

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS

**PROPOSED  
HIGHWAY PLANS**

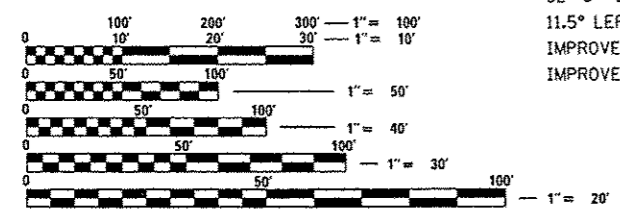
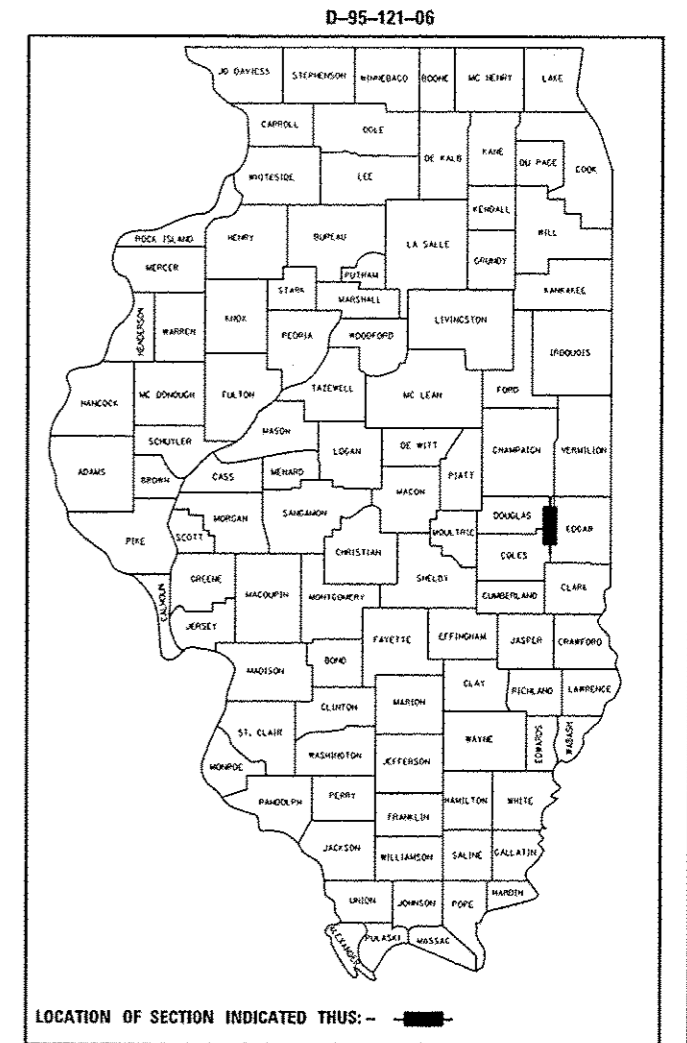
FAP ROUTE 836 (IL 49)  
SECTION 117BR-1  
PROJECT ACF-0836(032)  
BRIDGE REHABILITATION  
EDGAR COUNTY  
BRUSHY FORK CREEK, 1 MI. N. OF US 36

C-95-121-06

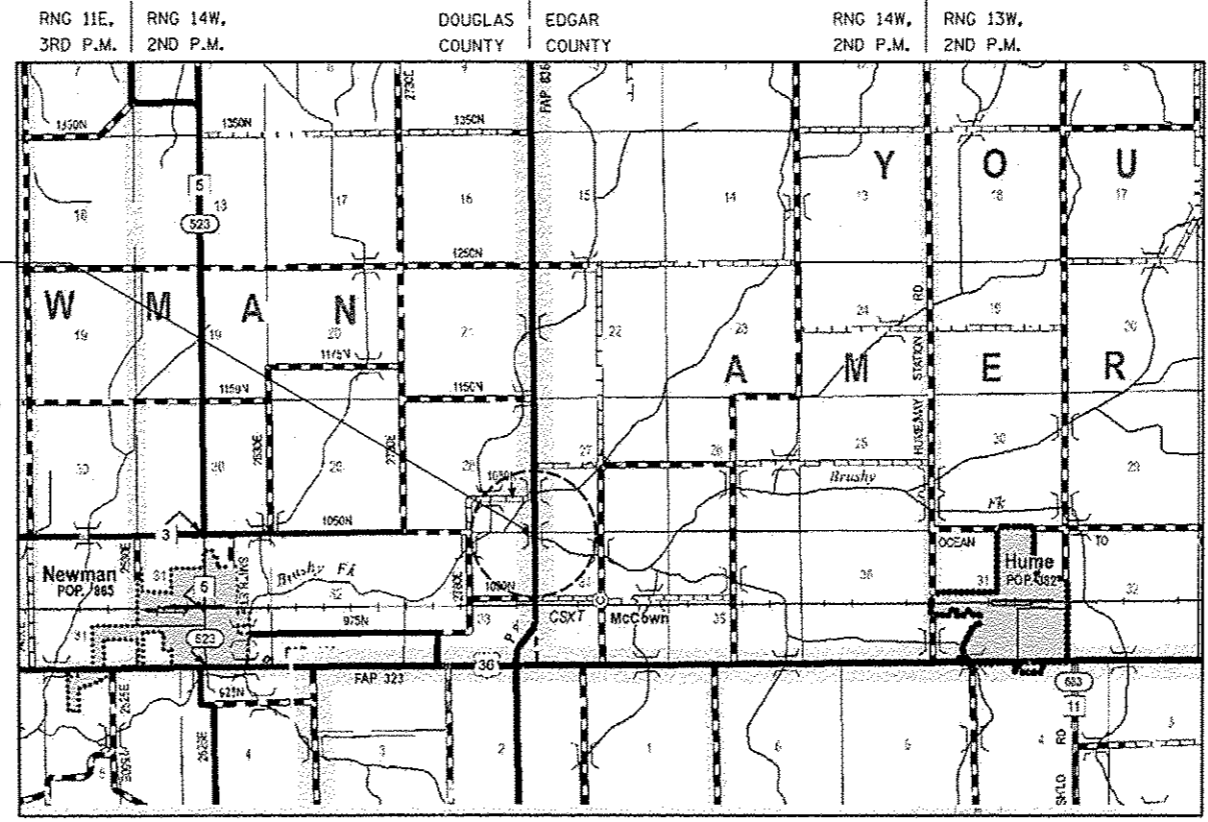
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	1
		ILLINOIS	CONTRACT NO. 70607	

FOR INDEX OF SHEETS, SEE SHEET NO. 2

**TRAFFIC DATA:**  
MINOR ARTERIAL (RURAL)  
ADT = 800 (YR 2013)  
PC = 660 (82.5%)  
SU = 50 (6.25%)  
MU = 90 (11.25%)



PROPOSED SUPERSTRUCTURE REPLACEMENT  
EXISTING STRUCTURE NUMBER 023-0018  
STATION 52+86.00 (IL 49)  
3-SPANS, 115'-10" B-B ABUTS.  
32'-0" OUT TO OUT OF DECK  
11.5° LEFT FORWARD SKEW  
IMPROVEMENT BEGINS AT STATION 51+00.00  
IMPROVEMENT ENDS AT STATION 54+50.00

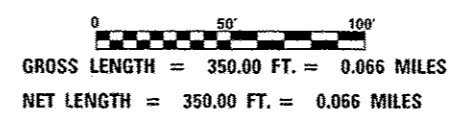


FULL SIZE PLANS HAVE BEEN PREPARED USING STANDARD ENGINEERING SCALES. REDUCED SIZED PLANS WILL NOT CONFORM TO STANDARD SCALES. IN MAKING MEASUREMENTS ON REDUCED PLANS, THE ABOVE SCALES MAY BE USED.

J.U.L.I.E.  
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION  
1-800-892-0123 YOUNG AMERICA TWP (EDGAR CO.)  
OR 811 NEWMAN TWP (DOUGLAS CO.)

PROJECT ENGINEER JASON STULTS  
PROJECT MANAGER RUSTIN KEYS  
DISTRICT 5 PHONE NUMBER: (217) 465-4181  
CONTRACT NO. 70607

DOUGLAS | EDGAR  
COUNTY | COUNTY  
**LOCATION MAP**



STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
SUBMITTED October 16, 2015  
Kensil A. Gannett  
DEPUTY DIRECTOR OF HIGHWAYS, REGION 3 ENGINEER  
Dec 4 2015  
John D. Baranzelli P.E.  
ENGINEER OF DESIGN AND ENVIRONMENT  
Dec 4 2015  
Omer Osman P.E.  
DIRECTOR OF HIGHWAYS, CHIEF ENGINEER

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







2025-01-12

TOTAL QUANTITY  
FAP 836 (IL 49)  
EDGAR COUNTY  
RURAL 2-LANE  
80% FEDERAL  
20% STATE  
BRIDGE  
0014  
023-0018

CODE NO.	ITEM	UNIT	
* 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1673
* 78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	11
* 78200410	GUARDRAIL MARKERS, TYPE A	EACH	8
* 78200420	GUARDRAIL MARKERS, TYPE B	EACH	4
* 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
78300100	PAVEMENT MARKING REMOVAL	SQ FT	204
78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	11
X0324744	REMOVAL OF EXISTING PRECAST CONCRETE UNITS	SQ FT	172
X6050065	REMOVING INLETS, SPECIAL	EACH	2
X7040125	PINNING TEMPORARY CONCRETE BARRIER	EACH	21
X7200201	WIDTH RESTRICTION SIGNING	L SUM	1
Z0001900	ASBESTOS BEARING PAD REMOVAL	EACH	48
Z0002900	BASE COURSE (OPTION)	SQ YD	143
Z0004552	APPROACH SLAB REMOVAL	SQ YD	73

TOTAL QUANTITY  
FAP 836 (IL 49)  
EDGAR COUNTY  
RURAL 2-LANE  
80% FEDERAL  
20% STATE  
BRIDGE  
0014  
023-0018

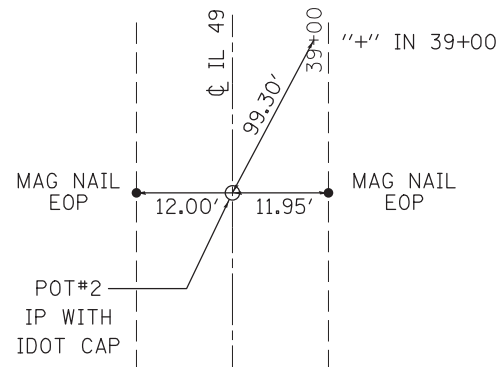
CODE NO.	ITEM	UNIT	
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO 0 THAN 5 INCHES)	SQ FT	63
Z0012755	STRUCTURAL REPAIR OF CONCRETE (DEPTH GREATER THAN 5 INCHES)	SQ FT	2
Z0038700	PERMANENT BENCH MARKS	EACH	1

3

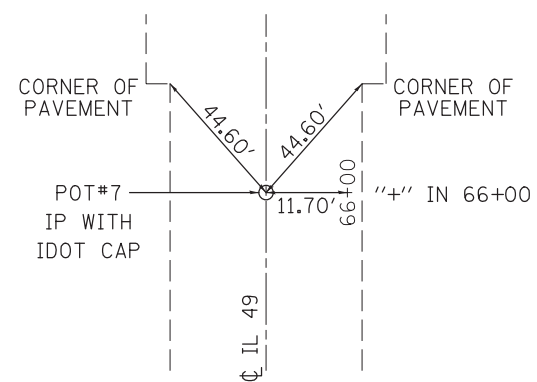
\* SPECIALTY ITEM

FILE NAME: \\N:\L\846310\INTE\all\edgar\gov\K1007\NO	USER NAME: kgerr	DESIGNED: -	REVISED: -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>SUMMARY OF QUANTITIES</b>				F.A.P. RTE.:	SECTION:	COUNTY:	TOTAL SHEETS:	SHEET NO.:
\\N:\L\846310\INTE\all\edgar\gov\K1007\NO	\\N:\L\846310\INTE\all\edgar\gov\K1007\NO	DRAWN: C:\Users\kgerr\Documents\B\Proj\edgar\NO	REVISED: -		836	1178R-1	EDGAR	48	5				
PLOT SCALE: 1/4"=1'-0"	CHECKED: -	REVISED: -	REVISED: -		CONTRACT NO. 70607								
PLOT DATE: 1/5/2018	DATE: -	REVISED: -	REVISED: -		SCALE:	SHEET	OF	SHEETS:	STA. TO STA.	ILLINOIS FED. AID PROJECT			

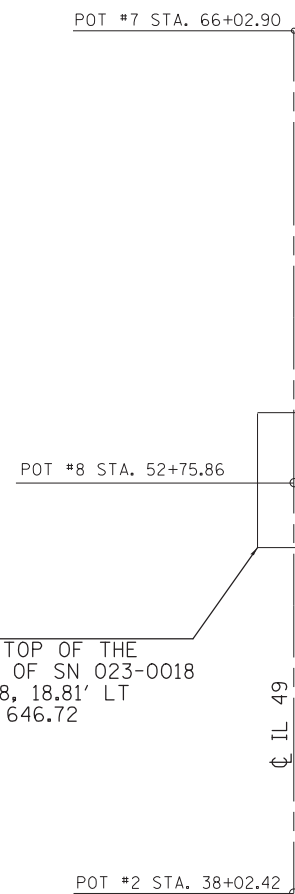
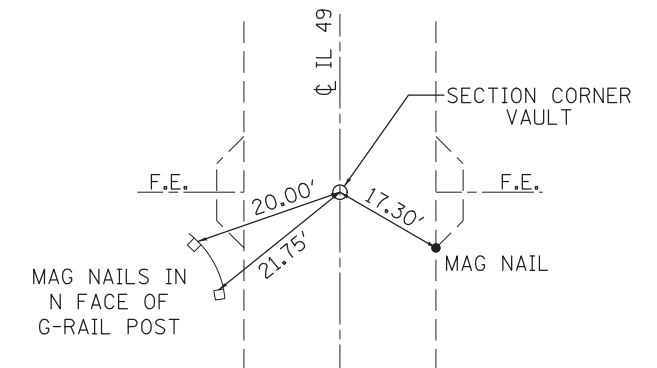
**POT #2**  
**STA. 38 + 02.42**  
**(1142098.728 N, 1095601.628 E)\***



**POT #7**  
**STA. 66 + 02.90**  
**(1144899.068 N, 1095574.999 E)\***



**SECTION CORNER VAULT #4**  
**STA. 55 + 37.5 0.08' RT.**  
**(1143833.720 N, 1095584.587 E)\***



B.M. 4944-1  
 DISK IN THE TOP OF THE  
 SW WINGWALL OF SN 023-0018  
 STA. 52+22.08, 18.81' LT  
 ELEVATION = 646.72

**\*STATE PLANE GRID COORDINATES**

**SEE SURVEY BOOK 4944 FOR MORE INFORMATION**

FILE NAME =	USER NAME = keysrb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>ALIGNMENTS, TIES AND BENCHMARK</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\IL\084EBIDINTEG.illinois.gov\PWIDOT\Documents\IDOT Offices\District 5\Projects\05796\Drawings\05796\Design\0579607-shr-ATB.dgn		CHECKED -	REVISED -		836	117BR-1	EDGAR	48	6				
\$MODELNAME\$		DATE -	REVISED -		SCALE: SHEET OF SHEETS STA. TO STA.				CONTRACT NO. 70607				
					ILLINOIS FED. AID PROJECT								

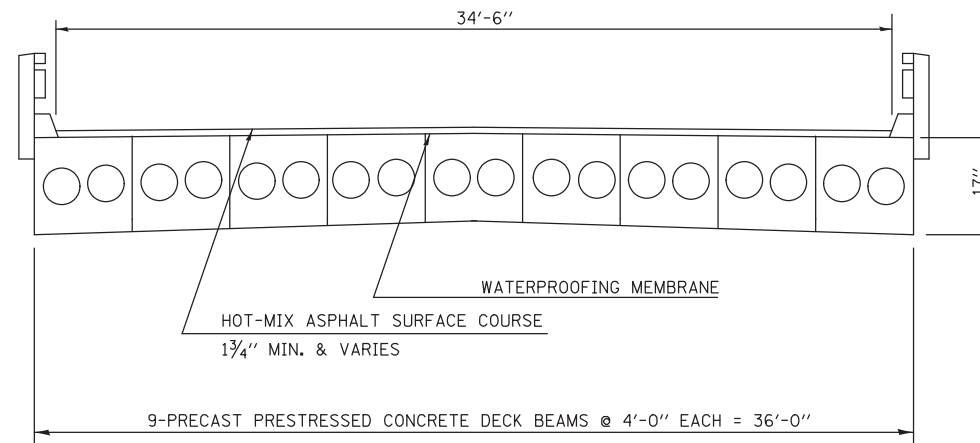


EXISTING TYPICAL CROSS SECTION

STATION TO STATION

52+17.6 TO 53+33.8

S.N. 023-0018

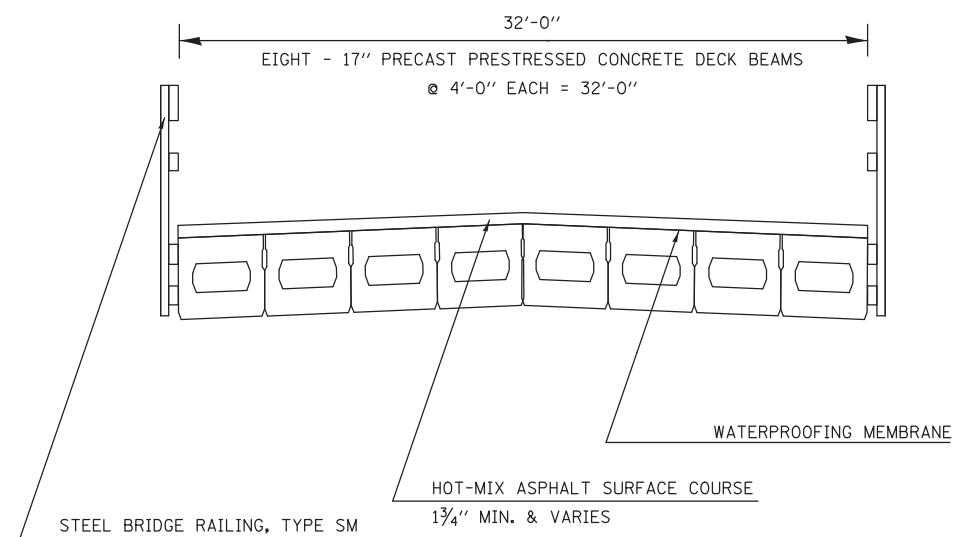


PROPOSED TYPICAL CROSS SECTION

STATION TO STATION

52+17.6 TO 53+33.8

S.N. 023-0018



FILE NAME =	USER NAME = keyrb	DESIGNED -	REVISED -
p:\11084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0579\Drawings\Design\05790607-shr-typical.dwg		DRAWN -	REVISED -
	PLOT SCALE = 60.0000' / in.	CHECKED -	REVISED -
#MODELNAME#	PLOT DATE = 9/29/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**TYPICAL SECTIONS**

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	8
CONTRACT NO.				
ILLINOIS FED. AID PROJECT				



**EARTHWORK**

LOCATION	20200100 EARTH EXCAVATION (CUT) CU YD	*EARTH EXCAVATION ADJUSTED FOR SHRINKAGE CU YD	EMBANKMENT (FILL) CU YD	EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-) CU YD	20400800 FURNISH EXCAVATION CU YD
STAGE I (RT)	67.4	50.6	298.4	-247.8	247.8
STAGE II (LT)	0.0	0.0	67.4	-67.4	67.4
<b>TOTAL</b>	<b>67.4</b>	<b>50.6</b>	<b>365.8</b>	<b>-315.2</b>	<b>315.2</b>
USE	70	-	-	-	320

\*SHRINKAGE FACTOR IS 25%

**40600990 TEMPORARY RAMP**

STATION	STATION	LENGTH FOOT	WIDTH FOOT	AREA SQ YD
50+00.0	50+05.0	5.0	24.0	13.3
52+14.6	52+19.6	5.0	24.0	13.3
50+69.8	50+74.8	5.0	24.0	13.3
55+20.0	55+25.0	5.0	24.0	13.3
<b>TOTAL</b>				<b>53.3</b>
USE				54.0

**LANDSCAPING ITEMS**

LOCATION	25000210 SEEDING CLASS 2A ACRE	25100115 MULCH METHOD 2 ACRE	25100630 EROSION CONTROL BLANKET SQ YD	25000400 NITROGEN FERTILIZER NUTRIENT POUND	25000500 PHOSPHORUS FERTILIZER NUTRIENT POUND	25000600 POTASSIUM FERTILIZER NUTRIENT POUND	28000250 *TEMPORARY EROSION CONTROL SEEDING POUND
SE QUADRANT	0.13	0.05	384.4	11.6	11.6	11.6	12.9
NE QUADRANT	0.16	0.06	472.6	14.1	14.1	14.1	15.6
SW QUADRANT	0.12	0.05	333.7	11.1	11.1	11.1	12.4
NW QUADRANT	0.11	0.01	484.7	9.6	9.6	9.6	10.7
<b>TOTAL</b>	<b>0.52</b>	<b>0.17</b>	<b>1675.31</b>	<b>46.50</b>	<b>46.50</b>	<b>46.50</b>	<b>51.66</b>
USE	0.50	0.25	1675.0	50	50	50	100

\*QUANTITY FOR 2 APPLICATIONS

**SURFACE REMOVAL AND HOT-MIX ASPHALT ITEMS**

O/S	LOCATION	LENGTH FOOT	WIDTH FOOT	AREA SQ YD	44000155 HOT-MIX ASPHALT SURFACE REMOVAL 1.5" SQ YD	40603310 HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50 TON	42001430 BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE) SQ YD	48203100 HOT-MIX ASPHALT SHOULDERS TON	40600275 *BITUMINOUS MATERIALS (PRIME COAT) POUND
CL	50+00.0	52+19.6	219.6	24.0	585.5	49.2			263.5
CL	52+21.4	53+33.7	112.2	32.0	399.0	48			-
RT, STG I	53+64.0	53+70.0	6.0	17.0	11.3		11.3		7.7
LT, STG II	53+64.0	53+70.0	6.0	15.0	10.0		10.0		6.8
CL	53+70.3	55+25.0	154.7	24.0	412.6	34.7			185.7
LT	50+96.3	52+20.7	124.4	4.0	55.3			4.6	24.9
LT	53+72.9	55+06.7	133.8	4.0	59.5			5.0	26.8
RT	51+07.1	52+14.6	107.5	4.0	47.8			4.0	21.5
RT	53+66.7	54+93.0	126.3	4.0	56.1			4.7	25.3
<b>TOTAL</b>					<b>1216.8</b>	<b>131.9</b>	<b>21.3</b>	<b>18.4</b>	<b>562.0</b>
USE					1217.0	132.0	21.3	19.0	562.0

\*APPLICATION RATE IS 0.05 LB/SQ FT ON MILLED HMA SURFACE, 0.025 LB/SQFT FOR FOG COAT BETWEEN LIFTS

**TEMPORARY EROSION CONTROL ITEMS**

O/S	STATION	STATION	LENGTH FOOT	28000305 TEMPORARY DITCH CHECKS FOOT	28000400 PERIMETER EROSION BARRIER FOOT
LT	52+13.0	-	15.00	15.0	
RT	52+17.0	-	15.00	15.0	
RT	53+51.0	-	15.00	15.0	
LT	53+21.0	55+25.0	204.00		204.0
<b>TOTAL</b>				<b>45.0</b>	<b>204.0</b>
USE				45.0	204.0

**APPROACH AND PAVEMENT REMOVAL**

STAGE	O/S	*STATION	*STATION	**LENGTH FOOT	WIDTH FOOT	Z0004552 APPROACH SLAB REMOVAL SQ YD	44000100 PAVEMENT REMOVAL SQ YD
I	RT	53+34.0	53+57.0	24.50	15.25	41.5	
	RT	53+57.0	53+70.0	11.70	14.00		18.2
II	LT	53+34.0	53+57.0	21.30	13.25	31.4	
	LT	53+57.0	53+70.0	14.60	11.90		19.3
<b>TOTAL</b>						<b>72.9</b>	<b>37.5</b>
USE						73.0	38.0

\*STATION GIVEN IS ALONG THE STAGE REMOVAL LINE.

\*\*DUE TO SKEW/TRAPEZOIDAL AREAS, THE LENGTH GIVEN IS MEASURED AT THE CENTER OF THE REMOVAL AREA, NOT AT THE FAS 493 CL.

**44000100 PAVED SHOULDER REMOVAL**

STAGE	O/S	STATION	STATION	LENGTH FOOT	AVG. WIDTH FOOT	AREA SQ YD
I	RT	53+57.0	53+67.7	10.70	4.20	5.0
II	LT	53+57.0	53+72.9	15.90	4.60	8.1
<b>TOTAL</b>						<b>13.1</b>
USE						13.5

**31101000 SUBBASE GRANULAR MATERIAL TYPE B**

STAGE	O/S	STATION	STATION	LENGTH FOOT	WIDTH FOOT	THICKNESS INCH	VOLUME CU YD	TONS
PRE	LT	50+96.3	51+16.7	20.4	4.0	4.0	1.0	1.8
PRE	LT	54+51.7	54+66.7	15.0	4.0	4.0	0.7	1.3
I	RT	51+07.1	52+14.6	107.5	4.0	4.0	5.3	9.6
	*RT	52+05.7	52+08.7	3.0	4.0	18.5	0.7	1.2
	RT	53+66.7	54+93.0	126.3	4.0	4.0	6.2	11.2
	**RT	53+56.3	53+57.8	1.5	4.3	20.6	0.4	0.7
II	LT	52+08.4	52+20.7	12.3	4.0	4.0	0.6	1.1
	*LT	52+10.5	52+13.5	3.0	4.0	18.5	0.7	1.2
	**LT	53+56.3	53+57.8	1.5	4.3	20.6	0.4	0.7
<b>TOTAL</b>							<b>29.0</b>	
USE							29.0	

\*THE ADDITIONAL THICKNESS IS INTENDED TO FILL THE VOID CREATED BY THE REMOVAL OF THE APPROX. 30" DEEP PCC SHOULDER INLETS BOX.

\*\*THIS QUANTITY IS NEEDED TO FILL THE VOID REMAINING AFTER REMOVAL OF THE APPROACH BEAM FOUNDATION. THE FOUNDATION AVERAGE DEPTH IS ESTIMATED TO BE 1.72 FEET AND ITS REMOVAL IS INCLUDED IN THE COST OF 'REMOVAL OF EXISTING PRECAST UNITS'.

**48102100 AGGREGATE WEDGE SHOULDER TYPE B**

STAGE	O/S	STATION	STATION	TONS
I	RT	50+00.0	51+07.1	4.7
	RT	54+93.0	55+25.0	1.5
II	LT	50+00.0	50+96.3	6.2
	LT	55+06.7	55+25.0	0.8
<b>TOTAL</b>				<b>13.2</b>
USE				14.0

**50105220 PIPE CUL VERT REMOVAL**

STAGE	O/S	STATION	STATION	LENGTH FOOT
I	RT	53+58.0	53+88.0	30.0
<b>TOTAL</b>				<b>30.0</b>
USE				30.0

REV.

STEEL PLATE BEAM GUARDRAIL ITEMS

STAGE	O/S	LOCATION			63100167	63100169	63000001	63100087	50901050	78200410	78200420	78201000
		STATION	STATION	LENGTH	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (TANGENT) EACH	TRAFFIC BARRIER TERMINAL TYPE 1 SPECIAL (FLARED) EACH	STEEL PLATE BEAM GUARDRAIL TYPE A 6 FOOT POSTS FOOT	TRAFFIC BARRIER TERMINAL TYPE 6A EACH	STEEL RAILING TYPE SM FOOT	GUARDRAIL MARKERS TYPE A EACH	GUARDRAIL MARKERS TYPE B EACH	TERMINAL MARKERS DIRECT APPLIED EACH
I	RT	50+59.5	51+09.5	50.0	1.0					2.0		1.0
		51+09.5	51+72.0	62.5			62.5					
		51+72.0	52+18.5	46.5				1.0				
		52+16.0	53+61.0	145.0					145.0		2.0	
		53+58.5	54+05.0	46.5				1.0		2.0		
		54+05.0	54+55.0	50.0		1.0					1.0	
II	LT	51+28.5	51+78.5	50.0	1.0					2.0		1.0
		51+78.5	52+25.0	46.5				1.0				
		52+22.5	53+67.5	145.0					145.0		2.0	
		53+65.0	54+11.5	46.5				1.0				
		54+11.5	54+61.5	50.0		1				2.0		1.0
TOTAL					2.0	2.0	62.5	4.0	290.0	8.0	4.0	
USE					2.0	2.0	62.5	4.0	290.0	8.0	4.0	

78300100 PAVEMENT MARKING REMOVAL

O/S	STATION	STATION	FOOT	SQ FT
LT	50+96.3	55+06.7	410.4	135.4
CL	50+79.0	55+24.0	111.3	36.7
RT	51+07.1	54+93.0	96.5	31.8
TOTAL			618.1	204.0
USE			-	204

PAVEMENT DELINEATION ITEMS

LOCATION		LT EDGE (WHITE)	RT EDGE (WHITE)	CL DASH (YELLOW)	78001110 PAINT PAVEMENT MARKING LINE 4"	78300200 RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	78100100 RAISED REFLECTIVE PAVEMENT MARKERS
STA	STA	FOOT	FOOT	FOOT	FOOT	EACH	EACH
49+23.5	56+66.9	743.4	743.4	185.9	1672.7	11.0	11.0
TOTAL					1672.7	11.0	11.0
USE					1673.0	11.0	11.0

63200310 GUARDRAIL REMOVAL

STAGE	O/S	STATION	STATION	LENGTH (FOOT)
I	RT	50+38.3	52+15.0	176.7
		53+56.5	54+58.2	101.7
II	LT	51+20.5	52+22.4	101.9
		53+57.3	55+34.2	176.9
TOTAL				557.2
USE				558.0

Z0002900 BASE COURSE OPTION

STAGE	O/S	STATION	STATION	LENGTH	WIDTH	AREA
				FOOT	FOOT	SQ YD
PRE	LT	50+96.3	51+16.7	20.4	4.0	9.1
		54+51.7	55+06.7	55.0	4.0	24.4
I	RT	51+07.1	52+14.6	107.5	4.0	47.8
		53+66.7	54+93.0	126.3	4.0	56.1
II	LT	52+08.4	52+20.7	12.3	4.0	5.5
TOTAL						142.9
USE						143.0

SHORT TERM PAVEMENT MARKING AND WORK ZONE PAVEMENT MARKING REMOVAL

STAGE	LOCATION		*TEMPORARY PAVEMENT MARKING LINE 4" (WHITE)	*TEMPORARY PAVEMENT MARKING LINE, 24" (WHITE)	70300100 **SHORT TERM PAVEMENT MARKING	70301000 WORK ZONE PAVEMENT MARKING REMOVAL
	STATION	STATION	FOOT	FOOT	FOOT	SQ FT
I	49+33.5	56+23.6	690.1			227.7
	50+96.3	55+06.7	410.4			135.4
	49+23.5			12.0		24.0
	56+83.9			12.0		24.0
	49+94.7	56+56.9	662.2			218.5
II	51+11.0	54+91.3	380.3			125.5
	49+34.8			12.0		24.0
	56+66.9			12.0		24.0
	FINAL	49+23.5	56+66.9			148.7
TOTAL			2143.0	48.0	148.7	852.3
USE			-	-	149.0	853

\*TEMPORARY PAVEMENT MARKINGS ARE NOT PAID FOR SEPARATELY; THEY ARE INCLUDED IN THE COST OF THE APPLICABLE TRAFFIC CONTROL AND PROTECTION STANDARD ON WHICH THEY ARE SHOWN.

\*\*INCLUDES TWO APPLICATIONS FOR YELLOW CENTERLINE SKIP DASH; ONE APPLICATION AFTER SURFACE REMOVAL AND ONE APPLICATION AFTER FINAL SURFACE IS PLACED.

TRAFFIC CONTROL ITEMS

STAGE	LOCATION			70400100 RELOCATE TEMPORARY CONCRETE BARRIER	70400100 RELOCATE TEMPORARY CONCRETE BARRIER	70600250 IMPACT ATTENUATOR TEMPORARY NON-REDIRECTIVE TL3	70600250 IMPACT ATTENUATOR RELOCATE NON-REDIRECTIVE TL3	*X7040125 PINNING TEMPORARY CONCRETE BARRIER
	STATION	STATION	LENGTH	FOOT	EACH	EACH	EACH	EACH
I	50+98.1	55+04.2	406.1	406.1		2.0		12
II	51+11.0	54+91.3	380.3		380.3		2.0	9
TOTAL				406.1	380.3	2.0	2.0	21.0
USE				406.1 (32 barriers)	380.3 (30 barriers)	2.0	2.0	21

\*IN STAGE 1, THE TEMPORARY CONCRETE BARRIER ADJACENT TO THE PROPOSED APPROACH AND FLEXIBLE CONNECTOR MUST BE FULLY PINNED ON THE TRAFFIC SIDE OF THE BARRIER. IN STAGE 2, THE TEMPORARY CONCRETE BARRIER ADJACENT TO THE FLEXIBLE CONNECTOR MUST BE FULLY PINNED ON THE TRAFFIC SIDE OF THE BARRIER. TRANSITIONS FROM FULLY PINNED TO UNPINNED BARRIER SHALL BE PER THE REQUIREMENTS GIVEN IN THE SPECIAL PROVISIONS.

X6050065 REMOVING INLETS, SPECIAL

STAGE	O/S	STATION	STATION	EACH
I	RT	52+02.0	52+14.6	1.0
II	LT	52+08.4	52+20.7	1.0
TOTAL				2.0
USE				2.0

SEC. 33, TWP. 16N, RNG. 14W, 2ND P.M. - DOUGLAS COUNTY

PROPOSED SUPERSTRUCTURE REPLACEMENT  
 3 SPAN, 17" PPC DECK BEAM SUPERSTRUCTURE  
 32'-0" OUT-OUT  
 115'-10" BACK TO BACK OF ABUTMENTS  
 SKEW 11° 30' LEFT FORWARD  
 EX. S.N. 023-0018  
 @ STA. 52+76.99  
 EX. S.N. 023-0018

PR. BRIDGE APPROACH PAVEMENT  
 30'  
 PR. BRIDGE APPROACH CONNECTOR  
 FLEXIBLE, 6'

PR. GUARDRAIL  
 TBT TY 1 SPL FLARED  
 TBT TY 6A

PROJECT ENDS  
 STA. 55+25

PROJECT BEGINS  
 STA. 50+00

PR. AGGREGATE WEDGE  
 SHOULDERS, TY. B  
 4', TYP.

PR. EARTH  
 SHOULDER  
 4', TYP.

PR. GUARDRAIL  
 TBT TY 1 SPL TAN  
 TBT TY 6A

PR. HMA SHOULDERS 168 LB/SY  
 OVER MILLED LT HMA SHOULDER

PR. HMA SURFACE COURSE  
 MIX "C", N50, 168 LB./S.Y.  
 OVER MILLED SURFACE,  
 24' WIDTH TYP.

PR. HMA SHOULDERS, 168 LB/SY  
 OVER MILLED BASE COURSE OPTION  
 AND AGGREGATE SUBBASE, 4"  
 4' WIDTH TYP.

PR. GUARDRAIL  
 TBT TY 1 SPL TAN  
 SPBGR TY A, 6' POSTS  
 TBT TY 6A

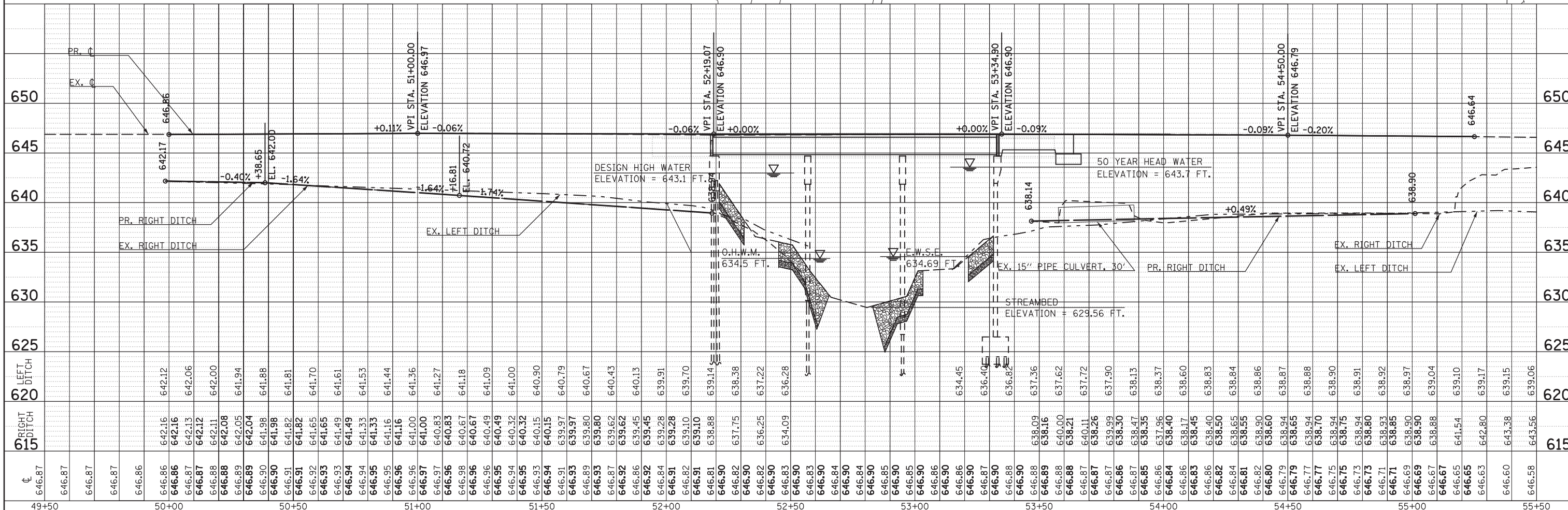
PR. STONE RIPRAP  
 CLASS A5 & FILTER  
 FABRIC, TYP.  
 SEE STRUCTURE PLANS  
 FOR DETAILS

PR. GUARDRAIL  
 TBT TY 1 SPL FLARED  
 TBT TY 6A

SEC. 32, TWP. 16N, RNG. 14W, 2ND P.M. - EDGAR COUNTY

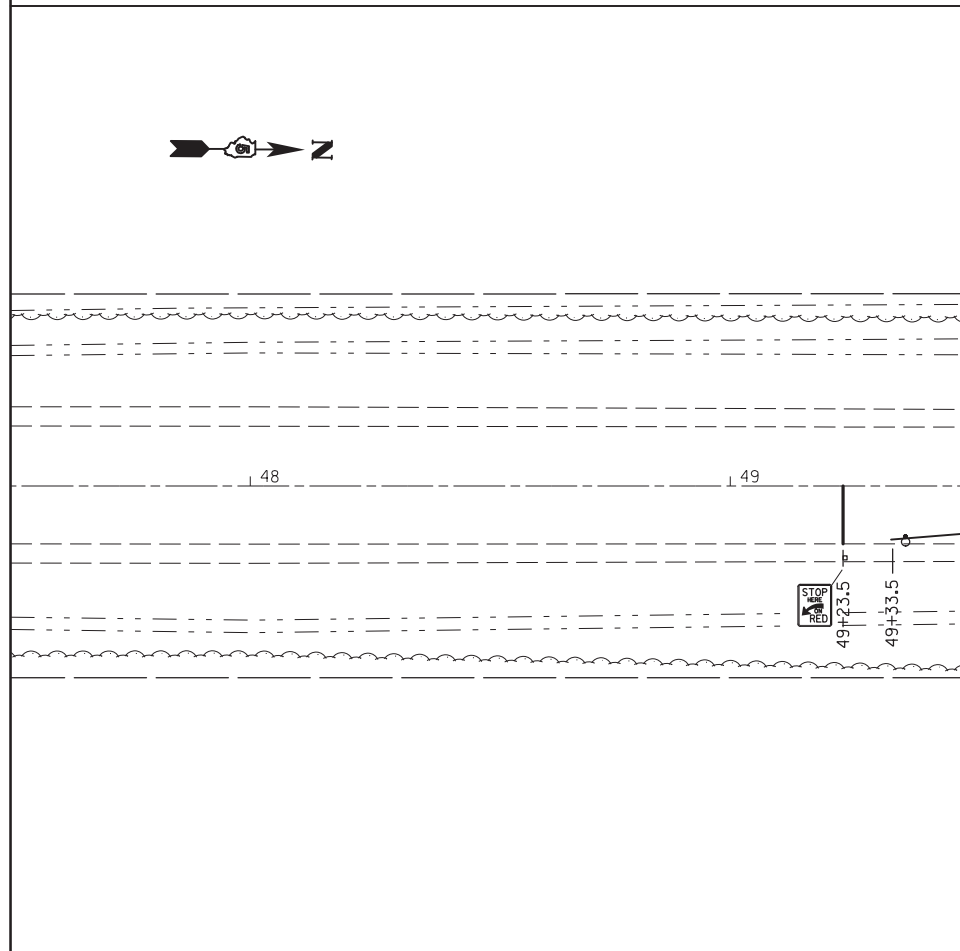
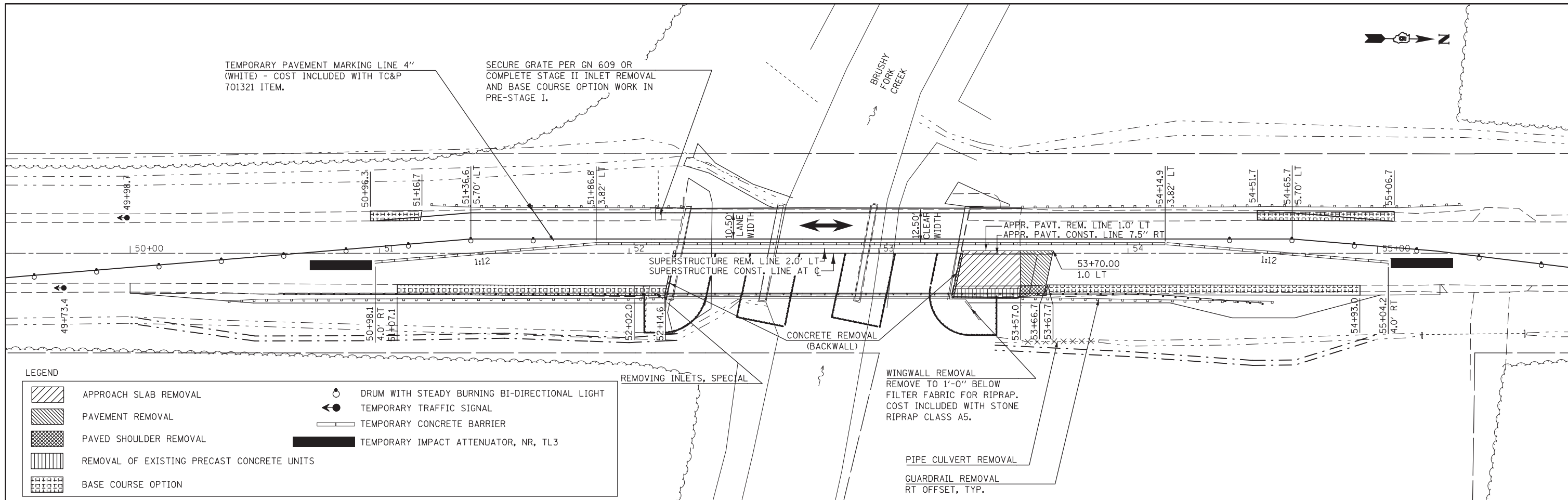
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	PLOTTED	
	ALIGNED	
	CHECKED	
	DESIGNED	
	FILED	
NO.		

PROFILE	SURVEYED	DATE
	PLOTTED	
	GRADES CHECKED	
	STRUCTURE	
	NOTATIONS CHECKED	
NO.		



FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED -	<p align="center"><b>STATE OF ILLINOIS</b>  <b>DEPARTMENT OF TRANSPORTATION</b></p> <p align="center"><b>PLAN AND PROFILE - IL 49</b></p>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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MODELNAME =		DATE -	REVISED -		CONTRACT NO. 70607				
					ILLINOIS FED. AID PROJECT				

SCALE: SHEET OF SHEETS STA. TO STA.



**GENERAL STAGING NOTES:**

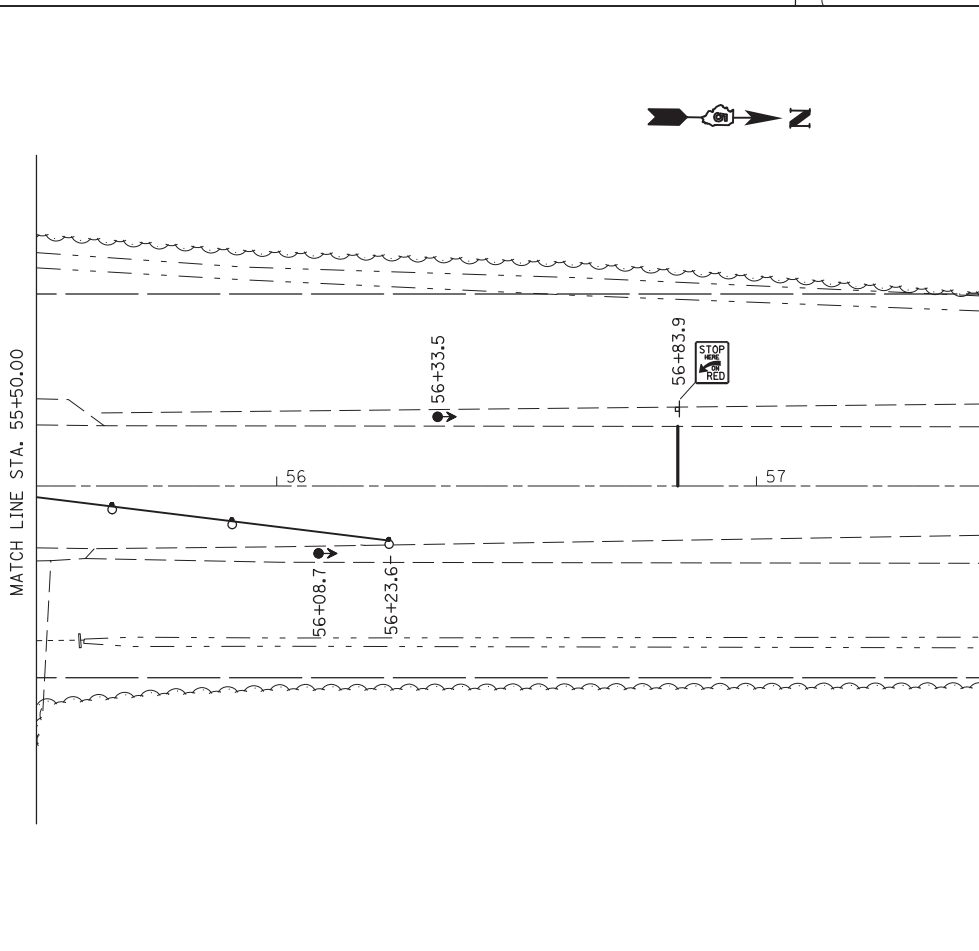
1. TRAFFIC CONTROL DETAILS NOT SHOWN SHALL BE INSTALLED PER TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
2. ALL TEMPORARY BRIDGE TRAFFIC SIGNALS WILL BE MEASURED AS ONE UNIT.
3. BARRIER OFFSETS ARE FROM THE CENTER OF THE BARRIER.
4. THE TWO FIELD ENTRANCES LOCATED JUST NORTH OF THE PROJECT LIMITS SHALL BE ACCESSIBLE AT ALL TIMES. DRUMS SHALL BE TEMPORARILY RELOCATED AND TRAFFIC SHALL BE GUIDED BY A FLAGGER WHEN INGRESS TO OR EGRESS FROM IL ROUTE 49 IS REQUIRED.

**PRE-STAGE I NOTES:**

1. UTILIZE TRAFFIC CONTROL AND PROTECTION STANDARD 701201 TO INSTALL BASE COURSE OPTION ADJACENT TO SOUTHBOUND LANE FOR STAGE I TRAFFIC. NO OPEN HOLES WILL BE ALLOWED OVERNIGHT.

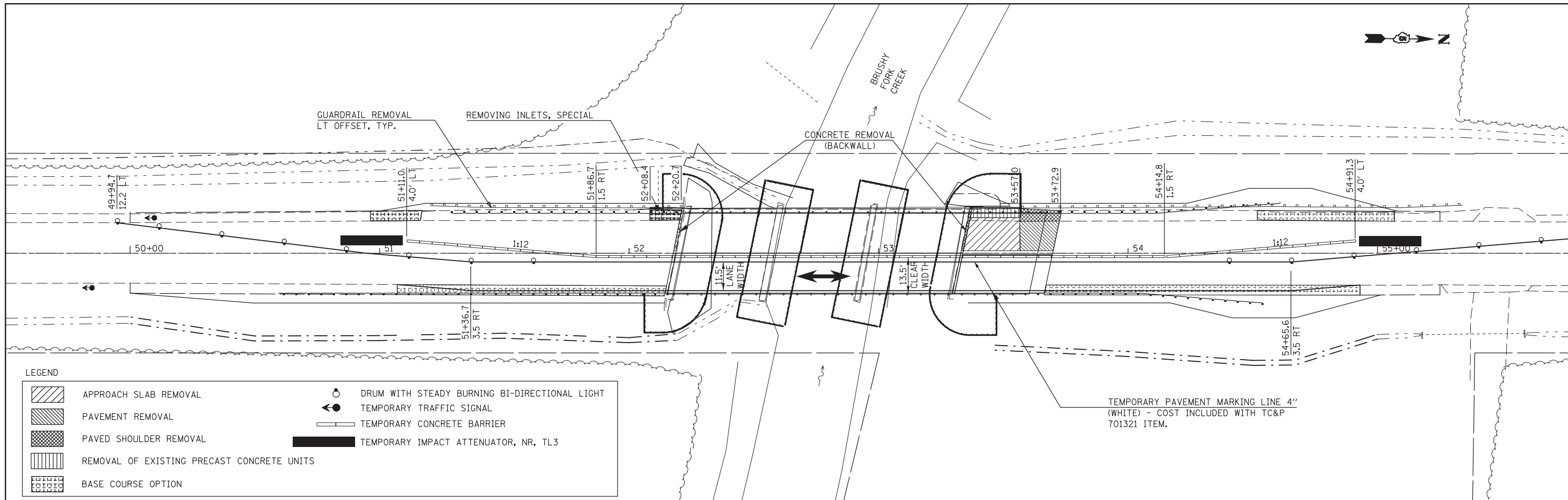
**STAGE I NOTES:**

1. INSTALL TRAFFIC CONTROL PER THIS DETAIL AND HIGHWAY STANDARD 701321. THE TEMPORARY CONCRETE BARRIER ADJACENT TO THE APPROACH SLAB AND PAVEMENT REMOVAL AREAS SHALL BE FULLY PINNED. THE TRANSITION FROM FULLY PINNED TO UNPINNED SHALL BE COMPLETED PER THE REQUIREMENTS GIVEN IN THE SPECIAL PROVISIONS.
2. REMOVE THE STAGE I PORTION OF THE EXISTING SUPERSTRUCTURE, PAVEMENT, GUARDRAIL, AND SHOULDER INLETS.
3. CONSTRUCT THE STAGE I PORTION OF THE NEW BRIDGE, APPROACH PAVEMENT AND FLEXIBLE CONNECTOR, AND TEMPORARY RAMPS.
4. COMPLETE STAGE I EARTHWORK AND CONSTRUCT BASE COURSE OPTION, AGGREGATE SHOULDERS, GUARDRAIL, AND BRIDGERAIL.



FILE NAME =	USER NAME = keysrb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>MAINTENANCE OF TRAFFIC STAGE 1</b>				F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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#MODELNAME#	PLOT SCALE = 40.0000' / in.	DATE -	REVISED -		CONTRACT NO. 70607				ILLINOIS FED. AID PROJECT				
	PLOT DATE = 9/29/2015				SCALE:	SHEET	OF	SHEETS	STA.	TO	STA.		





**LEGEND**

	APPROACH SLAB REMOVAL		DRUM WITH STEADY BURNING BI-DIRECTIONAL LIGHT
	PAVEMENT REMOVAL		TEMPORARY TRAFFIC SIGNAL
	PAVED SHOULDER REMOVAL		TEMPORARY CONCRETE BARRIER
	REMOVAL OF EXISTING PRECAST CONCRETE UNITS		TEMPORARY IMPACT ATTENUATOR, NR, TL3
	BASE COURSE OPTION		

TEMPORARY PAVEMENT MARKING LINE 4" (WHITE) - COST INCLUDED WITH TC&P 701321 ITEM.

**GENERAL STAGING NOTES:**

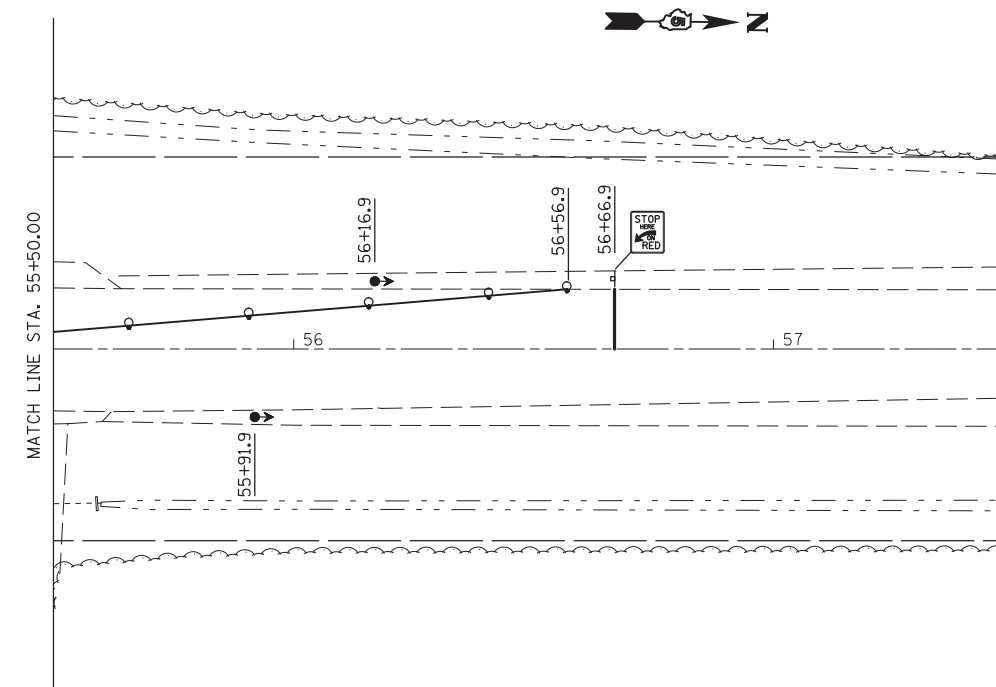
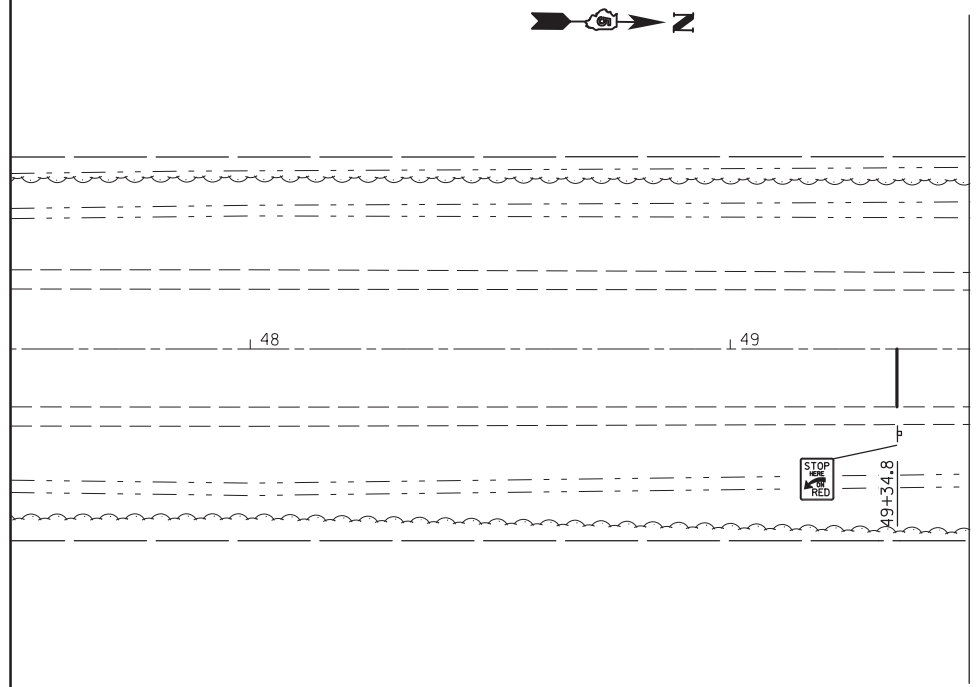
1. TRAFFIC CONTROL DETAILS NOT SHOWN SHALL BE INSTALLED PER TRAFFIC CONTROL AND PROTECTION STANDARD 701321.
2. TEMPORARY BRIDGE TRAFFIC SIGNALS UTILIZED WILL NOT BE MEASURED INDIVIDUALLY. THEY WILL BE MEASURED AS ONE UNIT TOTAL FOR THE PROJECT.
3. BARRIER OFFSETS ARE FROM THE CENTER OF THE BARRIER.
4. THE TWO FIELD ENTRANCES LOCATED JUST NORTH OF THE PROJECT LIMITS SHALL BE ACCESSIBLE AT ALL TIMES. DRUMS SHALL BE TEMPORARILY RELOCATED AND TRAFFIC SHALL BE GUIDED BY A FLAGGER WHEN INGRESS TO OR EGRESS FROM IL ROUTE 49 IS REQUIRED.

**STAGE II NOTES:**

1. RELOCATE TEMPORARY CONCRETE BARRIER AND INSTALL TRAFFIC CONTROL PER THIS DETAIL AND HIGHWAY STANDARD 701321.
2. STEEL RETAINER PLATES SHALL BE INSTALLED TO PIN THE TEMPORARY CONCRETE BARRIER ADJACENT TO THE DROPOFF ALONG THE APPROACH PAVEMENT STAGE CONSTRUCTION LINE AS SHOWN IN THE DETAILS. TEMPORARY BARRIER ADJACENT TO THE FLEXIBLE CONNECTOR SHALL BE FULLY PINNED ON THE TRAFFIC SIDE OF THE BARRIER. THE TRANSITION FROM FULLY PINNED TO UNPINNED BARRIER SHALL BE COMPLETED PER THE REQUIREMENTS GIVEN IN THE SPECIAL PROVISIONS.
3. REMOVE THE STAGE II PORTION OF THE EXISTING SUPERSTRUCTURE, PAVEMENT, GUARDRAIL, AND SHOULDER INLETS.
4. CONSTRUCT THE STAGE II PORTION OF THE NEW BRIDGE, APPROACH PAVEMENT AND FLEXIBLE CONNECTOR, AND TEMPORARY RAMPS.
5. COMPLETE STAGE II EARTHWORK AND CONSTRUCT AGGREGATE SHOULDERS, GUARDRAIL, AND BRIDGERAIL.

**FINAL STAGE:**

1. REMOVE TRAFFIC CONTROL AND PROTECTION STANDARD 701321 DEVICES AND MILL AND INLAY ROADWAY, PAVED SHOULDERS, AND BASE COURSE OPTION WHILE UTILIZING TRAFFIC CONTROL AND PROTECTION STANDARD 701201.
2. PLACE FERTILIZER, SEED, MULCH AND EROSION CONTROL BLANKET. INSTALL RAISED REFLECTIVE PAVEMENT MARKERS AND PAINT PAVEMENT MARKINGS.

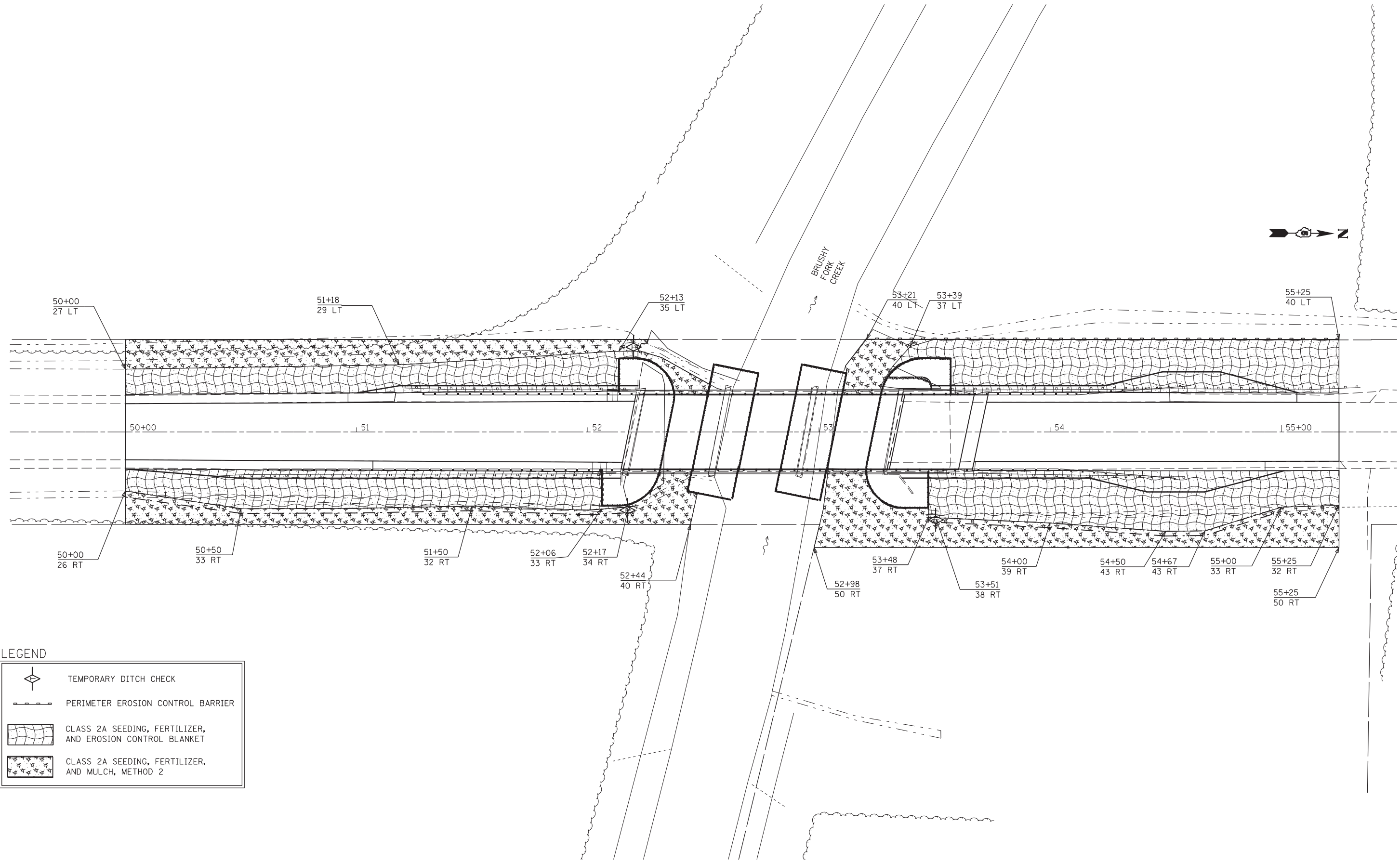


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#MODELNAME#	PLOT DATE = 9/5/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

<b>MAINTENANCE OF TRAFFIC STAGE 2</b>	
SCALE:	SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	13
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				



LEGEND

	TEMPORARY DITCH CHECK
	PERIMETER EROSION CONTROL BARRIER
	CLASS 2A SEEDING, FERTILIZER, AND EROSION CONTROL BLANKET
	CLASS 2A SEEDING, FERTILIZER, AND MULCH, METHOD 2

FILE NAME =	USER NAME = keysrb	DESIGNED -	REVISED -
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\$MODELNAME\$	PLOT DATE = 9/5/2015	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

LANDSCAPING AND EROSION CONTROL PLAN

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	14
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				



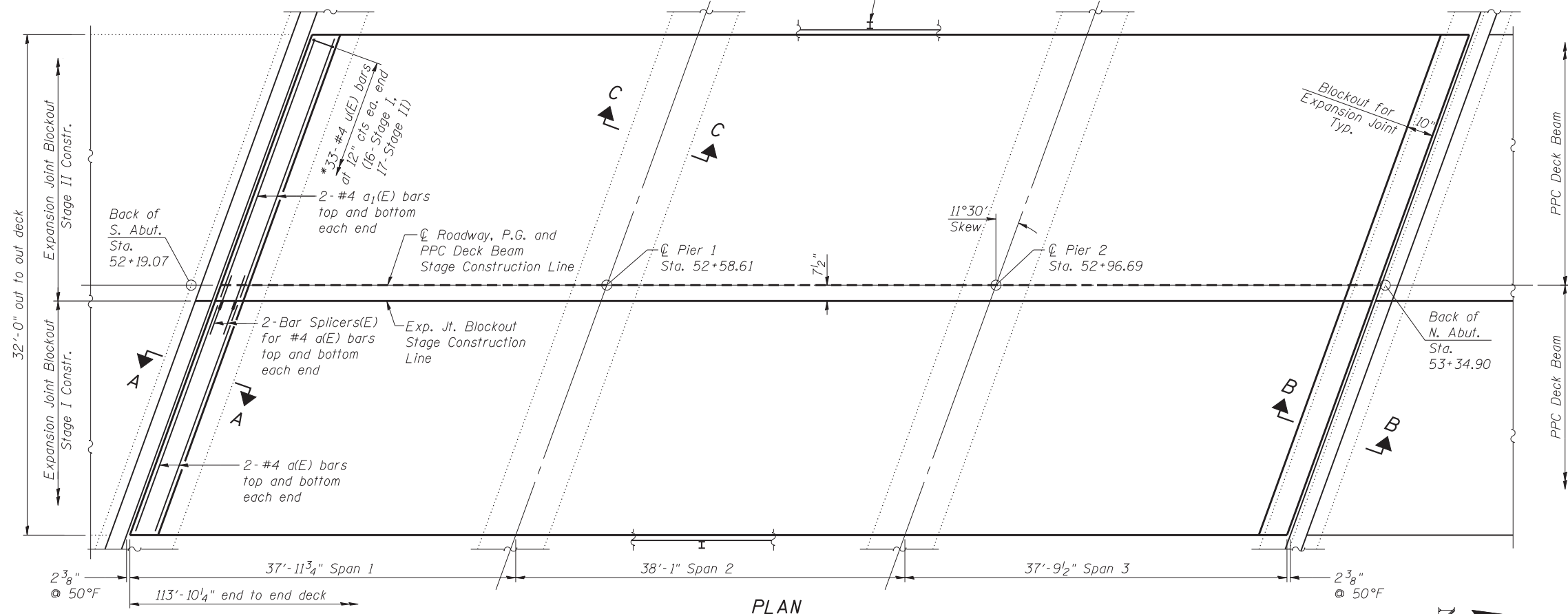




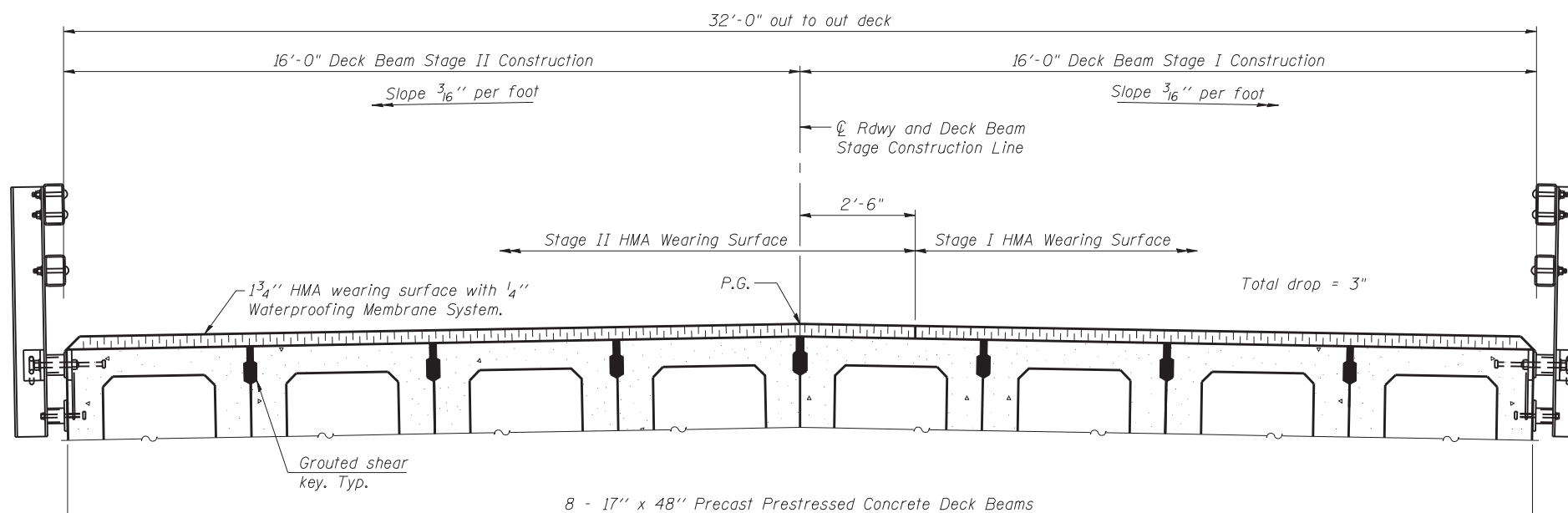


\* Place perpendicular to end of beam

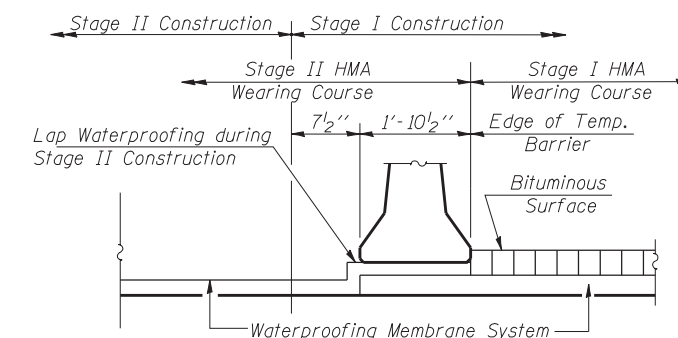
See Sheet 5 of 21 for rail post spacing



PLAN



CROSS SECTION  
(Looking North)



WATERPROOFING TREATMENT  
AT STAGE CONSTRUCTION

BILL OF MATERIAL

Item	Unit	Total
Hot Mix Asphalt Surface Course, Mix "C", N50	Tons	48
Waterproofing Membrane System	Sq. Yd.	405
Portland Cement Mortar Fairing Course	Foot	796

Notes:  
See sheet 5 of 21 for Superstructure Details, bar details and Bill of Material.  
See sheet 5 of 21 for Sec. A-A, Sec. B-B, and Sec. C-C.  
See sheet 20 of 21 for Bar Splicer Assembly Details.

FILE NAME = 70607-004-super.dgn  
PROJECT NO. 09070-B

PDS-HMA-M-R34-L 7-1-10

**Coome-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = .MML.  
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PLOT DATE = 9/19/2014

DESIGNED - GJB  
CHECKED - RKM/CME  
DRAWN - MML  
CHECKED - MCB/RKM

REVISED -  
REVISED -  
REVISED -  
REVISED -

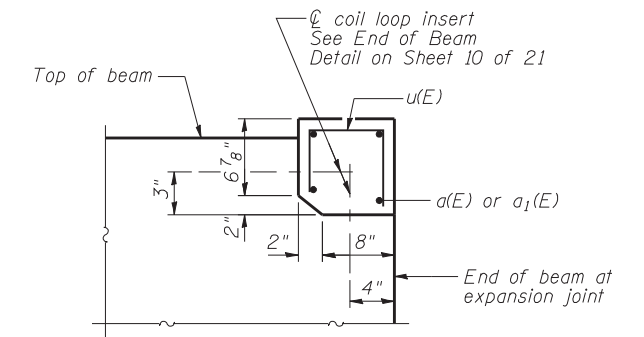
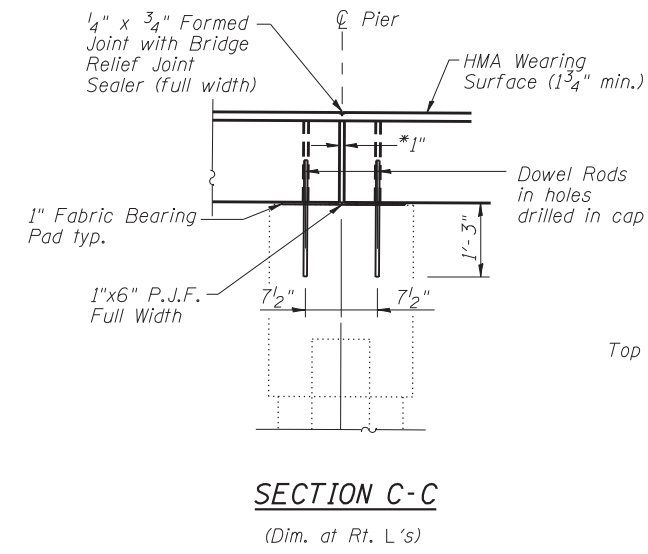
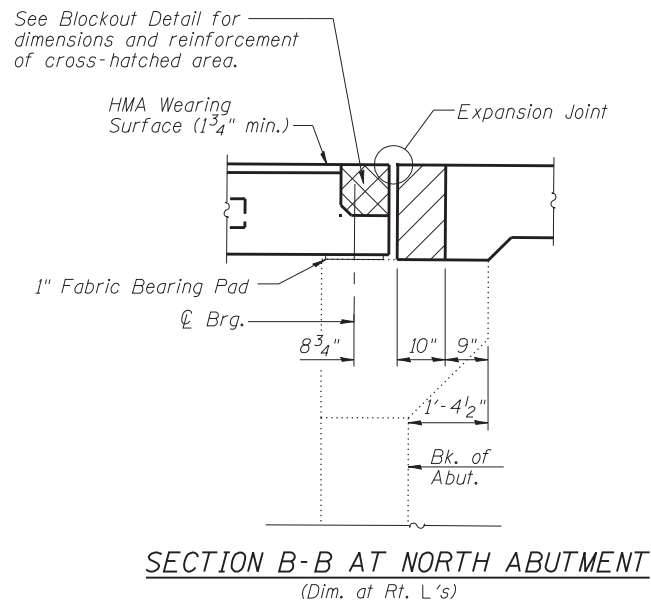
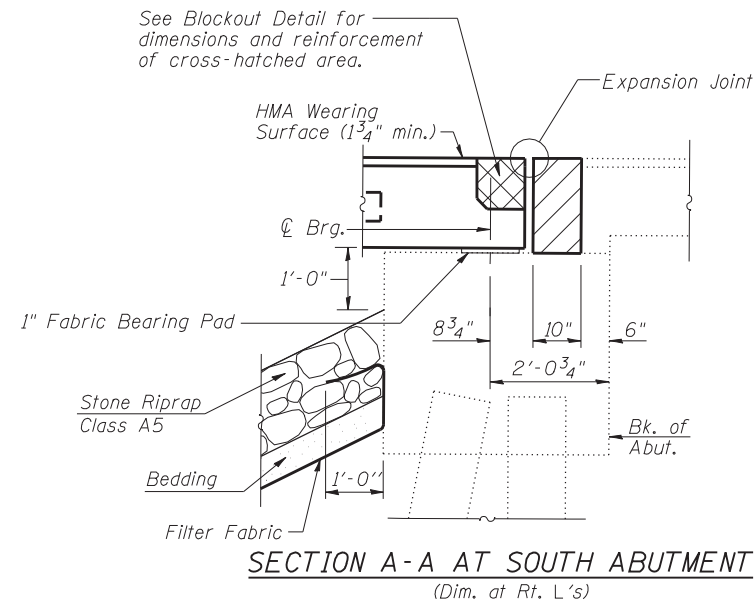
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE  
STRUCTURE NO. 023-0018

SHEET NO. 4 OF 21 SHEETS

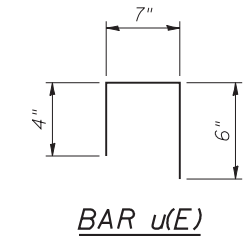
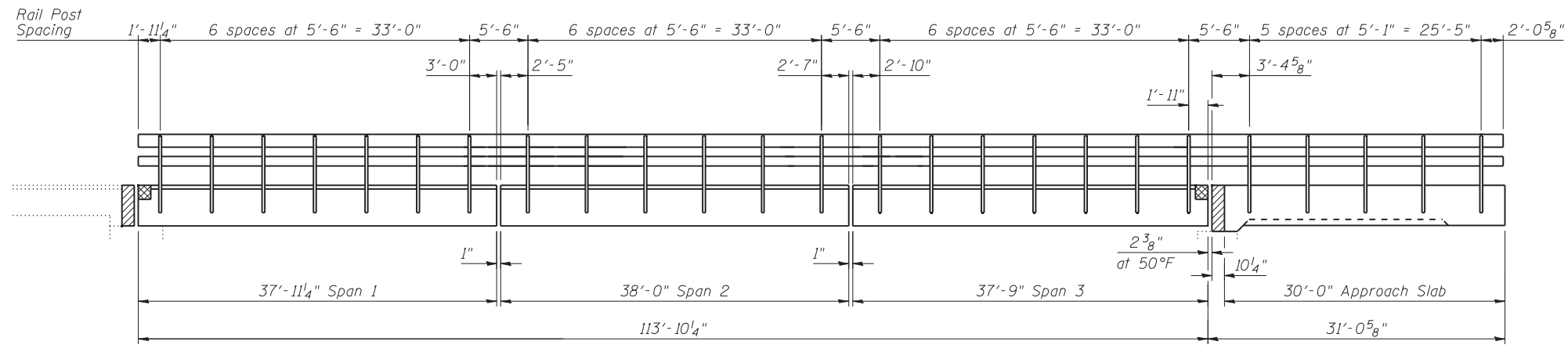
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	18

CONTRACT NO. 70607  
ILLINOIS FED. AID PROJECT



**Notes:**  
 Hatched areas and cross-hatched areas to be poured after beams have been erected and joints grouted. Ends of beams shall be aligned at the expansion joints. Any lineal variation in the beam lengths shall be placed at the fixed joint. See Sheets 16 and 17 of 21 for hatched area details. See Sheet 9 of 21 for Expansion Joint Details. See Sheet 12 of 21 for fabric bearing pad details.

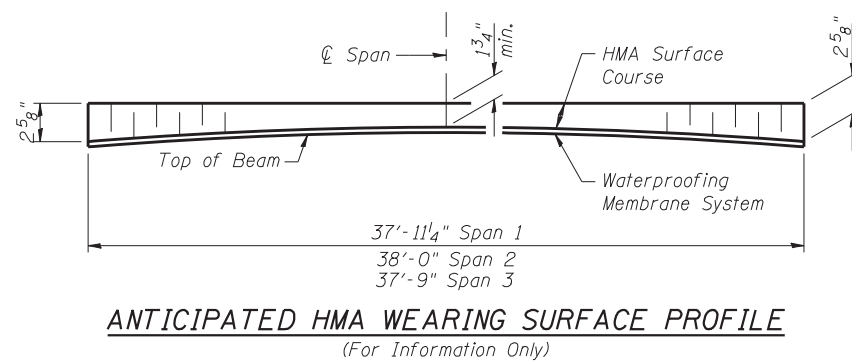
\*1\"/>



**RAILING ELEVATION**  
 See Sheet 8 of 21 for railing details

**SUPERSTRUCTURE BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
a(E)	8	#4	15'-4"	—
a <sub>1</sub> (E)	8	#4	16'-7"	—
u(E)	67	#4	1'-5"	U
Reinforcement Bars, Epoxy Coated			Pound	230
Concrete Superstructure			Cu. Yd.	1.5



FILE NAME = 70607-0018-101-101.dgn  
 PROJECT NO. 090708-B

**Coombe-Bloxdorf P.C.**  
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 STRUCTURAL ENGINEERS  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

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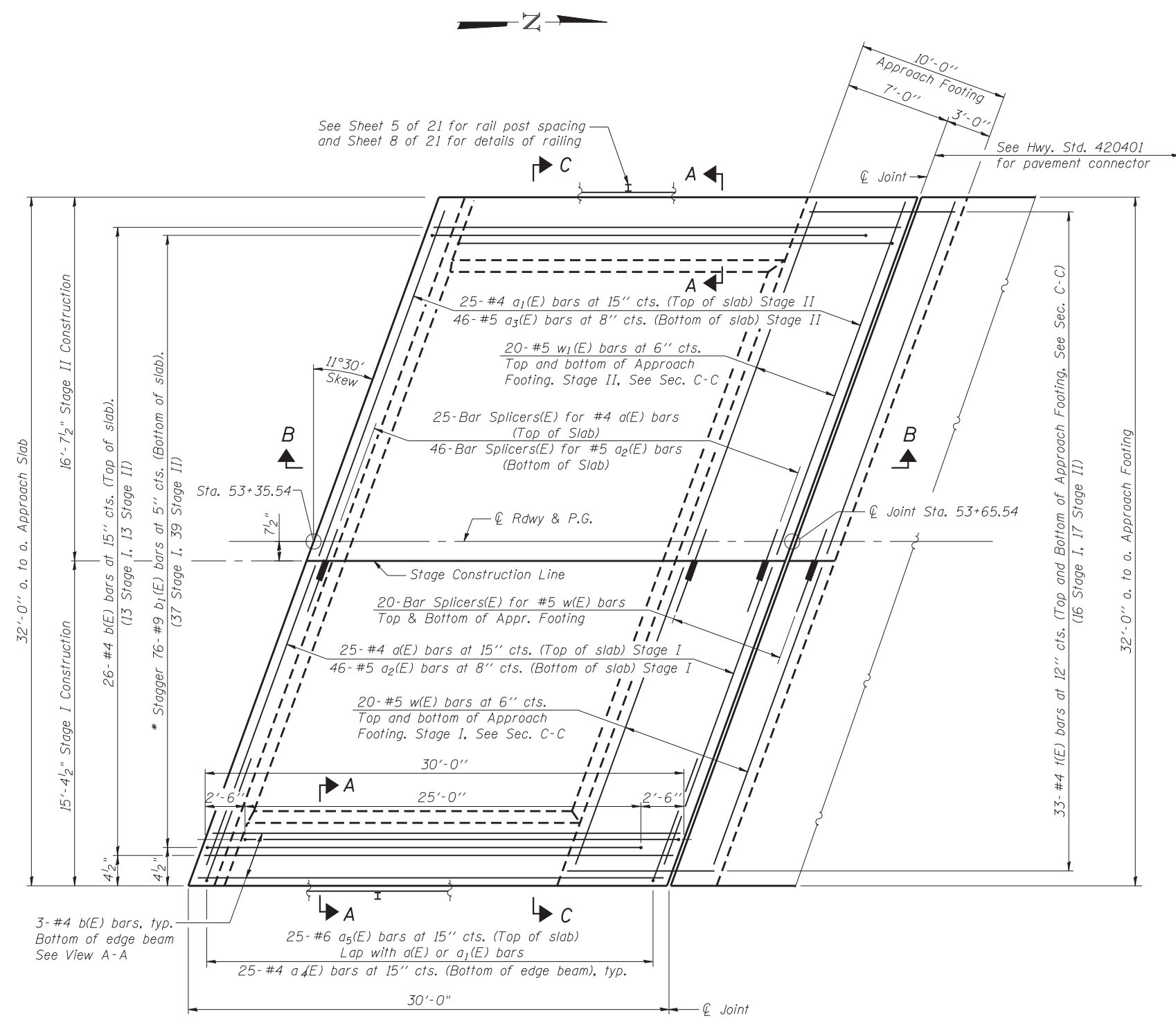
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**SUPERSTRUCTURE DETAILS  
 STRUCTURE NO. 023-0018**

SHEET NO. 5 OF 21 SHEETS

F.A.P. RTE. 836	SECTION 117BR-1	COUNTY EDGAR	TOTAL SHEETS 48	SHEET NO. 19
CONTRACT NO. 70607				ILLINOIS FED. AID PROJECT

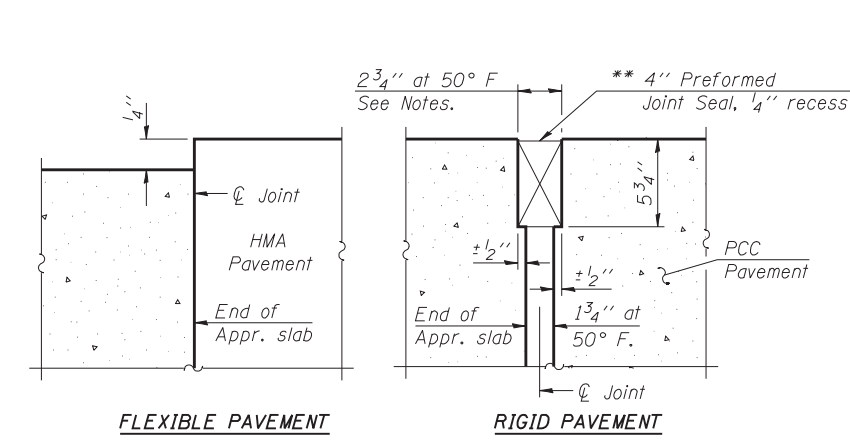
Notes:  
 See sheet 7 of 21 for Sections B-B & C-C.  
 a(E) thru a<sub>3</sub>(E) bar spacings measured along  $\phi$  Rdwy.  
 The joint opening shall be determined per Article 520.04 except that on jointless structures, the distance described as the bridge length between the nearest fixed bearings each way from the joint shall be taken as half the bridge length plus the approach slab length. The minimum dimension shall be 1 1/2' for installation purposes.



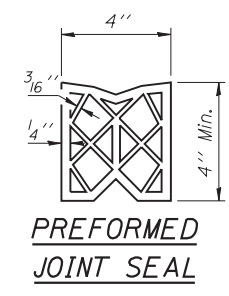
**PLAN**

\* Tilt #9 b<sub>1</sub>(E) bars as required to maintain clearance.

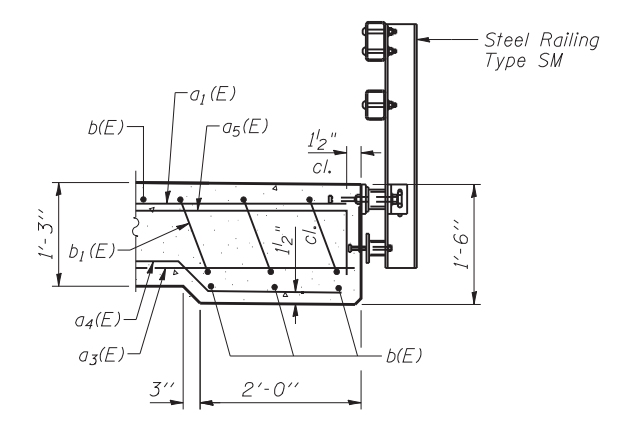
\*\* Cost included with Concrete Superstructure.



**DETAIL A**



**PREFORMED JOINT SEAL**



**VIEW A-A**

(Sheet 1 of 2)

FILE NAME = 70607-006-100-1.dgn  
 PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

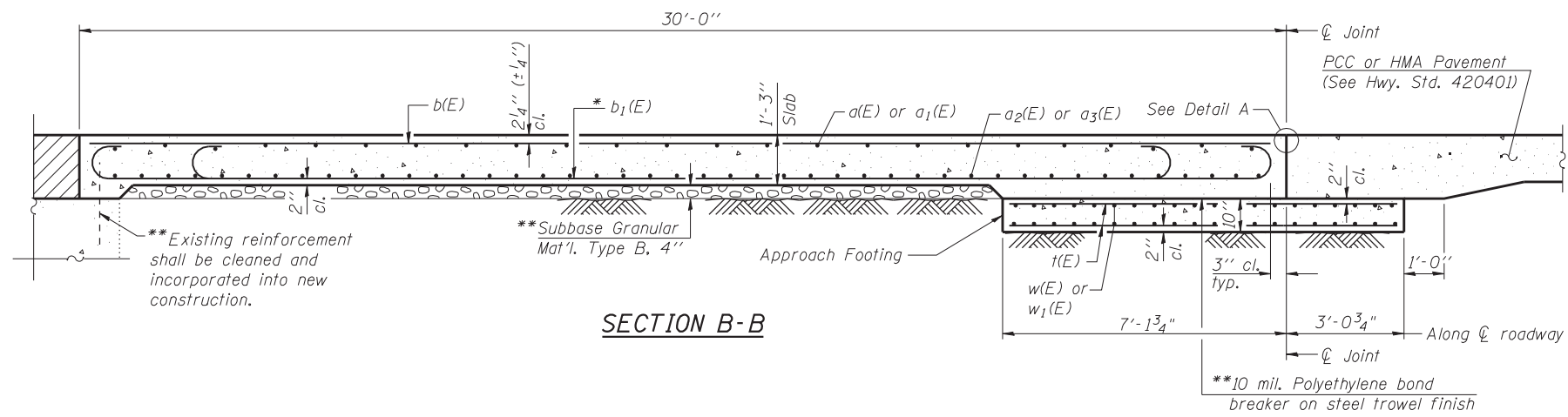
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**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

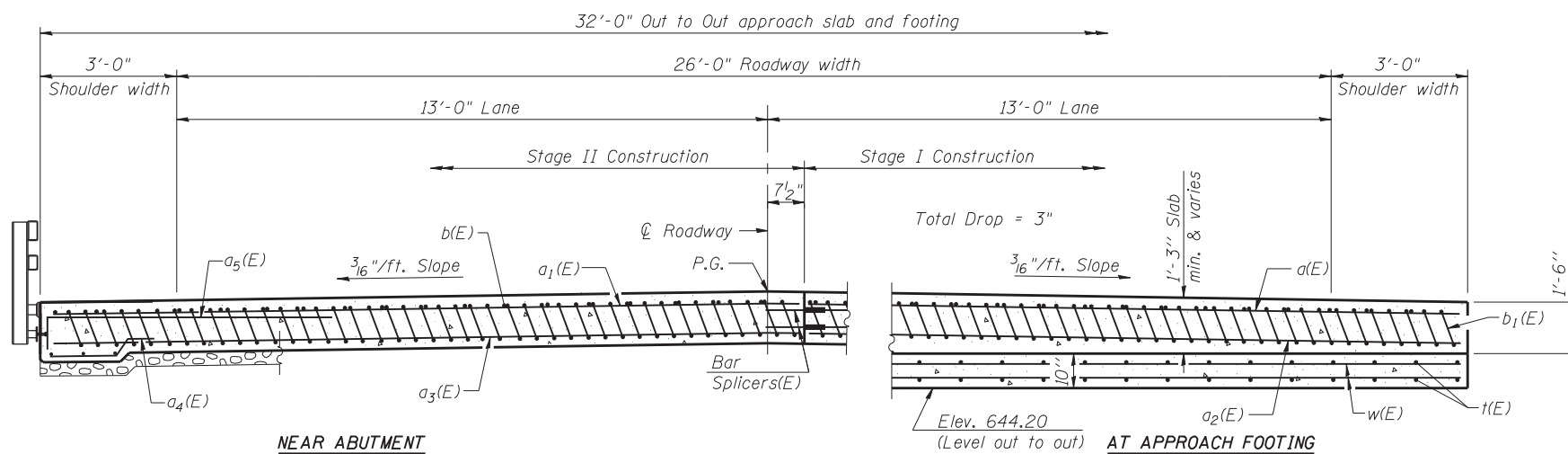
**BRIDGE APPROACH SLAB DETAILS**  
**STRUCTURE NO. 023-0018**

SHEET NO. 6 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	20
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				



Notes:  
 See sheet 6 of 21 for Detail A.  
 Approach slab concrete shall be paid for as Concrete Superstructure.  
 Approach footing concrete shall be paid for as Concrete Structures.  
 Reinforcement shall be paid for as Reinforcement Bars, Epoxy Coated.  
 The approach footing maximum applied service bearing pressure ( $Q_{max}$ ) = 2.0 ksf.  
 For bar splicer details, see sheet 20 of 21.  
 Cost of excavation for approach footing included with Concrete Structures.  
 See Sheets 16 and 17 of 21 for hatched area details.  
 Approach slab is at north end only.

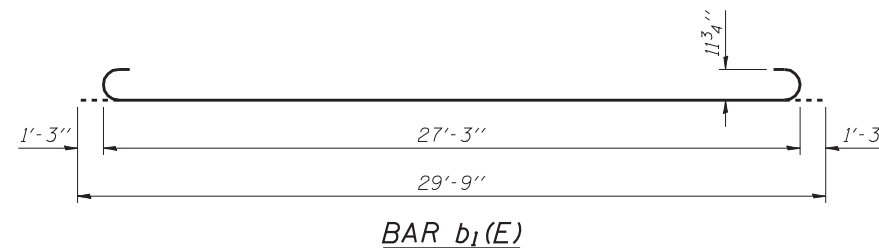
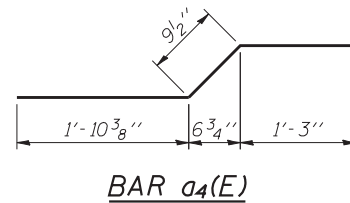
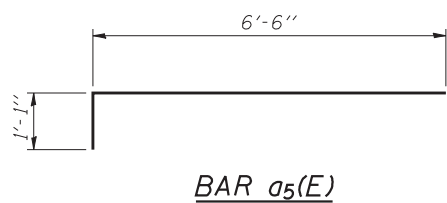


\* Tilt #9  $b_1(E)$  bars as required to maintain clearance.  
 \*\* Cost included with Concrete Superstructure.

**ONE APPROACH  
 BILL OF MATERIAL**

Bar	No.	Size	Length	Shape
$a(E)$	25	#4	15'-4"	—
$a_1(E)$	25	#4	16'-7"	—
$a_2(E)$	46	#5	15'-4"	—
$a_3(E)$	46	#5	16'-7"	—
$a_4(E)$	50	#4	3'-10"	—
$a_5(E)$	50	#6	7'-7"	—
$b(E)$	32	#4	29'-8"	—
$b_1(E)$	76	#9	29'-9"	—
$t(E)$	66	#4	9'-11"	—
$w(E)$	40	#5	15'-4"	—
$w_1(E)$	40	#5	16'-7"	—
Concrete Superstructure			Cu. Yd.	49.9
Concrete Structures			Cu. Yd.	10.1
*** Reinforcement Bars, Epoxy Coated			Pound	12,850
Bridge Deck Grooving			Sq. Yd.	113
Protective Coat			Sq. Yd.	113

\*\*\* 11,080 Pounds (Superstructure)  
 1,770 Pounds (Substructure)



BA-L

12-12-12

(Sheet 2 of 2)

FILE NAME = 70607-007-001-001.dwg  
 PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS  
 STRUCTURAL ENGINEERS  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

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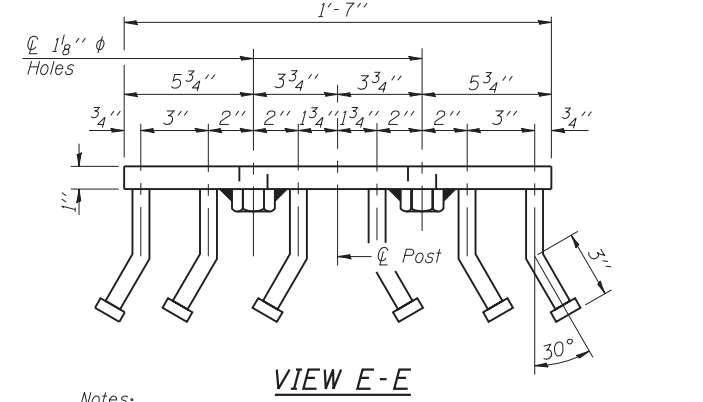
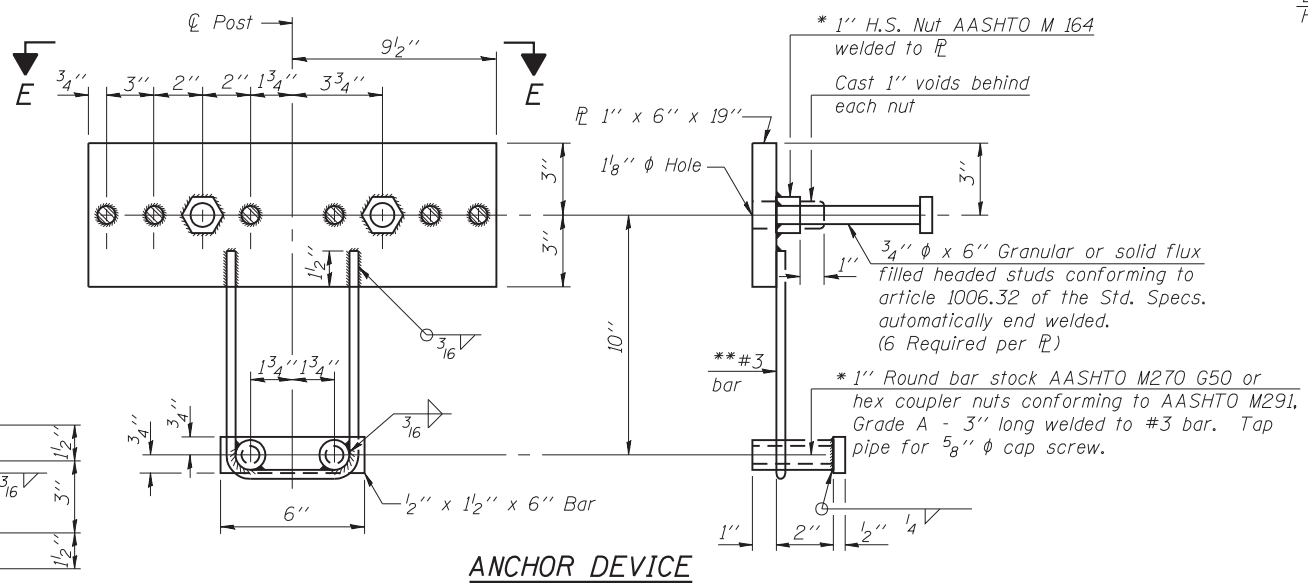
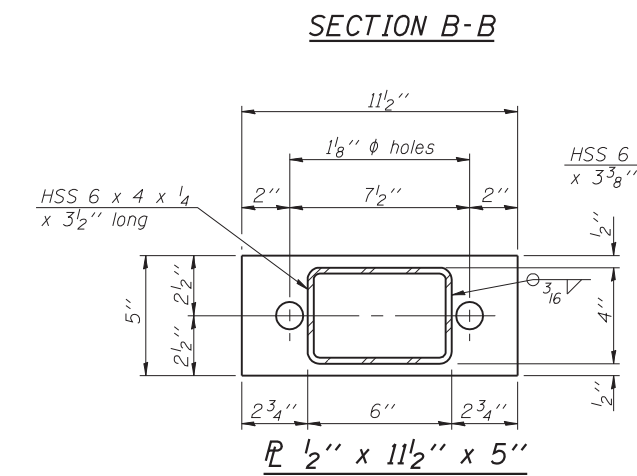
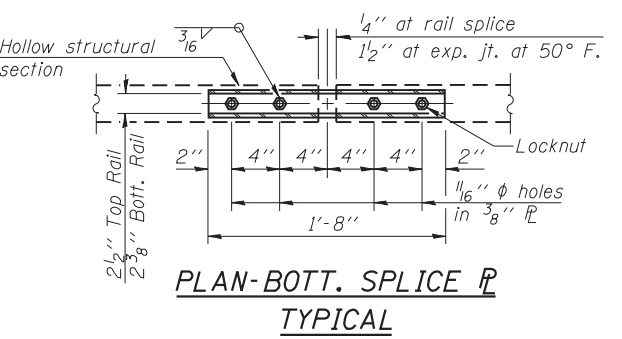
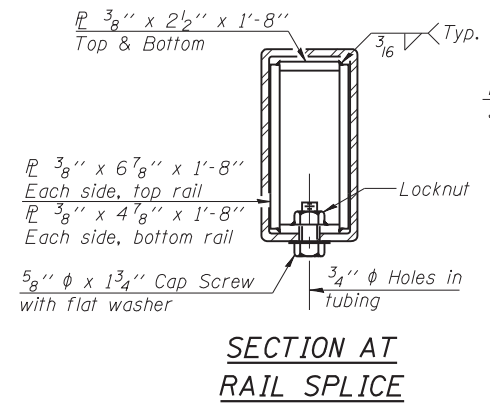
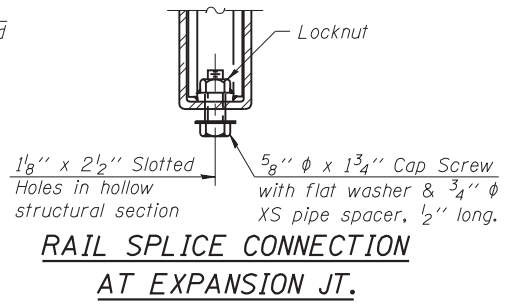
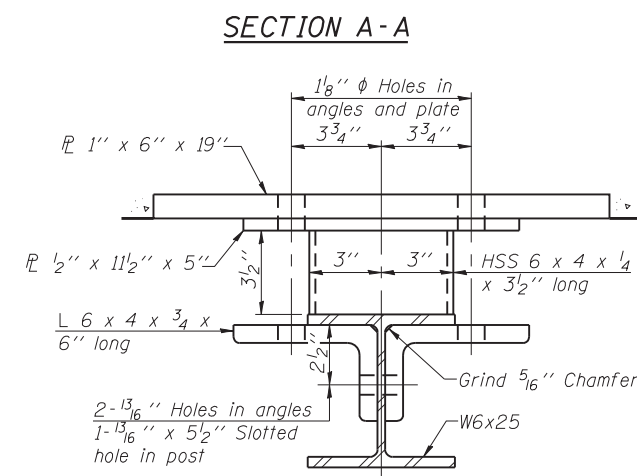
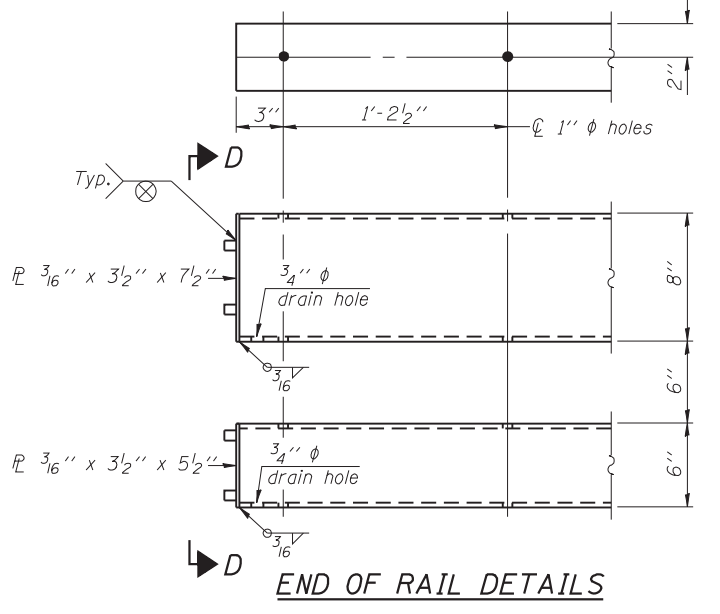
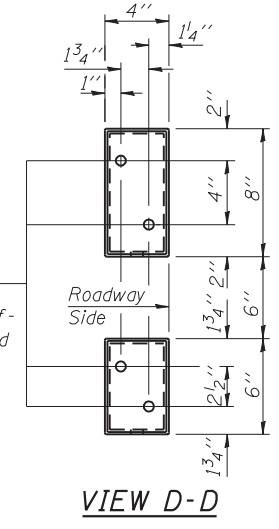
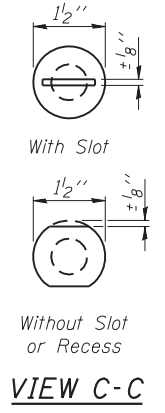
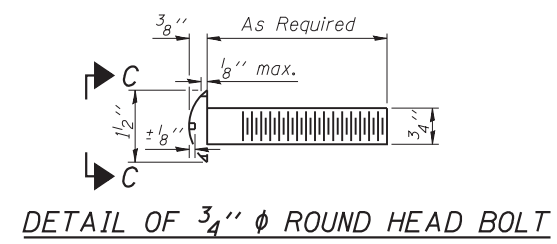
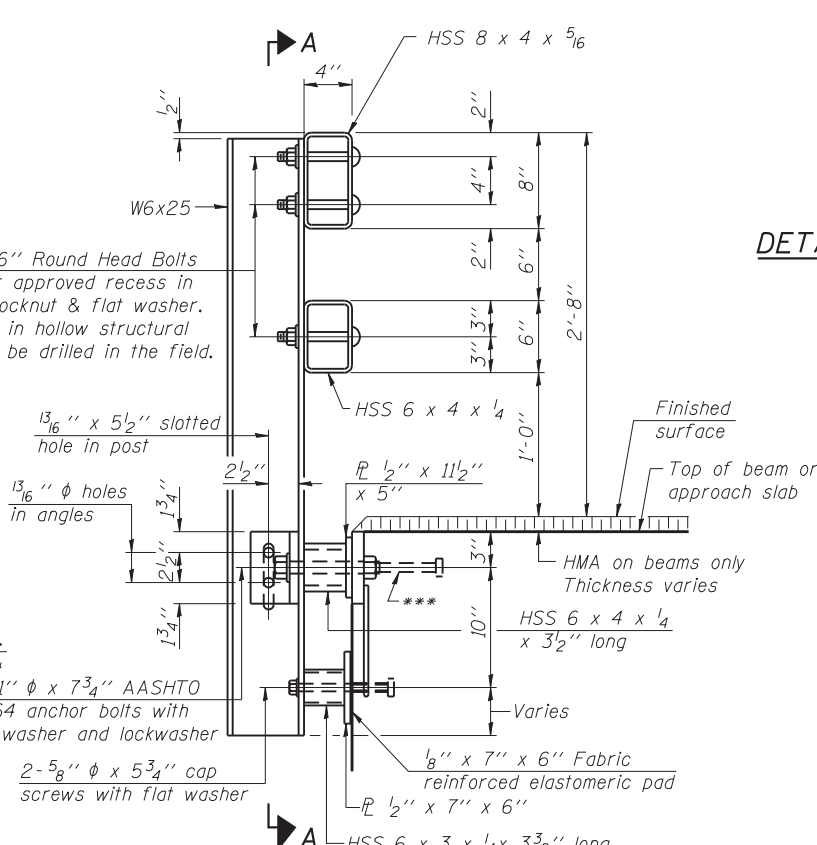
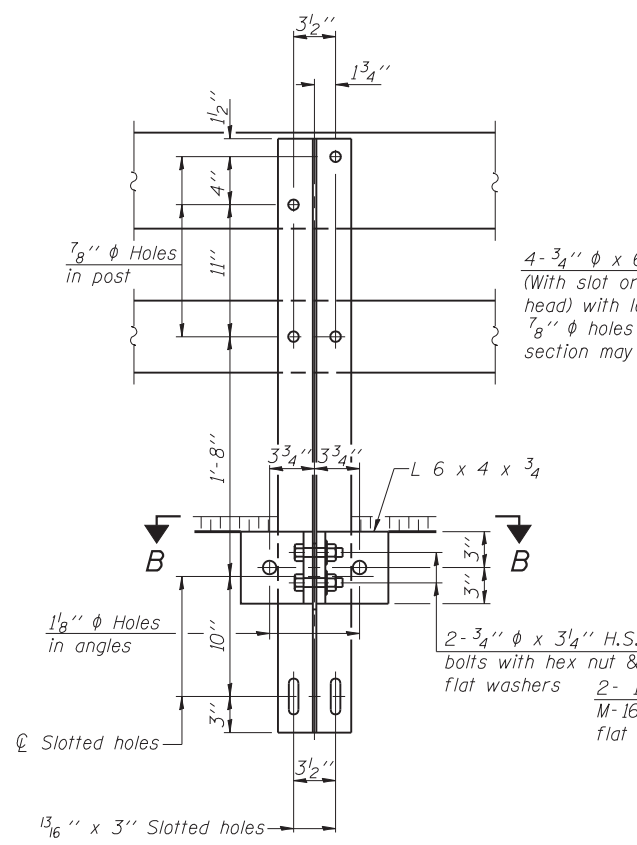
**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**BRIDGE APPROACH SLAB DETAILS  
 STRUCTURE NO. 023-0018**

SHEET NO. 7 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	21
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				





Notes:  
 All field drilled holes shall be coated with an approved zinc rich paint before erection.  
 For multi-span bridges, sufficient  $\frac{1}{4}$ " x 6" x 1'-2" galvanized steel shims shall be provided to align rail between adjacent spans. Cost included with Steel Railing, Type SM.  
 All steel rail members shall be galvanized according to Article 509.05 of the Standard Specifications.  
 \*\*\* The studs of the anchor devices shall be placed below the top reinforcement bars and the outermost longitudinal reinforcement bar shall be placed directly above the studs of the rail post anchor device.

**BILL OF MATERIAL**

Item	Unit	Quantity
Steel Railing, Type SM	Foot	290

\*Threaded areas shall be plugged or blocked off during casting of beam. Galvanized after fabrication.

\*\* Whenever the lower insert assemblies interfere with strand locations, the #3 bars shall be cut and adjusted in order to allow raising or lowering of the lower inserts. Maximum adjustment not to exceed  $\frac{1}{2}$ ".

FILE NAME = 70607-008-1.dgn  
 PROJECT NO. 09070-B

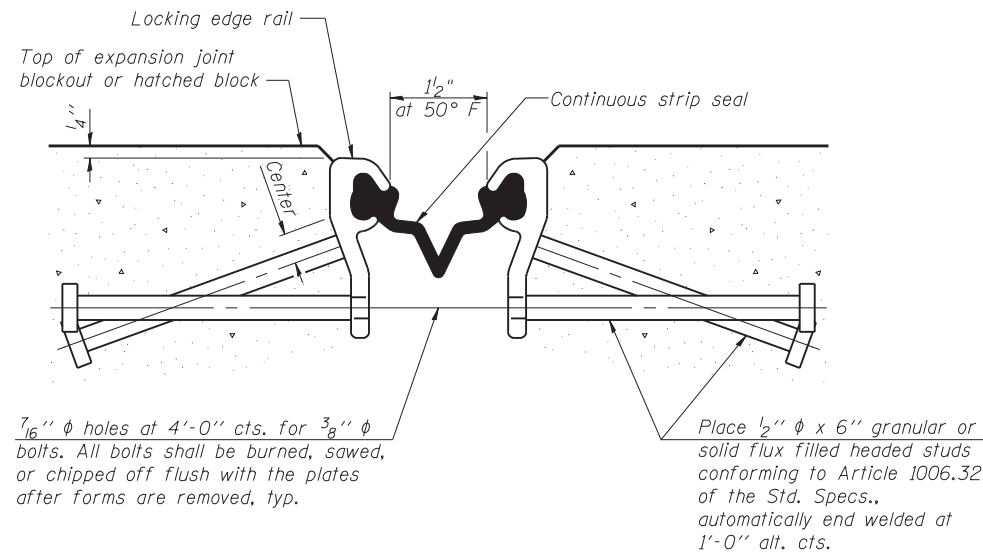
**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - GJB	REVISED -
PLOT SCALE = 0.1667' / IN.	CHECKED - RKM/CME	REVISED -
PLOT DATE = 9/19/2014	DRAWN - MML	REVISED -
	CHECKED - MCB	REVISED -

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

**STEEL RAILING, TYPE SM WITH HOT-MIX ASPHALT WEARING SURFACE**  
**STRUCTURE NO. 023-0018**

F.A.P. RTE. 836	SECTION 117BR-1	COUNTY EDGAR	TOTAL SHEETS 48	SHEET NO. 22
CONTRACT NO. 70607				ILLINOIS FED. AID PROJECT



**SECTION THRU STRIP SEAL JOINT**

**Notes:**

The strip seal shall be made continuous and shall have a minimum thickness of 1/4". The configuration of the strip seal shall match the configuration of the Locking Edge Rails.

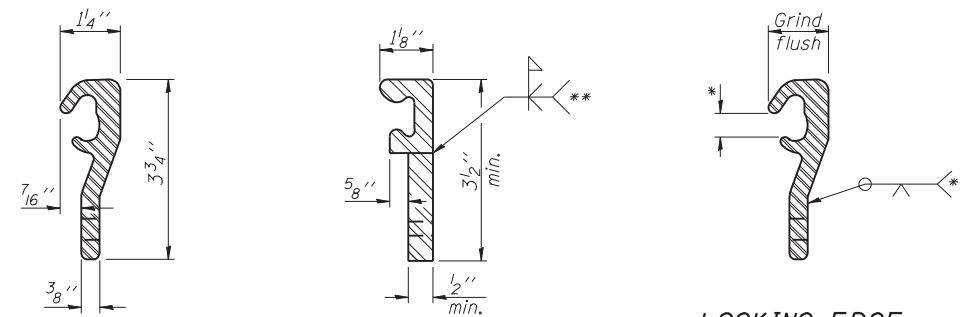
The height and thickness of the Locking Edge Rails shown are minimum dimensions. The actual configuration of the Locking Edge Rails and matching strip seal may vary from manufacturer to manufacturer. Flanged edge rails will not be allowed.

The inside of the Locking Edge Rail groove shall be free of weld residue. Locking Edge Rails may be spliced at slope discontinuities and stage construction joints.

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.

Maximum space between rail segments at stage lines shall be 3/16", sealed with a suitable sealant



**ROLLED (EXTRUDED) RAIL**

**WELDED RAIL**

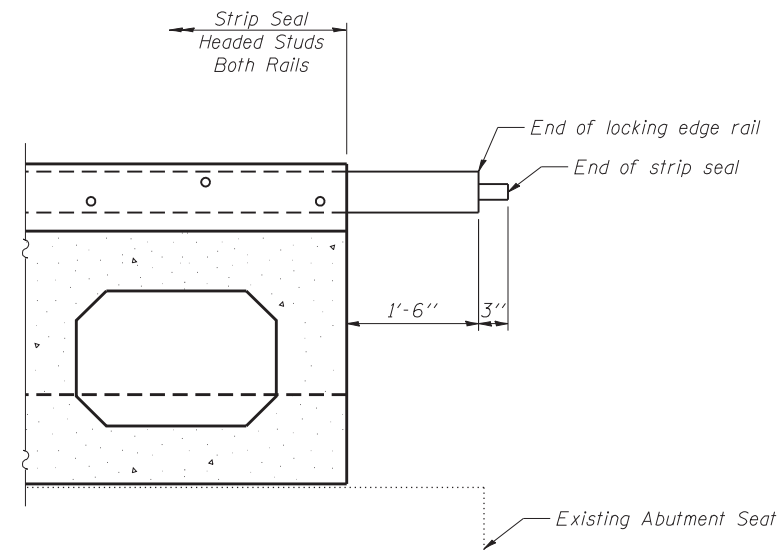
**LOCKING EDGE RAIL SPLICE**

Rolled rail shown, welded rail similar.

\* Omit weld at seal opening.

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

**LOCKING EDGE RAIL**



**STRIP SEAL EXTENSIONS**

**BILL OF MATERIAL**

Item	Unit	Total
Preformed Joint Strip Seal	Foot	73

FILE NAME = 70607-009-rpt-judgn  
PROJECT NO. 09070-B

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- LAND SURVEYORS -  
Design Firm License No. 184-002703

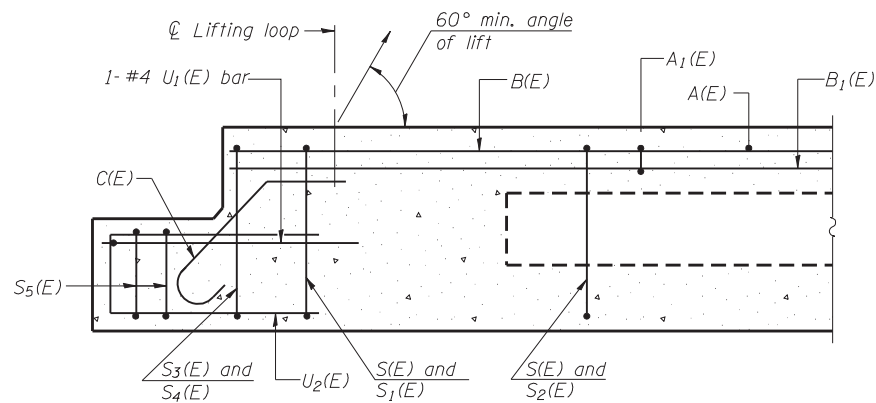
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	CHECKED - RKM/CME	REVISED -
PLOT SCALE = 0.1667' / IN.	DRAWN - MML	REVISED -
PLOT DATE = 9/19/2014	CHECKED - MCB	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

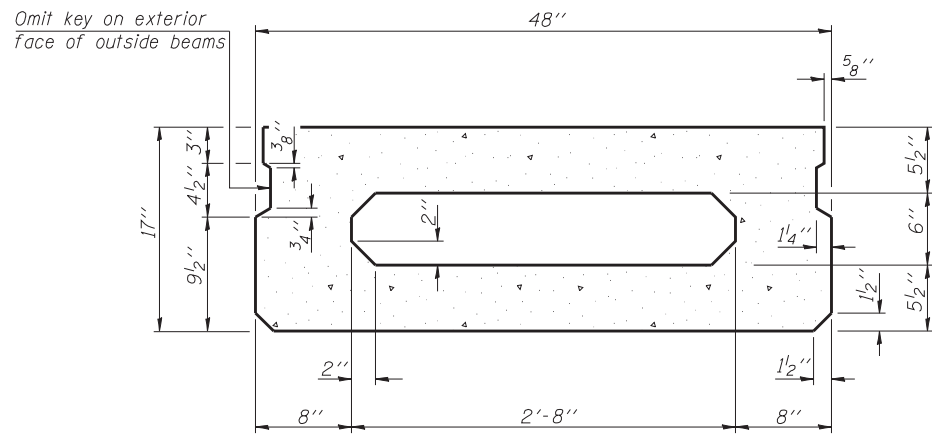
**PREFORMED JOINT STRIP SEAL  
STRUCTURE NO. 023-0018**

SHEET NO. 9 OF 21 SHEETS

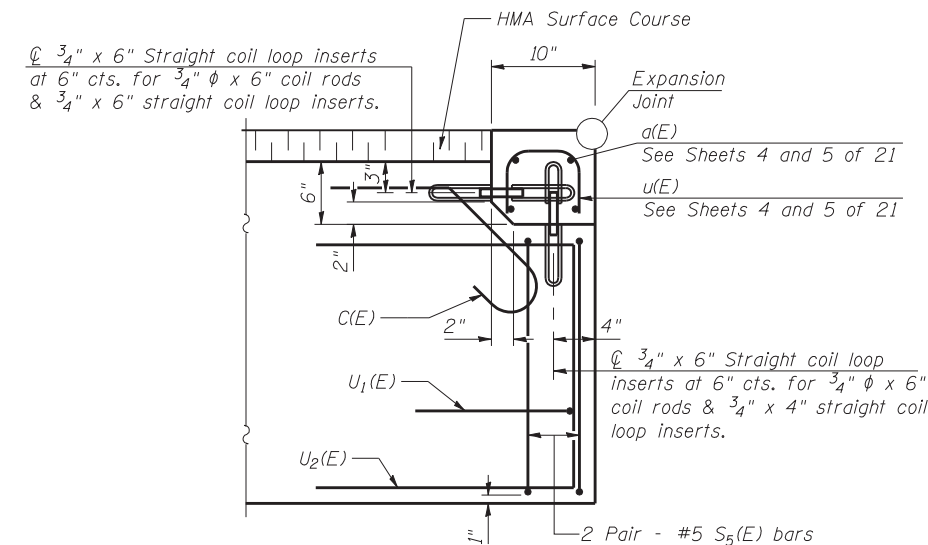
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	23
CONTRACT NO. 70607			ILLINOIS FED. AID PROJECT	



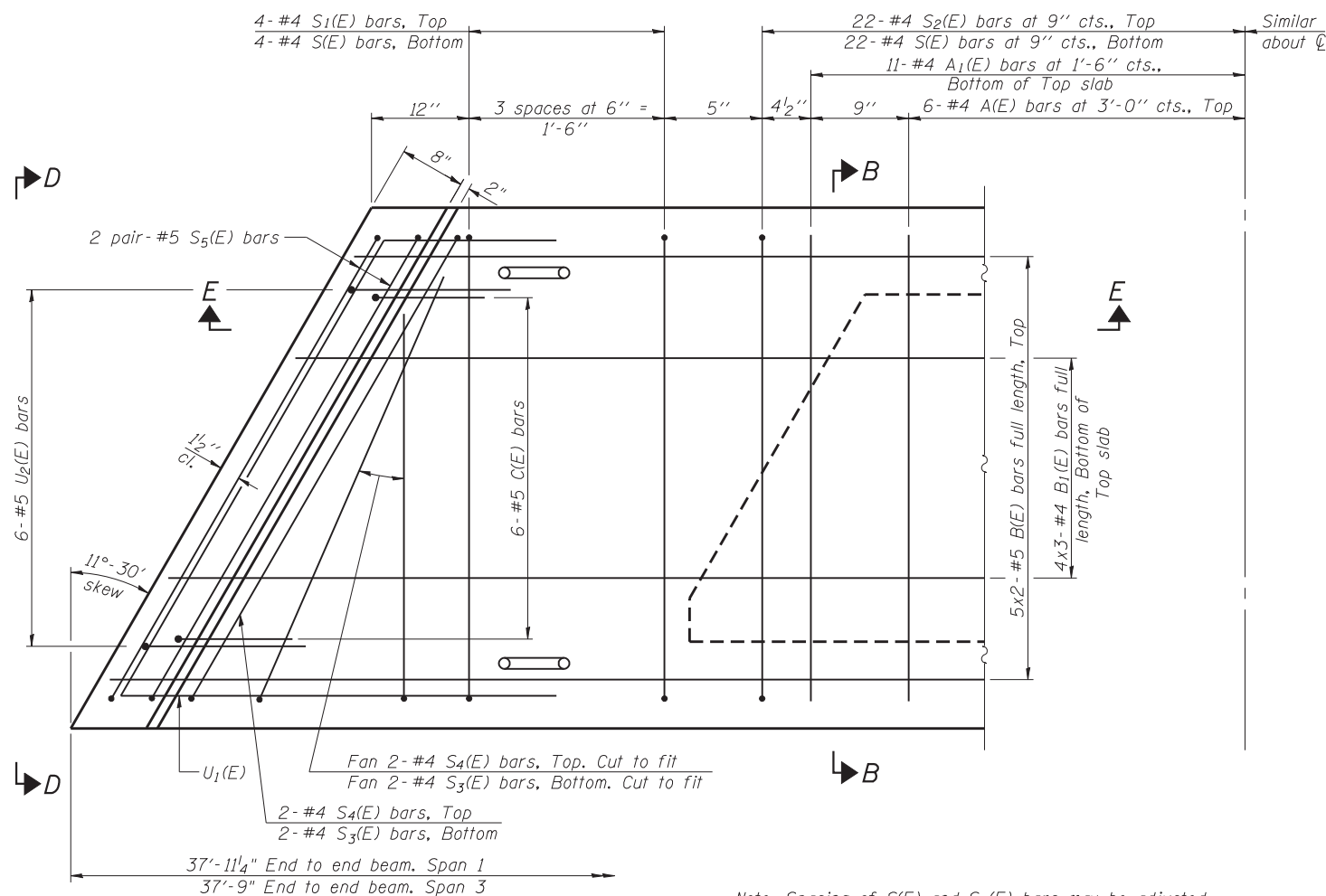
**SECTION E-E**



**SECTION B-B**  
(Showing dimensions)



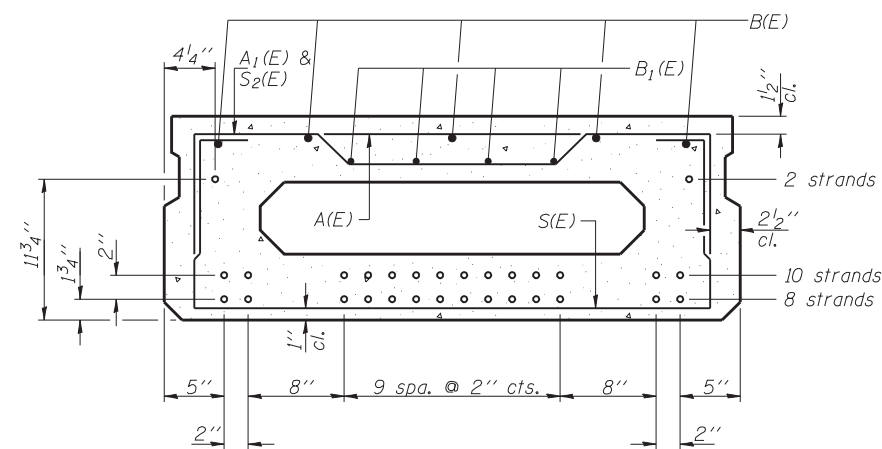
**END OF BEAM (EXP. END)**  
(Dimensions are at Rt. L's)



**PLAN VIEW**  
(Showing Expansion End of Beam)

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

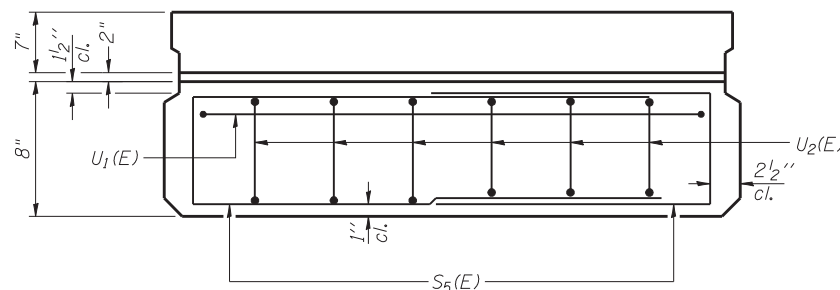
**MINIMUM BAR LAP**  
#4 bar = 2'-0"  
#5 bar = 2'-6"



**SECTION B-B**

(Showing reinforcement and permissible strand locations)

Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.



**VIEW D-D**

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	11	#4	3'-7"	—
A1(E)	22	#4	3'-10"	—
B(E)	10	#5	20'-1"	—
B1(E)	12	#4	13'-10"	—
C(E)	12	#5	3'-8"	⌋
S(E)	52	#4	6'-9"	⌋
S1(E)	8	#4	5'-3"	⌋
S2(E)	44	#4	5'-6"	⌋
S3(E)	8	#4	4'-6"	⌋
S4(E)	8	#4	3'-9"	⌋
S5(E)	8	#4	6'-6 1/2"	⌋
U1(E)	2	#4	6'-10"	⌋
U2(E)	12	#5	3'-8"	⌋

Note: See sheet 12 of 21 for additional details and Bill of Material.

FILE NAME = 70607-02-ppc-1-3.dgn  
CB PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
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STRUCTURAL ENGINEERS  
LAND SURVEYORS  
Design Firm License No. 184-002703

USER NAME = .MML.  
DESIGNED - GJB  
CHECKED - RKM/CME  
DRAWN - MML  
CHECKED - MCB  
PLOT SCALE = 0.1667' / IN.  
PLOT DATE = 9/19/2014

DESIGNED - GJB  
CHECKED - RKM/CME  
DRAWN - MML  
CHECKED - MCB

REVISED -  
REVISED -  
REVISED -  
REVISED -

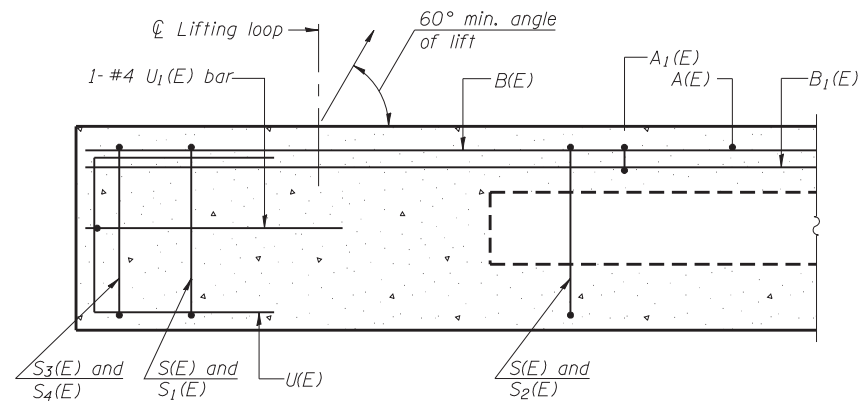
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**17" x 48" PPC DECK BEAM - SPANS 1 & 3**  
**STRUCTURE NO. 023-0018**

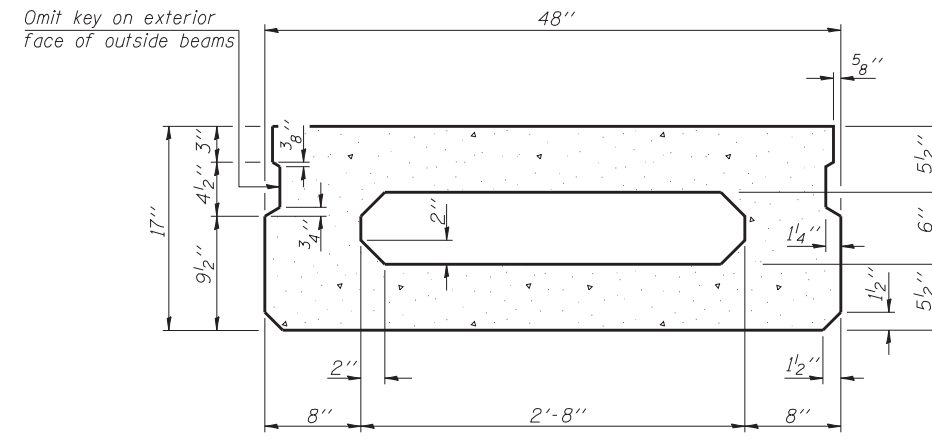
SHEET NO. 10 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	24
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				

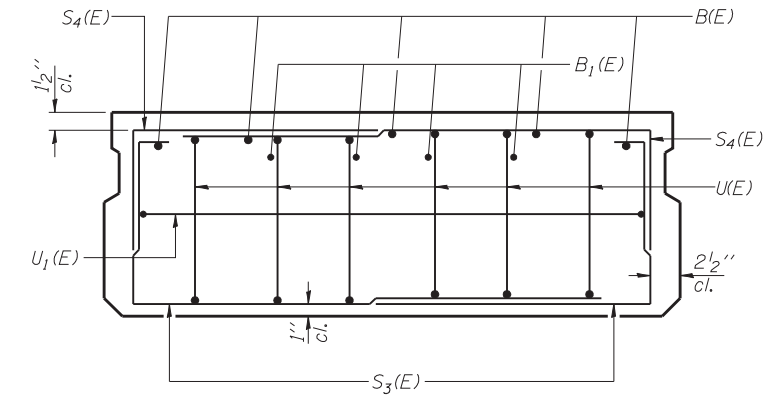




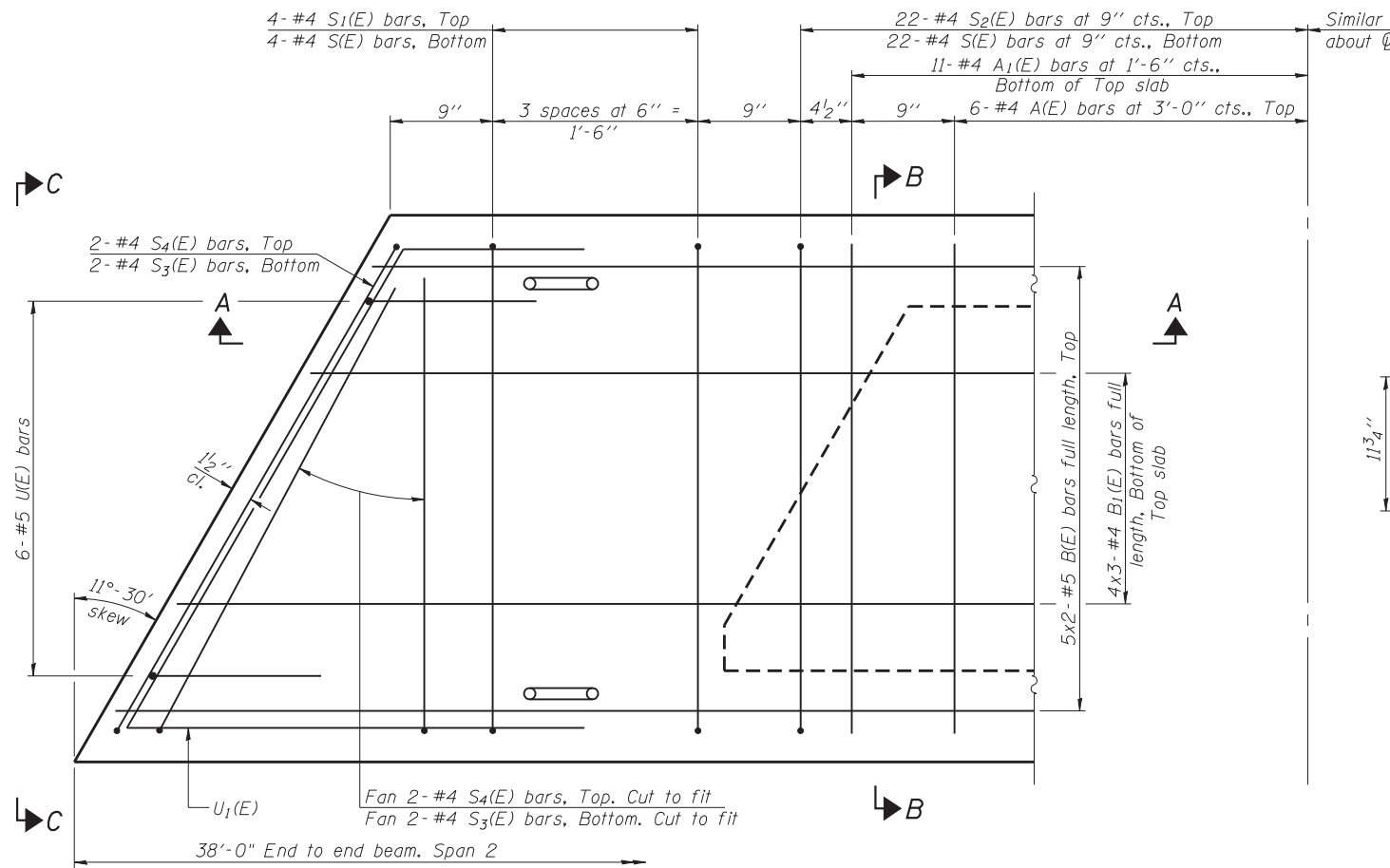
**SECTION A-A**



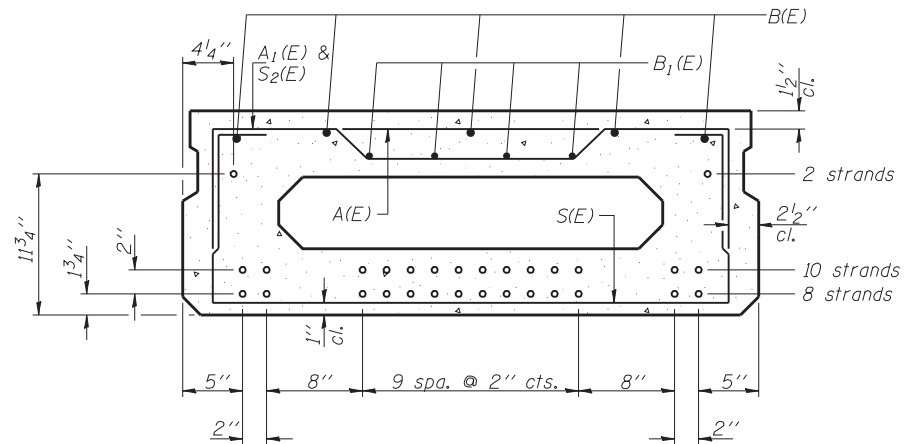
**SECTION B-B**  
(Showing dimensions)



**VIEW C-C**



**PLAN VIEW**  
Showing fixed end of beam



**SECTION B-B**  
(Showing reinforcement and permissible strand locations)  
Note: Place the number of strands specified in each row symmetrically about the centerline of beam in the permissible strand locations shown.

**BAR LIST**  
**ONE BEAM ONLY**  
(For information only)

Bar	No.	Size	Length	Shape
A(E)	11	#4	3'-7"	—
A1(E)	22	#4	3'-10"	~
B(E)	10	#5	20'-1"	—
B1(E)	12	#4	13'-10"	—
S(E)	52	#4	6'-9"	┌
S1(E)	8	#4	5'-3"	┌
S2(E)	44	#4	5'-6"	┌
S3(E)	8	#4	4'-6"	┌
S4(E)	8	#4	3'-9"	┌
U(E)	12	#5	3'-8"	┌
U1(E)	2	#4	6'-10"	┌

Note: See sheet 12 of 21 for additional details and Bill of Material.

**MINIMUM BAR LAP**  
#4 bar = 2'-0"  
#5 bar = 2'-6"

Note: Spacing of S(E) and S2(E) bars may be adjusted up to 4" in the immediate area of the transverse tie diaphragms to miss the block outs for the transverse ties.

FILE NAME = 70607-011-1-1-2.dgn  
PROJECT NO. 09070-B

**PD-1748-L**  
7-1-10  
Coombe-Bloxdorf P.C.  
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- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - GJB	REVISED -
CHECKED - RKM/CME	REVISIONS -	
DRAWN - MML	REVISIONS -	
CHECKED - MCB	REVISIONS -	

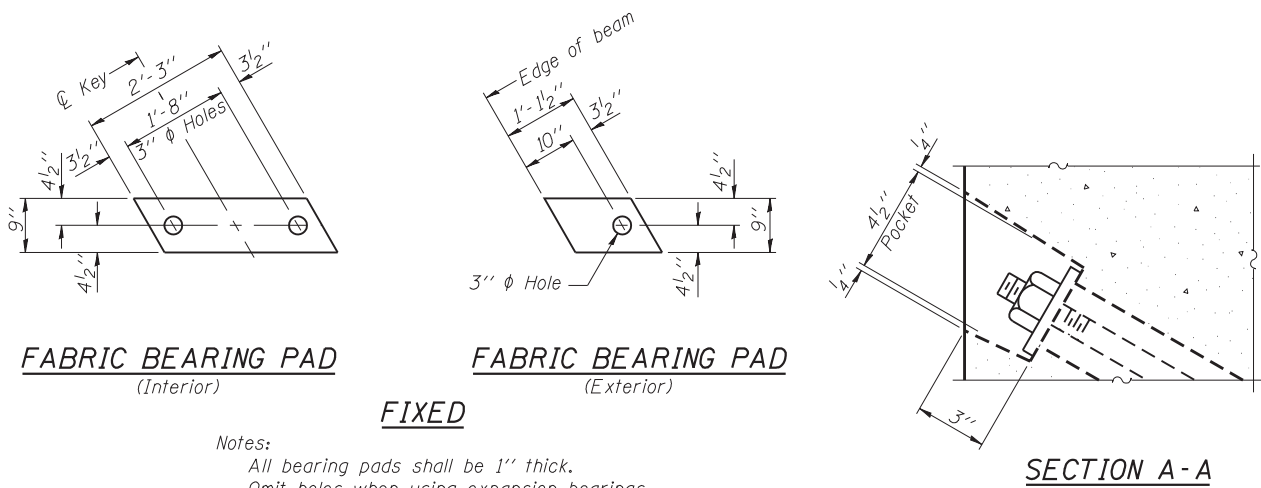
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**17" x 48" PPC DECK BEAM - SPAN 2**  
**STRUCTURE NO. 023-0018**

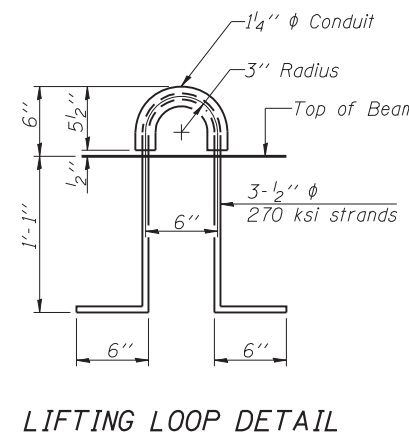
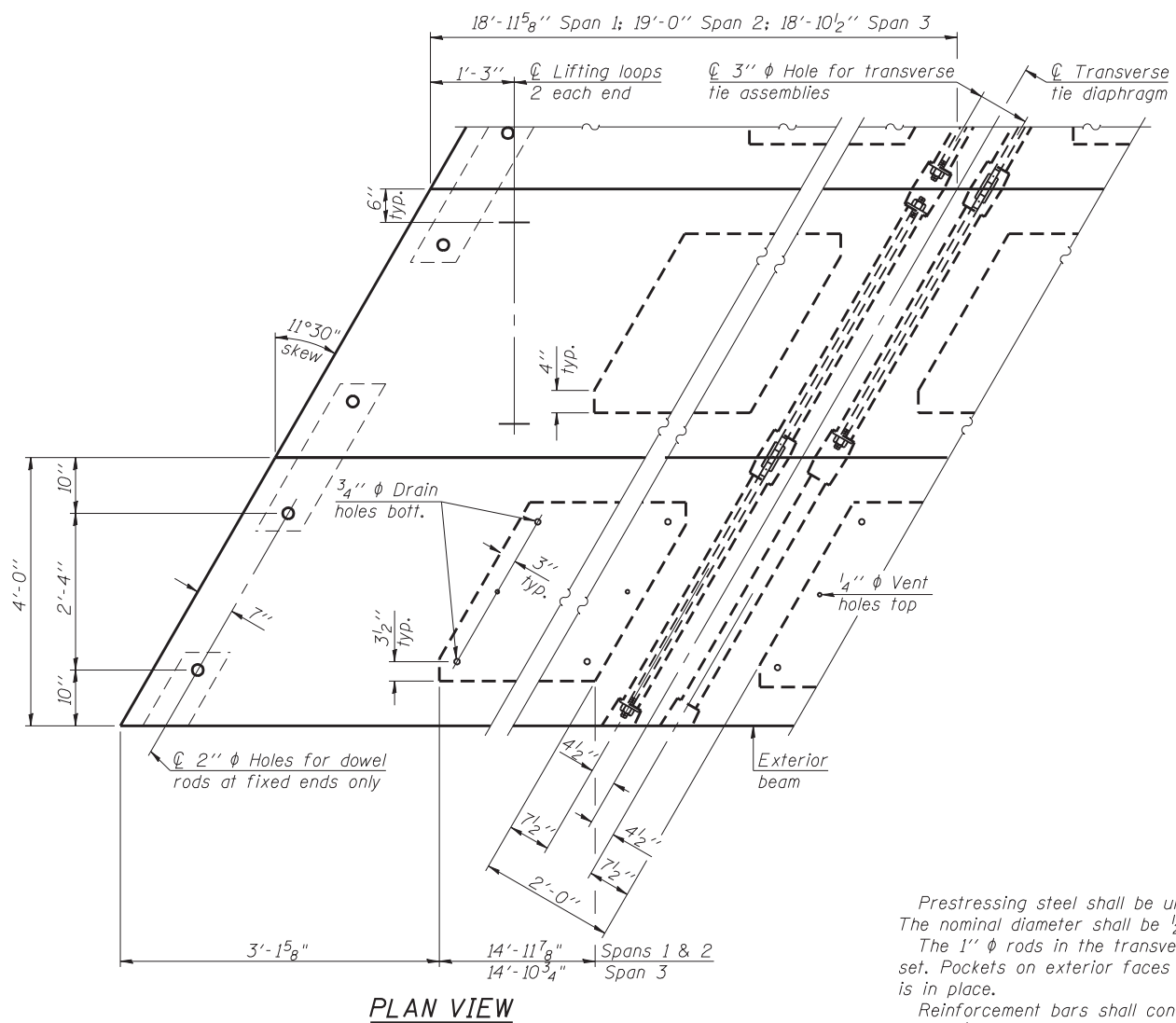
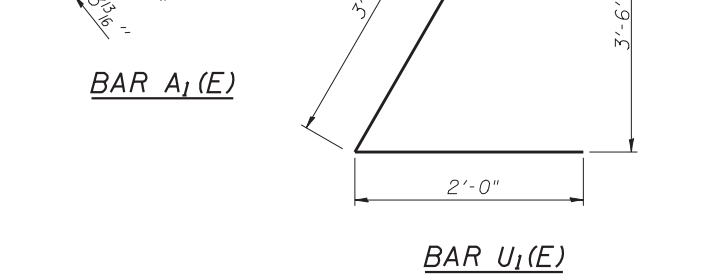
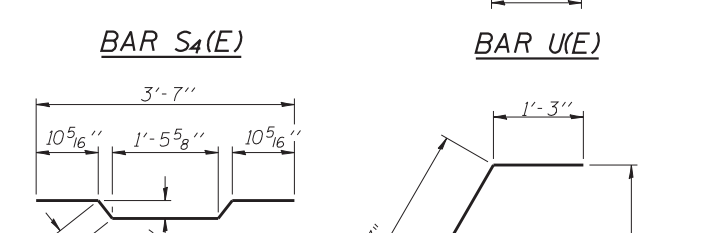
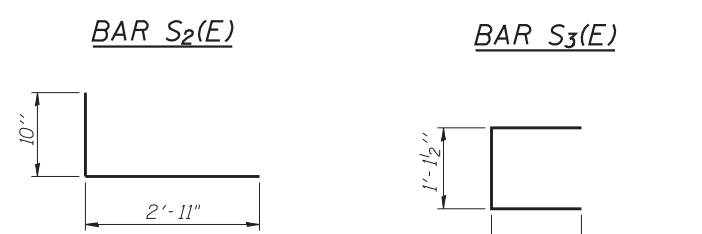
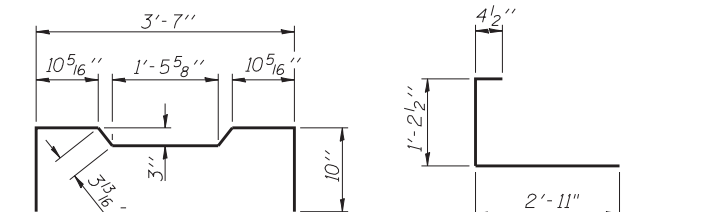
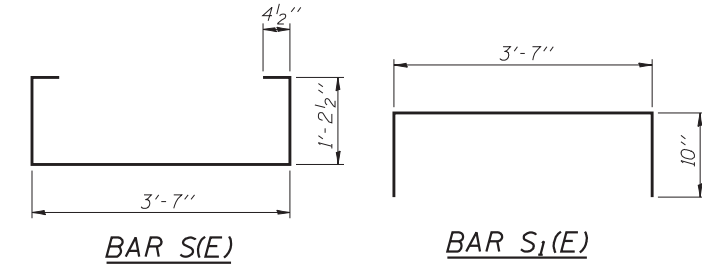
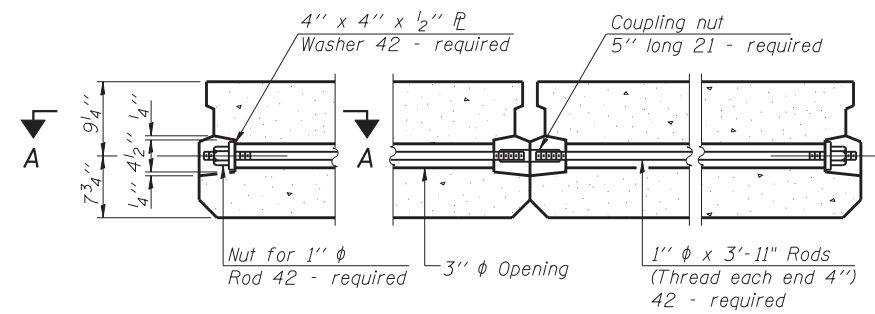
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	25
				CONTRACT NO. 70607

SHEET NO. 11 OF 21 SHEETS

ILLINOIS FED. AID PROJECT



**Notes:**  
 All bearing pads shall be 1" thick.  
 Omit holes when using expansion bearings.  
 Expansion bearing pad shall be bonded to the substructure.



**NOTES**

Prestressing steel shall be uncoated high strength, low relaxation 7-wire strand, Grade 270. The nominal diameter shall be 1/2" and the nominal cross-sectional area shall be 0.153 sq. in. The 1" diameter rods in the transverse tie assembly shall be tightened to a snug fit and the threads set. Pockets on exterior faces of bridge shall be filled with grout after transverse tie assembly is in place.

Reinforcement bars shall conform to ASTM A 706, Grade 60.

Two 3/8" fabric adjusting shims of the dimensions of the exterior bearing pad shall be provided for each bearing pad location.

A minimum 2 1/2" diameter lifting pin shall be used to engage the lifting loops during handling.

Corrosion Inhibitor, per Article 1020.05(b)(12) and 1021.06 of the Standard Specifications, shall be used in the concrete for precast prestressed concrete deck beams.

Compressive strength of prestressed concrete, f'c, shall be 6000 psi.

Compressive strength of prestressed concrete at release, f'ci, shall be 5000 psi.

See Sheet 2 of 21 for locations of semicircular recesses to be cast into beam at Stage Construction Line.

See Sheet 3 of 21 for inserts to be cast into beam adjacent to Temporary Concrete Barrier.

**BILL OF MATERIAL**

Precast Prestressed Conc. Deck Bms. (17" depth)	Sq. Ft.	3639
---	---------	------

Note: Connect beams in pairs with the transverse tie configuration shown.

PD-1748-LD 7-1-10

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 STRUCTURAL ENGINEERS  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - GJB	REVISED -
PLOT SCALE = 0.1667' / IN.	CHECKED - RKM/CME	REVISED -
PLOT DATE = 9/19/2014	DRAWN - MML	REVISED -
	CHECKED - MCB	REVISED -

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

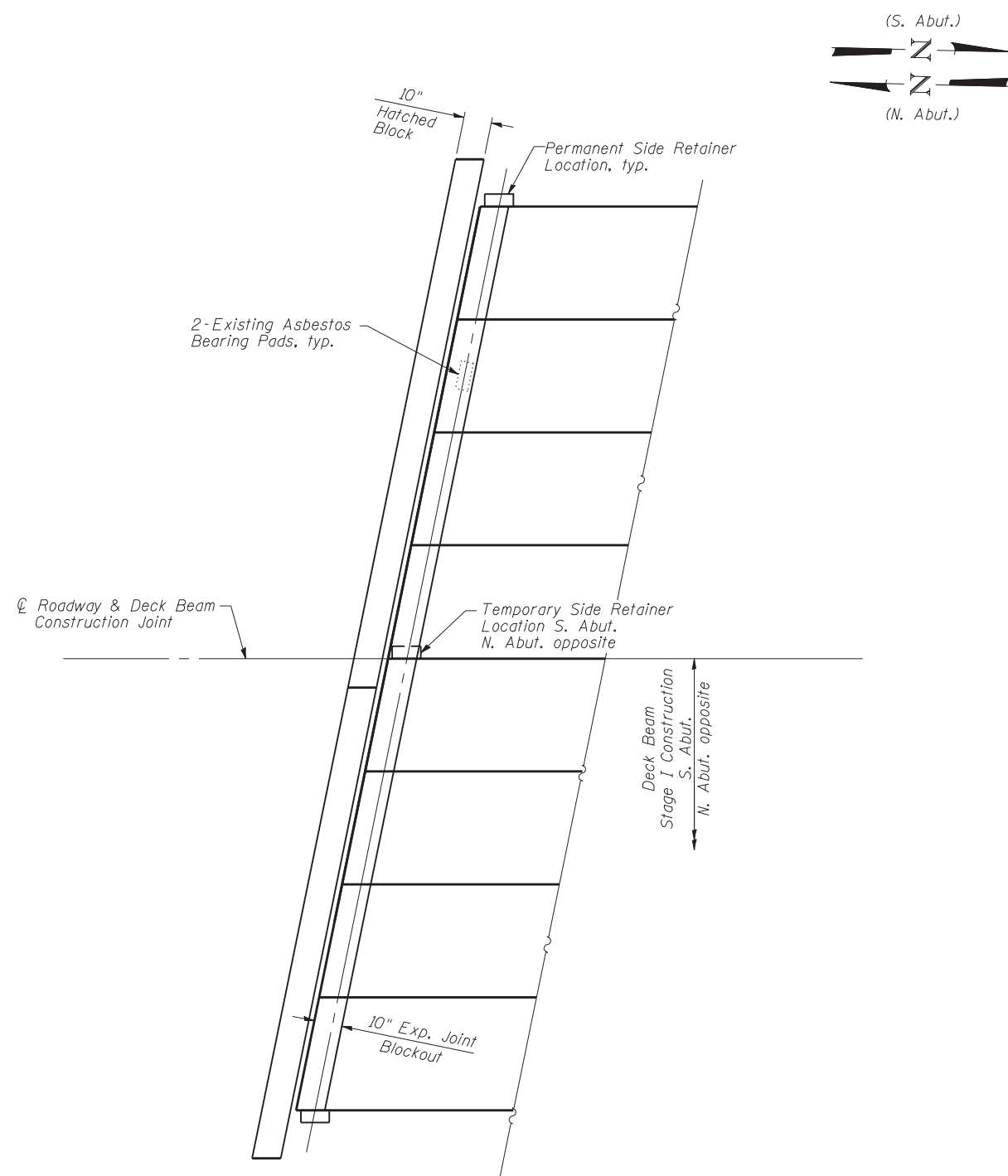
**17" x 48" PPC DECK BEAM DETAILS**  
**STRUCTURE NO. 023-0018**

SHEET NO. 12 OF 21 SHEETS

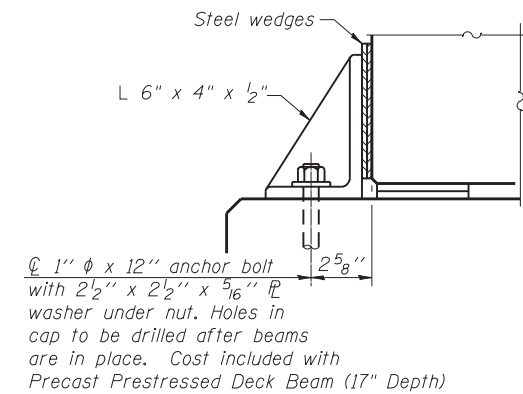
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	26
CONTRACT NO. 70607				

ILLINOIS FED. AID PROJECT

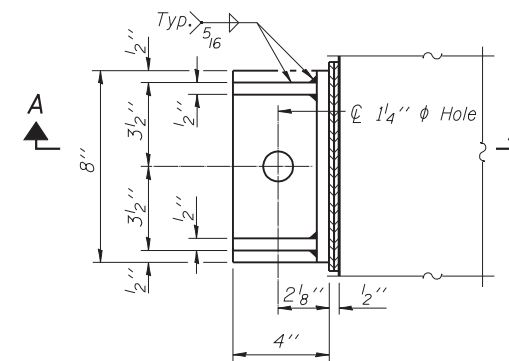
FILE NAME = 70607-023-ppc-de-t.dgn  
 PROJECT NO. 09070-B



**PARTIAL PLAN AT ABUTMENTS**  
(Showing Side Retainer Locations)



**SECTION A-A**



**PLAN**

**Notes:**

The temporary side retainer shall be removed after Stage I expansion joint blockout is poured and cured. The anchor bolt at the temporary side retainer location shall be burned flush with the existing abutments surface and the surface shall be ground smooth and sealed with epoxy. Cost of temporary side retainer removal is included in Precast Prestressed Concrete Deck Beams (17" Depth).

The side retainers and steel wedges shall have a tight fit against the side of the deck beams and shall be in place prior to grouting the shear keys in each stage.

Cost of anchor bolts, retainer and accessories including installation are included with Precast Prestressed Concrete Deck Beams (17" Depth).

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

The side retainers shall be galvanized after shop fabrication according to AASHTO M 111 and ASTM 385.

Anchor bolts and plate washers shall be galvanized according to AASHTO M 232.

After the Stage II expansion joint blockouts are poured and cured, the steel wedges at the permanent side retainer locations shall be removed.

**BILL OF MATERIAL**

Item	Unit	Total
Asbestos Bearing Pad Removal	Each	48

FILE NAME = 70607-013-40-w1.dgn  
PROJECT NO. 09070-B

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- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - GJB	REVISED -
PLOT SCALE = 2.6667' / IN.	CHECKED - RKM/CME	REVISED -
PLOT DATE = 9/19/2014	DRAWN - MML	REVISED -
	CHECKED - MCB	REVISED -

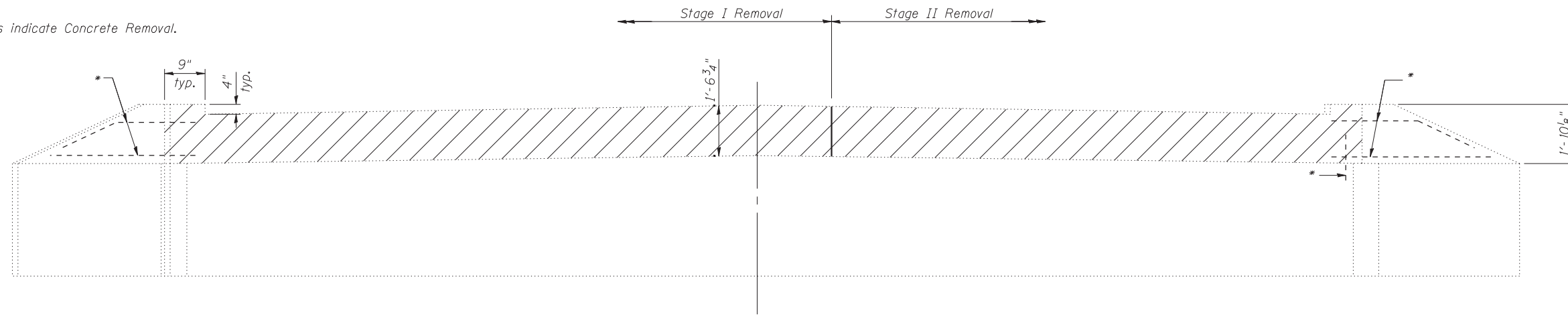
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**DOWEL ROD LOCATION DETAIL**  
**STRUCTURE NO. 023-0018**

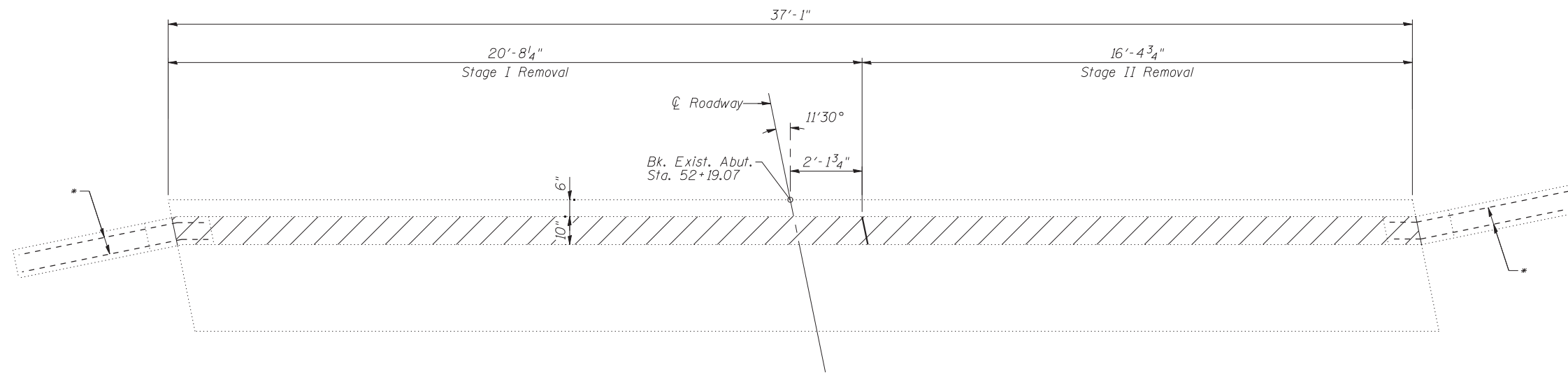
SHEET NO. 13 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	27
ILLINOIS FED. AID PROJECT			CONTRACT NO. 70607	

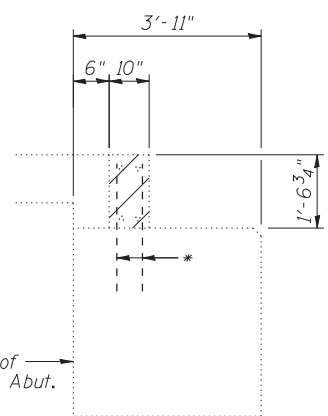
Note:  
Hatched areas indicate Concrete Removal.



**ELEVATION**  
(Looking South)



**PLAN**



**SECTION THRU SOUTH ABUTMENT**  
(at Right L's)

\* Existing reinforcement shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars being reused that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in Concrete Removal.



**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	1.8

FILE NAME = 70607-014-1-abutrem.dgn  
PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
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Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - GJB	REVISED -
PLOT SCALE = 4:0' / IN.	CHECKED - RKM/CME	REVISED -
PLOT DATE = 9/19/2014	DRAWN - MML	REVISED -
	CHECKED - MCB	REVISED -

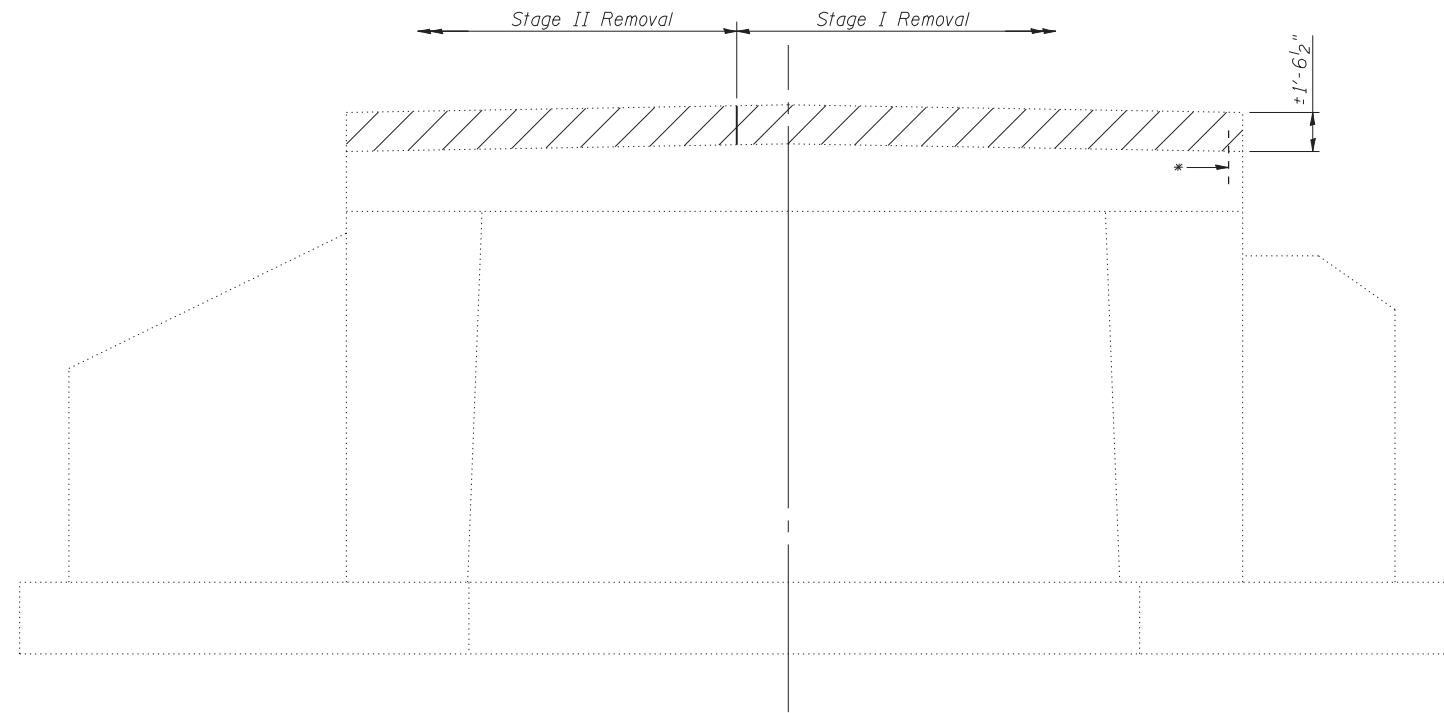
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**SOUTH ABUTMENT CONCRETE REMOVAL DETAILS**  
**STRUCTURE NO. 023-0018**

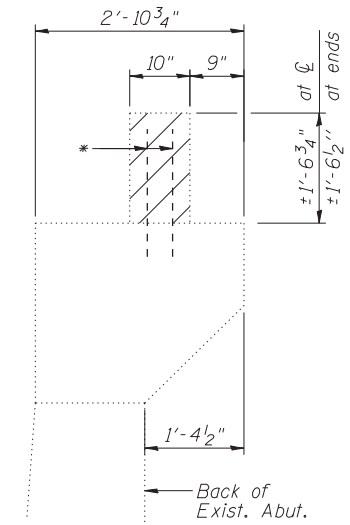
SHEET NO. 14 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	28
				CONTRACT NO. 70607
ILLINOIS FED. AID PROJECT				

Note:  
Hatched areas indicate Concrete Removal.



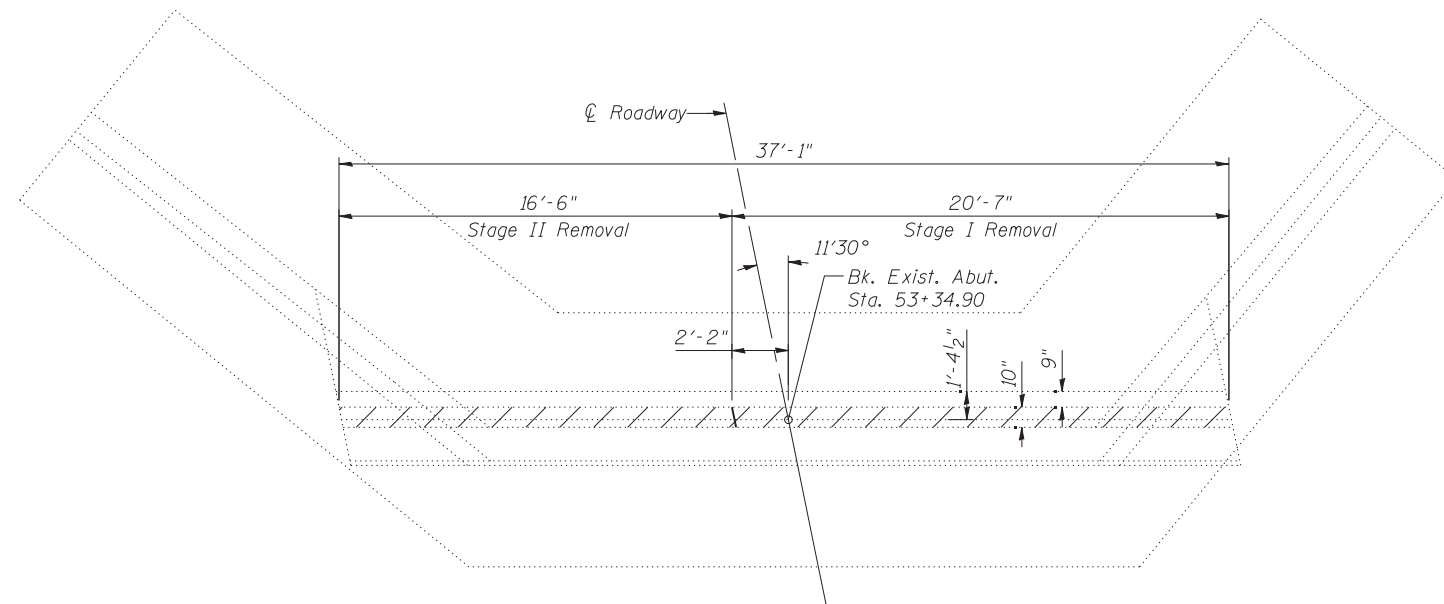
**ELEVATION**  
(Looking North)



**SECTION THRU NORTH ABUTMENT**  
(at Right L's)



\* Existing reinforcement shall be cleaned, straightened and incorporated into the new construction. Any reinforcement bars being reused that are damaged during concrete removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included in Concrete Removal.  
Existing reinforcement not extending into the areas of new construction shall be cut at the removal line and removed. Remaining exposed portions shall be coated with a layer of epoxy. Cost included with Concrete Removal.



**PLAN**

**BILL OF MATERIAL**

ITEM	UNIT	TOTAL
Concrete Removal	Cu. Yd.	1.8

FILE NAME = 70607-015-r-abut-rem.dgn  
PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

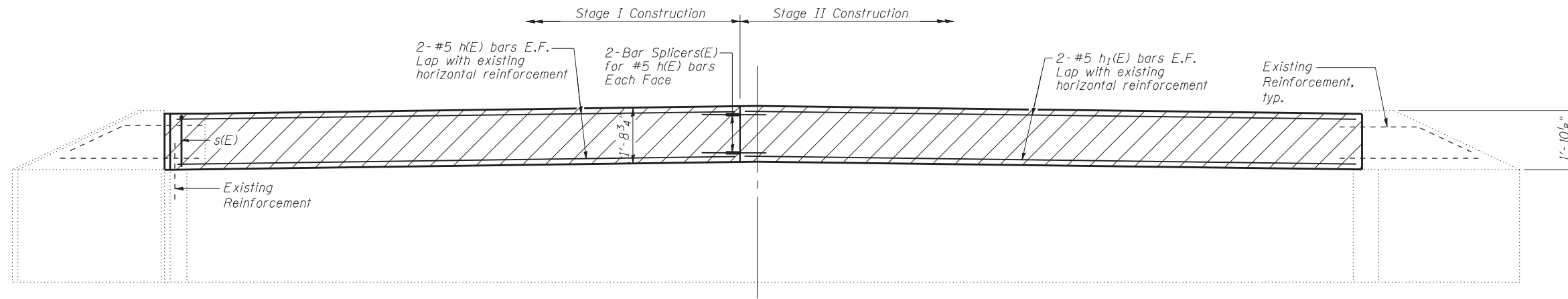
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	CHECKED - RKM/CME	REVISED -
PLOT SCALE = 8:0.0000 '1' / IN.	DRAWN - MML	REVISED -
PLOT DATE = 9/19/2014	CHECKED - MCB	REVISED -

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

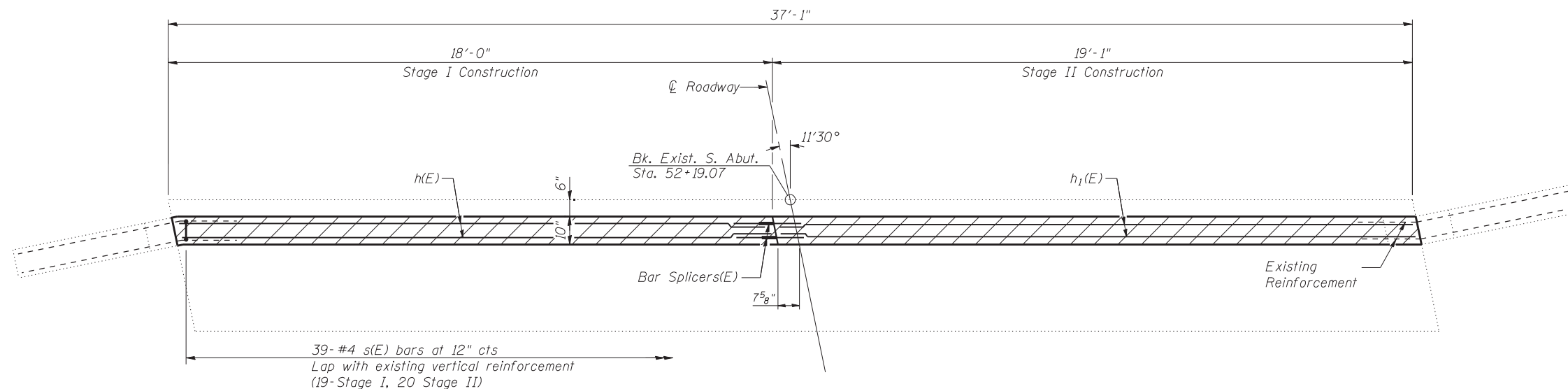
**NORTH ABUTMENT CONCRETE REMOVAL DETAILS**  
**STRUCTURE NO. 023-0018**

SHEET NO. 15 OF 21 SHEETS

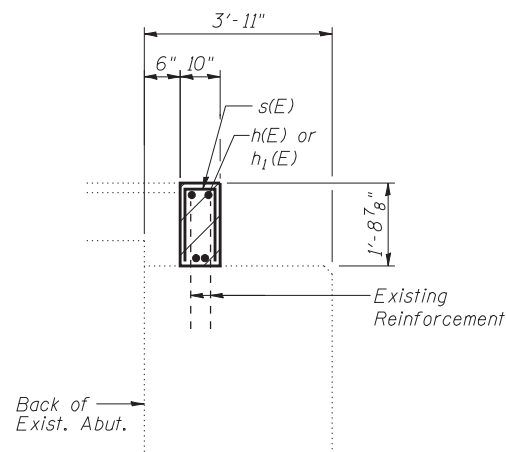
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	29
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				



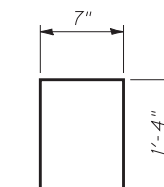
**ELEVATION**  
(Looking South)



**PLAN**



**SECTION THRU SOUTH ABUTMENT**  
(at Right L's)



**BAR s(E)**

**BILL OF MATERIAL**  
**SOUTH ABUTMENT**

Bar	No.	Size	Length	Shape
h(E)	4	#5	17'-8"	—
h <sub>1</sub> (E)	4	#5	18'-9"	—
s(E)	39	#4	3'-3"	□
Conc. Superstructure			Cu. Yd.	2.0
Reinforcement Bars, Epoxy Coated			Pound	240

Hatched areas shall be poured after beams have been erected and joints grouted.

FILE NAME = 70607-01E-s-abut-det.dgn  
PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

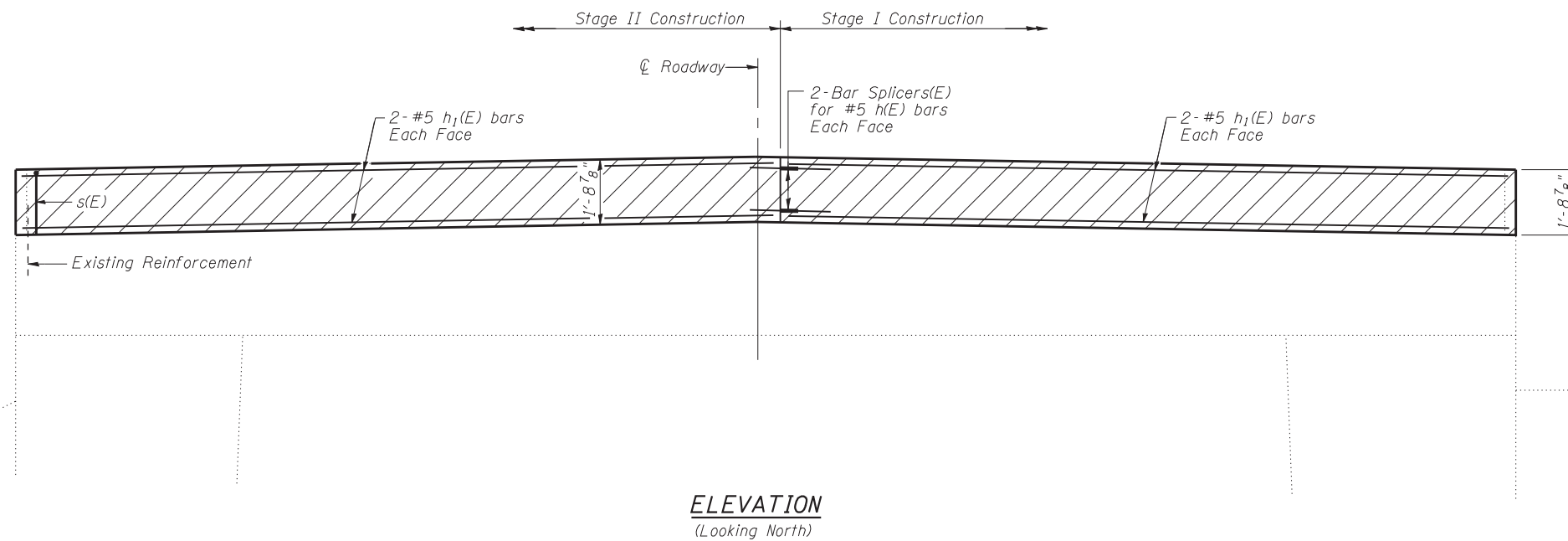
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	CHECKED - MCB	REVISED -

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

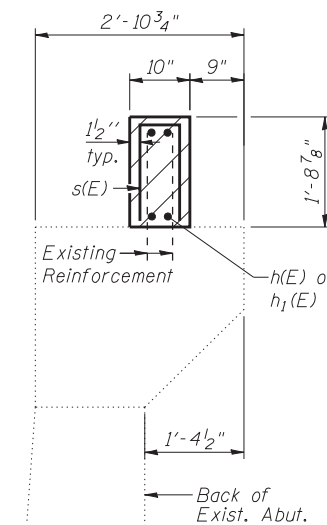
**SOUTH ABUTMENT DETAILS**  
**STRUCTURE NO. 023-0018**

SHEET NO. 16 OF 21 SHEETS

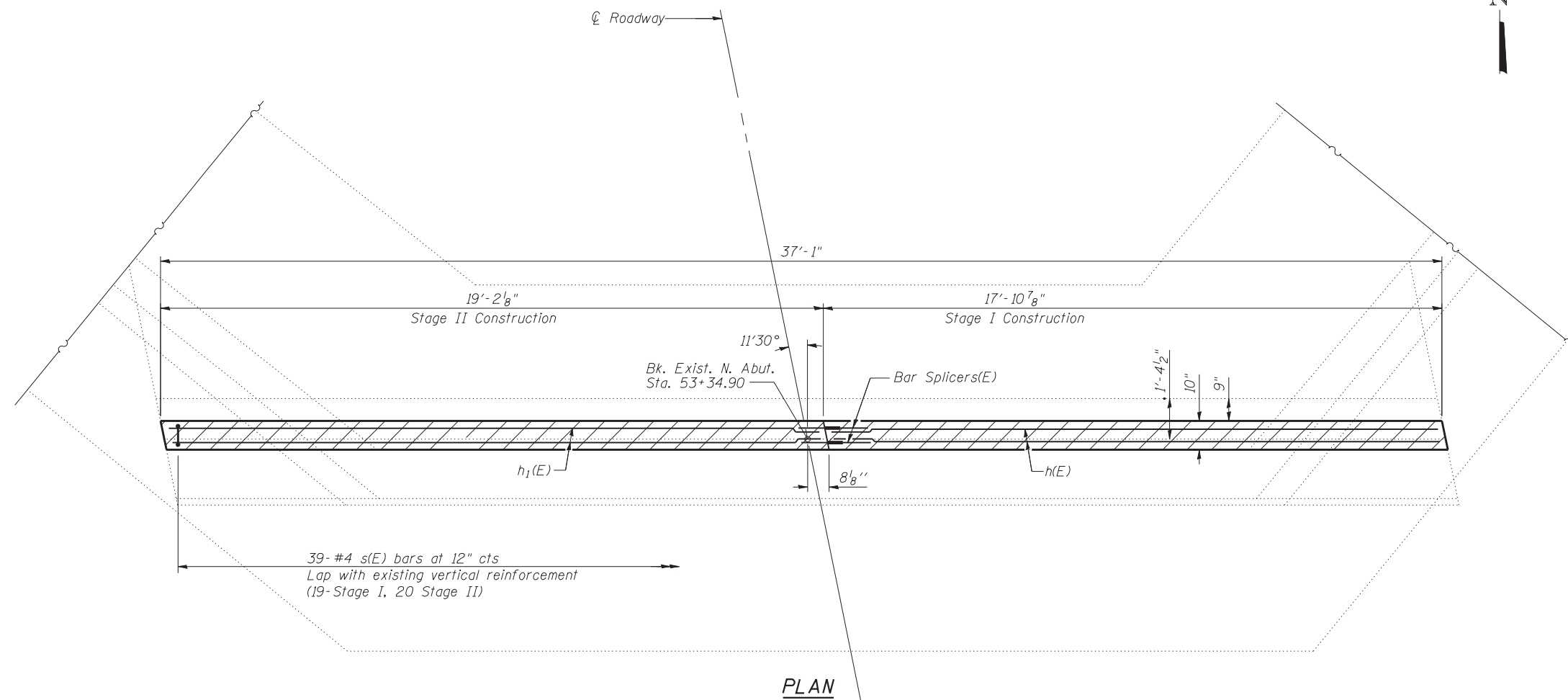
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	30
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				



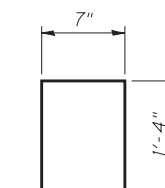
**ELEVATION**  
(Looking North)



**SECTION THRU NORTH ABUTMENT**  
(at Right L's)



**PLAN**



**BAR s(E)**

**BILL OF MATERIAL**  
**NORTH ABUTMENT**

Bar	No.	Size	Length	Shape
h(E)	4	#5	17'-8"	—
h1(E)	4	#5	18'-9"	—
s(E)	39	#4	3'-3"	□
Conc. Superstructure			Cu. Yd.	2.0
Reinforcement Bars, Epoxy Coated			Pound	240

Hatched areas shall be poured after beams have been erected and joints grouted. Concrete sealer shall be applied to the end faces of the hatched block.

FILE NAME = 70607-017-1-1-abut-det.dgn  
PROJECT NO. 09070-B

**Coombe-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = .MML.	DESIGNED - GJB	REVISED -
PLOT SCALE = 4.0000' / IN.	CHECKED - RKM/CME	REVISED -
PLOT DATE = 9/19/2014	DRAWN - MML	REVISED -
	CHECKED - MCB	REVISED -

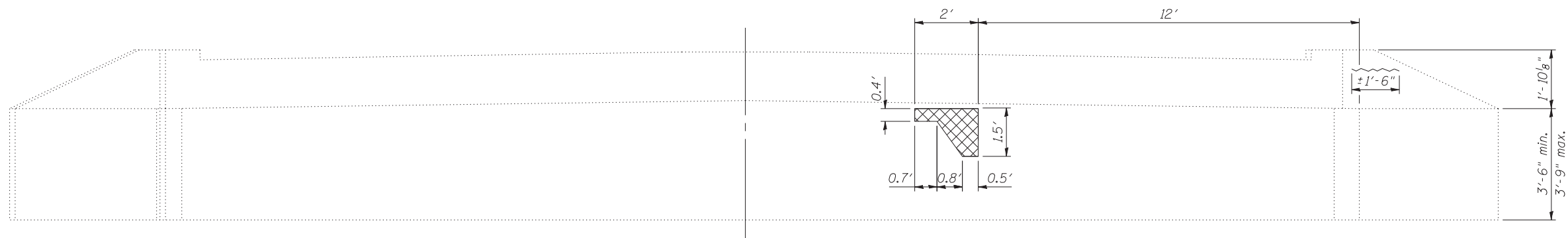
**STATE OF ILLINOIS**  
**DEPARTMENT OF TRANSPORTATION**

**NORTH ABUTMENT DETAILS**  
**STRUCTURE NO. 023-0018**

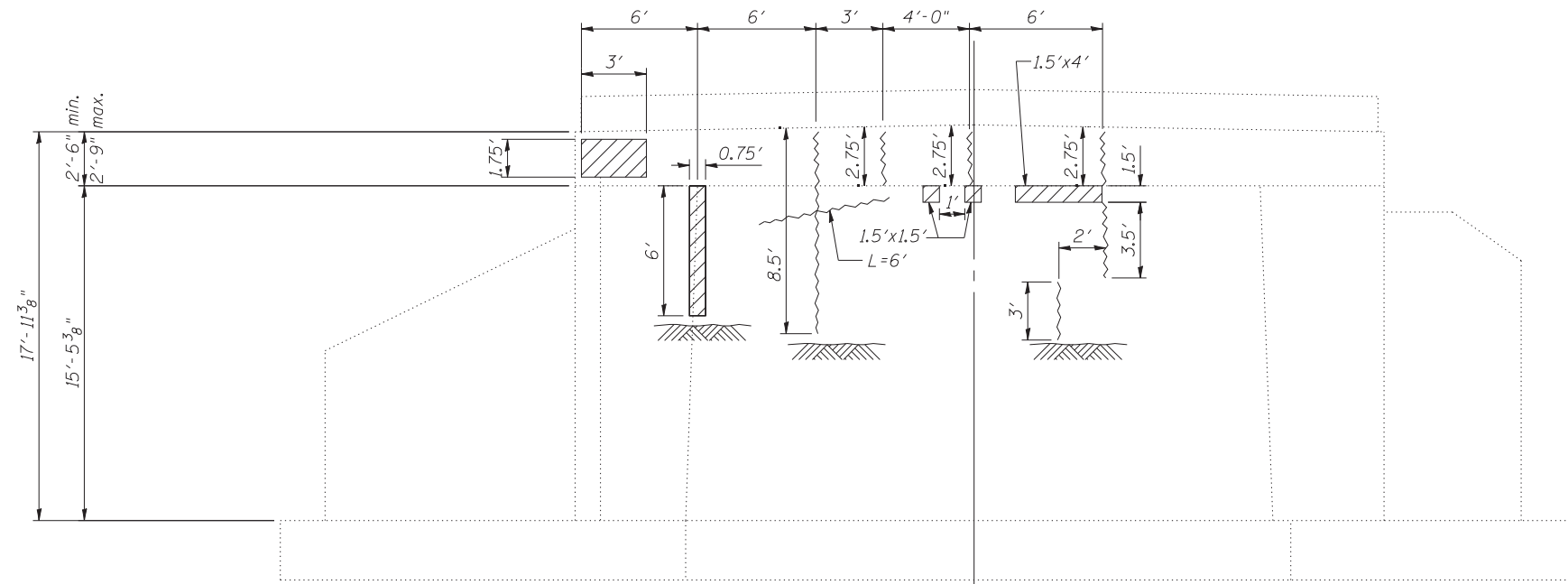
SHEET NO. 17 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	31
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				





**SOUTH ABUTMENT ELEVATION**



**NORTH ABUTMENT ELEVATION**

**LEGEND**

- Structural Repair of Concrete (Depth equal to or less than 5")
- Structural Repair of Concrete (Depth greater than 5")
- Epoxy Crack Injection



**TWO ABUTMENTS  
BILL OF MATERIAL**

Item	Unit	Total
Epoxy Crack Injection	Foot	31
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.	21
Structural Repair of Concrete (Depth greater than 5")	Sq. Ft.	2

FILE NAME = 70607-018-abut-pr-de.dgn  
CB PROJECT NO. 09270-B

**Coombe-Bloxdorf P.C.**  
- CIVIL ENGINEERS -  
- STRUCTURAL ENGINEERS -  
- LAND SURVEYORS -  
Design Firm License No. 184-002703

USER NAME = .MML.  
PLOT SCALE = 4.0000' / IN.  
PLOT DATE = 9/19/2014

DESIGNED - GJB  
CHECKED - RKM/CME  
DRAWN - MML  
CHECKED - MCB

REVISED -  
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REVISED -  
REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

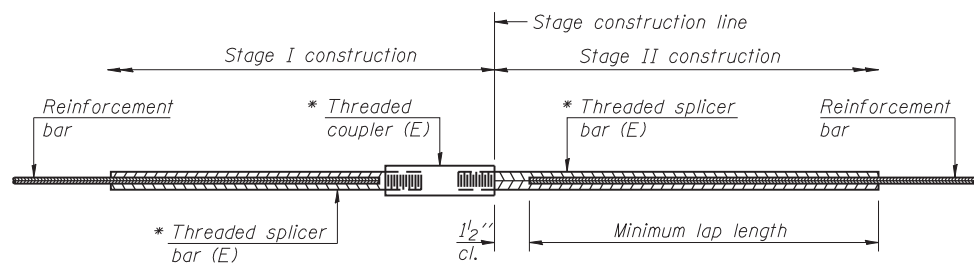
**ABUTMENT REPAIR DETAILS  
STRUCTURE NO. 023-0018**

SHEET NO. 18 OF 21 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	32
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				







**STANDARD BAR SPLICER ASSEMBLY**

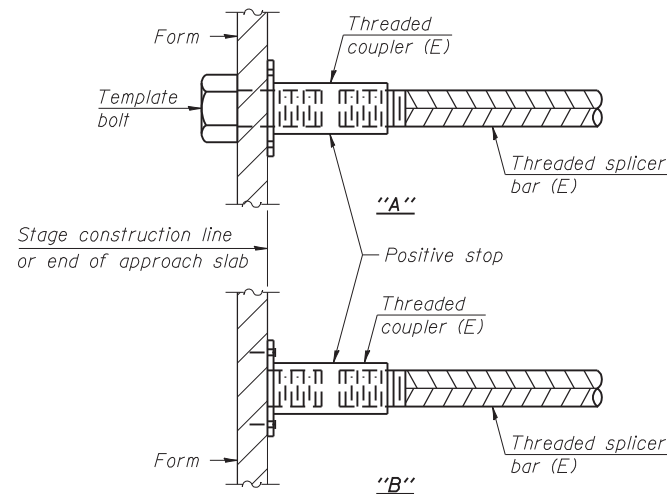
Minimum Lap Lengths						
Bar size to be spliced	Table 1	Table 2	Table 3	Table 4	Table 5	Table 6
3, 4	1'-5"	1'-11"	2'-1"	2'-4"	2'-7"	2'-11"
5	1'-9"	2'-5"	2'-7"	2'-11"	3'-3"	3'-8"
6	2'-1"	2'-11"	3'-1"	3'-6"	3'-10"	4'-5"
7	2'-9"	3'-10"	4'-2"	4'-8"	5'-2"	5'-10"
8	3'-8"	5'-1"	5'-5"	6'-2"	6'-9"	7'-8"
9	4'-7"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

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

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

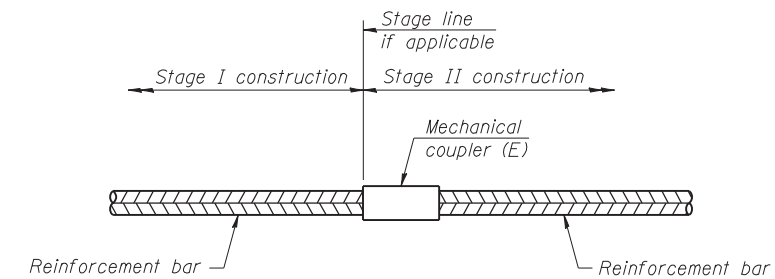
\* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Table for minimum lap length
Exp. Jt. Blockout	#4	8	6
Approach Slab, Top	#4	25	4
Approach Slab, Bottom	#4	46	3
Approach Slab, Footing	#5	40	3
Abutments	#5	8	6



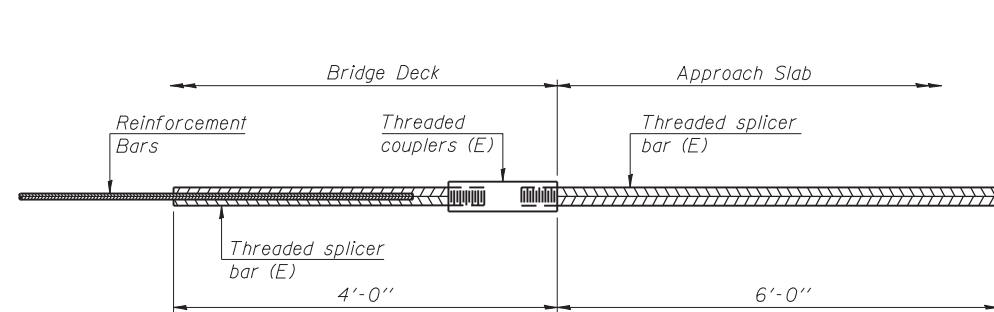
**INSTALLATION AND SETTING METHODS**

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



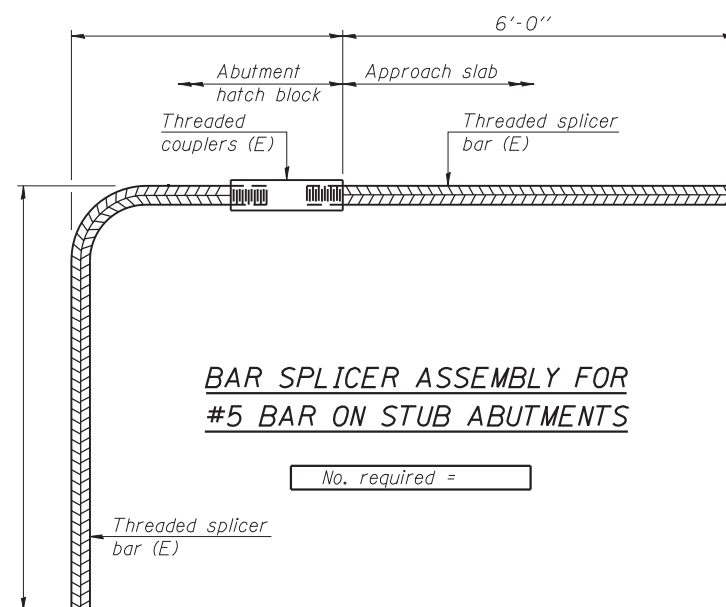
**STANDARD MECHANICAL SPLICER**

Location	Bar size	No. assemblies required



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

No. required =



**BAR SPLICER ASSEMBLY FOR #5 BAR ON STUB ABUTMENTS**

No. required =

**NOTES**

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

FILE NAME = 70607-020-011.cer.dgn  
 PROJECT NO. 09070-B

BSD-1

1-27-12

**Coombe-Bloxdorf P.C.**  
 CIVIL ENGINEERS-  
 STRUCTURAL ENGINEERS-  
 LAND SURVEYORS  
 Design Firm License No. 184-002703

USER NAME = .MML.  
 PLOT SCALE = 0.1667' / IN.  
 PLOT DATE = 9/19/2014

DESIGNED - GJB  
 CHECKED - RKM/CME  
 DRAWN - MML  
 CHECKED - MCB

REVISED -  
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 REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

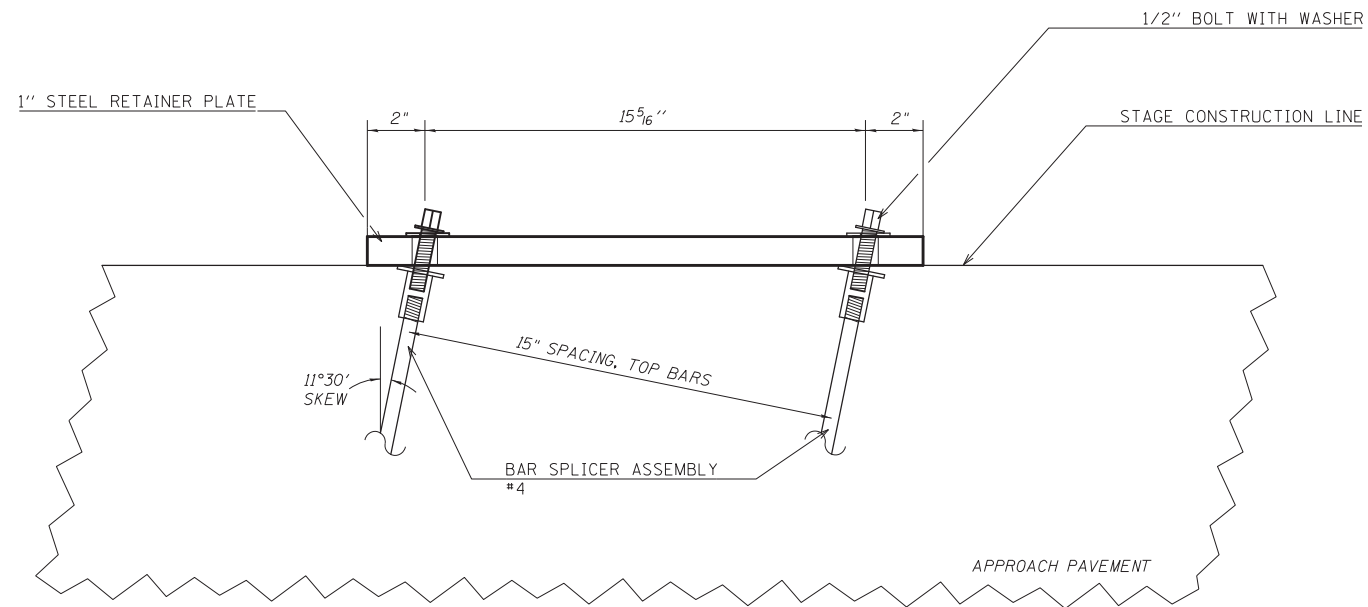
**BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS  
 STRUCTURE NO. 023-0018**

SHEET NO. 20 OF 21 SHEETS

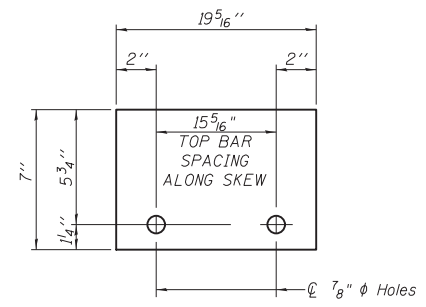
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	34
CONTRACT NO. 70607				

ILLINOIS FED. AID PROJECT

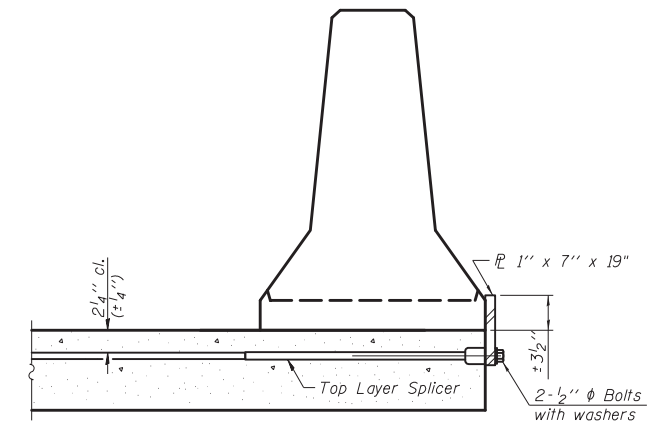




**PLAN VIEW**



**STEEL RETAINER PL 1" x 7" x 19 5/16"**



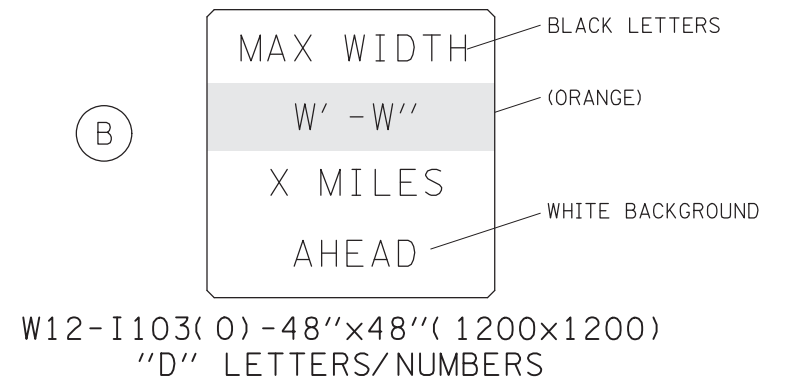
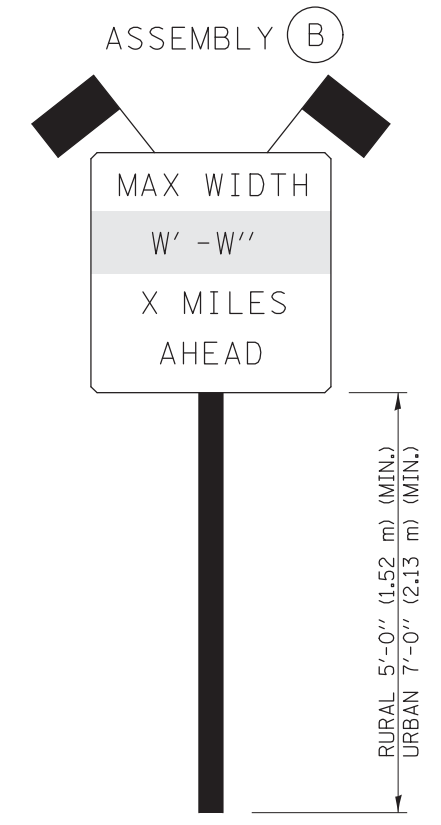
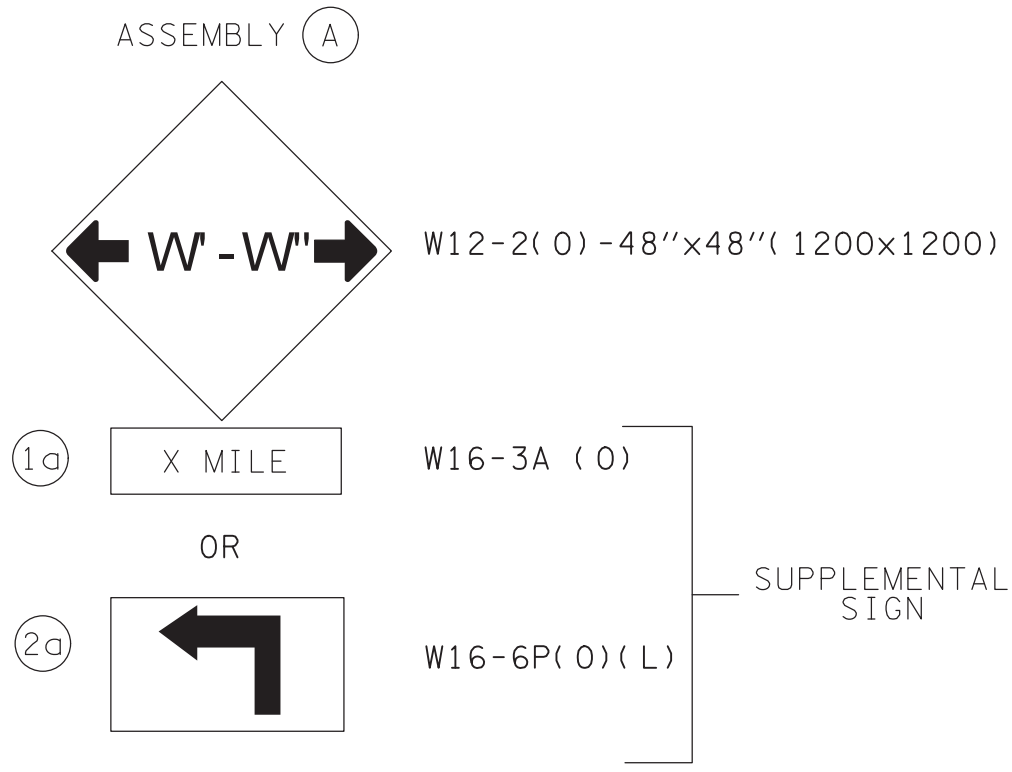
**SECTION THRU PROPOSED APPROACH PAVEMENT**

**NOTES**

Connect one (1) 1" x 7" x 19 5/16" steel PL to the top layer of couplers with 2-1/2"  $\phi$  bolts screwed to coupler at approximate  $\phi$  of each barrier panel.

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

FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>TEMPORARY CONCRETE BARRIER PINNING ALONG PROPOSED APPROACH PAVEMENT</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.	
p:\11\084EBIDINTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\05796\Drawings\Design\0579607-shr-details.dwg		DRAWN -	REVISED -			836	117BR-1	EDGAR	48	36	
\$MODELNAME\$	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -			<b>CONTRACT NO. 70607</b>					
	PLOT DATE = 9/5/2015	DATE -	REVISED -			SCALE:	SHEET	OF	SHEETS	STA.	TO
						ILLINOIS FED. AID PROJECT					



SIGN PANEL, TYPE II

W' -W'' = 11' -0'' FOR STAGE 1 and 12' -0'' FOR STAGE 2

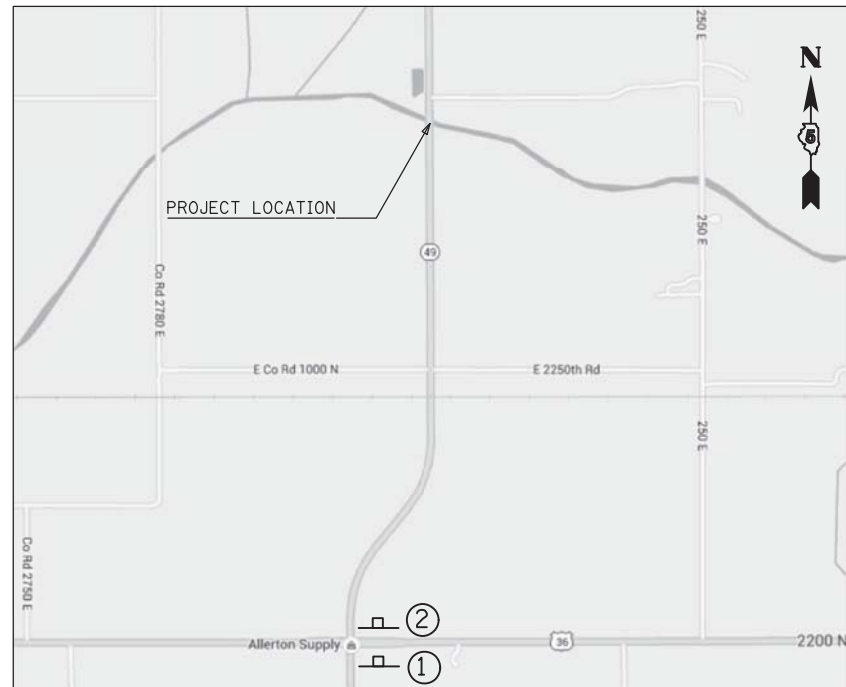
GENERAL NOTES

1. ALL TRAFFIC CONTROL DEVICES SHALL BE FURNISHED, ERECTED AND MAINTAINED BY THE CONTRACTOR. SIGN ASSEMBLIES (A) AND (B) ARE TO BE PLACED AS SHOWN IN THE PLANS OR AS DIRECTED BY THE ENGINEER. POSTING REQUIREMENTS FOR BOTH ARE SHOWN ON SIGN ASSEMBLY (B).
2. ALL B SIGNS SHALL HAVE FLAGS INSTALLED UNLESS OTHERWISE DIRECTED.
3. LOCATIONS OF TRAFFIC CONTROL DEVICES MAY BE ADJUSTED BY THE ENGINEER.
4. ALL TRAFFIC CONTROL SHOWN ON THIS SHEET SHALL BE PAID FOR AT THE CONTRACT LUMP SUM PRICE FOR WIDTH RESTRICTION SIGNING.
5. ALL SIGNS SHALL BE POST MOUNTED UNLESS OTHERWISE DIRECTED.
6. ALL SIGNS SHOWN ORANGE (O) SHALL BE FLUORESCENT ORANGE.
7. ALL SIGNS SHOWN SHALL CONSIST OF THE CURRENT RETROREFLECTIVE SHEETING REQUIREMENTS AS OUTLINED IN SECTION 1106.01 OF THE STANDARD SPECIFICATIONS BOOK.

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

FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED - 03/11 -KJT	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>WIDTH RESTRICTION SIGNING</b>			<b>DISTRICT 5 DETAIL NO. X7200201</b>	
p:\11\084EBIDINTEG.illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\0579\DRAWING\0579\Design\0579\shd-details.dwg	DRAWN -	REVISED - 05/08	REVISED - 05/08					F.A.P. RTE.	SECTION
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED - 10/08 - KJT		836	117BR-1	EDGAR	48	37
	PLOT DATE = 9/29/2015	DATE -	REVISED - 7/09 - KJT		CONTRACT NO. 70607			FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

IL 49/US 36 INTERSECTION

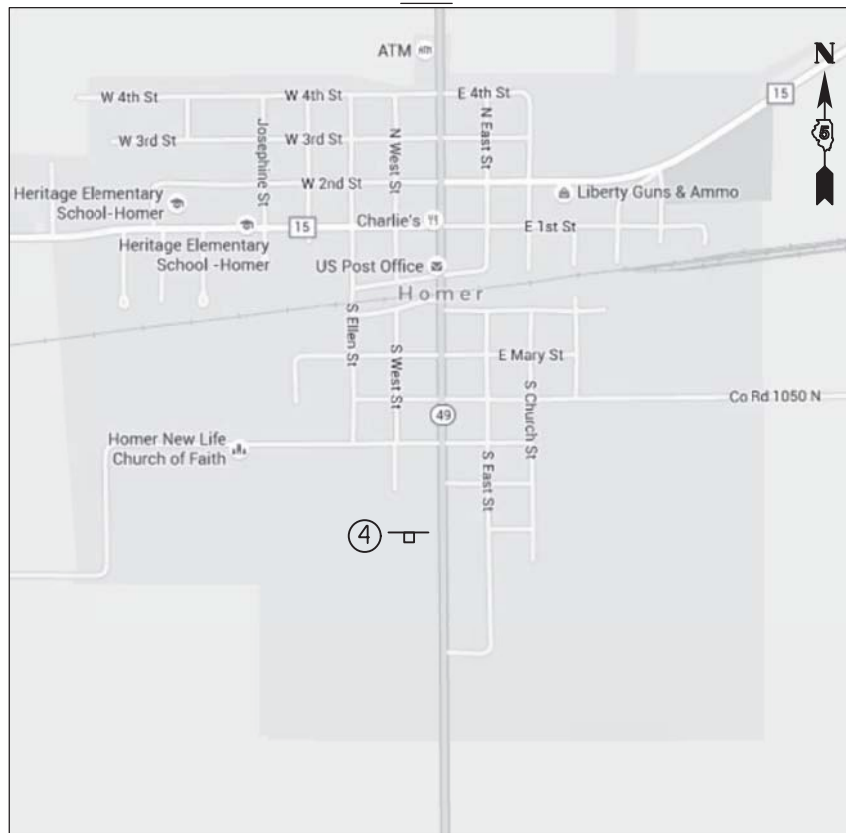


ALLERTON

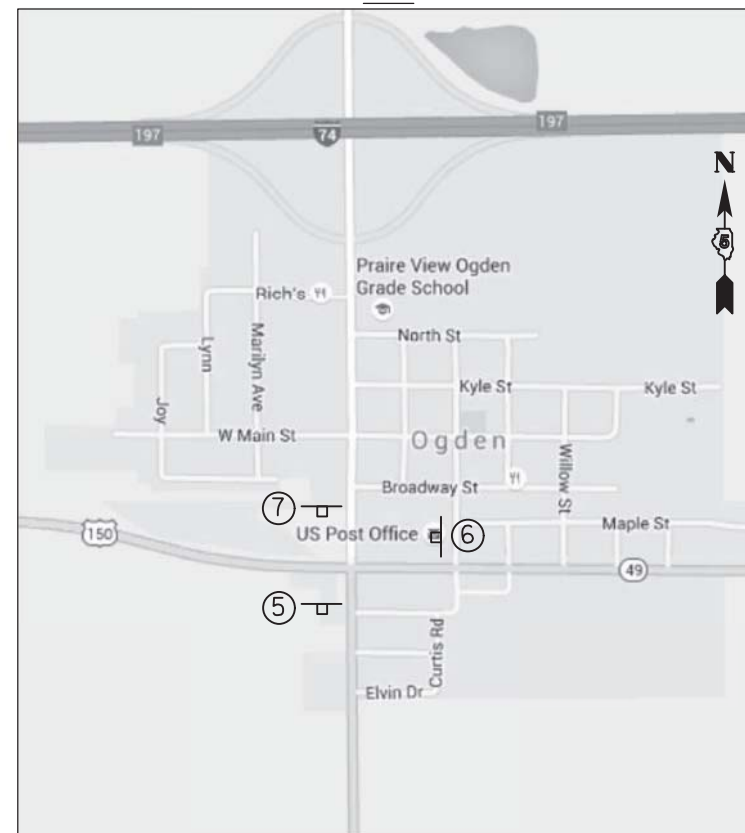


LOCATION NO.	LOCATION DESCRIPTION	SIGN ASSEMBLY	"X MILE"	SUPPLEMENTAL SIGN
1	ERECT BY JUNCTION US 36 SIGNS	B	1 MILE	-
2	ERECT BY NORTH IL 49 SIGN	A	1 MILE	1a
3	ERECT BY SOUTH IL 49 SIGN	A	6 MILE	1a
4	ERECT BESIDE ALLERTON AND CASEY SIGN JUST SOUTH OF HOMER	A	16 MILE	1a
5	ERECT BY SOUTH IL 49 SIGN	A	21 MILE	1a
6	ERECT BY STOP AHEAD SIGN	A	-	2a
7	ERECT BY STOP AHEAD SIGN	B	21 MILE	-

HOMER



OGDEN



FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED -
p:\1\084EBID\INTEG.illinois.gov\PI\DOT\Documents\DOT Offices\District 5\Projects\0579\Drawings\Design\0570607-shr-details.dwg		DRAWN -	REVISED -
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	PLOT DATE = 9/29/2015	DATE -	REVISED -

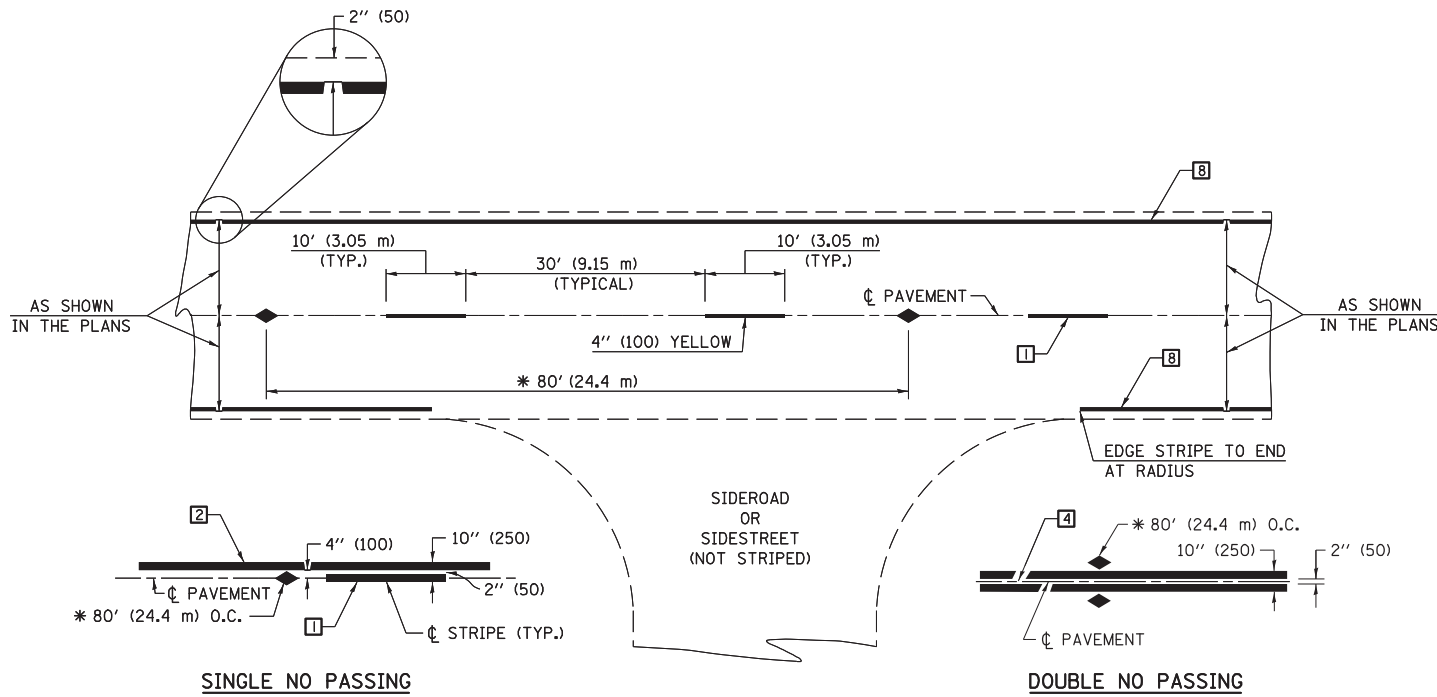
STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

WIDTH RESTRICTION SIGNING

SCALE: SHEET OF SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	38
CONTRACT NO. 70607				
ILLINOIS FED. AID PROJECT				





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

**TWO LANE/TWO WAY**

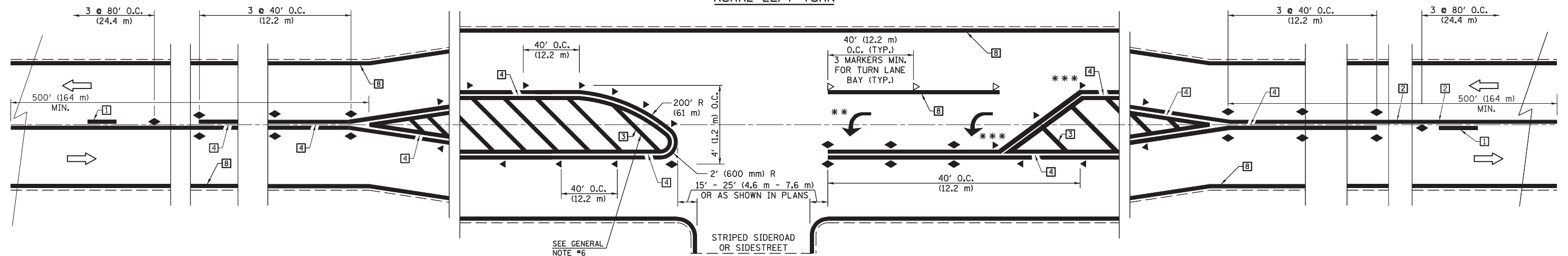
**TYPICAL PAVEMENT MARKING LEGEND**

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

**TYPICAL PAVEMENT MARKERS LEGEND**

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

**RURAL LEFT TURN**



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

\*\* TURN ARROWS SHALL BE PLACED AS SHOWN ON SHEET #2.

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

**DISTRICT 5 DETAIL NO. 7800AAAA**

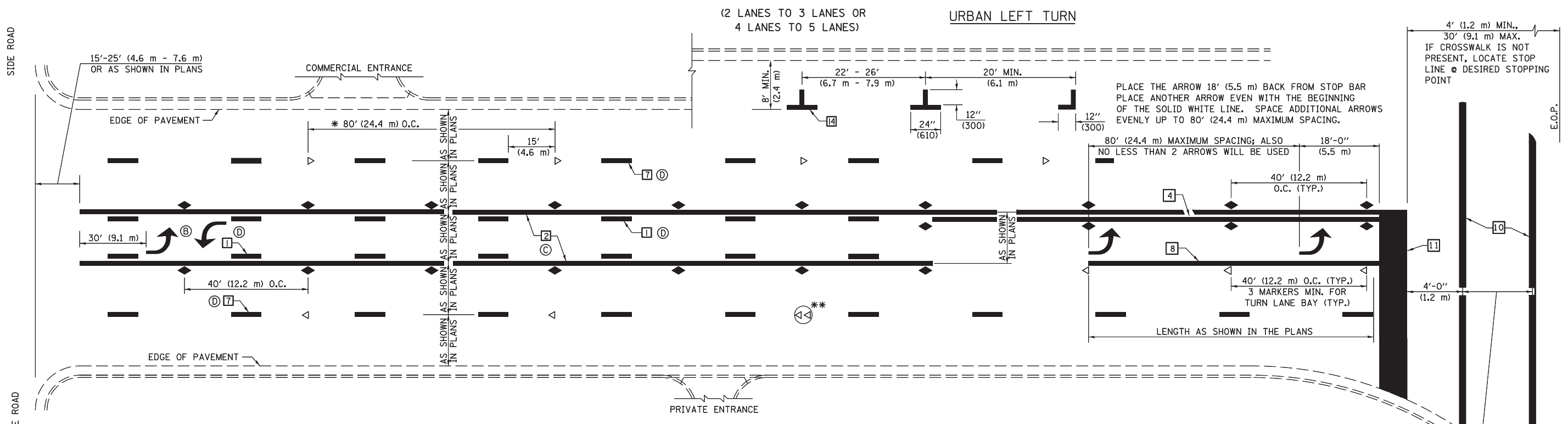
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	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 9/5/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION**

**PAVEMENT MARKING AND MARKERS  
(RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 1 OF 4 SHEETS STA. TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	39
CONTRACT NO. 70607				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

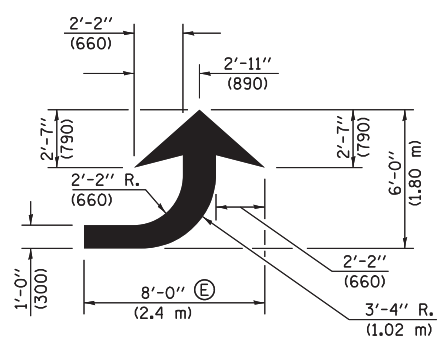


\* REDUCE TO 40 FEET (12.2 METERS) ON CENTER ON CURVES WHERE ADVISORY SPEEDS ARE 10 MPH (15 km/h) LOWER THAN POSTED SPEEDS.

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

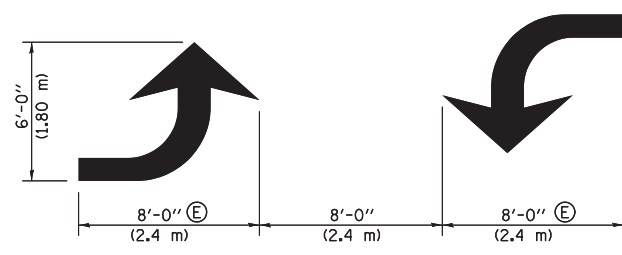
**GENERAL NOTES:**

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



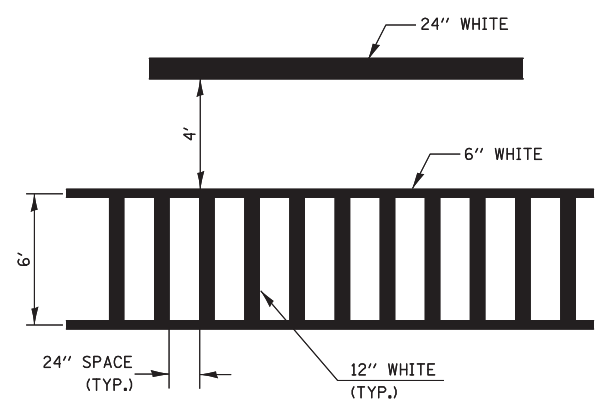
**LEFT ARROW**

REVERSE FOR RIGHT ARROW  
AREA = 15.6 SQ. FT. (1.47 m<sup>2</sup>)  
(WHITE)

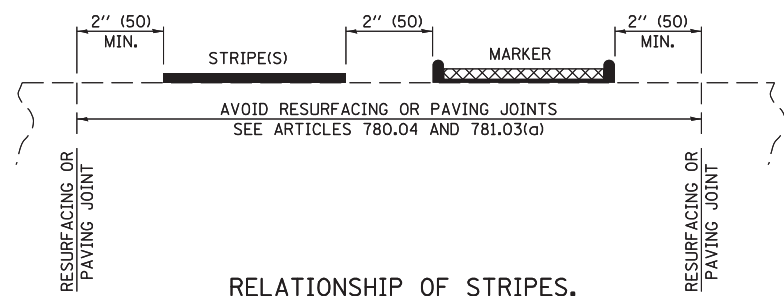


**TYPICAL DOUBLE TURN ARROWS (WHITE)**

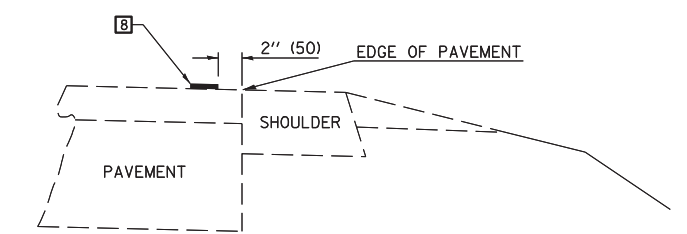
**BLOOMINGTON-NORMAL CITY LIMITS ONLY**



**TYPICAL SPACING FOR CROSSWALKS & STOP BARS**



**RELATIONSHIP OF STRIPES, MARKERS AND JOINTS**



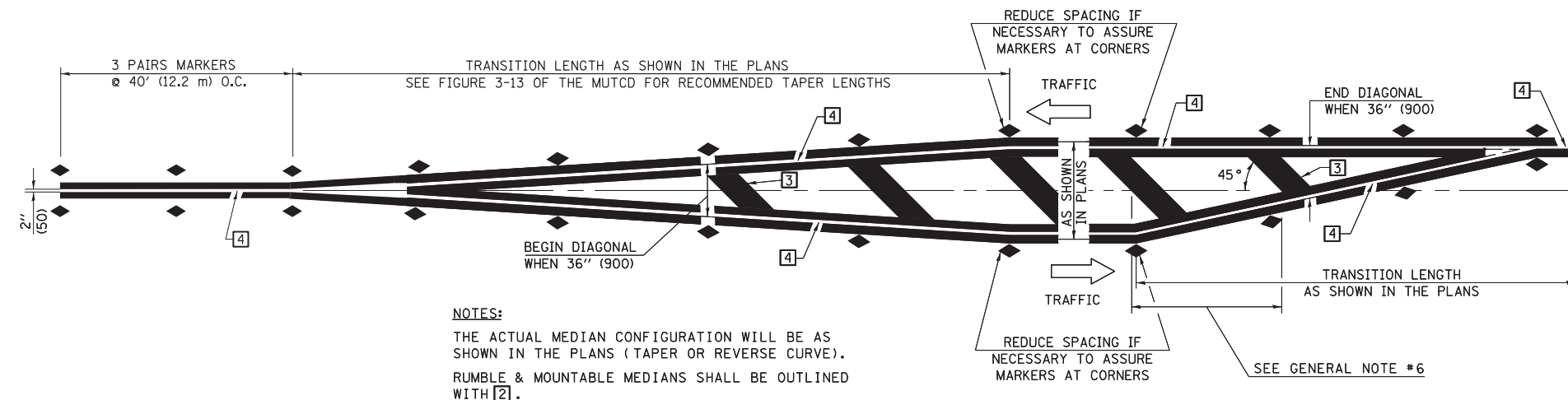
**RELATIONSHIP OF EDGE LINE TO EDGE OF PAVEMENT (SAFETY SHOULDER OR PAVED SURFACE) SEE ARTICLE 780.04**

CROSSWALK WIDTH 6'-0" (1.8 m) OR AS SHOWN IN THE PLANS

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

FILE NAME =	USER NAME = keysrb	DESIGNED -	REVISED - 11/06	<b>STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION</b>	<b>PAVEMENT MARKING AND MARKERS (RURAL &amp; URBAN APPLICATIONS)</b>	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw:\11\084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05796\Drawings\Design\0570607-shd-details.dwg	DESIGNED -	REVISED - 09/2009 - KJT	836			117BR-1	EDGAR	48	40	
PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -	CONTRACT NO. 70607							
PLOT DATE = 9/5/2015	DATE -	REVISED -	FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT							



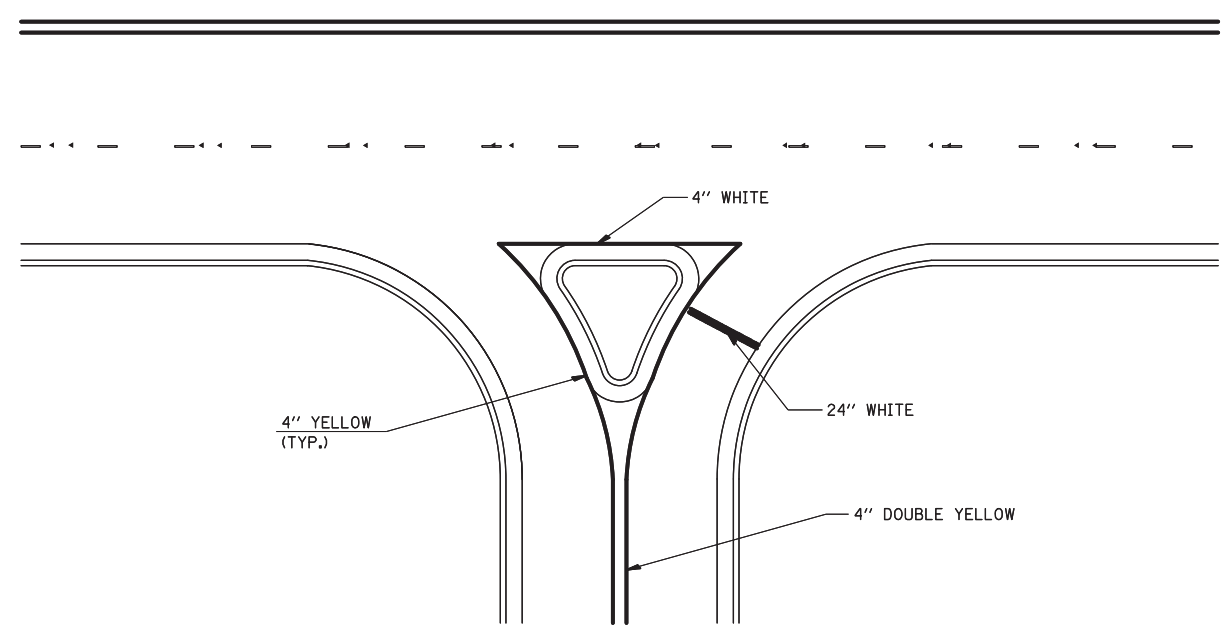


**NOTES:**  
 THE ACTUAL MEDIAN CONFIGURATION WILL BE AS SHOWN IN THE PLANS (TAPER OR REVERSE CURVE).  
 RUMBLE & MOUNTABLE MEDIANS SHALL BE OUTLINED WITH [2].

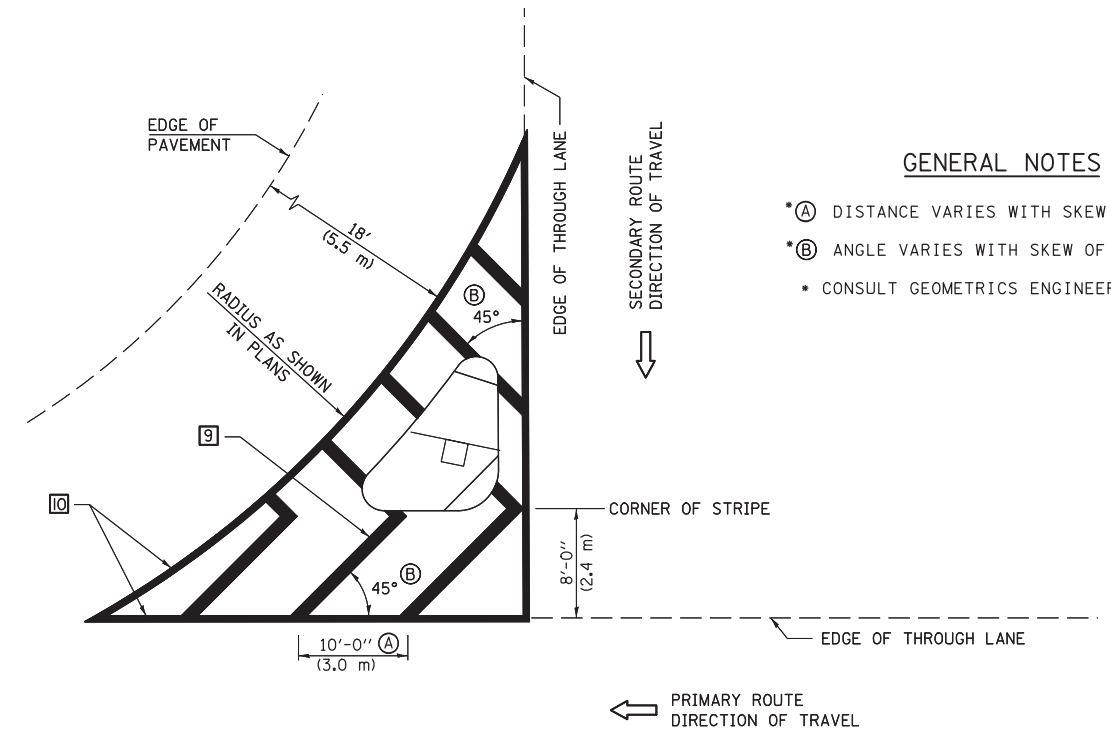
**TYPICAL MEDIAN TRANSITIONS**

**GENERAL NOTES**

1. WHEN MEDIANS ARE PRESENT, PAVEMENT MARKINGS ARE TO BE PLACED ADJACENT TO MEDIANS.
2. SOME OF THE INFORMATION INCLUDED WITH THIS DETAIL MAY NOT BE APPLICABLE TO THIS IMPROVEMENT.
3. PAVEMENT MARKINGS ARE TO BE EXTENDED THROUGH OMISSIONS WHEN APPLICABLE.
4. A STRIPING KEY IS AVAILABLE ELSEWHERE AND SHALL BE SHOWN WHERE THE QUANTITIES ARE LISTED.
5. FINAL PAVEMENT MARKINGS SHALL BE IN PLACE PRIOR TO PLACING ANY RAISED REFLECTIVE PAVEMENT MARKERS.
6. THE FOLLOWING CRITERIA SHALL BE USED FOR SELECTING THE DIAGONAL PAVEMENT MARKING SPACING,  
 < 30 MPH USE 15' (< 50 km/h USE 4.5 m)  
 30-45 MPH USE 20' (50-75 km/h USE 6.0 m)  
 > 45 MPH USE 30' (> 75 km/h USE 9.0 m)



**RIGHT IN - RIGHT OUT ACCESS**



**ISLAND**

**GENERAL NOTES**

- \* (A) DISTANCE VARIES WITH SKEW OF INTERSECTION.
- \* (B) ANGLE VARIES WITH SKEW OF INTERSECTION.
- CONSULT GEOMETRICS ENGINEER

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

FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED - 11/06
pw:\IL\084EBIDINTEG\illinois.gov\PWIDOT\Documents\DOT Offices\District 5\Projects\0579\DRAWING\0579\0607-shr-details.dwg		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 9/5/2015	DATE -	REVISED -

**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

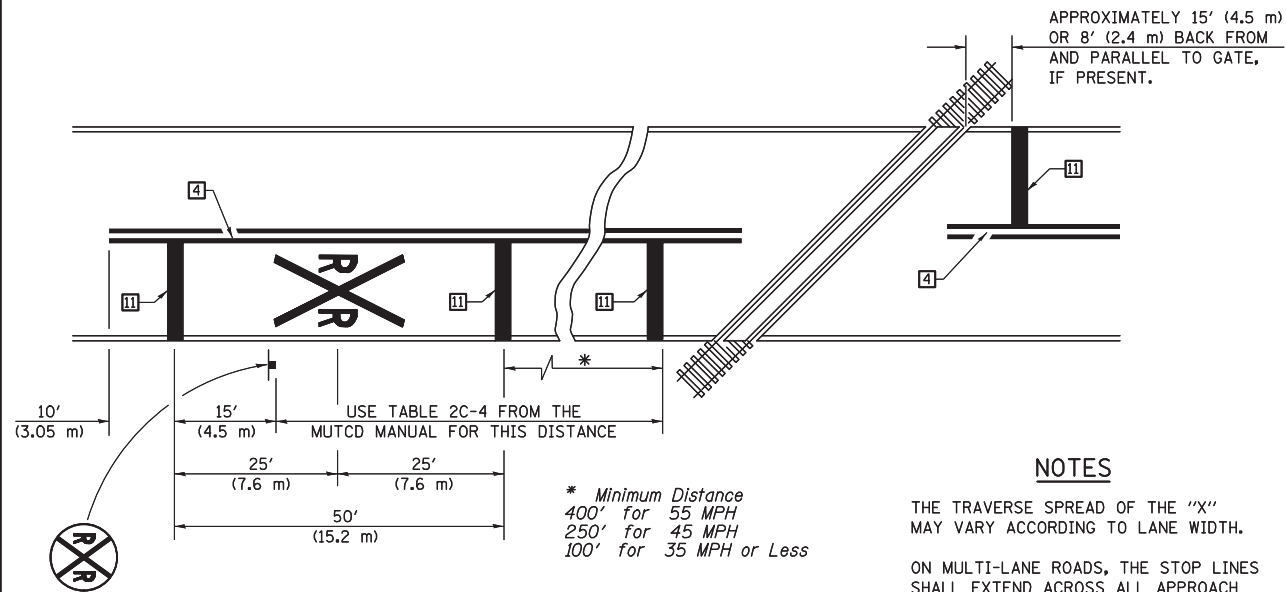
**PAVEMENT MARKING AND MARKERS  
 (RURAL & URBAN APPLICATIONS)**

SCALE: SHEET NO. 3 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAAA				
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	41
CONTRACT NO. 70607				
FED. ROAD DIST. NO.	ILLINOIS FED. AID PROJECT			

RAILROAD CROSSING WITH INTERCONNECT ONLY

RAILROAD CROSSING WITH INTERCONNECT AND PRE-SIGNALS



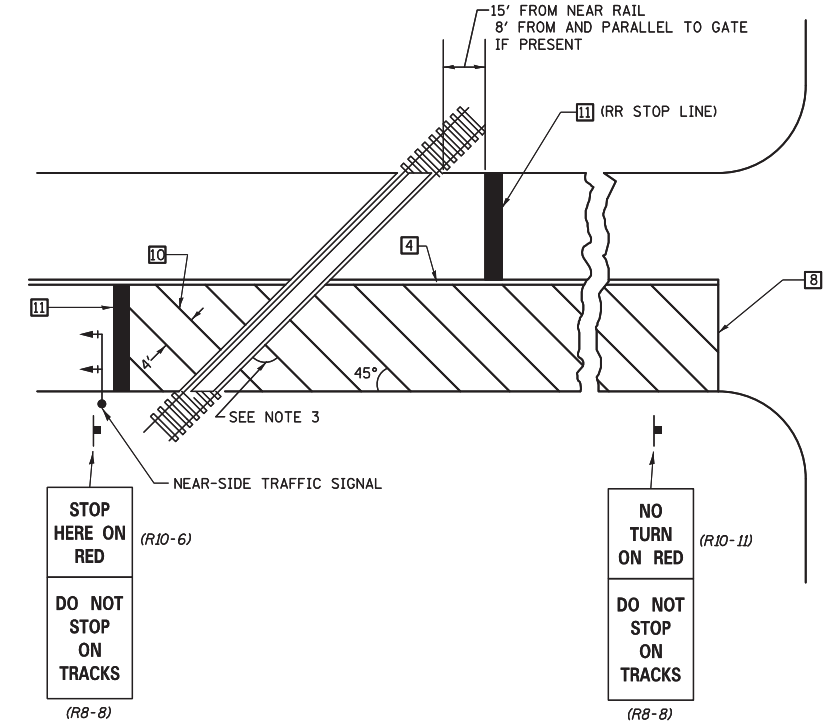
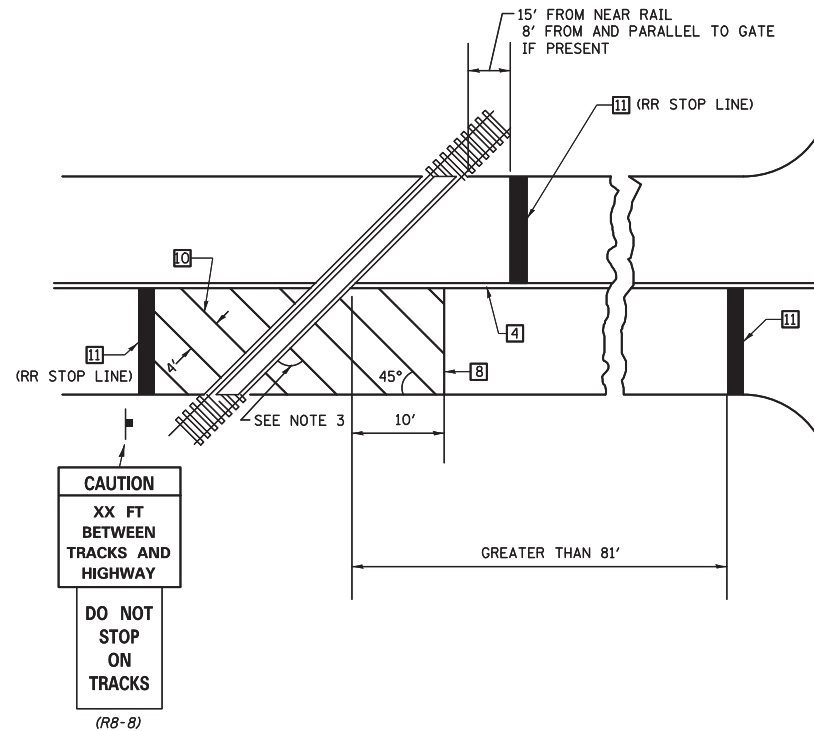
PAVEMENT MARKINGS AT RAILROAD-HIGHWAY GRADE CROSSING

NOTES

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

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

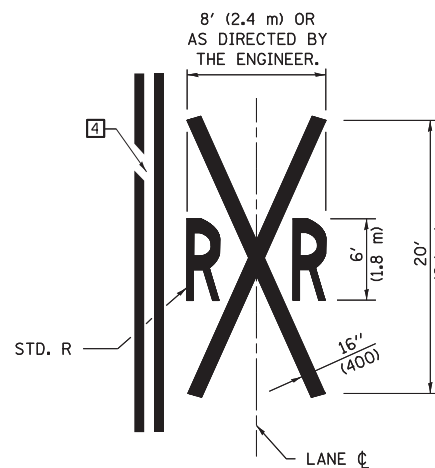
WHEN THE PAVEMENT MARKING SYMBOL IS USED, A PORTION OF THE SYMBOL SHOULD BE LOCATED DIRECTLY ADJACENT TO THE ADVANCE WARNING SIGN (W10-1) AS PLACED BY TABLE II-1, CONDITION B OF THE MUTCD.



SUPPLEMENTAL PAVEMENT MARKING TREATMENT FOR RAILROAD-HIGHWAY GRADE CROSSING

GENERAL NOTES

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



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

FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED - 11/06
p:\11\084EBIDINTEG\illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\05798\Drawings\Design\0570607-shr-details.dwg		DRAWN -	REVISED - 09/2009 - KJT
	PLOT SCALE = 40.0000' / in.	CHECKED -	REVISED -
	PLOT DATE = 9/5/2015	DATE -	REVISED -

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKING AND MARKERS  
(RURAL & URBAN APPLICATIONS)

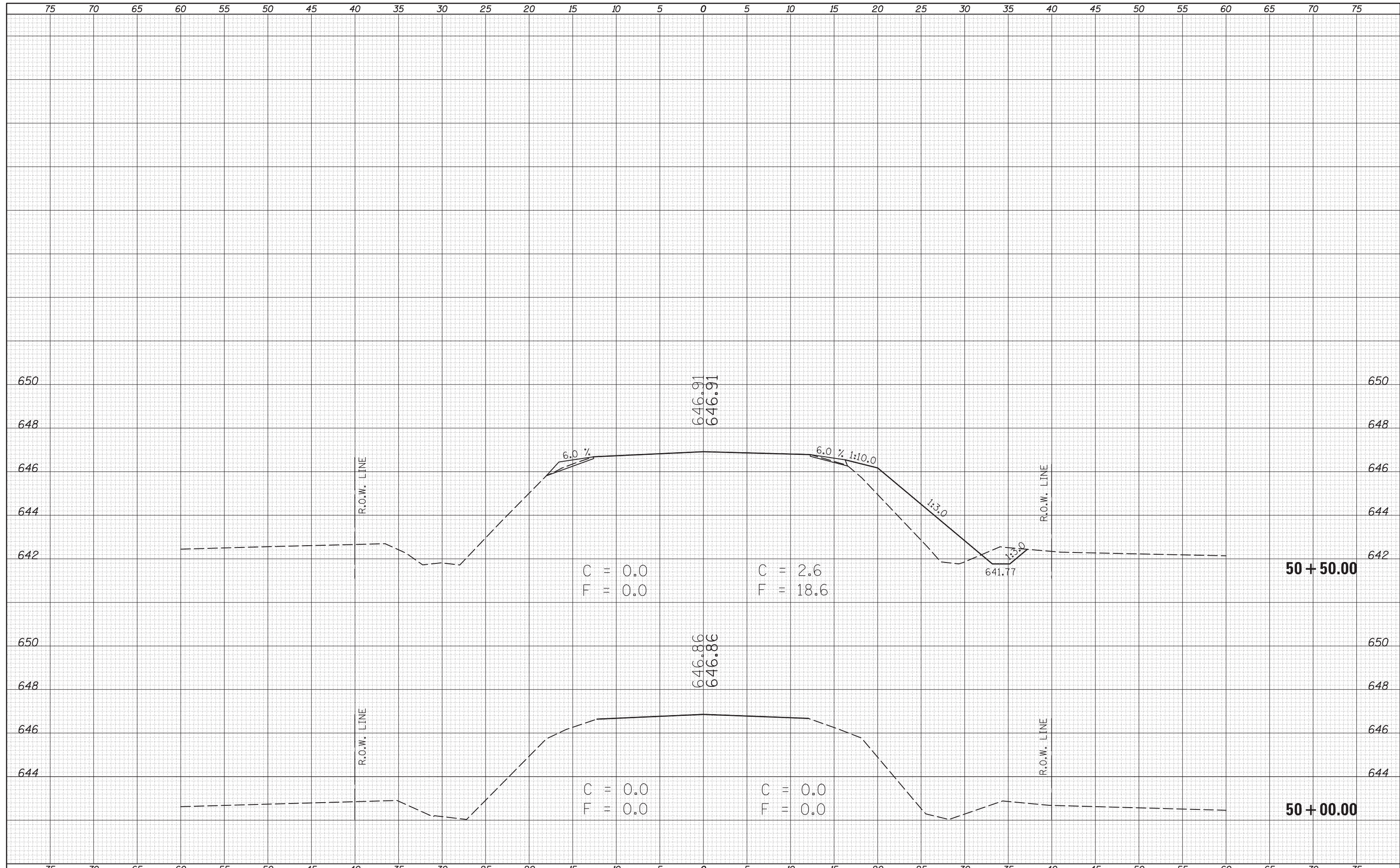
SCALE: SHEET NO. 4 OF 4 SHEETS STA. TO STA.

DISTRICT 5 DETAIL NO. 7800AAA

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	42
CONTRACT NO. 70607				
FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT				

DATE	
BY	
FINISHED SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	

DATE	
BY	
ORIGINAL SURVEY	
NOTE BOOK	
NO.	
SURVEYED	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	



FILE NAME =	USER NAME = keyrb	DESIGNED -	REVISED -	F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
p:\IL084EBIDINTEG\Illinois.gov\PWIDOT\Documents\IDOT Offices\District 5\Projects\0570607\CADD\Drawn\0570607-sht-XS_IL-49.dgn		REVISOR -	REVISOR -	836	117BR-1	EDGAR	48	43
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISOR -	REVISOR -	CONTRACT NO. 70607				
DATE = 9/9/2015	DATE -	REVISOR -	REVISOR -	ILLINOIS FED. AID PROJECT				

STATE OF ILLINOIS  
DEPARTMENT OF TRANSPORTATION

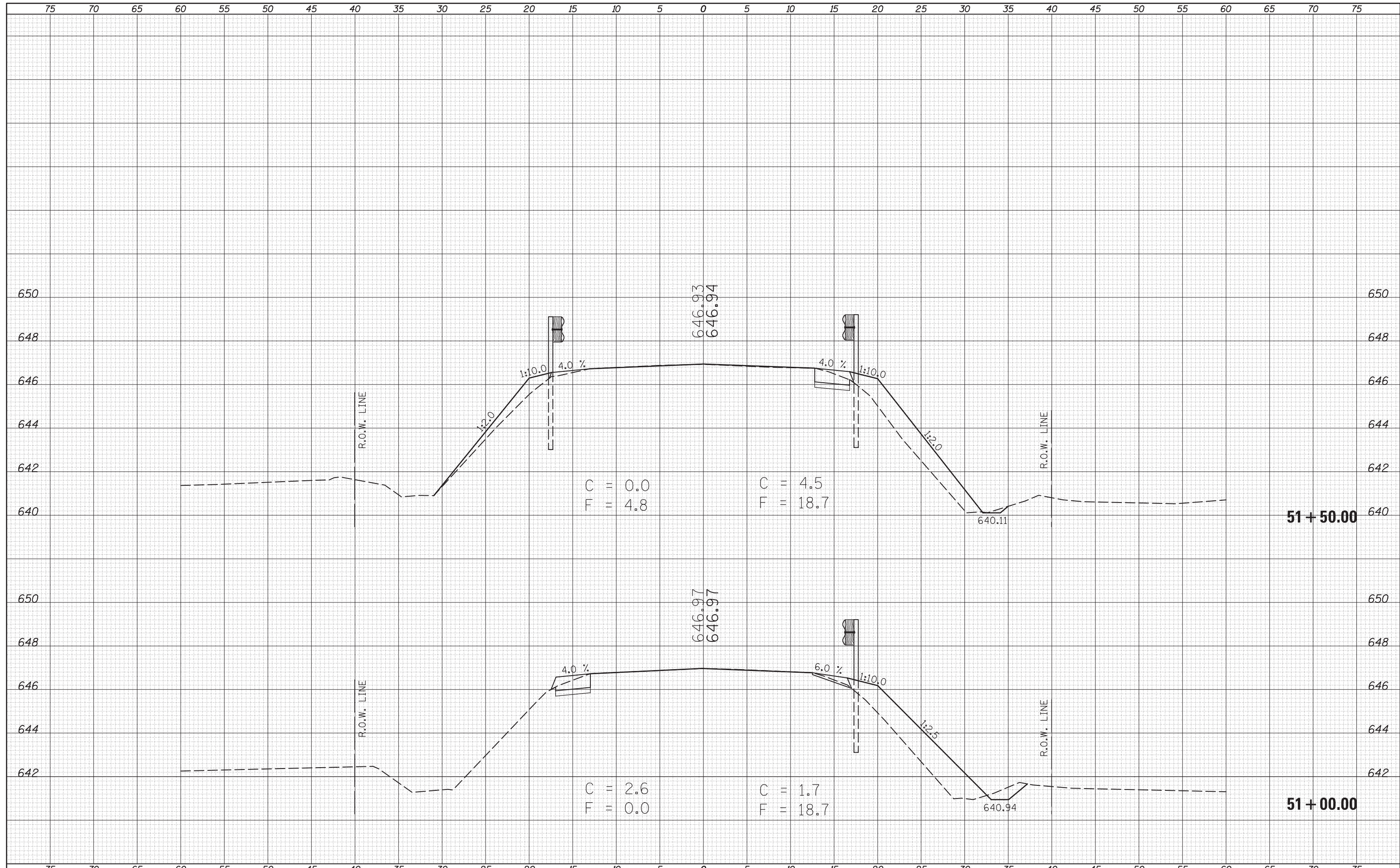
CROSS SECTIONS

SCALE: SHEET OF SHEETS STA. 50+00.00 TO STA. 50+50.00



DATE	
BY	
FINISHED SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
NO.	

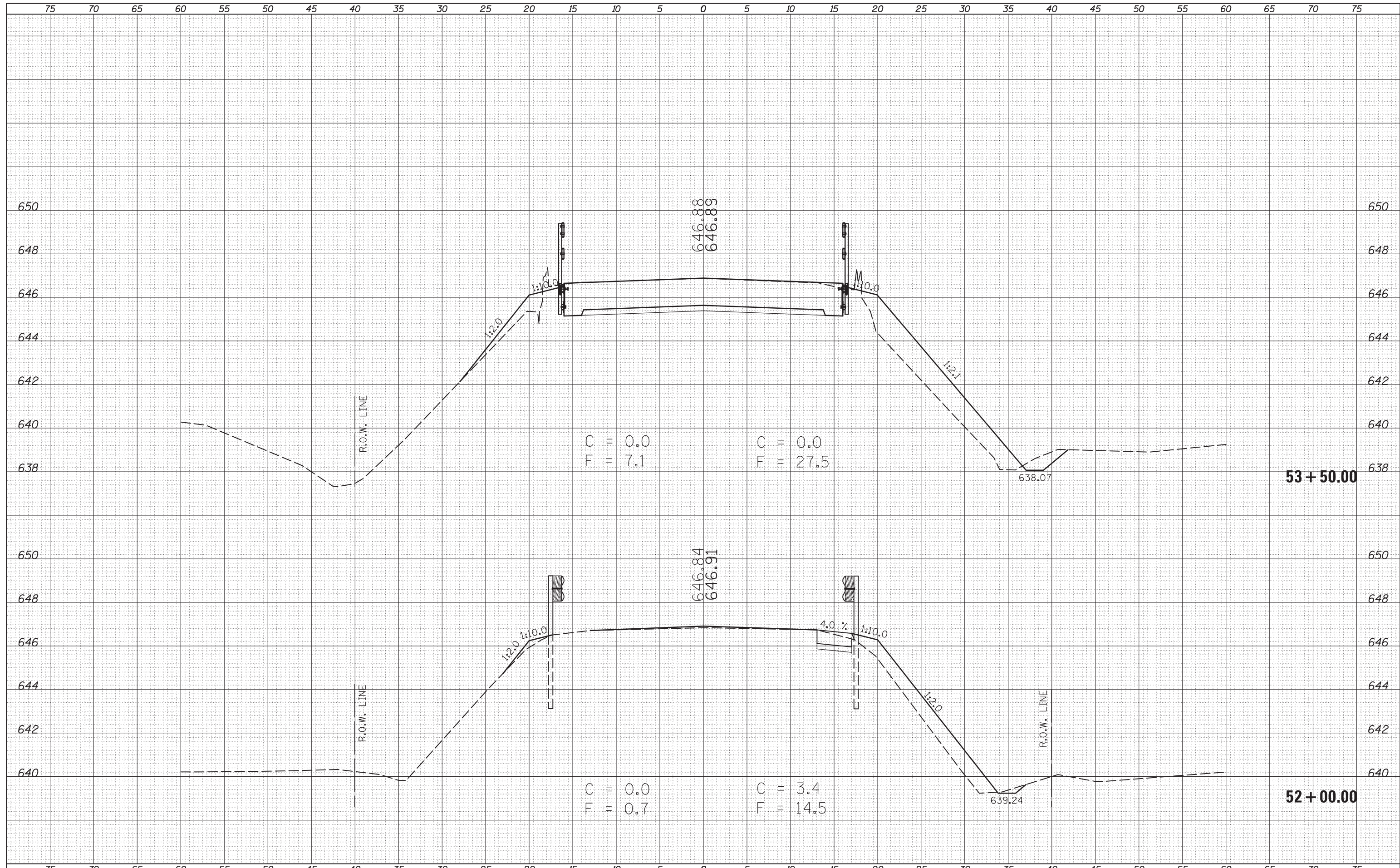
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ORIGINAL SURVEY	
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TEMPLATE	
NOTE BOOK	
AREAS CHECKED	
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FILE NAME =	USER NAME = keyrb	DESIGNED -	REVISIED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
pw\IL084EBIDINTEG.illinois.gov\PIDOT\Documents\IDOT Offices\District 5\Projects\0570607\CADD\Drawn\0570607-sht-XS-IL-49.dgn		REVISIED -	REVISIED -		836	117BR-1	EDGAR	48	44		
PLOT SCALE = 10.0000' / in.	CHECKED -	REVISIED -	REVISIED -		CONTRACT NO. 70607						
PLOT DATE = 9/9/2015	DATE -	REVISIED -	REVISIED -		SCALE:	SHEET	OF	SHEETS	STA. 51+00.00 TO STA. 51+50.00	ILLINOIS FED. AID PROJECT	

DATE	
BY	
FINISHED SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS	
CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
NOTE BOOK	
AREAS	
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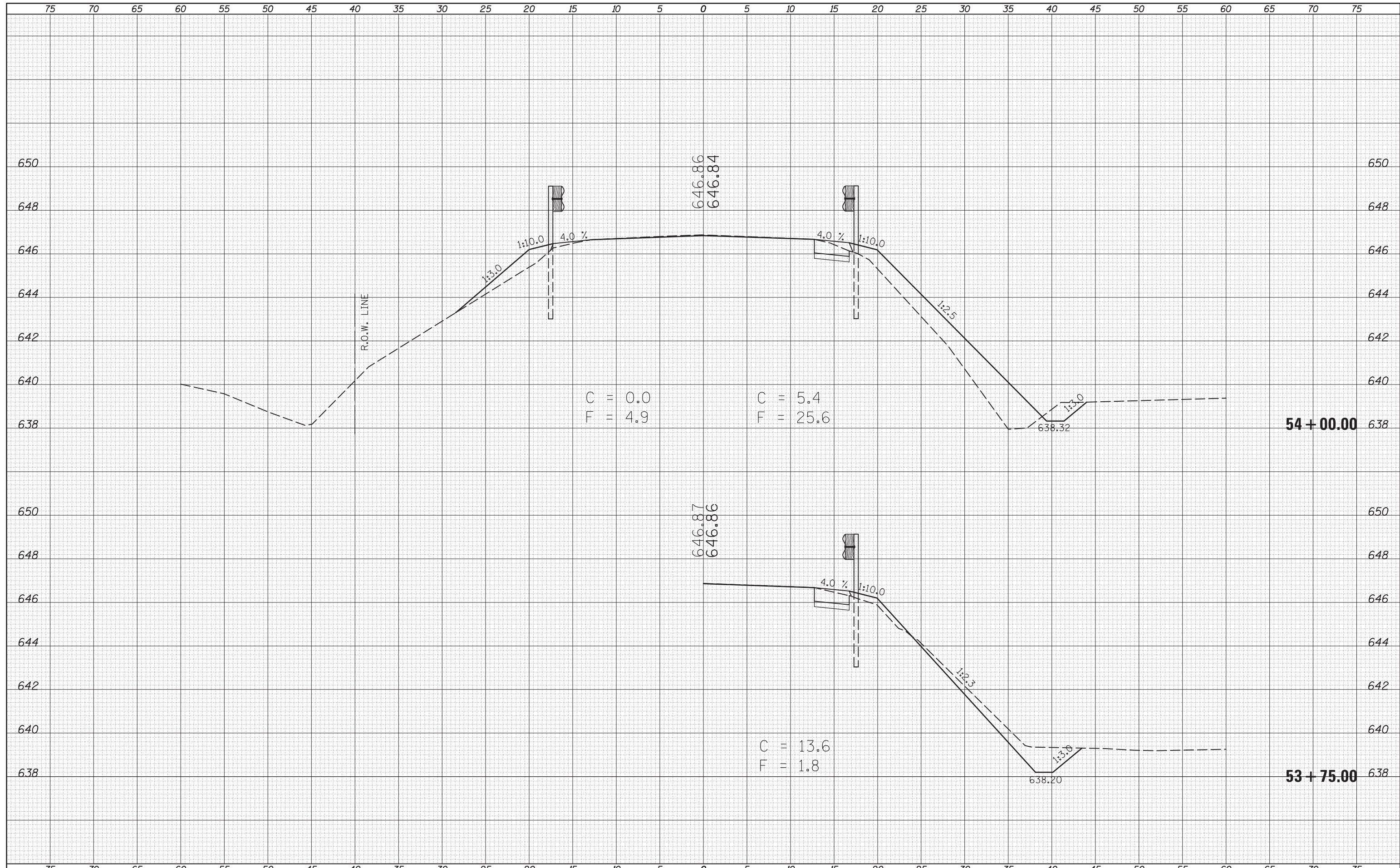


FILE NAME =	USER NAME = keyarb	DESIGNED -	REVISED -	<b>STATE OF ILLINOIS</b> <b>DEPARTMENT OF TRANSPORTATION</b>	<b>CROSS SECTIONS</b>		F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
\\IL084EBIDINTEG.illinois.gov\PIWIDOT\Documents\DOT Offices\District 5\Projects\0570607\CADD\Design\0570607-sht-XS_IL-49.dgn		REVISOR -	REVISOR -		836	117BR-1	EDGAR	48	45		
PLOT SCALE = 10.0000' / in.		CHECKED -	REVISOR -		CONTRACT NO. 70607						
DATE = 9/9/2015		DATE -	REVISOR -		SCALE:	SHEET	OF	SHEETS	STA. 52+00.00 TO STA. 53+50.00	ILLINOIS FED. AID PROJECT	



DATE	
BY	
FINISHED SURVEY	
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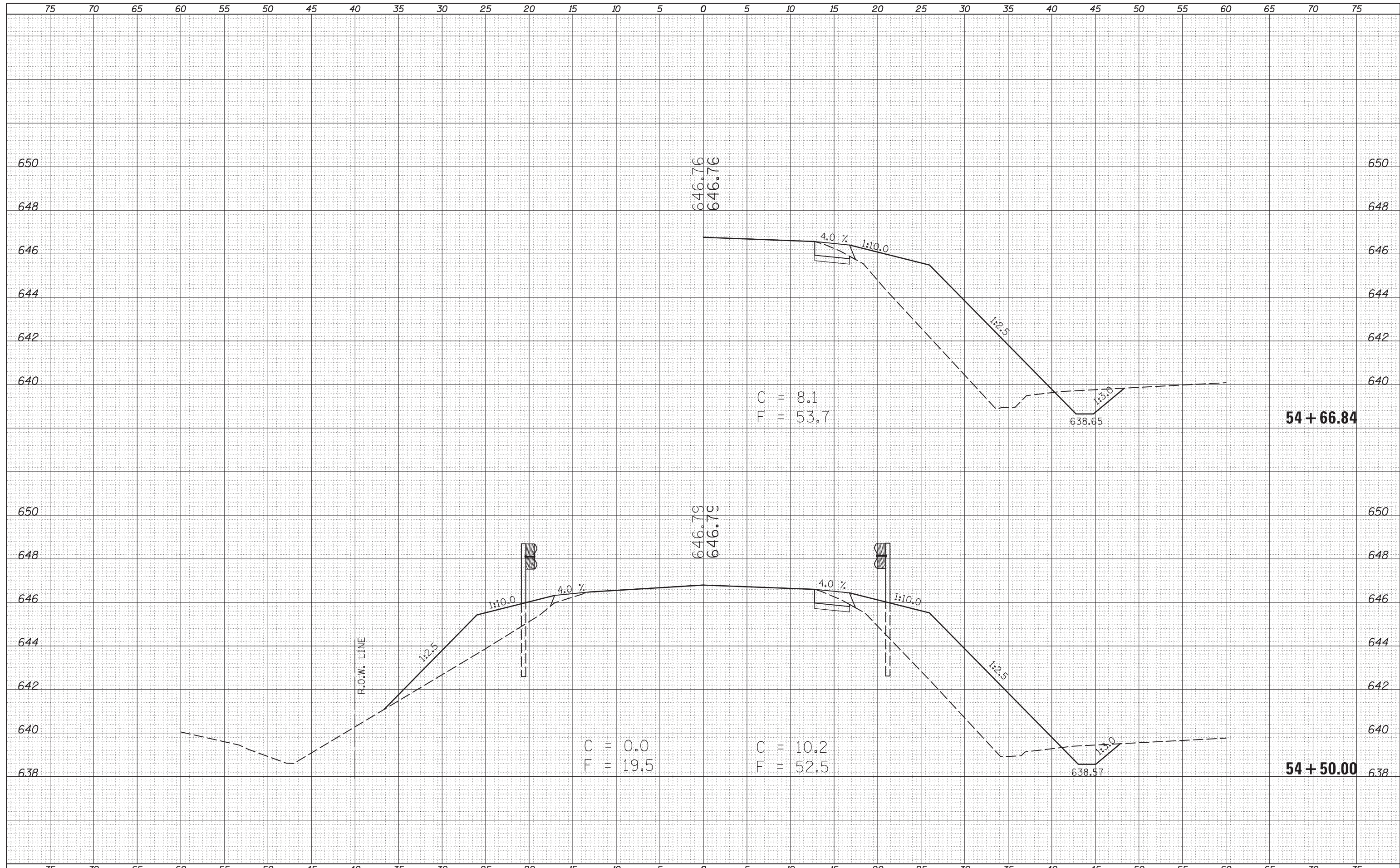
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BY	
ORIGINAL SURVEY	
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AREAS	
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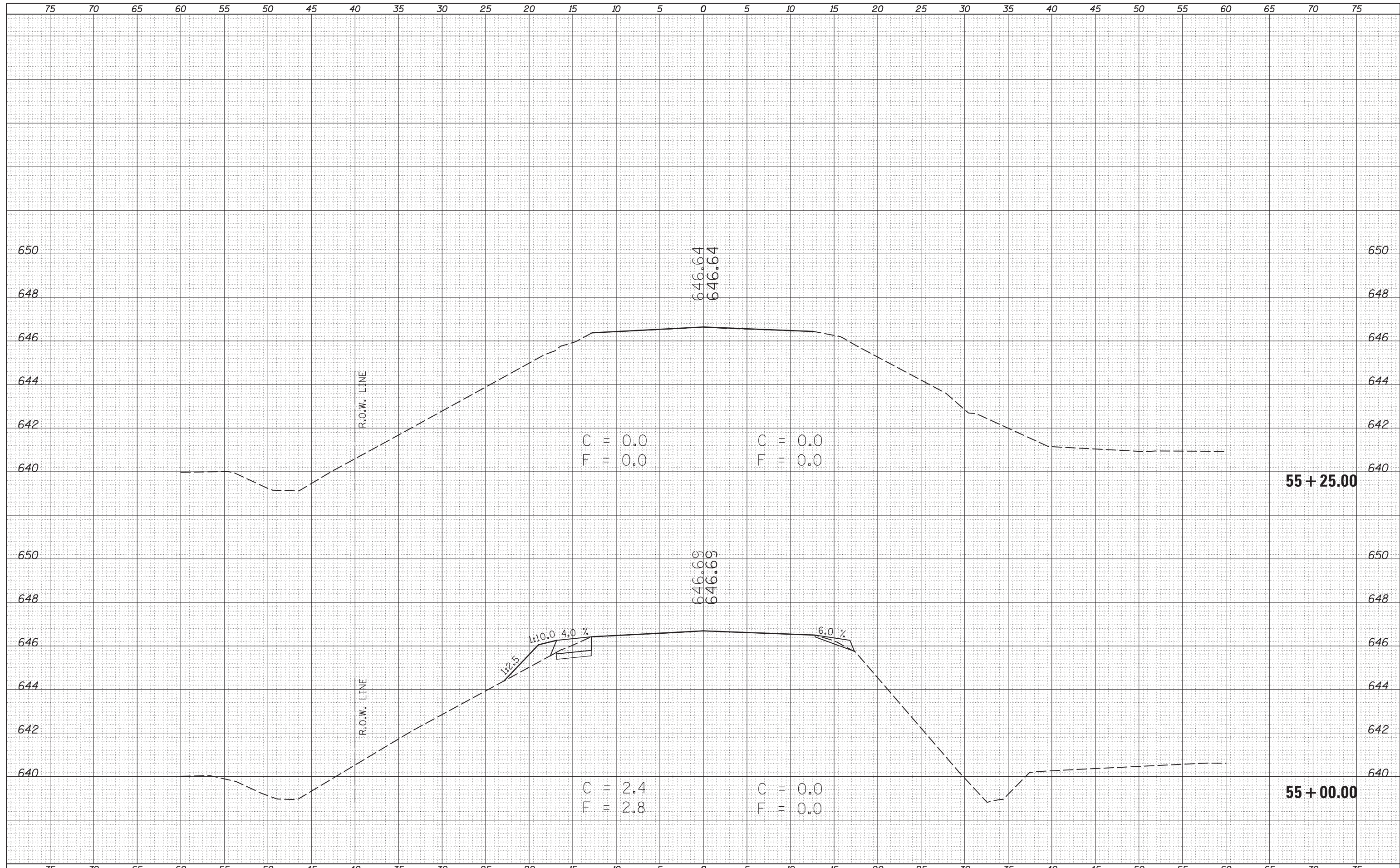
DATE	
BY	
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TEMPLATE	
AREAS	
CHECKED	
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DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
TEMPLATE	
AREAS	
CHECKED	
NO.	



DATE	
BY	
FINISHED SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	

DATE	
BY	
ORIGINAL SURVEY	
PLOTTED	
NOTE BOOK	
AREAS CHECKED	
NO.	



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**STATE OF ILLINOIS  
 DEPARTMENT OF TRANSPORTATION**

**CROSS SECTIONS**

SCALE: SHEET OF SHEETS STA. 55+00.00 TO STA. 55+25.00

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
836	117BR-1	EDGAR	48	48
CONTRACT NO. 70607			ILLINOIS FED. AID PROJECT	