MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

PLANS FOR PROPOSED STATE HIGHWAY

JOHNSON COUNTY

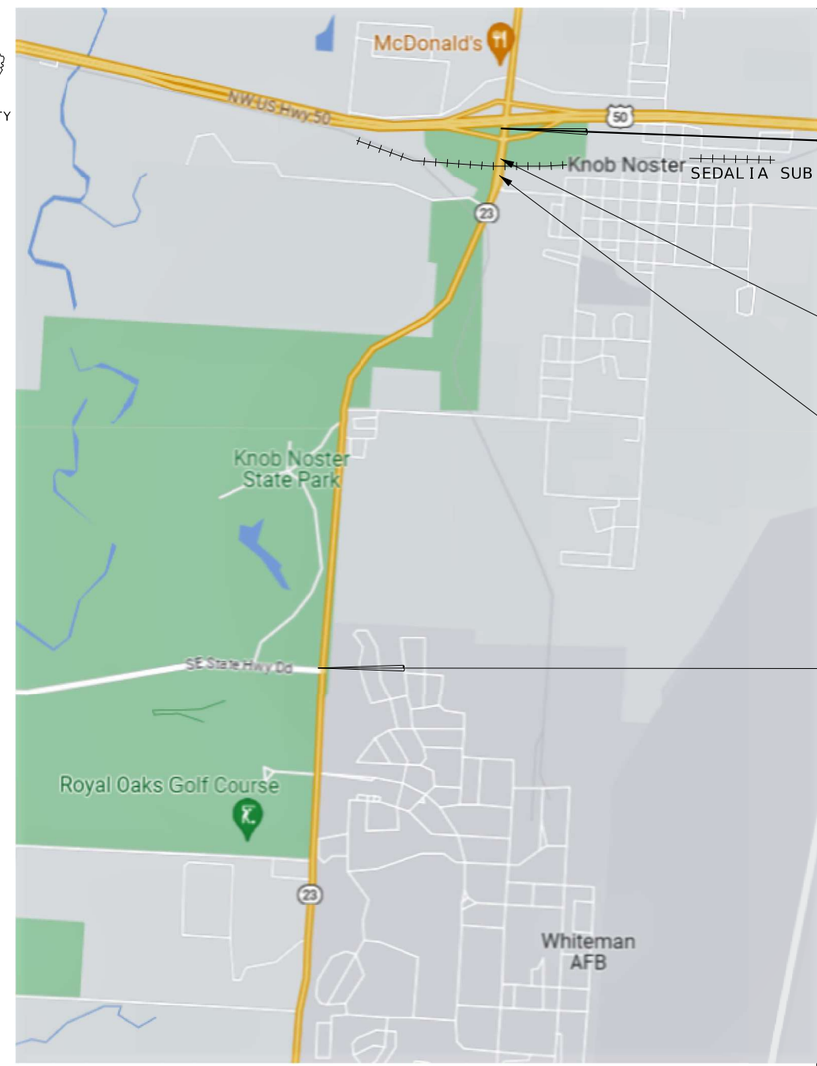
DESIGN DESIGNATION

A.A.D.T. - 2024 = 3623
A.A.D.T. - 2044 = 4348
D.H.V. = 11%
T = 8%
V = 45/55 M.P.H.

FUNCTIONAL CLASSIFICATION-PRINCIPAL ARTERIAL

NO RIGHT OF WAY REQUIRED

KEY MAP
LOCATION OF JOHNSON COUNTY



T46N
T46N

LOG MILE 31.734 SB

SEDALIA SUB

BR. A5039 EXCEPTION

PAVEMENT RESURFACING, PAVEMENT REPAIR, GUARDRAIL, SIGNALS, LIGHTING AND RIGHT TURN LANE
1.963 MILES

LOG MILE 33.697 SB

R24W
R24W

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	SAN	
FIRE HYDRANT	HYD	
WATER VALVE	WV	
WATER METER	WM	
DROP INLET	DI	
DITCH BLOCK		
GROUND MOUNTED SIGN	SIGN	
LIGHT POLE		
H-FRAME POWER POLE		
TELEPHONE PEDESTAL	PED	
FENCE		
CHAIN LINK	V	
WOVEN WIRE	X	
GATE POST		
BENCHMARK	BM	

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

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) (3 SHEETS)	2
QUANTITIES (QU) (3 SHEETS)	3
PLAN-PROFILE (PP)	4-7
REFERENCE POINTS (RP)	8
COORDINATE POINTS (CP)	9
TRAFFIC CONTROL SHEETS (TC)	10-17
SIGNALS (SG)	18-22
PAVEMENT MARKING (PM)	23
CROSS SECTIONS (XS)	1-3

LENGTH OF PROJECT

BEGINNING OF PROJECT LOG MILE 31.734 SB
END OF PROJECT LOG MILE 33.697 SB

APPARENT LENGTH 10364.64 FEET
EQUATIONS AND EXCEPTIONS:
BRIDGE EXCEPTION - A5039
LOG MI 31.830 SB TO LOG MI 31.869 205.92 FT

TOTAL CORRECTIONS 205.92 FEET
NET LENGTH OF PROJECT 10158.72 FEET
STATE LENGTH 1.924 MILES

FOR INFORMATION ONLY
ESTIMATED DISTURBED ACRES 0.10 ACRES

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
08/05/2024 12:20:13 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

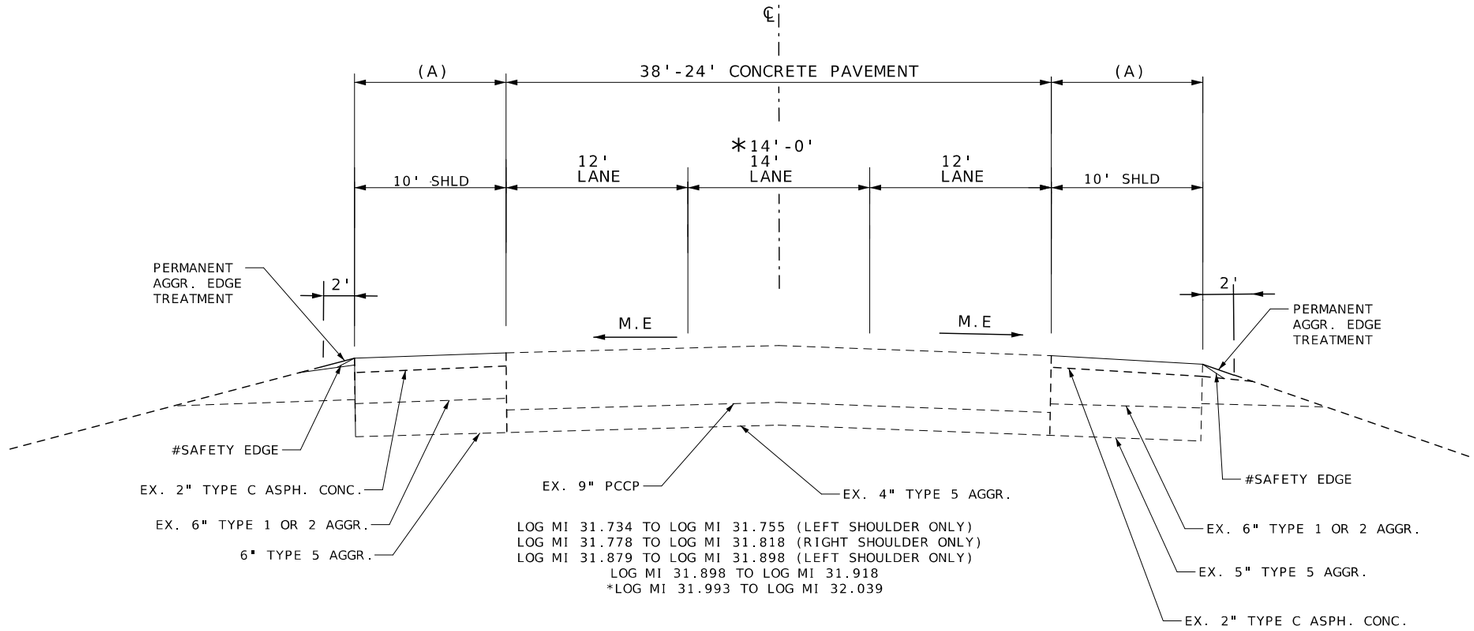
DATE PREPARED 8/5/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	1

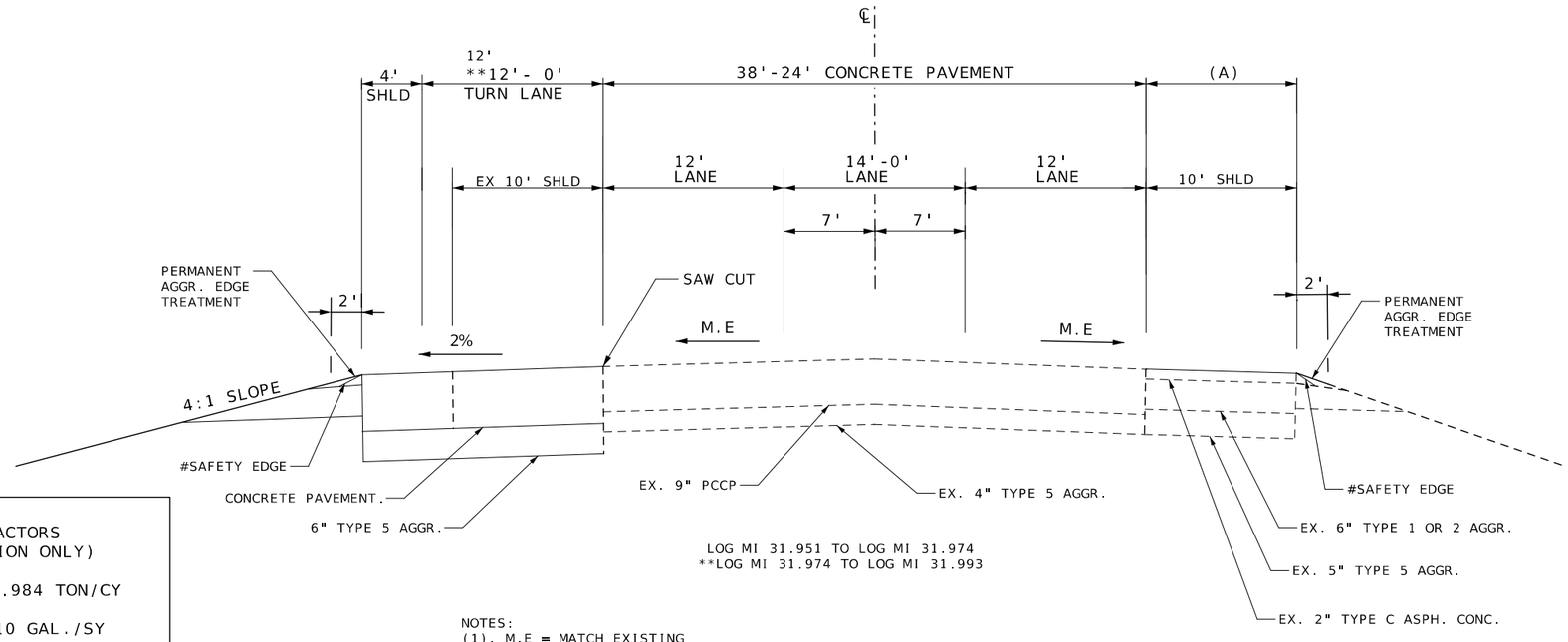
COUNTY JOHNSON
JOB NO. JKR0090
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DATE	DESCRIPTION

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



(A) 2" MILL/FILL WITH BP-1 W/PG64-22 AND TACK COAT
ON ASHPHALT PAVEMENT ONLY.



SEE STD 401.00C

CONCRETE PAVEMENT
RIGHT TURN LANE

PCCP DESIGN
8.5" PCCP OVER
6" TYPE 5 AGGREGATE BASE

ESTIMATE FACTORS
(FOR INFORMATION ONLY)

BP-1 (64-22) - 1.984 TON/CY

TACK COAT - 0.10 GAL./SY

NOTES:
(1). M.E = MATCH EXISTING
(2). EXEMPT LOCATIONS WITH CONCRETE LANE FROM RESURFACING.
(3). REFER TO QUANTITY SHEET FOR RUMBLE STRIP LOCATIONS.
(4). ALL LOG MILES ARE ON RTE 23 SB

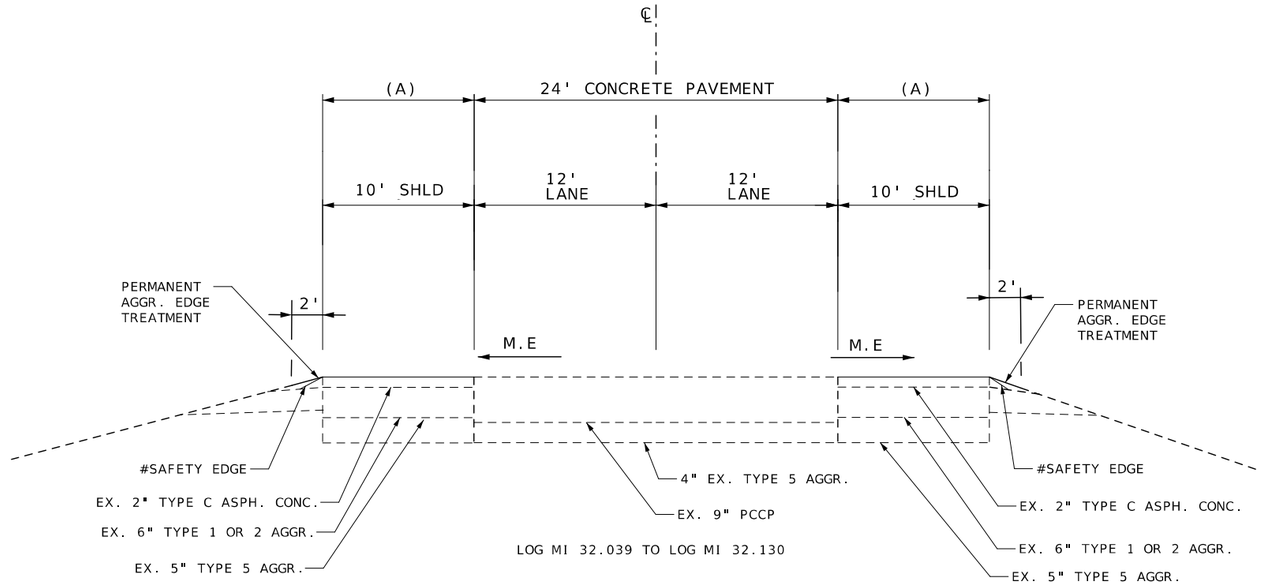
TYPICAL SECTION
SHEET 1 OF 3

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/21/2024 2:06:49 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	
8/21/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 2
COUNTY JOHNSON	
JOB NO. JKR0090	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

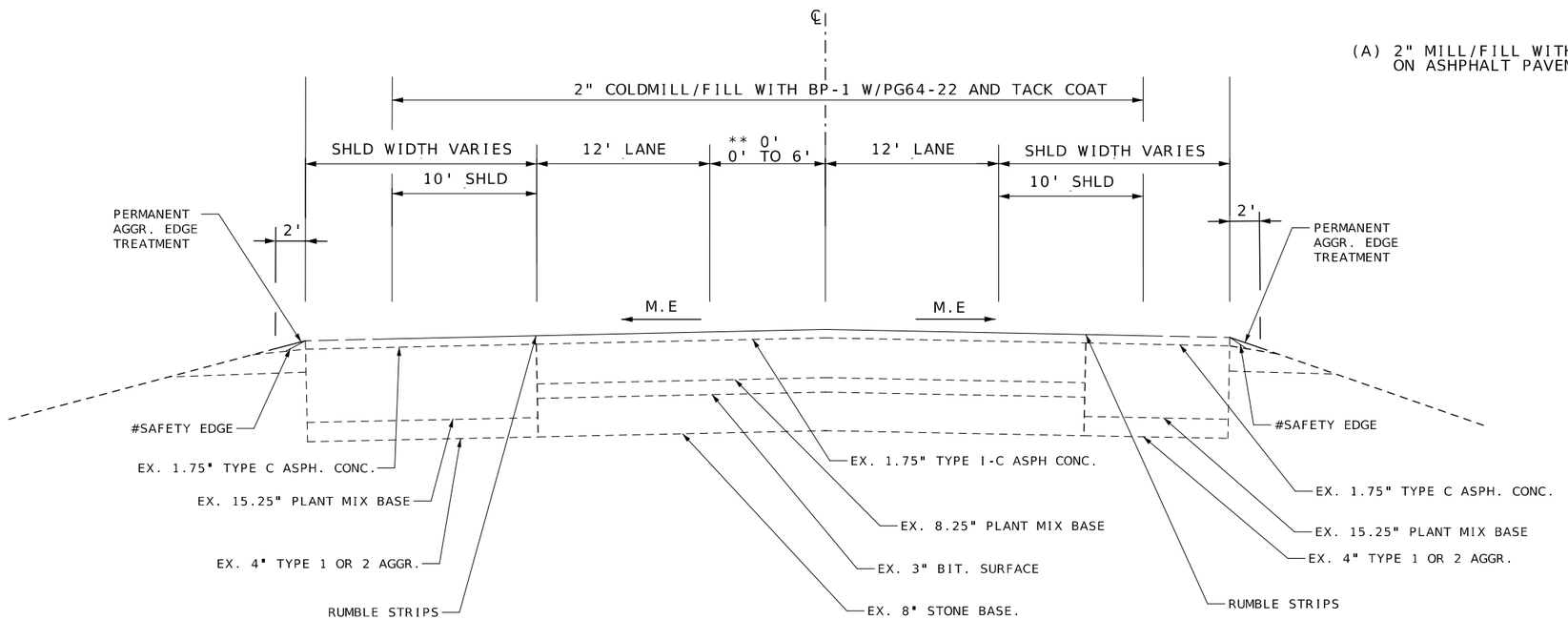
DATE	DESCRIPTION

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



LOG MI 32.039 TO LOG MI 32.130

(A) 2" MILL/FILL WITH BP-1 W/PG64-22 AND TACK COAT ON ASHPHALT PAVEMENT ONLY.



**LOG MI 32.130 TO LOG MI 33.637

LOG MI 33.637 TO LOG MI 33.659

NOTES:
(1). M.E = MATCH EXISTING.
(2). EXEMPT LOCATIONS WITH CONCRETE LANE FROM RESURFACING.
(3). REFER TO QUANTITY SHEET FOR RUMBLE STRIP LOCATIONS.
(4). ALL LOG MILES ARE ON RTE 23 SB

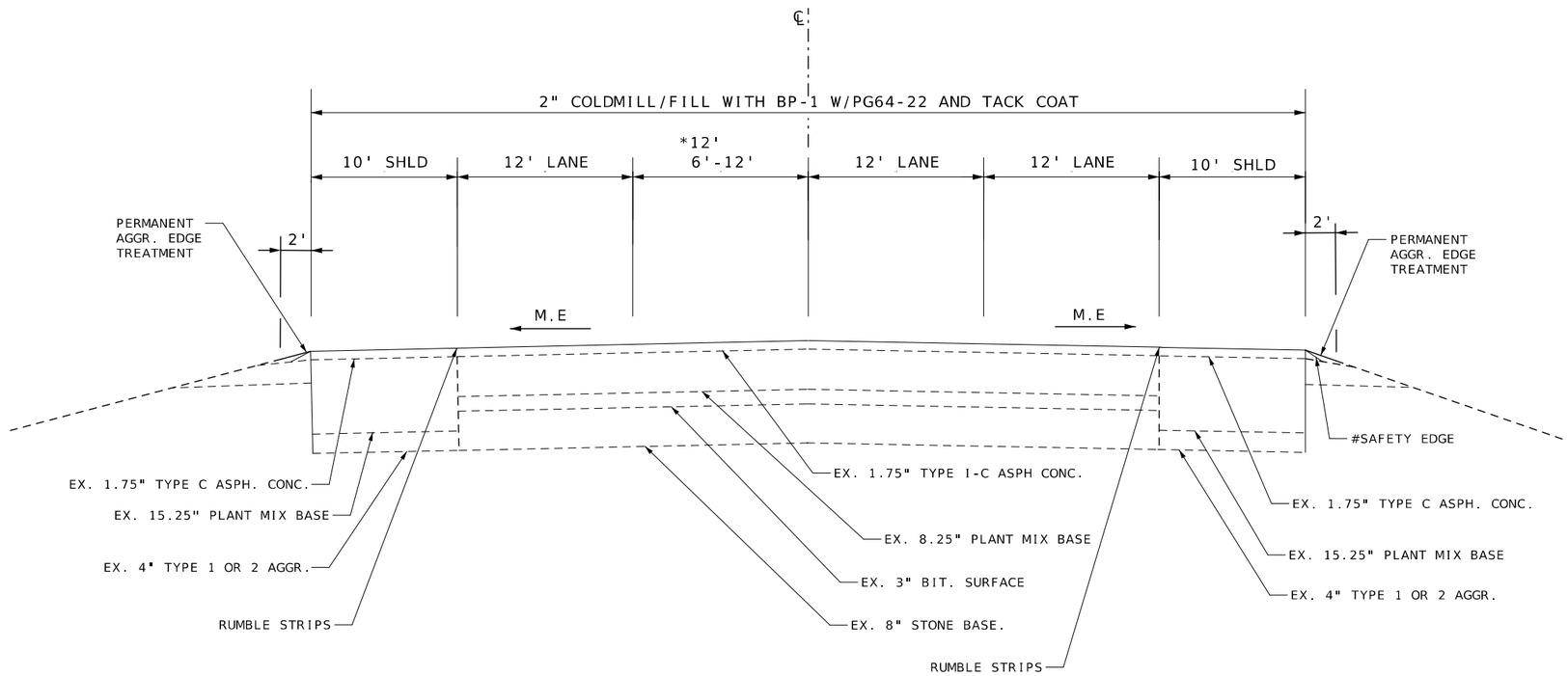
TYPICAL SECTION
SHEET 2 OF 3

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/21/2024 2:07:13 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/21/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	2
COUNTY	JOHNSON
JOB NO.	JKR0090
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)



LOG MI 33.659 TO LOG MI 33.683
*LOG MI 33.683 TO LOG MI 33.697

NOTES:
(1). M.E = MATCH EXISTING.
(2). EXEMPT LOCATIONS WITH CONCRETE LANE FROM RESURFACING.
(3). REFER TO QUANTITY SHEET FOR RUMBLE STRIP LOCATIONS.
(4). ALL LOG MILES ARE ON RTE 23 SB

TYPICAL SECTION
SHEET 3 OF 3

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/21/2024 2:07:41 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/21/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	2
COUNTY	JOHNSON
JOB NO.	JKR0090
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION

DATE

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

REMOVAL OF IMPROVEMENTS					
LOG MILE	LOCATION	ITEM	REMOVAL	UNIT	COMMENTS
31.652	NW CORNER, BR A5040	GUARDRAIL	143.55	FT	POSTS ON ASPHALT SHOULDER
31.652	NE CORNER, BR A5040	GUARDRAIL	148.22	FT	POSTS ON ASPHALT SHOULDER
31.724	SW CORNER, BR A5040	GUARDRAIL	180.73	FT	POSTS ON ASPHALT SHOULDER
31.724	SE CORNER, BR A5040	GUARDRAIL	167.44	FT	POSTS ON ASPHALT SHOULDER
31.804	NW CORNER, BR A5039	GUARDRAIL	134.69	FT	POSTS ON ASPHALT SHOULDER
31.804	NE CORNER, BR A5039	GUARDRAIL	144.43	FT	POSTS ON ASPHALT SHOULDER
31.870	SW CORNER, BR A5039	GUARDRAIL	129.92	FT	POSTS ON ASPHALT SHOULDER
31.870	SE CORNER, BR A5039	GUARDRAIL	134.60	FT	POSTS ON ASPHALT SHOULDER
	RTE 23	PAVEMENT	313.00	SY	PAVEMENT REMOVAL
	RTE 23	PULL BOXES	2.00	EA	ON TURNING RADIUS
	RTE 23	SIGNALS	1.00	EA	SIGNAL ARM BY THE CABINET
	RTE 23	SIGNALS	1.00	EA	SIGNAL CABINET
LUMP SUM					

SEEDING		
LOCATION	SEEDING COOL SEASON MIXTURES ACRE	REMARKS
RTE 23	1.0	RIGHT TURN LANE AND RADIUS
TOTAL	1.0	

CONTRACTOR FURNISHED SURVEYING AND STAKING
1 LUMP SUM

ADDITIONAL MOBILIZATION FOR SEEDING
2 EACH

RELOCATION OF SIGNS		
LOG MILE	SIGN POST	REMARKS
31.98 SB RTE 23	1	ON RIGHT SHOULDER
31.96 SB RTE 23	1	ON RIGHT SHOULDER
TOTAL	2	

MOBILIZATION
1 LUMP SUM

PAVEMENT									
BEGIN	END	LOCATION	LENGTH	WIDTH FOR BP-1 64-22 MAINLINE & SHOULDER FT	AREA SY	2" BP-1 64-22 TON	TACK COAT GAL	COLDMILL SY	COMMENTS
31.734	31.755	RTE 23 SB	110.88	10	123.2	13.61	12.32	123.20	MILL/FILL ONLY LEFT SHOULDER
31.778	31.818	RTE 23 SB	211.2	10	234.7	25.92	23.47	234.67	MILL/FILL ONLY RIGHT SHOULDER
31.879	31.898	RTE 23 SB	100.32	10	111.5	12.31	11.15	111.47	MILL/FILL ONLY LEFT SHOULDER
31.898	31.918	RTE 23 SB	105.6	20	234.7	25.92	23.47	234.67	MILL/FILL BOTH SHOULDERS
31.951	31.974	RTE 23 SB	121.44	10	134.9	14.90	13.49	134.93	MILL/FILL ONLY RIGHT SHOULDER
31.974	31.993	RTE 23 SB	100.32	10	111.5	12.31	11.15	111.47	MILL/FILL ONLY RIGHT SHOULDER
31.993	32.039	RTE 23 SB	242.88	20	539.7	59.61	53.97	539.73	MILL/FILL BOTH SHOULDERS
32.039	32.130	RTE 23 SB	480.48	20	1068	117.92	106.77	1067.73	MILL/FILL BOTH SHOULDERS
32.130	33.637	RTE 23 SB	7956.96	44	38901	4296.30	3890.07	38900.69	MILL/FILL BOTH DIRECTIONS
33.637	33.659	RTE 23 SB	116.16	47	606.6	67.00	60.66	606.61	MILL/FILL BOTH DIRECTIONS
33.659	33.683	RTE 23 SB	126.72	65	915.2	101.08	91.52	915.20	MILL/FILL BOTH DIRECTIONS
33.683	33.697	RTE 23 SB	73.92	68	558.5	61.68	55.85	558.51	MILL/FILL BOTH DIRECTIONS
31.918		MCPHERSON ST	90	10	100	11.04	10.00	100.00	WB SHOULDER ON RIGHT TURN RADIUS, MCPHERSON ST
32.739		ASHALT ENTRANCE			70.98	7.84	7.10	70.98	NE 901 RD
32.835		SIDE STREET			151.4	16.73	15.14	151.44	E DIVISION RD
SUBTOTAL						4,844.17	4,386.13	43,861.30	
TOTAL						4,844.20	4,386.00	43,861.00	

CONCRETE PAVEMENT									
BEGIN STA.	END STA.	LOCATION	LENGTH (FT)	WIDTH (FT)	AREA (SY)	SUBGRADE COMPACTION STA.	TYPE 5 AGGR 6" SY	PAVEMENT EDGE TREATMENT LF	COMMENTS
12+67.55	13+35.89	RTE 23	68	VAR	76	1	76	68	CONCRETE PAVEMENT UPTO RADIUS
13+35.89	14+54.90	RTE 23	119	16	212	1	212	119	FROM RADIUS TO RAPER
14+54.90	15+55.18	RTE 23	100	10	111	1	111	100	TAPER LENGTH
PAY TOTAL					399	3	399	287	

BITUMINOUS SHOULDER RUMBLE STRIP				
LOG MILE START	LOG MILE END	RIGHT ENDGE LINE STA.	LEFT EDGE LINE STA.	REMARKS
32.13	32.19		3.17	RTE. 23 SB
32.19	33.656	77.40	77.40	RTE. 23 SB
		-3.60	-5.40	ADJUSTMENTS FOR SIDE ROADS AND ENTRANCES
	SUB TOTAL	77.40	75.17	
	TOTAL STA.	152.6		

*REFER TO 626.00H FOR RUMBLE STRIP LAYOUTS

SUMMARY OF QUANTITIES
SHEET 1 OF 3

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/21/2024 2:09:10 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED 8/21/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	3

COUNTY JOHNSON
JOB NO. JKR0090
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)

EARTHWORK

BEGIN STA.	END STA.	CLASS A EXCAVATION CY	COMPACTING EMBANKMENT CY	EMBANKMENT IN PLACE CY	TYPE 1B EROSION CONTROL BLANKET SY	SILT FENCE LF	COMMENTS
12+67.55	15+55.18	108.212	358.659	250.447	320	300	FOR MAINLINE & TURN RADIUS
SUB-TOTAL		108.212	358.659	250.447	320	300	
TOTAL		108	359	250	320	300	

GUARDRAIL

REMOVAL LENGTH	LOCATION	MGS GUARDRAIL SYSTEM 6' POSTS FT	TYPE A CRASHWORTHY END TERMINAL MASH EA	MGS BRIDGE APPR TRANS SECT EA	SHAPING CLASS III SLOPES 100 FT	REMARKS
143.55	NW CORNER, BR A5040	25.0	1	1		POST IN ASPHALT
148.22	NE CORNER, BR A5040	0.0	1	1		POST IN ASPHALT
180.73	SW CORNER, BR A5040	0.0	1	1		POST IN ASPHALT
167.44	SE CORNER, BR A5040	25.0	1	1		POST IN ASPHALT
134.69	NW CORNER, BR A5039	25.0	1	1	0.75	POST IN ASPHALT
144.43	NE CORNER, BR A5039	0.0	1	1	0.75	POST IN ASPHALT
129.92	SW CORNER, BR A5039	0.0	1	1	0.75	POST IN ASPHALT
134.6	SE CORNER, BR A5039	25.0	1	1	0.75	POST IN ASPHALT
	SUB-TOTAL	100	8	8	3	
	TOTAL	100	8	8	3	

PAVEMENT MARKING

LOG MILE	LOG MILE	LOCATION	LENGTH	WATER BORNE PAINT WITH TYPE L BEADS			PREFORMED THERMOPLASTIC PAVEMENT MARKING			REMARKS
				6" SOLID WHITE FT	4" INTER. YELLOW FT	4" SOLID YELLOW FT	24" SOLID WHITE (STOP BAR) FT	24" SOLID YELLOW (CROSS HATCH) FT	LEFT/ RIGHT ARROW EACH	
31.734	31.758	RTE 23	126.72	381		254			2	BEGIN PROJECT
31.767	31.838	RTE 23	374.88	750		1500	53	144	6	INCLUDING STOP BAR, ARROWS FOR THE RAMP
31.838	31.918	RTE 23	422.40	1148		844	26		2	MAINLINE FOR BOTH DIRECTIONS
31.940	31.962	RTE 23	116.16	464		232	74		2	MAINLINE FOR BOTH DIRECTIONS & STOP BARS FOR SIDE STREET
31.962	32.039	RTE 23	406.56	814		1508				MAINLINE FOR BOTH DIRECTIONS
32.039	33.016	RTE 23	5158.56	10318		10318				MAINLINE FOR BOTH DIRECTIONS
33.016	33.216	RTE 23	1056.00	2112	264					INTER YELLOW BOTH DIRECTIONS
33.216	33.317	RTE 23	533.28	1066	133	533				BOTH DIRECTIONS, INTER YELLOW FOR NB
33.317	33.377	RTE 23	316.80	634		634				MAINLINE FOR BOTH DIRECTIONS
33.377	33.557	RTE 23	950.40	1900	238	950				BOTH DIRECTIONS, INTER YELLOW FOR SB
33.557	33.585	RTE 23	147.84	296	37					INTER BOTH DIRECTIONS
33.585	33.637	RTE 23	274.56	550		550				BOTH DIRECTIONS
33.637	33.678	RTE 23	216.48	432		864		20		MAINLINE FOR BOTH DIRECTIONS
33.678	33.697	RTE 23	100.32	200		400		48	1	END PROJECT
TOTAL				21065	672	18587	153	212	13	
PAY TOTAL				21,065	19,259		153	212	13	

PAVEMENT REPAIR

LOCATION	DIRECTION	FULL DEPTH						REMARKS
		FURN/PLACING CONC.MATL SY	SUBGRADE COMPACTION SY	TYPE 1 AGG. 4" THICK SY	SAW CUT LF	TIE BARS EACH	DOWEL BARS EACH	
RTE 23	NB/SB	1012.0	101.2	101.2	1849.0	150.0	693.0	LOCATIONS TO BE DETERMINED BY ENGINEERS
TOTAL		1012.0	101.0	101.0	1849.0	150.0	693.0	

SUMMARY OF QUANTITIES

SHEET 2 OF 3

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/21/2024 2:09:57 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED
8/21/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	3

COUNTY
JOHNSON

JOB NO.
JKR0090

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)

EFFECTIVE: 07-01-2024

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	DESCRIPTION
WARNING SIGNS								
WO1-1L	48X48	16.00						TURN (SYMBOL LEFT)
WO1-1R	48X48	16.00						TURN (SYMBOL RIGHT)
WO1-2L	48X48	16.00						CURVE (SYMBOL LEFT)
WO1-2R	48X48	16.00						CURVE (SYMBOL RIGHT)
WO1-3L	48X48	16.00						REVERSE TURN (SYMBOL LEFT)
WO1-3R	48X48	16.00						REVERSE TURN (SYMBOL RIGHT)
WO1-4L	48X48	16.00						REVERSE CURVE (SYMBOL LEFT)
WO1-4R	48X48	16.00						REVERSE CURVE (SYMBOL RIGHT)
WO1-4bL	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4bR	48X48	16.00						DOUBLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-4cL	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL LEFT)
WO1-4cR	48X48	16.00						TRIPLE ARROW REVERSE CURVE (SYMBOL RIGHT)
WO1-6	60X30	12.50						HORIZONTAL ARROW (SYMBOL)
WO1-6a	72X36	18.00						HORIZ. ARROW (SYMBOL ON PERMANENT BARRICADE)
WO1-7	60X30	12.50						DOUBLE HEAD HORIZONTAL ARROW (SYMBOL)
WO1-7a	72X36	18.00						DOUBLE HEAD HORIZ. ARROW (SYMBOL ON PERM. BARR.)
WO1-8	18X24	3.00						CHEVRON (SYMBOL)
WO1-8a	30X36	7.50						CHEVRON (SYMBOL FOR DIVIDED HIGHWAYS)
WO3-1	48X48	16.00						STOP AHEAD (SYMBOL)
WO3-2	48X48	16.00						YIELD AHEAD (SYMBOL)
WO3-3	48X48	16.00						SIGNAL AHEAD (SYMBOL)
WO3-4	48X48	16.00	4	64				BE PREPARED TO STOP
WO3-5	48X48	16.00						SPEED LIMIT AHEAD
WO4-1L	48X48	16.00						MERGE (SYMBOL FROM LEFT)
WO4-1R	48X48	16.00						MERGE (SYMBOL FROM RIGHT)
WO4-1aL	48X48	16.00						MERGE (LEFT)
WO4-1aR	48X48	16.00						MERGE (RIGHT)
WO5-1	48X48	16.00	4	64				ROAD/BRIDGE/RAMP NARROWS
WO5-3	48X48	16.00						ONE LANE BRIDGE
WO5-5	48X48	16.00						NARROW LANES
WO6-1	48X48	16.00						DIVIDED HIGHWAY (SYMBOL)
WO6-2	48X48	16.00						DIVIDED HIGHWAY END (SYMBOL)
WO6-3	48X48	16.00						TWO WAY TRAFFIC (SYMBOL)
WO7-3a	30X24	5.00						NEXT XX MILES (PLAQUE)
WO8-1	48X48	16.00						BUMP
WO8-2	48X48	16.00						DIP
WO8-3	48X48	16.00						PAVEMENT ENDS
WO8-4	48X48	16.00						SOFT SHOULDER
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
WO8-6	48X48	16.00						TRUCK CROSSING
WO8-6c	48X48	16.00						TRUCK ENTRANCE
WO8-7	36X36	9.00						LOOSE GRAVEL
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL
WO8-9	48X48	16.00						LOW SHOULDER
WO8-11	48X48	16.00						UNEVEN LANES
WO8-12	48X48	16.00						NO CENTER LINE
WO8-15	48X48	16.00						GROOVED PAVEMENT
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)
WO8-17R	48X48	16.00						SHOULDER DROP-OFF (SYMBOL RIGHT)
WO8-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)
W10-1	42RND.	9.62						RAILROAD CROSSING
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)
W012-2x	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	14	224				ROAD/BRIDGE/RAMP WORK AHEAD
WO20-2	48X48	16.00						DETOUR AHEAD
WO20-3	48X48	16.00						ROAD CLOSED AHEAD
WO20-4	48X48	16.00	2	32				ONE LANE ROAD AHEAD
WO20-5	48X48	16.00	2	32				RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00						RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00	6	96				FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00	2	32				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
WO22-3	42X36	10.50						END BLASTING ZONE
GO22-1	21X15	2.19	4	8.76				WET PAINT (ARROW PIVOTS)

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NUM.	DESCRIPTION
GUIDE SIGNS								
E05-1	36X48	12.00						GORE EXIT
E05-2	48X36	12.00						EXIT OPEN
E05-2a	48X36	12.00						EXIT CLOSED
GO20-1	60X24	10.00	2	20				ROAD WORK NEXT XX MILES
GO20-2	48X24	8.00	2	16				END ROAD WORK
GO20-4	36X18	4.50	1	4.5				PILOT CAR FOLLOW ME
GO20-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW
GO20-4a	18X12	1.50	8	12				PILOT CAR IN USE WAIT & FOLLOW
GO20-5aP	36X24	6.00	4	24				WORK ZONE (PLAQUE)
MO4-8a	24X18	3.00						END DETOUR
MO4-9L	48X36	12.00						DETOUR (LEFT)
MO4-9R	48X36	12.00						DETOUR (RIGHT)
MO4-9P	48X12	4.00						STREET NAME (PLAQUE)
MO4-10L	48X18	6.00						DETOUR ARROW (LEFT)
MO4-10R	48X18	6.00						DETOUR ARROW (RIGHT)
REGULATORY SIGNS								
R1-1	48X48	13.25						STOP
R1-2	48TRI.	6.93						YIELD
R1-2a	36X36	9.00						TO ONCOMING TRAFFIC (PLAQUE)
R1-3P	30X12	2.50						ALL WAY (PLAQUE)
R2-1	36X48	12.00	8	96				SPEED LIMIT 35,45
R3-1	48X48	16.00						NO RIGHT TURN (SYMBOL)
R3-2	48X48	16.00						NO LEFT TURN (SYMBOL)
R3-3	36X36	9.00						NO TURNS
R3-4	48X48	16.00						NO U-TURN (SYMBOL)
R3-7L	30X30	6.25						LEFT LANE MUST TURN LEFT
R3-7R	30X30	6.25						RIGHT LANE MUST TURN RIGHT
R4-1	36X48	12.00						DO NOT PASS
R4-2	36X48	12.00						PASS WITH CARE
R4-7a	36X48	12.00						KEEP RIGHT (HORIZONTAL ARROW)
R4-8a	36X48	12.00						KEEP LEFT (HORIZONTAL ARROW)
R5-1	30X30	6.25						DO NOT ENTER
R5-1a	36X24	6.00						WRONG WAY
R6-1L	54X18	6.75						ONE WAY ARROW (LEFT)
R6-1R	54X18	6.75						ONE WAY ARROW (RIGHT)
R6-2L	24X30	5.00						ONE WAY (LEFT)
R6-2R	24X30	5.00						ONE WAY (RIGHT)
R9-9	24X12	2.00						SIDEWALK CLOSED
R9-11L	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE
R10-6	24X36	6.00						STOP HERE ON RED (45^ ARROW)
R11-2	48X30	10.00						ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50						ROAD CLOSED TO THRU TRAFFIC
CONST-3A	60X48	20.00						FINE SIGN
CONST-3X	56X12	4.67						SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-5	96X48	32.00	2	64				POINT OF PRESENCE
CONST-8	48X36	12.00	2	24				WORK ZONE NO PHONE ZONE

616-10.05 CONSTRUCTION SIGNS	TOTAL	814
616-10.10 RELOCATED SIGNS	TOTAL	0

ITEM NUMBER	TOTAL QTY	DESCRIPTION
6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)
6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6123001	1	TRUCK MOUNTED ATTENUATOR (TMA)
6161008		ADVANCED WARNING RAIL SYSTEM
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161025	100	CHANNELIZER (TRIM LINE)
6161030		TYPE III MOVEABLE BARRICADE
6161033		DIRECTION INDICATOR BARRICADE
6161040	2	FLASHING ARROW PANEL
6161047		TYPE III OBJECT MARKER
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A		CHANGEABLE MESSAGE SIGN W/O COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED
6161099	2	CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE - CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/RETAINED
6173602B		TEMPORARY TRAFFIC BARRIER CONTRACTOR FURNISHED/COMMISSION RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6176000B		TEMPORARY TRAFFIC BARRIER COMMISSION FURNISHED/RETAINED
6177000B		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION COMMISSION FURNISHED/RETAINED
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING

SUMMARY OF QUANTITIES

SHEET 3 OF 3

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
08/21/2024 2:10:51 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED 8/21/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	3

COUNTY: JOHNSON

JOB NO. JKR0090

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)

END RESURFACING
LOG MILE 33.697
RTE 23 SB

1) GUARDRAIL BUILD NOTES:
RTE 23 SB RT SHOULDER (NW CORNER BR A5040)
REMOVE EX GUARDRAIL & REPLACE WITH
25' MGS GUARDRAIL,1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

2) GUARDRAIL BUILD NOTES:
RTE 23 SB LT SHOULDER (NE CORNER BR A5040)
REMOVE EX GUARDRAIL & REPLACE WITH
1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

3) GUARDRAIL BUILD NOTES:
RTE 23 SB RT SHOULDER (SW CORNER BR A5040)
REMOVE EX GUARDRAIL & REPLACE WITH
1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

4) GUARDRAIL BUILD NOTES:
RTE 23 SB LT SHOULDER (SE CORNER BR A5040)
REMOVE EX GUARDRAIL & REPLACE WITH
25' MGS GUARDRAIL,1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

NOT TO SCALE

5) GUARDRAIL BUILD NOTES:
RTE 23 SB RT SHOULDER (NW CORNER BR A5039)
REMOVE EX GUARDRAIL & REPLACE WITH
25' MGS GUARDRAIL,1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

6) GUARDRAIL BUILD NOTES:
RTE 23 SB LT SHOULDER (NE CORNER BR A5039)
REMOVE EX GUARDRAIL & REPLACE WITH
1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

7) GUARDRAIL BUILD NOTES:
RTE 23 SB RT SHOULDER (SW CORNER BR A5039)
REMOVE EX GUARDRAIL & REPLACE WITH
1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

8) GUARDRAIL BUILD NOTES:
RTE 23 SB LT SHOULDER (SE CORNER BR A5039)
REMOVE EX GUARDRAIL & REPLACE WITH
25' MGS GUARDRAIL,1 TYPE A CET (MASH)
1 MGS BR APPR. TRANS

NOTE:
(1). ALL THE POSTS INSTALLED IN EXISTING PAVEMENT OR FLUMES SHALL BE INSTALLED PER STANDARD PLAN 606.50 AT NO ADDITIONAL PAYMENT.

(2). OLD POSTS HOLES SHALL BE FILLED WITH MATERIAL APPROVED BY THE ENGINEER AT NO ADDITIONAL PAYMENT.

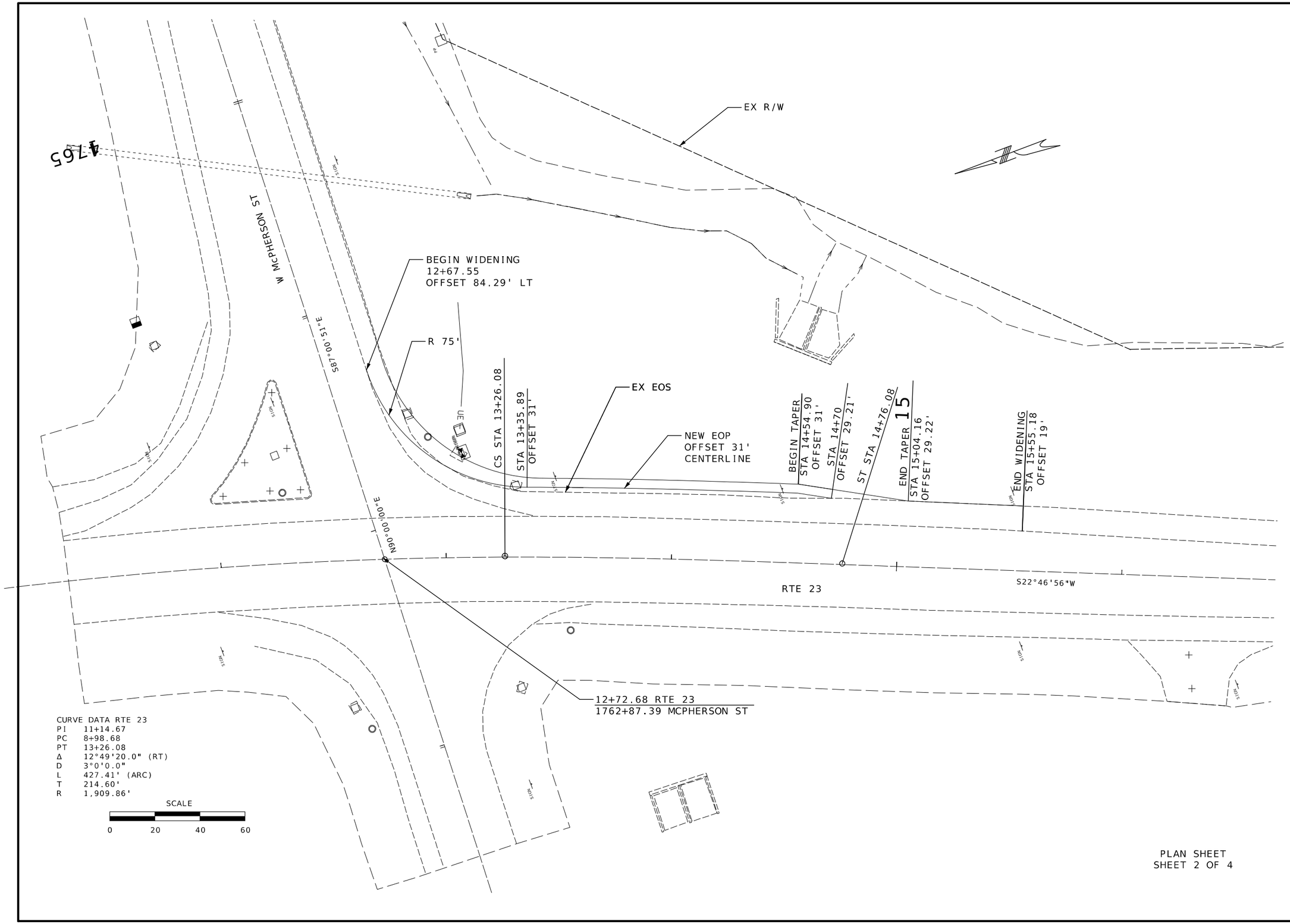
PLAN SHEET
SHEET 1 OF 4

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER
08/05/2024 5:31:42 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/5/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	4
COUNTY	JOHNSON
JOB NO.	JKR0090
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)



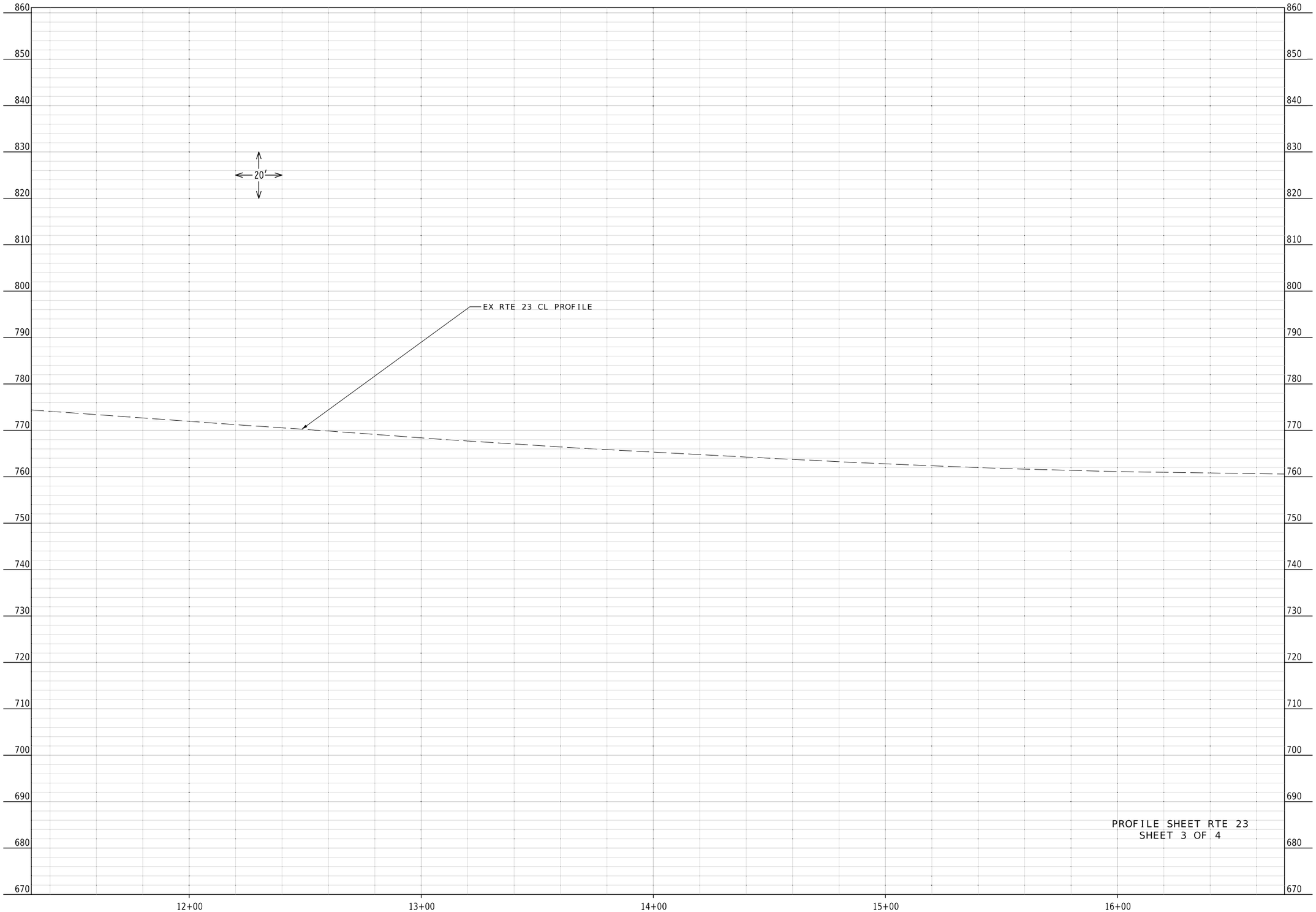
STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 6:18:51 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 5
COUNTY JOHNSON	
JOB NO. JKR0090	
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)



STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 5:34:39 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/5/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	6
COUNTY	JOHNSON
JOB NO.	JKR0090
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)

RADIUS PROFILE SHEET
SHEET 4 OF 4

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

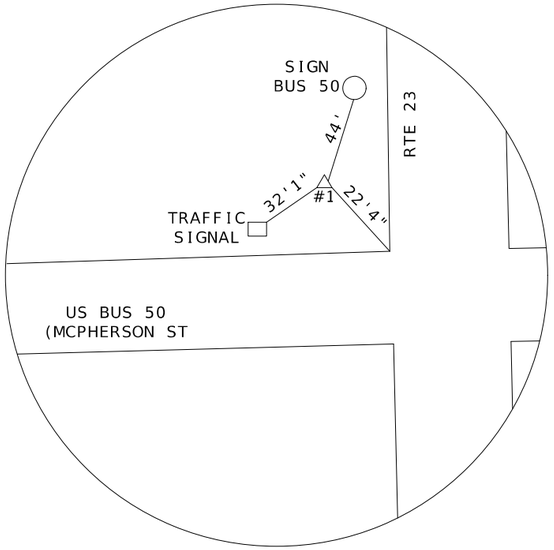
Jaclyn A. White
08/05/2024 5:35:32 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 7
COUNTY JOHNSON	
JOB NO. JKR0090	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

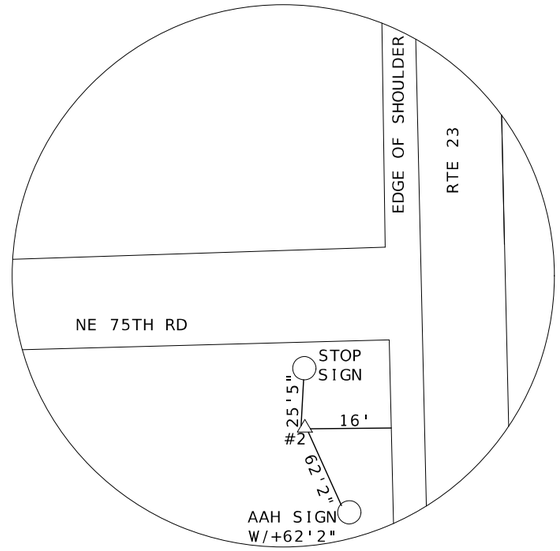
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



REFERENCE POINT #1
5/8" BAR WITH A PINK MODOT CAP
N: 947,663.691
E: 3,054,872.541
E: 766.378'



REFERENCE POINT #2
5/8" BAR WITH A PINK MODOT CAP
N: 947,258.632
E: 3,054,719.781
E: 757.465'

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/05/2024 9:41:33 AM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/2/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	8
COUNTY	JOHNSON
JOB NO.	JKR0090
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)

REFERENCE POINT SHEET
1 OF 1

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 MULTIPY THE PROJECT COORDINATES BY THE AVERAGE GRID FACTOR AS SHOWN IN THE "REFERENCE CONTROL INFORMATION" PORTION OF THIS TABLE.

PROJECT COORDINATE INFORMATION

COORDINATE SYSTEM	MODIFIED STATE PLANE (GROUND)
HORIZONTAL DATUM	NAD83
VERTICAL DATUM	NAVD88
GEOID MODEL	GEOID18
ELEVATIONS DETERMINED BY	GPS OBSERVATION
PROJECT PROJECTION FACTOR	1.00001290

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	**MO COORDINATE SYSTEM OF 1983**
CONTROL STATION	**MO GEOGRAPHIC REFERENCE SYSTEM**
DESIGNATION	JO-40
CORS_ID	XX
PID	101040
LATITUDE	38°45'29.04047"
LONGITUDE	**288000.5040**
NORTHING (M)	288000.5040
EASTING (M)	930470.4600
ZONE	WEST
PROJECT AVERAGE GRID FACTOR	0.99998710

EXAMPLE OF PROJECT COORDINATE TO S.P.C.

PROJECT NORTHING X AVERAGE GRID FACTOR
= STATE PLANE NORTHING
PROJECT EASTING X AVERAGE GRID FACTOR
= STATE PLANE EASTING

EXAMPLE: CONTROL POINT #___
N 947663.691 X 0.9999871 = N 947651.4661
E 947258.632 X 0.99998710 = E 947246.4124

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
				947,663.69	3,054,872.54	766.378'	5/8" BAR WITH A PINK MODOT CAP	1
				947,258.63	3,054,719.78	757.465'	5/8" BAR WITH A PINK MODOT CAP	2
ALIGNMENTS								
	12+74.91	RTE_23		947,539.52	3,055,298.97		BEGIN RTE 23	
	13+76.09	RTE_23		947,547.84	3,054,964.24		PI RTE 23	
	15+55.18	RTE_23		947,380.75	3,054,894.70		END RTE 23	
	1762+87.39	W MCPHERSON ST		947,644.21	3,055,000.14		INTERSECTION RTE 23 & W MCPHERSON ST	

COORDINATE POINT SHEET
SHEET 1 OF 1

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/21/2024 2:11:34 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED 8/21/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	9

COUNTY JOHNSON
JOB NO. JKR0090
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)

Sign Spacing, Device Spacing and Channelizing Taper Lengths

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

LONGITUDINAL BUFFER SPACE (B)	
SPEED MPH	BUFFER SPACE
0-35	250
40-45	360
50-55	495
60-70	730

TAPER LENGTHS AND SPACING OF CHANNELIZING DEVICES					
SPEED MPH	MINIMUM TAPER LENGTHS (L) FOR LANE WIDTHS (W)			MAXIMUM CHANNELIZER SPACING	
	10 FT	11 FT	12 FT	THROUGH TAPER	THROUGH WORK AREA
0-35	205	225	245	35	40
40-45	450	495	540	40	80
50-55	550	605	660	50	80
60-70	700	770	840	60	120

TAPER LENGTH (L):

L = WS FOR 40 MPH OR MORE

$L = \frac{WS^2}{60}$ FOR 35 MPH OR LESS

FOR SHOULDER TAPER USE L/3

WHERE:

L = TAPER LENGTH IN FEET

W = LATERAL SHIFT IN FEET

S = POSTED SPEED IN MPH

NOTES:

DIMENSIONS IN FEET UNLESS OTHERWISE NOTED.

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

(2) SPACINGS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS

TRAFFIC CONTROL DEVICES

GENERAL NOTES:

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

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- DIRECTIONAL INDICATOR BARRICADE
- CHANNELIZER
- BARRICADE
- CHANGEABLE MESSAGE BOARD
- TMA TRUCK MOUNTED ATTENUATOR W/ FLASHING ARROW

TEMPORARY TRAFFIC CONTROL

SHEET 1 OF 8

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 12:45:44 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED 8/5/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	10

COUNTY JOHNSON

JOB NO. JKR0090

CONTRACT ID.

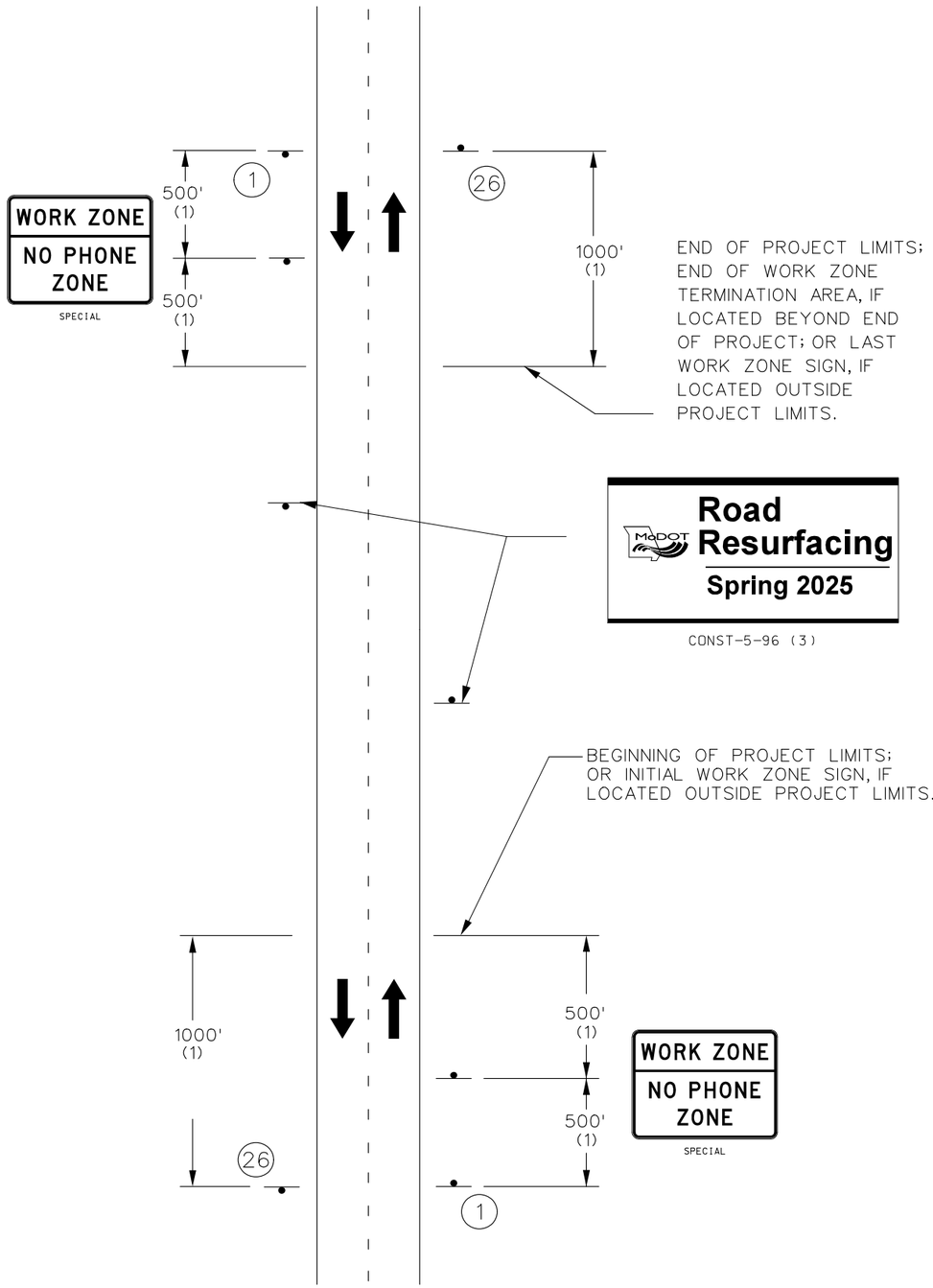
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TWO-LANE UNDIVIDED

BEGIN/END OF PROJECT SIGNING
(FOR USE ON ALL PROJECTS)

NOTES:

SIGN G020-1 IS REQUIRED PER EPG 616.6.56.

SIGN G020-2 IS USED ON ALL PROJECTS WHERE SIGN G020-1 IS USED.

OTHER SIGNS SUCH AS DETOUR OR ALTERNATE ROUTE SIGNING MAY BE USED OUTSIDE THE PROJECT LIMITS.

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

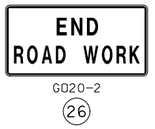
(1) DISTANCE MAY BE ADJUSTED ACCORDING TO FIELD CONDITIONS. WHERE TRAFFIC BACKUPS ARE EXPECTED BEYOND THE ADVANCE WARNING AREA, ADDITIONAL SIGNING MAY BE NEEDED.

(2) SIGN CONST-5-96 OR CONST-5-48 IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS 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 SIGN CONST-7-48 OR CONST-7-72.

(3) THE "RATE OUR WORK ZONE" SIGN IS AVAILABLE IN TWO SIZES DEPENDING ON ROADWAY CONDITIONS. THE 48 IN. X 24 IN. SIGN IS USED ON LOW VOLUME ROUTES THAT CARRY 400 AADT OR LESS,ON PROJECTS THAT HAVE A DURATION OF 4 WEEKS OR LESS OR IN URBAN AREAS WHERE THERE IS INSUFFICIENT RIGHT OF WAY FOR A SIX FOOT WIDE SIGN. THE 72 IN. X 36 IN. VERSION OF THE SIGN IS USED IN ALL OTHER APPLICATIONS. BUT CAN ALSO BE USED IN PLACE OF THE 48 IN. X 24 IN. SIGN IF ADDED EMPHASIS IS DEEMED NECESSARY.

(4) THE "POINT OF PRESENCE" SIGN IS AVAILABLE IN TWO SIZES DEPENDING ON ROADWAY CONDITION. THE 48 IN. X 36 IN. SIGN IS USED ON LOW VOLUME ROUTES THAT CARRY 400 AADT OR LESS, ON PROJECTS THAT HAVE A DURATION OF 4 WEEKS OR LESS OR IN URBAN AREAS WHERE THERE IS INSUFFICIENT RIGHT OF WAY FOR AN EIGHT FOOT WIDE SIGN. THE 96IN. X 48 IN. VERSION OF THE SIGN IS USED IN ALL OTHER APPLICATIONS. BUT CAN ALSO BE USED IN PLACE OF THE 48 IN. X 36 IN. SIGN IF ADDED EMPHASIS IS DEEMED NECESSARY.

WHEN THE "ROAD WORK NEXT 10 MILES" IS NOT USED THE "NO PHONE ZONE" SIGN IS TO BE PLACED A MINIMUM OF 500'BEFORE THE "ROAD WORK AHEAD" SIGN. REFER TO EPG 616.6.51.3 WORK ZONE NO PHONE ZONE SIGN



BEGIN/END
TEMPORARY
TRAFFIC CONTROL
SHEET 2 OF 8

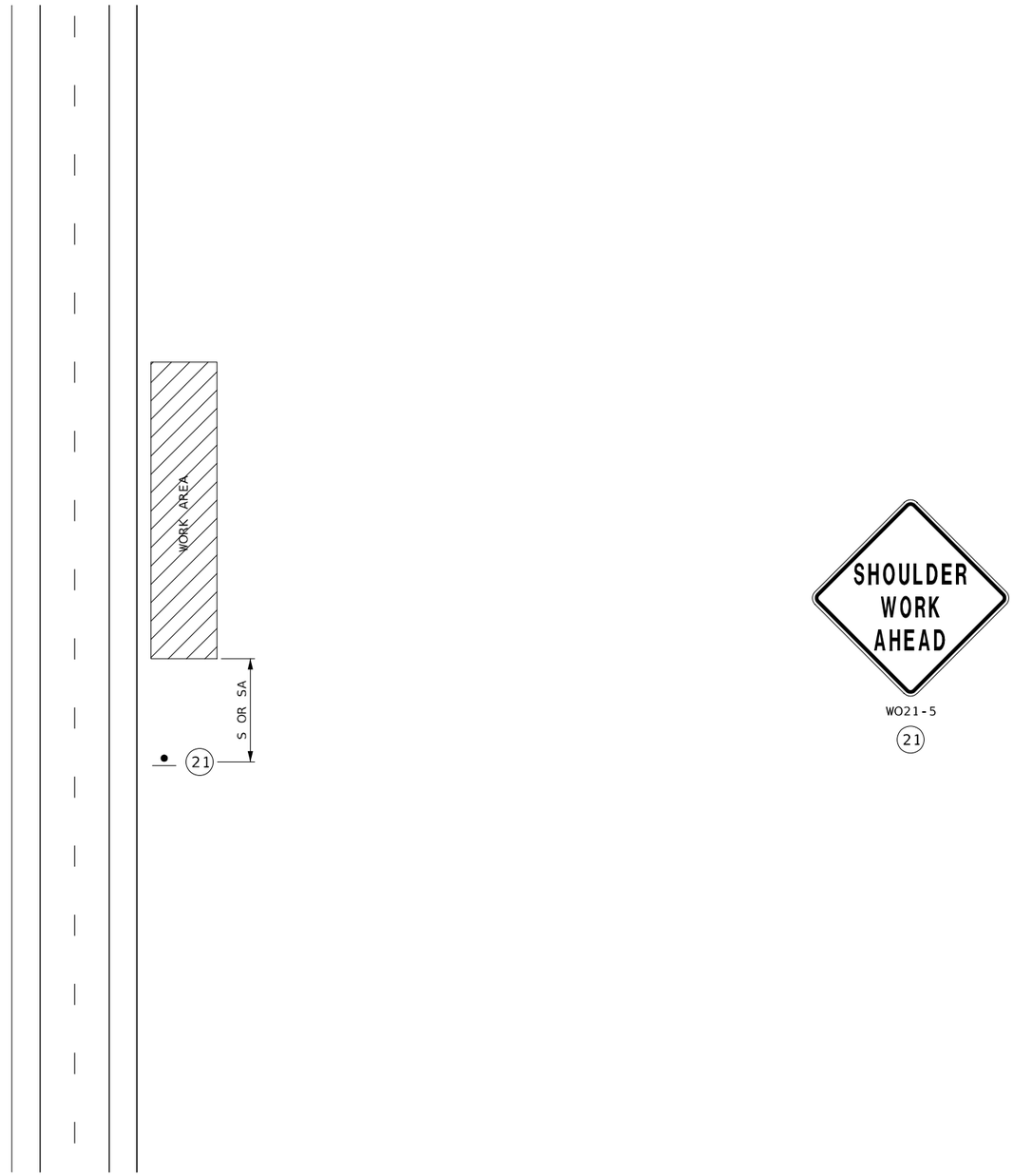
STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/30/2024 8:34:02 AM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 11
COUNTY JOHNSON	
JOB NO. JKR0090	
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)

NOT TO SCALE



WORK BEYOND THE SHOULDER

(UNDIVIDED OR DIVIDED HIGHWAY)

TEMPORARY TRAFFIC CONTROL

SHEET 3 OF 8

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 12:46:45 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

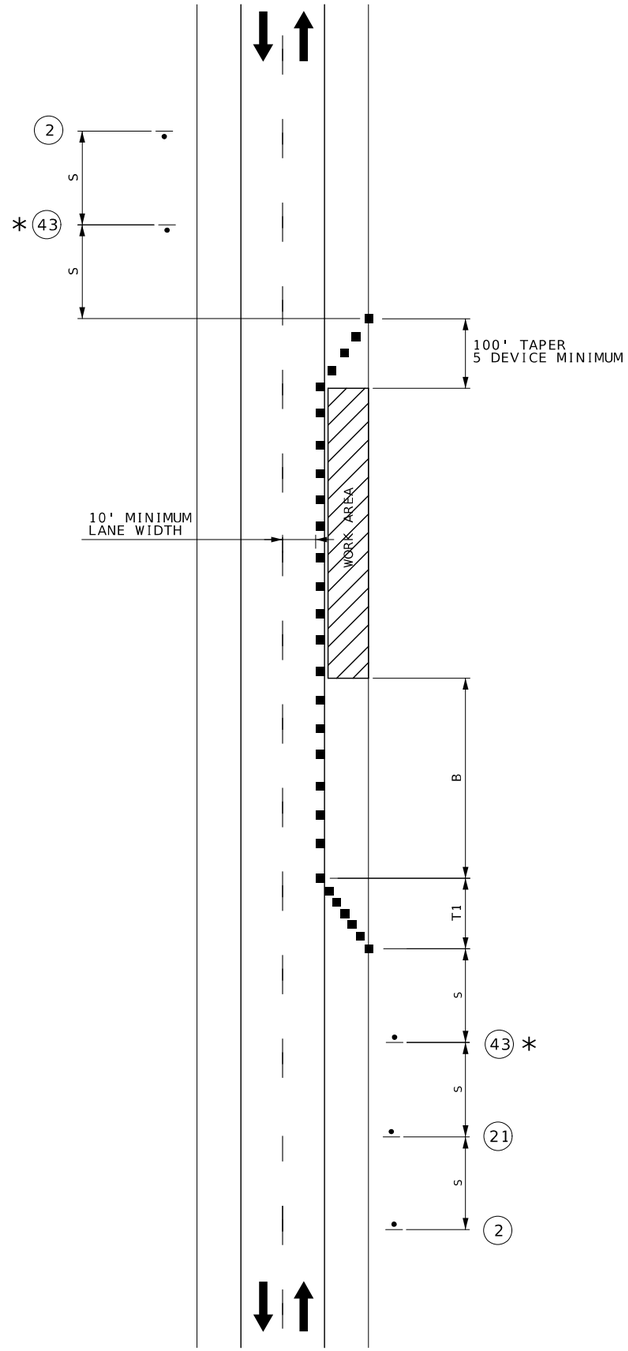
DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 12
COUNTY JOHNSON	
JOB NO. JKR0090	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOT TO SCALE



SHOULDER WORK

(UNDIVIDED HIGHWAY)

BRIDGE
OR
RAMP

WO20-1

2

WO21-5

21

BRIDGE
OR
RAMP

WO5-1

(PLAQUE NOT USED IF LESS THAN ONE MILE.)

WO7-3a

43 * OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT.

TEMPORARY TRAFFIC CONTROL

SHEET 4 OF 8

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 12:47:34 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 13
COUNTY JOHNSON	
JOB NO. JKR0090	
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)

NOT TO SCALE

W020-1

2

W020-4

7

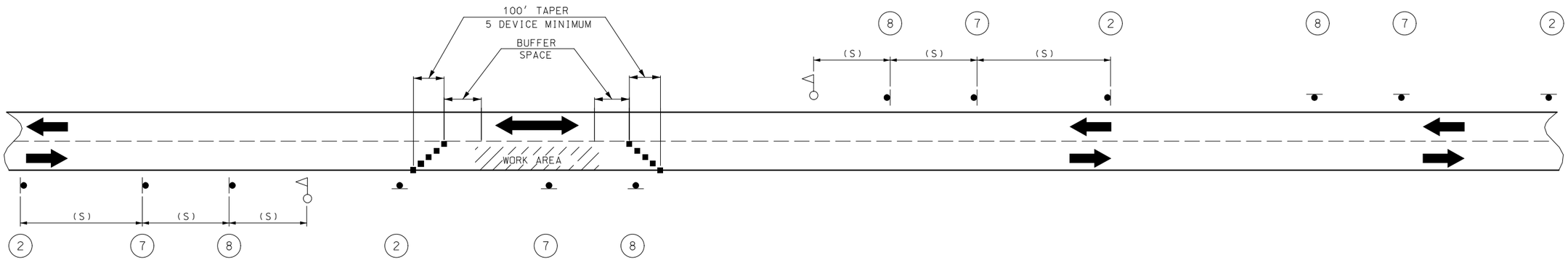
W020-7a

8

G020-4

53

SIGN 53, "PILOT CAR FOLLOW ME" SHALL BE THE CONTRACTOR'S RESPONSIBILITY WHEN IN USE DURING OPERATION.



NOTES:

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

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

TEMPORARY TRAFFIC CONTROL

SHEET 5 OF 8

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 12:48:44 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

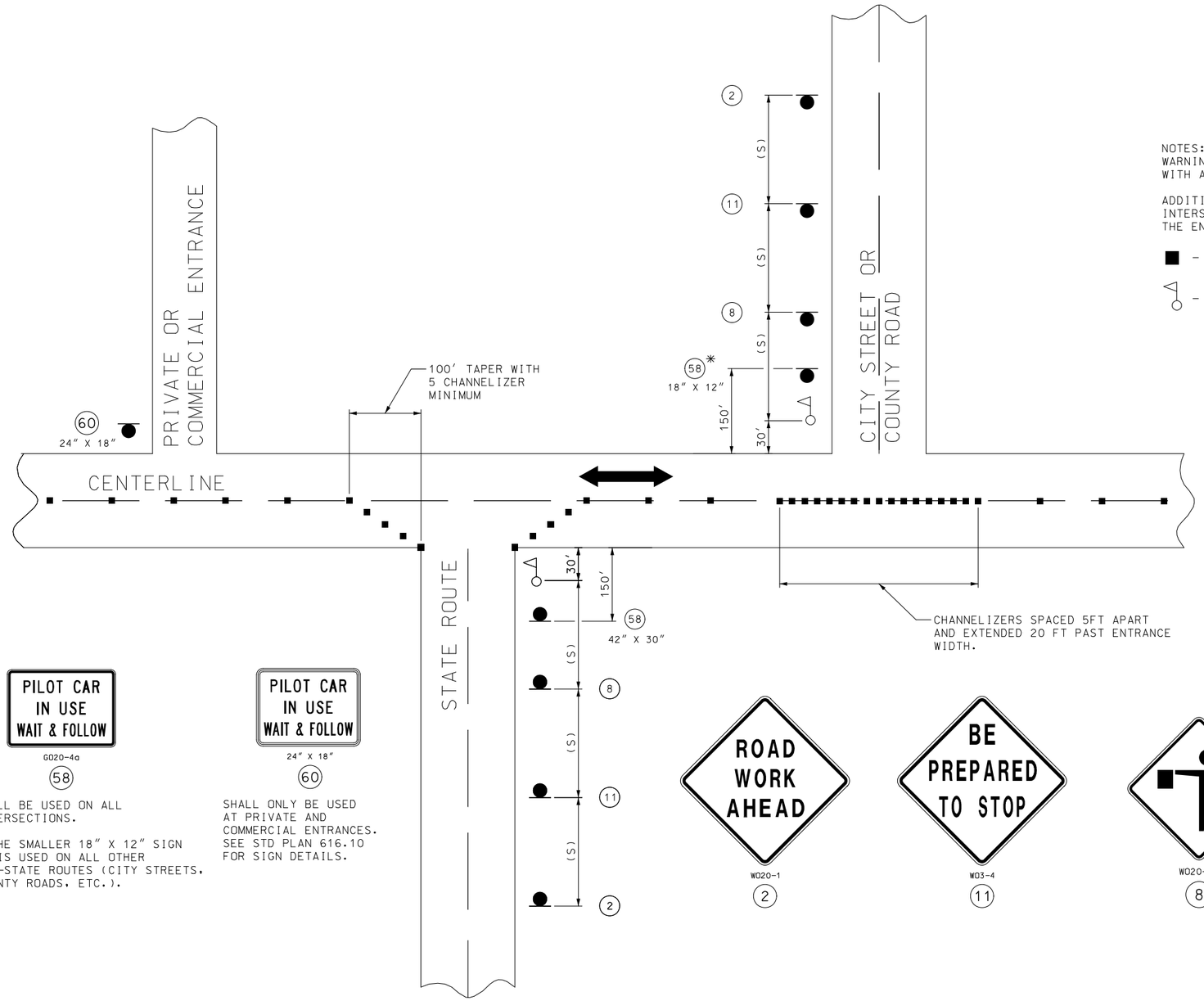
DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 14
COUNTY JOHNSON	
JOB NO. JKR0090	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOT TO SCALE



NOTES:
WARNING SIGNS SHALL BE ERECTED AT EACH INTERSECTION WITH ANOTHER STATE HIGHWAY WITHIN THE WORK ZONE.

ADDITIONAL WARNING SIGNS SHALL BE ERECTED AT OTHER INTERSECTIONS WITHIN THE WORK ZONE, AS DIRECTED BY THE ENGINEER.

■ - CHANNELIZERS (AS SPECIFIED)

- FLAGGER

G020-4a

58

SHALL BE USED ON ALL INTERSECTIONS.

* THE SMALLER 18" X 12" SIGN 58 IS USED ON ALL OTHER NON-STATE ROUTES (CITY STREETS, COUNTY ROADS, ETC.).

24" X 18"

60

SHALL ONLY BE USED AT PRIVATE AND COMMERCIAL ENTRANCES. SEE STD PLAN 616.10 FOR SIGN DETAILS.

W020-1

2

W03-4

11

W020-7a

8

SIDE ROADS ENTERING WORK ZONES

TEMPORARY TRAFFIC CONTROL

SHEET 6 OF 8

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 12:49:18 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

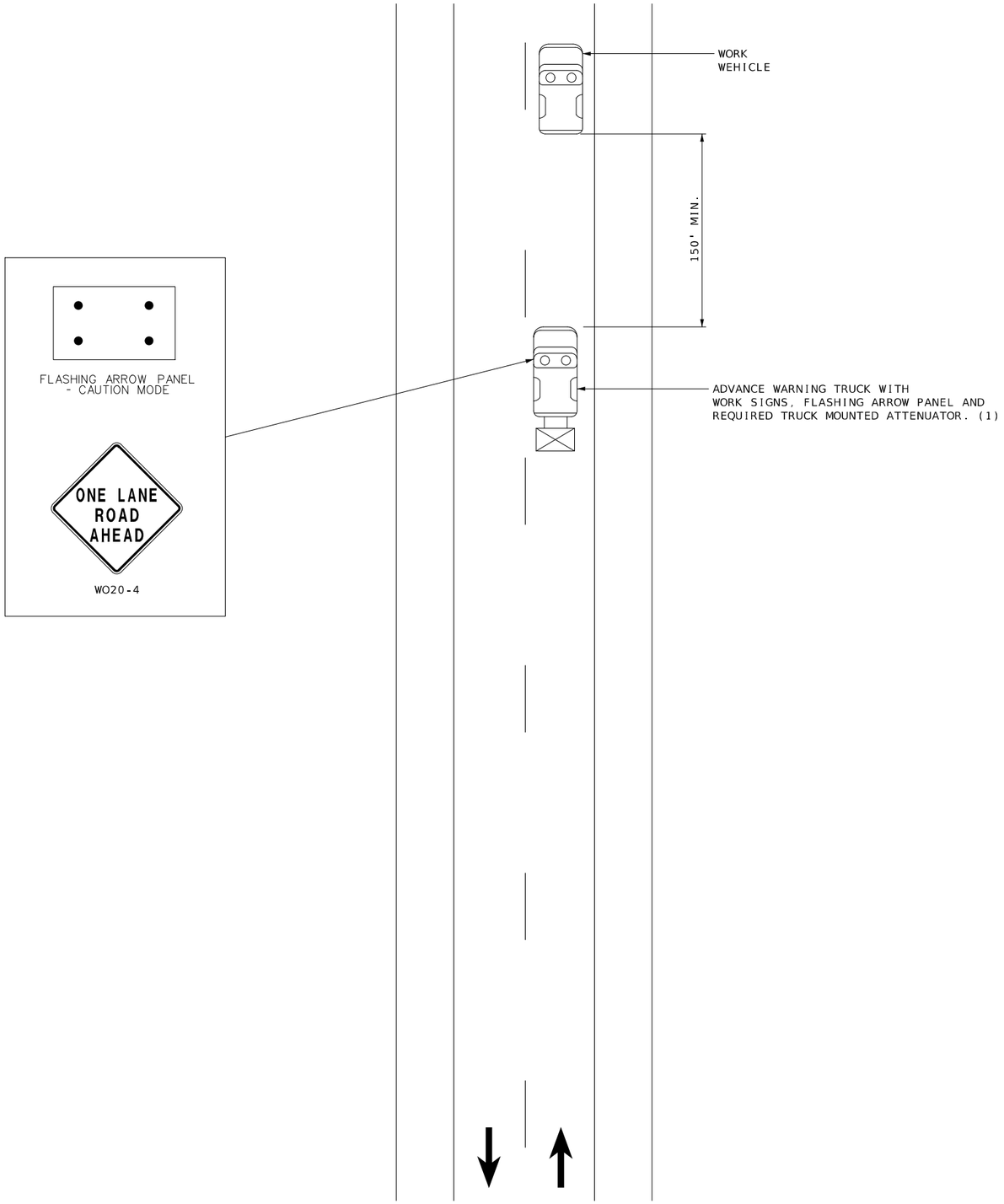
DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 15
COUNTY JOHNSON	
JOB NO. JKR0090	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOT TO SCALE



MOBILE ON TWO-LANE HIGHWAY

NOTES:

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

PROTECTIVE TRUCKS 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.

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

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

(1) ADVANCE WARNING TRUCK IS POSITIONED AT VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE OR SPACING SHOWN, WHICHEVER IS GREATER.

TEMPORARY TRAFFIC CONTROL
MOBILE ON TWO-LANE HIGHWAY
SHEET 7 OF 8

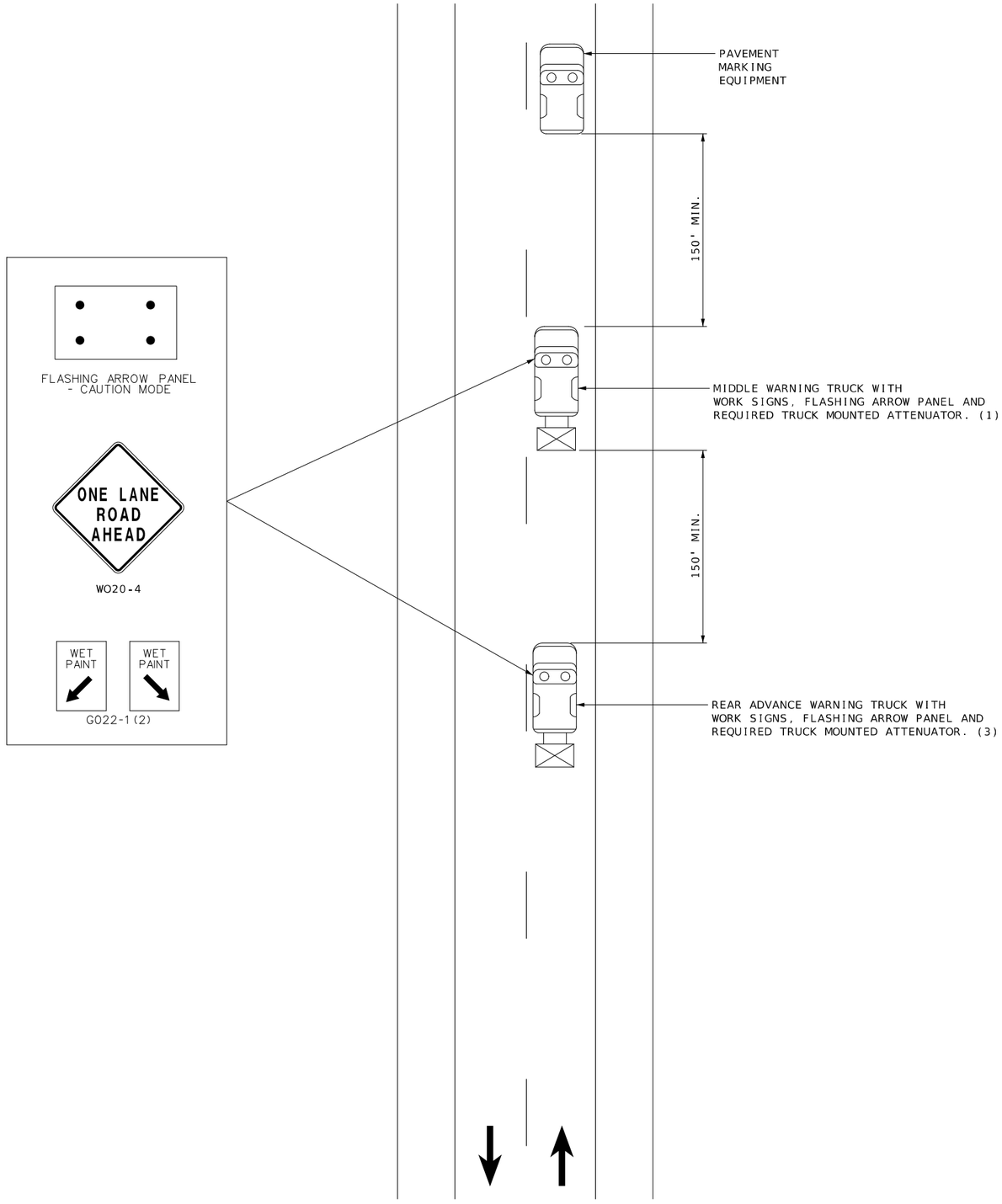
STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/05/2024 12:50:03 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/5/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	16
COUNTY	JOHNSON
JOB NO.	JKR0090
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)

NOT TO SCALE



STRIPING ON TWO-LANE HIGHWAY

NOTES:

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

PROTECTIVE TRUCKS 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.

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

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

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

(2) WET PAINT SIGNS ARE INSTALLED TO INDICATE THE SIDE IN 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.

(3) REAR 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.

TEMPORARY TRAFFIC CONTROL
STRIPING ON TWO-LANE HIGHWAY
SHEET 8 OF 8

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/05/2024 12:50:37 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

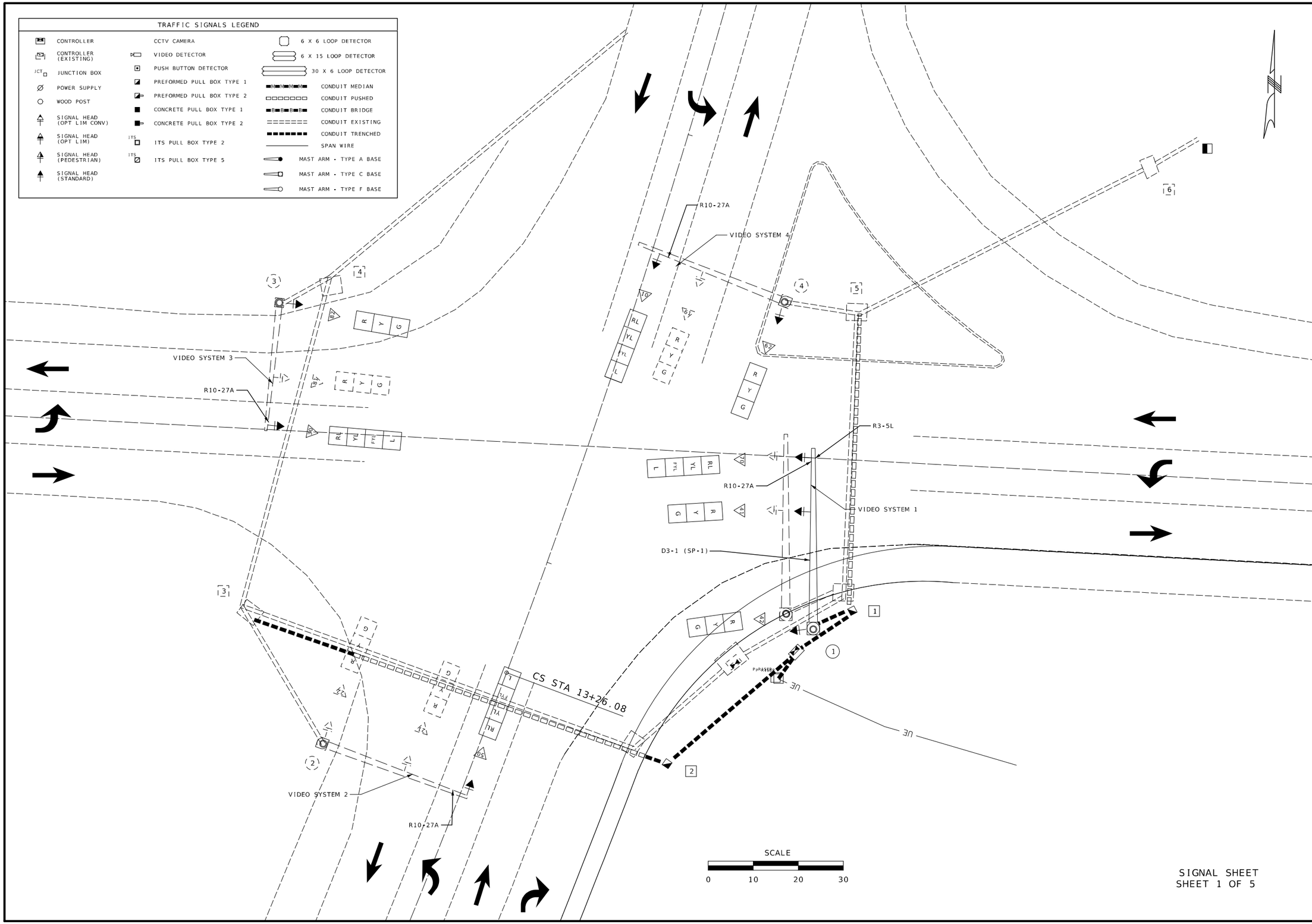
DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 17
COUNTY JOHNSON	
JOB NO. JKR0090	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

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

TRAFFIC SIGNALS LEGEND

CONTROLLER	CCTV CAMERA	6 X 6 LOOP DETECTOR
CONTROLLER (EXISTING)	VIDEO DETECTOR	6 X 15 LOOP DETECTOR
JUNCTION BOX	PUSH BUTTON DETECTOR	30 X 6 LOOP DETECTOR
POWER SUPPLY	PREFORMED PULL BOX TYPE 1	CONDUIT MEDIAN
WOOD POST	PREFORMED PULL BOX TYPE 2	CONDUIT PUSHED
SIGNAL HEAD (OPT LIM CONV)	CONCRETE PULL BOX TYPE 1	CONDUIT BRIDGE
SIGNAL HEAD (OPT LIM)	CONCRETE PULL BOX TYPE 2	CONDUIT EXISTING
SIGNAL HEAD (PEDESTRIAN)	ITS PULL BOX TYPE 2	CONDUIT TRENCHED
SIGNAL HEAD (STANDARD)	ITS PULL BOX TYPE 5	SPAN WIRE
		MAST ARM - TYPE A BASE
		MAST ARM - TYPE C BASE
		MAST ARM - TYPE F BASE



SIGNAL SHEET
SHEET 1 OF 5

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
Jaclyn A. White
08/30/2024 8:34:47 AM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	8/5/2024
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 18
COUNTY	JOHNSON
JOB NO.	JKR0090
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)

EFFECTIVE: 07-01-2018

| POST NUMBER | PULL BOX NUMBER | LOCATION APPROACH | STATION | OFFSET | BASE A 9 | A 9.5 | A 10 | A 10.5 | A 11 | A 12 | F 9 | F 9.5 | F 10 | F 10.5 | F 11 | F 12 | C | CONCRETE** (CU. YDS.) | PULL BOX PREFORMED CONCRETE CLASS 1 | CLASS 2 | CLASS 3 | CLASS 5 | STANDARD | DOUBLE, TYPE A | DOUBLE, TYPE B | DRAIN TYPE* I | II A | II B | II C | POST TOP MOUNT POST 8 FT. | 15 FT. | TYPE C & CL ARM LENGTH A | A | A | A | SIGNAL SPACING B | C | D | D' | SIGN SPACING B | C | D | D' | TYPE B & BL ARM LENGTH E | K | E | K | E | K | LEFT ARM E SIGNAL SPACING F | G | H | H' | SIGN SPACING F | G | H | H' | RIGHT ARM K SIGNAL SPACING L | M | N | N' | SIGN SPACING L | M | N | N' | INCLUDED ANGLE | LUMINAIRE BRACKET ARM* 4 FT. | 6 FT. | 8 FT. | 10 FT. | 12 FT. | 15 FT. |
|---|---|---

EFFECTIVE: 10-01-2015

*SEPERATE PAYMENT WILL NOT BE MADE. FOR INFORMATION ONLY

CONDUIT (WITH #14 TRACER WIRE)

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET. 1"	TRENCH 2"	TRENCH 3"	TRENCH 4"		PUSHED 2"	PUSHED 3"	PUSHED 4"	MEDIAN 2"	MEDIAN 3"	MEDIAN 4"	ON STRUCTURE 2"	ON STRUCTURE 3"		REMARKS
∅		7		13													
	1	15			14												
1	1	10			13												
	2	39			38												
2	3	99			30				67								
1	5	66							64								
SUBTOTALS				13	95				131								
TOTALS				13	95				131								

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	POWER	POWER 1c #8	CONTROL 2c #16	CONTROL 5c #16	CONTROL 7c #16	CONTROL 3c #16	CLOSED LOOP INTERCONNECT 3 PAIR #16	LUMINAIRE CONTROL 2c #12	LUMINAIRE POLE & BRACKET 1c #10	DETECTOR VIDEO*	DETECTOR	FIBER SINGLE-MODE	FIBER MULTI-MODE	REMARKS
∅		7		50												
	70	25					100									
	41	25					109									INCLUDES JUMPER TO 42
	50	166					239									
	30	219					315									INCLUDES JUMPER TO 82
	10	98					220									INCLUDES JUMPER TO 62
		25								70						
	1	25										100				
	2	166										239				
	3	219										294				
	4	98										171				
SUBTOTALS				50			1103			70		804				
TOTALS				50			1100			70		804				

INTERSECTION RTE 23 & W MCPHERSON ST

D-37B

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 5:52:19 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED 8/5/2024

ROUTE	STATE
23	MO

DISTRICT	SHEET NO.
KC	20

COUNTY JOHNSON

JOB NO. JKR0090

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)

SIGNAL SHEET
SHEET 3 OF 5

EFFECTIVE: 04-01-2018

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH TYPE		COORDINATION INTERFACE *						TIME * CLOCK	NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
									12C/7C HARDWIRE (1)		TIME BASE	CLOSED LOOP		FIBER								
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	MASTER	LOCAL		NEMA	170			E	EV	DOUBLE	332	336S	BITRAN	WAPITI
RTE 23	12+99.22	57.19' LT															1					

NEMA DETECTOR ASSIGNMENT

		CARD POSITION							
		1	2	3	4	5	6	7	8
CHANNEL	1	VIDEO							
	2								

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (2)

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE				
		PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
			STANDARD	DELAY/ EXTEND *	CALL UNIT *	
10	NBLT					1
61	NB					
50	SBLT					1
21	SB					
70	EBLT					1
41	EB					
30	WBLT					1
81	WB					
TOTAL						1 SYSTEM

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

*** USE D3-1 FOR ONE LINE. USE D3-1B FOR TWO LINE.

(1) MoDOT "D" PLUG SHALL BE WIRED INTO ALL NEMA CONTROLLERS WITH 7C HARDWIRE INTERCONNECT.

(2) PAYMENT IS MADE FOR THE NUMBER OF 2-CHANNEL DETECTOR CARDS AS SHOWN BELOW THE ASSIGNMENT CHART.

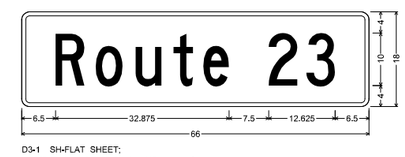
(3) MODOT WILL PROVIDE CONTROLLER.

SIGNAL SIGNS

QUANTITY	MUTCD SIGN NUMBER	SIZE	AREA	SIGN TOTAL AREA ITEM NO. 90208.33	SIGNAL SIGN MOUNTING HARDWARE ITEM NO. 90208.34
		INCHES	SQ.FT.	SQ.FT.	EA.
	R10-10L	24 X 30	5.0		
	R10-10R	24 X 30	5.0		
1	R3-5L	30 X 36	7.5	7.5	1
	R3-5R	30 X 36	7.5		
	R3-5A	30 X 36	7.5		
	R3-6L	30 X 36	7.5		
	R3-6R	30 X 36	7.5		
	R3-2	24 X 24	4.0		
	R3-1	24 X 24	4.0		
	R3-3	24 X 24	4.0		
1	D3-1 SP-1	66 X 18	8.25	8.25	1
	D3-1B ***	VAR. X 18			
	R10-3E	9 X 15	0.9		
	R10-11A	24 X 30	5.0		
	R10-13	36 X 24	6.0		
4	R10-27A	30 X 36	7.5	30	4
			SUBTOTAL	45.75	6
			TOTAL	46	6

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12
Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø7	Ø8	FYA Ø1	FYA Ø3	FYA Ø5	FYA Ø7
								13	14	15	16
								FUTURE			



D3-1 SH-FLAT SHEET;
1.500" Radius, 0.750" Border, White on, Green;
"Route 23", C;
Table of letter and object lefts

R	o	u	t	e	2	3
6.500	14.000	21.625	28.875	34.500	46.875	54.125

RTE 23 & MCPHERSON ST
INTERSECTION

D-37C

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER
08/05/2024 5:52:51 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED 8/5/2024

ROUTE	STATE
23	MO
DISTRICT	SHEET NO.
KC	21

COUNTY: JOHNSON
JOB NO.: JKR0090
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

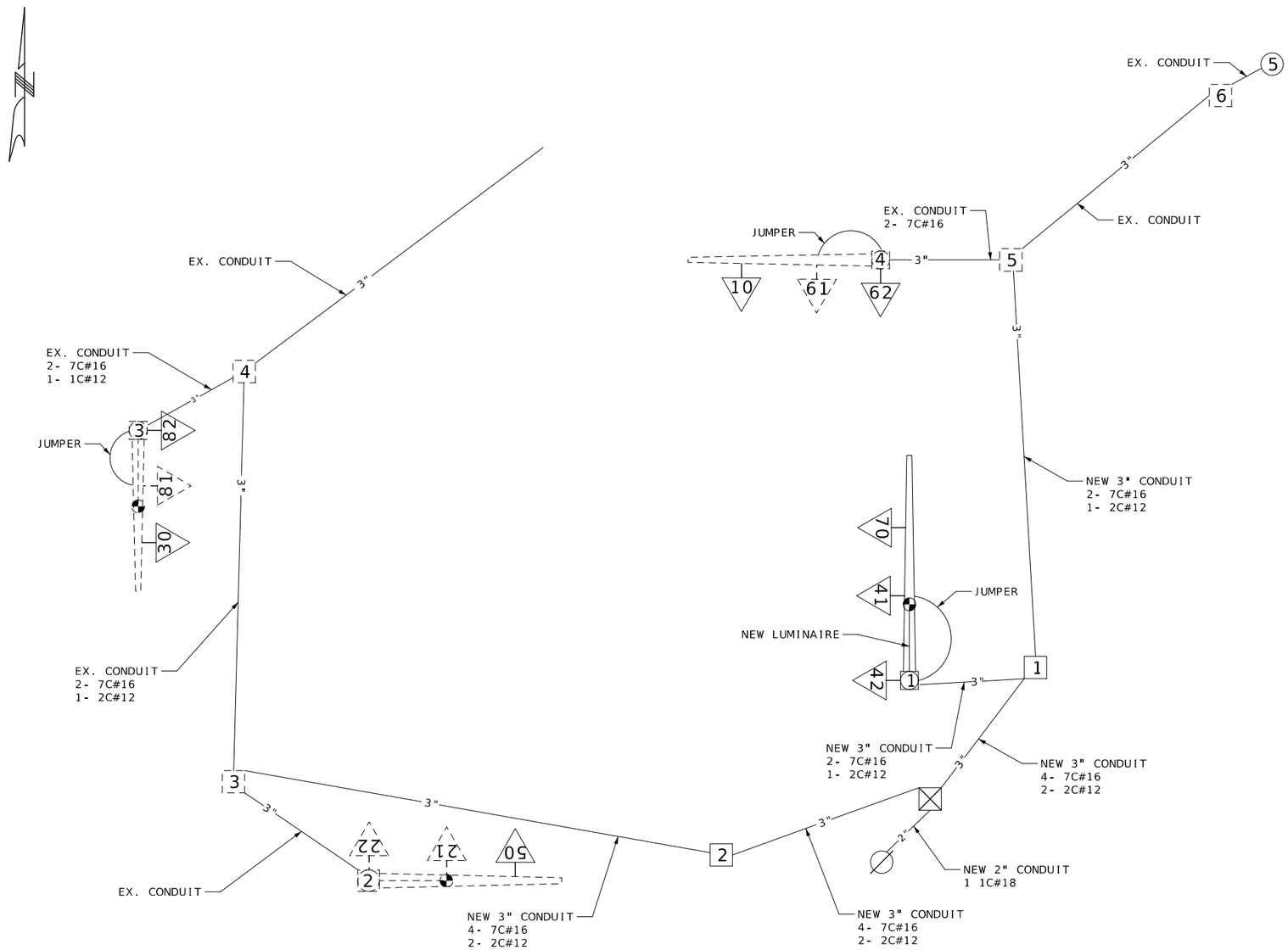
DATE	DESCRIPTION

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

SIGNAL SHEET
SHEET 4 OF 5

EFFECTIVE: 12-01-2017

WIRING DIAGRAM



LEGEND

3"	CONDUIT CONTAINING CABLE WITH SIZE
	CABLE
X-Xc	MULTI-CONDUCTOR CABLE #16 AWG (UNLESS OTHERWISE INDICATED)
LIC	#14 AWG DETECTOR LEAD-IN CABLE (2C TWISTED SHIELDED)
X	PULL BOX WITH NUMBER
X	POST WITH NUMBER
X	POST WITH MAST ARM
X	POST WITH MAST ARM AND LUMINAIRE
X	DETECTOR WITH NUMBER
X	SIGNAL HEAD WITH NUMBER
	SIGNAL CONTROLLER
	POWER SUPPLY
	LIGHTING CONTROLLER

RTE 23 & MCPHERSON ST

INTERSECTION

D-37D

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 5:53:34 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

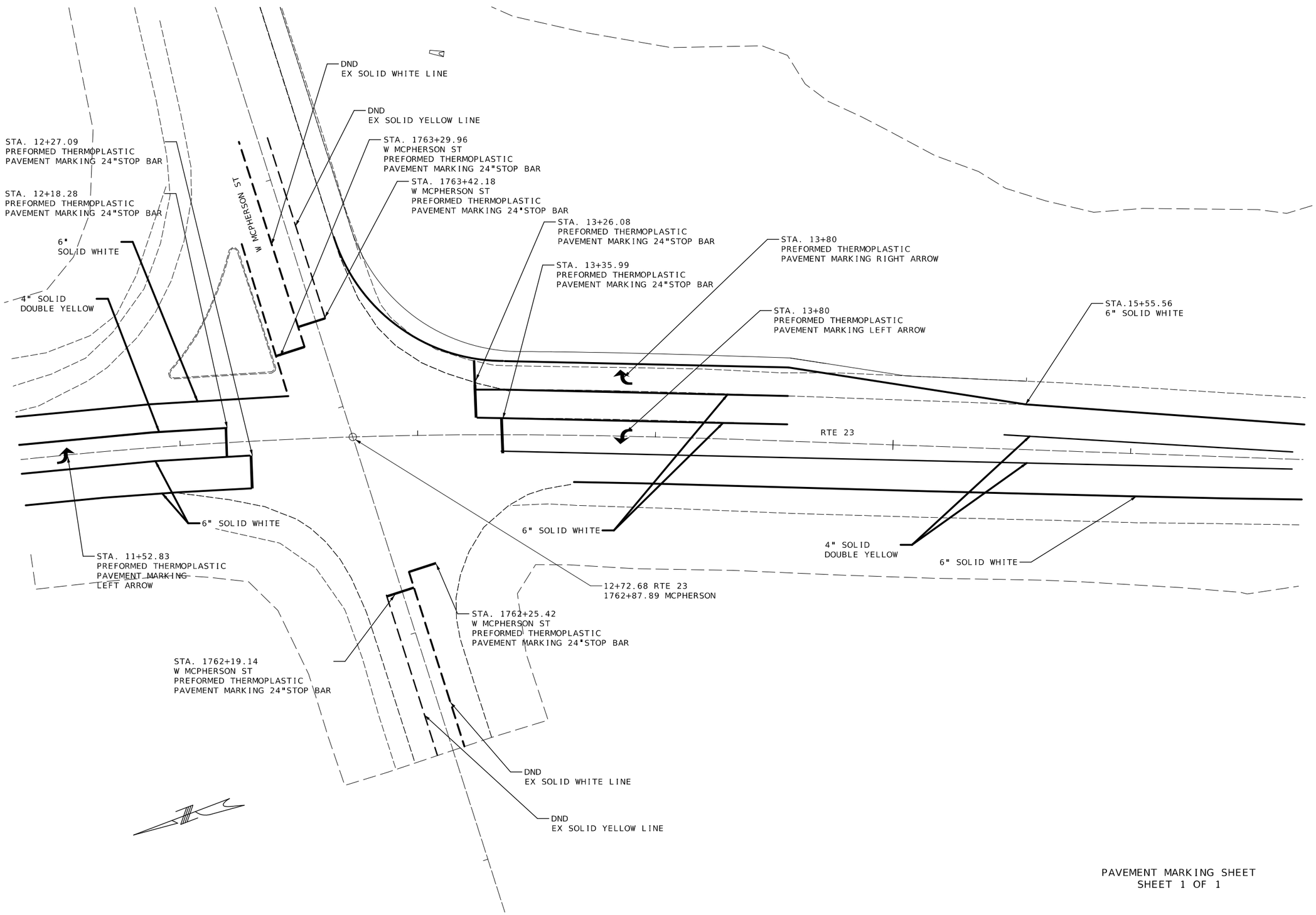
DATE PREPARED	8/5/2024
ROUTE	23
STATE	MO
DISTRICT	KC
SHEET NO.	22
COUNTY	JOHNSON
JOB NO.	JKR0090
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SIGNAL SHEET
SHEET 5 OF 5



PAVEMENT MARKING SHEET
SHEET 1 OF 1

STATE OF MISSOURI
JACLYN A. WHITE
NUMBER
PE-2003001116
PROFESSIONAL ENGINEER

Jaclyn A. White
08/05/2024 5:37:39 PM
JACLYN A WHITE - CIVIL
MO-PE-2003001116

DATE PREPARED	
8/5/2024	
ROUTE 23	STATE MO
DISTRICT KC	SHEET NO. 23
COUNTY JOHNSON	
JOB NO. JKR0090	
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)