DESIGN DESIGNATION

A.A.D.T. - 2024 = 31842
A.A.D.T. - 2044 = 35182
D.H.V. = 9%
T = 6.7%
V = VARIES 40-50 M.P.H.
D = 50.6%
FUNCTIONAL CLASSIFICATION - MINOR ARTERIAL/ PRINCIPAL ARTERIAL

TEMPORARY EASEMENTS WILL BE ACQUIRED

CONVENTIONAL SYMBOLS
(USED IN PLANS)

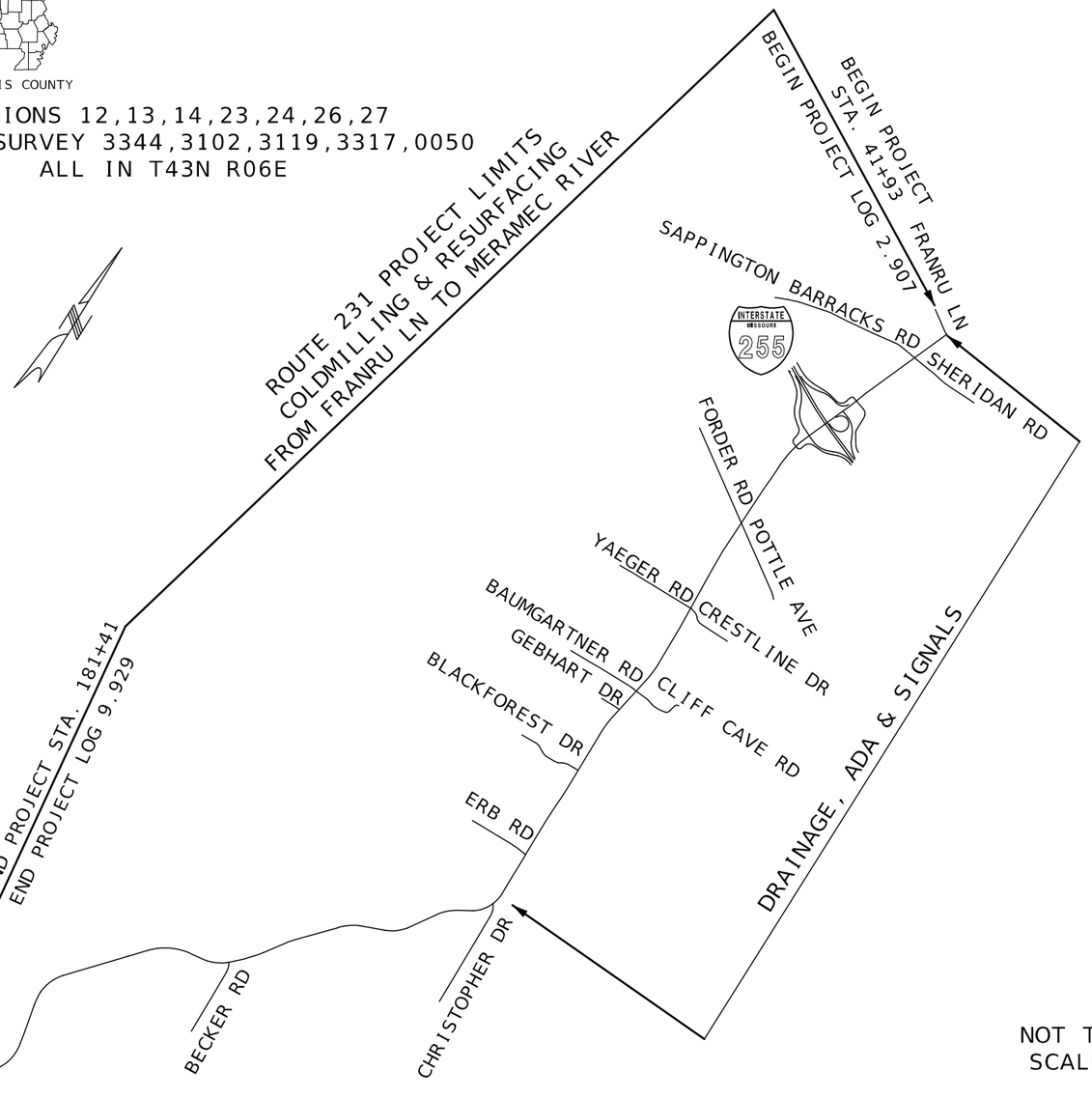
	EXISTING	NEW
BUILDINGS AND STRUCTURES		
GUARD RAIL		
GUARD CABLE		
CONCRETE RIGHT-OF-WAY MARKER		
STEEL RIGHT-OF-WAY MARKER		
LOCATION SURVEY MARKER		
UTILITIES		
FIBER OPTICS	-FO-	-FO-
OVERHEAD CABLE TV	-OTV-	-OTV-
UNDERGROUND CABLE TV	-UTV-	-UTV-
OVERHEAD TELEPHONE	-OT-	-OT-
UNDERGROUND TELEPHONE	-UT-	-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		
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

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
PLANS FOR PROPOSED
STATE HIGHWAY
ST. LOUIS COUNTY

KEY MAP
LOCATION OF ST. LOUIS COUNTY

SECTIONS 12,13,14,23,24,26,27
AND U.S. SURVEY 3344,3102,3119,3317,0050
ALL IN T43N R06E



NOT TO SCALE

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

25MSD-00154

INDEX OF SHEETS

DESCRIPTION	SHEET NUMBER
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QUANTITIES (QU) (17 SHEETS)	3
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REFERENCE POINTS (RP)	82-96
COORDINATE POINTS (CP)	97-98
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TRAFFIC CONTROL SHEETS (TC)	273-278
EROSION CONTROL SHEETS (EC)	279-294
CROSS SECTIONS/DRIVEWAY PROFILES (XS)	1-12

LENGTH OF PROJECT

BEGINNING OF PROJECT	STA.	41 + 93
END OF PROJECT	STA.	181 + 41
APPARENT LENGTH		13,948 FEET

EQUATIONS AND EXCEPTIONS:

1. 67+30.70 BK = 0+00.00 AH	6730.70 FEET
2. 8+66.20 BK = 8+67.44 AH	-1.24 FEET
3. 76+34.15 BK = 76+33.34 AH	0.81 FEET
4. 99+78.34 BK = 99+77.69 AH	0.65 FEET
5. 103+51.95 BK = 103+53.39 AH	-1.44 FEET
6. 129+31.21 BK = 129+30.37 AH	0.84 FEET
7. 141+46.26 BK = 141+48.19 AH	-1.93 FEET
8. 147+55.06 BK = 147+53.80 AH	1.26 FEET
9. 165+72.31 BK = 165+70.43 AH	1.88 FEET
10. 169+53.15 BK = 169+53.72 AH	-0.57 FEET
11. 183+58.76 BK = 18+89.45 AH	16469.31 FEET
12. 33+27.38 BK = 33+29.60 AH	-2.22 FEET
13. 52+86.71 BK = 52+83.33 AH	3.38 FEET
14. 107+87.09 BK = 107+95.69 AH	-8.60 FEET
15. 142+27.59 BK = 143+28.34 AH	-100.75 FEET
16. 155+27.20 BK = 155+04.42 AH	22.78 FEET

TOTAL CORRECTIONS	23,114.86 FEET
NET LENGTH OF PROJECT	37,062.86 FEET
STATE LENGTH	7.019 MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	2.5 ACRES

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/23/2025 3:19:03 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 6/23/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	1

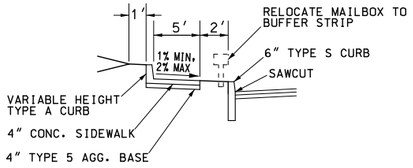
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

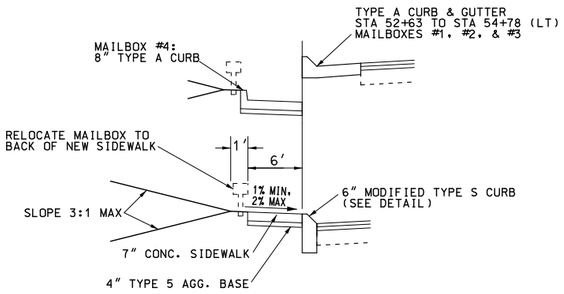
TITLE SHEET

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



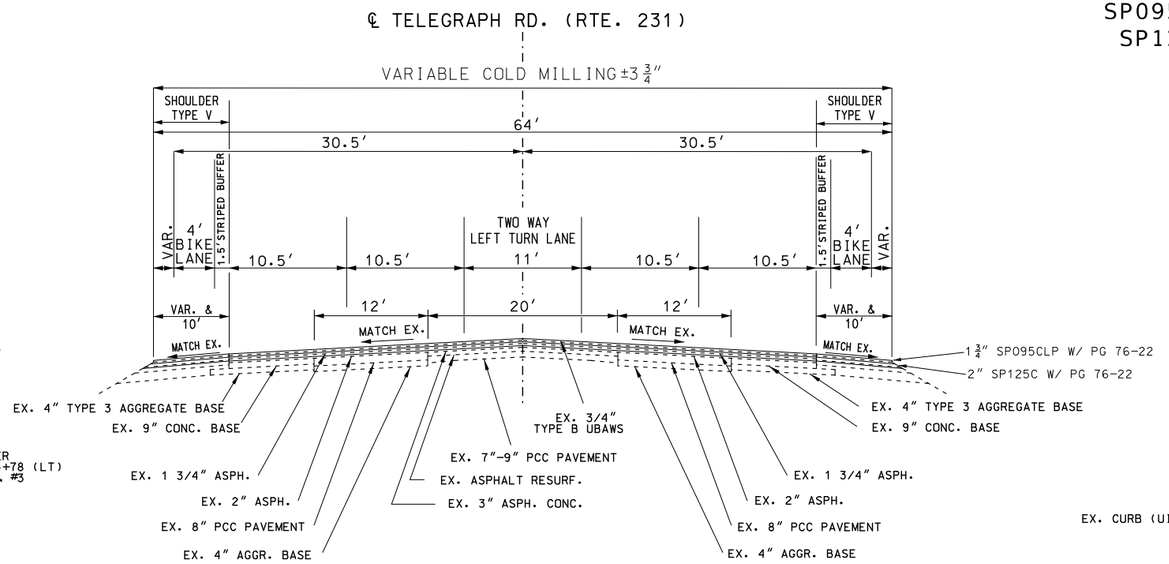
SIDEWALK WITH RELOCATED MAILBOX & BARRIER CURB WITH BUMP-OUT

STA. 56+93.0 TO STA. 57+94.6 (LT): MAILBOX #4A



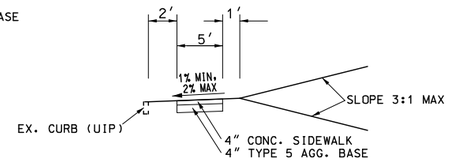
SIDEWALK WITH RELOCATED MAILBOX & MOUNTABLE CURB

STA. 59+06.0 TO STA. 60+46.6 (LT): MAILBOX #4
STA. 122+77.6 TO STA. 123+48.5 (LT): MAILBOX #5
STA. 131+34.0 TO STA. 131+87.5 (LT): MAILBOX #6 & #7
STA. 135+60.7 TO STA. 136+62.6 (LT): MAILBOX #8
STA. 146+45.7 TO STA. 148+19.2 (LT): MAILBOX #9



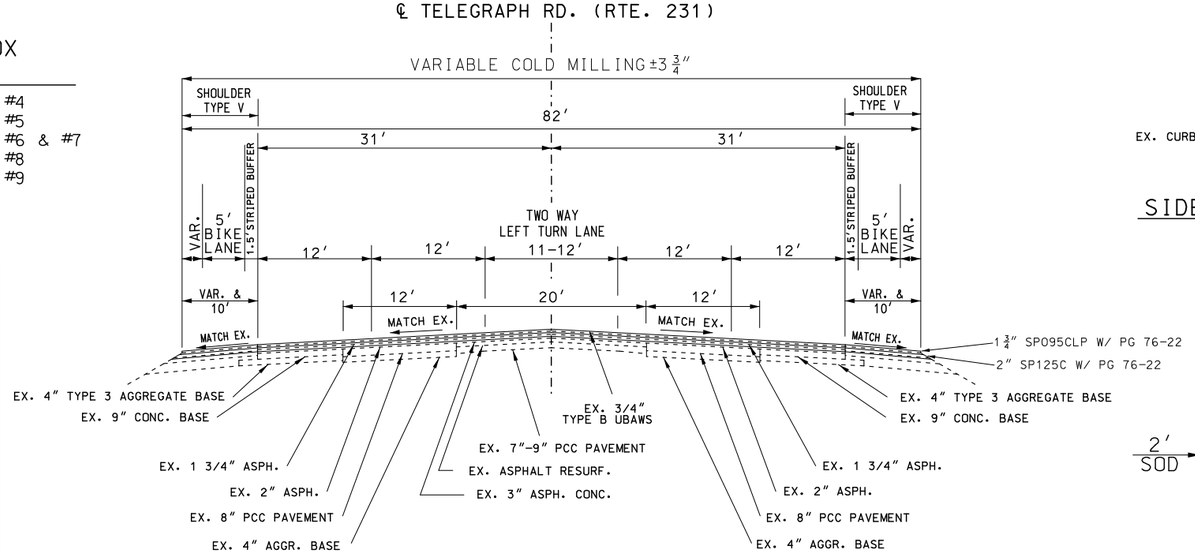
SECTION ON TANGENT

STA. 41+93 TO STA. 50+33.64



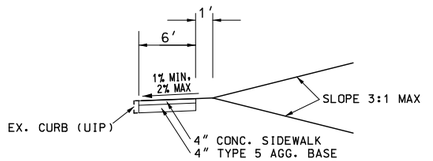
SIDEWALK WITH BUFFER STRIP

STA. 45+40 TO STA. 45+61 (RT)
STA. 51+59 TO STA. 51+88 (LT)



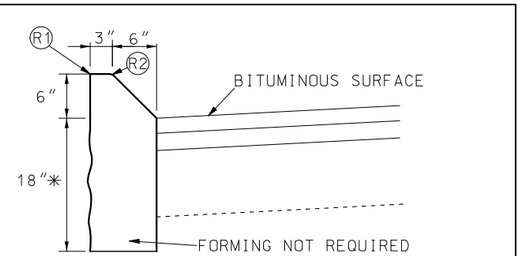
SECTION ON TANGENT

STA. 50+33.64 TO STA. 65+95.46



SIDEWALK WITHOUT BUFFER STRIP

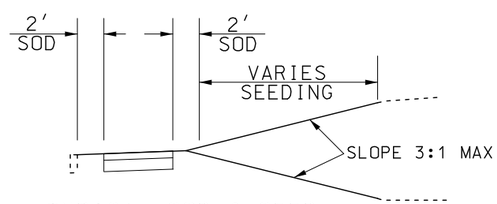
STA. 45+61 TO STA. 51+23 (RT)
STA. 58+48 TO STA. 58+66 (LT)
STA. 61+26 TO STA. 63+76 (LT)
STA. 63+57 TO STA. 63+88 (LT)



MODIFIED TYPE S CURB (MOUNTABLE)

* DEPTH MAY BE REDUCED IF KEYED 6″ IN ROCK
(R1) ROUND TO 1/4″ RADIUS
(R2) ROUND TO 3/4″ RADIUS.

DETAIL



TYPICAL SOD & SEED ALONG NEW SIDEWALK

VARIOUS LOCATIONS (RT & LT)

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:29:00 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	2

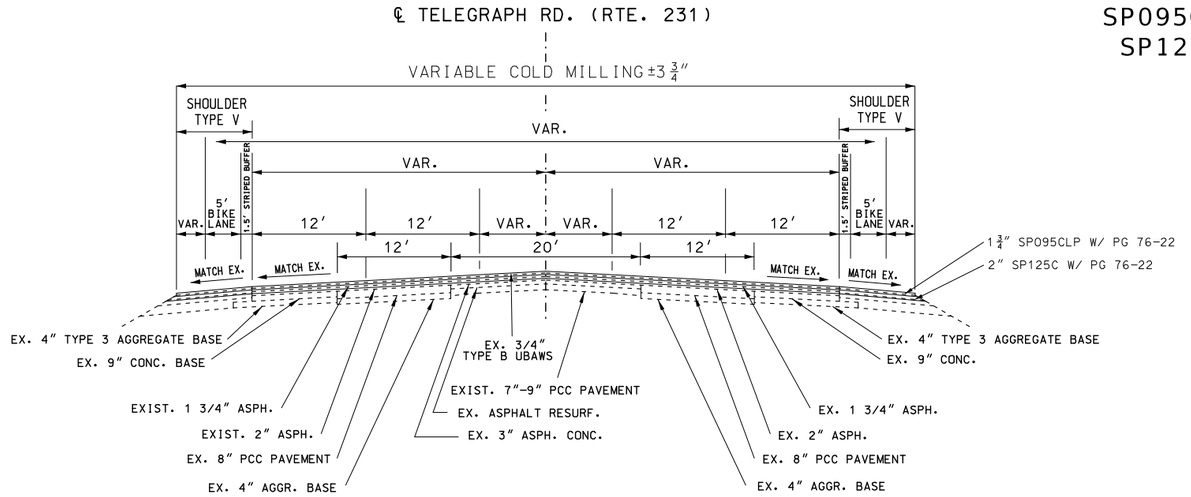
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION
DATE

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

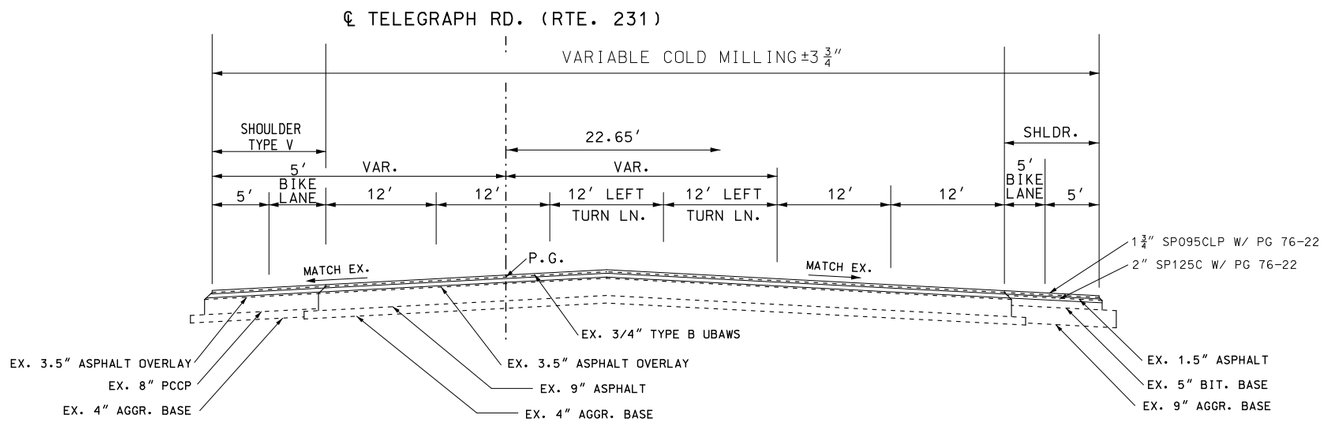
TYPICAL SECTIONS
1 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



SECTION ON TANGENT

STA. 65+95.46 TO STA. 67+30.70
EQ. STA. 67+30.70 BK. = STA. 0+00.00 AHD.



SECTION ON TANGENT

STA. 0+00 TO STA. 2+78.27

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:29:22 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

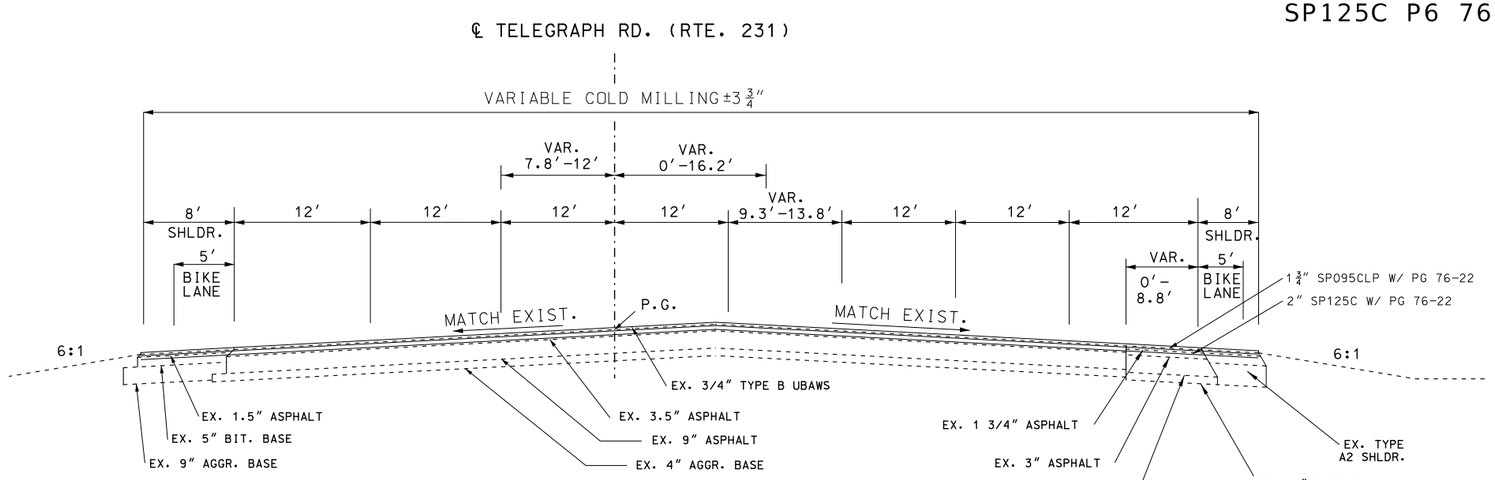
DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

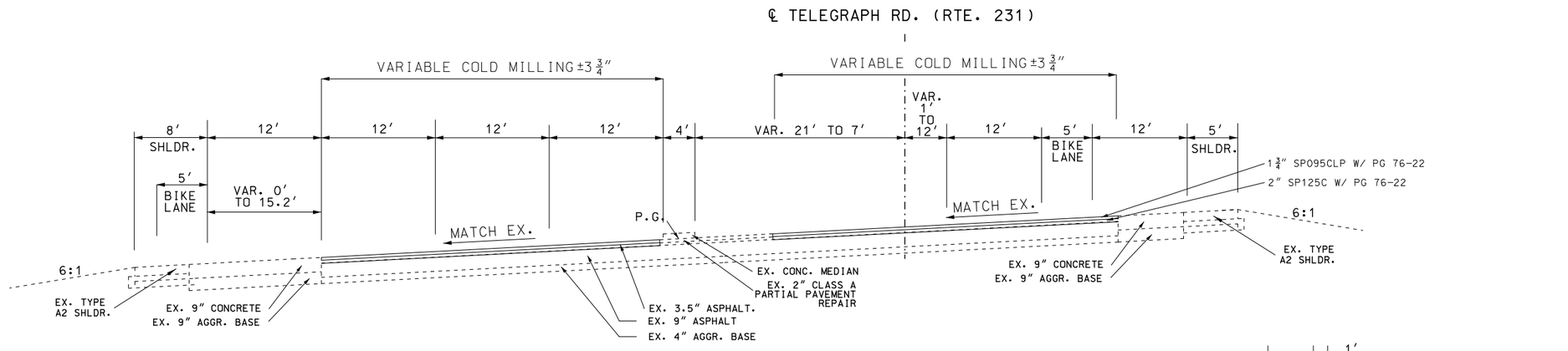
TYPICAL SECTIONS
2 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



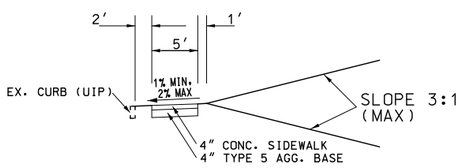
SECTION ON TANGENT

STA. 2+78.27 TO STA. 7+80.00



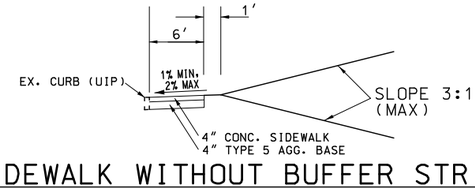
SECTION ON SUPER ELEVATED CURVE

STA. 20+00.00 TO STA. 22+43.78



SIDEWALK WITH BUFFER STRIP

STA. 19+12 TO STA. 22+43.78 (RT)



SIDEWALK WITHOUT BUFFER STRIP

STA. 3+76 TO STA. 6+83 (RT)
STA. 7+14 TO STA. 9+89 (RT)

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:28:24 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

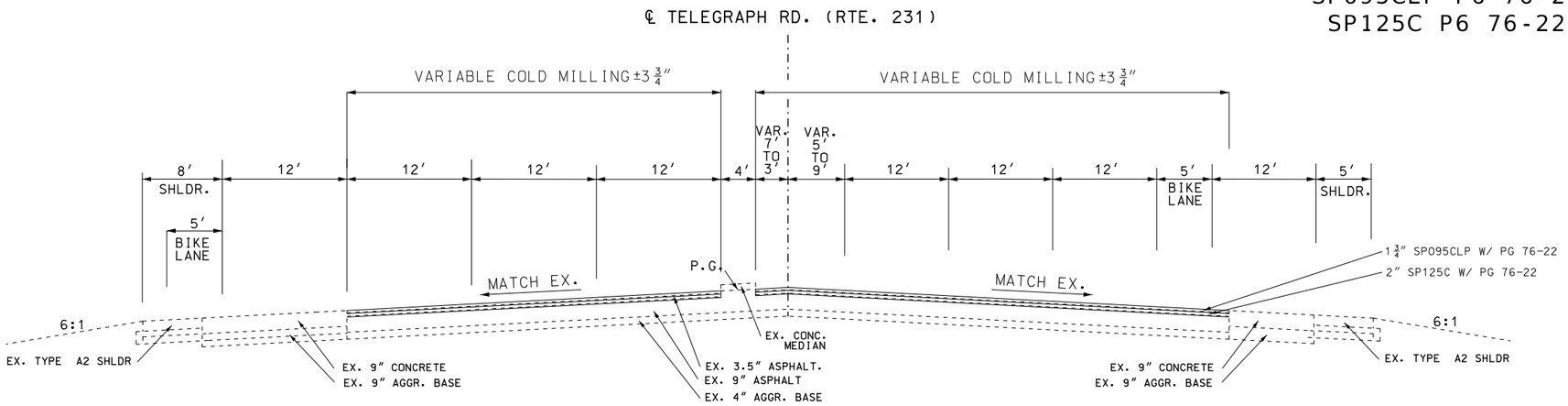
DATE PREPARED: 6/16/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

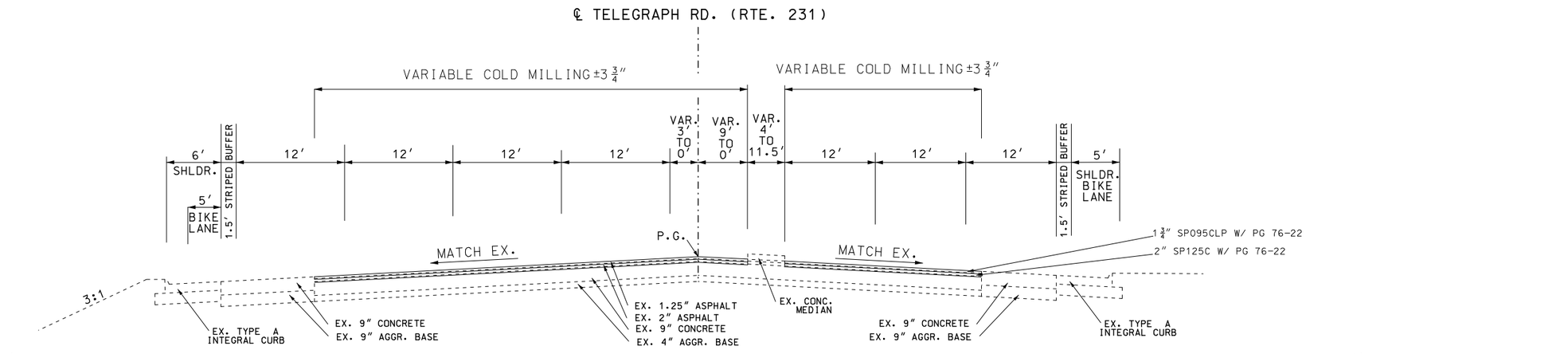
TYPICAL SECTIONS
3 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



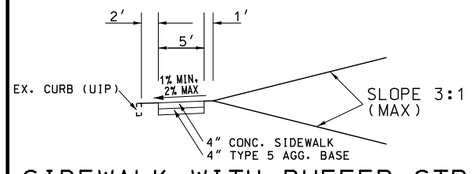
SECTION ON TANGENT

STA. 22+43.47 TO STA. 22+82.51



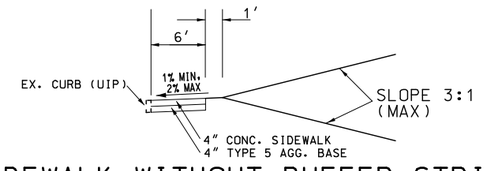
SECTION ON TANGENT

STA. 22+82.51 TO STA. 27+06.89



SIDEWALK WITH BUFFER STRIP

STA. 22+43.78 TO STA. 22+81 (RT)



SIDEWALK WITHOUT BUFFER STRIP

STA. 23+71 TO STA. 26+41 (RT)

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:29:52 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	2

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

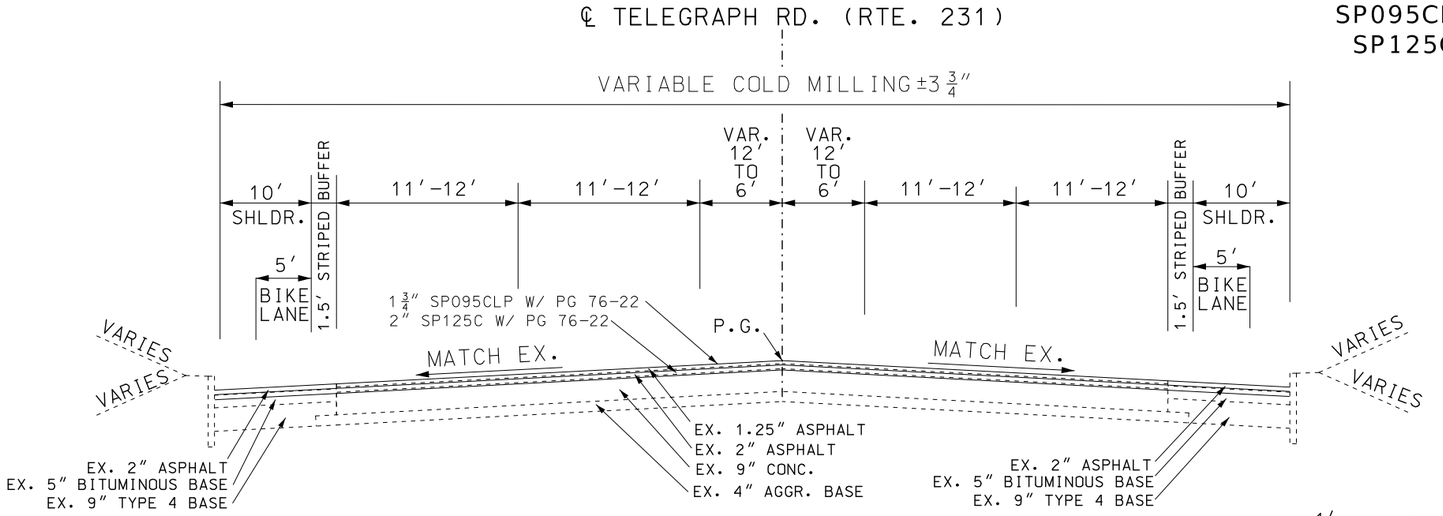
BRIDGE NO.

DESCRIPTION	DATE

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

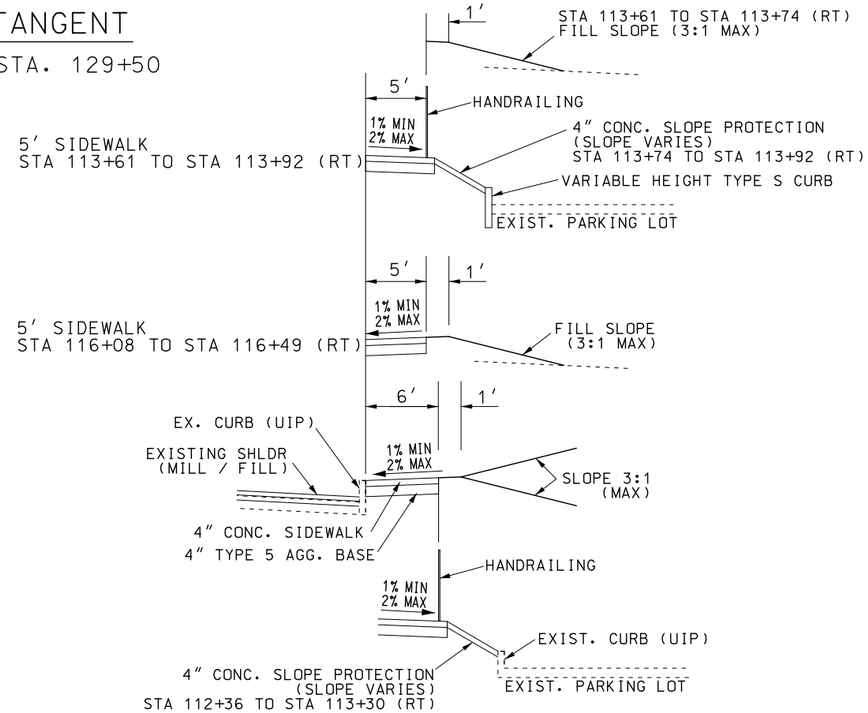
TYPICAL SECTIONS
4 OF 13

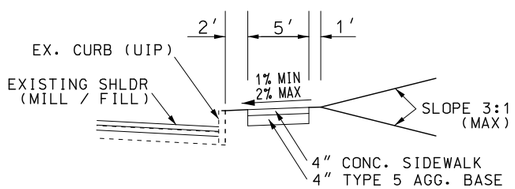
APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



SECTION ON TANGENT

STA. 27+06.89 TO STA. 129+50





SIDEWALK WITH BUFFER STRIP

STA. 63+84 TO STA. 69+58 (RT)
STA. 71+14 TO STA. 72+48 (RT)
STA. 88+15 TO STA. 89+51 (LT)
STA. 92+66 TO STA. 93+07 (LT)
STA. 117+90 TO STA 119+18 (RT)

SIDEWALK WITHOUT BUFFER STRIP

STA. 69+58 TO STA. 70+58 (LT)
STA. 89+51 TO STA. 92+71 (LT)
STA. 97+18 TO STA. 97+90 (LT)
STA. 112+36 TO STA. 113+30 (RT)
STA. 114+25 TO STA. 115+78 (RT)
STA. 116+85 TO STA. 117+49 (RT)
STA. 123+86 TO STA. 124+75 (LT)

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:29:42 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

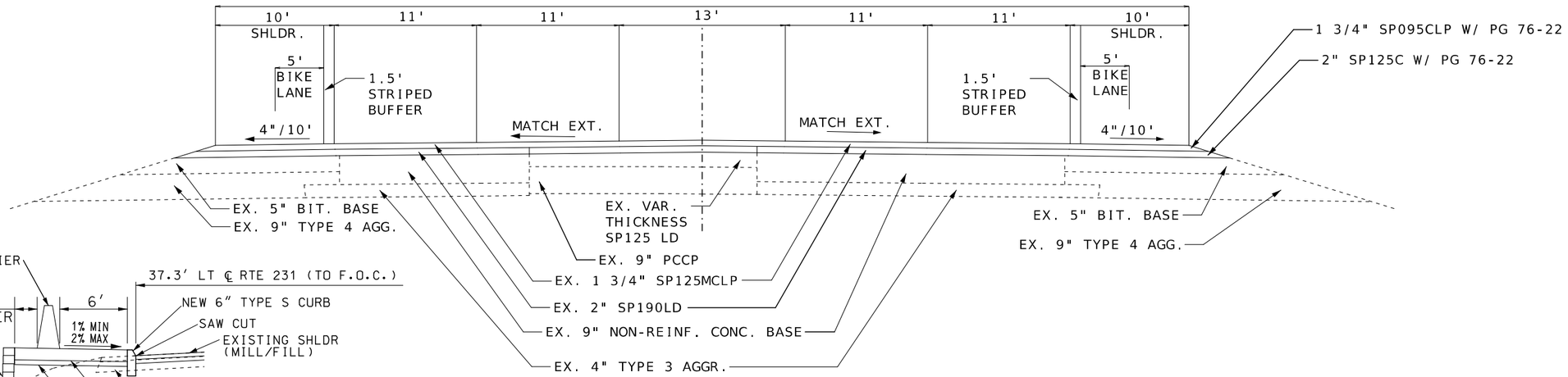
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TYPICAL SECTIONS
5 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY

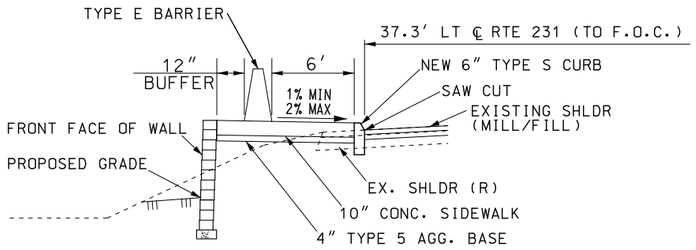
℄ TELEGRAPH RD. (RTE. 231)

VARIABLE COLD MILLING±3¾"



SECTION ON TANGENT

STA. 129+50 TO STA. 142+00

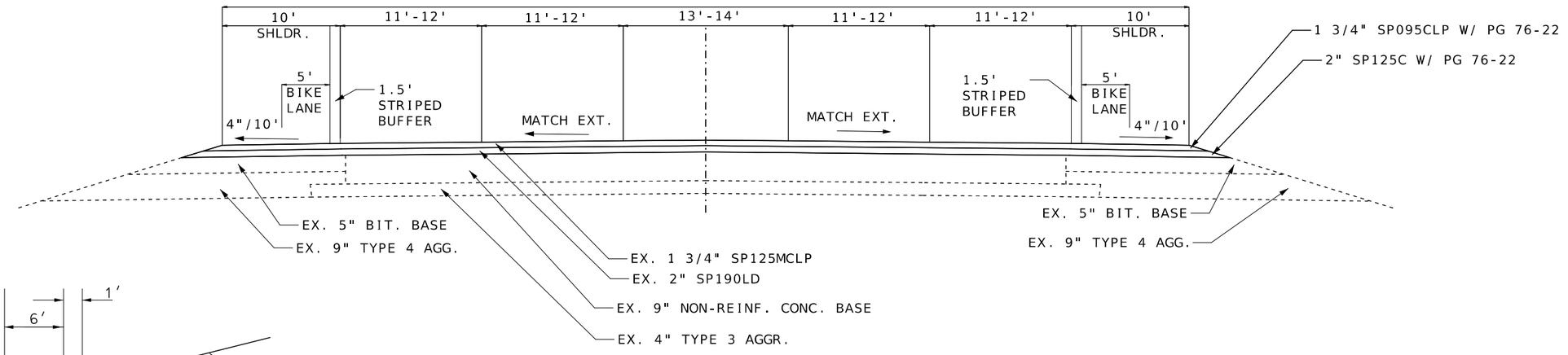


SIDEWALK WITH SMALL BLOCK WALL

(SEE SPECIAL SHEET FOR DETAILS)
STA. 129+60 TO STA. 130+63.4 (LT)

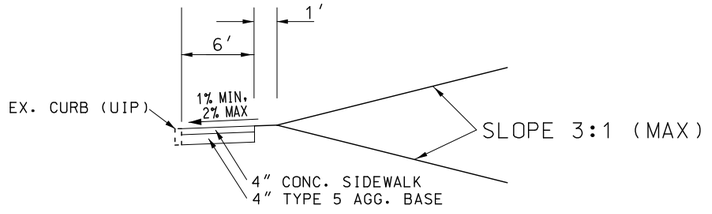
℄ TELEGRAPH RD. (RTE. 231)

VARIABLE COLD MILLING±3¾"



SECTION ON TANGENT

STA. 142+00 TO STA. 172+00



SIDEWALK WITHOUT BUFFER STRIP

STA. 148+61 TO STA. 149+28 (LT)
STA. 171+28 TO STA. 171+75 (RT)

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:40:07 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

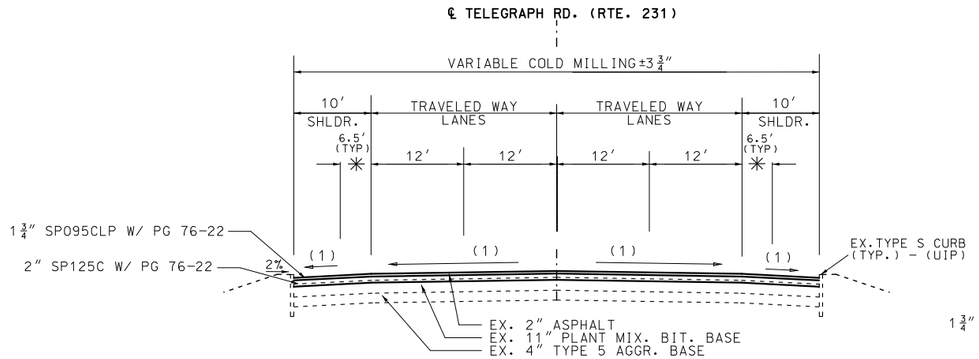
DATE PREPARED: 6/16/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

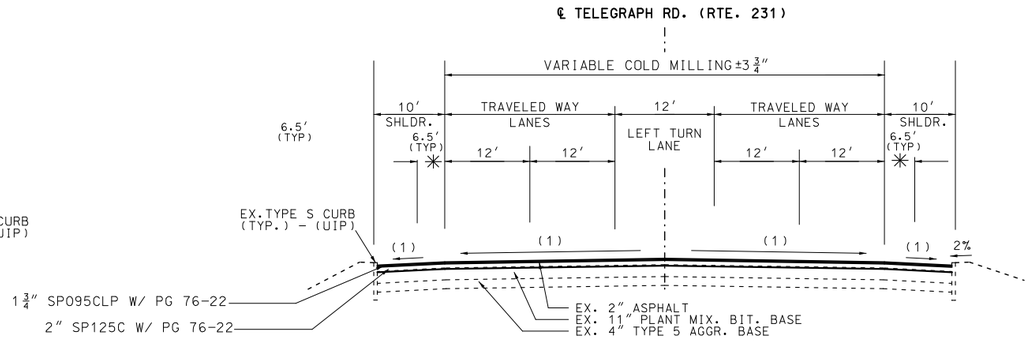
TYPICAL SECTIONS
6 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



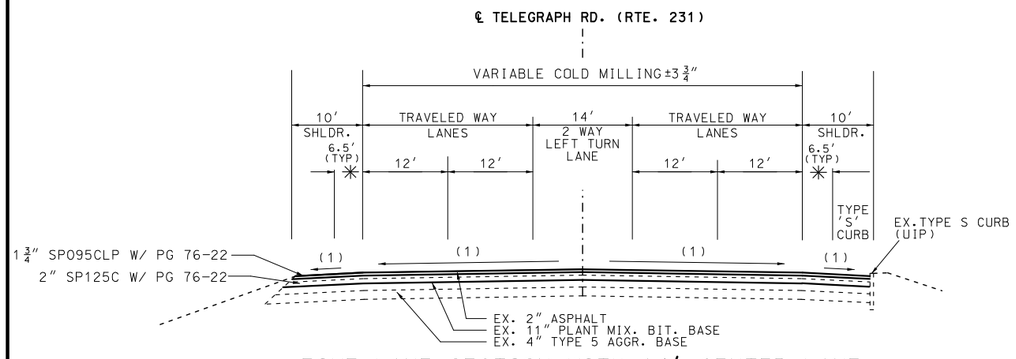
FOUR LANE SECTION
TYPICAL SECTION RTE. 231

STA. 91+37.13 TO STA. 107+87.09 BK.
STA. 107+95.68 AH TO STA. 110+92.50 (TAPER 48' TO 60')
STA. 117+94.60 TO STA. 139+10.70
STA. 139+10.70 TO STA. 142+10.70 (TAPER 48' TO 60')
STA. 155+05.20 TO STA. 155+27.19 BK.
STA. 155+04.42 AH TO STA. 155+84.00
STA. 155+84.00 TO STA. 158+82.51 (TAPER 48' TO 62')



FIVE LANE SECTION WITH 12' CENTER LANE
TYPICAL SECTION RTE. 231

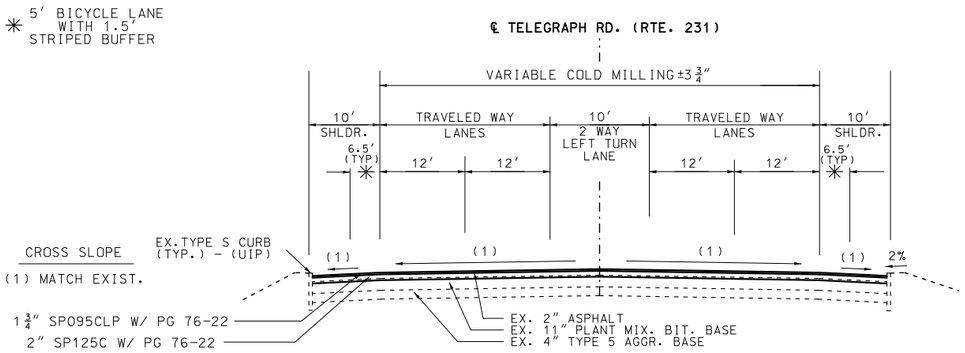
STA. 174+33.53 TO STA.183+55.95 BK.
STA. 18+86.04 AH TO STA. 57+41.46
STA. 110+92.50 TO STA. 114.96.04
STA. 114+96.04 TO STA. 117+94.60 (TAPER 60' TO 48')
STA. 158+82.51 TO STA. 162+01.30
STA. 162+01.30 TO STA. 166+00.00 (TAPER 60' TO 24')



FIVE LANE SECTION WITH 14' CENTER LANE
TYPICAL SECTION RTE. 231

STA. 172+00 TO STA.173+06.40
STA. 173+06.40 TO STA. 174+33.53(TAPER 62' TO 60')
STA. 57+41.46 TO STA. 87+92.63
STA. 87+92.63 TO STA. 91+37.13 (TAPER 62' TO 48')
STA. 142+10.70 TO STA. 142+27.60 BK.
STA. 143+28.34 AH. TO STA.145+83.30
STA. 145+83.30 TO STA. 148+32.60 (TAPER 62' TO 58')

✳ 5' BICYCLE LANE WITH 1.5' STRIPED BUFFER



FIVE LANE SECTION WITH 10' LEFT TURN LANE
TYPICAL SECTION RTE. 231

STA. 148+32.60 TO STA. 152+55.90
STA. 152+55.90 TO STA. 155+05.20 (TAPER 58' TO 48')

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:30:13 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

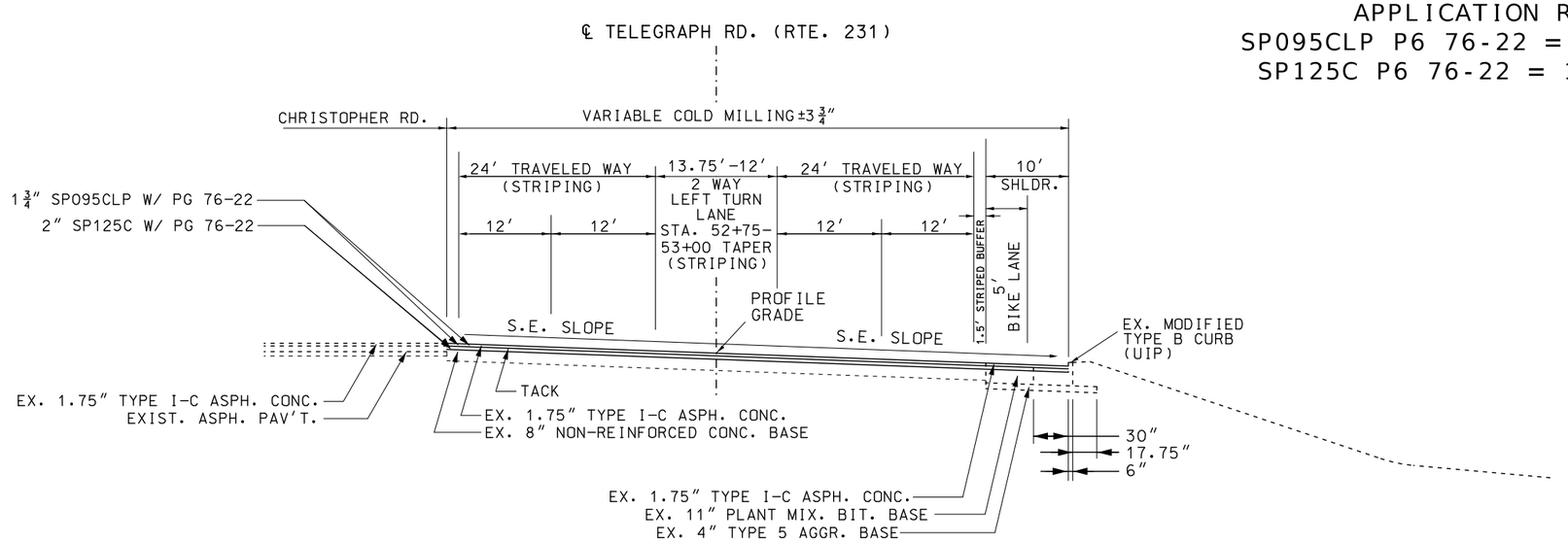
DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

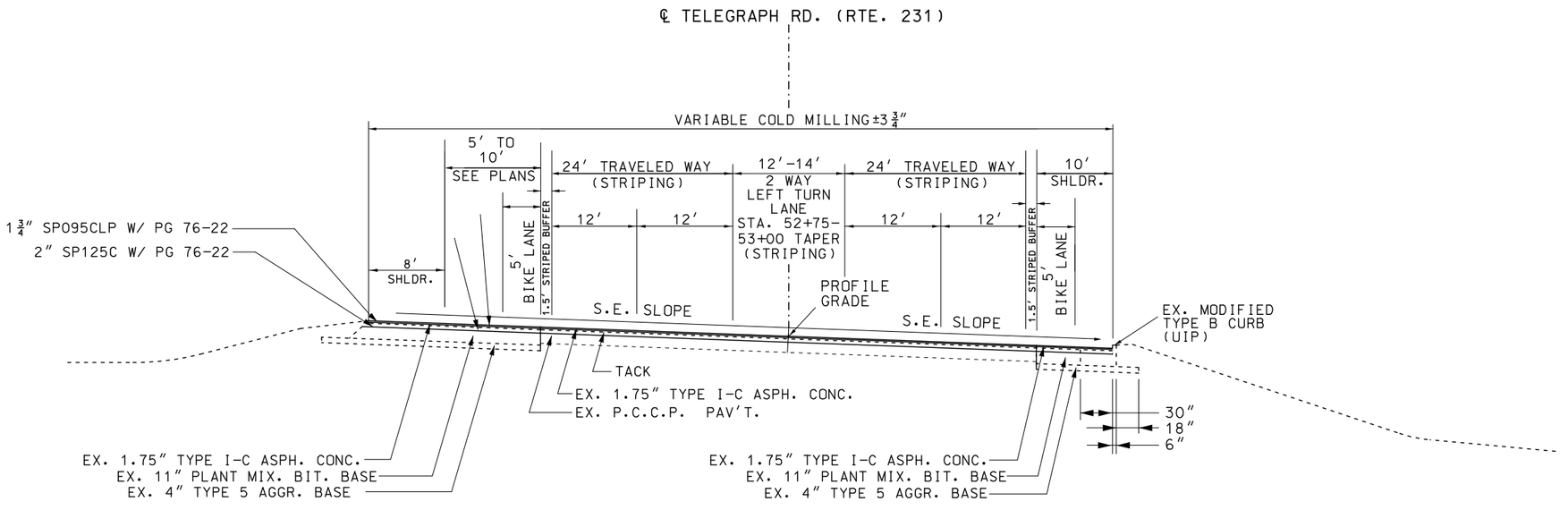
TYPICAL SECTIONS
7 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



SECTION ON SUPER ELEVATED CURVE

TYPICAL SECTION RTE. 231
P.O.C. STA. 52+84.19 TO P.O.C. STA. 53+13.75
P.O.C. STA. 53+46.20 TO P.O.C. STA. 53+78.31



SECTION ON SUPER ELEVATED CURVE

TYPICAL SECTION RTE. 231
P.O.C. STA. 52+75.000 TO P.O.C. STA. 52+84.19

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:30:33 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

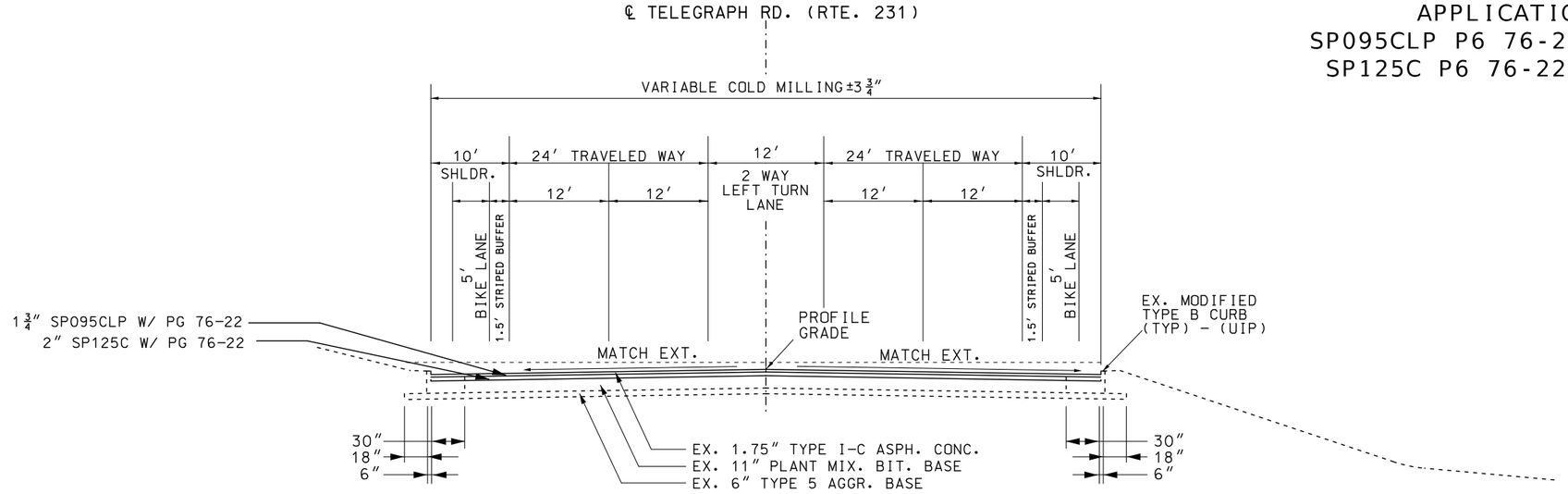
DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

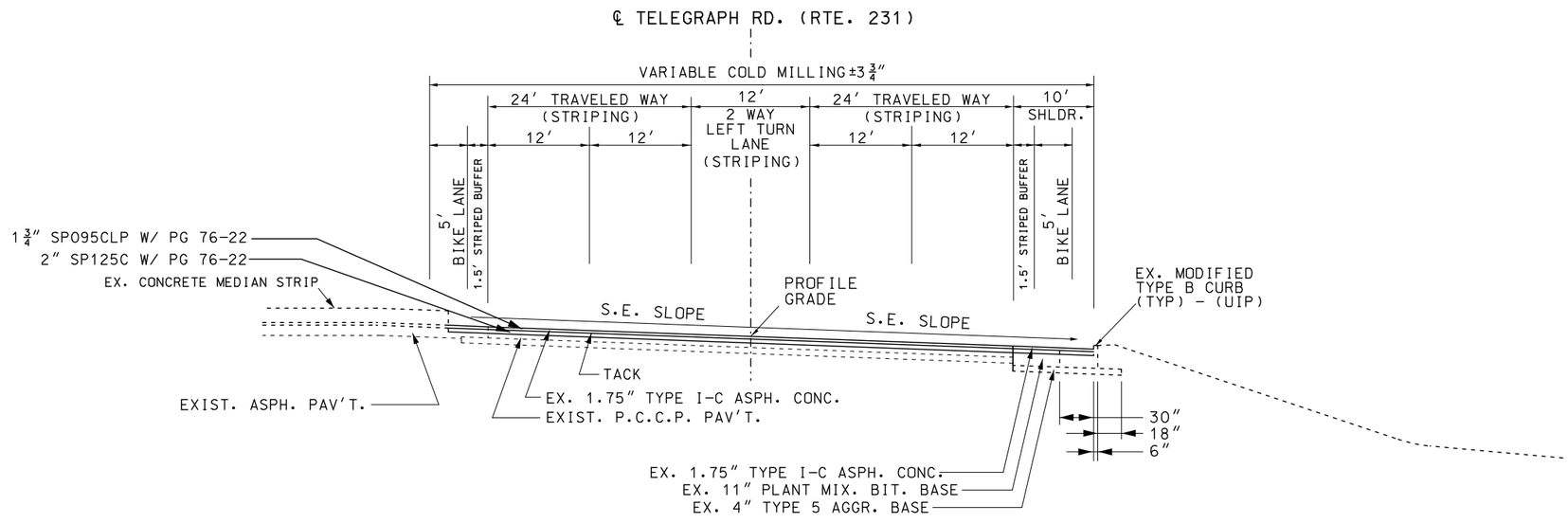
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TYPICAL SECTIONS
8 OF 13

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY



SECTION ON TANGENT
TYPICAL SECTION RTE. 231
STA. 17+50.000 TO P.C. STA. 19+50.000



SECTION ON SUPER ELEVATED CURVE
TYPICAL SECTION RTE. 231
P.O.C. STA. 53+13.75 TO P.O.C. STA. 53+46.20

NOT TO SCALE

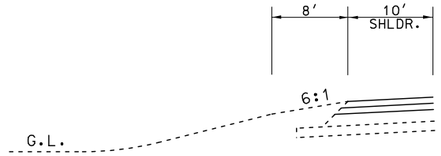
STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:30:46 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

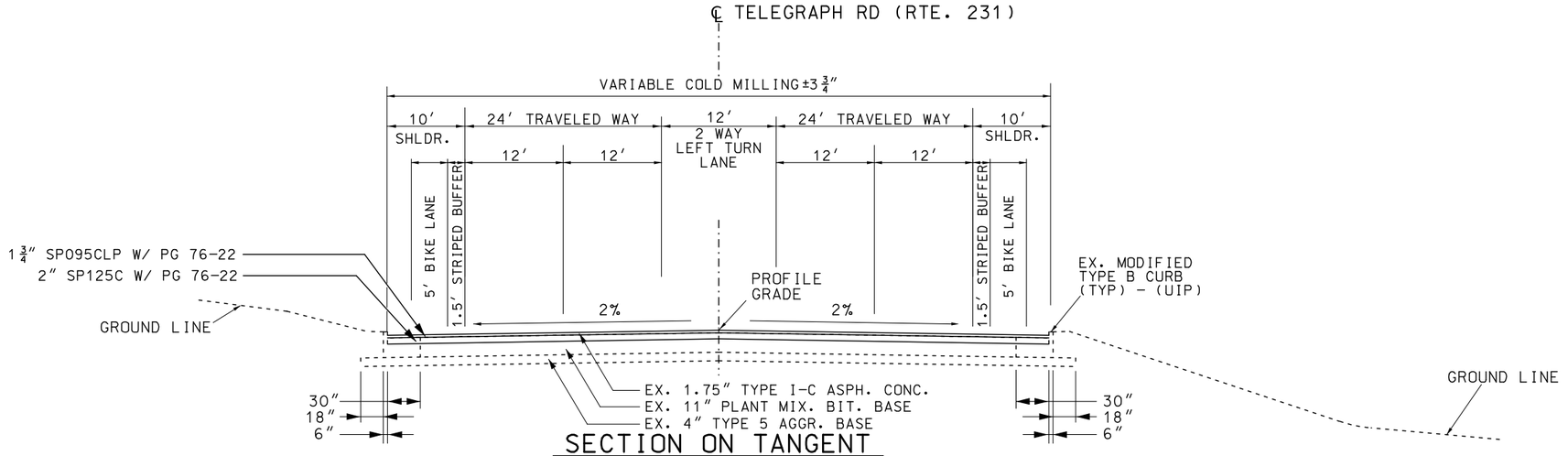
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TYPICAL SECTIONS
9 OF 13



NO CURB LT.

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY

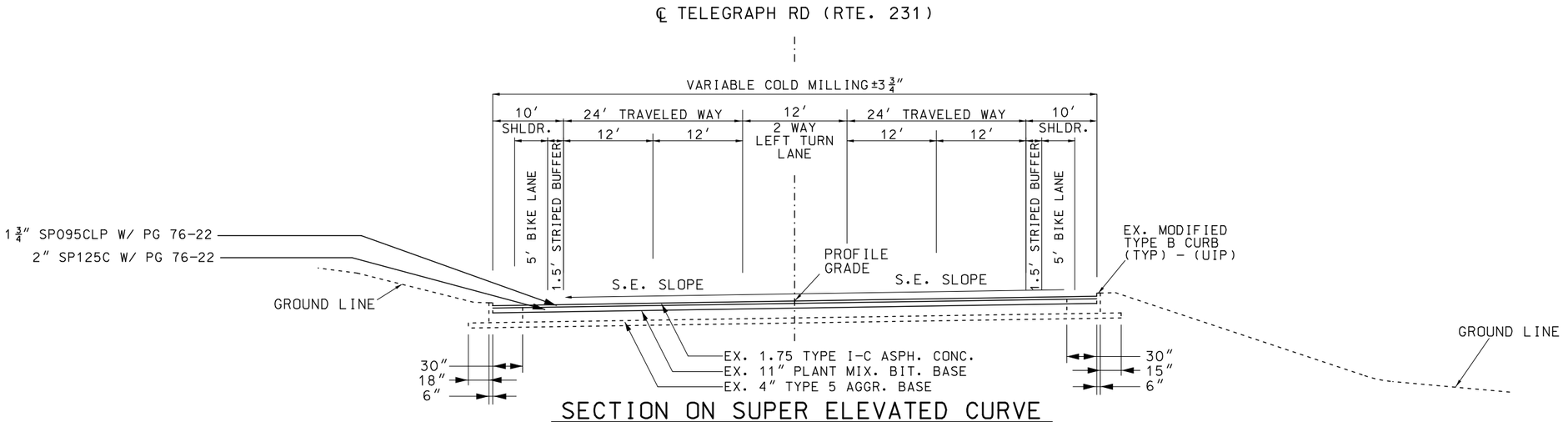


SECTION ON TANGENT

TYPICAL SECTION RTE. 231

S.T. STA. 55+22.059 TO P.C. STA. 55+94.905 BK.
P.T. STA. 12+30.286 TO P.C. STA. 14+11.763

P.T. STA. 7+79.733 TO P.C. STA. 10+15.057
P.T. STA. 16+13.070 TO STA. 17+50.000



SECTION ON SUPER ELEVATED CURVE

TYPICAL SECTION RTE. 231

P.O.C. STA. 53+46.2 TO S.T. STA. 55+22.059
P.C. STA. 5+74.866 AHD TO P.T. STA. 7+79.733
P.C. STA. 10+15.057 TO P.T. STA. 12+30.286
P.C. STA. 14+11.763 TO P.T. STA. 16+13.070

NOT TO SCALE

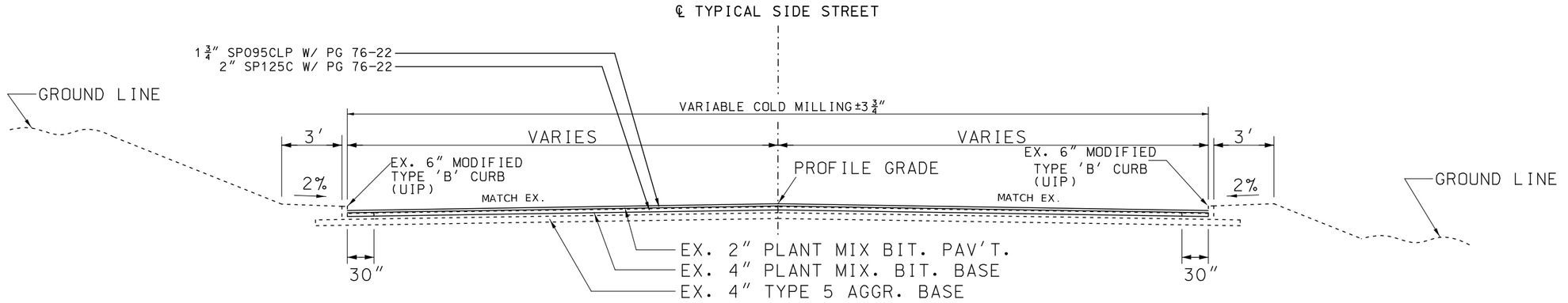
STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:30:59 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED	5/28/2025
ROUTE	231
STATE	MO
DISTRICT	SL
SHEET NO.	2
COUNTY	ST. LOUIS
JOB NO.	J6S3632
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)

TYPICAL SECTIONS
10 OF 13



TYPICAL SECTION

SIDE STREET

APPLICATION RATES:
SP095CLP P6 76-22 = 1.95 TON/CY
SP125C P6 76-22 = 1.96 TON/CY

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:31:13 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	2

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

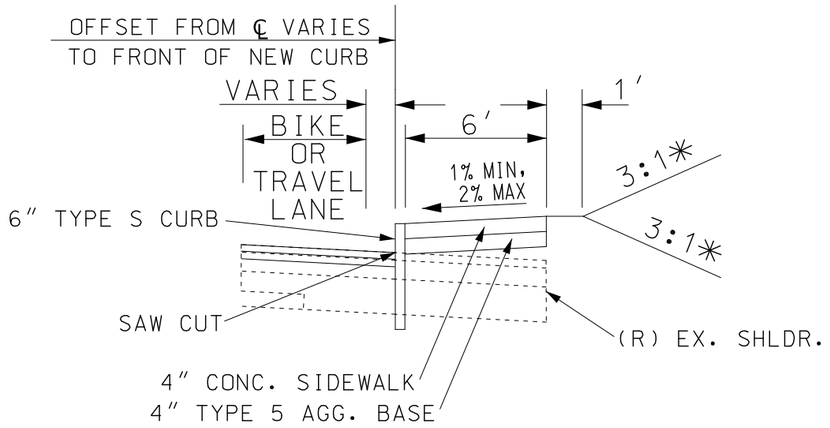
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TYPICAL SECTIONS
11 OF 13

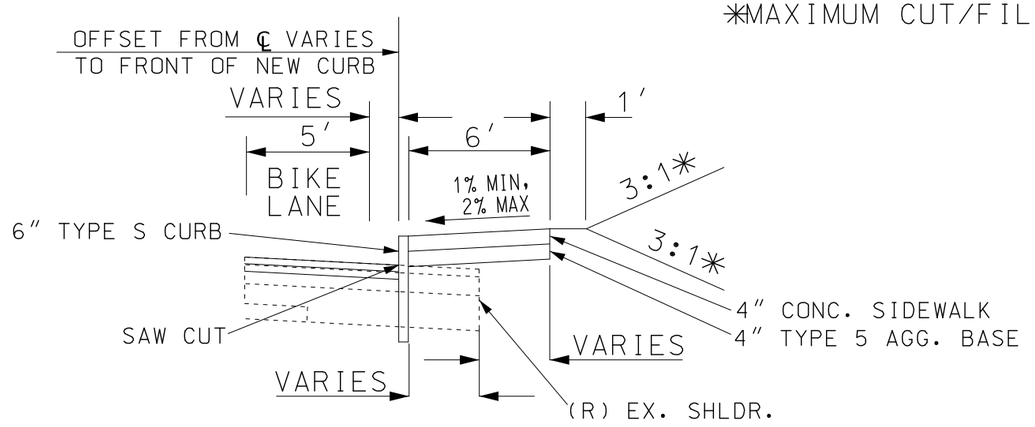


SIDEWALK BUMPOUT

FULL SHOULDER

STA. 52+99 TO STA. 54+19 (LT)
STA. 10+01 TO STA. 11+54 (RT)
STA. 14+42 TO STA. 18+43 (RT)
STA. 133+71 TO STA. 138+45 (RT)
STA. 139+90 TO STA. 145+18 (LT)

*MAXIMUM CUT/FILL SLOPE

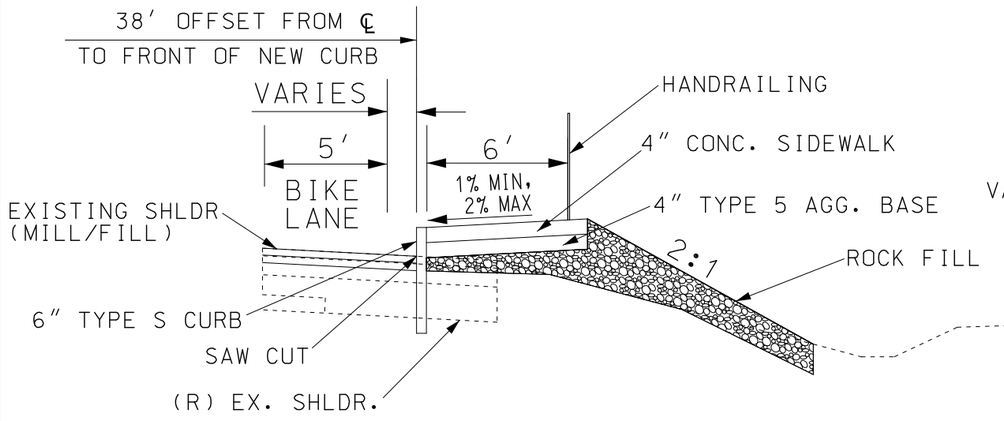


SIDEWALK BUMPOUT

VARIED SHOULDER

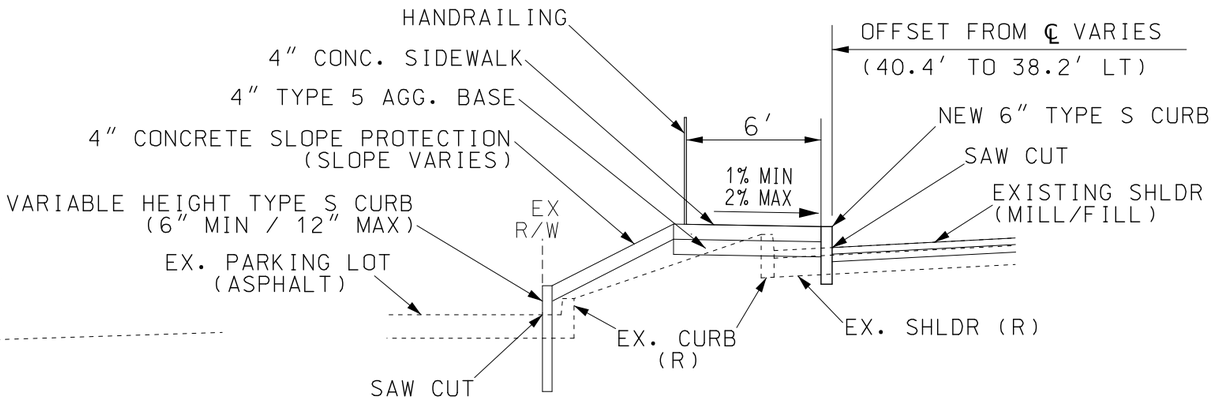
STA. 48+35 TO STA. 48+62 (RT)
STA. 48+92 TO STA. 49+16 (RT)
STA. 49+76 TO STA. 50+24 (RT)
STA. 52+59 TO STA. 52+86 (LT)
STA. 54+32 TO STA. 54+91 (LT)

STA. 9+89 TO STA. 10+01 (RT)
STA. 72+48 TO STA. 73+39 (RT)
STA. 73+70 TO STA. 74+60 (RT)
STA. 75+17 TO STA. 75+88 (RT)
STA. 127+61 TO STA. 129+74 (RT)
STA. 129+07 TO STA. 138+35 (LT)



SIDEWALK BUMPOUT

STA. 82+27 TO STA. 82+99 (RT)
STA. 83+39 TO STA. 83+98 (RT)
STA. 84+37 TO STA. 85+13 (RT)



SIDEWALK BUMPOUT

STA. 46+90 TO 47+71 (LT)

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 11:23:04 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

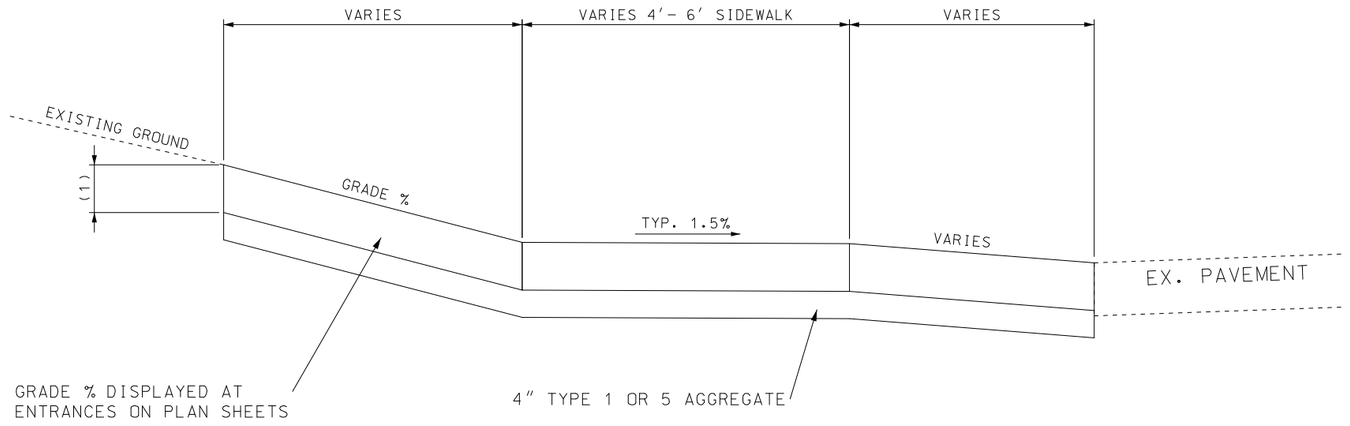
DATE PREPARED: 7/9/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 2
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

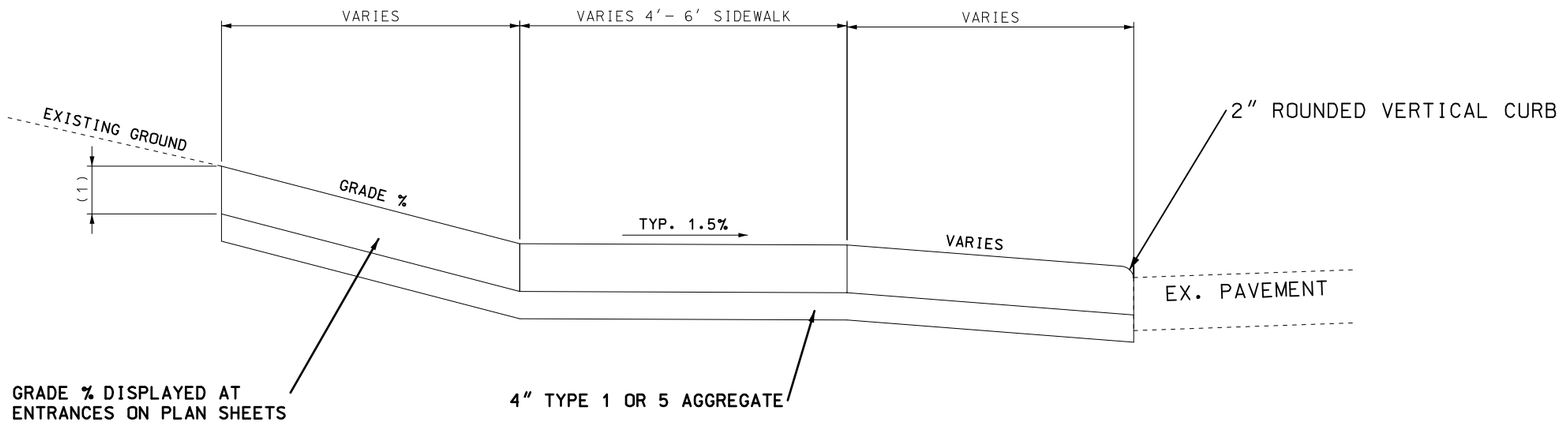
TYPICAL SECTIONS
12 OF 13

ENTRANCE DETAIL No. 1



NOTE (1):
PRIVATE ENTRANCE: 7" PAVED APPROACH
COMMERCIAL ENTRANCE: 8" PAVED APPROACH

ENTRANCE DETAIL No. 2



NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:32:03 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	02

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

TYPICAL SECTION
13 OF 13

REMOVAL OF IMPROVEMENTS

PLAN SHEET NO.	BEGIN STA.	END STA.	ROADWAY	LOCATION	DESCRIPTION
5	45+40	45+45	231	RT	REMOVE SIDEWALK (2.2 SY)
5	46+27	46+49	231	LT	REMOVE SIDEWALK (8.4 SY), ADA RAMP (1)
5	46+73	46+77	231	LT	REMOVE SIDEWALK (2.9 SY), STAIRS
5	45+62	46+61	231	RT	REMOVE CURB (99.8 LF)
5	47+67	47+76	231	LT	SHRUBS (2)
5	46+81	47+32	231	RT	SHRUBS (3) AND LANDSCAPING STONES
5&6	47+42	47+88	231	RT	REMOVE CURB (45.88 LF)
5&6	47+41	48+11	231	LT	REMOVE SIDEWALK (15.3 SY)
6			231	VARIOUS	SHERIDAN/SAPPINGTON BARRACKS: REMOVE ISLANDS (4), 4 SIGNAL POSTS AND MAST ARMS, 1 8' POST, 1 STANCHION
6	48+69	48+86	231	LT	REMOVE SIDEWALK (14.8 SY), ADA RAMP (1)
7&8	58+49	58+66	231	LT	REMOVE SIDEWALK (6.1 SY)
8	59+50	60+77	231	LT	REMOVE BOLLARDS (5) AND LANDSCAPING
9	64+21		231	LT	REMOVE ADA RAMP (1)
9	1+25	2+10	231	LT	REMOVE CURB (2206.2 LF)
9&10	2+09		231	LT	REMOVE SIDEWALK (11.8 SY), ADA Ramp (1)
10	2+72		231	LT	BARACKSVIEW: CUT THROUGH (22.7 SY), REMOVE ISLAND (26.3 SY)
10	3+41		231	LT	REMOVE ADA RAMP (1), LANDSCAPING
10	3+97	6+74	231	LT	SAWCUT (279.7 LF)
10&11	7+03	11+54	231	RT	SAWCUT (452.21 LF) NE CORNER
12&13	14+42	18+44	231	RT	SAWCUT (402.2 LF) SE CORNER
13	18+80	19+22	231	RT	REMOVE ISLAND (49.4 SY)
13	19.57	22.64	231	RT	SAWCUT (317.9 LF)
13	23+33		231	RT	KINSWOOD: CUT THROUGH (9.9 SY), REMOVE ISLAND (19.0 SY), REMOVE CONC. PVMT (12.4)
17&18	43+31	45+66	231	RT	REMOVE SIDEWALK (101.0), ADA RAMPS (2)
17&18	45+17	45+54	231	RT	REMOVE CURB (37.0 LF)
18	46+07	46+43.37	231	RT	REMOVE SIDEWALK (8.5 SY), 2 ADA RAMPS
18	46+90	47+83	231	LT	SAWCUT (93.1 LF)
18	47+77	48+04	231	LT	SAWCUT (27.7 LF)
18	47+68.71	48+26	231	LT	REMOVE CONCRETE STRIP (44.7 SY)
18	46+85	46+85	231	RT	REMOVE SIDEWALK (13.4 SY)
18	48+25	48.68	231	LT	SAWCUT (44.3 SY), REMOVE LANDSCAPING
18	47+73	47+85	231	RT	REMOVE SIDEWALK (7.12 SY)
18			231	VARIOUS	FORDER/POTTLE: CUT THROUGH (26.1 SY) NW CORNER, CUT THROUGH (28.7 SY), 2 ISLANDS, 2 SIGNAL POSTS AND MAST ARMS
18	50+12	50+34	231	LT	REMOVE SIDEWALK (16.4 SY)
18&19	50+07	51+48	231	RT	REMOVE SIDEWALK (58.2 SY)
19	52+47	52+52	231	RT	REMOVE SIDEWALK (2.8 SY)
20	56+84	57+00	231	LT	REMOVE SIDEWALK (8.4 SY)
20	57+94	58+22	231	LT	REMOVE SIDEWALK (6.7 SY)
20	59+74	60+29	231	LT	REMOVE SIDEWALK (28.2 SY)
20&21	60+54	61+74	231	LT	REMOVE SIDEWALK (54.0 SY)
21	62+03	63+33	231	LT	REMOVE SIDEWALK (63.7 SY)
21	65+98	66+16	231	RT	REMOVE SIDEWALK (6.3 SY), ADA RAMP (1)
21&22	66+78	67+28	231	RT	REMOVE SIDEWALK (21.8 SY)
22	67+55	67+70	231	RT	CUT THROUGH (6.9 SY)
22	67+98	68+32	231	RT	REMOVE SIDEWALK (25.9 SY), 1 ADA
22	72+03	72+08	231	RT	REMOVE SIDEWALK (2.8 SY)
22	72+04	72+19	231	LT	REMOVE SIDEWALK (8.4 SY)
23	72+48	73+14	231	RT	SAWCUT (66.2 LF)
23	73+72	74+54	231	RT	REMOVE CURB (84.7 LF)
23	75+18	76+02	231	RT	REMOVE CURB (102.4 LF), SAWCUT (102.1 LF)
23	75+76	75+99	231	LT	REMOVE SIDEWALK (15.2 SY)
23			231	VARIOUS	YEAGER/CRESTLINE: REMOVE 4 ISLANDS, 4 SIGNAL POSTS AND MAST ARMS
23	76+60	77+20	231	RT	REMOVE SIDEWALK (67.2 SY). ADA RAMP (1)
23	77+05		231	LT	REMOVE SIDEWALK (34.7 SY)
23	77+12	77+65	231	LT	REMOVE SIDEWALK (27.0 SY)
24	81+96		231	RT	REMOVE ADA RAMP (1)
24	82+24	82+76	231	RT	REMOVE SIDEWALK (24.5 SY), ADA RAMP (1)
24	81+81	82+40	231	RT	REMOVE CULVERT (59 LF)
24&25	82+94	83+45	231	RT	REMOVE CULVERT (51 LF)
25	83+89	84+42	231	RT	REMOVE CULVERT (53 LF)
25	85+47	85+81	231	RT	REMOVE SIDEWALK (14.5 SY)
25	88+13	88+31	231	RT	REMOVE SIDEWALK (11.8 SY)
26	88+74	88+95	231	LT	CUT THROUGH (13.5 SY)
26	90+55	91+02	231	LT	REMOVE SIDEWALK (21.8 SY)

REMOVAL OF IMPROVEMENTS CONT.

PLAN SHEET NO.	BEGIN STA.	END STA.	ROADWAY	LOCATION	DESCRIPTION
26	91+43	91+55	231	LT	REMOVE ADA RAMP (1)
26	92+68	92+96	231	RT	REMOVED SIDEWALK (13.1 SY), ADA RAMP (1)
26	93+39		231	RT	REMOVE MEDIAN (3.8 SY)
26	93+62	93+77	231	RT	REMOVE ISLAND (9.7 SY)
26&27	93+81	94+01	231	RT	REMOVE ADA RAMP (1)
27	97+19	97+29	231	LT	REMOVE SIDEWALK (4.6 SY)
28	102+83	103+00	231	LT	REMOVE SIDEWALK (9.9 SY), ADA RAMP (1)
28	102+95	103+21	231	RT	REMOVE SIDEWALK (18.5 SY), ADA RAMP (1)
28	103+53		231	VARIOUS	BAUMGARTNER/CLIFF CAVE: REMOVE 2 ISLANDS, 4 SIGNAL POSTS AND MAST ARMS, CUT THROUGH (11.0 SY)
28	103+85		231	LT	REMOVE SIDEWALK (7.7 SY), ADA RAMP (1)
28	104+07	104+65	231	RT	REMOVE SIDEWALK (42.4 SY), ADA RAMP (1)
30	110+53	110+80	231	LT	REMOVE SIDEWALK (6.8 SY), ADA RAMP (1)
30	110+91	111+25	231	RT	REMOVE SIDEWALK (13.8 SY), ADA RAMP (1)
30	111+31		231	VARIOUS	GEBHARDT: REMOVE ISLAND, REMOVE 4 SIGNAL POSTS AND MAST ARMS
30	111+64	111+90	231	RT	REMOVE SIDEWALK (6.6 SY), ADA RAMPS (2)
30	111+87	112+16	231	LT	REMOVE SIDEWALK (7.4 SY), ADA RAMP (1)
31	116+12	116+58	231	LT	REMOVE SIDEWALK (20.7 SY)
31	117+36	117+87	231	LT	REMOVE SIDEWALK (20.7 SY), ADA RAMP (1)
31	119+00	119+18	231	RT	REMOVE SIDEWALK (5.6 SY), ADA RAMP (1)
32	121+29	121+43	231	LT	REMOVE SIDEWALK (6.2 SY)
32	121+91		231	LT	ENGLAND TOWN ROAD: REMOVE 2 ISLANDS
32	122+75	122+85	231	LT	REMOVE SIDEWALK (4.4 SY)
32	124+55	125+27	231	LT	REMOVE ADA RAMPS (2), COMERCIAL ENTRANCE (105.0 SY)
33	126+86	126+97	231	RT	REMOVE ADA Ramp (1)
33	130+54		231	VARIOUS	BLACKFOREST: REMOVE 2 ISLANDS, 3 SIGNAL POSTS AND MAST ARMS
33	130+88	131+45	231	RT	REMOVE SIDEWALK (31.6 SY), ADA RAMP (1)
33&34	131+27	133+30	231	RT	SAWCUT AND REMOVE CURB (204 LF)
33&34	131+06	132+15	231	LT	SAWCUT AND REMOVE CURB (109 LF)
34	132+39	133+17	231	LT	SAWCUT (22.1 LF), REMOVE CURB (84.1 LF)
34	134+01.0	135+03	231	LT	SAWCUT (102 LF)
34	133+45	133+56	231	RT	REMOVE SIDEWALK (5.8 SY), ADA RAMP 1
34	133+96	134+08	231	RT	REMOVE SIDEWALK (6.1 SY), ADA RAMP 1
34	134+23	135+14	231	RT	SAWCUT AND REMOVE CURB (91 LF)
34	135+61	136+63	231	LT	SAWCUT (102.0 LF)
35	137+26	138+20	231	LT	SAWCUT (75.7 LF)
35	137+35	138+35	231	RT	SAWCUT (80.6 LF)
35	139+54	142+35	231	RT	SAWCUT (281.0 LF)
35&36	139+70	143+80	231	LT	SAWCUT (410.0 LF)
36	143+82	144+91	231	RT	SAWCUT (110.1 LF)
36	144+58	144+97	231	LT	SAWCUT (38.4 LF)
36	145+28	146+26	231	LT	REMOVE CONCRETE (38.7 SY), CURB (17.3 LF)
36	146+45	148+19	231	LT	SAWCUT (174.0 LF), REMOVE CONCRETE ENTRANCE/PARKING (68.8 SY)
41	171+36	173+68	231	RT	SAWCUT (229.0 LF)
41	173+83	174+08	231	LT	REMOVE ISLAND (27.8 SY)
41&42	174+40	175+25	231	LT	CUT THROUGH (48.7 SY)
42	175+56	179+36	231	LT	SAWCUT (399.1 LF), REMOVE SIDEWALK (8.5 SY)
11	10+65	11+56	231	RT/LT	REMOVE GUARDRAIL (125.4 LF)
12	14+35	15+06	231	LT	REMOVE GUARDRAIL (71.2 LF)
12&13	17+24	18+53	231	LT	REMOVE GUARDRAIL (127.5 LF)
52	66+14	66+85	231	LT	REMOVE GUARDRAIL (70.0 LF)
53	69+65	70+39	231	LT	REMOVE GUARDRAIL (73.9 LF)
73	179+75	181+37	231	LT/RT	REMOVE GUARDRAIL (162 LF)
VARIOUS			231	VARIOUS	REMOVE 148 SIGNS, 7 POSTS
VARIOUS			231	VARIOUS	REMOVE 7 STRUCTUAL SIGNS
VARIOUS			231	VARIOUS	REMOVE 1 8' SIGNAL POST AND BASE
VARIOUS			231	VARIOUS	REMOVE 2 PEDESTRIAN HEADS
VARIOUS			231	VARIOUS	REMOVE 38 PEDESTRIAN PUSH BUTTONS
PAY TOTAL			1 LUMP SUM		

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:03:09 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 1 OF 17

PAVEMENT RESURFACING

PLAN SHEET NO.	ROADWAY	STATION	STATION	AREA OF PAVEMENT (S.Y.)	1.75" ASPHALTIC CONCRETE MIXTURE PG 76-22 SP095CLP (TONS)	2" ASPHALTIC CONCRETE MIXTURE PG 76-22 SP125C (TONS)	COLDMILL GREATER THAN 3" (S.Y.)	TACK COAT - LOW TRACKING (GAL.)	REMARKS
4	231	41+93	42+40	331.91	31.46	36.14	331.91	49.79	
5	231	42+40	47+80	4432.79	420.19	482.68	4432.79	664.92	
6	231	47+80	53+20	6537.32	619.68	711.84	6537.32	980.60	
7	231	53+20	58+60	4783.42	453.43	520.86	4783.42	717.51	
8	231	58+60	64+00	4917.78	466.16	535.49	4917.78	737.67	
9	231	64+00	2+09	5490.20	520.43	597.82	5490.20	823.53	
10	231	2+09	7+49	7716.72	731.48	840.27	7716.72	1157.51	
11	231	7+49	12+90	275.12	26.08	29.96	275.12	41.27	
12	231	12+90	18+30	-	-	-	-	-	
13	231	18+30	23+70	4613.29	437.30	502.34	4613.29	691.99	
14	231	23+70	29+10	5178.74	490.90	563.91	5178.74	776.81	
15	231	29+10	34+50	5040.04	477.75	548.80	5040.04	756.01	
16	231	34+50	39+90	5211.30	493.99	567.45	5211.30	781.70	
17	231	39+90	45+30	5007.78	474.70	545.29	5007.78	751.17	
18	231	45+30	50+70	7274.38	689.55	792.10	7274.38	1091.16	
19	231	50+70	56+10	4882.76	462.84	531.68	4882.76	732.41	
20	231	56+10	61+50	4914.95	465.90	535.18	4914.95	737.24	
21	231	61+50	66+90	5001.93	474.14	544.65	5001.93	750.29	
22	231	66+90	72+30	5355.33	507.64	583.14	5355.33	803.30	
23	231	72+30	77+69	6493.38	615.52	707.06	6493.38	974.01	
24	231	77+69	83+09	4894.13	463.92	532.92	4894.13	734.12	
25	231	83+09	88+49	4815.08	456.43	524.31	4815.08	722.26	
26	231	88+49	93+89	5243.99	497.09	571.01	5243.99	786.60	
27	231	93+89	99+29	4897.08	464.20	533.24	4897.08	734.56	
28	231	99+29	104+70	6183.14	586.11	673.28	6183.14	927.47	
29	231	104+70	110+10	4977.01	471.78	541.94	4977.01	746.55	
30	231	110+10	115+50	5368.78	508.92	584.60	5368.78	805.32	
31	231	115+50	120+90	4942.80	468.54	538.22	4942.80	741.42	
32	231	120+90	126+30	5749.11	544.97	626.01	5749.11	862.37	
33	231	126+30	131+69	5310.47	503.39	578.25	5310.47	796.57	
34	231	131+69	137+09	4518.79	428.34	492.05	4518.79	677.82	
35	231	137+09	142+51	4577.09	433.87	498.39	4577.09	686.56	
36	231	142+51	147+90	4804.07	455.39	523.11	4804.07	720.61	
37	231	147+90	153+30	4953.21	469.52	539.35	4953.21	742.98	
38	231	153+30	158+70	5869.00	556.33	639.07	5869.00	880.35	
39	231	158+70	164+10	4923.15	466.67	536.08	4923.15	738.47	
40	231	164+10	169+48	5171.83	490.25	563.15	5171.83	775.77	
41	231	169+48	174+89	5877.09	557.10	639.95	5877.09	881.56	
42	231	174+89	180+29	5029.35	476.74	547.64	5029.35	754.40	
43	231	180+29	20+99	4802.29	455.22	522.92	4802.29	720.34	
44	231	20+99	26+39	4719.31	447.35	513.88	4719.31	707.90	
45	231	26+39	31+79	4714.60	446.90	513.37	4714.60	707.19	
46	231	31+79	37+21	4727.00	448.08	514.72	4727.00	709.05	
47	231	37+21	42+61	4742.43	449.54	516.40	4742.43	711.36	
48	231	42+61	48+01	4724.76	447.87	514.47	4724.76	708.71	
49	231	48+01	53+38	4735.64	448.90	515.66	4735.64	710.35	
50	231	53+38	58+78	4718.84	447.31	513.83	4718.84	707.83	
51	231	58+78	64+18	4846.63	459.42	527.74	4846.63	726.99	
52	231	64+18	69+58	4611.92	437.17	502.19	4611.92	691.79	
53	231	69+58	74+98	4810.50	456.00	523.81	4810.50	721.58	
54	231	74+98	80+38	4841.46	458.93	527.18	4841.46	726.22	
55	231	80+38	85+78	5907.27	559.96	643.24	5907.27	886.09	
56	231	85+78	91+18	5907.27	559.96	643.24	5907.27	886.09	
57	231	91+18	96+58	4003.00	379.45	435.88	4003.00	600.45	
58	231	96+58	101+98	3924.30	371.99	427.31	3924.30	588.65	
59	231	101+98	107+38	4010.17	380.13	436.66	4010.17	601.53	
60	231	107+38	112+87	4491.44	425.75	489.07	4491.44	673.72	
61	231	112+87	118+27	4457.65	422.55	485.39	4457.65	668.65	
62	231	118+27	123+67	4105.62	389.18	447.06	4105.62	615.84	
63	231	123+67	129+07	4064.00	385.23	442.52	4064.00	609.60	
64	231	129+07	134+47	4059.54	384.81	442.04	4059.54	608.93	
65	231	134+47	139+87	4119.45	390.49	448.56	4119.45	617.92	
66	231	139+87	146+27	4707.20	446.20	512.56	4707.20	706.08	
67	231	146+27	151+67	4731.75	448.53	515.24	4731.75	709.76	
68	231	151+67	156+85	4445.67	421.41	484.08	4445.67	666.85	
69	231	156+85	162+25	4655.59	441.31	506.94	4655.59	698.34	
70	231	162+25	167+65	2635.97	249.87	287.03	2635.97	395.40	
71	231	167+65	173+05	1376.36	130.47	149.87	1376.36	206.45	
72	231	173+05	178+45	1421.32	134.73	154.77	1421.32	213.20	
73	231	178+45	181+41	532.17	50.45	57.95	532.17	79.83	
			SUBTOTALS		30,533.86	35,074.81	322,115.4	48,317.3	
			PAY TOTALS		30,533.9	35,074.8	322,115	48,317	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
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STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 2 OF 17

PAVED APPROACHES & LINEAR GRADING CLASS 1

PLAN SHEET NO.	STATION	LOCATION	WIDTH (L.F.)	LENGTH (L.F.)	8" PAVED CONCRETE APPROACH (S.Y.)	7" PAVED CONCRETE APPROACH (S.Y.)	LINEAR GRADING CLASS 1 (STA)	4" TYPE 5 AGGREGATE BASE (S.Y.)	REMARKS
5	47+02	RT	32.4	14.4	52.25		0.14	52.3	
5	47+26	LT	30.0	10.6	37.96		0.11	38.0	
6	48+21.35	RT	32.7	10.46	35.69		0.10	35.7	
6	48+40.3	LT	60	8.78	58.09		0.09	58.1	
6	48+76.4	RT	34	9.91	34.62		0.10	34.6	
6	49+46.0	RT	59	9.07	60.60		0.09	60.6	
6	52+14.8	LT	27	20.62	82.32		0.21	82.3	
6	52+54.0	LT	11	8.9		12.91	0.09	12.9	
6	52+92.8	LT	11	11.61		23.08	0.12	23.1	
7	53+58.7	LT	15.9	12.54		29.70	0.13	29.7	
7	54+25.13	LT	11.6	12.96		25.92	0.13	25.9	
8	58.75.93	LT	20	13.88	34.85		0.14	34.9	
8	63+47.1	LT	18.7	10.61	26.48		0.11	26.5	
8&9	64+04.5	LT	30	13.77	53.74		0.14	53.7	
18	45+90.8	RT	39	11.41	64.54		0.11	64.5	
18	46+66.3	RT	43.4	7.77	43.20		0.08	43.2	
18	48+14.5	LT	21.6	11.69	30.00		0.12	30.0	
19	51+74.0	RT	44.3	11.95	76.60		0.12	76.6	
20	58+36.55	LT	26	42.2	162.70		0.42	162.7	
20	60+41.6	LT	24	13.86		43.07	0.14	43.1	
21	61+88.35	LT	27.9	15.62	56.61		0.16	56.6	
21	63+48.33	LT	29.9	14.80	57.86		0.15	57.9	
21	66+22	RT	13	17.49		33.75	0.17	33.8	
22	67+64	LT	40.9	20.05	107.18		0.20	107.2	
22	70+84.8	LT	57.6	10.12	64.22		0.10	64.2	
22	71+90.8	LT	27.5	26.73	86.93		0.27	86.9	
23	73+53.9	RT	30.8	12.01	45.56		0.12	45.6	
23	74+90.7	RT	53	15.64	101.53		0.16	101.5	
24	82+09.4	RT	28	30.64		116.36	0.31	116.4	
24&25	83+18.59	RT	30.2	29.75	116.78		0.30	116.8	
25	84+16.6	RT	37	26.05	109.52		0.26	109.5	
26	91+22.8	LT	45	20.39	96.97		0.20	97.0	
26&27	93+42.34	RT	71	25.01	115.20		0.25	115.2	
30	112+13	RT	52.1	12.35	61.95		0.12	62.0	
30	113+45.8	RT	37.3	14.08	52.89		0.14	52.9	
30	114+08.3	RT	43.8	9.33	36.45		0.09	36.5	
31	115+93.1	RT	30.6	8.02	27.52		0.08	27.5	
31	116+68.5	RT	36.3	13.08	54.54		0.13	54.5	
31	117+69.5	RT	32.9	16.3	79.35		0.16	79.4	
31	118+78.5	RT	41.3	22.09	109.49		0.22	109.5	
32	123+75.9	LT	18	14.31		33.48	0.14	33.5	
32	124+92.9	LT	33.1	22.23	104.96		0.22	105.0	
33	127+18.7	RT	44	24.95	145.03		0.25	145.0	
33	128+92.5	LT	22	34.98	114.46		0.35	114.5	
33	131+00.4	LT	20.8	19.91		46.55	0.20	46.6	
34	132+27.7	LT	21.7	12.09		36.91	0.12	36.9	
34	133+77.0	RT	26	33.1	95.62		0.33	95.6	
34	135+31.4	LT	15	9.41	21.25		0.09	21.3	
34	135+53.8	RT	18	20.28	40.56		0.20	40.6	
34	136+90.3	RT	36	6.95	27.80		0.07	27.8	
36	138+98.5	RT	87	6.56	48.65		0.07	48.7	
				SUBTOTALS	2832.52	401.73	8.32	3234.8	
				PAY TOTALS	2832.5	401.7	8.3	SEE QU SHEET 8	

ADJUSTING VALVES, METERS, AND PULL BOXES TO GRADE

PLAN SHEET NO.	STA.	OFF.	LOCATION	ADJUST TO GRADE PULL BOX (EA)	ADJUST BY OTHERS (EA)	DESCRIPTION
5	46+41	45.7	LT	1		
5	46+72	32.5	rt		1	WATER VALVE
5	46+93	43.3	LT		1	
5	47+47	44.3	LT		1	
7	54+38	34.6	LT		1	GAS VALVE
8	63+66	45.4	LT		1	GAS VALVE
8	63+80	47.6	LT	1		
10	3+22	56.4	LT	1		
10	3+28	62.2	LT	1		
10	7+04	60.6	LT	1		
14	24+22	69.9	RT	1		
17	43+82	47.6	RT		1	WATER VALVE
18	50+11	47.9	RT		1	WATER VALVE
18	50+46	44.3	RT		1	WATER VALVE
20	57+28	47	LT		1	WATER VALVE
20	60+19	48.2	LT		1	WATER VALVE
20	60+20	51.5	LT		1	WATER METER
21	66+80	49.9	RT		1	WATER VALVE
25	85+13	38.4	RT		1	GAS VALVE
26	91+45	49.2	LT		1	WATER VALVE
26	93+06	59.5	RT		1	WATER VALVE
28	104+01	57	LT		1	WATER VALVE
28	104+01	59	LT		1	WATER METER
30	114+32	47.4	RT		1	WATER VALVE
31	116+26	43.3	RT	1		
34	133+61	25.9	LT		1	GAS VALVE
34	133+06	44.1	RT		1	WATER VALVE
35	138+25	46.7	LT		1	GAS VALVE
42	175+68	62.9	LT	1		LIGHTING PULL BOX
			SUBTOTALS	8	21	
			PAY TOTALS	8	-	

MOBILIZATION	1 LUMP SUM
CONTRACTOR FURNISHED SURVEYING AND STAKING	1 LUMP SUM
ITS ASSET MANAGEMENT TOOL	1 LUMP SUM
TRAFFIC SIGNAL MAINTENANCE & PROGRAMMING	1 LUMP SUM
TEMPORARY PAVEMENT MARKING	1 LUMP SUM

CULVERT AND INLET CLEANOUT

PLAN SHEET NO.	STATION	LOCATION	LENGTH (FT)	CULVERT CLEANOUT (EACH)	REMARKS
7	54+75	RT/LT	137.5	1	RUNS UNDER HWY 231/TELEGRAPH RD
7	54+79	RT/LT		2	INLET CLEANOUTS
7	55+26	RT		1	INLET CLEANOUT
7	55+28	LT		1	INLET CLEANOUT
			SUBTOTALS	5	CLEARING AND GRUBING
			PAY TOTALS	5	IS INCIDENTAL TO CLEANOUT

STATE OF MISSOURI
STUART ROBINSON McNEIL
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ROUTE	STATE
231	MO
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COUNTY
ST. LOUIS

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SUMMARY OF QUANTITIES
SHEET 3 OF 17

MODIFIED LINEAR GRADING CLASS 2

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	DESCRIPTION	LENGTH (FT)	MODIFIED LINEAR GRADING CLASS 2 (STA)	REMARKS
5	45+40	46+87	RTE 231	RT	SIDEWALK & RAMP	147.0	1.47	
5	46+27	47+11	RTE 231	LT	SIDEWALK & RAMPS	84.0	0.84	INCLUDES GRADING FOR ENTRANCE AT 2940 TELEGRAPH
5 & 6	47+19	49+16	RTE 231	RT	SIDEWALK & RAMPS	130.3	1.30	EXCLUDES ENTRANCES
5 & 6	47+41	48+86	RTE 231	LT	SIDEWALK & RAMPS	85.0	0.85	EXCLUDES ENTRANCE
6 & 7	51+59	54+91	RTE 231	LT	SIDEWALK & RAMPS	255.0	2.55	EXCLUDES ENTRANCES
7 to 9	58+48	64+41	RTE 231	LT	SIDEWALK & RAMPS	473.0	4.73	EXCLUDES ENTRANCES
9 & 10	1+25	2+16	RTE 231	LT	SHARED USE PATH & RAMP	91.0	0.91	
10	3+52	6+74	RTE 231	LT	SHARED USE PATH & RAMPS	322.0	3.22	
10 & 11	7+03	11+54	RTE 231	RT	SIDEWALK & RAMP	449.8	4.50	
12 & 13	14+42	18+44	RTE 231	RT	SIDEWALK & RAMP	402.0	4.02	
13	19+02	22+81	RTE 231	RT	SHARED USE PATH & RAMPS	379.0	3.79	
14	23+71	26+42	RTE 231	RT	SIDEWALK & RAMP	271.0	2.71	
17 & 18	43+30	47+17	RTE 231	RT	SIDEWALK & RAMPS	304.6	3.05	EXCLUDES ENTRANCES
18	47+73	47+89	RTE 231	RT	RAMP	16.0	0.16	
18	46+74	48+85	RTE 231	LT	SIDEWALK & RAMPS	189.4	1.89	EXCLUDES ENTRANCE
18	50+12	50+34	RTE 231	LT	RAMP	22.0	0.22	
18 & 19	49+28	52+52	RTE 231	RT	SIDEWALK & RAMPS	279.7	2.80	EXCLUDES ENTRANCE
20	56+85	61+50	RTE 231	LT	SIDEWALK & RAMPS	415.0	4.15	EXCLUDES ENTRANCES
21	61+50	66+90	RTE 231	LT	SIDEWALK & RAMPS	482.2	4.82	EXCLUDES ENTRANCES
21	63+36	63+53	RTE 231	RT	SIDEWALK	17.0	0.17	
21	65+98	66+90	RTE 231	RT	SIDEWALK & RAMP	79.0	0.79	EXCLUDES ENTRANCE
22	66+90	67+31	RTE 231	RT	SIDEWALK & RAMP	41.0	0.41	CATHEDRAL DRIVE (NW QUAD)
22	67+98	68+32	RTE 231	RT	SIDEWALK & RAMP	34.0	0.34	CATHEDRAL DRIVE (SW QUAD)
22	66+90	72+19	RTE 231	LT	SIDEWALK & RAMPS	403.0	4.03	EXCLUDES ENTRANCES
22 & 23	72+03	76+02	RTE 231	RT	SIDEWALK & RAMPS	315.2	3.15	EXCLUDES ENTRANCES
23	76+60	77+20	RTE 231	RT	SIDEWALK & RAMP	60.0	0.60	YAEGER RD (SW QUAD)
23	75+75	76+00	RTE 231	LT	SIDEWALK & RAMP	25.0	0.25	AT CRESTLINE DR (NE QUAD)
23	76+97	77+70	RTE 231	LT	SIDEWALK & RAMP	73.0	0.73	AT CRESTLINE DR (SE QUAD)
24 & 25	81+84	85+83	RTE 231	RT	SIDEWALK & RAMPS	266.5	2.67	EXCLUDES ENTRANCES
25	88+13	88+45	RTE 231	LT	SIDEWALK & RAMP	32.0	0.32	
26	89+28	92+71	RTE 231	LT	SIDEWALK & RAMPS	298.0	2.98	EXCLUDES ENTRANCE
26	92+67	93+07	RTE 231	LT	RAMP	40.0	0.40	COPPERGATE SQUARE (NW QUAD)
26 & 27	93+78	94+01	RTE 231	LT	RAMP	23.0	0.23	COPPERGATE SQUARE (SW QUAD)
27	97+18	97+90	RTE 231	LT	SIDEWALK & RAMPS	72.0	0.72	
28	102+83	104+65	RTE 231	LT & RT	SIDEWALK & RAMPS	124.6	1.25	BAUMGARTNER RD / CLIFF CAVE RD (4 QUADS)
30	110+53	112+16	RTE 231	LT & RT	SIDEWALK & RAMPS	117.0	1.17	GEBHARDT DR (4 QUADS)
30 & 31	112+36	119+18	RTE 231	RT	SIDEWALK & RAMPS	458.4	4.58	EXCLUDES ENTRANCES
31	116+12	117+87	RTE 231	LT	SIDEWALK & RAMPS	96.5	0.97	PARCELS 50 & 54
32	121+29	121+56	RTE 231	LT	SIDEWALK & RAMP	27.0	0.27	ENGLAND TOWN RD (NE QUAD)
32	122+45	125+28	RTE 231	LT	SIDEWALK & RAMPS	231.9	2.32	EXCLUDES ENTRANCES
33	127+41	130+17	RTE 231	RT	SMALL BLOCK WALL, SIDEWALK & RAMPS	276.8	2.77	
33	129+04	130+86	RTE 231	LT	SMALL BLOCK WALL, SIDEWALK & RAMPS	182.8	1.83	EXCLUDES ENTRANCE
33 & 34	131+08	133+18	RTE 231	LT	SIDEWALK & RAMPS	188.3	1.88	
33 & 34	130+88	133+56	RTE 231	RT	SIDEWALK & RAMPS	268.0	2.68	
34	133+96	136+71	RTE 231	RT	SIDEWALK & RAMPS	256.7	2.57	EXCLUDES ENTRANCE
34	133+71	136+82	RTE 231	LT	SIDEWALK & RAMPS	296.0	2.96	EXCLUDES ENTRANCE
35	137+09	142+51	RTE 231	RT	SIDEWALK & RAMPS	482.9	4.83	EXCLUDES ENTRANCE
35	137+09	142+51	RTE 231	LT	SIDEWALK & RAMPS	445.7	4.46	EXCLUDES ENTRANCE
36	142+51	145+14	RTE 231	RT	SIDEWALK & RAMPS	187.2	1.87	EXCLUDES ENTRANCE
36	142+51	145+30	RTE 231	LT	SIDEWALK & RAMPS	258.0	2.58	EXCLUDES ENTRANCE
36 & 37	146+23	149+02	RTE 231	LT	SIDEWALK & RAMPS	262.5	2.63	EXCLUDES ENTRANCE
41	171+28	173+90	RTE 231	RT	SIDEWALK & RAMPS	262.0	2.62	
42	175+42	179+37	RTE 231	LT	SIDEWALK & RAMPS	395.0	3.95	
						SUBTOTAL	113.96	
						PAY TOTAL	114.0	

FESCUE SOD, SEEDING, AND EROSION CONTROL BLANKET

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	TURF TYPE TALL FESCUE SODDING (SY)	SEEDING COOL SEASON GRASSES (AC)	TYPE 2C EROSION CONTROL BLANKET (SY)	REMARKS
5 TO 42	45+40	179+37	RTE 231	VARIES	3700.0			ALONG NEW SIDEWALK
5 TO 42	45+40	179+37	RTE 231	VARIES		1.84	8905.6	ON SLOPES AT VARIOUS LOCATIONS & WITHIN TEMPORARY EASEMENTS
				SUBTOTALS	3700.0	1.84	8905.6	
				PAY TOTALS	3700	1.8	8,906	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:07:26 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

SUMMARY OF QUANTITIES
SHEET 4 OF 17

CONCRETE SIDEWALK (10 INCH THICK) & TYPE E CONCRETE TRAFFIC BARRIER

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	LENGTH (FT)	WIDTH (FT)	CONCRETE SIDEWALK (10" THICK) (SY)	TYPE 5 AGG. FOR BASE (4" THICK) (SY)	CONCRETE TRAFFIC BARRIER TYPE E (LF)	CONCRETE SIDEWALK 4 " (SY)	REMARKS
33	129+60	130+64	RTE 231	LT	104	6	69.33	69.3			SIDEWALK NEXT TO RETAINING WALL
33	129+60	130+64	RTE 231	LT	104	3	34.67	34.7			BENEATH TYPE E BARRIER PLUS BUFFER SPACE
33	129+60	130+64	RTE 231	LT					104.0		
33	129+40	129+60	RTE 231	LT	20	2		4.4	20.0	4.44	HEIGHT TRANSITION / CONCRETE & BASE BENEATH
33	130+64	130+84	RTE 231	LT	20	2		4.4	20.0	4.44	HEIGHT TRANSITION / CONCRETE & BASE BENEATH
						SUBTOTALS	104.0	112.8	144.0	8.9	
						PAY TOTALS	104.0	*	144.0	*	* SEE SIDEWALK & BASE QUANTITY TABLE FOR PAY TOTAL

BUS PADS

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	SIZE (FT X FT)	BUS PAD (EA)	REMARKS
5	45+61.2	45+68.2	RTE 231	RT	7 X 8	1	TYPE 2
7	57+50.3	57+57.3	RTE 232	LT	7 X 8	1	TYPE 2
14	26+27.6	26+34.6	RTE 231	RT	7 X 8	1	TYPE 2
17	44+67.0	44+74.0	RTE 231	RT	7 X 7.5	1	TYPE 2
18	46+93.0	47+00.0	RTE 231	LT	7 X 6	1	TYPE 2
19	50+74.0	50+81.0	RTE 231	RT	7 X 7.8	1	TYPE 1
20	57+21.0	57+28.0	RTE 231	LT	7 X 8	1	TYPE 1
23	74+30.0	74+37.0	RTE 231	LT	7 X 8.4	1	TYPE 1
					PAY TOTAL	8	SEE SPECIAL SHEET & JSP

SIDEWALK HANDRAILING WITH BALUSTERS

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	HANDRAILING (LF)	REMARKS
7	54+47	54+77	RTE 231	LT	30.5	
18	46+75	47+71	RTE 231	LT	95.5	ALONG SLOPE PROTECTION
24	82+33	82+96	RTE 231	RT	66.4	2:1 ROCK SLOPE
25	83+43	83+95	RTE 231	RT	52.0	2:1 ROCK SLOPE
25	84+38	84+96	RTE 231	RT	57.9	2:1 ROCK SLOPE
30	112+45	113+24	RTE 231	RT	80.0	ALONG SLOPE PROTECTION
30	113+74	113+91	RTE 231	RT	17.0	ALONG SLOPE PROTECTION
33	128+70	129+20	RTE 231	RT	50.0	FILL SLOPE
35 - 36	139+72	143+27	RTE 231	LT	354.0	FILL SLOPE
VARIES	VARIES	VARIES	RTE 231	RT & LT	165.0	SUBTOTAL FROM FLUMES (QU SHEET 10)
				SUBTOTAL	968.3	
				PAY TOTAL	968	

TYPE B GUTTER

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	TYPE B GUTTER (LF)	REMARKS
33	130+48	130+64	RTE 231	LT	18.4	AT RETAINING WALL
				SUBTOTAL	18.4	
				PAY TOTAL	18	

MSE WALL SYSTEMS

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	MSE WALL SYSTEMS (SF)	REMARKS
33	129+60.00	130+64.00	RTE 231	LT	674.5	DRYCAST MODULAR BLOCK WALL
				SUBTOTAL	674.5	SEE SPECIAL SHEETS 99 & 100
				PAY TOTAL	675	

ADJUSTING MANHOLES

PLAN SHEET No.	ROADWAY	STATION	LOCATION	MSD STRUCTURE No.	ADJUSTING MANHOLE (EA)	BY OTHERS (EA)	REMARKS
7	RTE 231	54+63	39' LT	29H4-141D	1		STORM MH *
7	RTE 231	58+22	46' RT		1		SAN MH *
8	RTE 231	62+28	43' LT	29H4-069D	1		STORM MH *
18	RTE 231	50+02	49' RT	N/A	1		STORM MH (MODOT) *
21	RTE 231	63+18	45' LT	---	1		SAN CLEANOUT *
21	RTE 231	63+19	48' LT	N/A		1	COMMUNICATIONS MH *
22	RTE 231	69+46	47' LT	N/A		1	COMMUNICATIONS MH *
22	RTE 231	69+47	44' LT	---	1		SAN CLEANOUT *
33	RTE 231	126+87	64' RT	---	1		SAN CLEANOUT *
33	RTE 231	128+34	50' RT	32H1-181S	1		SAN MH *
33	RTE 231	131+56	44' LT		1		SAN MH *
35	RTE 231	139+93	39' LT	N/A		1	COMMUNICATIONS MH *
				PAY TOTAL	9	N/A	* ADJUST TO GRADE (ATG)

CONCRETE SLOPE PROTECTION

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	CONCRETE SLOPE PROTECTION (S.Y.)	REMARKS
18	231	46+75	47+71	LT	33.7	
30	231	112+37	113+30	RT	16.5	
30	231	113+74	113+91	RT	1.8	
33	231	130+48	130+65	LT	6.3	AT RETAINING WALL
				SUBTOTAL	58.3	
				PAY TOTAL	58	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:07:38 PM
STUART ROBINSON McNEIL - CIVIL
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DATE PREPARED
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231	MO
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COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 5 OF 17

ADA CURB RAMP (1 of 2)

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	TRUNCATED DOMES (S.F.)	ADA CONCRETE CURB RAMP (EA.)	REMARKS
5	231	46+27	46+86	LT	-	2	LARGE RAD PERP RAMPS (NO TRUNCATED DOMES)
5	231	46+86	47+54	LT	36.9	2	LARGE RAD PERP RAMPS
5	231	46+61	47+41	RT	42.3	2	LARGE RAD PERP RAMPS
6	231	47+91	48+86	LT	20.0	2	SMALL RAD PERP RAMPS
6	231	49+79	VARIES	LT	30.0	-	DOME PADS IN CUT-THROUGH
6	231	51+72	52+48	LT	27.9	2	LARGE RAD PERP RAMPS
6	231	47+88	48+06	RT	12.0	1	SMALL RAD PERP RAMP
6	231	48+35	48+62	RT	24.0	2	2 SMALL RAD PERP RAMPS CONNECTED
6	231	48+91	49+16	RT	24.0	2	2 SMALL RAD PERP RAMPS CONNECTED
6	231	49+75	-	RT	10.0	1	5' MODIFIED SMALL RAD PERP RAMP
6	231	49.85	-	RT	10.0	1	MODIFIED TYPE 2 PARALLEL
6	231	50+06	-	RT	16.1	1	MODIFIED LARGE RAD PERP
7	231	54+87	55+41	LT	-	2	2 LARGE RAD PERP RAMPS (NO TRUNCATED DOMES)
7	231	55+54	56+44	LT	-	2	2 LARGE RAD PERP RAMPS (NO TRUNCATED DOMES)
7	231	57+83	58+0	LT	-	1	LARGE RAD PERP RAMP (NO TRUNCATED DOMES)
7,8	231	58+48	58+65	LT	-	1	2 SMALL RAMPS COUNTED AS 1 (NO TRUNCATED DOMES)
8	231	58+87	59+06	LT	12.0	1	SMALL RAD PERP RAMP
8	231	60+46	61+55	LT	51.8	2	LARGE RAD PERP RAMPS
8	231	63+14	63+37	LT	16.3	1	LARGE RAD PERP RAMP
8	231	63+57	63+88	LT	30.1	2	2 RAMPS CONNECTED, 1 LARGE RAD, 1 SMALL RAD
9	231	64+21	64+40	LT	10.7	1	SMALL RAD PERP RAMP
9,10	231	1+99	2+13	LT	10.0	1	SMALL RAD PERP RAMP
10	231	2+19	3+42	LT	60.0	-	CUT-THROUGHS
10	231	3+51	3+75	LT	10.0	1	SMALL RAD PERP RAMP
10	231	6+51	6+73	LT	10.0	1	TYPE 1 PARALLEL RAMP
10	231	6+88	7+12	LT	20.0	-	CUT-THROUGH
10	231	7+02	7+23	RT	10.0	1	TYPE 3 PARALLEL RAMP
12,13	231	18+27	18+43	RT	12.0	1	
13	231	18+82	18+98	RT	41.2	-	CUT-THROUGH (SHARED USE PATH 10' WIDE)
13	231	19+10	22+82	RT	41.6	2	MOD. TYPE 1 PARALLEL RAMPS (SHARED USE PATH 10' WIDE)
13	231	23+02	23+58	RT	90.0	-	CUT-THROUGHS (SHARED USE PATH 10' WIDE)
14	231	23+71	23+87	LT	21.2	1	MOD LG RAD PERP (1 W/DOME PADS, 1 W/O)COUNT AS 1
14	231	23+71	23+91	RT	10.0	1	TYPE 1 PARALLEL RAMP
17	231	43+30	43+59	RT	24.8	1	LARGE RAD PERP RAMP 5' WIDE
18	231	46+73	46+92	LT	12.0	1	SMALL RAD PERP RAMP
18	231	47+68	47+99	LT	31.2	1	LARGE RAD PERP RAMP
18	231	48+17	48+36	LT	12.0	1	SMALL RAD PERP RAMP
18	231	48+60	48+91	LT	22.5	1	LARGE RAD PERP RAMP
18	231	49+64	50+06	LT	31.7	-	CUT-THROUGH
18	231	50+12	50+33	LT	10.0	1	MODIFIED TYPE 2 PARALLEL
18	231	45+30	45+64	RT	32.6	1	LARGE RAD PERP RAMP 5' WIDE
18	231	46+07	46+43	RT	34.1	2	LARGE RAD PERP RAMPS 5' WIDE
18	231	46+89	47+12	RT	22.5	1	LARGE RAD PERP RAMP 5' WIDE
18	231	47+72	47+89	RT	10.0	1	COMPOUND PERPENDICULAR RAMP
18	231	48+02	48+50	RT	22.3	-	CUT-THROUGH
18	231	49+20	49+80	RT	26.5	2	LARGE RAD & COMPOUND PERP. RAMPS
19	231	51+24	52+23	RT	29.2	2	LARGE RAD PERP RAMPS
20	231	57+92	58+84	LT	30.9	2	LARGE RAD PERP RAMPS
20	231	60+09	60+73	LT	20.0	2	SMALL RAD PERP RAMPS
20, 21	231	61+44	62+31	LT	47.2	2	LARGE RAD PERP RAMPS
21	231	63+03	63+93	LT	48.3	2	LARGE RAD PERP RAMPS
21	231	65+95	66+45	RT	20.0	2	SMALL RAD PERP RAMPS
22	231	67+17	68+13	LT	29.8	2	LARGE RAD PERP RAMPS
22	231	70+41	70+60	LT	12.0	1	SMALL RAD PERP RAMP
22	231	71+14	71+36	LT	12.1	1	LARGE RAD PERP RAMP
22	231	71+64	72+19	LT	20.0	2	SMALL RAD PERP RAMPS
22	231	67+14	67+28	RT	10.0	1	MODIFIED TYPE 2 PARALLEL
22	231	67+54	67+70	RT	20.0	-	CUT-THROUGH
22	231	67+97	68+20	RT	10.0	1	COMPOUND PERPENDICULAR RAMP
23	231	75+86	75+99	LT	10.0	1	SMALL RAD PERP RAMP
23	231	76+06	76+18	LT	30.0	-	CUT-THROUGH
23	231	76+64	76+86	LT	31.5	-	CUT-THROUGH
23	231	76+97	77+14	LT	10.0	1	SMALL RAD PERP RAMP
23	231	73+13	75+41	RT	87.7	4	LARGE RAD PERP RAMPS
23	231	75+66	75+88	RT	10.0	1	TYPE 3 PARALLEL
23	231	75+97	76+15	RT	30.0	-	CUT-THROUGH
23	231	76+58	76+73	RT	30.0	-	CUT-THROUGH
23	231	76+83	76+98	RT	10.0	1	SMALL RAD PERP RAMP
24	231	81+83	81+95	RT	10.0	1	NEW RAMP TO EX. SIDEWALK
24	231	82+23	82+32	RT	10.0	1	TYPE 3 PARALLEL
24	231	82+69	82+99	RT	27.6	1	LARGE RAD PERP RAMP
SUBTOTALS (1 of 2)					1608.6	84	

ADA CURB RAMP (2 of 3)

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	TRUNCATED DOMES (S.F.)	ADA CONCRETE CURB RAMP (EA.)	REMARKS
25	231	88+22	88+45	LT	10.0	1	SMALL RAD PERP RAMP
25	231	83+38	83+98	RT	51.8	2	2 LARGE RAD PERP RAMPS CONNECTED
25	231	84+36	85+14	RT	44.7	2	2 LARGE RAD PERP RAMPS
25	231	85+51	85+67	RT	13.6	1	MODIFIED LARGE RAD PERP RAMP
26	231	88+74	88+95	LT	20.0	-	CUT-THROUGH
26	231	89+27	89+51	LT	10.0	1	MODIFIED SMALL RAD PERP RAMP
26	231	90+78	91+67	LT	39.6	2	LARGE RAD PERP RAMPS
26	231	92+50	92+71	LT	10.0	1	TYPE 3 PARALLEL
26	231	92+75	92+86	RT	19.6	1	MODIFIED BLENDED TRANSITION
26	231	93+61	93+72	RT	20.2	-	CUT-THROUGH
26, 27	231	93+81	94+00	RT	10.2	1	RAMP TO CONNECT TO EX. SIDEWALK
27	231	97+18	97+36	LT	-	1	TYPE 1 PARALLEL (NO TRUNCATED DOMES)
27	231	97+63	97+89	LT	21.0	1	LARGE RAD PERP RAMP
28	231	102+82	103+00	LT	10.0	1	MODIFIED COMPOUND PERPENDICULAR RAMP
28	231	103+10	103+29	LT	20.0	-	CUT-THROUGH
28	231	103+85	104+08	LT	30.9	2	MODIFIED BLENDED TRANSITION
28	231	102+94	103+21	RT	10.0	1	COMPOUND PERPENDICULAR RAMP
28	231	103+29	104+03	RT	50.0	-	CUT-THROUGHS
28	231	104+13	104+30	RT	10.0	1	SMALL RAD PERP RAMP
30	231	110+53	112+16	LT	36.2	2	LARGE RAD PERP RAMPS
30	231	110+93	111+10	LT	30.6	-	CUT-THROUGH
30	231	110+95	111+24	RT	20.0	2	2 RAMPS ON NW CORNER OF GEBHARDT
30	231	111+63	111+91	RT	20.0	2	2 RAMPS CONNECTED
30	231	112+34	112+54	RT	12.0	1	SMALL RAD PERP RAMP
30	231	113+11	113+30	RT	10.0	1	SMALL RAD PERP RAMP TRANSITIONS FROM 6' TO 5'
30	231	113+60	113+92	RT	20.0	2	TWO-5' SMALL RAD PERP RAMPS CONNECTED
30	231	114+23	114+42	RT	10.0	1	SMALL RAD PERP RAMP TRANSITIONS FROM 5' TO 6'
31	231	117+36	117+56	LT	-	1	SMALL RAD PERP (NO TRUNCATED DOMES)
31	231	115+59	115+78	RT	10.0	1	RAMP TRANSITIONS FROM 6' TO 5'
31	231	116+07	116+49	RT	29.2	2	5' SMALL & LRG RAD PERP RAMPS CONNECTED
31	231	116+84	117+49	RT	40.5	2	LARGE RAD PERP RAMPS
31	231	117+89	119+18	RT	30.0	3	SMALL RAD PERP RAMPS
32	231	121+38	121+55	LT	10.0	1	SMALL RAD PERP RAMP
32	231	121+64	121+74	LT	60.3	-	CUT-THROUGHS
32	231	122+44	122+77	LT	30.1	1	LARGE RAD PERP RAMP
32	231	123+48	124+06	LT	-	2	SMALL RAD PERP RAMPS (NO TRUNCATED DOMES)
32	231	124+59	124+76	LT	10.0	1	REPLACE RAMP AND CONNECT TO NEW SIDEWALK
32	231	125+09	125+27	LT	10.0	1	REMOVE AND REPLACE RAMP
33	231	129+04	129+15	LT	10.0	1	TYPE 1 PARALLEL
33	231	130+63	130+86	LT	-	1	LARGE RAD PERP RAMP (NO TRUNCATED DOMES)
33	231	131+08	131+34	LT	-	1	LARGE RAD PERP RAMP (NO TRUNCATED DOMES)
33	231	126+86	126+96	RT	10.0	1	
33	231	127+40	127+52	RT	10.0	1	TYPE 1 PARALLEL RAMP
33	231	129+99	130+16	RT	10.0	1	MODIFIED COMPOUND PERPENDICULAR
33	231	130+24	130+82	RT	40.0	-	2 CUT-THROUGHS
33	231	130+88	131+09	RT	10.0	1	COMPOUND PERPENDICULAR RAMP
34	231	131+87	132+64	LT	-	2	LARGE RAD PERP RAMPS (NO TRUNCATED DOMES)
34	231	132+86	134+00	LT	53.8	2	LARGE RAD PERP RAMPS
34	231	135+03	135+60	LT	-	2	SMALL RAD PERP RAMPS (NO TRUNCATED DOMES)
34,35	231	136+62	137+16	LT	-	2	SMALL RAD PERP RAMPS (NO TRUNCATED DOMES)
34	231	133+29	135+99	RT	85.3	4	LARGE RAD PERP RAMPS
34,35	231	136+45	137+25	RT	41.0	2	LARGE RAD PERP RAMPS
35	231	138+20	139+60	LT	46.9	2	LARGE RAD PERP RAMPS
35	231	138+35	139+44	RT	55.7	2	LARGE RAD PERP RAMPS
35,36	231	142+43	143+82	RT	56.0	2	LARGE RAD PERP RAMPS
36	231	143+80	144+58	LT	-	2	LARGE RAD PERP RAMPS (NO TRUNCATED DOMES)
36	231	144+96	147+03	LT	51.1	2	LARGE RAD PERP RAMPS
37	231	148+19	149+01	LT	-	3	LARGE RAD PERP RAMPS (NO TRUNCATED DOMES)
41	231	173+87	174+07	LT	20.0	-	CUT-THROUGH
41,42	231	174+39	175+25	LT	20.0	-	NEW CUT-THROUGH
41	231	171+27	171+54	RT	17.3	1	LARGE RAD PERP RAMP
41	231	173+68	173+90	RT	10.0	1	TYPE 3 PARALLEL
42	231	175+41	175+59	LT	10.0	1	TYPE 1 PARALLEL
SUBTOTALS (2 of 3)					1285.8	82	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:07:48 PM
STUART ROBINSON McNEIL-CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 6 OF 17

CONCRETE SIDEWALK & BASE (1 OF 2)

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	CONCRETE SIDEWALK 4" (S.Y.)	CONCRETE SIDEWALK 7" (S.Y.)	CONCRETE SIDEWALK 8" (S.Y.)	TYPE 5 AGG. FOR BASE (4" THICK) (S.Y.)	REMARKS
5	231	47+53	47+93	LT	-	-	12.37	12.4	SIDEWALK THROUGH ENTRANCE
5,6	231	47+54	47+94	LT	23.36	-	-	23.4	PART OF PERMANENT EASEMENT
5,6	231	45+40	47+87	RT	108.11	-	-	108.1	
6	231	48+86	49+55	LT	39.17	-	-	39.2	
6	231	49+79	VARIES	LT	-	9.88	-	9.9	CUT-THROUGH
6	231	51+59	51+74	LT	7.86	-	-	7.9	CONNECT NEW RAMP TO EX. SIDEWALK
6	231	52+59	52+86	LT	-	15.85	-	15.9	MOUNTABLE C&G & BUMP OUT (MAILBOX REL.1)
6,7	231	52+99	53+49	LT	-	30.43	-	30.4	MOUNTABLE C&G & BUMP OUT (MAILBOX REL. 2)
7	231	53+66	54+18	LT	-	32.66	-	32.7	MOUNTABLE C&G & BUMP OUT (MAILBOX REL. 3)
7	231	54+32	54+91	LT	-	43.50	-	43.5	MOUNTABLE C&G, BUMP OUT, & CONNECT TO EX. (INCLUDES WIDTH FOR HANDRAIL)
7	231	55+02	58+55	LT	-	-	73.87	73.9	SIDEWALK THROUGH 3 ENTRANCES
7	231	55+41	55+54	LT	-	8.49	-	8.5	MOUNTABLE CURB (MAILBOX REL. 10)
7	231	56+44	57+83	LT	-	87.79	-	87.8	NEW BUS PAD NOT INCLUDED IN SIDEWALK QTY
8	231	59+06	60+46	LT	-	93.72	-	93.7	MOUNTABLE CURB (MAILBOX REL. 4)
8	231	61+55	63+14	LT	106.02	-	-	106.0	
9	231	1+93	2+03	LT	5.66	-	-	5.7	CONNECT NEW RAMP TO EX. SIDEWALK
10	231	2+19	3+42	LT	-	31.21	-	31.2	CUT-THROUGHS
10	231	3+73	6+43	LT	181.36	-	-	181.4	
10	231	6+88	7+13	LT	-	11.15	-	11.2	CUT-THROUGH
10,11	231	7+23	11+53	RT	295.07	-	-	295.1	
12	231	14+42	18+28	RT	243.72	-	-	243.7	
13	231	18+82	23+58	RT	-	38.58	-	38.6	NEW SHARED USE PATH CUT-THROUGHS 10'
13	231	19+28	22+64	RT	384.65	-	-	384.7	NEW SHARED USE PATH 10'
14	231	23+87	26+27	RT	161.39	-	-	161.4	
17	231	43+60	45+30	RT	92.24	-	-	92.2	5' SIDEWALK
18	231	47+00	47+71	LT	52.38	-	-	52.4	BUMP OUT (INCLUDES WIDTH FOR HANDRAIL)
18	231	48+36	48+60	LT	14.34	-	-	14.3	
18	231	49+64	50+06	LT	-	28.68	-	28.7	CUT-THROUGH
18	231	47+11	47+16	RT	2.49	-	-	2.5	WARP SLAB TO MEET EX. SIDEWALK
18	231	48+02	48+50	RT	-	26.14	-	26.1	CUT-THROUGH
18,19	231	49+85	51+24	RT	76.06	-	-	76.1	
19	231	52+23	52+51	RT	16.18	-	-	16.2	
20	231	56+85	57+91	LT	60.18	-	-	60.2	BUMP-OUT (DOES NOT INCLUDE BUS PAD)
20	231	58+86	60+10	LT	68.23	-	-	68.2	
20	231	60+73	61+44	LT	46.97	-	-	47.0	
21	231	62+31	63+03	LT	48.01	-	-	48.0	
21,22	231	63+93	67+17	LT	180.15	-	-	180.2	
21	231	63+35	63+52	RT	8.93	-	-	8.9	
21,22	231	66+44	67+19	RT	48.47	-	-	48.5	
22	231	68+13	70+41	LT	143.47	-	-	143.5	
22	231	71+36	71+69	LT	20.38	-	-	20.4	
22	231	67+22	67+30	RT	15.76	-	-	15.8	CONNECT RAMP TO EX. SIDEWALK ON CATHEDRAL DR.
22	231	67+54	67+70	RT	-	8.95	-	9.0	CUT-THROUGH
22	231	68+17	68+31	RT	8.19	-	-	8.2	CONNECT TO EX. SIDEWALK
22,23	231	72+03	73+13	RT	70.06	-	-	70.1	
23	231	75+75	75+90	LT	10.46	-	-	10.5	CONNECT TO EX. SIDEWALK
23	231	76+06	76+86	LT	-	22.14	-	22.1	2 CUT-THROUGHS
23	231	77+06	77+69	LT	69.02	-	-	69.0	
23	231	73+94	74+29	RT	23.06	-	-	23.1	BUMP OUT
23	231	75+41	75+69	RT	18.22	-	-	18.2	BUMP OUT
23	231	75+97	76+15	RT	-	26.96	-	27.0	2 CUT-THROUGHS
23	231	76+60	77+20	RT	81.65	-	-	81.7	
24	231	82+27	82+69	RT	28.83	-	-	28.8	BUMP OUT
25	231	88+12	88+30	LT	12.73	-	-	12.7	
25	231	84+64	84+88	RT	17.36	-	-	17.4	BUMP OUT (INCLUDES WIDTH FOR HANDRAIL)
25	231	85+02	85+60	LT	-	-	32.84	32.8	SIDEWALK THROUGH COMMERCIAL ENTRANCE
25	231	85+62	85+82	RT	16.07	-	-	16.1	CONNECT TO EX. SIDEWALK
26	231	88+74	88+95	LT	-	11.28	-	11.3	CUT-THROUGH
26	231	89+47	90+78	LT	86.55	-	-	86.6	
26	231	91+67	92+50	LT	55.73	-	-	55.7	
26	231	93+61	93+72	RT	-	5.10	-	5.1	CUT-THROUGH
27	231	97+35	97+63	LT	18.74	-	-	18.7	SIDEWALK CONNECTING 2 RAMPS
28	231	103+10	103+29	LT	-	10.95	-	11.0	CUT-THROUGH
28	231	103+29	104+03	RT	-	22.23	-	22.2	CUT-THROUGHS
28	231	104+07	104+64	RT	48.65	-	-	48.7	
SUBTOTALS (1 OF 2)					3015.93	565.69	106.71	3689.1	SEE SIDEWALK & BASE QTY (2 of 2) FOR PAY TOTAL

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:07:56 PM
STUART ROBINSON McNEIL - CIVIL
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DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 7 OF 17

CONCRETE SIDEWALK & BASE (2 OF 2)

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	CONCRETE SIDEWALK 4" (S.Y.)	CONCRETE SIDEWALK 7" (S.Y.)	CONCRETE SIDEWALK 8" (S.Y.)	TYPE 5 AGG. FOR BASE (4" THICK) (S.Y.)	REMARKS
30	231	110+93	111+10	LT	-	13.79	-	13.8	CUT-THROUGH
30	231	110+90	111+75	RT	20.85	-	-	20.9	CONNECT TO EX . SIDEWALK N & S SIDES OF GEBHARDT
30	231	112+54	113+11	RT	42.92	-	-	42.9	INCLUDES WIDTH FOR HANDRAIL
30,31	231	114+42	115+59	RT	79.16	-	-	79.2	
31	231	116+12	117+86	LT	36.32	-	-	36.3	TWO SECTIONS OF SIDEWALK TO BE MOVED OFF R/W
31	231	115+50	VARIES	RT	30.09	-	-	30.1	2 SECTIONS OF SIDEWALK
32	231	VARIES	VARIES	LT	119.08	-	-	119.1	3 SECTIONS OF SIDEWALK (MAILBOX REL. 5)
32	231	VARIES	VARIES	LT	-	11.26	-	11.3	CUT-THROUGHS
33	231	129+09	130+69	LT	36.60	-	-	36.6	BUMP OUT
33,34	231	131+34	131+69	LT	3.09	35.41	-	38.5	BUMP OUT W/ MOUNTABLE CURB (MAILBOX REL. 7)
33	231	127+48	129+65	RT	148.01	-	-	148.0	BUMP OUT (INCLUDES WIDTH FOR HANDRAIL)
33	231	129+74	129+98	RT	15.46	-	-	15.5	SOUTH OF FLUME (ALONG 60 FT RADIUS)
33	231	130+24	130+82	RT	-	12.72	-	12.7	CUT-THROUGHS
33	231	131+07	131+69	RT	42.03	-	-	42.0	BUMP OUT
34	231	132+49	136+63	LT	68.21	151.15	-	219.4	BUMP OUTS (MAILBOX REL. 8)
34	231	131+69	136+45	RT	226.98	197.06	-	227.0	BUMP OUTS & CONNECTING SIDEWALK
35	231	137+25	138+20	LT	50.41	-	-	50.4	BUMP OUT
35,36	231	139+70	143+27	LT	262.62	-	-	262.6	BUMP OUT (INCLUDES WIDTH FOR HANDRAIL)
35	231	137+09	142+51	RT	238.09	-	-	238.1	BUMP OUTS
36	231	143+95	144+39	LT	-	20.89	-	20.9	SIDEWALK THROUGH ENTRANCE
36	231	145+14	146+88	LT	-	-	96.70	96.7	SIDEWALK THROUGH ENTRANCE
36	231	143+27	144+96	LT	60.96	-	-	61.0	BUMP OUTS
36,37	231	146+45	148+19	LT	-	116.22	-	116.2	BUMP OUTS WITH MOUNTABLE CURB (MAILBOX REL. 9)
36	231	143+82	145+14	RT	89.87	-	-	89.9	BUMP OUTS
37	231	148+35	148+70	LT	-	157.32	-	157.3	SIDEWALK THROUGH ENTRANCE
41	231	173+87	174+07	LT	-	14.41	-	14.4	CUT-THROUGH
41,42	231	174+39	175+25	LT	-	49.56	-	49.6	CUT-THROUGH
41	231	171+51	173+68	RT	137.93	-	-	137.9	BUMP OUT
42	231	175+56	179+36	LT	797.03	-	-	797.0	
47,48	231	40+42	43+25	RT	183.18			183.2	REMOVE AND REPLACE
48	231	43+90	45+33	RT	81.60			81.6	REMOVE AND REPLACE
48	231	46+19	47+42	RT	71.59			71.6	REMOVE AND REPLACE
49,50	231	52+77	54.14	LT	76.10			76.1	REMOVE AND REPLACE
50	231	54+95	55+73	LT	43.33			43.3	REMOVE AND REPLACE
50	231	56+09	57+10	LT	23.66			23.7	REMOVE AND REPLACE
				SUBTOTALS (1)	3015.93	565.69	106.71	3689.1	
				SUBTOTALS (2)	2656.75	754.74	96.70	3311.2	
				SUBTOTALS (3)	-	-	-	217.5	BASE FOR MEDIAN ISLANDS
				SUBTOTALS (4)	-	-	-	3216.8	BASE FOR PAVED APPROACH (SEE QU SHEET 3)
				SUBTOTALS (5)	8.90	-	-	112.8	AT RETAINING WALL (SEE QU SHEET 5)
				PAY TOTALS	5681.6	1320.4	203.4	10548	

ADA CURB RAMP (3 of 3)

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	TRUNCATED DOMES (S.F.)	ADA CONCRETE CURB RAMP (EA.)	REMARKS
47	231	40+17	40+42	LT	-	1	SMALL RAD PERP RAMP (NO DOMES)
48	231	43+25	43+44	LT	-	1	SMALL RAD PERP RAMP (NO DOMES)
48	231	43+74	43+90	LT	-	1	LARGE RAD PERP (NO DOMES)
48	231	45+35	45+47	LT	9.5	2	MODIFIED BLENDED TRANSITION
48	231	46+10	46+21	LT	9.5	2	MODIFIED BLENDED TRANSITION
50	231	54+14	54+24	RT	-	1	SMALL RAD PERP RAMP (NO DOMES)
50	231	54+51	54+66	RT	-	2	SMALL RAD PERP RAMPS (NO DOMES)
50	231	54+87	54+95	RT	-	1	SMALL RAD PERP RAMPS (NO DOMES)
50	231	55+72	55+82	RT	-	1	SMALL RAD PERP RAMPS (NO DOMES)
50	231	56+00	56+09	RT	-	1	SMALL RAD PERP RAMPS (NO DOMES)
50	231	57+07	57+19	RT	-	2	MODIFIED BLENDED TRANSITION
				SUBTOTALS (1 OF 3)	1608.6	84	
				SUBTOTALS (2 OF 3)	1285.8	82	
				SUBTOTAL (3 OF 3)	19.0	15.0	
				PAY TOTALS	2913	181	

STATE OF MISSOURI
STUART ROBINSON McNEIL
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PROFESSIONAL ENGINEER
07/09/2025 12:08:13 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

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BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SUMMARY OF QUANTITIES
SHEET 8 OF 17

CONCRETE CURB

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	6" TYPE A CURB (L.F.)	8 " TYPE A CURB (L.F.)	6" TYPE S CURB (L.F.)	6" MODIFIED TYPE S CURB (L.F.)	VARIABLE HEIGHT CURB TYPE S CURB (L.F.)	VARIABLE HEIGHT CURB TYPE A CURB (L.F.)	TYPE A CURB & GUTTER (L.F.)	REMARKS
5,6	231	47+48	47+95	LT	45.9	-	-	-	-		-	PART OF PERMANENT EASEMENT BACK OF SIDEWALK
5	231	45+49	46+30	RT	82.7	-	-	-	-		-	BACK OF SIDEWALK
5	231	45+61	46+61	RT	-	-	99.8	-	-		-	
5,6	231	47+42	47+87	RT	-	-	45.9	-	-		-	
6	231	52+63	52+81	LT	-	-	-	-	-		18.4	MOUNTABLE C&G DUE TO MAILBOX BEING MOVED
6,7	231	53+04	53+44	LT	-	-	-	-	-		39.9	MOUNTABLE C&G DUE TO MAILBOX BEING MOVED
7	231	53+71	54+14	LT	-	-	-	-	-		43.4	MOUNTABLE C&G DUE TO MAILBOX BEING MOVED
7	231	54+39	54+78	LT	-	-	-	-	-		39.5	MOUNTABLE C&G DUE TO MAILBOX BEING MOVED
7	231	55+24	55+70	LT	-	-	-	12.7	-	-	-	MOUNTABLE CURB DUE TO MAILBOX BEING MOVED
7	231	56+29	58+00	LT	-	-	-	138.9	-	-	-	MOUNTABLE DUE TO MAILBOX RELOCATES BEFORE & AFTER
8	231	58+90	60+61	LT	-	-	-	140.6	-		-	MOUNTABLE CURB DUE TO MAILBOX BEING MOVED
8	231	58+90	60+61	LT	-	140.6	-	-	-		-	BACK OF SIDEWALK
9	231	1+25	2+06	LT	86.5	-	-	-	-			BACK OF CONCRETE BASE
10	231	3+97	6+43	LT	-	-	246.4	-	-		-	NEW SHARED USE PATH
10,11	231	7+23	9+90	RT	-	-	267.3	-	-		-	
12	231	14+42	18+28	RT	-	-	376.3	-	-		-	
13	231	19+55	22+64	RT	-	-	319.8	-	-		-	NEW SHARED USE PATH
14	231	23+86	24+49	RT	-	-	66.1	-	-		-	NEW ADA PATH CONNECT TO EX. CURB
17	231	43+59	45+30	RT	-	171.7	-	-	-		-	BACK OF 5' SIDEWALK
17	231	45+17	45+30	RT	-	-	13.5	-	-		-	
18	231	46+92	49+17	LT	-	-	163.0	-	-		-	VARIOUS LOCATIONS
18	231	46+78	47+71	LT	-	-	-	-	93.2	-	-	ALONG EX. R/W ON PARKING LOT (PARCEL 18)
18	231	46+07	46+43	RT	SEE REMARKS	-	-	-	-	-	-	BACK OF RAMP(S), QTY INCLUDED WITH RAMP
18	231	48+98	50+57	RT	-	-	169.7	-	-	-	-	
19	231	52+23	52+51	RT	29.3	-	-	-	-	-	-	BACK OF SIDEWALK
20	231	56+95	57+91	LT	-	-	-	-	-	104.5	-	BACK OF SIDEWALK
20	231	56+80	57+95	LT	-	-	116.2	-	-	-	-	BUMP OUT
21,22	231	63+93	67+17	LT	-	323.8	-	-	-		-	BACK OF SIDEWALK
21,22	231	66+45	67+23	RT	-	107.5	-	-	-		-	BACK OF SIDEWALK
22	231	67+54	-	RT	-	-	5.0	-	-		-	CONNECT TO EX. CURB (OLD CUT-THROUGH)
22	231	67+71	-	RT	-	-	5.0	-	-		-	CONNECT TO EX. CURB (OLD CUT-THROUGH)
22	231	67+54	67+71	RT	32.3	-	-	-	-		-	NEW CUT-THROUGH
22,23	231	72+03	72+39	RT	36.8	-	-	-	-		-	BACK OF SIDEWALK
23	231	72+48	73+13	RT	-	-	66.1	-	-		-	NEW SIDEWALK BUMP-OUT
23	231	73+94	74+29	RT	-	-	34.6	-	-		-	NEW SIDEWALK BUMP-OUT
23	231	75+41	75+69	RT	-	-	28.9	-	-		-	NEW SIDEWALK BUMP-OUT
24	231	82+27	82+69	RT	-	-	34.5	-	-		-	BUMP OUT
25	231	84+64	84+87	RT	-	-	23.4	-	-		-	BUMP OUT
25	231	85+47	-	RT	-	-	5.0	-	-		-	GAP IN CURB WHERE SIDEWALK IS REMOVED
26	231	91+67	92+50	LT	-	83.6	-	-	-		-	BACK OF SIDEWALK
30	231	113+74	113+92	RT	-	-	-	-	18.9		-	SEE DETAIL ON SHEET
32	231	122+62	123+63	LT	-	-	-	70.9	-		-	MOUNTABLE CURB DUE TO MAILBOX BEING MOVED
32	231	123+87	124+75	LT	-	-	52.2	-	-		-	
33	231	129+15	130+64	LT	-	-	152.0	-	-		-	
33,34	231	131+19	132+02	LT	-	-	-	53.1	-		-	MOUNTABLE CURB DUE TO MAILBOX BEING MOVED
33	231	127+61	129+65	RT	-	-	204.6	-	-		-	BUMP OUT
33	231	129+74	129+98	RT	-	-	24.5	-	-		-	ALONG 60 FT RADIUS
33,34	231	131+07	133+29	RT	-	-	222.3	-	-		-	BUMP OUT
34	231	132+49	133+01	LT	-	-	22.1	-	-		-	BUMP OUT
34	231	133+85	135+03	LT	-	-	102.8	-	-		-	BUMP OUT
34	231	135+45	136+62	LT	-	-	-	102.2	-		-	MOUNTABLE CURB DUE TO MAILBOX BEING MOVED
34	231	134+23	135+13	RT	-	-	90.3	-	-		-	BUMP OUT
34	231	135+99	136+45	RT	-	-	45.8	-	-		-	BUMP OUT
35	231	137+25	138+20	LT	-	-	79.3	-			-	BUMP OUT
35,36	231	139+70	143+80	LT	-	-	408.1	-	-		-	BUMP OUT
35	231	137+34	138+35	RT	-	-	84.1	-	-		-	BUMP OUT
35	231	139+54	142+34	RT	-	-	278.4	-	-		-	BUMP OUT
36	231	144+58	144+96	LT	-	-	38.4	-	-		-	BUMP OUT
36,37	231	146+45	148+19	LT	-	-	-	174.4	-		-	MOUNTABLE CURB DUE TO MAILBOX BEING MOVED
36	231	143+82	144+91	RT	-	-	110.1	-	-		-	
41	231	171+37	173+68	RT	-	-	227.7	-	-		-	NEW SIDEWALK BUMP-OUT
42	231	175+55	179+30	LT	-	-	393.2	-	-		-	NEW SIDEWALK BUMP-OUT
				SUBTOTALS	313.5	827.2	4622.4	692.8	112.1	104.5	141.2	
				PAY TOTALS	314	827	4622	693	217		141	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:08:23 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 9 OF 17

DRAINAGE FLUMES

PLAN SHEET No.	ROADWAY	STATION	LOCATION	FLUME 8' X 6' (EA)	FLUME 8' X 10 (EA)	ROCK LINING (CY)	HANDRAILING (LF)	REMARKS
10	RTE 231	6+56.48	90.9' LT	1		0.2	11	
12	RTE 231	14+58.13	14.5' RT	1		0.2	11	
13	RTE 231	19+61.46	43.1' RT		1	0.25	11	
33	RTE 231	129.69.11	43.3' RT	1		0.2	11	
33	RTE 231	130+68.72	37.9' LT	1		0.2	**	** SEE TYPE E BARRIER TABLE (QU SHEET 5)
34	RTE 231	135+08.38	35.9' LT	1		0.2	11	
34	RTE 231	136+67.88	35.3' LT	1		0.2	11	
35	RTE 231	137+21.22	35.9' LT	1		0.2	11	
35	RTE 231	137+30.05	37.0' RT	1		0.2	11	
35	RTE 231	137+67.36	37.3' LT	1		0.2	11	
35	RTE 231	137+81.38	37.8' RT	1		0.2	11	
35	RTE 231	138+10.69	38.4' LT	1		0.2	11	
35	RTE 231	138+24.31	37.4' RT	1		0.2	11	
35	RTE 231	139+49.55	37.7' RT	1		0.2	11	
35	RTE 231	135+65.83	39.6' LT	1		0.2	11	
35	RTE 231	142+40.09	38.0' LT	1		0.2	11	
			SUBTOTALS 1	15	1	3.3	165	
			SUBTOTAL 2			2		SEE DRAINAGE PIPES TABLE
			PAY TOTALS	15	1	5.3	*	* SEE HANDRAILING TABLE (QU SHEET 5)

MODIFIED INLETS

PLAN SHEET No.	ROADWAY	STATION	LOCATION	REPLACE INLET WITH TOP TYPE "T" TO NEW GRADE (EA)
6	RTE 231	50+02	54.5' RT	1
6	RTE 231	52+78	39.6' LT	1
7	RTE 231	53+41	39.4 LT	1
7	RTE 231	54+09	39.5 LT	1
			SUBTOTAL	4
			PAY TOTAL	4

TEMPORARY SHORING	1 LUMP SUM

DRAINAGE PIPES, FLARED END SECTIONS AND PIPE COLLAR

PLAN SHEET No.	CULVERT SHEET No.	FROM STRUCTURE	TO STRUCTURE	ROADWAY	PIPES GROUP A 12 INCH (LF)	PIPES GROUP A 18 INCH (LF)	PIPES GROUP A 36 INCH (LF)	PIPES GROUP C 15 INCH (LF)	PIPES GROUP C 18 INCH (LF)	FLARED END SECTIONS GROUP A 18 INCH (EA)	FLARED END SECTIONS GROUP A 36 INCH (EA)	FLARED END SECTIONS GROUP C 15 INCH (EA)	FLARED END SECTIONS GROUP C 18 INCH (EA)	TYPE A PIPE COLLAR (EA)	CLASS 3 EXCAVATION (CY)	ROCK LINING (CY)	REMARKS
11	1 OF 4	1-1A	1-2A	RTE 231	21.9										14.1		
11	1 OF 4	1-3A	1-2A	RTE 231	22.7										14.7		
11	1 OF 4	1-2A	1-4FES	RTE 231		48.0				1					38.2	2.0	
24	2 OF 4	2-1FES	2-2FES	RTE 231					57.8				2		28.2		ENTRANCE PIPE: PARCEL 38
24-25	2 OF 4	3-1FES	3-2FES	RTE 231					46.9				2		21.9		ENTRANCE PIPE: PARCEL 40 (CRISIS AID)
25	3 OF 4	4-1FES	4-2FES	RTE 231				53.8				2			21.4		ENTRANCE PIPE: PARCEL 40 (REINHOLD FLOORING)
35	4 OF 4	5-1COL	5-2FES	RTE 231			10.0				1			1	8.5		PIPE EXTENSION
				SUBTOTALS	44.6	48.0	10.0	53.8	104.7	1	1	2	4	1	147.0	2.0	* SEE DRAINAGE STRUCTURES FOR PAY TOTAL
				PAY TOTALS	45	48	10	54	105	1	1	2	4	1	*	* *	* * SEE DRAINAGE FLUMES FOR PAY TOTAL

DRAINAGE STRUCTURES

PLAN SHEET No.	CULVERT SHEET No.	ROADWAY	STATION	LOCATION	STRUCTURE NUMBER	STRUCTURE TYPE	PIPE OPENINGS	ACTUAL DEPTH (FT)	PRECAST CONCRETE DROP INLET 2' X 4' (FT)	CURVED VANE GRATE & FRAME 2' X 4' (EA)	PRECAST CONCRETE DROP INLET 3' X 3' (FT)	GRATE & BEARING PLATE 3'-1" X 3'-1" (EA)	CLASS 3 EXCAVATION (CY)	REMARKS
11	1 OF 4	RTE 231	10+02.62	15.9 RT	1-1A	A	1 - 12"	4.11	4	1			16.0	
11	1 OF 4	RTE 231	10+26.48	15.87 RT	1-2A	A	2 - 12", 1 - 18"	5.59	6	1			23.3	
11	1 OF 4	RTE 231	10+51.22	15.82 RT	1-3A	A	1 - 12"	4.00	4	1			11.4	
													147.0	PIPE CLASS 3 EXCAVATION
								SUBTOTALS	14.0	3	0	0	197.7	
								PAY TOTALS	14	3	0	0	198	

FURNISHING & PLACING ROCK FILL

PLAN SHEET No.	STATION	STATION	ROADWAY	LOCATION	FURNISHING ROCK FILL (CY)	PLACING ROCK FILL (CY)	REMARKS
24	82+32	83+04	RTE 231	RT	64.6	64.6	ON 2:1 FILL SLOPE
25	83+34	84+00	RTE 231	RT	68.8	68.8	ON 2:1 FILL SLOPE
25	84+35	84+98	RTE 231	RT	45.8	45.8	ON 2:1 FILL SLOPE
				SUBTOTALS	179.2	179.2	
				PAY TOTALS	179	179	

STATE OF MISSOURI
STUART ROBINSON McNEIL
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STUART ROBINSON McNEIL - CIVIL
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DATE PREPARED 7/9/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 3
COUNTY ST. LOUIS
JOB NO. J6S3632
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)

SUMMARY OF QUANTITIES
SHEET 10 OF 17

PERMANENT PAVEMENT MARKING

PLAN SHEET NO.	ROADWAY	BEGIN STATION	END STATION	PREFORMED THERMOPLASTIC PAVEMENT MARKING: 6" SOLID WHITE (LF)	CONTINENTAL CROSSWALKS: 24" X 6' CROSSWALK (EA)	CONTINENTAL CROSSWALKS: 24" X 10' CROSSWALK (EA)	24" SOLID WHITE: 24" X 6' CROSSWALK (LF)	24" SOLID WHITE: 24" X 10' CROSSWALK (LF)	24" SOLID WHITE: STOP BAR (LF)	24" SOLID YELLOW HATCHBAR (LF)	BIKE LANE & ARROW (EA)	STRAIGHT & LEFT/RIGHT ARROW (EA)	STRAIGHT ARROW (EA)	LEFT & RIGHT ARROW (EA)	ONLY (EA)	I-255 TEXT (EA)	LANE DROP ARROW/LEFT (EA)	24 " WHITE YIELD LINE TRIANGLES (EA)	PAVEMENT MARKING REMOVALS (EA)
219	231	41+93	51+19		26		156		133		6			4				6	
220	231	51+19	64+69								3			10					3
221	231	64+69	10+90		87		522		248	125	11		2	17					27
222	231	10+90	24+40	891	18	27	108	270	282	38	9	2	2	23	2			20	
223	231	24+40	37+90	431							10		4	6	4	4			
224	231	37+90	51+40		41		246		154		6	1		13				10	
225	231	51+40	64+90								9			6					
226	231	64+90	78+39		39		234		122		8			10				25	
227	231	78+39	91+89						48		9			8					
228	231	91+89	105+40		74		444		259		9	1		11				17	
229	231	105+40	118+90		37		222		87		7			12					
230	231	118+90	132+39		12		72		82		8			6				11	
231	231	132+39	145+91		50		300		82		11			8					
232	231	145+91	159+40		23		138		91		6			8					
233	231	159+40	172+88						33		10			7					
234	231	172+88	21+69		23		138		90		8			9				11	
235	231	21+69	35+21								7			6					
236	231	35+21	48+71								9			6					
237	231	48+71	62+18		32		192		119		8	1		9				9	
238	231	62+18	75+68						81		8			6					
239	231	75+68	89+18		39		234		186		8	1		8					
240	231	89+18	102+68								6								
241	231	102+68	116+26								7			2					
242	231	116+26	129+76								6			4					
243	231	129+76	144+27								6								
244	231	144+27	157+54								9			6					
245	231	157+54	171+04								6			2			2		
246	231	171+04	181+41																
			SUBTOTALS	1322	501	27	3006	270	2097	163	210	6	8	207	6	4	2	109	30
			PAY TOTALS	1322			5373			163	210	6	8	207	6	4	2	109	30

PERMANENT PAVEMENT MARKINGS

PLAN SHEET NO.	ROADWAY	BEGIN STATION	END STATION	CLASS 1 PAVEMENT MARKING PAINT 18-MIL, TYPE P BEADS: 4" WHITE SOLID (LF)	4" WHITE INTERMITTENT (LF)	4" WHITE DOTTED (LF)	4" YELLOW SOLID (LF)	4" YELLOW INTERMITTENT (LF)	CLASS 2 PAVEMENT MARKING PAINT 25-MIL, TYPE L BEADS: 6" YELLOW SOLID (LF)	6" YELLOW INTERMITTENT (LF)	6" YELLOW DOTTED (LF)	6" WHITE SOLID (LF)	6" WHITE INTERMITTENT (LF)	6" WHITE DOTTED (LF)	12" WHITE GORE (LF)	PAVEMENT MARKING REMOVAL (LF)
219	231	41+93	51+19	4508	395	166	2119	325	90			429	61	45		
220	231	51+19	64+69						2812	620		7870	656	102		
221	231	64+69	10+90						4685	160	26	9957	390	193	444	2807
222	231	10+90	24+40						4275		48	9800	1089	94		9975
223	231	24+40	37+90						2700	550		7422	1109			
224	231	37+90	51+40						3038	463		8684	570	87		
225	231	51+40	64+90						2700	675		8100	675			
226	231	64+90	78+39						2400	485		7497	570	89		
227	231	78+39	91+89						2700	680		7368	680	87		
228	231	91+89	105+40						2300	365		7419	450	83		
229	231	105+40	118+90						2600	489		7937	580	78		
230	231	118+90	132+39						3050	505		7482	603			
231	231	132+39	145+91						2500	390		7598	541	91		
232	231	145+91	159+40						3250	410		8965	573	147		
233	231	159+40	172+88						2876	545		7085	661			
234	231	172+88	21+69						4136	228		10200	534	72		
235	231	21+69	35+21						2722	681		7026	681			
236	231	35+21	48+71						2700	675		6834	675			
237	231	48+71	62+18						2806	355		8912	528	98		
238	231	62+18	75+68						2385	404		7853	543			
239	231	75+68	89+18						2824	285		8704	534	57		
240	231	89+18	102+68						3125			8100	675			
241	231	102+68	116+26						3038	319		7640	679			
242	231	116+26	129+76						2960	550		7932	675			
243	231	129+76	144+27						3264	95		8706	726			
244	231	144+27	157+54						2654	664		7712	664			
245	231	157+54	171+04						3508		21	5061	202			
246	231	171+04	181+41						2070			2068				
			SUBTOTALS	4508	395	166	2119	325	80168	10593	95	210361	16324	1323	444	12782
			PAY TOTALS	5069			2444		90,856			228,008			444	12,782

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:08:49 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 11 OF 17

CONCRETE MEDIAN STRIP

PLAN SHEET NO.	ROADWAY	BEGIN STA.	END STA.	LOCATION	18" ISLAND TUBULAR MARKER (WHITE) (EA.)	CURB REFLECTORS (WHITE) (EA.)	TYPE 5 AGG. FOR BASE (4" THICK) (S.Y.)	CONCRETE BASE 8" NON-REINF. (S.Y.)	6" CONCRETE MEDIAN STRIP (S.Y.)	REMARKS
6	231	49+76	49+96	LT	3	9	5.1	5.08	14.78	REMOVE EX. ISLAND SHIFT EAST 1'
6	231	50+40	50+53	LT	3	9	5.5	5.47	9.06	REMOVE EX. ISLAND SHIFT EAST 1.5'
6	231	50+03	50+14	RT	-	-	8.7	8.67	-	REMOVE EX. ISLAND
6	231	50+60	50+91	RT	3	9	-	-	66.96	REMOVE & REPLACE EX. ISLAND
10	231	3+16	3+34	LT	2	6	4.7	4.69	31.03	REMOVE & REPLACE PART OF EX. ISLANDS
13	231	18+79	19+11	RT	2	6	36.9	36.94	33.65	AUSTRALIAN RIGHT
13	231	19+03	19+57	RT	3	9	53.2	53.21	53.21	
13	231	23+20	23+69	RT	2	6	28.0	28.02	28.02	(2) INCREASE SIZE OF ISLAND
18	231	48+95	49+07	LT	3	9	8.4	8.43	7.61	REBUILD & DECREASE SIZE OF ISLAND (SIGNAL REBUILD)
18	231	49+08	49+27	RT	3	9	11.3	11.30	14.66	SHIFT & INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
23	231	76+00	76+21	LT	3	9	4.1	4.14	14.70	SHIFT SW & INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
23	231	76+63	76+88	LT	3	9	2.3	2.31	23.74	SHIFT SW & INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
23	231	75+87	76+15	RT	3	9	10.8	10.76	35.05	SHIFT SE & INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
23	231	76+58	76+83	RT	3	9	-	-	31.70	INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
28	231	103+18	103+41	RT	3	9	2.6	2.61	25.04	SHIFT S & INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
28	231	103+85	104+17	RT	3	9	5.3	5.29	53.82	SHIFT S & INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
30	231	110+87	111+11	LT	3	9	-	-	32.10	INCREASE SIZE OF ISLAND (SIGNAL REBUILD)
32	231	121+58	122+25	LT	6	18	30.6	30.55	22.47	REBUILD ISLANDS
33	231	130+18	130+87	RT	6	18	-	-	25.46	INCREASE SIZE OF ISLANDS (SIGNAL REBUILD)
41	231	173+80	174+07	LT	3	9	-	-	29.02	INCREASE SIZE OF ISLAND
41	231	173+90	174+01	RT	1	3	-	-	7.43	SOUTH OF NEW RAMP
				SUBTOTALS	61	183	217.5	217.47	559.51	* SEE SIDEWALK & BASE QUANTITY TABLE
				PAY TOTALS	61	183	*	217.5	559.5	(2 of 2) FOR PAY TOTAL

GUARDRAIL & BARRIER

PLAN SHEET NO.	ROADWAY	DIRECTION	BEGIN STA.	END STA.	LOCATION	MGS GUARDRAIL (L.F.)	TYPE B BARRIER (L.F.)	MGS BRIDGE APPROACH TRANSITION SECTION REGULAR/ NO CURB (EACH)	MGS VERTICAL CONCRETE BARRIER TRANSITION (EACH)	MGS END ANCHOR (EACH)	TYPE A CRASHWORTHY END TERMINAL (MASH) (EACH)	SHAPING SLOPES CLASS III MODIFIED (100FT)	REMARKS
11	231	SB	9+39	11+54	RT	-	163.2	1		-	1	1	
11	231	NB	10+53	11+61	LT	87.5	-	1		1	-	-	
12	231	NB	14+35	15+86	LT	62.5	-	1		-	1	1	
12	231	NB	17+17	18+53	LT	75.0	-	-		1	1	1	
52	231	NB	66+07	66+85	LT	-	-	-	1	-	1	1	
53	231	NB	69+65	70+49	LT	-	-	1	1	-	1	1	
58,59	231	SB	97+40	103+29	RT	550.0	-	-	-	1	1	1	
72,73	231	NB & SB	178+35	181+41	LT & RT	425.0	-	2	-	-	2	2	
					SUBTOTALS	1200.0	163.2	6	2	3	8	8.0	
					PAY TOTALS	1200	163	6	2	3	8	8	

STATE OF MISSOURI
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DATE PREPARED: 7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
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COUNTY: ST. LOUIS
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SUMMARY OF QUANTITIES
SHEET 12 OF 17

D37A SIGNAL QUANTITIES SUMMARY (BASE CONCRETE, PULL BOXES AND POSTS)

PLAN SHEET NO.	INTERSECTION	BASE CONCRETE (CY)	PULL BOX PREFORMED CONCRETE CLASS 1 (EACH)	PULL BOX PREFORMED CONCRETE CLASS 2 (EACH)	PULL BOX PREFORMED CONCRETE CLASS 3 (EACH)	POST TOP MOUNT 8 FT (EACH)	POST TYPE C 20 FT ARM (EACH)	POST TYPE C 25 FT ARM (EACH)	POST TYPE C 35 FT ARM (EACH)	POST TYPE C 40 FT ARM (EACH)	POST TYPE C 45 FT ARM (EACH)	POST TYPE C 50 FT ARM (EACH)	POST TYPE C 55 FT ARM (EACH)	POST TYPE B 45 FT ARM (EACH)	POST TYPE B 55 FT ARM (EACH)	PEDESTRIAN PUSH BUTTON STANCHION (EACH)	REMARKS
116	SAPPINGTON BARRACKS RD	16.33	1	1	2	2				2		1	1			1	
162	BARACKSVIEW RD																
162	I-255 WB OFF RAMP	0.88		1		2											
162	I-255 EB OFF-RAMP	0.44															
162	KINSWOOD LN																
123	FORDER RD	16.43		2	3	3		2			1		1			2	
130	YAEGER RD	13.58		2	3	2	1		1	2						3	
158	COPPERGATE SQUARE DR	0.44		1		1											
137	BAUMGATNER RD	10.59	2	1	2	3								1	1	1	
144	GEBHARDT DR	13.95		2	3	3		1				1		1		2	
151	BLACKFOREST DR	11.40	2	2	1	1	1	1				1					
159	OAKVILLE SCHOOLS/BETHESDA	0.88				2											
162	ERB RD																
162	BECKER RD																
	SUBTOTALS	84.92	5	12	14	19	2	4	1	4	1	3	2	2	1	9	
	PAY TOTALS	85	5	12	14	19	2	4	1	4	1	3	2	2	1	9	

D37A SIGNAL QUANTITIES SUMMARY (SIGNAL HEADS)

PLAN SHEET NO.	INTERSECTION	COUNTDOWN PEDESTRIAN TYPE 1S (EACH)	SIGNAL HEAD TYPE 3S (EACH)	SIGNAL HEAD TYPE 3B (EACH)	SIGNAL HEAD TYPE 4B (EACH)	REMARKS
116	SAPPINGTON BARRACKS RD	4	1	8	4	
162	BARACKSVIEW RD				1	
156	I-255 WB OFF RAMP	2				
157	I-255 EB OFF-RAMP	1				
123	FORDER RD	6	2	7	3	
130	YAEGER RD	8		8	6	
158	COPPERGATE SQUARE DR	4				
137	BAUMGATNER RD	6	1	7	5	
144	GEBHARDT DR	6		9	4	
151	BLACKFOREST DR	2		6	1	
159	OAKVILLE SCHOOLS/BETHESDA	5				
	SUBTOTALS	44	4	45	24	
	PAY TOTALS	44	4	45	24	

D37B SIGNAL QUANTITIES SUMMARY (CABLE AND CONDUIT)

PLAN SHEET NO.	INTERSECTION	CONDUIT					CABLE				REMARKS
		TRENCHED		PUSHED			POWER	CONTROL			
		2" (LF)	3" (LF)	2" (LF)	3" (LF)	4" (LF)	1c - #8 (LF)	2c - #16 (LF)	5c - #16 (LF)	7c - #16 (LF)	
117	SAPPINGTON BARRACKS RD	29	22	148	323		90	550	560	2190	
162	BARRACKSVIEW RD	133					450				
156	I-255 WB OFF-RAMP	408			27		440	340	340		
157	I-255 EB OFF-RAMP	150			16		530	260	260		
162	KINSWOOD LN	43					180				
124	FORDER RD	21	68		398	91	90	1510	1480	3250	
131	YAEGER RD	17	17		397	36	50	800	810	2140	
158	COPPERGATE SQUARE DR		8		2			760	760		
138	BAUMGATNER RD	17	17		397	36	50	800	810	2140	
145	GEBHARDT DR		54		330	85	50	1050	1060	3100	
152	BLACKFOREST DR	13	157		221		90	220	220	1710	
159	OAKVILLE SCHOOLS/BETHESDA		14					990	990		
	SUBTOTALS	831	357	148	2111	248	2020	7280	7290	14530	
	PAY TOTALS	831	357	148	2111	248	2020	7280	7290	14530	

D37C SIGNAL QUANTITIES SUMMARY (POWER SUPPLY AND SIGNAL CONTROLLER)

PLAN SHEET NO.	INTERSECTION	COMBINATION PAD MOUNTED 120V/240V POWER SUPPLY & LIGHTING CONTROLLER WITH UPS (EACH)	SIGNAL CABINET CONTROLLER ASSEMBLY HOUSING NEMA TS2 (EACH)	SIGNAL CONTROLLER ATC TRAFFIC SIGNAL CONTROLLER (EACH)	CONTROLLER BASE WRAP (EACH)	REMARKS
118	SAPPINGTON BARRACKS RD	1	1	1		
162	BARRACKSVIEW RD	1	1		1	
162	I-255 WB OFF-RAMP	1	1		1	
162	I-255 EB OFF-RAMP	1	1		1	
162	KINSWOOD LN	1	1		1	
125	FORDER RD	1	1	1		
132	YAEGER RD	1	1	1		
162	COPPERGATE SQUARE DR		1		1	
139	BAUMGATNER RD	1	1	1		
146	GEBHARDT DR	1	1	1		
153	BLACKFOREST DR	1	1	1		
162	OAKVILLE SCHOOLS/BETHESDA		1		1	
162	ERB RD		1		1	
162	BECKER RD		1		1	
	SUBTOTALS	10	14	6	8	
	PAY TOTALS	10	14	6	8	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:06:51 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 7/9/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 3
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

SUMMARY OF QUANTITIES
SHEET 13 OF 17

D37C SIGNAL QUANTITIES SUMMARY (SIGNAL SIGNS AND DETECTION)

PLAN SHEET NO.	INTERSECTION	SH-FLAT SHEET SIGNAL SIGN (SF)	SIGNAL-SIGN MOUNTING HARDWARE (EACH)	SL DISTRICT TRAFFIC SIGNAL DECTECTION SYSTEM (EACH)	RECONFIGURATION OF VIDEO DETECTION ZONES (EACH)	ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSH BUTTON & SIGN (EACH)	PUSH BUTTON EXTENSION (EACH)	REMARKS
118	SAPPINGTON BARRACKS RD	75	12	1		4		
160/162	BARRACKSVIEW RD	8	1		2	8	3	
156	I-255 WB OFF-RAMP					2		
157	I-255 EB OFF-RAMP					2	1	
160	KINSWOOD LN					4	2	
125	FORDER RD	48	10	1		6		
132	YAEGER RD	75	12	1		8		
158	COPPERGATE SQUARE DR					4		
139	BAUMGATNER RD	60	10	1		6		
146	GEBHARDT DR	75	8	1		6		
153	BLACKFOREST DR	42	4	1		2		
159	OAKVILLE SCHOOLS/BETHESDA					8		
160	ERB RD					4		
160	CHRISTOPHER DR					4	2	
160	HEINTZ RD					6	1	
160	WINDING CREEK WAY					4	2	
160	BECKER RD					6	1	
	SUBTOTALS	383	57	6	2	84	12	
	PAY TOTALS	383	57	6	2	84	12	

LIGHTING (1 OF 2)

PLAN SHEET NO.	INTERSECTION	STATION FROM (STA)	STATION TO (STA)	CIRCUIT	CTR TO CTR DIST. (LF)	4" RIGID CONDUIT TRENCHED (LF)	3" RIGID CONDUIT PUSHED (LF)	8 AWG CABLE - CONDUIT (LF)	TRENCHING TYPE 1 (LF)	REMARKS
106	SAPPINGTON BARRACKS	50+38	50+36	1&2	5.5	8.5		19.5		
106	SAPPINGTON BARRACKS	50+36	49+70	2	70.0			81.0		
106	SAPPINGTON BARRACKS	50+36	50+73	1	46.9			57.9	32	
106	SAPPINGTON BARRACKS	50+73	50+93	1	134.0			139.0		
111	BLACKFOREST	131+03	131+10	1	11.0	14		25		
111	BLACKFOREST	130+83	131+03	1	21.1		13	32.1	12	
111	BLACKFOREST	130+00	130+83	1	85.0		93	95		
				SUBTOTALS		22.5	106	449.5	44	
				TOTALS		23	106	450	44	

LIGHTING (2 OF 2)

PLAN SHEET NO.	INTERSECTION	STATION	OFFSET	CIRCUIT	ITEM ID#	45' TOP MOUNT LIGHTING POLE (EACH)	TOP MOUNTED LED-B LUMINARE (EACH)	45' POLE FOUNDATION (EACH)	RELOCATE EX. LIGHT POLE (EACH)	CLASS 3 PULLBOX (EACH)	REMARKS
106	SAPPINGTON BARRACKS	50+38	80' LT	1&2	PB1					1	
106	SAPPINGTON BARRACKS	50+73	52' LT	1	LED1	1	1	1			
106	SAPPINGTON BARRACKS	50+93	80' RT	1	LED2	1	1	1			
106	SAPPINGTON BARRACKS	49+70	64' LT	2	LED3	1	1	1			
107	FORDER	47+49	48' RT				1				REMOVE AND REPLACE LUMINARE
107	FORDER	49+06	69' LT				1				REMOVE AND REPLACE LUMINARE
107	FORDER	49+03	81' RT				1				REMOVE AND REPLACE LUMINARE
107	FORDER	50+57	46' LT				1				REMOVE AND REPLACE LUMINARE
108	YEAGER	75+55	47' RT				1				REMOVE AND REPLACE LUMINARE
108	YEAGER	76+19	94' LT				1				REMOVE AND REPLACE LUMINARE
108	YEAGER	76+73	90' RT				1				REMOVE AND REPLACE LUMINARE
108	YEAGER	77+19	48' LT				1				REMOVE AND REPLACE LUMINARE
109	BAUMGARTNER	102+90	48' RT				1				REMOVE AND REPLACE LUMINARE
109	BAUMGARTNER	103+08	100' LT				1				REMOVE AND REPLACE LUMINARE
109	BAUMGARTNER	104+08	104' RT				1				REMOVE AND REPLACE LUMINARE
110	GEBHARDT	112+22	48' LT				1				REMOVE AND REPLACE LUMINARE
110	GEBHARDT	110+88	68' LT				1				REMOVE AND REPLACE LUMINARE
111	BLACKFOREST	131+03	85' RT		PB2					1	
111	BLACKFOREST	130+83	77' RT		LED4	1	1	1			
111	BLACKFOREST	130+00	58' RT		LED5	1	1	1			
112	OAKVILLE MIDDLE SCHOOL	139+72	45' LT					1	1		
					SUBTOTALS	5	18	6	1	2	
					PAY TOTALS	5	18	6	1	2	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:07:03 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 7/9/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 3
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

SUMMARY OF QUANTITIES
SHEET 14 OF 17

ITS QUANTITIES (1 OF 4)

INTERSECTION WITH 231/TELEGRAPH	WALL-MOUNT FIBER INTERCONNECT CENTER (EACH)	SM FIBER OPTIC PIGTAIL (EACH)	SM FIBER OPTIC JUMPER (EACH)	FUSION SPLICE (EACH)	RELOCATE COMMUNICATION EQUIPMENT (EACH)	INSTALL MoDOT FURNISHED IP-ADDRESSABLE POWER STRIP (EACH)	CONTRACTOR-FURNISHED AND INSTALL CLOSED CIRCUIT TELEVISION (CCTV) ASSEMBLY (EACH)
SAPPINGTON BARRACKS RD	1.0	4.0	4.0	4.0	1.0	1.0	1
BARRACKSVIEW RD	1.0	4.0	4.0	26.0	-	-	
I-255 WB OFF-RAMP	1.0	4.0	4.0	26.0	-	-	
I-255 EB OFF-RAMP	1.0	4.0	4.0	10.0	-	-	
KINSWOOD LN	1.0	4.0	4.0	26.0	-	-	
FORDER RD	1.0	4.0	4.0	26.0	1.0	1.0	1
YEAGER RD	1.0	4.0	4.0	26.0	1.0	1.0	1
OAKVILLE PLAZA	1.0	4.0	4.0	26.0	-	-	
BUAMGARTNER RD	1.0	4.0	4.0	26.0	1.0	1.0	1
GEBHARDT DR	1.0	4.0	4.0	26.0	1.0	1.0	1
BLACKFOREST DR	1.0	4.0	4.0	26.0	1.0	1.0	1
OAKVILLE SCHOOLS/BETHESDA	1.0	4.0	4.0	26.0	-	-	
ERB	1.0	4.0	4.0	26.0	-	-	
CHRISTOPHER DR	1.0	4.0	4.0	26.0	-	-	
HEINTZ RD	1.0	4.0	4.0	26.0	-	-	
WINDING CREEK WAY	1.0	4.0	4.0	26.0	-	-	
BECKER RD	1.0	4.0	4.0	4.0	-	-	
PULL BOX B-143 ALONG I-255	-			8.0	-	-	
NODE 4	-	4.0	4.0	4.0	-	-	
SUBTOTALS	17.0	72.0	72.0	394.0	6.0	6.0	6.0
TOTALS	17.0	72.0	72.0	394.0	6.0	6.0	6.0

ITS QUANTITIES (2 OF 4)

PLAN SHEET #	LOCATION FROM (STA)	LOCATION TO (STA)	CTR TO CTR DIST. (FT)	2" HDPE CONDUIT PUSHED (LF)	2" HDPE CONDUIT TRENCHED (LF)	REMARKS
168	50+39	50+43	5.5		8.5	
168	50+39	50+47	40.2	38.2		
174	42+51	48+09	557.9	555.9		
174	48+09	49+21	114.7	112.7		
174	49+21	49+52	35.9	33.9		
174	49+52	55+51	599.0	597		
174	49+15	49+20	16.0		19	
176	70+39	75+58	518.8	516.8		
176	75+58	75+81	99.5	97.5		
176	75+81	75+86	11.6		14.6	
176	75+81	81+49	591.7	589.7		
179	102+67	104+12	149.4	147.4		
179	104+12	104+27	15.2	18.2		
179	104+12	104+48	52.4	50.4		
179	104+48	107+65	164.1	151.7	163.1	
179	107+65	110+74	309.3	307.3		
179	110+74	110+83	9.7		12.7	
179 - 180	110+74	116+26	557.8	555.8		
181	126+18	131+16	498.7	496.7		
181 - 182	131+05	131+16	23.8		26.8	
182	131+16	135+96	482.2	480.2		
			SUBTOTAL	4749.4	244.7	
			PAY TOTAL	4749	245	

ITS QUANTITIES (3 OF 4)

PLAN SHEET #	LOCATION STA.	LOCATION OFF	CLASS 2 ITS PULL BOX (EACH)	CLASS 5 ITS PULL BOX (EACH)	REMARKS
168	50+39	76.0 LT		1	
168	50+48	37.0 LT	1		
174	48+09	39.0 RT	1		
174	49+21	64.0 RT		1	
174	49+52	47.0 RT	1		
176	75+58	44.0 RT	1		
176	75+81	53.0 LT		1	
179	104+12	85.0 RT		1	
179	104+48	46.5 RT	1		
179	107+65	44.5 RT	1		
179	110+74	49.0 RT		1	
181	131+16	56.0 RT		1	
		SUBTOTAL	6	6	
		PAY TOTAL	6	6	

ITS QUANTITIES (4 OF 4)

PLAN SHEET NUMBER RANGE	LOCATION FROM (STA)	LOCATION TO (STA)	CTR TO CTR DIST. (FT)	24-STRAND SINGLE MODE OPTICAL FIBER CABLE (LF)	MODOT BURRIED CABLE DRIVEABLE DELINEATOR POST (EACH)	REMARKS
168 - 171	50+39	14+70	4989.4	29,529.30	51	SAPPINGTON BARRACKS TO BECKER RD, DELINIATOR POST LOCATIONS SHALL BE DETERMINED BY THE ENGINEER
			SUBTOTAL	31,010	51	INCLUDES 5% FOR SNAKING AND INCLUDES ADJUSTMENTS FOR PULL BOXES AND CABINETS
			TOTAL	31,010	51	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:07:16 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019587

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 15 OF 17

TEMPORARY EROSION CONTROL

PLAN SHEET NO.	BEGIN STATION	END STATION	LOCATION	ALT. DITCH CHECK (EA.)	SILT FENCE (L.F.)	ALT DITCH CHECK (L.F.)	CURB INLET CHECK (EACH)	CURB INLET CHECK (L.F.)	SEDIMENT REMOVAL (C.Y.)	REMARKS
279	44+80	50+04	LT/RT				1	60.00	60.0	
280	52+38	63+73	LT		243.85		1	50.00	52.4	
281	1+09	2+19	LT		139.56				1.4	
281/282	7+01	11+54	RT		555.77				5.6	
282	14+42	22+85	RT		835.70		1	12.00	20.4	
283	24+85	26+96	RT				1	30.00	30.0	
284	43+46	50+68	LT/RT				1	50.00	50.0	
285	57+96	63+08	LT		465.13		1	30.00	34.7	
286	67+87	70+55	LT		261.87				2.6	
286	68+88	73+27	LT/RT				1	40.00	40.0	
286	75+50	75+90	LT		32.26				0.3	
286	77+00	77+70	LT		131.68		1	10.00	11.3	
287	82+31	85+91	RT	4	270.76	20.00			22.7	
287	89+28	90+51	LT		127.60				1.3	
288	95+40	98+69	LT				1	30.00	30.0	
288	102+91	104+67	LT/RT		151.18				1.5	
289	110+50	111+91	LT/RT		98.58				1.0	
289	113+61	117+91	LT/RT		431.48		1	10.00	14.3	
289/290	117+87	118+58	RT		48.55				0.5	
290	119+00	125+65	LT/RT	1	268.65	5.00			7.7	
290	127+27	130+21	RT		311.50				3.1	
290	129+04	130+92	LT		261.44				2.6	
290/291	131+07	132+17	LT		82.67				0.8	
291	132+39	144+09	LT/RT	6	965.17	30.00	1	40.00	79.7	
291	132+38	145+22	LT		911.54				9.1	
292	145+32	149+03	LT	1	206.54	7.00	1	10.00	19.1	
294	172+19	174+03	RT		184.00				1.8	
294	175+44	178+30	LT	2	311.28	12.00			15.1	
				SUBTOTALS	7296.8	74.0	12.0	-	519.0	
				PAY TOTALS	7297.0	74.0	12.0	-	519.0	

PAVEMENT REPAIR

LOCATION	LENGTH (FT)	WIDTH (FT)	TOTAL AREA (SF)	FULL DEPTH PAVEMENT REPAIR: FURNISHING AND PLACING CONCRETE MATERIAL FOR PVMT REPAIR (SY)	FULL DEPTH PAVEMENT REPAIR: FULL DEPTH PAVEMENT REPAIR SAWCUT (LF)	FULL DEPTH PAVEMENT REPAIR: DOWEL BARS (DRILLING, FURNISHING, AND PLACING) (EACH)	FULL DEPTH PAVEMENT REPAIR: SUBGRADE COMPACTION 6" DEPTH (100 FT)	FULL DEPTH PAVEMENT REPAIR: TYPE I OR V AGG FOR BASE, 4" DEPTH (SY)	CONCRETE PAVEMENT: 10" NON-REINFORCED (SY)	CONCRETE PAVEMENT: CONC. BASE 6" NON-REINFORCED (SY)	REMARKS
*	10	12	120	13.3	44.0	18.0	0.1	13.3	-	-	LOG MILE: 2.1, NB, Lane 1
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 2.462, NB, Lane 1
*	6	13	78	8.7	38	10	0.1	8.7	-	-	LOG MILE: 2.594, NB, Lane 1
*	6	13	78	8.7	38	10	0.1	8.7	-	-	LOG MILE: 4.226, NB, Lane 1
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 6.157, NB, Lane 1
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 6.157, NB, Lane 2
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.567, NB, Lane 1, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.567, NB, Lane 2, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.567, NB, Lane 3, **
*	6	14	84	9.3	40	10	0.1	9.3	-	-	LOG MILE: 8.567, NB, Lane 4, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.620, NB, Lane 1, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.620, NB, Lane 2, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.620, NB, Lane 3, **
*	6	16	96	10.7	44	10	0.1	10.7	-	-	LOG MILE: 8.624,NB, Lane 1/2, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.624, NB, Lane 3, **
*	6	25	150	16.7	62	10	0.1	16.7	-	-	LOG MILE: 8.693, NB, Lane 1/2
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 8.707, NB, Lane 1
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 9.770, SB, Lane 1
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 9.638, SB, Lane 1
*	6	16	96	10.7	44	10	0.1	10.7	-	-	LOG MILE: 3.665, SB, Lane 3, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 3.665, SB, Lane 2, **
*	6	12	72	8.0	36	10	0.1	8.0	-	-	LOG MILE: 3.665, SB, Lane 1, **
*	6	14	84	9.3	40	10	0.1	9.3	-	-	LOG MILE: 3.538, SB, Lane 1
*	6	14	84	9.3	40	10	0.1	9.3	-	-	LOG MILE: 3.538, SB, Lane 2
*	-	-	3666	-	-	-	-	-	407.3	407.3	KINSWOOD, NB
			SUBTOTAL	216.7	930.0	248.0	2.4	216.7	407.3	407.3	
			PAY TOTAL	216.7	930.0	248.0	3	216.7	407.3	407.3	

*LOCATON TO BE DETERMIED BY ENGINEER

** Do not install dowel bars into bridge deck, install 2" expansion joint and fill with bituminous material

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:09:07 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	3

COUNTY: ST. LOUIS

JOB NO.: J6S3632

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

SUMMARY OF QUANTITIES
SHEET 16 OF 17

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						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	2	32.00				MERGE (LEFT)
WO4-1aR	48X48	16.00						MERGE (RIGHT)
WO5-1	48X48	16.00	2	32.00				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	2	10.00				NEXT XX MILES (PLAQUE)
WO8-1	48X48	16.00						BUMP
WO8-2	48X48	16.00	28	448.00				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	8	128.00				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						ONE LANE ROAD AHEAD
WO20-5	48X48	16.00	6	96.00				RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00	6	96.00				RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00						FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00	4	64.00				SHOULDER WORK / SHOULDER WORK AHEAD
WO22-1	48X48	16.00						BLASTING ZONE AHEAD
WO22-2	42X36	10.50						TURN OFF 2-WAY RADIO AND PHONE
WO22-3	42X36	10.50						END BLASTING ZONE
GO22-1	21X15	2.19						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						ROAD WORK NEXT XX MILES
GO20-2	48X24	8.00						END ROAD WORK
GO20-4	36X18	4.50						PILOT CAR FOLLOW ME
GO20-4a	42X30	8.75						PILOT CAR IN USE WAIT & FOLLOW
GO20-4a	18X12	1.50						PILOT CAR IN USE WAIT & FOLLOW
GO20-5aP	36X24	6.00	4	24.00				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	96.00				SPEED LIMIT XX
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	2	12.50				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	2	4.00				SIDEWALK CLOSED
R9-11L	24X18	3.00	2	6.00				SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00	2	6.00				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						POINT OF PRESENCE
CONST-8	48X36	12.00						WORK ZONE NO PHONE ZONE

616-10.05 CONSTRUCTION SIGNS	TOTAL
	1055

616-10.10 RELOCATED SIGNS	TOTAL
	0

ITEM NUMBER	TOTAL QTY	EFFECTIVE: 07-01-2024 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		TRUCK MOUNTED ATTENUATOR (TMA)
6161008	8	ADVANCED WARNING RAIL SYSTEM
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161025	250	CHANNELIZER (TRIM LINE)
6161030	4	TYPE III MOVEABLE BARRICADE
6161033	14	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	** 2	CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE- CONTRACTOR FURNISHED/RETAINED
6161099		CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE- CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002		TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D	** 20	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

*** NOT INCLUDED IN
LUMP SUM TRAFFIC CONTROL

TEMPORARY TRAFFIC CONTROL	1 LUMP SUM

NOTES:

(1) NO DIRECT PAY WILL BE MADE FOR RELOCATING SIGNS

(2) SIGN & DEVICE LOCATION WILL BE FIELD VERIFIED & APPROVED BY THE ENGINEER

(3) CMS LOCATIONS TO BE DETERMINED BY ENGINEER

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:09:26 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	3

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SUMMARY OF QUANTITIES
SHEET 17 OF 17

GENERAL NOTES:

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.

ALL BEARINGS ARE BASED ON STATE PLANE BEARINGS, EASTERN ZONE

RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND FROM STATION 45+33.79 TO STATION 179+43.82 ALONG ROUTE 231 FOR A DISTANCE OF 3.815 MILES

ALL ENTRANCES SHALL BE USED IN PLACE EXCEPT WHERE INDICATED IN THE PLANS

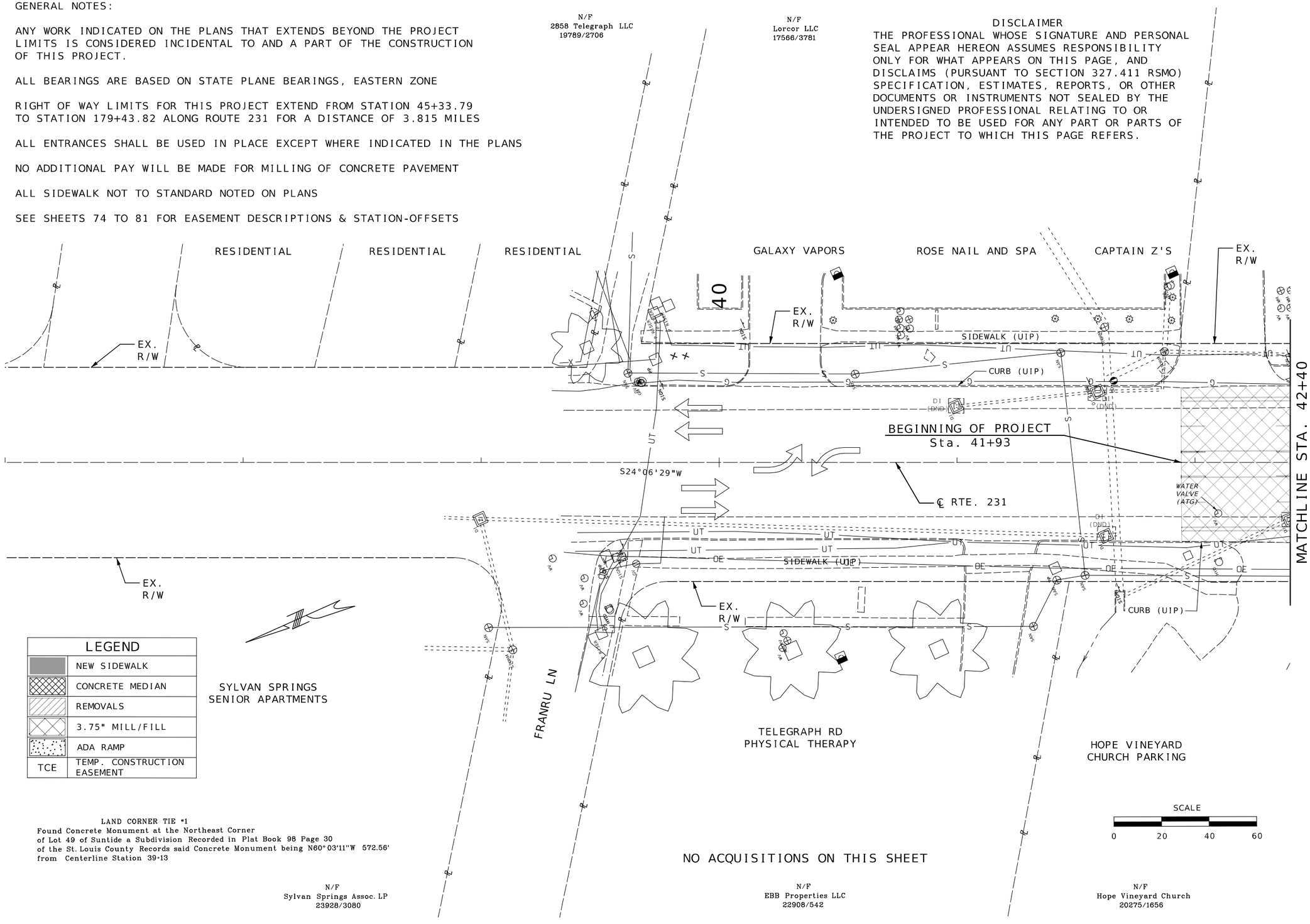
NO ADDITIONAL PAY WILL BE MADE FOR MILLING OF CONCRETE PAVEMENT

ALL SIDEWALK NOT TO STANDARD NOTED ON PLANS

SEE SHEETS 74 TO 81 FOR EASEMENT DESCRIPTIONS & STATION-OFFSETS

DISCLAIMER

THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411 RSMO) SPECIFICATION, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.



LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

LAND CORNER TIE #1
Found Concrete Monument at the Northeast Corner
of Lot 49 of Suntide a Subdivision Recorded in Plat Book 98 Page 30
of the St. Louis County Records said Concrete Monument being N60°03'11"W 572.56'
from Centerline Station 39+13

NO ACQUISITIONS ON THIS SHEET

N/F
Sylvan Springs Assoc. LP
23928/3080

N/F
EBB Properties LLC
22908/542

N/F
Hope Vineyard Church
20275/1656

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:16:40 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	4

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SENTINEL EMERGENCY SOLUTIONS

N/F
LJC Commercial LLC
23714/80

FRANVIEW PLAZA

N/F
LJC Commercial LLC
7353/723

N/F
Telegraph Real Property LLC
22118/1198

1
LJC COMMERCIAL LLC
6.931 AC PARCEL AREA
812 SF TEMP. ESM'T
(0.019 AC)
6.931 AC REMAINING

2878 TELEGRAPH RD

2940 TELEGRAPH RD

2
TELEGRAPH REAL PROPERTY LLC
0.275 AC PARCEL AREA
413 SF PERM. ESM'T.
(0.009 AC)
157 SF TEMP. ESM'T.
(0.004 AC)
0.275 AC REMAINING

2944 TELEGRAPH RD

VAN CITY RV

NOTE (1):
REMOVE EXISTING ASPHALT ENTRANCE, CURB & CONCRETE PAD
INSTALL 8" SIDEWALK THROUGH ENTRANCE
(ADA PATH 1% MIN, 2% MAX)
RE-GRADE FROM BACK OF SIDEWALK @ 10 % (UNPAVED)

DRIVEWAY (CONCRETE/ASPHALT) & CURB (R)

NEW LARGE RADIUS PERPENDICULAR RAMP, (WITHOUT TRUNCATED DOMES)
(R) EX. SIDEWALK
WARP SECTION TO CONNECT TO EXISTING SIDEWALK

STA. 47+26 (R & R)
COMMERCIAL ENTRANCE
30' PAVED APPROACH
(+1.45 %)

6" TYPE A CURB (BACK OF SIDEWALK)

PERM. ESM'T (SIDEWALK)

SHRUBS (DND)

2 SHRUBS (R)

PULL BOX (ATG)

SEE NOTE (1)

SIDEWALK, STAIRS & CONC. PAD (R)

TCE

S.L.

EX. R/W

EX. BUS STOP & SHELTER

SIDEWALK (UIP)

RAMP (R) & INSTALL TYPE S CURB (MATCH EX. HEIGHT)

2 LARGE RADIUS PERPENDICULAR RAMPS
1 WITH DOME PADS
1 NO DOME PADS

PULL BOX (REMOVE AND RELOCATE BY OTHERS)

PULL BOX (REMOVE AND RELOCATE BY OTHERS)

LARGE RADIUS PERPENDICULAR RAMP CONNECT TO EX. SIDEWALK

POWER SUPPLY (DND)

RELOCATE PP2
#167605
(BY OTHERS)

SIDEWALK (R & R)

RELOCATE PP3
#167826
(BY OTHERS)

EX. BUS STOP & SHELTER (DND)

RELOCATE PP1
#167827
(BY OTHERS)

BUS PAD:SEE NOTE (2)

6" TYPE A CURB (BACK OF SIDEWALK)
STA 45+49 TO 46+30

NEW 6" TYPE S CURB

CURB (R)

SHRUBS & LANDSCAPING STONES IN EX R/W (R)

6" TYPE S CURB

WATER VALVE (ATG)

MATCHLINE STA. 42+40

MATCHLINE STA. 47+80

S24°06'29"W

SIDEWALK (UIP)

EX. R/W

TCE

TREE (DND)

(R) EX. SIDEWALK TO JOINT, REPLACE AND CONNECT TO NEW SIDEWALK

NOTE (2):
-INSTALL BUS PAD (SEE SPECIAL SHEET)
STA 45+61 TO 45+68 (RT)
-EXISTING BUS STOP SIGN TO BE RELOCATED TO NEW PAD BY OTHERS (SEE JSPs)

SHRUB (DND)

PILLARS (DND)

CURB (R)

SIGN (DND)

STA. 47+02.56 (R & R)
COMMERCIAL ENTRANCE
32.4' PAVED APPROACH
(-6 %)

CONSTRUCT RAMP/SIDEWALK OVER THE TOP OF EX.INLET

NEW SIDEWALK AND TWO LARGE RADIUS PERPENDICULAR RAMPS (CURB - R & R)

VETERINARY HOSPITAL

5
NICHOLAS J. & KATHRYN A. PISONI
(SEE NEXT SHEET)

N/F
Nicholas & Kathryn Pisoni
10474/2149

HOPE VINEYARD CHURCH

SCALE
0 20 40 60

N/F
Hope Vineyard Church
20275/1656

3
HOPE VINEYARD CHURCH
3.47 AC PARCEL AREA
147 SF TEMP. ESM'T
(0.003 AC)
3.47 AC REMAINING
2923 TELEGRAPH RD

4
CC&S INVESTMENT INC
1.716 AC PARCEL AREA
694 SF TEMP. ESM'T
(0.016 AC)
1.716 AC REMAINING
307 BIEN VENIDO DR

N/F
CC&S Investment Inc.
14690/26

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:16:54 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	5

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

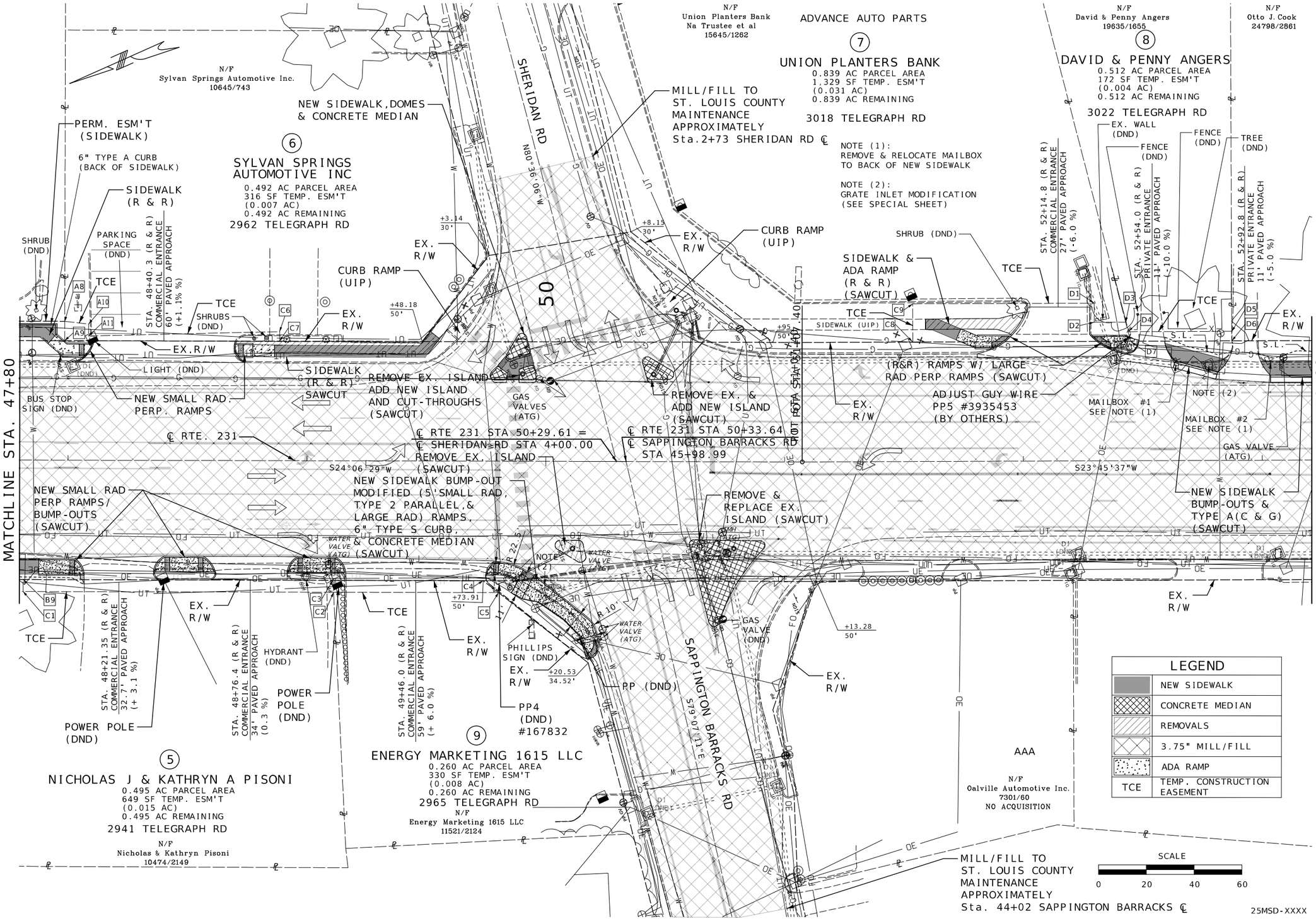
BRIDGE NO.

DESCRIPTION

DATE

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:17:05 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	6

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Stanley & Linda Courtway
16508/142
NO ACQUISITION

N/F
Phillips Pipe Line Company
NO ACQUISITION

N/F
Richard & Lillian Coger
17021/290

(10)

RICHARD & LILLIAN COGER

0.185 AC PARCEL AREA
216 SF TEMP. ESM'T TRACT 1
(0.005 AC)
240 SF TEMP. ESM'T TRACT 2
(0.006 AC)
0.184 AC REMAINING

3038 TELEGRAPH RD

NOTE (1):
REMOVE & RELOCATE MAILBOX
TO BACK OF NEW SIDEWALK

NOTE (2):
GRATE INLET MODIFICATION
(SEE SPECIAL SHEET)

NOTE (3):
-INSTALL BUS PAD (SEE SPECIAL SHEET)
STA 57+50 TO 57+57 (LT)
-EXISTING BUS STOP SIGN TO BE RELOCATED
TO NEW PAD BY OTHERS (SEE JSPs)

NOTE (4):
INSTALL 8" SIDEWALK THROUGH ENTRANCE
(ADA PATH 1% MIN, 2% MAX)

NOTE (5):
CLEAN OUT INLETS

N/F
RFTB PP LLC
23942/2977

(11)

RFTB PP LLC., ET AL

1.761 AC PARCEL AREA
2023 SF TEMP. ESM'T
(0.046 AC)
1.715 AC REMAINING

3040 TELEGRAPH RD

STA. 53+58.7 (R & R)
PRIVATE ENTRANCE
15.9' PAVED APPROACH
(-10.5 %)

STA. 54+25.13 (R & R)
PRIVATE ENTRANCE
11.6' PAVED APPROACH
(-5.0 %)

MATCHLINE STA. 53+20

MATCHLINE STA. 58+60

TCE
TRACT 1

TCE
TRACT 2

TCE

REMOVE EX. SIDEWALK

EX. R/W

SEE NOTE (2)

MAILBOX #3
SEE NOTE (1)

TREE
(DND)

SEE NOTE (2)

S.L.

EX. SIDEWALK (REMOVE)

SEE NOTE (4)

SEE NOTE (4)

BUS PAD:
SEE NOTE (3)

SIDEWALK (R)

6" MODIFIED TYPE S CURB

6" TYPE S CURB
(SAW CUT)

EX. BUS STOP

MAILBOX #10
SEE NOTE (1)

(5) NEW LARGE RAD RAMPS
NO DOME PADS

NEW LARGE RAD RAMPS
NO DOME PADS

℄ RTE.231

GAS VALVE
(ATG-BY OTHERS)

SIDEWALK WITH
HANDRAILING

POLE (R)
(BY OTHERS)

POWER POLE
(DND)

NEW SIDEWALK
BUMP-OUTS &
TYPE A (C & G)
(SAWCUT)

STORM MH
MSD #29H4-141D
(ATG)

S23°45'37"W

NEW SIDEWALK BUMP-OUT
& TYPE A (C & G)
(SAWCUT)

(5)

EX. R/W

EX. R/W

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Chris Cakes Holdings LLC
22884/2793
NO ACQUISITION

RAGSDALE PROPERTIES, L.L.C.
19493-1363
MAY 19, 2011
NO ACQUISITION

N/F
Thomas & Erin Dittrich
25377/2123
NO ACQUISITION

Adam Schaffer
23114/1965
NO ACQUISITION

LIN-TEL RD

SCALE
0 20 40 60

25MSD-XXXX

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:40:35 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	7

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Telegraph Real Property LLC
21824/01
Parcel 3

NOTE:
REMOVE & RELOCATE MAILBOX
TO BACK OF NEW SIDEWALK

N/F
Telegraph Real Property LLC
21824/01
Parcel 1

3068 TELEGRAPH RD

STA. 58+75.93 (R & R)
COMMERCIAL ENTRANCE
20' PAVED APPROACH
(+10.0 %)

(12)

TELEGRAPH REAL PROPERTY LLC
0.49 AC PARCEL AREA
773 SF TEMP. ESM'T
(0.018 AC)
0.49 AC REMAINING

3100 TELEGRAPH RD

STA. 61+01
INSTALL 8" SIDEWALK
(ADA PATH 1% MIN, 2% MAX)
THROUGH COMMERCIAL ENTRANCE
(EX. ASPHALT)

N/F
Southtown Holdings LLC

N/F
Pinehurst Apartment Complex LLC
17084/1561

(14)

PINEHURST APARTMENT COMPLEX LLC
3.50 AC PARCEL AREA
128 SF TEMP. ESM'T.
(0.003 AC)
3.50 AC REMAINING

3110 ALPEN ROSE CT

(13)

SOUTHTOWNE HOLDINGS LLC
0.465 AC PARCEL AREA
550 SF TEMP. ESM'T
(0.013 AC)
0.465 AC REMAINING

3130 TELEGRAPH RD

STA. 63+47.1 (R & R)
COMMERCIAL ENTRANCE
18.7' PAVED APPROACH
(-4.9 %)

MATCHLINE STA. 58+60

MATCHLINE STA. 64+00

60

TCE
RET.WALL (DND)
NEW 8" TYPE A CURB
EX. R/W
(DND) BOLLARDS & WOOD POSTS OUTSIDE OF R/W
NEW 8" TYPE A CURB
NEW SIDEWALK & LARGE RADIUS PERPENDICULAR RAMPS
STORM MH MSD #29H4-069D (ATG)
SHRUBS (DND)
LANDSCAPING (DND)
HYDRANT (DND)
POWER POLE (DND)
NEW S.W./RAMPS

DI (DND)

TYPE B CONCRETE CURB (R)
INSTALL 6" MODIFIED TYPE S CURB
(SAWCUT)

REMOVE BOLLARDS & LANDSCAPING WITHIN EX.R/W

NEW SIDEWALK, SMALL & LARGE RAD PERP RAMPS

MAILBOX #4 (SEE NOTE)

REMOVE BOLLARDS & LANDSCAPING WITHIN R/W

℄ RTE. 231

S23°45'37"W

CURB (UIP)

GAS VALVE (ATG) (BY OTHERS)

6" TYPE S CURB

PULL BOX (ATG)

EX. BUS STOP

EX. R/W

Lot 80

Lot 76

Lot 75

Lot 74

Lot 73

Lot 72

Lin-Tel Manor Plat One
PB 90 PG 41

Lin-Tel Manor Plat Two
PB 95 PG 42
NO ACQUISITION

LAND CORNER TIE #2

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

25MSD-XXXX

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:30:16 AM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	8

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
HZ Props RE LTD
23186/904
Lot 1 Bakker-Hahn Heights
PB 274 PG 55

N/F
Marlborough Development LLC
10454/519
Lot 3 of Bakker-Hahn Heights
PB 274 PG 55
NO ACQUISITION

N/F
THF Breihan Development Company
11007/315
NO ACQUISITION

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

(15)

HZ PROPS RE LTD
0.716 AC PARCEL AREA
394 SF TEMP. ESM'T.
(0.009 AC)
0.716 AC REMAINING
3150 TELEGRAPH RD

POPEYE'S

STA. 64+04.5 (R & R)
COMMERCIAL ENTRANCE
30' PAVED APPROACH
(-3.8 %)

TCE

RAMP
(R & R)
SMALL RAD
PERP RAMP

65

NEUBAUER RD

EX.
R/W

SIDEWALK (UIP)

+2.25
50'

EX.
R/W

MATCHLINE STA. 64+00

℄ RTE. 231

S23°45'37"W

EQUATION:
STA 67+30.70 BK =
STA 0+00.00 AHD

POT STA 0+00.00 R2

EX. BUS STOP
& SHELTER

TACO BELL

EX.
R/W

+78.88
104.40'

SIDEWALK (UIP)

MATCHLINE STA. 2+09

EX. BUS STOP

EX.
R/W

EX.
R/W

+26.72
50'

+26.72
85'

+76.02
85'

Lin-Tel Manor Plat Four
PB 98 PG 14
NO ACQUISITION

Lot 71	Lot 70	Lot 69	Lot 68	Lot 67	Lot 66	Lot 65	Lot 64	Lot 63
	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL	RESIDENTIAL

LAND CORNER TIE *2
Found Concrete Monument at the P.C. of the East Right-of-Way Line
of Tel Road (50'W) being 28.91' more or less Northeasterly from the Southwest Corner of Lot 75
of Lin-Tel Manor Plat 2 Recorded in Plat Book 95 Page 42 of the St. Louis County
Records said Concrete Monument being N03°22'31"W 384.32' from
Centerline Station 65+00

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:30:26 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	9

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

I-255 WB ON-RAMP

UT

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS VERTICAL BARRIER TRANSITION
INSTALL END TERMINAL

R&R EX. GUARDRAIL

BRIDGE
A7399

10

MATCHLINE STA. 7+49

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS VERTICAL BARRIER TRANSITION
INSTALL TYPE A CRASWORTHY END TERMINAL (MGS)
INSTALL TYPE B BARRIER

POT STA 8+67.44 R3

S23°45'37"W

1-1 A

1-2 A

1-3 A

℄ RTE. 231

4' x 2' CV INLET

TAPER CURB DOWN TO 2"

NEW CRASHWORTH END TERMINAL

EQUATION:
STA 8+67.44 BK =
STA 8+66.20 AH

S23°52'07"W

NEW 163.2'
TYPE D BARRIER

UE

NEW 12" DIAMETER PIPE

NEW 12" DIAMETER PIPE

NEW 18" DIAMETER PIPE

NEW SIDEWALK &
6" TYPE S CURB

1-4 FES

I-255

MATCHLINE STA. 12+90

NO ACQUISITIONS ON THIS SHEET

OUTLET

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:40:25 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	11

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

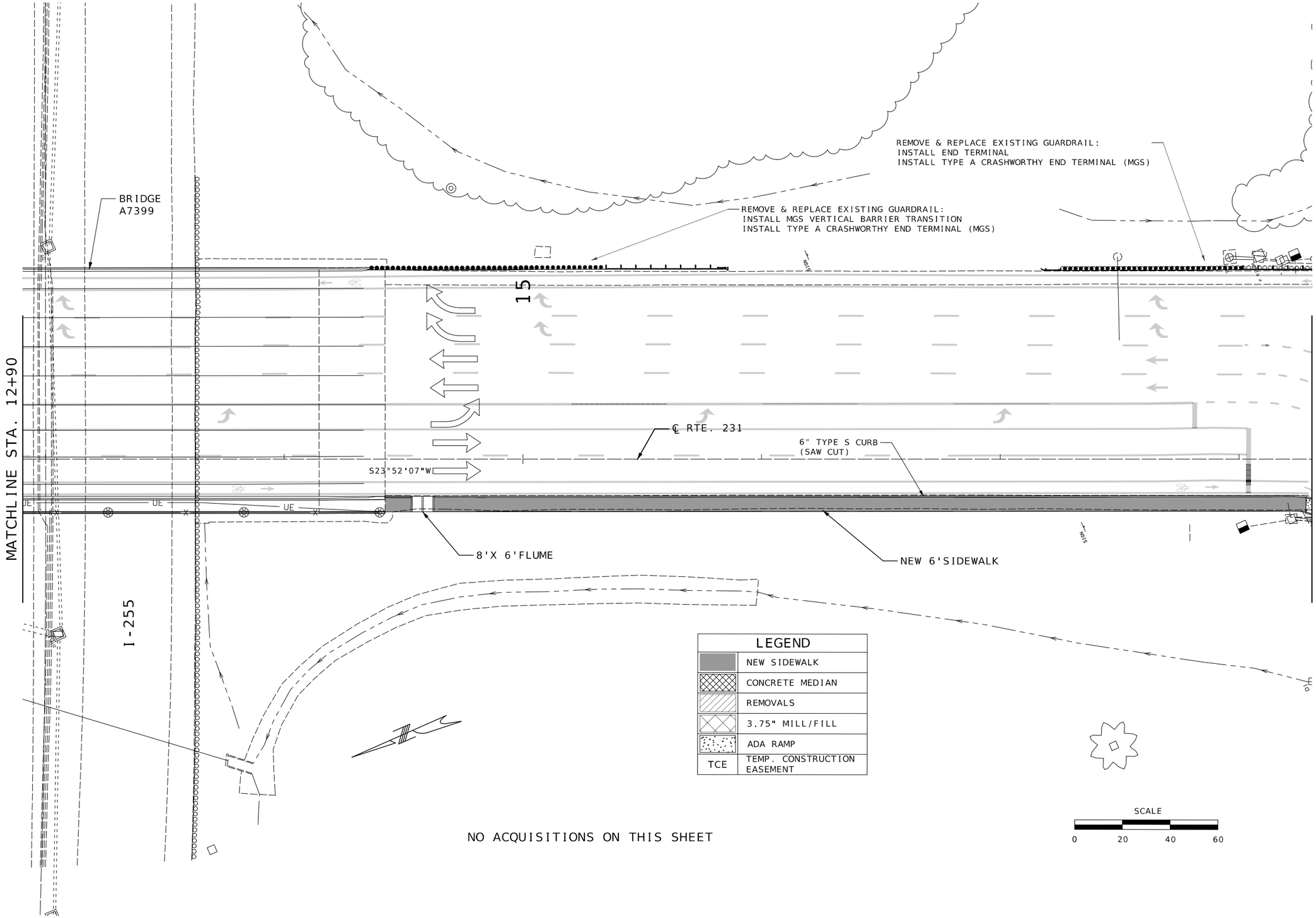
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



NO ACQUISITIONS ON THIS SHEET

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:31:16 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	12

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	21+36.78
PC	20+29.47
PT	22+43.47
Δ	10°41'47.8" (LT)
D	4°59'54.3"
L	214.00' (ARC)
T	107.31'
R	1,146.28'

MATCHLINE STA. 18+30

MATCHLINE STA. 23+70

I-255 EB ON-RAMP

I-255 EB ON-RAMP

I-255 EB OFF-RAMP

KINSWOOD LN

KINSWOOD LN

LAND CORNER TIE•3
Found Concrete Monument at the P.C. of the North Right-of-Way Line of Martigney Drive (50'W) being 36.72' more or less Southeasterly from the Southwest Corner of Lot 8 of Martigney Hills a Subdivision Recorded in Plat Book 76 Page 8 of the St. Louis County Records said Concrete Monument being S69°58'39"E 573.07' from Centerline Station 23+00

℄ RTE. 231

S23°52'07"W

S13°10'20"W

PC STA. 20+29.47

PT STA. 22+43.47

R3

R3

REMOVE ISLAND & REPLACE (SAWCUT)

NEW CONCRETE MEDIAN STRIP (SAWCUT)

10' SHARED USE PATH

FLUME 8' X 10'

NEW MODIFIED TYPE 1 PARALLEL 10' WIDE

NEW SIDEWALK, SMALL RAD RAMP, CUT-THROUGH, & DOME PADS

6" TYPE S CURB (SAW CUT)

10' SHARED USE PATH

NEW CONCRETE MEDIAN STRIP (SAWCUT) (UIP) EX. PULL BOX & SIGNAL POST

NEW CONCRETE MEDIAN STRIP (SAWCUT) REMOVE PART OF EX. & ADD TO ISLAND

NEW SIDEWALK, MOD TYPE 1 PARALLEL RAMP (10' WIDE), CUT-THROUGH (SAWCUT), & DOME PADS

EX. R/W

NO ACQUISITIONS ON THIS SHEET

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:23:11 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	13

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	28+48.05
PC	27+51.16
PT	29+44.49
Δ	9°39'48.3" (LT)
D	4°59'54.3"
L	193.33' (ARC)
T	96.89'
R	1,146.28'

MATCHLINE STA. 23+70

MATCHLINE STA. 29+10

Lot 92

N/F
Richard Olson
22388/125
NO ACQUISITION

N/F
Vernell Gettner
17754/4389
NO ACQUISITION

Lot 93

RESIDENTIAL

RESIDENTIAL

EX. R/W

EX. R/W

EX. R/W

EX. R/W

EX. R/W

LIGHT POLE (DND)

SIGNAL BASE (DND)

2 LARGE RADIUS PERPENDICULAR RAMPS
1 NO DOME PADS
1 WITH DOME PADS
PAID AS 1 ADA RAMP

℄ RTE. 231

S13°10'20"W

PC STA 27+51.16 R3

6" TYPE S CURB

PULL BOX (ATG)

STA 24+49
END 6" TYPE S CURB
BEGIN CURB UIP

CURB (UIP)

NEW 6' SIDEWALK & TYPE 3 PARALLEL RAMP

BUS PAD:SEE NOTE (1)

+00 70'

+50 70'

+00 95'

+00 95'

+00 115'

+00 115'

+50 90'

NO ACQUISITIONS ON THIS SHEET

PNC BANK

N/F
South Side National
Bank In STL
10944/1164
NO ACQUISITION

ZX GAS STATION & CAR WASH

N/F
Site Oil Company
9580/2018
NO ACQUISITION

Lot 2

RESIDENTIAL

NOTE (1):
- INSTALL BUS PAD (SEE SPECIAL SHEET) STA 26+28 TO STA 28+35 (RT)
- EXISTING BUS STOP SIGN TO BE RELOCATED TO NEW PAD BY OTHERS (SEE JSPs)

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:31:46 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	14

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Vernell Gettner
17754/4389

Boundary Adj. Plat
Birchwood Est. Lots 67 & 68
PB 289 PG 27

Birchwood Est. Plat 1
PB 186 PG 90

RESIDENTIAL

EX. R/W

Lot 68

Lot 69

+80
100'

+50
90'

30

MATCHLINE STA. 29+10

PT STA 29+44.49 R3

℄ RTE. 231

S03°30'31"W

POT. STA 32+50.00 R3

S04°22'37"W

MATCHLINE STA. 34+50

+00
70'

+56.31
62.2'

+50
60'

+82
59.25'

+98.01
75'

+48.01
75'

+75
50'

Lot 3

Lot 4

Lot 5

Lot 6

Lot 7

Lot 28

Lot 27

Tara South III
PB 95 PG 59

AQUA RIDGE DR.

NO ACQUISITIONS ON THIS SHEET

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:32:08 AM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	15

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

MATCHLINE STA. 34+50

MATCHLINE STA. 39+90

RESIDENTIAL

RESIDENTIAL

GOLDEN VALLEY DR

GOLDEN VALLEY DR

DUNKIN DONUTS

EX. R/W

EX. R/W

EX. R/W

EX. R/W

EX. BUS STOP
UIP

EX. BUS STOP
UIP

35

℄ RTE. 231

S04°22'37"W

STORM MH (ATG)

STORM MH (ATG)

STORM MH (ATG)

GAS VALVE (DND)

D1 (DND)

D1 (DND)

D1 (DND)

+40
90'

+45
50'

+45
50'

+00
50'

+68.83
73.16'

+18.71
76.50'

+80
115'

RESIDENTIAL
Lot 29

RESIDENTIAL
Lot 30

RESIDENTIAL
Lot 31

RESIDENTIAL
Lot 61

RESIDENTIAL
Lot 60

NO ACQUISITIONS ON THIS SHEET

Tara South III
PB 95 PG 59

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 7:31:56 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	16

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
TS Center LLC
21826/1368
NO ACQUISITION

DUNKIN
DONUTS

EX. R/W

N/F
TS Center LLC
21826/1368
AQUISITION
SEE SHEET 18

TELEGRAPH SOUTH
CENTER

EX. R/W

40

45

MATCHLINE STA. 39+90

MATCHLINE STA. 45+30

℄ RTE. 231

S03°22'37"W

ADA RAMP (R)
REPLACE WITH
LARGE RADIUS
PERPENDICULAR

SIDEWALK (R)
REPLACE WITH
5' SIDEWALK

BUS PAD:SEE NOTE (1)

CURB (UIP)

CURB (R)

CURB (UIP)

+75
50'

+00
50'

S.L.

WATER
VALVE
(ATG)

8" TYPE A CURB

EX. R/W

TCE

S.L.

TCE

FIRE HYDRANT
(DND)

STA 45+17
END CURB UIP
BEGIN NEW 6" TYPE S CURB

POWER POLE &
GUY WIRE
(DND)

9' X 9' RCB

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

EX. R/W

+25
155

+00
184'

+08
170'

EX. R/W

NOTE (1):
-INSTALL BUS PAD (SEE SPECIAL SHEET)
STA 44+67 TO STA 44+74 (RT)
-EXISTING BUS STOP SIGN TO BE RELOCATED
TO NEW PAD BY OTHERS

(17)

MEERAE LLC
2.744 AC PARCEL AREA
1,545 SF TEMP. ESM'T
(0.035 AC)
2.744 AC REMAINING
4345 TELEGRAPH RD

STRIP MALL

Meerae LLC
20076/2982

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 8:02:04 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	17

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
TS Center LLC
21826/1368

LAND CORNER TIE *4
Found Iron Pipe LS*14D at the Northwest Corner of QuikTrip *674 Boundary Consolidation Plat Recorded in Plat Book 354 Page 53 of the St. Louis County Records, said Iron Pipe being S55°42'27"W 307.45' from Centerline Station 50+00

N/F
Bhagatji LLC
25348/1406

(18)
TS CENTER LLC
6.857 AC PARCEL AREA
494 SF TEMP. ESM'T
(0.011 AC)
6.857 AC REMAINING
4220 TELEGRAPH RD

(19)
BHAGATJI LLC
0.412 AC PARCEL AREA
386 SF TEMP. ESM'T
(0.009 AC)
0.412 AC REMAINING
4390 TELEGRAPH RD

NOTE (1):
-INSTALL BUS PAD (SEE SPECIAL SHEET) STA 46+93 TO STA 47+00 (LT)
-EXISTING BUS STOP SIGN TO BE RELOCATED TO NEW PAD BY OTHERS

PHILLIPS 66

EX. R/W

SIDEWALK & ADA RAMP (R & R) SAWCUT
NEW TYPE 2 PARALLEL RAMP

POTTLE AVE

REMOVE LANDSCAPING CURB IN EXIST. R/W

MEET EX. CURB

VARIABLE HEIGHT TYPE S CURB (INSTALL ALONG EXIST. R/W)

CONCRETE SLOPE PROTECTION

SIDEWALK HANDRAILING WITH BALUSTERS

6" TYPE S CURB (SAWCUT)

TCE

STA. 48+14.5 (R & R) COMMERCIAL ENTRANCE (RIGHT-OUT ONLY) 21.6' PAVED APPROACH (+6.5 %)

NO PARKING SIGN (RELOC)
NO DIRECT PAY

WATER METER (DND)

BUS PAD: SEE NOTE (1)

MEET EX. CURB

NEW SIDEWALK BUMP-OUTS & ADA RAMPS

℄ RTE. 231

STA 49+17.62 ℄ RTE 231 = STA 10+00.00 ℄ POTTLE AVE

POT STA 49+17.62 R3

REMOVE EX. ISLAND (SAWCUT)

NEW SIDEWALK, CUT THROUGH, & DOME PADS (SAWCUT)

MATCHLINE STA. 45+30

MATCHLINE STA. 50+70

SIDEWALK & ADA RAMPS (R & R) (SAWCUT)
PP (DND)

5' LARGE RAD. PERP. RAMPS

STA 47+12
END 5' SIDEWALK

NEW 5' ADA RAMP, LEVEL LANDINGS & WARP SLAB

SIDEWALK (R) (SAWCUT)

S04°22'37"W

NEW SIDEWALK, CUT THROUGH, & DOME PADS (SAWCUT)

STA 49+04.44 ℄ RTE 231 = STA 10+00.00 ℄ FORDER RD

NEW LARGE RADIUS PERPENDICULAR & COMPOUND PERPENDICULAR RAMPS

REMOVE EX. ISLAND (SAWCUT)

S03°23'32"W

GUY WIRE (DND)

6" TYPE S CURB

SIDEWALK (R & R)

GAS VALVE (DND)

4' ADA PATH

SIDEWALK (UIP)

CURB (R)

TCE

SEE NOTE (2)

6" TYPE A CURB

GRATE (DND)

SHRUB (DND)

STA. 45+90.8 (R & R) COMMERCIAL ENTRANCE 39' PAVED APPROACH (+ 4.7 %)

STA. 46+66.3 (R & R) COMMERCIAL ENTRANCE 43.4' PAVED APPROACH (+ 5.9 %)

REMOVE SIDEWALK & INSTALL NEW COMPOUND PERPENDICULAR ADA RAMP (SAWCUT)

PARKING SPACE (DND)

NEW SIDEWALK

N/F
State Of Mo.

EX. R/W

STORM MH (ATG)

WATER VALVES (ATG)

MEET PRIVATE SIDEWALK (5'x3')

NOTE (2): INSTALL 2" MOUNTABLE CURB ALONG PAVED APPROACH

(17)
MEERAE LLC
(SEE SHEET 17)

Meerae LLC
20076/2982

(20)
RJCA LLC
0.435 AC PARCEL AREA
830 SF TEMP. ESM'T
(0.019 AC)
0.435 AC REMAINING
4389 TELEGRAPH RD

DIRT CHEAP
N/F
RJCA LLC
22808/2662

FORDER RD

N54°04'08"W

MEHLVILLE OAKVILLE

(21)
THOMAS R GREEN JR FAMILY LLC
(SEE NEXT SHEET)

TUSCANY VILLAGE APARTMENTS

N/F
Thomas R. Green Jr. Family LLC
23350/1969

FORDER ROAD APARTMENTS
NO ACQUISITION

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 8:02:28 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	18

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Tauc Properties LLC
22750/2731
NO ACQUISITION

N/F
Mallard Land Holdings LLC
24802/1863
NO ACQUISITION

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

TOTAL ACCESS URGENT CARE

PERFORMANCE EYE CARE

VERIZON

BJC MEDICAL GROUP

55

MATCHLINE STA. 50+70

MATCHLINE STA. 56+10

EX. R/W

SIDEWALK (UIP)

EX. R/W

SIDEWALK (UIP)

EX. R/W

SIDEWALK (UIP)

℄ RTE. 231

S03°23'32"W

BUS PAD:SEE NOTE (1)

PP (DND)

REMOVE & REPLACE SIDEWALK & LARGE RADIUS PERP. RAMP

NEW SIDEWALK & LARGE RADIUS PERP. RAMP

PP (DND)

CURB (UIP)

CURB (UIP)

DI (DND)

DI (DND)

DI (DND)

DI (DND)

EX. R/W

S.L.

MEET PRIVATE SIDEWALK (5'X3')

TCE

LIGHT POLE (DND)

TCE

S.L.

TREE (DND)

TCE

EX. R/W

SIDEWALK (UIP)

SIDEWALK (UIP)

EX. R/W

WARP INTO EXISTING SIDEWALK (REMOVE 1 SLAB)

6" TYPE A CURB

STONE WALL, LANDSCAPING & "TUSCANY VILLAGE" SIGN, (DND)

STA. 51+74.0 (R & R)
COMMERCIAL ENTRANCE
44.3' PAVED APPROACH
(-1 %)

NOTE (1):
-INSTALL BUS PAD (SEE SPECIAL SHEET) STA 50+74 TO STA 50+81 (RT)
-EXISTING BUS STOP SIGN TO BE RELOCATED TO NEW PAD BY OTHERS

(21)

THOMAS R. GREEN JR. FAMILY LLC
4.014 AC PARCEL AREA
1,570 SF TEMP. ESM'T
(0.036 AC)
4.014 AC REMAINING
2511 EL PAULO CT

N/F
Thomas R. Green Jr. Family LLC
23350/1969

(22)

QUIKTRIP CORP.
2.017 AC PARCEL AREA
169 SF TEMP. ESM'T
(0.004 AC)
2.017 AC REMAINING
4435 TELEGRAPH RD

QUIK TRIP

N/F
QuikTrip Corp.
16911/2549

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 8:02:46 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	19

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Greif Properties LLC
16488/1660

KINGSTON DENTAL CARE
LINHARDT CHIROPRACTIC

(23)
GREIF PROPERTIES LLC
0.435 AC PARCEL AREA
256 SF TEMP. ESM'T.
(0.006 AC)
0.435 AC REMAINING
4442 TELEGRAPH RD

N/F
Luong STL LLC
16966/2901

NOTE (1):
-INSTALL BUS PAD (SEE SPECIAL SHEET)
STA 57+21 TO STA 57+28 (LT)
-EXISTING BUS STOP SIGN TO BE RELOCATED
TO NEW PAD BY OTHERS

NOTE (2):
REMOVE & RELOCATE MAILBOX TO FRONT OF
NEW SIDEWALK BUMP-OUT IN 2 FT BUFFER STRIP

(24) VOID
LUONG SAINT LOUIS LLC
0.428 AC PARCEL AREA
1,129 SF TEMP. ESM'T.
(0.026 AC)
0.428 AC REMAINING
4448 TELEGRAPH RD

BURNCOATE DR
S86°38'41.1"E

N/F
Raymond Smetana
22846/4401

(25)
RAYMOND & DANA SMETANA
0.416 AC PARCEL AREA
800 SF TEMP. ESM'T.
(0.018 AC)
0.416 AC REMAINING
4456 TELEGRAPH RD

N/F
Daniel Ambrose
24803/175

(26)
DANIEL AMBROSE
0.434 AC PARCEL AREA
974 SF TEMP. ESM'T.
(0.022 AC)
0.434 AC REMAINING
4460 TELEGRAPH RD

N/F
Vogel Group LLC
11965/1735

(27)
VOGEL GROUP LLC
(SEE NEXT SHEET)

RTE 231 CENTERLINE	
PI	59+64.41
PC	56+71.29
PT	62+57.25
Δ	4°23'41.0" (LT)
D	0°45'0.0"
L	585.96' (ARC)
T	293.13'
R	7,639.44'

STA. 58+36.55 (R & R)
SIDE STREET
26' PAVED APPROACH
(-8.5 %)

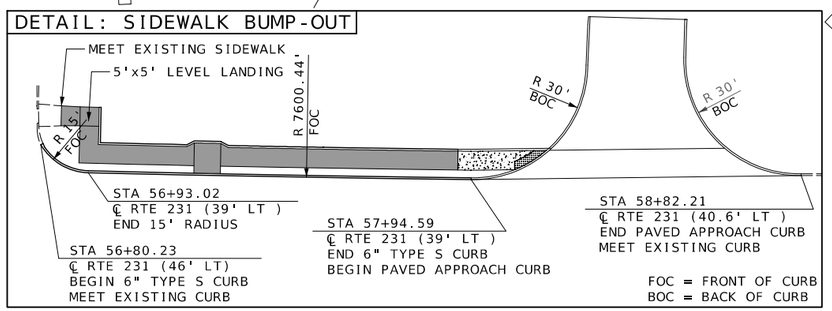
STA. 60+41.6 (R & R)
PRIVATE ENTRANCE
24' PAVED APPROACH
(+4.9 %)

MATCHLINE STA. 56+10

MATCHLINE STA. 61+50

VARIABLE HEIGHT TYPE A CURB
SHRUB (DND)
S.W. (R)
TCE (VOID)
EX.R/W
SIDEWALK (UIP)
S.L.
WATER VALVE (ATG)
CURB (R)
S.W.SLAB (R)
6" TYPE S CURB (SAWCUT)
BUS PAD: SEE NOTE (1)
NEW SIDEWALK BUMP-OUT & LARGE RAD. PERP. RAMP (SEE DETAIL)
MAILBOX #4A SEE NOTE (2)
TREES (DND)
SIGN (DND)
TCE
S.L.
MAILBOX (DND)
CURB (UIP)
NEW SIDEWALK & NEW LARGE AND SMALL RAD. PERP. RAMPS
℄ RTE. 231
℄ RTE 231 STA 50+33.64 = ℄ BURNCOATE DR. STA 45+98.99
MAILBOX (DND)
RELOCATE PP5.1 #194244 (BY OTHERS)
NEW SIDEWALK & SMALL RAD. PERP RAMP
LIGHT POLE (DND)
POWER POLE (DND)
CURB (UIP)
EX. BUS STOP
EX. R/W
SIDEWALK (UIP)
S03°23'32"W
PC STA 56+71.29
+71.29 50'
+87 50'
+88 50'
+25 50'
+79.77 25'
R 30' BOC
R 15' FOC
R 7600.44' FOC
D1 (DND)
DI (DND)

DETAIL: SIDEWALK BUMP-OUT



STA 56+93.02
℄ RTE 231 (39' LT)
END 15' RADIUS

STA 56+80.23
℄ RTE 231 (46' LT)
BEGIN 6" TYPE S CURB
MEET EXISTING CURB

STA 57+94.59
℄ RTE 231 (39' LT)
END 6" TYPE S CURB
BEGIN PAVED APPROACH CURB

STA 58+82.21
℄ RTE 231 (40.6' LT)
END PAVED APPROACH CURB
MEET EXISTING CURB

FOC = FRONT OF CURB
BOC = BACK OF CURB

NO ACQUISITION
N/F
Edelweiss Development LLC
12751/935

MULTI-BUSINESS BUILDING

MULTI-BUSINESS BUILDING

NO ACQUISITION
N/F
WR Investments
10537/916

SCALE
0 20 40 60

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 8:03:06 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	20

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION
03-03-25	REVISION: PARCEL 24 VOIDED

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

PLAN SHEET

N/F
Vogel Group LLC
11965/1735

N/F
Paul Knubley
236375/630

OAKVILLE VETERINARY OFFICE

N/F
St. Louis County
Catholic Church Real Estate
17765/ 4123

(27)

VOGEL GROUP LLC
0.994 AC PARCEL AREA
1,980 SF TEMP. ESM'T
(0.045 AC)
0.994 AC REMAINING
4500 TELEGRAPH RD

(28)

PAUL KNUBLEY
0.703 AC PARCEL AREA
1,304 SF TEMP. ESM'T
(0.030 AC)
0.703 AC REMAINING
4514 TELEGRAPH RD

(29)

ST LOUIS COUNTY CATHOLIC CHURCH REAL ESTATE
(SEE NEXT SHEET)

STA. 61+88.35 (R & R)
COMMERCIAL ENTRANCE
27.9' PAVED APPROACH
(+0.5 %)

STA. 63+48.33 (R & R)
COMMERCIAL ENTRANCE
29.9' PAVED APPROACH
(+4.9 %)

MATCHLINE STA. 61+50 R3

MATCHLINE STA. 66+90 R3

PT STA 62+57.25 R3

℄ RTE. 231

S01°00'08"E

N82°04'09"W

ROLENS DR

AMERICAN REALTY GROUP

N/F
4511 Telegraph Rd. LLC
23428/2537
NO ACQUISITION

TCE
"The Vogel Building" SIGN (DND)
EX. R/W
S.L.
NEW SIDEWALK & LARGE RADIUS RAMPS (SAWCUT)
CURB (UIP)
WATER VALVE & METER (DND)
TMH (ATG) (BY OTHERS)
SAN (ATG)
LANDSCAPING (DND)
WATER METER (DND)
TREE (DND)
8" TYPE A CURB
NEW SIDEWALK & LARGE RADIUS RAMP
SIGNAL PULL BOX (ATG)
DI (DND)
OE
UT
SIDEWALK (UIP)
EX. R/W
+72.11
25'
NEW SIDEWALK CONNECT EX. SIDEWALK
TCE (341 SF)
NEW SIDEWALK & SMALL RAD. PERP. RAMP
SIDEWALK (R)INSTALL SMALL RAD. PERP. RAMP
SIDEWALK (R & R) (SAWCUT)
POWER POLE (DND)
MAILBOX (DND)
WATER VALVE (ATG)
TCE (241 SF)
STA. 66+22 (R & R)
PRIVATE ENTRANCE
13' PAVED APPROACH
(+8.8 %)

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

(30)

FIRST COMMUNITY CREDIT UNION
1.994 AC PARCEL AREA
582 SF TEMP. ESM'T.
(0.013 AC)
1.944 AC REMAINING
4527 TELEGRAPH RD

N/F
First Community
Credit Union
16899/363

(31)

BILLY FAULKNER
0.277 AC PARCEL AREA
1,655 SF TEMP. ESM'T.
(0.038 AC)
0.277 AC REMAINING
4533 TELEGRAPH RD

N/F
Billy Faulkner
12958/939

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 9:51:06 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	21

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
St. Louis County
Catholic Church Real Estate
17765/ 4123

(29)

ST. LOUIS COUNTY CATHOLIC CHURCH REAL ESTATE

8.890 AC PARCEL AREA
5,932 SF TEMP. ESM'T.
(0.136 AC)
8.890 AC REMAINING

4550 TELEGRAPH RD

ST. FRANCIS OF ASSISI CHURCH

MATCHLINE STA. 66+90

MATCHLINE STA. 72+30

STA. 67+64 (R & R)
COMMERCIAL ENTRANCE
40.9' PAVED APPROACH
(-3.3 %)

STA. 70+84.8 (R & R)
COMMERCIAL ENTRANCE
57.6' PAVED APPROACH
(+2.6 %)

STA. 71+90.8 (R & R)
COMMERCIAL ENTRANCE
27.5' PAVED APPROACH
(+7.9 %)

TCE (4047 SF)

TCE (1885 SF)

(DND) LIGHT POLE

TREE (DND)

TCE

S.L.

EX. R/W

NEW 5'SIDEWALK & LARGE RAD. PERP.RAMPS

8" TYPE A CURB

CURB (UIP)

SIGN (DND)

TMH (ATG) (BY OTHERS)

SAN (ATG)

SIDEWALK (R) INSTALL LEVEL LANDING

NEW 5' & 6' SIDEWALK
NEW SMALL & LARGE
RADIUS PERPENDICULAR RAMPS

CURB RAMP (R & R) (SAWCUT)

℄ RTE. 231

RAISED MEDIAN (UIP)

S01°00'08"E

REMOVE ISLAND CUT-THROUGH
FILL IN VOID WITH SOIL
ADD 6" TYPE S CURB TO
CONNECT EX. CURB

FLAG POLE (DND)

CURB (UIP)

S88°59'54"W

STA 67+62.73
STA 10+00

CATHEDRAL DR

TREES (DND)

EX. R/W

SIDEWALK & COMPOUND PERPENDICULAR RAMP (R & R) (SAWCUT)

NEW ISLAND SIDEWALK CUT-THROUGH 6" TYPE A CURB (SAWCUT)

SIDEWALK & MODIFIED TYPE 2 PARALLEL RAMP (R & R) (SAWCUT)

SIDEWALK (UIP)

6" TYPE A CURB

PP (DND)

NEW SIDEWALK

TCE

S.L.

(32)

HODITS FAMILY TRUST
917 SF PARCEL AREA
86 SF TEMP. ESM'T
917 SF REMAINING
2509 CATHEDRAL DR

N/F
Hodits Family Trust
20733/607

BART INMAN
AIR CONDITIONING
& HEAT
N/F
4554 Telegraph Rd LLC
22684/2335
NO ACQUISITION

DOMINO'S

N/F
MBR Oakville Property LLC
24624/4737
NO ACQUISITION

(33)

AUTOZONE INC.

1.407 AC PARCEL AREA
152 SF TEMP. ESM'T.
(0.003 AC)
1.407 AC REMAINING

4561 TELEGRAPH RD

AUTO ZONE

N/F
Autozone Inc.
10464/991

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 9:51:18 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	22

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
St. Louis County
Catholic Church Real Estate
17765/ 4123

N/F
Oakville Ice Cream LLC
23328/2674

NOTE (1):
-INSTALL BUS PAD (SEE SPECIAL SHEET)
STA 74+30 TO STA 74+37 (LT)
-EXISTING BUS STOP SIGN TO BE RELOCATED
TO NEW PAD BY OTHERS

Ingress-Egress
11261/28

(34)
OAKVILLE ICE CREAM LLC
1.282 AC PARCEL AREA
105 SF TEMP. ESM'T
(0.002 AC)
1.282 AC REMAINING
4590 TELEGRAPH RD

SMALL RAD PERP RAMP &
5' SIDEWALK
(R & R)

BUS PAD:
SEE NOTE (1)

EX.
R/W

TCE
Q9
R1
R2
Q8

SIDEWALK (UIP)

CRESTLINE DR

SIDEWALK
(R & R)
WARP TO
BLEND W/
EXISTING

SIDEWALK
(R)

EX.
R/W

SMALL RAD
PERP RAMP
(R & R)
(SAWCUT)

SIDEWALK (UIP)

EX. R/W

NEW SIDEWALK, CUT-THROUGH,
CONCRETE MEDIAN & DOME PADS
(SAWCUT)

NEW SIDEWALK

NEW SIDEWALK BUMP-OUT
LARGE RAD & TYPE 1
PARALLEL RAMPS
(SAWCUT)

RELOCATE PP6
#2008640
(BY OTHERS)

NEW SIDEWALK,
CUT-THROUGH,
CONCRETE MEDIAN,
& DOME PADS (SAWCUT)

MATCHLINE STA. 72+30

℄ RTE. 231

STA. 72+48
END CURB UIP
BEGIN NEW 6" TYPE S CURB

CURB
(UIP)

6" TYPE S CURB
(SAW CUT)

NEW SIDEWALK
BUMP-OUTS &
LARGE RAD
PERP RAMPS
(SAWCUT)

S01°00'08"E

POWER POLES
(DND)

6" TYPE S CURB
(SAWCUT)

TELEPHONE PEDESTAL
(DND)

PULL BOX
CATV

6" TYPE S CURB
(SAWCUT)

CURB
(R)

LIGHT POLE
(DND)

Q4

+44.30
50'
Q7

Q6

TCE

CURB
(R)

R35'-0"

POT STA 76+33.34 R4

EQUATION:
STA 76+34.15 BK =
STA 76+33.32 AH

SIDEWALK (UIP)

+20.56
51.86'
R7

EX.
R/W

TCE (5' WIDE)

SMALL RAD
PERP RAMP
(R & R)

SIDEWALK
(R & R)

TCE (5' WIDE)

MATCHLINE STA. 77+70

Q2
S.L.
Q1
TCE
6" TYPE A CURB

CURB (R)
S.L.
TCE
FIRE HYDRANT
(DND)
LIGHT POLE
(DND)

STA. 73+53.9 (R & R)
COMMERCIAL ENTRANCE
30.8' PAVED APPROACH
(-2.2 %)

EX. R/W

CURB
(R)

TCE
MAILBOX
(DND)
LIGHT POLE
(DND)
"CHESTNUT PARK PLAZA"
SIGN (DND)

Q3
Q5
TCE

EX. R/W

STA. 74+90.7 (R & R)
COMMERCIAL ENTRANCE
53' PAVED APPROACH
(-4.3 %)

LIGHT POLE (R)
SHRUBS (R)
SHRUBS
(DND)

S.L.
MEET EXISTING CURB

YAEGER RD

(35)
CHESTNUT PARK PLAZA LLC
2.460 AC PARCEL AREA
1,885 SF TEMP. ESM'T.
(0.043 AC)
2.460 AC REMAINING
4565 CHESTNUT PARK PLAZA

(36)
ALEY LLC
0.394 AC PARCEL AREA
605 SF TEMP. ESM'T
(0.014 AC)
0.394 AC REMAINING
4591 TELEGRAPH RD

EXXON
MOBIL

N/F
Aley LLC
23476/2930

(37)
OTTO PARTNERSHIP
3.570 AC PARCEL AREA
756 SF TEMP. ESM'T
(0.017 AC)
3.570 AC REMAINING
5405 TELEGRAPH RD

EX.
R/W

S.L.

N/F
Otto Partnership
8792/1628

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

N/F
Chestnut Park Plaza LLC
12071/1490

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 9:51:29 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	23

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

Walgreens Store No. 5363
5414 Telegraph Road
PB 351 PG 145
March 17, 2003
NO ACQUISITION

Cliff Cave Library
PB 331 PG 78
NO ACQUISITION

WALGREENS

ST. LOUIS
COUNTY LIBRARY

MATCHLINE STA. 77+70

MATCHLINE STA. 83+09

+73.76
48.29'

+75
49.8'

+90
60'

EX. R/W

SIDEWALK (UIP)

℄ RTE. 231

PC STA 80+19.36 R4

S01°00'08"E

EX. BUS STOP
UIP

TRUE VALUE

TRUE VALUE

INSTALL SIDEWALK HANDRAILING
WITH BALUSTERS

NEW SIDEWALK BUMP-OUT
& LARGE RADIUS RAMP

ROCK FILL (2:1 SLOPE)

6" TYPE S CURB
(SAWCUT)

NEW TYPE 3
PARALLEL
RAMP

81+50
65'

81+31
50

S.L.

2-2
FES

2-1
FES

3-2
FES

R9

S1

S2

S3

SAWCUT

ADA RAMP
(R & R)

SHRUB
(DND)

TCE

TREE
(DND)

HYDRANT
(DND)

SIDEWALK &
RAMP (R)

GUY WIRE
ANCHOR (DND)
(SEE NOTE 1)

REMOVE 18" CMP/FES
INSTALL 18" GROUP C PIPE
& 2-18" GROUP C FES

STA. 82+09.4 (R & R)
PRIVATE ENTRANCE
28' PAVED APPROACH
(-5.6 %)

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

NOTE (1)
3 AMEREN POWER POLES TO BE USED IN PLACE.
PROPOSED FILL & GRADING SHALL BE DONE
WITH MINIMUM DISTURBANCE TO POLES

N/F
The Otto Partnership
8792/1628

SCALE
0 20 40 60

(38)

UNION ELECTRIC COMPANY

1.026 AC PARCEL AREA
1,303 SF TEMP. ESM'T.
(0.030 AC)
1.026 AC REMAINING

5423 TELEGRAPH RD

N/F
Union Electric Company
8749/2472

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 11:22:30 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	24

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

RTE 231 CENTERLINE	
PI	83+97.10
PC	80+19.36
PT	87+74.76
Δ	1°53'18.6" (RT)
D	0°15'0.0"
L	755.40' (ARC)
T	377.73'
R	22,918.31'

Cliff Cave Library
PB 331 PG 78
NO ACQUISITION

LAND CORNER TIE *5
Found Iron Pipe at the Southeast Corner of Lot 1
of Cliff Cave Library Subdivision Recorded in Plat Book 331 Page 78
of the St. Louis County Records, said Iron Pipe being N60°20'04"E 465.91' from
P.T. Centerline Station 87+74.76

ST. LOUIS
COUNTY LIBRARY

Southwind Meadows Court
(50')
NO ACQUISITION

SOUTHWIND MEADOWS COURT

Common Ground PB 339 PG 29
NO ACQUISITION

N/F
Mehlville Fire Protection District
17519/1746
Parcel 1

N/F
Mehlville Fire Protection District
17519/1746
Parcel 2

(39)
MEHLVILLE FIRE PROTECTION DISTRICT
1.125 AC PARCEL AREA
187 SF TEMP. ESM'T
(0.004 AC)
1.125 AC REMAINING
5434 TELEGRAPH RD

MATCHLINE STA. 83+09

MATCHLINE STA. 88+49

PT STA 87+74.76

℄ RTE. 231

EX. R/W

SIDEWALK (UIP)

SIDEWALK (R & R)

NEW ADA RAMP

TCE

LEVEL LANDING

+45.47
88.63'

+74.76
50'

+05.44
50'

85+80
60'

86+10
50'

86+65
50.26'

86+50
65'

S01°00'08"E

S00°53'12"W

INSTALL SIDEWALK HANDRAILING WITH BALUSTERS

6" TYPE S CURB (SAWCUT)

NEW SIDEWALK BUMP-OUTS
& LARGE RADIUS RAMPS

ROCK FILL
(2:1 SLOPE)

SEE NOTE (1)

SAWCUT

NEW SIDEWALK &
SMALL RADIUS RAMP

GAS VALVE
(ATG)
(BY OTHERS)

DI
(UIP)

DI
(DND)

FES (UIP)

3-1
FES

4-1
FES

4-2
FES

EX. R/W

TCE

GUY WIRE ANCHOR
& PWR POLE
(DND)

REMOVE 18" CMP/FES
INSTALL 18" GROUP C PIPE
& 2-18" GROUP C FES

STA. 83+19.3 (R & R)
COMMERCIAL ENTRANCE
30.2' PAVED APPROACH
(-9.1 %)

DITCH
(UIP)

"Reinhold
Flooring"
SIGN (DND)

12" FES (UIP)

REMOVE 15" CMP/FES
INSTALL 15" GROUP C PIPE
& 2-15" GROUP C FES

STA. 84+17.5 (R & R)
COMMERCIAL ENTRANCE
37' PAVED APPROACH
(-10.4 %)

S.L.

S4

S5

S6

S7

S8

S9

T1

T2

T3

T4

T5

"US Bank"
SIGN (DND)

SIDEWALK (R)

INSTALL TYPE S CURB
(MATCH EXISTING)

(40)
STEVE REINHOLD
1.700 AC PARCEL AREA
1.724 SF TEMP. ESM'T
(0.040 AC)
1.700 AC REMAINING
5429 TELEGRAPH RD

(41)
US BANK NA
1.530 AC PARCEL AREA
771 SF TEMP. ESM'T
(0.018 AC)
1.530 AC REMAINING
5433 TELEGRAPH RD

NOTE (1):
INSTALL 8" SIDEWALK THROUGH COMMERCIAL ENTRANCE
(ADA PATH 1% MIN, 2% MAX)

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

CRISIS AID
5427 TELEGRAPH RD
N/F
Steve Reinhold
13452/1462

REINHOLD
FLOORING
5429 TELEGRAPH RD
N/F
Steve Reinhold
12642/1050

N/F
US Bank NA
8146/110

CAR WASH
N/F
Hurlbut Investments
20054/1463
NO ACQUISITION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 11:20:08 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	25

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Darrel D. Climer Family Trust
24205/208

N/F
AC Telegraph LLC
16071/2967

AMERICAN CLEANERS

N/F
St. Paul's German Evangelical Church
(AT&T Wireless Services Lessee)

WHITSHIRE DR

NEW CUT-THROUGH, SIDEWALK, & DOME PADS (SAWCUT)

(43)
AC TELEGRAPH LLC
0.870 AC PARCEL AREA
1,700 SF TEMP. ESM'T
(0.039 AC)
0.870 AC REMAINING
5452 TELEGRAPH RD

(42)
DARREL D. CLIMER FAMILY TRUST
0.718 AC PARCEL AREA
1,170 SF TEMP. ESM'T
(0.027 AC)
0.718 AC REMAINING
5446 TELEGRAPH RD

(44)
ST. PAUL'S GERMAN EVANGELICAL CHURCH
12.63 AC PARCEL AREA
3,070 SF TEMP. ESM'T
(0.070 AC)
12.63 AC REMAINING
5500-5508 TELEGRAPH RD
(SEE ALSO NEXT SHEET)

MATCHLINE STA. 88+49

MATCHLINE STA. 93+89

STA. 91+22.8 (R & R)
COMMERCIAL ENTRANCE
45' PAVED APPROACH
(6.9 %)

POLE 7-AT&T TBR (BY OTHERS)

POLE 8- REMOVED (BY OTHERS)

LIGHT POLE (DND)

SIDEWALK (R)

TCE (2,680 sq ft)

8" TYPE A CURB

EX. R/W

S.L.

TCE

WATER METER (DND)

WATER VALVE (ATG)

CURB (UIP)

NEW MODIFIED SMALL RAD. PERP. RAMP

℄ RTE. 231

STA 88+83.63 ℄ RTE 231 =
STA 10+00.00 ℄ WHITSHIRE DR

S00°53'12"W

NEW 6' SIDEWALK & LARGE RAD. PERP. RAMP

NEW SIDEWALK & LARGE RAD. PERP. AND TYPE 3 PARALLEL RAMPS

SIGNAL BASE DND

REMOVE EX. ISLAND & RECONSTRUCT WITH SIDEWALK CUT-THROUGH & DOME PADS (ENLARGE MEDIAN) (SAWCUT)

RELOCATE PULL BOX

RECONSTRUCT MEDIAN

EX. BUS STOP

NEW ADA RAMP (CONNECT TO EXISTING SIDEWALK)

SIDEWALK (UIP)

SIDEWALK & ADA RAMP (R)

HYDRANT & VALVE (DND)

STA. 93+42.34 (R & R)
COMMERCIAL ENTRANCE
71' PAVED APPROACH
(-5 %)

ADA RAMP (R & R) (ADJUST DIRECTION)

(45)
COPPERGATE SQUARE LLC
3.856 AC PARCEL AREA
433 SF TEMP. ESM'T.
(0.010 AC)
3.856 AC REMAINING
5453 TELEGRAPH RD

TACO BELL

COPPERGATE SQUARE DR

Ingress-Egress 7344/1780 (Existing Easement)

(46)
MAGNA BANK OF MISSOURI
(SEE NEXT SHEET)

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

N/F
Coppergate Square LLC
18021/3860
NO ACQUISITION

N/F
Coppergate Square LLC
18021/3860
NO ACQUISITION

N/F
Coppergate Square LLC
18021/3860

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 9:52:05 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	26

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
St. Paul's German Evangelical Church
(AT&T Wireless Services Lessee)

N/F
Colfer Holdings LLC
20316/4858

CHARLES MEYER
INSURANCE AGENCY

N/F
5524 Telegraph Rd LLC
23134/1353
NO ACQUISITION

BANKHEAD & FIRTH
ORTHODONTICS

(44)

ST PAUL'S GERMAN EVANGELICAL CHURCH
(SEE SHEET 26)

(47)

COLFER HOLDINGS LLC
0.631 AC PARCEL AREA
110 SF TEMP. ESM'T
(0.003 AC)
0.631 AC REMAINING
5516 TELEGRAPH RD

EX.BUS STOP
UIP

EX.
R/W

95

+95.39
50'

PC STA 93+95.39 R4

MATCHLINE STA. 93+89

TCE
(390 SF)

U8

U9

U7

V1

W4

W5

W6

W7

PARKING LOT
(DND)

TCE

SIDEWALK (R)

TYPE 1 PARALLEL
RAMP

CURB (UIP)

DJ
(DND)

DI
(DND)

NEW SIDEWALK
& LARGE RADIUS
PERPENDICULAR RAMP

℄ RTE. 231

OE

SIDEWALK (UIP)

30

MATCHLINE STA. 99+29

D1
(DND)

V8

+95.39
60'

W3

W2

TCE

ADA RAMP (R & R)
ADJUST DIRECTION

+01.51
52.22'

+01.36
50'

SIGN

(46)

MAGNA BANK OF MISSOURI
2.296 AC PARCEL AREA
1295 SF TEMP. ESM'T.
(0.030 AC)
2.296 AC REMAINING

5505 TELEGRAPH RD

REGIONS BANK

N/F
MAGNA Bank
10662/711

Ingress-Egress
PG 8
PB 169
(Existing Basement)

RTE 231 CENTERLINE	
PI	96+87.88
PC	93+95.39
PT	99+77.69
Δ	11°39'32.0" (RT)
D	2°0'0.0"
L	582.94' (ARC)
T	292.48'
R	2,864.79'

FIRESTONE
COMPLETE
AUTO CARE

N/F
Menitoff Property
20674/810
NO ACQUISITION

MCDONALD'S

N/F
Archland Property
15941/1963
NO ACQUISITION

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/29/2025 9:52:17 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	27

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
SkS Property LLC
13834/1475

N/F
Sprint Energy LLC
14390/1521

N/F
Stochl Ltd LLC
18341/1025

(48)
SPRINT ENERGY LLC
0.895 AC PARCEL AREA
257 SF TEMP. ESM'T
(0.006 AC)
0.895 AC REMAINING
5590 TELEGRAPH RD

(49)
STOCHL LTD LLC
0.435 AC PARCEL AREA
285 SF TEMP. ESM'T
(0.007 AC)
0.435 AC REMAINING
5600 TELEGRAPH RD

MATCHLINE STA. 99+29

EQUATION:
STA 99+78.34 BK =
STA 99+77.69 AHD

PT STA 99+77.69 R 100

SHOPPING CENTER

CIRCLE K

SIDEWALK & RAMP (R)
INSTALL COMPOUND
PERP. ADA RAMP
(SAWCUT)

TCE

EX. R/W

(DND) SHRUBS AND LANDSCAPING

(DND) LANDSCAPING
& RETAINING WALL

VALVOLINE

WATER VALVE
& METER (ATG)

SIDEWALK (UIP)

+78.33
50'

+81.80
35'

+73.19
50'

+08.16
35'

+26.97
50'

+30
50'

EX. BUS STOP
UIP

℄ RTE. 231

S12°32'44"W

S12°31'28"W

NEW SIDEWALK,
CUT-THROUGH,
& DOME PADS
(SAWCUT)

NEW SIDEWALK,
CONCRETE MEDIAN,
& DOME PADS
(SAWCUT)

SIDEWALK &
RAMP (R)
INSTALL
BLENDED
TRANSITION
RAMP (SAWCUT)

SIDEWALK &
SMALL RAD
PERP RAMP
(R & R)

SIDEWALK & RAMP (R)
INSTALL COMPOUND
PERP. ADA RAMP

EQUATION:
STA 103+51.95 BK =
STA 103+53.39 AHD

PT STA 103+53.39 R 100

BAUMGARTNER RD

+21.10
40.94'

+27.70
48'

+60
47.82'

MIDWEST BANK CENTRE

Ingress-Egress
PB 169 PG 8
(Existing Easement)

N/F
Midwest Bank Center
12405/636
NO ACQUISITION

MATCHLINE STA. 104+70

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:41:00 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	28

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

MATCHLINE STA. 104+70

MATCHLINE STA. 110+10

105

110

20' Alley

TANZBERGER DR

STARBUCKS

N/F
Stochl LTD LLC
18341/1025
NO ACQUISITION

N/F
Robert Harvey
24672/4540
NO ACQUISITION

N/F
5620 Telegrapg RD
Partners LLC
25382/2216
NO ACQUISITION

N/F
Caplaco Twenty Three Inc. et al
11818/37

EX. R/W

EX. R/W

EX. R/W

SIDEWALK (UIP)

SIDEWALK (UIP)

SIDEWALK (UIP)

SIDEWALK (UIP)

SIDEWALK (UIP)

STA 107+22.04

STA 104+00

℄ RTE. 231

S12°31'28"W

S83°47'47"E

+22.38 25'

+27.96 25'

+66.81 50'

+66.20 50'

+73.60

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

BURGER KING

SCOTT'S AUTO CARE

DOBBS TIRE & AUTO CENTER

N/F
James Drury
10396/1638
Adjusted Parcel "A"
NO ACQUISITION

N/F
Jerry Michel Inc.
10508/1244
Adjusted Parcel "B"
NO ACQUISITION

N/F
Sunset Properties LLC
21198/3844
NO ACQUISITION

LAND CORNER TIE *6
Found Iron Rod LS*2009001156 at the Southwest Corner of Adjusted Lot 2 of The Boundary Adjustment Plat Recorded in Plat Book 225 Page 13 of the St. Louis County Records, said Iron Rod being S71°42'42"W 298.22' from Centerline Station 110+00

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:41:14 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	29

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Caplaco Twenty Three Inc. et al
11818/37

WENDY'S
5624 TELEGRAPH RD

Lot 3

Ingress-Egress
PB 285 PG 1
Also Shown on
PB 305 PG 9

N/F
Caplaco Twenty Three Inc. et al
11818/37

Leased to Commerce Bank
By 8929/62

COMMERCE BANK
5630 TELEGRAPH RD

N/F
Caplaco Twenty Three Inc. et al
11818/37

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

(50)

CAPLACO TWENTY THREE INC., ET AL

20.927 AC PARCEL AREA
4,292 SF TEMP. ESM'T.
(0.099 AC)
20.927 AC REMAINING

5624-5630-5626 TELEGRAPH RD
(SEE ALSO SHEET 31)

"DIERBERGS" SIGN & LANDSCAPING (DND)

TCE (2704 SF)
LIGHT POLE (DND)

"TELEGRAPH PLAZA" SIGN & LANDSCAPING (DND)

TCE

EX. R/W

SIDEWALK (UIP)

REMOVE EX. SIDEWALK, INSTALL NEW SIDEWALK WARP SLAB, & ADA RAMP (SAWCUT)

REMOVE EX. MEDIAN ISLAND
INSTALL NEW LARGER ISLAND, SIDEWALK CUT-THROUGH & DOME PADS (SAWCUT)

REMOVE EX. SIDEWALK, INSTALL NEW SIDEWALK WARP SLAB, & ADA RAMP (SAWCUT)

℄ RTE. 231

RELOCATE PP10
#187713
(BY OTHERS)

RELOCATE PP11
#187708
(BY OTHERS)

INSTALL NEW 5' SIDEWALK/ADA RAMPS

MATCHLINE STA. 110+10

MATCHLINE STA. 115+50

REMOVE EX. SIDEWALK, INSTALL NEW SIDEWALK, 6" TYPE S CURB, & ADA RAMPS (SAWCUT)

REMOVE EX. SIDEWALK
INSTALL NEW SIDEWALK, & ADA RAMPS (SAWCUT)

RELOCATE PP9
#191265
(BY OTHERS)

INSTALL NEW SIDEWALK & ADA RAMPS

INSTALL NEW SIDEWALK & ADA RAMPS

RAMP TAPER 5' TO 6'

RAMP TAPER 6' TO 5'

HANDRAIL

CURB (UIP)

CONCRETE SLOPE PROTECTION

SHRUB (DND)

SIDEWALK (UIP)

EX. R/W

TCE

1 PARKING SPACE (DND)

4 PARKING SPACES (DND)

2 PARKING SPACES (DND)

SEE DETAIL

GEBHARDT DR

STA. 112+13.0 (R & R)
COMMERCIAL ENTRANCE
52.1' PAVED APPROACH
(+1.0 %)

STA. 113+45.8 (R & R)
COMMERCIAL ENTRANCE
37.3' PAVED APPROACH
(-6.5 %)

STA. 114+08.3 (R & R)
COMMERCIAL ENTRANCE
43.8' PAVED APPROACH
(-6.0 %)

(51)

GUILSIN PROPERTIES LLC

0.600 AC PARCEL AREA
259 SF TEMP. ESM'T.
(0.006 AC)
0.600 AC REMAINING

5637 TELEGRAPH RD

PEDIATRIC DENTISTRY

N/F
Guilsin Properties LLC
24992/1627

(52)

OAKVILLE BP INC.

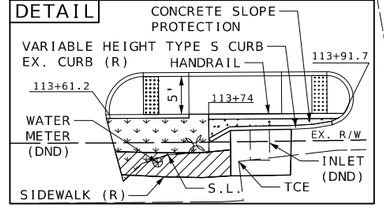
0.815 AC PARCEL AREA
1,360 SF TEMP. ESM'T
(0.031 AC)
0.815 AC REMAINING

5639 TELEGRAPH RD

BP

N/F
Oakville BP Inc.
21872/2466

DETAIL



(53)

KATON INVESTMENT CO.

1.084 AC PARCEL AREA
461 SF TEMP. ESM'T
(0.011 AC)
1.084 AC REMAINING

5647 & 5653 TELEGRAPH RD
(SEE ALSO SHEET 31)

GARVEY'S GRILL

AMERICAN FAMILY INSURANCE

N/F
Katon Investment Co.
6808/1721

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/23/2025 3:18:53 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/23/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	30

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Caplaco Twenty Three Inc. et al
11818/37

CLARKSON EYECARE
T-MOBILE
CELLAR HOUSE
5626 TELEGRAPH RD

(50)
CAPLACO TWENTY THREE INC., ET AL
(SEE SHEET 30)

Ingress-Egress
PB 285 PG 1
Also Shown on PB 305 PG 9

N/F
Hurlbut Investments
22964/3241

AUTO SPA ETC
EXPRESS OAKVILLE

(54)
HURLBUT INVESTMENTS
1.035 AC PARCEL AREA
391 SF TEMP. ESM'T
(0.009 AC)
1.035 AC REMAINING
5700 TELEGRAPH RD

RTE 231 CENTERLINE	
PI	115+58.65
PC	112+74.07
PT	118+41.37
Δ	11°20'46.0" (LT)
D	2°0'0.0"
L	567.31' (ARC)
T	284.58'
R	2,864.79'

N/F
Michael & Stacy Klinger
14127/327
NO ACQUISITION

SOUTH COUNTY
OBEDIENCE TRAINING

N/F
Maurice Anderson
10511/1146
NO ACQUISITION

SIDEWALK (R & R)
TCE (1509 SF)
DELINEATORS (R)
S.L.
SIDEWALK (UIP)
EX. R/W
TCE
SIDEWALK & RAMP (R & R)
INSTALL OFF EXISTING R/W
SIDEWALK (UIP)
EX. R/W
SIDEWALK (UIP)
MATCHLINE STA. 115+50
MATCHLINE STA. 120+90
PT STA 118+41.37
℄ RTE.231
S01°10'43"W
CURB (UIP)
NEW SIDEWALK & ADA RAMP
NEW 5' SIDEWALK & ADA RAMPS
RAMP TAPER 6' TO 5'
4' ADA
RELOCATE PP12 #187707 (BY OTHERS)
4' ADA
NEW SIDEWALK & ADA RAMPS
CURB (UIP)
NEW SIDEWALK & ADA RAMPS
PULL BOX (DND)
ADA RAMP (R & R)
PP & GUY WIRE (DND)
SIDEWALK (UIP)
SIDEWALK (UIP)
3 PARKING SPACES (DND)
STA. 115+93.1 (R & R) COMMERCIAL ENTRANCE 31.5' PAVED APPROACH (-4.4 %)
HYDRANT (DND)
T RISER (DND)
PULL BOX (ATG)
T RISER RELOCATE (BY OTHERS)
FENCE (DND)
STA. 116+68.5 (R & R) COMMERCIAL ENTRANCE 36.3' PAVED APPROACH (-8.0 %)
PARKING SPACE (DND)
PP & GUY WIRES (DND)
STA. 117+69.5(R & R) COMMERCIAL ENTRANCE 32.9' PAVED APPROACH (-8.5 %)
STA. 118+78.5 (R & R) COMMERCIAL ENTRANCE 41.8' PAVED APPROACH (-12.2 %)
SIGN (DND)
EX. R/W

(55)
5661 TELEGRAPH RD LLC
0.700 AC PARCEL AREA
276 SF TEMP. ESM'T
(0.006 AC)
0.700 AC REMAINING
5661 TELEGRAPH RD

KADEAN BUILDING

(56)
JEG LAND GROUP LLC
0.926 AC PARCEL AREA
1,519 SF TEMP. ESM'T
(0.035 AC)
0.926 AC REMAINING
5709 TELEGRAPH RD

DENTIST

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

N/F
Katon Investment co.
19491/780

N/F
5661 Telegraph Rd LLC
23737/329

N/F
JEG Land Group LLC
24244/5299

OUR FAMILY
HEALTH CARE
N/F
Opus Seven LLC
11485/1858
NO ACQUISITION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/23/2025 3:19:11 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/23/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	31

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Richard & Martha Watson
07873/1098

57
MAURICE ANDERSON
0.160 AC PARCEL AREA
181 SF TEMP. ESM'T
(0.004 AC)
0.160 AC REMAINING
2471 ENGLAND TOWN RD

New England Town Plat 1 Trustees
06707/1234
Common Ground

58
NEW ENGLAND TOWN PLAT 1 TRUSTEES
3.76 AC PARCEL AREA
383 SF TEMP. ESM'T
(0.009 AC)
3.76 AC REMAINING
2560 ENGLAND TOWN RD

N/F
Wendie Kinder
24096/4854
NO ACQUISITION

N/F
Gospel Church Trustees
18974/108

N/F
Gospel Church Trustees
18974/108

LAND CORNER TIE *7
Found Iron Rod at the Southeast Corner of Lot 7 of TEL-HAVEN Subdivision Recorded in Plat Book 89 Page 48 of the St. Louis County Records, said Iron Rod being S64°22'27"E 586.22' from Centerline Station 126+00

NOTE:
REMOVE & RELOCATE MAILBOX TO BACK OF NEW SIDEWALK

RESIDENTIAL

59
GOSPEL CHURCH TRUSTEES
6.18 AC PARCEL AREA
723 SF TEMP. ESM'T
(0.017 AC)
6.18 AC REMAINING
5736 TELEGRAPH RD

N/F
Maurice Anderson
10511/1146

ENGLAND TOWN RD

MATCHLINE STA. 120+90

MATCHLINE STA. 126+30

4+01.83
31.98'

4+00

4+02.90
32.74'

+60.67
60'

+10.72
50'

+00
60'

STA. 123+75.9 (R & R)
PRIVATE ENTRANCE
18' PAVED APPROACH
(+10.0 %)

STA. 124+92.9 (R & R)
COMMERCIAL ENTRANCE
33.1' PAVED APPROACH
(+5 %)

125

NEW SIDEWALK, LEVEL LANDING & WARP SLAB

NEW SIDEWALK, ADA RAMP, LEVEL LANDING & WARP SLABS

NEW SIDEWALK CUT-THROUGHS, CONCRETE MEDIANS & DOME PADS (SAWCUT)

NEW SIDEWALK & LARGE RADIUS PERPENDICULAR RAMP

6" MODIFIED TYPE S CURB
STA 122+77.6 TO 123+48.5

6" TYPE S CURB

NEW SIDEWALK & ADA RAMPS (NO DOME PADS)

ADA RAMPS (R & R) (SAWCUT)

PAVED DITCH (UIP)

7" THICK SIDEWALK

MAILBOX #5
SEE NOTE

℄ RTE. 231

℄ RTE 231 STA 121+90.95 =
℄ ENGLAND TOWN RD STA 5+00.00

S01°10'43"W

SIDEWALK (UIP)

S.WALK (UIP)

EX. R/W

TCE

GAS VALVE (DND)

Lot 101

AC6 AC7 AC8 AC9 AD1 AD2 AD3 AD4 AD5 AD6 AD7 AD8

D1 (DND)

SIMMONS BANK

MEINEKE CAR CARE CENTER

N/F
Reliance Bank
14897/2436
NO ACQUISITION

N/F
5757 Telegraph Rd LLC
15918/1478
NO ACQUISITION

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:42:01 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	32

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

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DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Oakville Mo. M.
23230/229
NO ACQUISITION

Tel-Haven Subdivision
PB 89 PG 48

TEL HAVEN CT

STA. 128+92.5 (R & R)
COMMERCIAL ENTRANCE
22' PAVED APPROACH
(-10.0 %)

N/F
Ann Strobl
NO ACQUISITION

RESIDENTIAL

STA 129+40 TO STA 129+60:
BARRIER HEIGHT TRANSITION

STA 129+60 TO STA 130+64:
TYPE E BARRIER

STA 130+64 TO STA 130+84
BARRIER HEIGHT TRANSITION

N/F
Gary Wriley
23269/154

NOTE (1): PARCEL 60
REMOVE MAILBOX AT STA 130+84 &
RELOCATE TO STA 131+34 AT
BACK OF NEW SIDEWALK

NOTE (2)
REMOVE & REPLACE
PRIVATE SIDEWALK
(8'X3')
INSTALL STEP

(60)
GARY WRILEY
0.329 AC PARCEL AREA
574 SF TEMP. ESM'T
(0.013 AC)
0.329 AC REMAINING
5822 TELEGRAPH RD

STA. 131+00.4
PRIVATE ENTRANCE
20.8' PAVED APPROACH (-2 %)
ASPHALT DRIVEWAY (-15 %)

TYPE B GUTTER &
SLOPE PROTECTION

DRYCAST MODULAR BLOCK WALL
(SEE SPECIAL SHEETS)

RET.WALL
(DND)

EX.
R/W

EX.R/W
+31.21
60'

+51.50
60'

+80.0
60'

+20.0
50'

10" THICK SIDEWALK

S.L.

TCE

SIDEWALK (UIP)

NEW
TYPE 1
PARALLEL
RAMP

6" TYPE S CURB
STA 129+15 TO 130+64
(SAWCUT)

8'X 6' FLUME

MAILBOX #6
SEE NOTE (1)

NOTE
(2)

NEW LARGE RAD
PERP RAMPS
(NO DOME PADS)
NEW SIDEWALK
BUMP-OUT

℄ RTE 231 STA 130+54.42 =
℄ BLACKFOREST DR
STA 10+00.00

CURB (R)
SAWCUT

7" THICK SIDEWALK

6" MODIFIED TYPE S CURB
STA 131+34 TO 131+69
(SAWCUT)

MATCHLINE STA. 126+30

MATCHLINE STA. 131+69

℄ RTE. 231

S01°10'43"W

EQUATION:
STA 129+31.21 BK
= STA 129+30.37 AHD

NEW SIDEWALK
BUMP-OUT

RELOCATE PP13
#191232
(BY OTHERS)

SIDEWALK HANDRAILING
WITH BALUSTERS
STA 128+70 TO 129+20

REMOVE 47 LF OF CURB
INSTALL 6" TYPE S CURB
(60' RADIUS)

NEW SIDEWALK,
CUT-THROUGH,
CONCRETE MEDIAN,
& DOME PADS

R&R CURB
(SAWCUT)
INSTALL 6"
TYPE S CURB
(50' RADIUS)

SAN MH & INLET
(DND)

NEW TYPE 1
PARALLEL RAMP

6" TYPE S CURB
(SAW CUT)

WATER
VALVE
(ATG)

CONCRETE
ISLANDS (R)
(SAWCUT)

REMOVE EX.
SIDEWALK

NEW COMPOUND
PERPENDICULAR
RAMP

EX.R/W

NOTE (3)

SLF

8'X6'
FLUME

NEW TYPE 1
PARALLEL RAMP

ADA RAMP
(R & R)

TREE & SHRUB
(DND)

TCE

TCE (TRACT 1)

TCE (TRACT 2)

SAN MH (ATG)
MSD #32H1-1815

MSD (8" PVC)

Lot 24

EX.
R/W

RESIDENTIAL
NO ACQUISITION

11+35.00
30'

RESIDENTIAL

Lot 25

(61)
5757 TELEGRAPH RD LLC
1.111 AC PARCEL AREA
717 SF TEMP. ESM'T
(0.016 AC)
1.111 AC REMAINING
5745 TELEGRAPH RD

MEINEKE

N/F
5757 Telegraph Rd LLC
15918/1478

25MSD-XXXX

STA. 127+18.7 (R & R)
COMMERCIAL ENTRANCE
44' PAVED APPROACH
(-3.6 %)

Sanders Drive
30' Wide Private

(62)
RICHARD C. HERZOG, ET AL
0.427 AC PARCEL AREA
864 SF TEMP. ESM'T
(0.020 AC)
0.427 AC REMAINING
5803 TELEGRAPH RD

RESIDENTIAL

N/F
Richard C Herzog, et al
25392/1182

Lot 1

(63)
NERMIN HALILOVIC
0.556 AC PARCEL AREA
TRACT 1:
566 SF TEMP. ESM'T (0.013 AC)
TRACT 2:
1,076 SF TEMP. ESM'T (0.025 AC)
0.556 AC REMAINING
5819 TELEGRAPH RD

RESIDENTIAL

River Oaks Plat 7
PB 155 PG 57

Lot 2

NOTE (3)
AMEREN POLES #191447 & #191448 TO BE USED
IN PLACE. PROPOSED FILL & GRADING SHALL BE
DONE WITH MINIMUM DISTURBANCE TO POLES.
ADJUSTMENTS TO ANCHORS AND GUY WIRES SHALL
BE COORDINATED WITH AMEREN

N/F
Nermin Halilovic
25150/1205

Lot 3

11+33.09
30'

BLACKFOREST DR

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/23/2025 3:18:42 PM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
6/23/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	33

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
David & Linda Koste
7621/468
RESIDENTIAL

(64)
DAVID & LINDA KOSTE
0.254 AC PARCEL AREA
339 SF TEMP. ESM'T
(0.008 AC)
0.254 AC REMAINING
5826 TELEGRAPH RD

N/F
JPL Holdings LLC
20492/2467
RESIDENTIAL

(65)
JPL HOLDINGS LLC
0.242 AC PARCEL AREA
213 SF TEMP. ESM'T
(0.005 AC)
0.242 AC REMAINING
5832 TELEGRAPH RD

N/F
Donald Jennewein
8613/2176
NO ACQUISITION

VACANT LOT

N/F
Gerald Lipinsky
11802/1575
NO ACQUISITION

RESIDENTIAL

PIONEER DR

MATCHLINE STA. 131+69

MATCHLINE STA. 137+09

SIDEWALK (DND)

MAILBOX REMOVE & RELOC. #7 TO BACK OF SIDEWALK

STA. 132+27.7 (R & R)
PRIVATE ENTRANCE
21.7' PAVED APPROACH
(-2.0 %)

RETAINING WALL (DND)

RELOCATE PP16 #A81159 (BY OTHERS)

EX. R/W

TCE

S.L.

AG1 AG2 AG3 AG4

4+17.34
15'

4+12.72
15'

+84.49
60'

+94.06
50'

GAS VALVE (A.T.G.) (BY OTHERS)

S84°51'37"E

8'X 6' FLUME

STA. 135+31.4 (R & R)
COMMERCIAL ENTRANCE
15' PAVED APPROACH
(-2.0 %)

+42.58
60'

8' FLUME

7" THICK SIDEWALK

NEW SIDEWALK BUMP-OUTS & ADA RAMPS

CURB (R)

7" THICK SIDEWALK

6" MODIFIED TYPE S CURB
STA 131+69 TO 131+87.5
(SAWCUT)

S01°10'43"W

6" TYPE S CURB
(SAWCUT)

STA 133+39.18=
STA 5+00

6" TYPE S CURB
(SAWCUT)

NEW SIDEWALK BUMP-OUT & ADA RAMPS (SAWCUT)

℄ RTE. 231

PC STA 135+42.59 R7

6" MODIFIED TYPE S CURB
STA 135+60.7 TO 136+62.6
(SAWCUT)

NEW SIDEWALK BUMP-OUT & ADA RAMPS

MAILBOX REMOVE & RELOC. #8 TO BACK OF SIDEWALK

POWER POLE (DND)

NEW SIDEWALK BUMP-OUT (SAWCUT)

ADA RAMP (R & R)

REMOVE EX. SIDEWALK. ADD NEW & WARP SLAB TO TIE IN EX.

STA 133+76.10=
STA 5+00

2.59%

NEW SIDEWALK BUMP-OUTS & ADA RAMPS. (SAWCUT)

6" TYPE S CURB

CURB (R)

+82.77
50'

+26.78
50'

WATER VALVE (ATG)

WATER VALVE (DND)

5+67.01
25'

5+69.04
25'

GAS VALVE (DND)

EX. R/W

POWER POLE (DND)

+42.58
60'

STA. 135+53.8 (R & R)
COMMERCIAL ENTRANCE
18' PAVED APPROACH
(-6.4 %)

STA. 136+90.3 (R & R)
COMMERCIAL ENTRANCE
36' PAVED APPROACH
(-5.0 %)

Lot 51

Lot 52

Lot 50

Lot 53

RESIDENTIAL

RESIDENTIAL

N/F
Juma Nizar Zwad
23724/634
NO ACQUISITION

N/F
Juma Nizar Zwad
23724/611
NO ACQUISITION

N/F
Jeffrey Loomis
23660/364
NO ACQUISITION

N/F
Bethesda Long Term Care Inc
13624/955
NO ACQUISITION

River Oaks Plat 2
PB 128 PG 72

River Oaks Plat 1
PB 127 PG 62

STA. 133+77.0 (R & R)
COMMERCIAL ENTRANCE
26' PAVED APPROACH
(-3.07 %)

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:42:31 AM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	34

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Gerald Lipinsky
11802/1575
NO ACQUISITION

N/F
Mehlville School District

(66)

MEHLVILLE SCHOOL DISTRICT
26.310 AC PARCEL AREA
7,511 SF TEMP. ESM'T
(0.172 AC)
26.310 AC REMAINING

5950 TELEGRAPH RD

WOHLWEND ELEMENTARY &
OAKVILLE MIDDLE SCHOOL

MATCHLINE STA. 137+09

MATCHLINE STA. 142+51

EX. R/W

138+57 100'

EX. R/W

BEGIN HANDRAILING STA 139+59 (47.7' LT)

139+30 100'

EX. R/W

MODOT ITS MH (DND)

AG6

139+70 60'

S.L.

INSTALL TYPE A PIPE COLLAR, 10'-36" GROUP A PIPE & 36" FES

AG7

5-2 FES

TCE

AG8

S.L.

5-1 COL

36" FES (R)

EX. R/W

+48.19 60'

AH2

INSTALL SIDEWALK HANDRAILING WITH BALUSTERS

TMH (ATG-BY OTHERS)

GAS VALVE (ATG) (BY OTHERS)

138+17 60'

8'X 6' FLUME

6" TYPE S CURB (SAWCUT)

8'X 6' FLUME

NEW SIDEWALK BUMP-OUT

6" TYPE S CURB (SAWCUT)

ADA RAMPS (R & R)

8'X 6' FLUME

RELOCATE LIGHT POLE

℄ RTE. 231

6" TYPE S CURB (SAWCUT)

NEW SIDEWALK BUMP-OUT

℄ PRC STA 141+48.19

EQUATION: STA 141+46.26 BK

36" RCP (UIP)

NEW LARGE RAD PERPENDICULAR RAMP

NEW SIDEWALK BUMP-OUT

8'X '6 FLUME

8'X 6' FLUME

8'X 6' FLUME

NEW LARGE RAD PERP ADA RAMPS

8'X 6' FLUME

6" TYPE S CURB (SAWCUT)

8'X 6' FLUME

6" TYPE S CURB (SAWCUT)

NEW SIDEWALK BUMP-OUT

8'X 6' FLUME

DI (UIP)

DI (UIP)

DI (UIP)

DI (UIP)

138+00 60'

139+80 61'

+48.19 60'

EX.R/W

EX. R/W

EX. R/W

STA. 139+98.5 (R & R)
COMMERCIAL ENTRANCE
87' PAVED APPROACH
(10.0 %)

RTE 231 CENTERLINE	
PI	138+44.49
PC	135+42.59
PT	141+48.19
Δ	3°1'6.1" (RT)
D	0°30'0.00"
L	603.67' (ARC)
T	301.91'
R	11,459.16'

SCALE
0 20 40 60

BETHESDA

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Bethesda Long Term Care Inc
13624/955
NO ACQUISITION

N/F
Bethesda Long Term Care Inc
13158/1511
NO ACQUISITION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:40:16 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	35

COUNTY
ST. LOUIS

JOB NO.
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DATE

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

PLAN SHEET

N/F
John Firth
17620/2108
NO ACQUISITION

N/F
TVS Properties LLC
23824/288
NO ACQUISITION

N/F
Rosie's Doggie Day Care
& More LLC
23772/4111
NO ACQUISITION

NOTES:
(1) INSTALL 7" SIDEWALK THROUGH PRIVATE ENTRANCE
(ADA PATH 1% MIN, 2% MAX)

(2) SAWCUT/REMOVE CONCRETE ALONG ADA PATH
INSTALL 8" SIDEWALK THROUGH COMMERCIAL ENTRANCES
(ADA PATH 1% MIN, 2% MAX)

(3) SAWCUT/REMOVE CURB IN EXISTING R/W

ANIMAL CLINIC

MATCHLINE STA. 142+51

MATCHLINE STA. 147+90

TCE

INSTALL SIDEWALK HANDRAILING WITH BALUSTERS

EX. R/W

END HANDRAILING
STA 143+27

SEE NOTE (1)

SEE NOTE (2)

SEE NOTE (3)

145

145+39.26
60'

+53.80
60.94'

NEW SIDEWALK
BUMP-OUT

6" TYPE S CURB
(SAWCUT)

NEW LARGE
RAD PERP
RAMPS
NO DOMEPADS

NEW SIDEWALK
BUMP-OUT

6" TYPE S CURB
(SAWCUT)

NEW LARGE RAD PERP RAMP

ADJUST ISLAND:
-CURB (R)
-INSTALL NEW CURB

℄ RTE. 231

NEW LARGE
RAD PERP
RAMP

NEW SIDEWALK
BUMP-OUT

6" MODIFIED TYPE S CURB
(SAWCUT)

S01°09'45"W

PT STA 147+53.80

EQUATION:
STA 147+55.06 BK
= STA 147+53.80

NEW SIDEWALK
BUMP-OUT

6" TYPE S CURB
(SAWCUT)

NEW LARGE
RAD PERP
RAMPS

STA 144+91.35
END 6" TYPE S CURB
MEET EXISTING CURB

MEET EXIST.
CURB

142+65
61'

EX.
R/W

SIDEWALK (UIP)

AH3

AH4

AH6

AH5

TCE

MEET EXISTING SIDEWALK

SIDEWALK (UIP)

EX.
R/W

+53.80
60'

RESIDENTIAL

RESIDENTIAL

TORI PINES DR

67

CAROL A. TERBROCK REVOCABLE TRUST
0.447 AC PARCEL AREA
144 SF TEMP. ESM'T
(0.003 AC)
0.447 AC REMAINING
101 TORI PINES DR

N/F
Carol A. Terbrock
Revocable Trust
25348/3098

N/F
Bethesda Long Term Care Inc
13158/1511
NO ACQUISITION

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	144+51.70
PC	141+48.19
PT	147+53.80
Δ	3°2'3.7" (LT)
D	0°30'0.0"
L	606.87' (ARC)
T	303.51'
R	11,459.16'

SCALE
0 20 40 60

STATE OF MISSOURI
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NUMBER PE-2006019687
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05/30/2025 6:43:01 AM
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MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
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SL	36

COUNTY
ST. LOUIS

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DATE

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

PLAN SHEET

N/F
Rosie's Doggie Day Care
& More LLC
24309/91
NO ACQUISITION

N/F
Nuns Of The Order Of
St. Clare St. Louis
3676/395
NO ACQUISITION

N/F
Pyatt Investments LLC
18881/1447
NO ACQUISITION

NOTE (1)
INSTALL 7" SIDEWALK THROUGH PRIVATE ENTRANCE
(ADA PATH 1% MIN, 2% MAX)

MARYCREST DR

THE GODDARD
SCHOOL OF
OAKVILLE

NATIONAL CHURCH
RESIDENCES

EX.
R/W

SEE NOTE (1)

SIDEWALK (UIP)

150

MATCHLINE STA. 147+90

MATCHLINE STA. 153+30

MAILBOX
REMOVE & RELOC. #9
(MOVE TO BACK OF
SIDEWALK)

2 LARGE RAD PERP RAMPS
CONNECTED
(NO DOMEPADS)

NEW LARGE
RAD PERP
RAMP
(NO DOMEPADS)

℄ RTE. 231

S01°09'45"W

MODIFIED TYPE S CURB
(SAW CUT)

NEW SIDEWALK BUMP-OUT

SIDEWALK (UIP)

EX.
R/W

LAS FUENTES
MEXICAN

EX.
R/W

SIDEWALK (UIP)

EX.
R/W

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

N/F
Parcfont Group LP
21362/102
NO ACQUISITION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:43:13 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	37

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
6 LLC
25174/50
NO ACQUISITION

N/F
Nature Gifts Inc.
17891/4245
NO ACQUISITION

N/F
St. Louis County
6560/545
NO ACQUISITION

CLOVERLEAF SPORTS LOUNGE

WILD BIRDS UNLIMITED

MATCHLINE STA. 153+30

MATCHLINE STA. 158+70

EX. R/W

℄ RTE. 231

155

S01°09'45"W

STA 157+55.00
STA 10+00

SIDEWALK (UIP)

+34.73
60'

+02.91
72.59'

11+11.95
61.1

+65.53
60'

11+60
102.36'

ERB RD

WALGREENS

Adjusted
Lot 3

N/F
Parcfont Group LP
21362/102
NO ACQUISITION

N/F
L2 Karma Fund 3 LLC
21822/1564
NO ACQUISITION

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:43:27 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	38

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Parc Place Trustees
10949/2177
NO ACQUISITION

Common Ground

Lot 43

Lot 44

N/F
Carolyn E. & Brian T. Soell
23254/404
NO ACQUISITION

RESIDENTIAL

Lot 1

N/F
John L. & Rachael E Cosby
19596/211
NO ACQUISITION

RESIDENTIAL

BOARDWALK PL DR

EX. R/W

160

+60.50
86.62'

+60.56
66.62'

EX. R/W

MATCHLINE STA. 158+70

MATCHLINE STA. 164+10

℄ RTE. 231

S01°09'45"W

SIDEWALK (UIP)

EX. R/W

FAITH OAKVILLE

SOUTHERN BANK

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Faith Evangelical
Lutheran Church of Oakville
10619/1897
NO ACQUISITION

SCALE
0 20 40 60

N/F
Fortune Bank
21954/465
NO ACQUISITION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:43:45 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	39

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Transitions Inc
19175/520
NO ACQUISITION

Laneridge Heights
Plat 1
PB 61 PG 38

Lot 1

RESIDENTIAL

EX.
R/W

EX.
R/W

+1.65
87.62

N73°20'15"W

SUSAN RD

STA 165+51.00
STA 5+00

EQUATION:
BK STA 165+70.43 R10
AH STA 165+70.43 R9

CENTERLINE SHIFT DIRECTION:
N88°50'15"W 1.89'

S91°09'45"W

POT STA 165+70.43 R9

℄ RTE. 231

S01°09'45"W

MATCHLINE STA. 164+10

MATCHLINE STA. 169+48

N/F
Grasso Brothers Land Co.
17511/1818
NO ACQUISITION

LAND CORNER TIE #9
Found Stone at the Northwest Corner of Adjusted Lot A
of the Boundary Adjustment Plat of Lot 8 of Clifton Heights
Recorded in Plat Book 239 Page 40 of the St. Louis County Records
said Stone being S23°09'08"E 179.79' from Centerline Station 169+00

RESIDENTIAL

+89.91
42.69

EX.
R/W

+40.14
70.46

EX.
R/W

EX.
R/W

EX.
R/W

SIDEWALK (UIP)

SIDEWALK (UIP)

SIDEWALK (UIP)

WATER TOWER PL DR

SOUTHERN BANK

GREAT SOUTHERN BANK

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

N/F
Fortune Bank
21954/465
NO ACQUISITION

N/F
RJCA LLC
22216/282
NO ACQUISITION

N/F
Great Southern Bank
21868/2482
NO ACQUISITION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:49:52 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	40

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

CHRISTOPHER DR ℄	
PI	7+91.93
PC	6+22.21
PT	9+52.21
Δ	32°59'59.5" (LT)
D	9°59'59.9"
L	330.00' (ARC)
T	169.72'
R	572.96'

RTE 231 CENTERLINE	
PI	170+53.75
Ls	150.00'
Ys	3.93'
Xs	149.91'
LT	100.03'
ST	50.03'

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
6178 LLC
24695/52
NO ACQUISITION

N/F
Grasso Brothers Land Co.
17663/3170
NO ACQUISITION

RESIDENTIAL

RESIDENTIAL
NO ACQUISITION

RESIDENTIAL

RESIDENTIAL
Lot 22

N/F
Said & Edina Tahic
23418/1179
NO ACQUISITION

EX. R/W

LAND CORNER TIE #9

MATCHLINE STA. 169+48

EQUATION STA 169+53.72 BK = STA 169+53.72 AH

℄ STA 169+53.72 R11

℄ STA 171+03.72 R11

℄ RTE. 231

6" TYPE S CURB (SAW CUT)

NEW SIDEWALK BUMP-OUT

NEW LARGE RAD PERP RAMP

TCE

"IMO'S / EDWARD JONES" SIGN (DND)

SIDEWALK (UIP)

GREAT SOUTHERN BANK

N/F
Great Southern Bank
21868/2482
NO ACQUISITION

68

MIHALJEVIC INC.
1.000 AC PARCEL AREA
740 SF TEMP. ESM'T
(0.017 AC)
1.000 AC REMAINING
6197 TELEGRAPH RD

IMO'S PIZZA

N/F
Mihaljevic Inc.
24910/3177

℄ CHRISTOPHER DR

CHRISTOPHER DR

NEW SIDEWALK, MEDIAN STRIP, CUT-THROUGH, & DOME PADS (SAWCUT)

STA 173+88.36 = STA 10+00

NEW CONCRETE MEDIAN STRIP

NEW TYPE 3 PARALLEL RAMP

CONCRETE CURB (91') (R)

MATCHLINE STA. 174+89

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:43:58 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	41

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
Legacy Partnership LLC
23360/1178
NO ACQUISITION

N/F
5 LLC
24592/3860

(69)
5 LLC
7.834 AC PARCEL AREA
367 SF TEMP. ESM'T
(0.008 AC)
7.834 AC REMAINING
6366 TELEGRAPH RD

EX. R/W

GUY POLE (DND)

NEW TYPE 1 PARALLEL RAMP

LIGHTING PULL BOX (ATG)

LIGHT POLE (DND)

NEW SIDEWALK BUMP-OUT

6" TYPE S CURB (SAW CUT)

S.L.

+14.55
63.37

12" PIPE (DND)

SHRUB (DND)

TCE

A11 A12 A13 A14

SIDEWALK (R & R)
INSTALL LEVEL LANDING
& 2 WARP SLABS

CHRISTOPHER DR

175

180

℄ RTE. 231

CS STA 179+66.95 R11

NEW SIDEWALK, CUT-THROUGH, & DOME PADS

MATCHLINE STA. 174+89

MATCHLINE STA. 180+29

RESIDENTIAL
NO ACQUISITION

Lot 17

Lot 16

Lot 18

Lot 20

RTE 231 CENTERLINE	
Total Delta	60°47'38"
SCS PI	175+89.47
TS	635.75'
PI	175+67.35'
PC	171+03.72'
PT	179+66.95'
Δ	51°47'38.0" (RT)
D	6°0'0.0"
L	863.23' (ARC)
T	463.63'
R	954.93'

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:50:14 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	42

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

N/F
5 LLC
24592/3860

LAND CORNER TIE #10
Found Concrete Monument at the P.C. of the East Right-of-Way Line of Highland Estates Dr. (50'W) being 37.61' more or less North from the Southwest Corner of Lot 5 of Highland Estates Recorded in Plat Book 233 Page 72 of the St. Louis County Records said Concrete Monument being N15°12'47"W 467.35' from Centerline Station 183+00

N/F
Kristin Katon
20617/2397

MATCHLINE STA. 180+29

MATCHLINE STA. 20+99

EX. R/W

SIDEWALK (UIP)

+20.55
60.67-50.0

+89.45
50.0

ST STA 181+16.95 R11

℄ RTE. 231

S61°57'23"W

PC STA 18+89.45 R12

EQUATION:
STA 183+58.76 BK =
STA 18+89.45 AH

DI (DND)

DI (DND)

DI (DND)

PI 180+16.98
Ls 150.00'
Ys 7.85'
Xs 149.75'
LT 100.03'
ST 50.03'

+96.13
50.0

+89.45
50.0

+72.25
60.0

HIGHLAND ESTATES DR.

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

Lot 15

Lot 1

Lot 59

RTE 231 CENTERLINE	
PI	180+16.98
Ls	150.00'
Ys	7.85'
Xs	149.75'
LT	100.03'
ST	50.03'

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

NO ACQUISITIONS FROM THIS SHEET TO SHEET 73

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:50:28 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	43

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

RTE 231 CENTERLINE	
PI	22+32.36
PC	18+89.45
PT	25+62.60
Δ	26°55'12.8" (LT)
D	3°59'56.9"
L	673.15' (ARC)
T	342.91'
R	1432.70'

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

Greymonte Estates Addition
PB 361 PG 121

RESIDENTIAL
Lot 58

RESIDENTIAL
Lot 57

RESIDENTIAL
Lot 56

PI 22+32.36
PC 18+89.45
PT 25+62.60
Δ 26°55'12.8" (LT)
D 3°59'56.9"
L 673.15' (ARC)
T 342.91'
R 1432.70'

MATCHLINE STA. 20+99

MATCHLINE STA. 26+39

SIDEWALK (UIP)

EX. R/W

℄ RTE. 231

PT STA 25+62.60

S35°02'10"W

+62.60
50.0

+12.10
50.0

+63.12
55.0

+51.04
50.0

+62.60
50.0

TREERIDGE TRAIL

DRAINAGE EASEMENT

RESIDENTIAL

Lot 58

Lot 57

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:50:42 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	44

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

MATCHLINE STA. 26+39

MATCHLINE STA. 31+79

Greymonte Estates
PB 356 PG 171

Lot 55

Lot 1

GREYMONTE EST DR

30

Common Ground

SIDEWALK (UIP)

SIDEWALK (UIP)

EX. R/W

EX. R/W

EX. R/W

EX. R/W

℄ RTE. 231

S35°02'10"W

DI (DND)

DI (DND)

DI (DND)

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

N/F
Refik & Asima Bukvic
25144/1927

N/F
JWH Properties LLC
23957/136

N/F
John J. Hummel
24049/157

N/F
Joseph & Constance Barlow
6612/1554

N/F
Eli Denise Deweez
7111/603

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:50:53 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	45

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

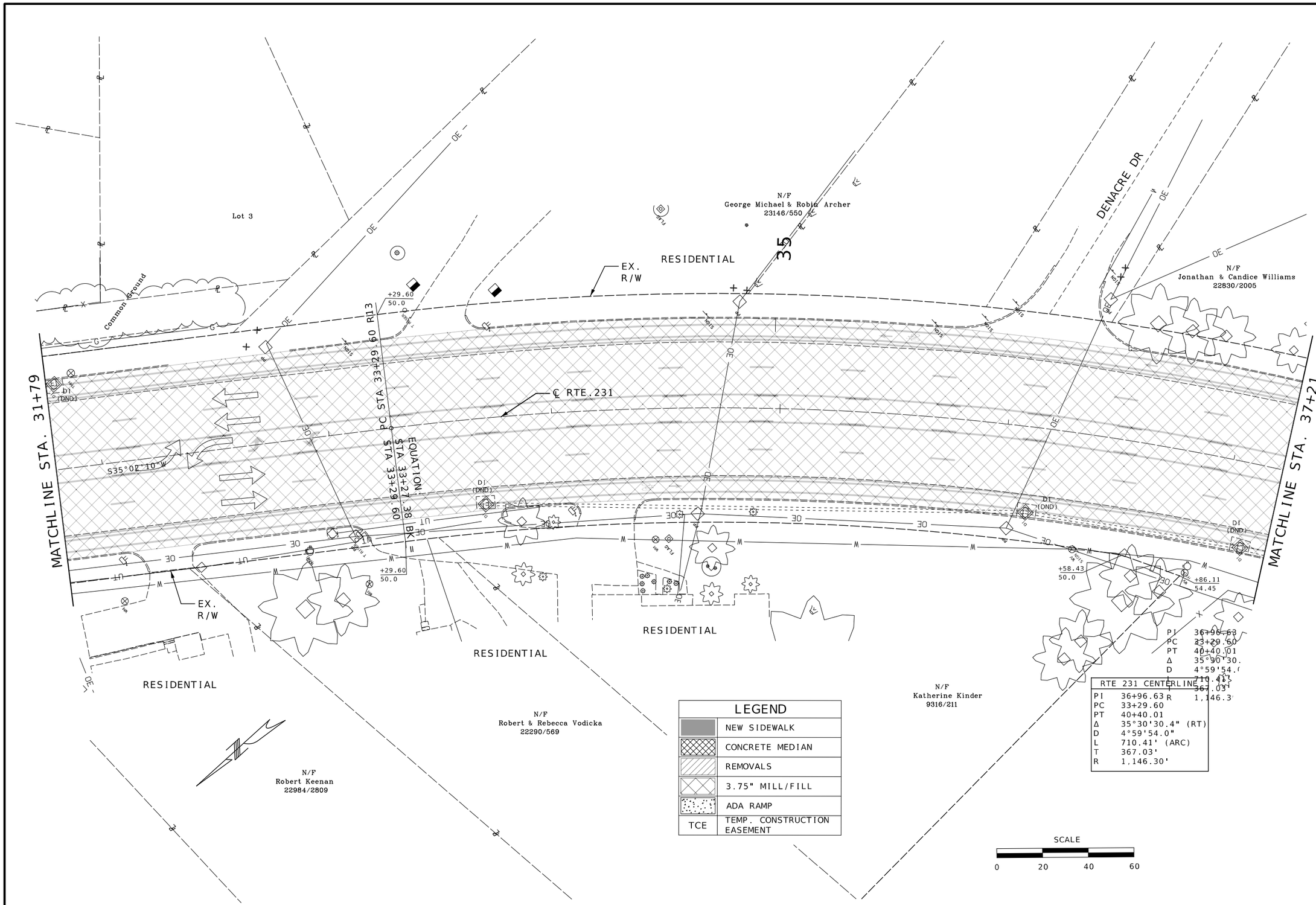
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE

0 20 40 60

RTE 231 CENTERLINE	
PI	36+96.63
PC	33+29.60
PT	40+40.01
Δ	35°30'30.4" (RT)
D	4°59'54.0"
L	710.41' (ARC)
T	367.03'
R	1,146.30'

PI	36+96.63
PC	33+29.60
PT	40+40.01
Δ	35°30'30.
D	4°59'54.(
	710.41'
	367.03'
R	1,146.3

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

Stuart McNeil

05/30/2025 6:53:14 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	46

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

Common Ground
& Easement Area

N/F
Shirley Ann McNeal
22098/2211

Lot 73

Lot 72

Lot 71

South Oaks
PB 283 PG 4

EX. R/W

℄ RTE. 231

PT STA 40+40.01

+40.01
50.0

S70°32'41"W

MATCHLINE STA. 37+21

MATCHLINE STA. 42+61

(R&R) EX. ADA RAMP

(R&R) EX. SIDEWALK

SIDEWALK (UIP)

+56.25
63.20

+70.34
50.0

BELLE TERRE CT

EX.
R/W

RESIDENTIAL

GOOD SHEPHERD
PRESBYTERIAN CHURCH

N/F
Good Shepherd
Presbyterian Church
10283/418

DRAINAGE
EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:51:09 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	47

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

MATCHLINE STA. 42+61

MATCHLINE STA. 48+01

Lot 70

Lot 69

Lot 1

Lot 2

TOWNE WOODS DR

45

EX. R/W

EX. R/W

+26.47
50.0

PC STA 46+26.47

℄ RTE. 231

S70°32'41"W

(R&R) EX. SIDEWALK

(R&R) EX. SIDEWALK

(R&R) EX. SIDEWALK

(R&R) EX. ADA RAMP

(R&R) EX. ADA RAMP

SIDEWALK (TYP)

EX. R/W

+26.47
50.0

EX. R/W

Lot 114

RESIDENTIAL

TOWNE WOODS DR

Lot 101

RESIDENTIAL

Lot 612

Lot 113

Lot 102

South Towne Plat 1
PB 150 PG 72

N/F
Good Shepherd
Presbyterian Church
10283/418

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 6:52:05 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	48

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	49+62.56
PC	46+26.47
PT	52+83.33
Δ	26°24'14.2" (LT)
D	3°59'56.9"
L	660.24' (ARC)
T	336.09'
R	1,432.70'

PI 49+62.56
PC 46+26.47
PT 52+83.33
Δ 26°24'14.2" (LT)
D 3°59'56.9"
L 660.24' (ARC)
T 336.09'
R 1,432.70'

South Oaks
PB 283 PG 4

Lot 3

Common Ground
& Easement Area

EX. R/W

℄ RTE. 231

MATCHLINE STA. 48+01

MATCHLINE STA. 53+38

EQUATION
BK STA 52+83.33
= AHD STA 52+83.33

+83.33
50.0

(R&R) EX.
SIDEWALK

S44°08'27"W

EX.
R/W

AMEREN

Lot 613

N/F
Union Electric Company
7098/1934

CREDIT UNION
LENDING SYSTEMS

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:52:16 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	49

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

MATCHLINE STA. 53+38

MATCHLINE STA. 58+78

RESIDENTIAL

RESIDENTIAL

Boundary Adj. Plat
WillowBrook Farm
PB 233 PG 18

RESIDENTIAL

RESIDENTIAL

Willow Brook Farm
Plat 1
PB 182 PG 74

RESIDENTIAL

Lot 1

Lot 2

Lot 3

Lot 4

Lot 212

PER MAP

55

BEAR CREEK DR

EX. R/W

+13.37
50-47.20

EX. R/W

(R&R) EX. ADA RAMP

(R&R) EX. SIDEWALK

(R&R)2 EX. ADA RAMPS

(R&R) EX. ADA RAMP

(R&R) EX. SIDEWALK

(R&R) EX. ADA RAMP

(R&R) EX. ADA RAMP

℄ RTE. 231

POT STA 57+42.61 R14

S44°08'27"W

S44°01'31"W

D1 (DND)

D1 (DND)

D1 (DND)

D1 (DND)

SIDEWALK (UIP)

EX. R/W

+85.0
50.0

+06.72
62.20

PLANTHAVEN FARMS

PER MAP

HEINTZ RD

+11.65
63.20

EX. R/W

FIRST BAPTIST CHURCH
OF OAKVILLE

+79.39
29.50

+32.40
29.50

N/F
Planthaven Farms LLC
22942/210

SCALE
0 20 40 60

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 6:52:25 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	50

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

N/F
Earl Sidwell
21451/345

N/F
Earl Sidwell
21451/345

N/F
Kim Vermilion
24689/211

N/F
Daniel P Block
22546/2217

EX. R/W

EX. R/W

℄ RTE. 231

S44°01'31"W

MATCHLINE STA. 58+78

MATCHLINE STA. 64+18

+48.32
50.0

FIRST BAPTIST CHURCH
OF OAKVILLE

RESIDENTIAL

RESIDENTIAL

N/F
First Baptist Church
of Oakville
20052/484

N/F
First Baptist Church
of Oakville
20052/484

N/F
First Baptist Church
of Oakville
20052/484

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:52:39 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	51

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	67+05.95
PC	66+17.88
PT	67+93.80
Δ	7°2'7.0" (LT)
D	3°59'56.9"
L	175.92' (ARC)
T	88.07'
R	1,432.70'

POINT ELEMENTARY SCHOOL

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS VERTICAL BARRIER TRANSITION
INSTALL TYPE A CRASHWORTHY END TERMINAL (MASH)

N/F
Haider & Samira Alkenani
21178/417

N/F
R-9 Reorganized School District

EX. R/W

℄ RTE.231

S44°01'31"W

S36°59'23"W

PC STA 66+17.88 R1432.70

PT STA 67+93.80 R1432.70

MATCHLINE STA. 64+18

MATCHLINE STA. 69+58

SIDEWALK (UIP)

Common Ground

WINDING CREEK WAY

STRIP RESERVED FOR
FUTURE WIDENING OF TELEGRAPH ROAD
PB 324 PG 80

N/F
Mehmetaj Erdisiano
25328/1762

Lot 72

Fairfield Estates
Plat 1
PB 352 PG 49

Lot 1

Fairfield Estates
Plat 2
PB 352 PG 52

Lot 3E

Re-Subdivision of Lot 3
of Cross of Christ Subdivision
PB 324 PG 80

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:52:52 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	52

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

Lot 1

Lot 2

Point Acres
Plat 2
PB 56 Pg 19

Lot 3

Lot 4

Lot 5

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS VERTICAL BARRIER TRANSITION
INSTALL TYPE A CRASHWORTHY END TERMINAL (MASH)

EX.
R/W

℄ RTE. 231

S36°59'23"W

PC STA. 74+09.70 R14

MATCHLINE STA. 69+58

MATCHLINE STA. 74+98

CROSSVIEW EST

D1 (DND)

SIDEWALK (UIP)

EX.
R/W

HEARTLAND CHURCH

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 6:53:02 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	53

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

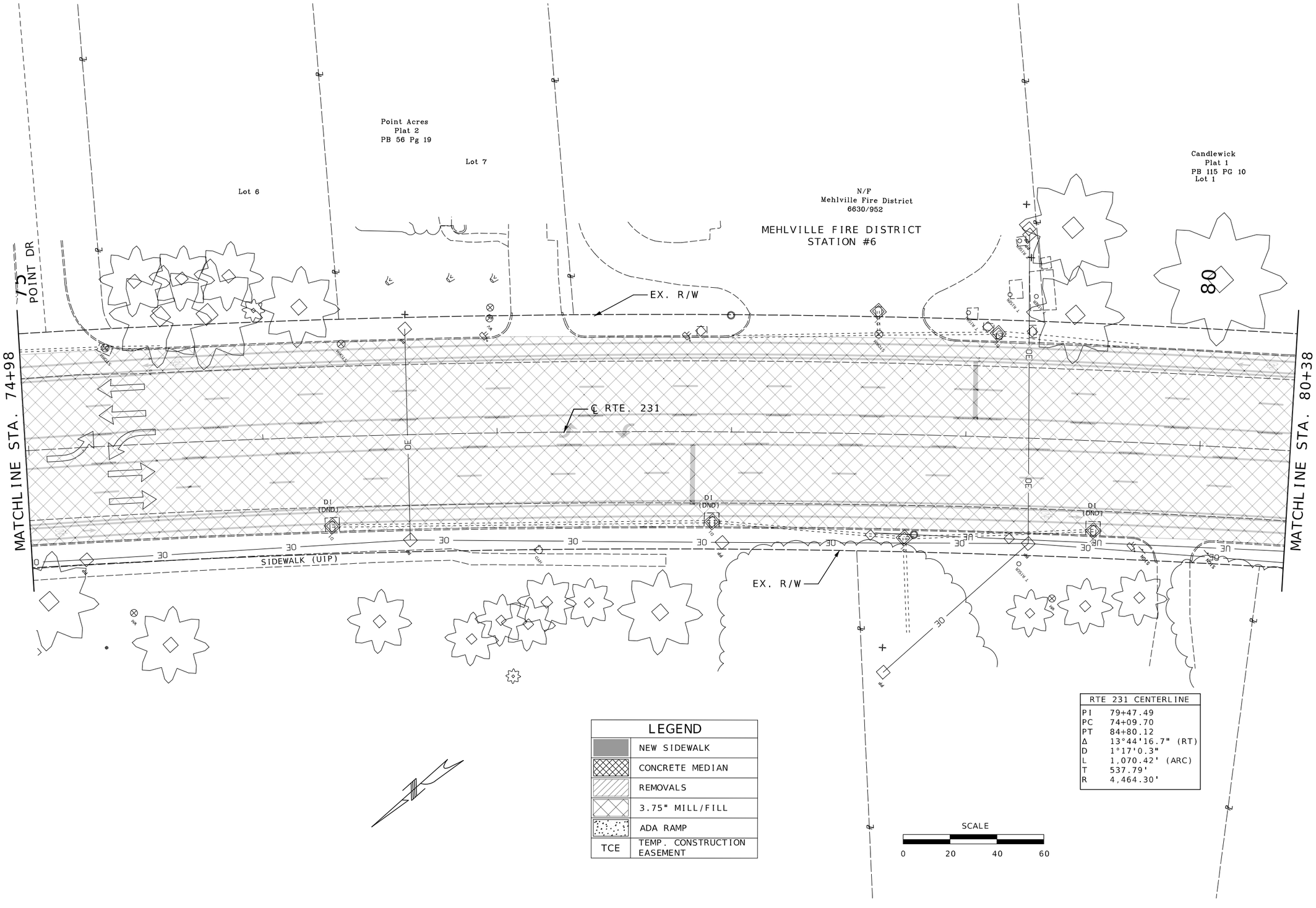
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	79+47.49
PC	74+09.70
PT	84+80.12
Δ	13°44'16.7" (RT)
D	1°17'0.3"
L	1,070.42' (ARC)
T	537.79'
R	4,464.30'

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 8:27:52 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	54

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

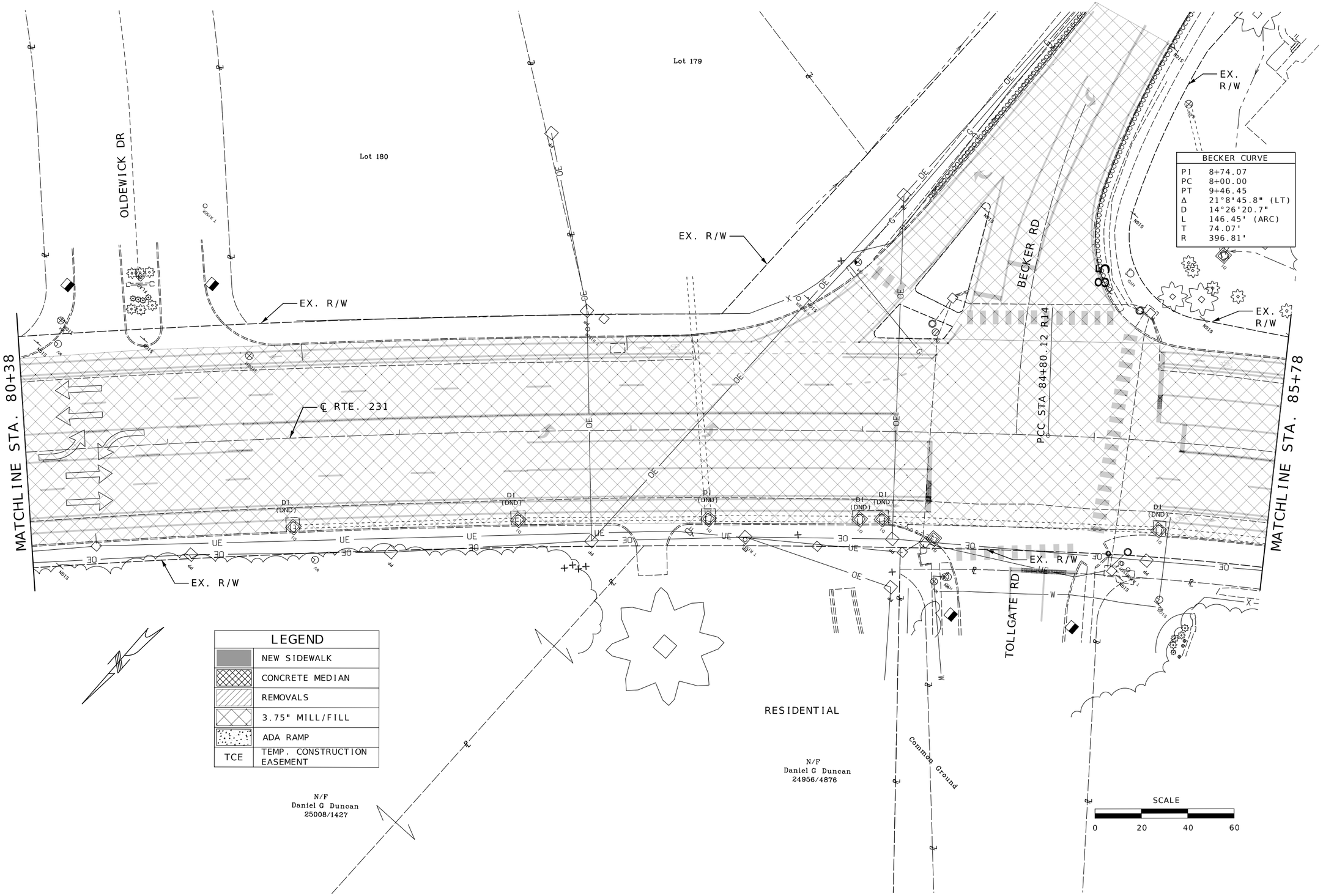
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

Stuart McNeil

05/30/2025 8:28:03 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	55

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

Lot 10

Beckers Divide Addition
Subdivision 2
PB 92 PG 31

Lot 11

RESIDENTIAL

Lot 12

RESIDENTIAL

Lot 13

RESIDENTIAL

N/F
Harry Bryan
25382/3992

EX. R/W

℄ RTE. 231

90

MATCHLINE STA. 85+78

MATCHLINE STA. 91+18

DI (DND)

30

SIGN

R/W Dedication Per
PB 195 PG 85

RTE 231 CENTERLINE	
PI	88+55.65
PC	84+80.12
PT	92+09.27
Δ	33°48'17.3" (RT)
D	4°38'10.4"
L	729.15' (ARC)
T	375.53'
R	1,235.83'

EX. R/W

Common Ground

New England Village
Plat 1
PB 195 PG 85

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Daniel Meshoto
13344/963

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 6:55:21 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	56

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LORI L VOGL
24164-4085
AUGUST 3, 2020

RESIDENTIAL

Lot 2

Lot 1

EX. R/W

℄ RTE.231

S84°31'57"W

RT STA 92+09.27 R14

PC STA 95+68.03 R14

MATCHLINE STA. 91+18

MATCHLINE STA. 96+58

DI (DND)

CRABAPPLE COVE NURSERY

N/F
Kenneth & Ann Dames
9052/167

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 8:28:20 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	57

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

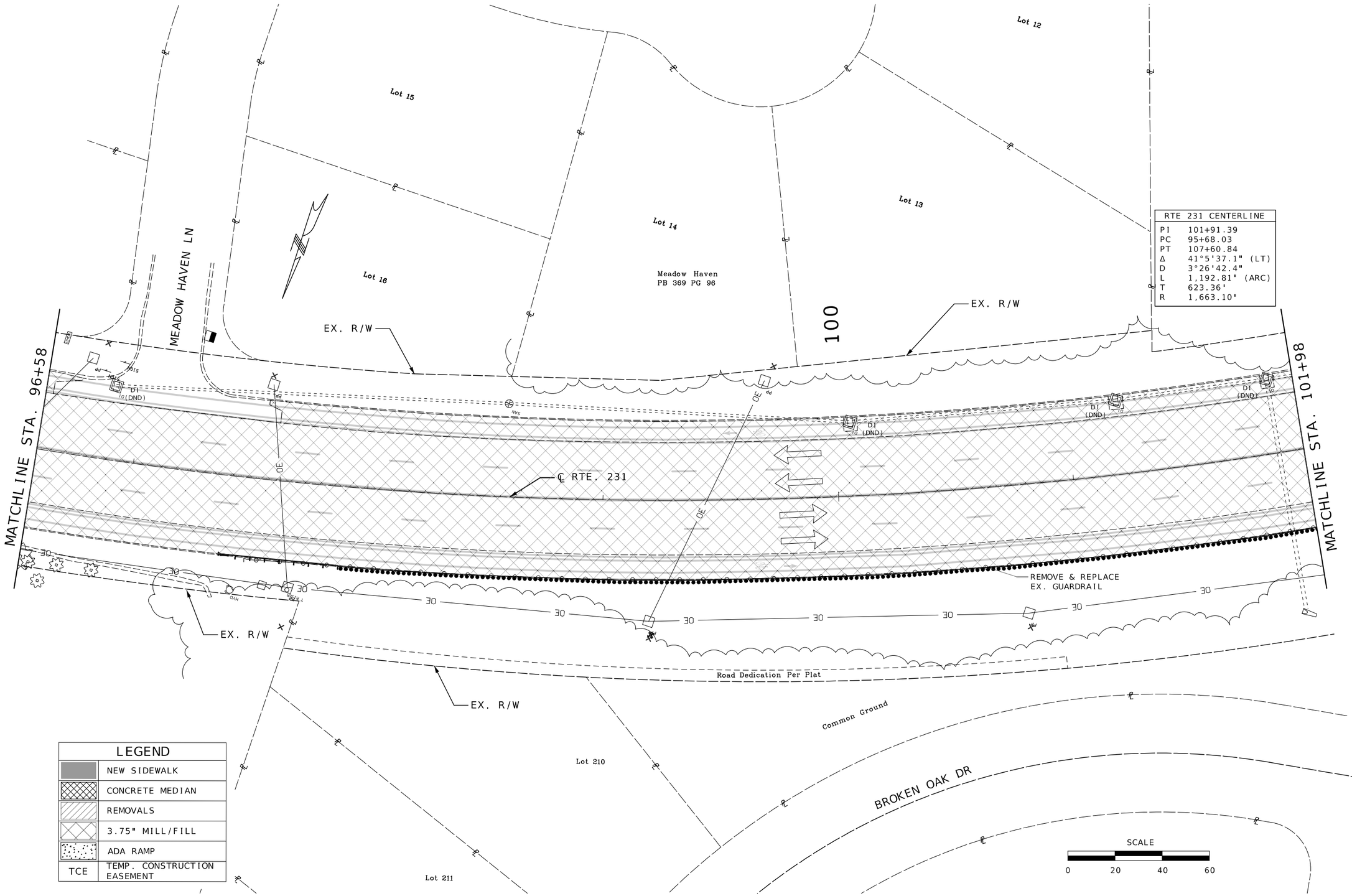
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



RTE 231 CENTERLINE	
PI	101+91.39
PC	95+68.03
PT	107+60.84
Δ	41°5'37.1" (LT)
D	3°26'42.4"
L	1,192.81' (ARC)
T	623.36'
R	1,663.10'

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 8:28:33 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	58

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
Jack & Annie Nelson
9091/2046

N/F
John & Marilyn Hassell
6858/1000

RESIDENTIAL

RESIDENTIAL

105

MATCHLINE STA. 101+98

MATCHLINE STA. 107+38

EX. R/W

EX. R/W

DI (DND)

DI (DND)

DT (DND)

℄ RTE. 231

REMOVE & REPLACE EX. GUARDRAIL

Common Ground

Road Dedication Per Plat

EX. R/W

EX. R/W

Lot 209

Lot 208

207

Lot 207

Lot 206

Lot 205

Lot 204

BROKEN OAK DR

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 8:28:42 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	59

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

N/F
James Wilson

RESIDENTIAL

RESIDENTIAL

110

MATCHLINE STA. 107+38

MATCHLINE STA. 112+87

EX. R/W

EX. R/W

EX. R/W

EX. R/W

Road Dedication Per Plat

PT STA 107+60.84 R14

PT STA 107+95.69 R15

EQUATION: STA 107+87.09 BK = STA 107+95.69 AH

S43°26'29"W

S43°26'20"W

℄ RTE. 231

OLDE POST RD

RESIDENTIAL

Common Ground

Lot 202

Lot 201

Lot 287

BROKEN OAK DR

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 8:28:53 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	60

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

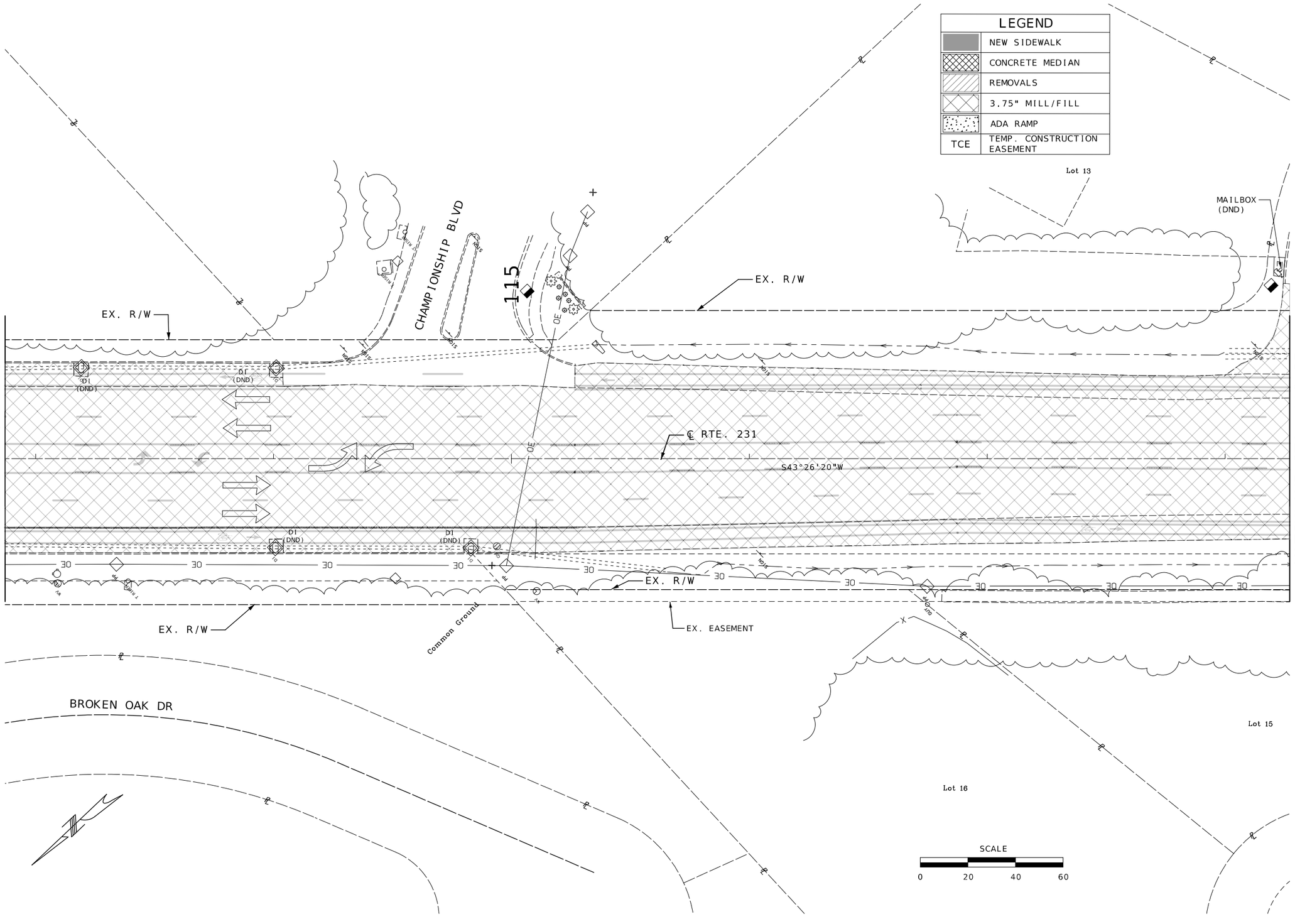
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 8:29:05 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	61

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

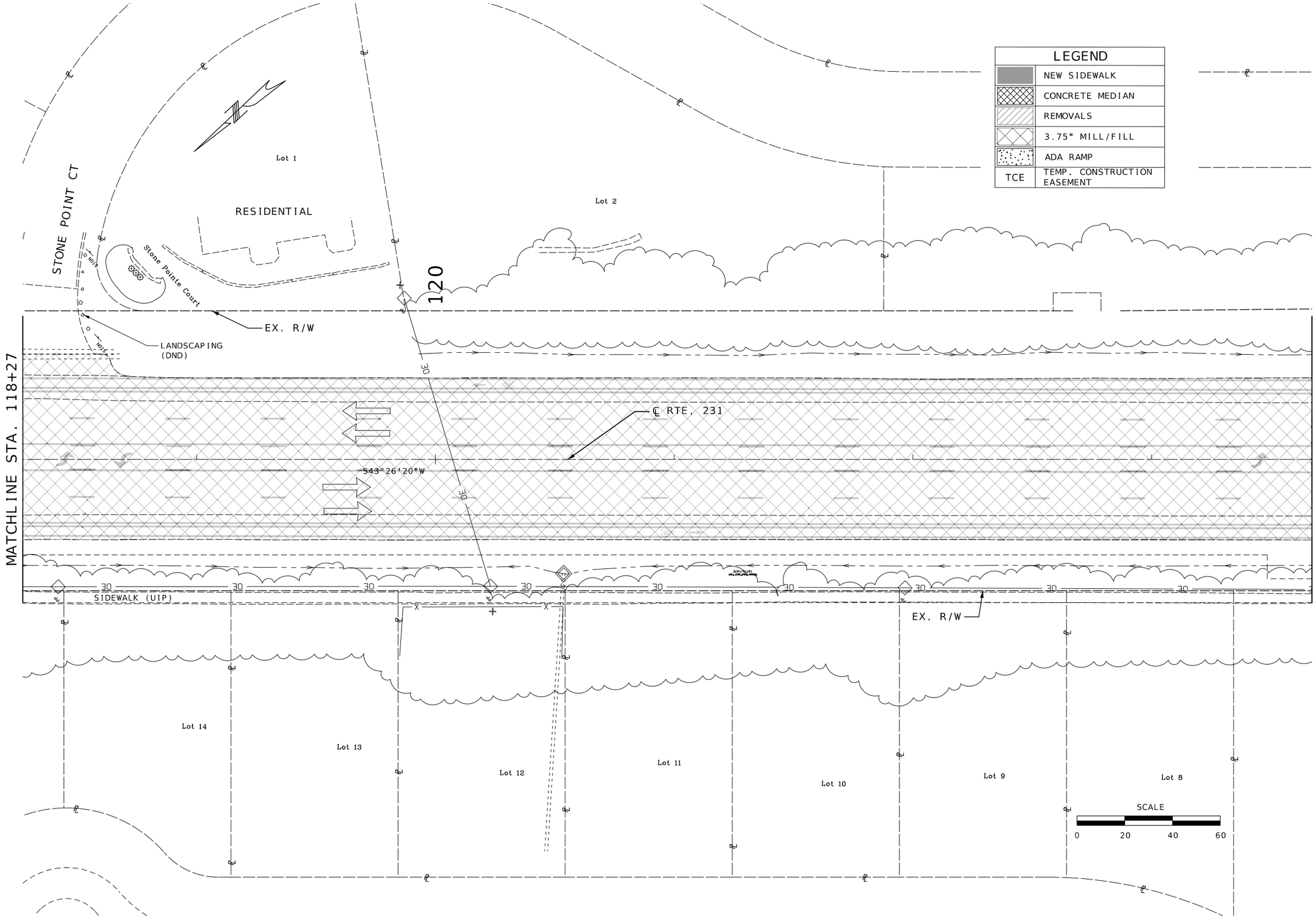
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 8:29:13 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	62

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

MATCHLINE STA. 123+67

MATCHLINE STA. 129+07

℄ RTE. 231

S43°26'20"W

EX. R/W

EX. R/W

SIDEWALK (UIP)

CRYSTAL LAKE PL

Common Ground

Lot 3

Lot 4

Lot 5

Lot 6

Lot 7

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 8:29:23 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	63

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

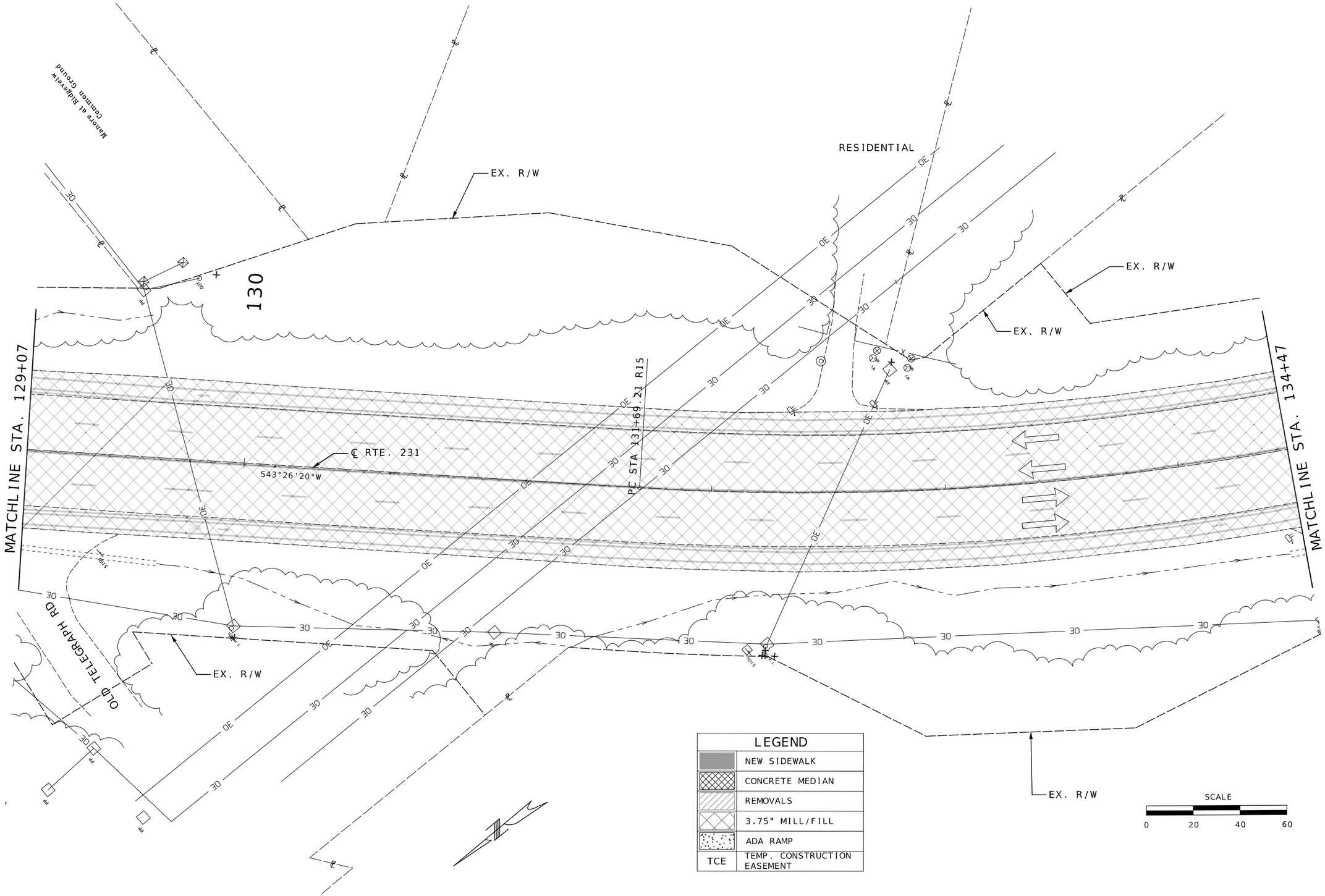
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 8:29:31 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	64

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

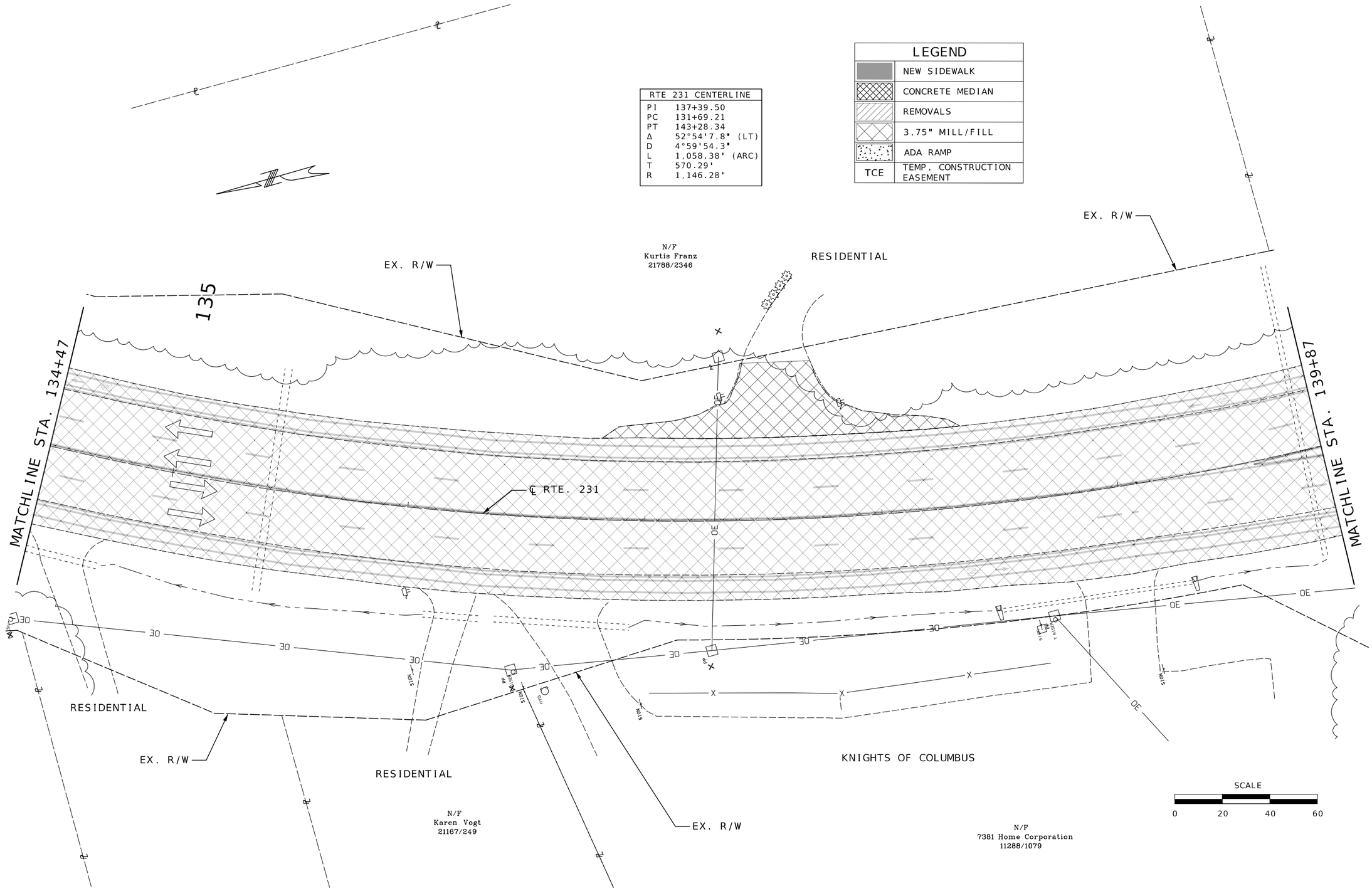
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET

RTE 231 CENTERLINE	
PI	137+39.50
PC	131+69.21
PT	143+28.34
Δ	52°54'7.8" (LT)
D	4°59'54.3"
L	1,058.38' (ARC)
T	570.29'
R	1,146.28'

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 8:29:42 AM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	65

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

Manors at Ridgeview Plat 1
Common Ground

EX. R/W

EX. R/W

140

145

RIDGEVIEW MANOR DR

MATCHLINE STA. 139+87

MATCHLINE STA. 146+27

℄ RTE. 231

EQUATION:
STA 142+27.59 BK =
STA 143+28.34 AH

STA 143+28.34 R16

S09°27'48"E

OE

PP

SIGN

STORM

WM

EX. R/W

EX. R/W

WHITE FLAG CHURCH

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 9:06:23 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	66

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

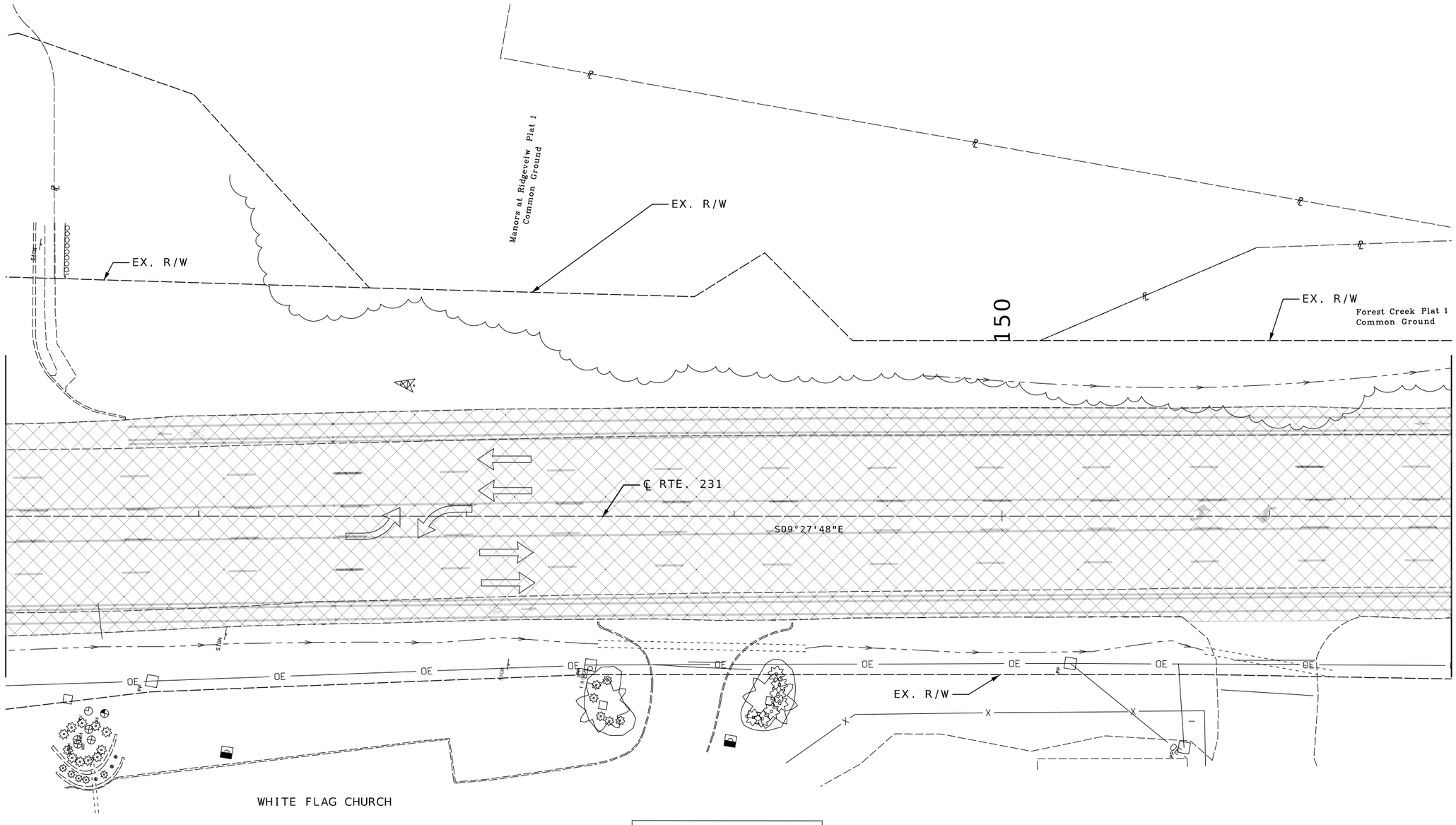
BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 9:06:33 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	67

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

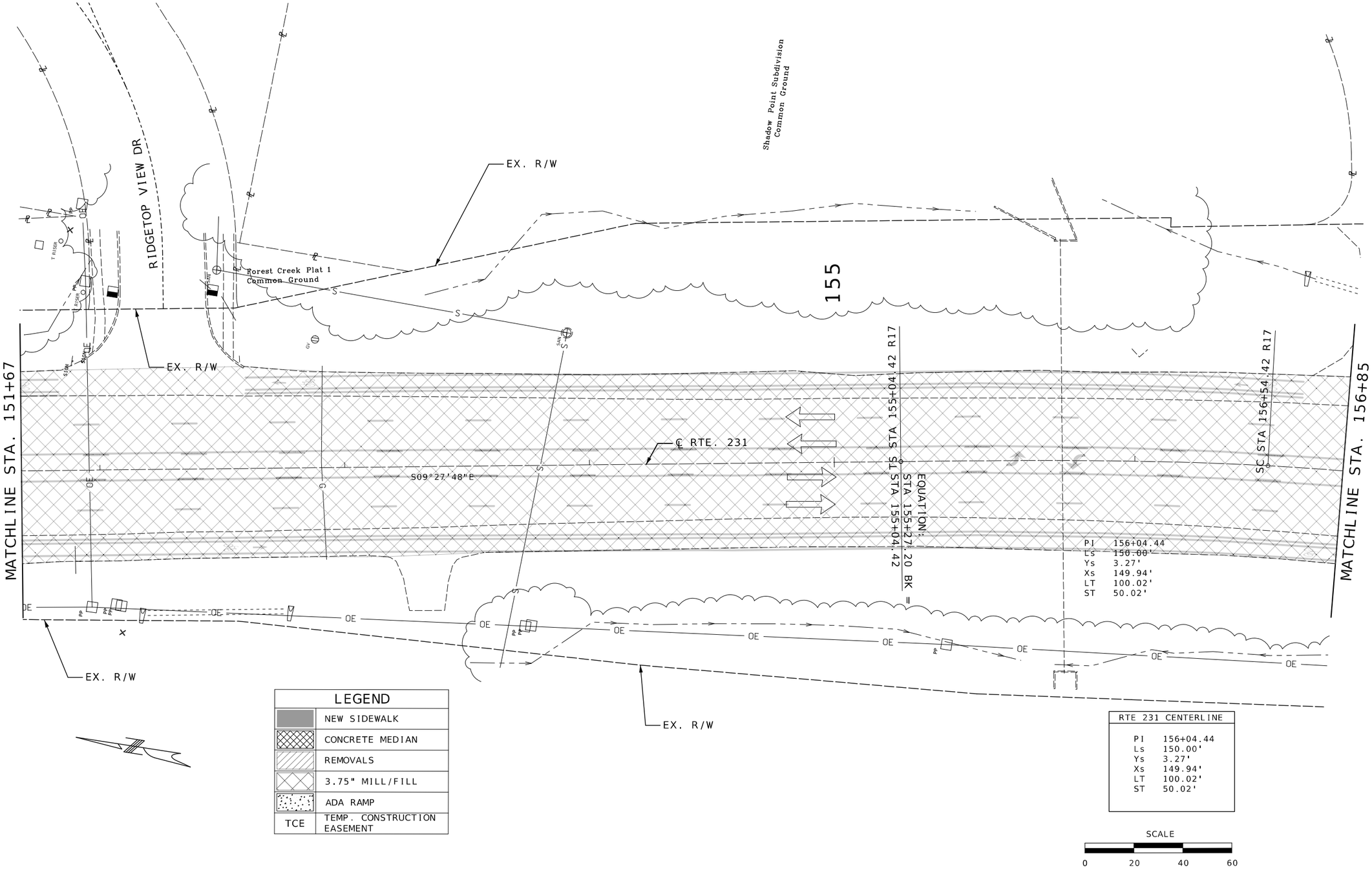
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

RTE 231 CENTERLINE	
PI	156+04.44
Ls	150.00'
Ys	3.27'
Xs	149.94'
LT	100.02'
ST	50.02'

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 9:06:46 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	68

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

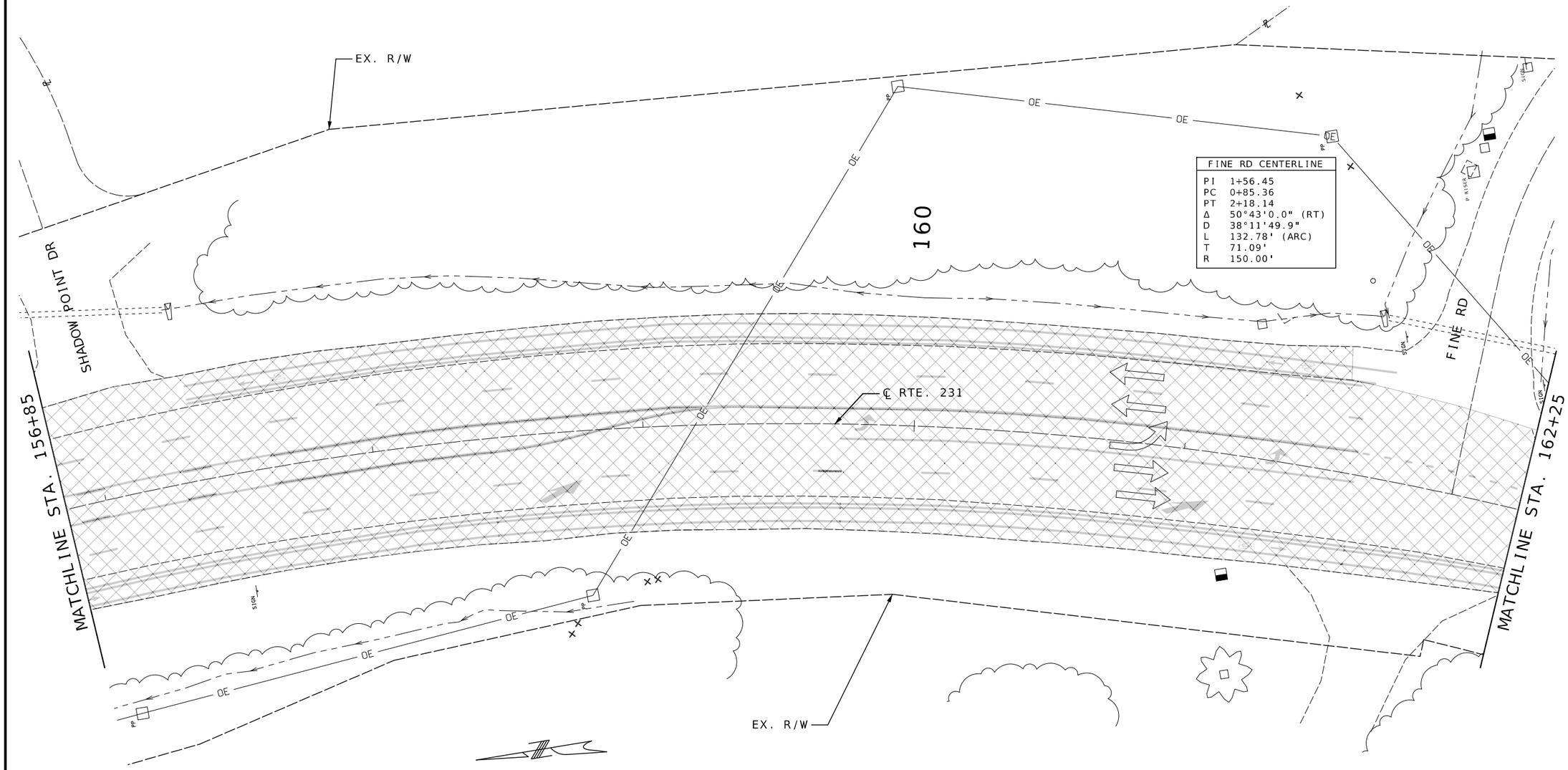
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 9:06:56 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	69

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

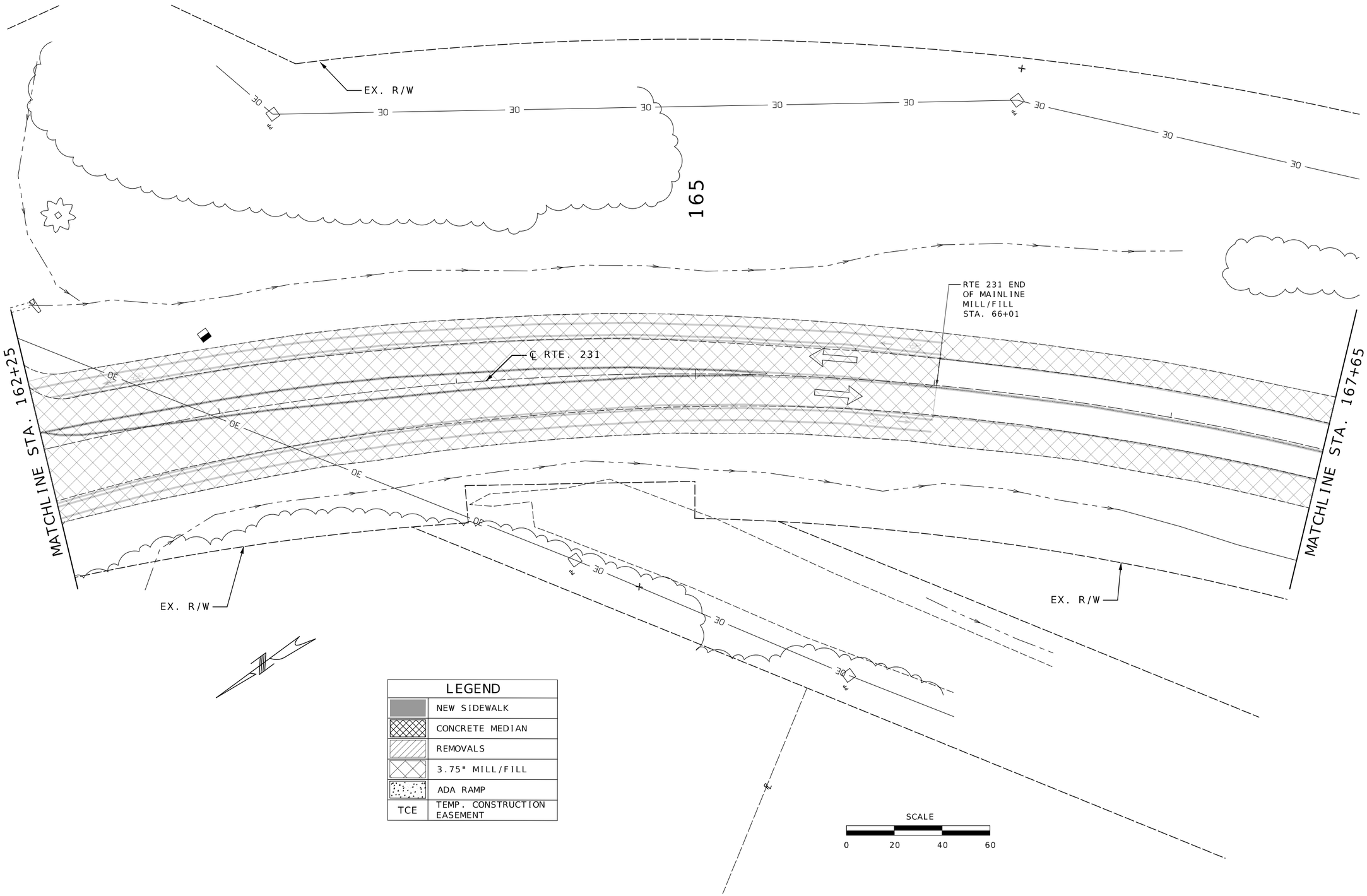
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 9:07:05 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	70

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

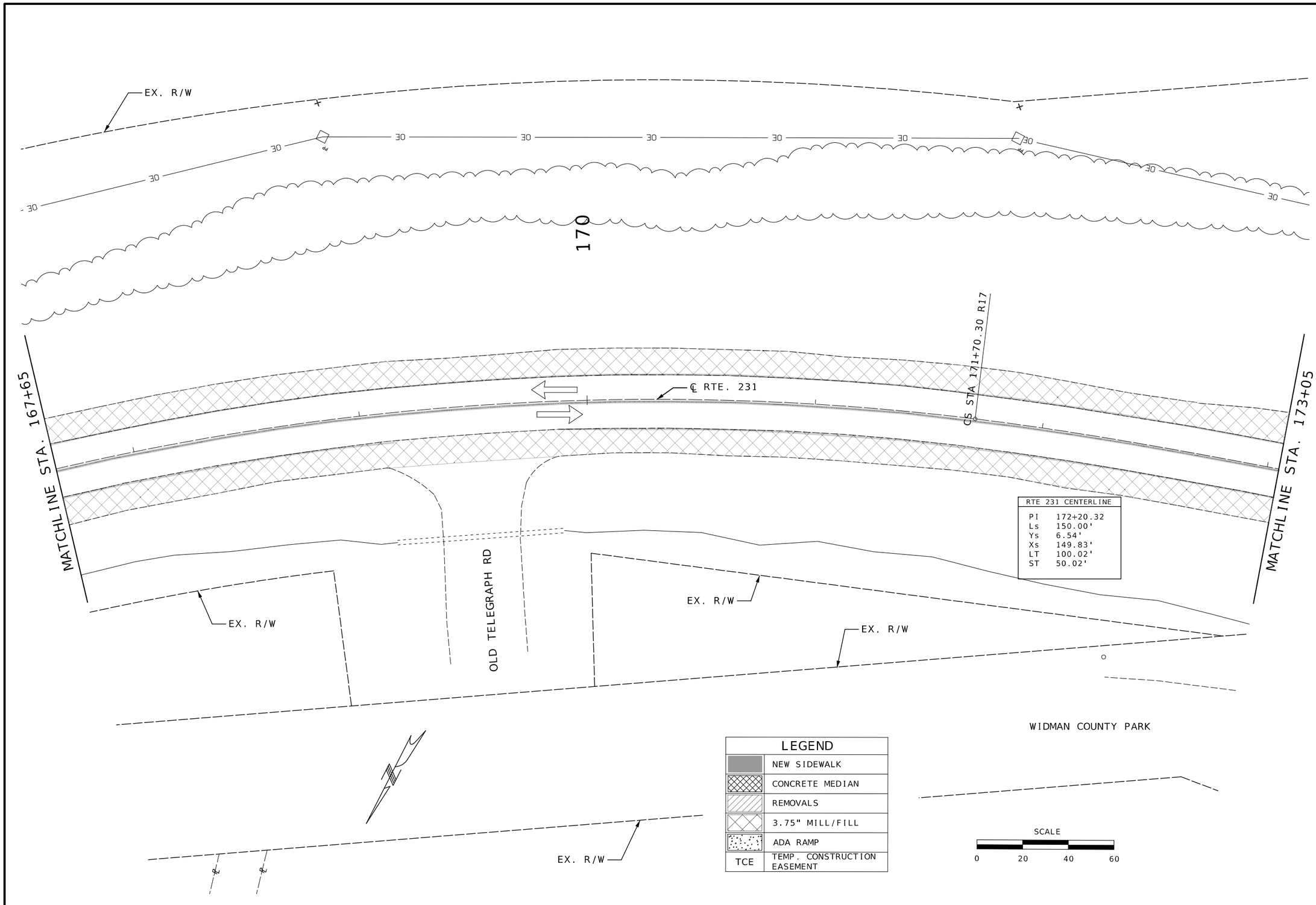
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 9:07:16 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	71

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

EX. R/W

GRIMMS PARK

30 30 30 30 30 30 30 30 30

PP PP

175

WILLIAMSON RD

SIGN SIGN

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS BRIDGE APPROACH TRANSITION
INSTALL TYPE A CRASHWORTHY END TERMINAL (MASH)
STA. 178+43

MATCHLINE STA. 173+05

ST STA 173+20.30 R17

℄ RTE. 231

S73°49'50"W

30 30

MATCHLINE STA. 178+45

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS BRIDGE APPROACH TRANSITION
INSTALL TYPE A CRASHWORTHY END TERMINAL (MASH)
STA. 178+35

EX. R/W

WIDMAN COUNTY PARK

SCALE

0 20 40 60

EX. R/W

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

Stuart Mc Neil

05/30/2025 9:07:26 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	72

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

GRIMMS PARK

180

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS VERTICAL BARRIER TRANSITION
INSTALL TYPE A CRASHWORTHY END TERMINAL (MASH)

BRIDGE
A4932

MATCHLINE STA. 178+45

℄ RTE. 231

END OF PROJECT
Sta. 181+41

S73°49'50"W

EX. R/W

REMOVE & REPLACE EXISTING GUARDRAIL:
INSTALL MGS VERTICAL BARRIER TRANSITION
INSTALL TYPE A CRASHWORTHY END TERMINAL (MASH)

EX. R/W

WIDMAN COUNTY PARK

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	3.75" MILL/FILL
	ADA RAMP
TCE	TEMP. CONSTRUCTION EASEMENT

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 9:08:13 AM
STUART ROBINSON McNEIL · CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	73

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PLAN SHEET

PARCEL 1: LJC COMERCIAL LLC (SHEET 5)

TEMPORARY EASEMENT
(812 SF = 0.019 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
A1	46+31.46	50.00	LT	A1	A2	S30°47'43"E	22.00
A2	46+44.11	68.00	LT	A2	A3	S24°06'29"W	20.00
A3	46+64.11	68.00	LT	A3	A4	S88°04'16"W	14.47
A4	46+70.46	55.00	LT	A4	A5	S24°06'29"W	53.00
A5	47+23.46	55.00	LT	A5	A6	N65°53"'31"W	5.00
A6	47+23.46	50.00	LT	A6	A1	N24°06'29"E	92.00

PARCEL 2: TELEGRAPH REAL PROPERTY LLC (SHEET 5&6)

TEMPORARY EASEMENT
(157 SF = 0.004 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
A5	47+23.46	55.00	LT	A6	A5	S65°53'31"E	5.00
A6	47+23.46	50.00	LT	A5	A7	S16°44'53"W	24.20
A7	47+47.46	58.10	LT	A7	A12	N65°53'31"W	8.10
A12	47+47.46	50.00	LT	A12	A6	N24°06'29"E	24.00

PERMANENT EASEMENT
(413 SF = 0.009 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
A7	47+47.46	58.10	LT	A7	A8	S24°06'29"W	51.00
A8	47+98.46	58.10	LT	A8	A9	N65°53'31"W	8.10
A9	47+98.46	50.00	LT	A9	A12	N24°06'29"E	51.00
A12	47+47.46	50.00	LT	A12	A7	S65°53'31"E	8.10

PARCEL 3: HOPE VINEYARD CHURCH (SHEET 5)

TEMPORARY EASEMENT
(147SF = 0.003 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
A13	45+33.79	50.00	RT	A13	B3	S24°06'29"W	13.50
B1	45+33.79	62.00	RT	B3	B2	N54°06'52"W	12.26
B2	45+44.79	62.00	RT	B2	B1	N24°06'29"E	11.00
B3	45+47.29	50.00	RT	B1	A13	S65°53'31"E	12.00

PARCEL 4: CC&S INVESTMENT INC (SHEET 5)

TEMPORARY EASEMENT
(694 SF = 0.016 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
B2	45+44.79	62.00	RT	B2	B3	S54°07'22"E	12.26
B3	45+47.29	50.00	RT	B3	B4	S24°06'29"W	20.00
B4	45+67.29	50.00	RT	B4	B2	N03°57'44"W	25.50
B5	46+73.83	50.00	RT	B5	B8	S24°06'29"W	72.56
B6	46+73.83	58.00	RT	B8	B7	N54°50'55"W	8.15
B7	47+44.83	58.00	RT	B7	B6	N24°06'29"E	71.00
B8	47+46.39	50.00	RT	B6	B5	S65°53'31"E	8.00

PARCEL 5: NICHOLAS J & KATHRYN A PISONI (SHEET 6)

TEMPORARY EASEMENT
(649 SF = 0.015 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
B9	47+81.29	50.00	RT	C1	B9	S65°53'31"E	5.00
C1	47+81.29	55.00	RT	B9	C3	S24°06'29"W	129.75
C2	49+11.29	55.00	RT	C3	C2	N68°45'35"W	5.01
C3	49+11.04	50.00	RT	C2	C1	N24°06'29"E	130.00

PARCEL 6: SYLVAN SPRINGS AUTOMOTIVE INC (SHEET 6)

TEMPORARY EASEMENT
(316 SF = 0.007 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
A9	47+98.46	50.00	LT	A9	A8	S65°53'31"E	7.00
A8	47+98.46	58.10	LT	A8	A10	S30°23'07"W	10.06
A10	48+08.46	57.00	LT	A10	A11	N65°53'31"W	5.00
A11	48+08.46	52.00	LT	A11	C6	S22°40'33"W	80.03
C6	48+88.46	54.00	LT	C6	C7	N65°53'31"W	4.00
C7	48+88.46	50.00	LT	C7	A9	N24°06'29"E	90.00

PARCEL 7: UNION PLANTERS BANK (SHEET 6)

TEMPORARY EASEMENT
(1329 SF = 0.031 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
C8	51+53.87	50.00	LT	C8	C9	S66°14'23"E	16.00
C9	51+53.87	66.00	LT	C9	D1	S23°45'37"W	76.00
D1	52+29.87	66.00	LT	D1	D2	N66°14'23"W	8.00
D2	52+29.87	58.00	LT	D2	D3	S23°45'37"W	13.13
D3	52+43.00	58.00	LT	D3	D7	N80°31'23"W	8.26
D7	52+45.04	50.00	LT	D7	C8	N23°45'37"E	91.16

PARCEL 8: DAVID & PENNY ANGERS (SHEET 6)

TEMPORARY EASEMENT
(172 SF = 0.004 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
D7	52+45.04	50.00	LT	D7	D4	S80°31'23"E	4.13
D4	52+44.02	54.00	LT	D4	D5	S23°45'37"W	43.38
D5	52+87.40	54.00	LT	D5	D6	N66°14'23"W	4.00
D6	52+87.40	50.00	LT	D6	D7	N23°45'37"E	42.38

PARCEL 9: ENERGY MARKETING 1615 LLC (SHEET 6)

TEMPORARY EASEMENT
(330 SF = 0.008 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
C2	49+11.29	55.00	RT	C2	C3	S68°45'35"E	5.01
C3	49+11.04	50.00	RT	C3	C4	N24°06'29"E	62.86
C4	49+73.91	50.00	RT	C4	C5	S61°58'21"W	8.15
C5	49+80.34	55.00	RT	C5	C2	S24°06'29"W	69.04

PARCEL 10, TRACT 1: RICHARD & LILLIAN COGER (SHEET 7)

TEMPORARY EASEMENT
(216 SF = 0.005 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
D8	54+65.72	50.00	LT	D8	D9	S66°14'24"E	4.00
D9	54+65.72	54.00	LT	D9	E1	S23°45'37"W	14.00
E1	54+79.72	54.00	LT	E1	E2	S66°14'23"E	6.00
E2	54+79.72	60.00	LT	E2	E3	S23°45'37"W	16.00
E3	54+95.72	60.00	LT	E3	E4	N66°14'23"W	10.00
E4	54+95.72	50.00	LT	E4	D8	N23°45'35"E	30.00

PARCEL 10, TRACT 2: RICHARD & LILLIAN COGER (SHEET 7)

TEMPORARY EASEMENT
(240 SF = 0.006 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
E4	54+95.72	50.00	LT	E4	AI5	S66°14'23"E	6.00
AI5	54+95.72	56.00	LT	AI5	E5	S23°45'37"W	40.00
AI6	55+35.72	56.00	LT	E5	E6	N66°14'24"W	6.00
AI7	55+35.72	50.00	LT	E6	E4	N23°45'37"E	40.00

PARCEL 11: RFTB PP LLC., ET AL (SHEET 7&8)

TEMPORARY EASEMENT
(2023 SF = 0.046 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
E5	55+35.72	56.00	LT	E6	E5	S66°14'24"E	6.00
E6	55+35.72	50.00	LT	E5	E7	S23°45'37"W	326.00
E7	58+62.10	56.00	LT	E7	E8	S66°14'23"E	7.00
E8	58+62.10	63.00	LT	E8	E9	S23°45'37"W	5.00
E9	58+67.10	63.00	LT	E9	F1	N66°14'24"W	13.00
F1	58+67.10	50.00	LT	F1	E6	N23°45'37"E	331.00

PARCEL 12: TELEGRAPH REAL PROPERTY LLC (SHEET 8)

TEMPORARY EASEMENT
(773 SF = 0.018 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
E9	58+67.10	63.00	LT	F1	E9	S66°14'24"E	13.00
F1	58+67.10	50.00	LT	E9	F2	S23°45'37"W	18.00
F2	58+85.10	63.00	LT	F2	F3	N76°37'55"W	10.68
F3	58+87.03	52.50	LT	F3	F4	S23°45'37"W	209.50
F4	60+96.53	52.50	LT	F4	F5	N65°47'03"W	2.50
F5	60+96.51	50.00	LT	F5	F1	N23°45'37"E	229.41

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 11:44:10 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 74
COUNTY ST. LOUIS
JOB NO. J6S3632
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)

R/W SHEET

PARCEL 13: SOUTHTOWNE HOLDINGS LLC (SHEET 8)

TEMPORARY EASEMENT
(550 SF = 0.013 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
F5	60+96.51	50.00	LT	F5	F4	S65°47'03"E	2.50
F4	60+96.51	52.50	LT	F4	F6	S23°45'37"W	220.11
F6	63+16.64	52.50	LT	F6	F7	N54°25'21"W	2.55
F7	63+16.12	50.00	LT	F7	F5	N23°45'37"E	219.61

PARCEL 14: PINEHURST APARTMENT COMPLEX LLC (SHEET 8)

TEMPORARY EASEMENT
(128 SF = 0.003 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
F6	63+16.64	52.50	LT	F7	F6	S54°25'21"E	2.55
F7	63+16.12	50.00	LT	F6	F8	S23°45'37"W	51.07
F8	63+67.71	52.50	LT	F8	F9	N54°25'21"W	2.55
F9	63+67.19	50.00	LT	F9	F7	N23°45'37"E	51.07

PARCEL 15: HZ PROPS RE LTD (SHEET 8&9)

TEMPORARY EASEMENT
(394 SF = 0.009 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
F8	63+67.71	52.50	LT	F9	F8	N54°25'21"W	2.55
F9	63+67.19	50.00	LT	F8	G1	S12°32'53"W	18.00
G1	63+85.37	56.00	LT	G1	G2	S23°45'37"W	53.00
G2	64+38.37	56.00	LT	G2	G3	N66°14'23"W	6.00
G3	64+38.37	50.00	LT	G3	F9	N23°45'37"E	71.18

NO ACQUESITION: PARCEL 16: THF TELEGRAPH PARCEL S DEVELOPMENT LP (SHEET 10)

TEMPORARY EASEMENT
(200 SF = 0.005 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
G4	3+39.34	98.82	LT	G4	G5	S69°57'07"E	10.00
G5	3+38.70	108.80	LT	G5	G6	S20°02'53"W	20.00
G6	3+58.66	110.09	LT	G6	G7	N69°57'07"W	10.00
G7	3+59.30	100.11	LT	G7	G4	N20°02'53"E	20.00

PARCEL 17: MEERAE LLC (SHEET 17&18)

TEMPORARY EASEMENT
(1545 SF = 0.035 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
G8	43+13.52	50.03	RT	G9	G8	S86°29'31"E	4.50
G9	43+13.51	54.53	RT	G8	H4	S03°30'29"W	322.31
H1	45+67.51	55.11	RT	H4	H3	N84°43'43"W	5.30
H2	45+67.51	57.11	RT	H3	H2	N02°29'50"E	68.16
H3	46+35.66	56.07	RT	H2	H1	S86°29'31"E	2.00
H4	46+35.83	50.77	RT	H1	G9	N03°30'29"E	254.00

PARCEL 18: TS CENTER LLC (SHEET 18)

TEMPORARY EASEMENT
(494 SF = 0.011 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
H7	46+72.16	50.00	LT	H7	H8	S86°37'23"E	5.00
H8	46+72.16	55.00	LT	H8	H9	S03°22'37"W	100.00
H9	47+72.16	55.00	LT	H9	I1	N59°20'44"W	5.63
I1	47+69.59	50.00	LT	I1	H7	N03°22'37"E	97.42

PARCEL 19: BHAGATJI LLC (SHEET 18)

TEMPORARY EASEMENT
(386 SF = 0.009 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
I1	47+69.59	50.00	LT	I1	H9	S59°20'44"E	5.63
H9	47+72.16	55.00	LT	H9	I2	S03°22'37"W	75.89
I2	48+48.06	55.00	LT	I2	I3	N86°37'23"W	5.00
I3	48+48.06	50.00	LT	I3	I1	N03°22'37"E	78.47

PARCEL 20: RJCA LLC (SHEET 18)

TEMPORARY EASEMENT
(830 SF = 0.019 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
H3	46+35.66	56.07	RT	H3	H4	S84°43'43"E	5.30			
H4	46+35.83	50.77	RT	H4	H5	S03°30'29"W	86.69			
H5	47+22.52	50.97	RT	H5	H6	N86°29'31"W	9.00			
H6	47+22.50	59.97	RT	H6	H3	N05°56'57"E	86.93			
I4	47+72.09	64.95	RT	I7	I6	S12°43'19"E	7.00			
I5	47+67.32	70.07	RT	I6	I5	S61°48'44"W	24.00			
I6	47+79.89	90.52	RT	I5	I4	N43°39'14"W	7.00			
I7	47+86.61	88.58	RT	I4	I7			28.07	52	S61°48'44"W 27.73'

PARCEL 21: THOMAS R. GREEN JR. FAMILY LLC (SHEET 18&19)

TEMPORARY EASEMENT
(1570 SF = 0.036 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
I8	50+19.75	50.00	RT	I9	I8	S76°46'35"E	7.10
I9	50+18.54	57.00	RT	I8	J3	S03°23'32"W	222.91
J1	52+28.54	57.00	RT	J3	J2	N70°44'49"W	9.36
J2	52+40.11	59.00	RT	J2	J1	N13°11'57"E	11.74
J3	52+42.67	50.00	RT	J1	I9	N03°23'32"E	210.00

PARCEL 22: QUIKTRIP CORP. (SHEET 19)

TEMPORARY EASEMENT
(169 SF = 0.004 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
J2	52+40.11	59.00	RT	J2	J3	S70°44'49"E	9.36
J3	52+42.67	50.00	RT	J3	J4	S03°23'32"W	17.44
J4	52+60.11	50.00	RT	J4	J5	N86°36'28"W	9.00
J5	52+60.11	59.00	RT	J5	J2	N03°23'32"E	20.00

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
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ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	75

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

R/W SHEET

PARCEL 23: GREIF PROPERTIES LLC (SHEET 20)

TEMPORARY EASEMENT
(256 SF = 0.006 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
J6	56+81.04	50.00	LT	J6	J7	S86°40'51"E	7.00			
J7	56+81.04	57.00	LT	J7	J8	S10°01'20"E	26.24			
J8	57+06.79	63.01	LT	J8	J9	N86°38'41"W	13.01			
J9	57+06.73	50.00	LT	J9	J6			25.53	7589.44	N03°13'22"E 25.53'

PARCEL 24 VOID: LUONG SAINT LOUIS LLC (SHEET 20)

TEMPORARY EASEMENT
(1129 SF = 0.026 AC) VOID

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
J8	57+06.79	63.01	LT	J9	J8	S86°38'41"E	13.01			
J9	57+06.73	50.00	LT	J8	K1	S03°06'42"W	94.82			
K1	58+02.39	62.44	LT	K1	K2	N38°35'20"W	18.95			
K2	57+88.00	50.00	LT	K2	J9			80.73	7589.44	N02°49'18"E 80.73'

PARCEL 25: RAYMOND & DANA SMETANA (SHEET 20)

TEMPORARY EASEMENT
(800 SF = 0.018 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
K3	58+87.00	50.00	LT	K3	K4	N43°27'27"E	13.00			
K4	58+77.21	58.64	LT	K4	K5	S01°16'26"W	94.23			
K5	59+72.17	59.00	LT	K5	K6	S89°42'54"W	9.00			
K6	59+72.40	50.00	LT	K6	K3			84.84	7589.44	N01°27'15"E 84.84

PARCEL 26: DANIEL AMBROSE (SHEET 20)

TEMPORARY EASEMENT
(974 SF = 0.022 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
K5	59+72.17	59.00	LT	K6	K5	N89°42'54"E	9.00			
K6	59+72.40	50.00	LT	K5	K7	S00°32'44"W	104.74			
K7	60+77.73	59.35	LT	K7	K8	S89°48'19"W	9.35			
K8	60+77.82	50.00	LT	K8	K6			104.74	7589.44	N00°44'19"E 104.74'

PARCEL 27: VOGEL GROUP LLC (SHEET 20&21)

TEMPORARY EASEMENT
(1980 SF = 0.045 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
K7	60+77.73	59.35	LT	K8	K7	N89°48'19"E	9.35			
K8	60+77.82	50.00	LT	K7	K9	S00°28'43"E	130.00			
K9	62+08.76	60.10	LT	K9	L1	S14°04'19"W	20.00			
L1	62+28.24	55.00	LT	L1	L2	S00°58'03"E	90.00			
L2	63+18.45	55.00	LT	L2	L3	S24°34'18"E	12.5			
L3	63+29.91	60.00	LT	L3	L4	S81°43'19"W	10.08			
L4	63+31.19	50.00	LT	L4	L5	N01°00'09"W	73.94			
L5	62+57.25	50.00	LT	L5	K8			178.26	7589.44	N00°19'47"W 178.25'

PARCEL 28: PAUL KNUBLEY (SHEET 21)

TEMPORARY EASEMENT
(1304 SF = 0.030 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
L3	63+29.91	60.00	LT	L4	L3	N81°43'19"E	10.08
L4	63+31.19	50.00	LT	L3	L6	S01°00'09"E	39.00
L6	63+68.91	60.00	LT	L6	L7	S88°59'52"W	10.00
L7	63+68.91	50.00	LT	L7	L4	N01°00'09"W	37.72
L8	63+84.02	50.00	LT	L8	L9	N88°59'52"E	6.00
L9	63+84.02	56.00	LT	L9	M1	S04°19'48"E	103.00
M1	64+86.85	61.98	LT	M1	M2	N87°35'41"W	12.00
M2	64+86.14	50.00	LT	M2	L8	N01°00'09"W	102.11

PARCEL 29: ST. LOUIS COUNTY CATHOLIC CHURCH REAL ESTATE (SHEET 21&22)

TEMPORARY EASEMENT
(5932 SF = 0.136 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
M1	64+86.85	61.98	LT	M2	M1	S87°35'41"E	12.00
M2	64+86.14	50.00	LT	M1	M3	S04°18'47"E	35.00
M3	65+21.79	64.00	LT	M3	M4	S03°41'26"W	110.00
M4	66+31.42	55.00	LT	M4	M5	S01°00'09"E	100.00
M5	67+31.42	55.00	LT	M5	M6	S67°26'45"E	12.00
M6	67+36.22	66.00	LT	M6	M7	S01°00'09"E	56.00
M7	67+92.22	66.00	LT	M7	M8	S61°16'32"W	12.43
M8	67+98.00	55.00	LT	M8	M9	S01°00'09"E	208.00
M9	70+06.00	55.00	LT	M9	N1	S88°59'52"W	5.00
N1	70+06.00	50.00	LT	N1	M2	N01°00'09"W	519.86
N2	70+51.00	50.00	LT	N2	N3	N88°59'51"E	5.00
N3	70+51.00	55.00	LT	N3	N4	S01°00'09"E	103.00
N4	71+54.00	55.00	LT	N4	N5	S45°04'54"E	23.00
N5	71+70.52	71.00	LT	N5	N6	S01°00'09"E	55.00
N6	72+25.52	71.00	LT	N6	N7	S88°59'51"W	21.00
N7	72+25.52	50.00	LT	N7	N2	N01°00'09"W	174.52

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ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	76

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

R/W SHEET

PARCEL 30: FIRST COMMUNITY CREDIT UNION (SHEET 21)

TEMPORARY EASEMENT
(582 SF = 0.013 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
N8	63+33.64	50.00	RT	N8	O2	S01°0'09"E	23.71
N9	63+32.34	64.00	RT	O2	O1	S88°59'51"W	14.00
O1	63+57.34	64.00	RT	O1	N9	N01°00'09"W	25.00
O2	63+57.34	50.00	RT	N9	N8	S85°43'14"E	14.07
O3	65+95.49	50.00	RT	O3	O6	S01°00'09"E	17.23
O4	65+95.49	58.00	RT	O6	O5	S88°59'51"W	20.00
O5	66+12.73	70.00	RT	O5	O4	N33°50'51"E	21.00
O6	66+12.73	50.00	RT	O4	O3	N88°59'51"E	8.00

PARCEL 31: BILLY FAULKNER (SHEET 21&22)

TEMPORARY EASEMENT
(1655 SF = 0.038 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
O5	66+12.73	70.00	RT	O5	O6	N88°59'51"E	20.00
O6	66+12.73	50.00	RT	O6	O7	S01°00'09"E	70.26
O7	66+82.99	50.00	RT	O7	P5	S44°07'18"W	42.15
O8	66+98.67	70.00	RT	P5	O9	S88°59'51"W	4.25
O9	67+12.73	84.12	RT	O9	O8	N44°07'18"E	19.92
P5	67+12.73	79.86	RT	O8	O5	N01°00'09"W	85.94

PARCEL 32: HODITS FAMILY TRUST (SHEET 22)

TEMPORARY EASEMENT
(86 SF = 0.002 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
O9	67+12.73	84.12	RT	O9	P1	S44°07'18"W	9.92
P1	67+19.73	91.15	RT	P1	P2	S88°59'51"W	16.00
P2	67+19.73	107.15	RT	P2	P3	S01°00'09"E	3.00
P3	67+22.73	107.15	RT	P3	P4	N88°59'51"E	17.24
P4	67+22.73	89.91	RT	P4	P5	N44°07'18"E	14.17
P5	67+12.73	79.86	RT	P5	O9	S88°59'51"W	4.25

PARCEL 33: AUTOZONE INC. (SHEET 22)

TEMPORARY EASEMENT
(152 SF = 0.003 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
P6	71+97.16	50.00	RT	P6	P7	S88°59'51"W	10.00
P7	71+97.16	60.00	RT	P7	P8	S01°00'09"E	15.00
P8	72+12.16	60.00	RT	P8	P9	S88°53'11"E	10.01
P9	72+12.53	50.00	RT	P9	P6	N01°00'09"W	15.37

PARCEL 34: OAKVILLE ICE CREAM LLC (SHEET 23)

TEMPORARY EASEMENT
(105 SF = 0.002 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
Q8	75+71.12	81.04	LT	Q8	Q9	N55°23'40"E	7.00
Q9	75+67.25	86.87	LT	Q9	R1	S34°36'20"E	15.00
R1	75+79.74	95.17	LT	R1	R2	S55°23'40"W	7.00
R2	75+83.62	89.35	LT	R2	Q8	N34°36'20"W	15.01

PARCEL 35: CHESTNUT PARK PLAZA LLC (SHEET 23)

TEMPORARY EASEMENT
(1885 SF = 0.043 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
P8	72+12.16	60.00	RT	P8	P9	S88°53'11"E	10.01
P9	72+12.53	50.00	RT	P9	Q4	S01°00'09"E	250.03
Q1	72+57.16	60.00	RT	Q4	Q3	N88°53'11"W	7.00
Q2	72+57.16	57.00	RT	Q3	Q2	N01°00'09"W	205.14
Q3	74+62.30	57.00	RT	Q2	Q1	S88°59'51"W	3.00
Q4	74+62.56	50.00	RT	Q1	P8	N01°00'09"W	45.00

PARCEL 36: ALEY LLC (SHEET 23)

TEMPORARY EASEMENT
(605 SF = 0.014 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
Q4	74+62.56	50.00	RT	Q5	Q4	S88°53'11"E	10.00
Q5	74+62.19	60.00	RT	Q4	Q7	S01°00'09"E	62.17
Q6	75+21.19	60.00	RT	Q7	Q6	N71°31'18"W	10.60
Q7	75+24.72	50.00	RT	Q6	Q5	N01°00'09"W	59.00

PARCEL 37: OTTO PARTNERSHIP (SHEET 23)

TEMPORARY EASEMENT
(756 SF = 0.014 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
R3	76+70.41	186.44	RT	R3	R4	N11°03'33"E	5.00
R4	76+65.52	185.39	RT	R4	R5	S78°56'27"E	104.56
R5	76+87.37	83.14	RT	R5	R6	S44°18'27"E	45.62
R6	77+20.56	51.85	RT	R6	R7	S01°13'23"E	7.32
R7	77+27.88	51.82	RT	R7	R8	N44°18'27"W	49.41
R8	76+91.93	85.71	RT	R8	R3	N78°56'27"W	103.00

PARCEL 38: UNION ELECTRIC COMPANY (SHEET 24)

TEMPORARY EASEMENT
(1303 SF = 0.030 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
R9	81+74.53	65.00	RT	S1	R9	N89°16'24"E	13.00			
S1	81+74.56	78.00	RT	R9	S3			100.56	22853.31	S00°29'17"E 100.56'
S2	82+74.90	77.92	RT	S3	S2	N88°13'32"W	12.93			
S3	82+75.38	65.00	RT	S2	S1	N00°32'04"W	100.00			

PARCEL 39: MEHLVILLE FIRE PROTECTION DISTRICT (SHEET 25)

TEMPORARY EASEMENT
(187 SF = 0.004 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
T2	88+05.44	50.00	LT	T2	T3	N00°53'12"E	7.20
T3	87+98.24	50.00	LT	T3	T4	S43°05'26"E	40.00
T4	88+27.03	77.77	LT	T4	T5	S46°54'34"W	5.00
T5	88+30.50	74.18	LT	T5	T2	N43°05'26"W	34.82

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DISTRICT	SHEET NO.
SL	77

COUNTY
ST. LOUIS

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

R/W SHEET

PARCEL 40: STEVE REINHOLD (SHEET 24&25)

TEMPORARY EASEMENT
(1724 SF = 0.040 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
S2	82+74.90	77.92	RT	S2	S3	S88°13'32"E	12.93			
S3	82+75.38	65.00	RT	S3	S4	S00°05'07"E	220.67	220.67	22853.31	S00°05'07"E 220.67'
S4	84+96.68	65.00	RT	S4	S5	N89°07'33"W	6.89			
S5	84+96.60	71.89	RT	S5	S6	N00°56'14"E	100.68			
S6	83+95.62	70.36	RT	S6	S2	N03°48'30"W	120.57			

PARCEL 41: US BANK NA (SHEET 25)

TEMPORARY EASEMENT
(771 SF = 0.018 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
S7	85+36.15	79.00	RT	S7	S8	S89°42'36"E	14.00			
S8	85+36.15	65.00	RT	S8	S9	S00°21'33"W	55.03	55.03	22853.31	S00°21'33"W 55.03'
S9	85+91.34	65.00	RT	S9	T1	N89°34'19"W	14.00			
T1	85+91.34	79.00	RT	T1	S7	N00°21'33"E	55.00			

PARCEL 42: DARREL D. CLIMER FAMILY TRUST (SHEET 26)

TEMPORARY EASEMENT
(1170 SF = 0.027 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
T6	89+65.38	50.00	LT	T6	T7	N46°54'34"E	16.68
T7	89+53.80	62.00	LT	T7	T8	S00°53'12"W	103.70
T8	90+57.51	62.00	LT	T8	T9	N84°51'00"W	12.03
T9	90+56.61	50.00	LT	T9	T6	N00°53'12"E	91.23

PARCEL 43:AC TELEGRAPH LLC (SHEET 26)

TEMPORARY EASEMENT
(1700 SF = 0.039 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
T9	90+56.61	50.00	LT	T9	U1	S84°51'00"E	17.05
U1	90+57.88	67.00	LT	U1	U2	S00°53'12"W	100.00
U2	91+57.88	67.00	LT	U2	U3	N84°51'00"W	17.05
U3	91+56.61	50.00	LT	U3	T9	N00°53'12"E	100.00

PARCEL 44: ST. PAUL'S GERMAN EVANGELICAL CHURCH (SHEET 26&27)

TEMPORARY EASEMENT
(3070 SF = 0.070 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
U3	91+56.61	50.00	LT	U3	U4	S84°51'00"E	21.06			
U4	91+58.18	71.00	LT	U4	U5	S00°53'12"W	126.82			
U5	92+85.00	71.00	LT	U5	U6	N89°06'48"W	21.00			
U6	92+85.00	50.00	LT	U6	U3	N00°53'12"E	128.39			
U7	97+05.91	50.00	LT	U7	U8	S82°54'10"E	15.00			
U8	97+05.91	65.00	LT	U8	U9	S07°29'18"W	26.00			
U9	97+31.34	64.94	LT	U9	V1	N83°43'10"W	14.94			
V1	97+31.68	50.00	LT	V1	U7			26.21	2914.79	N07°21'17"E 26.21'

PARCEL 45: COPPERGATE SQUARE LLC (SHEET 26)

TEMPORARY EASEMENT
(433 SF = 0.010 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
V2	92+61.48	60.00	RT	V2	V6	S00°53'12"W	36.12
V3	92+61.48	72.00	RT	V6	V4	N89°08'26"W	12.00
V4	92+97.59	72.00	RT	V4	V3	N00°52'53"E	36.11
V6	92+97.59	60.00	RT	V3	V2	S89°06'48"E	12.00

PARCEL 46: MAGNA BANK OF MISSOURI (SHEET 26&27)

TEMPORARY EASEMENT
(1295 SF = 0.030 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
V4	92+97.59	72.00	RT	V4	V6	S89°08'26"E	12.00
V6	92+97.58	60.00	RT	V6	V8	S00°53'12"W	97.81
V8	93+95.39	60.00	RT	V8	W3	S00°44'39"W	10.08
W2	94+05.74	71.97	RT	W3	W2	N89°06'48"W	12.01
W3	94+05.69	59.96	RT	W2	V4	N00°52'53"E	107.89

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R/W SHEET

PARCEL 47: COLFER HOLDINGS LLC (SHEET 27)

TEMPORARY EASEMENT
(110 SF = 0.003 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
U9	97+31.34	64.94	LT	V1	U9	S83°43'10"E	14.94			
V1	97+31.68	50.00	LT	U9	W4	S07°29'18"W	3.00			
W4	97+34.27	64.95	LT	W4	W5	N85°23'29"W	14.10			
W5	97+35.01	50.87	LT	W5	W6	S07°04'27"W	49.20			
W6	97+83.33	51.80	LT	W6	W7	N81°21'16"W	1.80			
W7	97+83.33	50.00	LT	W7	V1			52.56	2914.79	N08°07'44"E 52.56'

PARCEL 48: SPRINT ENERGY LLC (SHEET 28)

TEMPORARY EASEMENT
(257 SF = 0.006 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
W8	102+84.00	58.48	LT	W8	W9	N58°36'34"E	10.00			
W9	102+77.06	65.68	LT	W9	X1	S42°43'08"E	22.00			
X1	102+89.59	83.76	LT	X1	X2	S35°57'11"W	10.00			
X2	102+98.77	79.79	LT	X2	W8			26.10	66.00	N42°43'08"W 25.93'

PARCEL 49: STOCHL LTD LLC (SHEET 28)

TEMPORARY EASEMENT
(285 SF = 0.007 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
X3	103+89.79	67.74	LT	X3	X4	S28°08'59"E	9.00			
X4	103+96.61	73.60	LT	X4	X5	S44°32'08"W	25.00			
X5	104+17.81	60.35	LT	X5	X6	N62°46'44"W	9.00			
X6	104+15.53	51.65	LT	X6	X2			30.82	51.00	N44°32'08"E 30.36'

PARCEL 50: CAPLACO TWENTY THREE INC. , ET AL (SHEET 30&31)

TEMPORARY EASEMENT
(4292 SF = 0.099 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
X7	110+50.28	50.00	LT	X7	X8	S77°28'32"E	8.00			
X8	110+50.28	58.00	LT	X8	X9	S12°31'28"W	23.00			
X9	110+73.28	58.00	LT	X9	Y1	S49°55'53"E	13.53			
Y1	110+79.54	70.00	LT	Y1	Y2	S12°11'25"W	99.00			
Y2	111+78.53	70.58	LT	Y2	Y3	S56°50'51"W	18.00			
Y3	111+91.41	58.00	LT	Y3	Y4	S12°31'28"W	30.00			
Y4	112+21.41	58.00	LT	Y4	Y5	N77°57'14"W	8.00			
Y5	112+21.48	50.00	LT	Y5	X7	N12°31'28"E	171.20			
Z9	116+01.44	50.00	LT	Z9	AA1	S84°01'23"E	23.00			
AA1	116+01.44	73.00	LT	AA1	AA2	S05°18'36"W	65.00			
AA2	116+68.14	73.00	LT	AA2	AA3	N85°21'25"W	23.00			
AA3	116+68.14	50.00	LT	AA3	Z9			65.54	2814.79	N05°18'36"E 65.54'
AA7	117+31.89	50.00	LT	AA7	AA8	S86°37'55"E	8.00			
AA8	117+31.89	58.00	LT	AA8	AI6	S02°59'55"W	10.00			
AI6	117+42.09	58.05	LT	AI6	AI7	N83°47'49"W	8.06			
AI7	117+41.66	50.00	LT	AI7	AA7			9.60	2814.79	N03°16'13"E 9.60'

PARCEL 51: GUILSIN PROPERTIES LLC (SHEET 30)

TEMPORARY EASEMENT
(259 SF = 0.006 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
Y6	110+85.40	68.00	RT	Y6	Y7	S77°28'32"E	8.00
Y7	110+85.40	60.00	RT	Y7	Y8	S12°31'28"W	18.85
Y8	111+04.24	60.00	RT	Y8	Y9	S51°43'54"W	12.59
Y9	111+14.00	67.96	RT	Y9	Z1	N89°05'32"W	5.00
Z1	111+15.00	72.85	RT	Z1	Y6	N21°50'07"E	30.00

PARCEL 52: OAKVILLE BP INC. (SHEET 30)

TEMPORARY EASEMENT
(1360 SF = 0.031 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
Z2	111+81.99	59.69	RT	Z2	Z3	S38°17'25"E	12.50			
Z3	111+89.88	50.00	RT	Z3	Z4	S12°31'28"W	84.18			
Z4	112+74.07	50.00	RT	Z4	Z5			101.89	2914.79	S11°31'23"W 101.88'
Z5	113+74.21	50.00	RT	Z5	Z6	N89°05'09"W	8.00			
Z6	113+75.52	57.89	RT	Z6	Z7	N10°34'50"E	55.00			
Z7	113+21.61	58.32	RT	Z7	Z8	S78°25'35"E	4.00			
Z8	113+21.61	54.32	RT	Z8	Z2	N10°10'28"E	140.64			

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PARCEL 53: KATON INVESTMENT CO. (SHEET 30&31)

TEMPORARY EASEMENT
(461 SF = 0.011 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
Z5	113+74.21	50.00	RT	Z6	Z5	S89°05'09"E	8.00			
Z6	113+75.52	57.89	RT	Z5	AA4			57.10	2914.79	S09°57'37"W 57.10'
Z10	114+30.33	51.30	RT	AA4	Z10	N80°36'03"W	1.30			
Z11	113+90.54	51.30	RT	Z10	Z11	N09°47'49"E	40.50			
Z12	113+77.94	52.59	RT	Z11	Z12	N04°33'45"E	12.90			
Z13	113+78.46	57.77	RT	Z12	Z13	N85°24'16"W	5.20			
Z14	115+79.05	54.60	RT	Z13	Z6	N08°09'17"E	3.00			
Z15	115+79.05	50.00	RT	Z14	Z15	S83°34'31"E	4.60			
Z16	116+34.12	50.00	RT	Z15	Z16			56.03	2914.79	S05°52'26"W 56.03'
AA4	114+30.33	50.00	RT	Z16	AB2	S08°18'40"W	16.02			
AB2	116+49.84	50.88	RT	AB2	AB3	N84°37'16"W	4.98			
AB3	116+49.81	55.86	RT	AB3	Z14	N06°42'57"E	72.13			

PARCEL 54: HURLBUT INVESTMENTS (SHEET 31)

TEMPORARY EASEMENT
(391 SF = 0.009 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
AI6	117+42.09	58.05	LT	AI7	AI6	S83°47"49"E	8.06			
AI7	117+41.66	50.00	LT	AI6	AA9	S02°43'45"W	48.00			
AA9	117+91.09	58.00	LT	AA9	AB1	N87°48'57"W	8.00			
AB1	117+91.09	50.00	LT	AB1	AA7			48.57	2814.79	N02°40'42"E 48.56'

PARCEL 55: 5661 TELEGRAPH RD LLC (SHEET 31)

TEMPORARY EASEMENT
(276 SF = 0.006 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AB2	116+49.84	50.88	RT	AB2	AB6	S08°18'40"W	38.40
AB3	116+49.81	55.86	RT	AB6	AB5	N85°44'38"W	6.00
AB4	116+50.66	59.34	RT	AB5	AB4	N04°37'32"'E	37.58
AB5	116+87.48	59.34	RT	AB4	AB3	N80°57'52"E	3.59
AB6	116+87.48	53.34	RT	AB3	AB2	S84°37'16"E	4.98

PARCEL 56: JEG LAND GROUP LLC (SHEET 31)

TEMPORARY EASEMENT
(1519 SF = 0.035 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AB7	118+16.19	57.70	RT	AB7	AI8	S05°40'13"E	25.87
AI8	118+41.37	54.50	RT	AI8	AB8	S05°40'37"E	37.70
AB8	118+78.80	50.00	RT	AB8	AB9	S01°10'43"W	37.20
AB9	119+16.00	50.00	RT	AB9	AC1	S07°58'03"W	6.19
AC1	119+22.15	50.73	RT	AC1	AC2	N88°49'17"W	8.00
AC2	119+22.15	58.73	RT	AC2	AC3	N00°33'48"W	20.00
AC3	119+02.16	59.34	RT	AC3	AC4	N88°49'17"W	11.50
AC4	119+02.16	70.84	RT	AC4	AC5	N01°10'43"E	53.00
AC5	118+49.16	70.84	RT	AC5	AB7	N22°46'58"E	36.00

PARCEL 57: MAURICE ANDERSON (SHEET 32)

TEMPORARY EASEMENT
(181 SF = 0.004 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AC6	121+28.25	67.61	LT	AC6	AC7	N46°00'52"E	10.00
AC7	121+21.16	74.66	LT	AC7	AC8	S33°56'26"E	23.00
AC8	121+39.98	87.89	LT	AC8	AC9	S46°02'38"W	6.00
AC9	121+44.23	83.66	LT	AC9	AC6	N43°57'22"W	22.64

PARCEL 58: NEW ENGLAND TOWN PLAT 1 TRUSTEES (SHEET 32)

TEMPORARY EASEMENT
(383 SF = 0.009 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AD1	122+60.67	60.00	LT	AD1	AD2	N46°02'45"E	14.14
AD2	122+50.65	69.97	LT	AD2	AD3	S01°10'43"W	43.79
AD3	122+94.45	69.97	LT	AD3	AD4	N84°43'04"W	10.00
AD4	122+93.73	60.00	LT	AD4	AD1	N01°10'43"E	33.06

PARCEL 59: GOSPEL CHURCH TRUSTEES (SHEET 32)

TEMPORARY EASEMENT
(723 SF = 0.017 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AD5	124+50.47	60.00	LT	AD5	AD6	S84°45'33"E	9.02
AD6	124+51.11	69.00	LT	AD6	AD7	S01°10'43"W	80.00
AD7	125+31.11	69.00	LT	AD7	AD8	N88°49'17"W	9.00
AD8	125+31.11	60.00	LT	AD8	AD5	N01°10'43"E	80.64

PARCEL 60: GARY WRILEY (SHEET 33)

TEMPORARY EASEMENT
(574 SF = 0.013 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AD9	130+43.68	60.00	LT	AD9	AE1	S84°55'02"E	4.00
AE1	130+43.96	64.00	LT	AE1	AE2	S01°10'43"W	36.00
AE2	130+79.96	64.00	LT	AE2	AE3	S05°50'30"W	32.00
AE3	131+11.85	61.40	LT	AE3	AE4	S34°42'42"W	13.41
AE4	131+23.03	53.99	LT	AE4	AE5	S01°10'43"W	35.00
AE5	131+58.03	53.99	LT	AE5	AE6	N84°49'23"W	4.00
AE6	131+57.75	50.00	LT	AE6	AE7	N01°10'43"E	37.75
AE7	131+20.00	50.00	LT	AE7	AE8	N15°12'53"E	41.23
AE8	130+80.00	60.00	LT	AE8	AD9	N01°10'43"E	36.32

PARCEL 61: 5757 TELEGRAPH RD LLC (SHEET 33)

TEMPORARY EASEMENT
(717 SF = 0.016 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AE9	126+82.75	60.00	RT	AE9	AF3	S01°10'43"W	47.69
AF1	126+82.75	70.00	RT	AF3	AF2	S89°55'50"W	20.00
AF2	127+30.87	80.00	RT	AF2	AF1	N12°54'43"E	49.15
AF3	127+30.44	60.00	RT	AF1	AE9	S88°49'17"E	10.00

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PARCEL 62: RICHARD C. HERZOG, ET AL (SHEET 33)

TEMPORARY EASEMENT
(864 SF = 0.020 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AF2	127+30.87	80.00	RT	AF2	AF3	N89°55'50"E	20.00
AF3	127+30.44	60.00	RT	AF3	AF7	S01°10'43"W	100.12
AF4	127+45.87	79.67	RT	AF7	AF6	N89°08'10"W	5.00
AF5	127+64.82	65.00	RT	AF6	AF5	N01°10'43"E	65.76
AF6	128+30.59	65.00	RT	AF5	AF4	N36°33'38"W	23.97
AF7	128+30.56	60.00	RT	AF4	AF2	N00°04'10W	15.00

PARCEL 63: NERMIN HALILOVIC (SHEET 33)

TEMPORARY EASEMENT (TRACT 1)
(566 SF = 0.013 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AF6	128+30.59	65.00	RT	AF6	AF7	S89°08'10"E	5.00
AF7	128+30.56	60.00	RT	AF7	AF8	S01°10'43"W	110.29
AF8	129+40.00	60.00	RT	AF8	AF9	S41°55'31"W	7.66
AF9	129+45.80	65.00	RT	AF9	AF6	N01°10'43"E	116.06

TEMPORARY EASEMENT (TRACT 2)
(1,076 SF = 0.025 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AF6	128+30.59	65.00	RT	AF6	AF9	S01°10'43"W	116.06
AF9	129+45.80	65.00	RT	AF9	AF10	S41°55'31"W	16.00
AF10	129+57.93	75.44	RT	AF10	AF11	N01°10'43"E	90.00
AF11	128+68.77	75.44	RT	AF11	AF6	N16°28'31"E	39.59

PARCEL 64: DAVID & LINDA KOSTE (SHEET 33&34)

TEMPORARY EASEMENT
(339 SF = 0.008 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AE5	131+58.03	53.99	LT	AE6	AE5	S84°49'23"E	4.00
AE6	131+57.75	50.00	LT	AE5	AG2	S01°10'43"W	84.97
AG1	132+42.72	50.00	LT	AG2	AG1	N84°49'23"W	4.00
AG2	132+43.00	53.99	LT	AG1	AE6	N01°10'43"E	84.97

PARCEL 65: JPL HOLDINGS LLC (SHEET 34)

TEMPORARY EASEMENT
(213 SF = 0.005 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AG1	132+42.72	50.00	LT	AG1	AG2	S84°49'23"E	4.00
AG2	132+43.00	53.99	LT	AG2	AG3	S01°10'43"W	55.33
AG3	132+98.33	53.99	LT	AG3	AG4	N41°51'53"W	5.85
AG4	132+94.06	50.00	LT	AG4	AG1	N01°10'43"E	51.34

PARCEL 66: MEHLVILLE SCHOOL DISTRICT (SHEET 35&36)

TEMPORARY EASEMENT
(7511 SF = 0.172 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
AG5	139+70.01	60.00	LT	AG5	AG6	N48°00'59"E	15.00			
AG6	139+59.41	70.56	LT	AG6	AG7	S03°33'13"E	210.00			
AG7	141+68.45	97.33	LT	AG7	AG8	S10°39'51"W	65.00			
AG8	142+33.54	89.71	LT	AG8	AG9	S45°35'55"W	37.00			
AG9	142+61.26	65.00	LT	AG9	AH1	N85°10'00"W	5.00			
AH1	142+61.16	60.00	LT	AH1	AH2			112.38	11399.16	N03°54'52"E 112.38
AH2	141+48.19	60.00	LT	AH2	AG5			177.17	11519.16	N03°45'23"E 177.17'

PARCEL 67: CAROL A. TERBROCK REVOCABLE TRUST (SHEET 36)

TEMPORARY EASEMENT
(144 SF = 0.003 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)
AH3	144+99.64	58.88	RT	AH3	AH6	S02°03'01"W	24.00
AH4	144+99.68	64.88	RT	AH6	AH5	N87°56'59"W	6.00
AH5	145+23.54	64.75	RT	AH5	AH4	N02°03'01"E	24.00
AH6	145+23.52	58.75	RT	AH4	AH3	S87°56'59"E	6.00

PARCEL 68: MIHAL JEVIC INC. (SHEET 41)

TEMPORARY EASEMENT
(740 SF = 0.017 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
AH7	171+13.77	71.98	RT	AH7	AH8	S87°21'34"E	12.00			
AH8	171+12.96	60.00	RT	AH8	AH9			105.84	894.93	S09°36'19"W 105.78'
AH9	172+25.90	60.00	RT	AH9	AH7	N03°05'29"E	105.00			

PARCEL 69: 5 LLC (SHEET 42)

TEMPORARY EASEMENT
(367 SF = 0.008 AC)

POINT	STA.	OFF. (FT)	LOCATION	POINT	POINT	BEARING	LENGTH (FT)	CURVE LENGTH (FT)	RADIUS (FT)	CHORD
AI1	179+15.07	62.76	LT	AI1	AI2	S35°39'23"E	12.00			
AI2	179+15.07	74.75	LT	AI2	AI3	S55°32'29"W	31.00			
AI3	179+43.82	74.57	LT	AI3	AI4	N33°55'53"W	12.00			
AI4	179+43.82	62.57	LT	AI4	AI1			30.64	1014.93	N55°32'43"E 30.64'

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J6S3632

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)

R/W SHEET

PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 100 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 100

TIE SKETCH

NORTH

NORTH ARROW

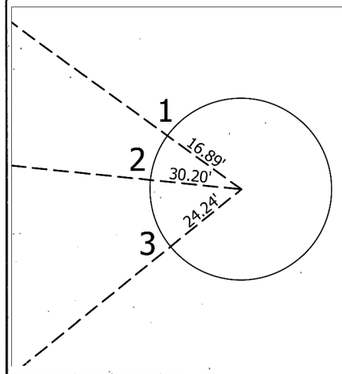
① AT&T HANDHOLE

② WATER METER

③ WATER METER

④ _____

⑤ _____



PT# 101 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 101

TIE SKETCH

NORTH

NORTH ARROW

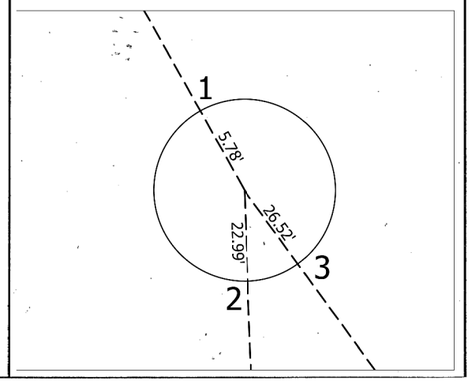
① STORM SEWER MANHOLE LID

② STORM SEWER MANHOLE LID

③ CHAIN LINK FENCE CORNER

④ _____

⑤ _____



PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 102 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 102

TIE SKETCH

NORTH

NORTH ARROW

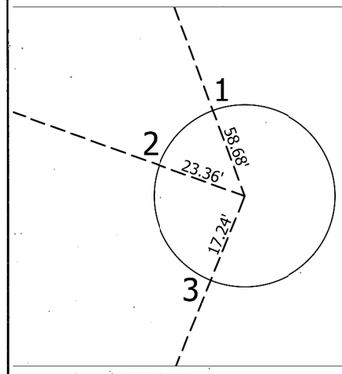
① TELEPHONE PEDESTAL

② WATER METER

③ FIRE HYDRANT

④ _____

⑤ _____



PT# 103 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 103

TIE SKETCH

NORTH

NORTH ARROW

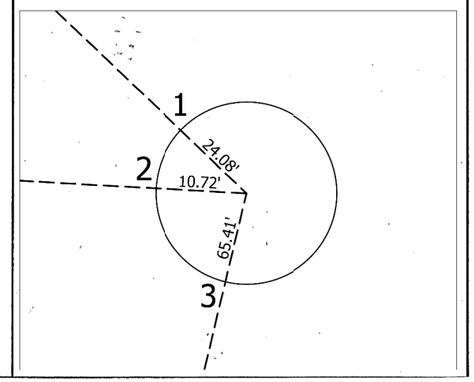
① MAG NAIL IN SIDEWALK

② DOWNGUY

③ MAG NAIL IN DRIVEWAY SEAM

④ _____

⑤ _____



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/06/2025 3:38:56 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	82

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 104 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 104

TIE SKETCH

NORTH

NORTH ARROW

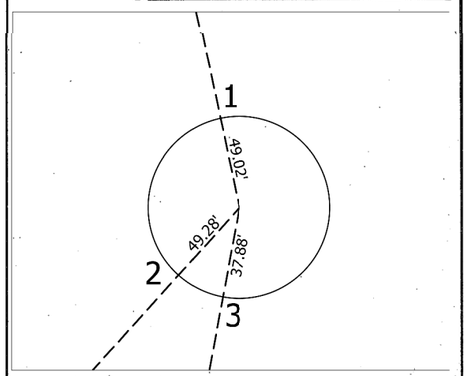
① LIGHT POLE

② NE CORNER OF BUILDING BUMPOUT

③ NE CORNER OF BUILDING

④ _____

⑤ _____



PT# _____ COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

TIE SKETCH

① _____

② _____

③ _____

④ _____

⑤ _____

NORTH ARROW

PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 110 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 110

TIE SKETCH

NORTH

NORTH ARROW

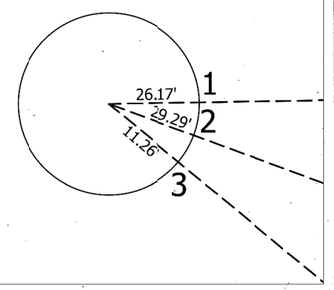
① FIRE HYDRANT

② WATER VALVE

③ DOWNGUY

④ _____

⑤ _____



PT# 111 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 111

TIE SKETCH

NORTH

NORTH ARROW

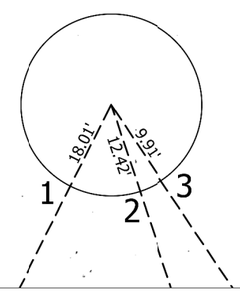
① SPEED LIMIT SIGN

② BOLLARD

③ BOLLARD

④ _____

⑤ _____



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/06/2025 3:39:25 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	83

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 112 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

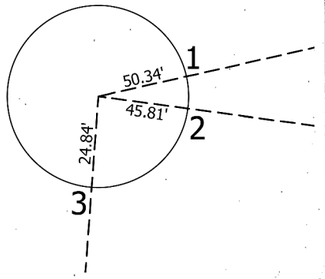
STAMPED: CP 112

TIE SKETCH

NORTH

NORTH ARROW

1. CLEANOUT
2. CENTER OF MANHOLE LID
3. SPEED LIMIT SIGN
4.
5.



PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 113 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

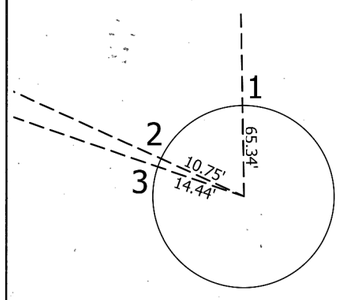
STAMPED: CP 113

TIE SKETCH

NORTH

NORTH ARROW

1. GATE VALVE
2. CORNER OF INLET GRATE
3. SW CORNER OF INLET GRATE
4.
5.



PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 114 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

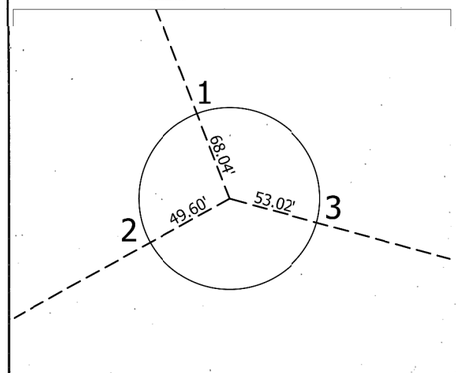
STAMPED: CP 114

TIE SKETCH

NORTH

NORTH ARROW

1. UTILITY POLE
2. NW CORNER OF INLET GRATE
3. LIGHT POLE
4.
5.



PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 115 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

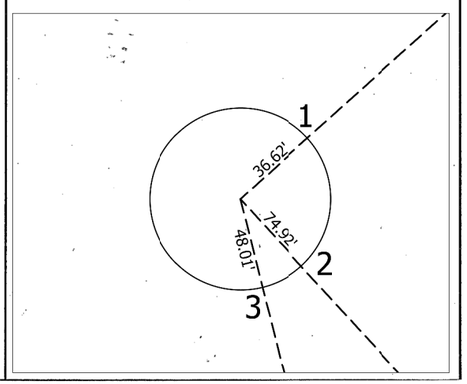
STAMPED: CP 115

TIE SKETCH

NORTH

NORTH ARROW

1. LIGHT POLE
2. LIGHT POLE
3. LIGHT POLE
4.
5.



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/06/2025 3:35:33 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	84

COUNTY
ST. LOUIS

JOB NO.
J6S362

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 SHEET

PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 116 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

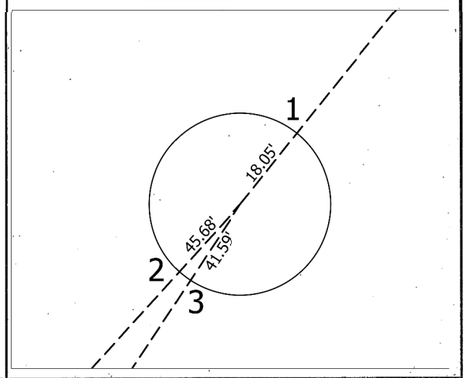
STAMPED: CP 116

TIE SKETCH

NORTH

NORTH ARROW

① ELECTRICAL HANDHOLE
② TELEPHONE PEDESTAL
③ CENTER OF MANHOLE LID
④
⑤



PT# 117 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

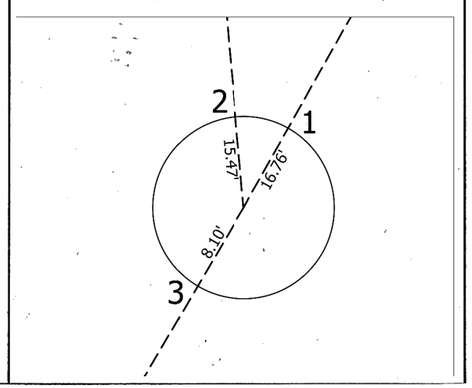
STAMPED: CP 117

TIE SKETCH

NORTH

NORTH ARROW

① WATER VALVE
② WATER METER
③ LIGHT POLE
④
⑤



PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 118 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

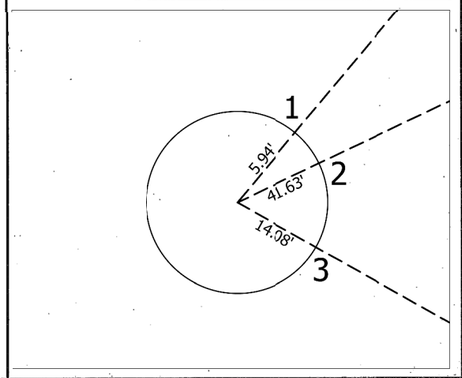
STAMPED: CP 118

TIE SKETCH

NORTH

NORTH ARROW

① MAILBOX POST
② LIGHT POLE
③ LIGHT POLE
④
⑤



PT# 119 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

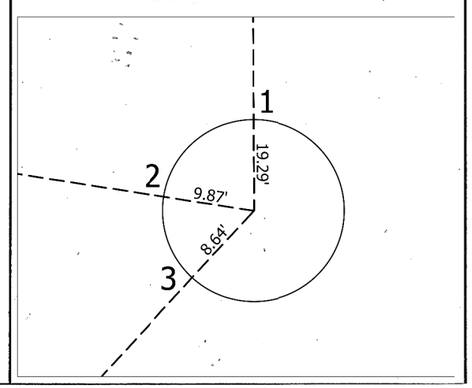
STAMPED: CP 119

TIE SKETCH

NORTH

NORTH ARROW

① STREET SIGN
② STOP SIGN
③ STORM SEWER MANHOLE LID
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/06/2025 3:39:48 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	85

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 120 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 120

TIE SKETCH

NORTH

NORTH ARROW

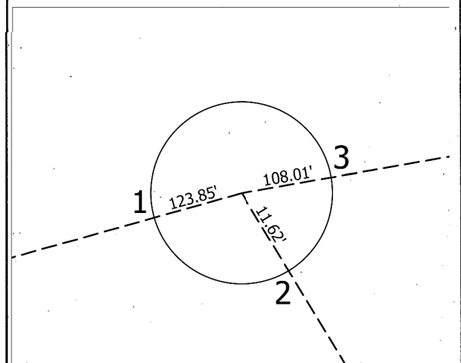
① FIRE HYDRANT

② TELEPHONE PEDESTAL

③ SPEED LIMIT SIGN

④ _____

⑤ _____



PT# 121 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 121

TIE SKETCH

NORTH

NORTH ARROW

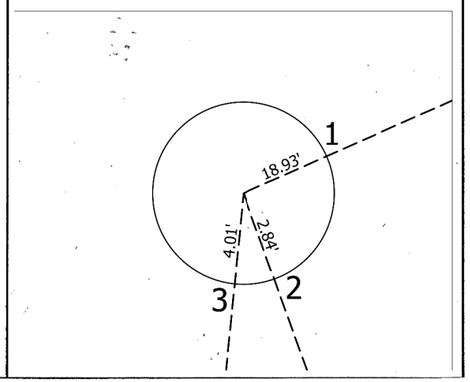
① MAG NAIL

② MAG NAIL

③ END OF GUARD RAIL

④ _____

⑤ _____



PROJ. NO. 18444.603 DATE 4/18/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 122 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 122

TIE SKETCH

NORTH

NORTH ARROW

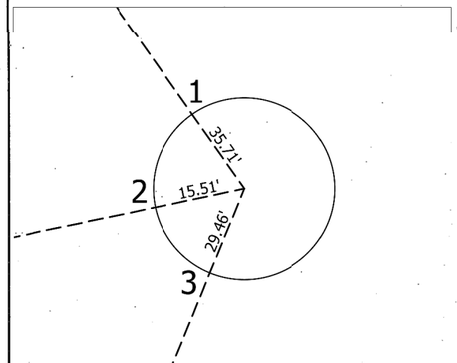
① MAG NAIL IN FOG LINE

② MAG NAIL IN FOG LINE

③ MAG NAIL IN FOG LINE

④ _____

⑤ _____



PT# 123 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

STAMPED: CP 123

TIE SKETCH

NORTH

NORTH ARROW

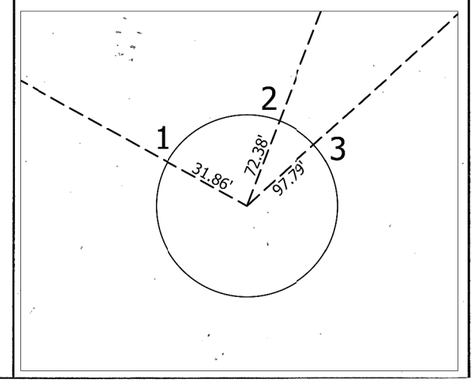
① LIGHT POLE

② LIGHT POLE

③ MODOT HANDHOLE

④ _____

⑤ _____



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/06/2025 3:39:57 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	86

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 200 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

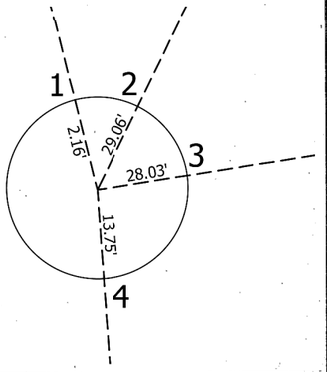
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① MANHOLE LID
② END OF GUARD RAIL
③ UTILITY POLE
④ SE CORNER OF DRAIN
⑤



PT# 201 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

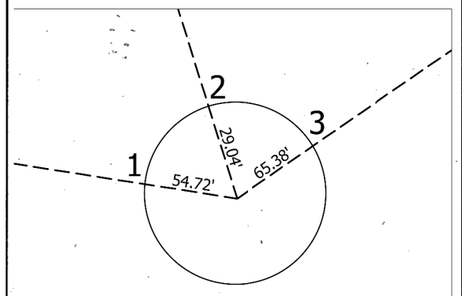
STAMPED: BM 201

TIE SKETCH

NORTH

NORTH ARROW

① SIGN POST
② MAG NAIL
③ SIGN POST
④
⑤



PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 202 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

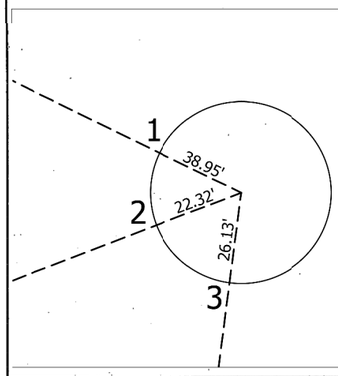
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① MAG NAIL
② MAG NAIL
③ MAG NAIL
④
⑤



PT# 203 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

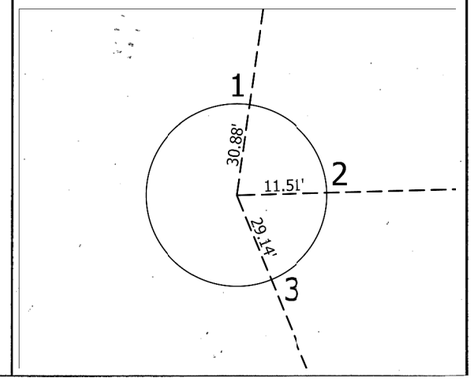
STAMPED: BM 203

TIE SKETCH

NORTH

NORTH ARROW

① "MERGE" SIGN POST
② MAG NAIL
③ MAG NAIL
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/06/2025 3:40:06 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	87

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 204 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

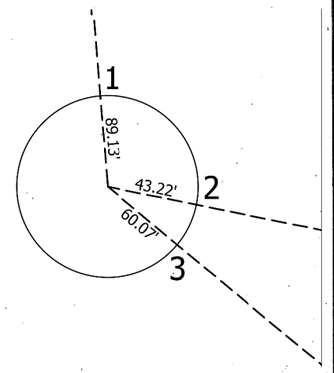
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① LIGHT POLE
② GAS VALVE
③ UTILITY POLE
④
⑤



PT# 205 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

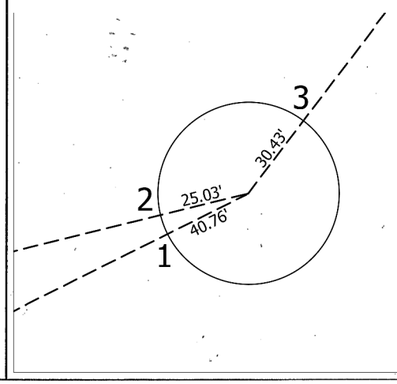
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① FIRE HYDRANT
② UTILITY POLE
③ MAIL BOX
④
⑤



PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 206 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

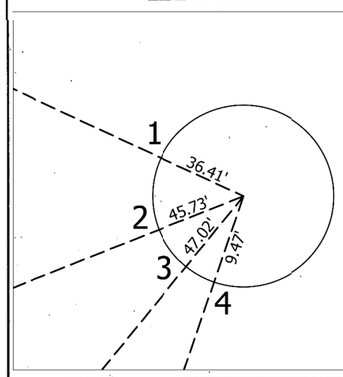
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① SIGN POST
② LIGHT POLE
③ SIGN POST
④ SIGN POST
⑤



PT# 207 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

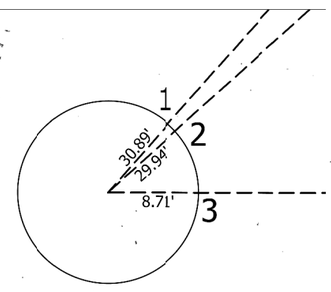
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① WATER VALVE
② FIRE HYDRANT
③ UTILITY POLE
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/06/2025 3:40:16 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	88

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 208 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

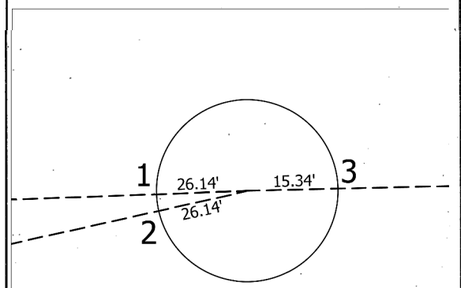
STAMPED: BM 208

TIE SKETCH

NORTH

NORTH ARROW

① DOWN GUY
② UTILITY POLE
③ END OF GUARD RAIL
④
⑤



PT# 209 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

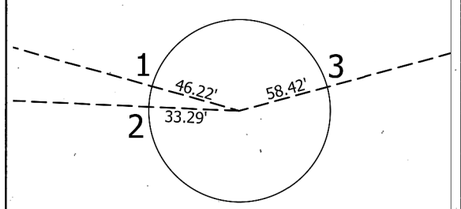
STAMPED: BM 209

TIE SKETCH

NORTH

NORTH ARROW

① FIBER OPTIC MARKER POST
② UTILITY POLE
③ R.O.W. MARKER POST
④
⑤



PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 210 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

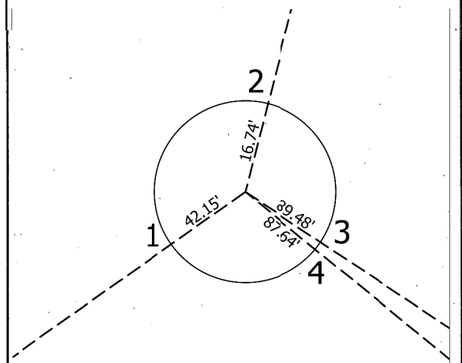
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① UTILITY POLE
② R.O.W. MAKER POST
③ SIGN POST
④ WATER VALVE
⑤



PT# 211 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

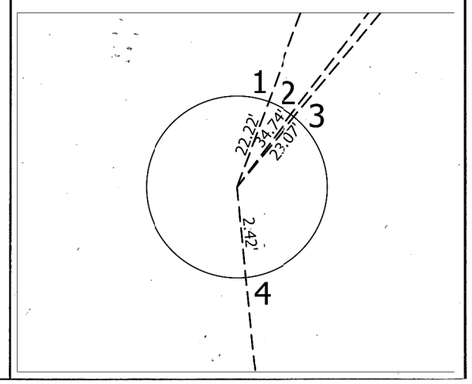
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① NW CORNER OF INLET
② MAILBOX
③ CENTER OF MANHOLE LID
④ LIGHT POLE
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/06/2025 3:40:26 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	89

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 212 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

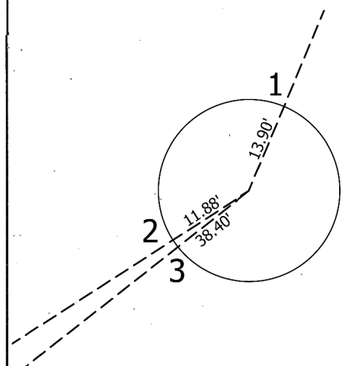
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① NW CORNER OF INLET
② MAG NAIL
③ NW CORNER OF INLET
④
⑤



PT# 213 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

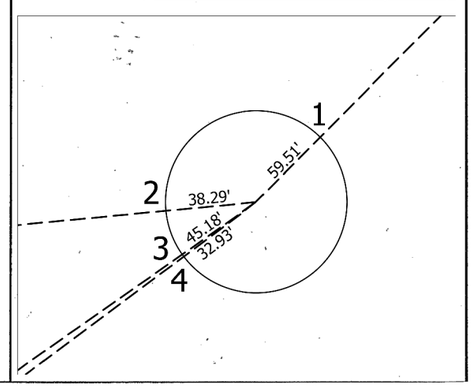
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① DOWN GUY
② DOWN GUY
③ UTILITY POLE
④ FIBER OPTIC MARKER POST
⑤



PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 214 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

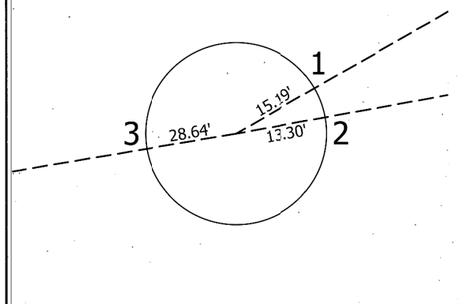
STAMPED: BM 214

TIE SKETCH

NORTH

NORTH ARROW

① UTILITY POLE
② DOWN GUY
③ SIGN POST
④
⑤



PT# 215 COR
SEC T R
NON-PLSS

DRAWING OR RUBBING OF MONUMENT

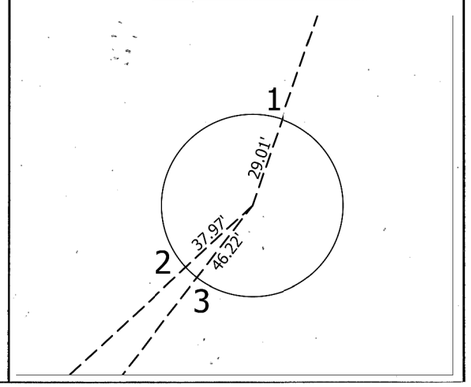
STAMPED: BM 215

TIE SKETCH

NORTH

NORTH ARROW

① NW CORNER OF INLET
② NW CORNER OF INLET
③ CENTER OF MANHOLE LID
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/06/2025 3:40:36 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	90

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 7/6/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 216 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

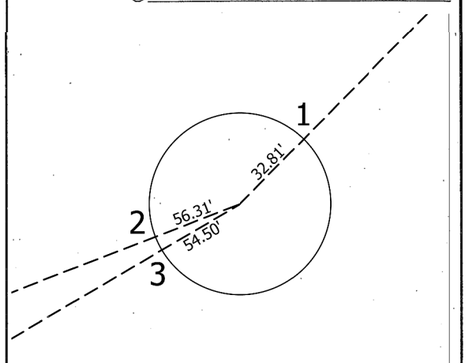
STAMPED: BM 216

TIE SKETCH

NORTH

NORTH ARROW

1. CENTER OF MANHOLE LID
2. DOWN GUY
3. UTILITY POLE
4.
5.



PT# 217 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

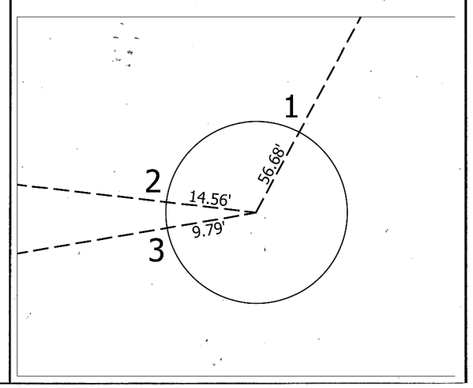
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

1. LIGHT POLE
2. UTILITY POLE
3. DOWN GUY
4.
5.



PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 218 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

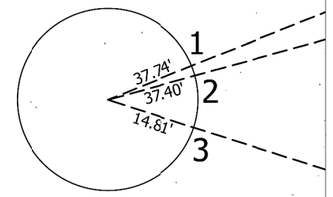
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

1. UTILITY POLE
2. RIGHT-OF-WAY POST
3. RIGHT-OF-WAY POST
4.
5.



PT# 219 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

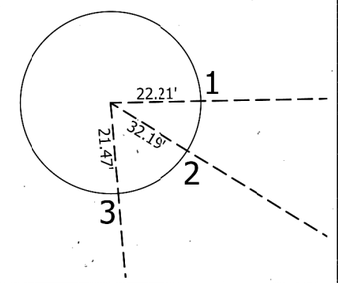
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

1. GAS DRIP PIPE
2. TELEPHONE PEDESTAL
3. MODOT HANDHOLE
4.
5.



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/06/2025 3:40:47 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	91

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 220 COR
SEC T R
NON-PLSS

TIE SKETCH

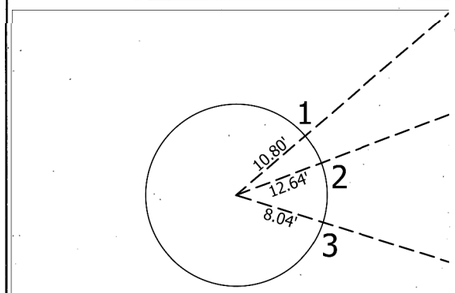
NORTH

NORTH ARROW

① WATER METER
② GAS VALVE
③ WESTERLY SIGN POLE
④
⑤

DRAWING OR RUBBING OF MONUMENT

CUT SQUARE IN CONCRETE



PT# 221 COR
SEC T R
NON-PLSS

TIE SKETCH

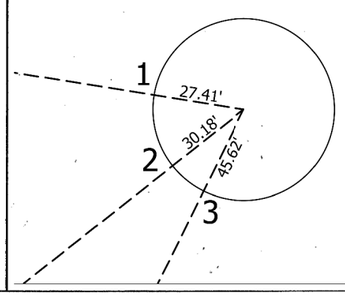
NORTH

NORTH ARROW

① LIGHT POLE
② MODOT HANDHOLE
③ MODOT HANDHOLE
④
⑤

DRAWING OR RUBBING OF MONUMENT

CUT SQUARE IN CONCRETE



PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 222 COR
SEC T R
NON-PLSS

TIE SKETCH

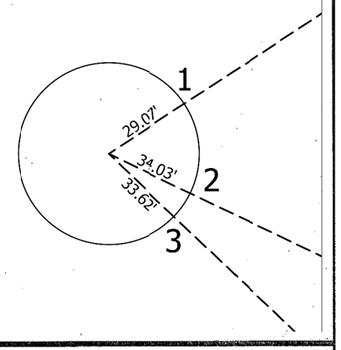
NORTH

NORTH ARROW

① SPRINKLER CONTROL VALVE
② NE CORNER OF INLET GRATE
③ UTILITY POLE
④
⑤

DRAWING OR RUBBING OF MONUMENT

CUT SQUARE IN CONCRETE



PT# 223 COR
SEC T R
NON-PLSS

TIE SKETCH

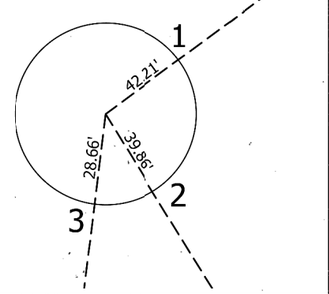
NORTH

NORTH ARROW

① LIGHT POLE
② LIGHT POLE
③ STOP SIGN
④
⑤

DRAWING OR RUBBING OF MONUMENT

STAMPED: BM 223



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/06/2025 3:40:59 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	92

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 224 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

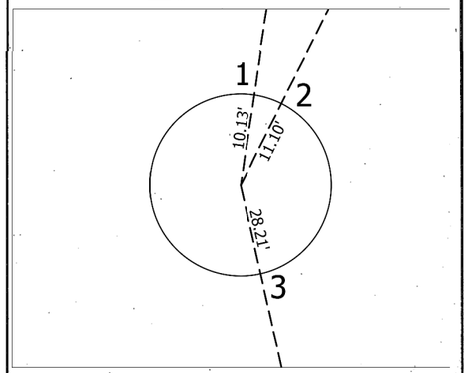
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① CLEANOUT
② TELEPHONE MANHOLE LID
③ UTILITY POLE
④
⑤



PT# 225 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

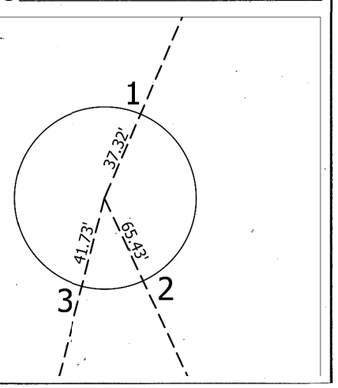
STAMPED: BM 225

TIE SKETCH

NORTH

NORTH ARROW

① UTILITY POLE
② WATER METER
③ UTILITY POLE
④
⑤



PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 226 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

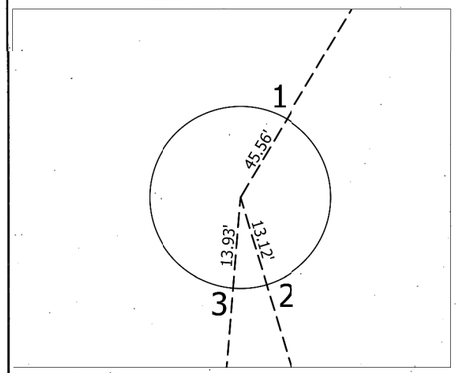
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① LIGHT POLE
② UTILITY POLE
③ CENTURYLINK HANDHOLE
④
⑤



PT# 227 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

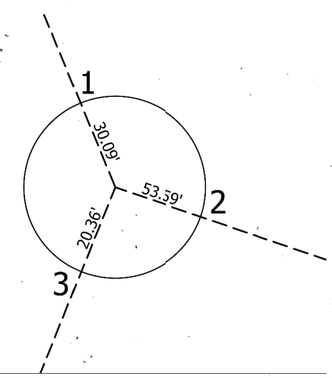
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① CENTER OF MANHOLE LID
② LIGHT POLE
③ LIGHT POLE
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/06/2025 3:41:08 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	93

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

REFERENCE POINT SHEET

PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 228 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

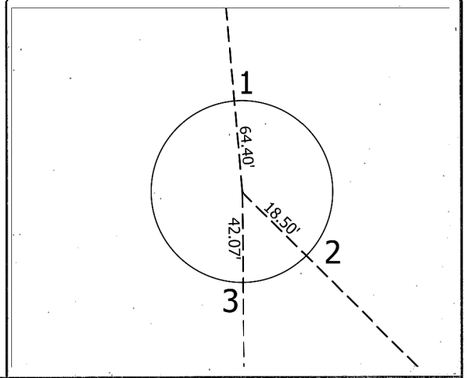
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① SW CORNER OF INLET GRATE
② 16" TREE
③ + CUT ON TOP OF CURB
④
⑤



PT# 229 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

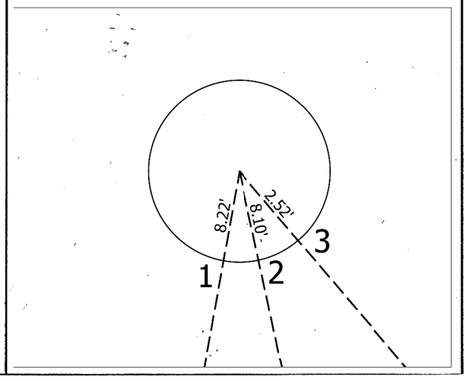
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① WATER VALVE
② WATER METER
③ LIGHT POLE
④
⑤



PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 230 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

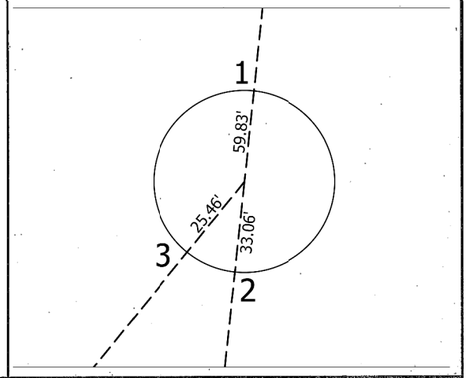
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① CENTER OF MANHOLE LID
② LIGHT POLE
③ NW CORNER OF INLET GRATE
④
⑤



PT# 231 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

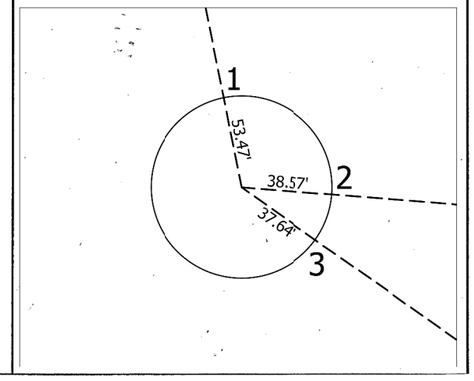
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① SW CORNER OF INLET GRATE
② CHAIN LINK FENCE CORNER
③ UTILITY POLE
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/06/2025 3:41:21 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	94

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 232 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

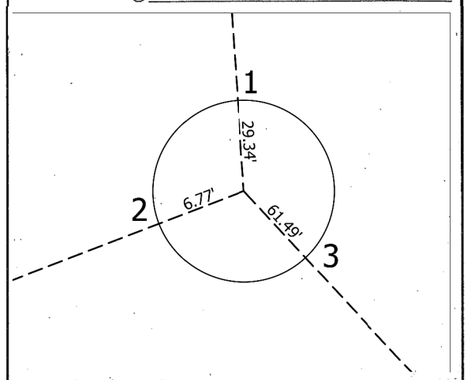
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① CENTER OF MANHOLE LID
② WATER METER
③ NE CORNER OF INLET GRATE
④
⑤



PT# 233 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

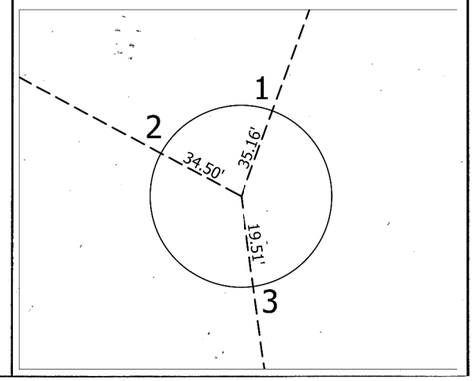
STAMPED: BM 233

TIE SKETCH

NORTH

NORTH ARROW

① + CUT IN CENTERLINE OF SPILLWAY
② + CUT IN CENTERLINE OF SPILLWAY
③ TIP OF TRAFFIC ARROW
④
⑤



PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS BARTLETT & WEST

PT# 234 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

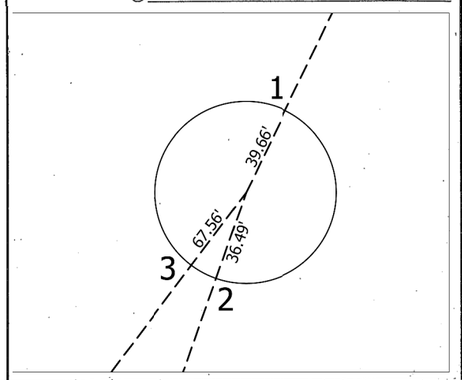
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① LIGHT POLE
② LIGHT POLE
③ MODOT HANDHOLE
④
⑤



PT# 235 COR _____

SEC _____ T _____ R _____

NON-PLSS _____

DRAWING OR RUBBING OF MONUMENT

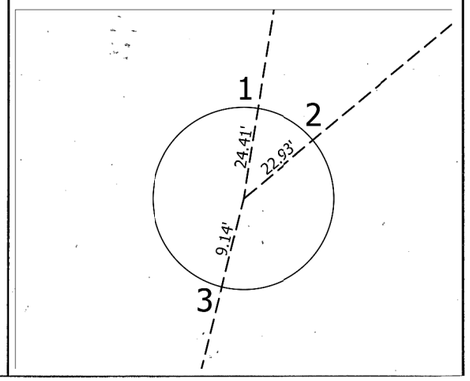
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① SW CORNER OF INLET GRATE
② HANDICAP SIGN
③ NO PARKING SIGN
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/06/2025 3:41:30 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	95

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

REFERENCE POINT SHEET

PROJ. NO. 18444.603 DATE 4/19/2022 CREW CHIEF DKS

BARTLETT & WEST

PT# 236 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

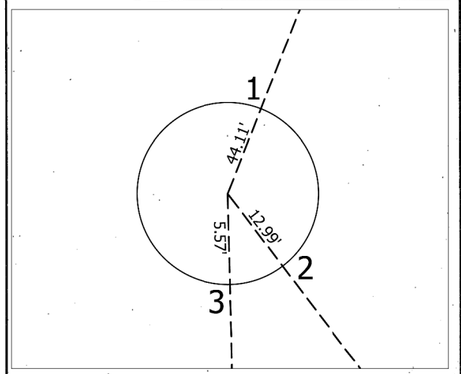
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① UTILITY POLE
② NE CORNER OF INLET GRATE
③ UTILITY POLE
④
⑤



PT# 237 COR

SEC T R

NON-PLSS

DRAWING OR RUBBING OF MONUMENT

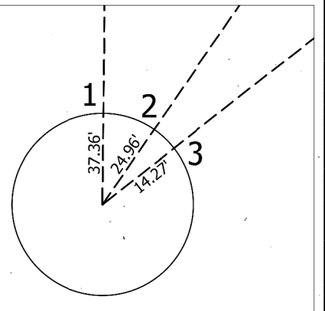
CUT SQUARE IN CONCRETE

TIE SKETCH

NORTH

NORTH ARROW

① CENTER OF MANHOLE LID
② CENTER OF MANHOLE LID
③ CENTER OF MANHOLE LID
④
⑤



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/06/2025 3:47:03 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/6/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	96

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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 SHEET

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	NAD 83 (2011) EPOCH 2010.0
VERTICAL DATUM	NAVID 1988: GNSS DERIVED
GEOID MODEL	GEOID18 (CONUS)
ELEVATIONS DETERMINED BY	
PROJECT PROJECTION FACTOR	1.00008780

REFERENCE CONTROL INFORMATION

COORDINATE SYSTEM	MISSOURI COORD. SYSTEM OF 1983
CONTROL STATION	MISSOURI CORS
DESIGNATION	MODOT SEILER TREECOURT CORS ARP
CORS_ID	MOSI
PID	DL3650
LATITUDE	30°33'44.23061" N
LONGITUDE	90°27'40.90237" W
NORTHING (M)	302843.5680
EASTING (M)	253367.3910
ZONE	EAST
PROJECT AVERAGE GRID FACTOR	0.99991220

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 1027709.437 X 0.9999122 = N 1027619.212
E 826027.084 X .09999122 = E

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	POINT ID
PROJECT CONTROL POINTS								
	19+28.95	℄ ROUTE 231	-766.29	974,643.95	879,600.59	557.89	5/8" IRON ROD W/ CAP	100
4	38+75.43	℄ ROUTE 231	1324.71	973,497.16	877,405.00	532.44	5/8" IRON ROD W/ CAP	101
6	49+11.27	℄ ROUTE 231	72.51	972,040.20	878,124.89	520.83	5/8" IRON ROD W/ CAP	102
8	61+37.91	℄ ROUTE 231	-46.05	970,869.85	877,737.90	525.30	5/8" IRON ROD W/ CAP	103
17	39+98.91	℄ ROUTE 231	-44.79	966,547.23	876,408.03	450.58	5/8" IRON ROD W/ CAP	104
19	54+12.16	℄ ROUTE 231	-50.6	965,136.08	876,330.45	487.34	5/8" IRON ROD W/ CAP	105
23	76+88.66	℄ ROUTE 231	-1690.4	962,892.27	877,967.59	554.60	5/8" IRON ROD W/ CAP	110
27	97+18.65	℄ ROUTE 231	-77.2	960,824.00	876,327.74	600.21	5/8" IRON ROD W/ CAP	111
30	110+40.12	℄ ROUTE 231	-47.73	959,532.13	876,022.71	599.45	5/8" IRON ROD W/ CAP	112
38	153+79.71	℄ ROUTE 231	-85.25	955,213.48	875,838.66	576.79	5/8" IRON ROD W/ CAP	113
40	167+24.79	℄ ROUTE 231	73.21	953,871.94	875,651.05	589.92	5/8" IRON ROD W/ CAP	114
45	27+81.35	℄ ROUTE 231	-1776.1	950,953.20	875,761.35	624.71	5/8" IRON ROD W/ CAP	115
46	33+81.06	℄ ROUTE 231	-41.48	951,458.99	873,996.01	576.52	5/8" IRON ROD W/ CAP	116
48	45+52.94	℄ ROUTE 231	-65.29	950,870.59	872,974.96	572.61	5/8" IRON ROD W/ CAP	117
56	89+85.09	℄ ROUTE 231	57.55	948,023.29	869,719.85	593.46	5/8" IRON ROD W/ CAP	118
59	103+27.49	℄ ROUTE 231	38.03	947,685.19	868,424.73	570.43	5/8" IRON ROD W/ CAP	119
67	149+56.31	℄ ROUTE 231	-45.85	944,049.30	866,309.40	444.64	5/8" IRON ROD W/ CAP	120
70	163+01.18	℄ ROUTE 231	-65.05	942,673.44	866,321.79	423.67	5/8" IRON ROD W/ CAP	121
	207+86.31	℄ ROUTE 231	2477.31	941,817.48	861,957.92	423.23	5/8" IRON ROD W/ CAP	122
	219+77.59	℄ ROUTE 231	3565.02	940,925.80	860,976.12	444.59	5/8" IRON ROD W/ CAP	123
ALIGNMENTS								
4	37+00.00	℄ ROUTE 231	0	973,116.20	878,685.82		BOP	
6	51+07.40	℄ ROUTE 231	0	971,831.56	878,110.96		PI	
9	67+30.70	℄ ROUTE 231	0	970,345.85	877,456.91		EQNBK	
9	0+00.00	℄ ROUTE 231	0	970,345.85	877,456.91		EQNAHD, PI	
11	8+66.20	℄ ROUTE 231	0	969,553.07	877,107.91		EQNBK, PI	
11	8+67.44	℄ ROUTE 231	0	969,553.07	877,107.91		EQNAHD, PI	
13	20+29.47	℄ ROUTE 231	0	968,490.43	876,637.71		PC	
13	22+43.47	℄ ROUTE 231	0	968,287.80	876,569.83		PT	
14	27+51.16	℄ ROUTE 231	0	967,793.47	876,454.14		PC	
15	29+44.49	℄ ROUTE 231	0	967,602.41	876,426.13		PT	
15	32+50.00	℄ ROUTE 231	0	967,297.47	876,407.43		PI	
18	49+17.62	℄ ROUTE 231	0	965,632.75	876,309.21		PI	
20	56+71.29	℄ ROUTE 231	0	964,880.40	876,264.61		PC	
21	62+57.25	℄ ROUTE 231	0	964,294.71	876,252.39		PT	
23	76+33.34	℄ ROUTE 231	0	962,918.02	876,276.48		EQNAHD, PI	
23	76+34.15	℄ ROUTE 231	0	962,918.02	876,276.48		EQNBK	
24	80+19.36	℄ ROUTE 231	0	962,532.05	876,283.23		PC	
25	87+74.76	℄ ROUTE 231	0	961,776.69	876,283.99		PT	
27	93+95.39	℄ ROUTE 231	0	961,156.13	876,274.38		PC	
28	99+78.34	℄ ROUTE 231	0	960,578.19	876,206.33		EQNBK	
28	99+77.69	℄ ROUTE 231	0	960,578.19	876,206.33		EQNAHD, PT	
28	103+51.95	℄ ROUTE 231	0	960,212.87	876,125.03		EQNBK	
28	103+53.39	℄ ROUTE 231	0	960,212.87	876,125.03		EQNAHD, PI	
30	112+74.07	℄ ROUTE 231	0	959,314.10	875,925.38		PC	
31	118+41.37	℄ ROUTE 231	0	958,751.76	875,857.81		PT	
33	129+31.21	℄ ROUTE 231	0	957,662.15	875,835.40		EQNBK	
33	129+30.37	℄ ROUTE 231	0	957,662.15	875,835.40		EQNAHD, PI	
34	135+42.59	℄ ROUTE 231	0	957,050.07	875,822.80		PC	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:01:37 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	97

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

COORDINATE POINTS SHEET
1 OF 2

COORDINATE POINT LISTING (CONT.)

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	POINT ID
ALIGNMENTS (CONT.)								
35	141+46.26	℄ ROUTE 231	0	956,447.13	875,794.50		EQNBK	
35	141+48.19	℄ ROUTE 231	0	956,447.13	875,794.50		PRC, EQNAHD	
36	147+53.80	℄ ROUTE 231	0	955,840.99	875,766.13		EQNAHD, PT	
36	147+55.06	℄ ROUTE 231	0	955,840.99	875,766.13		EQNBK	
40	165+70.43	℄ ROUTE 231	0	954,024.74	875,729.27		PI	
40	165+72.31	℄ ROUTE 231	0	954,024.78	875,727.38		EQNBK	
40	165+70.43	℄ ROUTE 231	0	954,024.78	875,727.38		EQNAHD, PI	
41	169+53.15	℄ ROUTE 231	0	953,642.13	875,719.62		EQNBK	
41	169+53.72	℄ ROUTE 231	0	953,642.13	875,719.62		EQNAHD, TS	
41	171+03.72	℄ ROUTE 231	0	953,492.34	875,712.65		SC	
42	179+66.95	℄ ROUTE 231	0	952,781.57	875,276.08		CS	
43	181+16.95	℄ ROUTE 231	0	952,707.63	875,145.62		ST	
43	183+58.76	℄ ROUTE 231	0	952,593.94	874,932.19		EQNBK	
43	18+89.45	℄ ROUTE 231	0	952,593.94	874,932.19		EQNAHD, PC	
44	25+62.60	℄ ROUTE 231	0	952,151.96	874,432.69		PT	
46	33+27.38	℄ ROUTE 231	0	951,525.76	873,993.63		EQNBK	
46	33+29.60	℄ ROUTE 231	0	951,525.76	873,993.63		EQNAHD, PC	
47	40+40.01	℄ ROUTE 231	0	951,103.00	873,436.85		PT	
48	46+26.47	℄ ROUTE 231	0	950,907.67	872,883.88		PC	
49	52+86.71	℄ ROUTE 231	0	950,554.54	872,332.92		EQNBK	
49	52+83.33	℄ ROUTE 231	0	950,554.54	872,332.92		EQNAHD, PT	
50	57+42.61	℄ ROUTE 231	0	950,224.94	872,013.06		PI	
52	66+17.88	℄ ROUTE 231	0	949,595.59	871,404.77		PC	
52	67+93.80	℄ ROUTE 231	0	949,461.92	871,290.57		PT	
53	74+09.70	℄ ROUTE 231	0	948,969.98	870,920.01		PC	
55	84+80.12	℄ ROUTE 231	0	948,200.00	870,180.11		PCC	
57	92+09.27	℄ ROUTE 231	0	947,926.50	869,515.57		PT	
57	95+68.03	℄ ROUTE 231	0	947,892.32	869,158.44		PC	
60	107+60.84	℄ ROUTE 231	0	947,380.30	868,109.31		PT	
60	107+87.09	℄ ROUTE 231	0	947,361.24	868,091.26		EQNBK	
60	107+95.69	℄ ROUTE 231	0	947,361.24	868,091.26		EQNAHD, PI	
64	131+69.21	℄ ROUTE 231	0	945,637.80	866,459.28		PC	
66	142+27.59	℄ ROUTE 231	0	944,661.18	866,160.92		EQNBK	
66	143+28.34	℄ ROUTE 231	0	944,661.18	866,160.92		EQNAHD, PT	
68	155+27.20	℄ ROUTE 231	0	943,478.64	866,358.03		EQNBK	
68	155+04.42	℄ ROUTE 231	0	943,478.64	866,358.03		EQNAHD, TS	
68	156+54.42	℄ ROUTE 231	0	943,330.20	866,379.46		SC	
71	171+70.30	℄ ROUTE 231	0	942,138.76	865,629.64		CS	
72	173+20.30	℄ ROUTE 231	0	942,093.87	865,486.55		ST	
74	184+15.09	℄ ROUTE 231	0	941,788.99	864,435.07		EOP	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:01:46 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	98

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

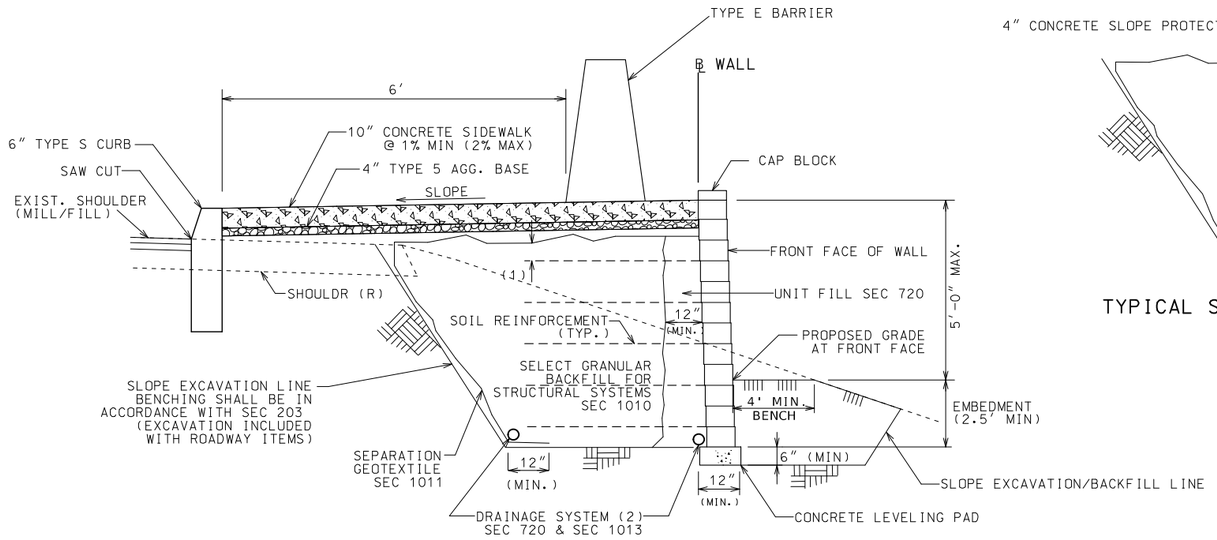
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

COORDINATE POINTS SHEET
2 OF 2

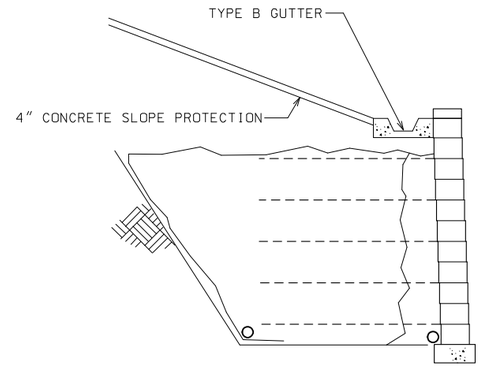
RETAINED BACKFILL CONDITIONS

DRAINED CONDITION	UNDRAINED CONDITION
ϕ_b = 30°	ϕ_b = N/A
γ_b = 120 pcf	γ_b = N/A

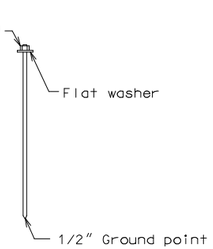


TYPICAL SECTION THRU MSE WALL (DRYCAST MODULAR BLOCK WALL)

DETAIL NOT TO SCALE



TYPICAL SECTION WITH GUTTER



DETAILS OF 1/2" THREADED ROD OR REINFORCING ROD

TYPICAL SECTION NOTES:

(1) TOPMOST LAYER FOR REINFORCEMENT SHALL BE FULLY COVERED WITH SELECT GRANULAR BACKFILL FOR STRUCTURAL SYSTEMS, AS APPROVED BY THE WALL MANUFACTURER, BEFORE PLACEMENT OF THE SEPARATION GEOTEXTILE.

(2) MINIMUM 6" DIAMETER PERFORATED PVC OR PE PIPE.

DISCHARGE TO DRAINAGE SYSTEM OR DAYLIGHT SCREENED OUTLET AT LEAST 10 FEET AWAY FROM FRONT FACE OF WALL

MANUFACTURER SHALL SHOW DRAIN DETAILS ON DESIGN PLANS TO BE SUBMITTED AS SHOWN ON MoDOT MSE WALL PLANS AND/OR ROADWAY PLANS.

CONTRACTOR SHALL MODIFY THE DRAIN DETAILS AS SHOWN IF IT WILL IMPROVE FLOW AS MAY BE THE CASE FOR STEPPED LEVELING PAD AND FOR AN UNEVEN GROUND LINE (APPROVAL OF THE ENGINEER REQUIRED).

ELEVATION VIEW NOTES:

WALL CONTRACTOR SHALL SHOW THE FOLLOWING ITEMS ON THE DESIGN DRAWINGS AND/OR ON THE FABRICATOR SHOP DRAWINGS:

(A) LEVELING PAD HORIZONTAL.

(B) LEVELING PAD LENGTH AND STEP ELEVATIONS SHALL BE BASED ON WALL MANUFACTURER'S RECOMMENDATION. TOP OF LEVELING PAD ELEVATIONS SHALL NOT BE HIGHER THAN THEORETICAL TOP OF LEVELING PAD ELEVATIONS SHOWN ON THESE PLANS.

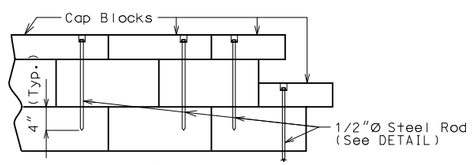
THE CAP BLOCKS AND LEVELING PAD STEPS SHOWN ARE FOR ILLUSTRATION PURPOSES ONLY. THE FINAL CONFIGURATION SHALL BE DETERMINED BY THE WALL ENGINEER.

ROD NOTES:

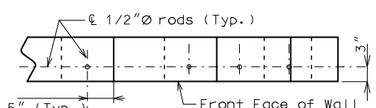
HOLES SHALL BE $\frac{5}{8}$" ROUND AND EXTENDED 4" INTO THE THIRD LAYER OF BLOCKS, RECESSED 2" DEEP BY 1-$\frac{1}{2}$" ROUND.

RODS OR REINFORCING BARS SHALL BE SECURED BY AN APPROVED RESIN ANCHOR SYSTEM IN ACCORDANCE WITH SEC 1039.

RECESS HOLE SHALL BE BACKFILLED WITH NON-SHRINK CEMENT GROUT.



WALL PROFILE
NOT TO SCALE



WALL PLAN
NOT TO SCALE

MSE WALL GENERAL NOTES:

DESIGN SPECIFICATIONS:

2002 AASHTO LFD (17TH ED.) STANDARD SPECIFICATIONS (SECTION 5, ASD DESIGN) SEISMIC PERFORMANCE CATEGORY A
ACCELERATION COEFFICIENT = 0.09

DESIGN LOADING:

THE MAXIMUM APPLIED BEARING PRESSURE FOR THE CONTROLLING DESIGN CASE AT THE FOUNDATION LEVEL SHALL BE SHOWN ON THE MANUFACTURER'S DESIGN PLANS WHERE THE MAXIMUM APPLIED BEARING PRESSURE ≤ ALLOWABLE BEARING PRESSURE. FOR SEISMIC DESIGN THE MAXIMUM APPLIED BEARING PRESSURE ≤ TWO TIMES ALLOWABLE BEARING PRESSURE.

FACTOR OF SAFETY SHALL BE 2.0 FOR OVERTURNING AND 1.5 FOR SLIDING.

FOR SEISMIC DESIGN THE FACTOR OF SAFETY SHALL BE 1.5 OVERTURNING AND 1.1 FOR SLIDING.

DESIGN UNIT STRESSES:

ALL CONCRETE FOR LEVELING PAD SHALL BE CLASS B OR B-1 WITH F'C = 4000 PSI.

MISCELLANEOUS:

ϕ_b = 30° AND UNIT WEIGHT, γ_b = 120 pcf FOR RETAINED BACKFILL MATERIAL TO BE RETAINED BY THE MECHANICALLY STABILIZED EARTH WALL SYSTEM.

ϕ_f = 30° FOR UNIMPROVED FOUNDATION GROUND WHERE WALL IS TO BEAR.

THE MSE WALL SYSTEM SHALL BE BUILT IN ACCORDANCE WITH SEC 720

A FILTER CLOTH MEETING THE REQUIREMENTS FOR A SEPARATION GEOTEXTILE MATERIAL SHALL BE PLACED BETWEEN THE SELECT GRANULAR BACKFILL OR STRUCTURAL SYSTEMS AND THE BACKFILL BEING RETAINED BY THE SMALL BLOCK WALL.

ALL WALL DETAILS SHOW TOP ELEVATIONS USING A BASELINE FOR A BATTERED WALL. IF A VERTICAL WALL SYSTEM IS USED, THE HEIGHT OF THE WALL SHALL BE ADJUSTED AS NECESSARY TO FIT THE GROUND SLOPE AND THE CONCRETE LEVELING PAD SHALL BE ADJUSTED AS NECESSARY.

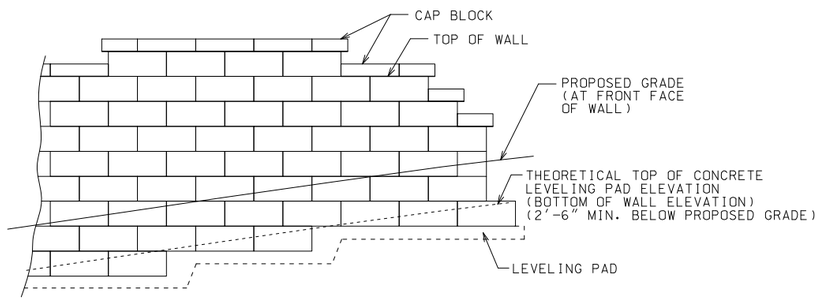
THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE TO COORDINATE CONSTRUCTION OF THE WALL WITH ROADWAY CONSTRUCTION AND ENSURE THAT THE ROADWAY CONSTRUCTION, RESULTING OR EXISTING OBSTRUCTIONS, SHALL NOT IMPACT THE CONSTRUCTION OR PERFORMANCE OF THE WALL. SOIL REINFORCEMENT SHALL BE DESIGNED AND PLACED TO AVOID DAMAGE BY PILE DRIVING, GUARDRAIL POST INSTALLATION, UTILITY AND SIGN FOUNDATIONS. (SEE ROADWAY PLANS.)

IF ROCK IS ENCOUNTERED IN THE PROPOSED REINFORCED BACKFILL AREA OR WEDGE AREA OF THE MSE WALL BEFORE OR DURING EXCAVATION, THE CONTRACTOR SHALL IMMEDIATELY CEASE EXCAVATION AND NOTIFY THE ENGINEER.

PERMANENT SHIMS FOR BLOCK MSE WALL:

SHIMS WILL BE SPARINGLY ALLOWED TO MAINTAIN HORIZONTAL AND VERTICAL CONTROL. THE PREFERABLE SHIM SHALL BE MADE OF A PLASTIC MATERIAL THAT WILL NOT RUST, STAIN, ROT OR LEACH ONTO THE CONCRETE AND HAS A MINIMUM COMPRESSIVE STRENGTH EQUAL TO BLOCK WALL UNIT. STEEL OR WOOD SHIMS WILL NOT BE ALLOWED. SHIMS SHALL NOT EXCEED $\frac{3}{4}$" IN THICKNESS AND SHALL DISTRIBUTE LOAD IN ORDER TO NOT INDUCE STRESS INTO BLOCK WALL UNITS. NO SHIM SHALL BE USED BETWEEN THE CONCRETE LEVELING PAD AND THE BASE COURSE OF THE BLOCK WALL.

THE SOIL CONDITION PROPERTIES ARE FOR GENERAL INFORMATION. IT DOES NOT PERTAIN TO ANY ONE PARTICUALR BLOCK WALL. IF MORE SOIL CONDITION PROPERTIES ARE NEEDED, THEN IT SHALL BE UP TO THE CONTRACTOR TO PROVIDE THAT INFORMATION AS NEEDED. IF ALLOWABLE BEARING PRESSURE IS NEEDED FOR RETAINING WALL DESIGN/CONSTRUCTION, IT SHALL BE UP TO THE CONTRACTOR.



TYPICAL MSE WALL ELEVATION
(DRYCAST MODULAR BLOCK WALL)

(LOOKING AT FRONT FACE OF WALL)
DETAIL NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:06:38 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

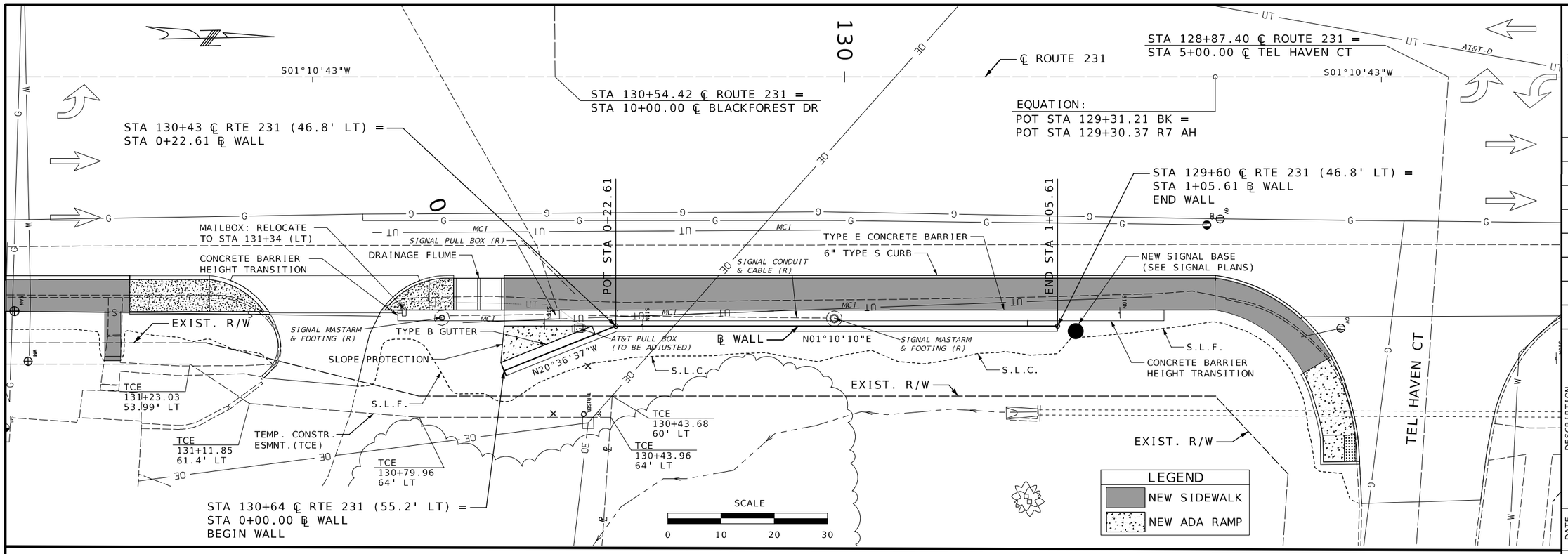
ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	99

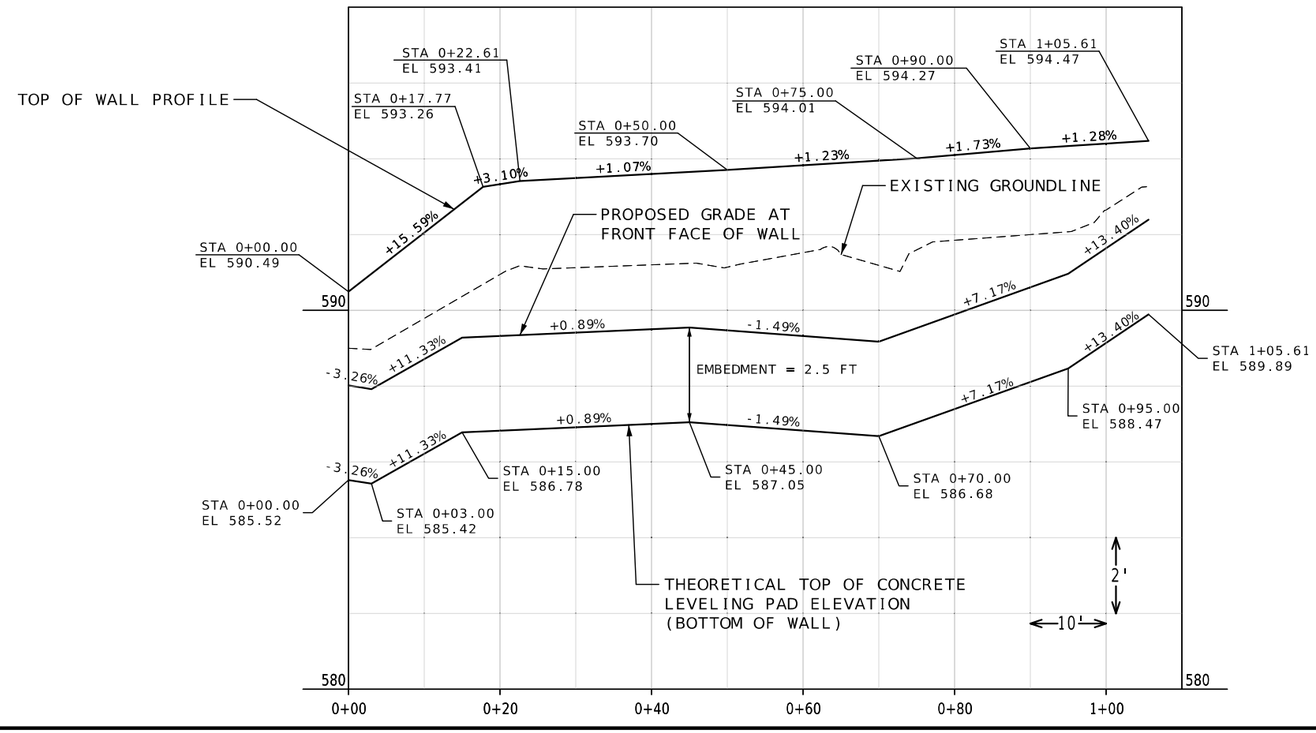
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

SPECIAL SHEET
MSE WALL SYSTEMS
DRYCAST MODULAR BLOCK WALL DETAILS





STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:06:52 AM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	100

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

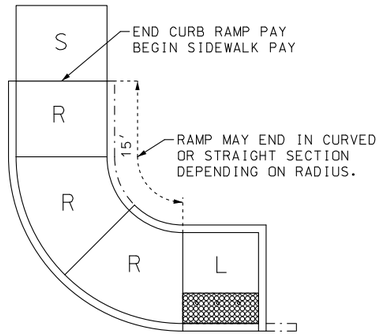
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SHEET

DRYCAST MODULAR BLOCK WALL

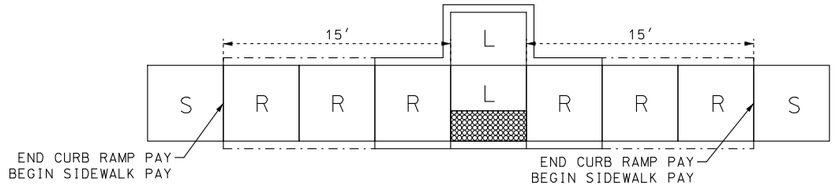
PLAN-PROFILE

PEDESTRIAN CURB RAMP PAY LIMITS

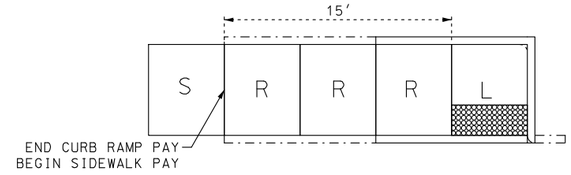


TYPE 1 PARALLEL

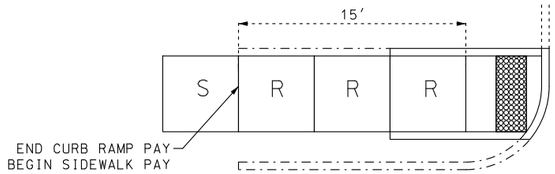
THE LENTH OF THIS RAMP SHALL BE MEASURED
ON THE INSIDE/SHORT SIDE OF THE CURVE



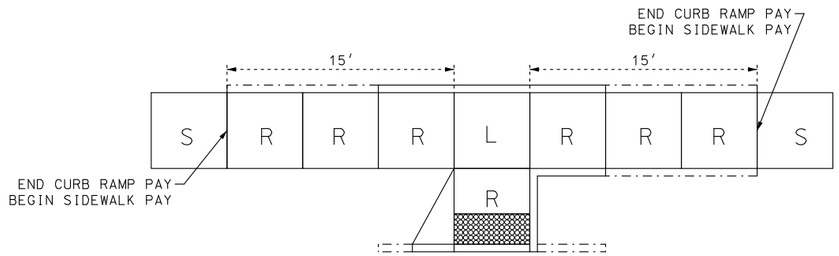
TYPE 2 PARALLEL



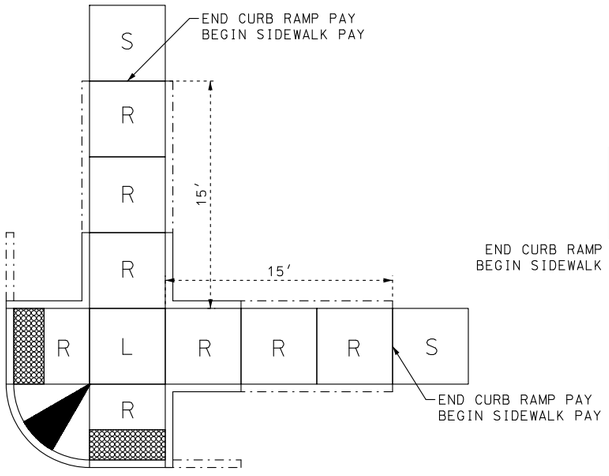
TYPE 3 PARALLEL



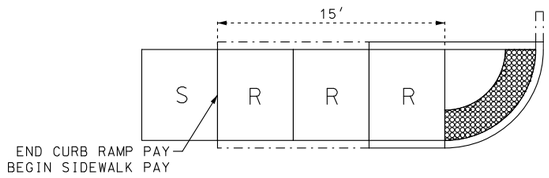
SMALL RADIUS PERPENDICULAR



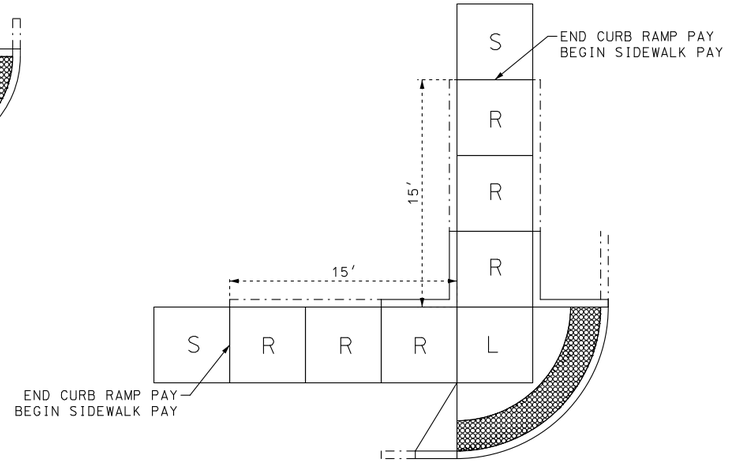
COMPOUND PERPENDICULAR



DUAL PERPENDICULAR
PAY AS 2 EACH



LARGE RADIUS PERPENDICULAR



BLENDED TRANSITION
PAY AS 2 EACH

Notes –
15 FEET OF WALKWAY SHALL BE INCLUDED IN CURB RAMP PAY, PER EACH, AS SHOWN.

L – LANDING OR CLEAR AREA FOR TURNING MOVEMENTS AND RESTS.
R – PAY AS RAMP
S – PAY AS SIDEWALK.

SEE JSP FOR OTHER INCIDENTALS INCLUDED IN CURB RAMP PAY.
SEE STANDARD PLANS 608 SERIES FOR DIMENTIONS, GRADES, AND OTHER REQUIREMENTS.
CONTRACTOR WILL HAVE OPTION TO CONSTRUCT RAMP WITH FLARE OR CURB FOR CERTAIN RAMPS ABOVE.

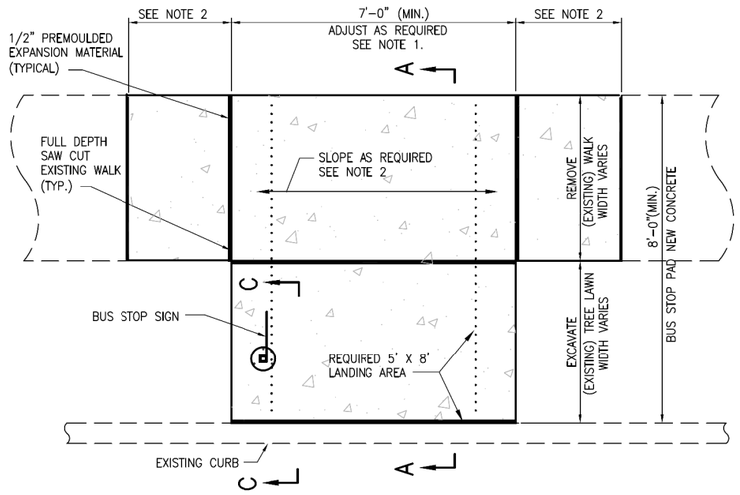
STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:07:04 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 101
COUNTY: ST LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

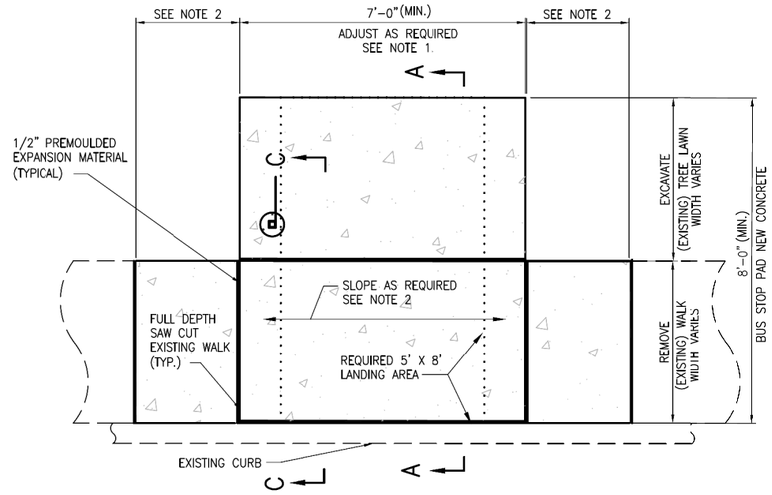
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SHEET
ADA CURB RAMP
PAY LIMITS



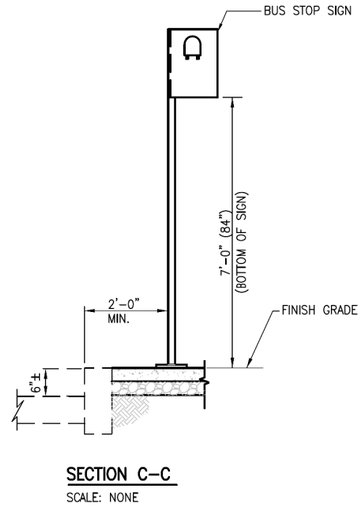
TYPE 1 IMPROVEMENT

NONE



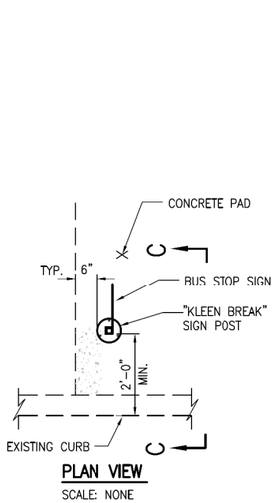
TYPE 2 IMPROVEMENT

NONE



SECTION C–C

SCALE: NONE

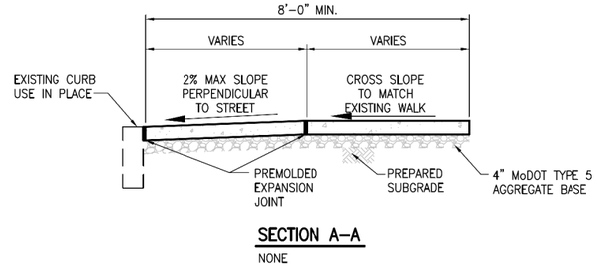


PLAN VIEW

SCALE: NONE

TYP. SIGN & POST DETAIL

SCALE: NONE



SECTION A–A

NONE

GENERAL NOTES:

1. NEW CONCRETE BUS STOP PAD:
   - 1A. DIMENSIONS: BUS STOP BOARDING AND ALIGHTING AREAS SHALL PROVIDE A CLEAR LENGTH OF 8'–0" MINIMUM, MEASURED PERPENDICULAR TO THE CURB OR VEHICLE ROADWAY EDGE, AND 7'–0" MINIMUM MEASURED PARALLEL TO THE VEHICLE ROADWAY.
   - 1B. SLOPE: PARALLEL TO THE ROADWAY, THE SLOPE OF THE BUS STOP BOARDING AND ALIGHTING AREA SHALL BE THE SAME AS THE ROADWAY, TO THE MAXIMUM EXTENT PRACTICABLE. PERPENDICULAR TO THE ROADWAY, THE SLOPE OF THE BUS STOP BOARDING AND ALIGHTING AREA SHALL NOT BE STEEPER THAN 2% MAX.
2. MODIFY EXISTING SIDEWALK SLOPE AS REQUIRED TO COMPLY WITH LOCAL CODES TO MEET WITH NEW BUS STOP PAD TO NEAREST SIDEWALK JOINT.
3. ALL FULL DEPTH SAW CUTS TO BE MADE AT EXISTING SIDEWALK JOINTS.
4. COMPLETE TOP SOIL BACKFILL, COMPACTION, FINISH GRADING, AND SEEDING/SODDING.
5. DO NOT PLACE CONCRETE ANCHORS FOR BENCH OR SIGN POST LESS THAN SIX (6) INCHES FROM EDGE OF CONCRETE.
6. ALL NEW CONCRETE SIDEWALK SLABS WILL BE 4" THICK, BUS STOP PADS 6" THICK WITH 4" MoDOT TYPE 5 AGGREGATE BASE.
7. SEE ST. LOUIS COUNTY STANDARD DRAWING C902.20 "METROBUS STOP/NO PARKING SIGN INSTALLATION" FOR SIGN PLACEMENT.

REV	DATE	BY	APP.	DESCRIPTION

DESIGNED:
DRAWN:
CHECKED:
APPROVED:
DATE:

DATE:

DISCLAIMER OF RESPONSIBILITY

I hereby specify that the documents intended to be authenticated by my seal are limited to this sheet, and I hereby disclaim any responsibility for all other Drawings, Specifications, Estimates, Reports or other documents or instruments relating to or intended to be used for any part of the architectural or engineering project or survey.

CITY OF ST. LOUIS ADA METROBUS STOP ENHANCEMENT IMPROVEMENT DETAILS

A Bi-State Development Enterprise

Metro®
211 N. Broadway | Suite 700 | St. Louis, MO | 63102-2595
314 - 982 - 1400 | metrostlouis.org

ADA ENHANCEMENT METRO BUS STOP DETAILS

REFERENCE
04/15/19
CONTRACT NO.
UNASSIGNED
FILENAME
CTYSTL–ADA BUS STOP 1
SHEET NO.
DETAIL "A–1"

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:07:16 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

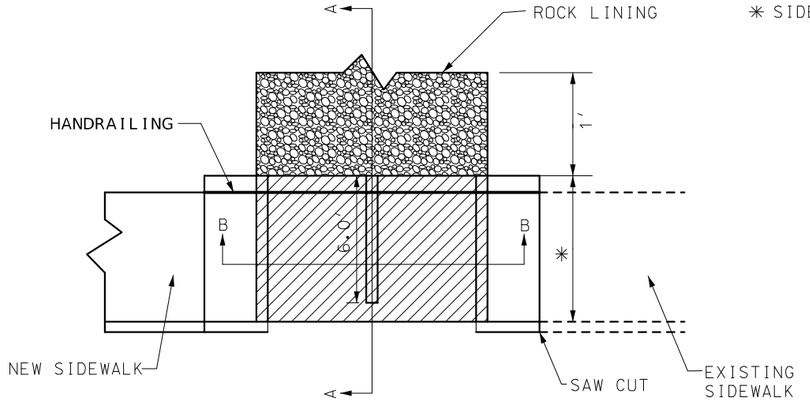
ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	102

COUNTY
ST LOUIS
JOB NO.
J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION
DATE

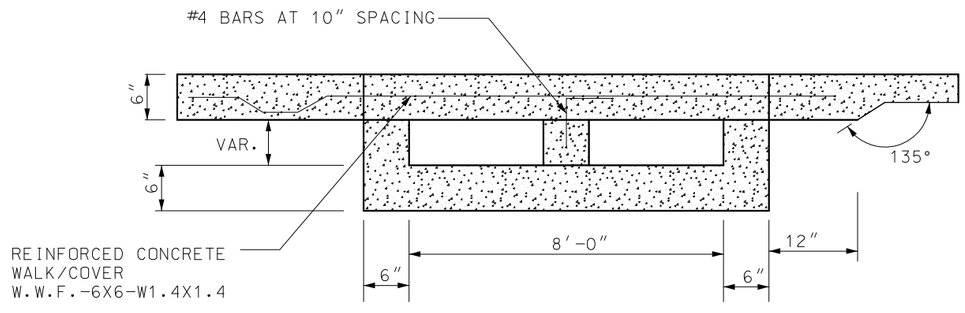
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SHEET
BUS PAD DETAILS

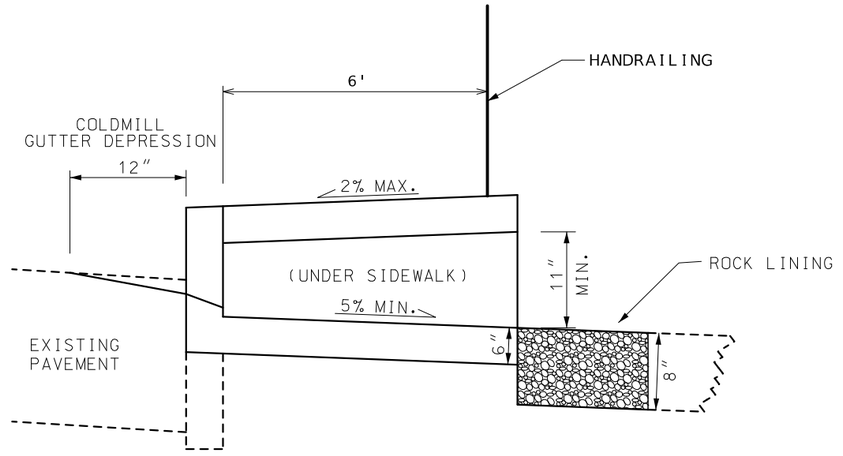


* SIDEWALK WIDTH PLUS 8" FOR HANDRAILING

PLAN
(SIDEWALK AT BACK OF CURB)



SECTION B-B



SECTION A-A

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:07:28 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	103

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

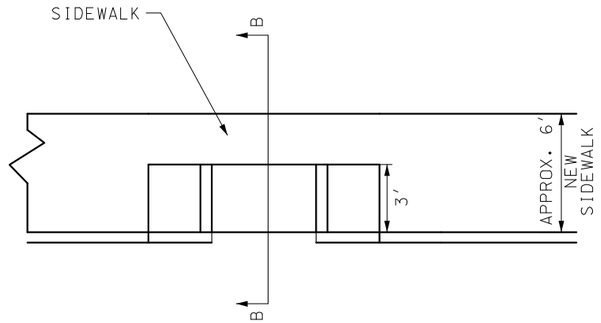
BRIDGE NO.

DESCRIPTION	DATE

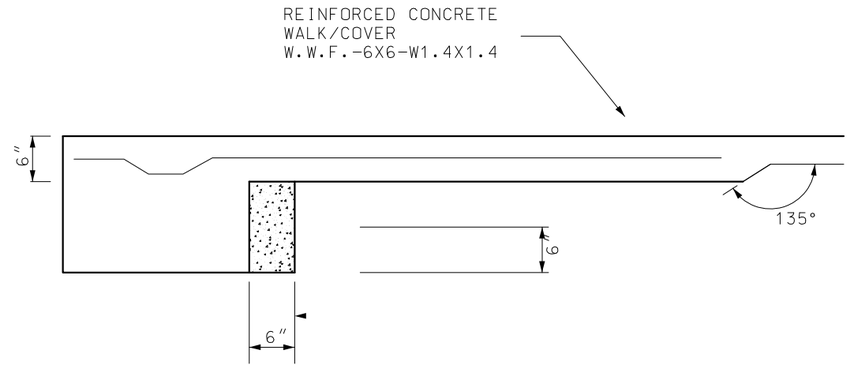
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEET
DRAINAGE FLUME



PLAN
(SIDEWALK AT BACK OF CURB)



SECTION B-B

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:07:39 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	104

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

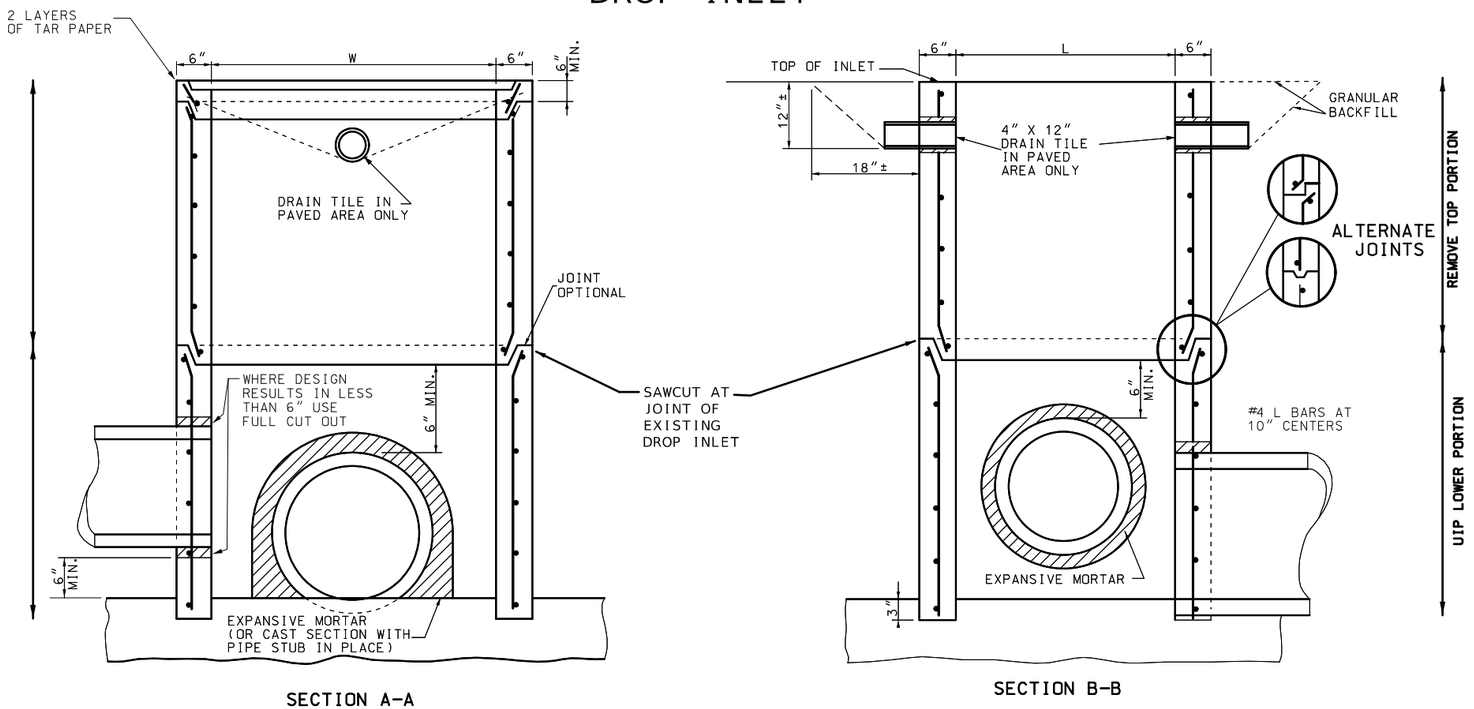
BRIDGE NO.

DESCRIPTION	DATE

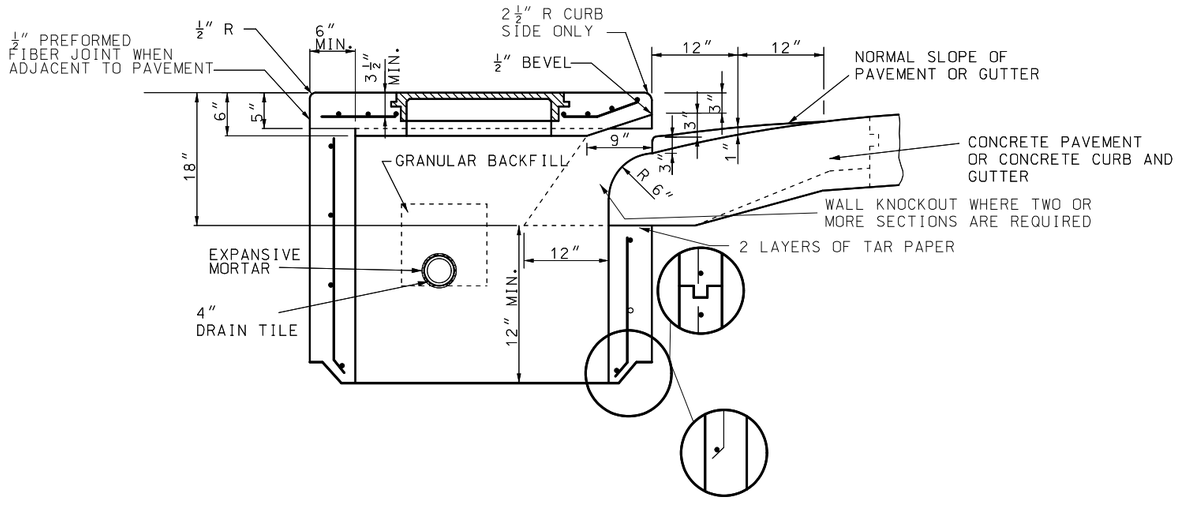
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SHEET
INLET COVER

DROP INLET



CURB OPENING INLET



INSTALL TOP PORTION ONTO EXISTING LOWER PORTION OF DROP INLET

MODIFIED FROM STANDARD PLANS 731.10T

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:07:50 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	105

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SPECIAL SHEET
MODIFIED INLET

COMMERCIAL

SAPPINGTON BARRACKS RD

EX. R/W

LUMINARE TO BE MOUNTED TO UTILITY POLE BY OTHERS

℄ RTE. 231

STA 50+29.61 ℄ RTE 231
4+00

℄ RTE 231 STA 50+29.61 ▬
℄ SHERIDAN RD STA 4+00.00

℄ RTE 231 STA 50+33.64 ▬
℄ SAPPINGTON BARRACKS RD
STA 45+98.99

STA 50+33.64 RTE 324
STA 45+98.99

CIRCUIT 1
#8 AWG
CABLE CONDUIT
3" PUSHED CONDUIT

LED3
STA. 49+70 - 64'LT
INSTALL TOP MOUNT LED-B,
45' POST AND FOUNDATION

EX. R/W

COMMERCIAL

CIRCUIT 2
#8 AWG
CABLE CONDUIT
3" PUSHED CONDUIT

PB1
STA. 50+38
80' LT

CIRCUIT 1 & 2
2-#8 AWG
CABLE CONDUIT
4" RIDGE TRENCH

SHERIDAN RD

N80°36'90"W

COMMERCIAL

LED2
STA. 50+93 - 81'RT
INSTALL TOP MOUNT LED-B,
45' POST AND FOUNDATION

NEW UPS
STA. 50+36.17
OFF. -58.30

EX. POWER SOURCE

NEW SIGNAL CABINET

POT STA 51+07.40

EX. R/W

CIRCUIT 1
#8 AWG
CABLE CONDUIT
TYPE 1 TRENCH AND
3" PUSHED CONDUIT

COMMERCIAL

LED1
STA. 50+73 - 52'LT
INSTALL TOP MOUNT LED-B,
45' POST AND FOUNDATION

LIGHTING LEGEND

- CONTROLLER
- POWER SUPPLY
- TOP MOUNT LED
- PULL BOX
- CONDUIT, RIGID (TRENCH)
- CONDUIT, RIGID (PUSHED)

SCALE
0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:07:59 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	106

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SAPPINGTON BARRACKS
LIGHTING PLANS

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP EX. LIGHT
POST AND BRACKET)
STA. 47+49
OFF. 48' RT

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 49+06
OFF. 69' LT

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 49+03
OFF. 81' RT

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 40+57
OFF. 46' LT

FORDER RD

POTTLE AVE

℄ RTE 231

℄ RTE 231
STA 49+04.34 =
℄ FORDER RD
STA 10+00.00

℄ RTE 231
STA 49+17.62 =
℄ POTTLE AVE
STA 10+00.00

POT STA 49+17.62 R3

S04°22'37"W

S03°23'21"W

N53°33'23"W

R 900.73 ft

R 516.78 ft

TCE

EX. R/W

MISC. PIPE

LIGHTING LEGEND

EX. LED-B LUMINAIRE

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:08:18 AM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	107

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

FORDER RD.
LIGHTING PLANS

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 75+55
OFF. 47' RT

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 76+19
OFF. 94' LT

COMMERCIAL
PROPERTY

TCE

EX.
R/W

℄ RTE. 231

℄ RTE 231
STA 76+33.34 =
℄ YAEGER RD
STA 5+00.00

YAEGER RD

CRESTLINE DR

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 76+73
OFF. 90' RT

REMOVE AND REPLACE
EX. LUMINARE WITH
NEW LED A LUMINARE
(UIP) EX. LIGHT
POST AND BRACKET)
STA. 77+19
OFF. 48' LT

SCALE
0 10 20 30

LIGHTING LEGEND

EX. LED-B LUMINAIRE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:13:22 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	108

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

YAEGER RD.
LIGHTING PLAN

COMMERCIAL

EX. R/W

REMOVE AND REPLACE EX. LUMINARE WITH NEW LED A LUMINARE (UIP) EX. LIGHT POST AND BRACKET)
STA. 104+08
OFF. 104' RT

REMOVE AND REPLACE EX. LUMINARE WITH NEW LED A LUMINARE (UIP) EX. LIGHT POST AND BRACKET)
STA. 102+90
OFF. 48' RT

℄ RTE. 231

BAUMGARTNER RD

EQUATION:
℄ STA 103+51.95 BK = ℄ STA 103+53.39 AHD

℄ RTE 231
STA 76+33.34 =
℄ BAUMGARTNER RD
STA 10+00.00

TCE

EX. R/W

CLIFF CAVE RD

COMMERCIAL

REMOVE AND REPLACE EX. LUMINARE WITH NEW LED A LUMINARE (UIP) EX. LIGHT POST AND BRACKET)
STA. 103+08
OFF. 100' LT

COMMERCIAL

SCALE
0 10 20 30

LIGHTING LEGEND

EX. LED-B LUMINAIRE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:13:32 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	109

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

BAUMGARTNER RD.
LIGHTING PLANS

COMMERCIAL

EX. R/W

TCE

SIGN

P RISER

GEBHARDT DR

111+00

N89°05'32"W

℄ RTE 231 STA 111+30.65 =
℄ GEBHARDT DR STA 10+00

S12°31'28"W

℄ HWY 231/TELEGRAPH RD

DI

STORM

CURB I

REMOVE AND REPLACE EX. LUMINARE WITH NEW LED A LUMINARE (UIP) EX. LIGHT POST AND BRACKET) STA. 110+88 OFF. 68' LT

COMMERCIAL

SIGN

TCE

COMMERCIAL

REMOVE AND REPLACE EX. LUMINARE WITH NEW LED A LUMINARE (UIP) EX. LIGHT POST AND BRACKET) STA. 112+22 OFF. 48' LT

EX. R/W

LIGHTING LEGEND

EX. LED-B LUMINAIRE

SCALE

0 10 20 30

BP

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 10:13:41 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	110

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

GEBHARDT RD
LIGHTING PLANS

SCALE
0 10 20 30

RESIDENTIAL

(R) EX. LUMINARE, POLE AND FOUNDATION

EX. R/W

LED5
STA. 130+00 - 58'RT
INSTALL TOP MOUNT LED-B,
45' POST AND FOUNDATION

CIRCUIT 1
#8 AWG
CABLE CONDUIT
3" PUSHED CONDUIT

℄ STA 130+54.42 =
STA 10+00

S01°01'43"W

℄ RTE. 231

℄ RTE 231 STA 130+54.42 =
℄ BLACKFOREST DR STA 10+00

130

EX. R/W

RESIDENTIAL

N89°04'10"W

11+00

LED4
STA. 130+83 - 77'RT
INSTALL TOP MOUNT LED-B,
45' POST AND FOUNDATION

BLACKFOREST DR

(R) EX. LUMINARE, POLE AND FOUNDATION

CIRCUIT 1
#8 AWG
CABLE CONDUIT
TYPE 1 TRENCH AND
3" PUSHED CONDUIT

PB2
STA. 131+03
OFF. 85' RT

NEW SIGNAL CONTROLLER

CIRCUIT 1
#8 AWG
CABLE CONDUIT
4" RIGID
CONDUIT TRENCHED

NEW UPS
STA. 131+09.94
OFF. 76.38'

EX. SIGNAL CONTROLLER

EX. R/W

RESIDENTIAL

RESIDENTIAL

LIGHTING LEGEND

- CONTROLLER
- POWER SUPPLY
- TOP MOUNT LED
- PULL BOX
- CONDUIT, RIGID (TRENCH)
- CONDUIT, RIGID (PUSHED)

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:13:51 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	111

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

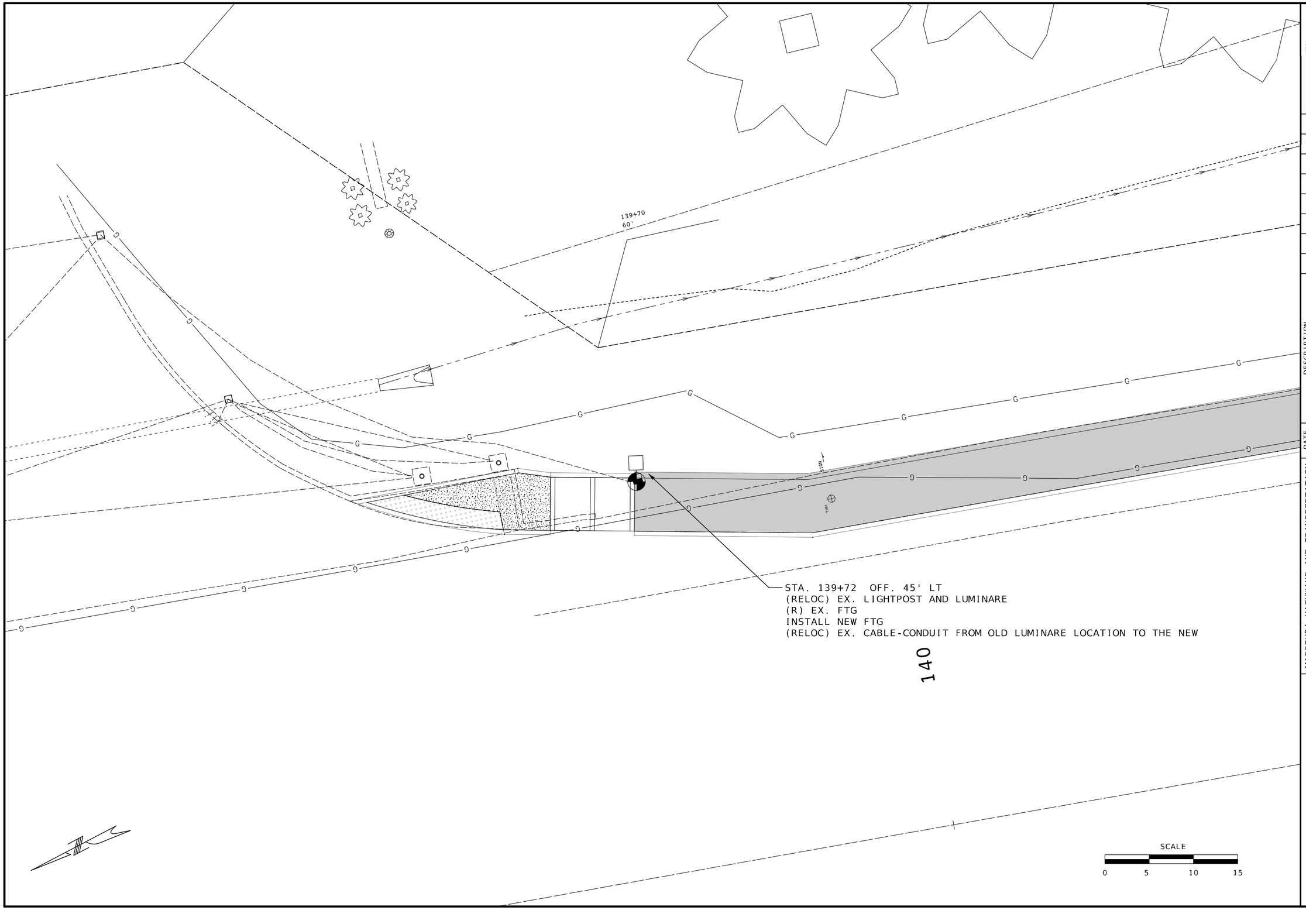
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

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

BLACKFOREST
LIGHTING SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 10:14:01 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	112

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

OAKVILLE SCHOOLS
LIGHTING SHEETS

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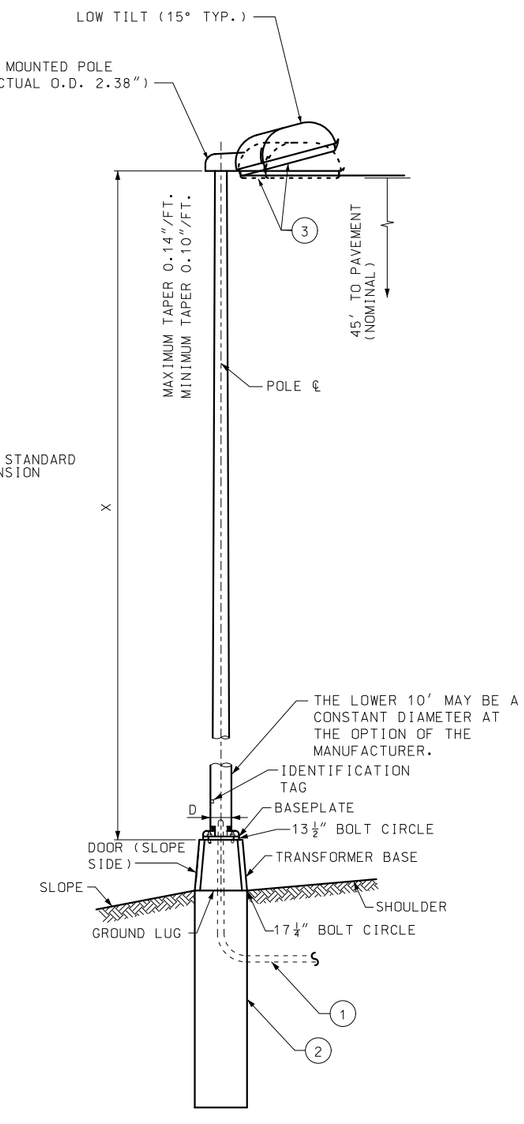


TYPE AT
(SINGLE LUMINAIRE)

NOTE: THIS DRAWING IS NOT TO SCALE. FOLLOW DIMENSIONS.

GENERAL NOTES:

A. HOLES SHALL BE PUNCHED ONLY FOR SPECIFIED BOLT CIRCLE.

B. TRANSFORMER BASE SHALL BE CERTIFIED AS MEETING THE BREAKAWAY CRITERIA AND STRUCTURAL REQUIREMENTS AS SET BY THE CURRENT AASHTO "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINARIES, AND TRAFFIC SIGNALS" AND MEET THE BREAKAWAY REQUIREMENTS OF NCHRP 350.

C. TRANSFORMER BASES SHALL BE FURNISHED WITH ONE DRILLED AND TAPPED HOLE AND GROUNDING LUG FOR GROUNDING EQUIPMENT.

D. TYPE AT POLES SHALL BE EQUIPPED WITH THE GROUNDING LUG INSIDE THE TRANSFORMER BASE. TYPE B AND MB POLES SHALL BE EQUIPPED WITH A GROUNDING LUG INSIDE THE POLE.

E. POST SHALL BE GROUNDED FROM GROUND LUG IN POST WITH #6 AWG BARE COPPER WIRE TO CONDUIT SYSTEM. GROUND LUG SHALL BE 90° OR 180° FROM HANDHOLE.

(1) RIGID CONDUIT SYSTEM. WIRES SHALL BE SPLICED AT FUSED CONNECTOR IN POLE BASE. IF CABLE-CONDUIT IS SPECIFIED, CUT CABLE-CONDUIT SHEATH AWAY FROM THE CABLES WHERE CABLE-CONDUIT EXITS THE RIGID CONDUIT SYSTEM IN THE POLE BASE. (SEE MODOT STANDARD DRAWING 901.02 "TYPICAL TRANSFORMER BASE ATTACHMENT")

(2) CONCRETE FOUNDATION PER MODOT STANDARD DRAWING 901.01, SHEET 6 OF 6. FOUNDATION SHALL MATCH DEPTH AS REQUIRED BY POLE DESIGNS 1, 2, 3, 4 & 5.

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
05/30/2025 10:14:11 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	113

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

LIGHTING SPECIAL SHEET
TOP-MOUNT LIGHT POLE

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

COMMERCIAL

(R) EX. SIGNAL POST, PEDESTRIAN HEAD, PUSH BUTTON

(R) EX. PULL BOX STA. 49+84.52 OFF. 49.81

NEXT SIGNAL: HWY 231/JEFFERSON BARRACKS RD 3500 FT GRADE: -0.19% 40 MPH

COMMERCIAL

RAISED ISLAND

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION, LUMINARE, WIRELESS ANTENNA, CCTV

EX. R/W

(R) EX. SIGNAL POST, PEDESTRIAN HEAD, PUSH BUTTON

(R) EX. PULL BOX STA. 49+91.04 OFF. -45.85

SAPPINGTON BARRACKS RD

CROSSWALK

RAISED ISLAND

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION, LUMINARE

NO SIGNAL

GRADE: -3.85% 35 MPH

℄ RTE. 231

STA 50+29.61 = STA 4+00

℄ RTE 231 STA 50+29.61 = ℄ SHERIDAN RD STA 4+00.00

ABANDON EX. SIGNAL CONDUIT

℄ RTE 231 STA 50+33.64 = ℄ SAPPINGTON BARRACKS RD STA 45+98.99

STA 50+33.64 = STA 45+98.99

ABANDON EX. SIGNAL CONDUIT

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION, LUMINARE

(R) EX. SIGNAL POST, PEDESTRIAN HEAD, PUSH BUTTON

RAISED ISLAND

SHERIDAN RD

NO SIGNAL

GRADE: 0.35% 35 MPH

(R) EX. PULL BOX STA. 50+74.43 OFF. 54.61

(R) EX. PULL BOX STA. 50+65.36 OFF. 38.79

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION

RAISED ISLAND

ABANDON EX. SIGNAL CONDUIT

(R) EX. PULL BOX STA. 50+56.1 OFF. -59.59

(R) EX. PULL BOX STA. 50+61.08 OFF. -60.85

POT STA 51+07.40

ABANDON EX. SIGNAL CONDUIT

SALVAGE EX. CABINET (R) EX. FTG

COMMERCIAL

NEXT SIGNAL: HWY 231/BARRACKSVIEW RD 1988 FT GRADE: -3.38% 40 MPH

EX. R/W

TRAFFIC SIGNALS LEGEND	
CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM – TYPE A BASE (EXISTING)

SCALE

0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:14:24 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	114

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SAPPINGTON BARRACKS
EX. SIGNAL PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

COMMERCIAL

SAPPINGTON BARRACKS RD

NO SIGNAL

GRADE: -3.85%
35 MPH

DETECTION ZONE 71

DETECTION ZONE 41

DETECTION ZONE 22

DETECTION ZONE 21

DETECTION ZONE 51

DET. ZONE 24

NEXT SIGNAL: HWY 231/JEFFERSON BARRACKS RD 3500 FT
GRADE: -0.49%
40 MPH

CROSSWALK

RAISED ISLAND

NEW CCTV

℄ RTE. 231

℄ RTE 231 STA 50+29.61 = ℄ SHERIDAN RD STA 4+00.00

℄ RTE 231 STA 50+33.64 = ℄ SAPPINGTON BARRACKS RD STA 45+98.99

STA 50+33.64 RTE 321 =
STA 45+98.99

R 85.60'

R 57.99'

R 39.14'

R 83.20'

(b) Sappington Barracks Rd / Sheridan Rd
D3-1b

(c) Sheridan Rd / Sappington Barracks Rd
D3-1b

(d) Telegraph Rd
D3-1

COMMERCIAL

NO SIGNAL

GRADE: 0.35%
35 MPH

N90,9E08N

SHERIDAN RD

COMMERCIAL

RAISED ISLAND

DETECTION ZONE 11

DETECTION ZONE 61

DETECTION ZONE 62

DET. ZONE 63

POT STA 51+07.40

NEXT SIGNAL: HWY 231/BARRACKS VIEW RD 1988 FT
GRADE: 3.38%
40 MPH

NEW UPS
STA. 50+36.17
OFF. -58.30

EX. POWER SOURCE AND CONTROLLER

NEW CABINET, FOUNDATION
STA. 50+44.89
OFF.-76.05

R10-3eL (1 3)

R10-3eR (3 5)

LEFT TURN YIELD ON FLASHING ARROW (a)
R10-27a

TRAFFIC SIGNALS LEGEND	
CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM – TYPE A BASE (EXISTING)

SCALE
0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:14:34 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	115

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

SAPPINGTON BARRACKS
PROPOSED SIGNAL PLAN SHEET

EFFECTIVE: 07-01-2018

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

CONDUIT

FROM	TO	CTR TO CTR DIST.	LOOP DETECT	TRENCHED			PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
SOURCE	UPS	9		(13)												INCLUDED IN COST OF PS
UPS	CONT	13		21												
CONT.	PB1	4			15											2x7.5'
PB1	P1	6			7											
PB1	PB2	62						60								
PB2	P2	6						9								
PB2	P3	8						9								
PB2	P4	11						14								
PB2	PB3	99						97								
PB 3	P5	4						5								
PB1	PB4	113						111								
PB4	P6	8						11								
PB4	P7	4						7								

EFFECTIVE: 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY			CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
						CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
								SIGNALS	LIGHTING				
ROUTE 231	50+36.17	58.30' LT	Type		1	15 AMPS	15 AMPS	100 AMPS			100 AMPS		
ROUTE 231	50+31.88	92.72' LT	Type										AMEREN
INTERSECTION TOTAL					1								

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									
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	MASTER	LOCAL		NEMA	170	FIBER		E	EV	DOUBLE	332	336S	BITRAN	WAPITI
ROUTE 231	50+44.89	76.05' LT			1												1					
INTERSECTION TOTAL					1												1					

NEMA DETECTOR ASSIGNMENT

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

OPTIONAL

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

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	DETECTOR ZONE	TYPE				
			ACCESSIBLE PED SIGNAL PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
				STANDARD	DELAY/ EXTEND *	CALL UNIT *	
V3	NB ROUTE 231 - THRU	61					1
	NB ROUTE 231 - THRU	62					
	NB ROUTE 231 - BIKE	63					
	NB ROUTE 231 - LEFT	11					
V1	SB ROUTE 231 - THRU	21					1
	SB ROUTE 231 - THRU	22					
	SB ROUTE 231 - RIGHT	23					
	SB ROUTE 231 - BIKE	24					
V2	SB ROUTE 231 - LEFT	51					1
	EB SAPPINGTON BARRACKS RD - THRU	41					
	EB SAPPINGTON BARRACKS RD - LEFT	71					
V4	WB SHERIDAN RD - THRU	81					1
	WB SHERIDAN RD - LEFT	31					
D1	SB RTE. 231 PEDESTRIANS	P1	1				
D2	NB RTE. 231 PEDESTRIANS	P2	1				
D3	EB SAPPINGTON BARRACKS RD PEDESTRIANS	P3	1				
D4	WB SHERIDAN RD PEDESTRIANS	P4	1				
INTERSECTION TOTAL			4				SEE BELOW

SL DISTRICT TRAFFIC SIGNAL DETECTION SYSTEM

	DETECTION SYSTEM (EACH)	REMARKS
INTERSECTION TOTAL	1	SEE JOB SPECIAL PROVISIONS

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			
	R3-5L	30 X 36	7.5			
	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			
2	D3-1	84 X 18	10.5	21.0	4	TELEGRAPH RD
1	D3-1B	96 X 18	12.0	12.0	2	SAPPINGTON BARRACK RD/ SHERIDAN RD
1	D3-1B	96 X 18	12.0	12.0	2	SHERIDAN RD/ SAPPINGTON BARRACK RD
	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	30.0	4	
2	R10-3eR	9 X 15	0.9	1.8**	2**	
2	R10-3eL	9 X 15	0.9	1.8**	2**	
		SUBTOTAL	78.6	16		
		TOTAL	75.0	12		

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1 NBL	Ø2 SBT	Ø3 WBL	Ø4 EBT	Ø5 SBL	Ø6 NBT	Ø7 EBL	Ø8 WBT	OLA FYA NBL	OLB FYA WBL	OLC FYA SBL	OLD FYA EBL	NOT USED	NOT USED	Ø6 PED NB	Ø8 PED WB

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

(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.

ROUTE 231 (TELEGRAPH RD) AT SAPPINGTON BARRACKS RD
INTERSECTION

D-37C

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:15:06 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	118

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

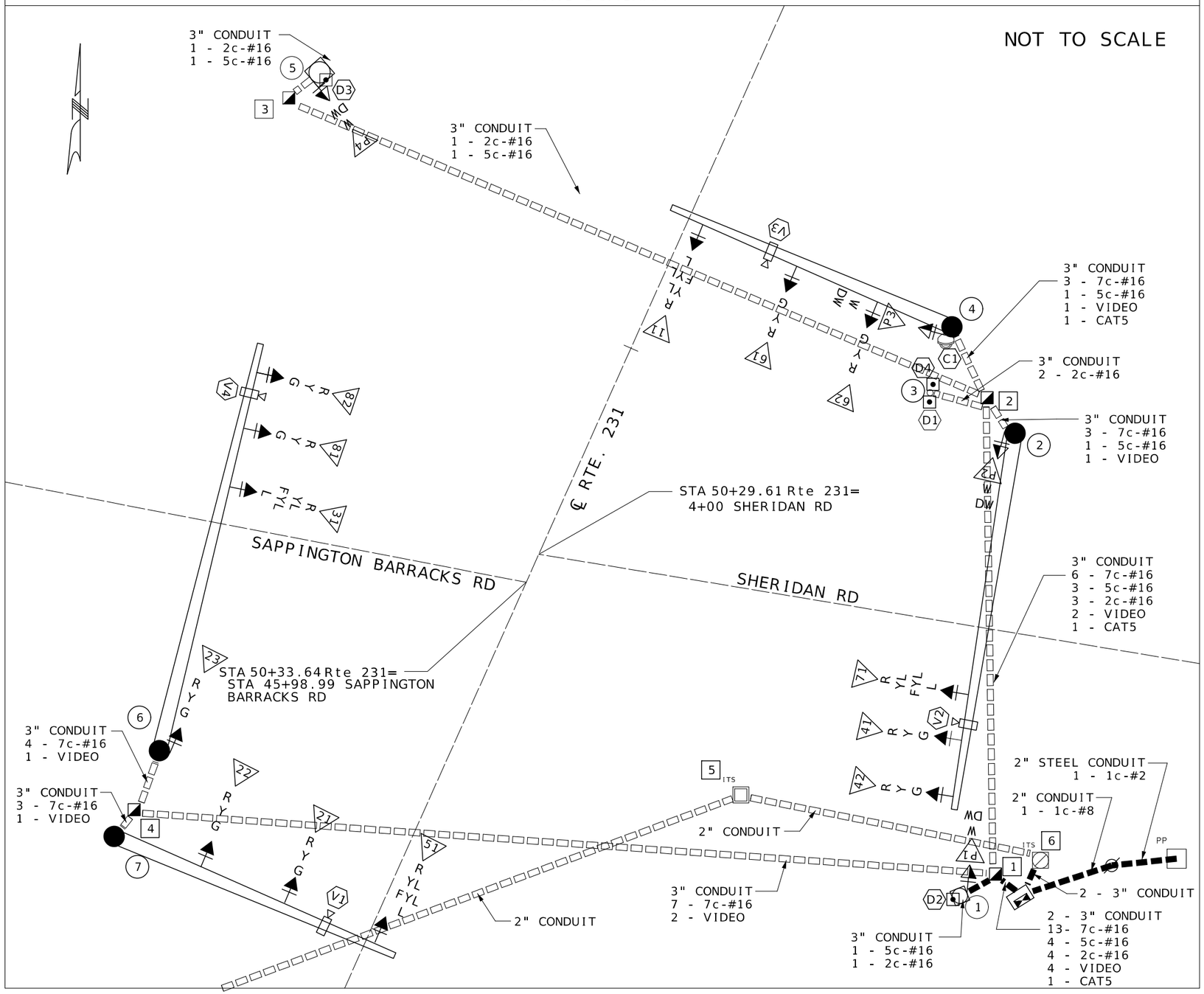
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SIGNAL SHEET
ROUTE 231 AT
SAPPINGTON BARRACKS RD
D-37C

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

ROUTE 231 (TELEGRAPH RD) AT SAPPINGTON BARRACKS RD

INTERSECTION

D-37D

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 10:15:17 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	119

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

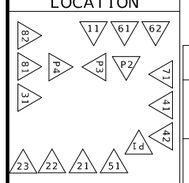
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

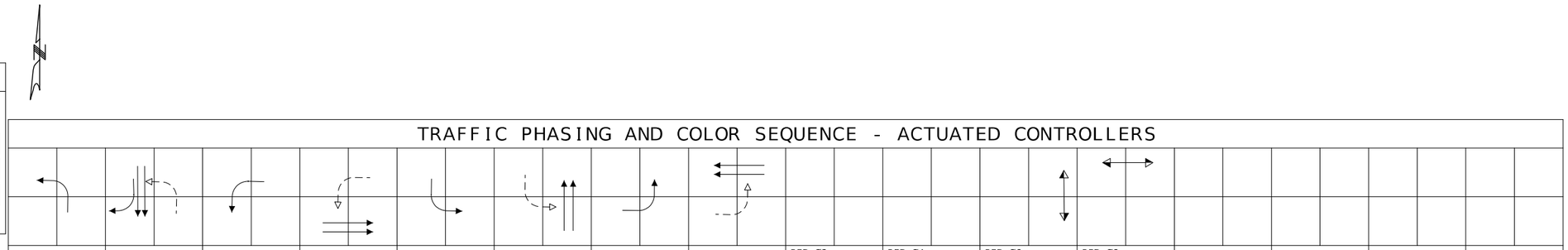
SIGNAL SHEET
ROUTE 231 AT
SAPPINGTON BARRACKS RD
D-37D

EFFECTIVE: 12-01-2017

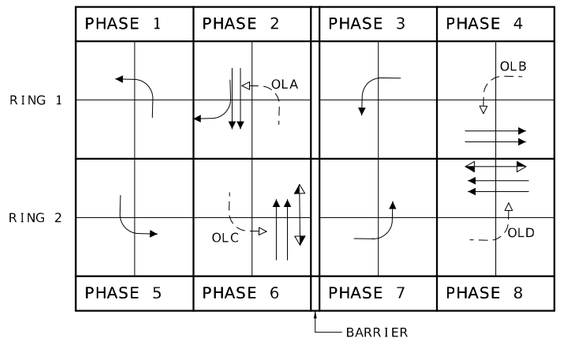
SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS



	PHASE Ø1	PHASE Ø2	PHASE Ø3	PHASE Ø4	PHASE Ø5	PHASE Ø6	PHASE Ø7	PHASE Ø8	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP	
FACE NUMBERS	11	21 22 23 11	31	41 42 31	51	61 62 51	71	81 82 71			P1 P2	P3 P4	FACE NUMBERS
SIGNAL INDICATIONS R	R	R R R R	R	R R R	R	R R R	R	R R R			DW	DW	R
SIGNAL INDICATIONS Y	YL	Y Y Y YL	Y	Y Y Y	YL	Y Y YL	YL	Y Y YL			FDW	FDW	Y
SIGNAL INDICATIONS FYA		FYL		FYL		FYL		FYL					FYA
SIGNAL INDICATIONS G		G G		G G		G G		G G			W	W	G
	L	Rt	L		L		L						SIGNAL INDICATIONS
DETECTOR ASSIGNMENTS	11	21 22 23	31	41 42	51	61 62	71	81 82					DETECTOR ASSIGNMENTS
DETECTOR ASSIGNMENTS (PEDS. ONLY)											D1 D2	D3 D4	
OVERLAP PARENT PHASES											Ø6	Ø8	



RING STRUCTURE

NOTES:

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

FLASHING OPERATION	
ROUTE 231 (TELEGRAPH RD)	FR
SAPPINGTON BARRACKS/SHERIDAN RD	FR

CONTROLLER TYPE	NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF ROUTE 231 (TELEGRAPH RD)
WITH SAPPINGTON BARRACKS RD/ SHERIDAN RD

D-38A

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:17:41 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

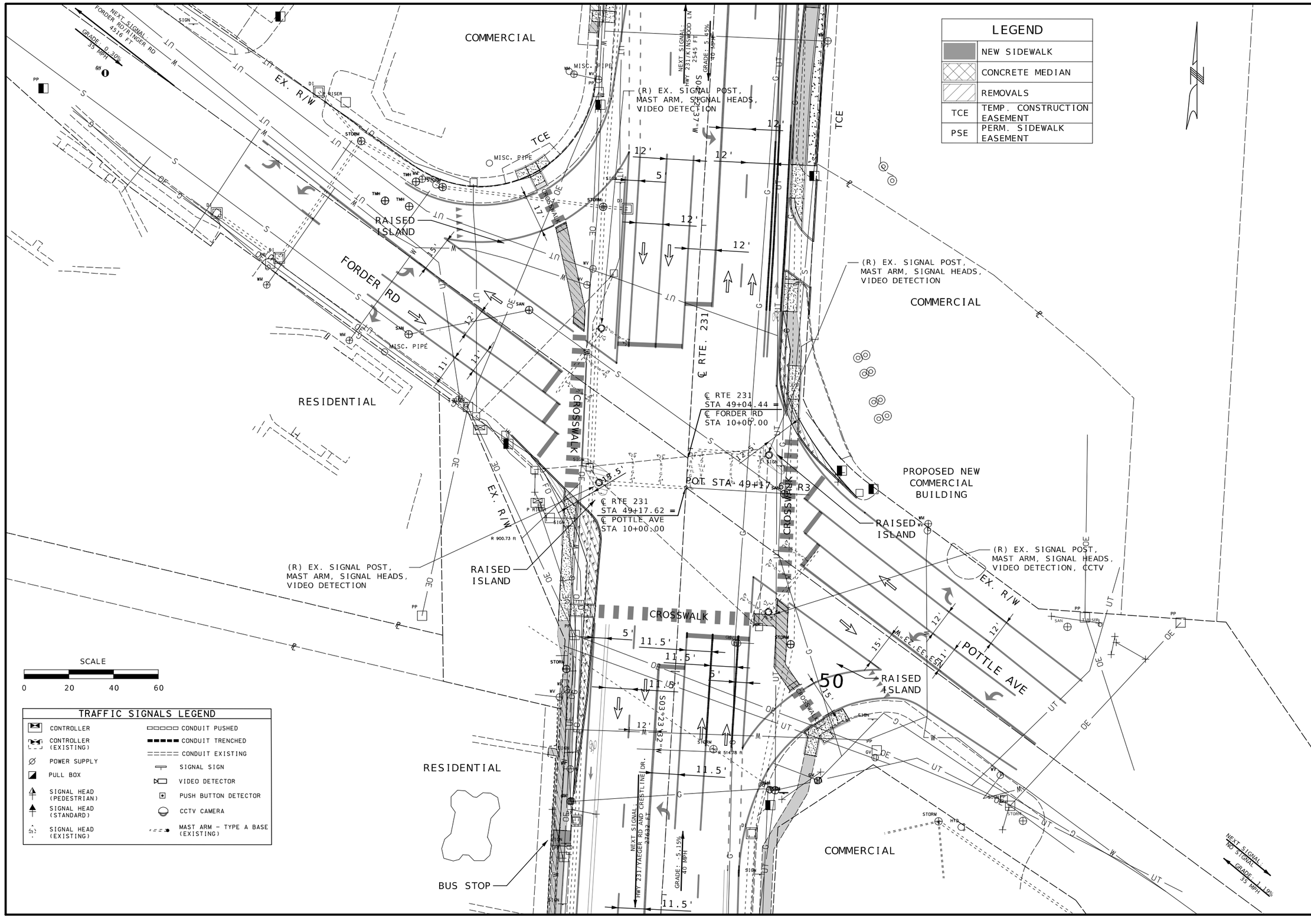
ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	120

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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
ROUTE 231 AT
SAPPINGTON BARRACKS RD
D-38A



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:17:52 AM
STUART ROBINSON McNEIL CIVIL MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	121

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

FORDER RD.
EX. SIGNAL PLAN SHEET

COMMERCIAL

RESIDENTIAL

FORDER RD

HWY 231/TELEGRAPH RD

EX. R/W

TCE

RAISED ISLAND

CROSSWALK

NEW CCTV

POTTLE AVE

PROPOSED NEW COMMERCIAL BUILDING

BUS STOP

℄ RTE 231
STA 49+04.44 =
℄ FORDER RD
STA 10+00.00

℄ RTE 231
STA 49+17.62 =
℄ POTTLE AVE
STA 10+00.00

POT STA 49+17.62 RT

NEXT SIGNAL HWY 231/KINSWOOD LN 2545 FT

NEXT SIGNAL FORDER RD/RINGER RD 4516 FT GRADE: 0.30% 55 MPH

NEXT SIGNAL HWY 231/AEGER RD AND CRESTLINE DR 27632 FT

GRADE: 5.45% 40 MPH

GRADE: -5.15% 40 MPH

GRADE: 1.19% 55 MPH

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

R10-3eL (1) (2)

R10-3eR (4) (8) (6) (7)

(a) LEFT TURN YIELD ON FLASHING ARROW
R10-27a

(c) Pottle Ave / Forder Rd
D3-1b

(b) Forder Rd / Pottle Ave
D3-1b

(d) Telegraph Rd
D3-1

TRAFFIC SIGNALS LEGEND	
CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM - TYPE A BASE (EXISTING)

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:18:03 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	122

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

FORDER RD.
PROPOSED SIGNAL PLAN SHEET

EFFECTIVE: 07-01-2018

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

CONDUIT

FROM	TO	CTR TO CTR DIST.	LOOP DETECT	TRENCHED			PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
SOURCE	UPS	30		(34)												INCLUDED IN COST OF PS
UPS	CONT.	13		21												
CONT.	PB1	9			25											2x12.5'
PB1	PB5	31			29											
PB5	P1	19						20								
PB1	PB2	93						91								
PB2	P2	20						23								
PB2	PB3	141						139								
PB3	P3	7						10								
PB3	P4	14						15								
PB3	PB4	94						92								
PB4	P5	7						10								
PB4	P6	19						20								
PB4	P7	21						22								
PB5	P8	25						26								
PB5	P9	22						25								

EFFECTIVE: 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY			CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
						CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
								SIGNALS	LIGHTING				
ROUTE 231	49+04.58	86.70' RT	Type		1	15 AMPS	15 AMPS	100 AMPS					
ROUTE 231	48+87.32	99.53' RT	Type										AMEREN
INTERSECTION TOTAL					1								

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
ROUTE 231	49+15.04	79.71' RT			1												1					
INTERSECTION TOTAL					1												1					

NEMA DETECTOR ASSIGNMENT

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

OPTIONAL

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

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	DETECTOR ZONE	TYPE				
			ACCESSIBLE PED SIGNAL PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
				STANDARD	DELAY/ EXTEND *	CALL UNIT *	
V3	NB ROUTE 231 - THRU	61					1
	NB ROUTE 231 - THRU	62					
	NB ROUTE 231 - BIKE	63					
	NB ROUTE 231 - LEFT	11					
V1	SB ROUTE 231 - THRU	21					1
	SB ROUTE 231 - THRU	22					
	SB ROUTE 231 - BIKE	23					
	SB ROUTE 231 - LEFT	51					
V4	EB FORDER RD- RIGHT	43					1
	EB FORDER RD- THRU	42					
	EB FORDER RD - LEFT	41					
V2	WB POTTLE AVE - RIGHT	33					1
	WB POTTLE AVE - THRU	32					
	WB POTTLE AVE - LEFT	31					
D1	SB RTE. 231 AT FORDER RD PEDESTRIANS	P1	1				
D2	NB RTE. 231 AT FORDER RD PEDESTRIANS	P2	1				
D5	SB RTE. 231 AT POTTLE AVE PEDESTRIANS	P5	1				
D6	NB RTE. 231 AT POTTLE AVE PEDESTRIANS	P6	1				
D4	EB FORDER RD PEDESTRIANS	P4	1				
D3	WB POTTLE AVE PEDESTRIANS	P3	1				
INTERSECTION TOTAL			6				SEE BELOW

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			
	R3-5L	30 X 36	7.5			
	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			
2	D3-1	84 X 18	10.5	21.0	4	TELEGRAPH RD
1	D3-1B	48 X 18	6.0	6.0	2	FORDER RD/ POTTLE AVE
1	D3-1B	48 X 18	6.0	6.0	2	POTTLE AVE/ FORDER RD
	R10-3E	9 X 15	0.9			
	R10-11A	24 X 30	5.0			
	R10-13	36 X 24	6.0			
2	R10-27A	30 X 36	7.5	15.0	2	
4	R10-3eR	9 X 15	0.9	3.6**	4**	
2	R10-3eL	9 X 15	0.9	1.8**	2**	
			SUBTOTAL	53.4	16	
			TOTAL	48.0	10	

SL DISTRICT TRAFFIC SIGNAL DETECTION SYSTEM

	DETECTION SYSTEM (EACH)	REMARKS
INTERSECTION TOTAL	1	SEE JOB SPECIAL PROVISIONS

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1 NBL	Ø2 SBT	Ø3 WB	Ø4 EB	Ø5 SBL	Ø6 NB	NOT USED	NOT USED	OLA FYA NBL	NOT USED	OLC FYA SBL	NOT USED	Ø2 PED SB	Ø4 PED EB	Ø6 PED NB	NOT USED

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

(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.

ROUTE 231 (TELEGRAPH RD) AT FORDER RD
INTERSECTION

D-37C

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:18:33 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	125

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

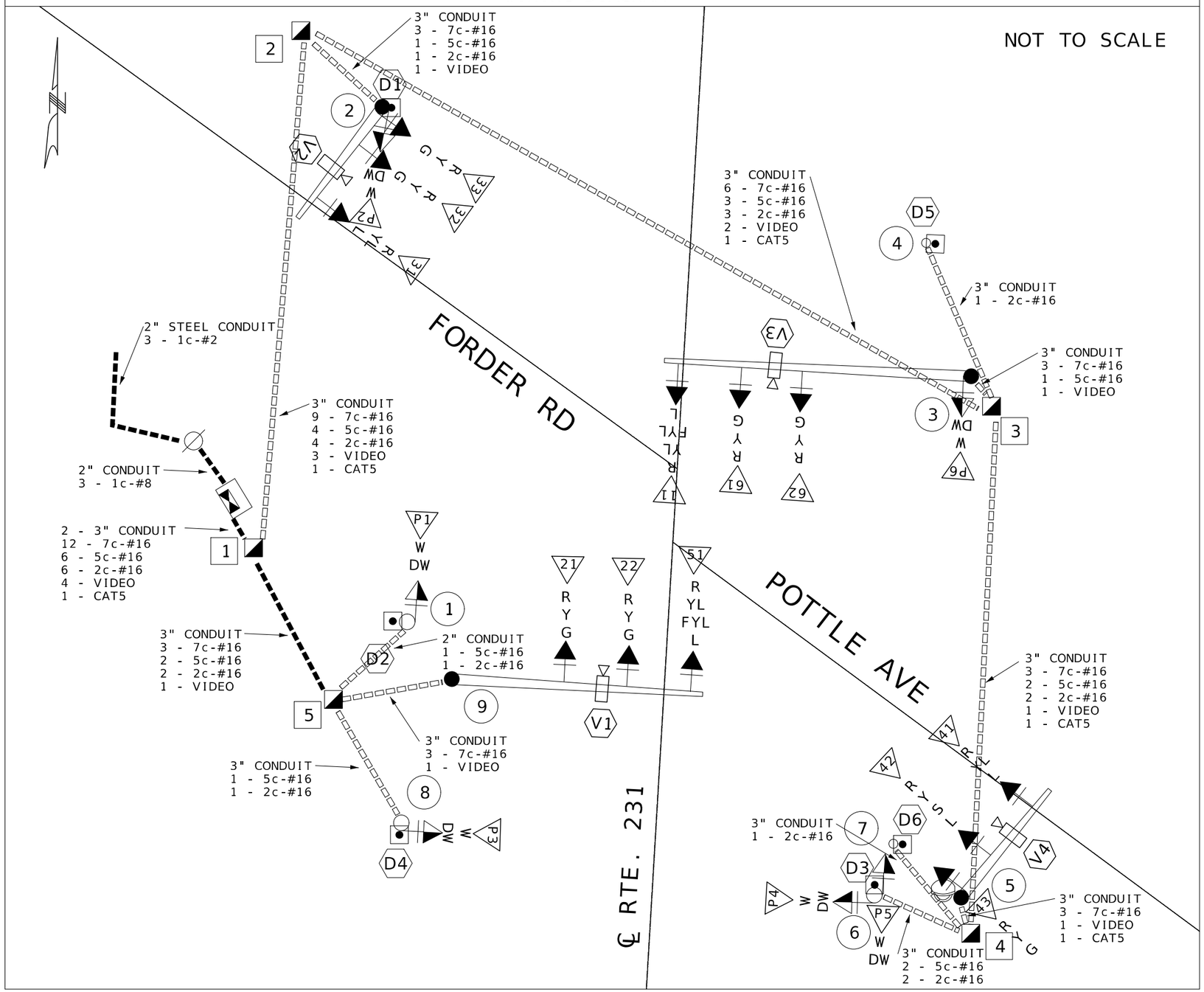
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SIGNAL SHEET
ROUTE 231 AT FORDER RD
D-37C

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

ROUTE 231 (TELEGRAPH RD) AT FORDER RD

INTERSECTION

D-37D

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:18:46 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	126

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

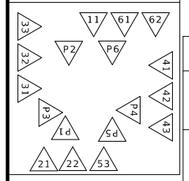
DESCRIPTION	DATE

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

SIGNAL SHEET
ROUTE 231 AT FORDER RD
D-37D

EFFECTIVE: 12-01-2017

SIGNAL FACE LOCATION



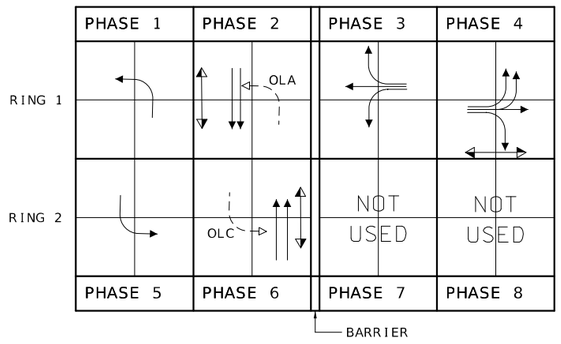
TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

	PHASE Ø1	PHASE Ø2	PHASE Ø3	PHASE Ø4	PHASE Ø5	PHASE Ø6	PHASE Ø7	PHASE Ø8				
							NOT USED	NOT USED	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP
FACE NUMBERS	11	21 22 11	31 32 33	41 42 43	51	61 62 51			P1	P3	P5	
									P2	P4	P6	
SIGNAL INDICATIONS R	R	R R R	R R R	R R R	R	R R R			DW	DW	DW	
SIGNAL INDICATIONS Y	YL	Y Y YL	YL Y Y	YL Y Y	YL	Y Y YL			FDW	FDW	FDW	
SIGNAL INDICATIONS FYA		FYL				FYL						
SIGNAL INDICATIONS G		G G	G	S G		G G			W	W	W	
SIGNAL INDICATIONS	L		L	L L	L							
DETECTOR ASSIGNMENTS	11	21 22	31 32 33	41 42 43	51	61 62						
DETECTOR ASSIGNMENTS (PEDS. ONLY)									D1 D2	D3 D4	D5 D6	
OVERLAP PARENT PHASES									Ø2	Ø4	Ø6	

FACE NUMBERS

SIGNAL INDICATIONS (R, Y, FYA, G)

DETECTOR ASSIGNMENTS



RING STRUCTURE

NOTES:

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

FLASHING OPERATION

ROUTE 231 (TELEGRAPH RD)	FR
FORDER RD/POTTLE AVE	FR

CONTROLLER TYPE	NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF ROUTE 231 (TELEGRAPH RD)

WITH FORDER RD/POTTLE AVE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:30:20 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	127

COUNTY: ST. LOUIS

JOB NO.: J6S3632

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
ROUTE 231 AT FORDER RD
D-38A

D-38A

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

COMMERCIAL PROPERTY

EX. R/W

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, PEDESTRIAN HEADS

RAISED ISLAND

CROSSWALK

YAEGER RD

APPR. GRADE: 3.79% (35 MPH)

NO SIGNAL

℄ RTE 231
STA 76+33.34 =
℄ YAEGER RD
STA 5+00.00

℄ RTE. 231

NEXT SIGNAL: HWY 231/FORDER RD 2600 FT

APPR. GRADE: 2.66% (40 MPH)

(R) EX. PULL BOX
STA. 76+07.40
OFF. -37.99

TCE

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DETECTION, PEDESTRIAN HEAD, PUSH BUTTON

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION, PEDESTRIAN HEAD

NEXT SIGNAL: HWY 231/COPPERGATE SQUARE DR 1689 FT

APPR. GRADE: -2.43% (40 MPH)

NO SIGNAL

APPR. GRADE: -1.93% (25 MPH)

CRESTLINE DR

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION, LUMINARE, WIRELESS ANTENNA, CCTV

TRAFFIC SIGNALS LEGEND	
CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM – TYPE A BASE (EXISTING)

SCALE
0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:30:31 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	128

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

YAEGER RD.
EX. SIGNAL PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

LEFT TURN YIELD ON FLASHING ARROW
R10-27a

Yaeger Rd
Crestline Dr
D3-1b

R10-3eL

R10-3eR

NEW POWER SOURCE
STA. 75+76.04
OFF.-57.97

NEW UPS
STA. 75+81.51
OFF. -60.30

NEW CABINET, FOUNDATION, AND CONTROLLER
STA. 75+85.33
OFF.-63.34

NEXT SIGNAL:
UT HWY 231/FORDER RD
2600 FT

APPR. GRADE
2.66%
(40 MPH)

DETECTION ZONE 51
DETECTION ZONE 22
DETECTION ZONE 21
DET. ZONE 23

CROSSWALK
RAISED ISLAND
STANCHION
TCE
EX. R/W
COMMERCIAL PROPERTY

℄ RTE 231
STA 76+33.34 =
℄ YAEGER RD
STA 5+00.00

YAEGER RD
CRESTLINE DR

DETECTION ZONE 71
DETECTION ZONE 41
DETECTION ZONE 81
DETECTION ZONE 31

APPR. GRADE: 3.79% (35 MPH)
NO SIGNAL
APPR. GRADE: -1.93% (25 MPH)

NEXT SIGNAL:
HWY 231/COPPERGATE SQUARE DR
1689 FT

APPR. GRADE: -2.43% (40 MPH)

DETECTION ZONE 61
DETECTION ZONE 62
DETECT. ZONE 63
DETECTION ZONE 11

NEW CCTV

Telegraph Rd
D3-1

SCALE
0 10 20 30

TRAFFIC SIGNALS LEGEND

CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM – TYPE A BASE (EXISTING)

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:30:50 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	129

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

YAEGER RD.
PROPOSED SIGNAL PLAN SHEET

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 | BASE F 9 | F 9.5 | F 10 | F 10.5 | F 11 | F 12 | C | CONCRETE** (CU. YDS.) | PULL BOX PREFORMED CLASS 1 | CLASS 2 | CLASS 3 | CLASS 5 | CONCRETE STANDARD | DOUBLE, TYPE A | DOUBLE, TYPE B | DRAIN TYPE* I | II A | II B | II C | TOP MOUNT POST 8 FT. | 15 FT. | POST 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. | PUSH BUTTON STANCHION EACH |
|---|---|---

CONDUIT

FROM	TO	CTR TO CTR DIST.	LOOP DETECT	TRENCHED			PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1″	2″	3″	4″	2″	3″	4″	2″	3″	4″	2″	3″	4″	
SOURCE	UPS	6		(10)												INCLUDED IN COST OF PS
UPS	CONT.	5		13												
CONT.	PB1	8			23											2x11.5′
PB1	PB2	28							26							
PB2	P6	16						19								
PB2	P7	12						13								
PB2	PB3	83						81								
PB3	P4	19						22								
PB3	P5	4						5								
PB3	PB4	56						54								
PB4	P3	10						11								
PB4	P2	15						16								
PB4	P1	15						18								
PB2	PB5	56						54								
PB5	P8	15						16								
PB5	P9	8						11								
SUBTOTALS		0	0	13	23	0	0	321	26	0	0	0	0	0	0	
PAY TOTALS		0	0	13	23	0	0	321	26	0	0	0	0	0	0	

CABLE

FROM	TO	CTR TO CTR DIST.	POWER		CONTROL				LIGHTING		DETECTOR		FIBER	REMARKS
			1c–#2	1c–#8	2c–#16	5c–#16	7c–#16	12c–#12	CONTROL 2c–#12	POLE & BRACKET 1c–#10	1c–#14 IN DUCT	2c–#14 LEAD IN	24 FIBER SINGLEMODE	
SOURCE	UPS	6	(147)											3x49′ INCLUDED IN COST OF PS
UPS	CONT.	5		99										3x33′
CONT.	PBD7	49			70									
CONT.	PED P6	53				75								
CONT.	PED P5	53				75								
CONT.	PBD4	53			74									
CONT.	H 62	53					99							
CONT.	H 61	53					109							
CONT.	H 11	53					121							
CONT.	PED P4	124				152								
CONT.	PBD5	124			151									
CONT.	PBD2	124			151									
CONT.	PED P3	124				152								
CONT.	H 82	138					169							
CONT.	H 81	138					188							
CONT.	H 31	138					195							
CONT.	PBD3	186			219									
CONT.	PDB8	191			224									
CONT.	PED P1	191				225								
CONT.	PED P2	190				224								
CONT.	H 22	190					249							
CONT.	H 21	190					261							
CONT.	H 51	190					272							
CONT.	PED P7	108				148								
CONT.	PED P8	108				148								
CONT.	PBD6	108			129									
CONT.	PBD1	108			129									
CONT.	H 42	101					147							
CONT.	H 41	101					156							
CONT.	H 71	101					166							
CONT.	CCTV	101												138′ ETHERNET CABLE
SUBTOTALS		0	99		1145	1198	2133	0	0	0	0	0	0	
PAY TOTALS		0	100		1200	1260	2240	0	0	0	0	0	0	INCLUDE 5% FOR SNAKING

INTERSECTION ROUTE 231 (TELEGRAPH RD) AT YAEGER RD

D-37B

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:31:12 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE 231 | STATE MO

DISTRICT SL | SHEET NO. 131

COUNTY ST. LOUIS

JOB NO. J6S3632

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
ROUTE 231 AT YAEGER RD
D-37B

EFFECTIVE: 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY			CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
						CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
								SIGNALS	LIGHTING				
ROUTE 231	75+81.51	60.30' LT	Type		1	15 AMPS	15 AMPS	100 AMPS					
ROUTE 231	75+76.04	57.97' LT	Type										AMEREN
INTERSECTION TOTAL					1								

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									
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	MASTER	LOCAL		NEMA	170	FIBER		E	EV	DOUBLE	332	336S	BITRAN	WAPITI
ROUTE 231	75+85.33	63.34' LT			1												1					
INTERSECTION TOTAL					1												1					

NEMA DETECTOR ASSIGNMENT

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

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

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	DETECTOR ZONE	TYPE: ACCESSIBLE PED SIGNAL PUSH BUTTON	INDUCTION LOOP (2): STANDARD	INDUCTION LOOP (2): DELAY/ EXTEND *	INDUCTION LOOP (2): CALL UNIT *	VIDEO
V1	SB ROUTE 231 - THRU	21					
	SB ROUTE 231 - THRU	22					1
	SB ROUTE 231 - BIKE	23					
	SB ROUTE 231 - LEFT	51					
V3	NB ROUTE 231 - THRU	61					1
	NB ROUTE 231 - THRU	62					
	NB ROUTE 231 - BIKE	63					1
	NB ROUTE 231 - LEFT	11					
V2	EB CRESTLINE DR - THRU	41					1
	EB CRESTLINE DR - LEFT	71					
V4	WB YAEGER RD - THRU	81					
	WB YAEGER RD - LEFT	31					
D1	SB RTE. 231,WB PEDESTRIANS	P1	1				
D2	WB YAEGER RD,SB PEDESTRIANS	P2	1				
D3	WB YAEGER RD,NB PEDESTRIANS	P3	1				
D4	NB RTE. 231,WB PEDESTRIANS	P4	1				
D5	NB RTE. 231,EB PEDESTRIANS	P5	1				
D6	EB CRESTLINE DR,NB PEDESTRIANS	P6	1				
D7	EB CRESTLINE DR,SB PEDESTRIANS	P7	1				
D8	SB RTE. 231,EB PEDESTRIANS	P8	1				
INTERSECTION TOTAL			8				SEE BELOW

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			
	R3-5L	30 X 36	7.5			
	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			
2	D3-1	84 X 18	10.5	21.0	4	TELEGRAPH RD
1	D3-1B	96 X 18	12.0	12.0	2	YAEGER RD/ CRESTLINE DR
1	D3-1B	96 X 18	12.0	12.0	2	YAEGER RD/ CRESTLINE DR
	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	30.0	4	
4	R10-3eR	9 X 15	0.9	3.6**	4**	
4	R10-3eL	9 X 15	0.9	3.6**	4**	
		SUBTOTAL		84	22	
		TOTAL		75	12	

SL DISTRICT TRAFFIC SIGNAL DETECTION SYSTEM

	DETECTION SYSTEM (EACH)	REMARKS
INTERSECTION TOTAL	1	SEE JOB SPECIAL PROVISIONS

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1 NBL	Ø2 SBT	Ø3 WBL	Ø4 EBT	Ø5 SBL	Ø6 NBT	Ø7 EBL	Ø8 WBT	OLA FYA NBL	OLB FYA WBL	OLC FYA SBL	OLD FYA EBL	Ø2 PED WB	Ø4 PED SB	Ø6 PED EB	Ø8 PED NB

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

(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.

ROUTE 231 (TELEGRAPH RD) AT YAEGER RD/CRESTLINE DR
INTERSECTION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:31:21 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	132

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

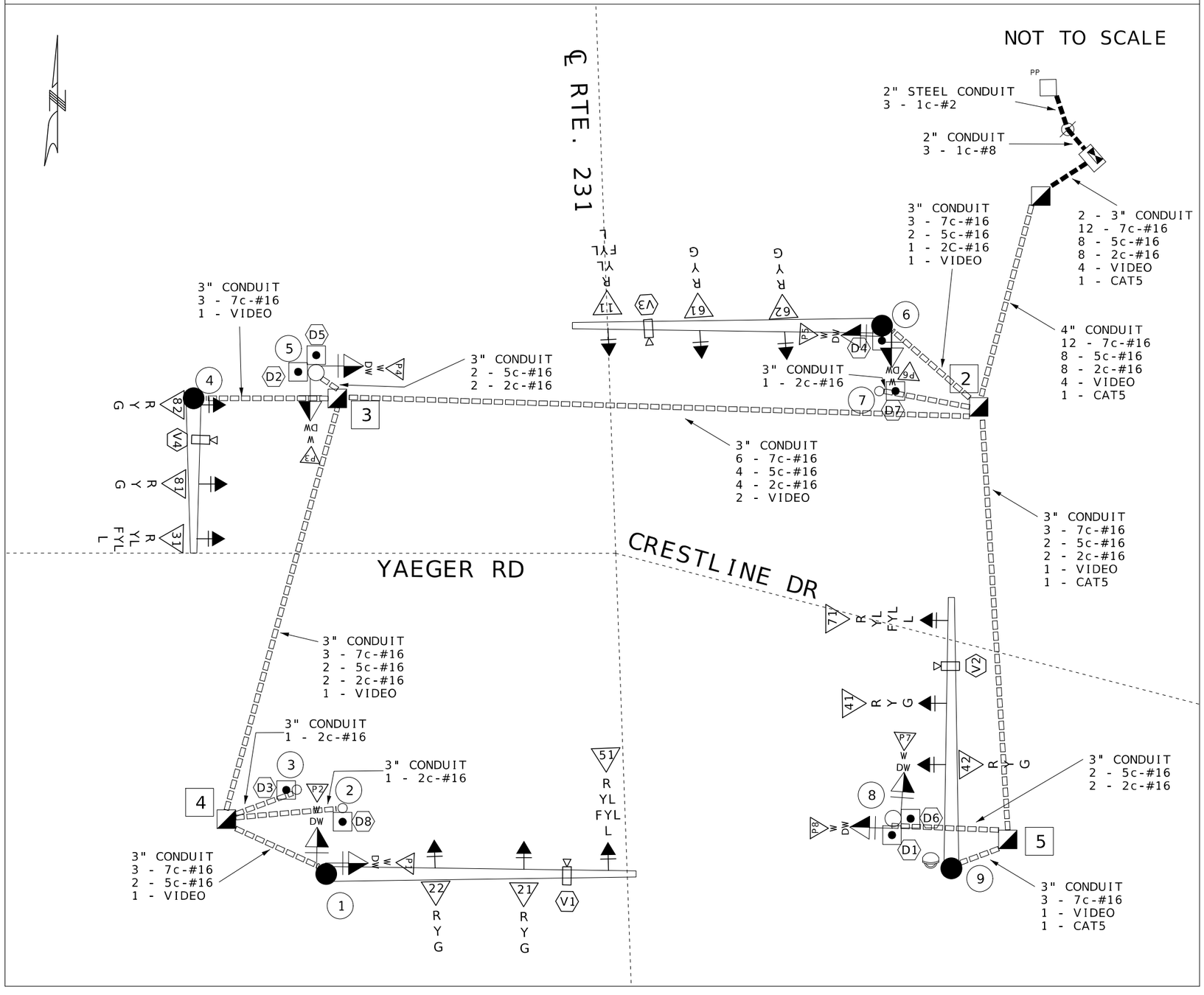
DESCRIPTION | DATE

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

SIGNAL SHEET
ROUTE 231 AT
SAPPINGTON BARRACKS RD
D-37C

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

ROUTE 231 (TELEGRAPH RD) AT YAEGER RD/CRESTLINE DR

INTERSECTION

D-37D

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:31:32 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	133

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

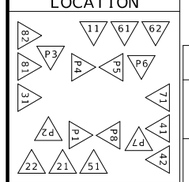
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SIGNAL SHEET
ROUTE 231 AT YAEGER RD
D-37D

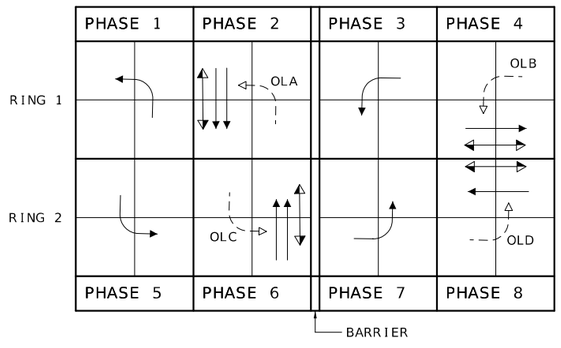
EFFECTIVE: 12-01-2017

SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

	PHASE Ø1	PHASE Ø2	PHASE Ø3	PHASE Ø4	PHASE Ø5	PHASE Ø6	PHASE Ø7	PHASE Ø8	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP	
FACE NUMBERS	11	21 22 11	31	41 42 31	51	61 62 51	71	81 82 71	P2 P3	P1 P8	P6 P7	P4 P5	FACE NUMBERS
SIGNAL INDICATIONS R	R	R R R	R	R R R	R	R R R	R	R R R	DW	DW	DW	DW	R
SIGNAL INDICATIONS Y	YL	Y Y YL	YL	Y Y YL	YL	Y Y YL	YL	Y Y YL	FDW	FDW	FDW	FDW	Y
SIGNAL INDICATIONS FYA		FYL		FYL		FYL		FYL					FYA
SIGNAL INDICATIONS G		G G		G G		G G		G G	W	W	W	W	G
SIGNAL INDICATIONS	L		L		L		L						
DETECTOR ASSIGNMENTS	ZONE 11	ZONE 21 ZONE 22 ZONE 11	ZONE 31	ZONE 41 ZONE 41	ZONE 51	ZONE 61 ZONE 62 ZONE 51	ZONE 71	ZONE 81 ZONE 81					DETECTOR ASSIGNMENTS
DETECTOR ASSIGNMENTS (PEDS. ONLY)									D2 D3	D1 D8	D6 D7	D4 D5	
OVERLAP PARENT PHASES									Ø2	Ø4	Ø6	Ø8	



RING STRUCTURE

NOTES:

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

FLASHING OPERATION	
ROUTE 231 (TELEGRAPH RD)	FR
YAEGER RD/ CRESTLINE DR	FR

CONTROLLER TYPE	NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF ROUTE 231 (TELEGRAPH RD)
WITH YAEGER RD/ CRESTLINE DR

D-38A

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:31:43 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	134

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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
ROUTE 231 AT YAEGER RD
D-38A

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

COMMERCIAL PROPERTY

EX. R/W

NEXT SIGNAL: BAUGARTNER/GEBHARDT & SOUTHFIELD 1026 FT

GRADE: 0.35% 35 MPH

BAUMGARTNER RD

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION

(R) EX. PULL BOX STA. 103+29.21 OFF. 35.55

ABANDON EX. SIGNAL CONDUIT

RAISED ISLAND

℄ RTE. 231

NEXT SIGNAL: HWY 231/COPPRGATE SQUARE DR. 1018 FT

GRADE: 0.35% UT 40 MPH

RAISED ISLAND

TCE

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION

(R) EX. PULL BOX STA. 103+23.98 OFF. -51.50

EX. R/W

ABANDON EX. SIGNAL CONDUIT

EQUATION: STA 103+51.95 BK = STA 103+53.39 AH

(R) EX. PULL BOX STA. 103+88.63 OFF. 38.47

(R) EX. PULL BOX STA. 103+96.58 OFF. 42.53

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION, CCTV

℄ RTE 231 STA 76+33.34 = ℄ BAUMGARTNER RD STA 10+00.00

CLIFF CAVE RD

NO SIGNAL

GRADE: 0.35% 25 MPH

(R) EX. SIGNAL POST, MAST ARM, SIGNAL HEADS, VIDEO DECTION

ABANDON EX. SIGNAL CONDUIT

ABANDON EX. SIGNAL CONDUIT

(DND) EX. PULL BOX

(DND) EX. CABINET

RAISED ISLAND

COMMERCIAL PROPERTY

EX. R/W

(R) EX. PULL BOX STA. 104+28.37 OFF. 63.8

EX. POWER SUPPLY

SALVAGE EX. CABINET (R) EX. FTG

EX. AMEREN POWER SOURCE

ABANDON EX. SIGNAL CONDUIT

S12°31'28"W

NEXT SIGNAL: HWY 231/GEBHARDT 779 FT

GRADE: 0.35% 40 MPH

TCE

COMMERCIAL PROPERTY

EX. R/W

(R) EX. PULL BOX STA. 104+21.55 OFF. -45.00

TRAFFIC SIGNALS LEGEND	
CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM - TYPE A BASE (EXISTING)

SCALE 0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:31:55 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	135

COUNTY ST. LOUIS

JOB NO. J6S3632

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)

BAUMGARTNER RD.
EX. SIGNAL PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

(d) Telegraph Rd
D3-1

COMMERCIAL

EX. R/W

NEXT SIGNAL: BAUGARTNER/GEBHARDT & SOUTHFIELD 1026 FT

GRADE: 0.35% 35 MPH

BAUMGARTNER RD

RAISED ISLAND

DETECTION ZONE 22

DETECTION ZONE 21

DET ZONE 23

NEXT SIGNAL: HWY 231/COPPERGATE SQUARE DR. 1018 FT

GRADE: 0.35% 40 MPH

℄ RTE. 231

TCE

COMMERCIAL

EX. R/W

DETECTION ZONE 41

DETECTION ZONE 42/43

DETECTION ZONE 32/33

DETECTION ZONE 31

CLIFF CAVE RD

NO SIGNAL

GRADE: 0.35% 25 MPH

EQUATION: STA 103+51.95 BK = STA 103+53.39 AHD

(a) (b) (c) (d)

NEW CCTV

℄ RTE 231 STA 76+33.34 = ℄ BAUMGARTNER RD STA 10+00.00

R 74.14'

R 56.91'

R 65.8'

R 112.46'

EX. POWER SOURCE (AMEREN) STA. 104+07.80 OFF. 103.89'

NEW UPS STA. 104+20.44 OFF. 70.70'

NEW CABINET, FOUNDATION, AND CONTROLLER STA. 104+25.85 OFF. 84.49'

Baumgartner Rd
Cliff Cave Rd
(b)
D3-1b

Cliff Cave Rd
Baumgartner Rd
(c)
D3-1b

COMMERCIAL

NEXT SIGNAL: HWY 231/GEBHARDT 779 FT

GRADE: 0.35% 40 MPH

DETECTION ZONE 11

DETECTION ZONE 62

DETECTION ZONE 61

DETECTION ZONE 64

TRAFFIC SIGNALS LEGEND	
CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT EXISTING
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM – TYPE A BASE (EXISTING)

START CROSSING Watch For Vehicles
DON'T START Finish Crossing If Started
TIME REMAINING To Finish Crossing
DON'T CROSS
PUSH BUTTON TO CROSS

R10-3eL

R10-3eR

(a) LEFT TURN YIELD ON FLASHING ARROW
R10-27a

SCALE 0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:32:06 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	136

COUNTY ST. LOUIS
JOB NO. J6S3632
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)

BAUMGARTNER RD.
PROPOSED SIGNAL PLAN SHEET

EFFECTIVE: 07-01-2018

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

CONDUIT

FROM	TO	CTR TO CTR DIST.	LOOP DETECT	TRENCHED			PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
SOURCE	UPS	18		(22)												INCLUDED IN COST OF PS
UPS	CONT.	9		17												
CONT.	PB1	5			17											2x8.5'
PB1	PB2	38							36							
PB2	P1	13						16								
PB2	PB5	53						51								
PB2	PB3	133						131								
PB3	P4	11						12								
PB3	P5	19						22								
PB5	P6	8						9								
PB1	PB4	134						132								
PB4	P2	5						6								
PB4	P3	17						18								
SUBTOTALS		0		17	17	0	0	397	36	0	0	0	0	0	0	
PAY TOTALS		0		17	17	0	0	397	36	0	0	0	0	0	0	

CABLE

FROM	TO	CTR TO CTR DIST.	POWER		CONTROL				LIGHTING		DETECTOR		FIBER	REMARKS
			1c-#2	1c-#8	2c-#16	5c-#16	7c-#16	12c-#12	CONTROL 2c-#12	POLE & BRACKET 1c-#10	1c-#14 IN DUCT	2c-#14 LEAD IN	24 FIBER SINGLEMODE	
SOURCE	UPS	18	(184)											3x43' INCLUDED IN COST OF PS
UPS	CONT.	9		75										3x25'
CONT.	P1	57				87								
CONT.	P2	57				87								
CONT.	PD3	57			86									
CONT.	PD4	57			86									
CONT.	H21	57					131							
CONT.	H22	57					120							
CONT.	H51	57					140							
CONT.	H31	57					127							
CONT.	H32	57					134							
CONT.	H33	57					139							
CONT.	P4	144				174								
CONT.	PD1	144			173									
CONT.	P5	156				186								
CONT.	PD6	156			185									
CONT.	PD5	108			143									
CONT.	P6	108				144								
CONT.	H61	116					184							
CONT.	H62	116					194							
CONT.	H63	116					155							
CONT.	H11	116					204							
CONT.	H41	116					195							
CONT.	H42	116					206							
CONT.	H43	116					215							
CONT.	P3	105				141								
CONT.	PD2	105			140									
CONT.	CCTV	57												TOTAL CAT5: 94'
SUBTOTALS			0	75	813	819	2144	0	0	0	0	0	0	
PAY TOTALS			0	80	850	860	2250	0	0	0	0	0	0	INCLUDE 5% FOR SNAKING

INTERSECTION ROUTE 231 (TELEGRAPH RD) AT BAUMGARTNER RD

D-37B

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:52:51 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 138
COUNTY ST. LOUIS
JOB NO. J6S3632
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
ROUTE 231 AT
BAUMGARTNER RD
D-37B

EFFECTIVE: 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY			CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
						CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
								SIGNALS	LIGHTING				
ROUTE 231	104+20.44	70.70' RT	Type		1	15 AMPS	15 AMPS	100 AMPS					
ROUTE 231	104+07.80	103.89' RT	Type									***	AMEREN
INTERSECTION TOTAL					1								

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									
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	MASTER	LOCAL		NEMA	170	FIBER		E	EV	DOUBLE	332	336S	BITRAN	WAPITI
ROUTE 231	104+25.85	84.49' RT			1												1					
INTERSECTION TOTAL					1												1					

NEMA DETECTOR ASSIGNMENT

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

OPTIONAL

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

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	DETECTOR ZONE	TYPE				
			ACCESSIBLE PED SIGNAL PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
				STANDARD	DELAY/ EXTEND *	CALL UNIT *	
V3	NB ROUTE 231 - THRU	61					
	NB ROUTE 231 - THRU	62					
	NB ROUTE 231 - BIKE	63					1
	NB ROUTE 231 - RIGHT	64					
	NB ROUTE 231 - LEFT	11					
V1	SB ROUTE 231 - THRU	21					
	SB ROUTE 231 - THRU	22					
	SB ROUTE 231 - THRU	23					1
	SB ROUTE 231 - LEFT	51					
V4	EB BAUMGARTNER RD - LEFT	41					1
	EB BAUMGARTNER RD - THRU/LEFT	42					
V2	WB CLIFF CAVE RD - THRU	32					1
	WB CLIFF CAVE RD - LEFT	31					
D1	WB RTE. 231 PEDESTRIANS	P1	1				
D2	SB BAUMGARTNER RD PEDESTRIANS	P2	1				
D3	NB BAUMGARTNER RD PEDESTRIANS	P3	1				
D4	EB RTE. 231 PEDESTRIANS	P4	1				
D5	SB CLIFF CAVE RD PEDESTRIANS	P5	1				
D6	NB CLIFF CAVE RD PEDESTRIANS	P6	1				
	INTERSECTION TOTAL		6				SEE BELOW

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			
	R3-5L	30 X 36	7.5			
	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			
2	D3-1	84 X 18	10.5	21.0	4	TELEGRAPH RD
1	D3-1B	96 X 18	12.0	12.0	2	BAUMGARTNER RD/ CLIFF CAVE RD
1	D3-1B	96 X 18	12.0	12.0	2	BAUMGARTNER RD/ CLIFF CAVE RD
	R10-3E	9 X 15	0.9			
	R10-11A	24 X 30	5.0			
	R10-13	36 X 24	6.0			
2	R10-27A	30 X 36	7.5	15.0	2	
4	R10-3eR	9 X 15	0.9	3.6**	4**	
2	R10-3eL	9 X 15	0.9	1.8**	2**	
			SUBTOTAL	65.4	16	
			TOTAL	60.0	10	

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1 NBL	Ø2 SBT	Ø3 WB	Ø4 EB	Ø5 SBL	Ø6 NBT	NOT USED	NOT USED	OLA FYA NBL	NOT USED	OLC FYA SBL	NOT USED	Ø2 PED SB	Ø4 PED EB	Ø6 PED NB	NOT USED

SL DISTRICT TRAFFIC SIGNAL DETECTION SYSTEM

	DETECTION SYSTEM (EACH)	REMARKS
INTERSECTION TOTAL	1	SEE JOB SPECIAL PROVISIONS

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

*** USE EXSISTING SERVICE POLE

(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.

ROUTE 231 (TELEGRAPH RD) AT BAUMGARTNER RD
INTERSECTION

D-37C

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:53:07 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	139

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

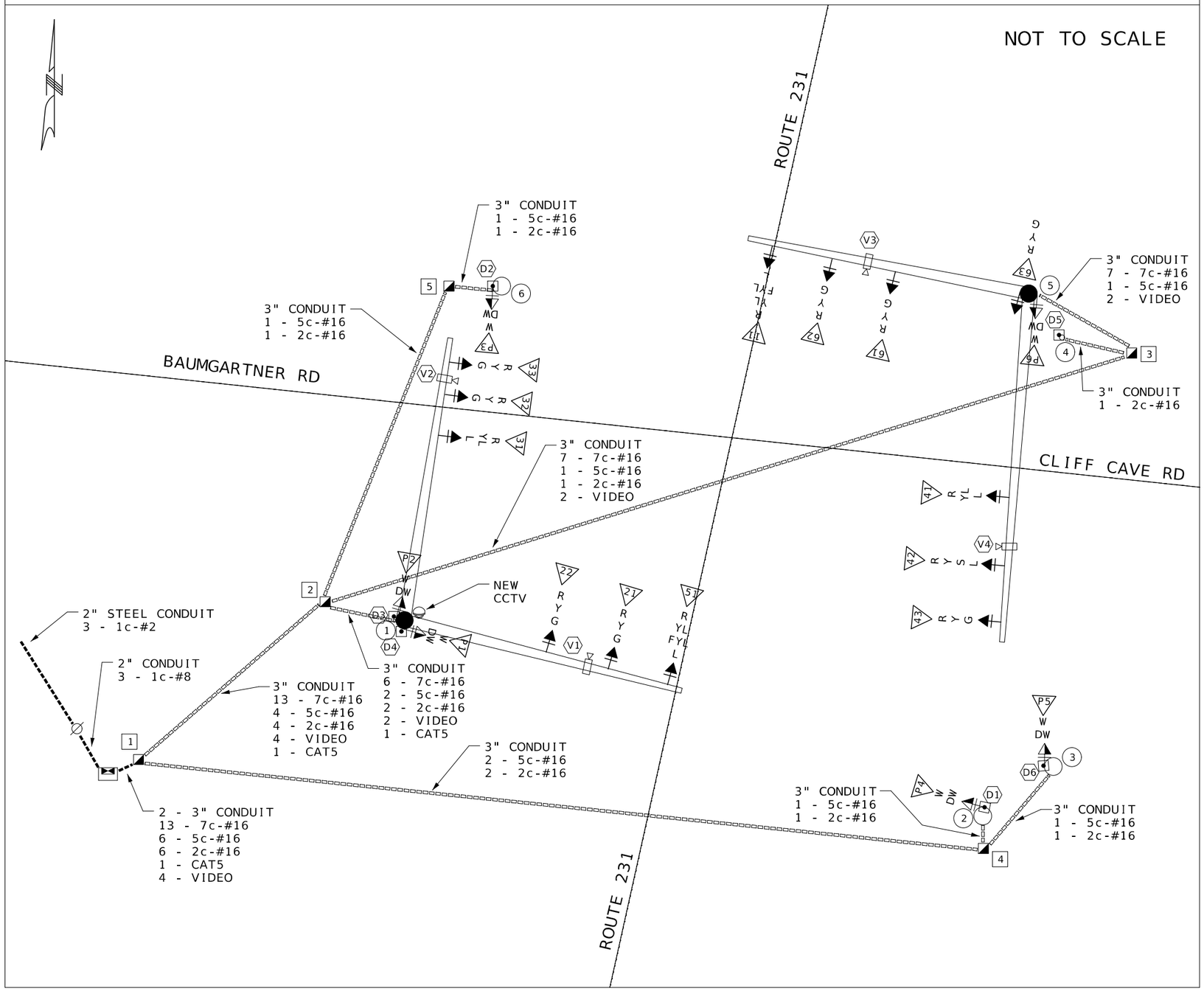
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SIGNAL SHEET
ROUTE 231 AT
BAUMGARTNER RD
D-37C

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

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:53:19 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	140

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

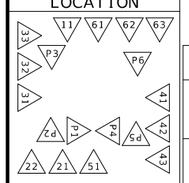
SIGNAL SHEET
ROUTE 231 AT
BAUMGARTNER RD
D-37D

ROUTE 231 (TELEGRAPH RD) AT BAUMGARTNER RD

INTERSECTION

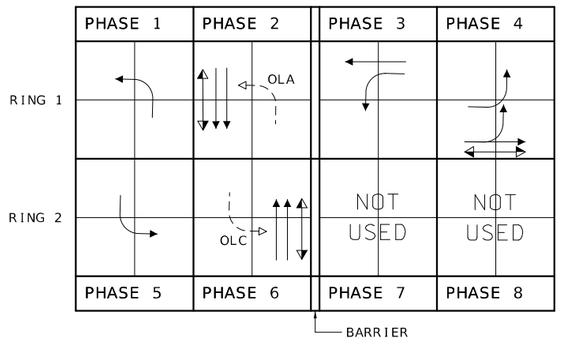
EFFECTIVE: 12-01-2017

SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

	PHASE Ø1	PHASE Ø2	PHASE Ø3	PHASE Ø4	PHASE Ø5	PHASE Ø6	PHASE Ø7	PHASE Ø8	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP	
FACE NUMBERS	11	21 22 11	31 32 33	41 42 43	51	61 62 51	NOT USED	NOT USED	P2 P3	P1 P4	P5 P6	NOT USED	FACE NUMBERS
SIGNAL INDICATIONS R	R	R R R	R R R	R R R	R	R R R			DW	DW	DW		R
SIGNAL INDICATIONS Y	YL	Y Y YL	YL Y Y	YL Y Y	YL	Y Y YL			FDW	FDW	FDW		Y
SIGNAL INDICATIONS FYA		FYL				FYL							FYA
SIGNAL INDICATIONS G		G G	L G G	L L	L	G G			W	W	W		G
SIGNAL INDICATIONS	L		L	L									SIGNAL INDICATIONS
DETECTOR ASSIGNMENTS	ZONE 11	ZONE 21 ZONE 22 ZONE 11	ZONE 31 ZONE 32 ZONE 33	ZONE 41 ZONE 42 ZONE 43	ZONE 51	ZONE 61 ZONE 62 ZONE 51							DETECTOR ASSIGNMENTS
DETECTOR ASSIGNMENTS (PEDS. ONLY)									D2 D3	D1 D4	D5 D6		
OVERLAP PARENT PHASES									Ø2	Ø4	Ø6		



RING STRUCTURE

NOTES:

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

FLASHING OPERATION	
ROUTE 231 (TELEGRAPH RD)	FR
BAUMGARTNER RD/ CLIFF CAVE RD	FR

CONTROLLER TYPE	NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF ROUTE 231 (TELEGRAPH RD)
WITH BAUMGARTNER RD/ CLIFF CAVE RD

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:53:32 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	141

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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
ROUTE 231 AT
BAUMGARTNER RD
D-38A

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

TRAFFIC SIGNALS LEGEND			
	CONTROLLER		CONDUIT PUSHED
	CONTROLLER (EXISTING)		CONDUIT TRENCHED
	POWER SUPPLY		CONDUIT EXISTING
	PULL BOX		SIGNAL SIGN
	SIGNAL HEAD (PEDESTRIAN)		VIDEO DETECTOR
	SIGNAL HEAD (STANDARD)		PUSH BUTTON DETECTOR
	SIGNAL HEAD (EXISTING)		CCTV CAMERA
			MAST ARM – TYPE A BASE (EXISTING)

EX. R/W
TCE
NEXT SIGNAL: BAUGARTNER/GEBHARDT/SOUTHFIELD 1026 FT
(R) EX. SIGNAL POST, FOUNDATION, SIGNAL HEADS
(R) EX. PULL BOX STA. 110+95.8 OFF. 46.11
STA 111+30.65= STA 10+00
℄ RTE 231 STA 111+30.65 = ℄ GEBHARDT DR STA 10+00
N89°05'32"W
GRADE: 3.88% 35 MPH
ABANDON EX. CONDUIT
(R) EX. PULL BOX STA. 111+73.68 OFF. 44.5
(R) EX. SIGNAL POST, FOUNDATION, SIGNAL HEADS, CAMERA DETECTION, LUMINARE, LUMINARE BRACKET
NEXT SIGNAL: HWY 231/BLACKFOREST 1914 FT
GRADE: 1.09% 35 MPH
RAISED ISLAND
NEXT SIGNAL: HWY 231/BAUMGARTNER & CLIFF CAVE 779 FT
GRADE: 1.10% 35 MPH
(R) EX. SIGNAL POST, FOUNDATION, SIGNAL HEADS, CAMERA DETECTION, LUMINARE, LUMINARE BRACKET
(R) EX. PULL BOX STA. 111+05.07 OFF. -44.75
(R) EX. SIGNAL POST, FOUNDATION, SIGNAL HEADS, CAMERA DETECTION
NO SIGNAL
GRADE: 4.44% 25 MPH
(R) EX. PULL BOX STA. 111+70.45 OFF. -38.14
CURB
SCALE 0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:53:44 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	142

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

GEBHARDT RD.
EX. SIGNAL PLAN SHEET

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

D2 D4 D5 — R10-3eL

D1 D3 D6 — R10-3eR

(b) Telegraph Rd
D3-1

NEW CABINET, FOUNDATION, AND CONTROLLER
STA. 110+92.25
OFF. 50.51' RT

NEW UPS
STA. 111+03.39
OFF. 53.30' RT

EX. POWER SOURCE

COMMERCIAL

TCE

EX. R/W

NEXT SIGNAL: HWY 231/BAUMGARTNER & CLIFF CAVE 779 FT

GRADE: 1.10% 35 MPH

DETECTION ZONE 22
DETECTION ZONE 21
DETECTION ZONE 51
DET. ZONE 23

(a) LEFT TURN YIELD ON FLASHING ARROW
R10-27a

(c) Gebhardt Dr
D3-1

COMMERCIAL

STA 111+30.65=
STA 10+00

NEXT SIGNAL: BAUMGARTNER/GEBHARDT/SOUTHFIELD 1026 FT

GEBHARDT DR

N89°05'32"W

GRADE: 3.88% 35 MPH

DETECTION ZONE 41
DETECTION ZONE 42/43

℄ RTE 231 STA 111+30.65 =
℄ GEBHARDT DR STA 10+00

℄ HWY 231/TELEGRAPH RD

DETECTION ZONE 81/82
DETECTION ZONE 31

NO SIGNAL
GRADE: 4.44% 25 MPH

COMMERCIAL

NEXT SIGNAL: HWY 231/BLACKFOREST 1914 FT

GRADE: 1.09% 35 MPH

DETECTION ZONE 11
DETECTION ZONE 61
DETECTION ZONE 62
DET. ZONE 63

COMMERCIAL

(d) Gebhardt Dr
D3-1

SCALE
0 10 20 30

TRAFFIC SIGNALS LEGEND	
CONTROLLER (EXISTING)	CONDUIT PUSHED
POWER SUPPLY	CONDUIT TRENCHED
PULL BOX	CONDUIT EXISTING
SIGNAL HEAD (PEDESTRIAN)	SIGNAL SIGN
SIGNAL HEAD (STANDARD)	VIDEO DETECTOR
PUSH BUTTON DETECTOR	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:53:58 AM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	143

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

GEBHARDT RD.
PROPOSED SIGNAL PLAN SHEET

EFFECTIVE: 07-01-2018

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

CONDUIT

FROM	TO	CTR TO CTR DIST.	LOOP DETECT	TRENCHED			PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
SOURCE	UPS	7		(11)												INCLUDED IN COST OF PS
UPS	CONT.	11		19												
CA	PB1	4			14											2x7'
PB1	P1	14						20								
PB1	PB2	87							85							
PB2	P2	4						5								
PB2	P3	5						8								
PB2	PB3	102						100								
PB3	P4	7			8											
PB3	P5	5			6											
PB3	PB4	109						107								
PB4	P6	16						19								
PB4	P7	12						13								
PB4	PB5	60						58								
PB5	P8	6			9											

EFFECTIVE: 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY			CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
						CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
								SIGNALS	LIGHTING				
ROUTE 231	111+03.39	53.30' RT	Type		1	15 AMPS	15 AMPS	100 AMPS					
ROUTE 231	111+09.71	54.65' RT	Type									***	AMEREN
INTERSECTION TOTAL					1								

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

*** USE EXSISTING SERVICE POLE

(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.

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *						TIME * CLOCK	NEMA CABINET TYPE *			170 CABINET TYPE *		170 SOFTWARE *	
							TYPE		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
ROUTE 231	110+92.25	50.51' RT			1												1					
INTERSECTION TOTAL					1												1					

NEMA DETECTOR ASSIGNMENT

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

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

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	DETECTOR ZONE	TYPE				
			ACCESSIBLE PED SIGNAL PUSH BUTTON	INDUCTION LOOP (2)			VIDEO
				STANDARD	DELAY/ EXTEND *	CALL UNIT *	
V1	NB ROUTE 231 - THRU	61					1
	NB ROUTE 231 - THRU	62					
	NB ROUTE 231 - BIKE	63					
	NB ROUTE 231 - LEFT	11					
V2	EB GEBHARDT RD - LEFT	41					1
	EB GEBHARDT RD - THRU/RIGHT	42/43					
V3	SB ROUTE 231 - THRU	21					1
	SB ROUTE 231 - THRU	22					
	SB ROUTE 231 - BIKE	23					
	SB ROUTE 231 - LEFT	51					
V4	WB TELEGRAPH PLAZA - THRU	81/82					1
	WB TELEGRAPH PLAZA - LEFT	31					
D1	WB PED - ROUTE 231		1				
D2	EB PED - ROUTE 231		1				
D3	NB - TELEGRAPH PLAZA		1				
D4	SB PED - TELEGRAPH PLAZA		1				
D5	SB PED - GEBHARDT RD		1				
D6	NB PED - GEBHARDT DR		1				
INTERSECTION TOTAL			6				SEE BELOW

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			
	R3-5L	30 X 36	7.5			
	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			
2	D3-1	84 X 18	10.5	21.0	4	Telegraph Rd
2	D3-1	96 x 18	12.0	24.0	4	Gebhardt Dr
	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	30.0	4	
3	R10-3eR	9 X 15	2.7	2.7 **	3 **	
3	R10-3eL	9 X 15	2.7	2.7 **	3 **	
			SUBTOTAL	80.4	18	
			TOTAL	75.0	12	

SL DISTRICT TRAFFIC SIGNAL DETECTION SYSTEM

	DETECTION SYSTEM (EACH)	REMARKS
INTERSECTION TOTAL	1	SEE JOB SPECIAL PROVISIONS

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1 NBL	Ø2 SBT	Ø3 WBL	Ø4 EBL	Ø5 SBT	Ø6 NBT	NOT USED	Ø8 WBT	OLA NBL	OLB WBL	OLC SBL	OLD EBL	Ø2 PED	NOT USED	Ø6 PED	Ø8 PED

ROUTE 231 (TELEGRAPH RD) AT GEBAHRDT DR
INTERSECTION

D-37C

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:55:00 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	146

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

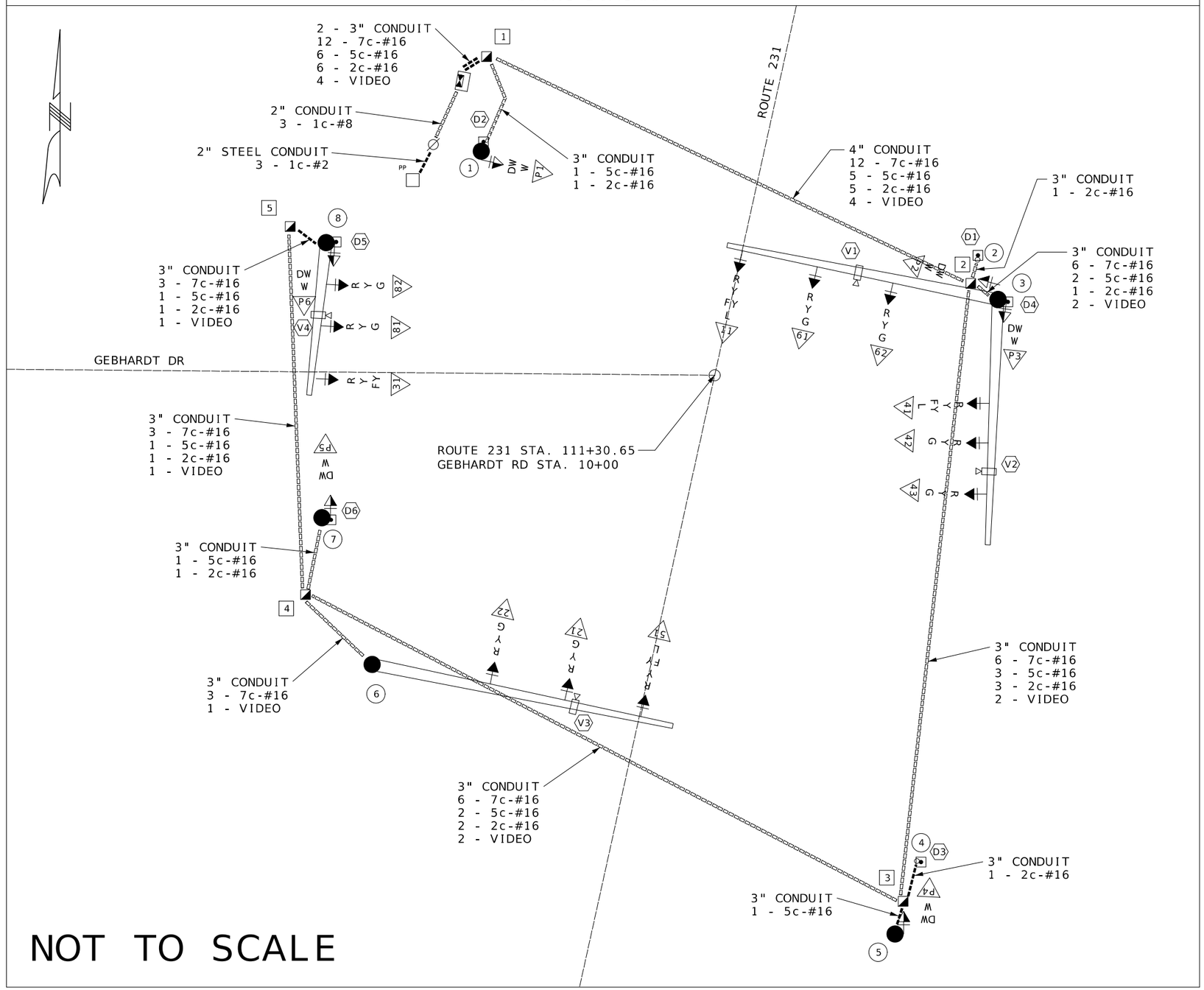
DESCRIPTION | DATE

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

SIGNAL SHEET
ROUTE 231 AT GEBAHRDT DR
D-37C

EFFECTIVE: 12-01-2017

WIRING DIAGRAM



NOT TO SCALE

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
	TRENCHED CONDUIT
	PUSHED CONDUIT

ROUTE 231 (TELEGRAPH RD) AT GEBHARDT DR
INTERSECTION

D-37D

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:55:10 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	147

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

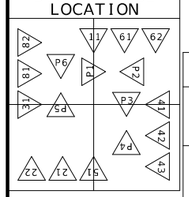
DESCRIPTION | DATE

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

SIGNAL SHEET
ROUTE 231 AT GEBHARDT DR
D-37D

EFFECTIVE: 12-01-2017

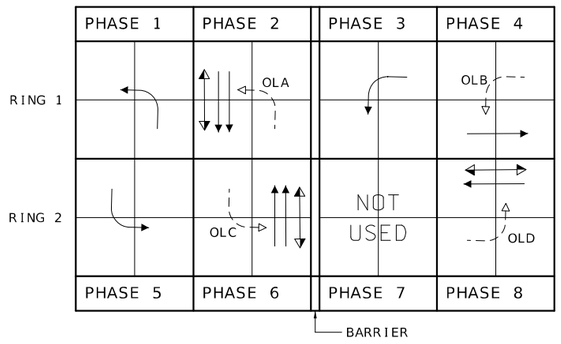
SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

	PHASE Ø1	PHASE Ø2	PHASE Ø3	PHASE Ø4	PHASE Ø5	PHASE Ø6	PHASE Ø7	PHASE Ø8	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP
							NOT USED			NOT USED		
FACE NUMBERS	11	21 22	11	31	31 42 43	51	51 61 62	41 81 82	P5 P6		P3 P4	P1 P2
SIGNAL INDICATIONS R	R	R	R	R	R	R	R	R	DW		DW	DW
SIGNAL INDICATIONS Y	YL	Y	YL	Y	Y	Y	Y	Y	FDW		FDW	FDW
SIGNAL INDICATIONS FYA	FYL		FYL	FYL	FYL	FYL		FYL				
SIGNAL INDICATIONS G		G		G	G	G		G	W		W	W
SIGNAL INDICATIONS L	L		L	L	L							
DETECTOR ASSIGNMENTS	ZONE 11	ZONE 21/22	ZONE 11	ZONE 31	ZONE 31 ZONE 42/43	ZONE 51	ZONE 51 ZONE 61/62	ZONE 41 ZONE 81/82				
DETECTOR ASSIGNMENTS (PEDS. ONLY)									D5 D6		D3 D4	D1 D2
OVERLAP PARENT PHASES									Ø2		Ø6	Ø8

FACE NUMBERS / SIGNAL INDICATIONS / DETECTOR ASSIGNMENTS (duplicated)



RING STRUCTURE

NOTES:

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED

FDW — FLASHING DON'T WALK
W — WALK
DW — DON'T WALK
R/W — RIGHT OF WAY INTERVAL
YRt — YELLOW RIGHT ARROW
RT. — GREEN RIGHT ARROW
LY -YL — YELLOW LEFT ARROW
L — GREEN LEFT ARROW
S — GREEN STRAIGHT AHEAD ARROW
G — CIRCULAR GREEN
Y — CIRCULAR YELLOW
R — CIRCULAR RED
RL — RED LEFT ARROW
Ø — TRAFFIC PHASE
AO — ALL OTHERS
FR — FLASHING RED
FY — FLASHING CIRCULAR YELLOW
FYL — FLASHING YELLOW LEFT ARROW

FLASHING OPERATION	
ROUTE 231 (TELEGRAPH RD)	FR
GEBHARDT DR	FR

CONTROLLER TYPE	NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION	
INTERSECTION OF	ROUTE 231 (TELEGRAPH RD)
WITH	GEBHARDT DR

D-38A

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 11:55:21 AM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	148

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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
ROUTE 231 AT GEBHARDT DR
D-38A

TRAFFIC SIGNALS LEGEND

- CONTROLLER
- CONTROLLER (EXISTING)
- POWER SUPPLY
- PULL BOX
- SIGNAL HEAD (PEDESTRIAN)
- SIGNAL HEAD (STANDARD)
- SIGNAL HEAD (EXISTING)
- CONDUIT PUSHED
- CONDUIT TRENCHED
- CONDUIT EXISTING
- SIGNAL SIGN
- VIDEO DETECTOR
- PUSH BUTTON DETECTOR
- CCTV CAMERA
- MAST ARM - TYPE A BASE (EXISTING)

RESIDENTIAL

(R) EX. PULL BOX
STA. 130+04.07
OFF. 52.22

RAISED ISLAND

NO SIGNAL

GRADE: 1.37%
25 MPH

N89°04'10"W

℄ RTE 231 STA 130+54.42 =
℄ BLACKFOREST DR STA 10+00

18.76'

15.65'

BLACKFOREST DR

GRADE: -1.20%
40 MPH

NEXT SIGNAL:
HWY 231/GEBHARDT
1924 FT

S01°10'43"W

(R) EX. SIGNAL POST, FOUNDATION,
SIGNAL HEADS, CAMERA DETECTION

130

(R) EX. PULL BOX
STA. 130+54.26
OFF. -44.6

ABANDON EX.
SIGNAL CONDUIT

RAISED ISLAND

(R) EX. SIGNAL POST, FOUNDATION,
SIGNAL HEADS, CAMERA DETECTION

(R) EX. PULL BOX
STA. 131+08.54
OFF. 56.80

(R) EX. PULL BOX
STA. 131+19.18
OFF. 70.2

SALVAGE EX. CABINET
(R) EX. FTG

ABANDON EX.
SIGNAL CONDUIT

(R) EX. SIGNAL POST, FOUNDATION,
SIGNAL HEADS, CAMERA DETECTION
CCTV

Lot 24

GRADE: 1.15%
40 MPH

NEXT SIGNAL:
HWY 231/OAKVILLE SCHOOL & BETHESDA
845 FT

RESIDENTIAL

LEGEND	
	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

SCALE
0 10 20 30

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:16:37 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	149

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

BLACKFOREST DR.
EX. SIGNAL PLAN SHEET

TRAFFIC SIGNALS LEGEND

CONTROLLER	CONDUIT PUSHED
CONTROLLER (EXISTING)	CONDUIT TRENCHED
POWER SUPPLY	CONDUIT TRENCHED
PULL BOX	SIGNAL SIGN
SIGNAL HEAD (PEDESTRIAN)	VIDEO DETECTOR
SIGNAL HEAD (STANDARD)	PUSH BUTTON DETECTOR
SIGNAL HEAD (EXISTING)	CCTV CAMERA
	MAST ARM – TYPE A BASE (EXISTING)

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
TCE	TEMP. CONSTRUCTION EASEMENT
PSE	PERM. SIDEWALK EASEMENT

SCALE 0 10 20 30

(b) Telegraph Rd D3-1

RESIDENTIAL

EX. R/W

(a)

LEFT TURN YIELD ON FLASHING ARROW R10-27a

PROPOSED RETAINING WALL

EX. R/W

RESIDENTIAL

DETAIL 4

R10-3eR

D2 P2 W DW

DETAIL 1

R10-3eL

D1 P1 W DW

R10-3eL R10-3eR

(c) Blackforest Dr D3-1

RESIDENTIAL

EX. R/W

TCE

RESIDENTIAL

RAISED ISLAND

NO SIGNAL

GRADE: 1.37% 25 MPH

N89°04'10"W

BLACKFOREST DR

DETECTION ZONE 41/42

CROSSWALK

RAISED ISLAND

NEW CCTV

NEW CABINET, FOUNDATION, AND CONTROLLER STA. 131+03.79 OFF. 75.85'

NEW UPS STA. 131+09.94 OFF. 76.38'

TO EXIST. POWER SOURCE

EXIST. CABINET

POWER SOURCE: STA. 132+15.67 OFFSET 44.54' RT

GRADE: 1.20% 40 MPH

NEXT SIGNAL: HWY 231/GEBHARDT 1924 FT

DETECTION ZONE 22

DETECTION ZONE 21

DET. ZONE 23

S01°10'43"W

GRADE: 1.15% 40 MPH

NEXT SIGNAL: HWY 231/OAKVILLE SCHOOL & BETHESDA 845 FT

DETECTION ZONE 11

DETECTION ZONE 61

DETECTION ZONE 62

DET. ZONE 63

℄ RTE 231 STA 130+54.42 = ℄ BLACKFOREST DR STA 10+00

STA 130+54.42 = STA 10+00

130

R 83.42'

R 55.4'

START CROSSING Watch For Vehicles
DON'T START Finish Crossing If Started
TIME REMAINING To Finish Crossing
DON'T CROSS
PUSH BUTTON TO CROSS

D1 D2

R10-3eL R10-3eR

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:16:48 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	150

COUNTY ST. LOUIS

JOB NO. J6S3632

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)

BLACKFOREST DR.
PROPOSED SIGNAL PLAN SHEET

EFFECTIVE: 07-01-2018

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

CONDUIT

FROM	TO	CTR TO CTR DIST.	LOOP DETECT	TRENCHED			PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"	2"	3"	4"	2"	3"	4"	2"	3"	4"	
SOURCE	UPS	111		(115)												INCLUDED IN COST OF PS
UPS	CA	5		13												
CA	PB1	5			16											2x13'
PB1	PB2	40						38								
PB1	PB3	125						123								
PB2	S1	9						12								
PB2	PB5	40						38								
PB5	S4	9						10								
PB3	S2	7			10											
PB3	PB4	125			123											
PB4	S3	5			8											
SUBTOTALS			0	13	157	0	0	221	0	0	0	0	0	0	0	
PAY TOTALS			0	13	157	0	0	221	0	0	0	0	0	0	0	

CABLE

FROM	TO	CTR TO CTR DIST.	POWER		CONTROL				LIGHTING		DETECTOR		FIBER	REMARKS
			1c-#2	1c-#8	2c-#16	5c-#16	7c-#16	12c-#12	CONTROL 2c-#12	POLE & BRACKET 1c-#10	1c-#14 IN DUCT	2c-#14 LEAD IN	24 FIBER SINGLEMODE	
SOURCE	UPS	111	(462)											3x231' INCLUDED IN COST OF PS
UPS	CA	12		84										3x27'
CA	21	54					117							
CA	22	54					105							
CA	P1	54				84								
CA	D1	54			83									
CA	P2	94				130								
CA	D2	94			129									
CA	41	137					195							
CA	42	137					188							
CA	11	260					354							
CA	61	260					341							
CA	62	260					329							
CA	CCTV	54												TOTAL CAT5: 99'
SUBTOTALS			0	84	212	214	1629	0	0	0	0	0	0	
PAY TOTALS			0	90	220	220	1710	0	0	0	0	0	0	INCLUDE 5% FOR SNAKING

INTERSECTION ROUTE 231 (TELEGRAPH RD) AT BLACKFOREST DR

D-37B

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:17:11 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE 231 | STATE MO

DISTRICT SL | SHEET NO. 152

COUNTY ST. LOUIS

JOB NO. J6S3632

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
ROUTE 231 AT BLACKFOREST DR
D-37B

EFFECTIVE: 04-01-2018

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY			CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)		SERVICE POLE	
						CONTROLLER		POWER SUPPLY DISCONNECT					
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
								SIGNALS	LIGHTING				
ROUTE 231	131+09.94	76.38' RT	Type		1	15 AMPS	15 AMPS	100 AMPS					AMEREN
			Type										
INTERSECTION TOTAL					1								

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

** PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

(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.

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 *	
APPROACH	STATION	OFFSET	NEMA	170	NEMA	170	I	II	12C/7C HARDWIRE (1) MASTER	12C/7C HARDWIRE (1) LOCAL	TIME BASE	CLOSED LOOP NEMA	CLOSED LOOP 170	FIBER		E	EV	DOUBLE	332	336S	BITRAN	WAPITI
ROUTE 231	131+03.79	75.85' RT			1												1					
INTERSECTION TOTAL					1												1					

NEMA DETECTOR ASSIGNMENT

CARD POSITION

		1	2	3	4	5	6	7	8
CHANNEL	1				OPTIONAL				
	2								

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

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	DETECTOR ZONE	TYPE: ACCESSIBLE PED SIGNAL PUSH BUTTON	TYPE: INDUCTION LOOP (2) STANDARD	TYPE: INDUCTION LOOP (2) DELAY/ EXTEND *	TYPE: INDUCTION LOOP (2) CALL UNIT *	TYPE: VIDEO
V3	NB ROUTE 231 - THRU	61					1
	NB ROUTE 231 - THRU	62					
	NB ROUTE 231 - BIKE	63					
	NB ROUTE 231 - LEFT	11					
V1	SB ROUTE 231 - THRU	21					1
	SB ROUTE 231 - THRU	22					
	SB ROUTE 231 - BIKE	23					
V2	EB BLACKFOREST - LEFT	41/42					1
D1	NB PED - BLACKFOREST DR		1				
D2	SB PED - BLACKFOREST DR		1				
INTERSECTION TOTAL			2				SEE BELOW

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			
	R3-5L	30 X 36	7.5			
	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	84 X 18	10.5	10.5	1	Telegraph Rd
2	D3-1	96 x 18	12.0	24.0	2	Blackforest Dr
	R10-3E	9 X 15	0.9			
	R10-11A	24 X 30	5.0			
	R10-13	36 X 24	6.0			
1	R10-27A	30 X 36	7.5	7.5	1	
1	R10-3eR	9 X 15	0.9	0.9 **	1 **	
1	R10-3eL	9 X 15	0.9	0.9 **	1 **	
			SUBTOTAL	43.8	6	
			TOTAL	42	4	

VIDEO DETECTION

CONTROLLER LOCATION			CAMERAS (EACH)	VIDEO CABLE (L.F.)	MONITOR, SOFTWARE, & ACCESSORIES (LUMP SUM)	VIDEO DETECTION SYSTEM (EACH)
APPROACH	STATION	OFFSET				
ROUTE 231	131+03.79	75.85' RT	3	638	1	1

SL DISTRICT TRAFFIC SIGNAL DETECTION SYSTEM

	DETECTION SYSTEM (EACH)	REMARKS
INTERSECTION TOTAL	1	SEE JOB SPECIAL PROVISIONS

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ø1	Ø2	NOT USED	Ø4	NOT USED	Ø6	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	NOT USED	Ø2 PED	NOT USED	NOT USED	NOT USED

ROUTE 231 (TELEGRAPH RD) AT BLACKFOREST DR

INTERSECTION

D-37C

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:17:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	153

COUNTY: ST. LOUIS

JOB NO.: J6S3632

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION | DATE

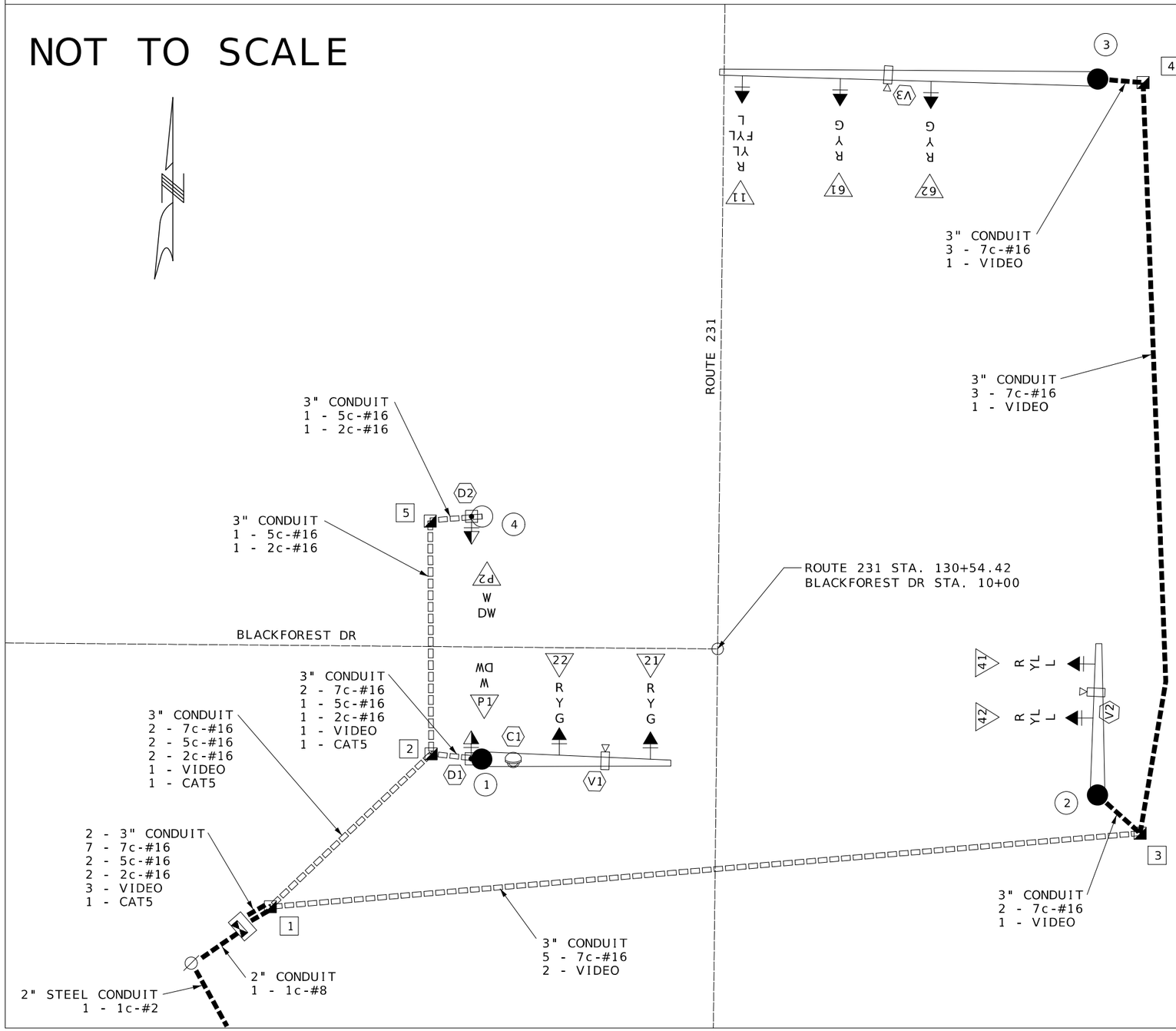
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SIGNAL SHEET
ROUTE 231 AT BLACKFOREST DR
D-37C

EFFECTIVE: 12-01-2017

WIRING DIAGRAM

NOT TO SCALE



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
	TRENCHED CONDUIT
	PUSHED CONDUIT

ROUTE 231 (TELEGRAPH RD) AT BLACKFOREST DR
INTERSECTION

D-37D

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:17:38 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	154

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

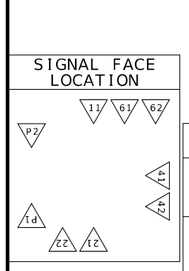
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SIGNAL SHEET
ROUTE 231 AT BLACKFOREST DR
D-37D

EFFECTIVE: 12-01-2017

SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

	PHASE Ø1	PHASE Ø2	PHASE Ø3	PHASE Ø4	PHASE Ø5	PHASE Ø6	PHASE Ø7	PHASE Ø8	PED Ø2 OVERLAP	PED Ø4 OVERLAP	PED Ø6 OVERLAP	PED Ø8 OVERLAP
			NOT USED		NOT USED		NOT USED	NOT USED		NOT USED	NOT USED	NOT USED
FACE NUMBERS	11	21 11		41		61			P1			
		22		42		62			P2			
SIGNAL INDICATIONS R	R	R R		R		R			DW			
SIGNAL INDICATIONS Y	YL	Y YL		YL		Y			FDW			
SIGNAL INDICATIONS FYA	FYL	FYL										
SIGNAL INDICATIONS G	L	G		L		G			W			
DETECTOR ASSIGNMENTS	ZONE 11	ZONE 21/22		ZONE 41/42		ZONE 61/62						
DETECTOR ASSIGNMENTS (PEDS. ONLY)									D1 D2			
OVERLAP PARENT PHASES									Ø2			

FACE NUMBERS

SIGNAL INDICATIONS (R, Y, FYA, G)

DETECTOR ASSIGNMENTS

PHASE 1	PHASE 2	PHASE 3	PHASE 4
RING 1	OLA	NOT USED	
RING 2 NOT USED		NOT USED	NOT USED
PHASE 5	PHASE 6	PHASE 7	PHASE 8

BARRIER

RING STRUCTURE

IF CALLED, ALL NON-CONFLICTING PHASES SHALL COMBINE AND TIME CONCURRENTLY. TIME TO BE DETERMINED BY THE ENGINEER AT SIGNAL TURN ON AND SET IN THE CONTROLLER BY THE CONTRACTOR.

LEGEND

- ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED ACTUATED VEHICULAR MOVEMENT
- NON-ACTUATED VEHICULAR MOVEMENT
- PARTIALLY RESTRICTED NON-ACTUATED VEHICULAR MOVEMENT
- ACTUATED PEDESTRIAN MOVEMENT
- NON-ACTUATED PEDESTRIAN MOVEMENT
- VEHICLE STOPPED
- FDW — FLASHING DON'T WALK
- W — WALK
- DW — DON'T WALK
- R/W — RIGHT OF WAY INTERVAL
- YRt — YELLOW RIGHT ARROW
- RT. — GREEN RIGHT ARROW
- LY -YL — YELLOW LEFT ARROW
- L — GREEN LEFT ARROW
- S — GREEN STRAIGHT AHEAD ARROW
- G — CIRCULAR GREEN
- Y — CIRCULAR YELLOW
- R — CIRCULAR RED
- RL — RED LEFT ARROW
- Ø — TRAFFIC PHASE
- AO — ALL OTHERS
- FR — FLASHING RED
- FY — FLASHING CIRCULAR YELLOW
- FYL — FLASHING YELLOW LEFT ARROW

FLASHING OPERATION	
ROUTE 231 (TELEGRAPH RD)	FR
BLACKFOREST DR	FR
CONTROLLER TYPE	NEMA Ø8

TRAFFIC SIGNAL CONTROL OPERATION	
INTERSECTION OF	ROUTE 231 (TELEGRAPH RD)
WITH	BLACKFOREST DR

D-38A

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:17:49 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	155

COUNTY: ST. LOUIS

JOB NO.: J6S3632

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
ROUTE 231 AT BLACKFOREST DR
D-38A

CONDUIT

FROM	TO	CTR TO CTR DISTANCE	TRENCHED 2″	TRENCHED 3″	PUSHED 3″
PB2	S1	10			11
PB3	S2	11			12
PB2	PB4	6			4
SUBTOTAL					27
SUBTOTAL FROM SHEET #162		408			
PAY TOTAL		408			27

CABLE

FROM	TO	CTR TO CTR DISTANCE	POWER 1c-#2	POWER 1c-#8	CONTROL 2c-#16	CONTROL 5c-#16	REMARKS
CA	P1	81				111	
CA	D1	81			110		
CA	P2	176				212	
CA	D2	176			211		
SUBTOTAL					321	323	
				416			
				440	340	340	INCLUDE 5% FOR SNAKING

LOCATION / BASE / PULL BOX / POST

POST NUMBER	PULL BOX NUMBER	APPROACH	STATION	OFFSET	BASE TYPE C	CONCRETE** (CU. YDS.)	PULL BOX PREFORMED CLASS 2	PREFORMED CLASS 3	PREFORMED CLASS 5	CONCRETE STANDARD	DRAIN TYPE* I	DRAIN TYPE* II A	II B	II C	POST TOP MOUNT 8 FT.	POST TOP MOUNT 15 FT.	POST STANCHION
1		ROUTE 231	6+95.50	55.25′ LT	1	0.44									1		
2		ROUTE 231	7+02.35	27.0′ RT	1	0.44									1		
	4	ROUTE 231	7+07.60	65.4′ LT			1				1						
SUBTOTAL						0.88	1								2		
PAY TOTAL						0.88	1								2		

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE: ACCESSIBLE PEDESTRIAN PUSH BUTTON
D1	EAST ISLAND – RTE 231	1
D2	WEST SIDE – RTE 231	1
	SUBTOTAL	2

NOTE: VIDEO DETECTION ZONES NEED TO BE REDRAWN

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.
1	R10-3eR	9 X 15	0.9	0.9	1
1	R10-3eL	9 X 15	0.9	0.9	1
			SUBTOTAL	1.8 ***	2 ***

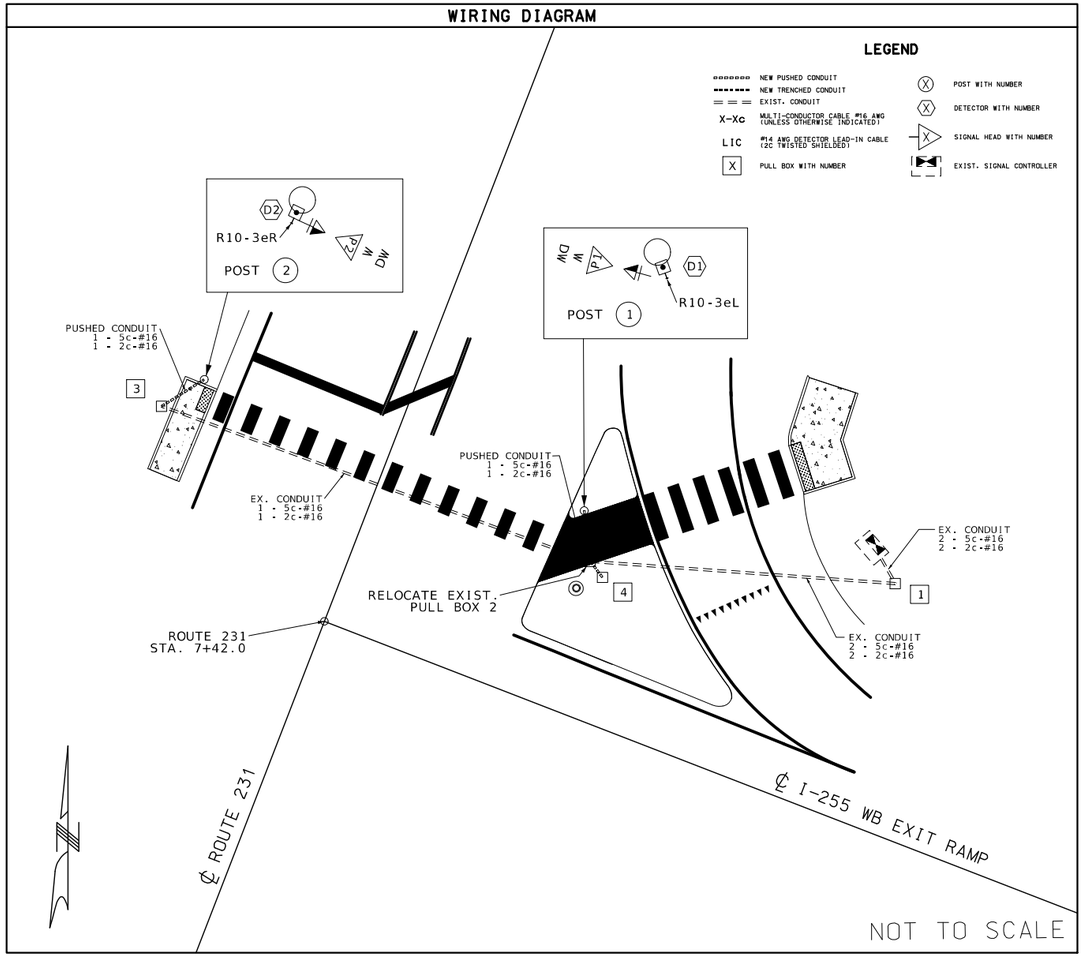
SIGNAL HEADS

POST NUMBER	FACE NUMBER	VISORS* 12″	VISORS* PED.	BRACKET* TYPE I	ONE-FACE 1- T	S	C	B
1	P1	1	1	1		1		
2	P2	1	1	1		1		
SUBTOTAL						2		

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
						UIP						NOT USED	NOT USED	NOT USED	Ø3 PED

WIRING DIAGRAM



LEGEND
T – TOP MOUNT
S – SIDE MOUNT
C – SPANWIRE MOUNT
B – MAST ARM MOUNT

PEDESTRIAN SIGNAL PHASING

		PED PHASE Ø3 OVERLAP	PED PHASE Ø	PED Ø	PED Ø OVERLAP
FACE NUMBERS	P1				
	P2				
SIGNAL INDICATIONS R	DW				
SIGNAL INDICATIONS Y	FDW				
SIGNAL INDICATIONS FYA					
SIGNAL INDICATIONS G	W				
DETECTOR ASSIGNMENTS					
DETECTOR ASSIGNMENTS (PEDS. ONLY)	D1				
	D2				
OVERLAP PARENT PHASES	Ø3				

ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.
* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
** SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.
*** PEDESTRIAN SIGNS & MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON

I-255 WB OFF RAMP
INTERSECTION

D-37 COMBINED

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:17:59 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 156
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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
I-255 WB EXIT RAMP
COMBINED D SHEET

CONDUIT / CABLE

CONDUIT FROM	CONDUIT TO	CTR TO CTR DISTANCE	TRENCHED 2″	TRENCHED 3″	PUSHED 3″	CABLE FROM	CABLE TO	CTR TO CTR DISTANCE	POWER 1c-#2	POWER 1c-#8	CONTROL 2c-#16	CONTROL 5c-#16	REMARKS
PB3	S2	15			16	CA	P2	206				242	
						CA	D2	206			241		
SUBTOTAL					16						241	242	
SUBTOTAL FROM SHEET #162		158								166			
PAY TOTAL		158			16					180	260	260	INCLUDE 5% FOR SNAKING

LOCATION / BASE / PULL BOX / POST

POST NUMBER	PULL BOX NUMBER	LOCATION APPROACH	LOCATION STATION	LOCATION OFFSET	BASE TYPE C	BASE CONCRETE** (CU. YDS.)	PULL BOX PREFORMED CLASS 2	PULL BOX PREFORMED CLASS 3	PULL BOX PREFORMED CLASS 5	PULL BOX CONCRETE STANDARD	DRAIN TYPE* I	DRAIN TYPE* II A	DRAIN TYPE* II B	DRAIN TYPE* II C	POST TOP MOUNT 8 FT.	POST TOP MOUNT 15 FT.	POST STANCHION
2		ROUTE 231	18+85.80	44.25′ RT	1	0.44									1		
SUBTOTAL						0.44									1		
PAY TOTAL						0.44									1		

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE: ACCESSIBLE PEDESTRIAN PUSH BUTTON	TYPE: PUSHBUTTON EXTENDED MOUNT
D1	NORTH CORNER – I-255EB OFF RAMP	1	1
D2	SOUTH ISLAND – I-255 EB OFF RAMP	1	
	SUBTOTAL	2	1

NOTE: VIDEO DETECTION ZONES NEED TO BE REDRAWN

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.
1	R10-3eR	9 X 15	0.9	0.9	1
1	R10-3eL	9 X 15	0.9	0.9	1
		SUBTOTAL		1.8 ***	2 ***

SIGNAL HEADS

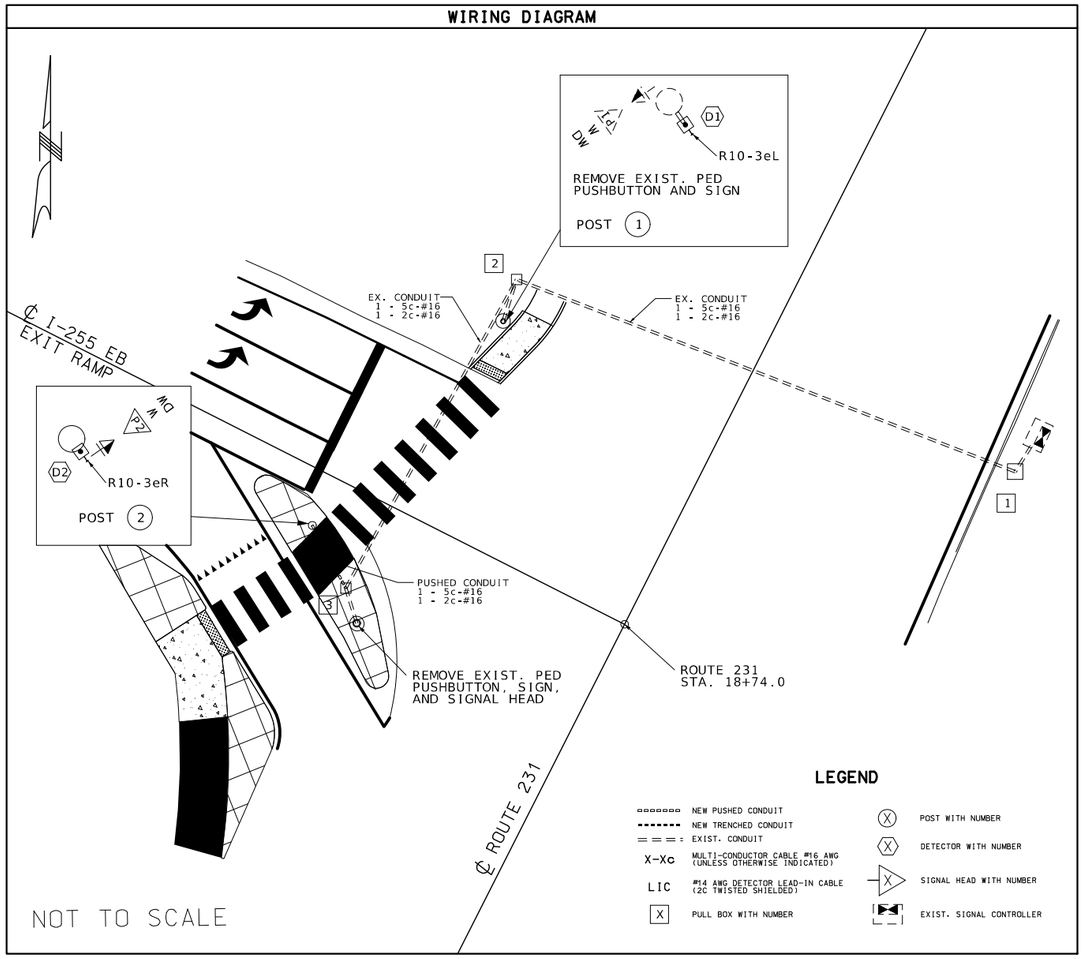
POST NUMBER	FACE NUMBER	🚶	VISORS* 12″	VISORS* PED.	BRACKET* TYPE I	ONE-FACE 1- T	S	C	B
2	P2	1		1	1		1		
					SUBTOTAL		1		

LEGEND
T – TOP MOUNT
S – SIDE MOUNT
C – SPANWIRE MOUNT
B – MAST ARM MOUNT

PEDESTRIAN SIGNAL PHASING

		PED PHASE ②2	PED PHASE ④	PED ④	PED ⑥
		OVERLAP	OVERLAP	OVERLAP	OVERLAP
FACE NUMBERS		P1				
		P2				
SIGNAL INDICATIONS	R	DW				
	Y	FDW				
	FYA					
	G	W				
DETECTOR ASSIGNMENTS						
DETECTOR ASSIGNMENTS (PEDS. ONLY)		D1				
		D2				
OVERLAP PARENT PHASES		②2				

WIRING DIAGRAM



ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.
* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
** SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.
*** PEDESTRIAN SIGNS & MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON

I-255 EB OFF RAMP
INTERSECTION

D-37 COMBINED

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:18:09 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 157
COUNTY ST. LOUIS
JOB NO. J6S3632
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
I-255 EB EXIT RAMP
COMBINED D SHEET

CONDUIT

FROM	TO	CTR TO CTR DISTANCE	TRENCHED 2″	TRENCHED 3″	PUSHED 3″
PB3	S3	7		8	
PB2	PB6	4			2
SUBTOTAL				8	2
PAY TOTAL				8	2

CABLE

FROM	TO	CTR TO CTR DISTANCE	POWER 1c-#2	POWER 1c-#8	CONTROL ⬡ 2c-#16	CONTROL ▽ 5c-#16
CA	P1	238				260
CA	D1	238			259	
CA	P2	145				187
CA	D2	145			186	
CA	P3	135				176
CA	D3	135			175	
CA	P4	58				99
CA	D4	58			98	
SUBTOTAL					718	722
PAY TOTAL					760	760

REMARKS: INCLUDE 5% FOR SNAKING

LOCATION / BASE / PULL BOX / POST

POST NUMBER	PULL BOX NUMBER	APPROACH	STATION	OFFSET	BASE TYPE C	BASE CONCRETE✳✳ (CU. YDS.)	PULL BOX PREFORMED CLASS 2	PREFORMED CLASS 3	PREFORMED CLASS 5	CONCRETE STANDARD	DRAIN TYPE✳ I	DRAIN TYPE✳ II A	II B	II C	POST TOP MOUNT 8 FT.	POST TOP MOUNT 15 FT.	POST STANCHION
3		ROUTE 231	92+83.0	53.1′ RT	1	0.44									1		
	6	ROUTE 231	93+63.75	51.5′ RT			1				1						
SUBTOTAL						0.44	1								1		
PAY TOTAL						0.44	1								1		

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE ACCESSIBLE PEDESTRIAN PUSH BUTTON
D1	EAST SIDE RTE 231	1
D2	WEST SIDE RTE 231	1
D3	NORTH SIDE COPPERGATE SQUARE	1
D4	SOUTH SIDE COPPERGATE SQUARE	1
	SUB TOTAL	4

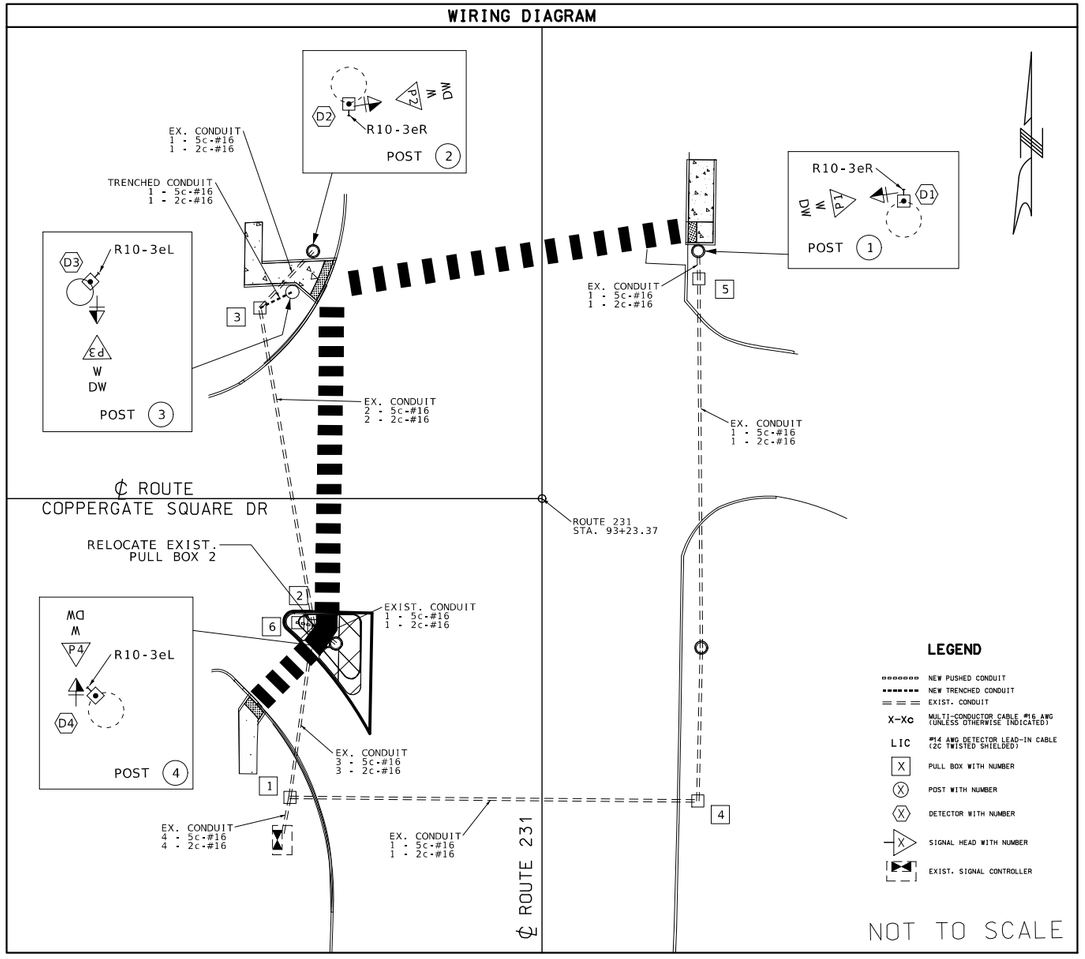
SIGNAL SIGNS

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.
2	R10-3eR	9 X 15	0.9	1.8	2
2	R10-3eL	9 X 15	0.9	1.8	2
			SUBTOTAL	3.6 ✳✳✳	4 ✳✳✳

NEMA LOAD SWITCH ASSIGNMENTS

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
						UIP						∅2 PED	NOT USED	NOT USED	∅3 PED

WIRING DIAGRAM



LEGEND
T – TOP MOUNT
S – SIDE MOUNT
C – SPANWIRE MOUNT
B – MAST ARM MOUNT

SIGNAL HEADS

POST NUMBER	FACE NUMBER	1	VISORS✳ 12″	VISORS✳ PED.	BRACKET✳ TYPE I	ONE-FACE 1– T	S	C	B
1	P1	1		1	1		1		
2	P2	1		1	1		1		
3	P3	1		1	1		1		
4	P4	1		1	1		1		
						SUB TOTAL	4		

PEDESTRIAN SIGNAL PHASING

		PED PHASE ∅2 OVERLAP	PED PHASE ∅3 OVERLAP	PED ∅ OVERLAP	PED ∅ OVERLAP
FACE NUMBERS		P3	P1		
		P4	P2		
SIGNAL INDICATIONS	R	DW	DW		
	Y	FDW	FDW		
	FYA				
	G	W	W		
DETECTOR ASSIGNMENTS					
DETECTOR ASSIGNMENTS (PEDS. ONLY)		D3 D4	D1 D2		
OVERLAP PARENT PHASES		∅2	∅3		

ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.
✳ ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
✳✳ SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.
✳✳✳ PEDESTRIAN SIGNS & MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON

COPPERGATE SQUARE DR
INTERSECTION

D-37 COMBINED

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:18:23 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 158
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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
COPPERGATE SQUARE DR
COMBINED D SHEET

CONDUIT

FROM	TO	CTR TO CTR DISTANCE	TRENCHED 2″	TRENCHED 3″	PUSHED 3″
PB4	S3	5		6	
PB5	S4	7		8	
SUBTOTAL				14	
PAY TOTAL				14	

CABLE

FROM	TO	CTR TO CTR DISTANCE	POWER 1c-#2	POWER 1c-#8	CONTROL ⬡ 2c-#16	CONTROL ▽ 5c-#16	REMARKS
CA	P1	120				150	
CA	D3	120			149		
CA	P2	120				150	
CA	D4	120			149		
CA	P3	203				239	
CA	D5	203			238		
CA	P4	203				239	
CA	D6	203			238		
CA	P5	126				162	
CA	D8	126			161		
					935	940	
					990	990	INCLUDE 5% FOR SNAKING

LOCATION / BASE / PULL BOX / POST

POST NUMBER	PULL BOX NUMBER	APPROACH	STATION	OFFSET	BASE TYPE C	CONCRETE✳✳ (CU. YDS.)	PULL BOX PREFORMED CLASS 2	PREFORMED CLASS 3	PREFORMED CLASS 5	CONCRETE STANDARD	DRAIN TYPE✳ I	DRAIN TYPE✳ II A	II B	II C	POST TOP MOUNT 8 FT.	POST TOP MOUNT 15 FT.	STANCHION
3		ROUTE 231	138+52.0	44.26′ RT	1	0.44									1		
4		ROUTE 231	139+34.5	45.15′ RT	1	0.44									1		
					SUBTOTAL	0.88									2		
					PAY TOTAL	0.88									2		

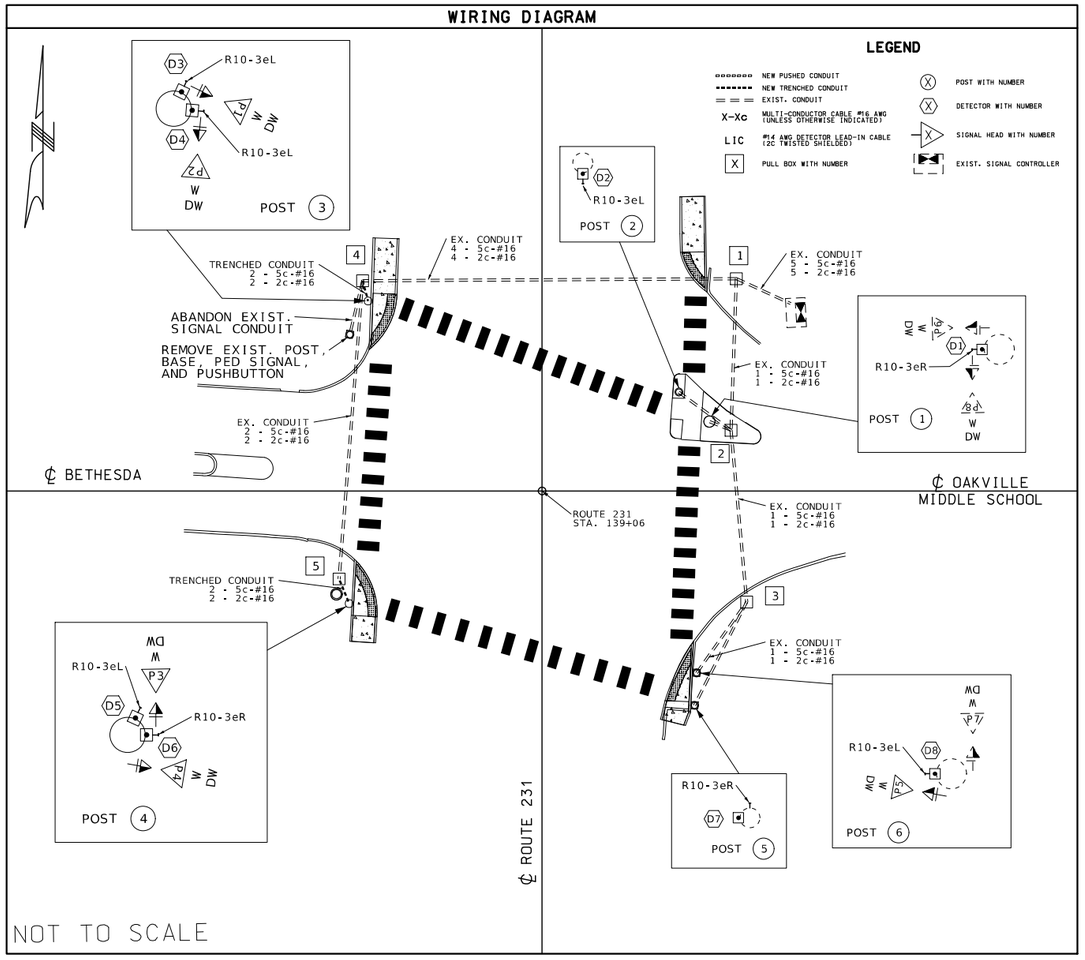
SIGNAL SIGNS

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.
3	R10-3eR	9 X 15	0.9	2.7	3
5	R10-3eL	9 X 15	0.9	4.5	5
			SUBTOTAL	7.2 ✳✳✳	8 ✳✳✳

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE: ACCESSIBLE PEDESTRIAN PUSH BUTTON
D1	NE ISLAND - OAKVILLE SCHOOL	1
D2	NE ISLAND - RTE 231	1
D3	NW CORNER - RTE 231	1
D4	NW CORNER - BETHESDA	1
D5	SW CORNER - BETHESDA	1
D6	SW CORNER - RTE 231	1
D7	SE CORNER - RTE 231	1
D8	SE CORNER - OAKVILLE SCHOOL	1
	SUB TOTAL	8

WIRING DIAGRAM



SIGNAL HEADS

POST NUMBER	FACE NUMBER	🚶	VISORS✳ 12″	VISORS✳ PED.	BRACKET✳ TYPE I	ONE-FACE 1- T	S	C	B
3	P1	1		1	1		1		
3	P2	1		1	1		1		
4	P3	1		1	1		1		
4	P4	1		1	1		1		
6	P5	1		1	1		1		
					SUB TOTAL		5		

LEGEND
T - TOP MOUNT
S - SIDE MOUNT
C - SPANWIRE MOUNT
B - MAST ARM MOUNT

PEDESTRIAN SIGNAL PHASING

		PED PHASE ⌀2	PED PHASE ⌀8	PED ⌀	PED ⌀
		OVERLAP	OVERLAP	OVERLAP	OVERLAP
FACE NUMBERS		P2 P7	P1 P4		
		P3 P8	P6 P5		
SIGNAL INDICATIONS	R	DW DW	DW DW		
	Y	FDW FDW	FDW FDW		
	FYA				
	G	W W	W W		
DETECTOR ASSIGNMENTS					
DETECTOR ASSIGNMENTS (PEDS. ONLY)		D4 D8 D6 D1	D3 D5 D2 D7		
OVERLAP PARENT PHASES		⌀2 ⌀6	⌀8 ⌀4		

ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.
✳ ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.
✳✳ SEE STANDARD PLANS 902.10 AND 902.30 FOR CONCRETE REQUIREMENTS ON BASES.
✳✳✳ PEDESTRIAN SIGNS & MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTON

BETHESDA/OAKVILLE SCHOOLS
INTERSECTION

D-37 COMBINED

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:18:35 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	159

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

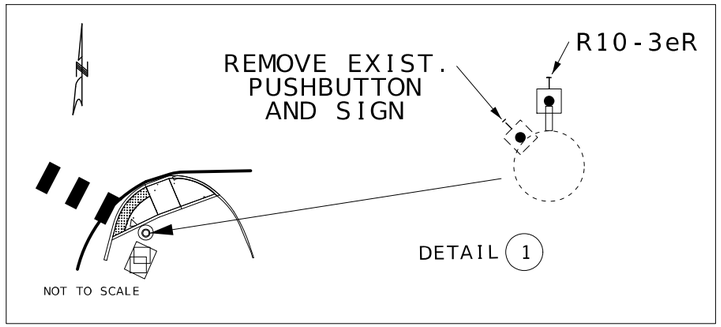
DESCRIPTION | DATE

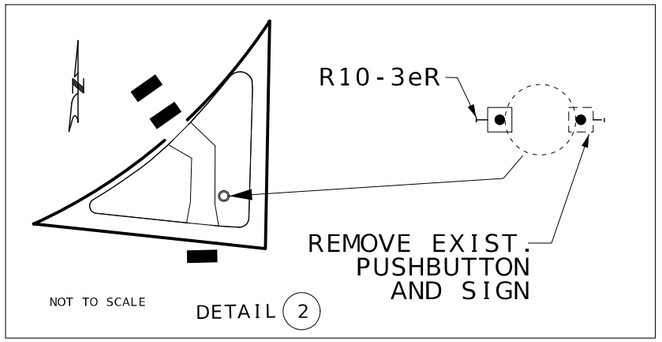
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

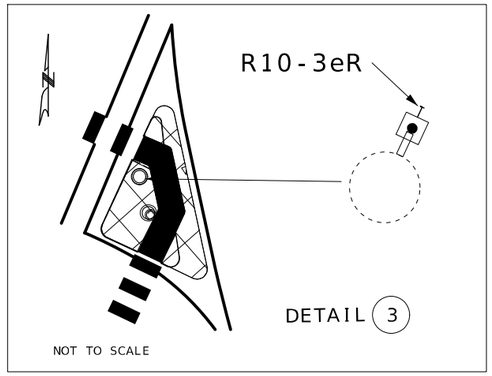
SIGNAL SHEET
BETHESDA/OAKVILLE SCHOOLS
COMBINED D SHEET

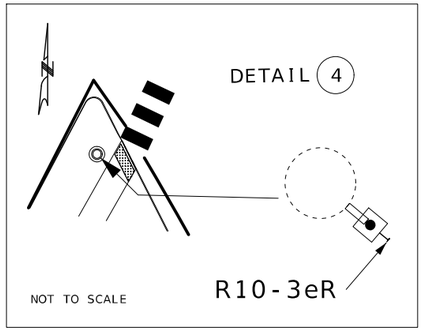
ACCESSIBLE PEDESTRIAN FACILITIES REMOVE AND REPLACE

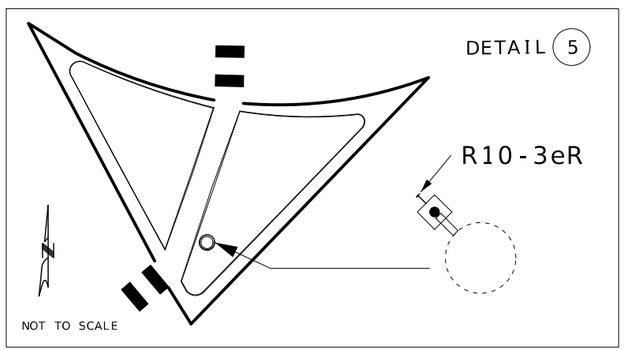
INTERSECTION	LOCATION	ACCESSIBLE PEDESTRIAN PUSH BUTTON (EACH)	PUSH BUTTON EXTENDED MOUNT (EACH)	PEDESTRIAN SIGNAL SIGNS				REMARKS
				MUTCD SIGN R10-3eL (9X15 IN.)		MUTCD SIGN R10-3eR (9X15 IN.)		
				QUANTITY (EACH)	TOTAL AREA (SQ. FT.)	QUANTITY (EACH)	TOTAL AREA (SQ. FT.)	
BARRACKSVIEW RD	NW CORNER	2		1	0.9	1	0.9	
BARRACKSVIEW RD	SW CORNER	2		1	0.9	1	0.9	
BARRACKSVIEW RD	SE ISLAND	2	1	1	0.9	1	0.9	
BARRACKSVIEW RD	NE ISLAND	2	2	1	0.9	1	0.9	
KINSWOOD LN	NW ISLAND	1	1	1	0.9			
KINSWOOD LN	SW ISLAND	2		1	0.9	1	0.9	
KINSWOOD LN	SE CORNER	1	1			1	0.9	SEE DETAIL 1
ERB RD	NW ISLAND, ERB	1				1	0.9	SEE DETAIL 2
ERB RD	SW ISLAND, ERB	2		2	1.8			
ERB RD	E SIDE, CLIFF CAVE TRAIL	1		1	0.9			
CHRISTOPHER DR	NE SMALL ISLAND	2	1	1	0.9	1	0.9	SEE DETAIL 3
CHRISTOPHER DR	SE BIG ISLAND	1	1	1	0.9			SEE DETAIL 4
CHRISTOPHER DR	NW SIDE, ALONG 231	1				1	0.9	
HEINTZ RD	N ISLAND	1	1			1	0.9	SEE DETAIL 5
HEINTZ RD	W ISLAND	2		2	1.8			
HEINTZ RD	S CORNER	2		1	0.9	1	0.9	
HEINTZ RD	E CORNER	1				1	0.9	
WINDING CREEK WAY	N CORNER	1				1	0.9	
WINDING CREEK WAY	W CORNER	2	2	2	1.8			SEE DETAIL 6
WINDING CREEK WAY	S SIDE	1				1	0.9	
BECKER RD	N CORNER	1		1	0.9			
BECKER RD	W CORNER	2		2	1.8			
BECKER RD	S CORNER	2		1	0.9	1	0.9	
BECKER RD	E ISLAND	1	1	1	0.9			SEE DETAIL 7
	SUBTOTAL	36	11	*21	*18.9	*15	*13.5	

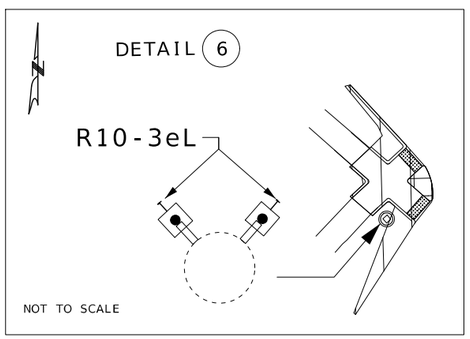


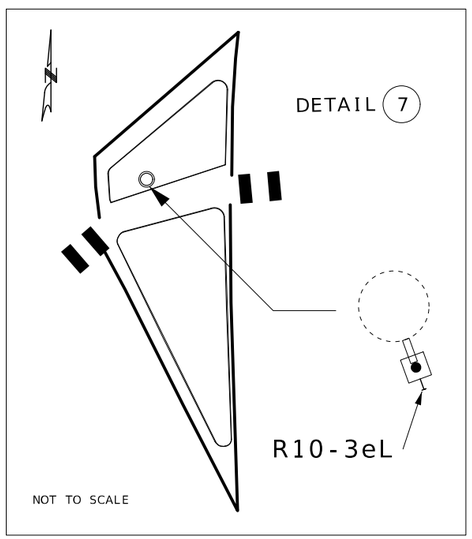












* PEDESTRIAN SIGNS AND MOUNTING HARDWARE INCLUDED IN PAY ITEM FOR ACCESSIBLE PEDESTRIAN PUSH BUTTON.

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:18:44 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	160

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

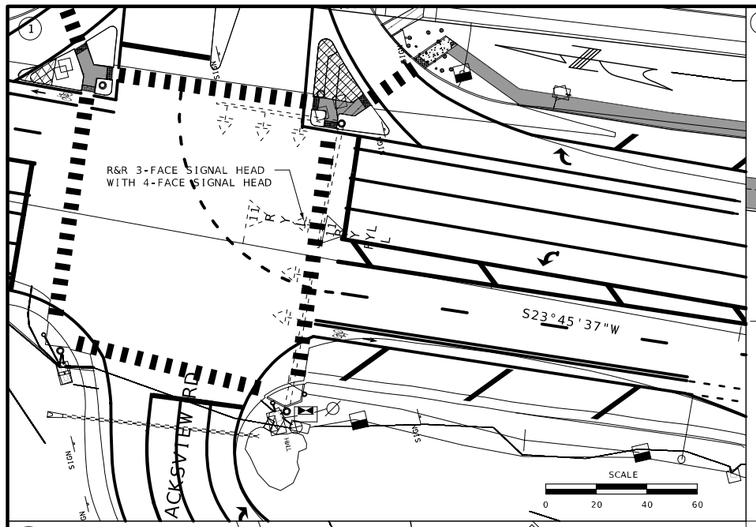
BRIDGE NO.

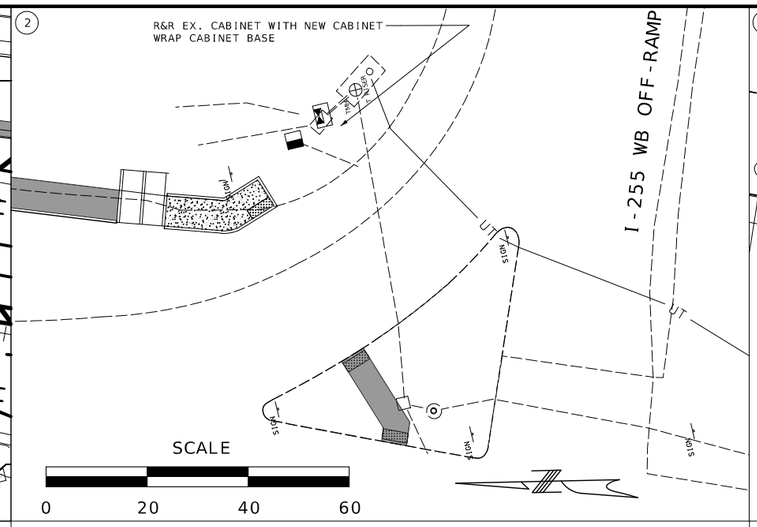
DESCRIPTION

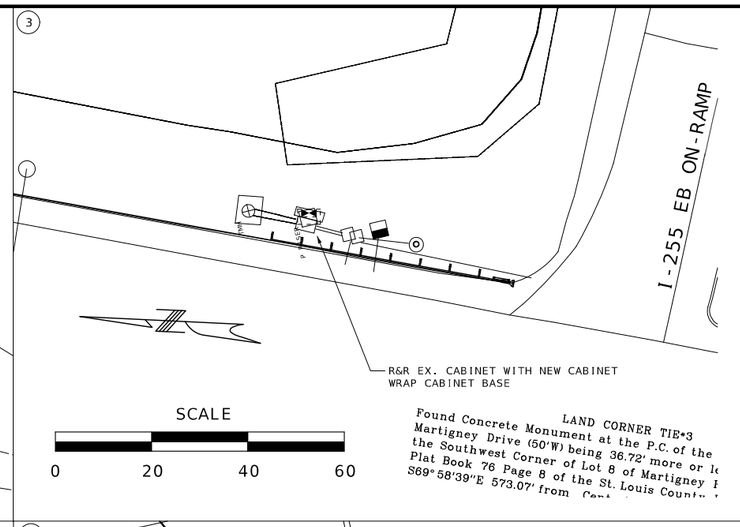
DATE

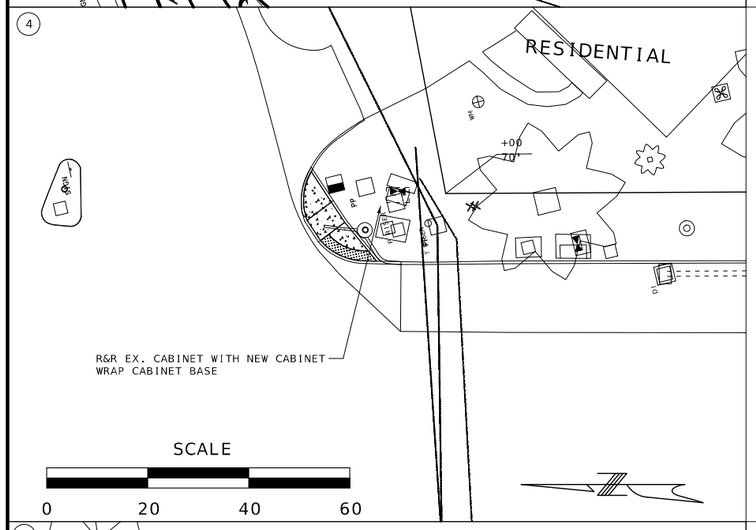
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SIGNAL SHEET
PUSHBUTTON
REMOVE & REPLACE



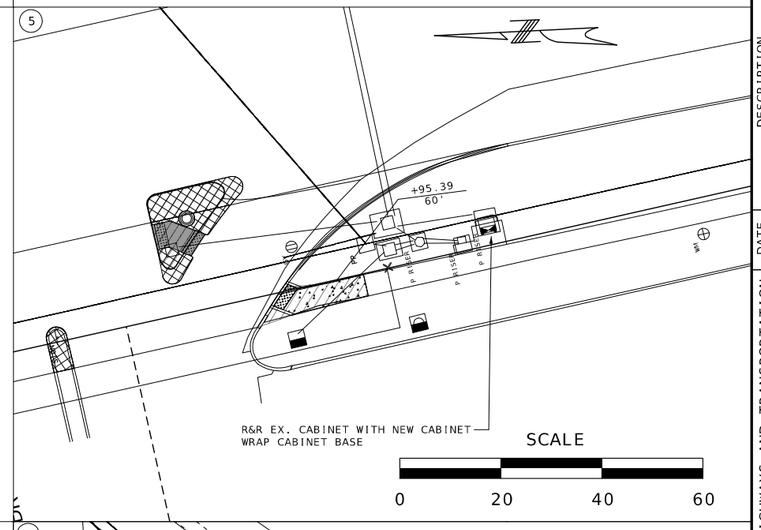


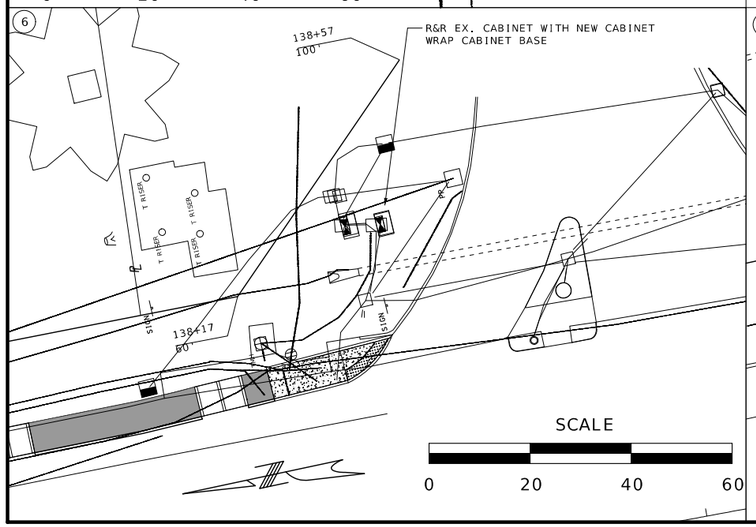


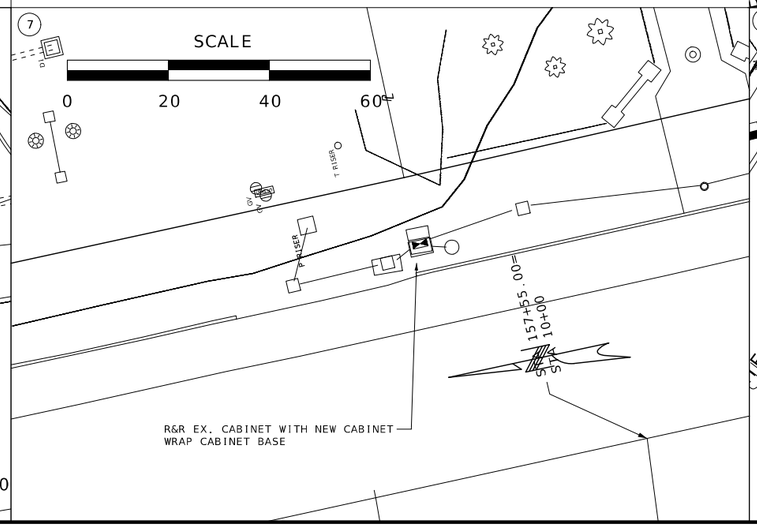


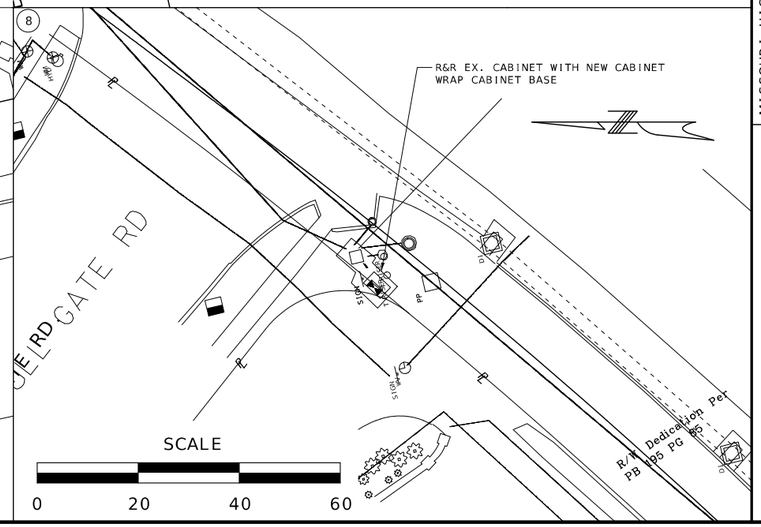
LOCATIONS:

1. BARRACKSVIEW RD
2. I-255 WB OFF-RMP
3. I-255 EB OFF-RAMP
4. KINSWOOD RD
5. COPPERGATE SQUARE DR
6. OAKVILLE SCHOOLS/BETHESDA
7. ERB RD
8. BECKER RD/TOLL GATE RD









STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:25:27 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	161

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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
VARIOUS CABINET REPLACEMENTS

CONDUIT

LOCATION	FROM	TO	CTR TO CTR DISTANCE	TRENCHED 2"	TRENCHED 3"	PUSHED 3"	REMARKS
BARRACKSVIEW RD	SOURCE	PS	11	(15)			(INCLUDED IN COST OF PS)
I-255 WB OFF-RAMP	SOURCE	PS	11	(15)			(INCLUDED IN COST OF PS)
I-255 EB OFF-RAMP	SOURCE	PS	11	(15)			(INCLUDED IN COST OF PS)
KINSWOOD DR	SOURCE	PS	35	(39)			(INCLUDED IN COST OF PS)
BARRACKSVIEW RD	PS	CABINET	125	133			
I-255 WB OFF-RAMP	PS	CABINET	400	408			
I-255 EB OFF-RAMP	PS	CABINET	150	158			
KINSWOOD DR	PS	CABINET	35	43			
BARRACKSVIEW RD SUBTOTAL				133			
I-255 WB OFF-RAMP SUBTOTAL				408			SEE SHEET #156 FOR PAY TOTAL
I-255 EB OFF-RAMP SUBTOTAL				158			SEE SHEET #157 FOR PAY TOTAL
KINSWOOD DR SUBTOTAL				43			
BARRACKSVIEW RD PAY TOTAL				133			INCLUDES 5% FOR SNAKING
KINSWOOD DR PAY TOTAL				43			INCLUDES 5% FOR SNAKING

CABLE

FROM	TO	CTR TO CTR DISTANCE	POWER 1c-#2	POWER 1c-#8	REMARKS
SOURCE	PS	11	(162)		(INCLUDED IN COST OF PS) = 54' X 3
SOURCE	PS	11	(162)		(INCLUDED IN COST OF PS) = 54' X 3
SOURCE	PS	11	(162)		(INCLUDED IN COST OF PS) = 54' X 3
SOURCE	PS	35	(234)		(INCLUDED IN COST OF PS) = 78' X 3
PS	CABINET	125		141	
PS	CABINET	400		416	
PS	CABINET	150		166	
PS	CABINET	35		51	
				141	
				416	SEE SHEET #156 FOR PAY TOTAL
				166	SEE SHEET #157 FOR PAY TOTAL
				51	
				150	INCLUDES 5% FOR SNAKING
				60	INCLUDES 5% FOR SNAKING

BASE WRAP

LOCATION #	APPROACH	STATION	OFFSET	CONCRETE BASE WRAP (EA)
1	BARRACKSVIEW RD	3+25	68' RT	1
2	I-255 WB OFF-RAMP	6+79	114' RT	1
3	I-255 EB OFF-RAMP	18+08	85' LT	1
4	KINSWOOD DR	23+90	68' LT	1
5	COPPERGATE SQUARE DR	110+83	53' RT	1
6	OAKVILLE SCHOOLS/BETHESDA	138+49	69' LT	1
7	ERB RD	157+19	48' LT	1
8	BECKER RD	85+17	59' RT	1
			SUBTOTAL	8
			PAY TOTAL	8

ALL LENGTHS AND SPACINGS ARE IN FEET UNLESS OTHERWISE INDICATED.
✳ ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

SIGNAL HEADS

LOCATION #	FACE NUMBER	12" LENS CONVENTIONAL R	YL	FYL	L	VISORS✳ 12"	BRACKET✳ TYPE I	ONE-FACE 4- T	S	C	B
1	P1	1	1	1	1	1	1				1
							SUBTOTAL CONVENTIONAL				1
							TOTAL CONVENTIONAL				1

LEGEND
T - TOP MOUNT
S - SIDE MOUNT
C - SPANWIRE MOUNT
B - MAST ARM MOUNT

SIGNAL SIGNS

LOCATION #	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.
1	1	R10-27a	30 X 36	7.5	7.5	1
				SUBTOTAL	7.5	1

POWER SUPPLY

LOCATION APPROACH	STATION	OFFSET	POWER SUPPLY ASSEMBLY: COMBINATION PAD MOUNTED 120/240V POWER SUPPLY & LIGHTING CONTROLLER & UPS (SEE SPECIAL SHEETS)	CIRCUIT BREAKER TRIP RATING✳ CONTROLLER: AUXILIARY BREAKER	CONT & SIGNAL LAMPS	POWER SUPPLY DISCONNECT MAIN BREAKER: SIGNALS	LIGHTING	LIGHTING CONTROL ✳ (ON POWER SUPPLY): 120/240 VOLT DUAL METER COMBO PS & LTG	MAIN BREAKER	SERVICE POLE: CONTRACT FURNISH	UTILITY COMPANY
BARRACKSVIEW RD	✳✳	✳✳	1	15 Amps	15 Amps	100 Amps	Amps		Amps	Ci. Ft.	AMEREN
I-255 WB OFF-RAMP	✳✳	✳✳	1	15 Amps	15 Amps	100 Amps	Amps		Amps	Ci. Ft.	AMEREN
I-255 EB OFF-RAMP	✳✳	✳✳	1	15 Amps	15 Amps	100 Amps	Amps		Amps	Ci. Ft.	AMEREN
KINSWOOD DR	✳✳	✳✳	1	15 Amps	15 Amps	100 Amps	Amps		Amps	Ci. Ft.	AMEREN
INTERSECTIONS TOTAL			4								

✳✳ LOCATION TO BE DETERMINED BY THE ENGINEER

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION INTERSECTION	STATION	OFFSET	SYSTEM MASTER (CLOSED LOOP) NEMA	170	ACTUATED NEMA	170	ON-OFF✳ SWITCH TYPE I	II	COORDINATION INTERFACE ✳ 12C/7C HARDWIRE (1) MASTER	LOCAL	TIME BASE	CLOSED LOOP NEMA	170	FIBER	TIME ✳ CLOCK	NEMA CABINET TYPE ✳ E	EV	DOUBLE	170 CABINET TYPE ✳ 332	336S	170 SOFTWARE ✳ BITRAN	WAPITI
BARRACKSVIEW RD	3+25	68' RT			1												1					
I-255 WB OFF-RAMP	6+79	114' LT			1												1					
I-255 EB OFF-RAMP	18+08	85' LT			1												1					
KINSWOOD LN	23+91	71' LT			1												1					
COPPERGATE SQUARE DR	94+27	55' RT			1												1					
OAKVILLE SCHOOLS/BETHESDA	138+46	69' LT			1												1					
ERB RD	157+19	48' LT			1												1					
BECKER RD	85+17	59' RT			1												1					
SHEET TOTALS:					8												8					

D-37 COMBINED

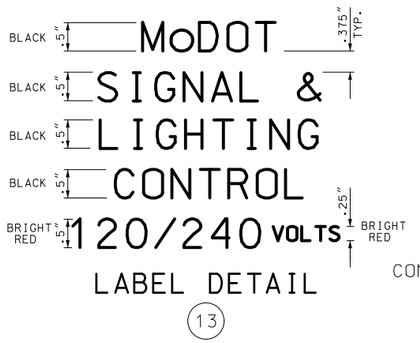
STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:25:37 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 162
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

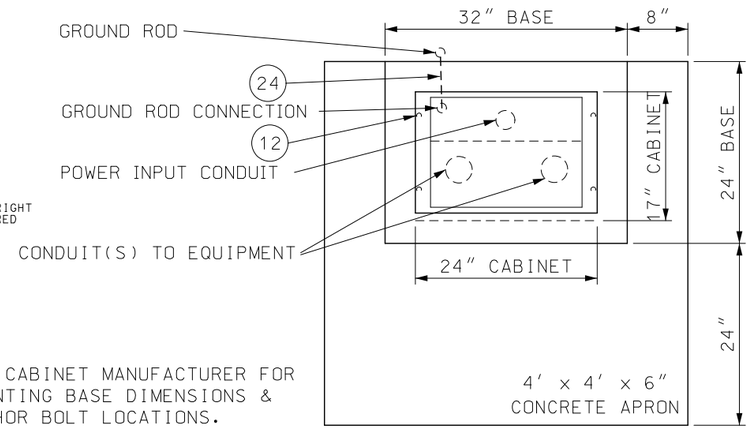
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SIGNAL QUANTITY SHEET
POWER SUPPLYS, CABINETS,
BASE WRAPS,
MISC. INTERSECTIONS



LABEL DETAIL

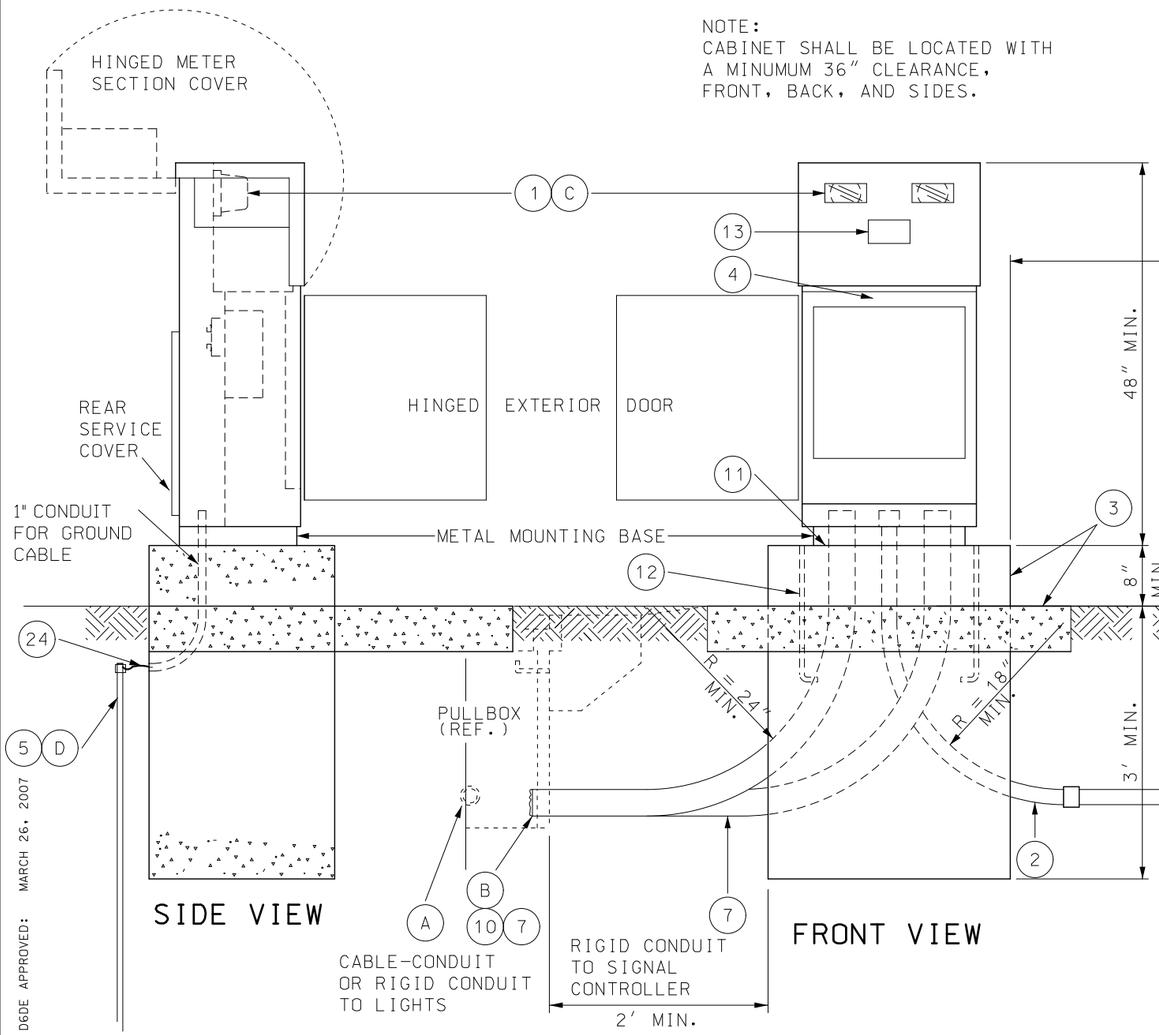
(13)



TOP VIEW

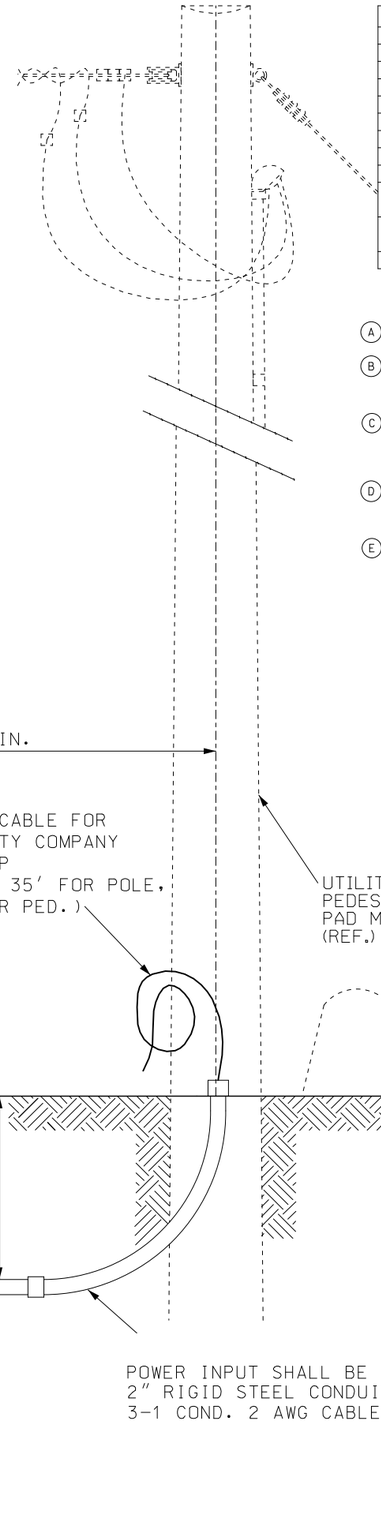
SEE CABINET MANUFACTURER FOR MOUNTING BASE DIMENSIONS & ANCHOR BOLT LOCATIONS.

NOTE:
CABINET SHALL BE LOCATED WITH A MINUMUM 36" CLEARANCE, FRONT, BACK, AND SIDES.



SIDE VIEW

FRONT VIEW



POWER INPUT SHALL BE (MIN.):
2" RIGID STEEL CONDUIT WITH
3-1 COND. 2 AWG CABLES.

LIST OF MATERIALS	
ITEM	DESCRIPTION
1	METER SOCKET, 200 AMP
2	RIGID STEEL CONDUIT, 2" MIN. TO UTILITY CO. FACILITIES
3	CLASS B CONCRETE, 0.9 C.Y.±
4	NEMA 4, DUST-TIGHT, WATERTIGHT, CABINET
5	GROUND ROD, 3/4" DIA. X 8' MIN. (MIN. 8' IN SOIL)
7	RIGID CONDUIT TO FIRST PULL BOX (SEE PLANS FOR SIZE)
10	PLIABLE DUCT SEALANT
11	LIFETIME SILICONE CAULK
12	ANCHOR BOLTS, ⅝" - 11 x 18" LONG BOLTS, HOT DIP GALVANIZED, 4 REQUIRED
13	WEATHERPROOF ADHESIVE LABEL, VINYL RAISED LETTERING (OR EQUIVALENT, SEE DETAIL)
24	GROUND WIRE, #2 AWG, MIN.

NOTES

(A) IF CABLE-CONDUIT IS SPECIFIED, THE CONDUIT SHALL BE CUT AWAY FROM CABLES BETWEEN PULL BOX AND CONTROL STATION.

(B) LIGHTING SYSTEM VOLTAGE AS SPECIFIED ON PLANS (120 OR 240 VOLTS). IF LIGHTS ARE TO BE MOUNTED ON SIGNAL POSTS, VOLTAGE MUST BE 120 VOLTS. 240 VOLT LIGHTS ARE NOT TO BE MOUNTED ON OR WIRED THROUGH SIGNAL POSTS, CONDUIT, OR PULL BOXES.

(C) CONTROLLER CABINET WITH POWER SUPPLY SHALL BE ALUMINUM OR STAINLESS STEEL. ALL HARDWARE, HINGES, CATCHES, ETC. SHALL BE STAINLESS STEEL. METER SOCKET AND OTHER EQUIPMENT AND MATERIALS SHALL BE U.L. APPROVED, AND CONFORM TO THE REQUIREMENTS OF THE UTILITY COMPANY OR MUNICIPALITY PROVIDING POWER.

(D) IF SUBSURFACE CONDITIONS EXIST WHICH PROHIBIT THE PLACEMENT OF THE GROUND ROD IN A VERTICAL POSITION, THE ROD MAY BE DRIVEN AT AN OBLIQUE ANGLE NOT TO EXCEED 45 DEGREES FROM VERTICAL OR BURIED IN A TRENCH AT LEAST 30 IN. DEEP. CONNECTION TO GROUND ROD SHALL BE CADWELDED.

(E) UTILITY COMPANY SHALL DECIDE IF LIGHTNING ARRESTERS ARE TO BE CONNECTED ON THE LOAD OR LINE SIDE OF THE METER. THE UTILITY COMPANY SHALL ALSO DECIDE WHERE THE LIGHTNING ARRESTER SHALL BE MOUNTED.

GENERAL NOTES:

ALTERNATE CABINET DIMENSIONS WILL BE ALLOWED AS APPROVED BY THE ENGINEER. INTERIOR CABINET VOLUME SHALL BE EQUAL TO OR GREATER THAN THAT SHOWN ON PLANS AND PROPER CLEARANCES SHALL BE PROVIDED FOR ALL EQUIPMENT. CONCRETE BASE DIMENSIONS SHALL BE MODIFIED TO FIT THE CABINET SUPPLIER.

PLACEMENT OF ALL ITEMS SHALL BE APPROVED BY THE ENGINEER.

CABINET SHALL BE LOCATED AWAY FROM TRAFFIC. TOP MOUNT PHOTO CONTROL SHALL FACE AN OPEN SKY. SIDE MOUNT PHOTO CONTROL SHALL FACE NORTH.

SEE PLANS FOR CIRCUIT WIRING; MAXIMUM LOADING PER CIRCUIT IS 7,400 WATTS.

SCHEMATIC DIAGRAM SHALL BE MOUNTED ON INSIDE OF CABINET DOOR.

THE UTILITY SHALL BE NOTIFIED IN WRITING 30 DAYS PRIOR TO DATE SERVICE WILL BE REQUIRED.

ALL CABINET OPENINGS SHALL BE COVERED AND SEALED WITH LIFETIME SILICONE CAULK.

ALL MATERIALS REQUIRED EXCLUDING REFERENCE ITEMS AS SHOWN ON DRAWING SHALL BE INCLUDED IN PRICE BID FOR '120/240V COMBINATION BASE MOUNTED POWER SUPPLY AND LIGHTING CONTROL STATION'.

CABLE AND CONDUIT FROM POWER SUPPLY ASSEMBLY TO UTILITY COMPANY FACILITIES SHALL BE INCLUDED IN PRICE BID FOR '120/240V COMBINATION BASE MOUNTED POWER SUPPLY AND LIGHTING CONTROL STATION'.

D6DE APPROVED: MARCH 26, 2007

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:25:48 PM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	163

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

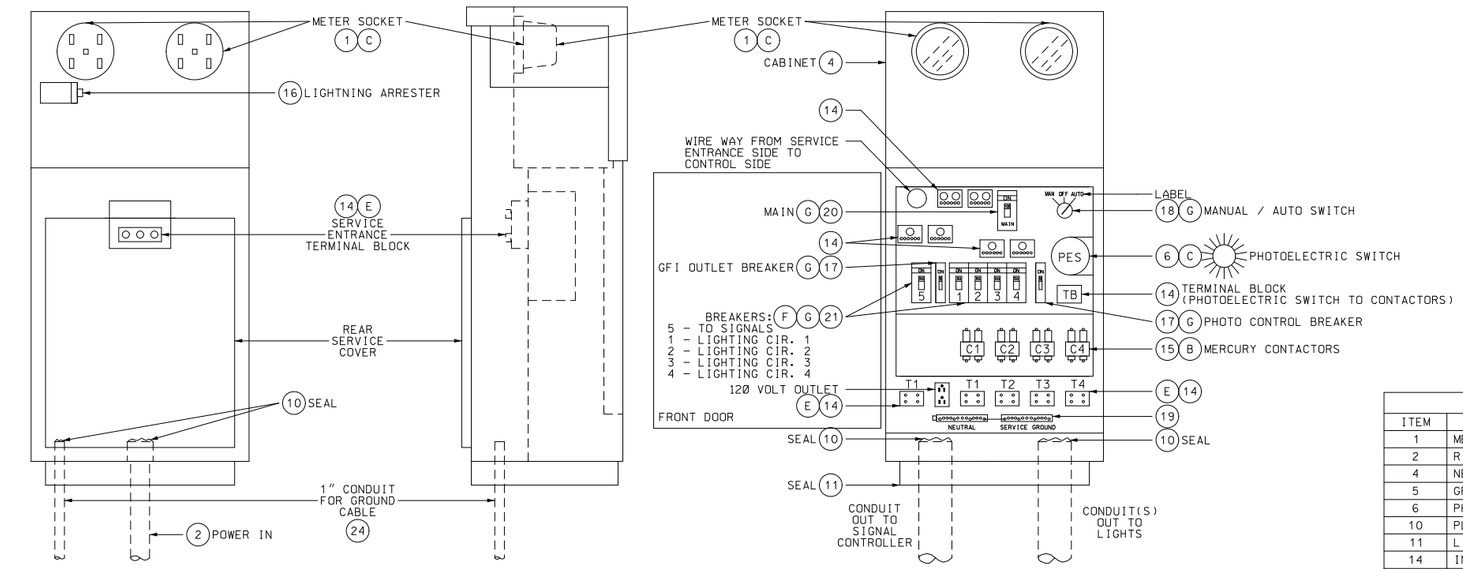
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SIGNAL SHEET
PAD MOUNTED 120V/240V POWER SUPPLY & LIGHTING CONTROLLER
DUAL METER
SHEET 1 OF 2

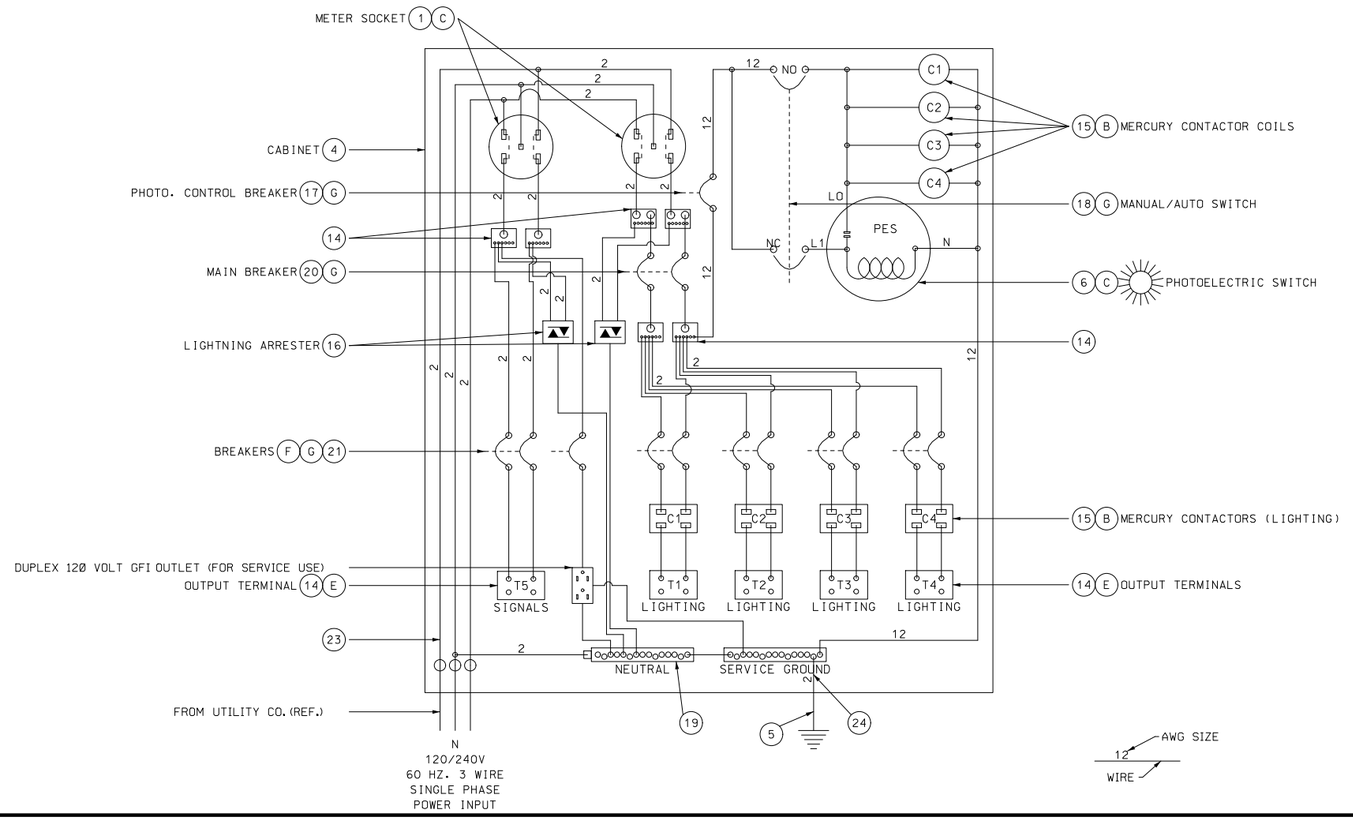


REAR VIEW (SERVICE ENTRANCE)

SIDE VIEW

FRONT VIEW (CONTROL SIDE)

EQUIPMENT LAYOUT



WIRING DIAGRAM

LIST OF MATERIALS	
ITEM	DESCRIPTION
1	METER SOCKET, 200 AMP, WITH LEVER TEST BYPASS
2	RIGID STEEL CONDUIT, 2" MIN. TO UTILITY CO. FACILITIES
4	NEMA 3R, DUST-TIGHT, WATERTIGHT CABINET
5	GROUND ROD, 3/4" DIA. X 8' MIN. (MIN. 8' IN SOIL)
6	PHOTOELECTRIC SWITCH AND SOCKET, 105/285 V., 1000 WATT
10	PLIABLE SEALANT
11	LIFETIME SILICONE CAULK
14	INSULATED TERMINAL BLOCK
15	2-POLE, 35 AMP, 120V COIL LIGHTING CONTACTOR (MERCURY)
16	2-POLE, 650 VOLT LIGHTNING ARRESTER
17	1-POLE, 15 AMP, TYPE B BREAKER TO PHOTOELECTRIC SWITCH
18	MANUAL-AUTO SWITCH
19	INSULATED GROUNDABLE NEUTRAL, 100 AMP
20	2-POLE, 100 AMP, TYPE A MAIN BREAKER
21	2-POLE, 15 AMP (MIN), TYPE A BREAKERS ✳
22	#12 AWG MIN., 600 V., CONTROL CABLE
23	#2 AWG MIN., 600 V., POWER CABLE ✳
24	#2 AWG MIN., 600 V., GROUND CABLE
✳	SEE PLANS FOR SIZE

NOTES

(B) LIGHTING SYSTEM VOLTAGE AS SPECIFIED ON PLANS (120 OR 240 VOLTS). IF LIGHTS ARE TO BE MOUNTED ON SIGNAL POSTS, VOLTAGE MUST BE 120 VOLTS. 240 VOLT LIGHTS ARE NOT TO BE MOUNTED ON OR WIRED THROUGH SIGNAL POSTS, CONDUIT, OR PULL BOXES.

(C) LOCATE PHOTOELECTRIC SWITCH AT CENTER OF WINDOW.

(E) IF FOR REASONS OF VOLTAGE DROP A WIRE SIZE IS SPECIFIED LARGER THAN #2 AWG, A LARGER TERMINAL BLOCK SHALL BE INSTALLED FOR THAT CIRCUIT.

(F) BREAKER SIZING:

SIZE (AMPS)	240V TOTAL CIRCUIT LOAD (WATTS)	120V TOTAL CIRCUIT LOAD (WATTS)
15	0-2800	0-1390
20	2850-3700	1400-1850
25	3750-4600	1860-2320
30	4650-5500	2330-2780
35	5550-6500	-
40	6550-7400	-

CIRCUIT LOAD INCLUDES LOAD DUE TO LINE LOSS, LAMP, AND BALLAST LOAD.

(G) ALL CIRCUIT BREAKERS SHALL CONFORM TO SECTION 901.4 OF THE STANDARD SPECIFICATIONS.

D6DE APPROVED: MARCH 26, 2007

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:26:01 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

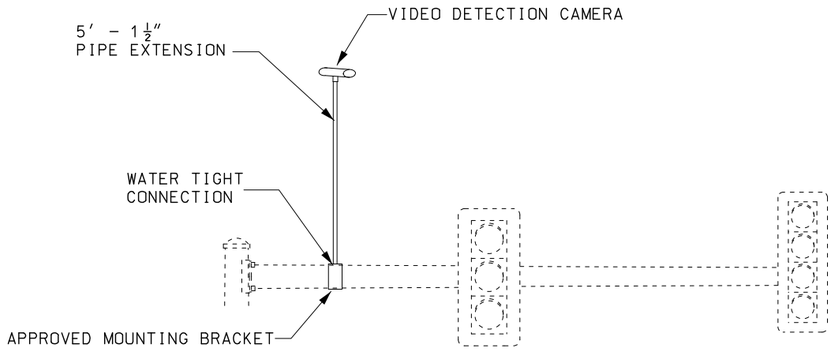
ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	164

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

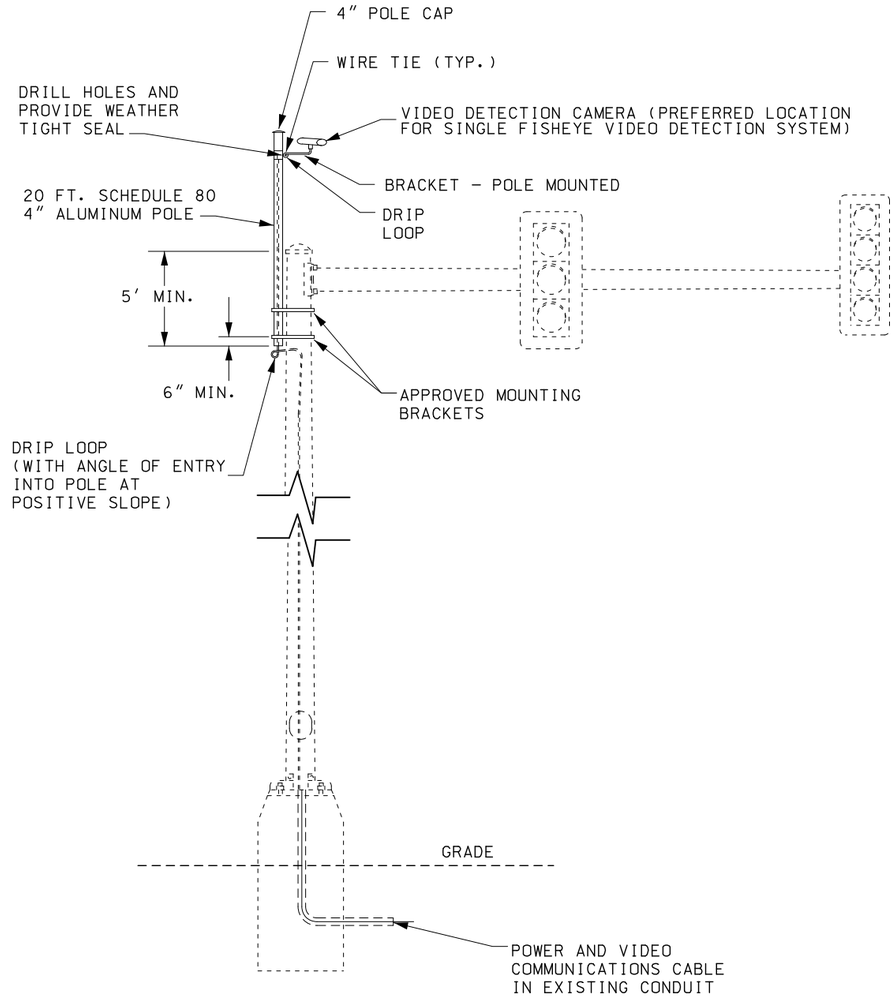
DESCRIPTION	DATE

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

SPECIAL SIGNAL SHEET
PAD MOUNTED 120V/240V POWER
SUPPLY & LIGHTING CONTROLLER
DUAL METER
SHEET 2 OF 2



CAMERAS SHALL BE AS CLOSE AS POSSIBLE TO CENTER OF SIGNALIZED APPROACH



GENERAL NOTES:

1) PROVIDE WATERTIGHT SEAL WHERE CABLES ENTER AND EXIT.
2) CAMERAS SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
3) NO CAMERA SHALL BE INSTALLED ON PEDESTALS UNLESS DIRECTED BY THE ENGINEER.
4) NO CAMERA SHALL BE INSTALLED ON 15' LUMINAIRE ARM UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

NOT TO SCALE

REVISED 07/27/2023

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:26:10 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	165

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

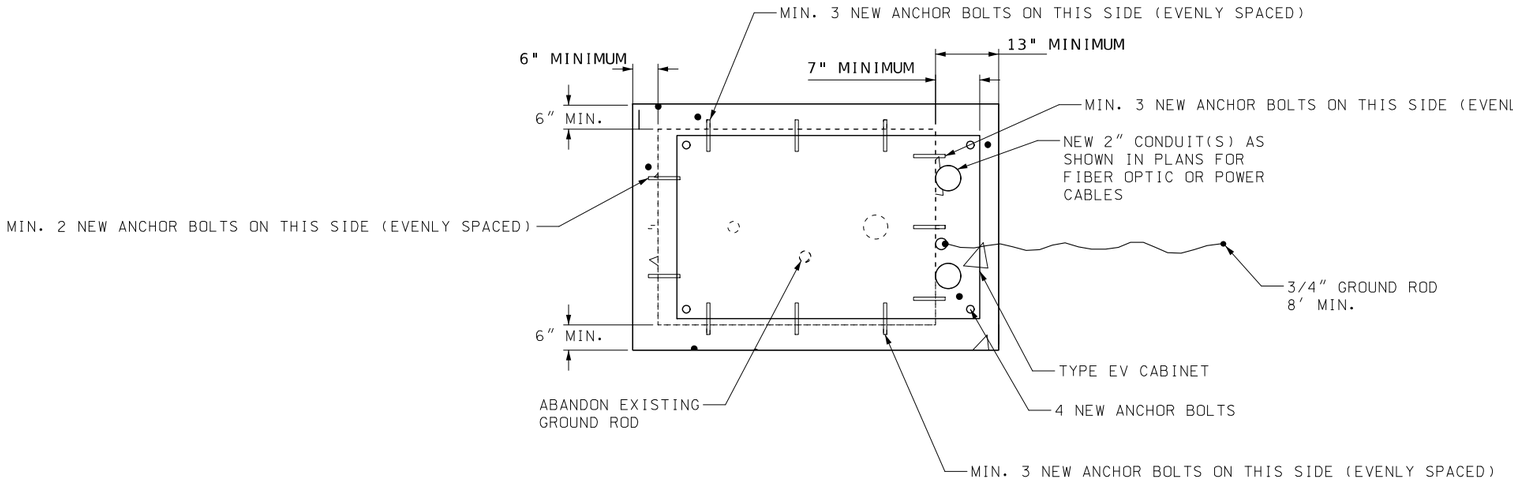
PROJECT NO.

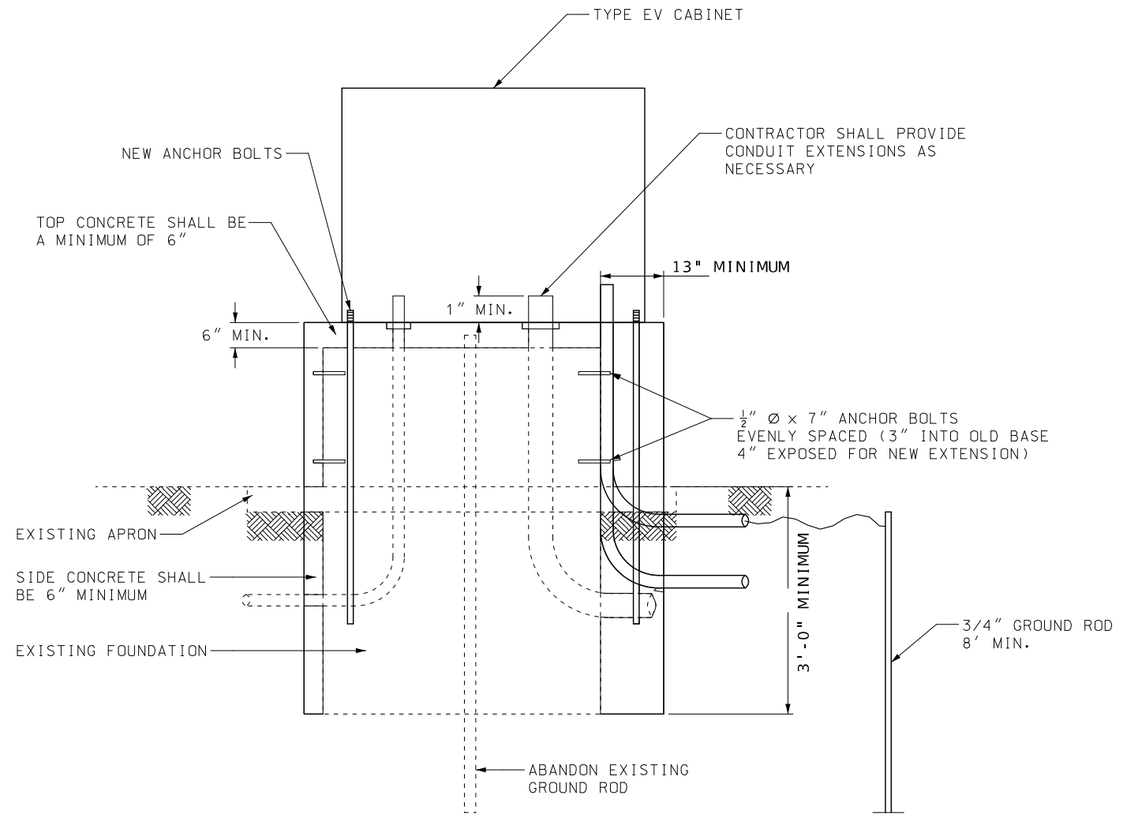
BRIDGE NO.

DESCRIPTION	DATE

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

SPECIAL SIGNAL SHEET
VIDEO DETECTION DETAIL





CABINET BASE WRAP

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:26:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	166

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

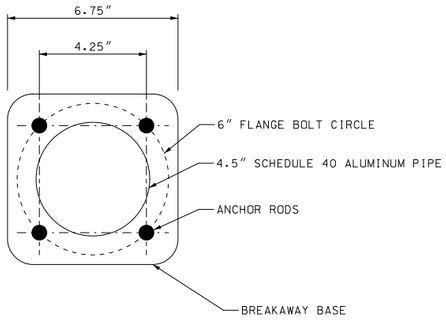
BRIDGE NO.

DESCRIPTION	DATE

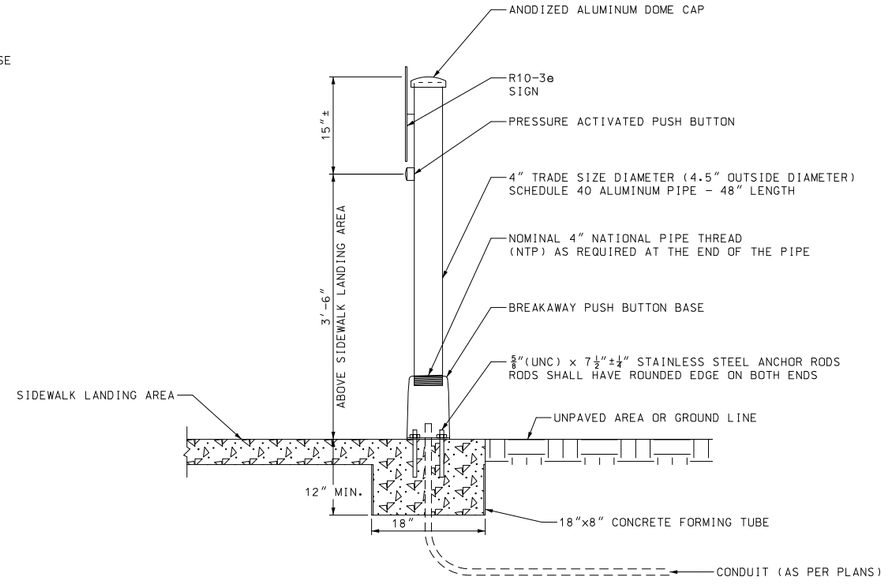
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SIGNAL SHEET
SIGNAL CABINET BASE WRAP



ANCHOR ROD PLACEMENT



PUSH BUTTON STANCHION

NOTES:

- THE PUSH BUTTON STANCHION FOUNDATION IS CONSTRUCTED AS PART OF THE SIDEWALK. INCREASE THE SIDEWALK THICKNESS TO 12″ (MIN.) TO PROVIDE FOR THE PUSH BUTTON STANCHION FOUNDATION.
- INSTALLATION OF THE PUSH BUTTON STANCHION SHALL BE PER MANUFACTURER'S RECOMMENDATIONS.
- CABLES SHALL HAVE A SLIP-FIT CONNECTION IN THE PEDESTAL THAT WILL DETACH IN THE EVENT THE POLE IS STRUCK.

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
05/30/2025 12:26:33 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	167

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

SPECIAL SIGNAL SHEET
ADA PEDESTRIAN
PUSH BUTTON STANCHION

ITS GENERAL NOTES

1. BASELINES SHOWN ON PLANS ARE FOR INFORMATION PURPOSES ONLY AND ARE NOT STAKED IN THE FIELD.

2. FOR SYSTEM COMMUNICATION REQUIREMENTS. SEE COMMUNICATION PLANS AND SPECIAL PROVISIONS.

3. ALL BRIDGE CONDUIT RUNS SHALL NOT EXCEED 270° OF BENDS CONDUITS OR OTHER ENTERABLE FITTINGS SHALL BE INCLUDED IN COST OF CONDUIT.

4. CONTRACTOR SHALL MAINTAIN 2' CONDUIT CLEARANCE FROM ALL LANDSCAPED FEATURES EXISTING WITHIN THE RIGHT OF WAY. ANY LANDSCAPING DISTURBED DURING CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.

5. CONTRACTOR SHALL COORDINATE HIS ACTIVITIES WITH OTHER CONTRACTORS IN THE AREA.

6. THE MAINTAINING AGENCY IS THE MHTC.

7. SITE COORDINATE SYSTEMS ARE UNIQUE FOR EACH SITE. THESE PLANS ARE TO COINCIDE WITH THE NAD 1983 COORDINATE SYSTEM AT ONLY ONE CONTROL POINT LOCATION PER SITE.

8. ALL UTILITIES SHALL BE LOCATED AND MARKED PRIOR TO INITIATION OF CONSTRUCTION PER SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING UTILITIES AND LOCATOR SERVICES AND SCHEDULING THE LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL ALSO CONTACT ANY AND ALL UTILITIES AND LOCAL GOVERNMENT AGENCIES NOT PARTICIPATING IN LOCATION SERVICES.

9. PROPOSED ITS EQUIPMENT LOCATIONS ARE APPROXIMATE AND MAY BE MODIFIED TO AVOID CONFLICTS WITH UNDERGROUND UTILITIES OR OTHER OBSTRUCTIONS. THE CONTRACTOR SHALL RECEIVE APPROVAL FROM THE ENGINEER PRIOR TO REVISING THE LOCATION OF ANY OF THE ITS EQUIPMENT.

10. LOCATION OF ITS EQUIPMENT ON THE PLANS BY THE ENGINEER HAS BEEN PERFORMED WITHOUT FULL CONSIDERATION OF EXISTING UNDERGROUND UTILITES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE ANY CONFLICTS WITH EXISTING UTILITIES AT SITES IN THE FIELD PRIOR TO INITIATION OF CONSTRUCTION PER SITE. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE ENGINEER UPON DETERMINATION OF ANT UTILITY CONFLICTS.

11. ALL ITS EQUIPMENT CALLED OUT BY PLANS AND SPECIFICATIONS AS "INSTALL" EQUIPMENT, INCLUDING CCTV ASSEMBLIES AND DMS ASSEMBLIES, SHALL INCLUDE ALL TRANSPORTATION. INSTALLATION AND TESTING OF MISSOURI DEPARTMENT OF TRANSPORTATION FURNISHED EQUIPMENT IN ACCORDANCE WITH THE SPECIFICATIONS.

12. ALL TRAFFIC CONTROL PLANS AND LANE CLOSURES SHALL BE PRE- APPROVED BY THE ENGINEER.

13. ALL WORK SHALL INCLUDE THE RESTORATION OF ANY DISTURBED AREAS AS DIRECTED BY THE ENGINEER. ALL GRADING WORK SHALL PROVIDE POSITIVE DRAINAGE.

14. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR ANY EXISTING CONDUIT, CONDUCTORS OR OTHER FACILITIES DAMAGED DURING CONSTRUCTION. ALL EXISTING IMPROVEMENTS NOT SPECIFICALLY IDENTIFIED AS BEING REMOVED OR RELOCATED IN THE PLANS THAT ARE DISTURBED OR OTHERWISE DAMAGED BY THE CONTRACTOR. SHALL BE REPLACED IN KIND BY THE CONTRACTOR, WITH NO ADDITIONAL COMPENSATION.

15. THE CONTRACTOR SHALL PROVIDE A FLAGMAN DURING ALL HOURS OF OPERATION WHEN CONTRACTOR OPERATIONS ARE WITHIN 25 FEET OF ANY ACTIVE RAIL LINES.

16. PROPOSED GUARDRAIL AND CRASHWORTHY END TREATMENTS SHALL BE IN PLACE PRIOR TO CONSTRUCTION OF ANY FOUNDATIONS LOCATED BEHIND THE GUARDRAIL.

17. THE PLANS DEPICT CONDUIT ROUTING IN SCHEMATIC FORM ONLY. CONTRACTOR SHALL DETERMINE FINAL ROUTING BASED ON ACTUAL FIELD CONDITIONS PRIOR TO CONSTRUCTION AT EACH SITE, INCLUDING UTILITY LOCATOR SERVICE MARKINGS. TO PREVENT CONFLICTS WITH EXISTING UTILITIES.

18. ALL CONDUITS SHALL BE NEW. SINGLE CELL CONDUITS ON BRIDGES SHALL BE ALUMINUM.

19. PULL ROPES ARE REQUIRED IN ALL EMPTY CONDUIT CELLS. PULL ROPES SHALL BE POLYPROPYLENE WITH A MINIMUM TENSILE STRENGTH OF 600 POUNDS.

20. THE CONTRACTOR SHALL FIELD REVIEW NECESSARY ROUTING AND MOUNTING HARDWARE, INCLUDING BRIDGE HANGERS, FITTINGS, EXPANSION JOINTS AND JUNCTION BOXES FOR ALL EXTERNALLY MOUNTED CONDUITS PRIOR TO SUBMITTAL OF BID TO DETERMINE THE TYPES AND EXTENT OF INCIDENTAL ITEMS TO BE INCLUDED IN THE UNIT PRICE OF CONDUIT.

21. THE CONTRACTOR SHALL FIELD REVIEW NECESSARY ROUTING OF CONDUIT AND LOCATION OF PULL BOXES PRIOR TO SUBMITTAL OFBID TO DETERMINE THE TYPES AND EXTENT OF INCIDENTAL REMOVAL, RELOCATION AND REPLACEMENT ITEMS TO BE INCLUDED IN THE UNIT PRICE OF CONDUIT AND PULL BOXES.

22. WARNING TAPE IS REQUIRED IN ALL TRENCHES CONTAINING CONDUIT.

23. JACKETED 0.10" THHN SOLID BLUE LOCATOR WIRE SHALL BE PLACED IN ALL UNDERGROUND NON-METALLIC CONDUITS BONDED TO GROUNDING RODS WITHIN A PULL BOX. APPROVED LOCATOR WIRE SHALL BE MOUNTED TO THE SIDE WALL OF EACH PULL BOX.

24. CONTRACTOR MAY BORE OR HORIZONTALLY DRILL WHEREVER TRENCHING IS SHOWN AT THE CONTRACTOR'S EXPENSE.

25. GROUND CONDUCTOR SHALL BE 1/C #6 UNLESS OTHERWISE NOTED ON THE PLANS.

26. EXPANSION FITTINGS SHALL BE PROVIDED WHEN CONDUIT PASSES ACROSS EXISTING EXPANSION DEVICES AND FILLED JOINTS ON BRIDGES INCLUDING FILLED JOINTS IN SAFETY BARRIER CURBS. THE DISTANCE BETWEEN EXPANSION FITTINGS SHALL NOT BE GREATER THAN 150 FEET. EXPANSION FITTINGS ON CONDUIT SHALL PROVIDE A MINIMUM MOVEMENT IN EITHER DIRECTION OF 4" AT OPEN JOINTS. BETWEEN ABUTMENT AND SUPER-STRUCTURES ENCOUNTERED AFTER RISING OUT OF THE GROUND AND 2" AT FILLED JOINTS. EXPANSION FITTINGS SHALL BE PROVIDED WITH A 2' BONDING JUMPER AROUND FITTING. BONDING JUMPER SHALL BE COMPATABLE WITH CONDUIT MATERIAL. LIQUID TIGHT FLEXIBLE METAL CONDUIT SHALL BE USED IN LOCATIONS WHERE CONDUIT CROSSES OVER BRIDGE SUPERSTRUCTURE, SUBSTRUCTURE OR SIGN STRUCTURES, OR AS OTHERWISE SHOWN IN THE PLANS.

27. THE GALVANIZED CONE EXPANSION ANCHOR SYSTEM SHALL BE FOR ATTACHING CONDUIT SUPPORTS AND JUNCTION BOXES TO STRUCTURAL CONCRETE.

28. ALL GROUNDING SYSTEMS SHALL BE IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE.

29. SLACK FIBER OPTIC CABLE SHALL BE STORED ACCORDING TO THE SPECIAL PROVISIONS. 30' OF SLACK FIBER OPTIC CABLE SHALL BE STORED IN EVERY PULL BOX. FOR EACH FIBER OPTIC CABLE THAT ENTERS A PULL BOX ADJACENT TO A CABINET, 60 OF SLACK CABLE SHALL BE STORED.

30. ITS DEVICES. THE ONLY EXCEPTION SHALL BE WHEN THE CONTRACTOR CUTS FIBER OPTIC CABLE SERVING THOSE DEVICES TO TIE THEM IN TO THE PROPOSED COMMUNICATIONS SYSTEM AS SHOWN IN THE PLANS. THESE CUTS SHALL BE MADE ONLY AFTER ALL PROPOSED DEVICES ARE FULLY OPERATIONAL, AND HAVE PASSED THEIR OPERATIONAL TESTS. NOTIFY THE ENGINEER AT LEAST 7 DAYS BEFORE CUTTING ANY EXISTING FIBER CABLE.

31. TRENCH EXCAVATION AND DIRECTIONAL DRILLING REQUIRED FOR THE INSTALLATION OF CONDUITS SHALL INCLUDE THE RESTORATION OF THE AREA IN ACCORDANCE WITH THE SPECIFICATIONS. THE RESTORATION SHALL INCLUDE FENCE REMOVAL AND REPLACEMENT, SIGN RELOCATION, UNDERDRAINS, AND RIPRAP OR OTHER EXISTING SLOPE PROTECTION APPURTENANCE.

32. TREES AND SHRUBS DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND AT THE CONTRACTOR'S EXPENSE. AS DIRECTED BY THE ENGINEER.

33. ALL ELECTRICAL CABLES IN PULL BOXES AND EQUIPMENT CABINETS SHALL BE PROVIDED WITH INDIVIDUAL BRASS TAGS. DIE STAMPED WITH PHASE AND CIRCUIT IDENTIFICATIONS.

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:29:03 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	168

COUNTY
ST. LOUIS

JOB NO.
J6S3632

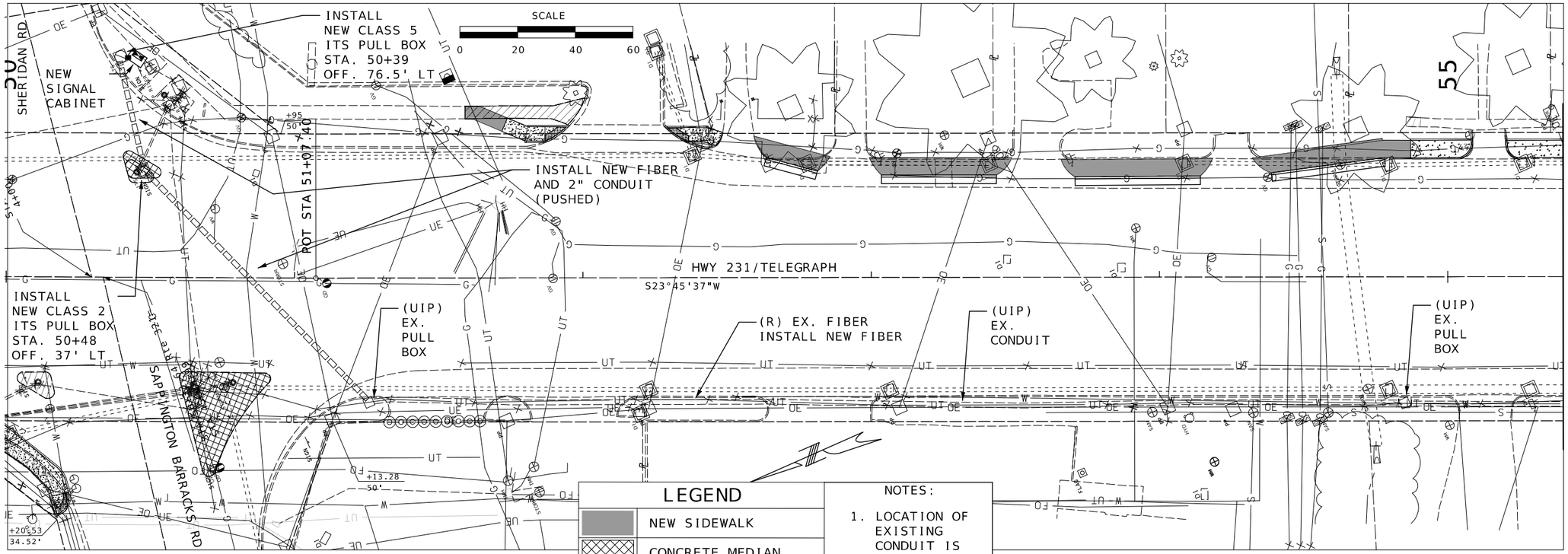
CONTRACT ID.

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
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 12:27:00 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	168A

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

SCALE
0 20 40 60

MATCHLINE STA. 60+80.00

MATCHLINE STA. 66+20.00

HWY 231/TELEGRAPH

S23°45'37"W

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
CONDUIT

(UIP)
EX.
PULL
BOX

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
CONDUIT

+26.72
50'

+2.25
50'

65

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 66+20.00

MATCHLINE STA. 4+29.30

HWY 231/TELEGRAPH

POT STA 0+00.00 RAD

EQUATION:
STA 67+30.70 BK =
STA 0+00.00

S23°45'37"W

(UIP)
EX.
CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
PULL
BOX

(UIP)
EX.
CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
CONDUIT

(UIP)
EX.
PULL
BOX

BARRACKSVIEW RD

+10.87
96.97'

+78.88
104.40'

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 12:27:11 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	169

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 4+29.30

MATCHLINE STA. 9+70.54

+40.26
111.85'

(UIP)
EX.
CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX.
PULL BOX

I-255 WB
OFF-RAMP

(UIP)
EX.
CONDUIT

I-255 WB ON-RAMP

(R) EX. FIBER
INSTALL NEW FIBER

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX.
PULL BOX

(UIP)
EX.
CONDUIT

SCALE
0 20 40 60

5

UT

UT

HWY 231/TELEGRAPH

45'37"W

S23°45'37"W

POT STA 8+67.44 R3

EQUATION:
STA 8+66.20 Bk
STA 8+67.44

I-255 WB ON-RAMP

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 9+70.54

MATCHLINE STA. 15+10.54

(UIP)
EX.
CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
CONDUIT

(UIP)
EX.
CONDUIT

(UIP) EX. PULL BOX (P-143),
CCTV POLE, FOUNDATION,
AND CCTV

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
CONDUIT

I-255

10

15

HWY 231/TELEGRAPH

S23°52'07"W

S23°52'07"W

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 12:27:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	170

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

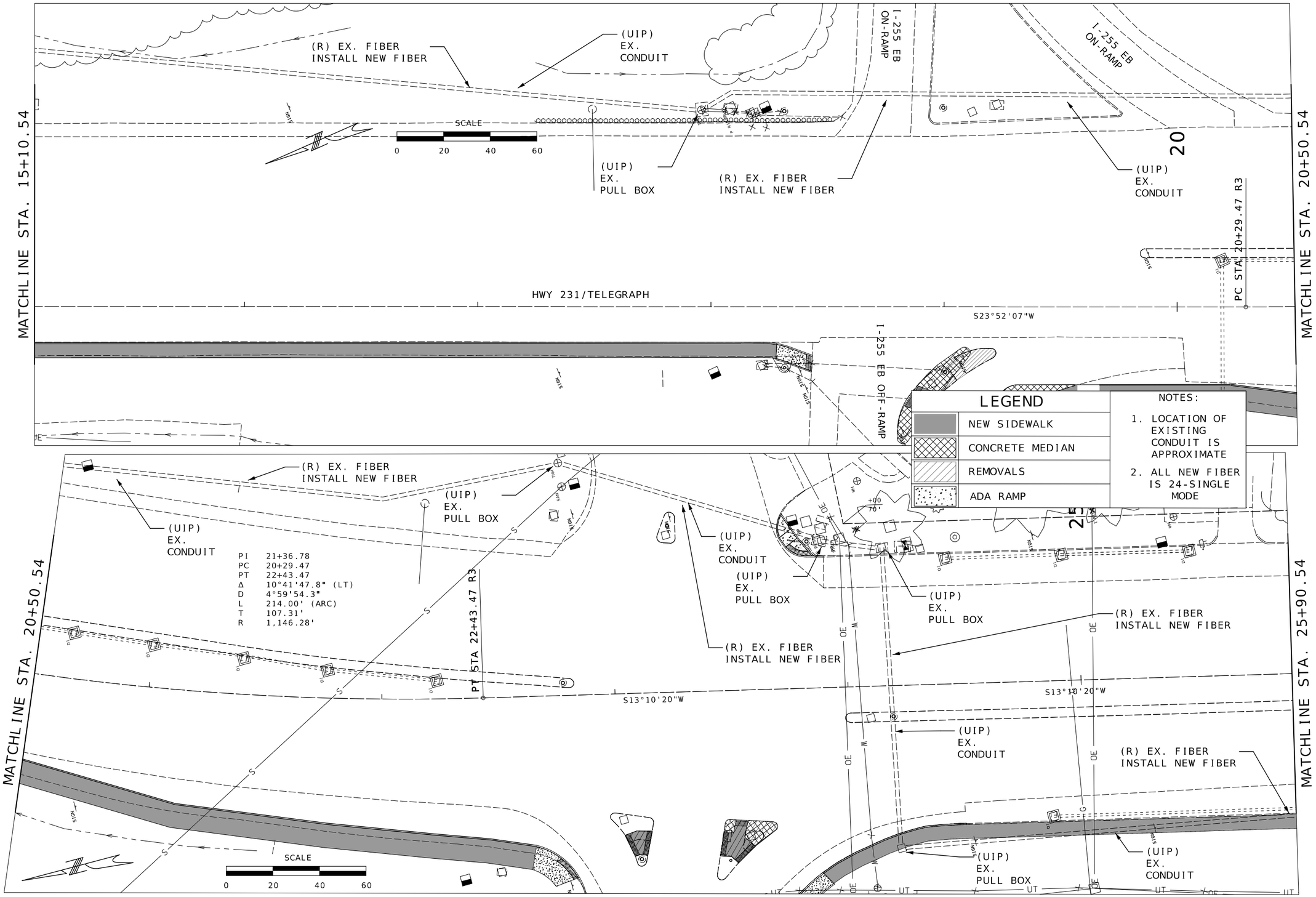
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:27:37 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	171

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

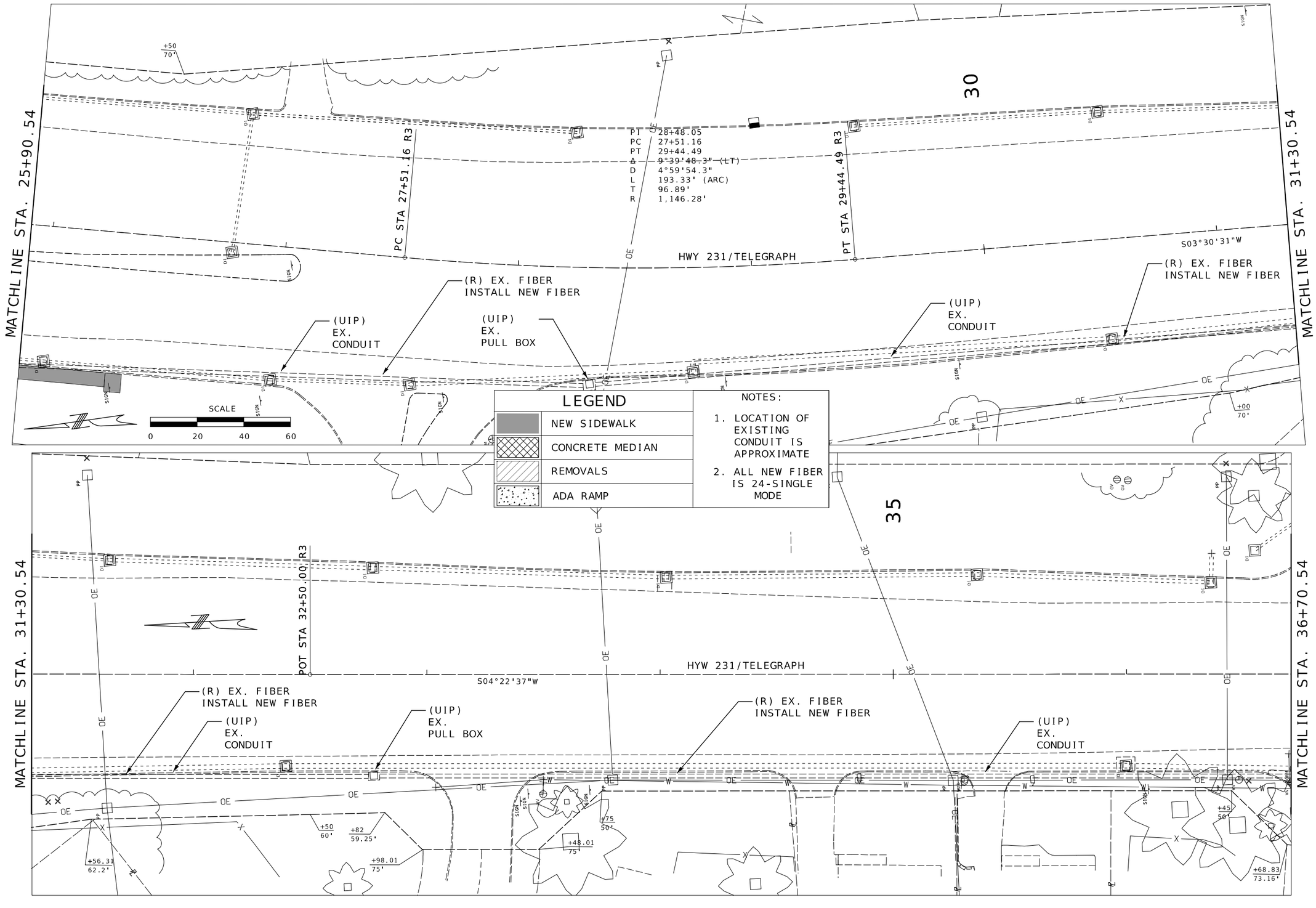
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 1:56:55 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	172

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 36+70.54

MATCHLINE STA. 42+10.54

HWY 231/TELEGRAPH

S04°22'37"W

S03°22'37"W

(UIP)
EX.
CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

+18.71

Lot 61

+45
50'

+00
50'

90'

40

SCALE
0 20 40 60

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 42+10.54

MATCHLINE STA. 47+50.54

HWY 231/TELEGRAPH

S04°22'

(R) EX. FIBER
INSTALL NEW FIBER

(UIP)
EX.
CONDUIT

(UIP) EX. PULL BOX
RUN NEW CONDUIT FROM
PULL BOX

INSTALL NEW FIBER
AND 2" CONDUIT (PUSHED)

+75
50'

+00
50'

+36.65
51'

40

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 12:27:47 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	173

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

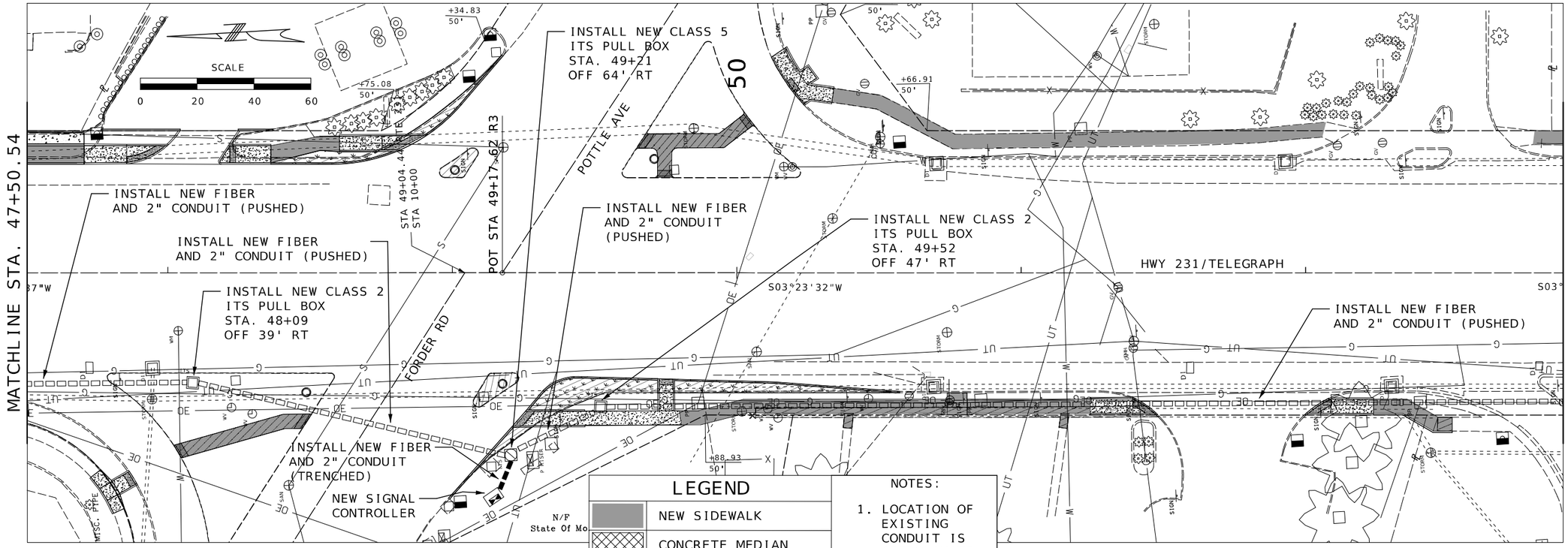
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:43:15 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	174

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

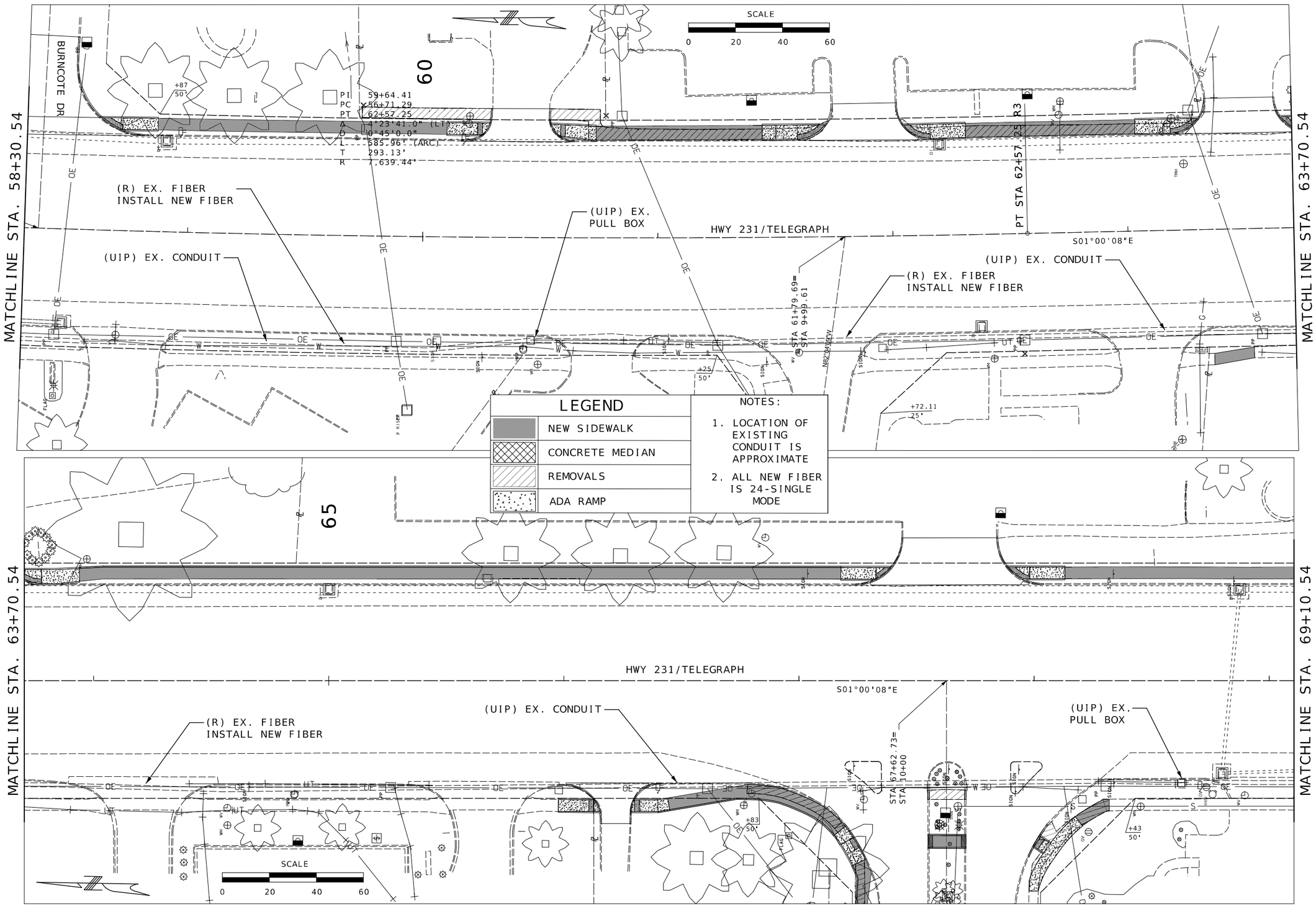
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:43:28 PM
STUART ROBINSON McNEIL . CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	175

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 69+10.54

MATCHLINE STA. 74+50.54

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX. CONDUIT

S01°00'08"E

HWY 231/TELEGRAPH

(UIP) EX. PULL BOX
RUN CONDUIT FROM PULL BOX

INSTALL NEW FIBER AND
2" CONDUIT (PUSHED)

S01°00'08"E

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 74+50.54

NEW SIGNAL
CABINET

INSTALL NEW FIBER AND
2" CONDUIT (TRENCHED)

INSTALL NEW FIBER AND
2" CONDUIT (PUSHED)

INSTALL NEW
CLASS 5 ITS
PULL BOX
STA. 75+81
OFF 53' LT

INSTALL NEW
CLASS 2 ITS
PULL BOX
STA. 75+58
OFF 44' RT

POT STA 76+33.34 R4

EQUATION:
STA 76+34.15 BK =
STA 76+33.34

YAEGER RD

HWY 231/TELEGRAPH

S01°00'08"E

S01°00'08"E

INSTALL NEW FIBER AND
2" CONDUIT (PUSHED)

MATCHLINE STA. 79+89.73

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 3:43:51 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	176

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

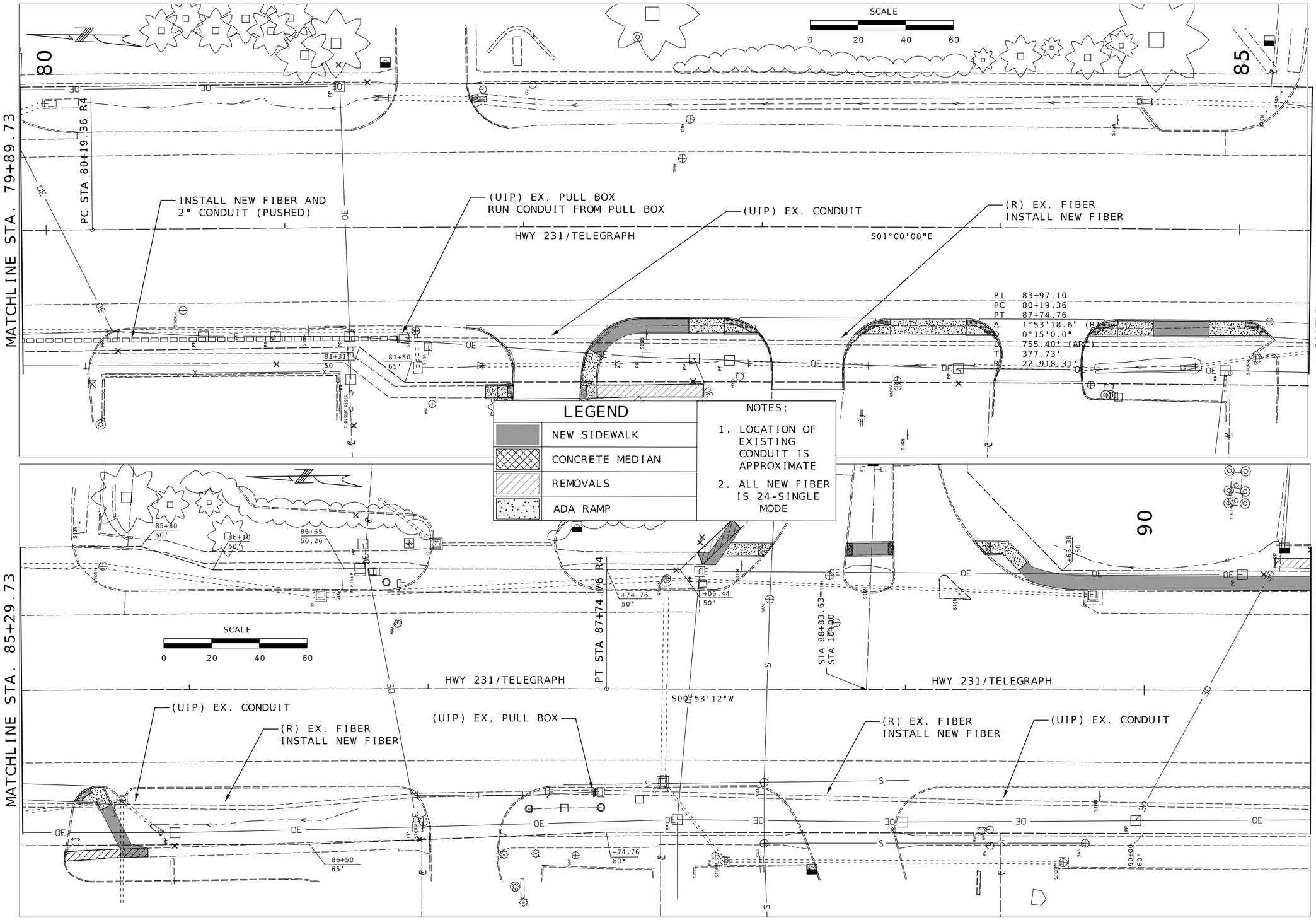
BRIDGE NO.

DESCRIPTION

DATE

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

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:43:59 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	177

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 90+69.73

HWY 231/TELEGRAPH

S00°53'12"W

PC STA 93+95.39 R4

+95.39
50'

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

OE

SIGN

PP

+95.39
60'

+01.51
52.22'

MATCHLINE STA. 96+09.73

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 96+09.73

HWY 231/TELEGRAPH

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

PT STA 99+77.69 R5

EQUATION:
STA 99+78.34 BK =
STA 99+77.69 AH

+78.33
50'

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX. CONDUIT

(UIP) EX. PULL BOX

MATCHLINE STA. 101+49.08

PI 96+87.88
PC 96+05.39
PT 99+77.69
Δ 11°39'32.0" (RT)
D 2°0'0.0"
L 582.94' (ARC)
T 292.48'
R 2,864.79'

SCALE

0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 3:44:10 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	178

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

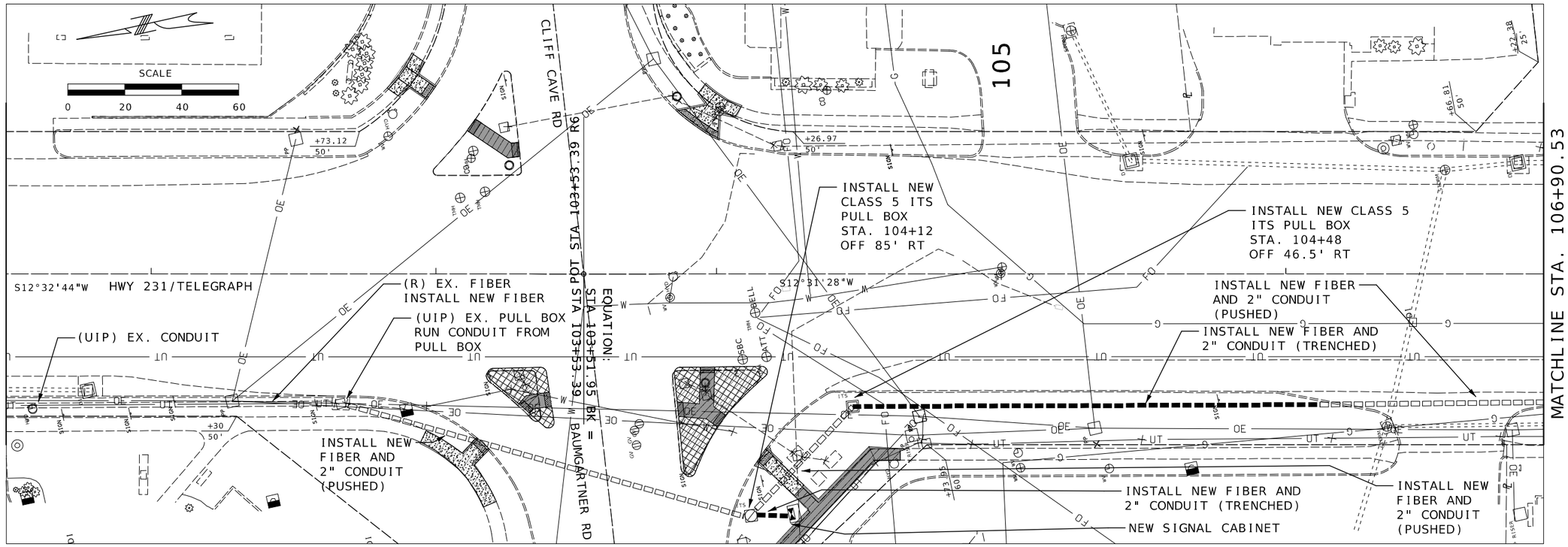
BRIDGE NO.

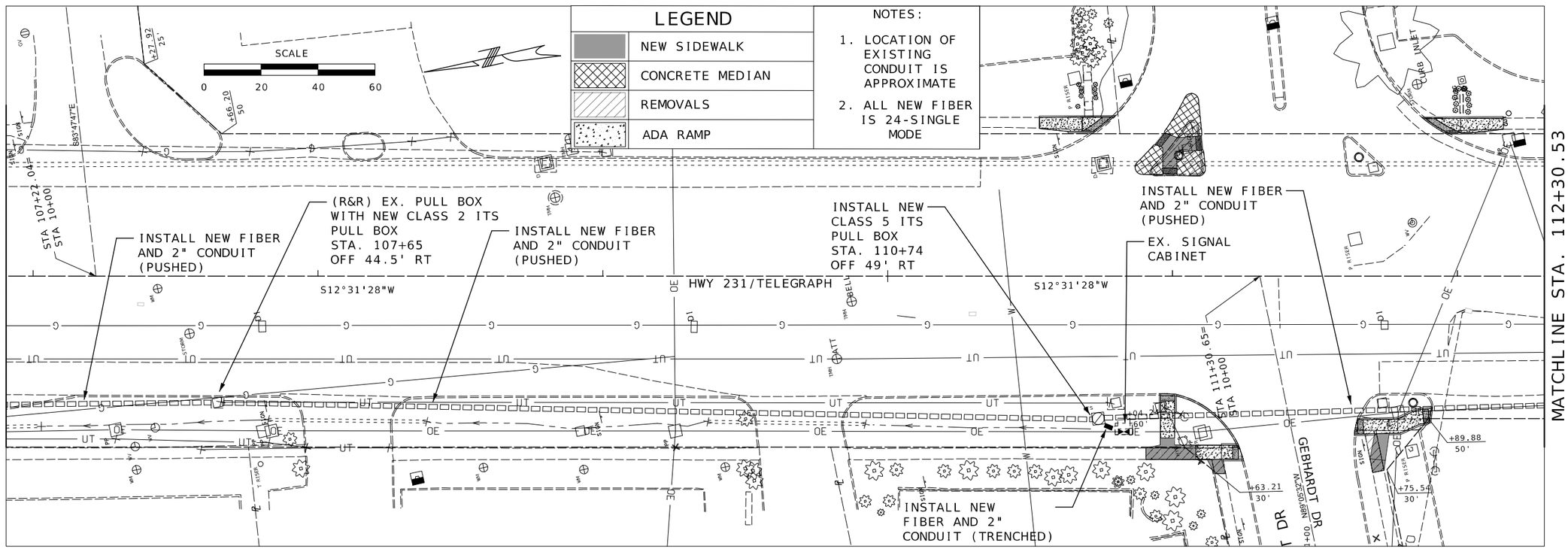
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET





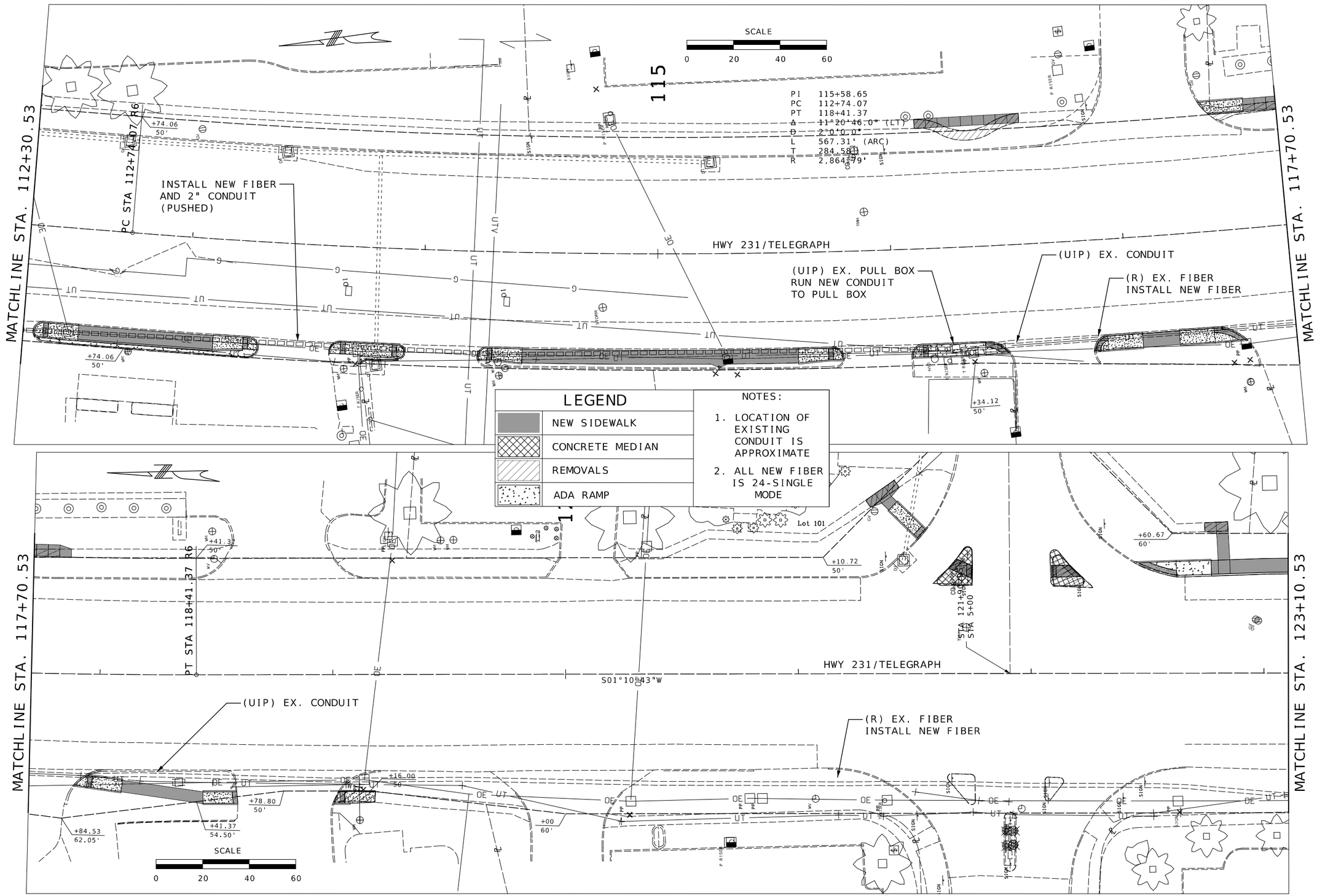
STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:44:21 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED	5/28/2025
ROUTE	231
STATE	MO
DISTRICT	SL
SHEET NO.	179
COUNTY	ST. LOUIS
JOB NO.	J6S3632
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)

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:44:32 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	180

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 123+10.53

MATCHLINE STA. 128+50.53

MATCHLINE STA. 128+50.53

MATCHLINE STA. 133+89.68

HWY 231/TELEGRAPH

S01°10'43"W

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX. PULL BOX
RUN NEW CONDUIT
TO PULL BOX

INSTALL NEW FIBER
AND 2" CONDUIT (PUSHED)

INSTALL NEW
FIBER AND
2" CONDUIT
(TRENCHED)

INSTALL NEW CLASS 5
ITS PULL BOX
STA. 131+16
OFF 56' RT

INSTALL NEW
FIBER AND 2"
CONDUIT (PUSHED)

INSTALL NEW
FIBER AND 2"
CONDUIT (PUSHED)

EQUATION:
STA 129+31.21 BK = STA 129+30.37 AHEAD

POT STA 129+30.37 R7

STA 128+87.40
STA 5+00

STA 133+39.18
STA 5+00

STA 133+76.10=
STA 5+00

BLACKFOREST DR

LEGEND

- NEW SIDEWALK
- CONCRETE MEDIAN
- REMOVALS
- ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:44:46 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	181

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

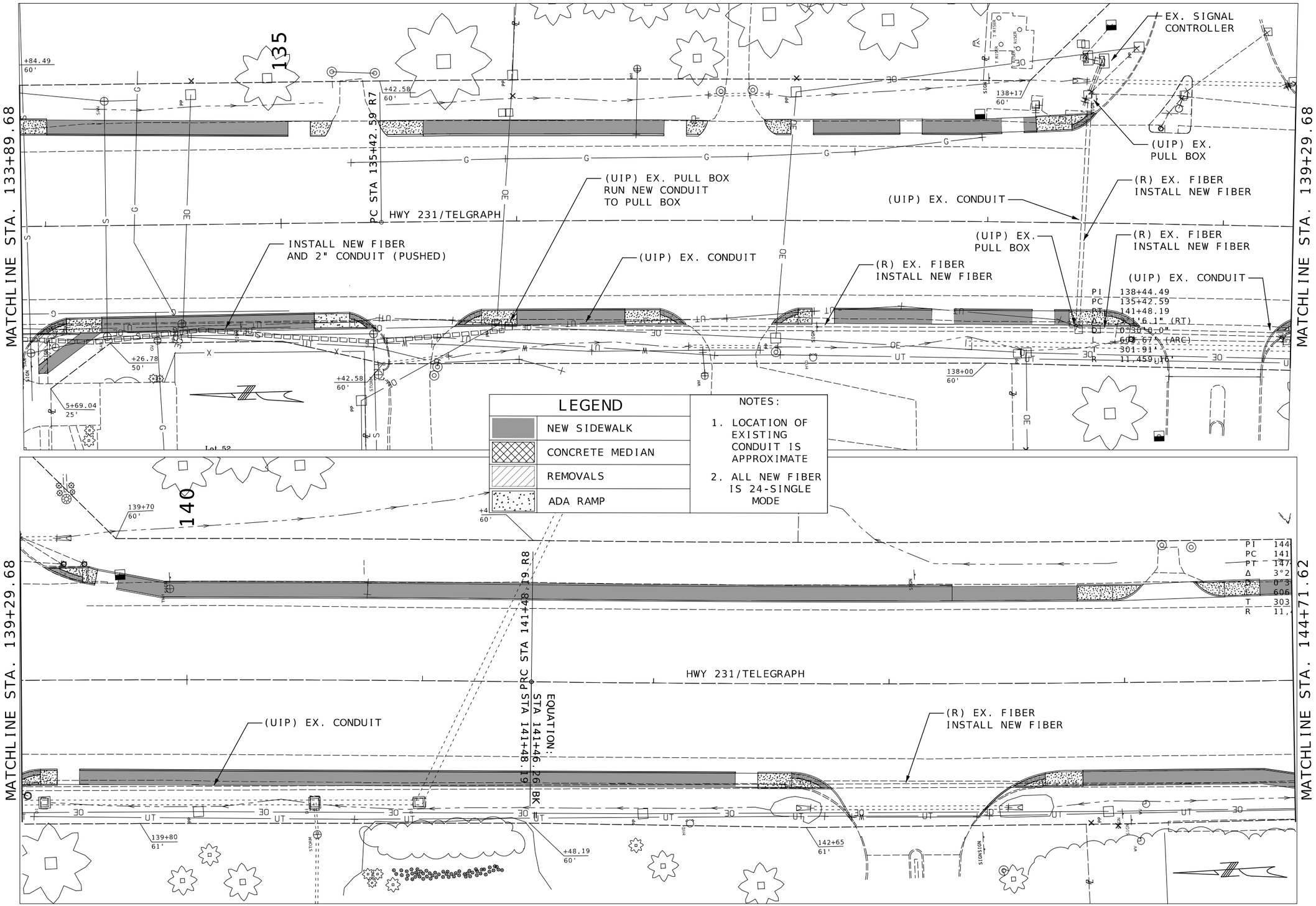
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:44:55 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	182

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 144+71.62

145

145+39.26
60'

51.70
48.19
53.80
3.7" (LT)
10.0"
87' (ARC)
51'
159.16'

SCALE
0 20 40 60

+53.80
60.94'

PT STA 147+53.80 R9

EQUATION:
STA 147+55.06 BK =
STA 147+53.80

S01°09'45"W

HWY 231/TELEGRAPH

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

150

MATCHLINE STA. 150+10.35

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 150+10.35

HWY 231/TELEGRAPH

S01°09'45"W

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX. CONDUIT

(R) EX. FIBER
INSTALL NEW FIBER

155

SCALE
0 20 40 60

MATCHLINE STA. 155+50.35

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:45:08 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	183

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 155+50.35

MATCHLINE STA. 160+90.35

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

EX. SIGNAL CONTROLLER

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

STA 15/7+55.00
STA 10+00

HWY 231/TELEGRAPH

S01°09'45"W

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. CONDUIT

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(R) EX. FIBER INSTALL NEW FIBER

+65.53
60'

+34.73
60'

+02.91

ERB

160

165

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

+60.56
66.62'

Susan Rd.

STA 165+51.00
STA 5+00

CENTERLINE SHIFT DIRECTION:
N88°50'15"W 1.89'

EQUATION:
STA 165+72.31 BK = POT STA 165+70.43 R10
STA 165+72.31 AHD = POT STA 165+70.43 R9

MATCHLINE STA. 160+90.35

MATCHLINE STA. 166+28.47

HWY 231/TELEGRAPH

S01°09'45"W

S01°09'45"W

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 3:45:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	184

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 166+28.47

+40.14
70.46

HWY 231/TELEGRAPH

S01°09'45"W

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

EQUATION
STA 169+53.15 BK =
STA 169+53.72 AH

ST STA 169+53.72 R11

(UIP) EX. PULL BOX

PI 170+53.75
Ls 150.00'
Ys 3°93' W
Xs 149.91'
LT W 100.03'
ST 60.01'

SE STA 171+03.72 R11

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. CONDUIT

MATCHLINE STA. 171+69.04

MATCHLINE STA. 171+69.04

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. PULL BOX

STA 173+88.16 =
STA 10+00

HWY 231/TELEGRAPH

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(UIP) EX. PULL BOX

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. CONDUIT

EX. SIGNAL CONTROLLER

Lot 21

Total Delta 60°47'38"

MATCHLINE STA. 177+09.04

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:43:41 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/29/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	185

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 177+09.04

MATCHLINE STA. 182+49.04

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

HWY 231/TELEGRAPH

CS STA 179+66.95 R11

ST STA 181+16.95 R11

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

PI 180+16.98
ES 150.00'
YS 7.85°
XS 149.75'
LT 100.03'
ST 50.03'

S61°57'23"

SCALE
0 20 40 60

Lot 17

Lot 58

PI 22+32.36
PC 18+89.45
PT 25+62.60
Δ 26°55'12.8" (LT)
D 3°59'56.9"
L 673.15' (ARC)
T 342.91'
R 821.32.70'

20

SCALE
0 20 40 60

MATCHLINE STA. 182+49.04

MATCHLINE STA. 23+19.73

PC STA 18+89.45 R12

EQUATION:
STA 18+83.76 BK = STA 18+89.45 AH

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. CONDUIT

(UIP) EX. PULL BOX

HWY 231/TELEGRAPH

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:53:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO

DISTRICT	SHEET NO.
SL	186

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

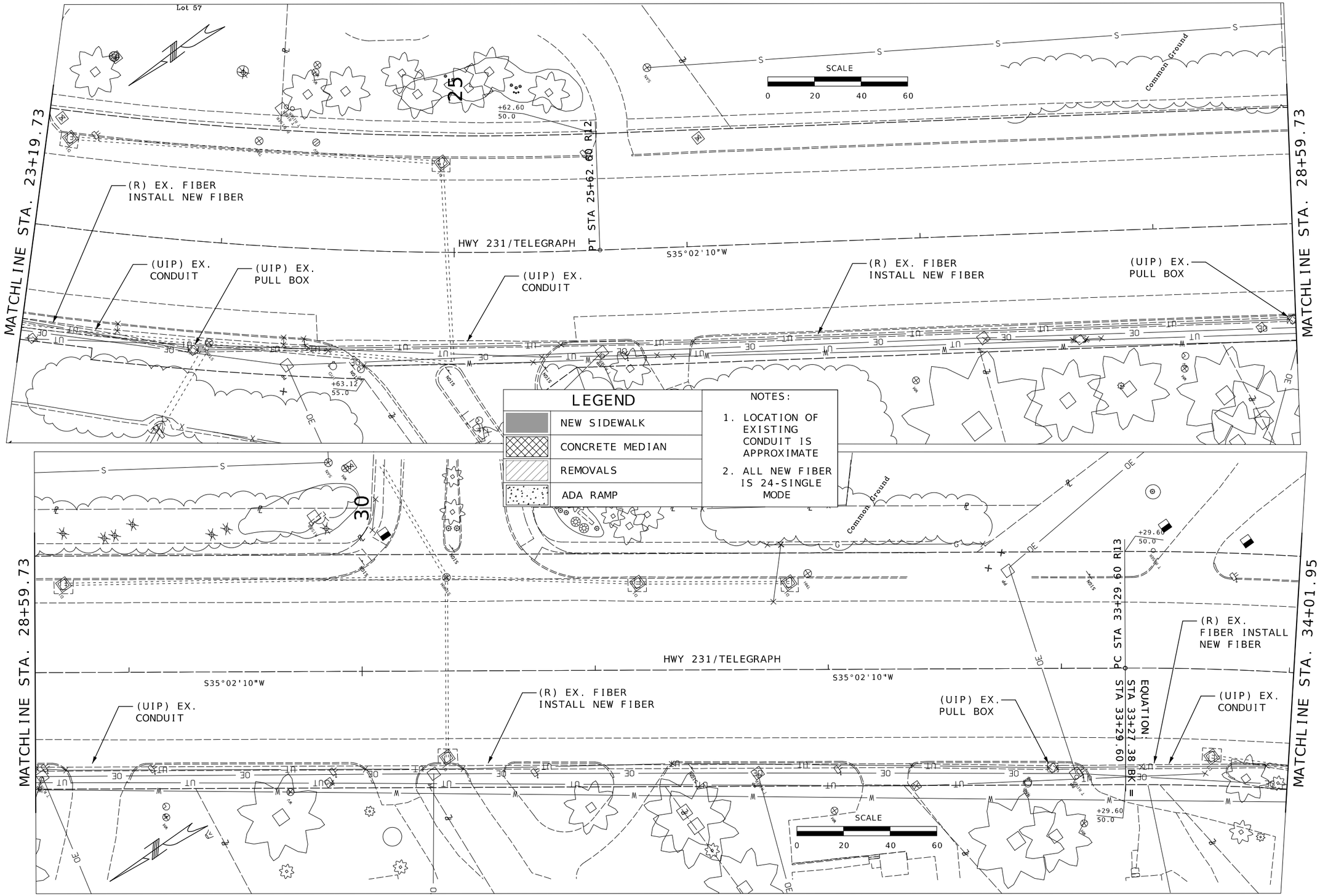
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:53:38 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	187

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 34+01.95

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

HWY 231/TELEGRAPH

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

MATCHLINE STA. 39+41.95

SCALE

0 20 40 60

PI 30+96.63
PC 33+29.60
PT 40+40.01
Δ 35°30'30.4" (RT)
D 4°59'50.0"
L 710.41' (ARC)

LEGEND

- NEW SIDEWALK
- CONCRETE MEDIAN
- REMOVALS
- ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 39+41.95

PT STA 40+40.01

S70°32'41"W

HWY 231/TELEGRAPH

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

SCALE

0 20 40 60

MATCHLINE STA. 44+81.95

Lot 70

Lot 69

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 3:53:49 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	188

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

SCALE
0 20 40 60

MATCHLINE STA. 44+81.95

MATCHLINE STA. 50+21.95

PC STA 46+26.47

PT STA 52+83.33

PI 49+62.56
PC 46+26.47
PT 52+83.33
Δ 26°24'14.2" (LT)
D 3°59'56.9"
L 660.24' (ARC)
T 336.09'
R 1,432.70'

HWY 231/TELEGRAPH

Lot 1
Lot 2
Lot 3
Lot 114

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

Common Ground & Easement Area

LEGEND

- NEW SIDEWALK
- CONCRETE MEDIAN
- REMOVALS
- ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

EQUATION:
STA 52+86.71 BK =
STA 52+83.33 AHD

S44°08'27"W

MATCHLINE STA. 55+58.57

PER MAP

SCALE
0 20 40 60

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:54:00 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	189

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 55+58.57

MATCHLINE STA. 60+98.57

MATCHLINE STA. 60+98.57

MATCHLINE STA. 66+38.57

BEAR CREEK DR

POT STA 57+42.61 R14

HWY 231/TELEGRAPH

S44°01'31"W

HEINTZ RD

PC STA 66+17.88 R14

SCALE

0 20 40 60

LEGEND

- NEW SIDEWALK
- CONCRETE MEDIAN
- REMOVALS
- ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

(UIP) EX. PULL BOX

(UIP) EX. CONDUIT

(R) EX. FIBER INSTALL NEW FIBER

EX. SIGNAL CONTROLLER

+13.37
50-47.20

+06.72
62.20

+11.65

+48.32
50.0

N/F
Earl Sidwell
21451/345

N/F
Kim Vermillion
24689/211

N/F
Haider & Samira Alkenani
21178/417

Common Ground

WAY

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

05/30/2025 3:54:12 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	190

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

ITS PLAN SHEET

MATCHLINE STA. 66+38.57

N/F
R-9 Reorganized School District

PI 67+05.95
PC 66+17.88
PT 67+93.80
Δ 7°2'7.0"(LT)
D 3°59'56.9"
L 175.92' (ARC)
T 88.07'
R 1,432.70'

PT STA 67+93.80 R14

S36°59'23"W

HWY 231/TELEGRAPH

S36°59'23"W

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX.
CONDUIT

STRIP RESERVED FOR
FUTURE WIDENING OF TELEGRAPH ROAD
PB 324 PG 80

Common Ground

TEMPORARY EASEMENT
(PRIVATE)

SCALE
0 20 40 60

MATCHLINE STA. 71+78.57

LEGEND

	NEW SIDEWALK
	CONCRETE MEDIAN
	REMOVALS
	ADA RAMP

NOTES:

1. LOCATION OF EXISTING CONDUIT IS APPROXIMATE
2. ALL NEW FIBER IS 24-SINGLE MODE

MATCHLINE STA. 71+78.57

PC STA 74+09.70 R14

HWY 231/TELEGRAPH

(R) EX. FIBER
INSTALL NEW FIBER

(UIP) EX.
CONDUIT

SCALE
0 20 40 60

MATCHLINE STA. 77+18.57

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:54:25 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	191

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

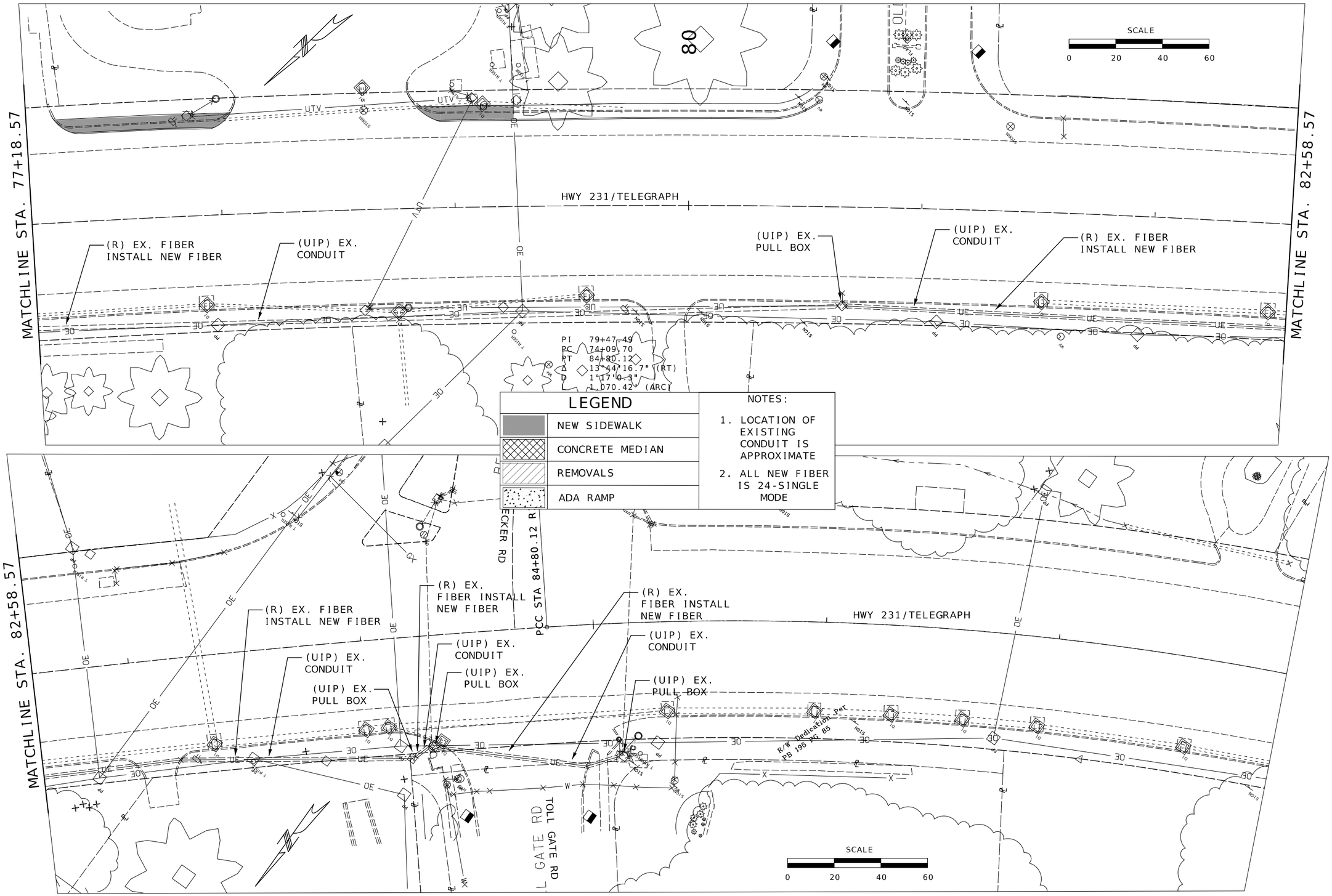
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ITS PLAN SHEET



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:54:38 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	192

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

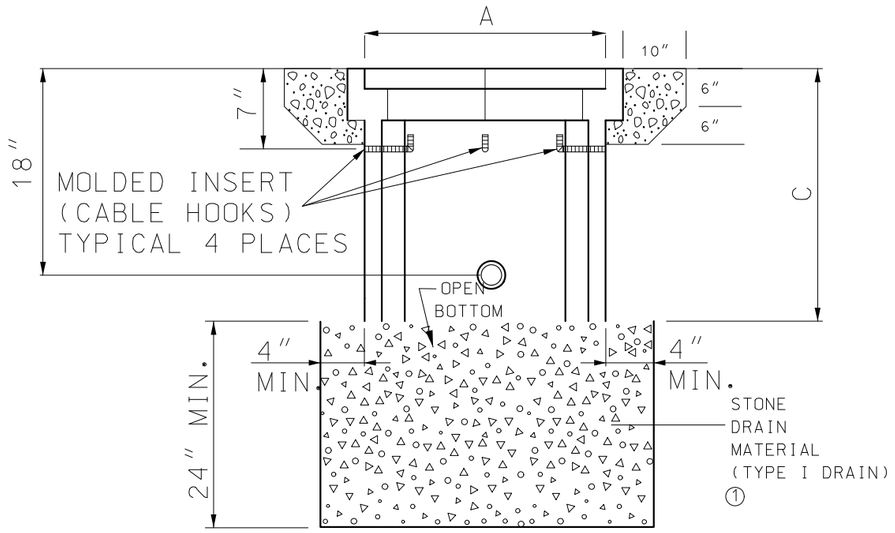
DATE	DESCRIPTION

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

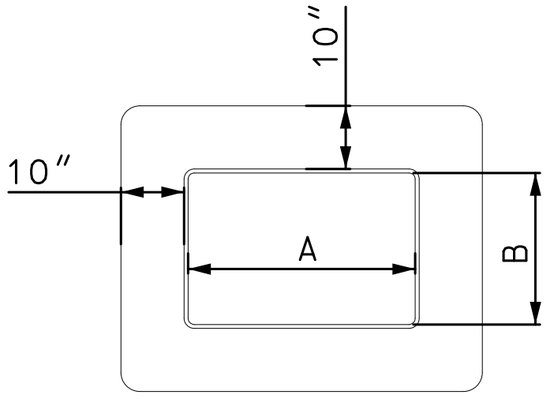
ITS PLAN SHEET

ITS PULL BOXES WITH CONCRETE PADS

CLASS 2 ITS PULLBOX WITH CONCRETE PAD



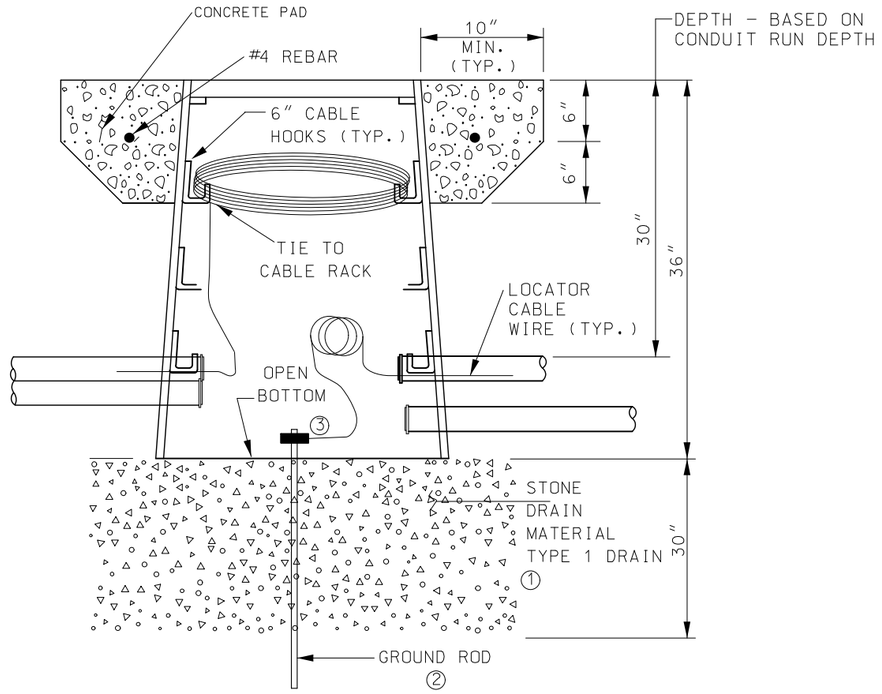
ELEVATION



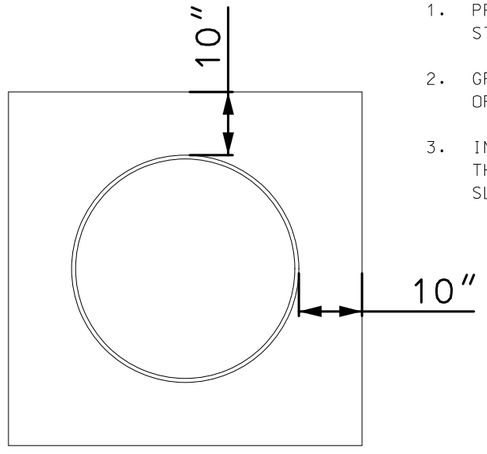
PLAN

FOR PULL BOX DIMENSIONS SEE STANDARD PLAN 902.20

CLASS 5 ITS PULLBOX WITH CONCRETE PAD



ELEVATION



PLAN

1. PROVIDE TYPE II DRAIN AS DIRECTED BY ENGINEER. SEE STANDARD PLAN 902.20 FOR TYPE II DRAIN DETAILS.
2. GROUND ROD ONLY REQUIRED IN PULL BOX NEAREST TO AN ITS OR SIGNAL CABINET.
3. IN THE PULL BOX NEAREST THE ITS OR SIGNAL CABINET, CONNECT THE TRACER WIRE TO A GROUND ROD CLAMP AND PROVIDE 5 FEET OF SLACK.

DISCLAIMER
THE PROFESSIONAL WHOSE SIGNATURE AND PERSONAL SEAL APPEAR HEREON ASSUMES RESPONSIBILITY ONLY FOR WHAT APPEARS ON THIS PAGE, AND DISCLAIMS (PURSUANT TO SECTION 327.411 RSMO) SPECIFICATION, ESTIMATES, REPORTS, OR OTHER DOCUMENTS OR INSTRUMENTS NOT SEALED BY THE UNDERSIGNED PROFESSIONAL RELATING TO OR INTENDED TO BE USED FOR ANY PART OR PARTS OF THE PROJECT TO WHICH THIS PAGE REFERS.

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:54:51 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	193

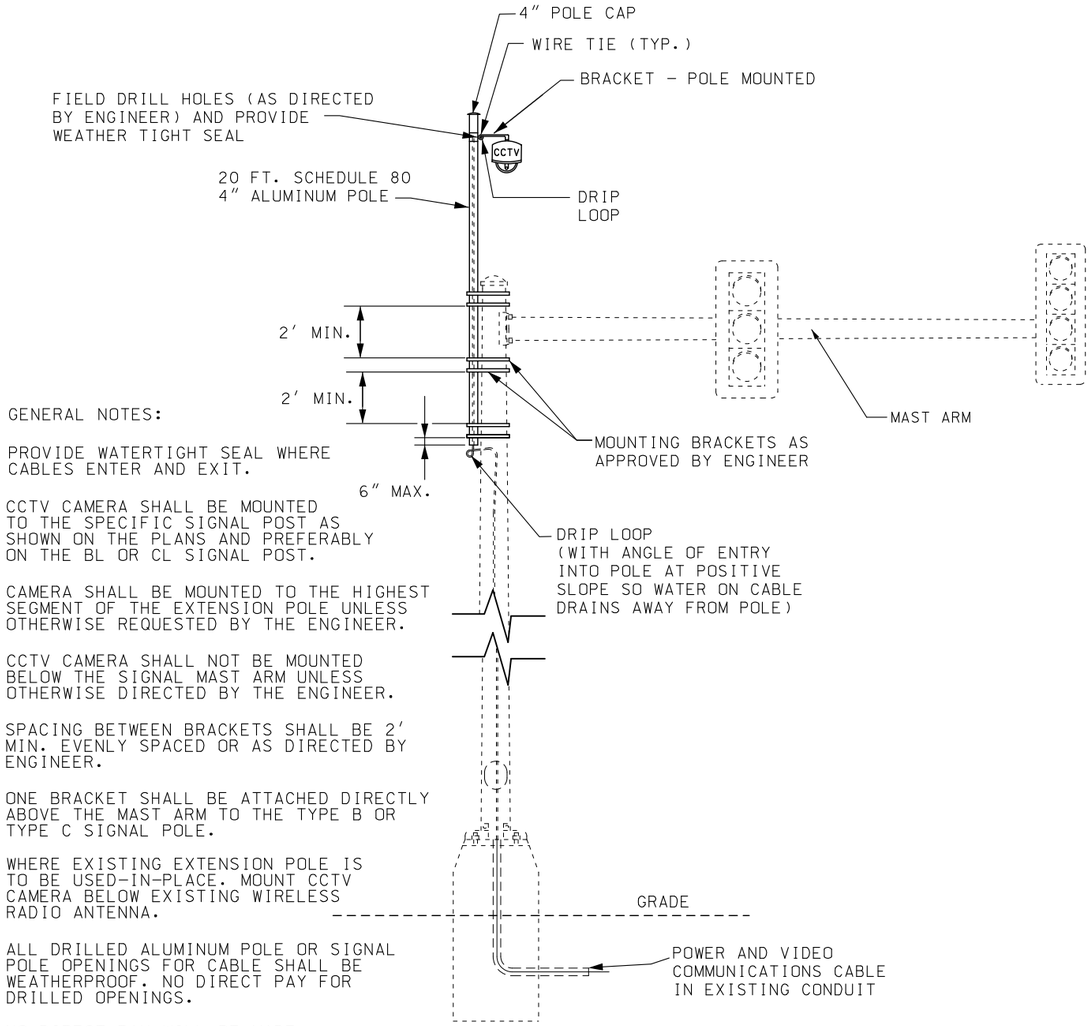
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DATE	DESCRIPTION

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

ITS SPECIAL SHEET
ITS PULL BOXES
WITH CONC. PADS

REVISED 6-06-2024



GENERAL NOTES:

PROVIDE WATERTIGHT SEAL WHERE CABLES ENTER AND EXIT.

CCTV CAMERA SHALL BE MOUNTED TO THE SPECIFIC SIGNAL POST AS SHOWN ON THE PLANS AND PREFERABLY ON THE BL OR CL SIGNAL POST.

CAMERA SHALL BE MOUNTED TO THE HIGHEST SEGMENT OF THE EXTENSION POLE UNLESS OTHERWISE REQUESTED BY THE ENGINEER.

CCTV CAMERA SHALL NOT BE MOUNTED BELOW THE SIGNAL MAST ARM UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

SPACING BETWEEN BRACKETS SHALL BE 2' MIN. EVENLY SPACED OR AS DIRECTED BY ENGINEER.

ONE BRACKET SHALL BE ATTACHED DIRECTLY ABOVE THE MAST ARM TO THE TYPE B OR TYPE C SIGNAL POLE.

WHERE EXISTING EXTENSION POLE IS TO BE USED-IN-PLACE. MOUNT CCTV CAMERA BELOW EXISTING WIRELESS RADIO ANTENNA.

ALL DRILLED ALUMINUM POLE OR SIGNAL POLE OPENINGS FOR CABLE SHALL BE WEATHERPROOF. NO DIRECT PAY FOR DRILLED OPENINGS.

NO DIRECT PAY WILL BE MADE FOR MOUNTING HARDWARE.

ALL LABOR AND MATERIALS NEEDED TO COMPLETE THIS WORK WILL BE CONSIDERED INCIDENTAL TO THE PAY ITEMS "CCTV CAMERA ASSEMBLY INSTALLED".

NOT TO SCALE

CCTV MOUNTING ON NEW OR EXISTING C OR B SIGNAL POST WITH EXTENSION POLE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:55:04 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	194

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

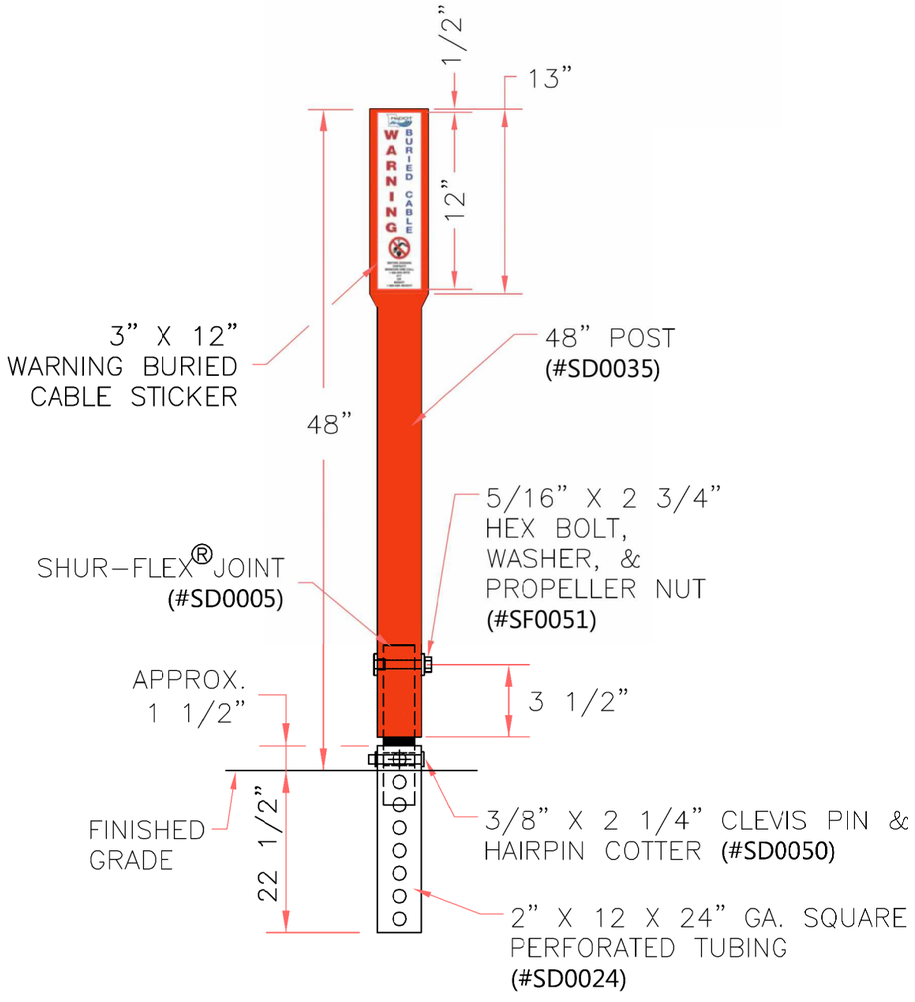
DESCRIPTION	DATE

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

SPECIAL SHEET
CCTV CAMERA MOUNTING TO SIGNAL POST DETAILS

MODOT BURIED CABLE WARNING; DELINEATOR POST

(#SD0031)



PAT# 7,722,286

H:\SHUR-TITE\MISSOURI\SF DR DEL SD0031 WARNING SIGN 101811.dwg, 10/18/2011 12:09:32 PM

SHUR-TITE® PRODUCTS P. O. BOX 2283 ROUND ROCK, TEXAS 78680 (512) 218-6500	TYPE: SHUR-FLEX® DRIVEABLE DELINEATOR MODOT WARNING BURIED CABLE POST DETAIL	DRAWN BY: PH CHECKED BY: DWH	ITEM #: SD0031 DATE: 10/18/11 SHEET: 1 OF 1

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 3:55:18 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	194A

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

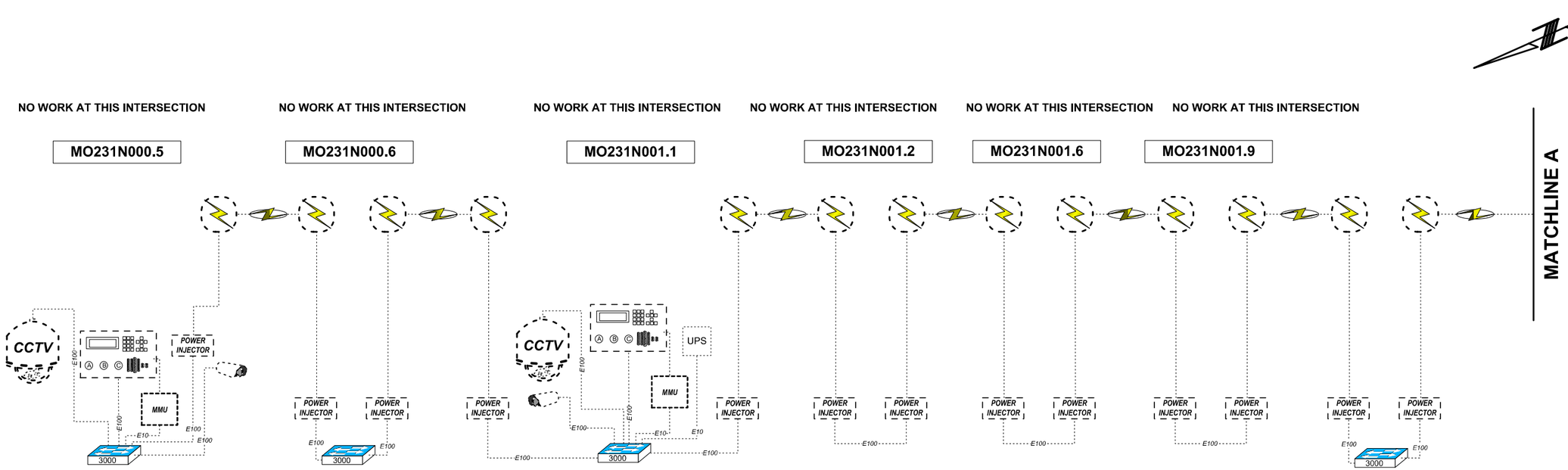
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

SPECIAL SHEET
MODOT BURRIED CABLE
DRIVABLE DELINEATOR POST



ROUTE 231

HOFFMEISTER AVE

RIPA AVE

COMMUNICATIONS PLAN

ROUTE 231
(BROADWAY/KINGSTON)
SHEET 1 OF 5

RT055E001.8T — DEVICE IDENTIFIER

EXISTING/ PROPOSED CCTV CAMERA

DMS — EXISTING DYNAMIC MESSAGE SIGN

EXISTING/PROPOSED CISCO ASA5505

EXISTING CISCO IE3000 SWITCH

EXISTING TRAFFIC SIGNAL CONTROLLER

MMU — EXISTING MALFUNCTION MANAGEMENT UNIT

CELL MODEM — EXISTING CELLULAR MODEM

EXISTING WIRELESS ETHERNET BRIDGE

POWER INJECTOR — EXISTING PROJECT INJECTOR

MC — EXISTING MEDIA CONVERTER

FO DATA MODEM — EXISTING FIBER OPTIC DATA MODEM

E10 — 10 MBPS ETHERNET

E100 — 100 MBPS ETHERNET

EXISTING VIDEO DETECTION SYSTEM

VDS AP — EXISTING SENSYS DETECTION SYSTEM

VD — EXISTING IP VIDEO ENCODER

DEVICE SERVER — EXISTING DEVICE SERVER

EXISTING RADAR DETECTION UNIT

MULTIMODE/ SINGLE MODE FIBER OPTIC CABLE

EXISTING WIRELESS CONNECTION

EXISTING/PROPOSED FUSION SPLICE

EXISTING CABLE

PROPOSED CABLE

DSL MODEM — PROPOSED DSL MODEM

NOTE:
1) DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.
2) ALL FIBER SPLICES ARE NOT SHOWN FOR CLARITY. SEE SPLICE DIAGRAMS.

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002000628
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/10/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 195
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105-1310
TELEPHONE (816) 472-1201
CERTIFICATE OF AUTHORITY NO. 001270

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

J6S3632_Local_Comm_v2.vsd 1/10/2025

MATCHLINE A

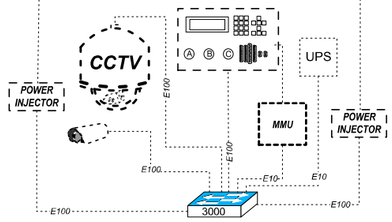
NO WORK AT THIS INTERSECTION

NO WORK AT THIS INTERSECTION

SEE FIBER SPLICING AND BLOCK DIAGRAM SHEET 1 OF 19

MO231N003.1

BARRACKSVIEW RD



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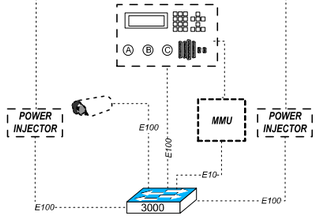
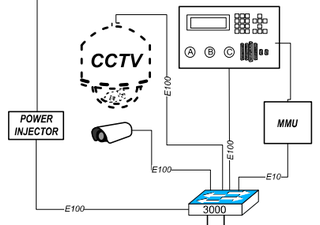


MO231S002.4

ROUTE 231

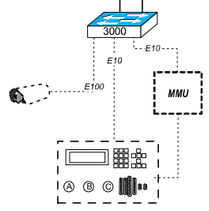


24-FIBER SINGLE MODE CABLE (YTP.)

2
2

2
VLAN 130
VLAN LOOP 130

MATCHLINE B



MO231S003.4

SEE FIBER SPLICING AND BLOCK DIAGRAM SHEET 2 OF 19

KINGSTON DRIVE

JEFFERSONIAN DRIVE

SAPPINGTON BARRACKS RD/ SHERIDAN RD

COMMUNICATIONS PLAN

ROUTE 231 (KINGSTON/TELEGRAPH) SHEET 2 OF 5

RT055E001.8T — DEVICE IDENTIFIER

CCTV — EXISTING/ PROPOSED CCTV CAMERA

DMS — EXISTING DYNAMIC MESSAGE SIGN

5505 5505 — EXISTING/PROPOSED CISCO ASA5505

IE3000 — EXISTING CISCO IE3000 SWITCH

EXISTING TRAFFIC SIGNAL CONTROLLER

MMU — EXISTING MALFUNCTION MANAGEMENT UNIT

CELL MODEM — EXISTING CELLULAR MODEM

EXISTING WIRELESS ETHERNET BRIDGE

POWER INJECTOR — EXISTING PROJECT INJECTOR

MC — EXISTING MEDIA CONVERTER

FO DATA MODEM — EXISTING FIBER OPTIC DATA MODEM

E10 — 10 MBPS ETHERNET

E100 — 100 MBPS ETHERNET

EXISTING VIDEO DETECTION SYSTEM

VDS AP — EXISTING SENSYS DETECTION SYSTEM

VD — EXISTING IP VIDEO ENCODER

DEVICE SERVER — EXISTING DEVICE SERVER

EXISTING RADAR DETECTION UNIT

MULTIMODE/ SINGLE MODE FIBER OPTIC CABLE

EXISTING WIRELESS CONNECTION

EXISTING/PROPOSED FUSION SPLICE

EXISTING CABLE

PROPOSED CABLE

DSL MODEM — PROPOSED DSL MODEM

NOTE:
1) DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.
2) ALL FIBER SPLICES ARE NOT SHOWN FOR CLARITY. SEE SPLICE DIAGRAMS.

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002006628
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/10/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	196

COUNTY: ST. LOUIS

JOB NO.: J6S3632

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DATE	DESCRIPTION

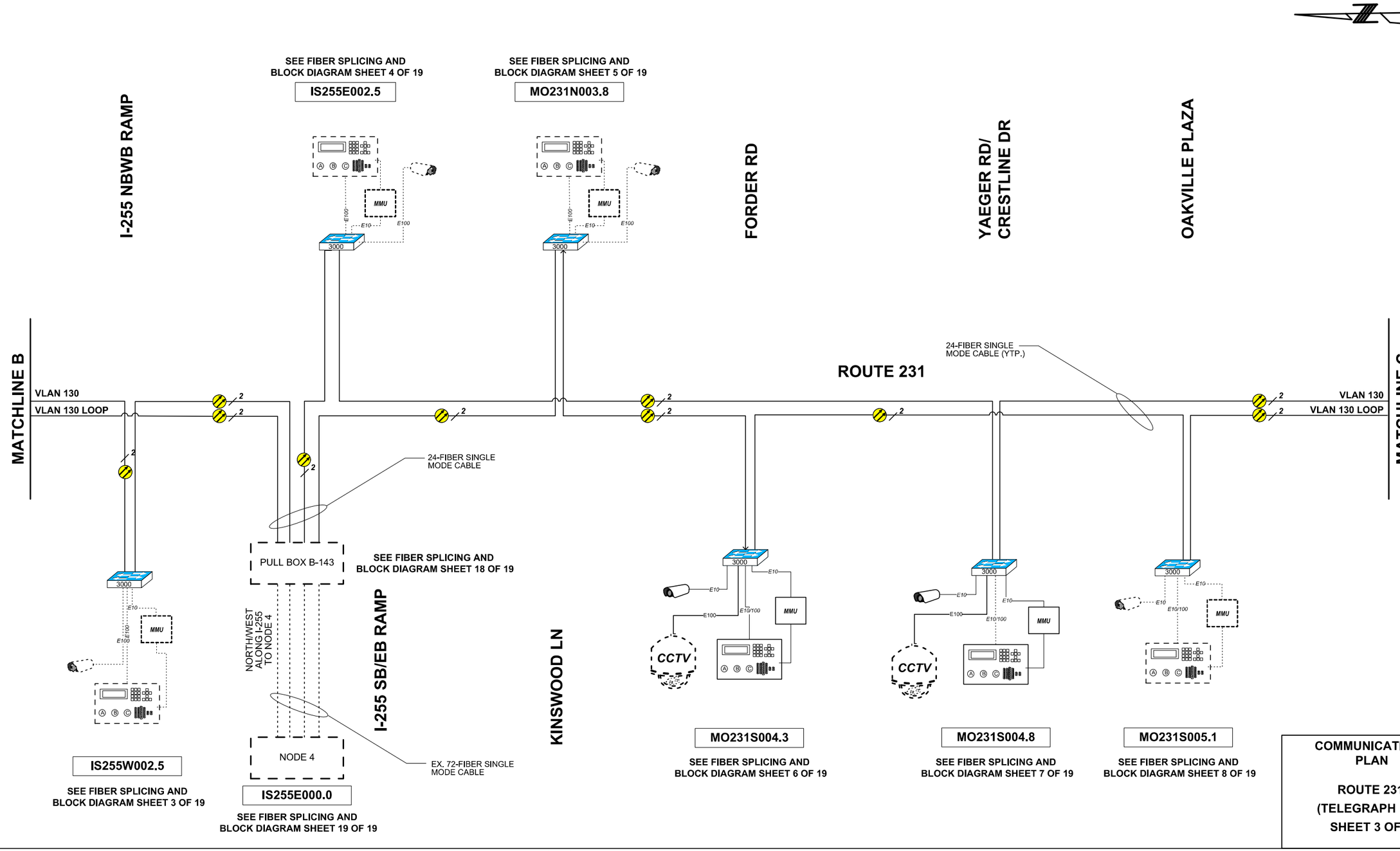
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105-1310
TELEPHONE (816) 472-1201
CERTIFICATE OF AUTHORITY NO. 001270

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

J6S3632_Local_Comm_v2.vsd 1/10/2025



COMMUNICATIONS PLAN

ROUTE 231 (TELEGRAPH RD.)

SHEET 3 OF 5

RT055E001.8T — DEVICE IDENTIFIER

CCTV — EXISTING/ PROPOSED CCTV CAMERA

DMS — EXISTING DYNAMIC MESSAGE SIGN

5505 — EXISTING/PROPOSED CISCO ASA5505

IE3000 — EXISTING CISCO IE3000 SWITCH

EXISTING TRAFFIC SIGNAL CONTROLLER

MMU — EXISTING MALFUNCTION MANAGEMENT UNIT

CELL MODEM — EXISTING CELLULAR MODEM

EXISTING WIRELESS ETHERNET BRIDGE

POWER INJECTOR — EXISTING PROJECT INJECTOR

MC — EXISTING MEDIA CONVERTER

FO DATA MODEM — EXISTING FIBER OPTIC DATA MODEM

E10 — 10 MBPS ETHERNET

E100 — 100 MBPS ETHERNET

EXISTING VIDEO DETECTION SYSTEM

VDS AP — EXISTING SENSYS DETECTION SYSTEM

VD — EXISTING IP VIDEO ENCODER

DEVICE SERVER — EXISTING DEVICE SERVER

EXISTING RADAR DETECTION UNIT

MULTIMODE/ SINGLE MODE FIBER OPTIC CABLE

EXISTING WIRELESS CONNECTION

EXISTING/PROPOSED FUSION SPLICE

EXISTING CABLE

PROPOSED CABLE

DSL MODEM — PROPOSED DSL MODEM

NOTE:
1) DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.
2) ALL FIBER SPLICES ARE NOT SHOWN FOR CLARITY. SEE SPLICE DIAGRAMS.

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002000628
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/10/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	197

COUNTY: ST. LOUIS

JOB NO.: J6S3632

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

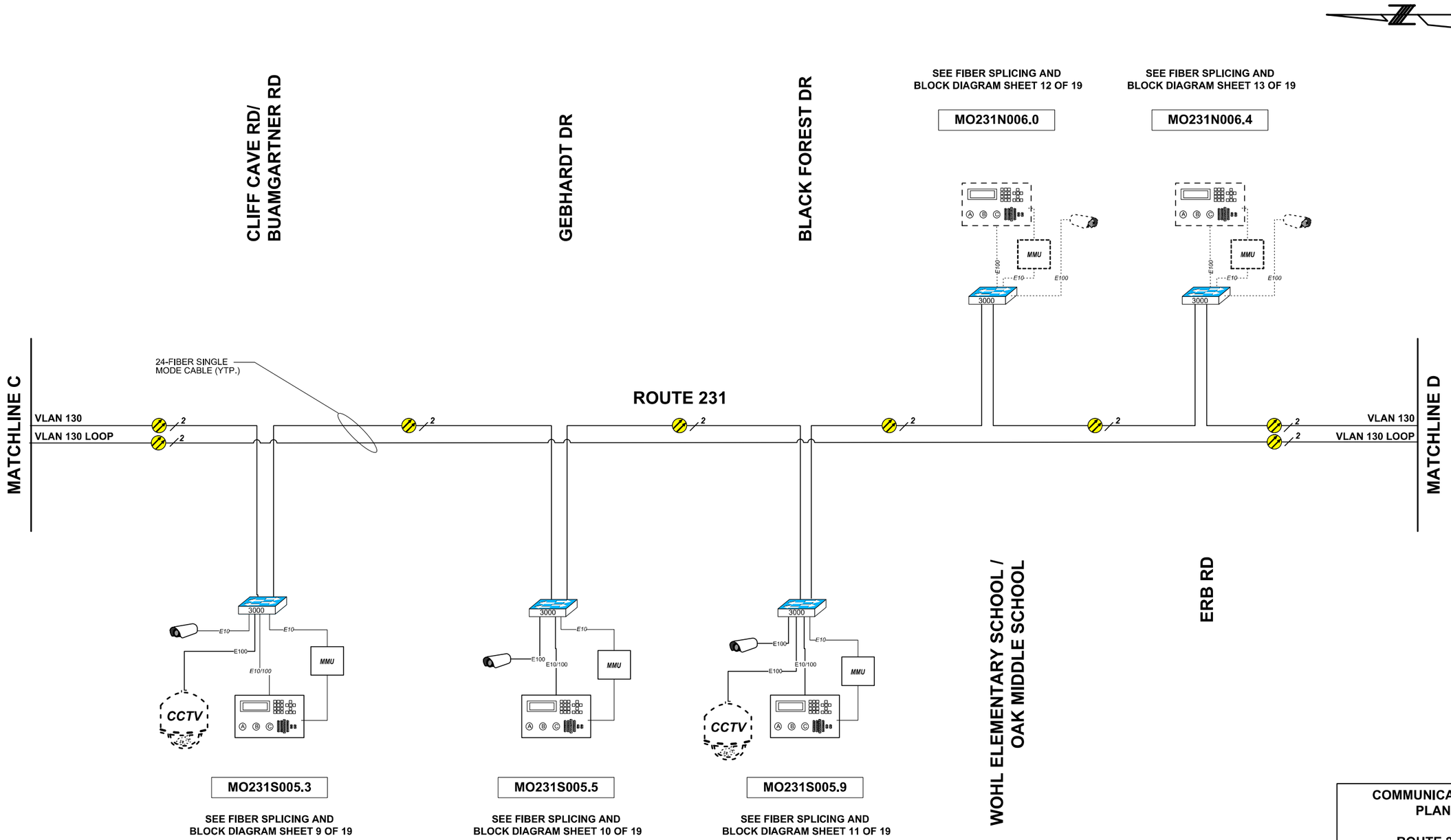
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION | DATE

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105-1310
TELEPHONE (816) 472-1201
CERTIFICATE OF AUTHORITY NO. 001270

REV.



COMMUNICATIONS PLAN

ROUTE 231
(TELEGRAPH RD.)
SHEET 4 OF 5

RT055E001.8T — DEVICE IDENTIFIER

CCTV — EXISTING/ PROPOSED CCTV CAMERA

DMS — EXISTING DYNAMIC MESSAGE SIGN

5505 — EXISTING/PROPOSED CISCO ASA5505

IE3000 — EXISTING CISCO IE3000 SWITCH

EXISTING TRAFFIC SIGNAL CONTROLLER

MMU — EXISTING MALFUNCTION MANAGEMENT UNIT

CELL MODEM — EXISTING CELLULAR MODEM

EXISTING WIRELESS ETHERNET BRIDGE

POWER INJECTOR — EXISTING PROJECT INJECTOR

MC — EXISTING MEDIA CONVERTER

FO DATA MODEM — EXISTING FIBER OPTIC DATA MODEM

E10 — 10 MBPS ETHERNET

E100 — 100 MBPS ETHERNET

EXISTING VIDEO DETECTION SYSTEM

VDS AP — EXISTING SENSYS DETECTION SYSTEM

VD — EXISTING IP VIDEO ENCODER

DEVICE SERVER — EXISTING DEVICE SERVER

EXISTING RADAR DETECTION UNIT

MULTIMODE/ SINGLE MODE FIBER OPTIC CABLE

EXISTING WIRELESS CONNECTION

EXISTING/PROPOSED FUSION SPLICE

EXISTING CABLE

PROPOSED CABLE

DSL MODEM — PROPOSED DSL MODEM

NOTE:
1) DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.
2) ALL FIBER SPLICES ARE NOT SHOWN FOR CLARITY. SEE SPLICE DIAGRAMS.

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002000628
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/10/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 198
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

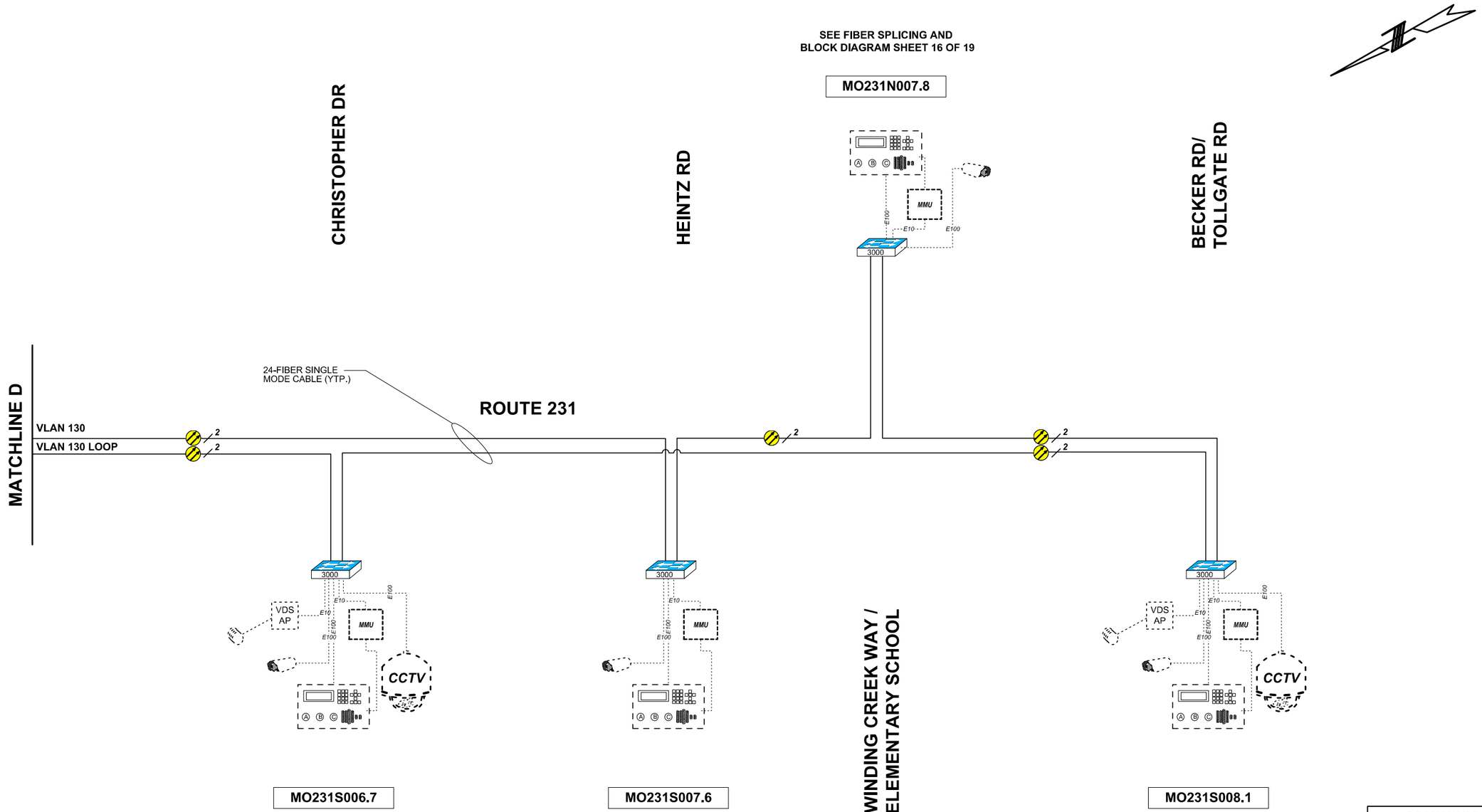
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION	DATE

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105-1310
TELEPHONE (816) 472-1201
CERTIFICATE OF AUTHORITY
NO. 001270

REV.



RT055E001.8T — DEVICE IDENTIFIER

CCTV — EXISTING/ PROPOSED CCTV CAMERA

DMS — EXISTING DYNAMIC MESSAGE SIGN

5505 5505 — EXISTING/PROPOSED CISCO ASA5505

IE3000 — EXISTING CISCO IE3000 SWITCH

EXISTING TRAFFIC SIGNAL CONTROLLER

MMU — EXISTING MALFUNCTION MANAGEMENT UNIT

CELL MODEM — EXISTING CELLULAR MODEM

EXISTING WIRELESS ETHERNET BRIDGE

POWER INJECTOR — EXISTING PROJECT INJECTOR

MC — EXISTING MEDIA CONVERTER

FO DATA MODEM — EXISTING FIBER OPTIC DATA MODEM

E10 — 10 MBPS ETHERNET

E100 — 100 MBPS ETHERNET

EXISTING VIDEO DETECTION SYSTEM

VDS AP — EXISTING SENSYS DETECTION SYSTEM

VD — EXISTING IP VIDEO ENCODER

DEVICE SERVER — EXISTING DEVICE SERVER

EXISTING RADAR DETECTION UNIT

MULTIMODE/ SINGLE MODE FIBER OPTIC CABLE

EXISTING WIRELESS CONNECTION

EXISTING / PROPOSED FUSION SPLICE

EXISTING CABLE

PROPOSED CABLE

DSL MODEM — PROPOSED DSL MODEM

NOTE:
1) DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.
2) ALL FIBER SPLICES ARE NOT SHOWN FOR CLARITY. SEE SPLICE DIAGRAMS.

COMMUNICATIONS PLAN

ROUTE 231
(TELEGRAPH RD.)
SHEET 5 OF 5

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002000608
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

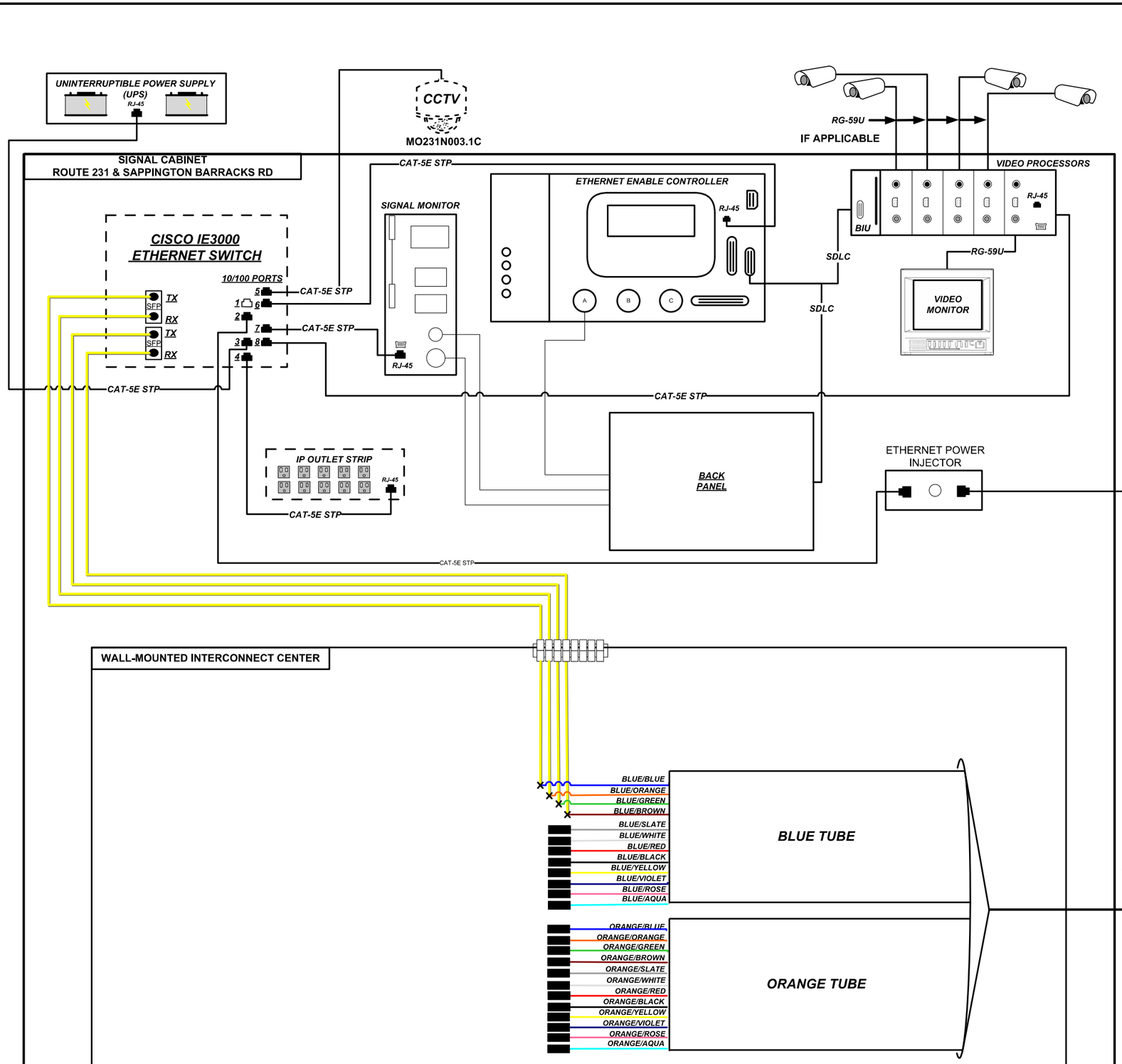
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	1/10/2025
ROUTE	231
STATE	MO
DISTRICT	SL
SHEET NO.	199
COUNTY	ST. LOUIS
JOB NO.	J6S3632
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION | DATE | REV.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105-1310
TELEPHONE (816) 472-1201
CERTIFICATE OF AUTHORITY
NO. 001270



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

M0231N003.1Z
ROUTE 231 & SAPPINGTON BARRACKS RD

SHEET 1 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	200

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

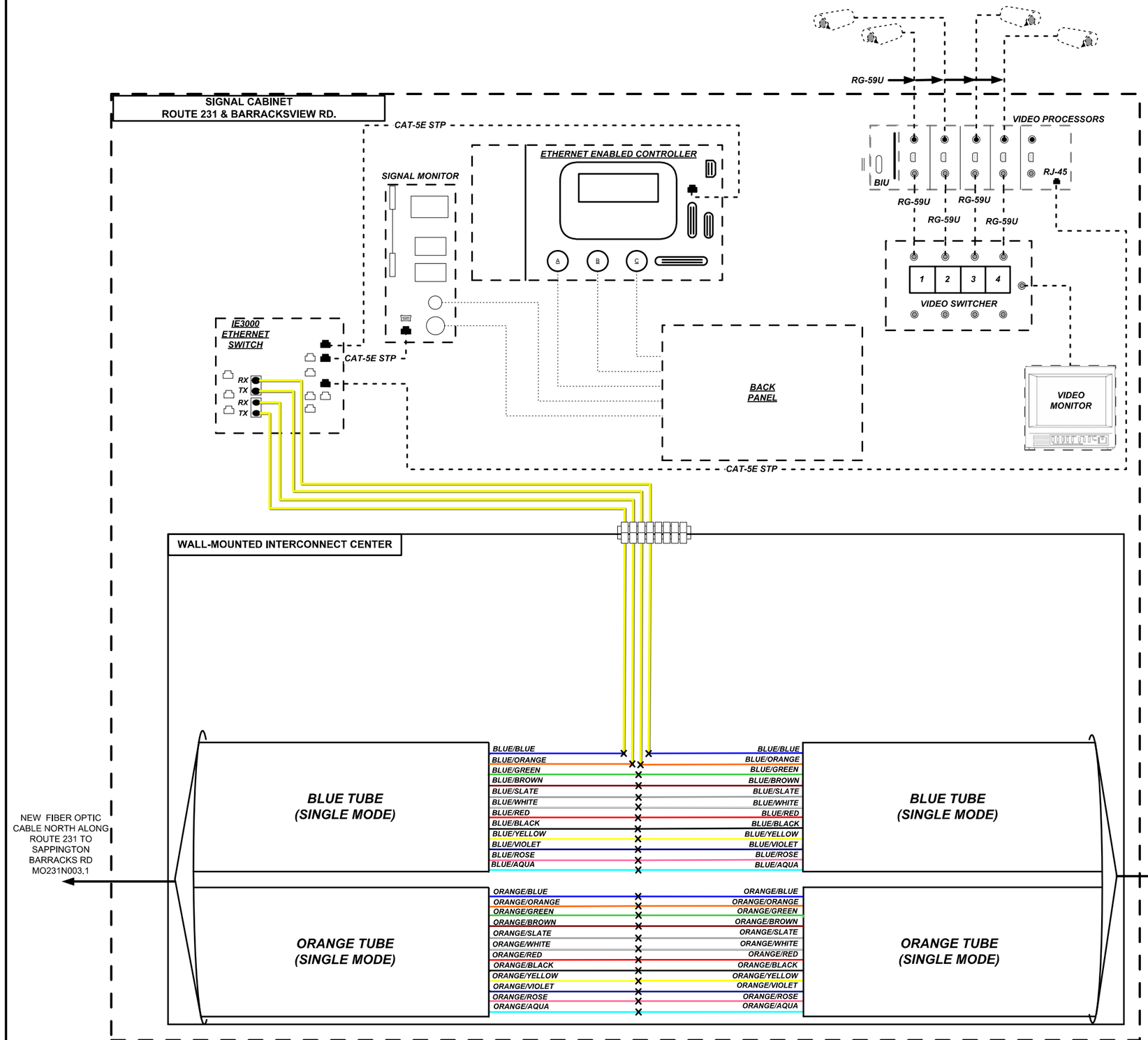
DESCRIPTION | DATE | REV.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd

1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S003.4Z
ROUTE 231 & BARRACKSVIEW RD.

SHEET 2 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-29023
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 201
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

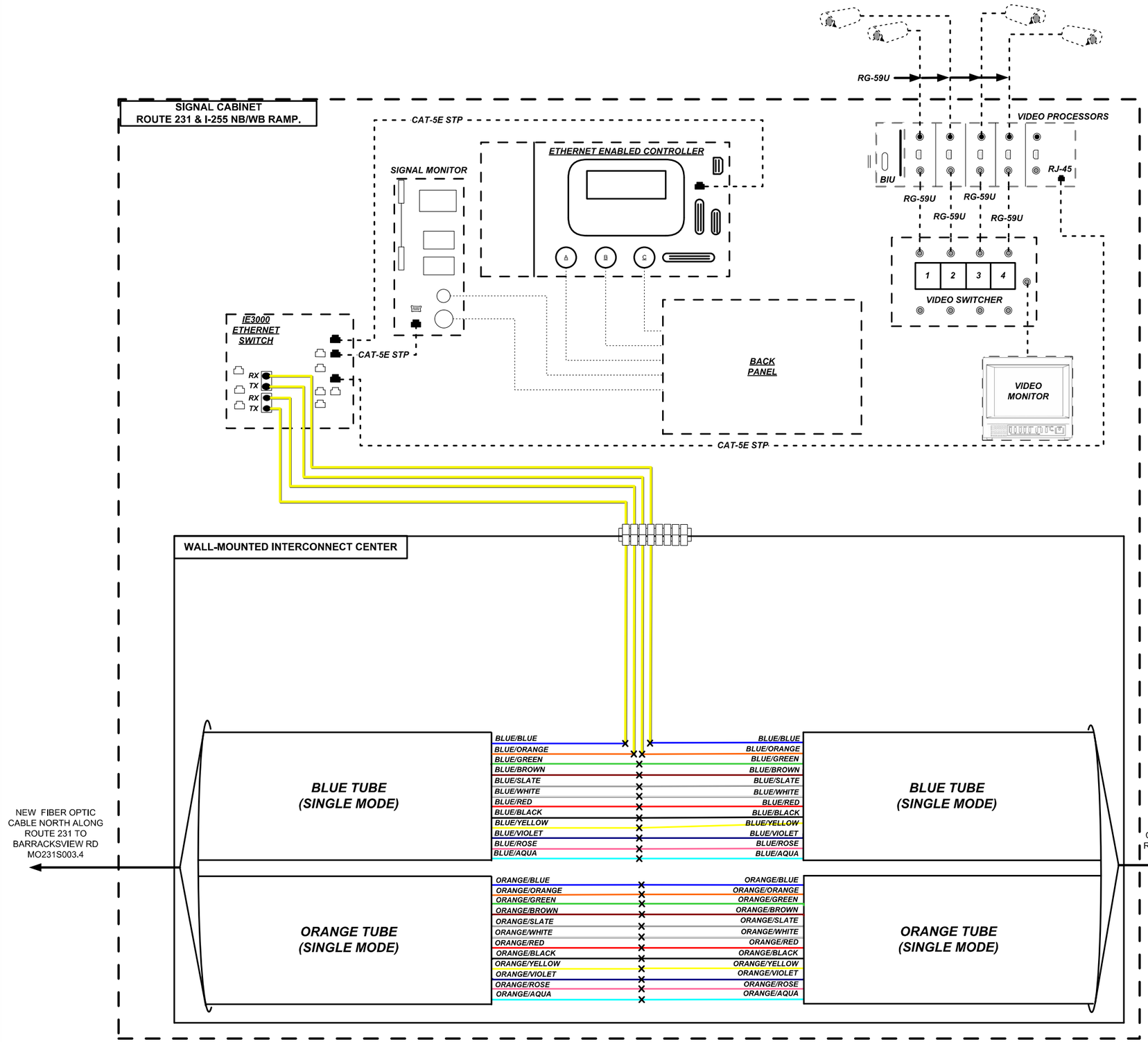
DESCRIPTION | DATE | REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN
VL130

FIBER SPLICING & BLOCK DIAGRAM

IS255W002.5Z
ROUTE 231 & I-255 NB/WB RAMP

SHEET 3 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	202

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

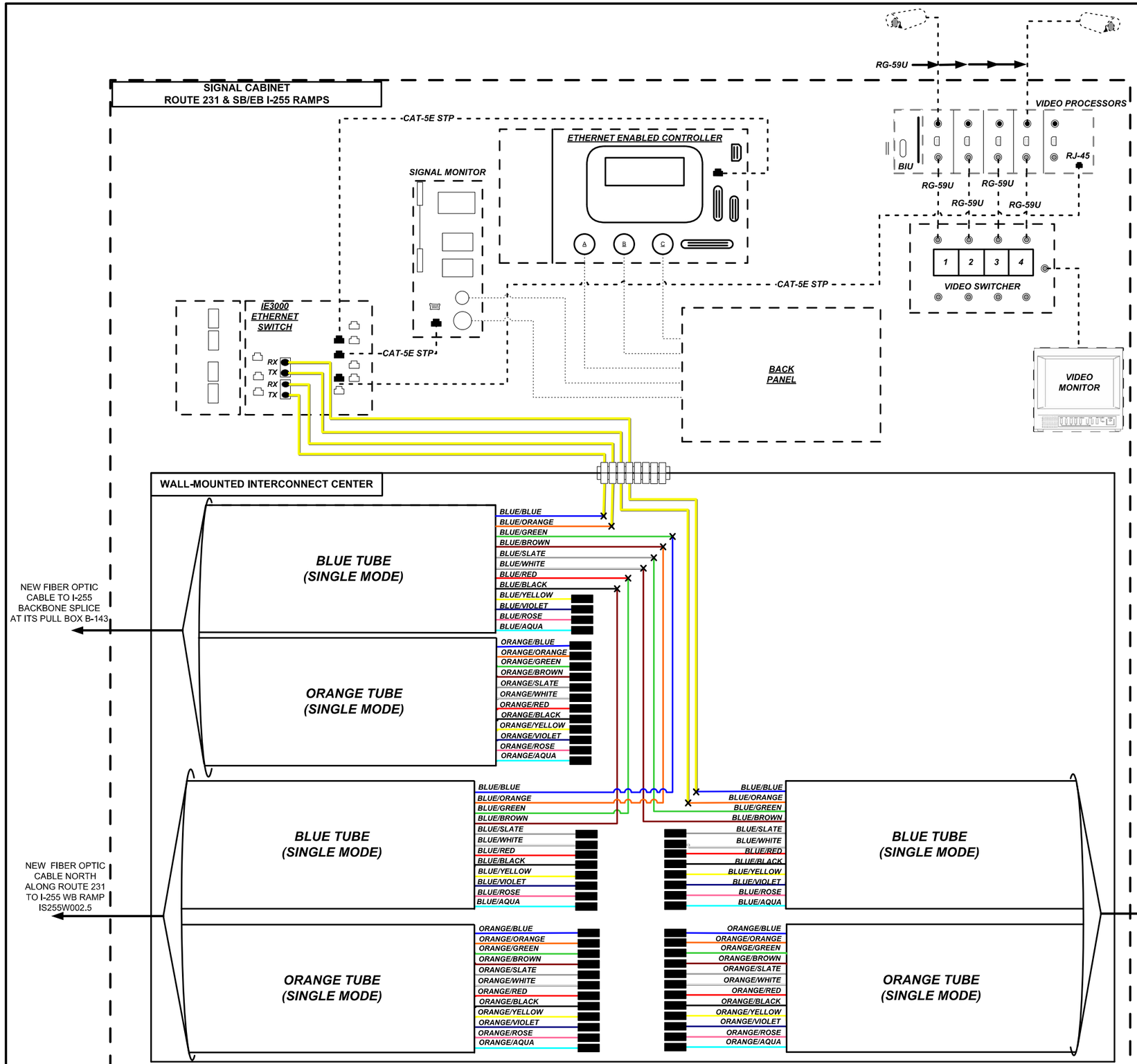
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION | DATE

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

IS255E002.5Z
ROUTE 231 & SB/EB I-255 RAMPS

SHEET 4 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	203

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

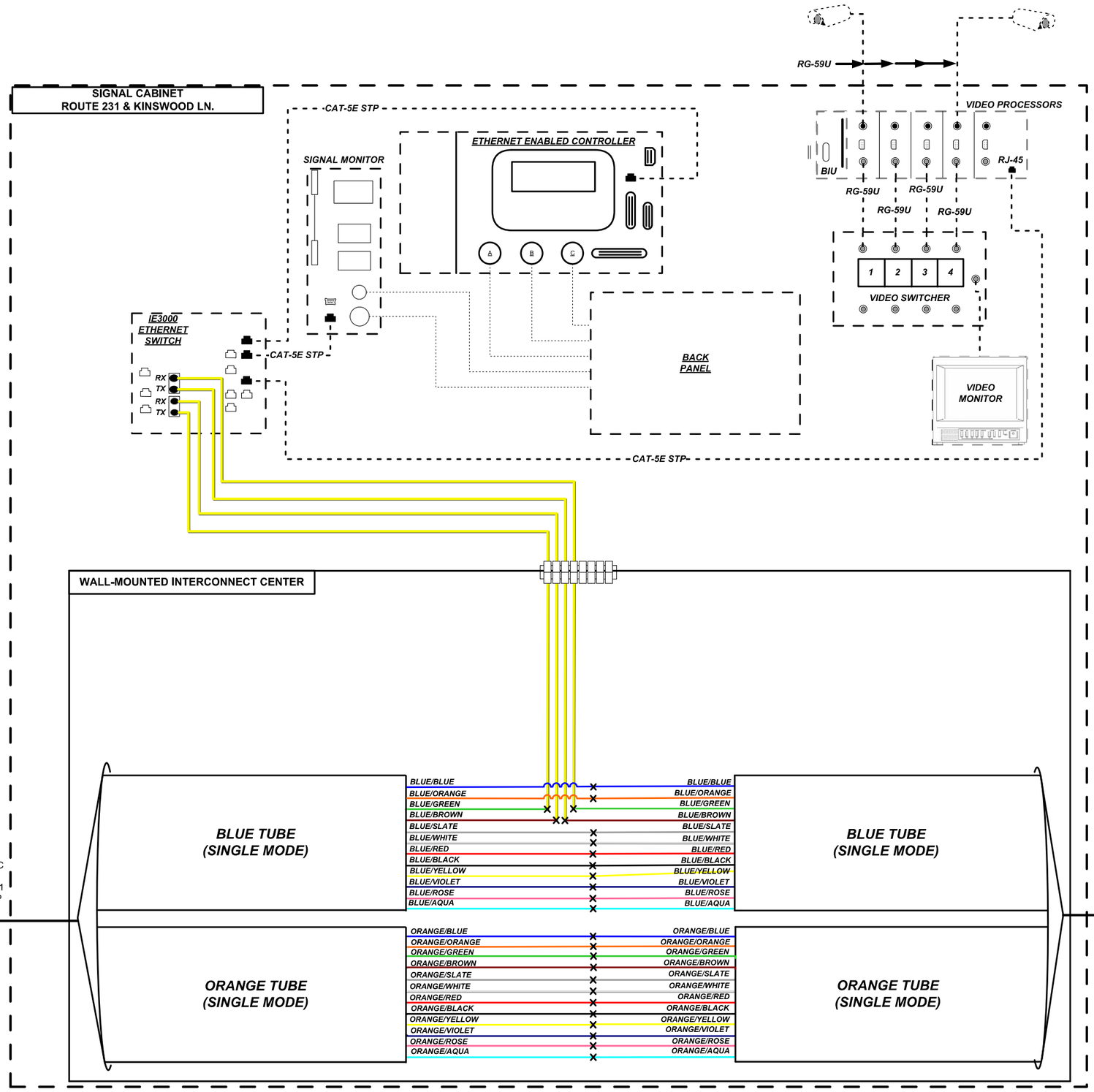
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231N003.8Z
ROUTE 231 & KINSWOOD LN.

SHEET 5 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	204

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

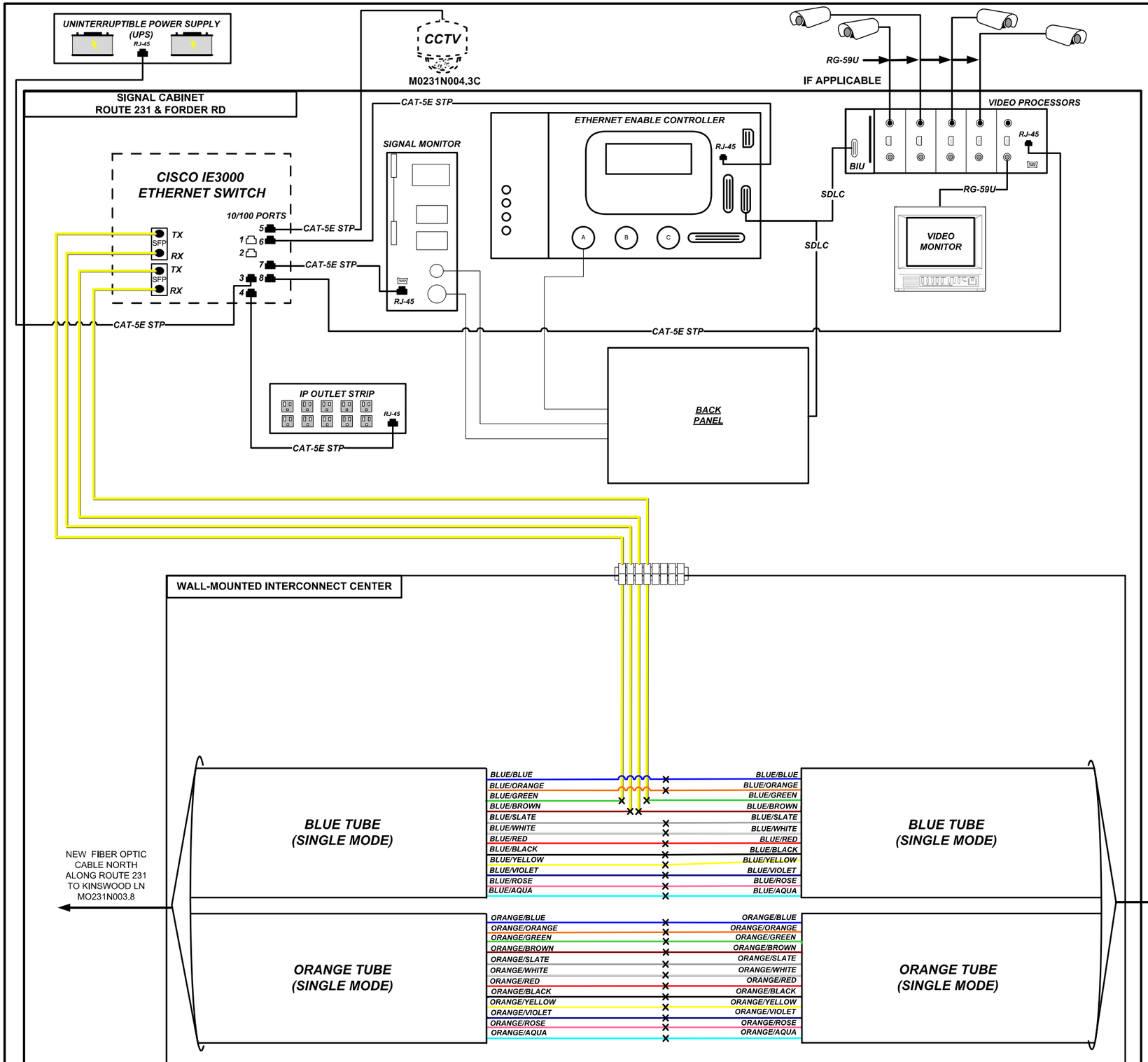
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S004.3Z
ROUTE 231 & FORDER RD.

SHEET 6 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 12/11/2024
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 205
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

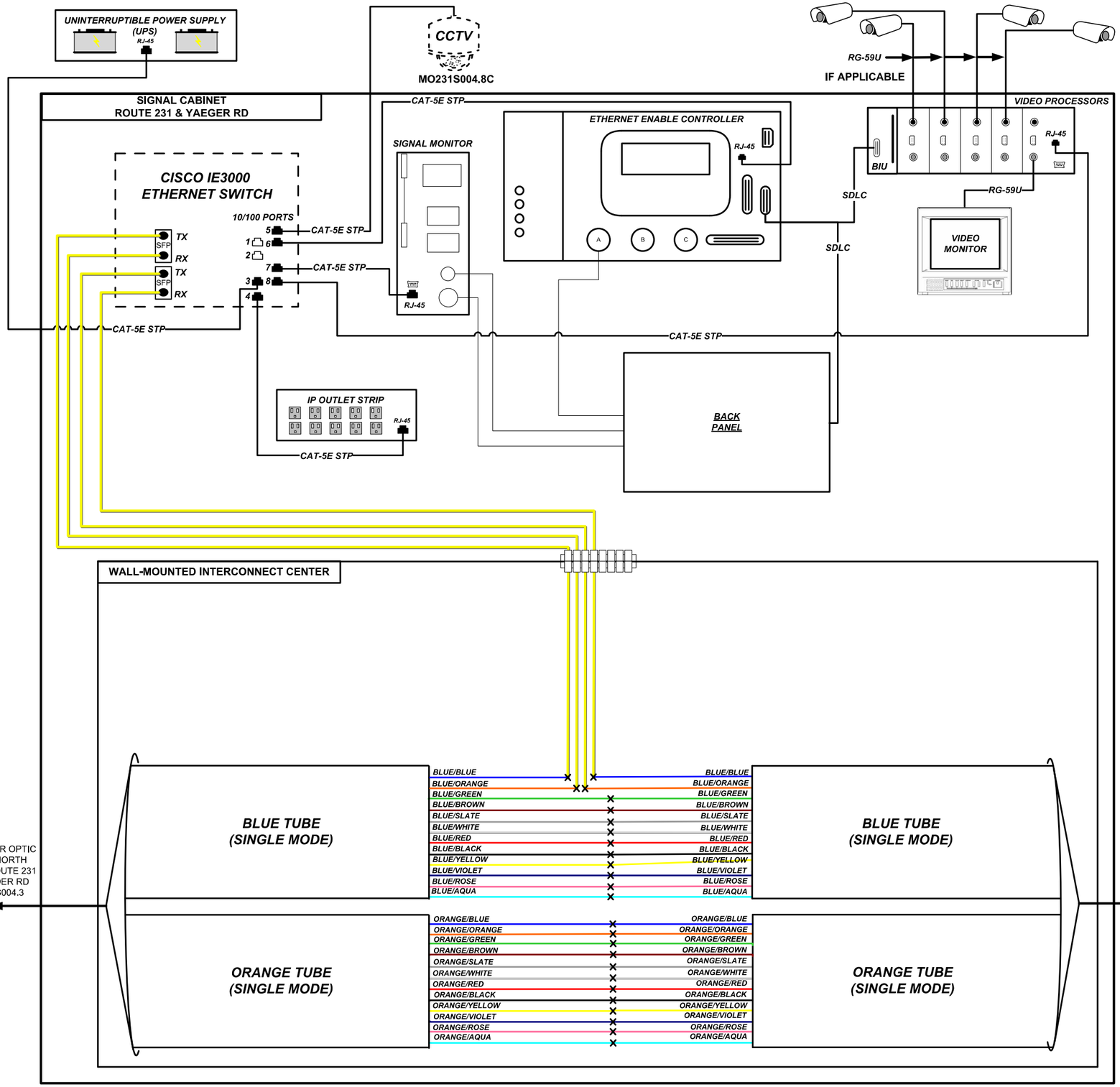
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

J6S2402_BlockSplice_v4.VSD 06/31/2012



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S004.8Z
ROUTE 231 & YAEGER RD./ CRESTLINE DR.

SHEET 7 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 206
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

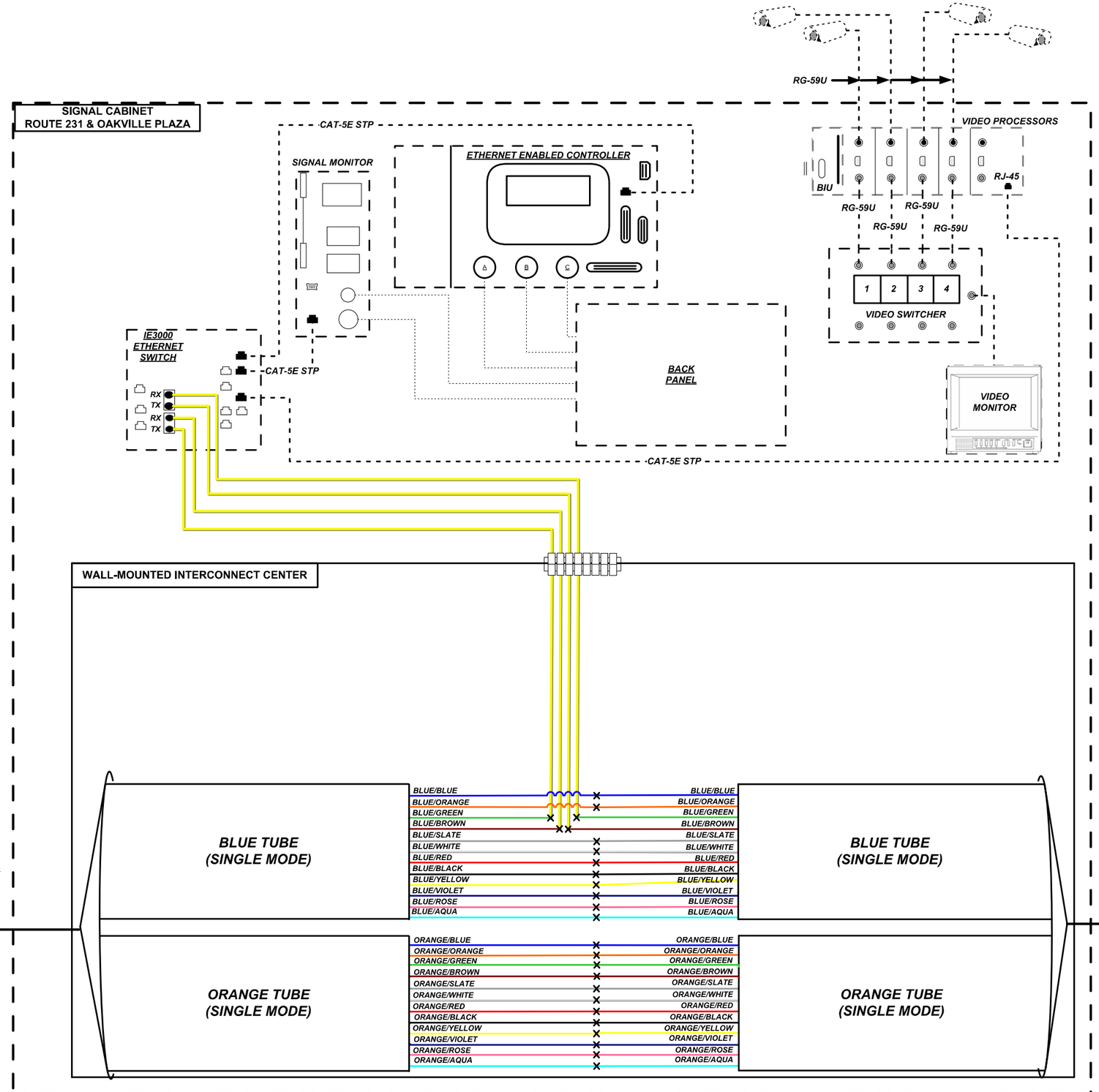
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S005.1Z
ROUTE 231 & OAKVILLE PLAZA

SHEET 8 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	207

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

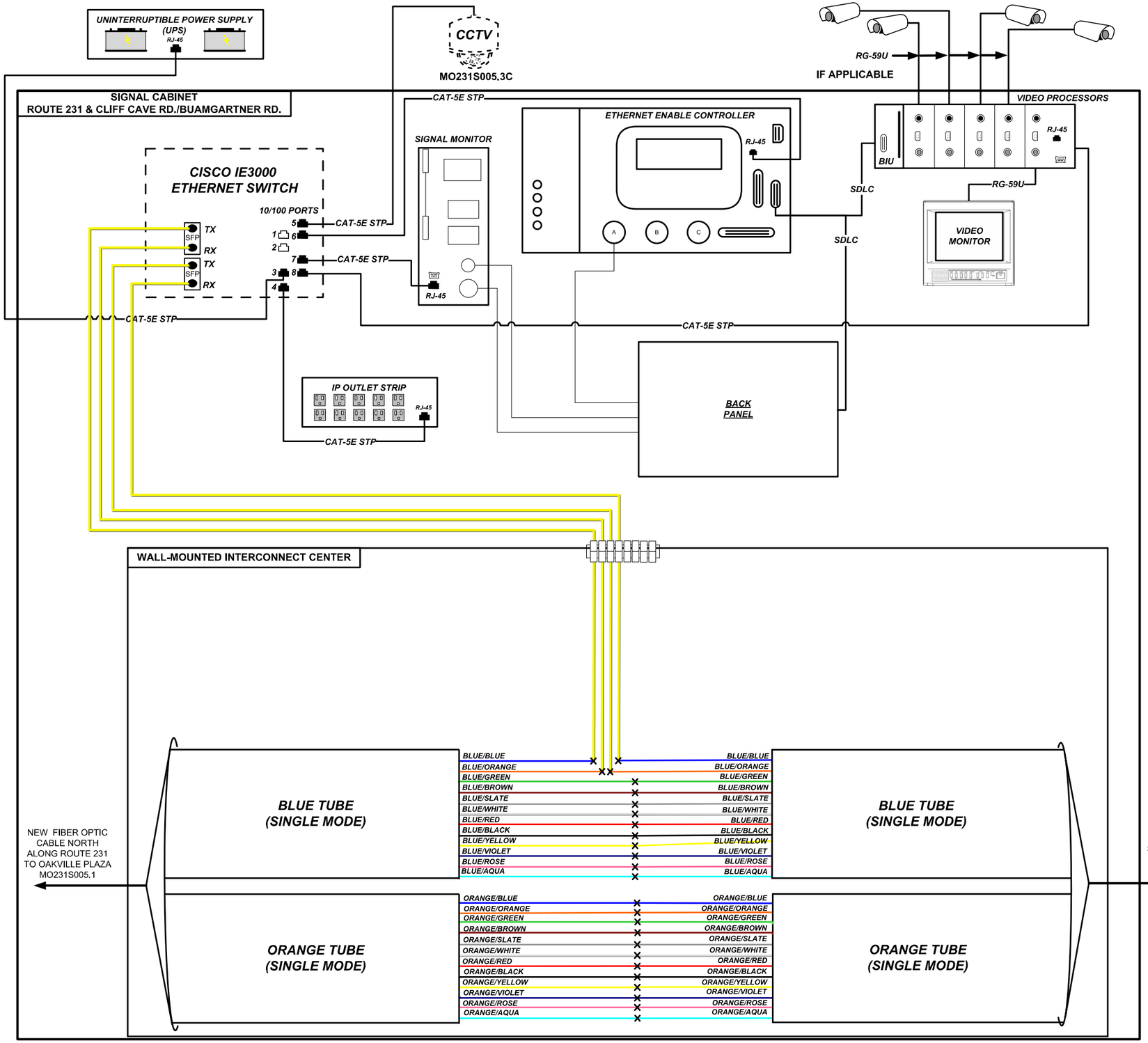
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DESCRIPTION | DATE | REV.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S005.3Z
ROUTE 231 & CLIFF CAVE RD./ BUAMGARTNER RD.

SHEET 9 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/19/2025
ROUTE: 231
STATE: MO
DISTRICT: SL
SHEET NO.: 208
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE | REV.

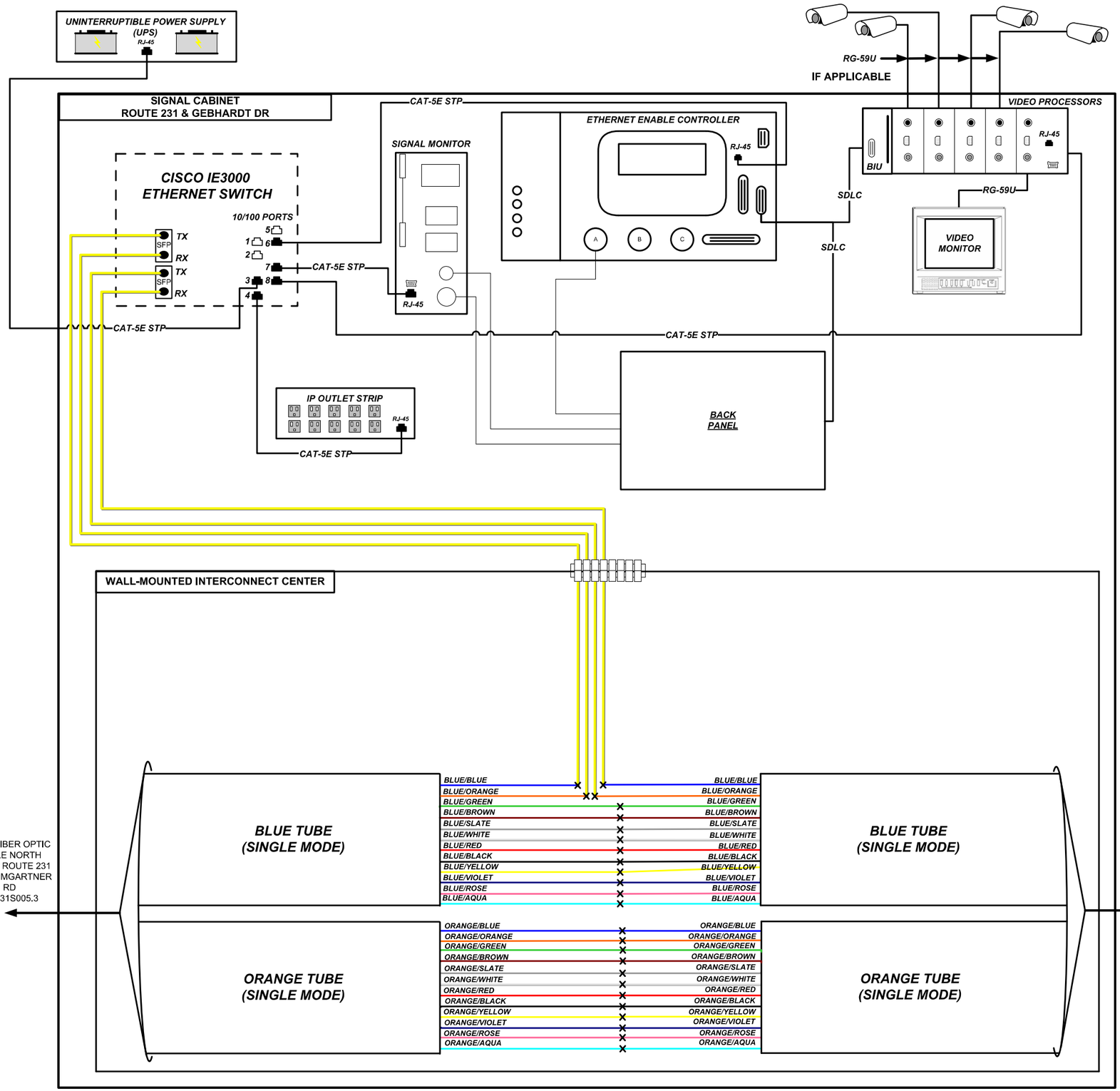
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd

1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S005.5Z
ROUTE 231 & GEBHARDT DR

SHEET 10 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

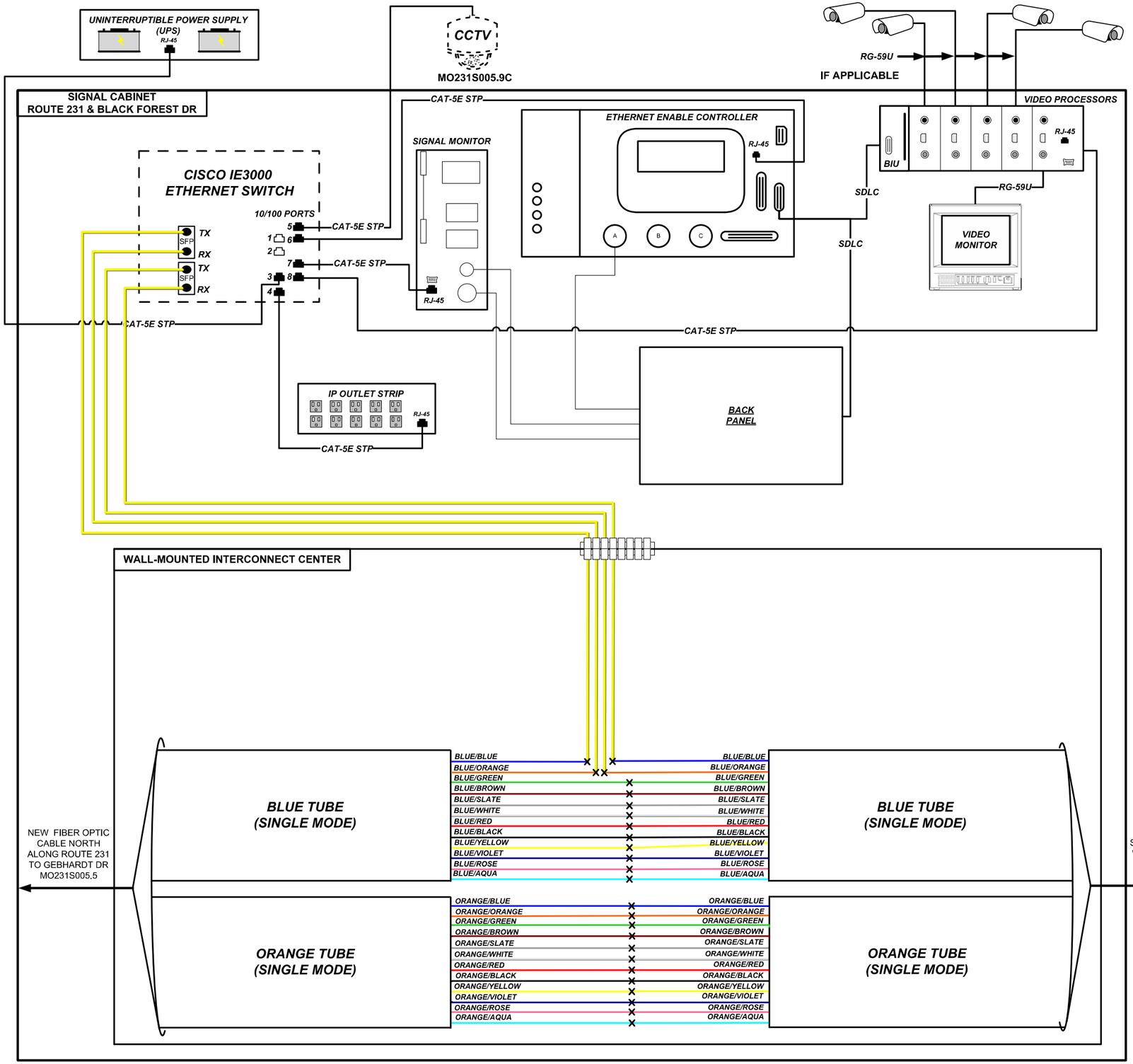
DATE PREPARED 1/19/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 209
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE | REV.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S005.9Z
ROUTE 231 & BLACK FOREST DR

SHEET 11 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

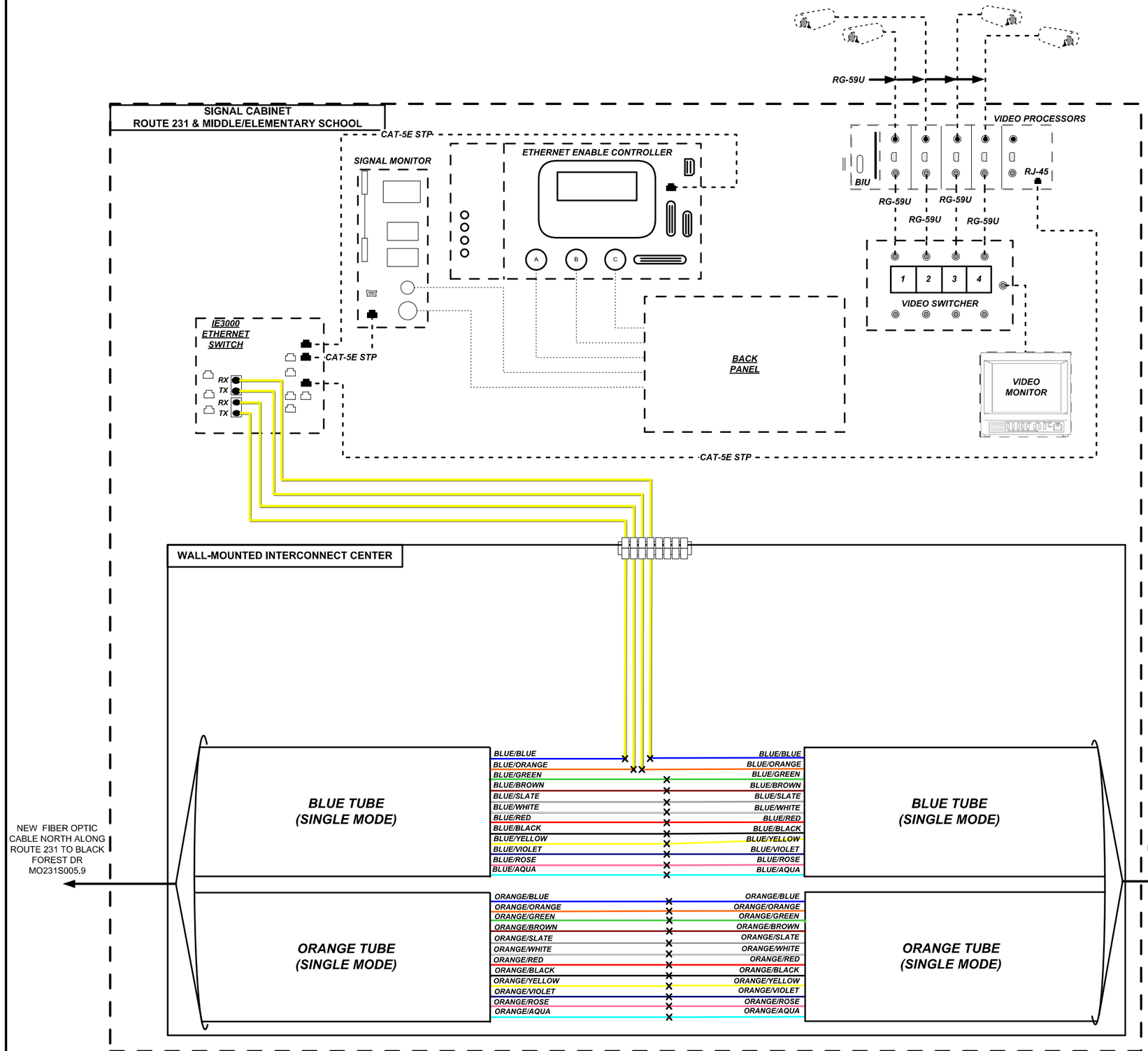
DATE PREPARED: 1/19/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 210
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL496

FIBER SPLICING & BLOCK DIAGRAM

MO231N006.0Z
ROUTE 231 & WOHL ELEMENTRY SCHOOL/ OAK MIDDLE SCHOOL

SHEET 12 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 211
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

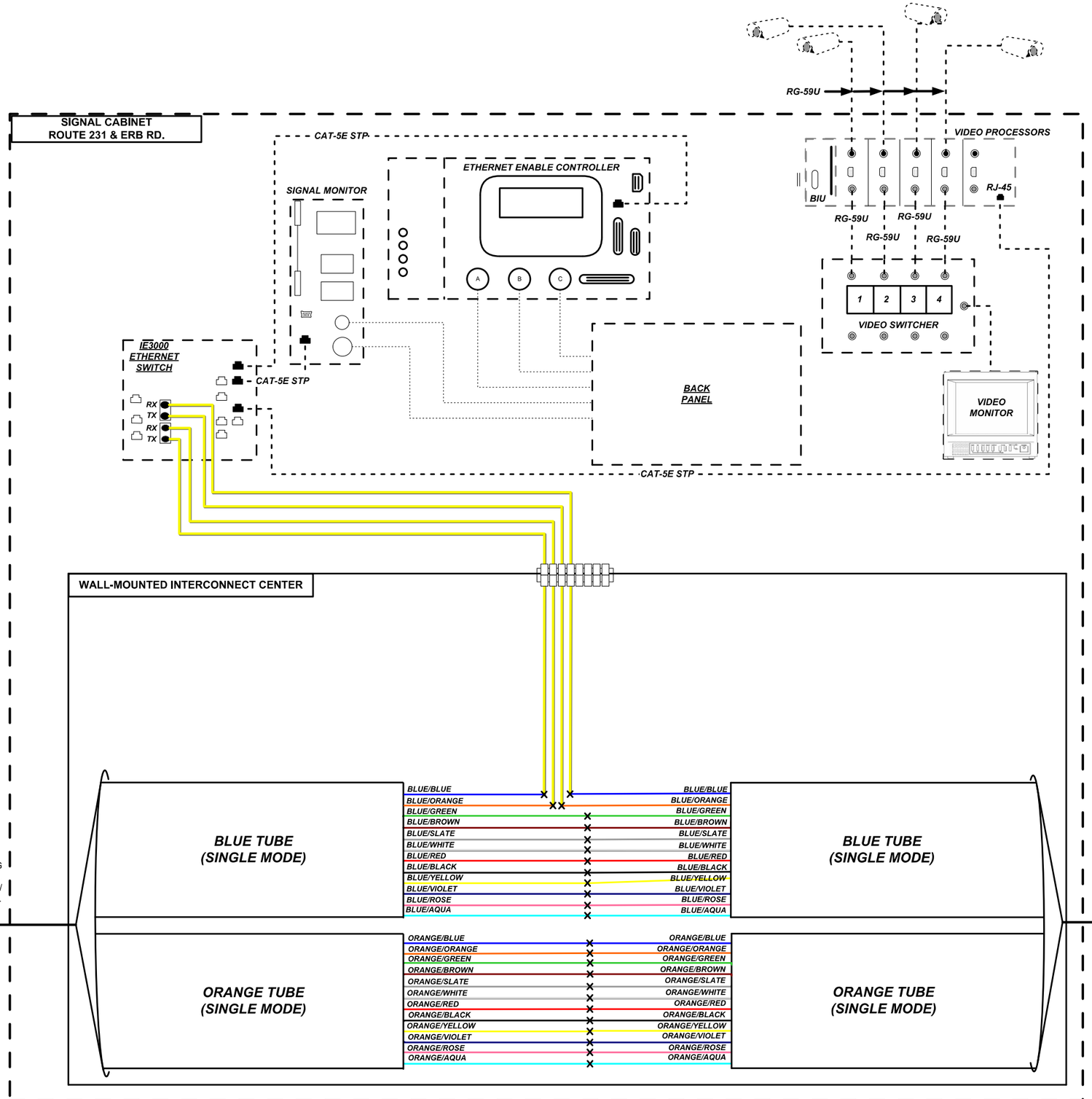
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd

1/19/2025

REV.



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN
VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231N006.4Z
ROUTE 231 & ERB RD.

SHEET 13 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025
ROUTE 231
STATE MO
DISTRICT SL
SHEET NO. 212
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION
DATE

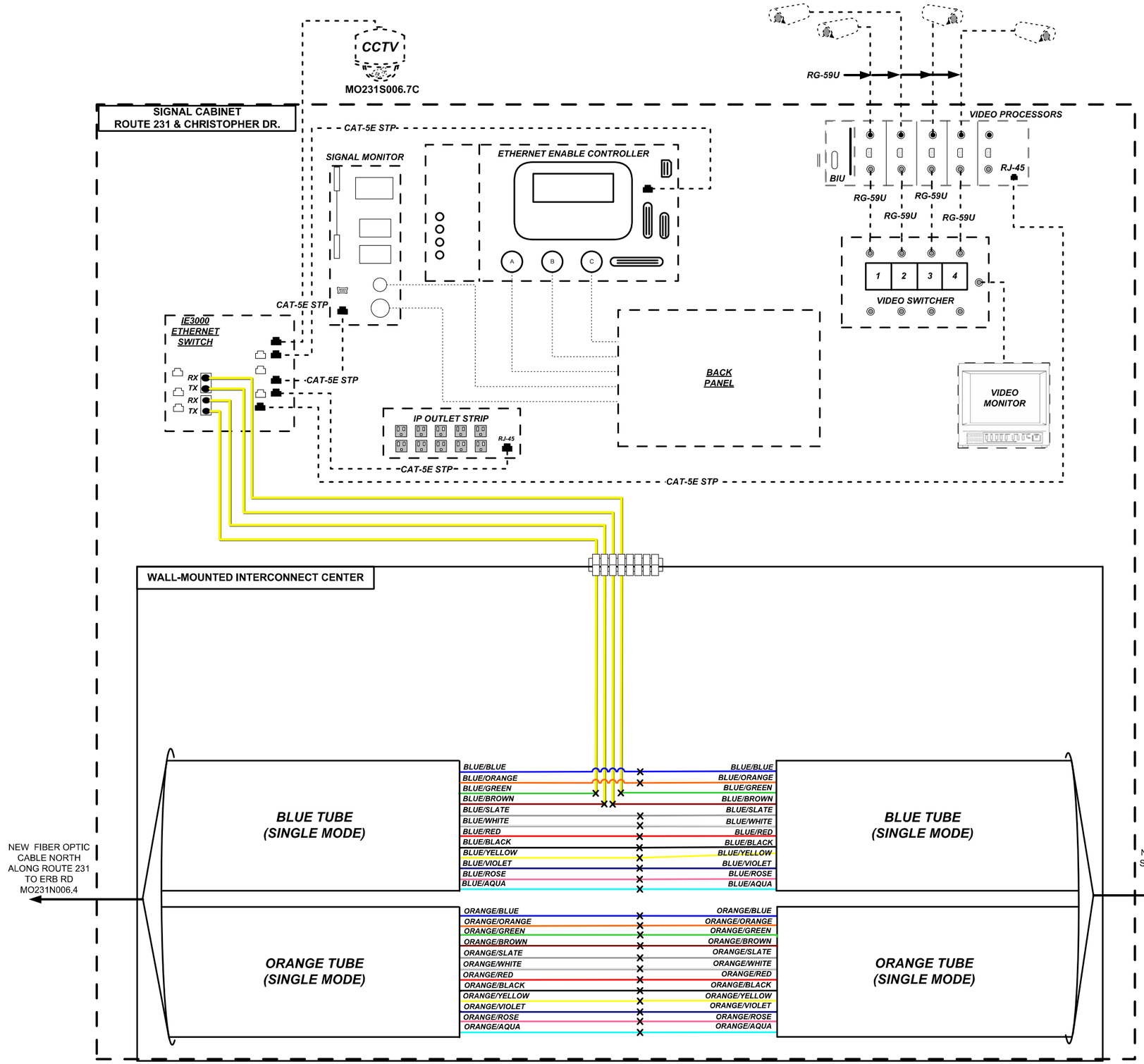
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S006.7Z
ROUTE 231 & CHRISTOPHER DR.

SHEET 14 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 213
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION
DATE

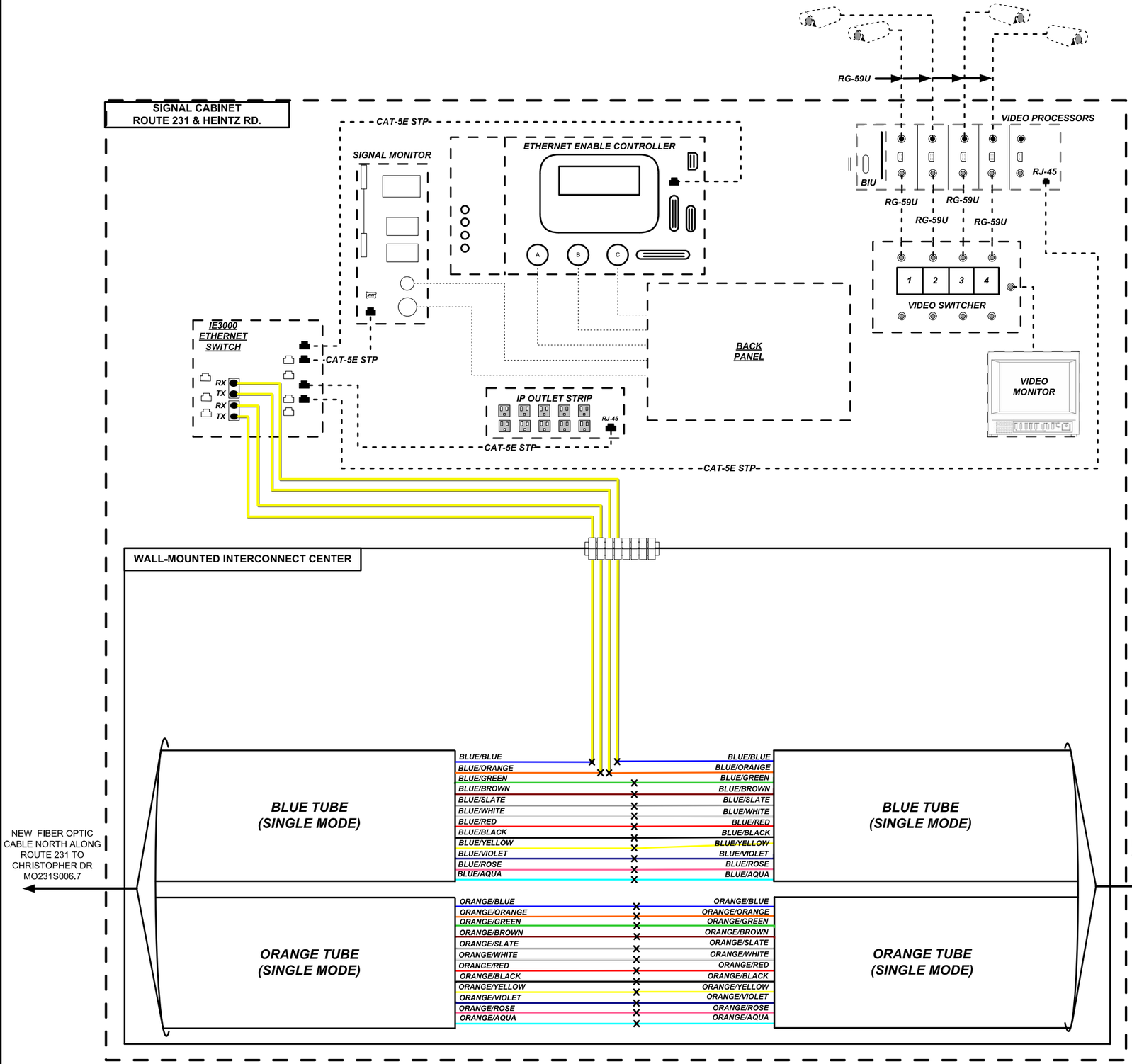
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
MoDOT
105 WEST CAPITOL
JEFFERSON CITY, MO 65101
1-888-ASK-MODOT (1-888-275-6636)

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S007.6Z
ROUTE 231 & HEINTZ RD.

SHEET 15 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025
ROUTE 231 | STATE MO
DISTRICT SL | SHEET NO. 214
COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

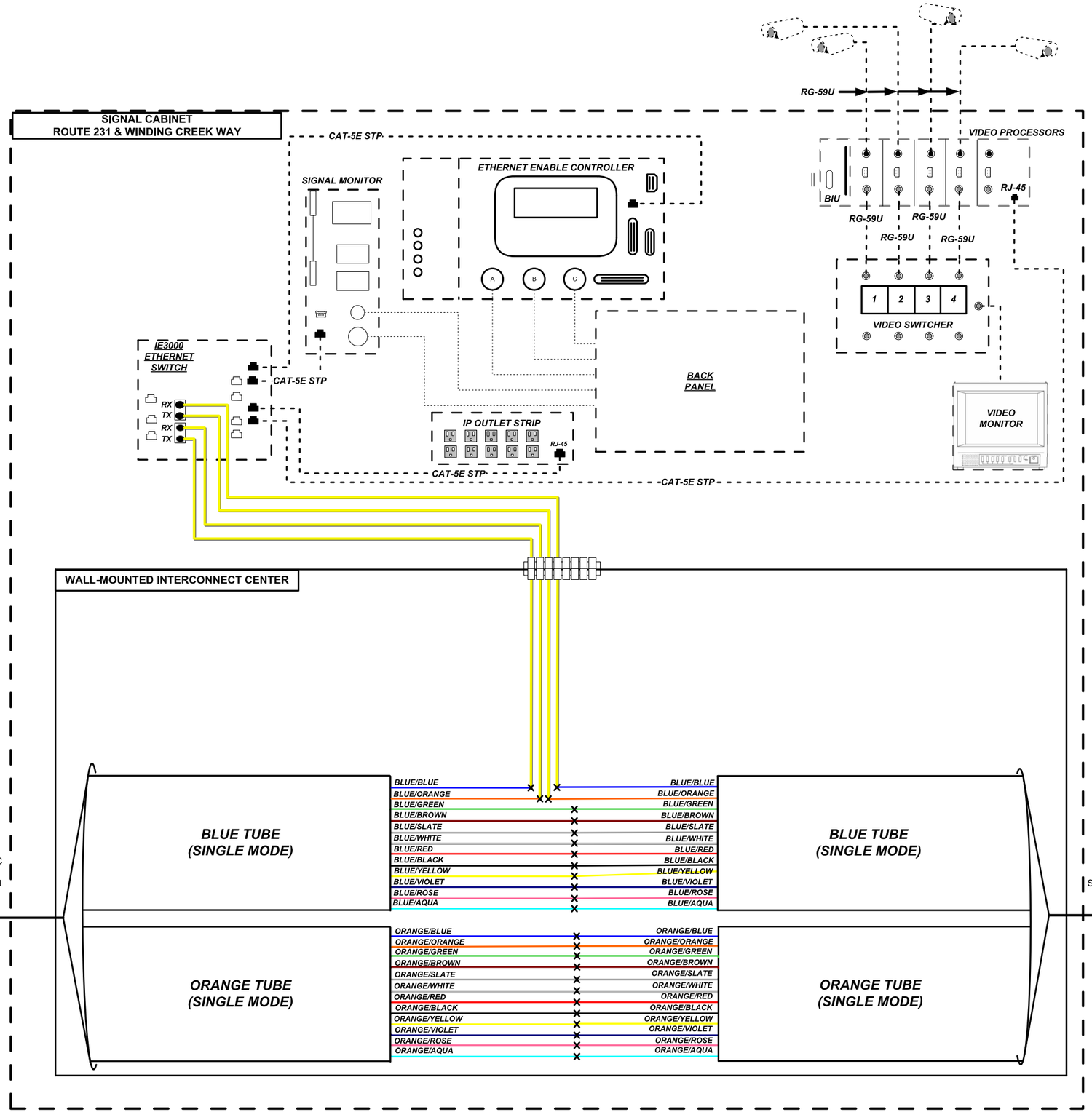
DESCRIPTION | DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
	SM PATCH THROUGH FIBER OPTIC JUMPER
	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231N007.8Z
ROUTE 231 & WINDING CREEK WAY

SHEET 16 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED 1/19/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	215

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

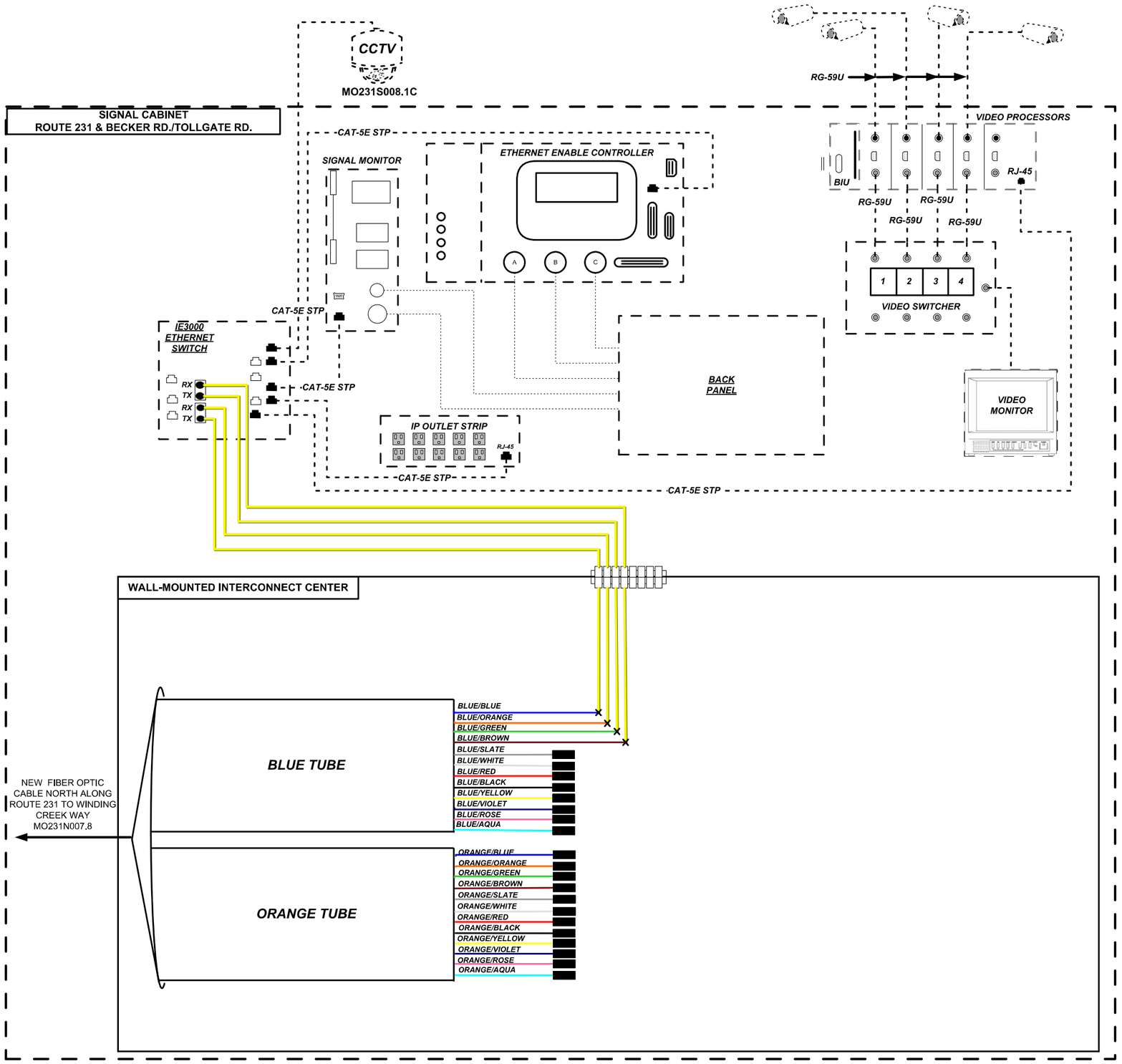
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

REV.	DESCRIPTION	DATE

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd 1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
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	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

VLAN VL130

FIBER SPLICING & BLOCK DIAGRAM

MO231S008.1Z
ROUTE 231 & BECKER RD./ TOLLGATE RD.

SHEET 17 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002030606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/19/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 216
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

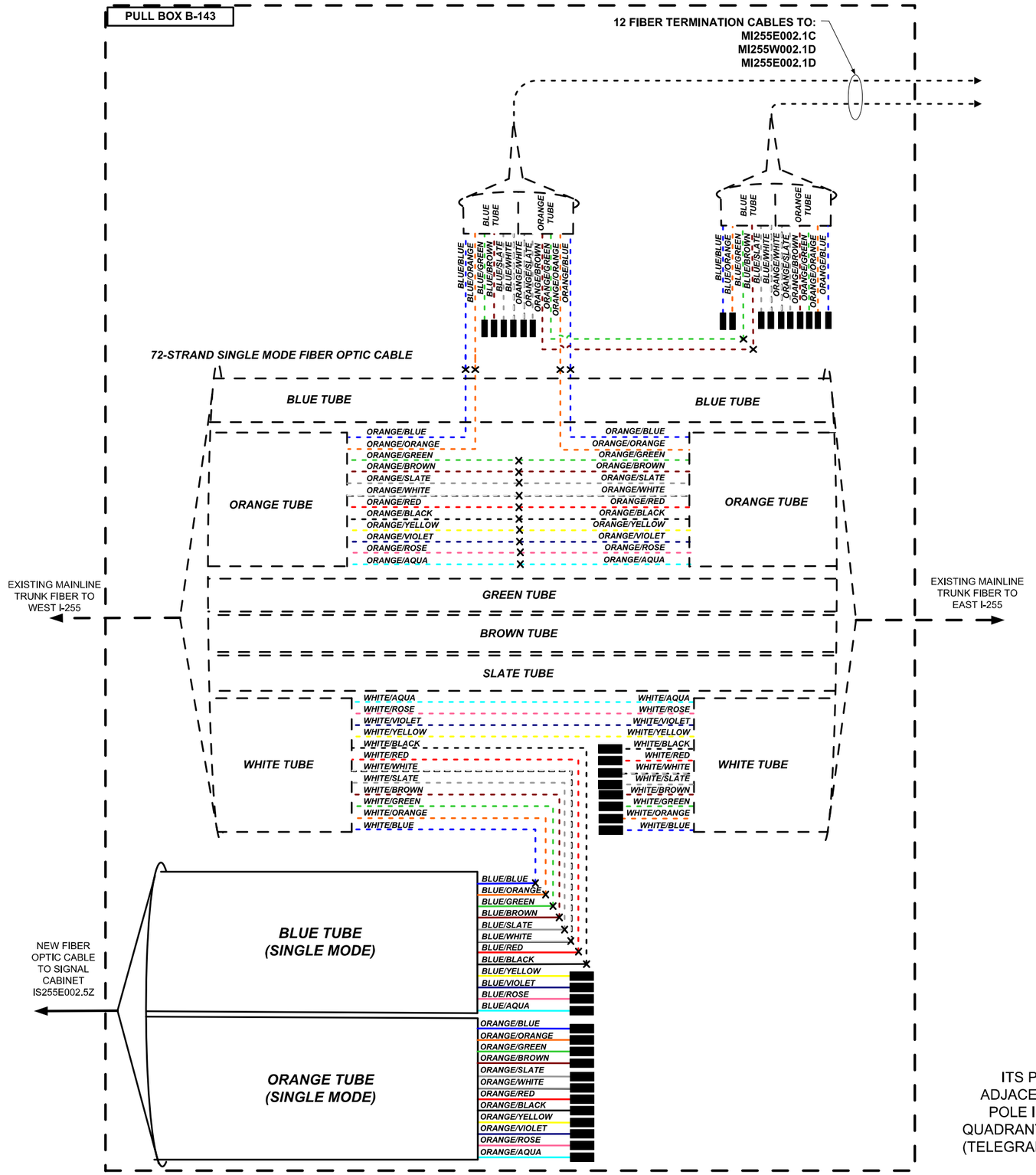
DESCRIPTION | DATE | REV.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd

1/19/2025



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
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	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
× ×	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

ITS PULL BOX B-143 IS ADJACENT TO THE CAMERA POLE IN THE SOUTHEAST QUADRANT OF THE I-255/U.S. 231 (TELEGRAPH RD.) INTERCHANGE

FIBER SPLICING & BLOCK DIAGRAM

PULL BOX B-143
NEAR CAMERA IS255E002.1C

SHEET 18 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002200606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/19/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 217
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

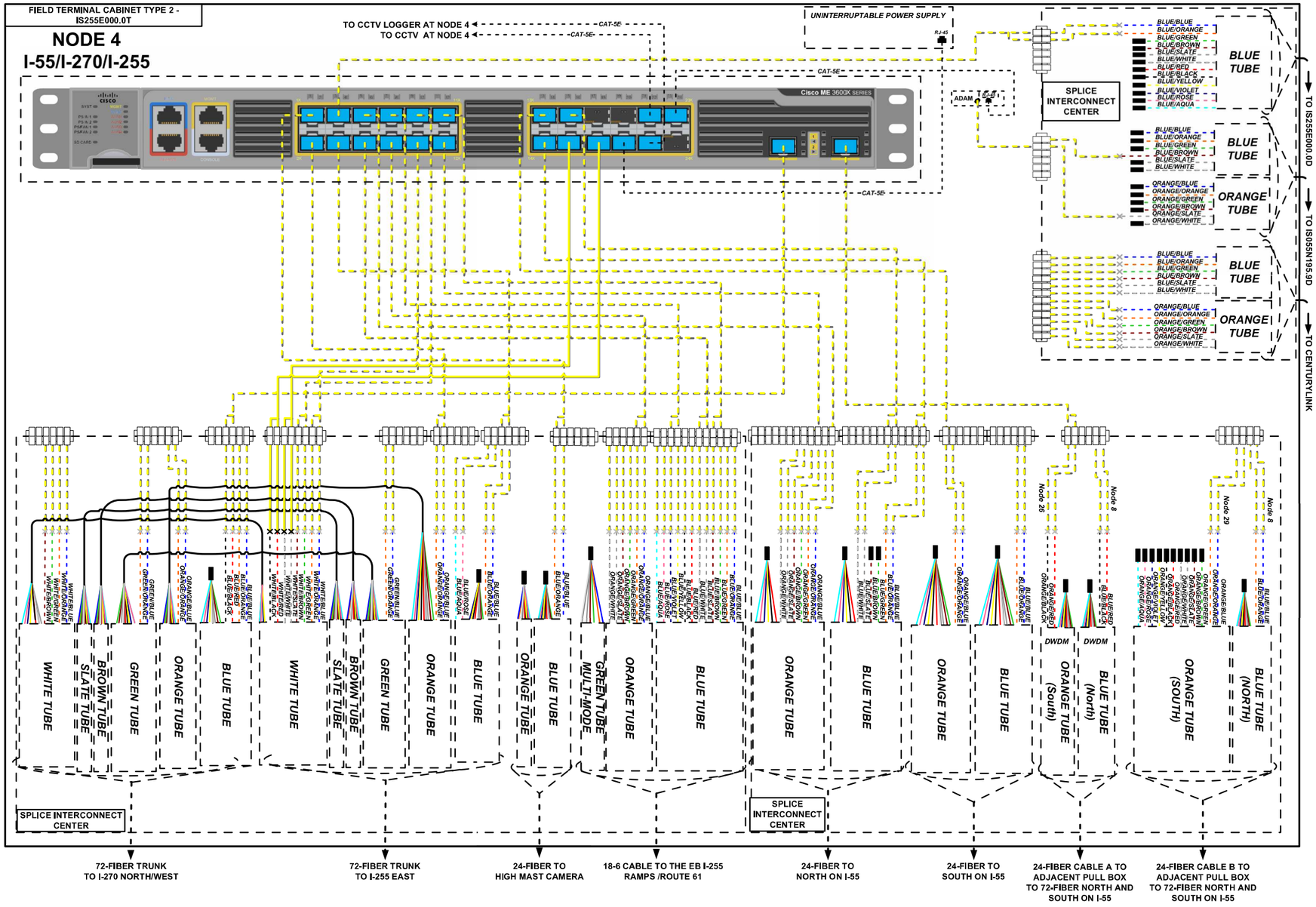
DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

J6S3632_BlockSplice_v2.vsd
1/19/2025
REV.



KEY

MI170N123.4C	DEVICE IDENTIFIER
CCTV	CCTV CAMERA
CCTV	EXISTING CCTV CAMERA
DMS	DYNAMIC MESSAGE SIGN
	RADAR DETECTION UNIT
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	SM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	SM FIBER OPTIC PIGTAIL
	MM PATCH THROUGH FIBER OPTIC JUMPER
	MM EQUIPMENT CONNECTION FIBER OPTIC JUMPER
	MM FIBER OPTIC PIGTAIL
	BARE FIBER LEFT COILED IN SPLICE TRAY
	EXISTING/PROPOSED FUSION SPLICE
	PATCH PANEL MODULE
	WIRELESS LINK
VDS AP	SENSYS DETECTION SYSTEM

1. MAXIMUM SPLICE LOSS SHALL BE 0.1 dB
2. NO INTERMEDIATE SPLICES ALLOWED
3. ALL SPLICES SHALL BE FUSION SPLICES
4. DASHED LINES INDICATE EXISTING EQUIPMENT OR CABLING.

NODE 4 IS LOCATED IN THE SOUTHEAST QUADRANT OF THE I-255/I-55 INTERCHANGE (LAT. 38.502949°, LON. -90.337980°)

FIBER SPLICING & BLOCK DIAGRAM

NODE 4
IS255E000.0T

SHEET 19 OF 19

STATE OF MISSOURI
CHARLES A. MILLER
NUMBER E-2002000606
REGISTERED PROFESSIONAL ENGINEER
5/28/2025

DATE PREPARED: 1/19/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 218
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

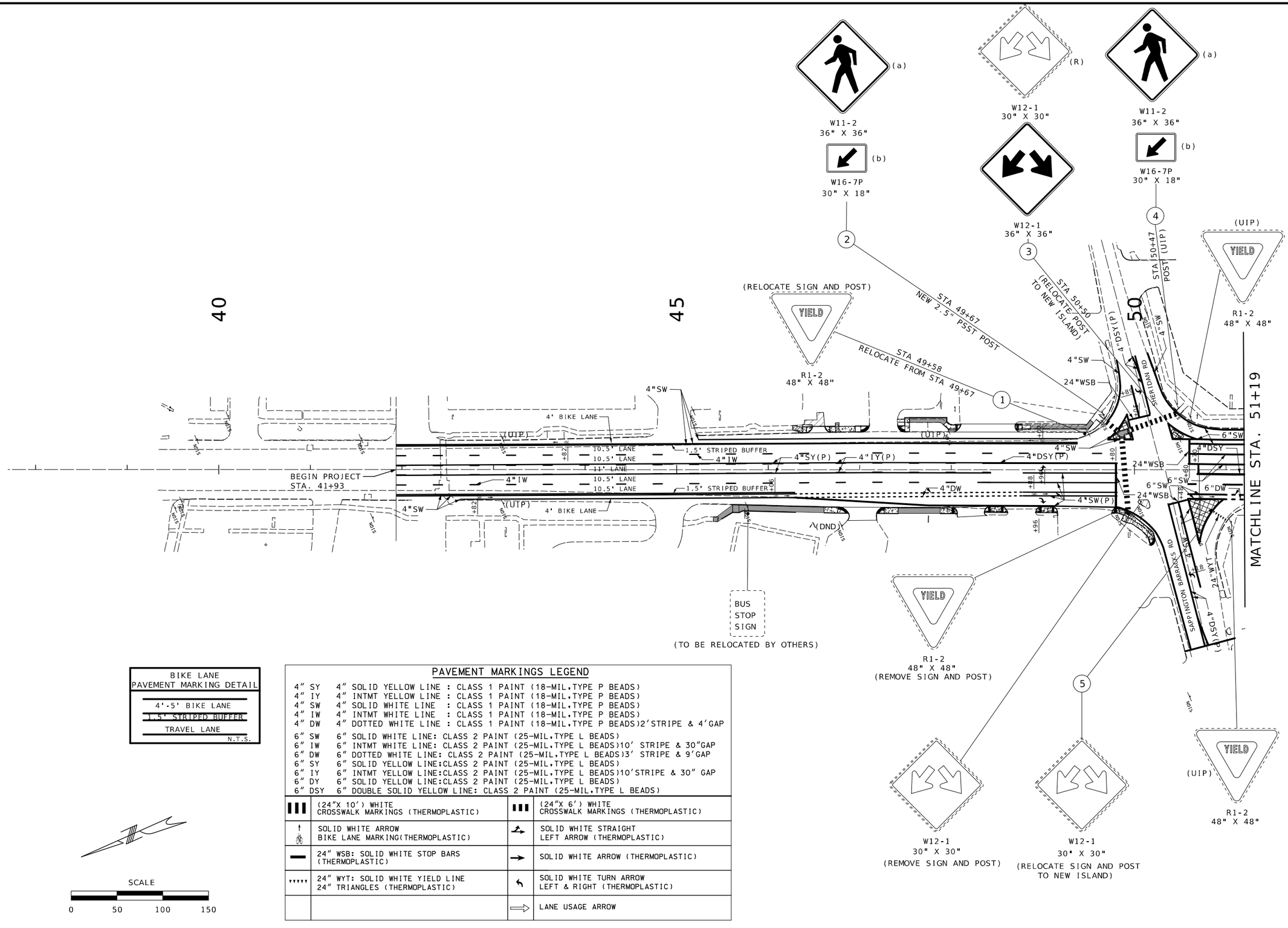
DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

HNTB
715 KIRK DRIVE
KANSAS CITY, MO 64105
(816) 472-1201

REV.



BIKE LANE
PAVEMENT MARKING DETAIL

4'-5' BIKE LANE
1.5' STRIPED BUFFER
TRAVEL LANE
N.T.S.

SCALE
0 50 100 150

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 4:09:44 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	219

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

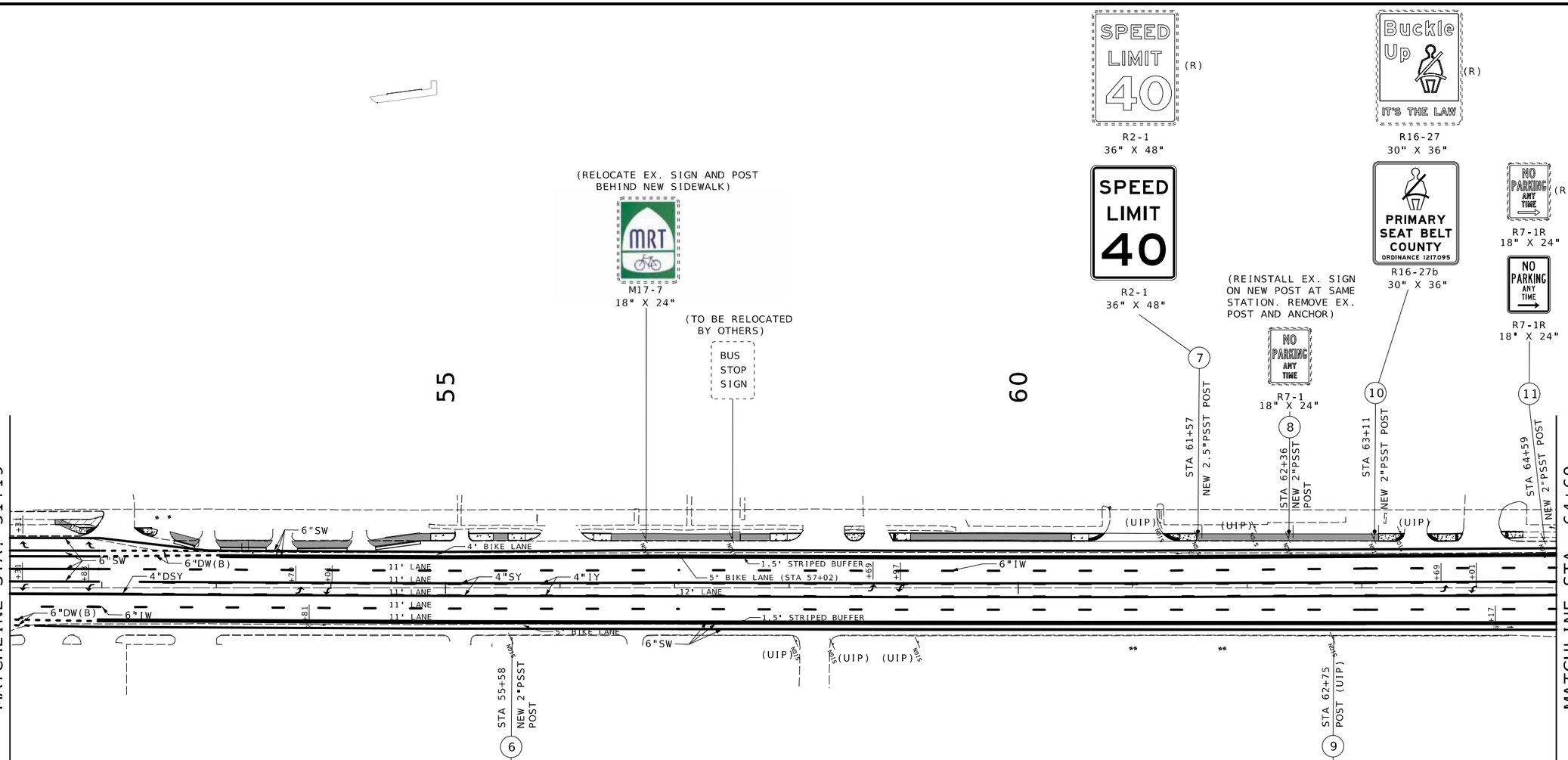
BRIDGE NO.

DESCRIPTION | DATE

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

PAVEMENT MARKING AND SIGNING SHEET

REV.



SCALE

0 50 100 150

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↗	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 4:09:53 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	220

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

REV.

(RELOCATE SIGN TO NEW POST)

CENTER LANE ONLY

R3-9b
24" X 36"

NO PARKING ANY TIME

R7-1L
18" X 24"

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)

(RELOCATE SIGN FROM STA 2+16)

YIELD

R1-2
48" X 48"

(a)

(b)

W11-2
36" X 36"

W16-7P
30" X 18"

(R)

YIELD

R1-2
48" X 48"

(a)

W11-2
36" X 36"

(b)

W16-7P
30" X 18"

TURNING VEHICLES

TO

R10-15R
30" X 30"

RIGHT LANE MUST TURN RIGHT

R3-7R
36" X 36"

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)

YIELD

R1-2
48" X 48"

(a)

W11-2
36" X 36"

(b)

W16-7P
30" X 18"

WEST
INTERSTATE 255
50
Memphis

E1-1
96" X 96"

MATCHLINE STA. 64+69

MATCHLINE STA. 10+90

65

0

5

10

12 STA 65+96 NEW 2"PSST POST

14 STA 1+05 NEW 2"PSST POST

15 STA 1+76 NEW 2"PSST POST

16 STA 2+16 POST(UIP)

17 STA 3+52 NEW 2.5"PSST POST

18 STA 3+81 NEW 2"PSST POST

22 STA 6+45 NEW 2"PSST POST

23 STA 6+74 RELOCATE POST FROM STA 6+64

24 STA 9+89 POST(UIP)

13 STA 0+11 POST(UIP)

19 STA 3+82 POST(UIP)

20 STA 4+23 NEW 2.5"PSST POST

21 STA 4+23 POST(UIP)

REMOVE POST

RELOCATE BEHIND SIDEWALK

BARRACKSVIEW RD

I-255 WB OFF-RAMP

I-255 WB ON-RAMP

24"SW HATCH BARS (45° WITH 50' SPACING) THERMOPLASTIC

24"SW CHEVRONS (50' SPACING) THERMOPLASTIC

24"SY HATCH BARS (45° WITH 50' SPACING) THERMOPLASTIC

12"SW GORE LINES

1.5' STRIPED BUFFER

12' LANE

12' BIKE LANE

6"SW THERMOPLASTIC

6"SW (THERMOPLASTIC)

6"IW

6"SY

4"SY

4"IY

4"DSY

4"DY

6"DW

6"DW(B)

6"SW(B)

24"WSB

(UIP)

(DND)

M2-1
21" X 15"

JCT

M2-1 Blue
21" X 15"

(R)

(a)

M1-1
30" X 24"

INTERSTATE 255

M1-1
30" X 24"

(b)

M1-4
24" X 24"

50

M1-4
24" X 24"

(c)

SCALE

0 50 100 150

96" X 48"

Chicago
Memphis

E1-1

M3-2
24" X 12"

EAST

M3-2 Blue
24" X 12"

(a)

M3-4 Blue
24" X 12"

WEST

(e)

(b)

(f)

M1-1
30" X 24"

(c)

(g)

M1-4
24" X 24"

M6-3
21" X 15"

(d)

M6-3 Blue
21" X 15"

(h)

M6-2R Blue
21" X 15"

INTERSTATE 255 50 WEST
Memphis

E1-1
132" X 60"

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 4:10:03 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	221

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

REV.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

PAVEMENT MARKING AND SIGNING SHEET

FACING NB 231

231 NORTH
Telegraph Rd
ONLY

E1-1 180" X 84"

25D

FACING NB 231

INTERSTATE 255 50 WEST
Memphis
ONLY

E1-1 NB 180" X 84"

25C

STA 11+59 POST(UIP)

MATCHLINE STA. 10+90

132" X 84"

INTERSTATE 255 50 EAST
Chicago
ONLY

E1-1
FACING SB 231

25A

180" X 84"

231 SOUTH
Telegraph Rd
ONLY

E1-1
FACING SB 231

SCALE
0 50 100 150

Memphis
Chicago

E1-1
84" X 48"

INTERSTATE 255 50 EAST
Chicago

E1-1
132" X 60"

INTERSTATE 255 50 WEST
ONLY

E1-1
180" X 60"

26

STA 16+20 POST(UIP)

STA 22+19 POST(UIP)

(R) WEST M3-4 24" X 12"
WEST (a) M3-4 Blue 24" X 12"
(e) EAST M3-2 Blue 24" X 12"
EAST (R) M3-2 24" X 12"

(R) INTERSTATE 255 M1-1 30" X 24"
255 (b) M1-1 30" X 24"
(f) 255 M1-1 30" X 24"
INTERSTATE 255 (R) M1-1 30" X 24"

(R) 50 M1-4 24" X 24"
50 (c) (g) 50 M1-4 24" X 24"
50 (R) M1-4 24" X 24"

(R) M6-3 21" X 15"
(d) M6-3 Blue 21" X 15"
(h) M6-2R Blue 21" X 15"
(R) M6-2R 21" X 15"

15

20

MATCHLINE STA. 24+40

I-255 EB ON-RAMP

I-255 EB OFF-RAMP

K'NSWOOD LN

10' SHARED USE PATH

12' LANE
BIKE LANE

6"SY
6"SW
6"IW
6"DW
6"DY
4"DSY
4"WSB
24"WSB
24"WYT
6"SW (THERMOPLASTIC)
24"SY PATCH BARS (45° WITH 50' SPACING) THERMOPLASTIC
4"SY
(DND)
(UIP)

STA 16+46 NEW 2"PSST POST
STA 16+36 RELOCATE SIGN REMOVE POST
STA 17+79 POST(UIP)
STA 19+09 NEW 2"PSST POST
STA 19+22 NEW 2.5"PSST POST
STA 19+48 NEW 2"PSST POST
STA 20+00 NEW 2"PSST POST
STA 21+33 POST(UIP)
STA 21+56 2"PSST POSTS
STA 22+19 NEW 2.5"PSST POST
STA 22+80 POST(UIP)
STA 24+09 NEW 2"PSST POST

25B
27
28
29
30
31
32
33
34
35
36
37
38

W4-3R
36" X 36"
RELOCATE SIGN FROM STA 17+36

E1-1
EAST
INTERSTATE 255 50
Chicago

YIELD
R1-2
48" X 48"

SIGN NOT IN USE

W11-15
36" X 36"
(a)
W16-7P
30" X 18"
(b)

R1-2
48" X 48"
(RELOCATE FROM 19+33)

M17-7
18" X 24"
(REINSTALL EX. SIGN ON NEW POST AT SAME STATION, BEHIND NEW SIDEWALK. REMOVE EX. POST AND ANCHOR)

HEROES WAY
SPC James F Costello III Army
72" X 36"
RELOCATE SIGN TO NEW POSTS

W11-2
36" X 36"
(a)
W16-7P
30" X 18"
(b)

R1-2
48" X 48"
(R)

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↗	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 4:10:13 PM
STUART ROBINSON McNEIL CIVIL MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	222

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↑	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
—	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

JCT (a) — M2-1 Blue, 21" X 15"

JCT (R) — M2-1, 21" X 15"

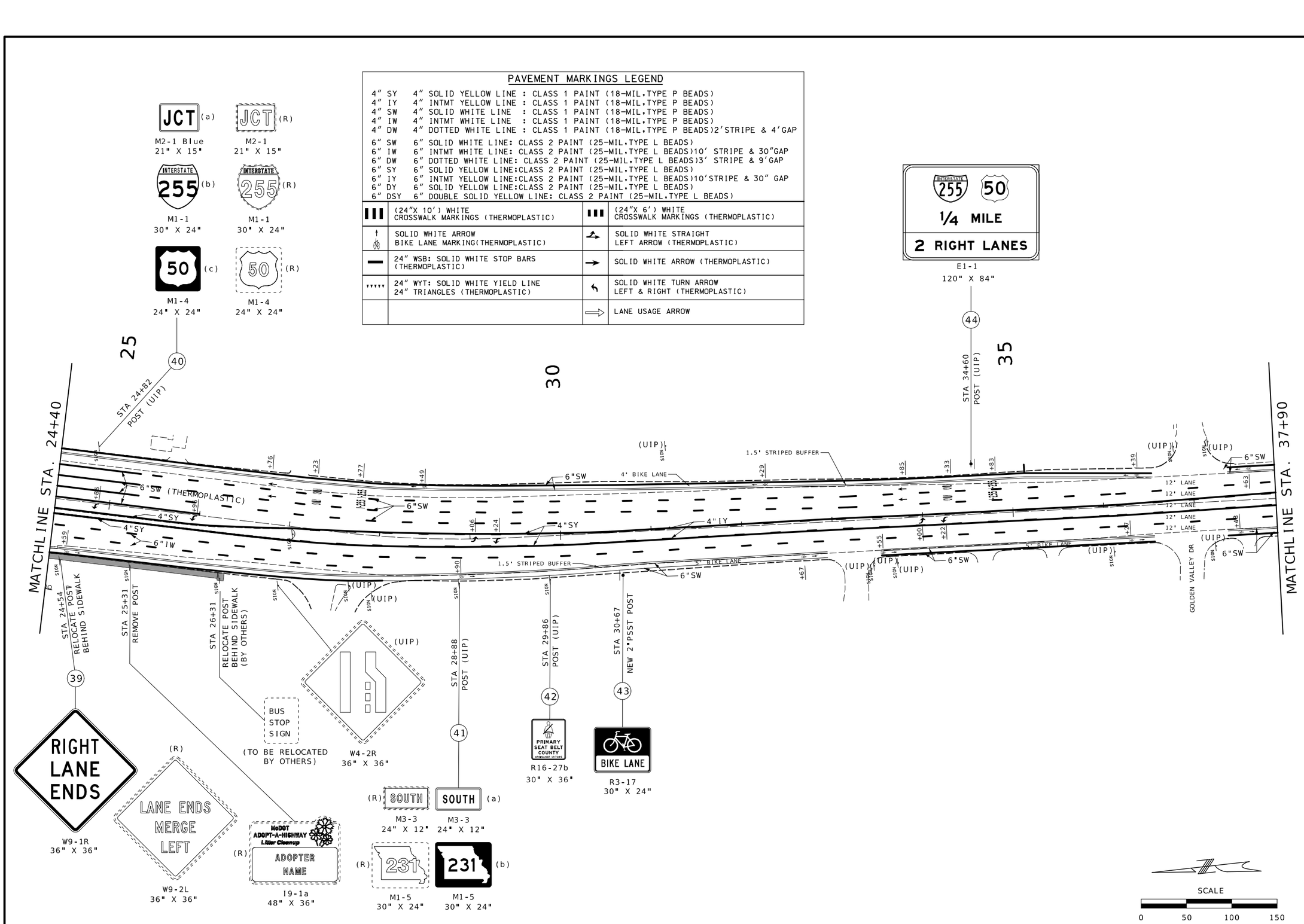
INTERSTATE 255 (b) — M1-1, 30" X 24"

INTERSTATE 255 (R) — M1-1, 30" X 24"

50 (c) — M1-4, 24" X 24"

50 (R) — M1-4, 24" X 24"

INTERSTATE 255 / 50
1/4 MILE
2 RIGHT LANES
E1-1, 120" X 84"



RIGHT LANE ENDS — W9-1R, 36" X 36"

LANE ENDS MERGE LEFT — W9-2L, 36" X 36"

BUS STOP SIGN (TO BE RELOCATED BY OTHERS)

W4-2R, 36" X 36"

MoDOT ADOPT-A-HIGHWAY Litter Cleanup — ADOPTER NAME — I9-1a, 48" X 36"

(R) SOUTH — M3-3, 24" X 12"

SOUTH (a) — M3-3, 24" X 12"

(R) 231 — M1-5, 30" X 24"

231 (b) — M1-5, 30" X 24"

PRIMARY SEAT BELT COUNTY — R16-27b, 30" X 36"

BIKE LANE — R3-17, 30" X 24"

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 4:10:50 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	223

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

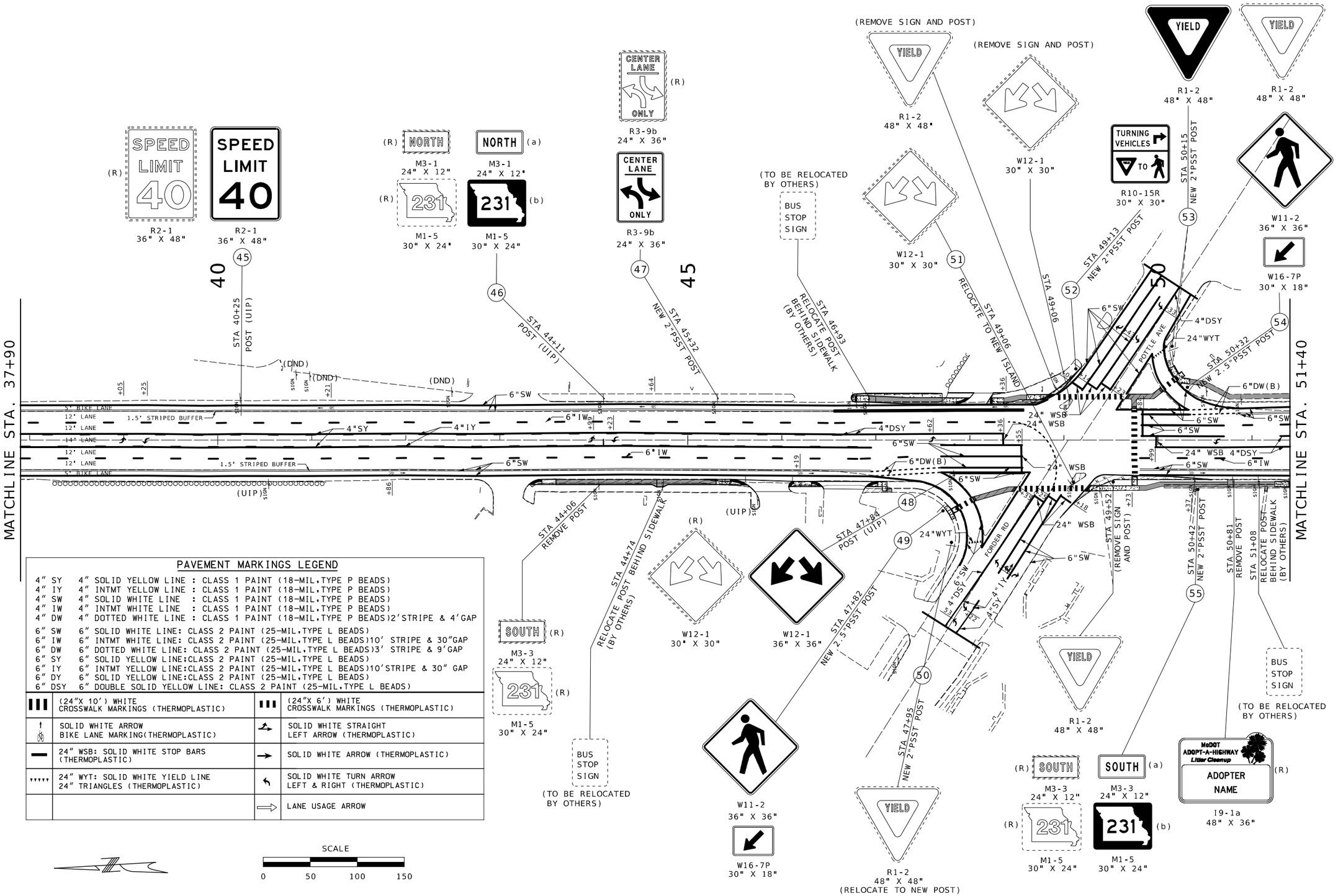
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
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6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/30/2025 4:11:02 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	224

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE | REV.

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
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6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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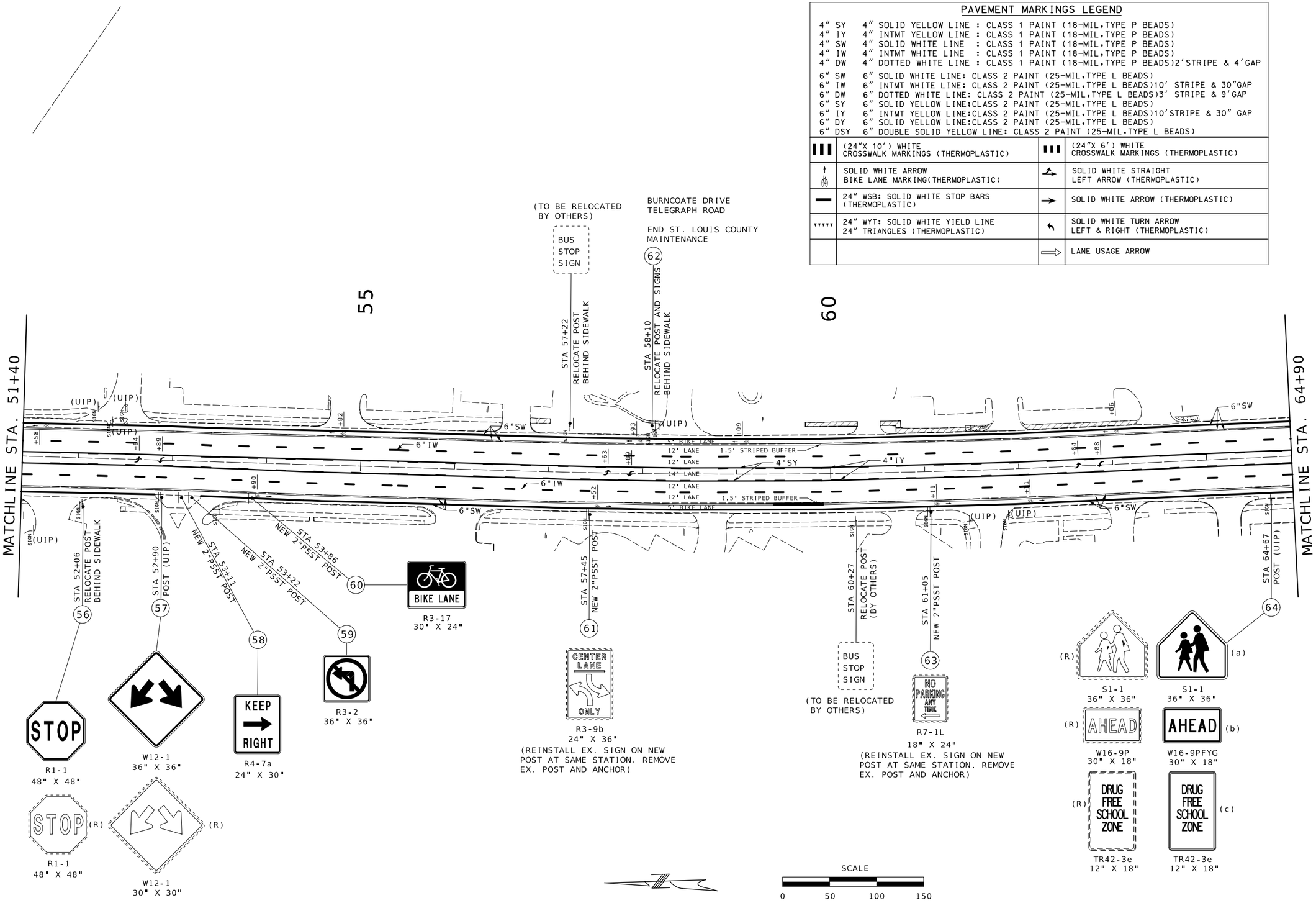
▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑ 🚲	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↰	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart M McN
05/30/2025 4:09:44 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	225

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)		
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)		
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)		
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)		
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP		
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)		
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP		
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP		
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)		
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP		
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)		
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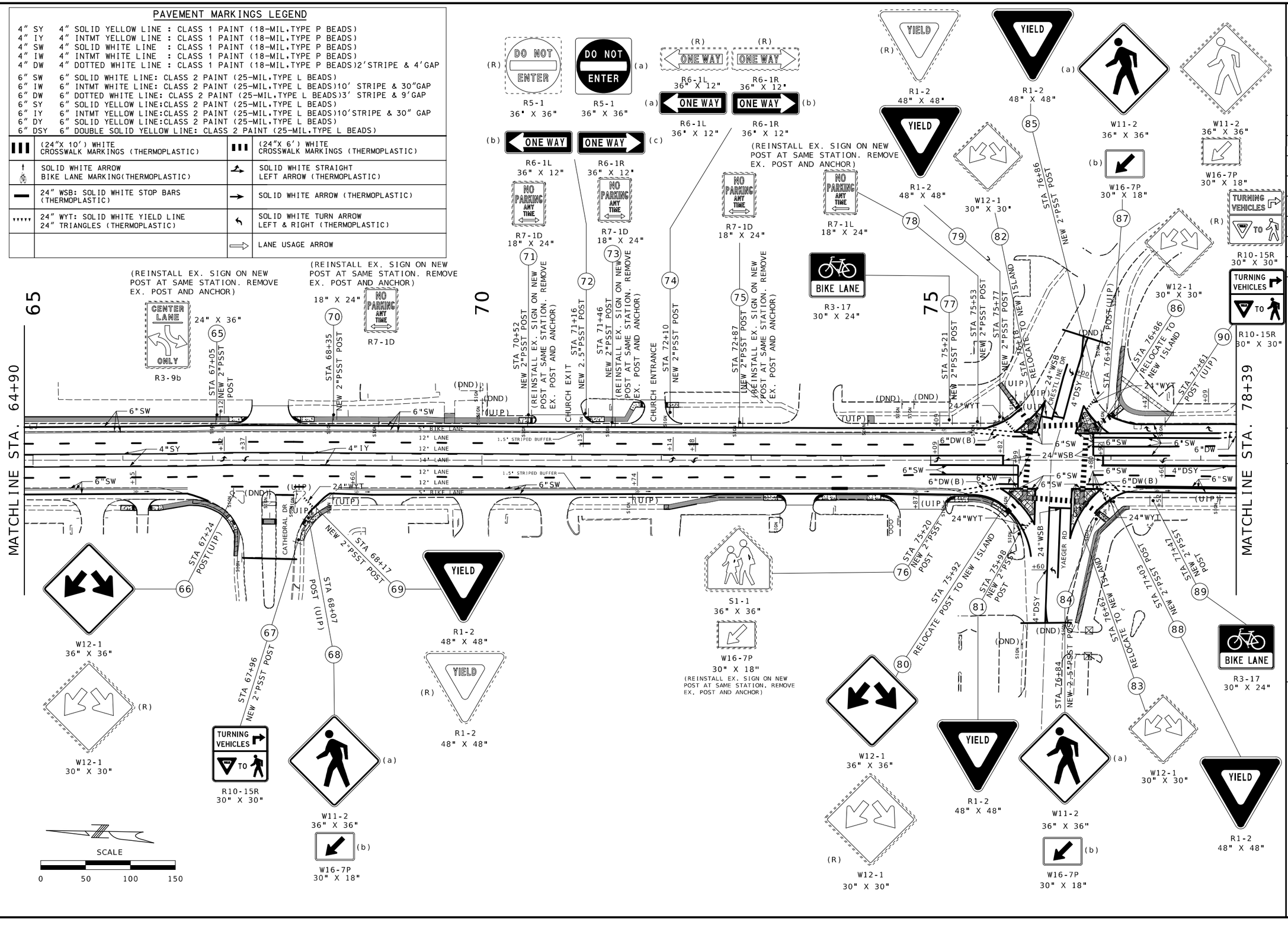
	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)		(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)		SOLID WHITE ARROW (THERMOPLASTIC)
	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
			LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:08:15 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	226

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

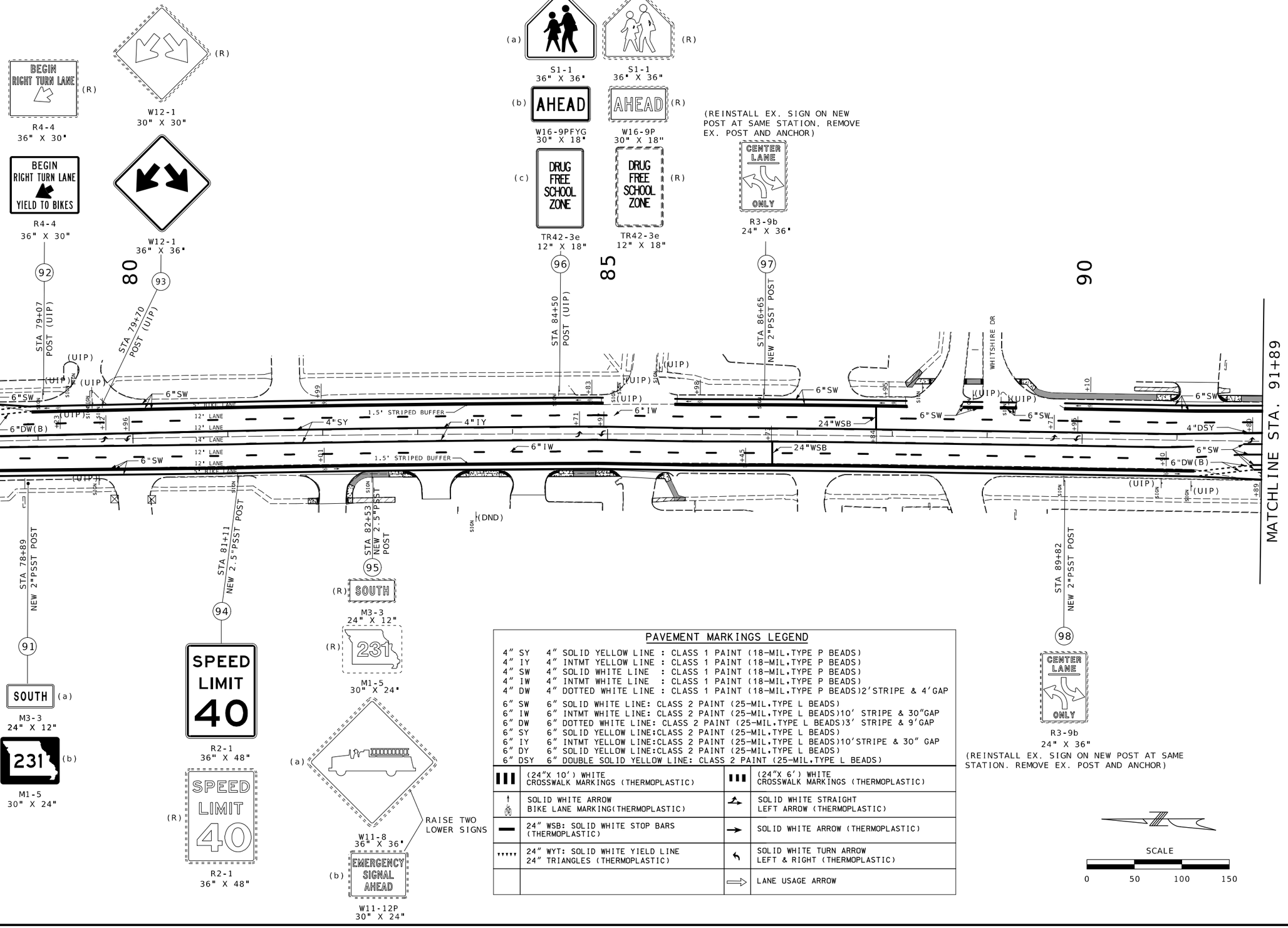
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

REV.



PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:08:28 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	227

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

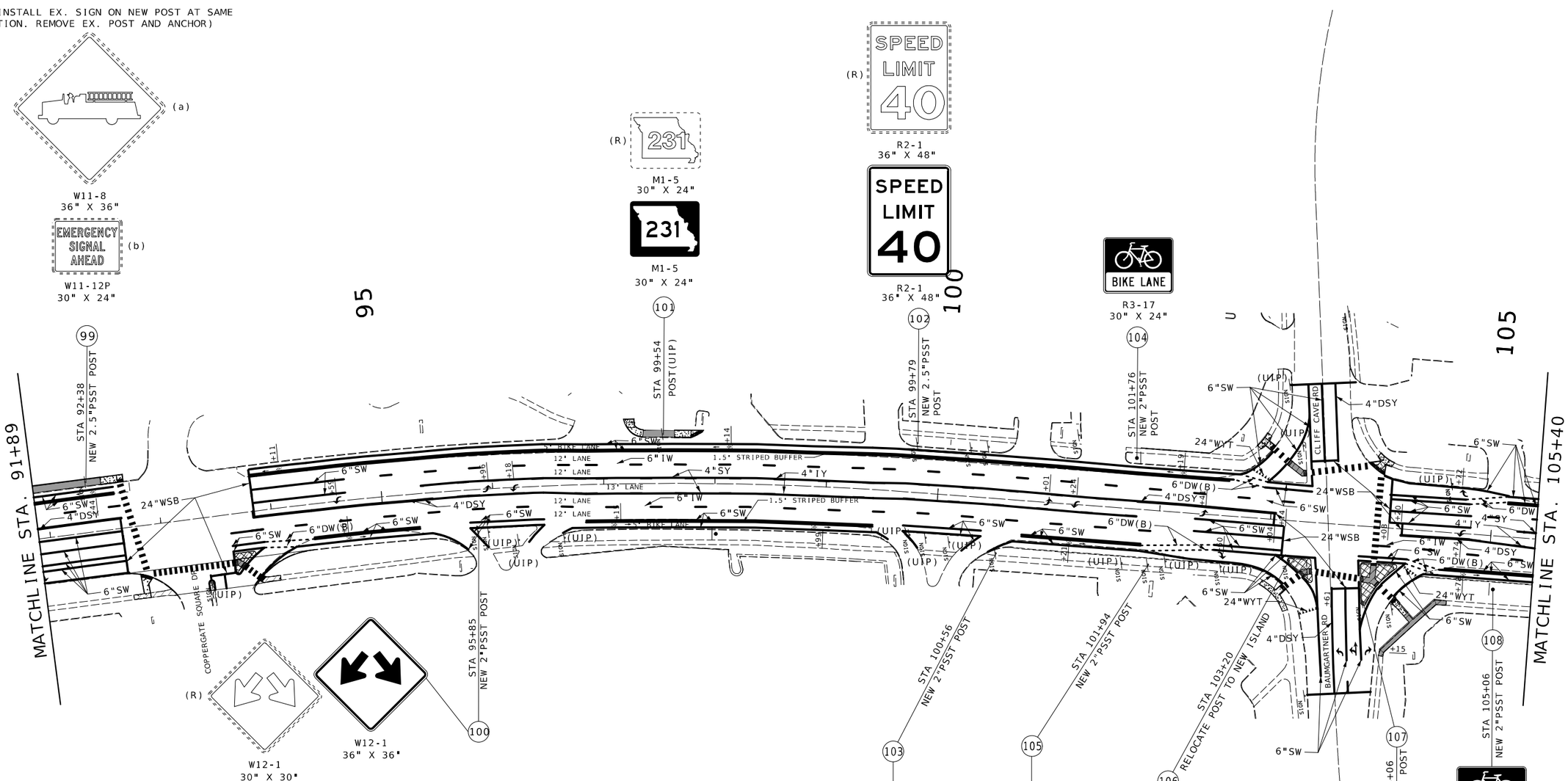
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

PAVEMENT MARKING AND SIGNING SHEET

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)



PAVEMENT MARKINGS LEGEND

4" SY 4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY 4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW 4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW 4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW 4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW 6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW 6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW 6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY 6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY 6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY 6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY 6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↖	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:08:42 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	228

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4″ SY	4″ SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ IY	4″ INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ SW	4″ SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ IW	4″ INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ DW	4″ DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2′STRIPE & 4′GAP
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6″ IW	6″ INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10′ STRIPE & 30″GAP
6″ DW	6″ DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3′ STRIPE & 9′GAP
6″ SY	6″ SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6″ IY	6″ INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10′STRIPE & 30″ GAP
6″ DY	6″ SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6″ DSY	6″ DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24″X 10′) WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24″X 6′) WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
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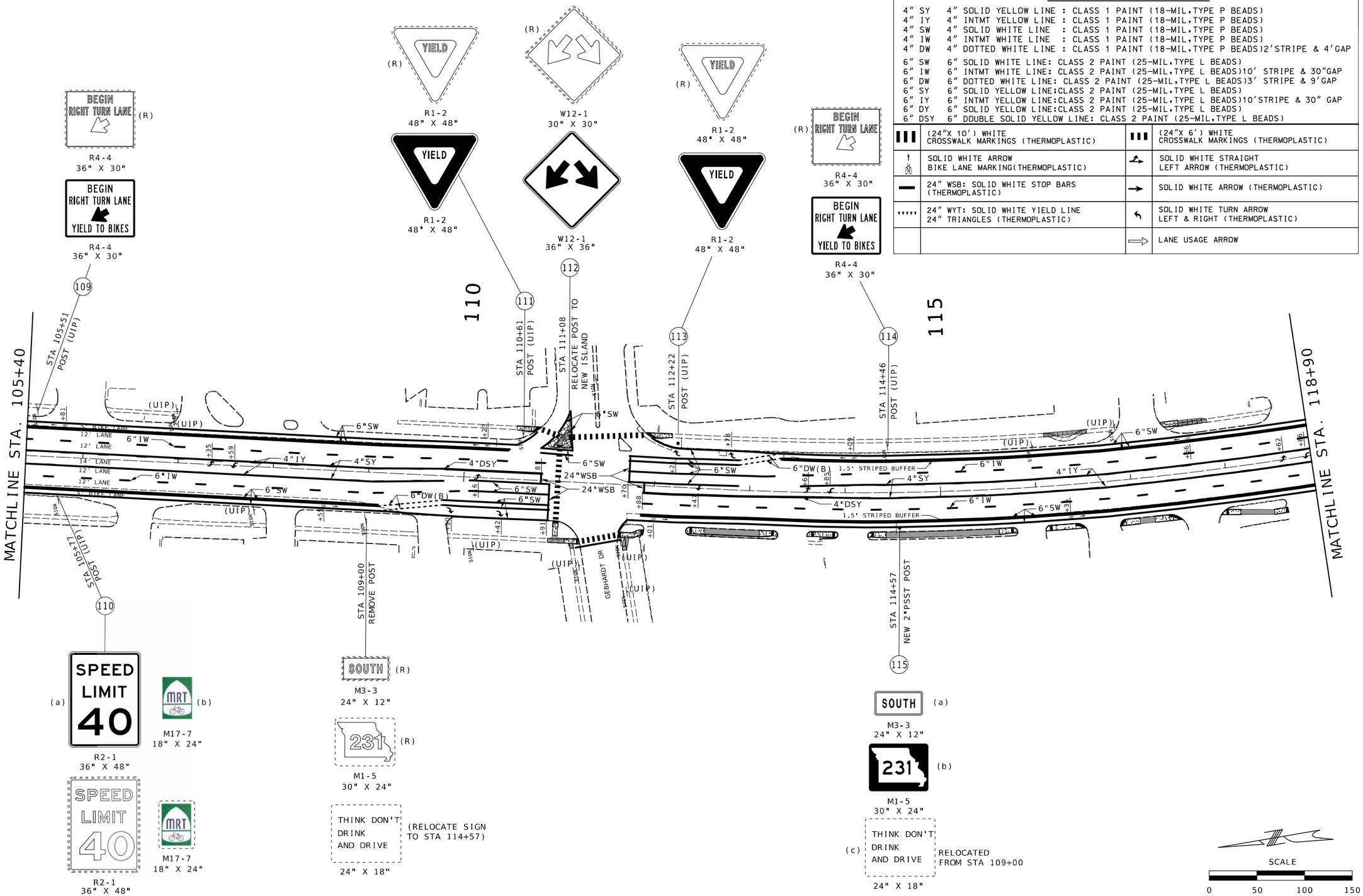
'''''	24″ WYT: SOLID WHITE YIELD LINE 24″ TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:08:54 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	229

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

REV. | DESCRIPTION | DATE

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
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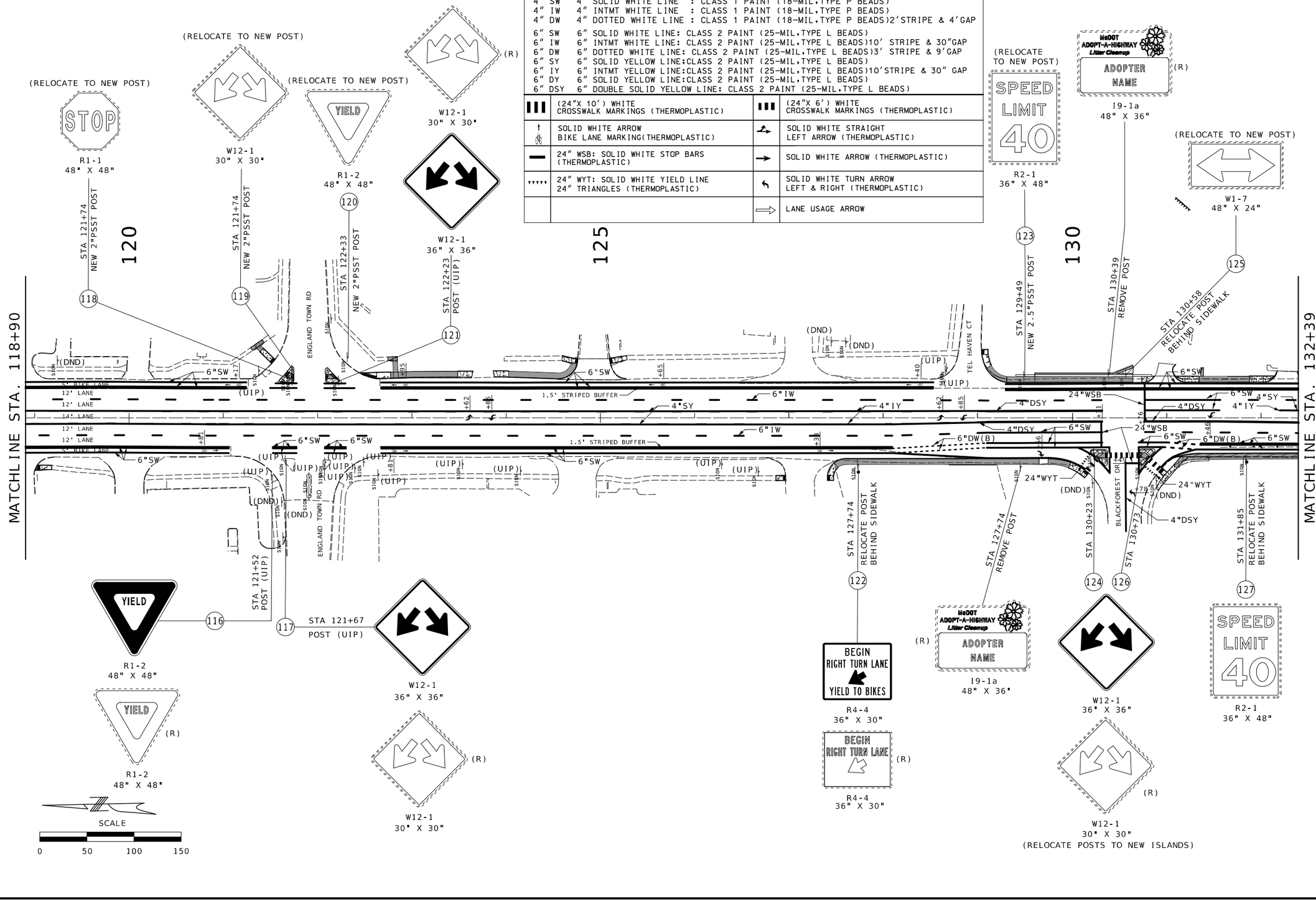
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:28:55 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	230

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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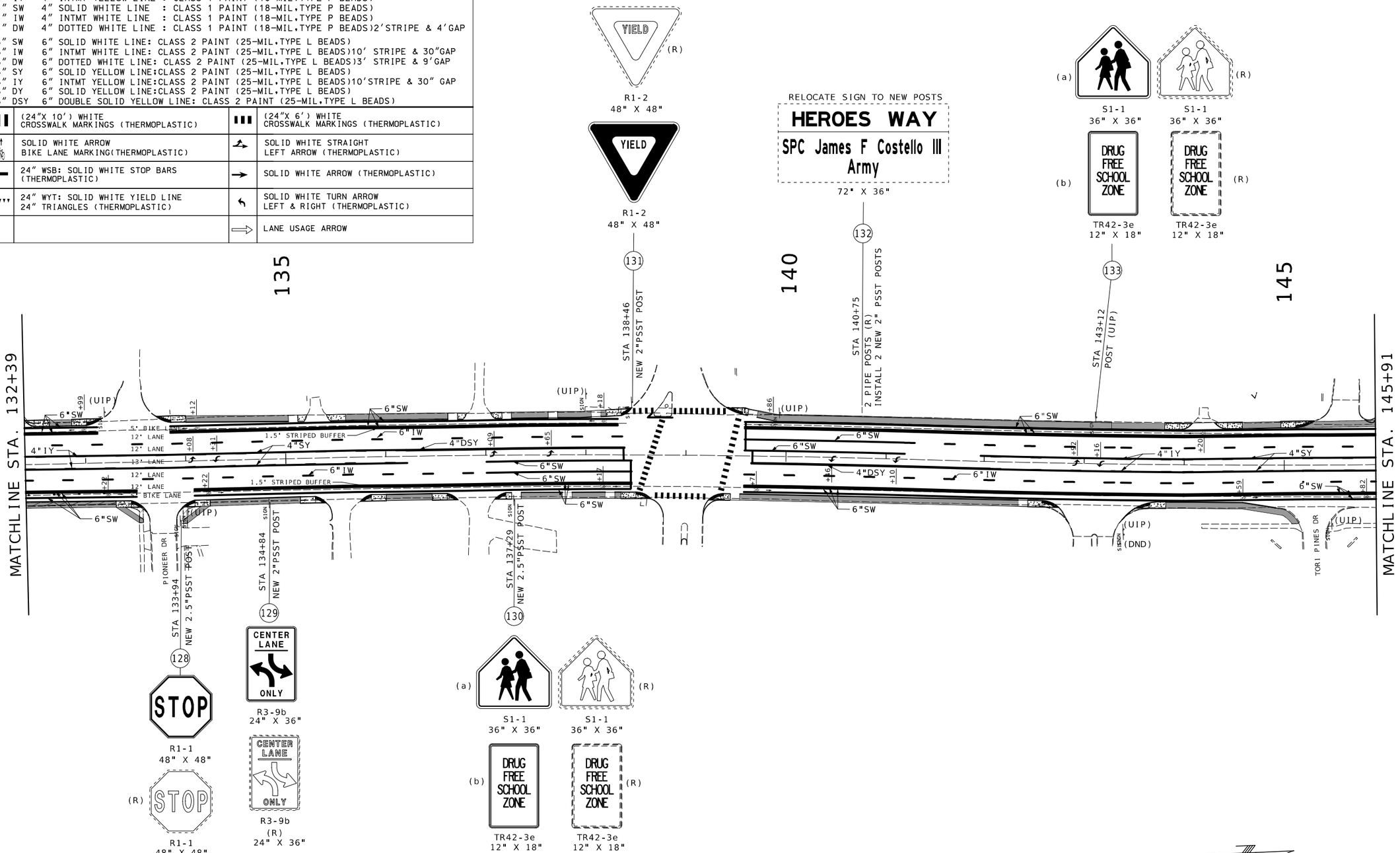
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑ 🚲	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↗	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:09:23 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	231

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

PAVEMENT MARKING AND SIGNING SHEET

REV.

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
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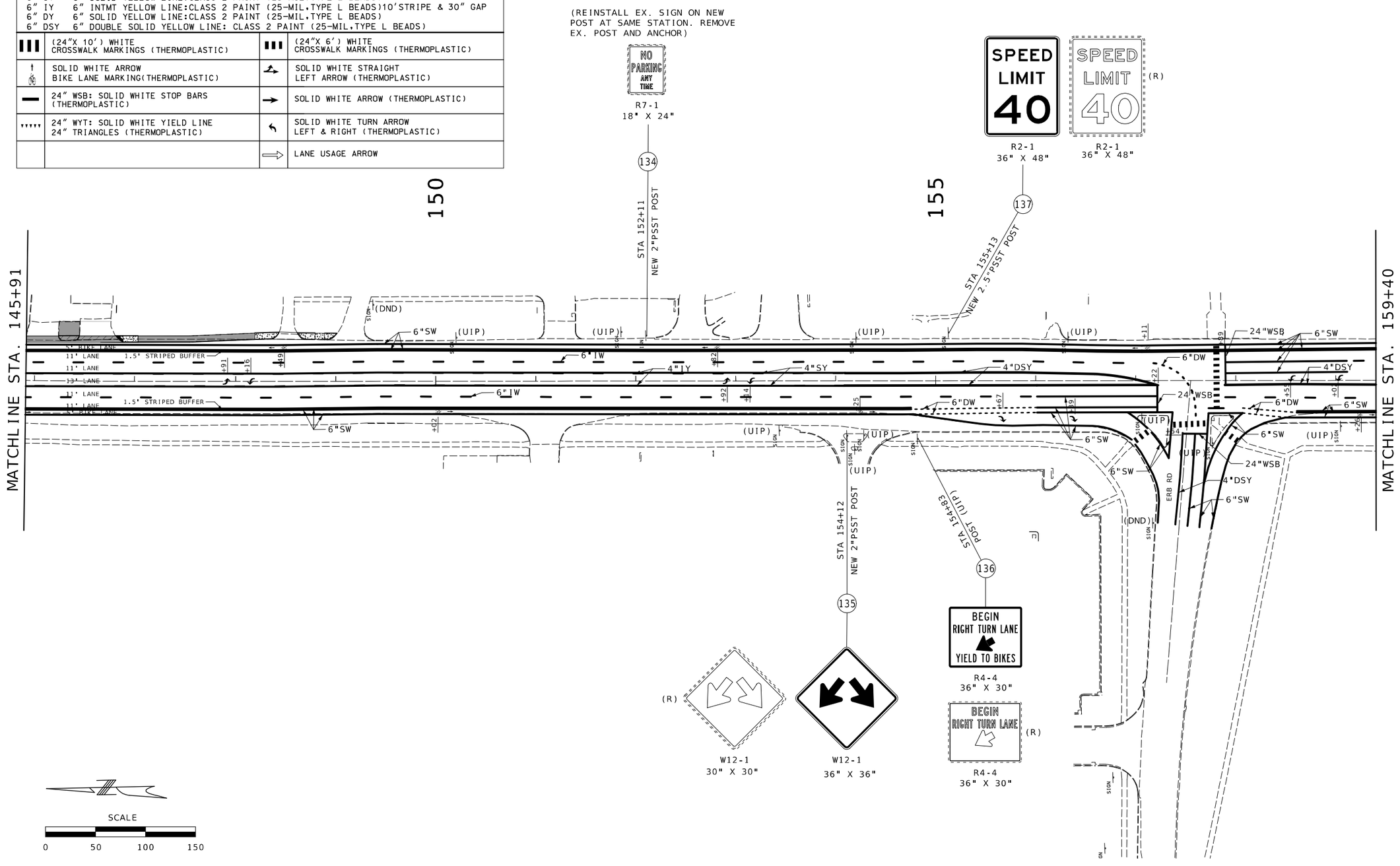
		⇨	LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:28:47 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	232

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
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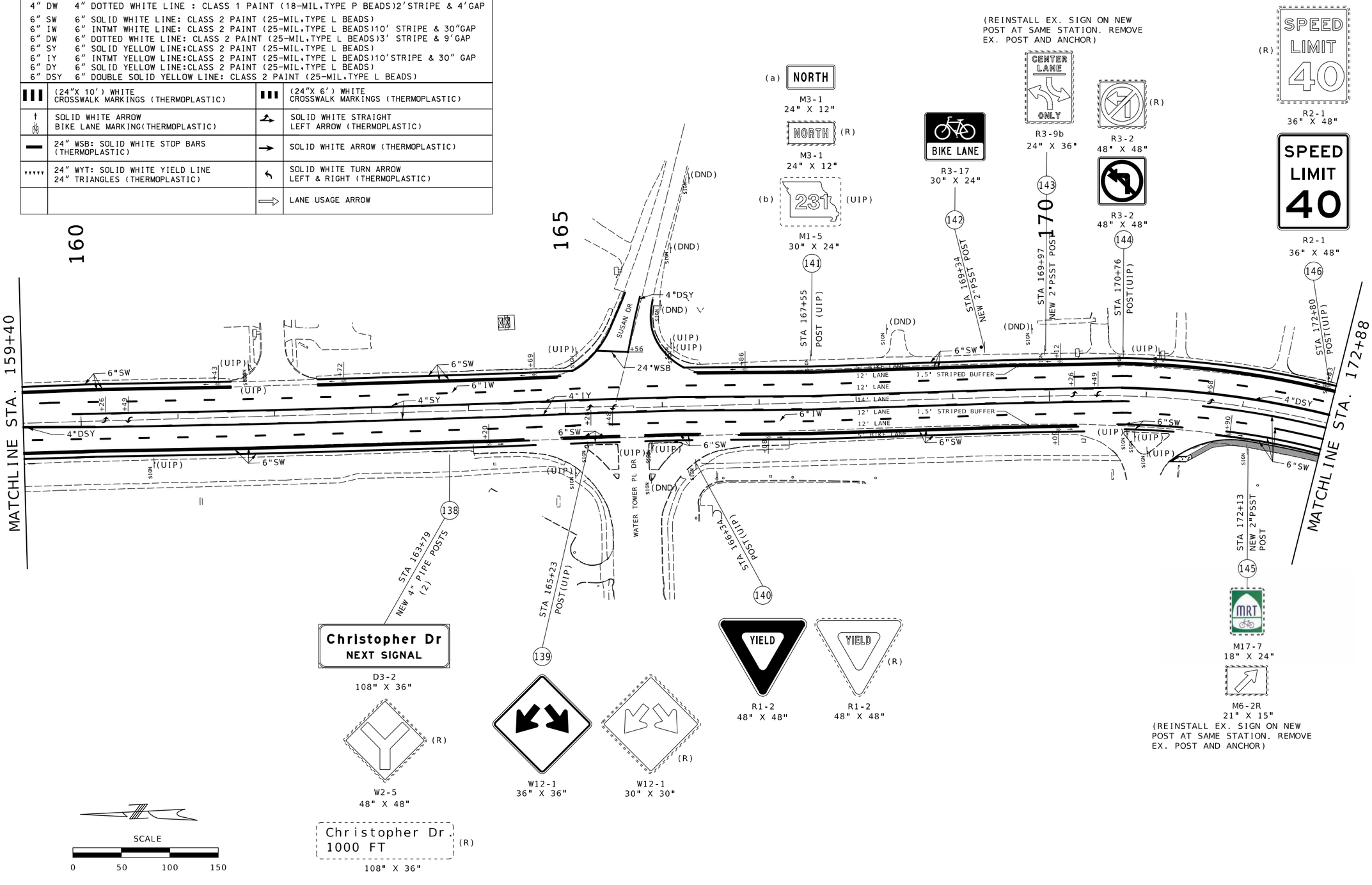
		⇨	LANE USAGE ARROW



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:09:57 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	233

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

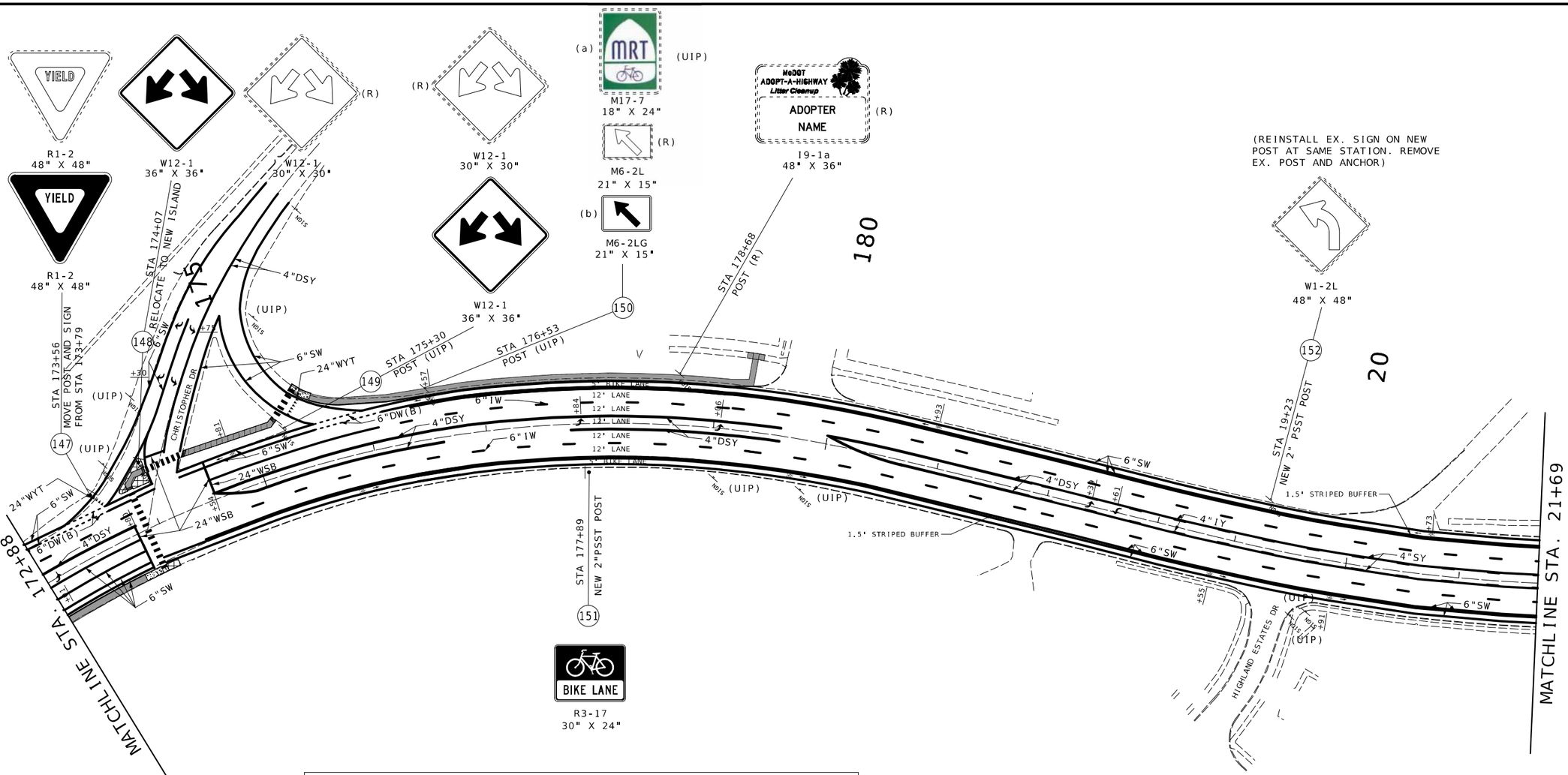
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

4″ SY	4″ SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ IY	4″ INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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6″ DY	6″ SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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▌▌▌	(24″X 10′) WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▌▌▌	(24″X 6′) WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
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		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
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PROFESSIONAL ENGINEER
06/20/2025 2:28:31 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	234

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

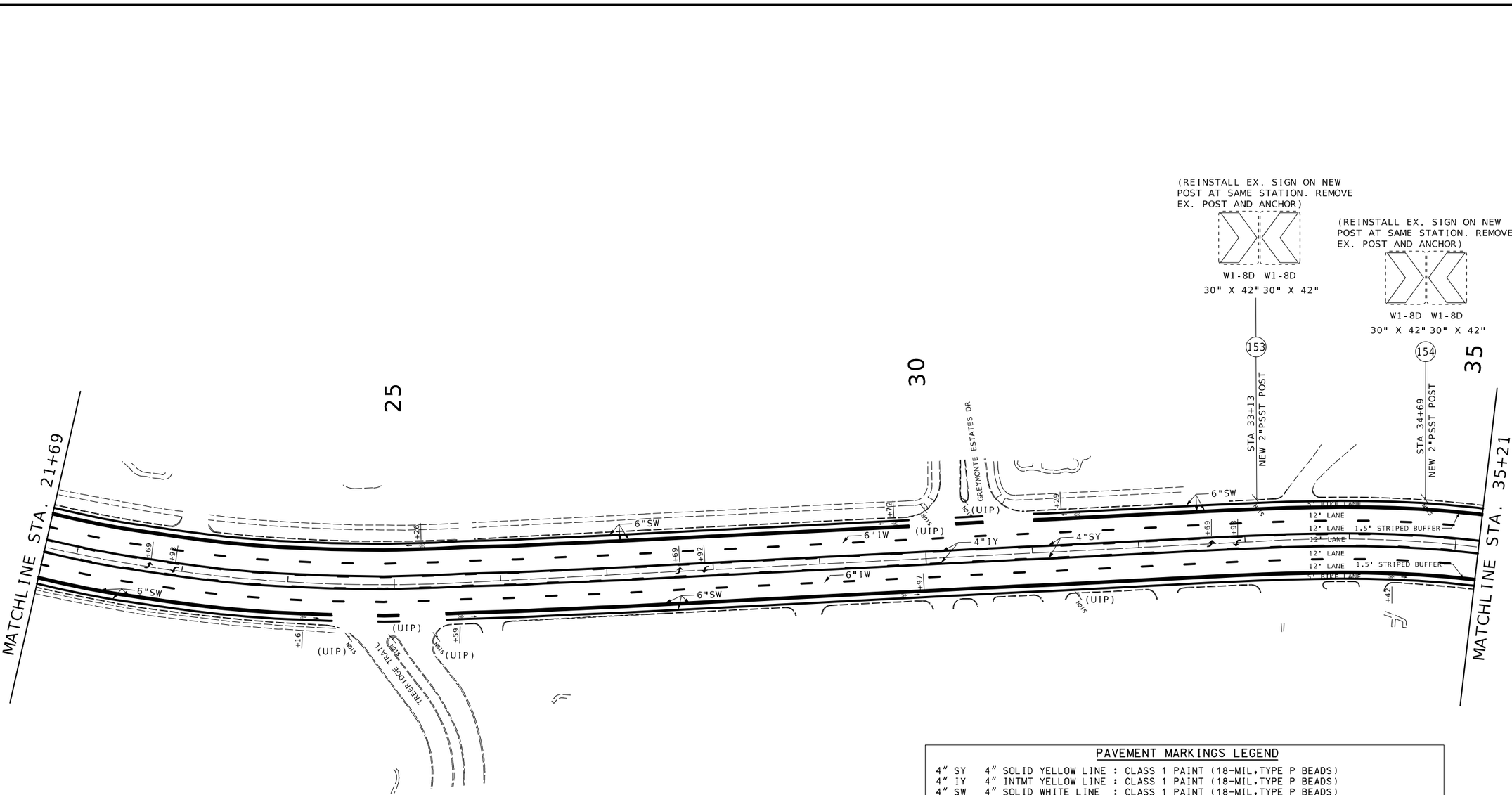
PROJECT NO.

BRIDGE NO.

DATE | DESCRIPTION

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

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
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		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
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PROFESSIONAL ENGINEER
06/01/2025 4:15:42 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	235

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

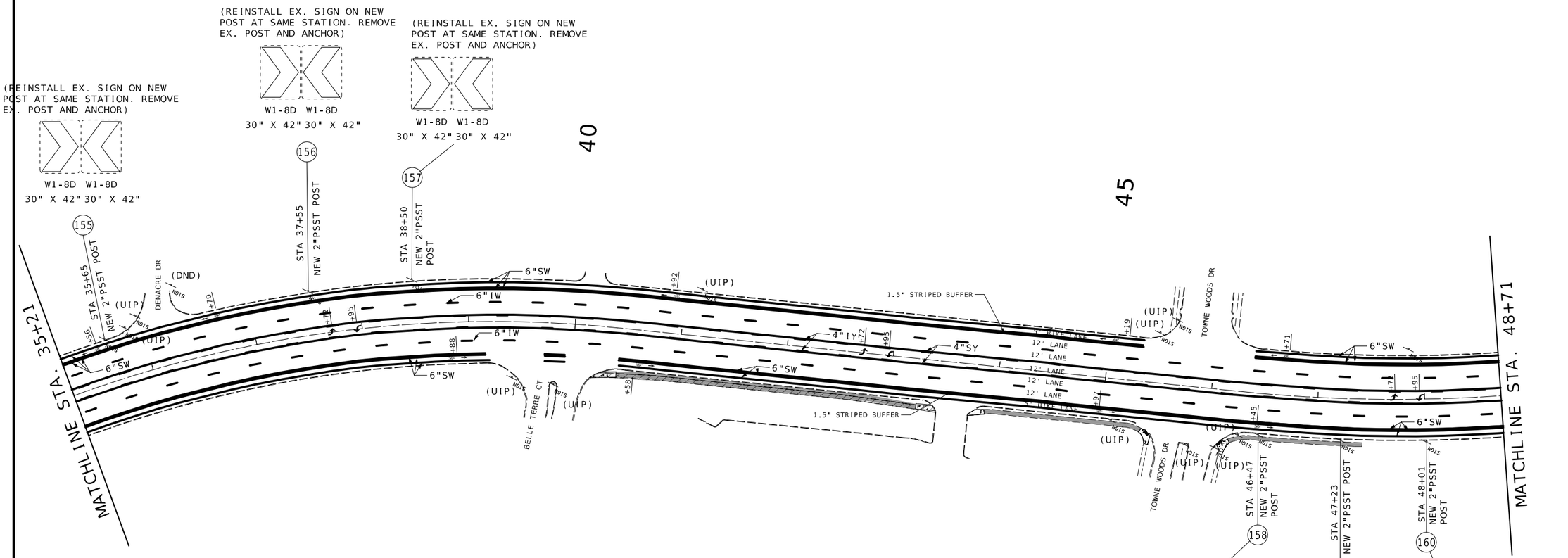
DATE

REVISION

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

PAVEMENT MARKING AND SIGNING SHEET

REV.



PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)		SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)		SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:42:04 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	236

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

REV.

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		⇨	LANE USAGE ARROW

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)

(a) W1-2R 36" X 36"

(b) R2-1 36" X 48"

(a) M3-1 NORTH 24" X 12"

M3-1 NORTH (R) 24" X 12"

(b) M1-5 231 (UIP) 30" X 24"

MATCHLINE STA. 48+71

MATCHLINE STA. 62+18

50 55 60

1.5' STRIPED BUFFER

12' LANE 12' LANE 12' LANE 12' LANE 12' BIKE LANE

6"SW 4"SY 6"IW 4"IY 4"DSY 24"WSB 24"WYT

(UIP) (DND)

STA 48+81 NEW 2"PSST POST 161

STA 49+76 NEW 2"PSST POST 162

STA 51+06 NEW 2.5"PSST POST 163

STA 52+70 POST (UIP) 164

STA 54+85 NEW 2"PSST POST 165

STA 57+74 NEW 2"PSST POST 166

STA 59+12 POST (UIP) 167

STA 59+25 NEW 2.5"PSST POST 168

UIP EXISTING SIGN 2"PSST

BEAR CREEK DR

HEINTZ RD

W1-8D W1-8D 30" X 42" 30" X 42"

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)

W1-8D W1-8D 30" X 42" 30" X 42"

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)

S1-1 36" X 36"

R1-2 48" X 48"

(REINSTALL EX. SIGN ON NEW POST AT SAME STATION. REMOVE EX. POST AND ANCHOR)

S5-1 30" X 60" — SCHOOL SPEED LIMIT 35 WHEN FLASHING

S4-3P 36" X 12" — SCHOOL (R)

R2-1 36" X 48" — SPEED LIMIT 40 (R)

S4-4P 36" X 18" — WHEN FLASHING (R)

R2-1 36" X 48" — SPEED LIMIT 45 (R)

R2-1 36" X 48" — SPEED LIMIT 45 (a)

S5-3 24" X 30" — END SCHOOL SPEED LIMIT (b)

SCALE 0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:29:12 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED 6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	237

COUNTY ST. LOUIS

JOB NO. J6S3632

CONTRACT ID.

PROJECT NO.

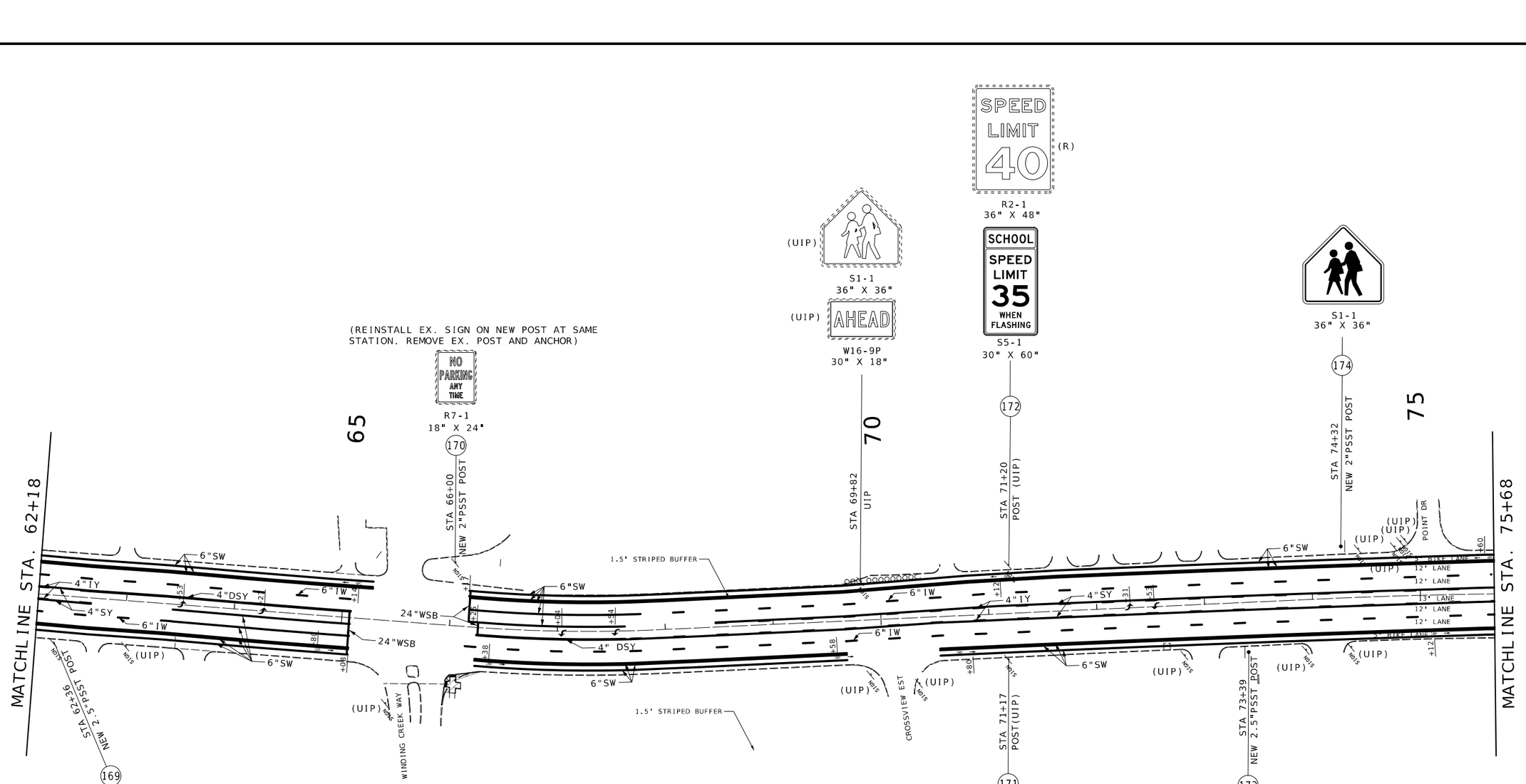
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

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		⇨	LANE USAGE ARROW

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:16:33 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

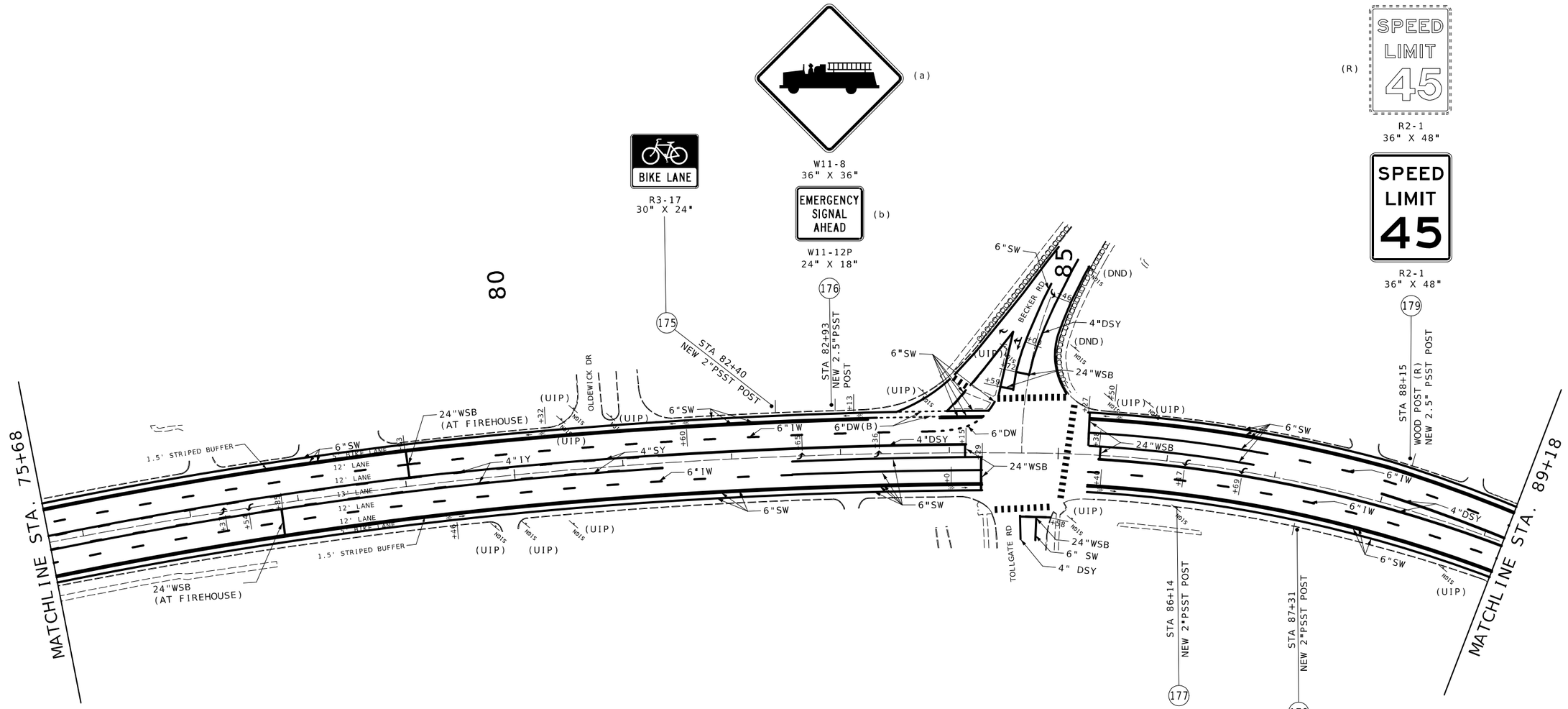
ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	238

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

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STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:16:45 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	239

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

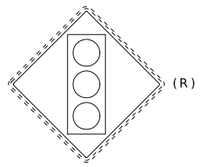
BRIDGE NO.

DATE	DESCRIPTION

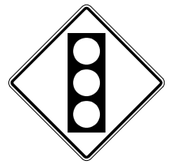
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET



W3-3
36" X 36"



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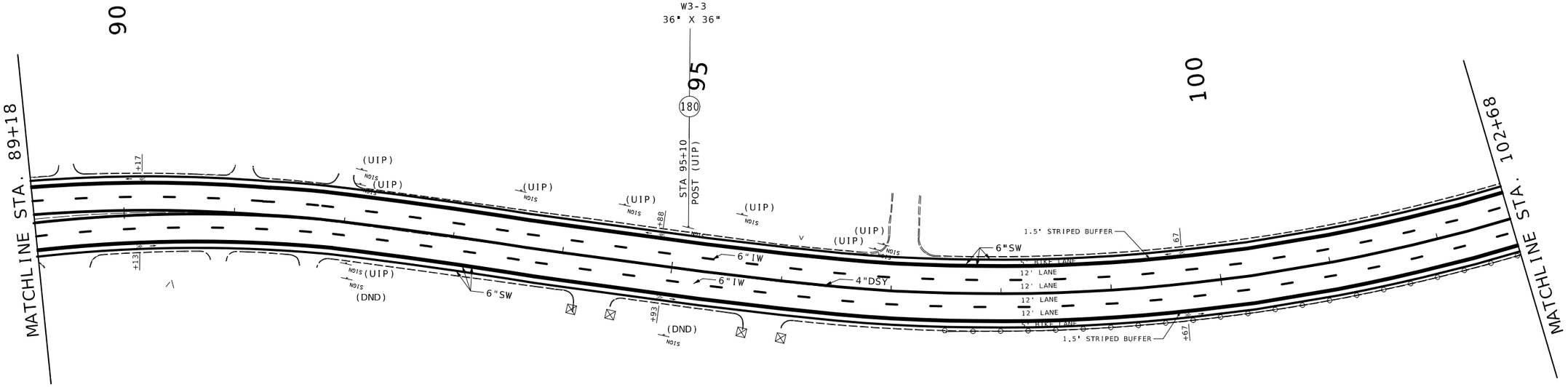
36" X 36"



PAVEMENT MARKINGS LEGEND

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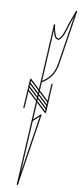


SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
08/01/2025 4:17:06 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	240

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

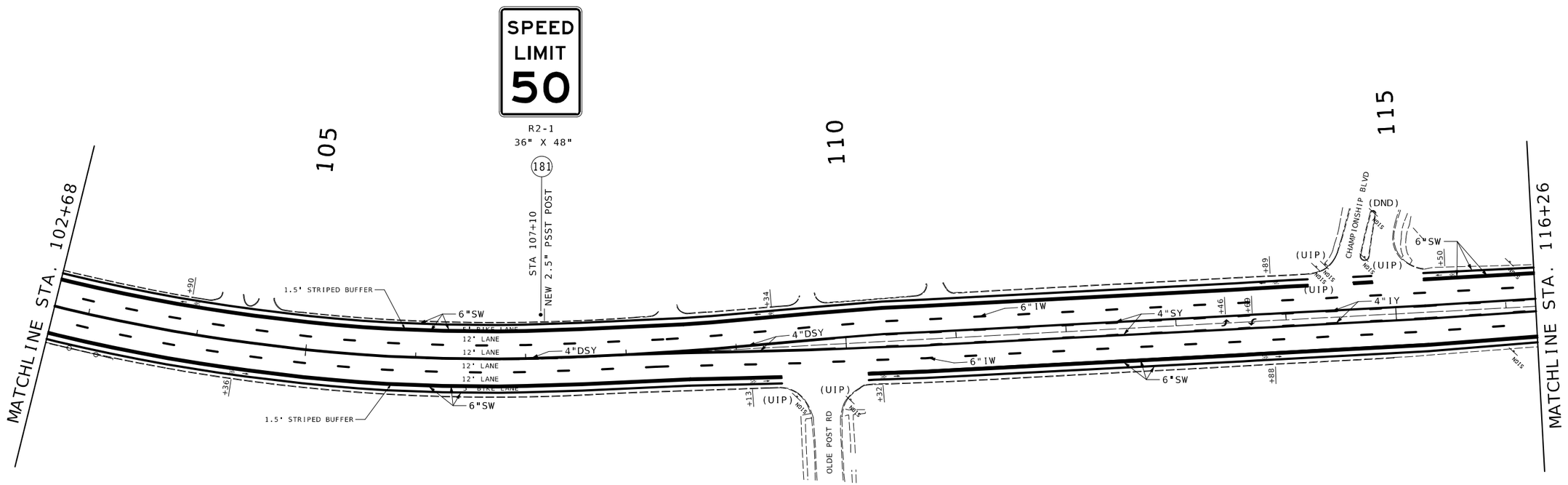
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

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SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:17:23 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	241

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

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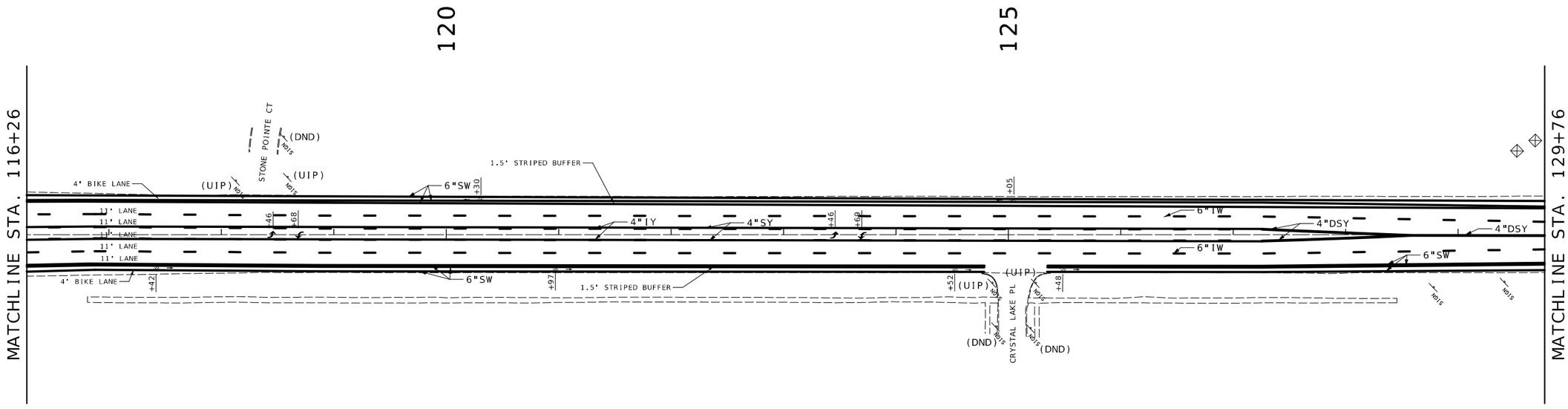
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET



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SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:17:42 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	242

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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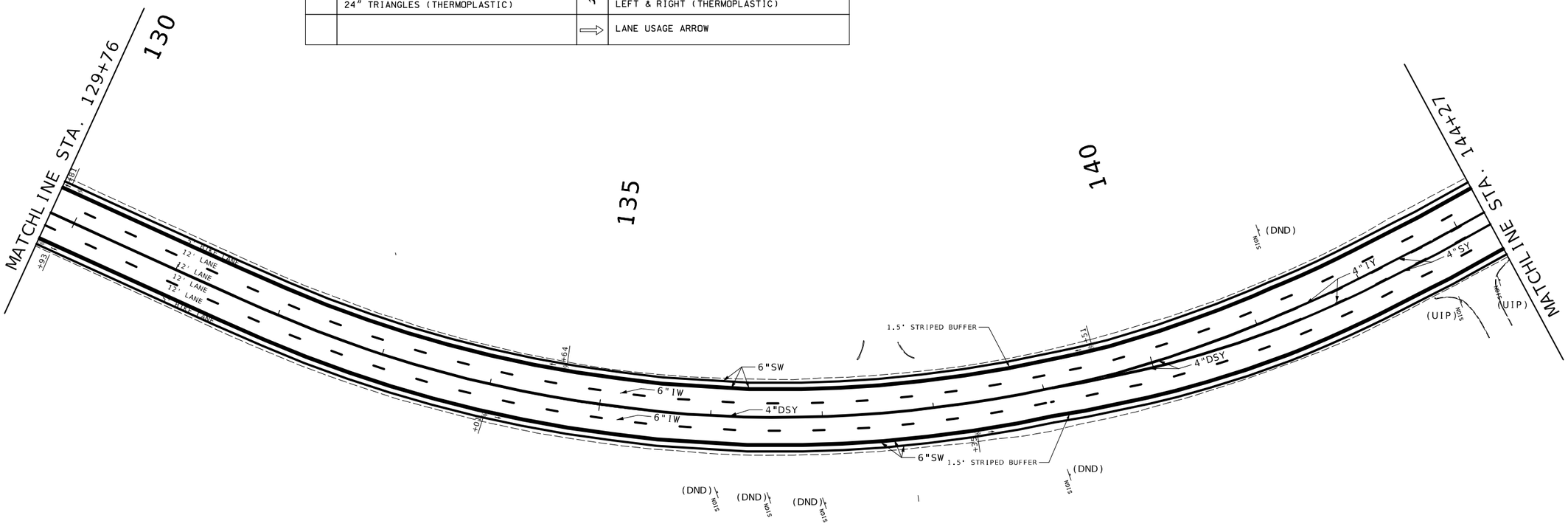
6" SW 6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW 6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW 6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY 6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY 6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY 6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY 6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
🚲	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↑	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW



SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:17:58 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	243

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

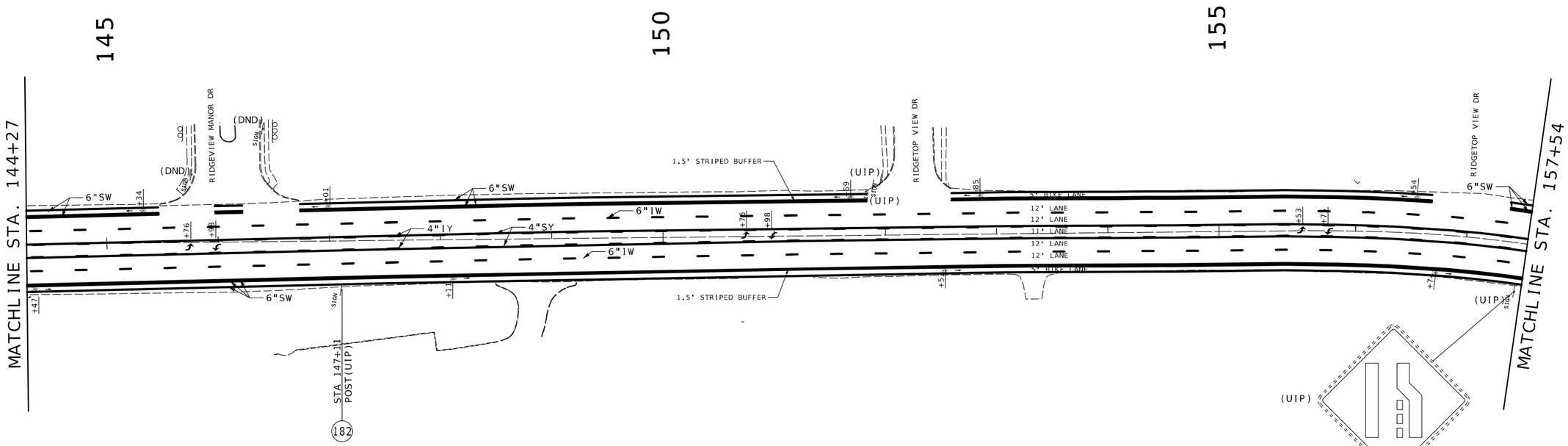
DATE	DESCRIPTION

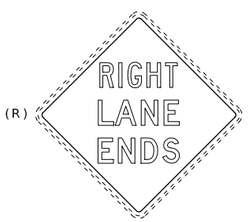
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

PAVEMENT MARKING AND SIGNING SHEET





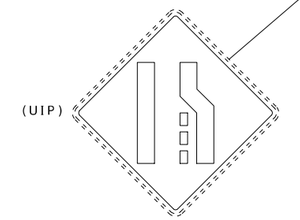
W9-1R
36" X 36"

W9-1R
36" X 36"

PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" DW	4" DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2'STRIPE & 4'GAP
6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IW	6" INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10' STRIPE & 30"GAP
6" DW	6" DOTTED WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)3' STRIPE & 9'GAP
6" SY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" IY	6" INTMT YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)10'STRIPE & 30" GAP
6" DY	6" SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6" DSY	6" DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑ 🚲	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↗	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW



W4-2R
36" X 36"

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:18:13 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	244

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

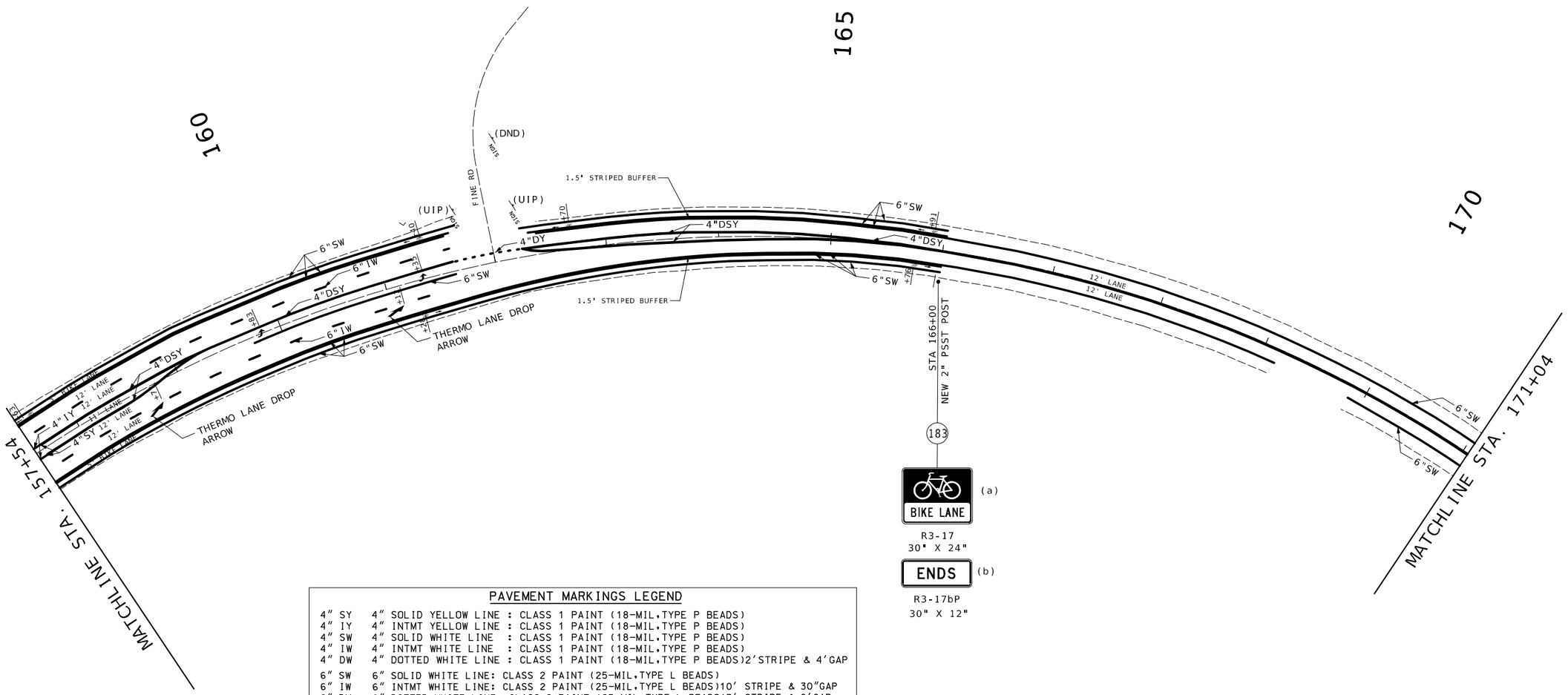
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

PAVEMENT MARKING AND SIGNING SHEET



PAVEMENT MARKINGS LEGEND

4″ SY	4″ SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ IY	4″ INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ SW	4″ SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ IW	4″ INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4″ DW	4″ DOTTED WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)2′STRIPE & 4′GAP
6″ SW	6″ SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6″ IW	6″ INTMT WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)10′ STRIPE & 30″GAP
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6″ DY	6″ SOLID YELLOW LINE:CLASS 2 PAINT (25-MIL,TYPE L BEADS)
6″ DSY	6″ DOUBLE SOLID YELLOW LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)

▮▮▮	(24″X 10′) WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24″X 6′) WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑ 🚲	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↗	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24″ WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▾▾▾▾▾	24″ WYT: SOLID WHITE YIELD LINE 24″ TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:18:28 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	245

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

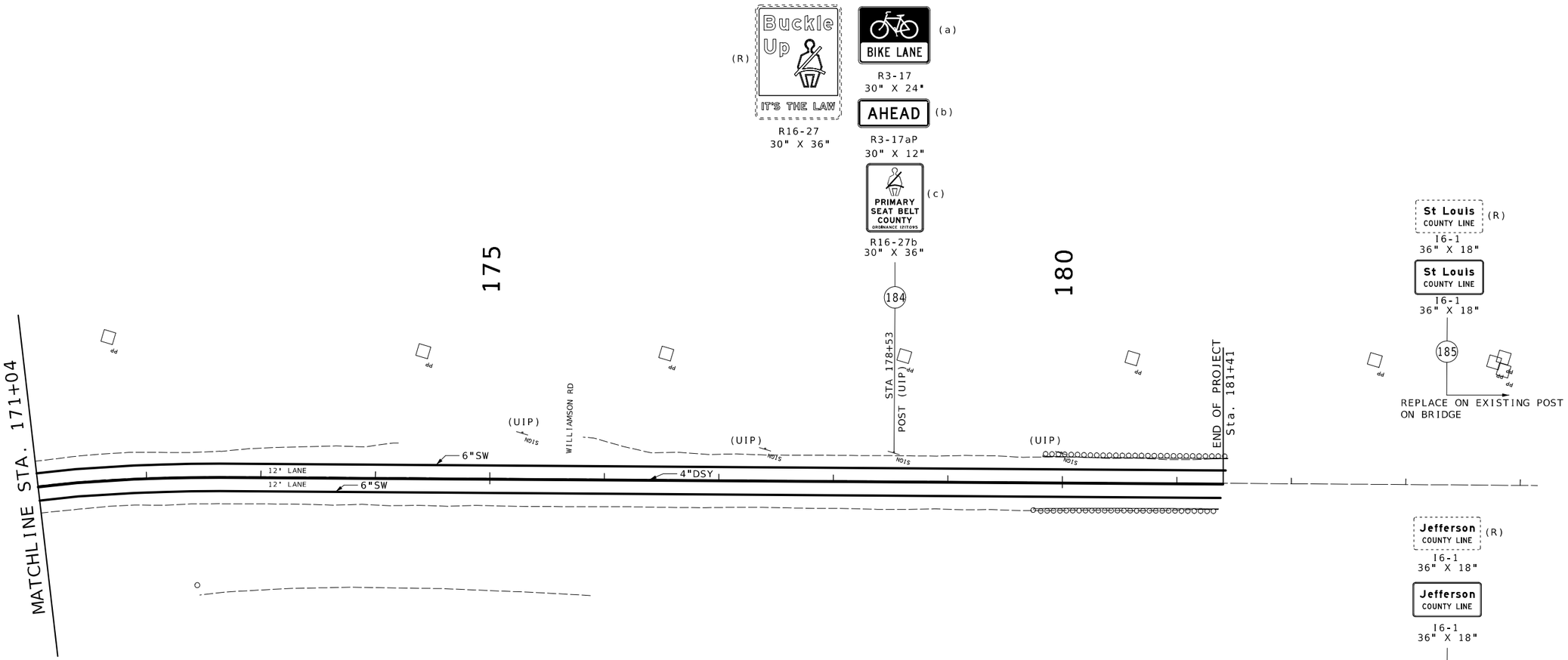
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

PAVEMENT MARKING AND SIGNING SHEET

REV.



PAVEMENT MARKINGS LEGEND

4" SY	4" SOLID YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IY	4" INTMT YELLOW LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" SW	4" SOLID WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
4" IW	4" INTMT WHITE LINE : CLASS 1 PAINT (18-MIL,TYPE P BEADS)
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6" SW	6" SOLID WHITE LINE: CLASS 2 PAINT (25-MIL,TYPE L BEADS)
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▮▮▮	(24"X 10') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)	▮▮▮	(24"X 6') WHITE CROSSWALK MARKINGS (THERMOPLASTIC)
↑	SOLID WHITE ARROW BIKE LANE MARKING(THERMOPLASTIC)	↗	SOLID WHITE STRAIGHT LEFT ARROW (THERMOPLASTIC)
▬	24" WSB: SOLID WHITE STOP BARS (THERMOPLASTIC)	→	SOLID WHITE ARROW (THERMOPLASTIC)
▼▼▼▼▼	24" WYT: SOLID WHITE YIELD LINE 24" TRIANGLES (THERMOPLASTIC)	↰	SOLID WHITE TURN ARROW LEFT & RIGHT (THERMOPLASTIC)
		⇨	LANE USAGE ARROW

SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:18:44 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	246

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

PAVEMENT MARKING AND SIGNING SHEET

REV.

EFFECTIVE: 07-01-2022

SIGNS (902 SIGNAL SIGNS TABULATED ON D-37A SHEET)							CONCRETE FOOTINGS EMBEDED	STRUCTURAL STEEL POSTS*						PIPE POSTS*					BACKING BARS**				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE													REMARKS AND OTHER REQUIRED ITEMS
																			2" X 3/8" BARS @ 2.55 LBS PER FT					2 IN. POST						2.5 IN. POST						BREAK-AWAY	
																										ANCHORS					ANCHORS					
SIGN NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD.	LOCATION (ROUTE)	LT OR RT	SIGN DTL. SHT. NO.	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	NO. EACH	LGTH IN.	TOTAL	NO. LBS	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ASSEMBLY ITEM NO. 9031241	
							CY		LF	LF	LF		LBS	IN.	LF	LF		LBS		IN.	LF		LF	LF	LF	LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA	
1	48X48	49+58		ROUTE 231	LT																					1										USE EXISTING POST
2	ASSEM.	49+67		ROUTE 231	LT																								13.50		13.50		1			
3	30X30	50+50		ROUTE 231	LT																					1										USE EXISTING POST
4	ASSEM.	50+47		ROUTE 231	LT																															USE EXISTING POST
5	30X30	50+71		ROUTE 231	RT																					1										USE EXISTING POST
6	24X36	55+58		ROUTE 231	RT																		11.50		11.50	1										
7	36X48	61+57		ROUTE 231	LT																								12.50		12.50		1			
8	18X24	62+36		ROUTE 231	LT																		10.25		10.25	1										
9	ASSEM.	62+75		ROUTE 231	RT																															USE EXISTING POST
10	30X36	63+11		ROUTE 231	LT																		11.50		11.50	1										
11	18X24	64+59		ROUTE 231	LT																		10.25		10.25	1										
12	24X36	65+96		ROUTE 231	LT																		11.50		11.50	1										
13	ASSEM.	0+11		ROUTE 231	RT																															USE EXISTING POST
14	18X24	1+05		ROUTE 231	LT																		10.25		10.25	1										
15	48X48	1+76		ROUTE 231	LT																		12.25		12.25	1										
16	ASSEM.	2+16		ROUTE 231	LT																															USE EXISTING POST
17	ASSEM.	3+52		ROUTE 231	LT																								13.50		13.50		1			
18	30X30	3+81		ROUTE 231	LT																		11.00		11.00	1										
19	96X48	3+82		ROUTE 231	RT																															USE EXISTING POST
20	ASSEM.	4+23		ROUTE 231	RT														8	50	4.17	10.6									15.00		15.00		1			
21	132X60	4+23		ROUTE 231	RT																															USE EXISTING POST
22	48X48	6+45		ROUTE 231	LT																		12.25		12.25	1										
23	ASSEM.	6+74		ROUTE 231	LT																					1										USE EXISTING POST
24	96X96	9+89		ROUTE 231	LT																															USE EXISTING POST
25A	180X84	11+59		ROUTE 231	RT																															USE EXISTING POST
25B	132X84	11+59		ROUTE 231	RT																															USE EXISTING POST
25C	180X84	11+59		ROUTE 231	LT																															USE EXISTING POST
25D	180X84	11+59		ROUTE 231	LT																															USE EXISTING POST
26	180X60	16+20		ROUTE 231	LT																															USE EXISTING POST
27	36X36	16+46		ROUTE 231	RT																		12.75		12.75	1										
28	96X96	17+79		ROUTE 231	RT																															USE EXISTING POST
29	ASSEM.	19+23		ROUTE 231	RT																								12.75		12.75		1			
30	48X48	19+48		ROUTE 231	RT																		12.25		12.25	1										
31	18X24	20+00		ROUTE 231	RT																		10.25		10.25	1										
32	48X48	19+09		ROUTE 231	RT																		12.25		12.25	1										
33	84X48	21+33		ROUTE 231	LT																															USE EXISTING POST
34	72X36	21+56		ROUTE 231	RT																		8.50	10.25	18.75	2										
35	132X60	22+19		ROUTE 231	LT																															USE EXISTING POST
36	ASSEM.	22+19		ROUTE 231	LT														8	50	4.17	10.6									15.00		15.00		1			
37	ASSEM.	22+80		ROUTE 231	RT																															USE EXISTING POST
38	48X48	24+09		ROUTE 231	RT																		12.25		12.25	1										
39	36X36	24+54		ROUTE 231	RT																					1										USE EXISTING POST
40	ASSEM.	24+82		ROUTE 231	LT																															USE EXISTING POST
41	ASSEM.	28+88		ROUTE 231	RT																															USE EXISTING POST
42	30X36	29+86		ROUTE 231	RT																															USE EXISTING POST
43	30X24	30+67		ROUTE 231	RT																		10.50		10.50	1										
44	120X84	34+60		ROUTE 231	LT																															USE EXISTING POST
45	36X48	40+25		ROUTE 231	LT																															USE EXISTING POST
46	ASSEM.	44+11		ROUTE 231	LT																															USE EXISTING POST
47	24X36	45+32		ROUTE 231	LT																		11.50		11.50	1										
48	30X30	47+84		ROUTE 231	RT																															USE EXISTING POST
49	ASSEM.	47+82		ROUTE 231	RT																								12.75		12.75		1			
50	48X48	47+95		ROUTE 231	RT																		12.25		12.25	1										
51	30X30	49+06		ROUTE 231	LT																					1										USE EXISTING POST
52	30X30	49+13		ROUTE 231	LT																		11.00		11.00	1										
53	48X48	50+15		ROUTE 231	LT																		12.25		12.25	1										
54	ASSEM.	50+32		ROUTE 231	LT																								12.75		12.75		1			
55	ASSEM.	50+42		ROUTE 231	RT																		11.50		11.50	1										
56	48X48	52+06		ROUTE 231	RT																															USE EXISTING POST
57	30X30	52+90		ROUTE 231	RT																															USE EXISTING POST
				SUBTOTAL 1			0.0						0					21				21.2	0			248	28	0	0			108	0	8	0	0	

* BREAKAWAY ASSEMBLY IS INCIDENTAL FOR STRUCTURAL STEEL AND PIPE POSTS.
** BACKING BARS ARE TOTALED WITH STRUCTURAL STEEL OR PIPE POSTS.

ROUND PIPE POST AND FOOTING DATA TABLE

NOM.SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	C.Y.
2½	5.79	0.48	4'- 3½"	12"	4-6"	0.13
3	7.58	0.63	4'- 3½"	12"	4-6"	0.13
4	10.79	0.90	5'- 3½"	18"	5-6"	0.36

STRUCTURAL STEEL POST AND FOOTING DATA TABLE

POST DES. NO.	NOM. SIZE	POST WEIGHT LBS/FT	POST WEIGHT LBS/IN	STUB LENGTH	FOOTING DIA.	LEVEL GROUND DEPTH	LEVEL GROUND C.Y.	6:1 GRADE DEPTH	6:1 GRADE C.Y.	4:1 GRADE DEPTH	4:1 GRADE C.Y.	3:1 OR 2:1 GRADE DEPTH	3:1 OR 2:1 GRADE C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:23:29 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/29/2025
ROUTE: 367 | STATE: MO
DISTRICT: SL | SHEET NO.: 247
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

D-29 SHEET
SIGN POST CALCULATIONS
SHEET 1 OF 4

EFFECTIVE: 07-01-2022

SIGNS (902 SIGNAL SIGNS TABULATED ON D-37A SHEET)							CONCRETE FOOTINGS EMBEDED	STRUCTURAL STEEL POSTS*						PIPE POSTS*						BACKING BARS**				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE													REMARKS AND OTHER REQUIRED ITEMS
																				2" X 3/8" BARS @ 2.55 LBS PER FT					2 IN. POST						2.5 IN. POST							BREAK-AWAY	
																										ANCHORS						ANCHORS					
SIGN NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD.	LOCATION (ROUTE)	LT OR RT	SIGN DTL. SHT. NO.	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	NO. EACH	LGTH	TOTAL	NO.	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ASSEMBLY ITEM NO. 9031241	
							CY		LF	LF	LF		LBS	IN.	LF	LF		LBS		IN.	LF		LF	LF	LF	LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA	
58	24X30	53+11		ROUTE 231	RT																		11.00		11.00	1											
59	36X36	53+22		ROUTE 231	RT																		11.50		11.50	1											
60	30X24	53+86		ROUTE 231	LT																		10.50		10.50	1											
61	24X36	57+45		ROUTE 231	RT																		11.50		11.50	1											
62	VAR.	58+10		ROUTE 231	RT																					1											USE EXISTING POST
63	18X24	61+05		ROUTE 231	RT																		10.25		10.25	1											
64	ASSEM.	64+67		ROUTE 231	RT																																USE EXISTING POST
65	24X36	67+05		ROUTE 231	LT																		11.50		11.50	1											
66	30X30	67+24		ROUTE 231	RT																																USE EXISTING POST
67	30X30	67+96		ROUTE 231	RT																		12.00		12.00	1											
68	ASSEM.	68+07		ROUTE 231	RT																																USE EXISTING POST
69	48X48	68+17		ROUTE 231	RT																		12.25		12.25	1											
70	18X24	68+35		ROUTE 231	LT																		10.25		10.25	1											
71	18X24	70+52		ROUTE 231	LT																		10.25		10.25	1											
72	ASSEM.	71+16		ROUTE 231	LT																									15.00		15.00		1				
73	18X24	71+46		ROUTE 231	LT																		10.25		10.25	1											
74	ASSEM.	72+10		ROUTE 231	LT																		10.75		10.75	1											
75	18X24	72+87		ROUTE 231	LT																		10.25		10.25	1											
76	ASSEM.	75+20		ROUTE 231	RT																		12.25		12.25	1											
77	30X24	75+21		ROUTE 231	LT																		10.50		10.50	1											
78	18X24	75+53		ROUTE 231	LT																		10.25		10.25	1											
79	48X48	75+77		ROUTE 231	LT																		12.25		12.25	1											
80	30X30	75+92		ROUTE 231	RT																					1											USE EXISTING POST
81	48X48	75+98		ROUTE 231	RT																		12.25		12.25	1											
82	30X30	76+18		ROUTE 231	LT																																USE EXISTING POST
83	30X30	76+62		ROUTE 231	RT																					1											USE EXISTING POST
84	ASSEM.	76+84		ROUTE 231	RT																									13.50		13.50		1				
85	48X48	76+86		ROUTE 231	LT																		12.25		12.25	1											
86	30X30	76+86		ROUTE 231	LT																					1											USE EXISTING POST
87	ASSEM.	76+96		ROUTE 231	LT																																USE EXISTING POST
88	48X48	77+03		ROUTE 231	RT																		11.25		11.25	1											
89	30X24	77+47		ROUTE 231	RT																		10.50		10.50	1											
90	30X30	77+61		ROUTE 231	LT																																USE EXISTING POST
91	ASSEM.	78+89		ROUTE 231	RT																		11.50		11.50	1											
92	36X30	79+07		ROUTE 231	LT																		11.00		11.00	1											
93	30X30	79+70		ROUTE 231	LT																																USE EXISTING POST
94	36X48	81+11		ROUTE 231	RT																									12.50		12.50		1				
95	ASSEM.	82+53		ROUTE 231	RT																									14.00		14.00		1				
96	ASSEM.	84+50		ROUTE 231	LT																																USE EXISTING POST
97	24X36	86+65		ROUTE 231	LT																		11.50		11.50	1											
98	34X36	89+82		ROUTE 231	RT																		11.50		11.50	1											
99	ASSEM.	92+38		ROUTE 231	LT																									14.00		14.00		1				
100	30X30	95+85		ROUTE 231	RT																		10.00		10.00	1											
101	30X24	99+54		ROUTE 231	LT																																USE EXISTING POST
102	36X48	99+79		ROUTE 231	LT																									12.50		12.50		1				
103	48X48	100+56		ROUTE 231	RT																		12.25		12.25	1											
104	30X24	101+76		ROUTE 231	LT																		10.50		10.50	1											
105	36X30	101+94		ROUTE 231	RT																		11.00		11.00	1											
106	30X30	103+20		ROUTE 231	RT																					1											USE EXISTING POST
107	30X30	104+06		ROUTE 231	RT																		12.00		12.00	1											
108	30X24	105+06		ROUTE 231	RT																		10.50		10.50	1											
109	36X30	105+51		ROUTE 231	LT																																USE EXISTING POST
110	ASSEM.	105+77		ROUTE 231	RT																																USE EXISTING POST
111	48X48	110+61		ROUTE 231	LT																																USE EXISTING POST
112	30X30	111+08		ROUTE 231	LT																					1											USE EXISTING POST
113	48X48	112+22		ROUTE 231	LT																																USE EXISTING POST
114	36X30	114+46		ROUTE 231	LT																																USE EXISTING POST
115	ASSEM.	114+57		ROUTE 231	RT																		13.00		13.00	1											
116	48X48	121+52		ROUTE 231	RT																																USE EXISTING POST
117	30X30	121+67		ROUTE 231	RT																																USE EXISTING POST
				SUBTOTAL 2			0.0						0					0				0	0			359	38	0	0			82	0	6	0	0	

* BREAKAWAY ASSEMBLY IS INCIDENTAL FOR STRUCTURAL STEEL AND PIPE POSTS.
** BACKING BARS ARE TOTALED WITH STRUCTURAL STEEL OR PIPE POSTS.

ROUND PIPE POST AND FOOTING DATA TABLE

NOM.SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	C.Y.
2½	5.79	0.48	4'- 3¼"	12"	4-6"	0.13
3	7.58	0.63	4'- 3¼"	12"	4-6"	0.13
4	10.79	0.90	5'- 3½"	18"	5-6"	0.36

STRUCTURAL STEEL POST AND FOOTING DATA TABLE

POST DES. NO.	NOM. SIZE	POST WEIGHT LBS/FT	POST WEIGHT LBS/IN	STUB LENGTH	FOOTING DIA.	LEVEL GROUND DEPTH	LEVEL GROUND C.Y.	6:1 GRADE DEPTH	6:1 GRADE C.Y.	4:1 GRADE DEPTH	4:1 GRADE C.Y.	3:1 OR 2:1 GRADE DEPTH	3:1 OR 2:1 GRADE C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:23:42 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/29/2025
ROUTE: 367 | STATE: MO
DISTRICT: SL | SHEET NO.: 248
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

D-29 SHEET
SIGN POST CALCULATIONS
SHEET 2 OF 4

EFFECTIVE: 07-01-2022

SIGNS (902 SIGNAL SIGNS TABULATED ON D-37A SHEET)							CONCRETE FOOTINGS EMBEDED	STRUCTURAL STEEL POSTS*						PIPE POSTS*					BACKING BARS**				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE												REMARKS AND OTHER REQUIRED ITEMS
																			2" X 3/8" BARS @ 2.55 LBS PER FT					2 IN. POST						2.5 IN. POST						BREAK-AWAY ASSEMBLY	
																									ANCHORS					ANCHORS						
SIGN NO.	SIGN SIZE	LOG MILE	HORZ CLEAR IF NOT STD.	LOCATION (ROUTE)	LT OR RT	SIGN DTL. SHT. NO.	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	NO. EACH	LGTH	TOTAL	NO.	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ITEM NO. 9031241	
							CY		LF	LF	LF		LBS	IN.	LF	LF		LBS		IN.	LF		LF	LF	LF	LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA	
118	48X48	121+74		ROUTE 231	LT																		12.75		12.75	1										
119	30X30	121+74		ROUTE 231	LT																		12.00		12.00	1										
120	48X48	122+33		ROUTE 231	LT																		12.25		12.25	1										
121	30X30	122+23		ROUTE 231	LT																															USE EXISTING POST
122	36X30	127+74		ROUTE 231	RT																					1										USE EXISTING POST
123	36X48	129+49		ROUTE 231	LT																									12.50		12.50		1		
124	30X30	130+23		ROUTE 231	RT																					1										USE EXISTING POST
125	48X24	130+58		ROUTE 231	LT																					1										USE EXISTING POST
126	30X30	130+73		ROUTE 231	RT																					1										USE EXISTING POST
127	36X48	131+85		ROUTE 231	RT																													1		USE EXISTING POST
128	48X48	133+94		ROUTE 231	RT																									12.75		12.75		1		
129	24X36	134+84		ROUTE 231	RT																		11.50		11.50	1										
130	ASSEM.	137+29		ROUTE 231	RT																									13.25		13.25		1		
131	48X48	138+46		ROUTE 231	LT																		12.25		12.25	1										
132	72X36	140+75		ROUTE 231	LT																		11.50	13.25	24.75	2										
133	ASSEM.	143+12		ROUTE 231	LT																															USE EXISTING POST
134	18X24	152+11		ROUTE 231	LT																		10.25		10.25	1										
135	30X30	154+12		ROUTE 231	RT																		10.25		10.25	1										
136	36X30	154+83		ROUTE 231	RT																															USE EXISTING POST
137	36X48	155+13		ROUTE 231	LT																									12.50		12.50		1		
138	108X36	163+79		ROUTE 231	RT		0.72							4	16.75	19.25	10.29	370.44																			
139	30X30	165+23		ROUTE 231	RT																															USE EXISTING POST
140	48X48	166+34		ROUTE 231	RT																															USE EXISTING POST
141	ASSEM.	167+55		ROUTE 231	LT																															USE EXISTING POST
142	30X24	169+34		ROUTE 231	LT																		10.50		10.50	1										
143	24X36	169+97		ROUTE 231	LT																		11.50		11.50	1										
144	48X48	170+76		ROUTE 231	LT																															USE EXISTING POST
145	ASSEM.	172+13		ROUTE 231	RT																		11.75		11.75	1										
146	36X48	172+80		ROUTE 231	LT																															USE EXISTING POST
147	48X48	173+56		ROUTE 231	LT																													1		USE EXISTING POST
148	30X30	174+07		ROUTE 231	LT																					1										USE EXISTING POST
149	30X30	175+30		ROUTE 231	LT																															USE EXISTING POST
150	ASSEM.	176+53		ROUTE 231	LT																															USE EXISTING POST
151	30X24	177+89		ROUTE 231	RT																		10.50		10.50	1										
152	48X48	19+23		ROUTE 231	LT																		12.75		12.75	1										
153	30X42	33+13		ROUTE 231	LT																		9.00		9.00	1										
154	30X42	34+69		ROUTE 231	LT																		9.00		9.00	1										
155	30X42	35+65		ROUTE 231	LT																		9.00		9.00	1										
156	30X42	37+55		ROUTE 231	LT																		9.00		9.00	1										
157	30X42	38+50		ROUTE 231	LT																		9.00		9.00	1										
158	30X42	46+47		ROUTE 231	RT																		9.00		9.00	1										
159	30X42	47+23		ROUTE 231	RT																		9.00		9.00	1										
160	30X42	48+01		ROUTE 231	RT																		9.00		9.00	1										
161	30X42	48+81		ROUTE 231	RT																		9.00		9.00	1										
162	30X42	49+76		ROUTE 231	RT																		9.00		9.00	1										
163	ASSEM.	51+06		ROUTE 231	LT																									17.00		17.00		1		
164	ASSEM.	52+70		ROUTE 231	LT																															USE EXISTING POST
165	36X36	54+85		ROUTE 231	RT																		11.50		11.50	1										
166	48X48	57+74		ROUTE 231	RT																		12.25		12.25	1										
167	ASSEM.	59+12		ROUTE 231	LT																															USE EXISTING POST
168	30X60	59+25		ROUTE 231	RT																									13.50		13.50		1		
169	ASSEM.	62+36		ROUTE 231	LT																									13.25		13.25		1		
170	18X24	66+00		ROUTE 231	RT																		10.25		10.25	1										
171	24X30	71+17		ROUTE 231	RT																															USE EXISTING POST
172	30X60	71+20		ROUTE 231	LT																															USE EXISTING POST
173	ASSEM.	73+39		ROUTE 231	RT																									13.50		13.50		1		
174	36X36	74+32		ROUTE 231	LT																		11.50		11.50	1										
175	30X24	82+40		ROUTE 231	LT																		10.50		10.50	1										
176	ASSEM.	82+93		ROUTE 231	LT																									13.50		13.50		1		
177	18X24	86+14		ROUTE 231	RT																		10.25		10.25	1										
				SUBTOTAL 3			0.7						0					370.4				0	0.0			319	35	0	0			121.75	0	11	0	0	

* BREAKAWAY ASSEMBLY IS INCIDENTAL FOR STRUCTURAL STEEL AND PIPE POSTS.
** BACKING BARS ARE TOTALED WITH STRUCTURAL STEEL OR PIPE POSTS.

ROUND PIPE POST AND FOOTING DATA TABLE

NOM. SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	C.Y.
2½	5.79	0.48	4'- 3¼"	12"	4-6"	0.13
3	7.58	0.63	4'- 3¼"	12"	4-6"	0.13
4	10.79	0.90	5'- 3½"	18"	5-6"	0.36

STRUCTURAL STEEL POST AND FOOTING DATA TABLE

POST DES. NO.	NOM. SIZE	POST WEIGHT LBS/FT	POST WEIGHT LBS/IN	STUB LENGTH	FOOTING DIA.	FOOTING LEVEL GROUND DEPTH	FOOTING LEVEL GROUND C.Y.	FOOTING 6:1 GRADE DEPTH	FOOTING 6:1 GRADE C.Y.	FOOTING 4:1 GRADE DEPTH	FOOTING 4:1 GRADE C.Y.	FOOTING 3:1 OR 2:1 GRADE DEPTH	FOOTING 3:1 OR 2:1 GRADE C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:24:02 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
367	MO
DISTRICT	SHEET NO.
SL	249

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

D-29 SHEET
SIGN POST CALCULATIONS
SHEET 3 OF 4

EFFECTIVE: 07-01-2022

SIGNS (902 SIGNAL SIGNS TABULATED ON D-37A SHEET)							CONCRETE FOOTINGS EMBEDED	STRUCTURAL STEEL POSTS*						PIPE POSTS*					BACKING BARS**				U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE												BREAK-AWAY ASSEMBLY	REMARKS AND OTHER REQUIRED ITEMS
																			2" X 3/8" BARS @ 2.55 LBS PER FT					2 IN. POST						2.5 IN. POST							
																								ANCHORS					ANCHORS							
SIGN NO.	SIGN SIZE	LOG MILE	HORZ CLEAR IF NOT STD.	LOCATION (ROUTE)	LT OR RT	SIGN DTL. SHT. NO.	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	NO. EACH	LGTH	TOTAL	NO.	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ITEM NO. 9031241	
							CY		LF	LF	LF		LBS	IN.	LF	LF		LBS		IN.	LF	LBS	LF	LF		LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA	
178	30X24	87+31		ROUTE 231	RT																			10.50		10.50	1										
179	36X48	88+15		ROUTE 231	LT																									12.75		12.75		1			
180	36X36	95+10		ROUTE 231	LT																																USE EXISTING POST
181	36X48	107+10		ROUTE 231	LT																			12.50		12.50	1			12.50		12.50		1			
182	36X36	147+11		ROUTE 231	RT																																USE EXISTING POST
183	ASSEM.	166+00		ROUTE 231	RT																			11.50		11.50	1										
184	ASSEM.	178+53		ROUTE 231	LT																																USE EXISTING POST
185	36X18	CT LINE		ROUTE 231	LT																																USE EXISTING POST
186	36X18	CT LINE		ROUTE 231	RT																																USE EXISTING POST
				SUBTOTAL 4			0.0						0					0.0				0	0.0			35	3	0	0			25.25	0	2	0	0	

* BREAKAWAY ASSEMBLY IS INCIDENTAL FOR STRUCTURAL STEEL AND PIPE POSTS.
** BACKING BARS ARE TOTALED WITH STRUCTURAL STEEL OR PIPE POSTS.

ROUND PIPE POST AND FOOTING DATA TABLE

NOM.SIZE	WEIGHT		STUB LENGTH	FOOTING		CONCRETE
(IN.)	LBS/FT	LBS/IN		DIA.	DEPTH	C.Y.
2½	5.79	0.48	4'- 3½"	12"	4~6"	0.13
3	7.58	0.63	4'- 3½"	12"	4~6"	0.13
4	10.79	0.90	5'- 3½"	18"	5~6"	0.36

STRUCTURAL STEEL POST AND FOOTING DATA TABLE

POST					FOOTING							
POST DES. NO.	NOM. SIZE	WEIGHT LBS/FT	WEIGHT LBS/IN	STUB LENGTH	DIA.	LEVEL GROUND DEPTH	LEVEL GROUND C.Y.	6:1 GRADE DEPTH	6:1 GRADE C.Y.	4:1 GRADE DEPTH	4:1 GRADE C.Y.	3:1 OR 2:1 GRADE DEPTH	3:1 OR 2:1 GRADE C.Y.
1	W6	9.0	0.75	3'-0"	15"	3'-0"	0.14	3'-2"	0.15	3'-3"	0.16	3'-6"	0.17
2	W6	15.0	1.25	4'-0"	24"	4'-0"	0.47	4'-2"	0.50	4'-3"	0.51	4'-6"	0.54
3	W8	18.0	1.50	4'-6"	28"	4'-6"	0.71	4'-8"	0.73	4'-9"	0.74	5'-0"	0.78
4	W10	22.0	1.83	5'-0"	36"	5'-0"	1.31	5'-2"	1.36	5'-3"	1.39	5'-6"	1.45
5	W10	26.0	2.17	5'-0"	36"	5'-0"	1.31	5'-3"	1.37	5'-5"	1.43	5'-9"	1.52
6	W12	35.0	2.92	5'-6"	36"	5'-6"	1.44	5'-9"	1.52	5'-11"	1.56	6'-3"	1.65

	CONCRETE FOOTINGS EMBEDED	STRUCTURAL STEEL POSTS*						PIPE POSTS *					BACKING BARS**					U-CHANNEL POST	PERFORATED SQUARE STEEL TUBE													
													2" X 3/8" BARS @ 2.55 LBS PER FT						2 IN. POST						2.5 IN. POST						BREAK-AWAY ASSEM.
																						ANCHORS					ANCHORS			
	ITEM NO. 9031010	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO 9031210	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220	NO. EACH	LGTH	TOTAL	NO.	ITEM NO. 9031250A	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031270A	DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	POST NO.1	POST NO.2	TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	ITEM NO. 9031241
	CY		LF	LF	LF		LBS	IN.	LF	LF		LBS		IN.	LF	LBS	LF	LF	LF	LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA
SUBTOTAL 1	0.0						0					21				**	0.0			248.0	28	0	0			108.0	0	8	0	0
SUBTOTAL 2	0.0						0					0				0	0.0			359.0	38	0	0			82.0	0	6	0	0
SUBTOTAL 3	0.7						0					370				0	0.0			319.0	35	0	0			121.8	0	11	0	0
SUBTOTAL 4	0.0						0					0				0	0.0			35.0	3	0	0			25.3	0	2	0	0.0
PAY TOTAL	0.7						0					391				-	0			961	104	0	0			337	0	27	0	-

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:24:15 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/29/2025

ROUTE	STATE
367	MO
DISTRICT	SHEET NO.
SL	250

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

D-29 SHEET
SIGN POST CALCULATIONS
SHEET 4 OF 4

EFFECTIVE: 10-01-2016

STANDARD SIGN ASSEMBLIES (TOTAL)

SIGN NUMBER	STATION	LOCATION	TYPE	SIGN DESCRIPTION, SIZES & NUMBER OF EACH
			SH M1-1	255 M1-1 30"x24"
			SH M1-4	50 M1-4 24"x24"
			SH M1-5	231 M1-5 30"x24"
			SH M2-1	JCT M2-1 21"x15"
			SH M3-1	NORTH M3-1 24"x12"
			SH M3-2 BL	EAST M3-2 24"x12"
			SH M3-3	SOUTH M3-3 24"x12"
			SH M3-4 BL	WEST M3-4 24"x12"
			SH M6-2R	M6-2R 21"x15"
			SH M6-2L	M6-2L 21"x15"
			SH M6-3	M6-3 21"x15"
			SH M17-7	MRT M17-7 18"x24"
			SH R1-1	STOP R1-1 48"x48"
			SH R1-2	YIELD R1-2 48"x48"
			SH R2-1	SPEED LIMIT 40 R2-1 36"x48"
			SH R3-2	R3-2 36"x36"
			SH R3-9B	CENTER LANE ONLY R3-9B 24"x36"
			SH R3-17	BIKE LANE R3-17 24"x24"
			SH R3-17aP	AHEAD R3-17aP 30"x12"
			SH R3-17bP	ENDS R3-17bP 30"x12"
			SH R4-4	KEEP RIGHT R4-4 36"x30"
			SH R4-7A	KEEP RIGHT R4-7A 24"x30"
			SH R5-1	R5-1 36"x36"
			SH R6-1R	R6-1R 36"x12"
			SH R6-1L	R6-1L 36"x12"
			SH R7-1	NO PARKING R7-1 18"x24"
			SH R7-1R	NO PARKING R7-1R 18"x24"
			SH R10-15R	R10-15R 30"x30"
			SH R16-27B	R16-27B 30"x36"
			SHF W3-3	W3-3 36"x36"
			SHF W9-1R	W9-1R 36"x36"
			SHF W11-2	W11-2 36"x36"
			SHF W11-15	W11-15 36"x36"
			SHF W11-12P	INCREASED DUAL ANGLE W11-12P 30"x24"
			SHF W12-1	W12-1 30"x30"
			SHF W16-7P	W16-7P 30"x18"
			SHF W16-9P FYG	AHEAD W16-9P 30"x18"
			SHF S1-1	S1-1 36"x36"
			SHF S5-1	SCHOOL SPEED LIMIT 35 S5-1 30"x60"
			SHF S5-3	END SCHOOL SPEED LIMIT S5-3 24"x30"
			SH TR42-3E	ORG TRL SCHOOL ZONE TR42-3E 12"x18"
			ST D3-2	Clarkson Rd D3-2 108"x36"
			SH I6-1	St Louis I6-1 36"x18"
			SH I6-1	Jefferson I6-1 36"x18"
			ST D1-2	Memorials Chicago D1-2 54"X48"
			ST D1-2	Chicago D1-2 96"x48"
			ST D15-1	D15-1 132"x60"
			ST E8-1	E8-1 96"x96"
			ST E1-1	E1-1 132"x60"
			ST E8-1	E8-1 96"x96"
			ST E1-1	E1-1 180"x84"
			ST E1-1	E1-1 132"x84"
			ST E1-1	E1-1 180"x84"
			ST E1-1	E1-1 180"x84"
			ST E1-1	E1-1 180"x60"
			STF D3-2	D3-2 120"x84"
1*	49+58	ROUTE 231 - LT		
2	49+67	ROUTE 231 - LT		
3	50+50	ROUTE 231 - LT		
4	50+47	ROUTE 231 - LT		
5*	50+71	ROUTE 231 - RT		
6*	55+58	ROUTE 231 - RT		
7	61+57	ROUTE 231 - LT		
8*	62+36	ROUTE 231 - LT		
9	62+75	ROUTE 231 - RT		
10	63+11	ROUTE 231 - LT		
11	64+59	ROUTE 231 - LT		
12*	65+96	ROUTE 231 - LT		
13	0+11	ROUTE 231 - RT	1	1 1
14*	1+05	ROUTE 231 - LT		
15*	1+76	ROUTE 231 - LT		
16	2+16	ROUTE 231 - LT		
17	3+52	ROUTE 231 - LT		
18	3+81	ROUTE 231 - LT		
19	3+82	ROUTE 231 - RT		
20	4+23	ROUTE 231 - RT	2	2 2
21	4+23	ROUTE 231 - RT		
22*	6+45	ROUTE 231 - LT		
23	6+74	ROUTE 231 - LT		
24	9+89	ROUTE 231 - LT		
25A	11+59	ROUTE 231 - RT		
25B	11+59	ROUTE 231 - RT		
25C	11+59	ROUTE 231 - LT		
25D	11+59	ROUTE 231 - LT		
26	16+20	ROUTE 231 - LT		
27*	16+46	ROUTE 231 - RT		
28	17+79	ROUTE 231 - RT		
29	19+23	ROUTE 231 - RT		
30*	19+48	ROUTE 231 - RT		
31*	20+00	ROUTE 231 - RT		
32	20+75	ROUTE 231 - RT		
33	21+33	ROUTE 231 - LT		
34*	21+56	ROUTE 231 - RT		
35	22+19	ROUTE 231 - LT		
36	22+19	ROUTE 231 - LT	2	2 2
37	22+80	ROUTE 231 - RT		
38	24+09	ROUTE 231 - RT		
39*	24+54	ROUTE 231 - RT		
40	24+82	ROUTE 231 - LT	1	1 1
41	28+88	ROUTE 231 - RT		
42	29+86	ROUTE 231 - RT		
43	30+67	ROUTE 231 - RT		
44	34+60	ROUTE 231 - LT		
45	40+25	ROUTE 231 - LT		
46	44+11	ROUTE 231 - LT		
47	45+32	ROUTE 231 - LT		
48	47+84	ROUTE 231 - RT		
49	47+82	ROUTE 231 - RT		
50*	47+95	ROUTE 231 - RT		
51*	49+06	ROUTE 231 - LT		
52	49+13	ROUTE 231 - LT		
53	50+15	ROUTE 231 - LT		
54	50+32	ROUTE 231 - LT		
		SUBTOTAL 1	6 6 3 2 1 2 2 2 2 0 2 0 0 3 2 0 1 1 0 0 0 0 0 0 0 0 0 1 2 2 0 0 8 1 0 2 9 0 0 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1 1 1 1	

* REUSE EXISTING SIGNS

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:24:31 PM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	251

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

STANDARD SIGN ASSEMBLIES
D-30
SHEET 1 OF 5

STANDARD SIGN ASSEMBLIES (TOTAL)

SIGN NUMBER	STATION	LOCATION	TYPE	SIGN DESCRIPTION, SIZES & NUMBER OF EACH
			SH M1-1	255 M1-1 30"x24"
			SH M1-4	50 M1-4 24"x24"
			SH M1-5	231 M1-5 30"x24"
			SH M2-1	JCT M2-1 21"x15"
			SH M3-1	NORTH M3-1 24"x12"
			SH M3-2	EAST M3-2 24"x12"
			SH M3-2 BL	EAST M3-2 24"x12"
			SH M3-3	SOUTH M3-3 24"x12"
			SH M3-4	WEST M3-4 24"x12"
			SH M3-4 BL	WEST M3-4 24"x12"
			SH M6-2R	M6-2R 21"x15"
			SH M6-2L	M6-2L 21"x15"
			SH M6-3	M6-3 21"x15"
			SH M17-7	MRT M17-7 18"x24"
			SH R1-1	STOP R1-1 48"x48"
			SH R1-2	YIELD R1-2 48"x48"
			SH R2-1	SPEED LIMIT 40 R2-1 36"x48"
			SH R3-2	R3-2 36"x36"
			SH R3-9B	CENTER LANE ONLY R3-9B 24"x36"
			SH R3-17	BIKE LANE R3-17 30"x24"
			SH R3-17aP	AHEAD R3-17aP 30"x12"
			SH R3-17bP	ENDS R3-17bP 30"x12"
			SH R4-4	R4-4 36"x30"
			SH R4-7A	KEEP RIGHT R4-7a 24"x30"
			SH R5-1	R5-1 36"x36"
			SH R6-1R	R6-1R 36"x12"
			SH R6-1L	R6-1L 36"x12"
			SH R7-1	NO PARKING R7-1 18"x24"
			SH R7-1R	R7-1R 18"x24"
			SH R10-15R	R10-15R 30"x30"
			SH R16-27B	R16-27B 30"x36"
			SHF W3-3	W3-3 36"x36"
			SHF W9-1R	W9-1R 36"x36"
			SHF W11-2	W11-2 36"x36"
			SHF W11-8	W11-8 36"x36"
			SHF W11-12P	W11-12P 30"x24"
			SHF W12-1	W12-1 30"x30"
			SHF W16-7P	W16-7P 30"x18"
			SHF W16-9P	AHEAD W16-9P 30"x18"
			SHF S1-1	S1-1 36"x36"
			SHF S5-1	SPEED LIMIT 35 S5-1 30"x60"
			SHF S5-3	END SCHOOL SPEED LIMIT S5-3 24"x30"
			SH TR42-3E	ORG TRL ROUTE TRL TR42-3E 12"x18"
			ST D3-2	Clarksville IL D3-2 108"x36"
			SH I6-1	St Louis I6-1 36"x18"
			SH I6-1	Jefferson I6-1 36"x18"
			ST D1-2	Memorial Chicago D1-2 84"X48"
			ST D1-2	Chicago D1-2 96"x48"
			ST D15-1	West Memorial D15-1 132"x60"
			ST E8-1	East Memorial D15-1 96"x96"
			ST E1-1	East Chicago E1-1 132"x60"
			ST E8-1	East Chicago E8-1 96"x96"
			ST E1-1	West Chicago E1-1 180"x84"
			ST E1-1	West St Louis E1-1 132"x84"
			ST E1-1	East St Louis E1-1 180"x84"
			ST E1-1	East Jefferson Memorial E1-1 180"x84"
			ST E1-1	West Jefferson Memorial E1-1 180"x84"
			ST E1-1	West Chicago E1-1 180"x60"
			STF D3-2	D3-2 120"x84"
55	50+42	ROUTE 231 - RT		1 1
56	52+06	ROUTE 231 - RT		1
57	52+90	ROUTE 231 - RT		1
58	53+11	ROUTE 231 - RT		1
59	53+22	ROUTE 231 - RT		1
60	53+68	ROUTE 231 - RT		1
61*	57+45	ROUTE 231 - RT		
62*	58+10	ROUTE 231 - RT		
63*	61+05	ROUTE 231 - RT		
64	64+67	ROUTE 231 - RT		1 1 1
65*	67+05	ROUTE 231 - LT		
66	67+24	ROUTE 231 - RT		1
67	67+96	ROUTE 231 - RT		1
68	68+07	ROUTE 231 - RT		1
69	68+17	ROUTE 231 - RT		1
70*	68+35	ROUTE 231 - LT		
71*	70+52	ROUTE 231 - LT		
72	71+16	ROUTE 231 - LT		1 1 1
73*	71+46	ROUTE 231 - LT		
74	72+10	ROUTE 231 - RT		1 1
75*	72+87	ROUTE 231 - RT		
76*	75+20	ROUTE 231 - RT		
77	75+21	ROUTE 231 - LT		1
78*	75+53	ROUTE 231 - LT		
79	75+77	ROUTE 231 - LT		1
80	75+92	ROUTE 231 - RT		1
81	75+98	ROUTE 231 - RT		1
82	76+18	ROUTE 231 - LT		1
83	76+62	ROUTE 231 - RT		1
84	76+84	ROUTE 231 - RT		1 1
85	76+86	ROUTE 231 - LT		1
86	76+86	ROUTE 231 - LT		1
87	76+96	ROUTE 231 - LT		1 1
88	77+03	ROUTE 231 - RT		1
89	77+47	ROUTE 231 - RT		1
90	77+61	ROUTE 231 - LT		1
91	78+89	ROUTE 231 - RT		1 1
92	79+07	ROUTE 231 - LT		1
93	79+70	ROUTE 231 - LT		1
94	81+11	ROUTE 231 - RT		1
95*	82+53	ROUTE 231 - RT		
96	84+50	ROUTE 231 - LT		1 1 1
97*	86+65	ROUTE 231 - LT		
98*	89+82	ROUTE 231 - RT		
99*	92+38	ROUTE 231 - LT		
100	95+85	ROUTE 231 - RT		1
101	99+54	ROUTE 231 - LT		1
102	99+79	ROUTE 231 - LT		1
103	100+56	ROUTE 231 - RT		1
104	101+76	ROUTE 231 - LT		1
105	101+94	ROUTE 231 - RT		1
106	103+20	ROUTE 231 - RT		1
107*	104+06	ROUTE 231 - RT		
108	105+06	ROUTE 231 - RT		1
109	105+51	ROUTE 231 - LT		1
110	105+77	ROUTE 231 - RT		1 1
111	110+61	ROUTE 231 - LT		1
		SUBTOTAL 2		0 0 3 0 0 0 2 0 0 0 0 1 1 7 3 1 0 4 1 0 3 1 1 2 2 0 0 2 0 0 0 2 0 0 10 2 2 2 0 0 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0

* REUSE EXISTING SIGNS

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:24:45 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	252

COUNTY: ST. LOUIS

JOB NO.: J6S3632

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)

STANDARD SIGN ASSEMBLIES
D-30
SHEET 2 OF 5

EFFECTIVE: 10-01-2016

STANDARD SIGN ASSEMBLIES (TOTAL)

SIGN NUMBER	STATION	LOCATION	TYPE	SIGN DESCRIPTION, SIZES & NUMBER OF EACH
			SH M1-1	255 M1-1 30"x24"
			SH M1-4	50 M1-4 24"x24"
			SH M1-5	231 M1-5 30"x24"
			SH M2-1	JCT M2-1 21"x15"
			SH M3-1	NORTH M3-1 24"x12"
			SH M3-2 BL	EAST M3-2 24"x12"
			SH M3-3	SOUTH M3-3 24"x12"
			SH M3-4 BL	WEST M3-4 24"x12"
			SH M6-2R	M6-2R 21"x15"
			SH M6-2L	M6-2L 21"x15"
			SH M6-3	M6-3 21"x15"
			SH M17-7	M17-7 18"x24"
			SH R1-1	STOP R1-1 48"x48"
			SH R1-2	YIELD R1-2 48"x48"
			SH R2-1	SPEED LIMIT 40 R2-1 36"x48"
			SH R3-2	R3-2 36"x36"
			SH R3-9B	CENTER LANE ONLY R3-9B 24"x36"
			SH R3-17	BIKE LANE R3-17 30"x24"
			SH R3-17aP	AHEAD R3-17aP 30"x12"
			SH R3-17bP	ENDS R3-17bP 30"x12"
			SH R4-7	KEEP RIGHT R4-7 24"x30"
			SH R4-7A	KEEP RIGHT R4-7A 24"x30"
			SH R5-1	R5-1 36"x36"
			SH R6-1R	R6-1R 36"x12"
			SH R6-1L	R6-1L 36"x12"
			SH R7-1	NO PARKING R7-1 18"x24"
			SH R7-1R	NO PARKING R7-1R 18"x24"
			SH R10-15R	R10-15R 30"x30"
			SH R16-27B	R16-27B 30"x36"
			SHF W3-3	W3-3 36"x36"
			SHF W9-1R	W9-1R 36"x36"
			SHF W11-2	W11-2 36"x36"
			SHF W11-8	W11-8 36"x36"
			SHF W11-12P	W11-12P 30"x24"
			SHF W12-1	W12-1 30"x30"
			SHF W16-7P	W16-7P 30"x18"
			SHF W16-9P FYG	AHEAD W16-9P 30"x18"
			SHF S1-1	S1-1 36"x36"
			SHF S5-1	SPEED LIMIT 35 S5-1 30"x60"
			SHF S5-3	END SCHOOL SPEED LIMIT S5-3 24"x30"
			SH TR42-3E	ORG TRL ROUTE TRL TR42-3E 12"x18"
			ST D3-2	D3-2 108"x36"
			SH I6-1	I6-1 96"x18"
			SH I6-1	St Louis I6-1 96"x18"
			ST D1-2	Jefferson I6-1 96"x18"
			ST D1-2	D1-2 84"X48"
			ST D15-1	D15-1 96"x48"
			ST E8-1	E8-1 132"x60"
			ST E1-1	E1-1 96"x96"
			ST E8-1	E8-1 132"x60"
			ST E1-1	E1-1 96"x96"
			ST E1-1	E1-1 180"x84"
			ST E1-1	E1-1 132"x84"
			ST E1-1	E1-1 180"x84"
			ST E1-1	E1-1 180"x84"
			ST E1-1	E1-1 180"x60"
			STF D3-2	D3-2 120"x84"
112	111+08	ROUTE 231 - LT		1
113	112+22	ROUTE 231 - LT	1	
114	114+46	ROUTE 231 - LT	1	
115	114+57	ROUTE 231 - RT	1 1	
116	121+52	ROUTE 231 - RT	1	
117	121+67	ROUTE 231 - RT		1
118*	121+74	ROUTE 231 - LT		
119*	121+74	ROUTE 231 - LT		
120*	122+33	ROUTE 231 - LT		
121	122+23	ROUTE 231 - LT		1
122	127+74	ROUTE 231 - RT	1	
123*	129+49	ROUTE 231 - LT		
124	130+23	ROUTE 231 - RT		1
125*	130+58	ROUTE 231 - LT		
126	130+73	ROUTE 231 - RT		1
127	131+85	ROUTE 231 - RT	1	
128	133+94	ROUTE 231 - RT	1	
129	134+84	ROUTE 231 - RT	1	
130	137+29	ROUTE 231 - RT		1 1
131	138+46	ROUTE 231 - LT	1	
132*	140+75	ROUTE 231 - LT		
133	143+12	ROUTE 231 - LT		1 1
134	152+11	ROUTE 231 - LT	1	
135	154+12	ROUTE 231 - RT		1
136	154+83	ROUTE 231 - RT	1	
137	155+13	ROUTE 231 - LT	1	
138	163+79	ROUTE 231 - RT		1
139	165+23	ROUTE 231 - RT		1
140	166+34	ROUTE 231 - RT	1	
141	167+55	ROUTE 231 - LT	1 1	
142	169+34	ROUTE 231 - LT	1	
143	169+97	ROUTE 231 - LT	1	
144	170+76	ROUTE 231 - LT	1	
145*	172+13	ROUTE 231 - RT		
146	172+80	ROUTE 231 - LT	1	
147	173+56	ROUTE 231 - LT	1	
148	174+07	ROUTE 231 - LT		1
149	175+30	ROUTE 231 - LT		1
150	176+53	ROUTE 231 - LT	1	
151	177+89	ROUTE 231 - RT	1	
152*	19+23	ROUTE 231 - LT		
153*	33+13	ROUTE 231 - LT		
154*	34+69	ROUTE 231 - LT		
155*	35+65	ROUTE 231 - LT		
156*	37+55	ROUTE 231 - LT		
157*	38+50	ROUTE 231 - LT		
158*	46+47	ROUTE 231 - RT		
159*	47+23	ROUTE 231 - RT		
160*	48+01	ROUTE 231 - RT		
161*	48+81	ROUTE 231 - LT		
162*	49+76	ROUTE 231 - RT		
163*	51+06	ROUTE 231 - LT		
164	52+70	ROUTE 231 - LT	1	
165	54+85	ROUTE 231 - RT		1
166*	57+74	ROUTE 231 - RT		
167	59+12	ROUTE 231 - LT	1	1
168	59+25	ROUTE 231 - RT		1
	SUBTOTAL 3		0 0 2 0 2 0 1 0 0 1 0 0 1 5 4 1 2 2 0 0 3 0 0 0 0 1 0 0 0 0 0 0 0 0 9 0 0 3 1 1 2 1 0 0 0 0 0 0 0 0 0 0 0 0 0

* REUSE EXISTING SIGNS

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:24:58 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	253

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

STANDARD SIGN ASSEMBLIES
D-30
SHEET 3 OF 5

STANDARD SIGN ASSEMBLIES (TOTAL)

SIGN NUMBER	STATION	LOCATION	TYPE	SIGN DESCRIPTION, SIZES & NUMBER OF EACH
169	62+36	ROUTE 231 - LT		
170*	66+00	ROUTE 231 - RT		
171	71+17	ROUTE 231 - RT		
172	71+20	ROUTE 231 - LT		
173	73+39	ROUTE 231 - RT		
174	74+32	ROUTE 231 - LT		
175	82+40	ROUTE 231 - LT		
176	82+93	ROUTE 231 - LT		
177*	86+14	ROUTE 231 - RT		
178	87+31	ROUTE 231 - RT		
179	88+15	ROUTE 231 - LT		
180	95+10	ROUTE 231 - LT		
181	107+10	ROUTE 231 - LT		
182	147+11	ROUTE 231 - RT		
183	166+00	ROUTE 231 - LT		
184	178+53	ROUTE 231 - LT		
185	CT LINE	ROUTE 231 - RT		
186	CT LINE	ROUTE 231 - LT		
		SUBTOTAL 4	SH M1-1	0
			SH M1-4	0
			SH M1-5	0
			SH M2-1	0
			SH M3-1	0
			SH M3-2 BL	0
			SH M3-3	0
			SH M3-4 BL	0
			SH M6-2R	0
			SH M6-2L	0
			SH M6-3	0
			SH M17-7	0
			SH R1-1	0
			SH R1-2	0
			SH R2-1	2
			SH R3-2	0
			SH R3-9B	0
			SH R3-17	4
			SH R3-17 aP	1
			SH R3-17 dP	1
			SH R4-4	0
			SH R4-7A	0
			SH R5-1	0
			SH R6-1R	0
			SH R6-1L	0
			SH R7-1	0
			SH R7-1R	0
			SH R10-15R	0
			SH R16-27B	1
			SHF W3-3	1
			SHF W9-1R	1
			SHF W11-2W	0
			SHF W11-8	2
			SHF W11-12P	2
			SHF W12-1	0
			SHF W16-7P	0
			SHF W16-9P FYG	1
			SHF S1-1	2
			SHF S5-1	1
			SHF S5-3 TR42-3E	1
			SH D3-2	0
			ST I6-1	0
			SH I6-1	1
			ST D1-2	0
			ST D1-2	0
			ST D15-1	0
			ST E8-1	0
			ST E1-1	0
			ST E8-1	0
			ST E1-1	0
			ST E1-1	0
			ST E1-1	0
			ST E1-1	0
			ST E1-1	0
			STF D3-2	0

* REUSE EXISTING SIGNS

STANDARD SIGN ASSEMBLIES (TOTAL)

	TYPE	SIGN DESCRIPTION, SIZES & NUMBER OF EACH
SUBTOTAL 1	SH M1-1	6
	SH M1-4	6
	SH M1-5	3
	SH M2-1	2
	SH M3-1	1
	SH M3-2 BL	2
	SH M3-3	2
	SH M3-4 BL	2
	SH M6-2R	2
	SH M6-2L	0
	SH M6-3	2
	SH M17-7	0
	SH R1-1	0
	SH R1-2	3
	SH R2-1	2
	SH R3-2	0
	SH R3-9B	1
	SH R3-17	1
	SH R3-17 aP	0
	SH R3-17 dP	0
	SH R4-4	0
	SH R4-7A	0
	SH R5-1	0
	SH R6-1R	0
	SH R6-1L	0
	SH R7-1	1
	SH R7-1R	2
	SH R10-15R	2
	SH R16-27B	0
	SHF W3-3	0
	SHF W9-1R	8
	SHF W11-2W	0
	SHF W11-8	0
	SHF W11-12P	1
	SHF W11-15	2
	SHF W12-1	9
	SHF W16-7P	0
	SHF W16-9P FYG	0
	SHF S1-1	0
	SHF S5-1	0
	SHF S5-3 TR42-3E	0
	SH D3-2	0
	ST I6-1	0
	SH I6-1	1
	ST D1-2	1
	ST D1-2	1
	ST D15-1	1
	ST E8-1	1
	ST E1-1	1
	ST E8-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	STF D3-2	1
SUBTOTAL 2	SH M1-1	0
	SH M1-4	0
	SH M1-5	3
	SH M2-1	0
	SH M3-1	0
	SH M3-2 BL	0
	SH M3-3	2
	SH M3-4 BL	0
	SH M6-2R	0
	SH M6-2L	0
	SH M6-3	0
	SH M17-7	1
	SH R1-1	1
	SH R1-2	7
	SH R2-1	3
	SH R3-2	1
	SH R3-9B	0
	SH R3-17	4
	SH R3-17 aP	1
	SH R3-17 dP	0
	SH R4-4	3
	SH R4-7A	1
	SH R5-1	1
	SH R6-1R	2
	SH R6-1L	2
	SH R7-1	0
	SH R7-1R	0
	SH R10-15R	2
	SH R16-27B	0
	SHF W3-3	0
	SHF W9-1R	0
	SHF W11-2W	2
	SHF W11-8	0
	SHF W11-12P	0
	SHF W11-15	0
	SHF W12-1	10
	SHF W16-7P	2
	SHF W16-9P FYG	2
	SHF S1-1	2
	SHF S5-1	0
	SHF S5-3 TR42-3E	0
	SH D3-2	2
	ST I6-1	0
	SH I6-1	0
	ST D1-2	0
	ST D1-2	0
	ST D15-1	0
	ST E8-1	0
	ST E1-1	0
	ST E8-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	STF D3-2	0
SUBTOTAL 3	SH M1-1	0
	SH M1-4	0
	SH M1-5	2
	SH M2-1	0
	SH M3-1	2
	SH M3-2 BL	0
	SH M3-3	1
	SH M3-4 BL	0
	SH M6-2R	0
	SH M6-2L	1
	SH M6-3	0
	SH M17-7	0
	SH R1-1	1
	SH R1-2	5
	SH R2-1	4
	SH R3-2	1
	SH R3-9B	2
	SH R3-17	2
	SH R3-17 aP	0
	SH R3-17 dP	0
	SH R4-4	3
	SH R4-7A	0
	SH R5-1	0
	SH R6-1R	0
	SH R6-1L	1
	SH R7-1	0
	SH R7-1R	0
	SH R10-15R	0
	SH R16-27B	0
	SHF W3-3	0
	SHF W9-1R	0
	SHF W11-2W	0
	SHF W11-8	0
	SHF W11-12P	0
	SHF W11-15	0
	SHF W12-1	9
	SHF W16-7P	0
	SHF W16-9P FYG	0
	SHF S1-1	3
	SHF S5-1	1
	SHF S5-3 TR42-3E	1
	SH D3-2	2
	ST I6-1	1
	SH I6-1	0
	ST D1-2	0
	ST D1-2	0
	ST D15-1	0
	ST E8-1	0
	ST E1-1	0
	ST E8-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	STF D3-2	0
SUBTOTAL 4	SH M1-1	0
	SH M1-4	0
	SH M1-5	0
	SH M2-1	0
	SH M3-1	0
	SH M3-2 BL	0
	SH M3-3	0
	SH M3-4 BL	0
	SH M6-2R	0
	SH M6-2L	0
	SH M6-3	0
	SH M17-7	0
	SH R1-1	0
	SH R1-2	0
	SH R2-1	2
	SH R3-2	0
	SH R3-9B	0
	SH R3-17	4
	SH R3-17 aP	1
	SH R3-17 dP	1
	SH R4-4	0
	SH R4-7A	0
	SH R5-1	0
	SH R6-1R	0
	SH R6-1L	0
	SH R7-1	0
	SH R7-1R	0
	SH R10-15R	1
	SH R16-27B	1
	SHF W3-3	1
	SHF W9-1R	1
	SHF W11-2W	0
	SHF W11-8	2
	SHF W11-12P	2
	SHF W11-15	0
	SHF W12-1	0
	SHF W16-7P	0
	SHF W16-9P FYG	1
	SHF S1-1	2
	SHF S5-1	1
	SHF S5-3 TR42-3E	1
	SH D3-2	0
	ST I6-1	1
	SH I6-1	1
	ST D1-2	0
	ST D1-2	0
	ST D15-1	0
	ST E8-1	0
	ST E1-1	0
	ST E8-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	ST E1-1	0
	STF D3-2	0
TOTAL	SH M1-1	6
	SH M1-4	6
	SH M1-5	8
	SH M2-1	2
	SH M3-1	3
	SH M3-2 BL	2
	SH M3-3	5
	SH M3-4 BL	2
	SH M6-2R	2
	SH M6-2L	1
	SH M6-3	2
	SH M17-7	1
	SH R1-1	2
	SH R1-2	15
	SH R2-1	11
	SH R3-2	2
	SH R3-9B	3
	SH R3-17	11
	SH R3-17 aP	2
	SH R3-17 dP	1
	SH R4-4	6
	SH R4-7A	1
	SH R5-1	1
	SH R6-1R	2
	SH R6-1L	2
	SH R7-1	1
	SH R7-1R	1
	SH R10-15R	4
	SH R16-27B	3
	SHF W3-3	1
	SHF W9-1R	1
	SHF W11-2W	10
	SHF W11-8	2
	SHF W11-12P	2
	SHF W11-15	1
	SHF W12-1	21
	SHF W16-7P	11
	SHF W16-9P FYG	3
	SHF S1-1	7
	SHF S5-1	2
	SHF S5-3 TR42-3E	2
	SH D3-2	4
	ST I6-1	1
	SH I6-1	1
	ST D1-2	1
	ST D1-2	1
	ST D15-1	1
	ST E8-1	1
	ST E1-1	1
	ST E8-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	ST E1-1	1
	STF D3-2	1

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:25:18 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025
ROUTE: 231 | STATE: MO
DISTRICT: SL | SHEET NO.: 254
COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

STANDARD SIGN ASSEMBLIES
D-30
SHEET 4 OF 5

SIGN SUMMARY

EFFECTIVE: 10-01-2016

STANDARD SIGN OR SPECIAL SIGN NUMBER	SIGN DETAIL SHEET NO.	NO. EACH	SIZE, TYPE & SQUARE FEET				
			SIZE	FLAT SHEET SH ITEM NO. 9035004A	FLAT SHEET FLUORESCENT SHF * ITEM NO. 9035069A	STRUCTURAL ST ITEM NO. 9035011A	STRUCTURAL FLUORESCENT STF * ITEM NO. 9035071A
M1-1 (255)	STANDARD	6	30"x24"	30			
M1-4 (50)	STANDARD	6	24"x24"	24			
M1-5 (231)	STANDARD	8	30"x24"	40			
M2-1 BL	STANDARD	2	21"x15"	7			
M3-1	STANDARD	3	24"x12"	6			
M3-2 BL	STANDARD	2	24"x12"	4			
M3-3	STANDARD	5	24"x12"	10			
M3-4 BL	STANDARD	2	24"x12"	4			
M6-2R	STANDARD	2	21"x15"	4.38			
M6-2L	STANDARD	1	21"x15"	2.19			
M6-3	STANDARD	2	21"x15"	4.38			
M17-7	STANDARD	1	18"x24"	3			
R1-1	STANDARD	2	48"x48"	32			
R1-2	STANDARD	15	48"x48"	240			
R2-1(40)	STANDARD	11	36"x48"	132			
R3-2	STANDARD	2	36"x36"	18			
R3-9B	STANDARD	3	24"x36"	18			
R3-17	STANDARD	11	30"x24"	55			
R3-17aP	STANDARD	2	30"x12"	5			
R3-17bP	STANDARD	1	30"x12"	2.5			
R4-4	STANDARD	6	36"x30"	45			
R4-7A	STANDARD	1	24"x30"	5			
R5-1	STANDARD	1	36"x36"	6			
R6-1R	STANDARD	2	36"x12"	6			
R6-1L	STANDARD	2	36"x12"	6			
R7-1	STANDARD	1	18"x24"	3			
R7-1R	STANDARD	1	18"x24"	3			
R10-15R	STANDARD	4	30"x30"	25			
R16-27B	256	3	30"x36"	22.5			
W3-3	STANDARD	1	36"x36"		9		
W9-1R	STANDARD	1	36"x36"		9		
W11-2	STANDARD	10	36"x36"		90		
W11-8	STANDARD	2	36"x36"		18		
W11-12P	STANDARD	2	30"x24"		10		
W11-15	STANDARD	1	36"x36"		9		
W12-1	STANDARD	21	36"x36"		189		
W16-7P	STANDARD	11	30"x18"		41.25		
W16-9P FYG	STANDARD	3	30"x18"		11.25		
S1-1	STANDARD	7	36"x36"		21		
S5-1	256	2	30"x60"		25		
S5-3	STANDARD	2	24"x30"		10		
TR42-3E	STANDARD	4	12"x18"	6			
D3-2 - SIGN #138	263	1	108"x36"			27	
I6-1 (SLC) - SIGN #185	256	1	36"x18"	4.5			
I6-1 (JC) - SIGN # 186	263	1	36"x18"	4.5			
D1-2 - SIGN #33	258	1	84"X48"			28	
D1-2 - SIGN #19	261	1	96"x48"			32	
D15-1 - SIGN #21	261	1	132"x60"			55	
E8-1 - SIGN #24	260	1	96"x96"			64	
E1-1 - SIGN #35	257	1	132"x60"			55	
E8-1 - SIGN # 28	262	1	96"x96"			64	
E1-1 - SIGN # 25A	262	1	180"x84"			105	
E1-1 - SIGN # 25B	261	1	132"x84"			77	
E1-1 - SIGN #25C	260	1	180"x84"			105	
E1-1 - SIGN #25D	259	1	180"x84"			105	
E1-1 - SIGN #26	258	1	180"x60"			75	
D3-2 - SIGN #44	257	1	120"x84"			50	20.0
SUBTOTALS				778.0	442.5	842.0	20.0
PAY TOTALS				778	443	842	20

* ORANGE, YELLOW & YELLOW/GREEN

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:25:35 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	255

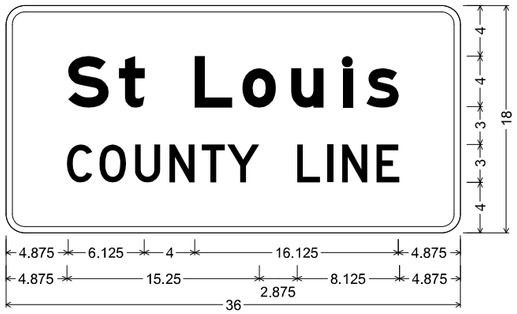
COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

SIGN SUMMARY
D-30
SHEET 5 OF 5

SIGN NO.	185
STATION	ON BRIDGE
ROADWAY	MO 231



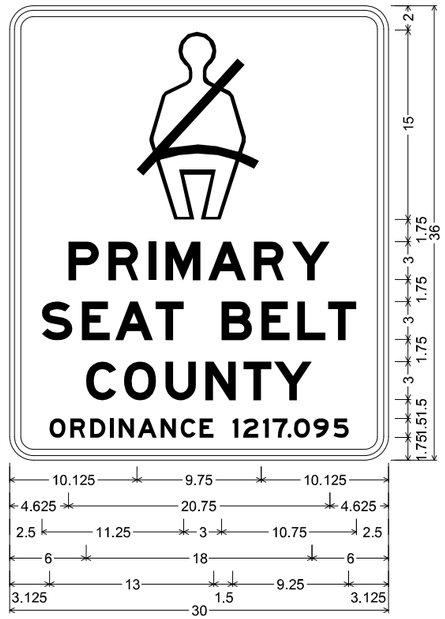
I6-1 SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
"St Louis", E Mod; "COUNTY LINE", D;
Table of letter and object lefts

S	t	L	o	u	l	s
4.875	9.000	15.000	18.750	22.625	26.625	28.500

C	O	U	N	T	Y
4.875	7.375	10.250	13.000	15.500	17.500

L	I	N	E
23.125	25.500	26.625	29.375

SIGN NO.	10, 42, 183
STATION	63+11, 29+86, 178+53
ROADWAY	MO 231



R16-27b SH-FLAT SHEET;
1.875" Radius, 0.500" Border, 0.375" Indent, Black on, White;
Symbol RG015; "PRIMARY", E Mod;
"SEAT BELT", E Mod; "COUNTY", E Mod;
"ORDINANCE 1217.095", E Mod;
Table of letter and object lefts

10.125

P	R	I	M	A	R	Y
4.625	7.750	11.000	12.375	15.750	19.375	22.375

S	E	A	T
2.500	5.750	8.375	11.500

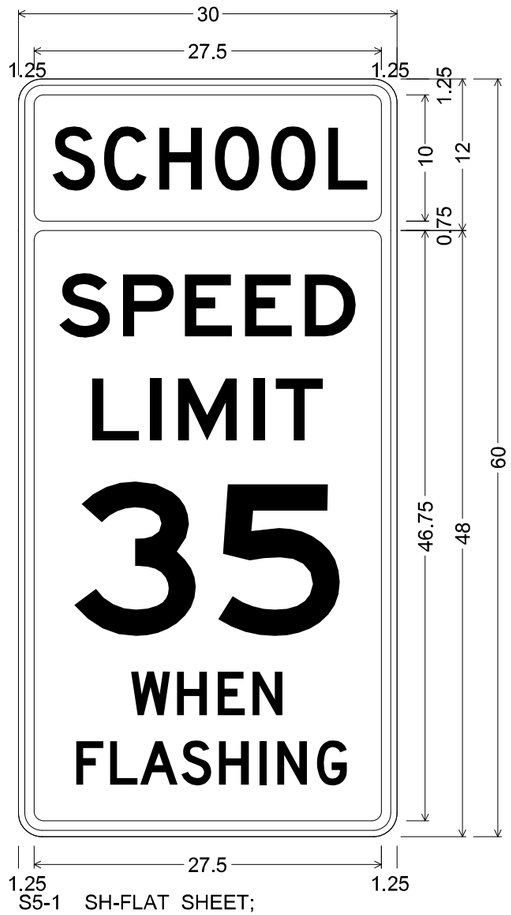
B	E	L	T
16.750	20.000	22.750	25.250

C	O	U	N	T	Y
6.000	9.125	12.375	15.500	18.500	21.000

O	R	D	I	N	A	N	C	E
3.125	4.750	6.375	8.000	8.625	10.125	12.000	13.500	15.000

1	2	1	7	.	0	9	5
17.625	18.500	20.000	20.875	22.000	22.500	24.125	25.625

SIGN NO.	168, 172
STATION	59+25, 71+20
ROADWAY	MO 231



S5-1 SH-FLAT SHEET;

1.875" Radius, 0.500" Border, White on, Black;
Rounded Rectangle 0.750" Radius Bright yellow green;

1.875" Radius, 0.500" Border, White on, Black;
Rounded Rectangle 0.750" Radius;
Table of letter and object lefts

1.250
1.250

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:30:33 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	256

COUNTY
ST. LOUIS
JOB NO.
J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

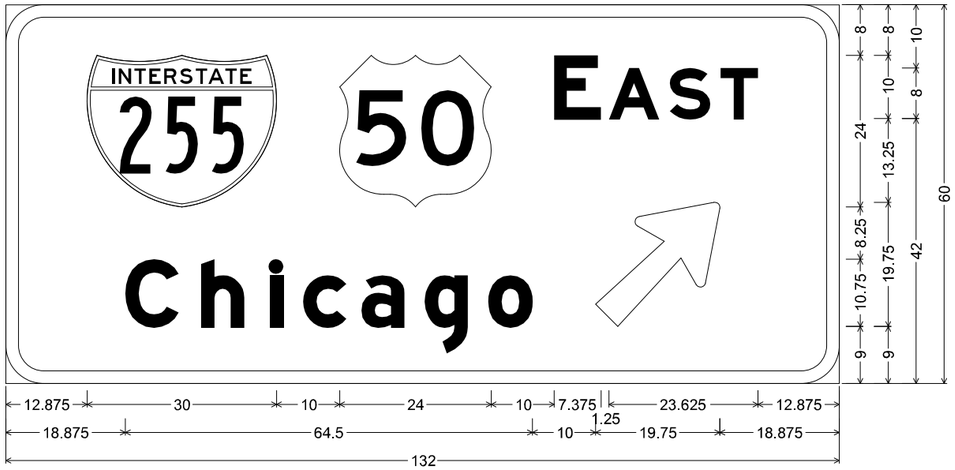
DESCRIPTION | DATE

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

SPECIAL SIGN DETAILS
SHEET 1 OF 13

REV.

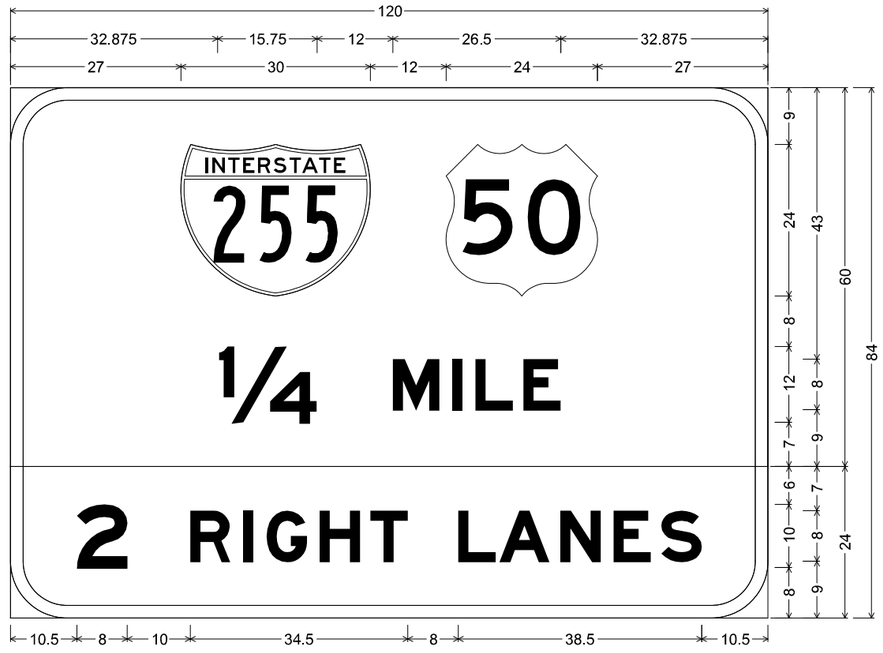
SIGN NO.	35
STATION	22+19
ROADWAY	MO 231



E1-1 ST-STRUCTURAL;
6.000" Radius, 2.000" Border, White on, Green;
Interstate 255 12.000" B; "EAST", E Mod; "Chicago", E Mod; Arrow 80 - 25.000" 45';
Table of letter and object lefts

255 12.875	50 52.875	**E** 86.875	**A** 95.500	**S** 105.125	**T** 113.250	
C 18.875	**h** 30.875	**I** 41.750	**c** 47.125	**a** 56.250	**g** 66.375	**o** 76.375	⇗ 93.375

SIGN NO.	44
STATION	34+60
ROADWAY	MO 231



D3-2 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
Interstate 255 12.000" B; "¼", E Mod; "MILE", E Mod;

STF-STRUCTURAL FLUORESCENT;
9.000" Radius, 2.000" Border, Black on, Yellow;
"2 RIGHT LANES", E Mod;
Table of letter and object lefts

255 27.000	50 69.000										
¼ 32.875	**M** 60.625	**I** 70.000	**L** 73.625	**E** 81.250							
2 10.500	**R** 28.500	**I** 36.875	**G** 40.500	**H** 49.000	**T** 57.000	**L** 71.000	**A** 77.500	**N** 87.125	**E** 95.500	**S** 103.125	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:30:46 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	257

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

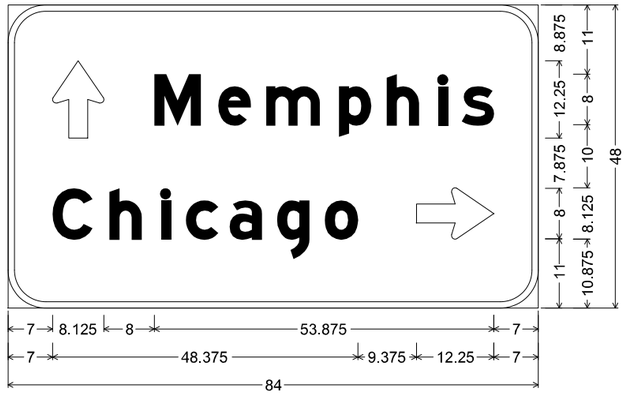
DESCRIPTION	DATE

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

SPECIAL SIGN DETAILS
SHEET 2 OF 13

REV.

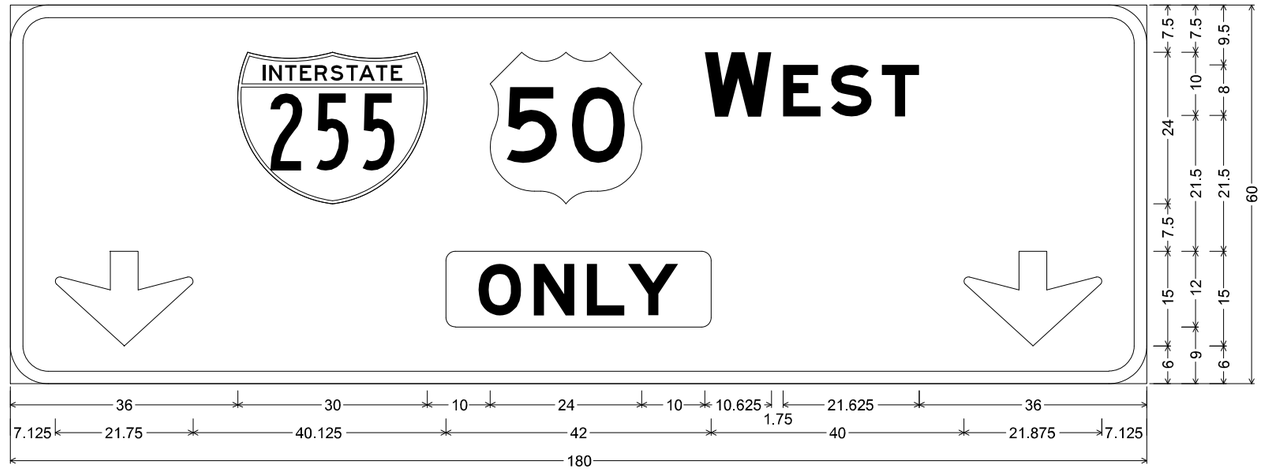
SIGN NO.	33
STATION	21+33
ROADWAY	MO 231



D1-2 ST-STRUCTURAL;
6.000" Radius, 1.000" Border, White on, Green;
Standard Arrow Custom 12.250" X 8.125" 90'; "Memphis", E Mod;
"Chicago", E Mod; Standard Arrow Custom 12.250" X 8.125" 0';
Table of letter and object lefts

⇧ 7.000	**M** 23.125	**e** 33.250	**m** 40.875	**p** 52.375	**h** 60.000	**i** 68.125	**s** 71.875
C 7.000	**h** 16.000	**i** 24.250	**c** 28.125	**a** 35.125	**g** 42.625	**o** 50.125	⇨ 64.750

SIGN NO.	26
STATION	16+20
ROADWAY	MO 231



E1-1 ST-STRUCTURAL;
6.000" Radius, 2.000" Border, White on, Green;
Interstate 255 12.000" B; "WEST", E Mod; Down Arrow 22.000" 270^; Rounded Rectangle 1.500" Radius Yellow;
Down Arrow 22.000" 270^;
Table of letter and object lefts

255 36.000	50 76.000	**W** 110.000	**E** 122.375	**S** 130.000	**T** 138.000
⇩ 7.125	▭ 69.000	⇩ 151.000			

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:30:58 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	258

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

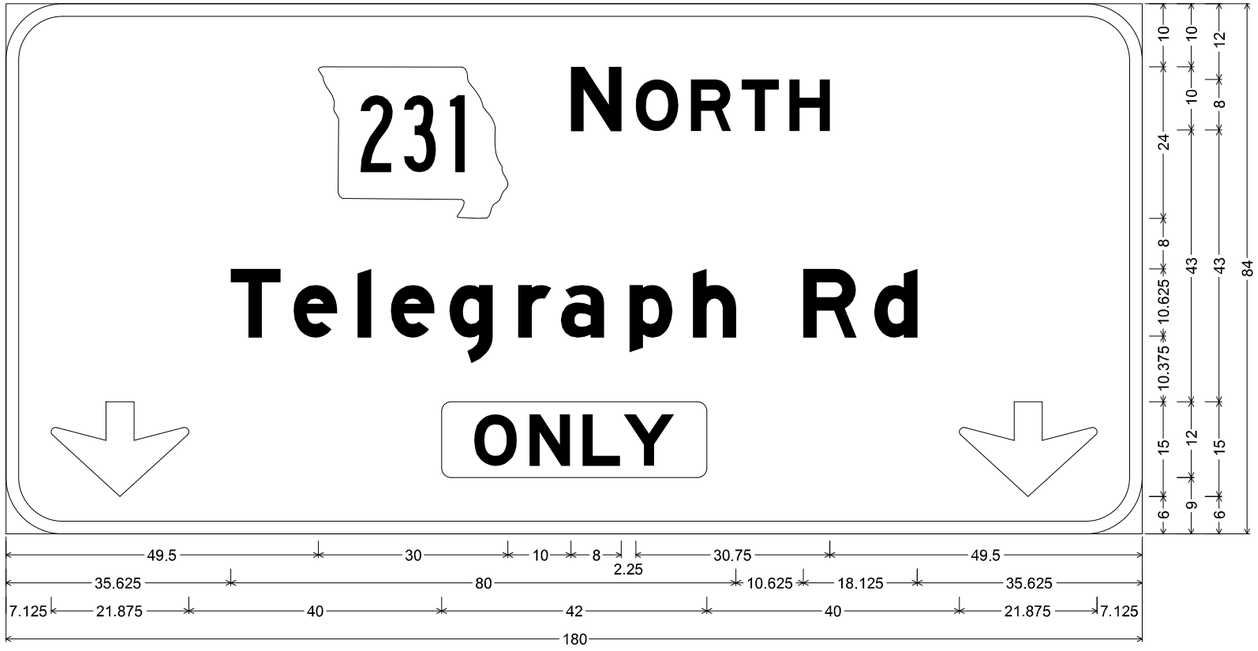
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SIGN DETAILS
SHEET 3 OF 13

REV.

SIGH NO.	25D
STATION	11+59
ROADWAY	MO 231 NB



E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
State Highway 231 M1-6a1 12.000" B; "NORTH", E Mod; "Telegraph Rd", E Mod; Down Arrow 22.000" 270^;
Rounded Rectangle 1.500" Radius Yellow;
Down Arrow 22.000" 270^;
Table of letter and object lefts

231	N	O	R	T	H
49.500	89.500	99.750	108.500	116.500	124.125

T	e	l	e	g	r	a	p	h	R	d
35.625	45.625	55.750	61.000	70.250	81.125	87.875	98.750	108.875	126.250	137.625

7.125	69.000	151.000

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:31:10 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	259

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

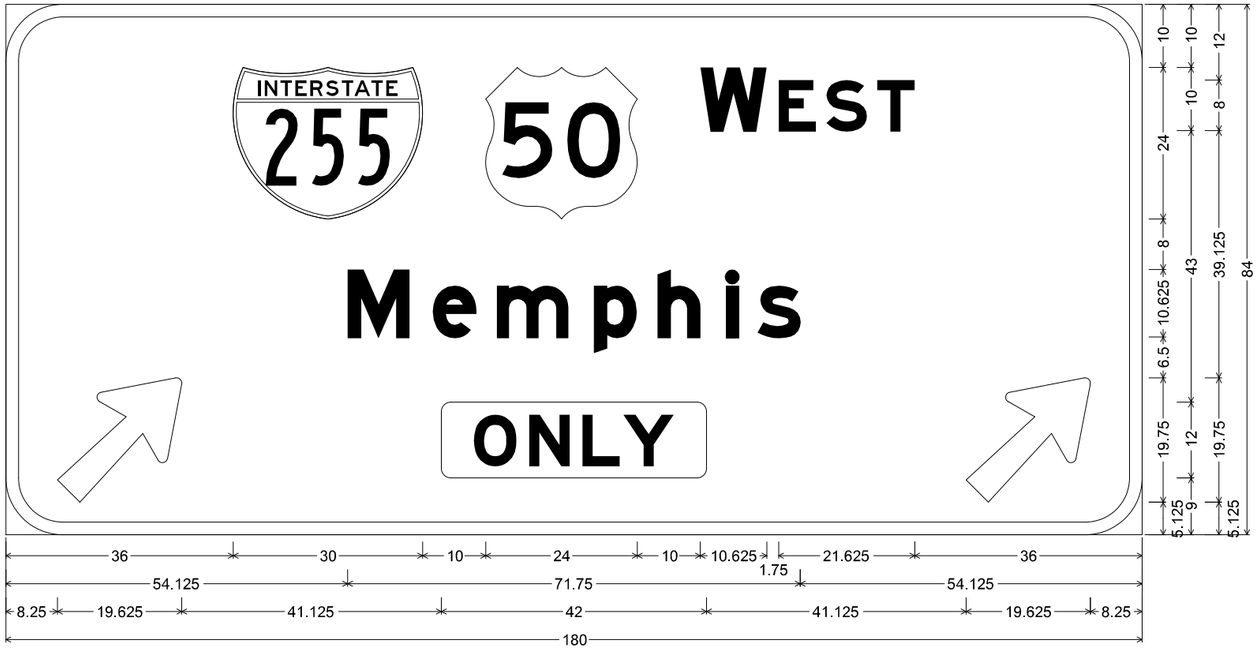
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SIGN DETAILS
SHEET 4 OF 13

REV.

SIGN NO.	25C
STATION	11+59
ROADWAY	MO 231



E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
Interstate 255 12.000" B; "WEST", E Mod; "Memphis", E Mod; Arrow 80 - 25.000" 45'; Rounded Rectangle 1.500" Radius Yellow;
Arrow 80 - 25.000" 45';
Table of letter and object lefts

WEST 36.000	50 76.000	**W** 110.000	**E** 122.375	**S** 130.000	**T** 138.000

M 54.125	**e** 67.625	**m** 77.750	**p** 93.125	**h** 103.250	**i** 114.125	**s** 119.125

8.250	69.000	152.125

SIGN NO.	24
STATION	9+89
ROADWAY	MO 231

E8-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
"WEST", E Mod; Interstate 255 12.000" B; "Memphis", E Mod;
Standard Arrow Custom 36.000" X 12.125" 0';
Table of letter and object lefts

W 31.000	**E** 43.375	**S** 51.000	**T** 59.000			

WEST 15.000	50 57.000

M 12.125	**e** 25.625	**m** 35.750	**p** 51.125	**h** 61.250	**i** 72.125	**s** 77.125

30.000

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart M. McN
06/01/2025 4:31:24 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	260

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

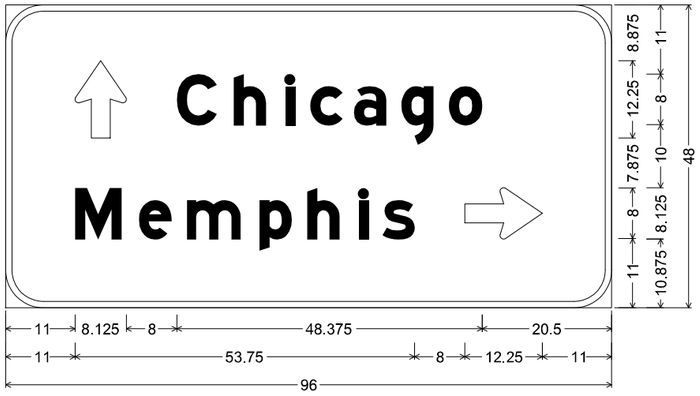
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SIGN DETAILS
SHEET 5 OF 13

REV.

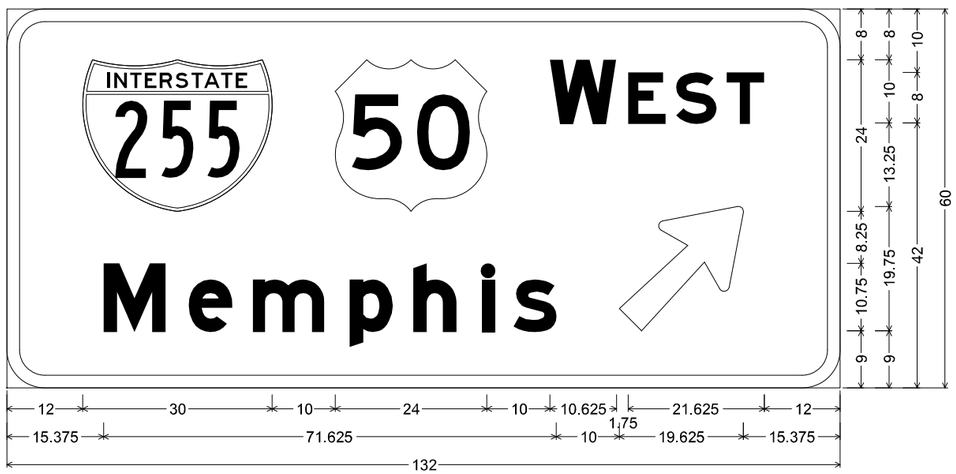
SIGN NO.	19
STATION	3+82
ROADWAY	MO 231



D1-2 ST-STRUCTURAL;
6.000" Radius, 1.000" Border, White on, Green;
Standard Arrow Custom 12.250" X 8.125" 90'; "Chicago", E Mod;
"Memphis", E Mod; Standard Arrow Custom 12.250" X 8.125" 0';
Table of letter and object lefts

⇧	C	h	l	c	a	g	o
11.000	27.125	36.125	44.250	48.250	55.125	62.625	70.250
M	**e**	**m**	**p**	**h**	**l**	**s**	⇨
11.000	21.125	28.750	40.250	47.750	56.000	59.750	72.750

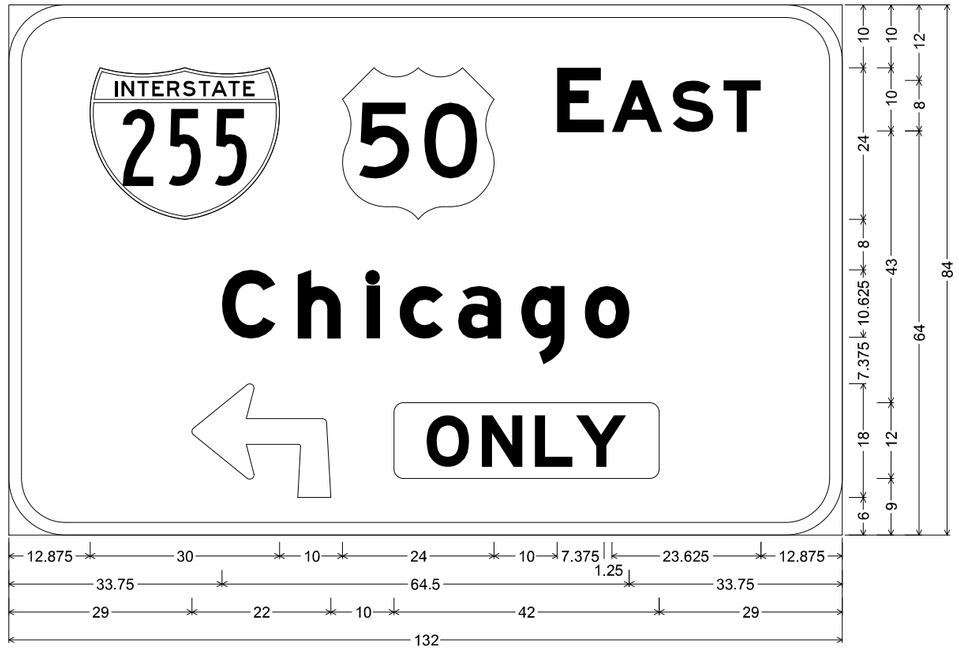
SIGN NO.	21
STATION	4+23
ROADWAY	MO 231



D15-1 ST-STRUCTURAL;
6.000" Radius, 2.000" Border, White on, Green;
Interstate 255 12.000" B; "WEST", E Mod; "Memphis", E Mod; Arrow 80 - 25.000" 45';
Table of letter and object lefts

255	50	W	E	S	T
12.000	52.000	86.000	98.375	106.000	114.000
M	**e**	**m**	**p**	**h**	**i**	**s**	⇗
15.375	28.750	39.000	54.250	64.375	75.250	80.250	97.000

SIGN NO.	25B
STATION	11+59
ROADWAY	MO 231



E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
Interstate 255 12.000" B; "EAST", E Mod; "Chicago", E Mod;
90 Deg Advance Turn Arrow 22.000" X 18.000"; Rounded Rectangle 1.500" Radius Yellow;
Table of letter and object lefts

255	50	E	A	S	T
12.875	52.875	86.875	95.500	105.125	113.250
C	**h**	**i**	**c**	**a**	**g**	**o**
33.750	45.750	56.625	61.875	71.125	81.125	91.250
⇦	▭
29.000	61.000

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 4:31:37 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	261

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

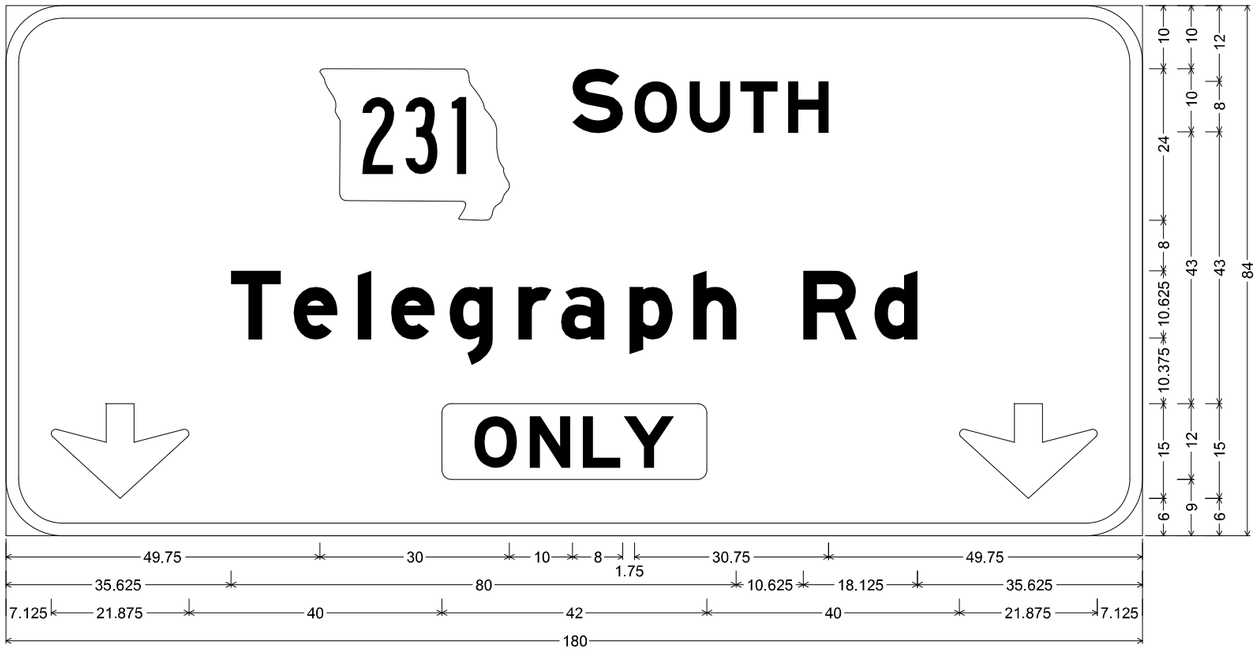
DESCRIPTION	DATE

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

SPECIAL SIGN DETAILS
SHEET 6 OF 13

REV.

SIGN NO.	25A
STATION	11+59
ROADWAY	MO 231



E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
State Highway 231 M1-6a1 12.000" B; "SOUTH", E Mod; "Telegraph Rd", E Mod; Down Arrow 22.000" 270^;
Rounded Rectangle 1.500" Radius Yellow;
Down Arrow 22.000" 270^;
Table of letter and object lefts

231 49.750	**S** 89.750	**O** 99.500	**U** 108.250	**T** 116.375	**H** 123.875	
T 35.625	**e** 45.625	**l** 55.750	**e** 61.000	**g** 70.250	**r** 81.125	**a** 87.875
p 98.750	**h** 108.875	**R** 126.250	**d** 137.625			
7.125	69.000	151.000				

SIGN NO.	28
STATION	17+79
ROADWAY	MO 231

E8-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
"EAST", E Mod; Interstate 255 12.000" B; "Chicago", E Mod;
Standard Arrow Custom 36.000" X 12.125" 180';
Table of letter and object lefts

E 31.875	**A** 40.500	**S** 50.125	**T** 58.250
255 15.000	50 57.000		
C 15.750	**h** 27.750	**i** 38.625	**c** 43.875	**a** 53.125	**g** 63.125	**o** 73.250
30.000						

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/01/2025 4:31:52 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	262

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

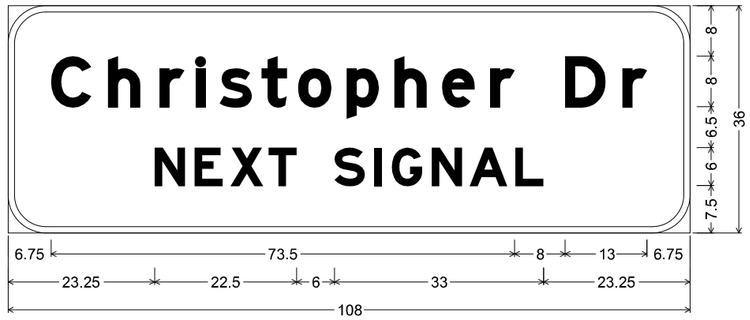
DATE

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

SPECIAL SIGN DETAILS
SHEET 7 OF 13

REV.

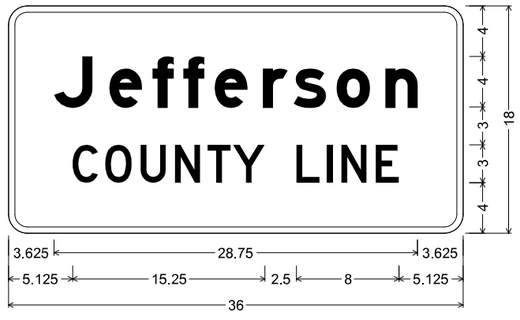
SIGN NO.	138
STATION	163+79
ROADWAY	MO 231



D3-2 ST-STRUCTURAL;
6.000" Radius, 1.000" Border, White on, Green;
"Christopher Dr", E Mod; "NEXT SIGNAL", E Mod;
Table of letter and object lefts

C 6.750	**h** 15.750	**r** 24.000	**l** 29.750	**s** 33.500	**t** 40.125	**o** 45.875	**p** 53.625	**h** 61.125	**e** 68.750	**r** 76.375	
	D 88.250	**r** 97.250									
N 23.250	**E** 29.500	**X** 35.250	**T** 41.250	**S** 51.750	**I** 58.000	**G** 60.750	**N** 67.125	**A** 73.125	**L** 80.375		

SIGN NO.	186
STATION	ON BRIDGE
ROADWAY	MO 231



I6-1 SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
"Jefferson", E Mod; "COUNTY LINE", D;
Table of letter and object lefts

J 3.625	**e** 8.000	**f** 11.375	**f** 13.875	**e** 16.375	**r** 20.125	**s** 22.625	**o** 26.000	**n** 29.875	
C 5.125	**O** 7.625	**U** 10.500	**N** 13.250	**T** 15.750	**Y** 17.750				
	L 22.875	**I** 25.250	**N** 26.375	**E** 29.125					

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/01/2025 4:32:06 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	263

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

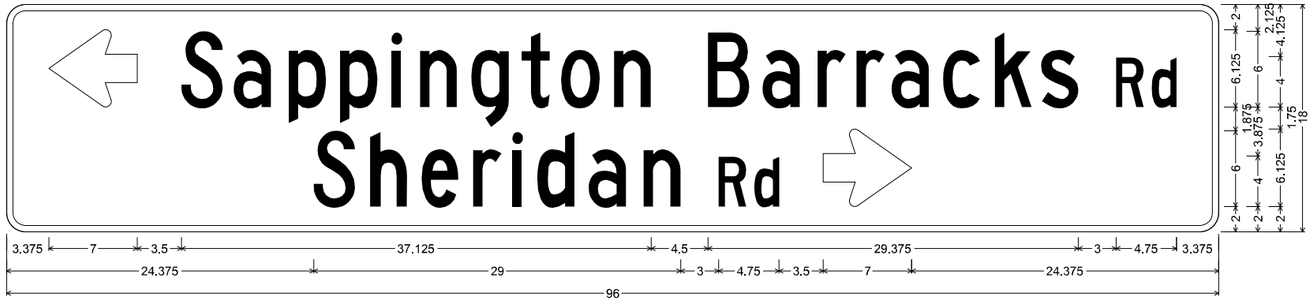
BRIDGE NO.

DESCRIPTION	DATE

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

SPECIAL SIGN DETAILS
SHEET 8 OF 13

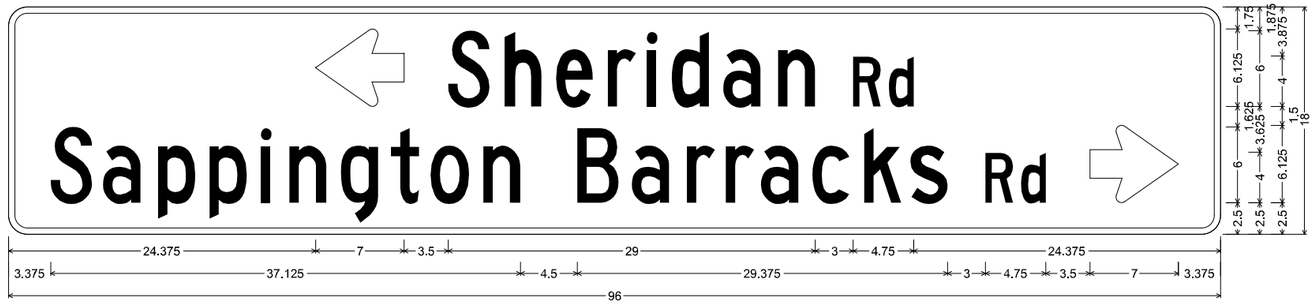
REV.



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Sappington Barracks", C 75% spacing; "Rd", C 75% spacing; "Sheridan", C 75% spacing; "Rd", C 75% spacing;
Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

⇦	S	a	p	p	i	n	g	t	o	n	B	a	r	r	a	c	k	s	R	d
3.375	13.875	18.000	22.375	26.375	30.500	32.750	36.875	40.750	43.875	48.125	55.500	59.875	64.250	67.375	70.125	74.125	78.250	81.875	87.875	90.750

S	h	e	r	i	d	a	n	R	d	⇨
24.375	28.750	32.875	37.000	40.000	42.000	46.125	50.500	56.375	59.250	64.625



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Sheridan", C 75% spacing; "Rd", C 75% spacing; "Sappington Barracks", C 75% spacing; "Rd", C 75% spacing;
Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

⇦	S	h	e	r	i	d	a	n	R	d
24.375	34.875	39.250	43.375	47.500	50.500	52.500	56.625	61.000	66.875	69.750

S	a	p	p	i	n	g	t	o	n	B	a	r	r	a	c	k	s	R	d	⇨
3.375	7.500	11.875	15.875	20.000	22.250	26.375	30.250	33.375	37.625	45.000	49.375	53.750	56.875	59.625	63.625	67.750	71.375	77.375	80.250	85.625

SEE SIGNAL PLANS FOR LOCATION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:32:17 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	264

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

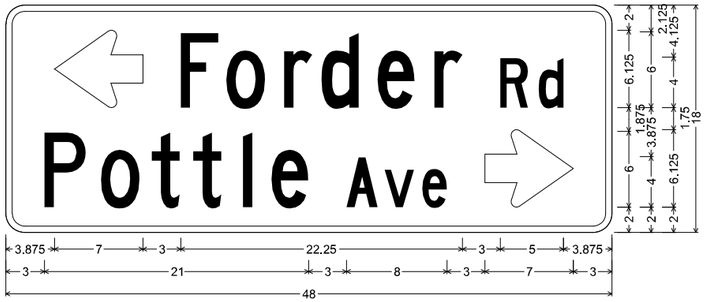
BRIDGE NO.

DESCRIPTION	DATE

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

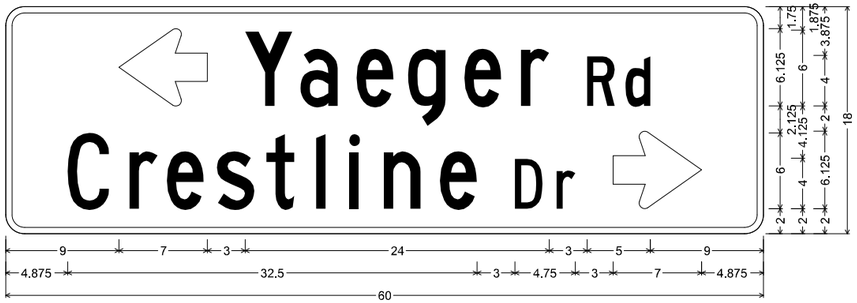
SPECIAL SIGN DETAILS
SHEET 9 OF 13

REV.



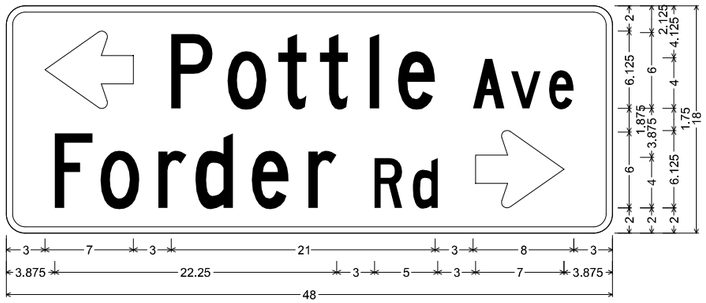
D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Forder", C; "Rd", C; "Pottle", C; "Ave", C;
Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

3.875	F 13.875	o 17.500	r 22.000	d 25.000	e 29.500	r 33.875	R 39.125	d 42.250
P 3.000	o 7.500	t 11.500	t 14.875	l 18.625	e 21.000	A 27.000	v 30.000	e 33.000



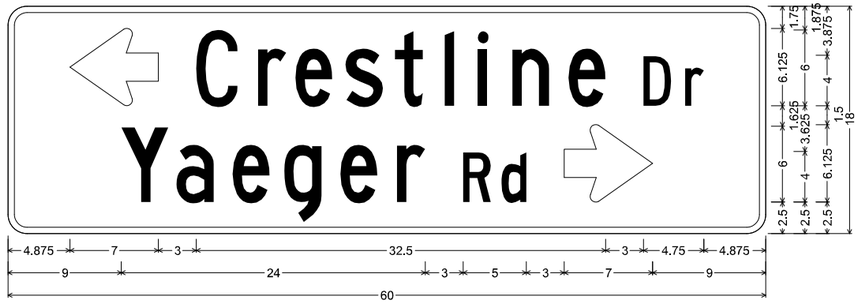
D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Yaeger", C; "Rd", C; "Crestline", C; "Dr", C;
Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

9.000	Y 19.000	a 23.375	e 27.750	g 31.875	e 36.375	r 40.750	R 46.000	d 49.125
C 4.875	r 9.750	e 12.750	s 16.750	t 20.625	l 24.500	l 27.250	n 29.875	e 34.375	D 40.375	r 43.625	48.125



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Pottle", C; "Ave", C; "Forder", C; "Rd", C;
Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

3.000	P 13.000	o 17.500	t 21.500	t 24.875	l 28.625	e 31.000	A 37.000	v 40.000	e 43.000
F 3.875	o 7.500	r 12.000	d 15.000	e 19.500	r 23.875	R 29.125	d 32.250	37.125



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Crestline", C; "Dr", C; "Yaeger", C; "Rd", C;
Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

4.875	C 14.875	r 19.750	e 22.750	s 26.750	t 30.625	l 34.500	i 37.250	n 39.875	e 44.375	D 50.375	r 53.625
Y 9.000	a 13.375	e 17.750	g 21.875	e 26.375	r 30.750	R 36.000	d 39.125	44.000

SEE SIGNAL PLANS FOR LOCATION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/01/2025 4:32:33 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	265

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

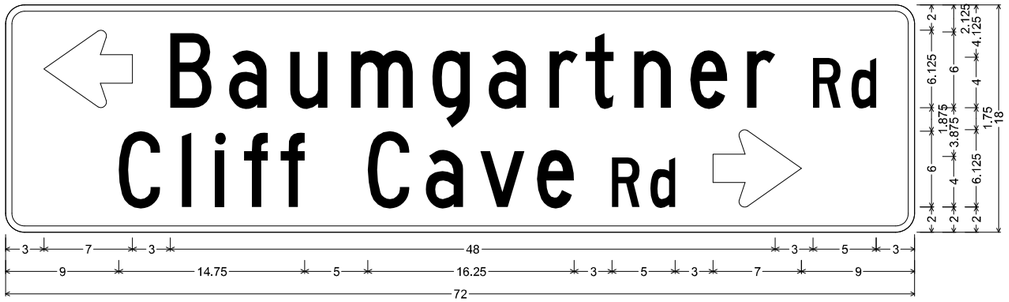
DESCRIPTION | DATE

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

SPECIAL SIGN DETAILS
SHEET 10 OF 13

REV.

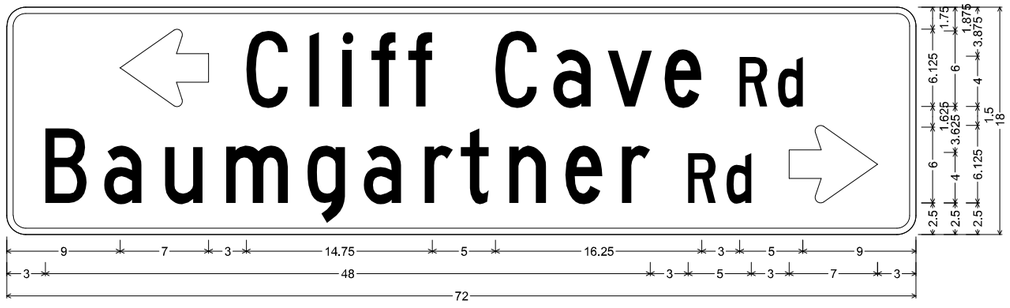
SEE SIGNAL PLANS FOR LOCATION



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Baumgartner", C; "Rd", C; "Cliff Cave", C; "Rd", C; Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

3.000	B 13.000	a 17.750	u 22.500	m 27.375	g 33.875	a 38.250	r 43.125	t 46.000	n 49.750	e 54.250	r 58.750	R 64.000	d 67.000
C 9.000	l 13.875	i 16.625	f 18.875	f 21.750	C 28.750	a 33.250	v 37.625	e 42.125	R 48.000	d 51.125	56.000		

SEE SIGNAL PLANS FOR LOCATION



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180'; "Cliff Cave", C; "Rd", C; "Baumgartner", C; "Rd", C; Standard Arrow Custom 7.000" X 6.125" 0';
Table of letter and object lefts

9.000	C 19.000	l 23.875	l 26.625	f 28.875	f 31.750	C 38.750	a 43.250	v 47.625	e 52.125	R 58.000	d 61.125		
B 3.000	a 7.750	u 12.500	m 17.375	g 23.875	a 28.250	r 33.125	t 36.000	n 39.750	e 44.250	r 48.750	R 54.000	d 57.000	62.000

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:32:47 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	266

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

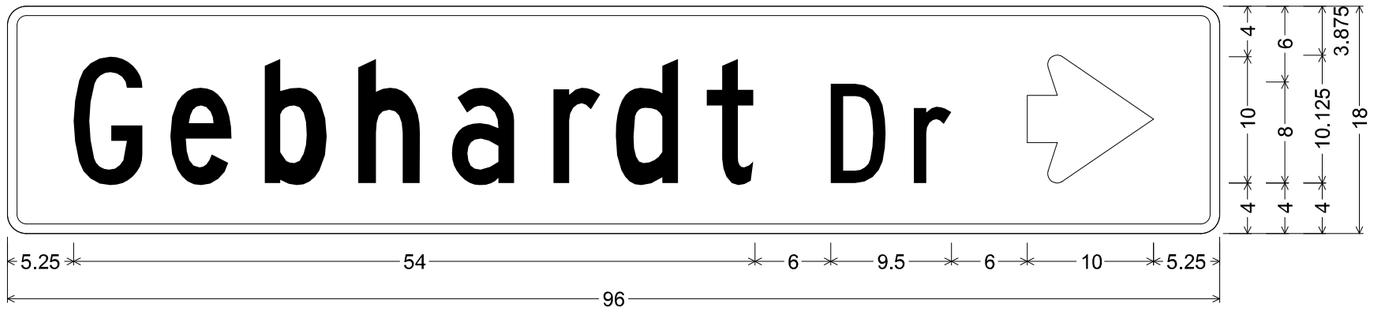
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SIGN DETAILS
SHEET 11 OF 13

REV.

D3-1 SH-FLAT SHEET;
1.500" Radius, 0.750" Border, White on, Green;
Standard Arrow Custom 10.000" X 10.125" 180'; "Gebhardt", C; "Dr", C;
Table of letter and object lefts

◁	G	e	b	h	a	r	d	t	D	r
5.250	21.250	28.875	36.375	43.750	51.250	59.250	64.125	71.375	81.250	87.750



D3-1 SH-FLAT SHEET;
1.500" Radius, 0.750" Border, White on, Green;
"Gebhardt", C; "Dr", C; Standard Arrow Custom 10.000" X 10.125" 0';
Table of letter and object lefts

G	e	b	h	a	r	d	t	D	r	▷
5.250	12.875	20.375	27.750	35.250	43.250	48.125	55.375	65.250	71.750	80.750

SEE SIGNAL PLANS FOR LOCATION

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:32:59 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	267

COUNTY ST. LOUIS
JOB NO. J6S3632
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

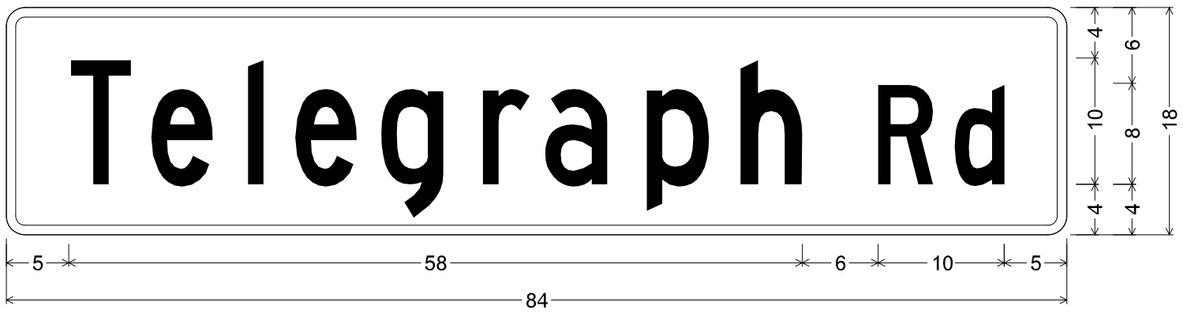
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SPECIAL SIGN DETAILS
SHEET 12 OF 13

REV.

D3-1 SH-FLAT SHEET;
1.500" Radius, 0.750" Border, White on, Green;
"Blackforest", C; "Dr", C 85% spacing;
Table of letter and object lefts

B	l	a	c	k	f	o	r	e	s	t	D	r
6.250	14.625	18.625	26.000	33.500	40.000	45.000	52.625	57.500	64.125	70.750	80.500	86.750



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

T	e	l	e	g	r	a	p	h	R	d
5.000	11.500	19.000	22.875	29.750	37.750	42.750	50.750	58.125	69.000	75.125

SEE SIGNAL PLANS FOR LOCATION

D-31

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:33:13 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	268

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

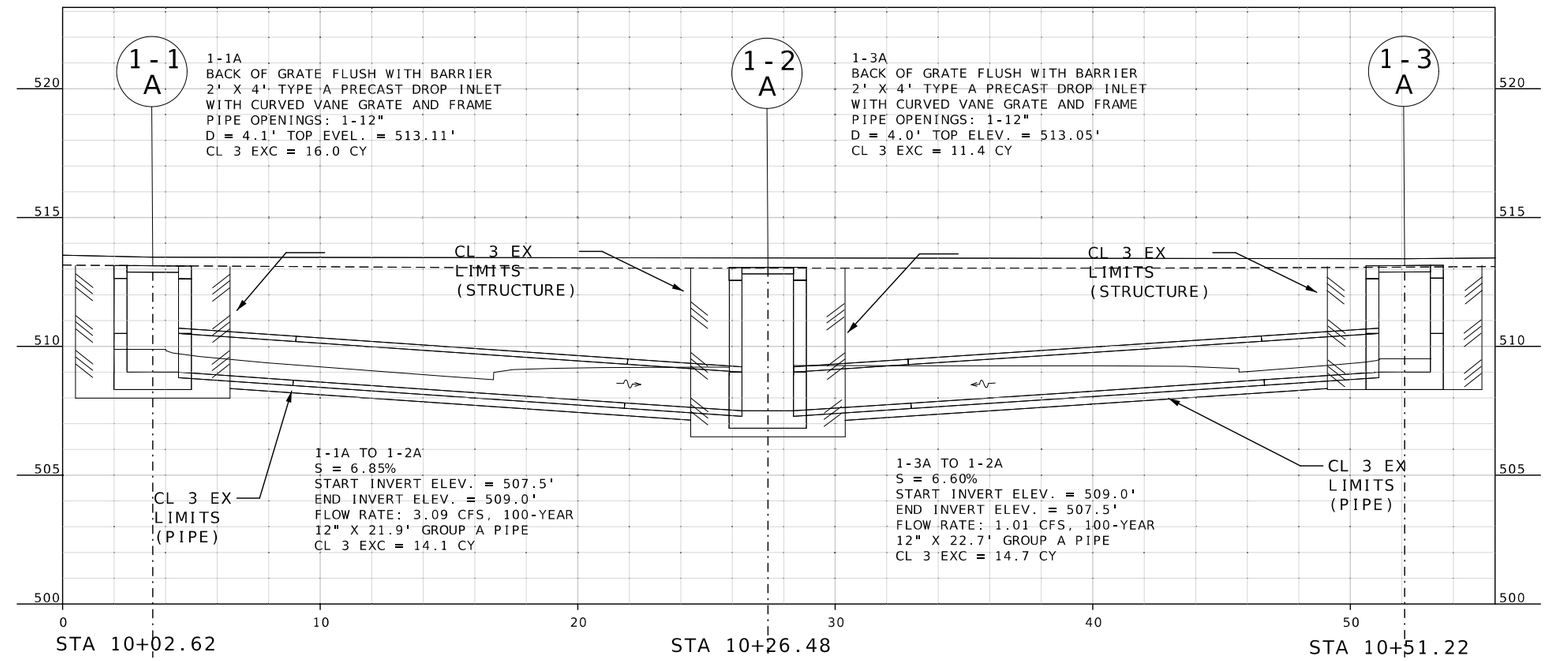
BRIDGE NO.

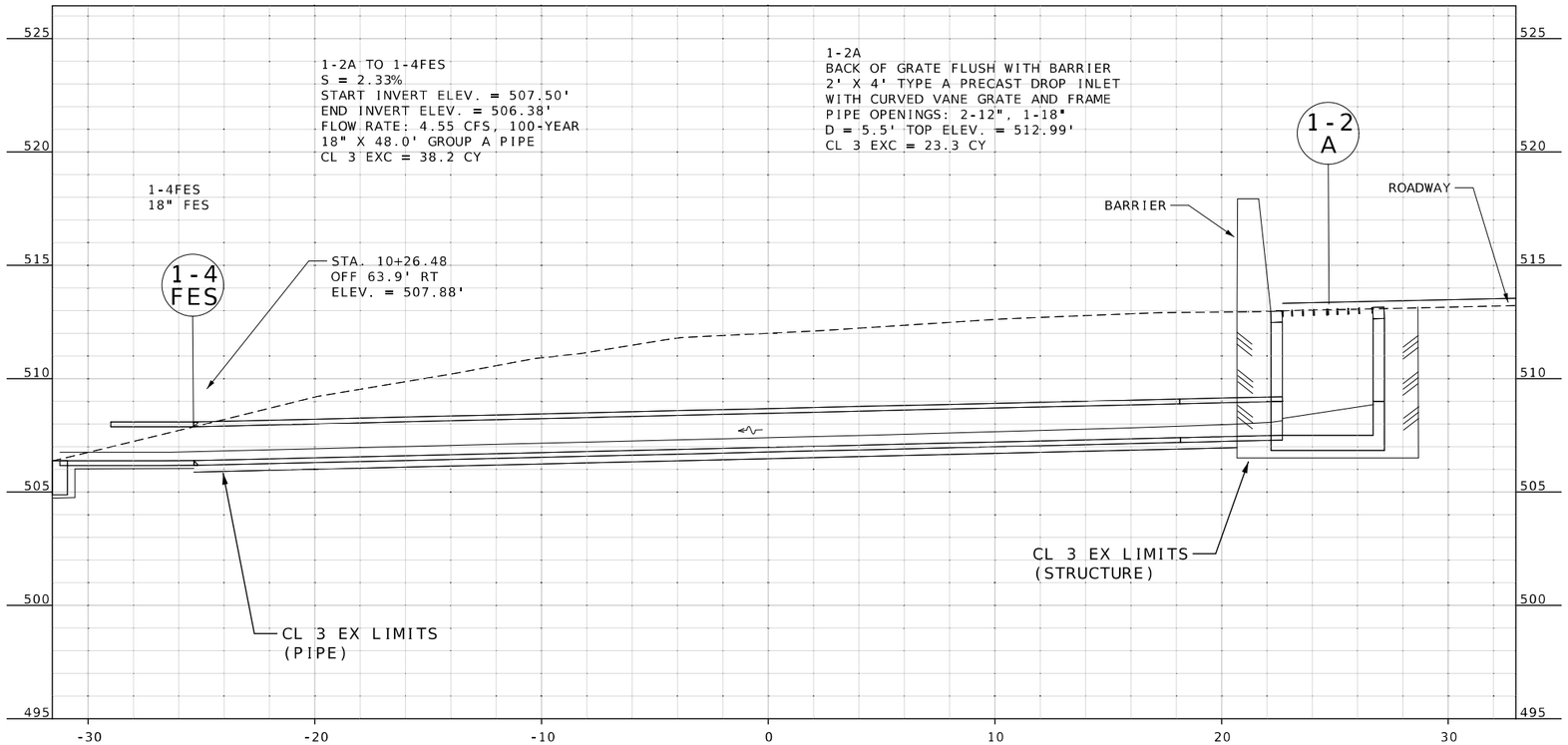
DESCRIPTION	DATE

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

SPECIAL SIGN DETAILS
SHEET 13 OF 13

REV.





STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:38:11 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	269

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

CULVERT SECTIONS

SHEET 1 OF 4

NORTH OF I-255

LEGEND

LIMITS OF CLASS 3 EXCAVATION

2-2FES
STA 81+80.4 RTE 231
(58.2' RT)
18" GROUP C FES

2-2 FES

2-1FES
STA 82+38.2 RTE 231
(57.5' RT)
18" GROUP C FES

2-1 FES

EXISTING INLET (UIP)

549.90

EXISTING GROUNDLINE

PROPOSED GROUNDLINE

RE-GRADE DITCH

FL 550.00

EX. 15" RCP
FL 546.78

STA 82+09.4
PRIVATE ENTRANCE
28' PAVED APPROACH

EXISTING GROUNDLINE

6'-0"
SIDEWALK

FL 550.63

MATCHLINE A

2-1FES TO 2-2FES
S = 1.0 %
18" X 57.8' GROUP C PIPE
& 2-18" GROUP C FES
CL 3 EXC. = 28.2 CY

10'

560 550 540 530 570

0+00 0+20 0+40 0+60 0+80 1+00

3-2 FES
STA 82+94.6 RTE 231
(57.2' RT)
18" GROUP C FES

3-2 FES

3-1 FES
STA 83+41.6 RTE 231
(58.1' RT)
18" GROUP C FES

3-1 FES

MATCHLINE A

EXISTING GROUNDLINE

RE-GRADE DITCH

PROPOSED GROUNDLINE

STA 83+19.31
COMMERCIAL ENTRANCE
30.2' PAVED APPROACH

PROPOSED GROUNDLINE

EXISTING GROUNDLINE

RE-GRADE DITCH

FL 552.42

FL 553.46

3-1FES TO 3-2FES
S = 2.0 %
18" X 46.9' GROUP C PIPE
& 2-18" GROUP C FES
CL 3 EXC. = 21.9 CY

MATCHLINE B (SEE SHEET 3 OF 4)

10'

570 560 550 540 530

1+00 1+20 1+40 1+60 1+80 2+00 2+20

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:02:16 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	270

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

CULVERT SECTIONS

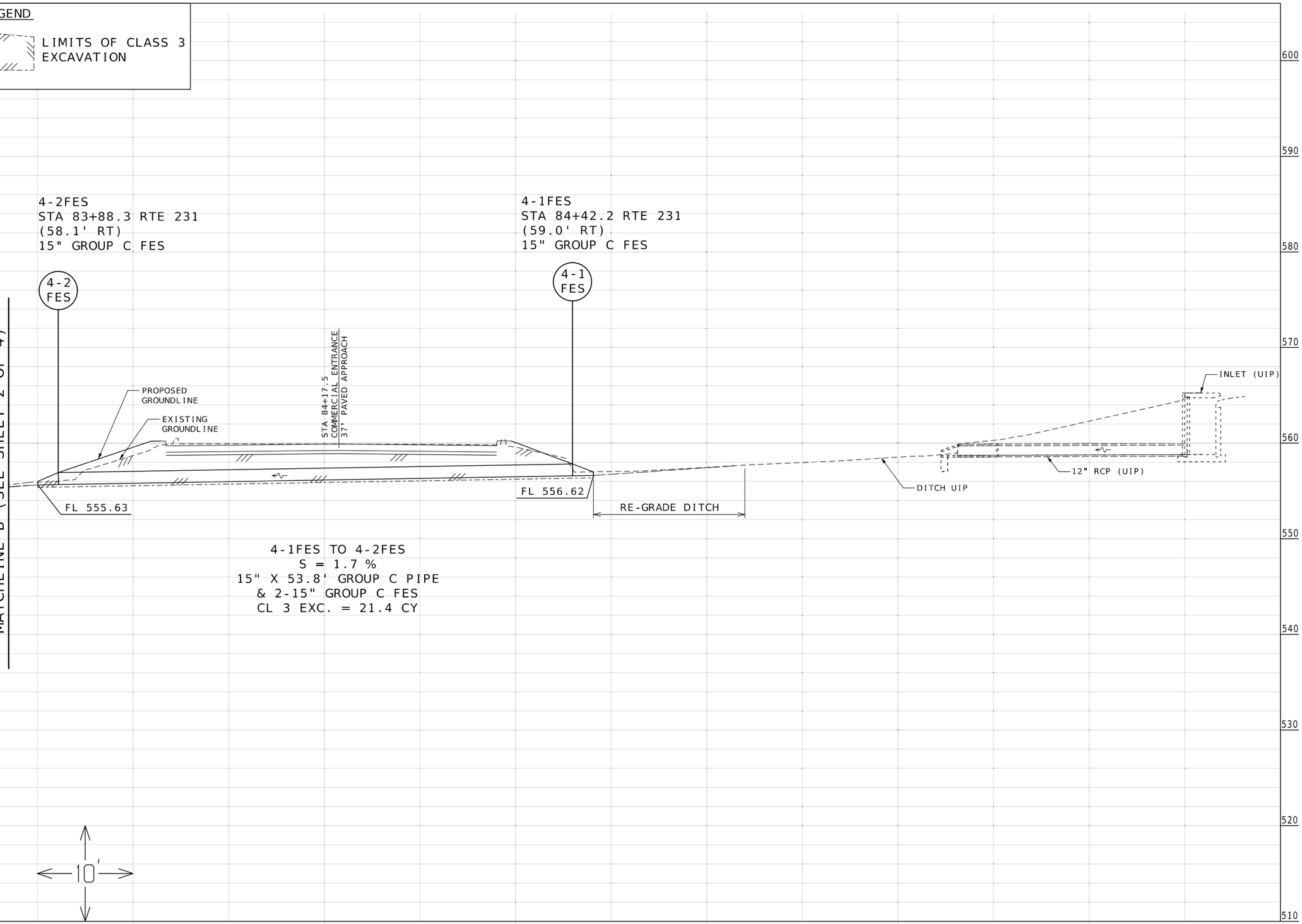
SHEET 2 OF 4

LEGEND

LIMITS OF CLASS 3 EXCAVATION

4-2FES
STA 83+88.3 RTE 231
(58.1' RT)
15" GROUP C FES

4-1FES
STA 84+42.2 RTE 231
(59.0' RT)
15" GROUP C FES



4-1FES TO 4-2FES
S = 1.7 %
15" X 53.8' GROUP C PIPE
& 2-15" GROUP C FES
CL 3 EXC. = 21.4 CY

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
07/09/2025 12:02:24 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED
7/9/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	271

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

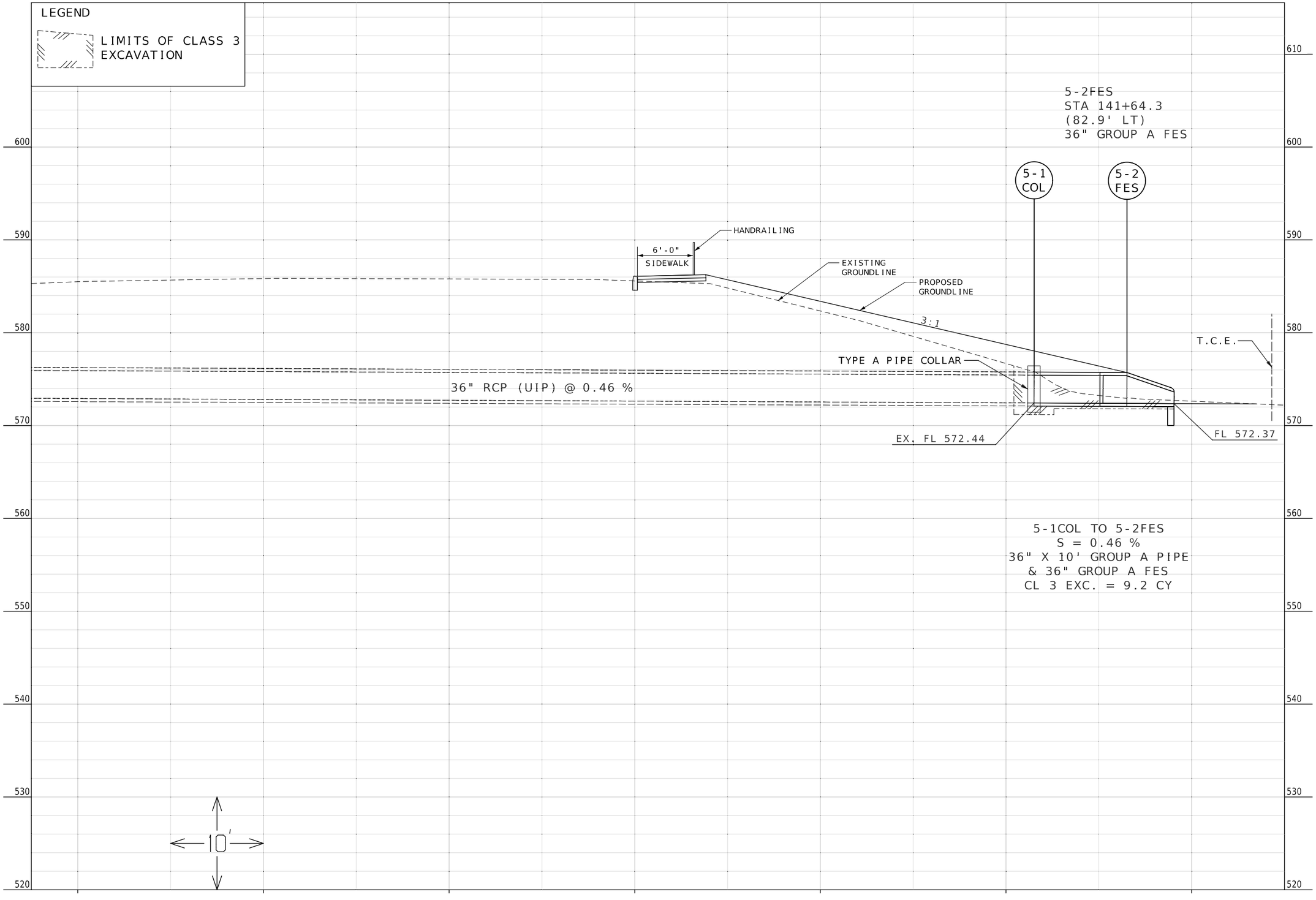
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

CULVERT SECTIONS

SHEET 3 OF 4

LEGEND

LIMITS OF CLASS 3 EXCAVATION



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/01/2025 4:39:00 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	272

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

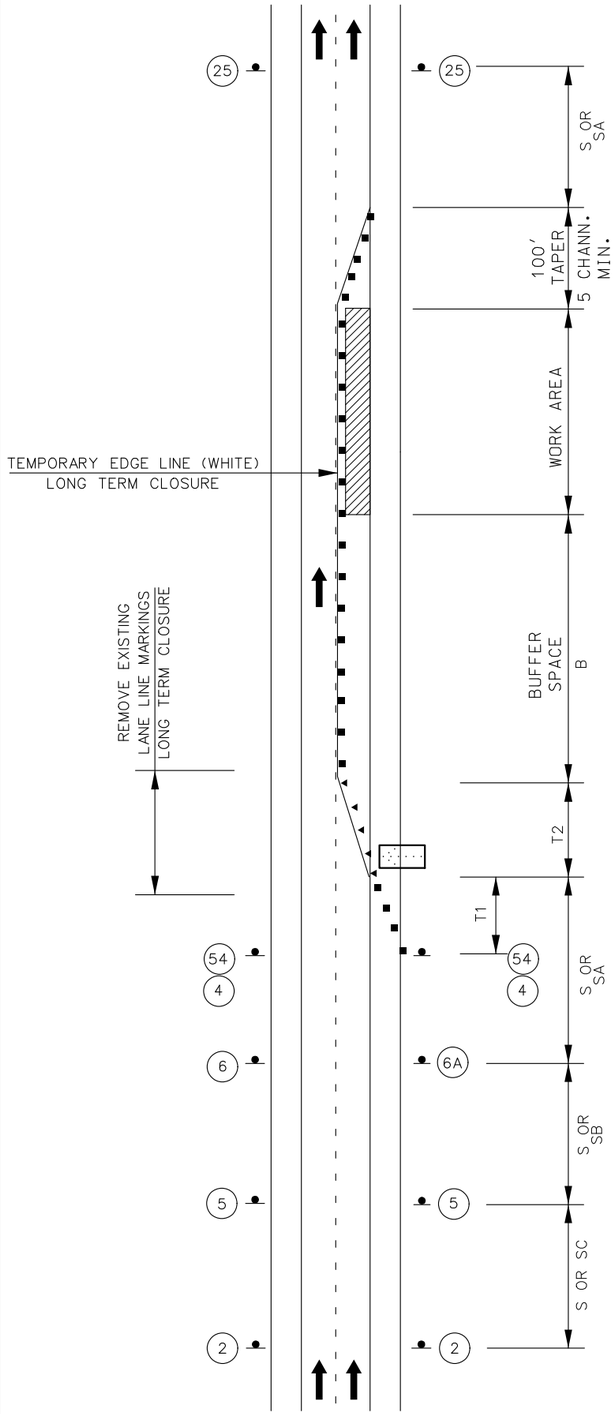
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

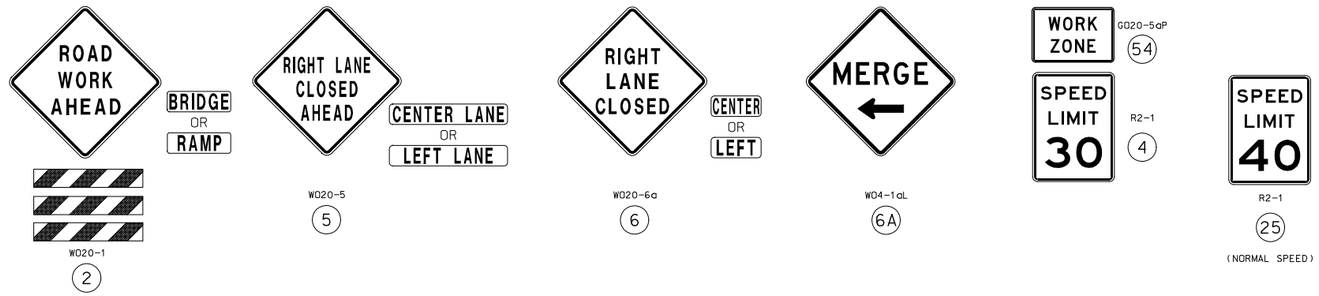
CULVERT SECTIONS

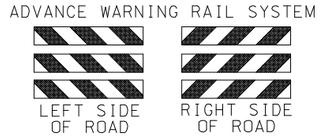
SHEET 4 OF 4



STATIONARY LANE CLOSURE
ON A DIVIDED HIGHWAY

NOT TO SCALE





TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- DIRECTIONAL INDICATOR BARRICADE
- CHANNELIZER (TRIM-LINE)
- WORK AREA
- FLASHING ARROW PANEL
- ADVANCE WARNING RAILS

NOTES:

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM CLOSURES.

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

THIS INFORMATION ALSO SHALL BE USED WHEN WORK IS BEING PERFORMED IN THE LANE ADJACENT TO THE MEDIAN ON A DIVIDED HIGHWAY. IN THIS CASE, THE LEFT LANE CLOSED SIGNS AND THE CORRESPONDING MERGE OR LANE ENDS SIGNS SHALL BE SUBSTITUTED.

WHEN A SIDE ROAD INTERSECTS THE HIGHWAY WITHIN THE TTC ZONE, ADDITIONAL TTC DEVICES SHALL BE PLACED AS NEEDED.

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

REVIEW EPG 616.6.83 WARNING LIGHTS WHEN SEQUENTIAL OR WARNING LIGHTS SHOULD BE USED ON NIGHTTIME OPERATIONS.

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

FOR FLAGS AND ADVANCE WARNING RAIL SYSTEMS, REFER TO EPG 616.6.2.2 FLAGS AND ADVANCE WARNING RAIL SYSTEM.

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

SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)	
PERM. POSTED (MPH)	UN -DIVIDED (S)	DIVIDED (S)	SHOULDER (1) (T1)	LANE (2) (T2)	BUFFER LENGTH (ft) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	-	200	70	245	280	35	40
40-45	-	500	150	540	400	40	80
50-55	-	1000	185	660	560	50	80
60-70	-	SA-1000 SB-1500 SC-2640	235	840	840	60	120
1 Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length based on 12 ft. (standard lane width) offset.							

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/23/2025 3:19:26 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/23/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	273

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

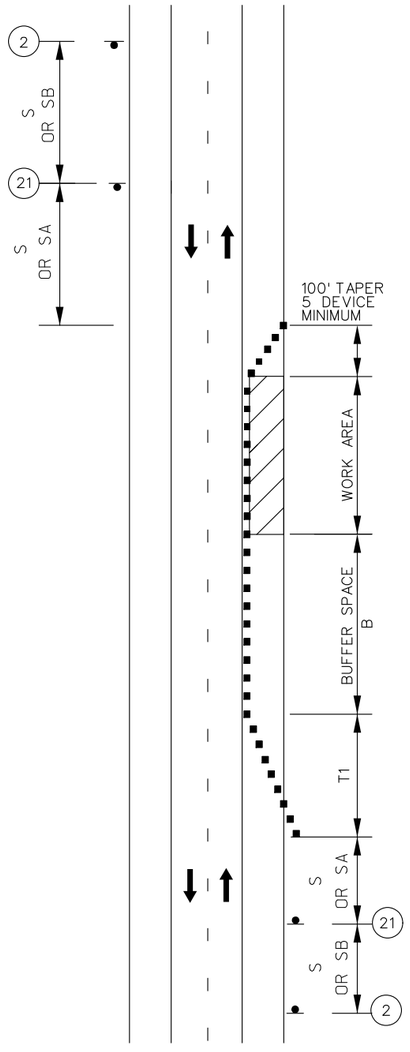
DESCRIPTION	DATE

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

TRAFFIC CONTROL SHEET
STATIONARY LANE CLOSURE
ON A DIVIDED HIGHWAY

SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)	
PERM. POSTED (MPH)	UN -DIVIDED (S)	DIVIDED (S)	SHOULDER (1) (T1)	LANE (2) (T2)	BUFFER LENGTH (ft) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	200	70	245	280	35	40
40-45	350	500	150	540	400	40	80
50-55	500	1000	185	660	560	50	80
60-70	1000	SA-1000 SB-1500 SC-2640	235	840	840	60	120

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset.
2. Lane taper length based on 12 ft. (standard lane width) offset.



WORK ON THE SHOULDER
ON DIVIDED AND UNDIVIDED
HIGHWAYS

NOTES:

PROVIDE SIGNS ON LEFT AND RIGHT SIDES OF DIVIDED HIGHWAYS.

ROAD WORK AHEAD SIGN NOT NEEDED IF SHOULDER WORK IS LOCATED WITHIN THE LIMITS OF AN ACTIVITY AREA WHERE ANOTHER ROAD WORK AHEAD SIGN IS ALREADY USED.

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

VEHICLE HAZARD WARNING SIGNALS SHALL NOT BE USED INSTEAD OF THE VEHICLE'S ROTATING LIGHTS OR STROBE LIGHTS.

WHEN PAVED SHOULDERS HAVING A WIDTH OF 8 FEET OR MORE ARE CLOSED, AT LEAST ONE ADVANCE WARNING SIGN SHALL BE USED. IN ADDITION, CHANNELIZING DEVICES SHALL BE USED TO CLOSE THE SHOULDER IN ADVANCE TO DELINEATE THE BEGINNING OF THE WORK SPACE AND DIRECT VEHICULAR TRAFFIC TO REMAIN WITHIN THE TRAVELED WAY.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER (TRIM-LINE)
- WORK AREA

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/01/2025 4:39:30 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	274

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

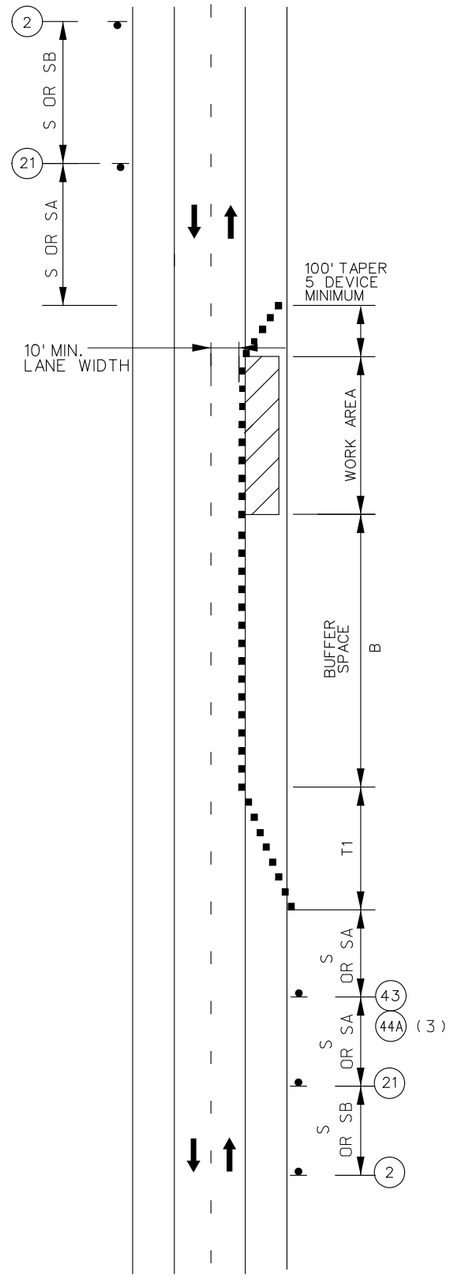
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

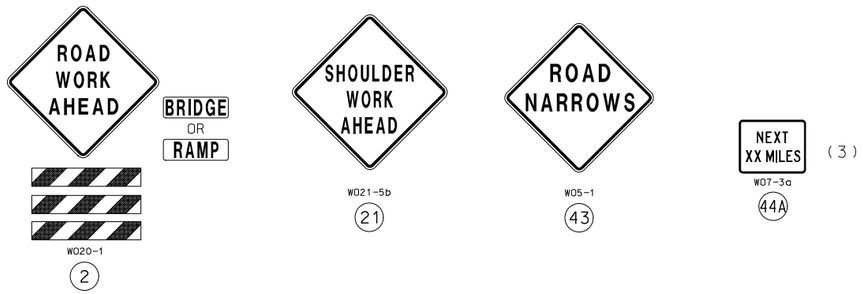
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET
WORK ON THE SHOULDER

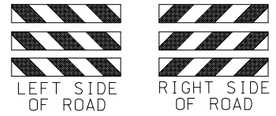


SHOULDER WORK WITH
MINOR TRAVELWAY ENCROACHMENT
DIVIDED AND UNDIVIDED

NOT TO SCALE



ADVANCE WARNING RAIL SYSTEM



NOTES:

PROVIDE SIGNS ON LEFT AND RIGHT SIDES OF DIVIDED HIGHWAYS.

ROAD WORK AHEAD SIGN NOT NEEDED IF SHOULDER WORK IS LOCATED WITHIN THE LIMITS OF AN ACTIVITY AREA WHERE ANOTHER ROAD WORK AHEAD SIGN IS ALREADY IN USE.

SEE EPG 616:12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

NEXT XX MILES SIGN NOT REQUIRED FOR NARROW LANE SECTIONS LESS THAN ONE MILE.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER (TRIM-LINE)
- WORK AREA
- TMA (TRUCK MOUNTED ATTENUATOR)

SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)	
PERM. POSTED (MPH)	UN-DIVIDED (S)	DIVIDED (S)	SHOULDER (1) (T1)	LANE (2) (T2)	BUFFER LENGTH (ft) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	200	70	245	280	35	40
40-45	350	500	150	540	400	40	80
50-55	500	1000	185	660	560	50	80
60-70	1000	SA-1000 SB-1500 SC-2640	235	840	840	60	120
1 Shoulder taper length based on 10 ft. (standard shoulder width) offset. 2. Lane taper length based on 12 ft. (standard lane width) offset.							

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 4:39:45 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	275

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

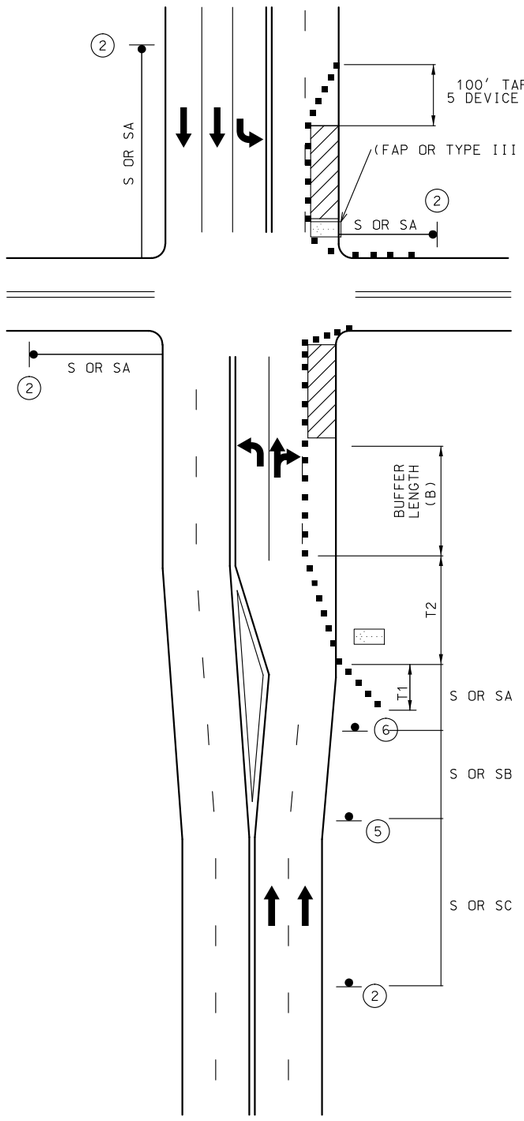
BRIDGE NO.

DESCRIPTION

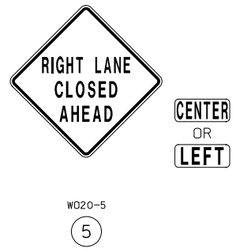
DATE

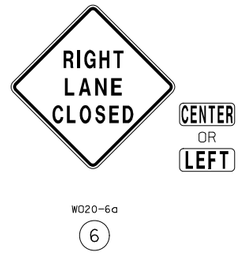
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRAFFIC CONTROL SHEET
SHOULDER WORK WITH
MINOR ENCROACHMENT

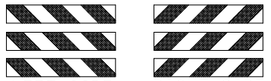


RIGHT LANE CLOSURE AT INTERSECTION
WORK ON NEAR OR FAR SIDE





ADVANCE WARNING RAIL SYSTEM



NOTES:

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.

FOR SIGNALIZED INTERSECTIONS, ADJUSTMENTS MAY NEED TO BE MADE TO SIGNAL PHASING, TIMING, INDICATIONS OR DETECTOR SETTINGS.

FOR SHORT TERM OPERATION, WHERE IT IS NOT FEASIBLE TO MODIFY PAVEMENT MARKING, A 10-FEET DEVICE SPACING IS USED WHERE TRAFFIC IS GUIDED ACROSS DOUBLE YELLOW LINES OR OTHER CONFLICTING PAVEMENT MARKING. ALL OTHER SPACING ARE ONE-HALF OF THE SPACING.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

PAVEMENT MARKING AND BARRICADES OPTIONAL FOR SHORT TERM OPERATIONS.

RIGHT LANE CLOSED AHEAD SIGN MAY BE OMITTED IN LOW SPEED URBAN AREAS WHERE THERE IS NOT SUFFICIENT SPACE FOR HTE FULL SIGN SERIES.

IF RUMBLE STRIPS ARE USED, REVIEW 616.6.87 RUMBLE STRIPS.

FOR FLAGS AND ADVANCED WARNING RAIL SYSTEM, REFER TO EPG 616.6.2.2 FLAGS AND ADVANCE WARNING RAIL SYSTEM.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER (TRIM-LINE)
- WORK AREA
- FLASHING ARROW PANEL

SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)	
PERM. POSTED (MPH)	UN -DIVIDED (S)	DIVIDED (S)	SHOULDER (1) (T1)	LANE (2) (T2)	BUFFER LENGTH (ft) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	200	70	245	280	35	40
40-45	350	500	150	540	400	40	80
50-55	500	1000	185	660	560	50	80
60-70	1000	SA-1000 SB-1500 SC-2640	235	840	840	60	120

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset.
2. Lane taper length based on 12 ft. (standard lane width) offset.

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:29:33 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	276

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

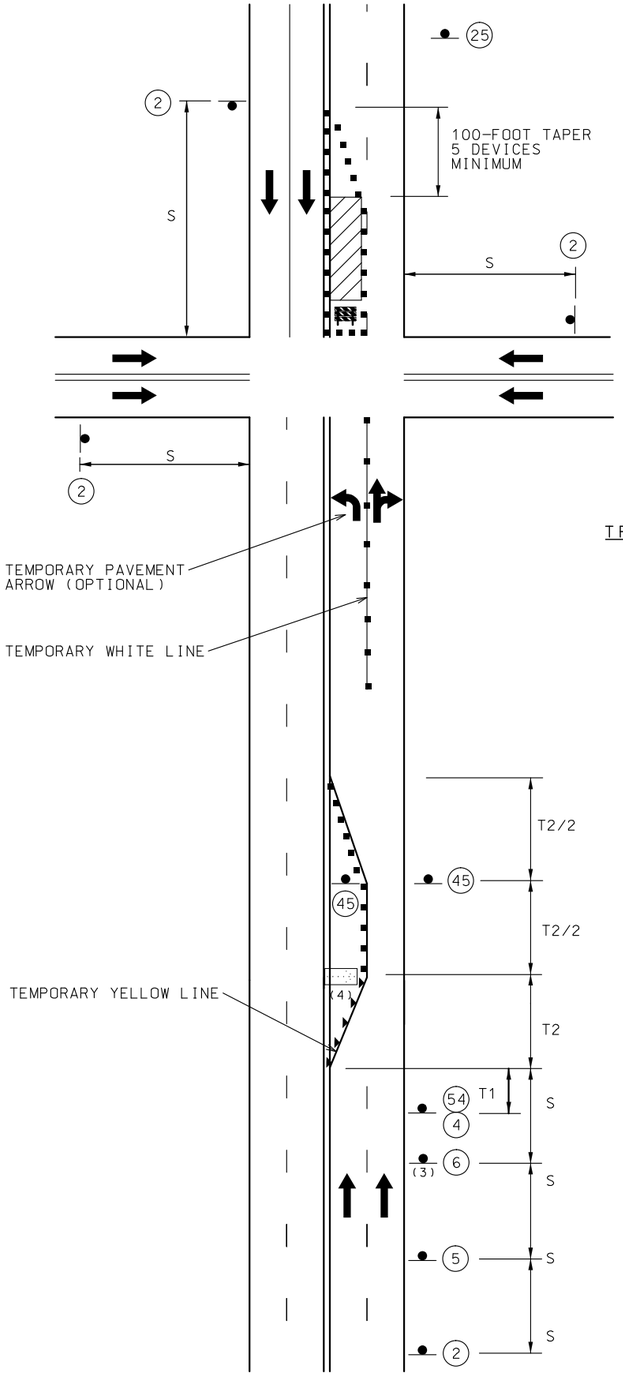
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TRAFFIC CONTROL SHEET
RIGHT LANE CLOSURE AT
INTERSECTION WORK ON
NEAR OR FAR SIDE



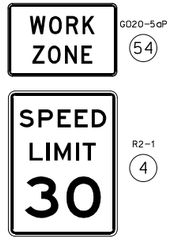
LEFT LANE CLOSURE AT INTERSECTION
WORK ON FAR SIDE

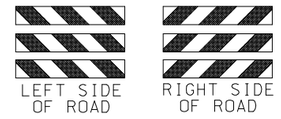
SPEED	SIGN SPACING (ft.)		TAPER LENGTH (ft.)		OPTIONAL	CHANNELIZER SPACING (ft.)	
PERM. POSTED (MPH)	UN -DIVIDED (S)	DIVIDED (S)	SHOULDER (1) (T1)	LANE (2) (T2)	BUFFER LENGTH (ft) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	200	70	245	280	35	40
40-45	350	500	150	540	400	40	80
50-55	500	1000	185	660	560	50	80
60-70	1000	SA-1000 SB-1500 SC-2640	235	840	840	60	120

1 Shoulder taper length based on 10 ft. (standard shoulder width) offset.
2. Lane taper length based on 12 ft. (standard lane width) offset.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER (TRIM-LINE)
- DIRECTIONAL INDICATOR BARRICADES (DIBS)
- WORK AREA
- FLASHING ARROW PANEL
- TYPE 3 BARRICADE





NOTES:

SEE EPG 616.12 WORK ZONE SPEED LIMITS FOR SPEED LIMIT GUIDELINES.

REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.

FOR SIGNALIZED INTERSECTIONS, ADJUSTMENTS MAY NEED TO BE MADE TO SIGNAL PHASING,TIMING, INDICATIONS OR DETECTOR SETTINGS.

FOR SHORT TERM OPERATION, WHERE IT IS NOT FEASIBLE TO MODIFY PAVEMENT MARKING, A 10-FEET DEVICE SPACING IS USED WHERE TRAFFIC IS GUIDED ACROSS DOUBLE YELLOW LINES OR OTHER CONFLICTING PAVEMENT MARKING. ALL OTHER SPACING ARE ONE-HALF OF THE SPACING.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

PAVEMENT MARKING AND BARRICADES OPTIONAL FOR SHORT TERM OPERATIONS.

IF RUMBLE STRIPS ARE USED, REVIEW 616.6.87 RUMBLE STRIPS.

FOR FLAGS AND ADVANCED WARNING RAIL SYSTEM, REFER TO EPG 616.6.2.2 FLAGS AND ADVANCE WARNING RAIL SYSTEM.

(3) LEFT LANE CLOSED AHEAD SIGN MAY BE OMITTED IN LOW SPEED URBAN AREAS WHERE THERE IS NOT SUFFICIENT SPACE FOR THE FULL SIGN SERIES.

(4) THE FLASHING ARROW BOARD SHOULD BE LOCATED AT THE BEGINNING OF THE MERGING TAPER WHEN MEDIAN WIDTH ALLOWS THIS PLACEMENT.

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:28:41 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	277

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

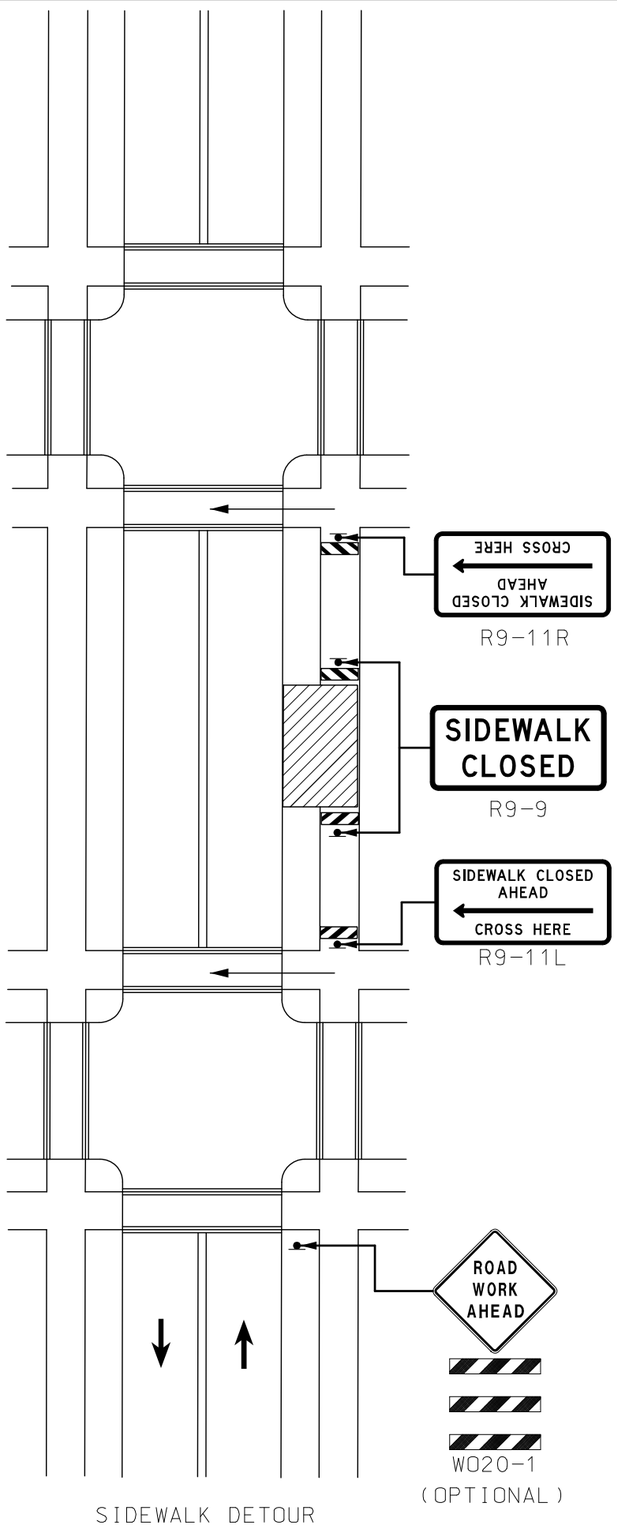
PROJECT NO.

BRIDGE NO.

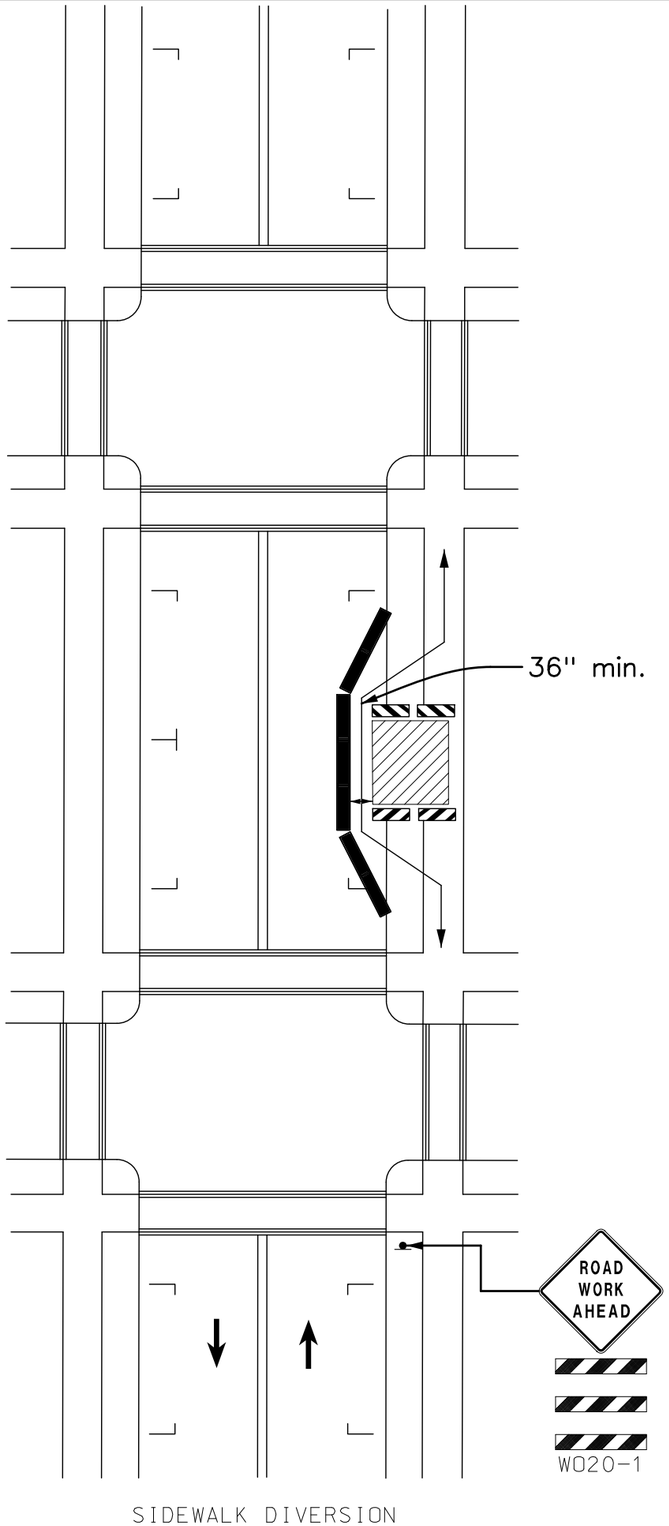
DESCRIPTION	DATE

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

TRAFFIC CONTROL SHEET
LEFT LANE CLOSURE AT
INTERSECTION WORK ON
FAR SIDE



SIDEWALK DETOUR



SIDEWALK DIVERSION

NOTES:

1. WHEN CROSSWALKS OR OTHER PEDESTRIAN FACILITIES ARE CLOSED OR RELOCATED, TEMPORARY FACILITIES SHALL BE DETECTABLE AND SHALL INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.

2. WHERE HIGH SPEEDS ARE ANTICIPATED, A TEMPORARY TRAFFIC BARRIER AND, IF NECESSARY, A CRASH CUSHION SHOULD BE USED TO SEPARATE SIDEWALKS FROM VEHICULAR TRAFFIC.

3. WHERE HIGH SPEEDS ARE ANTICIPATED, A TEMPORARY TRAFFIC BARRIER AND, IF NECESSARY, A CRASH CUSHION SHOULD BE USED TO SEPARATE SIDEWALKS FROM VEHICULAR TRAFFIC.

4. ONLY THE TTC DEVICES RELATED TO PEDESTRIANS ARE SHOWN. OTHER DEVICES, SUCH AS LANE CLOSURE SIGNING OR "ROAD NARROWS" SIGNS, MAY BE USED TO CONTROL VEHICULAR TRAFFIC.

5. SIGNS, SUCH AS "KEEP RIGHT (LEFT)", MAY BE PLACED ALONG A TEMPORARY SIDEWALK TO GUIDE OR DIRECT PEDESTRIANS.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- WORK AREA
- LONGITUDINAL CHANNELIZING DEVICE
- TYPE III BARRICADE
- ADVANCED WARNING RAILS
- DIRECTION OF PEDESTRIAN DETOUR
- DIRECTION OF TRAFFIC

NOT TO SCALE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:23:47 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED: 6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	278

COUNTY: ST. LOUIS
JOB NO.: J6S3632
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

TRAFFIC CONTROL SHEET
SIDEWALK DETOUR OR DIVERSION
TA-28

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

START OF EROSION CONTROL

MATCHLINE STA. 50+50.00

CURB INLET CHECK

N/F James Lesser 17311/3552

N/F 8858 Telegraph LLC 19789/2708

N/F Lorcor LLC 17566/3781

N/F LJC Commercial LLC 23714/80

N/F LJC Commercial LLC 7353/723

N/F Telegraph Real Property LLC 22118/1198

N/F Sylvan Springs Automotive Inc. 10645/743

SYLVANWOOD TERRACE (50' WIDE)

FRANRU LANE (26' WIDE)

Sylvan Springs Rd

S24°06'26"E 733.69'

N/F Sylvan Springs Assoc LP 23928/4080

Dedicated St. Louis County Port Public Rte PB 368 Pg 14

FRANRU LANE (VARIABLE WIDTH)

P.W. Dedication 7262778DE

N/F EBB Properties LLC 22908/542

N/F Hope Vineyard Church 20275/1656

N/F Hope Vineyard Church 20275/1656

N/F CC&S Investment Inc. 14690/26

N/F Nicholas & Kathryn Pisoni 10474/2149

N/F Nicholas & Kathryn Pisoni 10474/2149

N/F Energy Marketing Inc. 11521/2124

SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/01/2025 4:40:26 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	279

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

STA. 50+50.00

STA. 64+00.00

MATCHLINE STA. 51+07.40

MATCHLINE STA. 63+43.60

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

S23°45'37"W

N/F
Union Planters Bank
Na Trustee et al
15645/1262

N/F
David & Penny Angelo
19635/1655

N/F
Otto J. Cook
24798/2861

N/F
Stanley & Linda Cooper
16508/142
NO ACQUISITION

N/F
Thalhimer Bros Life Company
NO ACQUISITION

N/F
Richard & Lillian Coger
17021/290

N/F
RFTB PP LLC
23942/2977

N/F
Telegraph Real Property LLC
21824/01
Parcel 1

N/F
Telegraph Real Property LLC
21824/01
Parcel 3

N/F
Southtown Holdings LLC

N/F
Pinehurst Apartment Compl
17084/1561

N/F
Oalville Automotive Inc.
7301/602
NO ACQUISITION

N/F
Chris Cakes Holdings LLC
22884/2793
NO ACQUISITION

RAGSDALE PROPERTIES, L.L.C.
19993-1363
Inst No. 2011
NO ACQUISITION

N/F
Thomas & Erin Dittrich
25377/2123
NO ACQUISITION

Adam Schaffer
23114/1965
NO ACQUISITION

Lin-Tel Manor Plat One
PB 90 PG 41

Lin-Tel Manor
PB 95 PG
NO ACQUISI

Lot 80

Lot 76

Lot 75

Lot 74

Lot 73

Lot 72

LAND CORNER TIE #2

384.32'
N3°22'31"W

113.28'
50'

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
Stuart McNeil
06/01/2025 5:03:47 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	280

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

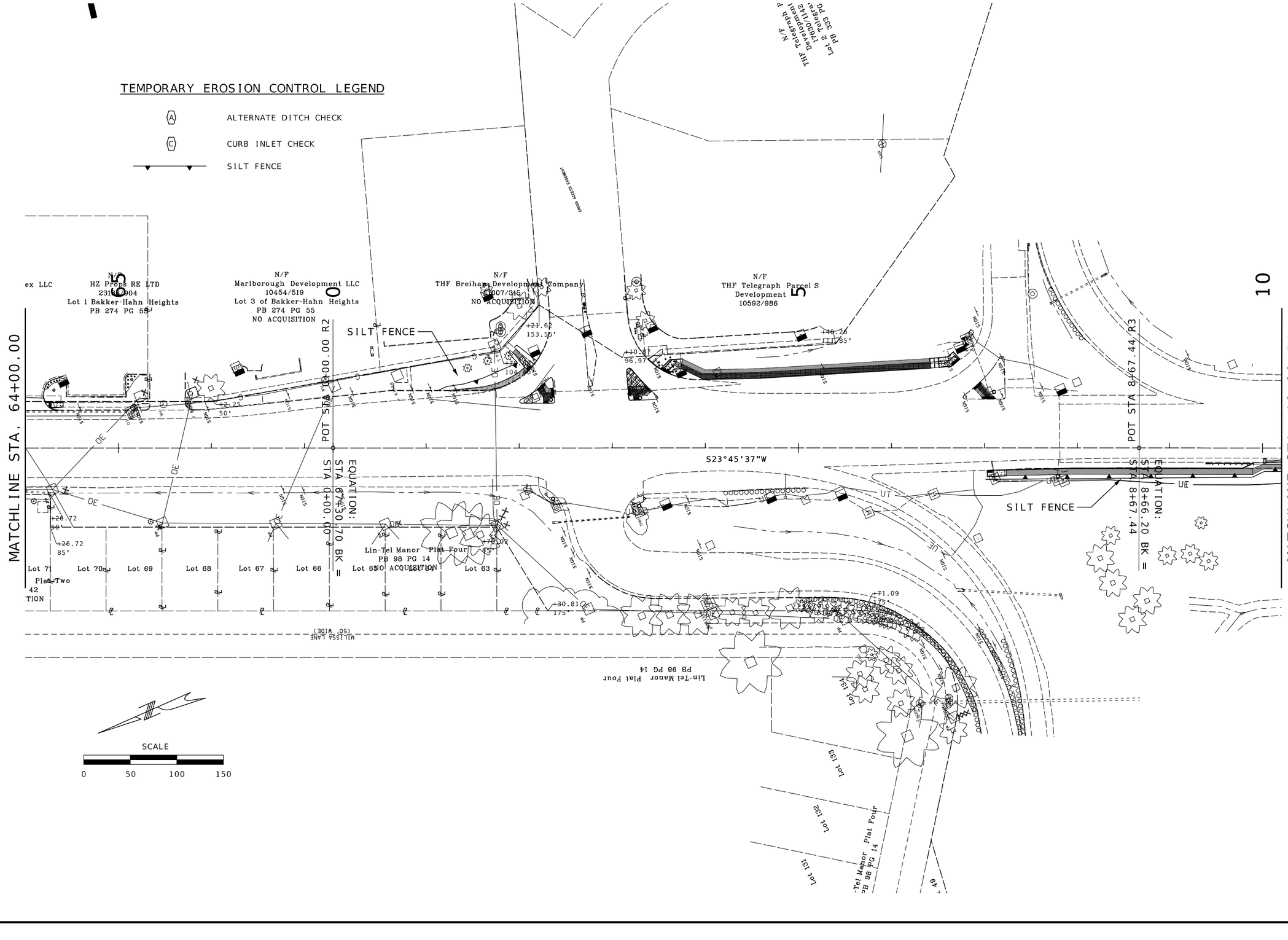
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE



DATE PREPARED	5/28/2025
ROUTE	231
STATE	MO
DISTRICT	SL
SHEET NO.	281
COUNTY	ST. LOUIS
JOB NO.	J6S3632
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
05/01/2025 5:04:01 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL

MATCHLINE STA. 10+20.54

MATCHLINE STA. 23+70.54

15

20

Bridgt View Amended Plat
PB 76 PG 40

Lot 9

Lot 65

Lot 68

Marligney Hills
PB 76 PG 8

Lot 9

Lot 5

Lot 4

Lot 67

MARTIGNEY DRIVE

PI 21+36.78
PC 20+29.47 R3
PT 22+43.47
Δ 10°41'47.3" (LT)
D 4°59'54.33"
L 214.00' (ARC)
T 107.31'
R 1,146.28'

PC STA 20+29.47 R3

PT STA 22+43.47 R3

S23°52'07"W

SILT FENCE

SILT FENCE

SILT FENCE

SILT FENCE

ALTERNATE
DITCH CHECK

TEMPORARY EROSION CONTROL LEGEND

ALTERNATE DITCH CHECK

CURB INLET CHECK

SILT FENCE

SCALE

0 50 100 150

N/F
KCR RE 2019012280

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/01/2025 5:04:14 PM
STUART ROBINSON McNEIL, CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	282

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 23+70.54

MATCHLINE STA. 37+20.54

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

S13°10'20"W

S03°30'31"W

PC STA 27+31.16 R3

PT STA 29+44.49

POT STA 32+50.08 R3

PI 28+48.05
PC 27+51.16 R3
PT 29+44.49
Δ 9°39'48" (LT)
D 4°59'54.3"
L 193.33' (ARC)
T 96.89'
R 1,146.28'

25

30

35

Lot 88

Lot 89

Lot 90

Lot 91

Lot 92

Lot 93

Lot 67

Lot 68

Lot 69

Lot 2

Lot 3

Lot 4

Lot 5

Lot 6

Lot 7

Lot 25

Lot 26

Lot 27

Lot 28

Lot 29

Lot 30

Lot 31

Lot 32

Lot 33

Lot 34

Lot 57

Lot 58

Marigney Hills
PB 76 PG 8

N/F
Richard Olson
22388/125
NO ACQUISITION

N/F
Vernell Gettner
17754/4389
NO ACQUISITION

N/F
Vernell Gettner
17754/4389

Boundary Adj. Plat
Birchwood Est. Lots 67 & 68
PB 289 PG 27

Birchwood Est. Plat 1
PB 186 PG 90

N/F
South Side National
Bank In STL
10944/1164
NO ACQUISITION

N/F
Site Oil Company
9580/2018
NO ACQUISITION

Tara South III
PB 95 PG 59

Tara South III
PB 95 PG 59

Boundary Adjustment Plat
PB 349 PG 22

AQUA RIDGE DRIVE (50' WIDE)

GOLDEN VALLEY DRIVE (50' WIDE)

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 5:04:35 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	283

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

STA. 37+20.54

STA. 50+70.54

MATCHLINE

MATCHLINE

GOLDEN VALLEY DRIVE

PEGASUS DRIVE (50' WIDE)

N/F TS Center LLC 21826/1368 NO ACQUISITION

N/F TS Center LLC 21826/1368 AQUISITION SEE SHEET 18

N/F TS Center LLC 21826/1368

N/F Bhagatji LLC 25348/1406

MARTINSKEY RIDGE PB 89 PG 35 MARCH 9, 1959

Lot 7

Lot 8

Lot 61

Lot 60

Lot 59

Lot 20

Lot 19

Lot 18

S03°22'37"W

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

Meerae LLC 20076/2982

Meerae LLC 20076/2982

N/F RJCA LLC 22808/2662

304 Forest LLC 14439/2902

N/F State Of Mo.

Thomas R.

SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/01/2025 5:04:54 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	284

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

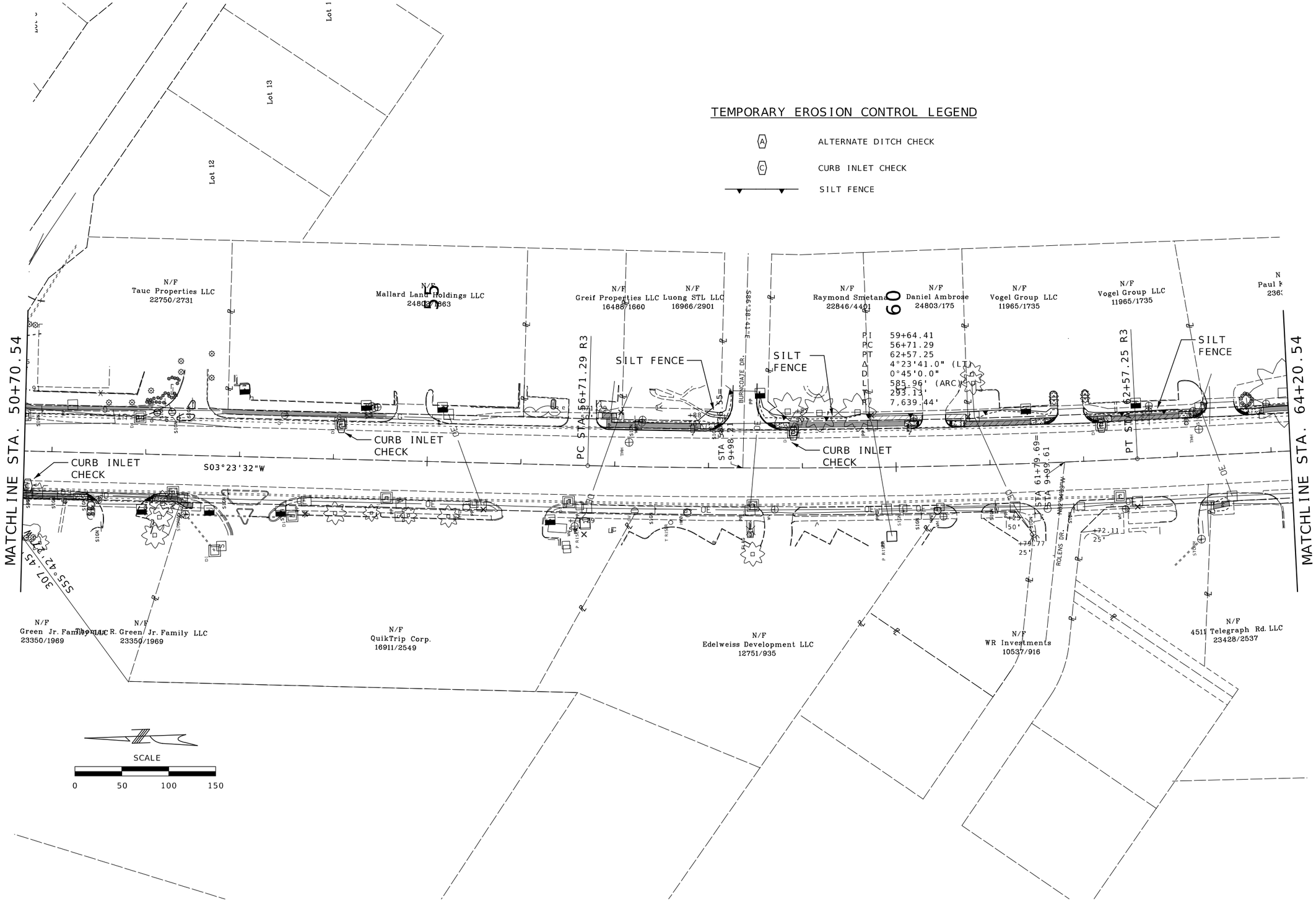
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 5:05:10 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED	5/28/2025
ROUTE	231
STATE	MO
DISTRICT	SL
SHEET NO.	285
COUNTY	ST. LOUIS
JOB NO.	J6S3632
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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 64+20.54

MATCHLINE STA. 77+69.73

SILT FENCE

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

EQUATION: STA 76+34.15 BK = STA 76+33.34 AH

S01°00'08"E

S01°00'08"E

S01°00'08"E

S01°00'08"E

STA 67+62.73=
STA 10+00

N/F
Knubley
375/630

N/F
St. Louis County
Catholic Church Real Estate
17765/ 4123

N/F
St. Louis County
Catholic Church Real Estate
17765/ 4123

N/F
St. Louis County
Catholic Church Real Estate
17765/ 4123

N/F
MR Maguire LLC
11261/28

N/F
Oakville Ice Cream LLC
23328/2674

Ingress Egress
11261/28

Crestline Dr

YAEGER ROAD

N/F
First Community
Credit Union
16899/363

N/F
Billy Faulkner
12958/939

N/F
Hodits Family LLC
20733/607

N/F
4554 Telegraph Rd LLC
22684/2335

N/F
MBR Oakville Property LLC
24624/4737

N/F
Autozone Inc.
10464/991

N/F
Chestnut Park Plaza LLC
12071/1490

N/F
Oakville Plaza LLC
23467/2930

SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/01/2025 5:05:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	286

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 77+69.73

MATCHLINE STA. 91+19.73

Walgreens Store No. 5363
5414 Telegraph Road
PB 351 PG 145
March 17, 2003

Cliff Cave Library
PB 331 PG 78

Cliff Cave Library
PB 331 PG 78

Lot 31

Lot 3

Lot 2

Lot 1

Common Ground PB 339 PG 29

Southwest Meramec Fire Protection District (Sold)

N/F
Melville Fire Protection District
17519/1746
Parcel 1

N/F
Melville Fire Protection District
17519/1746
Parcel 2

N/F
Darrel D. Climer Family Trust
24205/208

N/F
Darrel D. Climer Family Trust
24205/208

PC STA. 80+19.36 R4

PT STA. 80+74.76 R4

STA 88+83.63
STA 10000

S01°00'08"E

S00°53'12"W

ALTERNATE DITCH CHECK

ALTERNATE DITCH CHECK

CURB INLET CHECK

SILT FENCE

PC 80+19.36
PT 87+74.76
Δ 1°53'18.6" (RT)
D 0°15'0.0"
L 755.40' (ARC)
T 377.73'
R 22,918.31'

N/F
The Otto Partnership
8792/1628

N/F
Union Electric Company
8749/2472

N/F
Steve Reinhold
13452/1462

N/F
Steve Reinhold
12642/1050

N/F
US Bank NA
8146/110

N/F
Hurlbut Investments
20054/1463

N/F
Coppergate Square LLC
18021/3860
NO ACQUISITION

N/F
Coppergate Square LLC
18021/3860
NO ACQUISITION

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 5:05:40 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	287

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 91+19.73

MATCHLINE STA. 104+70.53

N/F
St. Paul's German Evangelical Church
(AT&T Wireless Services Lessee)

N/F
Telegraph LLC
071/2967

N/F
St. Paul's German Evangelical Church
(AT&T Wireless Services Lessee)

N/F
Colfer Holdings LLC
20316/4858

N/F
5524 Telegraph Rd LLC
23134/1353

N/F
SkS Property LLC
13834/1475

N/F
Sprint Energy LLC
14390/152

Lot 3

Out Of
Subdivision

N/F
Stochl LTD
18341/10

PC STA. 93+95.39 R4

PT STA. 99+77.69 R5

PDT STA. 103+53.39 R6

CURB INLET CHECK

CURB INLET CHECK

CURB INLET CHECK

EQUATION STA. 99+78.34 BK = STA. 99+69

EQUATION: STA. 103+51.95 BK = STA. 103+53.39 AH

S12°32'44"W

PI 96+87.88
PC 93+95.39
PT 99+77.69
Δ 11°39'32.0" (RT)
D 2°0'0.0"
L 582.94' (ARC)
T 292.48'
R 2,864.79'

N/F
Coppergate Square LLC
18021/3860

Ingress-Egress
7344/1780
(Existing Easement)

N/F
MAGNA Bank
10662/711

Ingress-Egress
PC 8
PB 169
(Existing Easement)

N/F
Menitoff Property
20674/810

N/F
Archland Property
15941/1963

Ingress-Egress
PB 169
PC 8
(Existing Easement)

N/F
Midwest Bank Center
12405/636

Beaumont Rd

W Cliff Cove Rd

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 5:06:38 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	288

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 104+70.53

MATCHLINE STA. 118+20.53

105

110

115

Lot 23

Lot 5

20' Alley

N/F
Stochl LTD LLC
18341/1025

N/F
Robert Harvey
24672/4540

N/F
5620 Telegrapg RD
Partners LLC
25382/2216

N/F
Caplaco Twenty Three Inc. et al
11818/37

Ingress Egress
PB 285 PG 1
Also Shown on
PB 305 PG 9

N/F
Caplaco Twenty Three Inc. et al
Leased to Commerce Bank
By 8929/62

N/F
Caplaco Twenty Three Inc. et al
11818/37

N/F
Caplaco Twenty Three Inc. et al
11818/37

Ingress Egress
PB 285 PG 1
Also Shown on PB 305 PG 9

PI 115+58.65
PC 112+74.07
PT 118+41.37
Δ 11°20'46.0" (LT)
D 2°0'0.0"
L 567.31' (ARC)
T 284.58'
R 2,864.79'

PC STA 112+74.07 R6

S12°31'28"W

ALTERNATE DITCH CHECK

SILT FENCE

CURB INLET CHECK

N/F
James Drury
10396/1638
Adjusted Parcel "A"

N/F
Jerry Michel Inc.
10508/1244
Adjusted Parcel "B"

N/F
Sunset Properties LLC
21198/3844

N/F
Guilsin Properties LLC
24992/1627

N/F
Oakville BP Inc.
21872/2466

N/F
Katon Investment Co.
6808/1721

N/F
Katon Investment co.
19491/780

N/F
5661 Telegraph Rd LLC
23737/329

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 5:06:49 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	289

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

PROJECT NO.

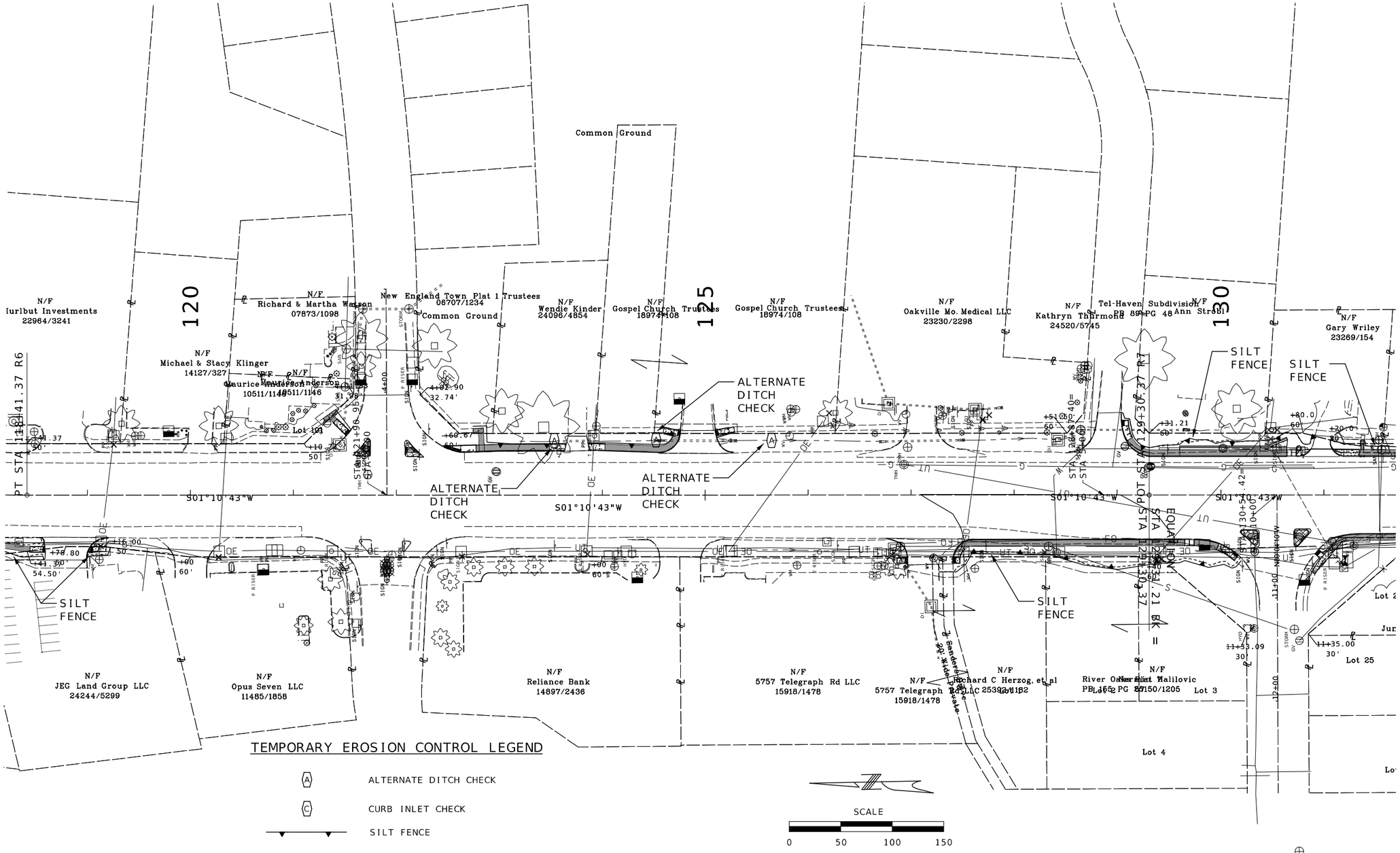
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL



STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER

06/01/2025 5:07:06 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	290

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 131+69.68

MATCHLINE STA. 145+21.62

N/F Michal McCollum 17758/945

A Boundary Adjustment Plat PB 312 PG 7

N/F Don Jennewein 19959/2750

N/F David & Linda Kostel 7621/468

N/F IPL Holdings LLC 20492/2467

N/F Donald Jennewein 8613/2176

N/F Gerald Lipinsky 11802/1575

N/F Melrville School District

N/F John Firth 17620/2108

SILT FENCE

ALTERNATE DITCH CHECK

CURB INLET CHECK

PC STA 135+42.59 R7

PT STA 141+48.19 R8

EQUATION STA 141+46.26 BK = STA 141+48.19 AHD

PI 144+51.
PC 141+48.
PT 147+53.
Δ 3°2'3.7
D 0°30'0.
L 606.87'
T 303.51'
R 11,459.

PI 138+44.49
PC 135+42.59
PT 141+48.19
Δ 3°1'6.1" (RT)
D 0°30'0.0"
L 603.67' (ARC)
T 301.91'
R 11,459.16'

S01°10'43"W

Lot 48 Lot 49 Lot 50 Lot 51 Lot 52 Lot 53 Lot 54 Lot 55

River Oaks Plat 2 PB 128 PG 72

River Oaks Plat 1 PB 127 PG 62

N/F Juma Nizar Zwad 23724/661

N/F Jeffrey Loomis 23660/364

N/F Bethesda Long Term Care Inc 13624/955

N/F Bethesda Long Term Care Inc 13158/1511

N/F Carol A. Terbrock Revocable Trust 25348/3098

SCALE

0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/01/2025 5:07:22 PM
STUART ROBINSON McNEIL CIVIL MO-PE-2006019687

DATE PREPARED 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	291

COUNTY ST. LOUIS

JOB NO. J6S3632

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

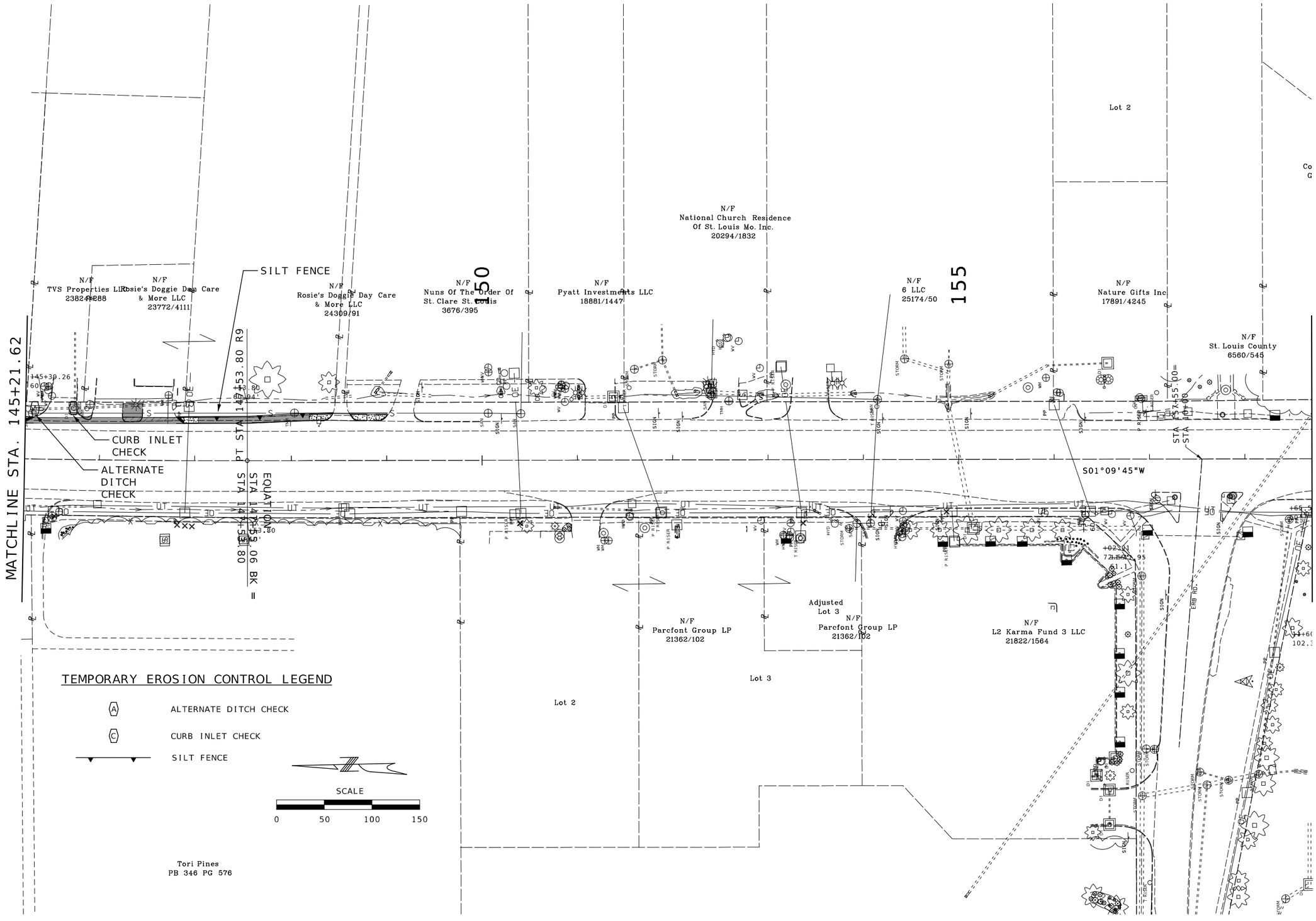
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EROSION CONTROL



TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 1:57:12 PM
STUART ROBINSON McNEIL CIVIL
MO-PE-2006019687

DATE PREPARED: 5/28/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	292

COUNTY: ST. LOUIS
JOB NO.: J6S3632
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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

MATCHLINE STA. 158+70.35

MATCHLINE STA. 172+19.04

Lot 39 | Lot 40 | Lot 41 | Lot 5 | Lot 4 | Lot 3 | Lot 2 | Lot 42 | Lot 43 | Lot 44

mmon round

Parc Place
PB 344 PG 180

N/F
Parc Place Trustee
10949/2177

Common Ground

N/F
Carolyn E. & Brian T. Soell
23254/404

Boardwalk Place Dr.

Lot 1
John L. & Rachael E Cosby
19596/211

Laneridge Heights
Plat 1
PB 61 PG 38

N/F
Transitions Inc
19175/520

160

165

170

N/F
Grasso Brothers Land Co.
17511/1818

N/F
Grasso Brothers Land Co.
17511/1818

N/F
6178 LLC
24695/52

LAND CORNER PT.

+60.50
86.62'

+60.56
66.62'

+1.65
87.62'

+89.91
42.69'

+40.14
76.46'

STA 165+63.00
STA 165+70.43 R10

POT STA 165+70.43 R9

S01°09'45"W

EQUATION
STA 165+72.31 BK =
STA 165+70.43

EQUATION
STA 169+53.15 BK =
STA 169+53.72

PT STA 169+53.72 R11

SC STA 171+03.22 R11

PI 170+53.75
Ls 150.00'
Ys 3.93'
Xs 149.91'
LT 100.03'
ST 50.03'

N/F
Faith Evangelical
Lutheran Church of Oakville
10619/1897

N/F
Fortune Bank
21954/465

N/F
Fortune Bank
21954/465

N/F
RJCA LLC
22216/282

N/F
Great Southern Bank
21868/2482

N/F
Great Southern Bank
21868/2482

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 1:57:23 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
5/29/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	293

COUNTY
ST. LOUIS

JOB NO.
J6S3632

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)

EROSION CONTROL

TEMPORARY EROSION CONTROL LEGEND

- (A) ALTERNATE DITCH CHECK
- (C) CURB INLET CHECK
- SILT FENCE

ALTERNATE DITCH CHECK

SILT FENCE

EROSION CONTROL

END OF EROSION CONTROL

MATCHLINE STA. 172+19.04

Out Lot 249

Out Lot 250

N/F Grasso Brothers Land Co. 17511/1820

N/F Grasso Brothers Land Co. 17511/1813

N/F Brothers Land Co. 163/3120

Common Ground Victoria Crossing Plaza PB 355 pg 675

N/F Legacy Partnership LLC 23360/1178

N/F 5 LLC 24592/3860

N/F 5 LLC 24592/3860

N/F Kristin Kat 20617/2397

N/F Said & Edina Tahic 23418/1179

N/F 'ihaljevic LLC. 24910/3177

Highland Estates PB 233 PG 71

Lot 1, Lot 2, Lot 3, Lot 4, Lot 16, Lot 17, Lot 18, Lot 20, Lot 21, Lot 22, Lot 59

CS STA 179+66.95 R11

ST STA 181+16.95 R11

PC STA 18+89.45 R12

BK STA 18+89.45 R12

+46.84 34.5

+29.79 48.95

+14.55 63.97

+20.55 60.67 50.0

+89.45 50.0

+22.36 60.0

S61°57'23"W

PI 180+16.98
Ls 150.00'
Ys 7.85'
Xs 149.75'
LT 100.03'
ST 150.03'

Total Delta 60°47'38"
SCS PC 175+89.47
TS 635.75'
PI 175+67.35
PC 171+03.72
PT 179+66.95
Δ 51°47'38.0" (RT)
D 6°0'0.0"
L 863.23' (ARC)
T 463.63'
R 954.93'

SCALE
0 50 100 150

STATE OF MISSOURI
STUART ROBINSON McNEIL
NUMBER PE-2006019687
PROFESSIONAL ENGINEER
06/20/2025 2:29:22 PM
STUART ROBINSON McNEIL - CIVIL
MO-PE-2006019687

DATE PREPARED
6/16/2025

ROUTE	STATE
231	MO
DISTRICT	SHEET NO.
SL	294

COUNTY
ST. LOUIS

JOB NO.
J6S3632

CONTRACT ID.

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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JEFFERSON CITY, MO 65102
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EROSION CONTROL