11-08-2024 LETTING ITEM 121

FOR INDEX OF SHEETS, SEE SHEET NO. 2

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	1
	ILLINOIS	CONTRACT NO. 68D84		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PROPOSED
HIGHWAY PLANS

FAI ROUTE I74 (INTERSTATE 74)
SECTION (72-3HVB)BR
PROJECT NHPP-ZF7F(092)
BRIDGE REPLACEMENT
PEORIA COUNTY

C-94-085-17

D-94-051-17

LOCATION OF SECTION INDICATED THUS: -

HIGHWAY STANDARDS

000001–08	515001–04	631031–18	701406–13
001001–02	542301–03	665001–02	701416–11
001006	601001–05	666001–01	701426–09
280001–07	601101–02	701101–05	701901–09
420001–10	630001–13	701106–02	704001–08
420401–13	630301–09	701400–12	782006–01
420701–03	631011–10	701401–13	830026–01

DISTRICT STANDARDS

205001–D4 406101–D4 667101–D4
205101–D4 630101–D4

DESIGN DESIGNATION (I–74)

INTERSTATE (2019)
ADT = 18,500
MU = 24.05%
SU = 5.14%

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 LOCATING INFORMATION FOR EXCAVATORS
1-800-892-0123
OR 811

GROSS LENGTH = 900.00 FT. = 0.170 MILE
NET LENGTH = 900.00 FT. = 0.170 MILE

DUSTIN M. SLIWA
062-067055
REGISTERED PROFESSIONAL ENGINEER
STATE OF ILLINOIS

DUSTIN M. SLIWA
ILLINOIS P.E. 062-067055
DATE: 08/19/2024
EXPIRES: 11/30/2025
SHEETS: 1-46, 115-158

MARK A. HENDERSON
081-005513
LICENSED STRUCTURAL ENGINEER
STATE OF ILLINOIS

MARK HENDERSON
ILLINOIS S.E. 081-005513
DATE: 08/19/2024
EXPIRES: 11/30/2024
SHEETS: 70-103

PLANS PREPARED BY:
VEENSTRA & KIMM INC.
552 W. BOUGHTON ROAD
BOLINGBROOK, IL 60440
PHONE: 630-755-0290

PROJECT DESCRIPTION:
REPLACEMENT OF SN 072-0074 (WB) & 072-0075 (EB) WITH SN 072-0258 (WB) & 072-0259 (EB) CARRYING I-74 OVER N. BRIMFIELD ROAD (CH 69), PAVEMENT TAPERS, CROSSOVERS TO MAINTAIN TRAFFIC, MINOR DRAINAGE IMPROVEMENTS, AND ANY OTHER COLLATERAL WORK NECESSARY TO COMPLETE THE PROJECT.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBMITTED Aug 22 20 24
Ronald A Barnett RSD
REGIONAL ENGINEER

October 4, 2024
ENGINEER OF DESIGN AND ENVIRONMENT

October 4, 2024
DIRECTOR OF HIGHWAYS PROJECT IMPLEMENTATION

PRINTED BY THE AUTHORITY OF THE STATE OF ILLINOIS

PROJECT ENGINEER: REBECCA MARRUFFO
PROJECT MANAGER: ELIAS ELDERZI 309-671-3482

CATALOG NO. 035508-00P
CONTRACT NO. 68D84

GENERAL NOTES

107.00 COMMITMENTS

COMMITMENTS ARE NOT TO BE ALTERED WITHOUT THE WRITTEN APPROVAL OF ALL PARTIES TO WHICH THE COMMITMENT WAS MADE.

204.00 ENVIRONMENTAL REVIEWS

PRIOR TO THE USE OF ANY PROPOSED BORROW AREAS, USE AREAS (TEMPORARY ACCESS ROADS, DETOURS, RUN-AROUNDS, ETC.) AND/OR WASTE AREAS, THE CONTRACTOR SHALL FILE THE REQUIRED ENVIRONMENTAL RESOURCE REQUEST SURVEYS ACCORDING TO SECTION 107.22 OF THE STANDARD SPECIFICATIONS. THESE SURVEYS ARE REQUIRED IN ORDER FOR THE DEPARTMENT TO CONDUCT CULTURAL AND BIOLOGICAL RESOURCE SURVEYS FOR THE PROPOSED SITE.

THE REQUIRED ENVIRONMENTAL RESOURCE DOCUMENTATION SHALL INCLUDE THE FOLLOWING:

- BDE FORM 2289 (BORROW SITE REVIEW)
- BDE FORM 2290 (WASTE/USE AREA REVIEW)
- A LOCATION MAP SHOWING THE SIZE LIMITS AND LOCATION OF THE USE AREA
- COLOR PHOTOGRAPHS DEPICTING THE USE AREA
- BORROW AREA ENTRY AGREEMENT FORM – D4 PI0101

PRIOR TO ANY WASTE MATERIALS BEING REMOVED FROM THE CONSTRUCTION SITE THE REQUIRED ENVIRONMENTAL RESOURCE SURVEYS SHALL BE OBTAINED AND FILED BY THE CONTRACTOR. EXCESS WASTE PRODUCTS REMOVED FROM THE CONSTRUCTION SITE SHALL BE DISPOSED OF AS REQUIRED IN SECTION 202.03 OF THE STANDARD SPECIFICATIONS.

ANY PROTRUDING METAL BARS SHALL BE REMOVED PRIOR TO THE DISPOSAL OF BROKEN CONCRETE AT APPROVED DISPOSAL SITES.

PLEASE NOTE THAT A MINIMUM OF FOUR WEEKS SHALL BE ALLOWED FOR THE DISTRICT TO OBTAIN THE REQUIRED WASTE SITE ENVIRONMENTAL CLEARANCES AND SIX WEEKS FOR THE REQUIRED BORROW SITE ENVIRONMENTAL CLEARANCES.

406.18 BUTT JOINT CUTTING TIME RESTRICTION

BUTT JOINTS SHALL NOT BE MILLED MORE THAN THREE (3) DAYS PRIOR TO PLACEMENT OF THE HMA SURFACE COURSE.

503.00 CROSSING EXISTING STRUCTURES WITH EQUIPMENT

THE FOLLOWING STRUCTURES, SN 072-0074(40 TONNAGE), SN 072-0075(40 TONNAGE), MAY BE CROSSED WITH AN EMPTY MTD OR WITH THE MAXIMUM TONNAGE LISTED.

ANY STRUCTURES NOT LISTED ABOVE SHALL BE VERIFIED BY THE RESIDENT PRIOR TO BEGINNING WORK.

542.00 ORDERING LENGTH CONFIRMATION - DRAINAGE ITEMS

THE CONTRACTOR SHALL CONSULT WITH THE ENGINEER IN REGARD TO THE EXACT LENGTH OF THE BOX/PIPE CULVERTS, STORM SEWERS, AND/OR PIPE DRAINS REQUIRED PRIOR TO ORDERING THESE ITEMS.

780.00 GROOVING FOR RECESSED PAVEMENT MARKINGS

GROOVING FOR RECESSED PAVEMENT MARKINGS SHALL BE OMITTED FROM ALL BRIDGE DECKS AND APPROACH PAVEMENTS.

781.00 RAISED REFLECTIVE PAVEMENT MARKER

RAISED REFLECTIVE PAVEMENT MARKERS SHALL BE OMITTED FROM ALL BRIDGE DECKS AND APPROACH PAVEMENTS.

INDEX OF SHEETS

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3	STATUS OF UTILITIES AND MIX DESIGN
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23	ALIGNMENTS AND TIES
25	REMOVAL PLAN
25-27	ROADWAY PLAN AND PROFILE
28	GUARDRAIL PLAN
29	GEOMETRIC PLAN
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44-46	GROUND IMPROVEMENT PLAN
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50-67	ROAD WEATHER INFORMATION SYSTEM RELOCATION PLAN
68-69	FIBER RELOCATION PLAN
70-103	STRUCTURE PLANS
104-114	RECORD PLANS - EXISTING STRUCTURES
115-150	CROSS SECTIONS
151-158	DISTRICT STANDARDS

MODEL: General Notes [Sheet]
FILE NAME: \\vkfil3\vkshare\0500\05234_IDOT_District_4\05234-0003\05234-0005_plb205_027_WO5_FAI74_over_CH69_Pt2_PS_ECADD_Bentley_ORD_Sheets\General\D4D84-sht-General Notes.dgn

VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GENERAL NOTES
		DRAWN - DMS	REVISED -		
		CHECKED - PMO	REVISED -		
		DATE - 08-19-2024	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	2
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATUS OF UTILITIES

68D84 STATUS OF UTILITIES						
ROUTE	**LOCATION(S)**	**MIN DEPTH**	**COMPANY**	**TYPE OF UTILITY**	**TYPE OF CONFLICT**	**DISPOSITION**
CH 69	NORTH OF W CALHOUN STREET	UNKNOWN	AMEREN ILLINOIS	GAS	NONE ANTICIPATED	N/A
I-74 AND CH 69	OVERHEAD I-74 ABOVE THE EXISTING WEST BRIDGE ABUTMENTS AND OVERHEAD CH 69 SOUTH OF THE EXISTING I-74 BRIDGES	AERIAL	AMEREN ILLINOIS	OVERHEAD ELECTRIC	EQUIPMENT/BRIDGE REMOVAL/ PILE DRIVING/BRIDGE CONSTRUCTION	CAUTION
CH 69	NORTH SIDE OF W CALHOUN STREET	10'	VILLAGE OF BRIMFIELD	WATERMAIN	NONE ANTICIPATED	N/A
I-74 AND CH 69	EAST SIDE OF CH 69 AND EAST OF THE EXISTING I-74 BRIDGES	UNKNOWN	FRONTIER COMMUNICATIONS	BURIED COPPER BURIED FIBER	BRIDGE PIER CONSTRUCTION TREE REMOVAL/DITCH GRADING	UTILITY TO RELOCATE
CH 69	EAST SIDE OF CH 69 AND BENEATH THE EXISTING I-74 EAST SLOPE WALL	24" TO 36"	MID CENTURY COMMUNICATIONS	BURIED FIBER	BRIDGE PIER CONSTRUCTION/ TREE REMOVAL/DITCH GRADING	UTILITY TO RELOCATE
CH 69	NOT IN PROJECT VICINITY	UNKNOWN	MEDIACOM	BURIED FIBER	NONE ANTICIPATED	N/A

MIX DESIGN

THE FOLLOWING MIXTURE REQUIREMENTS ARE APPLICALE FOR THIS PROJECT:

68D84 MIX DESIGN					
LOCATION(S)	**MAINLINE I-74 & SHOULDERS**	**MAINLINE I-74 & SHOULDERS**	**MAINLINE I-74 & SHOULDERS RECONSTRUCT**	**CROSSOVERS**	**CROSSOVERS**
MIXTURE USE(S):	POLYMER HMA SURFACE, 2"	POLYMER HMA BINDER, 2.25"	HMA BASE COURSE, 11"	POLYMER SURFACE, 2"	POLYMER LOWER LIFTS
AC/PG:	SBS OR SBR 70-28	SBS OR SBR 70-28	PG 58-28	SBS OR SBR 76-28	SBS OR SBR 76-28
DESIGN AIR VOIDS:	4.0% @ N = 90	4.0% @ N = 70	4.0% @ N = 50	4.0% @ N = 70	4.0% @ N = 70
MIXTURE COMPOSITION: (MIXTURE GRADATION)	IL-9.5	IL-9.5	IL-19.0	IL-9.5	IL-19.0
FRICTION AGGREGATE:	MIX E	N/A	N/A	MIX D	N/A
QUALITY MANAGEMENT PROGRAM:	QCP	QCP	QCQA	QCP	QCP
MTD:	YES	YES	YES	YES	YES

NOTE: 1) INDIVIDUAL LIFT THICKNESS OF EACH MIX TYPE WILL BE NO LESS THAN 3 TIMES NOMINAL MAXIMUM AGGREGATE SIZE AND NO MORE THAN 6 TIMES NOMINAL MAXIMUM AGGREGATE SIZE, UNLESS OTHERWISE APPROVED BY THE ENGINEER

2) FOR DESIGN PURPOSES, MIXTURE WEIGHT FOR ALL MIXES IS DETERMINED TO BE 112.0 LB/SY-IN, UNLESS OTHERWISE NOTED.

3) SUBLOT SIZES FOR QCP MIXES WILL BE 600 TONS, UNLESS OTHERWISE AGREED TO BY THE ENGINEER AND PAVING CONTRACTOR.

MODEL: Status of Utilities+Mix Design [Sheet]
FILE NAME: \\vkfs-4\dot$\share\05070\0523-IL_DOT_District_4\0523-2009\x005_pt0005_027_WO5_FAI74_over_CH69_Ph2_PS_E\CADD_Bentley_CRD_Sheets\General\D4984D84-In+Status+Utilities_Mix+Design.dgn

VEENSTRA & KIMM INC.

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	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

STATUS OF UTILITIES AND MIX DESIGN

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	3
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	

				CONSTRUCTION CODE			
				90/10	90/10	90/10	90/10
CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE	BRIDGE	SAFETY
				0004	0010	0010	0021
				RURAL	WB SN 072-0258	EB SN 072-0259	RURAL
20100500	TREE REMOVAL, ACRES	ACRE	1.00	1.00			
20200100	EARTH EXCAVATION	CU YD	3843	3843.0			
* 20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	564	564.0			
20400800	FURNISHED EXCAVATION	CU YD	31006	31006.0			
21101505	TOPSOIL EXCAVATION AND PLACEMENT	CU YD	2803	2803.0			
25000300	SEEDING, CLASS 3	ACRE	4.46	4.46			
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	402	402.0			
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	402	402.0			
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	402	402.0			
25000750	MOWING	ACRE	4.87	4.87			
25100115	MULCH, METHOD 2	ACRE	4.88	4.88			
25100630	EROSION CONTROL BLANKET	SQ YD	21578	21578.0			
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	488	488.0			
28000305	TEMPORARY DITCH CHECKS	FOOT	2010	2010.0			

* = SPECIALTY ITEM

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
28000400	PERIMETER EROSION BARRIER	FOOT	2700	2700.0			
28000500	INLET AND PIPE PROTECTION	EACH	2	2.0			
30300112	AGGREGATE SUBGRADE IMPROVEMENT 12"	SQ YD	11793	2896.0	4448.5	4448.5	
35501328	HOT-MIX ASPHALT BASE COURSE, 11"	SQ YD	2426	2426.0			
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	20674	657.0	10008.5	10008.5	
40600295	POLYMERIZED BITUMINOUS MATERIALS (TACK COAT)	POUND	10140	2894.0	3623.0	3623.0	
40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	265	265.0			
40603208	POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70	TON	813	813.0			
40604174	POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N90	TON	1211	747.0	232.0	232.0	
42000060	WELDED WIRE REINFORCEMENT	SQ YD	323		161.5	161.5	
42000080	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	SQ YD	323		161.5	161.5	
44000100	PAVEMENT REMOVAL	SQ YD	297	297.0			
44000161	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	SQ YD	2760		1380.0	1380.0	
44004250	PAVED SHOULDER REMOVAL	SQ YD	4776	1248.0	1764.0	1764.0	

* = SPECIALTY ITEM

MODEL: SOQ-1 [Sheet]
FILE NAME: \\vkfbk-fs\bkshare\0500\0523-IL_DOT_District_4\0523-0008-0005_ptb205_027_WO5_FAI74_over_CH69_Ph2_PS_E\CADD_Bentley_ORD_Sheets\General\D468D84-sht-SOQ.dgn

VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 2 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	5

CONTRACT NO. 68D84

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
48101200	AGGREGATE SHOULDERS, TYPE B	TON	116	116.0			
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	2		1.0	1.0	
50157300	PROTECTIVE SHIELD	SQ YD	470		235.0	235.0	
50200100	STRUCTURE EXCAVATION	CU YD	1325.9		672.5	653.4	
50300100	FLOOR DRAINS	EACH	16		8.0	8.0	
50300225	CONCRETE STRUCTURES	CU YD	536.8		270.3	266.5	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	477.5		238.8	238.7	
50300260	BRIDGE DECK GROOVING	SQ YD	1752		876.0	876.0	
50300300	PROTECTIVE COAT	SQ YD	2208		1104.0	1104.0	
50301350	CONCRETE SUPERSTRUCTURE (APPROACH SLAB)	CU YD	234		117.0	117.0	
50500105	FURNISHING AND ERECTING STRUCTURAL STEEL	L SUM	1		0.5	0.5	
50500505	STUD SHEAR CONNECTORS	EACH	11052		5526.0	5526.0	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	277700		138940.0	138760.0	
51100100	SLOPE WALL 4 INCH	SQ YD	1778		889.0	889.0	

* = SPECIALTY ITEM

MODEL: SOQ-2 [Sheet]
FILE NAME: \\vkblk-4\blk-share\0500\0523-IL_DOT_District_4\0523-0008-0005_ptb205_027_WO5_FAI74_over_CH69_Ph2_PS_E\CADD_Bentley_ORD_Sheets\General\D468D84-sht-SOQ.dgn

VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 3 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	6

CONTRACT NO. 68D84

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
51201800	FURNISHING STEEL PILES HP14X73	FOOT	2749		1381.0	1368.0	
51202305	DRIVING PILES	FOOT	2749		1381.0	1368.0	
51203800	TEST PILE STEEL HP14X73	EACH	4		2.0	2.0	
51500100	NAME PLATES	EACH	2		1.0	1.0	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	24		12.0	12.0	
52100520	ANCHOR BOLTS, 1"	EACH	96		48.0	48.0	
542A1081	PIPE CULVERTS, CLASS A, TYPE 2 36"	FOOT	261	261.0			
5421D018	PIPE CULVERTS, CLASS D, TYPE 1 18" (TEMPORARY)	FOOT	475		237.5	237.5	
54213681	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"	EACH	2	2.0			
54260718	SLOPED METAL END SECTION WITH GRATE, STANDARD 542411, 18", 1:6	EACH	4		2.0	2.0	
58600101	GRANULAR BACKFILL FOR STRUCTURES	CU YD	230		115.0	115.0	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	140		70.0	70.0	
60100060	CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	5	1.0	2.0	2.0	
60108100	PIPE UNDERDRAINS 4" (SPECIAL)	FOOT	30	30.0			

* = SPECIALTY ITEM

MODEL: SOQ-3 [Sheet]
FILE NAME: \\vkblk-4\blkshare\0500\0523-IL_DOT_District_4\0523-0008-0005_ptb205_027_WO5_FAI74_over_CH69_Ph2_PS_E\CADD_Bentley_ORD_Sheets\General\D468D84-sht-SOQ.dgn

VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 4 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	7

CONTRACT NO. 68D84

ILLINOIS FED. AID PROJECT

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
	60146304	PIPE UNDERDRAINS FOR STRUCTURES 4"	FOOT	264		132.0	132.0	
*	63000001	STEEL PLATE BEAM GUARDRAIL, TYPE A, 6 FOOT POSTS	FOOT	2138	2138.0			
*	63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2	2.0			
*	63100085	TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	6	6.0			
*	63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	4	4.0			
	63200310	GUARDRAIL REMOVAL	FOOT	2100	2100.0			
	63800920	MODULAR GLARE SCREEN SYSTEM, TEMPORARY	FOOT	1500		750.0	750.0	
	64200116	SHOULDER RUMBLE STRIPS, 16 INCH	FOOT	10549	10549.0			
	66500105	WOVEN WIRE FENCE, 4'	FOOT	200	200.0			
	66600105	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	EACH	4	4.0			
*	66700205	PERMANENT SURVEY MARKERS, TYPE I	EACH	4	4.0			
*	66900200	NON-SPECIAL WASTE DISPOSAL	CU YD	742	742.0			
*	66900530	SOIL DISPOSAL ANALYSIS	EACH	1	1.0			
*	66901001	REGULATED SUBSTANCES PRE-CONSTRUCTION PLAN	L SUM	1	1.0			

* = SPECIALTY ITEM

MODEL: SOQ-4 [Sheet]
FILE NAME: \\vkblk-4s\blkshare\0500\0523-IL_DOT_District_4\0523-0008-0005_ptb205_027_WO5_FAI74_over_CH69_Ph2_PS_E\CADD_Bentley_ORD_Sheets\General\D468D84-sht-SOQ.dgn

VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		SCALE: SHEET 5 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	8
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		

REV. 9/16/24

					CONSTRUCTION CODE			
					90/10	90/10	90/10	90/10
	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	ROADWAY	BRIDGE	BRIDGE	SAFETY
					0004	0010	0010	0021
					RURAL	WB SN 072-0258	EB SN 072-0259	RURAL
*	66901003	REGULATED SUBSTANCES FINAL CONSTRUCTION REPORT	L SUM	1	1.0			
*	66901006	REGULATED SUBSTANCES MONITORING	CAL DA	10	10.0			
	67000400	ENGINEER'S FIELD OFFICE, TYPE A	CAL MO	26		13.0	13.0	
	67000600	ENGINEER'S FIELD LABORATORY	CAL MO	26		13.0	13.0	
	67100100	MOBILIZATION	L SUM	1		0.5	0.5	
	70100410	TRAFFIC CONTROL AND PROTECTION, STANDARD 701416	EACH	1		0.5	0.5	
	70100700	TRAFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1		0.5	0.5	
	70100800	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	L SUM	1		0.5	0.5	
	70107005	PAVEMENT MARKING BLACKOUT TAPE, 5"	FOOT	34466		17233.0	17233.0	
	70107007	PAVEMENT MARKING BLACKOUT TAPE, 7"	FOOT	11152		5576.0	5576.0	
	70107025	CHANGEABLE MESSAGE SIGN	CAL DA	56		28.0	28.0	
	70300150	SHORT TERM PAVEMENT MARKING REMOVAL	SQ FT	27154		13577.0	13577.0	
	70300221	TEMPORARY PAVEMENT MARKING - LINE 4"- PAINT	FOOT	34800		17400.0	17400.0	
	70307120	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	FOOT	38160		19080.0	19080.0	

* = SPECIALTY ITEM

MODEL: SOQ-5 [Sheet]
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VEENSTRA & KIMM INC.

	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: | SHEET 6 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	9
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

REV. 9/16/24

	CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
	70400100	TEMPORARY CONCRETE BARRIER	FOOT	2146		1073.0	1073.0	
	70400200	RELOCATE TEMPORARY CONCRETE BARRIER	FOOT	2620		1310.0	1310.0	
	70500100	TEMPORARY STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	100		50.0	50.0	
	70500615	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1	EACH	2		1.0	1.0	
	70500665	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 6	EACH	2		1.0	1.0	
*	72501000	TERMINAL MARKER - DIRECT APPLIED	EACH	6		3.0	3.0	
*	78004620	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD - LINE 4"	FOOT	9001		4500.5	4500.5	
*	78004630	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD - LINE 6"	FOOT	2888		1444.0	1444.0	
*	78011025	GROOVING FOR RECESSED PAVEMENT MARKING 5"	FOOT	8587		4293.5	4293.5	
*	78011035	GROOVING FOR RECESSED PAVEMENT MARKING 7"	FOOT	2888		1444.0	1444.0	
*	78100100	RAISED REFLECTIVE PAVEMENT MARKER	EACH	105		53.0	52.0	
*	78200005	GUARDRAIL REFLECTORS, TYPE A	EACH	44	44.0			
	78300200	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	EACH	407		204.0	203.0	
	78300202	PAVEMENT MARKING REMOVAL - WATER BLASTING	SQ FT	8701		4350.5	4350.5	

* = SPECIALTY ITEM

MODEL: SOQ-6 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		SCALE: SHEET 7 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	10
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		

REV. 9/16/24

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
X0325712	RELOCATE EXISTING ELECTRICAL SYSTEM	L SUM	1				1.0
X0325833	WICK DRAINS	FOOT	24864		7959.0	16905.0	
X2600002	RECOVERABLE DELINEATORS	EACH	30		15.0	15.0	
X4400110	TEMPORARY PAVEMENT REMOVAL	SQ YD	5502		2751.0	2751.0	
X4400196	HOT-MIX ASPHALT SURFACE REMOVAL (SPECIAL)	SQ YD	219	219.0			
X4401198	HOT-MIX ASPHALT SURFACE REMOVAL, VARIABLE DEPTH	SQ YD	3416	3416.0			
X5080530	BAR TERMINATORS	EACH	1364		682.0	682.0	
X6010001	CONNECTION OF EXISTING PIPE UNDERDRAIN	EACH	1	1.0			
X6015000	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	EACH	1	1.0			
X6350120	DELINEATOR REMOVAL	EACH	30		15.0	15.0	
X6650202	WOVEN WIRE FENCE REMOVAL	FOOT	263	263.0			
X6670109	PERMANENT SURVEY TIES	EACH	4	4.0			
X7010216	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	L SUM	1		0.5	0.5	
X7810400	TEMPORARY RAISED PAVEMENT MARKER	EACH	312		156.0	156.0	

* = SPECIALTY ITEM

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VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES

SCALE: SHEET 8 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	11

CONTRACT NO. 68D84

ILLINOIS FED. AID PROJECT

CODE NO.	ITEM	UNIT	TOTAL QUANTITY	CONSTRUCTION CODE 90/10 ROADWAY 0004 RURAL	90/10 BRIDGE 0010 WB SN 072-0258	90/10 BRIDGE 0010 EB SN 072-0259	90/10 SAFETY 0021 RURAL
X7830050	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	EACH	316		158.0	158.0	
X7830052	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REPLACEMENT	EACH	316		158.0	158.0	
X8101100	UNDERGROUND CONDUIT, MULTI-DUCT, 7-16MM MICRODUCTS	FOOT	700		700.0		
X8410102	TEMPORARY LIGHTING SYSTEM	L SUM	1				1.0
X8710060	FIBER OPTIC CABLE, MICRO, 96 FIBERS, SINGLE MODE	FOOT	1100		1100.0		
Z0001002	GUARDRAIL AGGREGATE EROSION CONTROL	TON	612	612.0			
Z0004552	APPROACH SLAB REMOVAL	SQ YD	294		147.0	147.0	
Z0013798	CONSTRUCTION LAYOUT	L SUM	1		0.5	0.5	
Z0033052	COMMUNICATIONS VAULT	EACH	2		2.0		
Z0034105	MATERIAL TRANSFER DEVICE	TON	10344	3055.0	3644.5	3644.5	
Z0040530	PIPE UNDERDRAIN REMOVAL	FOOT	30	30.0			
Z0056100	SAND DRAINAGE BLANKET	CU YD	1831		653.0	1178.0	
Z0062456	TEMPORARY PAVEMENT	SQ YD	8897		4448.5	4448.5	
Z0065100	SETTLEMENT PLATFORMS	EACH	2		1.0	1.0	
Z0065765	SLOTTED DRAIN 18" WITH VARIABLE SLOT	FOOT	478		239.0	239.0	
Ø Z0076600	TRAINEES	HOUR	2000	2000.0			
Ø Z0076604	TRAINEES TRAINING PROGRAM GRADUATE	HOUR	2000	2000.0			

* = SPECIALTY ITEM Ø 0042

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VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	SUMMARY OF QUANTITIES
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		SCALE: SHEET 9 OF 9 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	12

CONTRACT NO. 68D84

ILLINOIS FED. AID PROJECT

REV. 9/30/24 REV. 9/16/24

CROSSOVER SCHEDULE

LOCATION	AREA	PAVED SHOULDER REMOVAL	AGGREGATE SUBGRADE IMPROVEMENT, 12"	PIPE CULVERTS, CLASS D, TYPE 1, 18" (TEMPORARY)	SLOTTED DRAIN 18" WITH VARIABLE SLOT	SLOPED METAL END SECTION WITH GRATE, STANDARD 542411, 18", 1:6	TEMPORARY PAVEMENT	MATERIAL TRANSFER DEVICE	TEMPORARY PAVEMENT REMOVAL	POLY BIT MATERIALS (TACK COAT)	BIT MATERIALS (PRIME COAT)
	SQ FT	SQ YD	SQ YD	FOOT	FOOT	EACH	SQ YD	TON	SQ YD	POUNDS	POUNDS
WEST CROSSOVER											
STA. 171+98.1 TO 182+00.0	40034.5	1784.5	4448.3	240.0	239.0	2.0	4448.3	2117.4	2730.2	3002.6	10008.6
EAST CROSSOVER											
STA. 191+00.0 TO 201+01.9	40034.5	1743.7	4448.3	235.0	239.0	2.0	4448.3	2117.4	2771.0	3002.6	10008.6
SUBTOTAL		*3528.1*	*8896.5*	*475.0*	*478.0*	*4.0*	*8896.5*	*4234.8*	*5501.2*	*6005.2*	*20017.2*
TOTAL		SEE REMOVALS	SEE PAVT	**475**	**478**	**4**	**8897**	SEE PAVT	**5502**	SEE PAVT	SEE PAVT

PIPE UNDERDRAIN SCHEDULE

LOCATION	PIPE UNDERDRAINS 4" (SPECIAL)	CONCRETE HEADWALLS FOR PIPE DRAINS	REMOVE CONCRETE HEADWALLS FOR PIPE DRAINS	CONNECTION OF EXISTING PIPE UNDERDRAIN	PIPE UNDERDRAIN REMOVAL
	FOOT	EACH	EACH	EACH	FOOT
WESTBOUND					
STA. 2192+00.0 TO 2192+00.0	30.0	1.0	1.0	1.0	30.0
UNDERDRAIN OUTLETS AT BRIDGE CONES		*4.0*			
SUBTOTAL	*30.0*	*5.0*	*1.0*	*1.0*	*30.0*
TOTAL	**30**	**5**	**1**	**1**	**30**

STAGING SCHEDULE

LOCATION	TEMPORARY CONCRETE BARRIER	MODULAR GLARE SCREEN SYSTEM, TEMPORARY	RELOCATE TEMPORARY CONCRETE BARRIER
	FOOT	FOOT	FOOT
PRE-STAGE/WINTER SHUTDOWN			
CROSS-OVERS			
STA. 2164+00.0 TO 2179+00.0	237.5	0.0	0.0
STA. 2194+00.0 TO 2209+00.0	237.5	0.0	0.0
WESTBOUND			
STAGE 1			
STA. 2164+00.0 TO 2179+00.0	84.0	0.0	237.5
STA. 2179+00.0 TO 2194+00.0	1500.0	1500.0	0.0
STA. 2194+00.0 TO 2209+00.0	86.5	0.0	237.5
EASTBOUND			
STAGE 2			
STA. 1175+32.0 TO 1179+94.4	0.0	0.0	324.3
STA. 1179+94.4 TO 1193+06.6	0.0	0.0	1500.0
STA. 1193+06.6 TO 1196+71.3	0.0	0.0	320.6
SUBTOTAL	*2145.5*	*1500.0*	*2619.9*
TOTAL	**2146**	**1500**	**2620**

EROSION CONTROL SCHEDULE

LOCATION						AREA	MULCH, METHOD 2	TEMPORARY EROSION CONTROL SEEDING	TEMPORARY DITCH CHECK	PERIMETER EROSION BARRIER	INLET AND PIPE PROTECTION
						SQ FT	ACRE	POUND	FOOT	FOOT	EACH
WESTBOUND											
LT	STA.	2182+00.0	TO	2186+35.9		25794.1	0.59	59.2	300.0	498.0	1.0
	STA.	2188+14.4	TO	2191+00.0		11810.4	0.27	27.1	210.0	390.0	
EASTBOUND											
RT	STA.	1182+00.0	TO	1186+56.5		25703.7	0.59	59.0	330.0	567.0	1.0
	STA.	1188+30.5	TO	1191+00.0		15014.8	0.34	34.5	210.0	455.0	
MEDIAN											
CTR	STA.	182+00.0	TO	186+62.6		8864.0	0.20	20.3	300.0	102.0	
	STA.	188+04.9	TO	191+00.0		6796.3	0.16	15.6	180.0	102.0	
CH 69 AND BRIDGE CONES											
LT	STA.	18+79.4	TO	22+33.3		13035.6	0.30	29.9	180.0	203.0	
RT	STA.	17+07.7	TO	21+02.2		20493.6	0.47	47.0	180.0	243.0	
CROSSOVERS											
WEST	STA.	171+98.1	TO	182+00.0		43308.6	0.99	99.4	60.0	70.0	
EAST	STA.	191+00.0	TO	201+01.9		41814.7	0.96	96.0	60.0	70.0	
SUBTOTAL							*4.88*	*488.1*	*2010.0*	*2700.0*	*2.0*
TOTAL							**4.88**	**488**	**2010**	**2700**	**2**

MAINTENANCE OF TRAFFIC & SHORT TERM & TEMPORARAY PAVEMENT MARKING SCHEDULE

LOCATION					PAVEMENT MARKING REMOVAL - WATER BLASTING	PAVEMENT MARKING BLACKOUT TAPE, 5"	PAVEMENT MARKING BLACKOUT TAPE, 7"	TEMPORARY PAVEMENT MARKING - LINE 4" - TYPE IV TAPE	SHORT TERM PAVEMENT MARKING REMOVAL	TEMPORARY PAVEMENT MARKING - LINE 4" - PAINT	TEMPORARY RAISED PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	HOT-MIX ASPHALT SURFACE REMOVAL, 3"	POLY HMA SURFACE COURSE, IL-9.5, MIX "E", N90 (3")	POLY BIT MATERIALS (TACK COAT)	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REMOVAL	RAISED REFLECTIVE PAVEMENT MARKER, REFLECTOR REPLACMENT
					SQ FT	FOOT	FOOT	FOOT	SQ FT	FOOT	EACH	EACH	SQ YD	TON	POUND	EACH	EACH
WESTBOUND																	
PRE-STAGE/ WINTER SHUTDOWN		WEST LIMIT	TO	2164+00.0	731.5	650.0	163.0	1950.0	244.0	1950.0	0.0	0	0.0	0.0	0.0	19.0	19.0
	STA.	2164+00.0	TO	2179+00.0	1687.5	1500.0	375.0	0.0	562.5	4500.0	0.0	0	0.0	0.0	0.0	40.0	40.0
	STA.	2179+00.0	TO	2194+00.0	1687.5	1500.0	375.0	0.0	562.5	4500.0	0.0	0	0.0	0.0	0.0	40.0	40.0
	STA.	2194+00.0	TO	2209+00.0	1687.5	1500.0	375.0	0.0	562.5	4500.0	0.0	0	0.0	0.0	0.0	40.0	40.0
	STA.	2209+00.0	TO	EAST LIMIT	731.5	650.0	163.0	0.0	244.0	1950.0	0.0	0	0.0	0.0	0.0	19.0	19.0
EASTBOUND																	
PRE-STAGE/ WINTER SHUTDOWN		WEST LIMIT	TO	1164+00.0	244.0	650.0	163.0	0.0	244.0	1950.0	0.0	0	0.0	0.0	0.0	19.0	19.0
	STA.	1164+00.0	TO	1179+00.0	562.5	1500.0	375.0	0.0	562.5	4500.0	0.0	0	0.0	0.0	0.0	40.0	40.0
	STA.	1179+00.0	TO	1194+00.0	562.5	1500.0	375.0	0.0	562.5	4500.0	0.0	0	0.0	0.0	0.0	40.0	40.0
	STA.	1194+00.0	TO	1209+00.0	562.5	1500.0	375.0	0.0	562.5	4500.0	0.0	0	0.0	0.0	0.0	40.0	40.0
	STA.	1209+00.0	TO	EAST LIMIT	244.0	650.0	163.0	1950.0	244.0	1950.0	0.0	0	0.0	0.0	0.0	19.0	19.0
PRE-STAGE/WINTER SHUTDOWN SUBTOTAL					*8701.0*	*11600.0*	*2902.0*	*3900.0*	*4351.0*	*34800.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*316.0*	*316.0*
WESTBOUND																	
STAGE 1		WEST LIMIT	TO	2164+00.0	0.0	0.0	0.0	0.0	1080.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	STA.	2164+00.0	TO	2179+00.0	0.0	1598.0	201.0	689.0	1374.0	0.0	0.0	0.0	115.0	19.3	51.8	0.0	0.0
	STA.	2179+00.0	TO	2194+00.0	0.0	3000.0	376.0	3000.0	201.0	0.0	0.0	0.0	500.0	84.0	225.0	0.0	0.0
	STA.	2194+00.0	TO	2209+00.0	0.0	1500.0	376.0	3000.0	385.0	0.0	0.0	0.0	500.0	84.0	225.0	0.0	0.0
	STA.	2209+00.0	TO	EAST LIMIT	0.0	2373.0	344.0	1734.0	0.0	0.0	0.0	0.0	126.0	21.2	56.7	0.0	0.0
EASTBOUND																	
STAGE 1		WEST LIMIT	TO	1164+00.0	0.0	1248.0	313.0	1496.0	0.0	0.0	0.0	0.0	86.0	14.4	38.7	0.0	0.0
	STA.	1164+00.0	TO	1179+00.0	0.0	1100.0	276.0	3008.0	1128.0	0.0	60.0	60	266.0	44.7	119.7	0.0	0.0
	STA.	1179+00.0	TO	1194+00.0	0.00	0.00	0.0	2604.0	1022.0	0.0	40.0	40	0.0	0.0	0.0	0.0	0.0
	STA.	1194+00.0	TO	1209+00.0	0.00	0.00	0.0	1539.0	1601.0	0.0	56.0	56	0.0	0.0	0.0	0.0	0.0
	STA.	1209+00.0	TO	EAST LIMIT	0.0	0.0	0.0	0.0	1550.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STAGE 1 SUBTOTAL					*0.0*	*10819.0*	*1886.0*	*17070.0*	*8341.0*	*0.0*	*156.0*	*156.0*	*1593.0*	*267.6*	*716.9*	*0.0*	*0.0*
WESTBOUND																	
STAGE 2		WEST LIMIT	TO	2164+00.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	STA.	2164+00.0	TO	2179+00.0	0.0	600.0	300.0	1360.0	878.3	0.0	60.0	60	0.0	0.0	0.0	0.0	0.0
	STA.	2179+00.0	TO	2194+00.0	0.0	1500.0	0.0	3000.0	1625.0	0.0	38.0	38	0.0	0.0	0.0	0.0	0.0
	STA.	2194+00.0	TO	2209+00.0	0.0	1300.0	1300.0	3010.0	2303.3	0.0	58.0	58	266.0	44.7	119.7	0.0	0.0
	STA.	2209+00.0	TO	EAST LIMIT	0.0	500.0	1000.0	2410.0	1595.0	0.0	0.0	0.0	72.0	12.1	32.4	0.0	0.0
EASTBOUND																	
STAGE 2		WEST LIMIT	TO	1164+00.0	0.0	1367.0	1734.0	730.0	1824.4	0.0	0.0	0.0	212.0	35.6	95.4	0.0	0.0
	STA.	1164+00.0	TO	1179+00.0	0.0	3000.0	1500.0	3000.0	3125.0	0.0	0.0	0.0	500.0	84.0	225.0	0.0	0.0
	STA.	1179+00.0	TO	1194+00.0	0.0	3000.0	190.0	3000.0	2360.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	STA.	1194+00.0	TO	1209+00.0	0.0	780.0	340.0	680.0	750.0	0.0	0.0	0.0	117.0	19.7	52.7	0.0	0.0
	STA.	1209+00.0	TO	EAST LIMIT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
STAGE 2 SUBTOTAL					*0.0*	*12047.0*	*6364.0*	*17190.0*	*14461.9*	*0.0*	*156.0*	*156.0*	*1167.0*	*196.1*	*525.2*	*0.0*	*0.0*
FROM PERMANENT MARKINGS SCHED												*95.0*					
SUBTOTAL					*8701.0*	*34466.0*	*11152.0*	*38160.0*	*27153.9*	*34800.0*	*312.0*	*407.0*	*2760.0*	*463.7*	*1242.0*	*316.0*	*316.0*
TOTAL					**8701**	**34466**	**11152**	**38160**	**27154**	**34800**	**312**	**407**	**2760**	**SEE PAVT**	**SEE PAVT**	**316**	**316**

REMOVAL SCHEDULE

LOCATION					HMA SURFACE REMOVAL - BUTT JOINT	HMA SURFACE REMOVAL VARIABLE DEPTH	PAVEMENT REMOVAL	PAVED SHOULDER REMOVAL	APPROACH SLAB REMOVAL	TREE REMOVAL, ACRES
					SQ YD	SQ YD	SQ YD	SQ YD	SQ YD	ACRE
WESTBOUND										
FULL WIDTH	STA.	182+00.0	TO	182+14.2	66.5					0.35
PAVT & SHLDRS	STA.	182+14.2	TO	184+90.0		910.5				
PAVEMENT	STA.	184+90.0	TO	185+01.7			31.4			
LT SHLDR	STA.	183+00.0	TO	185+01.7				162.4		
RT SHLDR	STA.	183+00.0	TO	185+01.7				180.7		
APPROACH	STA.	185+01.7	TO	185+21.7					74.8	
APPROACH	STA.	187+86.7	TO	188+06.7					72.1	
LT SHLDR	STA.	188+06.7	TO	190+00.0				144.6		
RT SHLDR	STA.	188+06.7	TO	190+00.0				131.6		
PAVEMENT	STA.	188+06.7	TO	188+48.9			112.8			
PAVT & SHLDRS	STA.	188+48.9	TO	190+85.8		792.5				
FULL WIDTH	STA.	190+85.8	TO	191+00.0	64.9					0.18
EASTBOUND										
FULL WIDTH	STA.	182+00.0	TO	182+14.2	67.0					0.25
PAVT & SHLDRS	STA.	182+14.2	TO	185+00.0		939.6				
PAVEMENT	STA.	185+00.0	TO	185+12.1			32.2			
LT SHLDR	STA.	183+00.0	TO	185+12.1				178.1		
RT SHLDR	STA.	183+00.0	TO	185+12.1				153.5		
APPROACH	STA.	185+12.1	TO	185+32.0					73.1	
APPROACH	STA.	187+96.7	TO	188+16.7					73.6	
LT SHLDR	STA.	187+16.7	TO	190+00.0				160.4		
RT SHLDR	STA.	187+16.7	TO	190+00.0				136.8		
PAVEMENT	STA.	187+16.7	TO	188+61.8			121.0			
PAVT & SHLDRS	STA.	188+61.8	TO	190+85.8		773.5				
FULL WIDTH	STA.	190+85.8	TO	191+00.0	66.7					0.22
SUBTOTAL ABOVE					*265.2*	*3416.1*	*297.4*	*1248.1*	*293.6*	1.00
FROM CROSSOVER SCHEDULE								*3528.1*		
SUBTOTAL					*265.2*	*3416.1*	*297.4*	*4776.2*	*293.6*	1.00
TOTAL					**265**	**3416**	**297**	**4776**	**294**	**1.00**

DRAINAGE SCHEDULE

LOCATION					PIPE CULVERTS, CLASS A, TYPE 2 36"	PRECAST REINFORCED CONCRETE FLARED END SECTIONS 36"
					FOOT	EACH
CH 69						
RT	STA.	18+28.3	TO	20+97.3	261.0	2.0
SUBTOTAL					*261.0*	*2.0*
TOTAL					**261**	**2**

RUMBLE STRIPS SCHEDULE

LOCATION					SHOULDER RUMBLE STRIPS, 16 INCH
					FOOT
WESTBOUND					
INSIDE SHOULDER					
	STA.	2182+00.0	TO	2186+23.8	423.8
	STA.	2188+31.5	TO	2191+00.0	268.5
	STA.	2201+02.0	TO	2211+15.4	1013.4
OUTSIDE SHOULDER					
	STA.	2175+46.0	TO	2186+23.8	1077.8
	STA.	2188+31.5	TO	2212+77.0	2445.5
EASTBOUND					
INSIDE SHOULDER					
	STA.	1161+42.0	TO	1171+98.1	1056.1
	STA.	1182+00.0	TO	1186+36.1	436.1
	STA.	1188+43.9	TO	1191+00.0	256.1
	STA.	1201+01.9	TO	1201+63.9	62.0
OUTSIDE SHOULDER					
	STA.	1160+32.9	TO	1186+36.1	2603.20
	STA.	1188+43.9	TO	1197+50.0	906.10
SUBTOTAL					*10548.6*
TOTAL					**10549**

RIGHT-OF-WAY SCHEDULE

LOCATION					WOVEN WIRE FENCE, 4'	WOVEN WIRE FENCE REMOVAL	FURNISHING AND ERECTING RIGHT OF WAY MARKERS	PERMANENT SURVEY MARKERS, TYPE I	PERMANENT SURVEY TIES
					FOOT	FOOT	EACH	EACH	EACH
WESTBOUND									
LT	STA.	2185+20.0	TO	2186+31.3	100.4	64.10	2.0		
LT	STA.	2187+84.5	TO	2187+84.5		42.40			
ESTIMATED QUANTITY								2.0	2.0
EASTBOUND									
RT	STA.	1185+33.4	TO	1186+67.5	99.5	72.80	2.0		
RT	STA.	1187+98.0	TO	1188+50.9		83.30			
ESTIMATED QUANTITY								2.0	2.0
SUBTOTAL					*199.9*	*262.6*	*4.0*	*4.0*	*4.0*
TOTAL					**200**	**263**	**4**	**4**	**4**

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VEENSTRA & KIMM INC.

	DESIGNED - DMS		REVISED -
	DRAWN - DMS		REVISED -
	CHECKED - PMO		REVISED -
	DATE - 08-19-2024		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SCHEDULE OF QUANTITIES

SCALE: | SHEET 3 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	15
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

PAVEMENT SCHEDULE

LOCATION					AREA	POLY HMA SURFACE COURSE, IL-9.5, MIX "E", N90 (2")	HOT-MIX ASPHALT SURFACE REMOVAL (SPECIAL)	POLY HMA BINDER COURSE, IL-9.5, N70 (2.25")	HMA BASE COURSE, 11"	MATERIAL TRANSFER DEVICE	AGGREGATE SUBGRADE IMPROVEMENT, 12"	POLY BIT MATERIALS (TACK COAT)	BIT MATERIALS (PRIME COAT)	PAVEMENT CONNECTOR (PCC) FOR BRIDGE APPROACH SLAB	WELDED WIRE REINFORCEMENT
					SQ FT	TON	SQ YD	TON	SQ YD	TON	SQ YD	POUND	POUND	SQ YD	SQ YD
EASTBOUND															
LT SHLD	STA.	1182+00.0	TO	1183+00.0	872.4	10.9	5.6	12.2		23.1		65.4			
LT SHLD	STA.	1183+00.0	TO	1186+18.6	2502.1	31.1	17.7	35.0	278.0	237.4	313.4	39.2	78.4		
RT SHLD	STA.	1182+00.0	TO	1183+00.0	972.3	12.1	5.6	13.6		25.7		72.9			
RT SHLD	STA.	1183+00.0	TO	1186+18.6	3183.3	39.6	17.7	44.6	353.7	302.1	389.1	48.6	97.3		
PAVEMENT	STA.	1182+00.0	TO	1185+00.0	7200.0	89.6	16.7	100.8		190.4		540.0			
PAVEMENT	STA.	1185+00.0	TO	1186+18.6	2847.4	35.4	6.6	39.9	316.4	270.2	316.4	39.5	79.1		
CONNECTOR	STA.	1186+18.6	TO	1186+36.1	725.7	9.0		10.2		19.2	66.9			80.6	80.6
CONNECTOR	STA.	1188+43.9	TO	1188+61.8	725.7	9.0		10.2		19.2	66.9			80.6	80.6
PAVEMENT	STA.	1188+61.8	TO	1191+00.0	5715.9	71.1	13.2	80.0		151.2		428.7			
LT SHLD	STA.	1188+61.8	TO	1189+97.3	1043.0	13.0	7.5	14.6	115.9	99.0	130.9	16.4	32.7		
LT SHLD	STA.	1189+97.3	TO	1191+00.0	783.5	9.8	5.7	11.0		20.7		58.8			
RT SHLD	STA.	1188+61.8	TO	1189+97.3	1386.6	17.3	7.5	19.4	154.1	131.6	169.1	21.1	42.3		
RT SHLD	STA.	1189+97.3	TO	1191+00.0	1025.3	12.8	5.7	14.4		27.1		76.9			
ADDITIONAL FOR LONGITUDINAL JOINT TRIMMING						12.3				12.3		32.8			
WESTBOUND															
LT SHLD	STA.	2182+00.0	TO	2183+00.0	1037.1	12.9	5.6	14.5		27.4		77.8			
LT SHLD	STA.	2183+00.0	TO	2186+05.7	3065.9	38.2	17.0	42.9	340.7	290.9	374.6	46.8	93.7		
RT SHLD	STA.	2182+00.0	TO	2183+00.0	785.8	9.8	5.6	11.0		20.8		58.9			
RT SHLD	STA.	2183+00.0	TO	2186+05.7	2391.4	29.8	17.0	33.5	265.7	226.9	299.7	37.5	74.9		
PAVEMENT	STA.	2182+00.0	TO	2184+90.0	6960.0	86.6	16.1	97.4		184.1		522.0			
PAVEMENT	STA.	2184+90.0	TO	2186+05.7	2777.9	34.6	6.4	38.9	308.7	263.6	308.7	38.6	77.2		
CONNECTOR	STA.	2186+05.7	TO	2186+21.7	725.7	9.0		10.2		19.2	66.9			80.6	80.6
CONNECTOR	STA.	2188+31.5	TO	2188+48.9	725.7	9.0		10.2		19.2	66.9			80.6	80.6
PAVEMENT	STA.	2188+48.9	TO	2191+00.0	6025.5	75.0	13.9	84.4		159.3		451.9			
LT SHLD	STA.	2188+48.9	TO	2190+00.0	1501.3	18.7	8.4	21.0	166.8	142.5	183.6	22.9	45.9		
LT SHLD	STA.	2190+00.0	TO	2191+00.0	915.5	11.4	5.6	12.8		24.2		68.7			
RT SHLD	STA.	2188+48.9	TO	2190+00.0	1139.0	14.2	8.4	15.9	126.6	108.1	143.3	17.9	35.8		
RT SHLD	STA.	2190+00.0	TO	2191+00.0	1025.3	12.8	5.6	14.4		27.1		76.9			
ADDITIONAL FOR LONGITUDINAL JOINT TRIMMING						12.3				12.3		32.8			
SUBTOTAL ABOVE					*58059.2*	*747.0*	*218.9*	*812.8*	*2426.4*	*3054.5*	*2896.3*	*2893.2*	*657.2*	*322.5*	*322.5*
FROM MOT SCHED						*463.7*						*1242.0*			
FROM CROSSOVER SCHED										*4234.8*	*8896.5*	*6005.2*	*20017.2*		
SUBTOTAL						*1210.7*	*218.9*	*812.8*	*2426.4*	*7289.3*	*11792.8*	*10140.3*	*20674.4*	*322.5*	*322.5*
TOTAL						**1211**	**219**	**813**	**2426**	**7289**	**11793**	**10140**	**20674**	**323**	**323**

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VEENSTRA & KIMM INC.	DESIGNED - DMS	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

SCHEDULE OF QUANTITIES

SCALE: | SHEET 4 OF 7 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	16
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

GUARDRAIL SCHEDULE

LOCATION					LENGTH OF NEED STATION		GUARDRAIL REMOVAL	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	TRAFFIC BARRIER TERMINAL, TYPE 2	SPBGR TYPE A 6 FT POSTS	TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL REFLECTORS, TYPE A	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL AGGREGATE EROSION CONTROL
					ALIGNMENT	STA.	FOOT	EACH	EACH	FOOT	EACH	EACH	EACH	TON
WESTBOUND														
LT	STA.	181+99.1	TO	185+99.0	I-74	EX SPBGR	309.3			400.0		6.0		77.5
	STA.	185+99.0	TO	186+35.9		PARAPET					1.0			
LT	STA.	188+13.6	TO	188+50.4	I-74	PARAPET	303.0				1.0	4.0		50.9
	STA.	188+50.4	TO	191+00.2		EX SPBGR				250.0				
RT	STA.	188+18.8	TO	188+55.7	I-74	PARAPET	298.2				1.0	4.0		52.7
	STA.	188+55.7	TO	190+43.2						187.5				
	STA.	190+43.2	TO	190+93.2		190+73.4		1.0					1.0	
EASTBOUND														
LT	STA.	183+74.4	TO	184+24.4	I-74	183+99.3	301.4	1.0				4.0	1.0	54.8
	STA.	184+24.4	TO	186+11.9						187.5				
	STA.	186+11.9	TO	186+48.8		PARAPET					1.0			
RT	STA.	181+92.2	TO	186+17.1	I-74	EX SPBGR	329.8			425.0		6.0		80.7
	STA.	186+17.1	TO	186+54.0		PARAPET					1.0			
RT	STA.	188+31.7	TO	188+68.6	I-74	PARAPET	295.0				1.0	4.0		47.7
	STA.	188+68.6	TO	191+05.9		EX SPBGR				237.5				
CH 69														
RT	STA.	17+47.7	TO	17+98.3	CH 69	17+65.0		1.0				4.0	1.0	62.7
	STA.	17+98.3	TO	20+38.5						237.5				
	STA.	20+38.5	TO	20+51.0		20+13.5			1.0					
LT	STA.	19+03.2	TO	19+15.6	CH 69	19+40.2	262.9		1.0			4.0		126.3
	STA.	19+15.6	TO	21+26.6						212.5				
	STA.	21+26.6	TO	21+76.6		21+54.6		1.0					1.0	
SUBTOTAL							*2099.6*	*4.0*	*2.0*	*2137.5*	*6.0*	*36.0*	*4.0*	*553.3*
TEMPORARY GUARDRAIL TABLE SUBTOTAL												*8.0*	*2.0*	*58.7*
TOTAL							**2100**	**4**	**2**	**2138**	**6**	**44**	**6**	**612**

TEMPORARY GUARDRAIL SCHEDULE

LOCATION					LENGTH OF NEED STATION		TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 1	TEMPORARY STEEL PLATE BEAM GUARDRAIL, TYPE A	TEMPORARY TRAFFIC BARRIER TERMINAL, TYPE 6	GUARDRAIL REFLECTORS, TYPE A	TERMINAL MARKER - DIRECT APPLIED	GUARDRAIL AGGREGATE EROSION CONTROL
					ALIGNMENT	STA.	EACH	FOOT	EACH	EACH	EACH	TON
STAGE 1 - WESTBOUND												
LT	STA.	183+74.9	TO	184+24.9	I-74	184+01.0	1.0			4.0	1.0	28.3
	STA.	184+24.9	TO	184+74.9				50.0				
	STA.	184+74.9	TO	185+11.8		PARAPET			1.0			
STAGE 2 - EASTBOUND												
LT	STA.	188+26.4	TO	188+63.3	I-74	PARAPET			1.0	4.0		30.4
	STA.	188+63.3	TO	189+13.3				50.0				
	STA.	189+13.3	TO	189+63.3		189+36.0	1.0				1.0	(TO REMAIN)
SUBTOTAL							*2.0*	*100.0*	*2.0*	*8.0*	*2.0*	*58.7*
TOTAL							**2**	**100**	**2**	**SEE GUARDRAIL TABLE**		

NOTES:

1. TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT IS ASSUMED TO BE 50.0' IN LENGTH, WITH THE FIRST 12.5' NOT APPLIED TO THE LENGTH OF NEED.
2. THE FULL LENGTH OF THE TRAFFIC BARRIER TERMINAL, TYPE 2, PLUS THE ADJACENT 25' OF GUARDRAIL, IS NOT INCLUDED IN THE LENGTH OF NEED.

EARTHWORK SCHEDULE

LOCATION	TOPSOIL EXCAVATION AND PLACEMENT	EARTH EXCAVATION	FURNISHED EXCAVATION	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	INFORMATION ONLY: EARTH EXCAVATION ADJUST FOR SHRINKAGE	INFORMATION ONLY: EMBANKMENT	INFORMATION ONLY: EARTHWORK BALANCE WASTE (+) OR SHORTAGE (-)	INFORMATION ONLY: PROPOSED TOPSOIL REQUIRED	INFORMATION ONLY: TOPSOIL BALANCE WASTE (+) OR SHORTAGE (-)
	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD	CU YD
CROSSOVERS									
WEST STA. 171+98.1 TO 182+00.0	526.1	710.8	1237.5	0.0	533.1	1770.6	-1237.5	0.0	526.1
EAST STA. 191+00.0 TO 201+01.9	508.5	765.2	878.7	0.0	573.9	1452.6	-878.7	0.0	508.5
W- REM STA. 171+98.1 TO 182+00.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	526.1	-526.1
E-REM STA. 191+00.0 TO 201+01.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	508.5	-508.5
CROSSOVER - SUBTOTAL	1034.6	1476.0	2116.3	0.0					0.0
I-74 EB									
STA. 182+00.0 TO 191+00.0	871.4	579.9	13289.4	347.5	434.9	13724.4	-13289.4	523.9	347.5
I-74 WB									
STA. 182+00.0 TO 191+00.0	500.0	517.7	9666.6	41.4	388.3	10054.9	-9666.6	458.6	41.4
CH 69, BRIDGE CONES, SLOPE WALLS									
STA. 17+07.7 TO 22+33.34	396.2	1269.1	5933.2	175.1	951.8	6885.0	-5933.2	221.1	175.1
SUBTOTAL	*2802.2*	*3842.7*	*31005.5*	*564.0*					
TOTAL	**2803**	**3843**	**31006**	**564**					

AGGREGATE SHOULDER SCHEDULE

LOCATION	AREA	AGGREGATE SHOULDERS, TYPE B
	SQ FT	TON
WESTBOUND		
INSIDE SHOULDER		
RT STA. 2182+00.0 TO 2186+41.1	1764.6	78.8
EASTBOUND		
INSIDE SHOULDER		
LT STA. 1182+00.0 TO 1183+40.4	561.6	25.1
CH 69		
OUTSIDE SHOULDER		
RT STA. 20+49.8 TO 20+69.8	81.2	3.6
LT STA. 18+84.0 TO 19+04.2	191.8	8.6
SUBTOTAL		*116.1*
TOTAL		**116**

LANDSCAPING SCHEDULE

LOCATION	AREA	SEEDING, CLASS 3	EROSION CONTROL BLANKET	NITROGEN FERTILIZER NUTRIENT	PHOSPHORUS FERTILIZER NUTRIENT	POTASSIUM FERTILIZER NUTRIENT
	SQ FT	ACRE	SQ YD	POUND	POUND	POUND
CROSSOVERS						
WEST STA. 171+98.1 TO 182+00.0	43308.6	0.99	4812.1	89.5	89.5	89.5
EAST STA. 191+00.0 TO 201+01.9	41814.7	0.96	4646.1	86.4	86.4	86.4
I-74 EB						
STA. 182+00.0 TO 191+00.0	45434.1	1.04	5048.2	93.9	93.9	93.9
I-74 WB						
STA. 182+00.0 TO 191+00.0	44174.1	1.01	4908.2	91.3	91.3	91.3
CH 69 & BRIDGE CONES						
STA. 17+07.7 TO 22+33.34	19462.9	0.45	2162.5	40.2	40.2	40.2
SUBTOTAL		*4.46*	*21577.2*	*401.2*	*401.2*	*401.2*
TOTAL		**4.46**	**21578**	**402**	**402**	**402**

GROUND IMPROVEMENT & SETTLEMENT SCHEDULE

LOCATION	WICK DRAINS	SAND DRAINAGE BLANKET	SETTLEMENT PLATFORMS
	FOOT	CU YD	EACH
EASTBOUND			
STAGE 1			
STA. 185+78.7 TO 186+94.7	16905	1178	1
WESTBOUND			
STAGE 2			
STA. 185+69.3 TO 186+71.2	7959	653	1
TOTAL	**24864**	**1831**	**2**

PAVEMENT MARKING SCHEDULE

LOCATION					PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD -LINE 4"		GROOVING FOR RECESSED PAVEMENT MARKING 5"	PREFORMED PLASTIC PAVEMENT MARKING, TYPE D - STANDARD -LINE 6"	GROOVING FOR RECESSED PAVEMENT MARKING 7"	RAISED REFLECTIVE PAVEMENT MARKER	RAISED REFLECTIVE PAVEMENT MARKER REMOVAL	RECOVERABLE DELINEATORS	DELINEATOR REMOVAL
					WHITE	YELLOW		WHITE					
					SOLID	SOLID		SKIP					
					FOOT	FOOT	FOOT	FOOT	FOOT	EACH	EACH	EACH	EACH
WESTBOUND													
		WEST LIMIT	TO	2164+00.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.0	4.0
	STA.	2164+00.0	TO	2179+00.0	0.0	702.0	702.0	25.0	25.0	2.0	2.0	3.0	3.0
	STA.	2179+00.0	TO	2194+00.0	0.0	600.0	600.0	0.0	0.0	10.0	0.0	0.0	0.0
	STA.	2194+00.0	TO	2209+00.0	0.0	1500.0	1500.0	300.0	300.0	17.0	17.0	5.0	5.0
	STA.	2209+00.0	TO	EAST LIMIT	0.0	216.0	216.0	1207.0	1207.0	16.0	16.0	5.0	5.0
EASTBOUND													
		WEST LIMIT	TO	1164+00.0	0.0	0.0	0.0	342.0	342.0	18.0	18.0	5.0	5.0
	STA.	1164+00.0	TO	1179+00.0	1500.0	702.0	2202.0	375.0	375.0	20.0	20.0	5.0	5.0
	STA.	1179+00.0	TO	1194+00.0	1500.0	927.0	2013.0	375.0	375.0	17.0	17.0	0.0	0.0
	STA.	1194+00.0	TO	1209+00.0	350.0	1004.0	1354.0	264.0	264.0	5.0	5.0	3.0	3.0
	STA.	1209+00.0	TO	EAST LIMIT	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUBTOTAL					*3350.0*	*5651.0*	*8587.0*	*2888.0*	*2888.0*	*105.0*	*95.0*	*30.0*	*30.0*
TOTAL						**9001**	**8587**	**2888**	**2888**	**105**	**SEE TEMP MKGS**	**30**	**30**

MOWING SCHEDULE

LOCATION	AREA (SQ FT)	NUMBER OF MOWINGS	MOWING
			ACRES
SEASON 1			
MEDIAN	28252.3	1	0.649
OUTSIDE SLOPES	77744.1	1	1.785
SEASON 2			
MEDIAN	28252.3	1	0.649
OUTSIDE SLOPES	77744.1	1	1.785
SUBTOTAL			*4.867*
TOTAL			**4.87**

JOBSITE SCHEDULE

LOCATION	MOBILIZATION	ENGINEER'S FIELD OFFICE, TYPE A	ENGINEER'S FIELD LABORATORY	CHANGEABLE MESSAGE SIGN	TRAFFIC CONTROL AND PROTECTION, STANDARD 701401	TRAFFIC CONTROL AND PROTECTION, STANDARD 701416	TRAFFIC CONTROL AND PROTECTION, (SPECIAL)	CONSTRUCTION LAYOUT	TRAINEES	TRAINEES TRAINING PROGRAM GRADUATE
	LSUM	CAL MO	CAL MO	CAL DAY	L SUM	EACH	L SUM	L SUM	HOURS	HOURS
JOBSITE	1	26	26	56	1	1	1	1	1000	1000
SUBTOTAL	*1.0*	*26.0*	*26.0*	*56.0*	*1.0*	*1.0*	*1.0*	*1.0*	*1000.0*	*1000.0*
TOTAL	**1**	**26**	**26**	**56**	**1**	**1**	**1**	**1**	**1000**	**1000**

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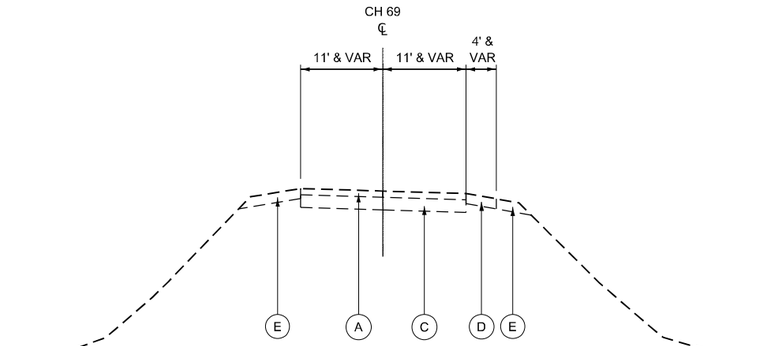
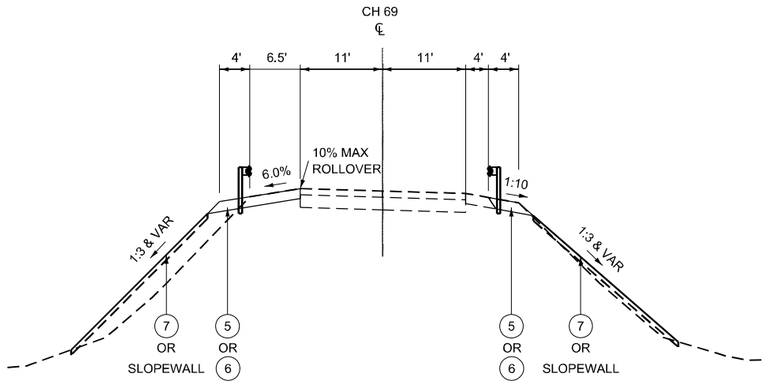
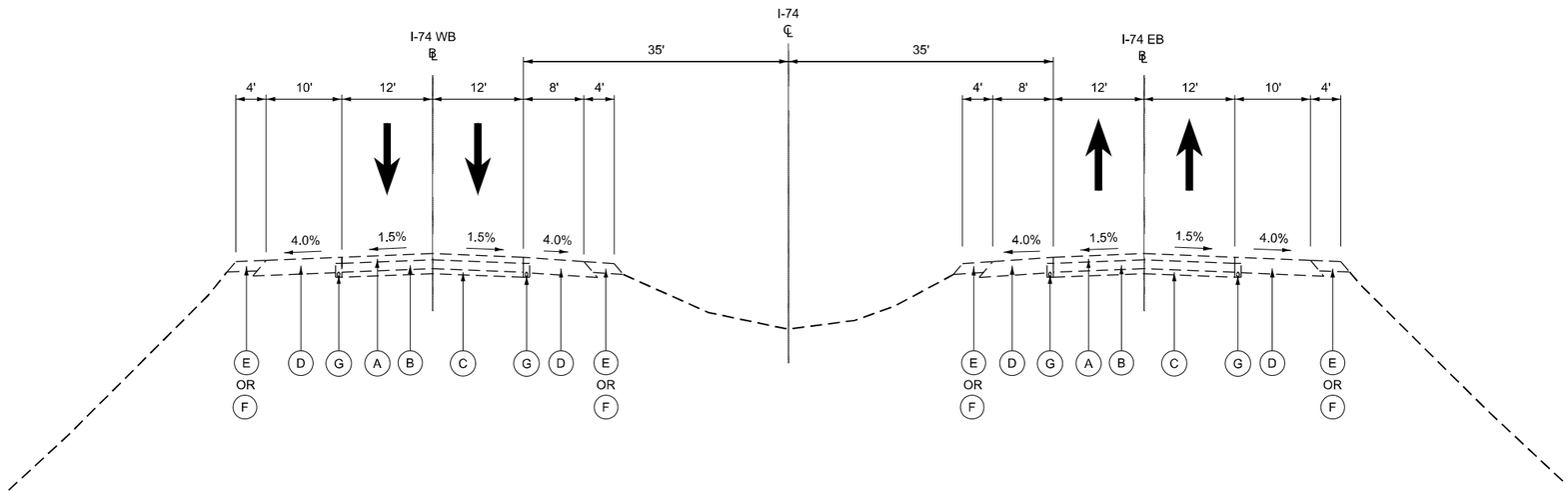


EXISTING TYPICAL CROSS SECTION
CH-69



PROPOSED TYPICAL CROSS SECTION
CH-69



EXISTING TYPICAL CROSS SECTION
I-74

LEGEND

EXISTING

- (A) BITUMINOUS PAVEMENT, 6"-9"
- (B) PCC PAVEMENT, 8"
- (C) STABILIZED SUBBASE
- (D) BITUMINOUS SHOULDER
- (E) GUARDRAIL AGGREGATE EROSION CONTROL
- (F) AGGREGATE SHOULDER
- (G) PIPE UNDERDRAIN

PROPOSED

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N90 (2")
- (2) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70 (2 $\frac{1}{4}$")
- (3) HOT-MIX ASPHALT BASE COURSE, 11"
- (4) AGGREGATE SUBGRADE IMPROVEMENT 12"
- (5) GUARDRAIL AGGREGATE EROSION CONTROL (8")
- (6) AGGREGATE SHOULDERS, TYPE B (8")
- (7) SEEDING, CLASS 3 PR TOPSOIL (4")
- (8) HOT-MIX ASPHALT SURFACE REMOVAL (SPECIAL)

MODEL: Typicals [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

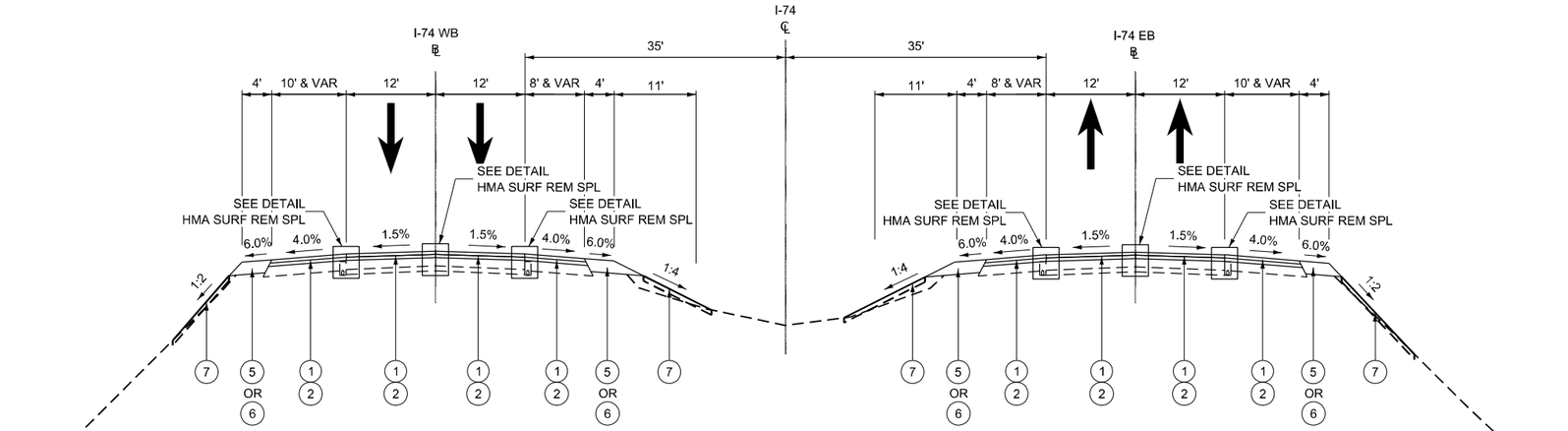
TYPICAL SECTIONS

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	20

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



PROPOSED TYPICAL CROSS SECTION

PAVEMENT RESURFACING - SHOULDER RESURFACING

W.B. STA. 182+00.00 TO 183+00.00
W.B. STA. 190+00.00 TO 191+00.00
E.B. STA. 182+00.00 TO 183+00.00
E.B. STA. 190+00.00 TO 191+00.00

PROPOSED TYPICAL CROSS SECTION

PAVEMENT RESURFACING - SHOULDER RECONSTRUCTION

W.B. STA. 183+00.00 TO 184+90.00
W.B. STA. 188+48.94 TO 190+00.00
E.B. STA. 183+00.00 TO 185+00.00
E.B. STA. 188+61.84 TO 190+00.00

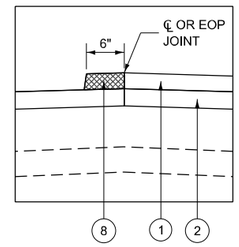
LEGEND

EXISTING

- (A) BITUMINOUS PAVEMENT, 6"-9"
- (B) PCC PAVEMENT, 8"
- (C) STABILIZED SUBBASE
- (D) BITUMINOUS SHOULDER
- (E) GUARDRAIL AGGREGATE EROSION CONTROL
- (F) AGGREGATE SHOULDER
- (G) PIPE UNDERDRAIN

PROPOSED

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N90 (2")
- (2) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70 (2 ¼")
- (3) HOT-MIX ASPHALT BASE COURSE, 11"
- (4) AGGREGATE SUBGRADE IMPROVEMENT 12"
- (5) GUARDRAIL AGGREGATE EROSION CONTROL (8")
- (6) AGGREGATE SHOULDERS, TYPE B (8")
- (7) SEEDING, CLASS 3
  PR TOPSOIL (4")
- (8) HOT-MIX ASPHALT SURFACE REMOVAL (SPECIAL)



NOTE:
SEE CONSTRUCTION SEQUENCE FOR MILLING AND PAVING SPECIAL PROVISION

HMA SURFACE REMOVAL (SPECIAL) DETAIL

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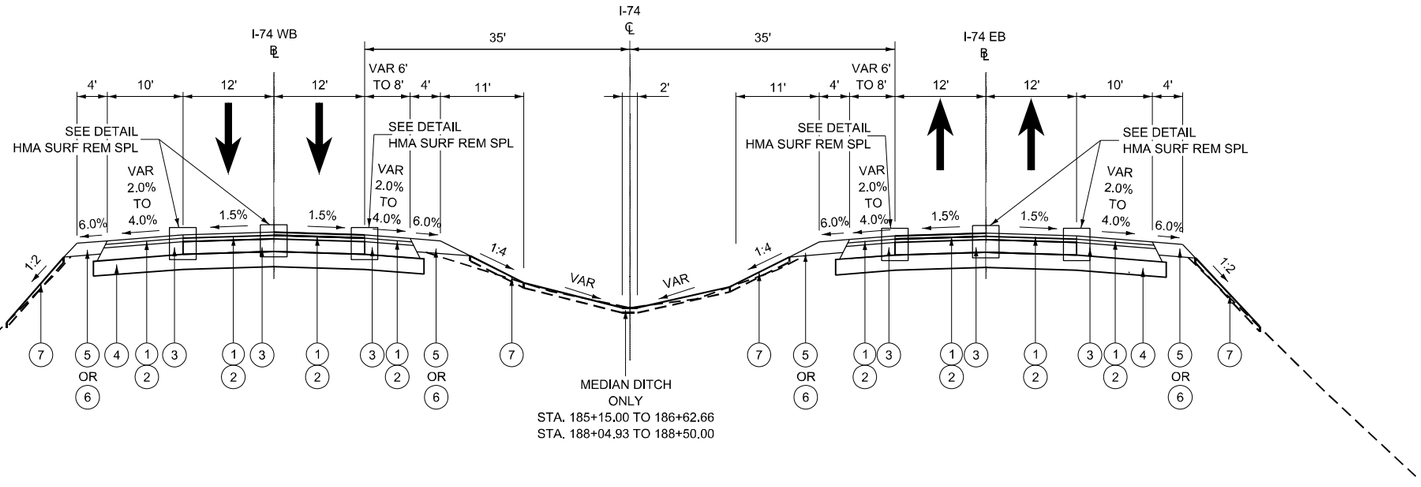
VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	21
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



LEGEND

EXISTING

- (A) BITUMINOUS PAVEMENT, 6"-9"
- (B) PCC PAVEMENT, 8"
- (C) STABILIZED SUBBASE
- (D) BITUMINOUS SHOULDER
- (E) GUARDRAIL AGGREGATE EROSION CONTROL
- (F) AGGREGATE SHOULDER
- (G) PIPE UNDERDRAIN

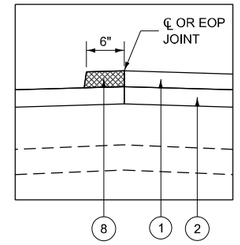
PROPOSED

- (1) POLYMERIZED HOT-MIX ASPHALT SURFACE COURSE, IL-9.5, MIX "E", N90 (2")
- (2) POLYMERIZED HOT-MIX ASPHALT BINDER COURSE, IL-9.5, N70 (2 ¼")
- (3) HOT-MIX ASPHALT BASE COURSE, 11"
- (4) AGGREGATE SUBGRADE IMPROVEMENT 12"
- (5) GUARDRAIL AGGREGATE EROSION CONTROL (8")
- (6) AGGREGATE SHOULDERS, TYPE B (8")
- (7) SEEDING, CLASS 3
  PR TOPSOIL (4")
- (8) HOT-MIX ASPHALT SURFACE REMOVAL (SPECIAL)

PROPOSED TYPICAL CROSS SECTION

PAVEMENT RECONSTRUCTION - SHOULDER RECONSTRUCTION

W.B. STA. 184+90.00 TO 186+05.74
E.B. STA. 185+00.00 TO 186+18.64



NOTE:
SEE CONSTRUCTION SEQUENCE FOR MILLING AND PAVING SPECIAL PROVISION

HMA SURFACE REMOVAL (SPECIAL)
DETAIL

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VEENSTRA & KIMM INC.

	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	22
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

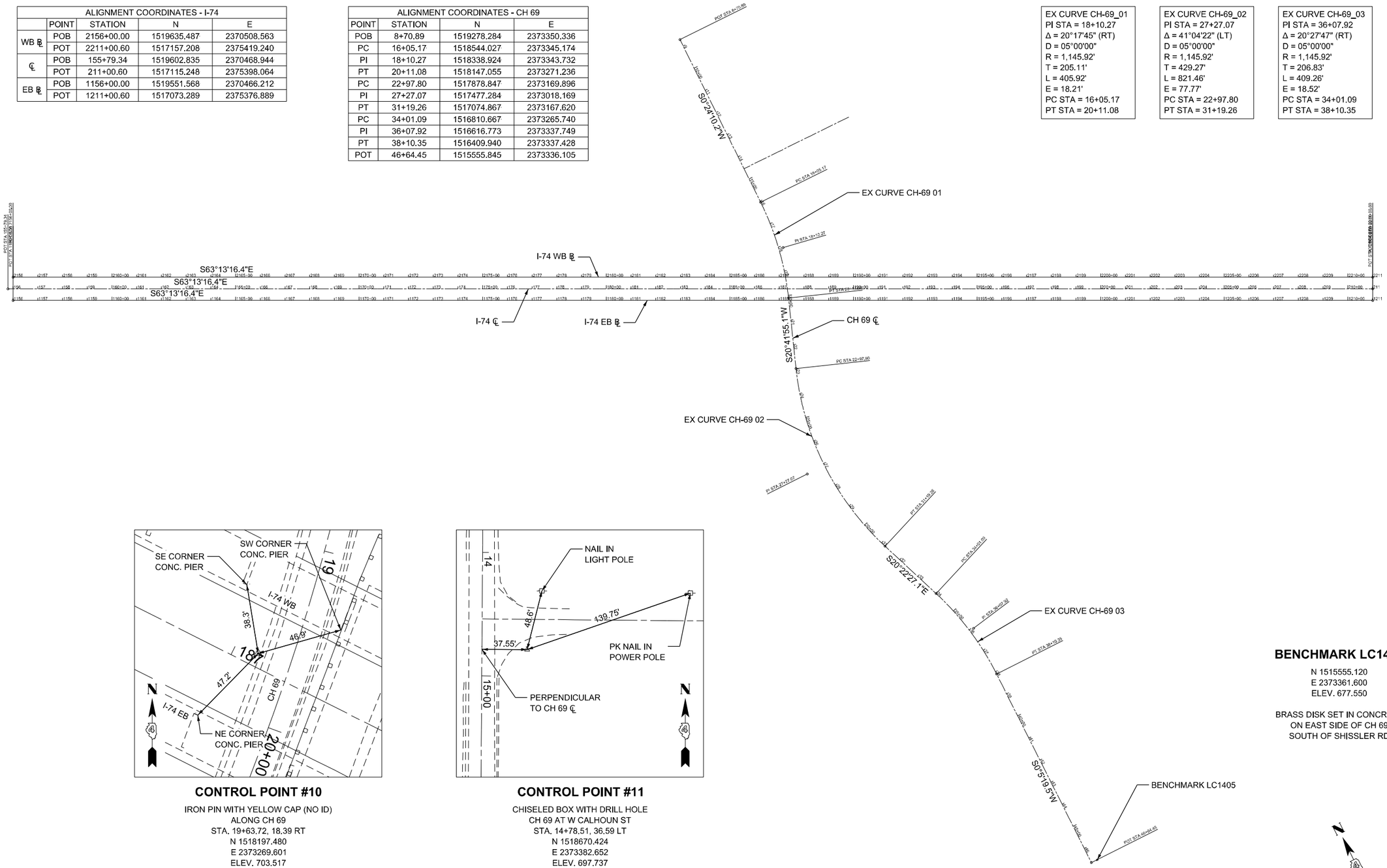
ALIGNMENT COORDINATES - I-74				
	POINT	STATION	N	E
WB ℄	POB	2156+00.00	1519635.487	2370508.563
	POT	2211+00.60	1517157.208	2375419.240
℄	POB	155+79.34	1519602.835	2370468.944
	POT	211+00.60	1517115.248	2375398.064
EB ℄	POB	1156+00.00	1519551.568	2370466.212
	POT	1211+00.60	1517073.289	2375376.889

ALIGNMENT COORDINATES - CH 69			
POINT	STATION	N	E
POB	8+70.89	1519278.284	2373350.336
PC	16+05.17	1518544.027	2373345.174
PI	18+10.27	1518338.924	2373343.732
PT	20+11.08	1518147.055	2373271.236
PC	22+97.80	1517878.847	2373169.896
PI	27+27.07	1517477.284	2373018.169
PT	31+19.26	1517074.867	2373167.620
PC	34+01.09	1516810.667	2373265.740
PI	36+07.92	1516616.773	2373337.749
PT	38+10.35	1516409.940	2373337.428
POT	46+64.45	1515555.845	2373336.105

EX CURVE CH-69_01
PI STA = 18+10.27
Δ = 20°17'45" (RT)
D = 05°00'00"
R = 1,145.92'
T = 205.11'
L = 405.92'
E = 18.21'
PC STA = 16+05.17
PT STA = 20+11.08

EX CURVE CH-69_02
PI STA = 27+27.07
Δ = 41°04'22" (LT)
D = 05°00'00"
R = 1,145.92'
T = 429.27'
L = 821.46'
E = 77.77'
PC STA = 22+97.80
PT STA = 31+19.26

EX CURVE CH-69_03
PI STA = 36+07.92
Δ = 20°27'47" (RT)
D = 05°00'00"
R = 1,145.92'
T = 206.83'
L = 409.26'
E = 18.52'
PC STA = 34+01.09
PT STA = 38+10.35



CONTROL POINT #10

IRON PIN WITH YELLOW CAP (NO ID)
ALONG CH 69
STA. 19+63.72, 18.39 RT
N 1518197.480
E 2373269.601
ELEV. 703.517

CONTROL POINT #11

CHISELED BOX WITH DRILL HOLE
CH 69 AT W CALHOUN ST
STA. 14+78.51, 36.59 LT
N 1518670.424
E 2373382.652
ELEV. 697.737

BENCHMARK LC1405

N 1515555.120
E 2373361.600
ELEV. 677.550

BRASS DISK SET IN CONCRETE
ON EAST SIDE OF CH 69
SOUTH OF SHISSLER RD

0 200 400 600
SCALE IN FEET

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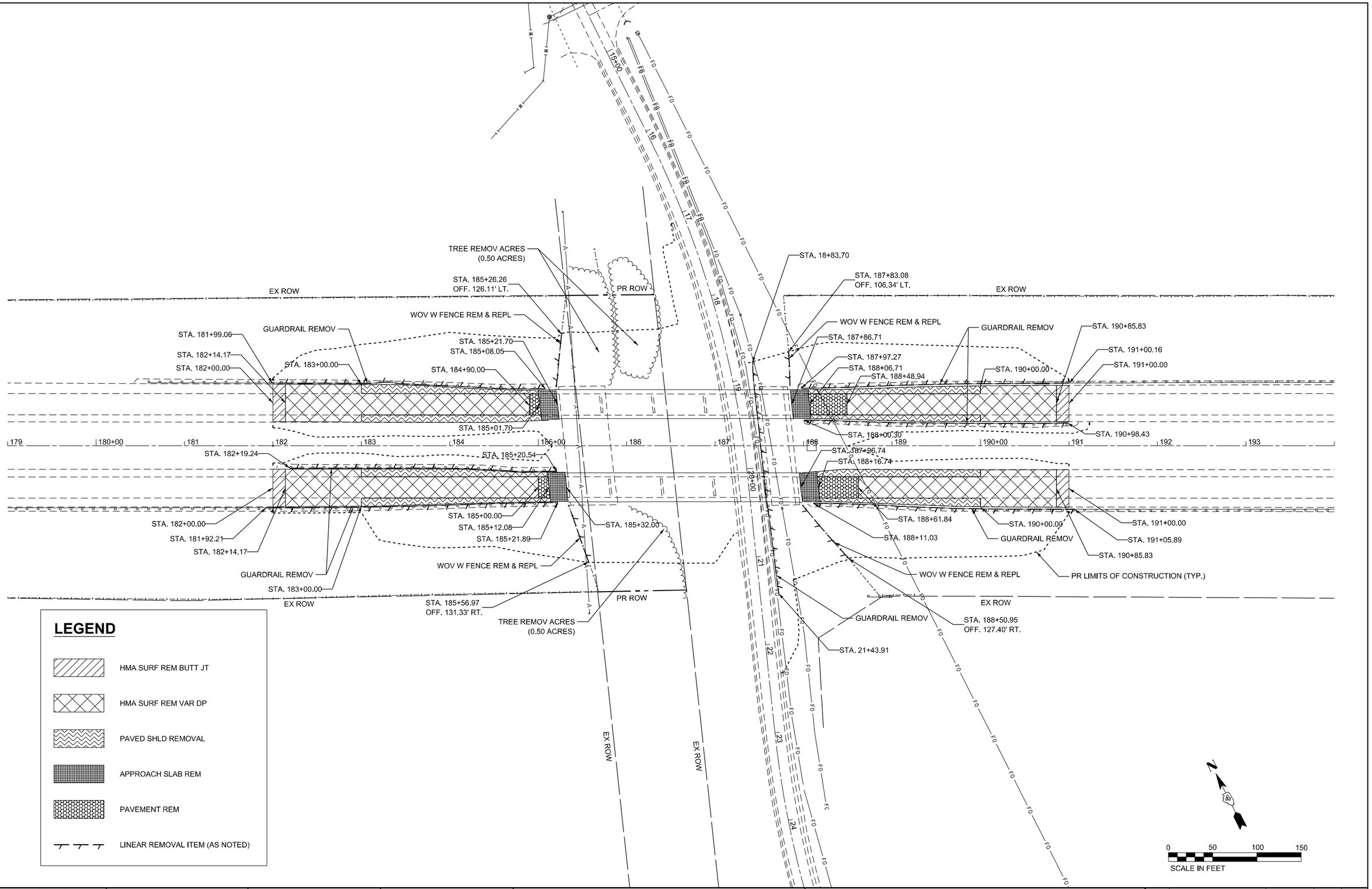
VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ALIGNMENT AND TIES

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	23
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



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VEENSTRA & KIMM INC.	DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

REMOVAL PLAN

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	24
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

EX ROW
PR ROW
EX ROW
EX ROW
FRONTIER FIBER OPTIC
FRONTIER COPPER CABLE
MID CENTURY FIBER OPTIC
I-74 ℄
I-74 WB ℄
I-74 WB
I-74 EB
AGGREGATE SHLDS B
PR DITCH
2 FT WIDE
STA. 189+97.33
GDRL AGG EROS CONT
(FROM TRAFFIC STAGING)
STA. 190+00.00
AGGREGATE SHLDS B
STA. 183+00.00
STA. 183+40.39
GDRL AGG EROS CONT
PR DITCH
2 FT WIDE
I-74 EB ℄
STA. 182+00.00
BEGIN IMPROVEMENTS
STA. 183+00.00
STA. 185+00.00
STA. 186+18.64
STA. 186+36.08
GDRL AGG EROS CONT
STA. 188+43.87
STA. 188+61.84
STA. 190+00.00
GDRL AGG EROS CONT
STA. 191+00.00
END IMPROVEMENTS
PR LIMITS OF CONSTRUCTION (TYP.)
CH 69
EX ROW
PR ROW
PROPOSED EB STRUCTURE
SN 072-0259
(SEE STRUCTURAL PLANS)
EX ROW
STA. 185+67.16, 165.03' RT
N: 1518109.351', E: 2373061.970'
STA. 186+67.50, 162.89' RT
N: 1518066.057', E: 2373152.521'
EX ROW
EX ROW
N
0 50 100 150
SCALE IN FEET

LEGEND

PAVEMENT RECONSTRUCTION
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70
HMA BASE CSE 11
AGG SUBGR IMPR 12

SHOULDER RECONSTRUCTION
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70
HMA BASE CSE 11
AGG SUBGR IMPR 12

PAVEMENT RESURFACING
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70

SHOULDER RESURFACING
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70

PAVEMENT CONNECTOR (PCC)
PAVT CON PCC BR APP SL
AGG SUBGR IMPR 12

200' PROFILE TRANSITION
L = 500.00'
K = 716.67
1182+00.00
EL 723.26
VPC 1184+00.00
EL 724.52
HP 1186+00.00
EL 724.80
VPI 1186+50.00
EL 725.22
L = 500.00'
K = 716.67
200' PROFILE TRANSITION
VPT 1189+00.00
EL 724.17
1191+00.00
EL 722.66
PR PROFILE
I-74 EB
EX PROFILE
I-74 EB
+0.28%
-0.42%
-1.51%
+4.33%
+15.00
722.03'
+62.66
719.80'
+50.00
721.46'
PR MEDIAN DITCH PROFILE
PR MEDIAN DITCH PROFILE
+04.93
719.51'
PROPOSED FILL
PR SAND DRAINAGE BLANKET
PR WICK DRAINS
P CUL CL A 2 36

1179+00	1180+00	1181+00	1182+00	1183+00	1184+00	1185+00	1186+00	1187+00	1188+00	1189+00	1190+00	1191+00	1192+00	1193+00	1194+00
720.83	721.32	721.78	722.20	722.56	722.94	723.26 **723.26**	723.61 **723.58**	723.92 **723.89**	724.05 **724.21**	724.18 **724.52**	724.28 **724.64**	724.37 **724.73**	724.44 **724.78**	724.46 **724.80**	724.49 **724.78**	724.45 **724.73**	724.38 **724.64**	724.31 **724.52**	724.00 **724.36**	723.82 **724.17**	723.57 **723.80**	723.30 **723.42**	723.01 **723.04**	722.66 **722.66**	722.27	721.85	721.44	720.96	720.46	719.85

DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	ROADWAY PLAN AND PROFILE I–74 EB
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		SCALE: SHEET 1 OF 3 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	25
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

VEENSTRA & KIMM INC.

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LEGEND

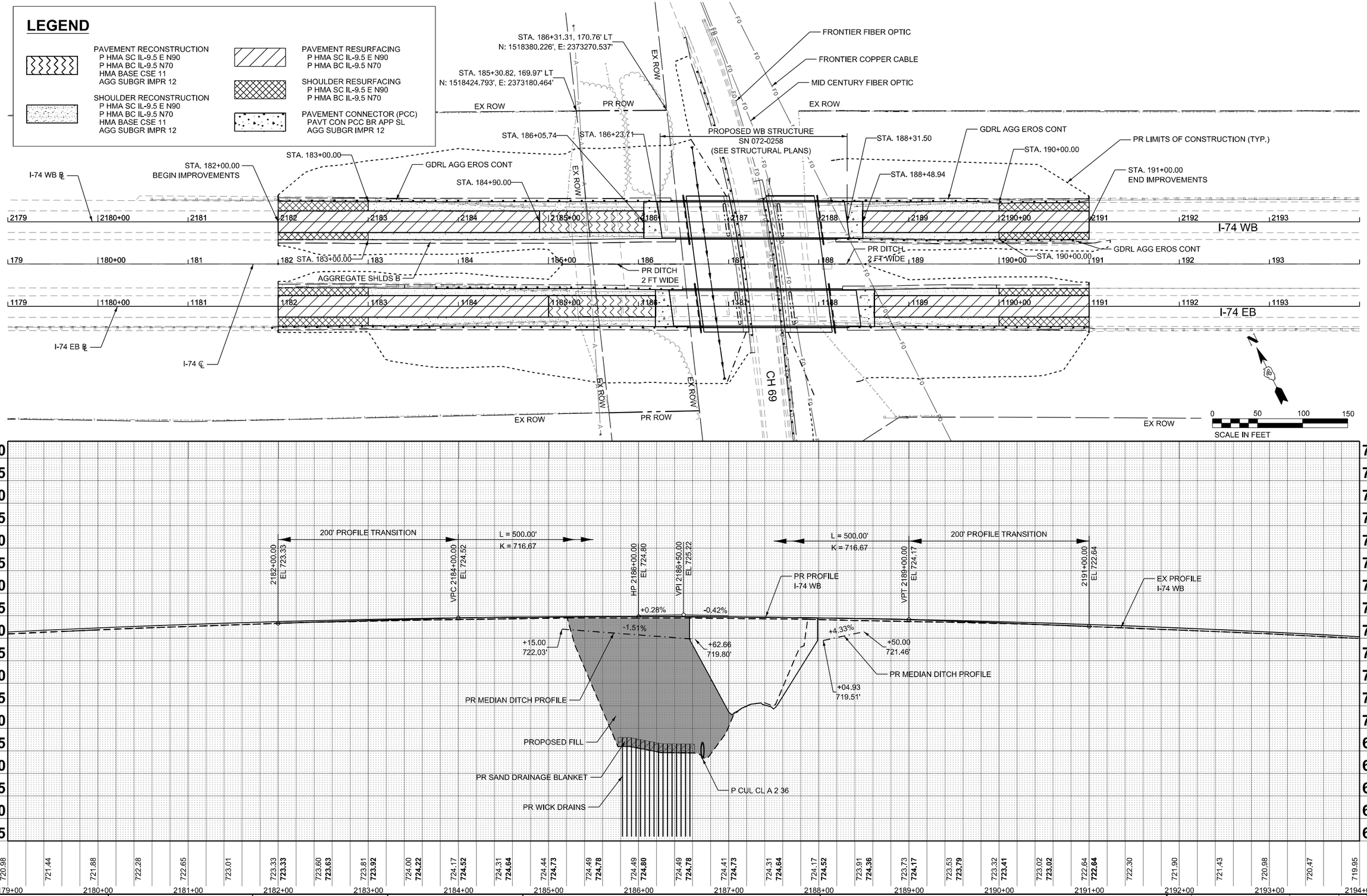
PAVEMENT RECONSTRUCTION
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70
HMA BASE CSE 11
AGG SUBGR IMPR 12

SHOULDER RECONSTRUCTION
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70
HMA BASE CSE 11
AGG SUBGR IMPR 12

PAVEMENT RESURFACING
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70

SHOULDER RESURFACING
P HMA SC IL-9.5 E N90
P HMA BC IL-9.5 N70

PAVEMENT CONNECTOR (PCC)
PAVT CON PCC BR APP SL
AGG SUBGR IMPR 12



720.98 721.44 721.88 722.28 722.65 723.01 **723.33** **723.63** **723.92** **724.22** **724.52** **724.64** **724.73** **724.78** **724.80** **724.78** **724.73** **724.64** **724.52** **724.36** **724.17** **723.79** **723.41** **723.02** **722.64** 722.30 721.90 721.43 720.98 720.47 719.95

2179+00 2180+00 2181+00 2182+00 2183+00 2184+00 2185+00 2186+00 2187+00 2188+00 2189+00 2190+00 2191+00 2192+00 2193+00 2194+00

VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
I–74 WB

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	26

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT

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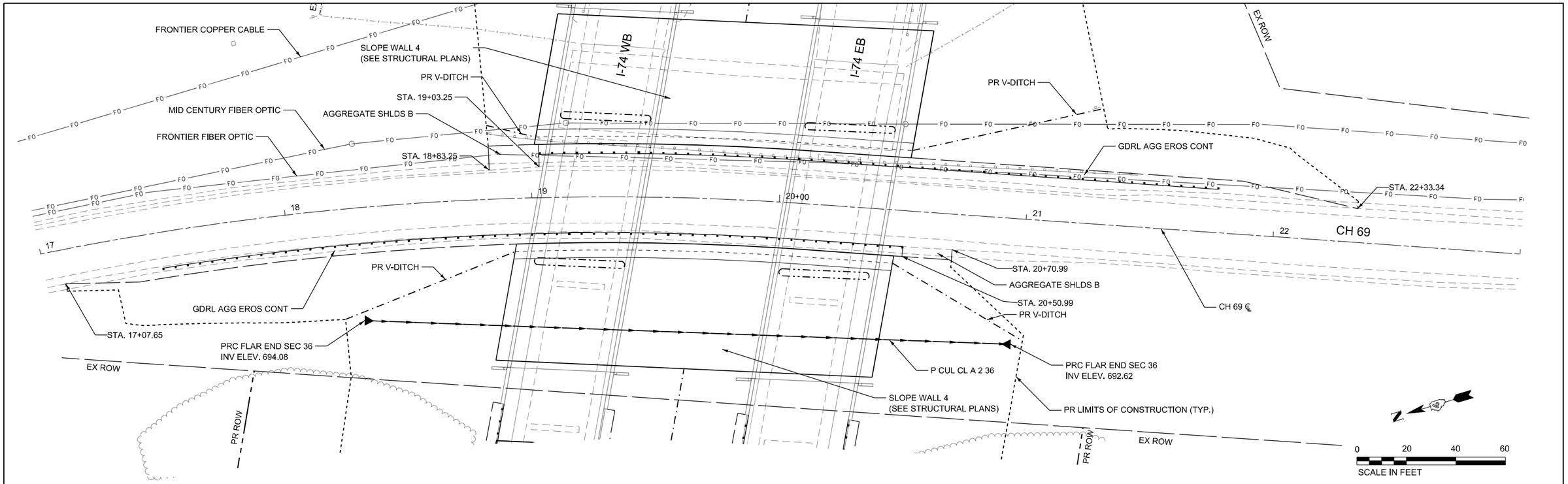

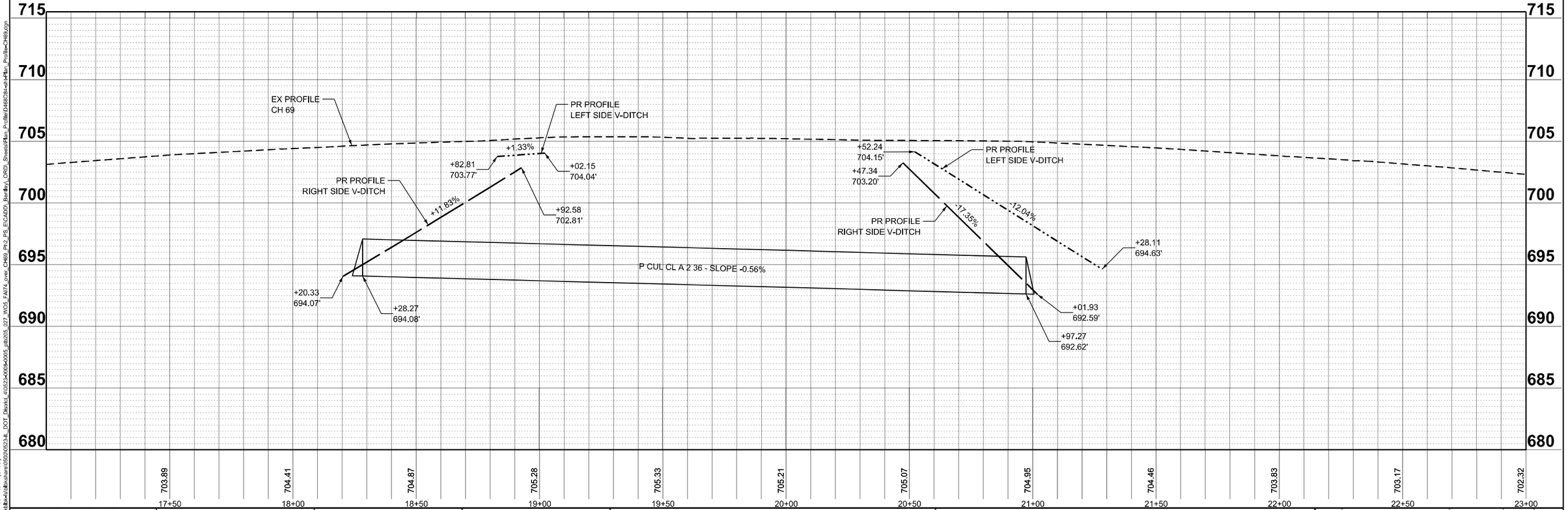

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VEENSTRA & KIMM INC.

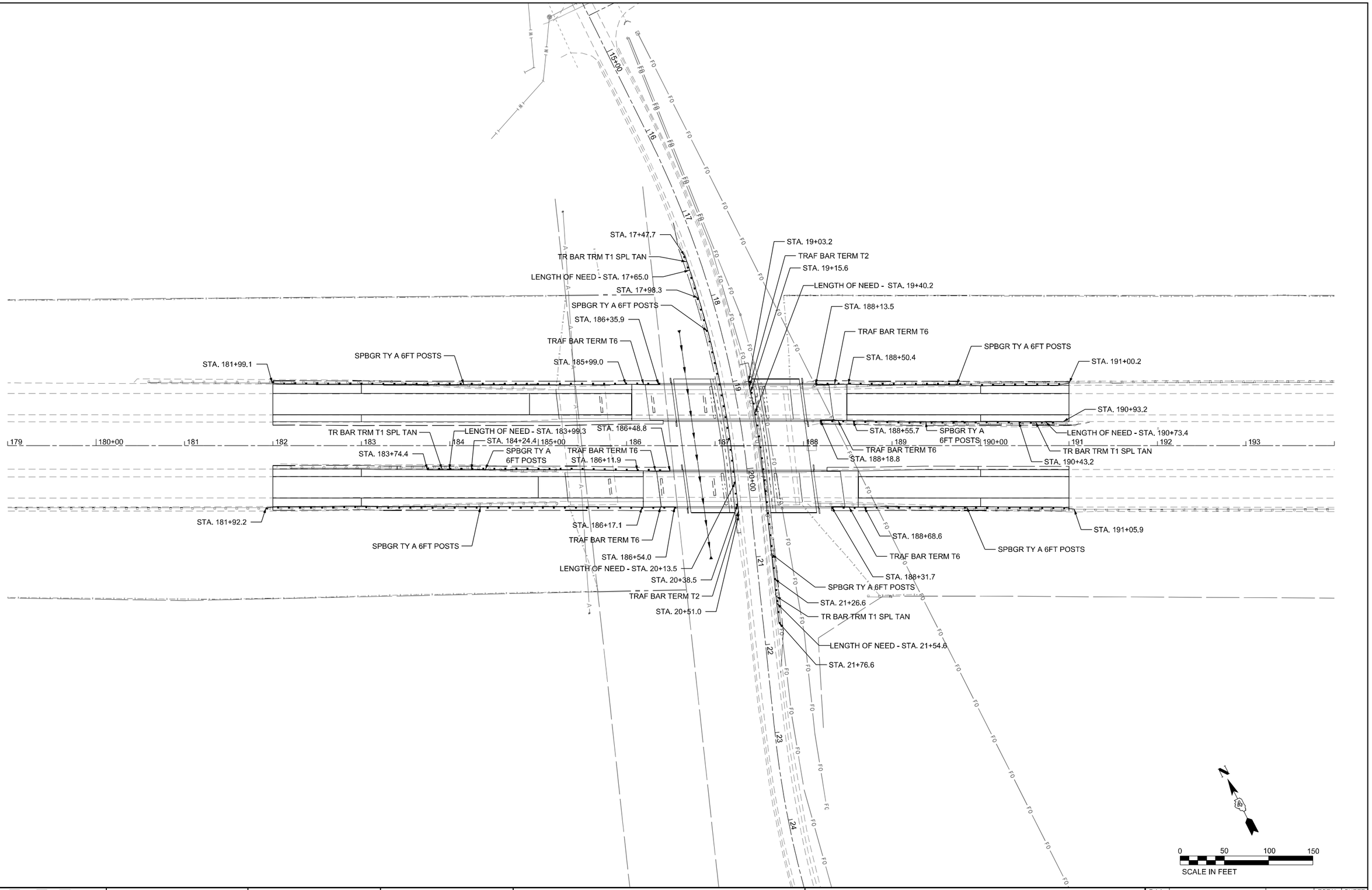
DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

ROADWAY PLAN AND PROFILE
CH 69

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	27
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



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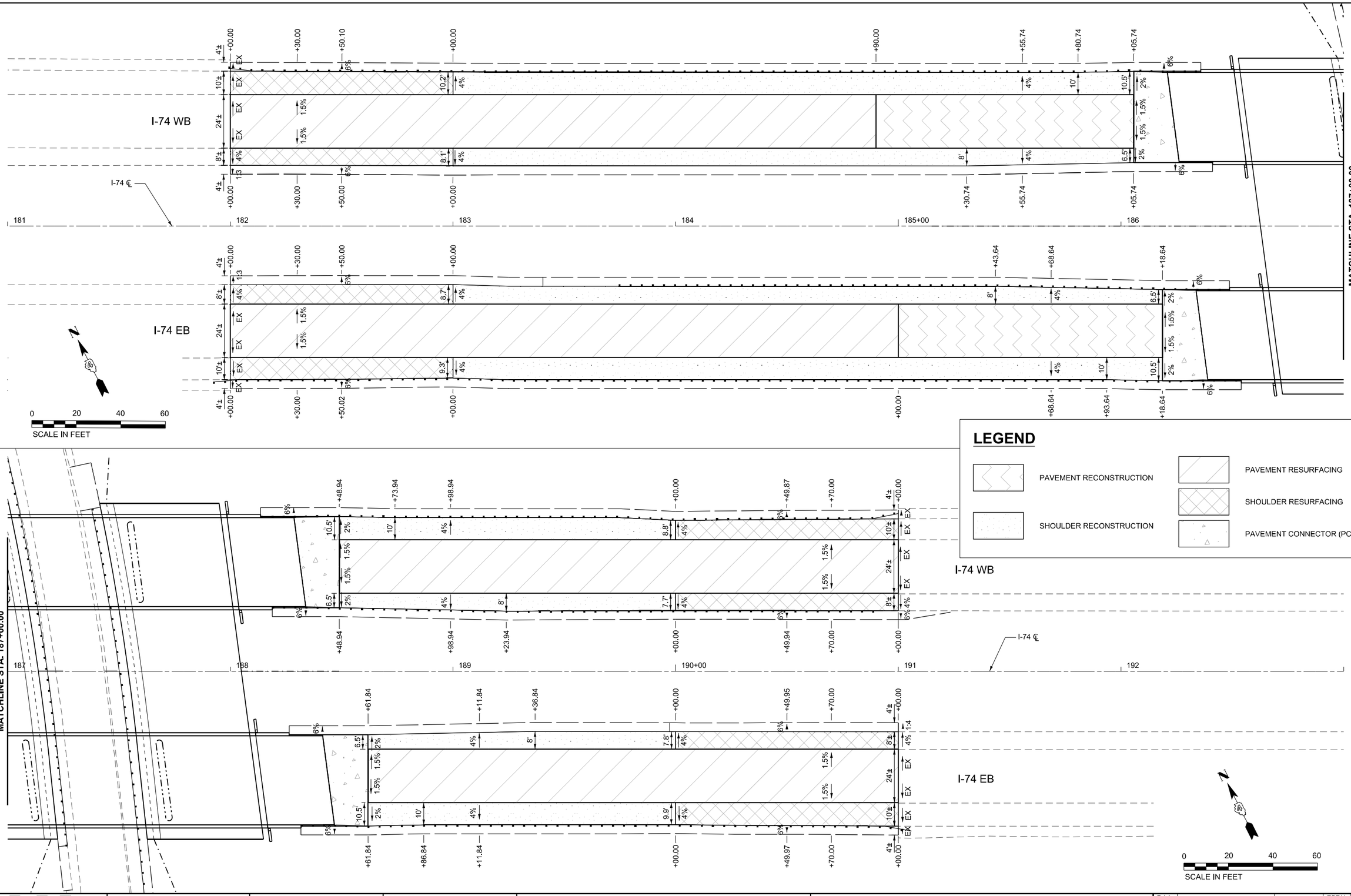
VEENSTRA & KIMM INC.	DESIGNED - DMS	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

GUARDRAIL PLAN

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	28
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	



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VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GEOMETRIC PLAN I-74
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		SCALE: SHEET 1 OF 1 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	29
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		

MAINTENANCE OF TRAFFIC NOTES - PRE-STAGE & WINTER SHUTDOWN

1. TRAFFIC CONTROL AND PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN. THESE NOTES, APPLICABLE SPECIAL PROVISIONS, AND SECTION 701 OF THE STANDARD SPECIFICATIONS AS AMENDED BY THE SPECIAL PROVISON FOR WORK ZONE TRAFFIC CONTROL (CHECK SHEET LRS 3).

2. WINTER SHUTDOWN STAGING FOLLOWING STAGE 1 IS DEPICTED IN THE PRE-STAGE AND WINTER SHUTDOWN PLANS. PRE-STAGE IS SIMILAR.

3. TEMPORARY PAVEMENT MARKINGS PLACED DURING PRE-STAGE SHALL BE TYPE IV TAPE AND TEMPORARY PAVEMENT MARKINGS PLACED DURING WINTER SHUTDOWN SHALL BE PAINT.

4. CONFLICTING PAVEMENT MARKINGS SHALL BE COVERED WITH BLACKOUT TAPE DURING PRE-STAGE AND SHALL BE REMOVED VIA WATERBLASTING DURING WINTER SHUTDOWN.

5. REFER TO THE TRAFFIC CONTROL LANE SHIFT DETAIL IN THE PLANS WHEN LANE SHIFTS ARE REQUIRED.

6. SEE CROSSOVER PLANS FOR HMA SURFACE REMOVAL AND HMA OVERLAY TO ADJUST SHOULDER CROSS-SLOPE AT CROSSOVERS.

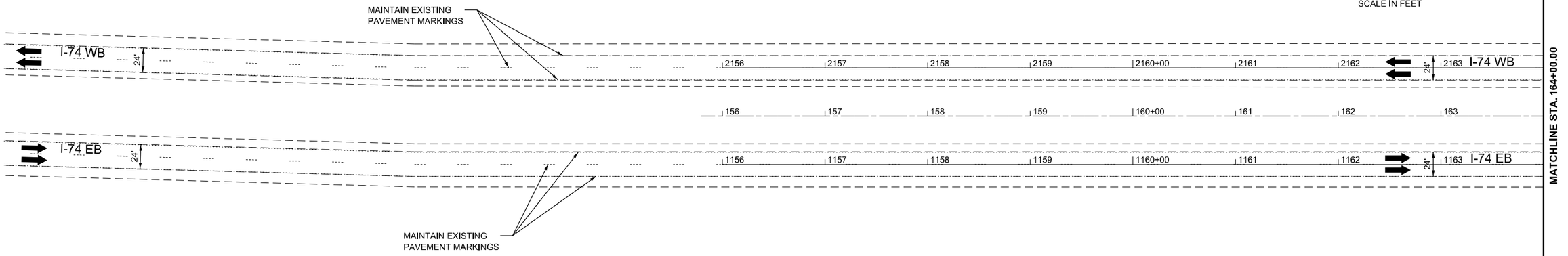
MAINTENANCE OF TRAFFIC HIGWAY STANDARDS

701101-05 OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02 OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-12 APPROACH TO LANE CLOSURE FREEWAY/EXPRESSWAY
701401-13 LANE CLOSURE, FREEWAY/EXPRESSWAY
701416-11 LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH CROSSOVER AND BARRIER
701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701901-09 TRAFFIC CONTROL DEVICES
704001-08 TEMPORARY CONCRETE BARRIER

LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL

0 50 100 150
SCALE IN FEET



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VEENSTRA & KIMM INC.

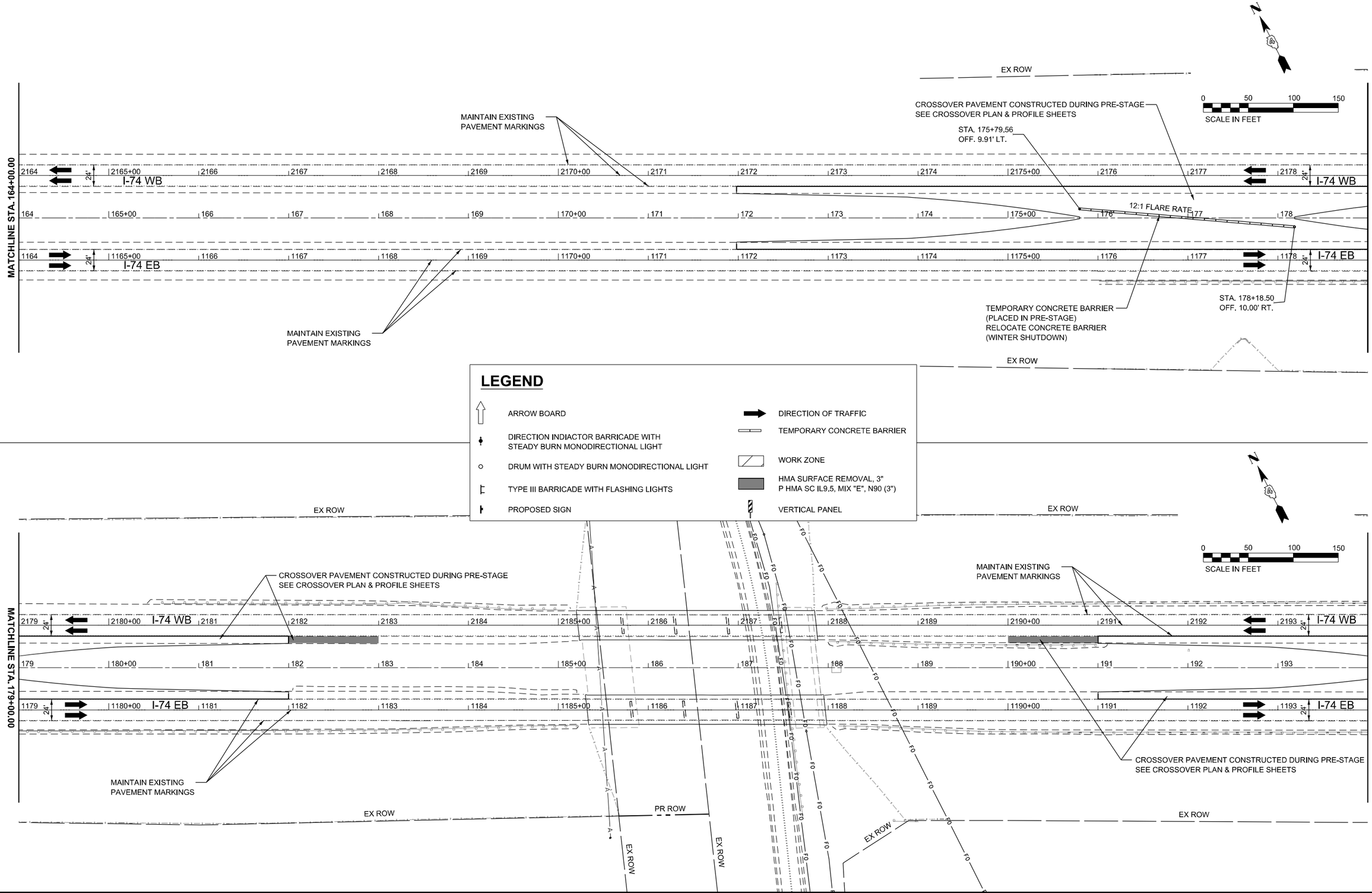
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PRE–STAGE AND WINTER SHUTDOWN

SCALE: | SHEET 1 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	30
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



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VEENSTRA & KIMM INC.

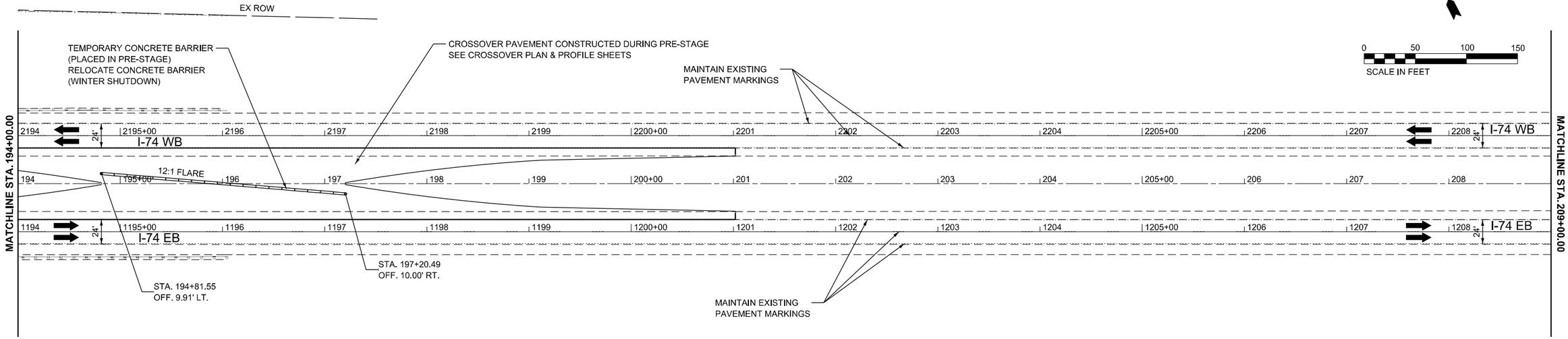
DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PRE–STAGE AND WINTER SHUTDOWN

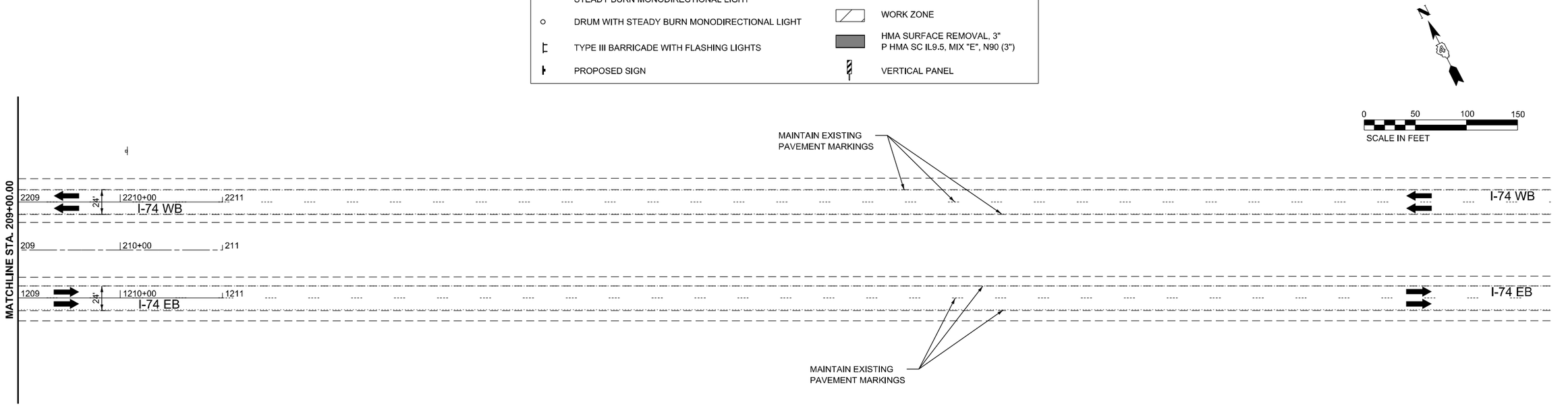
SCALE: | SHEET 2 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	31
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



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	DESIGNED - DMS	REVISED -
	DRAWN - DMS	REVISED -
	CHECKED - PMO	REVISED -
	DATE - 08-19-2024	REVISED -

VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
PRE–STAGE AND WINTER SHUTDOWN

SCALE: | SHEET 3 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	32
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MAINTENANCE OF TRAFFIC NOTES - STAGE 1

1. TRAFFIC CONTROL AND PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN, THESE NOTES, APPLICABLE SPECIAL PROVISIONS, AND SECTION 701 OF THE STANDARD SPECIFICATIONS AS AMENDED BY THE SPECIAL PROVISON FOR WORK ZONE TRAFFIC CONTROL (CHECK SHEET LRS 3).

2. DIMENSIONS FOR "L" AND "T" AS SHOWN ON STANDARD 701416 FOR STAGE 1 ARE AS FOLLOWS: L = 792' AND T = 1,109'

3. THE TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZEDBY THE ENGINEER TO USE AN ALTERNATE ARRANGEMENT.

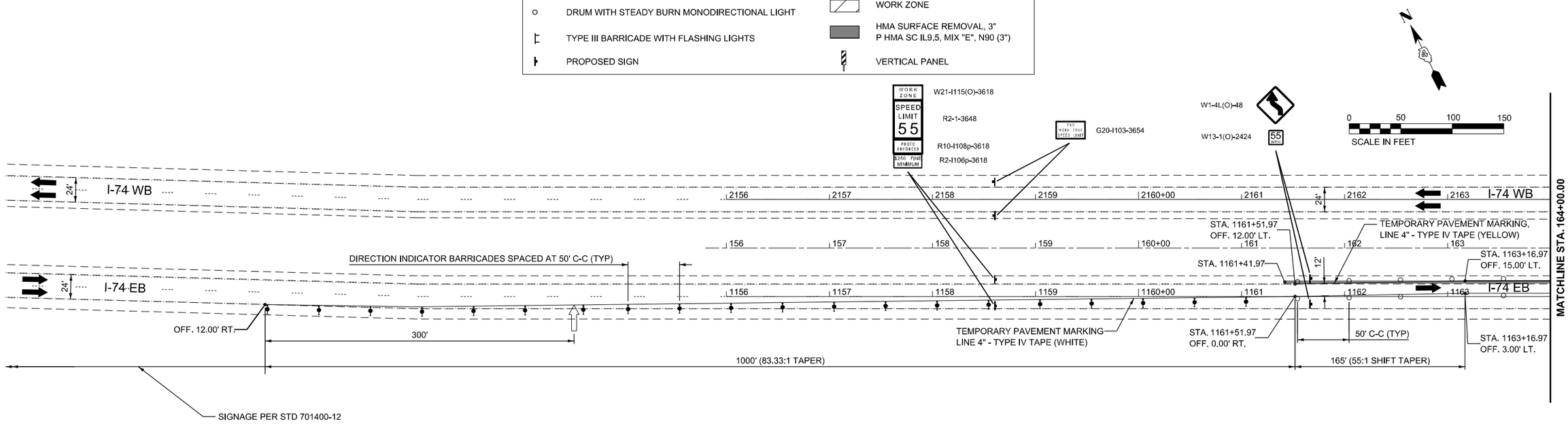
4. HMA SURFACE REMOVAL AND HMA OVERLAY IN THE TRAFFIC CONTROL PLANS ARE FOR THE PURPOSE OF REMOVING RUMBLE STRIPS IN AREAS OF TRAFFIC SHIFTS. SEE CROSSOVER PLANS FOR HMA SURFACE REMOVAL AND HMA OVERLAY TO ADJUST SHOULDER CROSS-SLOPE AT CROSSOVERS.

MAINTENANCE OF TRAFFIC HIGWAY STANDARDS

701101-05 OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02 OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-12 APPROACH TO LANE CLOSURE FREEWAY/EXPRESSWAY
701401-13 LANE CLOSURE, FREEWAY/EXPRESSWAY
701416-11 LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH CROSSOVER AND BARRIER
701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701901-09 TRAFFIC CONTROL DEVICES
704001-08 TEMPORARY CONCRETE BARRIER

LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WITH MODULAR GLARE SCREEN
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



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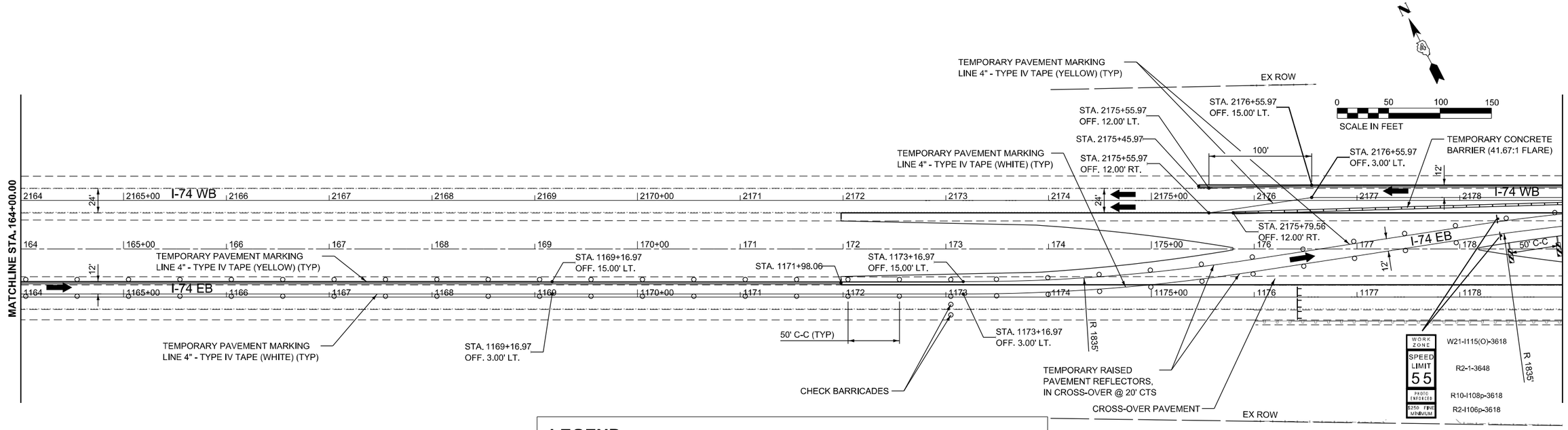
VEENSTRA & KIMM INC.	DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

TRAFFIC CONTROL PLAN
STAGE 1

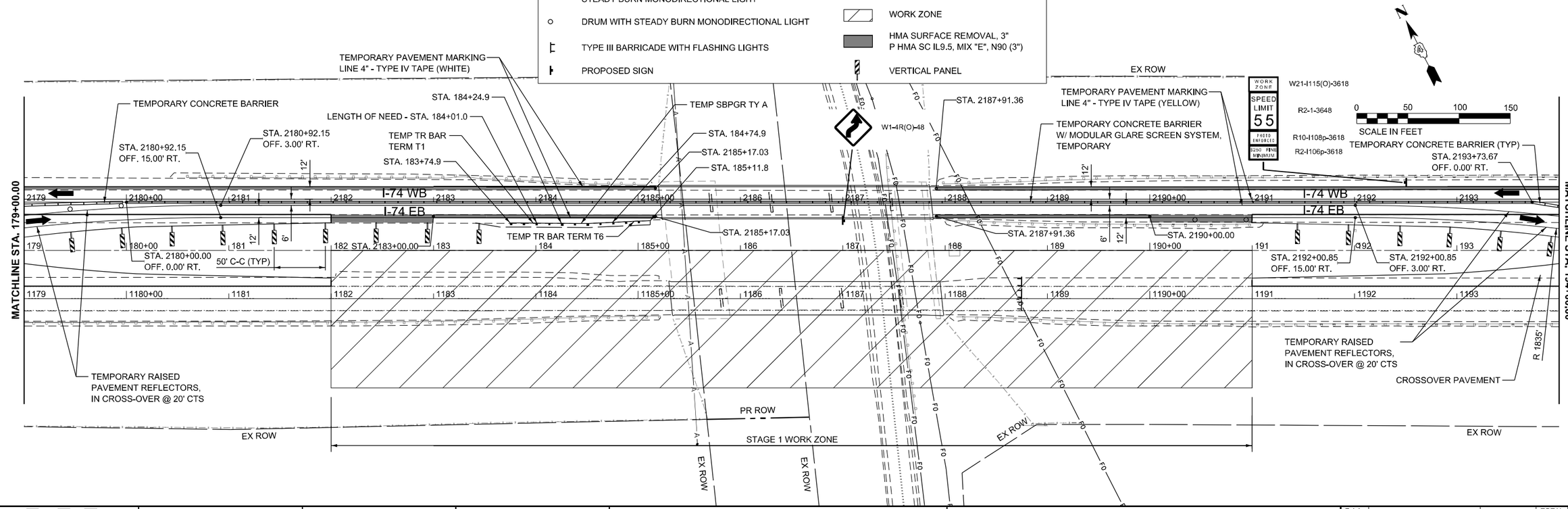
SCALE: | SHEET 4 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	33
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WITH MODULAR GLARE SCREEN
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



DESIGNED - DMS	REVISED -	**STATE OF ILLINOIS**	**TRAFFIC CONTROL PLAN**
DRAWN - DMS	REVISED -	**DEPARTMENT OF TRANSPORTATION**	**STAGE 1**
CHECKED - PMO	REVISED -		SCALE: SHEET 5 OF 9 SHEETS STA. TO STA.
DATE - 08-19-2024	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	34
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

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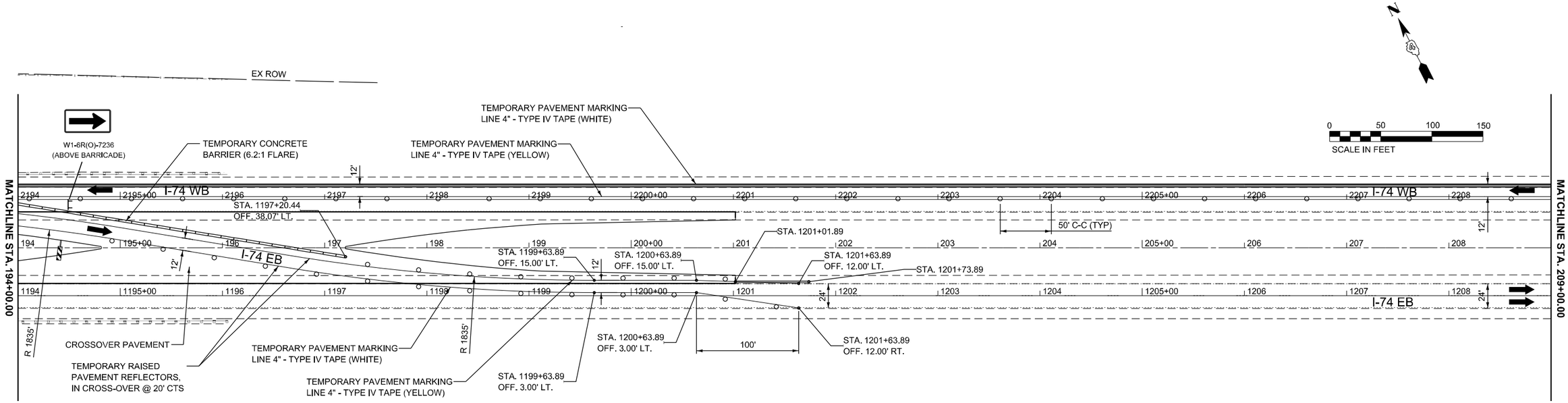
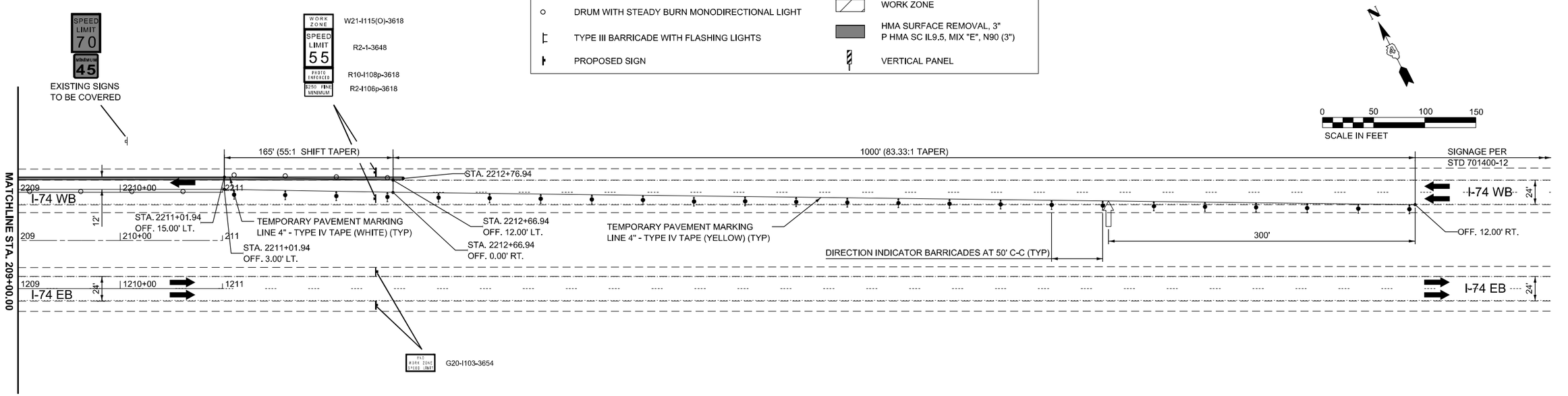


LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WITH MODULAR GLARE SCREEN
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
STAGE 1

SCALE: | SHEET 6 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	35
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: MOT Stage 1 Plan 5 [Sheet]
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MAINTENANCE OF TRAFFIC NOTES - STAGE 2

1. TRAFFIC CONTROL AND PROTECTION SHALL BE PERFORMED IN ACCORDANCE WITH THE TRAFFIC CONTROL PLAN, THESE NOTES, APPLICABLE SPECIAL PROVISIONS, AND SECTION 701 OF THE STANDARD SPECIFICATIONS AS AMENDED BY THE SPECIAL PROVISON FOR WORK ZONE TRAFFIC CONTROL (CHECK SHEET LRS 3).

2. DIMENSIONS FOR "L" AND "T" AS SHOWN ON STANDARD 701416 FOR STAGE 2 ARE AS FOLLOWS: L = 746' AND T = 1,122'

3. THE TYPE III BARRICADES ARE TO BE PLACED IN ACCORDANCE WITH STANDARD 701901 UNLESS AUTHORIZEDBY THE ENGINEER TO USE AN ALTERNATE ARRANGEMENT.

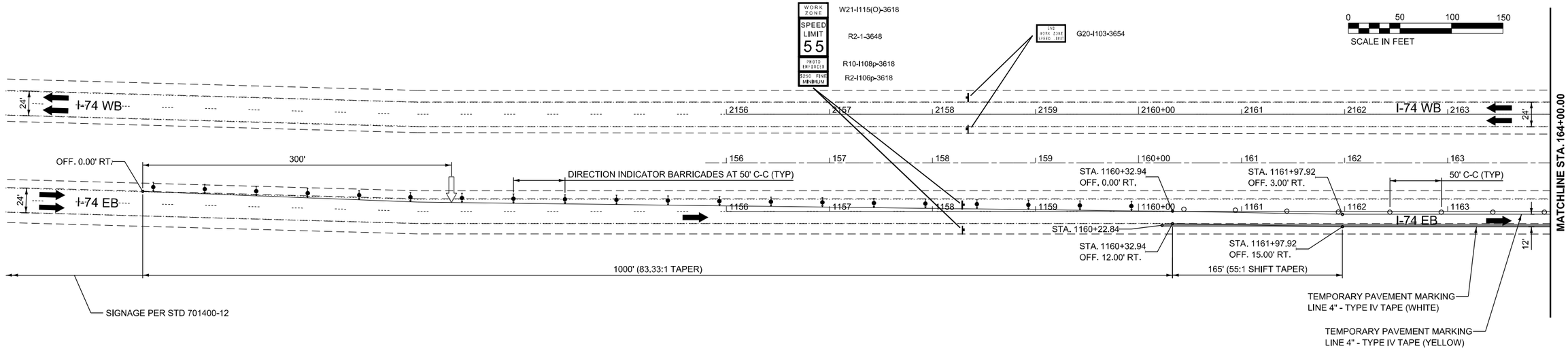
4. HMA SURFACE REMOVAL AND HMA OVERLAY IN THE TRAFFIC CONTROL PLANS ARE FOR THE PURPOSE OF REMOVING RUMBLE STRIPS IN AREAS OF TRAFFIC SHIFTS. SEE CROSSOVER PLANS FOR HMA SURFACE REMOVAL AND HMA OVERLAY TO ADJUST SHOULDER CROSS-SLOPE AT CROSSOVERS.

MAINTENANCE OF TRAFFIC HIGWAY STANDARDS

701101-05 OFF-RD OPERATIONS, MULTILANE, 15' TO 24" FROM PAVEMENT EDGE
701106-02 OFF-RD OPERATIONS, MULTILANE, MORE THAN 15' AWAY
701400-12 APPROACH TO LANE CLOSURE FREEWAY/EXPRESSWAY
701401-13 LANE CLOSURE, FREEWAY/EXPRESSWAY
701416-11 LANE CLOSURE, FREEWAY/EXPRESSWAY, WITH CROSSOVER AND BARRIER
701426-09 LANE CLOSURE, MULTILANE, INTERMITTENT OR MOVING OPER., FOR SPEEDS ≥ 45 MPH
701901-09 TRAFFIC CONTROL DEVICES
704001-08 TEMPORARY CONCRETE BARRIER

LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WITH MODULAR GLARE SCREEN
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



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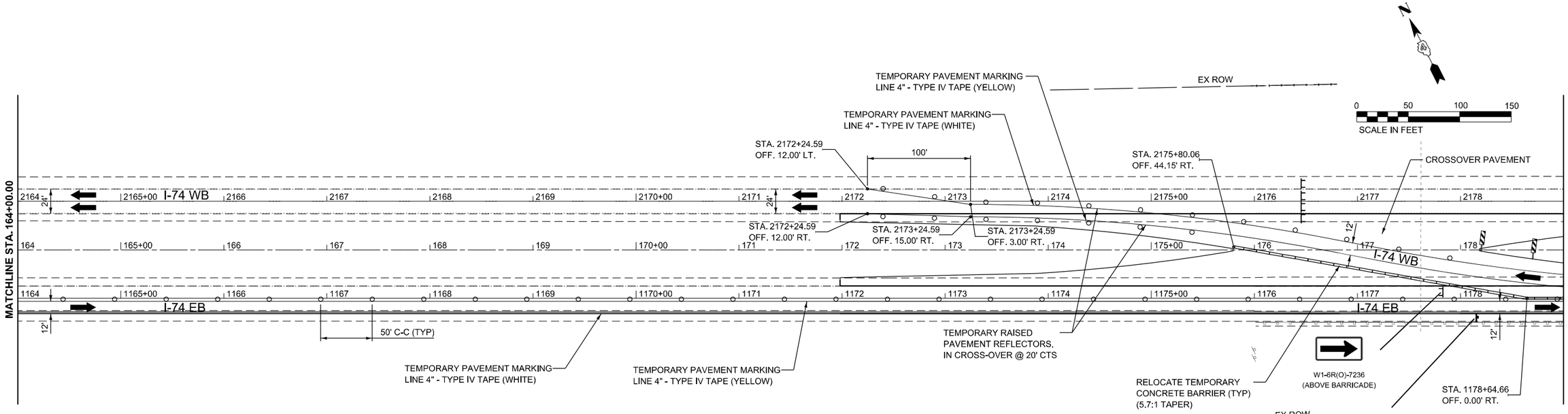
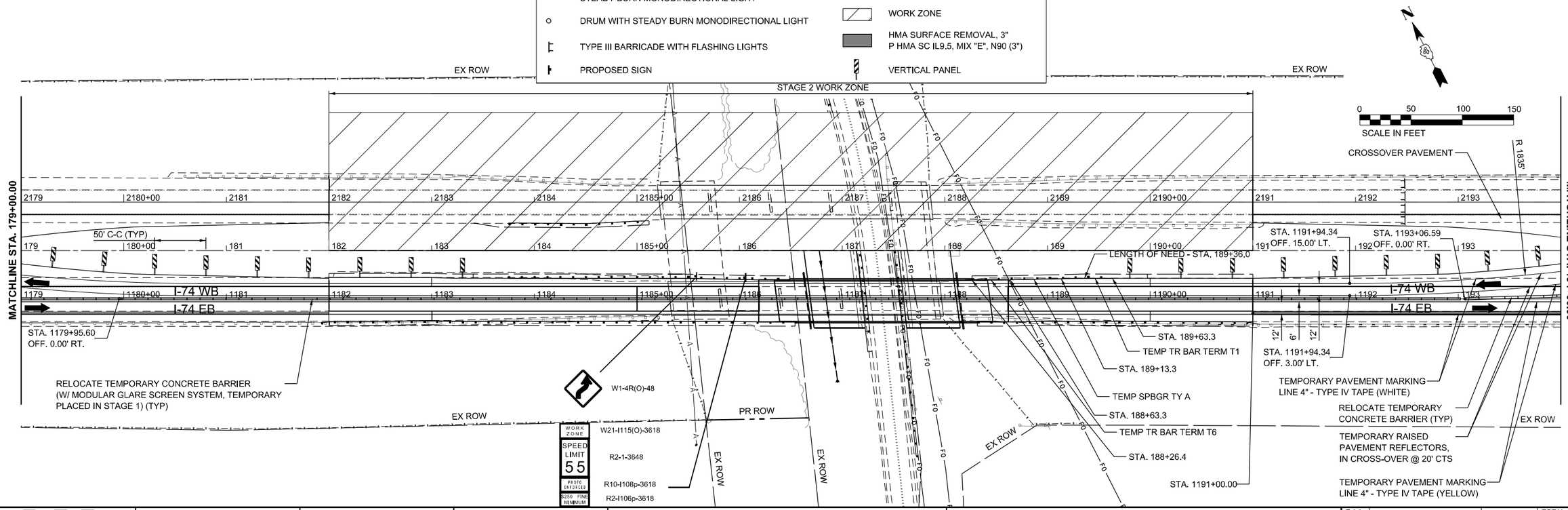
VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TRAFFIC CONTROL PLAN STAGE 2
		DRAWN - DMS	REVISED -		SCALE: SHEET 7 OF 9 SHEETS STA. TO STA.
		CHECKED - PMO	REVISED -		
		DATE - 08-19-2024	REVISED -		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	36
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WITH MODULAR GLARE SCREEN
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



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DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

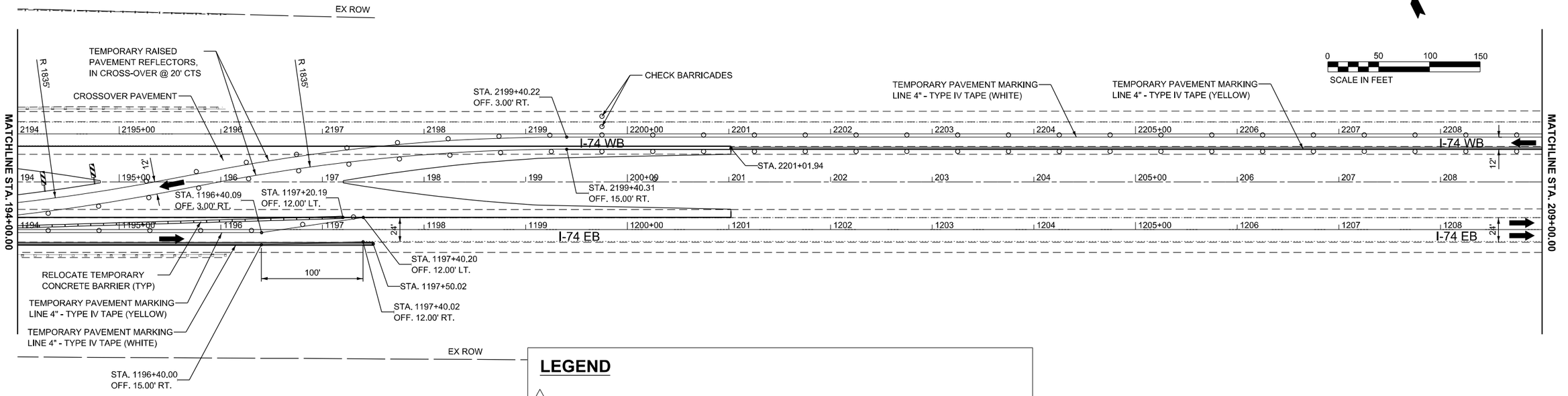
VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
STAGE 2

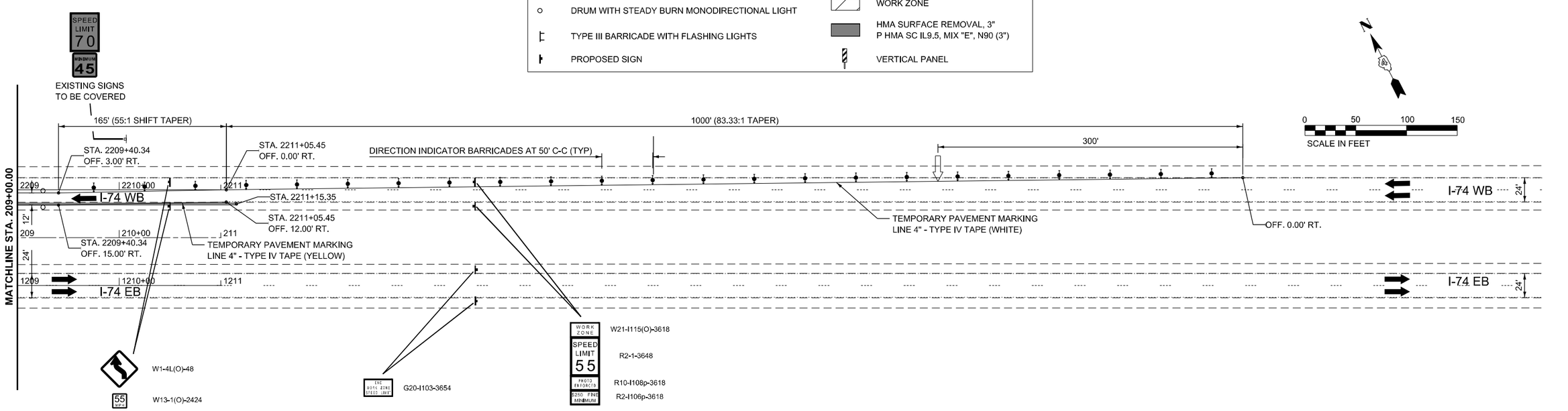
SCALE: | SHEET 8 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	37
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



LEGEND

- ARROW BOARD
- DIRECTION INDIACTOR BARRICADE WITH STEADY BURN MONODIRECTIONAL LIGHT
- DRUM WITH STEADY BURN MONODIRECTIONAL LIGHT
- TYPE III BARRICADE WITH FLASHING LIGHTS
- PROPOSED SIGN
- DIRECTION OF TRAFFIC
- TEMPORARY CONCRETE BARRIER WITH MODULAR GLARE SCREEN
- WORK ZONE
- HMA SURFACE REMOVAL, 3" P HMA SC IL9.5, MIX "E", N90 (3")
- VERTICAL PANEL



	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN
STAGE 2

SCALE: | SHEET 9 OF 9 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	38
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

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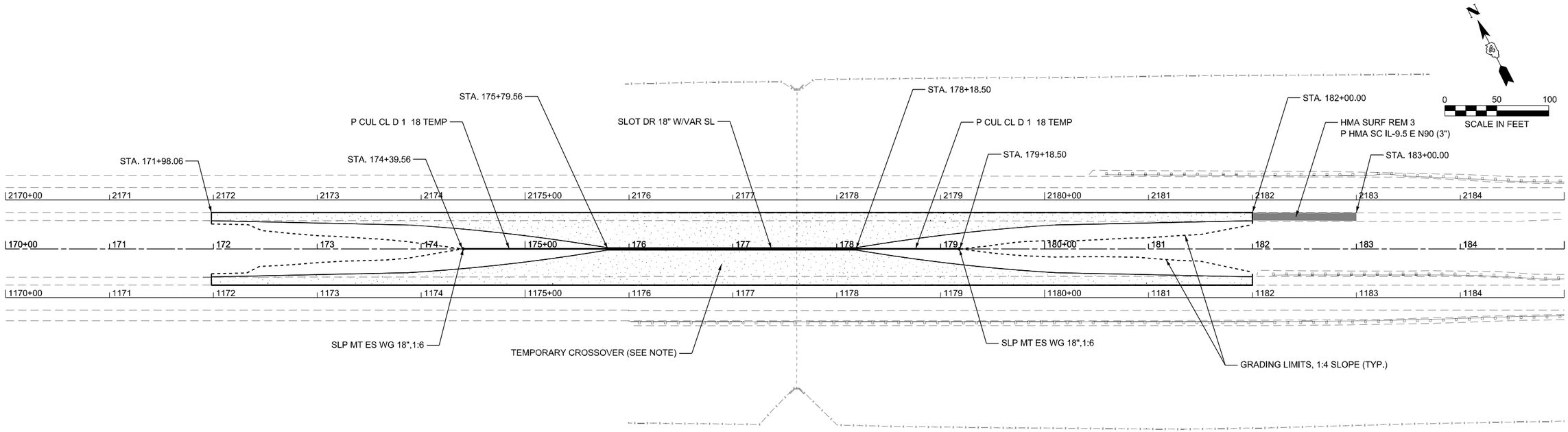
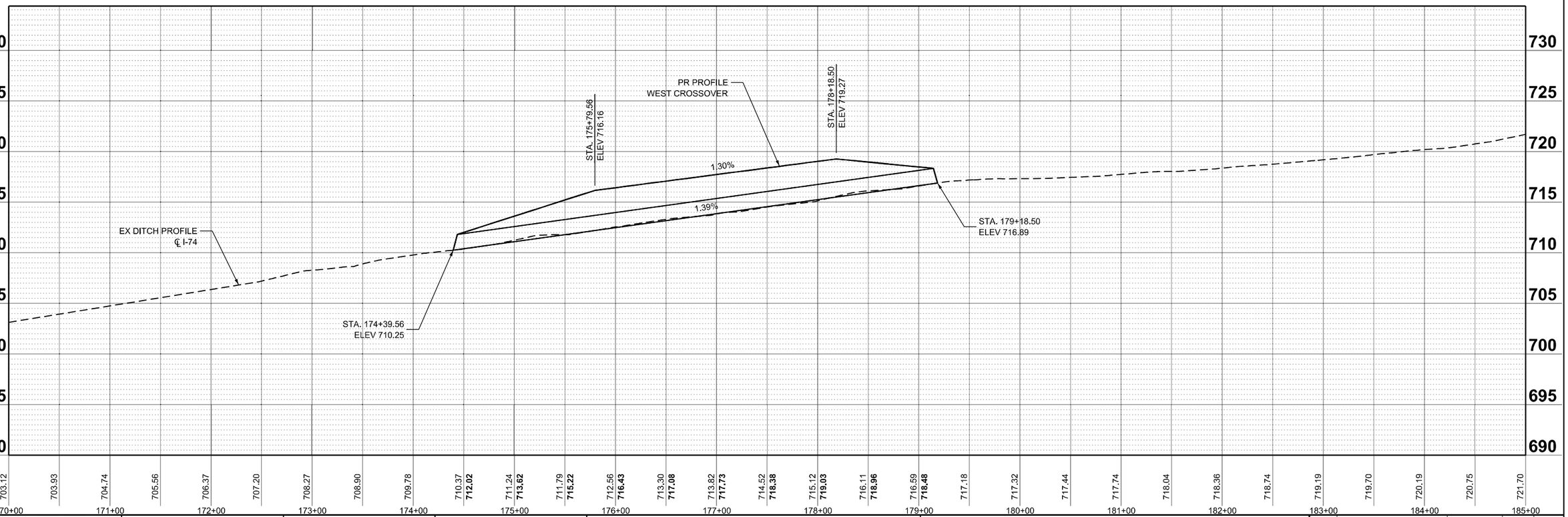


NOTE:
SEE MEDIAN CROSSOVER DETAIL, CROSSOVER CROSS-SECTIONS, AND SLOTTED DRAIN DETAIL FOR ADDITIONAL INFORMATION.



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VEENSTRA & KIMM INC.

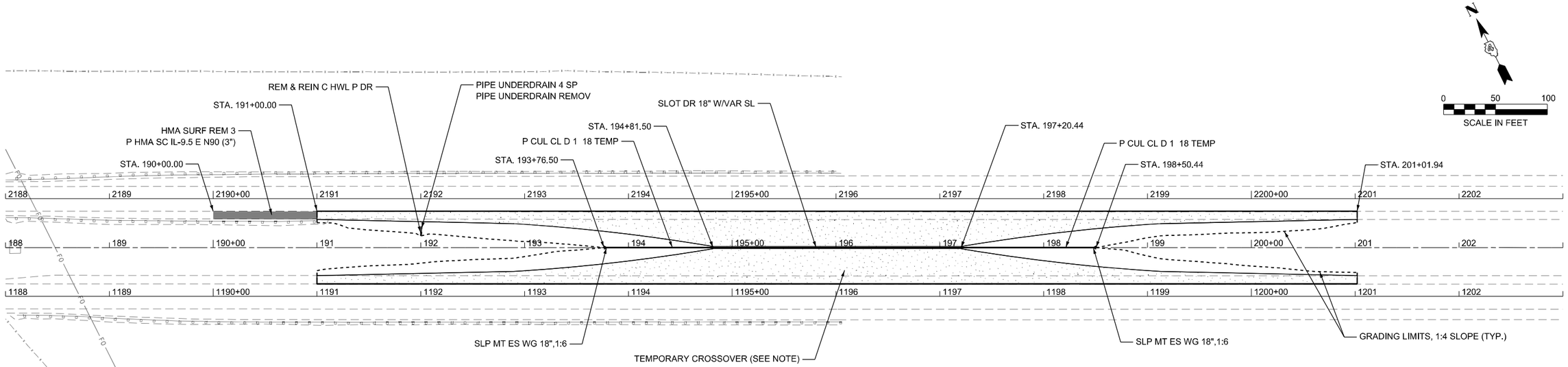
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

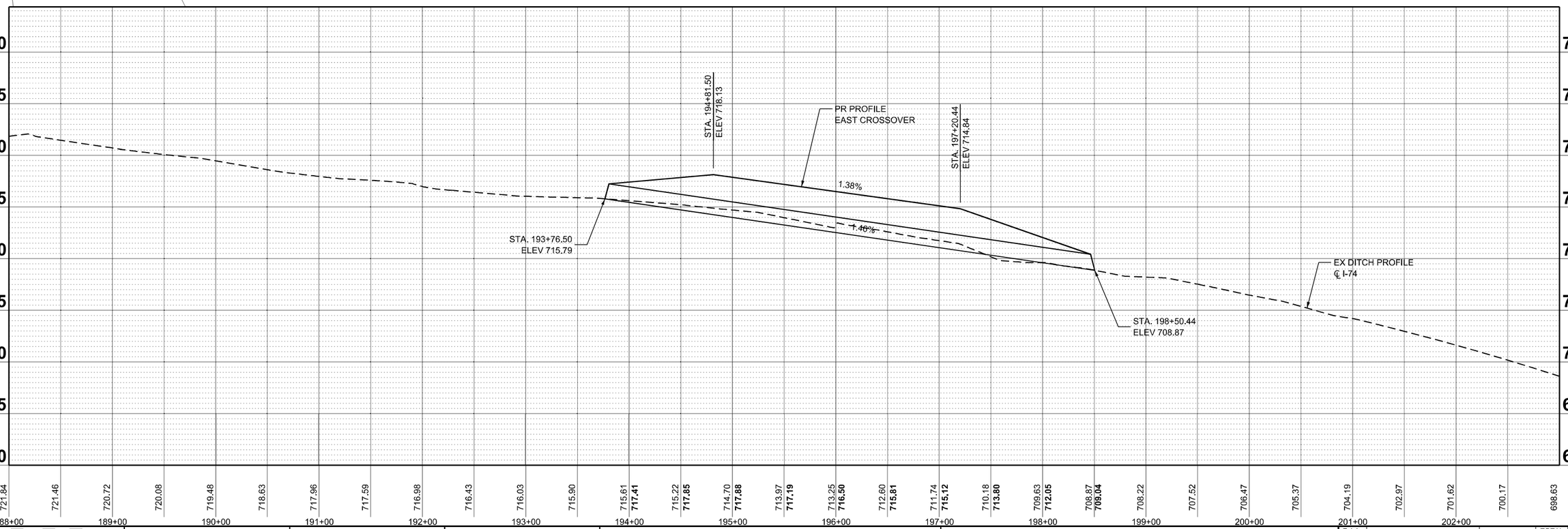
CROSSOVER PLAN AND PROFILE
WEST CROSSOVER

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

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	39
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



NOTE:
SEE MEDIAN CROSSOVER DETAIL, CROSSOVER CROSS-SECTIONS, AND SLOTTED DRAIN DETAIL FOR ADDITIONAL INFORMATION.



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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

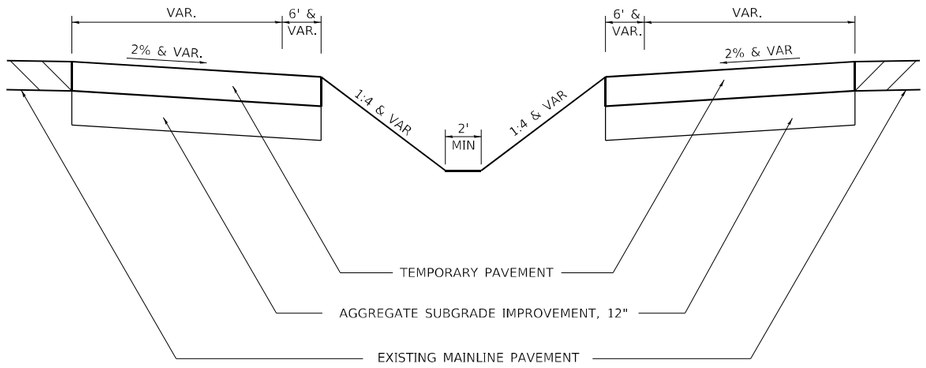
CROSSOVER PLAN AND PROFILE
EAST CROSSOVER

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

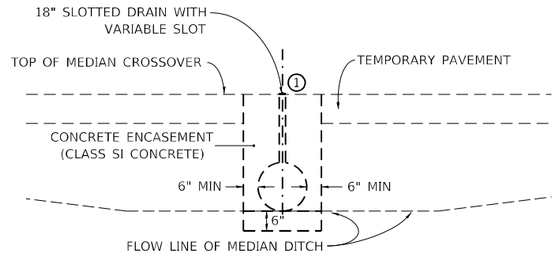
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	40
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

70' TWO LANE MEDIAN CROSSOVER

(POSTED SPEED LIMIT 65 MPH OR HIGHER, WORK ZONE SPEED LIMIT 55 MPH)



TYPICAL SECTION



SECTION A-A

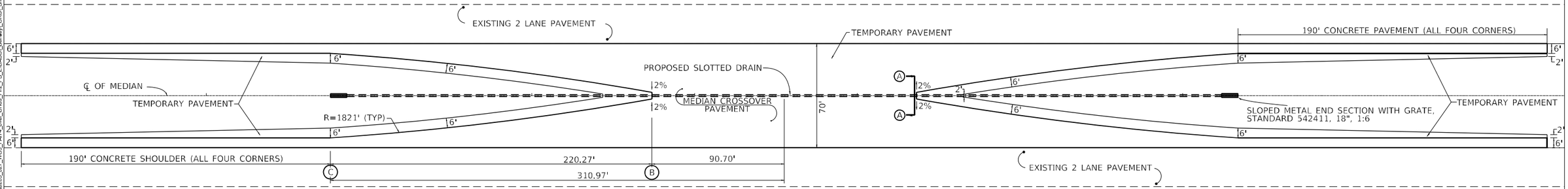
(USE TO MAINTAIN MEDIAN DRAINAGE THROUGH THE CROSSOVER)

1 DUCT TAPE OR WOOD BLOCKS SHALL BE USED TO COVER SLOTTED DRAIN DURING CONSTRUCTION OF CROSSOVER PAVING

NOTES:

1. CONSTRUCTION OF MEDIAN CROSSOVER SHALL CONFORM TO THE REQUIREMENT OF CURRENT STANDARD SPECIFICATIONS.
2. SLOTTED DRAIN SHALL BE CONSTRUCTED OF 14 OR 16 GAUGE CORRUGATED METAL ROADWAY PIPE MODIFIED TO ACCOMMODATE SLOTTED DRAIN AS SHOWN.
3. THE CROSSOVER IS DESIGNED USING A 55MPH DESIGN SPEED.
4. THE END OF THE METAL END SECTION SHALL BE SET WHERE A MINIMUM 1:4 FRONT SLOPE CAN BE CONSTRUCTED FROM EACH SIDE OF THE END SECTION TO THE EDGE OF THE SHOULDER.
5. THE REMOVAL OF TEMPORARY PIPE CULVERTS AND END SECTIONS USED FOR CROSSOVER DRAINAGE SHALL BE CONSIDERED INCLUDED IN THE COST OF PIPE CULVERTS, CLASS D, TYPE 1 (TEMPORARY). SLOTTED DRAIN REMOVAL SHALL BE INCLUDED IN THE COST OF TEMPORARY PAVEMENT REMOVAL.
6. SEE SPECIAL PROVISION FOR TEMPORARY PAVEMENT, TEMPORARY PAVEMENT REMOVAL, AND SLOTTED DRAIN.
7. IF PCC IS THE CHOSEN MATERIAL FOR THE TEMPORARY PAVEMENT, EXCAVATION AND SUBBASE QUANTITIES SHALL BE ADJUSTED ACCORDINGLY.
8. WHEN THE MEDIAN CROSSOVER IS TO BE REMOVED, THE CONTRACTOR SHALL BE REQUIRED TO SAW FULL-DEPTH ALONG THE SHOULDER LINE 8' FROM EDGE OF PAVEMENT. THE 8' TO THE EDGE OF PAVEMENT SHALL REMAIN IN PLACE AND BE USED AS SHOULDERS. THE COST OF SAWING SHALL BE INCLUDED IN THE COST OF TEMPORARY PAVEMENT REMOVAL.
9. TRAFFIC CONTROL STANDARD 701416 IS TO BE USED WITH THIS DETAIL.

Distance feet from location station	0	90.70' (B)	100'	125'	150'	175'	200'	225'	250'	275'	300'	310.97' (C)
Offsets feet from inside edge of pavement	35' (4)	33'	31.30'	26.99'	23.04'	19.44'	16.19'	13.30'	10.75'	8.56'	6.70'	6.00'



TYPICAL PLAN

(NOT TO SCALE)

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	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL
70' TWO LANE MEDIAN CROSSOVER

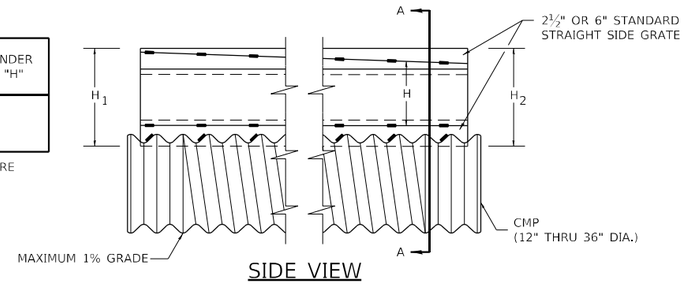
SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	41
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

SLOTTED DRAIN PIPE

LOADING CONDITION	MAX. EXTENDER HEIGHT - "H"
H20/H25 ~ 750 PSI CONCRETE	19"

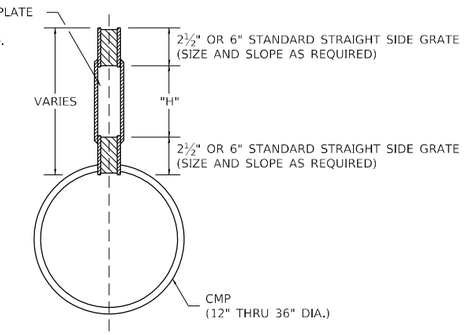
* 125 PSI TIRE PRESSURE



SIDE VIEW

DETAIL WITH VARIABLE HEIGHT GRATE

PLATE EXTENDERS
7 GA. GALVANIZED PLATE PER ASTM A761
SLOPE AS REQUIRED.



SECTION A-A

GENERAL

Class SI Concrete shall be used throughout.
This specification covers Slottted Drain used for the removal of water as shown on the plans.
The Slotted Drain shall be Corrugated Pipe Culvert with Integral Slotted Drains.
Before placing the concrete adjacent to the pipe, the slot shall be covered by either thin, flat metal sheeting or by a board notched to fit over the grate bars. This covering must fit closely in the slot to prevent entry of concrete into the pipe. Paving over the slotted drain will then be one continuous operation over the protected drain. The protection for the drain slot shall then be removed. The pipe shall drain into the side of the inlet. The opening where the slot is removed shall be covered to prevent concrete from entering the pipe.
The Corrugated Steel Pipe used in the Slotted Drain shall meet the requirements of AASHTO M36/ASTM A760.
The CMP shall be ALUMINIZED STEEL Type 2.
The diameter shall be as shown on the plans.
Steel grating shall meet the galvanizing requirements of AASHTO M111.
This work will be paid for at the contract unit price per foot for SLOTTED DRAIN of the pipe diameter specified WITH VARIABLE SLOT,or SLOTTED DRAIN, of the pipe diameter specified, WITH 6" SLOT, and shall include concrete and grating for depth specified on plans.
Use approved end cap to prevent concrete entry into the pipe during gutter construction on the upstream end of the pipe.

CONNECTIONS

The Corrugated Steel Pipe shall have a minimum of two rerolled annular ends.
The Slotted Drain bands shall be modified HUGGER Bands to secure the pipe and prevent infiltration of the backfill.
When the Slotted Drain is banded together, the adjacent grates shall have a maximum 3" gap.

GRATES

The grates shall be manufactured from ASTM A670, Grade 36 steel. The spacers and bearing bars (sides) shall be 3/16 " material ±0.008".
The spacers shall be on 6" centers and welded on both sides to each bearing bar (sides) with four (4) 1- 1/4 " long 3/16 " fillet welds on each side of the bearing bar.
The plate extender shall be 7 gage steel meeting ASTM A761.
The engineer may call for tensile strength tests on the grate if the grate is not in compliance with the above spacer specifications. If tensile strength tests are called for, minimum results for an in-place spacer pulled perpendicular to the bearing bar shall be:
T= 12,000 pounds for 2- 1/2 " grate
T= 15,000 pounds for 6" grate

GALVANIZING

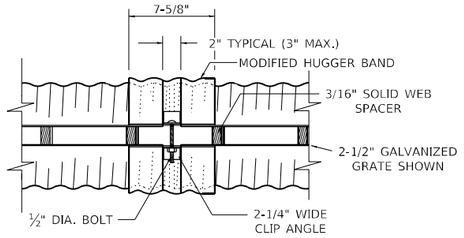
The grate and plate extenders shall be galvanized in accordance with ASTM A123 except with a 2 oz. galvanized coating.

GRATE ATTACHED TO CSP

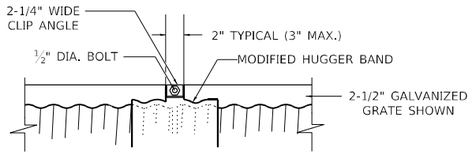
The grate shall be fillet welded with a minimum weld 1" long to the CSP on each side of the grate at every other corrugation.

TOLERANCES - FINISHED SLOTTED DRAIN - 20' LENGTHS

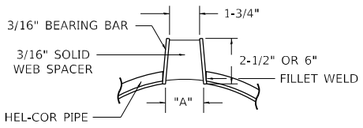
Vertical Bow= ± 3/8 "
Horizontal Bow= ± 5/8 "
Twist= ± 1/2 "



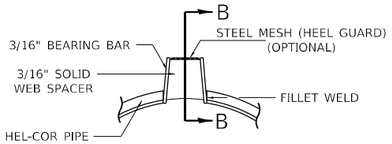
TOP VIEW



SIDE VIEW



SECTION A-A
STANDARD DETAIL



SECTION A-A
DETAIL WITH MESH

(TRAPEZOIDAL GALVANIZED GRATE SHOWN)

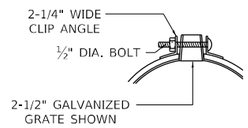
STANDARD SIZES						
GAGE OF PIPE	DIAMETER OF PIPE					
	12"	15"	18"	24"	30"	36"
16	X	X	X	X	X	X
14	X	X	X	X	X	X
12	N.A.	N.A.	N.A.	N.A.	X	X

GRATE TYPE		"A"
VERT	2-1/2"	1-3/4"
VERT	6"	1-3/4"
TRAP	2-1/2"	2-1/4"
TRAP	6"	3"

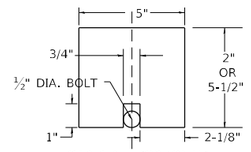
VERT = VERTICAL
TRAP = TRAPIZOIDAL

SLOTTED DRAIN NOTES

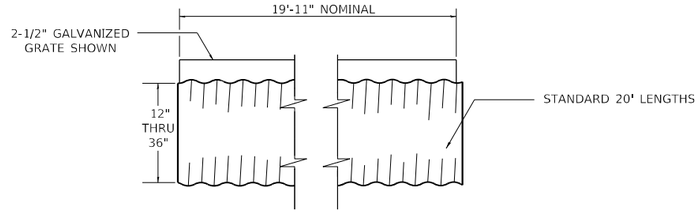
1. GRATING IS AVAILABLE IN DEPTHS OF 2-1/2" AND 6".
2. VERTICAL GRATING (STRAIGHT SIDES) WITH VERTICAL SPACERS IS ALSO AVAILABLE.
3. FOR 6" VERTICAL & TRAPIZOIDAL REQUIREMENTS, THE SLOTTED DRAIN BAND MAY BE FURNISHED WITH THE 4" TECHCO BAND ANGLE.
4. DIMENSIONS ARE SUBJECT TO MANUFACTURING TOLERANCES.
5. DIMENSIONS FOR H_1 AND H_2 AS REQUIRED.
6. H_1 AND H_2 MEASURED FROM TOP OF GRATE TO BOTTOM OF GRATE.



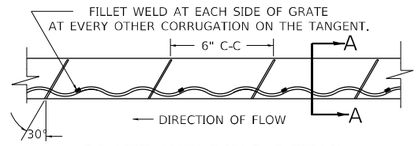
END VIEW



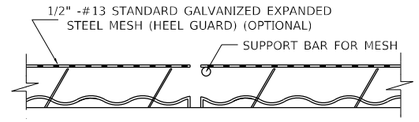
GAP PLATE (OPTIONAL)
MAY BE PLACED DIRECTLY OVER BAND BOLT TO PROVIDE CONTINUOUS FORM FOR GROUTING.



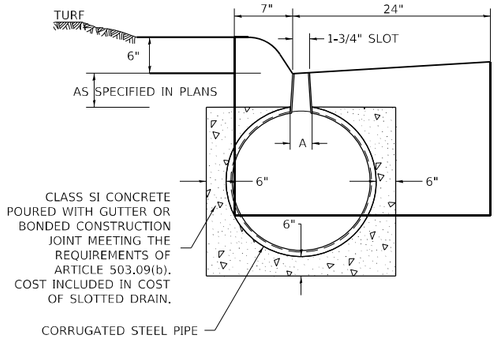
TYPICAL PIPE SECTION



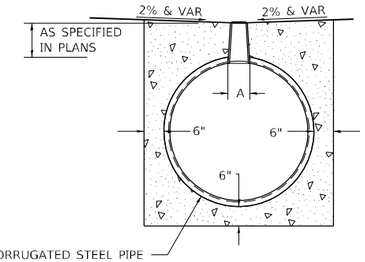
GRATE WELDING DETAIL



SECTION B-B



DETAIL FOR CURB & GUTTER



DETAIL FOR CROSSOVERS, DRIVEWAYS, OR PARKING LOTS

ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED.

MODEL: Slotted Drain Pipe [Sheet]
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	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

VEENSTRA & KIMM INC.

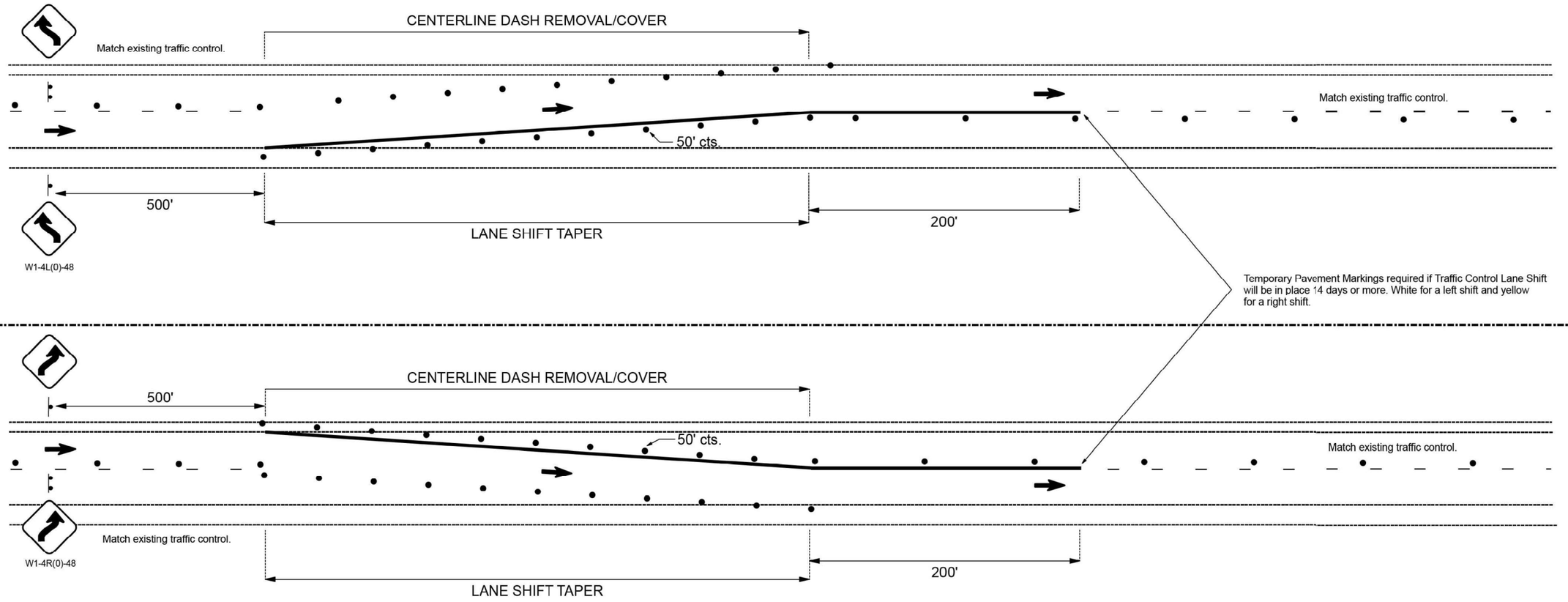
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL
SLOTTED DRAIN PIPE

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	42
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	

TRAFFIC CONTROL LANE SHIFT TYPICAL



LANE SHIFT TAPER LENGTH

NORMAL POSTED SPEED LIMIT	LANE SHIFT TAPER
65 MPH OR GREATER	450 FT.
55 MPH	350 FT.
50 MPH	300 FT.
45 MPH OR LESS	275 FT.

SYMBOLS

- DRUM WITH STEADY BURN MONO-DIRECTIONAL LIGHT (LIGHT IN TAPERS ONLY)
- TEMPORARY SIGN STAND MOUNT- CLOSED LANE/ LESS THAN 14 DAYS
- POST MOUNTED SIGN STAND MOUNT- GREATER THAN 14 DAYS

GENERAL NOTES

TO BE USED WHEN FIELD CONDITIONS WARRANT THE NEED FOR A LANE SHIFT DUE TO ADJACENT CONSTRUCTION PROJECTS OR OTHER MOTORIST/ WORKER SAFETY NEEDS.

THE RESIDENT ENGINEER MUST APPROVE THE USE OF THIS DETAIL.

CENTERLINE DASHES SHALL BE COVERED/REMOVED IF LANE SHIFT WILL BE IN PLACE GREATER THAN 24 HOURS.

DEVICES IN LANE SHIFT SHALL HAVE A STEADY BURN MONO-DIRECTIONAL LIGHT.

TC LANE SHIFT SHALL NOT BE PAID FOR SEPARATELY BUT SHALL BE CONSIDERED INCLUDED IN THE COST OF THE VARIOUS TRAFFIC CONTROL PAY ITEMS.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

REGION 3/ DISTRICT 4
TRAFFIC CONTROL LANE SHIFT TYPICAL

VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -	
DRAWN - DMS	REVISED -	
CHECKED - PMO	REVISED -	
DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

DETAIL
TRAFFIC CONTROL LANE SHIFT

SCALE: | SHEET 3 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	43
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: TC Lane Shift [Sheet]
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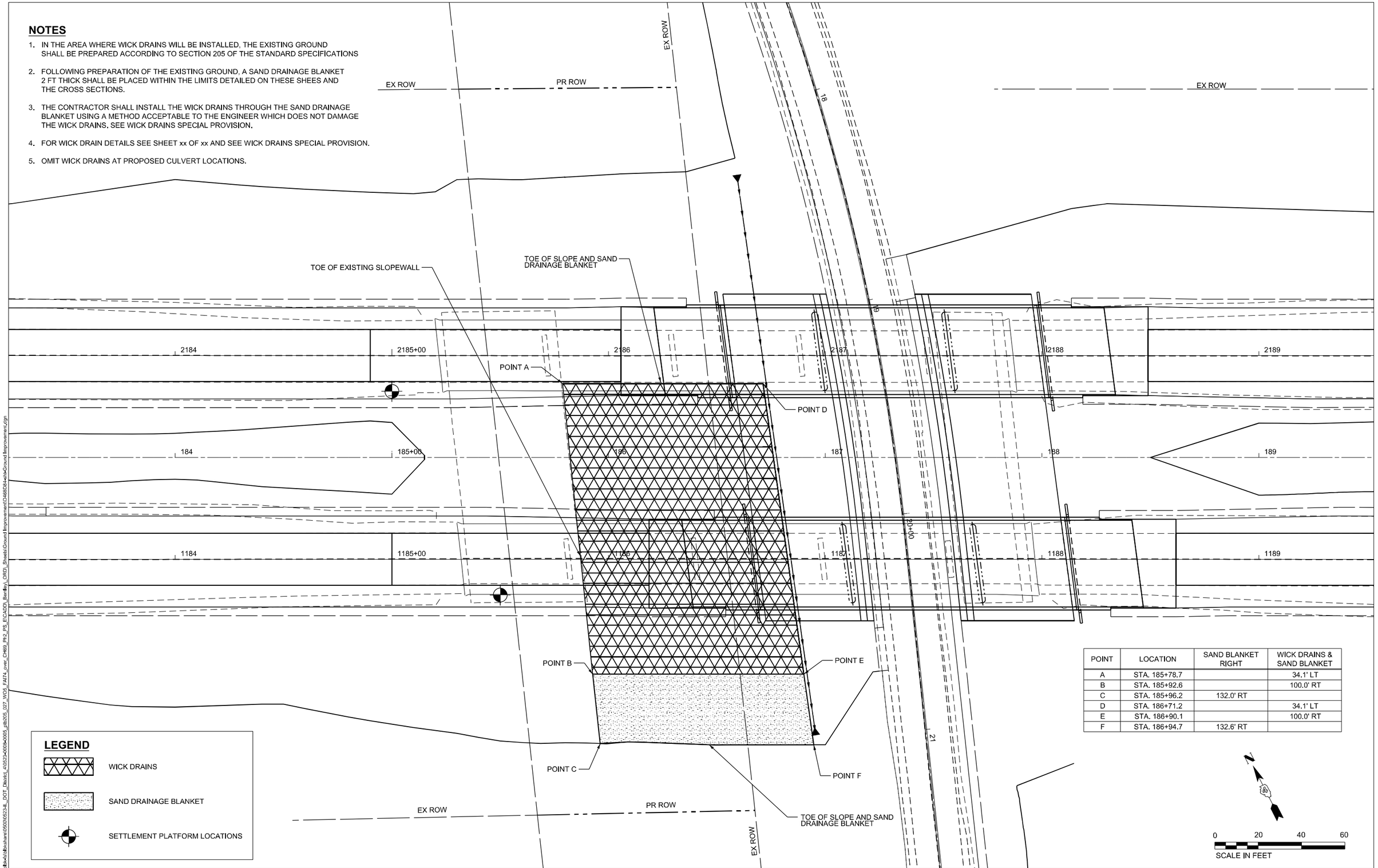
NOTES

1. IN THE AREA WHERE WICK DRAINS WILL BE INSTALLED, THE EXISTING GROUND SHALL BE PREPARED ACCORDING TO SECTION 205 OF THE STANDARD SPECIFICATIONS
2. FOLLOWING PREPARATION OF THE EXISTING GROUND, A SAND DRAINAGE BLANKET 2 FT THICK SHALL BE PLACED WITHIN THE LIMITS DETAILED ON THESE SHEES AND THE CROSS SECTIONS.
3. THE CONTRACTOR SHALL INSTALL THE WICK DRAINS THROUGH THE SAND DRAINAGE BLANKET USING A METHOD ACCEPTABLE TO THE ENGINEER WHICH DOES NOT DAMAGE THE WICK DRAINS. SEE WICK DRAINS SPECIAL PROVISION.
4. FOR WICK DRAIN DETAILS SEE SHEET xx OF xx AND SEE WICK DRAINS SPECIAL PROVISION.
5. OMIT WICK DRAINS AT PROPOSED CULVERT LOCATIONS.



POINT	LOCATION	SAND BLANKET RIGHT	WICK DRAINS & SAND BLANKET
A	STA. 185+78.7		34.1' LT
B	STA. 185+92.6		100.0' RT
C	STA. 185+96.2	132.0' RT	
D	STA. 186+71.2		34.1' LT
E	STA. 186+90.1		100.0' RT
F	STA. 186+94.7	132.6' RT	

MODEL: Stage 1
FILE NAME: \\wdfs-fs-01\dbshare\050\0052341_DOT_District_4\0523400\0052341_gt8205_t27_WO5_FA174_over_CH69_Rt2_PS_EICAD01_Bentley_CRD_Sheets\GroundImprovement\D488084eltwGroundImprovement.dgn

VEENSTRA & KIMM INC.

DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

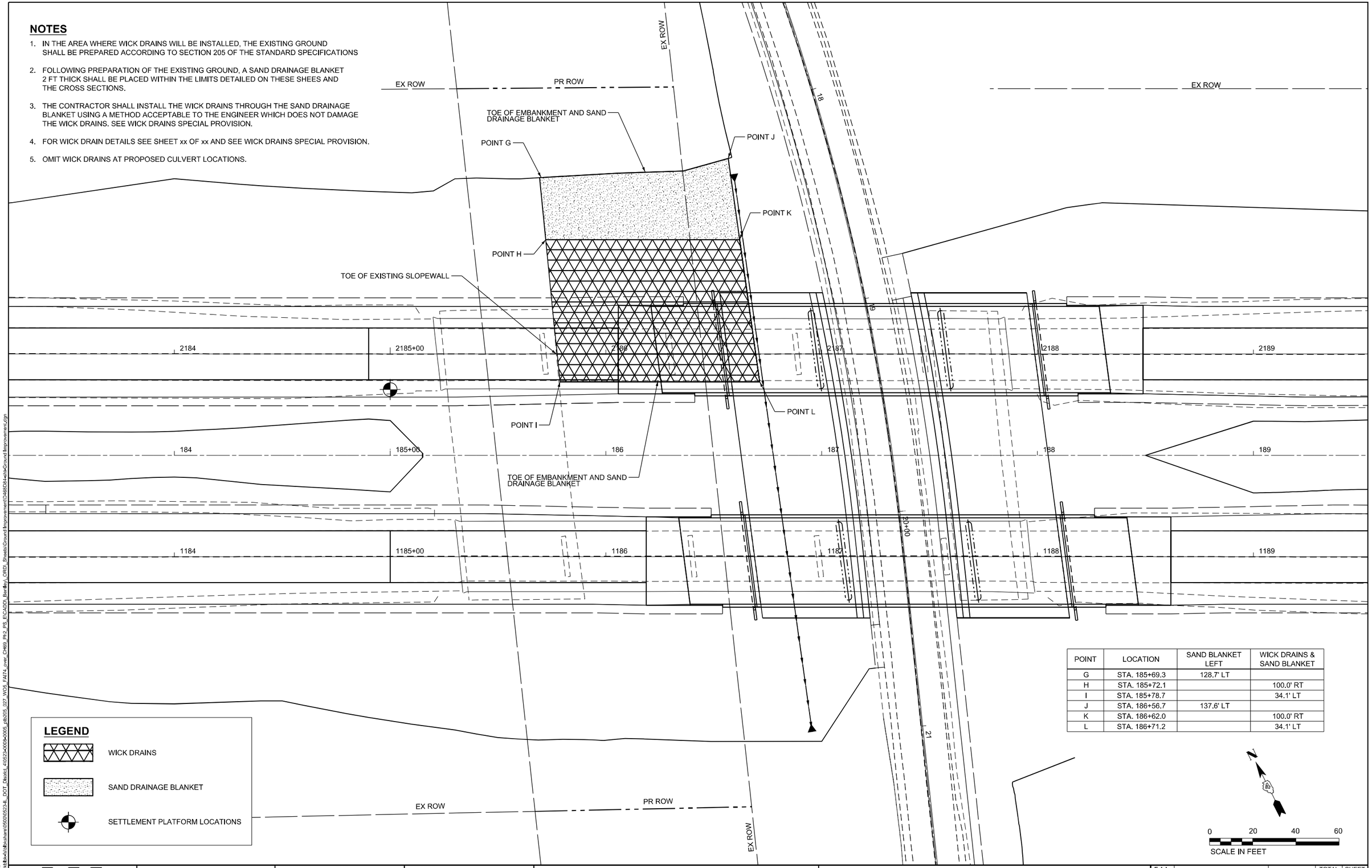
GROUND IMPROVEMENT PLAN
STAGE 1

SCALE: | SHEET 1 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	44
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

NOTES

1. IN THE AREA WHERE WICK DRAINS WILL BE INSTALLED, THE EXISTING GROUND SHALL BE PREPARED ACCORDING TO SECTION 205 OF THE STANDARD SPECIFICATIONS
2. FOLLOWING PREPARATION OF THE EXISTING GROUND, A SAND DRAINAGE BLANKET 2 FT THICK SHALL BE PLACED WITHIN THE LIMITS DETAILED ON THESE SHEES AND THE CROSS SECTIONS.
3. THE CONTRACTOR SHALL INSTALL THE WICK DRAINS THROUGH THE SAND DRAINAGE BLANKET USING A METHOD ACCEPTABLE TO THE ENGINEER WHICH DOES NOT DAMAGE THE WICK DRAINS. SEE WICK DRAINS SPECIAL PROVISION.
4. FOR WICK DRAIN DETAILS SEE SHEET xx OF xx AND SEE WICK DRAINS SPECIAL PROVISION.
5. OMIT WICK DRAINS AT PROPOSED CULVERT LOCATIONS.



POINT	LOCATION	SAND BLANKET LEFT	WICK DRAINS & SAND BLANKET
G	STA. 185+69.3	128.7' LT	
H	STA. 185+72.1		100.0' RT
I	STA. 185+78.7		34.1' LT
J	STA. 186+56.7	137.6' LT	
K	STA. 186+62.0		100.0' RT
L	STA. 186+71.2		34.1' LT

LEGEND

- WICK DRAINS
- SAND DRAINAGE BLANKET
- SETTLEMENT PLATFORM LOCATIONS

N

0 20 40 60

SCALE IN FEET

MODEL: Stage 2
FILE NAME: \\vkfile-vk\dfs\share\050\00523\Highway\Design\Sheets\Ground Improvement\D4488D84-ehi-Ground Improvement.dgn

VEENSTRA & KIMM INC.

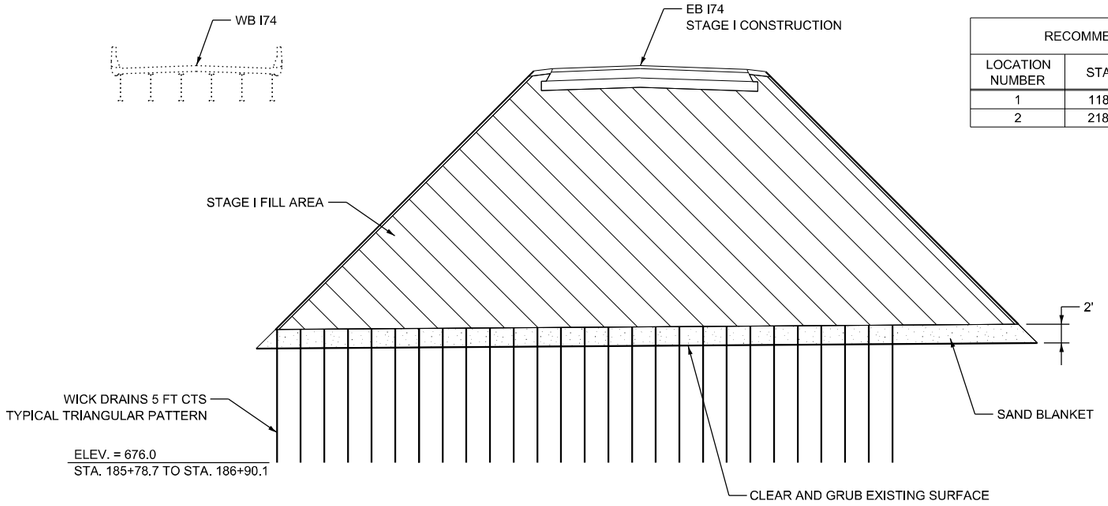
DESIGNED - DMS	REVISED -	
DRAWN - DMS	REVISED -	
CHECKED - PMO	REVISED -	
DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GROUND IMPROVEMENT PLAN
STAGE 2

SCALE: | SHEET 2 OF 3 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	45
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

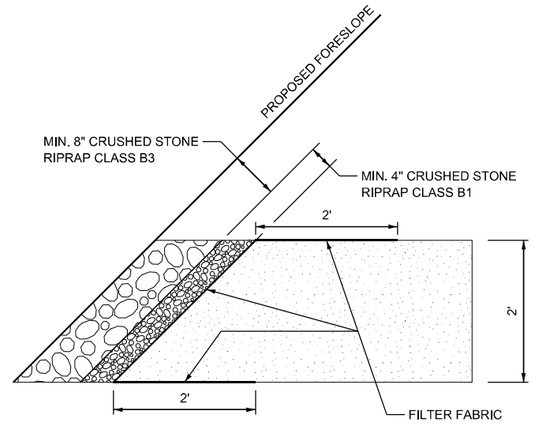


STAGE 1 DETAIL - SAND DRAINAGE BLANKET - CROSS SECTION

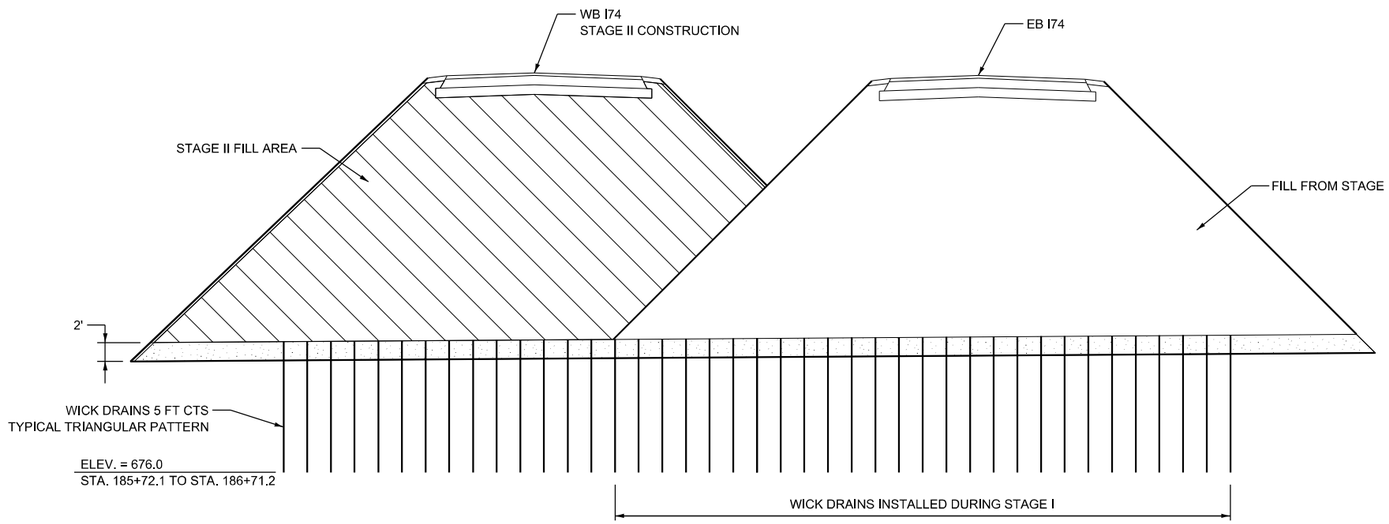
RECOMMENDED SETTLEMENT PLATFORM LOCATIONS				
LOCATION NUMBER	STATION	OFFSET	NEAREST BORING	APPROX. BASE ELEV.
1	1185+50	13' TO 20' RT	SB-04	695.0
2	2185+50	13' TO 20' RT	SB-01	695.0

BILL OF MATERIAL

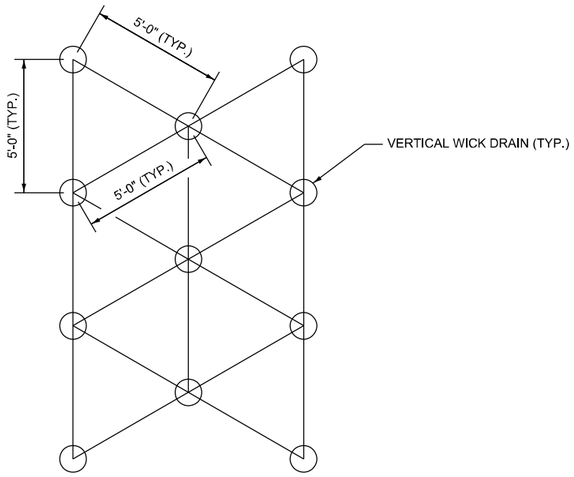
ITEM	UNIT	TOTAL
WICK DRAINS	FEET	24,864
SAND DRAINAGE BLANKET	CU YD	1,831
SETTLEMENT PLATFORMS	EACH	2



DRAINAGE BLANKET PROTECTION



STAGE 2 DETAIL - SAND DRAINAGE BLANKET - CROSS SECTION



WICK DRAIN PATTERN

MODEL: Default
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VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	GROUND IMPROVEMENT DETAILS				F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN - DMS	REVISED -						74	(72-3HVB)BR	PEORIA	158	46
		CHECKED - PMO	REVISED -								CONTRACT NO. 68D84		
		DATE - 08-19-2024	REVISED -		SCALE:	SHEET 3 OF 3 SHEETS	STA.	TO STA.			ILLINOIS	FED. AID PROJECT	

LEGEND

- PROPOSED ELECTRIC SERVICE
- PROPOSED TEMPORARY LIGHTING CONTROLLER
- PROPOSED TEMPORARY LIGHTING UNIT, 50 FT WOOD POLE, 15 FT. MAST ARM, WITH LUMINAIRE, LED, ROADWAY, OUTPUT DESIGNATION H
- PROPOSED TEMPORARY WOOD POLE, 50 FT,
- GUY WIRE ANCHOR
- -A- PROPOSED AERIAL CABLE, SIZED AS NOTED
- - — - PROPOSED UNIT DUCT, SIZED AS NOTED

SCHEDULE OF QUANTITIES

PAY ITEM	DESCRIPTION	UNITS	QTY
X8410105	TEMPORARY LIGHTING SYSTEM	L-SUM	1

HIGHWAY STANDARDS

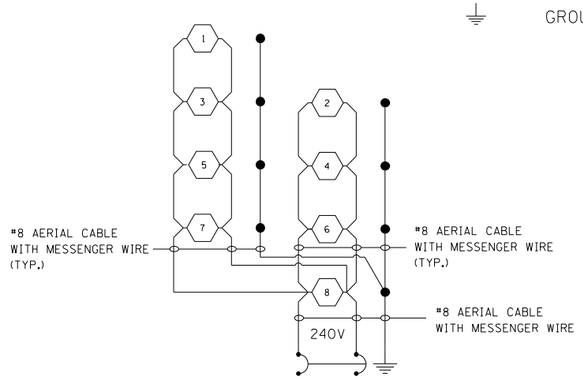
830026-01 TEMPORARY ROADWAY LIGHTING

NOTES:

1. ALL NECESSARY REVISIONS TO THE WIRING SHOWN ON THIS SHEET SHALL BE MADE AT NO ADDTIONAL COST TO THE DEPARTMENT AND TO THE SATISFACTION OF THE ENGINEER.

(1) TEMPORARY LIGHTING UNIT

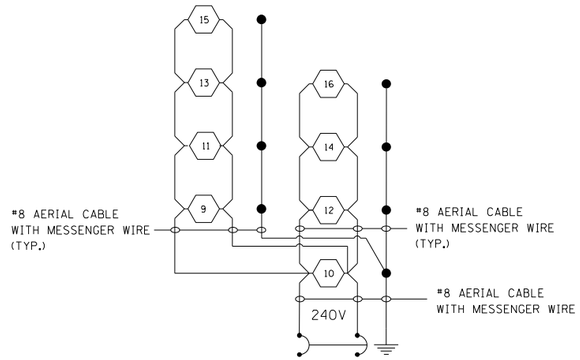
GROUND ROD



2 POLE 20 AMP BREAKER CKT 1

WEST CROSSOVER

PROPOSED TEMPORARY LIGHTING CONTROLLER



2 POLE 20 AMP BREAKER CKT 2

EAST CROSSOVER

PROPOSED TEMPORARY LIGHTING CONTROLLER

TEMPORARY LIGHTING NOTES:

1. TEMPORARY WOOD POLES SHALL BE INSTALLED OUTSIDE THE CLEARZONE.
2. THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO THE INSTALLATION OF ANY COMPONENTS.
3. THE CONTRACTOR SHALL VERIFY FIELD CONDITIONS PRIOR TO BIDDING. THERE WILL BE NO ADDITIONAL COMPENSATION FOR CLAIMS THAT ARISE FROM A FAILURE TO FULLY INVESTIGATE EXISTING FIELD CONDITIONS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADEQUATELY IDENTIFY AND LOCATE ALL EXISTING UNDERGROUND FACILITIES WITHIN THE LIMITS OF THE PROJECT. THE CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES FROM INACCURATE LOCATING.
5. ELECTRICAL WORK SHALL CONFORM TO NATIONAL, STATE, AND LOCAL CODES.
6. ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATIONS.
7. GUY WIRE ANCHORS SHALL BE INSTALLED AS NECESSARY TO THE SATISFACTION OF THE RESIDENT ENGINEER.
8. AT THE CONCLUSION OF THE PROJECT, THE CONTRACTOR SHALL REMOVE THE TEMPORARY LIGHTING SYSTEM IN ITS ENTIRETY WITH THE EXCEPTION OF THE UNDERGROUND WIRING. THE LIGHTING CONTROLLERS AND LUMINAIRES WILL BECOME THE PROPERTY OF THE DEPARTMENT AND THE CONTRACTOR SHALL DELIVER THEM TO THE IDOT TRAFFIC BUILDING LOCATED AT 1025 WEST DETWEILLER DRIVE, PEORIA. THE CONTRACTOR SHALL NOTIFY TONY BRIDSON AT (309) 370-7522 A MINIMUM OF FORTY EIGHT HOURS PRIOR TO MATERIAL DELIVERY. THE CONTRACTOR SHALL DISPOSE OF ALL OTHER ITEMS.

CONDUCTOR SCHEDULE

(1) AERIAL CABLE 2-1C NO. 8 WITH MESSENGER WIRE

(2) UNIT DUCT, 600V, 2-1C NO. 8, 1/C NO. 8 GROUND (XLP-TYPE USE) 3/4" DIA. POLYETHYLENE

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CROSSOVER LIGHTING
I-74 OVER N. BRIMFIELD RD.

SCALE: STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	47
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

Luminaire Performance Table

Project

Date	Contract Number	Section Number	County
3/21/24	68D84		PEORIA

Marked Route Number	Municipality
i-74 AT BRIMFIELD RD	BRIMFIELD TOWNSHIP

Roadway

Lane Width	#of Lanes	Median Width	Surface Classification	Q-Zero Value
12	2	N/A	R3	0.07

Structure

Mounting Height	Arm Length	Set Back	Number of Luminaires (Highmast & Sign Lighting Only)
45 FT	15 FT	20 FT	N/A

Luminaire

Description	Lateral Distribution	Transverse Distribution
ROADWAY, OUTPUT DESIGNATION H	MEDIUM	TYPE III

Total Light Loss Factor (LLF)	BUG Rating	Shields	Dimming Protocol
0.7	U = 0	N/A	0-10V

Layout

Spacing (to Nearest 5 Ft)	Configuration (Opposite, Staggered, 1 Sided, or Median)
155 FT	SINGLE SIDED

Performance

Average Illuminance, E_{AVE}(fc)	Uniformity Ratio, E_{AVE}/E_{MIN}
≥ 1.3	≤ 3:1

Average Luminance, L_{AVE} (cd/m')	Uniformity Ratio, L_{AVE}/L_{MIN}	Uniformity Ratio, L_{MAX}/L_{MIN}	Veiling Luminance Ratio, L_v/L_{AVE}
≥ 0.9	≤ 3:1	≤ 5:1	≤ 0.3:1

Light Tresspass

Distance to ROW (behind pole)	Max. Horizontal Illuminance at ROW, E	Max. Vertical Illuminance at ROW, E
N/A	N/A	N/A

NOTES

1. SET BACK IS FROM EDGE OF PAVEMENT (WHITE LINE) EXCEPT FOR SIGN LUMINAIRES WHEN IT IS VERTICAL AND HORIZONTAL FROM THE SIGN TO THE LUMINAIRE.
2. LIGHTING CALCULATIONS SHALL BE PERFORMED WITH ALL LUMINAIRES ORIENTED TOWARD AND PERPENDICULAR TO THE ROADWAY.
3. TOTAL LIGHT LOSS FACTOR (LLF) = THE PRODUCT OF ''LUMEN MAINTENANCE'' (LDD)=0.9, ''DIRT DEPRECIATION'' (LDD)=0.8'', AND ''EQUIPMENT FACTORS'' (EF)=0.95.
4. PERFORMACNE REQUIREMENTS SHALL BE THE MINIMUM ACCEPTABLE STANDARDS OF PHOTOMETRIC PERFORMANCE FOR THE LUMINAIRE, BASED ON GIVEN CONDITIONS ABOVE.
5. PHOTOMETRIC CALCULATIONS SHALL BE PERFORMED IN ONE DIRECTION ONLY.
6. ALL LED ROADWAY LUMINAIRES SHALL BE MOUNTED HORIZONTALLY.
7. COMPLIANCE WITH PERFORMANCE CRITERIA SHALL BE HELD TO ONE SIGNIFICANT DIGIT.
8. LUMINAIRE PERFORMANCE TABLE IS INTENDED TO DEFINE THE LUMINAIRE AND DOES NOT NECESSARILY REPRESENT SPECIFIC ROADWAY GEOMETRY, ARM LENGTH, SET BACK, OR MOUNTING HEIGHT.

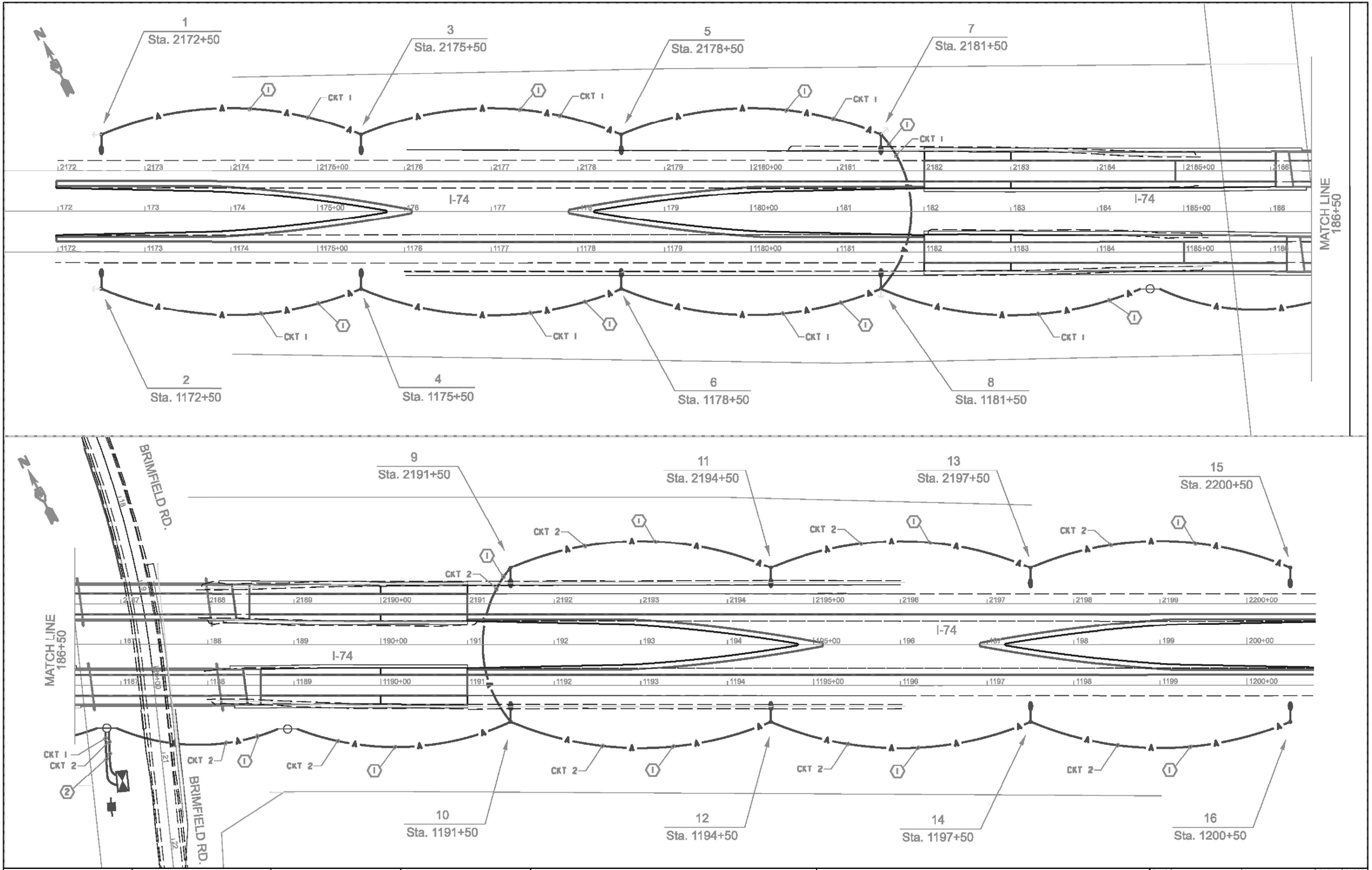
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY CROSSOVER LIGHTING
I-74 OVER N. BRIMFIELD RD.

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	48
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	TEMPORARY CROSSOVER LIGHTING I-74 OVER N. BRIMFIELD RD.	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			74	[72-3HVB]BR	PEORIA	158	49
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -					CONTRACT NO. 68D84		
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: STA. TO STA.		ILLINOIS	FED. AID PROJECT		

BILL OF MATERIALS I-74 @ BRIMFIELD RD. RWIS RELOCATION		
ITEM DESCRIPTION	**UNIT**	**TOTAL QTY.**
RELOCATE EXISTING ELECTRICAL SYSTEM	L SUM	1.0

CONSTRUCTION NOTES	
1.	EXISTING UTILITY LOCATION INFORMATION IS NOT SHOWN ON THE PLAN SHEETS. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES PRIOR TO THE INSTALLATION OF ANY COMPONENTS. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS AND TERRAIN PRIOR TO COMMENCING WORK ON THE PROJECT.
2.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
3.	ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
4	ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATION.
5.	NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
6.	THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE COMMUNICATIONS DUCT.
7.	THE EXISTING RWIS SYSTEM SHALL BE RELOCATED TO A LOCATION TO BE DETERMINED BY THE RESIDENT ENGINEER THAT IS NOT AFFECTED BY CONSTRUCTION.
8.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING A SITE VISIT TO VERIFY EXISTING FIELD CONDITIONS PRIOR TO BIDDING AS THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.
9.	ALL EQUIPMENT FURNISHED AND INSTALLED UNDER THIS CONTRACT SHALL BE COMPATIBLE WITH THE EXISTING STATEWIDE RWIS (ROADWAY WEATHER INFORMATION SYSTEM).
10.	ALL RWIS EQUIPMENT SHALL BE FURNISHED BY VAISALA TO ENSURE COMPATIBILITY WITH AND INTEGRATION INTO THE STATEWIDE SYSTEM.
11.	THE CONTRACTOR SHALL SUBMIT CATALOG CUT SHEETS TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO ORDERING ANY MATERIALS.
12.	VAISALA SHALL COMMISSION AND INTEGRATE THE SITE UPON COMPLETION OF THE WORK.
13.	ALL RWIS COMPONENTS SHALL HAVE A ONE-YEAR MANUFACTURER'S WARRANTY.
14.	THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL BACKFILL, GRADE, AND SEED ALL DISTURBED AREAS IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED COMMUNICATIONS DUCT.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
RWIS RELOCATION CONSTRUCTION NOTES

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	50
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

THE CONTRACTOR SHALL PERFORM THE FOLLOWING WORK. THIS WORK WILL BE PAID FOR UNDER THE PAY ITEM FOR "RELOCATE EXISTING ELECTRICAL SYSTEM".

RWIS REMOVAL WORK

- REMOVE EXISTING FENCE AND RELATED COMPONENTS IN THEIR ENTIRETY AND DISPOSE OF OFF ROW.
- REMOVE EXISTING PEDESTAL MOUNTED ITS EQUIPMENT CABINET AND DELIVER TO IDOT TRAFFIC BUILDING LOCATED AT 1025 W. DETWEILLER DR., PEORIA. CONTACT TONY BRIDSON AT (309) 370-7522 FORTY EIGHT HOURS PRIOR TO DELIVERY.
- REMOVE EXISTING RWIS TOWER INCLUDING ALL ATTACHED COMPONENTS AND RELOCATE TO PROPOSED SITE.
- REMOVE EXISTING RWIS EQUIPMENT CABINET INCLUDING CABINET CONTENTS AND RELOCATE TO PROPOSED SITE.

RWIS ELECTRIC SERVICE WORK

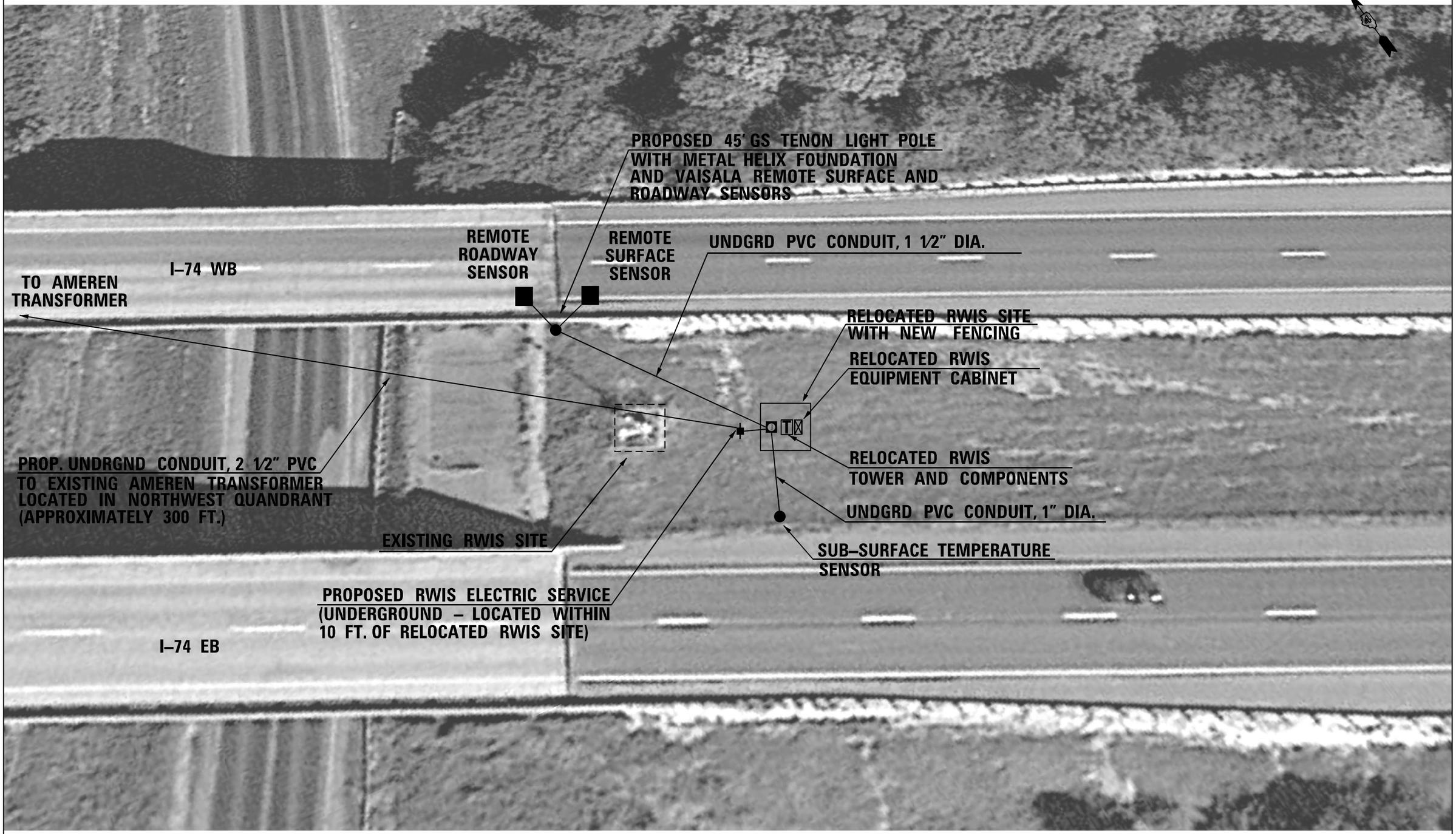
- REMOVE EXISTING ELECTRIC SERVICE IN ITS ENTIRETY AND DISPOSE OF OFF ROW.
- FURNISH AND INSTALL NEW UNDERGROUND METERED ELECTRIC SERVICE IN ACCORDANCE WITH PLAN SHEET DETAILS AND UTILITY AND NEC REQUIREMENTS. FURNISH AND INSTALL NEMA 4X DISCONENCT, METER SOCKET, CONDUIT, UNISTRUT, WIRING, GROUND RODS, AND ALL OTHER COMPONENTS REQUIRED FOR A FULLY OPERATIONAL ELECTRIC SERVICE. ELECTRIC SERVICE DISCONNECT AND METER SHALL BE INSTALLED WITHIN 10 FT. OF THE PROPOSED RWIS SITE.
- COORDINATE WITH IDOT AND UTILITY COMPANY AS REQUIRED TO FACILITATE INSTALLATION OF THE NEW SERVICE.

PROPOSED RWIS SITE WORK

- FURNISH AND INSTALL NEW FENCING AT PROPOSED SITE E IN ACCORDANCE WITH PLAN SHEET DETAILS.
- FURNISH AND INSTALL GROUNDING SYSTEM IN ACCORDANCE WITH PLAN DETAIL SHEETS. FURNISH AND INSTALL GROUND RODS, GROUNBD WIRE, CLAMPS, AND ALL OTHER COMPONENTS REQUIRED FOR GROUNDING SYSTEM.
- TEST GROUND SYSTEM IN ACCORDANCE WITH GROUND RESTISTANCE TESTING DETAIL PLAN SHEET.
- FURNISH AND INSTALL CONCRETE FOUNDATION FOR RWIS TOWER AND EQUIPMENT CABINET. FURNISH AND INSTALL STAND PAD FOR EQUIPMENT CABINET.
- INSTALL RELOCATED RWIS TOWER INCLUDING ALL APPURTENANCES. FURNISH AND INSTALL HARDWARE, WIRING, BRACKETS, AND ALL OTHER ITEMS REQUIRED FOR INSTALLATION.
- INSTALL RELOCATED RWIS EQUIUPMENT CABINET AND EQUIPMENT. FURNISH AND INSTALL HARDWARE, WIRING, AND ALL OTHER ITEMS REQUIRED FOR INSTALLATION.
- FURNISH AND INSTALL ONE 45 FT. GALVANIZED STEEL TENON LIGHT POLE AND METAL HELIX FOUNDATION AS SHOWN ON PLAN SHEETS. THE LIGHT POLE SHALL CONFORM TO HIGHWAY STANDARD 830021-04 AND THE HELIX FOUNDATION SHALL CONFORM TO HIGHWAY STANDARD 836001-04. THE LIGHT POLE SHALL BE INSTALLED IN A LOCATION THAT IS COMPATIBLE WITH THE OPERATION OF THE PROPOSED VAISALA REMOTE SENSORS.
- FURNISH AND INSTALL ONE NEW VAISALA REMOTE SURFACE TEMPERATURE SENSOR DST111 ON PROPOSED LIGHT POLE. INSTALL SENSOR IN ACCORDANCE WITH MANFACTURER RECOMMENDATIONS (MOUNTING HEIGHT, CONFIGURATION, ETC.). FURNISH AND INSTALL HARDWARE, SENSOR ARMS AND MOUNTING SUPPORTS, BRACKETS, WIRING, AND ALL OTHER ITEMS REQUIRED FOR INSTALLATION.
- FURNISH AND INSTALL ONE NEW VAISALA REMOTE ROAD SENSOR DSC211 ON PROPOSED LIGHT POLE. INSTALL SENSOR IN ACCORDANCE WITH MANFACTURER RECOMMENDATIONS (MOUNTING HEIGHT, CONFIGURATION, ETC.). FURNISH AND INSTALL HARDWARE, SENSOR ARMS AND MOUNTING SUPPORTS, BRACKETS, WIRING, AND ALL OTHER ITEMS REQUIRED FOR INSTALLATION.
- FURNISH AND INSTALL ALL ITEMS REQUIRED TO INTEGRATE NEW REMOTE ROAD SENSORS INTO EXISTING RWIS EQUIPMENT CABINET.
- COORDINATE WITH VAISALA TO TEST ALL RWIS SYSTEM COMPONENTS, CONFIGURE EQUIPMENT, AND COMMISSION SITE.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RWIS RELOCATION RWIS RELOCATION WORK SUMMARY	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS / SHEET NO.
		DRAWN -	REVISED -			74	[72-3HVB]BR	PEORIA	158 / 51
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -					CONTRACT NO. 68D84	
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: STA. TO STA.		ILLINOIS	FED. AID PROJECT	

RWIS SITE COORDINATES: 40.834945,–89.889232



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	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION – I–74 & BRIMFIELD RD.
RWIS RELOCATION SITE PLAN

SCALE: STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	52
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

ELECTRICAL LEGEND - ONE-LINE DIAGRAM	
	CABLE TERMINATOR/LUG
	TRANSFORMER
	DISCONNECT SWITCH
	FUSIBLE DISCONNECT SWITCH
	CIRCUIT BREAKER
	THERMAL MAGNETIC CIRCUIT BREAKER
	FUSE
	TRANSIENT VOLTAGE SURGE SUPPRESSOR OR SURGE PROTECTOR DEVICE
	GROUND - GROUND ROD, GROUNDING ELECTRODE, OR AT EARTH POTENTIAL
	INDICATING LIGHT
M	MOTOR
#	LOAD, MOTOR, # = HORSEPOWER
	ELECTRIC UTILITY METER BASE
	JUNCTION BOX WITH SPLICE
XXX	EQUIPMENT, XXX = DEVICE DESCRIPTION
GND	GROUND BUS, LUG, OR TERMINAL
S/N	NEUTRAL BUS
	PANELBOARD WITH MAIN LUGS
	PANELBOARD WITH MAIN BREAKER
	FUSE PANEL WITH MAIN FUSE PULLOUT
	DUPLEX RECEPTACLE 120V SINGLE PHASE GROUNDING TYPE
	CONTROL STATION
N EM L	TRANSFER SWITCH
G	ENGINE GENERATOR SET

ELECTRICAL ABBREVIATIONS	
A.F.F.	ABOVE FINISHED FLOOR
A, AMP	AMPERES
ATS	AUTOMATIC TRANSFER SWITCH
AWG	AMERICAN WIRE GAUGE
BKR	BREAKER
C	CONDUIT
CB	CIRCUIT BREAKER
CKT	CIRCUIT
CR	CONTROL RELAY
CU	COPPER
DPDT	DOUBLE POLE DOUBLE THROW
DPST	DOUBLE POLE SINGLE THROW
EM	EMERGENCY
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSURE
EOR	ENGINEER OF RECORD
EP	EXPLOSION PROOF
ES	EMERGENCY STOP
ETL	INTERTEK - ELECTRICAL TESTING LABS
ETM	ELAPSE TIME METER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
GND	GROUND
GRSC	GALVANIZED RIGID STEEL CONDUIT
HID	HIGH INTENSITY DISCHARGE
HOA	HAND OFF AUTOMATIC
HP	HORSEPOWER
HPS	HIGH PRESSURE SODIUM
J	JUNCTION BOX
KVA	KILOVOLT AMPERE(S)
KNL	KEVIN NEIL LIGHTFOOT
KW	KILOWATTS
LC	LIGHTING CONTACTOR
LTFMC	LIQUID TIGHT FLEXIBLE METAL CONDUIT (UL LISTED)
LTG	LIGHTING
LP	LIGHTING PANEL
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCM	THOUSAND CIRCULAR MIL
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MH	METAL HALIDE
MIN	MINIMUM
MLO	MAIN LUGS ONLY
NEC	NATIONAL ELECTRICAL CODE (NFPA 70)
NC	NORMALLY CLOSED
NO	NORMALLY OPEN
NTS	NOT TO SCALE
OHE	OVERHEAD ELECTRIC
OL	OVERLOAD

ELECTRICAL ABBREVIATIONS (CONTINUED)	
PB	PULL BOX
PC	PHOTO CELL
PDB	POWER DISTRIBUTION BLOCK
PNL	PANEL
RCPT	RECEPTACLE
R	RELAY
S	STARTER
SPD	SURGE PROTECTION DEVICE
SPST	SINGLE POLE SINGLE THROW
TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
TYP	TYPICAL
UG	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UL	UNDERWRITER'S LABORATORIES
V	VOLTS
W/	WITH
W/O	WITHOUT
WP	WEATHER PROOF
XFER	TRANSFER
XFMR	TRANSFORMER

NOTES:

1. ALL ELECTRICAL EQUIPMENT SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES, AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, INTERTEK TESTING SERVICES VERIFICATION/ETL LISTING (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.

2. KEEP A COPY OF THE LATEST NEC IN FORCE ON SITE AT ALL TIMES DURING/CONSTRUCTION FOR USE AS A REFERENCE. REFERENCES TO NEC ARTICLES NOTED IN THIS ELECTRIC SERVICE AND GROUNDING INSTALLATIONS AT RWIS SITES DESIGN MEMO ARE BASED ON 2020 AND/OR 2023 EDITIONS.

3. NEW WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).

4. LTFMC DENOTES LIQUID TIGHT FLEXIBLE METAL CONDUIT UL LISTED, SUNLIGHT RESISTANT, & SUITABLE FOR GROUNDING, LIQUID TIGHT FLEXIBLE METAL CONDUIT AND ASSOCIATED FITTINGS SHALL BE U.L. LISTED TO MEET THE REQUIREMENTS OF 2020/2023 NEC 350.6. LIQUID TIGHT FLEXIBLE METAL CONDUIT THAT IS USED FOR FLEXIBILITY (INCLUDING CONNECTIONS TO CCR'S & TRANSFORMERS) SHALL REQUIRE AN EXTERNAL BONDING JUMPER OR INTERNAL EQUIPMENT GROUNDING CONDUCTOR PER NEC 350.60, EXTERNAL BONDING JUMPERS USED WITH CCR INSTALLATIONS SHALL BE #6 AWG COPPER (MINIMUM). DO NOT INSTALL LTFMC THAT IS NOT UL LISTED. CONFIRM LTFMC BEARS THE UL LABEL PRIOR TO INSTALLATION.

5. INSULATED CONDUCTORS SHALL COLOR CODE PHASE AND NEUTRAL CONDUCTOR INSULATION FOR NO. 6 AWG OR SMALLER. PROVIDE COLORED INSULATION OR COLORED MARKING TAPE FOR PHASE AND NEUTRAL CONDUCTORS FOR NO. 4 AWG AND LARGER. INSULATED GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTOR AWG AND/OR KCMIL TO COMPLY WITH NEC 250.119. NEUTRAL CONDUCTORS SHALL HAVE WHITE COLORED INSULATION FOR NO. 6 AWG AND SMALLER TO MEET THE REQUIREMENTS OF NEC 200.6. STANDARD COLORS FOR POWER WIRING AND BRANCH CIRCUITS SHALL BE AS FOLLOWS:

120/240 VAC, 1 PHASE, 3 WIRE

PHASE A	BLACK
PHASE B	RED
NEUTRAL	WHITE
GROUND	GREEN

208/120 VAC, 3 PHASE, 4 WIRE

PHASE A	BLACK
PHASE B	RED
PHASE C	BLUE
NEUTRAL	WHITE
GROUND	GREEN

240/120 VAC, 3 PHASE, 4 WIRE

PHASE A	BLACK
PHASE B(HIGH LEG)	ORANGE
PHASE C	BLUE
NEUTRAL	WHITE
GROUND	GREEN

6. SEE RESPECTIVE SITE PLANS FOR SITE LEGEND INFORMATION.

7. ENCLOSURES RATED NEMA 4, 4X SHALL HAVE WATERTIGHT HUBS AT CONDUIT ENTRANCES UL LISTED NEMA 4, 4X FOR THE RESPECTIVE ENCLOSURE, TO MAINTAIN THE NEMA 4, 4X RATING. HUBS FOR USE WITH NEMA 4X STAINLESS STEEL ENCLOSURES SHALL BE NEMA 4X STAINLESS STEEL HUBS.

8. ONLY QUALIFIED ELECTRICAL CONTRACTORS SHALL PERFORM ELECTRICAL WORK ON THIS PROJECT. NEC DEFINES A QUALIFIED PERSON AS "ONE WHO HAS SKILLS AND KNOWLEDGE RELATED TO THE CONSTRUCTION AND OPERATION OF THE ELECTRICAL EQUIPMENT AND INSTALLATIONS AND HAS RECEIVED SAFETY TRAINING TO RECOGNIZE AND AVOID THE HAZARDS INVOLVED."

9. RESPECTIVE POWER SOURCES FOR EACH PANEL, DISCONNECT, EQUIPMENT, OR OTHER DEVICE SHALL BE VERIFIED PRIOR TO WORKING ON, RELOCATING, REMOVING, DISCONNECTING, AND/OR INSTALLING THE RESPECTIVE DEVICES. SHUT OFF, LOCKOUT, AND TAGOUT FOR PROTECTION OF PERSONNEL. INCLUDE LOCKOUT KITS AND TAGS FOR RESPECTIVE EQUIPMENT.

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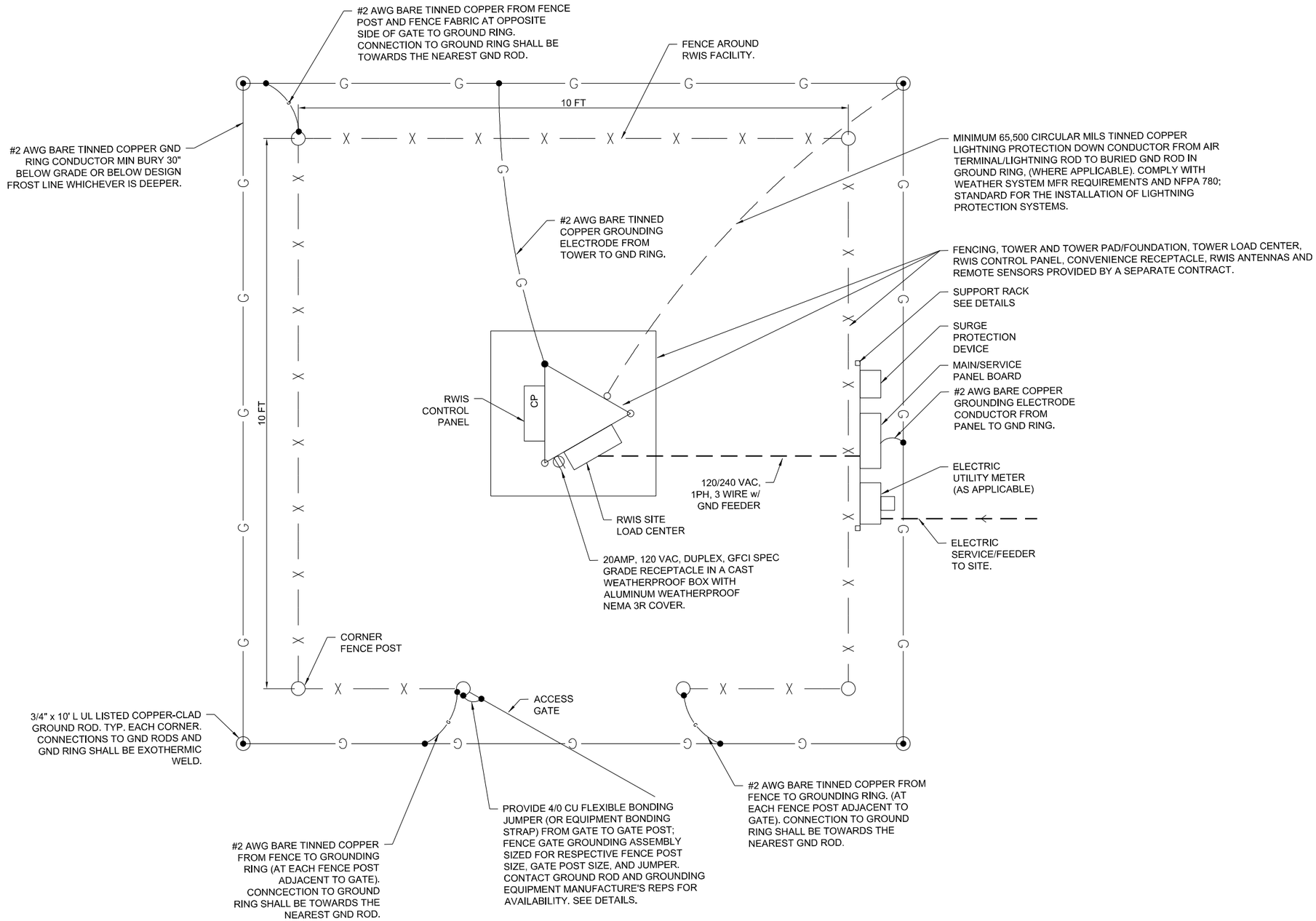
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
ELECTRICAL LEGEND AND ABBREVIATIONS

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	53
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



RWIS ELECTRICAL & GROUNDING PLAN

NOT TO SCALE

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
RWIS ELECTRICAL AND GROUNDING PLAN

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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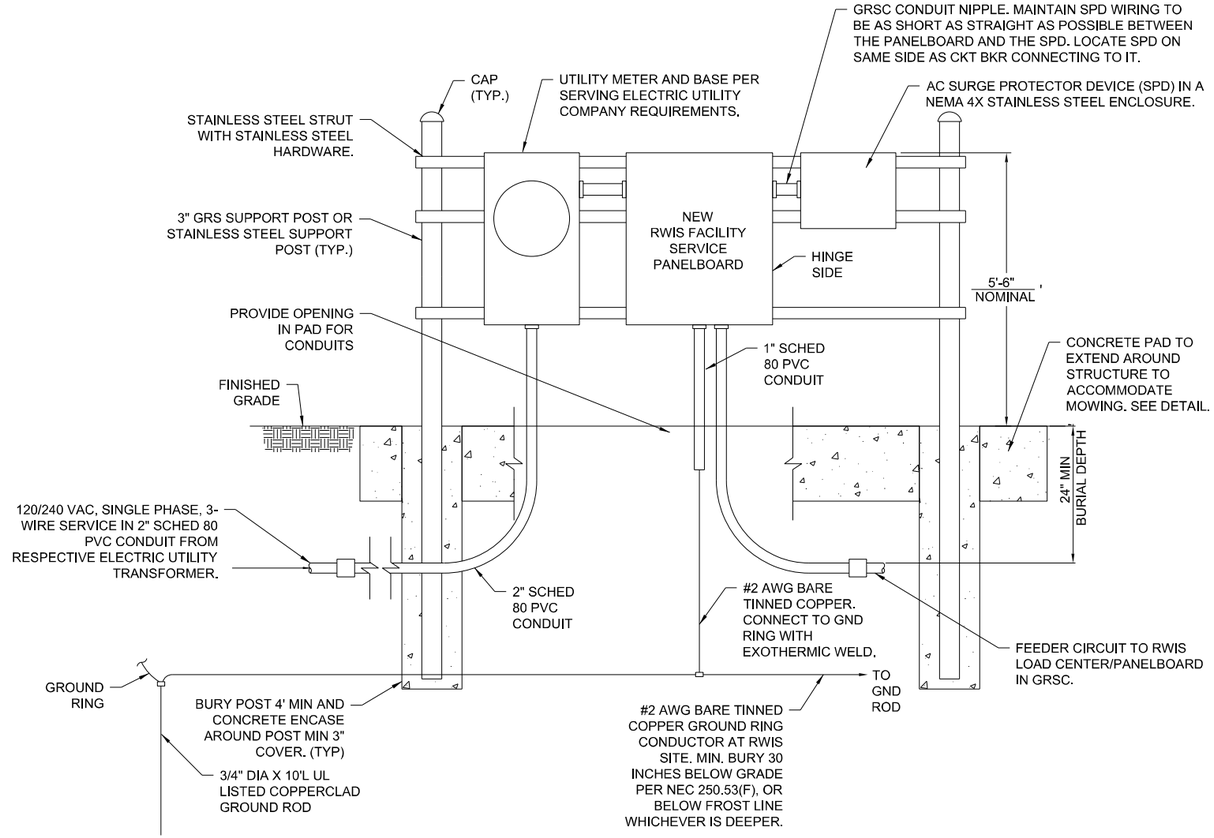
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



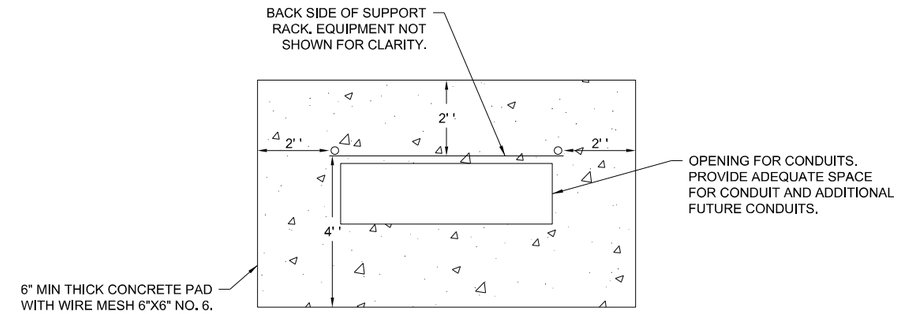
RWIS FACILITY SERVICE PANEL ELEVATION

NOT TO SCALE

THIS DETAIL APPLIES TO NEW SITES WITH NEW ELECTRIC SERVICE LOCATED AT THE RWIS SITE.

NOTES

1. FURNISH AND INSTALL A 100 AMP, 120/240 VAC, 1 PHASE, 3-WIRE SERVICE IN 2-INCH DUCT AND CONDUIT FROM THE RESPECTIVE ELECTRIC UTILITY TRANSFORMER TO THE SERVICE EQUIPMENT AT THE RWIS SITE.
2. FURNISH AND INSTALL A #2 AWG BARE TINNED COPPER GROUNDING ELECTRODE CONDUCTOR FROM THE RWIS SERVICE PANELBOARD TO THE GROUND RING AT THE RWIS FACILITY.
3. PROVIDE ADEQUATE CLEARANCE TO WORK AROUND AND OPERATE EQUIPMENT AND COMPLY WITH NATIONAL ELECTRICAL CODE 110.26 SPACES ABOUT ELECTRICAL EQUIPMENT.
4. COORDINATE ELECTRIC SERVICE WITH THE RESPECTIVE ELECTRIC UTILITY COMPANY AND VERIFY THEIR REQUIREMENTS.
5. CONCRETE SHALL BE 4,000 PSI AT 28 DAYS. CONCRETE MIX DESIGN SHALL BE APPROVED BY IDOT.



CONCRETE PAD DETAIL

NOT TO SCALE

FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RWIS RELOCATION RWIS FACILITY SERVICE PANEL ELEVATION DETAIL	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			74	[72-3HVB]BR	PEORIA	158	55
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -					CONTRACT NO. 68D84		
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: STA. TO STA.		ILLINOIS	FED. AID PROJECT		

GROUNDING NOTES

THE CONTRACTOR SHALL FURNISH AND INSTALL ALL GROUNDING AS MAY BE NECESSARY OR REQUIRED TO MAKE A COMPLETE GROUNDING SYSTEM AS REQUIRED BY THE LATEST NFPA70- NATIONAL ELECTRICAL CODE IN FORCE AND IN ACCORDANCE WITH THE RESPECTIVE EQUIPMENT MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND REQUIREMENTS FOR THE PRIORITY OF PROTECTION OF PERSONNEL AND ADDITIONALLY FOR THE PROTECTION OF EQUIPMENT. REFERENCES TO NEC ARTICLES NOTED BELOW ARE BASED ON 2020 AND/OR 2023 EDITIONS. ALL PERSONNEL SHALL ALSO COMPLY WITH NFPA 70E STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE. THE RELIABILITY OF THE GROUNDING SYSTEM IS DEPENDENT ON CAREFUL, PROPER INSTALLATION AND CHOICE OF MATERIALS. IMPROPER PREPARATION OF SURFACES TO BE JOINED TO MAKE AN ELECTRICAL PATH, LOOSE JOINTS OR CORROSION CAN INTRODUCE IMPEDANCE THAT WILL SERIOUSLY IMPAIR THE ABILITY OF THE GROUND PATH TO PROTECT PERSONNEL AND EQUIPMENT AND TO ABSORB TRANSIENTS THAT CAN CAUSE NOISE IN COMMUNICATIONS CIRCUITS. THE FOLLOWING FUNCTIONS ARE PARTICULARLY IMPORTANT TO ENSURE A RELIABLE GROUND SYSTEM:

1. ALL PRODUCTS ASSOCIATED WITH THE GROUNDING SYSTEM SHALL BE UL-LISTED AND LABELED.

2. GROUNDING CONDUCTORS SHALL BE 98% CONDUCTIVITY COPPER, EITHER BARE TINNED OR WITH GREEN COLORED INSULATION SUITABLE FOR THE RESPECTIVE APPLICATION. GROUNDING ELECTRODE CONDUCTORS TO BE BURIED IN EARTH SHALL BE TINNED BARE COPPER. EXTERIOR EXPOSED GROUND CONDUCTORS SHALL BE BARE TINNED COPPER. GROUNDING ELECTRODE CONDUCTORS INSTALLED INDOORS ABOVE GRADE SHALL BE BARE COPPER, TINNED COPPER, OR INSULATED COPPER WITH GREEN COLORED INSULATION. EQUIPMENT GROUNDING WIRES SHALL BE BARE COPPER OR INSULATED COPPER WITH GREEN COLORED INSULATION. INSULATED GROUND CONDUCTORS SHALL HAVE GREEN COLORED INSULATION FOR ALL CONDUCTOR SIZES (AWG OR KCMIL) TO COMPLY WITH NEC 250.119 IDENTIFICATION OF EQUIPMENT GROUNDING CONDUCTORS. DO NOT USE COLORS OTHER THAN GREEN FOR GROUNDING CONDUCTORS. CONDUCTORS OTHER THAN GREEN WITH GREEN TAPE WILL NOT SATISFY THE REQUIREMENT THAT INSULATED GROUNDING CONDUCTORS SHALL HAVE GREEN COLORED INSULATION.

3. GROUNDING ELECTRODE CONDUCTORS SHALL BE SIZED AS DETAILED HEREIN FOR THE RESPECTIVE APPLICATION AND IN NO CASE SMALLER THAN NEC ARTICLE 250.66 "SIZE OF ALTERNATING-CURRENT GROUNDING ELECTRODE CONDUCTOR," NEC TABLE 250.66 "GROUNDING ELECTRODE CONDUCTOR FOR ALTERNATING CURRENT SYSTEMS". WHERE NOTED HEREIN OR WHERE DETAILED ON PLANS FOR RESPECTIVE APPLICATIONS GROUNDING ELECTRODE CONDUCTORS SHALL BE LARGER THAN THOSE SPECIFIED IN NEC TABLE 250.66. BURIED GROUNDING ELECTRODE CONDUCTORS FOR ROADWAY WEATHER INFORMATION SYSTEM FACILITIES SHALL BE BARE TINNED COPPER #2 AWG (MINIMUM).

4. SUPPLY SIDE BONDING CONDUCTORS AND JUMPERS SHALL BE SIZED AS DETAILED HEREIN FOR THE RESPECTIVE APPLICATION AND IN NO CASE SMALLER THAN NEC ARTICLE 250.102(C) SIZE - SUPPLY-SIDE BONDING JUMPER AND NEC TABLE 250.102(C)(1) "GROUNDED CONDUCTOR, MAIN BONDING JUMPER, SYSTEM BONDING JUMPER, AND SUPPLY-SIDE BONDING JUMPER FOR ALTERNATING CURRENT SYSTEMS". WHERE NOTED HEREIN OR WHERE DETAILED ON PLANS FOR RESPECTIVE APPLICATIONS SUPPLY SIDE BONDING CONDUCTORS SHALL BE LARGER THAN THOSE SPECIFIED IN NEC TABLE 250.102(C)(1).

5. LOAD SIDE BONDING CONDUCTORS AND JUMPERS SHALL BE SIZED AS DETAILED HEREIN FOR THE RESPECTIVE APPLICATION AND IN NO CASE SMALLER THAN NEC ARTICLE 250.102(D) "SIZE - EQUIPMENT BONDING JUMPER ON LOAD SIDE OF AN OVERCURRENT DEVICE" AND NEC TABLE 250.122 "MINIMUM SIZE EQUIPMENT GROUNDING CONDUCTORS FOR GROUNDING RACEWAY AND EQUIPMENT". WHERE NOTED HEREIN OR WHERE DETAILED ON PLANS FOR RESPECTIVE APPLICATIONS LOAD SIDE BONDING CONDUCTORS SHALL BE LARGER THAN THOSE SPECIFIED IN NEC TABLE 250.122.

6. EQUIPMENT GROUNDING CONDUCTORS SHALL BE SIZED AS DETAILED HEREIN FOR THE RESPECTIVE APPLICATION AND IN NO CASE SMALLER THAN NEC 250.122 "SIZE OF EQUIPMENT GROUNDING CONDUCTORS" AND NEC TABLE 250.122 "MINIMUM SIZE EQUIPMENT GROUNDING CONDUCTORS FOR GROUNDING RACEWAY AND EQUIPMENT". WHERE NOTED HEREIN OR WHERE DETAILED ON PLANS FOR RESPECTIVE APPLICATIONS EQUIPMENT GROUNDING CONDUCTORS SHALL BE LARGER THAN THOSE SPECIFIED IN NEC TABLE 250.122.

7. PER NEC 250.122 (B) "INCREASED IN SIZE" IT NOTES "IF UNGROUNDED CONDUCTORS ARE INCREASED IN SIZE FOR ANY REASON OTHER THAN AS REQUIRED IN 310.15(B) OR 310.15(C), WIRE-TYPE EQUIPMENT GROUNDING CONDUCTOR, IF INSTALLED, SHALL BE INCREASED IN SIZE PROPORTIONATELY TO THE INCREASE IN CIRCULAR MIL AREA OF THE UNGROUNDED CONDUCTORS."

8. FURNISH AND INSTALL GROUND RODS AS DETAILED HEREIN. GROUND RODS SHALL BE SECTIONAL MINIMUM 3/4-IN. DIAMETER BY 10-FT LONG, UL-LISTED, COPPER CLAD WITH 10-MIL MINIMUM COPPER COATING (UNLESS DETAILED OTHERWISE HEREIN). LONGER GROUND RODS SHALL BE PROVIDED WHERE DETAILED HEREIN AND/OR WHERE NECESSARY TO MEET GROUND RESISTANCE MEASUREMENTS OF 25 OHMS OR LESS TO MEET NEC REQUIREMENTS OR 10 OHMS OR LESS TO MEET WEATHER SYSTEM INSTALLATION REQUIREMENTS. GROUND RODS SHALL BE SPACED OR AS DETAILED ON THE RESPECTIVE PLANS, AND IN NO CASE SPACED LESS THAN ONE ROD LENGTH APART. ALL CONNECTIONS TO GROUND RODS AND THE GROUND RING SHALL BE MADE WITH EXOTHERMIC WELD TYPE CONNECTORS. EXOTHERMIC WELD CONNECTIONS SHALL BE INSTALLED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S DIRECTIONS USING MOLDS AS REQUIRED FOR EACH RESPECTIVE APPLICATION. BOLTED CONNECTIONS WILL NOT BE PERMITTED AT GROUND RODS OR AT BURIED GROUNDING ELECTRODE CONDUCTORS.

9. CONTRACTOR SHALL TEST EACH MADE ELECTRODE GROUND ROD/GROUND FIELD/GROUND RING WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND FIELD SYSTEMS. IF GROUND RESISTANCE EXCEEDS 25 OHMS (OR 10 OHMS WHERE REQUIRED), CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTION. ALSO REFER TO EOR-47643 FOR ADDITIONAL INFORMATION ON GROUNDING REQUIREMENTS WHERE APPLICABLE. COPIES OF GROUND ROD TEST RESULTS SHALL BE FURNISHED TO THE OWNER'S REPRESENTITIVE.

10. ALL BOLTED OR MECHANICAL CONNECTIONS SHALL BE COATED WITH A CORROSION PREVENTATIVE COMPOUND BEFORE JOINING, SANCHEM INC. "NO-OX-ID "A-SPECIAL" COMPOUND, BURNDY PENETROX E, OR APPROVED EQUAL.

11. METALLIC SURFACES TO BE JOINED SHALL BE PREPARED BY THE REMOVAL OF ALL NON-CONDUCTIVE MATERIAL, PER 2020/2023 NATIONAL ELECTRICAL CODE ARTICLE 250-12. ALL COPPER BUS BARS MUST BE CLEANED PRIOR TO MAKING CONNECTIONS TO REMOVE SURFACE OXIDATION.

12. METALLIC RACEWAY FITTINGS SHALL BE TIGHTENED AS NECESSARY TO PROVIDE A PERMANENT LOW IMPEDANCE PATH FOR ALL CIRCUITS. METAL CONDUIT TERMINATIONS IN ENCLOSURES SHALL BE BONDED TO THE ENCLOSURE WITH UL-LISTED FITTINGS SUITABLE FOR GROUNDING. PROVIDE GROUNDING BUSHINGS WITH BONDING JUMPERS FOR ALL METAL CONDUITS ENTERING SERVICE EQUIPMENT (METER BASE, CT CABINET, MAIN SERVICE BREAKER ENCLOSURE, ETC.). PROVIDE GROUNDING BUSHINGS WITH BONDING JUMPERS FOR ALL METAL CONDUITS ENTERING AN ENCLOSURE THROUGH CONCENTRIC OR ECCENTRIC KNOCKOUTS THAT ARE PUNCHED OR OTHERWISE FORMED SO AS TO IMPAIR THE ELECTRICAL CONNECTION TO GROUND. STANDARD LOCKNUTS OR BUSHINGS SHALL NOT BE THE SOLE MEANS FOR BONDING WHERE A CONDUIT ENTERS AN ENCLOSURE THROUGH A CONCENTRIC OR ECCENTRIC KNOCKOUT

13. ALL CONNECTIONS, LOCATED ABOVE GRADE, BETWEEN THE DIFFERENT TYPES OF GROUNDING CONDUCTORS SHALL BE MADE USING UL-LISTED DOUBLE COMPRESSION CRIMP TYPE CONNECTORS OR UL-LISTED BOLTED GROUND CONNECTORS. FOR GROUND CONNECTIONS TO ENCLOSURES, CASES AND FRAMES OF ELECTRICAL EQUIPMENT NOT SUPPLIED WITH GROUND LUGS THE CONTRACTOR SHALL DRILL REQUIRED HOLES FOR MOUNTING A BOLTED GROUND CONNECTOR. TIGHTEN CONNECTIONS TO COMPLY WITH TIGHTENING TORQUES IN UL STANDARD 486A TO ASSURE PERMANENT AND EFFECTIVE GROUNDING.

14. ALL METAL EQUIPMENT ENCLOSURES, CONDUITS, CABINETS, BOXES, RECEPTACLES, MOTORS, ETC. SHALL BE BONDED TO THE RESPECTIVE GROUNDING SYSTEM.

15. PROVIDE ALL BOXES FOR PROPOSED OUTLETS, SWITCHES, CIRCUIT BREAKERS, ETC. WITH GROUNDING SCREWS. PROVIDE ALL PANELBOARD, SWITCHGEAR, ETC., ENCLOSURES WITH GROUNDING BARS WITH INDIVIDUAL SCREWS, LUGS, CLAMPS, ETC., FOR EACH OF THE GROUNDING CONDUCTORS THAT ENTER THEIR RESPECTIVE ENCLOSURES.

16. EACH NEW FEEDER CIRCUIT AND/OR BRANCH CIRCUIT SHALL INCLUDE AN EQUIPMENT GROUND WIRE. METAL RACEWAY OR CONDUIT SHALL NOT MEET THIS REQUIREMENT. THE EQUIPMENT GROUND WIRE FROM EQUIPMENT SHALL NOT BE SMALLER THAN ALLOWED BY 2020/2023 NEC TABLE 250-122 "MINIMUM SIZE CONDUCTORS OR GROUNDING RACEWAY AND EQUIPMENT." WHEN CONDUCTORS ARE ADJUSTED IN SIZE TO COMPENSATE FOR VOLTAGE DROP, EQUIPMENT-GROUNDING CONDUCTORS SHALL BE ADJUSTED PROPORTIONATELY ACCORDING TO CIRCULAR MIL AREA. ALL EQUIPMENT GROUND WIRES SHALL BE COPPER, EITHER BARE OR INSULATED GREEN IN COLOR. WHERE THE EQUIPMENT GROUNDING CONDUCTORS ARE INSULATED, THEY SHALL BE IDENTIFIED BY THE COLOR GREEN, AND SHALL BE THE SAME INSULATION TYPE AS THE PHASE CONDUCTORS.

17. ALL EXTERIOR METAL CONDUIT, WHERE NOT ELECTRICALLY CONTINUOUS BECAUSE OF MANHOLES, HANDHOLES, NON-METALLIC JUNCTION BOXES, ETC., SHALL BE BONDED TO ALL OTHER METAL CONDUIT IN THE RESPECTIVE DUCT RUN, AND AT EACH END, WITH A COPPER-BONDING JUMPER SIZED IN CONFORMANCE WITH 2020/2023 NEC 250-102. WHERE METAL CONDUITS TERMINATE IN AN ENCLOSURE (SUCH AS A MOTOR CONTROL CENTER, SWITCHBOARD, ETC) WHERE THERE IS NOT ELECTRICAL CONTINUITY WITH THE CONDUIT AND THE RESPECTIVE ENCLOSURE, PROVIDE A BONDING JUMPER FROM THE RESPECTIVE ENCLOSURE GROUND BUS TO THE CONDUIT SIZED PER 2020/2023 NEC 250-102.

18. IT IS THE INTENT OF THIS SPECIFICATION THAT ALL MOTOR FRAMES, PUMP BASES ELECTRICAL EQUIPMENT ENCLOSURES, PANEL HOUSINGS, CONDUITS, BOXES, ETC. HAVE A CONTINUOUS COPPER WIRE GROUND CONNECTION AND SHALL BE POSITIVELY BONDED TO THE RESPECTIVE GROUNDING SYSTEM. CONDUIT CONNECTORS WILL NOT BE CONSIDERED AS ADEQUATE GROUNDING.

19. PROVIDE A POSITIVE GROUND BOND FOR ALL OUTLET BOXES, ELECTRICAL EQUIPMENT ENCLOSURES, GROUNDING RECEPTACLES, TOGGLE SWITCHES, ETC. INSTALL A GROUNDING CONDUCTOR IN ALL WIRE AND CABLE RACEWAYS. GROUND CONDUCTOR TO HAVE 600-VOLT INSULATION AND BE IDENTIFIED BY A CONTINUOUS GREEN COLOR COATING. THEY SHALL BE USED SOLELY FOR GROUNDING PURPOSES AND BE ENTIRELY SEPARATE FROM WHITE GROUNDED NEUTRAL CONDUCTOR, EXCEPT AT SUPPLY SIDE OF SERVICE DISCONNECTING MEANS, WHERE GROUNDING AND NEUTRAL SYSTEMS ARE TO BE CONNECTED TO SERVICE GROUND.

20. EACH AND ALL GROUNDED CASED AND METAL PARTS ASSOCIATED WITH ELECTRICAL EQUIPMENT SHALL BE TESTED FOR CONTINUITY OF CONNECTION WITH GROUND BUS SYSTEM BY CONTRACTOR IN PRESENCE OF OWNER'S REPRESENTATIVE.

21. ALL CONNECTIONS BETWEEN THE DIFFERENT TYPES OF GROUNDING CONDUCTORS ABOVE GRADE SHALL BE MADE USING BOLTED GROUND CONNECTORS. GROUND LUGS SHALL BE PROVIDED IN ALL ENCLOSURES AND WIRING TERMINATION JUNCTION BOXES. EQUIPMENT GROUNDS AND GROUNDING CONDUCTOR SHALL BE CONNECTED TO THESE GROUND LUGS. FOR GROUND CONNECTIONS TO ENCLOSURES, CASES AND FRAMES OF ELECTRICAL EQUIPMENT NOT SUPPLIED WITH GROUND LUGS THE CONTRACTOR SHALL DRILL REQUIRED HOLES FOR MOUNTING A BOLTED GROUND CONNECTOR.

TABLE BELOW SHOWS THE RECOMMENDED TIGHTENING TORQUES FOR SILICON BRONZE, STAINLESS STEEL AND GALVANIZED STEEL HARDWARE. THIS TABLE REPRESENTS TORQUES PRESENTLY RECOMMENDED BY NEMA-CC1-1984 SPECIFICATION. FOR SPECIFIC EQUIPMENT CONFIRM TIGHTENING TORQUES WITH RESPECTIVE MANUFACTURERS.

TIGHTENING TORQUE TABLE

BOLT DIAMETER	SILICONE BRONZE GALVANIZED OR STAINLESS STEEL	
	Ft-Lbs.	Inch-Lbs
5/16-18	15	180
3/8-16	20	240
1/2-13	40	480
5/8-11	55	660
3/4-10	80	960

22. BOND ALL NONCURRENT-CARRYING PARTS OF METAL EQUIPMENT TO GROUND SYSTEM.

23. RESPECTIVE FACILITY SITE FENCING SHALL BE BONDED TO THE GROUND RING.

24. INSTALL GROUNDING ELECTRODE CONDUCTORS, LIGHTNING PROTECTION DOWN CONDUCTORS AND SEPARATE GROUND CONDUCTORS IN SCHEDULE 80 PVC CONDUIT OR EXPOSED WHERE ACCEPTABLE TO LOCAL CODES. WHERE GROUNDING ELECTRODE CONDUCTORS, LIGHTNING PROTECTION DOWN CONDUCTORS OR INDIVIDUAL GROUND CONDUCTORS ARE RUN IN PVC CONDUIT, DO NOT COMPLETELY ENCIRCLE CONDUIT WITH FERROUS AND/OR MAGNETIC MATERIALS. USE NON-METALLIC REINFORCED FIBERGLASS STRUT SUPPORT. WHERE METAL CONDUIT CLAMPS ARE INSTALLED, USE NYLON BOLTS, NUTS, WASHERS AND SPACERS TO INTERRUPT A COMPLETE METALLIC PATH FROM ENCIRCLING THE CONDUIT. THIS IS REQUIRED TO AVOID GIRDLING OF GROUND CONDUCTORS. GIRDLING OF A GROUND CONDUCTOR IS THE RESULT OF PLACING THE CONDUCTOR IN A RING OF MAGNETIC MATERIAL. THIS RING COULD BE A METALLIC CONDUIT, U-BOLT OR STRUT SUPPORT PIPE CLAMP, OR OTHER SUPPORT HARDWARE. THE RESULT OF GIRDLING GROUND CONDUCTORS SIGNIFICANTLY INCREASES THE INDUCTIVE IMPEDANCE OF THE GROUND CONDUCTOR. INDUCTIVE AND CAPACITIVE IMPEDANCE IS A TYPE OF RESISTANCE THAT OPPOSES THE FLOW OF ALTERNATING CURRENT. ANY INCREASE IN THE IMPEDANCE OF A GROUND CONDUCTOR REDUCES ITS ABILITY TO EFFECTIVELY MITIGATE RADIO FREQUENCY NOISE IN THE GROUND SYSTEM. THE CONDITION WHERE A GROUND CONDUCTOR IS GIRDLED DURING A LIGHTNING STRIKE RESULTS IN PHENOMENA KNOWN AS SURGE IMPEDANCE LOADING. SURGE IMPEDANCE LOADING IS A RESULT OF VOLTAGE AND CURRENT REACHING 500,000 VOLTS AND 10,000 AMPS FOR A SHORT DURATION. GIRDLING FURTHER INCREASES THE IMPEDANCE AT LIGHTNING FREQUENCIES OF 100 KILOHERTZ TO 100 MEGAHERTZ. AT THESE POWER AND FREQUENCY LEVELS ANY INCREASE IN THE IMPEDANCE OF THE GROUND CONDUCTOR MUST BE CONTROLLED. DURING LIGHTNING DISCHARGE CONDITIONS A LOW INDUCTIVE IMPEDANCE PATH IS MORE IMPORTANT THAN A LOW DC RESISTANCE PATH.

25. GROUNDING WORK AFFECTING OPERATIONS AT A FACILITY SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE. CONTRACTOR SHALL COORDINATE WORK AND ANY POWER OUTAGES WITH THE OWNER'S REPRESENTATIVE. ANY SHUTDOWN OF EXISTING SYSTEMS SHALL BE SCHEDULED WITH AND APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO SHUT DOWN. ALL POWER SYSTEMS (AC OR DC) SHALL HAVE PROVISIONS TO LOCKOUT AND TAGOUT ANY CIRCUIT TO HELP ENSURE THE CIRCUIT IS SAFE TO WORK ON FOR PROTECTION OF PERSONNEL. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT). WHERE A FACILITY DOES NOT HAVE LOCKOUT/TAGOUT KITS THE CONTRACTOR SHALL PROVIDE ADEQUATE QUANTITIES OF LOCKOUT/TAGOUT KITS SUITABLE FOR USE WITH THE RESPECTIVE EQUIPMENT. WHERE EXISTING ELECTRICAL EQUIPMENT DOES NOT HAVE FEATURES FOR LOCKOUT/TAGOUT THE CONTRACTOR WILL BE RESPONSIBLE TO PROVIDE THE APPROPRIATE LOCKOUT/TAGOUT EQUIPMENT AND MEASURES TO ENSURE THE SAFETY OF PERSONNEL. ALL PADLOCKS FOR USE WITH LOCKOUT/TAGOUT PROCEDURES SHALL HAVE A DIFFERENT KEY. PROVIDE LOCKOUT HASPS TO ACCOMMODATE MULTIPLE PADLOCKS WHERE MULTIPLE PEOPLE ARE WORKING ON THE SAME SYSTEM. INCLUDE LOCKOUT TAGS FOR EACH PIECE OF EQUIPMENT REQUIRING SERVICING AND SHUTDOWN. COMPLIANCE WITH LOCKOUT/TAGOUT PROCEDURES AND ALL OTHER SAFETY PROCEDURES AND REQUIREMENTS ARE THE RESPONSIBILITY OF THE RESPECTIVE PERSONNEL WORKING AT THE FACILITY.

26. IF LOCAL CODES DICTATE THAT INDIVIDUAL GROUNDING CONDUCTORS MUST BE RUN IN METAL CONDUIT OR RACEWAY, THEN THE CONDUIT OR RACEWAY MUST BE BONDED AT EACH END OF THE RUN WITH A BONDING JUMPER SIZED EQUAL TO THE INDIVIDUAL GROUNDING CONDUCTOR OR AS REQUIRED BY 2020/2023 NEC 250-102. NOTE THIS DOES NOT APPLY TO AC EQUIPMENT GROUNDING CONDUCTORS RUN WITH AC CIRCUITS.

27. NEVER REMOVE, ALTER, OR ATTEMPT TO REPAIR CONDUCTORS OR CONDUIT SYSTEMS PROVIDING GROUNDING OR ELECTRICAL BONDING FOR ANY ELECTRICAL EQUIPMENT UNTIL ALL POWER IS REMOVED FROM EQUIPMENT. WARN ALL PERSONNEL OF THE UNGROUNDED CONDITION OF THE EQUIPMENT. DISPLAY APPROPRIATE WARNING SIGNS, SUCH AS DANGER TAGS, TO WARN PERSONNEL OF THE POSSIBLE HAZARDS.

28. GROUNDING WORK AND MODIFICATIONS SHALL NOT BE PERFORMED DURING A THUNDERSTORM OR WHEN A THUNDERSTORM IS PREDICTED IN THE AREA

29. PER NFPA 70E STANDARD FOR ELECTRICAL SAFETY IN THE WORKPLACE IT DEFINES ELECTRICALLY SAFE WORK CONDITION AS "A STATE IN WHICH AN ELECTRICAL CONDUCTOR OR CIRCUIT PART HAS BEEN DISCONNECTED FROM ENERGIZED PARTS, LOCKED/TAGGED IN ACCORDANCE WITH ESTABLISHED STANDARDS, TESTED TO VERIFY THE ABSENCE OF VOLTAGE, AND, IF NECESSARY, TEMPORARILY GROUNDED FOR PERSONNEL PROTECTION." PRIOR TO CONDUCTING TESTS OR WORKING ON EQUIPMENT, VERIFY EQUIPMENT ENCLOSURES AND FRAMES HAVE A GOOD AND SECURE GROUND CONNECTION FOR THE SAFETY OF PERSONNEL.

30. WHERE A CONFLICT IS DETERMINED WITH RESPECT TO GROUNDING REQUIREMENTS PER MANUFACTURER INSTALLATION INSTRUCTIONS, NEC, AND/OR THE CONTRACT DOCUMENTS, CONTACT THE PROJECT ENGINEER OF RECORD; FOR FURTHER DIRECTIONS.

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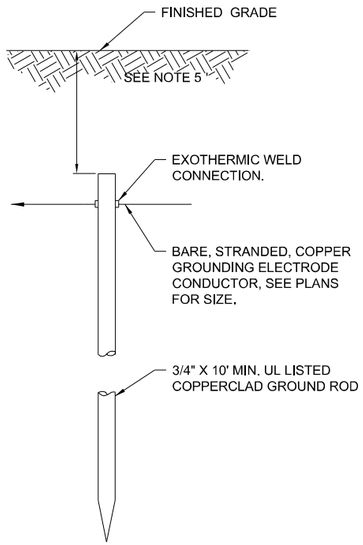
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

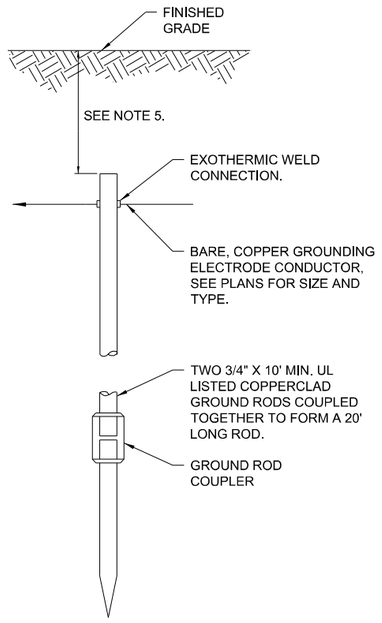
RWIS RELOCATION
RWIS GROUNDING NOTES

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	56
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



10 FT. GROUND ROD



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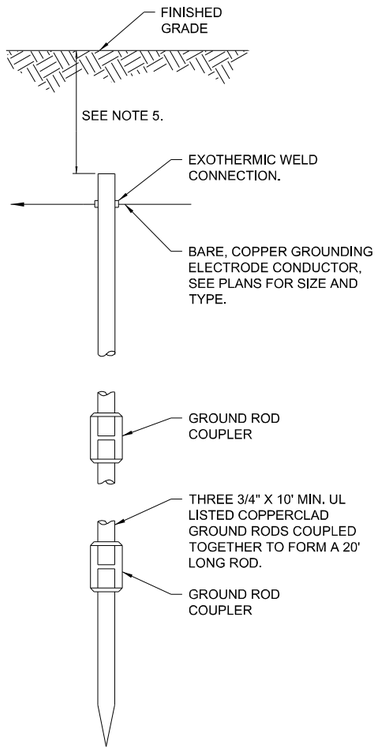
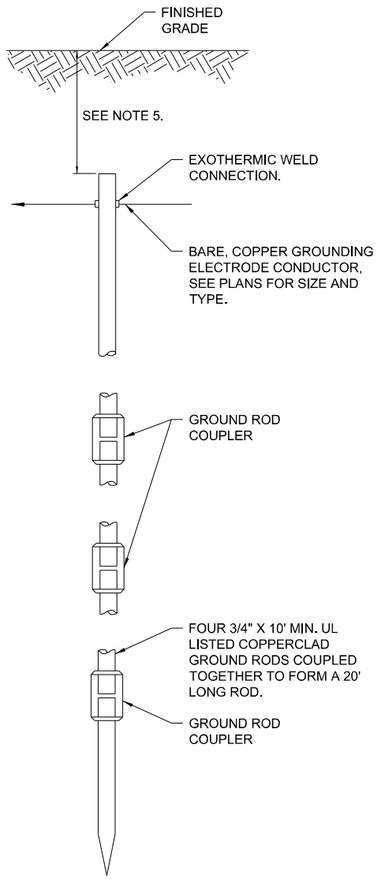
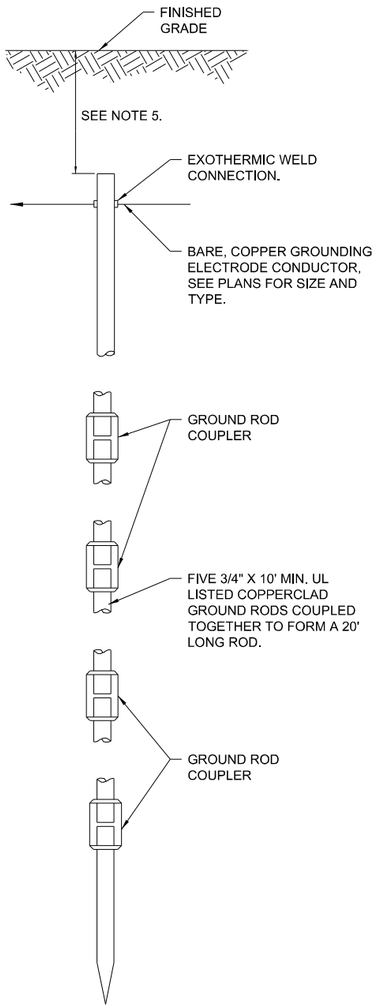


30 FT. GROUND ROD



40 FT. GROUND ROD



50 FT. GROUND ROD

NOTES

1. TYPE AND MINIMUM NUMBER OF GROUND RODS SHALL BE AS SPECIFIED ON THE PLAN.
2. THE RESISTANCE TO GROUND OF THE GROUNDING SYSTEM SHALL NOT EXCEED 25 OHMS FOR NEC APPLICATIONS AND SHALL NOT EXCEED 10 OHMS FOR ROADWAY WEATHER INFORMATION SYSTEM SITES.
3. COST OF GROUND RODS IS INCIDENTAL TO THE ASSOCIATED ITEMS REQUIRING GROUNDING UNLESS OTHERWISE SPECIFIED.
4. GROUND RODS SHALL BE SPACED AS DETAILED ON THE PLANS AND SHALL NOT BE SPACED LESS THAN ONE TOTAL ROD LENGTH APART.
5. TOP OF GROUND RODS SHALL NOT BE LESS THAN 12 INCHES ABOVE THE DESIGN FROST LINE DEPTH FOR THE RESPECTIVE SITE. FOR EXAMPLE IF THE DESIGN FROST LINE DEPTH IS 40" BELOW GRADE THE TOP OF THE GROUND RODS SHALL NOT BE LESS THAN 28" BELOW GRADE. GROUNDING ELECTRODE CONDUCTORS/GROUND RING CONDUCTORS SHALL BE 30" BELOW GRADE OR BELOW FROST LINE FOR RESPECTIVE AREA WHICHEVER IS DEEPER. THE DESIGN FROST LINE DEPTH FOR ILLINOIS WILL VARY FROM 30 INCHES IN SOUTHERN ILLINOIS TO 60 INCHES IN NORTHERN ILLINOIS. REFER TO ANSI/TIA-222-G-2005 TIA STANDARD STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS FOR FROST DESIGN DEPTHS. OTHER REFERENCES ARE ALSO AVAILABLE TO HELP DETERMINE FROST LINE DESIGN DEPTH.
6. ADDITIONAL GROUND RODS AND/OR LONGER GROUND RODS MIGHT BE REQUIRED FOR AREAS THAT HAVE SANDY SOIL, DIRT MIXED WITH ROCK, SANDY SOIL WITH ROCK. ROCKY SOIL, OR OTHER SITES WITH HIGHER SOIL RESISTIVITY.
7. SOIL CONDITIONS NEAR CREEKS AND RIVERS OFTEN ARE SANDY AND WILL AFFECT SOIL RESISTIVITY AND GROUNDING RESISTANCE. ADDITIONAL GROUNDING WILL PROBABLY BE REQUIRED TO ACHIEVE GROUND RESISTANCE OF 10 OHMS OR LESS.

GROUND RODS

NOT TO SCALE

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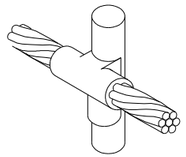
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

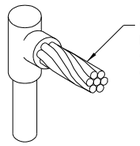
RWIS RELOCATION
RWIS GROUND ROD DETAILS

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	57
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



CABLE TO GROUND ROD



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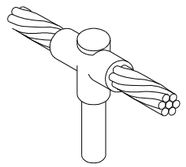

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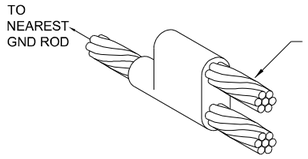
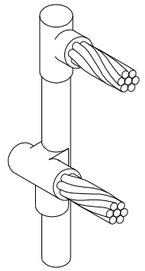
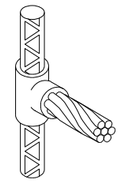


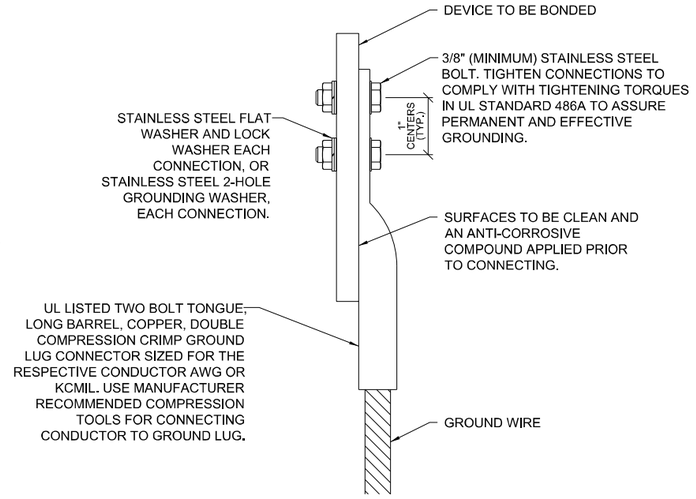
CABLE TO CABLE
HORIZONTAL PARALLEL TAP

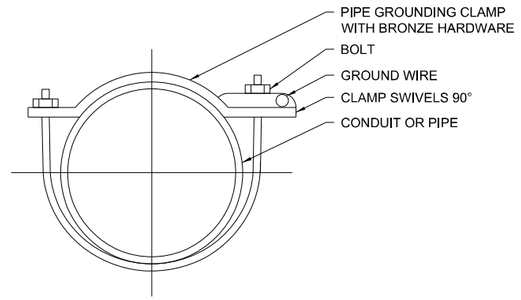


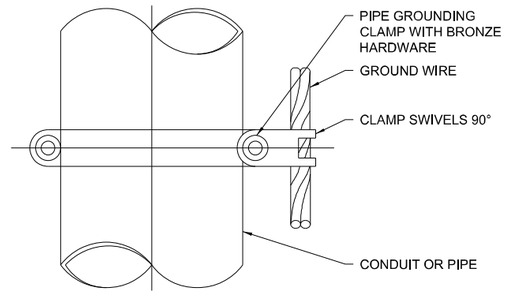
CABLES TO GROUND ROD



CABLE TO REBAR







DETAIL NOTES

1. KNOWLEDGEABLE AND QUALIFIED PERSONNEL SHALL PERFORM EXOTHERMIC WELD CONNECTIONS TO ENSURE GOOD, SAFE, & RELIABLE CONNECTIONS. ALL BELOW GRADE CONNECTIONS TO GROUND RODS & GROUND RING CONDUCTORS SHALL BE EXOTHERMIC WELD TYPE CONNECTIONS. VERIFY PROPER SIZES, MOLDS, TYPES, AND REQUIREMENTS FOR THE RESPECTIVE APPLICATION WITH THE MANUFACTURER, AND INSTALL PER THEIR DIRECTIONS.
2. INDIVIDUAL GROUNDING ELECTRODE CONDUCTORS SHALL NOT BE INSTALLED IN METAL CONDUIT. INSTALL GROUNDING ELECTRODE CONDUCTORS IN SCHED 80 PVC CONDUIT AS REQUIRED IN FOUNDATIONS, FOR PROTECTION, WHERE ENTERING ENCLOSURES, ETC. WHERE PLASTIC CONDUIT IS USED FOR INDIVIDUAL GROUND WIRES, DO NOT COMPLETELY ENCIRCLE THE CONDUIT WITH FERROUS AND/OR MAGNETIC MATERIALS. WHERE METAL CLAMPS ARE INSTALLED USE NYLON BOLTS, NUTS, WASHERS, & SPACERS TO INTERRUPT A COMPLETE METALLIC PATH FROM ENCIRCLING THE CONDUIT.
3. ALL APPLICATIONS TO GALVANIZED STEEL OR PAINTED STEEL, SHALL REMOVE GALVANIZING AND/OR PAINT & CLEAN THE SURFACE TO EXPOSE BARE STEEL BEFORE MAKING EXOTHERMIC WELD CONNECTION.

EXOTHERMIC WELD DETAILS

TABLE BELOW SHOWS THE RECOMMENDED TIGHTENING TORQUES FOR SILICON BRONZE, STAINLESS STEEL AND GALVANIZED STEEL HARDWARE. THIS TABLE REPRESENTS TORQUES PRESENTLY RECOMMENDED BY NEMA-CC1-1984 SPECIFICATION. FOR SPECIFIC EQUIPMENT CONFIRM TIGHTENING TORQUES WITH RESPECTIVE MANUFACTURERS.

TIGHTENING TORQUE TABLE		
BOLT DIAMETER	SILICONE BRONZE GALVANIZED OR STAINLESS STEEL	
	Ft-Lbs.	Inch-Lbs
5/16-18	15	180
3/8-16	20	240
1/2-13	40	480
5/8-11	55	660
3/4-10	80	960

NOTES

1. IT IS IMPORTANT TO HAVE GOOD SECURE GROUND CONNECTIONS THAT WILL WITHSTAND WEATHER CONDITIONS AND MAINTAIN CONTINUITY TO GROUND. OFTEN WEATHER CONDITIONS CAN AFFECT GROUNDING CONNECTIONS THAT RESULT IN LOOSE CONNECTIONS AND UNSAFE CONDITIONS.
2. SAFETY OF PERSONNEL IS THE PRIORITY. PROTECTION OF EQUIPMENT IS SECONDARY.
3. THE GROUND WIRE CONNECTIONS TO EQUIPMENT LOCATED ABOVE GRADE, SHALL BE WITH 2 HOLE TONGUE LONG BARREL COMPRESSION LUGS BOLTED TO THE DEVICE WITH 3/8-INCH STAINLESS STEEL BOLTS, NUTS, AND WASHERS OR WITH THE RESPECTIVE EQUIPT MANUFACTURER'S LUG OR TERMINAL WHERE APPLICABLE.
4. HOLES FOR TWO HOLE LONG BARREL COMPRESSION LUGS MUST ACCOMMODATE MINIMUM SIZE BOLTS OF 3/8" SIZE. BOLTS, NUTS, AND WASHERS SHALL BE STAINLESS STEEL.
5. EACH CONNECTION SHALL BE COATED WITH A CORROSION PREVENTATIVE COMPOUND BEFORE JOINING. ALL COPPER BUS BARS SHALL BE CLEANED PRIOR TO MAKING CONNECTIONS TO REMOVE SURFACE OXIDATION. CLEAN SURFACES, OF RESPECTIVE DEVICES TO BE BONDED, TO BARE METAL, PER NEC 250-12.

GROUNDING LUG CONNECTION DETAIL

NOTES

1. EACH PIPE GROUNDING CLAMP SHALL HAVE BRONZE HARDWARE, BE CORROSION RESISTANT, SUITABLE FOR DIRECT BURIAL IN EARTH OR CONCRETE, & UL 467 LISTED.
2. FOR APPLICATIONS SUBJECT TO ADDITIONAL CORROSION, PROVIDE PIPE GROUNDING CLAMPS WITH TINNED COATED BRONZE HARDWARE
3. HARDWARE FOR PIPE GROUNDING CLAMPS NEEDS TO BE CORROSION RESISTANT TO HAVE GOOD SECURE GROUND CONNECTIONS THAT WILL WITHSTAND WEATHER CONDITIONS AND MAINTAIN CONTINUITY TO GROUND. OFTEN WEATHER CONDITIONS CAN AFFECT GROUNDING CONNECTIONS THAT RESULT IN LOOSE CONNECTIONS AND UNSAFE CONDITIONS.

PIPE/CONDUIT GROUNDING CLAMP DETAIL

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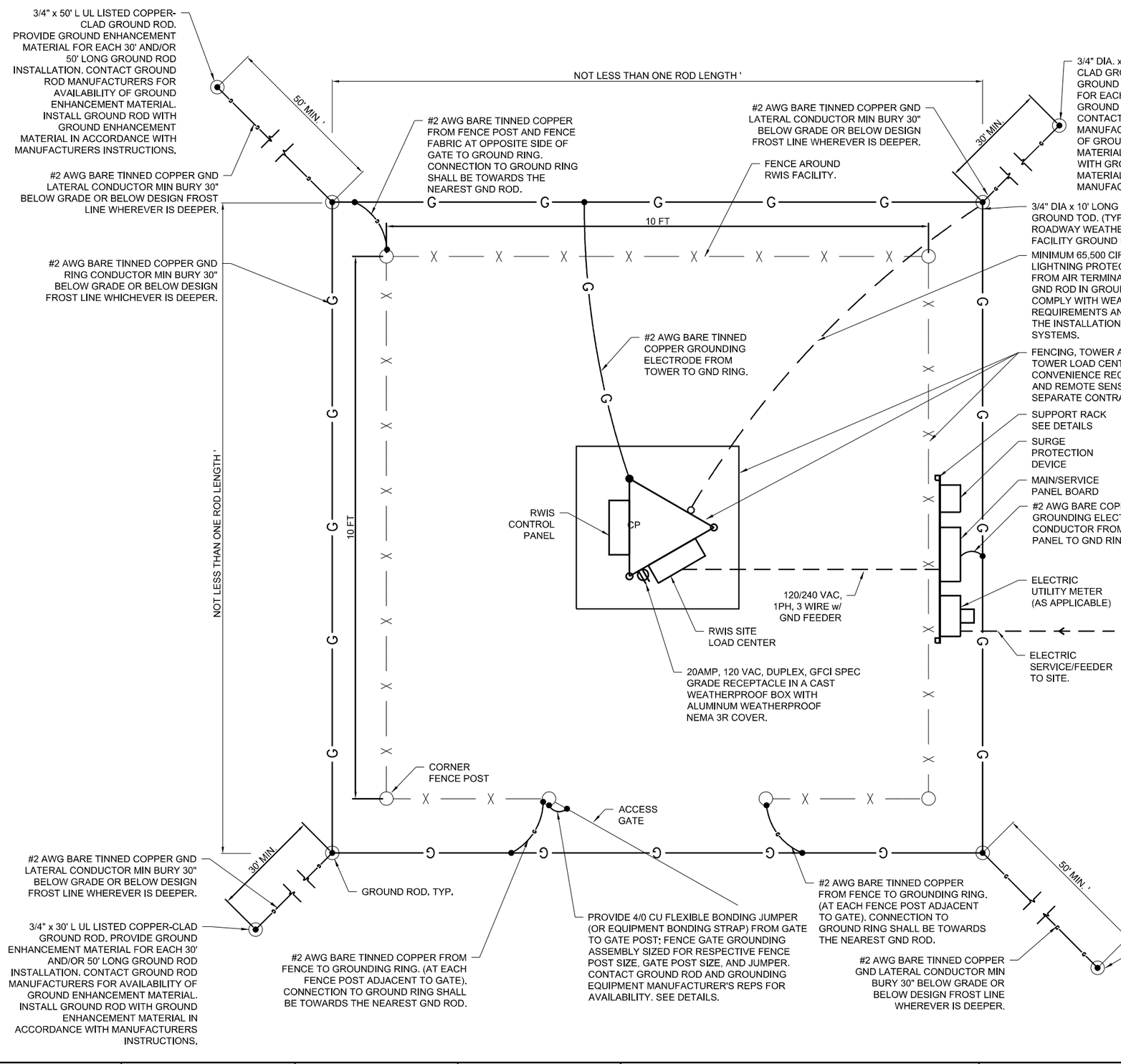
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
RWIS GROUNDING DETAILS

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	58
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



NOTES

1. SOIL CONDITIONS MUST PERMIT INSTALLATION OF GROUND RODS THAT ARE UP TO 50 FEET IN LENGTH. THE EXISTING GROUND RING FOR THE FACILITY SHALL BE EXCAVATED AT TWO OF THE RESPECTIVE OPPOSITE CORNERS TO LOCATE THE EXISTING CORNER GROUND RODS. A 3/4" DIAMETER BY 30-FOOT GROUND ROD SHALL BE INSTALLED 30 FEET OUTWARD DIAGONALLY FROM THE RESPECTIVE EXISTING CORNER GROUND ROD IN THE GROUND RING. A #2 AWG BARE TINNED COPPER LATERAL CONDUCTOR WILL BE CONNECTED TO THE EXISTING GROUND ROD IN THE GROUND RING AND EXTENDED 30 FEET DIAGONALLY OUTWARD FROM THE GROUND RING IN A 30-INCH MINIMUM DEPTH (OR BELOW FROST LINE WHICHEVER IS DEEPER) TRENCH AND CONNECTED TO THE 30 FOOT GROUND ROD. AT THE OPPOSITE CORNER OF THE EXISTING GROUND RING FOR THE FACILITY A SECOND 3/4" DIAMETER BY 30-FOOT GROUND ROD SHALL BE INSTALLED 30 FEET OUTWARD DIAGONALLY FROM THE RESPECTIVE EXISTING CORNER GROUND ROD IN THE GROUND RING. A #2 AWG BARE COPPER LATERAL CONDUCTOR WILL BE CONNECTED TO THE EXISTING GROUND ROD AND EXTENDED 30 FEET DIAGONALLY OUTWARD FROM THE GROUND RING IN A 30-INCH MINIMUM DEPTH (OR BELOW FROST LINE WHICHEVER IS DEEPER) TRENCH AND CONNECTED TO THE 30 FOOT GROUND ROD. AFTER THE TWO LATERALS AND GROUND RODS ARE INSTALLED THE CONTRACTOR SHALL TEST THE FACILITY GROUND RING WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND SYSTEMS. GROUND RESISTANCE TEST SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNER'S REPRESENTATIVE. TEST RESULTS SHALL BE RECORDED AND PROVIDED TO THE OWNER'S REPRESENTATIVE.
2. IF GROUND RESISTANCE STILL EXCEEDS 10 OHMS, TWO ADDITIONAL GROUND RODS AND LATERAL GROUNDING ELECTRODE CONDUCTORS WILL BE CONNECTED TO THE FACILITY GROUND RING AS FOLLOWS:
3. THE EXISTING GROUND RING FOR THE FACILITY SHALL BE EXCAVATED AT THE TWO REMAINING RESPECTIVE CORNERS TO LOCATE THE EXISTING CORNER GROUND RODS. A 3/4" DIAMETER BY 50-FOOT GROUND ROD SHALL BE INSTALLED 50 FEET. OUTWARD DIAGONALLY FROM THE RESPECTIVE EXISTING CORNER GROUND ROD IN THE GROUND RING. A #2 AWG BARE TINNED COPPER LATERAL CONDUCTOR WILL BE CONNECTED TO THE EXISTING GROUND ROD IN THE GROUND RING AND EXTENDED 50 FEET DIAGONALLY OUTWARD FROM THE GROUND RING IN A 30-INCH MINIMUM DEPTH (OR BELOW FROST LINE WHICHEVER IS DEEPER) TRENCH AND CONNECTED TO THE 50 FOOT GROUND ROD, AT THE OPPOSITE CORNER OF THE EXISTING GROUND RING, FOR THE FACILITY, A SECOND 3/4" DIAMETER BY 50-FOOT GROUND ROD SHALL BE INSTALLED 50 FEET OUTWARD DIAGONALLY FROM THE RESPECTIVE EXISTING CORNER GROUND ROD IN THE GROUND RING. A #2 AWG BARE TINNED COPPER LATERAL CONDUCTOR WILL BE CONNECTED TO THE EXISTING GROUND ROD AND EXTENDED 50 FEET DIAGONALLY OUTWARD FROM THE GROUND RING IN A 30-INCH MINIMUM DEPTH (OR BELOW FROST LINE WHICHEVER IS DEEPER) TRENCH AND CONNECTED TO THE 50 FOOT GROUND ROD. AFTER THE TWO ADDITIONAL LATERALS AND GROUND RODS ARE INSTALLED THE CONTRACTOR SHALL TEST THE FACILITY GROUND RING WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND SYSTEMS. GROUND RESISTANCE TEST SHALL BE CONDUCTED IN THE PRESENCE OF THE OWNERS'S REPRESENTATIVE. TEST RESULTS SHALL BE RECORDED AND PROVIDED TO THE OWNERS'S REPRESENTATIVE.
4. IF GROUND RESISTANCE STILL EXCEEDS 10 OHMS CONTACT THE OWNERS'S REPRESENTATIVE AND OR PROJECT ENGINEER OF RECORD FOR FURTHER DIRECTIONS.

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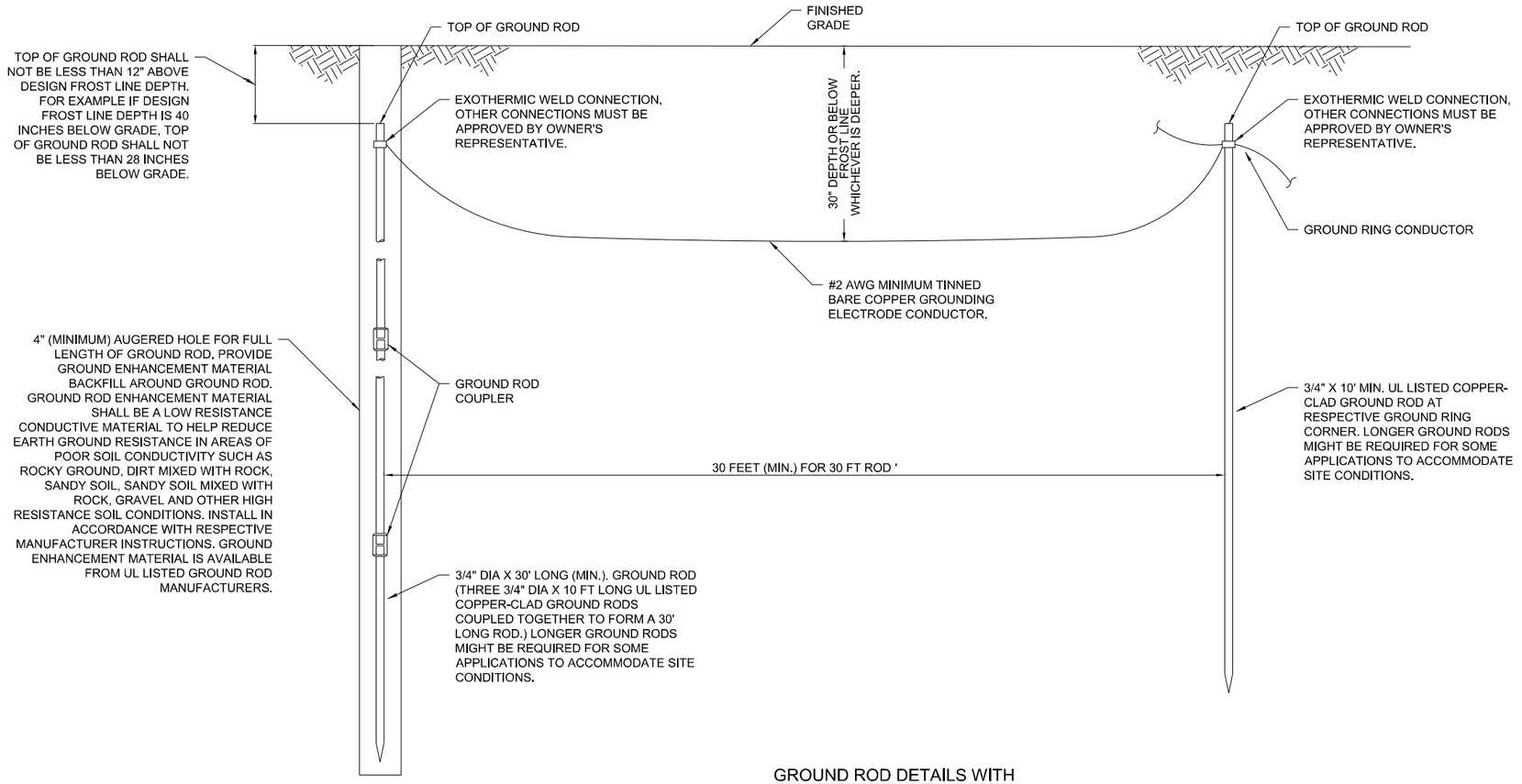
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
FACILITY SITE PLAN WITH GROUNDING

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	59
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



GROUND ROD DETAILS WITH ENHANCED MATERIAL BACKFILL

NOT TO SCALE

NOTES

1. GROUND ENHANCEMENT MATERIAL IS A LOW RESISTANCE CONDUCTIVE MATERIAL TO HELP LOWER GROUND SYSTEM RESISTANCE IN POOR RESISTANCE TYPE SOILS SUCH AS ROCKY SOIL, SAND, GRAVEL, MOUNTAIN TOPS AND OTHER HIGH RESISTANCE SOIL CONDITIONS. INSTALL IN ACCORDANCE WITH RESPECTIVE MANUFACTURER INSTRUCTIONS. GROUND ENHANCEMENT MATERIAL IS AVAILABLE FROM UL LISTED GROUND ROD MANUFACTURERS.
2. ALL CONNECTIONS TO GROUND RODS SHALL BE EXOTHERMIC WELD UNLESS APPROVED OTHERWISE BY OWNER REPRESENTATIVE..
3. ALL GROUNDING ELECTRODE CONDUCTORS IN DIRECT CONTACT WITH EARTH SHALL BE TINNED COPPER.
4. AUGER HOLE FOR EACH GROUND ROD AND PROVIDE GROUND ENHANCEMENT MATERIAL FOR BACKFILL AROUND GROUND ROD.
5. CONTRACTOR SHALL TEST AND RECORD THE EARTH RESISTANCE FOR EACH MADE ELECTRODE GROUNDING ROD WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND ELECTRODE SYSTEMS. COPIES OF GROUND RESISTANCE TEST RESULTS SHALL BE PROVIDED TO THE OWNER'S REPRESENTATIVE.
6. WHERE ADJACENT GROUND RODS ARE INSTALLED THEY SHALL BE LOCATED NOT LESS THAN ONE ROD LENGTH APART (EXAMPLE: 30 FT FOR A 30 FT LONG GROUND ROD).
7. GROUNDING ELECTRODE CONDUCTORS/GROUND RING CONDUCTORS SHALL BE 30" BELOW GRADE TO COMPLY WITH 2020/2023 NEC 250.53(F), OR BELOW FROST LINE FOR RESPECTIVE AREA WHICHEVER IS DEEPER. THE DESIGN FROST LINE DEPTH FOR ILLINOIS WILL VARY FROM 30 INCHES IN SOUTHERN ILLINOIS TO 60 INCHES IN NORTHERN ILLINOIS. REFER TO ANSI/TIA-222-G-2005 TIA STANDARD STRUCTURAL STANDARD FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS FOR FROST LINE DESIGN DEPTHS. OTHER REFERENCES ARE ALSO AVAILABLE TO HELP DETERMINE FROST LINE DESIGN DEPTH.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
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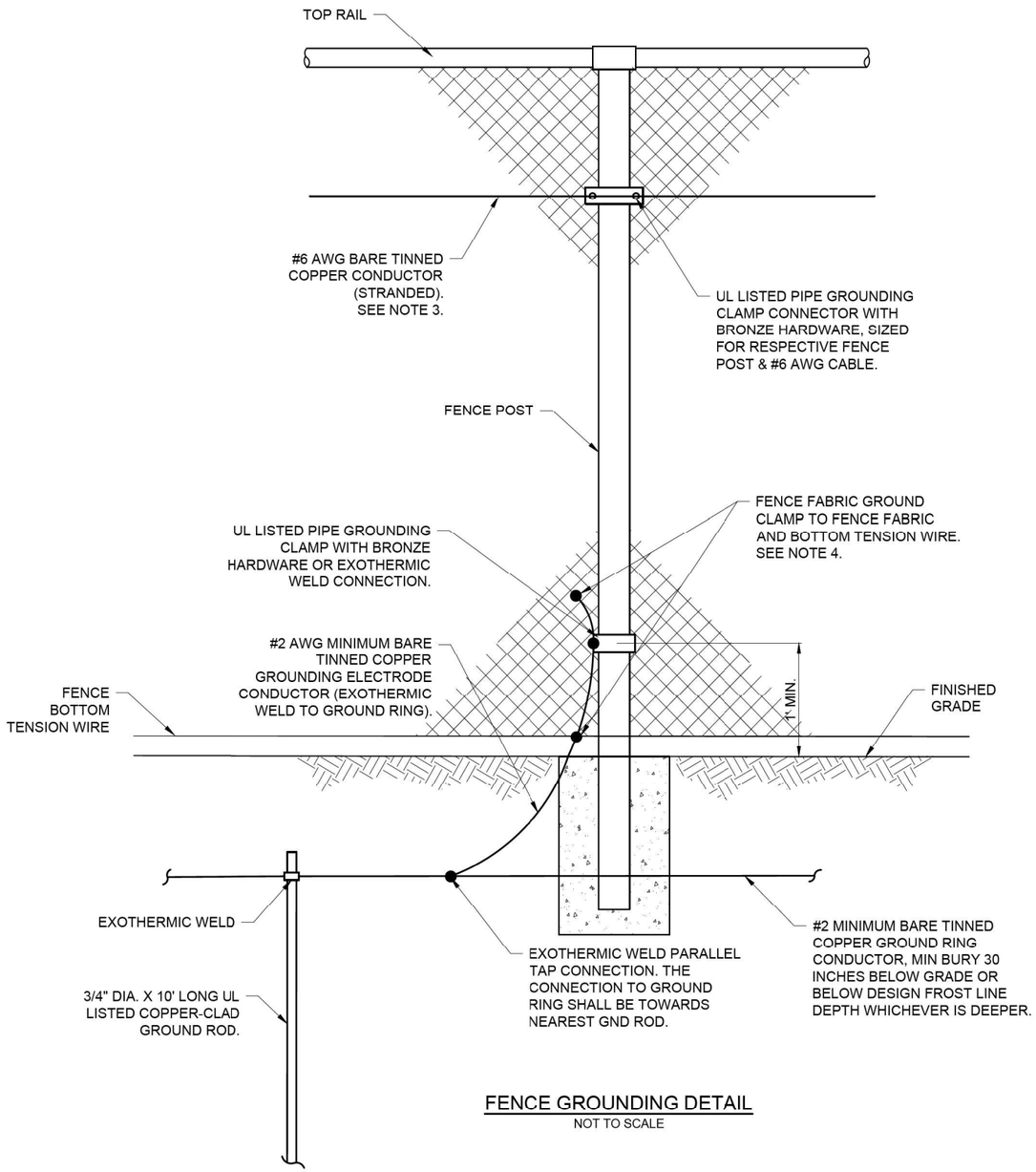
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
GROUNDING ROD DETAILS WITH ENHANCED MATERIAL BACKFILL

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
ILL.	[72-3HVB]BR	PEORIA	158	60
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



FENCE GROUNDING DETAIL

NOT TO SCALE

NOTES

1. REMOVE NON-CONDUCTIVE MATERIAL TO EXPOSED CLEAN METAL SURFACE. NON-CONDUCTIVE COATINGS (SUCH AS PAINT, LACQUER, AND ENAMEL) ON EQUIPMENT TO BE GROUNDED SHALL BE REMOVED FROM THREADS AND OTHER CONTACT SURFACES TO ENSURE GOOD ELECTRICAL CONTINUITY OR BE CONNECTED BE MEANS OF FITTINGS DESIGNED SO AS TO MAKE SUCH REMOVAL UNNECESSARY IN ACCORDANCE WITH NEC 250.12.

2. GATES SHALL HAVE A 1 IN. BY 1/8 IN. FLEXIBLE TINNED COPPER BOND STRIP OR AN INSULATED #4/0 AWG FLEXIBLE (WELDING) COPPER CABLE THAT IS BONDED TO THE ADJACENT POST (EXOTHERMIC WELDING IS RECOMMENDED). THE POSTS AT EACH SIDE OF THE GATE SHALL ALSO BE BONDED, AT A HEIGHT NO GREATER THAN 1 FOOT ABOVE GRADE, TO THE RESPECTIVE GROUND RING WITH A #2 AWG (MINIMUM) BARE TINNED COPPER CABLE. THE BONDING STRIP TO THE POST SHALL BE INSTALLED SO AS NOT TO LIMIT FULL MOTION OF THE GATE (WHETHER SWING OR SLIDE TYPE). ADDITIONALLY, A HORIZONTAL BARE TINNED #6 AWG STRANDED COPPER CONDUCTOR SHALL BE WOVEN CONTINUOUSLY THROUGH THE GATE FABRIC AND MECHANICALLY BONDED TO THE GATE RAILS, WITH UL LISTED GROUNDING CONNECTORS SIZED FOR THE RESPECTIVE RAILS & #6 AWG CONDUCTORS.

3. A HORIZONTAL BARE TINNED #6 AWG STRANDED COPPER CONDUCTOR, SHALL BE WOVEN THROUGH THE FENCING FABRIC AND SHALL BE MECHANICALLY BONDED TO THE FENCE POSTS AT INTERVALS NOT GREATER THAN 40 FEET. THE FENCE POSTS WITH THESE BONDS AND FENCE POSTS ADJACENT TO GATES SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG (MINIMUM) BARE TINNED COPPER CABLE. CONNECTION TO FENCE POSTS SHALL BE WITH UL LISTED PIPE GROUNDING CLAMPS WITH BRONZE HARDWARE OR EXOTHERMIC WELD CONNECTION.

4. PROVIDE UL LISTED, CORROSION RESISTANT FENCE FABRIC GROUND CLAMPS AS APPLICABLE TO GROUND FENCE FABRIC, BOTTOM TENSION WIRE, AND TO EACH BARBED WIRE AND SIZED FOR RESPECTIVE GROUNDING ELECTRODE CONDUCTOR. FENCE FABRIC GROUND CLAMPS SHALL BE SIZED FOR THE RESPECTIVE FENCE FABRIC AND GROUND WIRE. THEY SHALL BE COMPATIBLE WITH GALVANIZED STEEL FENCE FABRIC AND COPPER GROUND WIRES. FENCE FABRIC GROUND CLAMPS ARE AVAILABLE FROM MULTIPLE GROUNDING EQUIPMENT AND CONNECTOR MANUFACTURERS.

5. GROUNDING ASSOCIATED WITH THE FENCE SHALL BE INCIDENTAL TO THE INSTALLATION OF THE FENCE.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
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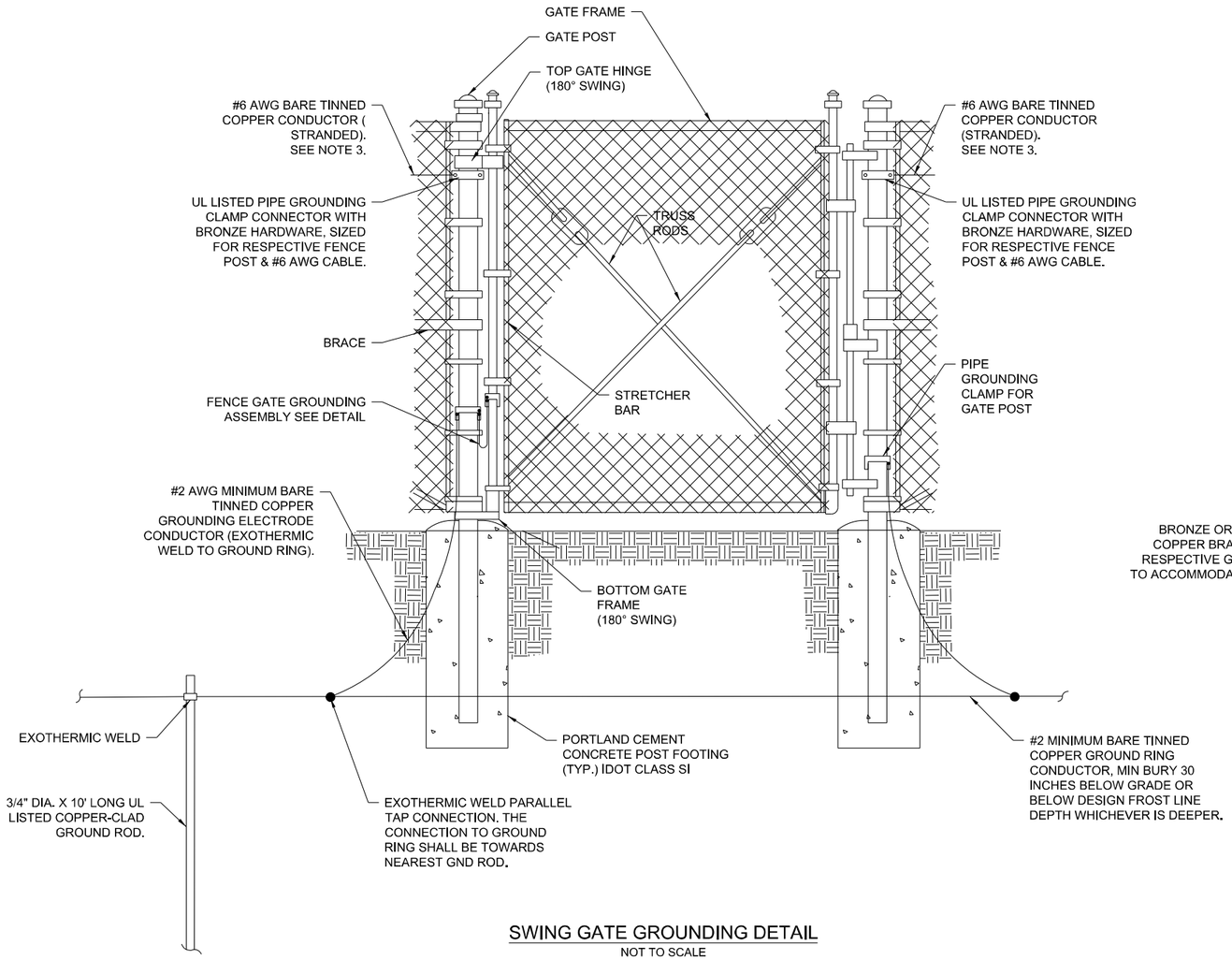
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
FENCE GROUNDING DETAIL 1

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	61
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



SWING GATE GROUNDING DETAIL

NOT TO SCALE

NOTES

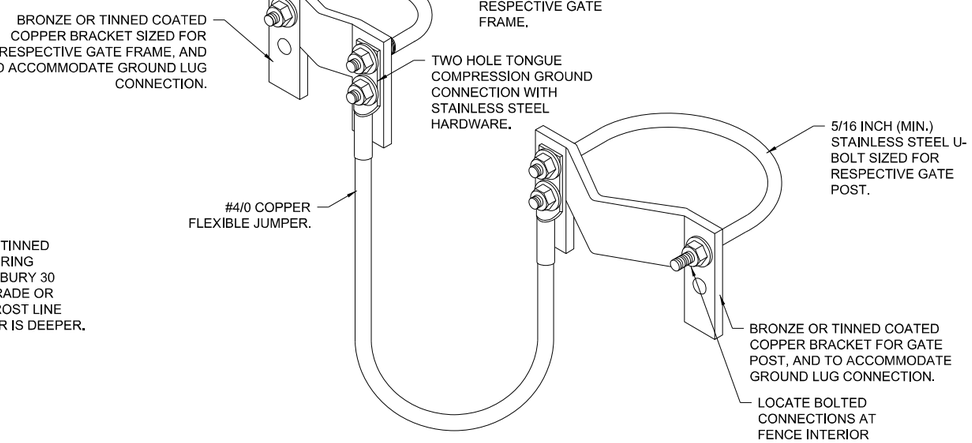
1. REMOVE NON-CONDUCTIVE MATERIAL TO EXPOSED CLEAN METAL SURFACE. NON-CONDUCTIVE COATINGS (SUCH AS PAINT, LACQUER, AND ENAMEL) ON EQUIPMENT TO BE GROUNDED SHALL BE REMOVED FROM THREADS AND OTHER CONTACT SURFACES TO ENSURE GOOD ELECTRICAL CONTINUITY OR BE CONNECTED BE MEANS OF FITTINGS DESIGNED SO AS TO MAKE SUCH REMOVAL UNNECESSARY IN ACCORDANCE WITH NEC 250.12.

2. GATES SHALL HAVE A 1 IN. BY 1/8 IN. FLEXIBLE TINNED COPPER BOND STRIP OR AN INSULATED #4/0 AWG FLEXIBLE (WELDING) COPPER CABLE THAT IS BONDED TO THE ADJACENT POST (EXOTHERMIC WELDING IS RECOMMENDED). THE POSTS AT EACH SIDE OF THE GATE SHALL ALSO BE BONDED, AT A HEIGHT NO GREATER THAN 1 FOOT ABOVE GRADE, TO THE RESPECTIVE GROUND RING WITH A #2 AWG (MINIMUM) BARE TINNED COPPER CABLE. THE BONDING STRIP TO THE POST SHALL BE INSTALLED SO AS NOT TO LIMIT FULL MOTION OF THE GATE (WHETHER SWING OR SLIDE TYPE). ADDITIONALLY, A HORIZONTAL BARE TINNED #6 AWG STRANDED COPPER CONDUCTOR SHALL BE WOVEN CONTINUOUSLY THROUGH THE GATE FABRIC AND MECHANICALLY BONDED TO THE GATE RAILS, WITH UL LISTED GROUNDING CONNECTORS SIZED FOR THE RESPECTIVE RAILS & #6 AWG CONDUCTORS.

3. A HORIZONTAL BARE TINNED #6 AWG STRANDED COPPER CONDUCTOR, SHALL BE WOVEN THROUGH THE FENCING FABRIC AND SHALL BE MECHANICALLY BONDED TO THE FENCE POSTS AT INTERVALS NOT GREATER THAN 40 FEET. THE FENCE POSTS WITH THESE BONDS AND FENCE POSTS ADJACENT TO GATES SHALL BE BONDED TO THE GROUND RING WITH A #2 AWG (MINIMUM) BARE TINNED COPPER CABLE. CONNECTION TO FENCE POSTS SHALL BE WITH UL LISTED PIPE GROUNDING CLAMPS WITH BRONZE HARDWARE OR EXOTHERMIC WELD CONNECTION.

4. PROVIDE UL LISTED, CORROSION RESISTANT FENCE FABRIC GROUND CLAMPS AS APPLICABLE TO GROUND FENCE FABRIC, BOTTOM TENSION WIRE, AND TO EACH BARBED WIRE AND SIZED FOR RESPECTIVE GROUNDING ELECTRODE CONDUCTOR. FENCE FABRIC GROUND CLAMPS SHALL BE SIZED FOR THE RESPECTIVE FENCE FABRIC AND GROUND WIRE. THEY SHALL BE COMPATIBLE WITH GALVANIZED STEEL FENCE FABRIC AND COPPER GROUND WIRES. FENCE FABRIC GROUND CLAMPS ARE AVAILABLE FROM MULTIPLE GROUNDING EQUIPMENT AND CONNECTOR MANUFACTURERS.

5. GROUNDING ASSOCIATED WITH THE FENCE SHALL BE INCIDENTAL TO THE INSTALLATION OF THE FENCE.



FENCE GATE GROUNDING ASSEMBLY

NOT TO SCALE

FENCE GROUNDING ASSEMBLIES ARE AVAILABLE FROM MULTIPLE GROUND ROD AND GROUNDING EQUIPMENT MANUFACTURERS.

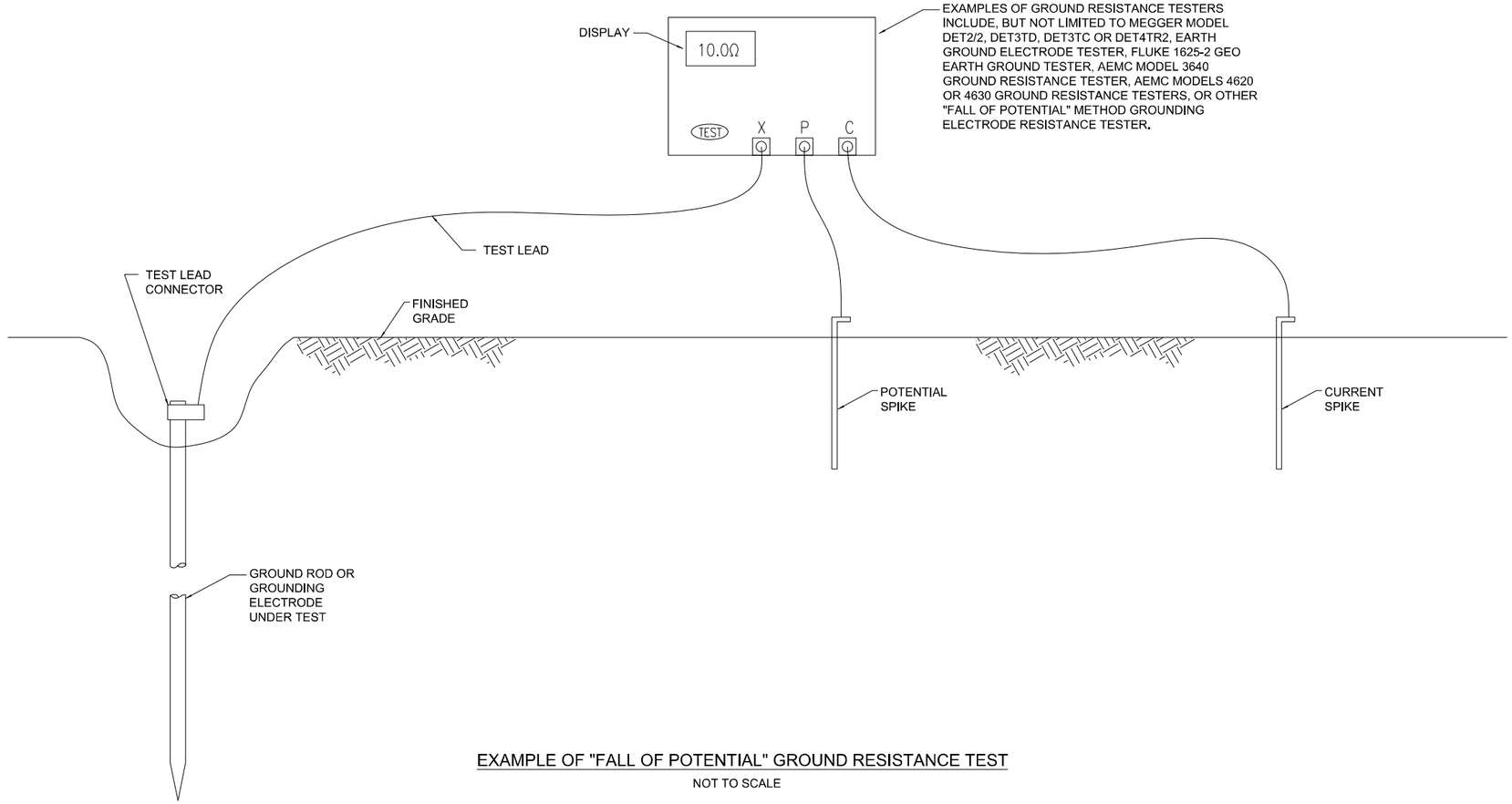
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
RWIS GROUNDING DETAIL 2

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	62
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



EXAMPLE OF "FALL OF POTENTIAL" GROUND RESISTANCE TEST

NOT TO SCALE

NOTES

1. CONTRACTOR SHALL TEST AND RECORD THE RESISTANCE FOR EACH MADE ELECTRODE GROUND ROD/GROUND FIELD/GROUND RING WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUNDING ELECTRODE SYSTEMS. IF GROUND RESISTANCE EXCEEDS 10 OHMS, CONTACT THE PROJECT ENGINEER FOR FURTHER DIRECTIONS. COPIES OF GROUND ROD TEST RESULTS SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE.

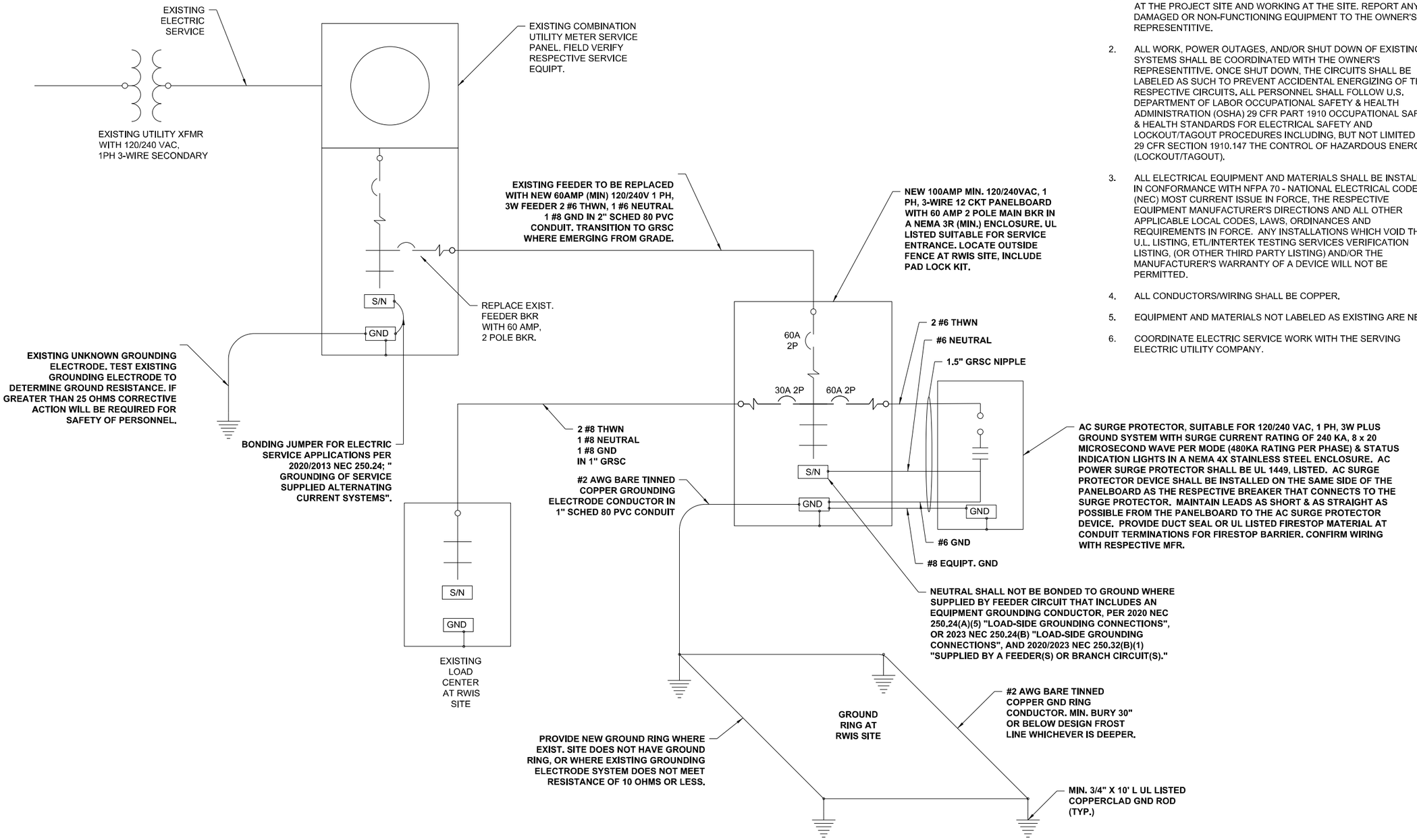
2. FOR EACH ROADWAY WEATHER INFORMATION SYSTEM FACILITY THE CONTRACTOR SHALL TEST THE MADE ELECTRODE GROUND SYSTEM WITH AN INSTRUMENT SPECIFICALLY DESIGNED FOR TESTING GROUND SYSTEMS AND RECORD THE TEST RESULTS. IF GROUND RESISTANCE EXCEEDS 10 OHMS, CONTACT THE PROJECT OWNER'S REPRESENTATIVE AND OR PROJECT ENGINEER OF RECORD FOR FURTHER DIRECTION. ALSO REFER TO EOR-47643 FOR ADDITIONAL INFORMATION ON GROUNDING REQUIREMENTS WHERE APPLICABLE. COPIES OF THE GROUND SYSTEM TEST RESULTS SHALL BE FURNISHED TO THE OWNER'S REPRESENTATIVE.

3. GROUND RESISTANCE TEST SHALL BE CONDUCTED IN ACCORDANCE WITH THE RESPECTIVE GROUND ELECTRODE RESISTANCE TESTING EQUIPMENT MANUFACTURER'S INSTRUCTIONS.

4. RECORD SITE CONDITIONS DURING TESTS.

5. "FALL OF POTENTIAL" TYPE GROUND ELECTRODE RESISTANCE TESTER IS RECOMMENDED FOR TESTING INDIVIDUAL STAND ALONE GROUND RODS, AND FOR TESTING THE GROUND RING.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RWIS RELOCATION GROUND RESISTANCE TESTING DETAILS	F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		DRAWN -	REVISED -			74	[72-3HVB]BR	PEORIA	158	63
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -					CONTRACT NO. 68D84		
	PLOT DATE = $DATE$	DATE -	REVISED -		SCALE: STA. TO STA.		ILLINOIS	FED. AID PROJECT		



NOTES

1. VERIFY EXISTING CONDITIONS. MAINTAIN SAFETY OF PERSONNEL AT THE PROJECT SITE AND WORKING AT THE SITE. REPORT ANY DAMAGED OR NON-FUNCTIONING EQUIPMENT TO THE OWNER'S REPRESENTITIVE.
2. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTITIVE. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
3. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL/INTERTEK TESTING SERVICES VERIFICATION LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
4. ALL CONDUCTORS/WIRING SHALL BE COPPER,
5. EQUIPMENT AND MATERIALS NOT LABELED AS EXISTING ARE NEW.
6. COORDINATE ELECTRIC SERVICE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY.

ELECTRICAL ONE-LINE, EXISTING
RWIS SITE WITH UPGRADES

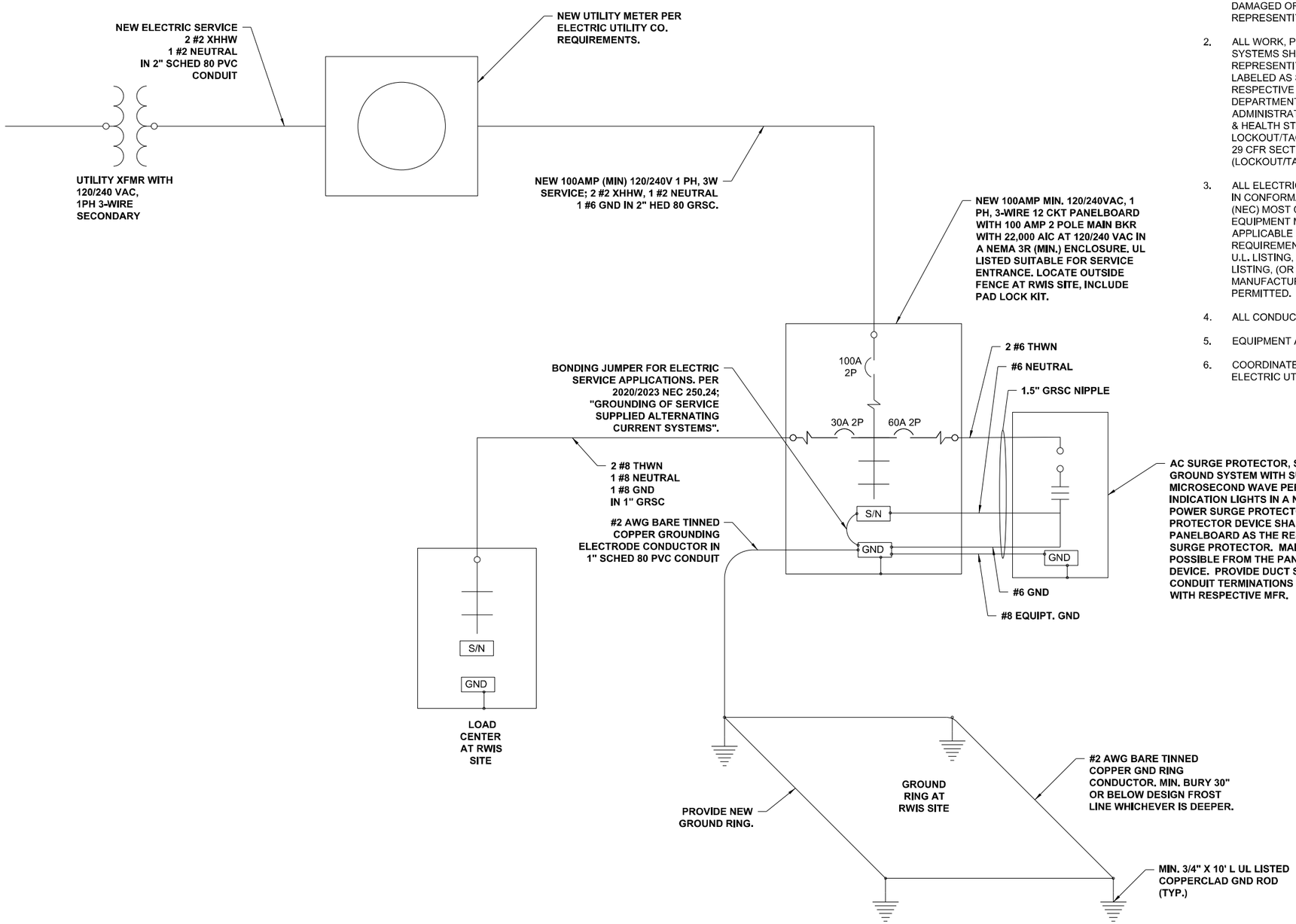
FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
ELECTRICAL ONE-LINE EXISTING SITE WITH UPGRADES

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	64
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



NOTES

1. VERIFY EXISTING CONDITIONS. MAINTAIN SAFETY OF PERSONNEL AT THE PROJECT SITE AND WORKING AT THE SITE. REPORT ANY DAMAGED OR NON-FUNCTIONING EQUIPMENT TO THE OWNER'S REPRESENTITIVE.
2. ALL WORK, POWER OUTAGES, AND/OR SHUT DOWN OF EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER'S REPRESENTITIVE. ONCE SHUT DOWN, THE CIRCUITS SHALL BE LABELED AS SUCH TO PREVENT ACCIDENTAL ENERGIZING OF THE RESPECTIVE CIRCUITS. ALL PERSONNEL SHALL FOLLOW U.S. DEPARTMENT OF LABOR OCCUPATIONAL SAFETY & HEALTH ADMINISTRATION (OSHA) 29 CFR PART 1910 OCCUPATIONAL SAFETY & HEALTH STANDARDS FOR ELECTRICAL SAFETY AND LOCKOUT/TAGOUT PROCEDURES INCLUDING, BUT NOT LIMITED TO, 29 CFR SECTION 1910.147 THE CONTROL OF HAZARDOUS ENERGY (LOCKOUT/TAGOUT).
3. ALL ELECTRICAL EQUIPMENT AND MATERIALS SHALL BE INSTALLED IN CONFORMANCE WITH NFPA 70 - NATIONAL ELECTRICAL CODE (NEC) MOST CURRENT ISSUE IN FORCE, THE RESPECTIVE EQUIPMENT MANUFACTURER'S DIRECTIONS AND ALL OTHER APPLICABLE LOCAL CODES, LAWS, ORDINANCES AND REQUIREMENTS IN FORCE. ANY INSTALLATIONS WHICH VOID THE U.L. LISTING, ETL/INTERTEK TESTING SERVICES VERIFICATION LISTING, (OR OTHER THIRD PARTY LISTING) AND/OR THE MANUFACTURER'S WARRANTY OF A DEVICE WILL NOT BE PERMITTED.
4. ALL CONDUCTORS/WIRING SHALL BE COPPER.
5. EQUIPMENT AND MATERIALS NOT LABELED AS EXISTING ARE NEW.
6. COORDINATE ELECTRIC SERVICE WORK WITH THE SERVING ELECTRIC UTILITY COMPANY.

ELECTRICAL ONE-LINE, NEW RWIS SITE

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
ELECTRICAL ONE-LINE DIAGRAM NEW RWIS SITE

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	65
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

RWIS MAIN PANEL (SEE NOTE 1)

CKT #	DUTY	SIZE	SIZE	DUTY	CKT #
1	MAIN CIRCUIT BREAKER	60A, 2P	60A, 2P	AC SURGE PROTECTOR DEVICE	2
3					4
5	FEEDER TO RWIS LOAD CENTER/PANEL	30A, 2P	20A, 1P	SPARE	6
7	(SEE NOTE 8)			BLANK	8
9	SPARE	20A, 2P		BLANK	10
11				BLANK	12

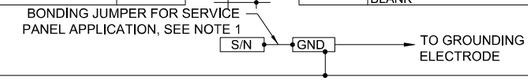
100AMP (MIN), 120/240VAC, 1 PHASE, 3 WIRE 12 CIRCUIT (MIN.) PANELBOARD WITH 60AMP, 2 POLE MAIN BREAKER RATED 22,000 AIC MINIMUM, OR GREATER THAN THE MAXIMUM AVAILABLE FAULT CURRENT, WHICHEVER IS HIGHER AT 120/240VAC IN A NEMA 3R AND 12 (MINIMUM) ENCLOSURE, OR NEMA 4X STAINLESS STEEL ENCLOSURE WHERE SUBJECT TO CORROSION WITH HINGED COVER, UL-LISTED SUITABLE FOR SERVICE ENTRANCE. PANEL SHALL ACCOMMODATE FEEDER AND BRANCH BREAKERS UP TO 100AMP, 2 POLE FRAME & TRIP RATING.

NOTES

1. THIS PANELBOARD IS INTENDED FOR USE WHERE SUPPLIED BY A FEEDER CIRCUIT THAT INCLUDES AN EQUIPMENT GROUNDING CONDUCTOR. NEUTRAL SHALL NOT BE BONDED TO GROUND WHERE SUPPLIED BY FEEDER CIRCUIT THAT INCLUDES AN EQUIPMENT GROUNDING CONDUCTOR, PER 2020 NEC 250.24(A)(5) "LOAD-SIDE GROUNDING CONNECTIONS" OR 2023 NEC 250.24(B) "LOAD-SIDE GROUNDING CONNECTIONS", AND 2020/2023 NEC 250.32(B)(1) "SUPPLIED BY A FEEDER(S) OR BRANCH CIRCUIT(S)".
2. ALL MAIN, FEEDER AND BRANCH CIRCUIT BREAKERS SHALL BE BOLT-ON WITH AMP INTERRUPTING CAPACITY THAT IS GREATER THAN THE MAXIMUM AVAILABLE FAULT CURRENT. FEEDER AND BRANCH BREAKERS THAT HAVE A 2-TIER SERIES RATING GREATER THAN THE MAXIMUM AVAILABLE FAULT CURRENT WILL BE ACCEPTABLE.
3. CIRCUIT BREAKERS AND WIRING SHALL BE SIZED FOR THE ACTUAL EQUIPMENT FURNISHED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S RECOMMENDATION AND N,E,C, CONTRACTOR SHALL ADJUST CIRCUIT BREAKER SIZES & WIRING WHERE APPLICABLE TO CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS AND N.E.C.
4. FOR A BOTTOM FEED PANEL, MOVE AC SURGE PROTECTOR BREAKER DOWN TO POSITIONS 10 AND 12.
5. PANELBOARDS LOCATED OUTDOORS IN A NON-CORROSIVE, NON-HAZARDOUS LOCATION SHALL BE INSTALLED IN A NEMA 3R AND 12 ENCLOSURE RATED SUITABLE FOR THE RESPECTIVE APPLICATION. PANELBOARDS LOCATED ADJACENT TO A CREEK, RIVER, OR BRIDGE OVER A WATERWAY OR AREA SUBJECT TO CORROSION DUE TO SALT OR OTHER CORROSIVE MATERIAL SHALL BE INSTALLED IN A NEMA 4X STAINLESS STEEL ENCLOSURE SUITABLE FOR THE RESPECTIVE APPLICATION. NATIONAL ELECTRICAL CODE ARTICLE 300.6 PROTECTION AGAINST CORROSION AND DETERIORATION NOTES "RACEWAYS, CABLE TRAYS, CABLE BUS, AUXILIARY GUTTERS, CABLE ARMOR, BOXES, CABLE SHEATHING, CABINETS, ELBOWS, COUPLINGS, FITTINGS, SUPPORTS AND SUPPORT HARDWARE SHALL BE OF MATERIALS SUITABLE FOR THE ENVIRONMENTS IN WHICH THEY ARE TO BE INSTALLED."
6. DO NOT SUBSTITUTE A LOAD CENTER FOR A PANELBOARD.
7. MOUNTING HARDWARE SHALL BE CORROSION RESISTANCE STAINLESS STEEL. INSTALL PANELBOARDS IN ACCORDANCE WITH ANSI/NEMA PB1.1 :GENERAL INSTRUCTIONS FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE OF PANELBOARDS RATED 1000V OR LESS".
8. PROVIDE WORKSPACE CLEARANCE WARNING: "WARNING-OSHA REGULATION-AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 IN. MINIMUM". INCREASE CLEARANCE DIMENSIONS AS APPLICABLE FOR THE RESPECTIVE VOLTAGE, APPLICATION, AND TO MEET NEC CLEARANCE REQUIREMENTS.
9. PROVIDE LOCKOUT KIT FOR FEEDER BREAKER TO RWIS LOAD CENTER PANEL.

RWIS MAIN SERVICE PANEL (SEE NOTE 1)

CKT #	DUTY	SIZE	SIZE	DUTY	CKT #
1	MAIN SERVICE BREAKER	100A, 2P	60A, 2P	AC SURGE PROTECTOR DEVICE	2
3					4
5	FEEDER TO RWIS LOAD CENTER/PANEL	30A, 2P	20A, 1P	SPARE	6
7	(SEE NOTE 8)			BLANK	8
9	SPARE	20A, 2P		BLANK	10
11				BLANK	12



100AMP (MIN), 120/240VAC, 1 PHASE, 3 WIRE 12 CIRCUIT (MIN.) PANELBOARD WITH 100AMP, 2 POLE MAIN SERVICE BREAKER RATED 22,000 AIC MINIMUM, OR GREATER THAN THE MAXIMUM AVAILABLE FAULT CURRENT, WHICHEVER IS HIGHER AT 120/240VAC IN A NEMA 3R AND 12 (MINIMUM) ENCLOSURE, OR NEMA 4X STAINLESS STEEL ENCLOSURE WHERE SUBJECT TO CORROSION WITH HINGED COVER, UL-LISTED SUITABLE FOR SERVICE ENTRANCE. PANEL SHALL ACCOMMODATE FEEDER AND BRANCH BREAKERS UP TO 100AMP, 2 POLE FRAME & TRIP RATING.

NOTES

1. THIS PANELBOARD IS INTENDED TO BE SUPPLIED BY AN ELECTRIC UTILITY SERVICE. PROVIDE BONDING JUMPER BETWEEN THE NEUTRAL AND GROUND/GROUNDING ELECTRODE CONDUCTOR PER 2020/2023 NEC 250.24 "GROUNDING OF SERVICE-SUPPLIED ALTERNATING CURRENT SYSTEMS".
2. ALL MAIN, FEEDER AND BRANCH CIRCUIT BREAKERS SHALL BE BOLT-ON WITH AMP INTERRUPTING CAPACITY THAT IS GREATER THAN THE MAXIMUM AVAILABLE FAULT CURRENT. FEEDER AND BRANCH BREAKERS THAT HAVE A 2-TIER SERIES RATING GREATER THAN THE MAXIMUM AVAILABLE FAULT CURRENT WILL BE ACCEPTABLE.
3. CIRCUIT BREAKERS AND WIRING SHALL BE SIZED FOR THE ACTUAL EQUIPMENT FURNISHED IN CONFORMANCE WITH THE RESPECTIVE MANUFACTURER'S RECOMMENDATION AND N.E.C. CONTRACTOR SHALL ADJUST CIRCUIT BREAKER SIZES & WIRING WHERE APPLICABLE TO CONFORM WITH THE MANUFACTURER'S RECOMMENDATIONS AND N.E.C.
4. FOR A BOTTOM FEED PANEL, MOVE AC SURGE PROTECTOR BREAKER DOWN TO POSITIONS 10 AND 12.
5. PANELBOARDS LOCATED OUTDOORS IN A NON-CORROSIVE, NON-HAZARDOUS LOCATION SHALL BE INSTALLED IN A NEMA 3R AND 12 ENCLOSURE RATED SUITABLE FOR THE RESPECTIVE APPLICATION. PANELBOARDS LOCATED ADJACENT TO A CREEK, RIVER, OR BRIDGE OVER A WATERWAY OR AREA SUBJECT TO CORROSION DUE TO SALT OR OTHER CORROSIVE MATERIAL SHALL BE INSTALLED IN A NEMA 4X STAINLESS STEEL ENCLOSURE SUITABLE FOR THE RESPECTIVE APPLICATION. NATIONAL ELECTRICAL CODE ARTICLE 300.6 PROTECTION AGAINST CORROSION AND DETERIORATION NOTES "RACEWAYS, CABLE TRAYS, CABLE BUS, AUXILIARY GUTTERS, CABLE ARMOR, BOXES, CABLE SHEATHING, CABINETS, ELBOWS, COUPLINGS, FITTINGS, SUPPORTS AND SUPPORT HARDWARE SHALL BE OF MATERIALS SUITABLE FOR THE ENVIRONMENTS IN WHICH THEY ARE TO BE INSTALLED."
6. DO NOT SUBSTITUTE A LOAD CENTER FOR A PANELBOARD.
7. MOUNTING HARDWARE SHALL BE CORROSION RESISTANCE STAINLESS STEEL. INSTALL PANELBOARDS IN ACCORDANCE WITH ANSI/NEMA PB1.1 :GENERAL INSTRUCTIONS FOR PROPER INSTALLATION, OPERATION AND MAINTENANCE OF PANELBOARDS RATED 1000V OR LESS".
8. PROVIDE WORKSPACE CLEARANCE WARNING: "WARNING-OSHA REGULATION-AREA IN FRONT OF ELECTRICAL EQUIPMENT MUST BE KEPT CLEAR FOR 36 IN. MINIMUM". INCREASE CLEARANCE DIMENSIONS AS APPLICABLE FOR THE RESPECTIVE VOLTAGE, APPLICATION, AND TO MEET NEC CLEARANCE REQUIREMENTS.
9. PROVIDE LOCKOUT KIT FOR FEEDER BREAKER TO RWIS LOAD CENTER PANEL.

FENCING SIGN DETAIL

NOT TO SCALE

SIZED TO ACCOMMODATE TEXT, CONTRUCTED OF DURABLE MATERIALS, CONTRASTING COLORS, AND REFLECTIVE MATERIAL SIGN BLANK 0.080" ALUMINUM

COLORS:
LEGEND FOR "NO TRESPASSING" - RED TEXT
BACKGROUND - WHITE (RETROREFLECTIVE)

LEGEND FOR REMAINING - BLACK TEXT
BACKGROUND - WHITE (RETROREFLECTIVE)

TEXT:
MUTCD/FHWA (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES/FEDERAL HIGHWAY ADMINISTRATION)
"SERIES C 2000" OR EQUIVALENT

SIGN NOTES:

1. INSTALL SIGNS AT EACH ACCESS GATE AND ALONG FENCE AT SPACING NOT TO EXCEED 100 FEET. SIGNS ALONG FENCE LINE SHALL BE LOCATED SUCH THAT WHEN STANDING AT ONE SIGN, THE OBSERVER IS ABLE TO SEE THE NEXT SIGN IN BOTH DIRECTIONS. FOR ROADWAY WEATHER INFORMATION SYSTEM SITES PROVIDE ONE SIGN ON EACH EXTERIOR FACE OF THE FENCING.
2. TOP OF SIGN SHALL BE INSTALLED APPROXIMATELY ONE FOOT BELOW THE TOP RAIL OF THE FENCE. CONFIRM MOUNTING HEIGHT WITH OWNER REPRESENTATIVE.
3. MOUNT SIGNS TO THE FENCE WITH COMPATIBLE MOUNTING HARDWARE, SUCH AS BRACKETS, BOLTS WASHERS, AND NUTS. THERE IS NO SEPARATE PAY ITEM FOR FURNISHING AND INSTALLING THE SIGNS TO THE FENCE. MOUNTING IS INCLUDED IN THE PAY ITEMS FOR FENCE AND GATES.

LEGEND PLATE SCHEDULE	
DEVICE	LABEL
RWIS MAIN SERVICE PANELBOARD OR DISCONNECT	RWIS SERVICE PANEL 120/240 VAC, 1-PHASE, 3-WIRE
RWIS MAIN SERVICE PANELBOARD OR DISCONNECT (SEE NOTE 2)	MAX AVAILABLE FAULT CURRENT AT UTILITY TRANSFORMER SECONDARY WAS CALCULATED TO BE: _____AMPS LINE TO LINE _____ AMPS LINE TO NEUTRAL ON (DATE)
RWIS MAIN PANELBOARD	RWIS MAIN PANEL 120/240 VAC, 1-PHASE, 3-WIRE NOTE: FED FROM SERVICE PANEL FOR RWIS
RWIS MAIN PANELBOARD (SEE NOTE 2)	MAX AVAILABLE FAULT CURRENT AT UTILITY TRANSFORMER SECONDARY WAS CALCULATED TO BE: _____ AMPS LINE TO LINE _____ AMPS LINE TO NEUTRAL ON (DATE)
RWIS SITE LOAD CENTER	RWIS SITE LOAD CENTER 120/240 VAC, 1-PHASE, 3-WIRE NOTE: FED FROM RWIS MAIN/SERVICE PANEL
RWIS SITE LOAD CENTER	MAX AVAILABLE FAULT CURRENT AT UTILITY TRANSFORMER SECONDARY WAS CALCULATED TO BE: _____ AMPS LINE TO LINE _____ AMPS LINE TO NEUTRAL ON (DATE)

NOTE: LEGEND PLATES SHALL BE WEATHERPROOF ENGRAVED PLASTIC OR PHENOLIC MATERIAL, 1/4" HIGH BLACK LETTERS ON A WHITE BACKGROUND UNLESS NOTED OTHERWISE. SECURE WITH WEATHERPROOF ADHESIVE AND MACHINE SCREWS. FURNISH ADDITIONAL LEGEND PLATES WHERE REQUIRED BY CODE, FOR ADDITIONAL EQUIPMENT, AS DETAILED HEREIN ON THE PLANS, AND AS NOTED IN THE SPECIAL PROVISION SPECIFICATIONS.

ARC FLASH RISK LABELS	
EQUIPMENT	LABEL
RWIS MAIN SERVICE PANELBOARD OR DISCONNECT	WARNING ARC FLASH HAZARD APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED. NOMINAL VOLTAGE: 120/240 VAC, 1-PHASE, 3-WIRE ARC FLASH BOUNDARY: 19 INCHES ARC FLASH PPE CATEGORY: 1
RWIS MAIN PANELBOARD	WARNING ARC FLASH HAZARD APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED. NOMINAL VOLTAGE: 120/240 VAC, 1-PHASE, 3-WIRE ARC FLASH BOUNDARY: 19 INCHES ARC FLASH PPE CATEGORY: 1
RWIS SITE LOAD CENTER	WARNING ARC FLASH HAZARD APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT IS REQUIRED. NOMINAL VOLTAGE: 120/240 VAC, 1-PHASE, 3-WIRE ARC FLASH BOUNDARY: 19 INCHES ARC FLASH PPE CATEGORY: 1

NOTE: ARC FLASH RISK LABELS ARE BASED ON FAULT CURRENTS LESS THAN 25,000 AMPS AT 120/240 VAC.

NOTES:

1. ARC FLASH RISK LABELS ARE BASED ON FAULT CURRENT FROM UTILITY TRANSFORMER THAT IS LESS THAN 25,000 AMPS AT 240 VAC.
2. FAULT CURRENT INFORMATION TO BE PROVIDED BY SERVING ELECTRIC UTILITY COMPANY OR FROM DATA OBTAINED FROM UTILITY TRANSFORMER NAMEPLATE. CONTACT PROJECT ENGINEER TO CONFIRM FAULT CURRENT CALCULATIONS.
3. CONTRACTOR SHALL PROVIDE APPROPRIATE LABELS ON ELECTRICAL EQUIPMENT, IN ACCORDANCE WITH NFPA 70E ARTICLE 130 WORK INVOLVING ELECTRICAL HAZARDS, PART 130.5 ARC FLASH RISK ASSESSMENT, (H) EQUIPMENT LABELING. WHERE MAXIMUM CALCULATED FAULT CURRENT EXCEEDS 25,000 AMPS CONTACT PROJECT ENGINEER.
4. ALL LABELING WILL BE CONSIDERED INCIDENTAL TO THE RESPECTIVE WORK ITEM

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RWIS RELOCATION
LEGEND PLATE SCHEDULE AND SIGNAGE DETAILS

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	67
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

CONSTRUCTION NOTES	
1.	EXISTING UTILITY LOCATION INFORMATION IS NOT SHOWN ON THE PLAN SHEETS. THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UTILITIES AND PRIVATELY OWNED FACILITIES PRIOR TO THE INSTALLATION OF ANY COMPONENTS. THE CONTRACTOR SHALL VERIFY EXISTING FIELD CONDITIONS AND TERRAIN PRIOR TO COMMENCING WORK ON THE PROJECT.
2.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING EXISTING IDOT ELECTRICAL FACILITIES AT HIS/HER OWN EXPENSE IF REQUIRED. THE CONTRACTOR SHALL ALSO BE LIABLE FOR ANY DAMAGE TO IDOT FACILITIES RESULTING FROM INACCURATE LOCATING.
3.	ELECTRICAL WORK SHALL CONFORM WITH NATIONAL, STATE, AND LOCAL CODES.
4	ALL SURPLUS MATERIALS SHALL BE DISPOSED OF IN ACCORDANCE WITH ARTICLE 202.03 OF THE STANDARD SPECIFICATION.
5.	THE COMMUNICATION VAULT SHALL BE CONSTRUCTED SO THAT THE TOP OF THE FRAME WILL BE FLUSH WITH THE SURFACE OF THE MEDIAN, SIDEWALK, OR GROUND LINE.
6.	THE CONTRACTOR SHALL SUBMIT A FIBER SPLICING PLAN TO THE DEPARTMENT FOR REVIEW AND APPROVAL PRIOR TO INSTALLING COMMUNICATIONS DUCT AND FIBER.
7.	PROPOSED FIBER OPTIC CABLE SHALL BE SPLICED TO EXISTING FIBER OPTIC CABLE (96 FIBER SINGLE MODE) TO RESTORE CONTINUITY. ALL FIBERS WITHIN THE CABLE SHALL BE FUSION SPLICED AND ALL SPLICES SHALL BE PROTECTED BY A WEATHERPROOF SPLICE ENCLOSURE. SPLICES SHALL BE MADE ONLY IN COMMUNICATION VAULTS.
8.	THE CONTRACTOR SHALL INSTALL A #12 (XLP-TYPE USE OR THHN) TRACER WIRE ALONG WITH THE FIBER OPTIC CABLE FOR LOCATING PURPOSES. THE TRACER WIRE SHALL BE CONTINUOUS AND BE ACCESSIBLE FROM THE COMMUNICATION VAULTS. THE COST OF FURNISHING AND INSTALLING THE TRACER WIRE SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE PAY ITEM "FIBER OPTIC CABLE 96 FIBERS, SINGLE MODE". AT THE CONTRACTOR'S OPTION, THE CONTRATOR MAY ELECT TO UTILIZE COMMUNICATION DUCT THAT CONTAINS AN INTEGRATED WIRE THAT CAN BE USED FOR UNDERGROUND LOCATING PURPOSES.
9.	ALL COMMUNICATIONS DUCT SHALL BE INSTALLED IN AND WILL BE PAID FOR IN ACCORDANCE WITH SECTION 810 "UNDERGROUND RACEWAYS" OF THE STANDARD SPECIFICATIONS.
10.	THE LOCATION OF THE PROPOSED CONDUIT AS SHOWN ON THE PLAN SHEETS IS APPROXIMATE AND NOT DRAWN TO SCALE. CONDUIT SHALL BE INSTALLED AT A 36" MINIMUM DEPTH EXCEPT WHEN CROSSING WATERWAYS AND DRAINAGE FLOW LINES WHERE IT SHALL BE INSTALLED AT A 60" MINIMUM DEPTH.
11.	THE COST OF ROCK EXCAVATION, ROCK DISPOSAL AND THE COST OF INSTALLING CONDUIT THROUGH ROCKY TERRAIN (TRENCHING, BORING, SAW-CUTTING, AND OTHER INSTALLATION METHODS AS REQUIRED) SHALL BE INCLUDED IN THE PAY ITEM "UNDERGROUND CONDUIT, MULTI-DUCT, 7-16MM MICRODUCTS". THERE WILL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.
12.	POTHOLING TO LOCATE EXISTING UNDERGROUND UTILITIES SHALL BE INCLUDED IN THE CONTRACT BID PRICE FOR THE PROPOSED CONDUIT.
13.	NO ADDITIONAL COMPENSATION SHALL BE ALLOWED FOR PLACING CONDUIT AT GREATER THAN THE REQUIRED MINIMUM DEPTH TO AVOID OBSTACLES SUCH AS UNDERGROUND UTILITIES.
14.	THE CONTRACTOR IS RESPONSIBLE FOR THE COST OF UNCOVERING OR HAND DIGGING AROUND UTILITIES AS NECESSARY. THIS COST OF THIS WORK SHALL BE INCLUDED IN THE UNIT BID PRICE FOR THE COMMUNICATIONS DUCT.
15.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING FIELD TILE, UNDERDRAIN, AND DRAINAGE STRUCTURE LOCATIONS. THE CONTRACTOR SHALL MAKE AN EFFORT TO MINIMIZE DAMAGE TO THESE FACILITIES DURING THE INSTALLATION OF CONDUIT AND COMMUNICATION VAULTS. IN THE EVENT THAT THESE FACILITIES ARE DAMAGED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAKING REPAIRS TO THESE ITEMS TO RESTORE FUCTIONALITY TO THE SATISFACTION OF THE ENGINEER.
16.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MOWING, BRUSH AND SHRUB REMOVAL, AND SMALL TREE (10" DIAMETER OR LESS) REMOVAL REQUIRED TO INSTALL THE PROPOSED CONDUIT AND COMMUNICATION VAULTS. THE CONTRACTOR SHALL DISPOSE OF ALL REMOVED ITEMS OFF OF THE JOB SITE. THE COST OF THIS WORK SHALL BE INCLUDED IN THE BID PRICES FOR THE PROPOSED CONDUIT.
17.	THE CONTRACTOR SHALL INSTALL THE PROPOSED COMMUNICATIONS DUCTS BY DIRECTIONALLY BORING CONDUIT UNDER BRIDGES AND WATERWAYS. THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER FOR APPROVAL PRIOR TO COMMENCING DUCT INSTALLATION.
18.	THE CONTRACTOR SHALL INSTALL NEW UNDERGROUND CONDUIT (MULTI-DUCT WITH SEVEN 16MM MICRODUCTS) AT THE LOCATIONS SHOWN ON THE PLAN SHEETS. THE PROPOSED CONDUIT SHALL BE DIRECTIONALLY BORED UNDER BRIMFIELD RD AND LOCATED ON THE OUTSIDE OF THE RIGHT OF WAY AND OUTSIDE THE LIMITS OF CONSTRUCTION.
19.	THE CONTRACTOR SHALL INTERCEPT THE EXISTING MULIT-DUCT AND INSTALL THE PROPOSED COMMUNICATIONS VAULT OVER THE EXISTING CONDUIT AT THE LOCATIONS SHOWN ON THE PLAN SHEETS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE COMMUNICATIONS DUCT.
20.	THE CONTRACTOR SHALL INSTALL NEW 96 FIBER SINGLE MODE CABLE INISDE THE PROPOSED COMMUNICATIONS DUCT AND LEAVE A 200 FT. SLACK COIL INSIDE EACH HANDHOLE. THE FIBER SHALL BE INSTALLED INSIDE THE SAME COLOR OF MICRODUCT AS THE EXISTING FIBER.
21.	THE CONTRACTOR SHALL COLLECT SLACK CABLE FROM EXISTING COMMUNICATIONS VAULTS AND PULL THIS SLACK CABLE (200 FT.) INTO THE PROPOSED COMMUNICATIONS VAULTS TO FACILITATE SPLICING. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE FIBER OPTIC CABLE.
22.	THE CONTRACTOR SHALL SCHEDULE AND CONDUCT ALL FUSION SPLICING WITHIN THE MAINTENANCE WINDOW OF 12:00 AM TO 5:00 AM. THE CONTRACTOR SHALL SPLICE ALL LIVE FIBER STRANDS FIRST TO RESTORE CONNECTIVITY AND REDUCE OUTAGE TIME, FOLLOWED BY ALL UNUSED FIBER STRANDS. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT A MINIMUM OF FOURTEEN DAYS PRIOR TO SPLICING. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE FIBER OPTIC CABLE.
23.	THE CONTRACTOR SHALL SPLICE ALL UNUSED MICRODUCTS CONTINUOUS INSIDE THE PROPOSED COMMUNICATIONS VAULTS. THE CONTRACTOR SHALL FIELD TEST ALL MICRODUCTS FOR CONTINUITY AND PRESSURIZATION IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED CONDUIT.
24.	ALL FIBER RELOCATION WORK SHALL BE COMPLETED PRIOR TO REMOVING THE EXISTING CONDUIT ATTACHED TO STRUCTURE AND JUNCTION BOXES. THE FIBER RELOCATION WORK SHALL BE COMPLETED BEFORE BRIDGE CONSTRUCTION ACTIVITIES WILL NECESSITATE THE REMOVAL OF THE EXISTING FACILITIES.
25.	THE CONTRACTOR SHALL RESTORE ALL DISTURBED AREAS UPON COMPLETION OF THE WORK. THE CONTRACTOR SHALL BACKFILL, GRADE, AND SEED ALL DISTURBED AREAS IN ACCORDANCE WITH SECTION 250 OF THE STANDARD SPECIFICATIONS. THE COST OF THIS WORK SHALL BE INCLUDED IN THE COST OF THE PROPOSED COMMUNICATIONS DUCT.

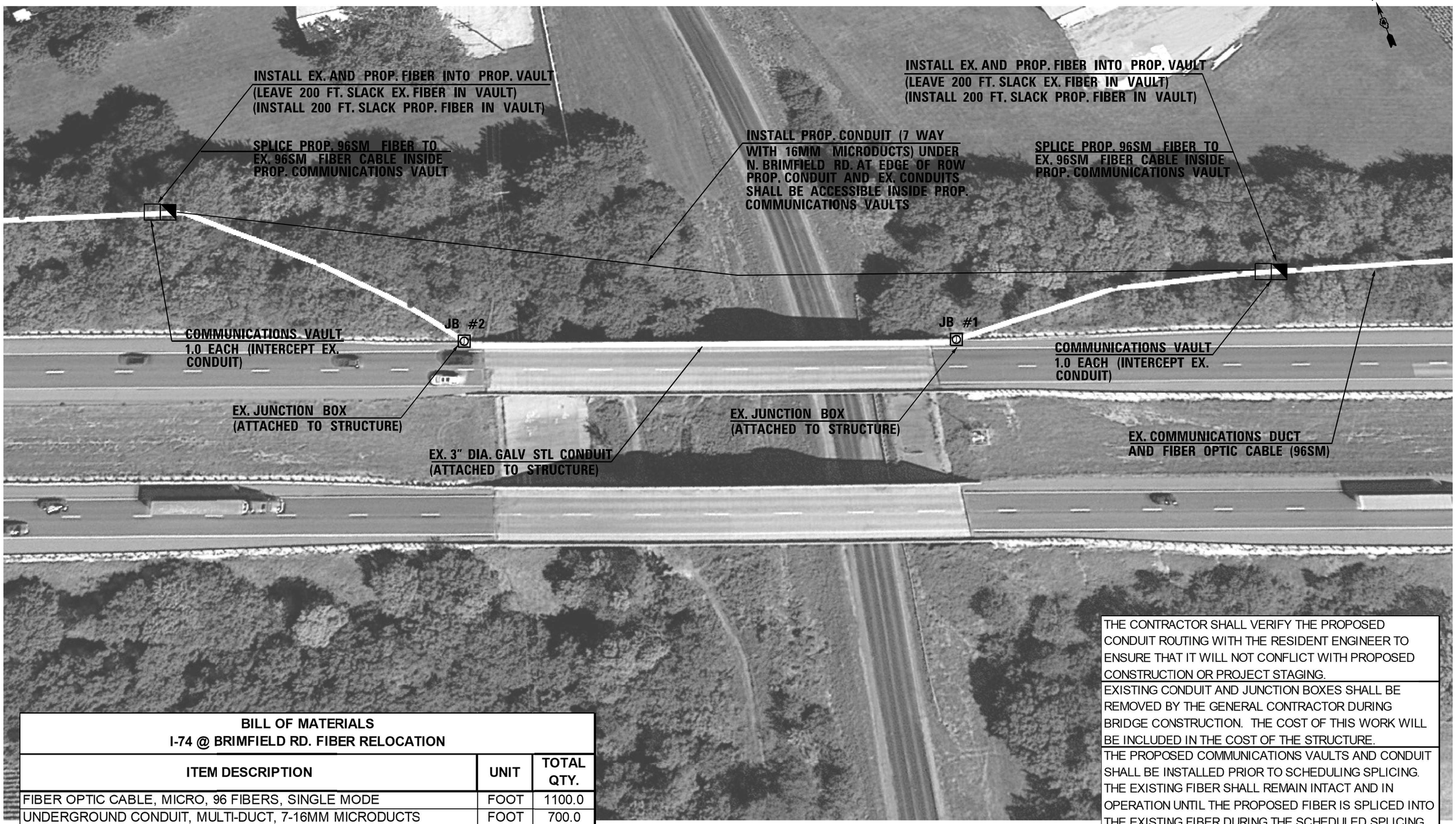
FILE NAME = $FILE$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC CABLE RELOCATION
I-74 OVER N. BRIMFIELD RD.

SCALE: | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	68
		CONTRACT NO. 68D84		
		ILLINOIS FED. AID PROJECT		



BILL OF MATERIALS
I-74 @ BRIMFIELD RD. FIBER RELOCATION

ITEM DESCRIPTION	UNIT	TOTAL QTY.
FIBER OPTIC CABLE, MICRO, 96 FIBERS, SINGLE MODE	FOOT	1100.0
UNDERGROUND CONDUIT, MULTI-DUCT, 7-16MM MICRODUCTS	FOOT	700.0
COMMUNICATIONS VAULT	EACH	2.0

THE CONTRACTOR SHALL VERIFY THE PROPOSED CONDUIT ROUTING WITH THE RESIDENT ENGINEER TO ENSURE THAT IT WILL NOT CONFLICT WITH PROPOSED CONSTRUCTION OR PROJECT STAGING.

EXISTING CONDUIT AND JUNCTION BOXES SHALL BE REMOVED BY THE GENERAL CONTRACTOR DURING BRIDGE CONSTRUCTION. THE COST OF THIS WORK WILL BE INCLUDED IN THE COST OF THE STRUCTURE.

THE PROPOSED COMMUNICATIONS VAULTS AND CONDUIT SHALL BE INSTALLED PRIOR TO SCHEDULING SPLICING. THE EXISTING FIBER SHALL REMAIN INTACT AND IN OPERATION UNTIL THE PROPOSED FIBER IS SPLICED INTO THE EXISTING FIBER DURING THE SCHEDULED SPLICING WINDOW.

FILE NAME = $FILEL$	USER NAME = $USER$	DESIGNED -	REVISED -
		DRAWN -	REVISED -
	PLOT SCALE = $SCALE$	CHECKED -	REVISED -
	PLOT DATE = $DATE$	DATE -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FIBER OPTIC CABLE RELOCATION
I-74 OVER N. BRIMFIELD RD.

SCALE: STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	69
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

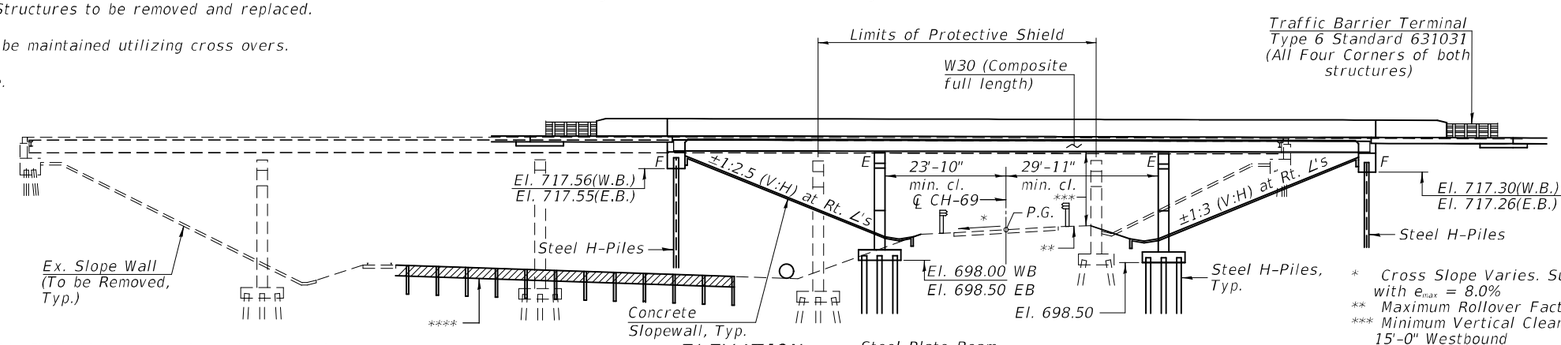
Bench Mark: BM #2: Chiseled "□" on concrete fence corner foundation at northwest corner of weather station. Top of overpass at Sta. 188+00. Elevation – 722.643

Existing Structure: Structure Numbers 072-0074 (W.B.) and 072-0075 (E.B.) were originally built in 1968 as FAI 74, Section 72-3HVB at Sta. 168+00.10. The existing dual structures each consist of five span steel beam bridges with concrete decks. The bridges are supported by hammerhead piers and open stub abutments. Back to back abutment length is 268'-6" and out to out bridge deck width is 36'-0". Structures to be removed and replaced.

Traffic to be maintained utilizing cross overs.

No salvage.

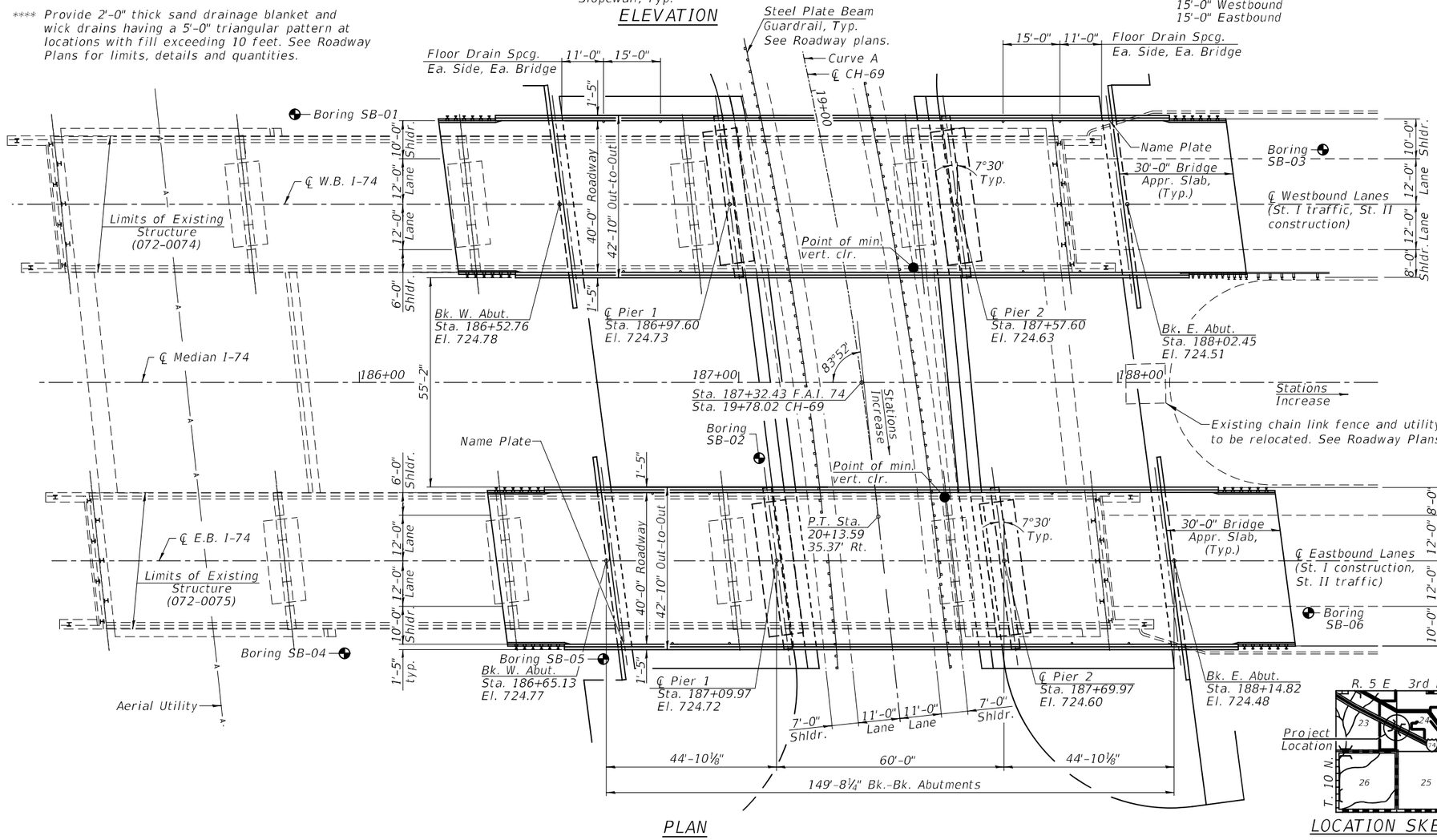
ELEVATION



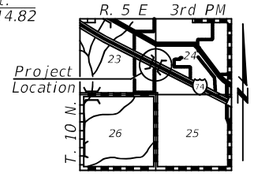
* Cross Slope Varies. Superelevation with e_{max} = 8.0%
** Maximum Rollover Factor = 12%
*** Minimum Vertical Clearance
15'-0" Westbound
15'-0" Eastbound

**** Provide 2'-0" thick sand drainage blanket and wick drains having a 5'-0" triangular pattern at locations with fill exceeding 10 feet. See Roadway Plans for limits, details and quantities.

PLAN



LOCATION SKETCH



LOADING HL-93

Allow 50#/sq. ft. for future wearing surface.

DESIGN SPECIFICATIONS

2020 AASHTO LRFD Bridge Design Specifications, 9th Edition.

DESIGN STRESSES

FIELD UNITS

f'_c = 3,500 psi
f'_c = 4,000 psi (Superstructure Concrete)
f_y = 60,000 psi (Reinforcement)
*f_y = 50,000 psi (M270 Grade 50)
*All new structural steel shall be galvanized

MARK A. HENDERSON 553 LICENSED STRUCTURAL ENGINEER STATE OF ILLINOIS

Expires: 11/30/2024
Signed: 8/19/2024

APPROVED For Structural Adequacy Only
Engineer of Bridges & Structures

SEISMIC DATA

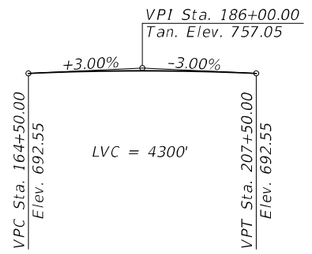
Seismic Performance Zone (SPZ) = 1
Design Spectral Acceleration at 1.0 sec. (SD1) = .107 g
Design Spectral Acceleration at 0.2 sec. (SDS) = .164 g
Soil Site Class = D

CURVE A DATA

(℄ County Highway 69)
P.I = Sta. 18+11.57
Δ = 20° 25' 16"
D = 5° 00' 00"
T = 206.40'
R = 1145.92'
L = 408.42'
E = 18.44'
S.E. = 0.08'/'
P.C = 16+05.17
P.T. = 20+13.59

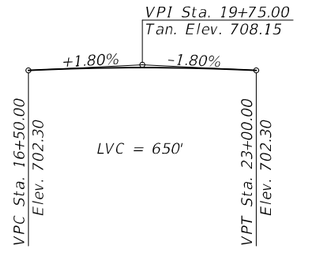
PROFILE GRADE

(Along ℄ WB/EB I-74)



PROFILE GRADE

(Along ℄ CH-69)



GENERAL PLAN & ELEVATION
I-74 OVER CH-69
F.A.I. ROUTE 74 - SEC. [72-3HVB]BR
PEORIA COUNTY
STA. 187+32.43
STRUCTURE NO. 072-0258 (W.B.)
STRUCTURE NO. 072-0259 (E.B.)

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____	DESIGNED - DJC	REVISED - ____	
	CHECKED - MAH	REVISED - ____	
PLOT SCALE = ____	DRAWN - DJC	REVISED - ____	
PLOT DATE = 8/16/2024	CHECKED - MAH	REVISED - ____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL PLAN & ELEVATION
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 1 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	70
			CONTRACT NO. 68D84	
		ILLINOIS	FED. AID PROJECT	

MODEL: 68D84-060
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-001-GPE.dgn
8/16/2024 1:30:17 PM

GENERAL NOTES

All new structural steel shall be hot dip galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel".

Fasteners shall be ASTM F3125 Grade A325 Type 1. Fasteners shall be hot dip galvanized. See Special Provision for "Hot Dip Galvanizing for Structural Steel." Bolts $\frac{7}{8}$ in. diameter, holes $\frac{15}{16}$ in. diameter, unless otherwise noted.

Calculated weight of Structural Steel (M270 Gr. 50) = 102,200 lbs. (072-0258)
Calculated weight of Structural Steel (M270 Gr. 36) = 18,400 lbs. (072-0258)
Calculated weight of Structural Steel (M270 Gr. 50) = 102,200 lbs. (072-0259)
Calculated weight of Structural Steel (M270 Gr. 36) = 18,400 lbs. (072-0259)

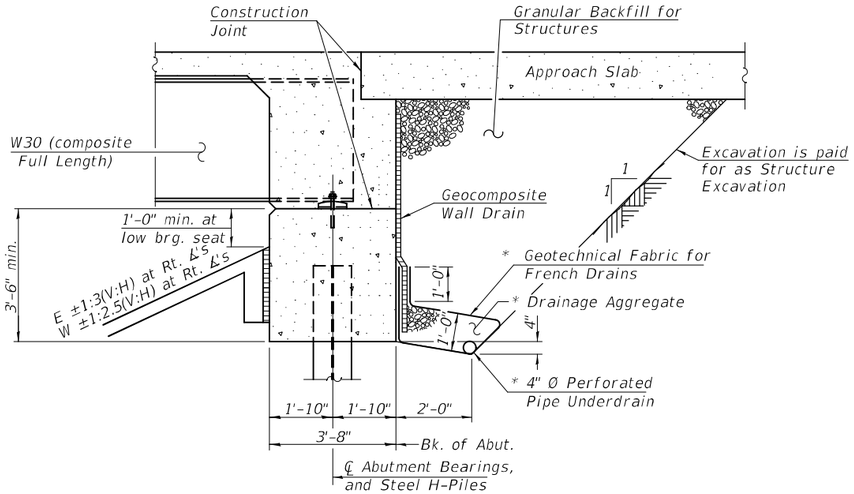
No field welding is permitted except as specified in the contract documents.

Reinforcement bars designated (E) shall be epoxy coated.

Bearing seat surfaces shall be constructed or adjusted to the designated elevations within a tolerance of $\frac{1}{8}$ in. (0.01 ft). Adjustment shall be made either by grinding the surface or by shimming the bearings.

The embankment configuration shown shall be the minimum that must be placed and compacted prior to construction of the abutments.

The existing structural steel coating contains lead. The contractor shall take appropriate precautions to address the presence of lead on this project.

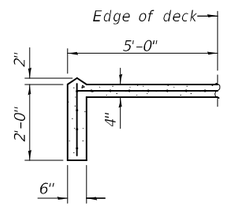


SECTION THRU INTEGRAL ABUTMENT

(Horiz. dim. @ Rt. ℄'s)

* Included in the cost for Pipe Underdrains for Structures 4"

Note:
All drainage system components shall extend to 2'-0" from the end of each wing wall except an outlet pipe shall extend until intersecting with the side slopes. The pipes shall drain into concrete headwalls. (See Article 601.05 of the Standard Specifications and Highway Standard 601101).



SECTION A-A

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4	Substructure Layout
5	Top of Slab Elevations - Location Plan
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7	Top of Slab Elevations (EB)
8	Top of Approach Slab Elevations (WB)
9	Top of Approach Slab Elevations (EB)
10	Superstructure (WB)
11	Superstructure Details (WB)
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16	Bridge Approach Slab Plan (WB)
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22	Framing Details (WB & EB)
23	Bearing Details
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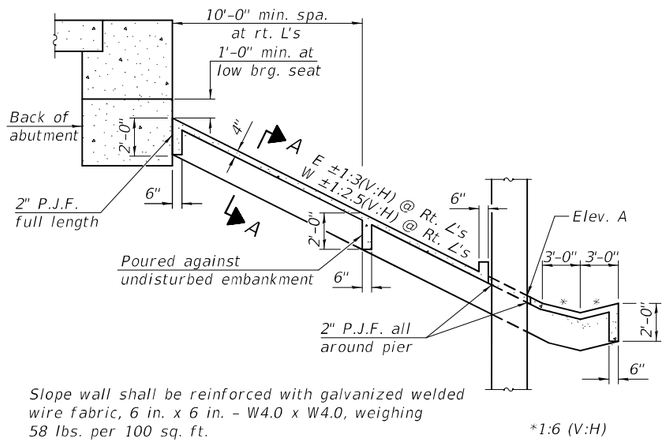
31	Concrete Parapet Slipforming Option
32	Soil Boring Logs
33	Soil Boring Logs
34	Soil Boring Logs

TOTAL BILL OF MATERIAL

ITEM	UNIT	SUPER	SUB	TOTAL
Removal Of Existing Structures	Each	2		2
Protective Shield	Sq Yd	470		470
Structure Excavation	Cu Yd		1325.9	1325.9
Floor Drains	Each	16		16
Concrete Structures	Cu Yd	51.0	485.8	536.8
Concrete Superstructure	Cu Yd	477.5		477.5
Bridge Deck Grooving	Sq Yd	1752		1752
Protective Coat	Sq Yd	2208		2208
Concrete Superstructure (Approach Slab)	Cu Yd	234.0		234.0
Furnishing And Erecting Structural Steel	L Sum	1.0		1.0
Stud Shear Connectors	Each	11052		11052
Reinforcement Bars, Epoxy Coated	Pound	208420	69280	277700
Slope Wall 4 Inch	Sq Yd		1778	1778
Furnishing Steel Piles HP14X73	Foot		2749	2749
Driving Piles	Foot		2749	2749
Test Pile Steel HP14X73	Each		4	4
Name Plates	Each	2		2
Elastomeric Bearing Assembly, Type I	Each	24		24
Anchor Bolts, 1"	Each	96		96
Granular Backfill For Structures	Cu Yd		230	230
Geocomposite Wall Drain	Sq Yd		140	140
Pipe Underdrains For Structures 4"	Foot		264	264
Bar Terminator	Each	500	864	1364



Slope wall shall be reinforced with galvanized welded wire fabric, 6 in. x 6 in. - W4.0 x W4.0, weighing 58 lbs. per 100 sq. ft.

*1:6 (V:H)

SECTION THRU CONCRETE SLOPEWALL

Location	Elev. A
W.B. Pier 1	703.3
W.B. Pier 2	705.9
E.B. Pier 1	704.4
E.B. Pier 2	705.6

STATION 187+32.43
BUILT 202_ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC [72-3HVB]BR
LOADING HL-93
STRUCTURE NO. 072-0258

NAME PLATE

See Std. 515001

STATION 187+32.43
BUILT 202_ BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC [72-3HVB]BR
LOADING HL-93
STRUCTURE NO. 072-0259

NAME PLATE

See Std. 515001

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PLOT DATE = 8/16/2024	CHECKED - MAH	REVISED - _____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GENERAL DATA
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 2 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	71
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: 68D84-061
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-002-GENERAL DATA.dgn
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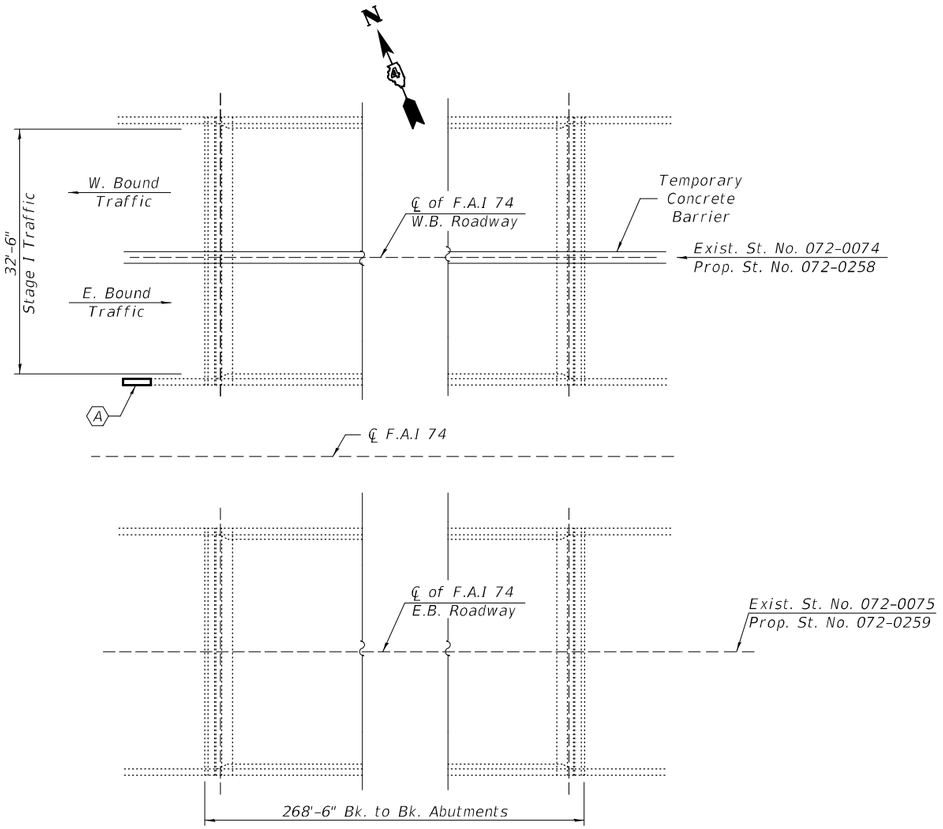
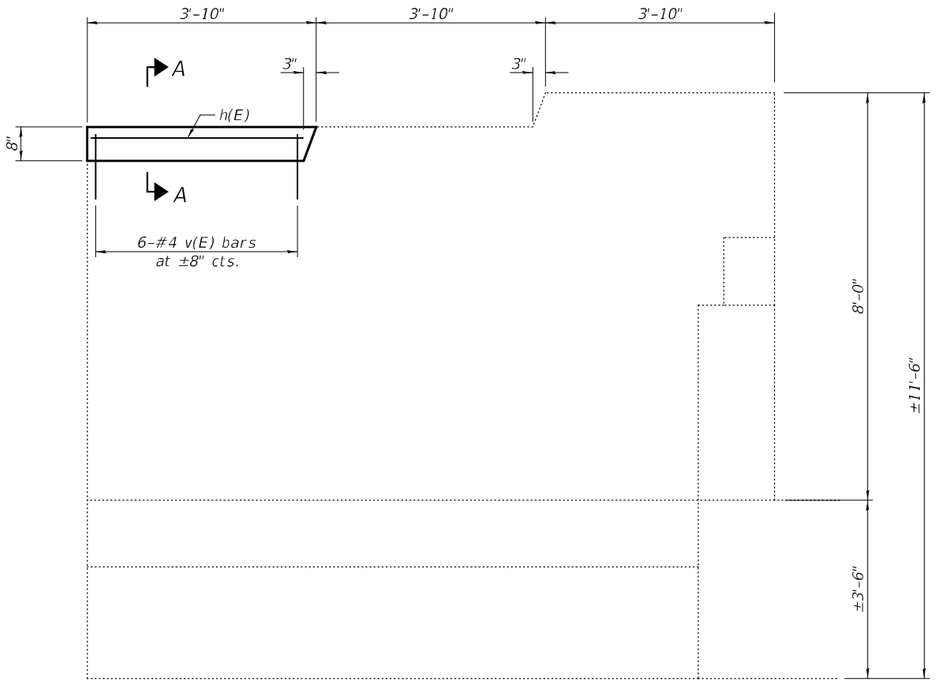
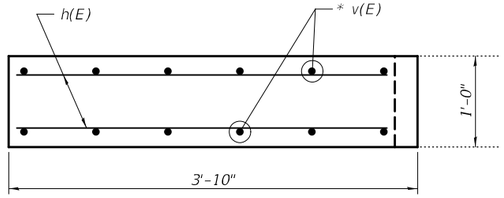


PARTIAL PLAN

(A) - Wingwall Retrofit.

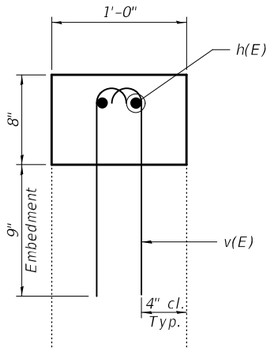


ELEVATION
(Looking West)

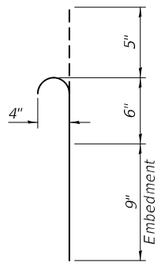


PLAN

* Epoxy v(E) bars in 9" min. holes according to Article 584 of the Standard Specs.



SECTION A-A



BAR v(E)

Notes:

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

TOTAL BILL OF MATERIAL
(1 Location)

Bar	No.	Size	Length	Shape
h(E)	2	#5	3'-6"	——
v(E)	12	#4	1'-8"	⌒
Concrete Superstructure			Cu. Yd.	0.1
Reinforcement Bars, Epoxy Coated			Pound	30

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PLOT DATE = 8/16/2024	CHECKED - DJC	REVISED - _____	

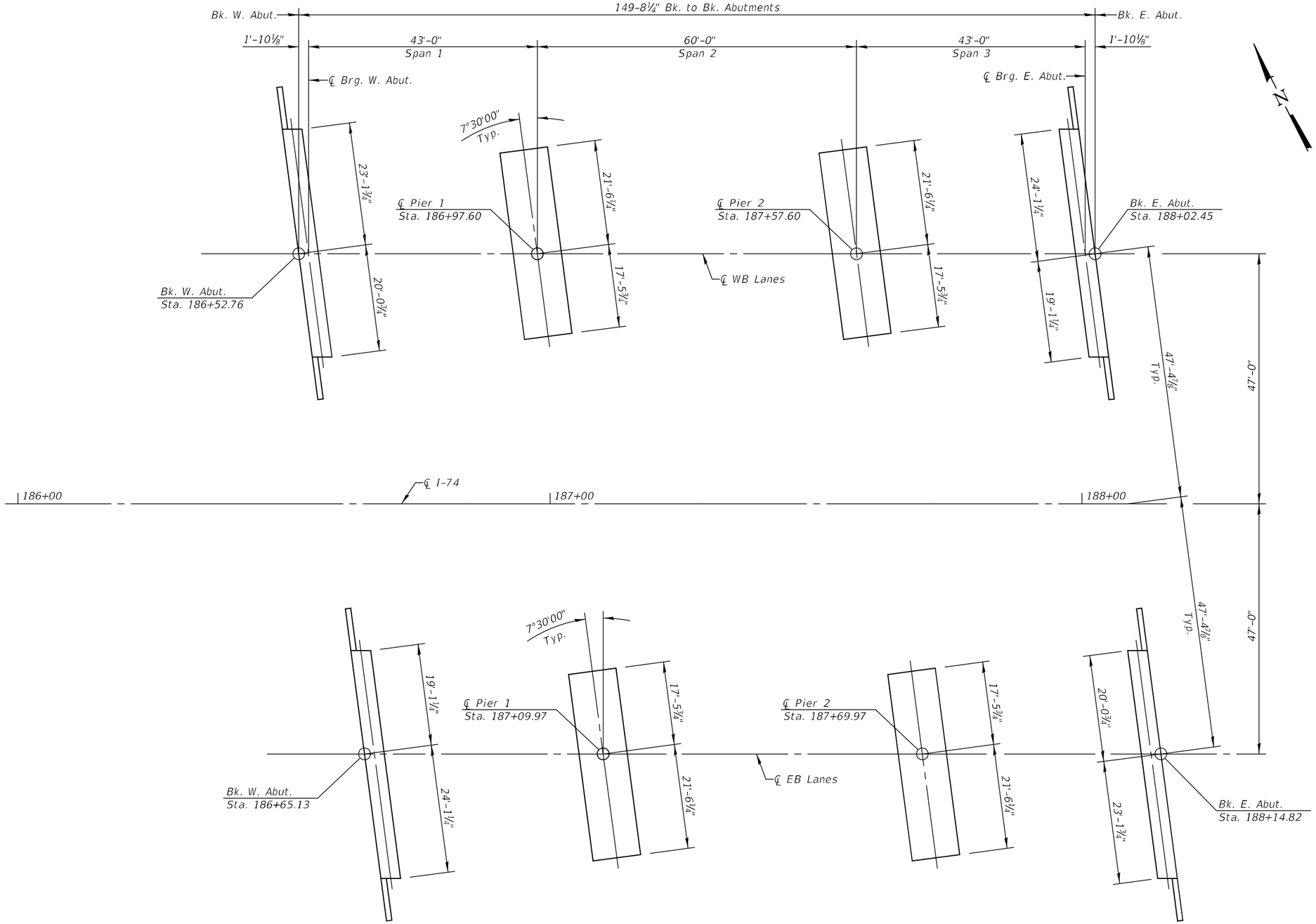
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TEMPORARY SOUTHWEST WINGWALL MODIFICATION DETAILS
EXISTING STRUCTURE NO. 072-0074 (W.B.)

SHEET 3 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	72
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: 68D84-062
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\0720258-68D84-003-SW WING MOD DET.dgn
8/16/2024 1:30:20 PM



MODEL: 68D84063
FILE NAME: z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\0720258-68D84-004-FTG LAYOUT.dgn

8/16/2024 1:30:20 PM

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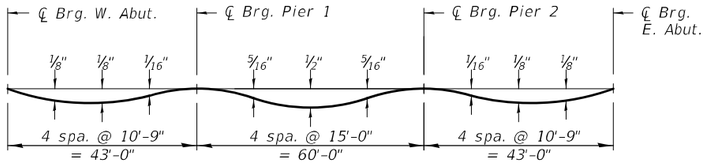
USER NAME = _____	DESIGNED - DJC	REVISED - _____
	CHECKED - MAH	REVISED - _____
PLOT SCALE = _____	DRAWN - DJC	REVISED - _____
PLOT DATE = 8/16/2024	CHECKED -	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUBSTRUCTURE LAYOUT
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 4 OF 34 SHEETS

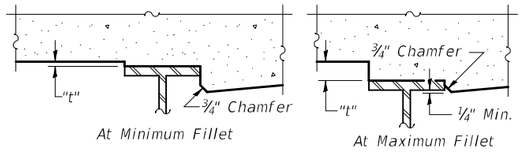
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVBJBR	PEORIA	158	73
			CONTRACT NO. 68D84	
		ILLINOIS	FED. AID PROJECT	



DEAD LOAD DEFLECTION DIAGRAM

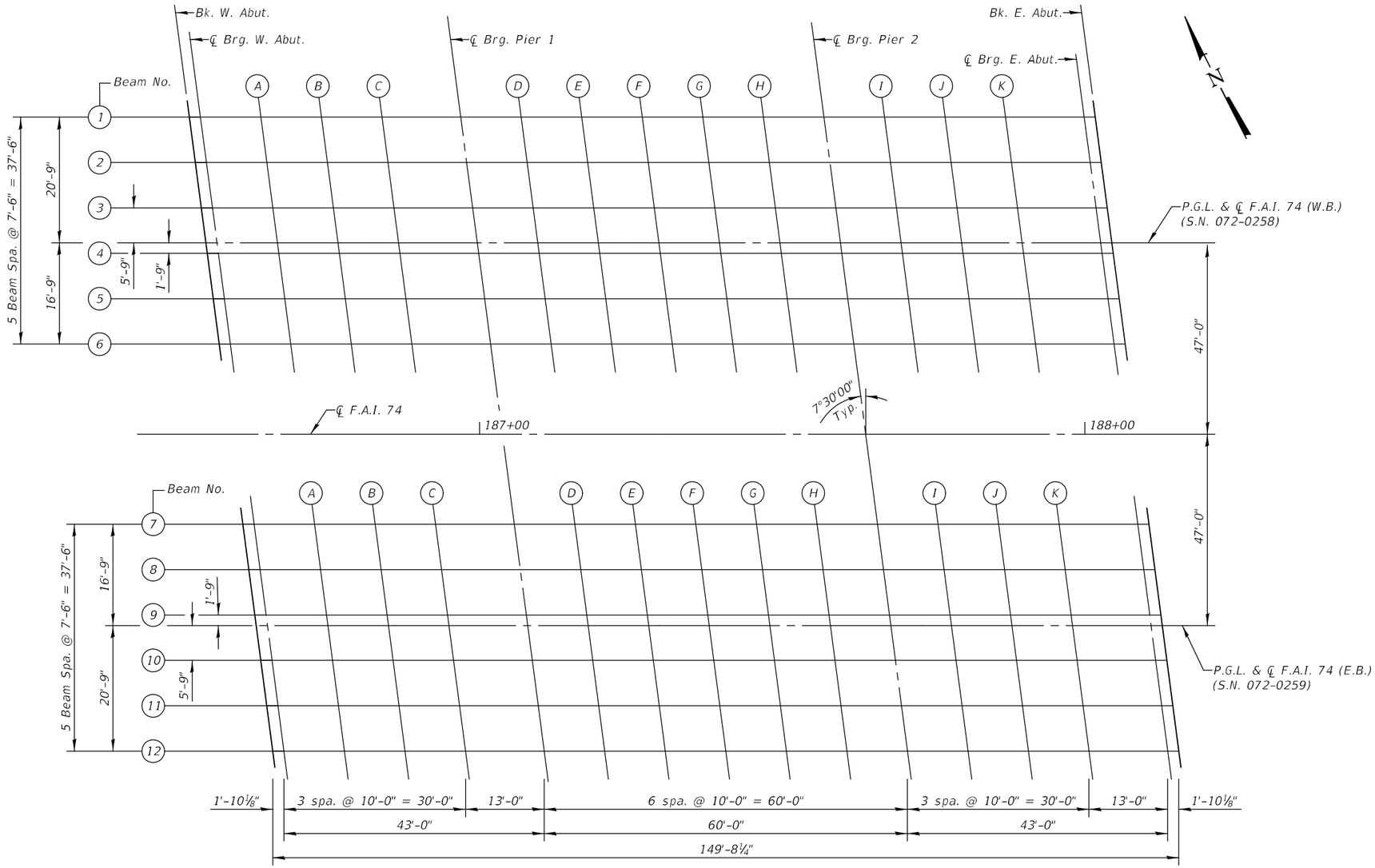
(Includes weight of concrete only.)

Note:
The above deflections are not to be used in the field if the engineer is working from the grade elevations adjusted for dead load deflections as shown on sheets 6 & 7 of 34.



To determine "t": After all structural steel has been erected, elevations of the top flanges of the beams shall be taken at intervals shown below. These elevations subtracted from the "Theoretical Grade Elevations Adjusted for Dead Load Deflection" shown on sheets 6 & 7 of 34, minus the slab thickness, equals the fillet heights "t" above the top flange of the beams.

FILLET HEIGHTS



LAYOUT PLAN FOR DECK ELEVATIONS

MODEL: 68D84-064
FILE NAME: z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\072025B-68D84-005-DK ELEV.dgn
8/16/2024 1:30:21 PM

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STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS – LOCATION PLAN
STRUCTURE NO. 072–0258 (W.B.) & 072–0259 (E.B.)
SHEET 5 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	74
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

Beam 1

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+50.03	-20.75	724.43	724.43
℄ Brg. W. Abut.	186+51.87	-20.75	724.43	724.43
A	186+61.87	-20.75	724.42	724.43
B	186+71.87	-20.75	724.41	724.42
C	186+81.87	-20.75	724.40	724.40
℄ Pier 1	186+94.87	-20.75	724.38	724.38
D	187+04.87	-20.75	724.37	724.38
E	187+14.87	-20.75	724.35	724.39
F	187+24.87	-20.75	724.34	724.38
G	187+34.87	-20.75	724.32	724.35
H	187+44.87	-20.75	724.30	724.31
℄ Pier 2	187+54.87	-20.75	724.28	724.28
I	187+64.87	-20.75	724.26	724.26
J	187+74.87	-20.75	724.23	724.24
K	187+84.87	-20.75	724.21	724.22
℄ Brg. E. Abut.	187+97.87	-20.75	724.17	724.17
Bk. E. Abut.	187+99.72	-20.75	724.17	724.17

Beam 2

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+51.02	-13.25	724.58	724.58
℄ Brg. W. Abut.	186+52.86	-13.25	724.58	724.58
A	186+62.86	-13.25	724.57	724.58
B	186+72.86	-13.25	724.56	724.57
C	186+82.86	-13.25	724.55	724.55
℄ Pier 1	186+95.86	-13.25	724.53	724.53
D	187+05.86	-13.25	724.52	724.53
E	187+15.86	-13.25	724.50	724.54
F	187+25.86	-13.25	724.48	724.53
G	187+35.86	-13.25	724.47	724.50
H	187+45.86	-13.25	724.45	724.46
℄ Pier 2	187+55.86	-13.25	724.43	724.43
I	187+65.86	-13.25	724.40	724.41
J	187+75.86	-13.25	724.38	724.39
K	187+85.86	-13.25	724.35	724.37
℄ Brg. E. Abut.	187+98.86	-13.25	724.32	724.32
Bk. E. Abut.	188+00.71	-13.25	724.31	724.31

Beam 3

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+52.00	-5.75	724.69	724.69
℄ Brg. W. Abut.	186+53.84	-5.75	724.69	724.69
A	186+63.84	-5.75	724.69	724.70
B	186+73.84	-5.75	724.68	724.69
C	186+83.84	-5.75	724.66	724.67
℄ Pier 1	186+96.84	-5.75	724.65	724.65
D	187+06.84	-5.75	724.63	724.65
E	187+16.84	-5.75	724.62	724.65
F	187+26.84	-5.75	724.60	724.64
G	187+36.84	-5.75	724.58	724.62
H	187+46.84	-5.75	724.56	724.58
℄ Pier 2	187+56.84	-5.75	724.54	724.54
I	187+66.84	-5.75	724.52	724.52
J	187+76.84	-5.75	724.50	724.51
K	187+86.84	-5.75	724.47	724.48
℄ Brg. E. Abut.	187+99.84	-5.75	724.44	724.44
Bk. E. Abut.	188+01.69	-5.75	724.43	724.43

℄ F.A.I 74 (W.B.) & P.G.L

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+52.76	0.00	724.78	724.78
℄ Brg. W. Abut.	186+54.60	0.00	724.78	724.78
A	186+64.60	0.00	724.77	724.78
B	186+74.60	0.00	724.76	724.77
C	186+84.60	0.00	724.75	724.76
℄ Pier 1	186+97.60	0.00	724.73	724.73
D	187+07.60	0.00	724.72	724.73
E	187+17.60	0.00	724.70	724.74
F	187+27.60	0.00	724.69	724.73
G	187+37.60	0.00	724.67	724.70
H	187+47.60	0.00	724.65	724.66
℄ Pier 2	187+57.60	0.00	724.63	724.63
I	187+67.60	0.00	724.60	724.61
J	187+77.60	0.00	724.58	724.59
K	187+87.60	0.00	724.56	724.57
℄ Brg. E. Abut.	188+00.60	0.00	724.52	724.52
Bk. E. Abut.	188+02.45	0.00	724.51	724.51

Beam 4

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+52.99	1.75	724.75	724.75
℄ Brg. W. Abut.	186+54.83	1.75	724.75	724.75
A	186+64.83	1.75	724.74	724.76
B	186+74.83	1.75	724.73	724.75
C	186+84.83	1.75	724.72	724.73
℄ Pier 1	186+97.83	1.75	724.71	724.71
D	187+07.83	1.75	724.69	724.71
E	187+17.83	1.75	724.68	724.71
F	187+27.83	1.75	724.66	724.70
G	187+37.83	1.75	724.64	724.68
H	187+47.83	1.75	724.62	724.64
℄ Pier 2	187+57.83	1.75	724.60	724.60
I	187+67.83	1.75	724.58	724.58
J	187+77.83	1.75	724.55	724.56
K	187+87.83	1.75	724.53	724.54
℄ Brg. E. Abut.	188+00.83	1.75	724.49	724.49
Bk. E. Abut.	188+02.68	1.75	724.49	724.49

Beam 5

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+53.98	9.25	724.64	724.64
℄ Brg. W. Abut.	186+55.82	9.25	724.64	724.64
A	186+65.82	9.25	724.63	724.64
B	186+75.82	9.25	724.62	724.63
C	186+85.82	9.25	724.61	724.61
℄ Pier 1	186+98.82	9.25	724.59	724.59
D	187+08.82	9.25	724.58	724.59
E	187+18.82	9.25	724.56	724.60
F	187+28.82	9.25	724.55	724.59
G	187+38.82	9.25	724.53	724.56
H	187+48.82	9.25	724.51	724.52
℄ Pier 2	187+58.82	9.25	724.49	724.49
I	187+68.82	9.25	724.46	724.47
J	187+78.82	9.25	724.44	724.45
K	187+88.82	9.25	724.41	724.42
℄ Brg. E. Abut.	188+01.82	9.25	724.38	724.38
Bk. E. Abut.	188+03.67	9.25	724.37	724.37

Beam 6

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+54.96	16.75	724.50	724.50
℄ Brg. W. Abut.	186+56.80	16.75	724.50	724.50
A	186+66.80	16.75	724.49	724.50
B	186+76.80	16.75	724.48	724.49
C	186+86.80	16.75	724.47	724.48
℄ Pier 1	186+99.80	16.75	724.46	724.46
D	187+09.80	16.75	724.44	724.45
E	187+19.80	16.75	724.43	724.46
F	187+29.80	16.75	724.41	724.45
G	187+39.80	16.75	724.39	724.42
H	187+49.80	16.75	724.37	724.38
℄ Pier 2	187+59.80	16.75	724.35	724.35
I	187+69.80	16.75	724.32	724.33
J	187+79.80	16.75	724.30	724.31
K	187+89.80	16.75	724.27	724.28
℄ Brg. E. Abut.	188+02.80	16.75	724.24	724.24
Bk. E. Abut.	188+04.65	16.75	724.23	724.23

Beam 7

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+62.93	-16.75	724.50	724.50
℄ Brg. W. Abut.	186+64.77	-16.75	724.50	724.50
A	186+74.77	-16.75	724.49	724.50
B	186+84.77	-16.75	724.48	724.49
C	186+94.77	-16.75	724.46	724.47
℄ Pier 1	187+07.77	-16.75	724.44	724.44
D	187+17.77	-16.75	724.43	724.44
E	187+27.77	-16.75	724.41	724.44
F	187+37.77	-16.75	724.39	724.43
G	187+47.77	-16.75	724.37	724.40
H	187+57.77	-16.75	724.35	724.37
℄ Pier 2	187+67.77	-16.75	724.33	724.33
I	187+77.77	-16.75	724.31	724.31
J	187+87.77	-16.75	724.28	724.29
K	187+97.77	-16.75	724.25	724.26
℄ Brg. E. Abut.	188+10.77	-16.75	724.22	724.22
Bk. E. Abut.	188+12.62	-16.75	724.21	724.21

Beam 8

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+63.92	-9.25	724.63	724.63
℄ Brg. W. Abut.	186+65.76	-9.25	724.63	724.63
A	186+75.76	-9.25	724.62	724.63
B	186+85.76	-9.25	724.61	724.62
C	186+95.76	-9.25	724.60	724.60
℄ Pier 1	187+08.76	-9.25	724.58	724.58
D	187+18.76	-9.25	724.56	724.58
E	187+28.76	-9.25	724.55	724.58
F	187+38.76	-9.25	724.53	724.57
G	187+48.76	-9.25	724.51	724.54
H	187+58.76	-9.25	724.49	724.50
℄ Pier 2	187+68.76	-9.25	724.46	724.46
I	187+78.76	-9.25	724.44	724.44
J	187+88.76	-9.25	724.41	724.42
K	187+98.76	-9.25	724.39	724.40
℄ Brg. E. Abut.	188+11.76	-9.25	724.35	724.35
Bk. E. Abut.	188+13.61	-9.25	724.34	724.34

Beam 9

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+64.91	-1.75	724.74	724.74
℄ Brg. W. Abut.	186+66.75	-1.75	724.74	724.74
A	186+76.75	-1.75	724.73	724.74
B	186+86.75	-1.75	724.72	724.73
C	186+96.75	-1.75	724.71	724.71
℄ Pier 1	187+09.75	-1.75	724.69	724.69
D	187+19.75	-1.75	724.67	724.69
E	187+29.75	-1.75	724.66	724.69
F	187+39.75	-1.75	724.64	724.68
G	187+49.75	-1.75	724.62	724.65
H	187+59.75	-1.75	724.60	724.61
℄ Pier 2	187+69.75	-1.75	724.57	724.57
I	187+79.75	-1.75	724.55	724.55
J	187+89.75	-1.75	724.52	724.53
K	187+99.75	-1.75	724.49	724.51
℄ Brg. E. Abut.	188+12.75	-1.75	724.46	724.46
Bk. E. Abut.	188+14.60	-1.75	724.45	724.45

℄ F.A.I 74 (E.B.) & P.G.L

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+65.13	0.00	724.77	724.77
℄ Brg. W. Abut.	186+66.97	0.00	724.77	724.77
A	186+76.97	0.00	724.76	724.77
B	186+86.97	0.00	724.75	724.76
C	186+96.97	0.00	724.74	724.74
℄ Pier 1	187+09.97	0.00	724.72	724.72
D	187+19.97	0.00	724.70	724.72
E	187+29.97	0.00	724.68	724.72
F	187+39.97	0.00	724.66	724.71
G	187+49.97	0.00	724.64	724.68
H	187+59.97	0.00	724.62	724.64
℄ Pier 2	187+69.97	0.00	724.60	724.60
I	187+79.97	0.00	724.57	724.58
J	187+89.97	0.00	724.55	724.56
K	187+99.97	0.00	724.52	724.53
℄ Brg. E. Abut.	188+12.97	0.00	724.48	724.48
Bk. E. Abut.	188+14.82	0.00	724.48	724.48

Beam 10

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+65.89	5.75	724.68	724.68
℄ Brg. W. Abut.	186+67.73	5.75	724.68	724.68
A	186+77.73	5.75	724.67	724.68
B	186+87.73	5.75	724.66	724.67
C	186+97.73	5.75	724.65	724.65
℄ Pier 1	187+10.73	5.75	724.63	724.63
D	187+20.73	5.75	724.61	724.63
E	187+30.73	5.75	724.59	724.63
F	187+40.73	5.75	724.58	724.62
G	187+50.73	5.75	724.55	724.59
H	187+60.73	5.75	724.53	724.55
℄ Pier 2	187+70.73	5.75	724.51	724.51
I	187+80.73	5.75	724.49	724.49
J	187+90.73	5.75	724.46	724.47
K	188+00.73	5.75	724.43	724.45
℄ Brg. E. Abut.	188+13.73	5.75	724.39	724.39
Bk. E. Abut.	188+15.58	5.75	724.39	724.39

Beam 11

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+66.88	13.25	724.56	724.56
℄ Brg. W. Abut.	186+68.72	13.25	724.56	724.56
A	186+78.72	13.25	724.55	724.56
B	186+88.72	13.25	724.54	724.55
C	186+98.72	13.25	724.53	724.53
℄ Pier 1	187+11.72	13.25	724.51	724.51
D	187+21.72	13.25	724.49	724.51
E	187+31.72	13.25	724.47	724.51
F	187+41.72	13.25	724.46	724.50
G	187+51.72	13.25	724.43	724.47
H	187+61.72	13.25	724.41	724.43
℄ Pier 2	187+71.72	13.25	724.39	724.39
I	187+81.72	13.25	724.36	724.37
J	187+91.72	13.25	724.34	724.35
K	188+01.72	13.25	724.31	724.32
℄ Brg. E. Abut.	188+14.72	13.25	724.27	724.27
Bk. E. Abut.	188+16.57	13.25	724.27	724.27

Beam 12

Location	Station	Offset	Theoretical Grade Elevations	Theoretical Grade Elev. Adj. For Dead Load Deflection
Bk. W. Abut.	186+67.87	20.75	724.41	724.41
℄ Brg. W. Abut.	186+69.71	20.75	724.41	724.41
A	186+79.71	20.75	724.40	724.41
B	186+89.71	20.75	724.39	724.40
C	186+99.71	20.75	724.38	724.38
℄ Pier 1	187+12.71	20.75	724.36	724.36
D	187+22.71	20.75	724.34	724.36
E	187+32.71	20.75	724.32	724.36
F	187+42.71	20.75	724.30	724.34
G	187+52.71	20.75	724.28	724.32
H	187+62.71	20.75	724.26	724.28
℄ Pier 2	187+72.71	20.75	724.24	724.24
I	187+82.71	20.75	724.21	724.21
J	187+92.71	20.75	724.19	724.20
K	188+02.71	20.75	724.16	724.17
℄ Brg. E. Abut.	188+15.71	20.75	724.12	724.12
Bk. E. Abut.	188+17.56	20.75	724.12	724.12

MODEL: 68D84-066
FILE NAME: z:\c V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-007-DK ELEV.dgn
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Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

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	CHECKED - MAH	REVISED - _____	
PLOT SCALE = _____	DRAWN - DJC	REVISED - _____	
PLOT DATE = 8/16/2024	CHECKED - MAH	REVISED - _____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF SLAB ELEVATIONS
STRUCTURE NO. 072-0259 (E.B.)
SHEET 7 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-3HVBJBR	PEORIA	158	76
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+20.87	-22.00	724.42
A1	186+30.87	-22.00	724.41
A2	186+40.87	-22.00	724.41
E. End W. App.	186+50.87	-22.00	724.40

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+22.19	-12.00	724.62
A1	186+32.19	-12.00	724.61
A2	186+42.19	-12.00	724.61
E. End W. App.	186+52.19	-12.00	724.60

℄ & P.G.L. WB LANES

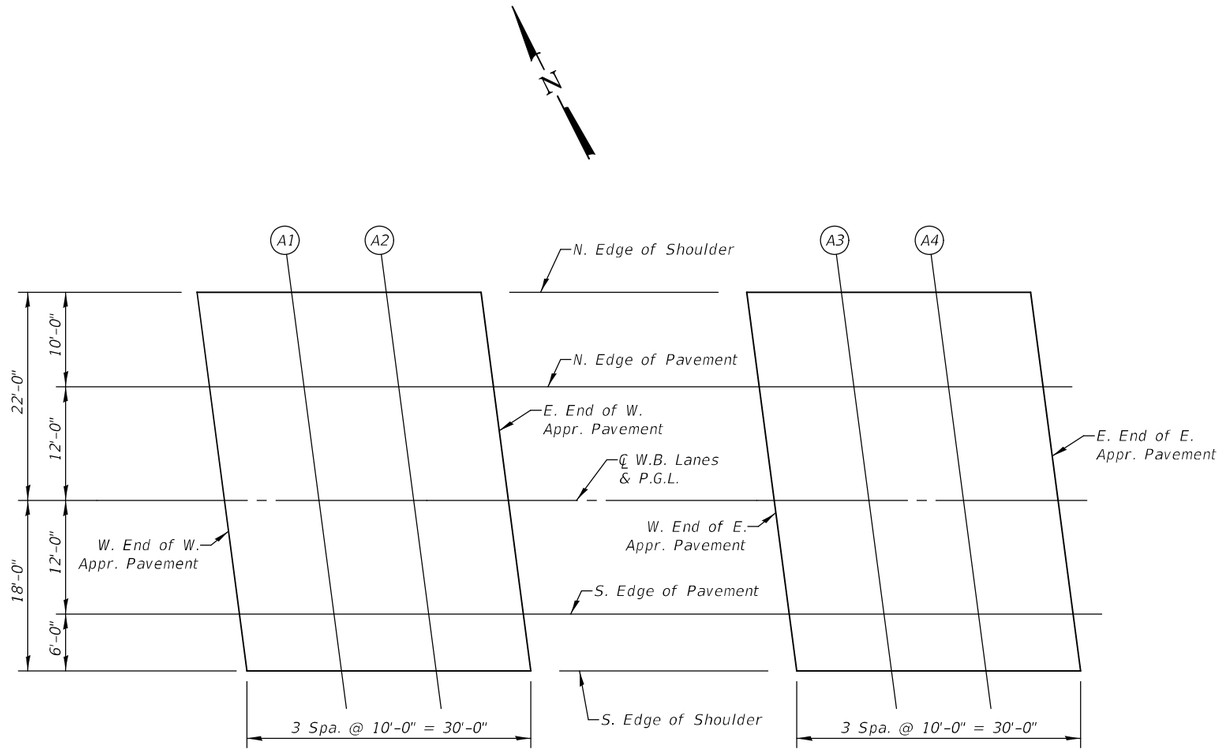
Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+23.77	0.00	724.80
A1	186+33.77	0.00	724.79
A2	186+43.77	0.00	724.79
E. End W. App.	186+53.77	0.00	724.78

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+25.35	12.00	724.62
A1	186+35.35	12.00	724.61
A2	186+45.35	12.00	724.61
E. End W. App.	186+55.35	12.00	724.60

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+26.14	18.00	724.50
A1	186+36.14	18.00	724.49
A2	186+46.14	18.00	724.49
E. End W. App.	186+56.14	18.00	724.48



PLAN
(S.N. 072-0258)

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	187+98.54	-22.00	724.15
A3	188+08.54	-22.00	724.12
A4	188+18.54	-22.00	724.09
E. End E. App.	188+28.54	-22.00	724.06

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E.App.	187+99.86	-12.00	724.34
A3	188+09.86	-12.00	724.31
A4	188+19.86	-12.00	724.28
E. End E. App.	188+29.86	-12.00	724.25

℄ & P.G.L. WB LANES

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+01.44	0.00	724.52
A3	188+11.44	0.00	724.49
A4	188+21.44	0.00	724.46
E. End E. App.	188+31.44	0.00	724.43

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+03.02	12.00	724.33
A3	188+13.02	12.00	724.30
A4	188+23.02	12.00	724.27
E. End E. App.	188+33.02	12.00	724.24

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+03.81	18.00	724.21
A3	188+13.81	18.00	724.18
A4	188+23.81	18.00	724.15
E. End E. App.	188+33.81	18.00	724.12

MODEL: 68D84-067
FILE NAME: Z:\V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-008-WB AP ELEV.dgn
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Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____	DESIGNED - DJC	REVISED - ____	
	CHECKED - MAH	REVISED - ____	
PLOT SCALE = ____	DRAWN - DJC	REVISED - ____	
PLOT DATE = 8/16/2024	CHECKED - ESG	REVISED - ____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-0258 (W.B.)
SHEET 8 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	77
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+33.77	-18.00	724.49
B1	186+43.77	-18.00	724.49
B2	186+53.77	-18.00	724.48
E. End W. App.	186+63.77	-18.00	724.47

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+34.56	-12.00	724.61
B1	186+44.56	-12.00	724.61
B2	186+54.56	-12.00	724.60
E. End W. App.	186+64.56	-12.00	724.59

℄ & P.G.L. EB LANES

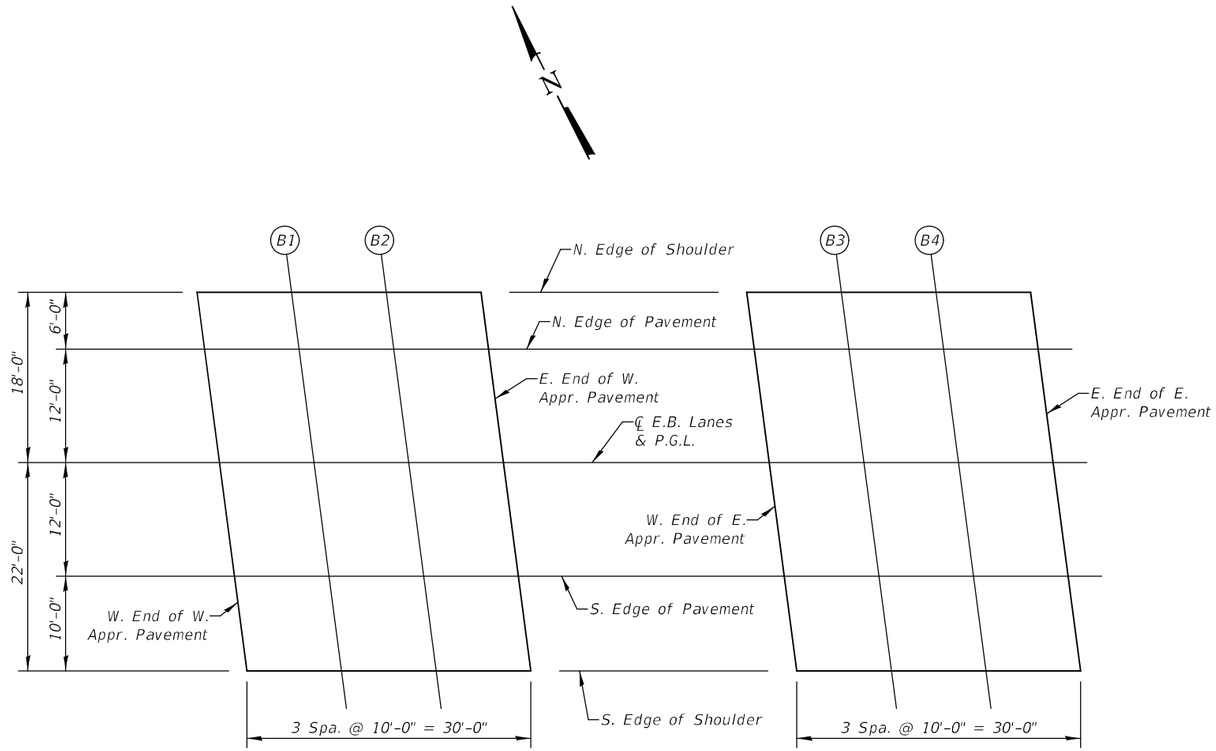
Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+36.14	0.00	724.79
B1	186+46.14	0.00	724.79
B2	186+56.14	0.00	724.78
E. End W. App.	186+66.14	0.00	724.77

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+37.72	12.00	724.61
B1	186+47.72	12.00	724.60
B2	186+57.72	12.00	724.60
E. End W. App.	186+67.72	12.00	724.59

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End W. App.	186+39.04	22.00	724.41
B1	186+49.04	22.00	724.40
B2	186+59.04	22.00	724.40
E. End W. App.	186+69.04	22.00	724.39



PLAN
(S.N. 072-0259)

NORTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+11.44	-18.00	724.19
B3	188+21.44	-18.00	724.16
B4	188+31.44	-18.00	724.13
E. End E. App.	188+41.44	-18.00	724.09

NORTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+12.23	-12.00	724.31
B3	188+22.23	-12.00	724.28
B4	188+32.23	-12.00	724.24
E. End E. App.	188+42.23	-12.00	724.21

℄ & P.G.L. EB LANES

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+13.81	0.00	724.48
B3	188+23.81	0.00	724.45
B4	188+33.81	0.00	724.42
E. End E. App.	188+43.81	0.00	724.39

SOUTH EDGE OF PAVEMENT

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+15.39	12.00	724.30
B3	188+25.39	12.00	724.27
B4	188+35.39	12.00	724.23
E. End E. App.	188+45.39	12.00	724.20

SOUTH EDGE OF SHOULDER

Location	Station	Offset	Theoretical Grade Elevations
W. End E. App.	188+16.71	22.00	724.09
B3	188+26.71	22.00	724.06
B4	188+36.71	22.00	724.03
E. End E. App.	188+46.71	22.00	724.00

MODEL: 68D84-068
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-009-EB AP ELEV.dgn
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IL. Design Firm No. 184-001939

USER NAME = _____	DESIGNED - DJC	REVISED - _____
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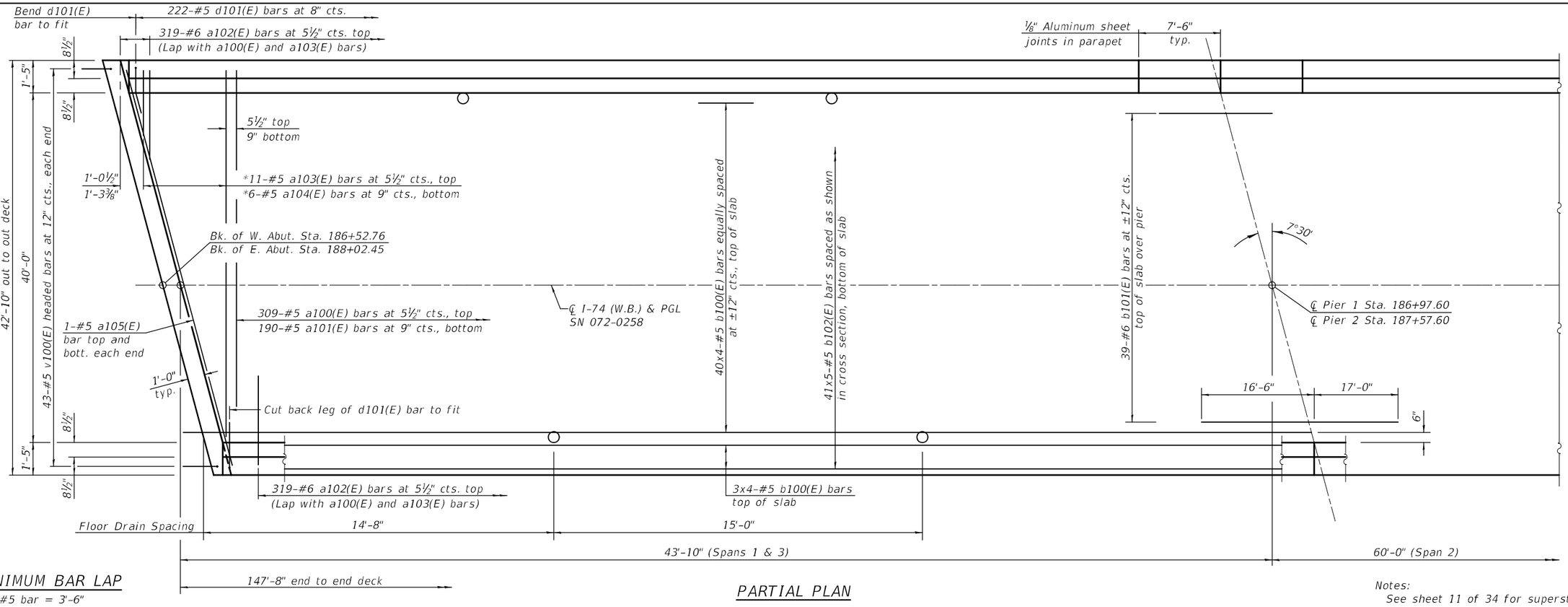
PLOT SCALE = _____	DRAWN - DJC	REVISED - _____
PLOT DATE = 8/16/2024	CHECKED - ESG	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

TOP OF APPROACH SLAB ELEVATIONS
STRUCTURE NO. 072-0259 (E.B.)
SHEET 9 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	78
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

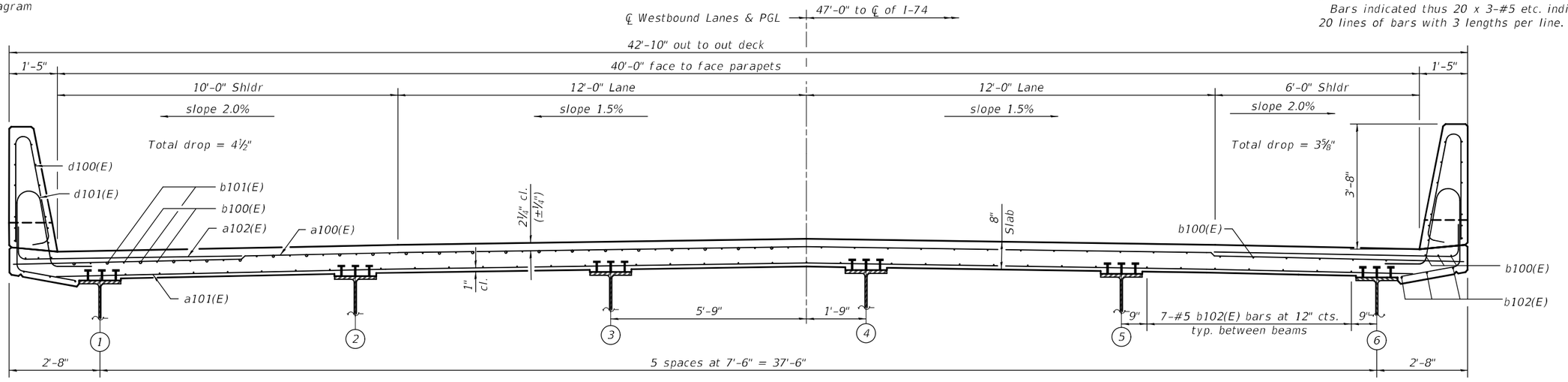


MINIMUM BAR LAP

#5 bar = 3'-6"

* See Field Cutting Diagram on sheet 11 of 34.

PARTIAL PLAN



NEAR PIER NEAR MIDSPAN

CROSS SECTION

(Looking East)

Notes:
See sheet 11 of 34 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.

MODEL: 68D84-069
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-010-WB DK PLAN.dgn
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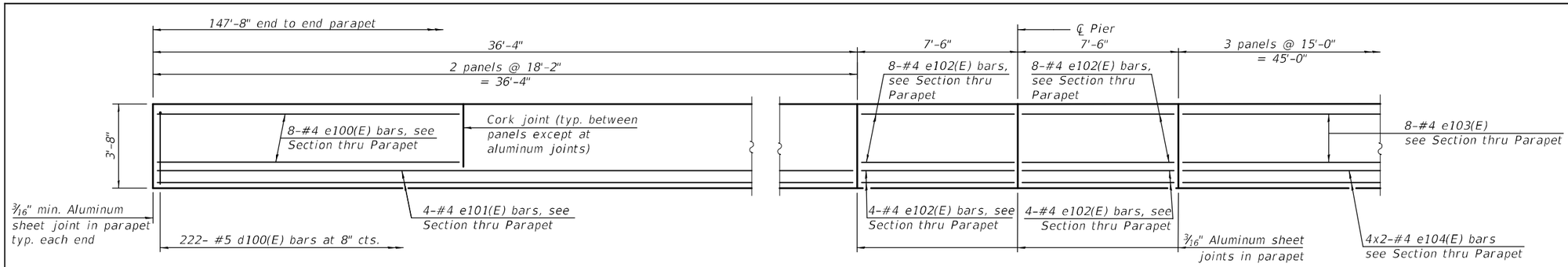
PLOT DATE = 8/16/2024	CHECKED - MAH	REVISED - ____

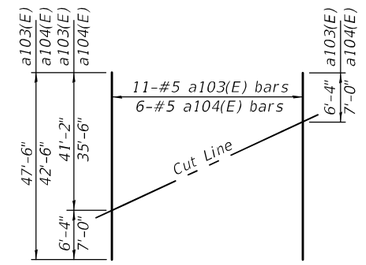
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE
STRUCTURE NO. 072-0258 (W.B.)
SHEET 10 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	79
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

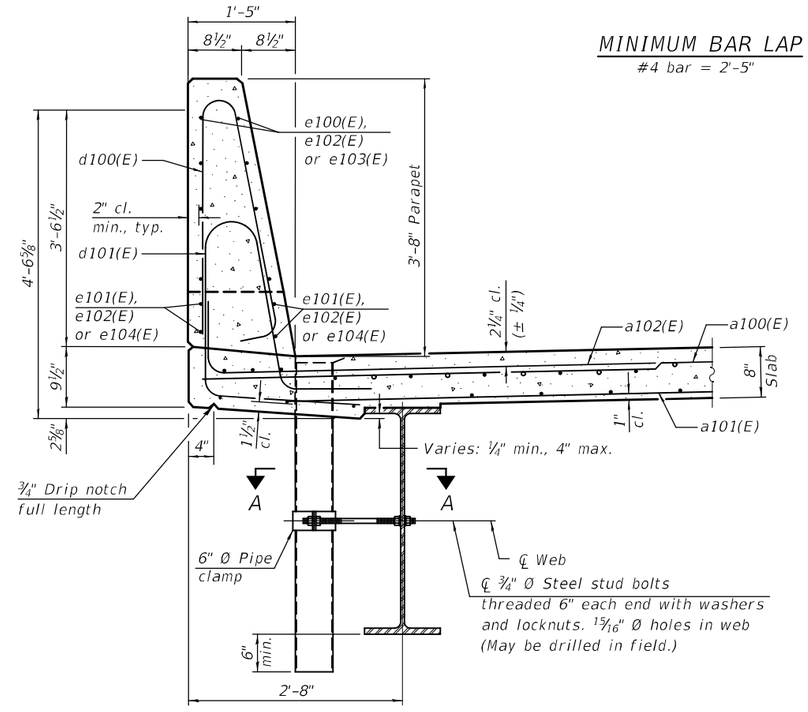


INSIDE ELEVATION OF PARAPET



FIELD CUTTING DIAGRAM

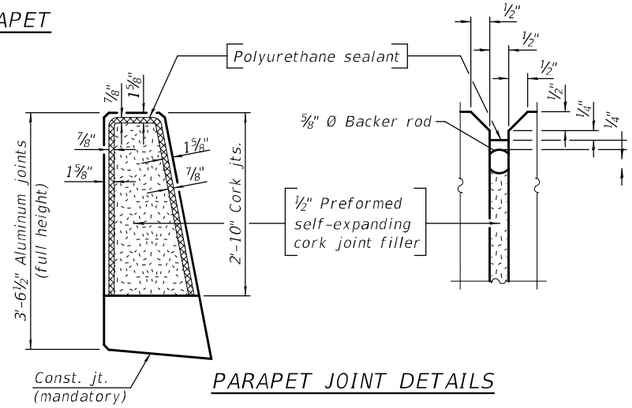
Order a103(E) and a104(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



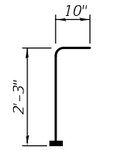
SECTION THRU PARAPET

MINIMUM BAR LAP

#4 bar = 2'-5"

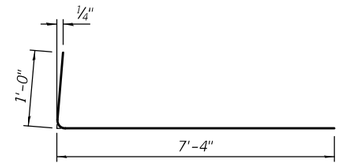


PARAPET JOINT DETAILS

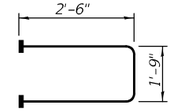


BAR v100(E)

(Headed. 86-#5 Bar terminators)



BAR a102(E)



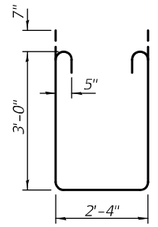
BAR s110(E)

(Headed. 164-#5 Bar terminators)

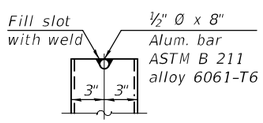
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a100(E)	309	#5	42'-6"	
a101(E)	190	#5	40'-0"	
a102(E)	642	#6	8'-4"	
a103(E)	11	#5	47'-6"	
a104(E)	6	#5	42'-6"	
a105(E)	4	#5	42'-10"	
b100(E)	184	#5	39'-6"	
b101(E)	78	#6	33'-6"	
b102(E)	205	#5	32'-4"	
d100(E)	444	#5	6'-11"	
d101(E)	444	#5	8'-0"	
e100(E)	64	#4	17'-10"	
e101(E)	16	#4	36'-0"	
e102(E)	96	#4	7'-2"	
e103(E)	48	#4	14'-8"	
e104(E)	16	#4	23'-7"	
m110(E)	8	#6	42'-10"	
m111(E)	30	#6	7'-2"	
m112(E)	12	#6	2'-4"	
s110(E)	82	#5	6'-9"	
s111(E)	82	#5	9'-6"	
v100(E)	86	#5	3'-1"	
Concrete Superstructure		Cu. Yds.	229.9	
Bridge Deck Grooving		Sq. Yds.	624	
Protective Coat		Sq. Yds.	802	
Reinforcement Bars, Epoxy Coated		Lbs.	60,860	
Name Plates		Each	1	

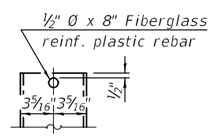
Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



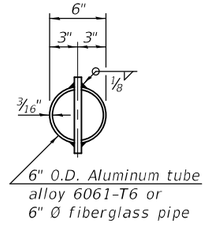
BAR s111(E)



ALUMINUM TUBE

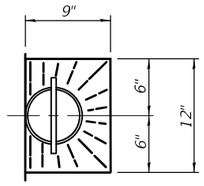


FIBERGLASS PIPE

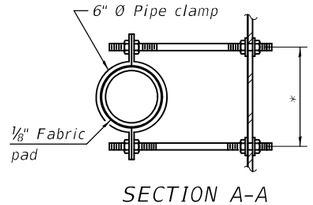


TOP PLAN

(Showing aluminum tube)



TOP PLAN



SECTION A-A

*Dimension as required by pipe clamp

Notes:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.

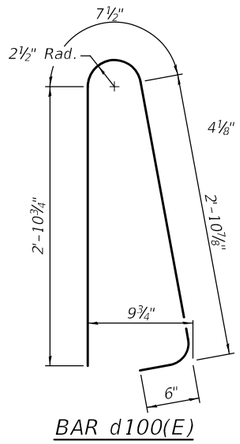
The top portion of aluminum floor drains shall be coated with 5 mils of either bitumen paint or epoxy paint to minimize reaction with wet concrete.

The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

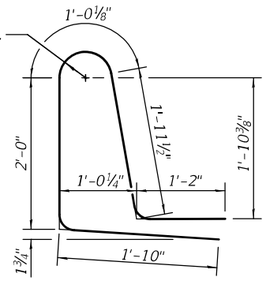
The 3/16" min. aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated with 5 mils of either bitumen paint or epoxy paint to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

Bar Terminators, paid for separately. See Total Bill of Material.



BAR d100(E)



BAR d101(E)

MODEL: 68D84-070
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-011-WB DK MISC DETAILS.dgn
8/16/2024 1:30:24 PM

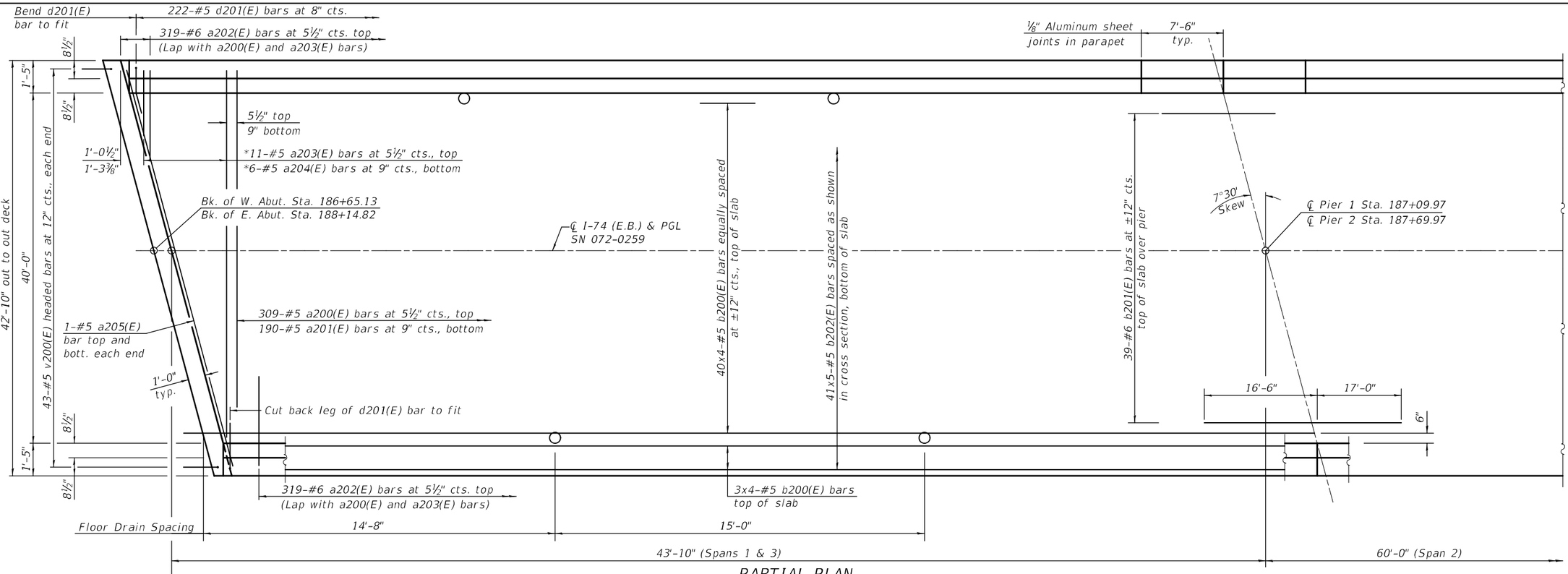
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____ | DESIGNED - DJC | REVISED - _____
PLOT SCALE = _____ | CHECKED - MAH | REVISED - _____
PLOT DATE = 8/16/2024 | DRAWN - DJC | REVISED - _____
CHECKED - MAH | REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 072-0258 (W.B.)
SHEET 11 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	80
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



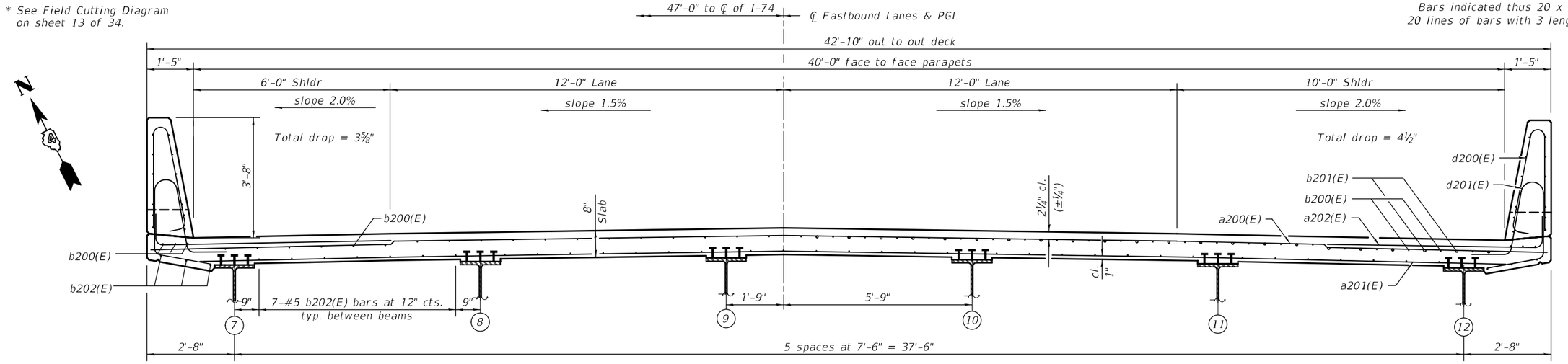
PARTIAL PLAN

MINIMUM BAR LAP

#5 bar = 3'-6"

* See Field Cutting Diagram on sheet 13 of 34.

Notes:
See sheet 13 of 34 for superstructure details and Bill of Material.
Bars indicated thus 20 x 3-#5 etc. indicates 20 lines of bars with 3 lengths per line.



NEAR MIDSPAN NEAR PIER

CROSS SECTION

(Looking East)

VEENSTRA & KIMM INC. Springfield, IL. Phone: (217)544-8033 IL. Design Firm No. 184-001939	USER NAME = _____	DESIGNED - DJC	REVISED - _____	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**	**SUPERSTRUCTURE STRUCTURE NO. 072-0259 (E.B.)**
		CHECKED - VRR	REVISED - _____		
	PLOT SCALE = _____	DRAWN - DJC	REVISED - _____		SHEET 12 OF 34 SHEETS
	PLOT DATE = 8/16/2024	CHECKED - VRR	REVISED - _____		

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	81
			CONTRACT NO. 68D84	
		ILLINOIS	FED. AID PROJECT	

MODEL: 68D84-071
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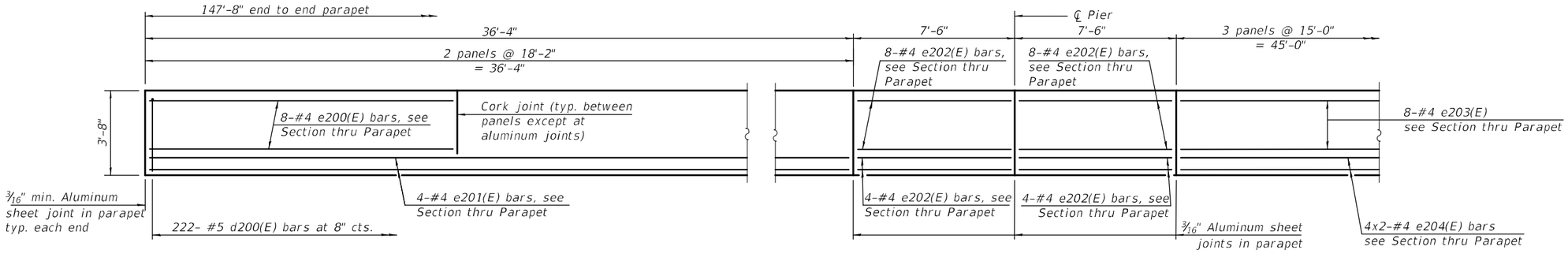
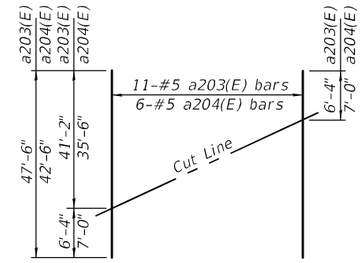
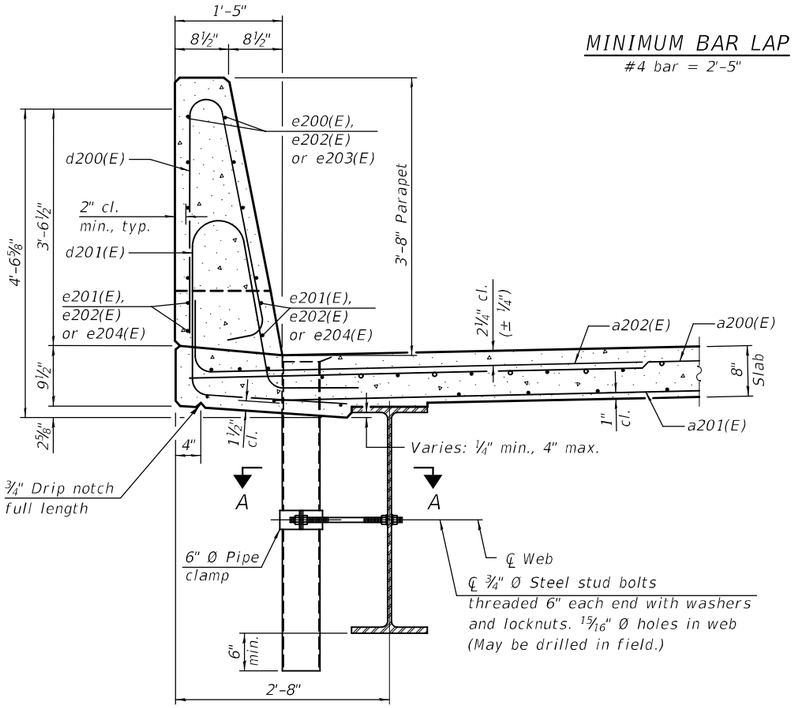


INSIDE ELEVATION OF PARAPET



FIELD CUTTING DIAGRAM

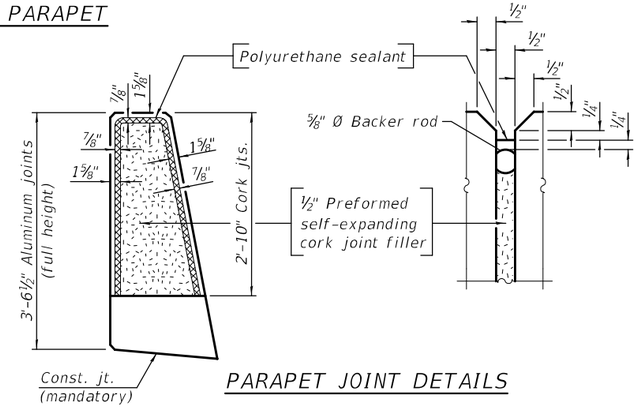
Order a203(E) and a204(E) bars full length. Cut as shown and use remainder of bars in opposite end of deck.



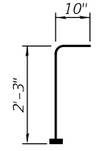
SECTION THRU PARAPET

MINIMUM BAR LAP

#4 bar = 2'-5"

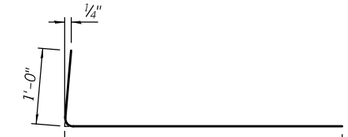


PARAPET JOINT DETAILS

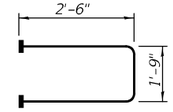


BAR v200(E)

(Headed. 86-#5 Bar terminators)



BAR a202(E)



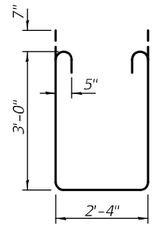
BAR s210(E)

(Headed. 164-#5 Bar terminators)

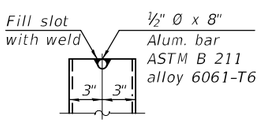
SUPERSTRUCTURE BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a200(E)	309	#5	42'-6"	
a201(E)	190	#5	40'-0"	
a202(E)	642	#6	8'-4"	
a203(E)	11	#5	47'-6"	
a204(E)	6	#5	42'-6"	
a205(E)	4	#5	42'-10"	
b200(E)	184	#5	39'-6"	
b201(E)	78	#6	33'-6"	
b202(E)	205	#5	32'-4"	
d200(E)	444	#5	6'-11"	
d201(E)	444	#5	8'-0"	
e200(E)	64	#4	17'-10"	
e201(E)	16	#4	36'-0"	
e202(E)	96	#4	7'-2"	
e203(E)	48	#4	14'-8"	
e204(E)	16	#4	23'-7"	
m210(E)	8	#6	42'-10"	
m211(E)	30	#6	7'-2"	
m212(E)	12	#6	2'-4"	
s210(E)	82	#5	6'-9"	
s211(E)	82	#5	9'-6"	
v200(E)	86	#5	3'-1"	
Concrete Superstructure		Cu. Yds.	229.9	
Bridge Deck Grooving		Sq. Yds.	624	
Protective Coat		Sq. Yds.	802	
Reinforcement Bars, Epoxy Coated		Lbs.	60,860	
Name Plates		Each	1	

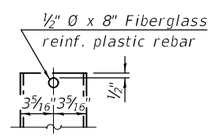
Bars indicated thus 1 x 2-#4 etc. indicates 1 line of bars with 2 lengths per line.



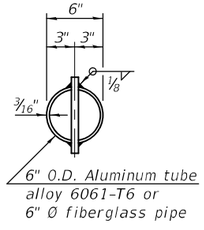
BAR s211(E)



ALUMINUM TUBE

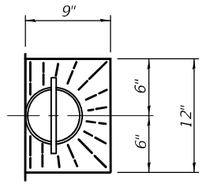


FIBERGLASS PIPE

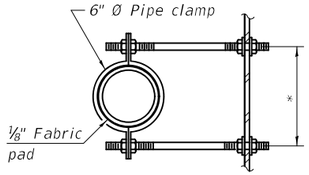


TOP PLAN

(Showing aluminum tube)



TOP PLAN



SECTION A-A

*Dimension as required by pipe clamp

Notes:

Fiberglass pipe shall conform to ASTM D2996, with short-time rupture strength hoop tensile stress of 30,000 p.s.i. minimum.

The exterior surfaces of the floor drains shall be painted according to Article 506 with the finish coat as specified. The exterior surfaces of the drains shall be cleaned according to the Society of Protective Coating's Spec. SSPC-SP1 prior to painting.

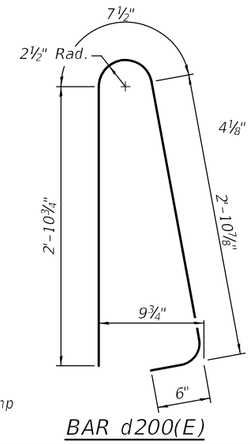
The top portion of aluminum floor drains shall be coated with 5 mils of either bitumen paint or epoxy paint to minimize reaction with wet concrete.

The clamping device shall be galvanized according to AASHTO M 232. Cost of clamping device included with Floor Drains.

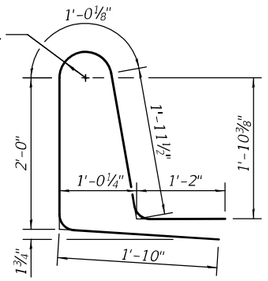
The 3/16" min. aluminum sheet shall be ASTM B 209 alloy 3003-H14 and coated with 5 mils of either bitumen paint or epoxy paint to minimize reaction with wet concrete. Cost included with Concrete Superstructure.

The polyurethane sealant shall be according to Article 1050.04 of the Std. Spec. and the color shall be gray.

Bar Terminators, paid for separately. See Total Bill of Material.



BAR d200(E)



BAR d201(E)

MODEL: 68D84-072
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VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____ | DESIGNED - DJC | REVISED - _____
PLOT SCALE = _____ | CHECKED - VVR | REVISED - _____
PLOT DATE = 8/16/2024 | DRAWN - DJC | REVISED - _____
CHECKED - VVR | REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SUPERSTRUCTURE DETAILS
STRUCTURE NO. 072-0259 (E.B.)
SHEET 13 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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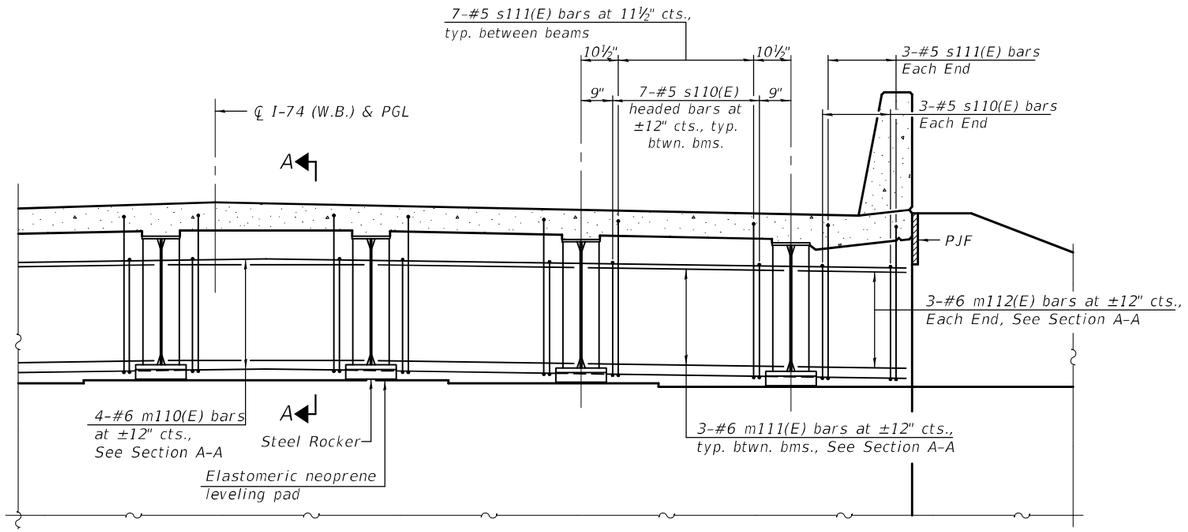
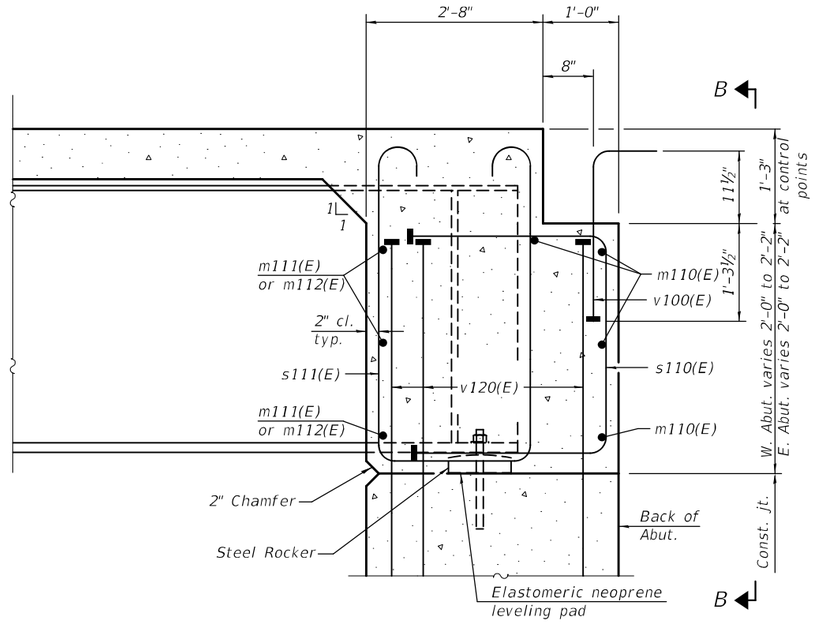
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



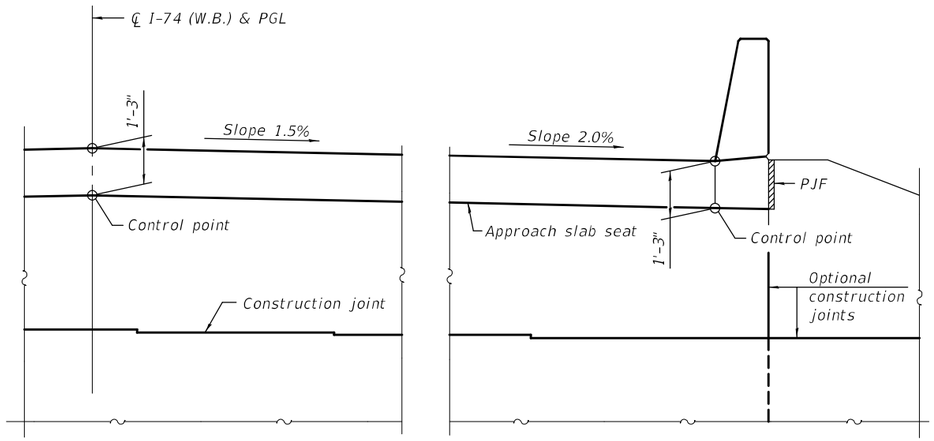
DIAPHRAGM AT ABUTMENT

Looking West
(West Abutment shown, East Abutment similar)

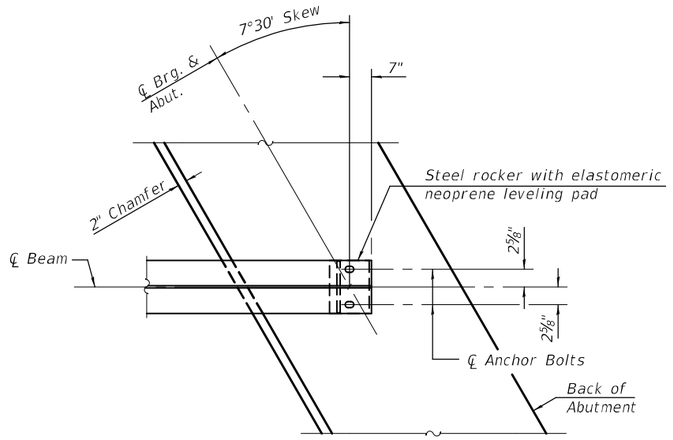


SECTION A-A

(@ Rt. ∠'s)



VIEW B-B



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:

See sheet 11 of 34 for superstructure details and Bill of Material.

See sheet 16 of 34 for PJF details.

The approach slab seat shall have a constant slope determined from the control points shown.

The s110(E) and s111(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MODEL: 68D84-073
FILE NAME: z:\v and k Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-014-WB DIAPHRAGM.dgn
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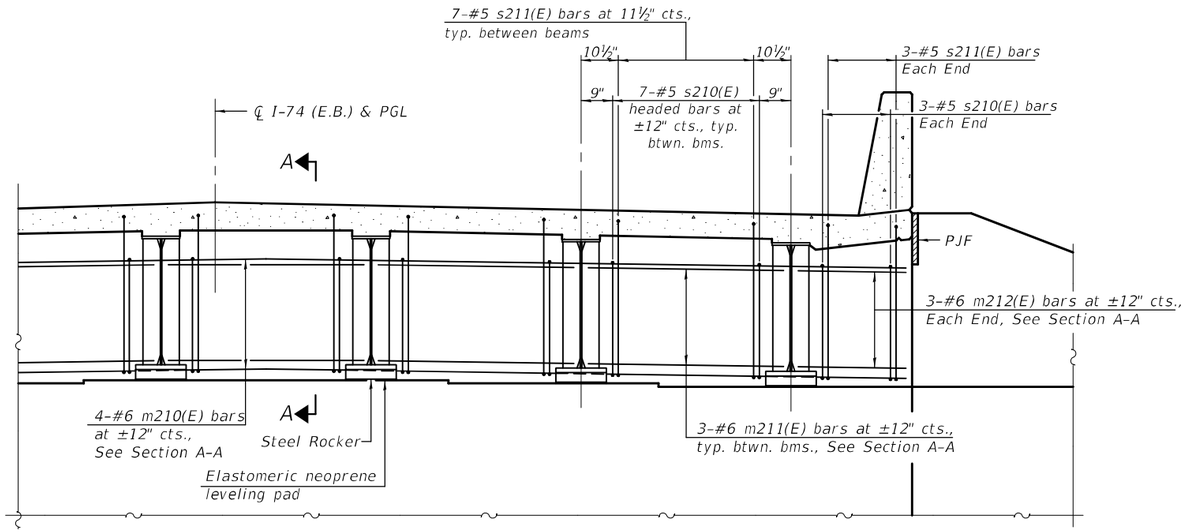
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____	DESIGNED - DJC	REVISED - _____	
	CHECKED - VRR	REVISED - _____	
PLOT SCALE = _____	DRAWN - DJC	REVISED - _____	
PLOT DATE = 8/16/2024	CHECKED - MAH	REVISED - _____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

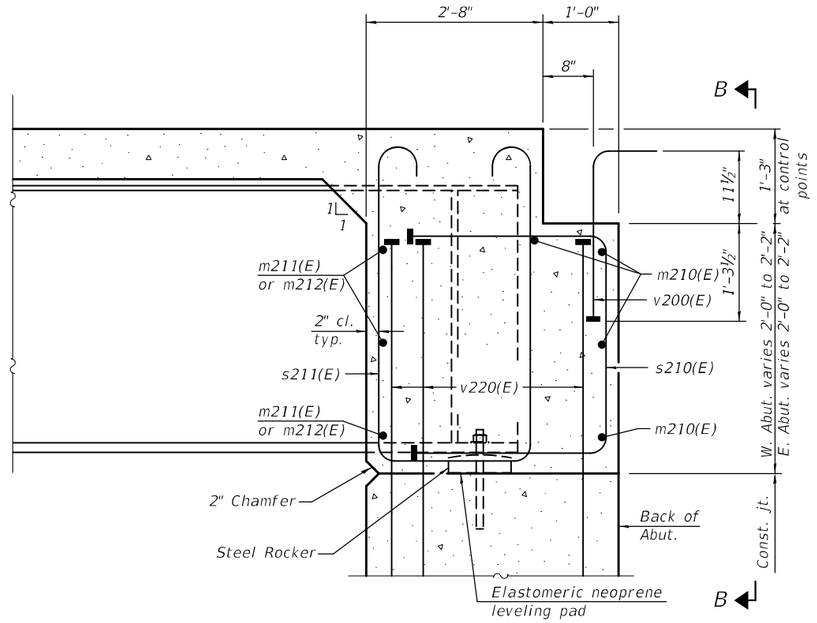
DIAPHRAGM DETAILS
STRUCTURE NO. 072-0258 (W.B.)
SHEET 14 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-3HVBJBR	PEORIA	158	83
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



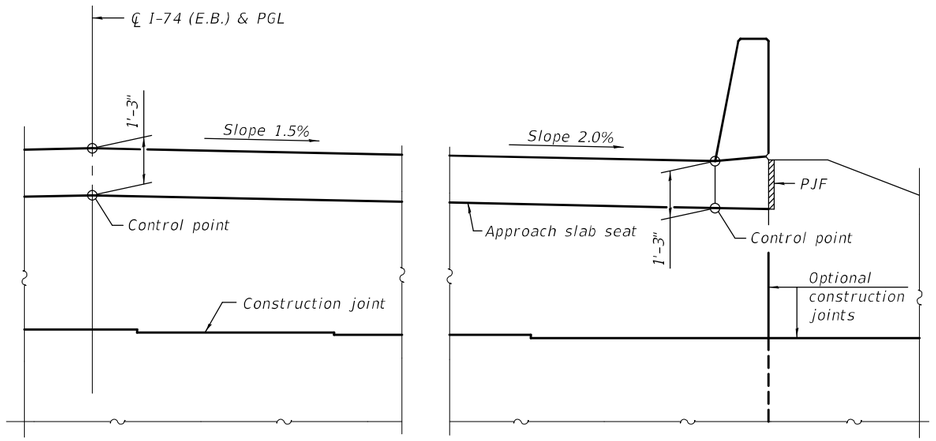
DIAPHRAGM AT ABUTMENT

Looking East
(East Abutment shown, West Abutment similar)

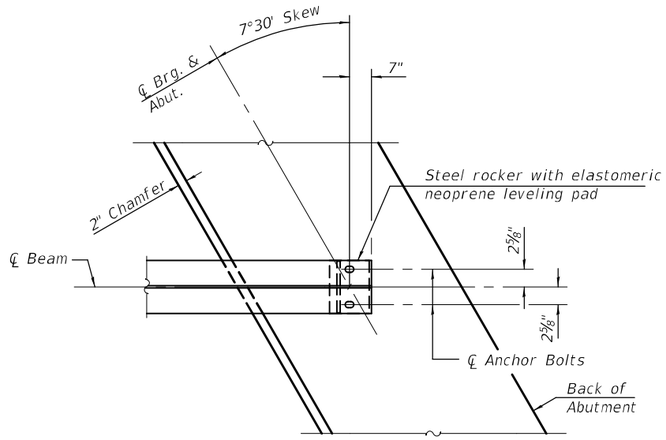


SECTION A-A

(@ Rt. ∠'s)



VIEW B-B



PLAN AT ABUTMENT

(Showing bottom flange of beam)

Notes:
See sheet 13 of 34 for superstructure details and Bill of Material.
See sheet 18 of 34 for PJF details.
The approach slab seat shall have a constant slope determined from the control points shown.
The s210(E) and s211(E) bars shall be placed parallel to the beams. Spacing for these bars shall be at right angles to the beams.

MODEL: 68D84-074
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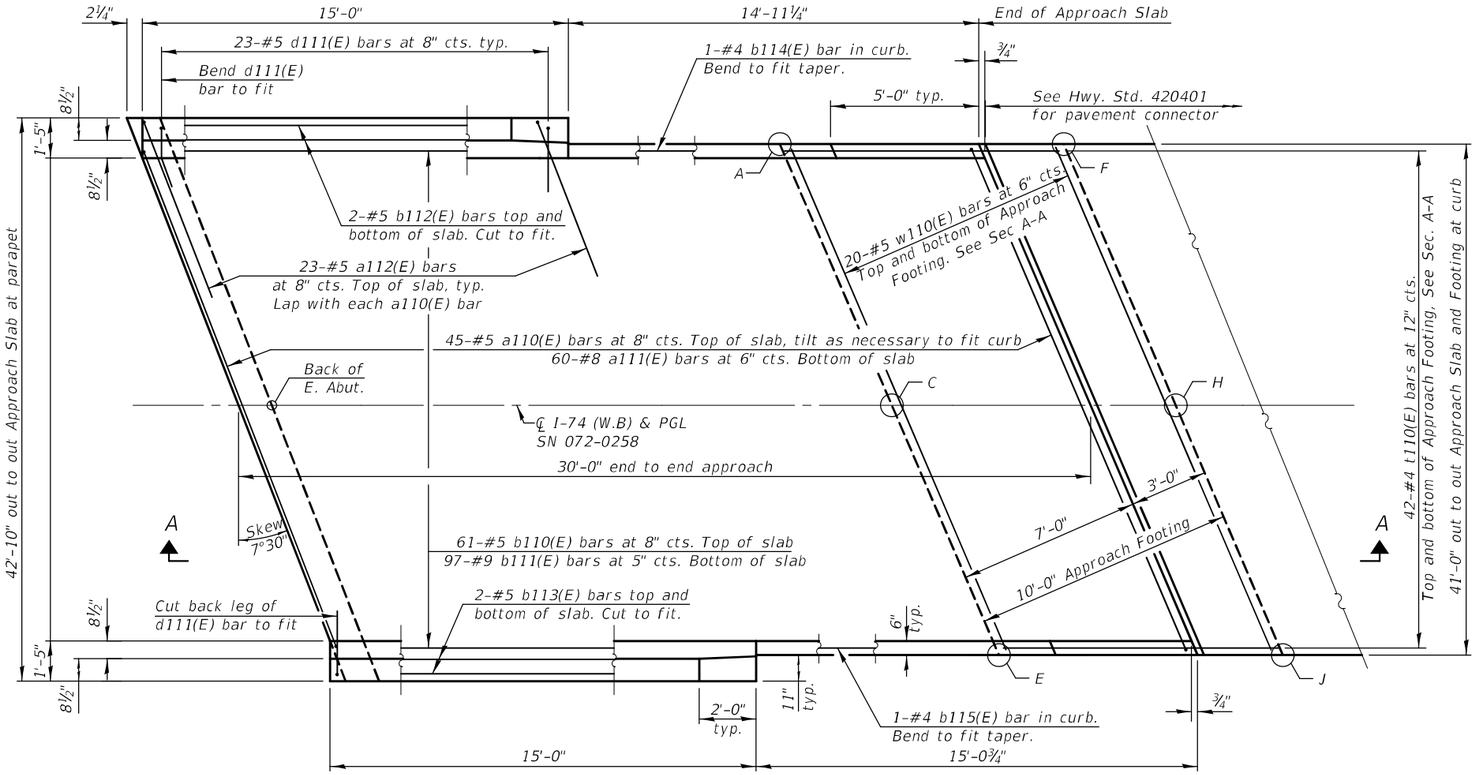
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____	DESIGNED - DJC	REVISED - _____	
	CHECKED - VRR	REVISED - _____	
PLOT SCALE = _____	DRAWN - DJC	REVISED - _____	
PLOT DATE = 8/16/2024	CHECKED - MAH	REVISED - _____	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

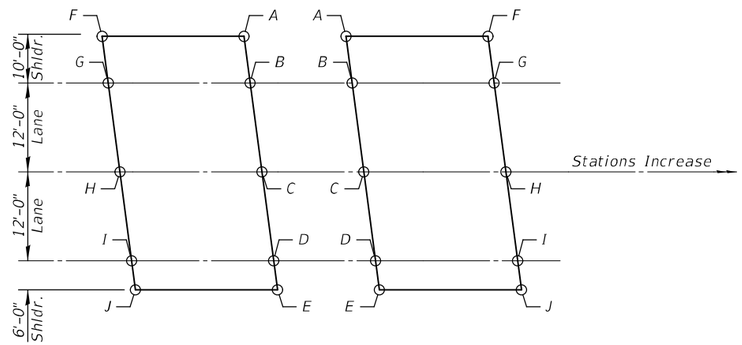
DIAPHRAGM DETAILS
STRUCTURE NO. 072-0259 (E.B.)
SHEET 15 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	172-3HVBJBR	PEORIA	158	84
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



PLAN

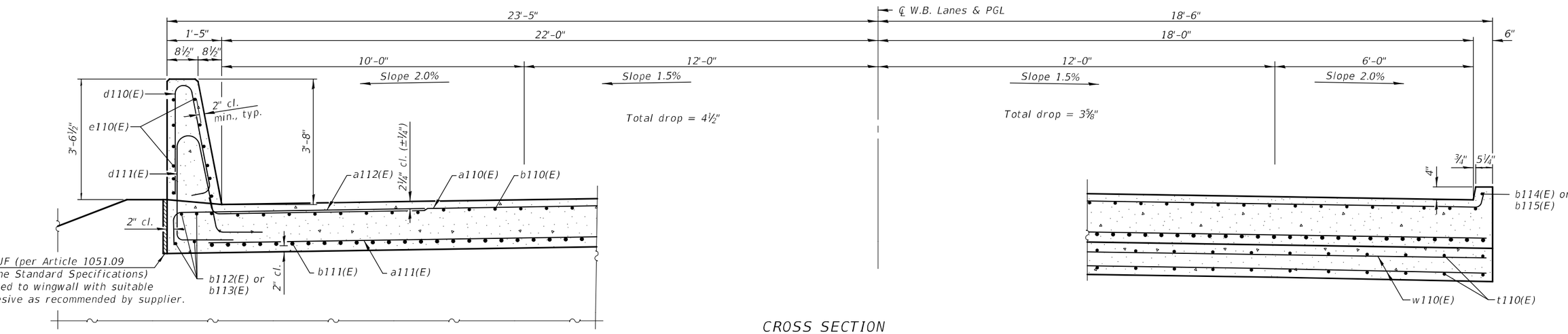
(East approach slab shown; West approach slab similar by mirror image)



TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	West Approach		East Approach	
Point	Top	Bottom	Top	Bottom
A	723.17	722.33	722.83	721.99
B	723.36	722.53	723.02	722.19
C	723.54	722.71	723.20	722.36
D	723.36	722.53	723.01	722.18
E	723.24	722.41	722.89	722.06
F	723.17	722.33	722.80	721.96
G	723.37	722.53	722.99	722.16
H	723.55	722.71	723.17	722.33
I	723.37	722.53	722.98	722.15
J	723.25	722.41	722.86	722.02

NEAR ABUTMENT



CROSS SECTION

(Looking East)

AT APPROACH FOOTING

MODEL: 68D84-075
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-016-WB AP PLAN.dgn
8/16/2024 1:30:27 PM

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____
PLOT SCALE = _____
PLOT DATE = 8/16/2024

DESIGNED - DJC
CHECKED - MAH
DRAWN - DJC
CHECKED - ESG

REVISED - _____
REVISED - _____
REVISED - _____
REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB PLAN (WB)
STRUCTURE NO. 072-0258 (W.B.)
SHEET 16 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
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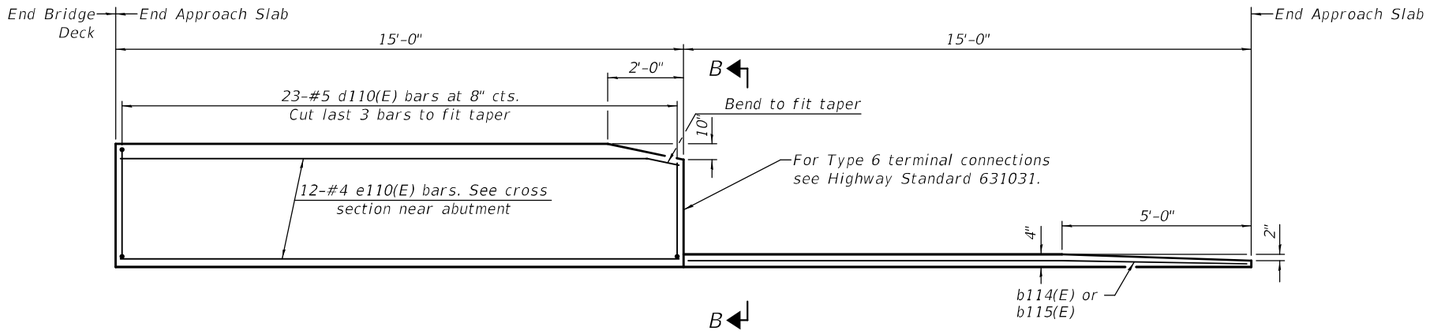
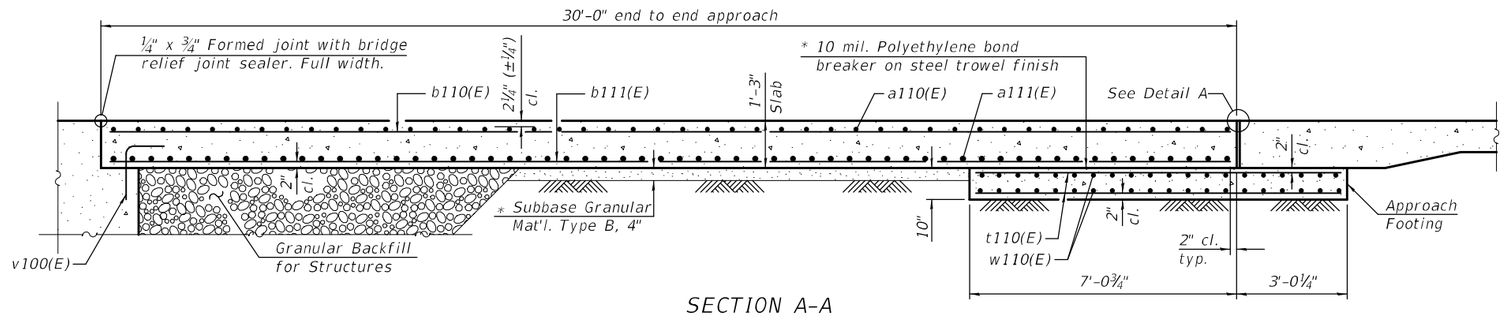
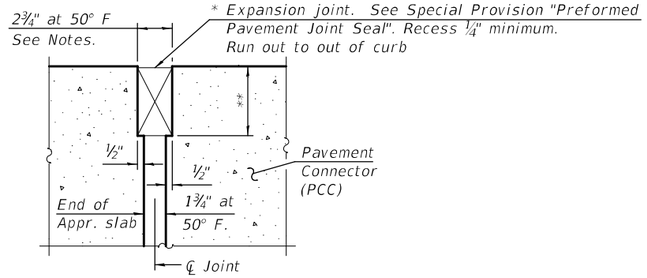
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



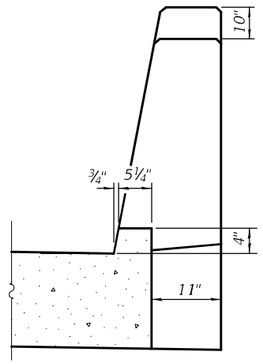
INSIDE ELEVATION OF PARAPET AND CURB



SECTION A-A



DETAIL A



VIEW B-B

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

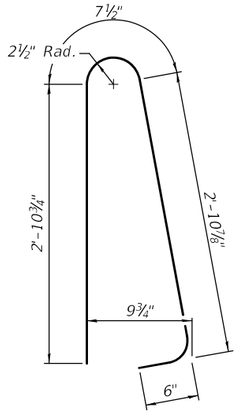
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

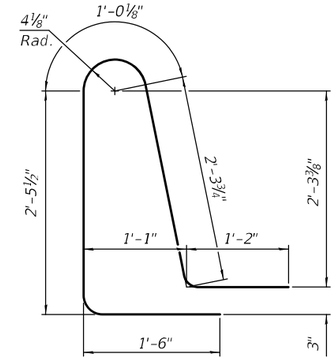
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 34.



BAR d110(E)



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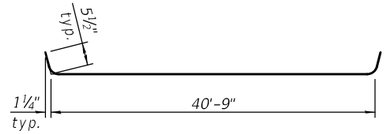
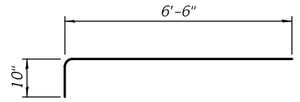


BAR a110(E)



BAR a112(E)

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a110(E)	90	#5	41'-8"	
a111(E)	120	#8	41'-0"	
a112(E)	92	#5	7'-4"	
b110(E)	122	#5	29'-8"	
b111(E)	194	#9	29'-8"	
b112(E)	8	#5	14'-10"	
b113(E)	8	#5	14'-6"	
b114(E)	2	#4	14'-7"	
b115(E)	2	#4	14'-9"	
d110(E)	92	#5	6'-11"	
d111(E)	92	#5	8'-6"	
e110(E)	48	#4	14'-8"	
t110(E)	168	#4	9'-9"	
w110(E)	80	#5	41'-0"	
Concrete Superstructure			Cu. Yd.	8.8
Bridge Deck Grooving			Sq. Yd.	252
Protective Coat			Sq. Yd.	302
Concrete Superstructure (Approach Slab)			Cu. Yd.	117.0
Concrete Structures			Cu. Yd.	25.5
Reinforcement Bars, Epoxy Coated			Pound	47,850

MODEL: 68D84-076
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-017-WB AP PLAN.dgn
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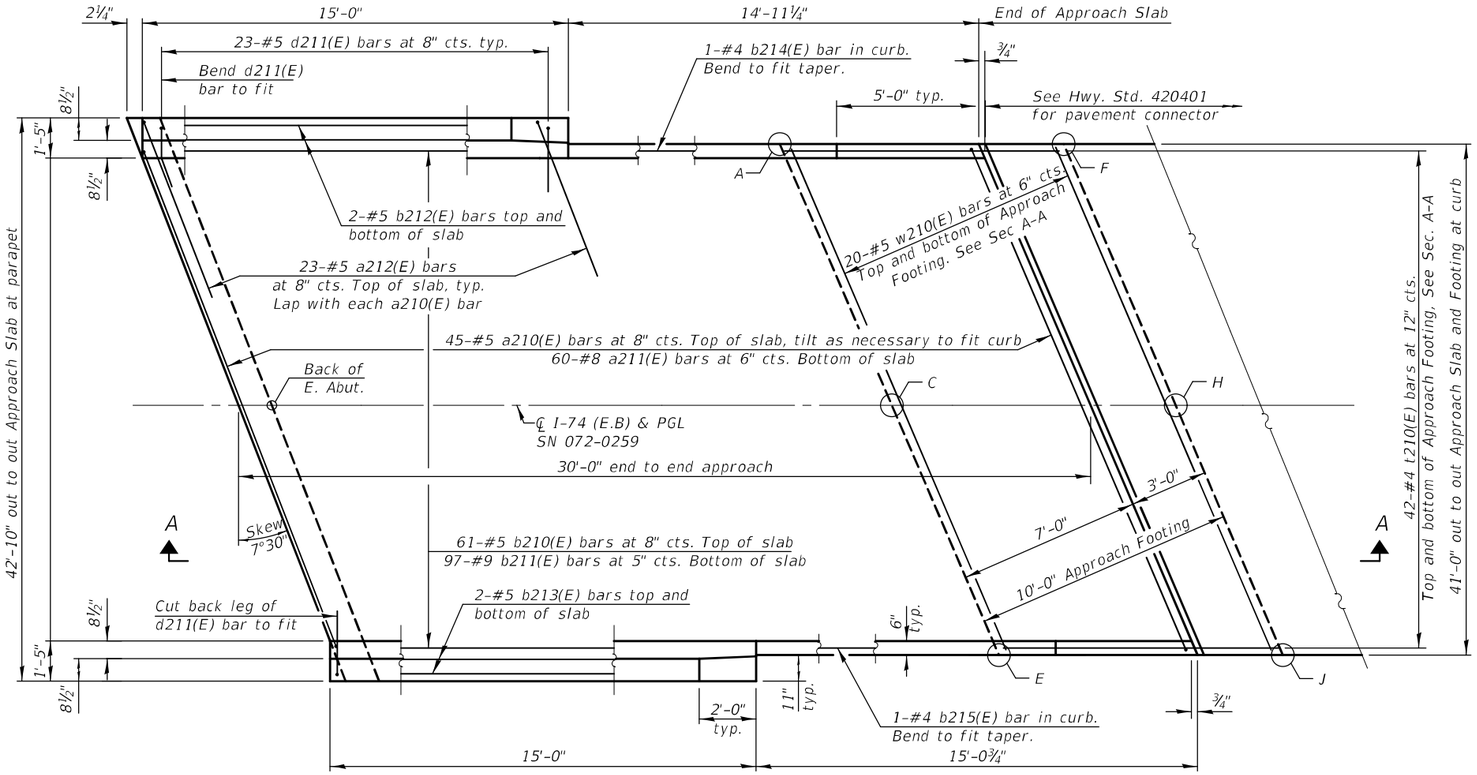
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____ | DESIGNED - DJC | REVISED - ____
CHECKED - MAH | REVISED - ____
PLOT SCALE = ____ | DRAWN - DJC | REVISED - ____
PLOT DATE = 8/16/2024 | CHECKED - MAH | REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

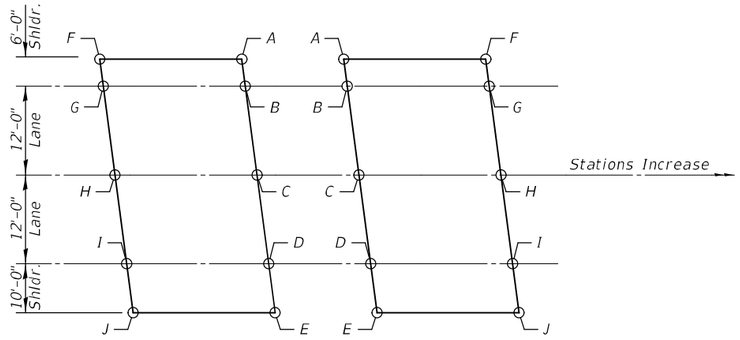
BRIDGE APPROACH SLAB DETAILS (WB)
STRUCTURE NO. 072-0258 (W.B.)
SHEET 17 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	86
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



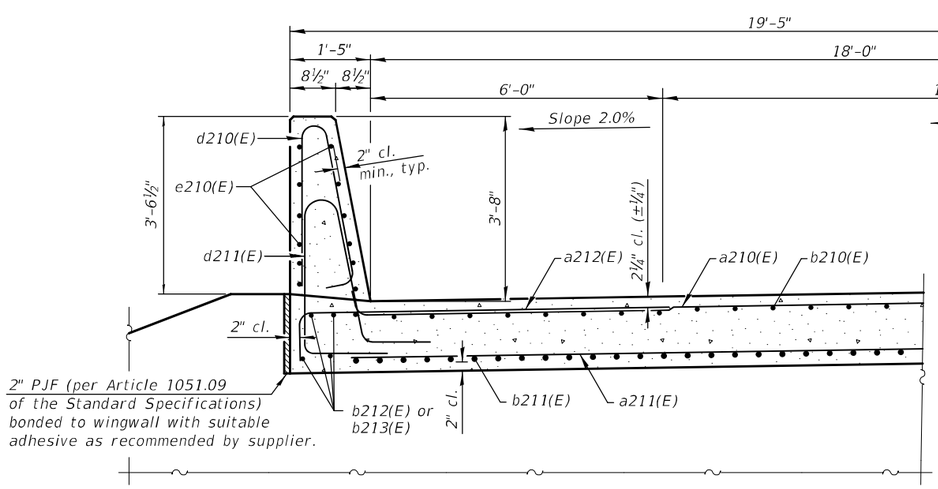
PLAN

(East approach slab shown; West approach slab similar by mirror image)



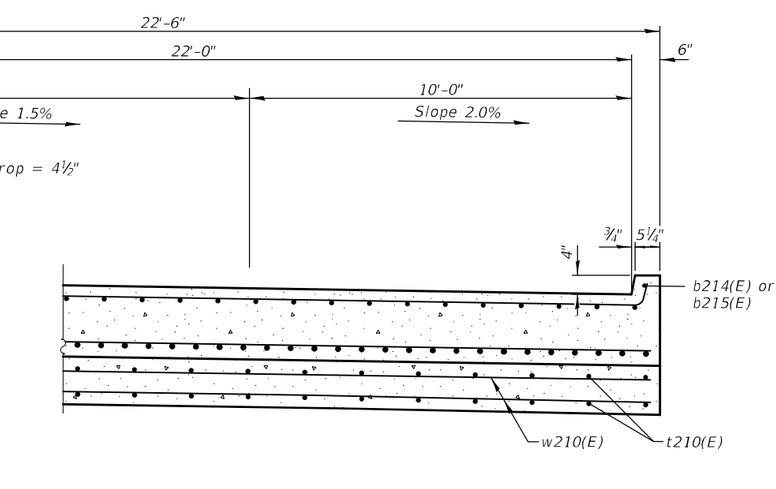
TOP AND BOTTOM ELEVATIONS FOR APPROACH FOOTING

	West Approach		East Approach	
Point	Top	Bottom	Top	Bottom
A	723.24	722.41	722.87	722.03
B	723.36	722.52	722.99	722.15
C	723.54	722.70	723.16	722.33
D	723.36	722.52	722.97	722.14
E	723.16	722.32	722.77	721.94
F	723.24	722.41	722.83	722.00
G	723.36	722.53	722.95	722.12
H	723.54	722.71	723.13	722.29
I	723.36	722.53	722.94	722.11
J	723.16	722.33	722.74	721.90



NEAR ABUTMENT

℄ E.B. Lanes & PGL



AT APPROACH FOOTING

CROSS SECTION

(Looking East)

(Sheet 1 of 2)

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME =		DESIGNED - DJC	REVISED -
		CHECKED - MAH	REVISED -
PLOT SCALE =		DRAWN - DJC	REVISED -
PLOT DATE =	8/16/2024	CHECKED - ESG	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BRIDGE APPROACH SLAB PLAN (EB)
STRUCTURE NO. 072-0259 (E.B.)
SHEET 18 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	87
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

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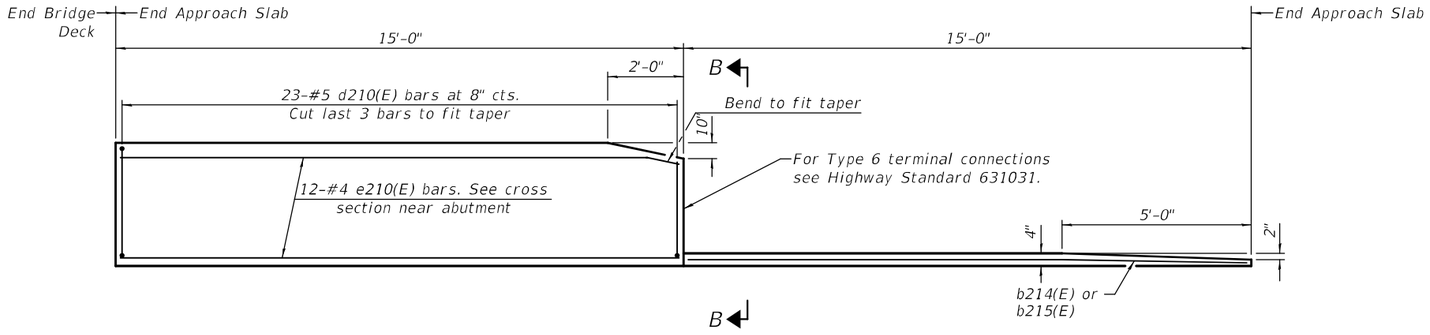
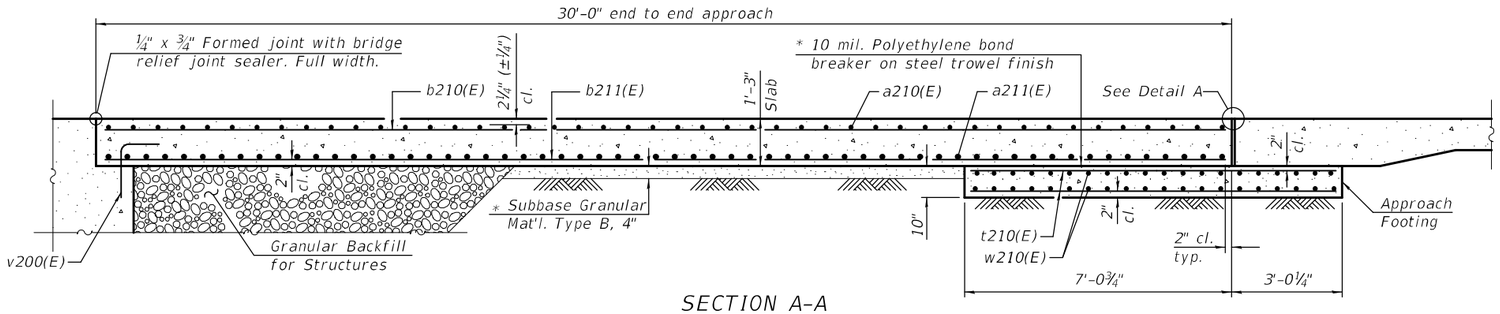
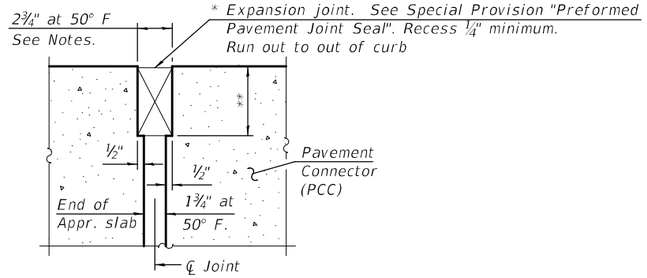


INSIDE ELEVATION OF PARAPET AND CURB



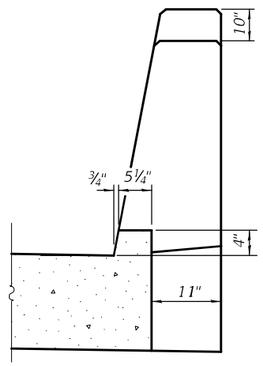
SECTION A-A



DETAIL A

* Cost included with Concrete Superstructure (Approach Slab).

** Per manufacturer recommendations



VIEW B-B

Notes:

The joint opening shall be adjusted for temperature per Article 520.04 of the Standard Specifications. However, since this detail is for jointless structures, the length of bridge used to calculate the adjustment shall be equal to half the total bridge length plus the length of the bridge approach slab.

Parapet concrete shall be paid for as Concrete Superstructure.

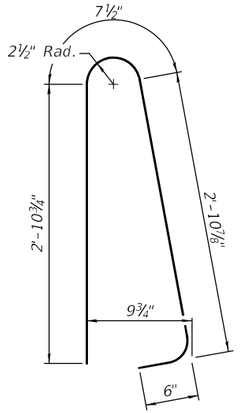
Approach slab shall be paid for as Concrete Superstructure (Approach Slab).

Approach footing concrete shall be paid for as Concrete Structures.

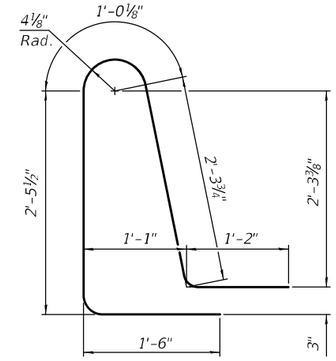
The approach footing maximum applied service bearing pressure (Qmax) = 2.0 ksf.

Cost of excavation for approach footing included with Concrete Structures.

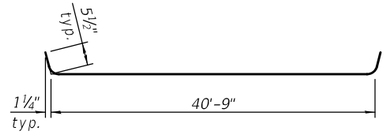
For Granular Backfill for Structures and drainage treatment details, see sheet 2 of 34.



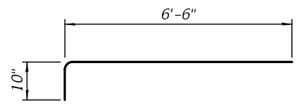
BAR d210(E)



BAR d211(E)



BAR a210(E)



BAR a212(E)

TWO APPROACHES BILL OF MATERIAL

Bar	No.	Size	Length	Shape
a210(E)	90	#5	41'-8"	
a211(E)	120	#8	41'-0"	
a212(E)	92	#5	7'-4"	
b210(E)	122	#5	29'-8"	
b211(E)	194	#9	29'-8"	
b212(E)	8	#5	14'-10"	
b213(E)	8	#5	14'-6"	
b214(E)	2	#4	14'-7"	
b215(E)	2	#4	14'-9"	
d210(E)	92	#5	6'-11"	
d211(E)	92	#5	8'-6"	
e210(E)	48	#4	14'-8"	
t210(E)	168	#4	9'-9"	
w210(E)	80	#5	41'-0"	
Concrete Superstructure			Cu. Yd.	8.8
Bridge Deck Grooving			Sq. Yd.	252
Protective Coat			Sq. Yd.	302
Concrete Superstructure (Approach Slab)			Cu. Yd.	117.0
Concrete Structures			Cu. Yd.	25.5
Reinforcement Bars, Epoxy Coated			Pound	47,850

MODEL: 68D84-078
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-019-EB AP PLAN.dgn
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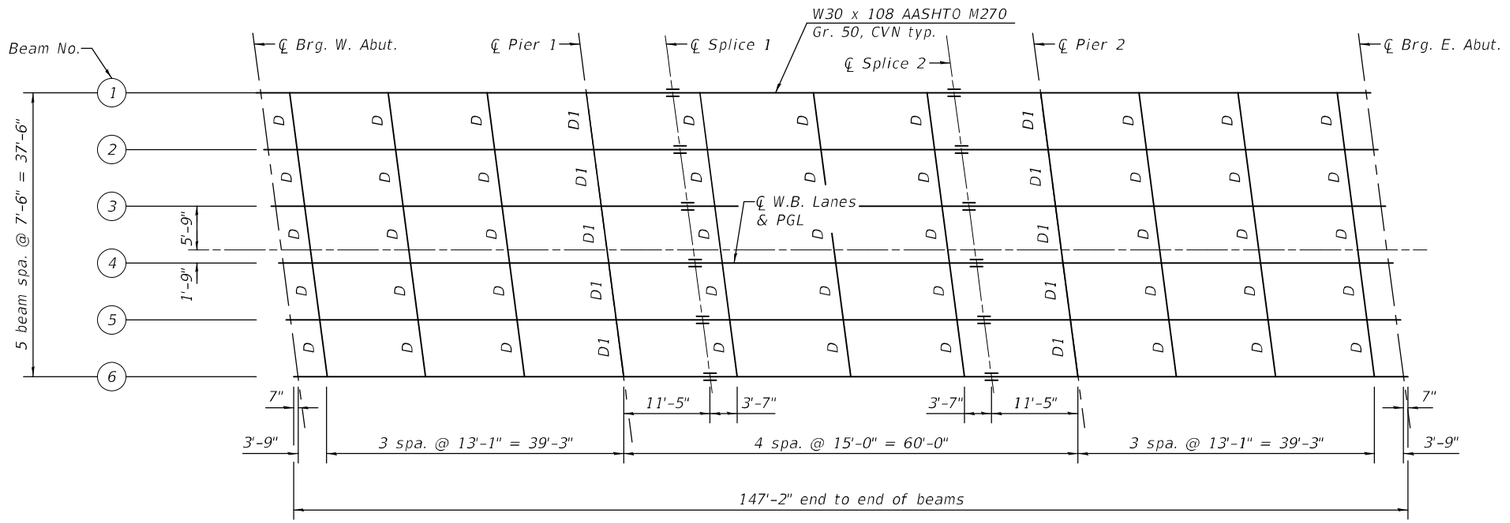
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____ | DESIGNED - DJC | REVISED - ____
CHECKED - MAH | REVISED - ____
PLOT SCALE = ____ | DRAWN - DJC | REVISED - ____
PLOT DATE = 8/16/2024 | CHECKED - MAH | REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

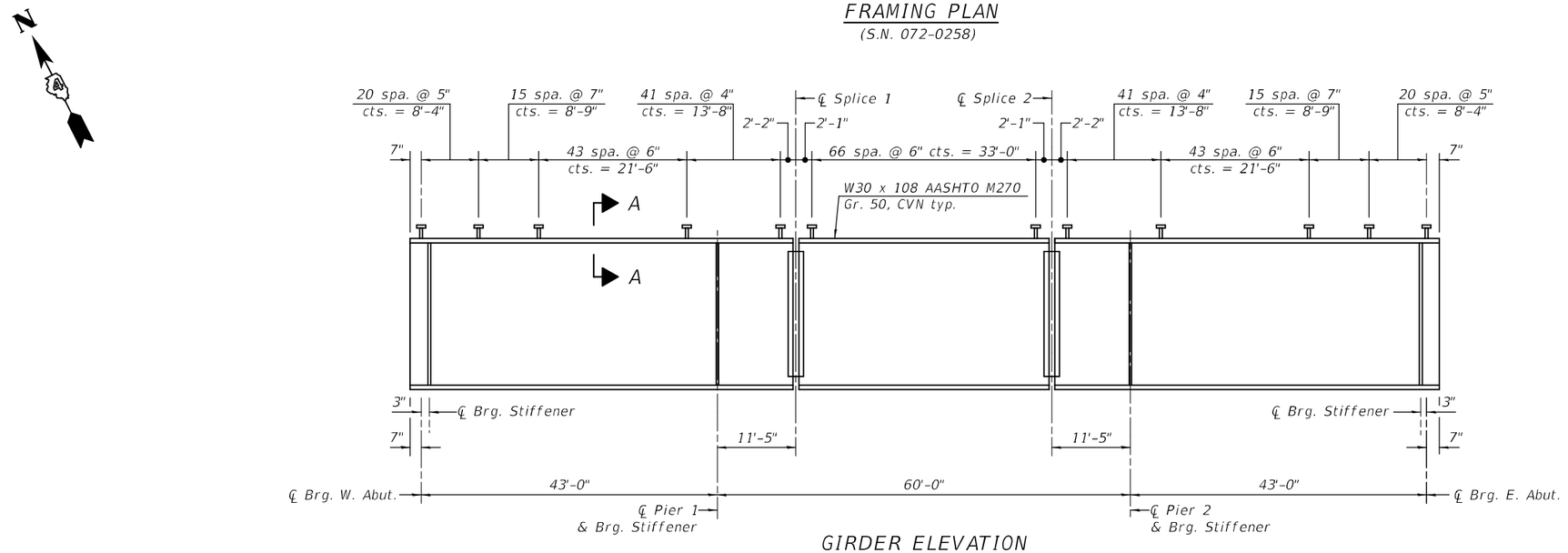
BRIDGE APPROACH SLAB DETAILS (EB)
STRUCTURE NO. 072-0259 (E.B.)
SHEET 19 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	88
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



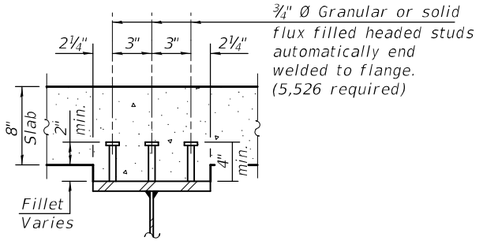
FRAMING PLAN

(S.N. 072-0258)



GIRDER ELEVATION

"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.



SECTION A-A

TOP OF BEAM ELEVATIONS

LOCATION	BEAM 1	BEAM 2	BEAM 3	BEAM 4	BEAM 5	BEAM 6
℄ Brg. W. Abut.	723.72	723.87	723.99	724.04	723.93	723.79
℄ Brg. Pier 1	723.62	723.77	723.89	723.95	723.83	723.69
℄ Splice 1	723.60	723.74	723.86	723.92	723.81	723.67
℄ Splice 2	723.53	723.68	723.79	723.85	723.74	723.60
℄ Brg. Pier 2	723.52	723.66	723.78	723.84	723.72	723.59
℄ Brg. E. Abut.	723.46	723.61	723.73	723.78	723.67	723.53

For Fabrication Only

Notes:

All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

MODEL: 68D84079
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\072025B-68D84-020-WB FRAMING PLAN.dgn
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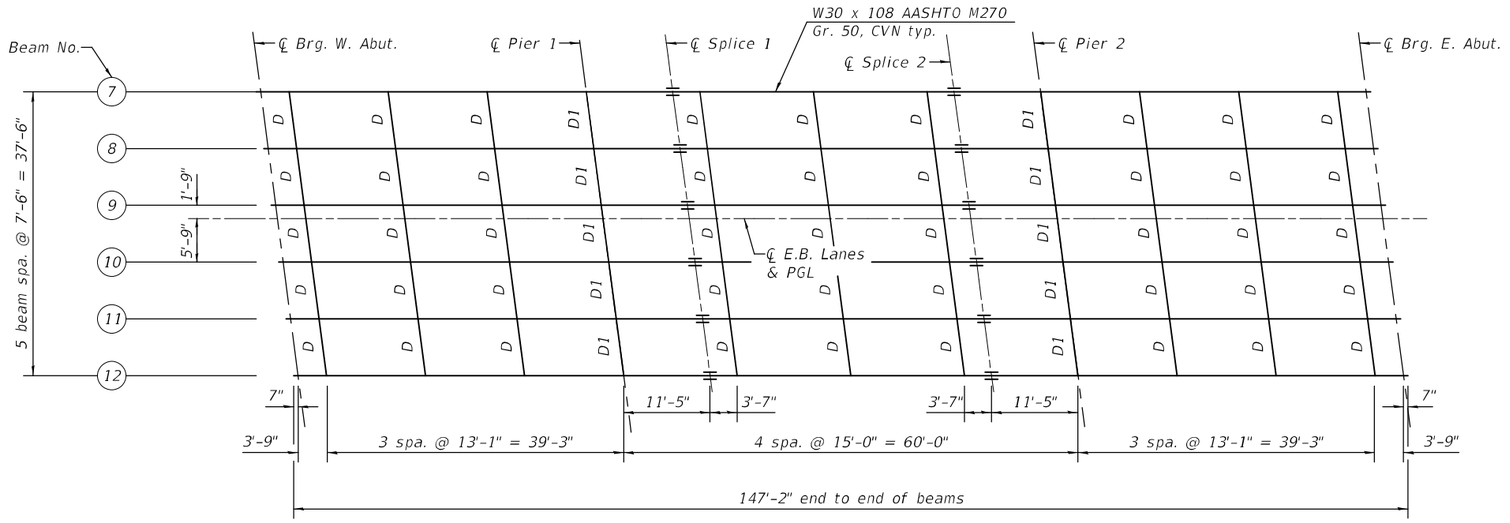
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____	DESIGNED - VRR	REVISED - ____	
	CHECKED - MAH	REVISED - ____	
PLOT SCALE = ____	DRAWN - VRR	REVISED - ____	
PLOT DATE = 8/16/2024	CHECKED - DJC	REVISED - ____	

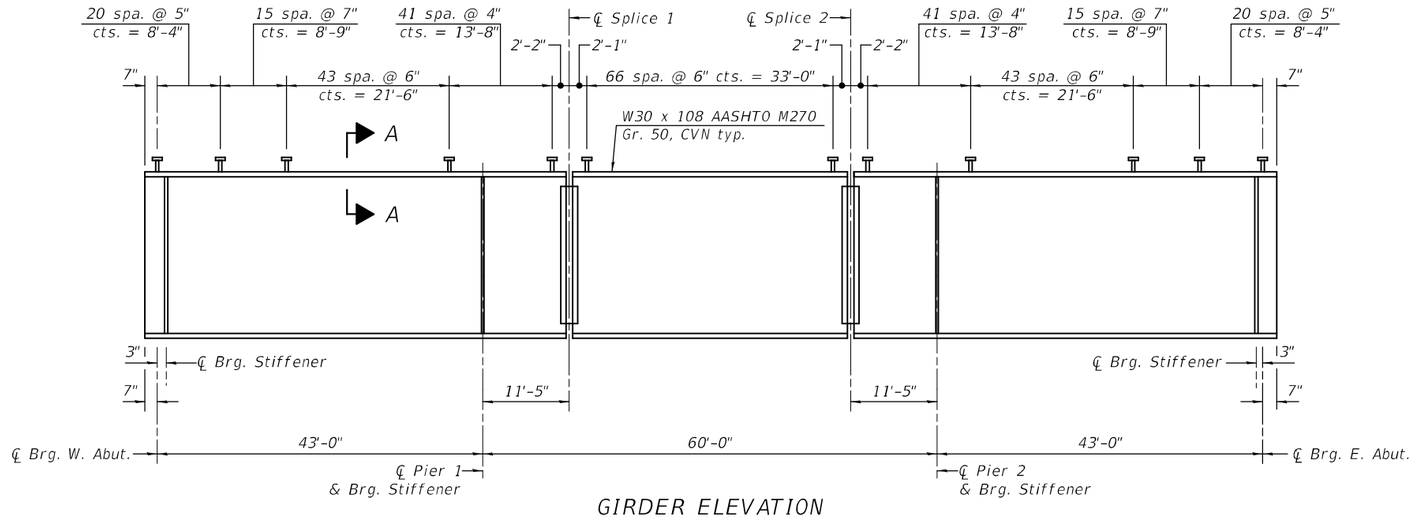
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING PLAN
STRUCTURE NO. 072-0258 (W.B.)
SHEET 20 OF 34 SHEETS

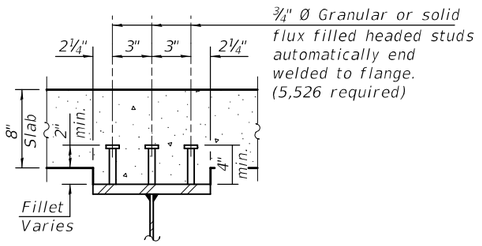
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVBJBR	PEORIA	158	89
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



FRAMING PLAN
(S.N. 072-0259)



GIRDER ELEVATION
"CVN" denotes Charpy-V-Notch impact energy requirements, zone 2.



SECTION A-A

TOP OF BEAM ELEVATIONS

LOCATION	BEAM 7	BEAM 8	BEAM 9	BEAM 10	BEAM 11	BEAM 12
℄ Brg. W. Abut.	723.79	723.92	724.03	723.97	723.85	723.70
℄ Brg. Pier 1	723.68	723.82	723.93	723.87	723.75	723.60
℄ Splice 1	723.66	723.79	723.90	723.84	723.72	723.57
℄ Splice 2	723.58	723.72	723.83	723.76	723.65	723.49
℄ Brg. Pier 2	723.57	723.70	723.81	723.75	723.63	723.48
℄ Brg. E. Abut.	723.51	723.64	723.75	723.69	723.56	723.41

For Fabrication Only

Notes:
All diaphragms shall be installed as steel is erected and secured with erection pins and bolts except as otherwise noted. Individual cross frames or diaphragms at supports may be temporarily disconnected to install bearing anchor rods.

MODEL: 68D84-080
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\072025B-68D84-021-EB FRAMING PLAN.dgn
8/16/2024 1:30:31 PM

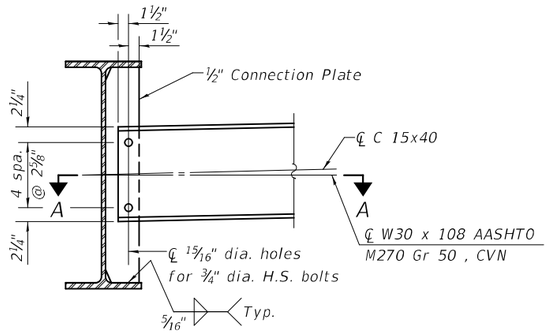
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____ | DESIGNED - VRR | REVISED - ____
PLOT SCALE = ____ | CHECKED - MAH | REVISED - ____
PLOT DATE = 8/16/2024 | DRAWN - VRR | REVISED - ____
CHECKED - DJC | REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

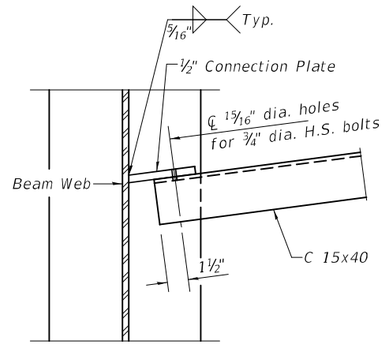
FRAMING PLAN
STRUCTURE NO. 072-0259 (E.B.)
SHEET 21 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	90
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



DIAPHRAGM D

(45 Required for SN 072-0258)
(45 Required for SN 072-0259)

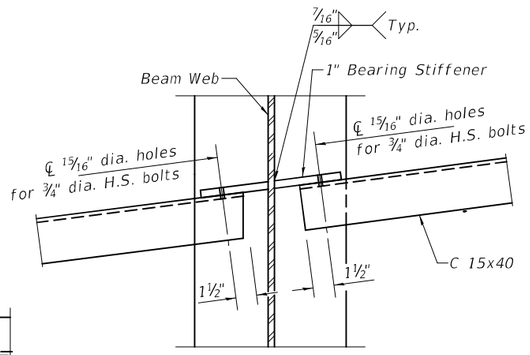


SECTION A-A

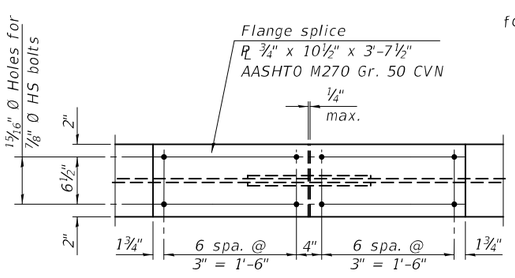
Notes:

Two hardened washers required for each set of oversized holes.

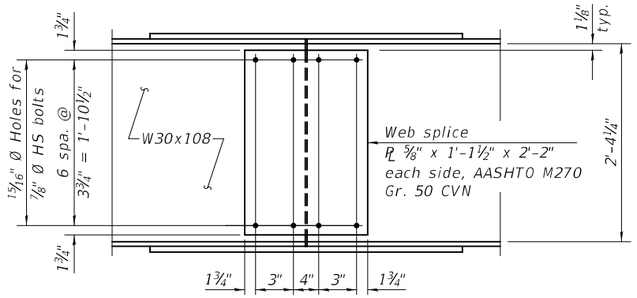
Alternate channels of equal depth and larger weight are permitted to facilitate material acquisition. Alternate channels, if utilitzed, shall be provided at no additional cost to the department.



SECTION B-B



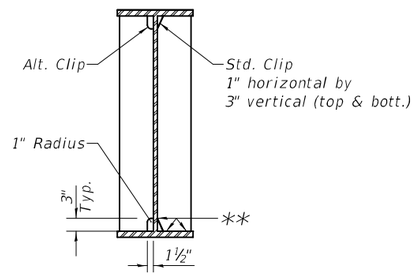
PLAN



ELEVATION

SPLICE DETAIL

(12 Required S.N. 072-0258)
(12 Required S.N. 072-0259)

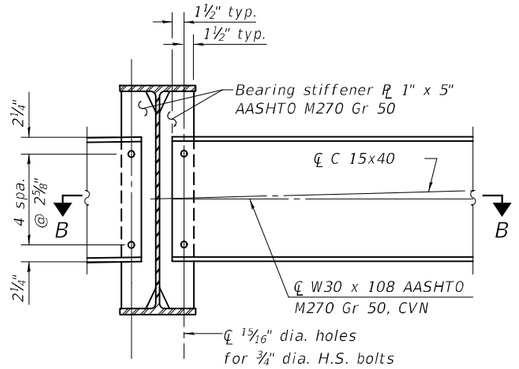


WELD LIMITS AND CLIP DETAILS

** Stop weld ¼" (7⁄16") from edges as shown, typ.

INTERIOR GIRDER MOMENT TABLE				
		0.4 Sp. 1/ 0.6 Sp. 3	Pier 1/ Pier 2	0.5 Span 2
Is	(in^4)	4470	4470	4470
Ic(n)	(in^4)	14036	14036	14036
Ic(3n)	(in^4)	10733	10733	10733
Ic(cr)	(in^4)	---	6736	---
Ss	(in^3)	299	299	299
Sc(n)	(in^3)	474	474	474
Sc(3n)	(in^3)	433	433	433
Sc(cr)	(in^3)	---	363	---
DC1	(k/')	0.888	0.888	0.888
MDC1	('k)	101	246	154
DC2	(k/')	0.190	0.190	0.190
MDC2	('k)	22	53	33
DW	(k/')	0.333	0.333	0.333
MDW	('k)	38	93	58
LLDF		0.699	0.677	0.659
M^{L+IM}	('k)	466	447	526
Mu (Strength I)	('k)	1026	-	1241
Ø Mn	('k)	2335	-	2335
fs DC1	(ksi)	4.1	9.9	6.2
fs DC2	(ksi)	0.6	1.8	0.9
fs DW	(ksi)	1.1	3.1	1.6
fs (L+IM)	(ksi)	11.8	14.8	13.3
fs (Service II)	(ksi)	21.1	33.9	26.0
0.95Rh Fyf	(ksi)	47.5	47.5	47.5
fs (Total)(Strength I)	(ksi)	-	45.0	-
Ø Fn	(ksi)	-	50.0	-
Vf	(k)	49.5	58.3	39.4

GIRDER REACTION TABLE			
		Abutment	Pier
LLDF		0.779	0.779
OCF		1.026	---
R_{DC1}	(k)	13.5	52.0
R_{DC2}	(k)	2.9	11.0
R_{DW}	(k)	5.0	19.3
R^{L}	(k)	53.0	83.6
R_{IM}	(k)	14.2	17.6
R_{Total} (Strength I)(Impact)	(k)	145.6	284.8
R_{Total} (Strength I)(No Impact)	(k)	120.8	254.0



DIAPHRAGM D1

.(10 Required for SN 072-0258)
(10 Required for SN 072-0258)

Is, Ss: Non-composite moment of inertia and section modulus of the steel section used for computing fs(Total-Strength I, and Service II) due to non-composite dead loads ($in.^4$ and $in.^3$).

Ic(n), Sc(n): Composite moment of inertia and section modulus of the steel and deck based upon the modular ratio, "n", used for computing fs(Total-Strength I, and Service II) in uncracked sections due to short-term composite live loads ($in.^4$ and $in.^3$).

Ic(3n), Sc(3n): Composite moment of inertia and section modulus of the steel and deck based upon 3 times the modular ratio, "3n", used for computing fs(Total-Strength I, and Service II) in uncracked sections, due to long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

Ic(cr), Sc(cr): Composite moment of inertia and section modulus of the steel and longitudinal deck reinforcement, used for computing fs (Total-Strength I and Service II) in cracked sections, due to both short-term composite live loads and long-term composite (superimposed) dead loads ($in.^4$ and $in.^3$).

DC1: Un-factored non-composite dead load (kips/ft.).

MDC1: Un-factored moment due to non-composite dead load (kip-ft.).

DC2: Un-factored long-term composite (superimposed excluding future wearing surface) dead load (kips/ft.).

MDC2: Un-factored moment due to long-term composite (superimposed excluding future wearing surface) dead load (kip-ft.).

DW: Un-factored long-term composite (superimposed future wearing surface only) dead load (kips/ft.).

MDW: Un-factored moment due to long-term composite (superimposed future wearing surface only) dead load (kip-ft.).

M^{L+IM}: Un-factored live load moment plus dynamic load allowance (impact) (kip-ft.).

Mu (Strength I): Factored design moment (kip-ft.).
$1.25\ (MDC1 + MDC2) + 1.5\ MDW + 1.75\ M^{L+IM}$

Ø Mn: Compact composite positive moment capacity computed according to Article 6.10.7.1 or non-slender negative moment capacity according to Article A6.1.1 or A6.1.2 (kip-ft).

fs DC1: Un-factored stress at edge of flange for controlling steel flange due to vertical non-composite dead loads as calculated below (ksi).
MDC1/ Snc

fs DC2: Un-factored stress at edge of flange for controlling steel flange due to vertical composite dead loads as calculated below (ksi).
MDC2/ Sc(3n) or MDC2/ Sc(cr) as applicable.

fs DW: Un-factored stress at edge of flange for controlling steel flange due to vertical composite future wearing surface loads as calculated below (ksi).
MDW/ Sc(3n) or MDW/ Sc(cr) as applicable.

fs (L+IM): Un-factored stress at edge of flange for controlling steel flange due to vertical composite live load plus impact loads as calculated below (ksi).
M^{L+IM} / Sc(n) or M^{L+IM} / Sc(cr) as applicable.

fs (Service II): Sum of stresses as computed below (ksi).
fsDC1 + fsDC2 + fsDW + 1.3 fs(L+IM)

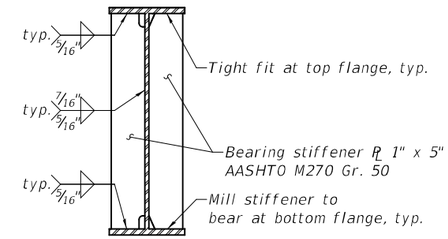
0.95RhFyf: Composite stress capacity for Service II loading according to Article 6.10.4.2 (ksi).

fs (Total)(Strength I): Sum of stresses as computed below on non-compact section (ksi).
1.25 (fsDC1 + fsDC2) + 1.5 fsDW + 1.75 fs(L+IM)

Ø Fn: Non-Compact composite positive or negative stress capacity for Strength I loading according to Article 6.10.7 or 6.10.8 (ksi).

Vf: Maximum factored shear range in span computed according to Article 6.10.10.

OCF: Obtuse correction factor



BEARING STIFFENER

(48 Required S.N. 072-0258)
(48 Required S.N. 072-0259)

MODEL: 68D84-081
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\072058-68D84-022-FRAMING DETAILS.dgn
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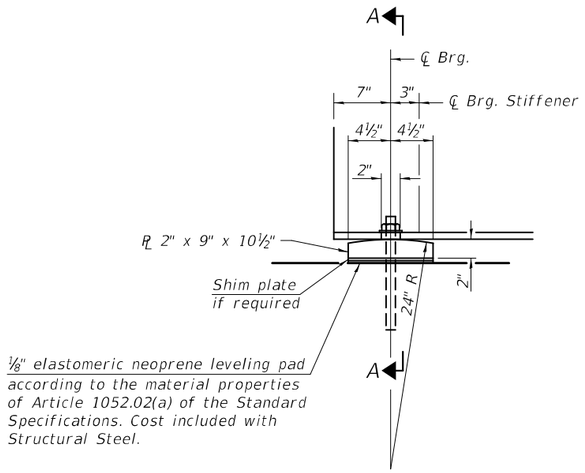
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____ | DESIGNED - DJC | REVISED - ____
PLOT SCALE = ____ | CHECKED - VRR | REVISED - ____
PLOT DATE = 8/16/2024 | DRAWN - DJC | REVISED - ____
CHECKED - VRR | REVISED - ____

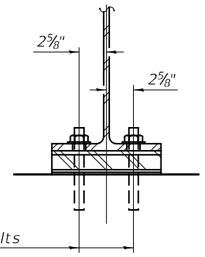
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

FRAMING DETAILS
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 22 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	91
			CONTRACT NO. 68D84	
		ILLINOIS	FED. AID PROJECT	



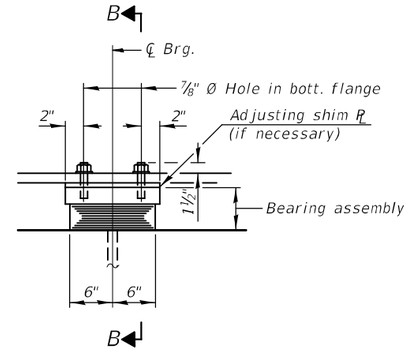
ELEVATION AT ABUTMENT



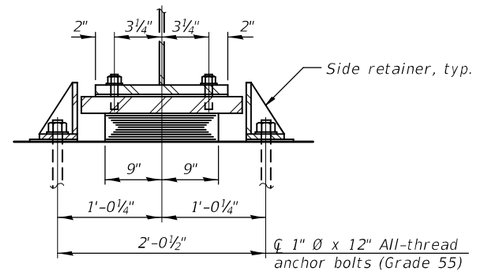
℄ 1" Ø x 12" All-thread anchor bolts
(Grade 55) with 2¼"x 2¼"x ⅝" ℄
washers under nuts. 1⅜"x 2" slotted
holes in flange. 1½" Ø holes in bearing plate.

SECTION A-A

FIXED BEARING AT ABUTMENTS
(12 Required S.N. 072-0258)
(12 Required S.N. 072-0259)

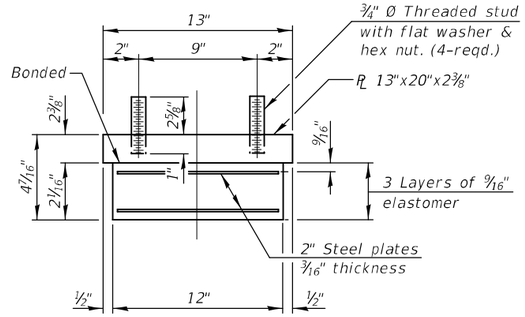


ELEVATION AT PIER



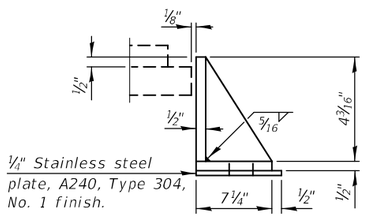
SECTION B-B

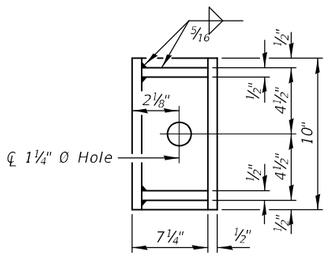
TYPE I ELASTOMERIC EXP. BRG.
(12 Required S.N. 072-0258)
(12 Required S.N. 072-0259)



BEARING ASSEMBLY

Note:
Shim plates shall not be placed
under bearing assembly.





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

Notes:
Anchor bolts shall be according to Article 521.06 of the Standard Specifications.
Beams shall be braced for stability during erection and remain braced until deck is poured and cured.
All bearing plates, side retainers, anchor bolts, nuts, washers, and pintles shall be galvanized according to AASHTO M111 or M232 as applicable.
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.
Side retainers and stainless steel plates shall be included in the cost of Elastomeric Bearing Assembly, Type I.
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.

BILL OF MATERIAL
S.N. 072-0258

Item	Unit	Total
Anchor Bolts, 1"	Each	48
Elastomeric Bearing Assembly Type I	Each	12

BILL OF MATERIAL
S.N. 072-0259

Item	Unit	Total
Anchor Bolts, 1"	Each	48
Elastomeric Bearing Assembly Type I	Each	12

MODEL: 68D84-082
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\072025B-68D84-023-BEARING DETAILS.dgn
8/16/2024 1:30:32 PM

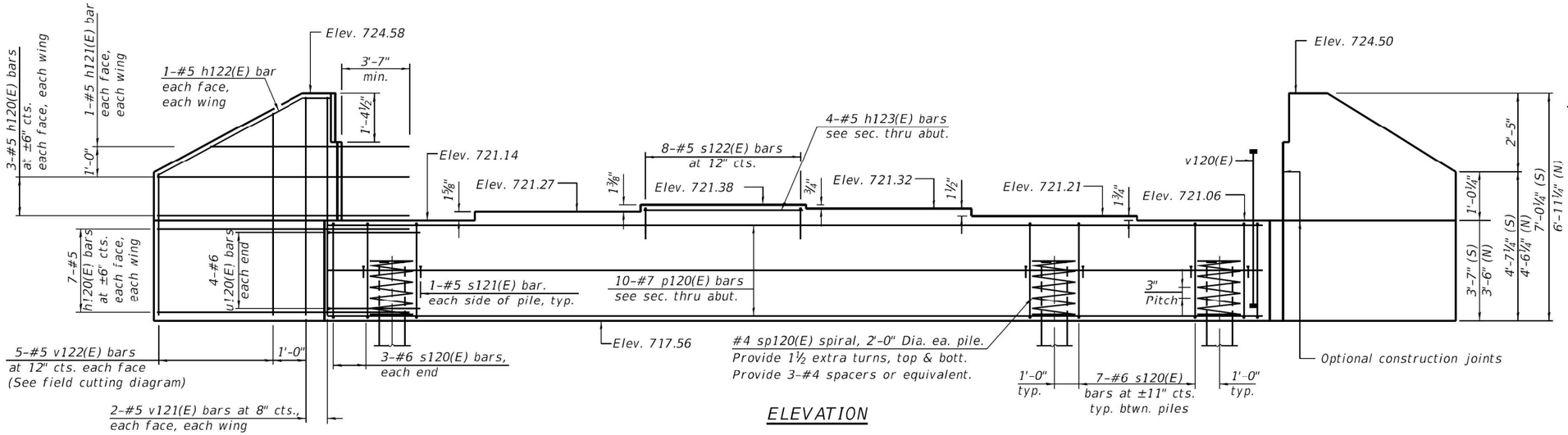
VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____ | DESIGNED - DJC | REVISED - _____
PLOT SCALE = _____ | CHECKED - ESG | REVISED - _____
PLOT DATE = 8/16/2024 | DRAWN - DJC | REVISED - _____
CHECKED - ESG | REVISED - _____

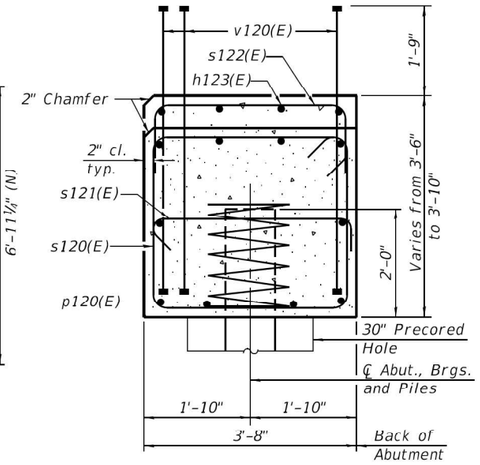
STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BEARING DETAILS
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 23 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	92
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

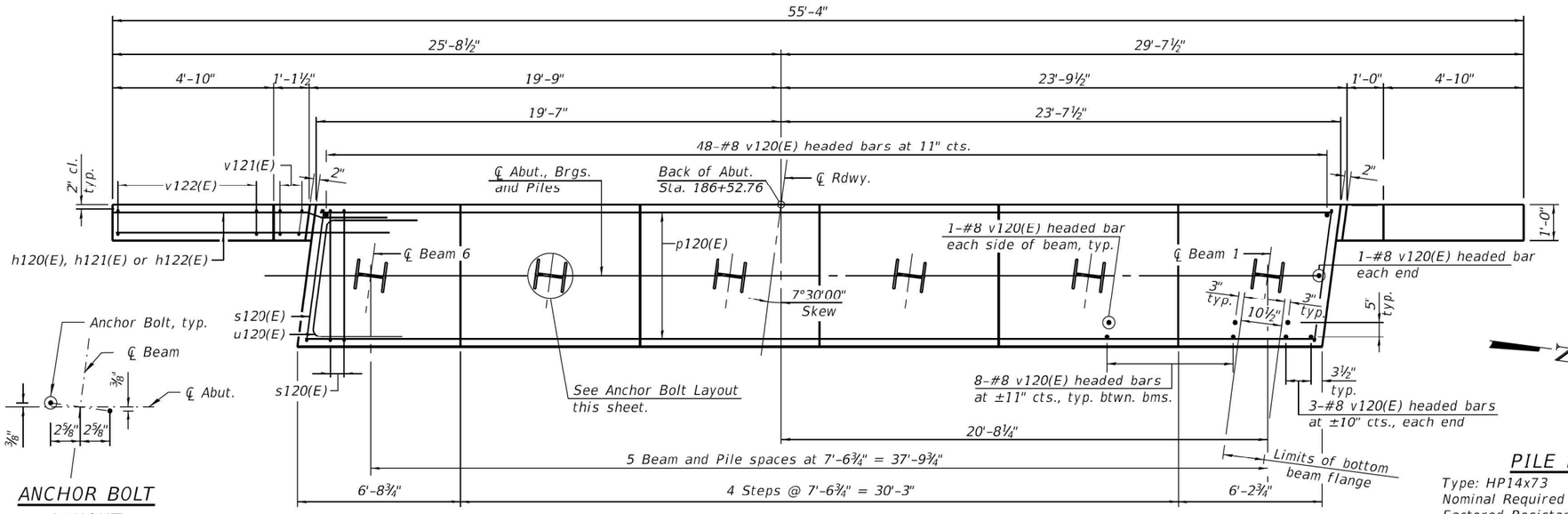


ELEVATION

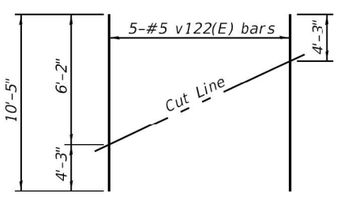


SEC. THRU ABUT.

Dimensions at right angles to abutment.



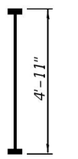
PLAN



ANCHOR BOLT LAYOUT

FIELD CUTTING DIAGRAM

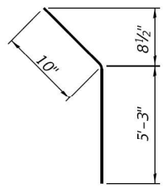
Order v122(E) full length. Cut as shown and use remainder of bars in opposite wing.



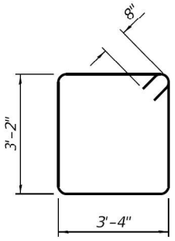
BAR v120(E)

(Headed)

(216–#8 Bar terminators)

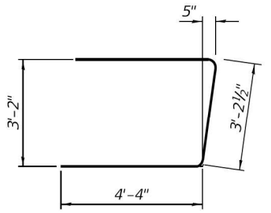


BAR h122(E)

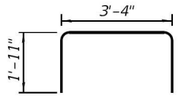


BAR s120(E)

BAR s121(E)



BAR u120(E)



BAR s122(E)

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h120(E)	40	#5	9'–7"	
h121(E)	4	#5	7'–6"	
h122(E)	4	#5	6'–1"	
h123(E)	4	#5	7'–2"	
p120(E)	10	#7	42'–11"	
s120(E)	41	#6	14'–4"	
s121(E)	12	#5	4'–4"	
s122(E)	8	#5	7'–2"	
* sp120(E)	6	#4	2'–0"	
u120(E)	8	#6	11'–11"	
v120(E)	108	#8	4'–11"	
v121(E)	8	#5	6'–7"	
v122(E)	10	#5	10'–5"	
Structure Excavation		Cu. Yd.	126	
Concrete Structures		Cu. Yd.	24.4	
Reinforcement Bars, Epoxy Coated		Pound	4,370	
Furnishing Steel Piles HP14x73		Foot	270	
Driving Piles		Foot	270	
Test Pile Steel HP14x73		Each	1	

** Length is height of spiral.*

PILE DATA

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 231 kips
Est. Length: 54 ft.
No. Production Piles: 5
No. Test Piles: 1

Notes:
Pour steps monolithically with cap.
Bar terminators paid for separately. See Total Bill of Material.
For details of piles see sheet 30 of 34.
Piles shall be driven through 30" diameter precored holes extending to Elev. 702.56 according to article 512.09(c) of the Standard Specifications. Cost included in driving piles.

CIVIL DESIGN, INC. WBE / DBE
EFFINGHAM, IL
LICENSE #184.003222

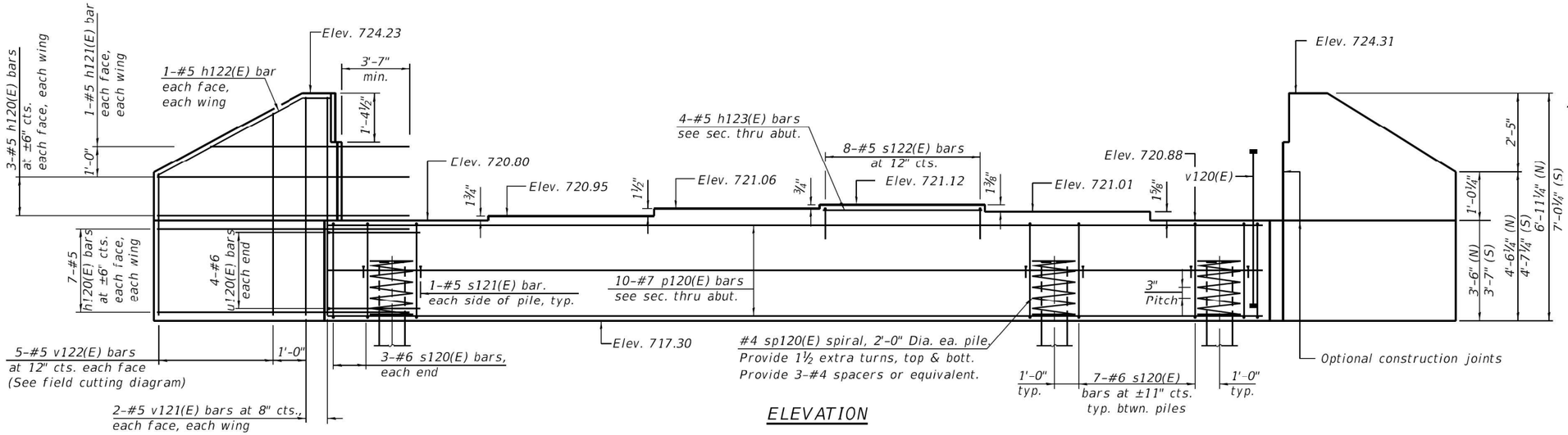
USER NAME = | DESIGNED – TAW | REVISED –
PLOT SCALE = | CHECKED – TJZ | REVISED –
PLOT DATE = | DRAWN – DCS | REVISED –
CHECKED – TJZ | REVISED –

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
STRUCTURE NO. 072-0258 (W.B.)
SHEET 24 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	93
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

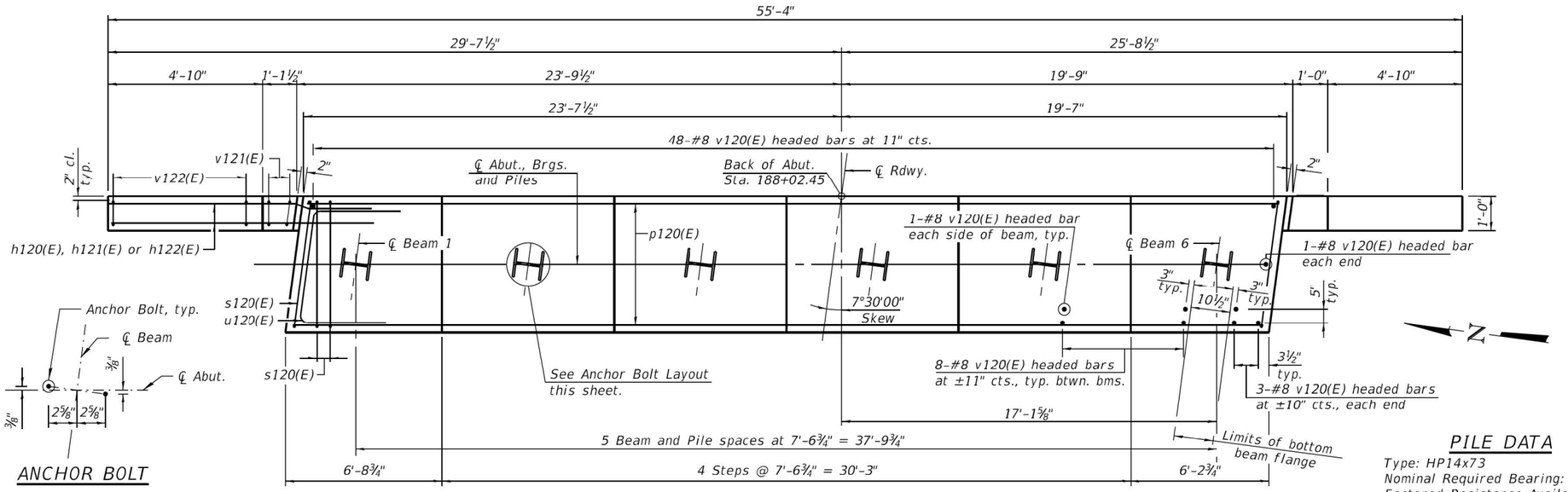
MODEL: Default
FILE NAME: P:\Effingham\4852 - IDOT PTB 198-018_D4_VV\Work Order #9\24-Structures\CAD\D4468084_024_West Abutment_WB.dgn
8/13/2024 8:42:50 AM



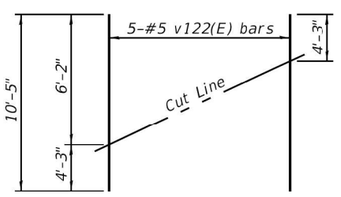
ELEVATION

SEC. THRU ABUT.

Dimensions at right angles to abutment.

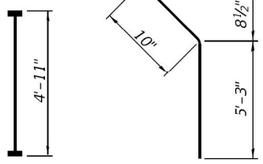


PLAN



FIELD CUTTING DIAGRAM

Order v122(E) full length. Cut as shown and use remainder of bars in opposite wing.

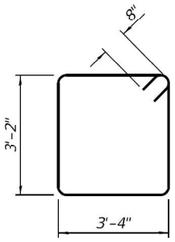


BAR v120(E)

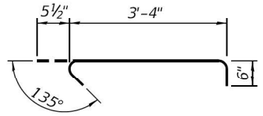
(Headed)

(216–#8 Bar terminators)

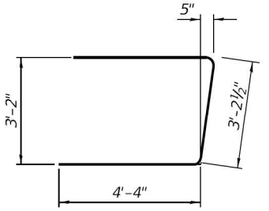
BAR h122(E)



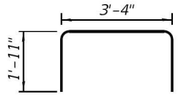
BAR s120(E)



BAR s121(E)



BAR u120(E)



BAR s122(E)

ANCHOR BOLT LAYOUT

BILL OF MATERIAL

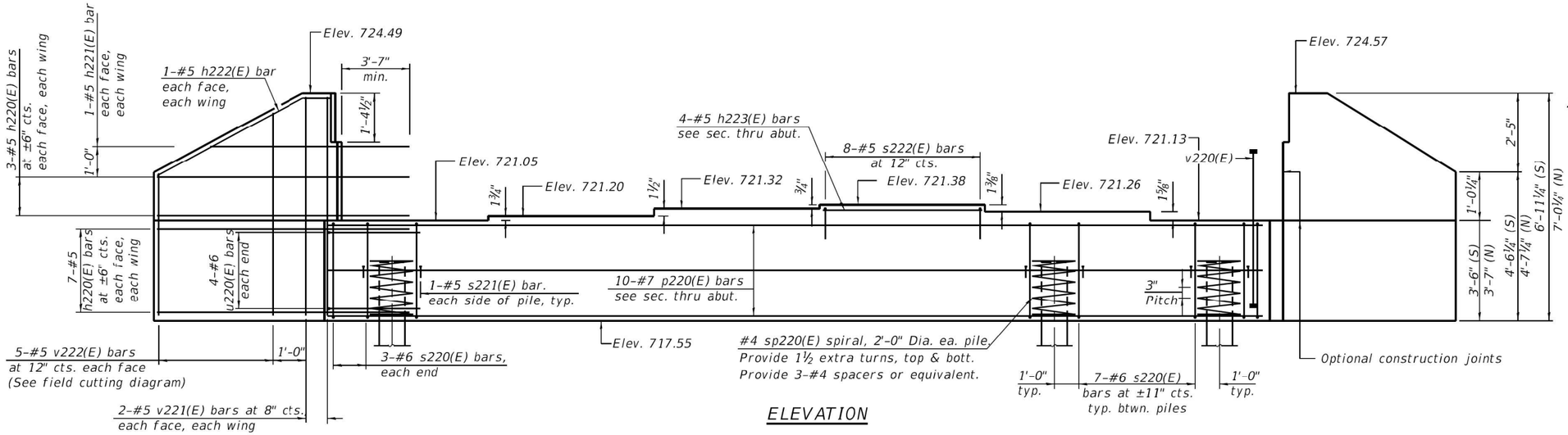
Bar	No.	Size	Length	Shape
h120(E)	40	#5	9'–7"	
h121(E)	4	#5	7'–6"	
h122(E)	4	#5	6'–1"	
h123(E)	4	#5	7'–2"	
p120(E)	10	#7	42'–11"	
s120(E)	41	#6	14'–4"	
s121(E)	12	#5	4'–4"	
s122(E)	8	#5	7'–2"	
* sp120(E)	6	#4	2'–0"	
u120(E)	8	#6	11'–11"	
v120(E)	108	#8	4'–11"	
v121(E)	8	#5	6'–7"	
v122(E)	10	#5	10'–5"	
Structure Excavation		Cu. Yd.	126	
Concrete Structures		Cu. Yd.	24.4	
Reinforcement Bars, Epoxy Coated		Pound	4,370	
Furnishing Steel Piles HP14x73		Foot	306	
Driving Piles		Foot	306	

** Length is height of spiral.*

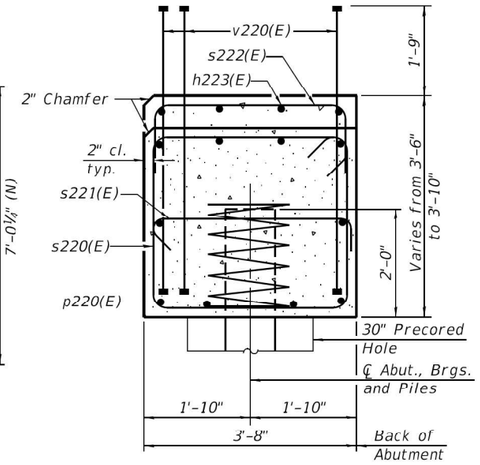
PILE DATA

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 51 ft.
No. Production Piles: 6
No. Test Piles: 0

Notes:
Pour steps monolithically with cap.
Bar terminators paid for separately. See Total Bill of Material.
For details of piles see sheet 30 of 34.

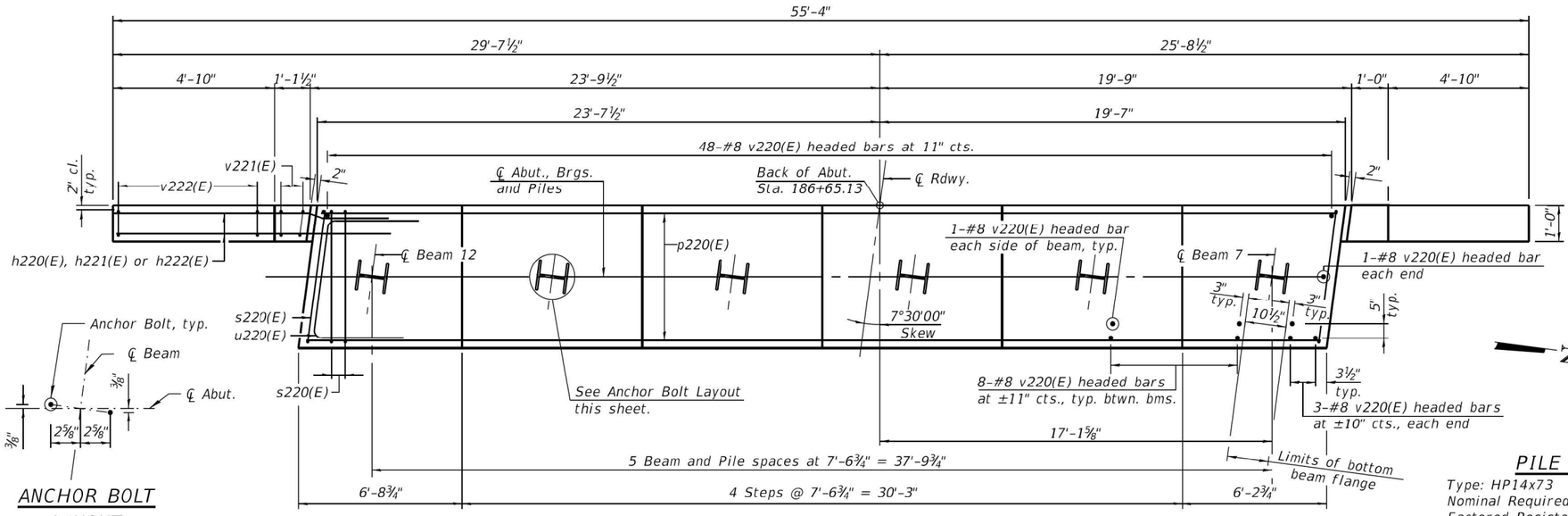


ELEVATION



SEC. THRU ABUT.

Dimensions at right angles to abutment.



PLAN

ANCHOR BOLT LAYOUT

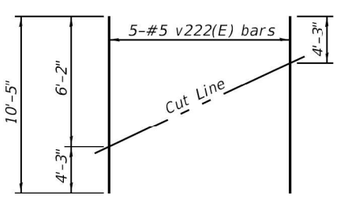
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h220(E)	40	#5	9'-7"	
h221(E)	4	#5	7'-6"	
h222(E)	4	#5	6'-1"	
h223(E)	4	#5	7'-2"	
p220(E)	10	#7	42'-11"	
s220(E)	41	#6	14'-4"	
s221(E)	12	#5	4'-4"	
s222(E)	8	#5	7'-2"	
* sp220(E)	6	#4	2'-0"	
u220(E)	8	#6	11'-11"	
v220(E)	108	#8	4'-11"	
v221(E)	8	#5	6'-7"	
v222(E)	10	#5	10'-5"	
Structure Excavation		Cu. Yd.		126
Concrete Structures		Cu. Yd.		24.4
Reinforcement Bars, Epoxy Coated		Pound		4,370
Furnishing Steel Piles HP14x73		Foot		324
Driving Piles		Foot		324

* Length is height of spiral.

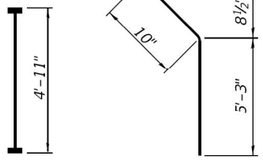
PILE DATA

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 212 kips
Est. Length: 54 ft.
No. Production Piles: 6
No. Test Piles: 0



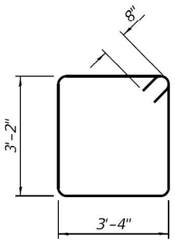
FIELD CUTTING DIAGRAM

Order v222(E) full length. Cut as shown and use remainder of bars in opposite wing.



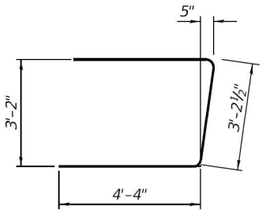
BAR v220(E)
(Headed)
(216-#8 Bar terminators)

BAR h222(E)

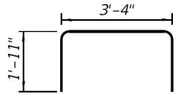


BAR s220(E)

BAR s221(E)



BAR u220(E)



BAR s222(E)

Notes:
Pour steps monolithically with cap.
Bar terminators paid for separately. See Total Bill of Material.
For details of piles see sheet 30 of 34.
Piles shall be driven through 30" diameter precored holes extending to Elev. 702.55 according to article 512.09(c) of the Standard Specifications. Cost included in driving piles.

CIVIL DESIGN, INC.
WBE / DBE
EFFINGHAM, IL
LICENSE #184.003222

USER NAME =	DESIGNED - TAW	REVISED -	
	CHECKED - TJZ	REVISED -	
PLOT SCALE =	DRAWN - DCS	REVISED -	
PLOT DATE =	CHECKED - TJZ	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

WEST ABUTMENT
STRUCTURE NO. 072-0259 (E.B.)
SHEET 26 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	95
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: Default
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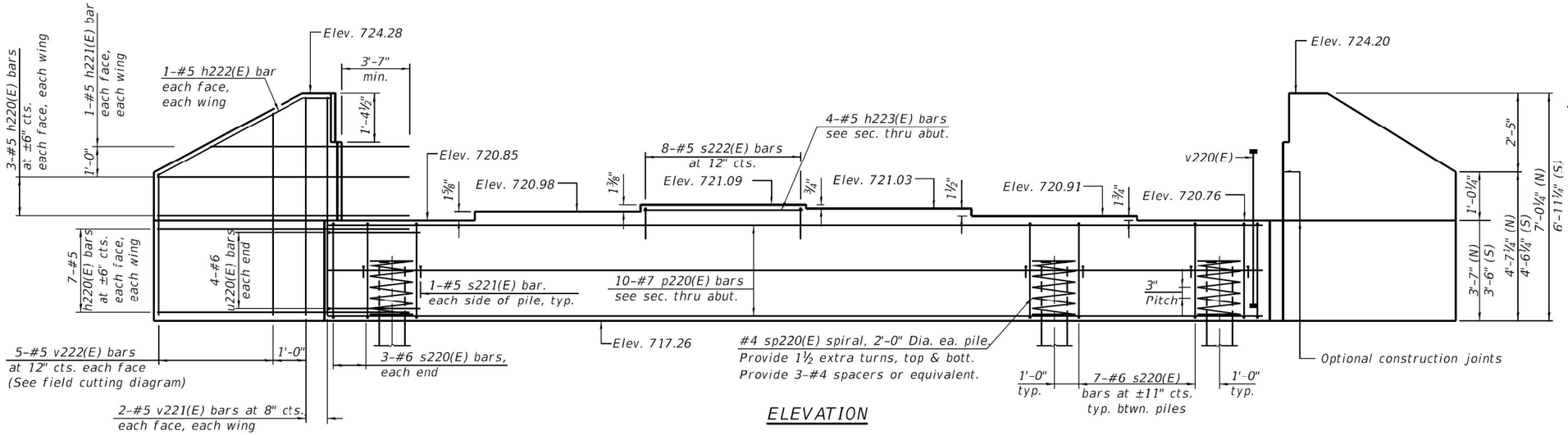
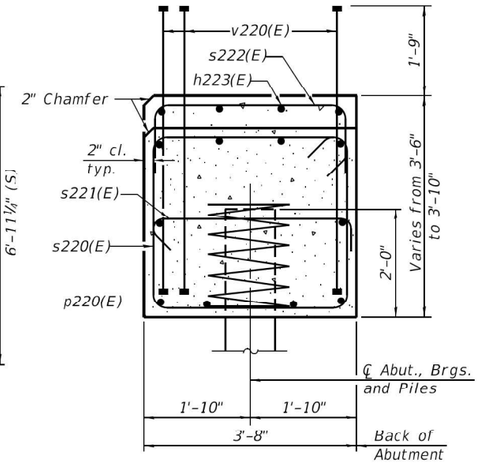
8/15/2024 4:27:41 PM

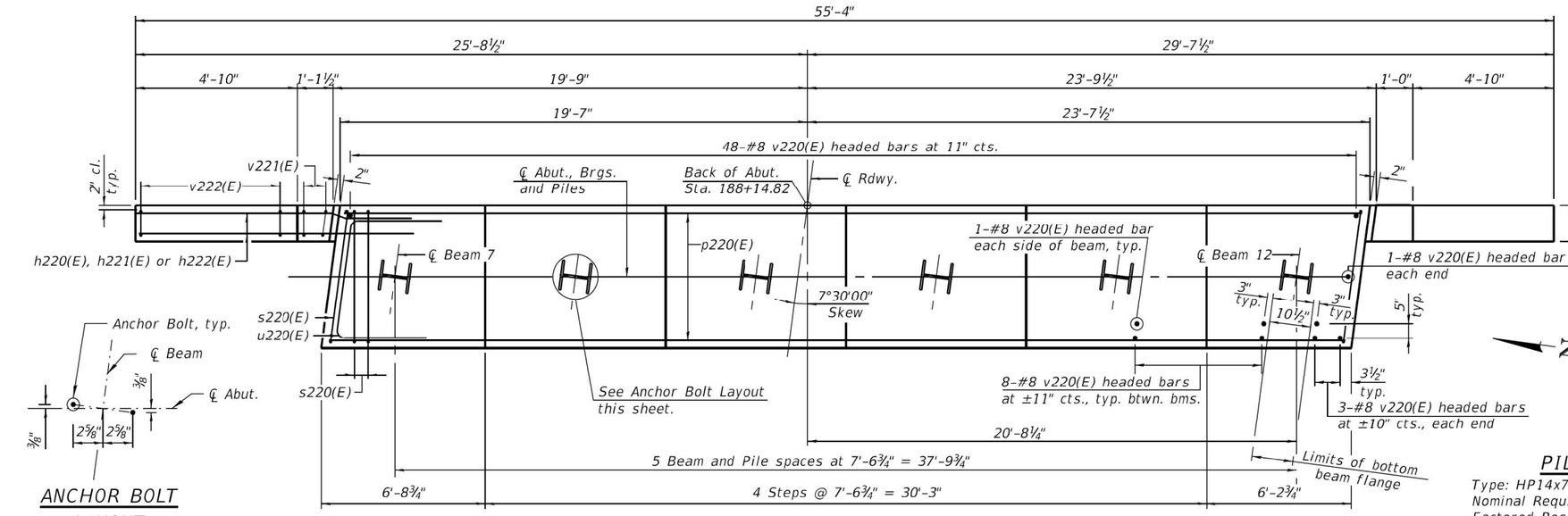


ELEVATION

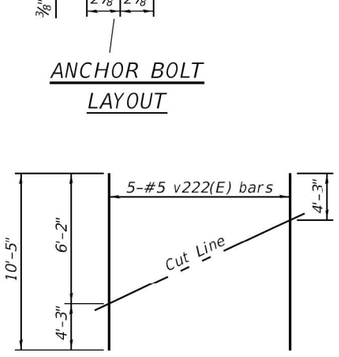


SEC. THRU ABUT.

Dimensions at right angles to abutment.



PLAN



ANCHOR BOLT LAYOUT

BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h220(E)	40	#5	9'–7"	
h221(E)	4	#5	7'–6"	
h222(E)	4	#5	6'–1"	
h223(E)	4	#5	7'–2"	
p220(E)	10	#7	42'–11"	
s220(E)	41	#6	14'–4"	
s221(E)	12	#5	4'–4"	
s222(E)	8	#5	7'–2"	
* sp220(E)	6	#4	2'–0"	
u220(E)	8	#6	11'–11"	
v220(E)	108	#8	4'–11"	
v221(E)	8	#5	6'–7"	
v222(E)	10	#5	10'–5"	
Structure Excavation	Cu. Yd.		126	
Concrete Structures	Cu. Yd.		24.4	
Reinforcement Bars, Epoxy Coated	Pound		4,370	
Furnishing Steel Piles HP14x73	Foot		285	
Driving Piles	Foot		285	
Test Pile Steel HP14x73	Each		1	

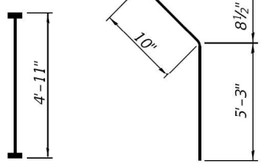
* Length is height of spiral.

PILE DATA

Type: HP14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 57 ft.
No. Production Piles: 5
No. Test Piles: 1

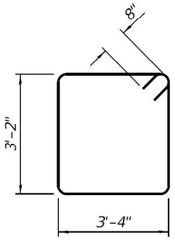
FIELD CUTTING DIAGRAM

Order v222(E) full length. Cut as shown and use remainder of bars in opposite wing.

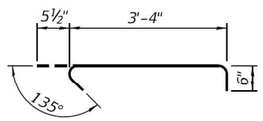


BAR v220(E)
(Headed)
(216–#8 Bar terminators)

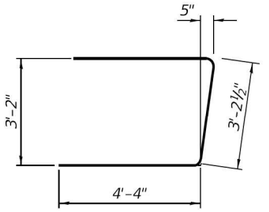
BAR h222(E)



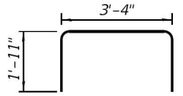
BAR s220(E)



BAR s221(E)



BAR u220(E)



BAR s222(E)

Notes:
Pour steps monolithically with cap.
Bar terminators paid for separately. See Total Bill of Material.
For details of piles see sheet 30 of 34.

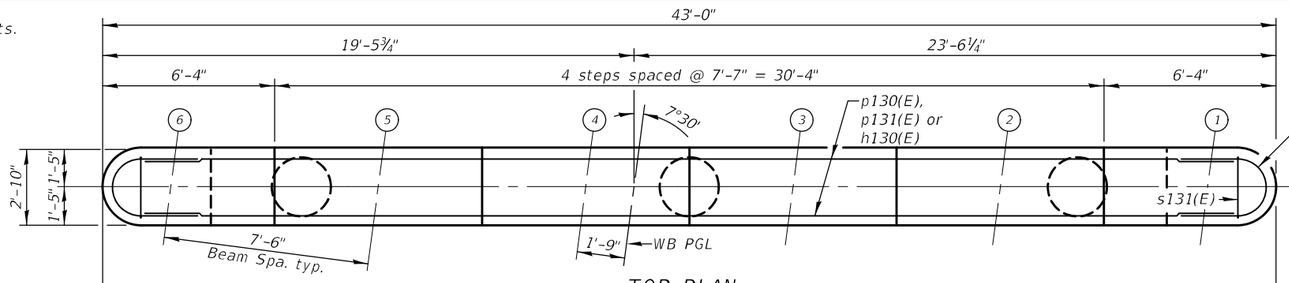
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 30 of 34.

PILE DATA – PIER 1

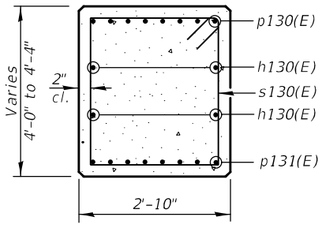
Type: 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 35'-0"
No. Production Piles: 11
No. Test Piles: 1

PILE DATA – PIER 2

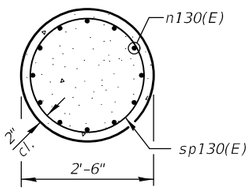
Type: 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 35'-0"
No. Production Piles: 12
No. Test Piles: 0



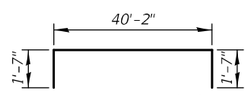
TOP PLAN



SEC. A-A



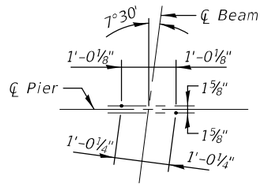
SEC. B-B



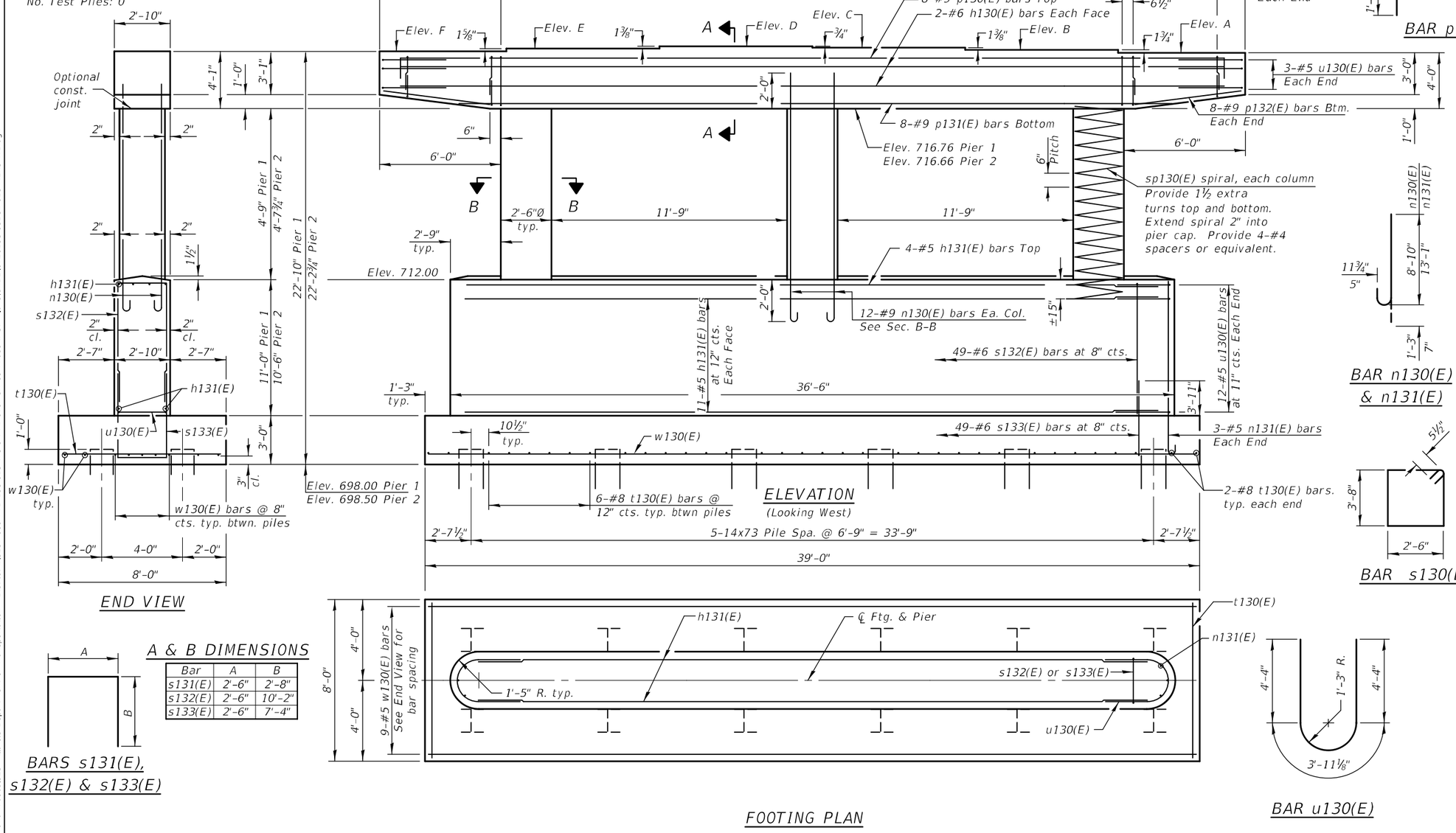
BAR p130(E)

BEARING SEAT ELEVATIONS

Elev.	Pier 1	Pier 2
A	720.76	720.66
B	720.91	720.81
C	721.02	720.92
D	721.08	720.98
E	720.97	720.87
F	720.83	720.73



ANCHOR BOLT LAYOUT



ELEVATION
(Looking West)

END VIEW

BAR n130(E) & n131(E)

BAR s130(E)

BILL OF MATERIAL TWO PIERS

Bar	No.	Size	Length	Shape
h130(E)	8	#6	40'-2"	
h131(E)	52	#5	33'-6"	
n130(E)	72	#9	10'-1"	
n131(E)	12	#5	13'-8"	
p130(E)	16	#9	43'-4"	
p131(E)	16	#9	32'-0"	
p132(E)	32	#9	5'-8"	
s130(E)	112	#5	13'-3"	
s131(E)	80	#5	7'-10"	
s132(E)	98	#6	22'-10"	
s133(E)	98	#6	17'-2"	
** sp130(E)	6	#5	6'-2"	
t130(E)	68	#8	7'-8"	
u130(E)	60	#5	12'-7"	
w130(E)	18	#5	38'-8"	
Structure Excavation		Cu. Yd.	420.5	
Concrete Structures		Cu. Yd.	196.0	
Reinforcement Bars, Epoxy Coated		Pound	21,460	
Furnishing Steel Piles, HP14x73		Foot	805	
Driving Piles		Foot	805	
Test Pile Steel HP14x73		Each	1	

** Length is height of spiral.

A & B DIMENSIONS

Bar	A	B
s131(E)	2'-6"	2'-8"
s132(E)	2'-6"	10'-2"
s133(E)	2'-6"	7'-4"

BARS s131(E), s132(E) & s133(E)

FOOTING PLAN

BAR u130(E)

MODEL: 68D84-087
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-028-PIERS WB.dgn
8/16/2024 1:30:57 PM

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = ____ | DESIGNED - DJC | REVISED - ____
PLOT SCALE = ____ | CHECKED - MAM | REVISED - ____
PLOT DATE = 8/16/2024 | DRAWN - DJC | REVISED - ____
CHECKED - MAM | REVISED - ____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS W.B.
STRUCTURE NO. 072-0258 (W.B.)
SHEET 28 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	97
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

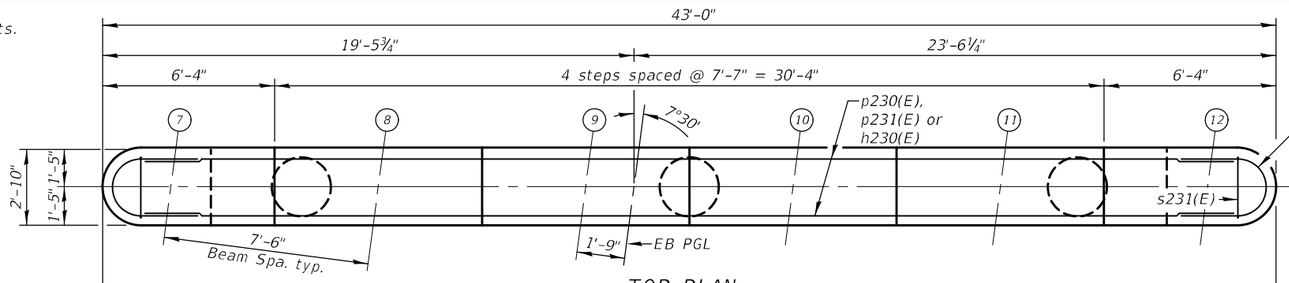
Notes:
Space reinforcement in cap to miss anchor bolts.
Pour steps monolithically with cap.
For details of piles, see sheet 30 of 34.

PILE DATA – PIER 1

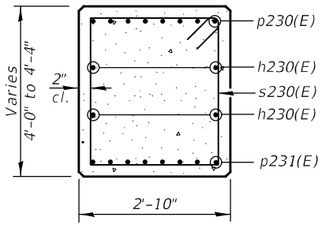
Type: 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 33'-0"
No. Production Piles: 12
No. Test Piles: 0

PILE DATA – PIER 2

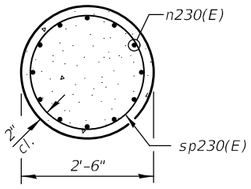
Type: 14x73
Nominal Required Bearing: 578 kips
Factored Resistance Available: 318 kips
Est. Length: 33'-0"
No. Production Piles: 11
No. Test Piles: 1



TOP PLAN



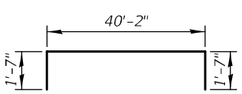
SEC. A-A



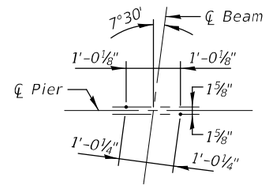
SEC. B-B

BEARING SEAT ELEVATIONS

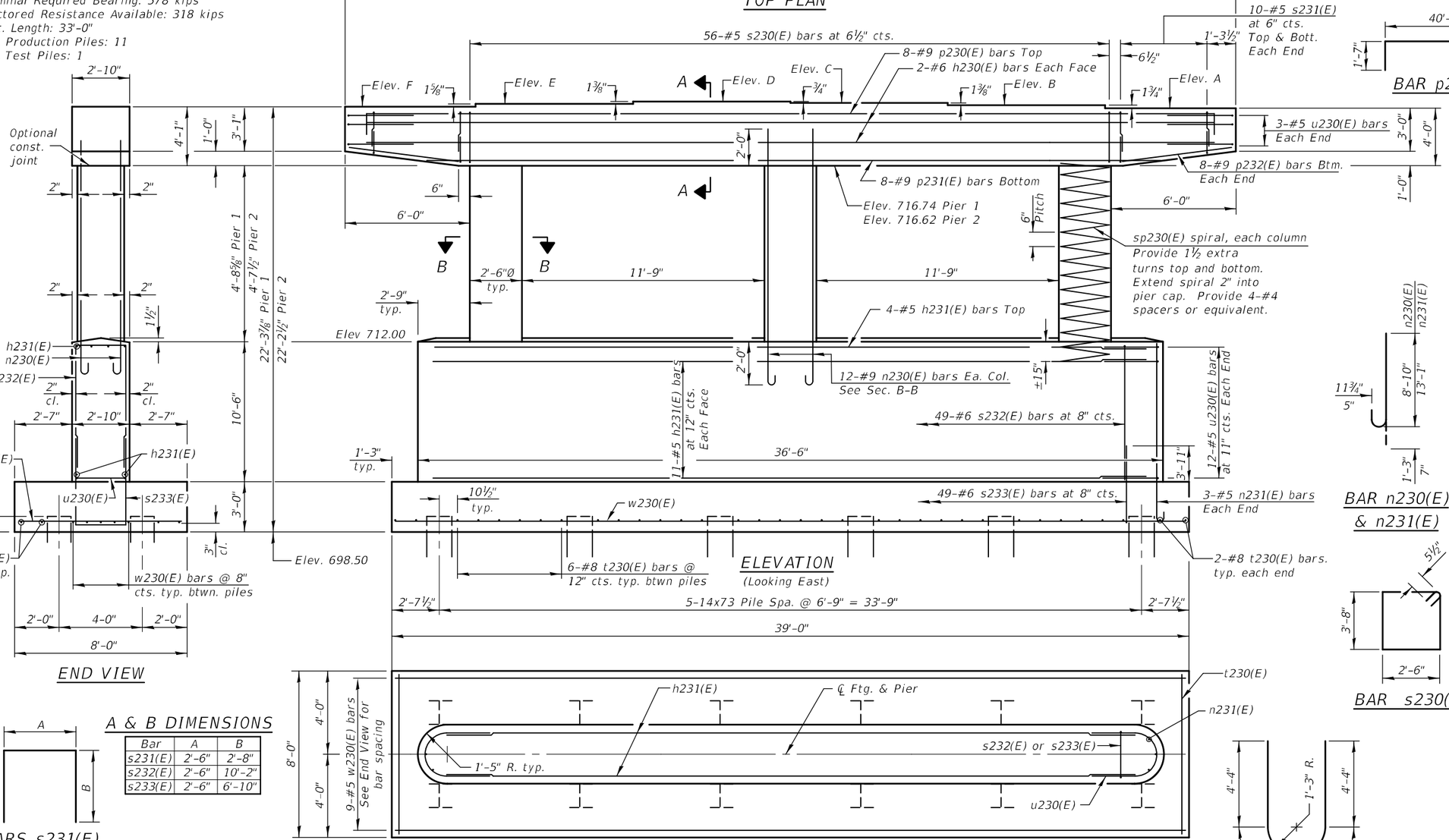
Elev.	Pier 1	Pier 2
A	720.74	720.62
B	720.89	720.77
C	721.00	720.88
D	721.06	720.94
E	720.95	720.83
F	720.81	720.69



BAR p230(E)



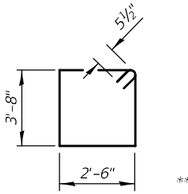
ANCHOR BOLT LAYOUT



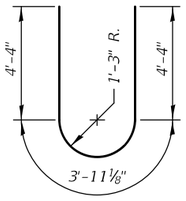
END VIEW

FOOTING PLAN

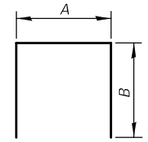
BAR n230(E) & n231(E)



BAR s230(E)



BAR u230(E)



BARS s231(E), s232(E) & s233(E)

A & B DIMENSIONS

Bar	A	B
s231(E)	2'-6"	2'-8"
s232(E)	2'-6"	10'-2"
s233(E)	2'-6"	6'-10"

BILL OF MATERIAL TWO PIERS

Bar	No.	Size	Length	Shape
h230(E)	8	#6	40'-2"	
h231(E)	52	#5	33'-6"	
n230(E)	72	#9	10'-1"	
n231(E)	12	#5	13'-8"	
p230(E)	16	#9	43'-4"	
p231(E)	16	#9	32'-0"	
p232(E)	32	#9	5'-8"	
s230(E)	112	#5	13'-3"	
s231(E)	80	#5	7'-10"	
s232(E)	98	#6	22'-10"	
s233(E)	98	#6	16'-2"	
** sp230(E)	6	#5	6'-2"	
t230(E)	68	#8	7'-8"	
u230(E)	60	#5	12'-7"	
w230(E)	18	#5	38'-8"	
Structure Excavation		Cu. Yd.	401.4	
Concrete Structures		Cu. Yd.	192.2	
Reinforcement Bars, Epoxy Coated		Pound	21,310	
Furnishing Steel Piles, HP14x73		Foot	759	
Driving Piles		Foot	759	
Test Pile Steel HP14x73		Each	1	

** Length is height of spiral.

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____ | DESIGNED - DJC | REVISED - _____
PLOT SCALE = _____ | CHECKED - MAM | REVISED - _____
PLOT DATE = 8/16/2024 | DRAWN - DJC | REVISED - _____
CHECKED - MAM | REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PIERS E.B.
STRUCTURE NO. 072-0259 (E.B.)
SHEET 29 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	98
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: 68D84-088
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-029-PIERS EB.dgn
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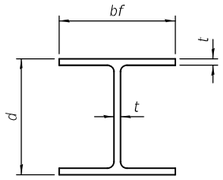
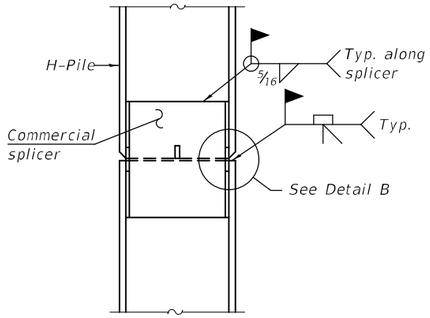
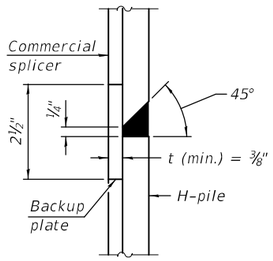


STEEL PILE TABLE

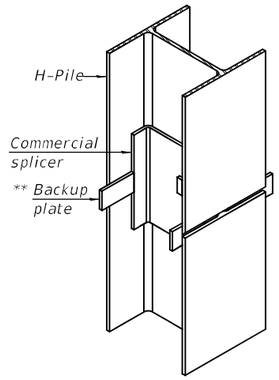
Designation	Depth d	Flange width bf	Web and Flange thickness t	Encasement diameter A
HP 18x181	18	18	1	36"
x157	17¾"	17⅞"	⅞"	36"
x135	17½"	17¾"	¾"	36"
HP 16x183	16½"	16½"	1⅛"	36"
x162	16¼"	16⅛"	1"	36"
x141	16	16	⅞"	36"
x121	15¾"	15⅞"	¾"	36"
HP 14x117	14¼"	14⅞"	13/16"	30"
x102	14"	14¾"	11/16"	30"
x89	13⅞"	14¾"	⅝"	30"
x73	13⅝"	14⅝"	½"	30"
HP 12x84	12¼"	12¼"	11/16"	24"
x74	12⅛"	12¼"	⅝"	24"
x63	12"	12⅛"	½"	24"
x53	11¾"	12"	7/16"	24"
HP 10x57	10"	10¼"	9/16"	24"
x42	9¾"	10⅛"	7/16"	24"
HP 8x36	8"	8⅛"	7/16"	18"



ELEVATION

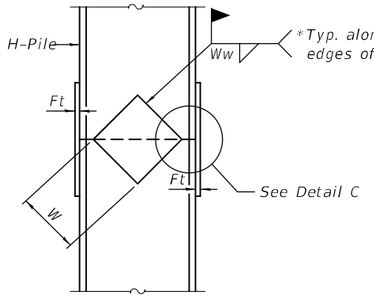


DETAIL B

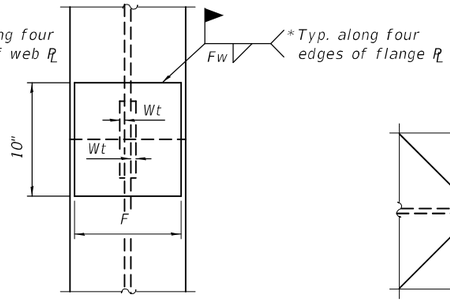


ISOMETRIC VIEW

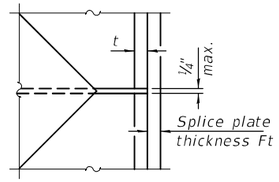
WELDED COMMERCIAL SPLICE



ELEVATION



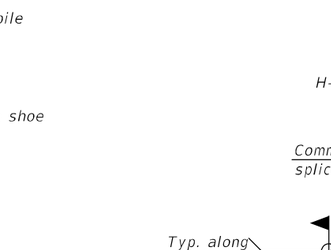
END VIEW



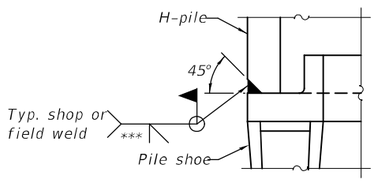
DETAIL C

Designation	F	Ft	Fw	W	Wt	Ww
HP 18x181	15½"	1½"	1"	9½"	⅞"	¾"
x157	15¼"	1¼"	1"	9½"	⅞"	¾"
x135	15¼"	1¼"	1"	9½"	⅞"	¾"
HP 16x183	13¾"	1½"	1"	8¼"	⅞"	¾"
x162	13½"	1½"	1"	8¼"	¾"	⅝"
x141	13½"	1¼"	⅞"	8¼"	¾"	⅝"
x121	13½"	1¼"	⅞"	8¼"	¾"	⅝"
HP 14x117	12½"	1¼"	⅞"	7¾"	⅝"	½"
x102	12½"	1"	¾"	7¾"	⅝"	½"
x89	12½"	⅞"	11/16"	7¾"	⅝"	½"
x73	12½"	¾"	9/16"	7¾"	⅝"	½"
HP 12x84	10"	1"	11/16"	6½"	⅝"	½"
x74	10"	⅞"	11/16"	6½"	⅝"	½"
x63	10"	¾"	½"	6½"	½"	⅜"
x53	10"	¾"	½"	6½"	½"	⅜"
HP 10x57	8"	⅞"	9/16"	5¼"	½"	⅜"
x42	8"	¾"	9/16"	5¼"	½"	⅜"
HP 8x36	6¾"	⅝"	7/16"	4"	½"	⅜"

WELDED PLATE FIELD SPLICE



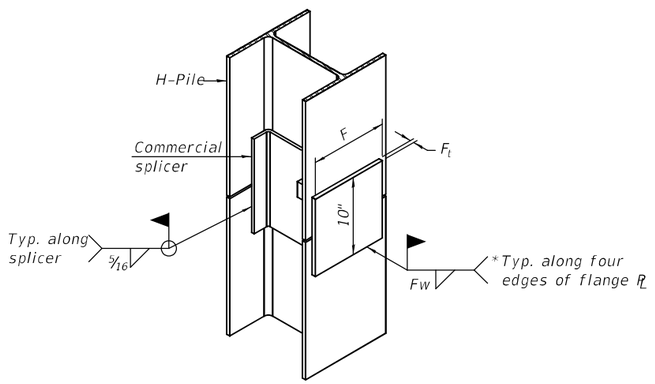
ELEVATION



DETAIL A

SHOE ATTACHMENT

Note:
The steel H-piles shall be according to AASHTO M270 Grade 50.



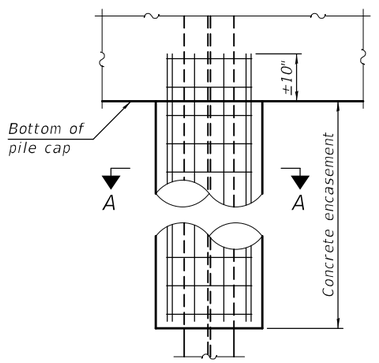
ISOMETRIC VIEW

WELDED COMMERCIAL SPLICE ALTERNATE

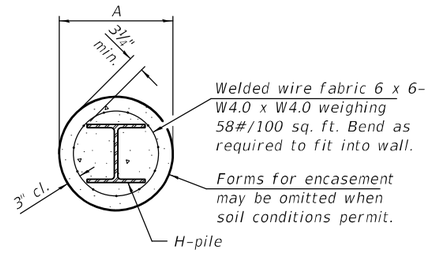
* Interrupt welds ¼" from end of web and/or each flange.

** Remove portions of backup plates that extend outside the flanges.

*** Weld size per pile shoe manufacturer (5/16" min.).



ELEVATION



SECTION A-A

INDIVIDUAL PILE CONCRETE ENCASEMENT

(when specified)

F-HP 10-27-2023

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____	DESIGNED - DJC	REVISED - _____
	CHECKED -	REVISED - _____
PLOT SCALE = _____	DRAWN - DJC	REVISED - _____
PLOT DATE = 8/16/2024	CHECKED -	REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

HP PILE DETAILS
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 30 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	99
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: 68D84-089
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\0720258-68D84-030 HP PILE DETAILS.dgn
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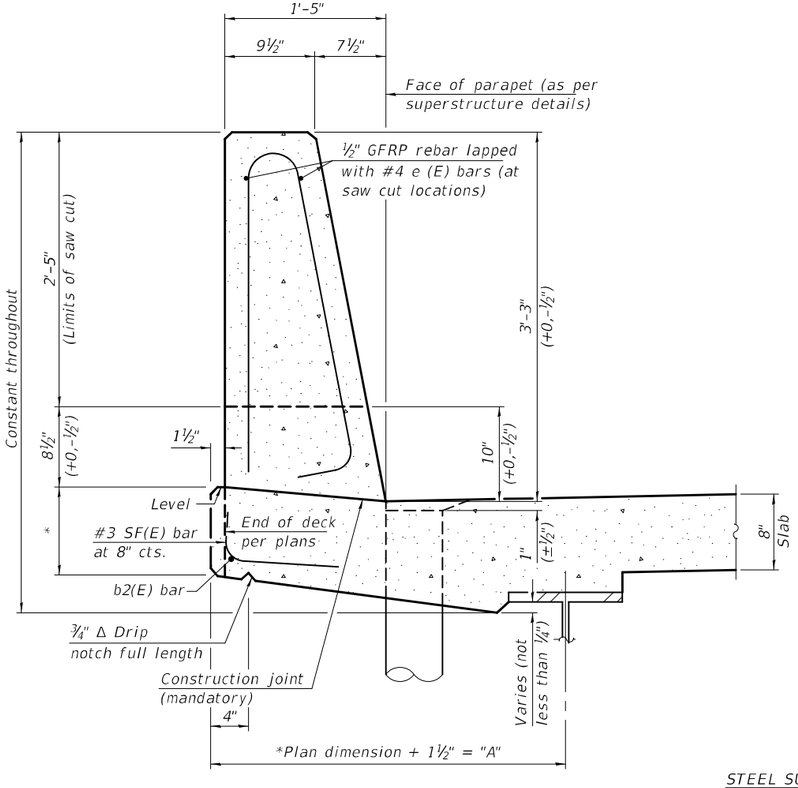
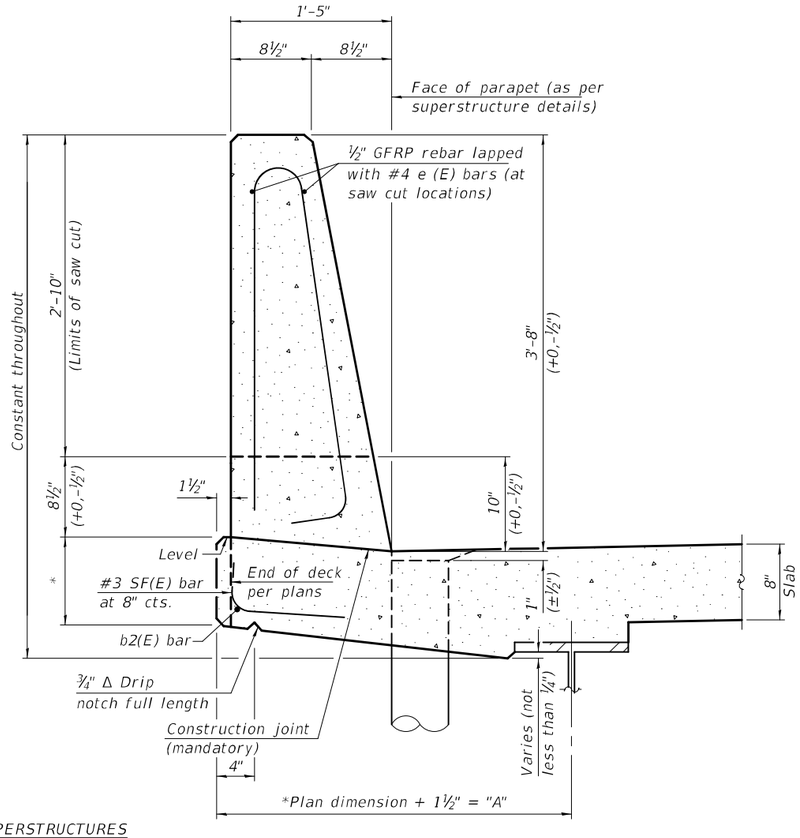


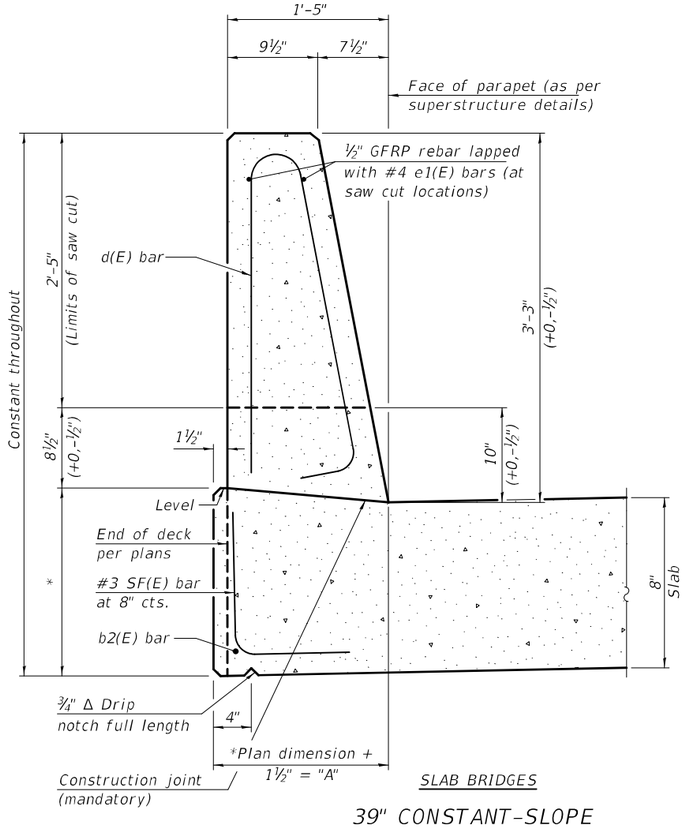
39" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)



44" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)



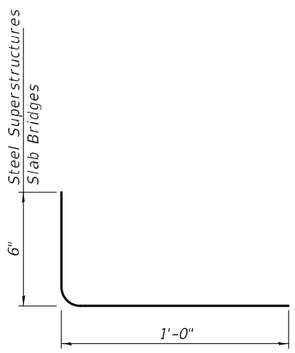
39" CONSTANT-SLOPE PARAPET SECTION

(Showing dimensions, d(E), and ½" Ø GFRP rebar)

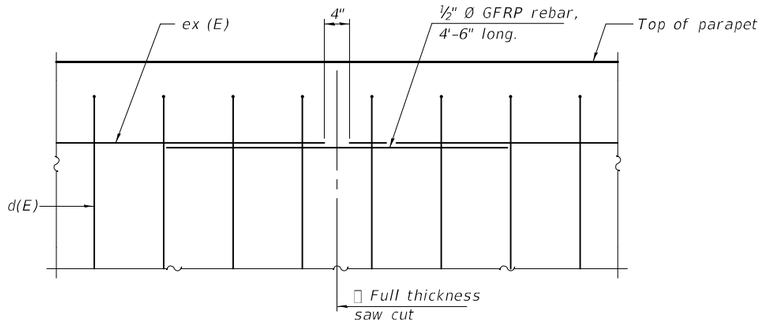
STEEL SUPERSTRUCTURES

SLAB BRIDGES

*See Superstructure Details.



SF(E) BAR



DETAIL - GFRP REBAR STIFFENING ELEVATION

(Place as shown in parapet section at each parapet joint location.)

Notes:
All dimensions shall remain the same as shown on superstructure details, except dimension "A" which is to be revised as shown.
Additional concrete needed to revise dimension "A" (39" and 44" parapets):
Steel Superstructures: 0.00348 cu. yds./ft.
Slab Bridge Superstructures: cu. yds./ft.
Place full depth aluminum sheets as shown on superstructure details.
Replace all cork joint filler locations with a full thickness saw cut.
Steel and slab superstructures shown. Other superstructure types similar.

SFP 39-44 10/27/2023

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME = _____ | DESIGNED - DJC | REVISED - _____
CHECKED - | REVISED - _____
PLOT SCALE = _____ | DRAWN - DJC | REVISED - _____
PLOT DATE = 8/16/2024 | CHECKED - | REVISED - _____

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CONCRETE PARAPET SLIPFORMING OPTION
STRUCTURE NO. 072-0258 (W.B.) & 072-0259 (E.B.)
SHEET 31 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	[72-3HVB]BR	PEORIA	158	100
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 68D84-090
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str. Plans\CADD\072025B-68D84-031 SFP DETAILS.dgn
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Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 1 of 1

Date 10/25/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station

BORING NO. SB-01
Station 185+82.98
Offset 70.68' LT
Ground Surface Elev. 697.07 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 683.6 ft ▼
Upon Completion 677.1 ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL-Black w/ Roots and Organic Material 696.3			
SILTY CLAY-Black, Soft to Medium-Stiff	2		
	3 4	0.2 B	28
693.1	3		
CLAY LOAM-Brown and Gray, Soft to Medium-Stiff -5	2 3	0.3 B	34
	2		
	3 3	0.4 B	24
Shelby Tube (8.0-10.0) 16" Recovery	N/A		
	N/A N/A	0.8 P	
-10	5		
	3 4	0.4 B	25
683.6 ▼	3		
SILTY CLAY-Brown, Soft to Medium-Stiff, Wet	3 3	0.9 B	27
-15 681.1	4		
CLAY-Brown and Gray, Stiff	5 7	1.5 B	25
678.6	4		
SILTY CLAY-Brown, Medium-Stiff, w/ Trace Gravels	3 6	0.8 B	25
677.1 ▽ -20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY-Brown, Very Stiff to Hard, w/ Gravels and Shale Fragments	10		
	13 25	3.9 B	14
673.6	10		
CLAYEY SHALE-Brown and Gray, Hard, w/ Shale and Sandstone Fragments -25	35 23	1.9 S	15
671.1	15		
SHALE-Gray, Hard	23 44	3.3 S	19
	20		
667.1 -30	30 50/5"	1.0 S	17
End of Boring			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 1 of 2

Date 10/26/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD MUD ROTARY HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station

BORING NO. SB-02
Station 187+05.40
Offset 19.94' RT
Ground Surface Elev. 695.99 ft

Surface Water Elev. ft
Stream Bed Elev. ft

Groundwater Elev.:
First Encounter 690.0 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL-Black, w/ Roots and Organic Material 695.0			
SILTY CLAY-Brown and Black, Stiff to Very Stiff	3		
	5 5	2.1 B	28
692.5	2		
CLAY LOAM-Brown and Gray, Soft to Medium-Stiff	3 2	0.4 B	24
▼ Becomes Wet -5	3		
	4 5	1.1 B	23
	3		
-10	3 4	1.1 B	26
	1		
	2 2	0.4 B	29
	2		
-15	3 4	0.9 B	27
680.0	4		
SILTY CLAY-Brown and Gray, Stiff, w/ Gravel Fragments	4 5	1.3 B	24
	3		
676.0 -20	4 7	1.4 B	21

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY-Brown and Gray, Very Stiff to Hard, w/ Shale and Sandstone Fragments	17		
	18 19	0.7 S	18
	12		
-25	14 20	2.8 S	18
670.0	15		
SHALE-Gray, Very Stiff to Hard	34 47	4.2 S	16
	18		
-30	28 33	3.7 S	15
Borehole continued with rock coring.			
-35			
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

ROCK CORE LOG

Page 2 of 2

Date 10/26/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria CORING METHOD Rotary Diamond Bit

STRUCT. NO. 072-0074/0075
Station

CORING BARREL TYPE & SIZE NX (5')
Core Diameter 2 in
Top of Rock Elev. 665.99 ft
Begin Core Elev. 665.99 ft

BORING NO. SB-02
Station 187+05.40
Offset 19.94' RT
Ground Surface Elev. 695.99 ft

DEPTH (ft)	CORE (#)	RECOVERY (%)	R.Q.D. (%)	CORE TIME (min/ft)	STRENGTH (tsf)
SHALE-Gray, Thin Bedding, Highly Weathered, Aphanitic 665.99	1	84	84	4	2.4
664.99 LIMESTONE-Gray, Thin Bedding, Highly Weathered, Very Finely Crystalline, Hard					
663.99 COAL SEAM-Black, Highly Weathered, Fractured					
662.49 CORE LOSS (9.5")					
661.69 COAL SEAM-Black, Highly Weathered, Fractured -35	2	88	0	2.5	
659.29 CORE LOSS (4") 658.99					
COAL SEAM-Black, Highly Weathered, Fractured					
657.24 CORE LOSS (3") 656.99					
COAL SEAM-Black, Highly-Weathered, Fractured -40	3	95	52	5	
655.32 CORE LOSS (3") 655.07					
SHALE-Gray, Thin Bedding, Highly Weathered, Aphanitic, w/ Some Fractures					
650.99 -45					
End of Boring -50					

Color pictures of the cores Yes
Cores will be stored for examination until Yes
The "Strength" column represents the uniaxial compressive strength of the core sample (ASTM D-2938)

BBS, form 138 (Rev. 8-99)

MODEL: 68D84091
FILE NAME: Z:\0 V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str

8/16/2024 1:31:03 PM

VEENSTRA & KIMM INC.
Springfield, IL. Phone: (217)544-8033
IL. Design Firm No. 184-001939

USER NAME =	DESIGNED -	REVISED -
	CHECKED -	REVISED -
PLOT SCALE =	DRAWN -	REVISED -
PLOT DATE = 8/16/2024	CHECKED -	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SOIL BORINGS
STRUCTURE NO. 072–0258 (W.B.) & 072–0259 (E.B.)
SHEET 32 OF 34 SHEETS

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	101
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 1 of 2

Date 10/28/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD MUD ROTARY HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station
BORING NO. SB-03
Station 188+54.04
Offset 61.36' LT
Ground Surface Elev. 724.89 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
ASPHALT (14") 723.7			
	2		
SILTY CLAY-Black and Brown, Medium-Stiff, w/ Trace Gravel	3 4	0.5 P	20
721.4			
SILTY CLAY FILL-Black and Gray, Stiff to Very Stiff	4		
	6 7	1.3 B	23
-5			
	4		
	6 9	1.6 B	22
Shelby Tube (8.0-10.0) 10" Recovery	N/A		
	N/A N/A	N/A	
-10			
	4		
	6 7	2.3 P	24
711.4			
SILTY CLAY-Brown and Gray, Medium-Stiff to Stiff	3		
	3 4	0.8 B	23
-15			
	4		
	7 7	1.2 B	24
Becomes Very Stiff w/ Trace Coal Fragments	4		
704.9	7 10	2.5 P	24
-20			

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY-Brown and Gray, Stiff to Very Stiff, w/ Trace Gravels and Shale Fragments	4		
	6 9	2.3 P	22
	7		
	9 12	1.5 B	21
-25			
	7		
	11 13	2.2 B	19
	7		
	9 13	3.3 B	19
-30			
	3		
691.4 CLAY LOAM-Brown and Gray, Medium-Stiff to Stiff	3 4	0.7 B	25
-35			
	4		
	3 4	1.0 P	
-40			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 2 of 2

Date 10/28/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD MUD ROTARY HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station
BORING NO. SB-03
Station 188+54.04
Offset 61.36' LT
Ground Surface Elev. 724.89 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
CLAY LOAM-Brown and Gray, Medium-Stiff to Stiff *(continued)*			
Shelby tube (43.0-45.0) 24" Recovery	N/A		
	N/A N/A	1.0 P	33
-45			
675.9	6		
SILTY CLAY-Brown and Gray, Very Stiff, w/ Fine Sand Grains and Shale Fragments	24 37	3.0 P	17
-50			
671.4 SHALE-Gray, Very Stiff to Hard	16		
	32 50/6"	>4.5 P	17
-55			
Begin MSPT Sample			
-60		1.9 S	18

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SHALE-Gray, Very Stiff to Hard *(continued)*			
660.4 COAL SEAM-Black, Brittle			
-65			17
Shale Fragments			
			43
654.9 End of Boring			
-70			
-75			
-80			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 1 of 1

Date 10/25/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD HSA HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station
BORING NO. SB-04
Station 185+96.06
Offset 71.39' RT
Ground Surface Elev. 698.17 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 677.2 ft ▼
Upon Completion 678.2 ft ▽
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
TOPSOIL-Black w/ Roots and Organic Material 697.2			
	4		
SILTY CLAY-Brown, Stiff	4 5	1.3 P	32
694.7			
CLAY LOAM-Brown and Gray, Medium-Stiff to Stiff	3		
	3 3	0.5 P	30
-5			
	3		
	3 4	0.6 B	21
	4		
	5 6	1.0 B	21
-10			
	4		
	3 3	0.5 B	22
684.7			
CLAY LOAM-Brown and Gray, Soft to Medium-Stiff, w/ Trace Sand	4		
	4 4	0.4 B	28
-15			
681.7	3		
SILTY CLAY-Brown and Gray, Stiff	3 5	0.9 B	26
	2		
▽ -20	4 6	1.1 B	25

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)
SILTY CLAY-Brown and Gray, Stiff *(continued)* 677.2 ▼			
	5		
SILTY CLAY-Brown, Stiff, w/ Fine Sand and Gravels, Wet	9 10	1.3 B	20
674.2			
CLAY-Gray, Very Stiff to Hard, w/ Shale Fragmetns	12 26	2.1 S	18
-25			
671.7	8		
SHALE-Gray, Hard	26 44	4.2 S	15
	16		
	15 50/5.5"	>4.5 P	20
-30			
664.5	50/2"		
Split-Spoon Refusal on Limestone	- -	>4.5 P	16
-35			
End of Boring			

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 1 of 1

Date 10/26/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD MUD ROTARY HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station
BORING NO. SB-05
Station 186+64.30
Offset 72.90' RT
Ground Surface Elev. 699.21 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter 693.2 ft ▼
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
698.2				TOPSOIL-Black, w/ Roots and Organic Material
	3			
	4	1.8	32	SILTY CLAY-Black and Brown, Stiff
	5	B		
695.7				
	2			CLAY-Brown and Gray, Medium
	3	0.5	29	Stiff to Stiff
-5	3	B		
				Becomes Wet ▼
	N/A			
	N/A	-		
	N/A			
	3			
	3	1.3	23	
-10	4	B		
				Becomes Soft to Medium-Stiff
	2			
	2	0.6	26	
	2	B		
	WH			
	WH	0.9	28	
-15	3	B		
682.7				
	5			
	5	1.7	25	SILTY CLAY-Brown and Gray, Stiff, w/ Trace Sands and Gravels
	7	B		
	4			
679.2	5			
-20	7	1.8	25	
		B		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SILTY CLAY-Brown and Gray, Very Stiff to Hard, w/ Shale and Sandstone Fragments
	13			
	24	3.1	11	
	28	S		
	20			
	24	2.0	24	
-25	38	P		
673.2				
	23			SHALE-Gray, Hard
	31	4.6	17	
	32	S		
				Begin MSPT Sample
		>4.5	22	
-30		P		
665.7				
				LIMESTONE
664.7				
-35				SHALE-Gray, Hard, w/ Coal Fragments
		4.4	17	
		B		
660.7				
		0.5	51	COAL-Black, Brittle
659.2		B		
-40				End of Boring

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 1 of 2

Date 10/27/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD MUD ROTARY HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station
BORING NO. SB-06
Station 188+50.21
Offset 60.74' RT
Ground Surface Elev. 723.94 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				ASPHALT
722.9				
	2			SILTY CLAY FILL-Brown and Gray, Stiff
	3	1.3	20	
	4	P		
	3			
	5	1.8	16	Gravel and Sandstone Fragments
-5	7	P		
717.9				
	9			SILTY CLAY FILL-Brown and Gray, Very Stiff, w/ Gravels
	9	2.1	16	
	10	S		
	5			
	6	3.7	23	
-10	9	S		
712.9				
	3			SILTY CLAY-Brown and Gray, Stiff to Very Stiff, w/ Trace Gravels
	6	2.8	28	
	7	S		
	3			
	5	1.0	20	
-15	5	P		
	4			
	5	3.1	24	
	8	B		
	4			
703.9	5			
-20	7	1.5	24	
		P		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SILTY CLAY-Brown and Gray, Stiff to Very Stiff, w/ Sandstone and Coal Fragments
	6			
	5	3.7	14	
	9	B		
	4			
	5	1.8	21	
-25	7	P		
697.9				
	5			SILTY CLAY-Brown and Gray, Very Stiff, w/ Trace Gravels
	8	2.8	31	
	10	B		
	7			
	16	3.3	12	
-30	50/4"	P		
694.9				
	4			SILTY CLAY-Brown and Black, Very Stiff, w/ Shale Fragments
	4	1.7	28	
	5	B		
690.4				
	N/A			CLAY LOAM-Brown and Gray, Medium-Stiff to Stiff
	N/A	0.5	27	
	N/A	P		
683.9				Shelby Tube (38.0-40.0) 24" Recovery
-40				

The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

Illinois Department of Transportation
Division of Highways

SOIL BORING LOG

Page 2 of 2

Date 10/27/21

ROUTE FAI 74 DESCRIPTION I-74 Over CH R23 and Abandoned Railroad LOGGED BY KEG

SECTION 72-(3RS-3;4RS-2) LOCATION Brimfield, IL

COUNTY Peoria DRILLING METHOD MUD ROTARY HAMMER TYPE Auto

STRUCT. NO. 072-0074/0075
Station
BORING NO. SB-06
Station 188+50.21
Offset 60.74' RT
Ground Surface Elev. 723.94 ft

Surface Water Elev. ft
Stream Bed Elev. ft
Groundwater Elev.:
First Encounter ft
Upon Completion ft
After Hrs. ft

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SILTY CLAY LOAM-Brown and Gray, Medium-Stiff to Stiff
	3			
	3	1.3	26	
-45	5	B		
	5			
674.4				
	8	1.9	26	SILTY CLAY LOAM-Brown and Gray, Stiff to Very Stiff, w/ Trace Sands
-50	11	B		
670.4				
	19			CLAYEY SHALE-Gray, Hard
	29	4.6	18	
-55	50/5.75"	B		
665.4				
		4.8	16	SHALE-Gray, Hard (Begin MSPT Sample)
-60		S		

DEPTH (ft)	BLOWS (/6")	UCS Qu (tsf)	MOIST (%)	Description
				SHALE-Gray, Hard (Begin MSPT Sample) *(continued)*
		>4.5	14	
-65		P		
655.4				
		1.5	20	COAL SEAM-Black, Brittle
653.9		P		
-70				End of Boring

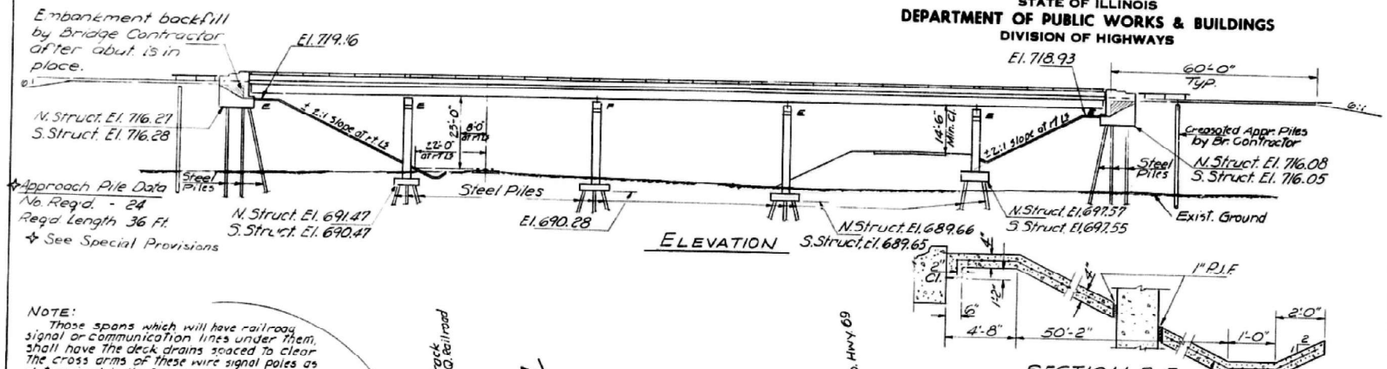
The Unconfined Compressive Strength (UCS) Failure Mode is indicated by (B-Bulge, S-Shear, P-Penetrometer)
The SPT (N value) is the sum of the last two blow values in each sampling zone (AASHTO T206)

BBS, form 137 (Rev. 8-99)

MODEL: 68D84-093
FILE NAME: z:\V and K Jobs\523 - Illinois Department of Transportation - District 4\5237-009 PTB 198-018 WO-9 I-74 over CH 69 Phase II Str Plans\CADD\072025B-68D84-034-SOIL BORINGS.dgn
8/16/2024 1:31:09 PM

B.M. #15 vertical lag screw on Top of fence post 100' ft. & Sta 188+90 Elev. 690.92

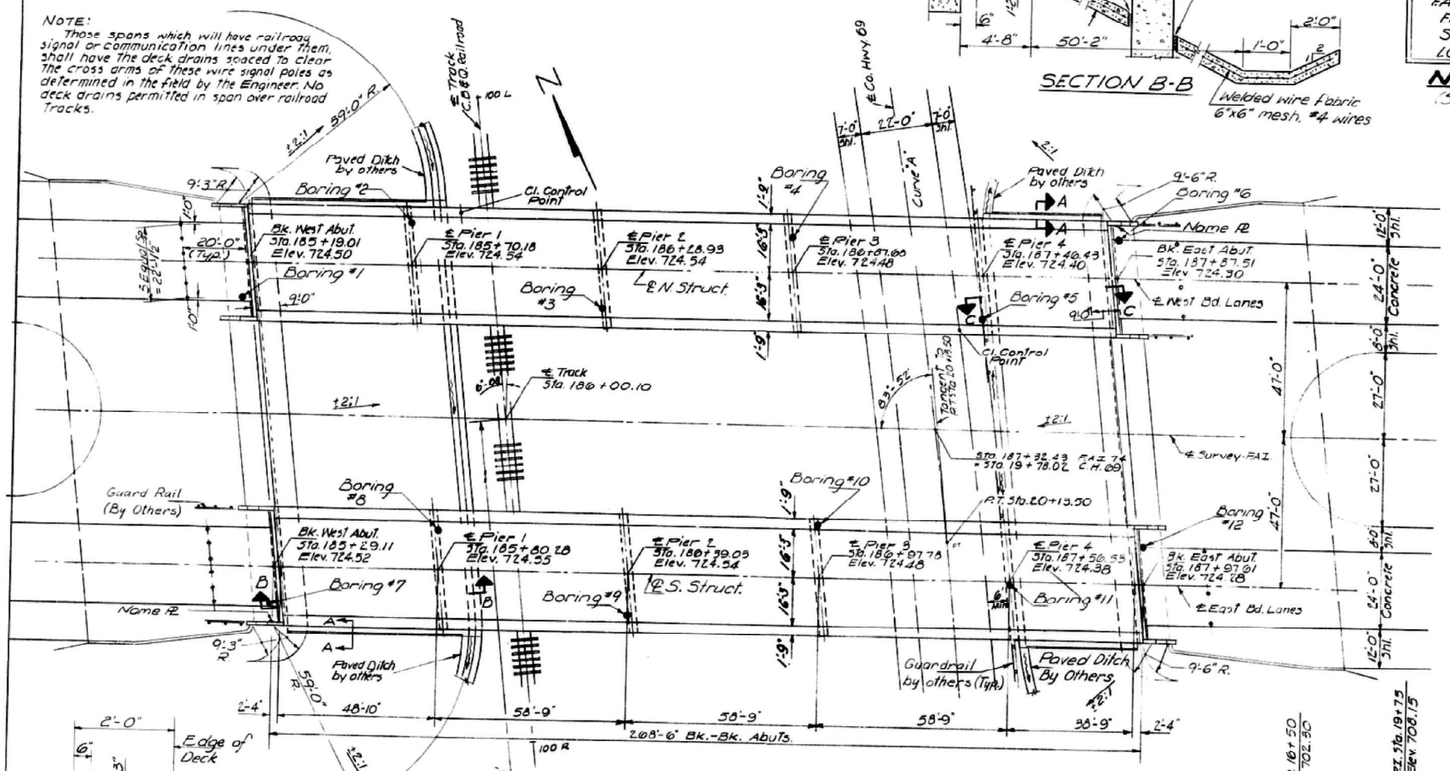
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS



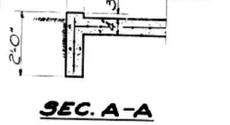
ELEVATION

SECTION B-B

NOTE:
Those spans which will have railroad signal or communication lines under them, shall have the deck drains spaced to clear the cross arms of these wire signal poles as determined in the field by the Engineer. No deck drains permitted in span over railroad Tracks.

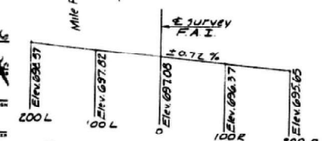


PLAN

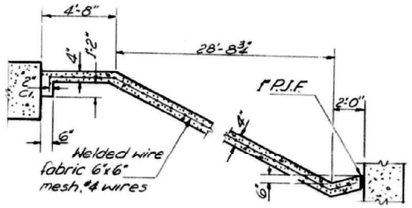


DESIGNED	D.E. Sponsler
CHECKED	R. D. FAIEL
F.M. DRAWN	A. Barrozo
CHECKED	

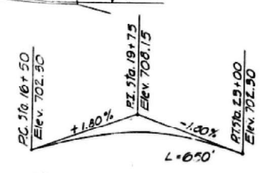
EXAMINED AUG. 23 1966
PASSED
APPROVED
ENGINEER OF BRIDGES AND TRAFFIC STRUCTURES
ENGINEER OF DESIGN
CHIEF HIGHWAY ENGINEER



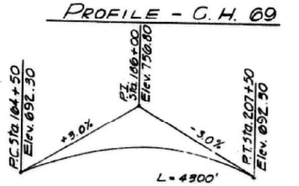
PROFILE - RAILROAD



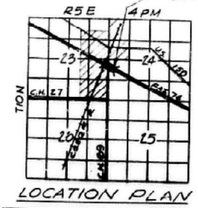
SECTION C-C



PROFILE - C.H. 69



PROFILE - F.A.I



LOCATION PLAN

C.B.&Q. R.R.
BUILT 196 BY
STATE OF ILLINOIS
F.A.I. RT. 74 SEC. 72-3HVB
FA. PROJ. I 36-74-3(14)
STA. 186+00.10
LOADING H520 & ALT.

NAME PLATE
(See Sta. 211.3-1)

CURVE "A"
P.I. = 18+11.53
Δ = 20°-25'
D = 5°-00'
T = 206.96'
R = 1145.92'
L = 408.33'
E = 18.43'
.IE. = 0.08½
TL = 216.0'

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 74	72-3 HVB	Peoria	46	8
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1 / 13 SHEETS

GENERAL NOTES

Class X Concrete shall be used throughout.

Coarse aggregate to be used in parapet handrails and end post must be absolutely free of chert, flint, limonite, lignite and soft sandstone.

The concrete floor slab shall be finished in accordance with Art. 51.19 of the Standard Specifications.

Slope wall shall be reinforced with welded wire fabric 6"x 6" mesh, #4 wires, weighing 58# per 100 Sq. Ft.

All reinforcement bars shall be lapped 20 dia. unless otherwise shown.

Rivets ¾" ϕ. Open holes 13/16" ϕ unless otherwise noted.

Anchor bolts shall be set before riveting diaphragms over supports.

The exposed surfaces of the expansion guards shall be given two shop coats of red lead paint, the contact surfaces shall be given one coat of red lead paint. Anchor studs shall not be painted.

Expansion guards are included in the quantity of Struct. Steel. Est. weight 3350 lbs.

Except as otherwise provided, all struct steel shall receive one shop coat of red lead paint and two field coats of paint. See Special Provisions for field paint.

All structural steel shall comply with the specification for structural steel ASTM Designation A-36.

The Contractor shall drive 3 Steel test piles in permanent locations one each at W. Abut. N. Struct., Pier 2 N. Struct. and E. Abut.-S. Struct. as directed by the Engr. before ordering the remainder of piles

Excavation for portion of structures in the embankments shall not be classified.

Permanent forms will not be permitted in forming the concrete deck.

FIELD WELDING OF CONSTRUCTION ACCESSORIES TO THE BOTTOM FLANGES OR FOR A DISTANCE OF 6" OF THE WEB FROM EACH END THEREOF, AND ON THE TOP FLANGES OF BEAMS OR GIRDERS WILL NOT BE PERMITTED. FIELD WELDING IN OTHER AREAS WILL BE PERMITTED ONLY WHEN APPROVED BY THE ENGINEER.

TOTAL BILL OF MATERIAL

	Item		Super.	Sub.	Total
	Class "A" Exc. for Structure	Cu Yds		315	315
*	Class X Concrete	Cu Yds	542.6	616.7	1159.3
#	Protective Coat	Sq Yds	2413		2413
	Structural Steel	Lbs.	463060		463,060
	Aluminum Handrail	Lin. Ft.	1061		1061
	Reinforcement Bars	Lbs.	149,320	51,800	201,120
	Creosoted Piles	Lin. Ft.			864
	Steel Piles (BBP36)	Lin. Ft.			4295
	Test Piles Steel (BBP36)	Ea.			3
	Name Plates	Ea.			2
	Slope Wall (4")	Sq. Yds.			1599
**	Bridge Seat Sealant	Lump Sum			

Includes inside vertical face, top and exposed end of Abutment Wings.
* Includes Excavation for slope wall.
** Applied at Abutments.

DESIGN STRESSES
f'c = 1400 psi. (Super. & Sub)
fs = 20,000 psi. (Reinf.)
fs = 20,000 psi. (Struct.)
Vc = 75 psi. (Flgs.)
n = 10
Allow. ℄ Defl. 1/850

GENERAL PLAN & ELEVATION
F.A.I. 74 OVER C.B.&Q. R.R. & RELOC. CH. 69
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.10
LOADING H320-44 & ALT.

Revised 1-20-66: Slopewall quantity, deleted Burrow Exc.; deleted By Others on C.H. 69 embankment. D.E.S.

Rev. 7-26-67 DES. Changed Curb & Rdwy. widths; changed Quantities of Class X Conc. from 525.4 - 617.9 - 1193.3 to 542.6 - 616.7 - 1159.3 cu. yds. & Reinf. Bars from 141,030-51,810-193,640 to 149,320 - 51,800 - 201,120 Lbs. D.E.S.

MODEL: Default
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VEENSTRA & KIMM INC.

DESIGNED - DMS	REVISED -		
DRAWN - DMS	REVISED -		
CHECKED - PMO	REVISED -		
DATE - 08-19-2024	REVISED -		

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

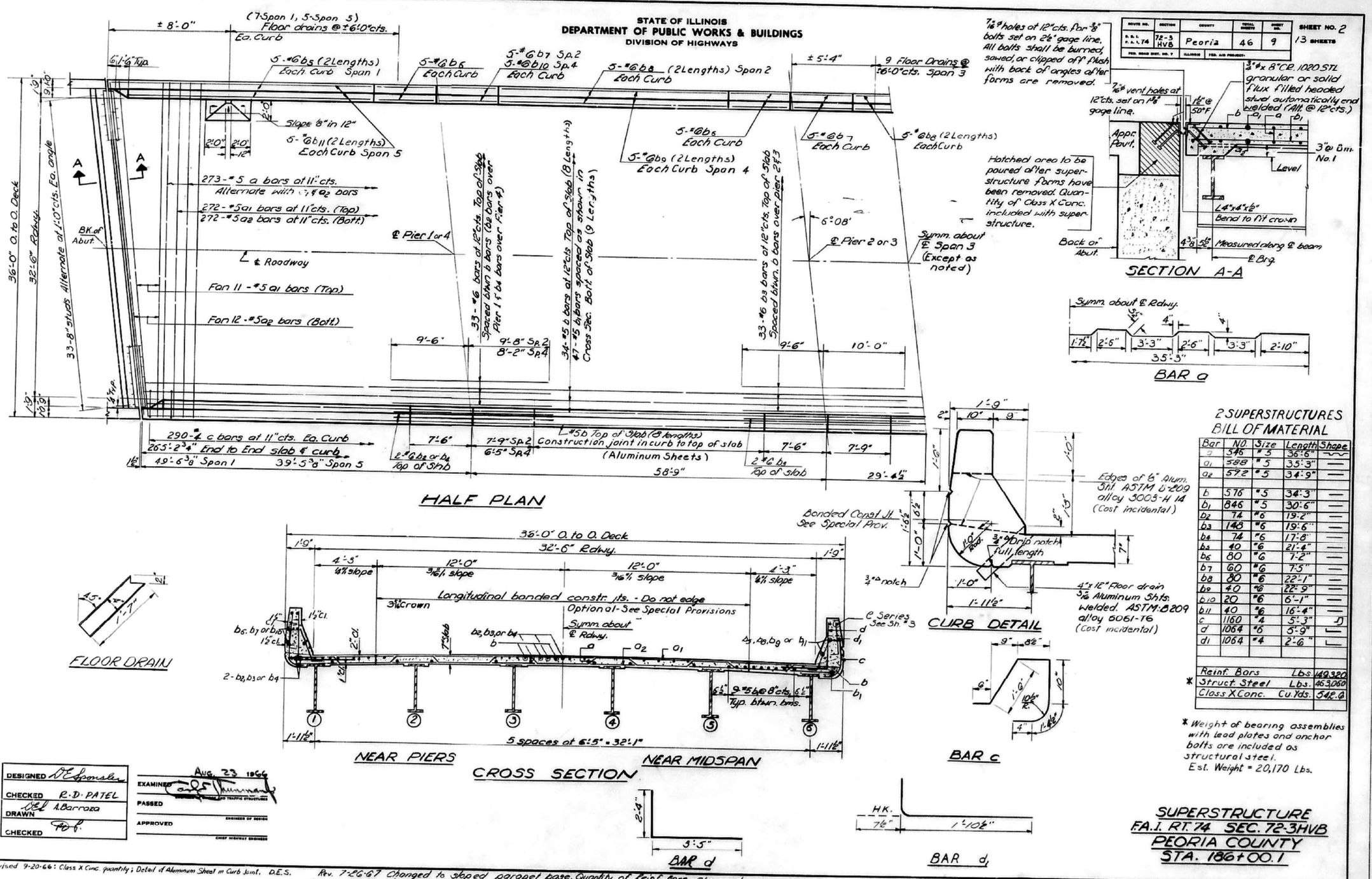
SCALE: NONE | SHEET 1 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	104
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	72-3 HVB	Peoria	46	9
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT:		

SHEET NO. 2
13 SHEETS



2 SUPERSTRUCTURES
BILL OF MATERIAL

Bar	NO	Size	Length	Shape
a	545	#5	36'-6"	
a1	388	#5	35'-3"	
a2	572	#5	34'-9"	
b	576	#5	34'-3"	
b1	846	#5	30'-6"	
b2	74	#6	19'-2"	
b3	148	#6	19'-6"	
b4	74	#6	17'-8"	
b5	40	#6	21'-4"	
b6	80	#6	7'-2"	
b7	60	#6	7'-5"	
b8	80	#6	22'-1"	
b9	40	#6	22'-9"	
b10	20	#6	6'-1"	
b11	40	#6	16'-4"	
c	1160	#4	5'-3"	
d	1064	#6	5'-9"	
d1	1064	#4	2'-6"	
Reinf. Bars			Lbs.	149,320
* Struct. Steel			Lbs.	463,060
Class X Conc.			Cu. Yds.	542.0

* Weight of bearing assemblies with lead plates and anchor bolts are included as structural steel. Est. Weight = 20,170 Lbs.

DESIGNED	D.E. Samsler	
CHECKED	R.D. PATEL	
DRAWN	A. Barroza	
CHECKED		
EXAMINED	Aug. 23 1966	
PASSED		
APPROVED		

Revised 9-20-66: Class X Conc. quantity; Detail of Aluminum Sheet in Curb Joint. D.E.S.
Rev. 7-26-67 Changed to sloped parapet base. Quantity of Reinf Bars Changed from 137,540 lbs. to 149,320 lbs; Class X changed from 584.4 cu yds to 542.6 cu yds. D.E.S.

SUPERSTRUCTURE
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

MODEL: Default
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VEENSTRA & KIMM INC.

	DESIGNED - DMS	REVISED -
	DRAWN - DMS	REVISED -
	CHECKED - PMO	REVISED -
	DATE - 08-19-2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

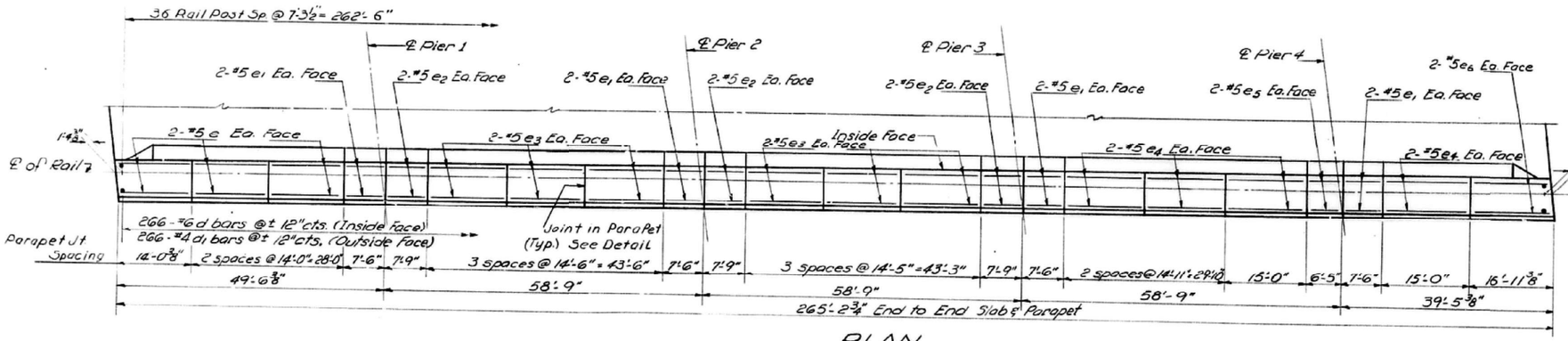
SCALE: NONE | SHEET 2 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	105
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

DIVIS NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
6 A.A. RTE. 74	72-3 HVB	Peoria	46	10
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

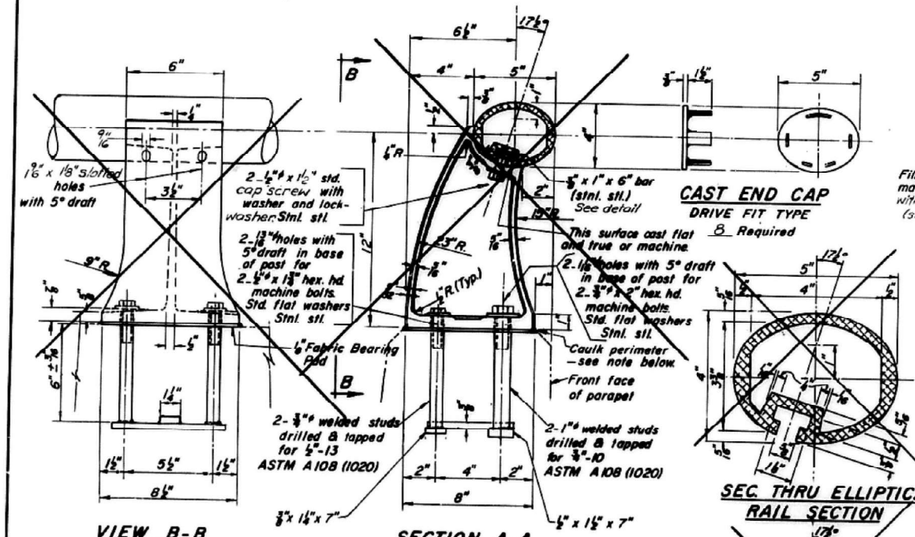
SHEET NO. 3
13 SHEETS

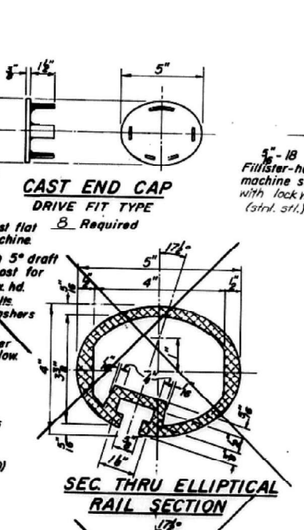


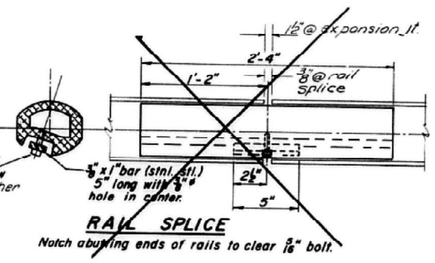
PLAN
Showing S. Parapet & Rail posts
(N. Parapet & Rail Posts same)

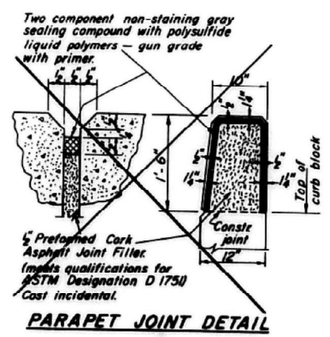
Note:
Quantity of Class X Concrete & Reinf. Bars in parapet are included with Superstructure.
See Sh. #2

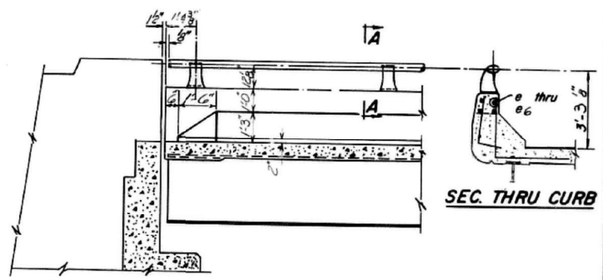
See Sh. #3a for Rail Details.











NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6, and shall extend a minimum of 2 panel lengths (attached to minimum of 3 posts) except at ends or at open joints where a minimum of 1 panel length is required. All joints in railing must be spliced per detail.

See Special Provisions for following Material Specifications:

Cast Aluminum Alloy Bridge Post— Alloy A344-T4.
Stainless Steel Welded Stud Bolts, Washers, and Locknuts.
Fabric Bearing Pad

METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1-½" and 2-⅛" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade — high spots shall be ground, and low spots shimmed.

BAR LIST

Bar	No.	Size	Length	Shape
e	48	#5	13'-8"	
e1	54	#5	7'-2"	
e2	48	#5	7'-5"	
e3	96	#5	14'-1"	
e4	64	#5	14'-7"	
e5	16	#5	6'-1"	
e6	16	#5	16'-6"	

BILL OF MATERIAL

Aluminum Handrail	Lin. Ft.	1061

ALUMINUM HANDRAIL
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

DESIGNED	D.E. Spurlock
CHECKED	R.D. PATEL
	A. BORRELLO
DRAWN	Wm. M. Best
CHECKED	PD

EXAMINED — Aug. 23 1966
PASSED
APPROVED

Note:
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers —gun grade with primer.

R-17 Rev. 10-8-65
Rev. 7-26-67 Inserted Sh #3a. Removed Class X Concrete & Reinf. Bar Quantities D.E.S.

MODEL: Default
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VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 3 OF 11 SHEETS | STA. | TO STA.

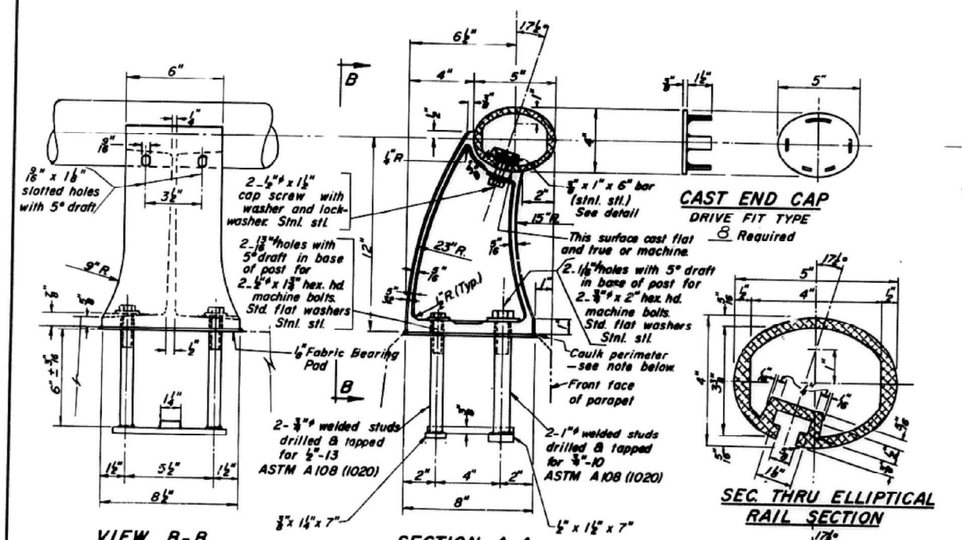
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	106
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	

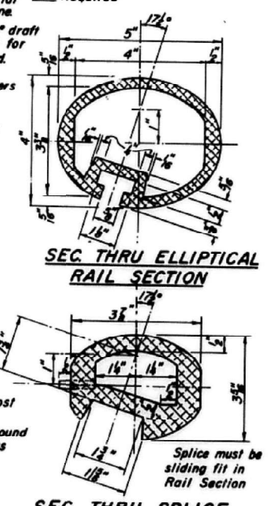
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

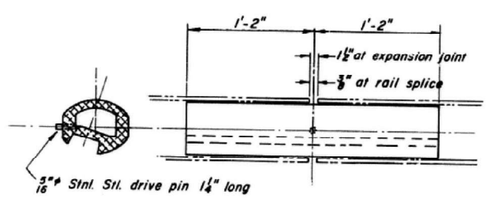
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. F.A.I. 74	72-3 HVB	Peoria	46	10A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

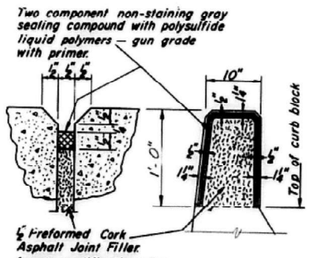
SHEET NO. 3a
13 SHEETS

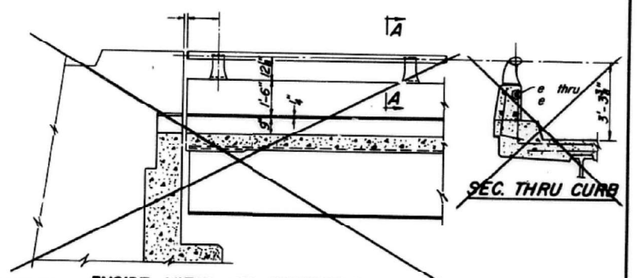
Note: For Plan see sheet # 3.











NOTES:

All Posts shall be normal to parapet.

All Aluminum Alloy Extruded Rail shall conform to ASTM specification B-221 alloy 6061-T6 and shall be supplied in modular lengths of 30 feet, except at the end of bridge or over open joints in bridge deck where the rail shall be attached to a minimum of 2 posts. If the rail is on a horizontal curve of 2300 foot radius or less, the modular lengths may be reduced but shall be attached to a minimum of 2 posts.

All joints in rail shall be spliced per detail.

See Special Provisions for following Material Specifications:
Cast Aluminum Alloy Bridge Post — Alloy A344-T4.
Stainless Steel Bars, Cap Screws, Washers and Lockwashers.
Fabric Bearing Pad.

METHOD of MEASUREMENT: Aluminum handrail shall be measured in lineal feet. The length paid for shall be the over all length along the top longitudinal railing member thru all posts and gaps.

BASIS of PAYMENT: Aluminum handrail shall be paid for at the contract unit price per lineal foot for ALUMINUM HANDRAIL, measured as specified, which price shall be payment in full for all materials, fabrication, transportation, and erection.

Cost of rail splice, end caps, and hardware to be incidental to item ALUMINUM HANDRAIL.

Provide 1-⅛" and 2-1/16" Aluminum Shims for 25% of the Posts. Rail element shall be parallel to Grade — high spots shall be ground, and low spots shimmed.

PARAPETS & RAILS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
e		#3		
e1		#5		
e2		#5		
e3		#6		
e4		#5		
Class X Concrete			Cu. Yds.	
Reinforcement Bars			Lbs	
Aluminum Handrail			Lin. Ft.	

ALUMINUM HANDRAIL
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

DESIGNED	D.L. Sponsler
CHECKED	R.D. PATEL
	D. Derringer
DRAWN	Wm. M. Best
CHECKED	

EXAMINED 19
ENGINEER OF BRIDGE AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF BRIDGES
APPROVED
CHIEF HIGHWAY ENGINEER

Note:
Seal perimeter of base of post to parapet with two component non-staining gray sealing compound with polysulfide liquid polymers —gun grade with primer.

R-17 11-18-66

MODEL: Default
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VEENSTRA & KIMM INC.

	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 4 OF 11 SHEETS | STA. | TO STA.

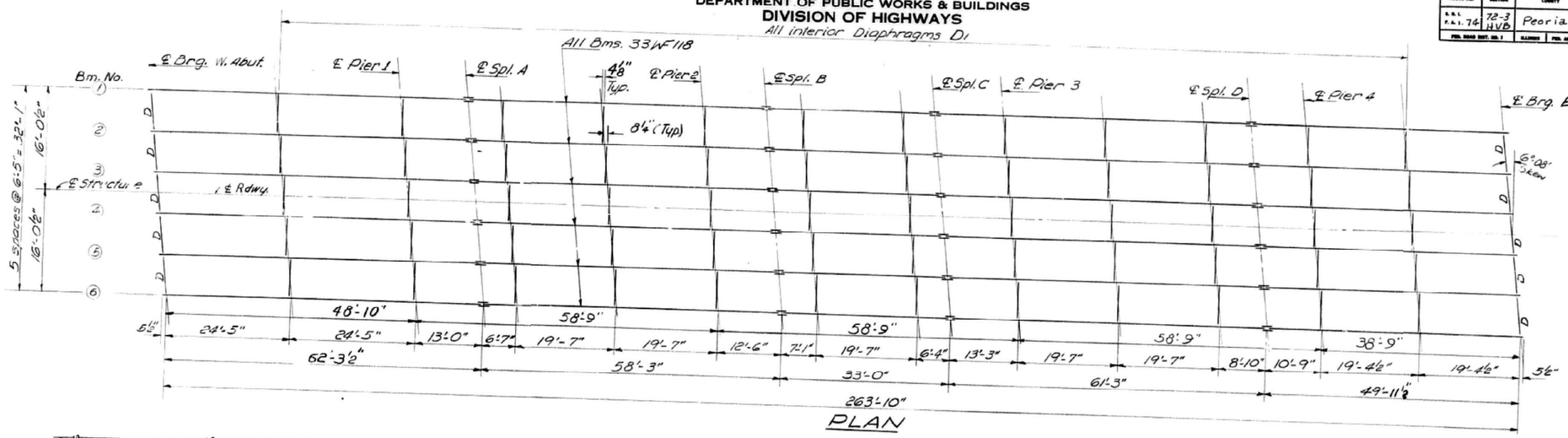
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	107
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

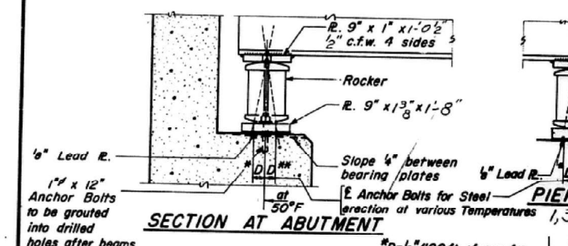
ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
A.R.I. P.A.I. 74	72-3 HVB	Peoria	46	11
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 4 / 13 SHEETS

All interior Diaphragms D1



PLAN



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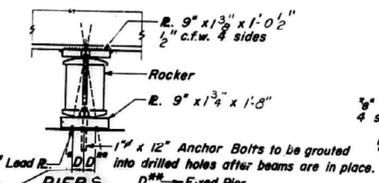
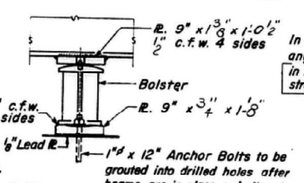


PIERS 1,3 & 4



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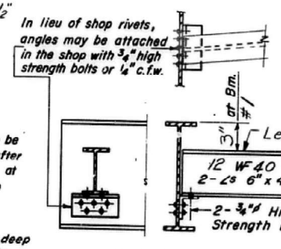
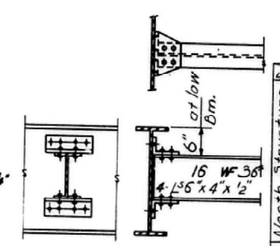


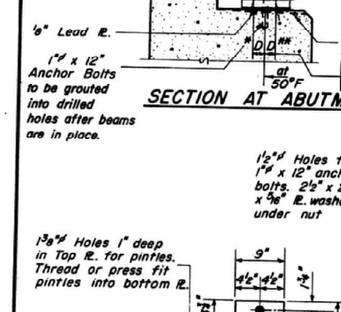
DIAPHRAGM D
20 Required



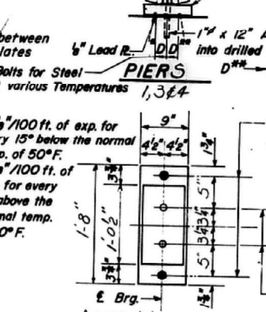
DIAPHRAGM D1
120 Required

TOP OF BEAM ELEVATIONS

	Loc. \ Bm. No.	1	2	3	4	5	6
North Structure	℄ Brg. W. Ab.	723.646	723.771	723.865	723.863	723.771	723.646
	℄ Pier 1	723.653	723.771	723.871	723.871	723.771	723.652
	℄ Spl. A.	723.653	723.778	723.872	723.872	723.778	723.653
	℄ Pier 2	723.646	723.771	723.865	723.865	723.771	723.646
	℄ Spl. B	723.644	723.769	723.863	723.863	723.769	723.644
	℄ Spl. C.	723.617	723.742	723.836	723.836	723.742	723.617
	℄ Pier 3	723.597	723.722	723.816	723.816	723.722	723.597
	℄ Spl. D.	723.526	723.651	723.745	723.745	723.651	723.526
	℄ Pier 4	723.510	723.635	723.729	723.729	723.635	723.510
	℄ Brg. E. Ab.	723.450	723.575	723.669	723.669	723.575	723.450
South Structure	℄ Brg. W. Ab.	723.657	723.782	723.876	723.876	723.782	723.657
	℄ Pier 1	723.655	723.780	723.874	723.874	723.780	723.655
	℄ Spl. A.	723.655	723.780	723.874	723.874	723.780	723.655
	℄ Pier 2	723.642	723.767	723.861	723.861	723.767	723.642
	℄ Spl. B	723.638	723.763	723.857	723.857	723.763	723.638
	℄ Spl. C	723.606	723.731	723.825	723.825	723.731	723.606
	℄ Pier 3	723.584	723.709	723.803	723.803	723.709	723.584
	℄ Spl. D	723.506	723.631	723.725	723.725	723.631	723.506
	℄ Pier 4	723.488	723.613	723.707	723.707	723.613	723.488
	℄ Brg. E. Ab.	723.423	723.548	723.642	723.642	723.548	723.423



PLAN



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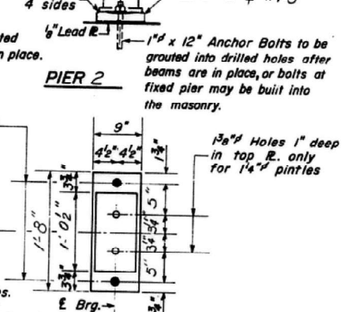
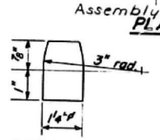


PLAN



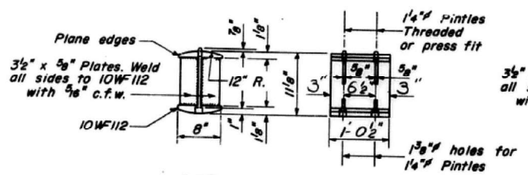
DETAIL OF PINTLE

TABLE OF INT. BM. MOMENTS - Ft-Kips

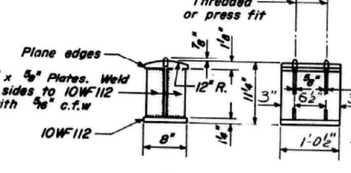
	A Spl	Pier 1	S Spl 2	Pier 2	S Spl 3	Pier 3	S Spl	Pier 4	A Spl 5
D.L.	153	-268	128	-257	126	272	-143	-223	77
L.L.	282	-233	280	-245	280	-245	273	-209	208
Imp.	82	-65	75	-66	76	-66	74	-60	62
Total	517	-566	483	-568	482	-583	490	-492	347

TABLE OF INT. BM. REACTIONS - Kips

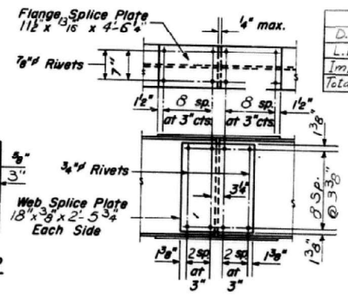
	W. Abut	Pier 1	Pier 2	Pier 3	Pier 4	E. Abut
D.L.	16.7	54.5	52.8	54.3	49.4	12.0
L.L.	32.8	40.9	41.3	41.3	39.4	30.4
Imp.	9.5	11.5	11.2	11.2	11.4	9.1
Total	59.0	106.9	105.3	106.8	100.2	51.5



DETAIL OF ROCKER AT PIERS 1,3 & 4 & ABUTS.



DETAIL OF BOLSTER AT PIER 2



DETAIL OF SPLICE

STRUCTURAL STEEL
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

DESIGNED	M.E. Spruncke
CHECKED	R. D. PATEL
P.G. Barnett	R. Barrazo
DRAWN	W. A. Sausaman Jr.
CHECKED	

EXAMINED Aug. 23 1966
BUREAU OF BRIDGES AND TRAFFIC STRUCTURES
PASSED
ENGINEER OF DESIGN
APPROVED
DIVISION HIGHWAY ENGINEER

I-2 7-2-62 Rev. 11-9-62 Rev. 8-16-63 Rev. 12-10-63

H-E

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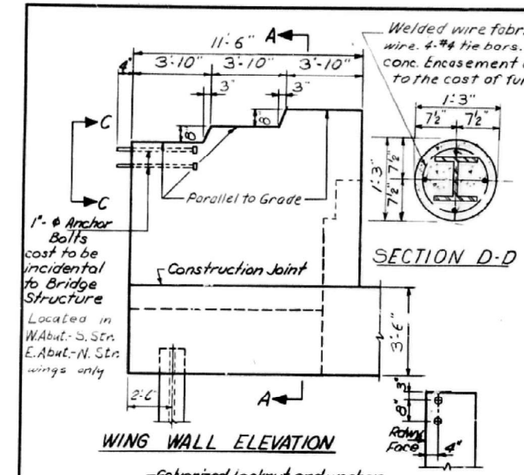
VEENSTRA & KIMM INC.	DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	RECORD PLANS – EXISTING STRUCTURES FOR INFORMATION ONLY	
	DRAWN - DMS	REVISED -			
	CHECKED - PMO	REVISED -			
	DATE - 08-19-2024	REVISED -		SCALE: NONE SHEET 5 OF 11 SHEETS STA. TO STA.	

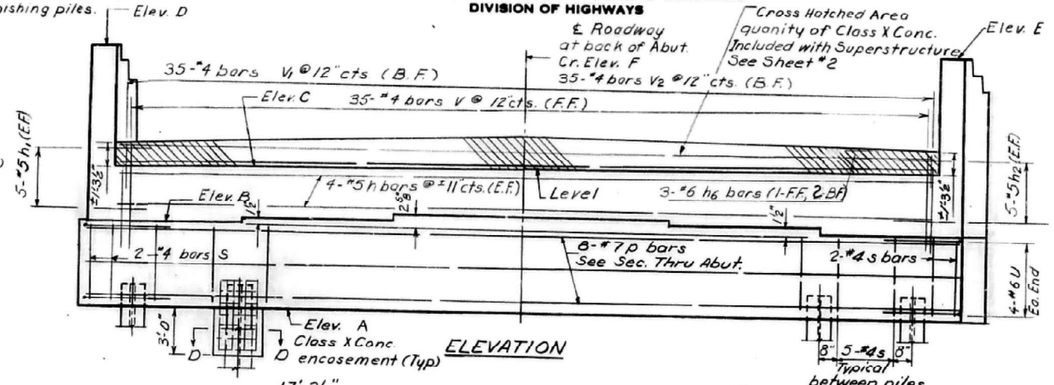
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	108
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

SEC. NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
R.B.I. P.A.I.-74	72-3 HVB	Peoria	46	12
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 5
13 SHEETS





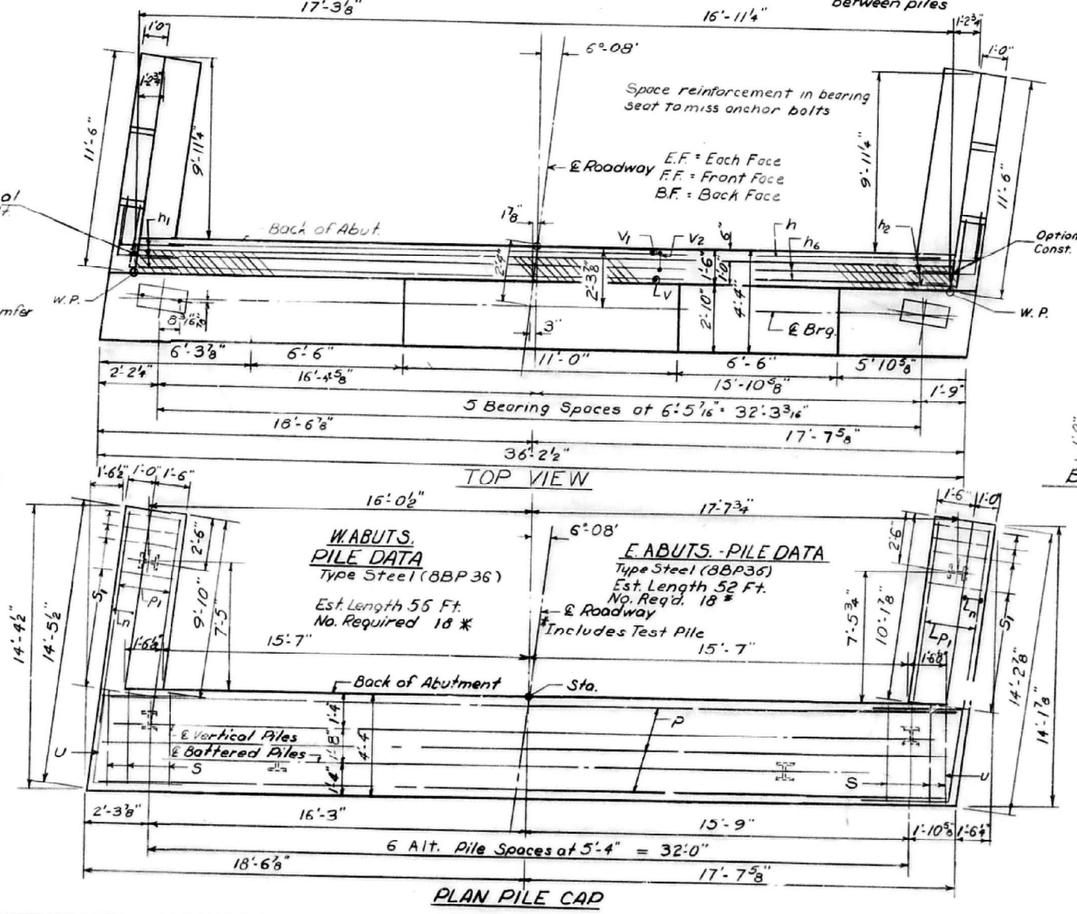
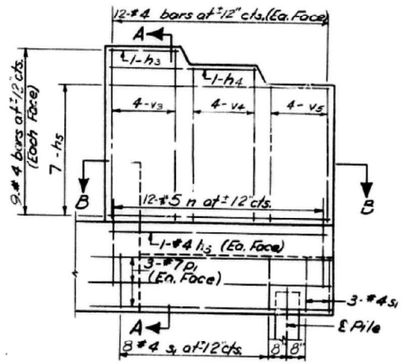


TABLE OF ELEVATIONS						
	Elev. A	Elev. B	Elev. C	Elev. D	Elev. E	Elev. F
N. Str. W. Abut	716.27	719.17	722.94	727.76	727.75	724.50
N. Str. E. Abut	716.08	719.58	722.75	727.56	727.55	724.30
S. Str. W. Abut	716.28	719.78	722.95	727.77	727.77	724.52
S. Str. E. Abut	716.05	719.55	722.72	727.54	727.53	724.28

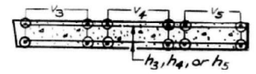
DESIGNED D.E. Sprowls
CHECKED R.D. PATEL
DRAWN Jerome P. Zink
CHECKED

EXAMINED Aug. 23 1966
PASSED
APPROVED

Rev. 11/26/67 Removed curb block & revised reinf. Changed Quantity of Class X Conc. from 154.8 to 153.6 Cu. Yds. & Reinf. Bars from 11,930 to 11,920 Lbs. D.E.S.



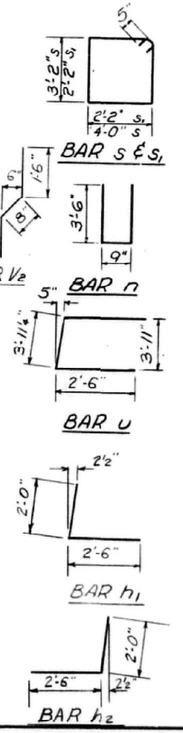
WING WALL ELEVATION
Reinforcement



SEC. B-B

4 ABUTMENTS
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h	32	#5	33'-10"	—
h1	40	#5	4'-6"	L
h2	40	#5	4'-6"	L
h3	16	#4	3'-5"	—
h4	16	#4	7'-3"	—
h5	128	#4	11'-1"	—
h6	12	#6	33'-10"	—
n	96	#5	7'-9"	U
P	32	#7	35'-9"	—
P1	48	#7	11'-6"	—
S	136	#4	15'-2"	□
S1	88	#4	9'-6"	□
U	32	#6	9'0"	⌐
V	140	#4	5'-6"	—
V1	140	#4	4'-3"	—
V2	140	#4	3'-2"	⌐
V3	64	#4	7'-10"	—
V4	64	#4	7'-2"	—
V5	64	#4	6'-6"	—
Class X Concrete			Cu. Yds.	153.6
Reinforcement Bars			Lbs.	11,920
Steel Piles (8BP36)			Lin. Ft.	1836
Test Piles Steel (8BP36)			Ea.	2



ABUTMENTS
FA.I. RT. 74 SEC. 72-3 HVB
PEORIA CO.
STA. 186+00.1

A-9

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VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 6 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	109
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	72-3 HVB	Peoria	46	13
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

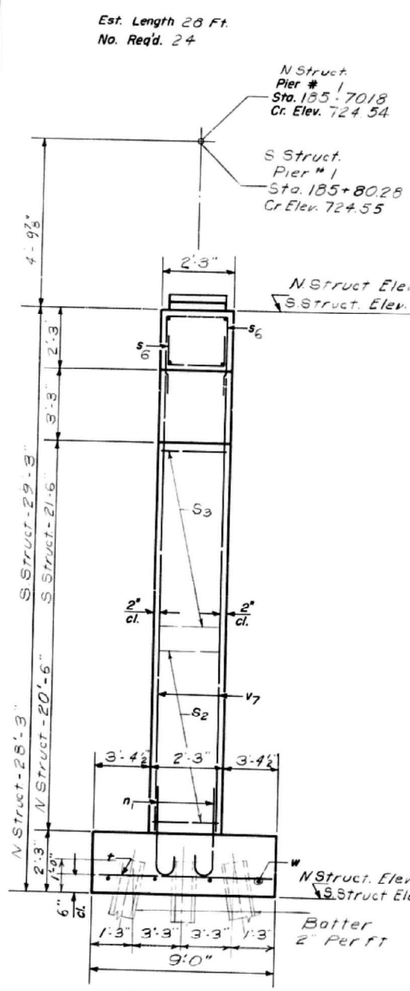
SHEET NO. 6
13 SHEETS

PILE DATA

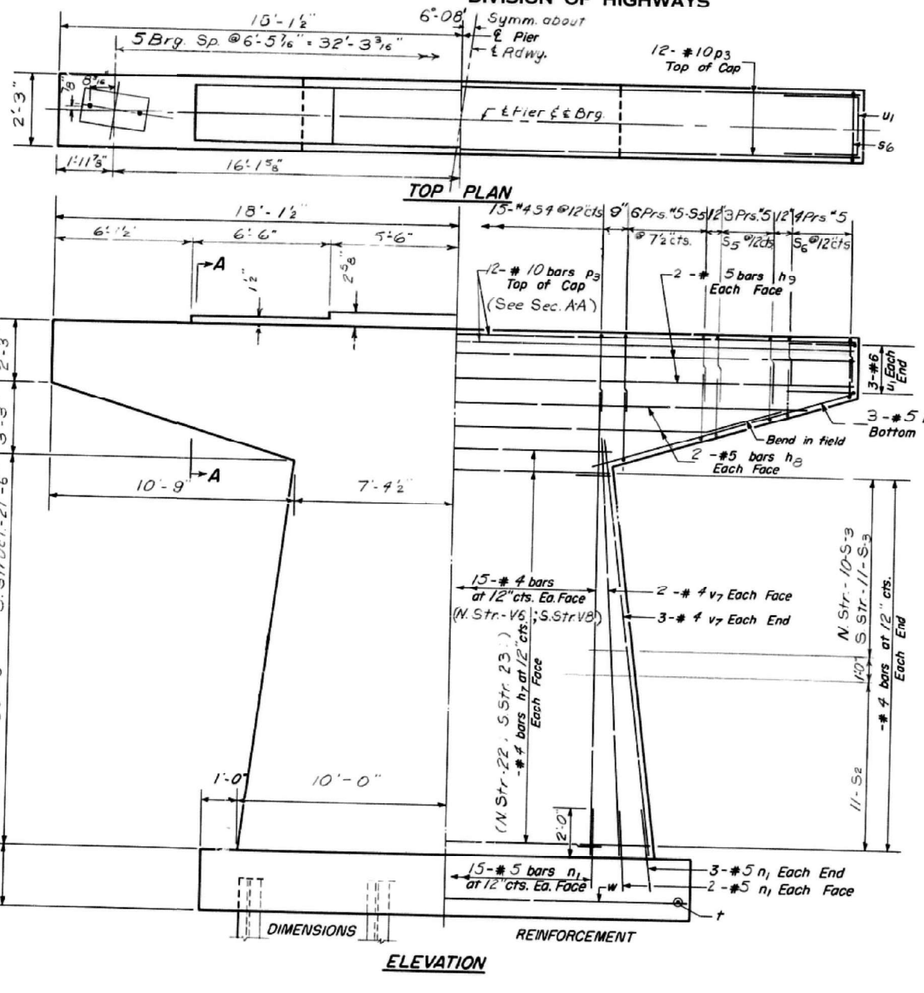
Type Steel (8BP36)

Est. Length 28 Ft.

No. Req'd. 24

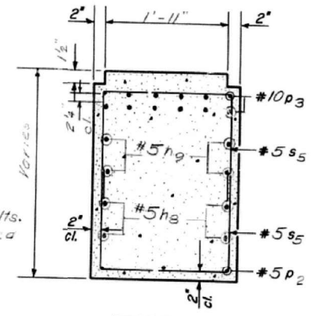


END VIEW

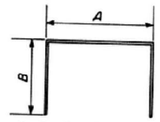


ELEVATION

Note: All edges shall have standard ¾" chamfers except footings.
Space reinf. in cap to miss anchor bolts.
Steps shall be poured monolithically with cap.



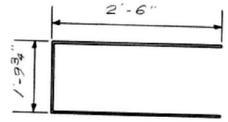
SECTION A-A



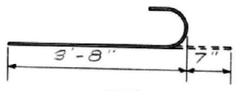
A & B DIMENSIONS

Bar	A	B
s_2	2'-0"	3'-7"
s_3	2'-0"	2'-4"
s_4	1'-11"	3'-0"
s_5	1'-11	3'-2"
s_6	1'-11	2'-0"

S BARS



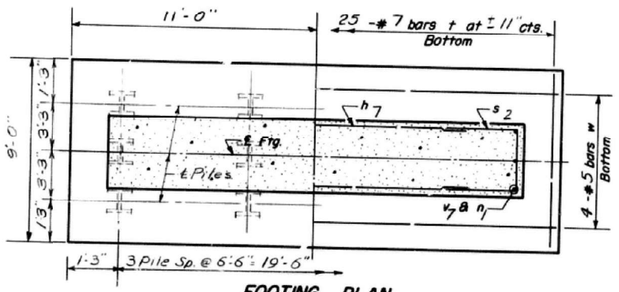
u_1 BAR



n_1 BAR

2 PIERS #1
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_7	90	#4	14'-5"	—
h_8	8	#5	29'-9"	—
h_9	8	#5	35'-11"	—
n_1	88	#5	4'-3"	⊃
p_2	12	#5	12'-6"	—
p_3	24	#10	35'-11"	—
s_2	44	#4	9'-2"	⊓
s_3	42	#4	6'-8"	⊓
s_4	30	#4	7'-11"	⊓
s_5	72	#5	8'-3"	⊓
s_6	32	#5	5'-11"	⊓
t	50	#7	8'-8"	—
u_1	12	#6	6'-9"	⊏
v_6	30	#4	24'-0"	—
v_7	28	#4	22'-6"	—
v_8	30	#4	25'-0"	—
w	8	#5	21'-8"	—
Class X Concrete			Cu. Yds.	121.7
Reinforcement Bars			Lbs.	9590
Steel Piles (8BP36)			Lin Ft.	672



FOOTING PLAN

DESIGNED	D.E. Sponsler	
CHECKED	R.D. PATEL	
DRAWN	K.J.P. Zink, W.A. Sausaman	
CHECKED	RDP	
EXAMINED	Aug. 23 1966	
PASSED		
APPROVED		

P-2 Re-drawn 7-17-59 Rev. 11-25-59

PIERS #1
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

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VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 7 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	110
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.B.I. Rt. 74	72-3 HVB	Peoria	46	14
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

SHEET NO. 7
13 SHEETS

PILE DATA

Type Steel (BBP36)

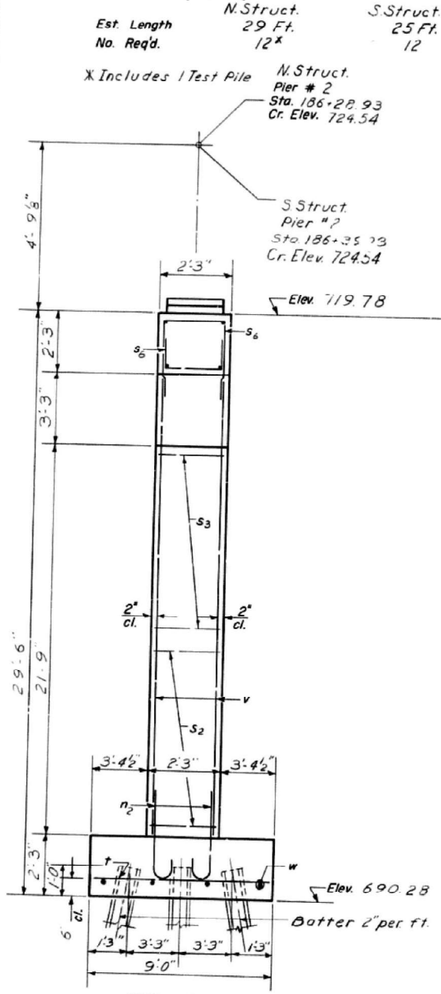
	N.Struct.	S.Struct.
Est. Length	29 Ft.	25 Ft.
No. Req'd.	12*	12

* Includes 1 Test Pile

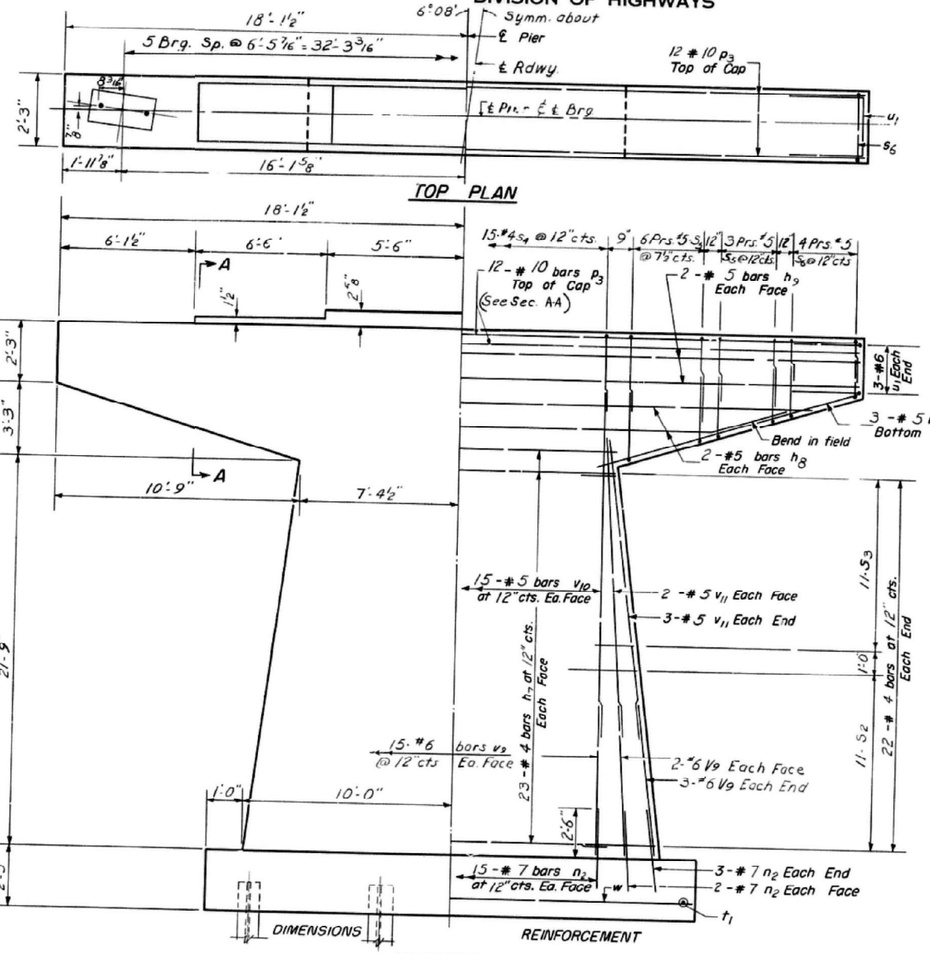
N.Struct. Pier # 2 Sta. 186+28.93 Cr. Elev. 724.54

S.Struct. Pier #2 Sta. 186+35.93 Cr. Elev. 724.54

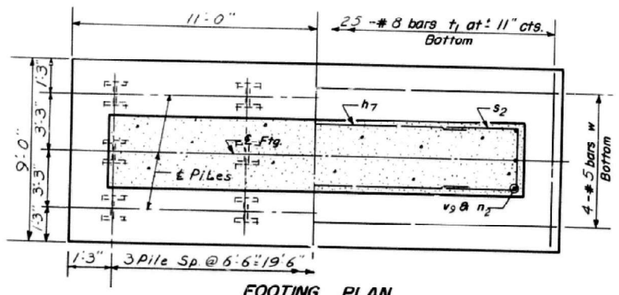
Elev. 719.78



END VIEW

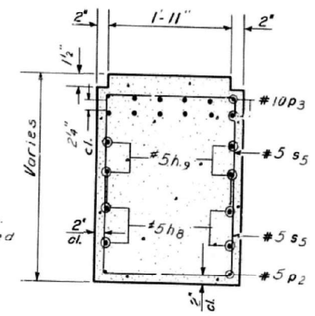


ELEVATION

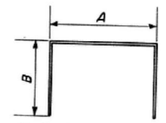


FOOTING PLAN

Note: All edges shall have standard ¾" chamfers except footings.
Space reinf. in cap to miss anchor bolts.
Steps shall be poured monolithically with cap.



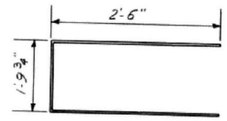
SECTION A-A



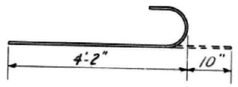
A & B DIMENSIONS

Bar	A	B
s_2	2'-0"	3'-7"
s_3	2'-0"	2'-4"
s_4	1'-11"	3'-0"
s_5	1'-11"	3'-2"
s_6	1'-11"	2'-0"

s BARS



u1 BAR



n_2 BAR

2 PIERS #2
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_7	92	# 4	14'-5"	—
h_8	8	# 5	29'-9"	—
h_9	8	# 5	35'-11"	—
n_2	88	# 7	5'-0"	⊃
p_2	12	# 5	12'-6"	—
p_3	24	#10	35'-11"	—
s_2	44	# 4	9'-2"	⊓
s_3	44	# 4	6'-8"	⊓
s_4	30	# 4	7'-11"	⊓
s_5	72	# 5	8'-3"	⊓
s_6	32	# 5	5'-11"	⊓
t_1	50	# 8	8'-8"	—
u_1	12	#6	6'-9"	⊏
v_9	88	# 6	9'-0"	—
v_{10}	60	# 5	17'-9"	—
v_{11}	28	# 5	16'-0"	—
w	8	# 5	21'-9"	—
Class X Concrete			Cu. Yds.	123.9
Reinforcement Bars			Lbs.	11,870
Steel Piles (BBP36)			Lin. Ft.	519
Test Pile (BBP36)			Each	1

DESIGNED	D.E. Sponsler	EXAMINED	Aug. 23 1966
CHECKED	R D PATEL	PASSED	
DRAWN	R.U.P. Zink W.A. Sausaman	APPROVED	
CHECKED	PDP		

P-2 Re-drawn 7-17-59 Rev. 11-25-59

PIERS #2
F.A.I. RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

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VEENSTRA & KIMM INC.

	DESIGNED - DMS		REVISED -
	DRAWN - DMS		REVISED -
	CHECKED - PMO		REVISED -
	DATE - 08-19-2024		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 8 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	111
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
S.R. 1 ** I. 74	72-3 HVB	Peoria	46	15
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT		

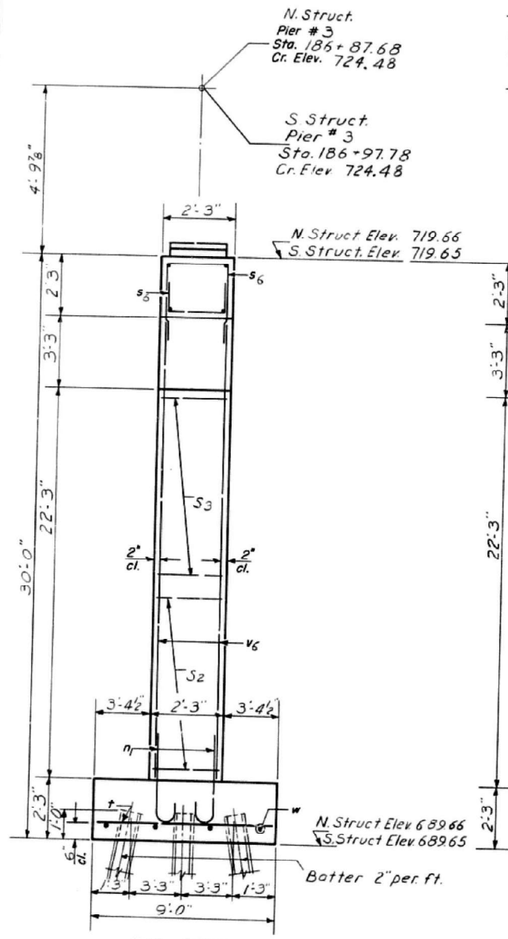
SHEET NO. 8
13 SHEETS

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

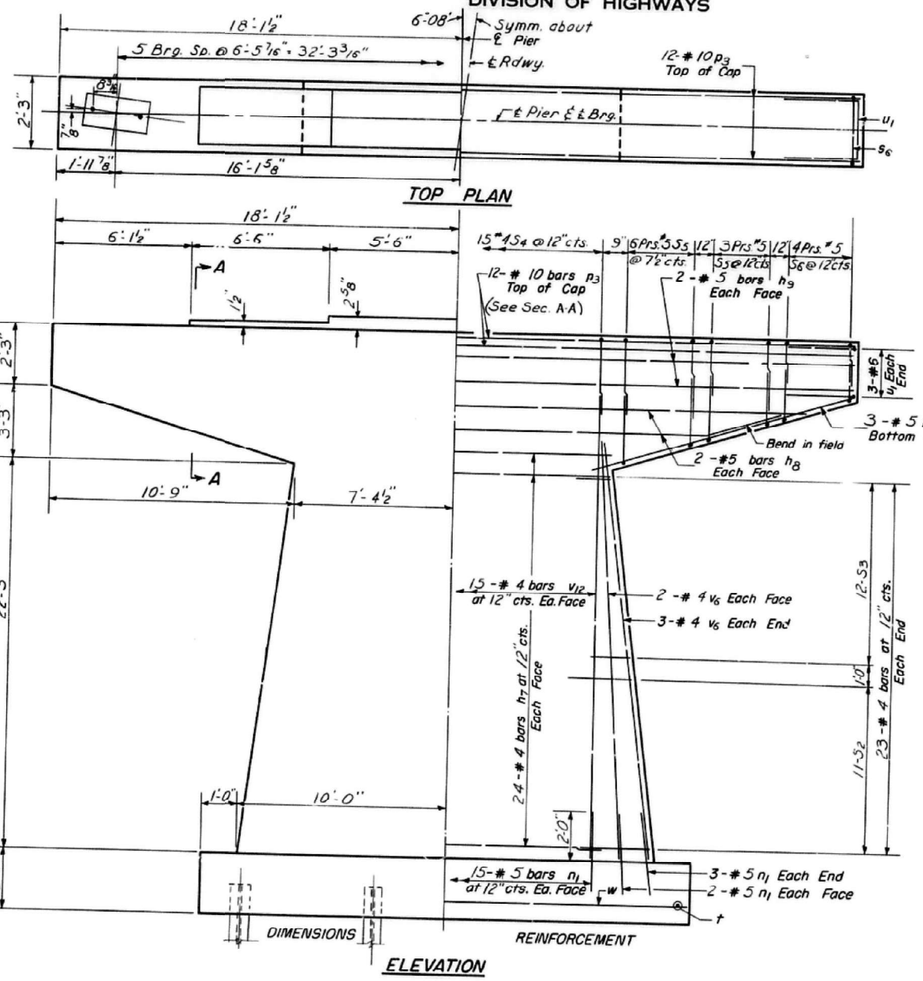
PILE DATA

Type Steel (BBP36)

Est. Length 29 Ft
No. Req'd. 24

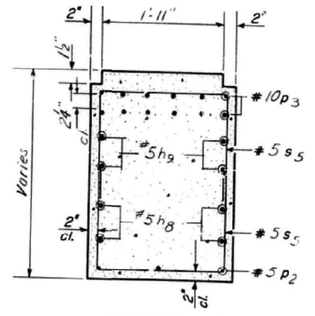


END VIEW

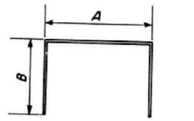


ELEVATION

Note: All edges shall have standard ¾" chamfers except footings. Space reinf. in cap to miss anchor bolts. Steps shall be poured monolithically with cap.



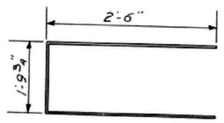
SECTION A-A



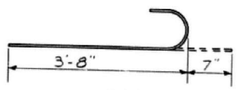
A & B DIMENSIONS

Bar	A	B
s_2	2'-0"	3'-7"
s_3	2'-0"	2'-4"
s_4	1'-11"	3'-0"
s_5	1'-11"	3'-2"
s_6	1'-11"	2'-0"

S BARS



u_1 BAR



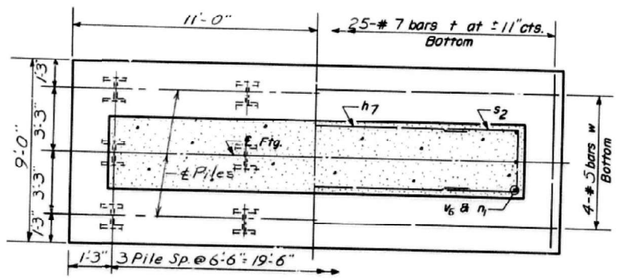
n_1 BAR

2 PIERS #3
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_7	96	#4	14'-5"	—
h_8	8	#5	29'-9"	—
h_9	8	#5	35'-11"	—
n_1	88	#5	4'-3"	⊃
p_2	12	#5	12'-6"	—
p_3	24	#10	35'-11"	—
s_2	44	#4	9'-2"	⊓
s_3	48	#4	6'-8"	⊓
s_4	30	#4	7'-11"	⊓
s_5	72	#5	8'-3"	⊓
s_6	32	#5	5'-11"	⊓
t	50	#7	8'-8"	—
u_1	12	#6	6'-9"	⊏
v_6	28	#4	24'-0"	—
v_{12}	60	#4	25'-7"	—
w	8	#5	21'-8"	—
Class X Concrete		Cu.Yds.	125 3	
Reinforcement Bars		Lbs.	9850	
Steel Piles (BBP36)		Lin. Ft.	696	

DESIGNED	D.E. Spruiell	EXAMINED	Aug. 23 1966
CHECKED	R.D. PATEL	PASSED	
DRAWN	J.P. ZINK, W.A. Sausaman	APPROVED	
CHECKED			

P-2 Re-drawn 7-17-59 Rev. 11-25-59



FOOTING PLAN

PIERS #3
FAI RT 74 SEC 72-3HVB
PEORIA COUNTY
STA. 186+001

MODEL: Default
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	DESIGNED - DMS	REVISED -
	DRAWN - DMS	REVISED -
	CHECKED - PMO	REVISED -
	DATE - 08-19-2024	REVISED -

VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 9 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	112
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	72-3 HVB	Peoria	46	16
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT.		

SHEET NO. 9
13 SHEETS

PILE DATA

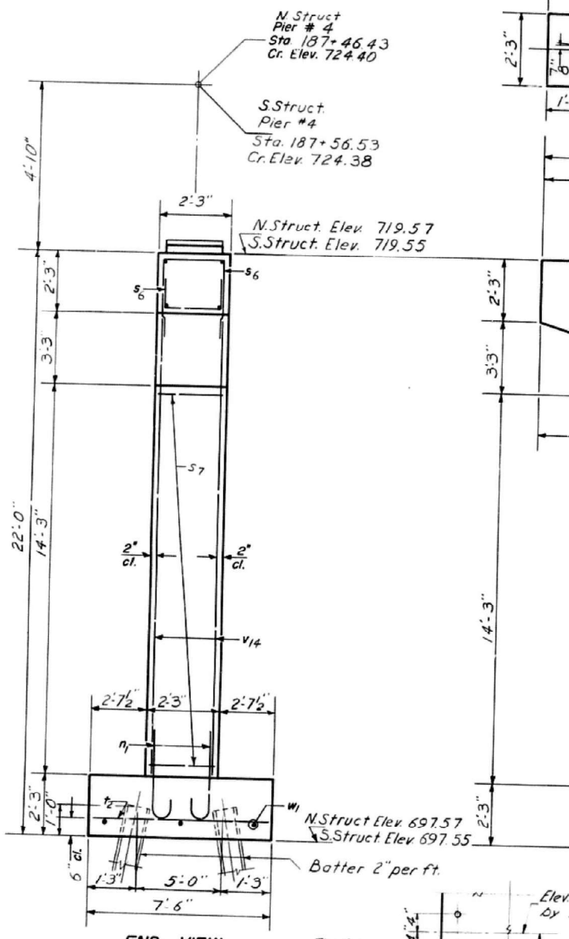
Type Steel (8BP36)

	N. Struct.	S. Struct.
Est. Length	32 Ft.	27 Ft.
No. Req'd.	8	8

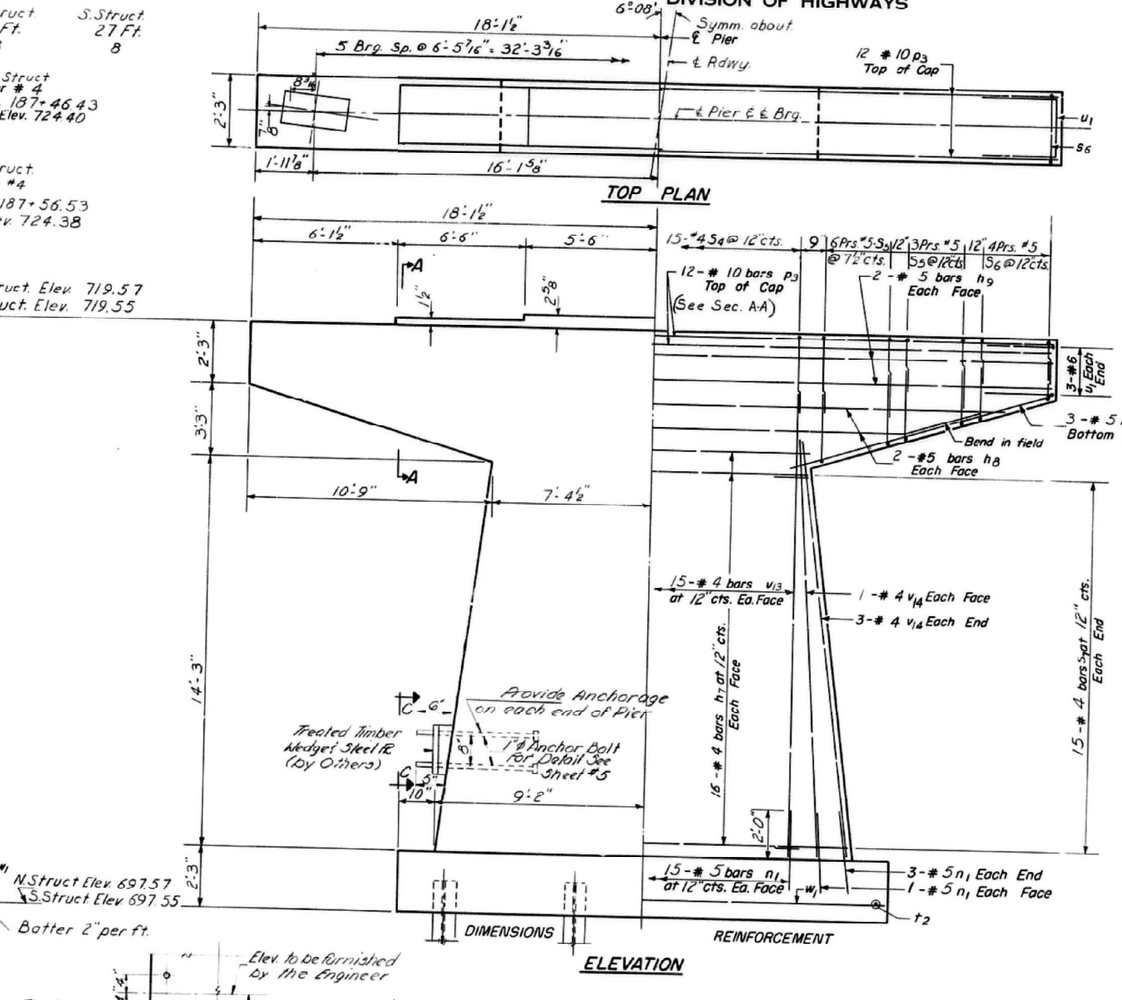
N. Struct. Pier # 4 Sta. 187+46.43 Cr. Elev. 724.40

S. Struct. Pier #4 Sta. 187+56.53 Cr. Elev. 724.38

N. Struct. Elev. 719.57
S. Struct. Elev. 719.55

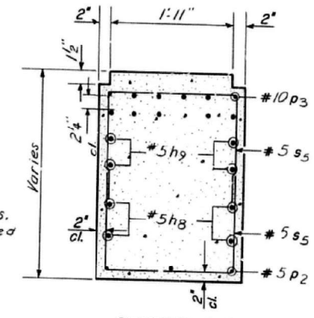


END VIEW

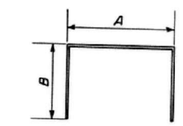


ELEVATION

Note: All edges shall have standard ¾" chamfers except footings. Space reinf in cap to miss anchor bolts. Steps shall be poured monolithically with cap.



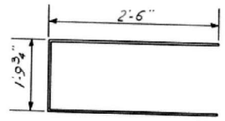
SECTION A-A



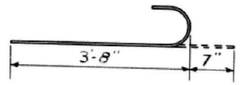
A & B DIMENSIONS

Bar	A	B
s_4	1'-11"	3'-0"
s_5	1'-11"	3'-2"
s_6	1'-11"	2'-0"
s_7	2'-0"	2'-10"

s BARS



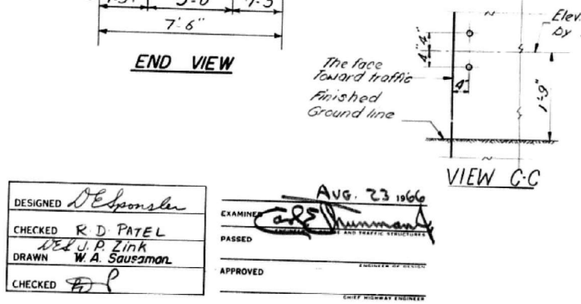
u_1 BAR



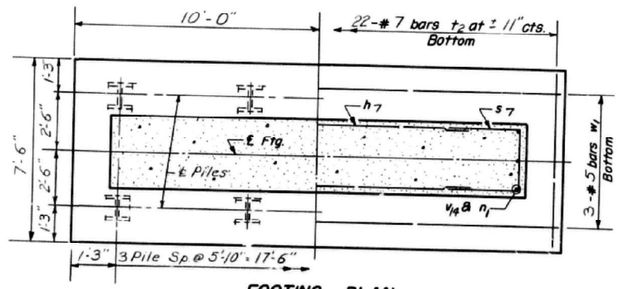
n_1 BAR

2 PIERS # 4
BILL OF MATERIAL

Bar	No.	Size	Length	Shape
h_7	64	# 4	14'-5"	—
h_8	8	# 5	29'-9"	—
h_9	8	# 5	35'-11"	—
n_1	80	# 5	4'-3"	⊃
p_2	12	# 5	12'-6"	—
p_3	24	#10	35'-11"	—
s_4	30	# 4	7'-11"	⊓
s_5	72	# 5	8'-3"	⊓
s_6	32	# 5	5'-11"	⊓
s_7	60	# 4	7'-8"	⊓
t_2	44	# 7	7'-2"	—
u_1	12	# 6	6'-9"	⊏
v_{13}	60	# 4	17'-7"	—
v_{14}	20	# 4	15'-9"	—
w_1	6	# 5	19'-8"	—
Class X Concrete			Cu.Yds.	92.2
Reinforcement Bars			Lbs.	8470
Steel Piles (8BP36)			Lin.Ft.	472



VIEW C-C



FOOTING PLAN

DESIGNED	D.E. Sponsler
CHECKED	R. D. PATEL
DRAWN	D.E. J. P. Zink W. A. Sausaman
CHECKED	

EXAMINED AUG. 23 1966
PASSED
APPROVED
CHIEF HIGHWAY ENGINEER

P-2 Re-drawn 7-17-59 Rev. 11-25-59
Rev. 7-1-67 DLS Added Anchor Bolts & Wash C.C.

PIERS # 4
FAI RT. 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 186+00.1

	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

VEENSTRA & KIMM INC.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

SCALE: NONE | SHEET 10 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	113
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

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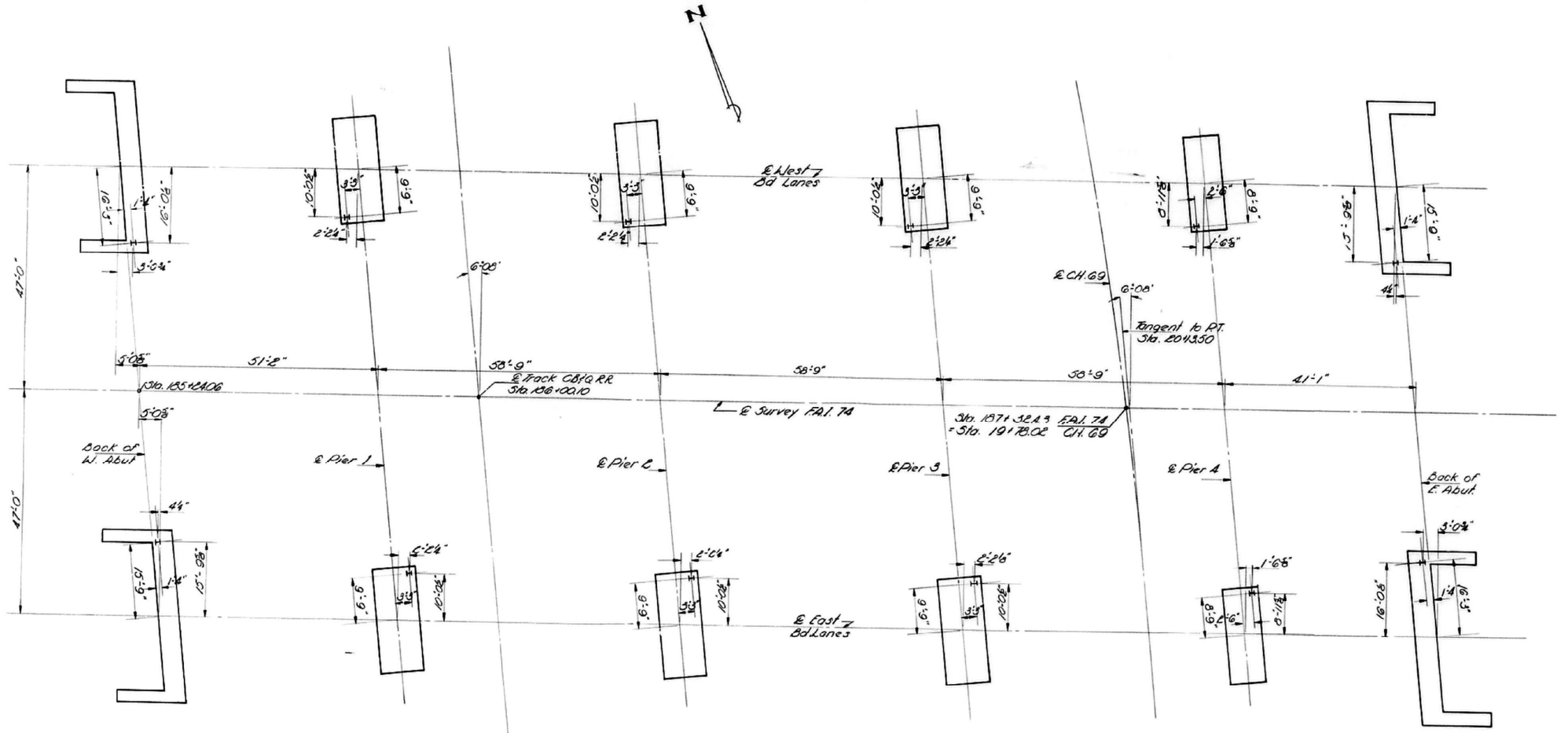
STATE OF ILLINOIS
DEPARTMENT OF PUBLIC WORKS & BUILDINGS
DIVISION OF HIGHWAYS

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
F.A.I. 74	72-3 HVB	Peoria	46	8A
FED. ROAD DIST. NO. 7	ILLINOIS	FED. AID PROJECT-		

SHEET NO. 1a
13 SHEETS



DESIGNED	D.E. Sponsler
CHECKED	R.D. PATEL
DRAWN	D.W. Williams Sr.
CHECKED	R.D.P.

EXAMINED 19
ENGINEER OF BRIDGES AND STRUCTURES
PASSED
ENGINEER OF DESIGN
APPROVED
CHIEF HIGHWAY ENGINEER

FOUNDATION LAYOUT
F.A.I. RT 74 SEC. 72-3HVB
PEORIA COUNTY
STA. 136+00.10

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VEENSTRA & KIMM INC.

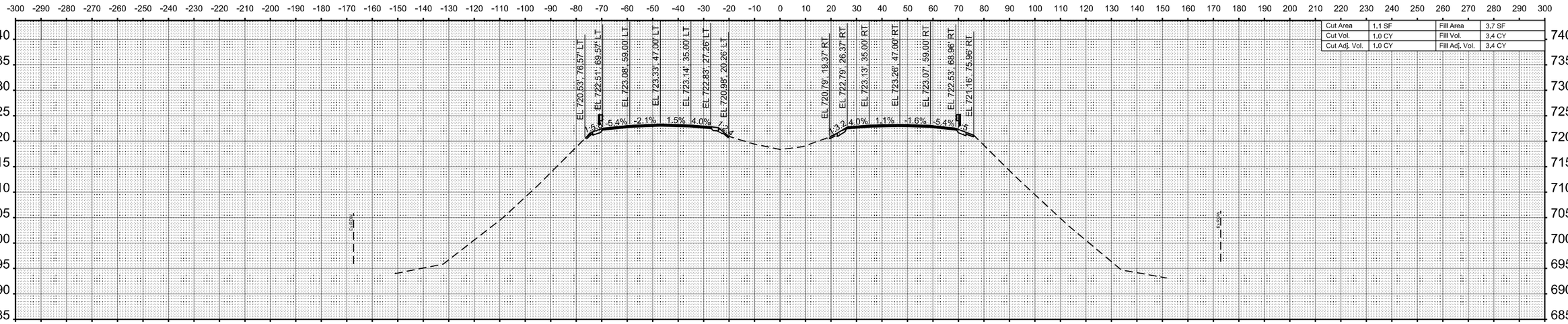
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

RECORD PLANS – EXISTING STRUCTURES
FOR INFORMATION ONLY

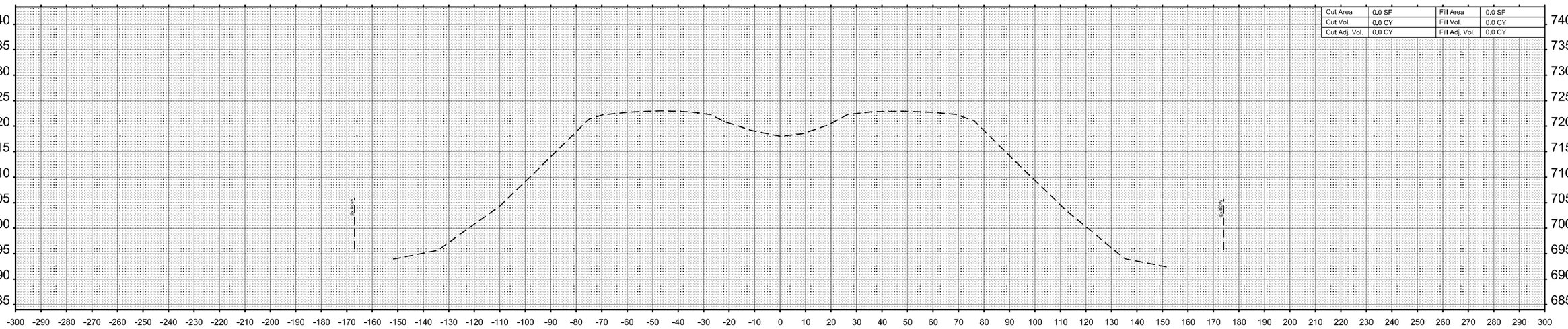
SCALE: NONE | SHEET 11 OF 11 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	114
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



Cut Area	1.1 SF	Fill Area	3.7 SF
Cut Vol.	1.0 CY	Fill Vol.	3.4 CY
Cut Adj. Vol.	1.0 CY	Fill Adj. Vol.	3.4 CY

STA 182+00.00



Cut Area	0.0 SF	Fill Area	0.0 SF
Cut Vol.	0.0 CY	Fill Vol.	0.0 CY
Cut Adj. Vol.	0.0 CY	Fill Adj. Vol.	0.0 CY

STA 181+50.00

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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

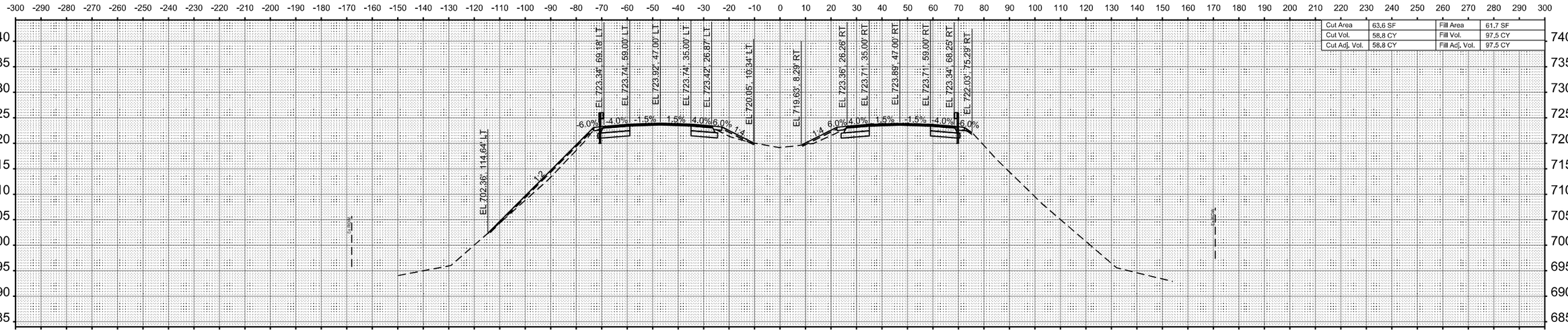
CROSS SECTIONS
I–74

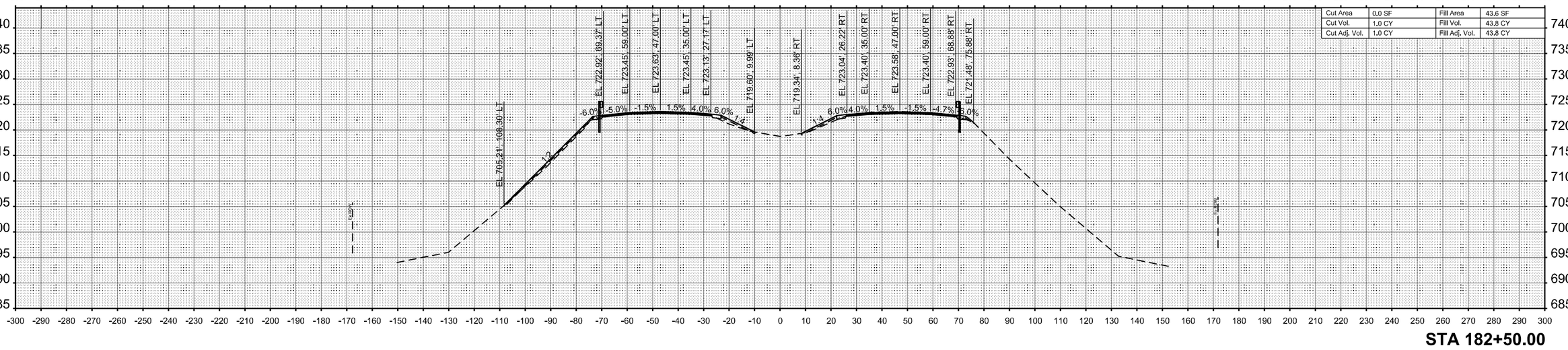
SCALE: 1"=20' | SHEET 1 OF 10 SHEETS | STA. 181+50.00 TO STA. 182+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	115

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT





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VEENSTRA & KIMM INC.

DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

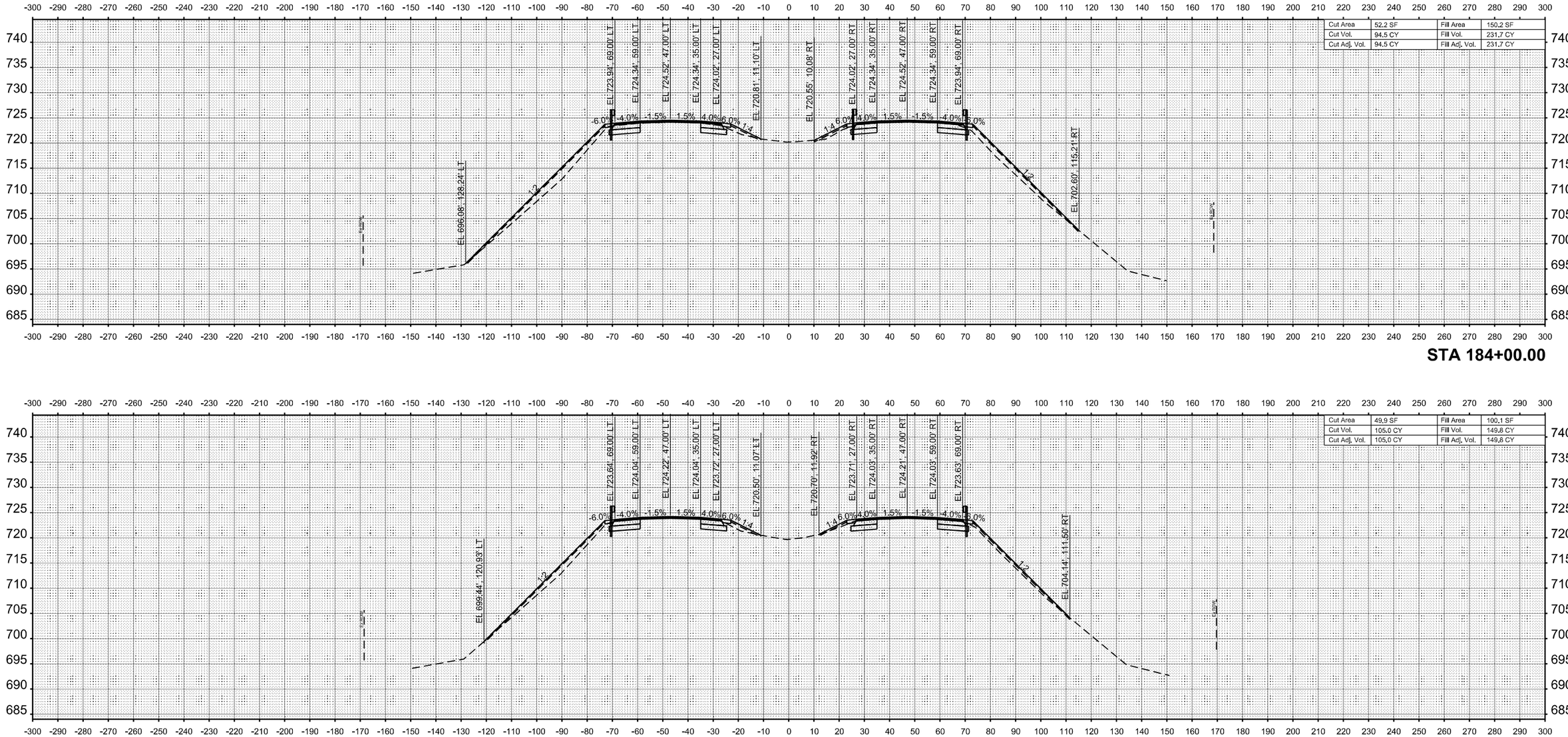
CROSS SECTIONS
I-74

SCALE: 1"=20' | SHEET 2 OF 10 SHEETS | STA. 182+50.00 | TO STA. 183+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	116

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 184+00.00

STA 183+50.00

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VEENSTRA & KIMM INC.

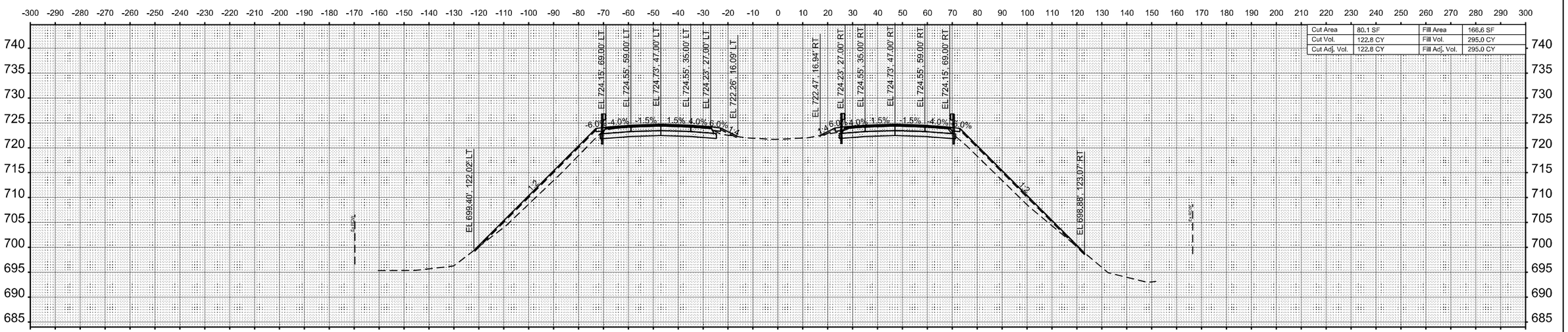
	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I–74

SCALE: 1"=20' | SHEET 3 OF 10 SHEETS | STA. 183+50.00 | TO STA. 184+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	117
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



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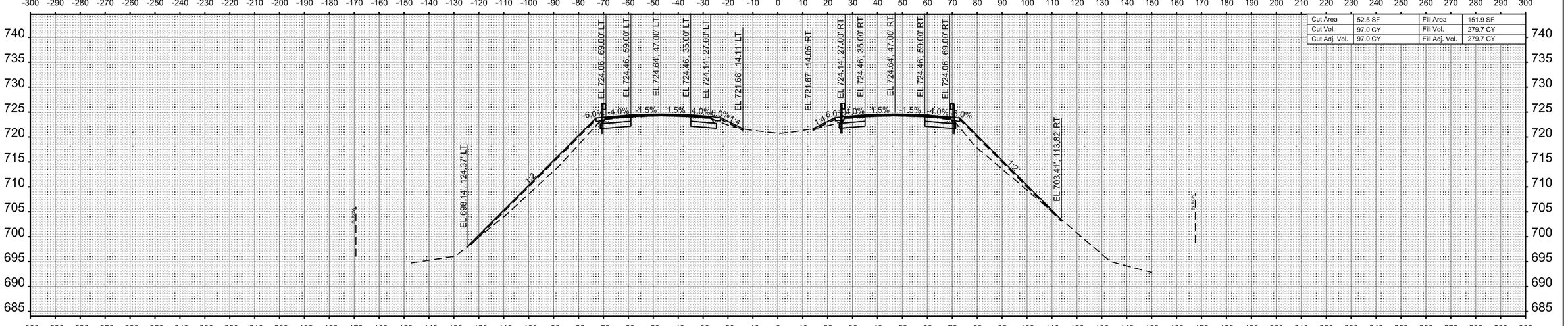

STA 184+50.00

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VEENSTRA & KIMM INC.

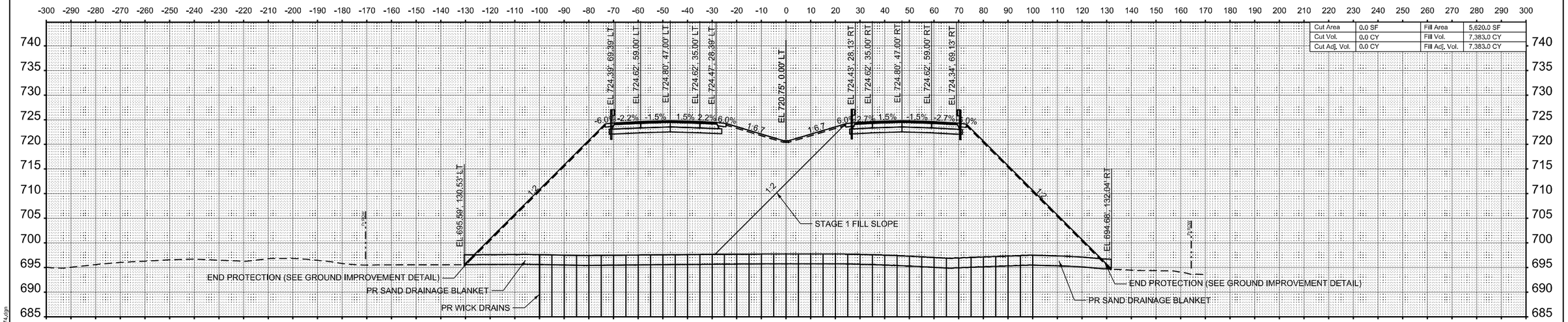
DESIGNED - DMS	REVISED -	
DRAWN - DMS	REVISED -	
CHECKED - PMO	REVISED -	
DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

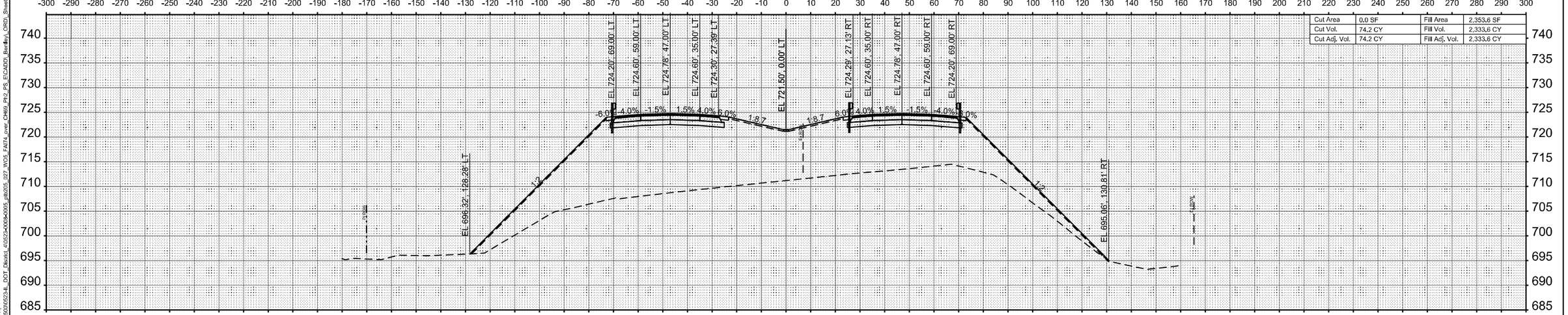
CROSS SECTIONS
I–74

SCALE: 1"=20' | SHEET 4 OF 10 SHEETS | STA. 184+50.00 | TO STA. 185+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	118
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



STA 186+00.00



STA 185+50.00

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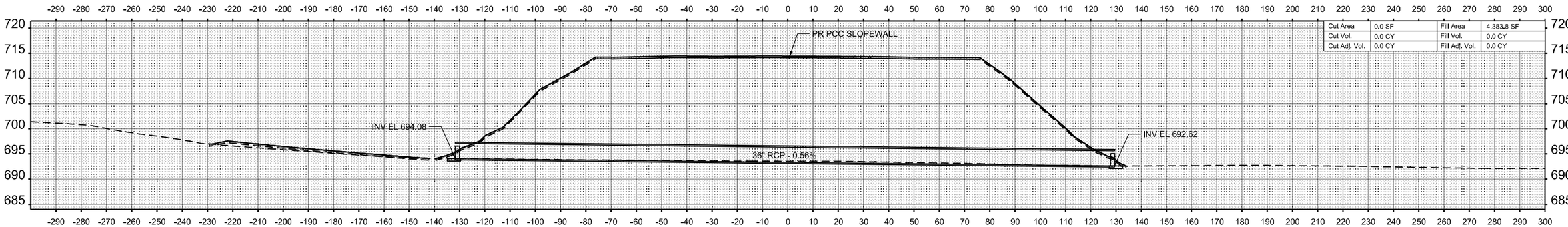
VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	**STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION**
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

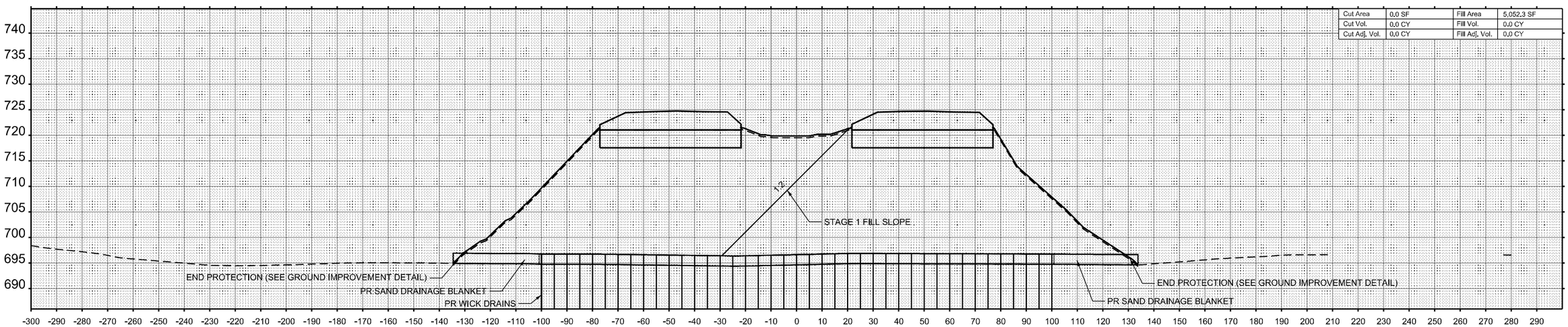
CROSS SECTIONS
I–74

SCALE: 1"=20' | SHEET 5 OF 10 SHEETS | STA. 185+50.00 | TO STA. 186+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	119
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



(SKEWED) STA 186+77.53



(SKEWED) STA 186+59.45

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VEENSTRA & KIMM INC.

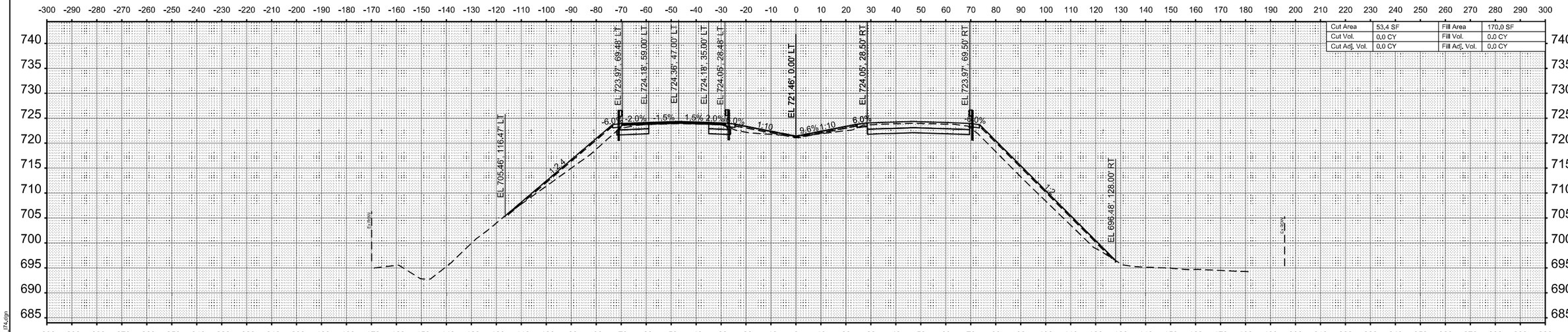
DESIGNED - DMS	REVISED -	
DRAWN - DMS	REVISED -	
CHECKED - PMO	REVISED -	
DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
I–74

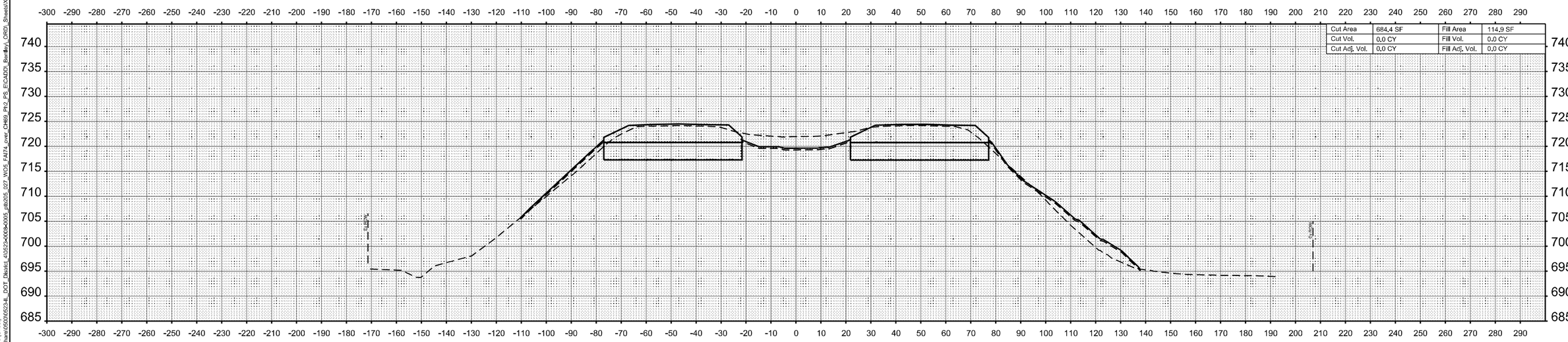
SCALE: 1"=20' | SHEET 6 OF 10 SHEETS | STA. 186+59.45 | TO STA. 186+77.53

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	120
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



Cut Area	53.4 SF	Fill Area	170.0 SF
Cut Vol.	0.0 CY	Fill Vol.	0.0 CY
Cut Adj. Vol.	0.0 CY	Fill Adj. Vol.	0.0 CY

STA 188+50.00



Cut Area	684.4 SF	Fill Area	114.9 SF
Cut Vol.	0.0 CY	Fill Vol.	0.0 CY
Cut Adj. Vol.	0.0 CY	Fill Adj. Vol.	0.0 CY

(SKEWED) STA 188+08.13

MODEL: EXCLI74 - 188+08.13 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

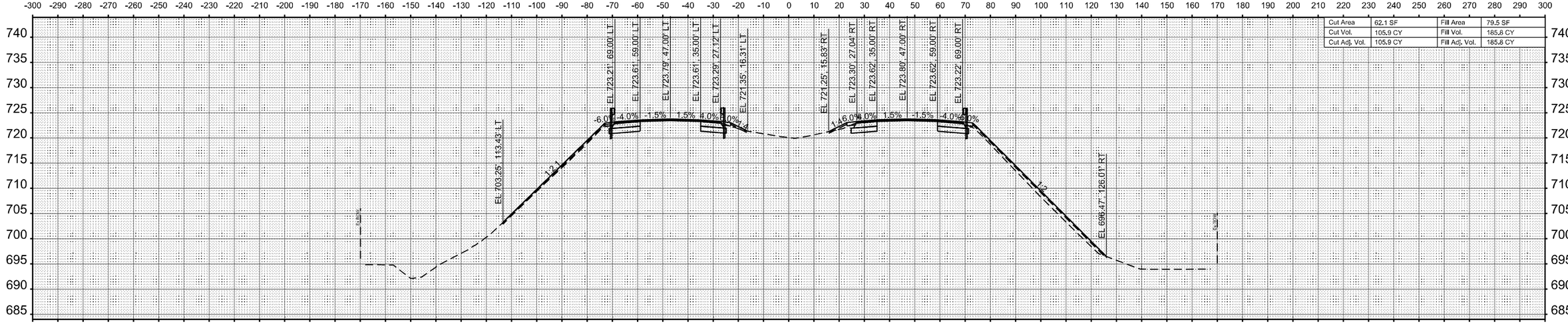
CROSS SECTIONS
I–74

SCALE: 1"=20' | SHEET 7 OF 10 SHEETS | STA. 188+08.13 TO STA. 188+50.00

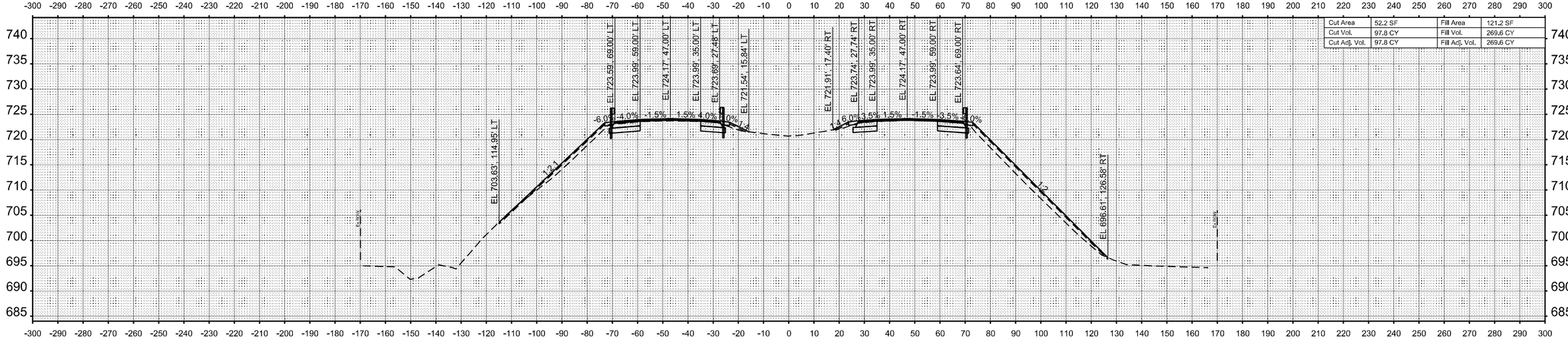
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	121

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 189+50.00



STA 189+00.00

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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

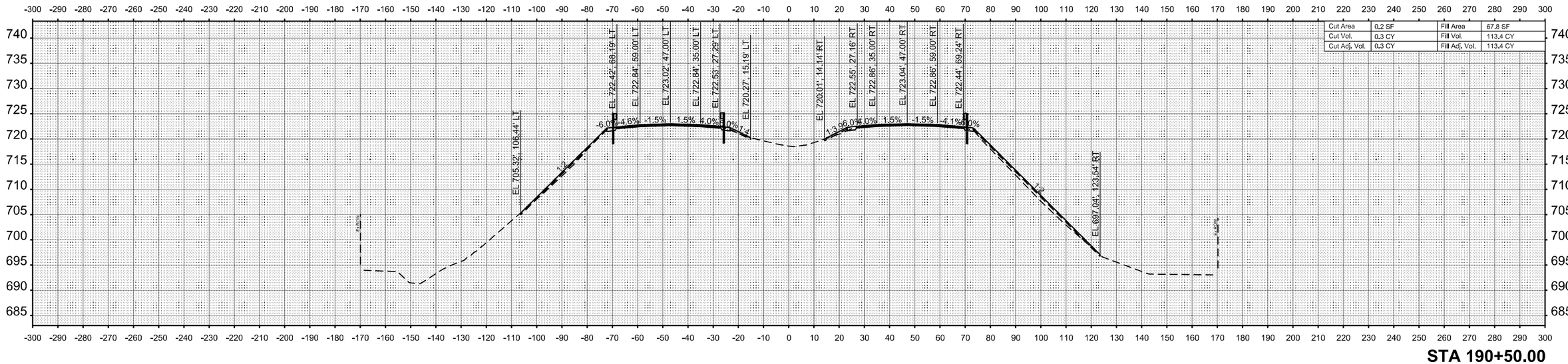
CROSS SECTIONS
I–74

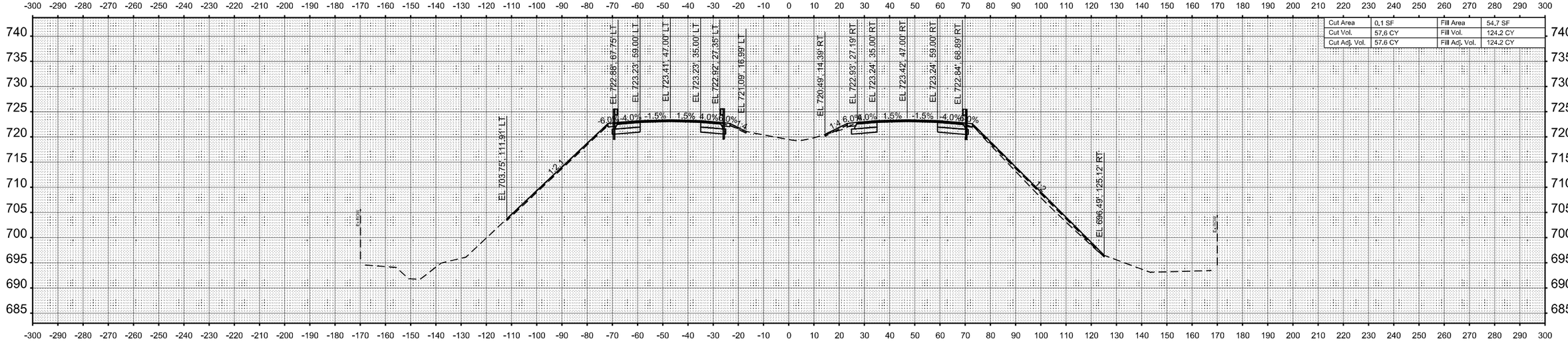
SCALE: 1"=20' | SHEET 8 OF 10 SHEETS | STA. 189+00.00 TO STA. 189+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	122

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT





VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION
		DRAWN - DMS	REVISED -	
		CHECKED - PMO	REVISED -	
		DATE - 08-19-2024	REVISED -	

CROSS SECTIONS
I–74

SCALE: 1"=20' | SHEET 9 OF 10 SHEETS | STA. 190+00.00 | TO STA. 190+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	123
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: EXCI74 - 190+00.00 [Sheet]
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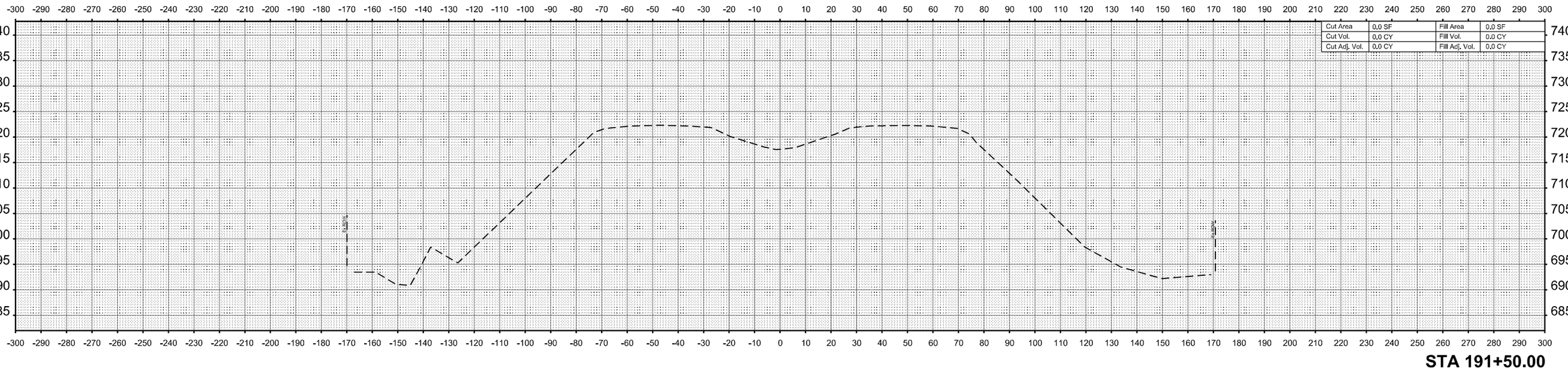
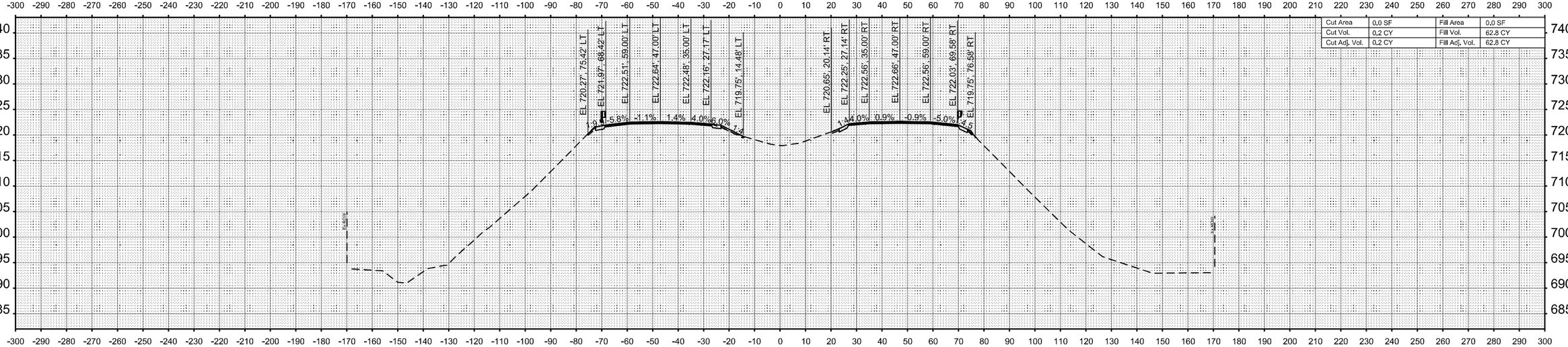


STA 191+50.00



STA 191+00.00

VEENSTRA & KIMM INC.		DESIGNED - DMS	REVISED -	STATE OF ILLINOIS DEPARTMENT OF TRANSPORTATION	CROSS SECTIONS I–74
		DRAWN - DMS	REVISED -		
		CHECKED - PMO	REVISED -		
		DATE - 08-19-2024	REVISED -		SCALE: 1"=20' SHEET 10 OF 10 SHEETS STA. 191+00.00 TO STA. 191+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	124
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			

MODEL: EXCI74 - 191+00.00 [Sheet]
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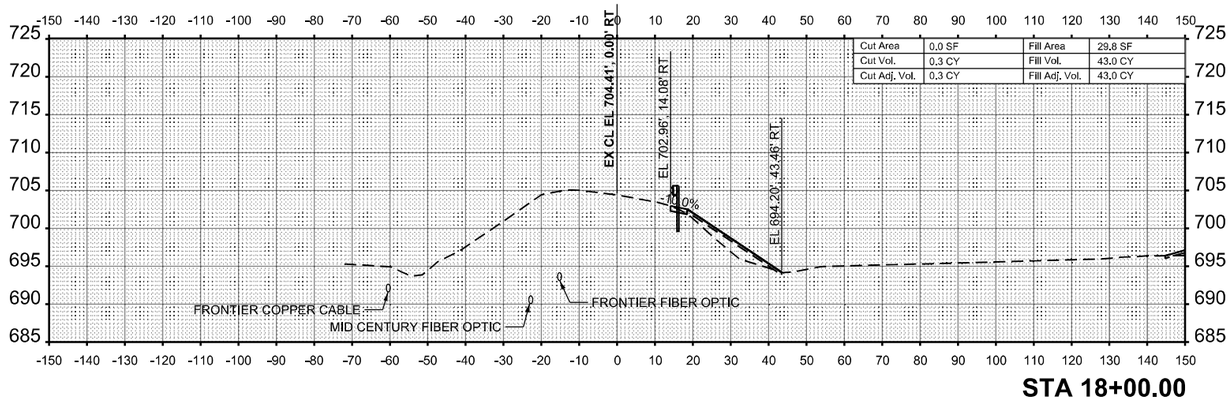
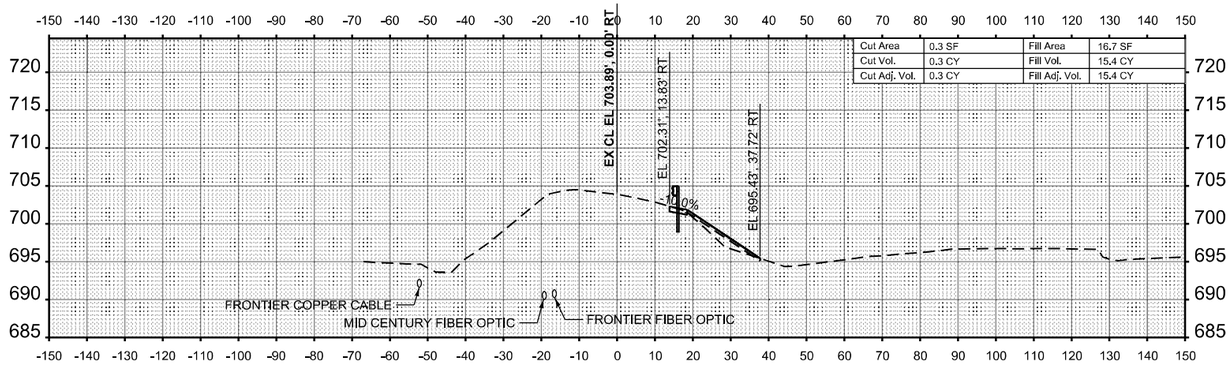


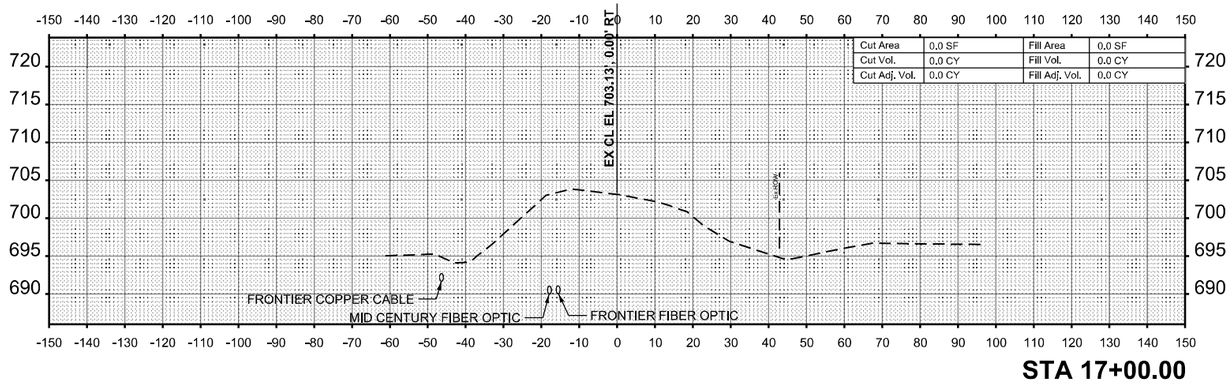
Cut Area	0.0 SF	Fill Area	29.8 SF
Cut Vol.	0.3 CY	Fill Vol.	43.0 CY
Cut Adj. Vol.	0.3 CY	Fill Adj. Vol.	43.0 CY

STA 18+00.00



Cut Area	0.3 SF	Fill Area	16.7 SF
Cut Vol.	0.3 CY	Fill Vol.	15.4 CY
Cut Adj. Vol.	0.3 CY	Fill Adj. Vol.	15.4 CY

STA 17+50.00



Cut Area	0.0 SF	Fill Area	0.0 SF
Cut Vol.	0.0 CY	Fill Vol.	0.0 CY
Cut Adj. Vol.	0.0 CY	Fill Adj. Vol.	0.0 CY

STA 17+00.00

MODEL: EXCLCH69 - 17+00.00 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

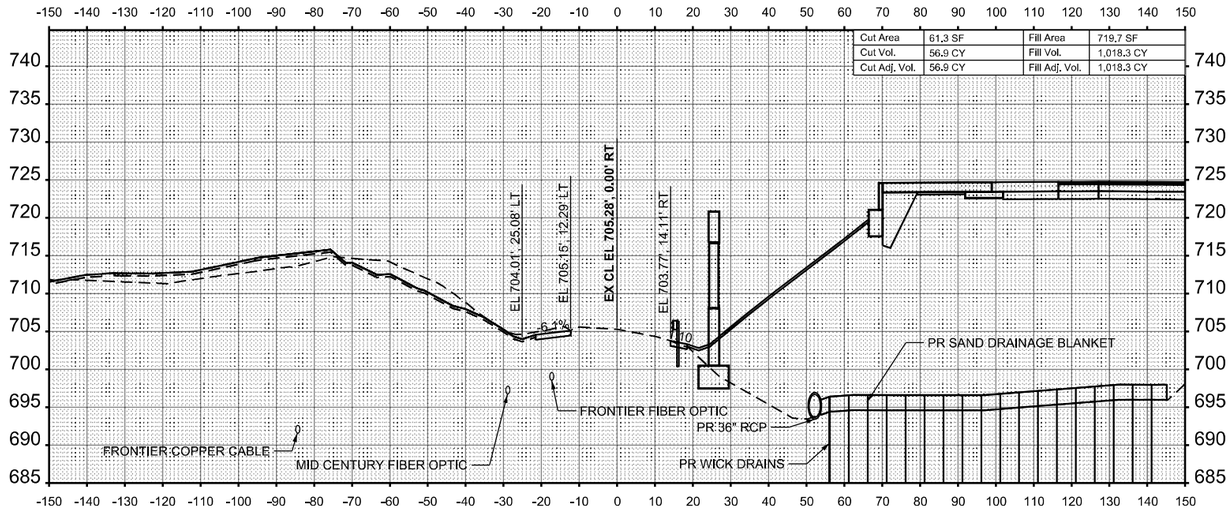
CROSS SECTIONS
CH 69

SCALE: 1"=20' | SHEET 1 OF 7 SHEETS | STA. 17+00.00 TO STA. 18+00.00

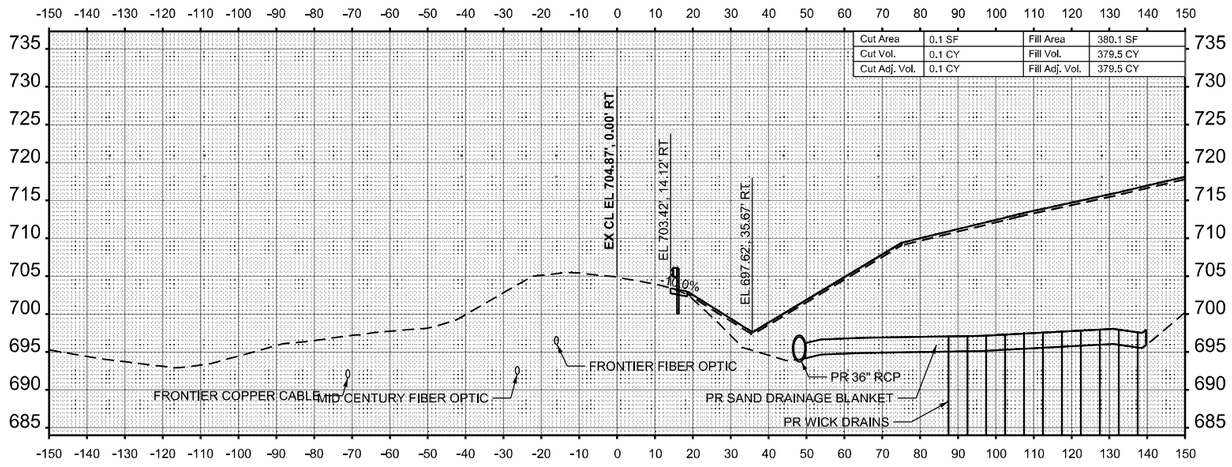
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	125

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 19+00.00



STA 18+50.00

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VEENSTRA & KIMM INC.

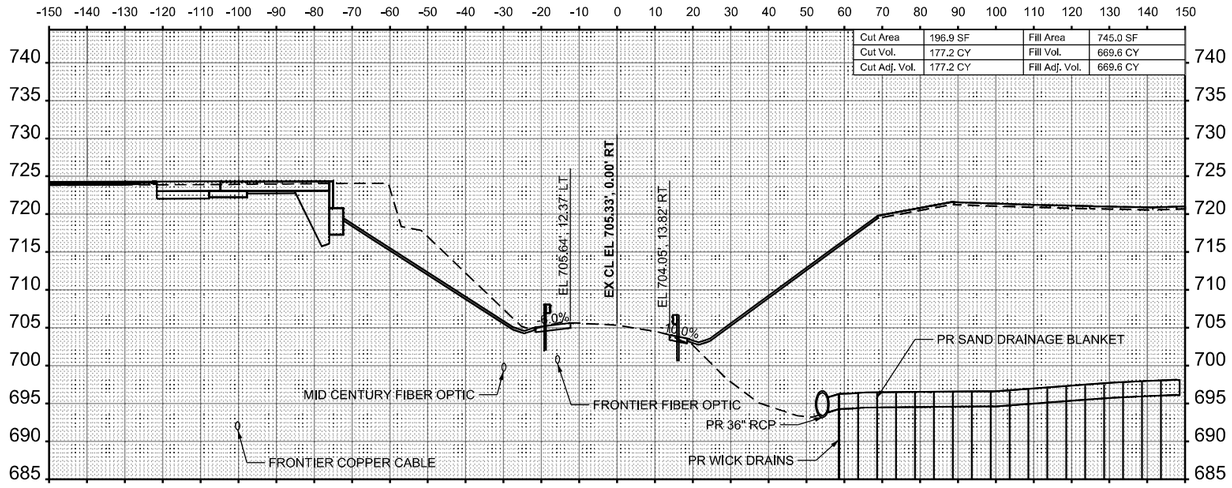
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

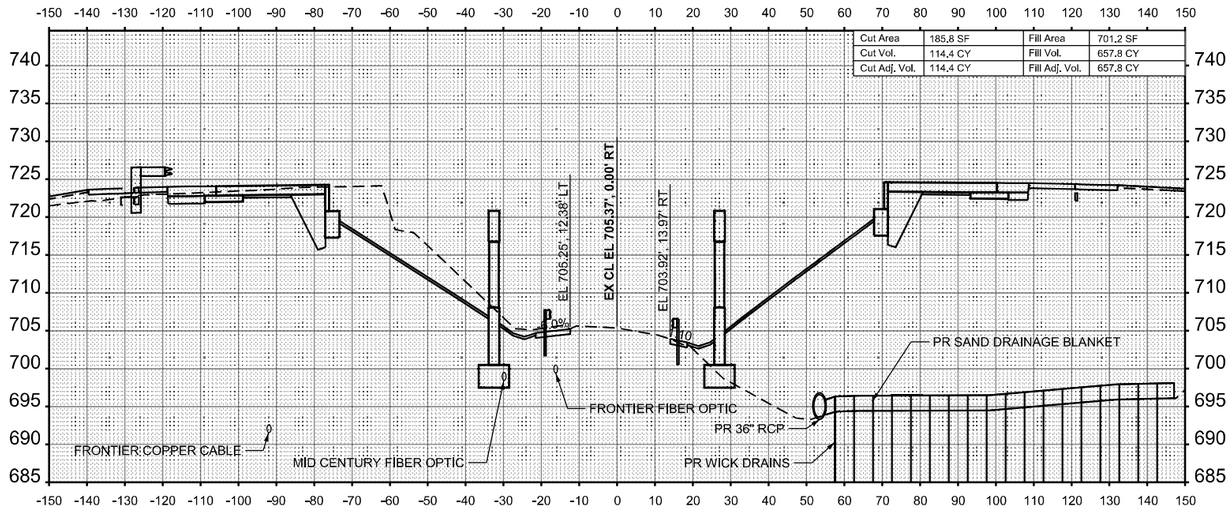
CROSS SECTIONS
CH 69

SCALE: 1"=20' | SHEET 2 OF 7 SHEETS | STA. 18+50.00 | TO STA. 19+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	126
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



STA 19+50.00



STA 19+25.00

MODEL: EXCLCH69 - 19+25.00 [Sheet]
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VEENSTRA & KIMM INC.

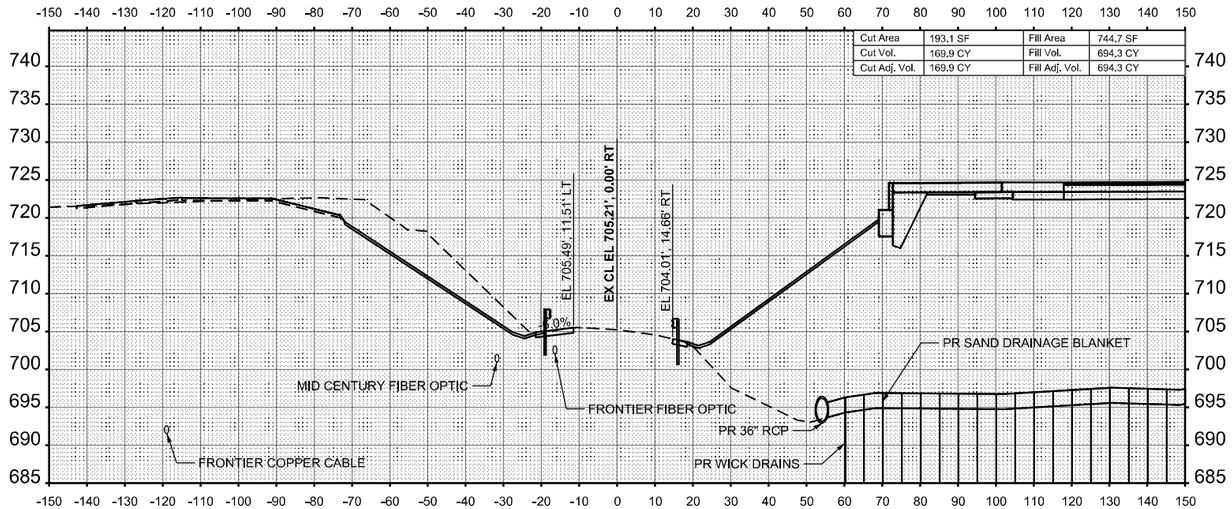
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

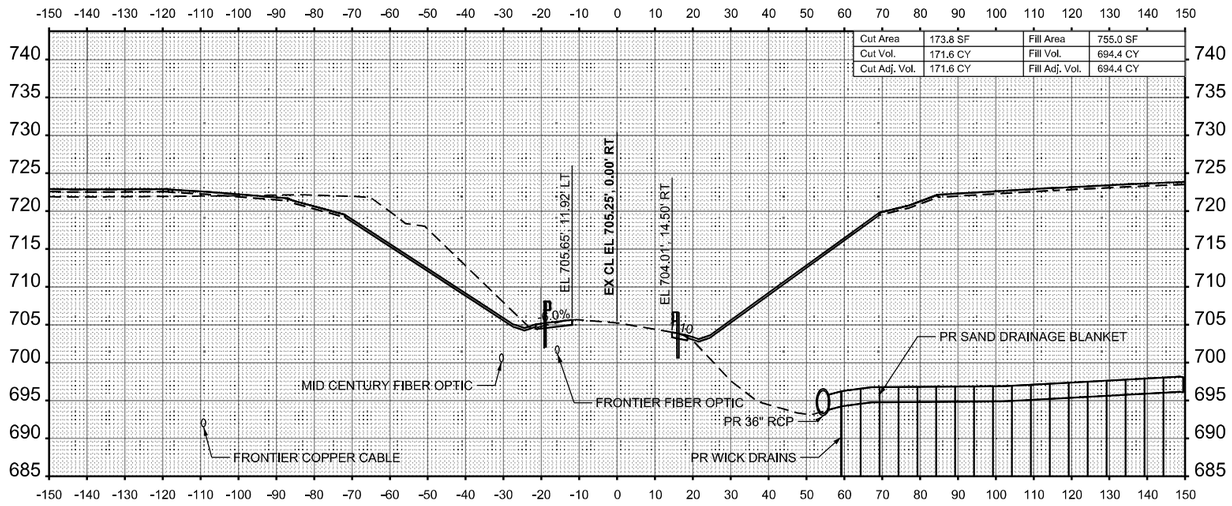
CROSS SECTIONS
CH 69

SCALE: 1"=20' | SHEET 3 OF 7 SHEETS | STA. 19+25.00 | TO STA. 19+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	127
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	



STA 20+00.00



STA 19+75.00

MODEL: EXCLCH69 - 19+75.00 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

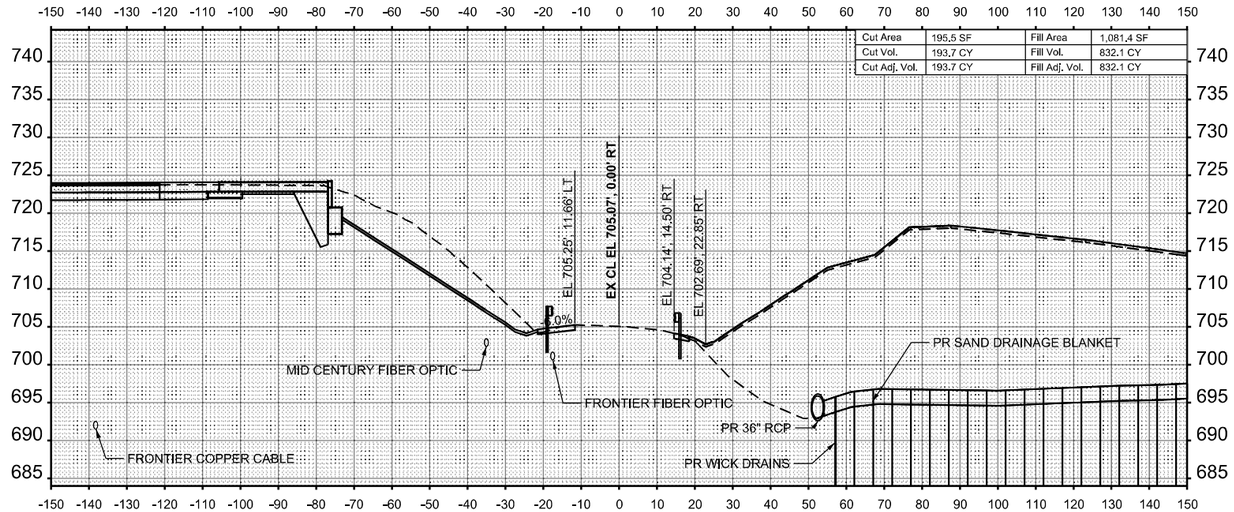
CROSS SECTIONS
CH 69

SCALE: 1"=20' | SHEET 4 OF 7 SHEETS | STA. 19+75.00 TO STA. 20+00.00

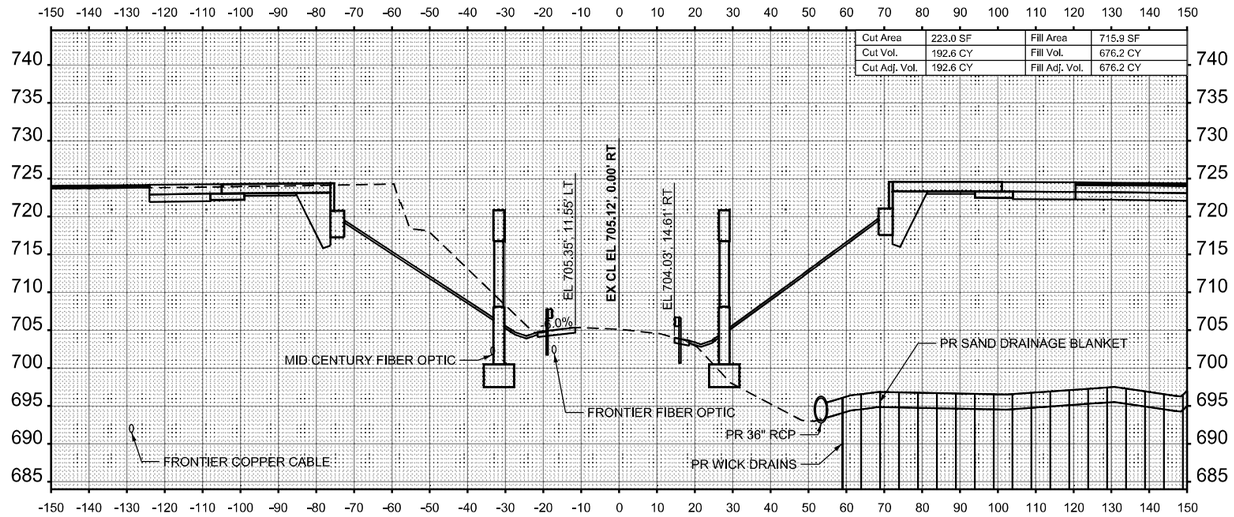
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	128

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 20+50.00



STA 20+25.00

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VEENSTRA & KIMM INC.

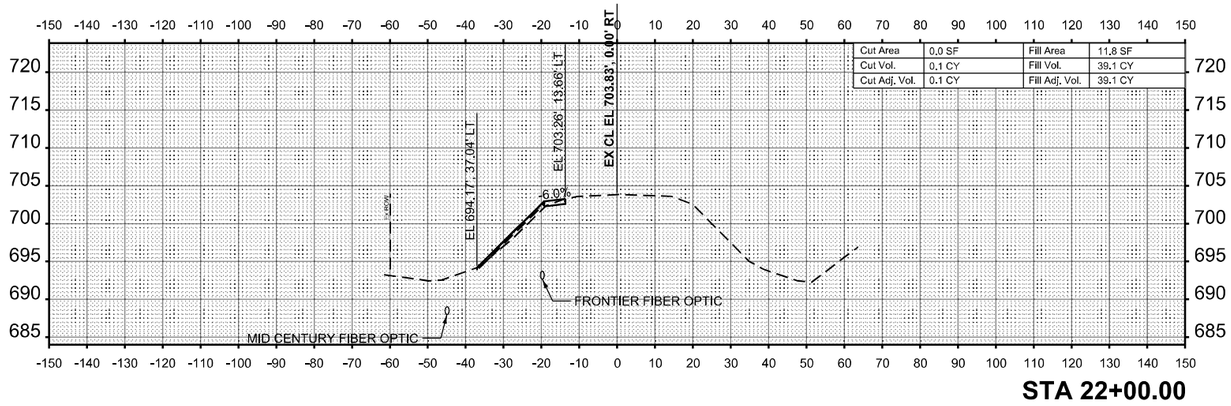
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
CH 69

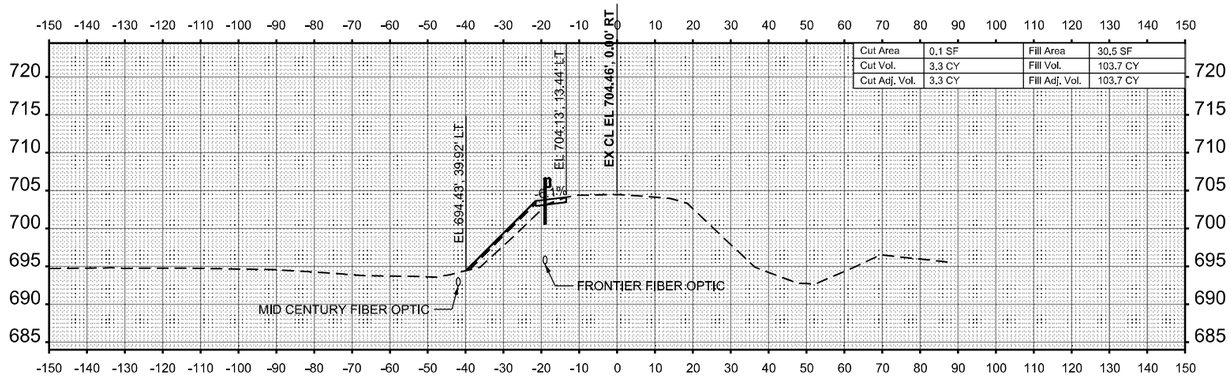
SCALE: 1"=20' | SHEET 5 OF 7 SHEETS | STA. 20+25.00 | TO STA. 20+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	129
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	



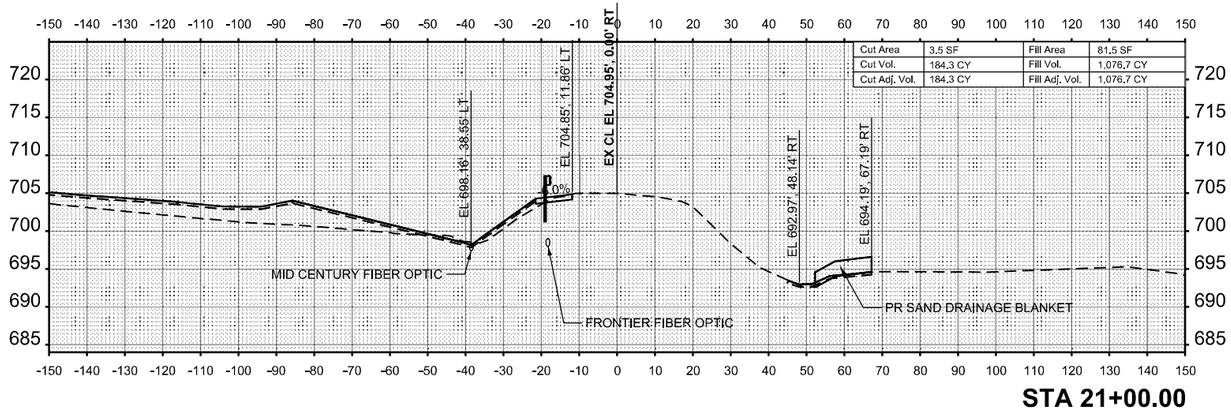
Cut Area	0.0 SF	Fill Area	11.8 SF
Cut Vol.	0.1 CY	Fill Vol.	39.1 CY
Cut Adj. Vol.	0.1 CY	Fill Adj. Vol.	39.1 CY

STA 22+00.00



Cut Area	0.1 SF	Fill Area	30.5 SF
Cut Vol.	3.3 CY	Fill Vol.	103.7 CY
Cut Adj. Vol.	3.3 CY	Fill Adj. Vol.	103.7 CY

STA 21+50.00



Cut Area	3.5 SF	Fill Area	81.5 SF
Cut Vol.	184.3 CY	Fill Vol.	1,076.7 CY
Cut Adj. Vol.	184.3 CY	Fill Adj. Vol.	1,076.7 CY

STA 21+00.00

MODEL: EXCLCH69 - 21+00.00 [Sheet]
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VEENSTRA & KIMM INC.

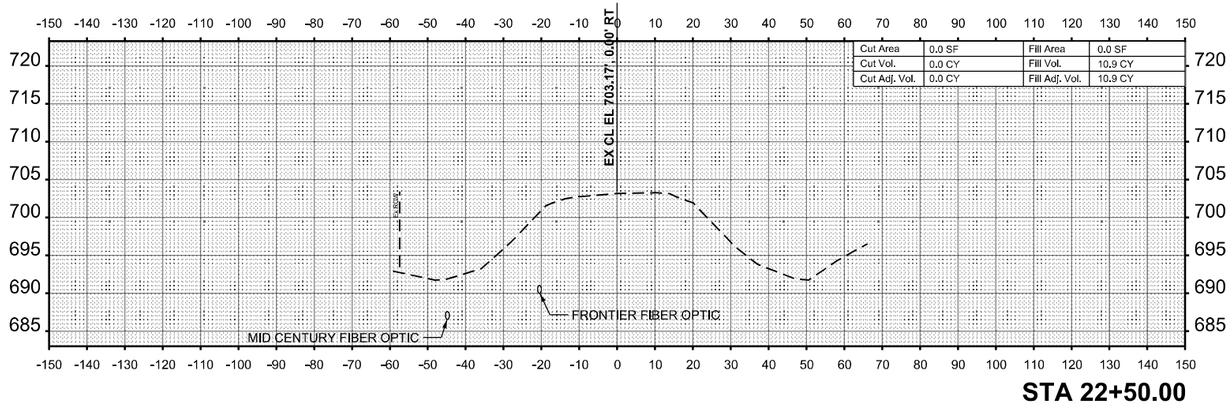
	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
CH 69

SCALE: 1"=20' | SHEET 6 OF 7 SHEETS | STA. 21+00.00 | TO STA. 22+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	130
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



Cut Area	0.0 SF	Fill Area	0.0 SF
Cut Vol.	0.0 CY	Fill Vol.	10.9 CY
Cut Adj. Vol.	0.0 CY	Fill Adj. Vol.	10.9 CY

STA 22+50.00

MODEL: EXCLCH69 - 22+50.00 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

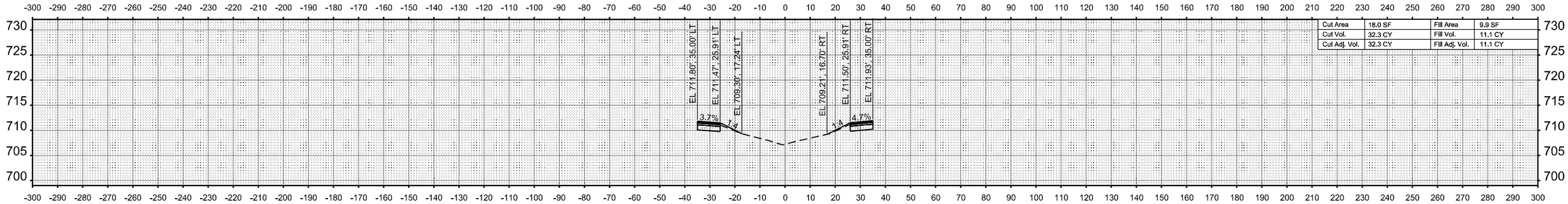
CROSS SECTIONS
CH 69

SCALE: 1"=20' | SHEET 7 OF 7 SHEETS | STA. 22+50.00 TO STA. 22+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	131

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



MODEL: MOT-Xover - 171+98.06 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

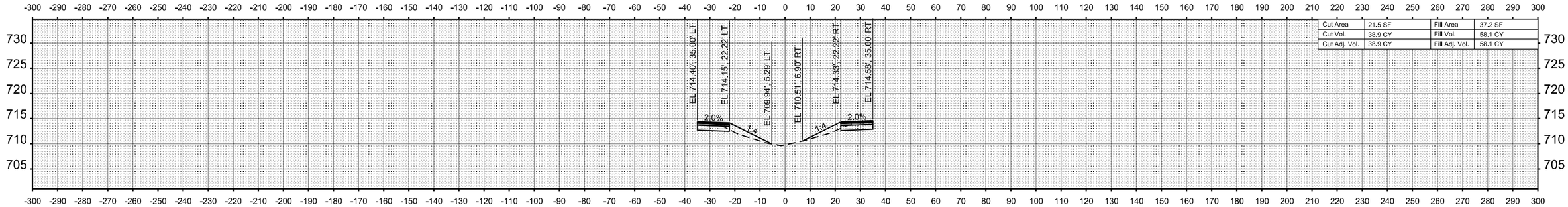
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 1 OF 19 SHEETS | STA. 171+98.06 TO STA. 172+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	132

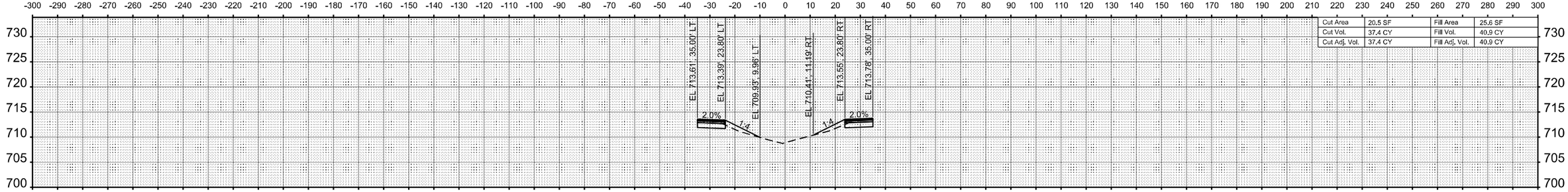
CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



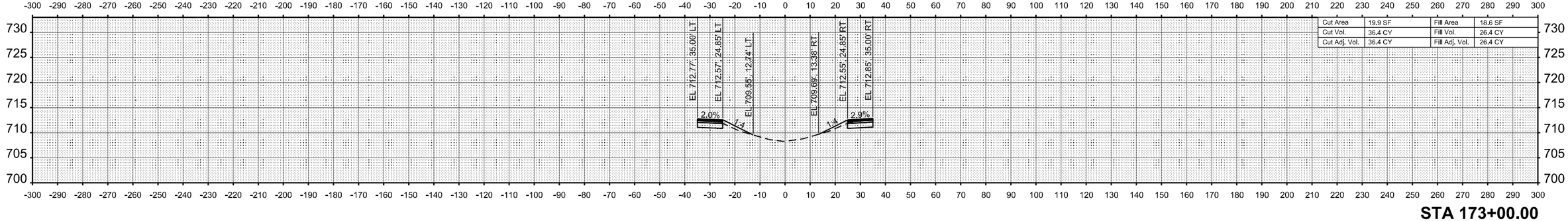
Cut Area	21.5 SF	Fill Area	37.2 SF
Cut Vol.	38.9 CY	Fill Vol.	58.1 CY
Cut Adj. Vol.	38.9 CY	Fill Adj. Vol.	58.1 CY

STA 174+00.00



Cut Area	20.5 SF	Fill Area	25.6 SF
Cut Vol.	37.4 CY	Fill Vol.	40.9 CY
Cut Adj. Vol.	37.4 CY	Fill Adj. Vol.	40.9 CY

STA 173+50.00



Cut Area	19.9 SF	Fill Area	18.6 SF
Cut Vol.	36.4 CY	Fill Vol.	26.4 CY
Cut Adj. Vol.	36.4 CY	Fill Adj. Vol.	26.4 CY

STA 173+00.00

MODEL: MOTXover - 173+00.00 [Sheet]
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VEENSTRA & KIMM INC.

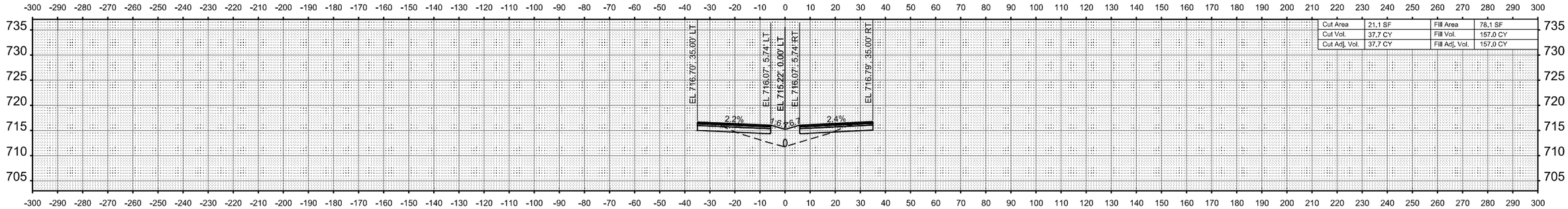
DESIGNED	DMS	REVISED	-
DRAWN	DMS	REVISED	-
CHECKED	PMO	REVISED	-
DATE	08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

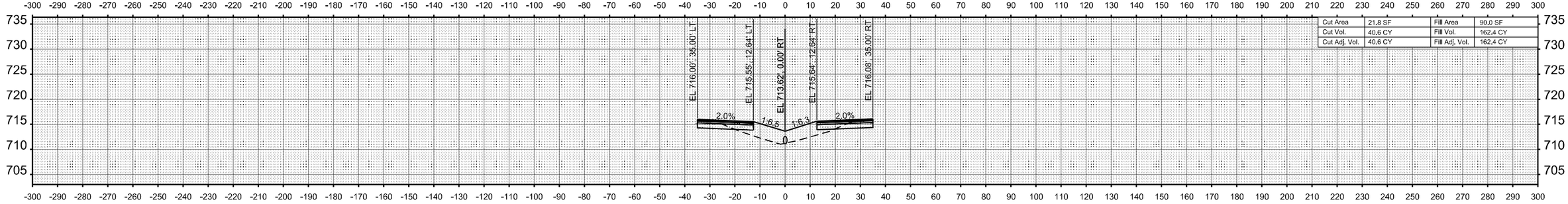
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 2 OF 19 SHEETS | STA. 173+00.00 | TO STA. 174+00.00

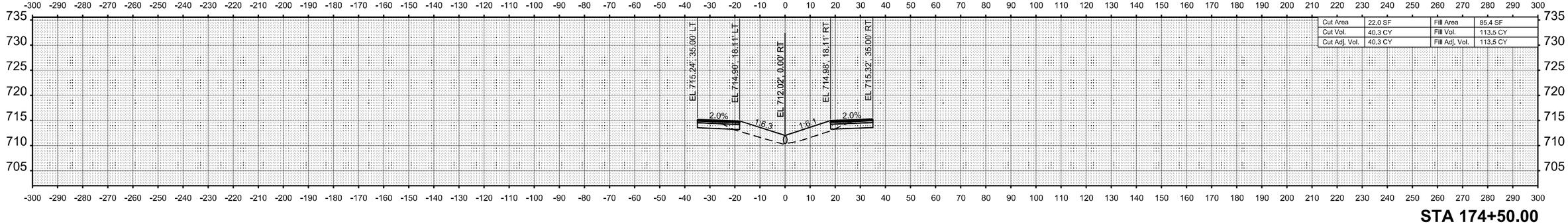
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	133
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



STA 175+50.00



STA 175+00.00



STA 174+50.00

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VEENSTRA & KIMM INC.

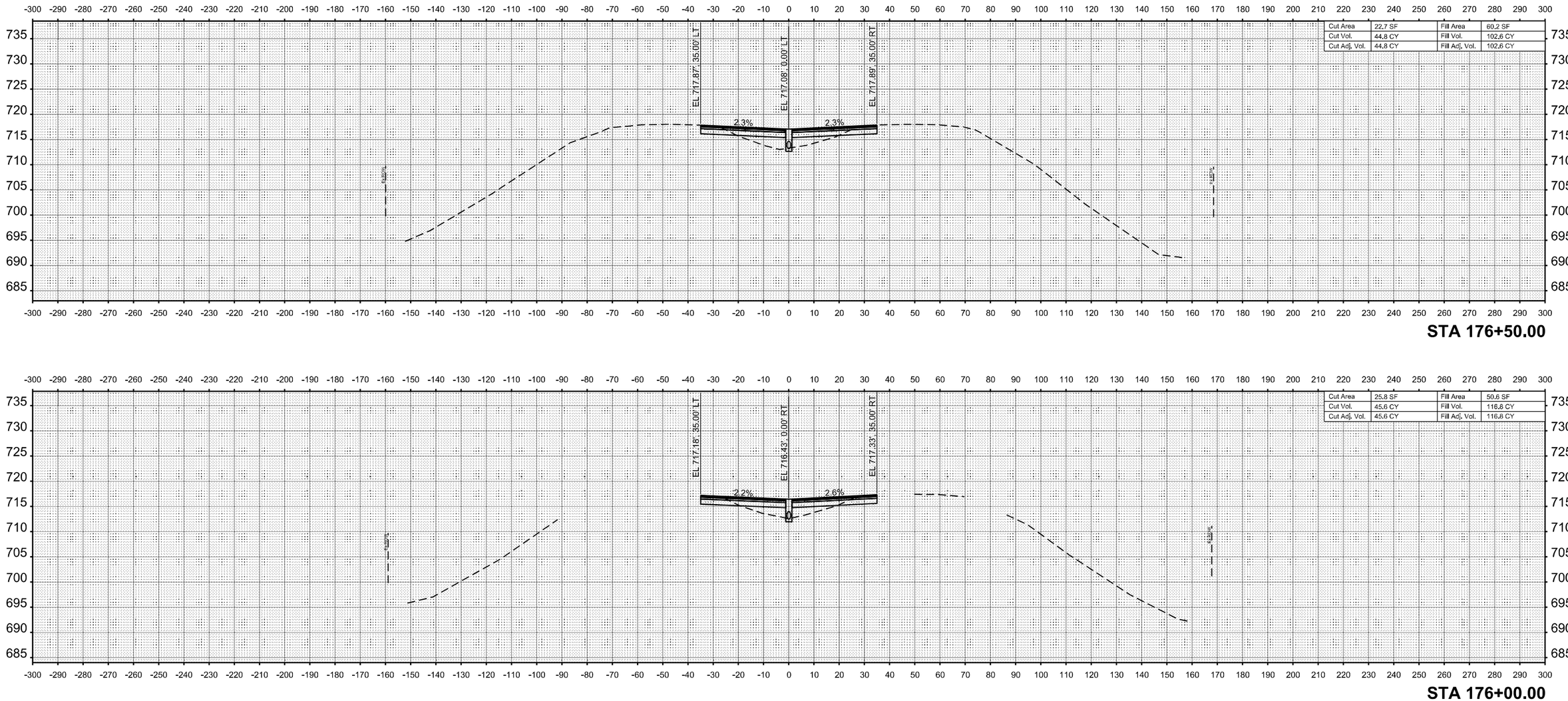
	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 3 OF 19 SHEETS | STA. 174+50.00 | TO STA. 175+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	134
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	



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VEENSTRA & KIMM INC.

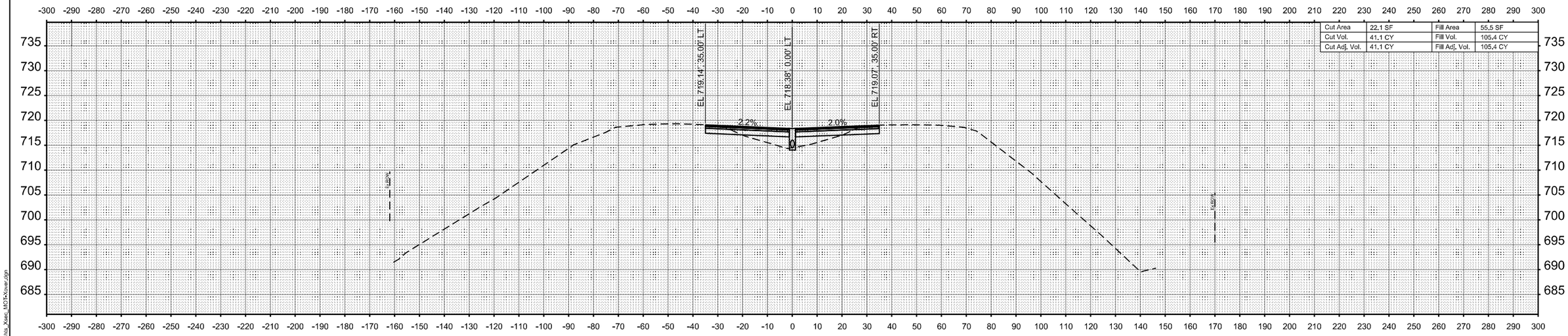
	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
WEST CROSSOVER

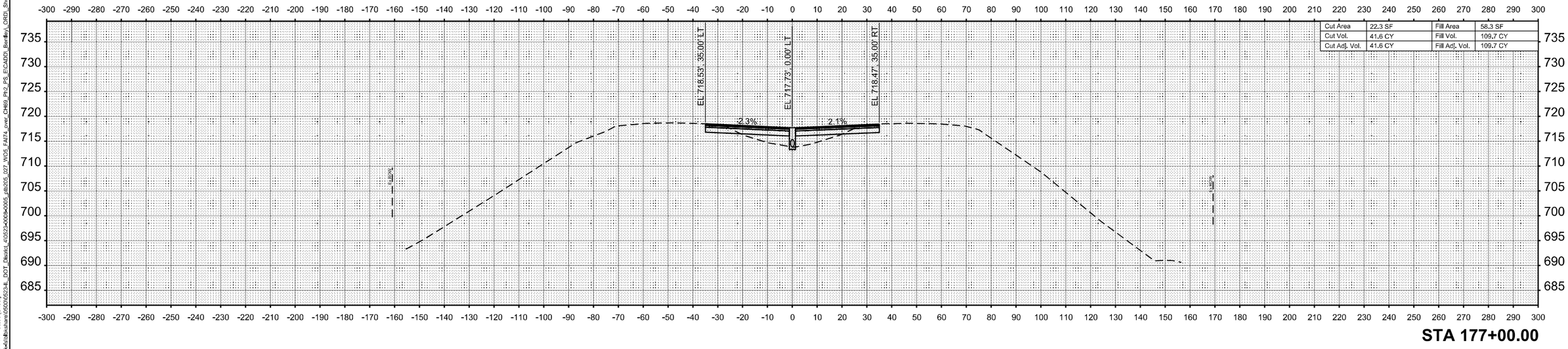
SCALE: 1"=20' | SHEET 4 OF 19 SHEETS | STA. 176+00.00 | TO STA. 176+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	135
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



Cut Area	22.1 SF	Fill Area	55.5 SF
Cut Vol.	41.1 CY	Fill Vol.	105.4 CY
Cut Adj. Vol.	41.1 CY	Fill Adj. Vol.	105.4 CY

STA 177+50.00



Cut Area	22.3 SF	Fill Area	58.3 SF
Cut Vol.	41.6 CY	Fill Vol.	109.7 CY
Cut Adj. Vol.	41.6 CY	Fill Adj. Vol.	109.7 CY

STA 177+00.00

MODEL: MOT-Xover - 177+00.00 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

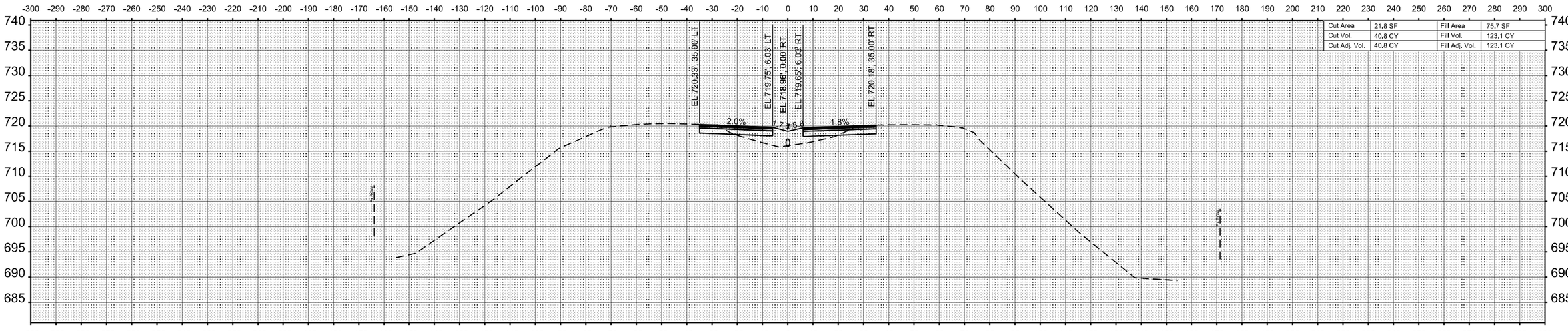
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 5 OF 19 SHEETS | STA. 177+00.00 TO STA. 177+50.00

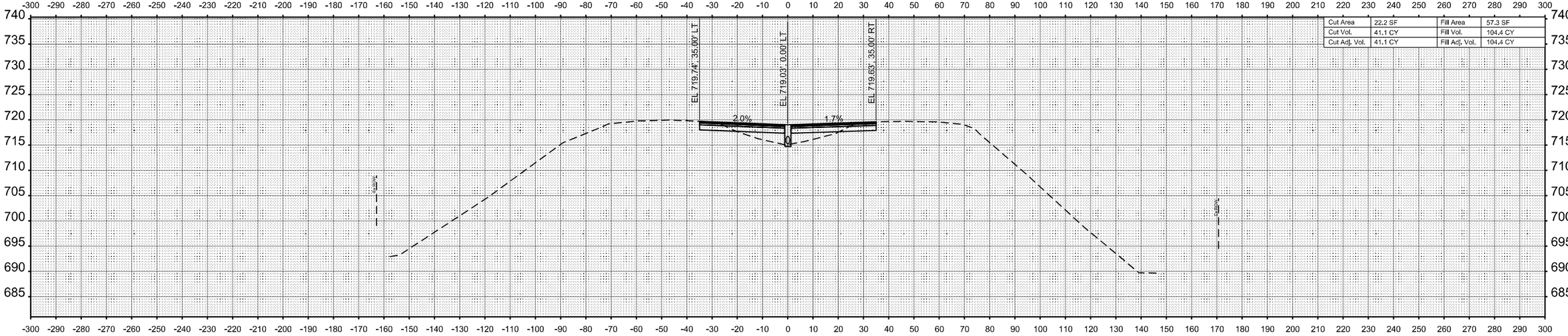
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	136

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 178+50.00



STA 178+00.00

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VEENSTRA & KIMM INC.

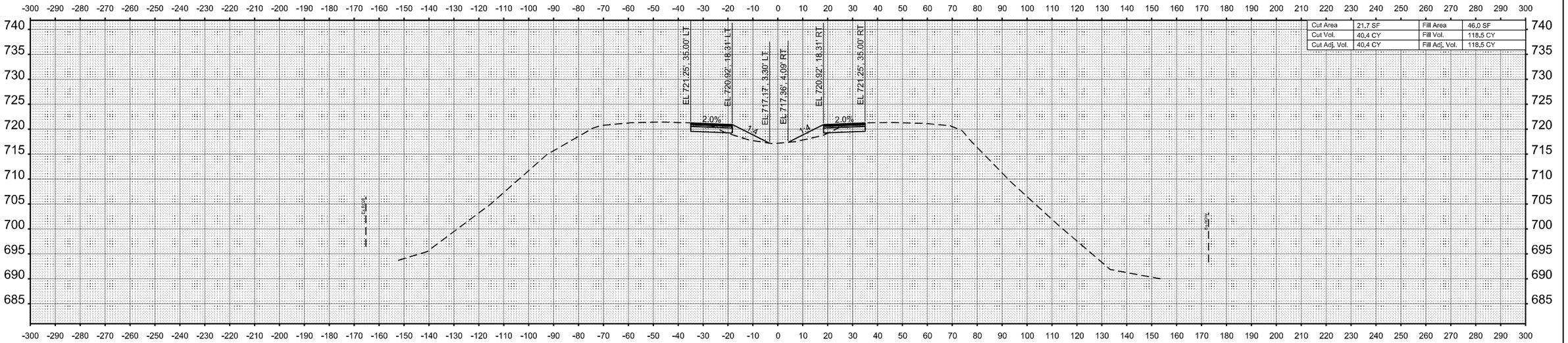
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

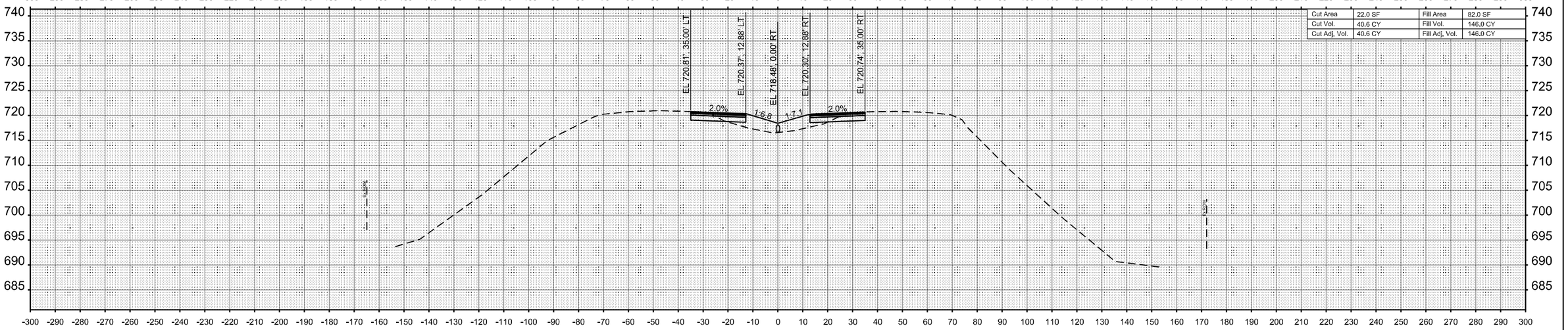
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 6 OF 19 SHEETS | STA. 178+00.00 | TO STA. 178+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	137
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



STA 179+50.00



STA 179+00.00

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VEENSTRA & KIMM INC.

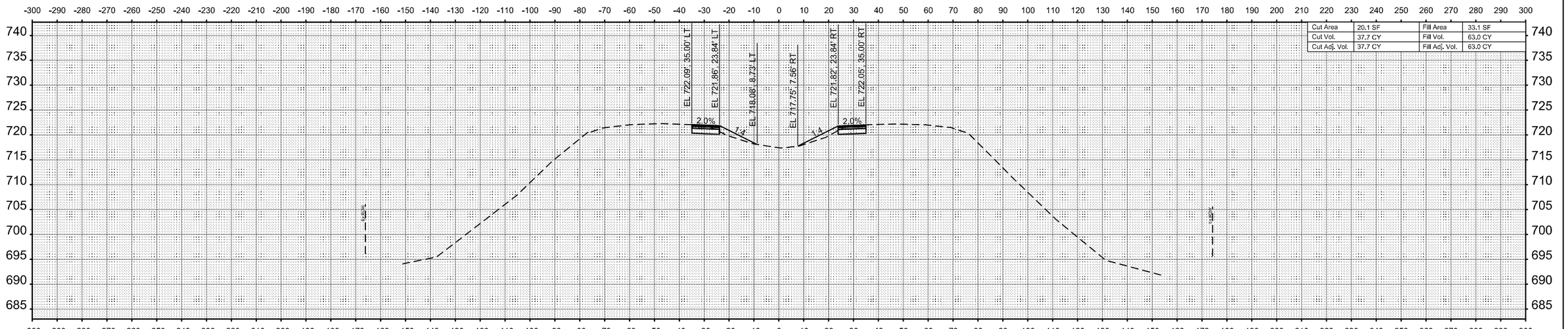
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

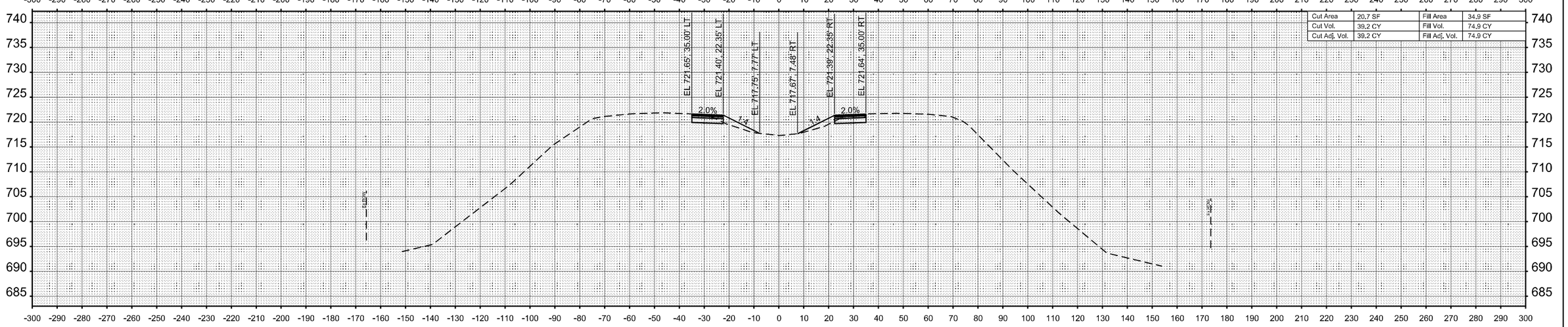
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 7 OF 19 SHEETS | STA. 179+00.00 | TO STA. 179+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	138
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



STA 180+50.00



STA 180+00.00

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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED	-
DRAWN -	DMS	REVISED	-
CHECKED -	PMO	REVISED	-
DATE -	08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

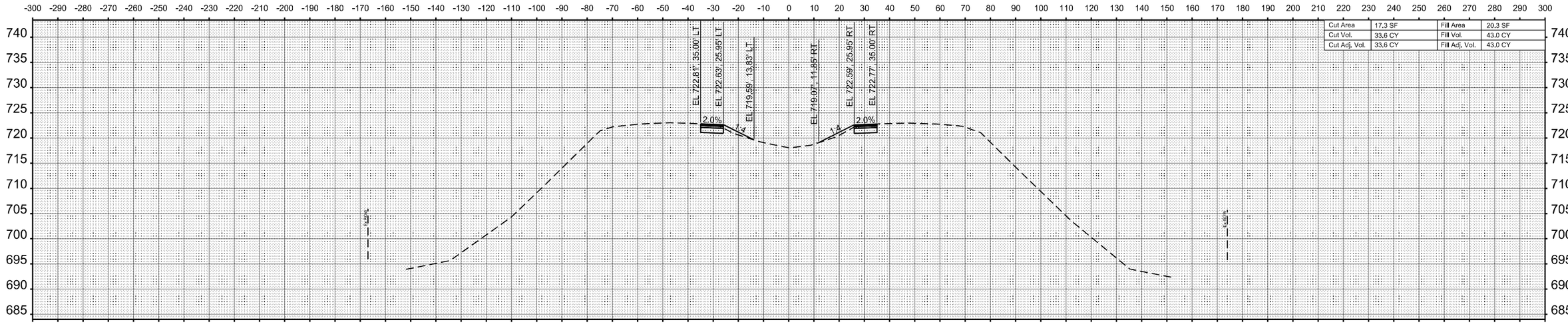
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 8 OF 19 SHEETS | STA. 180+00.00 | TO STA. 180+50.00

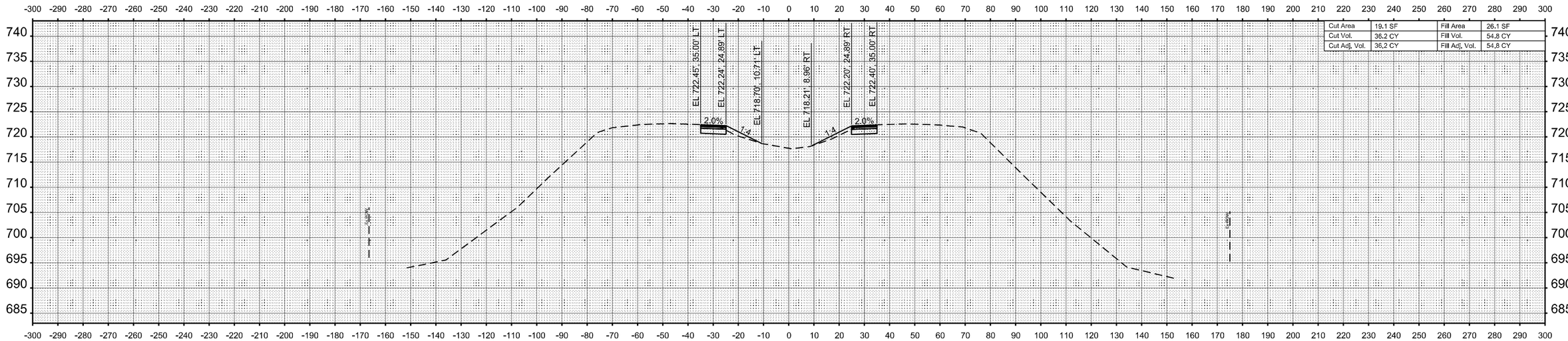
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	139

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 181+50.00



STA 181+00.00

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VEENSTRA & KIMM INC.

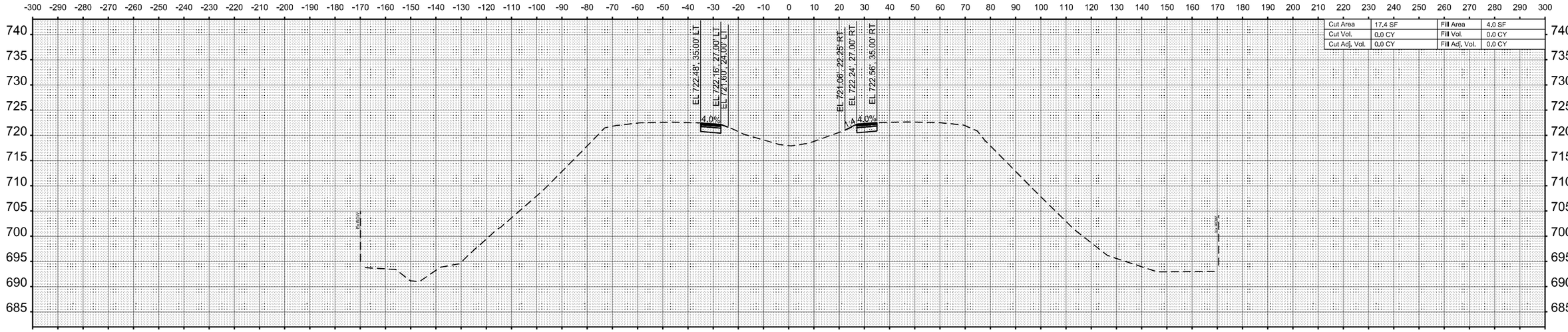
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

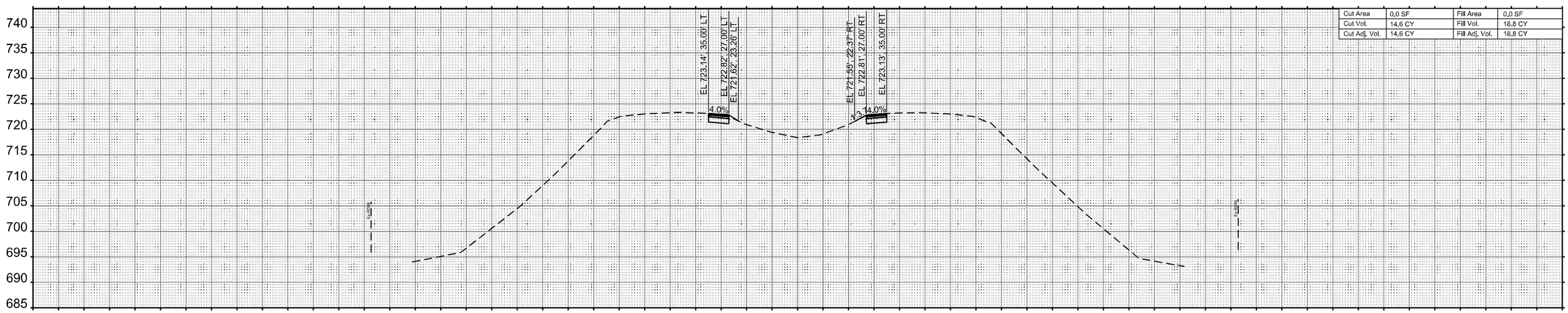
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 9 OF 19 SHEETS | STA. 181+00.00 | TO STA. 181+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	140
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



STA 191+00.00



STA 182+00.00

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VEENSTRA & KIMM INC.

DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

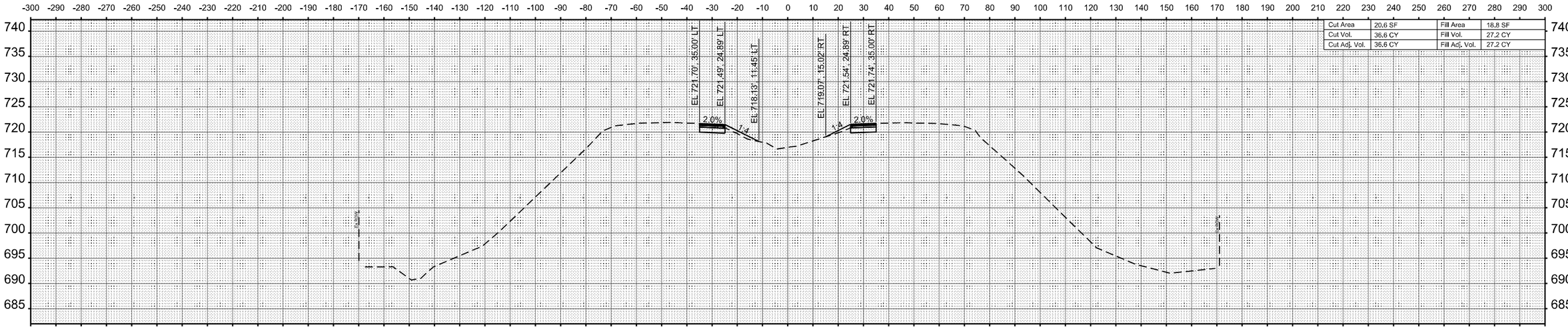
CROSS SECTIONS
WEST CROSSOVER

SCALE: 1"=20' | SHEET 10 OF 19 SHEETS | STA. 182+00.00 | TO STA. 191+00.00

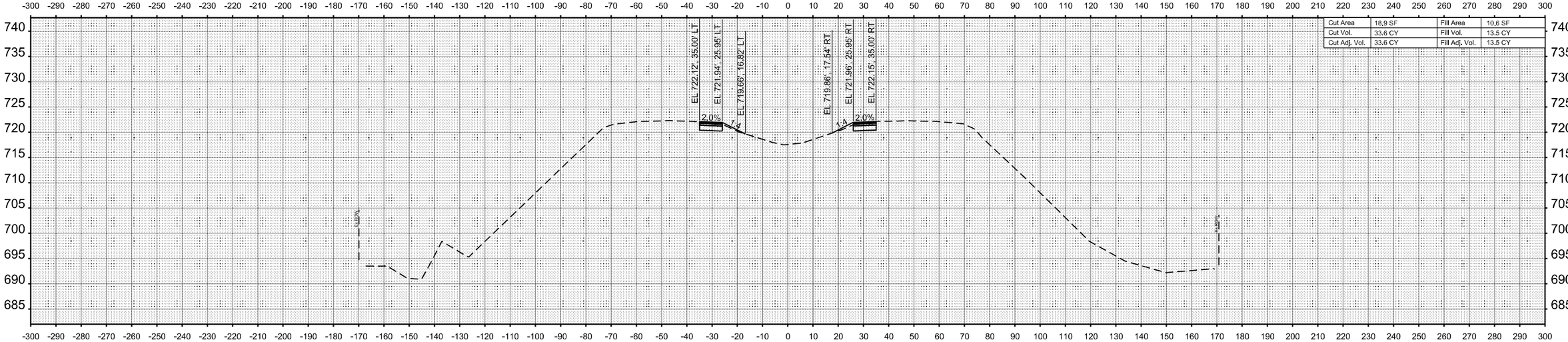
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	141

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 192+00.00



STA 191+50.00

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VEENSTRA & KIMM INC.

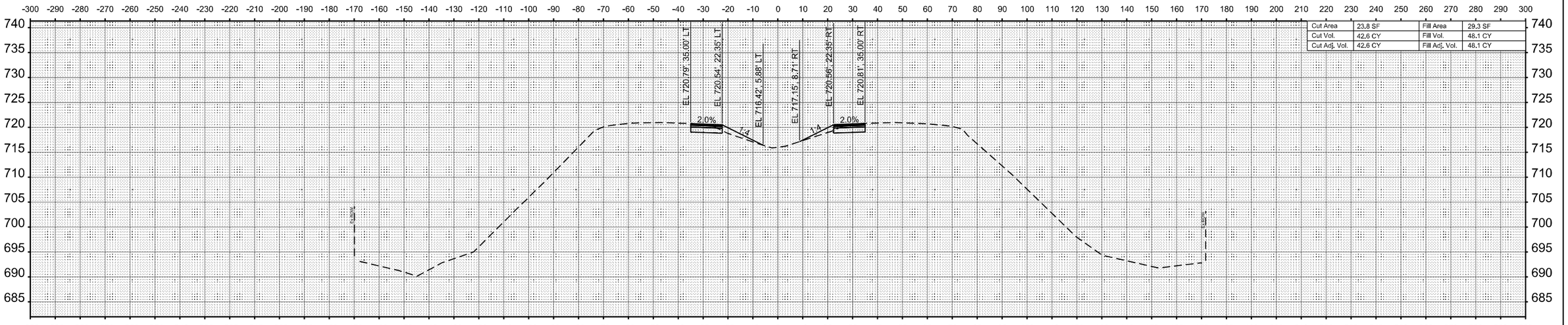
DESIGNED - DMS	REVISED -	
DRAWN - DMS	REVISED -	
CHECKED - PMO	REVISED -	
DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 11 OF 19 SHEETS | STA. 191+50.00 | TO STA. 192+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	142
		CONTRACT NO. 68D84		
	ILLINOIS FED. AID PROJECT			



Cut Area	23.8 SF	Fill Area	29.3 SF
Cut Vol.	42.6 CY	Fill Vol.	48.1 CY
Cut Adj. Vol.	42.6 CY	Fill Adj. Vol.	48.1 CY

STA 193+00.00

Cut Area	22.2 SF	Fill Area	22.7 SF
Cut Vol.	39.7 CY	Fill Vol.	38.4 CY
Cut Adj. Vol.	39.7 CY	Fill Adj. Vol.	38.4 CY

STA 192+50.00

MODEL: MOT-Xover - 192+50.00 [Sheet]
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VEENSTRA & KIMM INC.

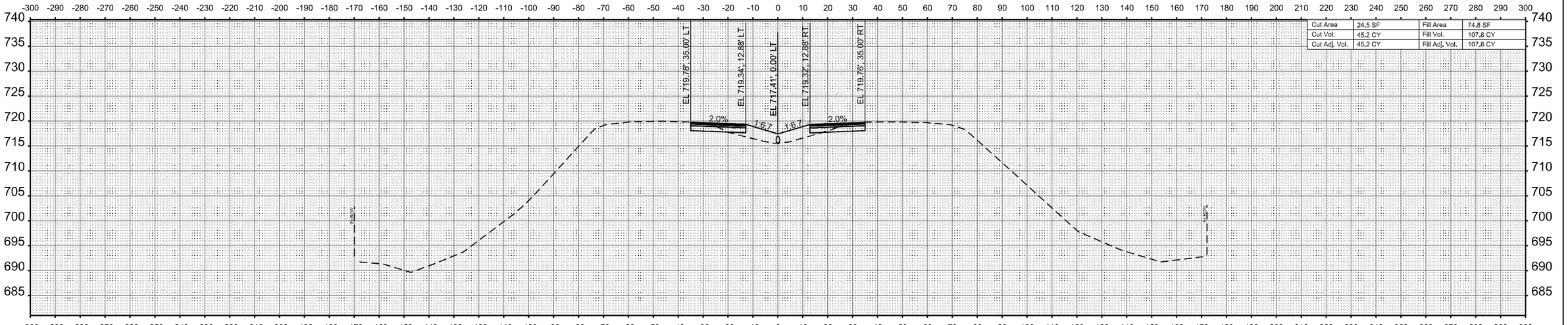
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

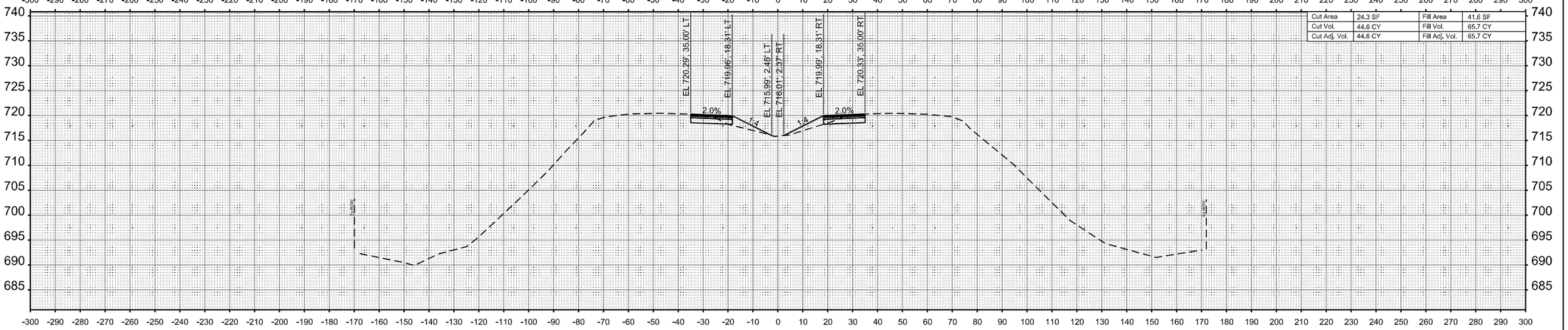
CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 12 OF 19 SHEETS | STA. 192+50.00 | TO STA. 193+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	143
		CONTRACT NO. 68D84		
		ILLINOIS	FED. AID PROJECT	



STA 194+00.00



STA 193+50.00

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VEENSTRA & KIMM INC.

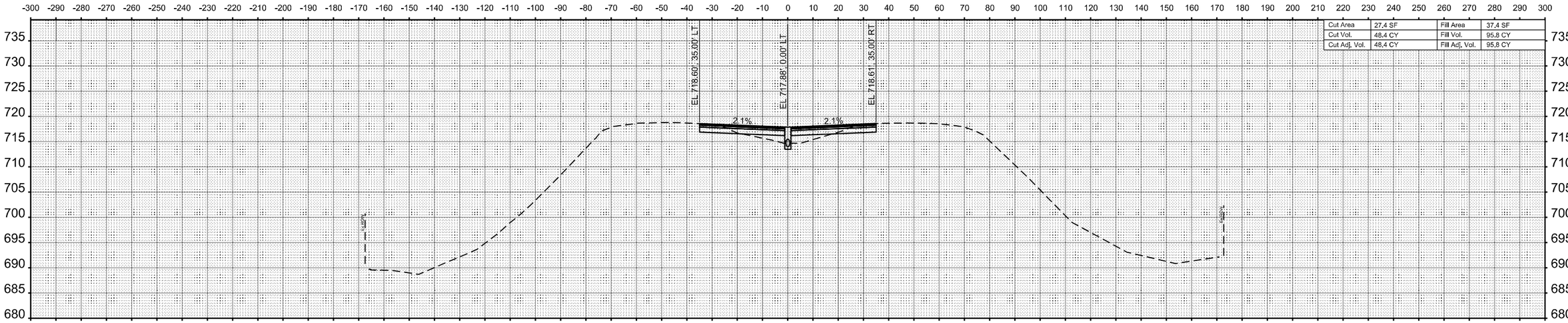
DESIGNED - DMS	REVISED -	
DRAWN - DMS	REVISED -	
CHECKED - PMO	REVISED -	
DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EAST CROSSOVER

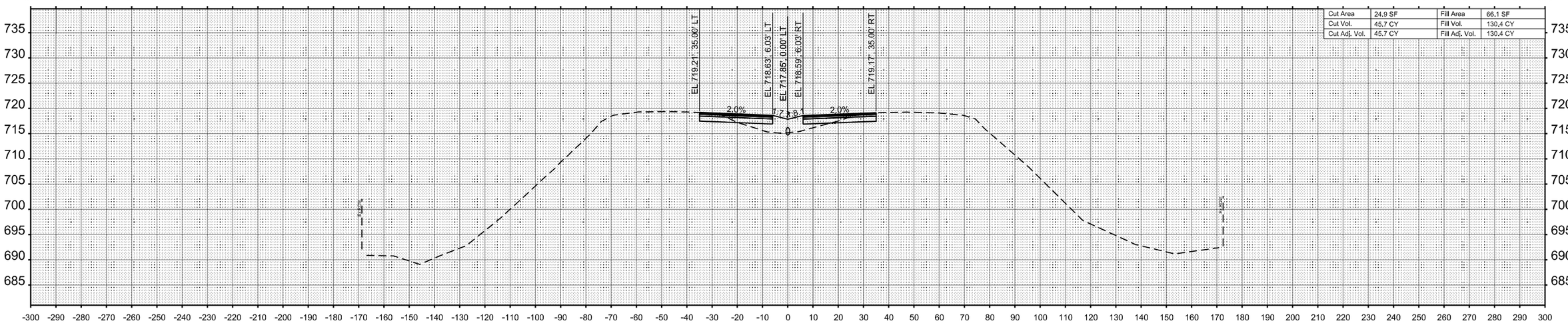
SCALE: 1"=20' | SHEET 13 OF 19 SHEETS | STA. 193+50.00 | TO STA. 194+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	144
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



Cut Area	27.4 SF	Fill Area	37.4 SF
Cut Vol.	48.4 CY	Fill Vol.	95.8 CY
Cut Adj. Vol.	48.4 CY	Fill Adj. Vol.	95.8 CY

STA 195+00.00



Cut Area	24.9 SF	Fill Area	66.1 SF
Cut Vol.	45.7 CY	Fill Vol.	130.4 CY
Cut Adj. Vol.	45.7 CY	Fill Adj. Vol.	130.4 CY

STA 194+50.00

MODEL: MOT-Xover - 194+50.00 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

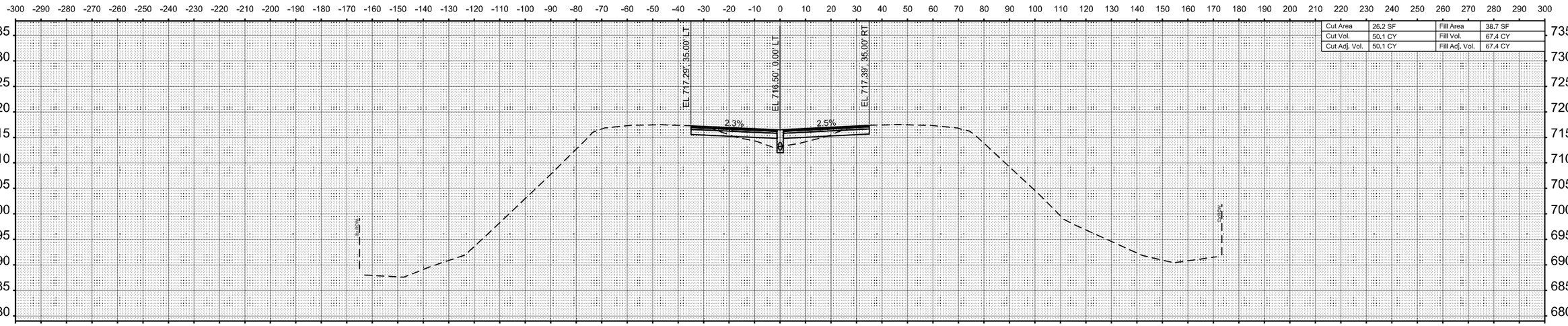
CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 14 OF 19 SHEETS | STA. 194+50.00 TO STA. 195+00.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	145

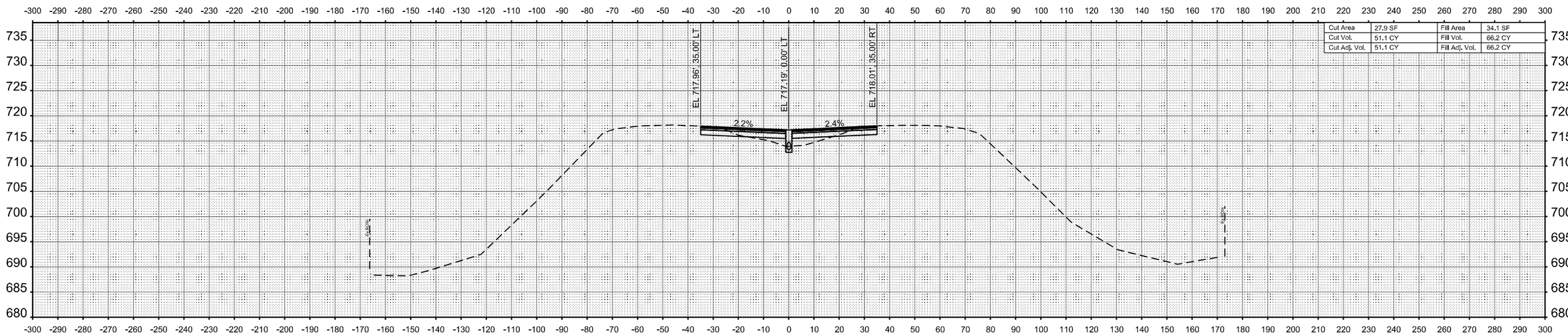
CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



Cut Area	26.2 SF	Fill Area	38.7 SF
Cut Vol.	50.1 CY	Fill Vol.	67.4 CY
Cut Adj. Vol.	50.1 CY	Fill Adj. Vol.	67.4 CY

STA 196+00.00



Cut Area	27.9 SF	Fill Area	34.1 SF
Cut Vol.	51.1 CY	Fill Vol.	66.2 CY
Cut Adj. Vol.	51.1 CY	Fill Adj. Vol.	66.2 CY

STA 195+50.00

MODEL: MOT-Xover - 195+50.00 [Sheet]
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VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

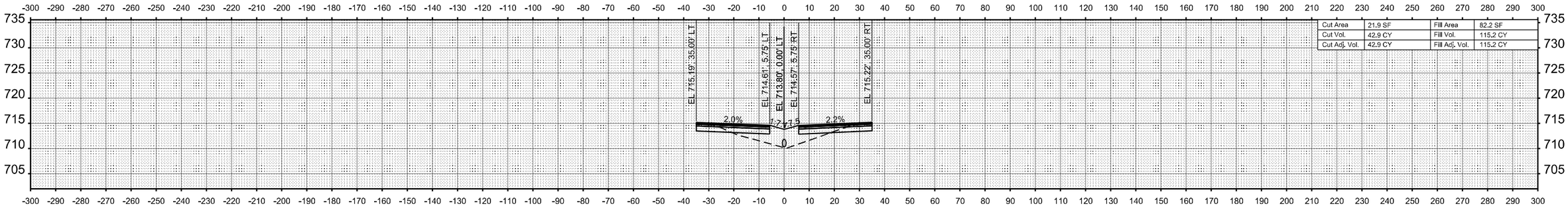
CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 15 OF 19 SHEETS | STA. 195+50.00 TO STA. 196+00.00

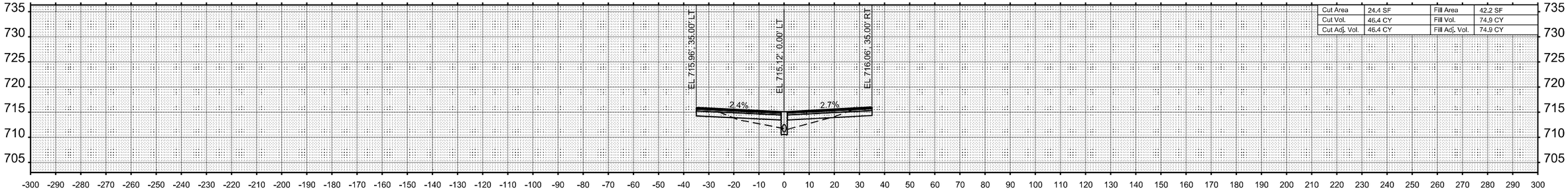
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	146

CONTRACT NO. 68D84

ILLINOIS | FED. AID PROJECT



STA 197+50.00



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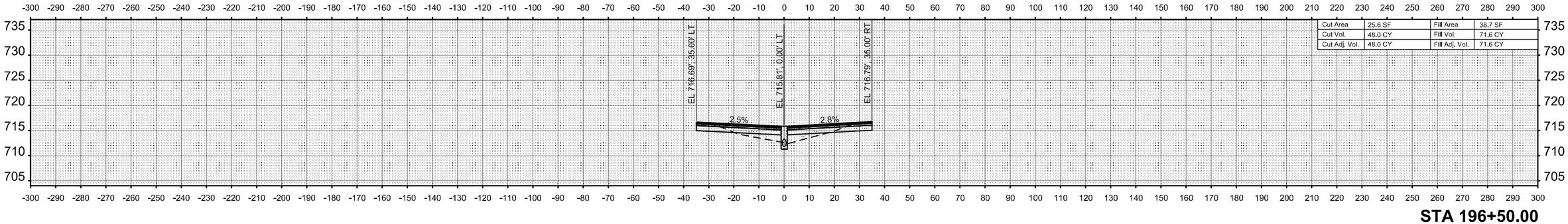

STA 196+50.00

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VEENSTRA & KIMM INC.

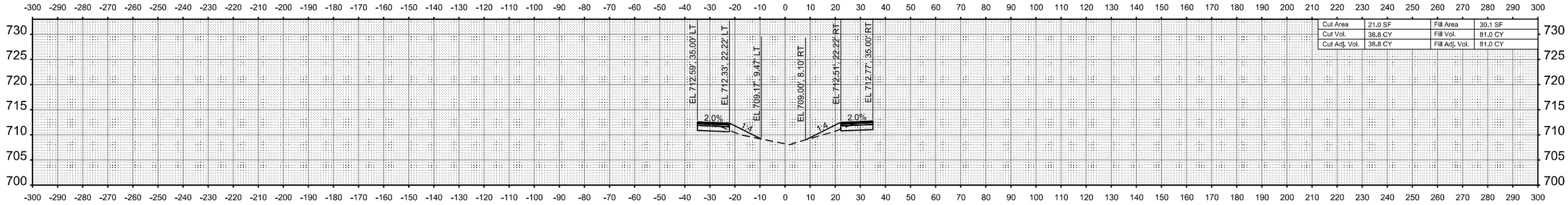
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

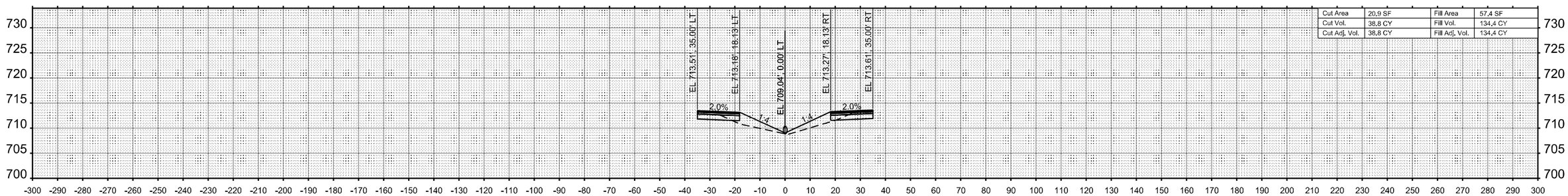
CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 16 OF 19 SHEETS | STA. 196+50.00 | TO STA. 197+50.00

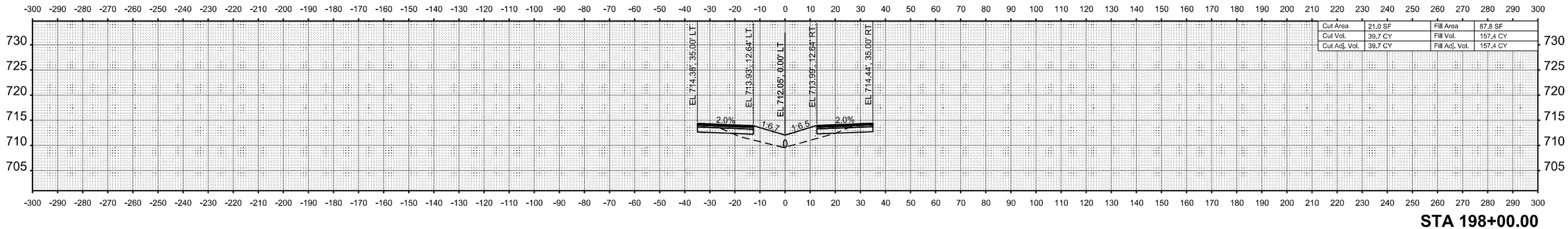
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	147
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



STA 199+00.00



STA 198+50.00



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VEENSTRA & KIMM INC.

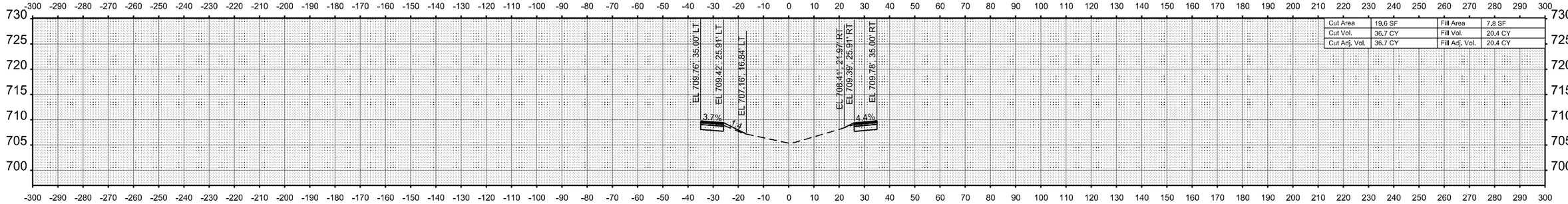
	DESIGNED - DMS	REVISED -	
	DRAWN - DMS	REVISED -	
	CHECKED - PMO	REVISED -	
	DATE - 08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

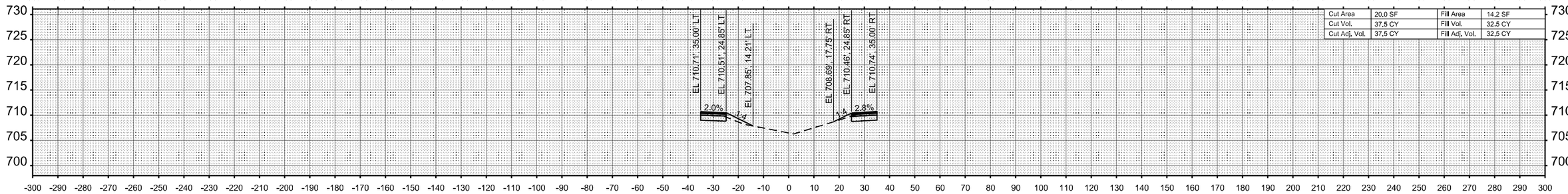
CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 17 OF 19 SHEETS | STA. 198+00.00 | TO STA. 199+00.00

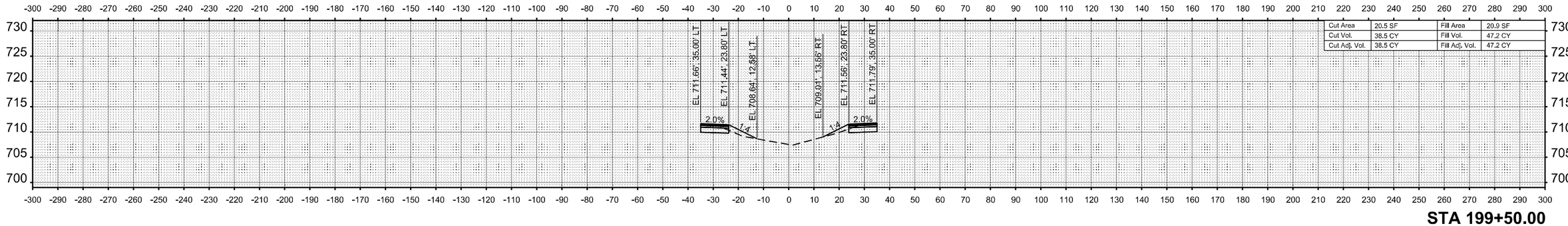
F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	148
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



STA 200+50.00



STA 200+00.00



STA 199+50.00

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VEENSTRA & KIMM INC.

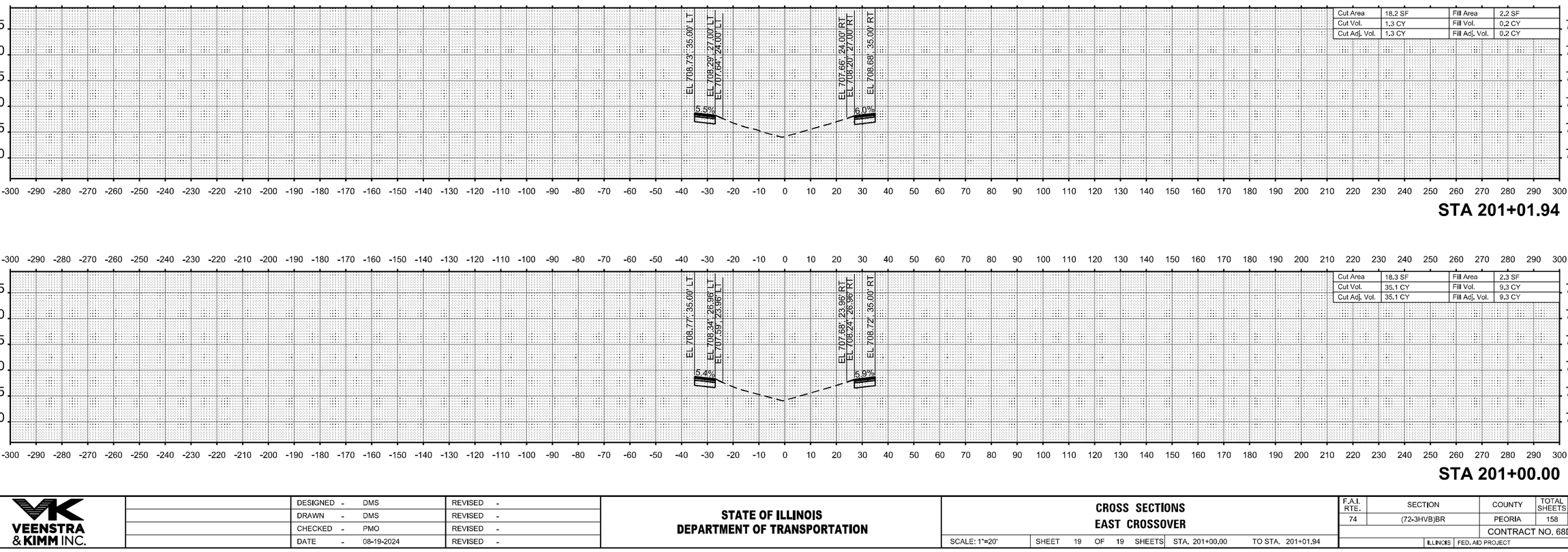
DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 18 OF 19 SHEETS | STA. 199+50.00 | TO STA. 200+50.00

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	149
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		



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VEENSTRA & KIMM INC.

DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

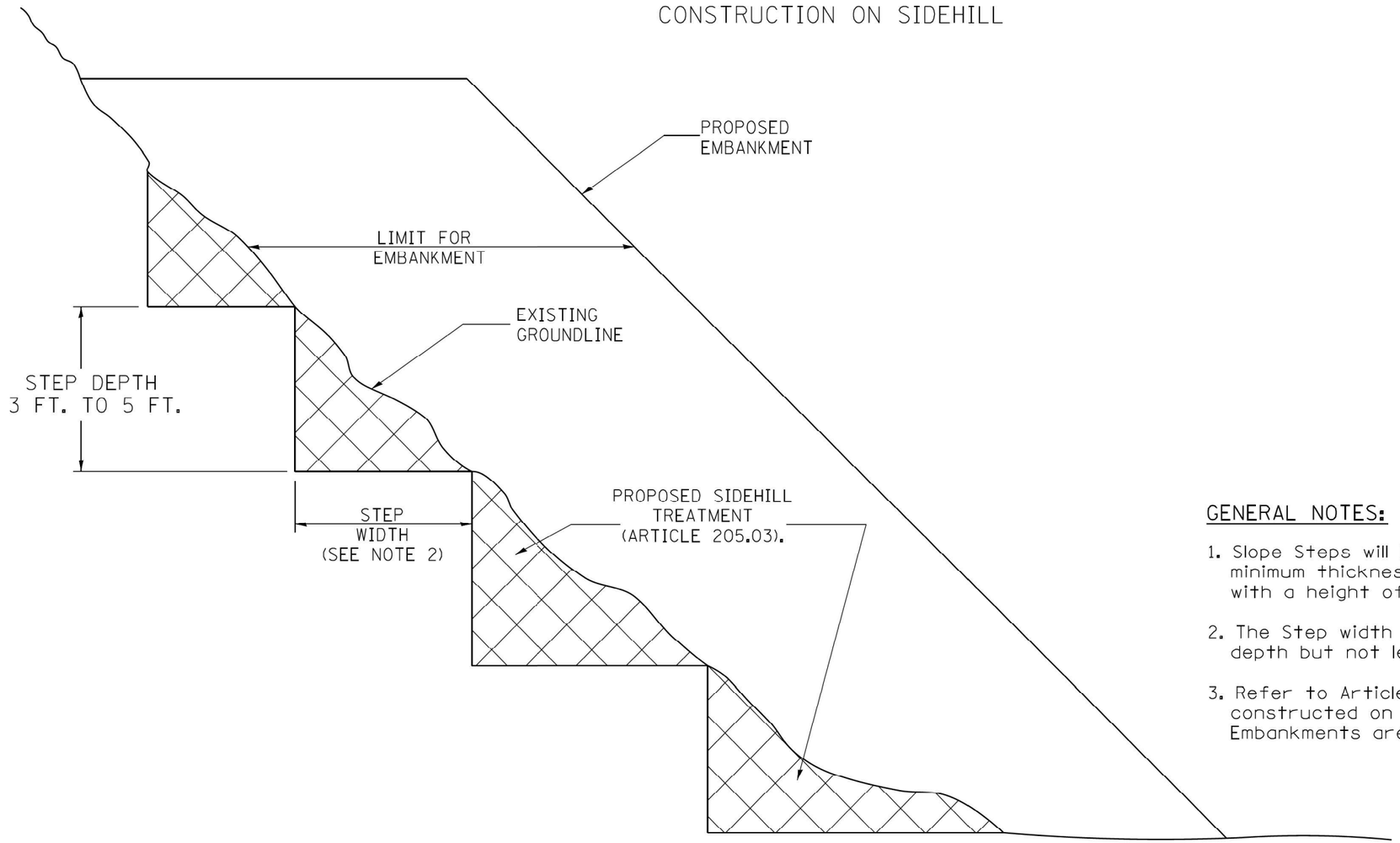
CROSS SECTIONS
EAST CROSSOVER

SCALE: 1"=20' | SHEET 19 OF 19 SHEETS | STA. 201+00.00 | TO STA. 201+01.94

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	150
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

SLOPE STEPS DETAIL

TYPICAL CROSS-SECTION EMBANKMENT
CONSTRUCTION ON SIDEHILL



GENERAL NOTES:

1. Slope Steps will be required for all 12(300) minimum thickness "sliver fills" and on all fills with a height of 10 feet or greater.

2. The Step width shall be twice the Step depth but not less than 6 feet.

3. Refer to Article 205.03 for Embankment to be constructed on Hillside or Slopes, or if existing Embankments are to be widened.

REPLACEMENT MATERIAL:

STANDARD EMBANKMENT
(IN ACCORDANCE WITH
205 OF THE STANDARD SPECIFACATION).

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

1-1-97	RENUM. L-5.03, NEW REVISION BOX, REVISED TITLE	T.P.				
	BOX, REVISED GENERAL NOTES.					
10-16-06	REVISED TO 2007 SPEC.	M.A.				
5-30-18	MINOR CORRECTION	R.D.				

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SLOPE STEPS DETAIL

NOT TO SCALE

CADD STD. 205001-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

	DESIGNED -	DMS	REVISED -
	DRAWN -	DMS	REVISED -
	CHECKED -	PMO	REVISED -
	DATE -	08-19-2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: NONE | SHEET 1 1 OF 138 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	151
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 205001-D4 [Sheet]
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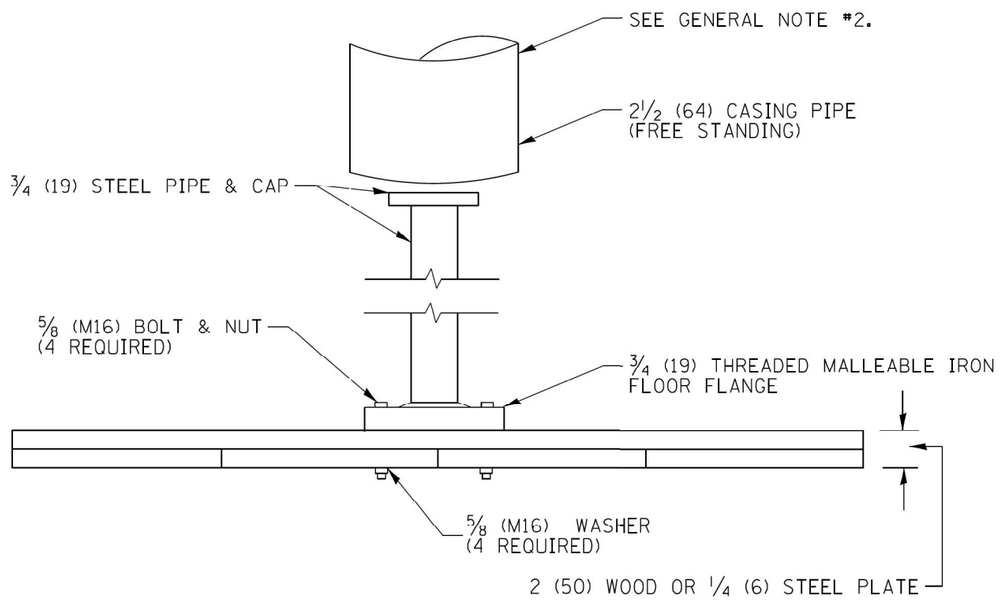

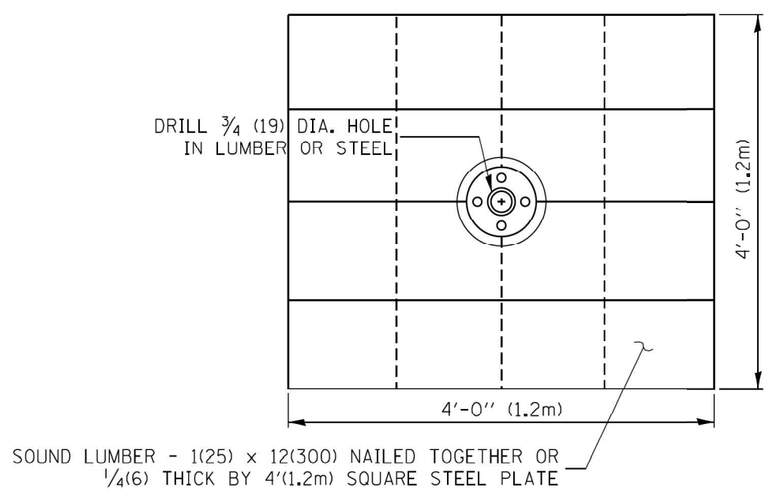

GENERAL NOTES:

1. Settlement Platform shall be in accordance with the appicable portions of Article 204.06 of the Standard Specifications.

2. Do Not install casing pipe until after one section of 3/4"(19 mm) has been covered with earth. The casing pipe should not rest on platform.

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

1-1-97	RENUM. L-5.04, NEW REVISION BOX, REVISED NOTES,	T.P.	8-23-01	UPDATE FOR NEW SPEC.	M.A.
	REVISED TITLE BOX		10-16-06	REVISED TO 2007 SPEC.	M.A.
4-14-99	ADDED "CASING PIPE" REQUIREMENT	J.A.			
5-19-99	CORRECTIONS TO CASING PIPE	J.A.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

SETTLEMENT PLATFORM

NOT TO SCALE

CADD STD. 205101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: SHEET 2 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	152
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 205101-D4 [Sheet]
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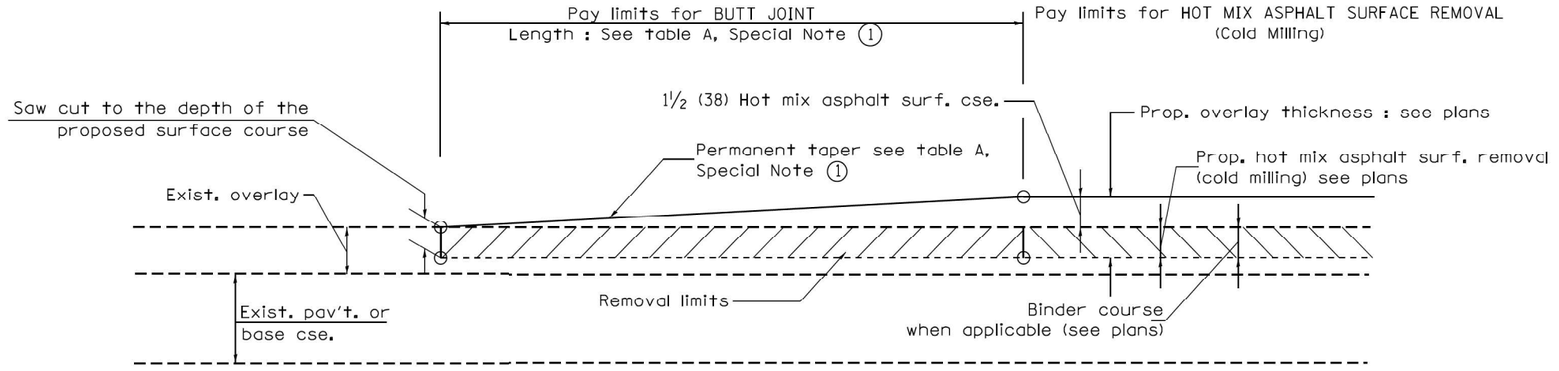


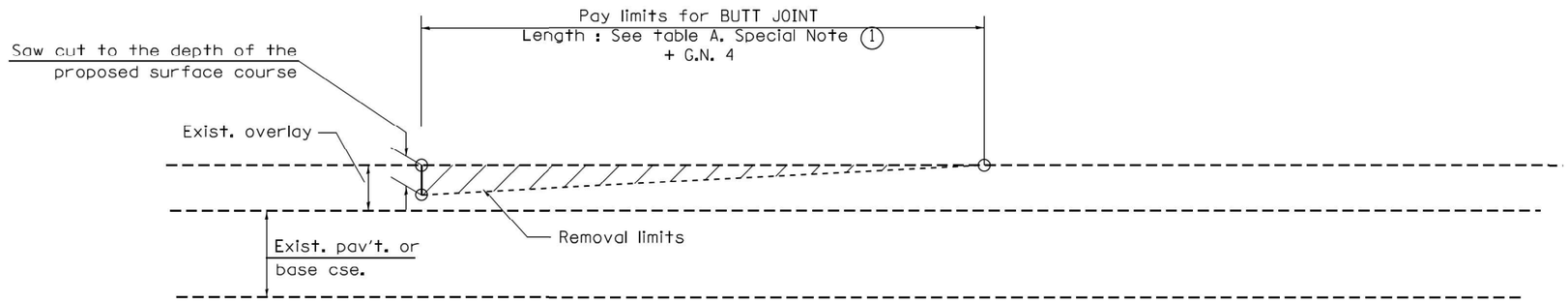
CASE 1 : WITH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

TABLE A
TAPER RATES

SPECIAL NOTE NUMBER	ELEMENT	MAINLINE INTERSTATES & 4-LANE EXPRESSWAYS	ALL OTHERS
(1)	BUTT JOINT TAPER RATE	1:480	1:240
(2)	TEMPORARY RAMP TAPER RATE	1:80	1:40

GENERAL NOTES

1. The work shall be done in accordance with Article 406.08 and the Special Provision for Butt Joints.
2. The pavement surface to be removed may be either bituminous or P.C. concrete. The work shall be performed in accordance with Article 440.04 and the Special Provisions for Butt Joints.
3. The saw cut joints shall be primed just prior to the placing of bituminous material. The work will be in accordance with the applicable portions of Article 406.05.
4. The length of butt joint is based on the taper rate times change in cold milling depth within the butt joint pay limits, unless otherwise indicated.
5. Temporary ramps are paid for separately and not included in the cost of the butt joints.



CASE 2 : NO HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)

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

01-01-97	RENUM. C-23.01, NEW REVISION BOX	T.P.	08-21-13	MAJOR MODIFICATIONS	R.D.
04-01-97	CORRECTION TO DEPTH	J.A.	04-12-16	MINOR CORRECTIONS	R.D.
09-15-05	REVISED DESIGNER NOTE	M.M.A.	02-14-17	ADDED NOTE 5	R.D.
10-16-06	REVISED TO 2007 SPEC.	M.A.	07-16-19	Wording and Spelling corrections	R.D.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 1 OF 3
CADD STD. 406101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -
DRAWN -	DMS	REVISED -
CHECKED -	PMO	REVISED -
DATE -	08-19-2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: | SHEET 3 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	153
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 406101-D4 1-3 [Sheet]
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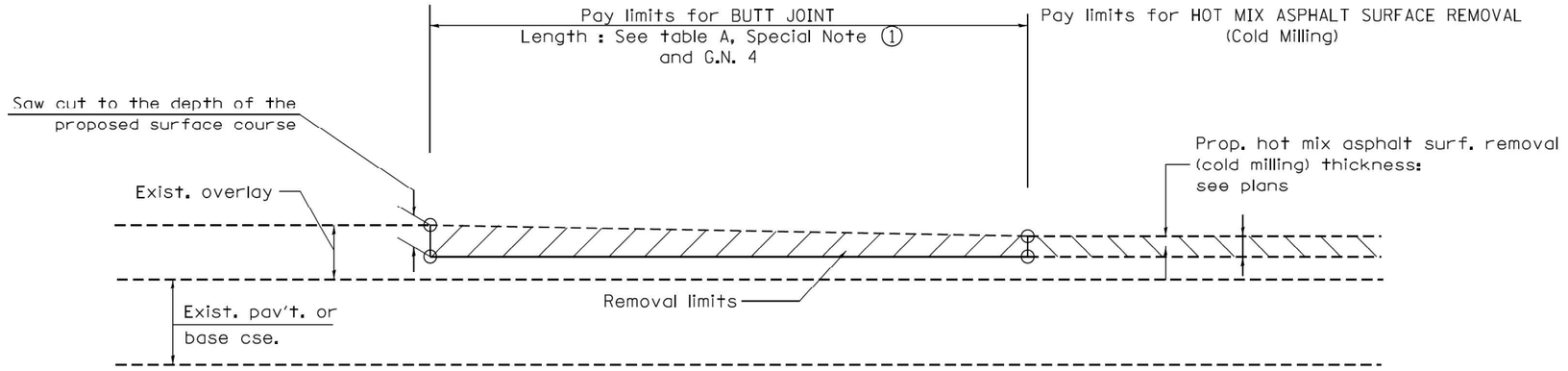
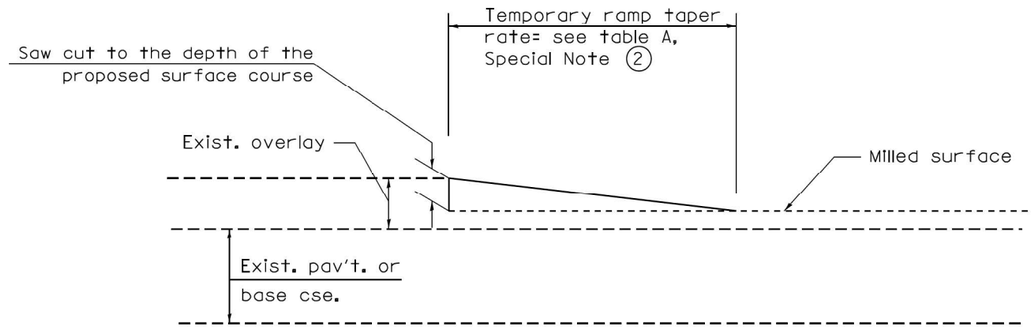


CASE 3 : HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING)
TIE-IN TO EXISTING BITUMINOUS TAPER



DETAIL TEMPORARY RAMP

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 2 OF 3
CADD STD. 406101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

	DESIGNED	-	DMS	REVISED	-
	DRAWN	-	DMS	REVISED	-
	CHECKED	-	PMO	REVISED	-
	DATE	-	08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: | SHEET 4 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	154
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 406101-D4-2-2 [Sheet]
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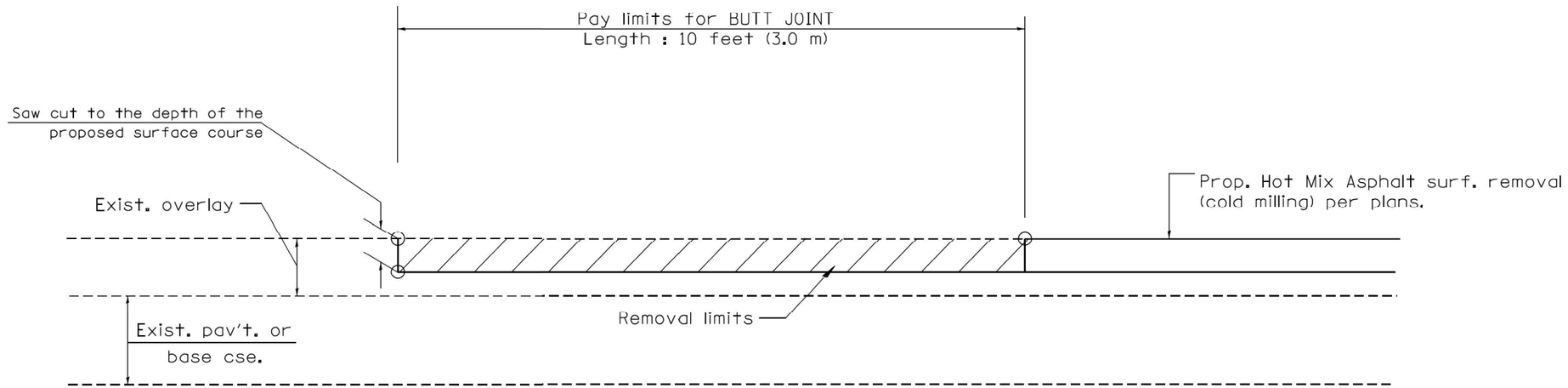

CASE 4 : SINGLE LIFT OVERLAY WITH EQUIVALENT DEPTH HOT MIX ASPHALT SURFACE REMOVAL (COLD MILLING) TIE-IN TO EXISTING BITUMINOUS TAPER

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

BUTT JOINTS

NOT TO SCALE

SHT. 3 OF 3
CADD STD. 406101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

DESIGNED	-	DMS	REVISED -
DRAWN	-	DMS	REVISED -
CHECKED	-	PMO	REVISED -
DATE	-	08-19-2024	REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: | SHEET 5 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	155
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 406101-D4 3-3 [Sheet]
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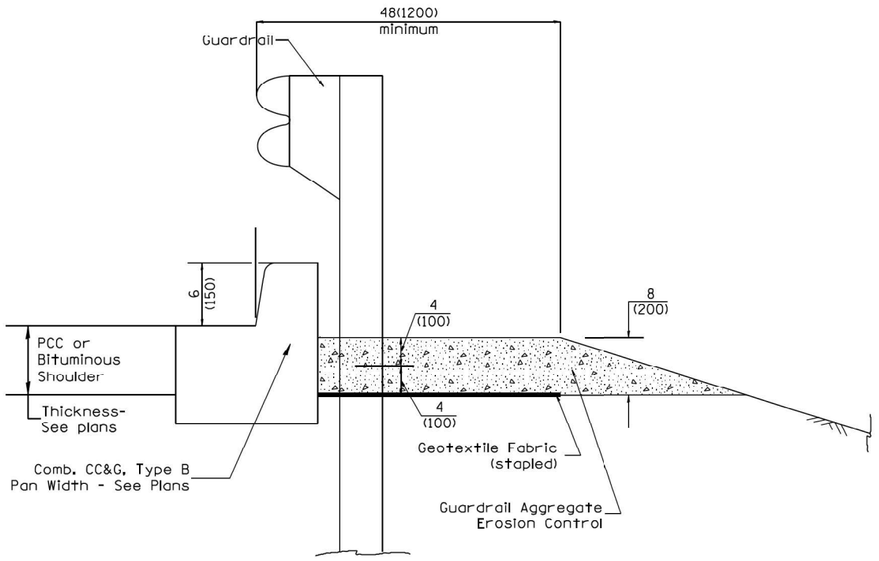
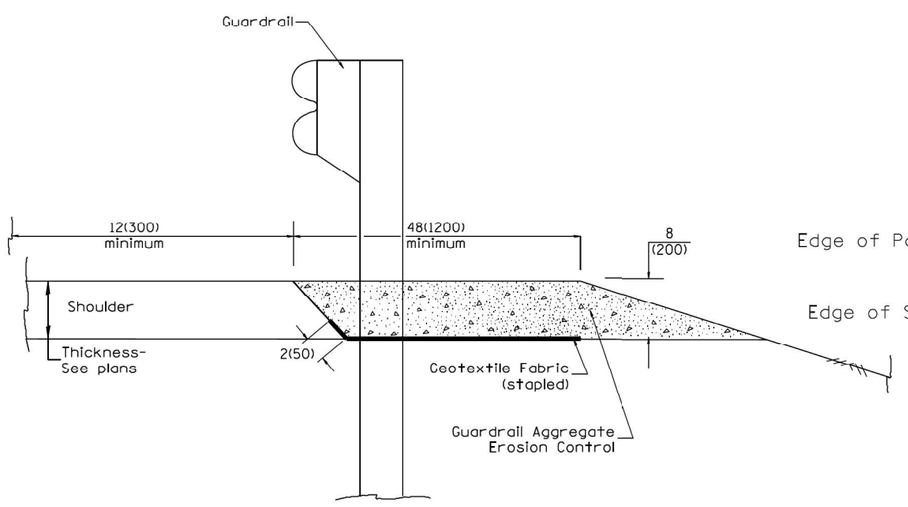


TYPICAL SECTION WITH COMBINATION CONCRETE CURB & GUTTER



TYPICAL SECTION WITHOUT EROSION CONTROL CURB

GENERAL NOTES: GUARDRAIL AGGREGATE EROSION CONTROL

1. This work shall consist of grading as needed, furnishing and installing geotextile fabric and staples, and furnishing, placing and shaping crushed aggregate around and behind Steel Plate Beam Guardrail posts in accordance with Plan Details.

2. Before placing the aggregate and the Geotextile Fabric, weeds and grass shall be removed from the area to be covered.

3. After the area has been prepared, and in a dry condition, the Geotextile fabric shall be placed with a 12(300) minimum overlap. A knife cut for guardrail post installation is necessary.

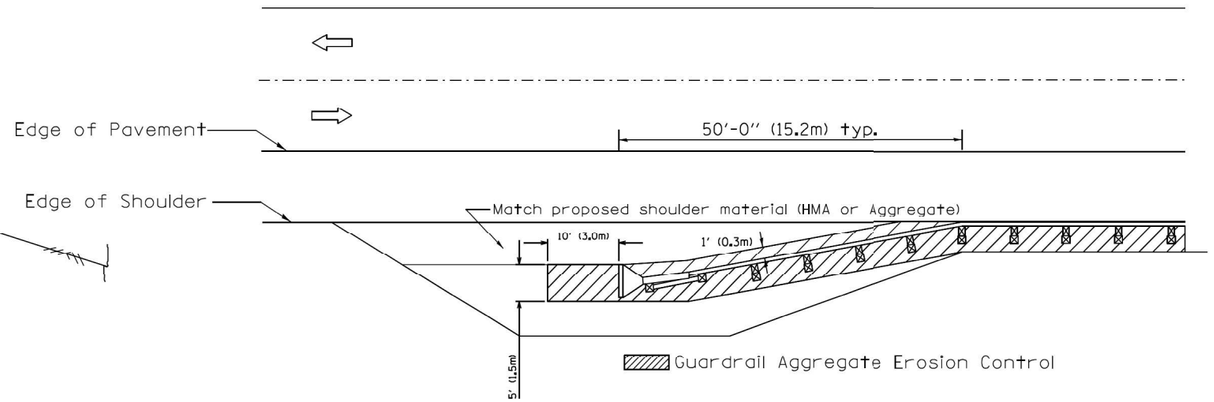
4. The aggregate shall be deposited, compacted and shaped by either mechanical or hand methods, in a manner reasonably true to line and grade.

5. The Contractor shall have the option of placing the guardrail before or after the Geotextile Fabric and Aggregate are in place. If the guardrail is placed after the Geotextile Fabric and Aggregate, then any voids must be filled and the aggregate returned to line and grade.

6. Materials shall meet the following requirements:

   A. The crushed aggregate shall be CA1 gradation in accordance with Article 1004.01(c) of the Standard Specifications.

   B. The Geotextile Fabric shall be nonwoven fabric in accordance with Article 1080.02 of the Standard Specifications.



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

03-07-11	ADDED DETAIL SHOWING PLAN VIEW	R.D.	5-30-18	CHANGE B CURB TO CC&G	R.D.
08-10-12	REVISED CURB "B" AND AGGREGATE	R.D.	07-16-19	SPELLING CORRECTIONS	R.D.
07-15-15	ADDRESSED SHOULDER INLET CURB	R.D.			
01-26-17	REVISED	R.D.			

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS
NOT TO SCALE
SHT. 1 OF 2
CADD STD. 630101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

	DESIGNED - DMS		REVISED -
	DRAWN - DMS		REVISED -
	CHECKED - PMO		REVISED -
	DATE - 08-19-2024		REVISED -

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: | SHEET 6 OF 8 SHEETS | STA. | TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	156
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 630101-D4 1x2 [Sheet]
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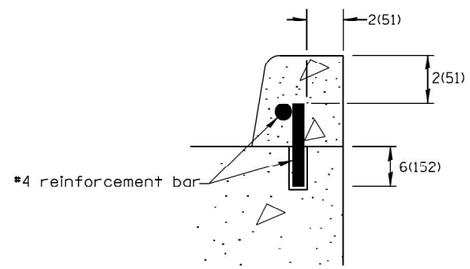
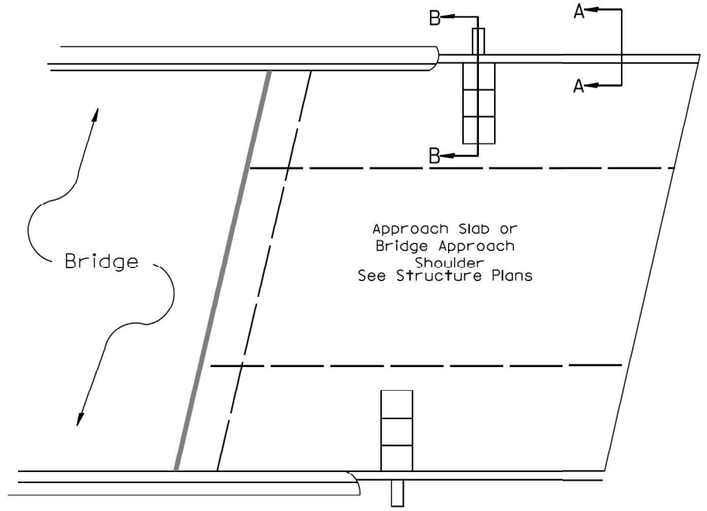
DETAIL "A"

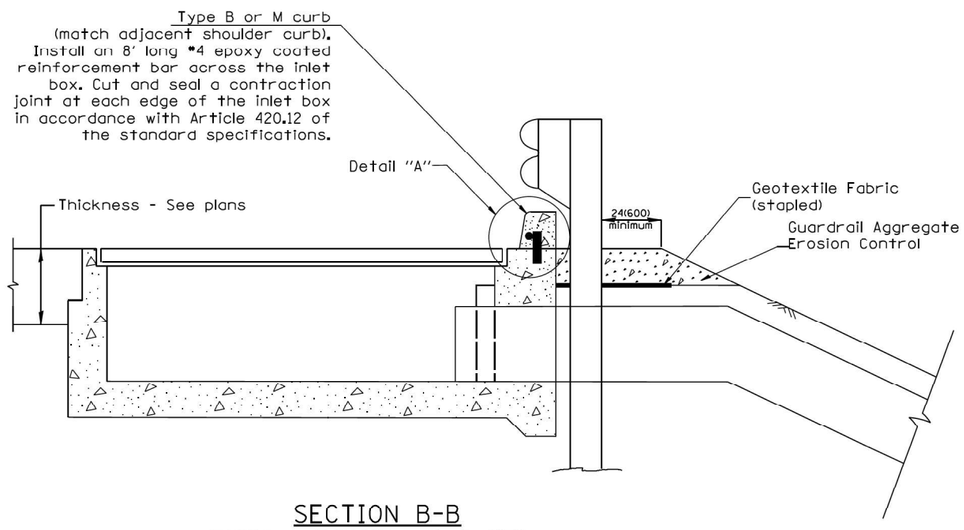
#4 reinforcement bars may be cast in PCC apron and precast inlet box or drilled and anchored with an approved chemical adhesive at 2' spacing. Cost of curb and reinforcement are included in the cost of shoulder inlet.





PLAN VIEW

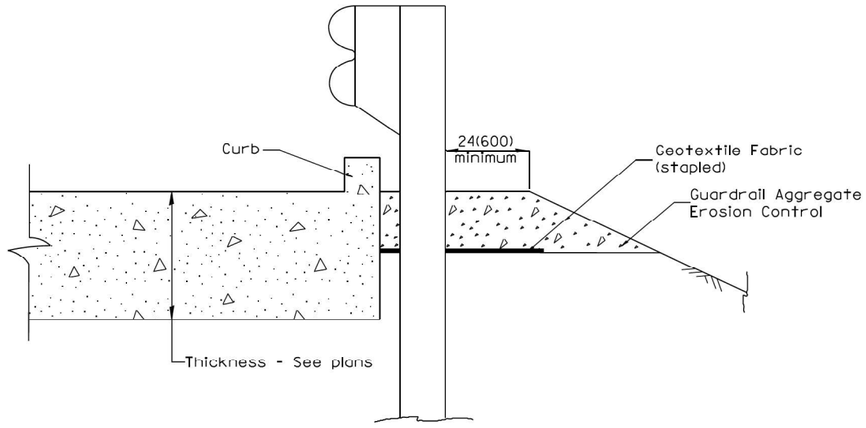
APPROACH SLAB OR SHOULDER PLACEMENT



SECTION B-B

TYPICAL SECTION AT INLETS

TYPE E, F & G (HIGHWAY STANDARD 610001)



SECTION A-A

TYPICAL SECTION WITH BRIDGE APPROACH CURB

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

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

GUARDRAIL EROSION CONTROL TREATMENTS

NOT TO SCALE

SHT. 2 OF 2
CADD STD. 630101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

DESIGNED -	DMS	REVISED -	
DRAWN -	DMS	REVISED -	
CHECKED -	PMO	REVISED -	
DATE -	08-19-2024	REVISED -	

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: SHEET 7 OF 8 SHEETS STA. TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	157
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

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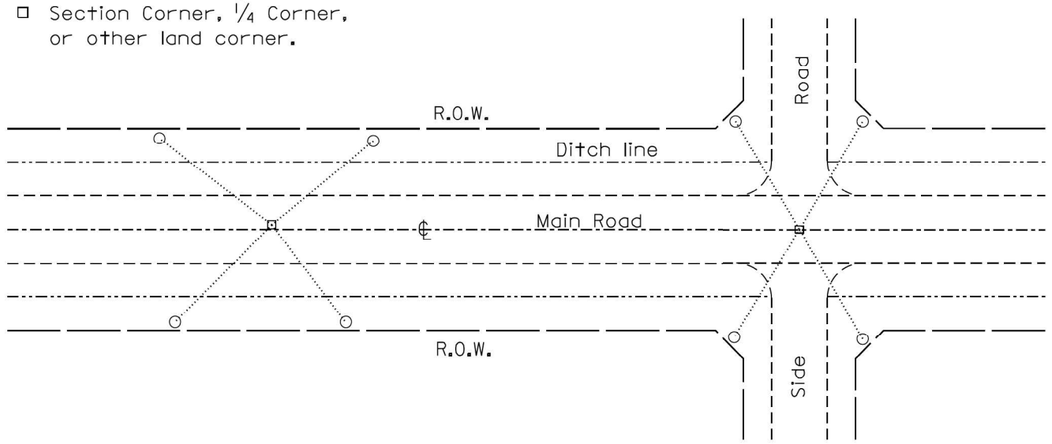
PERMANENT SURVEY TIES

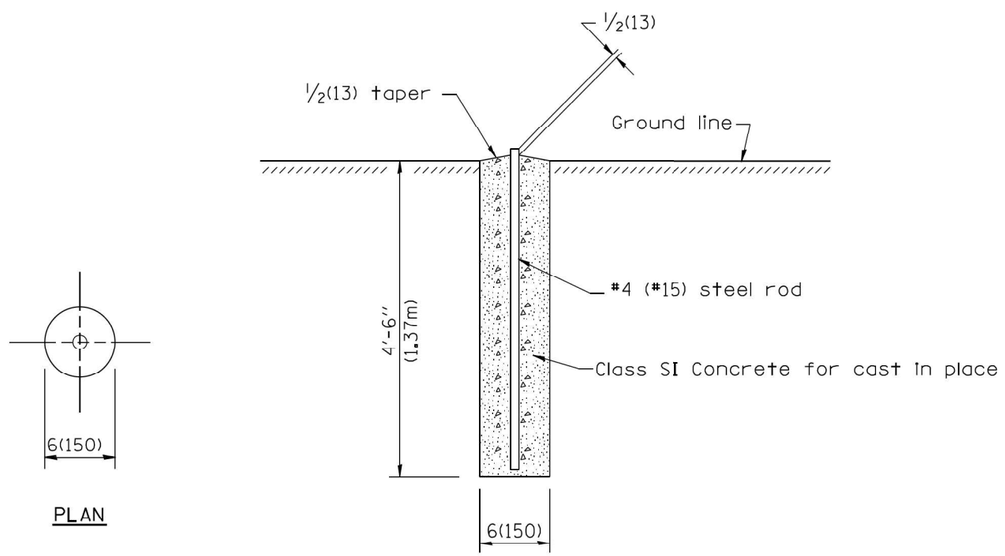
○ Permanent Survey Tie
□ Section Corner, 1/4 Corner, or other land corner.



TYPICAL APPLICATION

GENERAL NOTES

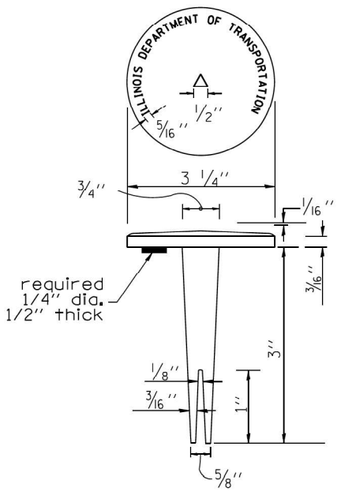
1. The marker shall be cast in place of Class SI Concrete.
2. Tie marker shall be installed after the final seeding has been completed unless otherwise specified by the Engineer.
3. The tie distances to the section corner shall be measured and recorded by the surveyor setting the PSM. All ties shall be turned over to the IDOT Chief of Surveys or Chief of Plats after recordation.
4. All documentation shall be performed by a PLS
5. The metal tablet used on permanent survey markers shall be made of bronze.



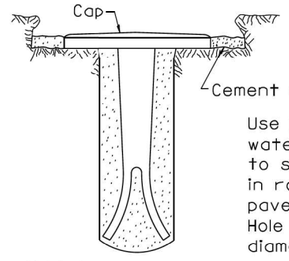
PLAN

SECTION

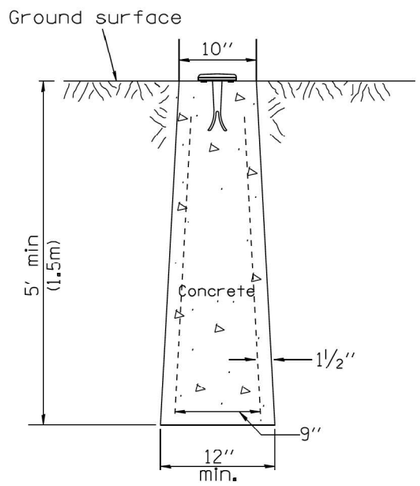
PERMANENT SURVEY MARKERS



BRASS TABLET



TYPE I



TYPE II
CAST-IN-PLACE MARKER

GENERAL NOTES

1. All type II markers shall be cast in place, and precast markers will not be allowed.
2. Two permanent magnets, each having a diameter of 3/4 (19) and a thickness of 1/4 (6), or equivalent, shall be attached to the underside of the tablet with an approved epoxy bonding agent.
3. The location of the markers shall be in accordance with the plans in general, the markers will be placed at the P.T.'s, P.C.'s, and P.I.'s located within the R.O.W. of horizontal curves and spaces along the tangents in a way that a minimum of two markers are always inter-visible, and not to exceed 1000' (300m).
4. The markers shall be placed under the direction of the Engineer and shall be installed in a workmanlike manner in order that there will be no further settlement or horizontal shifting. The monuments shall be placed in a way that the survey point will fall within the portion of the plaque provided for that purpose.
5. The project designation, the centerline station, the survey point, and the elevation shall be permanently marked by the use of metal dies after marker has been installed.

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

01-01-97	RENUM. D-3.01, NEW REVISION BOX, REVISED	T.P.	10-16-06	REVISED TO 2007 SPEC.	M.A.
	TITLE BOX, ADD DESIGNER NOTE		01-04-11	REVISED FOR CORRECTIONS	R.D.
07-07-98	ADD DESIGNER NOTE	J.A.	08-21-13	CHANGED MIN. DIAMETER	R.D.
05-24-06	REMOVED GEN. NOTE UNDER TIES	M.A.	08-25-15	REVISED MATERIAL	R.D.

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

PERMANENT SURVEY TIE &
PERMANENT SURVEY MARKERS TY.I – TY.II

NOT TO SCALE — CADD STD. 667101-D4

F.A. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
		CONTRACT NO.		
FED. ROAD DIST. NO.	ILLINOIS	FED. AID PROJECT		

VEENSTRA & KIMM INC.

DESIGNED	- DMS	REVISED	-
DRAWN	- DMS	REVISED	-
CHECKED	- PMO	REVISED	-
DATE	- 08-19-2024	REVISED	-

STATE OF ILLINOIS
DEPARTMENT OF TRANSPORTATION

IDOT DISTRICT 4 STANDARDS

SCALE: — SHEET 8 OF 8 SHEETS — STA. — TO STA.

F.A.I. RTE.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
74	(72-3HVB)BR	PEORIA	158	158
		CONTRACT NO. 68D84		
	ILLINOIS	FED. AID PROJECT		

MODEL: 667101-D4 [Sheet]
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