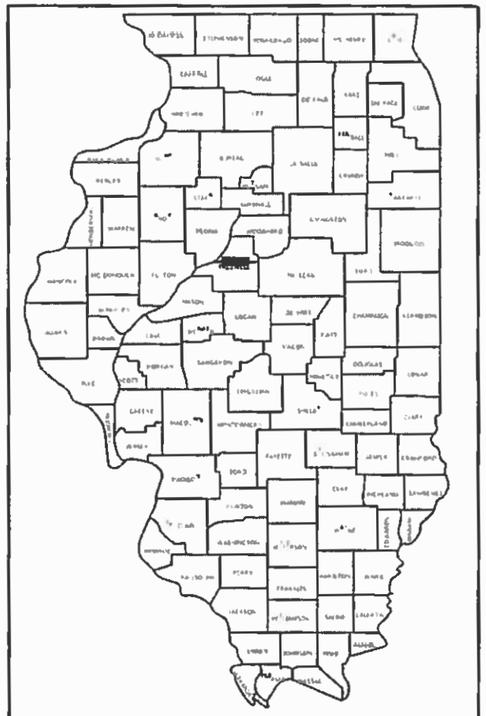
01-18-2019 LETTING ITEM 018

018

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR, 12[(HVB, HB)BR]BR	TAZEWELL	61*	1
		ILLINOIS	CONTRACT NO. 68D59	

*61 + 6 = 67 TOTAL SHEETS

D94-026-17



LOCATION OF SECTION INDICATED THUS:- ▬▬

FOR INDEX OF SHEETS SEE SHEET NO 2

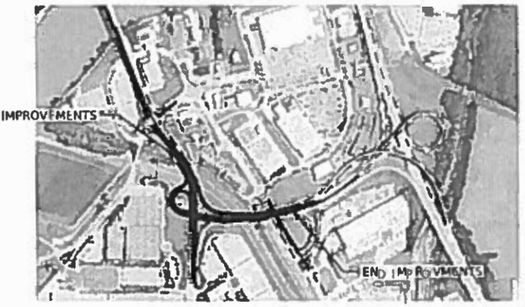
FOR HIGHWAY STANDARDS SEE SHEET NO 2

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

PROPOSED
HIGHWAY BRIDGE REPAIR PLANS

FAP ROUTE 404 (IL ROUTE 40)
SECTION (50B-4)BR;12[(HVB,HB)BR]BR
PROJECT NHPP-HK6S(511)
BRIDGE REHABILITATION
TAZEWELL COUNTY

C-94-054-17



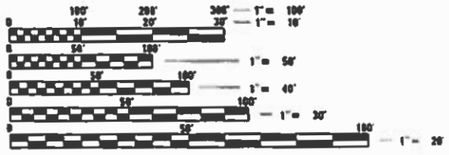
PROJECT DESCRIPTION: REHABILITATION OF STRUCTURES 090-0044, 090-0046 AND 090-0120

FUNCTIONAL CLASSIFICATION
URBAN OTHER PRINCIPAL ARTERIAL

TRAFFIC DATA
IL.40/WASHINGTON STREET
EXISTING ADT=17300
S.U. = 1.5%
M.U. = 1.5%

IL. 40
EXISTING ADT = 8600
S.U. = 1.5%
M.U. = 1.5%

POSTED SPEED (40)



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

J.U.L.I.E.
JOINT UTILITY LOCATION INFORMATION FOR EXCAVATION
1-800-892-0123
OR 811

BRYAN C. DONZE
LICENSED PROFESSIONAL ENGINEER
NO. 062.059597
STATE OF ILLINOIS

EXPIRES 11/30/2019
Bryan Donze
SIGNATURE
10/19/2018
DATE
1-18
SHEETS

BENJAMIN BOVEE
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

EXPIRES 11/30/2018
Benjamin Bovee
SIGNATURE
10/19/2018
DATE
19-61
SHEETS

GROSS LENGTH = 6287.04 FT. = 1.19 MILE
NET LENGTH = 1260.21 FT. = 0.12 MILE

PROJECT ENGINEER: MIKE LEWIS 309-671-3454
PROJECT MANAGER: MIKE MCLUCKIE 309-671-3468

CONTRACT NO. 68D59 CATALOG NO. 035477-00D

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED October 19 20 18
Kenneth A. Barnett
REGION THREE ENGINEER
Dec 7 20 18
ENGINEER OF DESIGN AND ENVIRONMENT
Dec 7 20 18
DIRECTOR OF HIGHWAY PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

REV. 11/30/18

INDEX OF SHEETS

HIGHWAY STANDARDS

000001-07	STANDARD SYMBOLS, ABBREVIATIONS AND PATTERNS
701456-05	PARTIAL EXIT RAMP CLOSURE, FREEWAY / EXPRESSWAY
701601-09	URBAN LANE CLOSURE, MULTILANE, 1W OR 2W WITH NONTRANSVERSABLE MEDIAN
701611-01	URBAN HALF ROAD CLOSURE, MULTILANE, 2W WITH MOUNTABLE MEDIAN
701701-10	URBAN LANE CLOSURE, MULTILANE INTERSECTION
701801-06	SIDEWALK, CORNER OR CROSSWALK CLOSURE
701901-08	TRAFFIC CONTROL DEVICES
704001-08	TEMPORARY CONCRETE BARRIER

GENERAL NOTES

PRIOR TO ROUTING TRAFFIC ONTO THE SHOULDERS AS SHOWN IN THE STAGING PLANS, THE CONSTRACTOR SHALL SECURE GRATINGS ON SHOULDER INLETS AS DIRECTED BY THE ENGINEER. THIS WORK WILL NOT BE PAID FOR SEPARATELY, BUT SHALL BE INCLUDED IN THE COST OF THE TRAFFIC CONTROL PAY ITEM.

THE DEPARTMENT RESERVES THE RIGHT AT ANY TIME TO ADD ADDITIONAL TRAFFIC CONTROL SYSTEMS OR DEVICES WITHIN THE ACTIVE CONTRACT LIMITS, BY MEANS OF AN ADDITIONAL CONTRACT. ALL TERMS OF ARTICLE 105.08 OF THE STANDARD SPECIFICATIONS SHALL BE FOLLOWED BY EACH CONTRACTOR.

SIGN LOCATIONS MAY VARY FROM THE STATIONS SHOWN ON THE PLANS IN ACCORDANCE WITH DIRECTIONS FROM THE ENGINEER AT THE TIME OF CONSTRUCTION. SIGN LOCATIONS MAY BE ADJUSTED IN THE FIELD TO AVOID ANY FOUND UTILITIES.

ALL WOOD POST LOCATIONS SHALL BE VERIFIED WITH THE BUREAU OF OPERATIONS, TRAFFIC SECTION, BEFORE INSTALLATION.

TRAFFIC CONTROL ITEMS SHALL BE PAID FOR BY LUMP SUM TRAFFIC CONTROL AND PROTECTION, (SPECIAL). SEE HIGHWAY STANDARDS AND SPECIAL PROVISIONS FOR ADDITIONAL DETAILS. ALL SIGNS AND TEMPORARY PAVEMENT MARKINGS SHALL BE INCLUDED IN THE PAY ITEM.

EXISTING PAVEMENT MARKINGS IN CONFLICT WITH TEMPORARY PAVEMENT MARKINGS SHALL BE COVERED WITH PAVEMENT MARKING BLACKOUT TAPE OR HYDROBLASTED AND SHALL BE INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL).

USER NAME = bcd	DESIGNED - BCD	REVISED - 11/21/2018
	DRAWN - GDC	REVISED -
PLOT SCALE = 1:50	CHECKED - LDC	REVISED -
PLOT DATE = 11/21/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

INDEX OF SHEETS, HIGHWAY STANDARDS
GENERAL NOTES AND COMMENTS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	2
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

CODE No.	ITEM	UNIT	CONSTRUCTION TYPE CODE				
			TOTAL QUANTITY	URBAN BRIDGE SN-090-0044 0013	URBAN BRIDGE SN 090-0046 0013	URBAN BRIDGE SN 090-0120 0013	URBAN ROADWAY 0006
20800150	TRENCH BACKFILL	CU YD	1				1
44000100	PAVEMENT REMOVAL	SQ YD	56				56
44000500	COMBINATION CURB AND GUTTER REMOVAL	FOOT	246				246
50102400	CONCRETE REMOVAL	CU YD	135.2	45.3	60.1	29.8	
50300225	CONCRETE STRUCTURES	CU YD	70.2		70.2		
50300255	CONCRETE SUPERSTRUCTURES	CU YD	29.8			29.8	
50500405	FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	8080	4420	3660		
50606701	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 1	L SUM	1	1			
50606702	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 2	L SUM	1		1		
50606703	CLEANING AND PAINTING STRUCTURAL STEEL, LOCATION 3	L SUM	1			1	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	15290		10590	4700	
50800515	BAR SPLICERS	EACH	24			24	
50900105	ALUMINUM RAILING, TYPE L	FOOT	9			9	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	233			233	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	10		10		
52100510	ANCHOR BOLTS, 3/4"	EACH	80		80		
52100520	ANCHOR BOLTS, 1"	EACH	54	54			
550A0050	STORM SEWERS, CLASS A, TYPE 1 12"	FOOT	7				7
60234200	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID	EACH	1				1
60255500	MANHOLES TO BE ADJUSTED	EACH	1				1
60260100	INLETS TO BE ADJUSTED	EACH	2				2
63302400	REMOVE AND RE-ERECT TRAFFIC BARRIER TERMINAL, TYPE 5	EACH	1			1	
67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	4	2	2	
67100100	MOBILIZATION	L SUM	1	0.34	0.33	0.33	

MODEL: Summary of Quantities
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10 CAD\CADD Sheets\D468D59 sht003 MOT SummaryOfQuantities.dgn

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	DRAWN - GDC	REVISED -
PLOT SCALE = 1:1	CHECKED - LDC	REVISED -
PLOT DATE = 11/21/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	3
		CONTRACT NO.68D59		
	ILLINOIS FED. AID PROJECT			

REV. 11/30/18 REV. 11/30/18

CODE No.	ITEM	UNIT	CONSTRUCTION TYPE CODE				
			TOTAL QUANTITY	URBAN BRIDGE SN-090-0044 0013	URBAN BRIDGE SN 090-0046 0013	URBAN BRIDGE SN 090-0120 0013	URBAN ROADWAY 0006
70103815	TRAFFIC CONTROL SURVEILLANCE	CAL DA	120	40	40	40	
70107025	CHANGEABLE MESSAGE SIGN	CAL DA	480	160	160	160	
70400100	TEMPORARY CONCRETE BARRIER	FOOT	2400	1875		525	
70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	500			500	
70600260	IMPACT ATTENUATORS, TEMPORARY (FULLY, REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	2	1		1	
70600332	IMPACT ATTENUATORS, RELOCATE (FULLY, REDIRECTIVE, NARROW), TEST LEVEL 3	EACH	1			1	
78009004	MODIFIED URETHANE PAVEMENT MARKING - LINE 4"	FOOT	12105				12105
78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 6"	FOOT	1054				1054
78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 8"	FOOT	2336				2336
78009012	MODIFIED URETHANE PAVEMENT MARKING - LINE 12"	FOOT	330				330
X4402020	CONCRETE MEDIAN SURFACE REMOVAL	SQ FT	1695				1695
X5060603	CONTAINMENT AND DISPOSAL OF NON-LEAD PAINT CLEANING RESIDUES NO. 3	L SUM	1			1	
X6064500	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (TEMPORARY)	FOOT	188				188
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1	0.34	0.33	0.33	
Z0001899	JACK AND REMOVE EXISTING BEARINGS	EACH	67	27	40		
Z0001905	STRUCTURAL STEEL REPAIR	POUND	2540		2540		
Z0007101	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1			
Z0007102	CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1		1		
Z0012754	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5")	SQ FT	3754.9	3658.9	96		
Z0016200	DECK SLAB REPAIR (PARTIAL)	SQ YD	225.0	225.0			
Z0021920	SILICONE JOINT SEALER SPECIAL	FOOT	40	36	4		
Z0032400	JOINT REPAIR	EACH	14	11	3		
Z0062456	TEMPORARY PAVEMENT	SQ YD	230				230
Z0073200	TEMPORARY SHORING AND CRIBBING	EACH	97	57	40		

MODEL: Summary of Quantities
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PLOT DATE = 11/21/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	4
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

REV. 11/30/18

STAGE 1

TRAFFIC

MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN BOTH WEST WASHINGTON STREET EB AND WEST WASHINGTON STREET WB DIRECTIONS AT ALL TIMES.

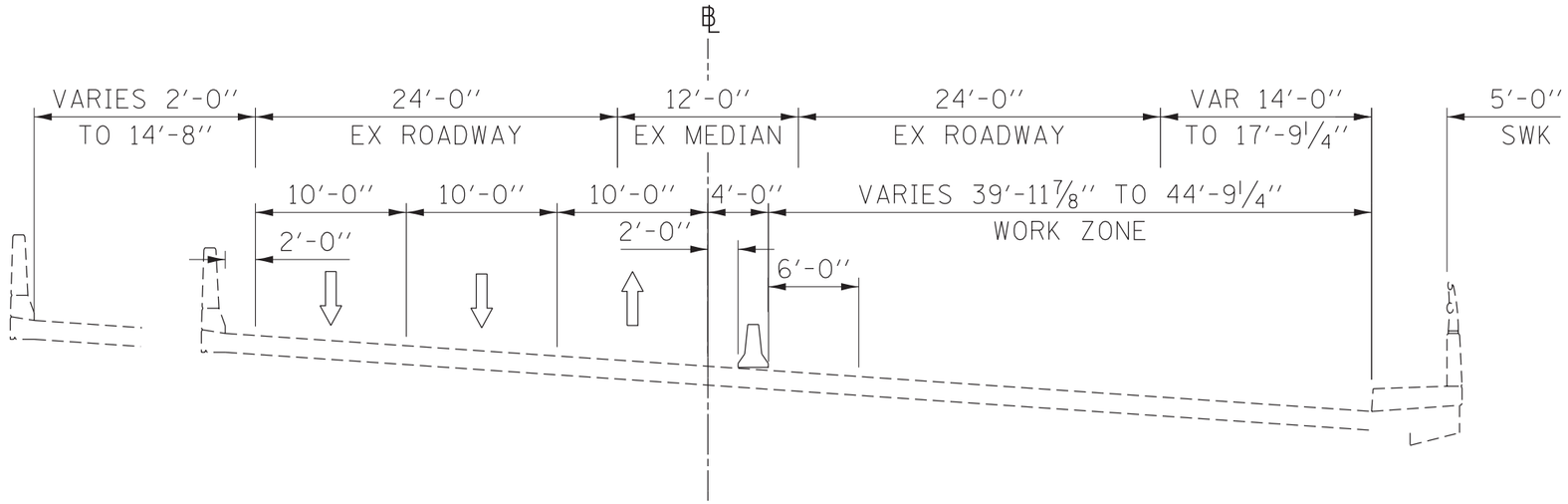
BRIDGE CONSTRUCTION

CONSTRUCT WEST WASHINGTON STREET SB DRIVING LANE.

SEE PROPOSED TYPICAL SECTION SHEETS FOR DETAILED INFORMATION.

PRIMARY IDOT STANDARDS THIS STAGE
(SEE SPECIAL PROVISIONS FOR ADDITIONAL APPLICABLE STANDARDS)

701400, 701456, 701611, 701701



STAGE 1 - TYPICAL SECTION
WEST WASHINGTON STREET

STAGE 2

TRAFFIC

MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN BOTH WEST WASHINGTON STREET EB AND WEST WASHINGTON STREET WB DIRECTIONS AT ALL TIMES.

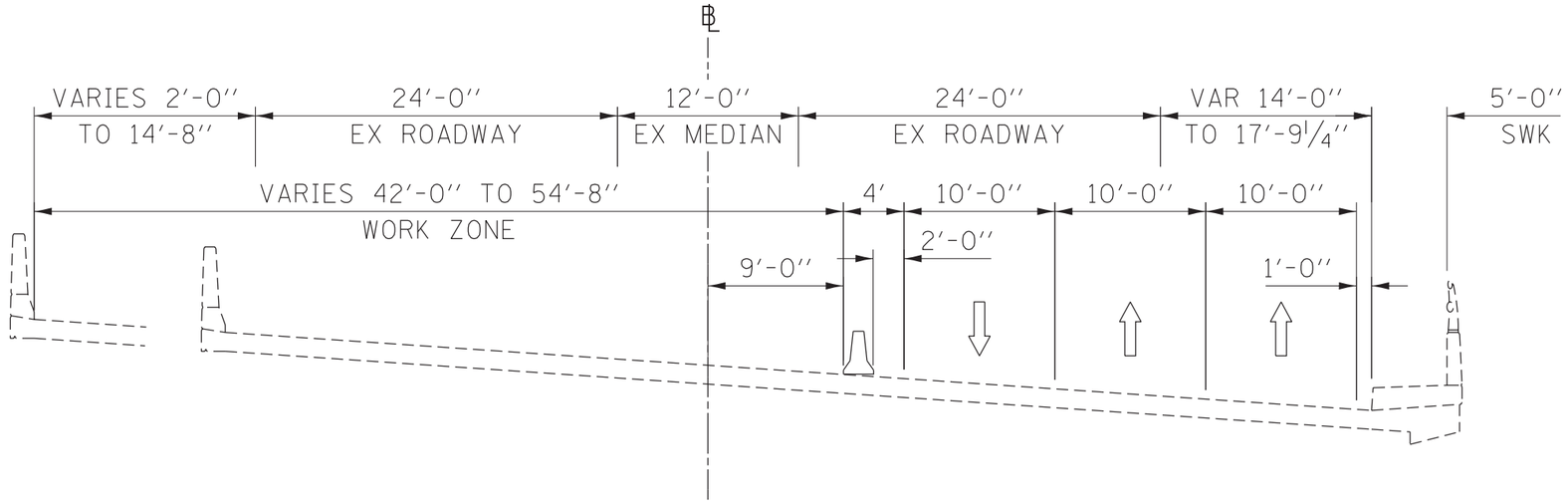
BRIDGE CONSTRUCTION

CONSTRUCT WEST WASHINGTON STREET NB.

SEE PROPOSED TYPICAL SECTION SHEETS FOR DETAILED INFORMATION.

PRIMARY IDOT STANDARDS THIS STAGE
(SEE SPECIAL PROVISIONS FOR ADDITIONAL APPLICABLE STANDARDS)

701400, 701456, 701611, 701701



STAGE 2 - TYPICAL SECTION
WEST WASHINGTON STREET

SECTIONS LOOKING SOUTH

MODEL: West Washington Typicals
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10 CADCADD Sheets\D9402617 sht002 MOT Typicals.dgn

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	DRAWN - GDC	REVISED -
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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS – SN 009–0120 OVER FARM CREEK

SCALE: 1"=5' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	5
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

STAGE 1

TRAFFIC

MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN BOTH RIVERFRONT DRIVE SPUR EB AND WEST WASHINGTON STREET DIRECTIONS AT ALL TIMES.

CLOSE RAMP A FROM WEST WASHINGTON TO RAMP ND

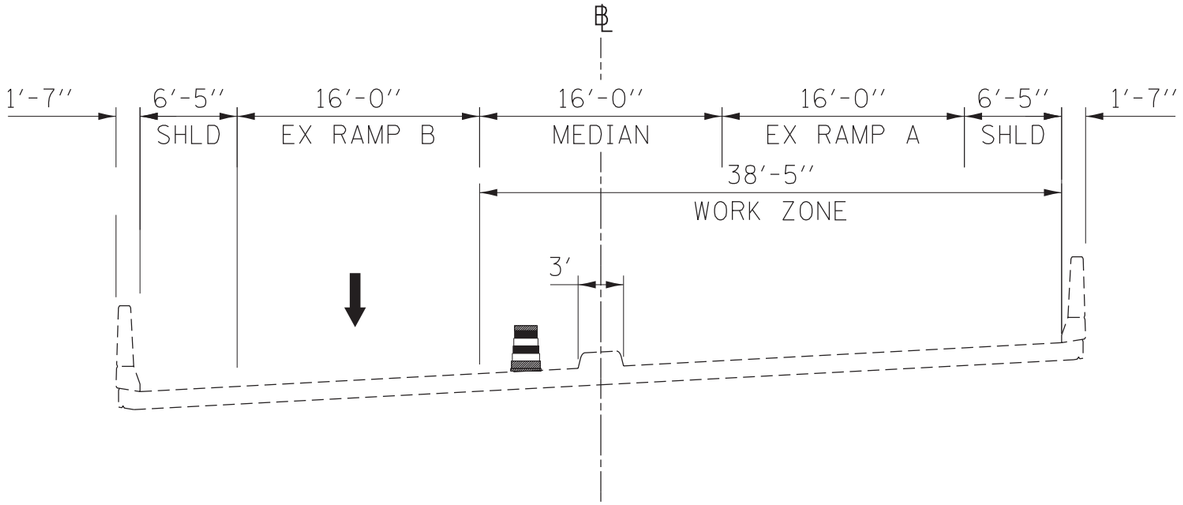
BRIDGE CONSTRUCTION

CONSTRUCT RIVERFRONT DRIVE SPUR OVER WASHINGTON STREET REPAIRS FROM WEST WASHINGTON STREET

SEE PROPOSED TYPICAL SECTION SHEETS FOR DETAILED INFORMATION.

PRIMARY IDOT STANDARDS THIS STAGE
(SEE SPECIAL PROVISIONS FOR ADDITIONAL APPLICABLE STANDARDS)

701400, 701456, 701611, 701701



STAGE 1 - TYPICAL SECTION
RIVERFRONT DRIVE SPUR
RAMP A & RAMP B

STAGE 2

TRAFFIC

MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN BOTH DIRECTIONS ON RIVERFRONT DRIVE SPUR AND WEST WASHINGTON STREET. CLOSE INSIDE SHOULDERS AND MEDIAN ON RIVERFRONT DRIVE SPUR

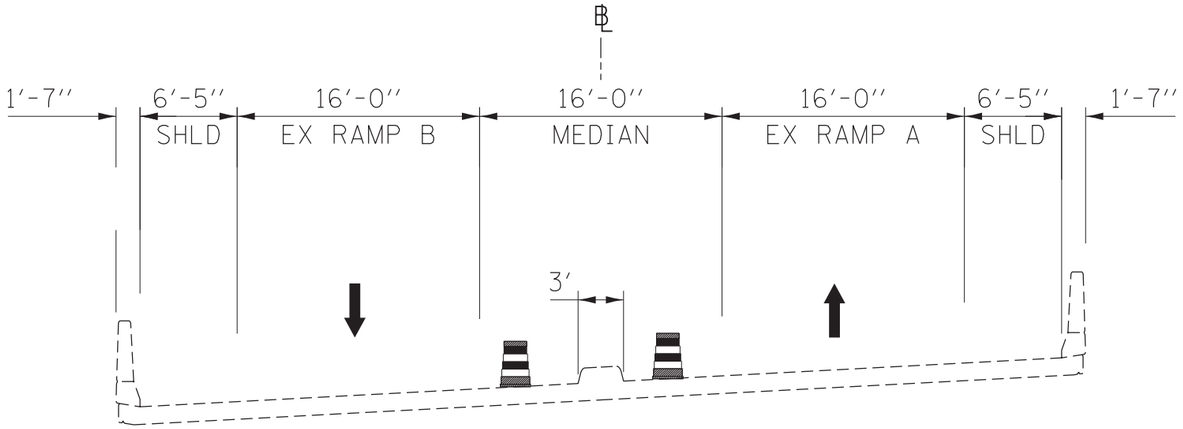
BRIDGE CONSTRUCTION

CONSTRUCT RIVERFRONT DRIVE SPUR OVER WASHINGTON STREET REPAIRS FROM WEST WASHINGTON STREET

SEE PROPOSED TYPICAL SECTION SHEETS FOR DETAILED INFORMATION.

PRIMARY IDOT STANDARDS THIS STAGE
(SEE SPECIAL PROVISIONS FOR ADDITIONAL APPLICABLE STANDARDS)

701400, 701456, 701611, 701701



STAGE 2 - TYPICAL SECTION
RIVERFRONT DRIVE SPUR
RAMP A & RAMP B

SECTIONS LOOKING EAST

MODEL: 01 Industrial Spur Typicals
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10 CADCADD Sheets\D9402617 sht003 MOT Typicals.dgn

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	DRAWN - GDC	REVISED -
PLOT SCALE = 1:5	CHECKED - LDC	REVISED -
PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS – SN 009-0046 OVER WEST WASHINGTON STREET

SCALE: 1"=5' | SHEET OF SHEETS | STA. | TO STA.

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	6
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

STAGE 1

TRAFFIC

MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC IN BOTH RIVERFRONT DRIVE SPUR EB AND WB AT ALL TIMES.

CLOSE RAMP A FROM WEST WASHINGTON STREET TO RAMP ND

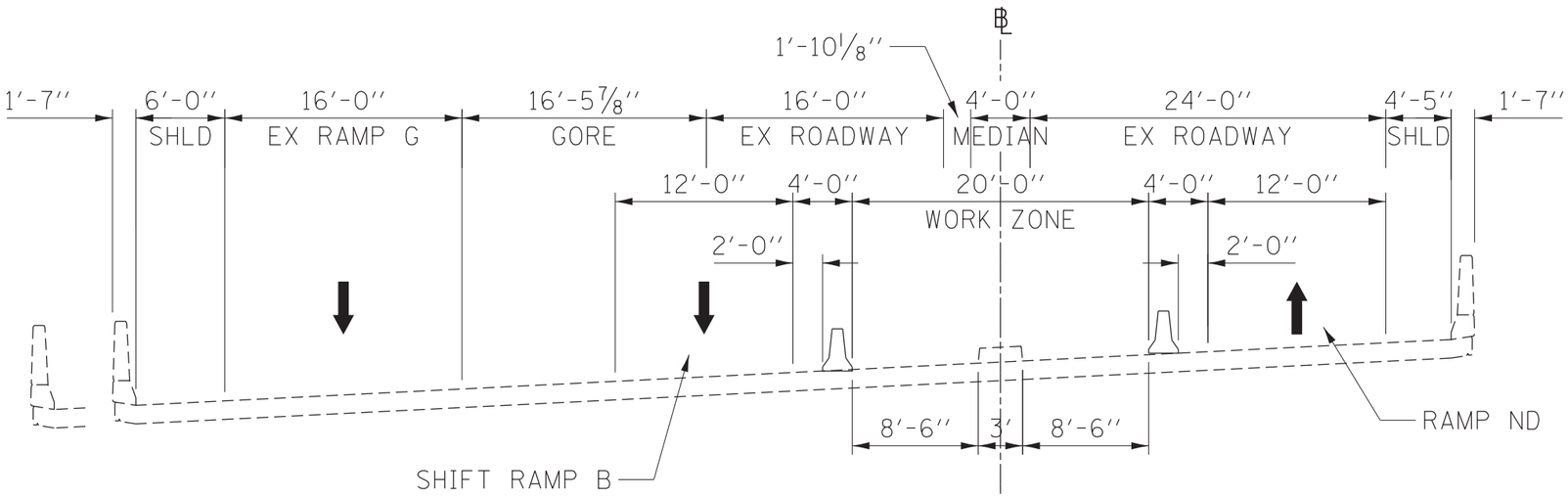
BRIDGE CONSTRUCTION

CONSTRUCT RIVERFRONT DRIVE SPUR EB AND WB DRIVING LANE. REMOVE RAISED MEDIAN.

SEE PROPOSED TYPICAL SECTION SHEETS FOR DETAILED INFORMATION.

PRIMARY IDOT STANDARDS THIS STAGE
(SEE SPECIAL PROVISIONS FOR ADDITIONAL APPLICABLE STANDARDS)

701400, 701456, 701611, 701701



STAGE 1 - TYPICAL SECTION
RIVERFRONT DRIVE SPUR

STAGE 2

TRAFFIC

MAINTAIN A MINIMUM OF ONE LANE OF TRAFFIC ON RIVERFRONT DRIVE SPUR WB TO RAMP B AND TWO LANES OF TRAFFIC ON RIVERFRONT DRIVE SPUR EB FROM RAMPS A AND ND.

CLOSE RAMP G FROM RIVERFRONT DRIVE SPUR TO WEST WASHINGTON STREET

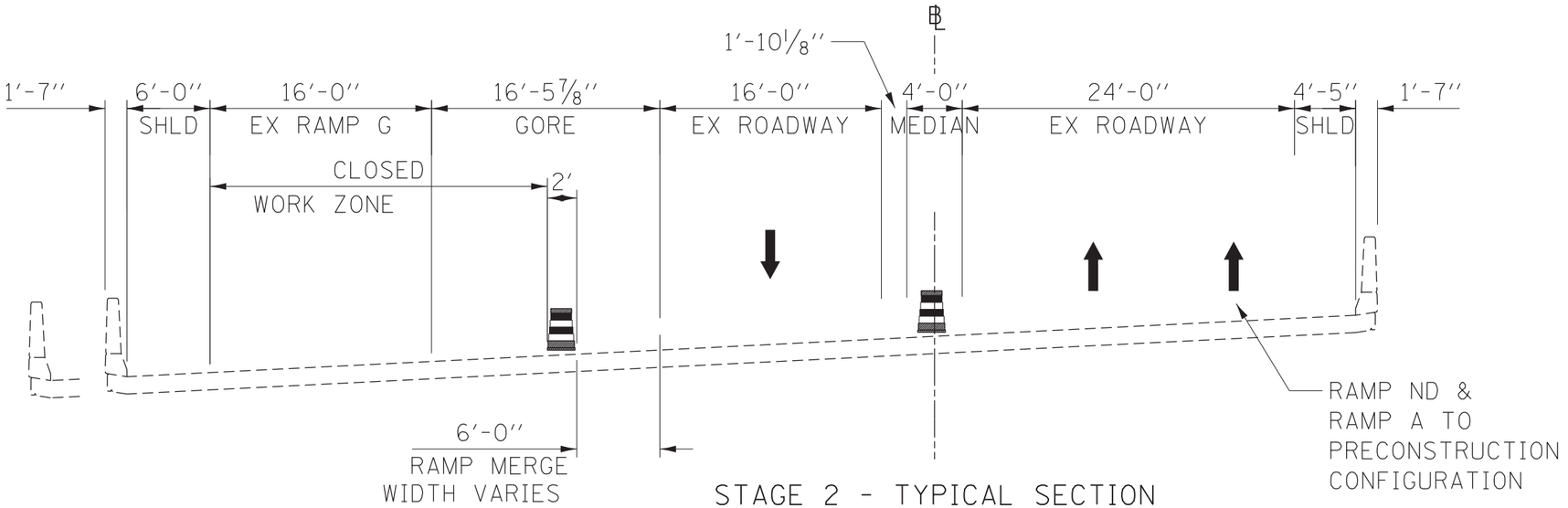
BRIDGE CONSTRUCTION

CONSTRUCT RIVERFRONT DRIVE SPUR WB REPAIRS ALONG RAMP G

SEE PROPOSED TYPICAL SECTION SHEETS FOR DETAILED INFORMATION.

PRIMARY IDOT STANDARDS THIS STAGE
(SEE SPECIAL PROVISIONS FOR ADDITIONAL APPLICABLE STANDARDS)

701400, 701456, 701611, 701701



STAGE 2 - TYPICAL SECTION
RIVERFRONT DRIVE SPUR

SECTIONS LOOKING EAST

MODEL: 02 - Industrial Spur Typicals
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10 CADCADD Sheets\D9402617 sht004 MOT Typicals.dgn

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	DRAWN - GDC	REVISED -
PLOT SCALE = 1:5	CHECKED - LDC	REVISED -
PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

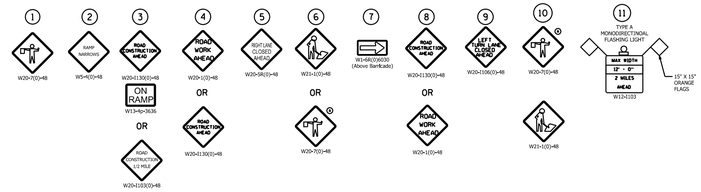
SUGGESTED MAINTENANCE OF TRAFFIC
TYPICAL SECTIONS – SN 009–0044 OVER FARM CREEK & CAMP STREET

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	7
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

TEMPORARY CONCRETE BARRIER					
LOCATION STATION TO STATION	DESCRIPTON	TEMPORARY CONCRETE BARRIER 70400100 FOOT	RELOCATE TEMPORARY CONCRETE BARRIER 70400200 FOOT	IMPACT ATTENUATORS, TEMPORARY (FULLY-REDIRECTIVE NARROW) TEST LEVEL 3 70600260 EACH	IMPACT ATTENUATORS, RELOCATE (FULLY-REDIRECTIVE NARROW) TEST LEVEL 3 7060332 EACH
WEST WASHINGTON ST					
	SN 009-0120, STAGE 1	500.0		1	
	SN 009-0120, STAGE 2	25.0	500.0		1
RIVERFRONT DRIVE SPUR					
	SN 009-0044, STAGE 1	1875.0		1	
PROJECT TOTAL		2,400.0	500.0	2	1

SCHEDULE OF MOT SIGNS



SIGN SPACING TABLE	
POSTED SPEED	SIGN SPACING
55	500' (150 m)
50 - 45	350' (100 m)
< 45	200' (60 m)

⊙ REFER TO SIGN SPACING TABLE FOR DISTANCES

CONSTRUCTION AREA

TEMPORARY PAVEMENT MARKINGS

LOCATION STATION TO STATION	DESCRIPTION	PAVT MARK TAPE TYPE 3 OR 4, 4" SOLID LINE 4" WHITE FOOT	 YELLOW FOOT	PAVT MARK TAPE TYPE 3 OR 4, 8" DOTTED LINE 8" WHITE FOOT
WEST WASHTINGTON				
	MEDIAN MODIFICIATION, PRE-STAGE	2,212		91
	SN 009-0120 & SN 009-0046, STAGE 1	3,814	1,852	
	SN 009-0120 & SN 009-0046, STAGE 2	3,184	1,737	
RIVERFRONT DRIVE SPUR				
	SN 009-0044 & SN 009-0046, STAGE 1	2,416	2,250	
	SN 009-0044 & SN 009-0046, STAGE 2	1,277	1,485	
CAMP STREET				
	SN 009-0044, STAGE 1	614		
	SN 009-0044, STAGE 2	614		
PROJECT TOTAL		**14,131**	**7,324**	**91**

* SCHEDULE FOR INFORMATION ONLY. PLACEMENT SHALL BE PER STANDARD OR AT THE DIRECTION OF THE ENGINEER. PAVEMENT MARKING TAPE IS INCLUDED IN THE COST OF TRAFFIC CONTROL AND PROTECTION, (SPECIAL)

MODEL: Schedules
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10 CADCADD Sheets\D4680959 sht008 MOT Schedule.dgn

USER NAME = bcd	DESIGNED - BCD	REVISED - 11/21/2018
	DRAWN - GDC	REVISED -
PLOT SCALE = 1:1	CHECKED - LDC	REVISED -
PLOT DATE = 11/21/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES AND MOT LEGEND

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	8
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

LOCATION	COMBINATION CURB AND GUTTER REMOVAL 44000500	PAVEMENT REMOVAL 44000100	CONCRETE MEDIAN SURFACE REMOVAL X4402020	TEMPORARY PAVEMENT Z0062456	COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (TEMPORARY) X6064500
	FOOT	SQ YD	SQ FT	SQ YD	FOOT
WASHINGTON ST. MEDIAN MODIFICATION	246	56	1695	230	188
PROJECT TOTAL:	246	56	1695	230	188

NOTE: EXISTING PAVEMENT THICKNESS IS 10".
EXISTING CONCRETE MEDIAN SURFACE THICKNESS IS 4".

LOCATION	MANHOLES TO BE ADJUSTED 60255500	INLETS TO BE ADJUSTED 60260100	INLETS, TYPE A, TYPE 1 FRAME, OPEN LID 60234200	STORM SEWERS, CLASS A, TYPE 1 12" 550A0050	TRENCH BACKFILL 20800150
	EACH	EACH	EACH	FOOT	CU YD
WASHINGTON ST. MEDIAN MODIFICATION	1	2	1	7	1
PROJECT TOTAL:	1	2	1	7	1

PERMANENT PAVEMENT MARKINGS

LOCATION	MODIFIED URETHANE PAVEMENT MARKING - LINE 4" 78009004			MODIFIED URETHANE PAVEMENT MARKING - LINE 6" 78009006	MODIFIED URETHANE PAVEMENT MARKING - LINE 8" 78009008	MODIFIED URETHANE PAVEMENT MARKING - LINE 12" 78009012
	FOOT			FOOT	FOOT	FOOT
	WHITE	YELLOW	YELLOW- DOUBLE	WHITE-SKIP DASH	WHITE	YELLOW
WASHINGTON ST.	3052	1356	2056	784	474	330
RIVERFRONT DRIVE SPUR	1967	3674		270	1862	
PROJECT TOTAL:	12105			1054	2336	330

MODEL: $MODELNAME$
FILE NAME: $FILE$

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	DRAWN -	REVISED -	
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PLOT DATE = $DATE$	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULES

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	8A
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

MODEL: $MODELNAME$
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PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
PRE-STAGE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	8B
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

MODEL: $MODELNAME$
FILE NAME: $FILEL$

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PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
PRE-STAGE

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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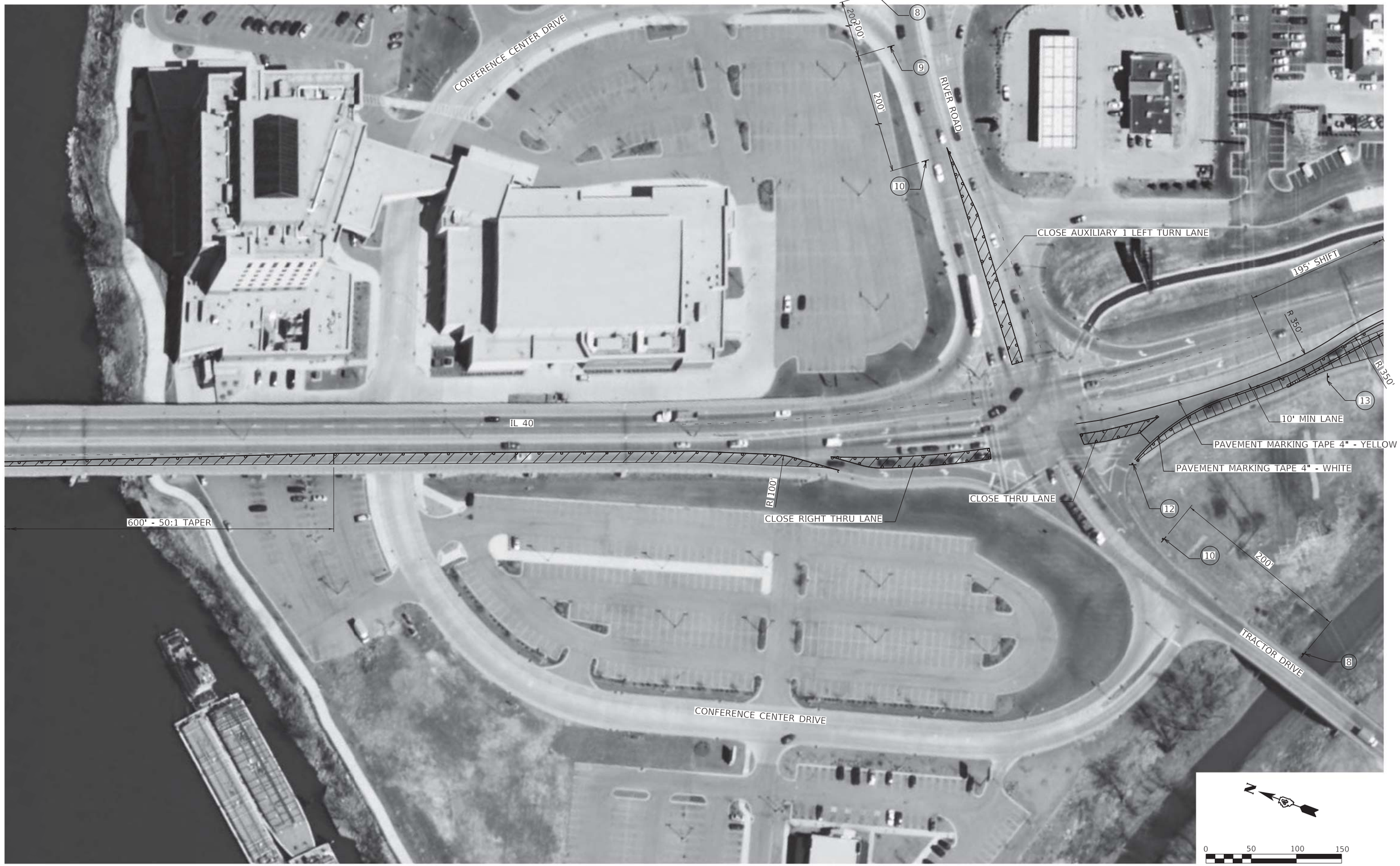
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			



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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
STAGE 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12([HVB,HB)BR	TAZEWELL	61	9
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

MODEL: 02 - Suggested MOT
FILE NAME: P:\05-0006.22 IDOT D4 MOT Plans\10_CADCADD Sheets\D9402617 sht006 MOT Stage 1.dgn

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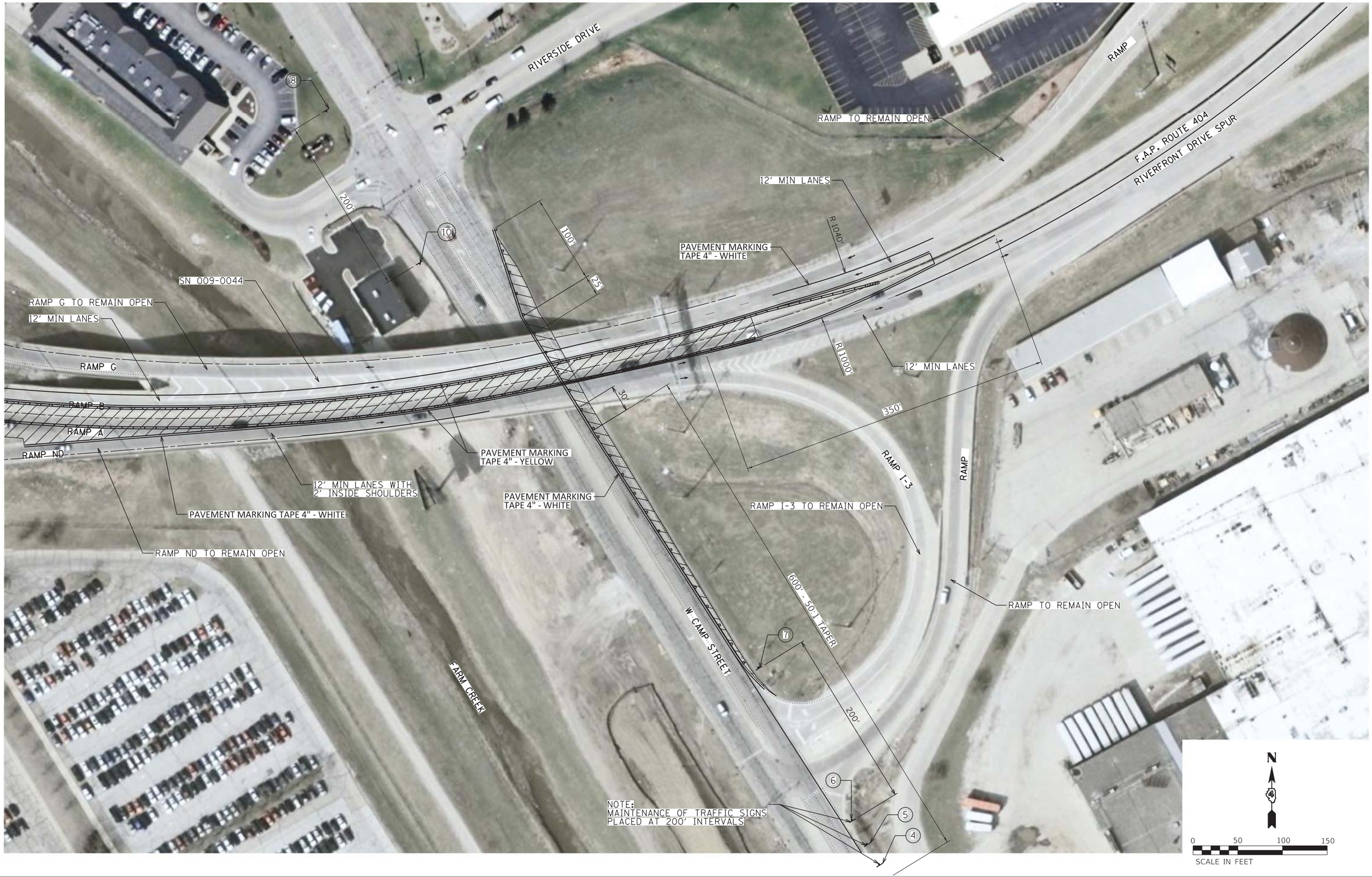
PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
STAGE 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	10
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
STAGE 1

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	11
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

MODEL: 04 - Suggested MOT
FILE NAME: P:\09-0006.22 IDOT D4 MOT Plans\10_CAD\CADD Sheets\D9402617 -sht008 MOT Stage 2.dgn

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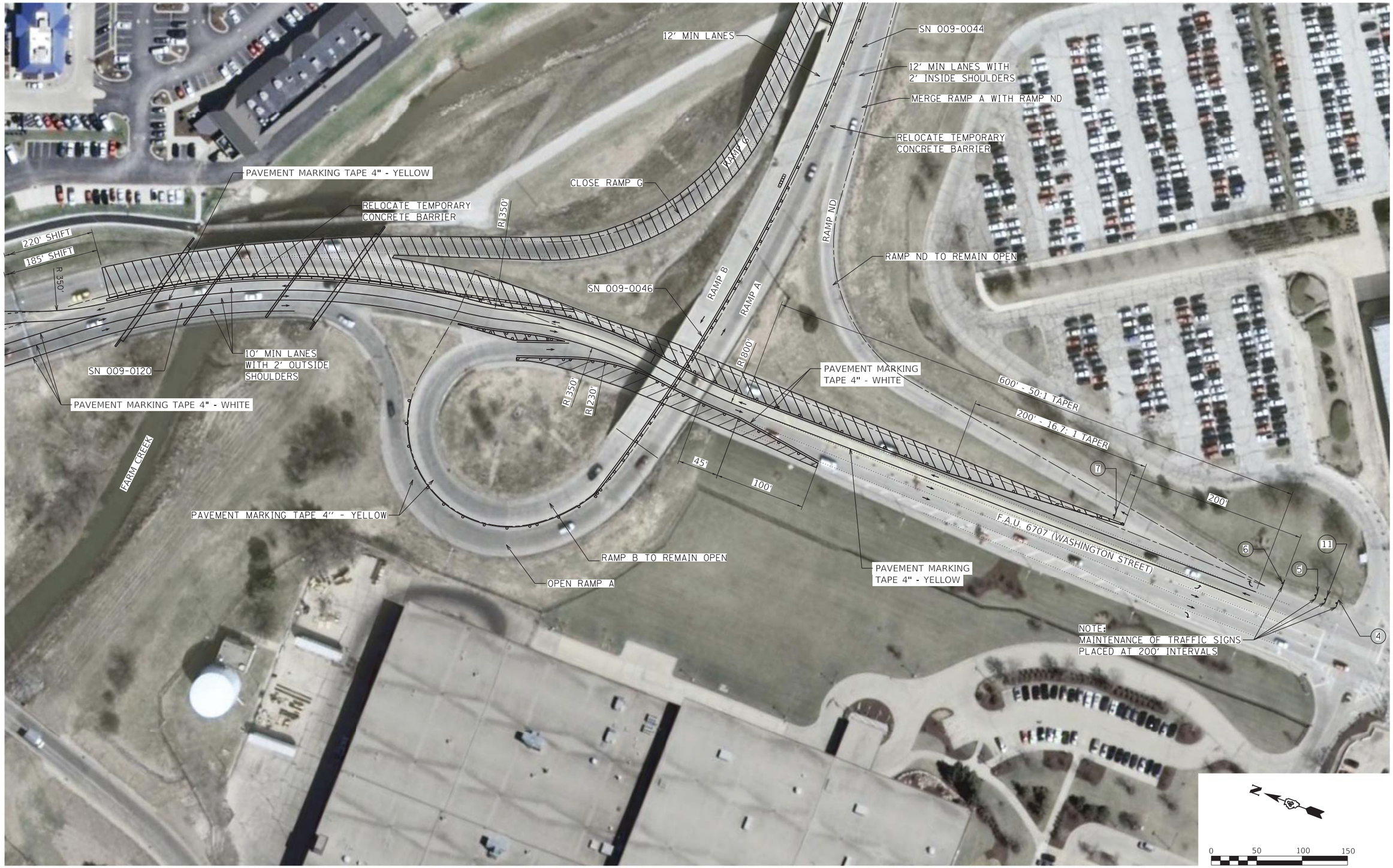
PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
STAGE 2

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	12
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		



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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
STAGE 2

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	13
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

MODEL: 06 - Suggested MOT
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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
STAGE 2

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	14
		CONTRACT NO.68D59		
	ILLINOIS FED. AID PROJECT			

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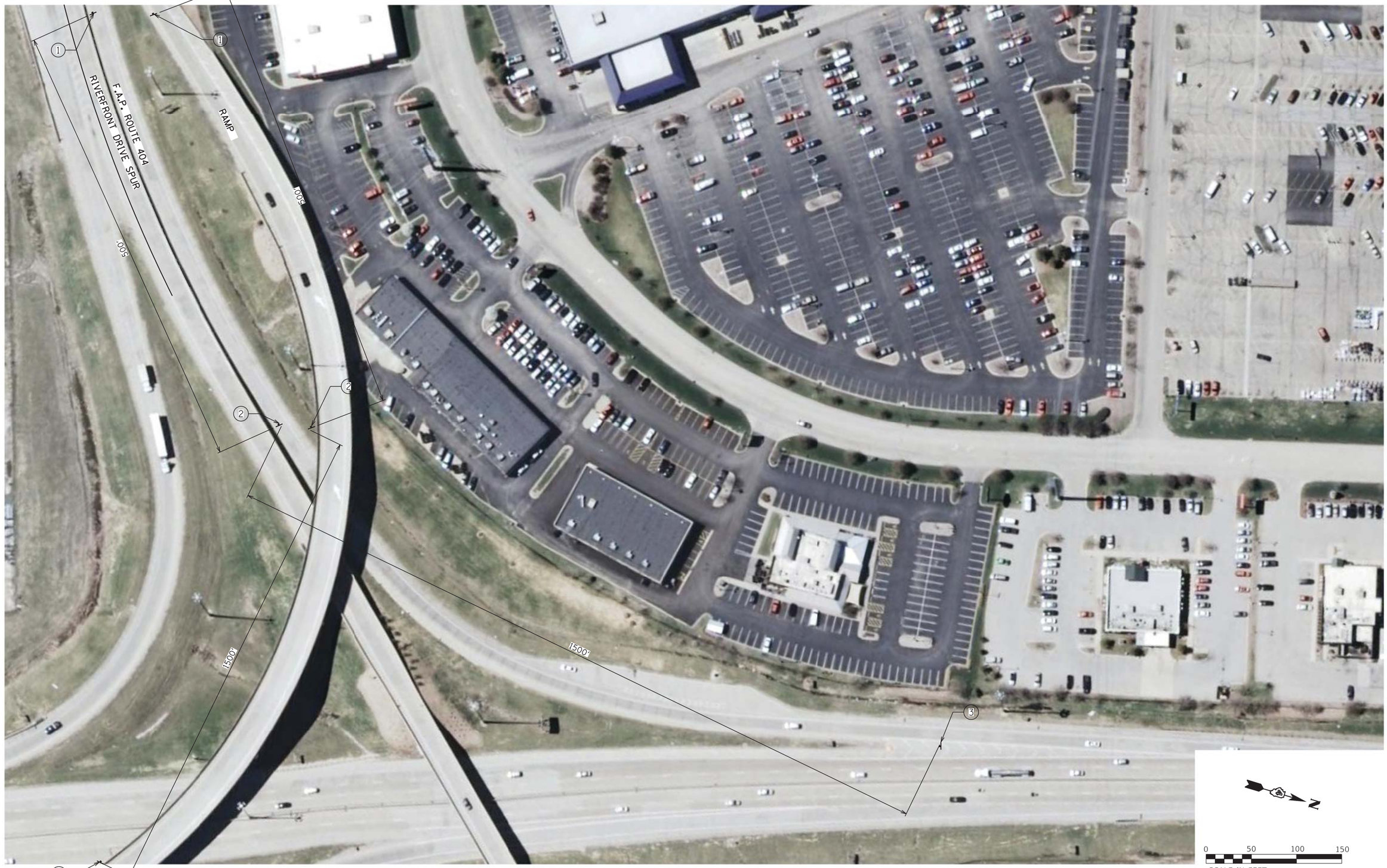
PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
ADVACNED SIGNING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	15
		CONTRACT NO.68D59		
	ILLINOIS FED. AID PROJECT			



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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUGGESTED MAINTENANCE OF TRAFFIC
ADVANCED SIGNING

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	16
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

MODEL: 02 Advanced Signing
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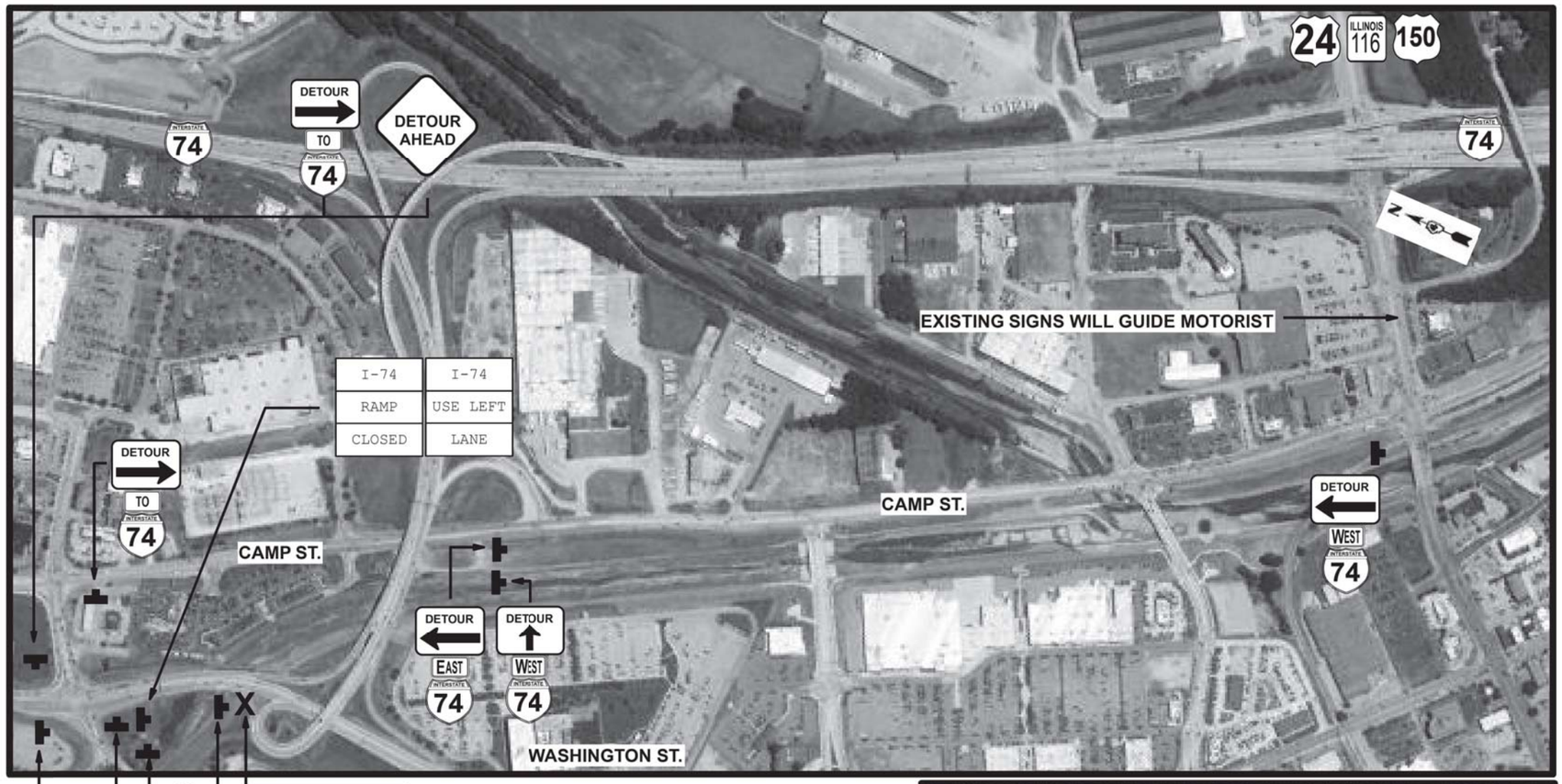

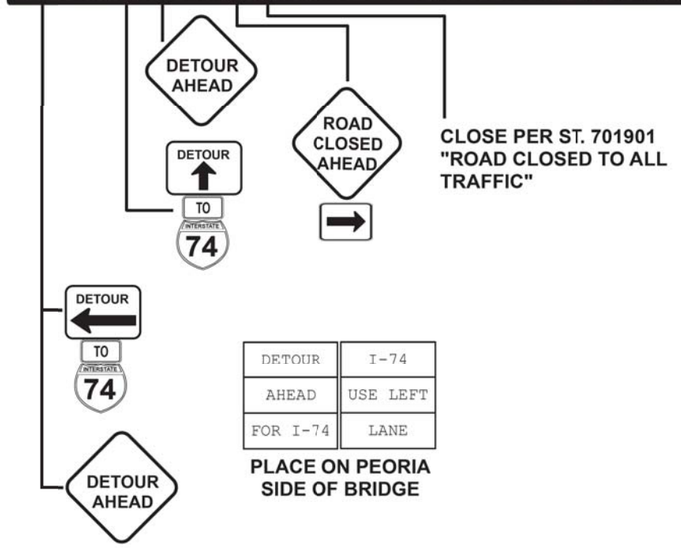

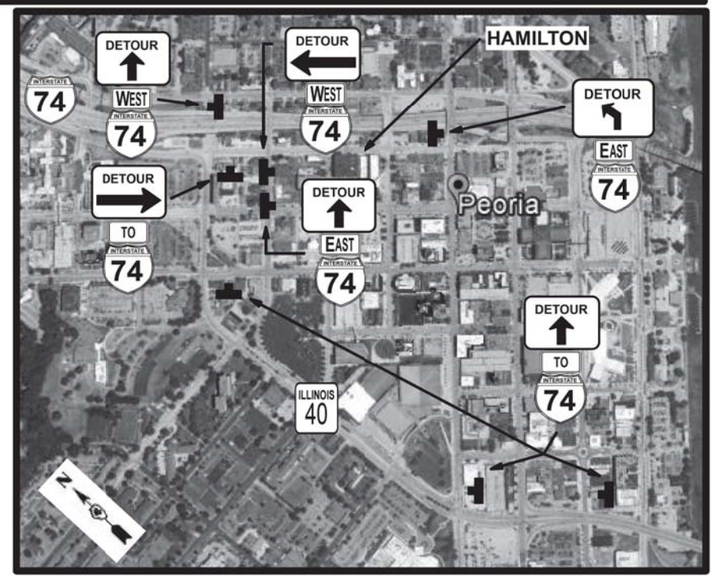

DETOUR/CLOSURE NOTES

1) ONE PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE IN PLACE FOR FIVE DAYS TO ADVANCE WARN THE PUBLIC OF THE RAMP CLOSURE.

2) SIGNS SHALL BE STAND MOUNTED IN AREAS WHERE POST MOUNTING IS NOT PRACTICAL. THE RESIDENT ENGINEER SHALL APPROVE SUCH LOCATIONS.

3) CARDINAL DIRECTION SIGNS SHALL BE BLACK ON WHITE. DETOUR SIGNS SHALL BE BLACK ON ORANGE. EAST, WEST, AND TO SIGNS SHALL BE WHITE ON BLUE.

4) SIGN LOCATIONS SHALL BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING.

MODEL: Default
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PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP A CLOSURE DETOUR

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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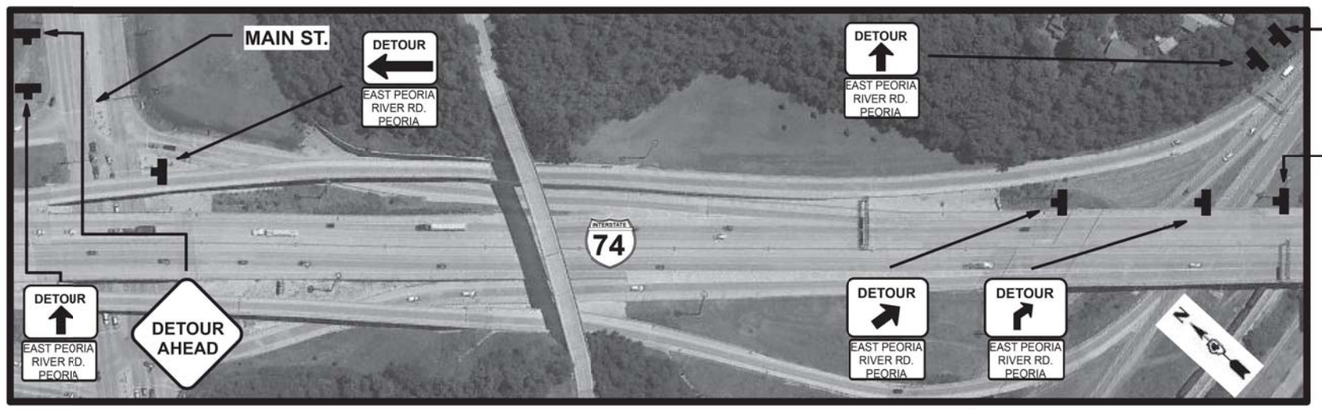
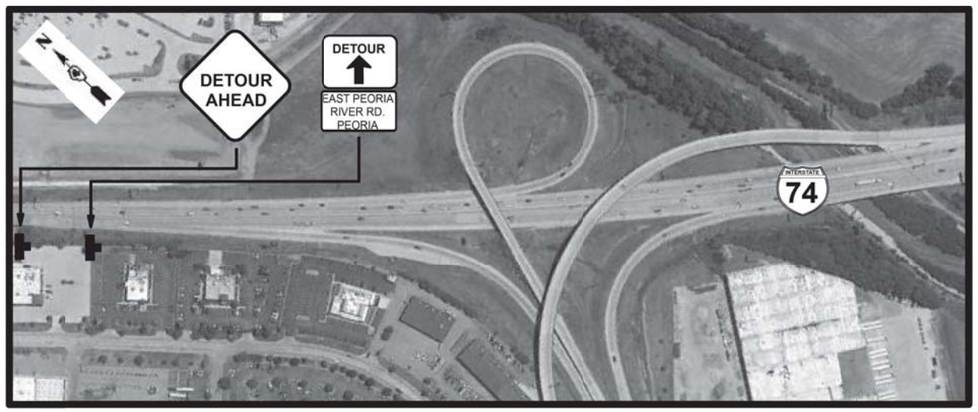
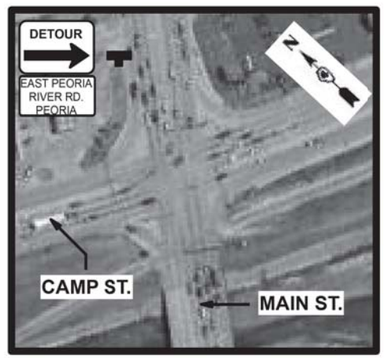
		CONTRACT NO.68D59		
	ILLINOIS	FED. AID PROJECT		

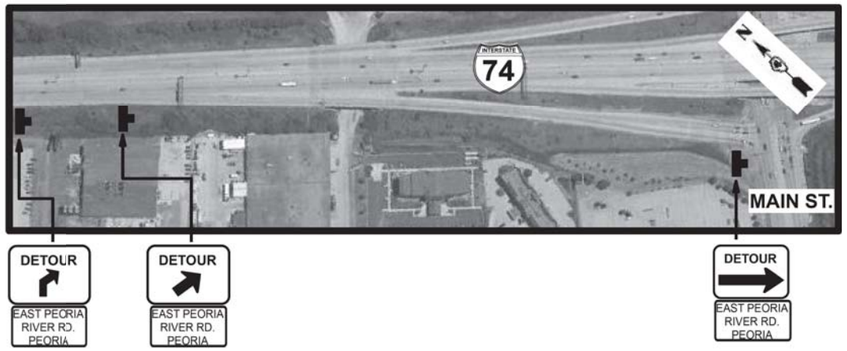


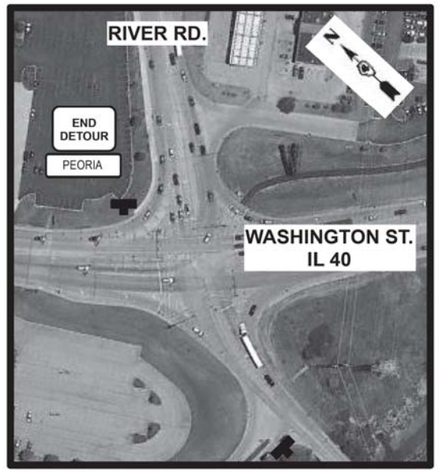
RIVER DR	RIVER RD
DETOUR	USE EXIT
AHEAD	95

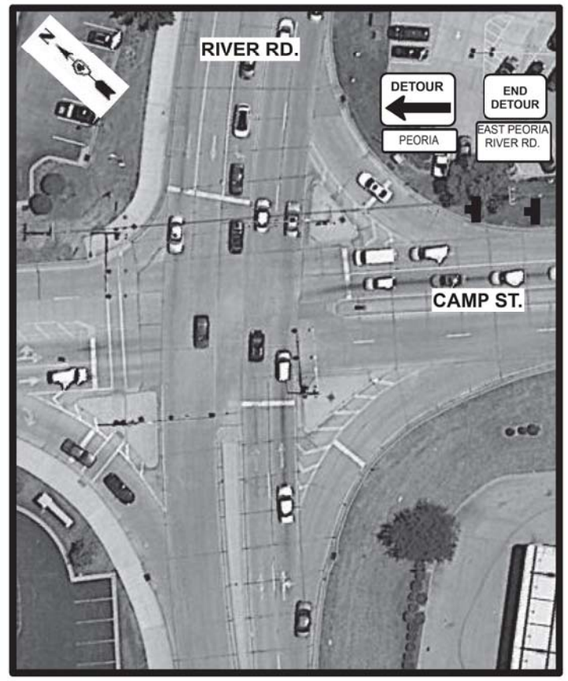
PLACE ON WB I-74 IN U-TURN PRIOR TO EXIT 96











DETOUR/CLOSURE NOTES

1) ONE PORTABLE CHANGEABLE MESSAGE SIGN SHALL BE IN PLACE FOR FIVE DAYS TO ADVANCE WARN THE PUBLIC OF THE RAMP CLOSURE.

2) SIGNS SHALL BE STAND MOUNTED IN AREAS WHERE POST MOUNTING IS NOT PRACTICAL. THE RESIDENT ENGINEER SHALL APPROVE SUCH LOCATIONS.

3) DESTINATION SIGNS SHALL BE BLACK ON WHITE. DETOUR SIGNS SHALL BE BLACK ON ORANGE.

4) SIGN LOCATIONS SHALL BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING.

5) TWO ADDITIONAL PORTABLE CHANGEABLE MESSAGE SIGNS SHALL BE UTILIZED FOR THE ENTIRE DURATION OF THE CLOSURE SHOWN. THE PCMS ARE NOT SHOWN AND THE LOCATION SHALL BE DISCUSSED AT THE PRE-CONSTRUCTION MEETING.

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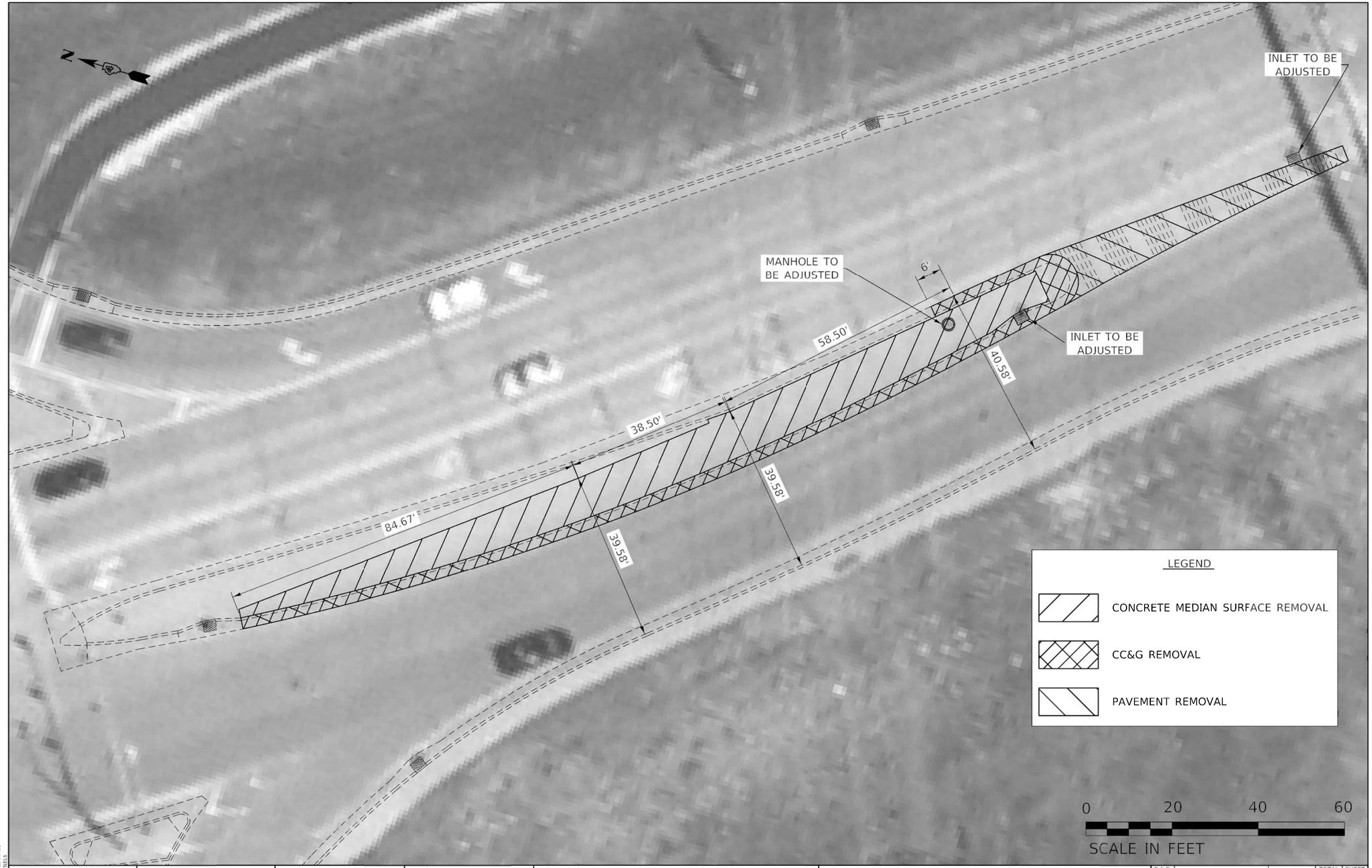
PLOT DATE = 10/19/2018	DATE - 10/8/2018	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RAMP G CLOSURE DETOUR

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	18
		CONTRACT NO.68D59		
	ILLINOIS FED. AID PROJECT			



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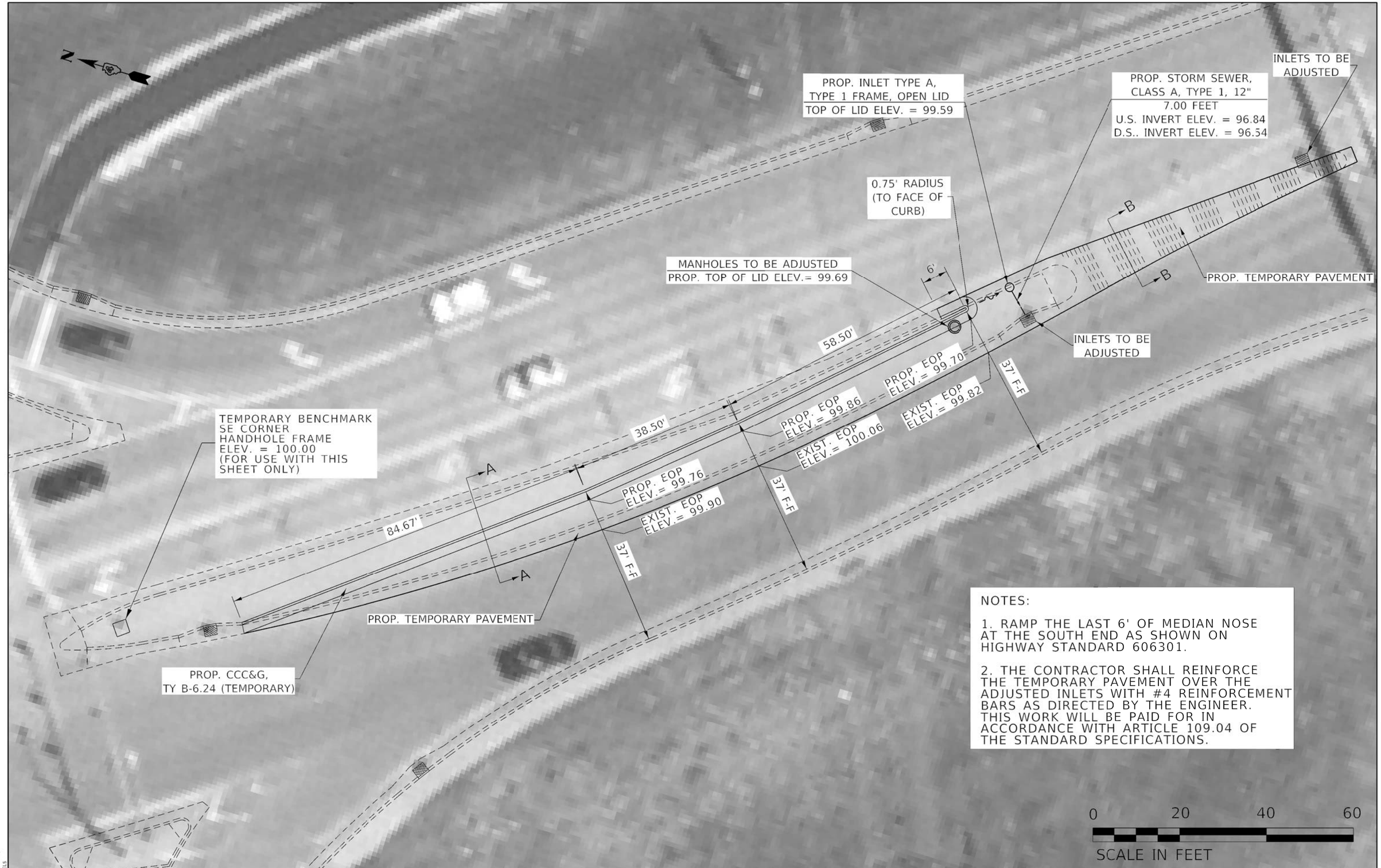
PLOT DATE = $DATE$	DATE -	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WASHINGTON ST. MEDIAN REMOVAL DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12|(HVB,HB)BR|BR	TAZEWELL	61	18A
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			



NOTES:

1. RAMP THE LAST 6' OF MEDIAN NOSE AT THE SOUTH END AS SHOWN ON HIGHWAY STANDARD 606301.

2. THE CONTRACTOR SHALL REINFORCE THE TEMPORARY PAVEMENT OVER THE ADJUSTED INLETS WITH #4 REINFORCEMENT BARS AS DIRECTED BY THE ENGINEER. THIS WORK WILL BE PAID FOR IN ACCORDANCE WITH ARTICLE 109.04 OF THE STANDARD SPECIFICATIONS.

0 20 40 60

SCALE IN FEET

MODEL: $MODELNAME$
FILE NAME: $FILE$

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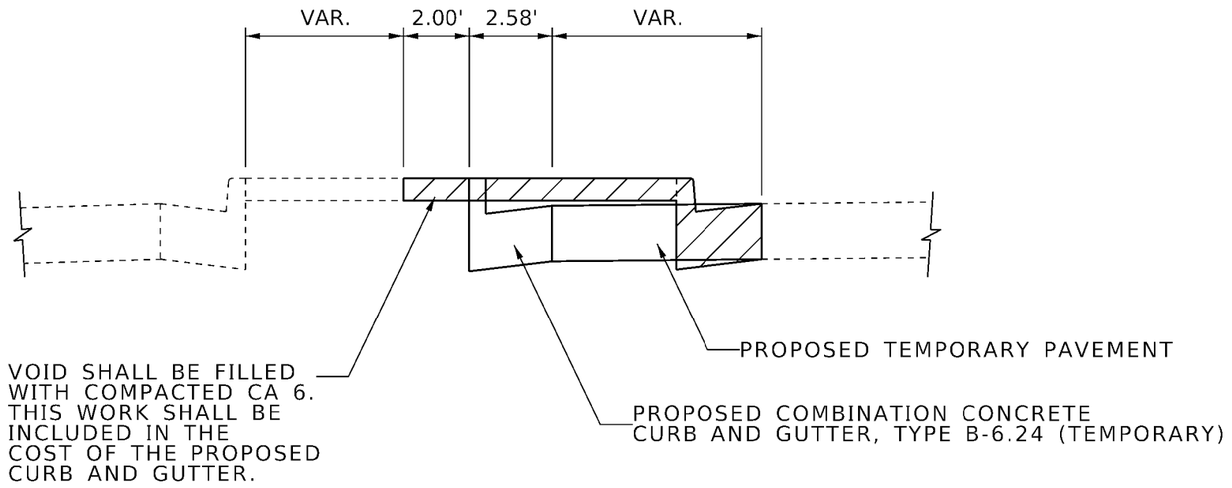
	DRAWN - IDOT	REVISED -
PLOT SCALE = $SCALE$	CHECKED -	REVISED -
PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

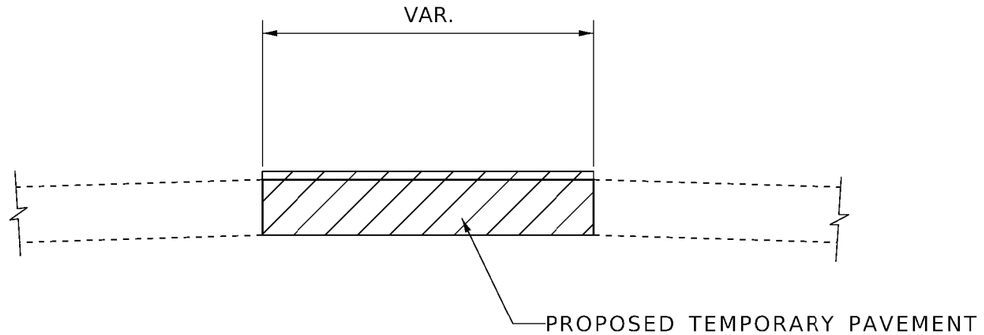
WASHINGTON ST. MEDIAN MODIFICATION DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	18B
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			



SECTION A-A



SECTION B-B

NOTE:

ANY EARTH EXCAVATION REQUIRED SHALL BE CONSIDERED INCLUDED IN THE COST OF TEMPORARY PAVEMENT AND COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (TEMPORARY).

LEGEND

REMOVAL (SEE WASHINGTON ST. MEDIAN REMOVAL DETAILS)

MODEL: $MODELNAME$
FILE NAME: $FILE$

USER NAME = $USER$	DESIGNED - IDOT	REVISED - 11/21/2018	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN - IDOT	REVISED -	
PLOT SCALE = $SCALE$	CHECKED -	REVISED -	
PLOT DATE = $DATE$	DATE -	REVISED -	

WASHINGTON ST. MEDIAN MODIFICATION DETAILS

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

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	18C
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

Bench Mark: Chiseled cross on guard rail bolt. Station 13+35 ± 45-ft right along Existing F.A.P. Rte. 404 centerline. Elevation 484.47

Existing Structure: S.N. 090-0044 Built as F.A. Route 10(Spur), Section 12HVB in 1959. The deck was removed and the structure widened in 1993. A portion of the deck and parapet was removed and the structure widened again in 2003. The Superstructure consists of a reinforced concrete deck supported on eight spans with composite wide flange beams and plate girders. The substructure consists of pile bent abutments and multi-column piers supported by timber and driven steel piling.

Salvage: Existing Temporary Shoring

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges
1983 AASHTO Guide Specifications for Seismic Design of Highway Bridges

LOADING HS20-44

No future wearing surface allowed.

SCOPE OF WORK:

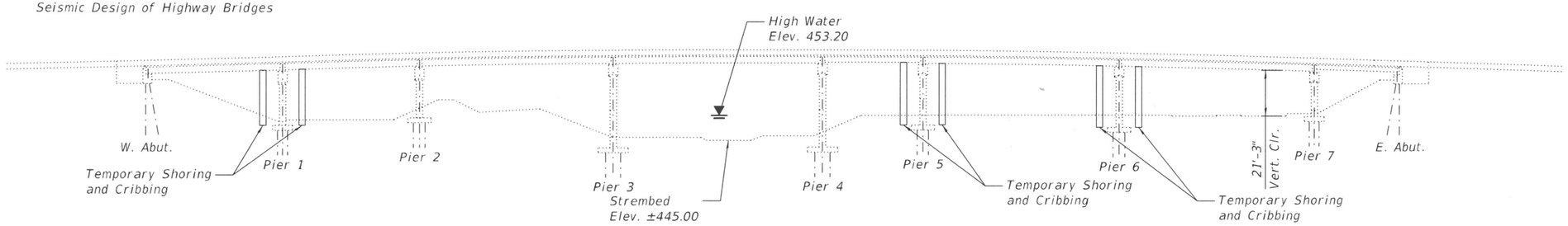
1. Clean and paint beam ends, end diaphragms.
2. Perform structural repair of concrete to piers at noted areas of delamination and spalling.
3. Remove and replace the bearings from the original construction at the east and west abutments with galvanized fixed bearings.
4. Remove the existing median for use as temporary pavement in upcoming project.
5. Repair Deck at median removal locations.
6. Caulk existing joints.
7. The existing steel shoring materials on Piers 1, 4, 5 and 6 are to be salvaged and remain the property of the State in accordance with Section 501.02 of the Standard Specifications. The Contractor shall fully disassemble all bolted connections and stockpile the material until the Department can arrange for pickup (contact: Mark Eckhoff - 309-671-4463). The Department will provide hauling and the Contractor shall provide loading. Cost to be inlcuded in Furnishing and Erecting Structural Steel.

INDEX OF SHEETS

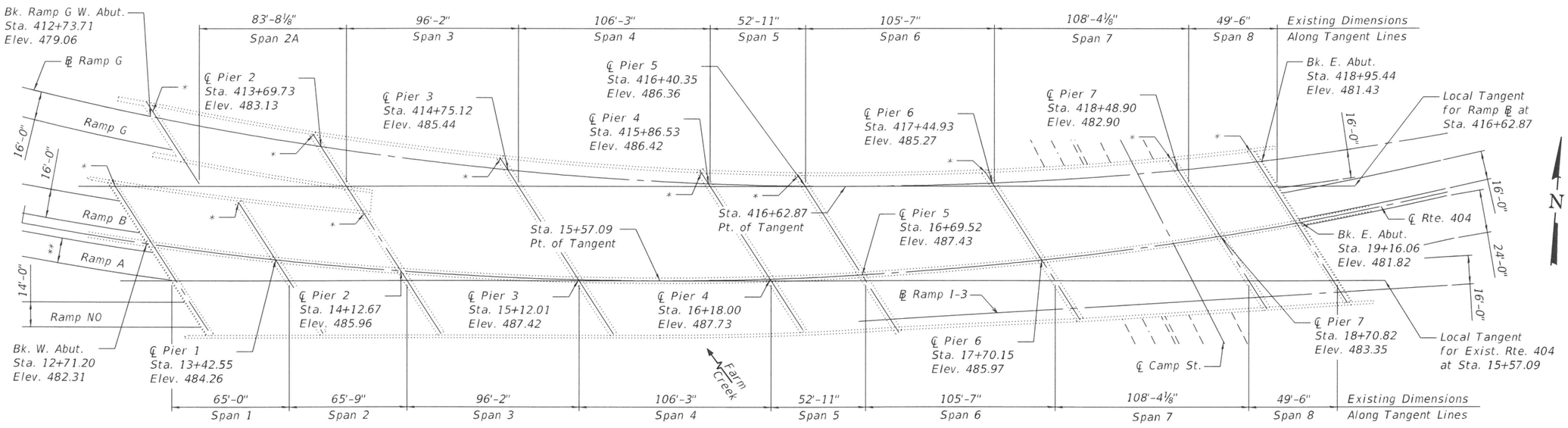
DESIGN STRESSES

New Construction

f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Concrete)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

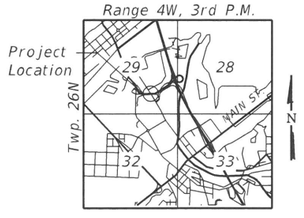


ELEVATION



* Indicates Locations for "Joint Repair"
** Varies from 14'-0" to 16'-0"

PLAN



LOCATION SKETCH

BENJAMIN BOVEE
081-007230
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

SIGNED: Benjamin Bovee
DATE: 11/28/2018
ILLINOIS STRUCTURAL ENGINEER
NO. 081-007230
LICENSE EXPIRES: 11-30-2020

GENERAL PLAN & ELEVATION
RIVERFRONT DRIVE & RAMP I-3 OVER CAMP STREET, FARM CREEK AND TOLEDO, PEORIA & WESTERN RR
F.A.P. ROUTE 404 - SEC. (50B-4)BR;12[(HVB,HB)BR]BR
TAZEWELL COUNTY
STATION 15+57.09
STRUCTURE NO. 090-0044

Kaskaskia Engineering Group, LLC
300 E. Main St., Suite 700, Belleville, Illinois 62220
618.233.5877 phone
618.233.5878 fax
www.kaskaskiaengineering.com
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm: Professional Engineering Group
LICENSE NO.: 184.001773, 25-3000540

USER NAME =	DESIGNED - KS	REVISED -	
	CHECKED - BB	REVISED -	
PLOT SCALE =	DRAWN - KS	REVISED -	
PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 090-0044
SHEET 1 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	19
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

FILE NAME: P:\10-1010.18 SN0900044 Repairs\10_CAD\CADD Sheets\0900044-68D59-001-GPE.dgn
11/28/2018 9:50:51 AM

GENERAL NOTES:

All structural steel shall be AASHTO M 270 Grade 50.

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 materials. Such variations shall not be cause for additional compensation for a change in scope of work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for work.

All new structural steel and bearing assemblies shall be hot-dipped galvanized. See special provisions for "Hot Dip Galvanizing for Structural Steel.

Cleaning and painting of the existing structure steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". All beams, diaphragms, bearings and other structural steel within 5 ft. (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning – SSPC-SP-10.

The designated areas cleaned per Near White Blast Cleaning – SSPC-SP-10 shall be painted according to the requirements of Paint System 1 – OZ/E/U.

The color of the final finish coat for all steel surfaces shall be Blue, Munsell NO. 10B 3/6.

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

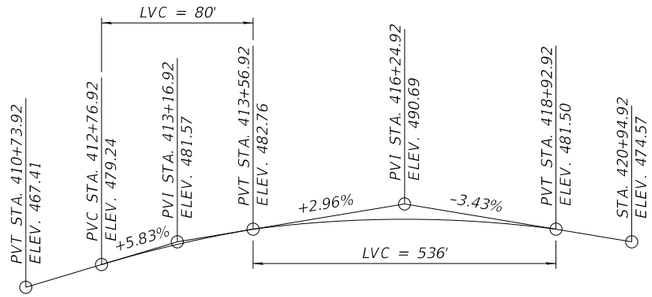
Jack and remove existing bearings shall be specified in special provisions for "Jack and Remove Existing Bearings". This work shall consist of the preparation of all designated metal surfaces by the method(s) specified on the plans. This work also includes the painting of those designated surfaces with the paint system(s) specified on the plans. The Contractor shall furnish all materials, equipment, labor, and other essentials necessary to accomplish this work and all other work described herein and as directed by the Engineer.

Containment and disposal as specified shall follow the special provisions for "Containment and Disposal of Lead Paint Cleaning Residue." The use of four air monitors will be required to monitor abrasive blasting operations.

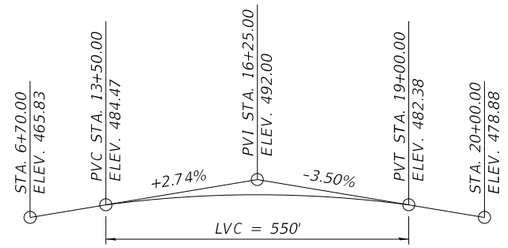
The painting contractor shall be SSPC-QP1 and SSPC-QP2 certified for this project and shall maintain certifcation throughout the duration of the project.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	45.3		45.3
Anchor Bolts, 1"	Each	54		54
Furnishing and Erecting Structural Steel	Pound		4420	4420
Structural Repair of Concrete (Depth equal to or less than 5")	Sq. Ft.		3658.9	3658.9
Cleaning and Painting Structural Steel, Location 1	L. Sum	1		1
Jack and Remove Existing Bearings	Each	27		27
Containment and Disposal of Lead Paint Cleaning Residues No. 1	L. Sum			1
Deck Slab Repair (Partial)	Sq. Yd.	225.0		225.0
Silicone Joint Sealer, Special	Foot	36		36
Joint Repair	Each	11		11
Temporary Shoring and Cribbing	Each	57		57



PROFILE GRADE RAMP G

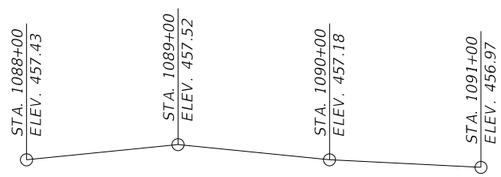


PROFILE GRADE F.A.P. RTE 404

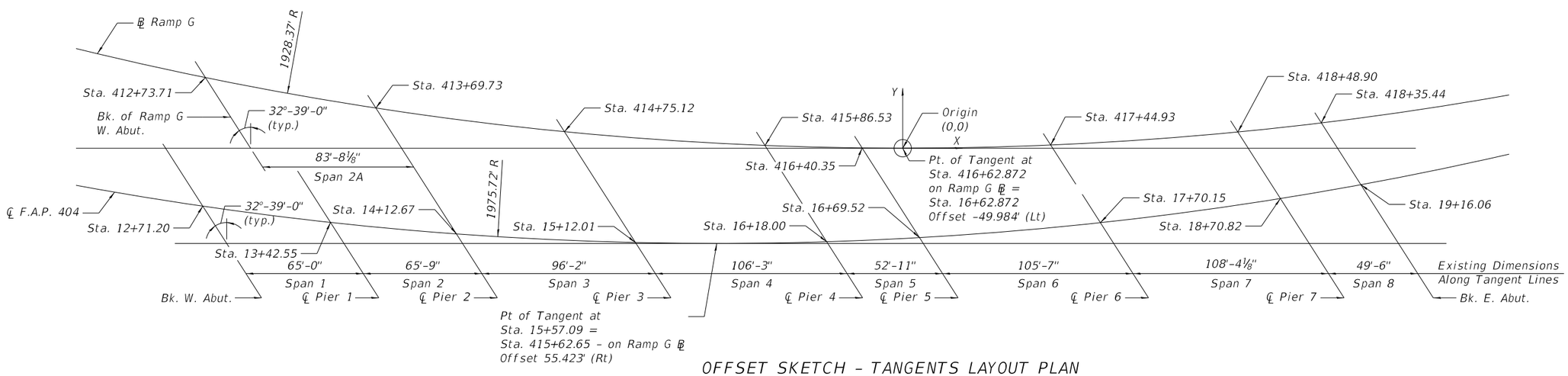
OFFSET TABLE

(All dimensions are in feet)

Location	Ramp ℄		℄ F.A.P. 404		Tangent to Ramp G ℄		Tangent to ℄ F.A.P. 404	
	X	Y	X	Y	X	Y	X	Y
Bk. W. Abut.	--	--	-387.950	-32.096	--	--	-374.719	-52.744
Bk. Ramp G W. Abut.	-386.524	39.135	--	--	-361.448	0.000	--	--
Pier 1	--	--	-317.175	-41.107	--	--	-309.719	-52.744
Pier 2	-292.012	22.238	-247.348	-47.468	-277.768	0.000	-243.967	-52.744
Pier 3	-187.451	9.132	-148.132	-52.230	-181.599	0.000	-147.803	-52.744
Pier 4	-76.319	1.511	-42.156	-51.805	-75.351	0.000	-41.554	-52.744
Pier 5	-22.518	0.132	9.313	-49.546	-22.434	0.000	11.862	-52.744
Pier 6	82.030	1.746	109.591	-41.267	83.149	0.000	116.945	-52.744
Pier 7	185.743	8.966	209.357	-27.887	191.488	0.000	225.284	-52.744
Bk. E. Abut.	232.009	14.008	253.942	-20.223	240.984	0.000	274.780	-52.744



PROFILE GRADE CAMP STREET



OFFSET SKETCH - TANGENTS LAYOUT PLAN

Kaskaskia Engineering Group, LLC
200 E. Main St., Suite 100, Belleville, Illinois 62220
618.233.5077 phone
618.233.5977 fax
www.kaskaskiaeng.com
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm 184.005773; Professional Engineering Group 20-3680586

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 090-0044
SHEET 2 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12((HVB,HB)BR|BR	TAZEWELL	61	20
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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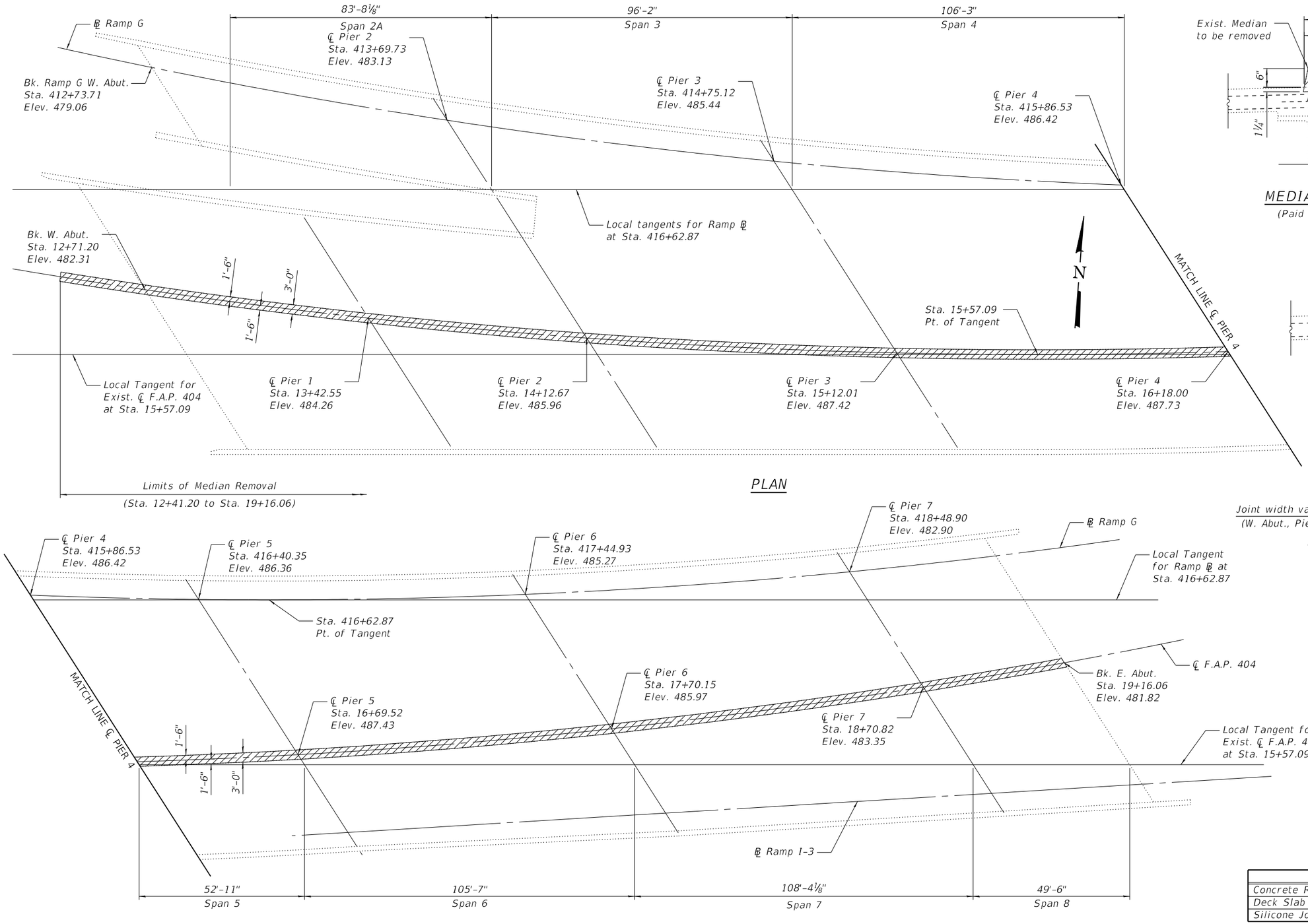
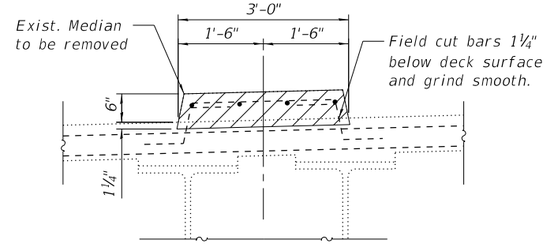
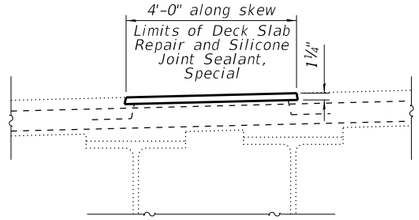




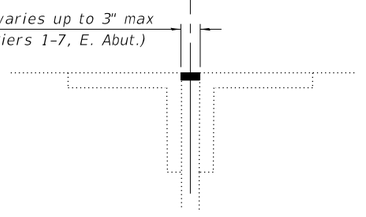
MEDIAN REMOVAL DETAIL

(Paid for as Concrete Removal)



DECK REPAIR DETAIL

(Paid for as Deck Slab Repair (Partial))



SECTION THRU MEDIAN JOINT

(Paid for as Silicone Joint Sealer, Special)

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	45.3
Deck Slab Repair (Partial)	Sq. Yd.	225.0
Silicone Joint Sealer, Special	Foot	36

FILE NAME: P:\10-1010.18 SN0900044 Repairs\10_CAD\CADD Sheets\0900044-68D59-003-Deck Repairs.dgn

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Kaskaskia Engineering Group, LLC
Illinois Professional Design Firm
Professional Engineering Group
PROFESSIONAL REGISTRATION NO.
184.004773
20-588886
200 E. Main St., Suite 300
Belleville, Illinois 62220
618.233.5677 phone
618.233.5977 fax
www.kaskaskiaeng.com

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PLOT DATE =		CHECKED - BB	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE CONCRETE REMOVAL
STRUCTURE NO. 090-0044
SHEET 3 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	21
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

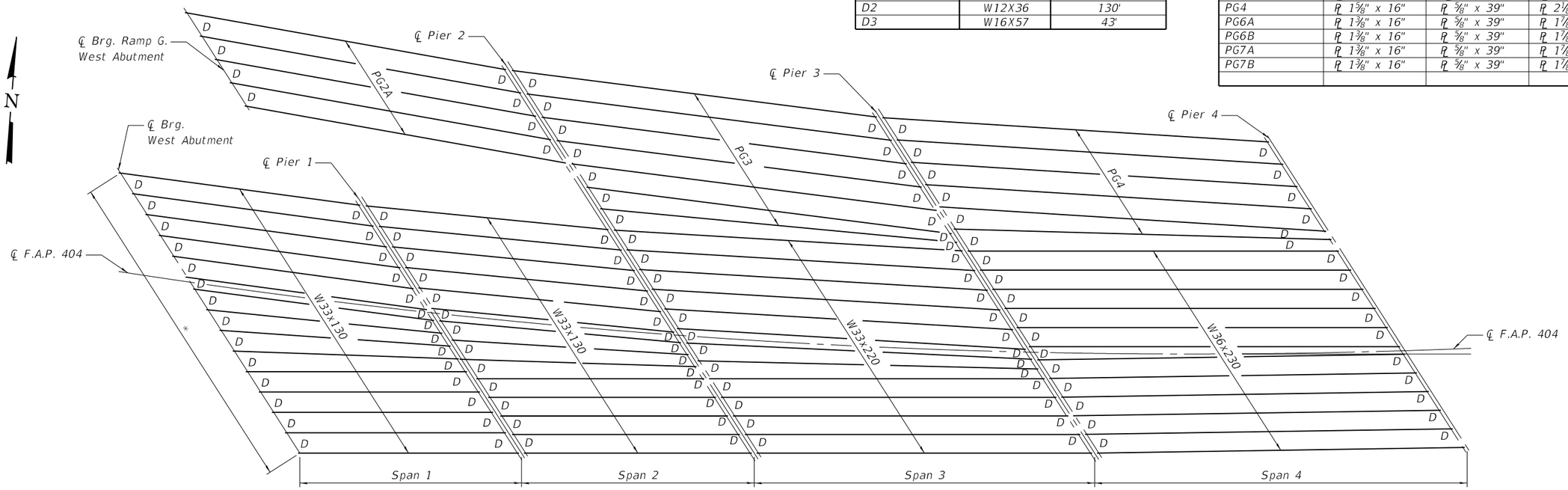
* Indicates location of brg. replacement

DIAPHRAGM DETAILS

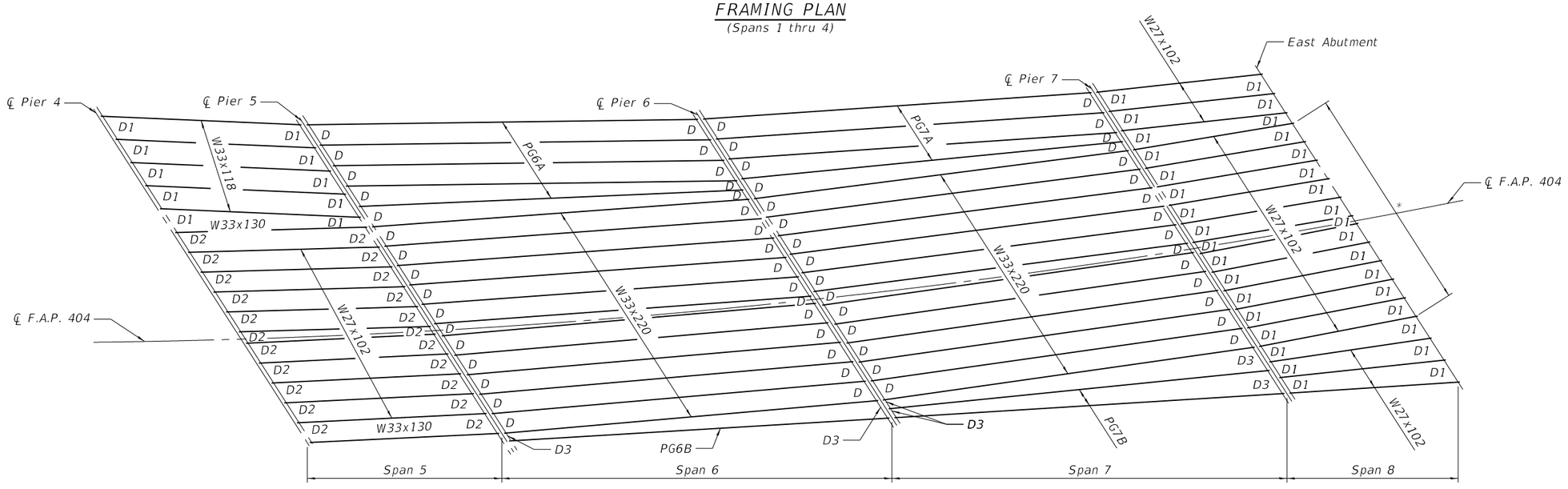
DESIGNATION	SHAPE	TOTAL LENGTH
D	W16X36	1206'
D1	W12X40	260'
D2	W12X36	130'
D3	W16X57	43'

PLATE GIRDER DETAILS

DESIGNATION	TOP FLANGE	WEB	BOT. FLANGE
PG2A	PL 1" x 12"	PL 5/8" x 39"	PL 1 3/8" x 16"
PG3	PL 1 3/8" x 16"	PL 5/8" x 39"	PL 1 7/8" x 18"
PG4	PL 1 3/8" x 16"	PL 5/8" x 39"	PL 2 1/8" x 18"
PG6A	PL 1 3/8" x 16"	PL 5/8" x 39"	PL 1 7/8" x 18"
PG6B	PL 1 3/8" x 16"	PL 5/8" x 39"	PL 1 7/8" x 18"
PG7A	PL 1 3/8" x 16"	PL 5/8" x 39"	PL 1 7/8" x 18"
PG7B	PL 1 3/8" x 16"	PL 5/8" x 39"	PL 1 7/8" x 18"



FRAMING PLAN
(Spans 1 thru 4)



FRAMING PLAN
(Spans 5 thru 8)

Kaskaskia Engineering Group, LLC
299 E. Main St., Suite 100, Robinson, Illinois 62220
618.233.3677 phone
618.233.3977 fax
www.kaskaskiaeng.com
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm: 184.004773 Professional Engineering Group: 20-588886

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 090-0044
SHEET 4 OF 13 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	22
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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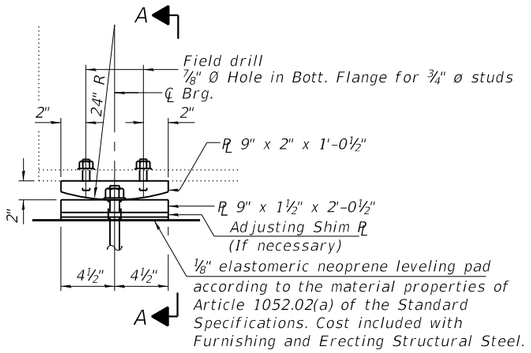
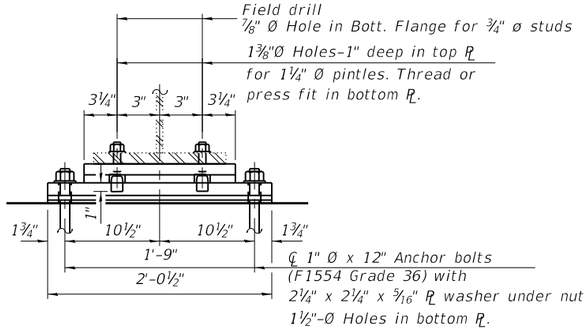
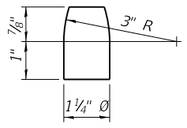


ELEVATION AT WEST ABUTMENT

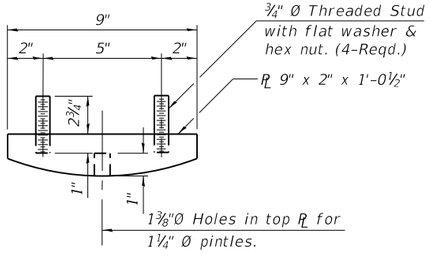


SECTION A-A

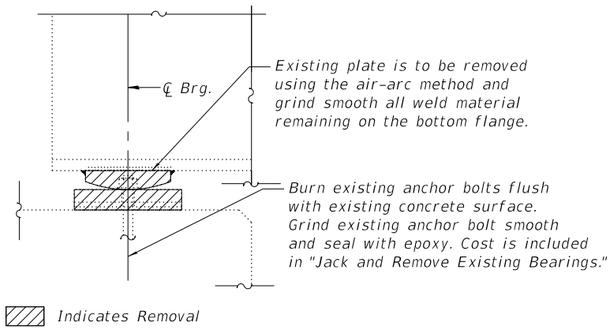
FIXED BEARING WEST ABUTMENT



PINTLE



WEST ABUTMENT TOP PLATE DETAIL

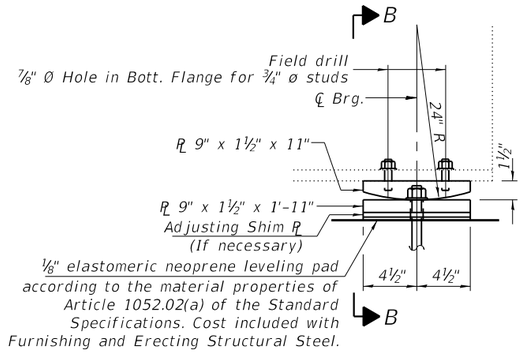


EXISTING BEARING REMOVAL DETAIL

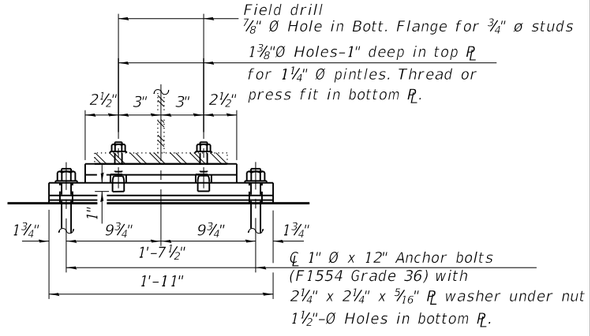
(27 Required)

(15 at West Abut., 12 at East Abut.)

INTERIOR GIRDER REACTION TABLE			
		W. Abut.	E. Abut.
$R_{\text{℄}}$	(k)	31.3	27.8
$R_{\text{℄}}$	(k)	32.3	27.4
R_I	(k)	8.4	8.2
R_{Total}	(k)	72.0	63.4

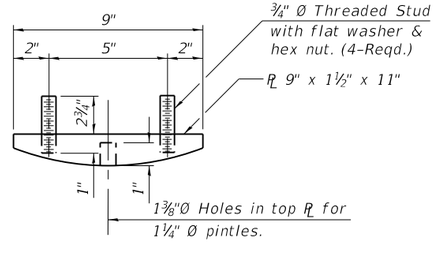


ELEVATION AT EAST ABUTMENT



SECTION B-B

FIXED BEARING EAST ABUTMENT



EAST ABUTMENT TOP PLATE DETAIL

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

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

All steel for the bearings, shim plates, anchor bolts, and connection bolts shall be hot dipped galvanized.

The structural steel bearing plates for the bearings shall conform to the requirements of AASHTO M270 Grade 50.

Bearing plates, shim plates and connection bolts shall be included in Furnishing and Erecting Structural Steel.

Diaphragm removal and replacement may be required to facilitate drilling holes. Cost included in Furnishing and Erecting Structural Steel.

BILL OF MATERIAL

Item	Unit	Total
Anchor Bolts, 1"	Each	54
Furnishing and Erecting Structural Steel	Pound	4420

Kaskaskia Engineering Group, LLC
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PROFESSIONAL REGISTRATIONS
Illinois Professional Design Firm
Professional Engineering Group
184.004773
20-588886

USER NAME =		DESIGNED - KS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	BEARING DETAILS STRUCTURE NO. 090-0044
		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		
PLOT DATE =		CHECKED - BB	REVISED -		SHEET 5 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	23
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1010.18 SN0900044 Repairs\10_CAD\CADD Sheets\0900044-68D59-005-Bearing Details.dgn

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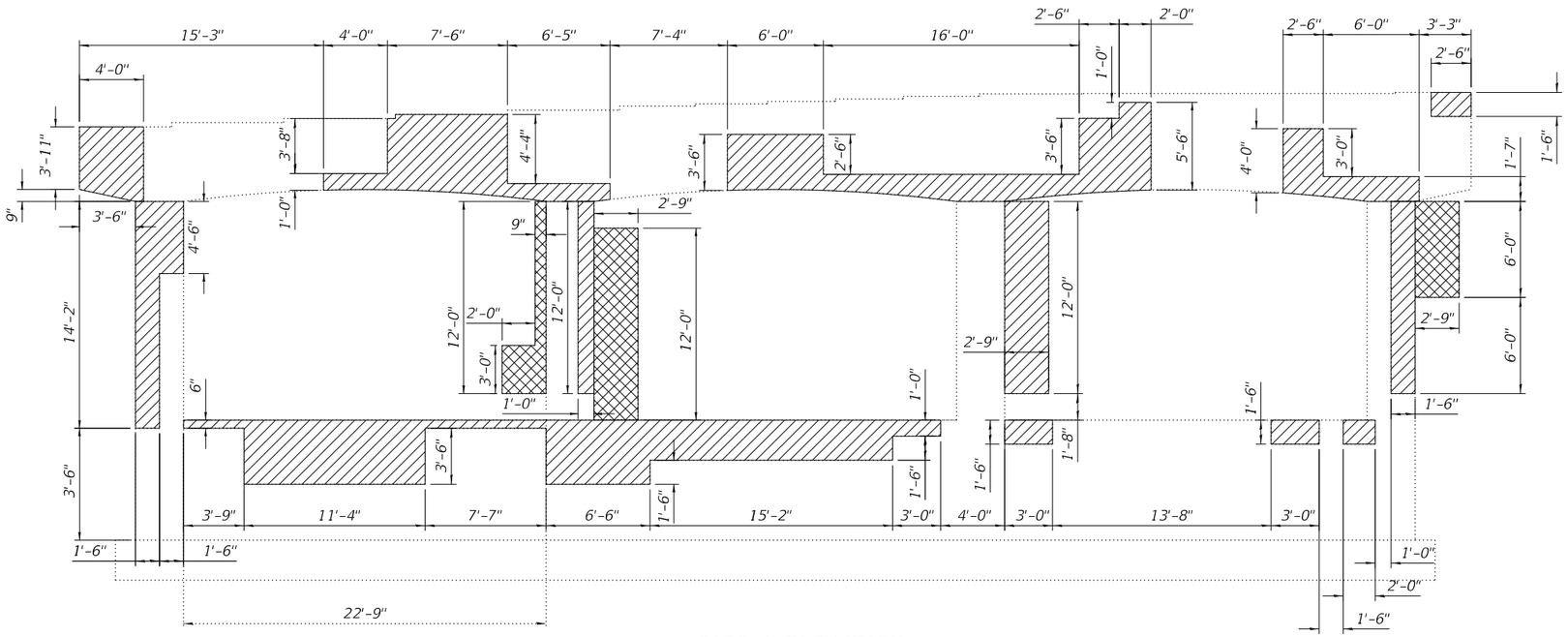
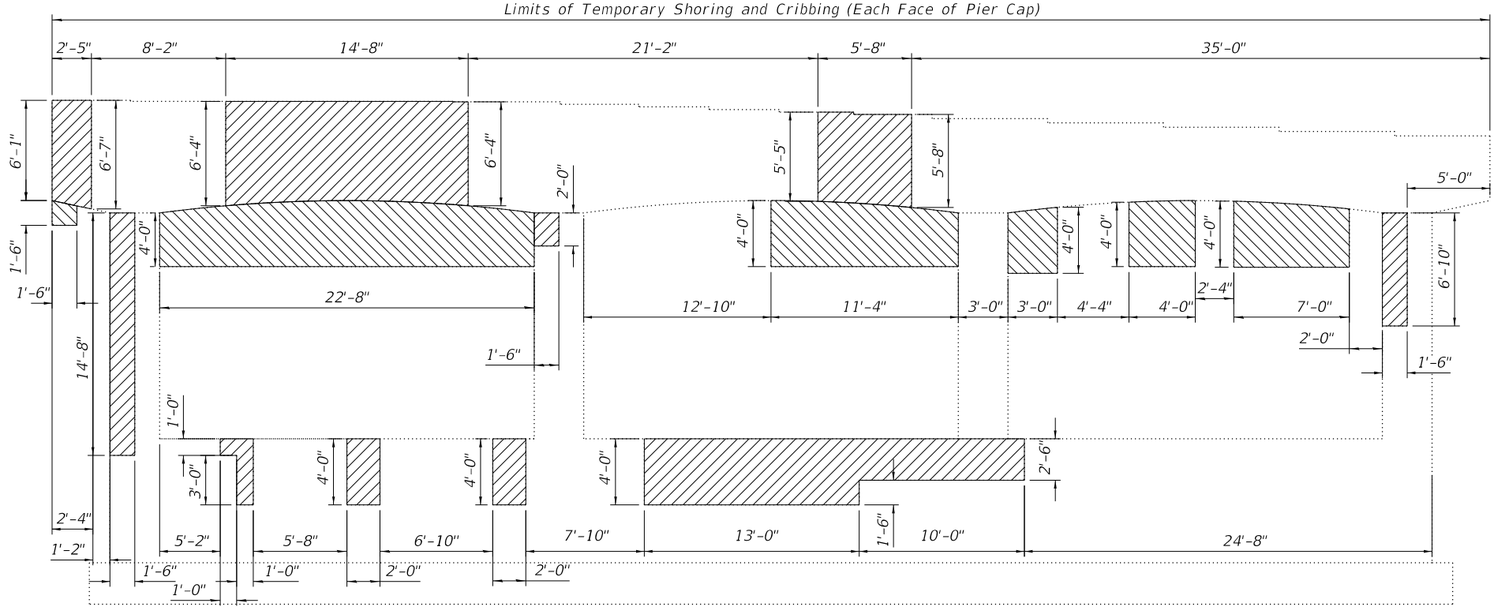


PIER 1 ELEVATION

(Looking East)



PIER 1 ELEVATION

(Looking West)

EXISTING INTERIOR BEAM REACTION TABLE

Reaction		Span 1	Span 2
DL	(k)	31.3	30.2
LL	(k)	32.3	30.4
IMP.	(k)	8.4	7.9
Total	(k)	72.0	68.5

Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	898.4
Temporary Shoring And Cribbing	Each	29

Kaskaskia Engineering Group, LLC
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm 184.005733; Professional Engineering Group 20-5680586
LICENSE NO.
200 E. Main St., Suite 100, Belleville, Illinois 62220, 618.233.5077 phone, 618.233.5977 fax, www.kaskaskiaeng.com

USER NAME =		DESIGNED - KS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 1 CONCRETE REPAIR DETAILS STRUCTURE NO. 090-0044
		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		SHEET 6 OF 13 SHEETS
PLOT DATE =		CHECKED - BB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	24
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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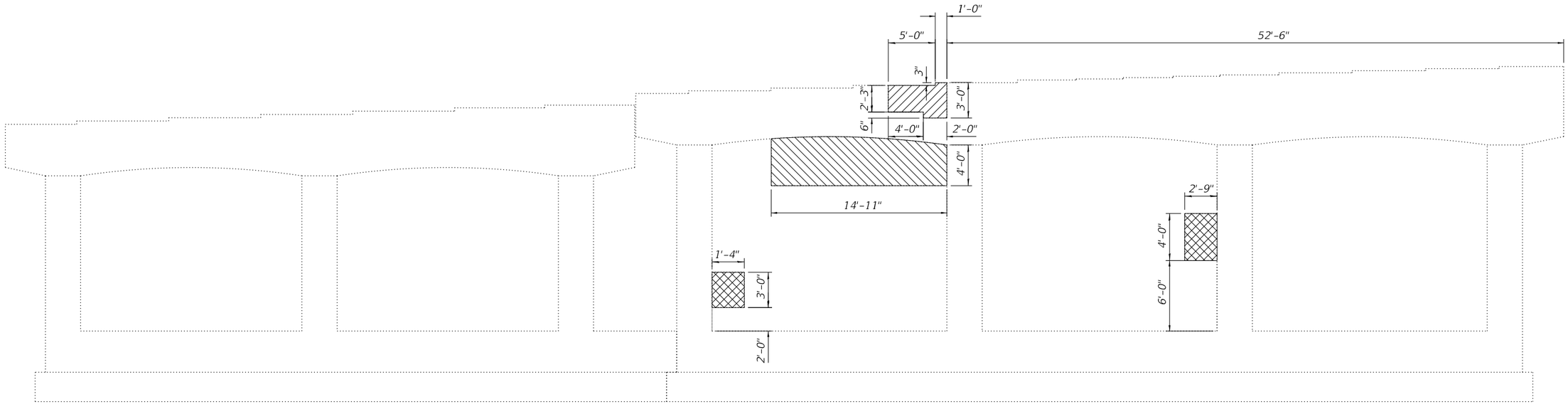
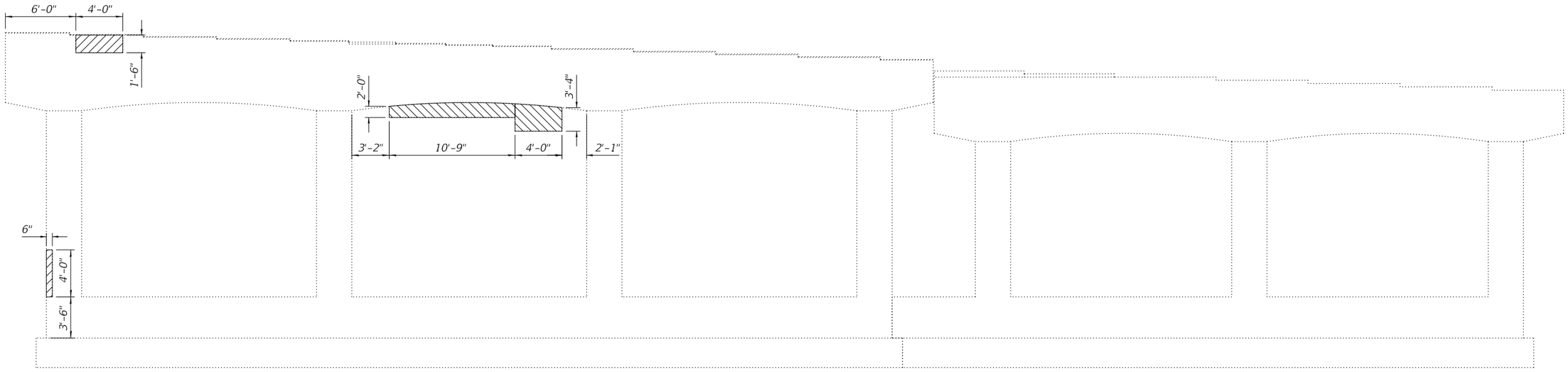


PIER 2 ELEVATION
(Looking East)



Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

PIER 2 ELEVATION
(Looking West)

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	133.2

Kaskaskia Engineering Group, LLC
PROFESSIONAL REGISTRATIONS
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Professional Engineering Group 20-5008586
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618.233.5975 fax
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USER NAME =		DESIGNED - KS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 2 CONCRETE REPAIR DETAILS STRUCTURE NO. 090-0044
		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		SHEET 7 OF 13 SHEETS
PLOT DATE =		CHECKED - BB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12((HVB,HB)BR]BR	TAZEWELL	61	25
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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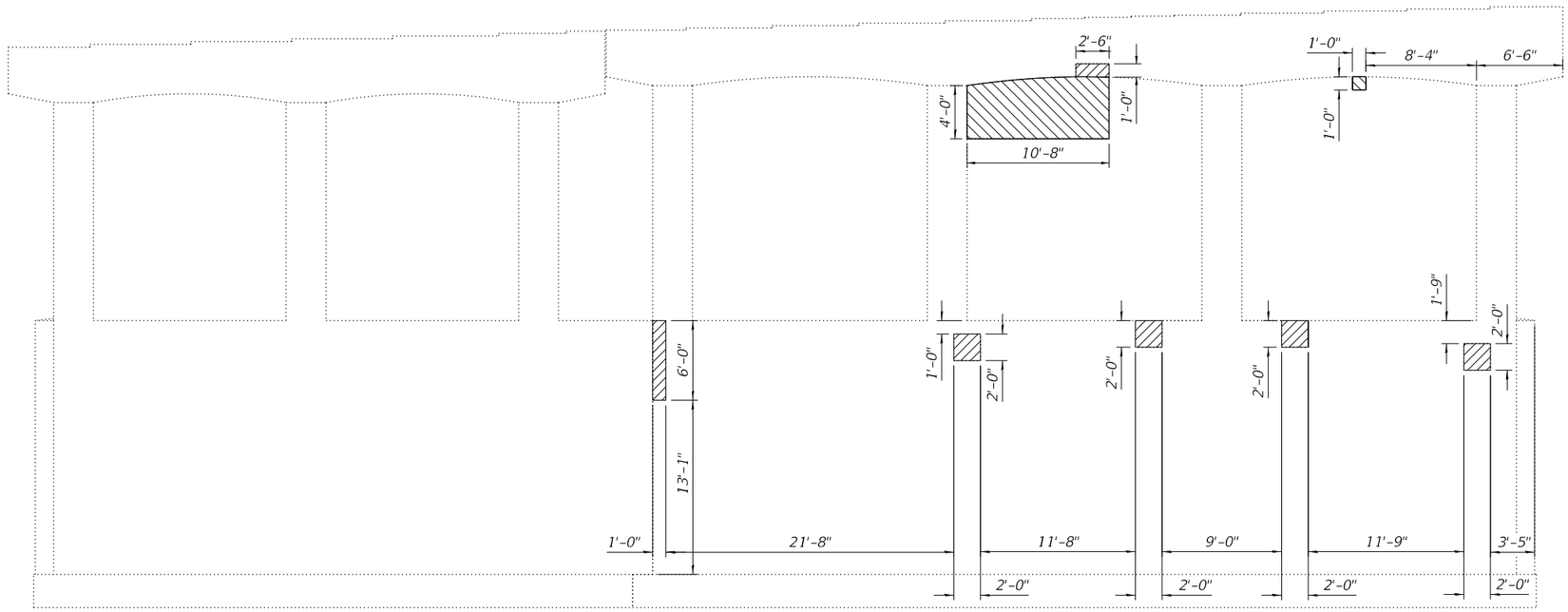
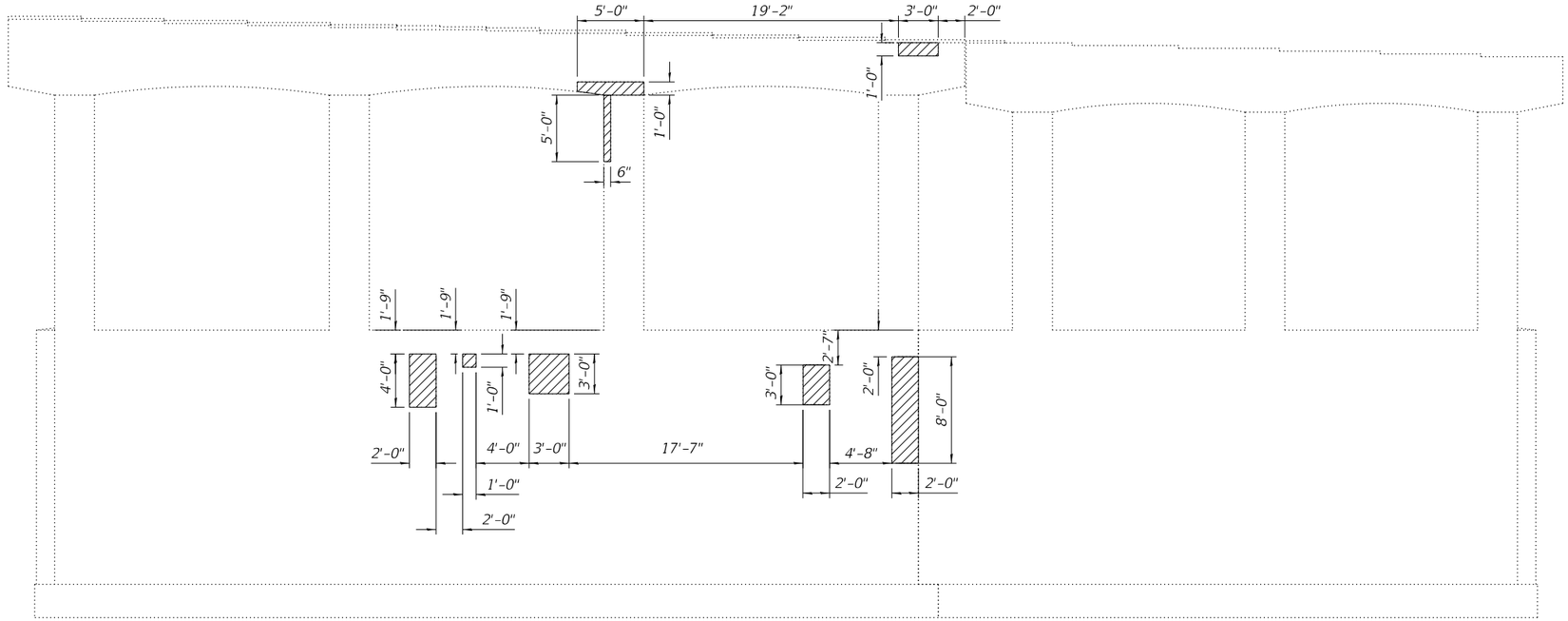


PIER 3 ELEVATION

(Looking East)



PIER 3 ELEVATION

(Looking West)

Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

BILL OF MATERIAL

ITEM	UNIT	QUANITIY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	117.7

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 3 CONCRETE REPAIR DETAILS
STRUCTURE NO. 090-0044

SHEET 8 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	26
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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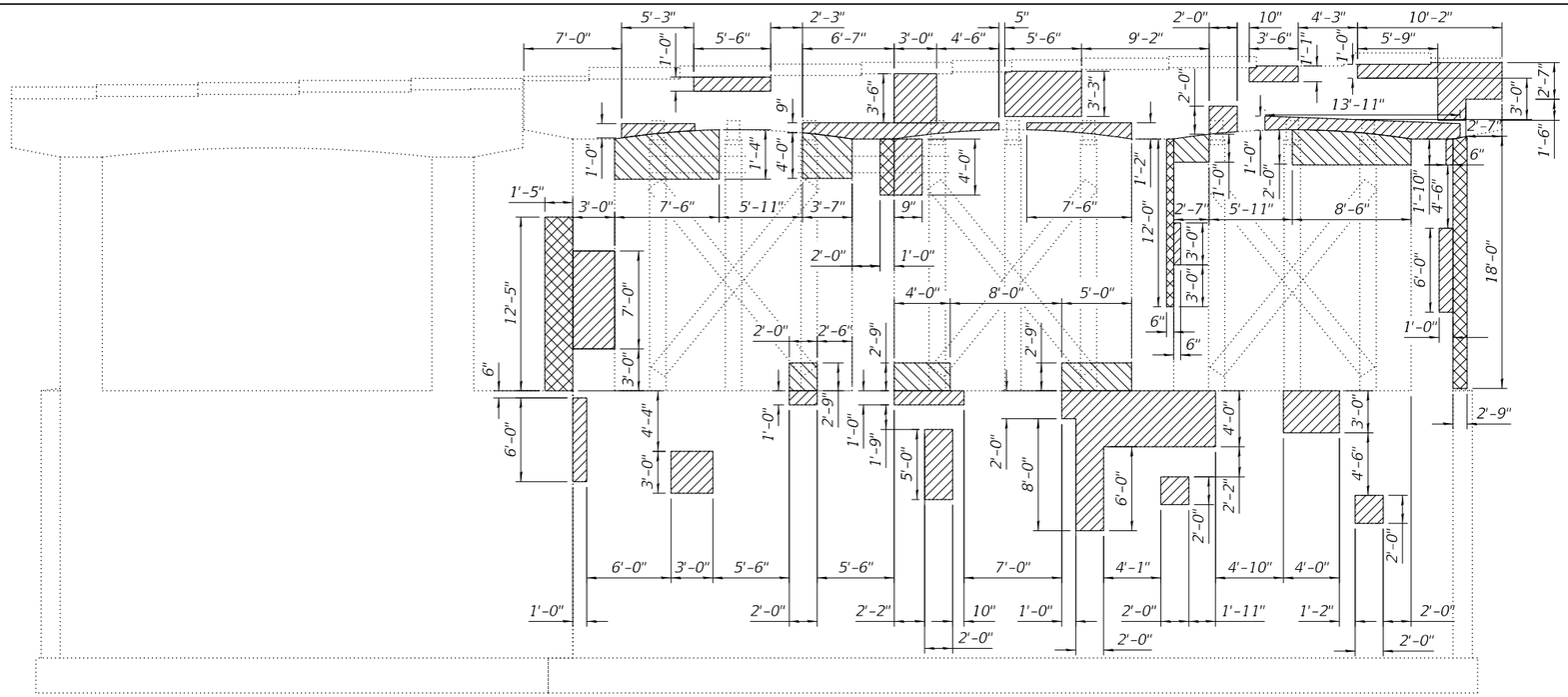
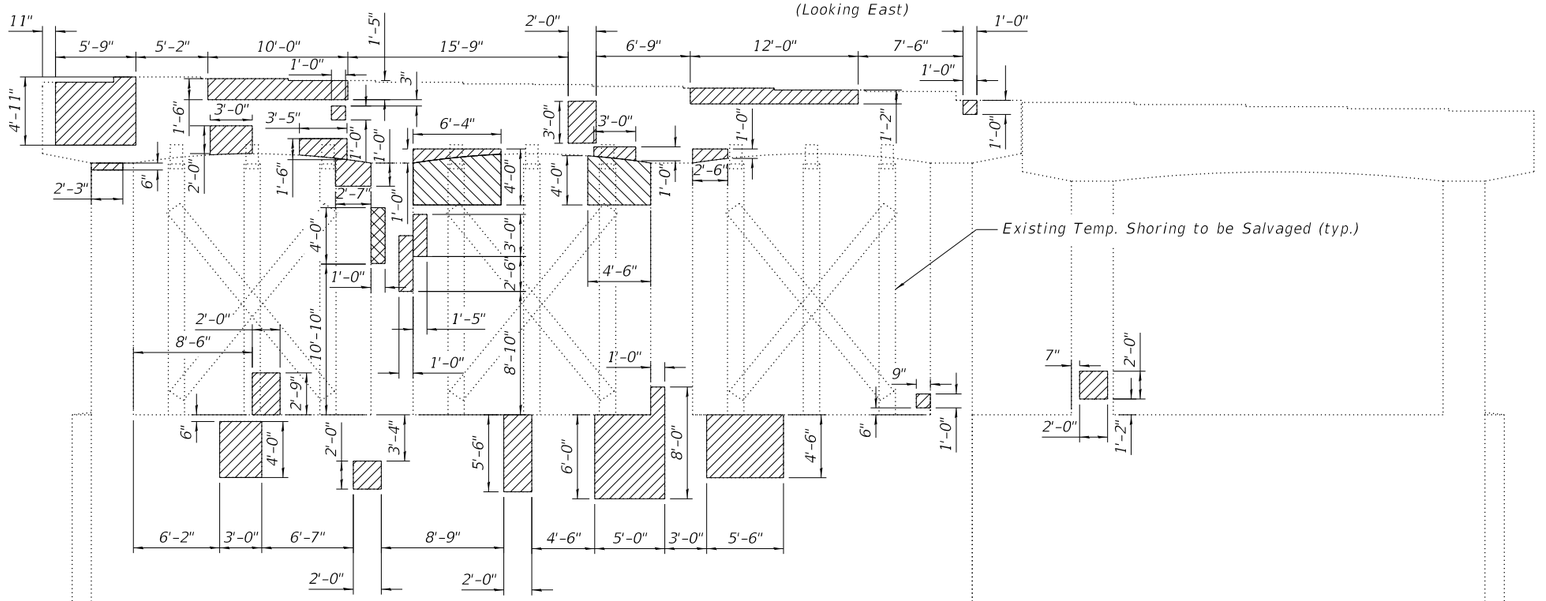


PIER 4 ELEVATION

(Looking East)



PIER 4 ELEVATION

(Looking West)

Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	627.7

FILE NAME: P:\10-1010.18 SN0900044 Repairs\10_CAD\CADD Sheets\0900044-68D59-009-Pier 4.dgn

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Illinois Professional Design Firm 184.006752
Professional Engineering Group 20-5680586
LICENSE NO.

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 4 CONCRETE REPAIR DETAILS
STRUCTURE NO. 090-0044
SHEET 9 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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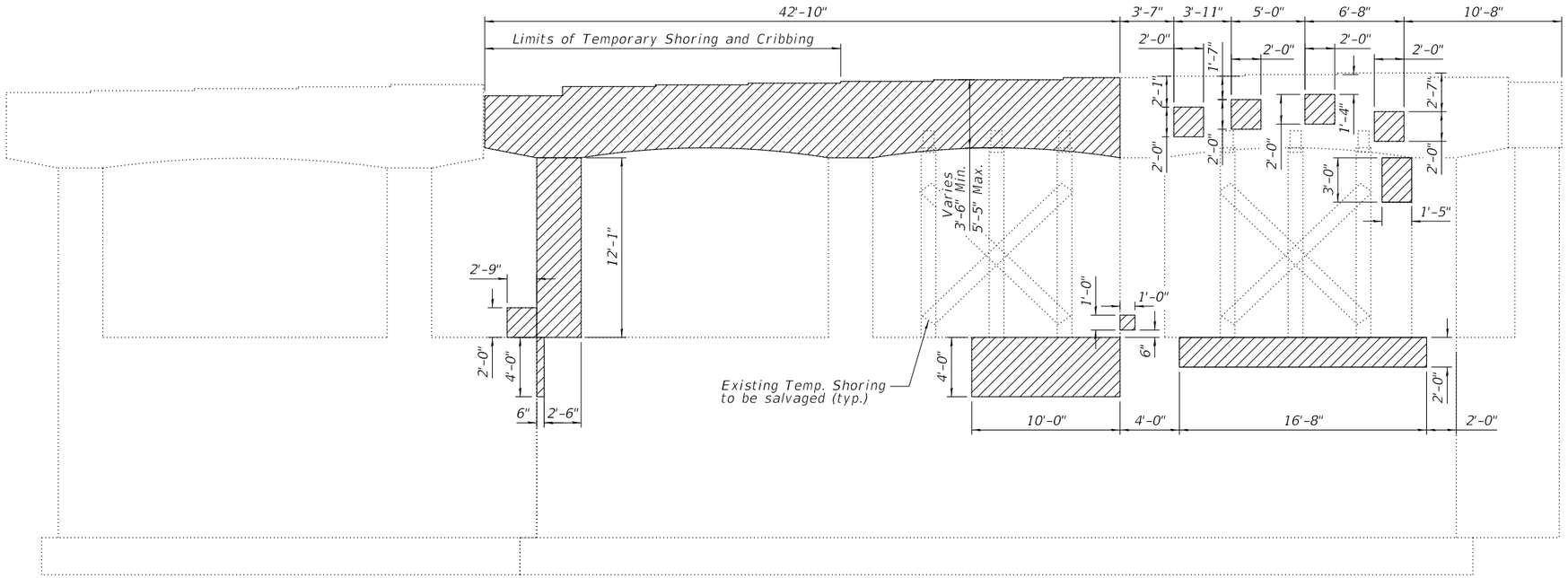
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			



PIER 5 ELEVATION

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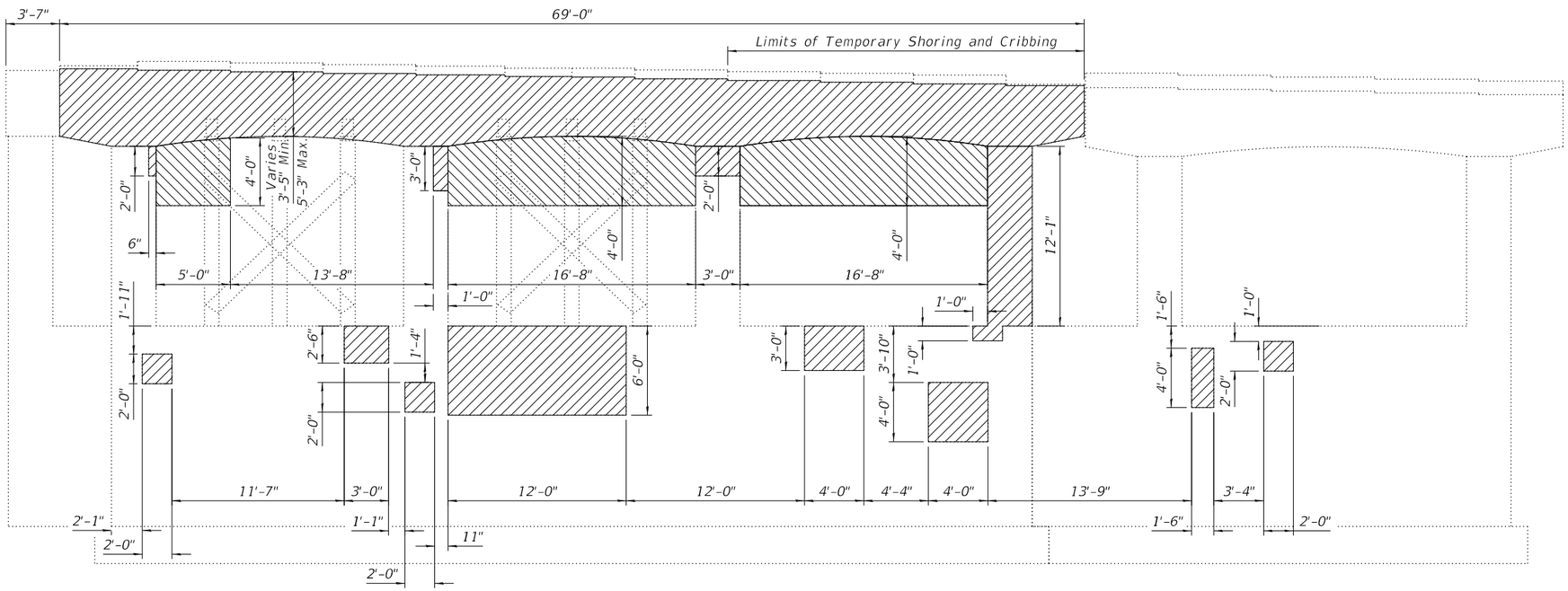

PIER 5 ELEVATION

(Looking West)

EXISTING INTERIOR BEAM REACTION TABLE

Reaction		Span 5	Span 6
DL	(k)	21.2	50.8
LL	(k)	28.7	32.0
IMP.	(k)	8.3	7.0
Total	(k)	58.2	89.8

Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	952.7
Temporary Shoring And Cribbing	Each	8

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 5 CONCRETE REPAIR DETAILS
STRUCTURE NO. 090-0044
SHEET 10 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	28
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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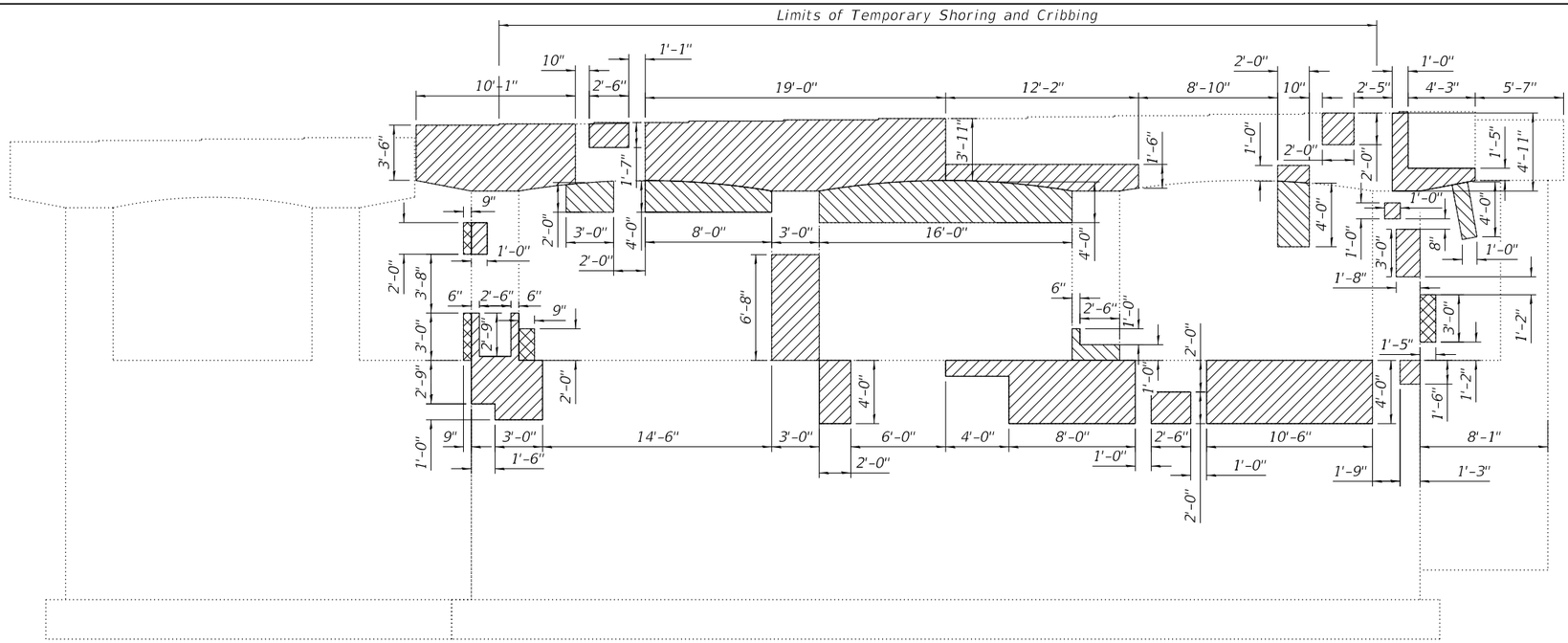
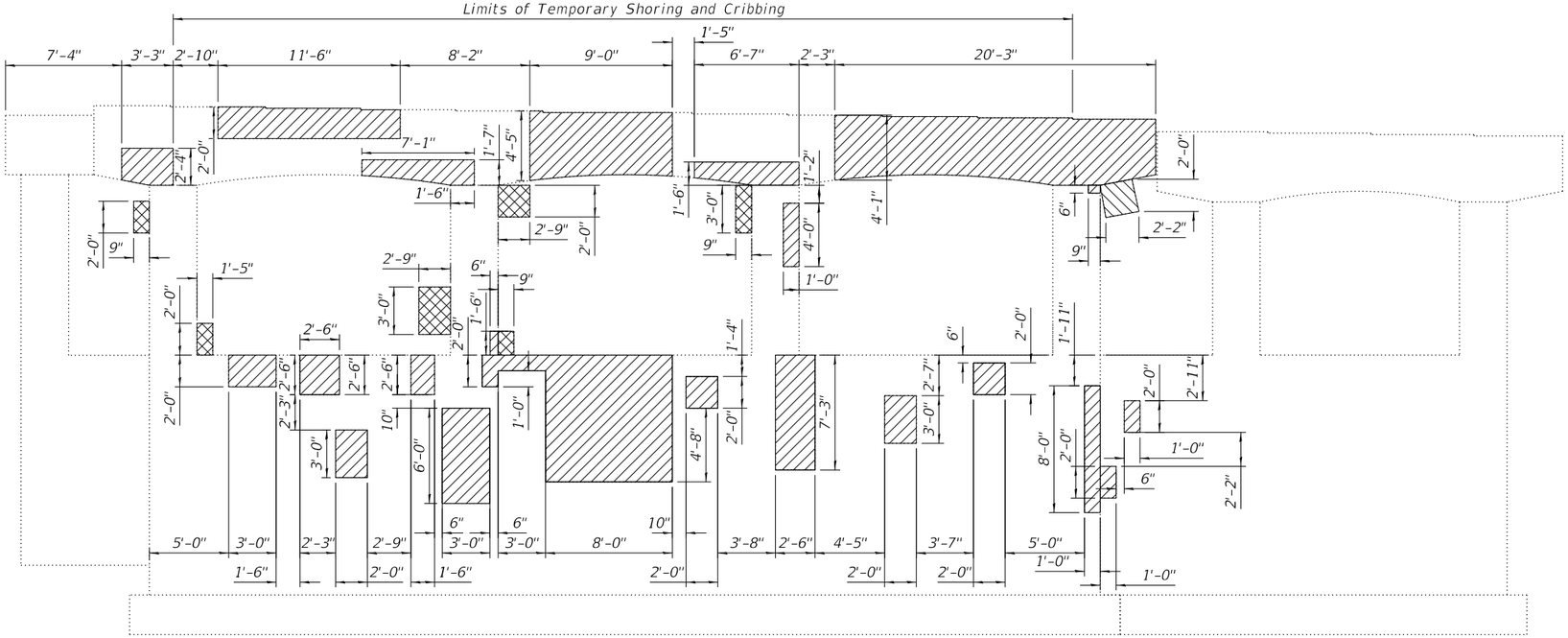


PIER 6 ELEVATION

(Looking East)



PIER 6 ELEVATION

(Looking West)

EXISTING INTERIOR BEAM REACTION TABLE

Reaction		Span 6	Span 7
DL	(k)	50.8	50.8
LL	(k)	32.0	32.0
IMP.	(k)	7.0	7.0
Total	(k)	89.8	89.8

Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	771.2
Temporary Shoring And Cribbing	Each	20

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184.005753
20-3686586

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		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		SHEET 11 OF 13 SHEETS
PLOT DATE =		CHECKED - BB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12((HVB,HB)BR|BR	TAZEWELL	61	29
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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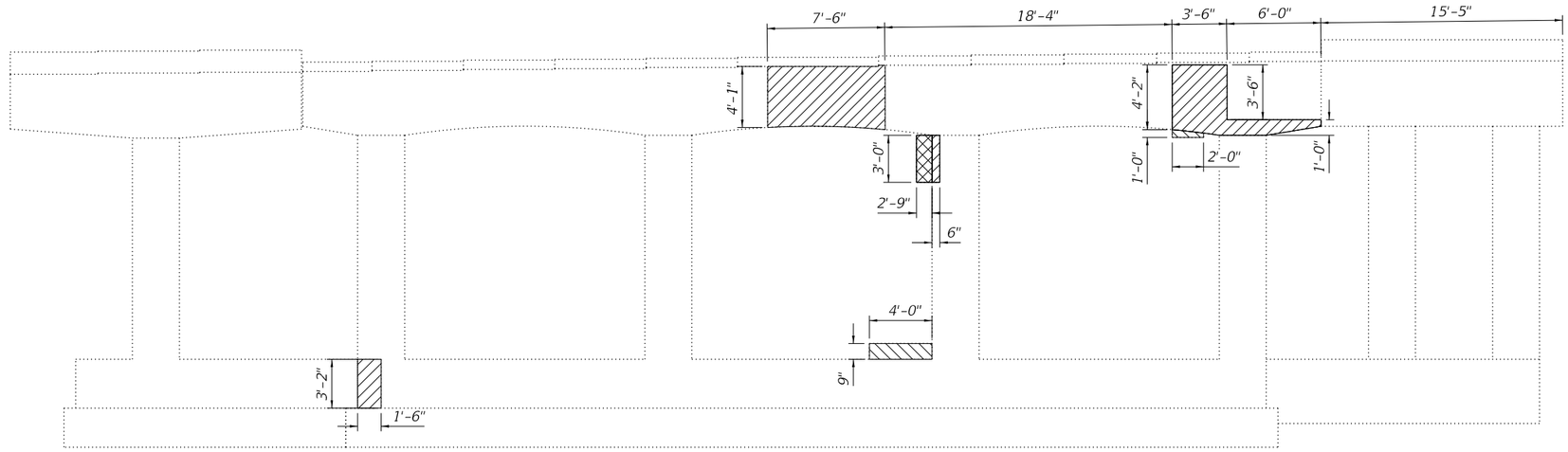
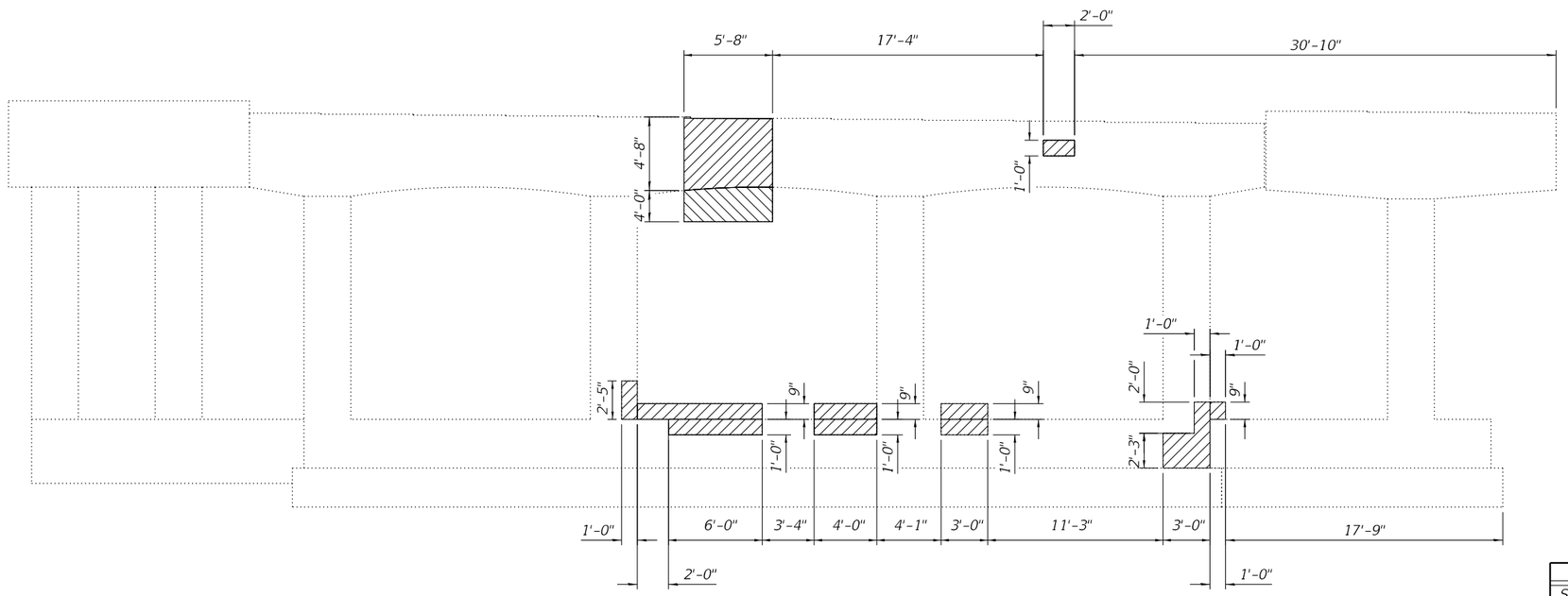


PIER 7 ELEVATION

(Looking East)



PIER 7 ELEVATION

(Looking West)

Indicates Structural Repair of Concrete (Depth equal to or less than 5")

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on bottom of cap.

Indicates Structural Repair of Concrete (Depth equal to or less than 5") on side of column.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	Sq. Ft	158.1

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		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		SHEET 12 OF 13 SHEETS
PLOT DATE =		CHECKED - BB	REVISED -		

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	30
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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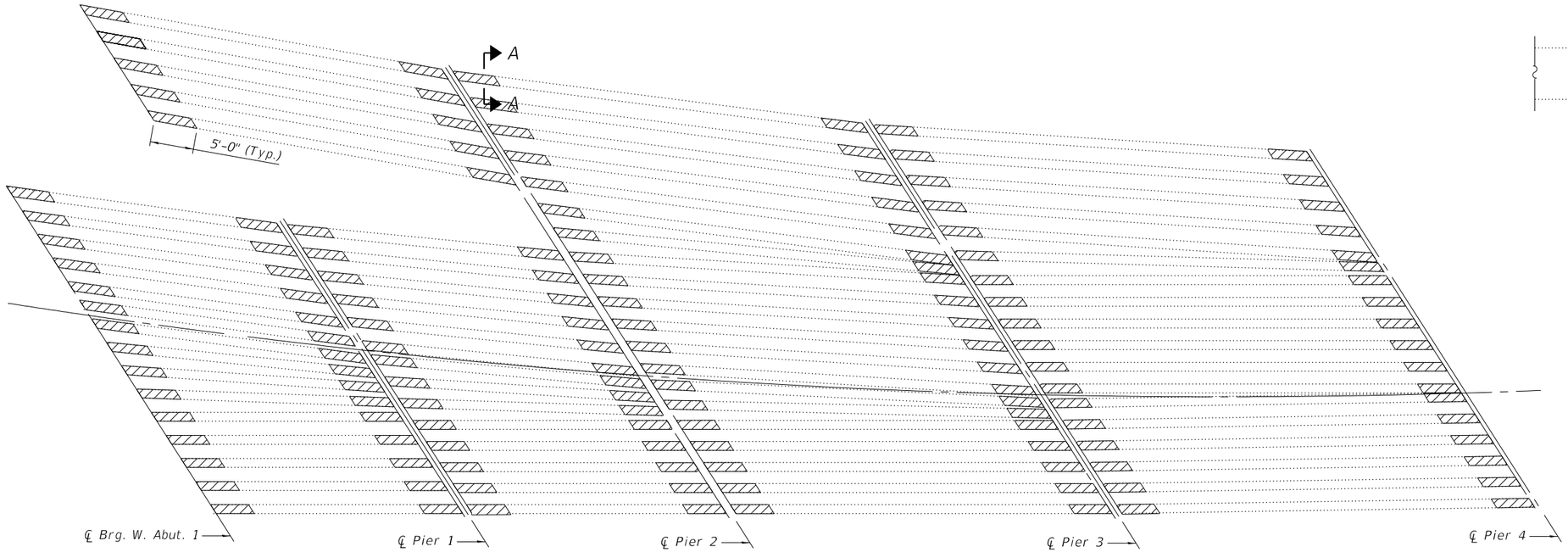
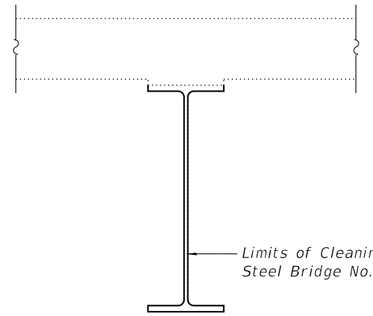
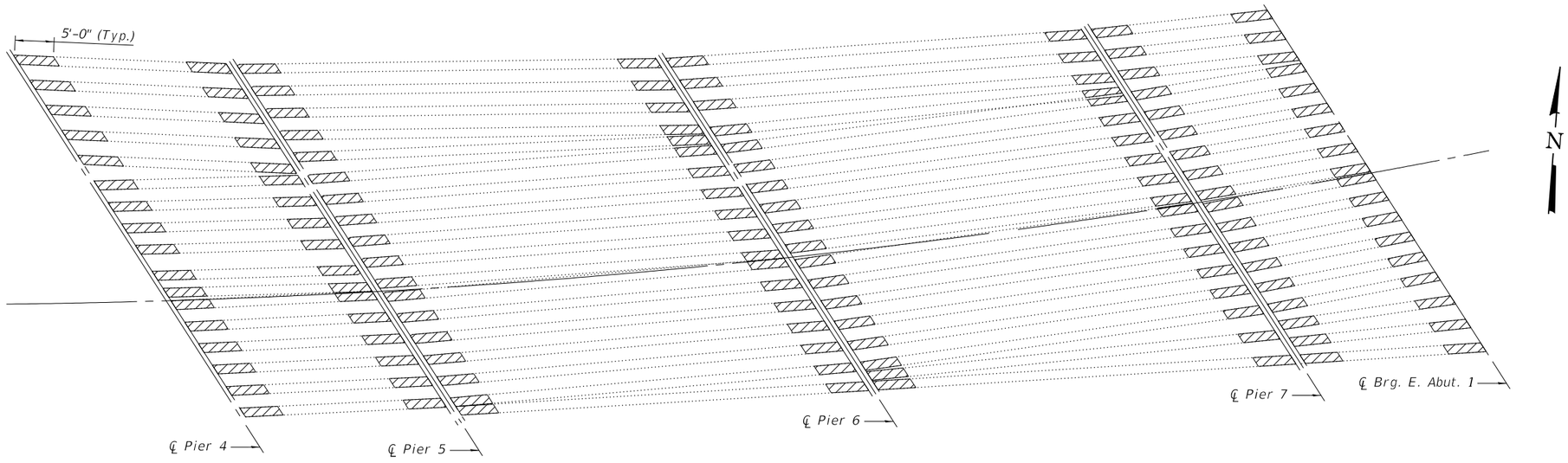


PLAN
(Spans 1 thru 4)



SECTION A-A



PLAN
(Spans 5 thru 8)

Indicates limits of Cleaning and Painting Steel Bridge No. 1.

BILL OF MATERIAL

Item	Unit	Total
Cleaning and Painting Structural Steel, Location 1	L. Sum	1

Notes:
See General Notes for additional painting requirements.
For existing beam and diaphragm sizes to be cleaned and painted see Sheet 4 of 13.

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USER NAME =		DESIGNED - KS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	EXISTING STEEL CLEANING & PAINTING DETAILS STRUCTURE NO. 090-0044
		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		
PLOT DATE =		CHECKED - BB	REVISED -		SHEET 13 OF 13 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	31
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1010.18 SN0900044 Repairs\10_CAD\CADD Sheets\0900044-68D59-013-Cleaning and Painting.dgn
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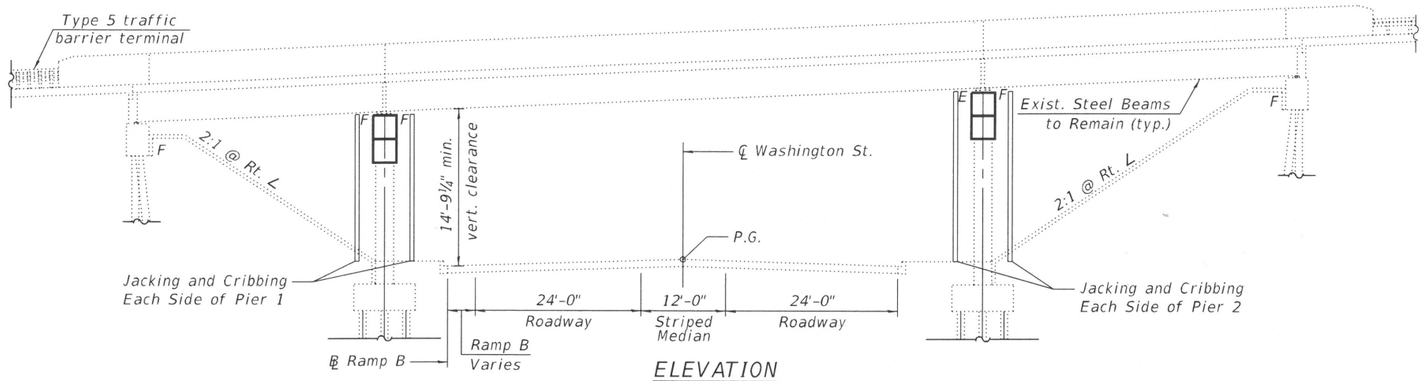
Bench Mark: Chiseled cross on guard rail bolt. Station 13+35 ± 45-ft right along Existing F.A.U. Rte. 6712 centerline. Elevation 484.47

Existing Structure: Originally built in 1958 as F.A. Rt 10 (Spur) Section (12-HB) and rehabilitated in 1991 as a three span composite steel I-beam bridge having spans of 36'-3", 84'-0", and 45'-8" with a back to back abutment length of 165'-11", measured along the tangent to the horizontal curved roadway. The bridge has a skew of 12°-4'-22". The out-to-out width of the structure is 63'-8" with 1'-7" wide parapets on both sides and a 3'-0" wide raised median. The bridge is supported by driven steel pile supported abutments and multi-column piers supported on driven steel piling.

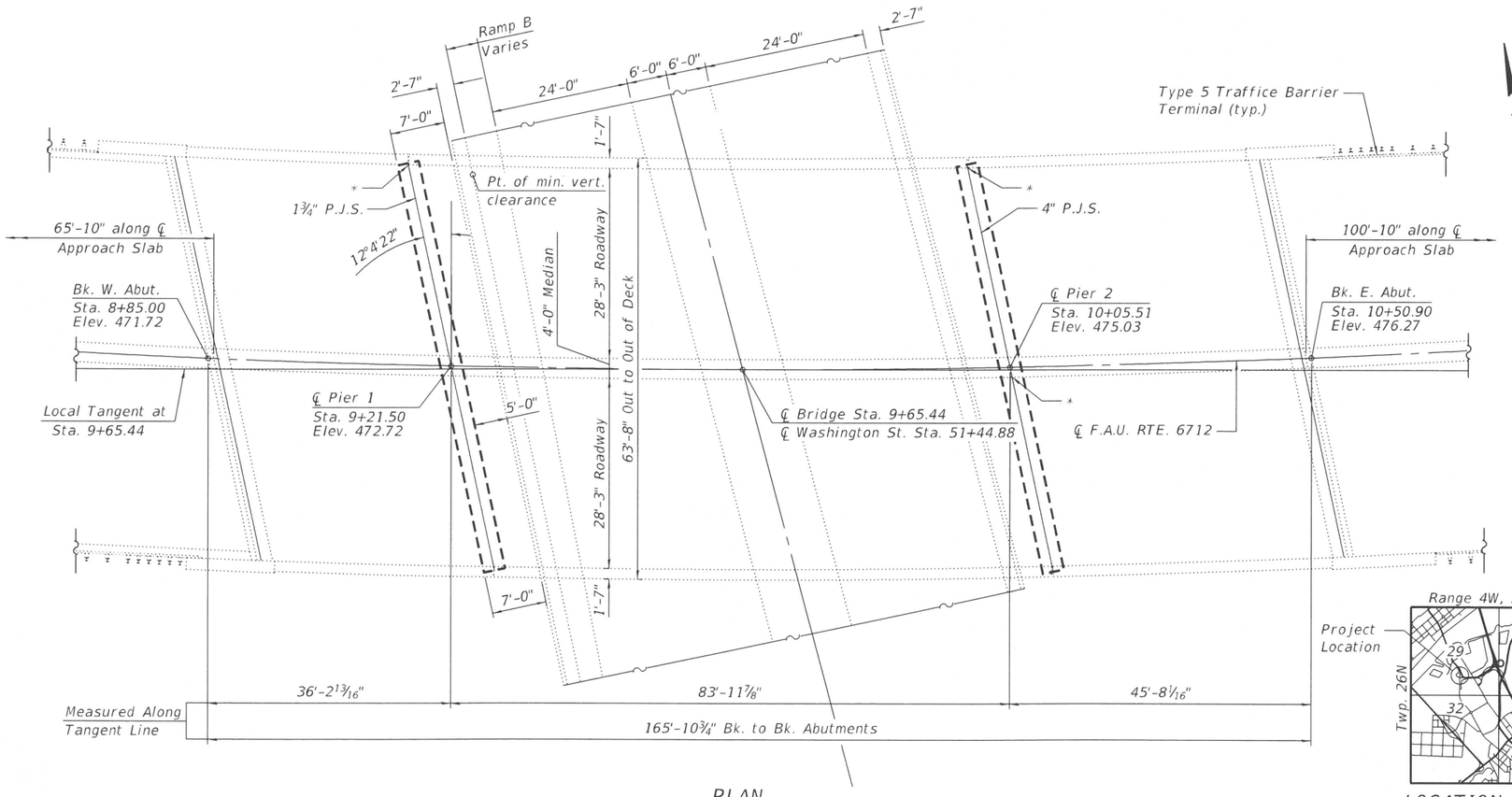
Salvage: None

BENJAMIN BOVEE
081-007230
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

SIGNED: Benjamin Bovee
DATE: 11/28/2018
ILLINOIS STRUCTURAL ENGINEER
NO. 081-007230
LICENSE EXPIRES: 11-30-2020



ELEVATION



PLAN

LOCATION SKETCH

INDEX OF SHEETS

CURVE DATA

P.I. Sta. = 16+66.65
Δ = 45°-00'-00"
D = 2°-54'-00"
R = 1,975.72'
T = 818.37'
L = 1,551.72'
E = 162.78'
P.C. Sta. = 8+48.28
P.T. Sta. = 24+00.00

DESIGN STRESSES

Existing Structure
f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M183 Grade 36)

New Construction
f'c = 4,000 psi (Superstructure)
f'c = 3,500 psi (Substructure)
fy = 60,000 psi (Reinforcement)
fy = 50,000 psi (M270 Grade 50)

DESIGN SPECIFICATIONS

2002 AASHTO Standard Specifications for Highway Bridges

LOADING HS20-44

No future wearing surface shall be installed.

* Indicates Locations for "Joint Repair"

GENERAL PLAN & ELEVATION
RIVERFRONT DRIVE OVER WEST WASHINGTON ST.
F.A.U. RTE. 6712, SEC. (12-HVB)BR-1
TAZEWELL COUNTY
STATION 9+65.44
STRUCTURE NO. 090-0046

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CAD\CADD Sheets\090-0046\090046-68D59-01_General Plan and Elevation.dgn
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Professional Engineering Group
LICENSE NO.
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20-3688584

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 090-0046
SHEET 1 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	32
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 50.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from surfaces in contact with the concrete. Removal shall be accomplished by methods that will not damage the steel and the cost will be included with Concrete Removal.

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.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of ⅛ inch (0.01 ft.). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The existing bridge deck at the pier joints is heaving due to pack rust at the bearings. The Contractor shall adjust the bearing seat elevations as needed to bring the bridge deck to a level plane.

All structural steel and exposed surfaces of bearings within a distance of 5 ft. each way from the deck joints shall be painted as specified in Section 506 of the Standard Specifications.

The structural steel plates of the Bearing Assembly shall conform to the requirements of AASHTO M 270 Grade 50.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

Existing reinforcement shall be cleaned and incorporated into the new construction. Cost included with Concrete Removal.

Any reinforcement bars damaged during the Concrete Removal operations shall be repaired or replaced using an approved bar splicer or anchorage system. Cost included with Concrete Removal. Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at ambient temperature other than 50°F.

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

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

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". Areas to be cleaned and painted shall consist of all beam ends, end diaphragms and steel components of the steel bearings at the abutments and piers. Beam end painting shall extend 5 feet from the ends of the beams longitudinally. This surface preparation shall be accomplished according to the requirements of Near-White Metal Blast Cleaning SSPC-SP 10. The paint system shall be applied as specified for System 1 OZ/E/U. The color of the final finish coat shall be Blue, Munsell No. 10B 3/6.

Containment and disposal as specified shall follow the special provision for "Containment and Disposal of Lead Paint Cleaning Residue". The use of four air monitors will be required to monitor abrasive blasting operations.

The painting contractor shall be SSPC-QP 1 and SSPC-QP2 certified for this project and shall maintain certification throughout the duration of the project.

Fasteners shall be high strength bolts. Bolts ⅞" open holes $1^{5}/_{16}$", unless otherwise noted.

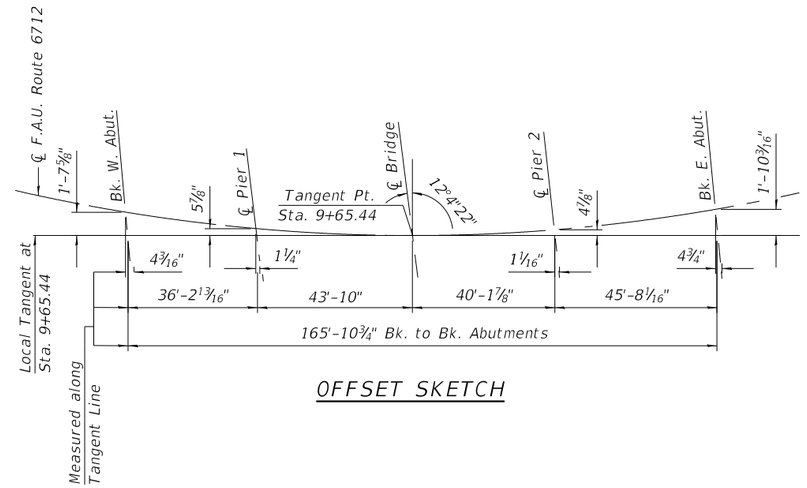
Cost of removal and re-installation of all members necessary to complete the work as detailed on the plans and as specified in the Special Provisions shall be included with Structural Steel Repair.

SCOPE OF WORK

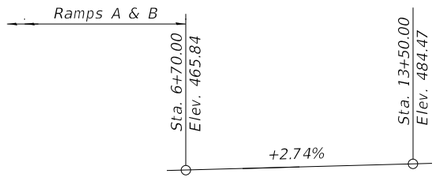
1. Install temporary shoring to each side of Pier 1 and Pier 2.
2. Remove existing pier caps at Pier 1 & Pier 2.
3. Repair designated beam ends.
4. Construct new pier caps at Pier 1 and Pier 2.
5. Replace bearings at Pier 1 and Pier 2.
6. Complete Structural Repair of Concrete to designated areas of Pier 2.
7. Clean and Paint structure at designated locations.
8. Repair joints at existing concrete median on structure.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	CU. YD.	–	60.1	60.1
Concrete Structures	CU. YD.	–	70.2	70.2
Reinforcement Bars (Epoxy Coated)	POUND	–	10,590	10,590
Jack and Remove Existing Bearings	EACH	40	–	40
Elastomeric Bearing Assembly, Type I	EACH	10	–	10
Furnishing and Erecting Structural Steel	POUND	3,660	–	3,660
Cleaning and Painting Steel Bridge Location 2	L. SUM	1	–	1
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	5.0	91.0	96.0
Silicone Joint Sealer (Special)	FOOT	4	–	4
Anchor Bolt, ¾"	EACH	80	–	80
Temporary Shoring and Cribbing	EACH	40	–	40
Structural Steel Repair	POUND	2,540	–	2,540
Joint Repair	EACH	3	–	3
Containment and Disposal of Lead Paint Cleaning Residues No. 2	L. SUM	1	–	1

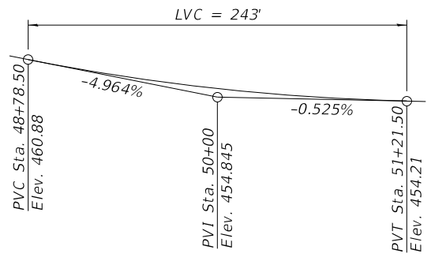


OFFSET SKETCH



PROFILE GRADE

F.A.U. RTE. 6712
(Along ℄ Roadway)



PROFILE GRADE

Washington St.
(Along ℄ Roadway)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 090-0046
SHEET 2 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	33
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CAD\CADD Sheets\090-0046\090046-68059-02_General Data.dgn

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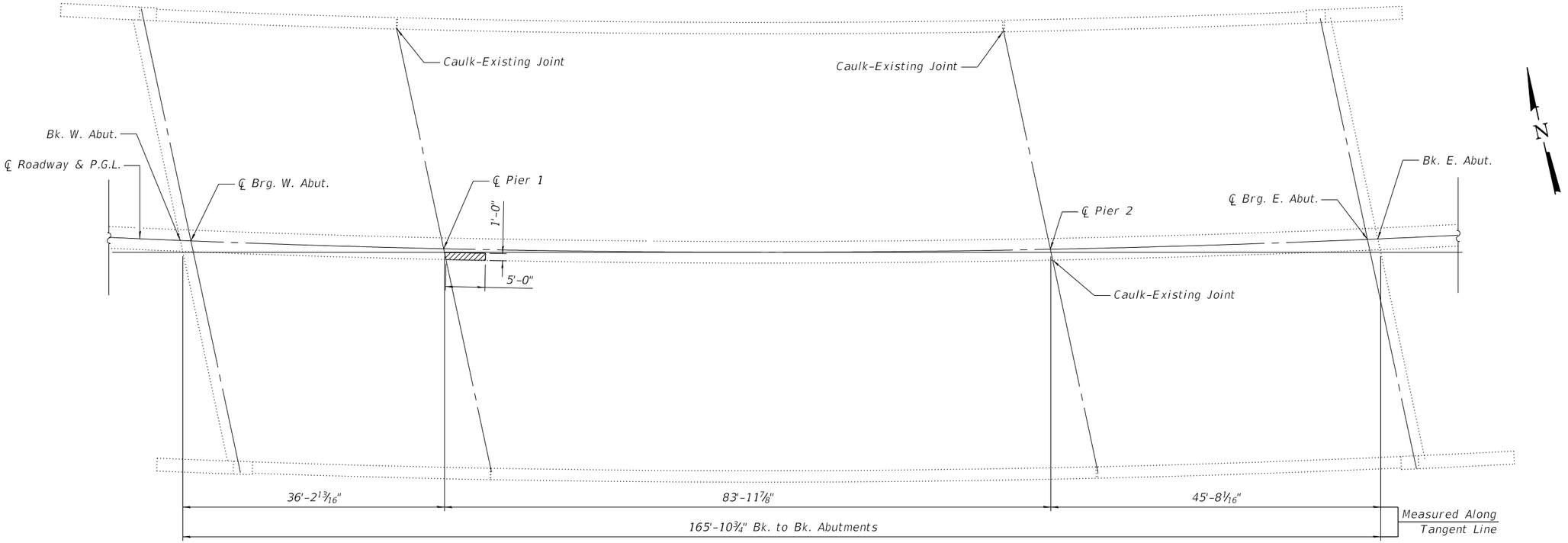
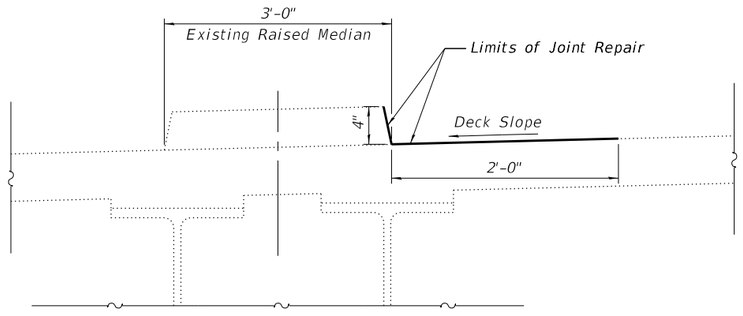
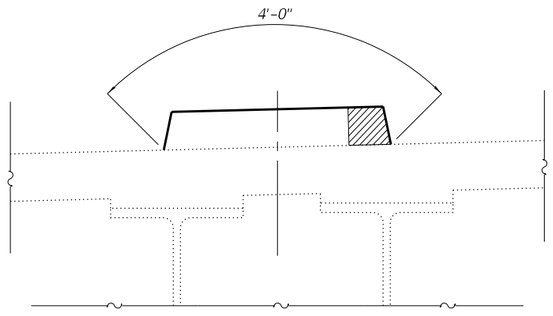


PLAN



MEDIAN JOINT REPAIR DETAIL

(Pier 2 median and Pier 1 and Pier 2 North Parapet)



SILICONE JOINT SEALER (SPECIAL) DETAIL

(Pier 1 median)

Indicates Limits of Structural Repair of Concrete (Depth equal to or less than 5 inches)

Note:
At Pier 1, remove existing Preformed Joint Seal and replace with Silicone Joint Sealer (Special).

BILL OF MATERIAL

Item	Unit	Quantity
Silicone Joint Sealer (Special)	Foot	4
Joint Repair	Each	3
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT.	5.0

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STATE OF ILLINOIS
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MEDIAN REPAIR DETAILS
STRUCTURE NO. 090-0046
SHEET 3 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	34
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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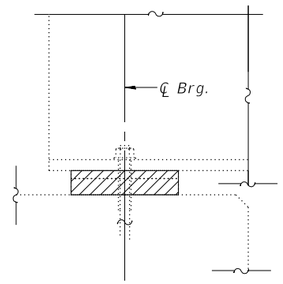


Indicates Removal

EXISTING BEARING REMOVAL DETAIL

(8 Required)
(Pier 1, Span 1 Interior Beams)

Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Side retainers and other steel members required for the elastomeric bearing assembly shall be included in the cost of Elastomeric Bearing Assembly, Type I.

Diaphragm removal and replacement may be required to facilitate drilling holes: Cost shall be included with Furnishing and Erecting Structural Steel.

New shim plates and pintles are included with Furnishing and Erecting Structural Steel.

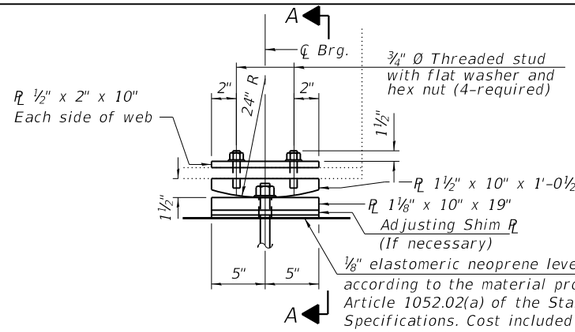
Prior to ordering any material. Contractor shall verify in the field all existing bearing heights.

Two ⅛ in. adjusting shims shall be provided for each bearing in addition to all other plates or shims and placed as shown on bearing details.

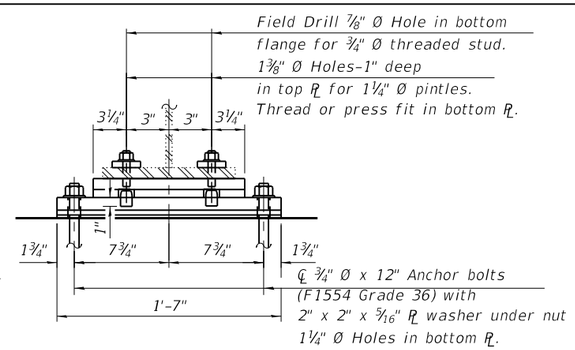
Anchor bolts and side retainers at all supports shall be installed as each member is erected unless an equivalent temporary means of lateral restraint is used.

EXISTING INTERIOR BEAM REACTION TABLE

Reaction		Span 1	Span 2	Span 3
DL	(k)	14.9	43.1	19.6
LL	(k)	40.3	49.1	43.7
IMP.	(k)	12.1	11.9	13.0
Total	(k)	67.3	104.1	76.3



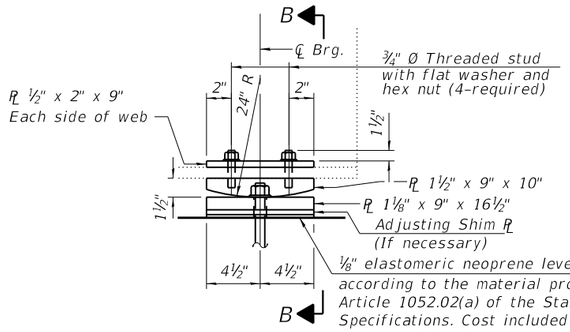
ELEVATION AT PIER



SECTION A-A

FIXED BEARING

(2 required, Pier 1 Span 1 Exterior Beams)



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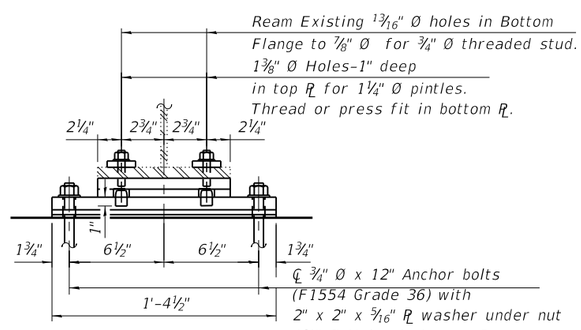
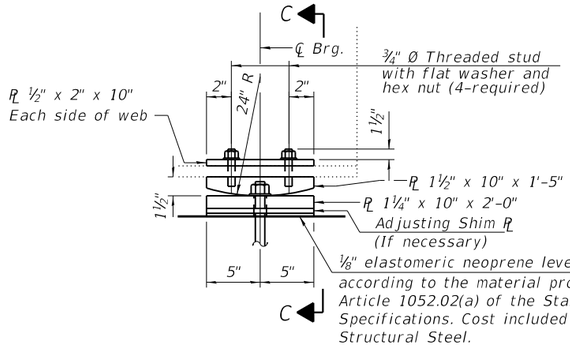


SECTION B-B

FIXED BEARING

(8 required, Pier 1 Span 1 Interior Beams)



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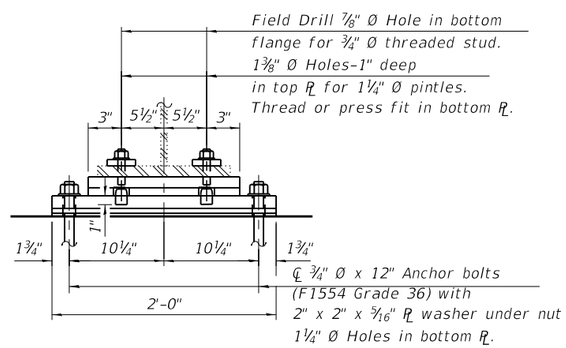
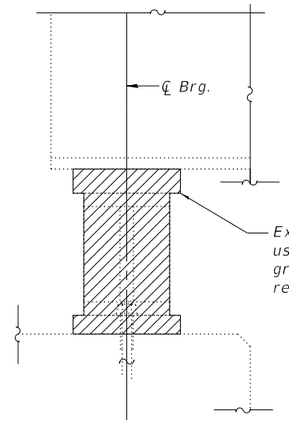


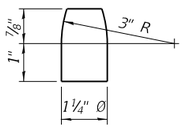
SECTION C-C



Indicates Removal

EXISTING BEARING REMOVAL DETAIL

(12 Required)
(Pier 1, Span 1 Exterior Beams & Pier 1 Span 2)



PINTLE

FIXED BEARING

(10 required, Pier 1 Span 2)

BILL OF MATERIAL

Item	Unit	Total
Furnishing and Erecting Structural Steel	Pound	2,650
Anchor Bolts, ¾"	Each	40

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 090-0046
SHEET 4 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	35
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADCADD Sheets\090-0046\0900046-68D59-04_Bearing Details.dgn

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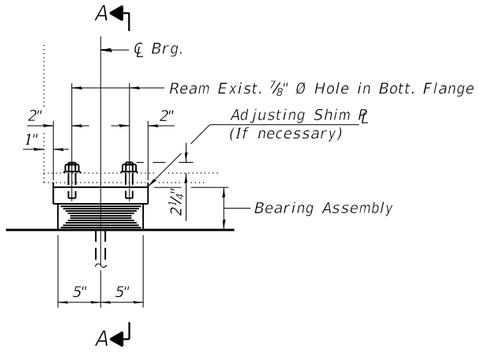
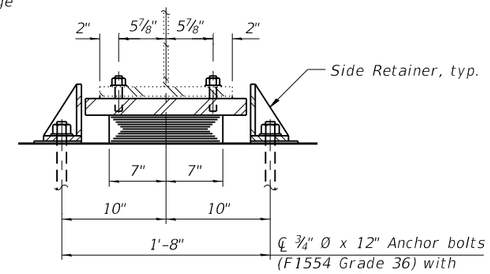


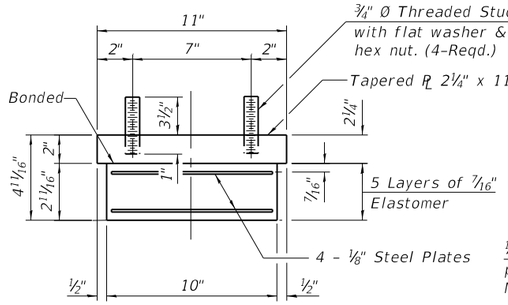
ELEVATION AT PIER



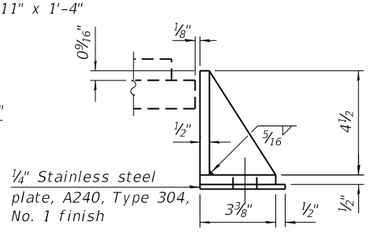
SECTION A-A

TYPE I ELASTOMERIC EXP. BRG.

(10 required, Pier 2 Span 2)



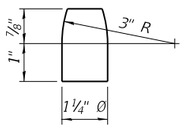
BEARING ASSEMBLY



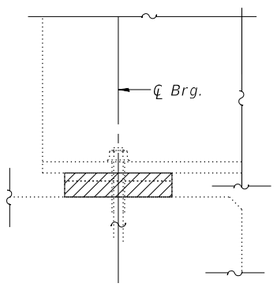
SIDE RETAINER

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

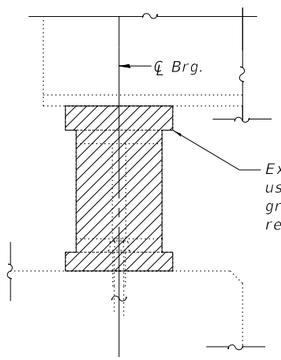
Note:
Shim plates shall not be placed under Bearing Assembly.



PINTLE



EXISTING BEARING REMOVAL DETAIL
(8 Required)
(Pier 2, Span 3 Interior Beams)



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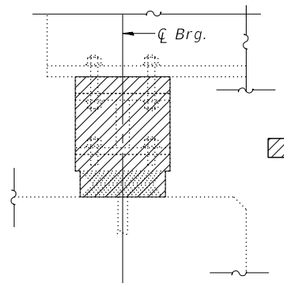
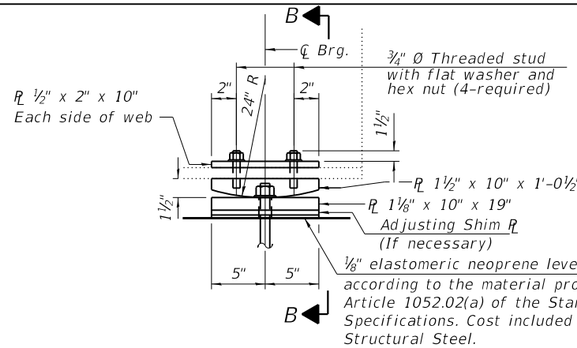
(2 Required)
(Pier 2, Span 3 Exterior Beams)



EXISTING BEARING REMOVAL DETAIL
(2 Required)
(Pier 2, Span 2)



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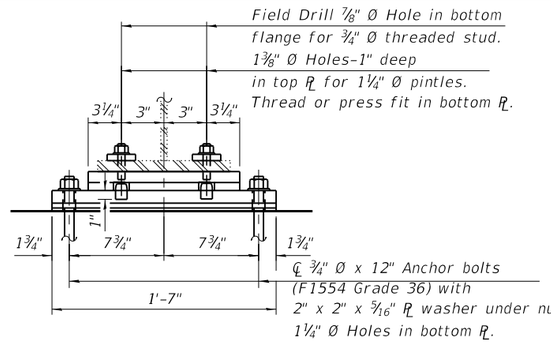
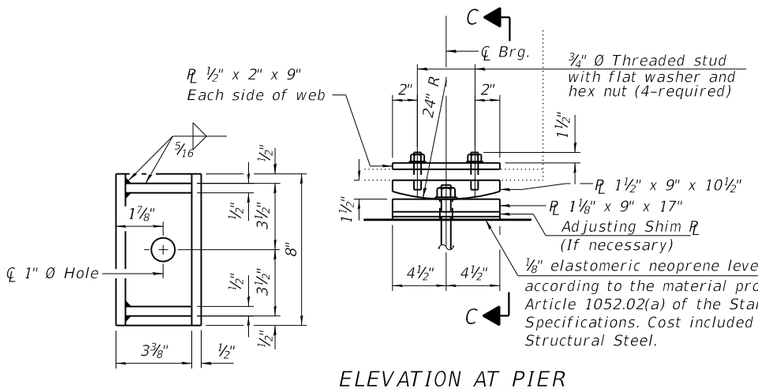


SECTION B-B

FIXED BEARING

(2 required, Pier 2 Span 3 Exterior Beams)



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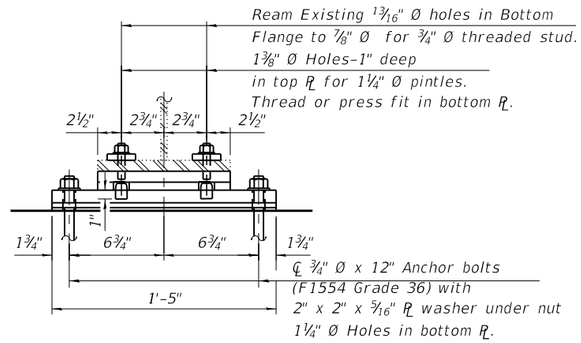

SECTION C-C

FIXED BEARING

(8 required, Pier 2 Span 3 Interior Beams)

BILL OF MATERIAL

Item	Unit	Total
Elastomeric Bearing Pad Type I	Each	10
Furnishing and Erecting Structural Steel	Pound	1,010
Anchor Bolts, ¾"	Each	40

Notes:
See Sheet 4 of 15 for Bearing Notes.
See Sheet 4 of 15 for Interior Beam Reaction Table.

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 090-0046

SHEET 5 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	36
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CAD\CADD Sheets\090-0046\090046-68D59-05_Bearing Details.dgn

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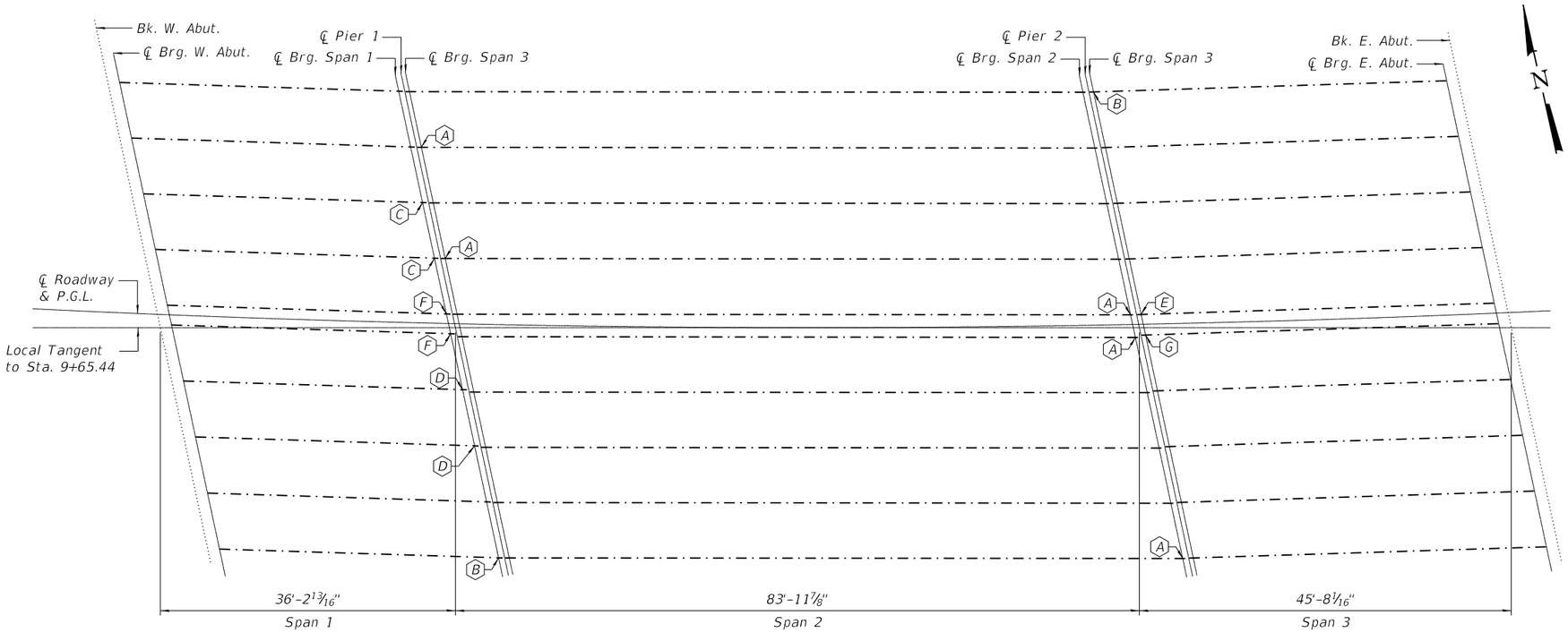
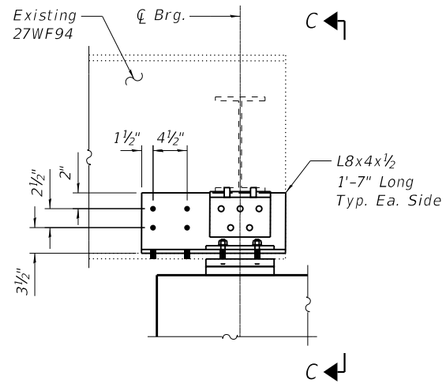


FRAMING PLAN

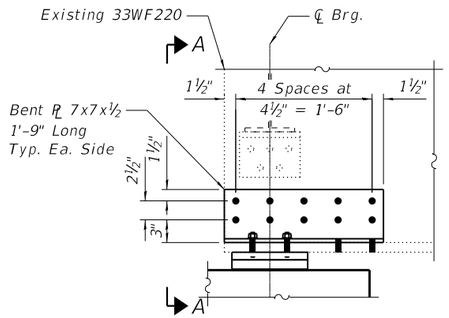
- (A) REPAIR A
- (B) REPAIR B
- (C) REPAIR C
- (D) REPAIR D
- (E) REPAIR E
- (F) REPAIR F
- (G) REPAIR G

BOLT HOLE LEGEND

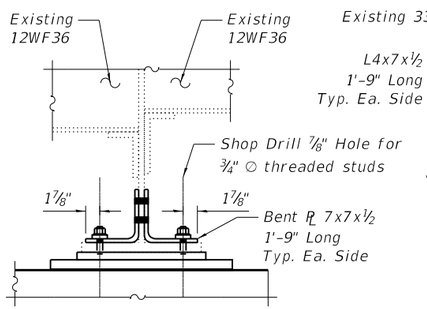
- ○ – Field drill using existing steel as template
- ● – Shop drill holes in new steel



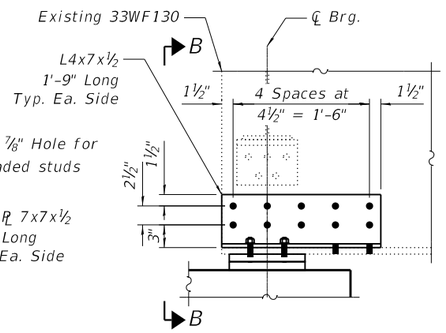
REPAIR "C"



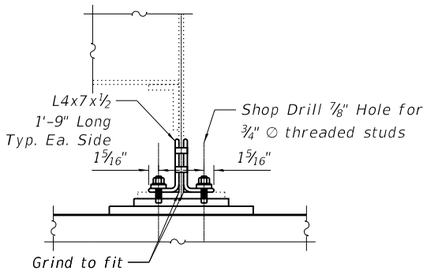
REPAIR "A"



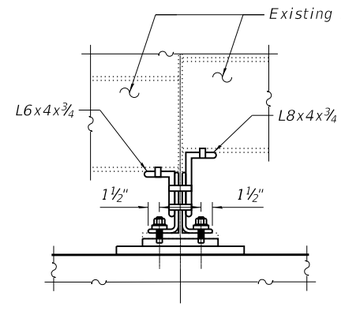
VIEW A-A



REPAIR "B"



VIEW B-B



VIEW C-C

USER NAME =	DESIGNED - KS	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**STRUCTURAL STEEL REPAIRS STRUCTURE NO. 090-0046**	
	CHECKED - BB	REVISED -			
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PLOT DATE =	CHECKED - BB	REVISED -		SHEET 6 OF 15 SHEETS	

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F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	37
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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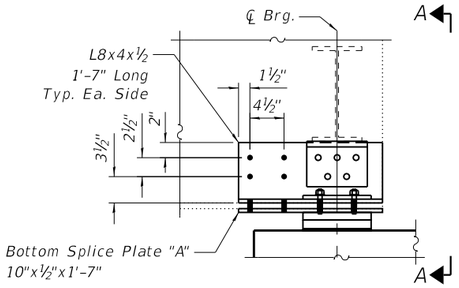
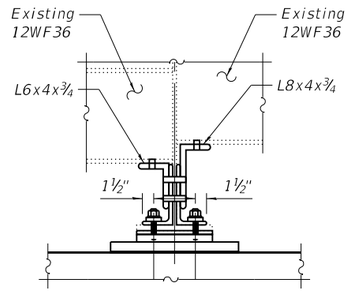
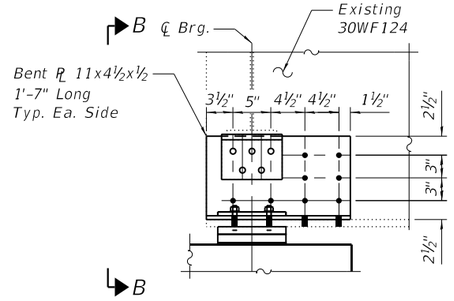


REPAIR "D"



VIEW A-A



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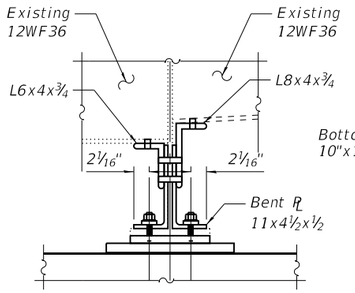
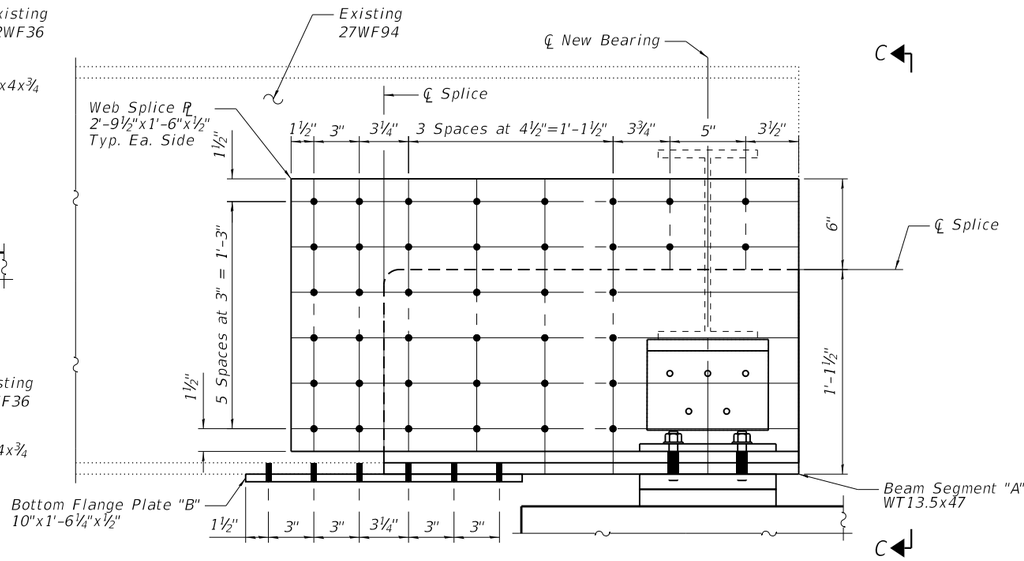


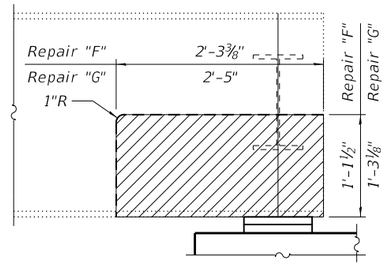
VIEW B-B



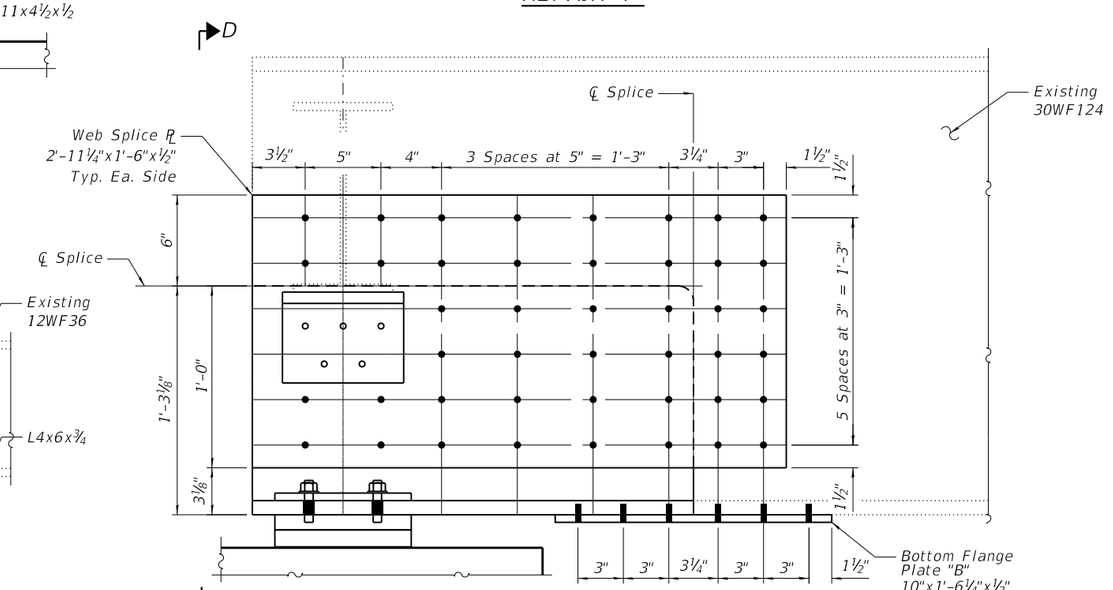
REPAIR "F"

BOLT HOLE LEGEND

- ○ – Field drill using existing steel as template
- ● – Shop drill holes in new steel.



REMOVAL DETAIL FOR DETAILS "F" & "G"



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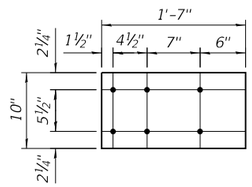
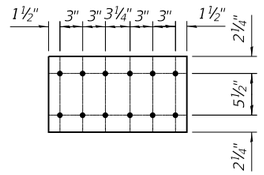
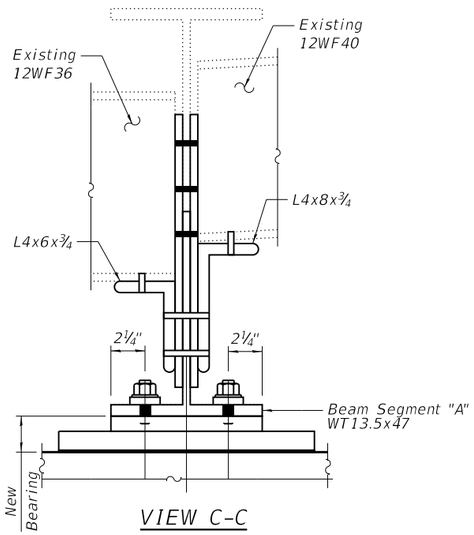


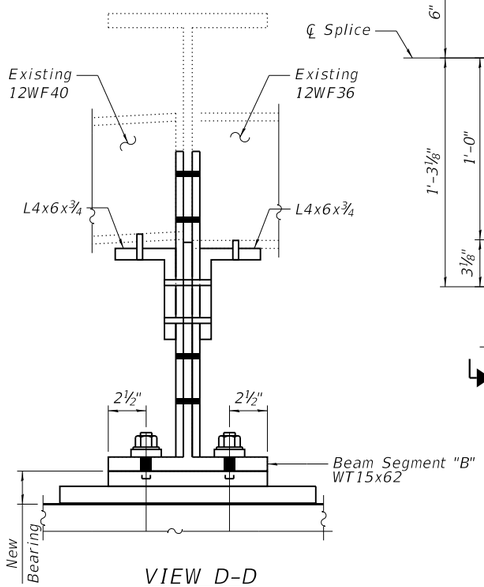
BOTTOM SPLICE PLATE "A"
(10"X½"x1'-7")



BOTTOM SPLICE PLATE "B"
(10"X½"x1'-6¼")



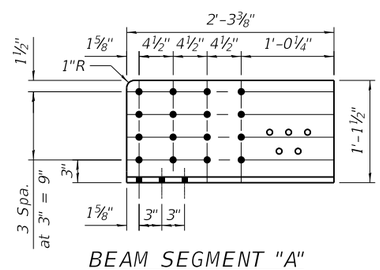
VIEW C-C



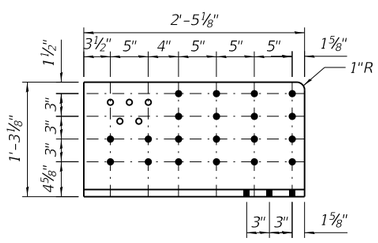
VIEW D-D

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Steel Repair	Pound	2140



BEAM SEGMENT "A"
(WT13.5x47)



BEAM SEGMENT "B"
(WT15x62)

Kaskaskia Engineering Group, LLC
PROFESSIONAL REGISTRATIONS
Illinois Professional Design Firm 184.004773
Professional Engineering Group 20-5008046
200 E. Main St., Suite 100, Belleville, Illinois 62220
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618.233.5955 fax
www.kaskeng.com

USER NAME =		DESIGNED -	KS	REVISED -	
		CHECKED -	BB	REVISED -	
PLOT SCALE =		DRAWN -	RJO	REVISED -	
PLOT DATE =		CHECKED -	BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STRUCTURAL STEEL REPAIRS
STRUCTURE NO. 090-0046
SHEET 7 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	38
		CONTRACT NO. 68D59		
		ILLINOIS	FED. AID PROJECT	

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADCADD Sheets\090-0046\090046-68D59-07_Structural Steel Repairs.dgn
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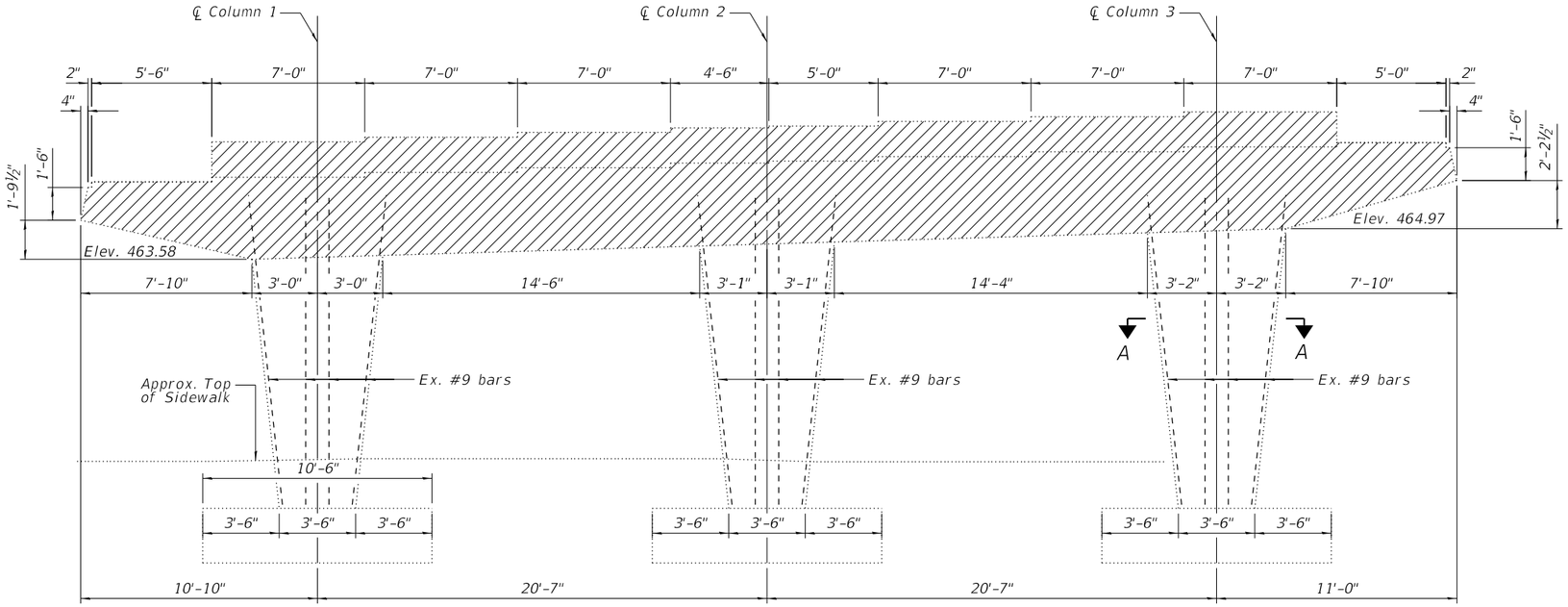
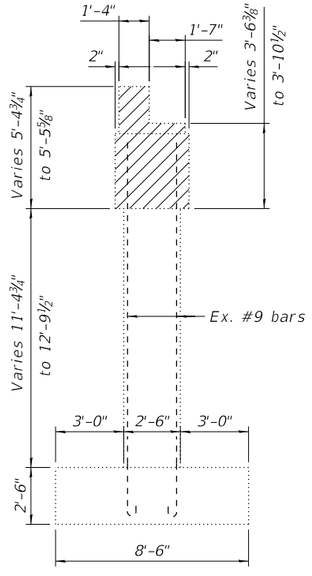


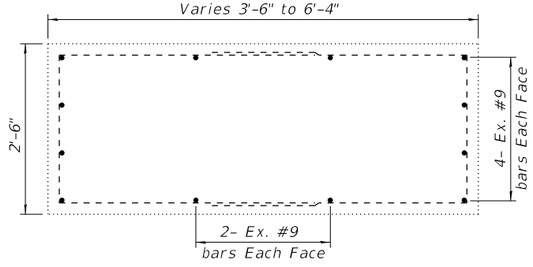
PIER 1 ELEVATION – REMOVAL

(Looking East)



PIER 1 END VIEW

(Looking North)



SECTION A-A

▨ – Indicates Limits of Concrete Removal

Notes:

Existing reinforcing extending from existing columns to be incorporated into new construction shall be cleaned and straightened. Cost included with Concrete Removal.

Existing elevations and dimensions shown are taken from the 1957 bridge plans. Contractor shall field verify all elevations and dimensions shown.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	CU. YD.	30.4

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADD\CADD Sheets\090-0046\090046-68D59-08_Pier 1 Concrete Removal Details.dgn

11/26/2018 3:59:47 PM

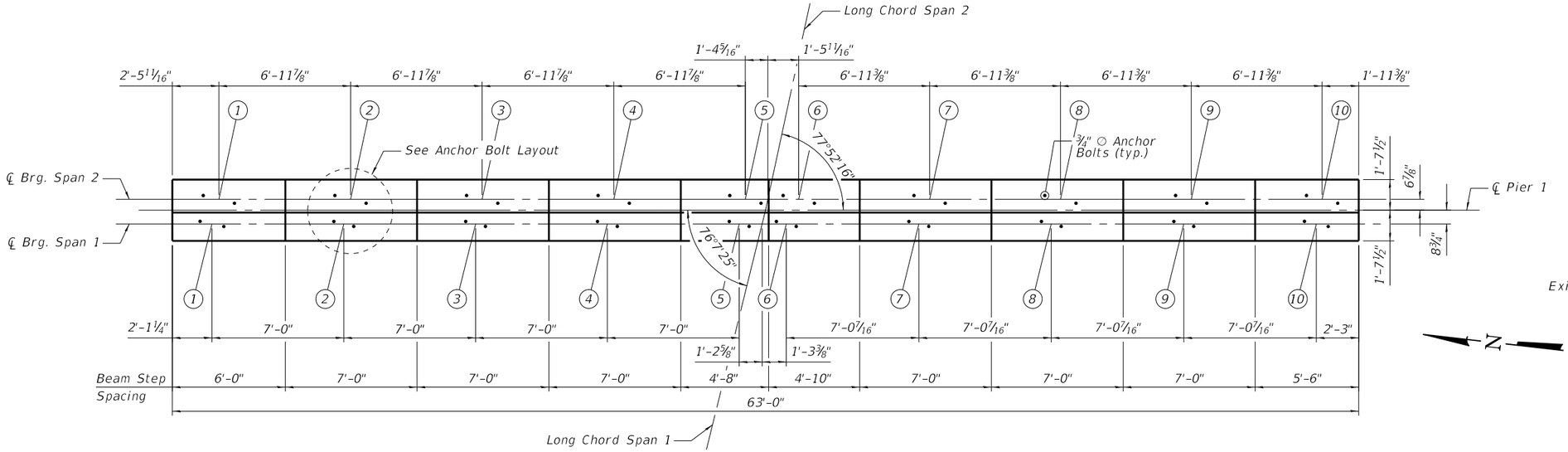
Kaskaskia Engineering Group, LLC
PROFESSIONAL ENGINEERING Illinois Professional Design Firm Professional Engineering Group
LICENSE NO. 184.004773 20.588886
200 E. Main St., Suite 100 Belleville, Illinois 62220 618.233.5077 phone 618.233.5977 fax www.kaskaskiaeng.com

USER NAME =	DESIGNED - MC	REVISED -	
	CHECKED - BB	REVISED -	
PLOT SCALE =	DRAWN - MC	REVISED -	
PLOT DATE =	CHECKED - BB	REVISED -	

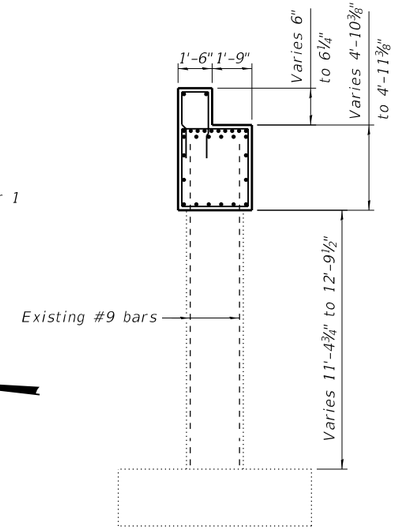
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 CONCRETE REMOVAL DETAILS
STRUCTURE NO. 090-0046
SHEET 8 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	39
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

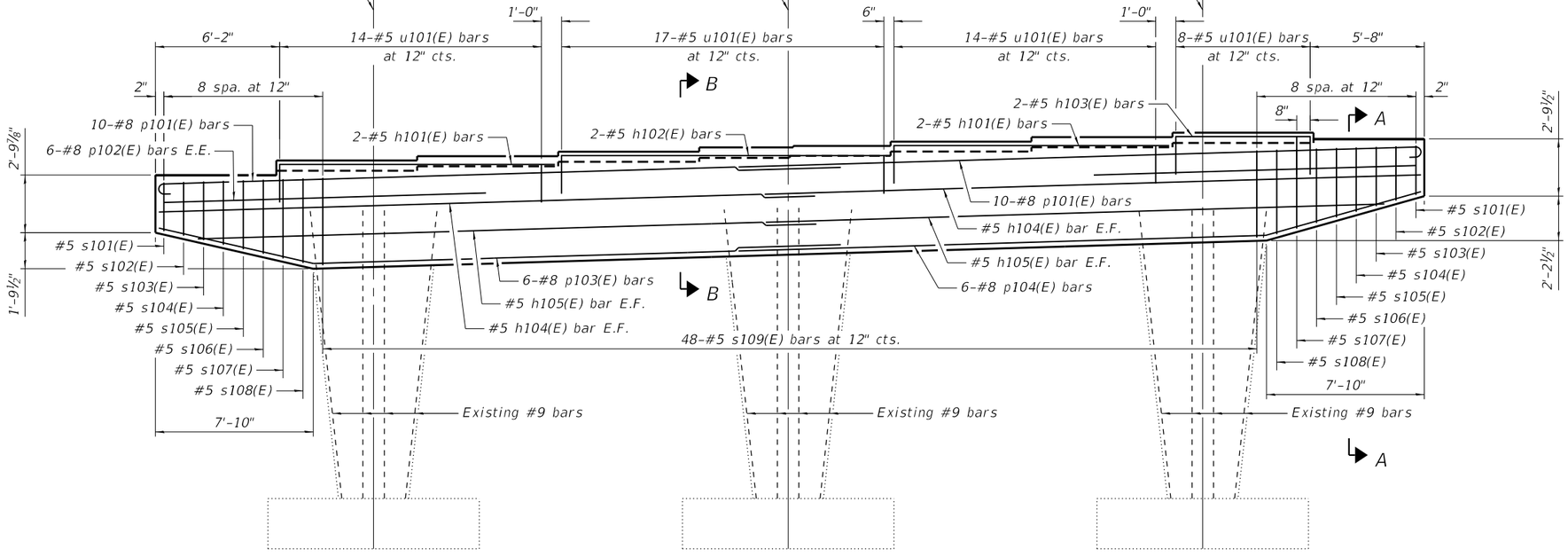


PIER 1 PLAN



PIER 1 END ELEVATION

(Looking North)



PIER 1 ELEVATION

(Looking East)

Min. Bar Lap

#5 bar = 5'-4"
#8 bar = 8'-2"

Notes:

Existing reinforcement extending into concrete removal shall be cleaned, straightened and incorporated into the new concrete. Cost included with Concrete Removal.

See sheet 10 of 15 for Sections A-A and B-B.

Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.

E.F. denotes "Each Face."

E.E. denotes "Each End."

See sheet 10 of 15 for Anchor Bolt Layouts.

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Professional Engineering Group 20-5000586

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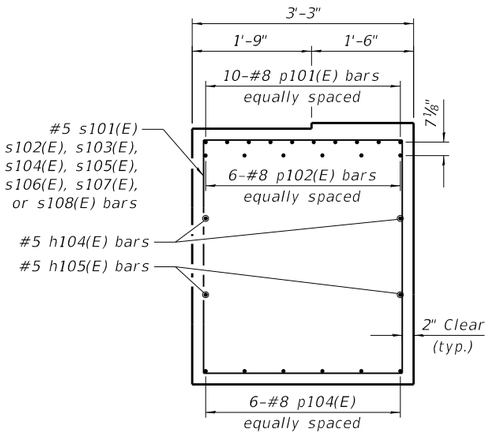
	CHECKED - BB	REVISED -	
PLOT SCALE =	DRAWN - MC	REVISED -	
PLOT DATE =	CHECKED - BB	REVISED -	

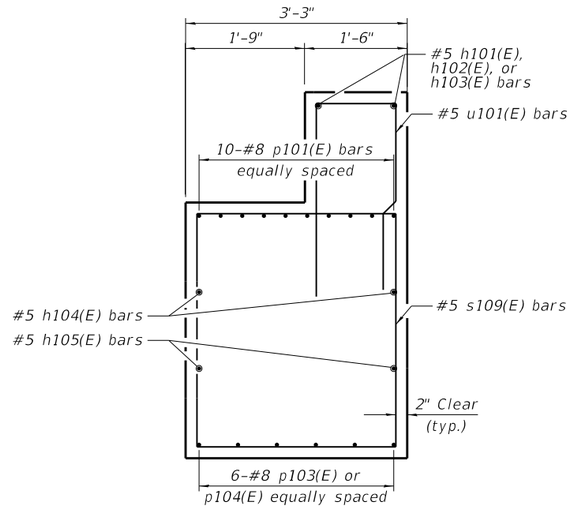
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 090-0046
SHEET 9 OF 15 SHEETS

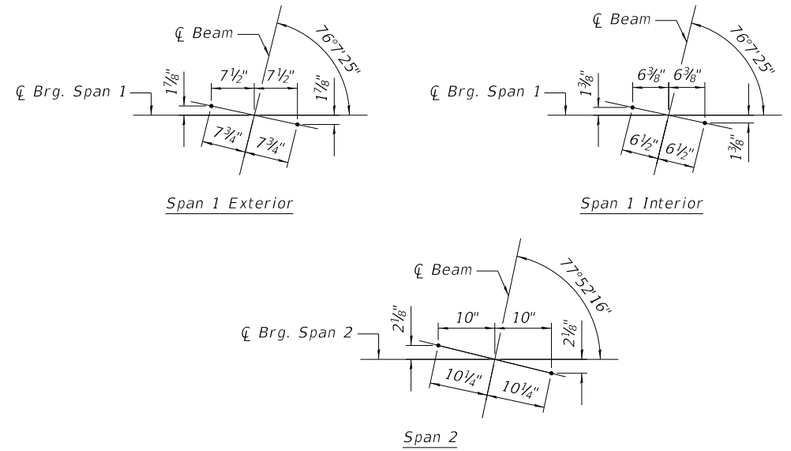
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	40
		CONTRACT NO. 68D59		
		ILLINOIS	FED. AID PROJECT	



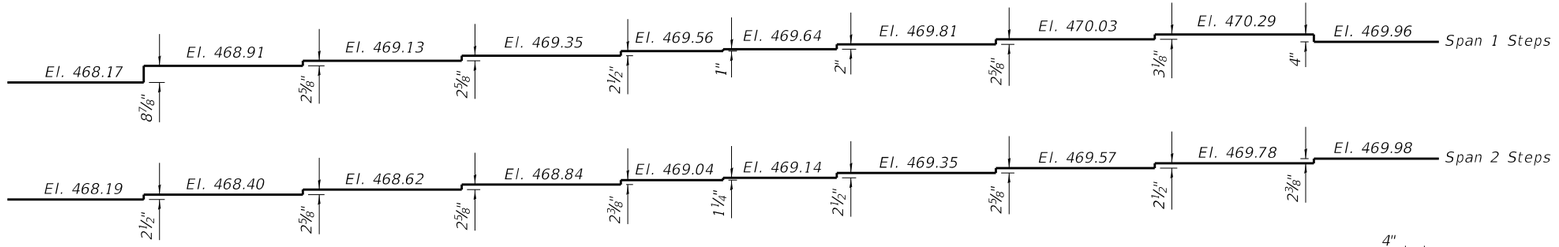
SECTION A-A



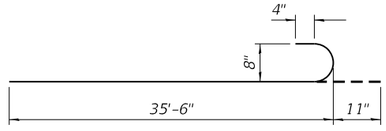
SECTION B-B



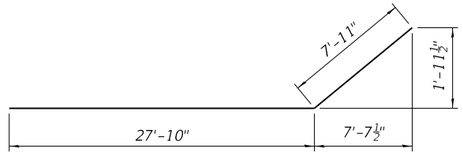
ANCHOR BOLT LAYOUT



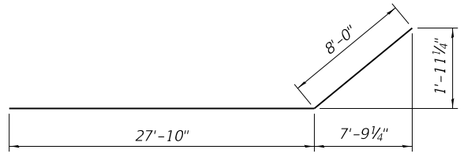
PIER 1 DETAIL OF STEPS



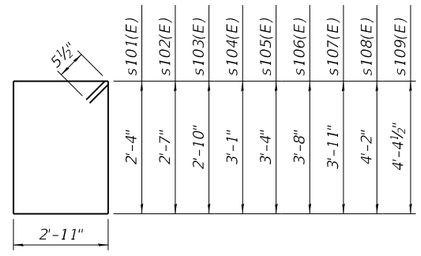
BAR p101(E)



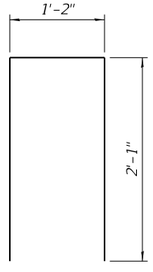
BAR p103(E)



BAR p104(E)



s(E) Bars



BAR u101(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h101(E)	4	#5	13'-8"	
h102(E)	2	#5	16'-2"	
h103(E)	2	#5	6'-8"	
h104(E)	4	#5	34'-1"	
h105(E)	4	#5	32'-2"	
p101(E)	20	#8	36'-5"	
p102(E)	12	#8	16'-0"	
p103(E)	6	#8	35'-9"	
p104(E)	6	#8	35'-10"	
s101(E)	2	#5	11'-5"	
s102(E)	2	#5	11'-11"	
s103(E)	2	#5	12'-5"	
s104(E)	2	#5	12'-11"	
s105(E)	2	#5	13'-5"	
s106(E)	2	#5	14'-1"	
s107(E)	2	#5	14'-7"	
s108(E)	2	#5	15'-1"	
s109(E)	48	#5	15'-6"	
u101(E)	53	#5	5'-4"	
Concrete Structures			Cu. Yd.	36.3
Reinforcement Bars (Epoxy Coated)			Pound	5280

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Illinois Professional Design Firm 184.005733
Professional Engineering Group 20-5000586

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	CHECKED - BB	REVISED -	
PLOT SCALE =	DRAWN - MC	REVISED -	
PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 1 DETAILS
STRUCTURE NO. 090-0046
SHEET 10 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR:12[(HVB,HB)BR]BR	TAZEWELL	61	41
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADD\CADD Sheets\090-0046090046-68D59-10_Pier 1 Details_2.dgn

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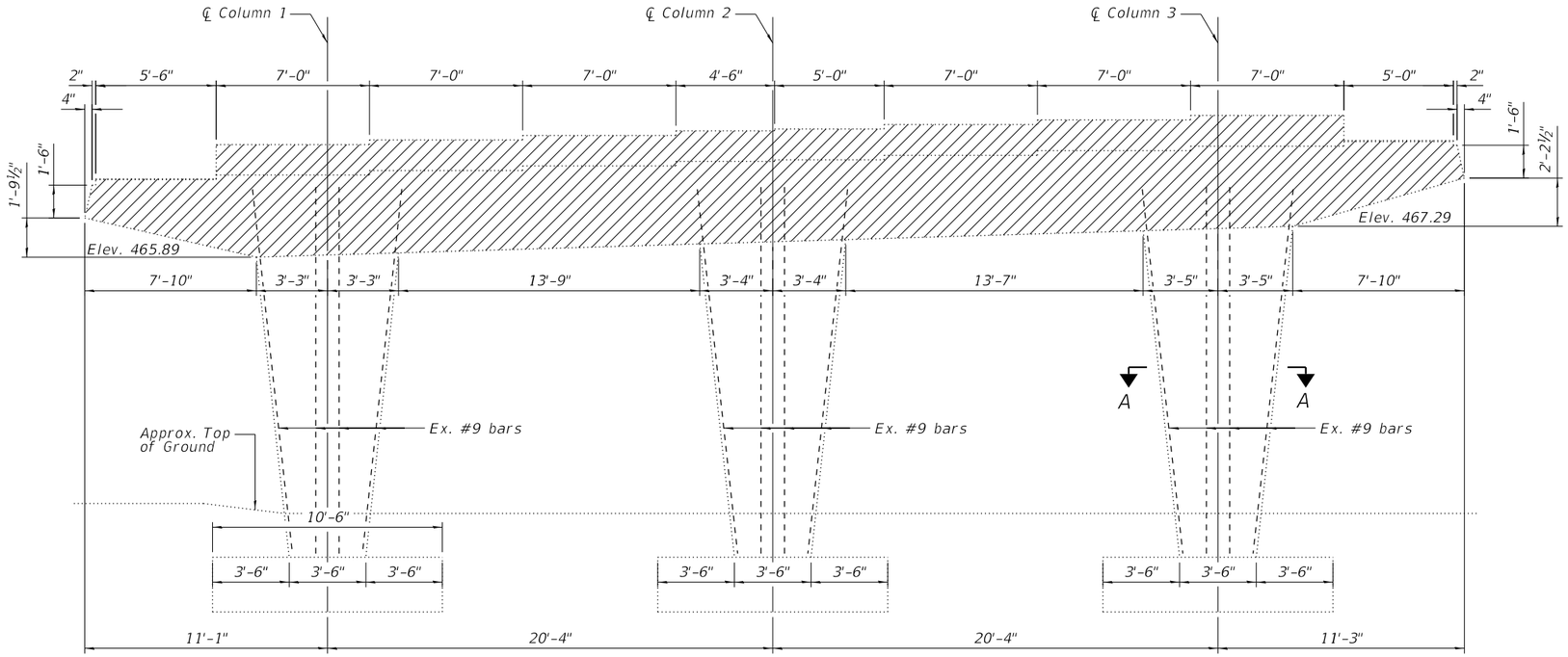
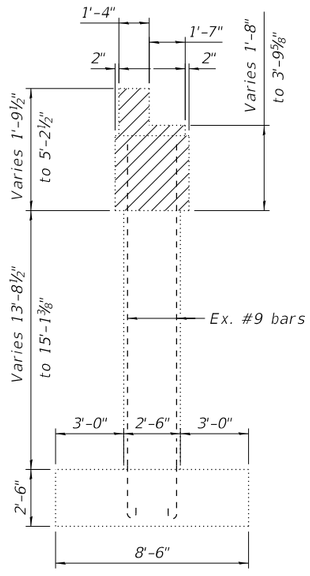


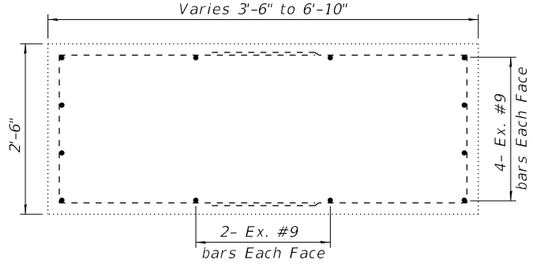
PIER 2 ELEVATION – REMOVAL

(Looking East)



PIER 2 END VIEW

(Looking South)



SECTION A-A

▨ – Indicates Limits of Concrete Removal

Notes:

Existing reinforcing extending from existing columns to be incorporated into new construction shall be cleaned and straightened. Cost included with Concrete Removal.

Existing elevations and dimensions shown are taken from the 1957 bridge plans. Contractor shall field verify all elevations and dimensions shown.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Concrete Removal	CU. YD.	29.7

Kaskaskia Engineering Group, LLC
PROFESSIONAL REGISTRATIONS: Illinois Professional Design Firm; Professional Engineering Group
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200 E. Main St., Suite 300, Belleville, Illinois 62220
618.233.5077 phone; 618.233.5977 fax; www.kaskaskiaeng.com

USER NAME =		DESIGNED - MC	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	PIER 2 CONCRETE REMOVAL DETAILS STRUCTURE NO. 090-0046
		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - MC	REVISED -		
PLOT DATE =		CHECKED - BB	REVISED -		SHEET 11 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	42
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADD\CADD Sheets\090-0046\090046-68D59-11_Pier 2 Concrete Removal Details.dgn

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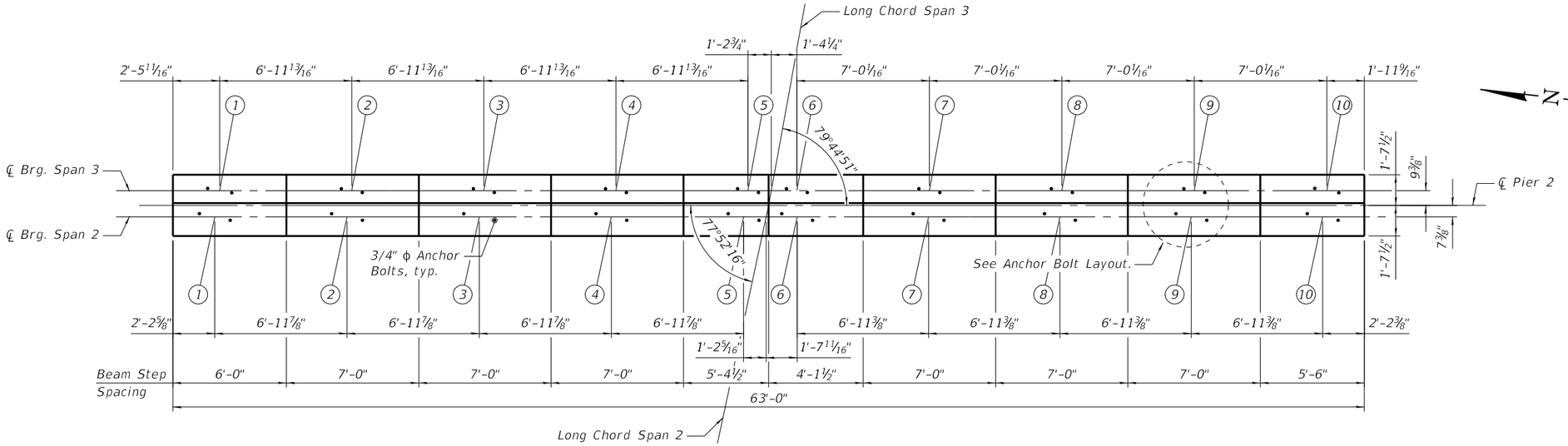
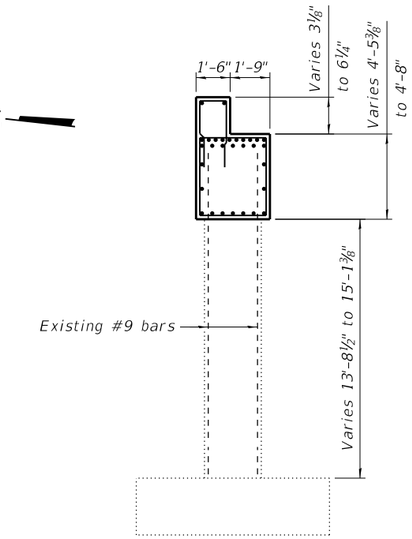
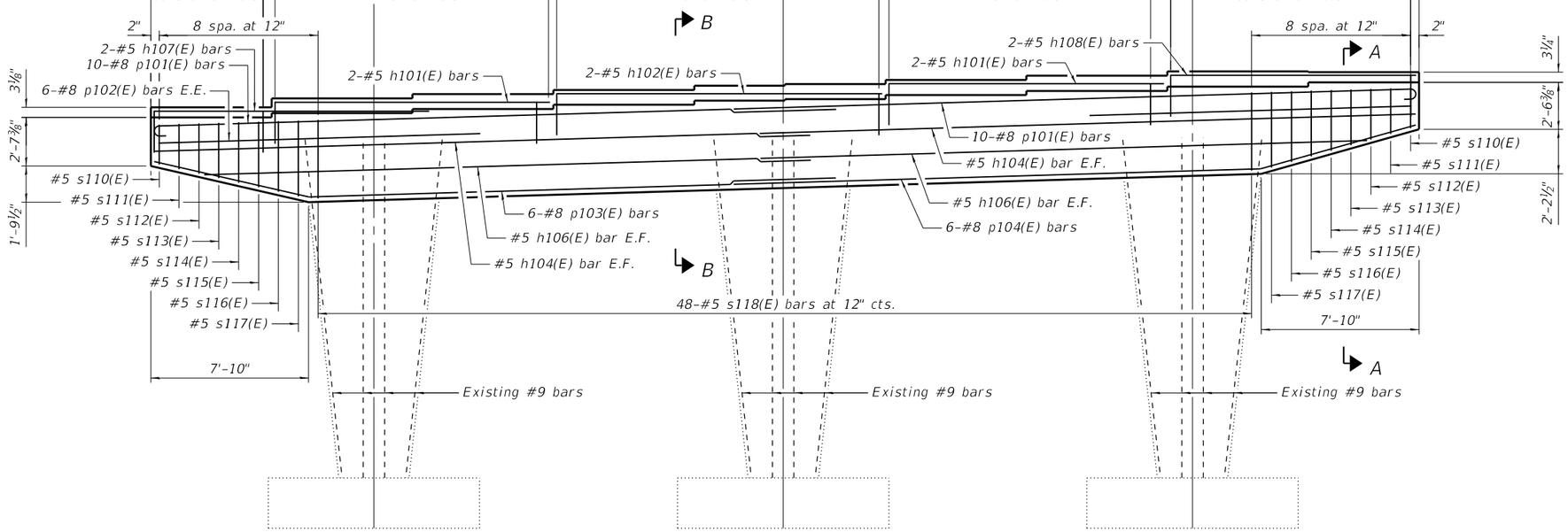


PIER 2 PLAN



PIER 2 END ELEVATION

(Looking South)



PIER 2 ELEVATION

(Looking East)

Notes:

Existing reinforcement extending into concrete removal shall be cleaned, straightened and incorporated into the new concrete. Cost included with Concrete Removal

See sheet 13 of 15 for Sections A-A and B-B.

Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.

E.F. denotes "Each Face."

E.E. denotes "Each End."

See sheet 13 of 15 for Anchor Bolt Layout.

Minimum Bar Lap

#5 bar = 5'-4"

#8 bar = 8'-2"

Kaskaskia Engineering Group, LLC
PROFESSIONAL REGISTRATIONS
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618.233.5977 fax
www.kaskaskiaeng.com

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		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - MC	REVISED -		
PLOT DATE =		CHECKED - BB	REVISED -		

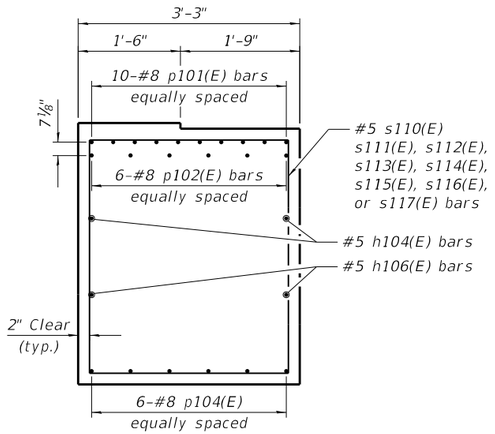
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 DETAILS
STRUCTURE NO. 090-0046
SHEET 12 OF 15 SHEETS

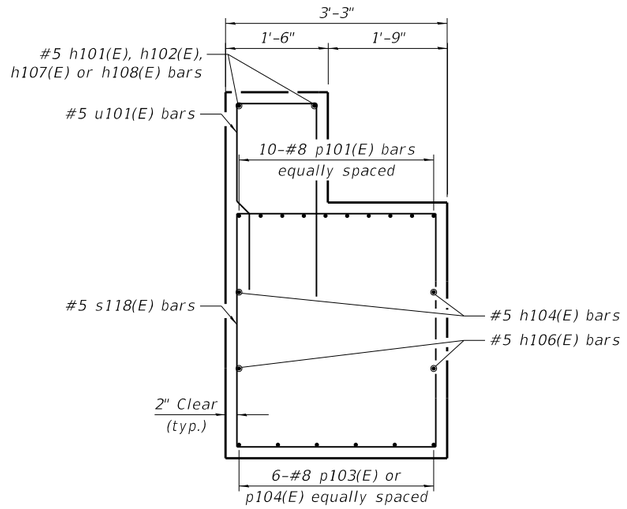
F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	43
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADD\CADD Sheets\090-0046\090046-68D59-12_Pier 2 Details_1.dgn

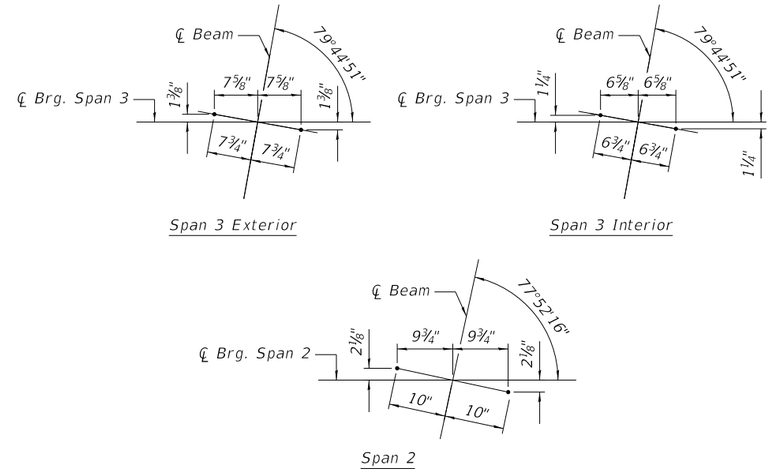
11/27/2018 11:07:33 AM



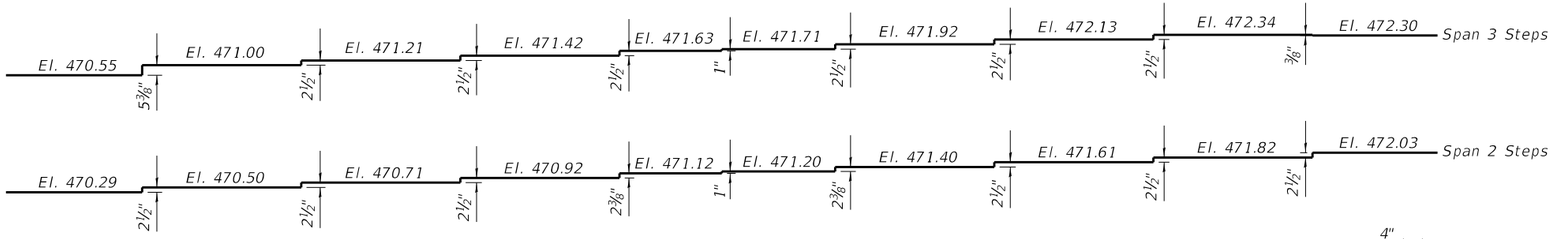
SECTION A-A



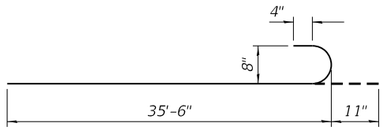
SECTION B-B



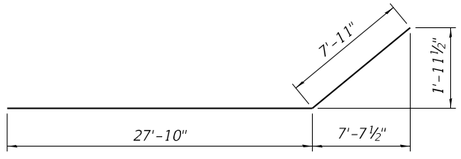
ANCHOR BOLT LAYOUT



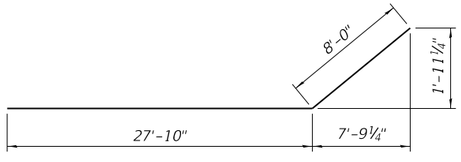
PIER 2 DETAIL OF STEPS



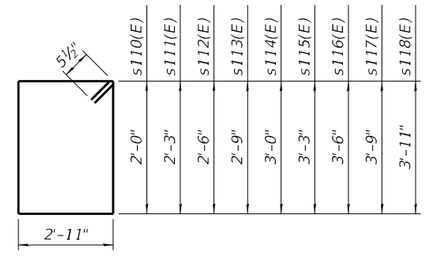
BAR p101(E)



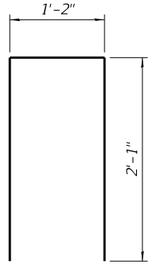
BAR p103(E)



BAR p104(E)



s(E) BARS



BAR u101(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h101(E)	4	#5	13'-8"	
h102(E)	2	#5	16'-2"	
h104(E)	4	#5	34'-1"	
h106(E)	4	#5	32'-2"	
h107(E)	2	#5	5'-8"	
h108(E)	2	#5	12'-2"	
p101(E)	20	#8	36'-5"	
p102(E)	12	#8	16'-0"	
p103(E)	6	#8	35'-9"	
p104(E)	6	#8	35'-10"	
s110(E)	2	#5	10'-9"	
s111(E)	2	#5	11'-3"	
s112(E)	2	#5	11'-9"	
s113(E)	2	#5	12'-3"	
s114(E)	2	#5	12'-9"	
s115(E)	2	#5	13'-3"	
s116(E)	2	#5	13'-9"	
s117(E)	2	#5	14'-3"	
s118(E)	48	#5	14'-7"	
u101(E)	64	#5	5'-4"	
Concrete Structures			Cu. Yd.	33.9
Reinforcement Bars (Epoxy Coated)			Pound	5310

Notes:

Existing reinforcement extending into concrete removal shall be cleaned, straightened and incorporated into the new concrete. Cost included with Concrete Removal.

Space reinforcement in cap to miss anchor bolts. Pour steps monolithically with cap.

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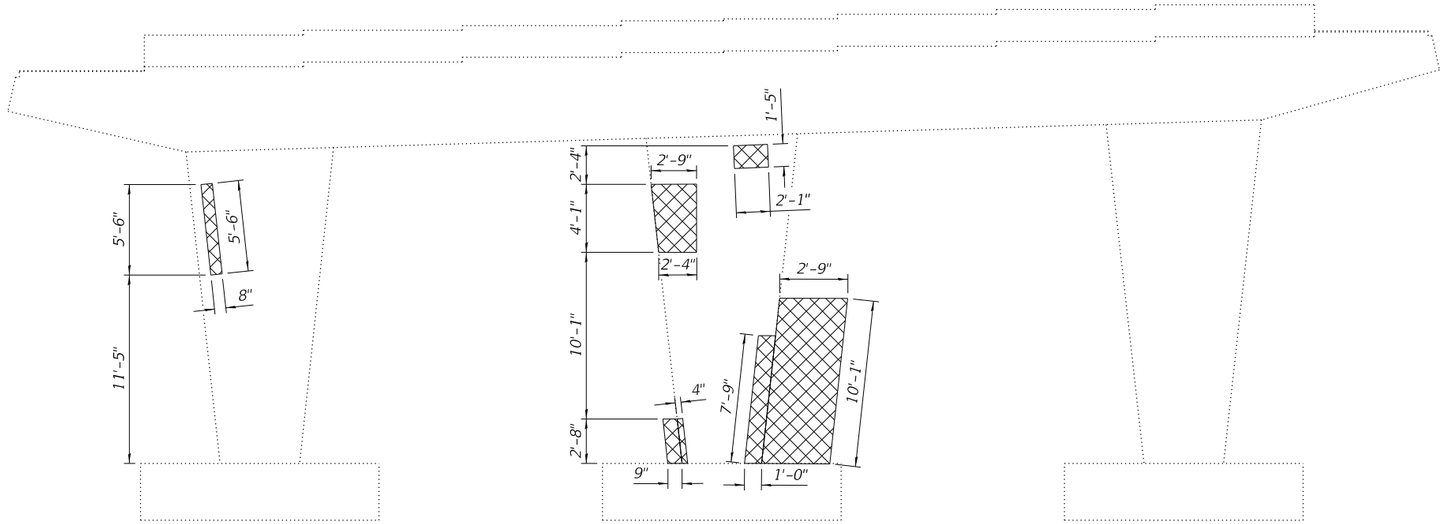
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

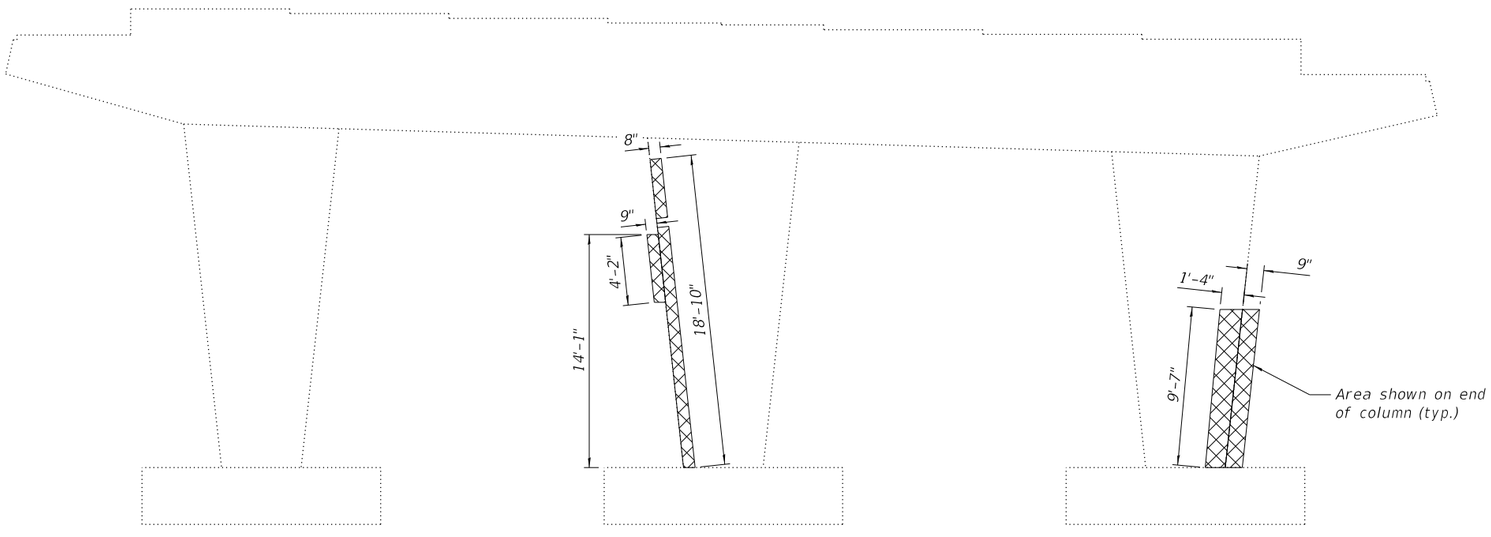
PIER 2 DETAILS
STRUCTURE NO. 090-0046
SHEET 13 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR:12[(HVB,HB)BR]BR	TAZEWELL	61	44
		CONTRACT NO. 68D59		
		ILLINOIS	FED. AID PROJECT	



PIER 2 ELEVATION – REPAIR

(Looking East)



PIER 2 ELEVATION – REPAIR

(Looking West)

– Indicates Structural Repair of Concrete (Depth equal to or less than 5")

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Structural Repair of Concrete (Depth Equal to or Less than 5")	SQ. FT	91.0

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIER 2 CONCRETE REPAIR DETAILS
STRUCTURE NO. 090-0046

SHEET 14 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	45
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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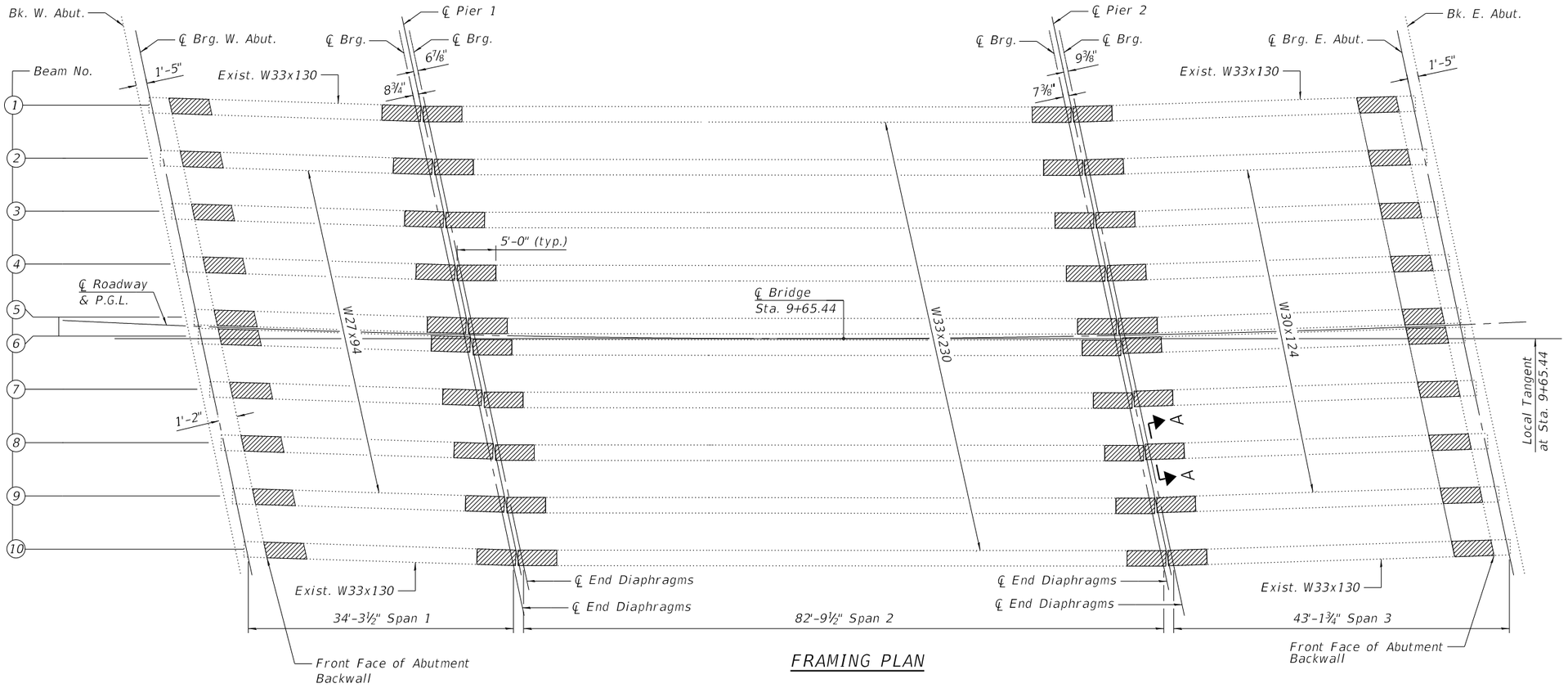
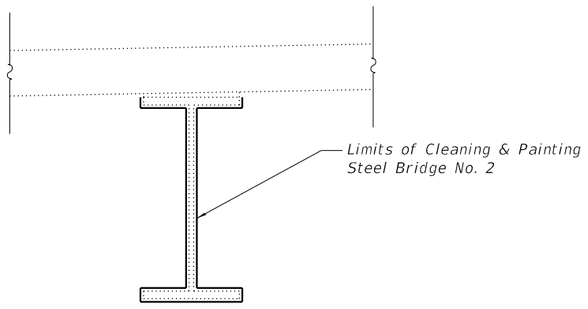


FRAMING PLAN



SECTION A-A

▨ - Indicates limits of Cleaning & Painting Steel Bridge No. 2.

BILL OF MATERIAL

ITEM	UNIT	QUANTITY
Cleaning & Painting Steel Bridge No. 2	L. SUM	1

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

EXISTING STEEL CLEANING & PAINTING
STRUCTURE NO. 090-0046

SHEET 15 OF 15 SHEETS

F.A.P. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
404	(50B-4)BR;12[(HVB,HB)BR]BR	TAZEWELL	61	46
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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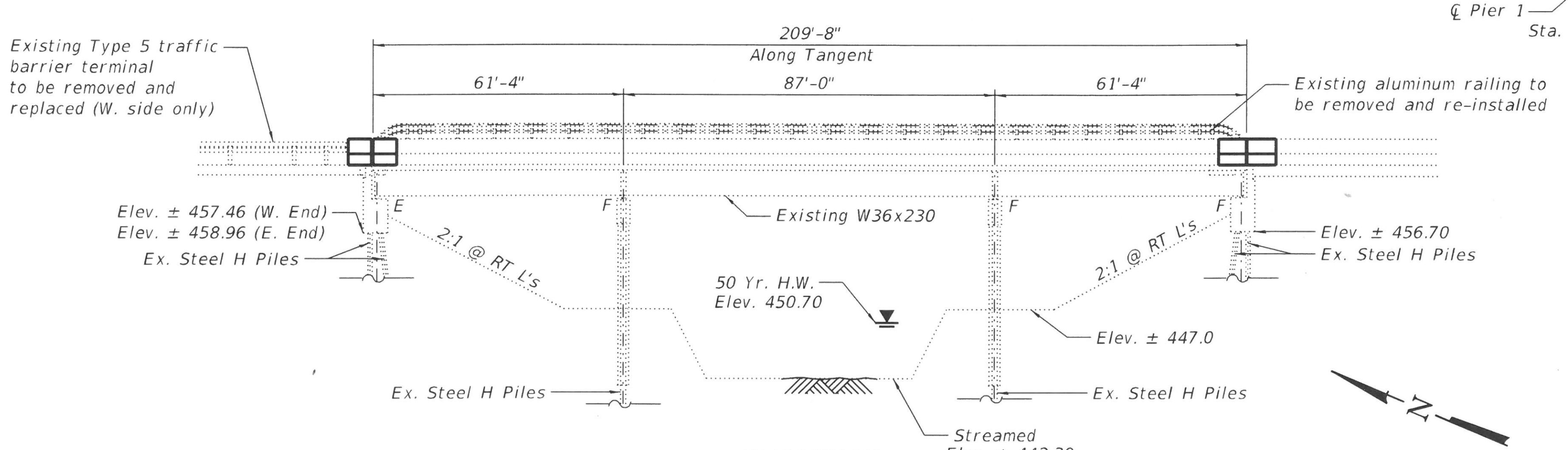
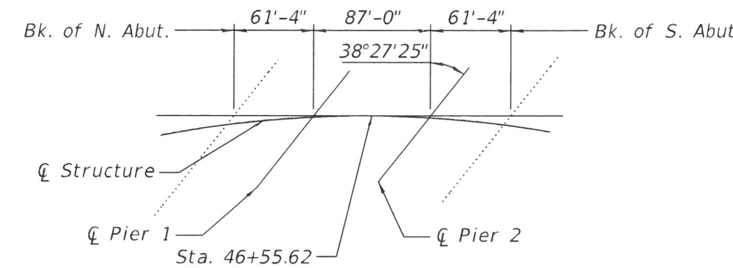
Bench Mark: Chiseled cross on guard rail bolt. Station 13+35 ± 45-ft right along Existing F.A.U. Rte. 6712 centerline. Elevation 484.47

Existing Structure: SN 090-0120 originally built in 1993 as F.A.U. 6707 Section (50B-4, 50-4) as a three span steel I-beam bridge having spans of 61'-4", 87'-0", an 61'-4" with a back to back abutment length of 209'-8", measured along the tangent to the horizontal curved roadway. The bridge is skewed 38°-27'-25", left advance. The out-to-out width varies from 121'-7⅞" at the north abutment to 116'-5" at the south abutment. There is a 1'-0" wide parapet with aluminum railing and a 5'-0" sidewalk on the west side of the bridge. There is a 1'-7" wide parapet on the east side of the bridge. The bridge is supported by reinforced concrete pile supported abutments and solid wall piers.

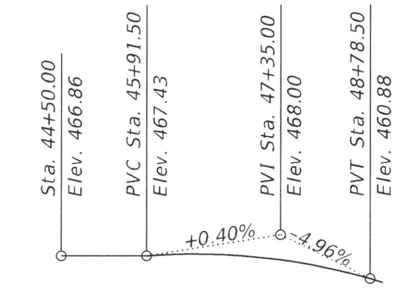
Salvage: The ends of the aluminum railings shall be removed and reinstalled.



ELEVATION

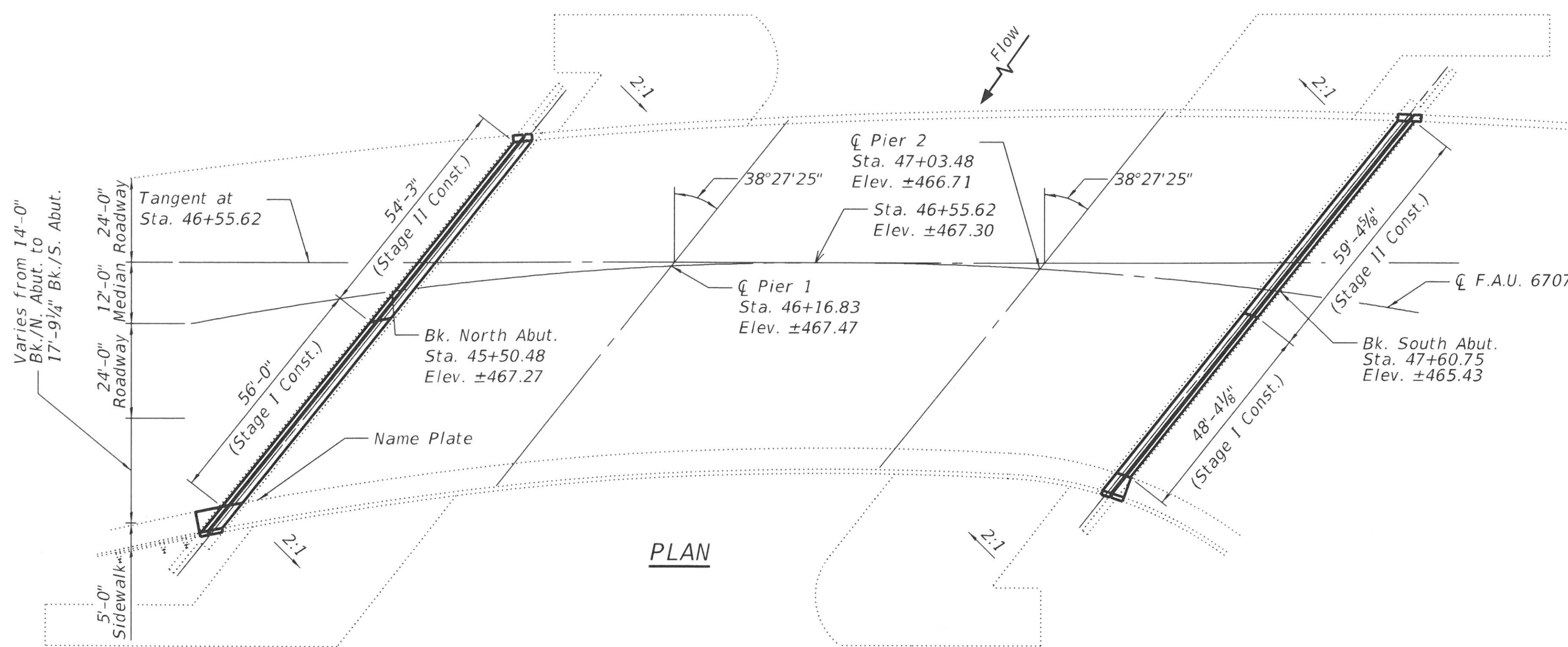


Offset Sketch



Profile Grade

Along ℄ F.A.U. Rt. 6707 (Washington St.)



PLAN

INDEX OF SHEETS

SCOPE OF WORK

To be completed under stage construction.

1. Replace joints at both abutments.
2. Clean and paint structural steel at designated locations.

DESIGN STRESSES

Existing Structure

f'c = 3,500 psi
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M183 Grade 36)

New Construction

f'c = 4,000 psi (Superstructure)
fy = 60,000 psi (Reinforcement)
fy = 36,000 psi (M270 Grade 36)

DESIGN SPECIFICATIONS

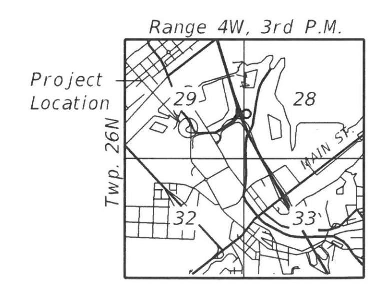
2002 AASHTO Standard Specifications for Highway Bridges
1983 AASHTO Guide Specifications for Seismic Design of Highway Bridges

LOADING HS20-44

Allow 25#/sq. ft. for future wearing surface.

SEISMIC DATA

Seismic Performance Category (SPC) = A



LOCATION SKETCH

GENERAL PLAN & ELEVATION
WASHINGTON STREET OVER FARM CREEK
F.A.U. 6707 - SEC. (50B-4)BR; 12[(HVB,HB)BR]BR
TAZEWELL COUNTY
STATION 46+55.62
STRUCTURE NO. 090-0120

BENJAMIN BOVEE
081-007230
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

SIGNED: Benjamin Bovee
DATE: 11/28/2018
ILLINOIS STRUCTURAL ENGINEER
NO. 081-007230
LICENSE EXPIRES: 11-30-2020

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CAD\CADD Sheets\090-0120\0900120-68D59-001-GPE.dgn

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN AND ELEVATION
STRUCTURE NO. 090-0120

SHEET 1 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	47
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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GENERAL NOTES

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete. As directed by the Engineer, existing construction accessories welded to the top flange of beams shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by qualified personnel approved by the Engineer. Any cracks that cannot be removed by grinding ¼ in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans are subject to nominal construction variations. The Contactor 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.

The existing structural steel does not contain lead paint.

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

Cleaning and painting of the existing structure steel shall be as specified in the special provisions for "Cleaning and Painting Existing Steel Structures". All beams, bearings and other structural steel within 5 ft. (measured along the beam) of either side of the deck joints shall be cleaned per Near White Blast Cleaning – SSPC-SP-10.

The designated areas cleaned per Near White Blast Cleaning – SSPC-SP-10 shall be painted according to the requirements of Paint System 1 – OZ/E/U.

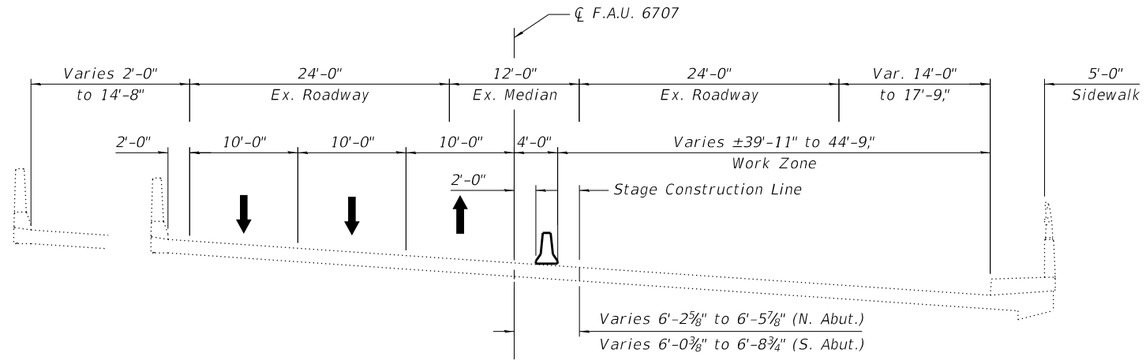
The color of the final finish coat for all steel surfaces shall be Blue, Munsell NO. 10B 3/6.

Containment and disposal of non-lead paint cleaning residues shall be as specified in special provisions for "Containment and Disposal of Non-Lead Paint Cleaning Residues". This work shall consist of the containment, collection, temporary storage, transportation and disposal of waste from non-lead paint removal projects. Waste requiring containment and control includes, but is not limited to, old paint, spent abrasives, corrosion products, mill scale, dirt, dust, grease, oil, and salts.

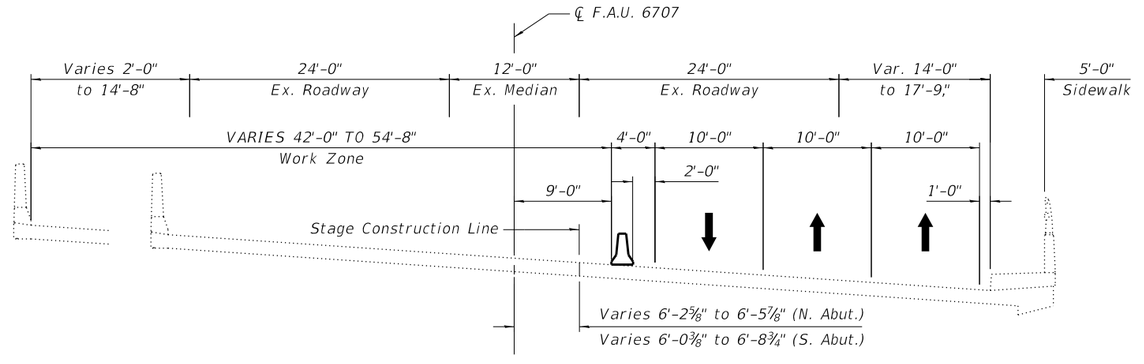
The painting Contractor shall be SSPC-QP1 certified for this project and shall maintain certification throughout the duration of the project.

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Concrete Removal	Cu. Yd.	29.8		29.8
Concrete Superstructure	Cu. Yd.	29.8		29.8
Reinforcement Bars, Epoxy Coated	Pound	3170	1530	4700
Preformed Joint Strip Seal	Foot	233		233
Cleaning and Painting Steel Bridge No. 3	L. Sum	1		1
Bar Splicers	Each	16	8	24
Containment and Disposal of non-lead Paint Cleaning Residues No. 3	L. Sum	1		1
Remove and Re-erect Traffic Barrier Terminals, Type 5	Each	1		1
Aluminum Railing, Type L	Foot	9		9



STAGE 1 – TYPICAL SECTION
(Looking Upstation)



STAGE – 2 TYPICAL SECTION
(Looking Upstation)

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PLOT DATE =		CHECKED - BB	REVISED -		SHEET 2 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	48
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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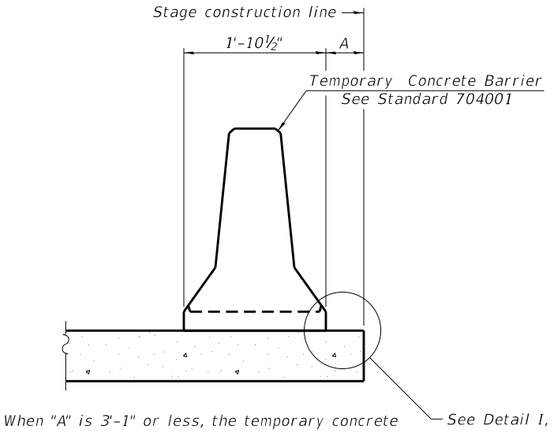
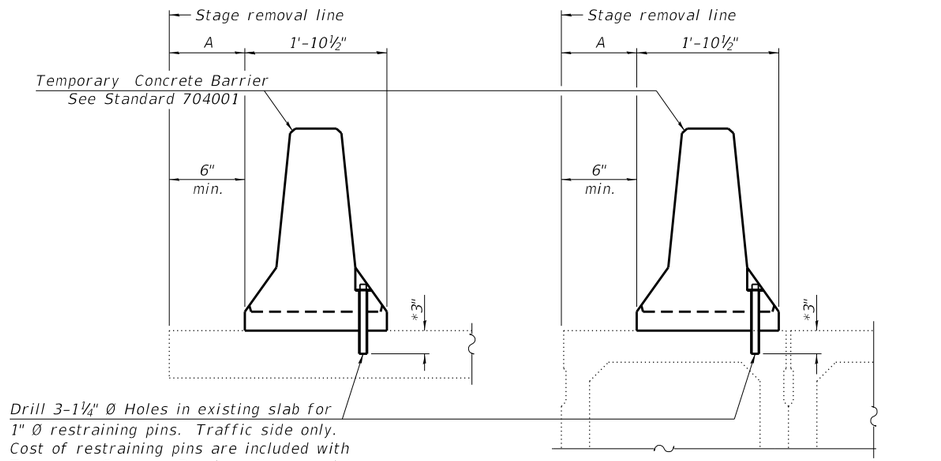


When "A" is 3'-1" or less, the temporary concrete barrier shall be restrained to the new slab according to Detail I, II or III. No restraint is required when "A" is greater than 3'-1".

NEW SLAB OR NEW DECK BEAM



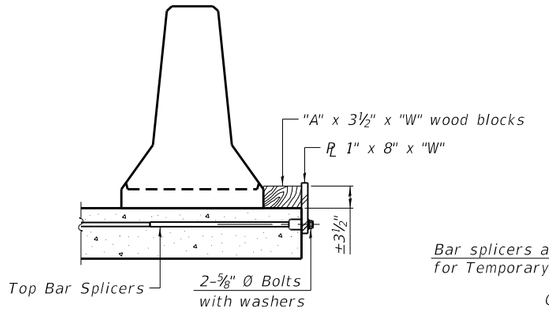
Drill 3-1¼" Ø Holes in existing slab for 1" Ø restraining pins. Traffic side only. Cost of restraining pins are included with Temporary Concrete Barrier. No restraint is required when "A" is greater than 3'-1".

EXISTING SLAB

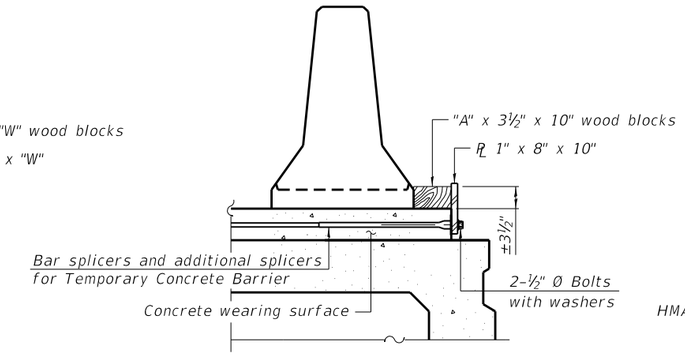
* When hot-mix asphalt wearng surface is present, embedment shall be 3" plus the wearing surface depth.

EXISTING DECK BEAM

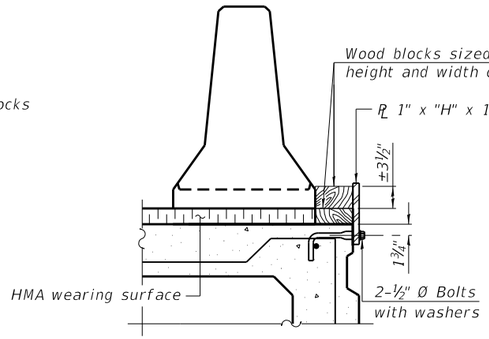
SECTIONS THRU SLAB OR DECK BEAM



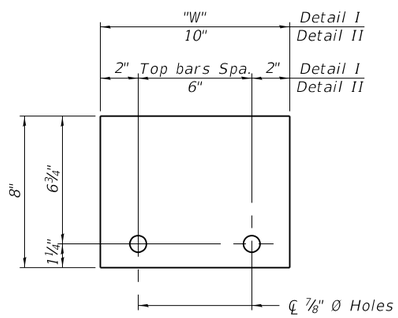
DETAIL I



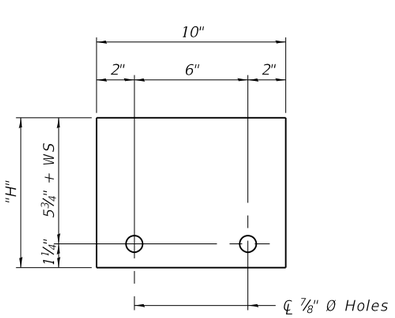
DETAIL II



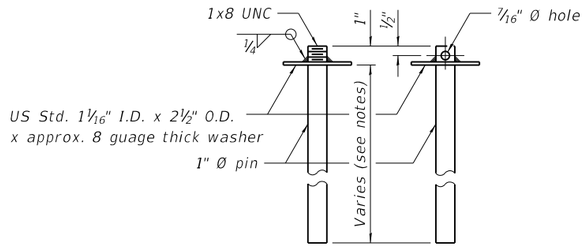
DETAIL III



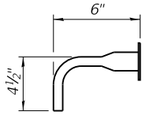
STEEL RETAINER ℄ 1" x 8" x "W"
(Detail I and II)



STEEL RETAINER ℄ 1" x "H" x 10"
(Detail III)



RESTRAINING PIN



BAR SPLICER FOR #4 BAR - DETAIL III

Notes:

Cost of retainer assembly is included with Temporary Concrete Barrier.

A retainer assembly shall be located at the approximate ℄ of each temporary concrete barrier.

The retainer plate shall not be removed until the concrete on the adjacent stage is ready to be poured. For Detail III applications the retainer plate shall not be removed until just prior to placing the adjacent beam.

When the 'A' dimension is less than 1½", the wood block shall be omitted and the barrier shall be placed in direct contact with the steel retainer plate. For deck beam applications the minimum required 'A' distance is 6" to accommodate the shear key clamping device.

Detail I - Installation for a new bridge deck or bridge slab.

Detail II - Installation for a new deck beam with an initial concrete wearing surface. Additional bar splicers shall be provided at 6'-0" centers and paired with the bar splicers of the concrete wearing surface reinforcement to accommodate the installation of the retainer assemblies. The cost of the additional bar splicers is included with the concrete wearing surface.

Detail III - Installation for a new deck beam with no initial wearing surface or with an initial hot-mix asphalt (HMA) wearing surface present. The deck beam directly beneath the temporary concrete barrier shall be fabricated with bar splicer inserts in the side of the beam, as detailed, to accommodate the installation of the retainer assemblies. A pair of bar splicers, 6" apart, shall be placed at 6'-0" centers along the length of the beam. The cost of the bar splicers is included with the deck beam.

R-27

8-11-2017

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LICENSE NO.

USER NAME =		DESIGNED - KS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CONCRETE BARRIER FOR STAGE CONSTRUCTION STRUCTURE NO. 090-0120
		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		
PLOT DATE =		CHECKED - BB	REVISED -		SHEET 3 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	49
		CONTRACT NO. 68D59		
		ILLINOIS	FED. AID PROJECT	

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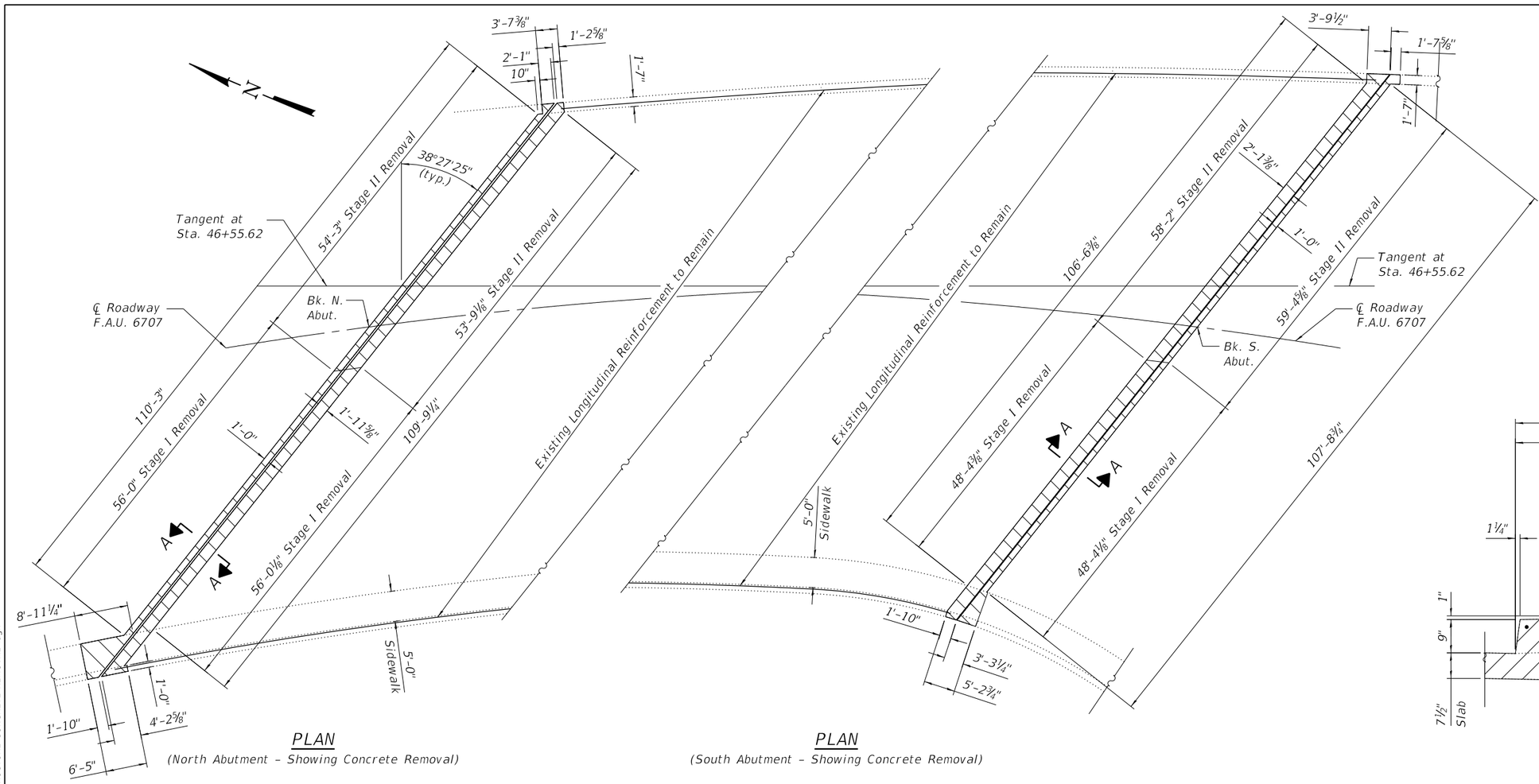
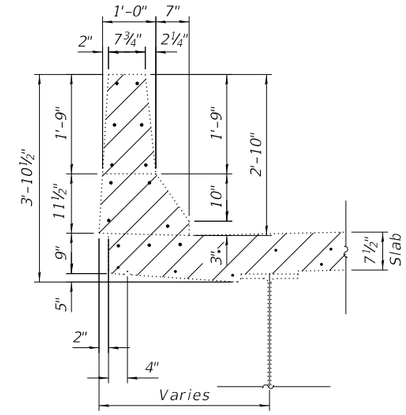
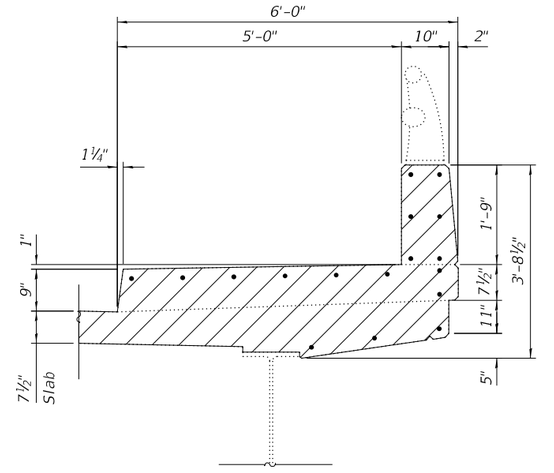


PLAN
(North Abutment – Showing Concrete Removal)

PLAN
(South Abutment – Showing Concrete Removal)



SECTION THRU PARAPET



SECTION THRU SIDEWALK

BILL OF MATERIAL

Item	Unit	Total
Concrete Removal	Cu. Yd.	17.7

Notes:

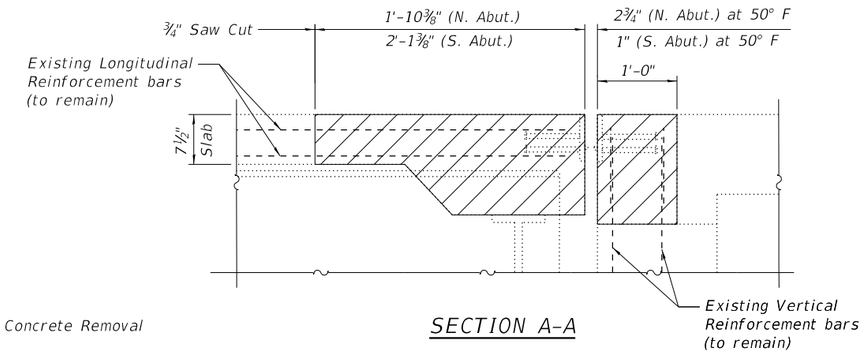
The Contractor shall use extreme care during concrete removal so as not to damage the existing steel beams.

Removal of existing expansion joint and associated material shall not be paid for separately, but shall be included in the cost of Concrete Removal.

Trim existing reinforcement to accommodate proposed expansion joint.

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

Stud shear connectors damaged during concrete removal operations shall be removed and replaced per Section 505 of the Standard Specifications. Cost included in Concrete Removal.



SECTION A–A

Indicates Concrete Removal

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Illinois Professional Design Firm 184.005733
Professional Engineering Group 20-5680586

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		CHECKED - BB	REVISED -		
PLOT SCALE =		DRAWN - KS	REVISED -		SHEET 4 OF 15 SHEETS
PLOT DATE =		CHECKED - BB	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12([HVB,HB)BR]BR	TAZEWELL	61	50
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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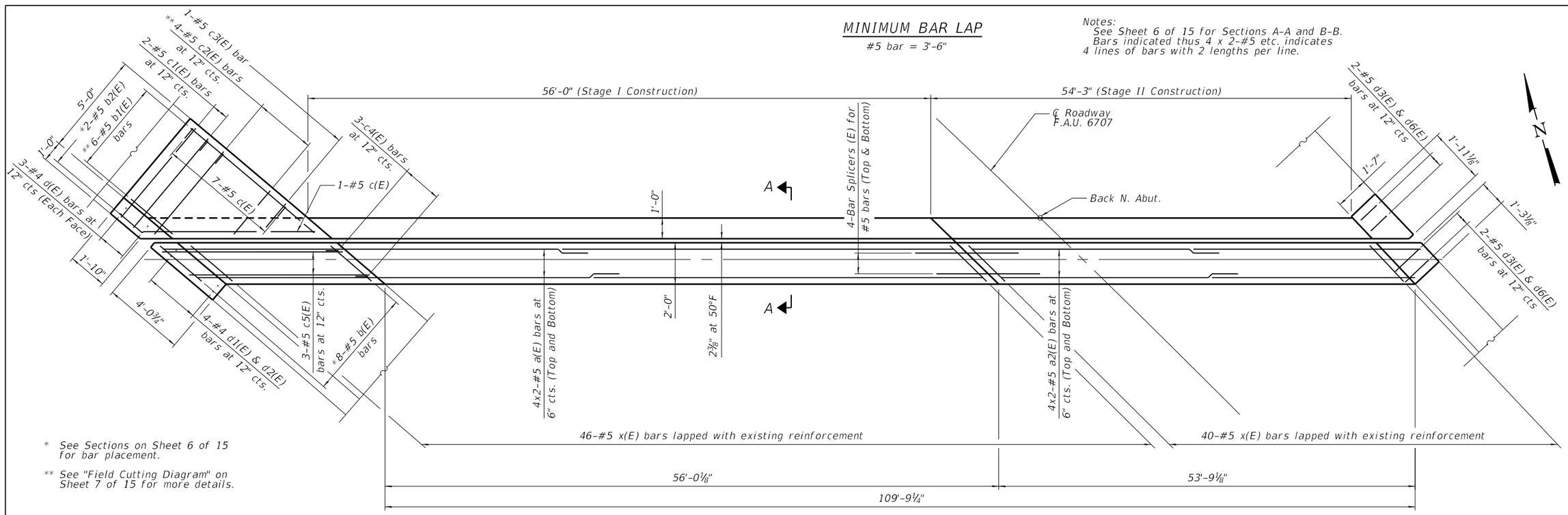
MINIMUM BAR LAP

#5 bar = 3'-6"

Notes:
See Sheet 6 of 15 for Sections A-A and B-B.
Bars indicated thus 4 x 2-#5 etc. indicates 4 lines of bars with 2 lengths per line.

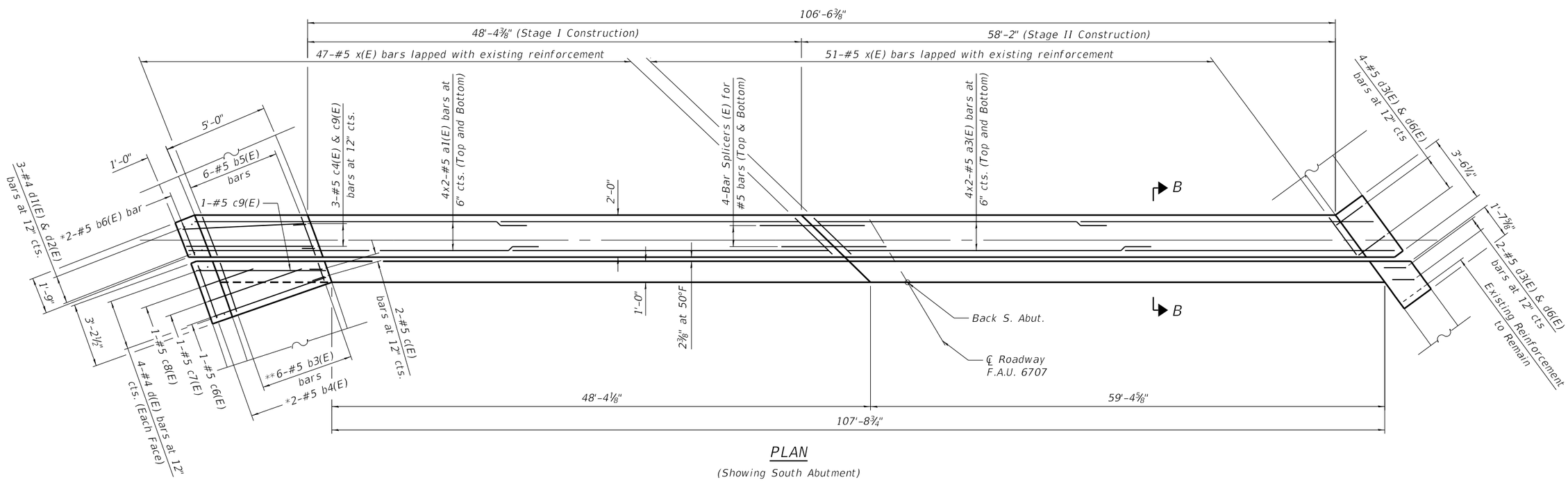


* See Sections on Sheet 6 of 15 for bar placement.

** See "Field Cutting Diagram" on Sheet 7 of 15 for more details.

PLAN

(Showing North Abutment)



PLAN

(Showing South Abutment)

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PLOT DATE =	CHECKED - BB	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 090-0120
SHEET 5 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12(HVB,HB)BR]BR	TAZEWELL	61	51
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

FILE NAME: P:\10-1063.08 SN 0046 0120 Repairs\10_CADCADD Sheets\090-0120\090120-68D59-005-SUPERSTRUCTURE.dgn

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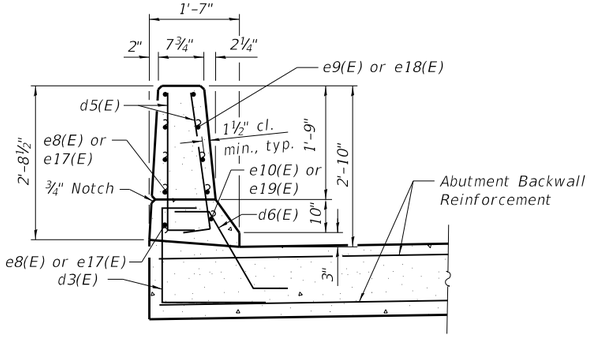
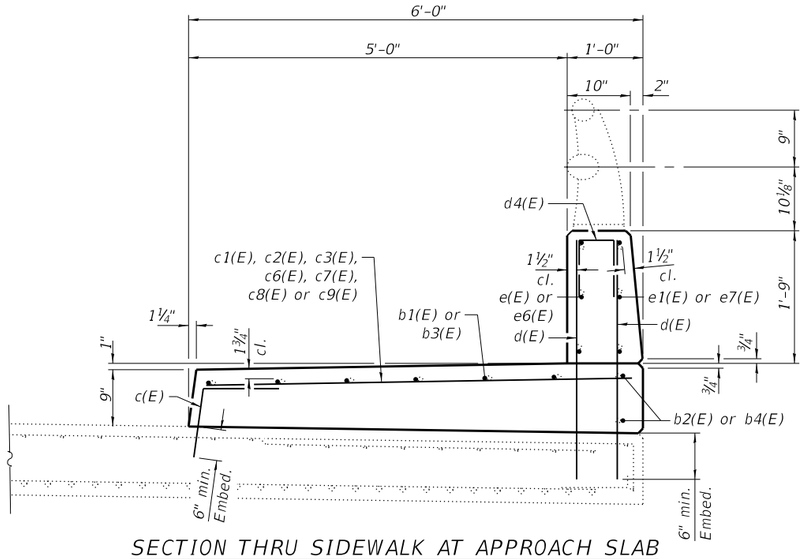
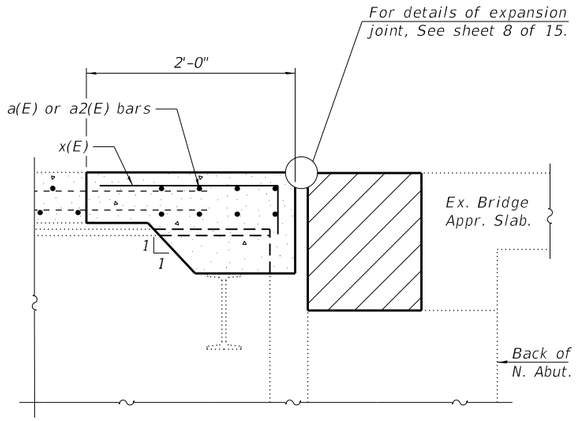


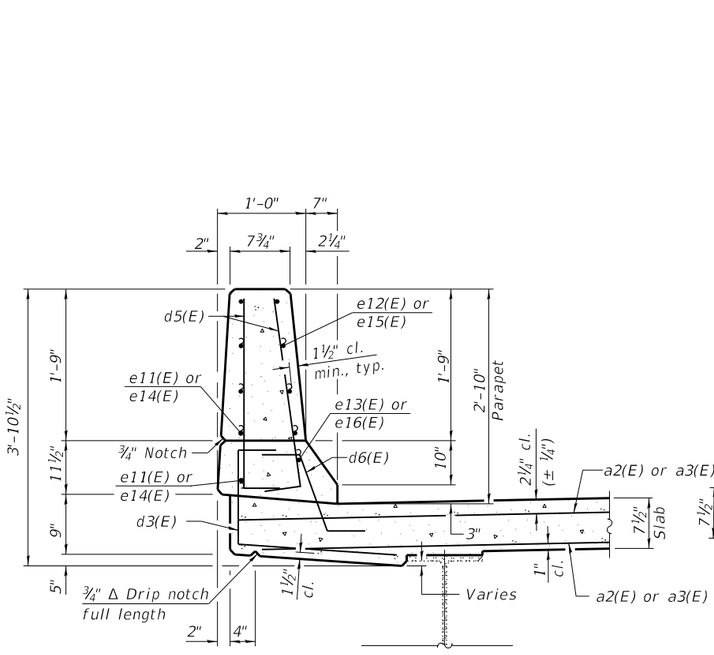
SECTION THRU PARAPET AT ABUTMENT BACKWALL



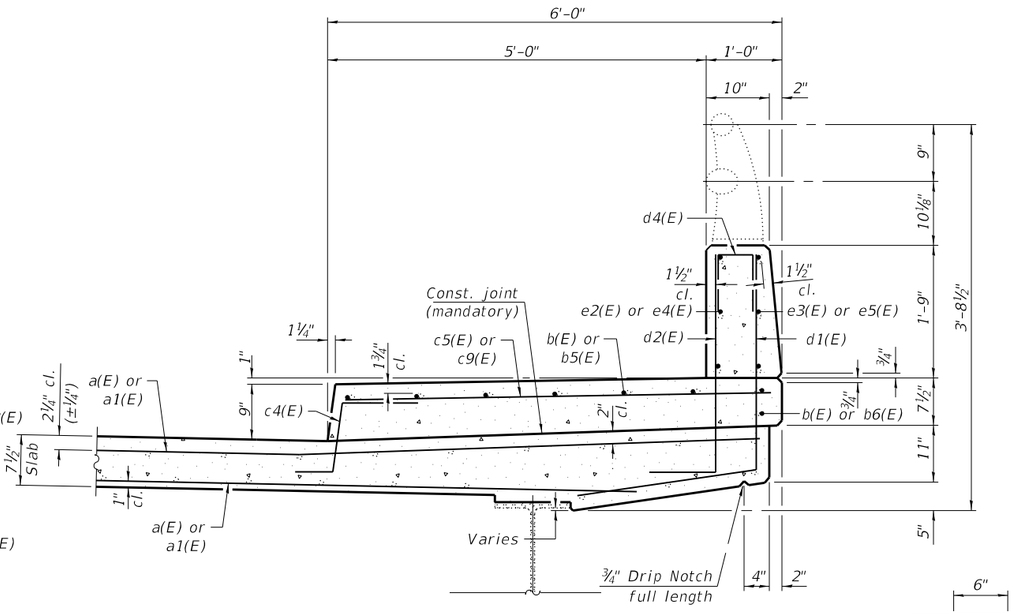
SECTION THRU SIDEWALK AT APPROACH SLAB



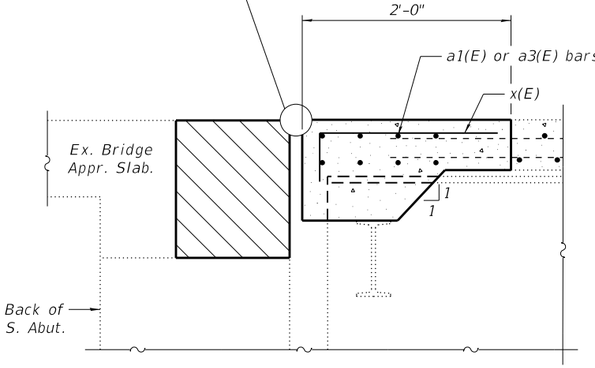
SECTION A-A



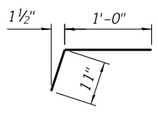
SECTION THRU PARAPET



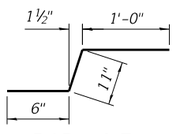
SECTION THRU SIDEWALK



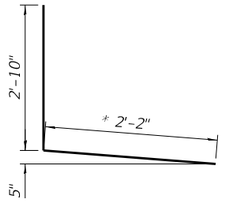
SECTION B-B



BAR c(E)

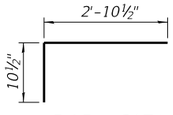


BAR c4(E)

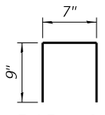


BAR d1(E)

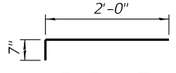
* Trim to fit in field



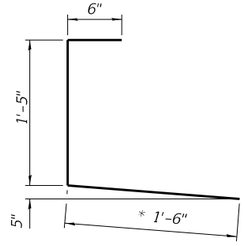
BAR d2(E)



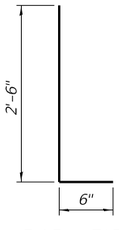
BAR d4(E)



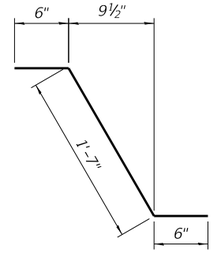
BAR x(E)



BAR d3(E)



BAR d5(E)



BAR d6(E)

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 090-0120
SHEET 6 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	52
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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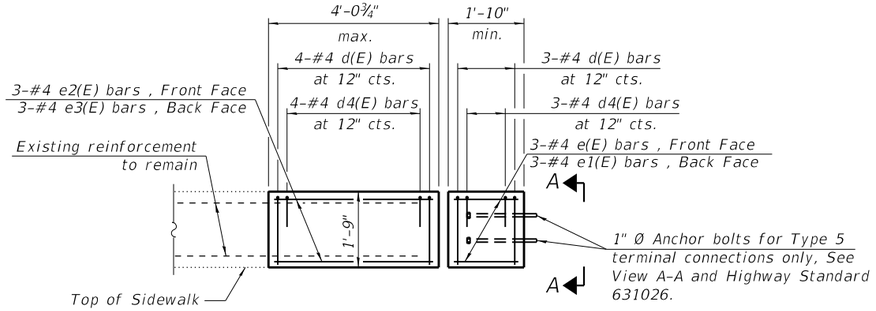
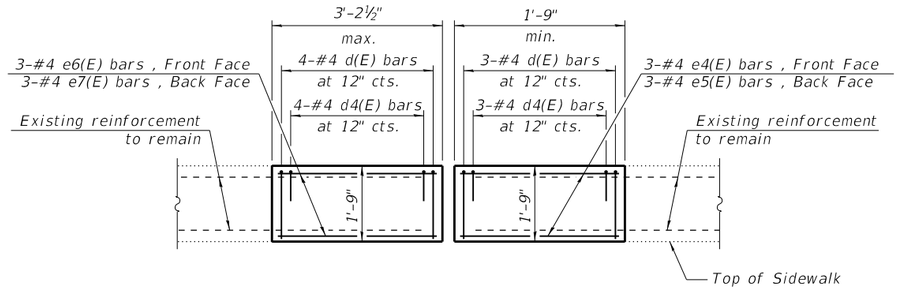


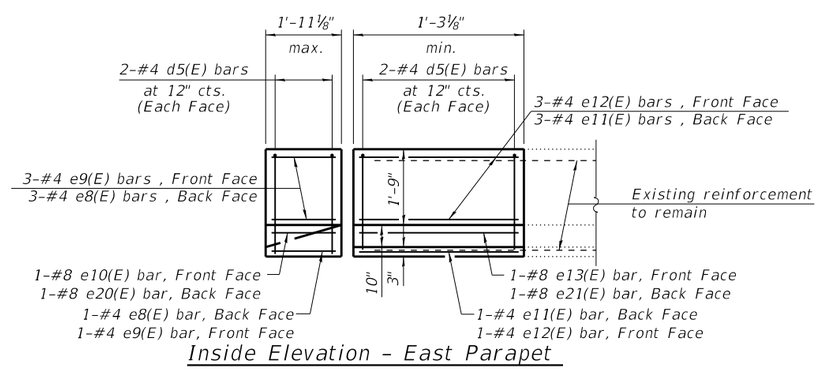
Inside Elevation – West Parapet

(North Abutment)



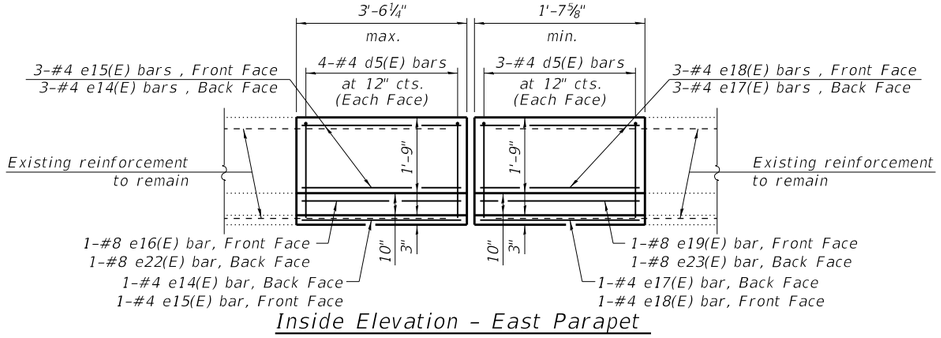
Inside Elevation – West Parapet

(South Abutment)



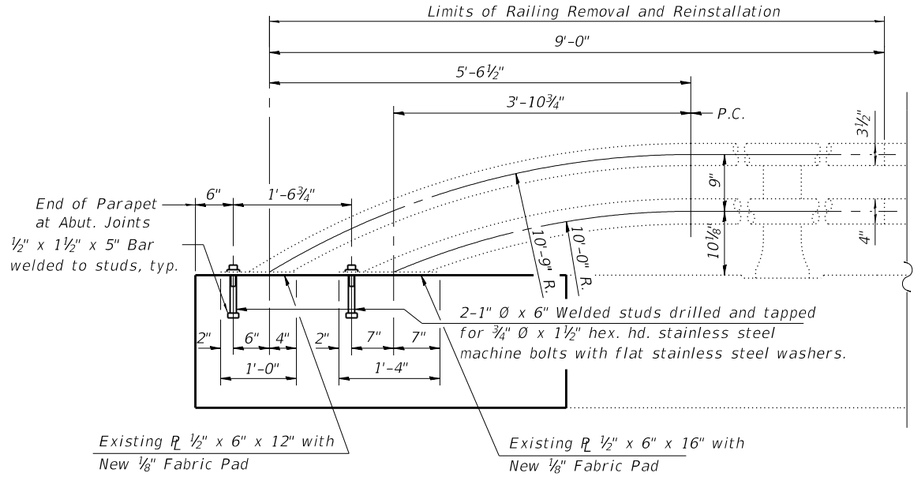
Inside Elevation – East Parapet

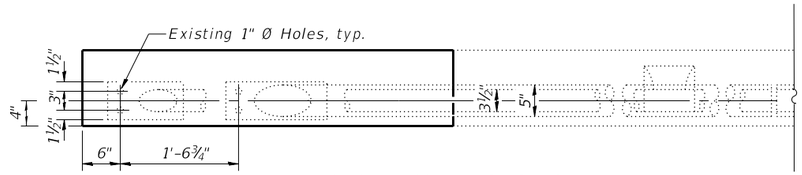
(North Abutment)



Inside Elevation – East Parapet

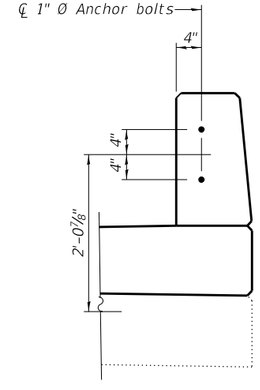
(South Abutment)



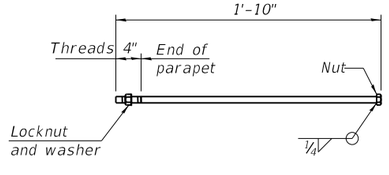


RAIL TERMINAL SECTION

Note: The end rail post shall be set back as required for the terminal rail section.

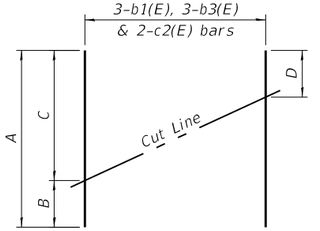


VIEW A-A



*1" Ø ANCHOR BOLT

(Anchor bolt assemblies shall be galvanized according to Article 1006.09 of the Standard Specifications)



FIELD CUTTING DIAGRAM

(b1(E), b3(E) and c2(E) bars)

Bar	A	B	C	D
b1(E)	11'-0"	2'-9"	8'-3"	6'-0"
b3(E)	3'-6"	1'-7"	1'-11"	2'-6¾"
c2(E)	8'-2"	2'-10"	5'-4"	4'-6"

Notes:
Length of parapet shown in Parapet Elevations is taken along the back face of parapet.
See sheet 6 of 15 for Bar Bend Details.

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a(E)	16	#5	34'-1"	
a1(E)	16	#5	29'-0"	
a2(E)	16	#5	29'-8"	
a3(E)	16	#5	32'-1"	
b(E)	8	#5	2'-6"	
b1(E)	3	#5	11'-0"	
b2(E)	2	#5	1'-8"	
b3(E)	3	#5	3'-6"	
b4(E)	2	#5	2'-10"	
b5(E)	6	#5	1'-9"	
b6(E)	2	#5	1'-5"	
c(E)	9	#5	1'-11"	
c1(E)	2	#5	5'-8"	
c2(E)	2	#5	8'-2"	
c3(E)	1	#5	2'-0"	
c4(E)	6	#5	2'-5"	
c5E)	3	#5	8'-9"	
c6(E)	1	#5	5'-10"	
c7(E)	1	#5	5'-5"	
c8(E)	1	#5	2'-6"	
c9(E)	4	#5	6'-0"	
d(E)	14	#4	2'-11"	
d1(E)	7	#4	5'-0"	
d2(E)	7	#6	3'-9"	
d3(E)	10	#5	3'-5"	
d4(E)	14	#4	2'-1"	
d5(E)	22	#5	3'-0"	
d6(E)	10	#5	2'-7"	

BILL OF MATERIAL CONT'D

Bar	No.	Size	Length	Shape
e(E)	3	#4	2'-6"	
e1(E)	3	#4	1'-8"	
e2(E)	3	#4	2'-11"	
e3(E)	3	#4	3'-9"	
e4(E)	3	#4	1'-9"	
e5(E)	3	#4	1'-5"	
e6(E)	3	#4	2'-7"	
e7(E)	3	#4	2'-10"	
e8(E)	4	#4	1'-7"	
e9(E)	4	#4	0'-5"	
e10(E)	1	#8	0'-5"	
e11(E)	4	#4	1'-0"	
e12(E)	4	#4	2'-3"	
e13(E)	1	#8	2'-3"	
e14(E)	4	#4	3'-0"	
e15(E)	4	#4	2'-3"	
e16(E)	1	#8	2'-3"	
e17(E)	4	#4	1'-4"	
e18(E)	4	#4	2'-3"	
e19(E)	1	#8	2'-3"	
e20(E)	1	#8	1'-7"	
e21(E)	1	#8	1'-0"	
e22(E)	1	#8	3'-0"	
e23(E)	1	#8	1'-4"	
x(E)	184	#5	2'-7"	
Concrete Superstructure		Cu. Yd.	17.7	
Reinforcement Bars, Epoxy Coated		Pound	3170	

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 090-0120
SHEET 7 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12([HVB,HB)BR]BR	TAZEWELL	61	53
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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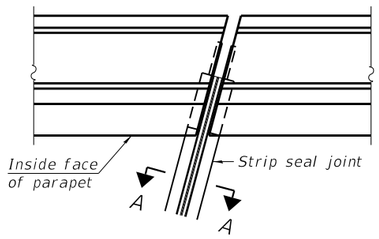
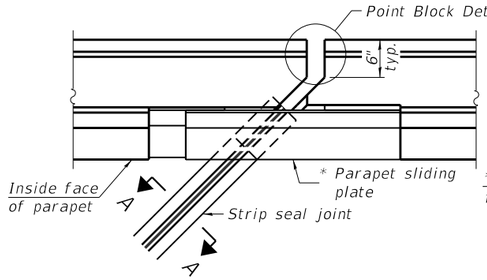
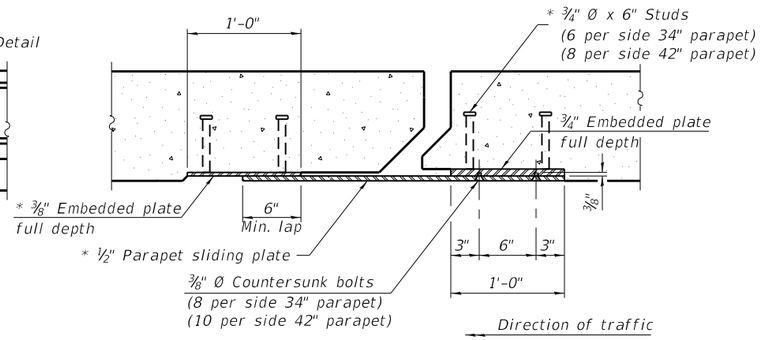


FOR SKEWS ≤ 30°

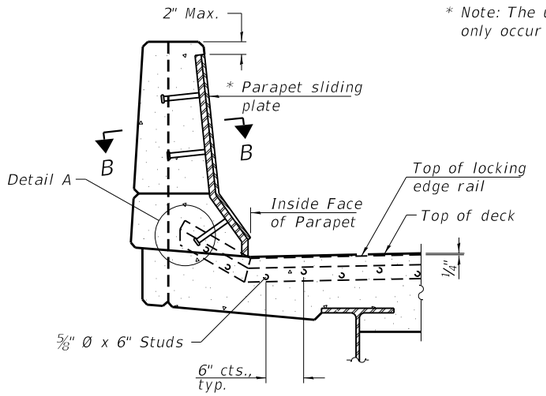


FOR SKEWS > 30°

PLAN AT PARAPET



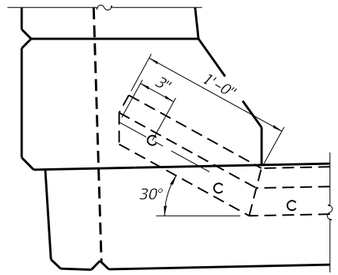
SECTION B-B



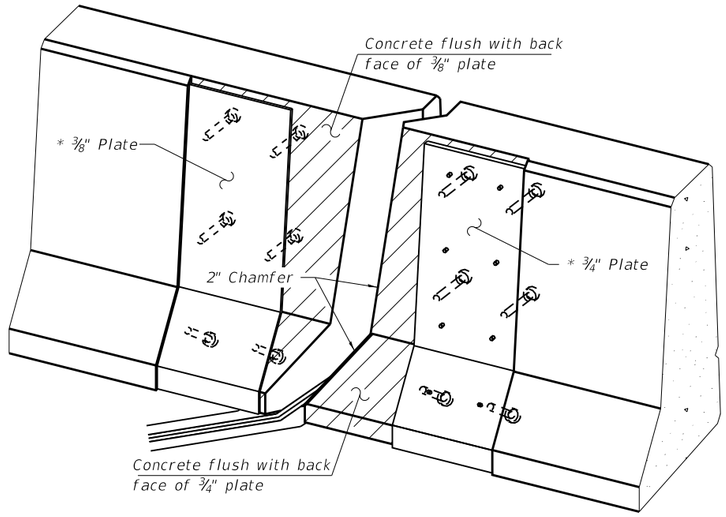
* Note: The use of the sliding plate shall only occur at the south abutment, east parapet.

ELEVATION AT PARAPET

(Skews > 30° shown. Skews ≤ 30° similar except as shown in plan view.)



DETAIL A



TRIMETRIC VIEW

(Showing embedded plates only)

Notes:

The strip seal shall be made continuous and shall have a minimum thickness of ¼". 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 4½" maximum depth provided the anchorage system is revised according to the manufacturer's recommendation.

The manufacturer's recommended installation methods shall be followed.

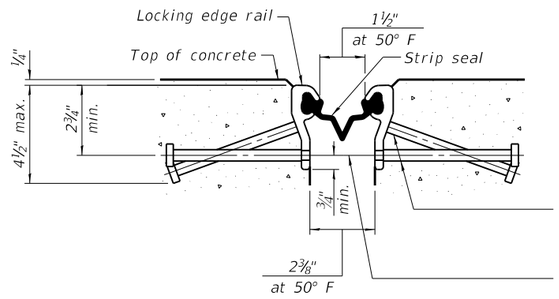
All steel components shall be galvanized after fabrication according to Article 520.03 of the Standard Specifications.

The maximum space between locking edge rail segments shall be 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.

The top surface of sidewalk sliding plates shall have a raised pattern according to ASTM A786.

Cost of sidewalk sliding plates, embedded plates, anchorage studs, and expansion anchors included with Preformed 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.



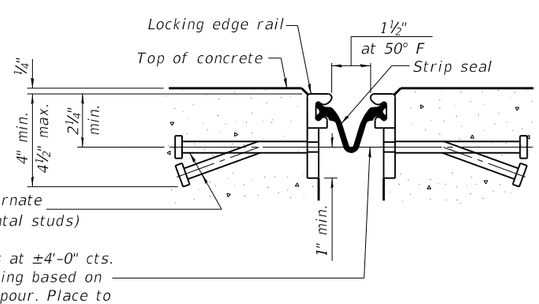
SHOWING ROLLED RAIL JOINT

** ⅝" Ø x 6" studs @ 6" cts. (alternate angled/bent studs with horizontal studs)

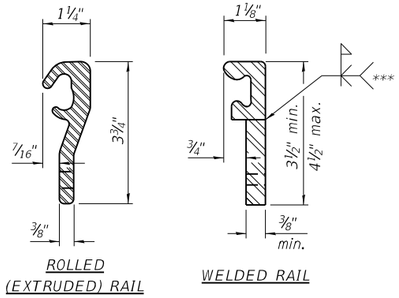
⅜" ϕ threaded rods in 7/16" ϕ holes at ±4'-0" cts. for holding the proper joint opening based on the temperature during the deck pour. Place to miss studs. All rods shall be burned, or sawed off flush with the plates after concrete is set.

SECTION A-A

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



SHOWING WELDED RAIL JOINT

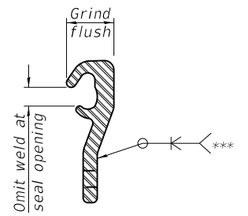


ROLLED (EXTRUDED) RAIL

WELDED RAIL

LOCKING EDGE RAILS

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



LOCKING EDGE RAIL SPLICE

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

BILL OF MATERIAL

Item	Unit	Total
Preformed Joint Strip Seal	Foot	233

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PLOT SCALE =		DRAWN - KS	REVISED -		SHEET 8 OF 15 SHEETS
PLOT DATE =		CHECKED - BB	REVISED -		

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12((HVB,HB)BR)BR	TAZEWELL	61	54
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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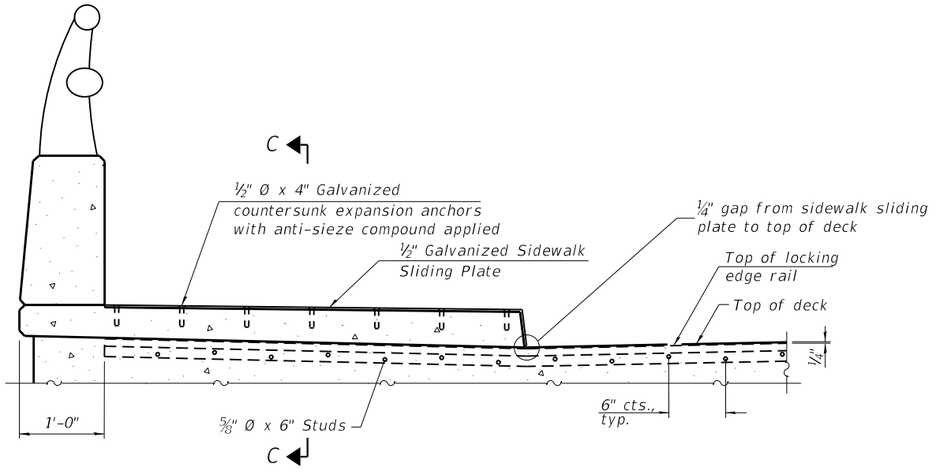
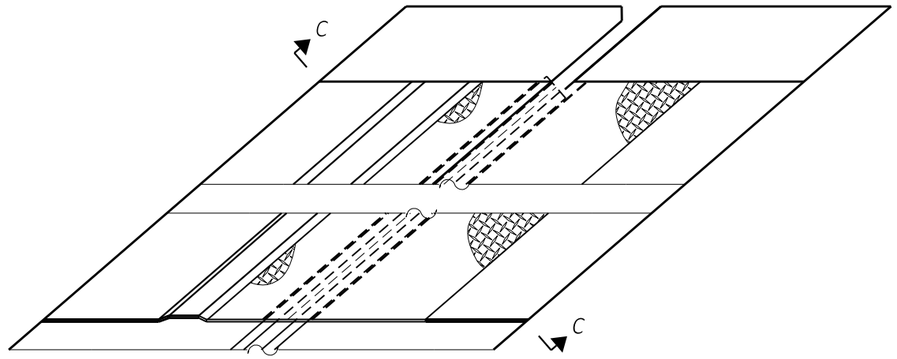
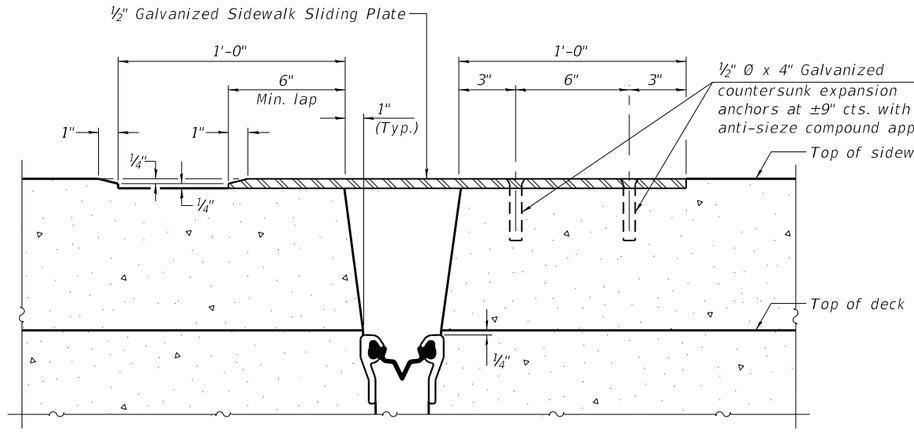


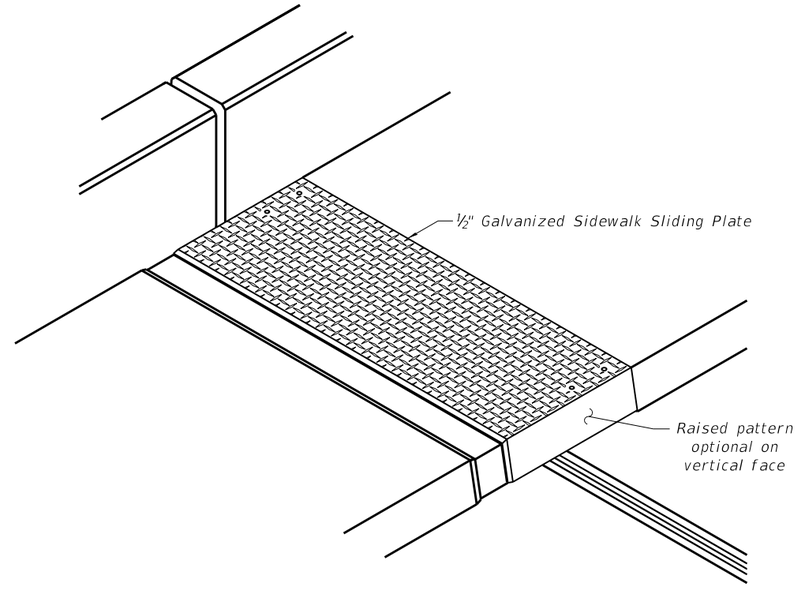
ELEVATION AT RAISED SIDEWALK



PLAN AT RAISED SIDEWALK



SECTION C-C



TRIMETRIC VIEW

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PREFORMED JOINT STRIP SEAL - SIDEWALK
STRUCTURE NO. 090-0120

SHEET 9 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	55
		CONTRACT NO. 68D59		
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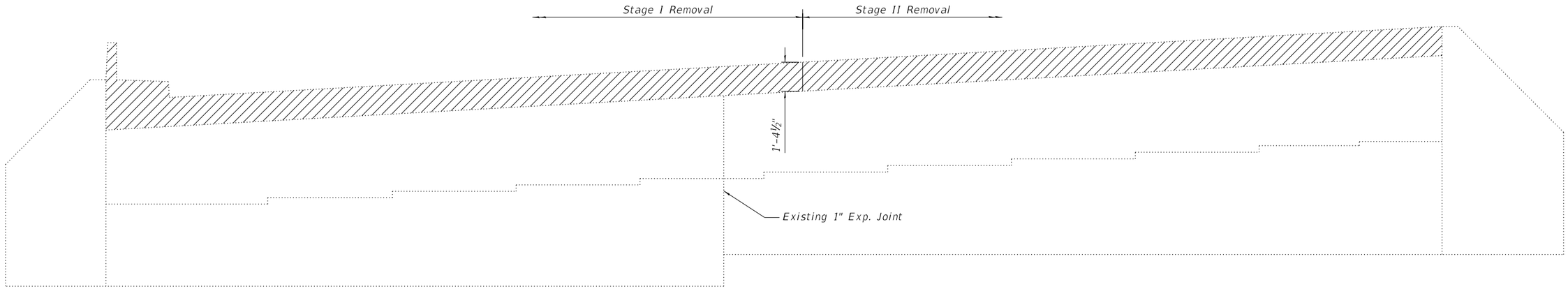

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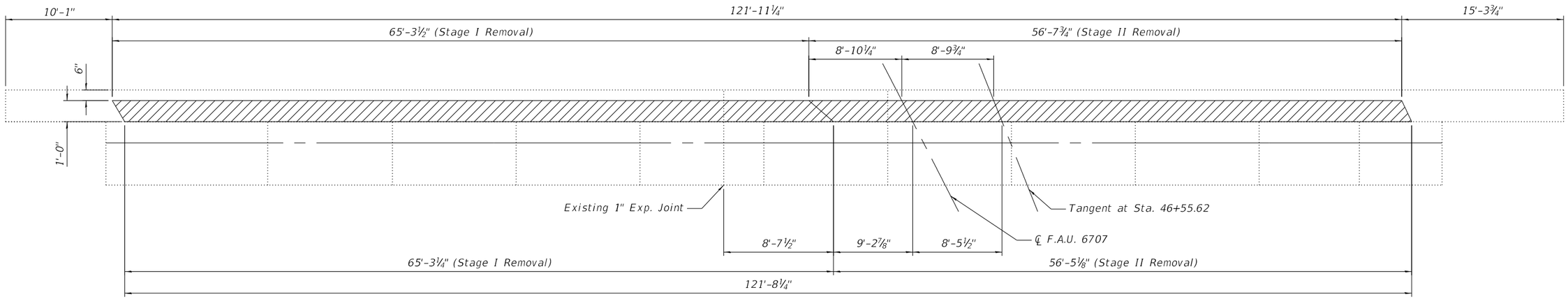

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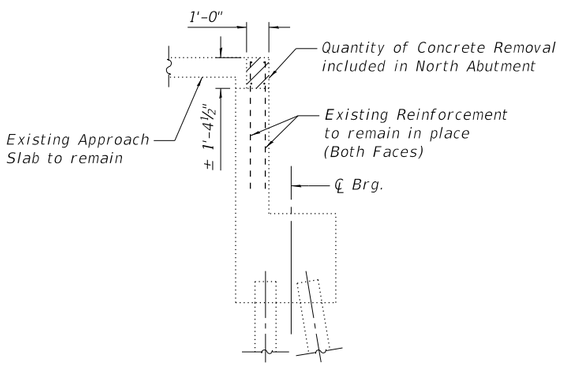

SECTION THRU ABUTMENT

Indicates Limits of Concrete Removal

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	CU YD	6.2

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NORTH ABUTMENT CONCRETE REMOVAL
STRUCTURE NO. 090-0120
SHEET 10 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12((HVB,HB)BR)BR	TAZEWELL	61	56
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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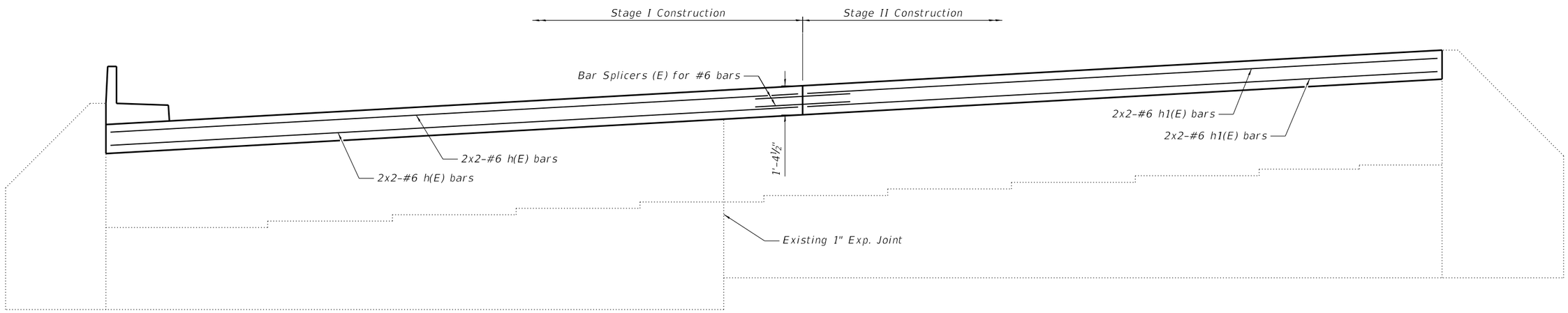

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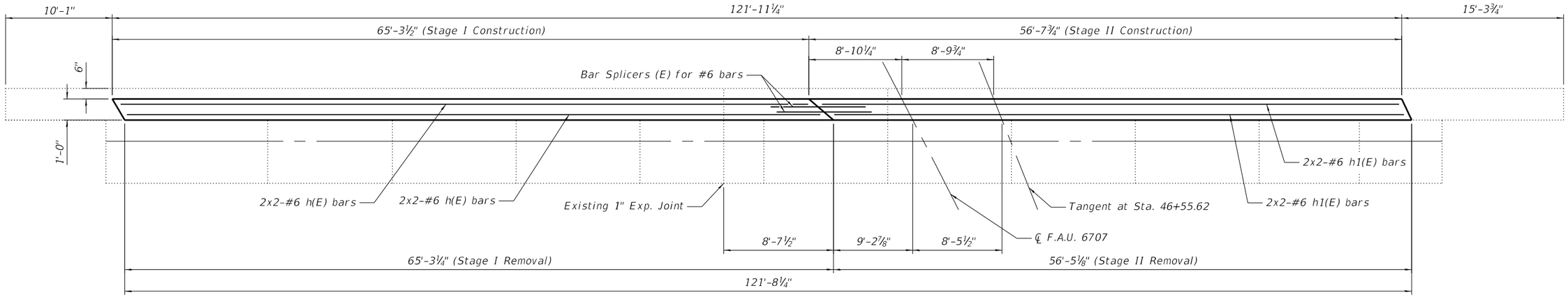

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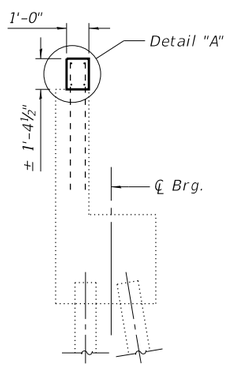
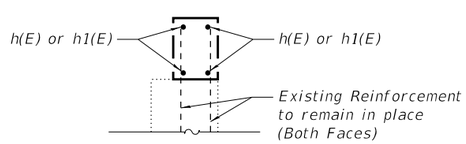


SECTION THRU ABUTMENT



DETAIL "A"

MINIMUM BAR LAP

#6 BAR = 4'-0"

NORTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h(E)	8	#6	34'-6"	———
h1(E)	8	#6	30'-3"	———
Concrete Superstructure			Cu. Yd.	6.2
Reinforcement Bars, Epoxy Coated			Pound	780

For details of Bar Splicers, see sheet 15 of 15.
See Superstructure Details for Sidewalk and parapet details and reinforcing.
Bars indicated thus 2 x 2-#6 etc. indicates 2 lines of bars with 2 lengths per line.

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NORTH ABUTMENT CONCRETE REPAIRS
STRUCTURE NO. 090-0120
SHEET 11 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	57
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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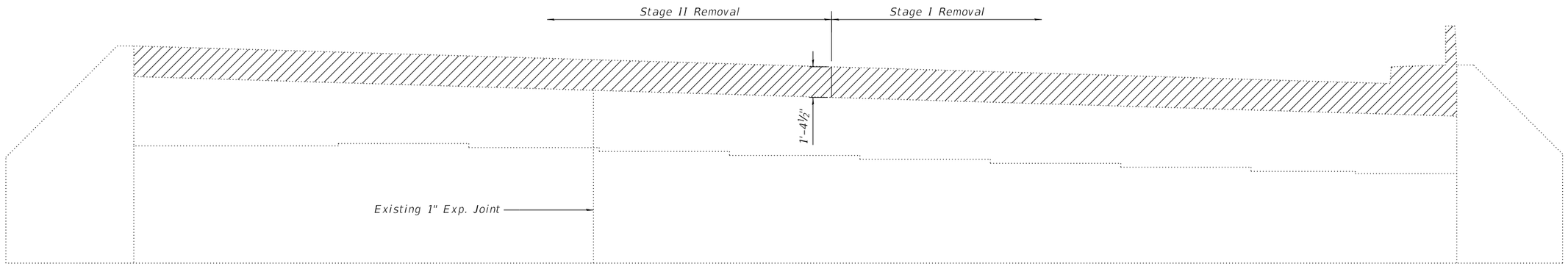
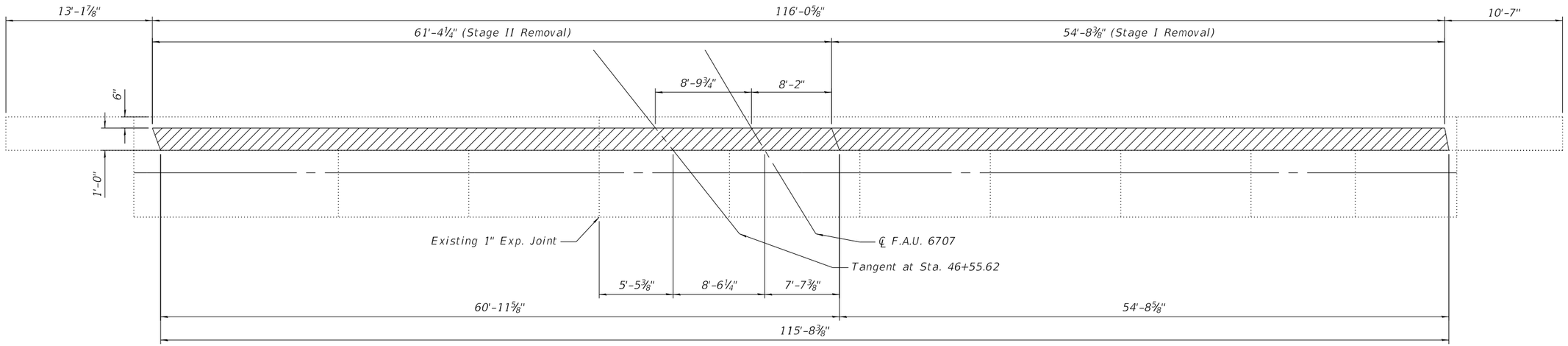
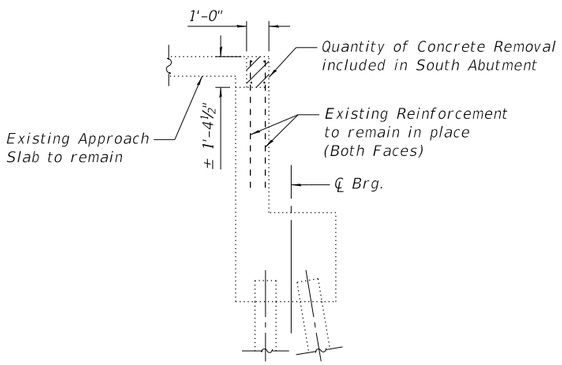


ELEVATION - REMOVAL



PLAN - REMOVAL



SECTION THRU ABUTMENT

Indicates Limits of Concrete Removal

BILL OF MATERIAL

ITEM	UNIT	TOTAL
Concrete Removal	CU YD	5.9

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STATE OF ILLINOIS
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SOUTH ABUTMENT CONCRETE REMOVAL
STRUCTURE NO. 090-0120
SHEET 12 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12((HVB,HB)BR]BR	TAZEWELL	61	58
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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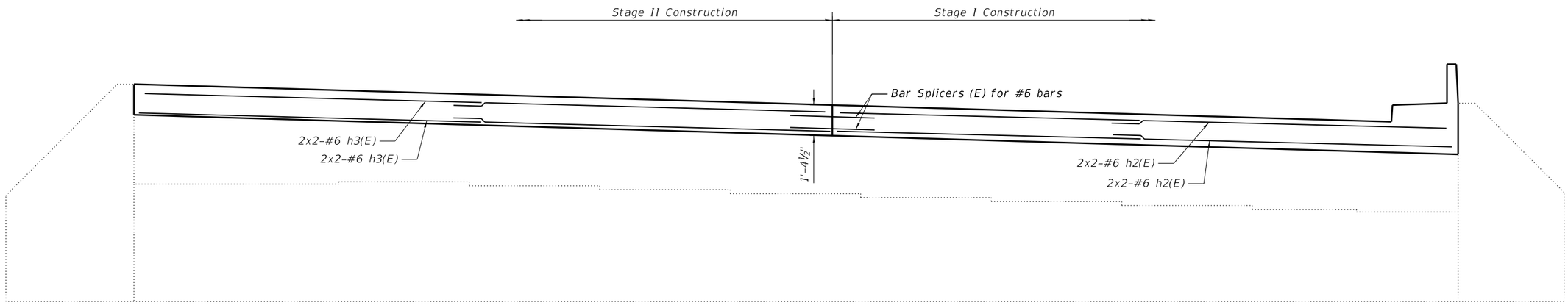

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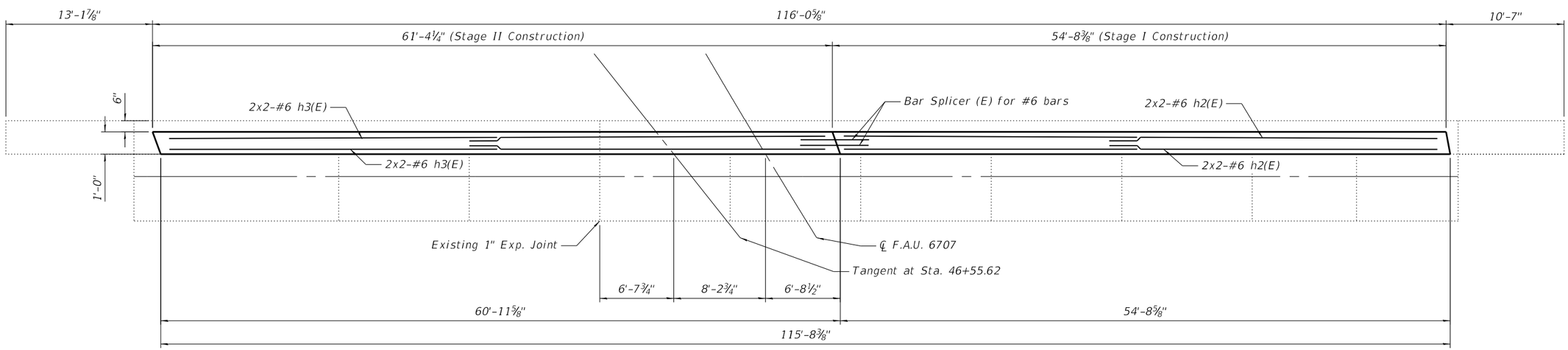
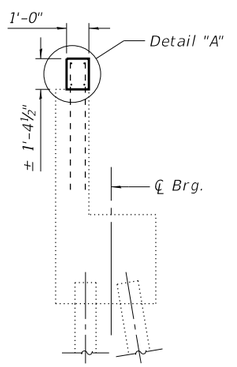
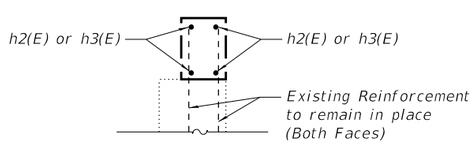


PLAN



SECTION THRU ABUTMENT



DETAIL "A"

MINIMUM BAR LAP

#6 BAR = 4'-0"

SOUTH ABUTMENT BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h2(E)	8	#6	29'-3"	———
h3(E)	8	#6	32'-7"	———
Concrete Superstructure			Cu. Yd.	5.9
Reinforcement Bars, Epoxy Coated			Pound	750

For details of Bar Splicers, see sheet 15 of 15.
See Superstructure Details for Sidewalk and parapet details and reinforcing.
Bars indicated thus 2 x 2-#6 etc. indicates 2 lines of bars with 2 lengths per line.

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PLOT DATE =	CHECKED - BB	REVISED -		SHEET 13 OF 15 SHEETS	

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	59
		CONTRACT NO. 68D59		
	ILLINOIS	FED. AID PROJECT		

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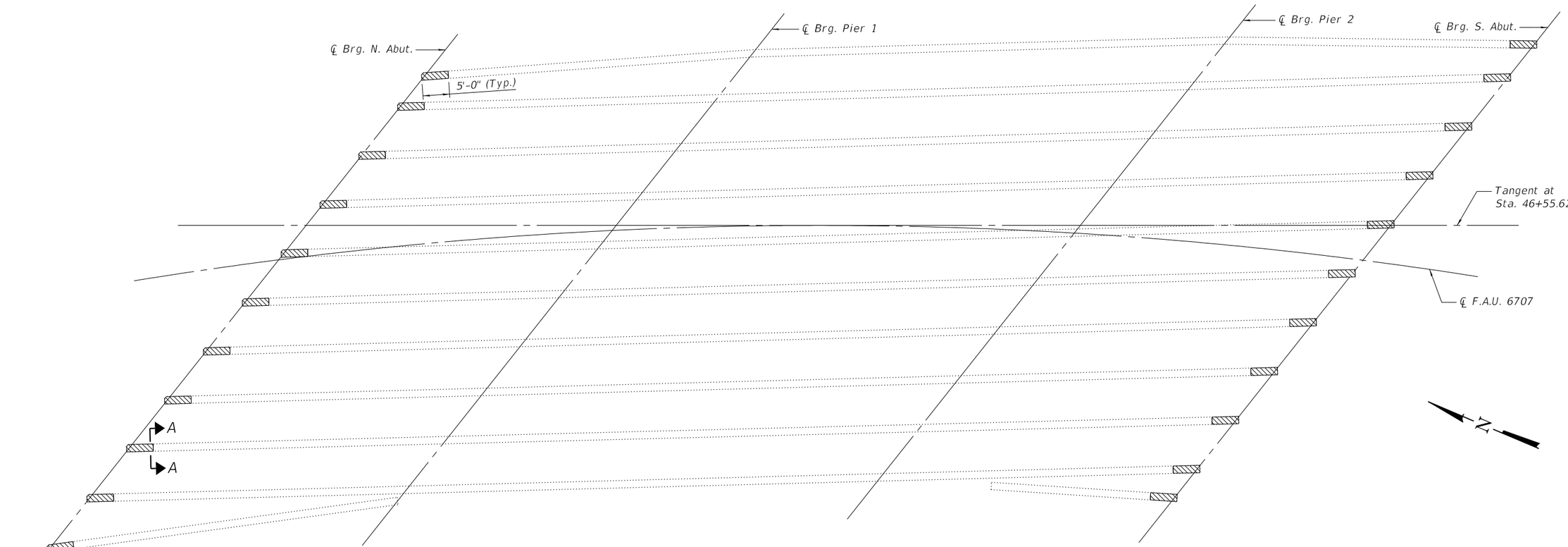
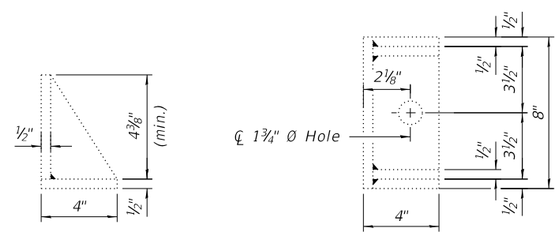
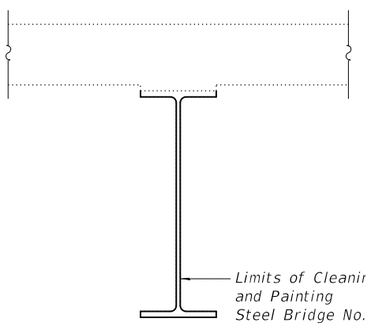


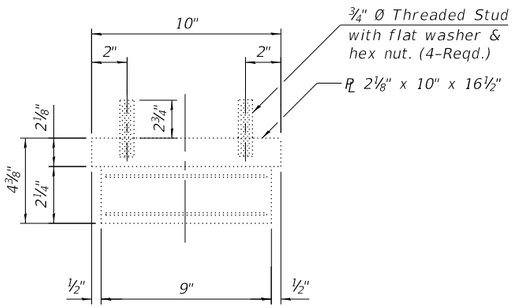
Indicates limits of Cleaning and Painting Steel Bridge No. 1.



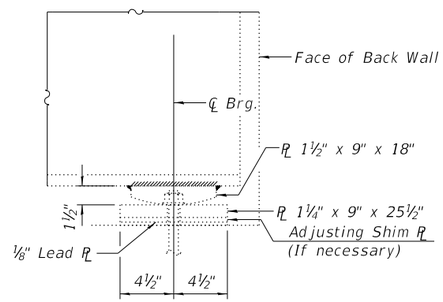
EXISTING SIDE RETAINER AT NORTH ABUTMENT
(2 Present)



SECTION A-A



EXISTING BEARING ASSEMBLY
AT NORTH ABUTMENT



EXISTING FIXED BEARING
AT SOUTH ABUTMENT

Notes:
All beams are W36 X 230.
All diaphragms at abutments to be cleaned and painted are W12 X 40.
See General Notes for additional painting requirements.

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F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	60
		CONTRACT NO. 68D59		
	ILLINOIS FED. AID PROJECT			

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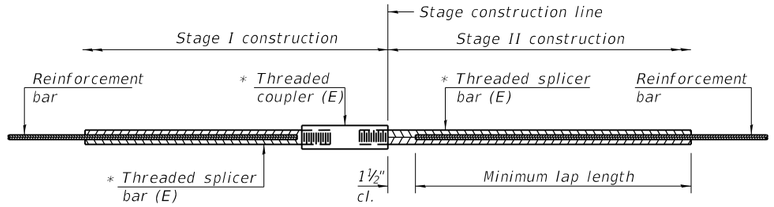
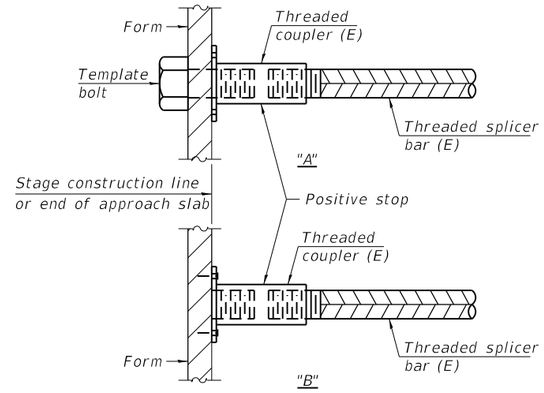


STANDARD BAR SPLICER ASSEMBLY

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

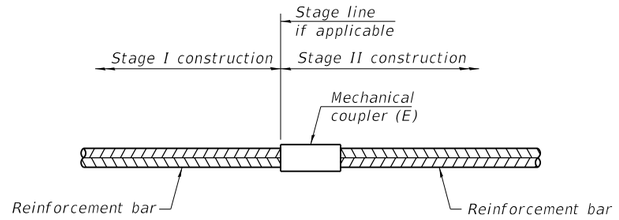
* Epoxy not required on Bar Splicer Assembly components used in conjunction with black bars.

Location	Bar size	No. assemblies required	Minimum lap length
North Abutment	#6	4	4'-0"
South Abutment	#6	4	4'-0"
Deck	#5	16	3'-6"



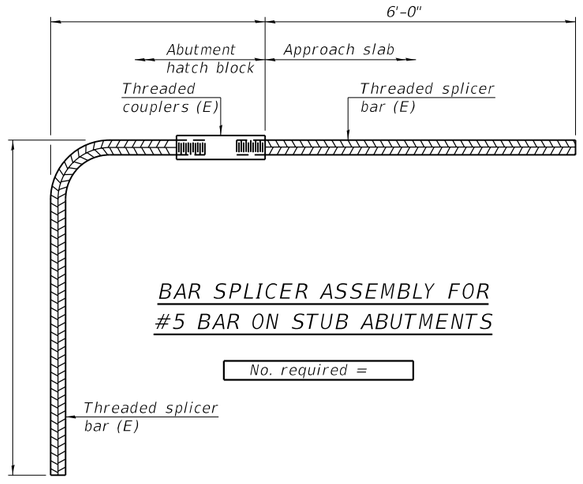
INSTALLATION AND SETTING METHODS

"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



NOTES

Splicer bars shall be deformed with threaded ends and have a minimum 60 ksi yield strength.

All reinforcement shall be lapped and tied to the splicer bars.

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

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

BSD-1

2-17-2017

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BAR SPLICER ASSEMBLY AND MECHANICAL SPLICER DETAILS
STRUCTURE NO. 090-0120

SHEET 15 OF 15 SHEETS

F.A.U. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6707	(50B-4)BR; 12[(HVB,HB)BR]BR	TAZEWELL	61	61
		CONTRACT NO. 68D59		
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