

DESIGN DESIGNATION

A.A.D.T. - 2026 = 8228

A.A.D.T. - 2046 = 9091

D.H.V. = 8.9%

T = 11.6%

V = 40/45 M.P.H.

D = 50.8% N / 49.2% S

FUNCTIONAL CLASSIFICATION - PRINCIPAL ARTERIAL

NORMAL RIGHT-OF-WAY

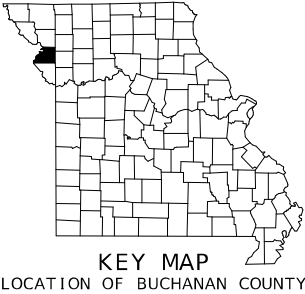
CONVENTIONAL SYMBOLS

(USED IN PLANS)

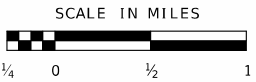
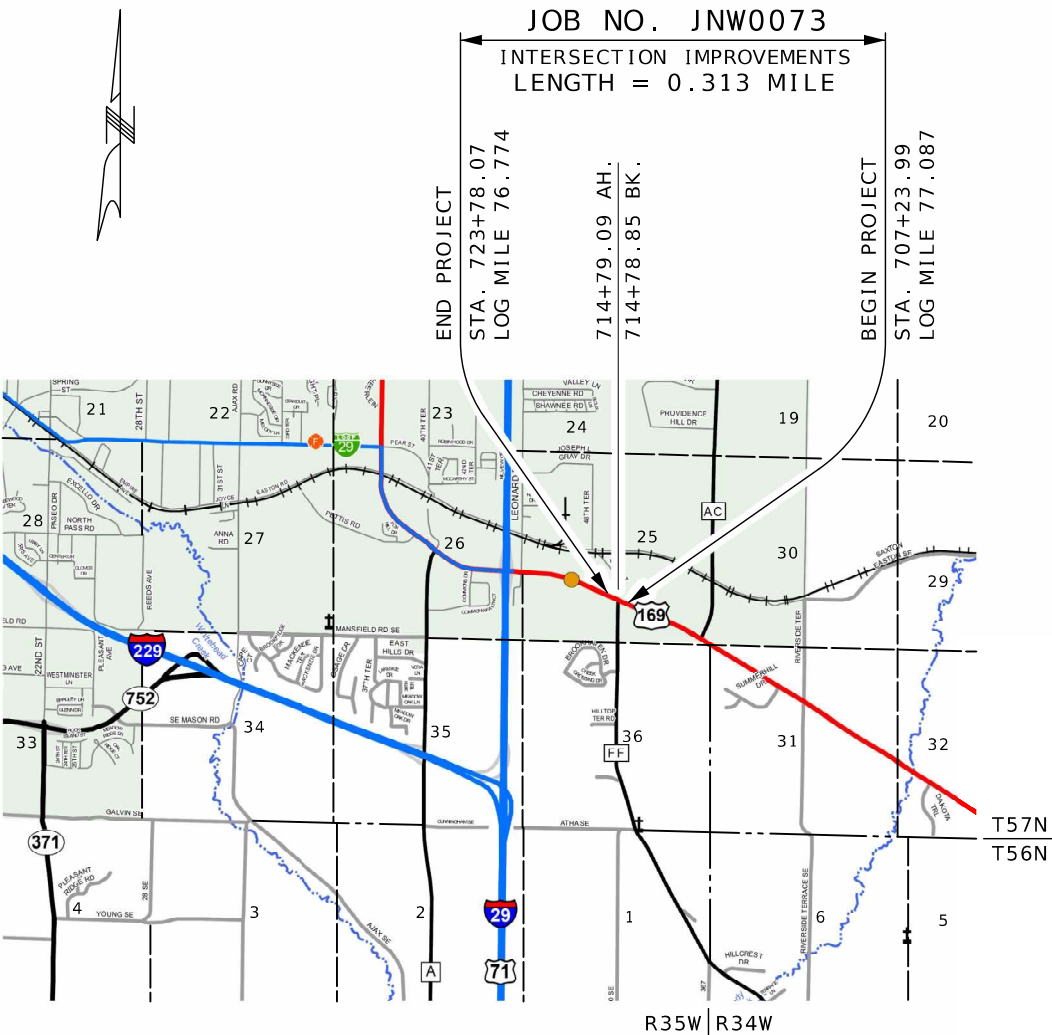
	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
GUARD CABLE		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	-FO-	-FO-
OVERHEAD CABLE TV	-OTV-	-OTV-
UNDERGROUND CABLE TV	-UTV-	-UTV-
OVERHEAD TELEPHONE	-OT-	-OT-
UNDERGROUND TELEPHONE	-UT-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

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY
BUCHANAN COUNTY



KEY MAP
LOCATION OF BUCHANAN COUNTY



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.

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
TITLE SHEET	1
TYPICAL SECTIONS (TS) (5 SHEETS)	2
QUANTITIES (QU) (5 SHEETS)	3
PLAN-PROFILE (PP)	4-6
REFERENCE POINTS (RP)	7
COORDINATE POINTS (CP)	8
SPECIAL SHEETS (SS)	9-13
TRAFFIC CONTROL SHEETS (TC)	14-21
EROSION CONTROL SHEETS (EC)	22-23
SIGNING (SN)	24-29
PAVEMENT MARKING (PM)	30-32
CULVERT SECTIONS (CS)	33-34
CROSS SECTIONS (XS)	1-42

LENGTH OF PROJECT

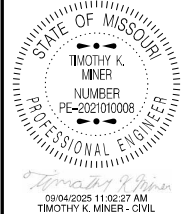
BEGINNING OF PROJECT	STA. 707+23.99
END OF PROJECT	STA. 723+78.07

APPARENT LENGTH 1654.08 FEET

EQUATIONS AND EXCEPTIONS:
714+78.85 BK. = -0.24 FEET
714+79.09 AH.

TOTAL CORRECTIONS	-0.24 FEET
NET LENGTH OF PROJECT	1653.84 FEET
STATE LENGTH	0.313 MILE

FOR INFORMATION ONLY
ESTIMATED DISTURBED ACRES 1.8 ACRES



DATE PREPARED 9/4/2025	
ROUTE 169	STATE MO
DISTRICT NW	SHEET NO. 1
COUNTY BUCHANAN	
JOB NO. JNW0073	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

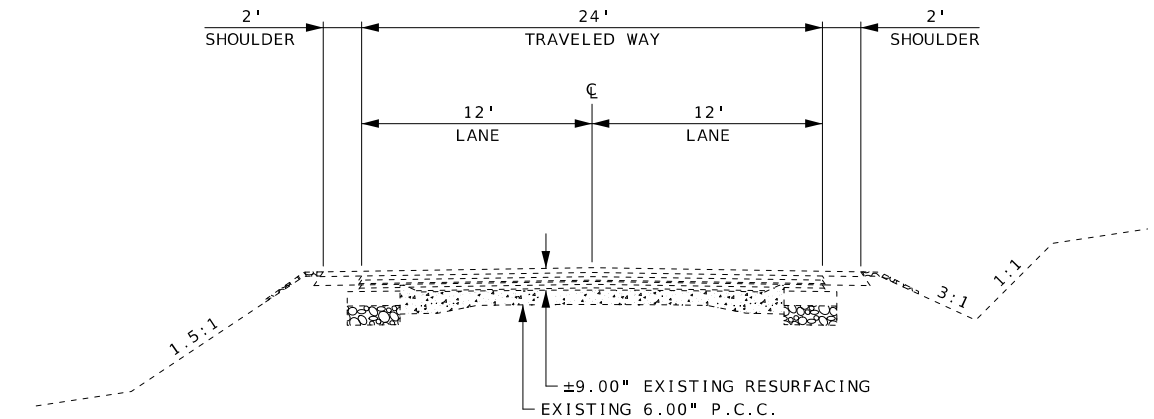
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

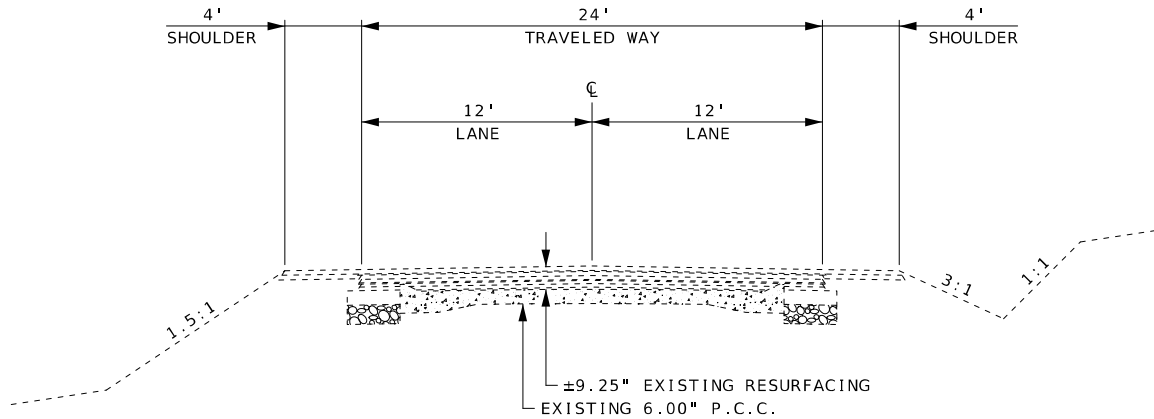
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

PAVEMENT HISTORY STA. 707+23.99 TO STA. 713+20.00					
YEAR	PROJECT	TRAVELED WAY		SHOULDER	
		TREATMENT	WIDTH	TREATMENT	WIDTH
1930	1-31	6.00" P.C.C.	20'		
1955	SEC. 11(1)	8.00" STABILIZED AGGR. 4.00" A.C. 0.50" A.C. WEDGE COURSE 1.50" TYPE B A.C. 1.25" TYPE C A.C.	2'-9" (EACH SIDE) 2'-9" (EACH SIDE) 24' 24' 24'		
1977	1-U-169-31	0.50" MINIMUM LEVELING 1.50" TYPE C A.C.	24' 24'		
1999	J1L9908A	1.75" TYPE I-C A.C.	24'		
2008	J1P0965	TYPE II MICROSURFACE	24'		
2013	J1P2215	1.75" BP-1	24'	4.00" BITUMINOUS BASE 1.75" BP-1 VAR. TYPE 1 AGGR.	2' (EACH SIDE) 2' (EACH SIDE) REMAINING SHLDR. WIDTH
2020	J1S3195B	SCRUB SEAL	24'	SCRUB SEAL	2' (EACH SIDE)
2024	JNW0016	2.00" COLDMILLING 2.00" BP-1	24' 24'	2.00" COLDMILLING 2.00" BP-1	2' (EACH SIDE) 2' (EACH SIDE)

PAVEMENT HISTORY STA. 713+20.00 TO STA. 723+78.07					
YEAR	PROJECT	TRAVELED WAY		SHOULDER	
		TREATMENT	WIDTH	TREATMENT	WIDTH
1930	1-31	6.00" P.C.C.	20'		
1955	SEC. 11(1)	8.00" STABILIZED AGGR. 4.00" A.C. 0.50" A.C. WEDGE COURSE 1.50" TYPE B A.C. 1.25" TYPE C A.C.	2'-9" (EACH SIDE) 2'-9" (EACH SIDE) 24' 24' 24'		
1977	1-U-169-31	0.50" MINIMUM LEVELING 1.50" TYPE C A.C.	24' 24'		
1999	J1L9908A	1.75" TYPE I-C A.C.	24'		
2010	J1S0977	0.75" SP095C LEVELING 1.50" SP095C	24' 24'	3.75" BP-1	4' (EACH SIDE)
2020	J1S3257	1.75" COLDMILLING 1.75" SP125C	24' 24'	1.75" COLDMILLING 1.75" SP125C	4' (EACH SIDE) 4' (EACH SIDE)



SECTION ON TANGENT
EXISTING TYPICAL SECTION ROUTE 169
STA. 707+23.99 TO STA. 713+20.00



SECTION ON TANGENT
EXISTING TYPICAL SECTION ROUTE 169
STA. 713+20.00 TO STA. 723+78.07

NOT TO SCALE

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER
PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:53:39 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

2

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

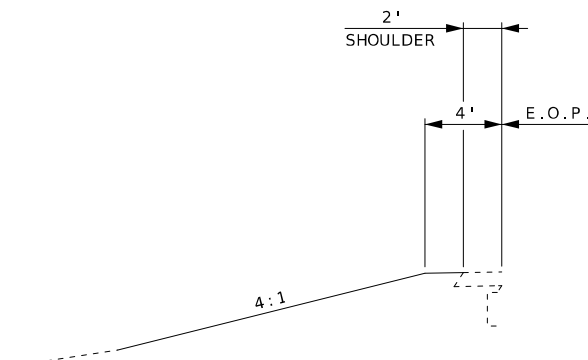
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

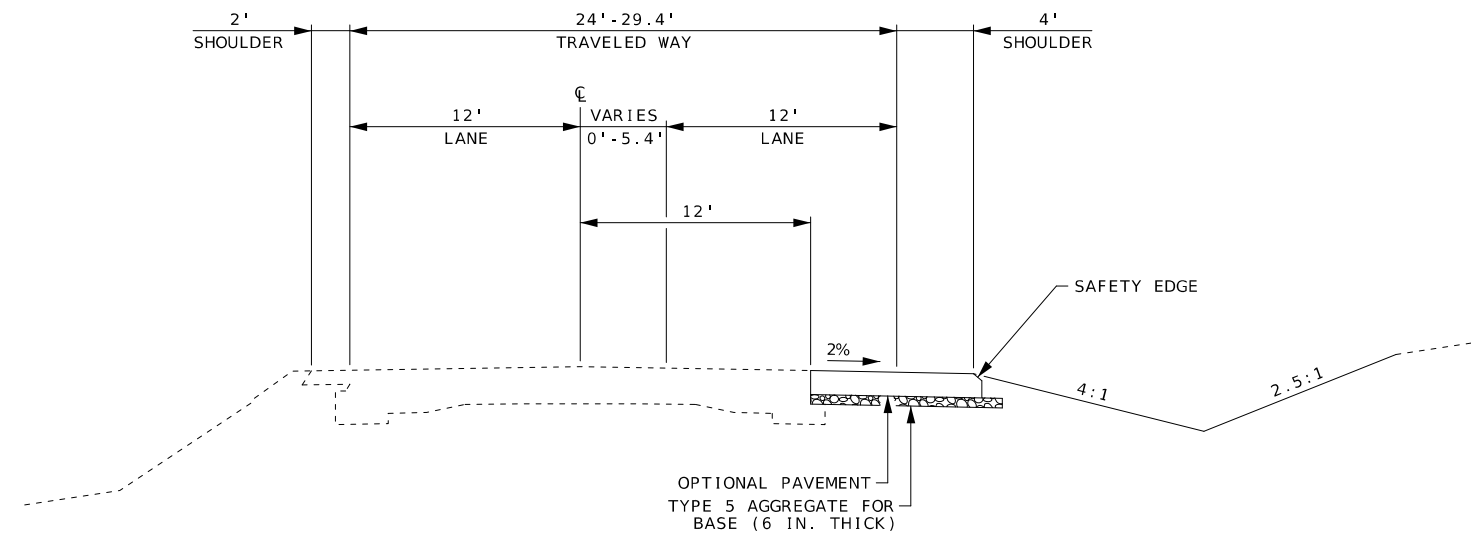
JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

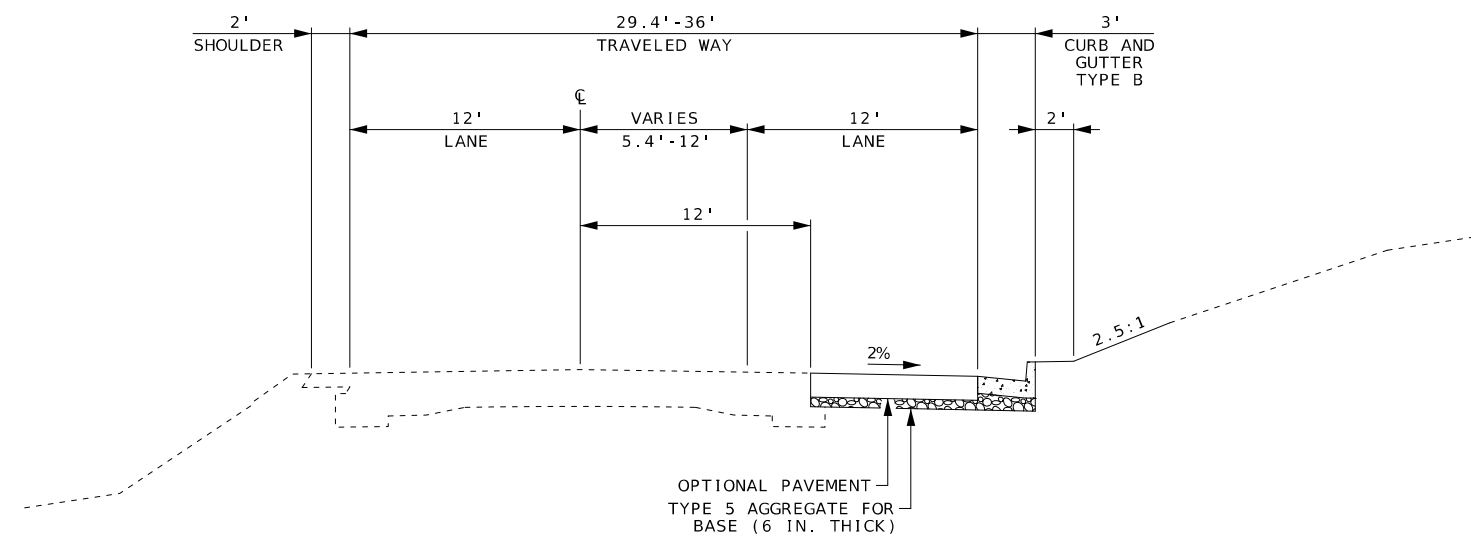
NOTE: SEE TYPICAL SECTION SHEET 4 OF 4
FOR DETAILS OF OPTIONAL PAVEMENT



WORK ALONG LEFT SHOULDER
STA. 709+35.00 TO STA. 709+60.00



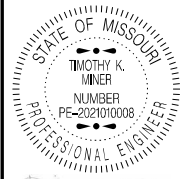
SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 707+23.99 TO STA. 709+66.39



SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 709+66.39 TO STA. 712+63.99

NOT TO SCALE

TYPICAL SECTIONS
SHEET 2 OF 5



09/04/2025 10:53:29 AM
TIMOTHY K. MINER - CIVIL

DATE PREPARED
9/4/2025

ROUTE	STATE
160	MO

109	MO
DISTRICT	SHEET NO.
NW	3

NW	2
COUNTY	
RICHMAN	

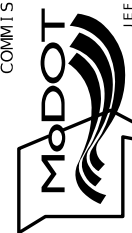
BUCHANAN
JOB NO.
UNW0073

JNW0073

CONTRACT ID.

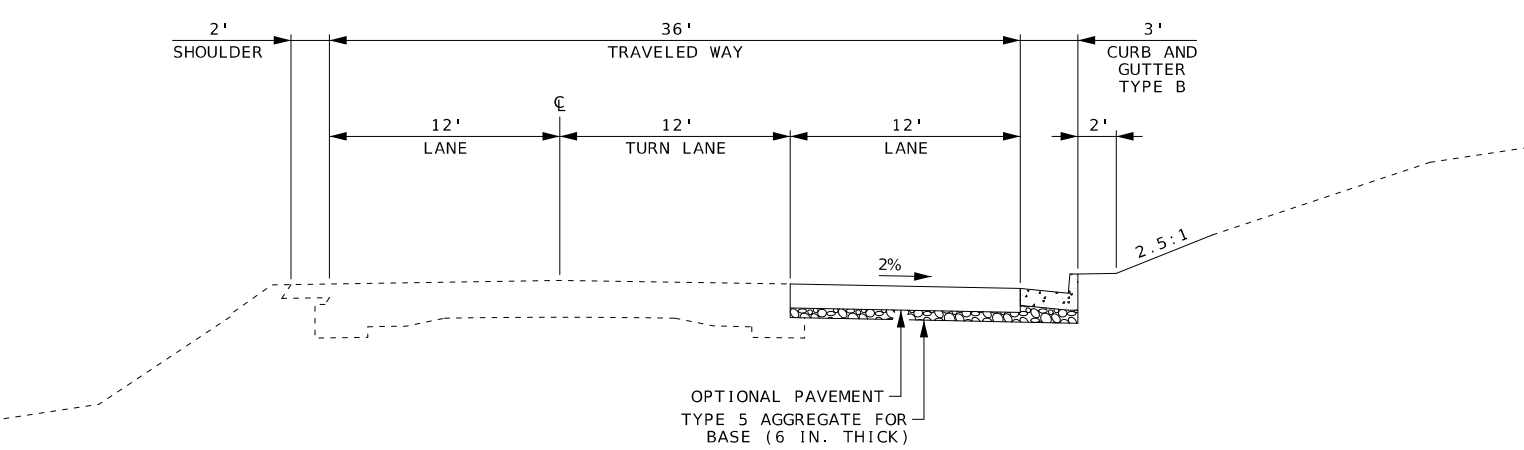
PROJECT NO.

BRIDGE NO.

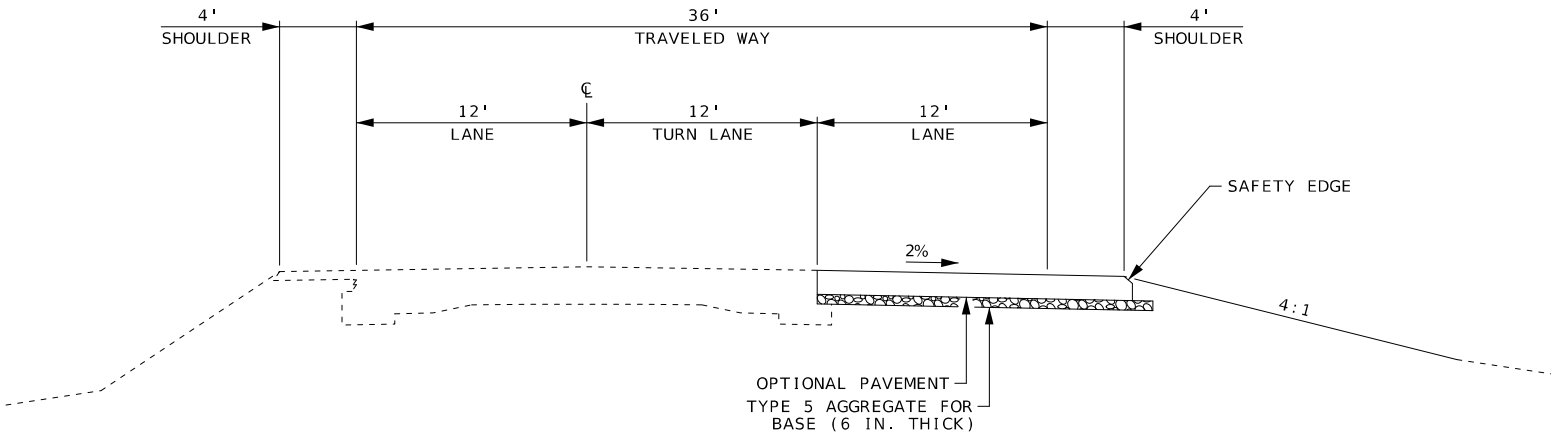
[illegible]MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

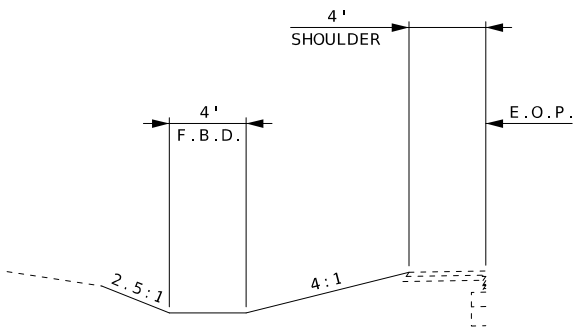
NOTE: SEE TYPICAL SECTION SHEET 4 OF 4
FOR DETAILS OF OPTIONAL PAVEMENT



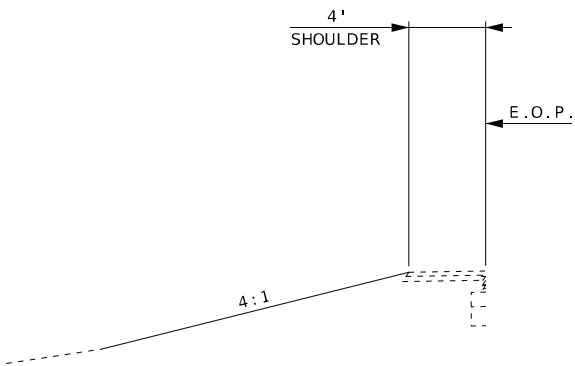
SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 712+63.99 TO STA. 714+78.85 BK.



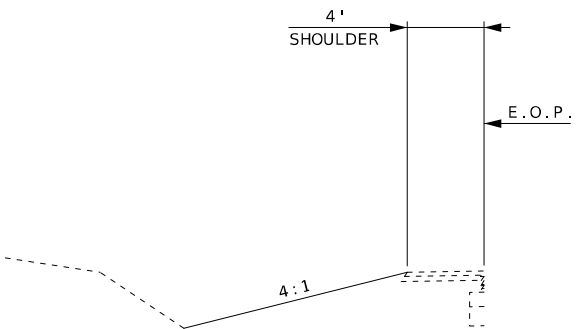
SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 714+79.09 AH. TO STA. 720+10.01



WORK ALONG LEFT SHOULDER
STA. 717+71.85 TO STA. 718+20.48



WORK ALONG LEFT SHOULDER
STA. 718+20.48 TO STA. 718+55.52



WORK ALONG LEFT SHOULDER
STA. 718+55.52 TO STA. 719+63.00

NOT TO SCALE

TYPICAL SECTIONS
SHEET 3 OF 5

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:53:18 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

2

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

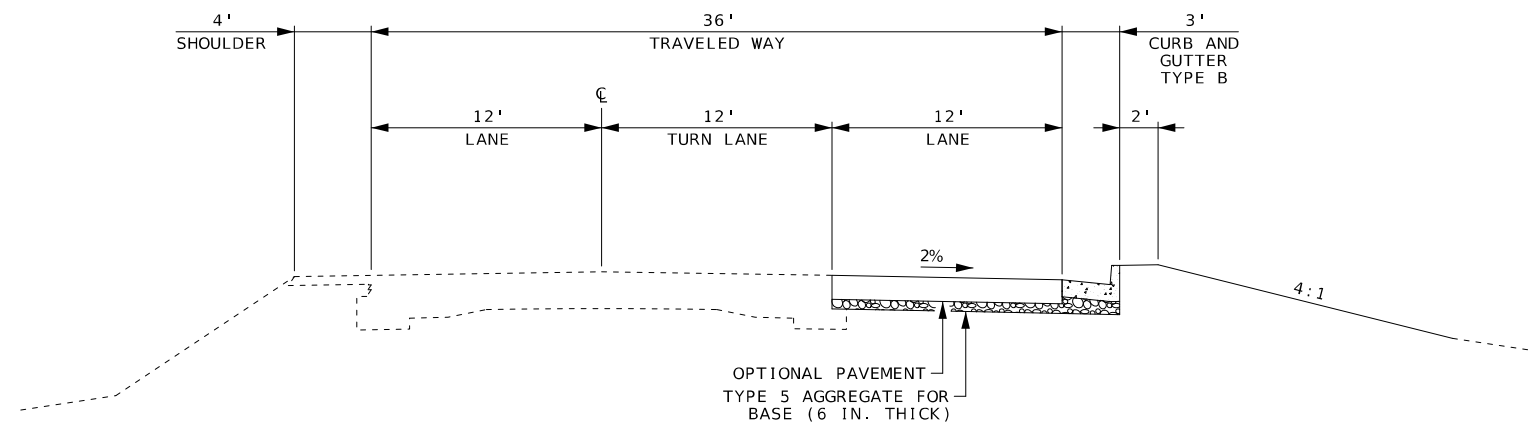
105 WEST CAPITOL

JEFFERSON CITY, MO 65102

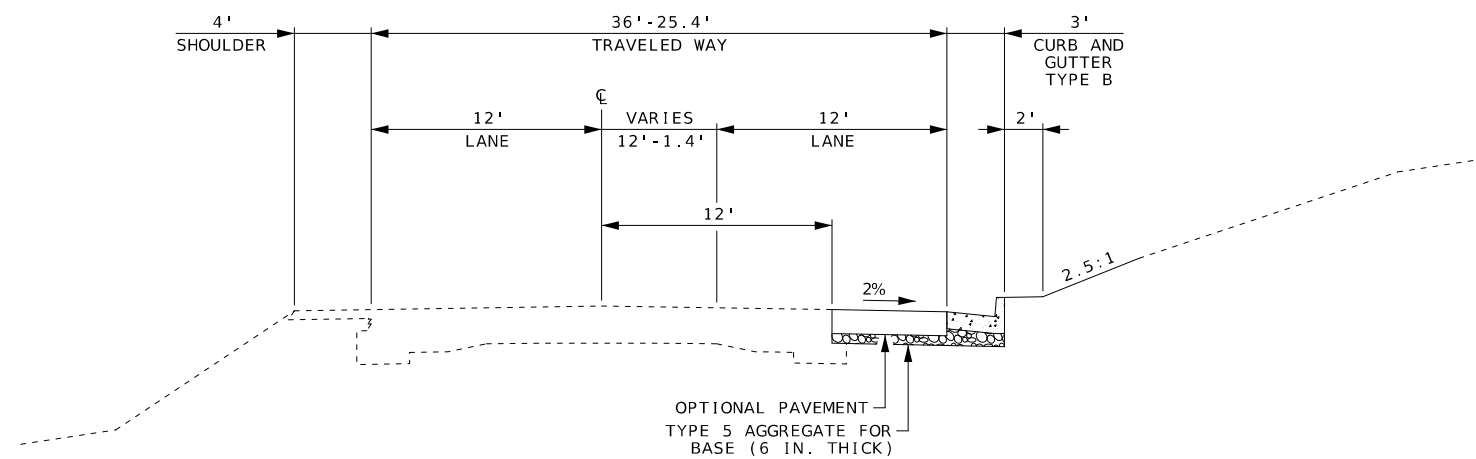
1-888-ASK-MODOT (1-888-275-6636)

MoDOT

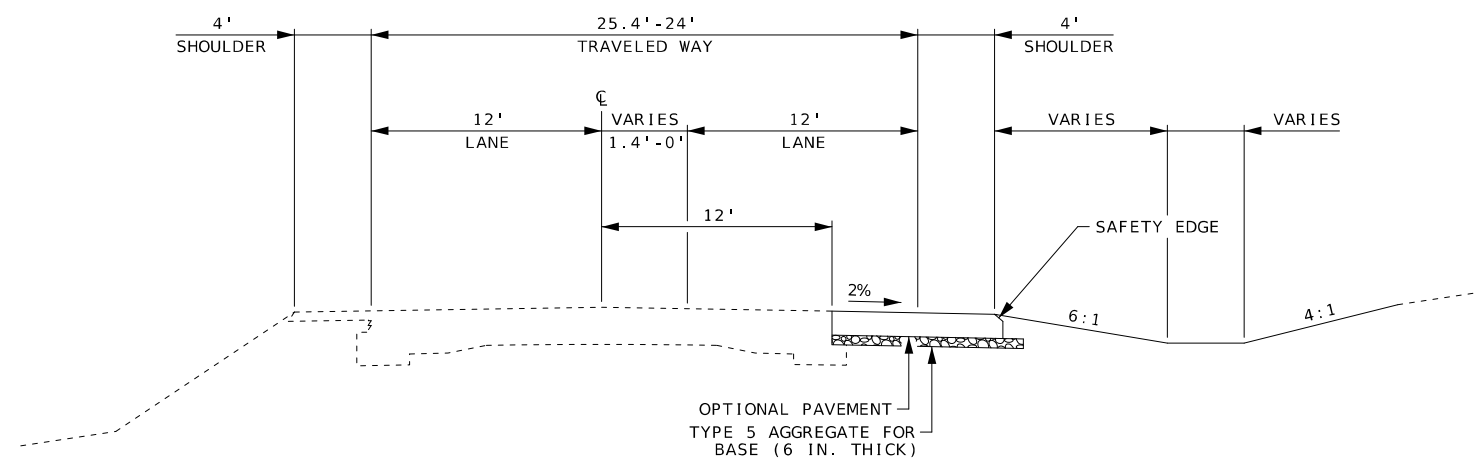
NOTE: SEE TYPICAL SECTION SHEET 4 OF 4
FOR DETAILS OF OPTIONAL PAVEMENT



SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 720+10.01 TO STA. 720+58.07



SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 720+58.07 TO STA. 723+41.85



SECTION ON TANGENT
PROPOSED TYPICAL SECTION ROUTE 169
STA. 723+41.85 TO STA. 723+78.07

NOT TO SCALE

TYPICAL SECTIONS
SHEET 4 OF 5



09/04/2025 10:52:54 AM
TIMOTHY K. MINER - CIVIL
MO-PE-20211010008

DATE PREPARED
9/4/2025

ROUTE 169	STATE MO
--------------	-------------

DISTRICT	SHEET NO.
NW	2

COUNTY
BUCHANAN

JOB NO.
JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

REMOVAL OF IMPROVEMENTS			
STATION	STATION	LOCATION	DESCRIPTION
707+23.99	723+78.07	ROUTE 169 RT.	+/-673 S.Y. EXISTING PAVEMENT AND SHOULDER *
709+50.54	--	ROUTE 169	2' X 1.5' R.C.B. - REMOVE HEADWALLS AND PLUG CULVERT (NO DIRECT PAYMENT WILL BE MADE FOR PLUGGING OF CULVERT)
710+76.74	--	ROUTE 169 RT.	D1-2 SIGN - REMOVE POSTS AND FOOTINGS, RE-USE SIGN
713+21.06	--	ROUTE 169 LT.	SOUTH ROUTE 169 SIGN - REMOVE POST, FOOTING AND SIGN
714+27.74	--	ROUTE 169 RT.	ROUTE FF LEFT / ROUTE 169 STRAIGHT SIGN - REMOVE POST, FOOTING AND SIGN
714+56.66	--	ROUTE 169 RT.	ROUTE 169 LEFT AND RIGHT SIGN - REMOVE POST, FOOTING AND SIGN
715+25.33	--	ROUTE 169 LT.	ROUTE 169 STRAIGHT / ROUTE FF RIGHT SIGN - REMOVE POST, FOOTING AND SIGN
716+25.61	--	ROUTE 169 RT.	NORTH ROUTE 169 SIGN - REMOVE POST, FOOTING AND SIGN
717+63.31	--	ROUTE 169 RT.	SPEED LIMIT SIGN - REMOVE POST, FOOTING AND SIGN
718+36.49	--	ROUTE 169	10' X 8' R.C.B. - REMOVE WING AND HEADWALLS LT. & RT. FOR CULVERT EXTENSION
718+95.56	--	ROUTE 169 LT.	D1-2 SIGN - REMOVE POSTS AND FOOTINGS, RE-USE SIGN
10+24.00	11+43.01	49TH STREET	+/-408 S.Y. EXISTING PAVEMENT AND SHOULDER *
10+47.85	--	49TH STREET LT.	STOP SIGN - REMOVE POST, FOOTING AND SIGN
0+22.06	1+64.82	ROUTE FF LT.	+/-269 S.Y. EXISTING PAVEMENT AND SHOULDER *
0+82.59	--	ROUTE FF LT.	STOP SIGN - REMOVE POST, FOOTING AND SIGN
1+12.49	--	ROUTE FF RT.	ROUTE FF SIGN - REMOVE POST, FOOTING AND SIGN
1 LUMP SUM			
* EXISTING PAVEMENT AND SHOULDER VOLUMES INCLUDED IN EARTHWORK CALCULATIONS			

CLEARING AND GRUBBING				
STATION	STATION	LOCATION	CLEARING AND GRUBBING (ACRE)	REMARKS
707+23.87	709+58.84	ROUTE 169 RT.	0.13	BEGIN PROJECT TO TYPE III DRIVEWAY
709+35.00	709+60.00	ROUTE 169 LT.	0.01	CULVERT OUTLET LEFT
709+77.81	715+29.64	ROUTE 169 RT.	0.24	TYPE III DRIVEWAY TO 49TH STREET
715+21.90	723+78.07	ROUTE 169 RT.	0.76	49TH STREET TO END OF PROJECT
717+71.85	719+63.00	ROUTE 169 LT.	0.13	CULVERT EXTENSION AND DITCHES LEFT
0+06.12	1+54.16	ROUTE FF RT.	0.07	
0+52.68	2+16.34	ROUTE FF LT.	0.19	
TOTAL			1.53	
PAY TOTAL			2	

EARTHWORK							
STATION	STATION	LOCATION	CLASS A EXCAVATION (CU. YD.)	EMBANKMENT IN PLACE (CU. YD.)	COMPACTING EMBANKMENT (CU. YD.)	COMPACTING IN CUT (STA.)	REMARKS
707+23.99	714+78.85 BK.	ROUTE 169	692		84	7.55	USE 320 C.Y. IN BALANCE BETWEEN 714+79.09 AH. AND 723+78.07 ROUTE 169 USE 128 C.Y. IN BALANCE BETWEEN 10+00.00 AND 11+43.01 49TH STREET
714+79.09 AH.	723+78.07	ROUTE 169	1112	857	1633	8.99	OBTAIN 320 C.Y. FROM BALANCE BETWEEN 707+23.99 AND 714+78.85 BK. ROUTE 169 OBTAIN 415 C.Y. FROM BALANCE BETWEEN 0+00.00 AND 3+02.83 ROUTE FF EAST RADIUS OBTAIN 43 C.Y. FROM BALANCE BETWEEN 0+00.00 AND 1+58.87 ROUTE FF WEST RADIUS
10+00.93	11+43.01	49TH STREET	327		380	1.42	OBTAIN 128 C.Y. FROM BALANCE BETWEEN 707+23.99 AND 714+78.85 BK. ROUTE 169
0+00.00	3+02.83	ROUTE FF EAST RADIUS	558		14	3.03	USE 415 C.Y. IN BALANCE BETWEEN 714+79.09 AH. AND 723+78.07 ROUTE 169
0+00.00	1+58.87	ROUTE FF WEST RADIUS	74		14	1.59	USE 43 C.Y. IN BALANCE BETWEEN 714+79.09 AH. AND 723+78.07 ROUTE 169
TOTALS						22.58	
PAY TOTALS			2763	857	2125	22.6	

DRAINAGE									
STATION	STATION	LOCATION	SKEW	CLASS 3 EXCAVATION (CU. YD.)	GRATE AND BEARING PLATE (3'1" X 2'1") (EACH)	18 IN. PIPE GROUP C (LIN. FT.)	JACKED 24 IN. CLASS III R.C.P. (LIN. FT.)	PRECAST DROP INLET 3 FT. X 2 FT. (FT.)	24 IN. GROUP A F.E.S. (EACH)
709+42.95	--	CL	10°47'40" L.A.	7.5			51.9		2
718+35.60	718+87.00	LT.	--	17.3		52.0			
718+88.00	--	LT.	--	6.3	1			4.0	
TOTALS				31.1		52.0	51.9	4.0	
PAY TOTALS				31	1	52	52	4	2

MOBILIZATION
1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING AND STAKING
1 LUMP SUM

CULVERT EXTENSIONS						
STATION	LOCATION	SKEW	CLASS 4 EXCAVATION (CU. YD.)	CLASS B-1 CONCRETE (CULVERTS) (CU. YD.)	REINFORCING STEEL (CULVERTS) (LB.)	REMARKS
718+36.49	LT.	09°54'40" R.A.	83.5	34.1	6870	INCL. 1-18" PIPE OPENING
718+36.49	RT.	09°54'40" R.A.	91.3	55.1	10860	INCL. 1-10° HORIZONTAL BEND
TOTALS			174.8			
PAY TOTALS			175	89.2	17730	

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

08/04/2025 10:52:07 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

3

COUNTY

BUCHANAN

JOB NO.

JNW0073

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)

MoDOT

PAVEMENT								
STATION	STATION	LOCATION	LENGTH (FT.)	WIDTH (FT.)	TYPE 5 AGGR. FOR BASE (6" THICK) (SQ. YD.)	OPTIONAL PAVEMENT (SQ. YD.)	CONCRETE PAVEMENT (8" N.R. 15' JOINTS) (SQ. YD.)	REMARKS
707+23.99	709+35.01	ROUTE 169 RT.	211.02	4.00-8.69	148.77	148.77		INCLUDES SHOULDER
709+35.01	712+63.99	ROUTE 169 RT.	328.98	4.69-12.00	305.04	305.04		
712+63.99	714+78.85 BK.	ROUTE 169 RT.	214.86	12.00	286.48	286.48		
714+79.09 AH.	716+54.05	ROUTE 169 RT.	174.96	12.00	233.28	233.28		
716+54.05	719+79.01	ROUTE 169 RT.	324.96	16.00	577.71	577.71		INCLUDES SHOULDER
719+79.01	720+58.07	ROUTE 169 RT.	79.06	12.00	105.41	105.41		
720+58.07	723+41.85	ROUTE 169 RT.	283.78	12.00-1.36	210.63	210.63		
723+41.85	723+78.07	ROUTE 169 RT.	36.22	5.36-4.00	18.83	18.83		INCLUDES SHOULDER
10+24.00	11+43.01	49TH STREET	119.01		952.73	862.13	90.60	
0+00.00	3+02.83	ROUTE FF EAST RADIUS	302.83	VARIES	563.60	563.60		
0+10.25	1+31.67	ROUTE FF WEST RADIUS	121.42	VARIES	108.42		108.42	
TOTALS					3510.9	3311.88	199.02	
PAY TOTALS					*	3311.9	199.0	

* SEE TYPE 5 AGGREGATE TABLE FOR PAY TOTAL

TYPE 5 AGGREGATE	
DESCRIPTION	TYPE 5 AGGR. FOR BASE (6" THICK) (SQ. YD.)
FROM 'PAVEMENT' TABLE	3510.9
FROM 'CONCRETE MEDIAN STRIP, GUTTER, CURB AND GUTTER, AND CURB' TABLE	306.3
FROM 'PAVED APPROACHES' TABLE	241.4
TOTAL	4058.6
PAY TOTAL	4059

CONCRETE MEDIAN STRIP, GUTTER, CURB AND GUTTER, AND CURB								
STATION	STATION	LOCATION	TYPE 5 AGGR. FOR BASE (6" THICK) (SQ. YD.)	3" CONC. MEDIAN STRIP (SQ. YD.)	CONCRETE GUTTER TYPE A (LIN. FT.)	CURB AND GUTTER TYPE B (LIN. FT.)	CONCRETE CURB TYPE T1-M (LIN. FT.)	REMARKS
709+97.00	714+05.88	☺ ROUTE 169 RT.	136.6			409.7		
714+05.88	714+25.16	☺ ROUTE 169 RT.	10.9			20.9		GUTTER OUTLET
714+25.16	714+29.86	☺ ROUTE 169 RT.	2.0		6.1			
720+41.01	723+24.41	☺ ROUTE 169 RT.	94.7			284.2		
723+24.41	723+43.94	☺ ROUTE 169 RT.	10.0			20.9		GUTTER OUTLET
723+43.94	723+50.42	☺ ROUTE 169 RT.	2.7		8.2			
0+50.22	1+43.73	Ⓡ 49TH EAST RADIUS RT.	20.8				93.5	
10+34.00	10+50.76	☺ 49TH STREET LEFT		12.97				
0+10.25	1+38.87	Ⓡ FF WEST RADIUS RT.	28.6				128.6	
0+33.30	0+69.27	☺ ROUTE FF LT.		68.61				
TOTALS			306.3	81.58	14.3	735.7	222.1	
PAY TOTALS			*	81.6	14	736	222	

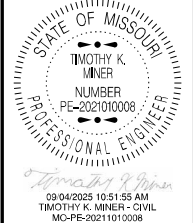
* SEE TYPE 5 AGGREGATE TABLE FOR PAY TOTAL

PAVED APPROACHES						
STATION	LOCATION	SKEW	WIDTH (FT.)	TYPE 5 AGGR. FOR BASE (6" THICK) (SQ. YD.)	PAVED APPROACH 8 IN. (SQ. YD.)	REMARKS
709+66.39	ROUTE 169 RT.	01°16'23" L.A.	22	148.1	148.05	TYPE III DRIVEWAY
720+10.01	ROUTE 169 RT.	RT. ∟	22	93.3	93.30	TYPE III DRIVEWAY
TOTALS				241.4	241.35	
PAY TOTALS				*	241.4	

* SEE TYPE 5 AGGREGATE TABLE FOR PAY TOTAL

PAVEMENT EDGE TREATMENT			
STATION	STATION	LOCATION	PAVEMENT EDGE TREATMENT (LIN. FT.)
713+99.99	714+49.99	ROUTE 169 LT.	50.0
0+06.04	1+54.16	ROUTE FF RT.	158.9
0+22.06	2+16.34	ROUTE FF LT.	196.2
TOTAL			405.1
PAY TOTAL			405

PERMANENT EROSION CONTROL								
STATION	STATION	LOCATION	ROCK LINING (CU. YD.)	TYPE 2 ROCK BLANKET		PERMANENT EROSION CONTROL GEOTEXTILE (SQ. YD.)	TYPE 2 TURF REINFORCEMENT MAT (SQ. YD.)	REMARKS
				FURNISHING (CU. YD.)	PLACING (CU. YD.)			
709+42.95	--	LT.	3.1					1'X6'X14' AT 24" CULVERT OUTLET
717+40.00	718+40.59	RT.					119.5	8" TREATMENT DEPTH
717+71.85	718+20.49	LT.					38.3	6" TREATMENT DEPTH
718+38.40	718+79.90	RT.	34.1	79.4	79.4	178.3		3' ROCK LINING / 2' ROCK BLANKET THICKNESS
TOTALS			37.2	79.4	79.4	178.3	157.8	
PAY TOTALS			37	79	79	178	158	



DATE PREPARED 9/4/2025	
ROUTE 169	STATE MO
DISTRICT NW	SHEET NO. 3
COUNTY BUCHANAN	
JOB NO. JNW0073	
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)

DITCH CHECKS							
STATION	STATION	LOCATION	SPACING (FT.)	LENGTH PER CHECK (LIN. FT.)	NUMBER OF CHECKS (EACH)	ROCK DITCH CHECK (LIN. FT.)	REMARKS
707+53	708+37	ROUTE 169 RT.	28	20.9	4	83.6	LENGTH VARIES - 20.8' TO 13.0'
708+65	709+21	ROUTE 169 RT.	28	13.0	3	39.0	
709+49	--	ROUTE 169 LT.	--	17.0	1	17.0	
717+83	718+13	ROUTE 169 LT.	15	16.2	3	48.6	
718+34	--	ROUTE 169 RT.	--	12.5	1	12.5	
718+88	--	ROUTE 169 LT.	--	30.0	1	30.0	DROP INLET CHECK
723+78	--	ROUTE 169 RT.	--	31.4	1	31.4	
0+00	--	ROUTE FF EAST RADIUS RT.	--	17.0	1	17.0	
1+46	3+00	ROUTE FF EAST RADIUS RT.	22	12.7	8	101.6	LENGTH VARIES - 14.3' TO 11.1'
0+00	0+85	ROUTE FF WEST RADIUS RT.	85	11.0	2	22.0	
10+41	10+61	49TH STREET RT.	20	16.6	2	33.2	LENGTH VARIES - 20.2' TO 13.0'
10+74	10+91	49TH STREET RT.	17	13.0	2	26.0	
11+11	11+43	49TH STREET RT.	32	11.2	2	22.4	LENGTH VARIES - 13.0' TO 9.3'
TOTAL						484.3	
PAY TOTAL						484	

SEDIMENT REMOVAL		
DESCRIPTION	SILT FENCE (LIN. FT.)	REMARKS
31 EA. ROCK DITCH CHECKS	31.0	EST. 1 C.Y./DITCH CHECK
1311 LIN. FT. SILT FENCE	13.1	EST. 1 C.Y./100 L.F. SILT FENCE
TOTAL	44.1	
PAY TOTAL	44	

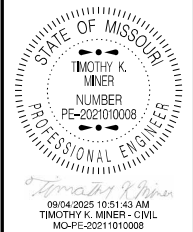
SILT FENCE				
STATION	STATION	LOCATION	SILT FENCE (LIN. FT.)	REMARKS
709+83	714+30	ROUTE 169 RT.	488.9	BACK OF CURB
715+56	717+40	ROUTE 169 RT.	233.3	BOTTOM OF SLOPE
717+90	718+45	ROUTE 169 LT.	87.8	MID SLOPE
718+70	719+96	ROUTE 169 RT.	155.8	BOTTOM OF SLOPE
720+21	723+50	ROUTE 169 RT.	345.2	BACK OF CURB
TOTAL			1311.0	
PAY TOTAL			1311	

SEEDING AND MULCH					
STATION	STATION	LOCATION	MULCHING (ACRE)	SEEDING COOL SEASON GRASSES (ACRE)	REMARKS
707+23.99	709+54.48	ROUTE 169 RT.	0.12	0.12	BEGIN PROJECT TO TYPE III DRIVEWAY
709+35.00	709+60.00	ROUTE 169 LT.	0.01	0.01	CULVERT OUTLET LEFT
709+76.48	715+29.60	ROUTE 169 RT.	0.11	0.11	TYPE III DRIVEWAY TO 49TH STREET
715+40.57	719+99.01	ROUTE 169 RT.	0.33	0.33	49TH STREET TO TYPE III DRIVEWAY
717+71.85	719+63.00	ROUTE 169 LT.	0.12	0.12	CULVERT EXTENSION AND DITCHES LEFT
720+21.01	723+78.07	ROUTE 169 RT.	0.14	0.14	TYPE III DRIVEWAY TO END OF PROJECT
0+06.97	1+54.16	ROUTE FF RT.	0.04	0.04	
0+67.15	2+16.34	ROUTE FF LT.	0.13	0.13	
TOTALS			1.00	1.00	
PAY TOTALS			1.0	1.0	

ADDITIONAL MOBILIZATION FOR SEEDING
4 EACH

PAVEMENT MARKING REMOVAL				
STATION	STATION	LOCATION	PAVEMENT MARKING REMOVAL (LIN. FT.)	REMARKS
701+91.91	725+44.94	ROUTE 169	4706.1	EXISTING CENTERLINE PRIOR TO STAGE 1 TEMPORARY PAVEMENT MARKING
701+91.91	725+44.94	ROUTE 169	7059.1	STAGE 1 TEMPORARY PAVEMENT MARKING
701+91.91	725+44.94	ROUTE 169	7327.6	STAGE 2 TEMPORARY PAVEMENT MARKING
TOTAL			19092.8	
PAY TOTAL			19093	

TEMPORARY PAVEMENT MARKING					
STATION	STATION	LOCATION	TEMPORARY REMOVABLE MARKING TAPE		REMARKS
			4 IN. WHITE (LIN. FT.)	4 IN. YELLOW (LIN. FT.)	
701+91.91	725+44.94	ROUTE 169	2353.0	4706.1	STAGE 1 TEMPORARY PAVEMENT MARKING
701+91.91	707+23.99	ROUTE 169	532.1	1064.2	FROM LIMITS OF STAGE 1 REMOVAL TO BEGINNING OF STAGE 2 TEMPORARY PAVEMENT MARKING
707+23.99	723+78.07	ROUTE 169	1922.5	3308.2	STAGE 2 TEMPORARY PAVEMENT MARKING (INCLUDES EDGE LINES ON ROUTE FF)
723+78.07	725+44.94	ROUTE 169	166.9	333.7	FROM STAGE 2 TEMPORARY PAVEMENT MARKING TO LIMITS OF STAGE 1 REMOVAL
TOTALS			4974.5	9412.2	
PAY TOTALS			4975	9412	



DATE PREPARED 9/4/2025	
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BRIDGE NO.	

DESCRIPTION					

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

SIGN	SIZE	AREA	QTY	TOTAL	RELOC	RELOC	SIGN	DESCRIPTION	SIGN	SIZE	AREA	QTY	TOTAL	RELOC	RELOC	SIGN	DESCRIPTION	ITEM	TOTAL	EFFECTIVE: 07-01-2025	
IN.	SQ. FT.	EACH	SQ. FT.	EACH	SQ. FT.	NO.	IN.		SQ. FT.	EACH	SQ. FT.	EACH	SQ. FT.	NO.	NUMBER	QTY		DESCRIPTION			
WARNING SIGNS									GUIDE SIGNS									6122008	1	IMPACT ATTENUATOR 40 MPH (SAND BARRELS)	
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)	E05-1	36X48	12.00						GORE EXIT	6122009	1	IMPACT ATTENUATOR 45 MPH (SAND BARRELS)	
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)	E05-2	48X36	12.00						EXIT OPEN	6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)	
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)	E05-2a	48X36	12.00						EXIT CLOSED	6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)	
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)	GO20-1	60X24	10.00						ROAD WORK NEXT XX MILES	6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)	
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)	GO20-2	48X24	8.00						END ROAD WORK	6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)	
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)	GO20-4	36X18	4.50						PILOT CAR FOLLOW ME	6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)	
WO1-4L	48X48	16.00	2	32.00			15L	REVERSE CURVE (SYMBOL LEFT)	GO20-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW	6122020	2	REPLACEMENT SAND BARREL	
WO1-4R	48X48	16.00	2	32.00			15R	REVERSE CURVE (SYMBOL RIGHT)	GO20-4a	18X12	1.50						PILOT CAR IN USE WAIT & FOLLOW	6122030		IMPACT ATTENUATOR (RELOCATION)	
WO1-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)	GO20-5aP	36X24	6.00	11	66.00			54	WORK ZONE (PLAQUE)	6122040		WORK ZONE CRASH CUSHION (NARROW)	
WO1-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-8a	24X18	3.00						END DETOUR	6122041		WORK ZONE CRASH CUSHION (RELOCATION)	
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)	MO4-9L	48X36	12.00						DETOUR (LEFT)	6123001	2	TRUCK MOUNTED ATTENUATOR (TMA)	
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)	MO4-9R	48X36	12.00						DETOUR (RIGHT)	6161012		BUOYS (BOATS KEEP OUT)	
WO1-6	60X30	12.50	1	12.50			16L	HORIZONTAL ARROW (SYMBOL)	MO4-9P	48X12	4.00						STREET NAME (PLAQUE)	6161013		BUOYS (NO WAKE)	
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4-10L	48X18	6.00						DETOUR ARROW (LEFT)	6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)	
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4-10R	48X18	6.00						DETOUR ARROW (RIGHT)	6161020		CHANNELIZER (DRUM-LIKE)	
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)	REGULATORY SIGNS									6161022		CHANNELIZER (CONE)	
WO1-8	18X24	3.00						CHEVRON (SYMBOL)	R1-1	48X48	13.25						STOP	6161025	217*	CHANNELIZER (TRIM-LINE)	
WO1-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)	R1-2	48TRI.	6.93						YIELD	6161026		CHANNELIZER (VERTICAL PANEL)	
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)	R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)	6161030	8*	TYPE 3 MOVEABLE BARRICADE	
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)	R1-3P	30X12	2.50						ALL WAY (PLAQUE)	6161033		DIRECTION INDICATOR BARRICADE	
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)	R2-1	36X48	12.00	11	132.00			4	SPEED LIMIT 35	6161040		FLASHING ARROW PANEL	
WO3-4	48X48	16.00	2	32.00			11	BE PREPARED TO STOP	R2-1	36X48	12.00	6	72.00			25A	SPEED LIMIT 45	6161047		TYPE 3 OBJECT MARKER	
WO3-5	48X48	16.00						SPEED LIMIT AHEAD	R2-1	36X48	12.00	4	48.00			25B	SPEED LIMIT 40	6161055		SEQUENTIAL FLASHING WARNING LIGHT	
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)	R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)	6161070		TUBULAR MARKER	
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)	R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)	6161095		RADAR SPEED ADVISORY SYSTEM	
WO4-1aL	48X48	16.00						MERGE (LEFT)	R3-3	36X36	9.00						NO TURNS	6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED	
WO4-1aR	48X48	16.00						MERGE (RIGHT)	R3-4	48X48	16.00						NO U-TURN (SYMBOL)	6161098A	3	CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED	
WO5-1	48X48	16.00	3	48.00			43	ROAD/BRIDGE/RAMP NARROWS	R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT	6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED	
WO5-3	48X48	16.00						ONE LANE BRIDGE	R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT	6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM	
WO5-5	48X48	16.00						NARROW LANES	R4-1	36X48	12.00						DO NOT PASS	6162002		TEMPORARY LONG-TERM RUMBLE STRIPS	
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)	R4-2	36X48	12.00						PASS WITH CARE	6173600D	1882	TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED	
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)	R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)	6173700B		TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED	
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)	R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)	6174000A		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION CONTRACTOR FURNISHED/RETAINED	
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)	R5-1	30X30	6.25						DO NOT ENTER	6175010A		RELOCATING TEMP. TRAFFIC BARRIER ANCHORED	
WO8-1	48X48	16.00						BUMP	R5-1a	36X24	6.00						WRONG WAY	6175013		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS	
WO8-2	48X48	16.00						DIP	R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)	6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT	
WO8-3	48X48	16.00						PAVEMENT ENDS	R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)	6208064A		TEMPORARY RAISED PAVEMENT MARKER	
WO8-4	48X48	16.00						SOFT SHOULDER	R6-2L	24X30	5.00						ONE WAY (LEFT)	9029400		TEMPORARY TRAFFIC SIGNALS	
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)	R6-2R	24X30	5.00						ONE WAY (RIGHT)	9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING	
WO8-6	48X48	16.00						TRUCK CROSSING	R9-9	24X12	2.00						SIDEWALK CLOSED				
WO8-6c	48X48	16.00						TRUCK ENTRANCE	R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE				
WO8-7	36X36	9.00						LOOSE GRAVEL	R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE				
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL	R10-6	24X36	6.00						STOP HERE ON RED (45° ARROW)				
WO8-9	48X48	16.00						LOW SHOULDER	R11-2	48X30	10.00	1	10.00			29	ROAD CLOSED				
WO8-11	48X48	16.00						UNEVEN LANES	R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY				
WO8-12	48X48	16.00						NO CENTER LINE	R11-4	60X30	12.50	1	12.50			55	ROAD CLOSED TO THRU TRAFFIC				
WO8-15	48X48	16.00						GROOVED PAVEMENT	CONST-3A	60X48	20.00						FINE SIGN				
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)	CONST-3X	56X12	4.67						SPEEDING/PASSING (PLATE)				
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)	MISCELLANEOUS SIGNS												
WO8-17R	48X48	16.00	2	32.00			23R	SHOULDER DROP-OFF (SYMBOL RIGHT)	CONST-5	48X36	12.00						POINT OF PRESENCE				
WO8-17P	30X24	5.00	2	10.00			23P	SHOULDER DROP-OFF (PLAQUE)	CONST-5	96X48	32.00	2	64.00			56	POINT OF PRESENCE				
W10-1	42RND.	9.62						RAILROAD CROSSING	CONST-8	48X36	12.00	2	24.00			57	WORK ZONE NO PHONE ZONE				
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)													
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)													
WO12-2x	24X18	3.00						LOW CLEARANCE (PLAQUE)													
WO12-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)													
WO12-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD													
WO12-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD													
WO13-1	30X30	6.25						ADVISORY SPEED (PLAQUE)													
WO16-2	30X24	5.00						XXX FEET (PLAQUE)													
WO16-3	30X24	5.00						X MILE (PLAQUE)													
WO20-1	48X48	16.00	13	208.00			2	ROAD/BRIDGE/RAMP WORK AHEAD													
WO20-2	48X48	16.00						DETOUR AHEAD													
WO20-3	48X48	16.00	1	16.00			20A	ROAD CLOSED 500 FT.													
WO20-3	48X48	16.00	1	16.00			20B	ROAD CLOSED 1000 FT.													
WO20-4	48X48	16.00	6	96.00			7	ONE LANE ROAD AHEAD	616-10.05	TOTAL											
WO20-5	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED AHEAD	CONSTRUCTION SIGNS	1068*							6169901	1	LUMP SUM TEMPORARY TRAFFIC CONTROL (*ITEM INCLUDED)		
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD	616-10.10				TOTAL								
WO20-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED	RELOCATED SIGNS												
WO20-7a	48X48	16.00	6	96.00			8	FLAGGER (SYMBOL)													
WO21-2	36X36	9.00						FRESH OIL													
WO21-5	48X48	16.00						SHOULDER WORK / SHOULDER WORK AHEAD													
WO22-1	48X48	16.00						BLASTING ZONE AHEAD													
WO22-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE													
GO22-1	21X15	2.19	4	8.76			61	WET PAINT (ARROW PIVOTS)													

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:51:13 AM

TIMOTHY K. MINER - CIVIL

MO-PE-20211010008

DATE PREPARED

9/4/2025

ROUTE

STATE

169

MO

DISTRICT

SHEET NO.

NW

3

COUNTY

BUCHANAN

JOB NO.

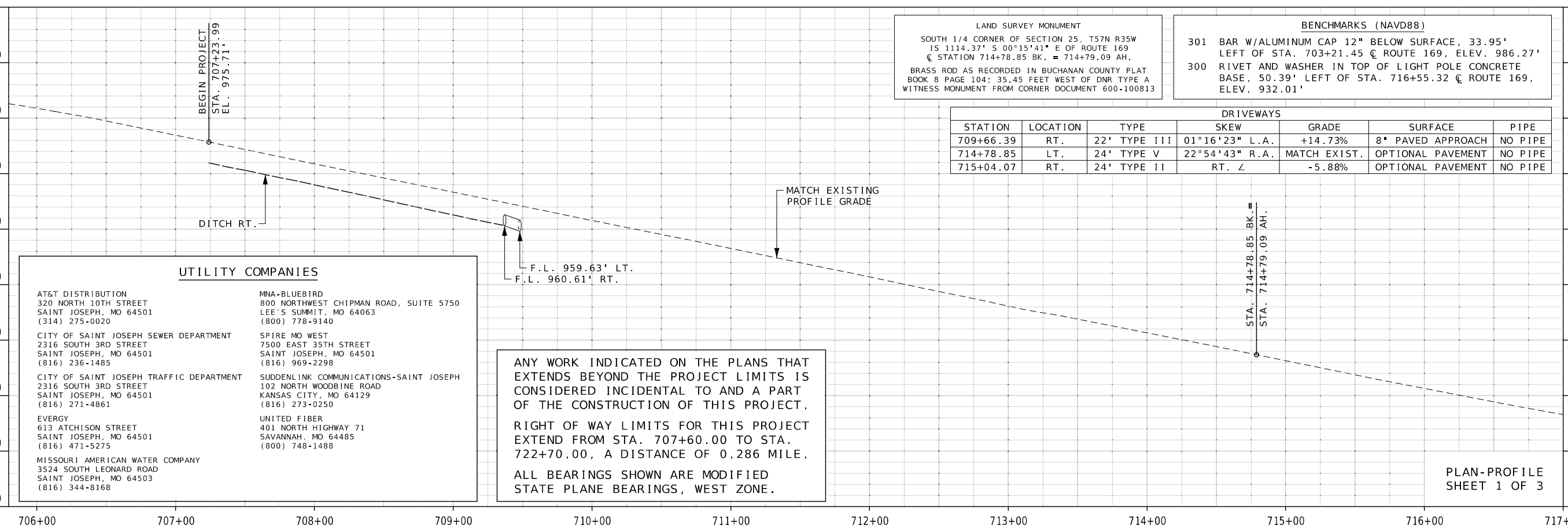
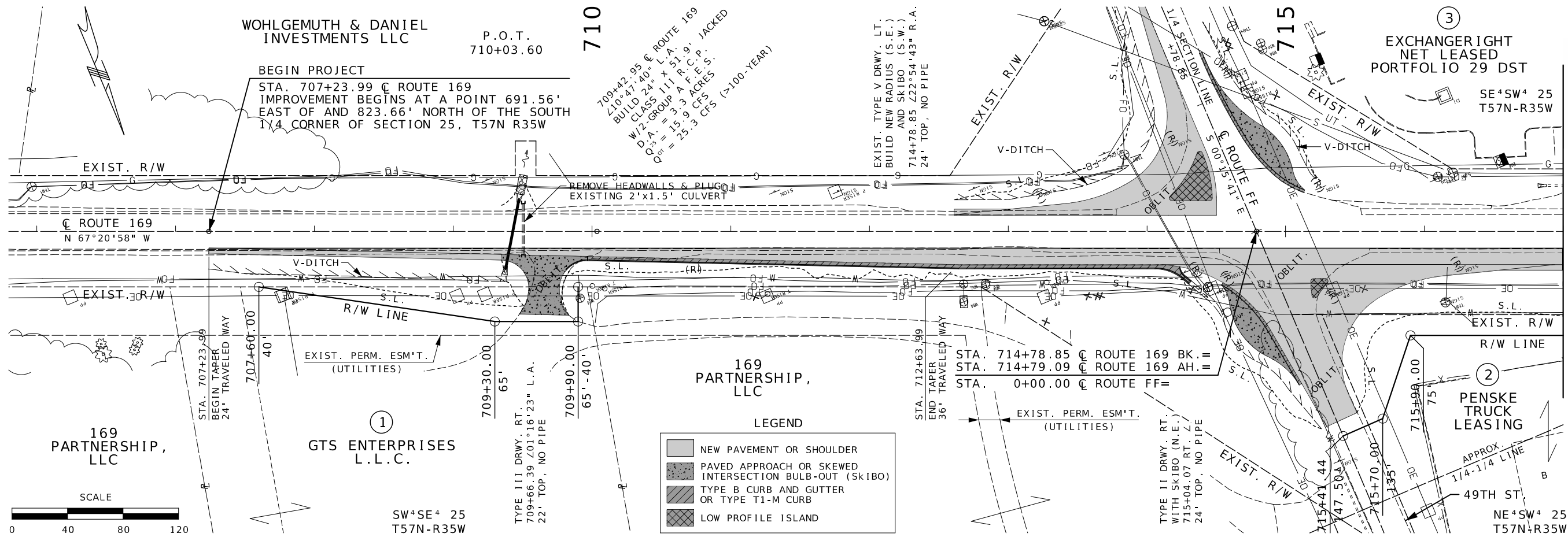
JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION



UTILITY COMPANIES	
AT&T DISTRIBUTION 320 NORTH 10TH STREET SAINT JOSEPH, MO 64501 (314) 275-0020	MNA-BLUEBIRD 800 NORTHWEST CHIPMAN ROAD, SUITE 5750 LEE'S SUMMIT, MO 64063 (800) 778-9140
CITY OF SAINT JOSEPH SEWER DEPARTMENT 2316 SOUTH 3RD STREET SAINT JOSEPH, MO 64501 (816) 236-1485	SPIRE MO WEST 7500 EAST 35TH STREET SAINT JOSEPH, MO 64501 (816) 969-2298
CITY OF SAINT JOSEPH TRAFFIC DEPARTMENT 2316 SOUTH 3RD STREET SAINT JOSEPH, MO 64501 (816) 271-4861	SUDENLINK COMMUNICATIONS-SAINT JOSEPH 102 NORTH WOODBINE ROAD KANSAS CITY, MO 64129 (816) 273-0250
EVERGY 613 ATCHISON STREET SAINT JOSEPH, MO 64501 (816) 471-5275	UNITED FIBER 401 NORTH HIGHWAY 71 SAVANNAH, MO 64485 (800) 748-1488
MISSOURI AMERICAN WATER COMPANY 3524 SOUTH LEONARD ROAD SAINT JOSEPH, MO 64503 (816) 344-8168	

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.

RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STA. 707+60.00 TO STA. 722+70.00, A DISTANCE OF 0.286 MILE.

ALL BEARINGS SHOWN ARE MODIFIED STATE PLANE BEARINGS, WEST ZONE.

LAND SURVEY MONUMENT
SOUTH 1/4 CORNER OF SECTION 25, T57N R35W
IS 1114.37' S 00°15'41" E OF ROUTE 169
€ STATION 714+78.85 BK. = 714+79.09 AH.
BRASS ROD AS RECORDED IN BUCHANAN COUNTY PLAT
BOOK 8 PAGE 104; 35.45 FEET WEST OF DNR TYPE A
WITNESS MONUMENT FROM CORNER DOCUMENT 600-100813

BENCHMARKS (NAVD88)
301 BAR W/ALUMINUM CAP 12" BELOW SURFACE, 33.95'
LEFT OF STA. 703+21.45 € ROUTE 169, ELEV. 986.27'
300 RIVET AND WASHER IN TOP OF LIGHT POLE CONCRETE
BASE, 50.39' LEFT OF STA. 716+55.32 € ROUTE 169,
ELEV. 932.01'

DRIVEWAYS						
STATION	LOCATION	TYPE	SKEW	GRADE	SURFACE	PIPE
709+66.39	RT.	22' TYPE III	01°16'23" L.A.	+14.73%	8" PAVED APPROACH	NO PIPE
714+78.85	LT.	24' TYPE V	22°54'43" R.A.	MATCH EXIST.	OPTIONAL PAVEMENT	NO PIPE
715+04.07	RT.	24' TYPE II	RT. L	-5.88%	OPTIONAL PAVEMENT	NO PIPE

STATE OF MISSOURI
TIMOTHY K. MINER
NUMBER
PE-2021010008
PROFESSIONAL ENGINEER
09/04/2025 10:50:58 AM
TIMOTHY K. MINER - CIVIL
MO-PE-2021010008

DATE PREPARED
9/4/2025

ROUTE
169

DISTRICT
NW

COUNTY
BUCHANAN

JOB NO.
JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

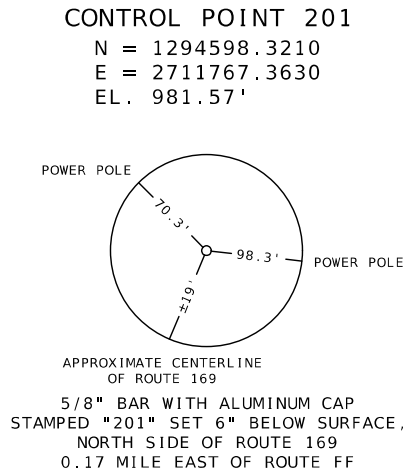
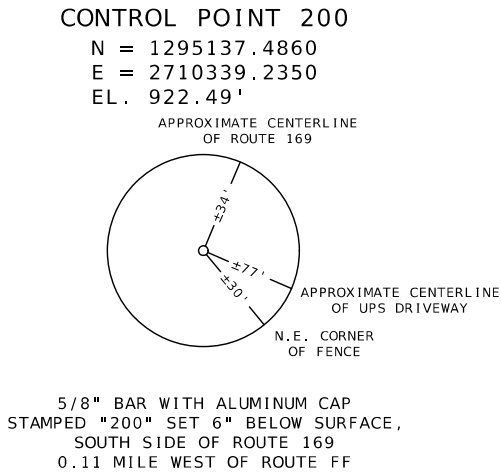
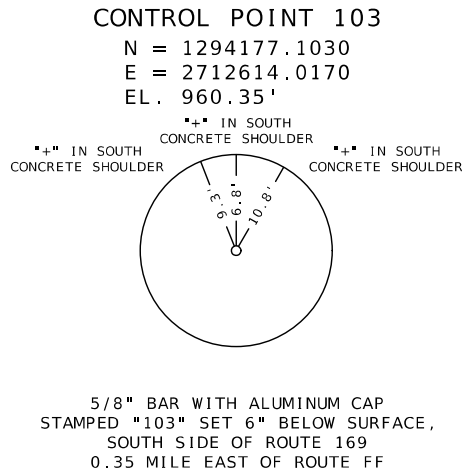
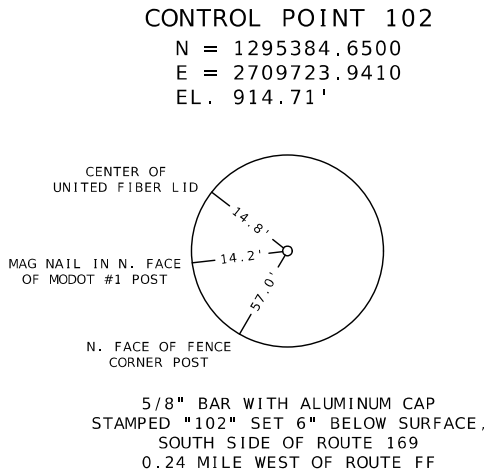
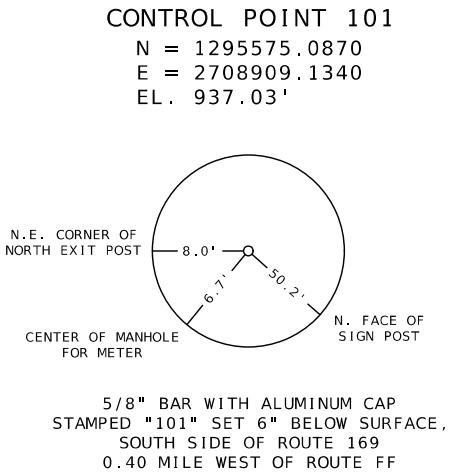
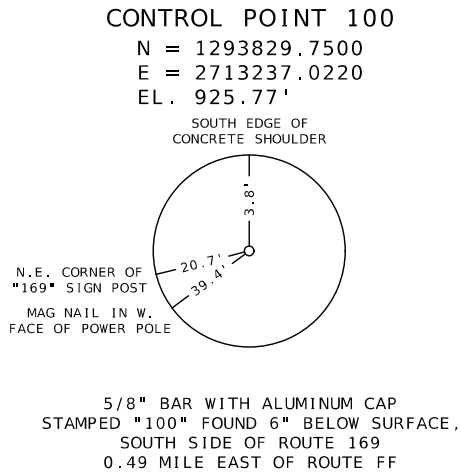
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

[illegible]



THE COORDINATES SHOWN 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 GIVEN IN THE "REFERENCE CONTROL INFORMATION" TABLE ON SHEET 8.

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:46:20 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

DISTRICT

NW

STATE

MO

SHEET NO.

7

COUNTY

BUCHANAN

JOB NO.

JNW0073

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)

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 (2011) EPOCH 2010	
VERTICAL DATUM	NAVD88	
GEOID MODEL	GEOID18	
ELEVATIONS DETERMINED BY	DIFFERENTIAL LEVELING	
PROJECT PROJECTION FACTOR		1.0000918
REFERENCE CONTROL INFORMATION		
COORDINATE SYSTEM	MO. COORDINATE SYSTEM OF 1983	
CONTROL STATION	MISSOURI CORS	
DESIGNATION	MODOT SAVANNAH CORS ARP	
CORS_ID	MOSV	
PID	DM5403	
LATITUDE	39°57'15.14746" N	
LONGITUDE	94°50'51.31691" W	
NORTHING (M)	420441.539	
EASTING (M)	820300.015	
ZONE	WEST	
PROJECT AVERAGE GRID FACTOR		0.9999082
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 #100 N 1293829.7500 X 0.9999082 = N 1293710.9764 E 2713237.0220 X 0.9999082 = E 2712987.9468		
LINEAR UNIT CONVERSION		
1 METER = 3.280833333 US SURVEY FEET (USFT)		

COORDINATE POINT LISTING							
NAME	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND)			DESCRIPTION
				NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	
PROJECT CONTROL POINTS							
100				1293829.7500	2713237.0220	925.77	5/8" BAR WITH ALUMINUM CAP STAMPED "100", 6" BELOW SURFACE
101				1295575.0870	2708909.1340	937.03	5/8" BAR WITH ALUMINUM CAP STAMPED "101", 6" BELOW SURFACE
102				1295384.6500	2709723.9410	914.71	5/8" BAR WITH ALUMINUM CAP STAMPED "102", 6" BELOW SURFACE
103				1294177.1030	2712614.0170	960.35	5/8" BAR WITH ALUMINUM CAP STAMPED "103", 6" BELOW SURFACE
200	720+85.05	EX. 169	31.54' LT.	1295137.4860	2710339.2350	922.49	5/8" BAR WITH ALUMINUM CAP STAMPED "200", 6" BELOW SURFACE
201	705+59.19	EX. 169	20.87' RT.	1294598.3210	2711767.3630	981.57	5/8" BAR WITH ALUMINUM CAP STAMPED "201", 6" BELOW SURFACE
300	716+55.32	EX. 169	50.39' LT.	1294954.5940	2710728.5580	932.01	RIVET AND WASHER IN TOP OF LIGHT POLE CONCRETE BASE
301	703+21.45	EX. 169	33.95' LT.	1294456.1420	2711965.6480	986.27	BAR WITH ALUMINUM CAP, 12" BELOW SURFACE
ALIGNMENTS							
EX_CL_169	703+36.72			1294493.3844	2711964.6381		START
	704+33.30			1294530.5778	2711875.5085		P.I.
	710+03.60			1294750.2058	2711349.1953		P.I.
	714+79.09			1294933.2288	2710910.6018		P.I.
	722+03.00			1295212.0118	2710242.5304		P.I.
	724+72.00			1295315.6063	2709994.2781		END
EX_CL_FF	0+00.00			1294933.2288	2710910.6018		START
	0+16.90			1294916.3290	2710910.6789		P.I.
	8+01.40			1294131.8371	2710914.2574		P.I.
	11+15.00			1293818.2404	2710915.6879		END
FF_EAST_RADIUS	0+00.00			1294716.9222	2710922.5863		START
	1+00.74			1294816.9952	2710934.1322		P.C.
	1+41.98			1294857.9687	2710938.8595		P.I.
	1+71.52			1294864.9075	2710979.5170		P.C.C.
	1+97.54			1294869.2863	2711005.1743		P.I.
	2+22.63			1294861.7025	2711030.0731		P.T.
	2+62.83			1294849.9896	2711068.5284		P.I.
	3+02.83			1294834.5852	2711105.4432		END
FF_WEST_RADIUS	0+00.00			1294926.9648	2710860.5282		P.C.
	0+18.12			1294916.6414	2710875.4144		P.I.
	0+35.45			1294900.3927	2710883.4240		P.C.C.
	0+52.36			1294885.2276	2710890.8994		P.I.
	0+69.03			1294868.5526	2710893.6936		P.C.C.
	1+01.39			1294836.6340	2710899.0423		P.I.
	1+33.61			1294804.2706	2710899.1899		P.T.
	1+58.87			1294779.0140	2710899.3051		END
PR_CL_49TH	10+00.00			1294942.8486	2710887.5491		START
	10+34.00			1294974.2262	2710900.6428		P.C.
	10+55.69			1294994.2413	2710908.9950		P.I.
	10+76.71			1295015.9182	2710908.3051		P.T.
	11+70.00			1295109.1567	2710905.3377		P.I.
	13+40.00			1295279.1316	2710902.4120		P.I.
	15+03.99			1295443.1246	2710902.9529		END
49TH_EAST_RADIUS	0+00.00			1294927.6354	2710986.3256		P.C.
	0+54.65			1294948.6797	2710935.8953		P.I.
	0+99.18			1295002.8531	2710928.7311		P.T.
	1+79.58			1295082.5581	2710918.1903		END
49TH_WEST_RADIUS	0+00.00			1295081.7947	2710894.2024		START
	0+14.31			1295067.4926	2710894.6576		P.C.
	0+62.24			1295019.5897	2710896.1822		P.I.
	0+93.16			1295011.5269	2710848.9382		P.C.C.
	1+19.18			1295007.1481	2710823.2809		P.I.
	1+44.27			1295014.7320	2710798.3821		P.T.
	2+24.67			1295038.1578	2710721.4715		END
REARDON	10+00.00			1294735.8757	2711383.5357		START
	11+00.00			1294827.2844	2711424.0875		END
GACH_E	10+00.00			1295137.6909	2710420.6319		START
	11+00.00			1295229.9780	2710459.1429		END



09/04/2025 10:46:01 AM
TIMOTHY K. MINER - CIVIL
MO-PE-2021010008

DATE PREPARED
9/4/2025

ROUTE 169
STATE MO

DISTRICT NW
SHEET NO. 8

COUNTY
BUCHANAN

JOB NO.
JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE						

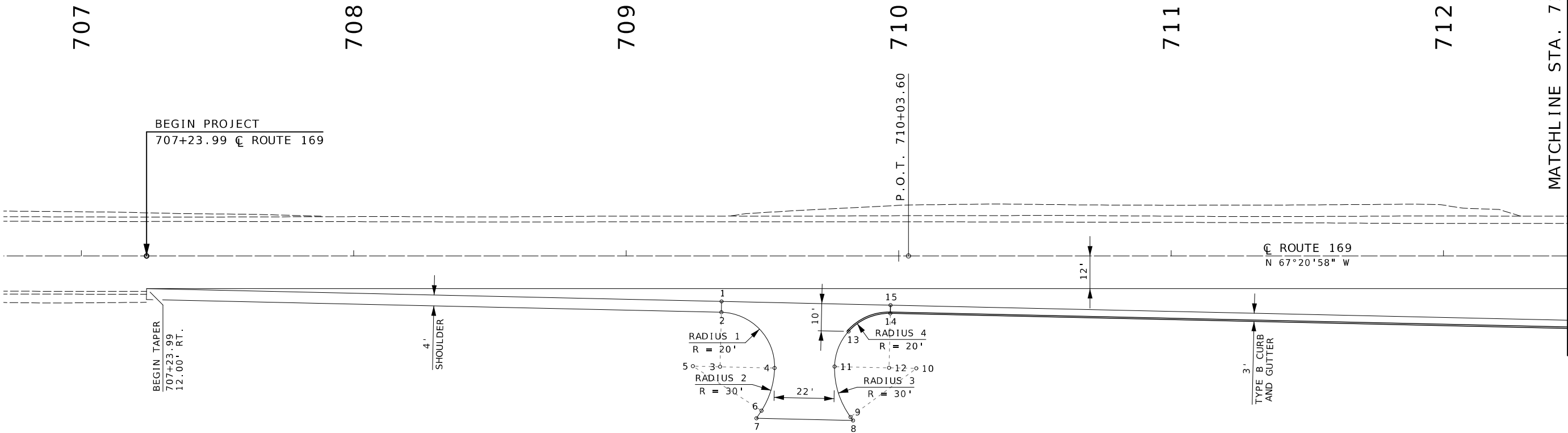
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



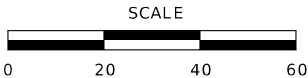
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



POINT NAME	STATION	OFFSET (FT.)	NORTHING (FT.)	EASTING (FT.)	REMARKS
1	709+35.01 C ROUTE 169	16.69' RT.	1294739.1937	2711418.9213	E.O.P. - END SHOULDER / BEGIN PAVED APPROACH
2	709+34.92 C ROUTE 169	20.69' RT.	1294742.8501	2711420.5434	E.O.S. - P.C. OF RADIUS 1
3	709+34.48 C ROUTE 169	40.68' RT.	1294761.1318	2711428.6537	CENTER OF RADIUS 1
4	709+54.47 C ROUTE 169	41.13' RT.	1294769.2422	2711410.3720	P.C.C. OF RADIUS 1 AND 2
5	709+24.48 C ROUTE 169	40.46' RT.	1294757.0767	2711437.7946	CENTER OF RADIUS 2
6	709+49.64 C ROUTE 169	56.80' RT.	1294781.8415	2711420.8623	P.T. OF RADIUS 2
7	709+47.82 C ROUTE 169	59.60' RT.	1294783.7302	2711423.6247	END EAST EDGE OF PAVED APPROACH
8	709+83.30 C ROUTE 169	60.39' RT.	1294798.1204	2711391.1875	BEGIN WEST EDGE OF PAVED APPROACH
9	709+82.35 C ROUTE 169	59.11' RT.	1294796.5697	2711391.5683	P.C. OF RADIUS 3
10	710+06.48 C ROUTE 169	41.28' RT.	1294789.4150	2711362.4339	CENTER OF RADIUS 3
11	709+76.49 C ROUTE 169	40.62' RT.	1294777.2495	2711389.8565	P.C.C. OF RADIUS 3 AND 4
12	709+96.48 C ROUTE 169	41.06' RT.	1294785.3599	2711371.5748	CENTER OF RADIUS 4
13	709+81.58 C ROUTE 169	27.73' RT.	1294767.3134	2711380.1960	BEGIN CURB
14	709+96.93 C ROUTE 169	21.07' RT.	1294767.0781	2711363.4644	B.O.C. - P.T. OF RADIUS 4
15	709+97.00 C ROUTE 169	18.07' RT.	1294764.3358	2711362.2479	E.O.P. - END PAVED APPROACH / BEGIN TYPE B CURB AND GUTTER



NOTE:
SEE SHEET 11 FOR DRIVEWAY PROFILE.



GEOMETRICS
SHEET 1 OF 4
SPECIAL SHEET 1 OF 5



DATE PREPARED
9/19/2025

ROUTE 169
DISTRICT NW
STATE MO
SHEET NO. 9

COUNTY
BUCHANAN
JOB NO.
JNW0073
CONTRACT ID.

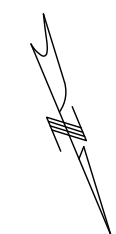
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



MATCHLINE STA. 712+45.51

MATCHLINE STA. 718+19.76

FF EAST RADIUS
P.I. 1+97.54
P.C. 1+71.52
P.T. 2+22.63
Δ 26°37'30" (RT.)
D 52°05'13"
L 51.12' (ARC)
T 26.03'
R 110.00'

FF EAST RADIUS
P.I. 1+41.98
P.C. 1+00.74
P.T. 1+71.52
Δ 73°44'01" (RT.)
D 104°10'27"
L 70.78' (ARC)
T 41.25'
R 55.00'

FF WEST RADIUS
P.I. 1+01.39
P.C. 0+69.03
P.T. 1+33.61
Δ 09°15'05" (RT.)
D 14°19'26"
L 64.59' (ARC)
T 32.36'
R 400.00'

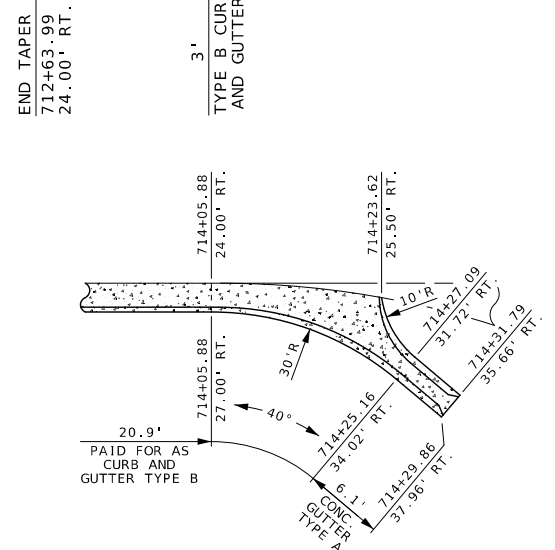
FF WEST RADIUS
P.I. 0+52.36
P.C. 0+35.45
P.T. 0+69.03
Δ 16°43'39" (RT.)
D 49°49'21"
L 33.57' (ARC)
T 16.91'
R 115.00'

FF WEST RADIUS
P.I. 0+18.12
P.C. 0+00.00
P.T. 0+35.45
Δ 29°01'08" (RT.)
D 81°51'04"
L 35.45' (ARC)
T 18.12'
R 70.00'

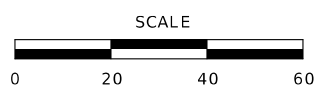
49TH STREET
P.I. 10+55.69
P.C. 10+34.00
P.T. 10+76.71
Δ 24°28'24" (LT.)
D 57°17'45"
L 42.71' (ARC)
T 21.69'
R 100.00'

49TH WEST RADIUS
P.I. 0+62.24
P.C. 0+14.31
P.T. 0+93.16
Δ 82°08'16" (RT.)
D 104°10'27"
L 78.85' (ARC)
T 47.93'
R 55.00'

49TH WEST RADIUS
P.I. 1+19.18
P.C. 0+93.16
P.T. 1+44.27
Δ 26°37'30" (RT.)
D 52°05'13"
L 51.12' (ARC)
T 26.03'
R 110.00'



GUTTER OUTLET DETAIL



NOTES:

SEE SHEET 11 FOR STATIONS, OFFSETS, AND COORDINATES OF POINTS 16-31.

LOW PROFILE ISLANDS ARE PAID FOR AS 3 IN. CONCRETE MEDIAN STRIP. CORNER RADII OF ISLANDS SHALL BE 2'.

CROSS-SECTIONS AND PROFILES FOR ROUTE FF ARE FROM RADIUS BASELINES. PROFILES ARE SHOWN ON SHEET 11.

CROSS-SECTIONS FOR 49TH STREET UP TO P.T. STA 10+76.71 ARE FROM BASELINE SHOWN.

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:38:42 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

10

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE

DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

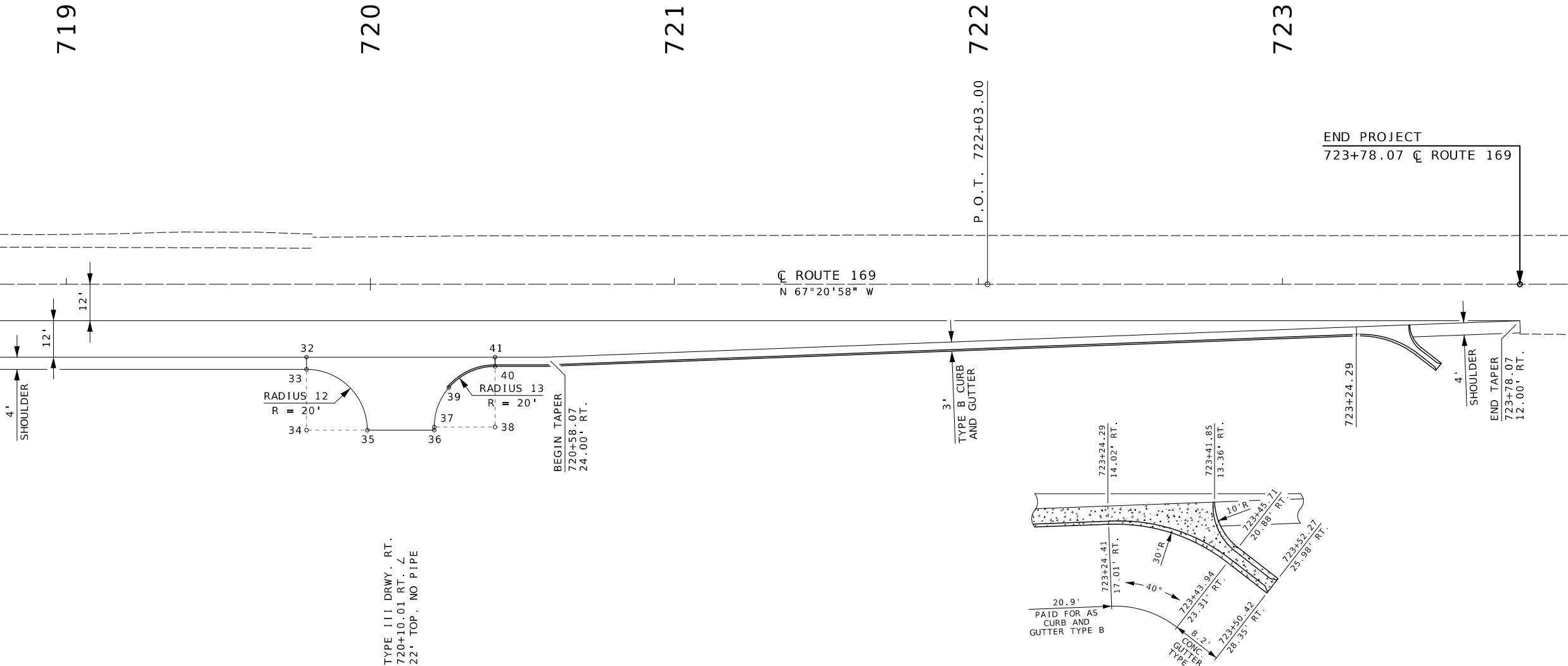
JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

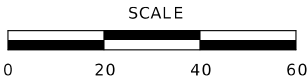
GEOMETRICS
SHEET 2 OF 4
SPECIAL SHEET 2 OF 5



MATCHLINE STA. 718+19.76



TYPE III DRWY. RT.
720+10.01 RT. ∠
22' TOP, NO PIPE



NOTE:
SEE SHEET 11 FOR DRIVEWAY PROFILE.

POINT NAME	STATION	OFFSET (FT.)	NORTHING (FT.)	EASTING (FT.)	REMARKS
32	719+79.01 C ROUTE 169	24.00' RT.	1295147.9014	2710458.4835	E.O.P. - END SHOULDER / BEGIN PAVED APPROACH
33	719+79.01 C ROUTE 169	28.00' RT.	1295151.5929	2710460.0240	E.O.S. - P.C. OF RADIUS 12
34	719+79.01 C ROUTE 169	48.00' RT.	1295170.0503	2710467.7262	CENTER OF RADIUS 12
35	719+99.01 C ROUTE 169	48.00' RT.	1295177.7525	2710449.2687	P.T. OF RADIUS 12 / END EAST EDGE OF PAVED APPROACH
36	720+21.01 C ROUTE 169	48.00' RT.	1295186.2249	2710428.9656	BEGIN WEST EDGE OF PAVED APPROACH
37	720+21.01 C ROUTE 169	47.00' RT.	1295185.3021	2710428.5805	P.C. OF RADIUS 13
38	720+41.01 C ROUTE 169	47.00' RT.	1295193.0042	2710410.1230	CENTER OF RADIUS 13
39	720+25.81 C ROUTE 169	34.00' RT.	1295175.1538	2710419.1430	BEGIN CURB
40	720+41.01 C ROUTE 169	27.00' RT.	1295174.5468	2710402.4209	B.O.C. - P.T. OF RADIUS 13
41	720+41.01 C ROUTE 169	24.00' RT.	1295171.7782	2710401.2655	E.O.P. - END PAVED APPROACH / BEGIN TYPE B CURB AND GUTTER

GUTTER OUTLET DETAIL

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER
PE-2021010008

PROFESSIONAL ENGINEER

Timothy K. Miner

09/22/2025 9:10:57 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/19/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

12

COUNTY

BUCHANAN

JOB NO.

JNW0073

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
9/4/2025

ROUTE 169 STATE MO

DISTRICT NW SHEET NO. 13

COUNTY BUCHANAN

JOB NO. JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

DATE

DATE

DATE

DATE

DATE

DATE

DATE

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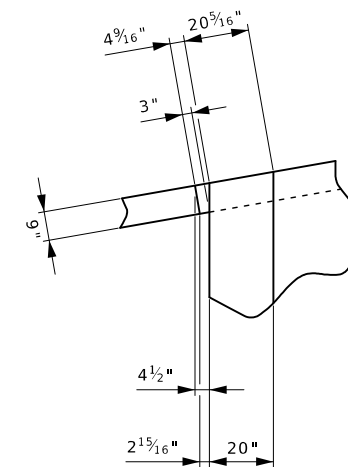
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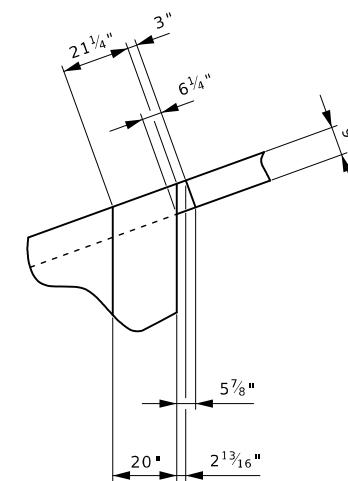
DATE

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

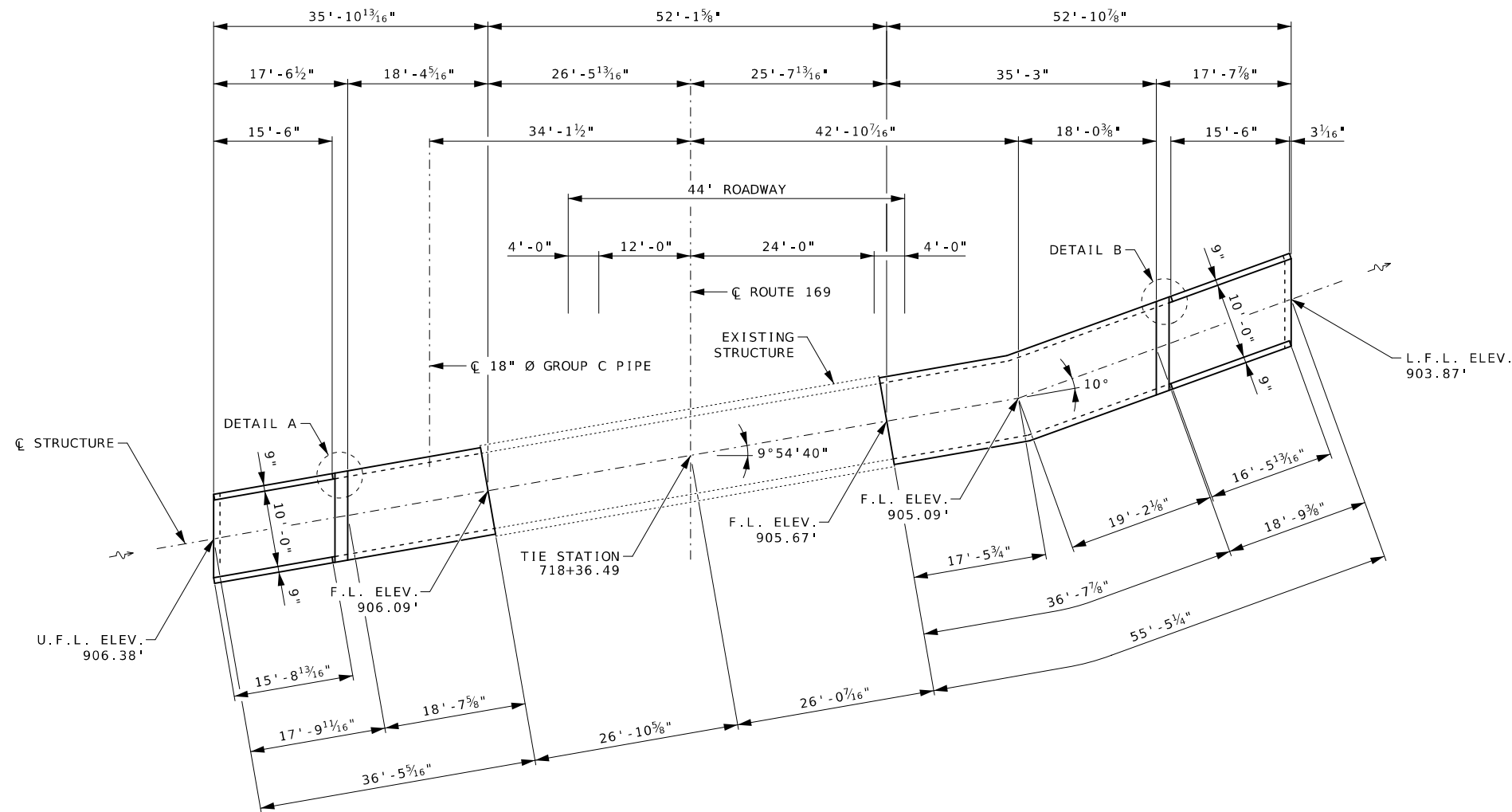
10' x 8' REINFORCED CONCRETE BOX CULVERT EXTENSIONS
STA. 718+36.49 CL ROUTE 169 LT. & RT.



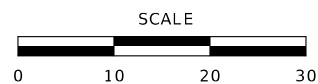
DETAIL A



DETAIL B

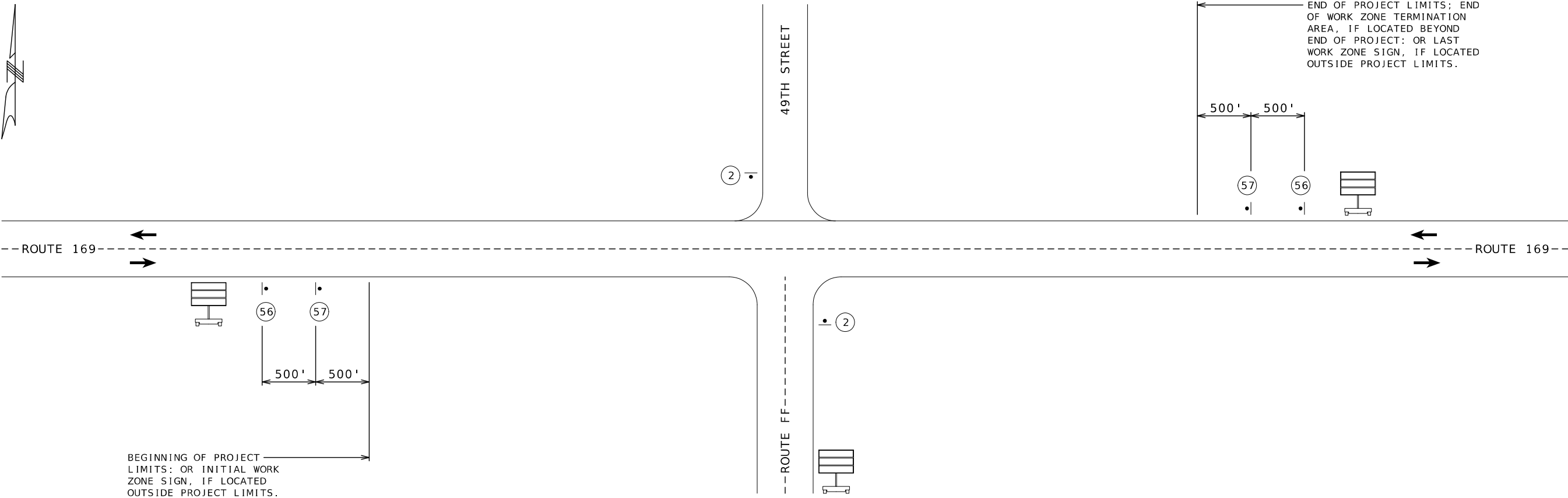
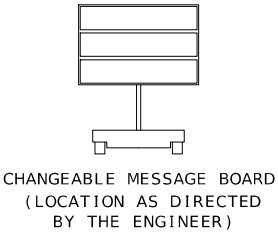


PLAN



10' x 8' REINFORCED CONCRETE BOX CULVERT EXTENSIONS
STA. 718+36.49 CL ROUTE 169 LT. & RT.

CULVERT DIMENSIONS
SHEET 1 OF 1
SPECIAL SHEET 5 OF 5



NOTES:

ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.

SIGN SPACING MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS. WHERE TRAFFIC BACKUPS ARE EXPECTED BEYOND THE ADVANCE WARNING AREA ADDITIONAL SIGNING MAY BE NEEDED.

SIGN #56 IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED IT'S PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE THE SIGN MAY BE PLACED 500 FEET BEFORE THE "WORK ZONE NO PHONE ZONE" SIGN.

THE "WORK ZONE NO PHONE ZONE" SIGN IS PLACED A MINIMUM OF 500 FEET BEFORE THE "ROAD WORK AHEAD" SIGN.

NOT TO SCALE

BEGINNING AND END OF PROJECT

TRAFFIC CONTROL
SHEET 1 OF 8

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER
PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:34:56 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED
9/4/2025

ROUTE
169

DISTRICT
NW

STATE
MO

SHEET NO.
14

COUNTY
BUCHANAN

JOB NO.
JNW0073

CONTRACT ID.

PROJECT NO.

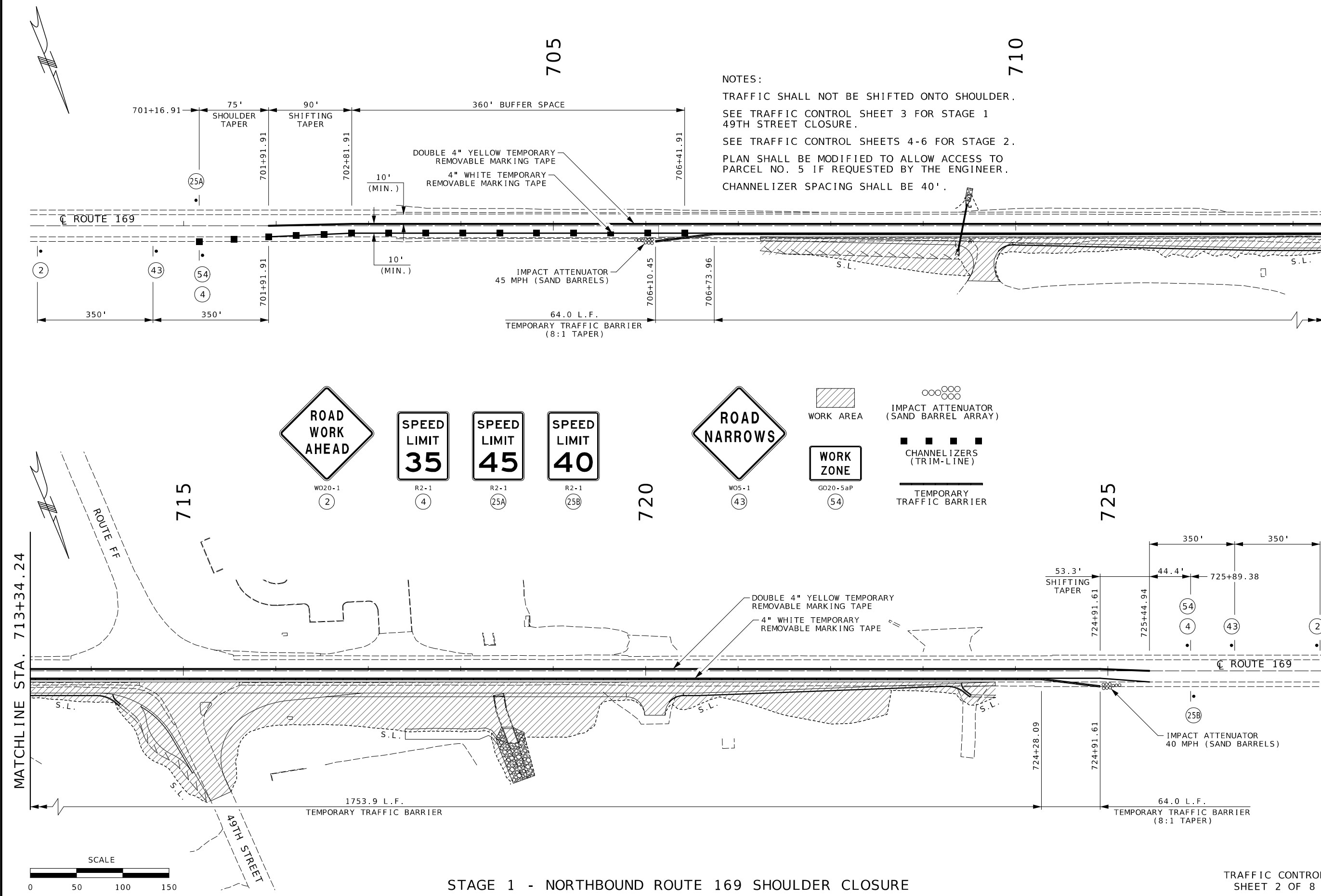
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

MoDOT

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



NOTES:
TRAFFIC SHALL NOT BE SHIFTED ONTO SHOULDER.
SEE TRAFFIC CONTROL SHEET 3 FOR STAGE 1 49TH STREET CLOSURE.
SEE TRAFFIC CONTROL SHEETS 4-6 FOR STAGE 2.
PLAN SHALL BE MODIFIED TO ALLOW ACCESS TO PARCEL NO. 5 IF REQUESTED BY THE ENGINEER.
CHANNELIZER SPACING SHALL BE 40'.

MATCHLINE STA. 713+34.24

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:34:28 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

15

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

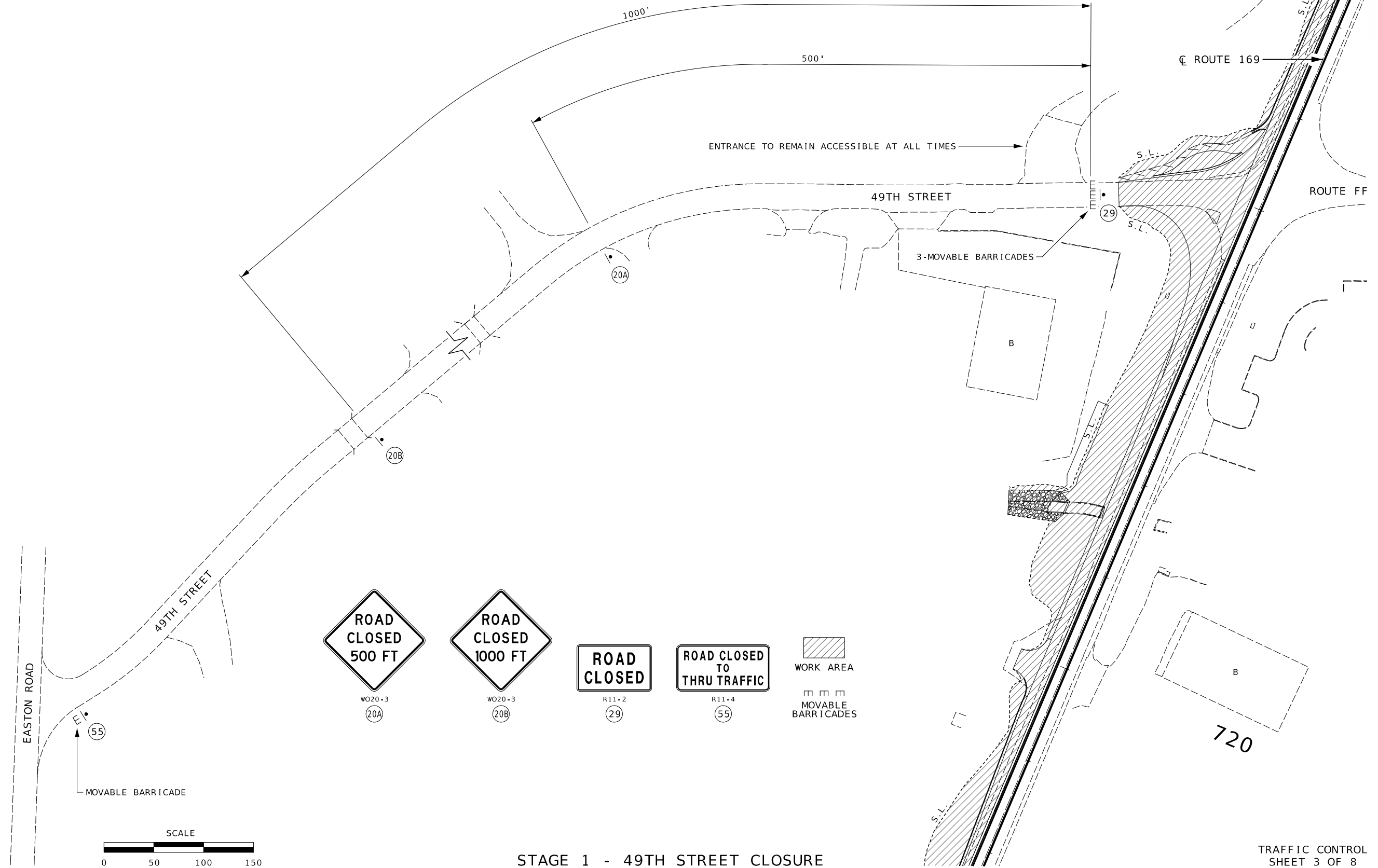
JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

MoDOT

STAGE 1 - NORTHBOUND ROUTE 169 SHOULDER CLOSURE

TRAFFIC CONTROL SHEET 2 OF 8



TRAFFIC CONTROL
SHEET 3 OF 8

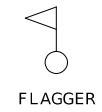
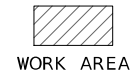
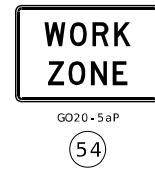
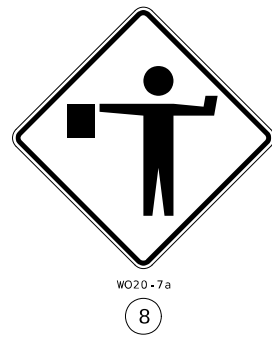
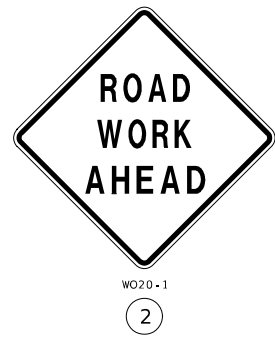


105 WEST CAPITAL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

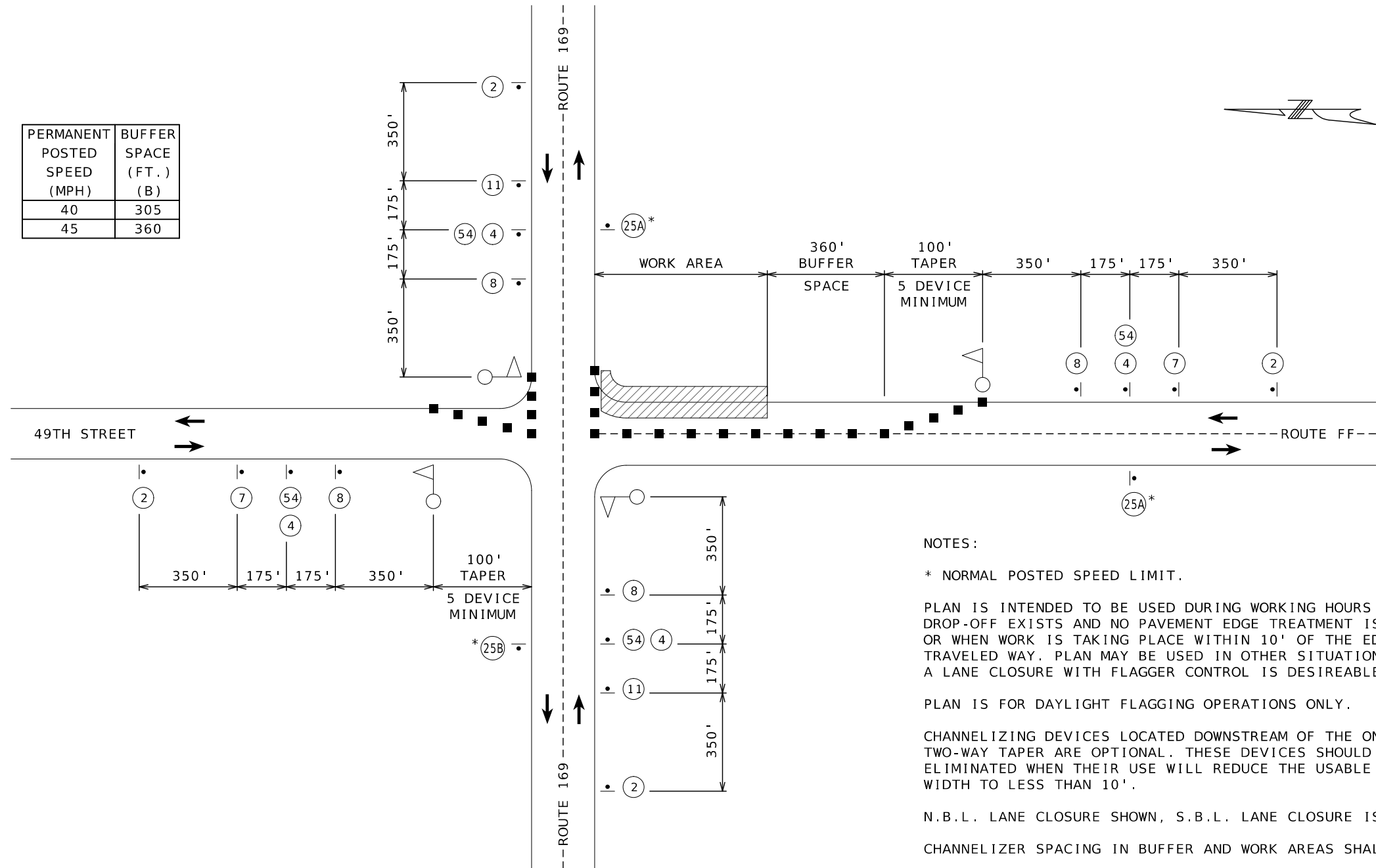


TRAFFIC CONTROL
SHEET 5 OF 8

--



PERMANENT POSTED SPEED (MPH)	BUFFER SPACE (FT.) (B)
40	305
45	360



NOTES:

* NORMAL POSTED SPEED LIMIT.

PLAN IS INTENDED TO BE USED DURING WORKING HOURS WHEN A DROP-OFF EXISTS AND NO PAVEMENT EDGE TREATMENT IS IN PLACE OR WHEN WORK IS TAKING PLACE WITHIN 10' OF THE EDGE OF TRAVELED WAY. PLAN MAY BE USED IN OTHER SITUATIONS WHERE A LANE CLOSURE WITH FLAGGER CONTROL IS DESIREABLE.

PLAN IS FOR DAYLIGHT FLAGGING OPERATIONS ONLY.

CHANNELIZING DEVICES LOCATED DOWNSTREAM OF THE ONE-LANE, TWO-WAY TAPER ARE OPTIONAL. THESE DEVICES SHOULD BE ELIMINATED WHEN THEIR USE WILL REDUCE THE USABLE LANE WIDTH TO LESS THAN 10'.

N.B.L. LANE CLOSURE SHOWN, S.B.L. LANE CLOSURE IS SIMILAR.

CHANNELIZER SPACING IN BUFFER AND WORK AREAS SHALL BE 40'.

NOT TO SCALE

STAGE 2 - ROUTE FF LANE CLOSURE WITH FLAGGERS

TRAFFIC CONTROL
SHEET 6 OF 8

STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:31:54 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

DISTRICT

NW

STATE

MO

SHEET NO.

19

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

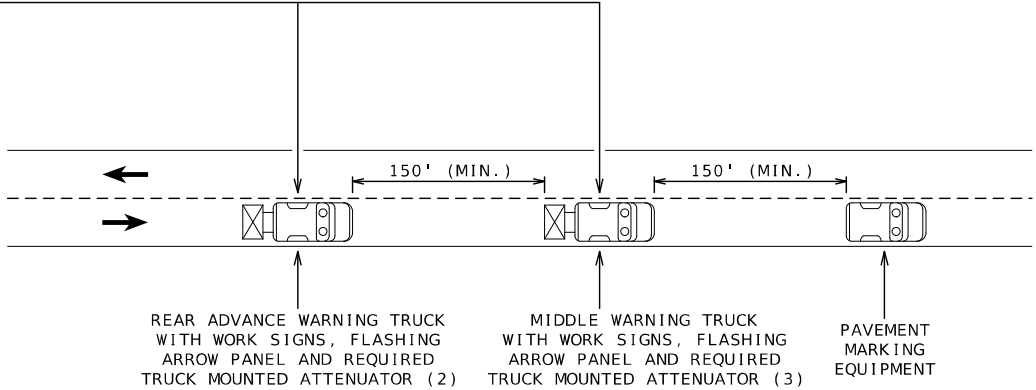
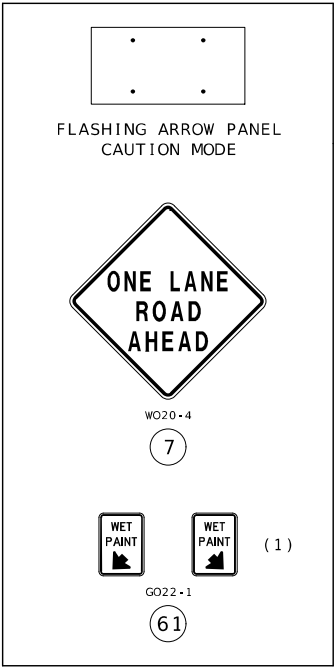
105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)

DATE

DESCRIPTION



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, OSCILLATING, OR STROBE LIGHTS.

FLASHING ARROW PANELS SHALL BE INCIDENTAL TO TRUCK MOUNTED ATTENUATORS, WHEREVER USED, NO ADDITIONAL PAYMENT WILL BE MADE.

(1) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE TO WHICH THE PAVEMENT MARKING MATERIAL IS BEING APPLIED. AT THE CONTRACTOR'S OPTION A FRONT FACING WET PAINT SIGN MAY BE INSTALLED ON THE LEFT SIDE OF THE PAVEMENT MARKING EQUIPMENT.

(2) REAR ADVANCE WARNING TRUCK IS POSITIONED AT THE NO TRACK POINT OF THE PAVEMENT MARKING MATERIAL, OR VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE, OR SPACING SHOWN, WHICHEVER IS GREATER.

(3) TRUCK IS OPTIONAL ON TWO-LANE UNDIVIDED HIGHWAYS IF SIGNING AND ARROW BOARD ARE MOUNTED ON THE PAVEMENT MARKING EQUIPMENT.



DATE PREPARED
9/4/2025

ROUTE
169

STATE
MO

DISTRICT
NW

SHEET NO.
21

COUNTY
BUCHANAN

JOB NO.
JNW0073

CONTRACT ID.

PROJECT NO.

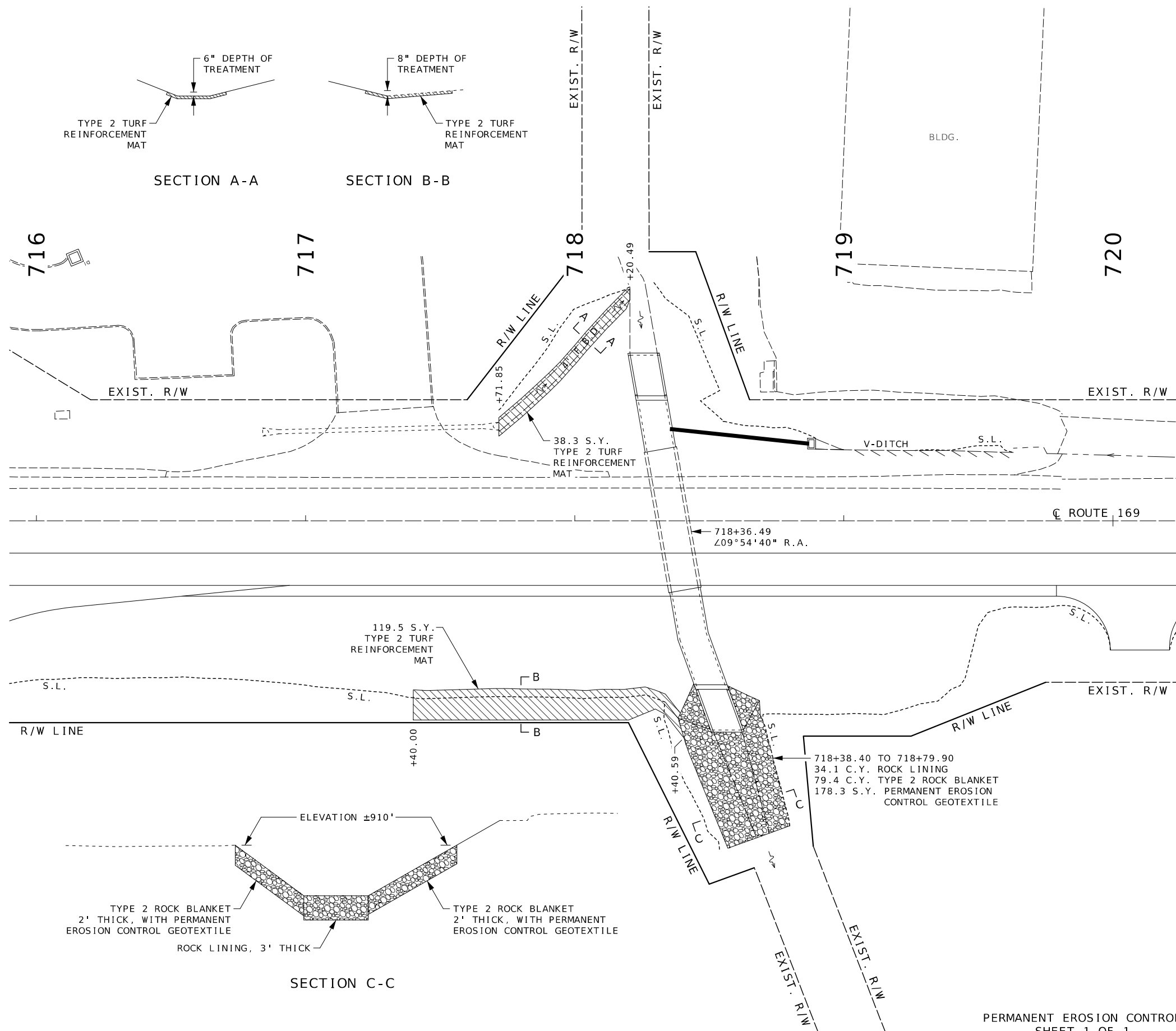
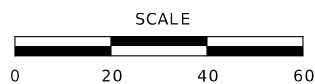
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

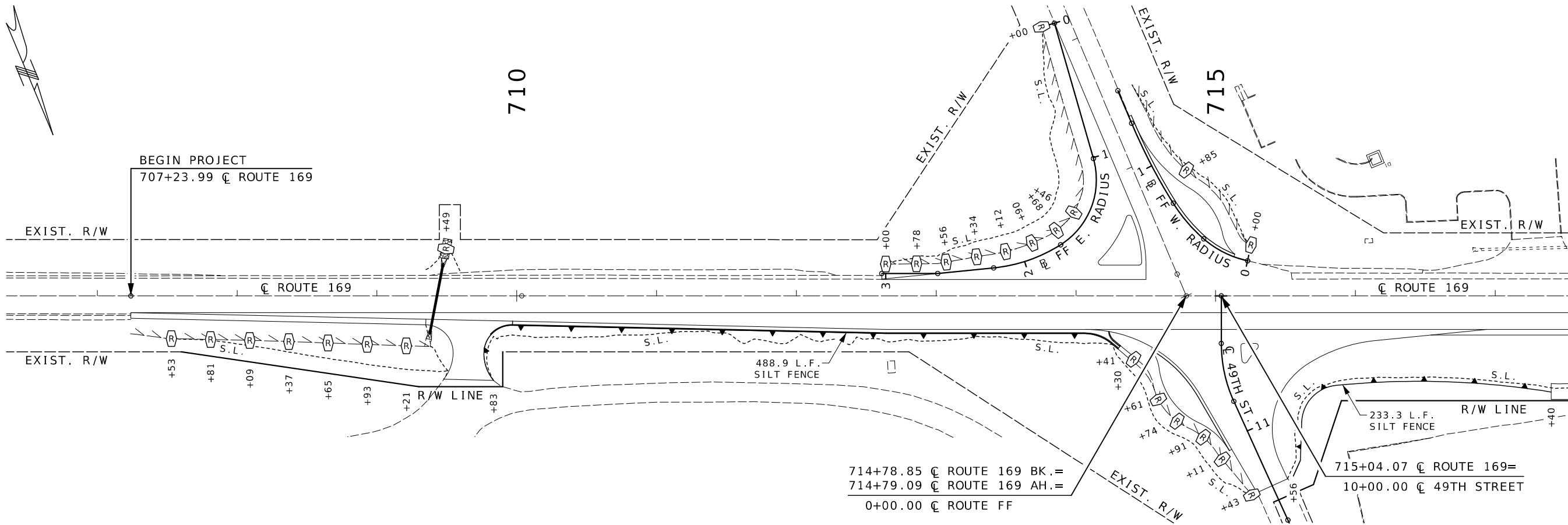
MoDOT



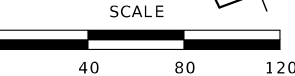
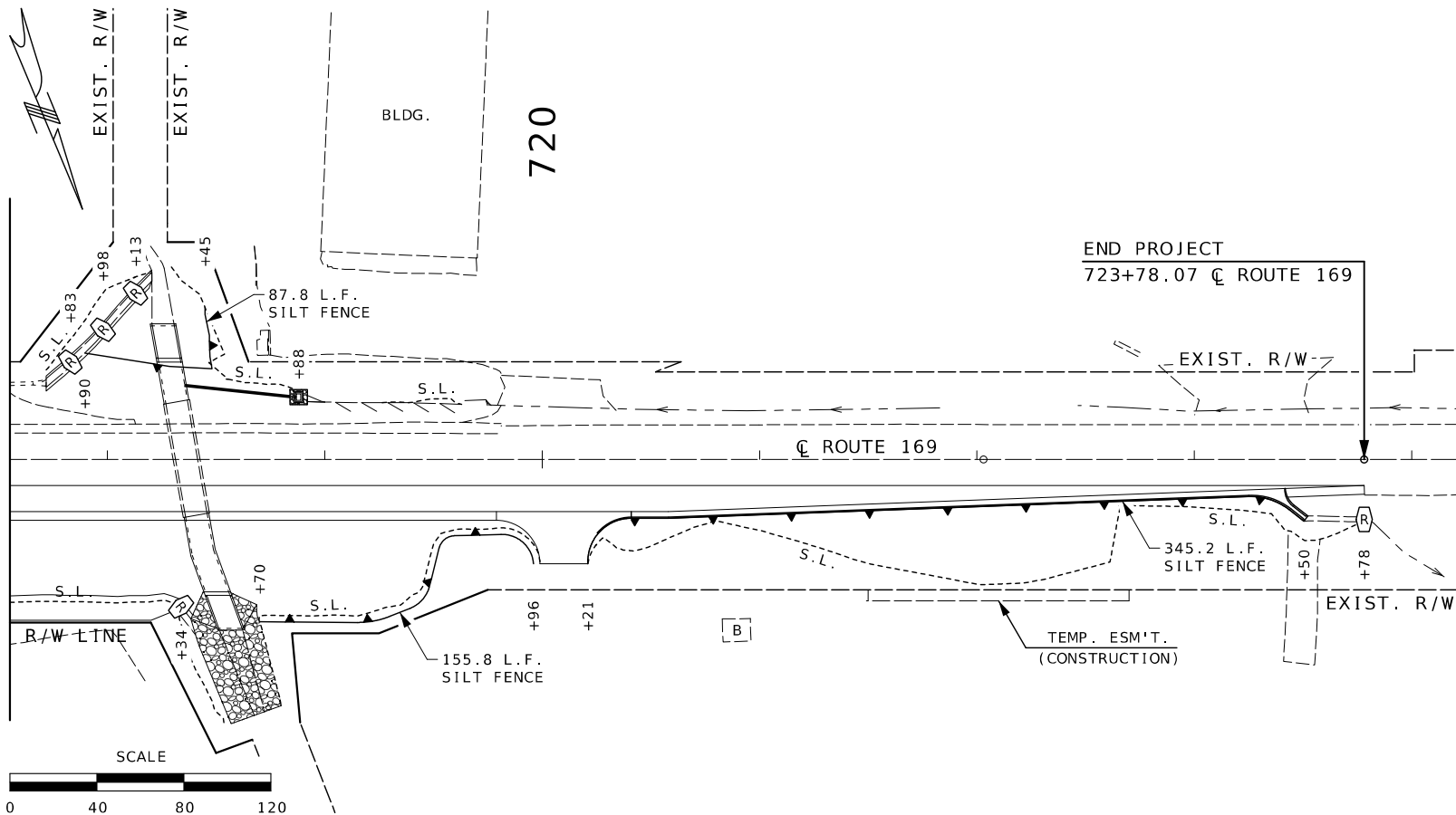
PERMANENT EROSION CONTROL
SHEET 1 OF 1



105 WEST CAPITOL
JEFFERSON CITY, MO 65102



MATCHLINE STA. 717+55.24



TEMPORARY EROSION CONTROL LEGEND

-  ROCK DITCH CHECK
-  DROP INLET CHECK
-  SILT FENCE



DATE PREPARED
9/4/2025

ROUTE 169
DISTRICT NW
STATE MO
SHEET NO. 23

COUNTY BUCHANAN
JOB NO. JNW0073
CONTRACT ID.

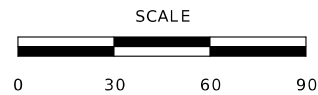
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

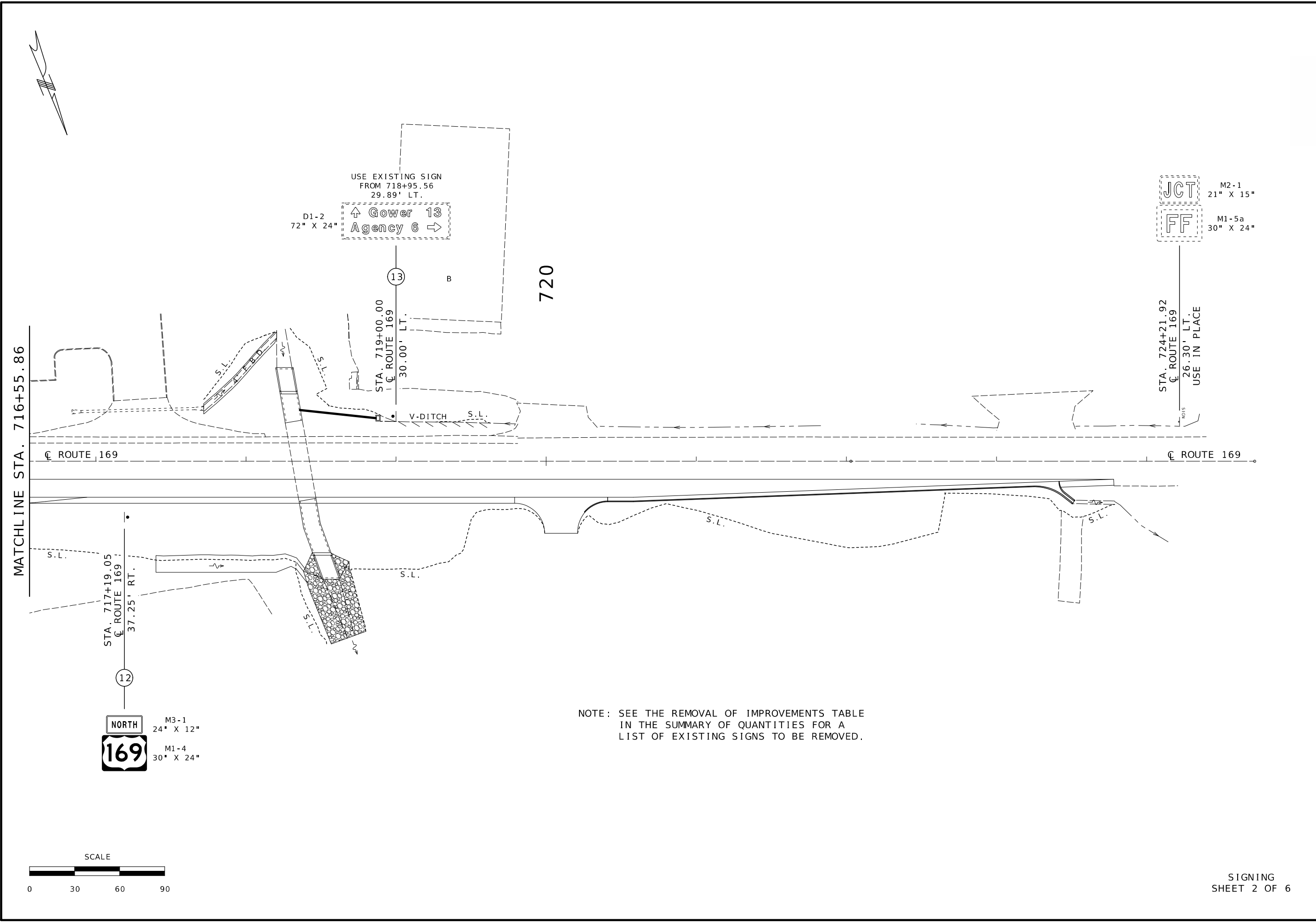
MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



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



11/11/2016



STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:23:40 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

DISTRICT

NW

STATE

MO

SHEET NO.

25

COUNTY

BUCHANAN

JOB NO.

JNW0073

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)

SIGNING

SHEET 2 OF 6

10/1/2025 6:04:41 PM
TIMOTHY K. MINER - CIVIL
MO-PE-20211010008

DATE PREPARED
10/1/2025

ROUTE 169	STATE MO
DISTRICT NW	SHEET NO. 26
COUNTY BUCHANAN	
JOB NO. JNW0073	
CONTRACT ID.	

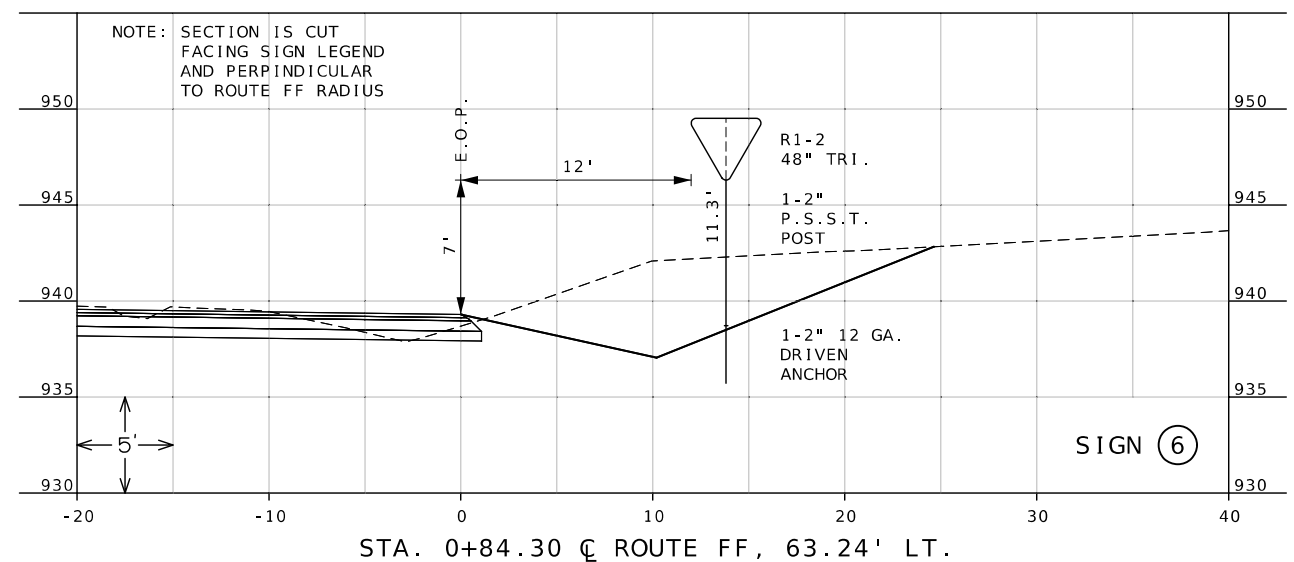
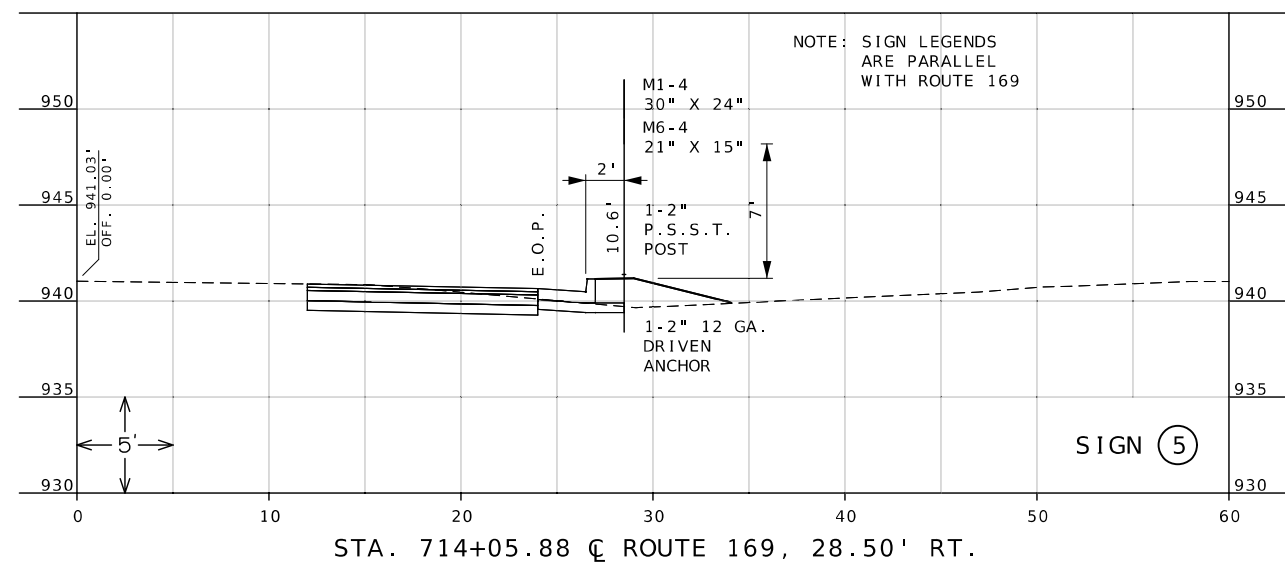
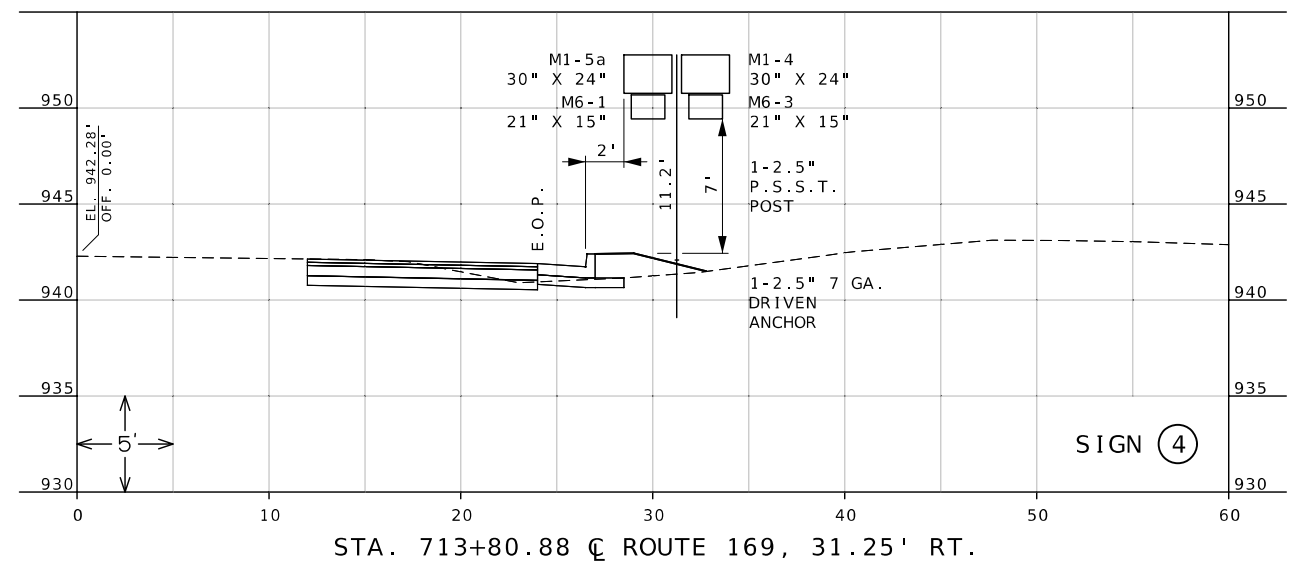
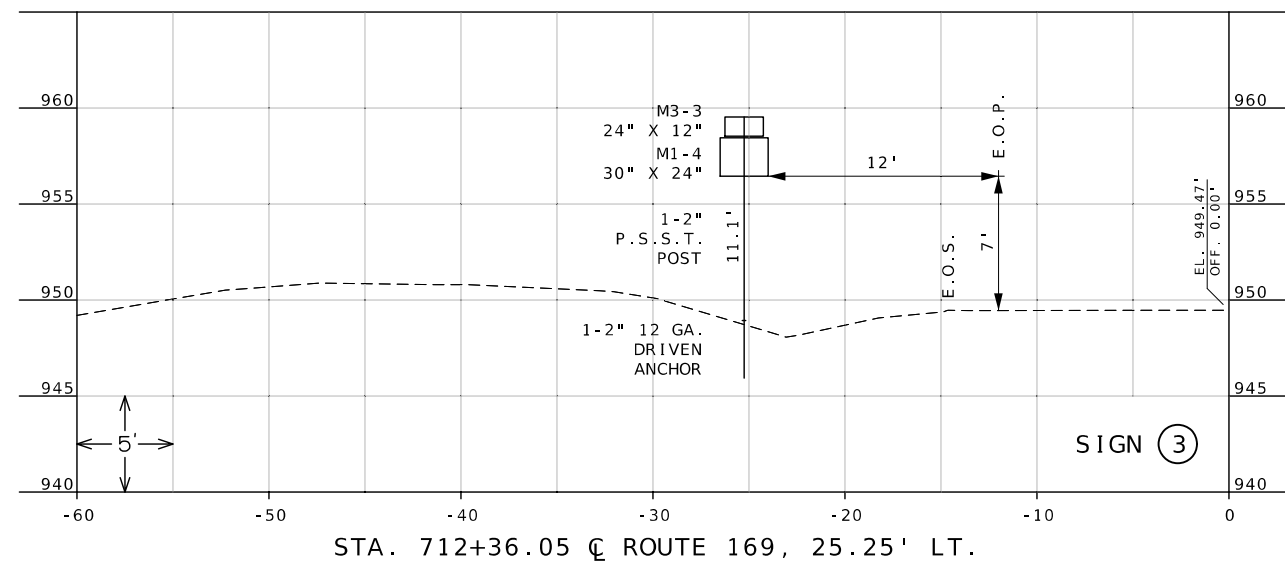
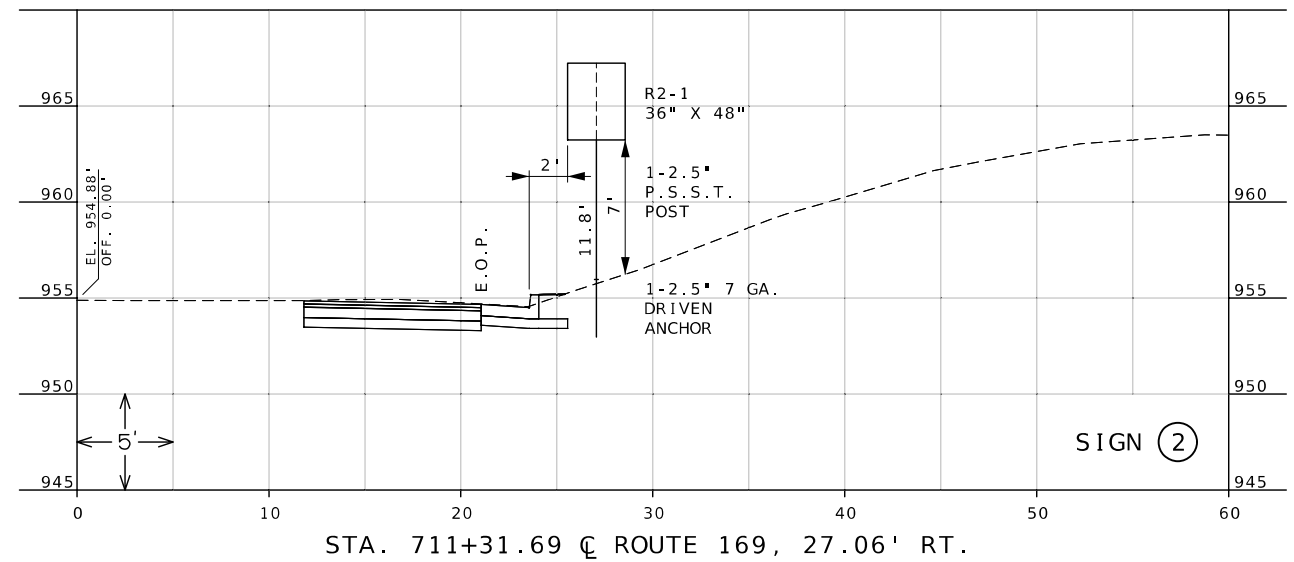
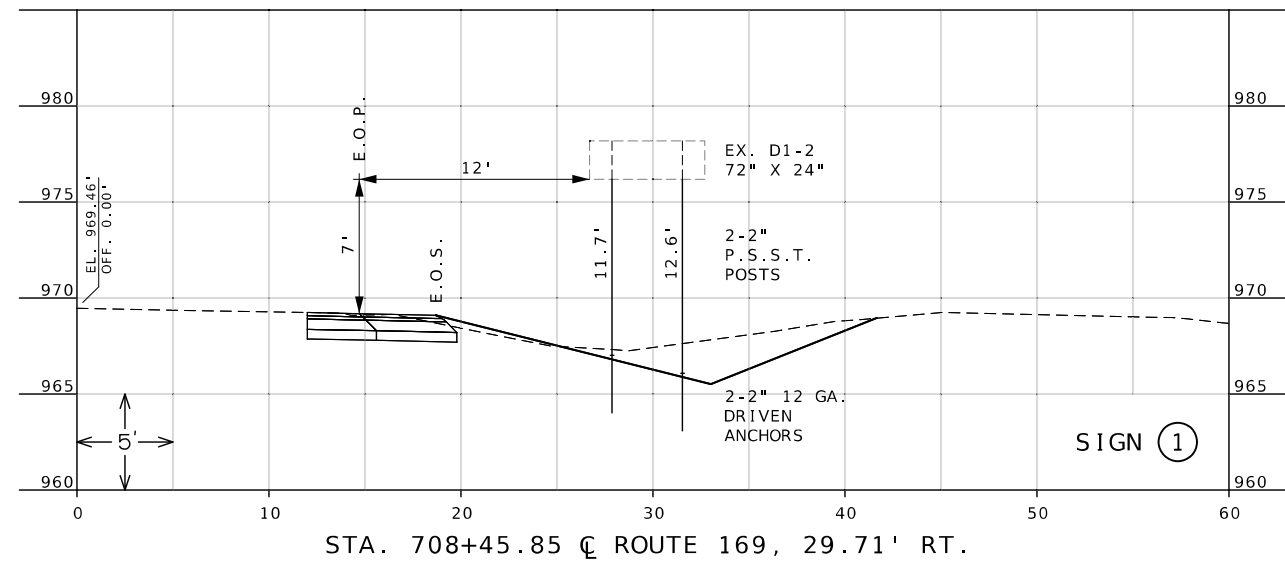
PROJECT NO.
BRIDGE NO.

[illegible]

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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

SIGN SUMMARY				EFFECTIVE: 10-01-2016
STANDARD OR SPECIAL SIGN DESIGNATION	SIGN DTL. SHT. NO.	NO. EACH	SIGN SIZE	TYPE & SQUARE FEET
				FLAT SHEET SH ITEM NO. 9035004A
M1-4 - US ROUTE 169 SHIELD		5	30" X 24"	25.0
M1-5a - MO ROUTE FF SHIELD		3	30" X 24"	15.0
M3-1 - NORTH		1	24" X 12"	2.0
M3-3 - SOUTH		1	24" X 12"	2.0
M6-1 - LEFT OR RIGHT ARROW		2	21" X 15"	4.4
M6-3 - STRAIGHT ARROW		2	21" X 15"	4.4
M6-4 - LEFT AND RIGHT ARROW		1	21" X 15"	2.2
R1-1 - STOP		2	36" OCT.	14.9
R1-2 - YIELD		2	48" TRI.	13.6
R2-1 - SPEED LIMIT 40		1	36" X 48"	12.0
			TOTAL	95.5
			PAY TOTAL	96



STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

09/04/2025 10:21:27 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

27

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

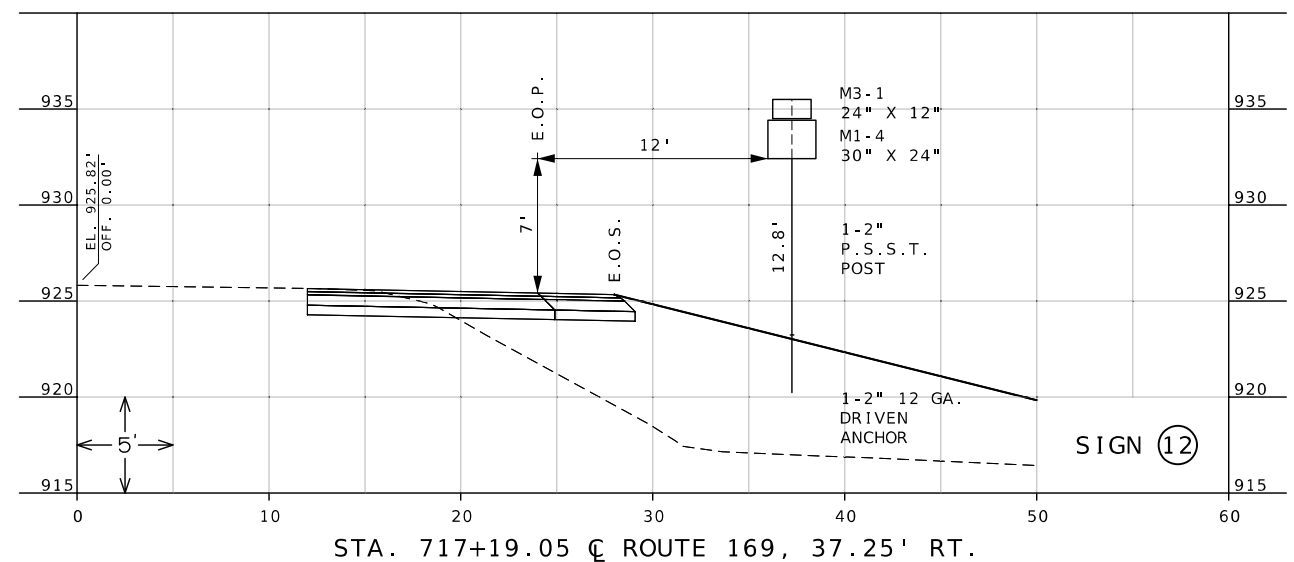
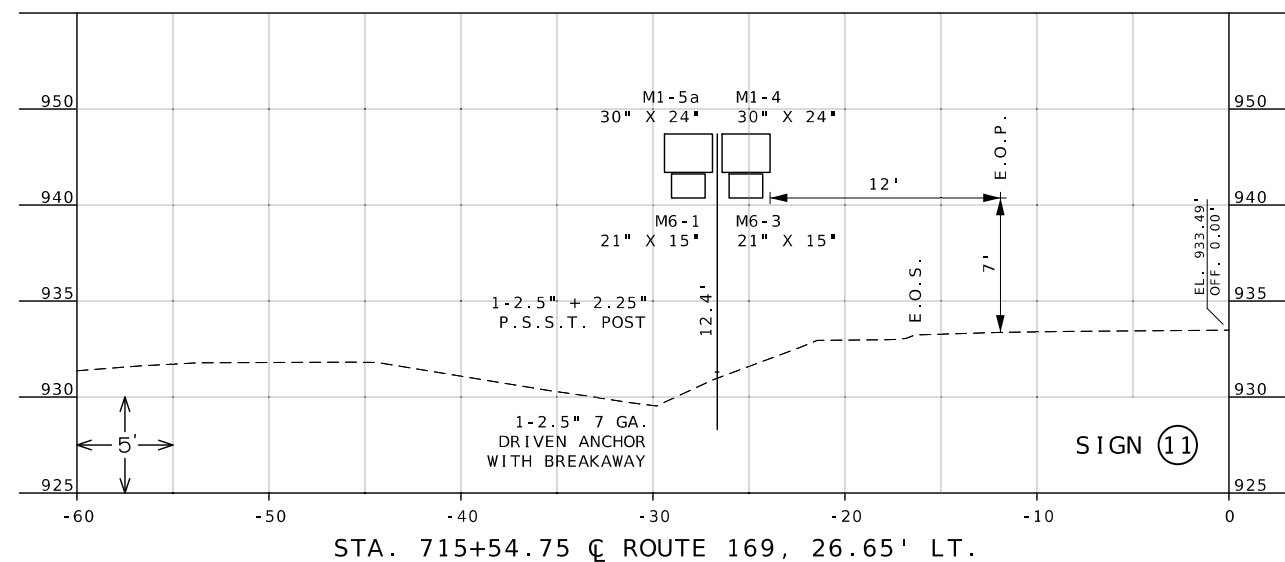
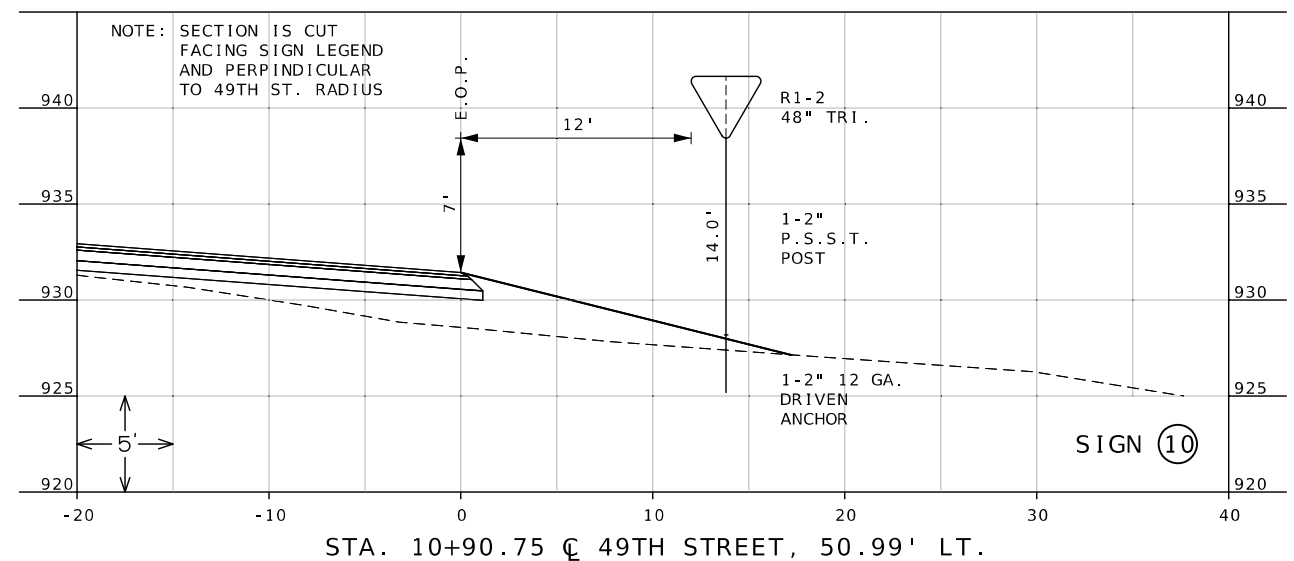
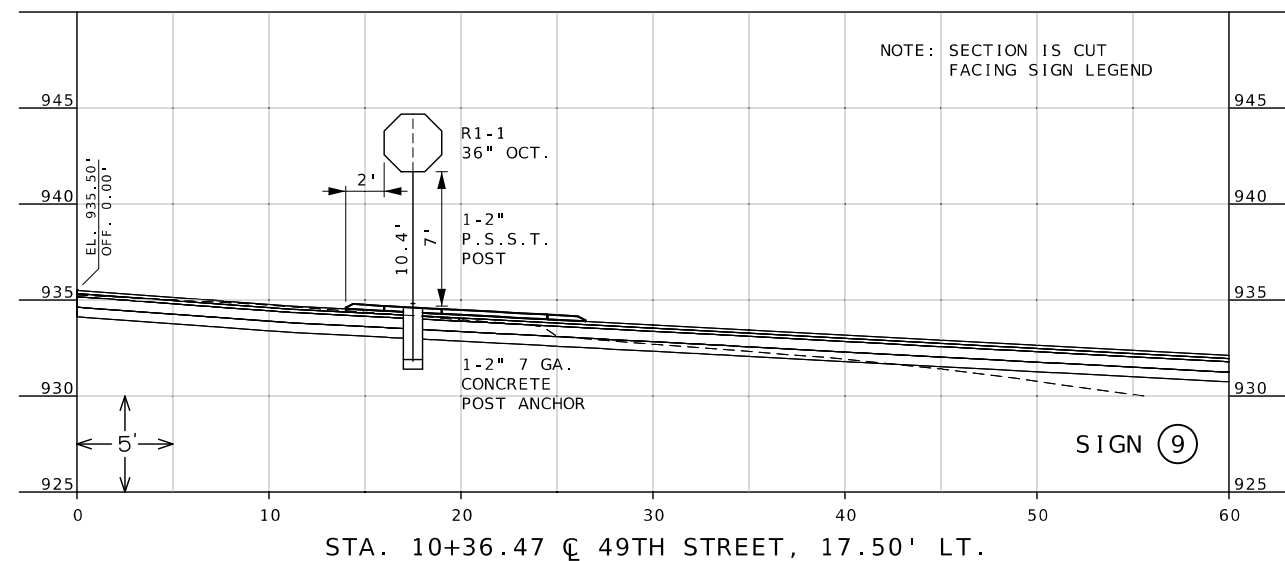
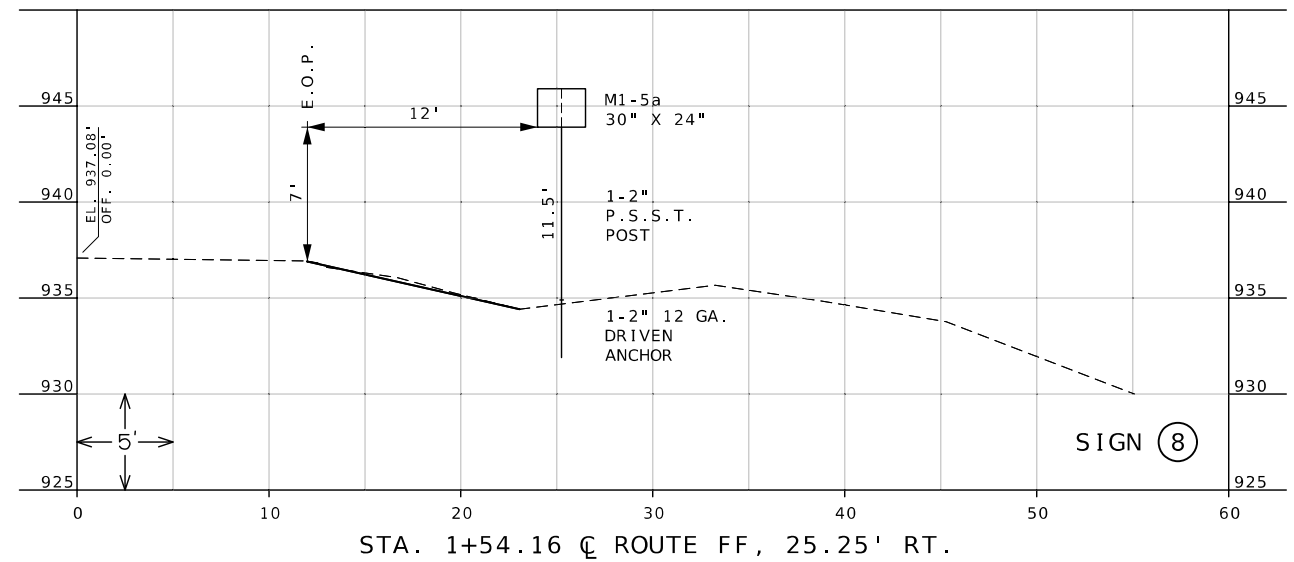
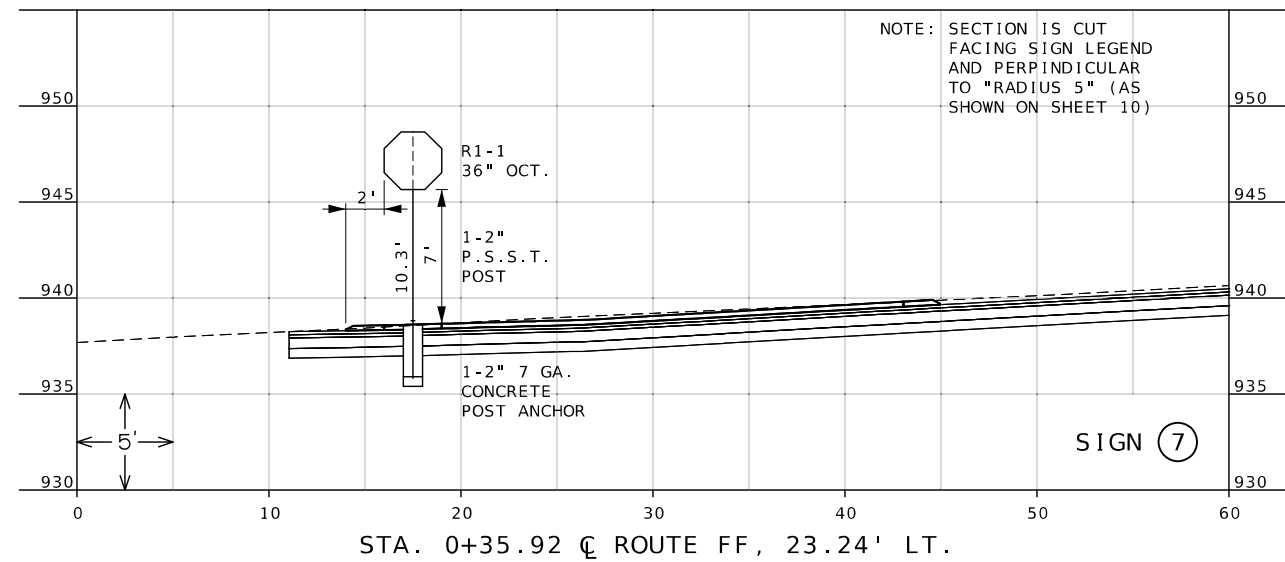
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)



STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

08/04/2025 10:20:53 AM

TIMOTHY K. MINER - CIVIL

MO-PE-2021010008

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

28

COUNTY

BUCHANAN

JOB NO.

JNW0073

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

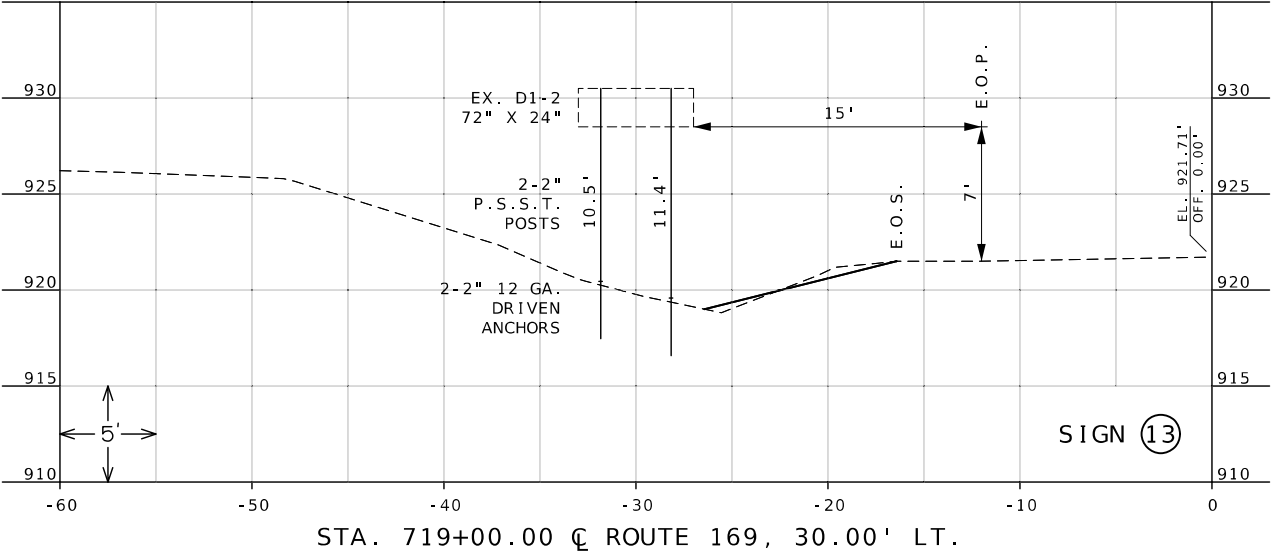
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL

JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-275-6636)



STATE OF MISSOURI

TIMOTHY K. MINER

NUMBER

PE-2021010008

PROFESSIONAL ENGINEER

DATE PREPARED

9/4/2025

ROUTE

169

STATE

MO

DISTRICT

NW

SHEET NO.

29

COUNTY

BUCHANAN

JOB NO.

JNW0073

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 LEGEND

	- 24 IN. WHITE (SOLID)
	- 24 IN. YELLOW (SOLID)
	- 6 IN. WHITE (SOLID)
	- 6 IN. WHITE (DOTTED)
	- 4 IN. YELLOW (SOLID)
	- DOUBLE 4 IN. YELLOW (SOLID)
	- 4 IN. YELLOW (INTERMITTENT)
	- WHITE LEFT OR RIGHT ARROW

NOTE: QUANTITIES ARE PROVIDED TO STRIPE TO THE LIMITS OF THE TEMPORARY PAVEMENT MARKING ON ROUTE 169 AND 100' BEYOND THE WORK LIMITS ON ROUTE FF.

BEGIN PROJECT
707+23.99 @ ROUTE 169

710

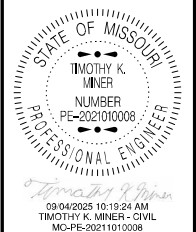
24" YELLOW HASH BARS AT 45°
ANGLE AND 50' SPACING (TYP.)

@ ROUTE 169

12'

12'

MATCHLINE STA. 712+45.51



DATE PREPARED 9/4/2025	
ROUTE 169	STATE MO
DISTRICT NW	SHEET NO. 30
COUNTY BUCHANAN	
JOB NO. JNW0073	
CONTRACT ID.	

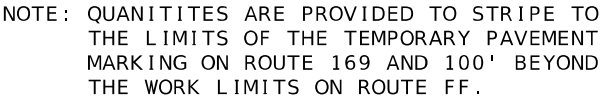
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

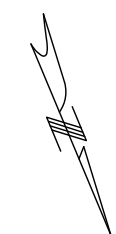
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)





PAVEMENT MARKING
SHEET 2 OF 3

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

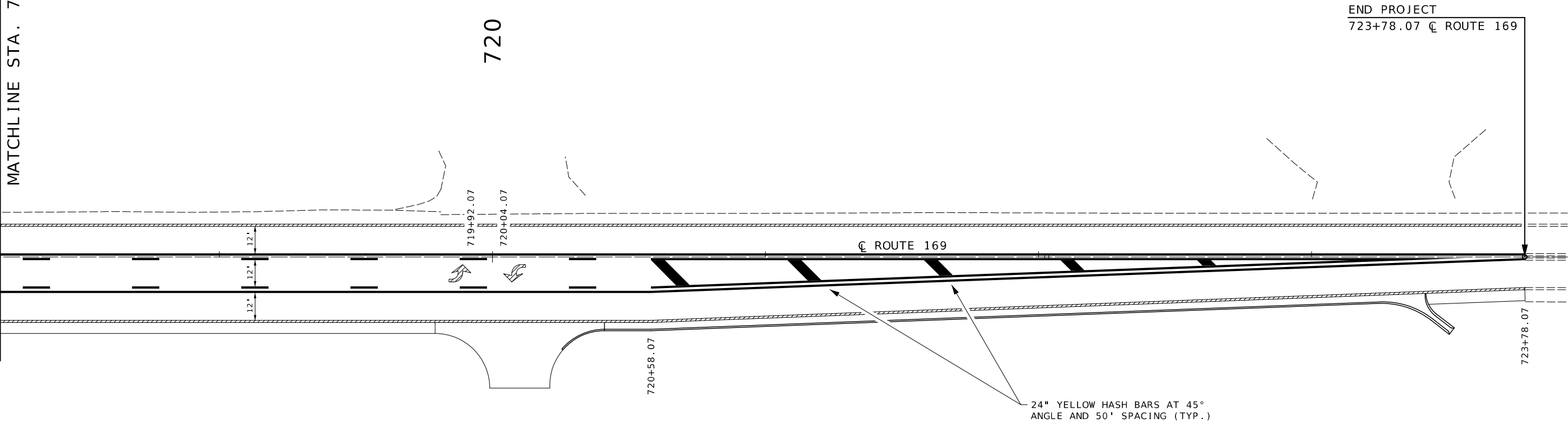


PAVEMENT MARKING LEGEND

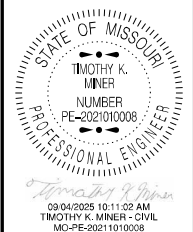
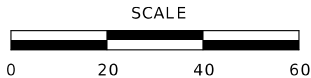
	- 24 IN. WHITE (SOLID)
	- 24 IN. YELLOW (SOLID)
	- 6 IN. WHITE (SOLID)
	- 6 IN. WHITE (DOTTED)
	- 4 IN. YELLOW (SOLID)
	- DOUBLE 4 IN. YELLOW (SOLID)
	- 4 IN. YELLOW (INTERMITTENT)
	- WHITE LEFT OR RIGHT ARROW

NOTE: QUANITITES ARE PROVIDED TO STRIPE TO THE LIMITS OF THE TEMPORARY PAVEMENT MARKING ON ROUTE 169 AND 100' BEYOND THE WORK LIMITS ON ROUTE FF.

MATCHLINE STA. 718+19.76



END PROJECT
723+78.07 @ ROUTE 169



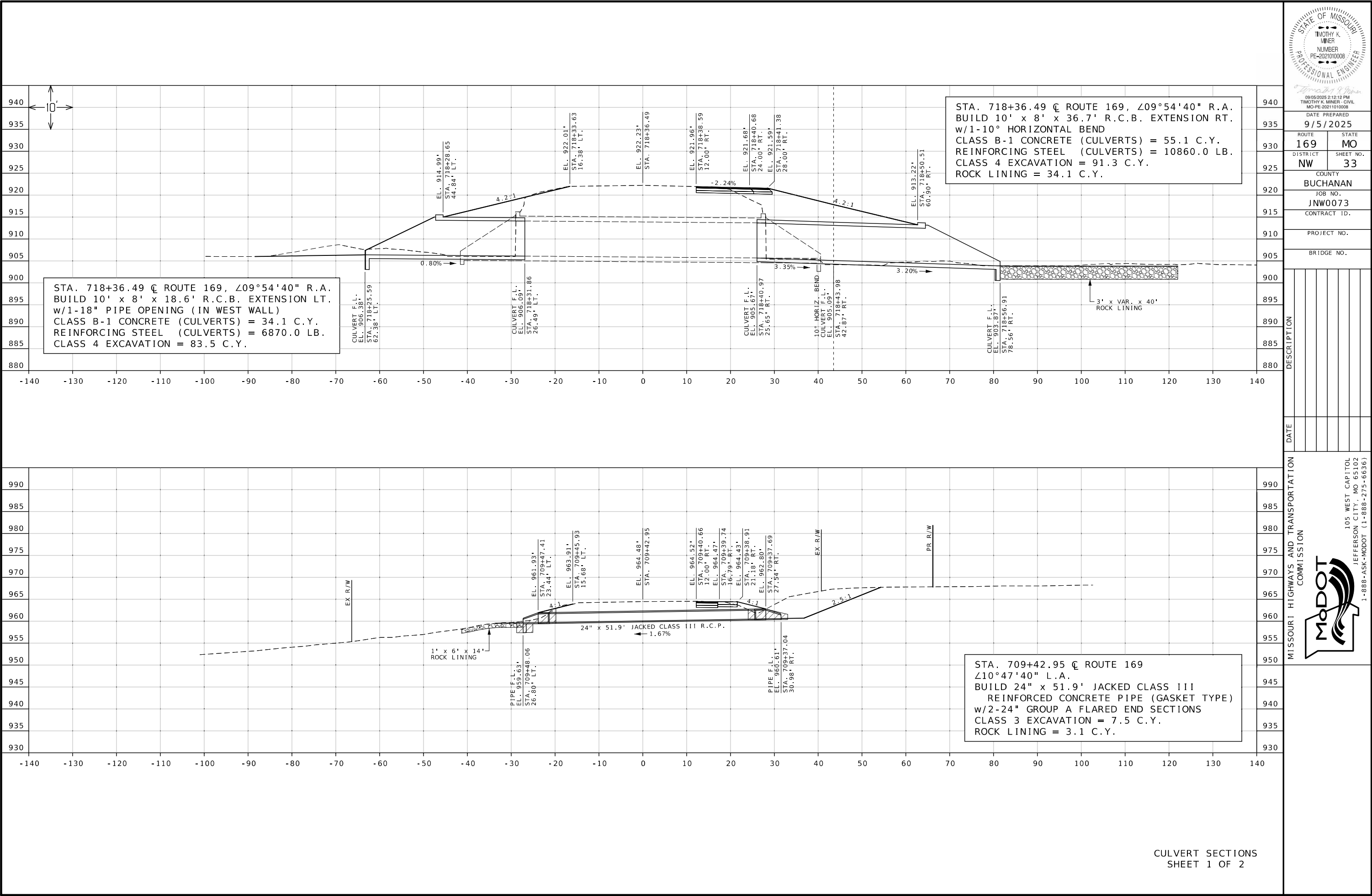
DATE PREPARED 9/4/2025	
ROUTE 169	STATE MO
DISTRICT NW	SHEET NO. 32
COUNTY BUCHANAN	
JOB NO. JNW0073	
CONTRACT ID.	

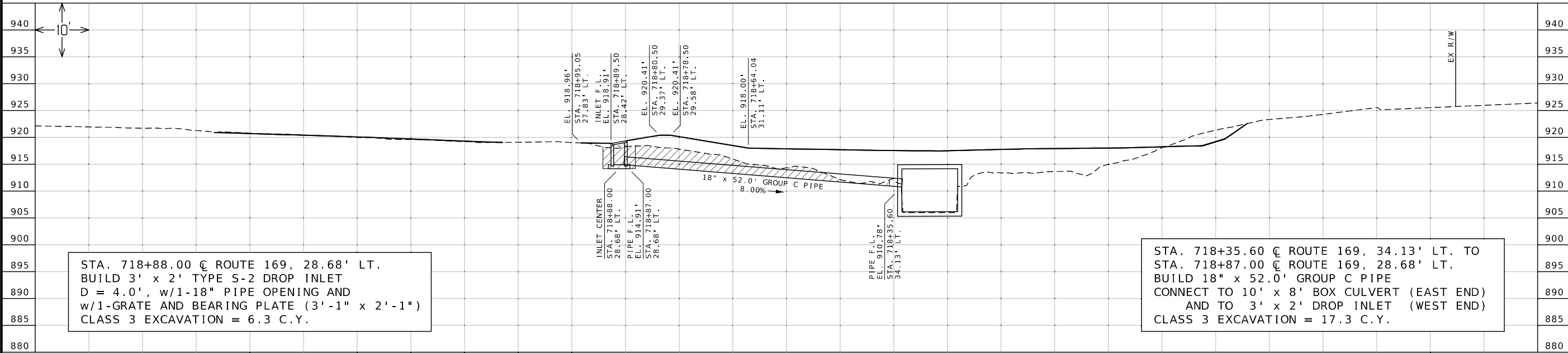
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

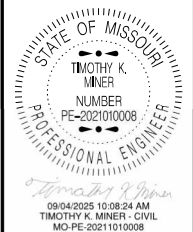
MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION

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





CULVERT SECTIONS
SHEET 2 OF 2



DATE PREPARED 9/4/2025	
ROUTE 169	STATE MO
DISTRICT NW	SHEET NO. 34
COUNTY BUCHANAN	
JOB NO. JNW0073	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION
COMMISSION



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