DESIGN DESIGNATION BEGIN TO ROUTE U

A.A.D.T. - 2022 = 1,825 A.A.D.T. - 2036 = 1,862 T = 31% V = 60 M.P.H.

FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

FROM ROUTE U TO ROUTE 5(S)

A.A.D.T. - 2022 = 2,673A.A.D.T. - 2036 = 2,727V = 60 M.P.H.

FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

D = 46% / 54%

NO RIGHT-OF-WAY ACQUISITION

CONVENTIONAL SYMBOLS

(USED IN PLANS	1)	
	EXISTING	NEW
BUILDINGS AND STRUCTURES GUARD RAIL GUARD CABLE CONCRETE RIGHT-OF-WAY MARKER STEEL RIGHT-OF-WAY MARKER LOCATION SURVEY MARKER	0000	
UTILITIES FIBER OPTICS OVERHEAD CABLE TV UNDERGROUND CABLE TV OVERHEAD TELEPHONE UNDERGROUND TELEPHONE OVERHEAD POWER UNDERGROUND POWER SANITARY SEWER STORM SEWER GAS WATER	- FOOTVUTV OT UT OE UE SS G W	-OTV -UTV -OT- -UT- -OE- -UE- -S
MANHOLE	SAN)
FIRE HYDRANT	HAD]
WATER VALVE	wv C)
WATER METER	₩ 🕀)
DROP INLET	° [_	
DITCH BLOCK	=	⊨
GROUND MOUNTED SIGN	SIGN	-
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL FENCE CHAIN LINK WOVEN WIRE GATE POST	—— V ——— X	-
	DM	

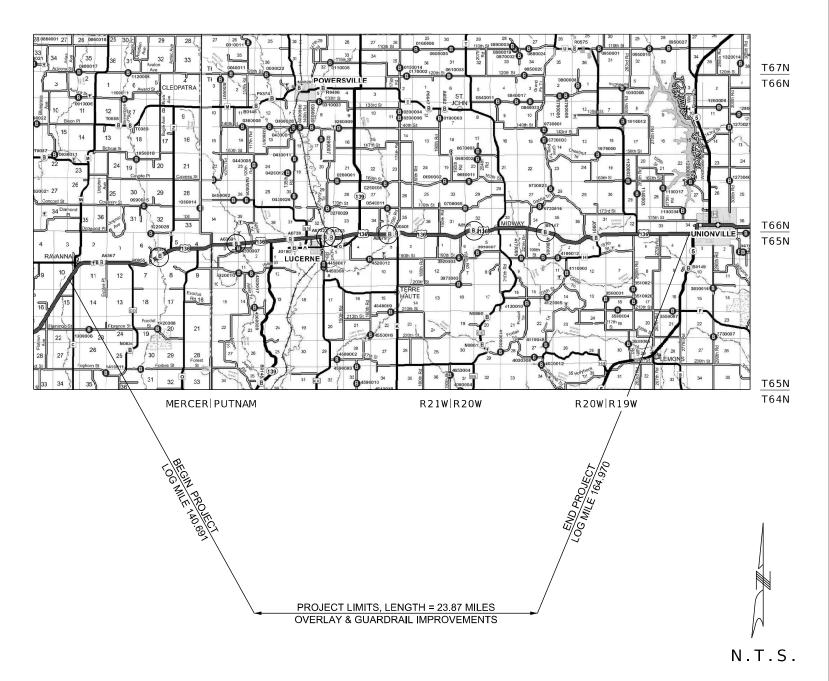
NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

BENCHMARK

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



PLANS FOR PROPOSED STATE HIGHWAY MERCER/PUTNAM 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) (02 SHEETS)	2
QUANTITY SHEETS (QU) (6 SHEETS)	3
PLAN (PL)	4
SPECIAL SHEETS	5 - 6
TRAFFIC CONTROL SHEETS (TC)	7 - 11
BRIDGE DRAWINGS (B)	
Н09552	1 - 2
J04011	1-5
J09011	1 - 4

THIS SHEET SIGNED, SEALEI ELECTROP	SER *** SER ** S	CTRONICALLY SEALED AND DATED.
	REPARED / 2025	TRON
ROUTE	STATE	\Box
136	MO	ELEC
DISTRICT	SHEET NO.	-
NW	1	BEEN
COU	NTY	۳.
	/PUTNAM	HAS
	NO.	L
	3442	Ξ
CONTRA	CT ID.	SHEET
		豆
PROJE	CT NO.	٧,
		IS
BRIDG	E NO.	프

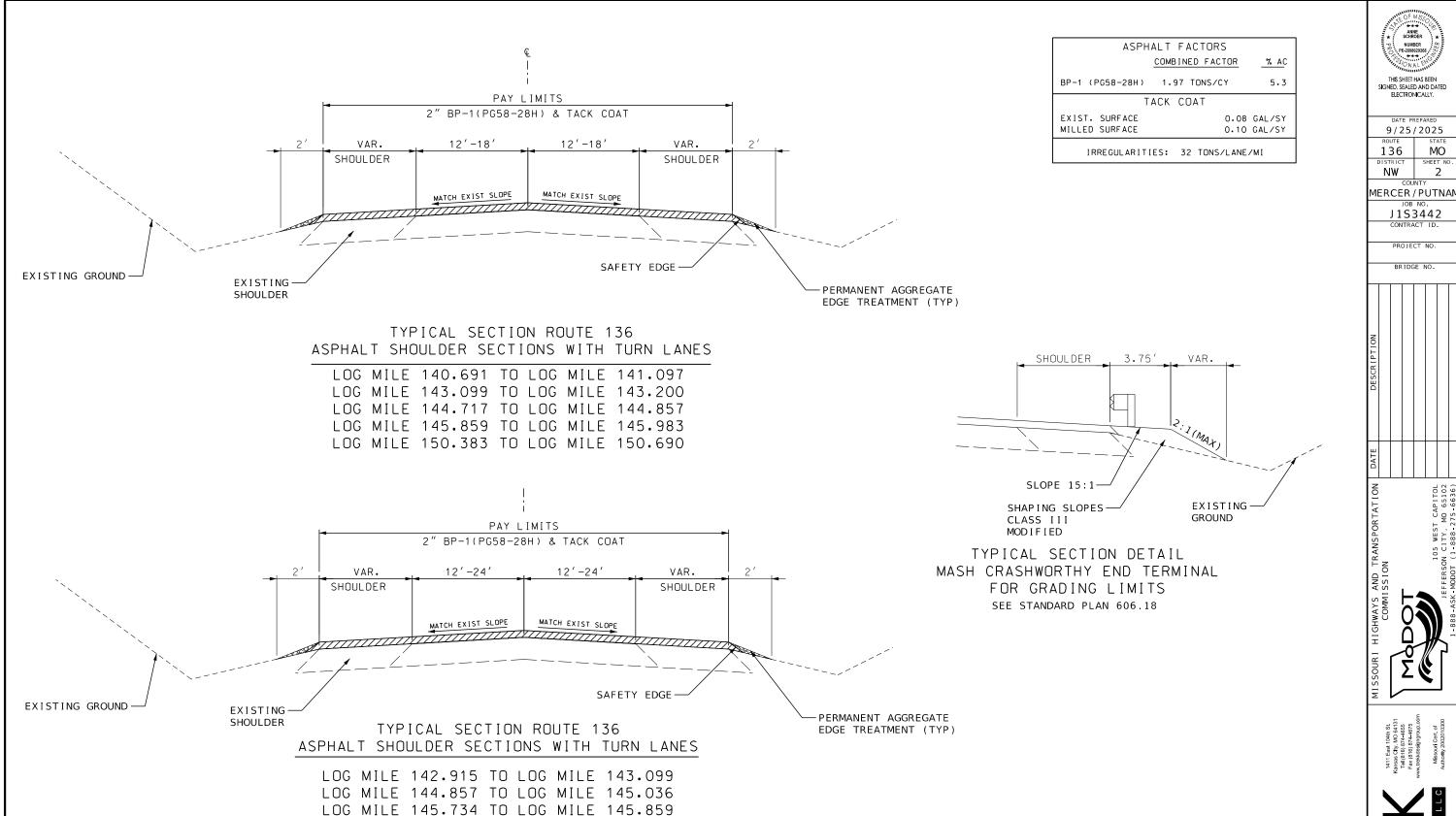
LENGTH OF DROLLECT

	LENGTH OF	PROJECT
	BEGINNING OF PROJECT	LOG MILE 140.69
	APPARENT LENGTH	24.279
	AFFARENT LENGTH	Z4.Z79 MILE
	EQUATIONS AND EXCEPTIONS:	
	LM 144.375 TO LM 144.441 (BRIDGE A6368) WEST MEDICINE CREEK	-190.08 FT
	LM 147.319 TO LM 147.360 (BRIDGE A6369) BARBER CREEK	-216.48 FT
	LM 150.690 TO LM 150.763 (BRIDGE A6732) RR TRACKS	-385.44 FT
	LM 150.906 TO LM 151.004 (BRIDGE A6733) MEDICINE CREEK	-517.44 FT
	LM 153.155 TO LM 153.180 (BRIDGE A8579) ELM BRANCH	-132.00 FT
	LM 156.397 TO LM 156.457 (BRIDGE A8181) WEST FORK LOCUST CREEK	-316.80 FT
	LM 159.154 TO LM 159.182 (BRIDGE B0147) EAST FORK LOCUST CREEK	-147.84 FT
	TOTAL CORRECTIONS	-1906.08 FEET
	NET LENGTH OF PROJECT	126,287.04 FEET
	STATE LENGTH	23.918 MILE
ı		

FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES



0 ACRES 001_TITLE_JIS3442.dgn 2:35:01 PM 9/25/2025



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

NOT TO SCALE

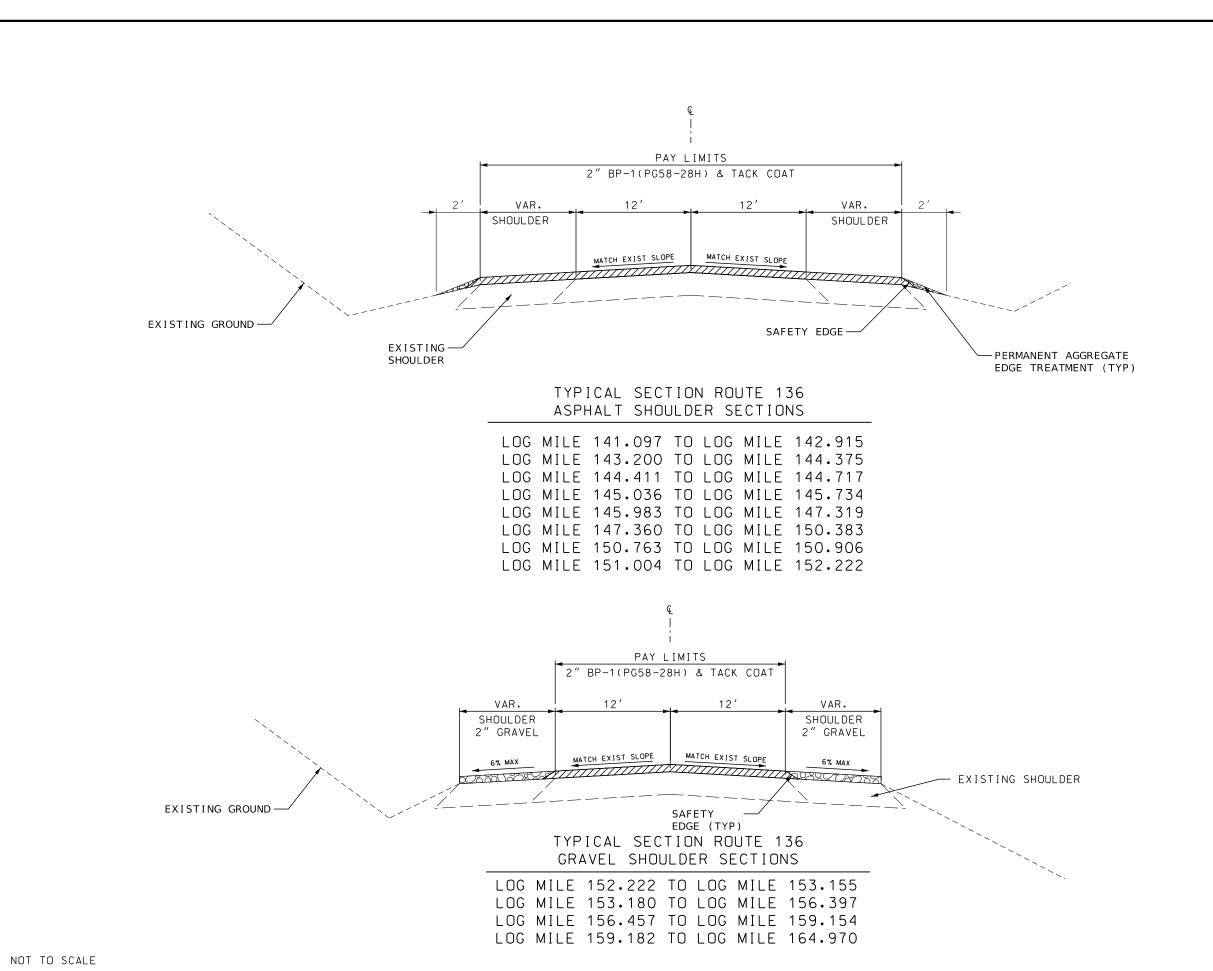
TYPICAL SECTIONS SHEET 1 OF 2

MO

2

PROJECT NO

BRIDGE NO.



SCHOOL *

NUMBER
PE-200027288

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

9/25/2025
ROUTE STATE

ROUTE STATE
136 MO
DISTRICT SHEET NO
NW 2

MERCER / PUTNA

JOB NO.
J1S3442
CONTRACT ID.

PROJECT NO

BRIDGE NO.

TE DESCRIPTION

ANSPORTATION DATE

I HIGHWAYS AND TRANSPORTAT COMMISSION

111 East 104th St. Isas City, MO 64131 el (816) 874-4655 ax (816) 874-4675 trekkdesigngroup.com



TYPICAL SECTIONS SHEET 2 OF 2 MOBILIZATION 1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING & STAKING 1 LUMP SUM

	REMOVAL OF	IMPROVEMI	ENTS	
LOCATION	DESCRIPTION	AMOUNT	UNITS	REMARKS
BRIDGE H0995	GUARDRA I L	88	LF	SEE BRIDGE PLANS
VAR I OUS	GUARDRAIL CET	12	EA	SEE GUARDRAIL QUANTITIES FOR LOCATIONS
VAR I OUS	GUARDRA I L	2525	LF	SEE GUARDRAIL QUANTITIES FOR LOCATIONS
VAR I OUS	GUARDRAIL BRIDGE TRANSITION	8	EA	SEE GUARDRAIL QUANTITIES FOR LOCATIONS
LM 159.461-LM 159.580	SIGNS	7	EA	
	TOTAL	LUMP SUI	V	

				PER	MANENT A	GGREGATE	EDGE TREATMENT
LOG	LOG	LENGTH	WIDTH	DEPTH	VOLUME	PERMANENT	REMARKS
MILE	MILE					AGGREGATE	
EB	EB					EDGE	
						TREATMENT	
						1.83	
						TON/CY	
		(LF)	(LF)	(INCH)	(CY)	(TON)	
140.691	144.375	19451.52	2	2	240.14	439.46	BEGINNING OF PROJECT
144.375	144.411	190.08					BRIDGE OVER WEST MEDICINE CREEK (A6368)
144.411	147.319	15354.24	2	2	189.56	346.89	
147.319	147.360	216.48					BRIDGE OVER BARBER CREEK (A6369) INCLUDES APPROACH PAVEMENT
147.360	150.690	17582.4	2	2	217.07	397.24	
150.690	150.763	385.44					BRIDGE OVER RR TRACKS (A6732) INCLUDES APPROACH PAVEMENT
150.763	150.906	755.04	2	2	9.32	17.06	
150.906	151.004	517.44					BRIDGE OVER MEDICINE CREEK (A6733) INCLUDES APPROACH PAVEMENT
151.004	153.155	11357.28	2	2	140.21	256.58	
153.155	153.180	132					BRIDGE OVER ELM BRANCH (A8579)
153.180	156.397	16985.76	2	2	209.70	383.75	
156.397	156.457	316.8					BRIDGE OVER WEST FORK LOCUST CREEK (A8181)
156.457	159.154	14240.16	2	2	175.80	321.71	
159.154	159.182	147.84					BRIDGE OVER EAST FORK LOCUST CREEK (B0147)
159.182	164.970	30560.64	2	2	377.29	690.44	END OF PROJECT
					SUBTOTAL	2853.13	
					ADDITION	142.66	5% FOR VARIATIONS
					TOTAL	2996	

			(GUARDRA I L		
LOG	LOCATION	MGS	TYPE A	MGS	SHAPING	REMARKS
MILE		GUARDRA I L	CRASHWORTHY	BRIDGE APPROACH	SLOPES	
EB		8FT POSTS	END TERMINAL	TRANSITION	CLASS III	
		6 FT-3 IN SPACING	(MASH)	(REGULAR/NO CURB)	MODIFIED	
		(LF)	(EA)	(EA)	(100 FT)	
143.951						TRIPLE BOX WEST OF LITTLE MEDICINE CREEK (H0955), UIP *
144.338	NW CORNER		1		0.75	BRIDGE OVER WEST MEDICINE CREEK (A6368)
147.238	NW, SW & NE CORNER		3		2.25	BRIDGE OVER BARBER CREEK (A6369)
150.344	ALL 4 CORNERS	500	4	4	8.00	BRIDGE OVER RR TRACKS (A6732)
150.884	ALL 4 CORNERS	500	4	4	8.00	BRIDGE OVER MEDICINE CREEK (A6733)
153.120						BRIDGE OVER ELM BRANCH (A8579) UIP
153.401	EB	125	2		2.75	HYLAN BRANCH WEST OF ROUTE K, DOUBLE BOX (J0401) **
153.401	WB	125	2		2.75	HYLAN BRANCH WEST OF ROUTE K, DOUBLE BOX (J0401) **
153.959	EB	150	2		3.00	HYLAN BRANCH EAST OF ROUTE K, SINGLE BOX
153.959	WB	150	2		3.00	HYLAN BRANCH EAST OF ROUTE K, SINGLE BOX
156.357						BRIDGE OVER WEST FORK LOCUST CREEK (A8181) UIP
159.122						BRIDGE OVER EAST FORK LOCUST CREEK (B0147) UIP
159.461-159.580	WB	550	2		7.00	HIGH BANK
161 242 161 303	WB	212.5	2		3.63	WEST OF ROUTE H, SKEWED DOUBLE BOX (J0901) **
161.242-161.303	EB	212.5	2		3.63	WEST OF ROUTE H, SKEWED DOUBLE BOX (J0901) **
	SUBTOTALS	2525	26	8	44.76	
	TOTALS	2525	26	8	45	

* SEE BRIDGE PLANS FOR GUARDRAIL ATTACHMENT TO BOX CULVERT AND QUANTITIES. UIP REMAINING GUARDRAIL.

** SEE BRIDGE PLANS FOR GUARDRAIL ATTACHMENT TO BOX CULVERT AND QUANTITIES.



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

10/8/2025 136 STATE MO

SHEET NO NW

MERCER / PUTNAM

JOB NO.
J1S3442
CONTRACT ID.

PROJECT NO.

BRIDGE NO.



				ENTRANC	ES AND S	IDEROADS		
SIDEROAD	WIDTH	WIDTH	LENGTH	BP - 1	TACK	GRAVEL (A)	MODIFIED	REMARKS
	AT	l at l	то	(PG58-28H)	COAT	CRUSHED	COLDMILLING	
	ROUTE 136		RADIUS	2" THICK	00/11	STONE (B)	0025220	
	INCOTE 130	JIDLKOAD		-		J STONE (B)		
			POINT	MAINLINE				
				1.97	0.1	1.83		
				TONS/CY	GAL/SY	TON/CY		
	(LF)	(LF)	(LF)	(TON)	(GAL)	(TON)	(SY)	
ROUTE C	115	45	40	104.58	100.00		533.33	
ROUTE W	130	28	50	146.53	138.33		533.33	
ROUTE DD	85	30	45	98.65	94.58		533.33	
ROUTE Z	100	30	50	117.35	111.67		533.33	
ROUTE O	80	25	33	86.61	83.58		533.33	
APPLE TRAIL	75	20	38	91.63	88.17		533.33	
ROUTE 139 (S)	120	36	80	176.08	165.33		533.33	
ROUTE NN (N)	80	22	50	106.40	101.67		533.33	
ROUTE NN (S)	90	22	50	115.52	110.00		533.33	
ROUTE A	130	30	60	162.95	153.33		533.33	
ROUTE 139 (N)	125	30	35	114.16	108.75		533.33	
LINE STREET	100	25	35	47.88	43.75		437.50	TO RIGHT OF WAY LINE ONLY
ROUTE K	125	30	60	157.48	148.33		533.33	
ROUTE E	105	37	30	90.72	87.33		533.33	
ROUTE EE	100	34	40	101.66	97.33		533.33	
ROUTE H	85	22	62	124.75	118.43		533.33	
ROUTE U	112	26	40	116.25	110.67		533.33	
ENTRANCES	20		4			150.01		83 ENTRANCES
SIDEROADS	40		10			515.11		57 SIDEROADS AND WIDE ENTRANCES
			SUBTOTALS	1854.6	1761	665	8437	SEE RESURFACING QUANTITIES

		RUMBLE STRIPS												
LOG	LOG	LENGTH	SHOULDER	CENTERLINE	REMARKS									
MILE	MILE MILE		RUMBLE	RUMBLE										
EB	EB		STRIP	STRIP										
	-5		311(11	Jimi										
			(100 51)	(400 61)										
		(LF)	(100 ft)	(100 ft)										
140.691	144.375	19451.52	389.03	194.52	BEGINNING OF PROJECT									
144.375	144.411	190.08			BRIDGE OVER WEST MEDICINE CREEK (A6368)									
144.411	147.319	15354.24	307.08	153.54										
147.319	147.360	216.48			BRIDGE OVER BARBER CREEK (A6369) INCLUDES APPROACH PAVEMENT									
147.360	150.690	17582.40	351.65	175.82										
150.690	150.763	385.44			BRIDGE OVER RR TRACKS (A6732) INCLUDES APPROACH PAVEMENT									
150.763	150.906	755.04	15.10	7.55										
150.906	151.004	517.44			BRIDGE OVER MEDICINE CREEK (A6733) INCLUDES APPROACH PAVEMENT									
151.004	153.155	11357.28	227.15	113.57										
153.155	153.180	132.00			BRIDGE OVER ELM BRANCH (A8579)									
153.180	156.397	16985.76	339.72	169.86										
156.397	156.457	316.80			BRIDGE OVER WEST FORK LOCUST CREEK (A8181)									
156.457	159.154	14240.16	284.80	142.40										
159.154	159.182	147.84			BRIDGE OVER EAST FORK LOCUST CREEK (B0147)									
159.182	164.970	30560.64	611.2128	305.61	END OF PROJECT									
	SU	BTOTALS	2525.74	1262.87										
	SUBTR	ACTIONS	339.57	6.40	SIDE ROADS AND ENTRANCES									
		TOTALS	2186.2	1256.5										



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED
9/25/2025

ROUTE STATE
136 MO
DISTRICT SHEET NO.
NW 3

COUNTY
MERCER / PUTNAM

JOB NO.
J1S3442
CONTRACT ID.

PROJECT N

BRIDGE NO.

E DESCRIPTION

COMMISSION

COMMISSION

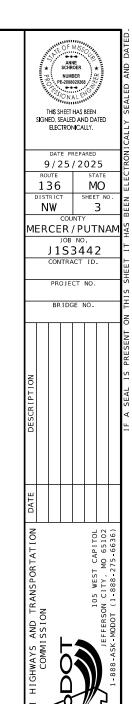
LEFFERSON CITY, MO 65102

1411 East 104th St. ansas City, MO 64131 Tel (816) 874-4655 Fax (816) 874-4675



								RE	SURFACING			
LOG	LOG	LANE	SHLDR	LENGTH	BP - 1	BP - 1	TACK	TACK	GRAVEL (A)	MODIFIED	COLDMILLING	REMARKS
MILE	MILE	WIDTH	WIDTH		(PG58-28H)	(PG58-28H)	COAT	COAT	CRUSHED	COLDMILLING	SIN. THICK	
EB	EB				2" THICK	2" THICK		MILLED	STONE (B)		OR LESS	
					MAINLINE	SHOULDER		AREA	310112 (8)			
							0.00		1 02			
					1.97	1.97	0.08	0.1	1.83			
					TONS/CY	TONS/CY	GAL/SY	GAL/SY	TON/CY			
		(LF)	(LF)	(LF)	(TON)	(TON)	(GAL)	(GAL)	(TON)	(SY)	(SY)	
140.691	140.790	24 - 36	20	522.72	190.70	127.13	290.40			977.78		ASPHALT SHOULDERS (TAPER) (BEGINNING OF PROJECT)
140.790	141.017	36	20	1198.56	787.05	291.50	745.77					
141.017	141.097	36-24	20	422.40	154.10	102.73	234.67					(TAPER)
141.097	142.915	24	20	9599.04	4202.25	2334.58	4692.86					
142.915	143.034	24-46	16	628.32	267.42	122.25	356.05					(TAPER)
143.034	143.099	46	16	343.20	287.97	66.78	236.43					TURN LANE TO ROUTE DD
143.099	143.140	36	16	216.48	142.16	42.12	125.08					TURN LANE TO ROUTE DD
143.140		36-24	20	316.80	115.57	77.05	176.00					(TAPER)
143.200	144.375	24	20	6204.00	2715.97	1508.87	2984.18	48.89		977.78		
144.375	144.411	24	20	190.08	-0							BRIDGE OVER WEST MEDICINE CREEK (A6368)
144.411	144.717	24	20	1615.68	707.31	392.95	741.00	48.89		977.78		(=10=0)
	144.798	24-36	20	427.68	156.02	104.02	237.60					(TAPER)
144.798	144.857	36	20	311.52	204.56	75.76	193.83					TURN LANE TO ROUTE Z
144.857	144.976	48	20	628.32	550.13	152.81	474.73					TURN LANE TO ROUTE Z
144.976	145.036	48-24	20	316.80	138.69	77.05	197.12					(TAPER)
145.036	145.734	24	20	3685.44	1613.40	896.34	1801.77					(TARER)
145.734	145.802	24-48	16	359.04	157.18	69.86	207.45					(TAPER)
145.802	145.859	48 36	20 20	300.96	263.51	73.20	227.39 144.55					TURN LANE AT ROUTE O
145.859 145.903	145.903 145.983	36-24	20	232.32 422.40	152.56 154.10	56.50 102.73	234.67					TURN LANE AT ROUTE O (TAPER)
145.903	145.963	24	20	7054.08	3088.12	1715.62	3399.77	48.89		977.78	1711.11	350' ADDITIONAL COLDMILLING TO REMOVE RUTTING
147.319	147.319	24	20	216.48	3000.12	1/13.02	3399.77	40.09		977.76	1/11.11	BRIDGE OVER BARBER CREEK (A6369) INCLUDES APPROACH PAVEMENT
147.360	150.383	24	20	15961 44	6987.56	3881.98	7754.48	48.89		977.78	1466.67	300' ADDITIONAL COLDMILLING TO REMOVE RUTTING
150.383	150.502	24-36	20	628.32	229.22	152.81	349.07	40.05		311.10	1400.07	(TAPER)
150.502	150.563	36	20	322.08	211.50	78.33	200.41					TURN LANE AT ROUTE A
150.563	150.690	36-24	20	670.56	244.63	163.09	316.98	48.89		977.78		(TAPER)
150.690	150.763	24	20	385 44	244.05	103.03	310.30	40.05		377.70		BRIDGE OVER RR TRACKS (A6732) INCLUDES APPROACH PAVEMENT
150.763	150.906	24	20	755.04	330.54	183.63	320.24	48.89		1955.56		Bribat atti in in and (narat) inclases him and in the
	151.004	24	20	517.44								BRIDGE OVER MEDICINE CREEK (A6733) INCLUDES APPROACH PAVEMENT
151.004	152.222	24	20	6431.04	2815.37	1564.09	3095.18	48.89		977.78		END OF ASPHALT SHOULDERS
152.222	153.155	24	12	4926.24	2156.60		1287.00	40.00	1335.5584	533.33		GRAVEL SHOULDERS
153.155	153.180	24	12	132.00								BRIDGE OVER ELM BRANCH (A8579)
	156.397	24	12	16985.76	7435.99		4502.87	40.00	4605.028267	1066.67		GRAVEL SHOULDERS
156.397	156.457	24	12	316.80								BRIDGE OVER WEST FORK LOCUST CREEK (A8181)
156.457	159.154	24	12	14240.16	6234.03		3770.71	40.00	3860.6656	1066.67		GRAVEL SHOULDERS
159.154	159.182	24	12	147.84								BRIDGE OVER EAST FORK LOCUST CREEK (B0147)
159.182	164.970	24	12	30560.64	13378.77		8122.84	40.00	8285.329067	533.33		GRAVEL SHOULDERS (END OF PROJECT)
			S	UBTOTALS	55882.3	14286.7	47131	502	18087	11022	3178	
				UBTOTALS				1761	665	8437		ENTRANCES AND SIDEROADS
								1,01		0.07		2% FOR SAFETY EDGE
						72.0		10.4	10750	10450	2170	32 TONS/LANE MILE FOR SURFACE IRREGULARITIES
				TOTALS	<u> </u> /46	72.0	493	394	18752	19459	3178	

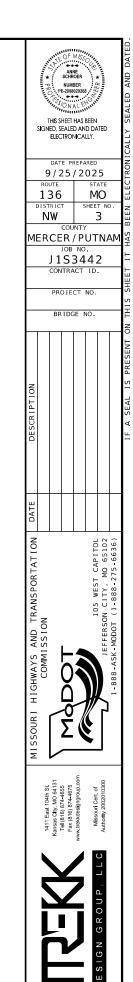
	SIGNS													
LOG	LOG	CHEVRON	2.5" PSST POST	DRIVEN POST ANCHOR	SH	REMARKS								
MILE	MILE	SIGN (W1-8)	12 GA.	FOR 2.5" PSST - 7 GA.	FLAT SHEET									
EB	EB	(EA)	(LF)	(EA)	(SF)									
159.461	159.580	7	112	7	63	HIGH FILL AT GUARDRAIL LOCATION								
		TOTALS	112	7	63									



141 East 104th St.
Kansas Clty, Mo 64131
Tel (816) 874-4655
Fax (816) 874-4675
www.trekkdesigngroup.com
Missouri Cert. of



				PAVEMENT MARK	I NG		
LOG	LOG	LENGTH	4 INCH WHITE	4 INCH YELLOW	24 INCH YELLOW	PREFORMED	REMARKS
MILE	MILE	(FT)	CLASS 1	CLASS 1	CLASS 1	THERMOPLASTIC	
			PAVEMENT MARKING	PAVEMENT MARKING	PAVEMENT MARKING	PAVEMENT	
			PAINT	PAINT	PAINT	MARK I NG	
EB	EB		(LF)	(18-MIL, TYPE P BEADS) (LF)	(LF)	(EA)	
140.691	140.790	522.72	1568	2091	(LF) 60	(EA)	
140.790	140.865	396.00	1188	792		2	ROUTE C
140.865	140.925	316.80	634	1267	96		
140.925 141.025	141.025 141.085	528.00 316.80	1584 634	1056 1267	74	2	ROUTE W
141.025	141.784	3690.72	7381	7381	74		
141.784	141.964	950.40	1901	1188			
141.964	142.064	528.00	1056	132			
142.064 142.264	142.264 142.543	1056.00 1473.12	2112 2946	1320 2946			
142.543	142.882	1789.92	3580	2237			
142.882	142.943	322.08	644	644			
142.943	143.042	522.72	1045	2091	73	2	DOUTE DD
143.042 143.083	143.083 143.144	216.48 322.08	649 966	866 644	96	3	ROUTE DD
143.144	143.223	417.12	834	1668	48		
143.223	143.423	1056.00	2112	2112			
143.423 143.583	143.583 144.005	844.80 2228.16	1690 4456	1056 4456			
144.005	144.104	522.72	1045	653			
144.104	144.144	211.20	422	422			
144.144	144.324	950.40	1901	1188			
144.324 144.563	144.563 144.723	1261 92 844 80	2524 1690	315 1690			
144.723	144.784	322.08	644	1288	55		
144.784	144.864	422.40	845	1267		1	
144.864 144.963	144.963 145.023	522.72 316.80	1568 634	2091 1267	26 68	3	ROUTE Z
145.023	145.062	205.92	412	412	68		
145.062	145.462	2112.00	4224	2640			
145.462	145.741	1473.12	2946	2946			
145.741 145.802	145.802 145.859	322.08 300.96	644 903	1288 1204	47 80	2	ROUTE O
145.859	145.903	232.32	697	465	00	1	NOOTE O
145.903	145.983	422.40	845	845	45		
145.983	146.664	3595.68	7191	7191			
146.664 146.824	146.824 146.903	844.80 417.12	1690 834	1056 104			
146.903	147.264	1906.08	3812	2383			
147.264	147.403	733.92	1468	183			
147.403 147.583	147.583 148.261	950.40 3579.84	1901 7160	1188 7160			
148.261	148.461	1056.00	2112	1320			
148.461	148.542	427.68	855	107			
148.542	148.721	945.12	1890	1181			
148.721 149.061	149.061 149.262	1795.20 1061.28	3590 2123	3590 1327			
149.262	149.582	1689.60	3379	422			
149.582	149.782	1056.00	2112	1320			
149.782 150.003	150.003 150.322	1166.88 1684.32	2334 3369	2334 2105			
150.322	150.322	322.08	644	644			
150.383	150.502	628.32	1257	2513	111		
150.502	150.563	322.08	966	644		1	ROUTE A
150.563 150.663	150.663 150.823	528.00 844.80	1056 1690	2112 1056	111		
150.823	151.684	4546.08	9092	1137			
151.684	151.903	1156.32	2313	1445			
151.903	152.062	839.52	1679	1679			
152.062 152.461	152.461 152.96	2106.72 2634.72	4213 5269	2633 5269			
152.960	153.281	1694.88	3390	2119			
153.281	153.341	316.80	634	634			
153.341	153.5	839.52	1679	1049			
153.500 153.820	153.82 154.378	1689.60 2946.24	3379 5892	3379 3683			
154 378	154.438	316.80	634	634			
154.438	154.537	522.72	1045	653			
154.537 154.737	154.737 155.157	1056.00 2217.60	2112 4435	2112 2772			
154.757		SUBTOTALS		122242	930	15	
		JODIOTALS	174777	122242	330	1 1 1	



SUMMARY OF QUANTITIES SHEET 4 OF 6

				PAVEMENT MARK	ING					
LOG LOG LENGTH 4 INCH WHITE 4 INCH YELLOW 24 INCH YELLOW PREFORMED REMARK										
MILE	MILE	(FT)	CLASS 1	CLASS 1	CLASS 1	THERMOPLASTIC				
		(,	PAVEMENT MARKING	PAVEMENT MARKING	PAVEMENT MARKING					
			PAINT	PAINT	PAINT	MARKING				
			(18-MIL, TYPE P BEADS)	(18-MIL, TYPE P BEADS)	(18-MIL, TYPE P BEADS)	LEFT/RIGHT ARROW				
EB	EB		(LF)	(LF)	(LF)	(EA)				
155.157	155.277	633.60	1267	1267						
155.277	155.617	1795.20	3590	2244						
155.617	155.737	633.60	1267	1267						
155.737	155.938	1061.28	2123	1327						
155.938	156.038	528.00	1056	132						
156.038	156.178	739.20	1478	924						
156.178	156.477	1578.72	3157	3157						
156.477	156.636	839.52	1679 4013	1049 4013						
156.636	157.016	2006.40	4013 3876	4013						
157.016	157.383 157.862	1937.76								
157.383 157.862	157.862	2529.12 1795.20	5058 3590	5058 2244						
157.862	158.202	1/95.20	211	2244						
158.202	158.362	739.20	1478	924						
158.362	158.401	205.92	412	412						
158.401	158.521	633.60	1267	792						
158.521	158.741	1161.60	2323	2323						
158.741	158.921	950.40	1901	1188						
158.921	159.381	2428.80	4858	607						
159.381	159.541	844.80	1690	1056						
159.541	159.92	2001.12	4002	4002						
159.920	160.121	1061.28	2123	1327						
160.121	160.221	528.00	1056	132						
160.221	160.381	844.80	1690	1056						
160.381	162.38	10554.72	21109	21109						
162.380	162.7	1689.60	3379	2112						
162.700	162.92	1161.60	2323	2323						
162.920	163.08	844.80	1690	1056						
163.080	163.24	844.80	1690	211						
163.240	163.42	950.40	1901	1188						
163.420	163.62	1056.00	2112	2112						
163.620	163.78	844.80	1690	1056						
163.780	163.9	633.60	1267	158						
163.900	164.04	739.20	1478	924						
164.040	164.1	316.80	634	634						
164.100	164.2	528.00	1056	660						
164.200	164.26 164.539	316.80 1473.12	634 2946	634 1841						
164.260 164.539	164.539	2275.68	2946 4551	1841 569						
104.539										
		SUBTOTALS		75721	0	0				
		SUBTOTALS		122242	930	15	FROM SHEET 4 OF 6			
		SUBTOTALS		6400			STATE ROUTES/SIDEROADS			
	· · ·	TOTALS	262040	204363	930	15				



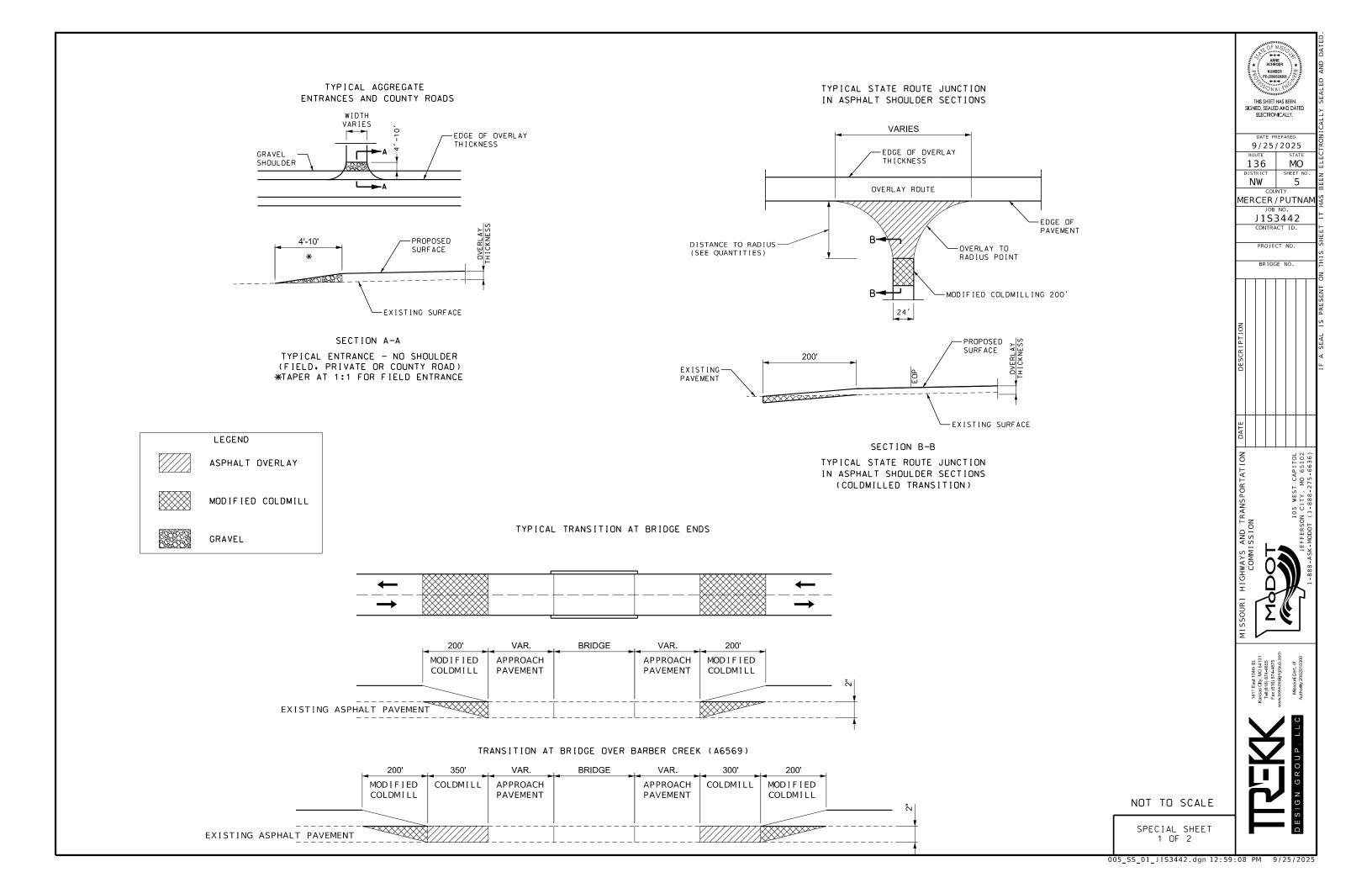
DATE PREPARED
9/25/2025
ROUTE STATE
136 MO
DISTRICT SHEET NO.
NW 3

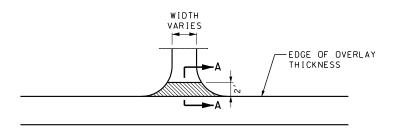
COUNTY
MERCER/PUTNAM
JOB NO.
J1S3442
CONTRACT ID.

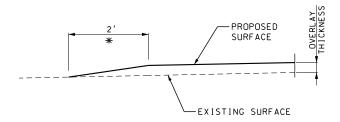


	1	T T	[=o=+:	L ory Irozail						0.71/	I=0=4.1		T	_	
		l l	TOTAL	1 ' 1 1				l		QTY			EFFECTIVE: 07-01-2025	┧.	AND STATE OF THE PARTY OF THE P
SIGN			·	RELOC RELOC SIGN		SIGN	1	1	QTY TOTAL	1		TTEM TOTA		zriri.	VE OL WISION
	IN.	SQ.FT.		EACH SQ.FT. NO.	DESCRIPTION	<u> </u>	IN.	SQ.FT.	EACH SQ.FT.			NUMBER QTY			ANNE SCHROER *
			WAR	NING SIGNS	-				GU :	IDE SI		6122008	IMPACT ATTENUATOR 40 MPH (SAND BARRELS)	78	NUMBER &
WO1-1L		16.00			TURN (SYMBOL LEFT)	E05-1		12.00			GORE EXIT	6122009	IMPACT ATTENUATOR 45 MPH (SAND BARRELS)		Signal ENGRA
WO1 - 1R		16.00			TURN (SYMBOL RIGHT)	E05-2		12.00			EXIT OPEN	6122010	IMPACT ATTENUATOR 50 MPH (SAND BARRELS)	- 1	THE PERSON NAMED IN
WO1 - 2L		16.00			CURVE (SYMBOL LEFT)	E05-2a	48X36		<u> </u>		EXIT CLOSED	6122012	IMPACT ATTENUATOR 55 MPH (SAND BARRELS)		IS SHEET HAS BEEN D, SEALED AND DATED
WO1 - 2R		16.00			CURVE (SYMBOL RIGHT)	GO20-1		10.00			1 ROAD WORK NEXT XX MILES	6122014	IMPACT ATTENUATOR 60 MPH (SAND BARRELS)		LECTRONICALLY.
WO1 - 3L		16.00			REVERSE TURN (SYMBOL LEFT)	GO20-2	48X24		2 16.00		26 END ROAD WORK	6122017	IMPACT ATTENUATOR 65 MPH (SAND BARRELS)	_	
WO1 - 3R		16.00			REVERSE TURN (SYMBOL RIGHT)	GO20-4		4.50	8 36.00		60 PILOT CAR FOLLOW ME	6122019	IMPACT ATTENUATOR 70 MPH (SAND BARRELS)		ATE PREPARED
WO1 - 4L		16.00			REVERSE CURVE (SYMBOL LEFT)	GO20 - 4a	_		8 70.00		58 PILOT CAR IN USE WAIT & FOLLOW	6122020	REPLACEMENT SAND BARREL		/28/2025
WO1 - 4R		16.00			REVERSE CURVE (SYMBOL RIGHT)	GO20 - 4a			2 3.00		58 PILOT CAR IN USE WAIT & FOLLOW	6122030	IMPACT ATTENUATOR (RELOCATION)	1 7	
WO1 4bD		16.00			DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)	GO20-5aP MO4-8a	24X18		4 24.00		54 WORK ZONE (PLAQUE)	6122040	WORK ZONE CRASH CUSHION (NARROW)	13	
WO1 - 4bR	48X48	16.00			DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)		48X36				END DETOUR	6122041	WORK ZONE CRASH CUSHION (RELOCATION) TRUCK MOUNTED ATTENUATOR (TMA)	- NW	
WO1-4cL WO1-4cR	48X48				TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)	MO4 - 9L MO4 - 9R	48X36				DETOUR (LEFT) DETOUR (RIGHT)	6123001 2 * 6161012	BUOYS (BOATS KEEP OUT)	+ '''	COUNTY
WO1 - 4CK		12.50			TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT) HORIZONTAL ARROW (SYMBOL)	MO4 - 9R MO4 - 9P	48X12				STREET NAME (PLAQUE)	6161013	BUOYS (NO WAKE)	MERC	CER / PUTNA
WO1-6a		18.00			HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4 - 10L	_				DETOUR ARROW (LEFT)	6161014	SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)	_	JOB NO.
WO1 - 7		12.50			DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4 - 10L					DETOUR ARROW (RIGHT)	6161020	CHANNELIZER (DRUM-LIKE)		1S3442
WO1-7 WO1-7a	72X36				DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)	1004-10K	40/10	0.00	REGIII	A TORY	SIGNS	6161022	CHANNELIZER (CONE)	CC	ONTRACT ID.
WO1-74		3.00			CHEVRON (SYMBOL)	R1-1	18Y18	13.25		TONT	STOP	-	CHANNELIZER (TRIM-LINE)	 	DOLECT NO
WO1-8 WO1-8a		7.50			CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)	R1-2	48TRI.		 		YIELD	6161026	CHANNELIZER (VERTICAL PANEL)	┨ ゜゜	PROJECT NO.
WO1-84		16.00			STOP AHEAD (SYMBOL)	R1-2a	36X36				TO ONCOMING TRAFFIC (PLAQUE)	6161030	TYPE 3 MOVEABLE BARRICADE	+	BRIDGE NO.
WO3 - 1		16.00			YIELD AHEAD (SYMBOL)	R1-3P	30X12				ALL WAY (PLAQUE)	6161033	DIRECTION INDICATOR BARRICADE	┨ `	-
WO3-2		16.00			SIGNAL AHEAD (SYMBOL)	R2 - 1		12.00	12 144.00		25/4 SPEED LIMIT 6-50, 6-60	6161040 2	FLASHING ARROW PANEL	+	\top
WO3 - 4		16.00	8 128.00) 11	BE PREPARED TO STOP	R3 - 1	48X48		144.00		NO RIGHT TURN (SYMBOL)	6161047	TYPE 3 OBJECT MARKER	- 	
WO3 - 5		16.00			SPEED LIMIT AHEAD	R3-2	48X48				NO LEFT TURN (SYMBOL)	6161055	SEQUENTIAL FLASHING WARNING LIGHT	- 	
WO4-1L		16.00			MERGE (SYMBOL FROM LEFT)	R3-3	36X36				NO TURNS	6161070	TUBULAR MARKER	- 	
WO4 - 1R		16.00			MERGE (SYMBOL FROM RIGHT)	R3 - 4	48X48				NO U-TURN (SYMBOL)	6161095	RADAR SPEED ADVISORY SYSTEM		
WO4-1aL		16.00			MERGE (LEFT)	R3 - 7L	30X30				LEFT LANE MUST TURN LEFT		CHANGEABLE MESSAGE SIGN,	 2	
WO4-1aR		16.00			MERGE (RIGHT)	R3 - 7R	30X30				RIGHT LANE MUST TURN RIGHT	6161096	COMMISSION FURNISHED/RETAINED	<u>-</u>	
WO5 - 1		16.00	2 32.00	34	ROAD/BRIDGE/RAMP NARROWS	R4-1		12.00			DO NOT PASS		CHANGEABLE MESSAGE SIGN WITHOUT COMM.	 %	
WO5 - 3	48X48	16.00			ONE LANE BRIDGE	R4-2	36X48	12.00			PASS WITH CARE	6161098A	INTERFACE, CONTRACTOR FURNISHED/RETAINED	JES	
WO5 - 5	48X48	16.00			NARROW LANES	R4-7a	36X48	12.00			KEEP RIGHT (HORIZONTAL ARROW)		CHANGEABLE MESSAGE SIGN WITH COMM.	7711	
WO6 - 1	48X48	16.00			DIVIDED HIGHWAY (SYMBOL)	R4-8a	36X48	12.00			KEEP LEFT (HORIZONTAL ARROW)	6161099	INTERFACE, CONTRACTOR FURNISHED/RETAINED		
WO6 - 2	48X48	16.00			DIVIDED HIGHWAY END (SYMBOL)	R5-1	30X30	6.25			DO NOT ENTER	6162000A	WORK ZONE TRAFFIC SIGNAL SYSTEM		
WO6-3	48X48	16.00			TWO WAY TRAFFIC (SYMBOL)	R5-1a	36X24	6.00			WRONG WAY	6162002	TEMPORARY LONG-TERM RUMBLE STRIPS		
WO7-3a	30X24	5.00			NEXT XX MILES (PLAQUE)	R6-1L	54X18	6.75			ONE WAY ARROW (LEFT)		TEMPORARY TRAFFIC BARRIER,	\vdash	++++
WO8 - 1	48X48	16.00			BUMP	R6-1R	54X18	6.75			ONE WAY ARROW (RIGHT)	6173600D	CONTRACTOR FURNISHED/RETAINED	쁘	
WO8 - 2	48X48	16.00			DIP	R6-2L	24X30	5.00			ONE WAY (LEFT)		TEMP. TRAFFIC BARRIER ANCHORED,	Tå	
WO8 - 3	48X48	16.00			PAVEMENT ENDS	R6-2R	24X30	5.00			ONE WAY (RIGHT)	6173700B	CONTRACTOR FURNISHED/RETAINED		\bot
WO8 - 4	48X48	16.00			SOFT SHOULDER	R9-9	24X12	2.00			SIDEWALK CLOSED]	TEMP. TRAFFIC BARRIER STIFFNESS TRANSITIO	N S	CAP TOL MO 65102
WO8 - 5		16.00			SLIPPERY WHEN WET (SYMBOL)]]					SIDEWALK CLOSED AHEAD,	6173706	CONTRACTOR FURNISHED/RETAINED	_ E	P 17
WO8 - 6		16.00			TRUCK CROSSING	R9-11L	24X18	3.00			(ARROW LEFT) CROSS HERE		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION,	Ĭ.	5 € ;
WO8 - 6 c		16.00			TRUCK ENTRANCE	<u> </u>					SIDEWALK CLOSED AHEAD,	6174000A	CONTRACTOR FURNISHED/RETAINED	٦ĕ	WEST ITY, P
WO8 - 7		9.00			LOOSE GRAVEL	R9-11R	24X18				(ARROW RIGHT) CROSS HERE	6175010A	RELOCATING TEMPORARY TRAFFIC BARRIER	- S	w E
WO8 - 7a	36X36				FRESH OIL / LOOSE GRAVEL	R10-6	24X36				STOP HERE ON RED (45^ ARROW)	6175011B	RELOCATING TEMP. TRAFFIC BARRIER ANCHORED	–l∢	105 SON CI
WO8 - 9		16.00	10 760 06	36	LOW SHOULDER	R11-2	48X30	10.00			ROAD CLOSED	6175013	RELOCATING TEMP. TRAFFIC BARRIER STIFFNES		30 N
			48 768.00		UNEVEN LANES	R11-3a	60730	12 50			ROAD CLOSED XX MILES AHEAD	6175020A	RELOCATING TEMP. TRAFFIC BARRIER HEIGHT TEMPORARY RAISED PAVEMENT MARKER	SIC	ER
WO8 - 12			24 384.00	35	NO CENTER LINE GROOVED PAVEMENT	R11-3a					ROAD CLOSED TO THRU TRAFFIC	6208064A 9029400	TEMPORARY TRAFFIC SIGNALS	A S	
WO8 - 15P					MOTORCYCLE (PLAQUE)	CONST - 3A	_				FINE SIGN	9029401	TEMPORARY TRAFFIC SIGNALS AND LIGHTING	- S <u>₹</u>	
WO8 - 17L					SHOULDER DROP-OFF (SYMBOL LEFT)	CONST - 3X	_		+ +		SPEEDING/PASSING (PLATE)	3023701	TENIONANT INALTIC STOWARS AND LIGHTING	− [€ 6	
WO8 - 17E					SHOULDER DROP-OFF (SYMBOL RIGHT)	1 221131 - 37	1 20/12		MISCELL	ANFO	JS SIGNS			Ⅎ⋚	\times 711 :
WO8-17R					SHOULDER DROP-OFF (PLAQUE)	CONST - 5	48X36	12.00		_, .	POINT OF PRESENCE	* ITEMS	S NOT INCLUDED IN LUMP SUM	ΙĔ	
W10-1	42RND.				RAILROAD CROSSING	CONST - 5		-			POINT OF PRESENCE	TRAF	FIC CONTROL	<u> </u>	<u>_0</u> ///)
WO12-1					DOUBLE DOWN ARROW (SYMBOL)	-		-	2 24.00		59 WORK ZONE NO PHONE ZONE	1	· - · · · · - -	15 C	~ <i>M</i>
WO12-2					LOW CLEARANCE (SYMBOL)	-			2 36.00		56 RATE OUR WORK ZONE	1		SOI	とじ し
W012-2x					LOW CLEARANCE (PLAQUE)							1		15;	_
WO12-2a	84X24	14.00			OVERHEAD LOW CLEARANCE (FEET AND INCHES)]		E	
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									÷ £	. 55 5.com 7 300
WO13-1	30X30	6.25			ADVISORY SPEED (PLAQUE)									Ath S	14.46. 4.46. group group ert o
WO16-2	30X24	5.00			XXX FEET (PLAQUE)							616-99		1st 10	6) 87. 6) 87. 6) 87. esign vun C.
WO16-3					X MILE (PLAQUE)							J MISC. L	LUMP SUM TEMPORARY 1-LUMP SUM	11 Es	Kansas Ctty, MC e41.3 Tel (816) 874-4655 Fax (816) 874-4655 Fax (816) 874-4675 www.trekkdesigngroup.α Missouri Cert. of Authority 2002010300
		16.00	8 128.00	2	ROAD/BRIDGE/RAMP WORK AHEAD							TRAFFIC	CONTROL	Kans	Fa Fa
WO20-2					DETOUR AHEAD	<u> </u>						J			3
	48X48				ROAD CLOSED AHEAD	616-10			TOTAL						∠ ∪
		16.00	4 64.00	7	ONE LANE ROAD AHEAD	CONSTR		N SIGN	IS 2037						
WO20-5					RIGHT/CENTER/LEFT LANE CLOSED AHEAD	616-10					TOTAL				—
WO20-5a					2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD	RELOCA	ILD S	I GNS						.7	
WO20-6a					RIGHT/CENTER/LEFT LANE CLOSED										
			8 128.00	8	FLAGGER (SYMBOL)	l NC	OTE: U	NLESS	NOTED OTHE	ERWISE	IN THE PLANS, ALL TRAFFIC CONTROL [DEVICES ARE	INCLUDED IN		8
WO21-2			2 2 2 2 2		FRESH OIL						JMP SUM TEMPORARY TRAFFIC CONTROL, LU			▎┡	
			2 32.00	21	SHOULDER WORK / SHOULDER WORK AHEAD						SUBJECT TO CHANGE BASED UPON FIELD				7/ 🛭
WO22-1					BLASTING ZONE AHEAD	AF	VE ONF	ı AN I	LOTIMATE AL	ND AKE	. BODIECT TO CHANGE BASED UPON FIELD	CONDITIONS	•		ပ
WO22-2					TURN OFF 2-WAY RADIO AND PHONE										S
WO22-3					END BLASTING ZONE	-								▏▐▄	
GO22-1	Z1X15	∠.19			WET PAINT (ARROW PIVOTS)	J							SUMMARY OF QUANTITIES	•	Ω
													SHEET 6 OF 6		









SECTION A-A

TYPICAL ENTRANCE - NO SHOULDER (FIELD, PRIVATE OR COUNTY ROAD) *TAPER AT 1:1 FOR FIELD ENTRANCE

NOTE: 4 TONS GRAVEL A OR CRUSHED STONE B CALCULATED PER ENTRANCE.

6 TONS CALCULATED PER COUNTY ROAD.

EXISTING SURFACE

ASPHALT & CONCRETE ENTRANCES

VARIES

SHOULDER

AGGREGATE & EARTH ENTRANCES

SURFACE

SHOULDER-

— EDGE OF OVERLAY THICKNESS

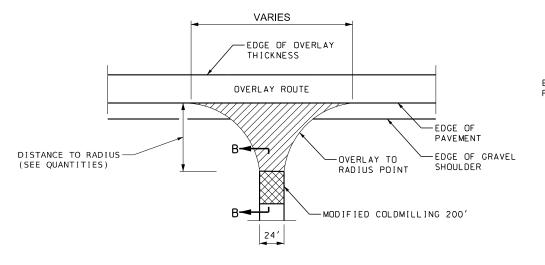
DASOGOBA OF THE CONTRACT OF THE CASE OF TH

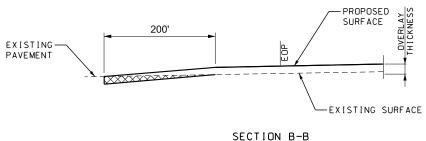
EXISTING SURFACE

SECTION B-B

TYPICAL ENTRANCE - EXIST/NEW SHOULDER (FIELD, PRIVATE OR COUNTY ROAD)
*TAPER AT 1:1 FOR FIELD ENTRANCE

TYPICAL STATE ROUTE JUNCTION IN GRAVEL SHOULDER SECTIONS





TYPICAL STATE ROUTE JUNCTION
IN GRAVEL SHOULDER SECTIONS
(COLDMILLED TRANSITION)



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

 DATE PREPARED

 9/25/2025

 ROUTE
 STATE

 136
 MO

 DISTRICT
 SHEET NO.

 NW
 6

MERCER / PUTNAM

J1S3442 CONTRACT ID

PROJECT NO.

DESCRIPTION

BEIDGE NO.

TRANSPORTATION DATE

AISSOURI HIGHWAYS AND TRANSPOR COMMISSION

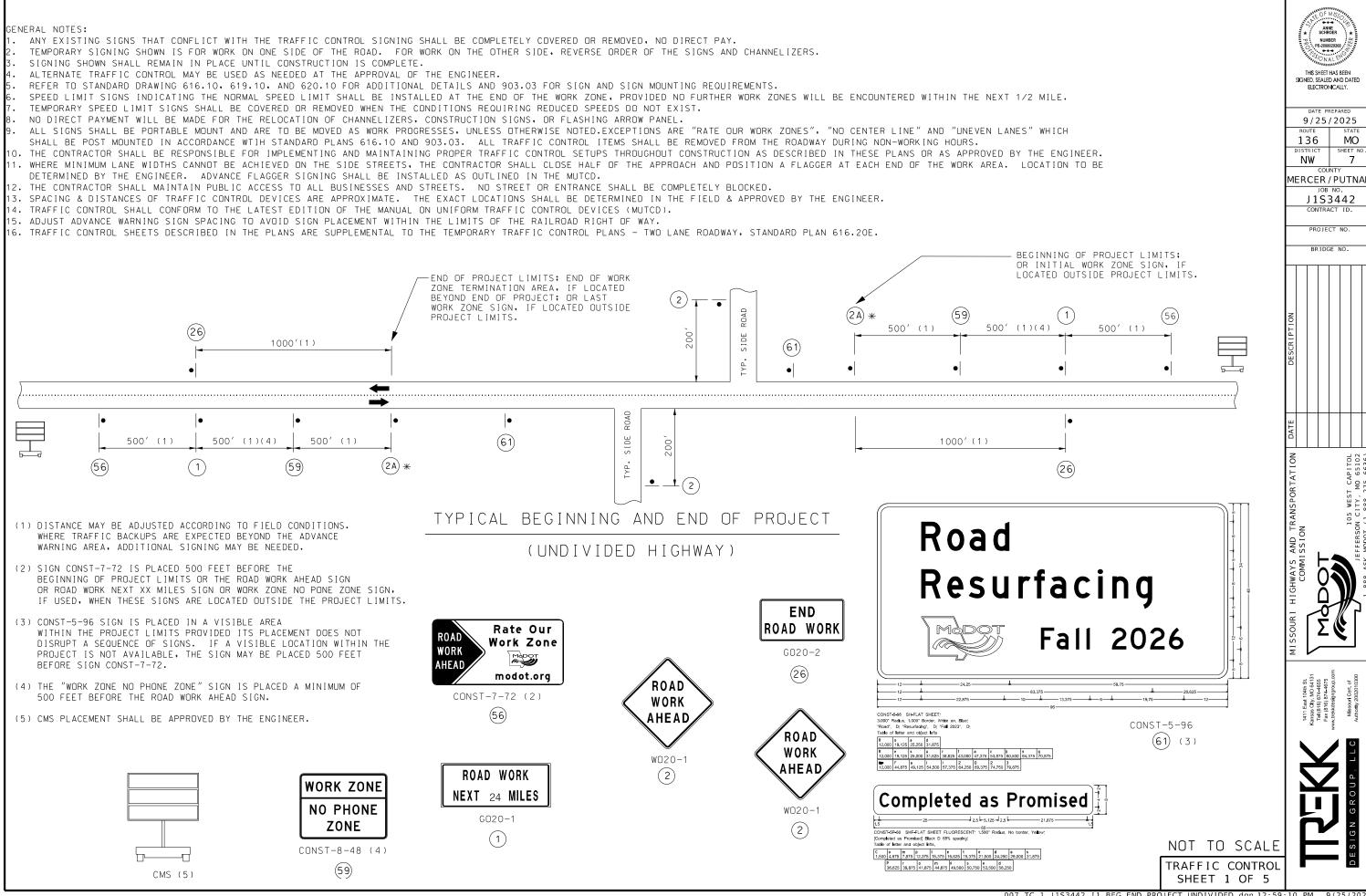
MADOT

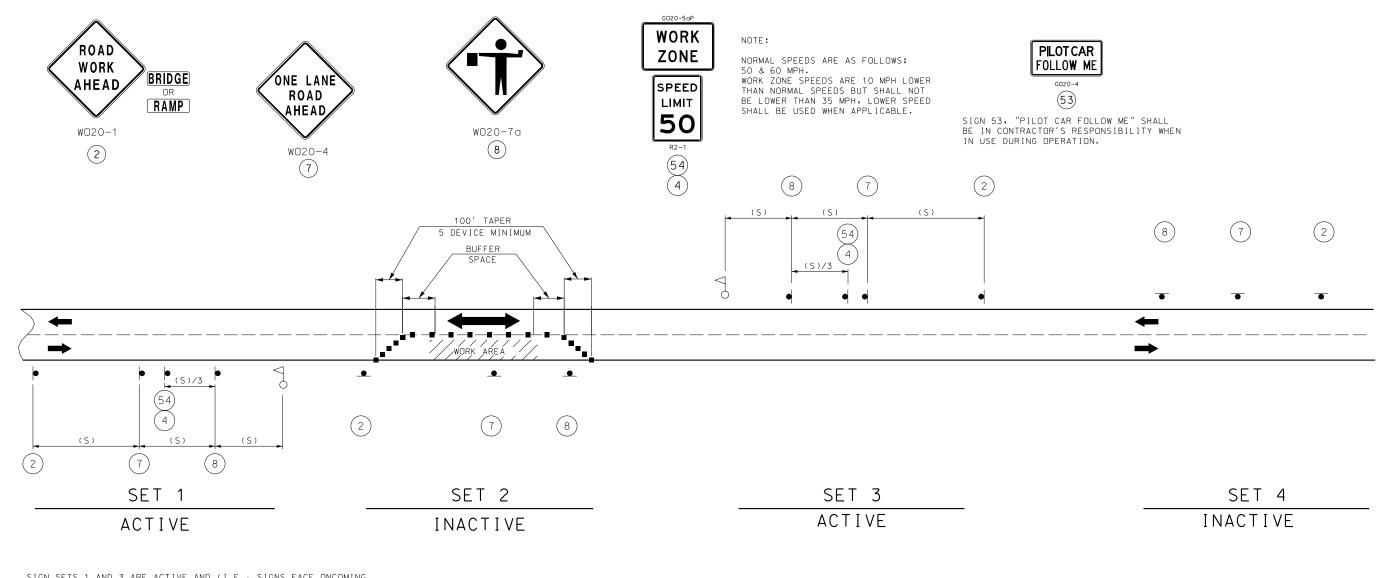
105 WEST

1411 East 104th St. Kansas City, MO 64131 Tel (816) 874-4655 Fax (816) 874-4675 www.trekkdesigngroup.com



SPECIAL SHEET 2 OF 2





SIGN SETS 1 AND 3 ARE ACTIVE AND (I.E., SIGNS FACE ONCOMING TRAFFIC).

SIGN SETS 2 AND 4 ARE INACTIVE (I.E., SIGNS DO NOT FACE EITHER DIRECTION OF TRAFFIC) WHEN THE RESURFACING OPERATION IS LOCATED BETWEEN SIGN SETS 1 AND 3.

WHEN SIGN SETS 2 AND 4 ARE ACTIVE, SIGN SETS 1 AND 3 BECOME INACTIVE AND ARE ADVANCED TO BECOME SETS 2 AND 4 WITH SIGN LEGENDS TURNED AWAY FROM BOTH DIRECTIONS OF TRAFFIC.

WHEN THE RESURFACING OPERATION ADVANCES TO BETWEEN SIGN SETS 2 AND 4. SIGN SETS 2 AND 4 BECOME ACTIVE (I.E., NEW SIGN SETS 1 AND 3) AND SIGN SETS 1 AND 3 ADVANCED IN THE DIRECTION OF THE OPERATION (I.E., NEW SIGN SETS 2 AND 4).

- CHANNELIZERS

- FLAGGER

NOTES:

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, INCLUDING ANY ACCEPTABLE SHOULDERS, TO LESS THAN 10' OR WILL SIGNIFICANTLY AFFECT THE RESURFACING OPERATION.

FLAG ASSEMBLIES FOR SIGN W020-7a ARE SUBSIDIARY TO THE SIGN.

SPEED	SIGN SPACING (FT) (1)	CHANNELIZER SPACING (FT)	OPTIONAL				
PERMANENT POSTED (MPH)	NON-DIVIDED HIGHWAYS (S)	BUFFER/ WORK AREAS	BUFFER SPACE LENGTH (FT)				
0-35	200	40	250				
40-45	350	80	360				
50-55	500	80	495				
60-70	60-70 1000		730				

NOTES:

(1) SPACING BETWEEN SIGNS, BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS, AS APPROVED BY ENGINEER.

MOVING FLAGGER OPERATION
(UNDIVIDED HIGHWAY)

NOT TO SCALE

SHEET 2 OF 5



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

| DATE | PREPARED | 9 / 25 / 2025 | | ROUTE | | STATE | 136 | MO | DISTRICT | SHEET NO. | NW | 8

MERCER / PUTNAM JOB NO. J 153442

PROJECT NO

DESCRIPTION

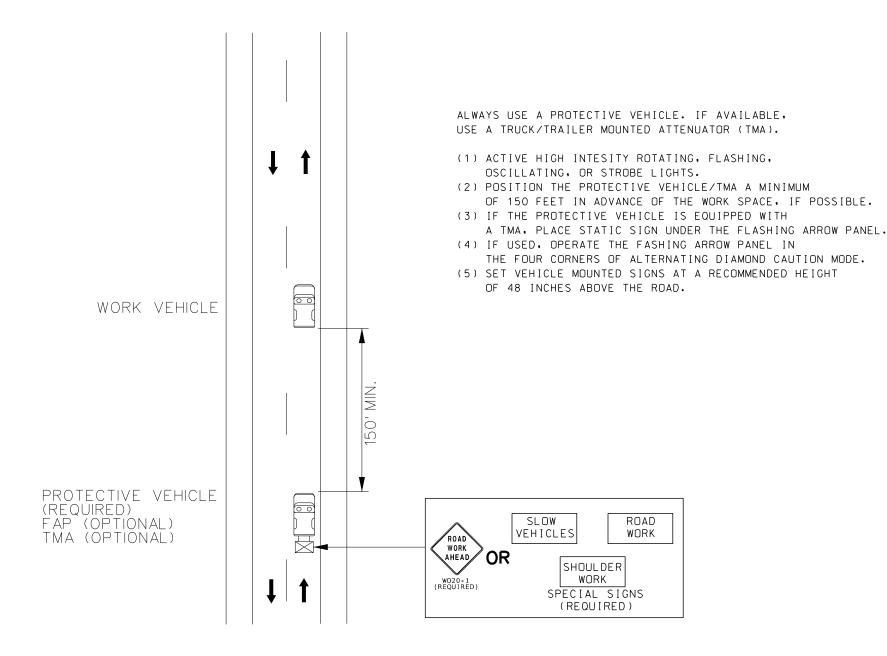
BRIDGE NO.

SOURI HIGHWAYS AND TRANSPORTATION
COMMISSION
TO DOT

105 WEST CAPITOL
HEFFERSON CITY, MO 65102

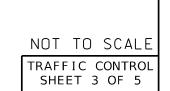
1411 East 104th St. Kansas City, MO 64131 Tel (816) 874-4655 Fax (816) 874-4675 www.trekkdesigngroup.com

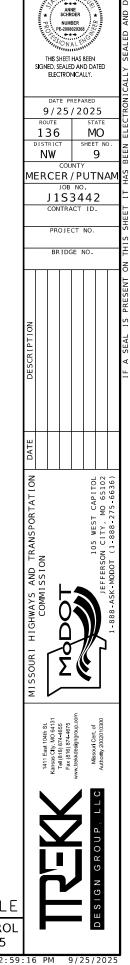




TWO-LANE HIGHWAY

MOVING OPERATION ON HIGHWAY OPEN TO TRAFFIC





<u>L E G E N D</u>

___ SIGN (SINGLE SIDED)

▲ TRAFFIC CONE

CHANNELIZER (TRIM-LINE)

F L A G G E R

REQUIRED - PROTECTIVE VEHICLE W/ 150' ROLL AHEAD SPACE

OPTIONAL - FLASHING ARROW PANEL (FAP)

OPTIONAL - TRUCK/TRAILER MOUNTED ATTENUATOR (TMA)



WORK ZONE

TAPER LENGTH AND SPACING											
SPEED LIMIT!	TAPER L	ENGTH <mark>,</mark> T	CHANNELIZIN F	BUFFER							
MPH MPH	SHOULDER⁴ (T1)	LANE ⁵ (T2)	TAPERS	BUFFER/ WORK AREA	LENGTH, FT						
0-35	35	100	25	25 40 ⁶							
40-45	35	100	25	80 ⁶	360						
50-55	35	100	25	807	495						
60-70	35	100	25	1207	730						

'POSTED SPEED LIMIT.

'TAPER LENGTHS MAY BE ADJUSTED.

'SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

'BASED ON 10FT SHOULDER WIDTH

BASED ON 12FT LANE WIDTH

'SPACING REDUCED TO1/2 AT INTERSECTIONS.

'SPACING MAY BE REDUCED TO $\!\!\!/_2\!\!\!$ AT INTERSECTIONS.

ADVANCE	WARNING SIGN MINIMUM SPACING								
SPEED LIMIT!	SIGN SPACING, FT (S)								
MPH MPH	UNDIVIDED HIGHWAY								
0-35	200 ³								
40-45	350								
50-55	500								
60-70	1000								

SHOULDER

WORK

WO21-5

(21)

POSTED SPEED LIMIT.

²SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

³FOR URBAN LOW SPEED, MINIMUM RECOMMENDED SPACING IS 100 FT.







(43) *



NOTES:



* OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT



LEGEND

WO20-1

(2)

___ SIGN (SINGLE SIDED)

▲ TRAFFIC CONE

CHANNELIZER (TRIM-LINE)

FLAGGER

REQUIRED - PROTECTIVE VEHICLE
W/ 150' ROLL AHEAD SPACE

OPTIONAL - FLASHING ARROW PANEL

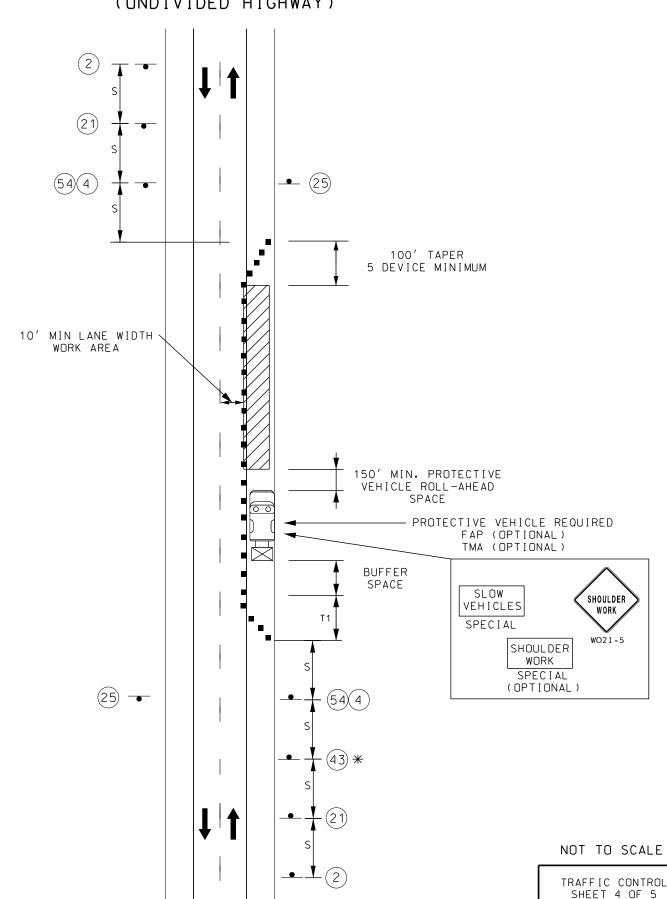
OPTIONAL - TRUCK/TRAILER MOUNTED ATTENUATOR (TMA)



WORK ZONE

(UNDIVIDED HIGHWAY)

SHOULDER WORK WITH MINOR TRAVELWAY ENCROACHMENT OR NO ENCROACHMENT



010_TC_4_J1S3442_I1_SHOULDER_WORK_MINOR_ENCROACHMENT_UNDIVIDED.dgn 12:59:17 PM 9/25/2025

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

9/25/2025

MERCER / PUTNAN

J1S3442

PROJECT NO.

MO

10

136

NW

TAPER LENGTH AND SPACING										
SPEED LIMIT.	TAPER L	ENGTH,² T	CHANNELIZIN F	IG SPACING, ³ T	BUFFER LENGTH, FT					
MPH MPH	SHOULDER⁴ (T1)	LANE ⁵ (T2)	TAPERS	BUFFER/ WORK AREA	(B)					
0-35	35	100	25 ⁶	40 ⁶	250					
40-45	35	100	25 ⁶	80 ⁶	360					
50-55	35	100	25 7	80 ⁷	495					
60-70	35	100	25 ⁷	120 ⁷	730					

'POSTED SPEED LIMIT.

'TAPER LENGTHS MAY BE ADJUSTED.
'SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

'BASED ON 10FT SHOULDER WIDTH

BASED ON 12FT LANE WIDTH

*SPACING REDUCED TO $\frac{1}{2}$ AT INTERSECTIONS.

'SPACING MAY BE REDUCED TO1/2 AT INTERSECTIONS.

ADVANCE	WARNING SIGN MINIMUM SPACING
SPEED LIMIT,	SIGN SPACING, FT (S)
MPH MPH	UNDIVIDED HIGHWAY
0-35	200 ³
40-45	350
50-55	500
60-70	1000

TYPE OF ROADWAY	SIGN HEIGHT (MINIMUM)	WORK ZONE LENGTH (L) (MAXIMUM)
URBAN	1' PORTABLE 7' POST	1 MILE
RURAL UNDIVIDED	1' PORTABLE 5' POST	3 MILES

²SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

³FOR URBAN LOW SPEED, MINIMUM RECOMMENDED SPACING







LEGEND

__ SIGN (SINGLE SIDED)

A TRAFFIC CONE

CHANNELIZER (TRIM-LINE)

FLAGGER

REQUIRED - PROTECTIVE VEHICLE W/ 150' ROLL AHEAD SPACE

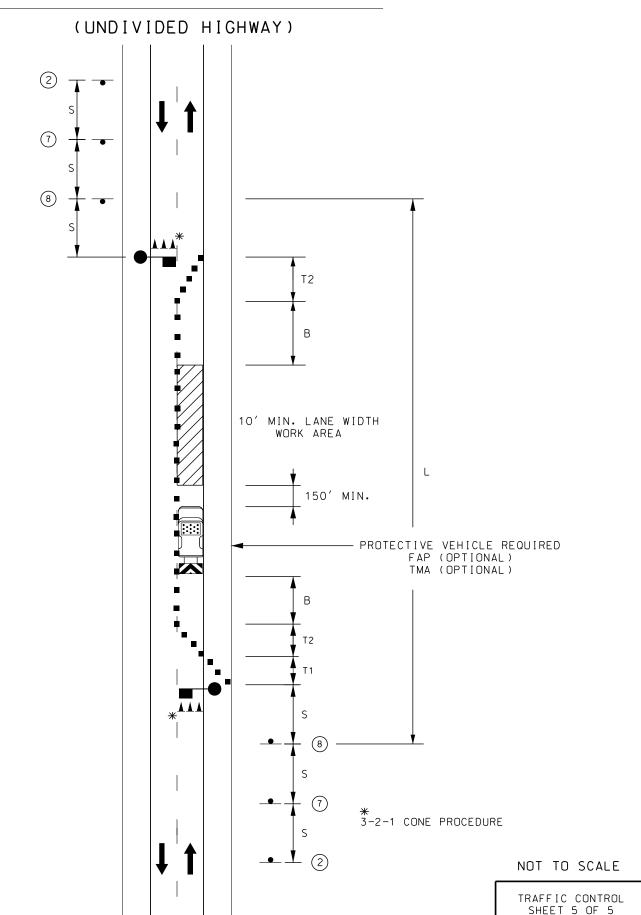
OPTIONAL - FLASHING ARROW PANEL

OPTIONAL - TRUCK/TRAILER MOUNTED ATTENUATOR (TMA)



WORK ZONE





011_TC_5_J1S3442_I1_STATIONARY_LANE_CLOSURE_TWO_LANE_WITH_FLAGGERS.dgn 12:59:18 PM 9/25/2025

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

9/25/2025

MERCER / PUTNAI

J1S3442

PROJECT NO

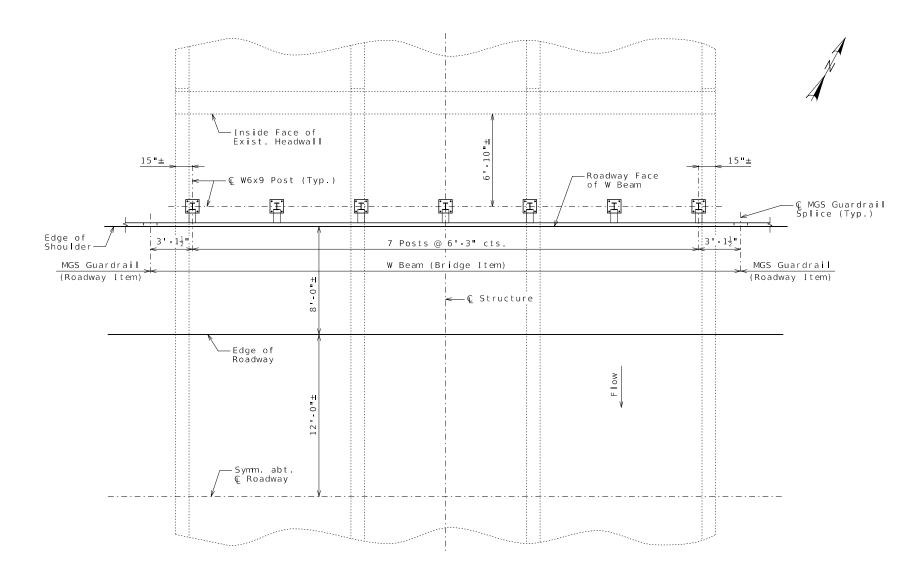
MO

11

136

NW

SEC/SUR 6 TWP 65N RGE 22W



PART PLAN OF EXISTING CULVERT SHOWING POST LOCATIONS

Estimated Quantities	
I t em	Total
Bridge Guardrail (W-Beam) linear foot	88

General Notes:

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications

Standard Plans:

606.50

Miscellaneous:

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

Dimensions are based on existing bridge plans. Contractor shall verify all dimensions in field.

Existing post and guardrail removal shall be considered completely covered by roadway pay item. Anchor bolts of existing rail posts shall be cut off one inch into the deck concrete and the resulting holes backfilled with an approved qualified special mortar.

Cost of required excavation for the installation of Bridge Guardrail (W-Beam) post and the determination of the post height shall be considered completely covered by the contract unit price for Bridge Guardrail (W-Beam)

Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

REPAIRS TO BRIDGE: ROUTE 136 OVER BURRIS CREEK

ROUTE 136 FROM ROUTE DD TO ROUTE Z ABOUT 0.9 MILE EAST OF ROUTE DD TIE STA. 755+55.75

CONTRACT ID. PROJECT NO. BRIDGE NO H09552

TIMOTHY D. LEAF NUMBER

09/10/2025 1:27:05 PM TIMOTHY D. LEAF - CIVIL MO-PE-2012000778 9/10/2025

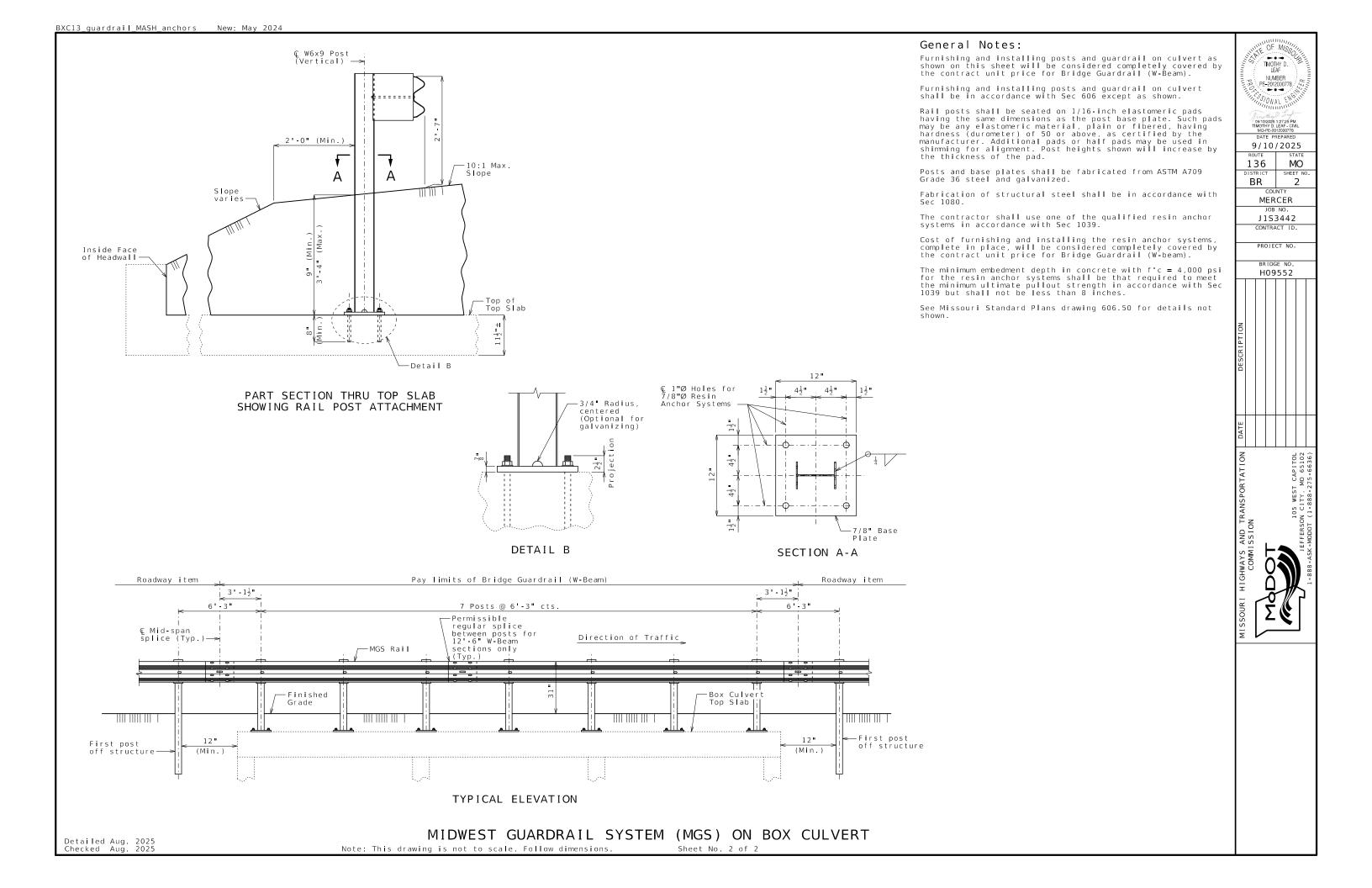
> MERCER J1S3442

MO SHEET NO

1

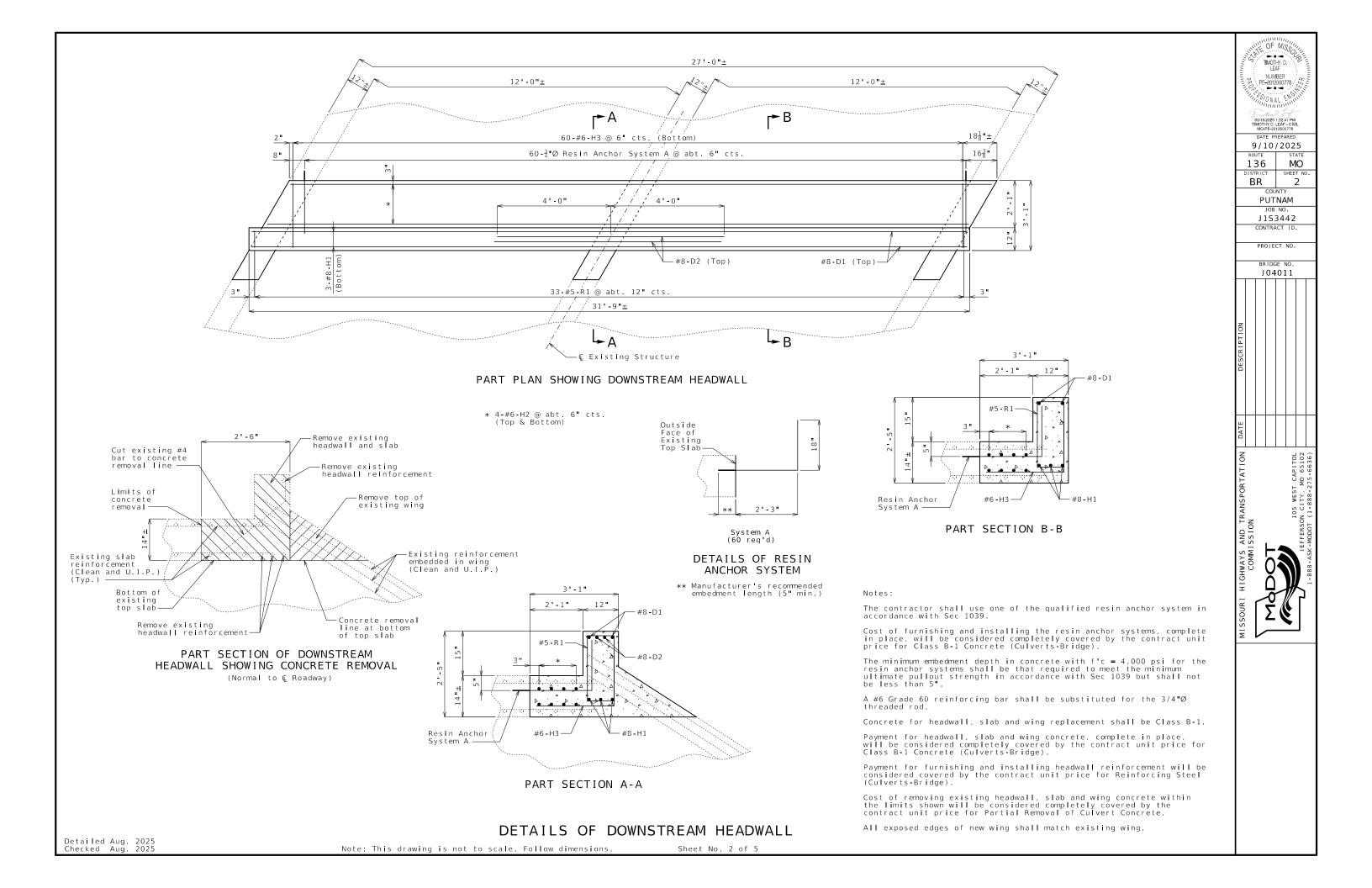
136

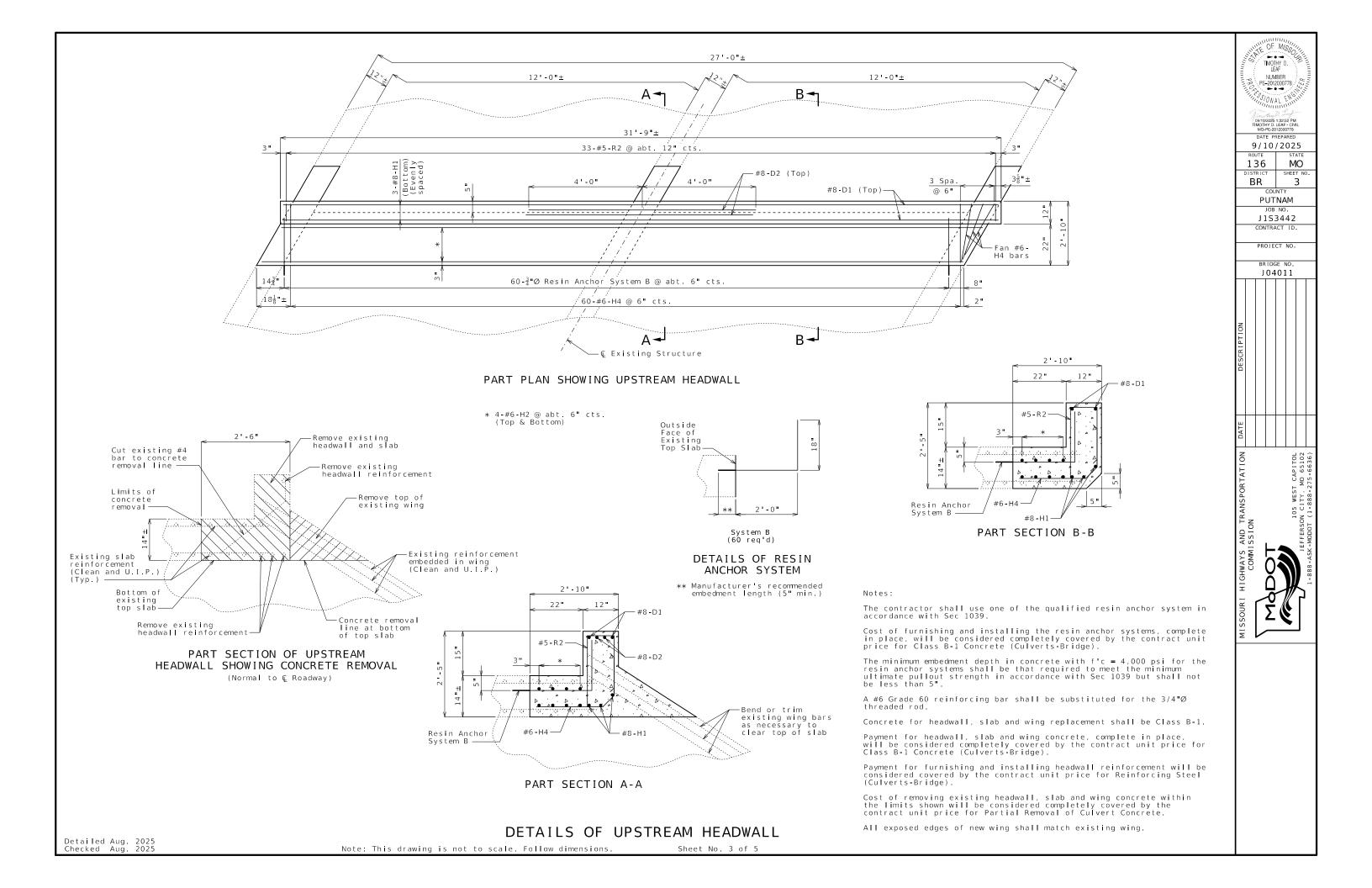
BR



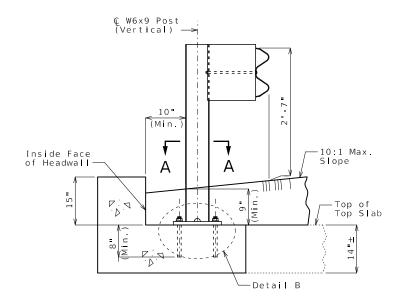
REPAIRS TO BRIDGE: ROUTE 136 OVER HYLAN BRANCH ROUTE 136 FROM ROUTE K TO ROUTE 139

ABOUT 0.1 MILE WEST OF ROUTE K TIE STA. 380+35.00

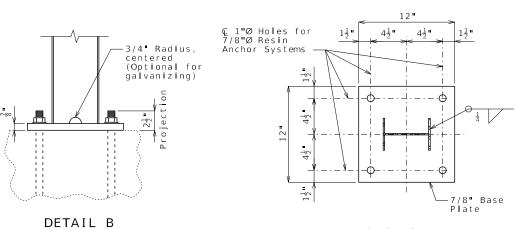




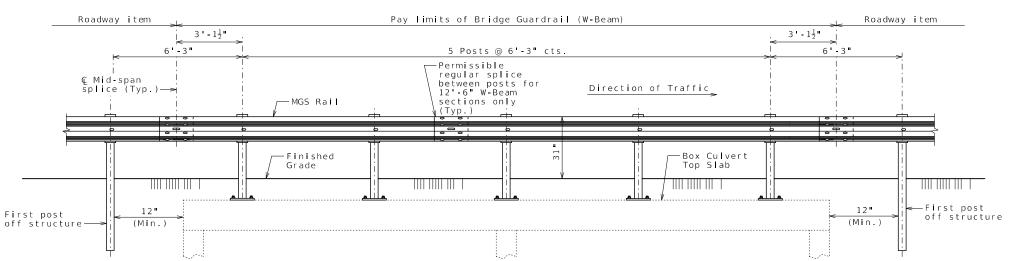
Detailed Aug. 2025 Checked Aug. 2025



PART SECTION THRU TOP SLAB SHOWING RAIL POST ATTACHMENT



SECTION A-A



TYPICAL ELEVATION

MIDWEST GUARDRAIL SYSTEM (MGS) ON BOX CULVERT

Note: This drawing is not to scale. Follow dimensions.

Sheet No. 4 of 5

General Notes:

Furnishing and installing posts and guardrail on culvert as shown on this sheet will be considered completely covered by the contract unit price for Bridge Guardrail (W-Beam).

Furnishing and installing posts and guardrail on culvert shall be in accordance with Sec 606 except as shown.

Rail posts shall be seated on 1/16-inch elastomeric pads having the same dimensions as the post base plate. Such pads may be any elastomeric material, plain or fibered, having hardness (durometer) of 50 or above, as certified by the manufacturer. Additional pads or half pads may be used in shimming for alignment. Post heights shown will increase by the thickness of the pad.

Posts and base plates shall be fabricated from ASTM A709 Grade 36 steel and galvanized.

Fabrication of structural steel shall be in accordance with Sec 1080.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Guardrail (W-beam).

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 8 inches.

See Missouri Standard Plans drawing 606.50 for details not shown.

TIMOTHY D LEAF PE-2012000778

09/10/2025 1:33:02 PM TIMOTHY D. LEAF - CIVIL MO-PE-2012000778

9/10/2025 ROUTE STATE

136 MO
DISTRICT SHEET NO.
BR 4

PUTNAM

JOB NO.

J1S3442

CONTRACT ID.

PROJECT NO.



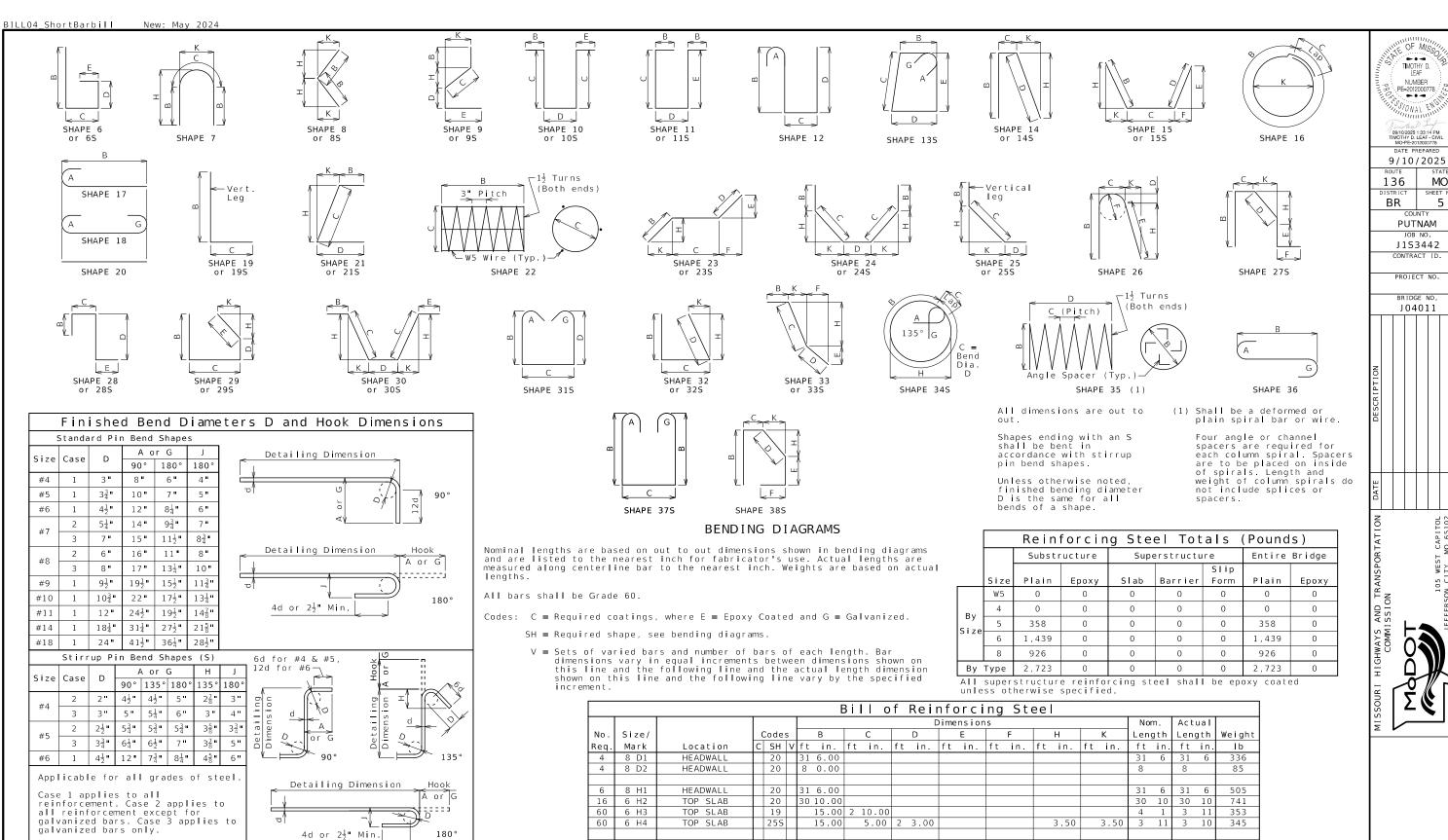
COMMISSION

COMMISSION

TODOT

105 WEST CAPITOL

LEFFESSON CITY, MO 65102



Req.	Mark	Location	ΙC	SH	V	f t	in.	ft	in.	f t	in.	ft	in.	ft	in.	ft	in.	ft	in.	ft	in.	ft	in.	lb
4	8 D1	HEADWALL		20		31	6.00													31	6	31	6	336
4	8 D2	HEADWALL		20		8	0.00													8		8		85
			Г																					
6	8 H1	HEADWALL		20		31	6.00													31	6	31	6	505
16	6 H2	TOP SLAB		20		30	10.00													30	10	30	10	741
60	6 H3	TOP SLAB	П	19			15.00	2	10.00											4	1	3	11	353
60	6 H4	TOP SLAB	Т	255	П		15.00		5.00	2	3.00						3.50		3.50	3	11	3	10	345
					Г																			
33	5 R1	HEADWALL	Г	135			9.00	2	0.00		9.00	2	0.00							6	5	6	1	209
33	5 R2	HEADWALL	Г	115				2	1.00		9.00	:	21.00							4	7	4	4	149
			Г																					
					Г																			
					Ι																			

TIMOTHY D. LEAF NUMBER PE-2012000778

09/10/2025 1:33:14 PM TIMOTHY D. LEAF - CIVIL

PUTNAM

J1S3442

CONTRACT ID.

PROJECT NO.

BRIDGE NO

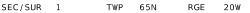
J04011

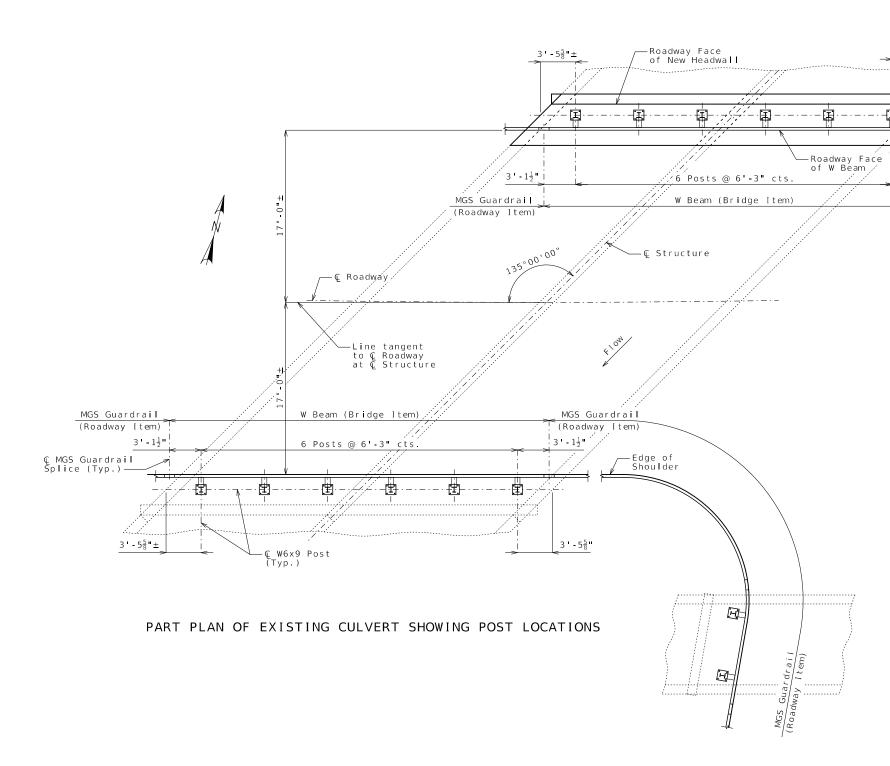
MO

SHEET NO

5

BILL OF REINFORCING STEEL





Estimated Quantities						
Item		Total				
Partial Removal of Culvert Concrete	lump sum	1				
Class B-1 Concrete (Culverts-Bridge)	cu. yard	11.9				
Reinforcing Steel (Culverts-Bridge)	pound	2050				
Bridge Guardrail (W-Beam)	linear foot	75				

General Notes:

MGS Guardrail

Splice (Typ.)

MGS Guardrail

(Roadway Item)

3 ' - 1½"

Design Specifications:

2002 AASHTO LFD (17th Ed.) Standard Specifications

Design Unit Stresses:

Class B-1 Concrete (Box Culvert) f'c = 4,000 psi Reinforcing Steel (ASTM A615 Grade 60) fy = 60,000 psi

Refinion ching steel (ASIM A015 Grade 60) Ty = 60,000

Standard Plans: 606.50

Miscellaneous:

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

Dimensions are based on existing bridge plans. Contractor shall verify all dimensions in field.

Existing post and thrie beam removal shall be considered completely covered by roadway pay item. Anchor bolts of existing rail posts shall be cut off one inch into the deck concrete and the resulting holes backfilled with an approved qualified special mortar.

Cost of required excavation for the installation of Thrie Beam post and the determination of the post height shall be considered completely covered by the contract unit price for Bridge Guardrail (Thrie Beam)

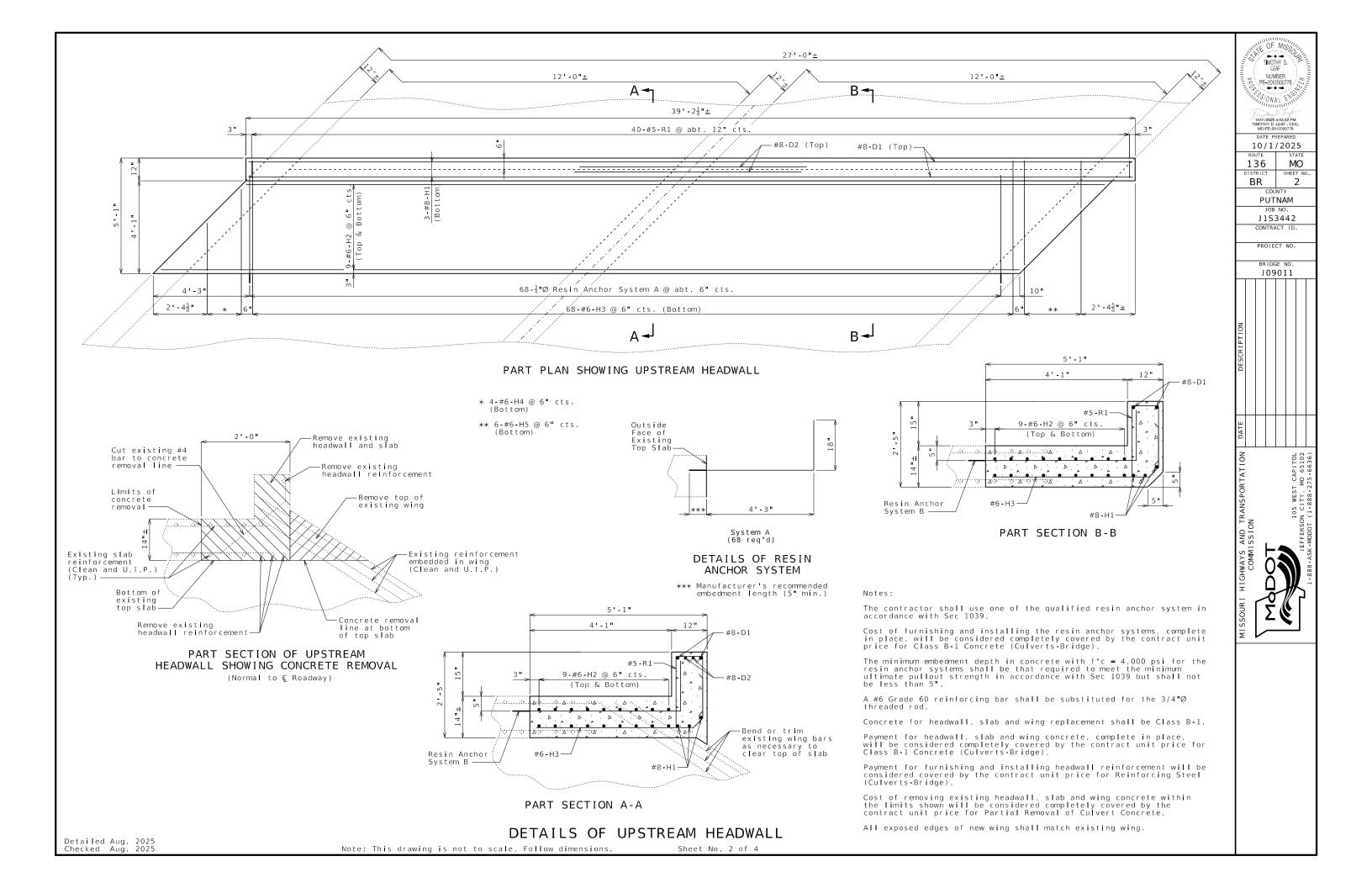
Traffic Handling:

Traffic to be maintained on structure during construction. See roadway plans for traffic control.

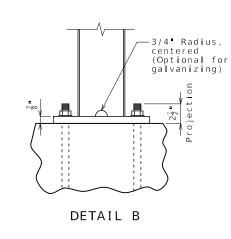
REPAIRS TO BRIDGE: ROUTE 136 OVER TANYARD BRANCH

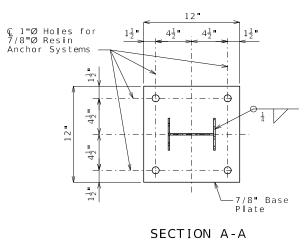
ROUTE 136 FROM ROUTE H TO ROUTE EE ABOUT 0.1 MILE WEST OF ROUTE H TIE STA. 795+50.00 OF MISSONAL ENTERPRISE OF MISSONAL ENTERPRISE OF MISSONAL ENTERPRISE OF ACT OF





Detailed Aug. 2025 Checked Aug. 2025 PART SECTION THRU TOP SLAB SHOWING RAIL POST ATTACHMENT





General Notes:

Furnishing and installing posts and guardrail on culvert as shown on this sheet will be considered completely covered by the contract unit price for Bridge Guardrail (W-Beam).

Furnishing and installing posts and guardrail on culvert shall be in accordance with Sec 606 except as shown.

Rail posts shall be seated on 1/16-inch elastomeric pads having the same dimensions as the post base plate. Such pads may be any elastomeric material, plain or fibered, having hardness (durometer) of 50 or above, as certified by the manufacturer. Additional pads or half pads may be used in shimming for alignment. Post heights shown will increase by the thickness of the pad.

Posts and base plates shall be fabricated from ASTM A709 Grade 36 steel and galvanized.

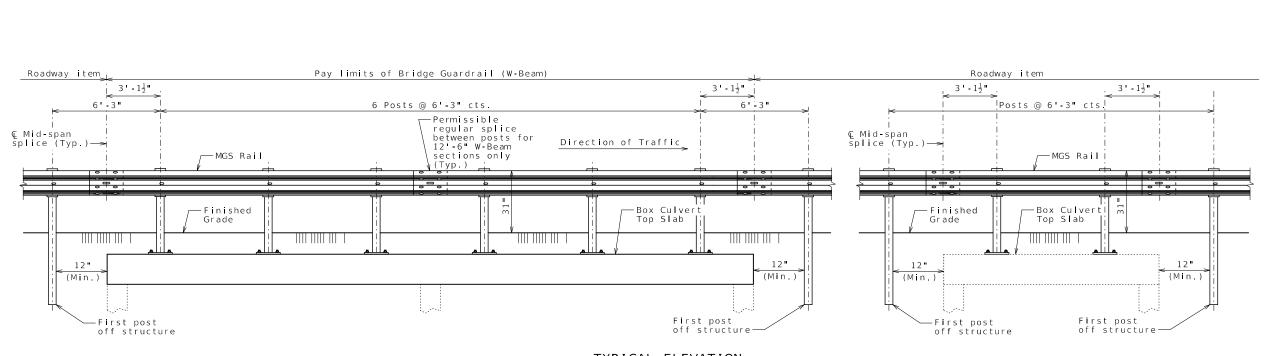
Fabrication of structural steel shall be in accordance with Sec 1080.

The contractor shall use one of the qualified resin anchor systems in accordance with Sec 1039.

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Bridge Guardrail (W-beam).

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 8 inches.

See Missouri Standard Plans drawing 606.50 for details not shown.



TYPICAL ELEVATION

Upstream side shown, downstream side similar.

MIDWEST GUARDRAIL SYSTEM (MGS) ON BOX CULVERT

10/01/2025 4:03:43 PM TIMOTHY D. LEAF - CIVI MO-PE-2012000778 DATE PREPARED

10/1/2025

ROUTE STATE
136 MO

DISTRICT SHEET NO
BR 3

BR COUNTY
PUTNAM
JOB NO.
J1S3442

CONTRACT ID.

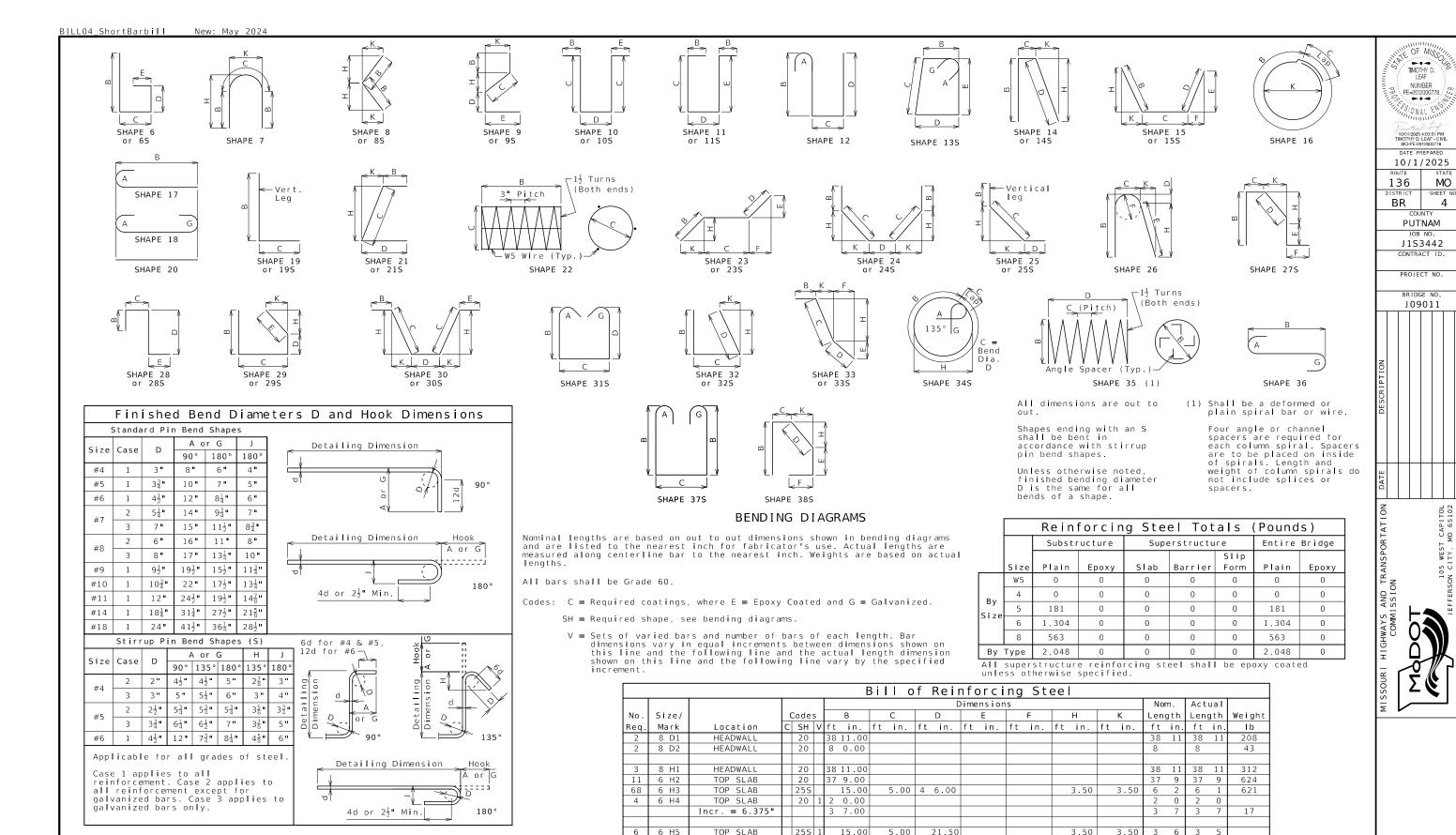
PROJECT NO.

BRIDGE NO.
J09011

COMMISSION

COMMISSION

105 WEST CAPITOL



BILL OF REINFORCING STEEL

40

5 R1

Incr. = 6.000"

HEADWALL

Detailed Aug. 2025

15.00

5.00 4 3.50

9.00

21.00

2 1.00

3.50

6 0

5 11

4 4

181

3.50

DESIGN DESIGNATION

FROM ROUTE 5 (S) TO ROUTE 5 (N)

A.A.D.T. - 2022 = 4.032 A.A.D.T. - 2036 = 4,324 V = 60 M.P.H

D = 46% / 54%

FROM ROUTE 5 (N) TO END

FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

A.A.D.T. - 2022 = 1,252 A.A.D.T. - 2036 = 1,285T = 20%

> V = 60 M.P.H. D = 50% / 50%

FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL

NO RIGHT-OF-WAY ACQUISITION

CONVENTIONAL SYMBOLS

BUILDINGS AND STRUCTURES ロモニコ GUARD RAIL •••• GUARD CABLE •••• CONCRETE RIGHT-OF-WAY MARKER STEEL RIGHT-OF-WAY MARKER LOCATION SURVEY MARKER \circ UTILITIES FIBER OPTICS -FO--FO- OVERHEAD CABLE TV -OTV--OTV- UNDERGROUND CABLE TV OVERHEAD TELEPHONE -UTV-- OT --UTV- -OT- - UT -- OE -- UE -- S -- SS -—UT— —OE— UNDERGROUND TELEPHONE OVERHEAD POWER UNDERGROUND POWER —UE— —S SANITARY SEWER STORM SEWER -ss-WATER MANHOLE w W W FIRE HYDRANT WATER VALVE ··· WATER METER DROP INLET DITCH BLOCK = GROUND MOUNTED SIGN LIGHT POLE H-FRAME POWER POLE TELEPHONE PEDESTAL Δ FENCE

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

 \boxtimes

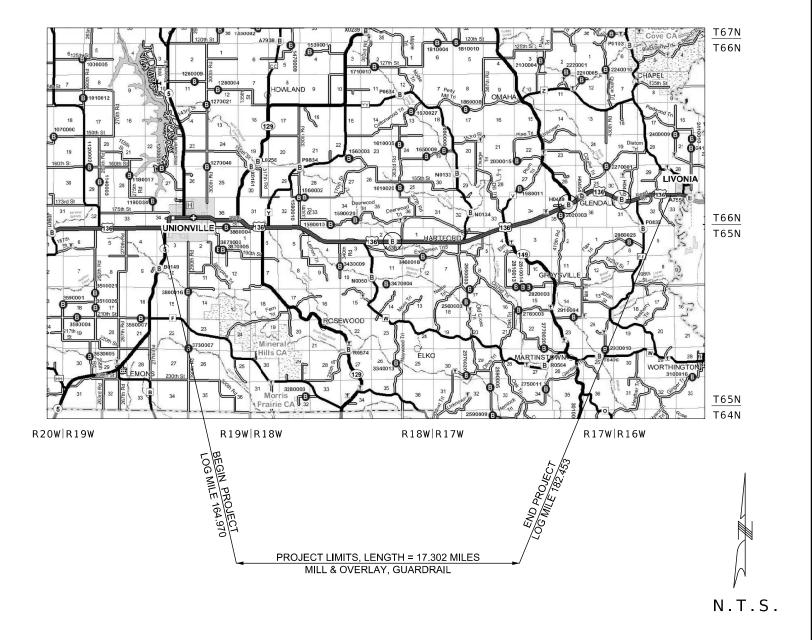
CHAIN LINK WOVEN WIRE GATE POST

BENCHMARK

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



PLANS FOR PROPOSED STATE HIGHWAY PUTNAM 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) (02 SHEETS)	2
QUANTITIES (QU) (05 SHEETS)	3
PLAN (PL)	4
SPECIAL SHEETS (SS) (2 SHEETS)	5 - 6
TRAFFIC CONTROL SHEETS (TC)	7 - 11

ANNE ANNE SCHRÖGER NUMBER NUMBER NUMBER SCHRÖGER NUMBER NU										
	PREPARED	A TROUTOU								
	8/2025	_ [
ROUTE	STATE	ľ								
136	MO SHEET NO.	_								
NW	1 1	_ L								
	OUNTY									
PU	TNAM									
JNV	ов NO. VOO43	H								
CONT	RACT ID.	1								
PRO.										
BRI	DGE NO.	_ :								
	\top	- 6								
		1								
		Ĺ								
		2								

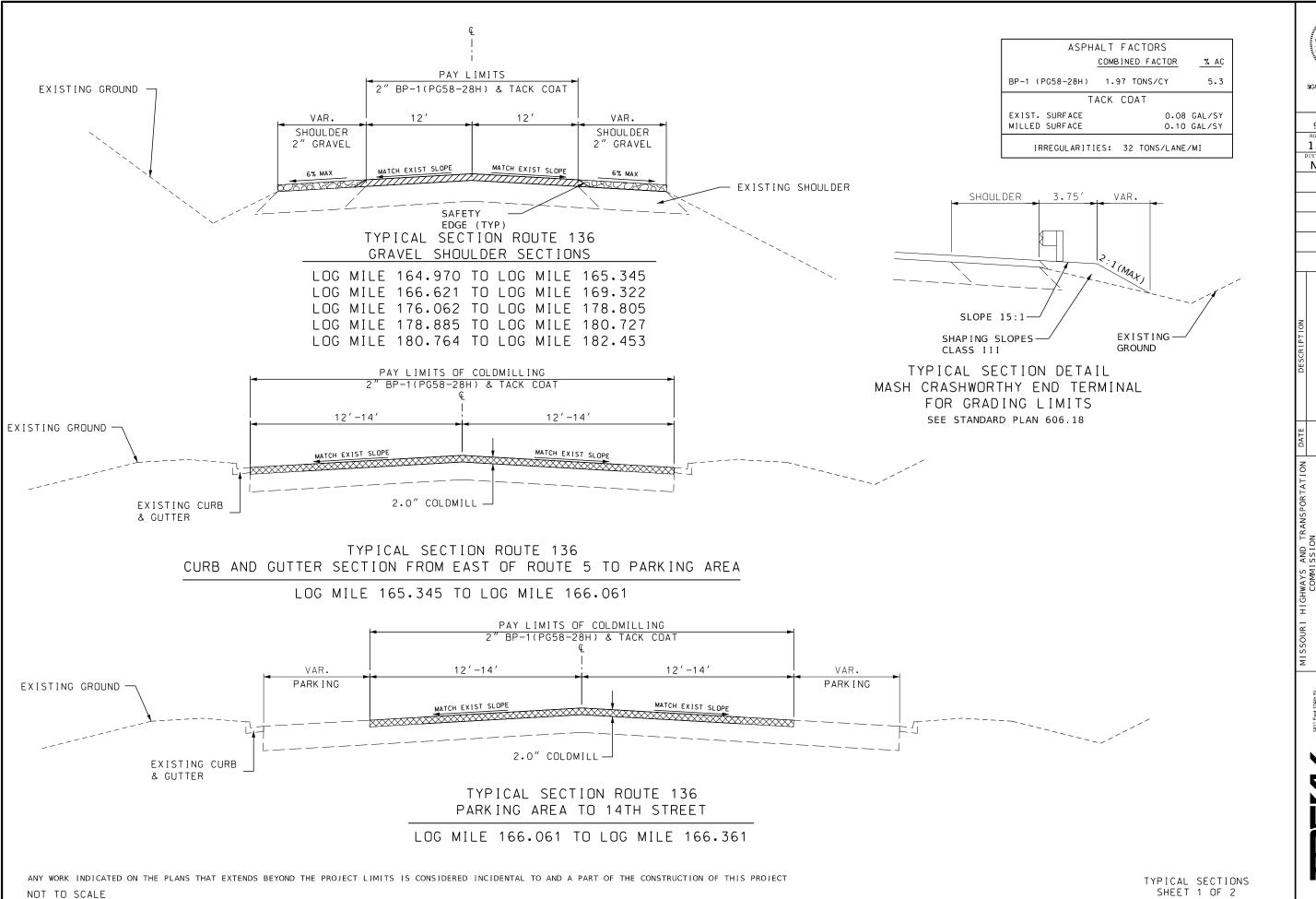
LENGTH OF PROJECT

BEGINNING OF PROJECT END OF PROJECT	LOG MILE 164.970
APPARENT LENGTH	17.483 MILE
EQUATIONS AND EXCEPTIONS:	
LM 172.878 TO LM 172.944 (BRIDGE A6381) BLACK BIRD CREEK	-348.48 FT
LM 178.805 TO LM 178.885 (BRIDGE HO439) SHOAL CREEK	-422.4 FT
LM 180.727 TO LM 180.764 (BRIDGE H0440) BRUSH CREEK	-195.36 FT

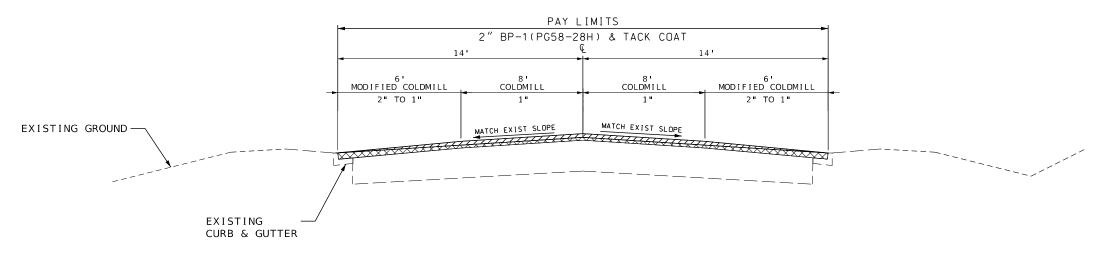
TOTAL CORRECTIONS	-966.24	FEET
NET LENGTH OF PROJECT	91,344.00	FEET
STATE LENGTH	17.300	MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	0.00	ACRES





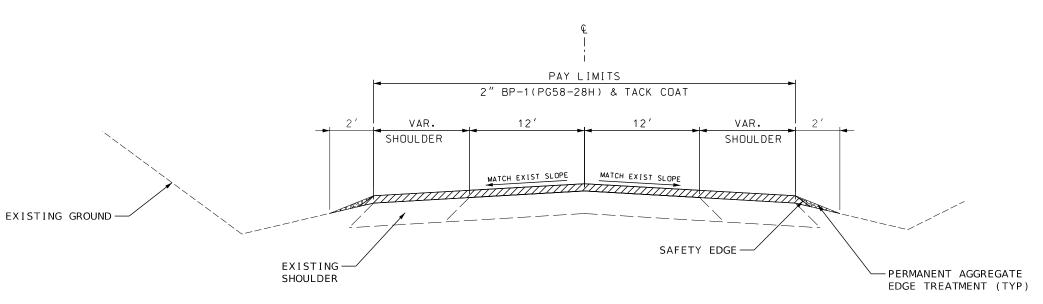


THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY, 9/25/2025 136 MO NW 2 PUTNAM JNW0043 PROJECT NO BRIDGE NO.



TYPICAL SECTION ROUTE 136 14TH STREET TO 10TH STREET

LOG MILE 166.361 TO LOG MILE 166.621



TYPICAL SECTION ROUTE 136 ASPHALT SHOULDER SECTIONS

LOG MILE 169.322 TO LOG MILE 172.878 LOG MILE 172.944 TO LOG MILE 176.062

TYPICAL SECTIONS SHEET 2 OF 2



DATE PREPARED						
9/25/2025						
ROUTE	STATE					
136	MO					
DISTRICT	SHEET NO.					
NW	2					
COUNTY						

PUTNAM

JOB NO.

JOB NO.
JNW0043
CONTRACT ID.

PROJECT NO

DATE DESCRIPTION

HIGHWAYS AND TRANSPORTATION COMMISSION

MISSOURI HIGHWAYS A

1411 East 104th St. Kansas City, MO 64131 Tel (816) 874-4655 Fax (816) 874-4675 ww.trekkdesigngroup.com



MOBILIZATION 1 LUMP SUM

CONTRACTOR FURNISHED SURVEYING & STAKING 1 LUMP SUM

	DEMOVAL OF I	ADDOVENATALEC								
REMOVAL OF IMPROVEMENTS										
LOCATION	DESCRIPTION	AMOUNT	UNITS	REMARKS						
VAR I OUS	GUARDRAIL CET	35	EA	SEE GUARDRAIL QUANTITIES FOR LOCATIONS						
VAR I OUS	GUARDRA I L	6738	LF	SEE GUARDRAIL QUANTITIES FOR LOCATIONS						
VAR I OUS	GUARDRAIL BRIDGE TRANSITION	4	EA	SEE GUARDRAIL QUANTITIES FOR LOCATIONS						
NW CORNER, 25TH STREET	CURB AND GUTTER	9	LF	DI ADJUSTMENT						
WEST SIDE OF WEST CASEY'S ENTRANCE	CURB AND GUTTER	5	LF	DI RECONSTRUCTION						
WEST SIDE OF WEST CASEY'S ENTRANCE	DI COVER	1	EA	DI RECONSTRUCTION						
	TOTAL	1 LUMP SUM		<u> </u>						

DROP INLETS								
LOCATION	CURB AND	ADJUSTING	CURVED VANE	REINFORCING	CLASS B	REMARKS		
	GUTTER	BASIN	GRATE AND FRAME	STEEL	CONCRETE			
	TYPE A	OR INLET	(4 FT X 2 FT)	EPOXY COATED	(MISC)			
	(LF)	(EA)	(EA)	(LBS)	(CY)			
NW CORNER 25TH STREET	9	1						
WEST SIDE OF WEST CASEY'S ENTRANCE	5	1	1	120	0.8	SEE SPECIAL SHEET FOR DETAIL		
TOTALS	14	2	1	120	0.8			



THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

DATE PREPARED 9 / 25 / 2025 ROUTE STATE

136 MO
DISTRICT SHEET NO.

NW 3

PUTNAM

JOB NO.

JNW0043

CONTRACT ID.

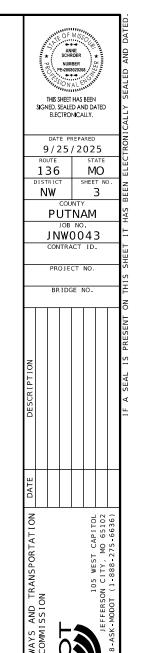
PROJECT NO.

BRIDGE NO.



	RESURFACING													
LOG	LOG			LENGTH	BP-1	BP-1	TACK	TACK	TACK COAT		' '	COLDMILLING		REMARKS
MILE	MILE	MIDIH	WIDTH		(PG58-28H)	, ,	COAT	COAT		NON-TRACK ING		3 IN THICK	COLDMILLING	
EB	EB				2" THICK	2" THICK		MILLED	0.08 GAL/SY	0.1 GAL/SY	STONE (B)	OR LESS		
					MAINLINE	SHOULDER		AREA		MILLED AREA				
					1.97	1.97	0.08	0.1			1.83			
					TONS/CY	TONS/CY	GAL/SY	GAL /SY			TON/CY			
					10113701	10113701	0,12,31	0,12,31			1011701			
		(LF)	(LF)	(LF)	(TON)	(TON)	(GAL)	(GAL)	(GAL)	(GAL)	(TON)	(SY)	(SY)	
164.970	165.345	24	20	1980.00	591.2		432.2				869.8			GRAVEL SHOULDER SECTION (2 FEET ADDED TO INSIDE OF FIRST CURVE WEST SIDE OF TOWN)
165.345	165.922	24		3046.56	889.1					812.4		8124.2		CURB AND GUTTER SECTION TO EAST OF ROUTE 5
165.922	166.061	28		733.92	249.9					228.3		2283.3		CURB AND GUTTER SECTION FROM EAST OF ROUTE 5 TO DOWNTOWN PARKING
166.061	166.321	24		1372.80	400.7					366.1		3660.8		SECTION WITH CITY PARKING AREA
166.321	166.361	28		211.20	71.9					65.7		657.1		TO 14TH STREET
166.361	166.602	28		1272.48	433.3				316.7			3110.5	848.3	CURB AND GUTTER SECTION
166.602	166.621	28		100.32	34.2				25.0			245.2	66.9	END OF CURB AND GUTTER SECTION
166.621	169.322	24	16	14261.28	4245.9		3073.0				5077.4			GRAVEL SHOULDER SECTION (2 FEET ADDED TO INSIDE OF FIRST 4 CURVES EAST SIDE OF TOWN)
169.322	172.878	24	16	18775.68	5479.7	3653.1	6604.7	88.9					888.9	ASPHALT SHOULDER SECTION
172.878	172.944			348.48										BRIDGE OVER BLACK BIRD CREEK (A6381) INCLUDES APPROACH PAVEMENT
172.944	176.062	24	16	16463.04	4804.8	3203.2	5782.4	88.9					888.9	ASPHALT SHOULDER SECTION
176.062	178.805	24	16	14483.04	4226.9		3047.0	53.3			5235.4		533.3	GRAVEL SHOULDER SECTION
178.805	178.885			422.40										BRIDGE OVER SHOAL CREEK (H0439)
178.885	180.727	24	12	9725.76	2838.5		2032.2	53.3			2636.8		1066.7	GRAVEL SHOULDER SECTION
180.727	180.764	24	12	195.36										BRIDGE OVER BRUSH CREEK (H0440) INCLUDES APPROACH PAVEMENT
180.764	182.453	24	12	8917.92	2602.7		1859.8	53.3			2417.7		533.3	GRAVEL SHOULDERS SECTION
			SUE	BTOTALS	26868.8	6856.3	22831	338	342	1473	16237	18081	4826	
•	•		SUE	BTOTALS	1356.1			9558			5937		5429	ENTRANCES AND SIDEROADS
			ADE	DITIONS	537.4									2% FOR SAFETY EDGE
			ADE	DITIONS	1107.2									32 TONS/LANE MILE FOR SURFACE IRREGULARITIES
				TOTALS	367	725.8	32	727	18	15	22174	18081	10255	

					ENTRAI	NCES AND S	IDEROADS	
SIDEROAD	WIDTH	WIDTH	LENGTH	BP - 1	TACK	GRAVEL (A)	MODIFIED	REMARKS
	AT	l at l	TO	(PG58-28H)	COAT	CRUSHED	COLDMILLING	
	ROUTE 136	SIDEROAD	RADIUS	`2" THICK		STONE (B)		
	1.0012 130		POINT	MAINLINE		310112 (8)		
			FOINI		0 0	1 02		
				1.97	0.8	1.83		
				TONS/CY	GAL/SY	TON/CY		
	(LF)	(LF)	(LF)	(TON)	(GAL)	(TON)	(SY)	
JEFFERSON STREET	50	35	15	4.1	30.0		37.5	RESURFACE TO THE RADIUS POINT ONLY
8TH STREET	43	25	15	4.9	36.0		45.0	RESURFACE TO THE RADIUS POINT ONLY
ROUTE 129 (N)	125	40	35	112.6	787.8		533.3	
ROUTE 129 (S)	112	26	55	144.6	1021.8		533.3	
ROUTE Y	110	28	45	125.7	883.1		533.3	
ROUTE W	100	32	40	108.0	753.8		533.3	
ROADSIDE PARK	60	43	30	67.7	459.1		533.3	
ROUTE YY	100	30	45	115.8	811.1		533.3	
ROUTE 149 (S)	105	35	50	122.2	857.8		533.3	
ROUTE V	100	35	40	105.8	737.8		533.3	
ROUTE 149 (N)	150	34	55	174.7	1241.8		533.3	
ROUTE FF	150	22	90	268.5	1927.1		533.3	
ENTRANCES	25		5	1.5	11.1		13.9	1 ENTRANCE (ASPHALT)
ENTRANCES	20		5		<u> </u>	1220.0		60 ENTRANCES (GRAVEL)
SIDEROAD	40		10			4717.3		58 SIDEROADS AND WIDE ENTRANCES (GRAVEL)
		SU	BTOTALS	1356.1	9558	5937	5429	SEE RESURFACING QUANTITIES



SUMMARY OF QUANTITIES SHEET 2 OF 5

				GUARDRA I L		
LOG	LOCATION	MGS	TYPE A	MGS	SHAPING	REMARKS
MILE		GUARDRA I L	CRASHWORTHY	BRIDGE APPROACH	SLOPES	
EB		8FT POSTS	END TERMINAL	TRANSITION	CLASS III	
		6 FT-3 IN SPACING	(MASH)	(REGULAR/NO CURB)	MODIFIED	
		(LF)	(EA)	(EA)	(100 FT)	
172.823	ALL 4 CORNERS	750	4	4	*	BRIDGE OVER BLACK BIRD CREEK (A6381)
176.143	EB	212.5	2		3.63	PIPE, HGH BANK, EAST OF DEERWOOD TRAIL
176.143	WB	262.5	2		4.13	PIPE, HGH BANK, EAST OF DEERWOOD TRAIL
176.683	EB	450	2		6.00	PIPE, HGH BANK, WEST OF ROUTE V
176.683	WB	425	2		5.75	PIPE, HGH BANK, WEST OF ROUTE V
177.164	EB	375	2		5.25	PIPE, HGH BANK, SECOND RUN WEST OF ROUTE V
177.164	WB	462.5	2		6.13	PIPE, HGH BANK, SECOND RUN WEST OF ROUTE V
177.824	EB	312.5	2		4.63	PIPE, HIGH BANK
177.924	EB	350	2		5.00	PIPE, HIGH BANK
177.924	WB	350	2		5.00	PIPE, HIGH BANK
178.864	NW, NE, SW CORNERS		3		*	BRIDGE OVER SHOAL CREEK (H0439), END SECTIONS ONLY
180.744					*	BRIDGE OVER BRUSH CREEK (H0440), UIP
181.585	EB	750	2		9.00	EAST OF ROUTE FF
181.585	WB	812.5	2		9.63	EAST OF ROUTE FF
181.863	EB	350	2		5.00	EAST OF REED TRAIL ROAD
182.163	EB	587.5	2		7.38	EAST OF 447TH ROAD
182.163	WB	287.5	2		4.38	EAST OF 447TH ROAD
	TOTALS	6738	35	4	81	

K	SLOPE	ΙN	GOOD	CONDITION

	RUMBLE STRIPS										
LOG	LOG	LENGTH	SHOULDER	CENTERLINE	REMARKS						
MILE	MILE		RUMBLE	RUMBLE							
EB	EB		STRIP	STRIP							
		(LF)	(100 FT)	(100 FT)							
166.920	169.322	31458.24	629.16	314.58	50 MPH OR GREATER GRAVEL SHOULDERS						
169.322	172.878	19124.16	382.48	191.24	ASPHALT SHOULDER SECTION						
172.878	172.944	348.48			BRIDGE OVER BLACK BIRD CREEK (A6381) INCLUDES APPROACH PAVEMENT						
172.944	178.805	30946.08	618.92	309.46	ASPHALT SHOULDER SECTION						
178.805	178.885	422.4			BRIDGE OVER SHOAL CREEK (H0439)						
178.885	180.727	9725.76	194.52	97.26	GRAVEL SHOULDER SECTION						
180.727	180.764	195.36			BRIDGE OVER BRUSH CREEK (H0440) INCLUDES APPROACH PAVEMENT						
180.764	182.453	8917.92	178.36	89.18	GRAVEL SHOULDER SECTION						
	SU	BTOTALS	2003.44	1001.72							
	SU	BTOTALS	140.35	0.00	ENTRANCES AND SIDEROADS (SUBTRACT)						
		TOTALS	1863.1	1001.7							

PERMANENT AGGREGATE EDGE TREATMENT										
LOG	LOG	LENGTH	WIDTH	DEPTH	VOLUME	PERMANENT	REMARKS			
MILE	MILE					AGGREGATE				
EB	EB					EDGE				
						TREATMENT				
						1.83				
						TON/CY				
		(LF)	(LF)	(INCH)	(CY)	(TON)				
169.322	172.878	18775.68	2	2	231.80	848.39	ASPHALT SHOULDER SECTION			
172.944	176.062	16463.04	2	2	203.25	743.90	ASPHALT SHOULDER SECTION			
					1592.29					
ADDITION						79.61	5% FOR VARIATIONS			
		•		•	1672					



1411 East 104th St. Kansas City, MO 64131 Tel (816) 874-4655 Fax (816) 874-4675 www.trekkdesigngroup.com



LOG			PAVEMENT MARKING									
	LOG	LENGTH	4 INCH WHITE	4 INCH YELLOW	REMARKS							
MILE	MILE		CLASS 1	CLASS 1								
			PAVEMENT MARKING	PAVEMENT MARKING								
			PAINT	PAINT								
				l l								
		(==\		(18-MIL, TYPE P BEADS)								
EB	EB	(FT)	(LF)	(LF)								
164.970	165.345	1980.00	3960	495								
165.345	166.621	6737.28		2884	CURB AND GUTTER SECTION							
166.621	167.238	3257.76	6516	6516	NO PASSING BOTH DIRECTION							
167.238 167.358	167.358	633.60 417.12	1267 834	792	NO PASSING ONE DIRECTION NO PASSING BOTH DIRECTION							
167.336	167.437 167.557	633.60	1267	834 792	NO PASSING BOTH DIRECTION NO PASSING ONE DIRECTION							
167.557	168.137	3062.40	6125	6125	NO PASSING ONE DIRECTION							
168.137	168.676	2845.92	5692	3557	NO PASSING ONE DIRECTION							
168.676	168.736	316.80	634	634	NO PASSING BOTH DIRECTION							
168.736	168.836	528.00	1056	660	NO PASSING ONE DIRECTION							
168 836	169.096	1372.80	2746	2746	NO PASSING BOTH DIRECTION							
169.096	169.216	633.60	1267	792	NO PASSING ONE DIRECTION							
169.216	169.297	427.68	855	855	NO PASSING BOTH DIRECTION							
169.297	169.476	945.12	1890	1181	NO PASSING ONE DIRECTION							
169.476	169.596	633.60	1267	1267	NO PASSING BOTH DIRECTION							
169.596	169.697	533.28	1067	667	NO PASSING ONE DIRECTION							
169.697	169.796	522.72	1045	1045	NO PASSING BOTH DIRECTION							
169.796	170.016	1161.60	2323	1452	NO PASSING ONE DIRECTION							
170.016	170.316	1584.00	3168	396								
170.316	170.516	1056.00	2112	1320	NO PASSING ONE DIRECTION							
170.516	170.715	1050.72	2101	2101	NO PASSING BOTH DIRECTION							
170.715	170.916	1061.28	2123	1327	NO PASSING ONE DIRECTION							
170.916	171.096	950.40	1901	238								
171.096	171.495	2106.72	4213	2633	NO PASSING ONE DIRECTION							
171.495	171.555	316.80	634	79								
171.555 171.735	171.735	950.40 105.60	1901 211	1188 211	NO PASSING BOTH DIRECTION							
171.755	171.755 172.173	2207.04	4414	2759	NO PASSING BOTH DIRECTION							
171.733	172.173	1272.48	2545	2545	NO PASSING ONE DIRECTION							
172.173	172.594	950.40	1901	1188	NO PASSING ONE DIRECTION							
172 594	173.734	6019.20	12038	1505	NO TASSING ONE DIRECTION							
173.734	173.912	939.84	1880	1175	NO PASSING ONE DIRECTION							
173.912	174.013	533.28	1067	1067	NO PASSING BOTH DIRECTION							
174.013	174.213	1056.00	2112	1320	NO PASSING ONE DIRECTION							
174.213	174.731	2735.04	5470	684								
174.731	174.929	1045.44	2091	1307	NO PASSING ONE DIRECTION							
174.929	174.97	216.48	433	433	NO PASSING BOTH DIRECTION							
174.970	175.169	1050.72	2101	1313	NO PASSING ONE DIRECTION							
175.169	176.509	7075.20	14150	1769								
176.509	176.863	1869.12	3738	2336	NO PASSING ONE DIRECTION							
176.863		2534.40	5069	634								
177.343	177.764	2222.88	4446	2779	NO PASSING ONE DIRECTION							
177.764	180.383	13828.32 1906.08	27657	3457	NO DACCING ONE DIRECTION							
180.383 180.744	180.744 180.825	1906.08 427.68	3812 855	2383 107	NO PASSING ONE DIRECTION							
180 744	180.825	739.20	1478	924	NO PASSING ONE DIRECTION							
180.823	181.105	739.20	1478	1478	NO PASSING ONE DIRECTION							
181.105	181.264	839.52	1679	1049	NO PASSING ONE DIRECTION							
181.264	181.504	1267.20	2534	317								
181.504	181.644	739.20	1478	924	NO PASSING ONE DIRECTION							
181.644	181.784	739.20	1478	1478	NO PASSING BOTH DIRECTION							
181.784	182.144	1900.80	3802	2376	NO PASSING ONE DIRECTION							
182.144	182.344	1056.00	2112	2112	NO PASSING BOTH DIRECTION							
182.344	182.453	575.52	1151	719	NO PASSING ONE DIRECTION							
	SU	BTOTALS	153954	71441								
	SU	BTOTALS	1904		FROM SIDEROADS							



THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

DATE PREPARED 9 / 25 / 2025 ROUTE STATE

136 MO
DISTRICT SHEET NO.

NW 3

PUTNAM

JOB NO.

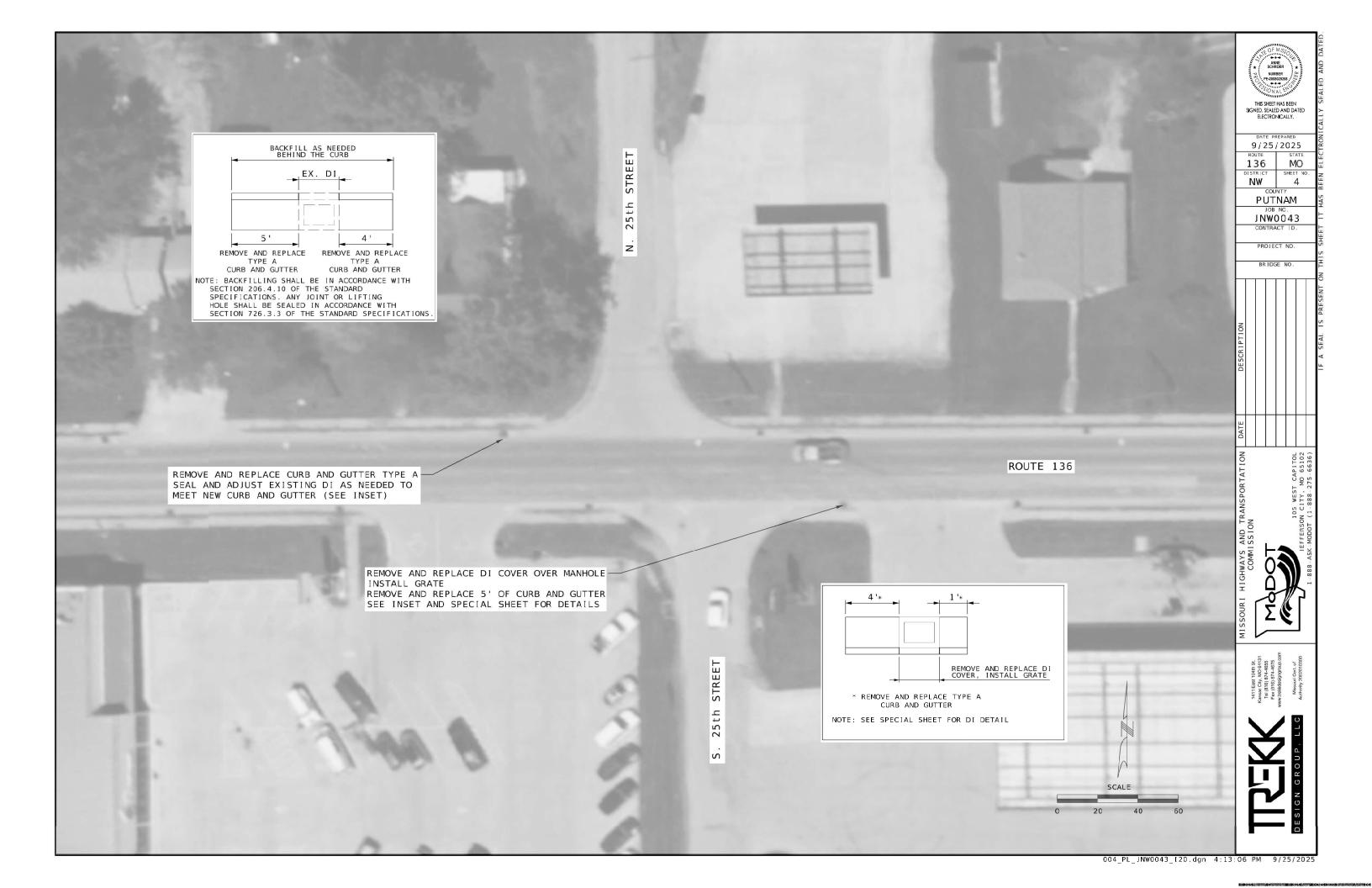
JNW0043

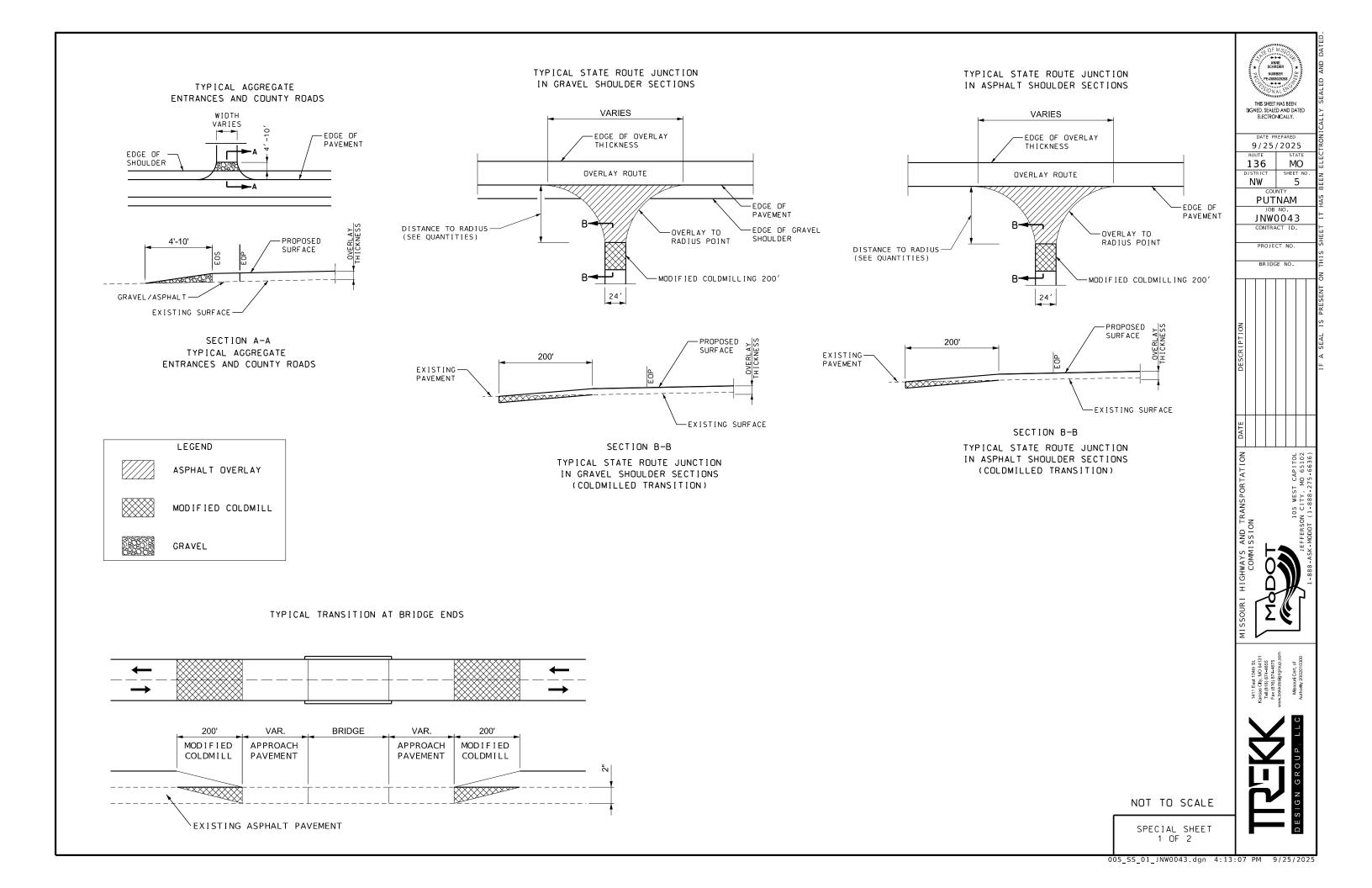
CONTRACT ID.

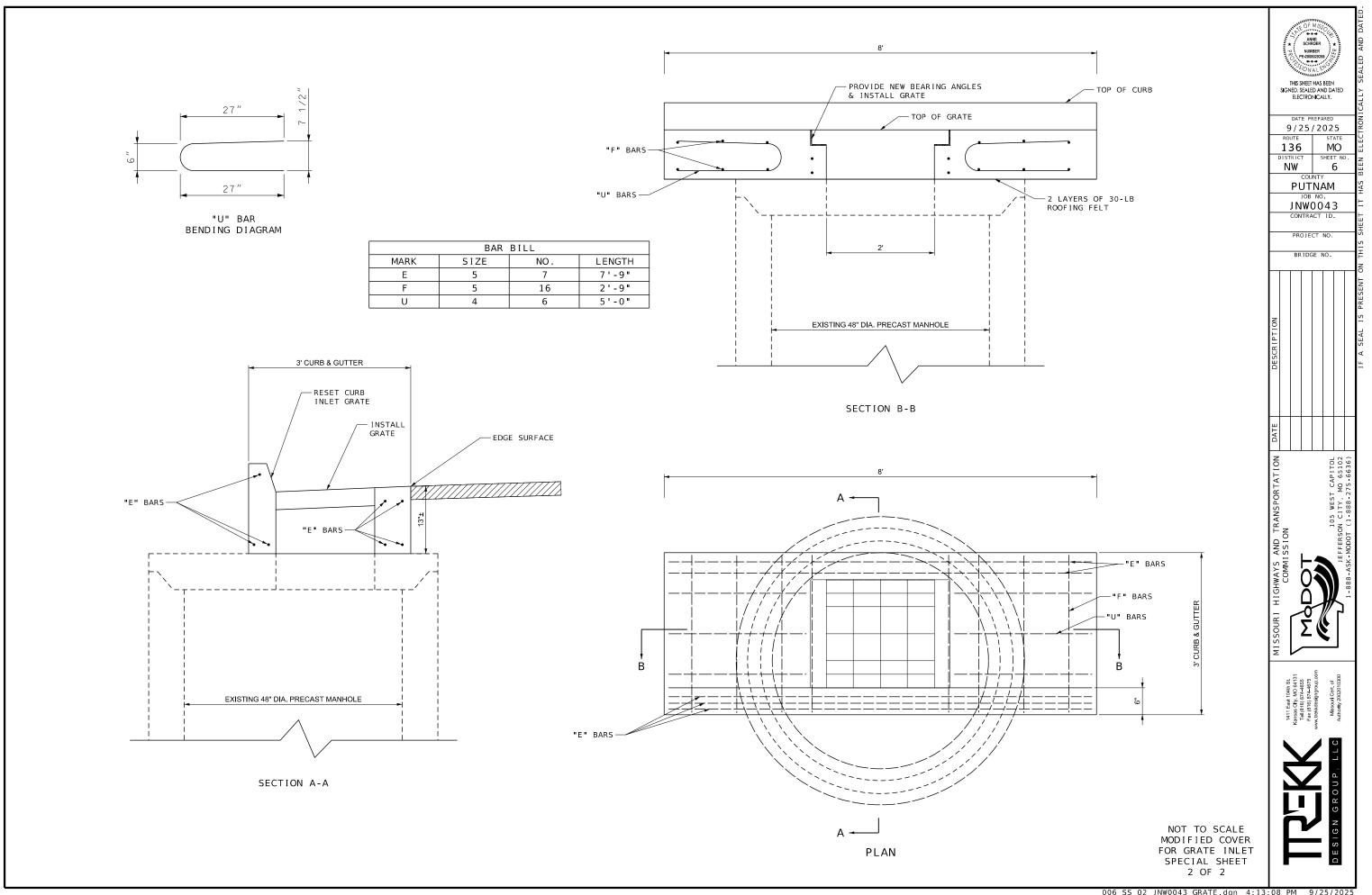
PROJECT NO.

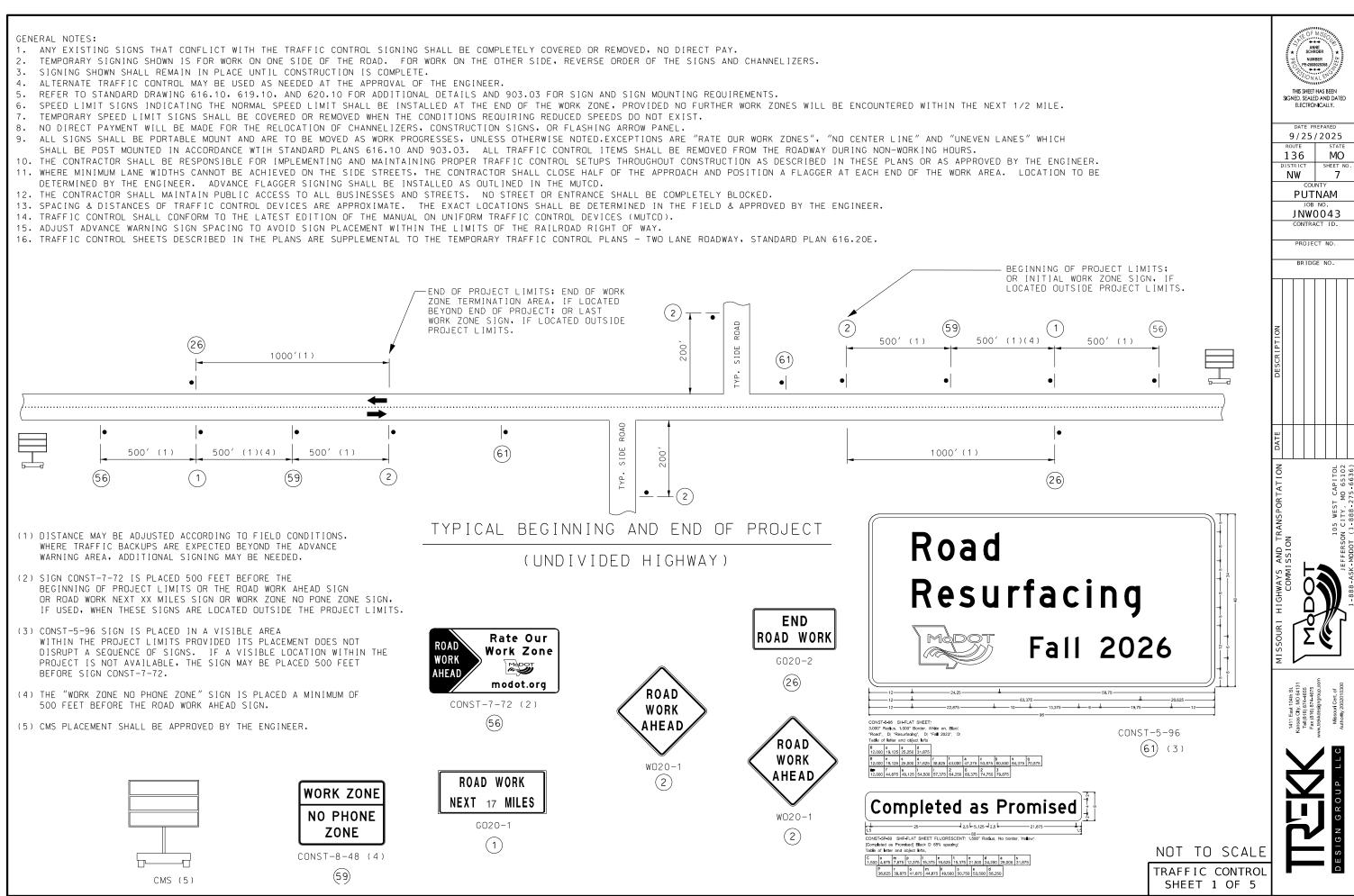


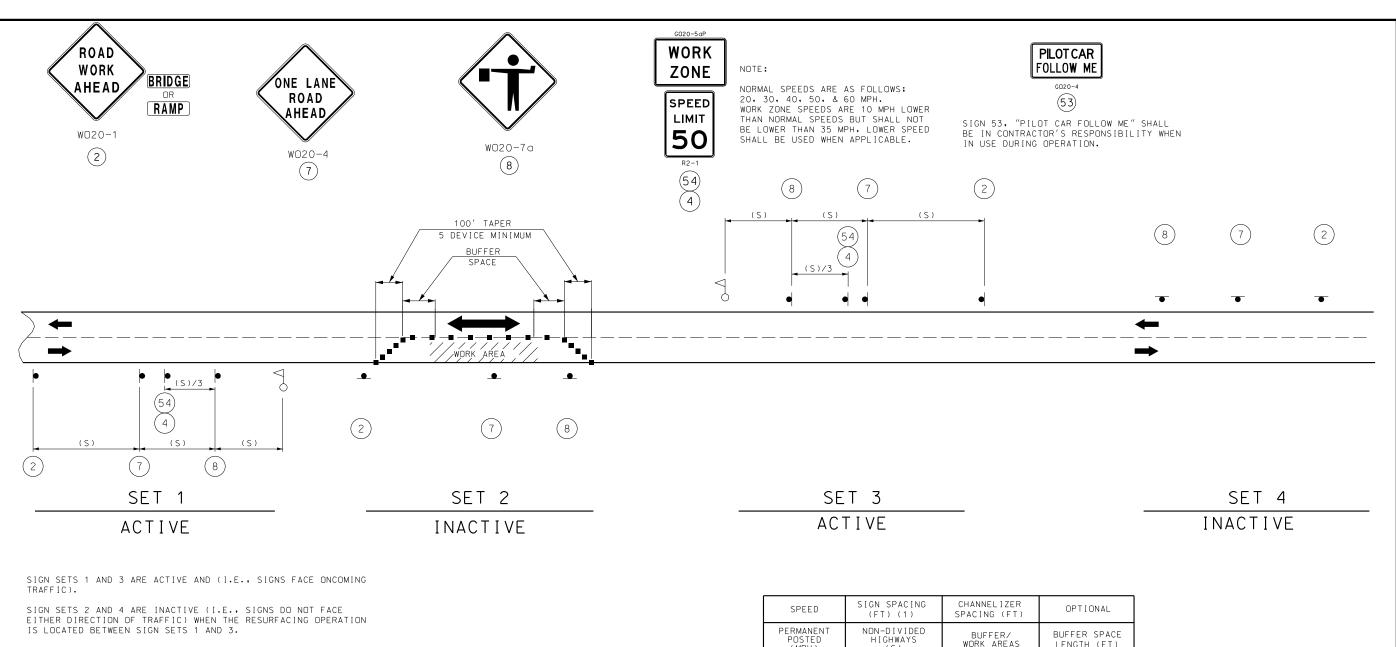
		1	1	TOTAL OTY ITOTA	A . I	1	1		_	1	ı	L OTY TOTAL			1	5555671V5 07 01 2025	
SIGN	SIZE	AREA		TOTAL QTY TOTA AREA RELOCIRELO			SIGN	 C 1 7 E	ADEA		TOTAL	RELOCRELOC	SIGN		ITEM	TOTAL EFFECTIVE: 07-01-2025	OF M/SC
3 I GIV	IN.		1 '	l I I		DESCRIPTION	3101	IN.			SQ.FT.	EACH SQ FT		DESCRIPTION		R OTY DESCRIPTION	ANNE
	IIV.	J3Q.11.	LACIT	WARNING SIGNS		DESCRIFTION		1111.	JQ.11.	LACII		IDE SIGNS	NO.	DESCRIPTION	6122008	`	ANNE * SCHROER *
WO1-1L	48X48	16.00				TURN (SYMBOL LEFT)	E05-1	36X48	12.00					GORE EXIT	6122009		PE-2008029268
WO1-1R	48X48	16.00				TURN (SYMBOL RIGHT)	E05-2	48X36	12.00					EXIT OPEN	6122010		NAL ENGLISH
WO1 - 2L		16.00				CURVE (SYMBOL LEFT)			12.00		20.00			EXIT CLOSED	6122012		THIS SHEET HAS BEEN SIGNED, SEALED AND DATED
WO1-2R WO1-3L		16.00				CURVE (SYMBOL RIGHT) REVERSE TURN (SYMBOL LEFT)	GO20-1 GO20-2		8.00	2	20.00			ROAD WORK NEXT XX MILES END ROAD WORK	6122014		ELECTRONICALLY.
WO1-3E WO1-3R		16.00				REVERSE TURN (SYMBOL RIGHT)	GO20-2		4.50	8	36.00			PILOT CAR FOLLOW ME	6122017		DATE DREDADED
WO1-4L	48X48	16.00				REVERSE CURVE (SYMBOL LEFT)	GO20-4a	+		8	70.00				6122020		DATE PREPARED 10/28/2025
WO1 - 4R		16.00				REVERSE CURVE (SYMBOL RIGHT)	GO20-4a			2	3.00			PILOT CAR IN USE WAIT & FOLLOW	6122030		ROUTE STATE
WO1-4bL WO1-4bR		16.00				DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)	GO20-5aP			4	24.00		54	WORK ZONE (PLAQUE)	6122040		136 MO
WO1-46K		16.00				DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT) TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)	MO4-8a MO4-9L		3.00					END DETOUR DETOUR (LEFT)	6122041 6123001		NW 3
WO1 -4cR						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)			12.00					DETOUR (RIGHT)	6161012		COUNTY
WO1-6	60X30	12.50				HORIZONTAL ARROW (SYMBOL)	MO4 - 9P	48X12	4.00					STREET NAME (PLAQUE)	6161013	BUOYS (NO WAKE)	PUTNAM JOB NO.
WO1-6a		18.00				HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)	MO4-10L							DETOUR ARROW (LEFT)	6161014		JNW0043
WO1 - 7		12.50				DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)	MO4 - 10R	48X18	6.00		DECIII	ATORY CLONG		DETOUR ARROW (RIGHT)	6161020		CONTRACT ID.
WO1-7a WO1-8	18X24	18.00				DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.) CHEVRON (SYMBOL)	R1 - 1	48X48	13.25		REGUL.	ATORY SIGNS		STOP	6161022 6161025		PROJECT NO.
WO1 -8a	30X36					CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)	R1-2		6 93					YIELD	6161026		PROJECT NO.
WO3 - 1		16.00				STOP AHEAD (SYMBOL)	R1-2a	+	9.00					TO ONCOMING TRAFFIC (PLAQUE)	6161030	·	BRIDGE NO.
WO3 - 2		16.00				YIELD AHEAD (SYMBOL)	R1-3P		2.50					ALL WAY (PLAQUE)	6161033		<u> </u>
WO3 - 3		16.00	0	138 00	1.1	SIGNAL AHEAD (SYMBOL)	R2-1		12.00	18	216.00		24/4	SPEED LIMIT 6-40, 6-50, 6-60	6161040		
WO3 - 4 WO3 - 5		16.00	8	128.00	11	BE PREPARED TO STOP SPEED LIMIT AHEAD	R3-1 R3-2		16.00					NO RIGHT TURN (SYMBOL) NO LEFT TURN (SYMBOL)	6161047 6161055		
WO4-1L		16.00				MERGE (SYMBOL FROM LEFT)	R3-2		9.00					NO TURNS	6161070		
WO4-1R		16.00				MERGE (SYMBOL FROM RIGHT)	R3-4		16.00					NO U-TURN (SYMBOL)	6161095		
WO4-1aL		16.00				MERGE (LEFT)	R3-7L		6.25					LEFT LANE MUST TURN LEFT		CHANGEABLE MESSAGE SIGN,	Ē
		16.00		22.00	2.4	MERGE (RIGHT)	R3 - 7R		6.25					RIGHT LANE MUST TURN RIGHT	6161096		
WO5 - 1 WO5 - 3		16.00	2	32.00	34	ROAD/BRIDGE/RAMP NARROWS ONE LANE BRIDGE	R4-1 R4-2		12.00					DO NOT PASS PASS WITH CARE	6161098	2 * CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED	ESC
WO5 - 5		16.00				NARROW LANES	R4 - 7a		12.00					KEEP RIGHT (HORIZONTAL ARROW)	0101030	CHANGEABLE MESSAGE SIGN WITH COMM.	
WO6 - 1	48X48	16.00				DIVIDED HIGHWAY (SYMBOL)	R4-8a	36X48	12.00					KEEP LEFT (HORIZONTAL ARROW)	6161099	INTERFACE, CONTRACTOR FURNISHED/RETAINED	
WO6 - 2		16.00				DIVIDED HIGHWAY END (SYMBOL)	R5 - 1		6.25					DO NOT ENTER	6162000		
WO6 - 3		16.00				TWO WAY TRAFFIC (SYMBOL)	R5-1a		6.00					WRONG WAY	6162002		
WO7-3a WO8-1	30X24 48X48	16.00				NEXT XX MILES (PLAQUE) BUMP	R6-1L R6-1R		6.75					ONE WAY ARROW (LEFT) ONE WAY ARROW (RIGHT)	6173600	TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED	ш
WO8 - 2		16.00				DIP	R6 - 2L		5.00					ONE WAY (LEFT)	0173000	TEMP. TRAFFIC BARRIER ANCHORED,	DAT
WO8 - 3		16.00				PAVEMENT ENDS	R6-2R		5.00					ONE WAY (RIGHT)	6173700	· ·	
WO8 - 4		16.00				SOFT SHOULDER	R9-9	24X12	2.00					SIDEWALK CLOSED		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION	ON 102 36)
WO8 - 5		16.00				SLIPPERY WHEN WET (SYMBOL)	DO 111	24710	2.00					SIDEWALK CLOSED AHEAD,	6173706		AT I
WO8-6 WO8-6c		16.00				TRUCK CROSSING TRUCK ENTRANCE	R9-11L	24818	3.00					(ARROW LEFT) CROSS HERE SIDEWALK CLOSED AHEAD,	6174000	TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED	ORTATION T CAPITOL MO 65102 -275-6636)
WO8 - 7	36X36					LOOSE GRAVEL	R9-11R	24X18	3.00					(ARROW RIGHT) CROSS HERE	6175010		TRANSPOI ON 105 WEST SON CITY, OT (1-888-2)
WO8 - 7a	36X36					FRESH OIL / LOOSE GRAVEL	R10-6		6.00					STOP HERE ON RED (45^ ARROW)	6175011	B RELOCATING TEMP. TRAFFIC BARRIER ANCHORED	ANS N 21 C 1 T C 1 T C 1 T C 1 T C 1 T C C I T C C I T C C I T C C C C C C C
WO8-9		16.00				LOW SHOULDER	R11-2	48X30	10.00					ROAD CLOSED	6175013		N N 10 10 (1)
WO8 - 11						UNEVEN LANES	D11 2-	COVO	12.50					ROAD CLOSED XX MILES AHEAD	6175020		ND S10 FERS
WO8 - 12 WO8 - 15				272.00	35	NO CENTER LINE GROOVED PAVEMENT	R11-3a R11-4							LOCAL TRAFFIC ONLY ROAD CLOSED TO THRU TRAFFIC	6208064 9029400		AN I SS
WO8-15P						MOTORCYCLE (PLAQUE)	CONST - 3A							FINE SIGN	9029401		YS MIM
WO8-17L	48X48	16.00				SHOULDER DROP-OFF (SYMBOL LEFT)	CONST - 3X				<u> </u>			SPEEDING/PASSING (PLATE)			
WO8 - 17R						SHOULDER DROP-OFF (SYMBOL RIGHT)				М	ISCELL	ANEOUS SIGN	1		*	ITEMS NOT INCLUDED IN LUMP CUM	
WO8 - 17P						SHOULDER DROP-OFF (PLAQUE)	CONST 5						-	POINT OF PRESENCE	T	ITEMS NOT INCLUDED IN LUMP SUM	
W10-1 WO12-1		9.62			-	RAILROAD CROSSING DOUBLE DOWN ARROW (SYMBOL)	CONST - 5				24 00			POINT OF PRESENCE WORK ZONE NO PHONE ZONE		TRAFFIC CONTROL	
WO12-1						LOW CLEARANCE (SYMBOL)	CONST - 7 -							RATE OUR WORK ZONE			2 &
W012-2x						LOW CLEARANCE (PLAQUE)											
WO12-2a						OVERHEAD LOW CLEARANCE (FEET AND INCHES)										l	Σ
WO12-4						LOW CLEARANCE XX FT XX IN XX MILES AHEAD			-								- E C
WO12-5 WO13-1		6.25			-	WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD ADVISORY SPEED (PLAQUE)	-		+		-						th St. 16413 4655 4675 σup.α t. of 110300
WO16-2						XXX FEET (PLAQUE)									61	16-99.01	st 1044 by, MO) 874-4) 874-4 signgr in Cer 20026
		5.00				X MILE (PLAQUE)										ISC. LUMP SUM TEMPORARY 1-LUMP SUM	11 Eas as Olt (816) ((816) ekkde: Aissou hortty:
WO20-1				128.00	2	ROAD/BRIDGE/RAMP WORK AHEAD									TR	RAFFIC CONTROL	1411 E Kansas 1 Tel (8' Fax (8 www.trekk
		16.00				DETOUR AHEAD	616 10	0.5			TOTAL					'	.
		16.00		64.00	7	ROAD CLOSED AHEAD ONE LANE ROAD AHEAD	616-10 CONSTR		N SIGN	ς	TOTAL 1778	-					
		16.00		07.00		RIGHT/CENTER/LEFT LANE CLOSED AHEAD	616-10		אוטוכ או	J	1//0	TOTAL	1				
WO20-5a						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD	RELOCA		I GNS				1				
WO20-6a						RIGHT/CENTER/LEFT LANE CLOSED							-				
WO20-7a			8	128.00	8	FLAGGER (SYMBOL)		NO	TE: IINI	ESS	NOTED	OTHERWISE	IN TH	E PLANS, ALL TRAFFIC CONTE	ROI DEV	VICES ARE INCLUDED IN	8
WO21-2 WO21-5		9.00	2	32 00	2.1	FRESH OIL SHOULDER WORK / SHOULDER WORK AHEAD								TEMPORARY TRAFFIC CONTROL			٥
		16.00		32.00	21	BLASTING ZONE AHEAD						•		CT TO CHANGE BASED UPON F		•	
WO22-2						TURN OFF 2-WAY RADIO AND PHONE		A111	- SIVE	, L	J . 11·1∕\ 1	/D AIL .	I - I	S. 13 SIMMOL BASED OF ON T			
WO22-3	42X36	10.50				END BLASTING ZONE										SUMMARY OF QUANTITIES	ш
GO22-1	21X15	2.19	2	4.38		WET PAINT (ARROW PIVOTS)										SHEET 5 OF 5	Ω
																JIILLI J OF J	











WHEN SIGN SETS 2 AND 4 ARE ACTIVE. SIGN SETS 1 AND 3 BECOME INACTIVE AND ARE ADVANCED TO BECOME SETS 2 AND 4 WITH SIGN LEGENDS TURNED AWAY FROM BOTH DIRECTIONS OF TRAFFIC.

WHEN THE RESURFACING OPERATION ADVANCES TO BETWEEN SIGN SETS 2 AND 4, SIGN SETS 2 AND 4 BECOME ACTIVE (I.E., NEW SIGN SETS 1 AND 3) AND SIGN SETS 1 AND 3 ADVANCED IN THE DIRECTION OF THE OPERATION (I.E., NEW SIGN SETS 2 AND 4).

- CHANNELIZERS

- FLAGGER

NOTES

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, INCLUDING ANY ACCEPTABLE SHOULDERS, TO LESS THAN 10' OR WILL SIGNIFICANTLY AFFECT THE RESURFACING OPERATION.

FLAG ASSEMBLIES FOR SIGN W020-70 ARE SUBSIDIARY TO THE SIGN.

SPEED	SPEED SIGN SPACING (FT) (1)		OPTIONAL
PERMANENT NON-DIVIDED POSTED HIGHWAYS (MPH) (S)		BUFFER/ WORK AREAS	BUFFER SPACE LENGTH (FT)
0-35	200	40	250
40-45	350	80	360
50-55	500	80	495
60-70	1000	120	730

NOTES:

(1) SPACING BETWEEN SIGNS, BETWEEN LAST SIGN AND FLAGGER, BEGINNING OF TAPER OR SIGNED CONDITION.

SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS, AS APPROVED BY ENGINEER.

MOVING FLAGGER OPERATION
(UNDIVIDED HIGHWAY)

NOT TO SCALE
TRAFFIC CONTROL
SHEET 2 OF 5

SANGE SCHOOLE SCHOOLE SCHOOLE SCHOOLE SCHOOLE SCHOOLE SCHOOLE SCHOOLE SCHOOLE SCHOOL S

THIS SHEET HAS BEEN
SIGNED, SEALED AND DATED
ELECTRONICALLY.

| DATE | PREPARED | 9 / 25 / 2025 | | STATE | | 136 | MO | | DISTRICT | | SHEET NO. | NW | 8 |

PUTNAM
JOB NO.
JNW0043

CONTRACT ID

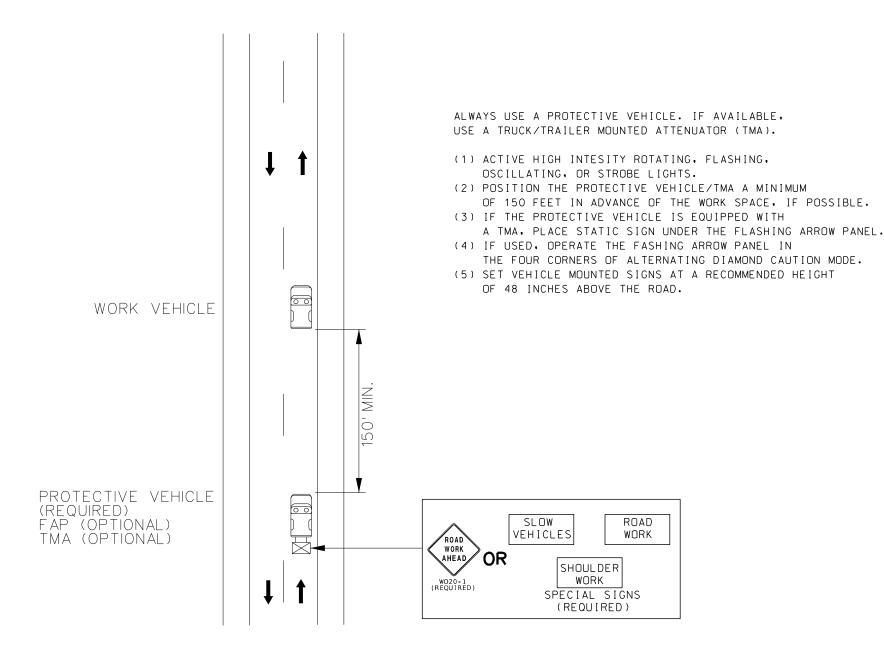
PROJECT NO

BRIDGE NO.

COMMISSION
COMISSION
COMMISSION
COMISSION
COMMISSION
COMMISSION
COMMISSION
COMMISSION
COMMISSION
CO

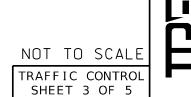
1411 East 104th St. Kansas City, MO 64131 Tal (1616) 874-4655 Fax (816) 874-4675 ww.trekkdesigngroup.com





TWO-LANE HIGHWAY

MOVING OPERATION ON HIGHWAY OPEN TO TRAFFIC





THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY,

9/25/2025

<u>L E G E N D</u>

___ SIGN (SINGLE SIDED)

▲ TRAFFIC CONE

CHANNELIZER (TRIM-LINE)

FLAGGER

REQUIRED - PROTECTIVE VEHICLE W/ 150' ROLL AHEAD SPACE

OPTIONAL - FLASHING ARROW PANEL (FAP)

OPTIONAL - TRUCK/TRAILER MOUNTED ATTENUATOR (TMA)



WORK ZONE

TAPER LENGTH AND SPACING						
SPEED LIMIT,	TAPER L	ENGTH <mark>,</mark> T	CHANNELIZIN F	BUFFER		
MPH MPH	SHOULDER⁴ (T1)	LANE ⁵ (T2)	TAPERS	BUFFER/ WORK AREA	LENGTH, FT	
0-35	35	100	25	40 ⁶	250	
40-45	35	100	25	80 ⁶	360	
50-55	35	100	25	807	495	
60-70	35	100	25	120 ⁷	730	

'POSTED SPEED LIMIT.

'TAPER LENGTHS MAY BE ADJUSTED.

'SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

'BASED ON 10FT SHOULDER WIDTH

BASED ON 12FT LANE WIDTH

'SPACING REDUCED TO1/2 AT INTERSECTIONS.

'SPACING MAY BE REDUCED TO $\!\!\!/_2\!\!\!$ AT INTERSECTIONS.

ADVANCE	WARNING SIGN MINIMUM SPACING								
SPEED LIMIT,	SIGN SPACING, FT (S)								
MPH MPH	UNDIVIDED HIGHWAY								
0-35	200 ³								
40-45	350								
50-55	500								
60-70	1000								

SHOULDER

WORK

WO21-5

(21)

POSTED SPEED LIMIT.

²SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

³FOR URBAN LOW SPEED, MINIMUM RECOMMENDED SPACING IS 100 FT.









NOTES:





* OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT



(NORMAL SPEED)
R2-1
(25)

LEGEND

___ SIGN (SINGLE SIDED)

▲ TRAFFIC CONE

CHANNELIZER (TRIM-LINE)

FLAGGER

REQUIRED - PROTECTIVE VEHICLE W/ 150' ROLL AHEAD SPACE

OPTIONAL - FLASHING ARROW PANEL

OPTIONAL - TRUCK/TRAILER MOUNTED ATTENUATOR (TMA)

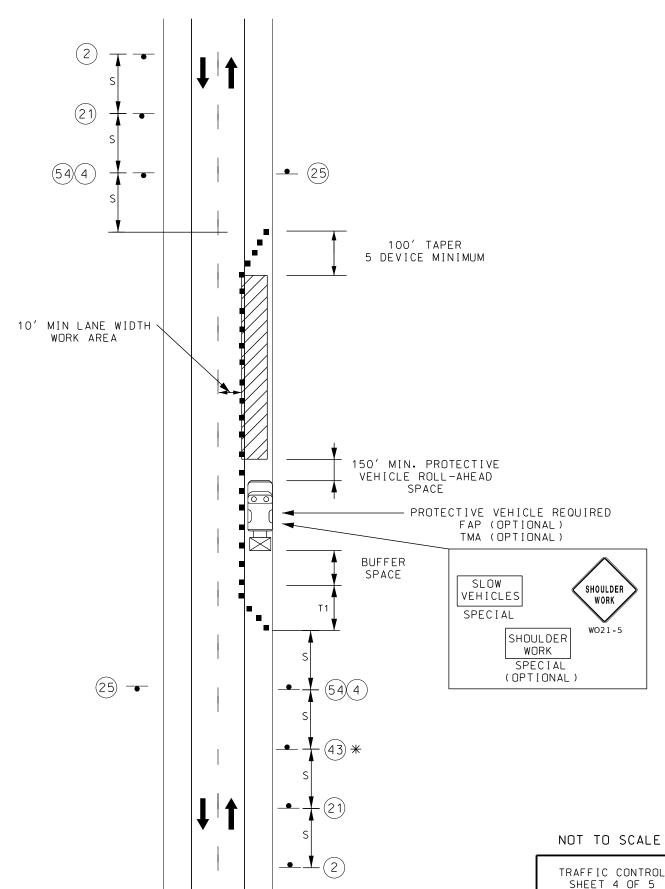


WORK ZONE

OR NO ENCROACHMENT

SHOULDER WORK WITH MINOR TRAVELWAY ENCROACHMENT







THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY,

9/25/2025 136 MO NW 10

> PUTNAM JNW0043

PROJECT NO.

BRIDGE NO.



010_TC_4_JNW0043_I1_SHOULDER_WORK_MINOR_ENCROACHMENT_UNDIVIDED.dgn 4:13:15 PM 9/25/2025

TAPER LENGTH AND SPACING							
SPEED LIMIT.	TAPER L	ENGTH,² T	CHANNELIZIN F	BUFFER			
MPH MPH	SHOULDER⁴ (T1)	LANE ⁵ (T2)	TAPERS	BUFFER/ WORK AREA	LENGTH, FT (B)		
0-35	35	100	25 ⁶	40 ⁶	250		
40-45	35	100	25 6	80 ⁶	360		
50-55	35	100	25 7	80 ⁷	495		
60-70	35	100	25 ⁷	1207	730		

'POSTED SPEED LIMIT.

'TAPER LENGTHS MAY BE ADJUSTED.
'SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.

'BASED ON 10FT SHOULDER WIDTH

BASED ON 12FT LANE WIDTH

*SPACING REDUCED TO $\frac{1}{2}$ AT INTERSECTIONS.

'SPACING MAY BE REDUCED TO 1/2 AT INTERSECTIONS.

ADVANCE	WARNING SIGN MINIMUM SPACING						
SPEED LIMIT,	SIGN SPACING, FT (S)						
MPH	UNDIVIDED HIGHWAY						
0-35	200 ³						
40-45	350						
50-55	500						
60-70	1000						

TYPE OF ROADWAY	SIGN HEIGHT (MINIMUM)	WORK ZONE LENGTH (L) (MAXIMUM)
URBAN	1' PORTABLE 7' POST	1 MILE
RURAL UNDIVIDED	1' PORTABLE 5' POST	3 MILES

³FOR URBAN LOW SPEED, MINIMUM RECOMMENDED SPACING



LEGEND

___ SIGN (SINGLE SIDED)

A TRAFFIC CONE

CHANNELIZER (TRIM-LINE)

FLAGGER

REQUIRED - PROTECTIVE VEHICLE W/ 150' ROLL AHEAD SPACE

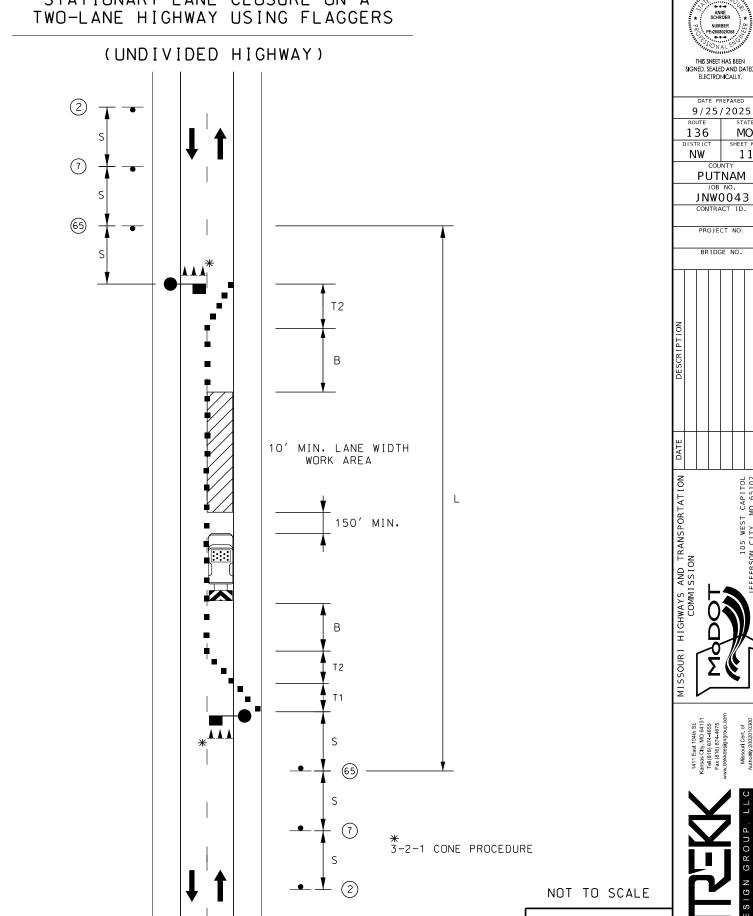
OPTIONAL - FLASHING ARROW PANEL

OPTIONAL - TRUCK/TRAILER MOUNTED ATTENUATOR (TMA)



WORK ZONE





011 TC_5_JNW0043_I1_STATIONARY_LANE_CLOSURE_TWO_LANE_WITH_FLAGGERS.dgn 4:13:17 PM 9/25/2025

MO

11

TRAFFIC CONTROL SHEET 5 OF 5

POSTED SPEED LIMIT.

²SPACING MAY BE ADJUSTED FOR FIELD CONDITIONS.