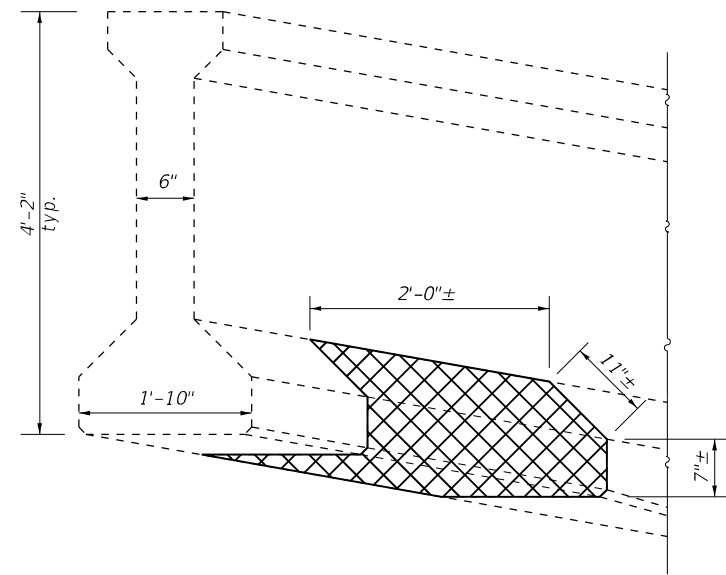
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74	(10-6)BDR	CHAMPAIGN	51	36
CONTRACT NO. 70D69				

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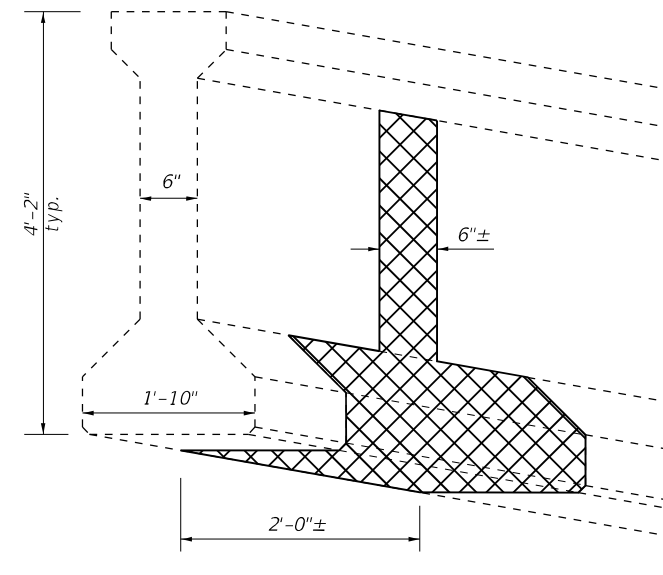
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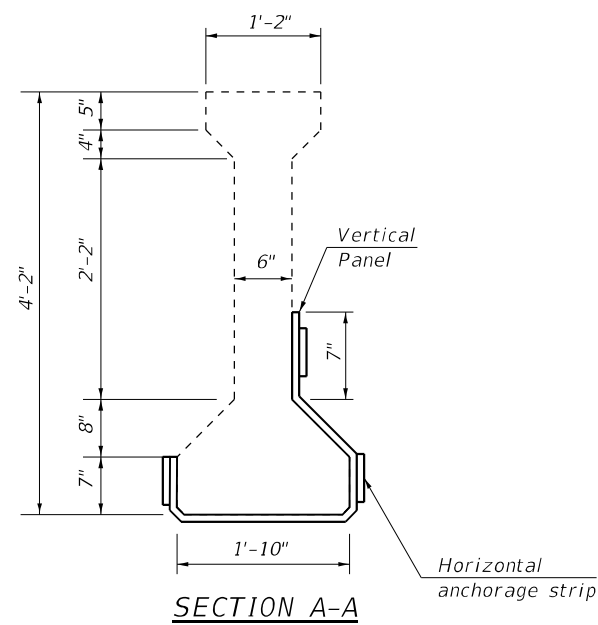


**DAMAGE AT MID-BEAM - E**  
 1959 Beams

Note:  
 Vertical FRP panels may be trimmed to fit around diaphragms. The minimum width of the trimmed legs must be 5". The FRP panel may terminate at the base of the diaphragm if the minimum width cannot be met. The horizontal anchorage strips must wrap 6" onto the diaphragm face if the strip is broken due to the diaphragm location.



**DAMAGE AT MID-BEAM - F**  
 1959 Beams

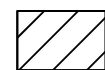


**SECTION A-A**

Horizontal anchorage strip



Fiber Wrap Strips

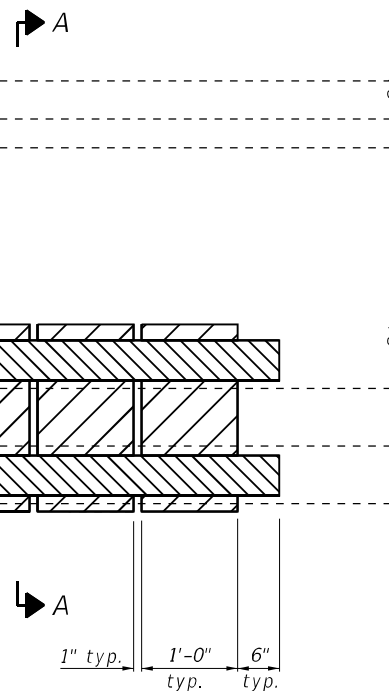


Fiber Wrap

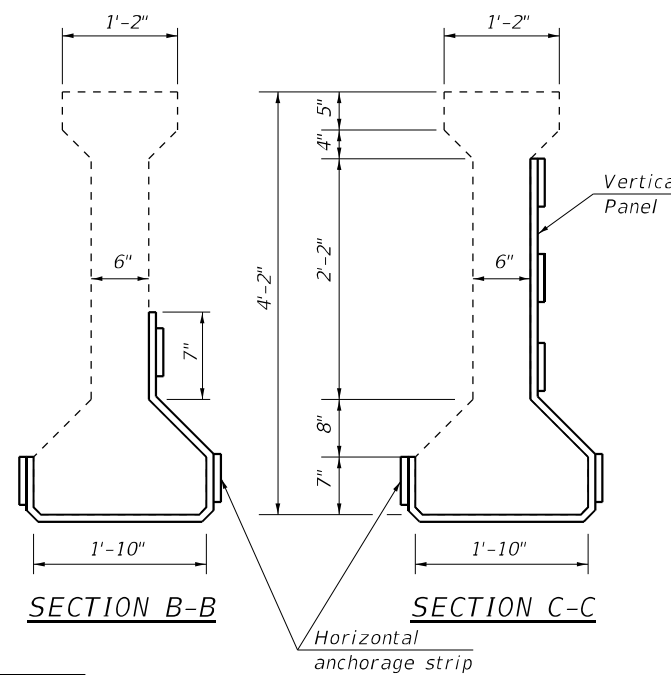


Precast Prestressed Concrete I-Beam Repair

Note:  
 Wrap Vertical FRP strip around bottom of beam.



**MID-BEAM ELEVATION REPAIR E**  
 (1959 BEAMS, 1 LOCATION)



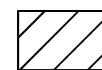
**SECTION B-B**

**SECTION C-C**

Horizontal anchorage strip



Fiber Wrap Strips

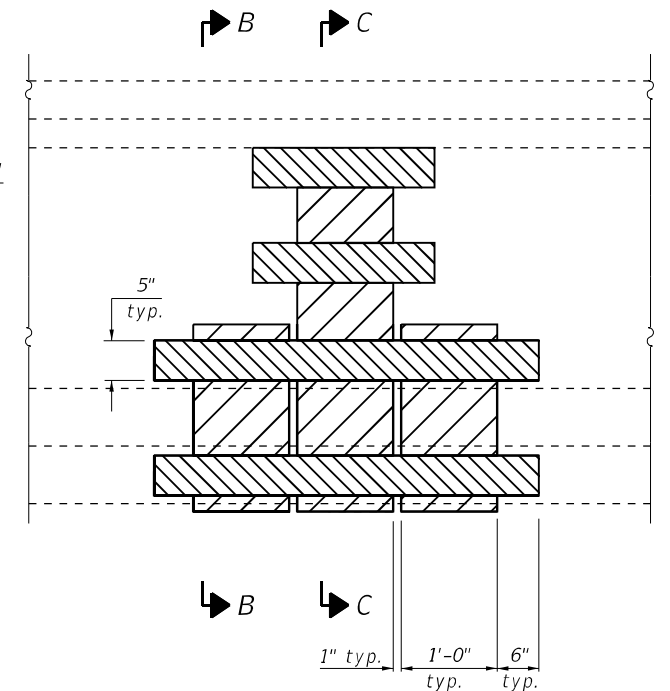


Fiber Wrap



Precast Prestressed Concrete I-Beam Repair

Note:  
 Wrap Vertical FRP strip around bottom of beam.



**MID-BEAM ELEVATION REPAIR F**  
 (1959 BEAMS, 2 LOCATIONS)

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BEAM REPAIR DETAILS  
 STRUCTURE NO. 010-0033

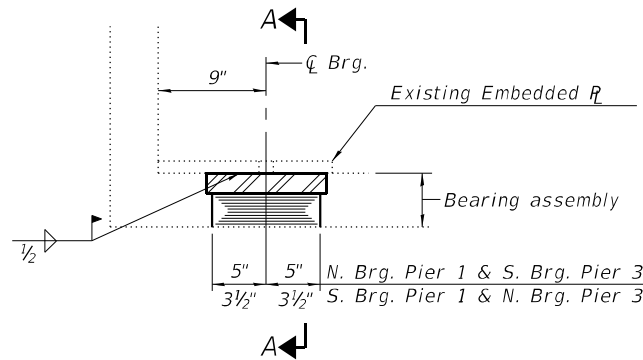
SHEET 15 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	37
CONTRACT NO. 70D69				

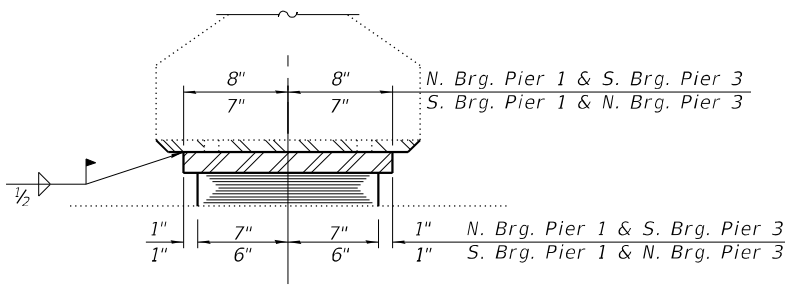
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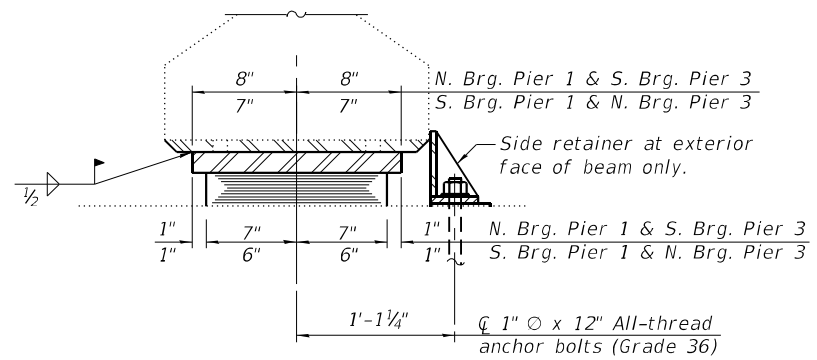
**ELEVATION AT PIER**



**SECTION A-A**

(Beams 1-8)

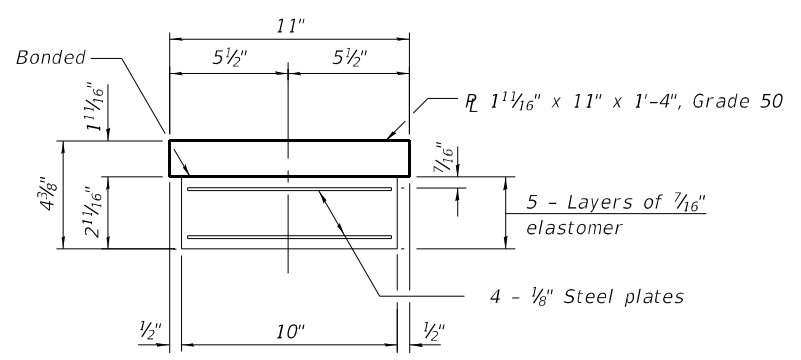
**TYPE I ELASTOMERIC EXP. BRG.**



**SECTION A-A**

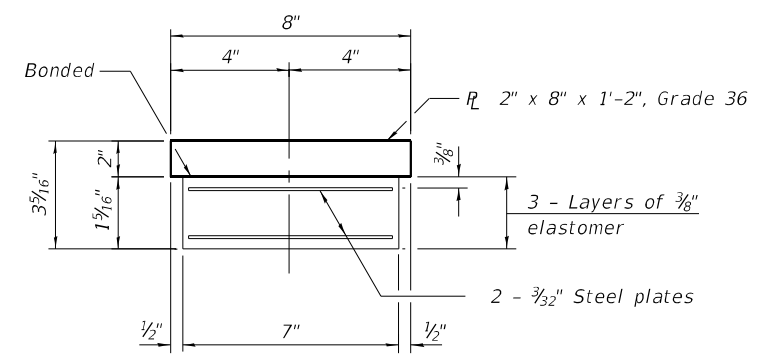
(Beams 1A & 8A)

1" x 1 1/4"  $\phi$  1"  $\times$  12" All-thread anchor bolts (Grade 36) with 2 1/4" x 2 1/4" x 5/16" R washer under nut.



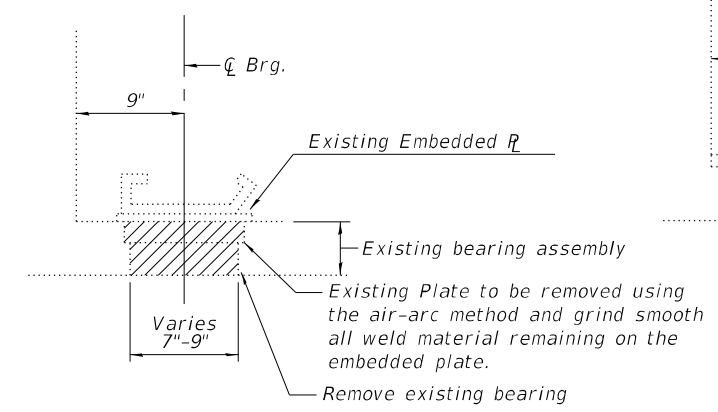
**BEARING ASSEMBLY**

(N. Brg. Pier 1 & S. Brg. Pier 3)



**BEARING ASSEMBLY**

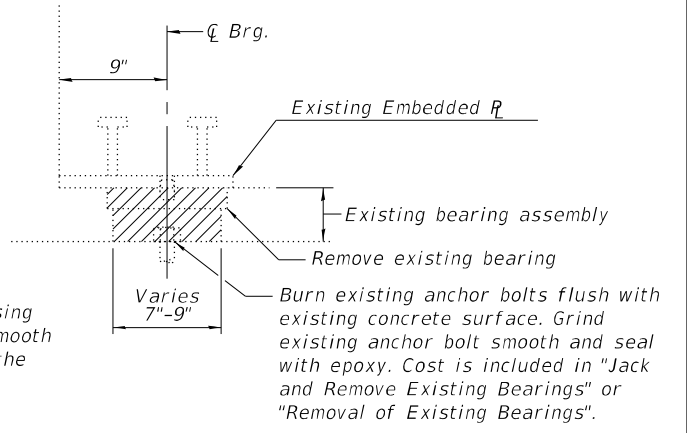
(S. Brg. Pier 1 & N. Brg. Pier 3)



**EXISTING BEARING REMOVAL DETAIL**

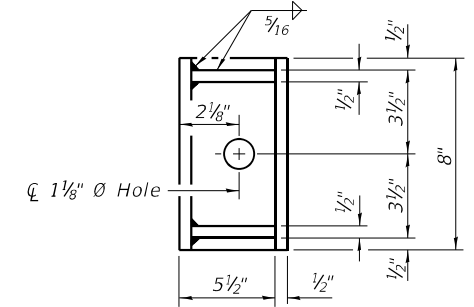
(Beams 1-8)

Extreme care shall be used while removing the existing bearings to ensure that existing beam embedded plate is not damaged.



**EXISTING BEARING REMOVAL DETAIL**

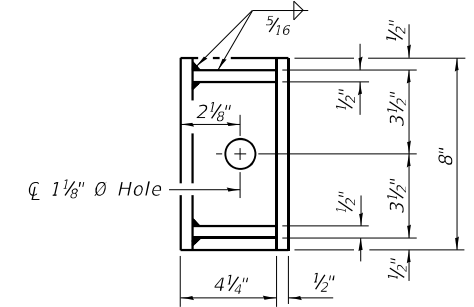
(Beams 1A & 8A)



**SIDE RETAINER**

(N. Brg. Pier 1 & S. Brg. Pier 3)

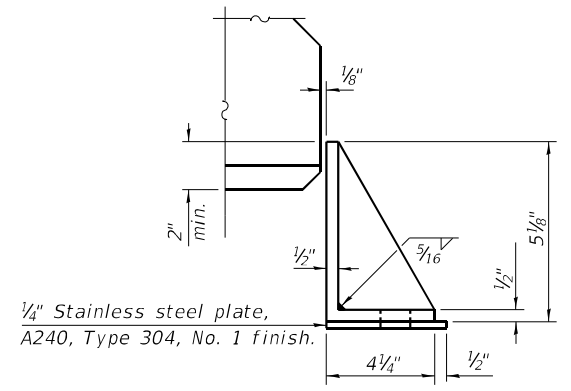
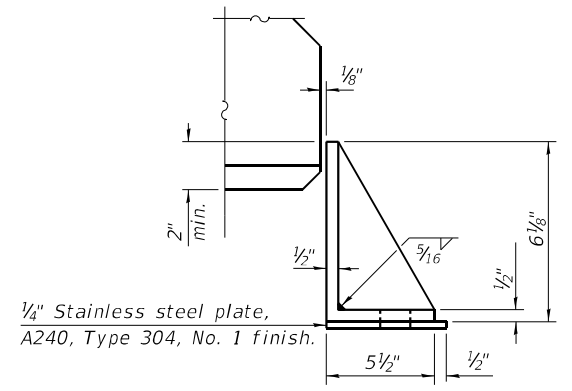
Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



**SIDE RETAINER**

(S. Brg. Pier 1 & N. Brg. Pier 3)

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



**BEAM REACTIONS**

	(1)	(2)
R <sub>P</sub> (k)	66.1	39.4
R <sub>L</sub> (k)	32.3	27.6
Imp. (k)	9.7	7.5
R (Total) (k)	108.2	74.5

(1) N. Brg. Pier 1 & S. Brg. Pier 3  
(2) S. Brg. Pier 1 & N. Brg. Pier 3

**BILL OF MATERIAL**

Item	Unit	Total
Elastomeric Bearing Assembly, Type 1	Each	40
Jack & Remove Existing Bearings	Each	26
Removal of Existing Bearings	Each	14
Anchor Bolts 1"	Each	8

MODEL: Default  
FILE NAME: I:\jobs\2019\1011.1901.PTB\_193-025\_D5\_Various Phase - I\Work Order 5\Drawings\CADD\_Sheets\Structure\_0100033\0100033-70D69-016 - BEARING DETAILS.dgn  
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**BEARING DETAILS  
STRUCTURE NO. 010-0033**

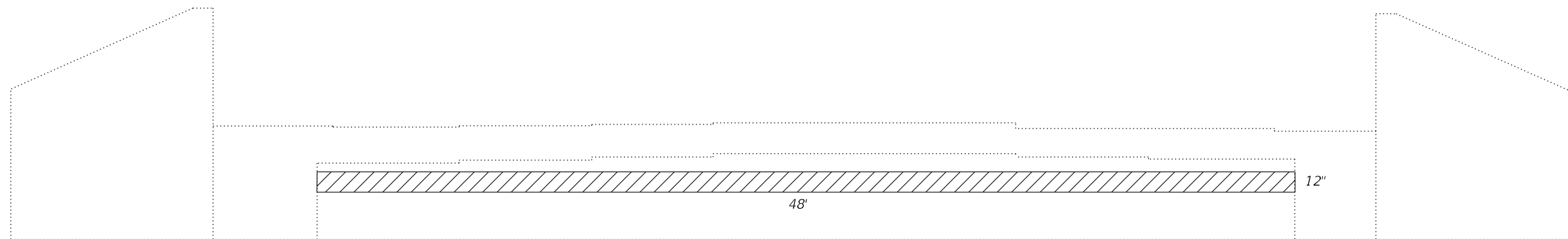
SHEET 16 OF 25 SHEETS

F.A. RTE. =	SECTION =	COUNTY =	TOTAL SHEETS =	SHEET NO. =
74	(10-6)BDR	CHAMPAIGN	51	38
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

MODEL: ABUTMENT REPAIR  
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


NORTH ABUTMENT ELEVATION  
 (Looking East)



SOUTH ABUTMENT ELEVATION  
 (Looking West)

LEGEND

 Structural Repair of Concrete Depth <=5"

Notes:

Repair areas and locations are estimated.  
 The Engineer shall show actual locations  
 of the repairs on as-built plans.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete Depth <=5"	Sq. Ft.	48.0

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**ABUTMENT REPAIRS  
 STRUCTURE NO. 010-0033**

SHEET 17 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	39
CONTRACT NO. 70D69				

ILLINOIS FED. AID PROJECT

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	518.3
Concrete Sealer	Sq. Ft.	518.3
Temporary Shoring and Cribbing	Each	5

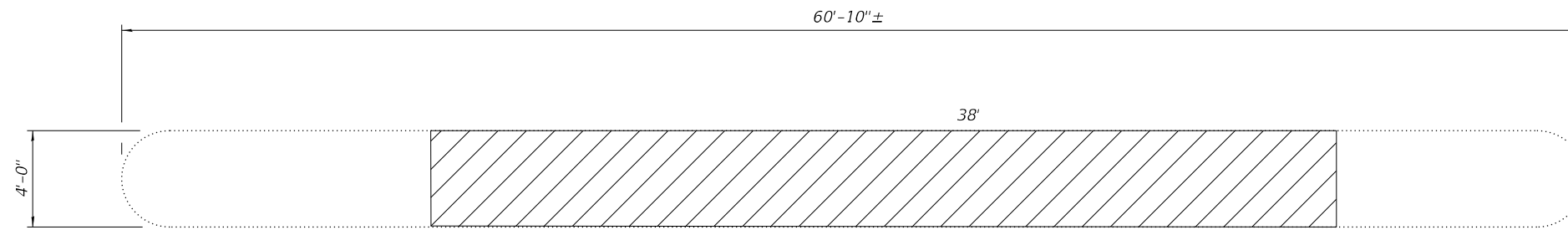
**Notes:**

1. Repair areas and locations are estimated. The Engineer shall show actual locations of the repairs on as-built plans.
2. See sheet 16 of 25 for beam reactions for temporary shoring and cribbing design.

**LEGEND**

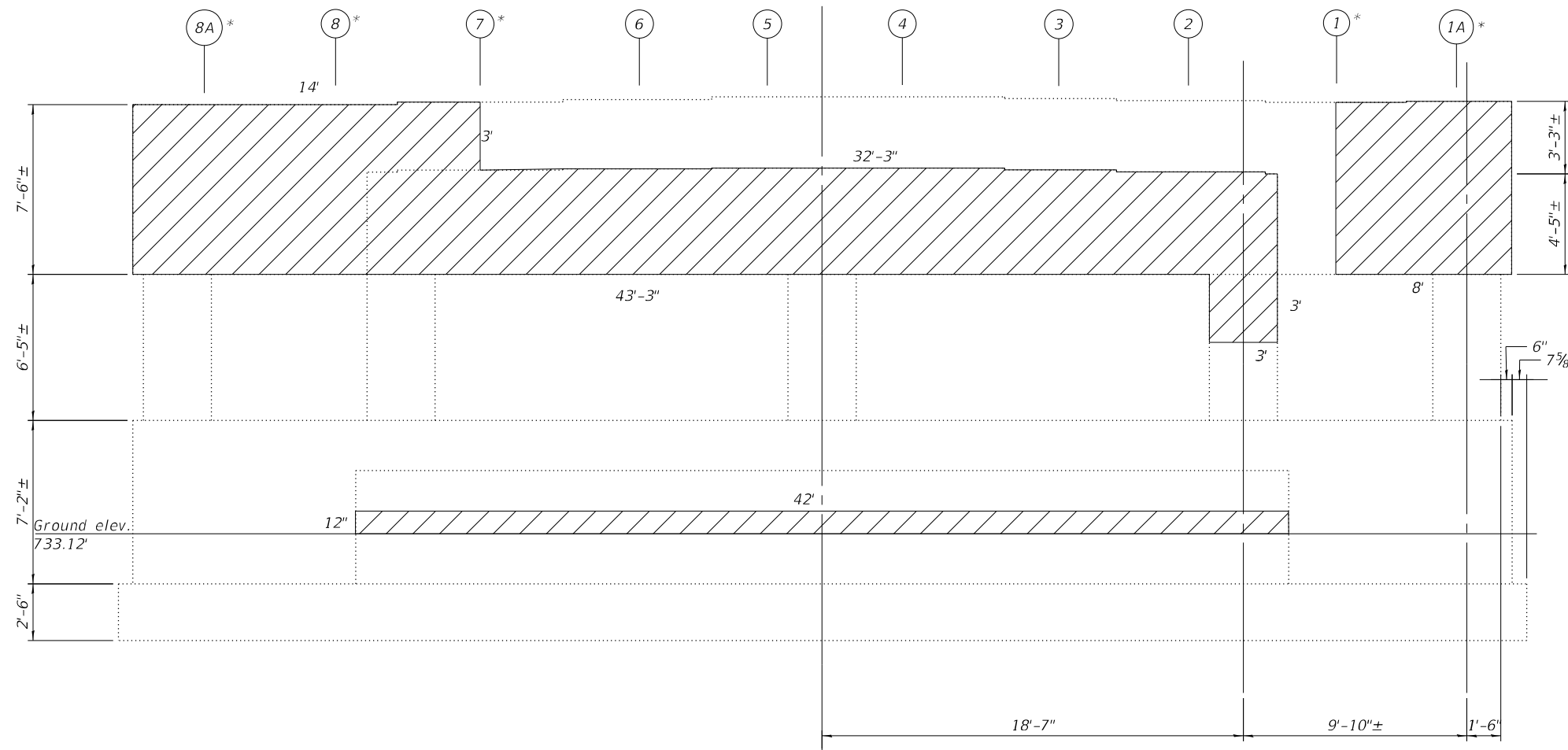


Structural Repair of Concrete Depth <=5"

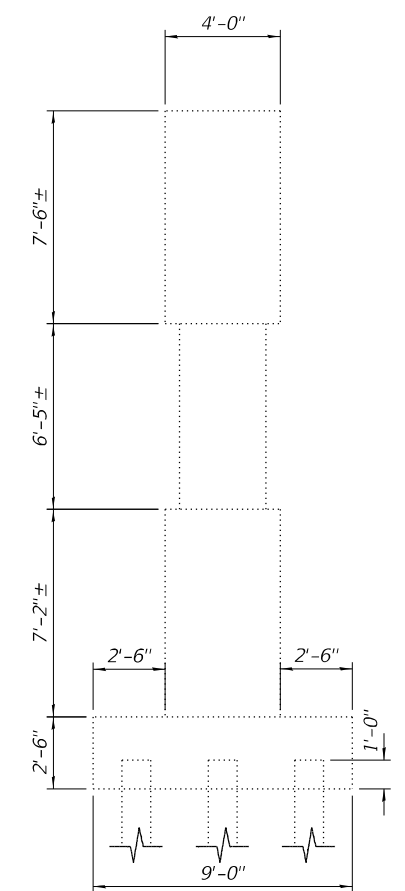


**BOTTOM OF CAP PLAN**  
(See next sheet for top of cap.)

\*Temporary Shoring and Cribbing, 5 locations



**NORTH ELEVATION**



**WEST END VIEW**

(Sheet 1 of 2)

MODEL: Default  
FILE NAME: I:\jobs\2019\101.1901.PTB\_193-025.D5\_Various Phase - I\Work Order 5\Drawings\CADD\_Sheets\Structure\_0100033\0100033-70D69-018 - PIER 1 NW.dgn  
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**PIER REPAIR DETAILS - PIER 1  
STRUCTURE NO. 010-0033**

SHEET 18 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	40
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				



**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	202.7
Concrete Sealer	Sq. Ft.	202.7

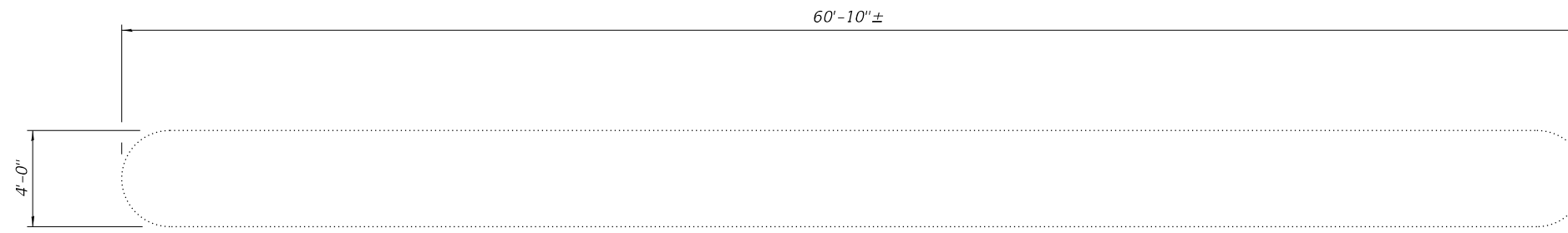
**Notes:**

Repair areas and locations are estimated.  
The Engineer shall show actual locations of the repairs on as-built plans.

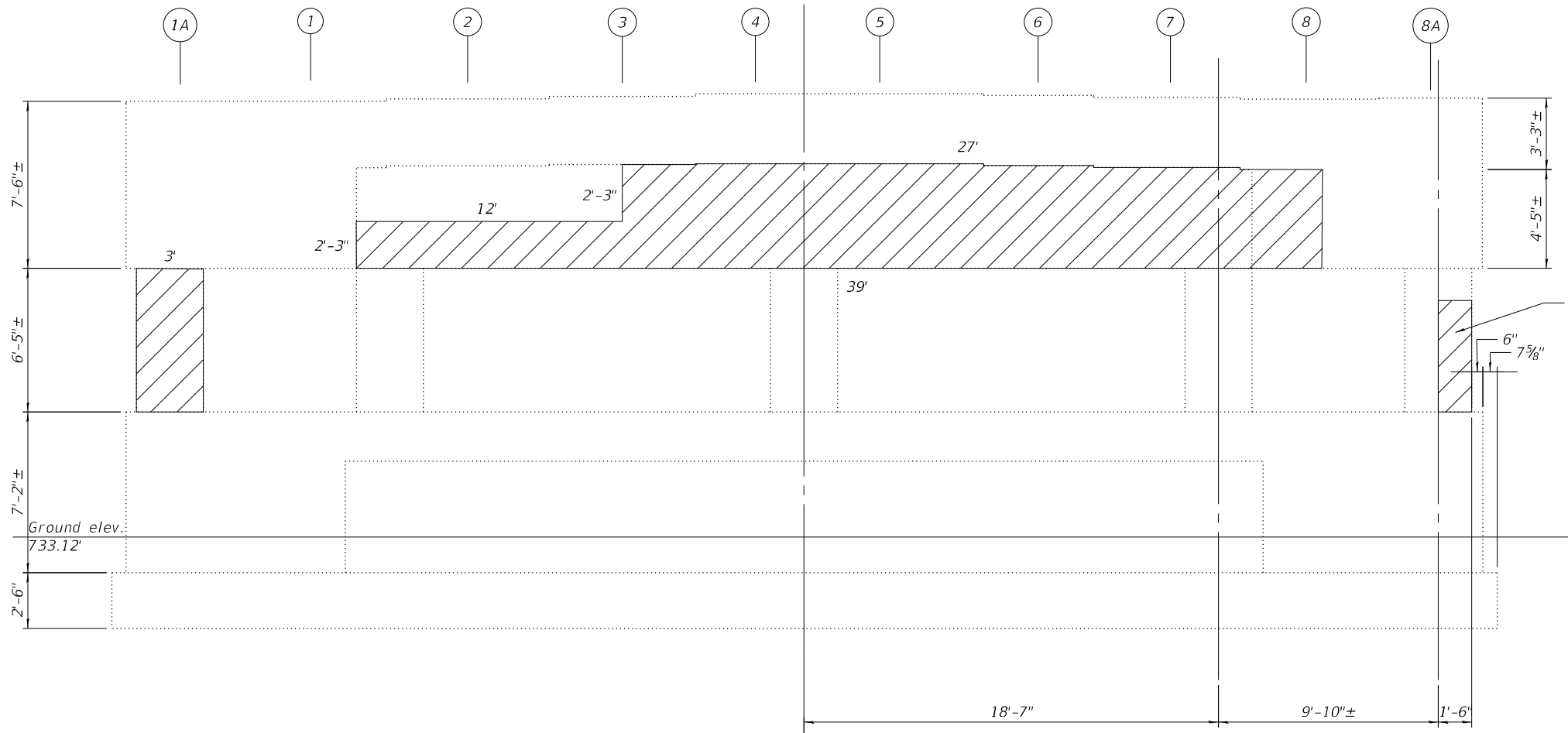
**LEGEND**



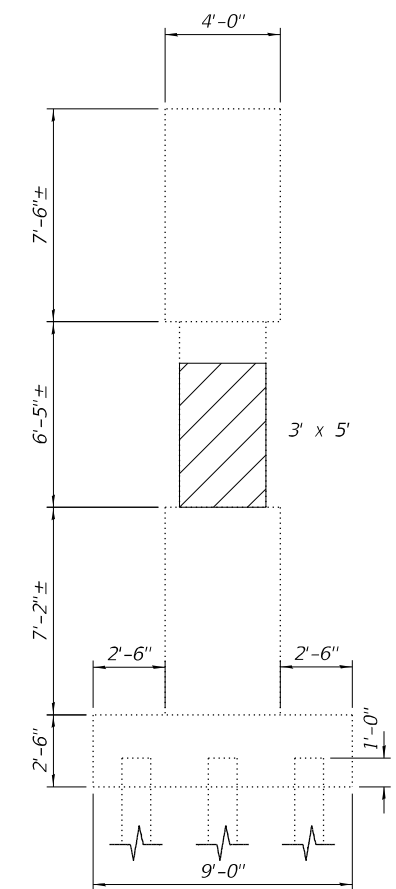
Structural Repair of Concrete Depth <=5"



**TOP PLAN**



**SOUTH ELEVATION**



**EAST END VIEW**

(Sheet 2 of 2)

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**PIER REPAIR DETAILS - PIER 1  
STRUCTURE NO. 010-0033**

SHEET 19 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	41
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	117.7
Concrete Sealer	Sq. Ft.	117.7
Temporary Shoring and Cribbing	Each	2

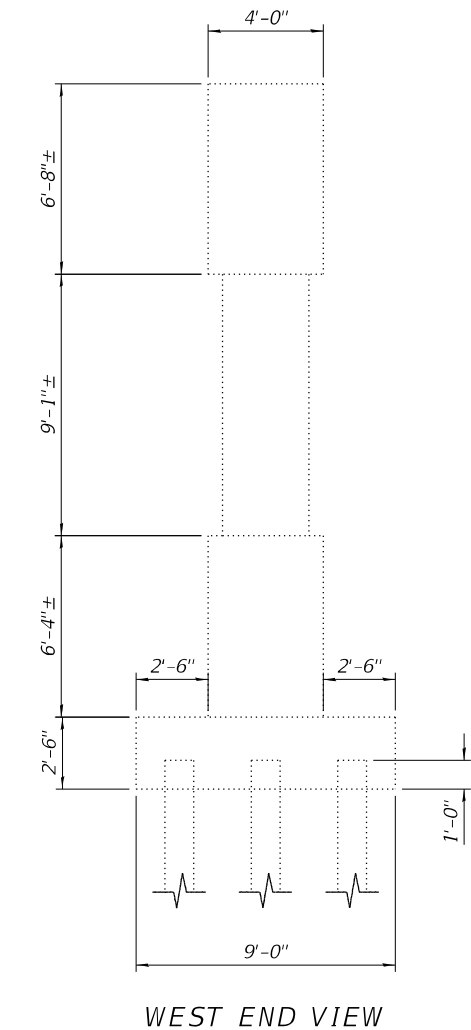
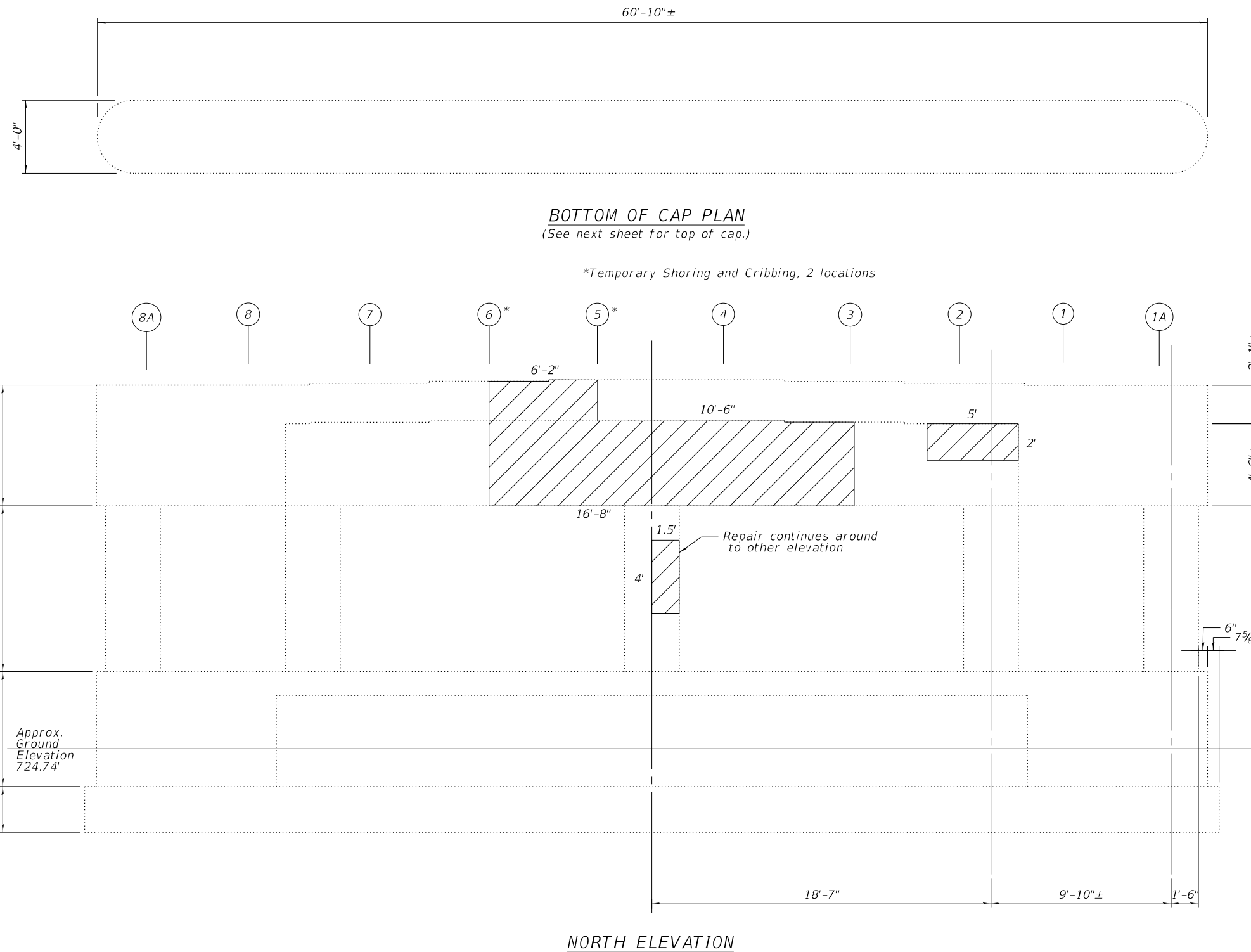
**Notes:**

1. Repair areas and locations are estimated. The Engineer shall show actual locations of the repairs on as-built plans.
2. See sheet 16 of 25 for beam reactions for temporary shoring and cribbing design.

**LEGEND**



Structural Repair of Concrete Depth <=5"



(Sheet 1 of 2)

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**PIER REPAIR DETAILS - PIER 2  
 STRUCTURE NO. 010-0033**

SHEET 20 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	42
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	71.1
Concrete Sealer	Sq. Ft.	71.1
Temporary Shoring and Cribbing	Each	3

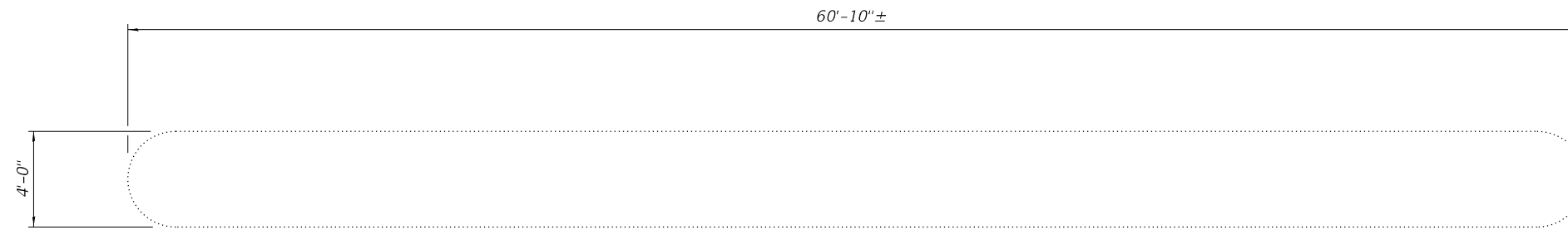
**Notes:**

1. Repair areas and locations are estimated. The Engineer shall show actual locations of the repairs on as-built plans.
2. See sheet 16 of 25 for beam reactions for temporary shoring and cribbing design.

**LEGEND**

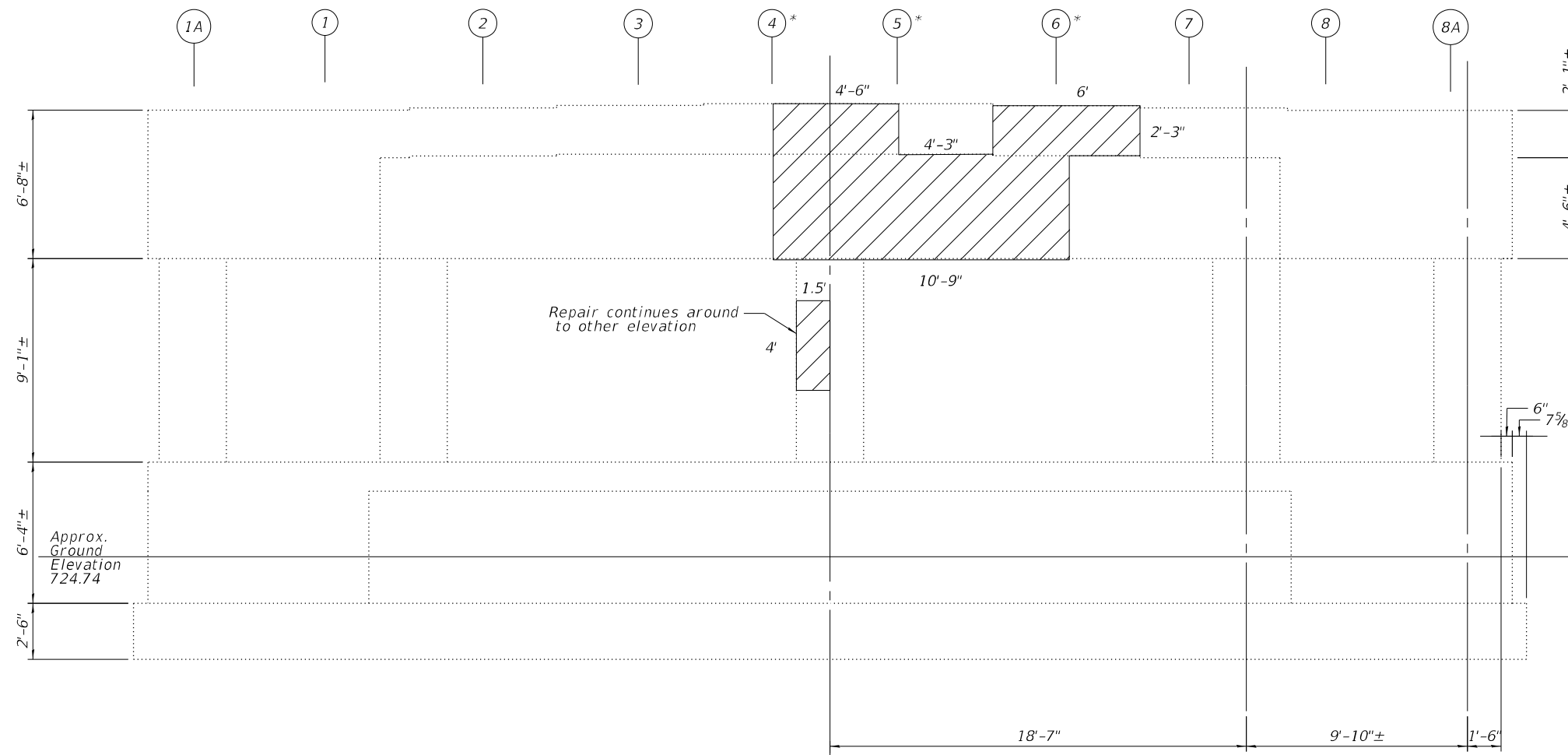


Structural Repair of Concrete Depth <=5"

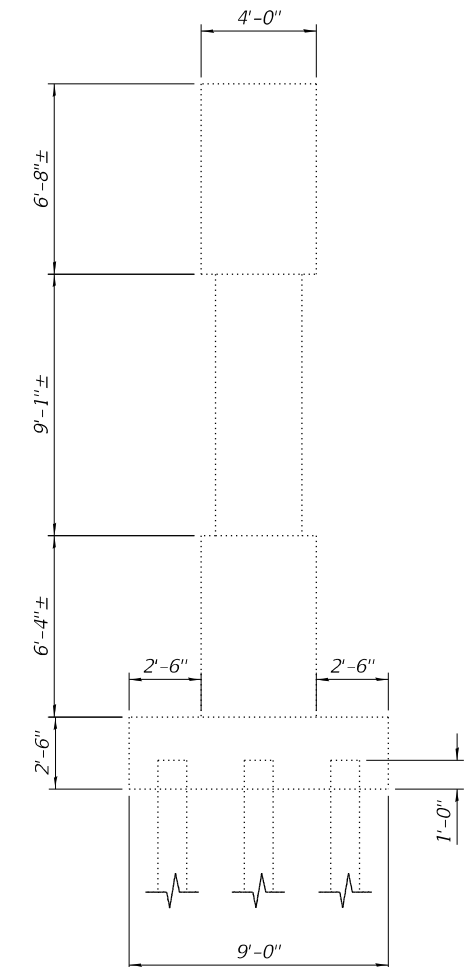


**TOP PLAN**

\* Temporary Shoring and Cribbing, 3 locations



**SOUTH ELEVATION**



**EAST END VIEW**

(Sheet 2 of 2)

MODEL: Default  
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**PIER REPAIR DETAILS - PIER 2  
 STRUCTURE NO. 010-0033**

SHEET 21 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	43
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	14.2
Concrete Sealer	Sq. Ft.	14.2
Fiber Wrap	Sq. Ft.	18.8
Acrylic Coating	Sq. Yd.	4.2

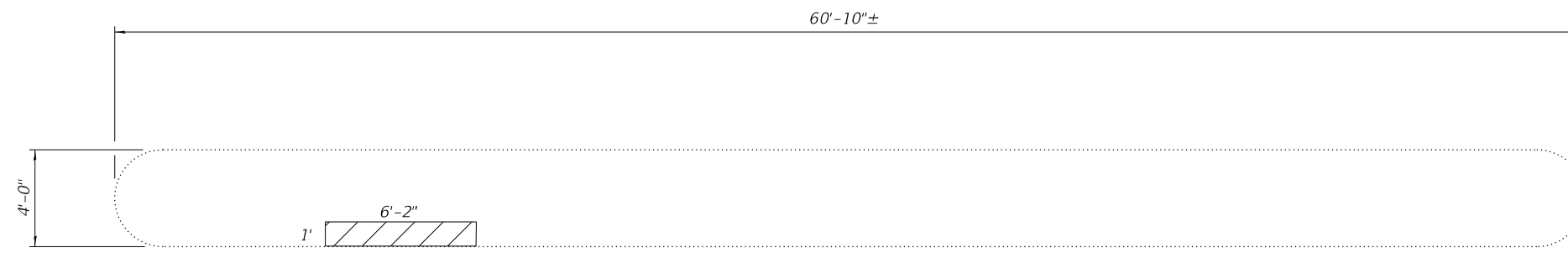
**Notes:**

Repair areas and locations are estimated.  
The Engineer shall show actual locations of the repairs on as-built plans.

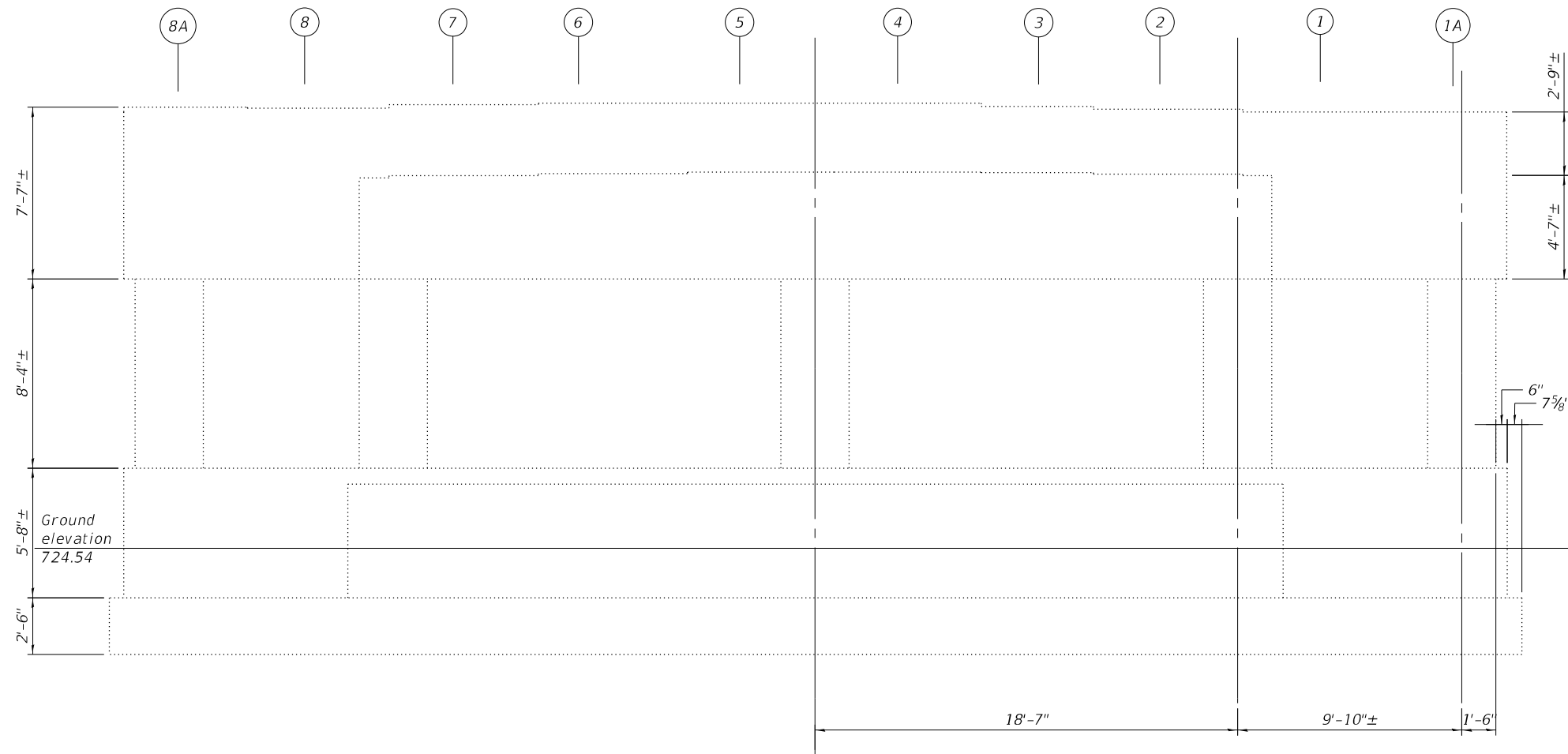
**LEGEND**



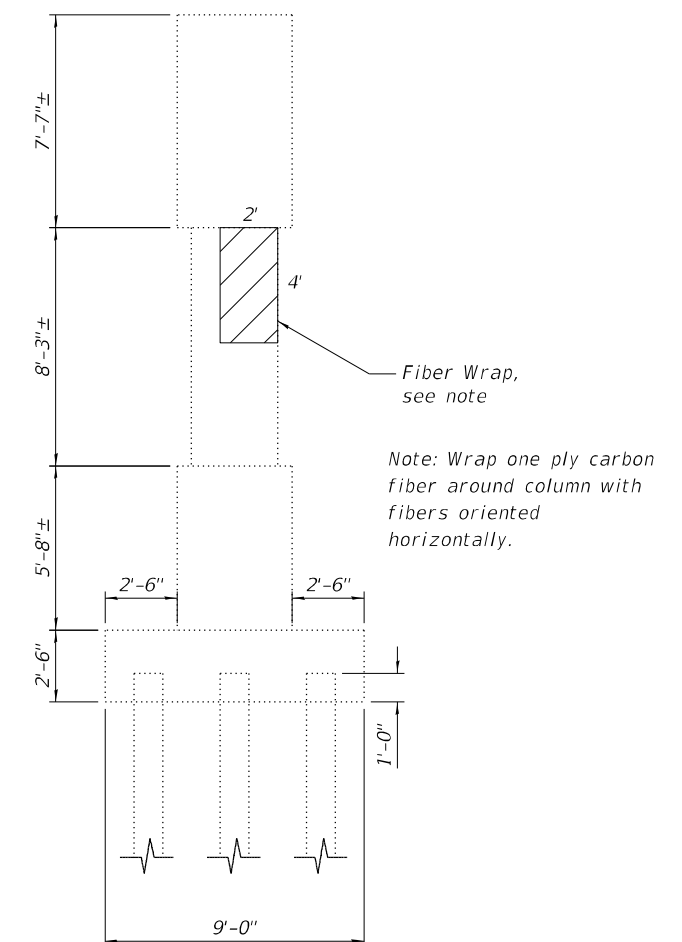
Structural Repair of Concrete Depth <=5"



**BOTTOM OF CAP PLAN**  
(See next sheet for top of cap.)



**NORTH ELEVATION**



**WEST END VIEW**

(Sheet 1 of 2)

MODEL: Default  
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**PIER REPAIR DETAILS - PIER 3  
STRUCTURE NO. 010-0033**

SHEET 22 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	44
CONTRACT NO. 70D69				
ILLINOIS		FED. AID PROJECT		

**BILL OF MATERIAL**

Item	Unit	Quantity
Structural Repair of Concrete Depth <=5"	Sq. Ft.	552.3
Concrete Sealer	Sq. Ft.	552.3
Fiber Wrap	Sq. Ft.	38.9
Temporary Shoring and Cribbing	Each	9
Acrylic Coating	Sq. Yd.	8.6

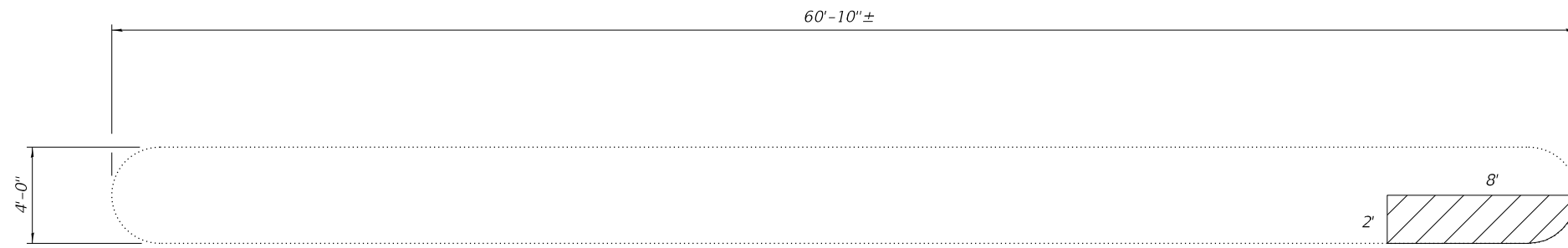
**Notes:**

1. Repair areas and locations are estimated. The Engineer shall show actual locations of the repairs on as-built plans.
2. See sheet 16 of 25 for beam reactions for temporary shoring and cribbing design.

**LEGEND**

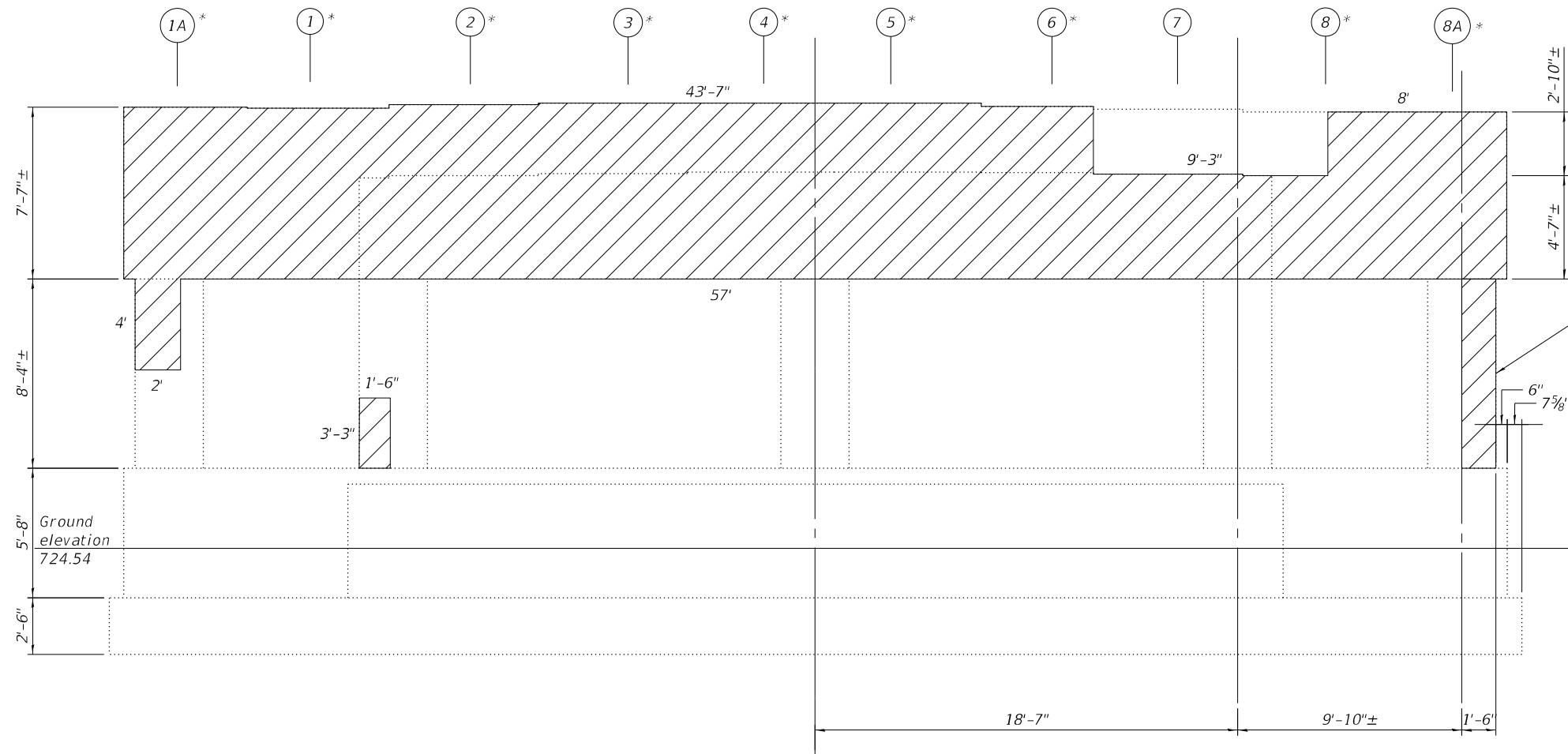


Structural Repair of Concrete Depth <=5"

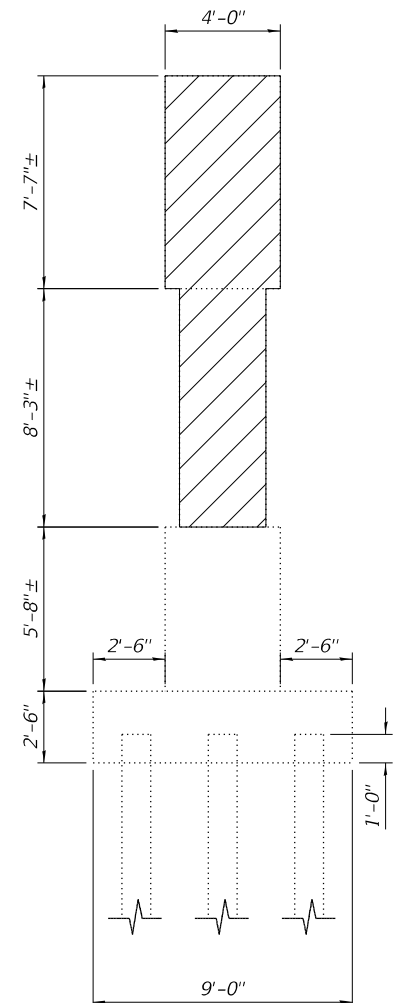


**TOP PLAN**

\*Temporary Shoring and Cribbing, 9 locations



**SOUTH ELEVATION**



**EAST END VIEW**

(Sheet 2 of 2)

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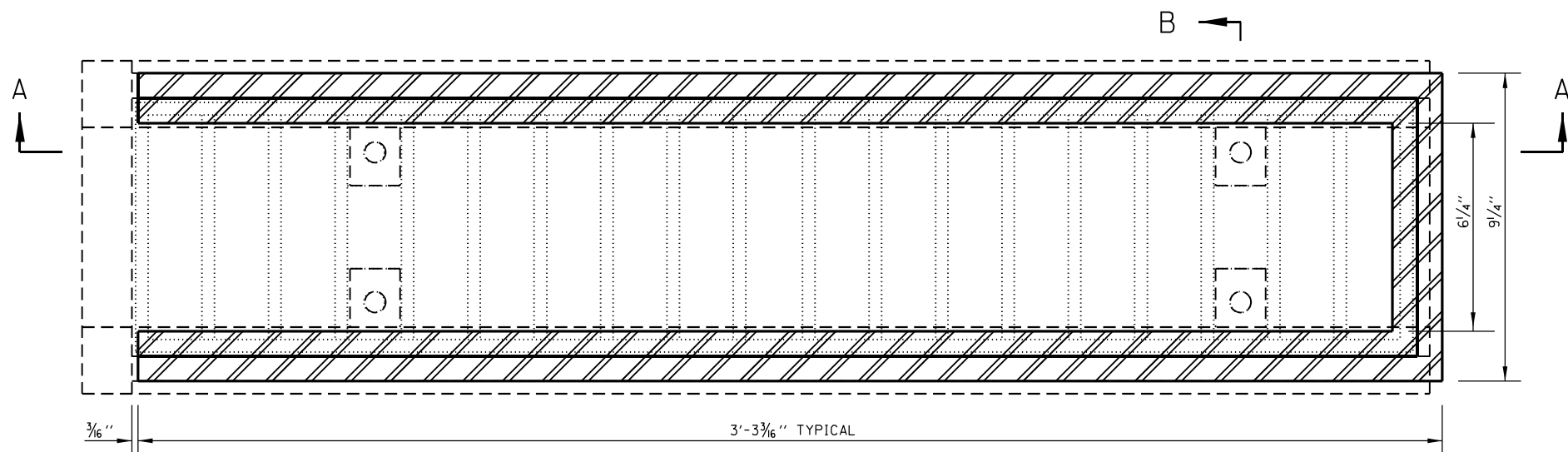
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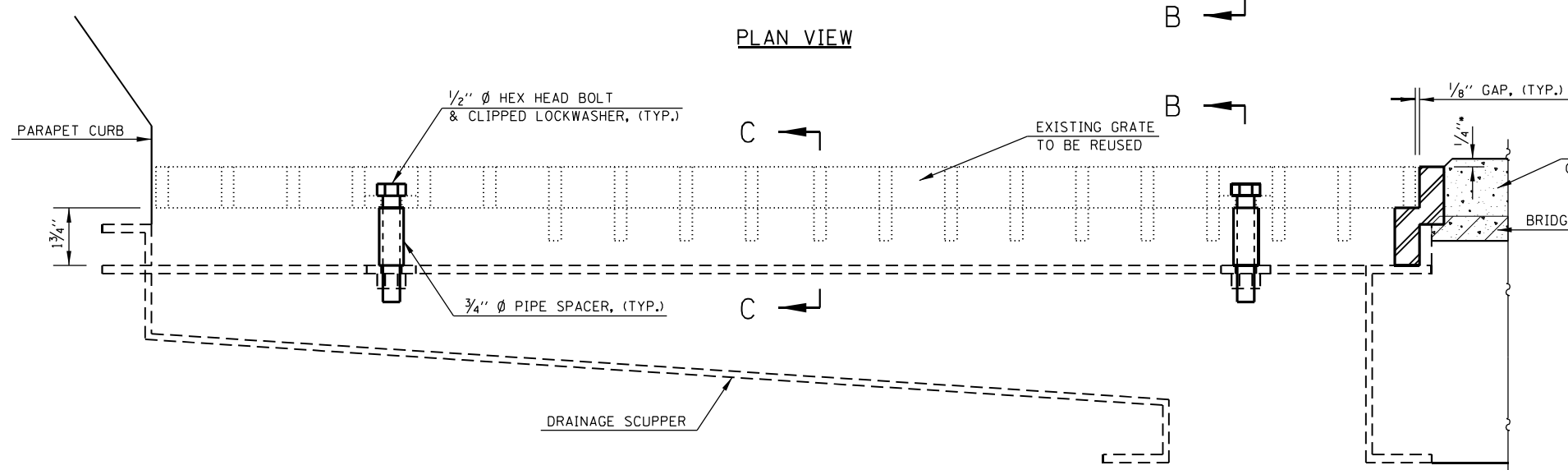
**PIER REPAIR DETAILS - PIER 3  
 STRUCTURE NO. 010-0033**

SHEET 23 OF 25 SHEETS

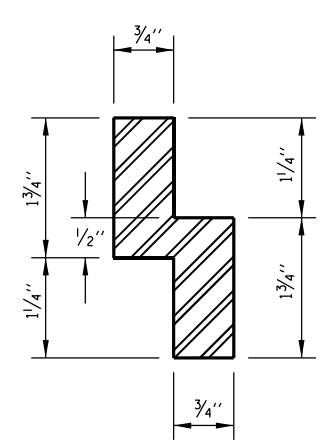
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74	(10-6)BDR	CHAMPAIGN	51	45
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				



PLAN VIEW

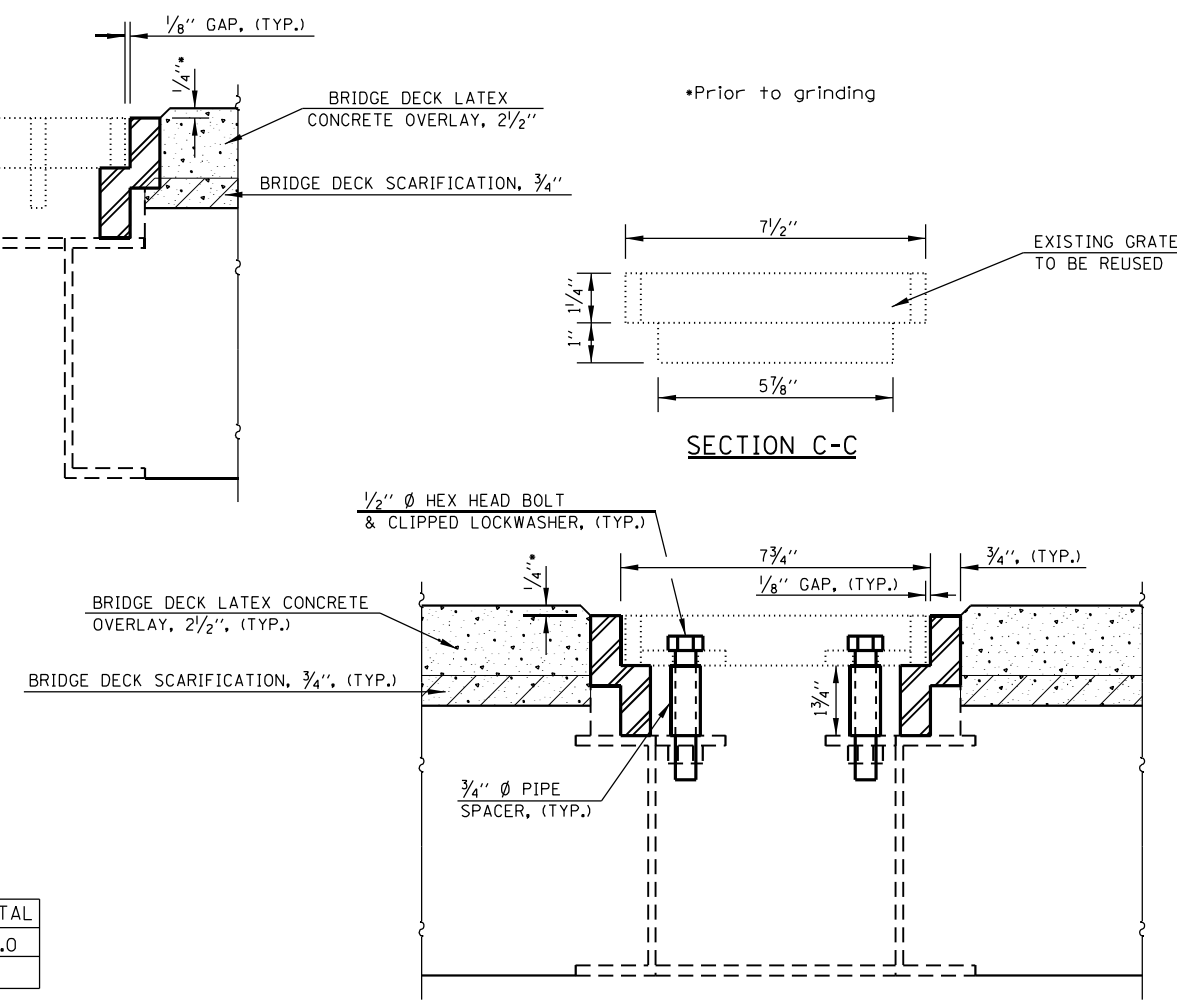


SECTION C-C



ADJUSTING SCUPPER RING

SECTION A-A



SECTION B-B

BILL OF MATERIALS

ITEM	UNIT	TOTAL
DRAINAGE SCUPPERS TO BE ADJUSTED	EACH	8.0

**NOTES:**

ALL STRUCTURAL STEEL SHALL BE AASHTO M270 GRADE 36. THE ADJUSTING SCUPPER RING AND 3/4" Ø PIPE SLEEVE SPACERS SHALL BE GALVANIZED.

BOLTS SHALL BE 1/2" Ø AASHTO M164 TYPE 1, MECHANICALLY GALVANIZED.

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 BASED AT THE UNIT PRICE BID FOR THE WORK.

SHOP PLANS FOR PROPOSED ADJUSTING SCUPPER RING SHALL BE SUBMITTED FOR APPROVAL PRIOR TO FABRICATION.

COST OF ALL LABOR AND MATERIALS NECESSARY TO REMOVE EXISTING GRATES, CLEAN EXISTING SCUPPERS, INSTALL STEEL PLATE FRAME EXTENSIONS, AND INSTALL GRATES IS INCLUDED IN THE COST PER UNIT EACH OF "DRAINAGE SCUPPERS TO BE ADJUSTED".

**LEGEND**



•Prior to grinding

MODEL: Default  
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3/17/2023 9:03:52 AM

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	CHECKED - SMJ	REVISED -

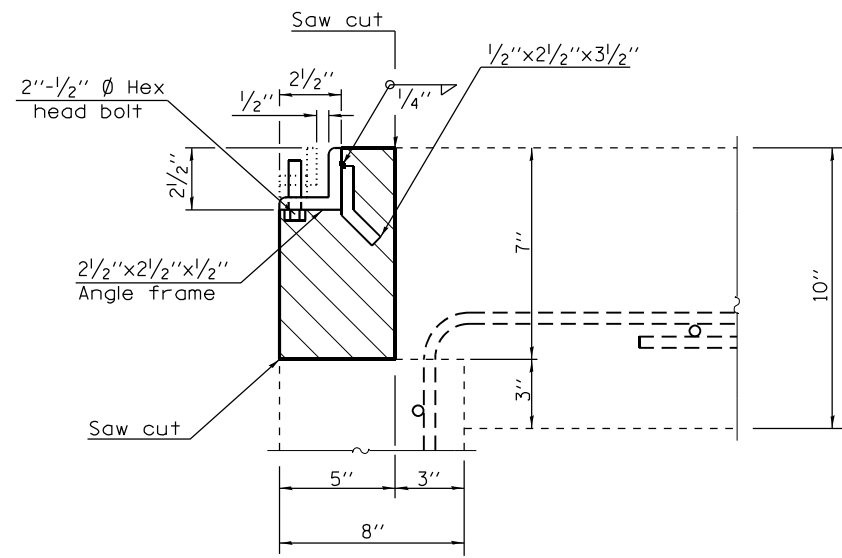
**STATE OF ILLINOIS  
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**DRAINAGE SCUPPER ADJUSTMENT RING DETAIL  
STRUCTURE NO. 010-0033**

SHEET 24 OF 25 SHEETS

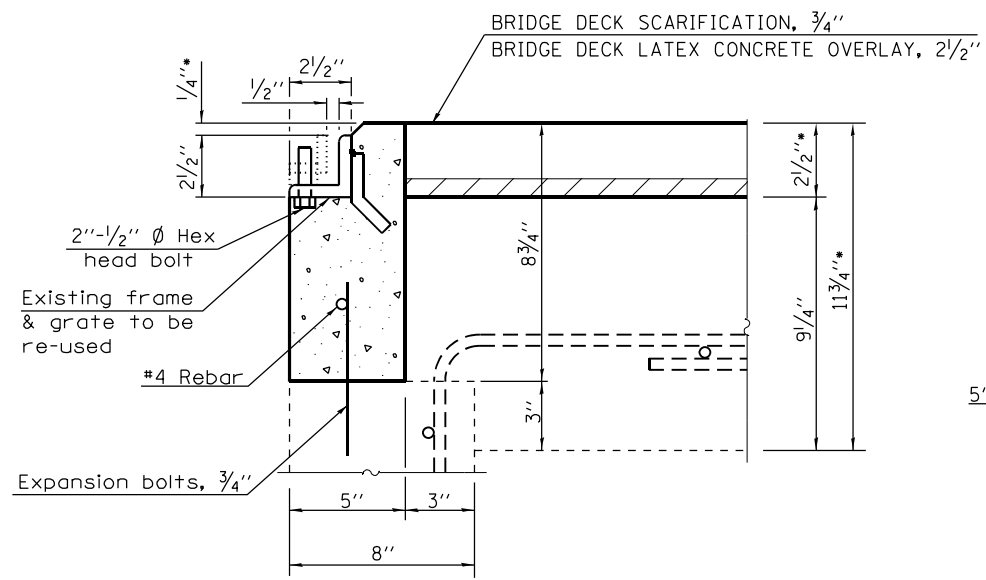
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CONTRACT NO. 70D69			ILLINOIS FED. AID PROJECT	

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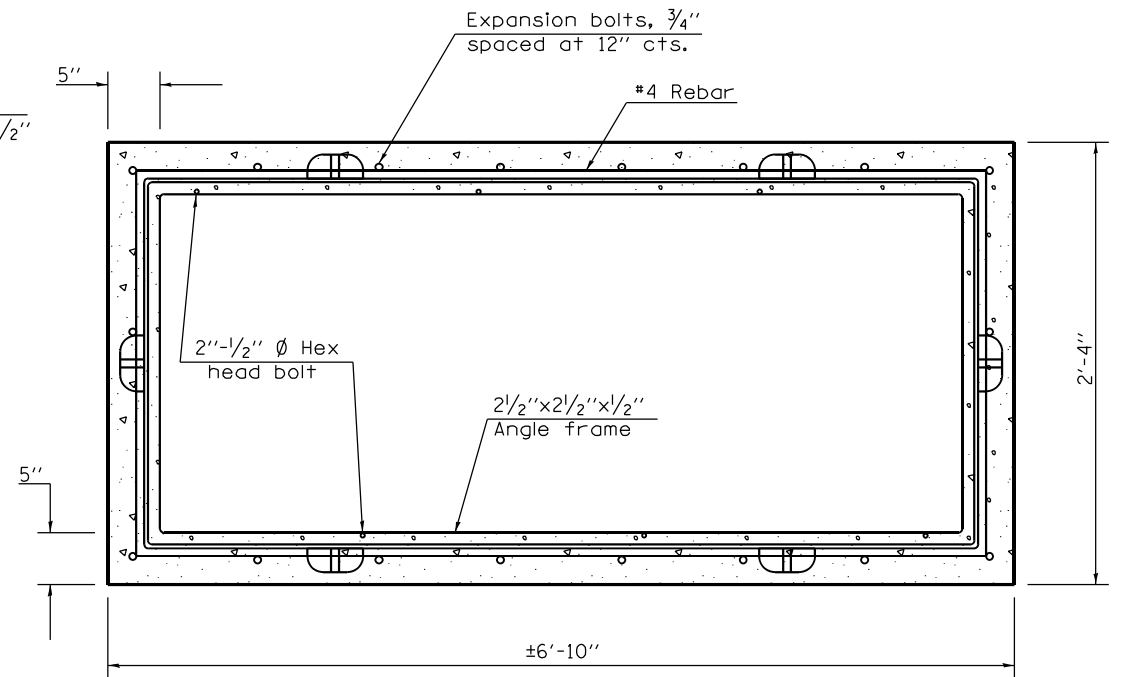
**DETAIL "A" - EXISTING**

Concrete Removal



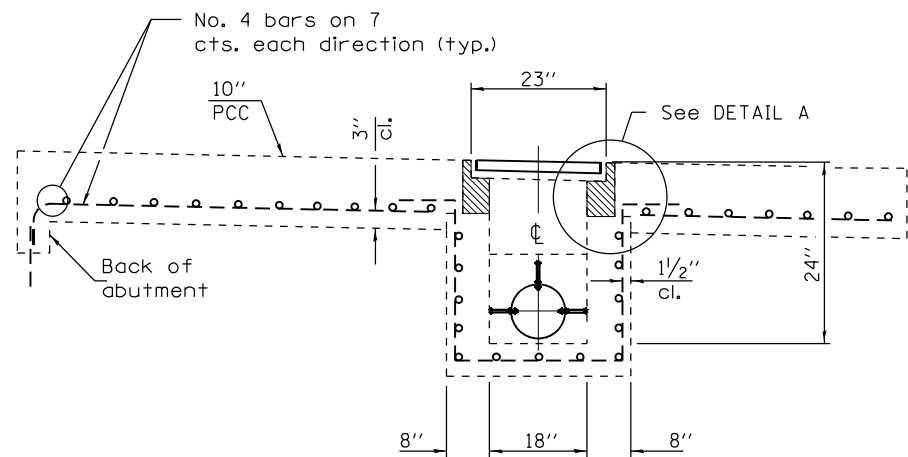
**DETAIL "A" - PROPOSED**

Class S.I. Concrete



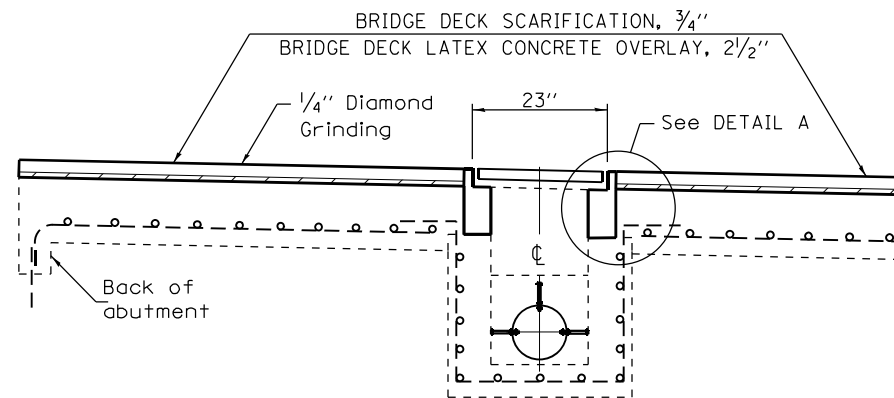
**PLAN - PROPOSED  
 (GRATING OMITTED FOR CLARITY)**

\*Prior to grinding



**EXISTING PROFILE**

**BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN**



**PROPOSED PROFILE**

**BRIDGE APPROACH SHOULDER PAVEMENT AND DRAIN**

**NOTES:**

EXPANSION BOLTS SHALL EXTEND A MINIMUM OF 4" INTO THE PROPOSED CONCRETE.

ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE PORTIONS OF SECTION 602.

THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE EACH FOR "INLET BOXES TO BE ADJUSTED (SPECIAL)" WHICH SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIAL NECESSARY TO COMPLETE THE WORK.

**ESTIMATED QUANTITIES**

ITEM	UNIT	TOTAL
CONCRETE REMOVAL	CU YD	0.13
REINFORCEMENT BARS (EPOXY)	POUND	11.4
CLASS S.I. CONCRETE	CU YD	0.17
EXPANSION BOLTS, 3/4"	EACH	18.0

**BILL OF MATERIALS**

ITEM	UNIT	TOTAL
INLET BOXES TO BE ADJUSTED (SPECIAL)	EACH	4.0

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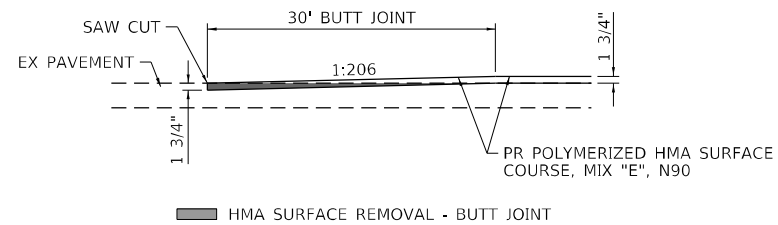
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PLOT SCALE =	CHECKED - CJE	REVISED -
PLOT DATE =	DRAWN - JZM & JLM	REVISED -
	CHECKED - SMJ	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**INLET BOX TO BE ADJUSTED  
 STRUCTURE NO. 010-0033**

SHEET 25 OF 25 SHEETS

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	47
CONTRACT NO. 70D69				
ILLINOIS FED. AID PROJECT				



**NOTE:**

COST OF SAW CUT SHALL BE INCLUDED IN THE COST OF HMA SURFACE REMOVAL - BUTT JOINT.

**BUTT JOINT DETAIL**

URBANA SPUR RT (E.B.):  
 STA. 48+47.85 TO STA. 48+77.85  
 STA. 51+40.90 TO STA. 51+70.90  
 URBANA SPUR LT (W.B.):  
 STA. 48+39.57 TO STA. 48+69.57  
 STA. 51+32.86 TO STA. 51+62.86

MODEL: Details  
 FILE NAME: \\sbs301b1011901\_PFB\_193-2025\_D5\_Voribus\_Phase\_HilWork\_Order\_5\Drawings\CADD\_Sheets\0570069-ft-details.dgn

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PLOT DATE = 3/17/2023	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

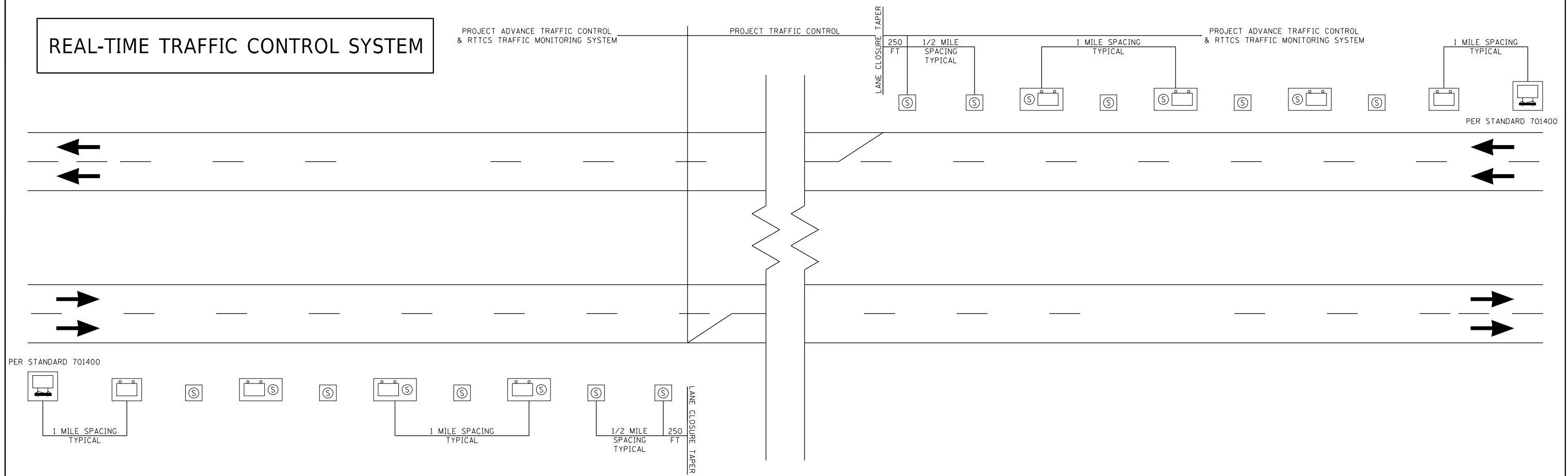
**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
 MISCELLANEOUS DETAILS**

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




F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	48
CONTRACT NO. 70D69				
		ILLINOIS	FED. AID PROJECT	



# REAL-TIME TRAFFIC CONTROL SYSTEM



## LEGEND

- 
 REAL-TIME TRAFFIC CONTROL WARNING SIGN  
 PROJECT SIGN SHALL BE A 48" X 96" (1200MM X 2400MM)  
 SIGN THAT SAYS  
 "STOPPED TRAFFIC NEXT MILE WHEN FLASHING".
- 
 SINGLE PORTABLE CHANGEABLE MESSAGE SIGN PLACED 1 MILE  
 IN ADVANCE OF THE REAL-TIME TRAFFIC CONTROL WARNING SIGN.  
 IT SHALL READ: "RIGHT/LEFT LANE CLOSED // X MILES AHEAD"  
 THIS PORTABLE CHANGEABLE MESSAGE SIGN IS INCLUDED IN STANDARD 701400
- 
 REAL-TIME TRAFFIC MONITORING SENSOR UNIT

**NOTE:**

1. THE NUMBER OF REAL-TIME TRAFFIC CONTROL WARNINGS SIGNS MAY BE CHANGED AS DIRECTED BY THE ENGINEER. RELOCATION OF REAL-TIME TRAFFIC CONTROL STATIC WARNING SIGNS IS INCLUDED IN THE REAL-TIME TRAFFIC CONTROL PAY ITEMS.
2. REAL-TIME TRAFFIC CONTROL MONITORING SENSOR UNITS SPACED APPROXIMATELY EVERY 1/2 MILE AND REAL-TIME TRAFFIC CONTROL WARNING SIGNS SPACED EVERY 1 MILE OR AS DIRECTED BY THE ENGINEER.
3. THE FIRST REAL-TIME TRAFFIC MONITORING SENSORS UNIT IS TO BE PLACED 250 FOOT UPSTREAM OF THE TAPER.
4. THE SECOND REAL-TIME SPEED TRAFFIC MONITORING SENSOR UNIT IS TO BE PLACED 250 FOOT IN ADVANCE OF THE RIGHT LANE/LEFT LANE CLOSED 1/2 MILE SIGN (STD. 701400).
5. THE FIRST REAL-TIME TRAFFIC CONTROL WARNINGS SIGN SHOULD BE PLACED 500 FOOT IN ADVANCE OF THE RIGHT/LEFT LANE CLOSED 1 MILE SIGN (STD. 701400)
6. THE NUMBER OF RTTCS DEVICES MAY BE REDUCED BASED ON THE LOCATION OF THE PORTABLE CHANGEABLE MESSAGE SIGN PER (STD. 701400) AS DIRECTED BY THE ENGINEER.

MODEL: RTTCS Det-11  
FILE NAME: I:\2023\301\101\1901\_PFB\_193-025\_D5\_Varibus\_Phase\_HitWork\_Order\_3\Drawings\CADD\_Sheets\05700069-ft-detail-RTTCS.dgn

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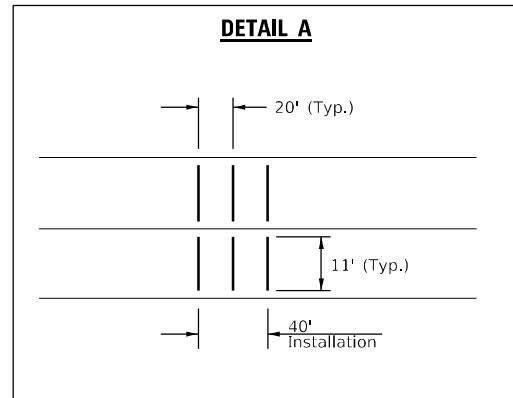
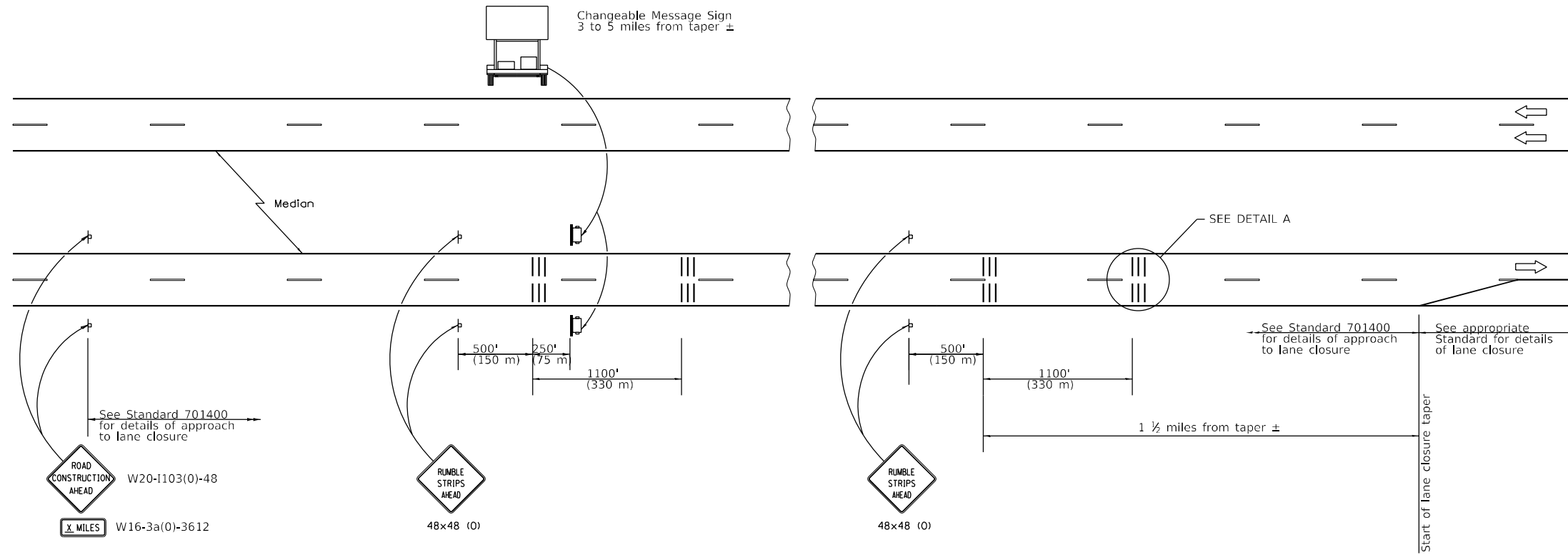
**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA  
REAL-TIME TRAFFIC CONTROL SYSTEM DETAIL**

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

F.A.I RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	49
			CONTRACT NO. 70D69	
ILLINOIS FED. AID PROJECT				

## DETAIL FOR TEMPORARY RUMBLE STRIPS (SPECIAL)



#### SYMBOLS

- Sign
- Temporary Rumble Strips (Special)
- Trailer Mounted Sign

#### GENERAL NOTES

Remove the Temporary Rumble Strips (Special) prior to the removal of the advanced warning signs.

All dimensions are in inches (millimeters) unless otherwise shown.

MODEL: Details; Temp Rumble Strips  
 FILE NAME: \\sbs3d01\B1\01\1901\_PFB\_193-025\_D5\_Voribus\_Phase\_HilWork\_Order\_5\Drawings\CADD\_Sheets\0570069-sh-detail-05\_TempRumbleStrips.dwg  
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	DATE -	REVISED -

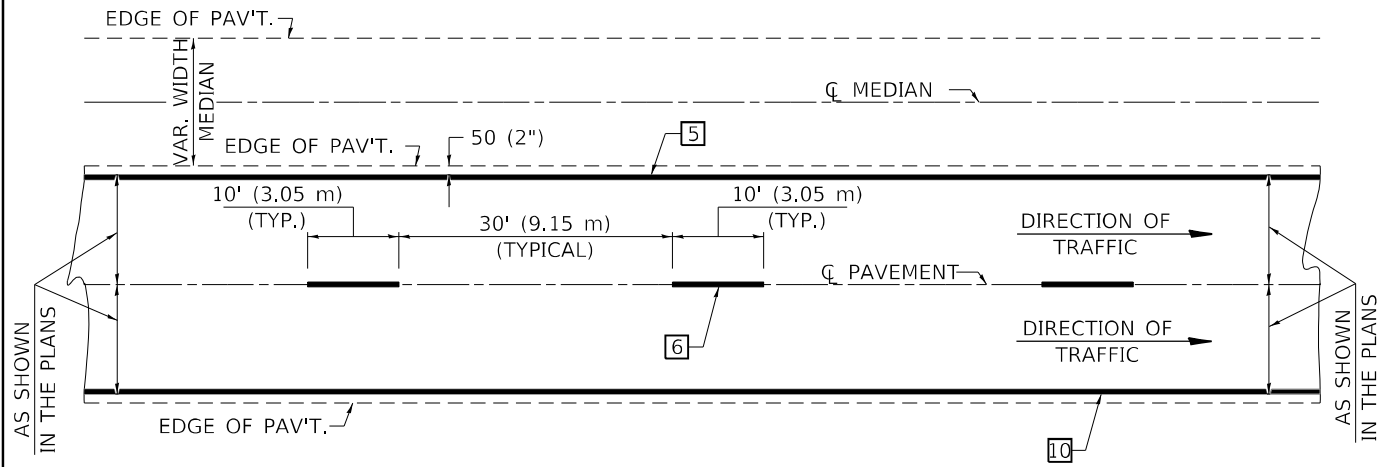
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**BRIDGE DECK OVERLAY – RAMPS OVER I-74 AT ECL OF URBANA**  
**TEMPORARY RUMBLE STRIPS (SPECIAL) DETAIL**

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	50
				CONTRACT NO. 70D69
		ILLINOIS	FED. AID PROJECT	

**CENTERLINE INTERSTATE OR MULTI-LANE TWO WAY DIVIDED HIGHWAY**

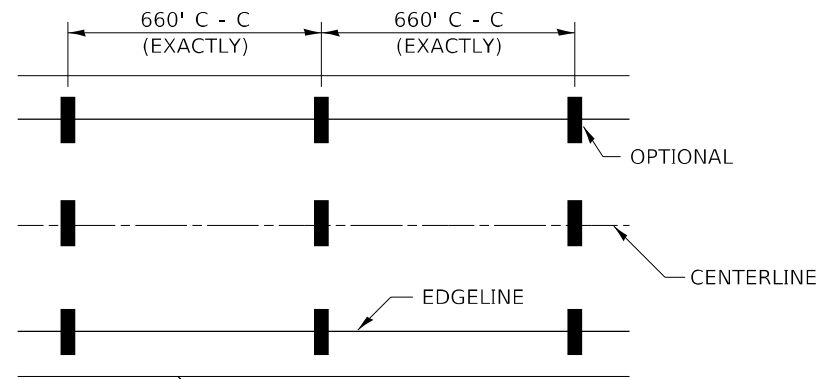


NOTE: PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.

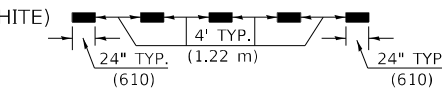
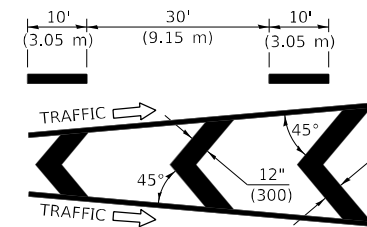
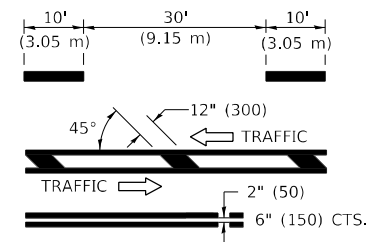
NOTE: SEE ARTICLES 780.04 & 781.03 FOR LOCATION OF STRIPES AND MARKERS RELATIVE TO EDGES OR JOINTS.

FOR RAISED REFLECTIVE PAVEMENT MARKERS, REFER TO STANDARD 781001.

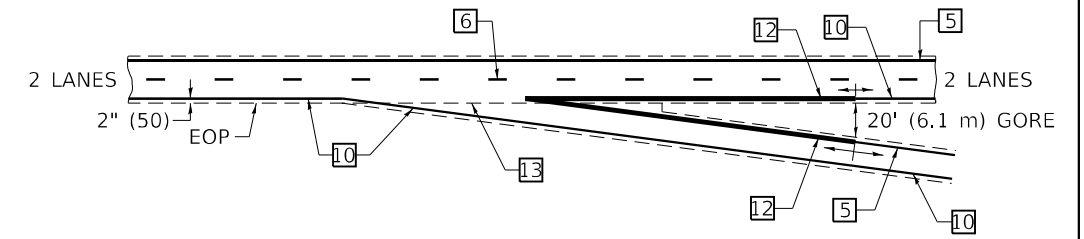
**TYPICAL PAVEMENT MARKING LEGEND**



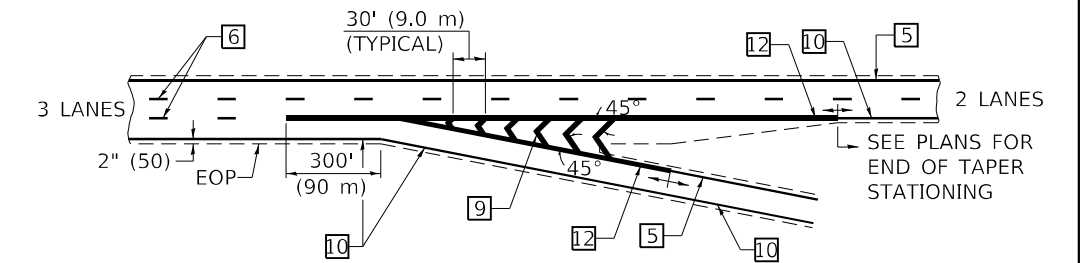
- 1 4" (100) SKIP-DASH (YELLOW)
- 2 4" (100) SOLID (YELLOW)
- 3 12" (300) DIAGONAL (YELLOW)
- 4 4" (100) DOUBLE YELLOW (NARROW)
- 5 6" (150) SOLID (YELLOW)
- 6 6" (150) SKIP-DASH (WHITE)
- 7 4" (100) SKIP-DASH (WHITE)
- 8 4" (100) SOLID (WHITE)
- 9 12" (300) DIAGONAL (WHITE)
- 10 6" (150) SOLID (WHITE)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



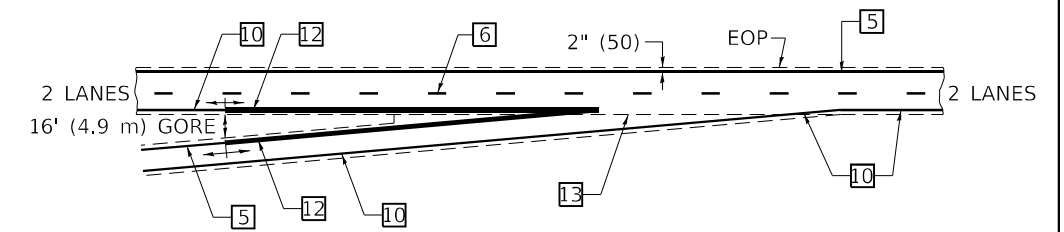
**TYPICAL EXIT RAMP TERMINAL**



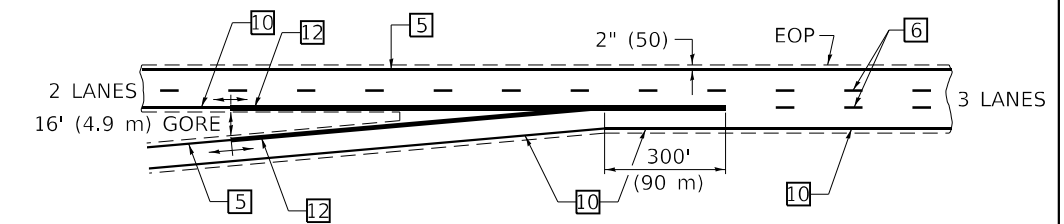
**EXIT RAMP TERMINAL with EXCLUSIVE (auxiliary) LANE**



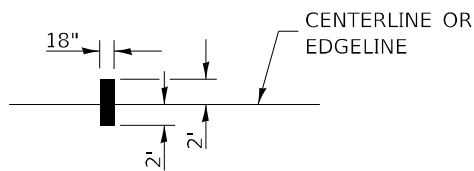
**TYPICAL ENTRANCE RAMP TERMINAL**



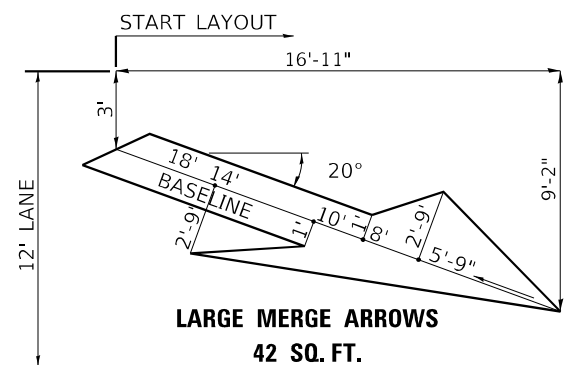
**ENTRANCE RAMP TERMINAL with EXCLUSIVE LANE**



IT WILL BE NECESSARY TO HAVE A REPRESENTATIVE OF THE STATE POLICE PRESENT SO THAT THE ACCURACY OF MEASUREMENT CAN BE ATTESTED TO IN COURT.



**AERIAL SPEED CHECK ZONES**



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

MODEL: Plan01  
FILE NAME: \\s:\bbs\30181\01\_1901\_PFB\_193-025\_D5\_Voribus\_Phase\_III\Work\_Order\_5\Drawings\CADD\_Sheets\0570069-rt-detail-05-7800BBB.dwg  
DRAWN BY: BBRENNAN

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**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING (INTERSTATE & MULTI-LANE APPLICATIONS)**

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

**DISTRICT 5 DETAIL NO. 7800BBB**

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(10-6)BDR	CHAMPAIGN	51	51
CONTRACT NO. 70D69				
ILLINOIS		FED. AID PROJECT		