

**DESIGN DESIGNATION**

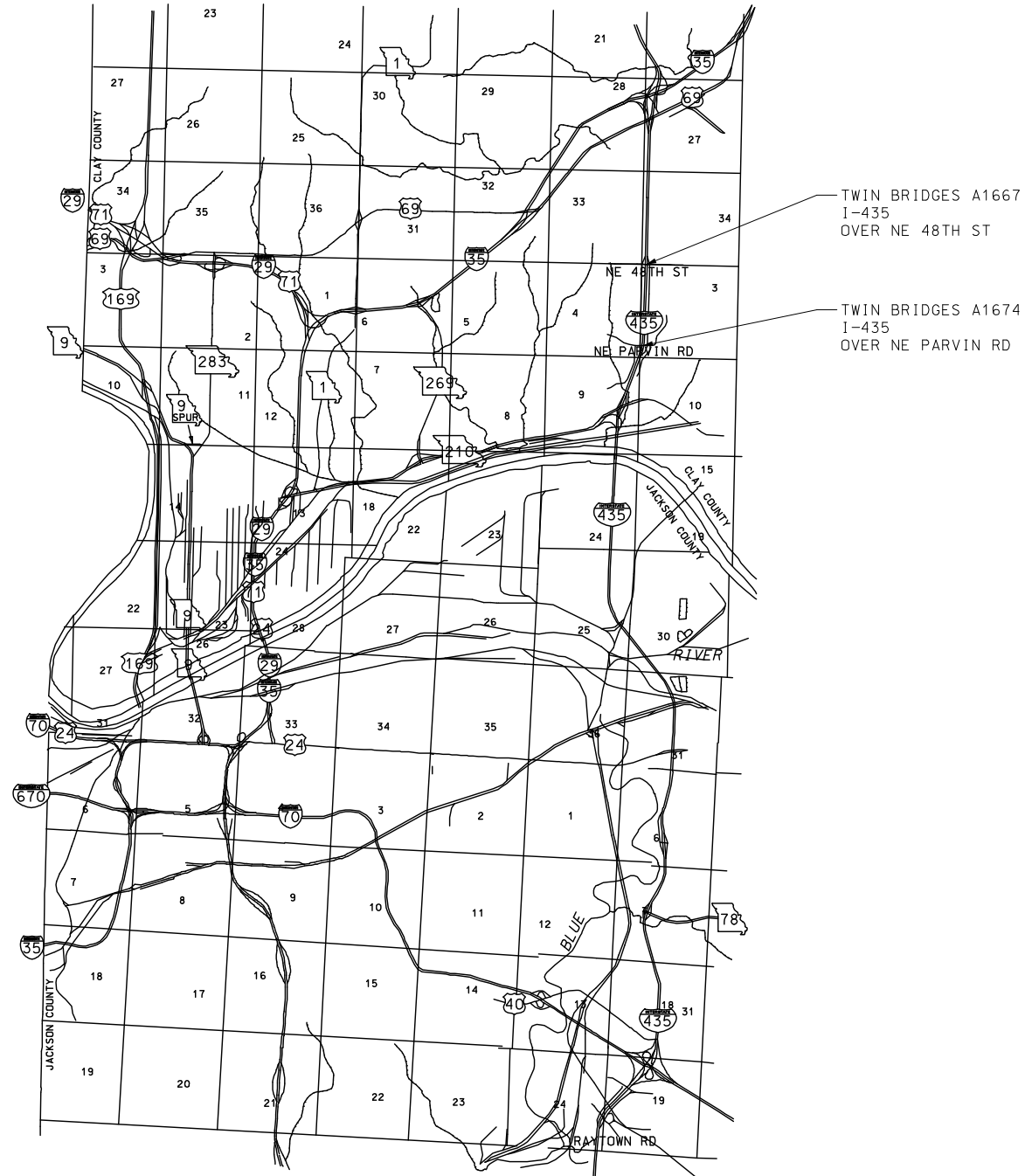
A.A.D.T. - 2024 = 59,114  
 A.A.D.T. - 2044 = 106,405  
 T = 19.0%  
 V = 65 M.P.H.

FUNCTIONAL CLASSIFICATION- INTERSTATE

# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

## PLANS FOR PROPOSED STATE HIGHWAY

### CLAY COUNTY



NOT TO SCALE

THE EXISTENCE AND APPROXIMATE LOCATION OF UTILITY FACILITIES KNOWN TO EXIST, AS SHOWN ON THE PLANS, ARE BASED ON THE BEST INFORMATION AVAILABLE TO THE COMMISSION AT THIS TIME. THIS INFORMATION IS PROVIDED BY THE COMMISSION "AS-IS" AND THE COMMISSION EXPRESSLY DISCLAIMS ANY REPRESENTATION OR WARRANTY AS TO THE COMPLETENESS, ACCURACY, OR SUITABILITY OF THE INFORMATION FOR ANY USE. RELIANCE UPON THIS INFORMATION IS DONE AT THE RISK AND PERIL OF THE USER, AND THE COMMISSION SHALL NOT BE LIABLE FOR ANY DAMAGES THAT MAY ARISE FROM ANY ERROR IN THE INFORMATION. IT IS, THEREFORE, THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND STATUS OF ANY FACILITY. SUCH VERIFICATION INCLUDES DIRECT CONTACT WITH THE LISTED UTILITIES.

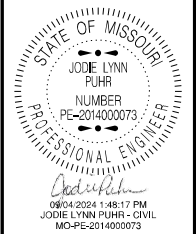
**CONVENTIONAL SYMBOLS**  
(USED IN PLANS)

	EXISTING	NEW
BUILDINGS AND STRUCTURES	[Symbol]	[Symbol]
GUARD RAIL	[Symbol]	[Symbol]
GUARD CABLE	[Symbol]	[Symbol]
CONCRETE RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
STEEL RIGHT-OF-WAY MARKER	[Symbol]	[Symbol]
LOCATION SURVEY MARKER	[Symbol]	[Symbol]
UTILITIES		
FIBER OPTICS	-FO-	-FO-
OVERHEAD CABLE TV	-OTV-	-OTV-
UNDERGROUND CABLE TV	-UTV-	-UTV-
OVERHEAD TELEPHONE	-OT-	-OT-
UNDERGROUND TELEPHONE	-UT-	-UT-
OVERHEAD POWER	-OE-	-OE-
UNDERGROUND POWER	-UE-	-UE-
SANITARY SEWER	-S-	-S-
STORM SEWER	-SS-	-SS-
GAS	-G-	-G-
WATER	-W-	-W-
MANHOLE	[Symbol]	[Symbol]
FIRE HYDRANT	[Symbol]	[Symbol]
WATER VALVE	[Symbol]	[Symbol]
WATER METER	[Symbol]	[Symbol]
DROP INLET	[Symbol]	[Symbol]
DITCH BLOCK	[Symbol]	[Symbol]
GROUND MOUNTED SIGN	[Symbol]	[Symbol]
LIGHT POLE	[Symbol]	[Symbol]
H-FRAME POWER POLE	[Symbol]	[Symbol]
TELEPHONE PEDESTAL	[Symbol]	[Symbol]
FENCE		
CHAIN LINK	[Symbol]	[Symbol]
WOVEN WIRE	[Symbol]	[Symbol]
GATE POST	[Symbol]	[Symbol]
BENCHMARK	[Symbol]	[Symbol]

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

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DATE PREPARED: 9/4/2024

ROUTE	STATE
435	MO
DISTRICT	SHEET NO.
KC	1
COUNTY	
CLAY	
JOB NO.	J4P3468
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

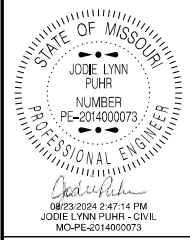
DATE	DESCRIPTION

**LENGTH OF PROJECT**

BEGINNING OF PROJECT	STA. 586+10.72
END OF PROJECT	STA. 652+10.23
APPARENT LENGTH	6,599.51 FEET
EQUATIONS AND EXCEPTIONS:	
BRIDGE A16674	142.50 FT
BRIDGE A16675	142.50 FT
BRIDGE A16744	152.73 FT
BRIDGE A16745	152.73 FT
TOTAL CORRECTIONS	0 FEET
NET LENGTH OF PROJECT	6,304.28 FEET
STATE LENGTH	1.19 MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	0 ACRES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
**8/21/2024**

ROUTE	STATE
<b>435</b>	<b>MO</b>
DISTRICT	SHEET NO.
<b>KC</b>	<b>2</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

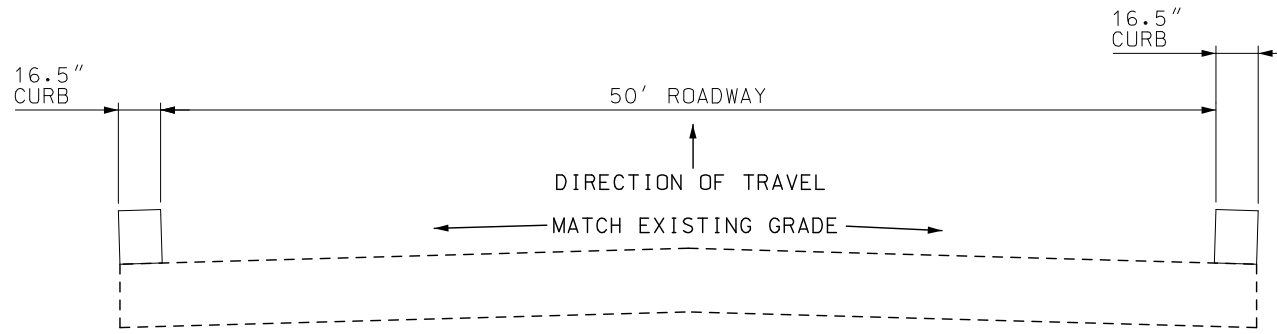
PROJECT NO.

BRIDGE NO.

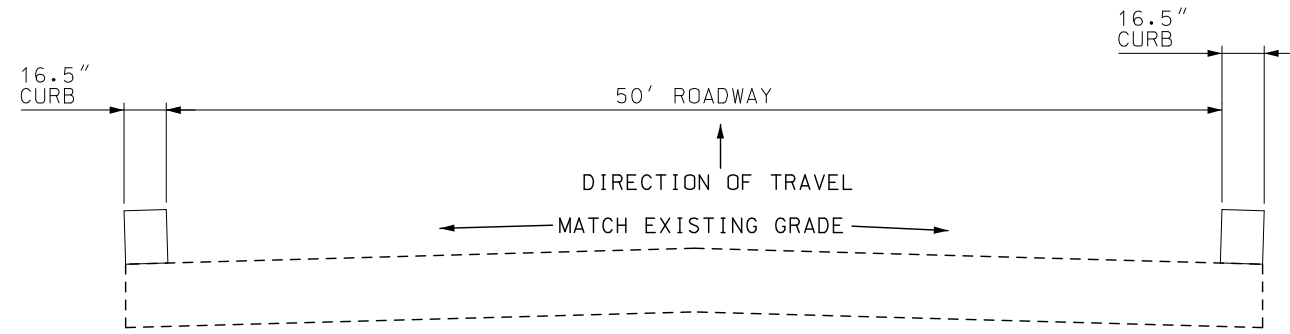
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

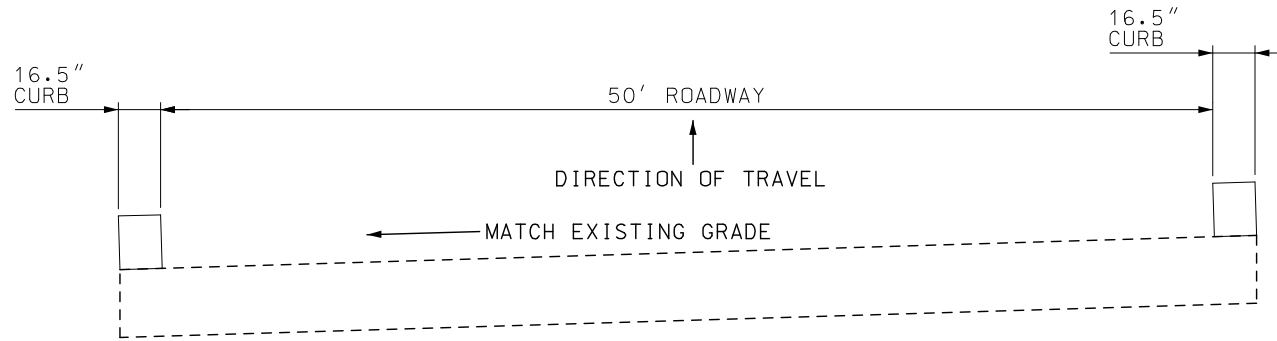
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JEFFERSON CITY, MO 65102  
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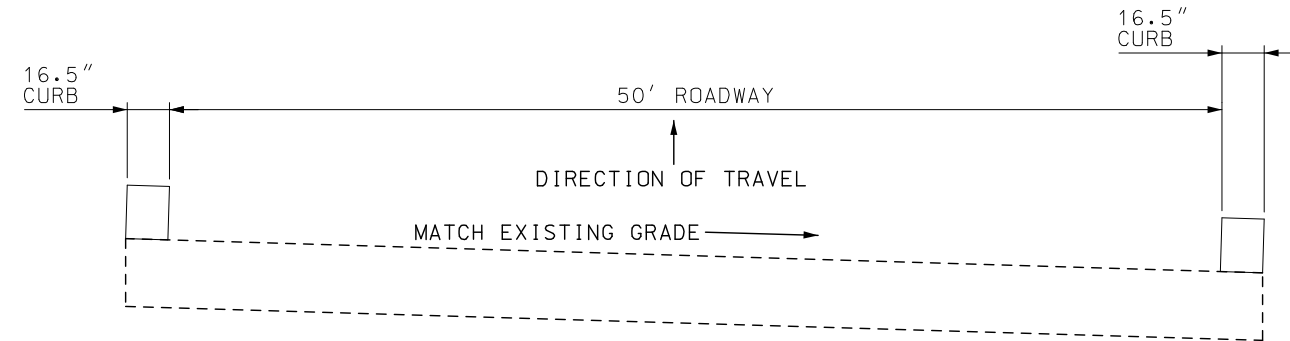
BRIDGE A16675  
I-435 NB  
OVER 48TH ST



BRIDGE A16674  
I-435 SB  
OVER 48TH ST



BRIDGE A16745  
I-435 NB  
OVER PARVIN RD



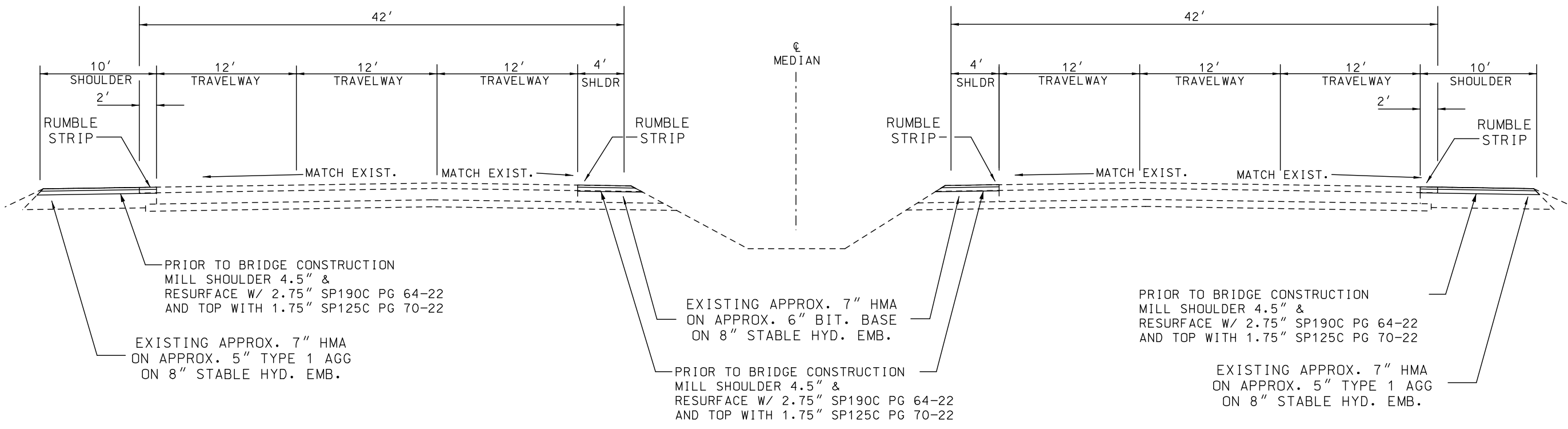
BRIDGE A16744  
I-435 SB  
OVER PARVIN RD

TEMP. CROSSOVER PAVEMENT

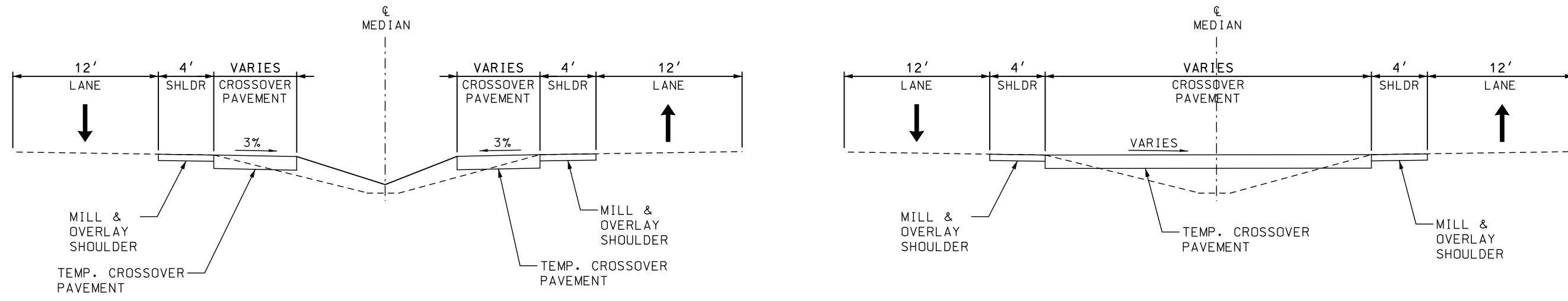
9" JPCP WIDENED SLAB  
W/ 1-1/4" DOWELS  
& 15' JOINT SPACING  
4" TYPE 5 AGGREGATE BASE

(FOR INFORMATIONAL PURPOSES ONLY)  
**BITUMINOUS PAVEMENT MIXTURE RATES**  
SP125C ASPHALT MIX = 1.999 TONS/C.Y.  
SP190C ASPHALT MIX = 2.018 TONS/C.Y.  
TACK COAT = 0.1 GAL/S.Y.

NOT TO SCALE



I-435  
 STA. 586+10.72 TO STA. 652+10.23



CROSSOVER OPTIONAL PAVEMENT SECTIONS

TEMP. CROSSOVER PAVEMENT  
 9" JPCP WIDENED SLAB  
 W/ 1-1/4" DOWELS  
 & 15' JOINT SPACING  
 4" TYPE 5 AGGREGATE BASE

(FOR INFORMATIONAL PURPOSES ONLY)  
BITUMINOUS PAVEMENT MIXTURE RATES  
 SP125C ASPHALT MIX = 1.999 TONS/C.Y.  
 SP190C ASPHALT MIX = 2.018 TONS/C.Y.  
 TACK COAT = 0.1 GAL/S.Y.

NOT TO SCALE

TYPICAL SECTION SHEET  
 SHEET 2 OF 2

STATE OF MISSOURI  
 JODIE LYNN PUHR  
 NUMBER  
 PE-201400073  
 PROFESSIONAL ENGINEER

DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 2
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

REMOVAL OF IMPROVEMENTS						
STA.	STA.	LOCATION	DESCRIPTION	QUANTITY	UNITS	REMARKS
586+20.73	595+12.95	I-435 MEDIAN	CONCRETE PAVEMENT	1921.65	SY	REMOVE CROSSOVER
586+20.73	595+15.95	I-435 MEDIAN	SAWCUT	895.22	LF	REMOVE CROSSOVER
588+10.92	594+64.88	I-435 MEDIAN	SAWCUT	653.96	LF	REMOVE CROSSOVER
588+25.00	593+15.00	I-435 MEDIAN	PIPE	490	LF	REMOVE TEMP. CROSSOVER PIPE AND TWO FES
594+12.38	594+75.42	I-435 MEDIAN	PIPE	63.04	LF	REMOVE PIPE AND TWO FES
642+99.13	645+37.55	I-435 MEDIAN	GUARDRAIL	238.42	LF	REMOVE GUARDRAIL
643+01.81	644+61.21	I-435 MEDIAN	GUARDRAIL	159.4	LF	REMOVE GUARDRAIL
644+77.98	652+10.23	I-435 SB	ASPHALT PAVEMENT	528.85	SY	EXISTING GUARDCABLE ASPHALT STRIP REMOVAL
644+77.98	652+10.23	I-435 SB	SAWCUT	745.25	LF	EXISTING GUARDCABLE ASPHALT STRIP REMOVAL
643+33.84	652+00.28	I-435 MEDIAN	CONCRETE PAVEMENT	1918.8	SY	REMOVE CROSSOVER
643+33.84	651+21.74	I-435 MEDIAN	SAWCUT	787.9	LF	REMOVE CROSSOVER
644+37.94	652+00.28	I-435 MEDIAN	SAWCUT	762.34	LF	REMOVE CROSSOVER
644+96.97		I-435 MEDIAN	DROP INLET	1	EA	REMOVE DROP INLET
644+96.97	645+62.12	I-435 MEDIAN	PIPE	65.15	LF	REMOVE PIPE
645+62.12		I-435 MEDIAN	DROP INLET	1	EA	REMOVE DROP INLET
		I-435 MEDIAN	SLOTTED DRAIN	265	LF	REMOVE TEMP. SLOTTED DRAIN
	649+70.26	I-435 MEDIAN	PIPE	10	LF	REMOVE TEMP. PIPE AND PIPE COLLAR
649+70.26		I-435 MEDIAN	DROP INLET	1	EA	REMOVE DROP INLET
651+95.00		I-435 MEDIAN	GUARDCABLE ANCHOR	1	EA	REMOVE TEMP. GUARDCABLE ANCHOR
TOTAL				1	LUMP SUM	

CROSSOVER				
STA.	STA.	LOCATION	CONCRETE PAVEMENT (SY)	4" TYPE 5 AGGREGATE BASE (SY)
586+20.73	595+12.95	I-435 NORTH OF 48TH ST.	1921.6	1921.6
643+33.84	652+00.29	I-435 SOUTH OF PARVIN RD.	1918.8	1918.8
TOTAL			3840	3840

PAVEMENT EDGE TREATMENT			
STA.	STA.	LOCATION	PAVEMENT EDGE TREATMENT (LF)
586+10.72	596+80.48	I-435 NB MEDIAN SHOULDER NORTH OF 48TH ST.	1069.8
588+00.88	596+78.16	I-435 SB MEDIAN SHOULDER NORTH OF 48TH ST.	877.3
642+98.85	651+31.77	I-435 NB MEDIAN SHOULDER SOUTH OF PARVIN RD.	832.9
643+02.04	652+10.23	I-435 SB MEDIAN SHOULDERS SOUTH OF PARVIN RD.	908.2
TOTAL			3688

SHOULDER								
STA.	STA.	LOCATION	LENGTH (FT)	WIDTH (FT)	COLDMILLING BITUMINOUS PAVEMENT FOR REMOVAL OF SURFACING (GREATER THAN 3 IN. THICK) (SY)	ASPHALTIC CONCRETE MIXTURE PG 64-22 (SP190C MIX) (TON)	ASPHALTIC CONCRETE MIXTURE PG 70-22 (SP125C MIX) (TON)	TACK COAT (GAL)
586+10.72	651+31.77	I-435 NB	6196.95	4	2754.20	424.57	267.64	550.84
590+35.20	649+68.18	I-435 NB	5636.24	10	6262.49	965.38	608.55	1252.50
588+00.88	652+10.23	I-435 SB	6104.99	4	2713.33	418.27	263.66	542.67
590+70.26	649+50.75	I-435 SB	5576.44	10	6196.04	955.14	602.09	1239.21
TOTALS					17926	2763.4	1741.9	3585

RUMBLE STRIPS			
STA.	STA.	LOCATION	SHOULDER RUMBLE STRIPS (100 FT)
586+10.72	651+31.77	I-435 NB	62.0
590+35.20	649+68.18	I-435 NB	56.4
588+00.88	652+10.23	I-435 SB	61.0
590+70.26	649+50.75	I-435 SB	55.8
TOTAL			235.2

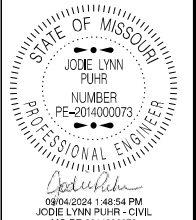
GUARDCABLE						
STA.	STA.	LOCATION	REMOVE AND REINSTALL HIGH TENSION 3-STRAND GUARD CABLE (EA)	HTGC ANCHOR ASSEMBLY 3-STRAND (EA)	3" ASPHALT STRIP BP-1 W/ PG64-22 (TON)	REMARKS
582+96.42	594+94.78	I-435 MEDIAN	1			REMOVE GUARD CABLE FOR CROSSOVER AND REPLACE AFTER CROSSOVER REMOVAL
643+60.24	651+95.00	I-435 MEDIAN	1			REMOVE GUARD CABLE FOR CROSSOVER AND REPLACE AFTER CROSSOVER REMOVAL
651+95.00				1		TEMPORARY ANCHOR DURING CONSTRUCTION
644+77.98	652+10.23	I-435 MEDIAN			87.4	REPLACE ASPHALT STRIP AFTER CROSSOVER REMOVAL
TOTALS			2	1	87.4	

CONTRACTOR FURNISHED  
SURVEYING AND STAKING  
ONE LUMP SUM

MOBILIZATION  
ONE LUMP SUM

GUARDRAIL						
STA.	STA.	LOCATION	MGS BRIDGE APPROACH TRANSITION SECTION (REGULAR/NO CURB) (EA)	MGS GUARDRAIL (LF)	END TERMINAL (EA)	SHAPING SLOPES CLASS III (100 FT)
642+99.13	643+74.13	I-435 MEDIAN	1	75	1	1.6
643+01.81	645+40.06	I-435 MEDIAN	1	150	1	2.4
TOTALS			2	225	2	4

SUMMARY OF QUANTITIES  
SHEET 1 OF 3



DATE PREPARED  
9/4/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 3

COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



PAVEMENT MARKING								
LOCATION	HIGH BUILD WATERBORNE PAVEMENT MARKING PAINT, TYPE L BEADS						4 IN. TEMPORARY PAVEMENT MARKING PAINT (LF)	PAVEMENT MARKING REMOVAL (LF)
	6" SOLID YELLOW (LF)	6" INTERMITTENT WHITE (LF)	6" SOLID WHITE (LF)	6" DOTTED WHITE (LF)	12" SOLID WHITE (LF)	12" DOTTED WHITE (LF)		
SB CROSSOVERS							46707	46707
NB CROSSOVERS							40421	40421.00
I-435 NB	10300	5150	10300	78	842	432	2400	27102
I-435 SB	10300	5150	10300	122	613	384	2400	26869
SUBTOTALS	20600	10300	20600	200	1455	816	91928	141099
TOTALS	20600		31100		2271		91928	141099

TEMPORARY EROSION CONTROL		
LOCATION	SILT FENCE (LF)	ALTERNATE DITCH CHECK (LF)
I-435 NORTH OF 48TH ST.	20.0	30.0
I-435 SOUTH OF PARVIN RD.	20.0	105.0
TOTALS	40	135

DRAINAGE									
STA.	STA.	LOCATION	18" GROUP A PIPE (LF)	12" FLARED END SECTION (EA)	18" FLARED END SECTION (EA)	12" SLOTTED DRAIN (LF)	12" GROUP A PIPE (LF)	PIPE COLLAR, TYPE A (EA)	CLASS 3 EXCAVATION (CY)
588+25.00	593+15.00	I-435 MEDIAN	490		2				176.0
646+95.00	649+72.26	I-435 MEDIAN							21.8
646+95.00	649+55.26	I-435 MEDIAN				260.28			
649+55.26	649+72.26	I-435 MEDIAN					17.0		
649+70.26		I-435 MEDIAN		1					
649+72.26		I-435 MEDIAN						1.0	
TOTALS			490	1	2	261	17	1	198

SEEDING AND MULCHING				
LOCATION	STA.	STA.	COOL SEASON GRASSES (AC)	MULCHING (AC)
I-435 MEDIAN	586+20.73	595+12.95	0.6	0.6
I-435 MEDIAN	643+33.84	652+00.29	0.6	0.6
TOTALS			1.2	1.2

EARTHWORK					
LOCATION	STA.	STA.	CLASS A EXCAVATION (CY)	COMPACTING EMBANKMENT (CY)	SUBGRADE COMPACTION (6 IN. DEPTH) (100 FT)
NORTH CROSSOVER	586+20.73	595+12.95	522	97	8.9
SOUTH CROSSOVER	643+33.84	652+00.29	97	522	8.7
REMOVE NORTH CROSSOVER	586+20.73	595+12.95	866	62	
REMOVE SOUTH CROSSOVER	643+33.84	652+00.29	62	866	
TOTALS			1547	1547	18

CULVERT CLEANOUT	
STA.	CULVERT CLEANOUT (EA)
649+70.26	1.0
TOTALS	1.0

DATE PREPARED: 9/4/2024

ROUTE: 435 STATE: MO  
DISTRICT: KC SHEET NO.: 3

COUNTY: CLAY  
JOB NO.: J4P3468  
CONTRACT ID.:  
PROJECT NO.:  
BRIDGE NO.:

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)



SB CROSSOVER 1		NB CROSSOVER 2	
SB CURVE 1		NB CURVE 3	
PI 1+96.22		PI 1+76.05	
PC 0+00.00		PC 0+00.00	
PT 3+91.82		PT 3+51.66	
$\Delta$ 7°50'58.5" (RT)		$\Delta$ 7°2'41.7" (RT)	
D 2°0'12.1"		D 2°0'12.1"	
L 391.82' (ARC)		L 351.66' (ARC)	
T 196.22'		T 176.05'	
R 2,860.00'		R 2,860.00'	

SB CROSSOVER 1		NB CROSSOVER 2	
SB CURVE 2		NB CURVE 4	
PI 7+42.77		PI 6+74.53	
PC 5+41.82		PC 5+01.66	
PT 9+43.06		PT 8+46.98	
$\Delta$ 8°2'17.7" (RT)		$\Delta$ 6°55'5.2" (RT)	
D 2°0'12.1"		D 2°0'12.1"	
L 401.24' (ARC)		L 345.33' (ARC)	
T 200.95'		T 172.87'	
R 2,860.00'		R 2,860.00'	

SB CROSSOVER 1  
 START STA. 0+00.00 TO STOP STA. 9+43.06  
 = I-435 @  
 STA. 585+76.78 TO STOP STA. 595+16.07

REMOVE AND INSTALL  
 NEW GUARDRAIL  
 STA. 582+96.42 TO STA. 594+94.78

NB CROSSOVER 2  
 START STA. 0+00.00 TO STOP STA. 8+46.98  
 = I-435 @  
 START STA. 594+64.88 TO STOP STA. 586+20.76

BUILD CROSSOVER PAVEMENT  
 STA. 586+20.73 TO STA. 595+12.95

590

MILL/FILL  
 10' SHOULDER

BUILD CROSSOVER PIPE  
 490' X 18" GROUP A PIPE  
 CLASS III, TYPE 3  
 2-18" GROUP A F.E.S.  
 STA. 588+25.00 TO STA. 593+15.00

MILL/FILL  
 4' SHOULDER

REMOVE PIPE AND TWO FES  
 STA. 594+12.38 TO STA. 594+75.42

595

MILL/FILL  
 10' SHOULDER

MILL/FILL  
 4' SHOULDER

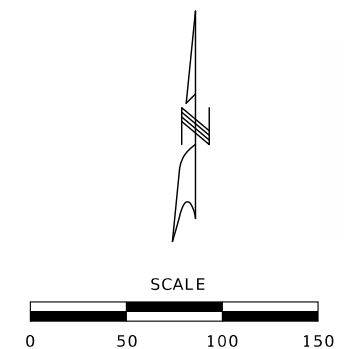
SB CURVE 1

NB CURVE 4

NB CURVE 3

SB CURVE 2

ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.



DATE PREPARED  
**8/23/2024**

ROUTE	STATE
<b>435</b>	<b>MO</b>
DISTRICT	SHEET NO.
<b>KC</b>	<b>4</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

SB CROSSOVER 2  
 SB CURVE 3  
 PI 2+49.06  
 PC 0+00.00  
 PT 4+94.99  
 $\Delta$  15°45'21.2" (RT)  
 D 3°10'59.2"  
 L 494.99' (ARC)  
 T 249.06'  
 R 1,800.00'

NB CROSSOVER 1  
 NB CURVE 1  
 PI 1+58.17  
 PC 0+00.00  
 PT 3+15.52  
 $\Delta$  10°2'36.5" (RT)  
 D 3°10'59.2"  
 L 315.52' (ARC)  
 T 158.17'  
 R 1,800.00'

SB CROSSOVER 2  
 SB CURVE 4  
 PI 7+48.95  
 PC 6+24.77  
 PT 8+72.74  
 $\Delta$  7°53'36.2" (RT)  
 D 3°10'59.2"  
 L 247.98' (ARC)  
 T 124.19'  
 R 1,800.00'

NB CROSSOVER 1  
 NB CURVE 2  
 PI 6+12.31  
 PC 5+37.61  
 PT 6+86.92  
 $\Delta$  4°45'9.0" (RT)  
 D 3°10'59.2"  
 L 149.30' (ARC)  
 T 74.69'  
 R 1,800.00'

NB CROSSOVER 1  
 START STA. 0+00.00 TO STOP STA. 6+86.92  
 = 1-435 €  
 START STA. 651+21.75 TO STOP STA. 644+37.94

MILL/FILL  
 10' SHOULDER

MILL/FILL  
 4' SHOULDER

REMOVE DROP INLET  
 STA. 649+70.26  
 INSTALL PIPE COLLAR TO  
 ATTACH TEMPORARY  
 12" GROUP A CMP PIPE  
 TO EXISTING 12" PIPE

AFTER TEMPORARY CROSSOVER IS REMOVED  
 REMOVE PIPE COLLAR AND  
 INSTALL FLARED END SECTION  
 STA. 649+70.26

REMOVE AND REPLACE  
 3" ASPHALT STRIP  
 STA. 644+77.98 TO STA. 652+10.23

REMOVE AND INSTALL  
 NEW GUARDCABLE  
 STA. 643+60.24 TO STA. 652+10.23

ATTACH EXISTING GUARDCABLE  
 ONTO TEMPORARY GUARDCABLE  
 ANCHOR ASSEMBLY  
 STA. 651+95.00

REMOVE AND REPLACE  
 GUARDRAIL  
 STA. 642+99.13 TO STA. 643+74.13

REMOVE AND REPLACE  
 GUARDRAIL  
 STA. 643+01.81 TO STA. 645+40.06

SB CROSSOVER 2  
 START STA. 0+00.00 TO STOP STA. 8+72.74  
 = 1-435 €  
 START STA. 643+33.84 TO STOP STA. 652+00.30

REMOVE TWO DROP INLETS AND PIPE  
 STA. 644+96.97 TO STA. 645+62.12

BEFORE CONSTRUCTION OF CROSSOVER  
 COVER DROP INLET AT STA. 646+81.49  
 WITH SUITABLE MATERIAL TO PREVENT  
 SEDIMENT/ROCKS FROM ENTERING DROP INLET

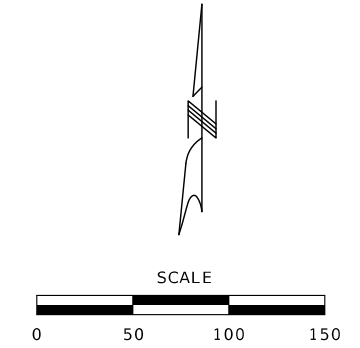
BUILD TEMPORARY  
 12" SLOTTED DRAIN\*  
 STA. 646+95.00 TO STA. 649+55.26  
 AND 12" GROUP A CMP PIPE  
 STA. 649+55.26 TO STA. 649+72.26

\*12" PIPE WILL BE ENCASED FOR  
 THE LENGTH OF THE PAVEMENT  
 AT NO DIRECT PAY.

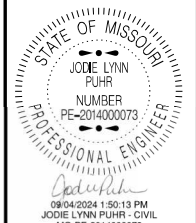
BUILD CROSSOVER PAVEMENT  
 STA. 643+33.84 TO STA. 652+00.29

MILL/FILL  
 10' SHOULDER

MILL/FILL  
 4' SHOULDER



ANY WORK INDICATED ON THE PLANS THAT  
 EXTENDS BEYOND THE PROJECT LIMITS IS  
 CONSIDERED INCIDENTAL TO AND A PART OF  
 THE CONSTRUCTION OF THIS PROJECT.



DATE PREPARED  
 9/4/2024

ROUTE 435 STATE MO  
 DISTRICT KC SHEET NO. 5

COUNTY CLAY  
 JOB NO. J4P3468  
 CONTRACT ID.

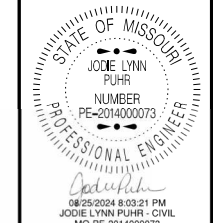
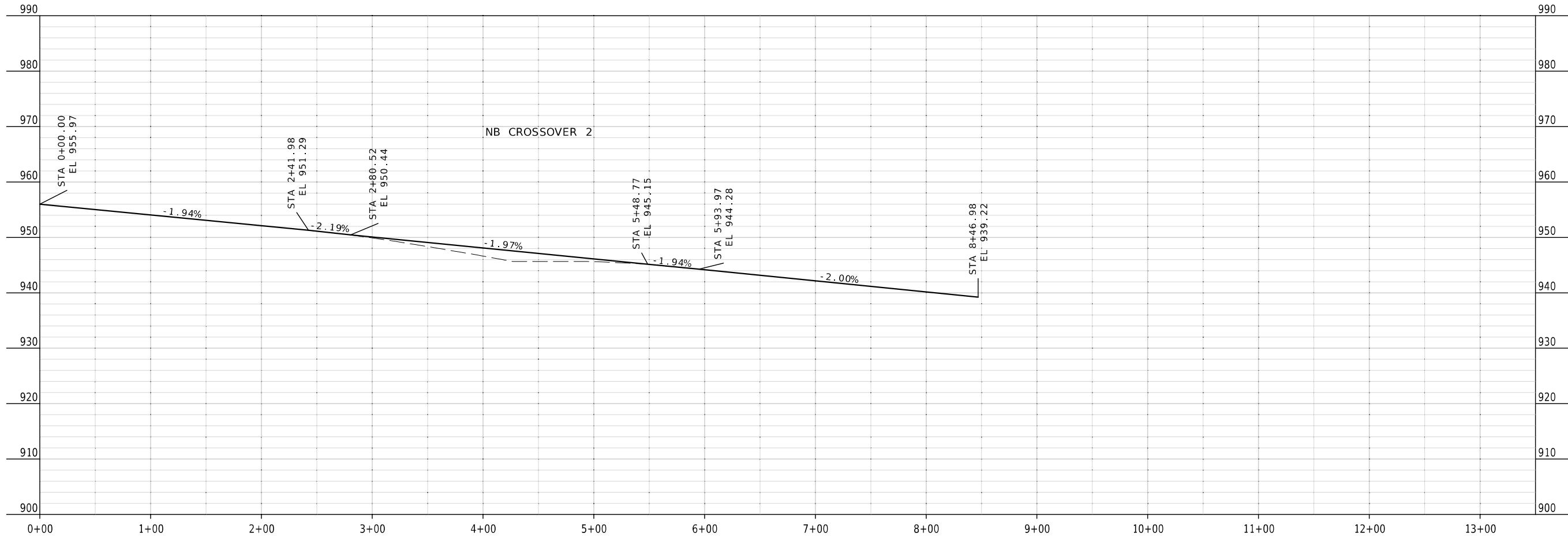
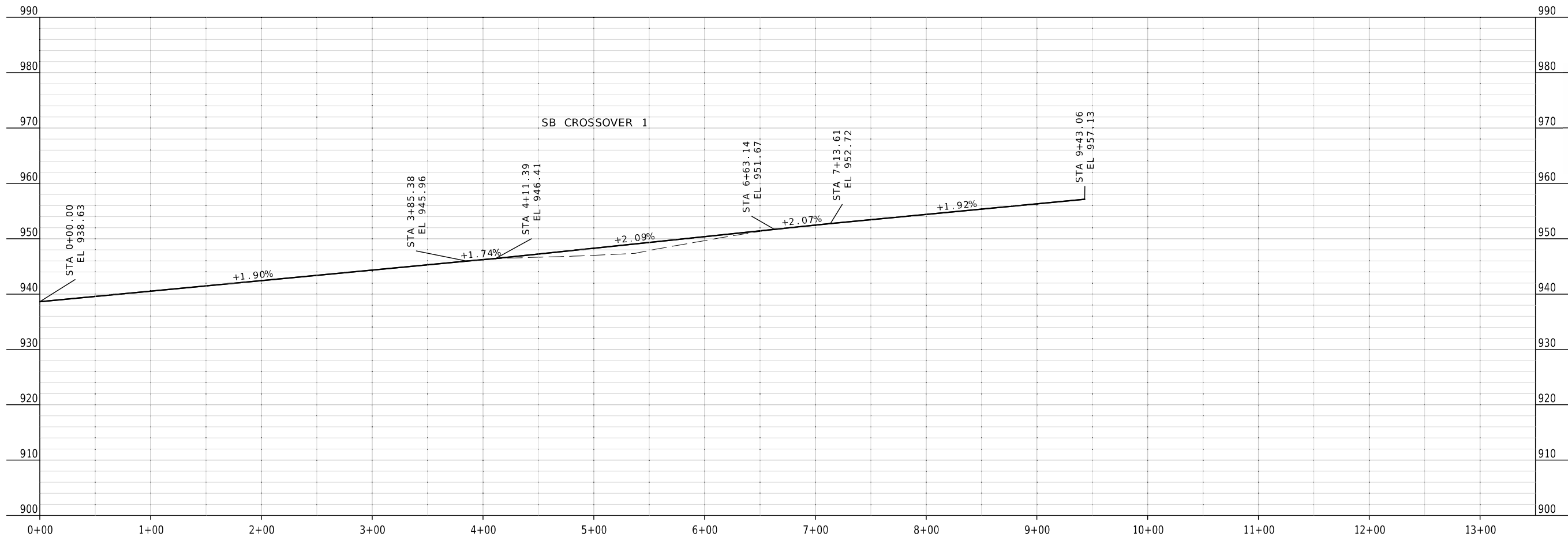
PROJECT NO.  
 BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)





DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 6

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

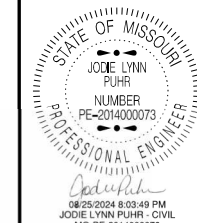
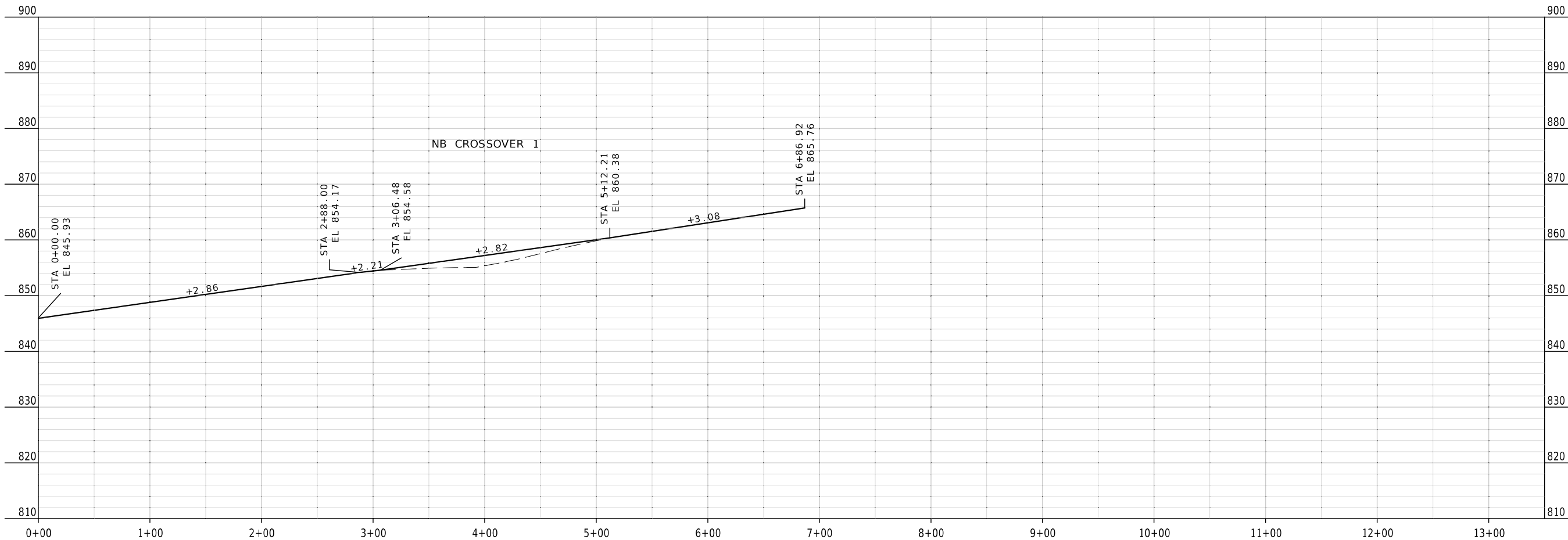
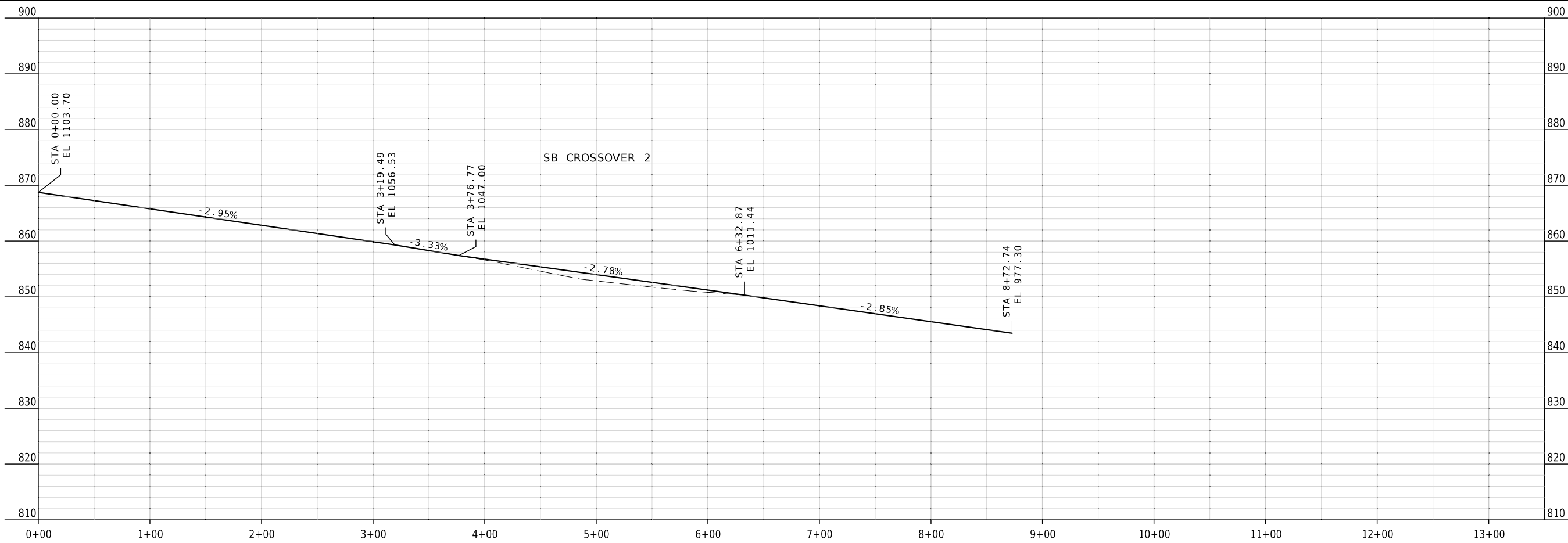
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

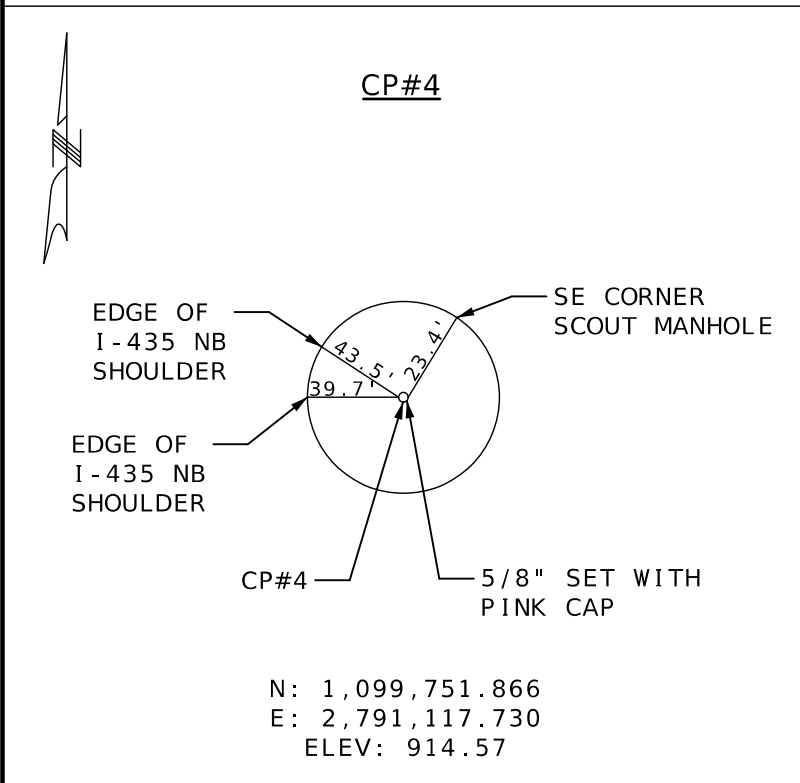
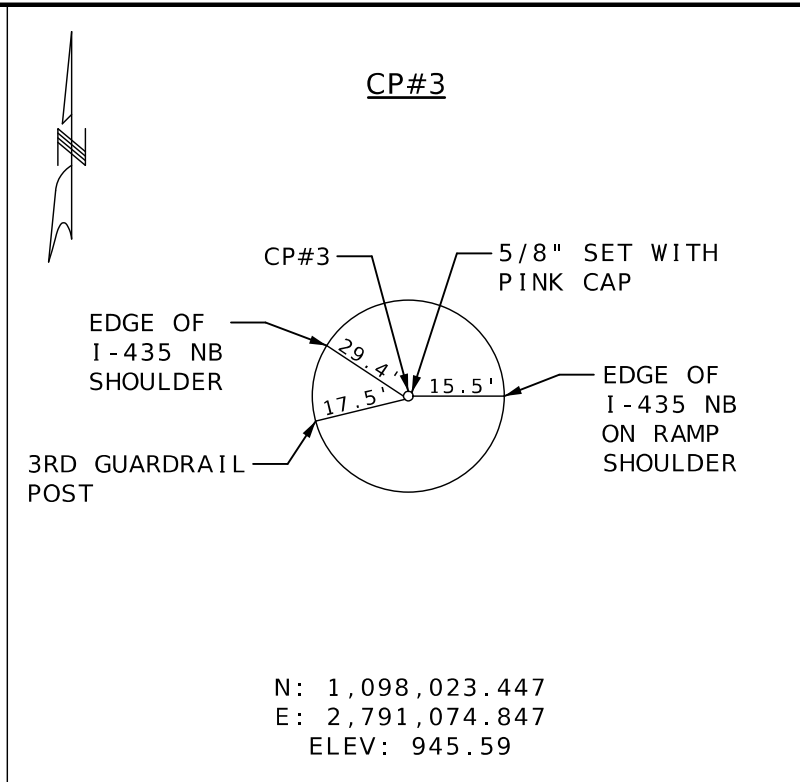
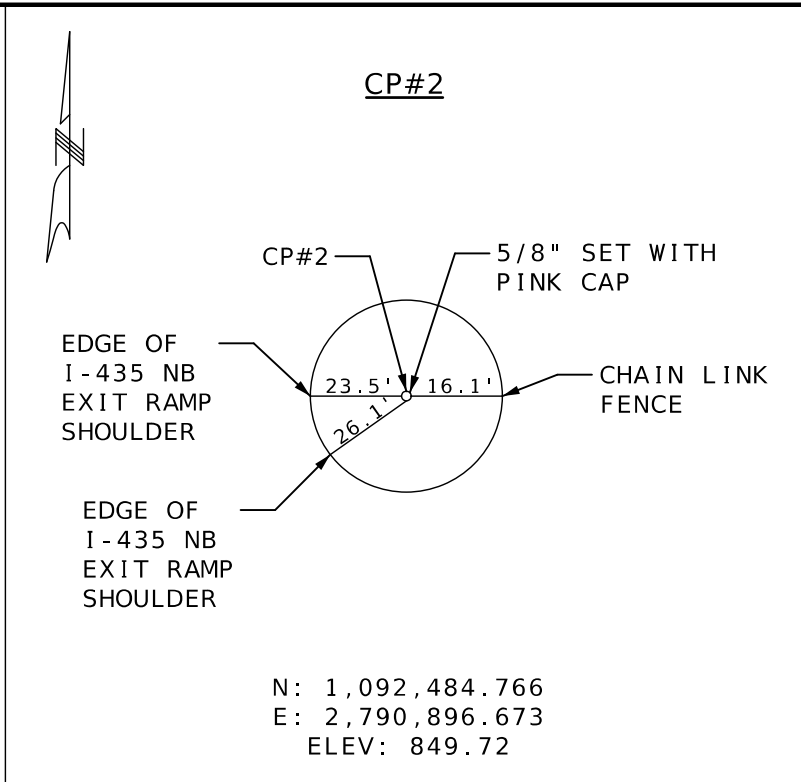
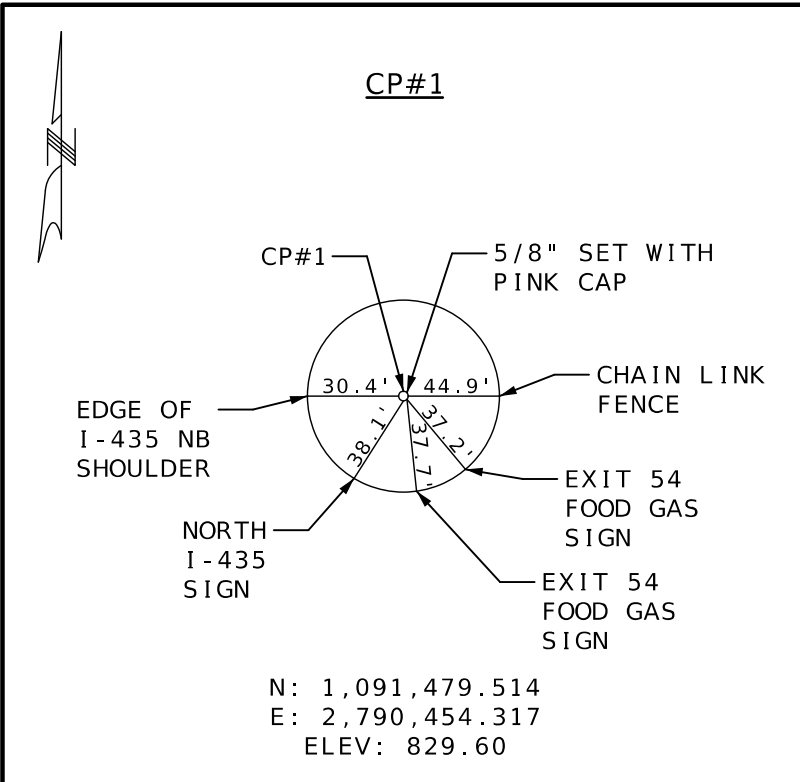


DATE PREPARED  
**8/21/2024**  
 ROUTE **435** STATE **MO**  
 DISTRICT **KC** SHEET NO. **7**  
 COUNTY **CLAY**  
 JOB NO. **J4P3468**  
 CONTRACT ID.  
 PROJECT NO.  
 BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
 COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)



ALL COORDINATES SHOWN ON THIS SHEET  
ARE MODIFIED STATE PLANE (GROUND)  
MISSOURI WESTERN ZONE, NAD 1983  
PROJECTION FACTOR: 1.00009951

STATE OF MISSOURI  
JODIE LYNN FUHR  
NUMBER  
PE-2014000073  
PROFESSIONAL ENGINEER  
09/04/2024 1:50:38 PM  
JODIE LYNN FUHR - CIVIL  
MO-PE-2014000073

DATE PREPARED 9/4/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 8
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

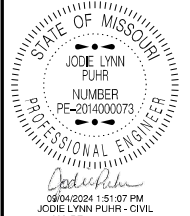
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES MULTIPLY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION		
COORDINATE SYSTEM	MODIFIED STATE PLANE (GROUND)	
HORIZONTAL DATUM	NAD83	
VERTICAL DATUM	NAVD88	
GEOID MODEL	GEOID18	
ELEVATIONS DETERMINED BY	GPS OBSERVATION	
PROJECT PROJECTION FACTOR	1.00009951	
REFERENCE CONTROL INFORMATION		
COORDINATE SYSTEM	MO COORDINATE SYSTEM OF 1983	
CONTROL STATION	MO GEOGRAPHIC REFERENCE SYSTEM	
DESIGNATION	BUSTER 3	
CORS_ID	XX	
PID	KE1404	
LATITUDE	39°10'32.97283"	
LONGITUDE	094°29'31.38148	
NORTHING (M)	333967.9530	
EASTING (M)	850686.8960	
ZONE	WEST	
PROJECT AVERAGE GRID FACTOR	0.99990050	
EXAMPLE OF PROJECT COORDINATE TO S.P.C.		
PROJECT NORTHING X AVERAGE GRID FACTOR	= STATE PLANE NORTHING	
PROJECT EASTING X AVERAGE GRID FACTOR	= STATE PLANE EASTING	
EXAMPLE: CONTROL POINT # ___		
N _____ X _____ = N _____		
E _____ X _____ = E _____		
LINEAR UNIT CONVERSION		
1 METER = 3.280833333 US SURVEY FEET (USFT)		

COORDINATE POINT LISTING								
SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION	GPK POINT ID
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)		
PROJECT CONTROL POINTS								
		I-435		1,091,479.514	2,790,454.317	829.60	CP#1 - SET BAR WITH PINK CAP	
		I-435		1,092,484.766	2,790,896.673	849.72	CP#2 - SET BAR WITH PINK CAP	
		I-435		1,098,023.447	2,791,074.847	945.59	CP#3 - SET BAR WITH PINK CAP	
		I-435		1,099,751.866	2,791,117.730	914.57	CP#4 - SET BAR WITH PINK CAP	
ALIGNMENTS								
	0+00.00	I-435 SB CROSSOVER 1		1,098,714.640	2,790,955.33	938.63	PC	
	1+96.22	I-435 SB CROSSOVER 1		1,095,518.439	2,790,952.702		HPI	
	3+91.82	I-435 SB CROSSOVER 1		1,098,323.718	2,790,976.898	946.07	PT	
	5+41.82	I-435 SB CROSSOVER 1		1,098,174.863	2,790,995.395	949.14	PC	
	7+42.77	I-435 SB CROSSOVER 1		1,097,975.447	2,791,016.825		HPI	
	9+43.06	I-435 SB CROSSOVER 1		1,097,774.525	2,791,016.825	957.13	PT	
	0+00.00	I-435 SB CROSSOVER 2		1,092,956.246	2,790,894.591	868.74	PC	
	2+49.06	I-435 SB CROSSOVER 2		1,092,713.128	2,790,840.491		HPI	
	4+94.99	I-435 SB CROSSOVER 2		1,092,493.835	2,790,722.407	854.12	PT	
	6+24.77	I-435 SB CROSSOVER 2		1,092,379.568	2,790,660.878	850.51	PC	
	7+48.95	I-435 SB CROSSOVER 2		1,092,270.227	2,790,602.000		HPI	
	8+72.74	I-435 SB CROSSOVER 2		1,092,153.173	2,790,558.697	843.46	PT	
	0+00.00	I-435 NB CROSSOVER 1		1,092,201.225	2,790,656.426	845.30	PC	
	1+58.17	I-435 NB CROSSOVER 1		1,092,349.400	2,790,711.752		HPI	
	3+15.53	I-435 NB CROSSOVER 1		1,092,504.954	2,790,740.390	854.83	PT	
	5+37.61	I-435 NB CROSSOVER 1		1,092,723.373	2,790,780.600	861.16	PC	
	6+12.31	I-435 NB CROSSOVER 1		1,092,796.833	2,790,794.124		HPI	
	6+86.92	I-435 NB CROSSOVER 1		1,092,686.920	2,790,813.687	865.76	PT	
	0+00.00	I-435 NB CROSSOVER 2		1,097,826.418	2,790,959.878	955.97	PC	
	1+76.05	I-435 NB CROSSOVER 2		1,098,002.456	2,790,961.917		HPI	
	3+51.66	I-435 NB CROSSOVER 2		1,098,176.915	2,790,985.532	949.04	PT	
	5+01.66	I-435 NB CROSSOVER 2		1,098,325.560	2,791,005.652	946.08	PC	
	6+74.53	I-435 NB CROSSOVER 2		1,098,496.871	2,791,028.840		HPI	
	8+46.98	I-435 NB CROSSOVER 2		1,098,669.729	2,791,031.225	939.22	PT	



DATE PREPARED	
ROUTE	STATE
435	MO
DISTRICT	SHEET NO.
KC	9
COUNTY	
CLAY	
JOB NO.	
J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION



# Traffic Control Legend, Sign Spacing, Device Spacing, Channelizing Taper Lengths And Recommended Maximum Speed Reductions

SIGN SPACING FOR ADVANCE SIGN SERIES (1) (2)		
PERMANENT POSTED SPEED MPH	UNDIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)
0-35	200'	200'
40-45	350'	500'
50-55	500'	1000'
60-70	1000'	SA - 1000' SB - 1500' SC - 2640'

TAPER LENGTHS AND END TREATMENTS FOR CONCRETE BARRIER				
PERMANENT POSTED SPEED MPH	MINIMUM LANE TAPER LENGTH (3)			END TREATMENT (4)
	10'	11'	12'	
<40	160'	168'	176'	BARRIER HEIGHT TRANSITION
>40	160'	168'	176'	APPROVED CRASH CUSHION

TAPER LENGTHS AND SPACING FOR CHANNELIZERS							
PERMANENT POSTED SPEED MPH	MINIMUM LANE TAPER LENGTH (L) (3)			MINIMUM SHOULDER TAPER LENGTH (T1) BASED ON 10' SHOULDER	BUFFER LENGTH FT	MAXIMUM CHANNELIZER SPACING	
	10'	11'	12'			THROUGH TAPER	THROUGH WORK AREA
0-35	205'	225'	245'	70'	280'	35'	40'
40-45	450'	495'	540'	150'	400'	40'	80'
50-55	550'	605'	660'	185'	560'	50'	80'
60-70	700'	770'	840'	235'	840'	60'	120'

\*\* THE SA DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN.  
THE SB DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS.  
THE SC DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS.

(THE "FIRST SIGN" IS THE SIGN IN A THREE-SIGN SERIES THAT IS CLOSEST TO THE TEMPORARY TRAFFIC CONTROL ZONE. THE "THIRD SIGN" IS THE SIGN THAT IS FURTHEST UPSTREAM FROM THE TEMPORARY TRAFFIC CONTROL ZONE)

**DETAILS NOTES:**

- (1) SPACING BETWEEN SIGNS AND SPACING BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER, OF SIGNED CONDITION.
- (2) SPACING MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS.
- (3) TAPER LENGTHS SHOWN INCLUDE LENGTH REQUIRED FOR LANE AND 10' SHOULDER
- (4) CONCRETE BARRIER MAY BE INSTALLED AT 8:1 FLARE RATE FROM THE SHOULDER POINT OF THE LIMITS OF THE CLEAR ZONE WHERE THE SIDE SLOPE IS 6:1 OR FLATTER

**TAPER LENGTH (L)**  
 L = W X P FOR 40 MPH OR MORE  
 L =  $\frac{WP^2}{60}$  FOR 35 MPH OR LESS  
 L = TAPER LENGTH IN FEET  
 W = LATERAL SHIFT IN FEET  
 P = POSTED SPEED PRIOR TO ROAD WORK IN MPH

**TRAFFIC CONTROL LEGEND**

<ul style="list-style-type: none"> <li> SIGN (SINGLE SIDED)</li> <li> FLAGGER</li> <li> CHANNELIZER</li> <li> PROTECTIVE VEHICLE WITH WORK SIGN, FLASHING ARROW PANEL AND REAR-MOUNTED IMPACT ATTENUATOR UNIT.</li> </ul>	<ul style="list-style-type: none"> <li> FLASHING ARROW PANEL</li> <li> CHANGEABLE MESSAGE BOARD</li> <li> BARRICADE</li> </ul>
---	--

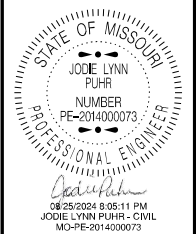
**LEGEND NOTE:**  
 THE PROTECTIVE VEHICLE SIGN SHALL BE MOUNTED AT A RECOMMENDED HEIGHT OF 48 IN. ABOVE THE ROAD SURFACE.

**GENERAL NOTES:**

1. SEE STANDARD PLAN 616.10 FOR DETAILS AND ITEMS NOT SHOWN.
2. EXISTING SIGNS SHALL BE COVERED DURING WORKING HOURS ONLY IF IN CONFLICT WITH TRAFFIC CONTROL PLANS.
3. NO DIRECT PAYMENT WILL BE MADE FOR RELOCATING, COVERING, UNCOVERING OR REMOVING SIGNS.
4. CONES ALLOWABLE FOR DAYTIME OPERATIONS ON MINOR ROUTES ONLY.
5. LOCATE FLASHING ARROW PANEL AT BEGINNING OF TAPER WHEN FEASIBLE, ARROW PANELS ARE ALWAYS LOCATED BEHIND CHANNELIZERS OR CONES.

EPG TABLE 616.12 RECOMMENDED MAXIMUM SPEED REDUCTIONS	
ACTIVITY (I.E. WORKERS, EQUIPMENT OR MATERIAL) LOCATION	RECOMMENDED WORK ZONE SPEED REDUCTION (WHEN APPLICABLE)
10 FT. BEYOND EDGE OF TRAVELWAY TO EDGE OF RIGHT OF WAY	NO SPEED REDUCTION
IN TRAFFIC LANE OR WITHIN 10FT. OF THE TRAFFIC LANE	10 MPH
HEAD-TO-HEAD ON MULTILANE	10 MPH
SPECIAL CIRCUMSTANCES WITHIN A TEMPORARY TRAFFIC CONTROL WORK ZONE MAY WARRANT A LOWER SPEED LIMIT THAN RECOMMENDED ABOVE. ALL SPEED LIMIT REDUCTIONS GREATER THAN 10 MPH SHALL BE DOCUMENTED, SUBMITTED TO AND APPROVED BY THE DISTRICT WORK ZONE COORDINATOR.	

TEMPORARY TRAFFIC CONTROL SHEET 1 OF 53



DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 10
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>11</b>

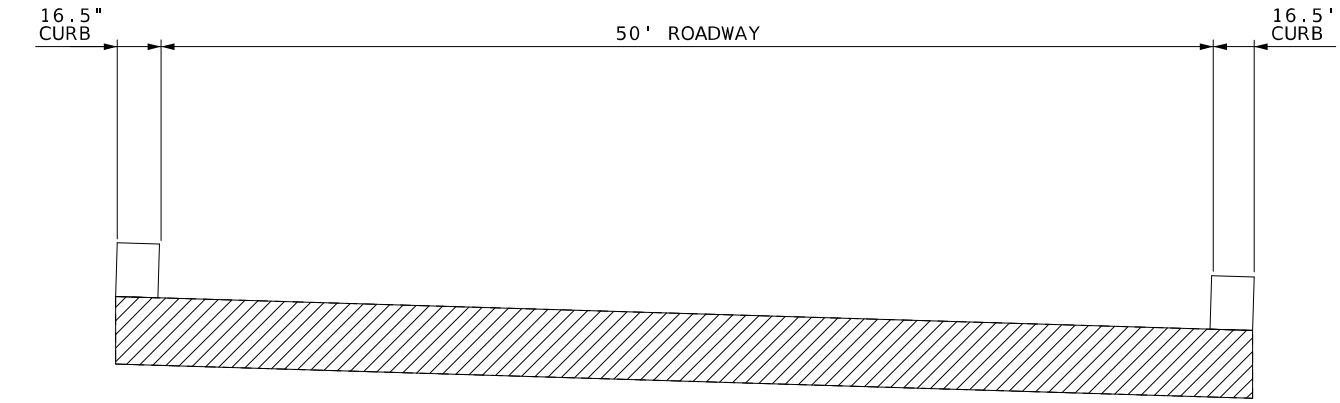
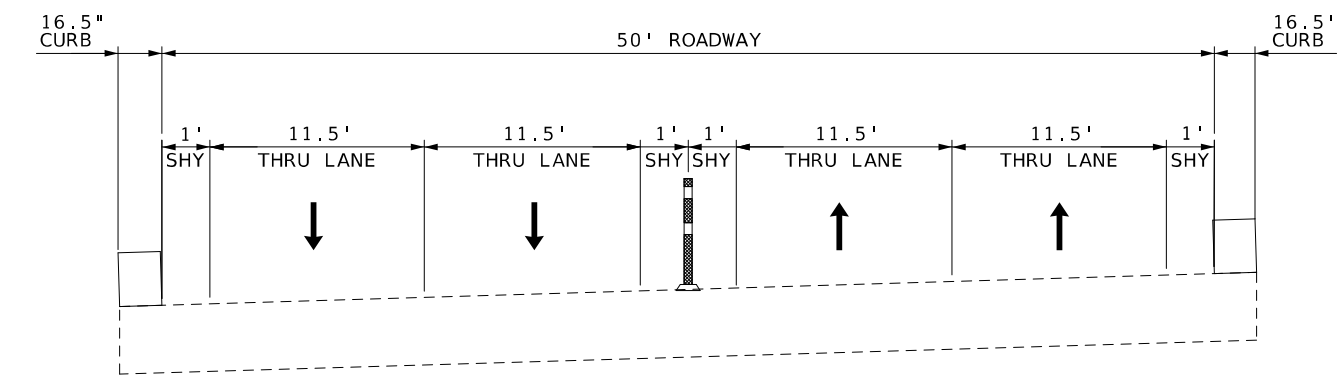
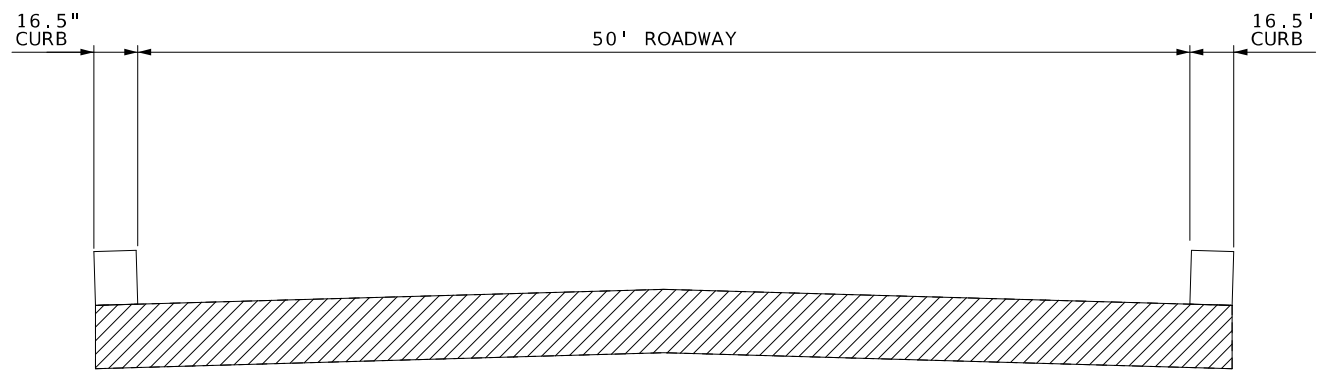
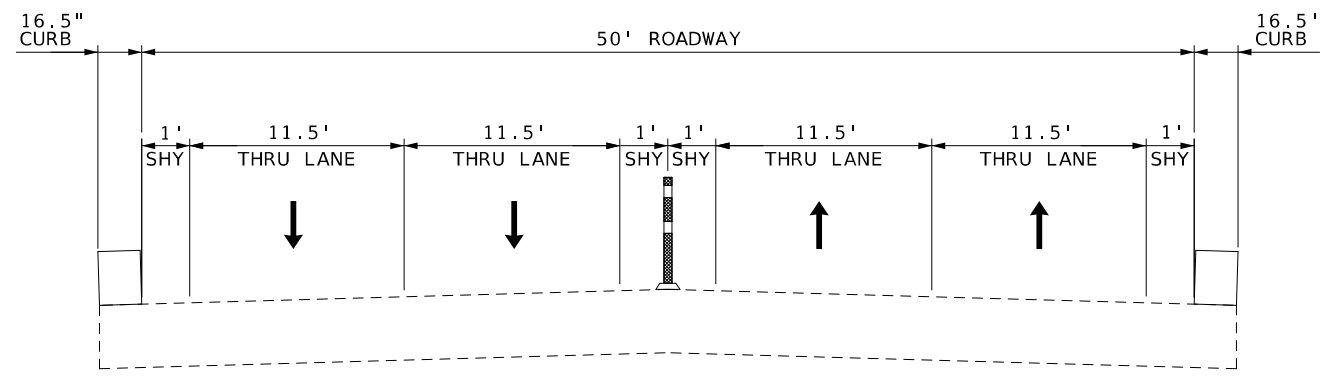
COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.



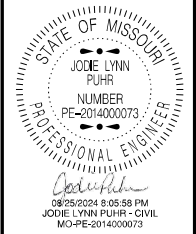
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

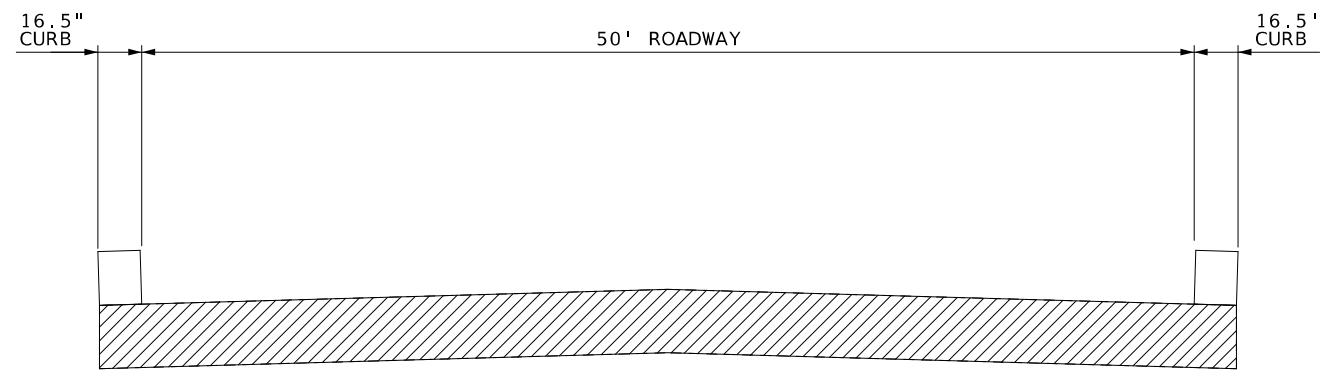
105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

NOT TO SCALE

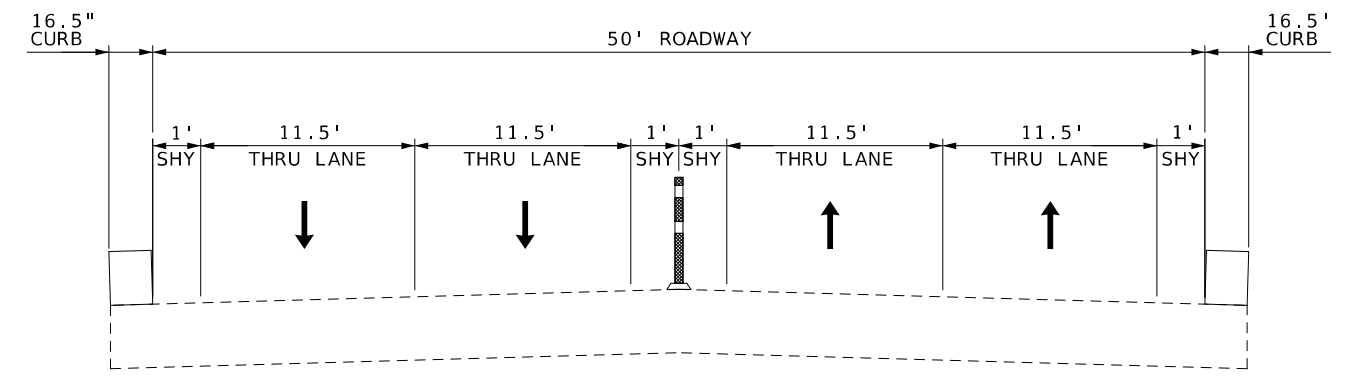
TRAFFIC CONTROL SHEET  
 CONSTRUCTION TYPICAL SECTIONS  
 SHEET 2 OF 53



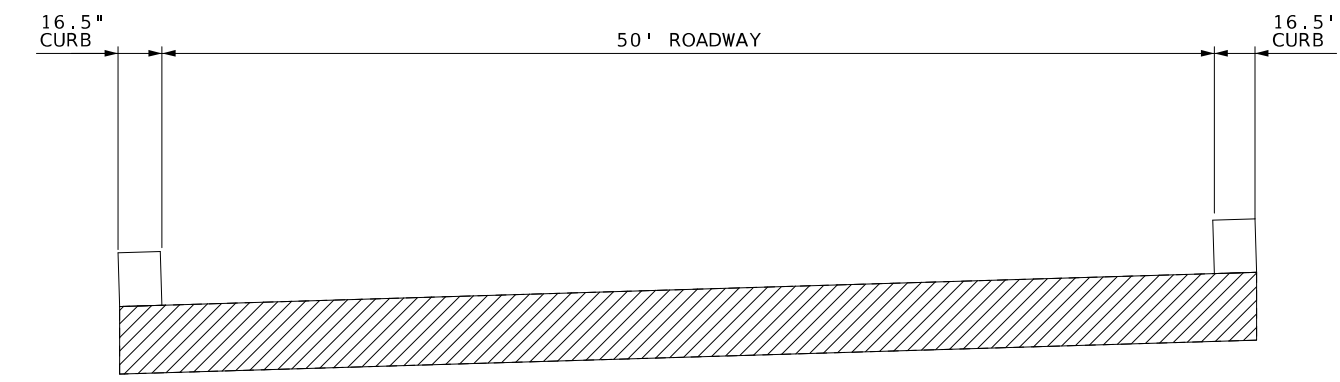
DATE PREPARED  
**8/21/2024**  
 ROUTE STATE  
**435 MO**  
 DISTRICT SHEET NO.  
**KC 12**  
 COUNTY  
**CLAY**  
 JOB NO.  
**J4P3468**  
 CONTRACT ID.  
 PROJECT NO.  
 BRIDGE NO.



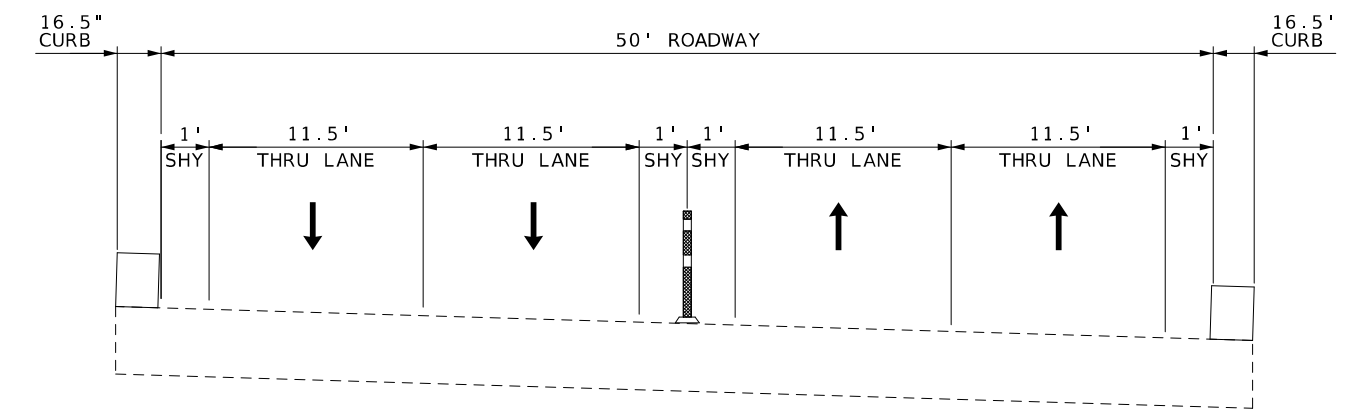
BRIDGE A16675  
 I-435 NB  
 OVER 48TH ST  
 PHASE 2



BRIDGE A16674  
 I-435 SB  
 OVER 48TH ST  
 PHASE 2



BRIDGE A16745  
 I-435 NB  
 OVER PARVIN RD  
 PHASE 2



BRIDGE A16744  
 I-435 SB  
 OVER PARVIN RD  
 PHASE 2

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION  
 COMMISSION  
  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

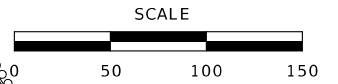
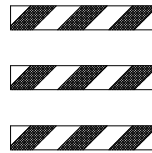
NOT TO SCALE



BRIDGE  
OR  
RAMP

W020-1

2



DATE PREPARED  
8/21/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 13

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

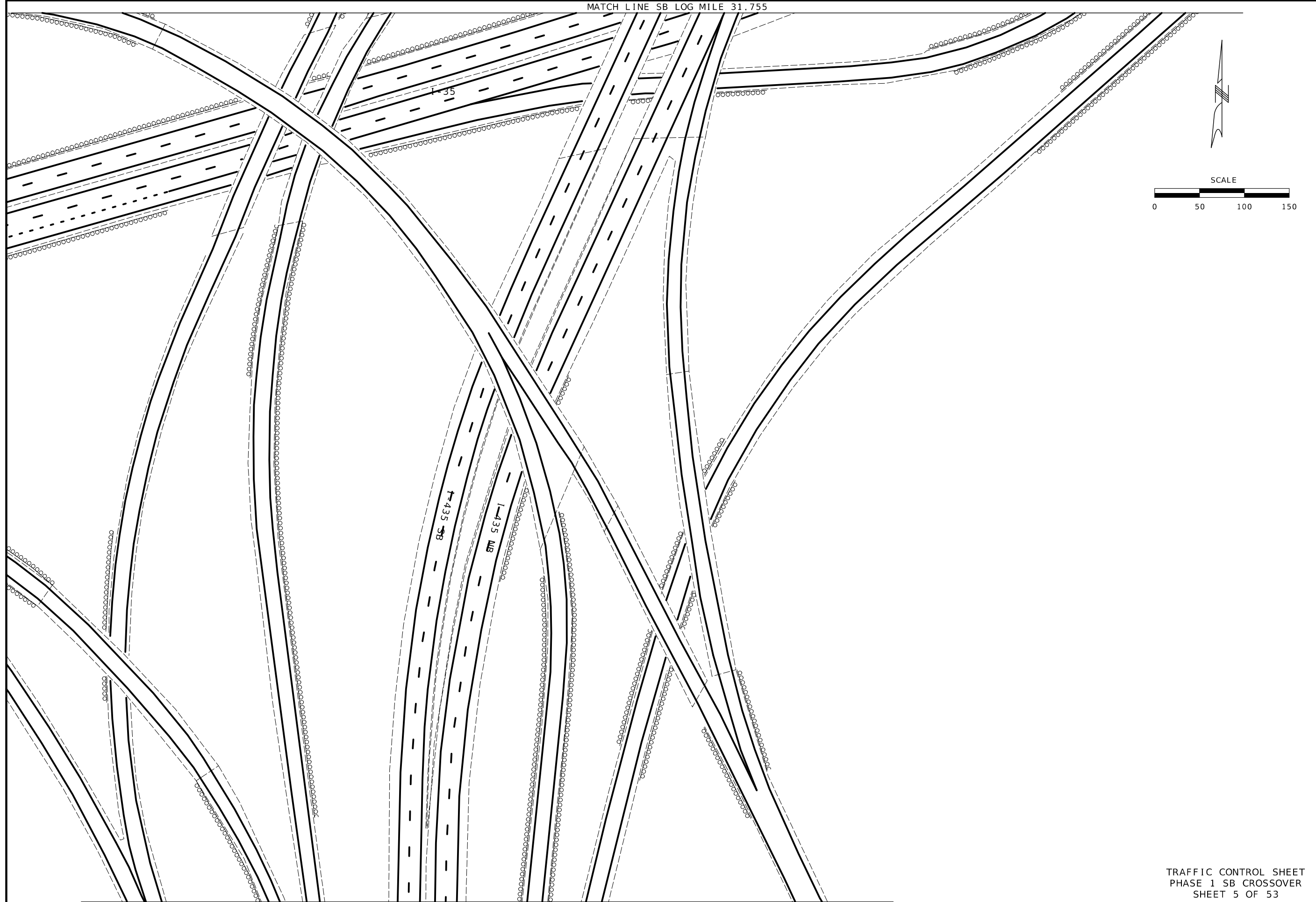


MATCH LINE  
SB LOG MILE 31.755

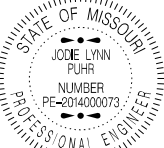
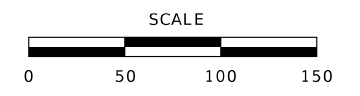
TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 4 OF 53



MATCH LINE SB LOG MILE 31.755



MATCH LINE SB LOG MILE 31.941



DATE PREPARED  
8/21/2024

ROUTE	STATE
435	MO
DISTRICT	SHEET NO.
KC	14

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

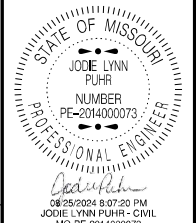
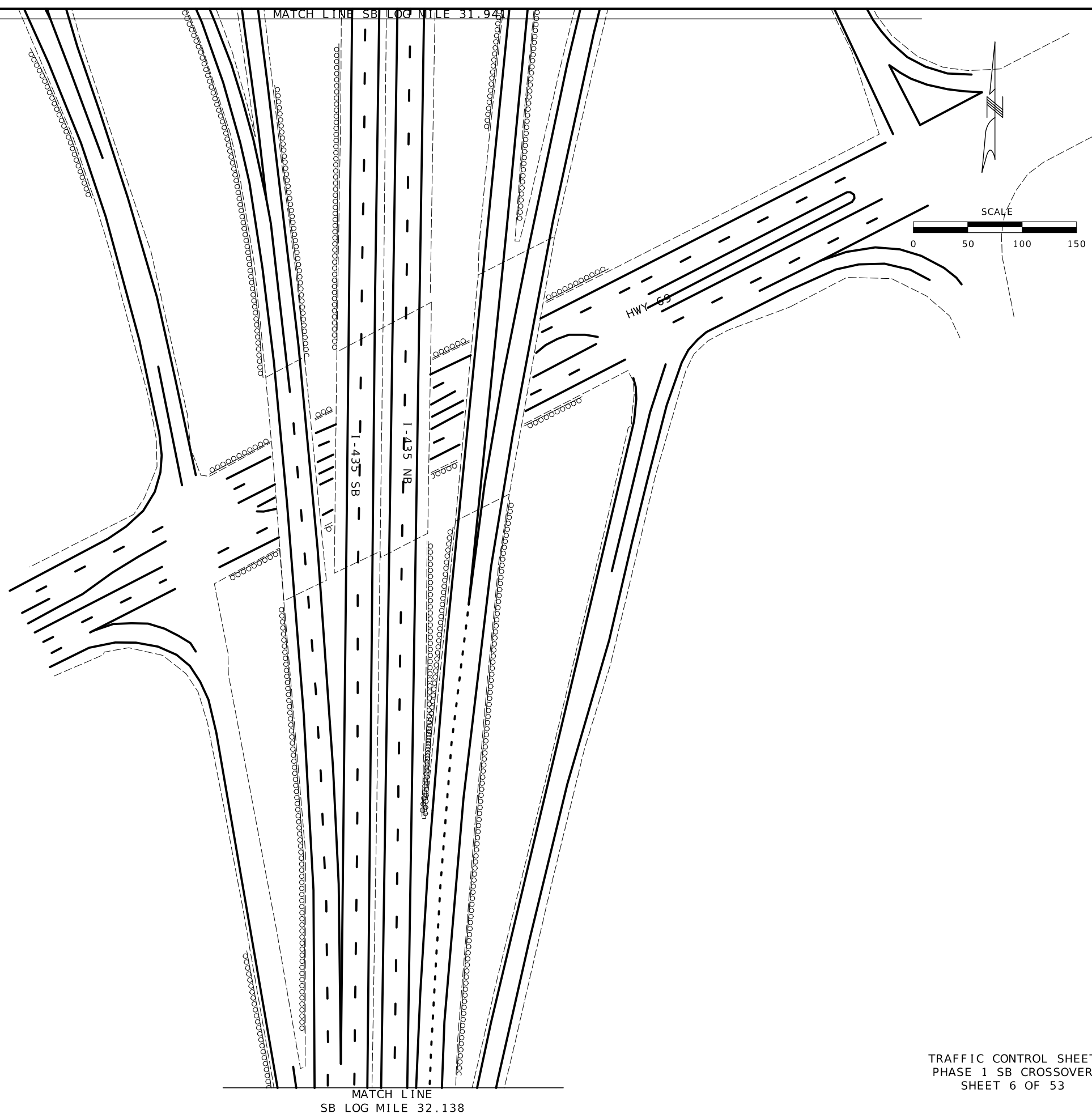
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 5 OF 53



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 15

COUNTY  
CLAY

JOB NO.  
J4P3468


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 6 OF 53

MATCH LINE  
SB LOG MILE 32.138

**RIGHT LANE CLOSED AHEAD**

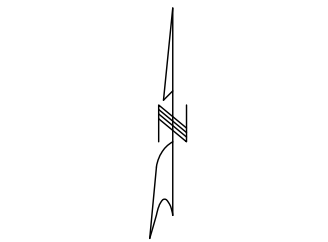
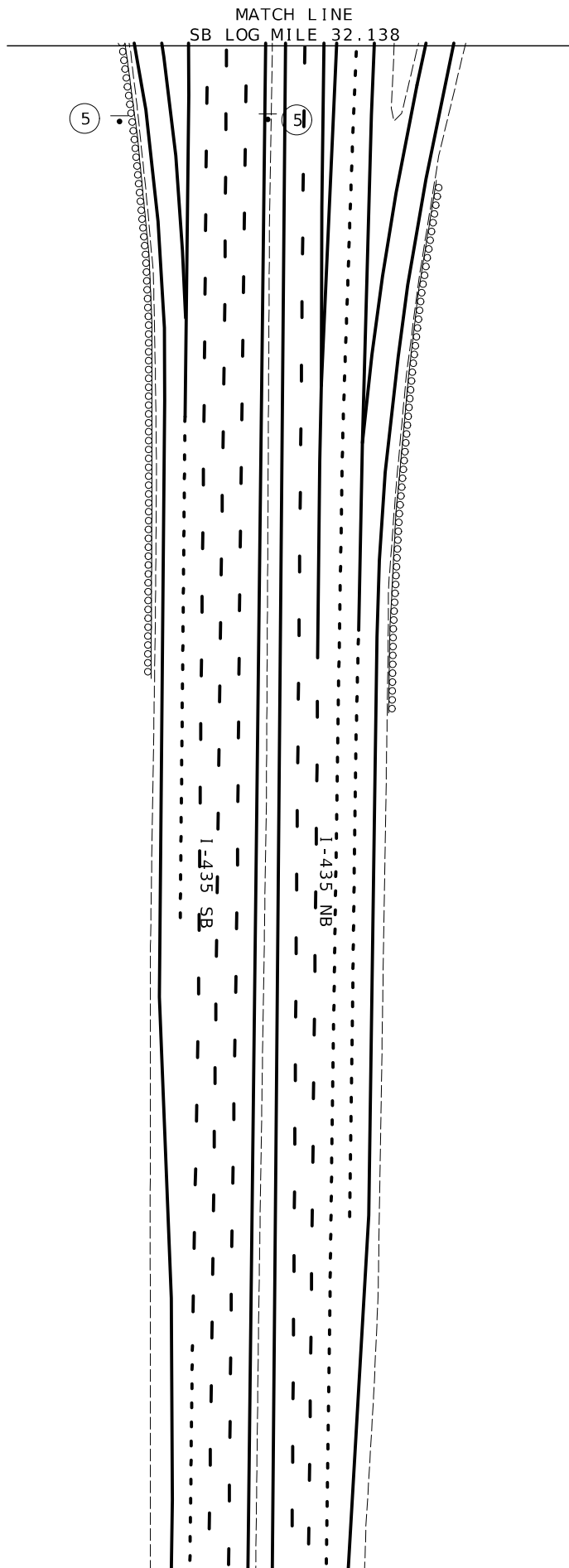
W020-5

(5)

**CENTER LANE**

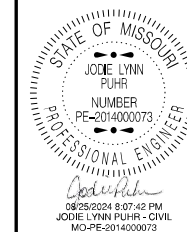
OR

**LEFT LANE**



SCALE  
0 50 100 150

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 7 OF 53



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>16</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

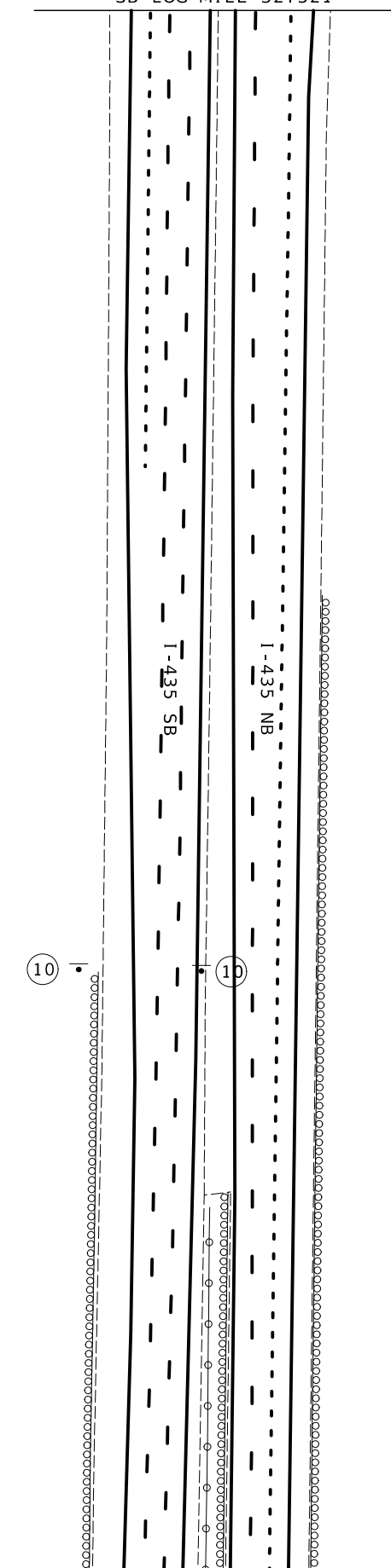
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

MATCH LINE  
SB LOG MILE 32.321

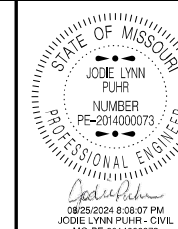
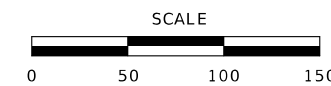


MATCH LINE  
SB LOG MILE 32.503



WO3-5

10



DATE PREPARED

8/21/2024

ROUTE STATE

435 MO

DISTRICT SHEET NO.

KC 17

COUNTY

CLAY

JOB NO.

J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

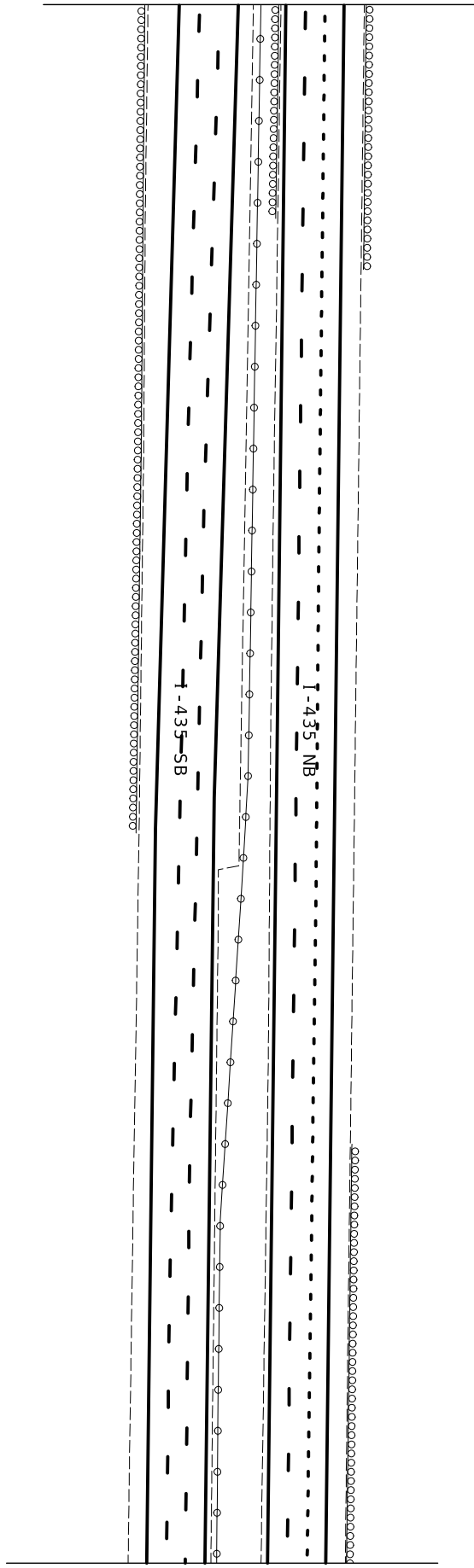
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



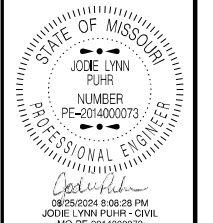
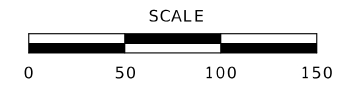
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 8 OF 53

MATCH LINE  
SB LOG MILE 32.503



MATCH LINE  
SB LOG MILE 32.681



STATE OF MISSOURI  
JOE LYNN PUHR  
NUMBER  
PE-2014000073  
PROFESSIONAL ENGINEER  
DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 18  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 9 OF 53



WO4-1aR

6A



WO20-6a

6

CENTER  
OR  
LEFT

MATCH LINE  
SB LOG MILE 32.681

6

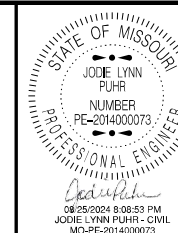
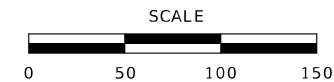
6A

1.435 SB

1.435 NB

NE 55RD TER.

MATCH LINE  
SB LOG MILE 32.862



DATE PREPARED  
8/21/2024

ROUTE STATE  
435 MO

DISTRICT SHEET NO.  
KC 19

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

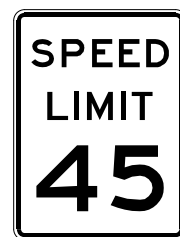
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

MATCH LINE  
SB LOG MILE 32.862



R2-1

4



G020-5aP

54

235' SHOULDER TAPER  
5 DEVICES AT 60' SPACING

840' LANE CLOSURE TAPER  
14 DEVICES AT 60' SPACING

54  
4

START STA 565+00.00

565

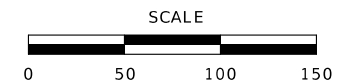
1-435 SB  
1-435 NB

568+96.83

TEMP. 4" YELLOW EDGE LINE

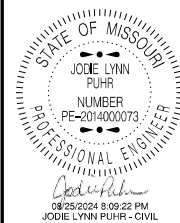
570

MATCH LINE  
STA. 580+50.00



TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLASHING ARROW PANEL
- CHANNELIZER
- TUBULAR MARKER
- BARRICADE
- CHANGEABLE MESSAGE BOARD



DATE PREPARED  
8/21/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 20

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MATCH LINE STA. 571+50.00

840' LANE CLOSURE TAPER  
14 DEVICES AT 60' SPACING

840' BUFFER  
7 DEVICES AT 120' SPACING

1-435 SB

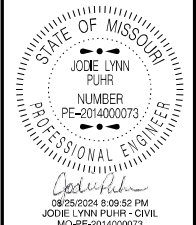
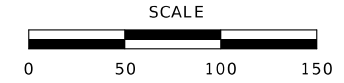
1-435 NB

TEMP. 4" YELLOW EDGE LINE

575

580

MATCH LINE  
STA. 581+33.00



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 21

COUNTY  
CLAY

JOB NO.  
J4P3468


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

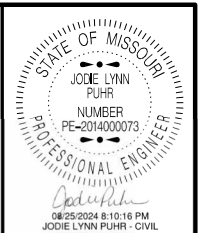
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 12 OF 53



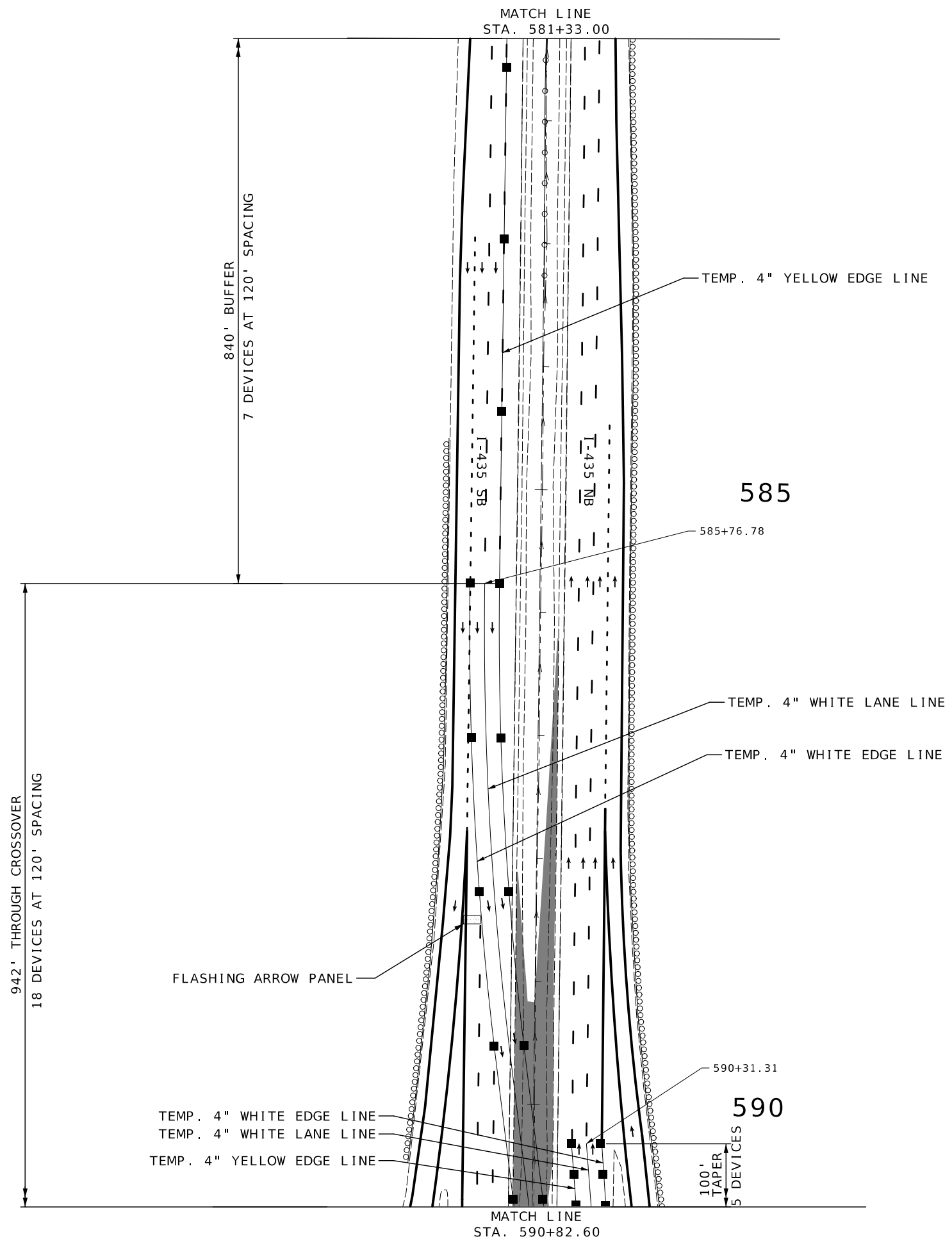
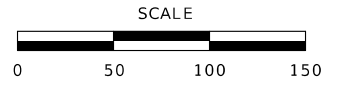
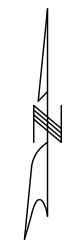


DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 22  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.

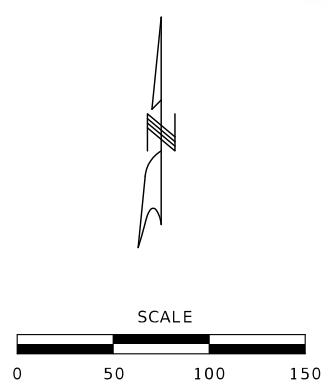
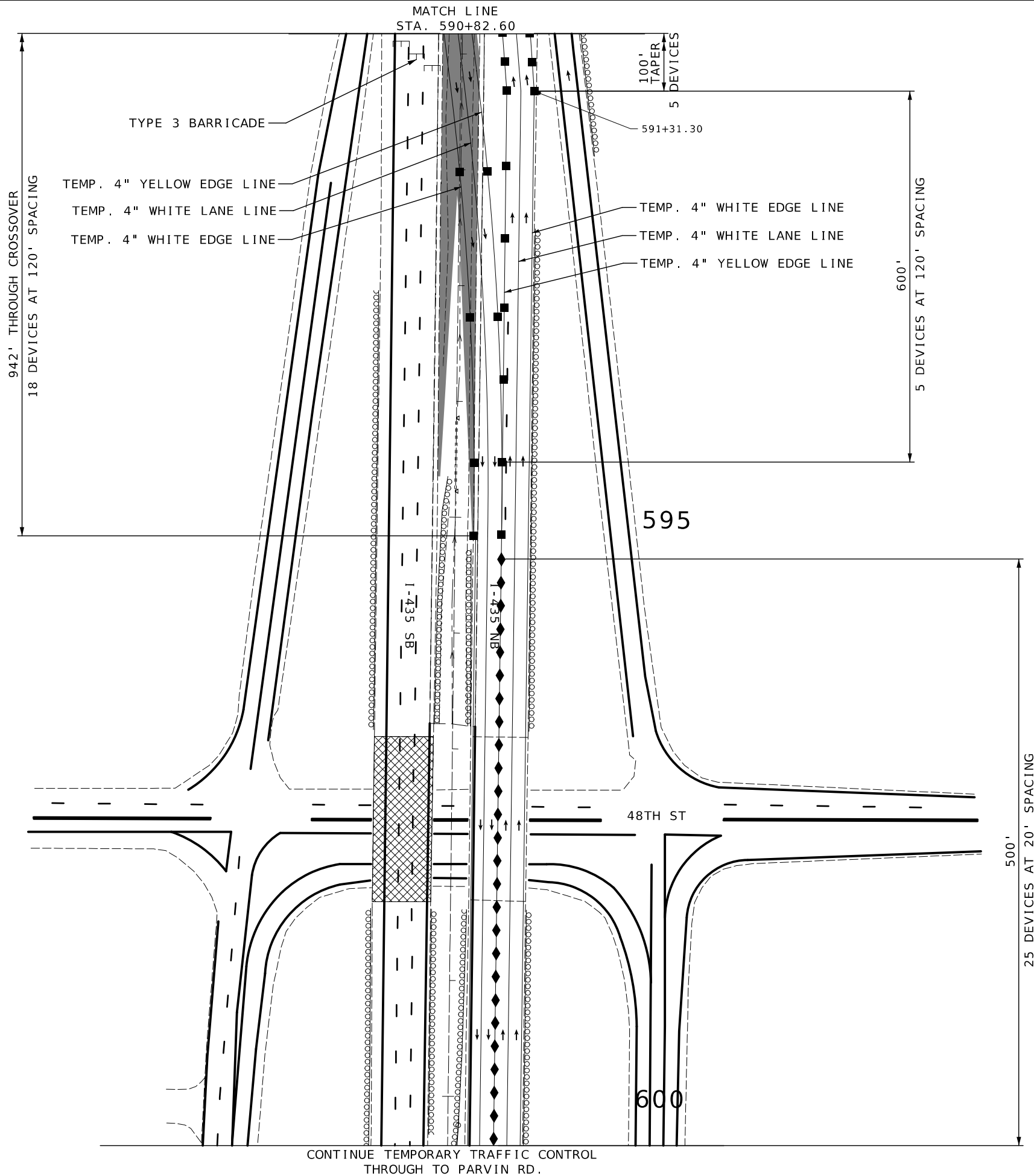
PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

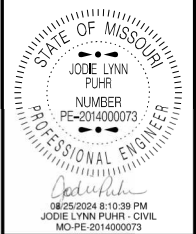
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)



TRAFFIC CONTROL SHEET  
 PHASE 1 SB CROSSOVER  
 SHEET 13 OF 53



TRAFFIC CONTROL SHEET  
 PHASE 1 SB CROSSOVER  
 SHEET 14 OF 53



DATE PREPARED  
 8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 23

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

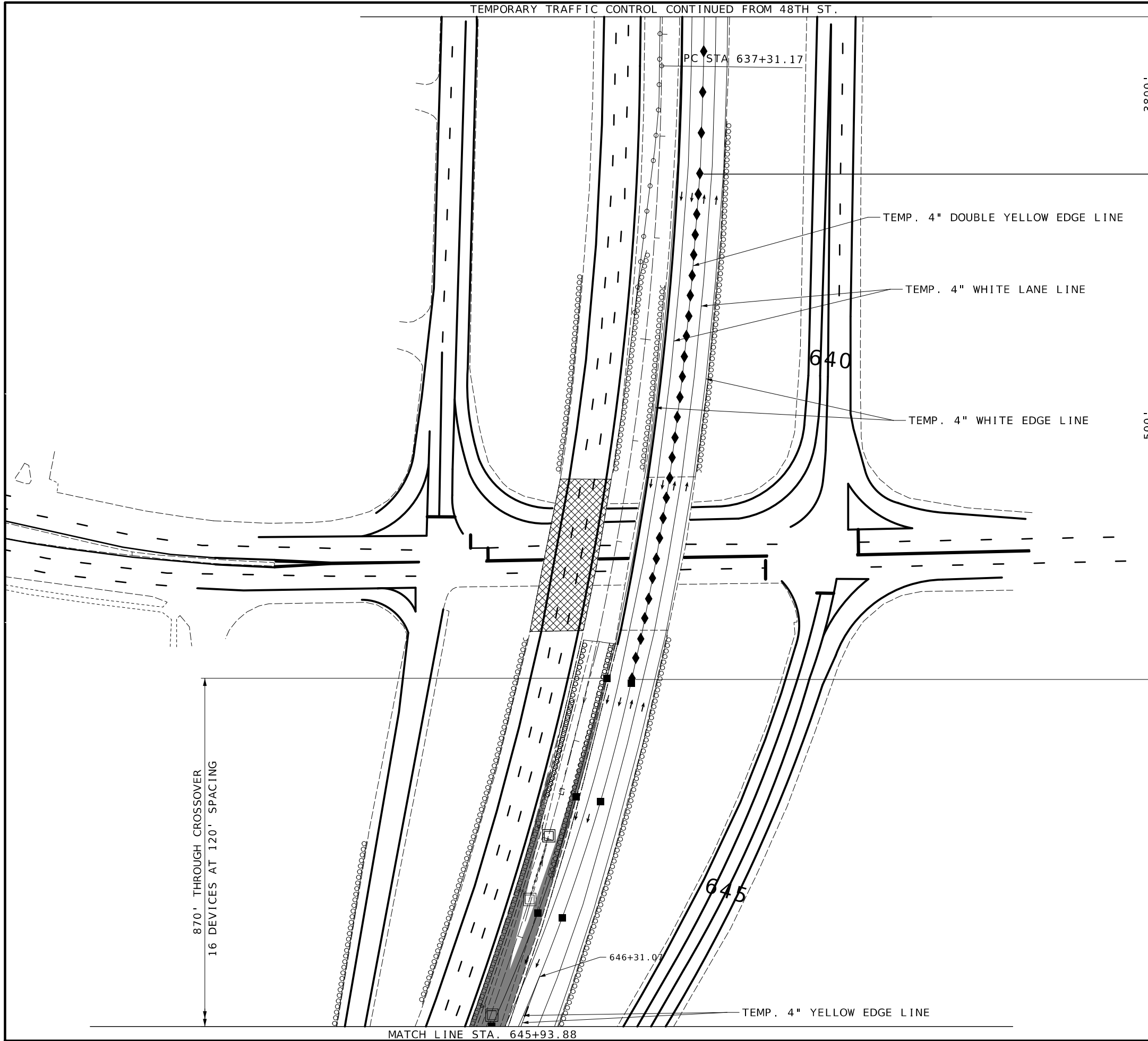
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

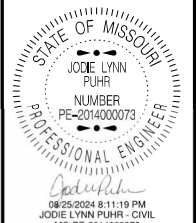
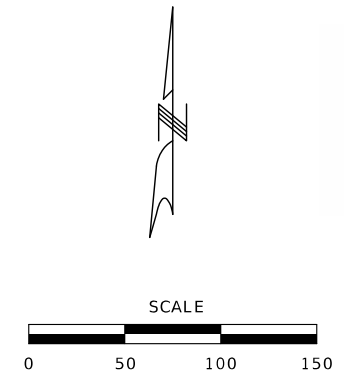
TEMPORARY TRAFFIC CONTROL CONTINUED FROM 48TH ST.



3800'  
95 DEVICES AT 40' SPACING

500'  
25 DEVICES AT 25' SPACING

870' THROUGH CROSSOVER  
16 DEVICES AT 120' SPACING



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 24

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

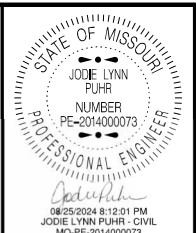
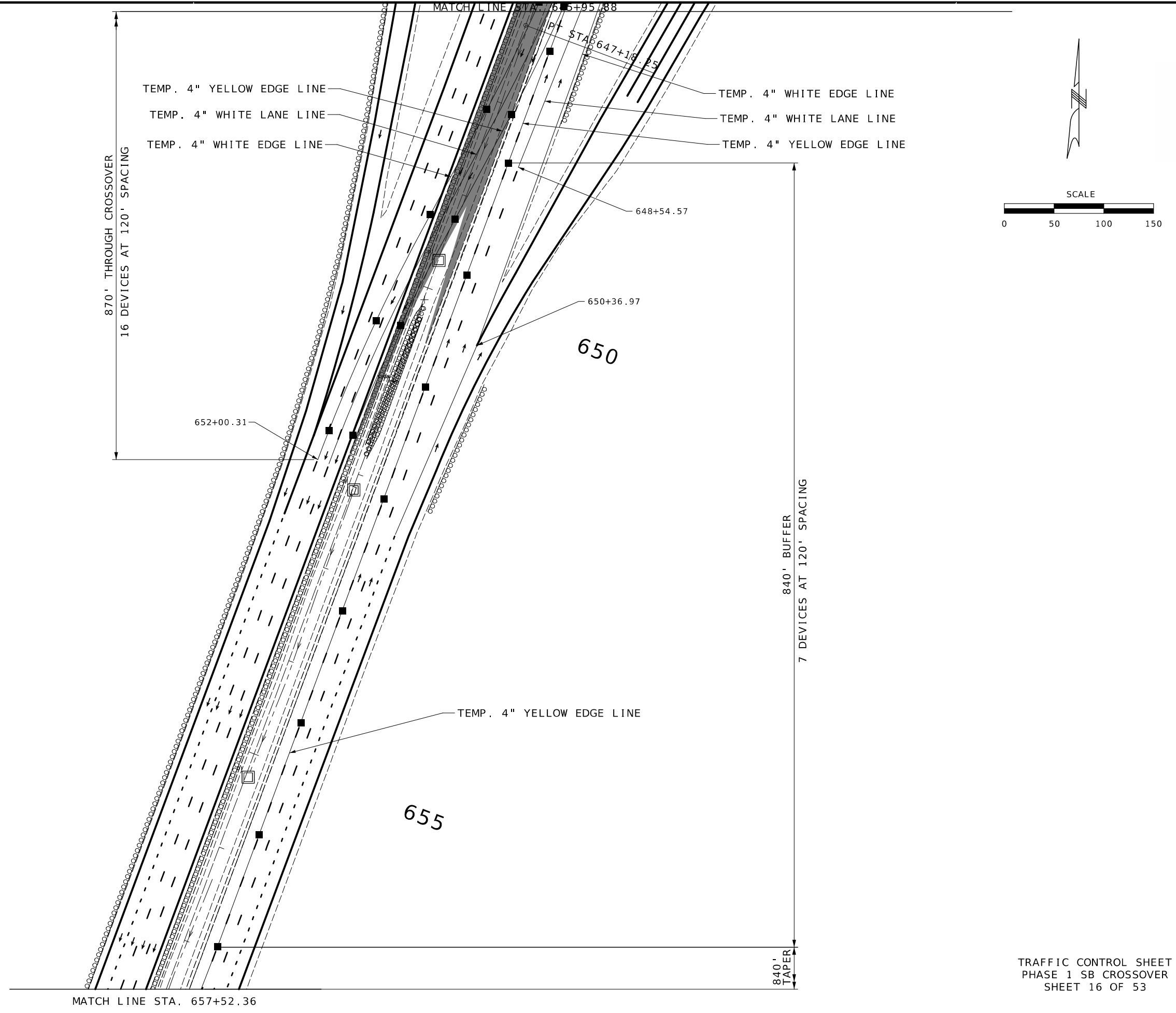
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 15 OF 53



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 25

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

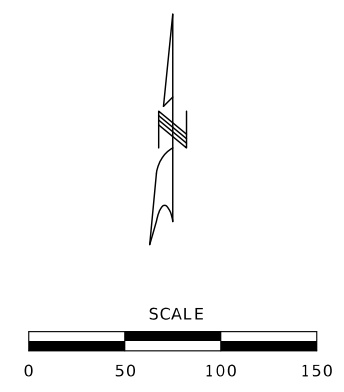
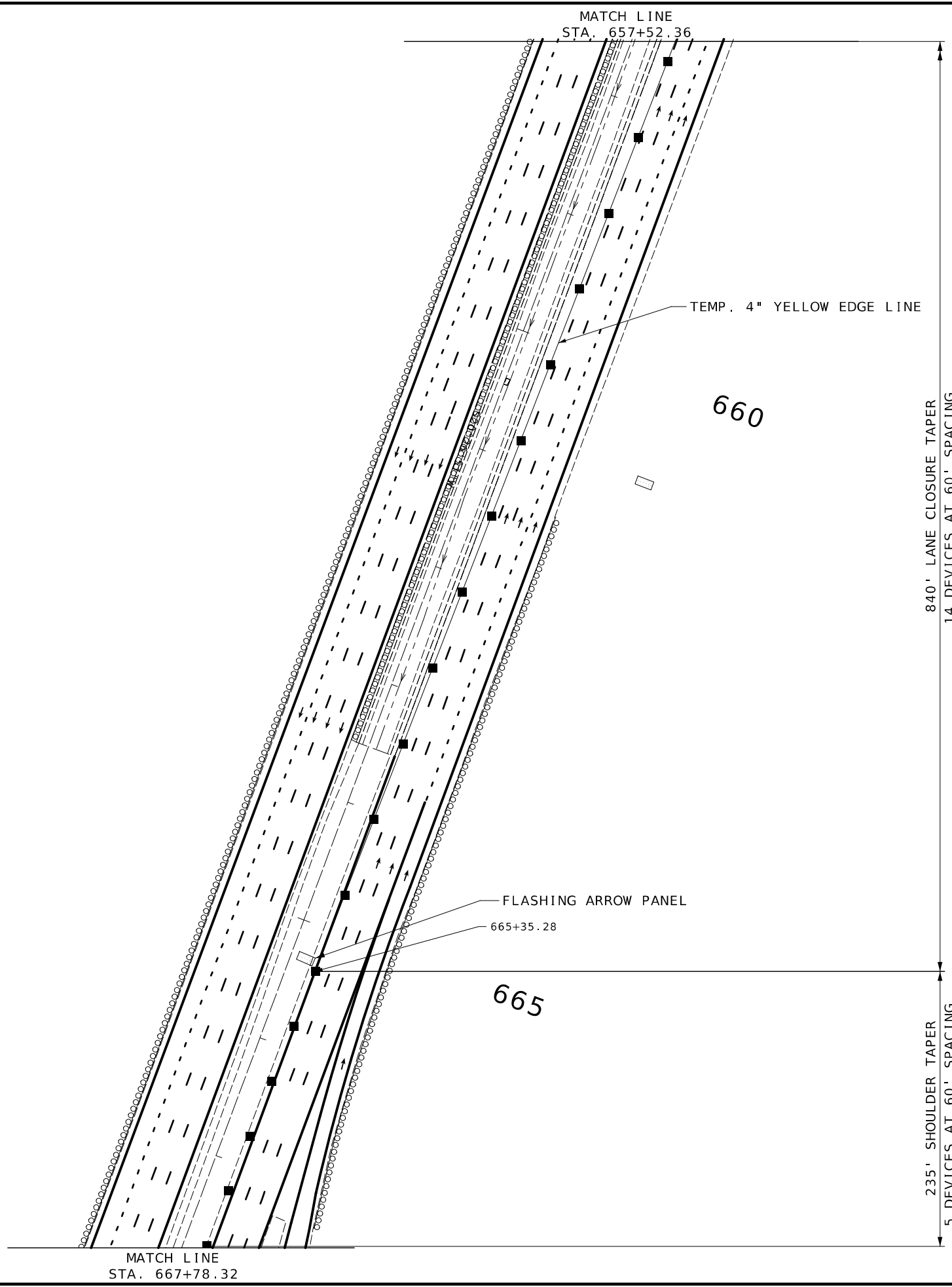
PROJECT NO.

BRIDGE NO.

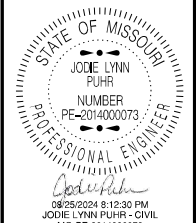
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



TRAFFIC CONTROL SHEET  
 PHASE 1 SB CROSSOVER  
 SHEET 17 OF 53



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>26</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
 COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)



R2-1

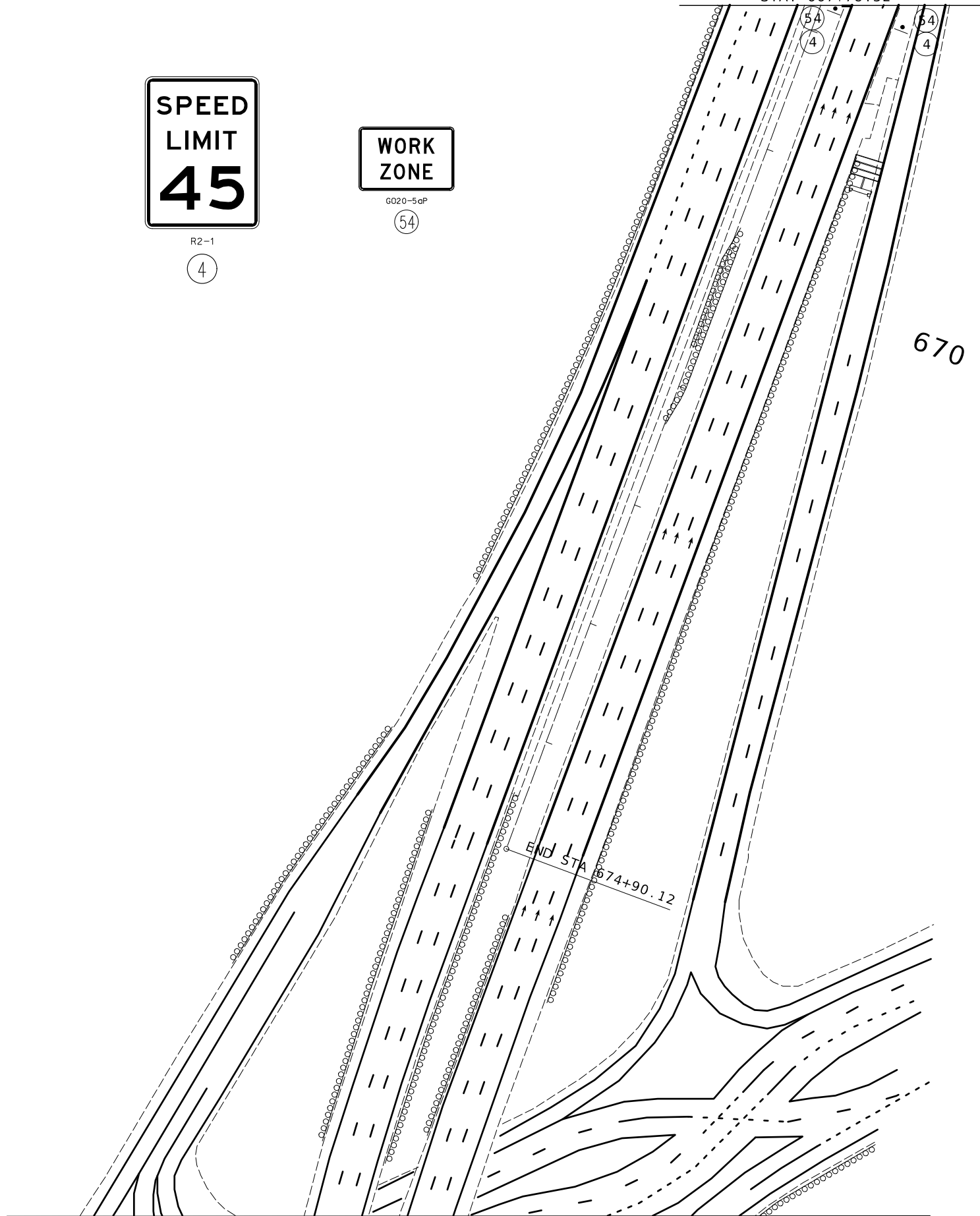
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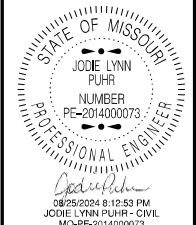
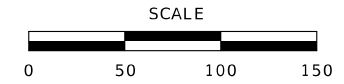
G020-5aP

54

MATCH LINE  
STA. 667+78.32



MATCH LINE  
SB LOG MILE 35.066



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 27

COUNTY  
CLAY

JOB NO.  
J4P3468


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

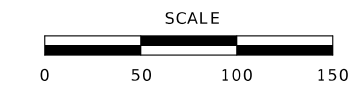
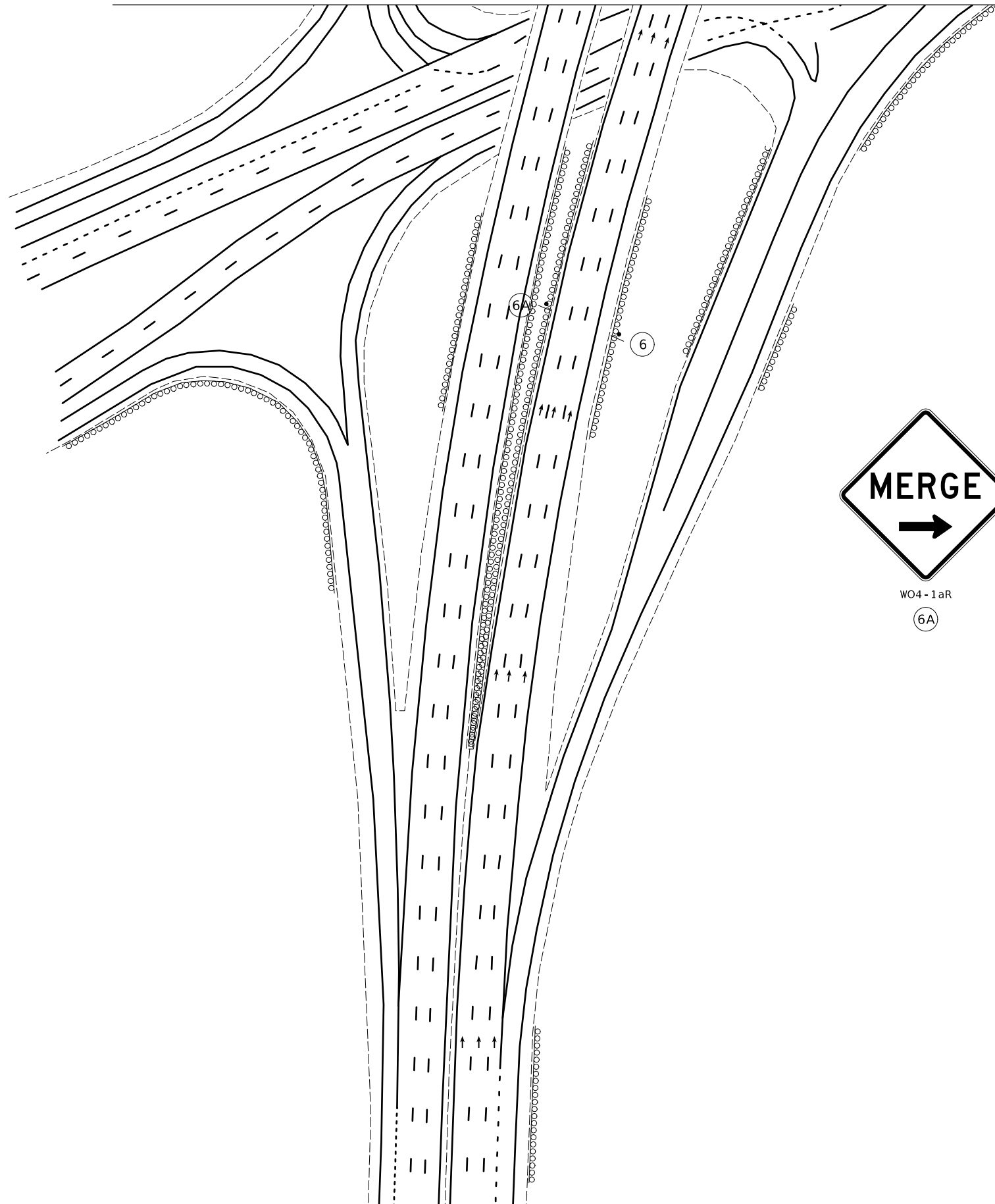
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

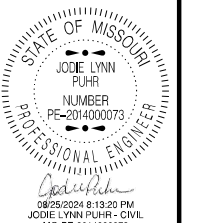
TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 18 OF 53

MATCH LINE  
SB LOG MILE 35.066



MATCH LINE  
SB LOG MILE 35.246


TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 19 OF 53



DATE PREPARED	
8/21/2024	
ROUTE	STATE
435	MO
DISTRICT	SHEET NO.
KC	28
COUNTY	
CLAY	
JOB NO.	
J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

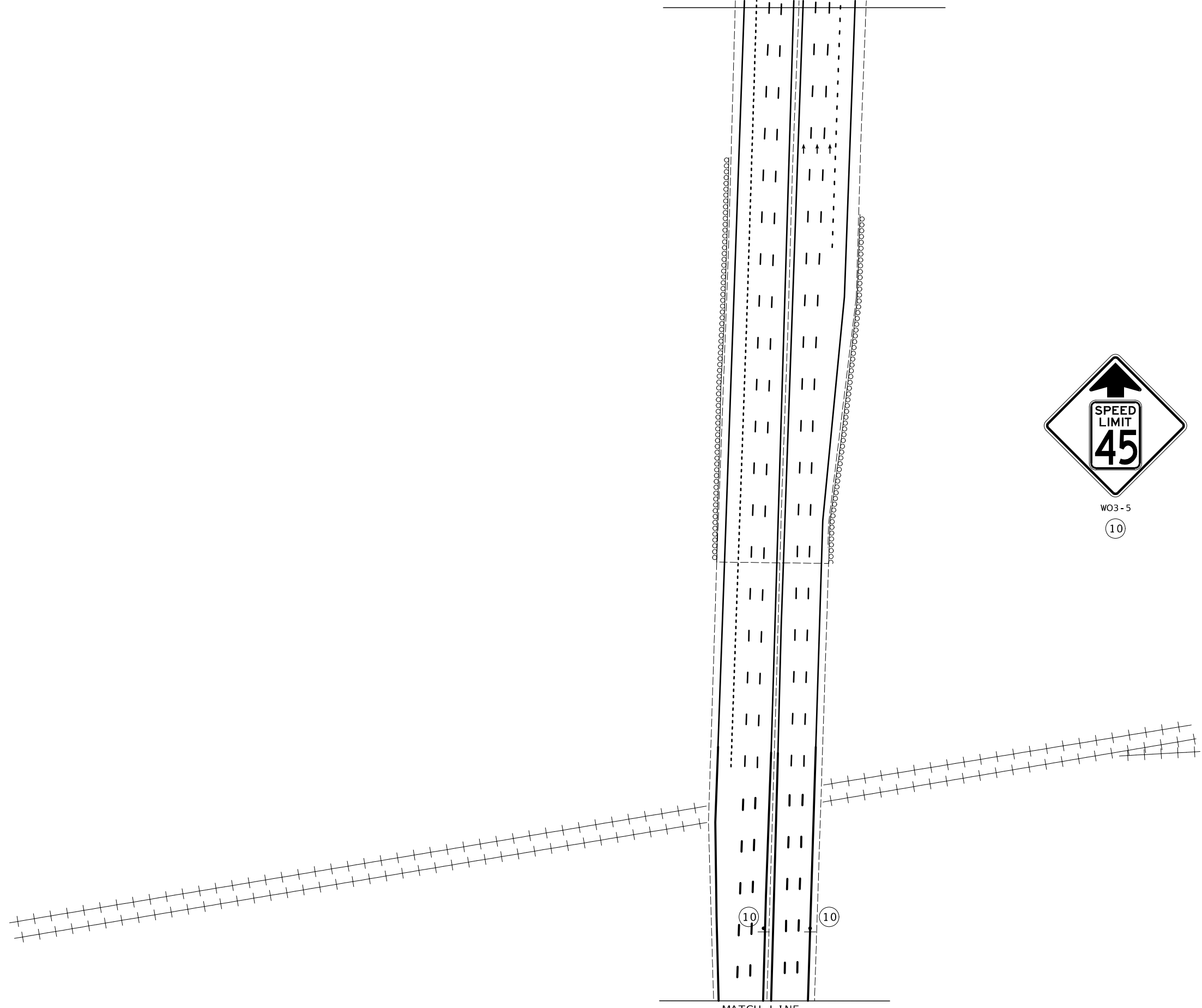
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

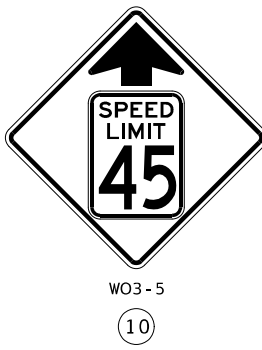
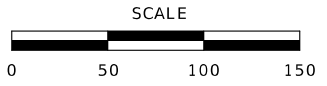


105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

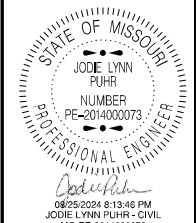
MATCH LINE  
SB LOG MILE 35.246



MATCH LINE  
SB LOG MILE 35.411



TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 20 OF 53



DATE PREPARED  
**8/21/2024**

ROUTE	STATE
<b>435</b>	<b>MO</b>
DISTRICT	SHEET NO.
<b>KC</b>	<b>29</b>
COUNTY	
<b>CLAY</b>	
JOB NO.	
<b>J4P3468</b>	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

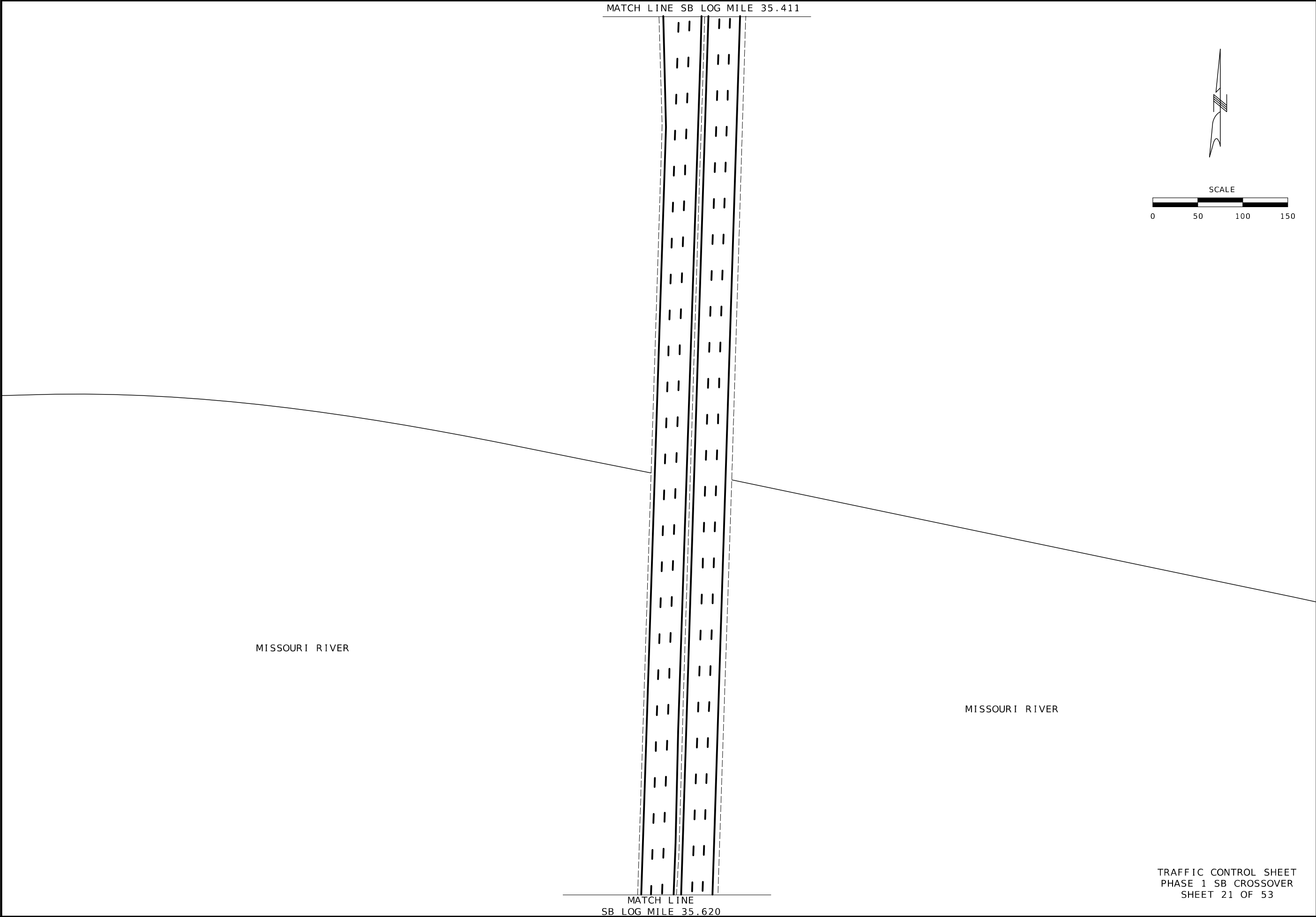
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

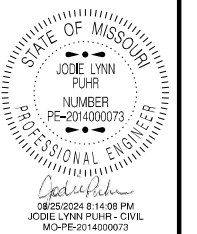
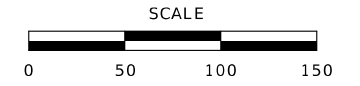
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



MATCH LINE SB LOG MILE 35.411



MATCH LINE  
SB LOG MILE 35.620



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 30

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

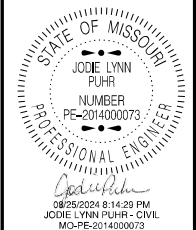
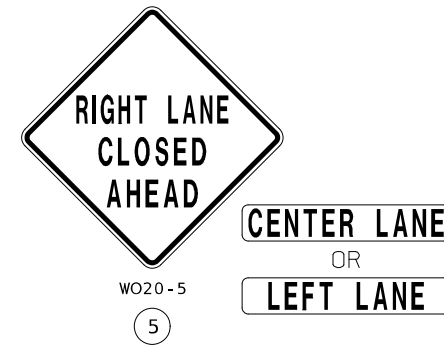
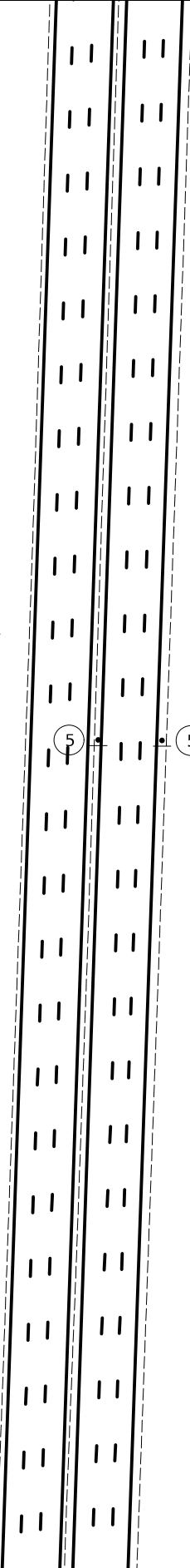
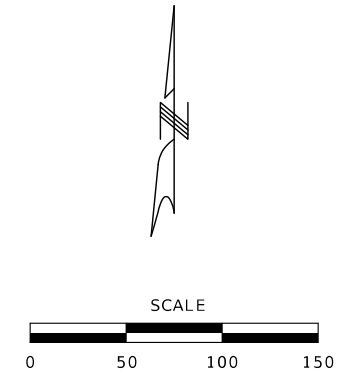
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 21 OF 53

MISSOURI RIVER

MISSOURI RIVER



DATE PREPARED  
8/21/2024

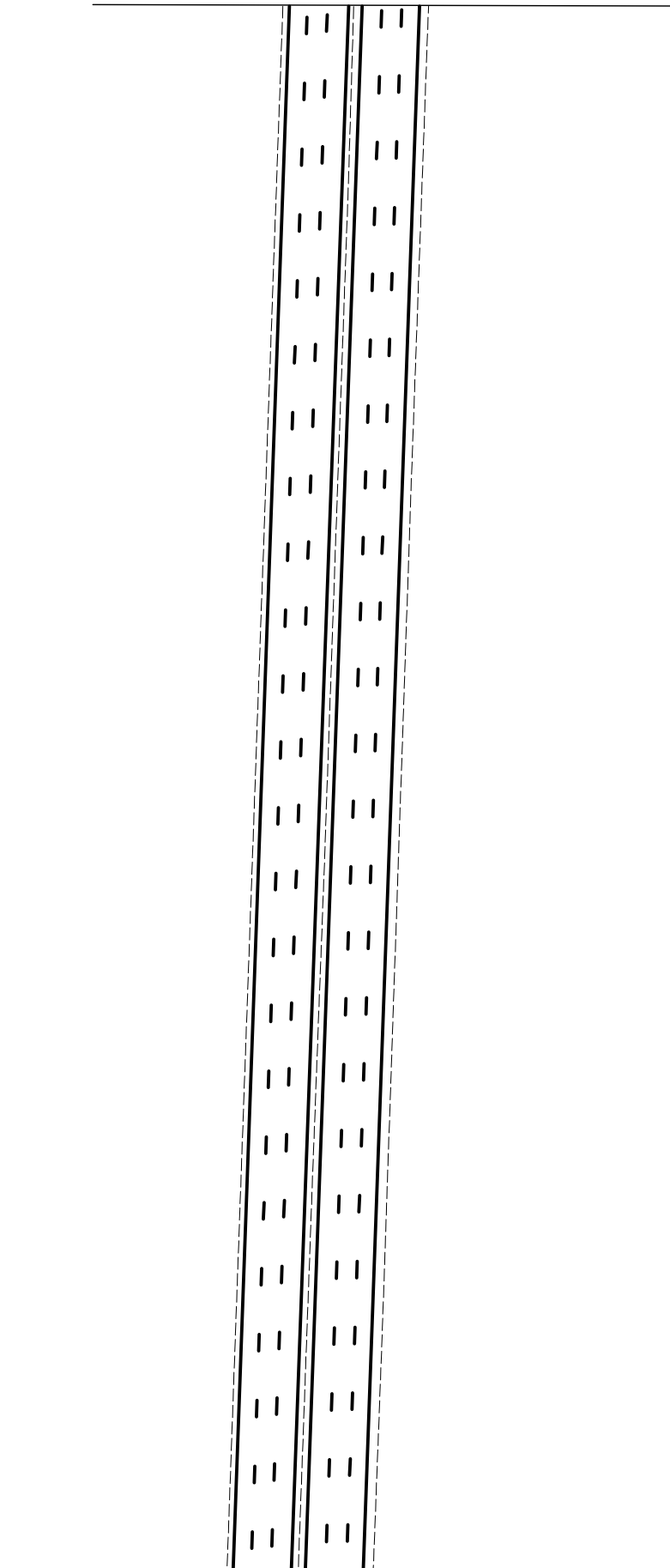
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 31
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

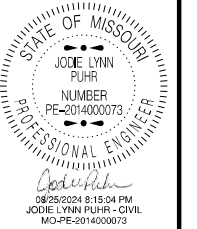
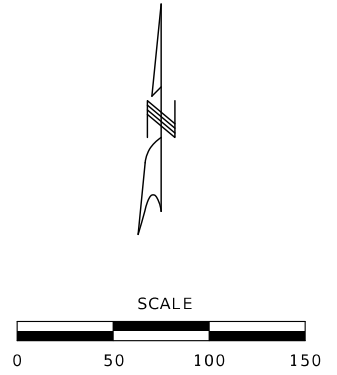
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MATCH LINE  
SB LOG MILE 35.808



MATCH LINE  
SB LOG MILE 35.989



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>32</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



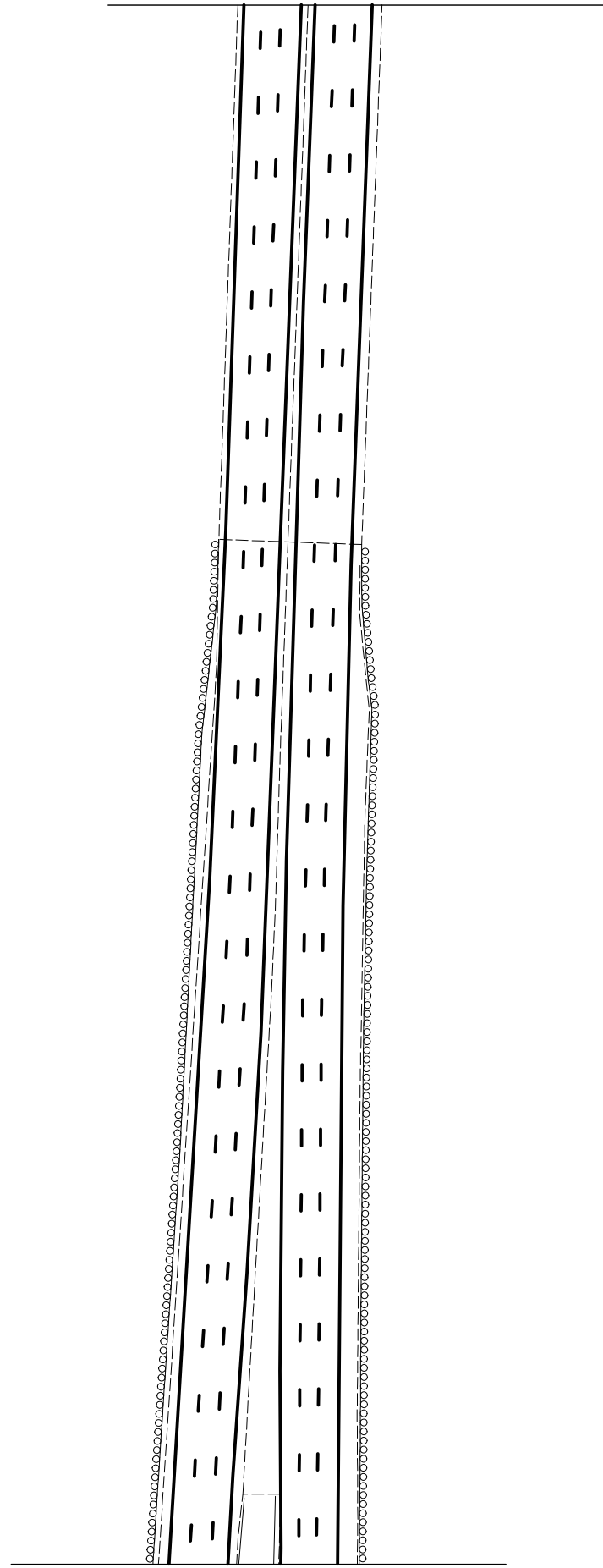
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 23 OF 53

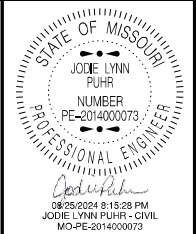
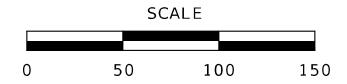


DATE PREPARED  
8/21/2024 8:13:29 PM  
JODIE LYNN PUHR - CIVIL  
MO-PE-2014000073

MATCH LINE  
SB LOG MILE 35.989



MATCH LINE  
SB LOG MILE 36.276



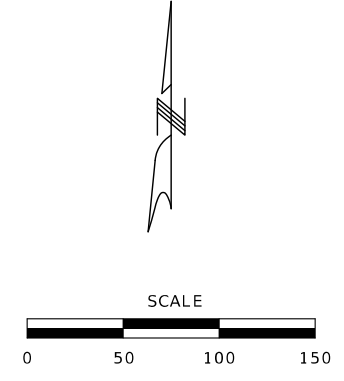
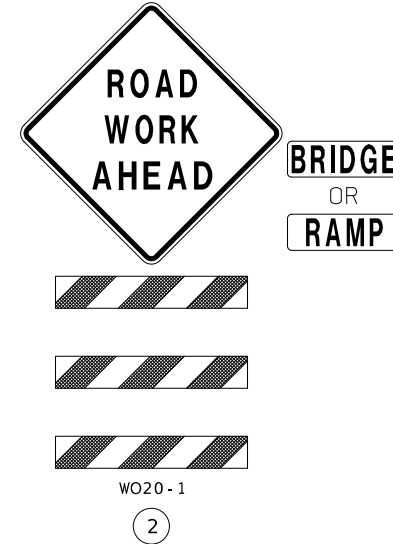
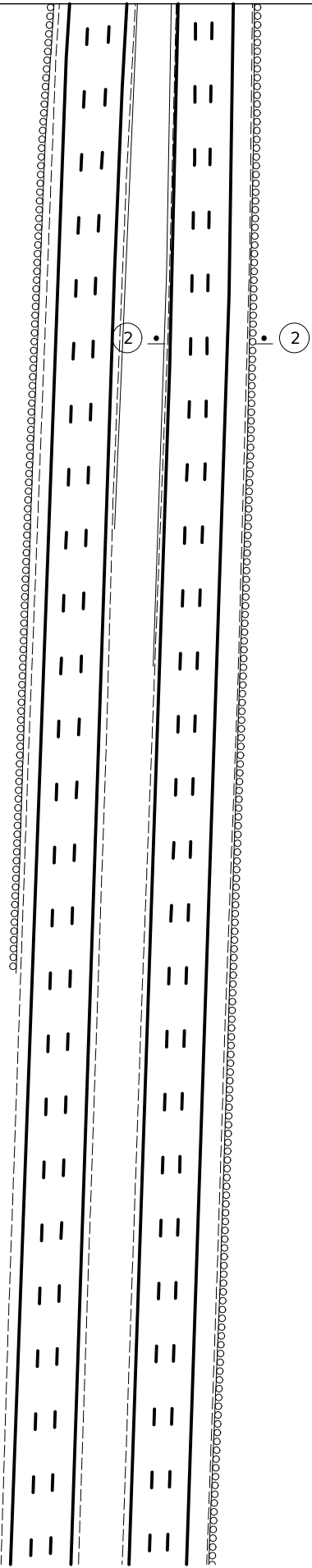
DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 33  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



TRAFFIC CONTROL SHEET  
PHASE 1 SB CROSSOVER  
SHEET 24 OF 53



STATE OF MISSOURI  
JOE LYNN PÜHR  
NUMBER  
PE-2014000073  
PROFESSIONAL ENGINEER  
DATE PREPARED  
8/21/2024

ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 34  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.

PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)  
MoDOT

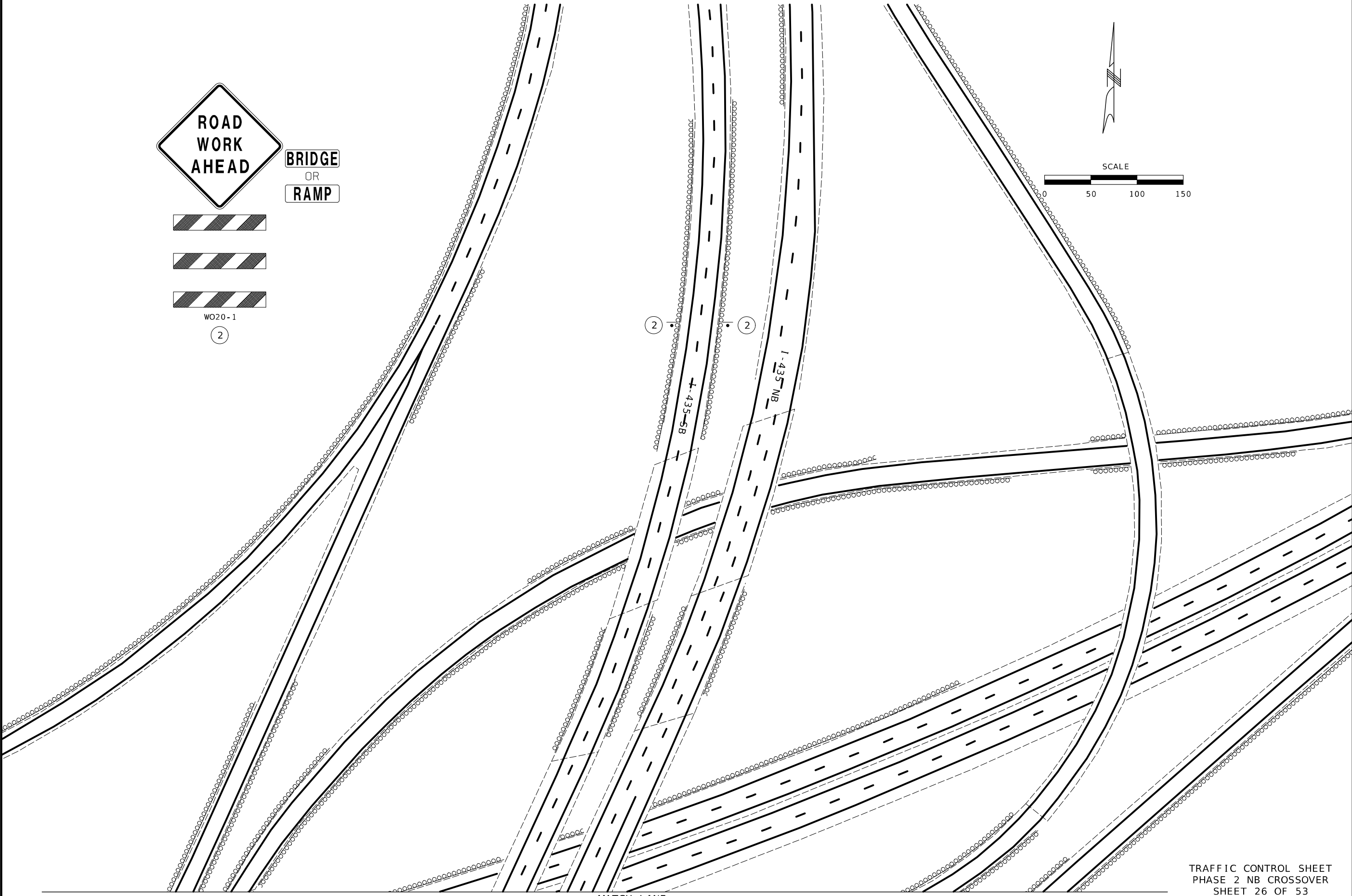
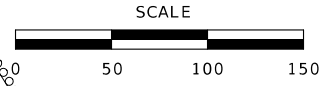


BRIDGE  
OR  
RAMP



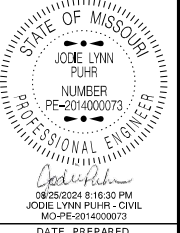
WO20-1

2



MATCH LINE  
SB LOG MILE 31.755

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 26 OF 53

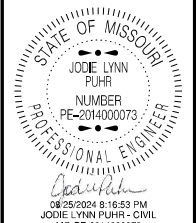
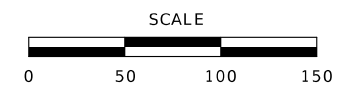
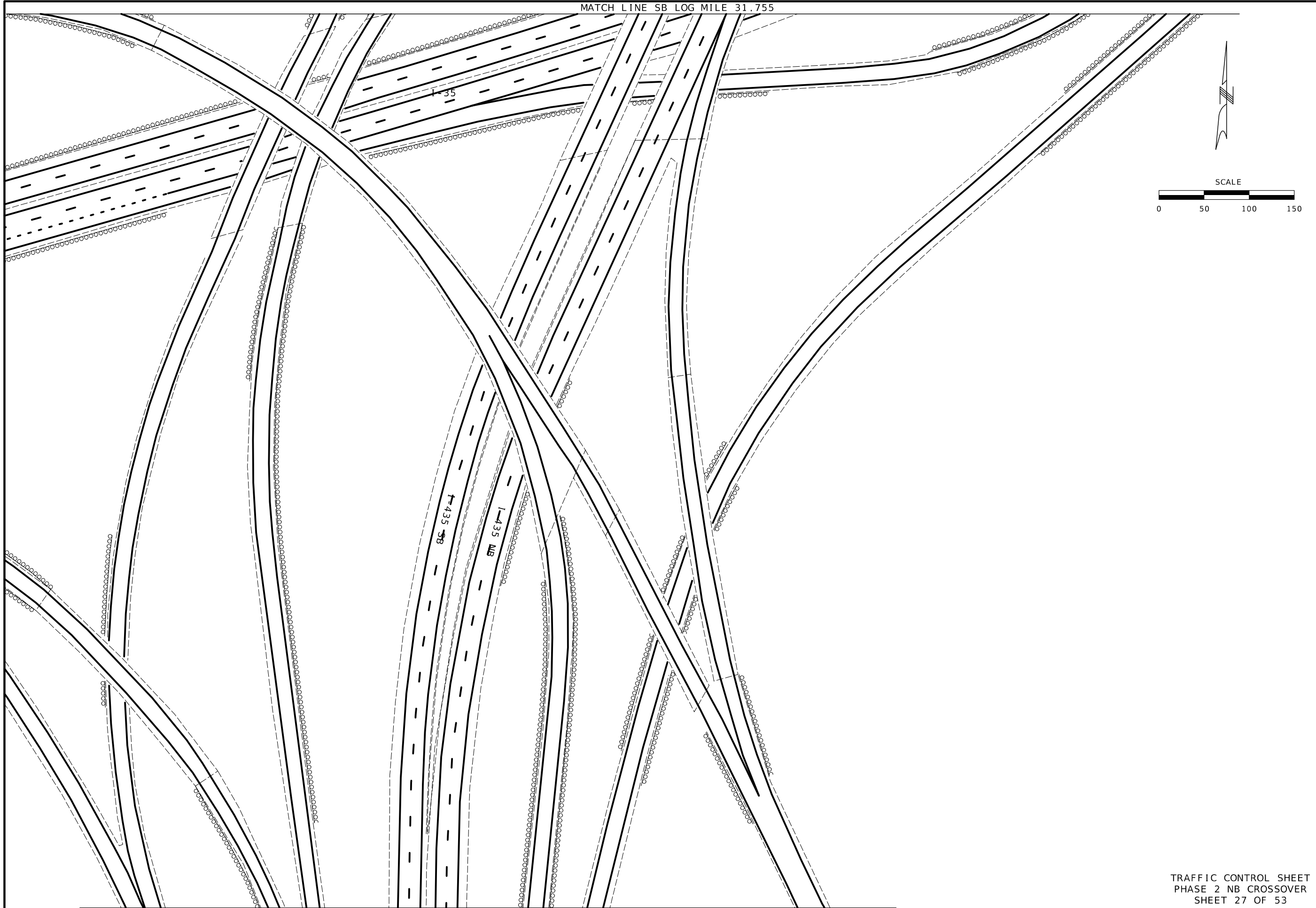


DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 35  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION  
**MoDOT**  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MATCH LINE SB LOG MILE 31.755



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 36

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

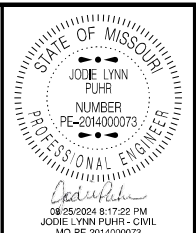
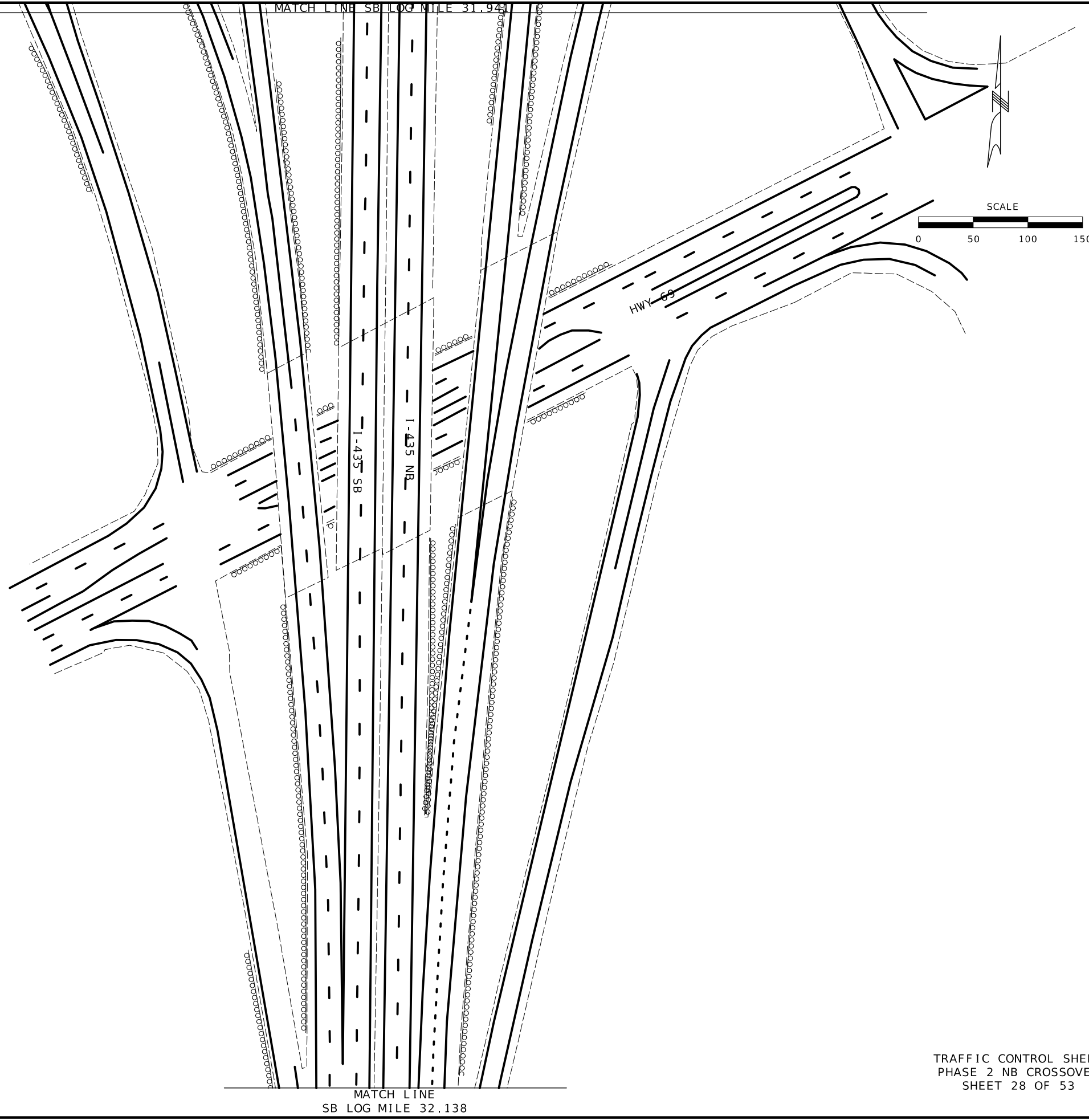
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 27 OF 53

MATCH LINE SB LOG MILE 31.941



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>37</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

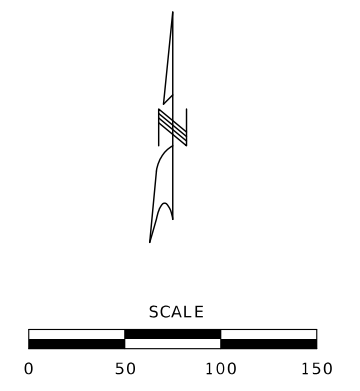
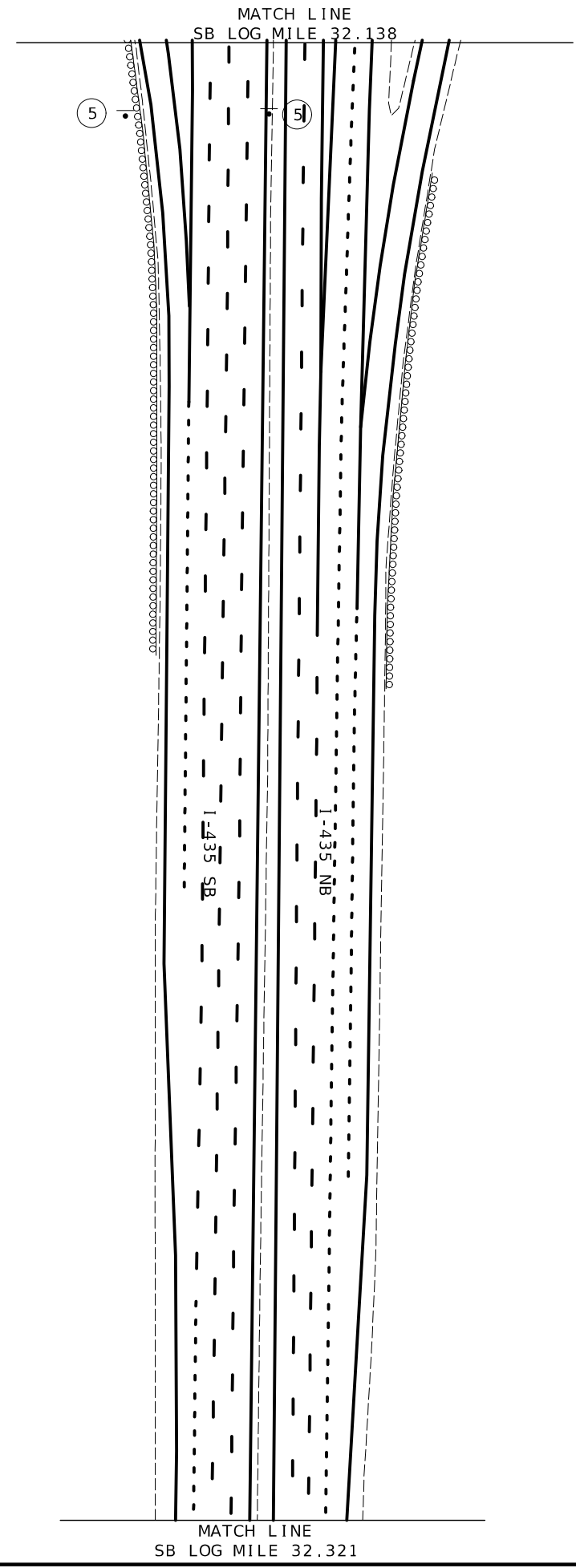
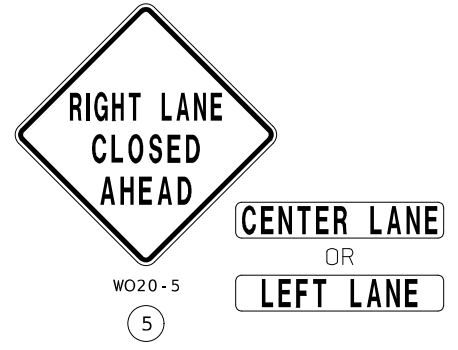


105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)

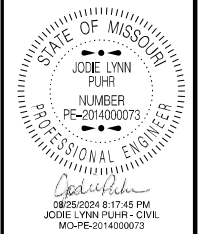
TRAFFIC CONTROL SHEET  
 PHASE 2 NB CROSSOVER  
 SHEET 28 OF 53

MATCH LINE  
 SB LOG MILE 32.138





TRAFFIC CONTROL SHEET  
 PHASE 2 NB CROSSOVER  
 SHEET 29 OF 53



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>38</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

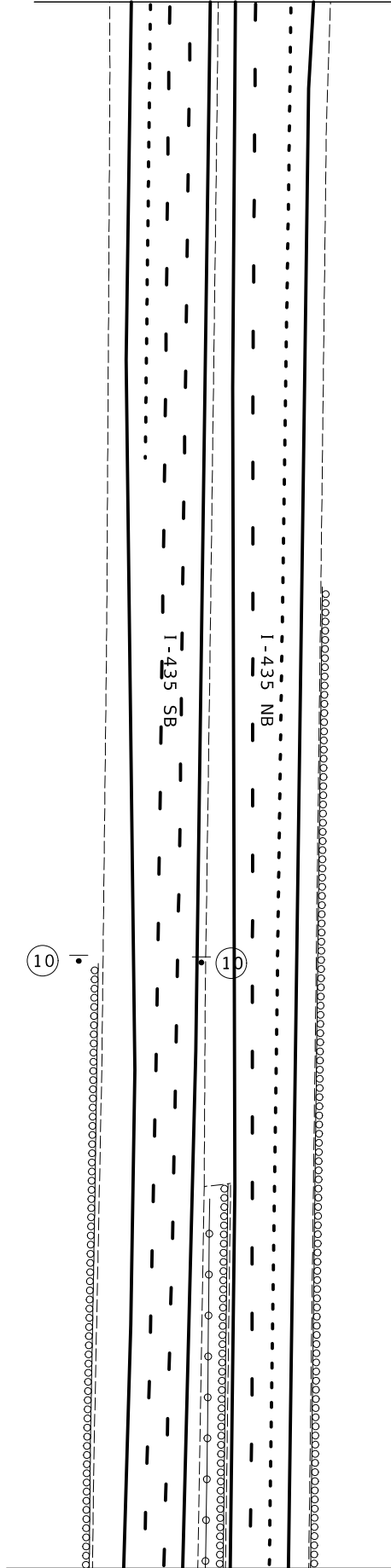
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

MATCH LINE  
SB LOG MILE 32.321



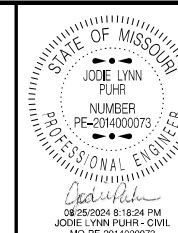
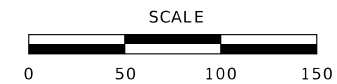
MATCH LINE  
SB LOG MILE 32.503



W03-5

10

MATCH LINE  
STA. 667+00.00



DATE PREPARED  
8/21/2024

ROUTE STATE  
435 MO

DISTRICT SHEET NO.  
KC 39

COUNTY  
CLAY

JOB NO.  
J4P3468


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

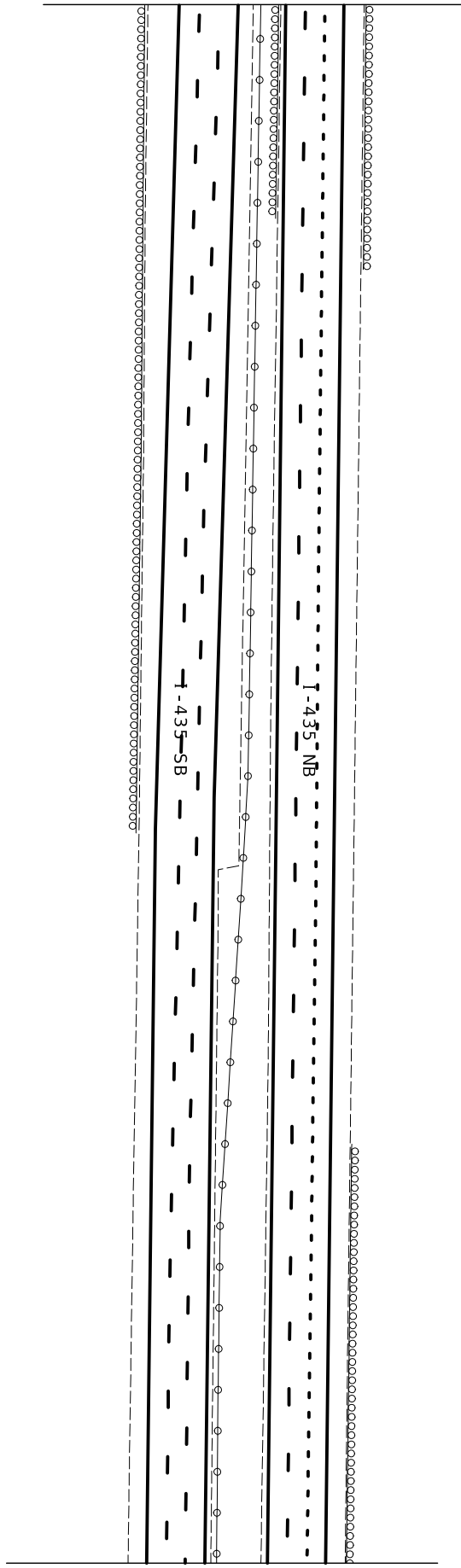
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



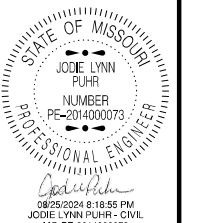
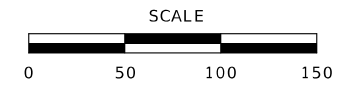
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 30 OF 53

MATCH LINE  
SB LOG MILE 32.503



MATCH LINE  
SB LOG MILE 32.681



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 40

COUNTY  
CLAY  
JOB NO.  
J4P3468  
CONTRACT ID.  
  
PROJECT NO.  
  
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 31 OF 53

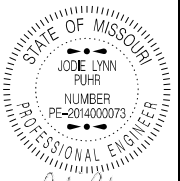
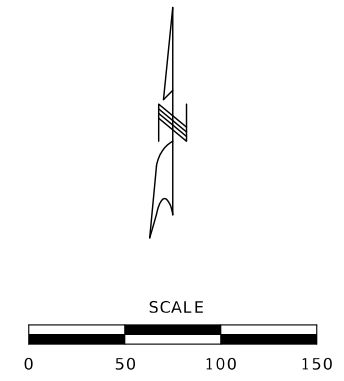
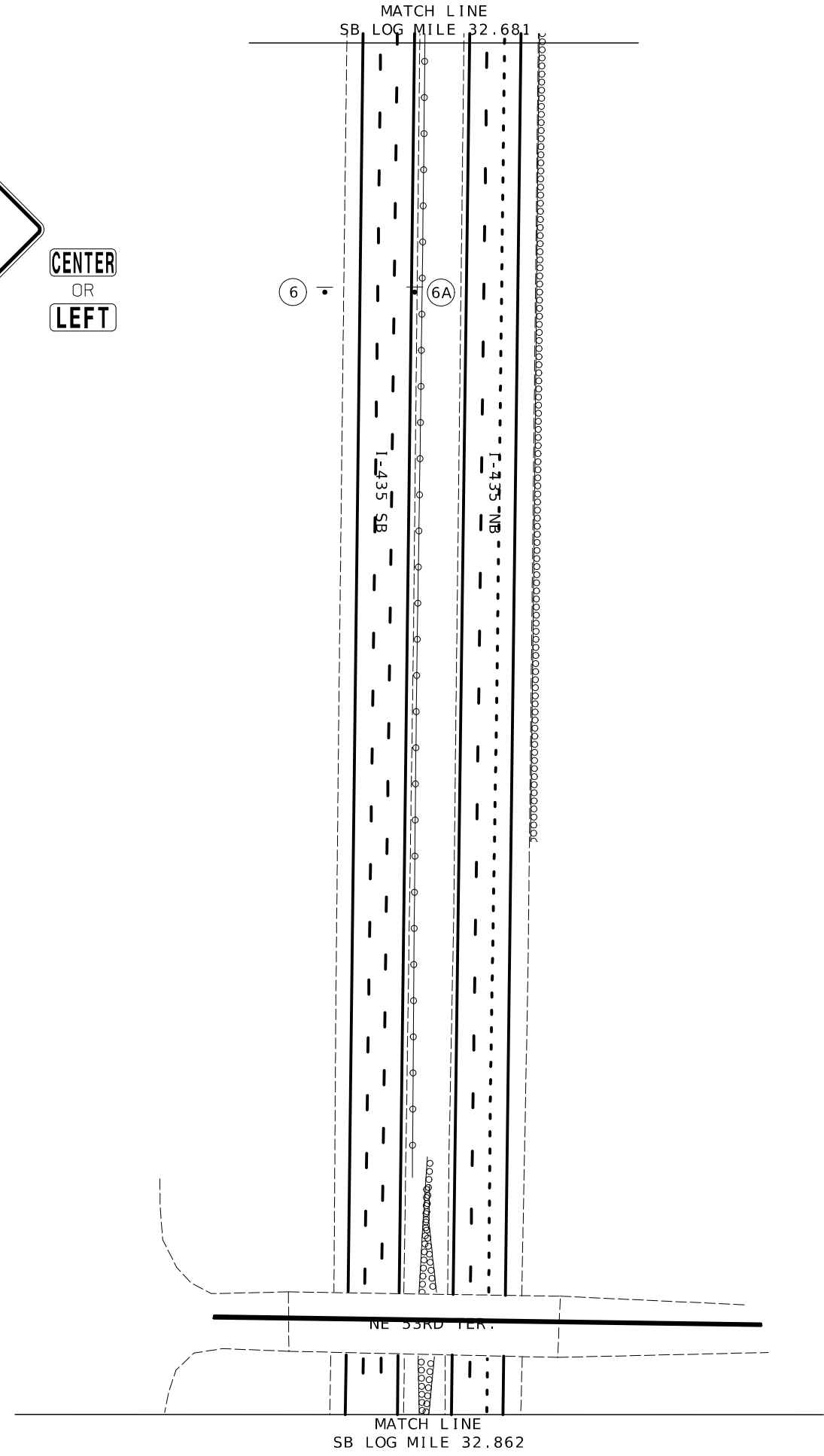


W04-1aR  
6A



W020-6a  
6

CENTER  
OR  
LEFT



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 41

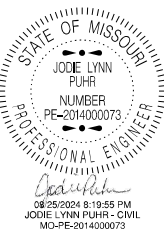
COUNTY  
CLAY  
JOB NO.  
J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

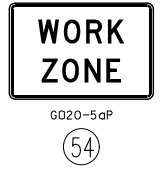
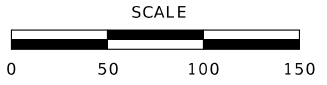
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MATCH LINE  
SB LOG MILE 32.862



DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 42
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	



840' LANE CLOSURE TAPER  
14 DEVICES AT 60' SPACING

235' SHOULDER TAPER  
5 DEVICES AT 60' SPACING

(54)  
(4)

(54)  
(4)

START STA 565+00.00

565

MATCH LINE  
STA. 580+50.00

568+96.83

TEMP. 4" YELLOW EDGE LINE

570

1-435 SB

1-435 NB

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- ◫ SIGN (DOUBLE SIDED)
- ◻ FLASHING ARROW PANEL
- CHANNELIZER
- ◆ TUBULAR MARKER
- E BARRICADE
- ◻ CHANGEABLE MESSAGE BOARD

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

MATCH LINE STA. 571+50.00

840' LANE CLOSURE TAPER  
14 DEVICES AT 60' SPACING

840' BUFFER  
7 DEVICES AT 120' SPACING

1-435 SB

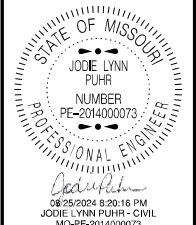
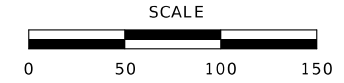
1-435 NB

TEMP. 4" YELLOW EDGE LINE

575

580

MATCH LINE  
STA. 581+33.00



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 43

COUNTY  
CLAY

JOB NO.  
J4P3468


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

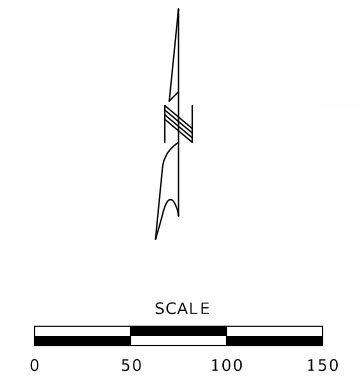
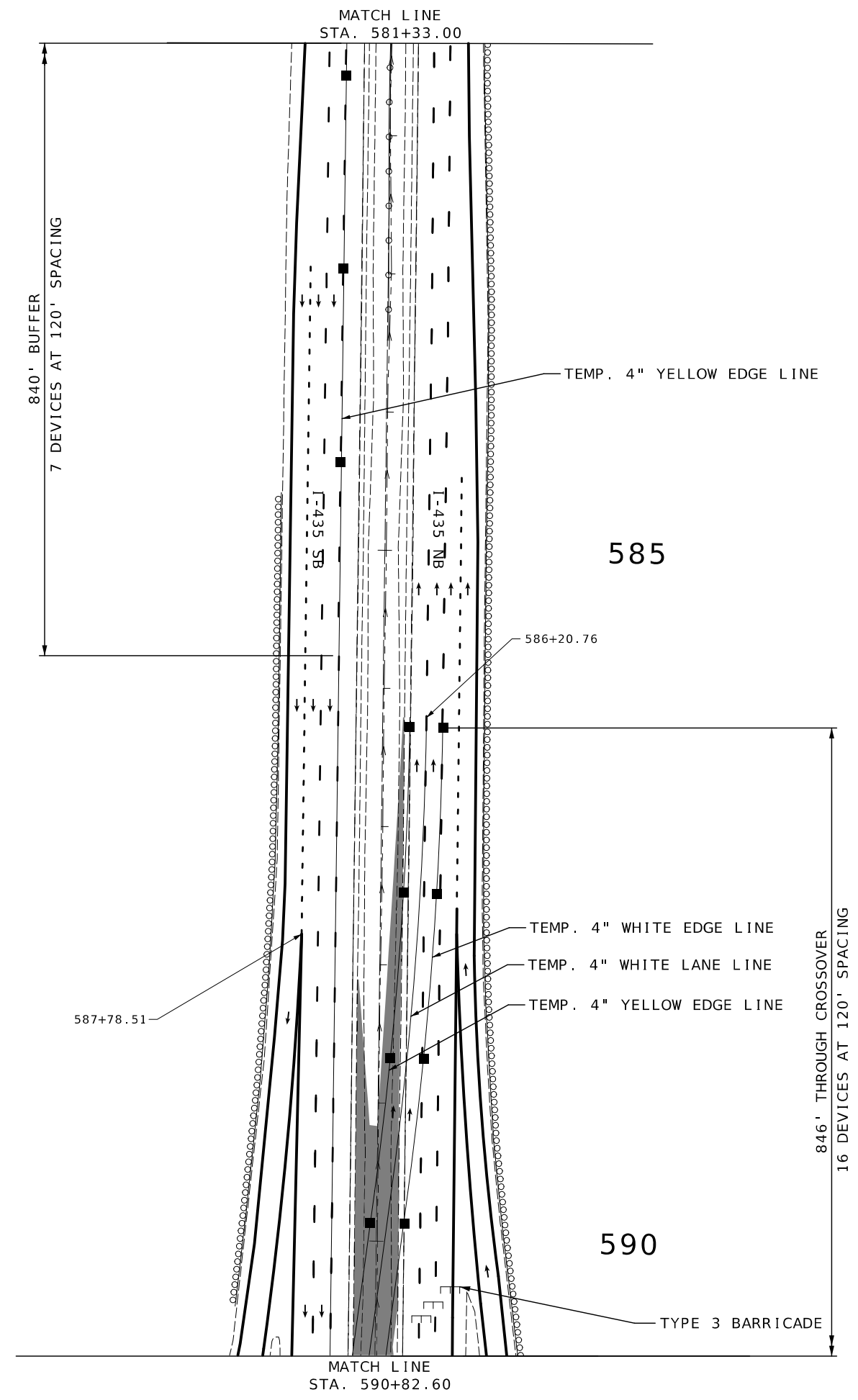
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

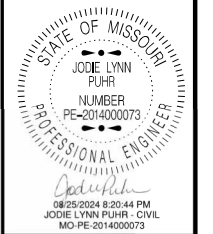


105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 34 OF 53




TRAFFIC CONTROL SHEET  
 PHASE 2 NB CROSSOVER  
 SHEET 35 OF 53



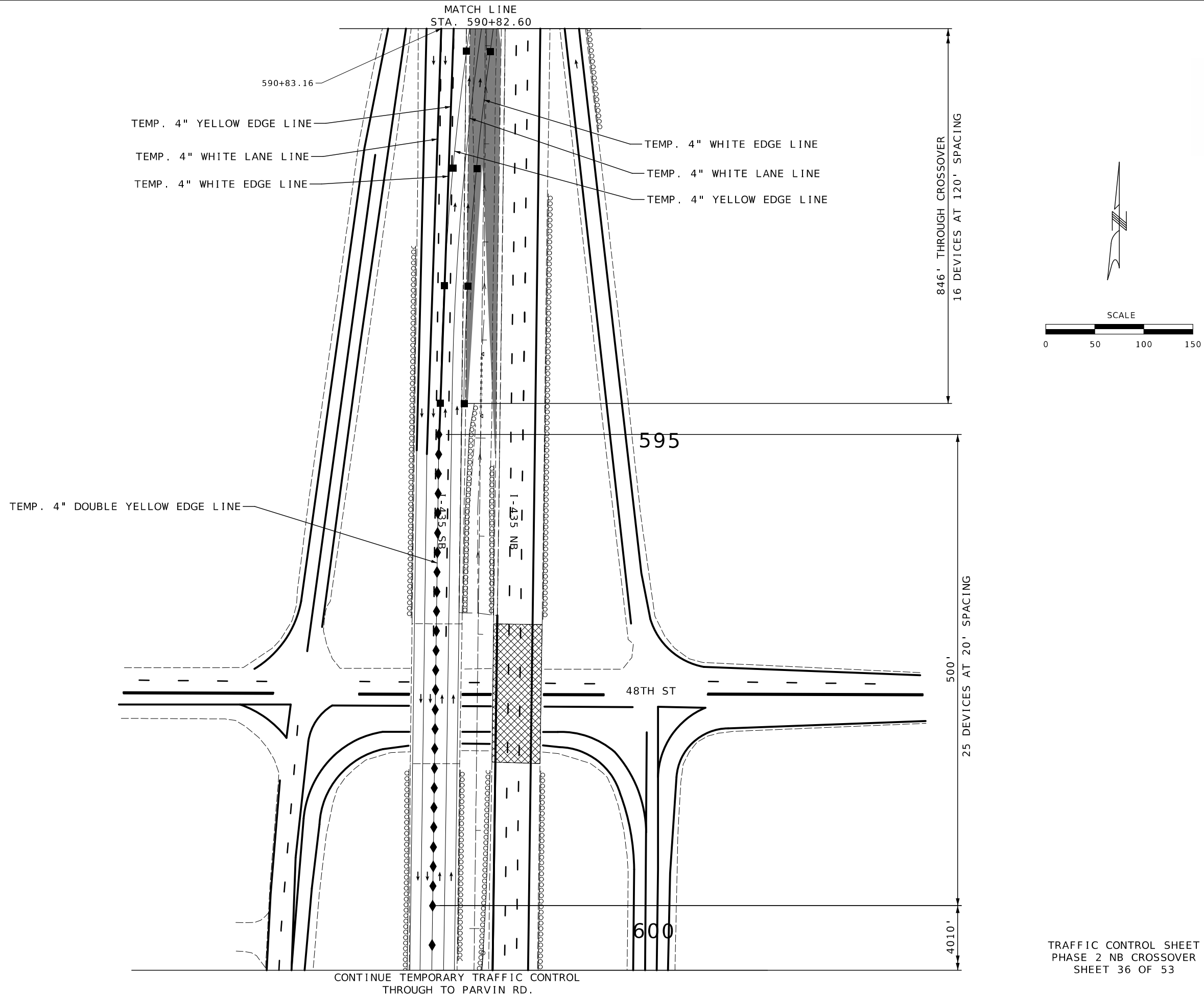
DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 44
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
 COMMISSION



105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)



TRAFFIC CONTROL SHEET  
 PHASE 2 NB CROSSOVER  
 SHEET 36 OF 53



DATE PREPARED  
 8/21/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 45

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

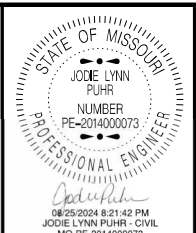
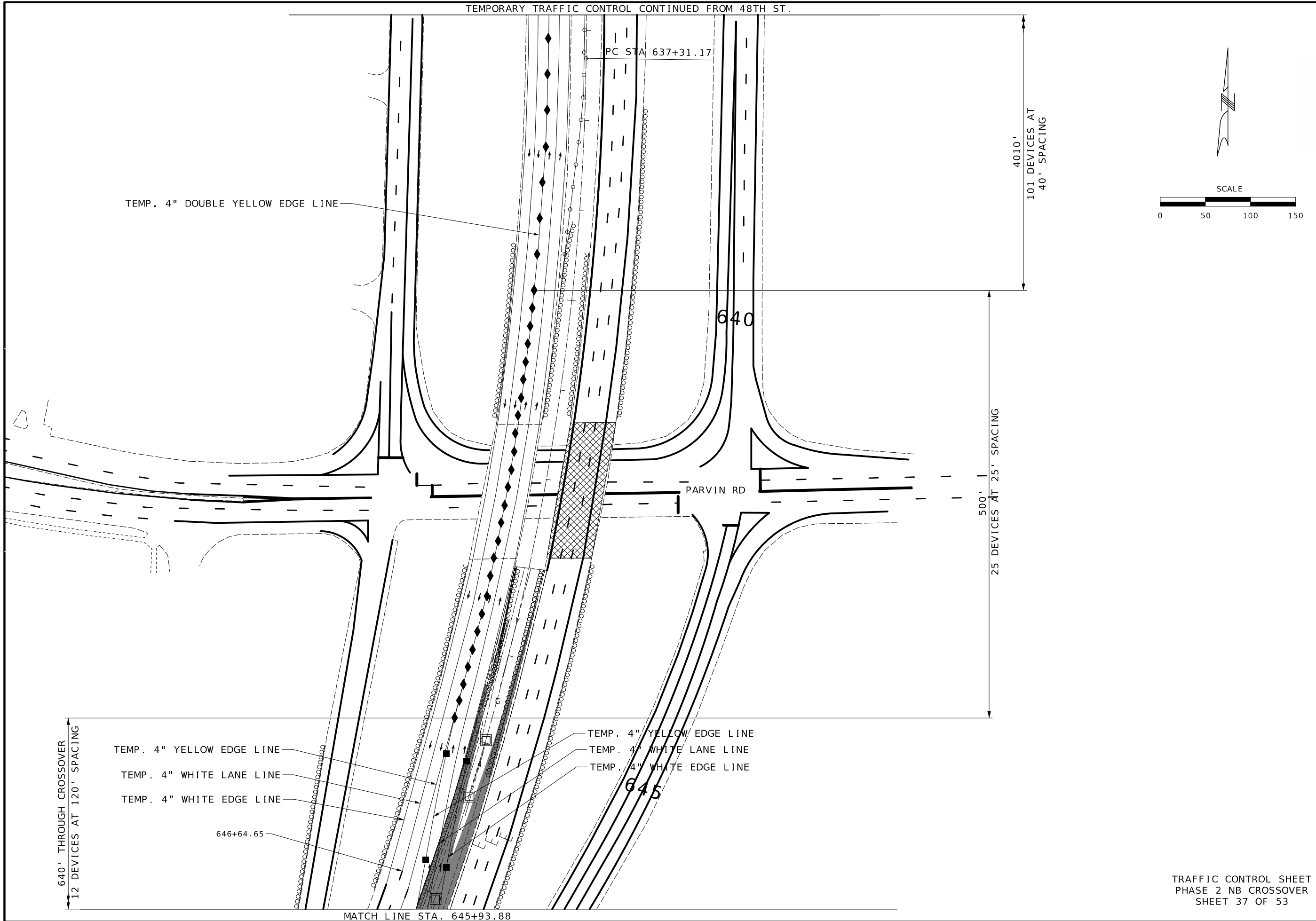
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION





TEMPORARY TRAFFIC CONTROL CONTINUED FROM 48TH ST.



DATE PREPARED  
8/21/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 46

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

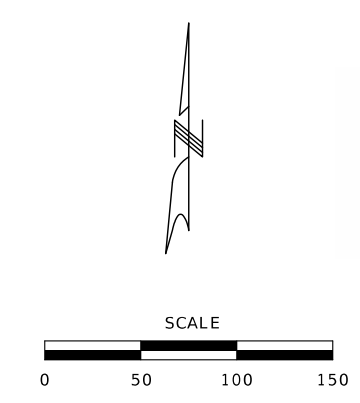
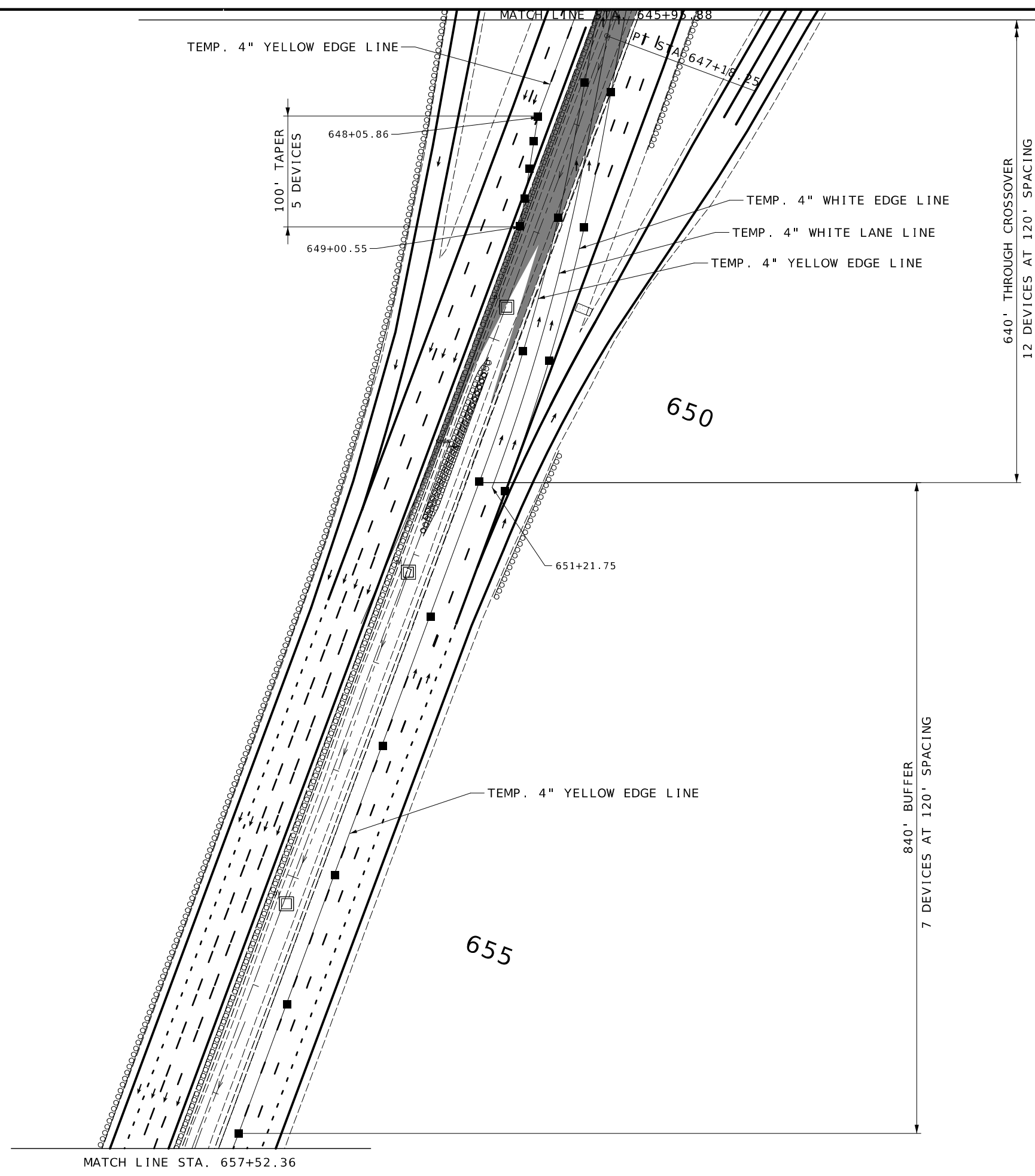
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 37 OF 53



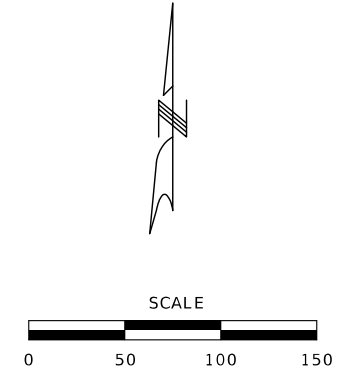
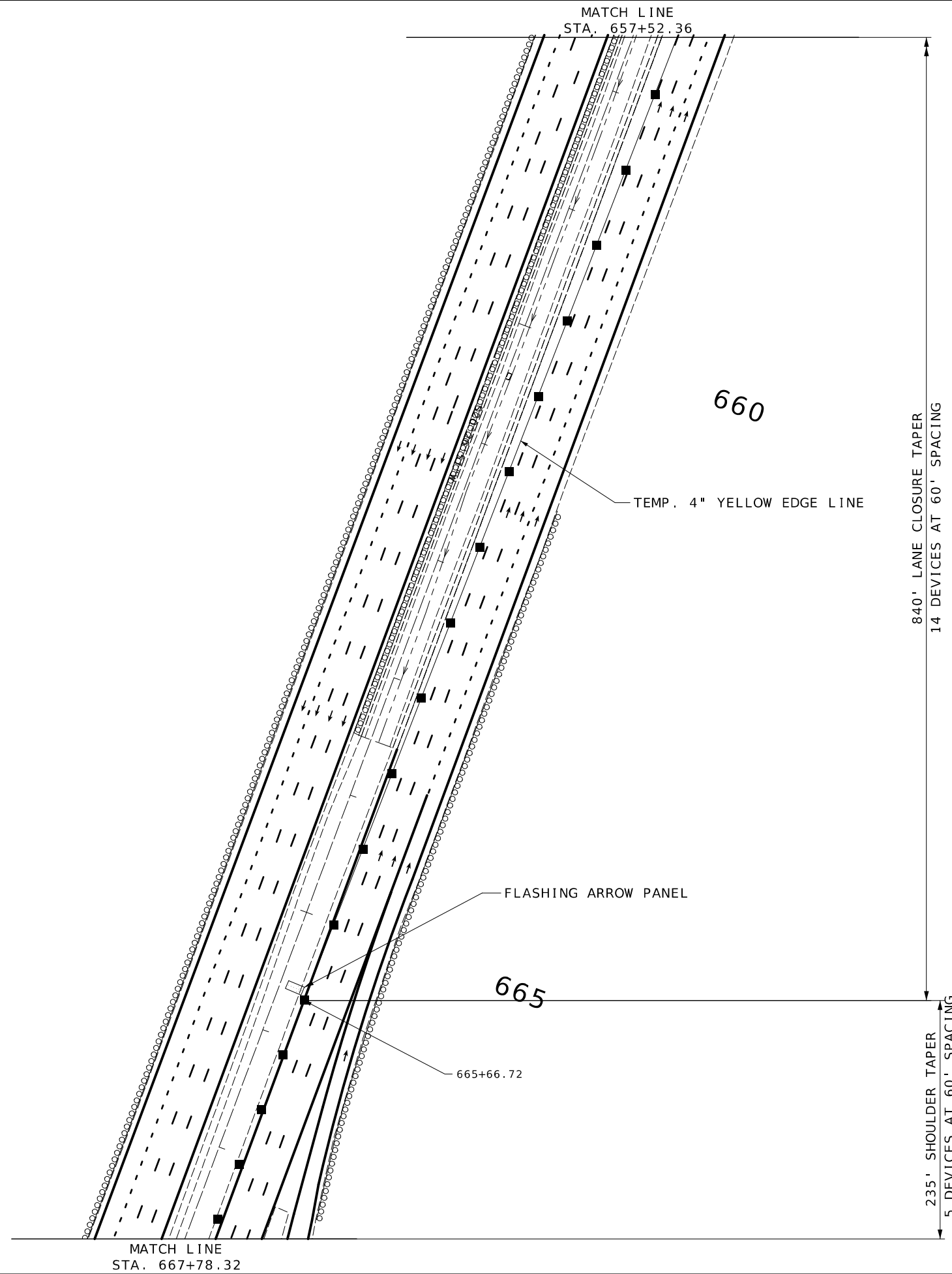
TRAFFIC CONTROL SHEET  
 PHASE 2 NB CROSSOVER  
 SHEET 38 OF 53

STATE OF MISSOURI  
 JOE LYNN FUHR  
 NUMBER PE-2014000073  
 PROFESSIONAL ENGINEER

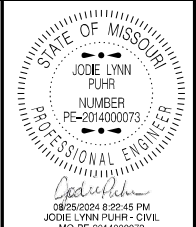
DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 47
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)



TRAFFIC CONTROL SHEET  
 PHASE 2 NB CROSSOVER  
 SHEET 39 OF 53



DATE PREPARED  
 8/21/2024  
 ROUTE 435 STATE MO  
 DISTRICT KC SHEET NO. 48  
 COUNTY CLAY  
 JOB NO. J4P3468  
 CONTRACT ID.  
 PROJECT NO.  
 BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)



R2-1

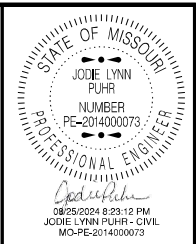
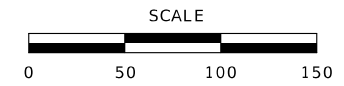
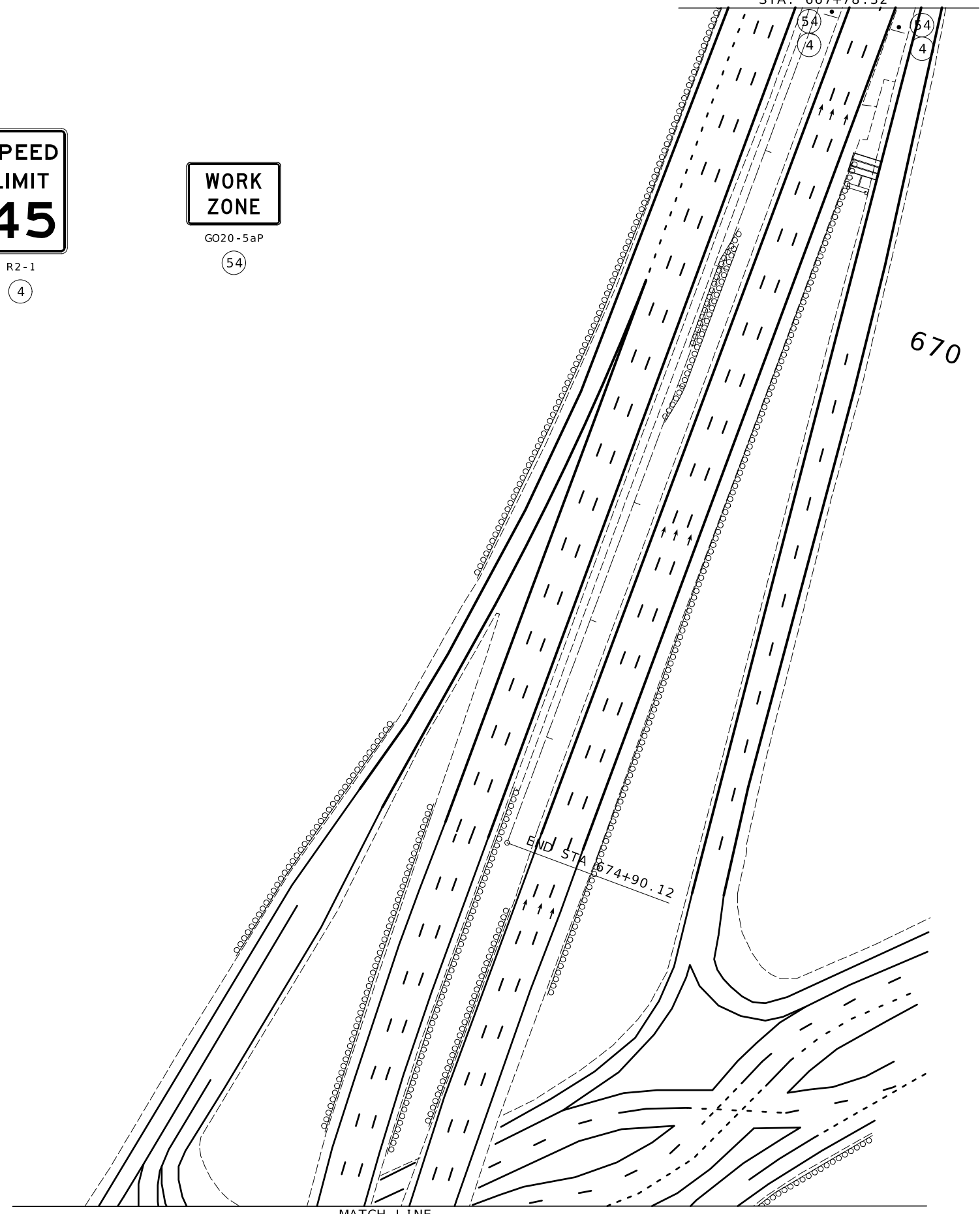
4



GO20-5aP

54

MATCH LINE  
STA. 667+78.32



DATE PREPARED  
8/21/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 49

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

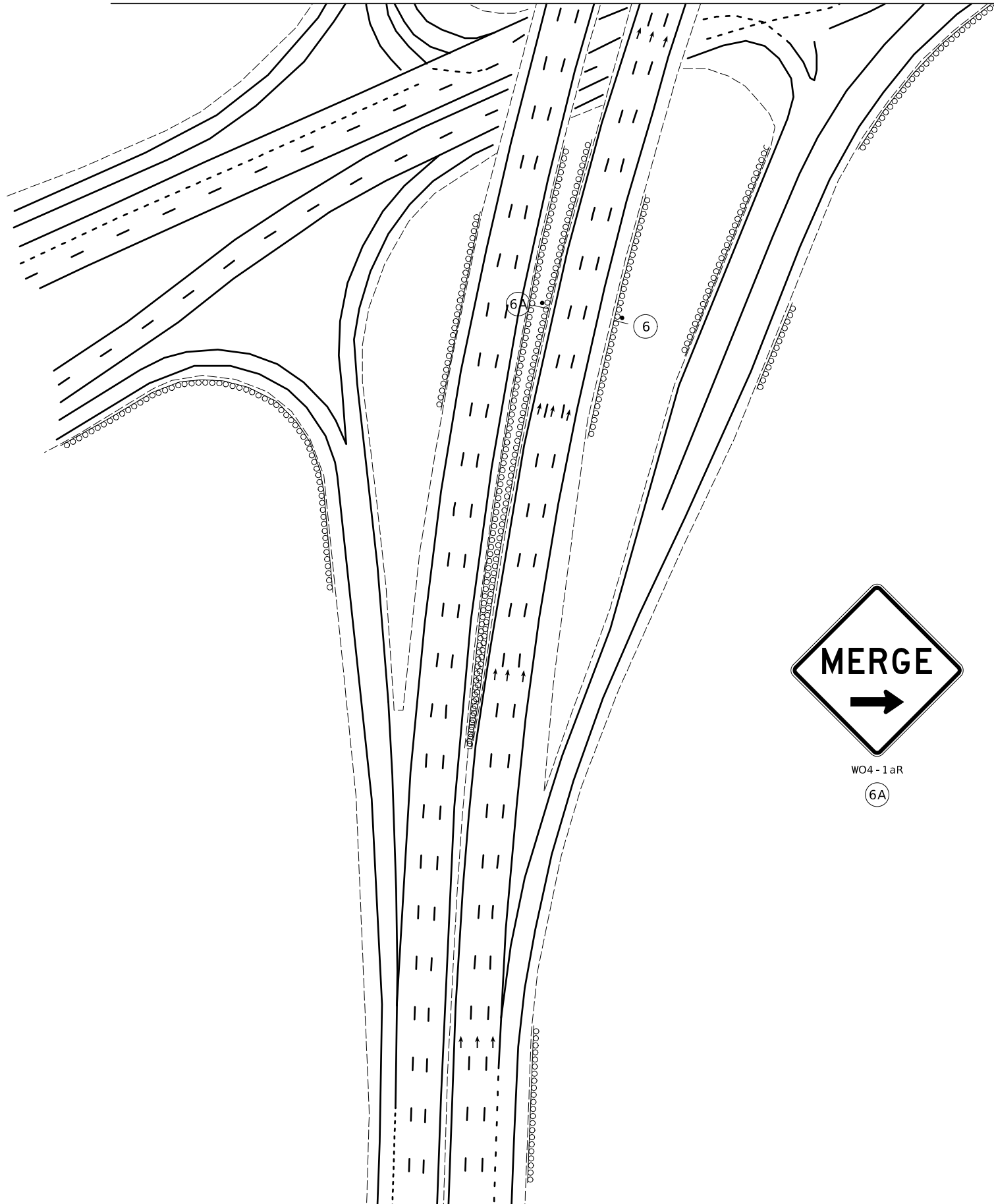
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

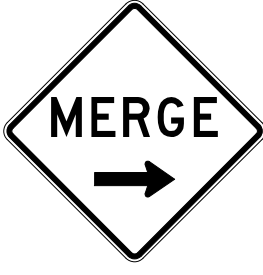
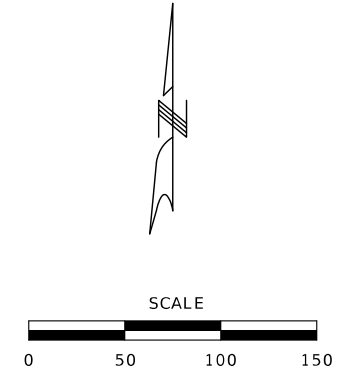
TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 40 OF 53

MATCH LINE  
SB LOG MILE 35.066

MATCH LINE  
SB LOG MILE 35.066



MATCH LINE  
SB LOG MILE 35.246



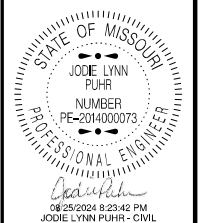
W04-1aR  
6A



CENTER  
OR  
LEFT

W020-6a  
6

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 41 OF 53



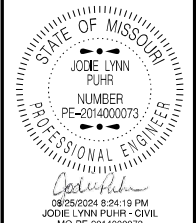
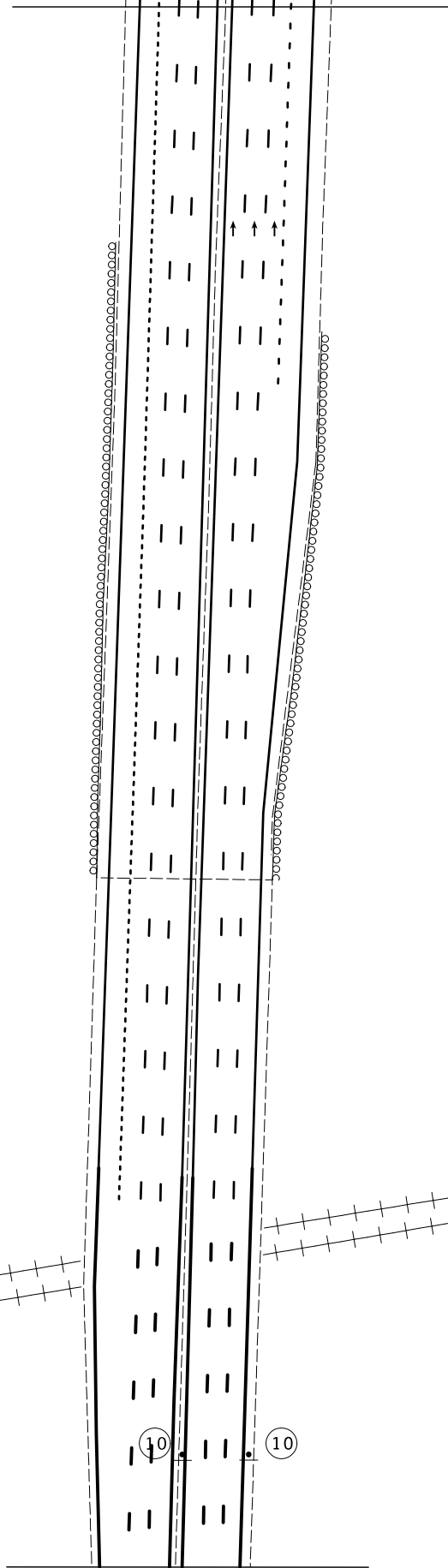
DATE PREPARED		8/21/2024	
ROUTE	STATE	435	MO
DISTRICT	SHEET NO.	KC	50
COUNTY		CLAY	
JOB NO.		J4P3468	
CONTRACT ID.			
PROJECT NO.			
BRIDGE NO.			

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

MATCH LINE  
SB LOG MILE 35.246



DATE PREPARED  
8/21/2024

ROUTE	STATE
435	MO
DISTRICT	SHEET NO.
KC	51

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

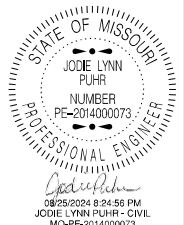
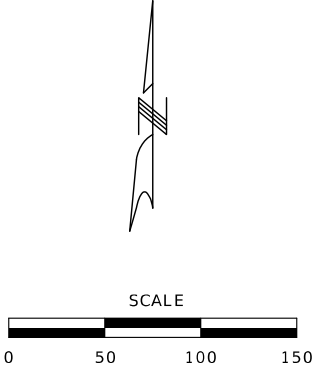
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

MATCH LINE SB LOG MILE 35.411

MATCH LINE  
SB LOG MILE 35.620

MISSOURI RIVER

MISSOURI RIVER



DATE PREPARED  
**8/21/2024**

ROUTE <b>435</b>	STATE <b>MO</b>
DISTRICT <b>KC</b>	SHEET NO. <b>52</b>

COUNTY  
**CLAY**

JOB NO.  
**J4P3468**

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

MISSOURI RIVER

MISSOURI RIVER

5      5



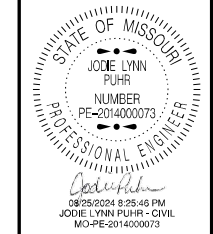
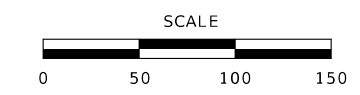
W020-5

5

CENTER LANE

OR

LEFT LANE



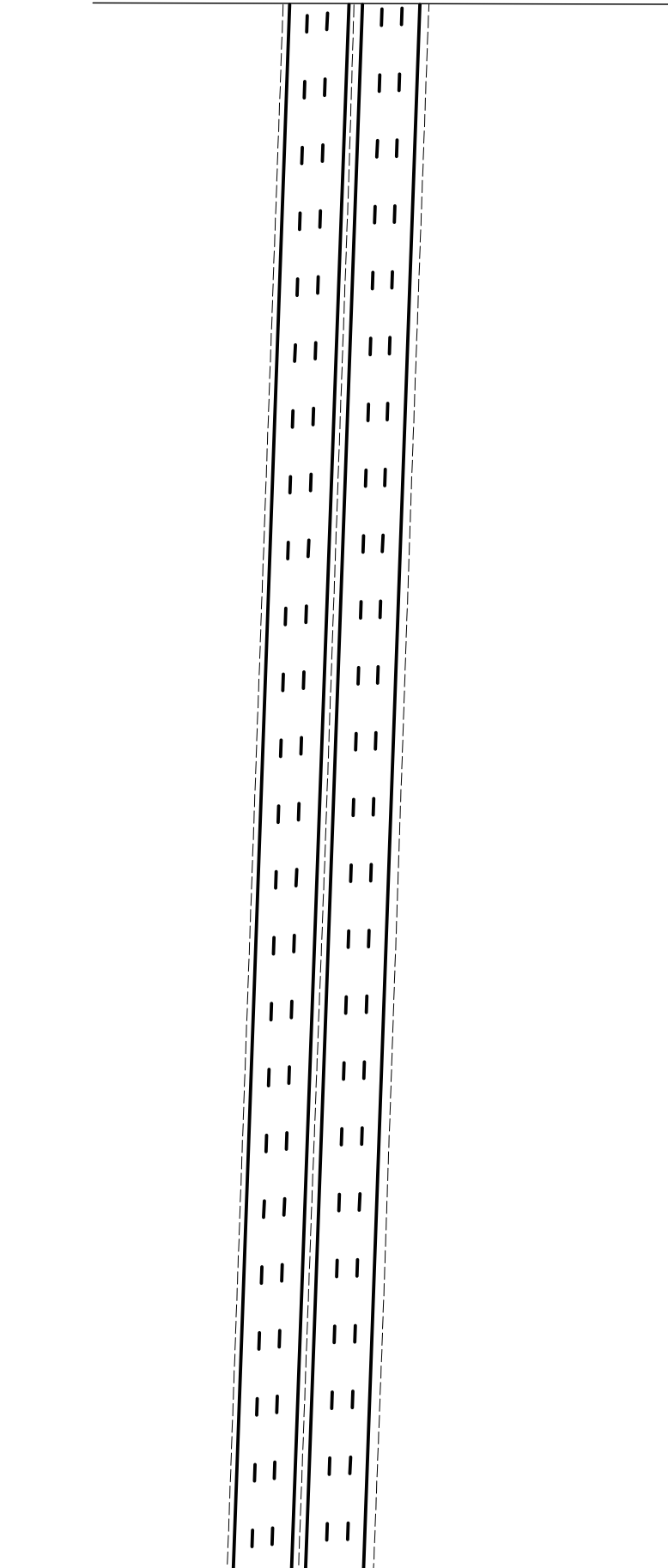
STATE OF MISSOURI  
JOE LYNN PUHR  
NUMBER  
PE-2014000073  
PROFESSIONAL ENGINEER  
DATE PREPARED  
8/21/2024  
ROUTE 435  
STATE MO  
DISTRICT KC SHEET NO. 53  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

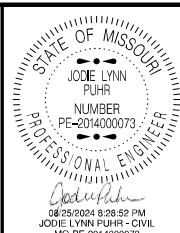
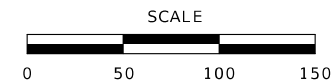
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



MATCH LINE  
SB LOG MILE 35.808



MATCH LINE  
SB LOG MILE 35.989



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 54

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

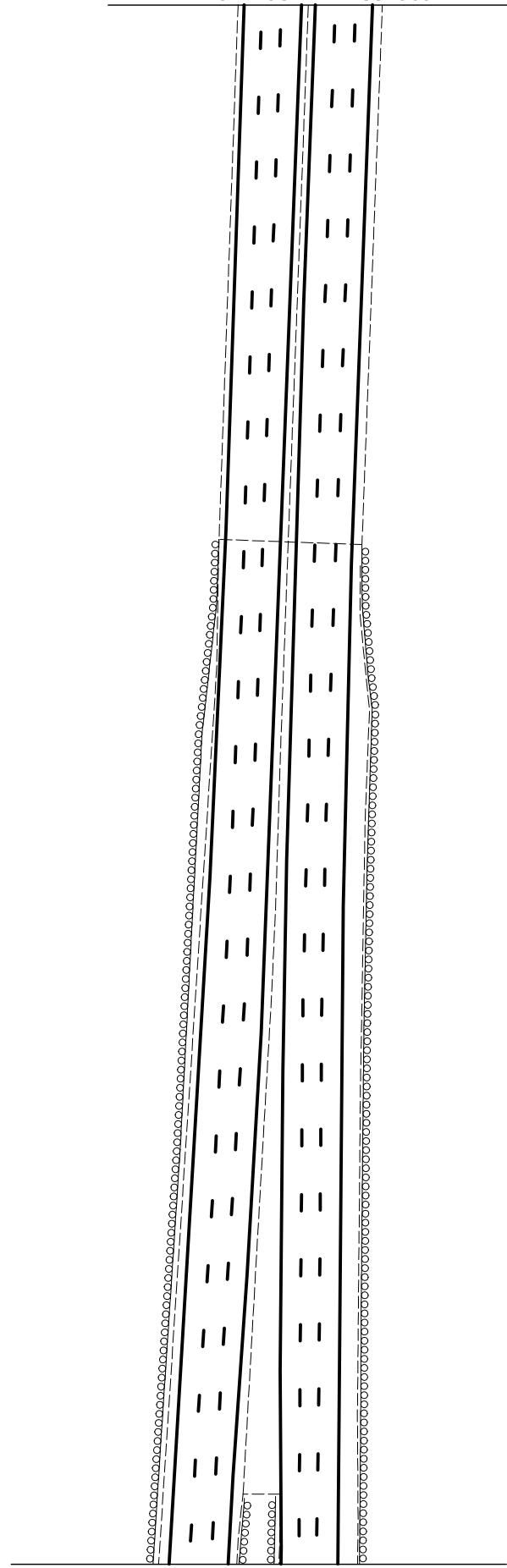
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

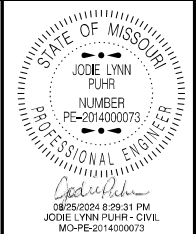
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 45 OF 53

MATCH LINE  
SB LOG MILE 35.989



MATCH LINE  
SB LOG MILE 36.276



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 55

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

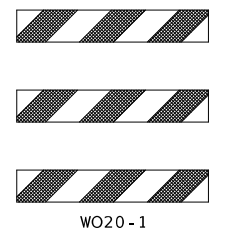
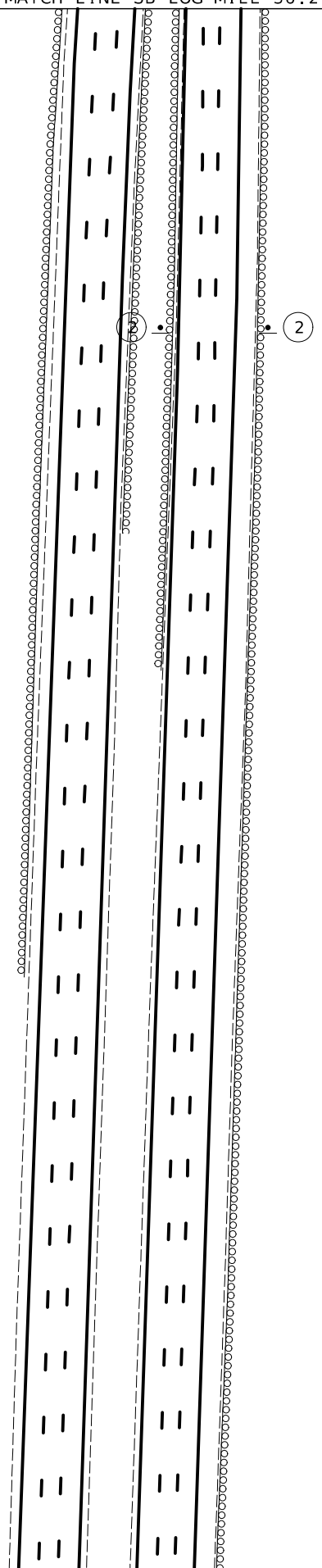
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

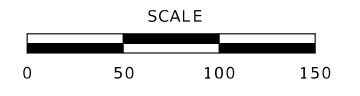
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

TRAFFIC CONTROL SHEET  
PHASE 2 NB CROSSOVER  
SHEET 46 OF 53

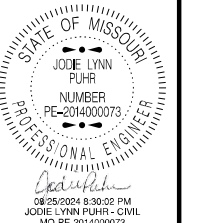


WO20-1

2



SCALE

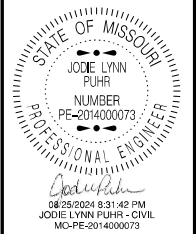


STATE OF MISSOURI  
 JOE LYNN  
 PUHR  
 NUMBER  
 PE-2014000073  
 PROFESSIONAL ENGINEER  
 DATE PREPARED  
 8/21/2024  
 ROUTE 435 STATE MO  
 DISTRICT KC SHEET NO. 56  
 COUNTY CLAY  
 JOB NO. J4P3468  
 CONTRACT ID.  
 PROJECT NO.  
 BRIDGE NO.

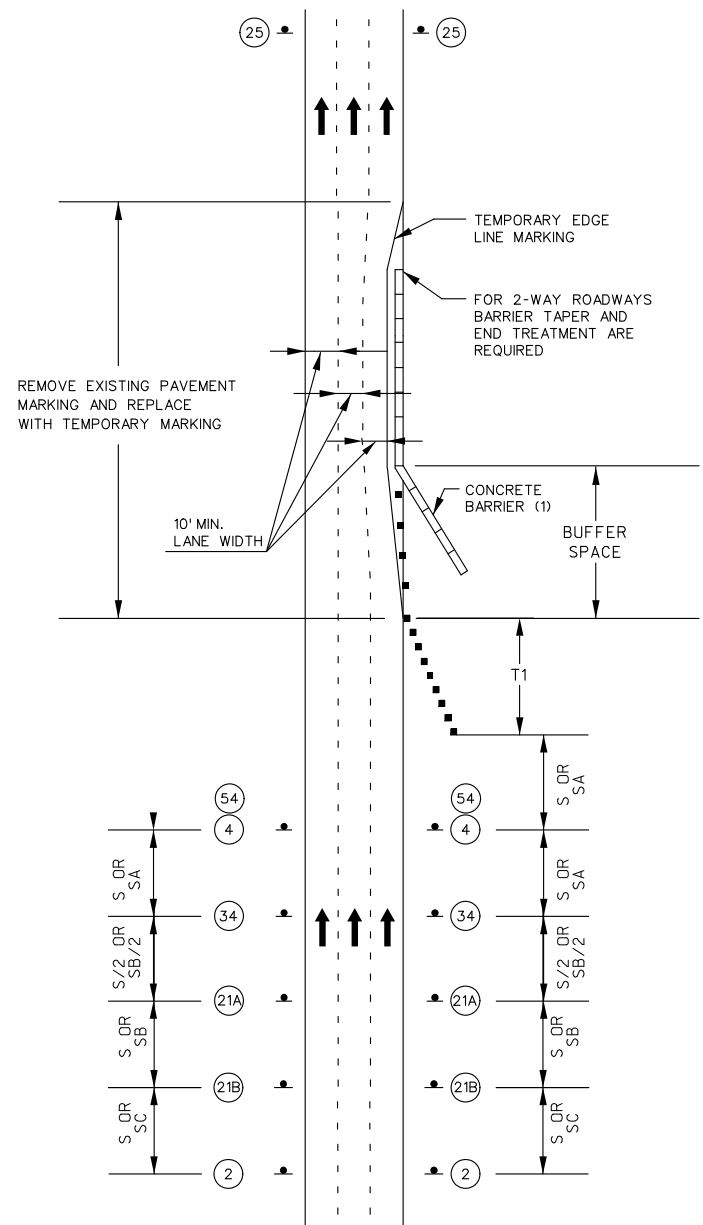
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-273-6636)

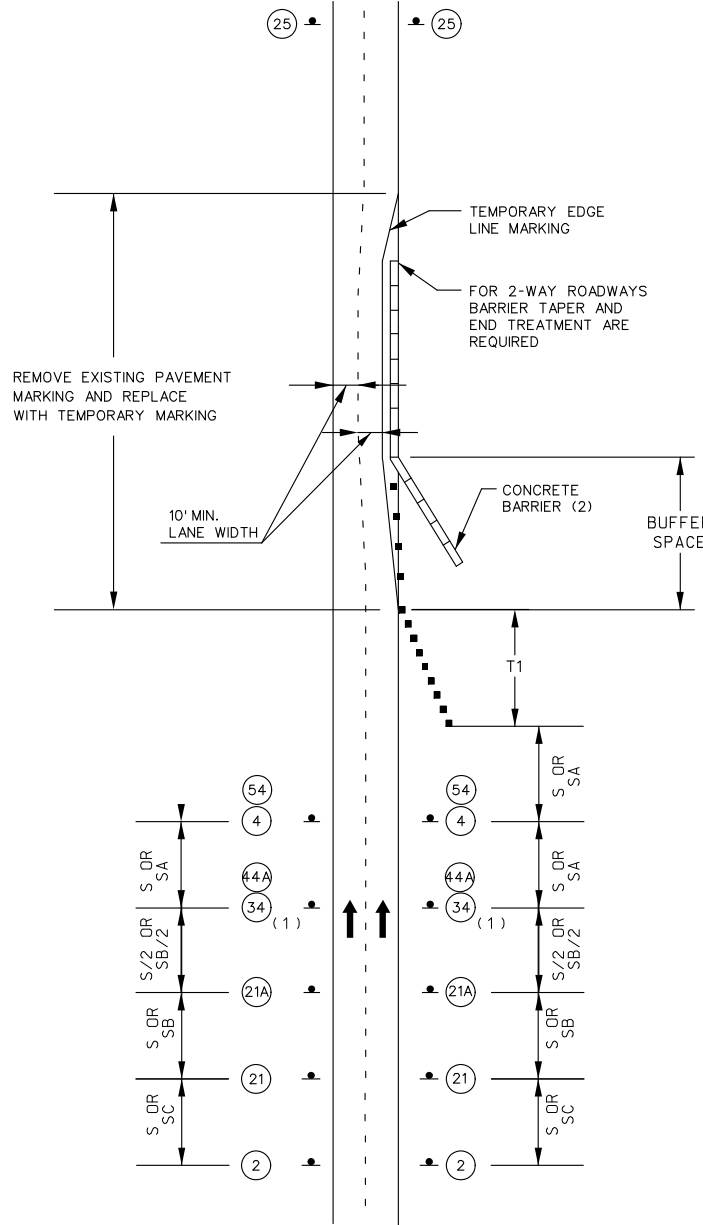




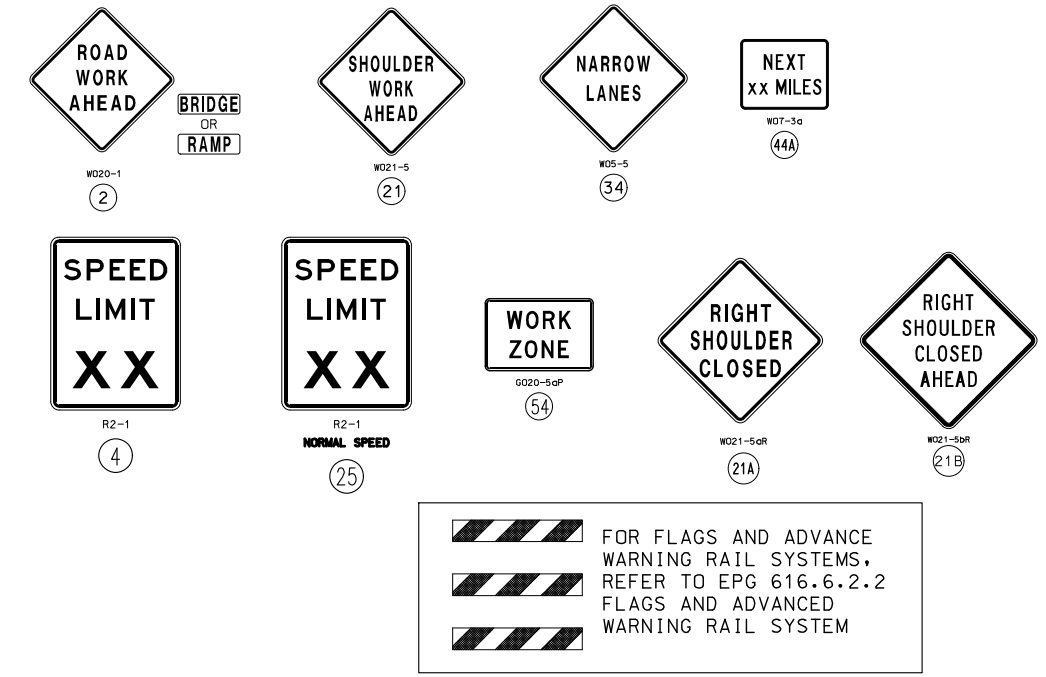
DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 57  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.



SHOULDER WORK ON DIVIDED AND UNDIVIDED HIGHWAY  
REDUCED LANE WIDTHS



SHOULDER WORK ON DIVIDED HIGHWAY  
REDUCED LANE WIDTHS



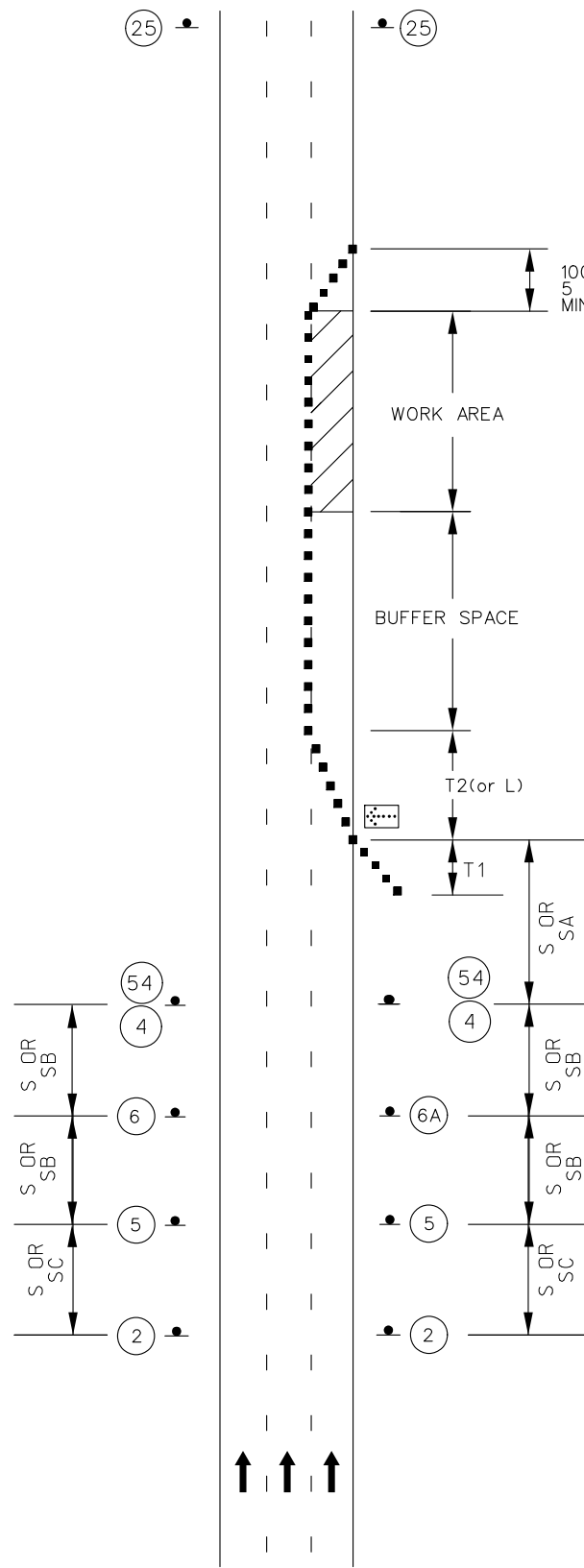
NOTES:

- SEE TRAFFIC CONTROL SHEET 24 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- SEE TRAFFIC CONTROL SHEET 24 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- ROAD WORK AHEAD NOT REQUIRED IF SHOULDER WORK IS LOCATED WITHIN THE LIMITS OF AN ACTIVITY AREA WHERE ANOTHER ROAD WORK AHEAD IS ALREADY USED.
- IF SHOULDER IS SUITABLE FOR CARRYING TRAFFIC, THE LANES MAY BE SHIFTED TO THE SHOULDER WITH APPROPRIATE PAVEMENT MARKING.
- ROAD NARROWS SIGN SHOULD BE USED WHEN THE LANE WIDTH IS REDUCED.
- ON UNDIVIDED HIGHWAYS PROVIDE SIGNS ONLY ON THE RIGHT SIDE OF EACH APPROACH.
- (1). SIGN 44A NOT REQUIRED FOR NARROW LANE SECTIONS LESS THAN ONE MILE.
- (2). FLARE BARRIER TO EXTEND BEYOND CLEAR ZONE OR FLARE BARRIER TO EDGE LINE AND USE APPROVED END TREATMENT.
- CONCRETE BARRIER MAY BE INSTALLED AT AN 8:1 FLARE RATE FROM THE SHOULDER POINT TO THE LIMITS OF THE CLEAR ZONE WHERE THE SIDE SLOPE IS 6:1 OR FLATTER.
- BARRIER HEIGHT TRANSITIONS MAY BE USED WHEN THE POSTED SPEED LIMIT PRIOR TO ROAD WORK IS LESS THAN 40 MPH.
- APPROVED CRASH CUSHION ARE TO BE USED WHEN THE POSTED SPEED LIMIT PRIOR TO ROAD WORK IS GREATER THAN OR EQUAL 40 MPH.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

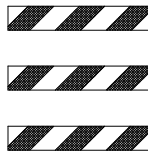
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



TYPICAL LEFT OR RIGHT LANE CLOSURE  
MULTI-LANE DIVIDED HIGHWAY



W020-1  
2



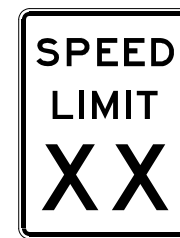
W020-5  
5



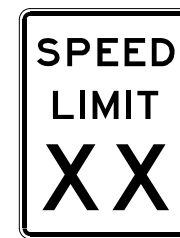
W020-6a  
6



W04-1a  
6A



R2-1  
4



R2-1  
NORMAL SPEED  
25



G020-5aP  
54



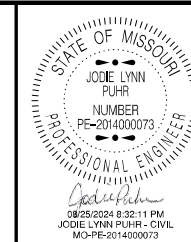
FLASHING  
ARROW PANEL



CHANNELIZERS

NOTES:

- SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.
- TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.
- ALTERNATIVE TEMPORARY TRAFFIC CONTROL SET-UPS SHOULD BE CONSIDERED WHEN REDUCTION IN CAPACITY CANNOT BE TOLERATED.
- FOR NIGHT TIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.
- REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.
- A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 58

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

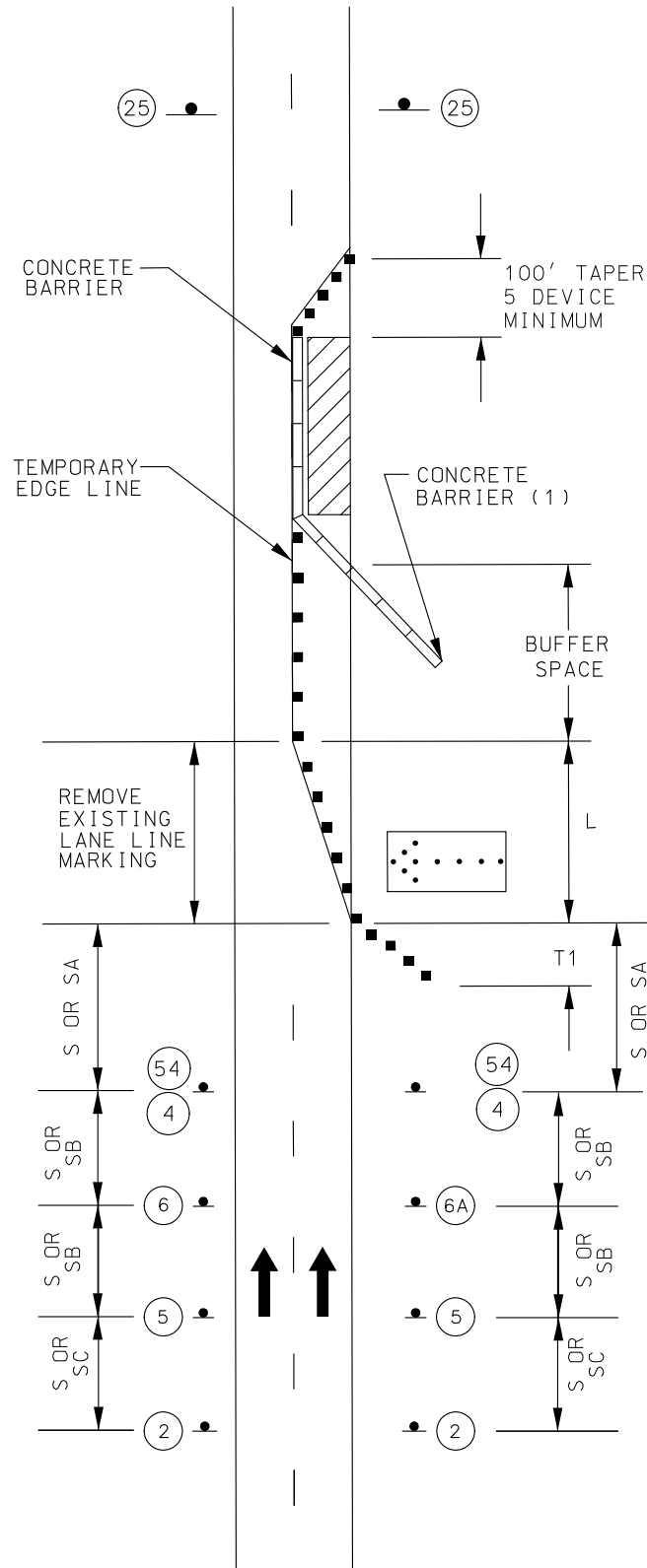
PROJECT NO.

BRIDGE NO.

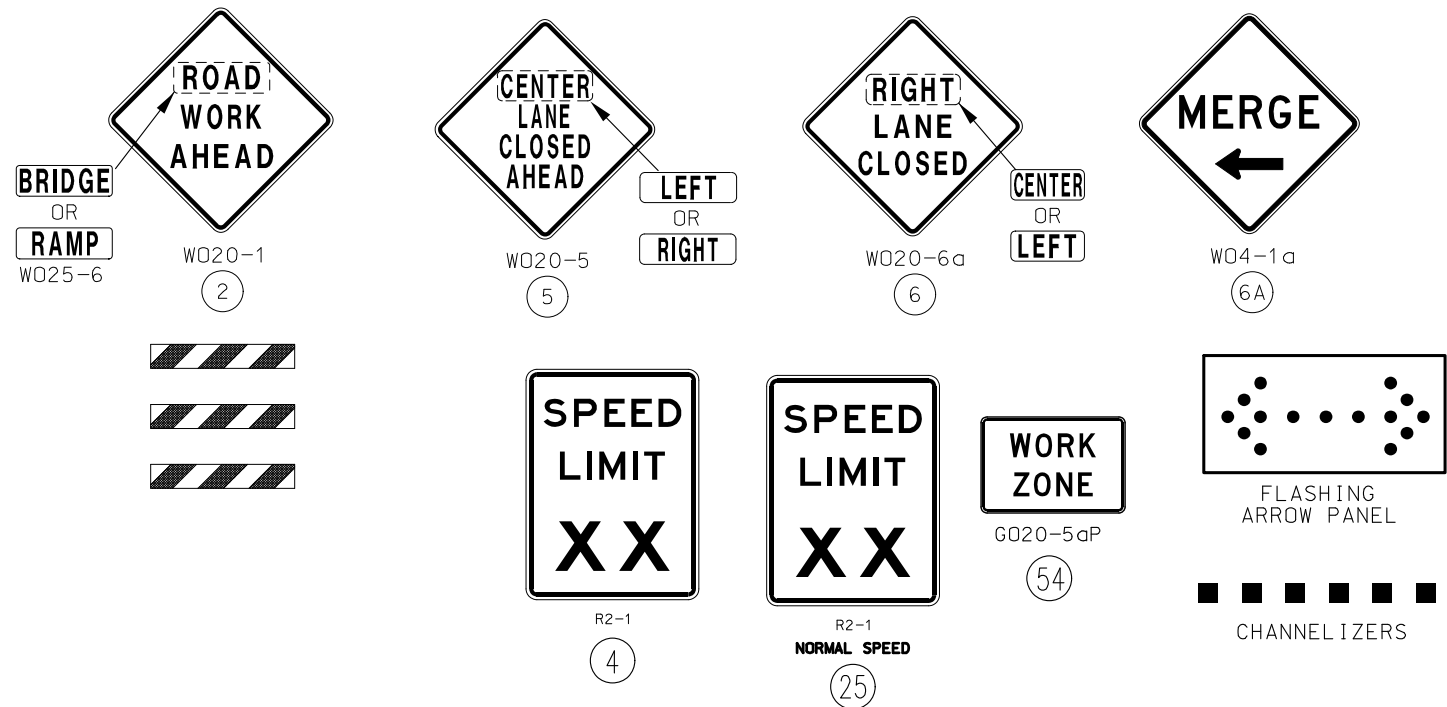
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



TWO-LANE DIVIDED HIGHWAY WITH BARRIER



NOTES:

SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.

SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.

REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.

REVIEW STATIONARY LANE CLOSURE.

SEE LANE CLOSURE WITH WIDTH AND LANE RESTRICTION-DE/CM FOR A LANE CLOSURE WITH WIDTH RESTRICTION.

TEMPORARY TRAFFIC BARRIERS, IF USED SHALL COMPLY WITH THE PROVISIONS IN EPG 616.6.85 TEMPORARY TRAFFIC BARRIERS.

FOR NIGHTTIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.

IF RUMBLE STRIPS ARE USED, REVIEW EPG 616.6.87 RUMBLE STRIPS.

REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.

(1) FLARE BARRIER TO EXTEND BEYOND CLEAR ZONE OR FLARE BARRIER TO THE EDGE LINE AND USE APPROVED END TREATMENT.

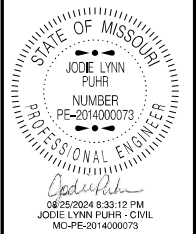
CONCRETE BARRIER SHALL BE INSTALLED AT AN 8:1 FLARE RATE WITHIN THE TRAVEL LANES.

CONCRETE BARRIER MAY BE INSTALLED AT AN 8:1 FLARE RATE FROM THE SHOULDER POINT TO THE LIMITS OF THE CLEAR ZONE WHERE THE SIDE SLOPE IS 6:1 OR FLATTER.

APPROVED CRASH CUSHION ARE TO BE USED WHEN THE POSTED SPEED LIMIT PRIOR TO ROAD WORK IS GREATER THAN OR EQUAL TO 40 MPH.

BARRIER HEIGHT TRANSITION MAY BE USED WHEN THE POSTED SPEED LIMIT PRIOR TO ROAD WORK IS LESS THAN 40 MPH.

LANE CLOSURE WITH TEMPORARY TRAFFIC BARRIER  
TEMPORARY TRAFFIC CONTROL SHEET 50 OF 53



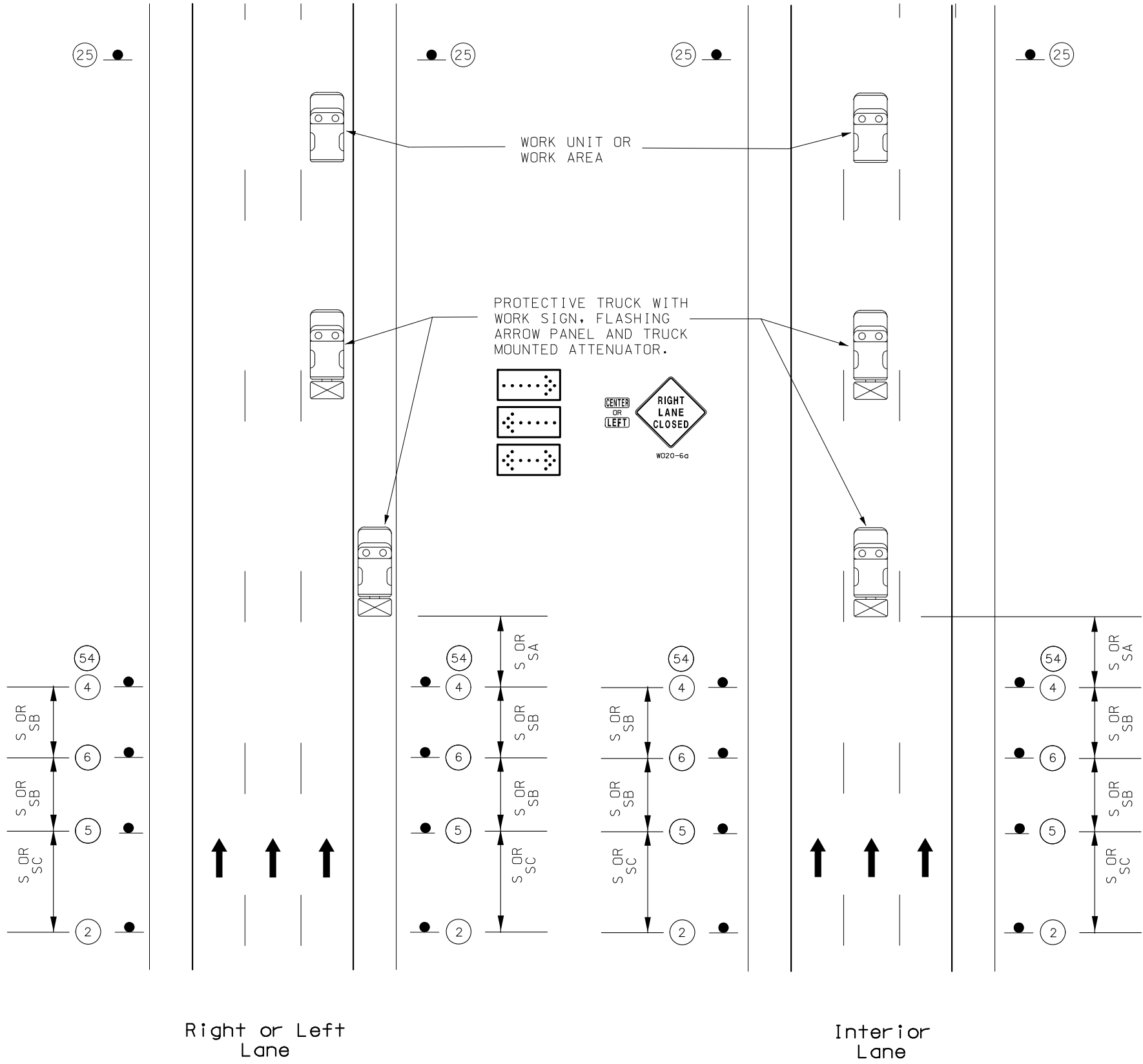
DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 59

COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

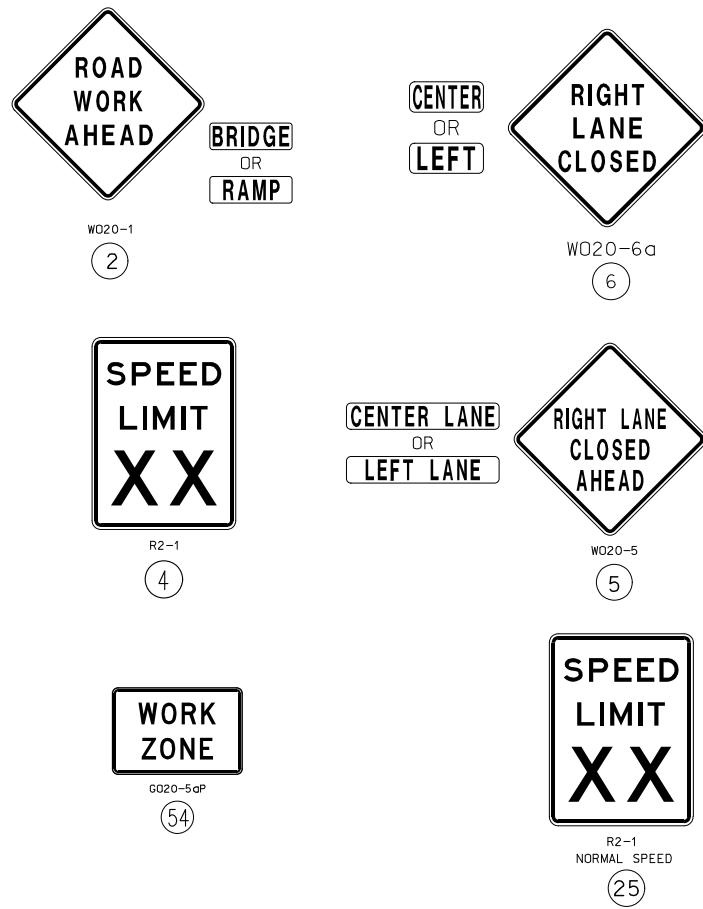
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)





**MOVING OPERATION ON  
MULTI-LANE DIVIDED HIGHWAY  
OPEN TO TRAFFIC**



**NOTES:**

SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.

SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING CHANNELIZING TAPER LENGTHS.

UPON APPROVAL OF THE ENGINEER, THE CONTRACTOR MAY PROVIDE ADDITIONAL PROTECTIVE TRUCKS EQUIPPED WITH PROPER WARNING DEVICES.

PROTECTIVE TRUCK AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING OR STROBE LIGHTS.

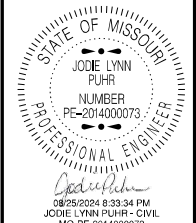
VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S HIGH -INTENSITY ROTATING FLASHING, FLASHING, OSCILLATING, OR STROBE LIGHTS.

FLASHING ARROW PANELS SHALL, AS A MINIMUM, BE TYPE B, WITH A SIZE OF 60 X 30 INCHES.

VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED IN A MANNER SUCH THAT THEY ARE NOT OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS ON VEHICLE-MOUNTED SIGNS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

A FLASHING ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED, WHEN MORE THAN ONE LANE IS CLOSED A SEPARATE FLASHING ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

MOBILE OPERATION  
ON DIVIDED OR  
MULTI-LANE HIGHWAYS  
TEMPORARY  
TRAFFIC CONTROL  
SHEET 51 OF 53



STATE OF MISSOURI  
JODIE LYNN PUHR  
NUMBER PE-2014000073  
DATE PREPARED 8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 60  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO.

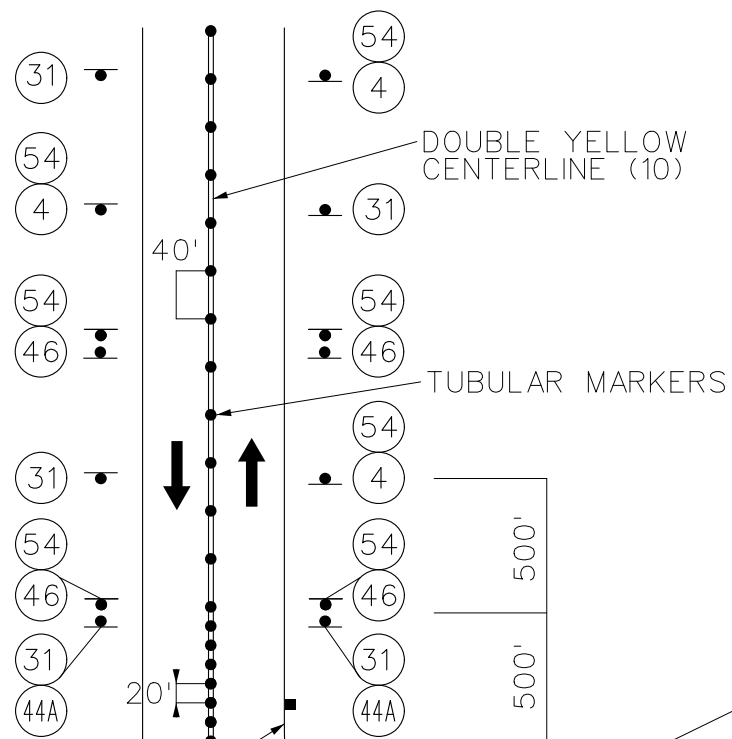
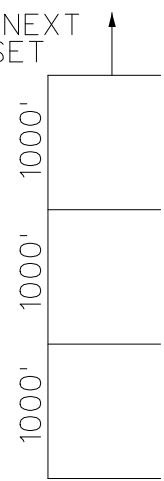
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

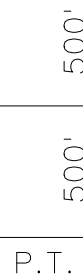
1000' TO NEXT SET

REPEAT SIGNING SET THROUGH 2-WAY SECTION BOTH DIRECTIONS



DOUBLE YELLOW CENTERLINE (10)

TUBULAR MARKERS



8" YELLOW (L) AND WHITE (R) EDGE LINES THROUGH CROSSOVER

WHITE EDGE LINES EDGE OF TRAVELWAY

24" DIAGONAL YELLOW MARKING AT 50' TYPICAL SPACING (OPTIONAL)

YELLOW EDGE LINE

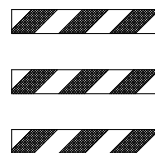
100' TAPER 5' DEVICE MIN.

WHITE EDGE LINE

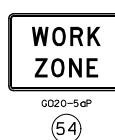
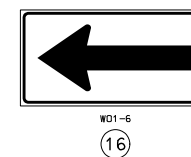
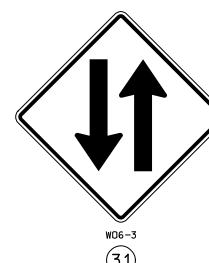
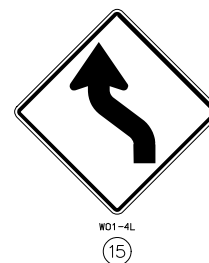
YELLOW (L) AND WHITE (R) TEMP. RAISED PAVEMENT MARKERS (OPTIONAL)

DIRECTIONAL INDICATOR BARRICADES

LANE CLOSURE SIGNING (7)



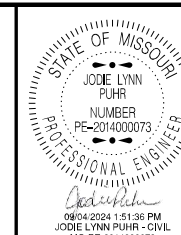
BRIDGE OR RAMP



NOTES:

- (1) SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- (2) SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- (3) REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.
- (4) TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.
- (5) FOR NIGHT TIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.
- (6) REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.
- (7) ADVANCED LANE CLOSURE SIGNING IS AS SHOWN ON TRAFFIC CONTROL SHEET 50, LANE CLOSURE WITH A TEMPORARY TRAFFIC BARRIER.
- (8) CROSSOVER PAVEMENT WIDTH MAY BE WIDER AS NEEDED.
- (9) FLARE BARRIER TO EXTEND BEYOND CLEAR ZONE OR FLARE BARRIER TO EDGE LINE AND USE APPROVED END TREATMENT.
- (10) SEE STANDARD PLAN 616.10 FOR ADDITIONAL INFORMATION.

MEDIAN CROSSOVER  
DIVIDED HIGHWAY  
TEMPORARY  
TRAFFIC CONTROL  
SHEET 52 OF 53



DATE PREPARED  
9/4/2024

ROUTE  
435

STATE  
MO

DISTRICT  
KC

SHEET NO.  
61

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



LANE CLOSURE SIGNING (7)

L/3

L

B

CHANNELIZERS

CRASH CUSHION (9)

YELLOW EDGE LINE

YELLOW (L) AND WHITE (R) TEMP RAISED PAV'T MARKERS (OPTIONAL)

BUFFER SPACE

8" YELLOW (L) AND WHITE (R) EDGE LINES THROUGH CROSSOVER



END TREATMENT

TEMPORARY LIGHTING (OPTIONAL)

24" DIAGONAL YELLOW MARKING AT 50' TYPICAL SPACING (OPTIONAL)

20'

40'

TUBULAR MARKERS

DOUBLE YELLOW CENTERLINE

REPEAT SIGNING SET THROUGH 2-WAY SECTION BOTH DIRECTIONS

1000' TO NEXT SIGNING SET

54

4

15

44

54

46

31

54

4

15

44

54

46

54

4

54

31

25



BRIDGE OR RAMP

W020-1

(2)



WORK ZONE

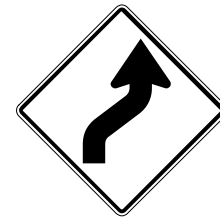
G020-5aP

(54)

ROAD CLOSED

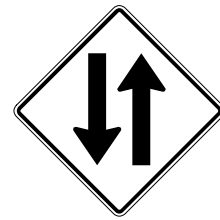
R11-2

(29)



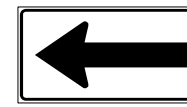
W01-4R

(15)



W06-3

(31)



W01-6

(16)

XX MPH

W013-1

(44)

NEXT XX MILES

W07-3a

(44A)

DO NOT PASS

R4-1

(46)

SPEED LIMIT XX

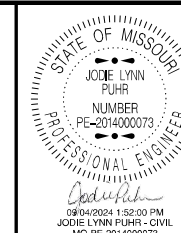
R2-1

(4)

NOTES:

- (1) SEE TRAFFIC CONTROL SHEET 1 FOR WORK ZONE SPEED LIMIT GUIDELINES.
- (2) SEE TRAFFIC CONTROL SHEET 1 FOR SIGN SPACING, DEVICE SPACING AND CHANNELIZING TAPER LENGTHS.
- (3) REMOVE AND/OR MODIFY ANY EXISTING PAVEMENT MARKING AS NEEDED.
- (4) TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.
- (5) FOR NIGHT TIME OPERATIONS, REVIEW EPG 616.6.83 WARNING LIGHTS FOR USE OF SEQUENTIAL LIGHTS.
- (6) REVIEW EPG 616.6.63 CHANNELIZING DEVICES FOR DIFFERENT TYPES AND GUIDELINES FOR THE DEVICES.
- (7) ADVANCED LANE CLOSURE SIGNING IS AS SHOWN ON TRAFFIC CONTROL SHEET 50, LANE CLOSURE WITH A TEMPORARY TRAFFIC BARRIER.
- (8) CROSSOVER PAVEMENT WIDTH MAY BE WIDER AS NEEDED.
- (9) CRASH CUSHION SHALL CONSIST OF IMPACT ATTENUATOR (SAND BARRELS) OR OTHER TEMPORARY CRASHWORTHY DEVICE, AS APPROVED BY THE ENGINEER.
- (10) SEE STANDARD PLAN 616.10 FOR ADDITIONAL INFORMATION.

MEDIAN CROSSOVER DIVIDED HIGHWAY TEMPORARY TRAFFIC CONTROL SHEET 53 OF 53



DATE PREPARED 9/4/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 62

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

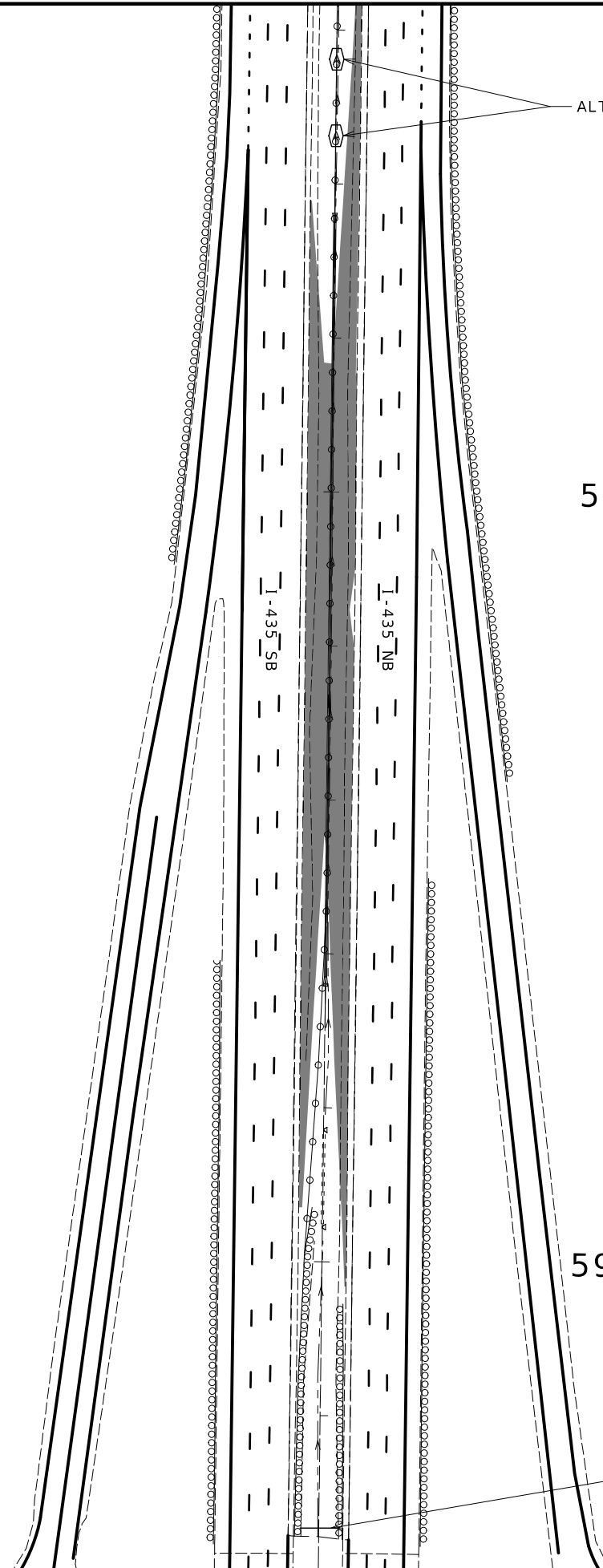
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MODOT (1-888-275-6636)



TEMPORARY EROSION CONTROL LEGEND

-  ALTERNATE DITCH CHECK
-  SILT FENCE

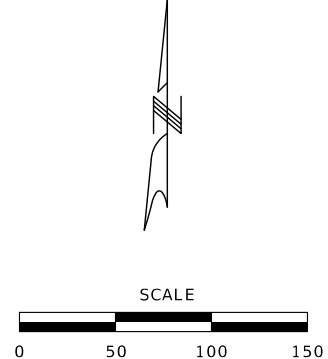


ALTERNATE DITCH CHECK

590

595

SILT FENCE



EROSION CONTROL SHEET  
NORTH OF 48TH ST  
SHEET 1 OF 2



DATE PREPARED  
8/21/2024

ROUTE 435 STATE MO

DISTRICT KC SHEET NO. 63

COUNTY CLAY

JOB NO. J4P3468


CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

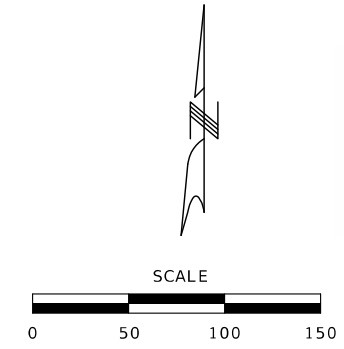
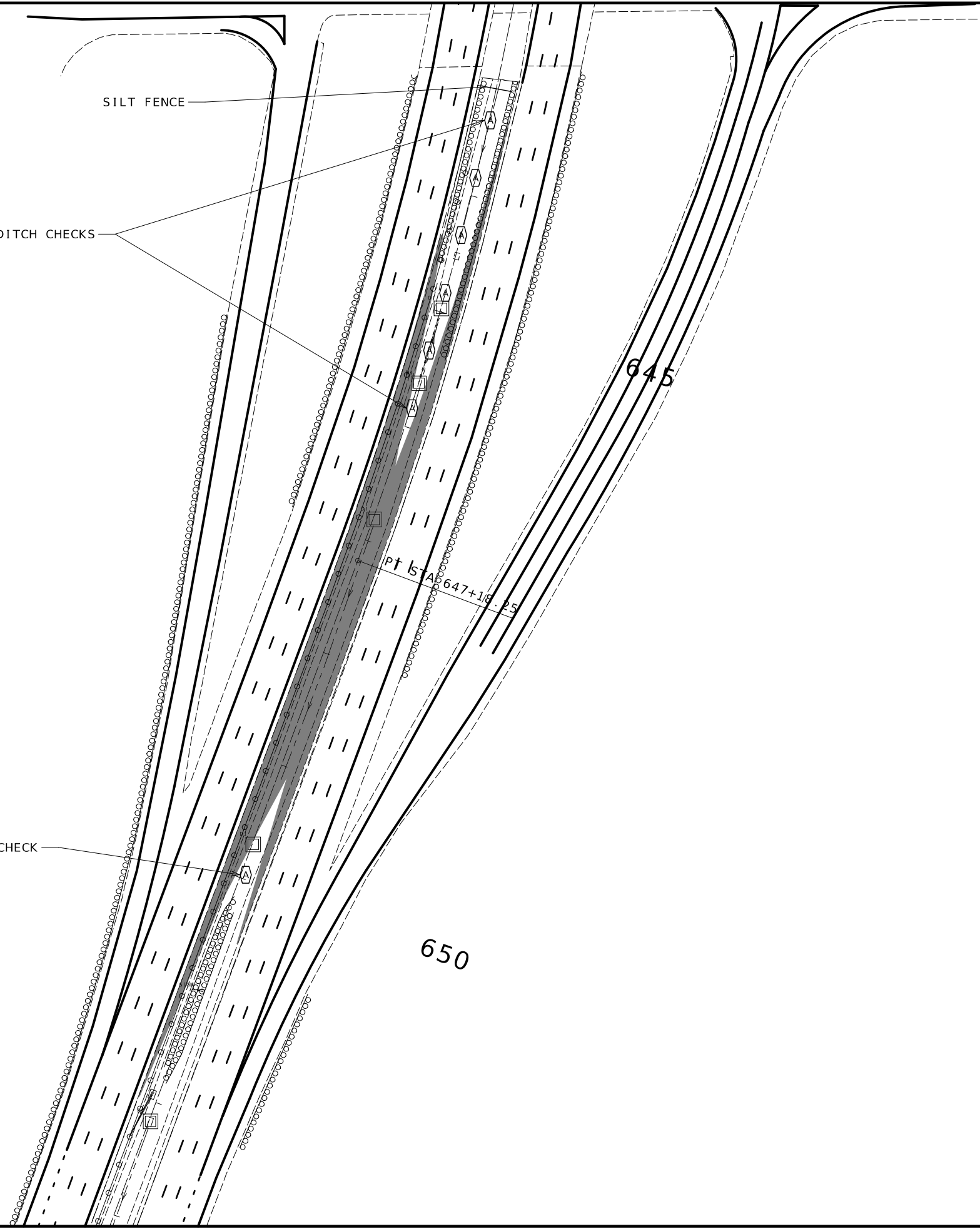


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JEFFERSON CITY, MO 65102  
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SILT FENCE

6 ALTERNATE DITCH CHECKS

ALTERNATE DITCH CHECK



EROSION CONTROL SHEET  
SOUTH OF PARVIN RD  
SHEET 2 OF 2



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 64

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

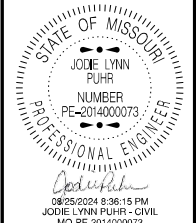
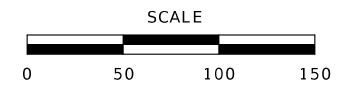
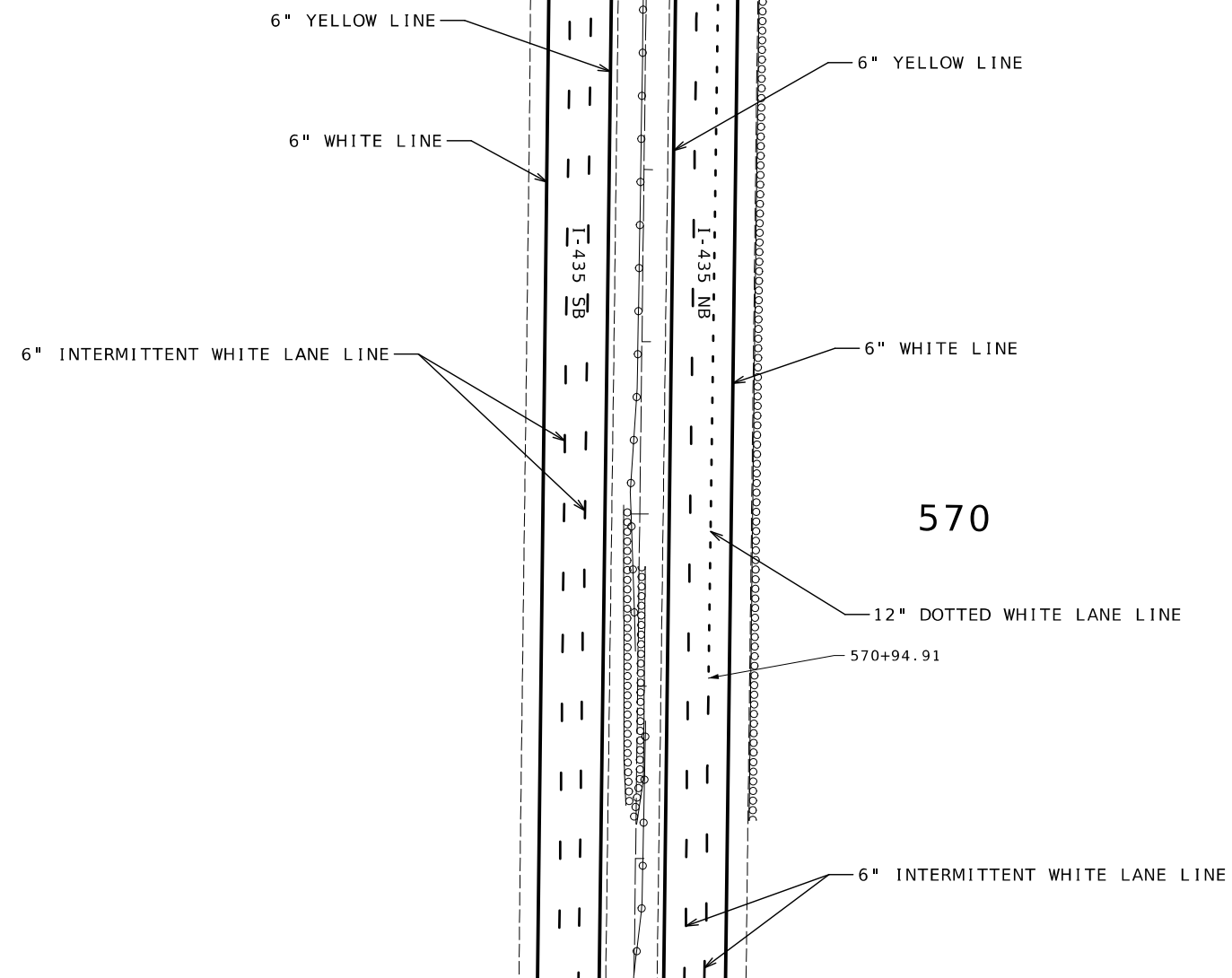
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)

BEGIN PAVEMENT MARKING  
STA. 565+00.00

START STA 565+00.00

565



DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 65
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



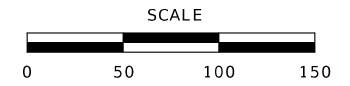
DATE PREPARED  
8/21/2024 8:56:38 PM  
JOE LYNN FUHR - CIVIL  
MO-PE-2014000073

575

6" INTERMITTENT WHITE LANE LINE

6" YELLOW LINE

6" YELLOW LINE



6" WHITE LINE

6" WHITE LINE

580

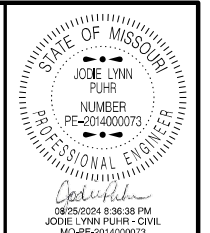
582+90.20

6" DOTTED WHITE LANE LINE

6" INTERMITTENT WHITE LANE LINE

I-435 SB

I-435 NB



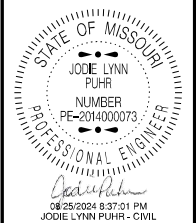
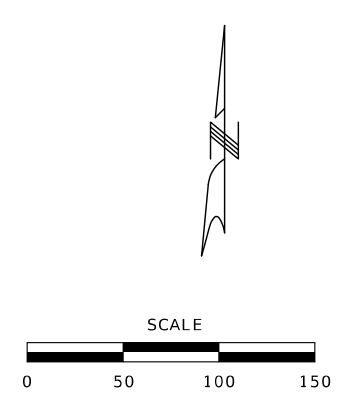
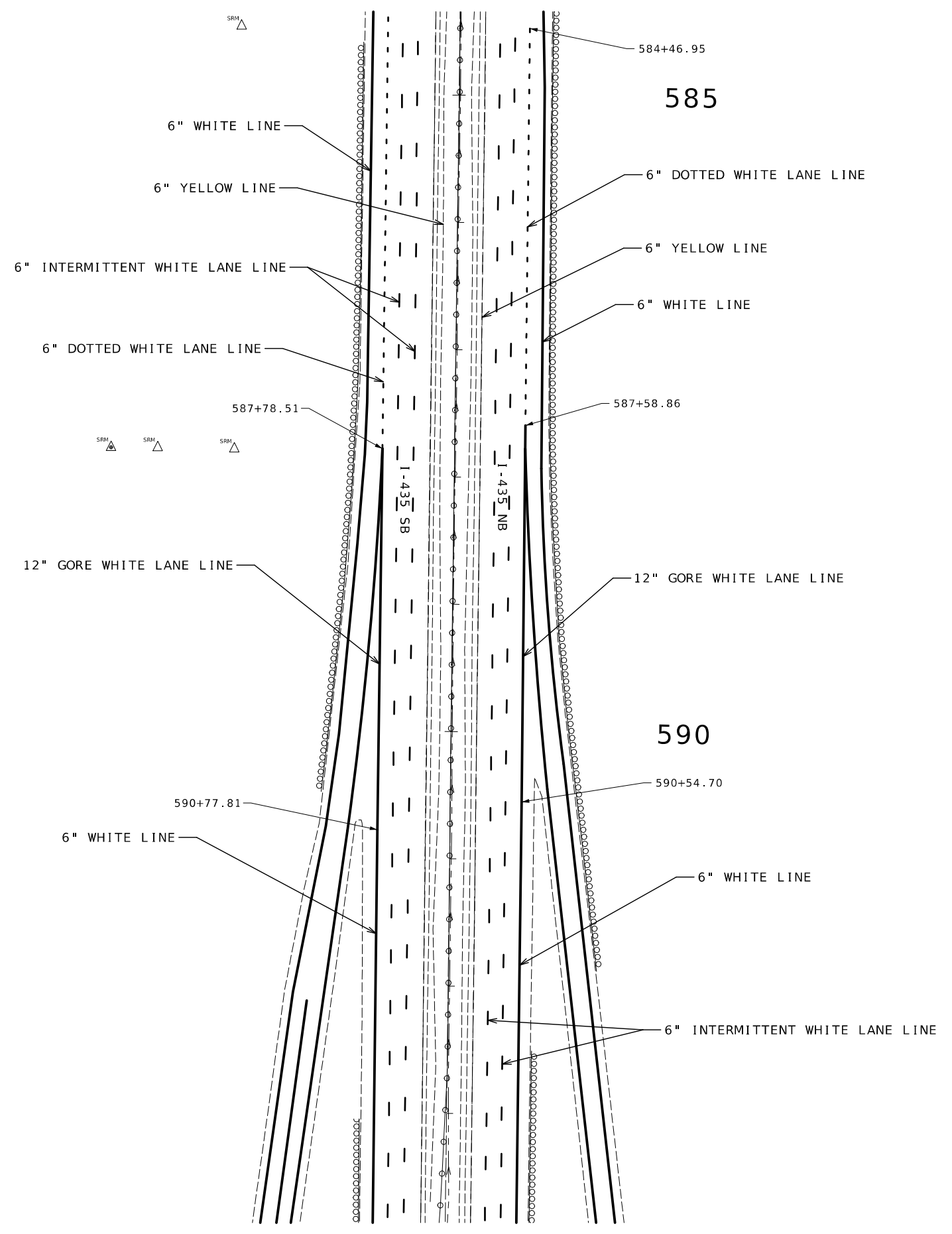
DATE PREPARED  
8/21/2024  
ROUTE 435 STATE MO  
DISTRICT KC SHEET NO. 66  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.

PROJECT NO.  
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



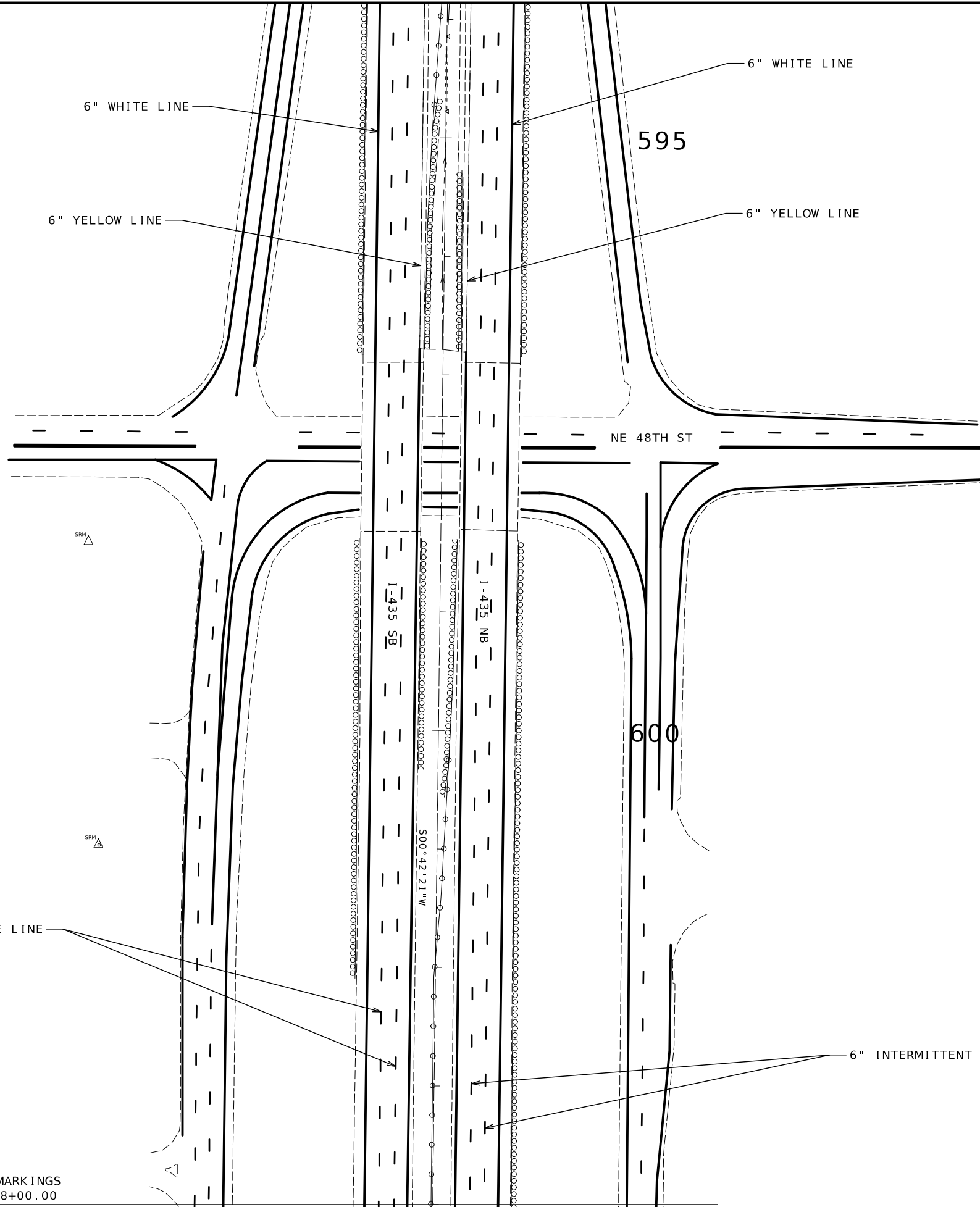


DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 67
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

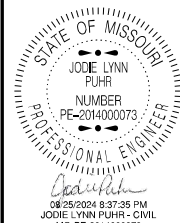
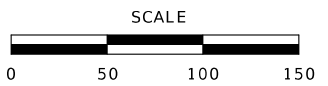
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



6" INTERMITTENT WHITE LANE LINE

CONTINUE PAVEMENT MARKINGS  
THROUGH TO STA. 638+00.00



DATE PREPARED 8/21/2024	
ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 68
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

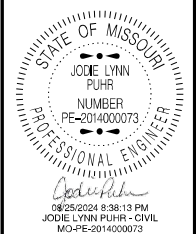
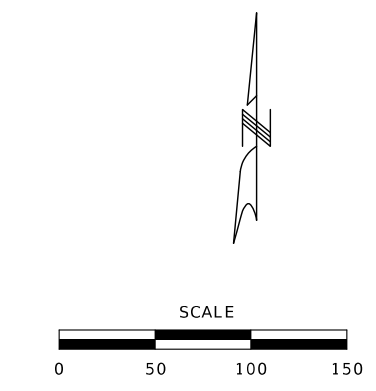
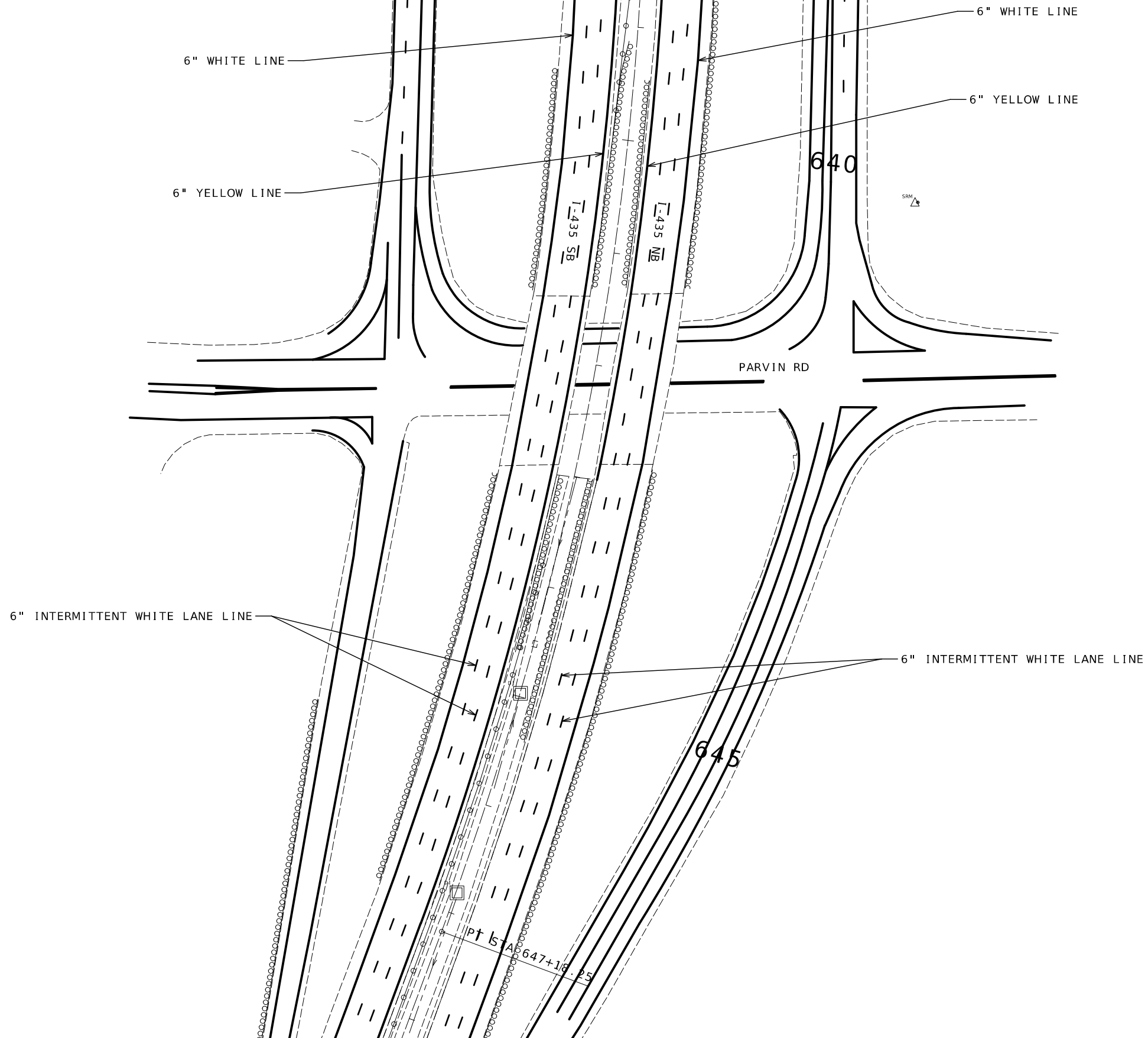
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

PAVEMENT MARKING SHEET  
SHEET 4 OF 7

PAVEMENT MARKINGS CONTINUED  
THROUGH FROM STA. 604+00.00



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 69

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

PROJECT NO.

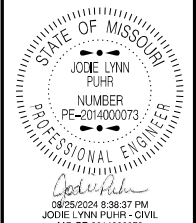
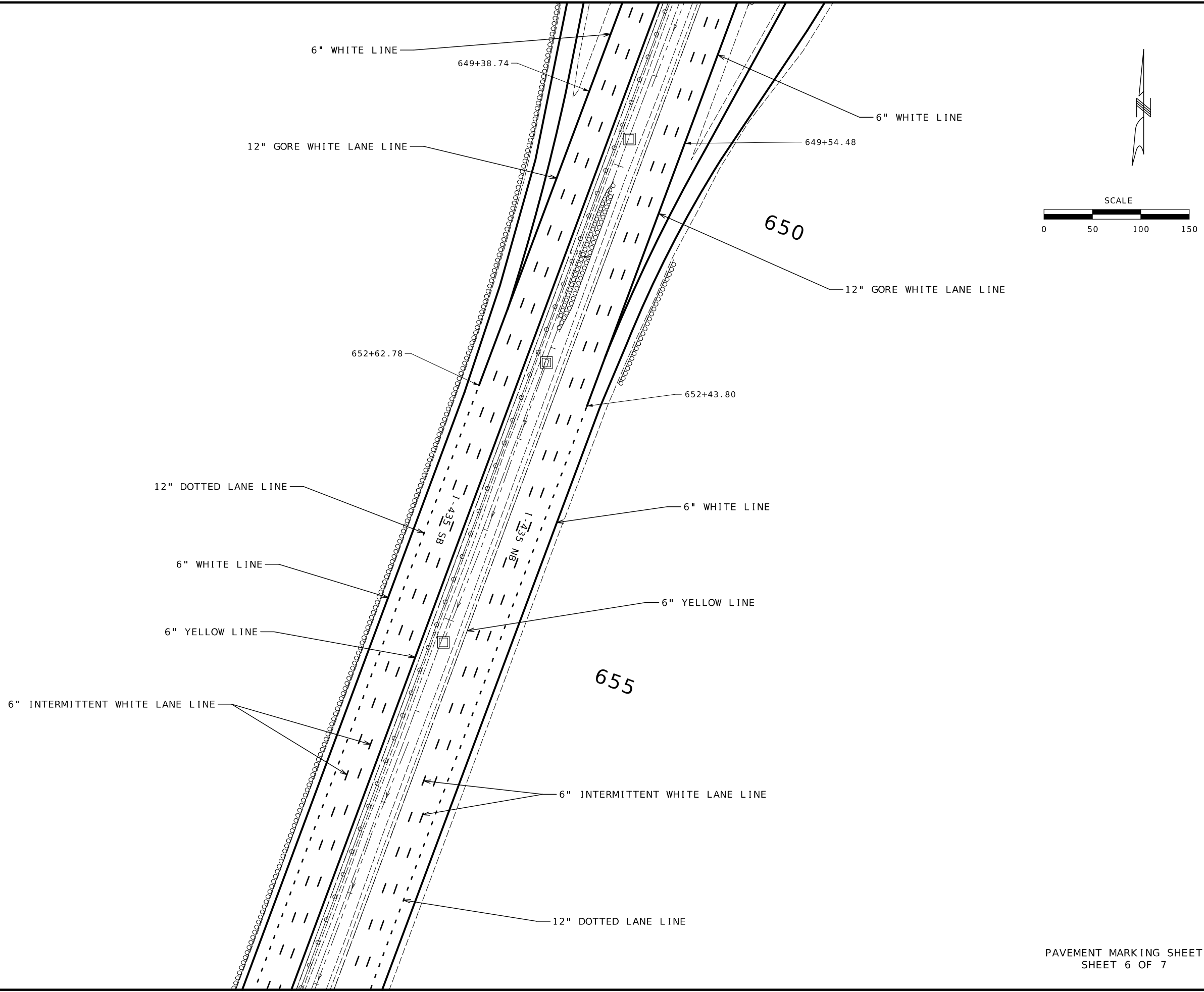
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)





DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 70

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

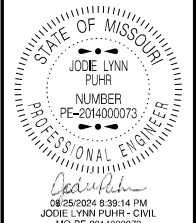
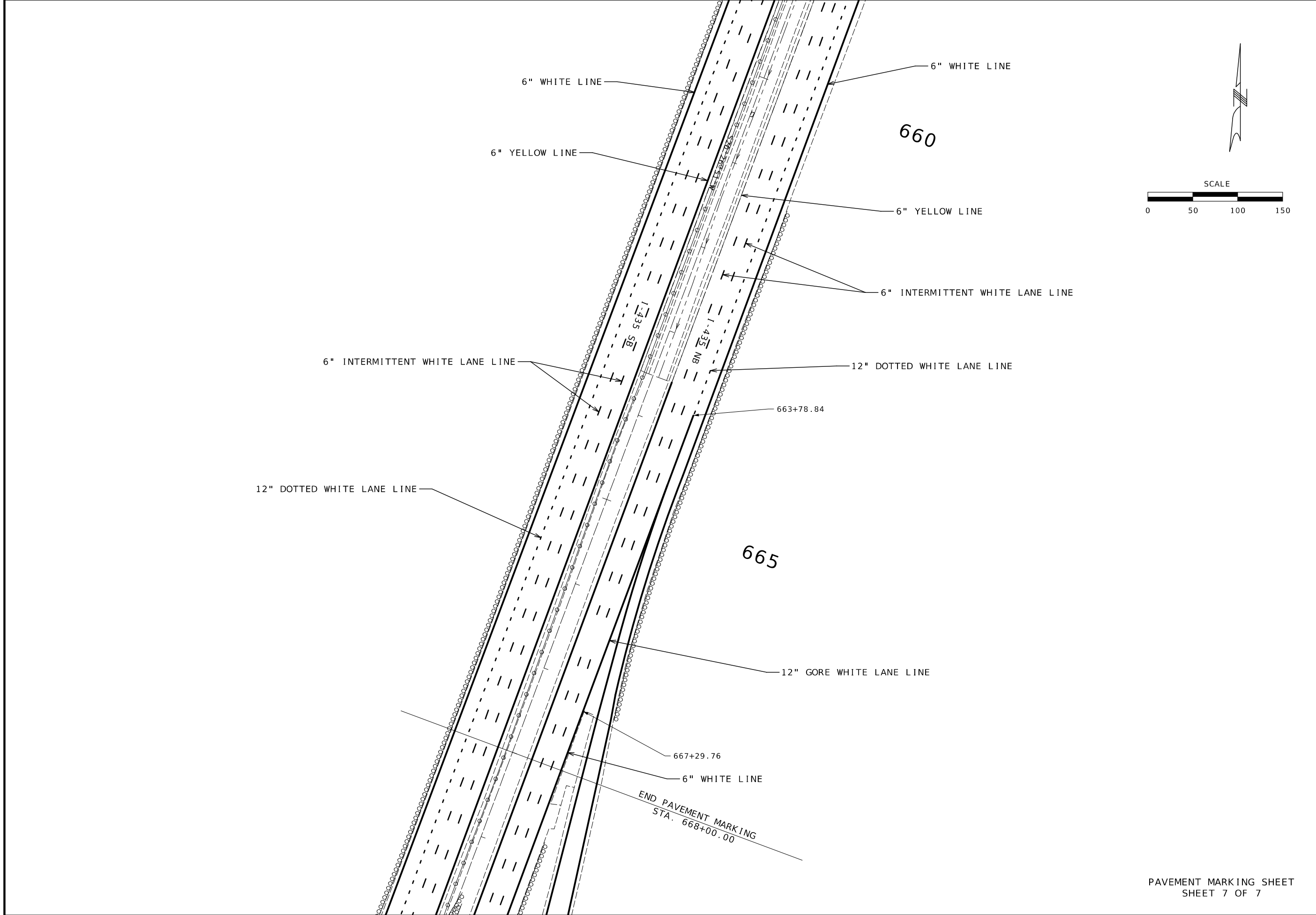
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
8/21/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 71

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

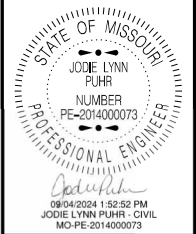
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-273-6636)



DATE PREPARED  
9/4/2024

ROUTE 435	STATE MO
DISTRICT KC	SHEET NO. 72

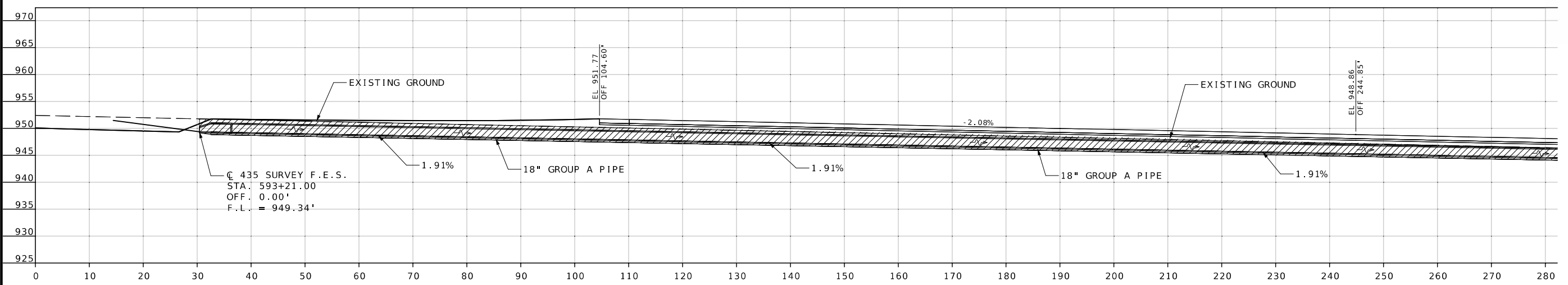
COUNTY  
CLAY

JOB NO.  
J4P3468

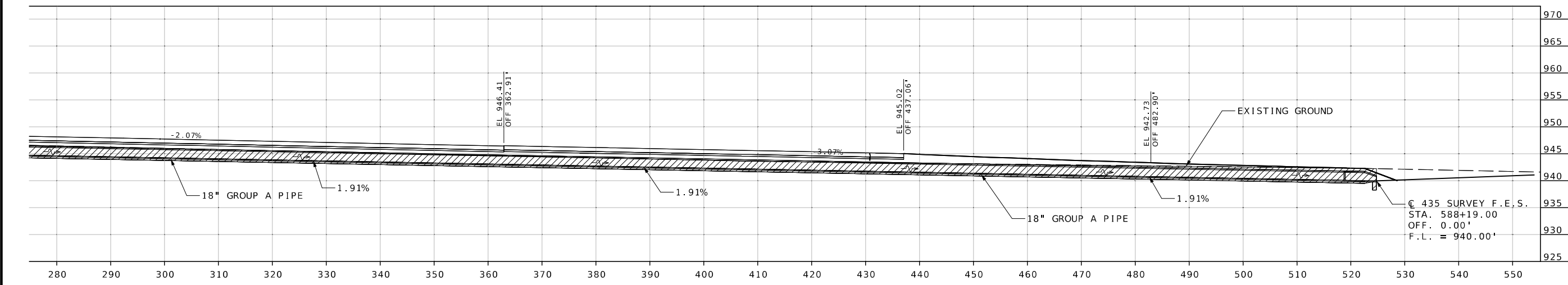
CONTRACT ID.

PROJECT NO.

BRIDGE NO.



CL SURVEY 435  
 STA. 593+15.00 TO 588+25.00  
 SKEW 0°  
 490.00' X 18" GROUP A PIPE  
 CLASS III, TYPE 3  
 2-18" GROUP A F.E.S.  
 CL. 3 EXC. = 176 C.Y.



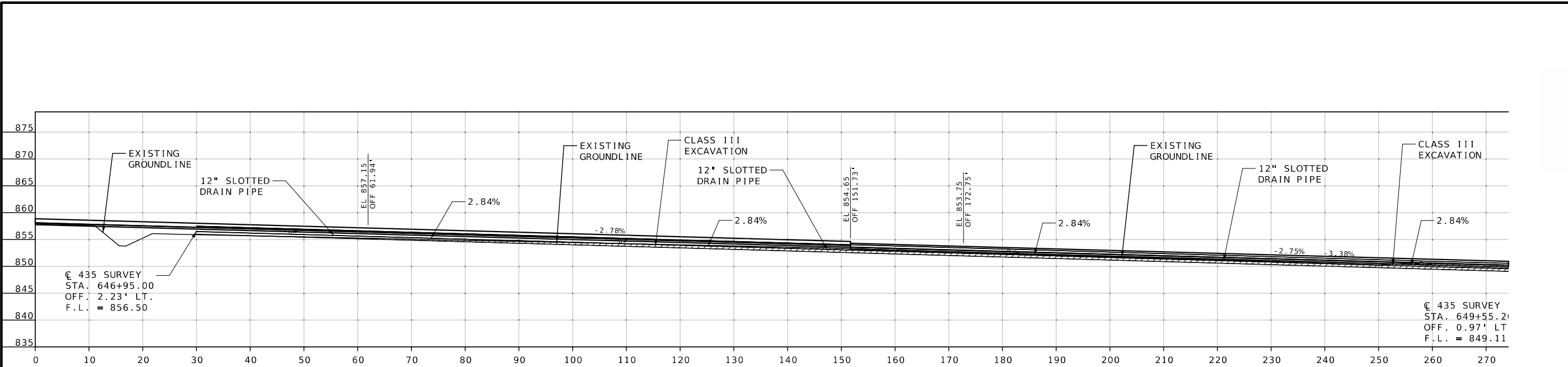
CL SURVEY 435 F.E.S.  
 STA. 588+19.00  
 OFF. 0.00'  
 F.L. = 940.00'

DATE	DESCRIPTION

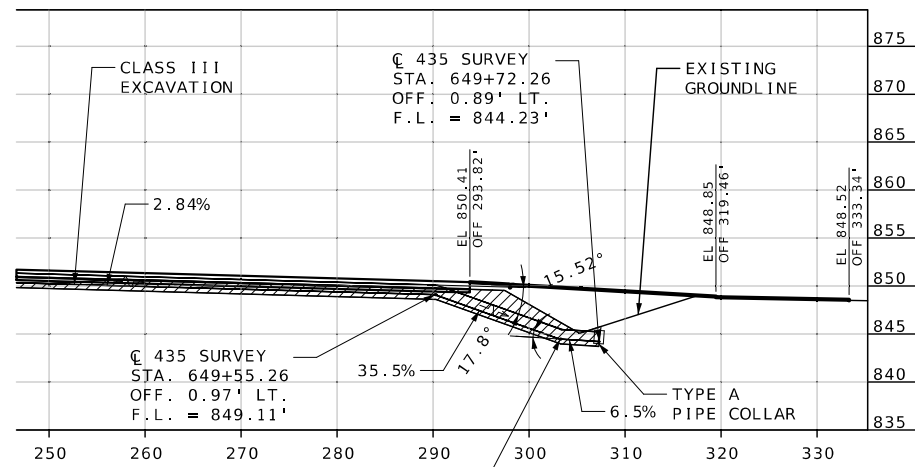
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



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JEFFERSON CITY, MO 65102  
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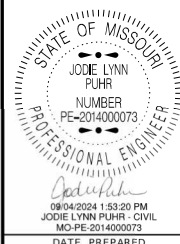
☉ 435 SURVEY  
 STA. 646+95.00 TO 649+55.26  
 260.28' X 12" TYPE A  
 SLOTTED DRAIN PIPE  
 CL 3 EXC. = 21.8 C.Y.



☉ 435 SURVEY  
 STA. 649+55.26 TO 649+68.26  
 13.00' X 12" TYPE A PIPE  
 CL 3 EXC. UNDER FIRST PIPE NOTE

☉ 435 SURVEY  
 STA. 649+68.26 TO 649+72.26  
 4.00' X 12" TYPE A PIPE  
 CL 3 EXC. UNDER FIRST PIPE NOTE

SOUTH MEDIAN CULVERT SECTION SHEET  
SHEET 2 OF 2



DATE PREPARED  
 9/4/2024  
 ROUTE I-435 STATE MO  
 DISTRICT KC SHEET NO. 73

COUNTY CLAY  
 JOB NO. J4P3468  
 CONTRACT ID. \_\_\_\_\_  
 PROJECT NO. \_\_\_\_\_  
 BRIDGE NO. \_\_\_\_\_

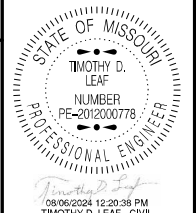
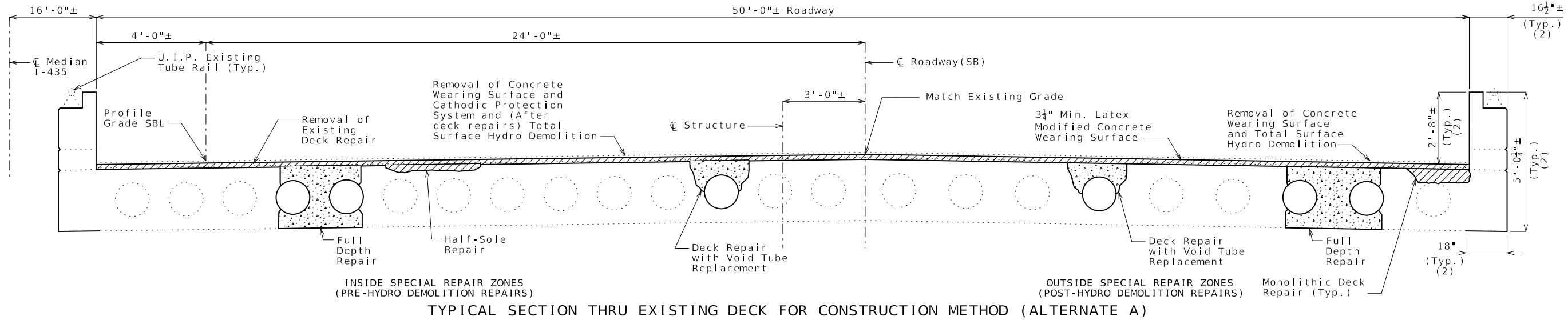
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MODOT (1-888-275-6636)

U.I.P. AND REHABILITATE EXISTING (37'-66'-37') CONTINUOUS CONCRETE VOIDED SLAB SPANS

SEC/SUR 3 TWP 50N RGE 32W



DATE PREPARED  
8/6/2024  
ROUTE I-435 STATE MO  
DISTRICT BR SHEET NO. 1  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A16674

(2) Limits of Cleaning and Epoxy Coating (See Sec. 711)

For details of superstructure repairs and limits of cleaning and epoxy coating, see Sheet No. 4.

Optional Construction Methods	
Construction Method	Method Used (✓)
Alternate A	
Alternate B	

MoDOT construction personnel will complete column labeled "Method Used (✓)".

For additional details of Construction Method A, see Sheet No. 2

For details of Construction Method B, see Sheet No. 3

Estimated Quantities		
Item		Total
Total Surface Hydro Demolition	sq. yard	792
Removal of Concrete Wearing Surface	sq. foot	7,125
Removal of Existing Deck Repair	sq. foot	200
(1) Removal of Cathodic Protection System	lump sum	1
Latex Modified Concrete Wearing Surface	sq. yard	792
Diamond Grinding	sq. yard	792
Substructure Repair (Unformed)	sq. foot	45
Full Depth Repair	sq. foot	350
Deck Repair with Void Tube Replacement	sq. foot	250
Cleaning and Epoxy Coating	sq. foot	3244
Alternate A		
* Supplementary Wearing Surface Material (Alternate A)	cu. yard	15
Half-Sole Repair (Alternate A)	sq. foot	1200
Alternate B		
* Supplementary Wearing Surface Material (Alternate B)	cu. yard	29

- (1) Disconnect and remove existing cathodic protection system and wiring.
- \* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications  
Bridge Deck Rating = 6

Design Loading:

HS20-44 with Mod. 24,000 pounds Tandem axle (1965 and New Construction)

Design Unit Stresses:

Class B-1 Concrete (Half-Sole & Full Depth Repair & Deck Repair with Void Tube Replacement)  $f'c = 4,000$  psi

Miscellaneous:

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

All concrete repairs shall be in accordance with Sec. 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

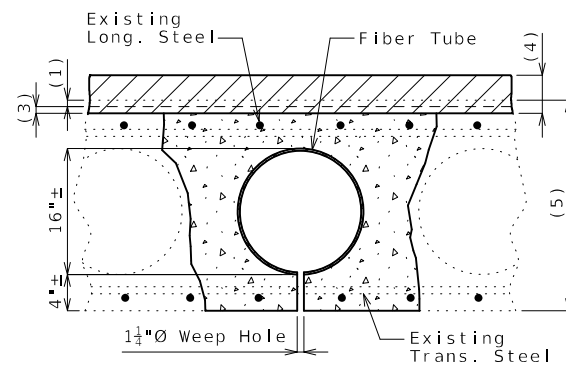
In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Removal of existing wearing surface and 1/2" of existing deck to be considered completely covered by the contract unit cost for Removal of Concrete Wearing Surface.

No heavy equipment will be allowed on the structure during construction. See special provisions.

Traffic Handling:

Bridge is to be closed to traffic during construction. See Roadway Plans for traffic control.



FIBER VOID TUBE REPLACEMENT

Fiber tubes for producing voids shall have an approximate outside diameter of 16 inches and a wall thickness of 1/4 inch and shall be anchored to joists carrying the floor form at not more than 4-foot centers.

One 1 1/4" weep hole shall be provided at 3" from each end of each new void.

Void Repair:

Any damage sustained to the void tube as a result of the contractor's operations shall be patched or replaced as required by the engineer at the contractor's expense.

An exposed void in the deck shall be patched as approved by the engineer in a manner that shall maintain the void area completely free of concrete. Cost of patching an exposed void will be considered completely covered by the contract unit price for Half-Sole Repair inside special repair zones and Supplementary Wearing Surface Material (Alternate A) outside special repair zones.

When a deteriorated portion of the void tube is beyond the point of patching as determined by the engineer, the portion of the deteriorated void tube shall be replaced. The void area shall be maintained completely free of concrete. Cutting of the longitudinal reinforcing steel will not be permitted. The fiber tubes for producing the voids shall have an outside diameter with the wall thickness the same as the existing tubes and anchored at not more than the original spacing. Cost of replacing the void tube will be considered completely covered by the contract unit price for Deck Repair with Void Tube Replacement. Measurement will be horizontal projection of the area of exposed tube in plan.

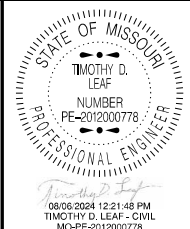
REPAIRS TO BRIDGE: ROUTE I-435 SB OVER 48TH STREET

ROUTE I-435 SB FROM I-35 TO ROUTE 210  
ABOUT 1.8 MILES SOUTH OF ROUTE I-35 INTERCHANGE  
BEGINNING STATION 596+89.95± (MATCH EXISTING)

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
8/6/2024

ROUTE I-435 STATE MO

DISTRICT BR SHEET NO. 2

COUNTY CLAY

JOB NO. J4P3468

CONTRACT ID.

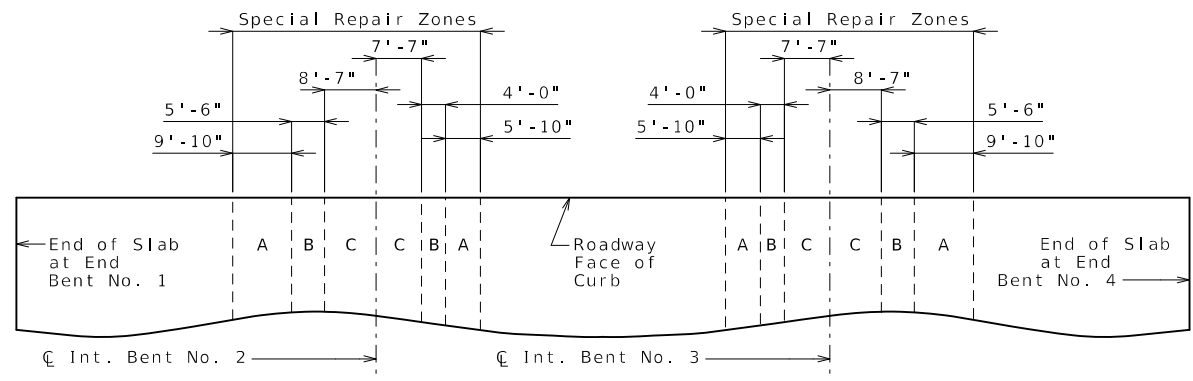
PROJECT NO.

BRIDGE NO. A16674

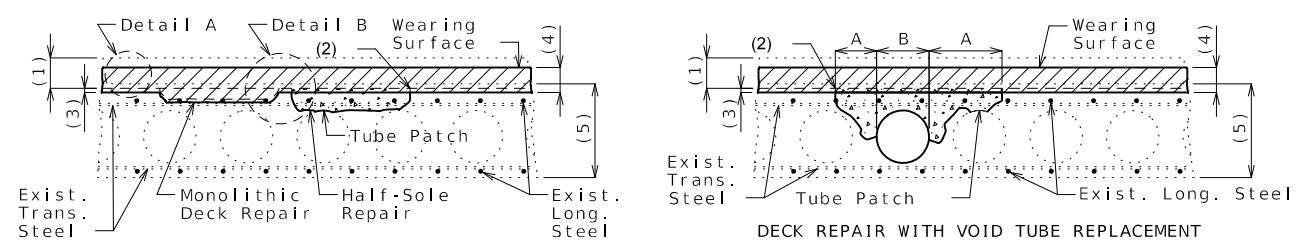
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

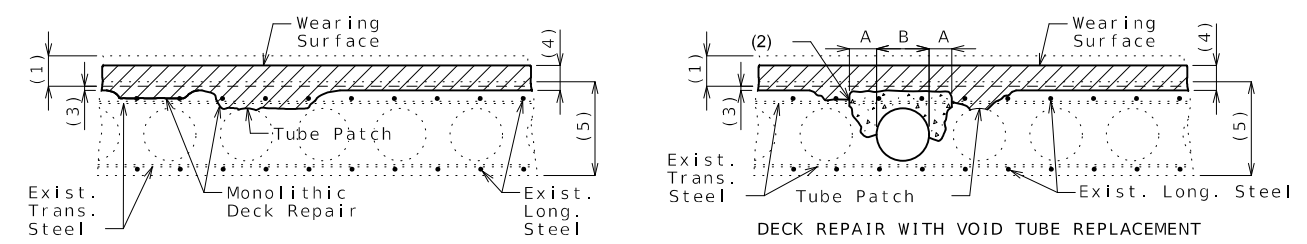
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

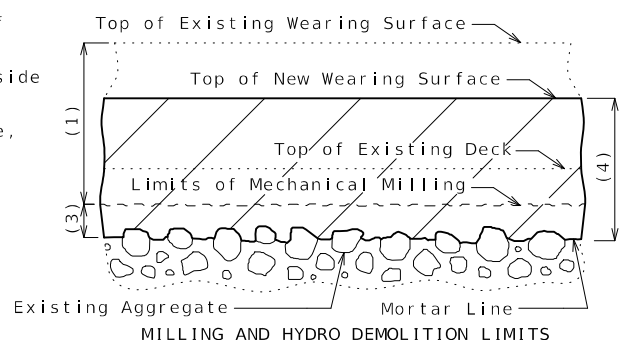


DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)



DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)

- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition of sound concrete, measured to mortar line:  
1/4" minimum inside special repair zones  
1/2" minimum outside special repair zones
- (4) Latex Modified concrete wearing surface:  
3" minimum inside special repair zones  
3 1/4" minimum outside special repair zones
- (5) Original depth minus previous scarification
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



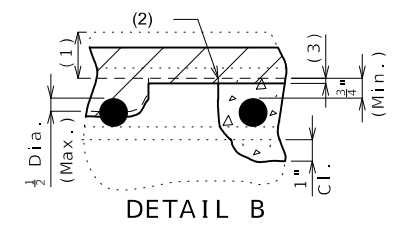
DETAIL A

\* For details of Void Tube Replacement not shown, see Sheet No. 1

**DECK REPAIR DETAILS (ALTERNATE A)**  
(EXISTING CATHODIC PROTECTION SYSTEM NOT SHOWN, FOR CLARITY)

**Deck Repair Notes (Alternate A):**

- Order of Repair:
1. Remove existing wearing surface plus 1/2" of existing deck.
  2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repairs areas shall be per the approval of the engineer.
  3. Inside special repair zones, complete the following repairs:  
a. Removal of existing deck repair  
b. Half-sole repair  
c. Deck repair with void tube replacement \*  
d. Full Depth Repair
  4. Outside special repair zones, remove existing deck repair.
  5. Complete total surface hydro demolition, removing 1/4" minimum of sound concrete inside special repair zones and removing 1/2" minimum of sound concrete and all deteriorated concrete outside special repair zones.
  6. Sound deck and if needed complete incidental concrete removal.
  7. Outside special repair zones, complete the following repairs:  
a. Deck repair with void tube replacement \*  
b. Full Depth Repair
  8. Place new wearing surface including additional material for areas of monolithic deck repair.



Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

**Hold Point to Determine Extent of Special Repair Zones:**

A hold point will be established to determine the overall condition of the voided slab after completion of the wearing surface removal and scarification operations. The bridge deck will then be sounded to determine whether special repair zone work will be required. The sounding information will be cross-referenced with the GPR data in the electronic deliverables/

If it is determined by the engineer that special repair zones are unnecessary, use details for Outside Special Repair Zones (After Hydro Demolition).

**Special Repair Zones:**

Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

If any single repair area does not exceed 4 square feet in size and the total repair area within a special repair zone does not exceed 12 square feet, the special repair zone may be repaired at the same time as an adjacent zone.

**Work Outside Special Repair Zones:**

Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.



STATE OF MISSOURI  
TIMOTHY D. LEAF  
NUMBER  
PE-2012000778  
PROFESSIONAL ENGINEER

DATE PREPARED  
8/6/2024

ROUTE  
I-435  
DISTRICT  
BR

STATE  
MO  
SHEET NO.  
3

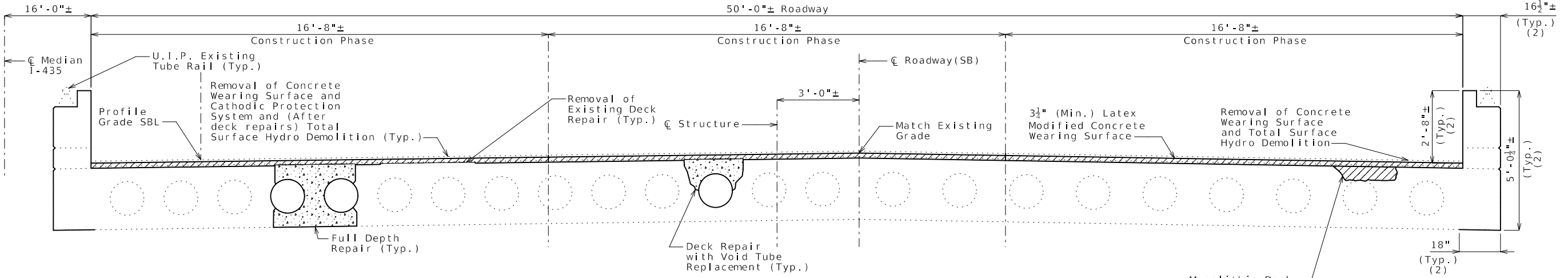
COUNTY  
CLAY  
JOB NO.  
J4P3468  
CONTRACT ID.

PROJECT NO.

BRIDGE NO.  
A16674

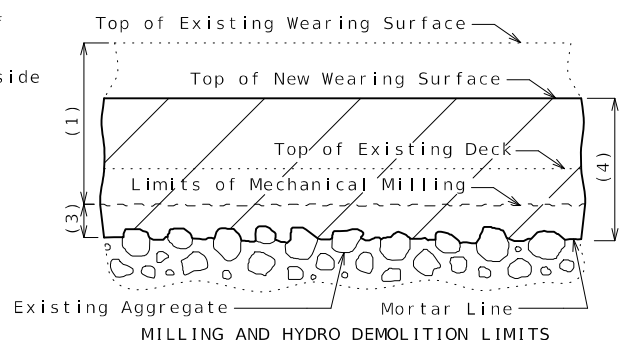
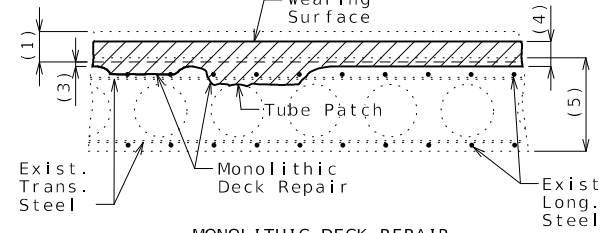
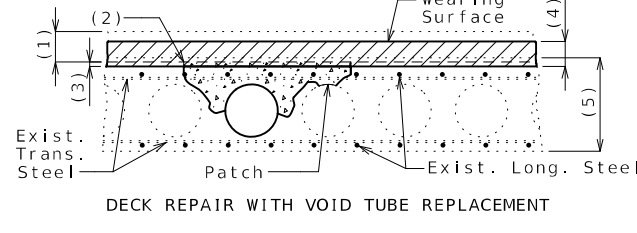
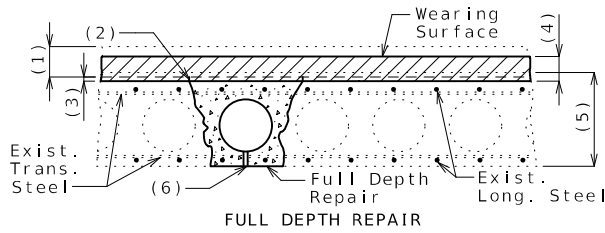
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



**TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE B)**

Construction phases may be completed in any order, but only one at a time, all repairs shall be completed and allowed to cure before starting on the next phase.



**DETAIL A**

- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition 1/2" minimum of sound concrete, and all unsound concrete.
- (4) 3 1/4" minimum Latex Modified concrete wearing surface:
- (5) Original depth minus scarification.
- (6) Increase size of existing weep hole to 1 1/4", if encountered.

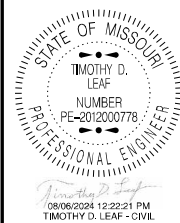
**Deck Repair Notes (Alternate B):**

- Order of Repair (repeat for each construction phase):
1. Remove existing wearing surface plus 1/2" of existing deck.
  2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
  3. Complete the following repairs:
    - a. Removal of existing deck repair
    - b. Deck repair with void tube replacement \*
    - c. Full Depth Repair
  4. Complete total surface hydro demolition, removing 1/2" minimum of sound concrete and all deteriorated concrete.
  5. Sound deck and if needed, complete incidental concrete removal.
  6. Place new wearing surface including additional material for areas of monolithic deck repair.

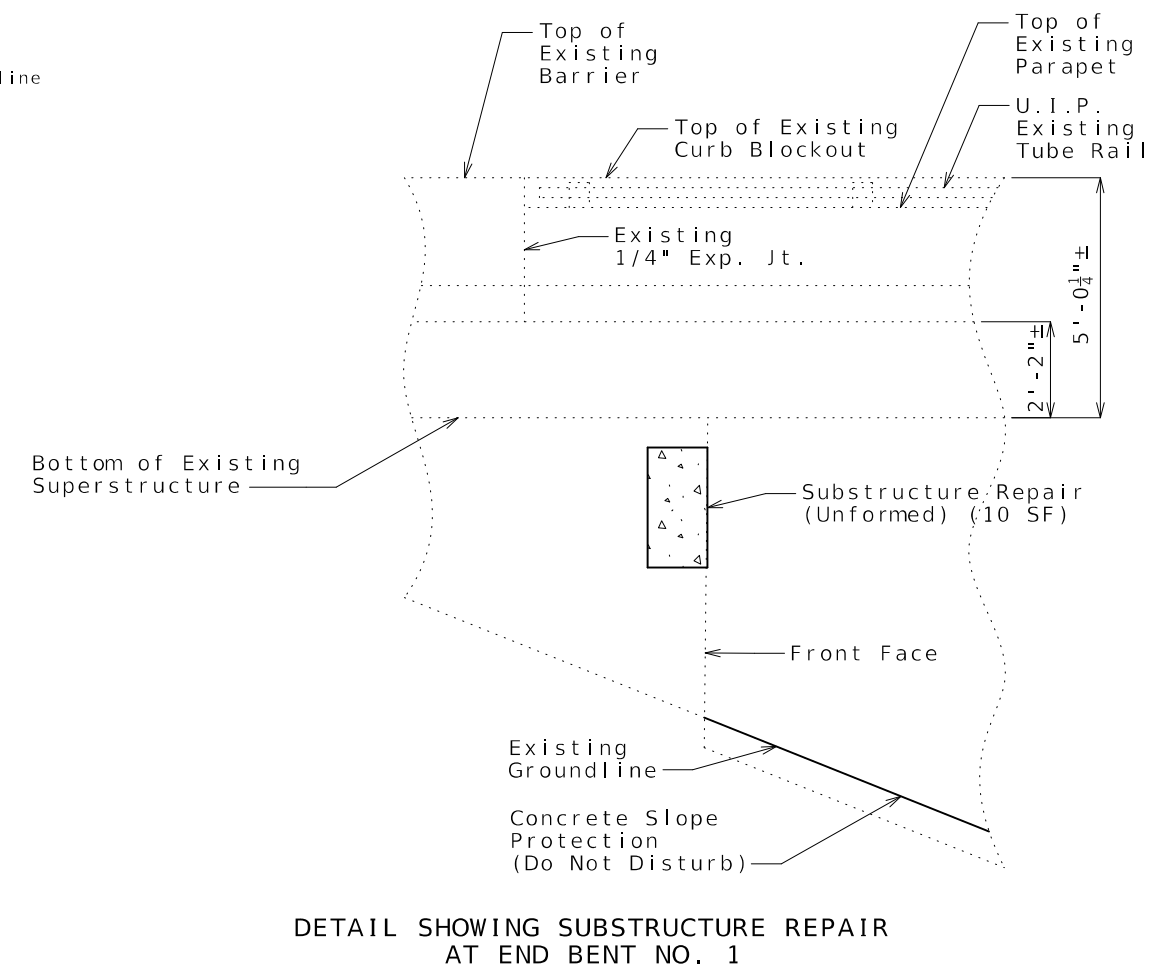
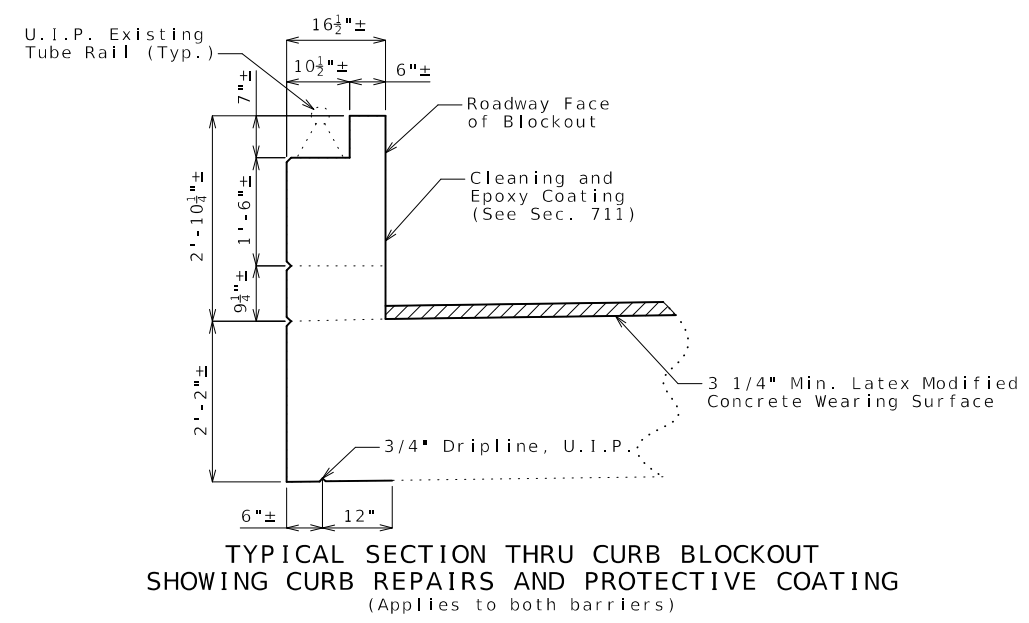
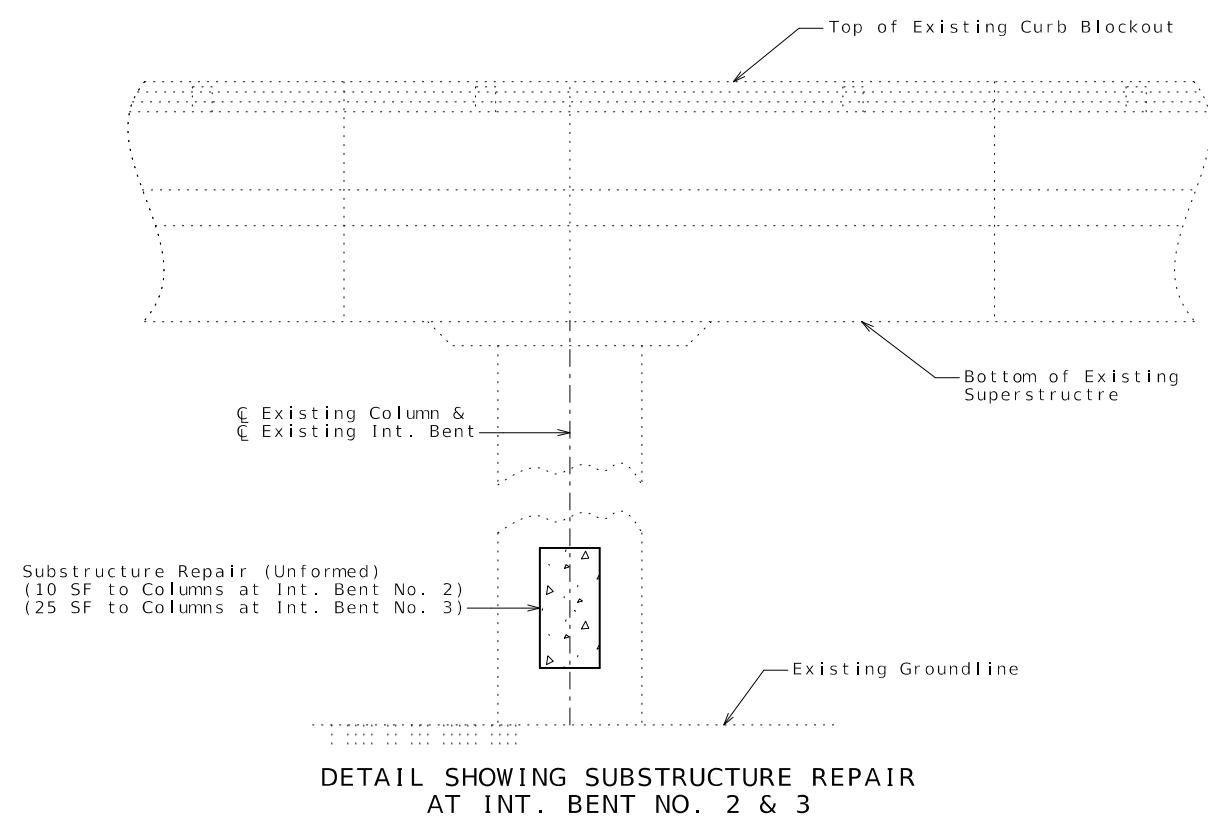
\* For details of Void Tube Replacement not shown, see Sheet No. 1

**DECK REPAIR DETAILS (ALTERNATE B)**

(EXISTING CATHODIC PROTECTION SYSTEM NOT SHOWN, FOR CLARITY)



DATE PREPARED 8/6/2024	
ROUTE I-435	STATE MO
DISTRICT BR	SHEET NO. 4
COUNTY CLAY	
JOB NO. J4P3468	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO. A16674	



PROTECTIVE COATING AND SUBSTRUCTURE REPAIR DETAILS

DATE	DESCRIPTION

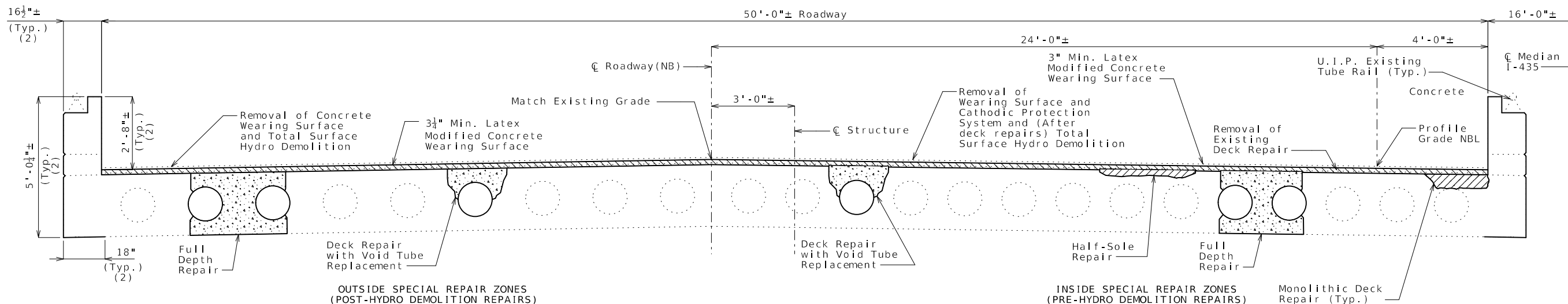
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



U.I.P. AND REHABILITATE EXISTING (37'-66'-37') CONTINUOUS CONCRETE VOIDED SLAB SPANS

SEC/SUR 3 TWP 50N RGE 32W



TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE A)

(2) Limits of Cleaning and Epoxy Coating (See Sec. 711)

For details of superstructure repairs and limits of cleaning and epoxy coating, see Sheet No. 4.

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications  
Bridge Deck Rating = 6

Design Loading:

HS20-44 with Mod. 24,000 pounds Tandem axle (1965 and New Construction)

Design Unit Stresses:

Class B-1 Concrete (Half-Sole Repair & Full Depth Repair & Deck Repair with Void Tube Replacement) f'c = 4,000 psi

Miscellaneous:

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

All concrete repairs shall be in accordance with Sec. 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Removal of existing wearing surface and 1/2" of existing deck to be considered completely covered by the contract unit cost for Removal of Concrete Wearing Surface.

No heavy equipment will be allowed on the structure during construction. See special provisions.

Traffic Handling:

Bridge is to be closed to traffic during construction. See Roadway Plans for traffic control.

Optional Construction Methods	
Construction Method	Method Used (✓)
Alternate A	
Alternate B	

MoDOT construction personnel will complete column labeled "Method Used (✓)".

For additional details of Construction Method A, see Sheet No. 2

For details of Construction Method B, see Sheet No. 3

Void Repair:

Any damage sustained to the void tube as a result of the contractor's operations shall be patched or replaced as required by the engineer at the contractor's expense.

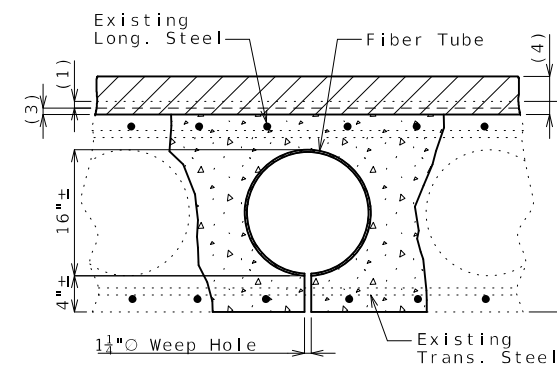
An exposed void in the deck shall be patched as approved by the engineer in a manner that shall maintain the void area completely free of concrete. Cost of patching an exposed void will be considered completely covered by the contract unit price for Half-Sole Repair inside special repair zones and Supplementary Wearing Surface Material (Alternate A) outside special repair zones.

When a deteriorated portion of the void tube is beyond the point of patching as determined by the engineer, the portion of the deteriorated void tube shall be replaced. The void area shall be maintained completely free of concrete. Cutting of the longitudinal reinforcing steel will not be permitted. The fiber tubes for producing the voids shall have an outside diameter with the wall thickness the same as the existing tubes and anchored at not more than the original spacing. Cost of replacing the void tube will be considered completely covered by the contract unit price for Deck Repair with Void Tube Replacement. Measurement will be horizontal projection of the area of exposed tube in plan.

Estimated Quantities

Item	Unit	Total
Total Surface Hydro Demolition	sq. yard	792
Removal of Concrete Wearing Surface	sq. foot	7,125
Removal of Existing Deck Repair	sq. foot	1180
(1) Removal of Cathodic Protection System	Lump sum	1
Latex Modified Concrete Wearing Surface	sq. yard	792
Diamond Grinding	sq. yard	792
Substructure Repair (Unformed)	sq. foot	45
Full Depth Repair	sq. foot	350
Deck Repair with Void Tube Replacement	sq. foot	250
Cleaning and Epoxy Coating	sq. foot	3244
Alternate A		
* Supplementary Wearing Surface Material (Alternate A)	cu. yard	15
Half-Sole Repair (Alternate A)	sq. foot	1200
Alternate B		
* Supplementary Wearing Surface Material (Alternate B)	cu. yard	29

- (1) Disconnect and remove existing cathodic protection system and wiring.
- \* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.



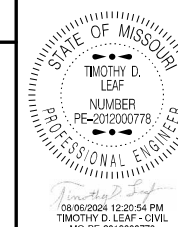
FIBER VOID TUBE REPLACEMENT

Fiber tubes for producing voids shall have an approximate outside diameter of 16 inches and a wall thickness of 1/4 inch and shall be anchored to joists carrying the floor form at not more than 4-foot centers.

One 1 1/4"Ø weep hole shall be provided at 3" from each end of each new void.

REPAIRS TO BRIDGE: ROUTE I-435 NB OVER 48TH STREET

ROUTE I-435 NB FROM ROUTE 210 TO ROUTE I-35 ABOUT 1.5 MILES NORTH OF ROUTE 210 BEGINNING STATION 596+89.95± (MATCH EXISTING)



DATE PREPARED 8/6/2024

ROUTE I-435 STATE MO

DISTRICT BR SHEET NO. 1

COUNTY CLAY

JOB NO. J4P3468

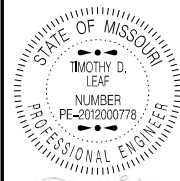
CONTRACT ID.

PROJECT NO.

BRIDGE NO. A16675

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
8/6/2024

ROUTE  
I-435

STATE  
MO

DISTRICT  
BR

SHEET NO.  
2

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

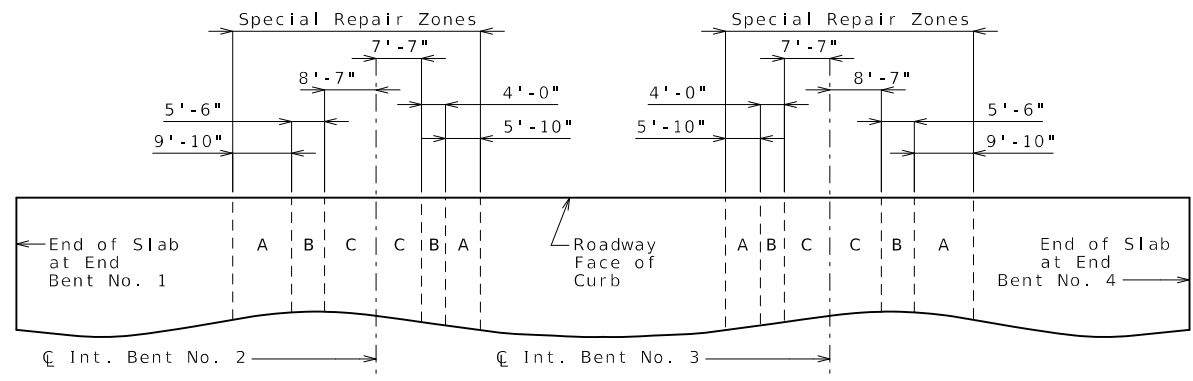
PROJECT NO.

BRIDGE NO.  
A16675

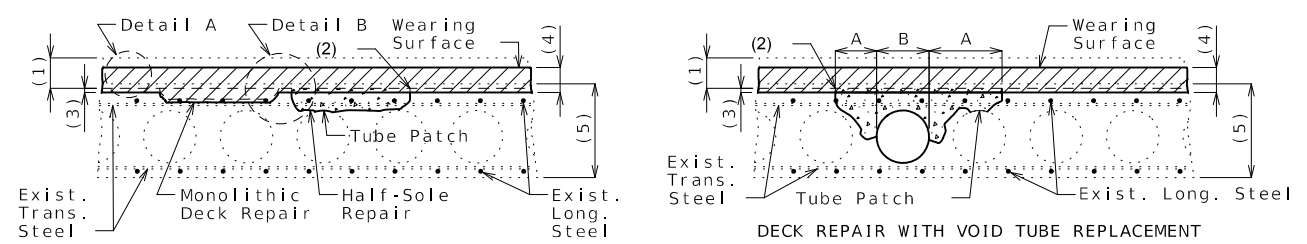
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

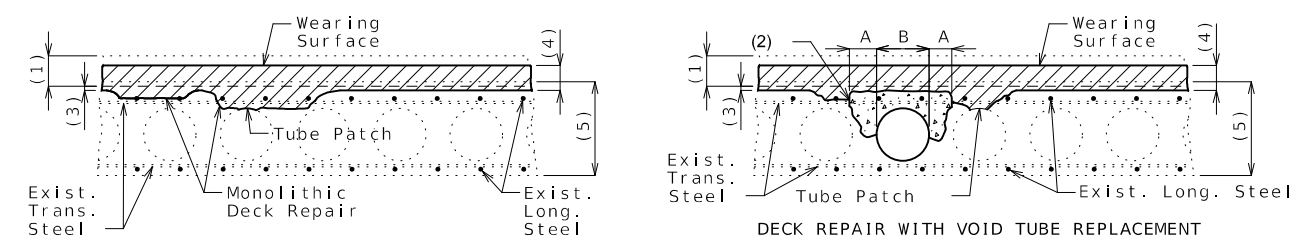
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
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PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES



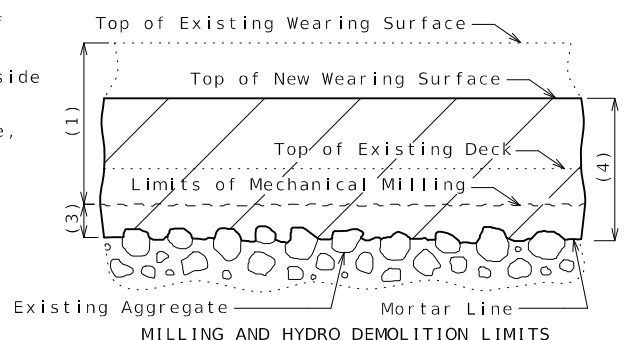
DECK REPAIR WITH VOID TUBE REPLACEMENT  
A = Half-Sole Repair  
B = Deck Repair with Void Tube Replacement



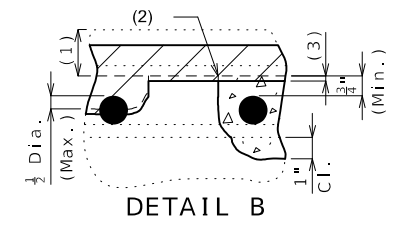
DECK REPAIR WITH VOID TUBE REPLACEMENT  
A = Half-Sole Repair  
B = Deck Repair with Void Tube Replacement

DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)

- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition of sound concrete, measured to mortar line:  
1/4" minimum inside special repair zones  
1/2" minimum outside special repair zones
- (4) Latex Modified concrete wearing surface:  
3" minimum inside special repair zones  
3 1/4" minimum outside special repair zones
- (5) Original depth minus previous scarification
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



MILLING AND HYDRO DEMOLITION LIMITS  
DETAIL A



Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

Deck Repair Notes (Alternate A):

Order of Repair:

1. Remove existing wearing surface plus 1/2" of existing deck.
2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
3. Inside special repair zones, complete the following repairs:  
a. Removal of existing deck repair  
b. Half-sole repair  
c. Deck repair with void tube replacement \*  
d. Full Depth Repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing 1/4" minimum of sound concrete inside special repair zones and removing 1/2" minimum of sound concrete and all deteriorated concrete outside special repair zones.
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete the following repairs:  
a. Deck repair with void tube replacement \*  
b. Full Depth Repair
8. Place new wearing surface including additional material for areas of monolithic deck repair.

Hold Point to Determine Extent of Special Repair Zones:

A hold point will be established to determine the overall condition of the voided slab after completion of the wearing surface removal and scarification operations. The bridge deck will then be sounded to determine whether special repair zone work will be required. The sounding information will be cross-referenced with the GPR data in the electronic deliverables.

If it is determined by the engineer that special repair zones are unnecessary, use details for Outside Special Repair Zones (After Hydro Demolition).

**Special Repair Zones:**  
Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

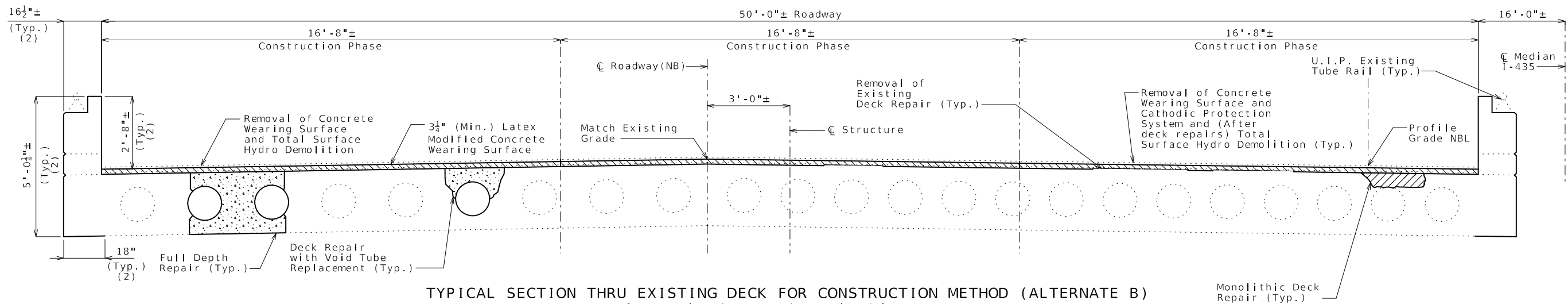
If any single repair area does not exceed 4 square feet in size and the total repair area within a special repair zone does not exceed 12 square feet, the special repair zone may be repaired at the same time as an adjacent zone.

Work Outside Special Repair Zones:

Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.

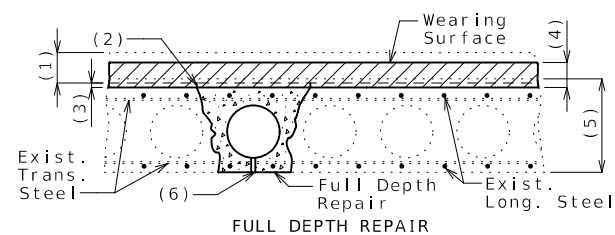
\* For details of Void Tube Replacement not shown, see Sheet No. 1

DECK REPAIR DETAILS (ALTERNATE A)

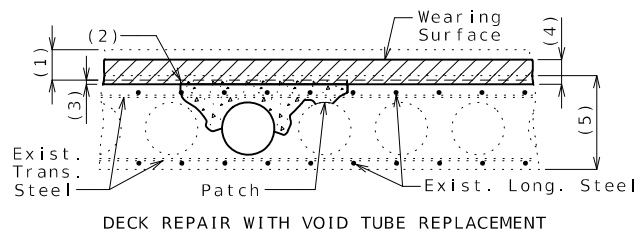


TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE B)

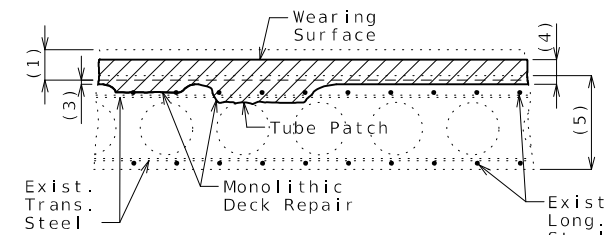
Construction phases may be completed in any order, but only one at a time. All repairs shall be completed and allowed to cure before starting on the next phase.



FULL DEPTH REPAIR

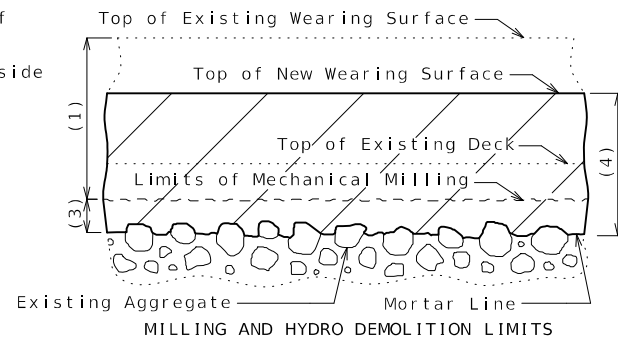


DECK REPAIR WITH VOID TUBE REPLACEMENT



MONOLITHIC DECK REPAIR

- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition 1/2" minimum of sound concrete, and all unsound concrete.
- (4) 3 1/4" minimum Latex Modified concrete wearing surface.
- (5) Original depth minus scarification.
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



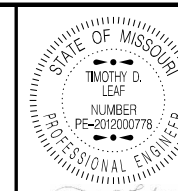
DETAIL A

\* For details of Void Tube Replacement not shown, see Sheet No. 1

DECK REPAIR DETAILS (ALTERNATE B)

Deck Repair Notes (Alternate B):

- Order of Repair (repeat for each construction phase):
1. Remove existing wearing surface plus 1/2" of existing deck.
  2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
  3. Complete the following repairs:
    - a. Removal of existing deck repair
    - b. Deck repair with void tube replacement \*
    - c. Full Depth Repair
  4. Complete total surface hydro demolition, removing 1/2" minimum of sound concrete and all deteriorated concrete.
  5. Sound deck and if needed, complete incidental concrete removal.
  6. Place new wearing surface including additional material for areas of monolithic deck repair.



DATE PREPARED  
8/6/2024

ROUTE I-435 STATE MO  
DISTRICT BR SHEET NO. 3

COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.

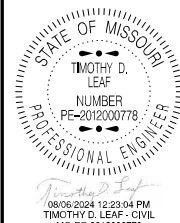
PROJECT NO.

BRIDGE NO. A16675

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)





DATE PREPARED  
8/6/2024

ROUTE STATE  
I-435 MO

DISTRICT SHEET NO.  
BR 4

COUNTY  
CLAY

JOB NO.  
J4P3468

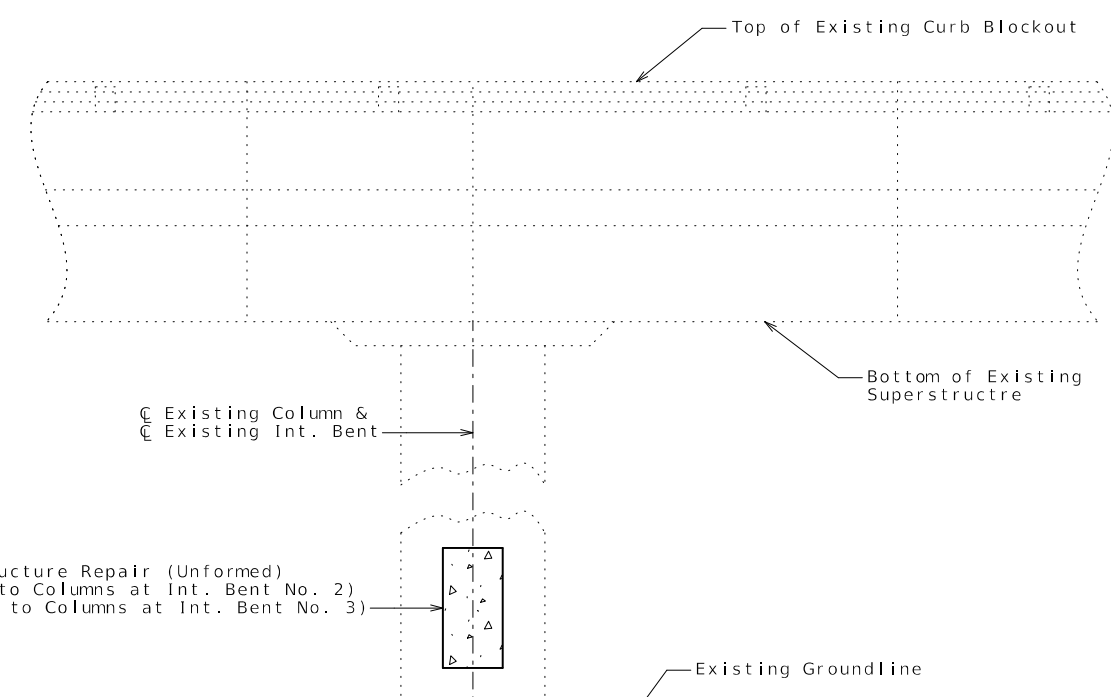
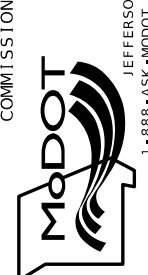
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PROJECT NO.

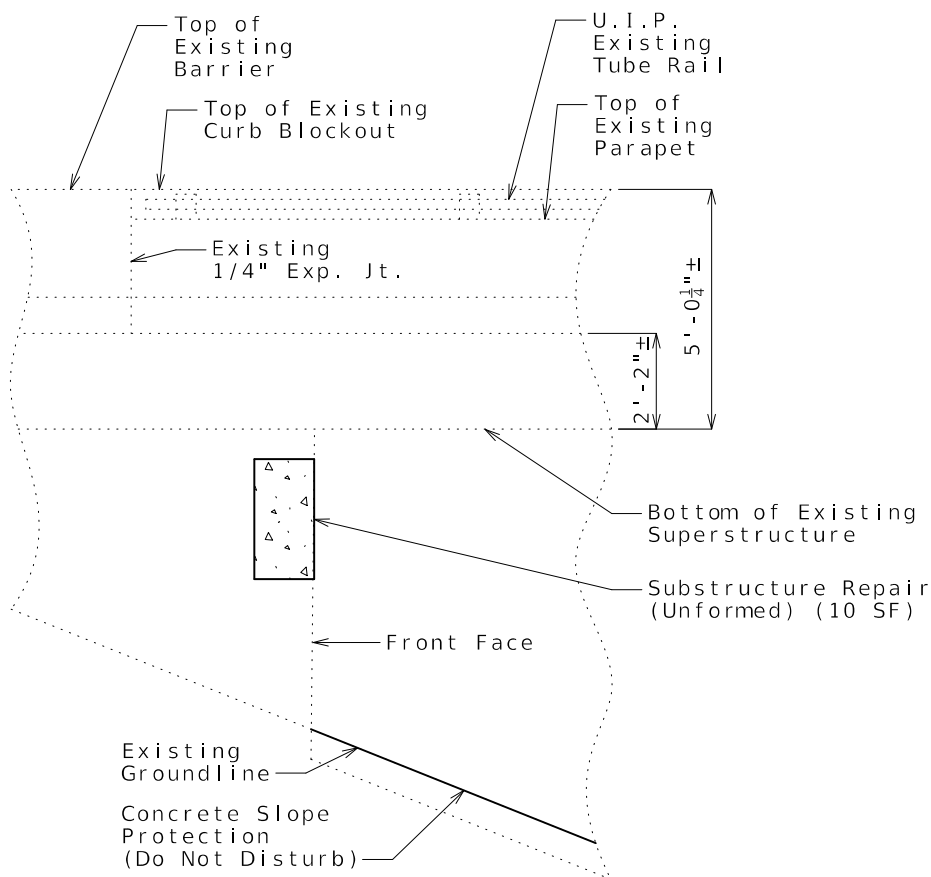
BRIDGE NO.  
A16675

DESCRIPTION	DATE

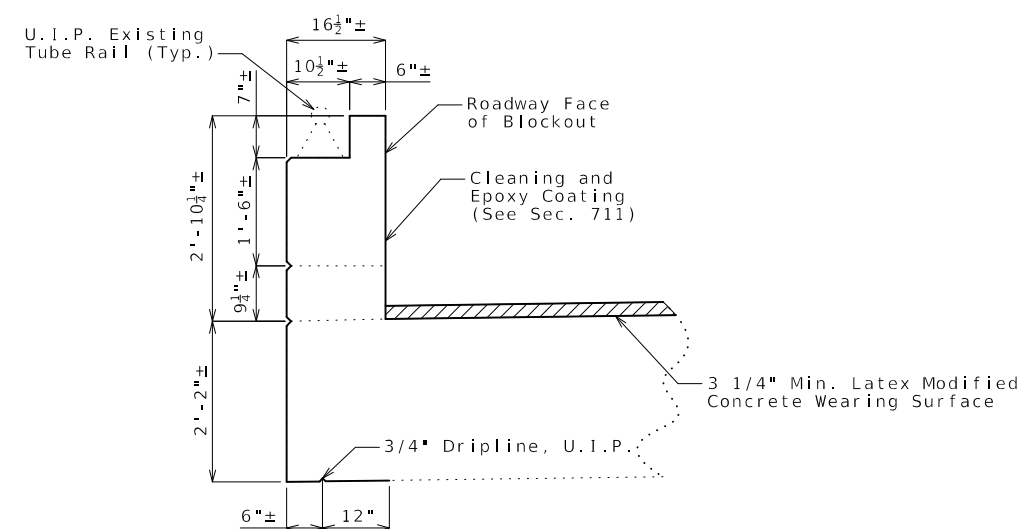
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



DETAIL SHOWING SUBSTRUCTURE REPAIR AT INT. BENT NO. 2 & 3



DETAIL SHOWING SUBSTRUCTURE REPAIR AT END BENT NO. 1

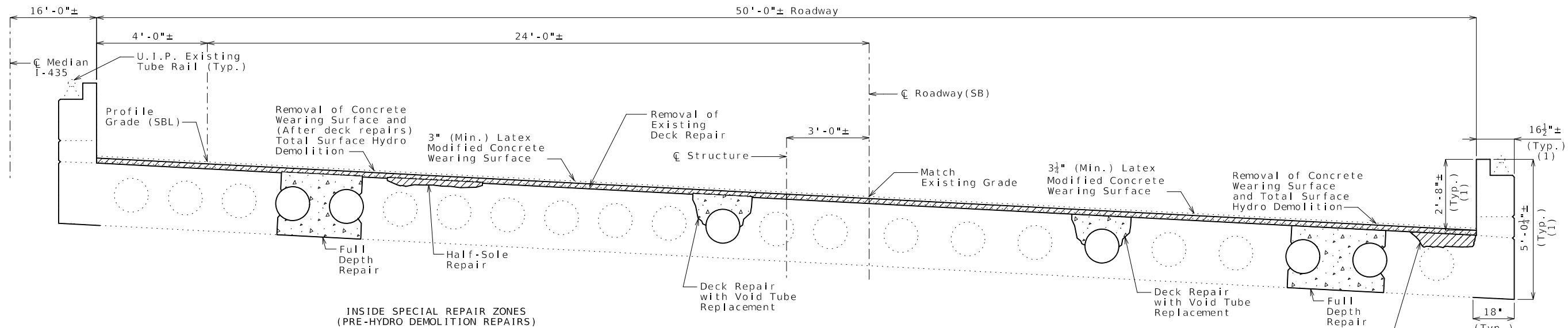


TYPICAL SECTION THRU CURB BLOCKOUT SHOWING CURB REPAIRS AND PROTECTIVE COATING (Applies to both barriers)

PROTECTIVE COATING AND SUBSTRUCTURE REPAIR DETAILS

U.I.P. AND REHABILITATE EXISTING (47'-64'-39') CONTINUOUS CONCRETE VOIDED SLAB SPANS

SEC/SUR 3 TWP 50N RGE 32W



(1) Limits of Cleaning and Epoxy Coating (See Sec. 711)

For details of superstructure repairs and limits of cleaning and epoxy coating, see Sheet No. 4.

TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE A)

Estimated Quantities		
Item		Total
Total Surface Hydro Demolition	sq. yard	849
Removal of Concrete Wearing Surface	sq. foot	7,637
Removal of Existing Deck Repair	sq. foot	850
Latex Modified Concrete Wearing Surface	sq. yard	792
Diamond Grinding	sq. yard	792
Substructure Repair (Unformed)	sq. foot	15
Full Depth Repair	sq. foot	400
Deck Repair with Void Tube Replacement	sq. foot	200
Cleaning and Epoxy Coating	sq. foot	3514
Alternate A		
* Supplementary Wearing Surface Material (Alternate A)	cu. yard	12
Half-Sole Repair (Alternate A)	sq. foot	1,000
Alternate B		
* Supplementary Wearing Surface Material (Alternate B)	cu. yard	24

\* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.

Optional Construction Methods	
Construction Method	Method Used (✓)
Alternate A	
Alternate B	

MoDOT construction personnel will complete column labeled "Method Used (✓)".

For additional details of Construction Method Alternate A, see Sheet No. 2

For Details of Construction Method Alternate B, see Sheet No. 3

**General Notes:**

**Design Specifications:**  
2002 AASHTO LFD (17th Ed.) Standard Specifications  
Bridge Deck Rating = 6

**Design Loading:**  
HS20-44 with Mod. 24,000 pounds Tandem axle (1965 and New Construction)

**Design Unit Stresses:**  
Class B-1 Concrete (Half-Sole Repair & Full Depth & Deck Repair with Void Tube Replacement) f'c = 4,000 psi

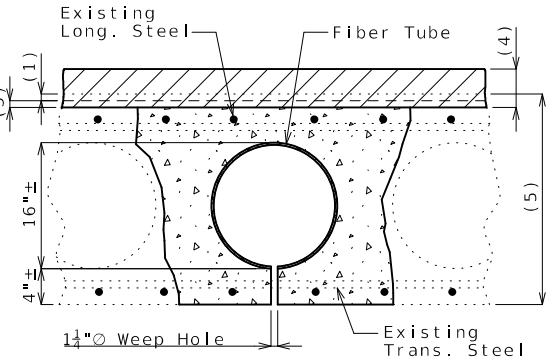
**Miscellaneous:**  
Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).  
All concrete repairs shall be in accordance with Sec. 704, unless otherwise noted.  
Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.  
Contractor shall verify all dimensions in field before ordering new material.  
In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.  
Removal of existing wearing surface and 1/2" of existing deck to be considered completely covered by the contract unit cost for Removal of Concrete Wearing Surface.  
No heavy equipment will be allowed on the structure during construction. See special provisions.

**Traffic Handling:**  
Bridge is to be closed to traffic during construction. See Roadway Plans for traffic control.

**Void Repair:**  
Any damage sustained to the void tube as a result of the contractor's operations shall be patched or replaced as required by the engineer at the contractor's expense.

An exposed void in the deck shall be patched as approved by the engineer in a manner that shall maintain the void area completely free of concrete. Cost of patching an exposed void will be considered completely covered by the contract unit price for Half-Sole Repair inside special repair zones and Supplementary Wearing Surface Material (Alternate A) outside special repair zones.

When a deteriorated portion of the void tube is beyond the point of patching as determined by the engineer, the portion of the deteriorated void tube shall be replaced. The void area shall be maintained completely free of concrete. Cutting of the longitudinal reinforcing steel will not be permitted. The fiber tubes for producing the voids shall have an outside diameter with the wall thickness the same as the existing tubes and anchored at not more than the original spacing. Cost of replacing the void tube will be considered completely covered by the contract unit price for Deck Repair with Void Tube Replacement. Measurement will be horizontal projection of the area of exposed tube in plan.



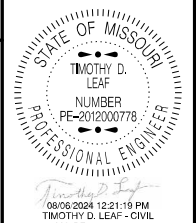
FIBER VOID TUBE REPLACEMENT

Fiber tubes for producing voids shall have an approximate outside diameter of 16 inches and a wall thickness of 1/4 inch and shall be anchored to joists carrying the floor form at not more than 4-foot centers.

One 1 1/4"Ø weep hole shall be provided at 3" from each end of each new void.

REPAIRS TO BRIDGE: ROUTE I-435 SB OVER PARVIN ROAD

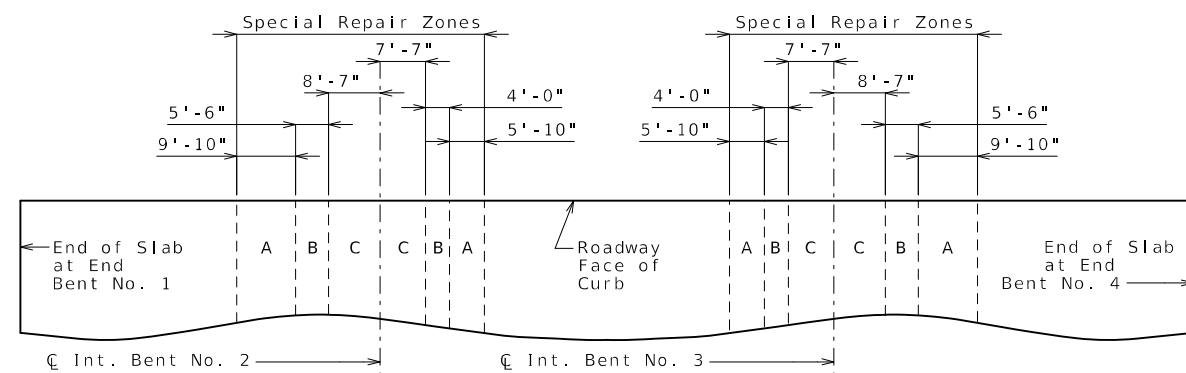
ROUTE I-435 SB FROM I-35 TO ROUTE 210 ABOUT 2.6 MILES SOUTH OF ROUTE I-35 INTERCHANGE BEGINNING STATION 641+44.46± (MATCH EXISTING)



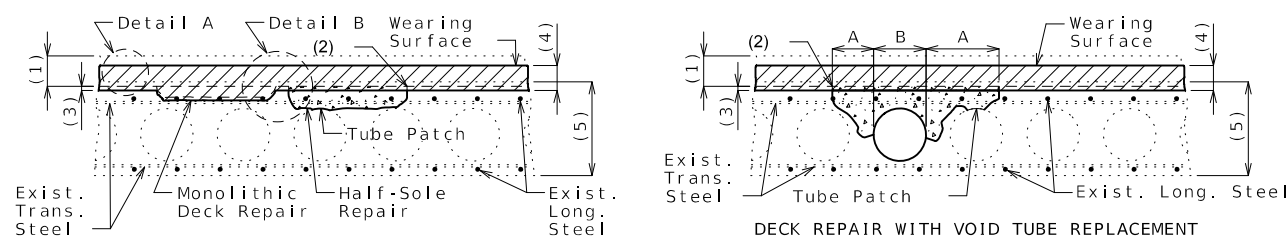
DATE PREPARED  
8/6/2024  
ROUTE I-435 STATE MO  
DISTRICT BR SHEET NO. 1  
COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.  
PROJECT NO.  
BRIDGE NO. A16744

DESCRIPTION	DATE

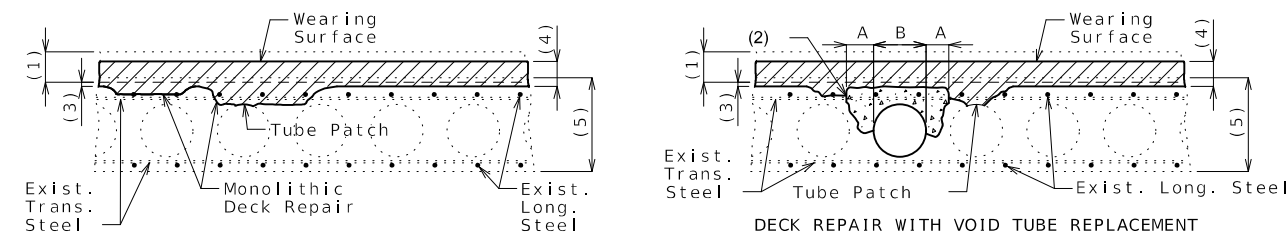
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

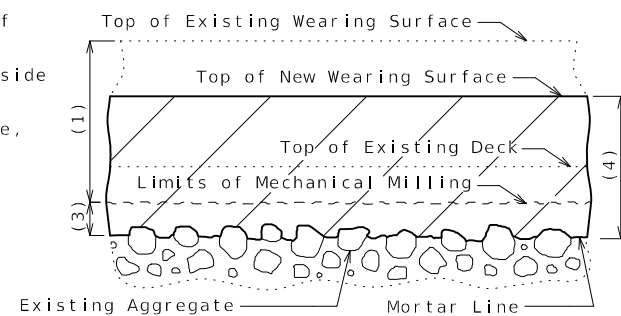


DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)  
 A = Half-Sole Repair  
 B = Deck Repair with Void Tube Replacement

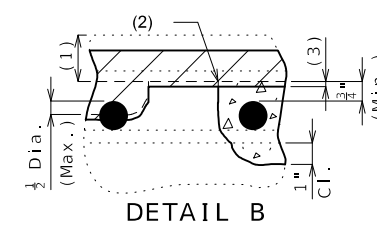


DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)  
 A = Half-Sole Repair  
 B = Deck Repair with Void Tube Replacement

- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition of sound concrete, measured to mortar line:  
 1/4" minimum inside special repair zones  
 1/2" minimum outside special repair zones
- (4) Latex Modified concrete wearing surface:  
 3" minimum inside special repair zones  
 3 1/4" minimum outside special repair zones
- (5) Original depth minus previous scarification
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



DETAIL A



DETAIL B

Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

\* For details of Void Tube Replacement not shown, see Sheet No. 1

DECK REPAIR DETAILS (ALTERNATE A)

Deck Repair Notes (Alternate A):

Order of Repair:

1. Remove existing wearing surface plus 1/2" of existing deck.
2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
3. Inside special repair zones, complete the following repairs:  
 a. Removal of existing deck repair  
 b. Half-sole repair  
 c. Deck repair with void tube replacement \*  
 d. Full Depth Repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing 1/4" minimum of sound concrete inside special repair zones and removing 1/2" minimum of sound concrete and all deteriorated concrete outside special repair zones.
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete the following repairs:  
 a. Deck repair with void tube replacement \*  
 b. Full Depth Repair
8. Place new wearing surface including additional material for areas of monolithic deck repair.

Hold Point to Determine Extent of Special Repair Zones:

A hold point will be established to determine the overall condition of the voided slab after completion of the wearing surface removal and scarification operations. The bridge deck will then be sounded to determine whether special repair zone work will be required. The sounding information will be cross-referenced with the GPR data in the electronic deliverables.

If it is determined by the engineer that special repair zones are unnecessary, use details for Outside Special Repair Zones (After Hydro Demolition).

Special Repair Zones:

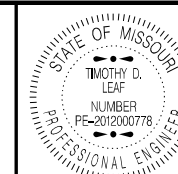
Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

If any single repair area does not exceed 4 square feet in size and the total repair area within a special repair zone does not exceed 12 square feet, the special repair zone may be repaired at the same time as an adjacent zone.

Work Outside Special Repair Zones:

Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.



DATE PREPARED  
8/6/2024

ROUTE I-435 STATE MO  
DISTRICT BR SHEET NO. 2

COUNTY CLAY  
JOB NO. J4P3468  
CONTRACT ID.

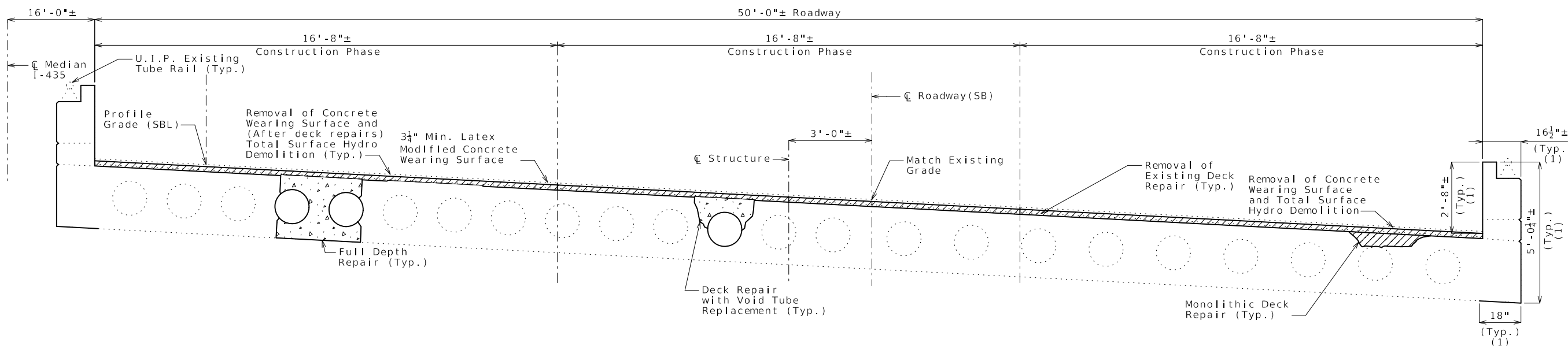
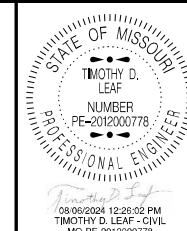
PROJECT NO.

BRIDGE NO. A16744

DESCRIPTION	DATE

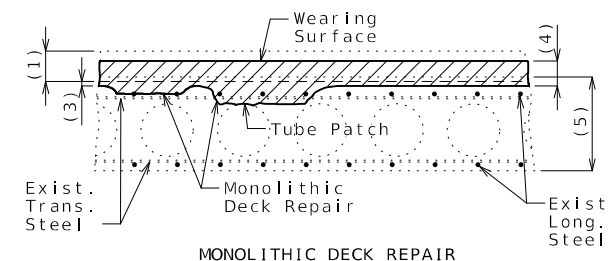
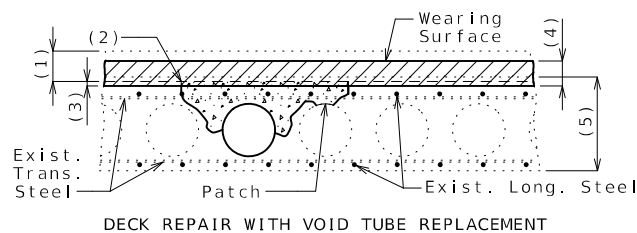
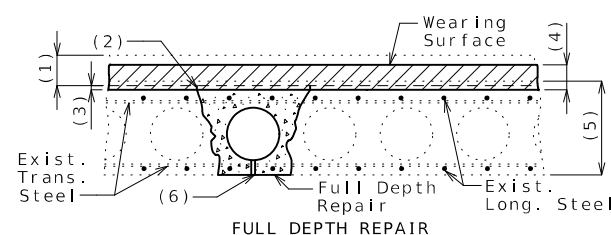
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)

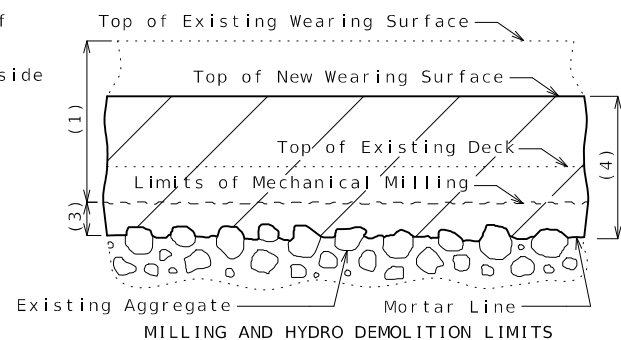


**TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE B)**

Construction phases may be completed in any order, but only one at a time. All repairs shall be completed and allowed to cure before starting on the next phase.



- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition 1/2" minimum of sound concrete, and all unsound concrete.
- (4) 3 1/4" minimum Latex Modified concrete wearing surface:
- (5) Original depth minus scarification
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



**DETAIL A**

\* For details of Void Tube Replacement not shown, see Sheet No. 1

**DECK REPAIR DETAILS (ALTERNATE B)**

**Deck Repair Notes (Alternate B):**

Order of Repair (repeat for each construction phase):

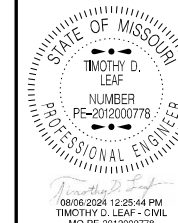
1. Remove existing wearing surface plus 1/2" of existing deck.
2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
3. Complete the following repairs:
  - a. Removal of existing deck repair
  - b. Deck repair with void tube replacement \*
  - c. Full Depth Repair
4. Complete total surface hydro demolition, removing 1/2" minimum of sound concrete and all deteriorated concrete.
5. Sound deck and if needed, complete incidental concrete removal.
6. Place new wearing surface including additional material for areas of monolithic deck repair.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION





DATE PREPARED  
8/6/2024

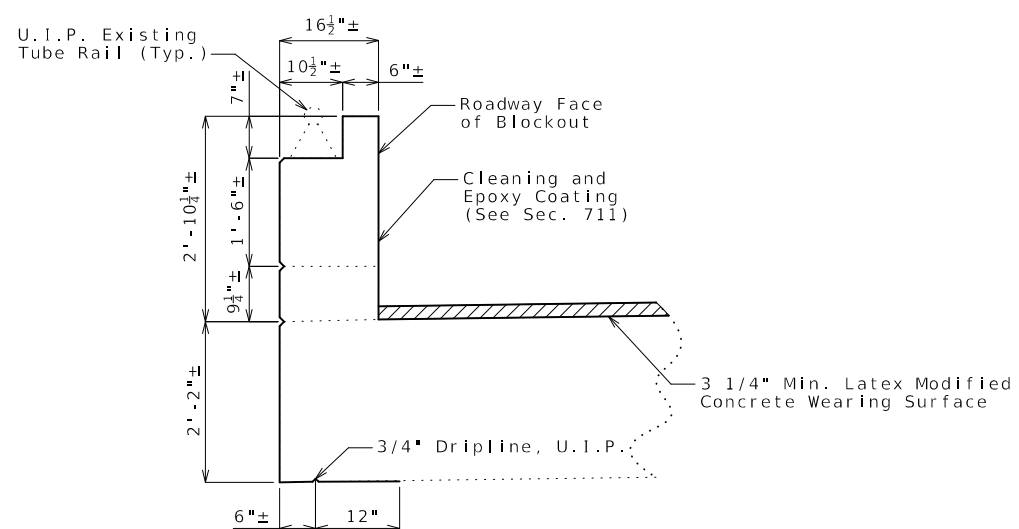
ROUTE	STATE
I - 435	MO
DISTRICT	SHEET NO.
BR	4
COUNTY	
CLAY	
JOB NO.	
J4P3468	
CONTRACT ID.	
PROJECT NO.	

BRIDGE NO.  
A16744

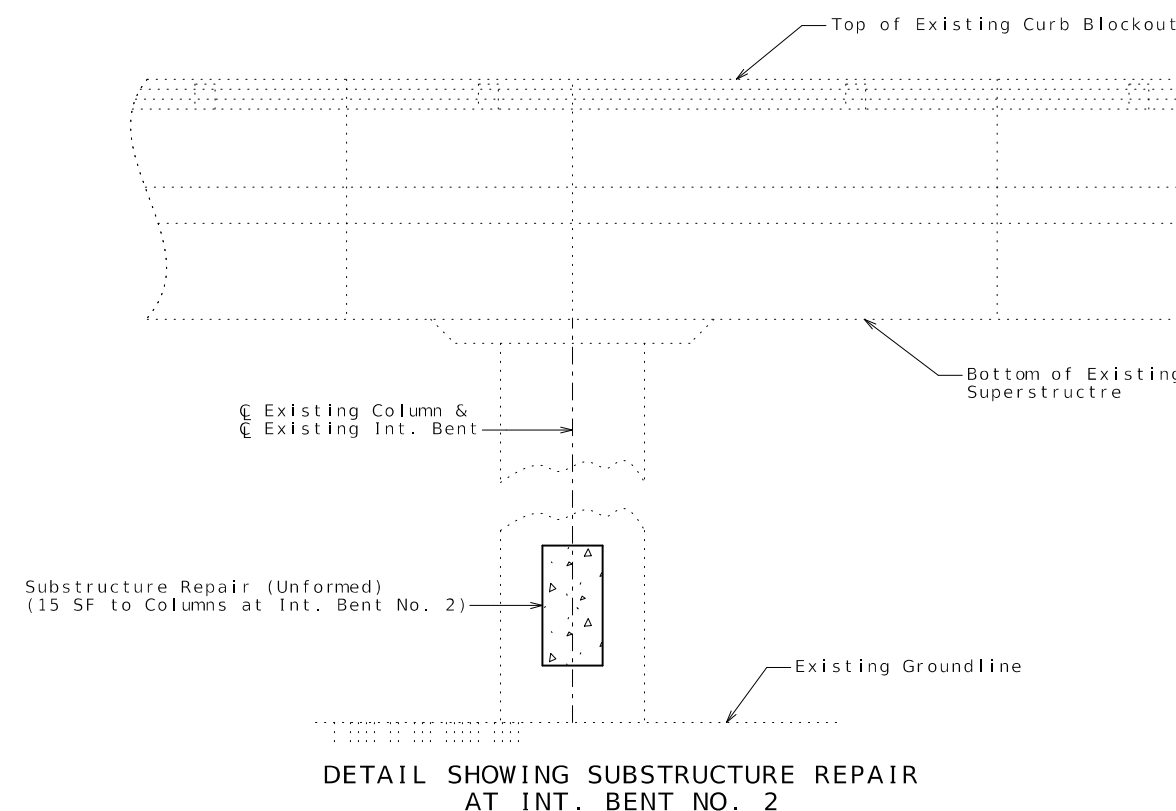
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



TYPICAL SECTION THRU CURB BLOCKOUT  
SHOWING CURB REPAIRS AND PROTECTIVE COATING  
(Applies to both barriers)



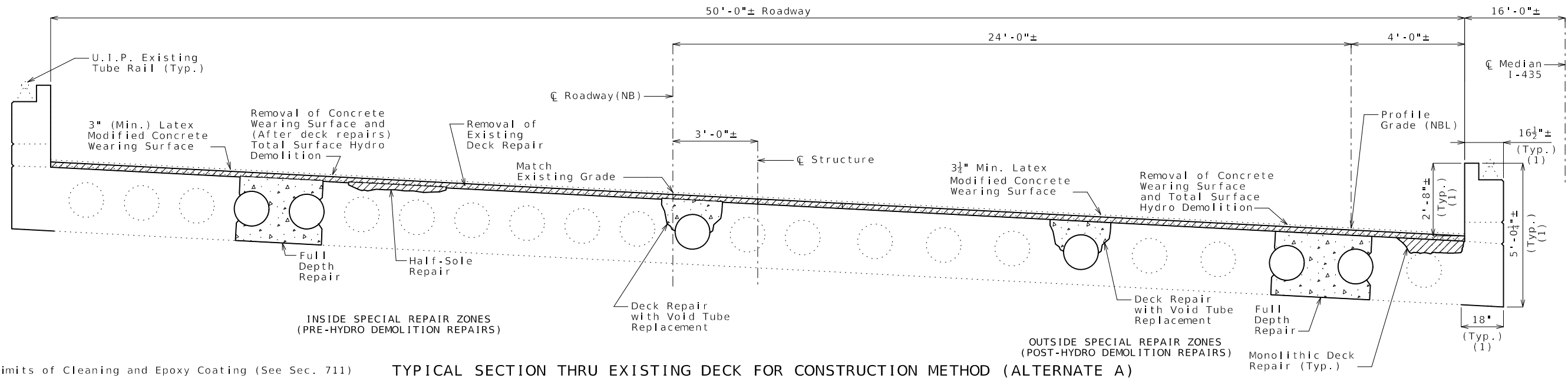
DETAIL SHOWING SUBSTRUCTURE REPAIR  
AT INT. BENT NO. 2

### PROTECTIVE COATING AND SUBSTRUCTURE REPAIR DETAILS



U.I.P. AND REHABILITATE EXISTING (47'-64'-39') CONTINUOUS CONCRETE VOIDED SLAB SPANS

SEC/SUR 3 TWP 50N RGE 32W



(1) Limits of Cleaning and Epoxy Coating (See Sec. 711)

TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE A)

For details of superstructure repairs and limits of cleaning and epoxy coating, see Sheet No. 4.

Estimated Quantities		
Item		Total
Total Surface Hydro Demolition	sq. yard	849
Removal of Concrete Wearing Surface	sq. foot	7,637
Removal of Existing Deck Repair	sq. foot	550
Latex Modified Concrete Wearing Surface	sq. yard	792
Diamond Grinding	sq. yard	792
Substructure Repair (Unformed)	sq. foot	15
Full Depth Repair	sq. foot	400
Deck Repair with Void Tube Replacement	sq. foot	200
Cleaning and Epoxy Coating	sq. foot	3510
Alternate A		
* Supplementary Wearing Surface Material (Alternate A)	cu. yard	12
Half-Sole Repair (Alternate A)	sq. foot	1,000
Alternate B		
* Supplementary Wearing Surface Material (Alternate B)	cu. yard	24

\* Supplementary wearing surface material for monolithic deck repair will be paid for at the fixed unit price in accordance with Sec 109.

Optional Construction Methods	
Construction Method	Method Used (✓)
Alternate A	
Alternate B	

MoDOT construction personnel will complete column labeled "Method Used (✓)".

For additional details of Construction Method Alternate A, see Sheet No. 2

For details of Construction Method Alternate B, see Sheet No. 3

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications  
Bridge Deck Rating = 6

Design Loading:

HS20-44 with Mod. 24,000 pounds Tandem axle (1965 and New Construction)

Design Unit Stresses:

Class B-1 Concrete (Half-Sole Repair & Full Depth & Deck Repair with Void Tube Replacement) f'c = 4,000 psi

Miscellaneous:

Roadway surfacing adjacent to bridge ends shall match new bridge wearing surface (Roadway Item).

All concrete repairs shall be in accordance with Sec. 704, unless otherwise noted.

Outline of existing work is indicated by light dashed lines. Heavy lines indicate new work.

Contractor shall verify all dimensions in field before ordering new material.

In order to maintain grade and a minimum thickness of wearing surface as shown on plans it may be necessary to use additional quantities of wearing surface at various locations throughout the structure. The cost of furnishing and installing the wearing surface will be considered completely covered in the contract unit price, including all additional labor, materials or equipment for variations in thickness of wearing surface.

Removal of existing wearing surface and 1/2" of existing deck to be considered completely covered by the contract unit cost for Removal of Concrete Wearing Surface.

No heavy equipment will be allowed on the structure during construction. See special provisions.

Traffic Handling:

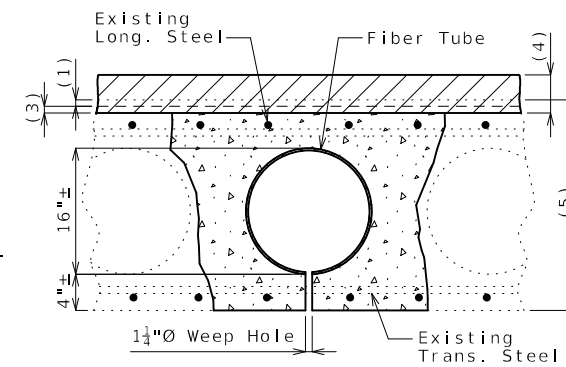
Bridge is to be closed to traffic during construction. See Roadway Plans for traffic control.

Void Repair:

Any damage sustained to the void tube as a result of the contractor's operations shall be patched or replaced as required by the engineer at the contractor's expense.

An exposed void in the deck shall be patched as approved by the engineer in a manner that shall maintain the void area completely free of concrete. Cost of patching an exposed void will be considered completely covered by the contract unit price for Half-Sole Repair inside special repair zones and Supplementary Wearing Surface Material (Alternate A) outside special repair zones.

When a deteriorated portion of the void tube is beyond the point of patching as determined by the engineer, the portion of the deteriorated void tube shall be replaced. The void area shall be maintained completely free of concrete. Cutting of the longitudinal reinforcing steel will not be permitted. The fiber tubes for producing the voids shall have an outside diameter with the wall thickness the same as the existing tubes and anchored at not more than the original spacing. Cost of replacing the void tube will be considered completely covered by the contract unit price for Deck Repair with Void Tube Replacement. Measurement will be horizontal projection of the area of exposed tube in plan.



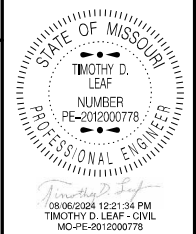
FIBER VOID TUBE REPLACEMENT

Fiber tubes for producing voids shall have an approximate outside diameter of 16 inches and a wall thickness of 1/4 inch and shall be anchored to joists carrying the floor form at not more than 4-foot centers.

One 1 1/4" weep hole shall be provided at 3" from each end of each new void.

REPAIRS TO BRIDGE: ROUTE I-435 NB OVER PARVIN ROAD

ROUTE I-435 NB FROM Route 210 TO ROUTE I-35 ABOUT 0.7 MILES NORTH OF ROUTE 210 BEGINNING STATION 641+29.18± (MATCH EXISTING)

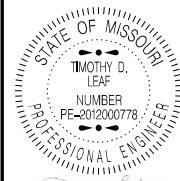


DATE PREPARED	8/6/2024
ROUTE	I-435
STATE	MO
DISTRICT	BR
SHEET NO.	1
COUNTY	CLAY
JOB NO.	J4P3468
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	A16745

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
8/6/2024

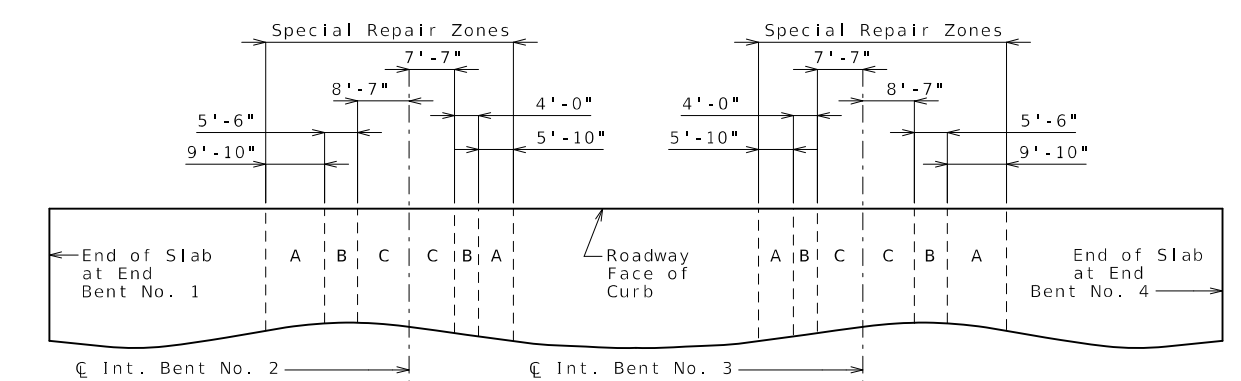
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I-435 MO  
DISTRICT SHEET NO.  
BR 2

COUNTY  
CLAY  
JOB NO.  
J4P3468  
CONTRACT ID.

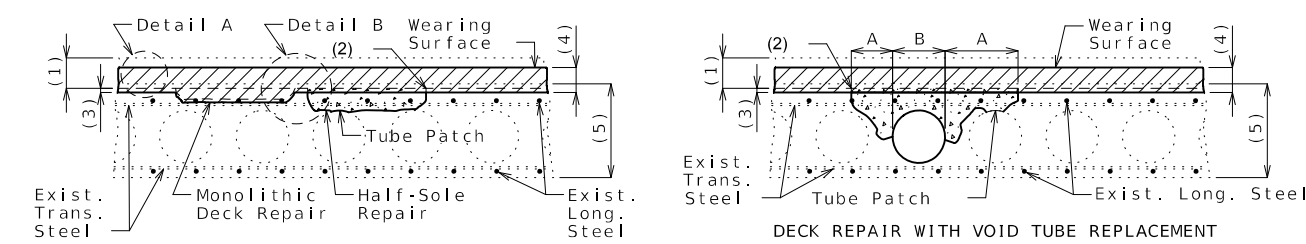
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BRIDGE NO.  
A16745

DESCRIPTION	DATE

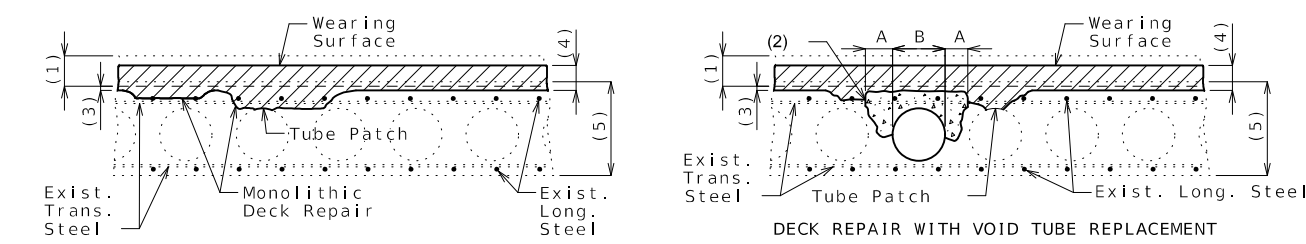
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



PART PLAN OF SLAB SHOWING SPECIAL REPAIR ZONES

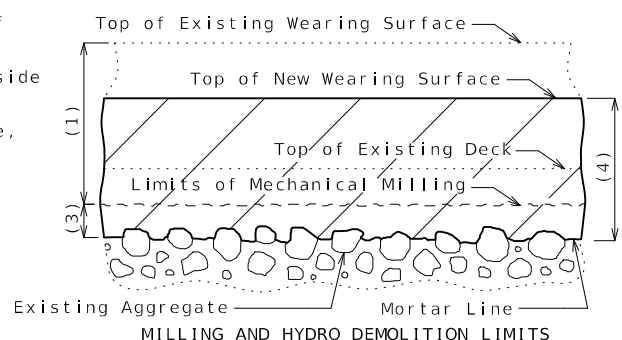


MONOLITHIC AND HALF-SOLE REPAIR  
DECK REPAIR INSIDE SPECIAL REPAIR ZONES (BEFORE HYDRO DEMOLITION)



MONOLITHIC DECK REPAIR  
DECK REPAIR OUTSIDE SPECIAL REPAIR ZONES (AFTER HYDRO DEMOLITION)

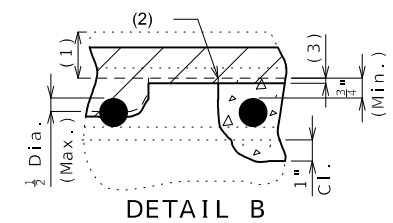
- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition of sound concrete, measured to mortar line:  
1/4" minimum inside special repair zones  
1/2" minimum outside special repair zones
- (4) Latex Modified concrete wearing surface:  
3" minimum inside special repair zones  
3 1/4" minimum outside special repair zones
- (5) Original depth minus previous scarification
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



MILLING AND HYDRO DEMOLITION LIMITS  
DETAIL A

\* For details of Void Tube Replacement not shown, see Sheet No. 1

DECK REPAIR DETAILS (ALTERNATE A)



Monolithic deck repair shall be used when only half the diameter or less of the top bar is exposed.

Clearance around top bar and around bottom bar at the intersection of top bar shall be required when more than half the diameter of the top bar is exposed.

Deck Repair Notes (Alternate A):

Order of Repair:

1. Remove existing wearing surface plus 1/2" of existing deck.
2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
3. Inside special repair zones, complete the following repairs:  
a. Removal of existing deck repair  
b. Half-sole repair  
c. Deck repair with void tube replacement \*  
d. Full Depth Repair
4. Outside special repair zones, remove existing deck repair.
5. Complete total surface hydro demolition, removing 1/4" minimum of sound concrete inside special repair zones and removing 1/2" minimum of sound concrete and all deteriorated concrete outside special repair zones.
6. Sound deck and if needed complete incidental concrete removal.
7. Outside special repair zones, complete the following repairs:  
a. Deck repair with void tube replacement \*  
b. Full Depth Repair
8. Place new wearing surface including additional material for areas of monolithic deck repair.

**Hold Point to Determine Extent of Special Repair Zones:**  
A hold point will be established to determine the overall condition of the voided slab after completion of the wearing surface removal and scarification operations. The bridge deck will then be sounded to determine whether special repair zone work will be required. The sounding information will be cross-referenced with the GPR data in the electronic deliverables.

If it is determined by the engineer that special repair zones are unnecessary, use details for Outside Special Repair Zones (After Hydro Demolition).

**Special Repair Zones:**  
Deck repair required in the areas designated as special repair zones shall be completed before hydro demolition in alphabetical sequence beginning with Zone A. Zones with the same letter designation may be repaired at the same time. Hydro demolition shall not move forward until the repairs in all special repair zones are completed and properly cured.

Removal and deck repair shall be completed in one special repair zone and concrete shall have attained a compressive strength of 3200 psi before work can be started in the next special repair zone.

If any single repair area does not exceed 4 square feet in size and the total repair area within a special repair zone does not exceed 12 square feet, the special repair zone may be repaired at the same time as an adjacent zone.

**Work Outside Special Repair Zones:**  
Any deck repair in areas not designated as a special repair zone shall be completed after hydro demolition.



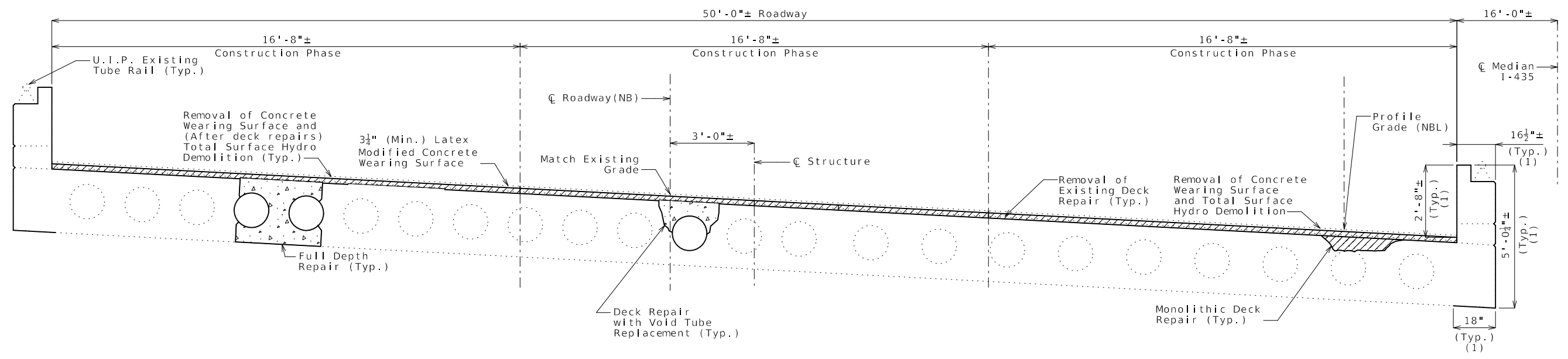
DATE PREPARED  
8/6/2024

ROUTE  
I-435  
STATE  
MO  
DISTRICT  
BR  
SHEET NO.  
3

COUNTY  
CLAY  
JOB NO.  
J4P3468  
CONTRACT ID.

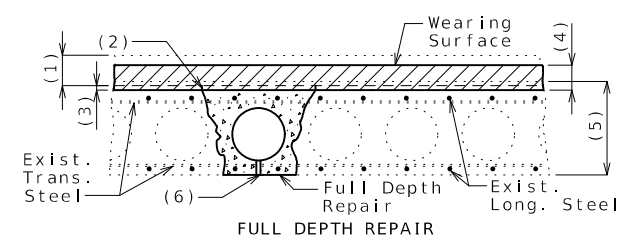
PROJECT NO.

BRIDGE NO.  
A16745

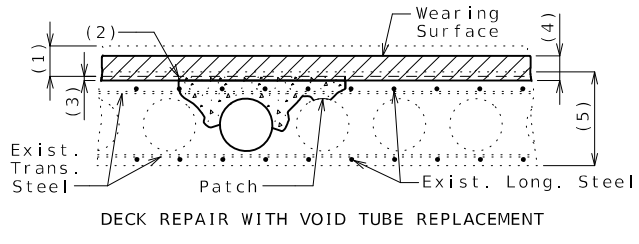


TYPICAL SECTION THRU EXISTING DECK FOR CONSTRUCTION METHOD (ALTERNATE B)

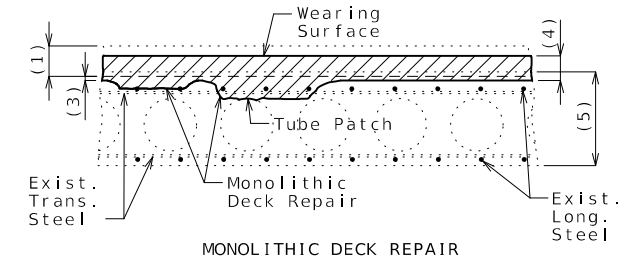
Construction phases may be completed in any order, but only one at a time. All repairs shall be completed and allowed to cure before starting on the next phase.



FULL DEPTH REPAIR

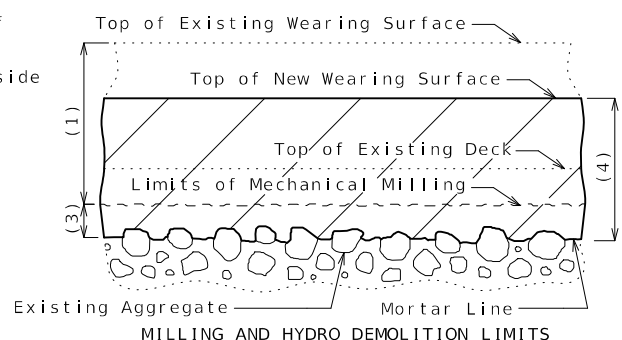


DECK REPAIR WITH VOID TUBE REPLACEMENT



MONOLITHIC DECK REPAIR

- (1) Removal of existing wearing surface plus 1/2" of existing deck
- (2) One inch vertical side shall be established outside the deteriorated area.
- (3) Total surface hydro demolition 1/2" minimum of sound concrete, and all unsound concrete.
- (4) 3 1/4" minimum Latex Modified concrete wearing surface:
- (5) Original depth minus scarification.
- (6) Increase size of existing weep hole to 1 1/4", if encountered.



DETAIL A

\* For details of Void Tube Replacement not shown, see Sheet No. 1

Deck Repair Notes (Alternate B):

Order of Repair (repeat for each construction phase):

1. Remove existing wearing surface plus 1/2" of existing deck.
2. Power wash deck. Then sound deck to identify sound and unsound existing deck repair. Repair areas shall be per the approval of the engineer.
3. Complete the following repairs:
  - a. Removal of existing deck repair
  - b. Deck repair with void tube replacement \*
  - c. Full Depth Repair
4. Complete total surface hydro demolition, removing 1/2" minimum of sound concrete and all deteriorated concrete.
5. Sound deck and if needed, complete incidental concrete removal.
6. Place new wearing surface including additional material for areas of monolithic deck repair.

DECK REPAIR DETAILS (ALTERNATE B)

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

**MoDOT**

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



DATE PREPARED  
8/6/2024

ROUTE STATE  
I-435 MO

DISTRICT SHEET NO.  
BR 4

COUNTY  
CLAY

JOB NO.  
J4P3468

CONTRACT ID.

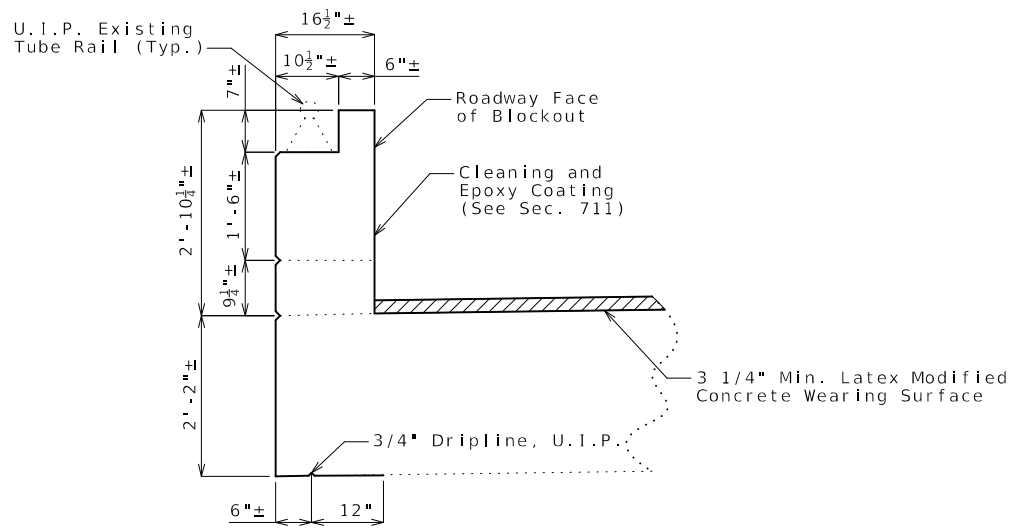
PROJECT NO.

BRIDGE NO.  
A16745

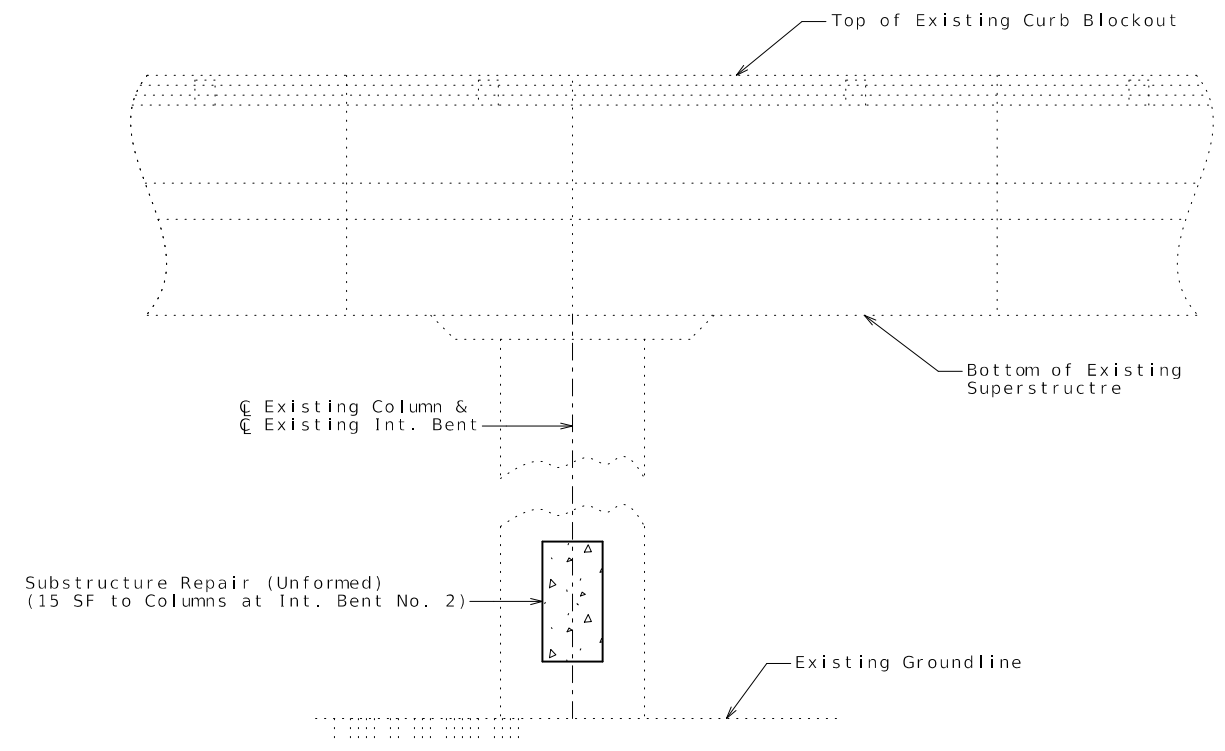
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL  
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-275-6636)



TYPICAL SECTION THRU CURB BLOCKOUT SHOWING CURB REPAIRS AND PROTECTIVE COATING (Applies to both barriers)



DETAIL SHOWING SUBSTRUCTURE REPAIR AT INT. BENT NO. 2

PROTECTIVE COATING AND SUBSTRUCTURE REPAIR DETAILS