MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

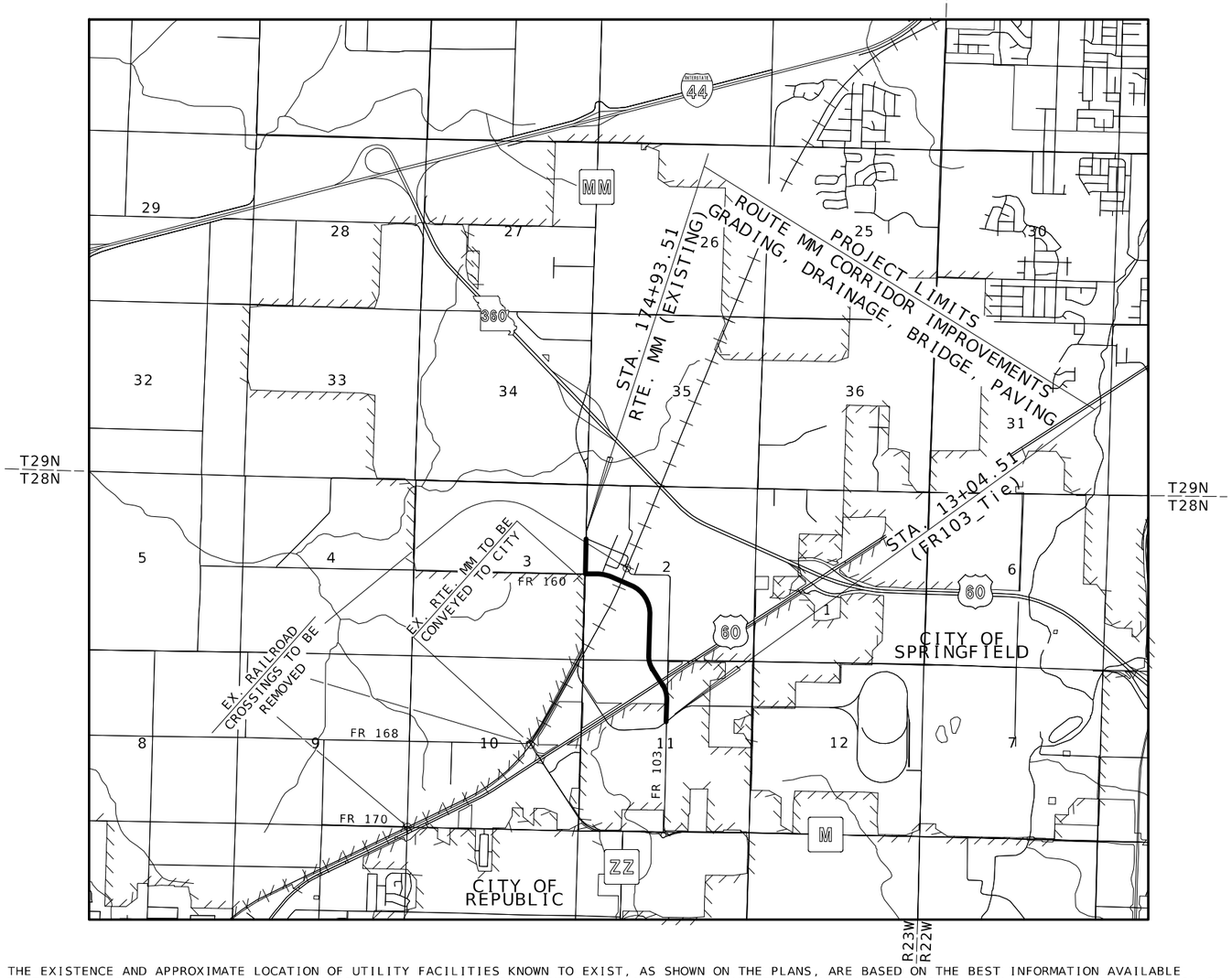
PLANS FOR PROPOSED STATE HIGHWAY

GREENE COUNTY

SECTIONS 2,3,11 T28N, R23W

KEY MAP
LOCATION OF GREENE COUNTY

SCALE IN MILES



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.

DESIGN DESIGNATION

A.A.D.T. - 2025 = 11,553
A.A.D.T. - 2045 = 16,214
D.H.V. = 8.86%
T = 13.67%
V = 45 M.P.H.
D = 49.3%/50.7% (N/S)

FUNCTIONAL CLASSIFICATION - FREEWAY

PARTIAL CONTROLLED ACCESS HIGHWAY

THIS SHALL BE A PARTIAL CONTROLLED ACCESS HIGHWAY, EXCEPT AT LOCATIONS AND AS OTHERWISE SPECIFICALLY SHOWN ON THESE PLANS. NO ABUTTER'S RIGHTS IN OR OF DIRECT ACCESS TO, FROM, OR ACROSS THE HIGHWAY OR ITS RIGHT-OF-WAY SHALL ATTACH OR BELONG TO ANY PROPERTY ABUTTING ON SAID SECTION OF HIGHWAY, OR TO ANY PERSON MERELY BECAUSE OF OWNERSHIP OF SUCH ABUTTING PROPERTY WHERE THE SYMBOL SHOWN BELOW IS SHOWN ON THE RIGHT-OF-WAY LINE.

BEGINNING AND ENDING OF CONTROLLED ACCESS

NO RIGHT OF ACCESS OR CROSSING OF LINES BEARING THIS SYMBOL WILL BE PERMITTED UNDER ANY CIRCUMSTANCES.

CONVENTIONAL SYMBOLS
(USED IN PLANS)

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

NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES

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A9472	1-63
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LENGTH OF PROJECT

EX. ROUTE MM

BEGINNING OF PROJECT	STA.	174 + 93.51
END OF PROJECT	STA.	194 + 02.76
APPARENT LENGTH		1909.25 FEET
EQUATIONS AND EXCEPTIONS:		0 FEET

PR. ROUTE MM

BEGINNING OF PROJECT	STA.	0 + 00.00
END OF PROJECT	STA.	47 + 37.08
APPARENT LENGTH		4737.08 FEET
EQUATIONS AND EXCEPTIONS:		0 FEET

FARM ROAD 160

BEGINNING OF PROJECT	STA.	23 + 85.00
END OF PROJECT	STA.	26 + 64.54
APPARENT LENGTH		279.54
EQUATIONS AND EXCEPTIONS:		0 FEET

PR. FARM ROAD 103

BEGINNING OF PROJECT	STA.	0 + 00.00
END OF PROJECT	STA.	13 + 04.51
APPARENT LENGTH		1304.51
EQUATIONS AND EXCEPTIONS:		0 FEET

US HWY 60

BEGINNING OF PROJECT	STA.	228+50.00
END OF PROJECT	STA.	248+18.97
APPARENT LENGTH		1968.97
EQUATIONS AND EXCEPTIONS:		0 FEET

TOTAL CORRECTIONS	0.00 FEET
NET LENGTH OF PROJECT	10199.35 FEET
STATE LENGTH	1.932 MILES
FOR INFORMATION ONLY ESTIMATED DISTURBED ACRES	22.030 ACRES

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/12/2025 11:26:03 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025

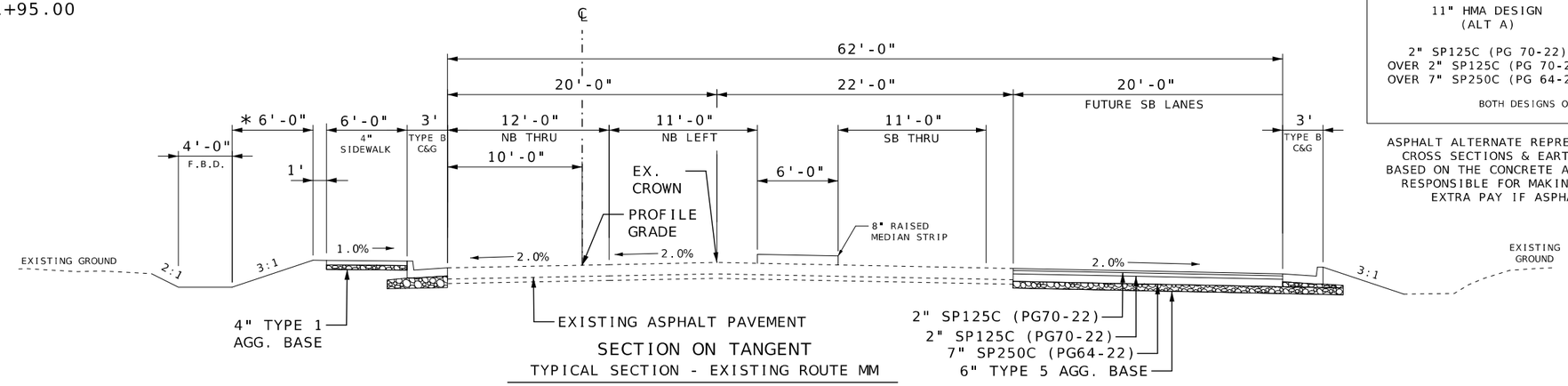
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	1

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION
DATE

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

* TRANSITION DITCH TO 3.3' DEPTH FROM STA. 181+75.00 TO STA. 181+95.00



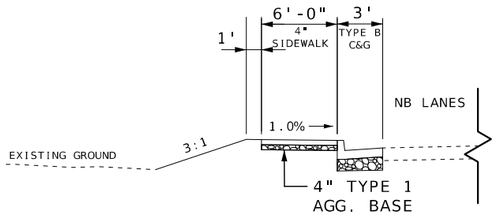
SECTION ON TANGENT
TYPICAL SECTION - EXISTING ROUTE MM
STA. 178+92.00 TO STA. 183+26.56

ALTERNATE PAVEMENT DESIGNS

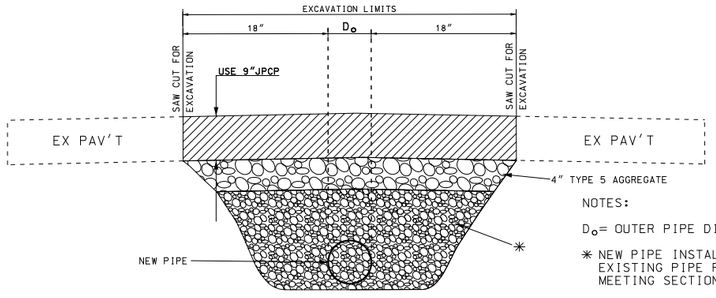
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS

BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.



PARTIAL SECTION ON TANGENT
TYPICAL SECTION - EXISTING ROUTE MM
STA. 179+05.00 TO STA. 179+30.00



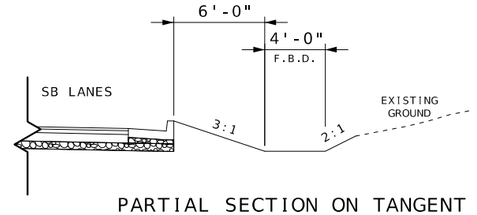
EXISTING PAVEMENT REPAIR DETAIL
PIPE INSTALLATION & REMOVAL
STA. 181+81 (EX. MM)

NOTES:

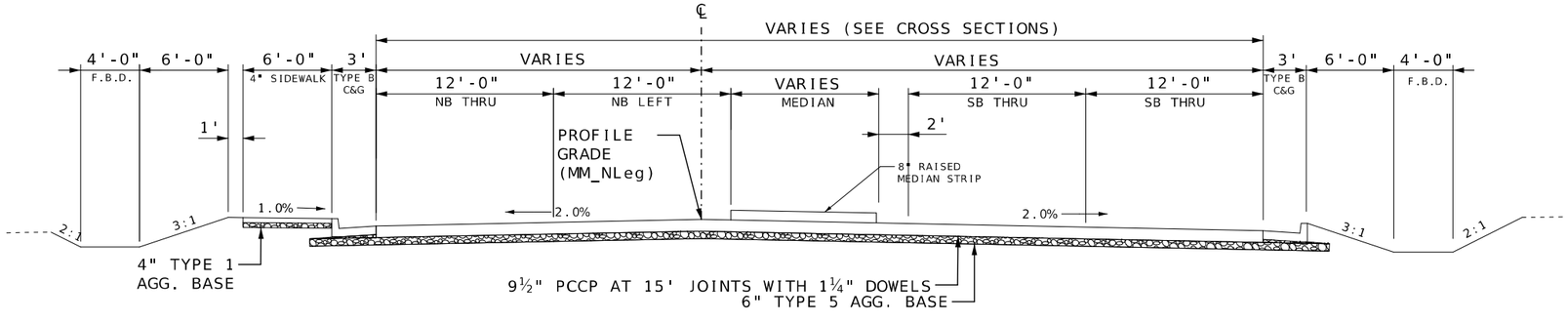
D_o= OUTER PIPE DIAMETER

* NEW PIPE INSTALLATION: SEE STANDARDS FOR BEDDING MATERIAL
EXISTING PIPE REMOVAL ONLY: USE CRUSHED AGGREGATE MEETING SECTION 1005 (COARSE) OR SECTION 1009 SPECS

CRUSHED AGGREGATE PAID AS BID ITEM 310-99.10 FOR PIPE REMOVALS IN PAV'T REPAIR LOCATIONS



PARTIAL SECTION ON TANGENT
TYPICAL SECTION - EXISTING ROUTE MM
STA. 183+14.40 TO STA. 184+03.25



SECTION ON TANGENT
TYPICAL SECTION - EXSTING MM ROUNDABOUT NORTH LEG BASELINE
(CONCRETE DESIGN)
STA. 1+00.00 TO STA. 4+11.73

TYPICAL SECTION SHEET
SHEET 1 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:57:40 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

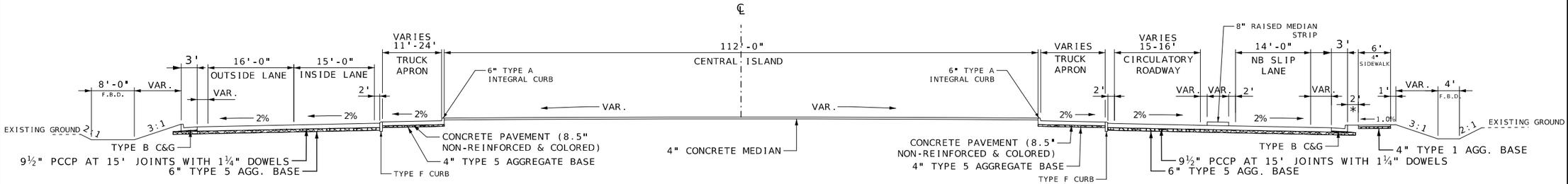
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

NOTES:

∗ 2' ROCK-LINED SETBACK ALONG NORTHEAST RADIUS BETWEEN STA. 188+14.22 & 188+84.71



SECTION ON TANGENT

TYPICAL SECTION - ROUTE MM (CONCRETE DESIGN)

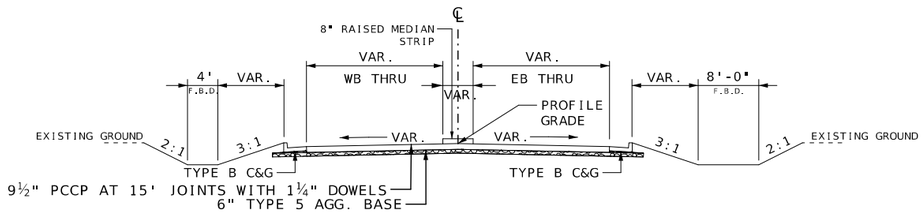
CIRCULATORY ROADWAY
STA. 0+00.00 TO STA. 3+51.86

NOTES:

\# TRANSITION CROSS SLOPE FROM 2.0% (STA. 191+80.00) TO EXISTING (STA. 192+15.51)

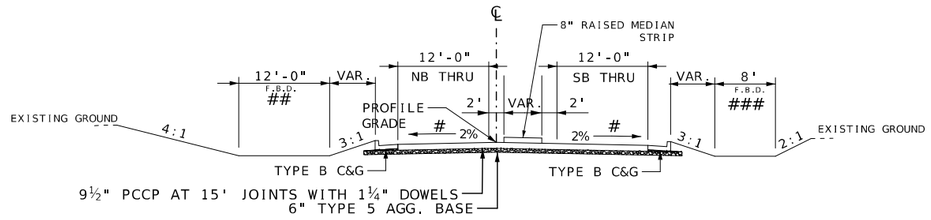
\## TRANSITION DITCH WIDTH FROM 12' (STA. 191+70.00) TO 4' (STA. 192+55.00)

\### TRANSITION DITCH WIDTH FROM 8' (STA. 191+70.00) TO 4' (STA. 192+15.51)



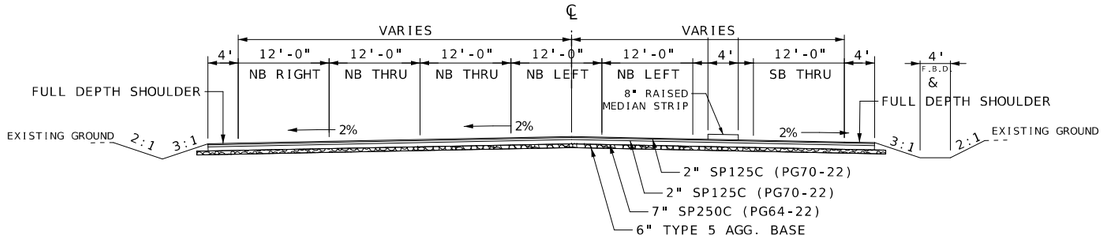
SECTION ON TANGENT

TYPICAL SECTION - PROPOSED FARM ROAD 160 BASELINE (CONCRETE DESIGN)
STA. 2+00.00 TO STA. 2+71.55



SECTION ON TANGENT

TYPICAL SECTION - EXISTING MM (CONCRETE DESIGN)
STA. 191+42.35 TO STA. 192+15.51



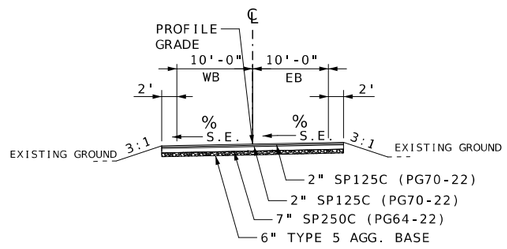
SECTION ON TANGENT

TYPICAL SECTION - FARM ROAD 103 (ASPHALT DESIGN)
STA. 2+24.76 TO STA. 4+55.17 (FR103_Tie)

NOTES:

& TRANSITION 4' FLAT BOTTOM DITCH (STA. 2+24.76) TO V DITCH (STA. 3+25.00)

% FULL S.E.=4% FROM STA. 2+26.92 TO STA. 4+04.74



SECTION ON TANGENT

TYPICAL SECTION - EXISTING FARM ROAD 168 ℄ (ASPHALT DESIGN)
STA. 1+05.00 TO STA. 5+50.00

TYPICAL SECTION SHEET
SHEET 2 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/08/2025 8:42:36 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/6/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

NOTES:

* WIDTH TRANSTION: 90.8' (STA. 1+60.01)
TO 86.1' (STA. 1+75.00)

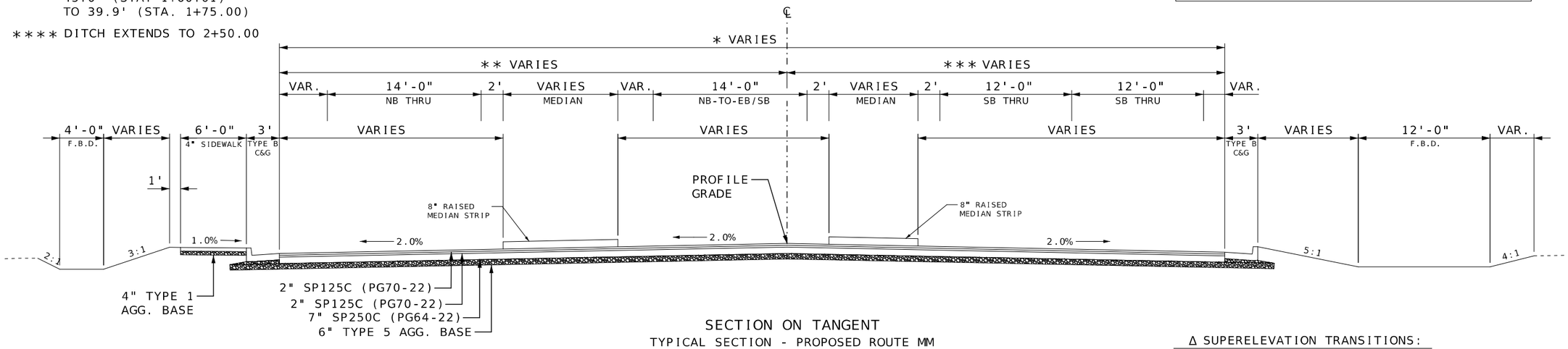
** WIDTH TRANSTION, LEFT SIDE:
47.8' (STA. 1+60.01)
TO 46.2' (STA. 1+75.00)

*** WIDTH TRANSTION, RIGHT SIDE:
43.0' (STA. 1+60.01)
TO 39.9' (STA. 1+75.00)

**** DITCH EXTENDS TO 2+50.00

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

ALTERNATE PAVEMENT DESIGNS	
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS
BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE	



SECTION ON TANGENT

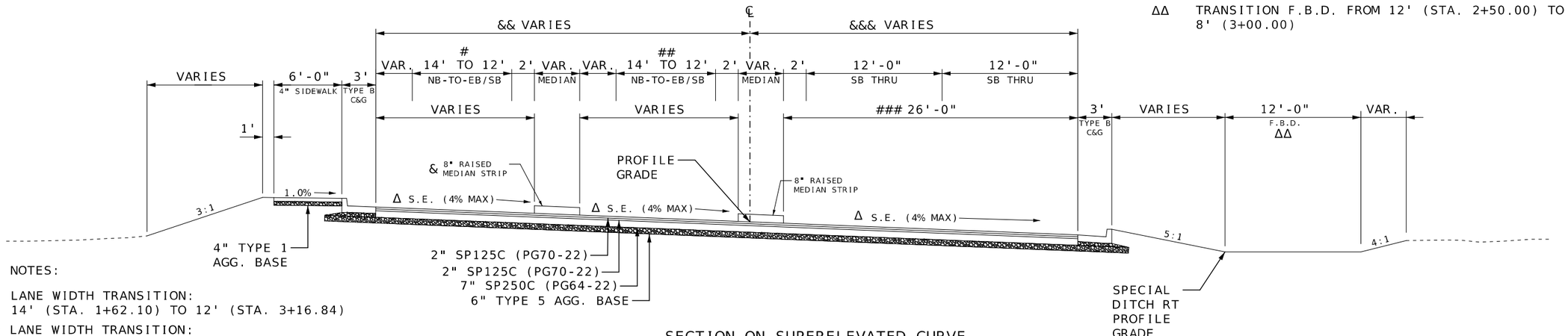
TYPICAL SECTION - PROPOSED ROUTE MM

STA. 1+60.01 TO STA. 1+75.00

Δ SUPERELEVATION TRANSITIONS:

NORMAL CROWN: STA. 1+75.00
LEVEL CROWN: STA. 2+12.50
REVERSE CROWN: STA. 2+56.95
FULL SUPER: STA. 3+01.39 TO 7+59.51
REVERSE CROWN: STA. 8+02.47
LEVEL CROWN: STA. 8+45.43
NORMAL CROWN: STA. 8+88.39

ΔΔ TRANSITION F.B.D. FROM 12' (STA. 2+50.00) TO 8' (3+00.00)



SECTION ON SUPERELEVATED CURVE

TYPICAL SECTION - PROPOSED ROUTE MM

STA. 1+75.00 TO STA. 3+16.84

NOTES:

\# LANE WIDTH TRANSITION:
14' (STA. 1+62.10) TO 12' (STA. 3+16.84)

\#\# LANE WIDTH TRANSITION:
14' (STA. 1+84.50) TO 12' (STA. 2+77.20)

\#\#\# WIDTH TRANSITION, RIGHT SIDE:
27.9' (STA. 1+75.00) TO 26.0' (STA. 2+04.78)

& RAISED MEDIAN ENDS AT 2+37.25

&& WIDTH TRANSITION, LEFT SIDE:
46.2' (STA. 1+75.00) TO 32.9' (STA. 3+02.20)

&&& WIDTH TRANSITION, RIGHT SIDE:
36.7' (STA. 2+04.78) TO 34.3' (STA. 2+72.39)

TYPICAL SECTION SHEET
SHEET 3 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:02:46 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

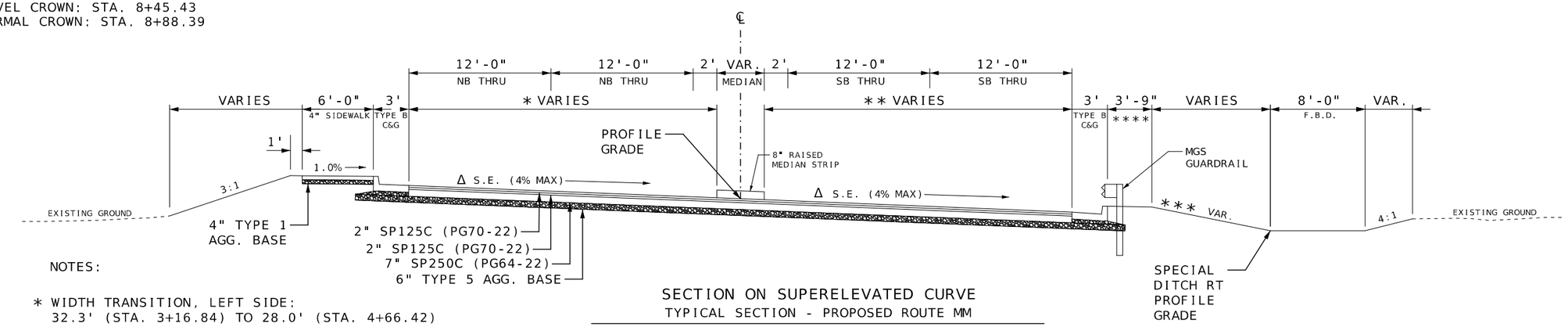
BRIDGE NO.

DESCRIPTION	DATE

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

Δ SUPERELEVATION TRANSITIONS:

FULL SUPER: STA. 3+01.39
TO 7+59.51
REVERSE CROWN: STA. 8+02.47
LEVEL CROWN: STA. 8+45.43
NORMAL CROWN: STA. 8+88.39



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 3+16.84 TO STA. 4+66.42

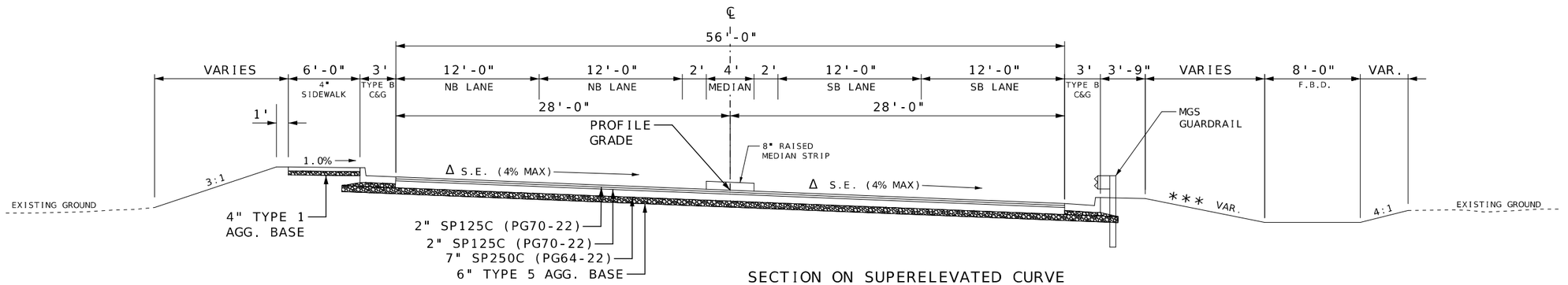
NOTES:

* WIDTH TRANSITION, LEFT SIDE:
32.3' (STA. 3+16.84) TO 28.0' (STA. 4+66.42)

** WIDTH TRANSITION, RIGHT SIDE:
33.0' (STA. 3+16.84) TO 28.0' (STA. 4+66.42)

*** TRANSITION DITCH FORESLOPE FROM 5:1 (STA. 4+50.00) TO 3:1 (STA. 5+50.00)

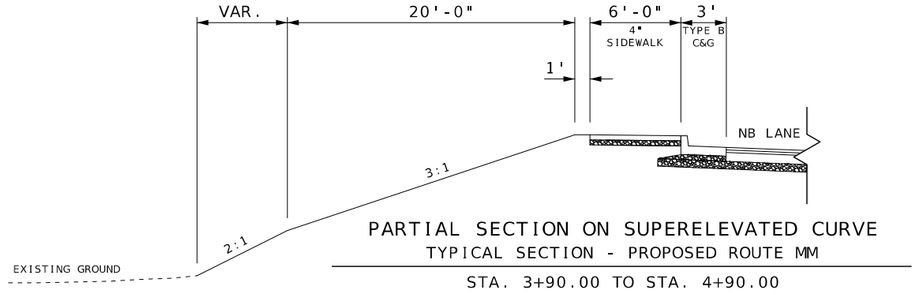
**** BEGIN GUARDRAIL WIDENING AT STA. 3+24.50



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 4+66.42 TO STA. 5+17.75

ALTERNATE PAVEMENT DESIGNS	
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS
BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE	

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.



PARTIAL SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 3+90.00 TO STA. 4+90.00

TYPICAL SECTION SHEET
SHEET 4 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
05/15/2025 12:18:59 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOTES:

\# TRANSITION DITCH FORESLOPE FROM 5:1 (STA. 4+50.00) TO 3:1 (STA. 5+50.00)

BEGIN GUARDRAIL WIDENING AT STA. 5+17.75

TRANSITION SIDEWALK WIDTH FROM 6' (STA. 5+17.75) TO 5' (STA. 5+67.75) & MATCH BRIDGE SLAB ELEVATION AT STA. 7+97.75

Δ SUPERELEVATION TRANSITIONS:

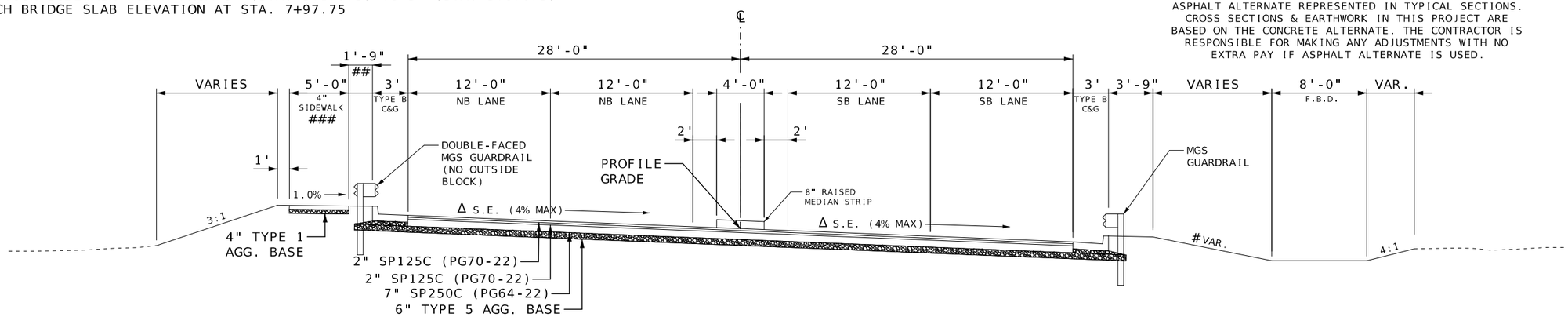
FULL SUPER: STA. 3+01.39
TO 7+59.51
REVERSE CROWN: STA. 8+02.47
LEVEL CROWN: STA. 8+45.43
NORMAL CROWN: STA. 8+88.39

ALTERNATE PAVEMENT DESIGNS

11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS

BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 5+17.75 TO STA. 7+97.75

NOTES:

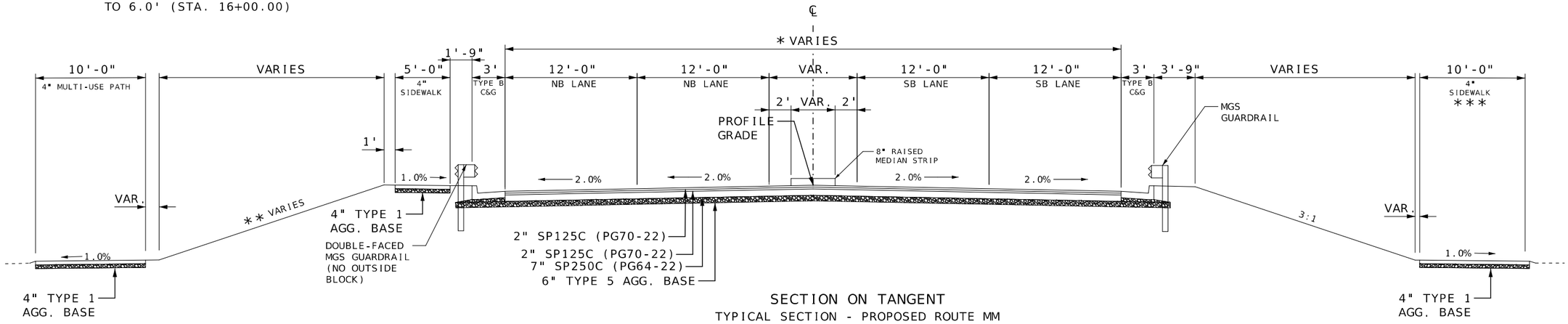
* PAVEMENT WIDTH TRANSITION: 56.0' (STA. 13+10.75) TO 62.0 (STA. 14+45.75)

** TRANSITION 2.5:1 (STA. 13+50.00) TO 3:1 (STA. 15+00.00)

*** TRANSITION SIDEWALK WIDTH: 10.0' (STA. 13+78.00) TO 6.0' (STA. 16+00.00)

Δ SUPERELEVATION TRANSITIONS:

NORMAL CROWN: STA. 13+42.43
LEVEL CROWN: STA. 13+86.87
REVERSE CROWN: STA. 14+31.32
FULL SUPER: STA. 14+75.76
TO 25+67.05
REVERSE CROWN: STA. 26+11.50
LEVEL CROWN: STA. 26+55.94
NORMAL CROWN: STA. 27+00.39



SECTION ON TANGENT
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 13+31.25 TO STA. 13+42.43

TYPICAL SECTION SHEET
SHEET 5 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:03:37 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

NOTES:

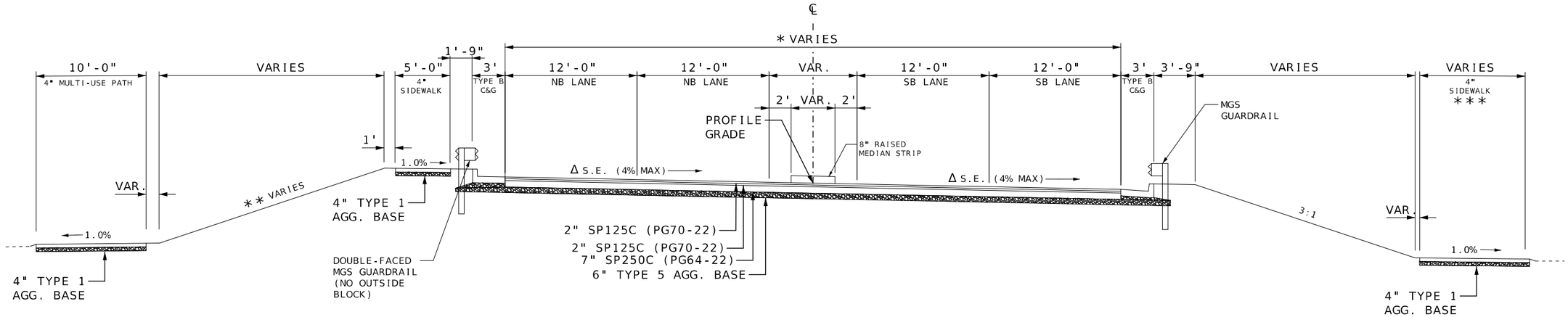
* PAVEMENT WIDTH TRANSITION: 56.0' (STA. 13+10.75) TO 62.0 (STA. 14+45.75)

** TRANSITION 2.5:1 (STA. 13+50.00) TO 3:1 (STA. 15+00.00)

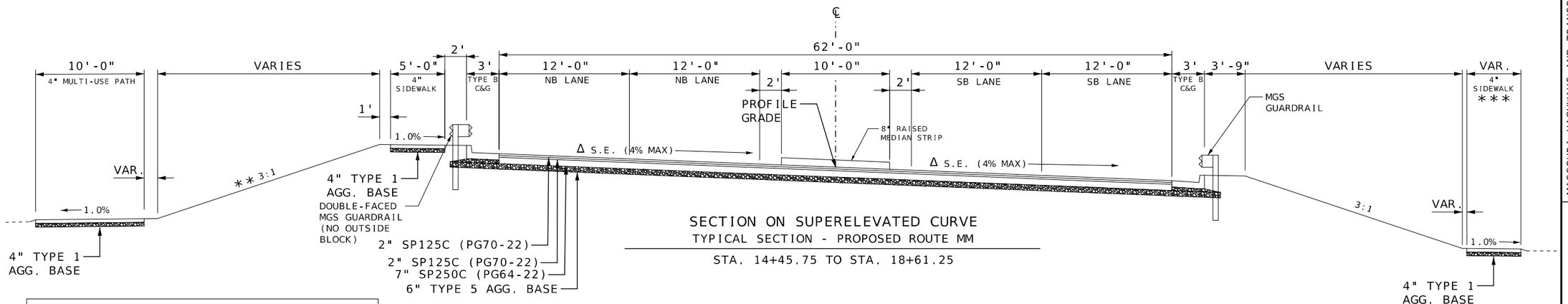
*** TRANSITION SIDEWALK WIDTH: 10.0' (STA. 13+78.00) TO 6.0' (STA. 16+00.00)

Δ SUPERELEVATION TRANSITIONS:

NORMAL CROWN: STA. 13+42.43
LEVEL CROWN: STA. 13+86.87
REVERSE CROWN: STA. 14+31.32
FULL SUPER: STA. 14+75.76
TO 25+67.05
REVERSE CROWN: STA. 26+11.50
LEVEL CROWN: STA. 26+55.94
NORMAL CROWN: STA. 27+00.39



SECTION ON TANGENT
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 13+42.43 TO STA. 14+45.75



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 14+45.75 TO STA. 18+61.25

ALTERNATE PAVEMENT DESIGNS

11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS

BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

TYPICAL SECTION SHEET
SHEET 6 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:04:00 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

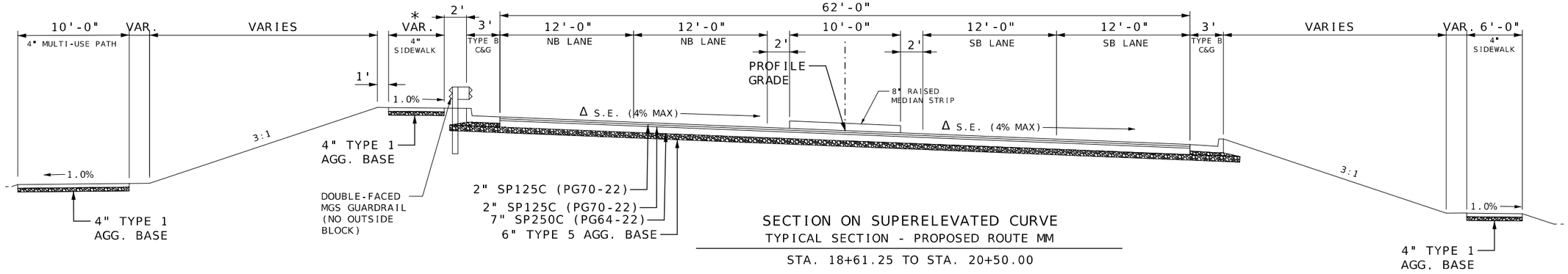
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

NOTES:

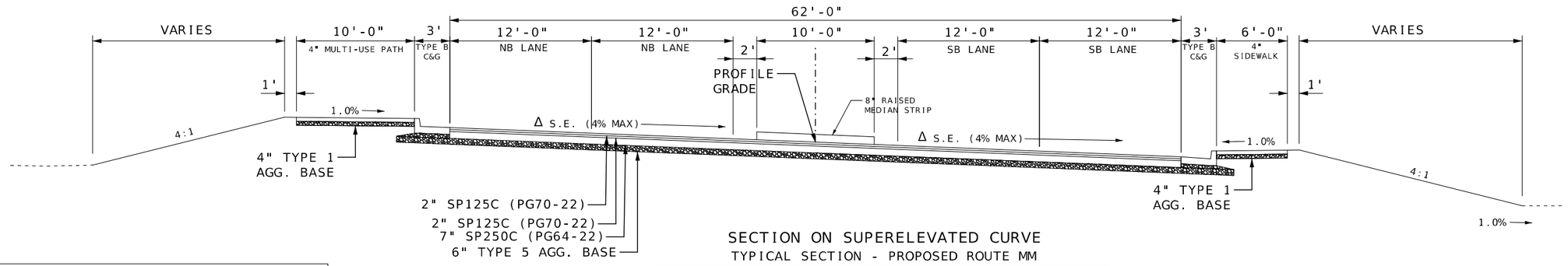
* SIDEWALK WIDTH TRANSITION: 5' (STA. 19+99.50) TO 6' (STA. 20+50.00)

Δ SUPERELEVATION TRANSITIONS:

NORMAL CROWN: STA. 13+42.43
LEVEL CROWN: STA. 13+86.87
REVERSE CROWN: STA. 14+31.32
FULL SUPER: STA. 14+75.76
TO 25+67.05
REVERSE CROWN: STA. 26+11.50
LEVEL CROWN: STA. 26+55.94
NORMAL CROWN: STA. 27+00.39



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 18+61.25 TO STA. 20+50.00



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM
STA. 22+00.00 TO STA. 23+01.09

ALTERNATE PAVEMENT DESIGNS

11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS

BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

TYPICAL SECTION SHEET
SHEET 7 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2005645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:04:20 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-2005645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

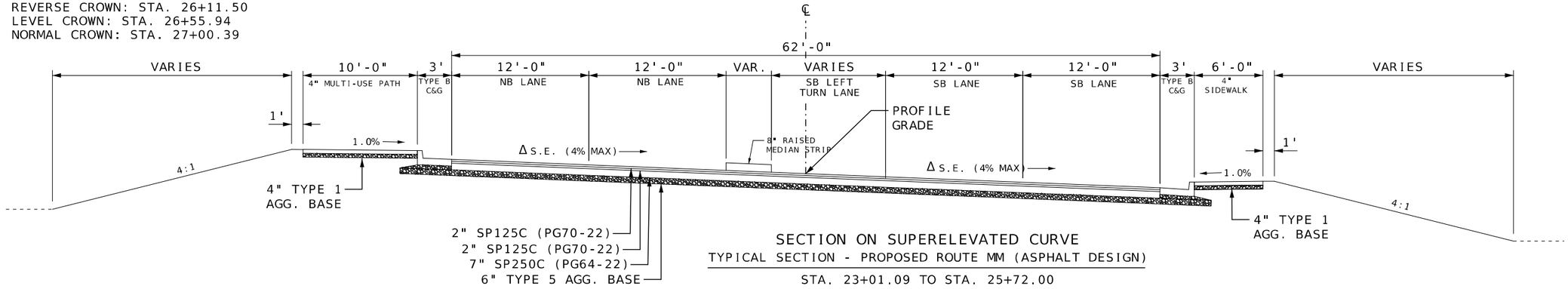
BRIDGE NO.

DESCRIPTION	DATE

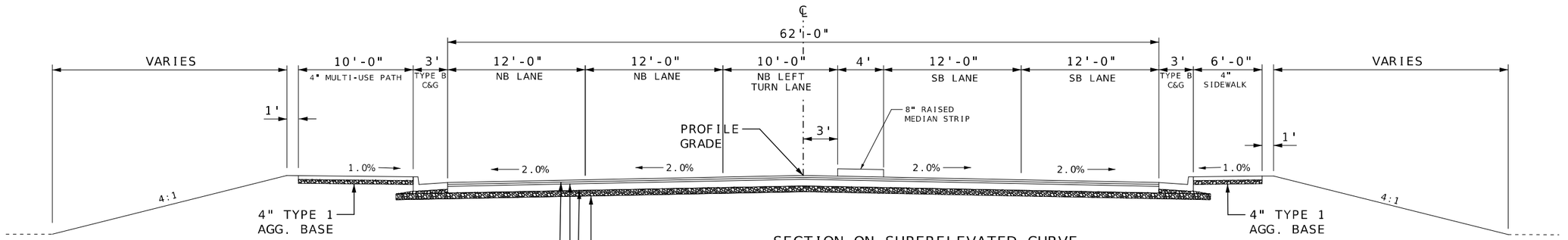
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Δ SUPERELEVATION TRANSITIONS:

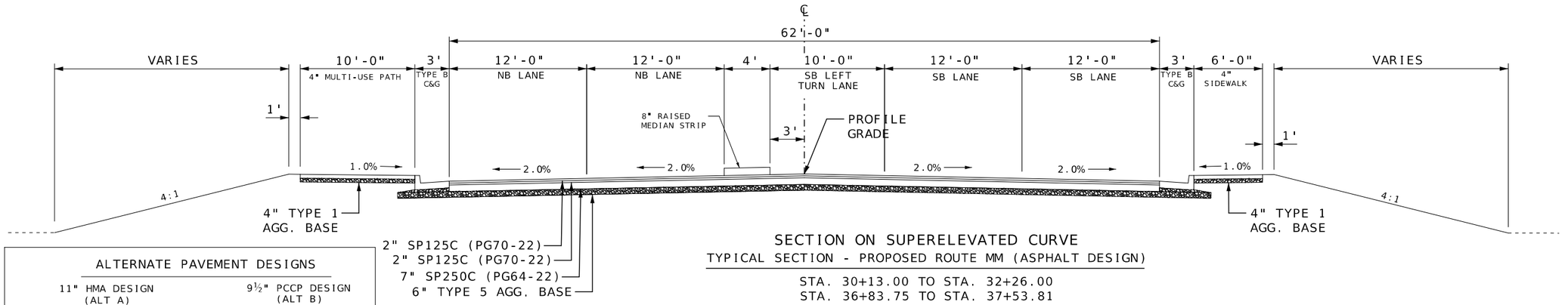
FULL SUPER: STA. 14+75.76
TO 25+67.05
REVERSE CROWN: STA. 26+11.50
LEVEL CROWN: STA. 26+55.94
NORMAL CROWN: STA. 27+00.39



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)
STA. 23+01.09 TO STA. 25+72.00



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)
STA. 27+07.25 TO STA. 29+13.00
STA. 33+59.00 TO STA. 35+84.00



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)
STA. 30+13.00 TO STA. 32+26.00
STA. 36+83.75 TO STA. 37+53.81

ALTERNATE PAVEMENT DESIGNS	
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS
BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE	

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

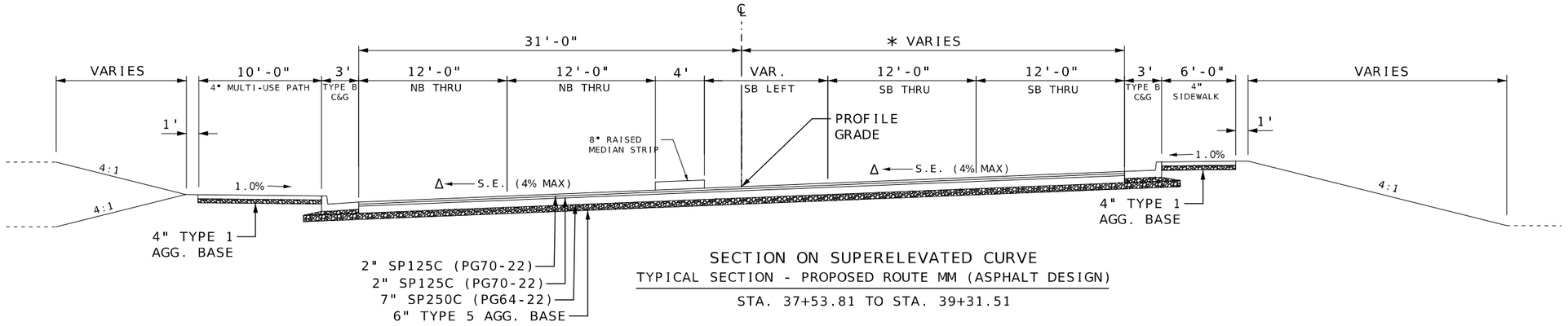
TYPICAL SECTION SHEET
SHEET 8 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:04:42 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/24/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 2
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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



SECTION ON SUPERELEVATED CURVE

TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)

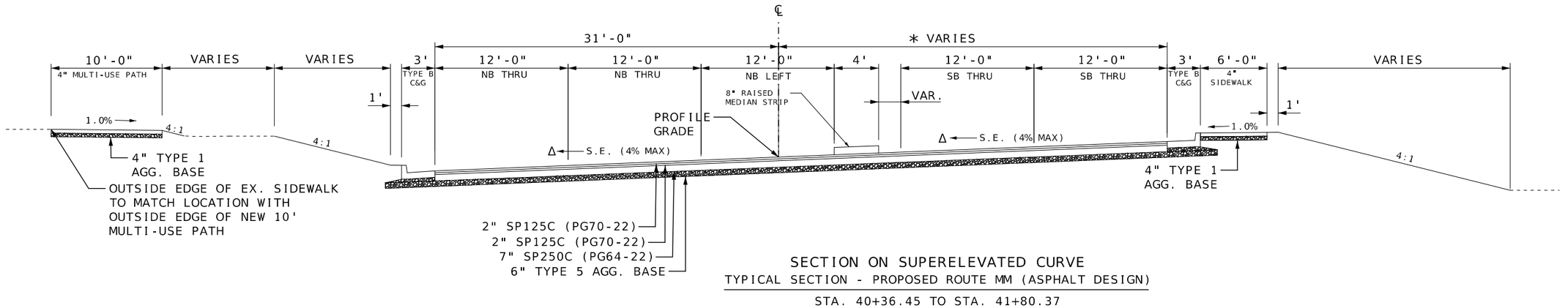
STA. 37+53.81 TO STA. 39+31.51

SUPERELEVATION TRANSITIONS:

NORMAL CROWN: STA. 37+53.81
LEVEL CROWN: STA. 37+98.25
REVERSE CROWN: STA. 38+42.70
FULL SUPER: STA. 38+87.14
TO 42+71.90
REVERSE CROWN: STA. 43+16.35
LEVEL CROWN: STA. 43+60.79
NORMAL CROWN: STA. 44+05.24

* NOTES:

31.0' PAVEMENT WIDTH TO STA.38+50.00, THEN TRANSITION TO 36.0' AT STA. 42+25.00



SECTION ON SUPERELEVATED CURVE

TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)

STA. 40+36.45 TO STA. 41+80.37

ALTERNATE PAVEMENT DESIGNS	
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS
BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE	

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

TYPICAL SECTION SHEET
SHEET 9 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:05:03 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

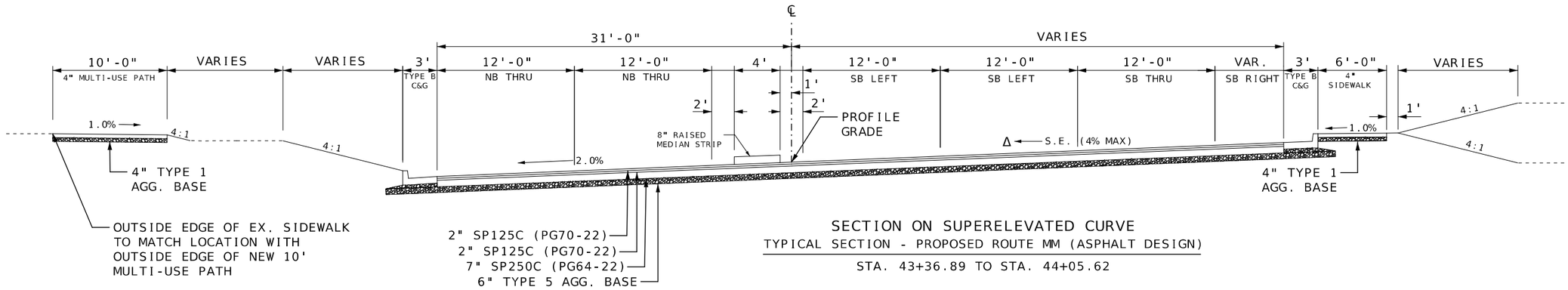
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

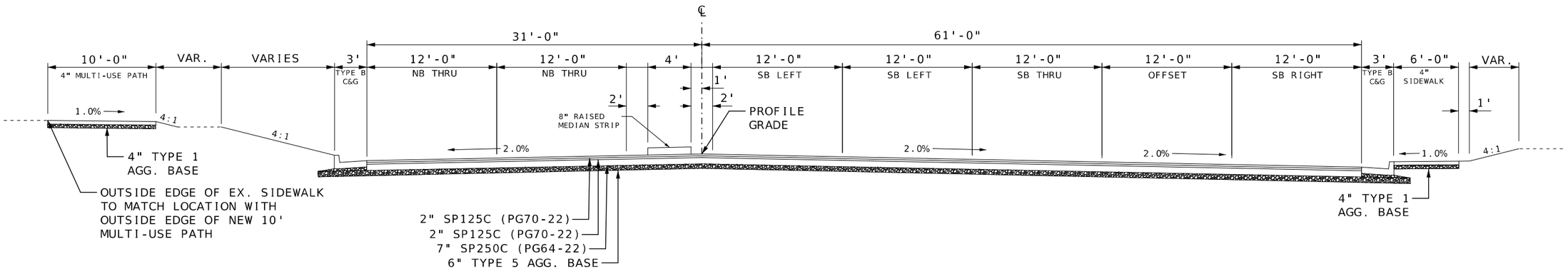
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

SUPERELEVATION TRANSITIONS:

NORMAL CROWN: STA. 37+53.81
LEVEL CROWN: STA. 37+98.25
REVERSE CROWN: STA. 38+42.70
FULL SUPER: STA. 38+87.14
TO 42+71.90
REVERSE CROWN: STA. 43+16.35
LEVEL CROWN: STA. 43+60.79
NORMAL CROWN: STA. 44+05.24



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)
STA. 43+36.89 TO STA. 44+05.62



SECTION ON SUPERELEVATED CURVE
TYPICAL SECTION - PROPOSED ROUTE MM (ASPHALT DESIGN)
STA. 44+33.75 TO STA. 44+76.07

ALTERNATE PAVEMENT DESIGNS	
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS
BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE	

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

TYPICAL SECTION SHEET
SHEET 10 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:58:02 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

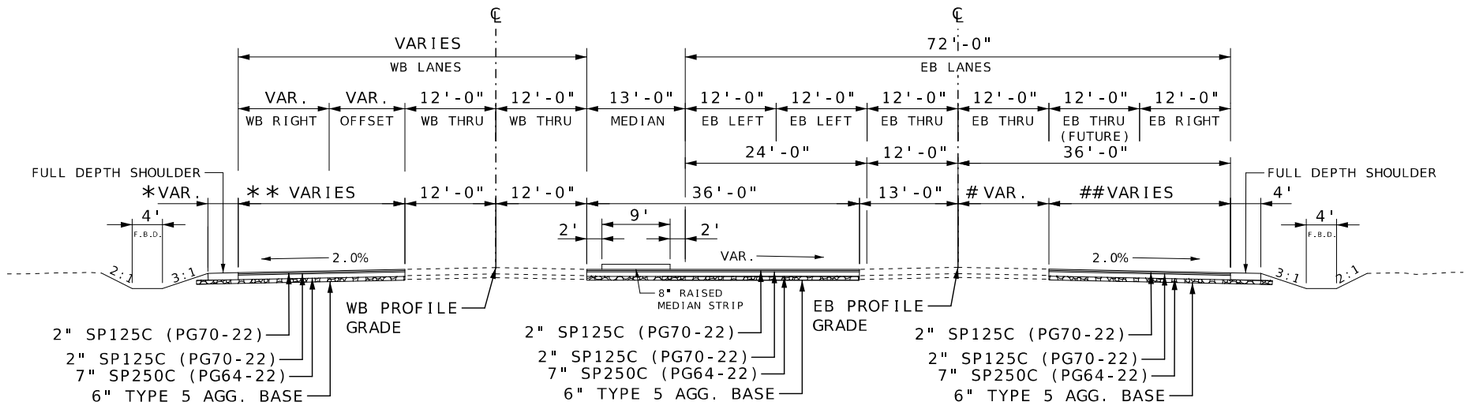
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

* SHOULDER WIDTH TRANSITION FROM 2' AT STA. 235+20.00 TO 4' AT 236+00.00

** PAVEMENT WIDTH TRANSITION FROM 22.3' AT STA. 235+20.00 TO 11.4' AT STA. 237+24.66

\# - U.I.P. EXISTING PAVEMENT. WIDTH VARIES FROM 12.8 STA. 235+20.00 TO 22.8' AT STA. 237+24.66.

- NEW PAVEMENT WIDTH TRANSITION FROM 23.2' AT STA. 235+20.00 TO 13.2' AT STA. 2347+24.66



SECTION ON TANGENT

TYPICAL SECTION - EXISTING ROUTE 60

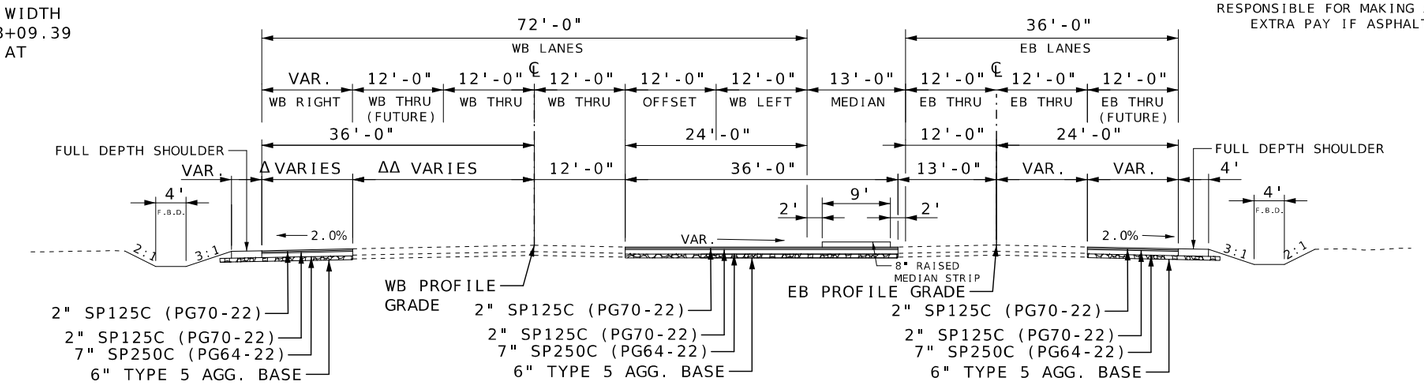
STA. 235+20.00 TO STA. 237+24.66

ALTERNATE PAVEMENT DESIGNS	
11" HMA DESIGN (ALT A)	9½" PCCP DESIGN (ALT B)
2" SP125C (PG 70-22) OVER 2" SP125C (PG 70-22) OVER 7" SP250C (PG 64-22)	9½" PCCP AT 15 FT. JOINTS WITH 1¼" DOWELS
BOTH DESIGNS OVER 6" TYPE 5 AGGREGATE BASE	

ASPHALT ALTERNATE REPRESENTED IN TYPICAL SECTIONS. CROSS SECTIONS & EARTHWORK IN THIS PROJECT ARE BASED ON THE CONCRETE ALTERNATE. THE CONTRACTOR IS RESPONSIBLE FOR MAKING ANY ADJUSTMENTS WITH NO EXTRA PAY IF ASPHALT ALTERNATE IS USED.

Δ NEW 4.0' WIDTH PAVEMENT FROM STA. 241+02.32 TO 243+09.40 THEN TRANSITIONS TO 12.5' AT 244+03.28

ΔΔ U.I.P. EX. 32.0' PAVEMENT WIDTH FROM STA. 241+75.16 TO 243+09.39 THEN TRANSITIONS TO 23.5' AT 244+03.28



SECTION ON TANGENT

TYPICAL SECTION - EXISTING ROUTE 60

STA. 241+75.16 TO STA. 244+03.28

TYPICAL SECTION SHEET
SHEET 11 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:58:22 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

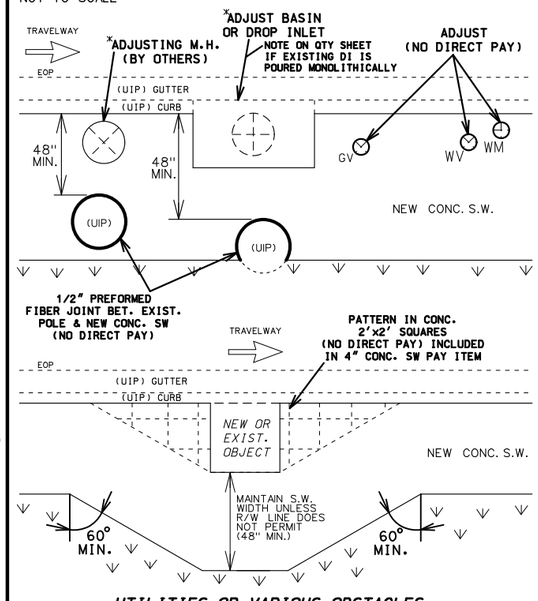
DESCRIPTION | DATE

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

1. CONCRETE SIDEWALK, CURB RAMP AND DETECTABLE WARNING DEVICE (TRUNCATED DOMES) DETAILS SHALL CONFORM TO ADA REQUIREMENTS UNLESS NOTED OTHERWISE IN THESE PLANS. FOR SIDEWALK JOINT AND CURB DETAILS, SEE STANDARD PLAN 609.00.
2. TINTED CONCRETE SHALL NOT BE USED. TRUNCATED DOMES SHALL BE OF A COLOR CONTRASTING WITH UNTINTED CONCRETE AND APPROVED BY THE ENGINEER. TRUNCATED DOMES ARE REQ'D. AT STREET INTERSECTIONS AND COMMERCIAL ENTRANCES WITH TRAFFIC CONTROL ONLY. (STOP/YIELD SIGNS OR SIGNALS)
3. CONCRETE SHALL BE IN ACCORDANCE WITH SEC. 608 & SEC. 609. CURING COMPOUND SHALL BE TRANSPARENT.
4. ALL CONCRETE SIDEWALK AND CURB RAMP/TRANSITION/LANDING AREAS SHALL BE 4" THICK, WITH THE EXCEPTION OF THE BOTTOM TRANSITION WHICH TIES INTO THE EXISTING PAVED APPROACH AND ROADWAY. THIS TRANSITION, OR LANDING AREA, MUST BE 8" THICK IF IT FALLS WITHIN THE RADIUS OF THE APPROACH AND SITS AT THE BACK OF CURB OF THE ROADWAY. ALL CONCRETE SIDEWALK AND CURB RAMP/TRANSITION/LANDING AREAS SHALL BE ON 4" TYPE 1 AGGREGATE BASE.
5. AGGREGATE BASE DENSITY - CONTRACTOR SHALL EXERCISE GOOD COMPACTIVE EFFORT AS APPROVED BY THE ENGINEER. DENSITY REQUIREMENTS BY NUCLEAR METHOD WILL NOT BE REQUIRED DUE TO WORK AREA CONSTRAINTS.
6. CONCRETE CURB RAMP - WIDTH = 5' MIN. LENGTH = 5' MIN. TO 15' PREFERRED MAX. (16' MAX.)
   RUNNING SLOPE = >5% (MIN.) TO 8.33% (MAX.) UNIFORMLY DOWN THE LENGTH OF THE RAMP.

   CONCRETE LANDING - WIDTH = TO MATCH PROPOSED CURB RAMP AND SIDEWALK WIDTH LENGTH = 5' MIN.
   SLOPE IN ALL DIRECTIONS = 1% PREFERRED (2% MAX.) UNLESS TIED TO ROADWAY EXCEPTION.
7. ALL EXISTING UTILITIES SHALL BE USED IN PLACE UNLESS OTHERWISE NOTED. ALL MANHOLE OR VALVE COVER, ETC. ELEVATIONS SHALL BE ADJUSTED AS REQUIRED IF THEY ARE LOCATED WITHIN THE IMPROVEMENT AREA.
8. "PREFORMED FIBER JOINT" SHALL BE IN ACCORDANCE WITH SEC. 1057 FOR PREFORMED FIBER JOINT EXPANSION JOINT FILLER.
9. REINFORCING STEEL TIE BARS SHALL BE IN ACCORDANCE WITH SECTION 706. ALL REINFORCING STEEL SHALL BE EPOXY COATED AND USED AS APPROVED BY THE ENGINEER. WHERE TIE BARS ARE USED, THE CONCRETE SHALL BE 8" THICK (NO DIRECT PAY).
10. CONSTRUCTION AND LENGTH OF EACH CURB RAMP INCLUDING LANDINGS AND TRANSITION AREAS SHALL BE AS SHOWN ON THE PLANS UNLESS DIFFERING FIELD CONDITIONS ARE FOUND OR AS APPROVED BY THE ENGINEER. CURB RAMP CROSS SLOPES SHALL BE 1% PREFERRED (2% MAX.) TOWARD THE STREET. CURB RAMPS ARE TO BE FORMED UP AND HAVE A TRUE AND STRAIGHT LINE.
11. SIDEWALK AND CONCRETE CURB SHALL BE POURED MONOLITHICALLY. THE CONTRACTOR SHALL MATCH EXISTING GROUND SLOPES ADJACENT TO THE CURB RAMPS OR USE AN ALTERNATE METHOD APPROVED BY THE ENGINEER.
12. S-CURB 12"-30" HIGH (MODIFIED S-CURB) WILL REQUIRE #4 REINFORC. BARS ON MAX. 12" CENTERS - SEE DETAIL (NO DIRECT PAY)
13. SODDED SLOPES AT EDGES OF SIDEWALK OR S-CURB SHOULD BE GRADED TO BE 6:1 MIN.
14. IF THERE IS NO EXISTING CURB & GUTTER, OFFSET THE EOP 2.5' BEFORE CONSTRUCTING ANY CURBING, RAMP OR SIDEWALK.

NOT TO SCALE

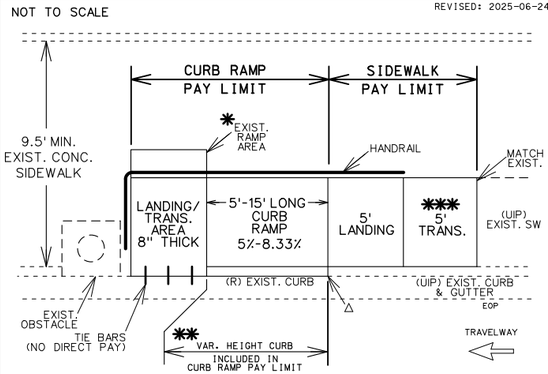


UTILITIES OR VARIOUS OBSTACLES

NO UTILITY POLES ARE ALLOWED IN THE RAMP LIMITS, BUT ARE PERMITTED IN THE LANDING AREAS AND SIDEWALK WITH A MINIMUM OF 4' CLEARANCE AROUND THE POLE

NOT TO SCALE

REVISED: 2025-06-24



△ MATCH EXIST CURB

* FILL IN WHERE EXIST. RAMP WAS. SIZE WILL VARY. (SEE TYPICAL SHEET)

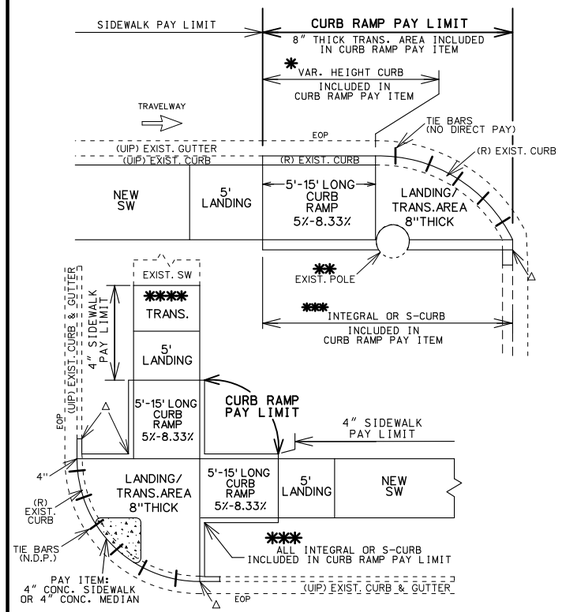
** VAR. HEIGHT CURB ALONG ROADSIDE MAY BE CONSTRUCTED MONOLITHIC OR SEPERATE DEPENDING ON CONST. OPERATIONS.

*** TRANSITION PANEL(S) TO BLEND CROSS SLOPE DISCREPENCY WARP RATE NOT TO EXCEED 0.5% PER FT

HANDRAIL 2' OFF E.O.P (SEE HANDRAIL STANDARDS)

CURB RAMP - IN EXISTING 9.5'+ WIDE SW

PAY LIMITS



△ MATCH EXIST CURB HEIGHT, OPTIONAL 1' TIE-IN TO EXIST CURB

* VAR. HEIGHT CURB ALONG ROADSIDE MAY BE CONST. MONOLITHIC OR SEP. DEPENDING ON CONST. OPERATIONS.

** NO UTILITY POLES ARE ALLOWED IN THE RAMP LIMITS, BUT ARE PERMITTED IN THE LANDING AND TRANSITION AREAS.

*** TYPE OF CURB WILL DEPEND ON FIELD CONDITIONS.

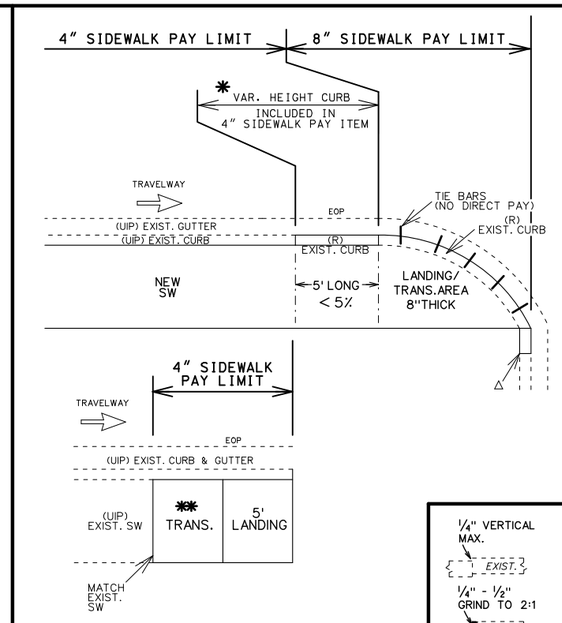
*** TRANSITION PANEL(S) TO BLEND CROSS SLOPE DISCREPENCY WARP RATE NOT TO EXCEED 0.5% PER FT

CURB RAMP

PAY LIMITS

WHEN RAMP AREA IS LONGER THAN 5'AND BETW. 5%-8.33% GRADE, IT IS CONSIDERED A CURB RAMP

NOT TO SCALE



△ MATCH EXIST CURB HEIGHT (1' TAPER FROM SIDEWALK UP TO EXIST CURB HEIGHT)

* VAR. HEIGHT CURB ALONG ROADSIDE MAY BE CONSTRUCTED MONOLITHIC OR SEPERATE DEPENDING ON CONST. OPERATIONS. DOWEL TO EXIST. GUTTER/PAVEMENT (NO DIRECT PAY).

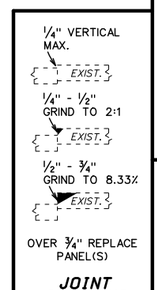
** TRANSITION PANEL(S) TO BLEND CROSS SLOPE DISCREPENCY WARP RATE NOT TO EXCEED 0.5% PER FT

SIDEWALK

PAY LIMITS

WHEN RAMP AREA IS LESS THAN 5% GRADE, IT IS CONSIDERED SIDEWALK

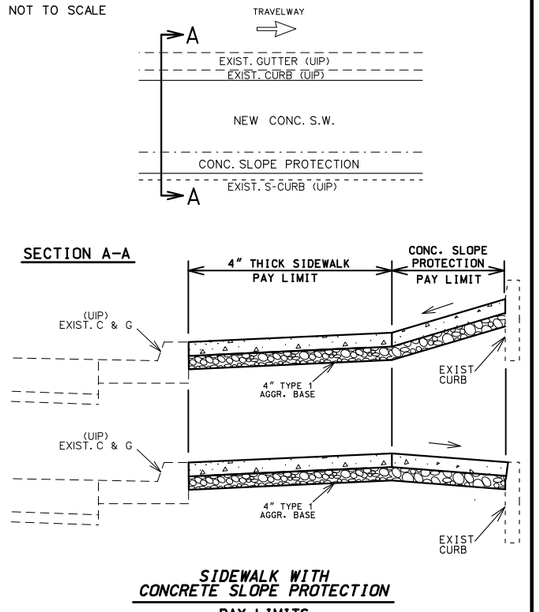
NOT TO SCALE



JOINT GRINDING

TRIP HAZARDS 622-99.03

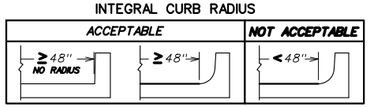
NOT TO SCALE



SIDEWALK WITH CONCRETE SLOPE PROTECTION

PAY LIMITS

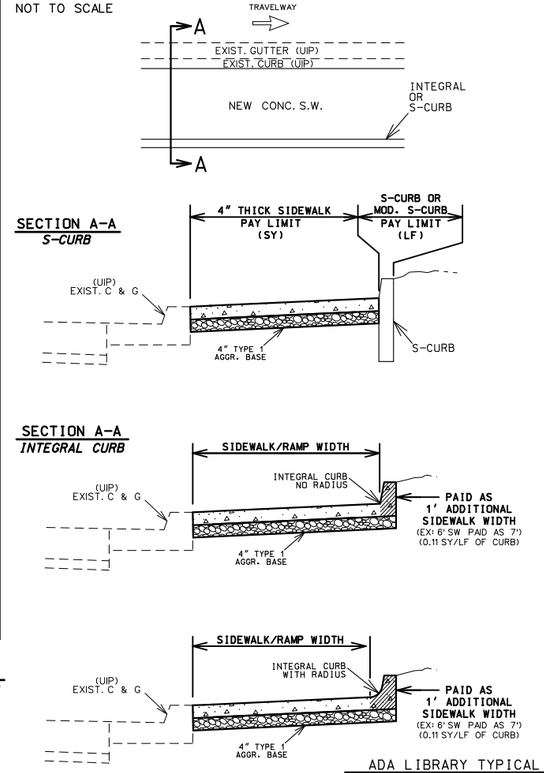
INTEGRAL CURB RADIUS



SECTION A-A

INTEGRAL CURB WITH RADIUS

NOT TO SCALE



ADA LIBRARY TYPICAL

SIDEWALK & RAMP WITH CURB

PAY LIMITS

TYPICAL SHEET
SHEET 12 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:58:44 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

REVISED: 2025-05-30

TYPE 1-A

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	22.0	24.0	–	22.0	24.0	–	22.0	24.0	
CURB RAMP SY	–	10.9	13.1	–	13.6	16.3	–	16.2	19.3	
CONC. SIDEWALK SY	–	5.6	6.3	–	5.6	6.4	–	4.9	5.7	
TYPE 1 AGGREGATE SY	–	16.5	19.4	–	19.2	22.7	–	21.1	25.0	
ADA LINEAR GRADING LF	–	28.0	28.0	–	34.5	34.5	–	38.0	38.0	
SODDING SY	–	7.4	7.8	–	8.4	8.7	–	9.1	9.5	

TYPE 1-B

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	12.0	–	10.0	12.0	–	10.0	12.0	
CURB RAMP SY	–	8.8	10.3	–	11.5	13.4	–	14.1	16.5	
CONC. SIDEWALK SY	–	5.6	6.4	–	5.6	6.4	–	4.9	5.7	
TYPE 1 AGGREGATE SY	–	14.4	16.7	–	17.1	19.8	–	19.0	22.1	
ADA LINEAR GRADING LF	–	22.0	22.0	–	26.5	26.5	–	30.0	30.0	
SODDING SY	–	11.5	11.7	–	13.5	13.5	–	15.0	15.2	

TYPE 1-C

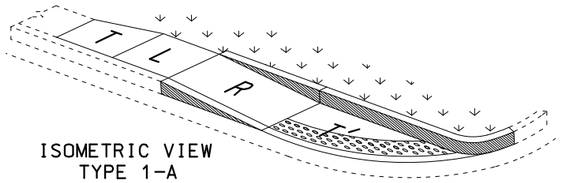
LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	18.0	24.0	–	18.0	24.0	–	18.0	24.0	
CURB RAMP SY	–	18.6	22.8	–	24.0	29.0	–	29.3	35.3	
CONC. SIDEWALK SY	–	11.2	12.8	–	11.2	12.8	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	29.8	35.6	–	35.2	41.8	–	39.1	46.7	
ADA LINEAR GRADING LF	–	42.0	50.0	–	57.0	61.0	–	67.0	72.0	
SODDING SY	–	11.0	11.3	–	13.0	13.3	–	14.5	14.9	

TYPE 1-D

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	18.0	24.0	–	18.0	24.0	–	18.0	24.0	
CURB RAMP SY	–	14.8	19.0	–	20.1	25.2	–	25.5	31.4	
CONC. SIDEWALK SY	–	11.2	12.8	–	11.2	12.8	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	26.0	31.8	–	31.3	38.0	–	35.3	42.8	
ADA LINEAR GRADING LF	–	43.0	46.0	–	52.0	55.0	–	59.0	62.0	
SODDING SY	–	13.3	13.6	–	16.0	16.9	–	18.6	19.3	

TYPE 1-E

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	14.0	16.0	–	14.0	16.0	–	14.0	16.0	
CURB RAMP SY	–	15.5	19.0	–	20.8	25.2	–	26.2	31.4	
CONC. SIDEWALK SY	–	11.2	12.8	–	11.2	12.8	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	26.7	31.8	–	32.0	38.0	–	36.0	42.8	
ADA LINEAR GRADING LF	–	43.0	46.0	–	52.0	55.0	–	59.0	62.0	
SODDING SY	–	18.4	18.8	–	22.4	22.8	–	25.6	25.9	



ISOMETRIC VIEW
TYPE 1-A

T'- IS TO BE 8" THICK AT ALL PAVED APPROACHES AND STREETS IF WITHIN THE RADIUS. PAID FOR AS CONCRETE CURB RAMP

T - TRANSITION TO EXISTING SW OR PAVED APPROACH (LANDING PREFERED AT PAVED APPROACH IF CONDITIONS ALLOW)

* - T IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK.(IT WILL BLEND THE EXIST XSLOPE INTO THE NEW LANDING XSLOPE)

L - LANDING

R - RAMP

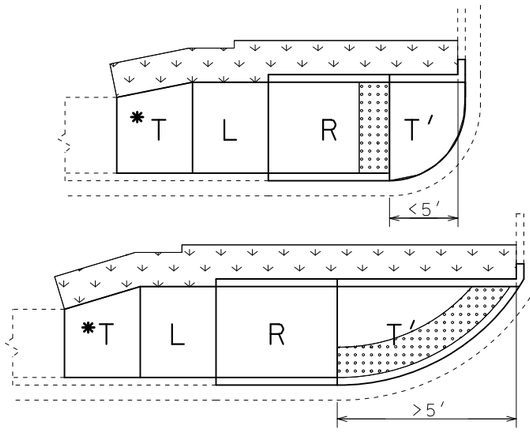
- CURB RAMP PAY LIMITS

- SOD SLOPE 6:1 MIN.

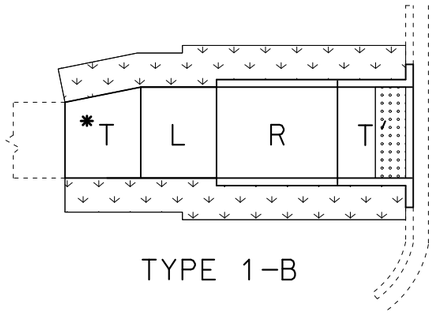
- TRUNCATED DOME LOCATION IF DIST. IS <5' OR >5'

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

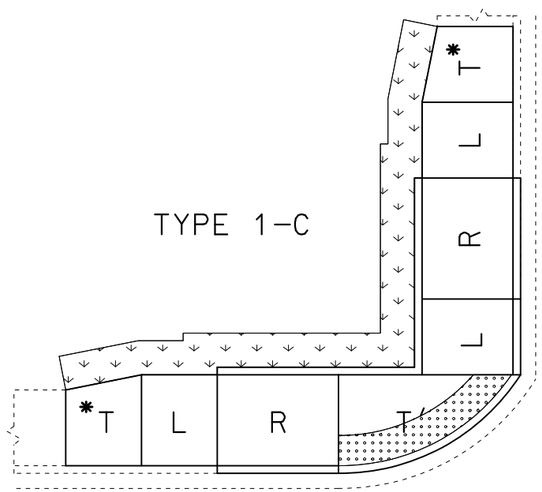
NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



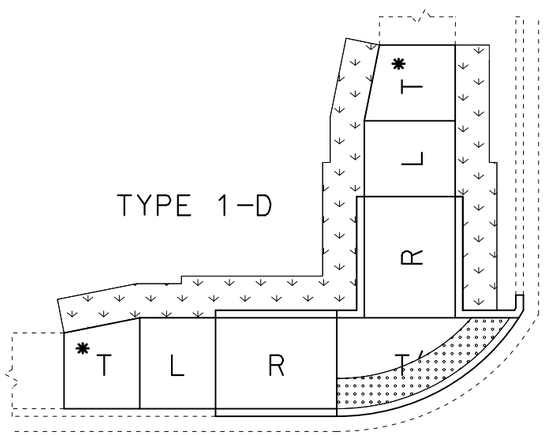
TYPE 1-A



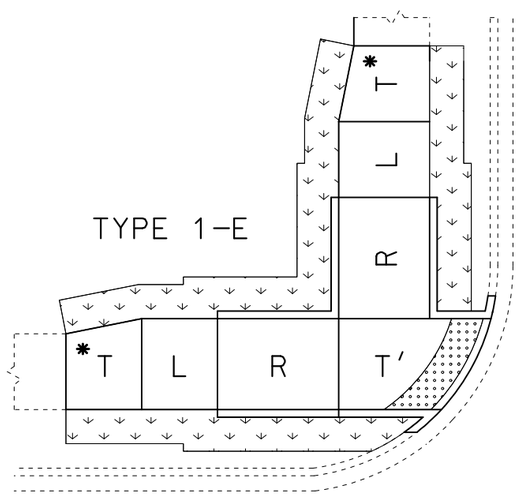
TYPE 1-B



TYPE 1-C



TYPE 1-D



TYPE 1-E

ADA LIBRARY TYPICAL

TYPE 1

PERPENDICULAR CURB RAMPS

TYPICAL SHEET 13 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:59:04 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

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)

PARALLEL – TYPE 2

TYPE 2-A

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	10.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	9.1	10.6	–	11.8	13.7	–	14.4	16.8	
CONC. SIDEWALK SY	–	5.6	6.4	–	4.9	5.7	–	4.9	5.7	
TYPE 1 AGGREGATE SY	–	14.7	17.0	–	16.7	19.4	–	19.3	22.5	
ADA LINEAR GRADING LF	–	26.0	26.0	–	29.0	29.0	–	33.0	33.0	
SODDING SY	–	8.0	8.3	–	8.6	8.8	–	9.6	9.8	

TYPE 2-B

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	10.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	11.8	13.3	–	14.5	16.4	–	17.2	19.5	
CONC. SIDEWALK SY	–	5.6	6.4	–	4.9	5.7	–	4.9	5.7	
TYPE 1 AGGREGATE SY	–	17.4	19.7	–	19.4	22.1	–	22.1	25.2	
ADA LINEAR GRADING LF	–	26.0	26.0	–	29.0	29.0	–	33.0	33.0	
SODDING SY	–	13.8	14.1	–	15.1	15.5	–	17.1	17.5	

TYPE 2-C

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	10.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	16.4	18.7	–	21.7	24.9	–	27.0	31.2	
CONC. SIDEWALK SY	–	11.2	12.8	–	9.8	11.4	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	27.6	31.5	–	31.5	36.3	–	36.8	42.6	
ADA LINEAR GRADING LF	–	41.0	41.0	–	47.0	47.0	–	55.0	55.0	
SODDING SY	–	12.3	12.5	–	13.6	13.9	–	15.6	15.9	

TYPE 2-D

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	10.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	16.8	19.2	–	22.2	25.4	–	27.5	31.6	
CONC. SIDEWALK SY	–	11.2	12.8	–	9.8	11.4	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	28.0	32.0	–	32.0	36.8	–	37.3	43.0	
ADA LINEAR GRADING LF	–	41.0	41.0	–	47.0	47.0	–	55.0	55.0	
SODDING SY	–	20.2	20.3	–	22.4	23.2	–	26.4	27.2	

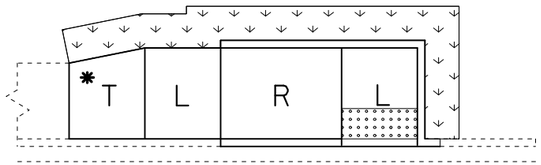
TYPE 2-E

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	10.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	10.8	11.5	–	13.2	14.4	–	15.7	17.3	
CONC. SIDEWALK SY	–	5.6	6.7	–	5.0	6.0	–	5.0	6.0	
TYPE 1 AGGREGATE SY	–	16.4	18.2	–	18.2	20.4	–	20.7	23.3	
ADA LINEAR GRADING LF	–	22.5	22.5	–	26.5	26.5	–	30.5	30.5	
SODDING SY	–	–	–	–	–	–	–	–	–	
HANDRAIL LF	–	–	–	–	–	–	–	–	–	SEE STANDARDS FOR LENGTH

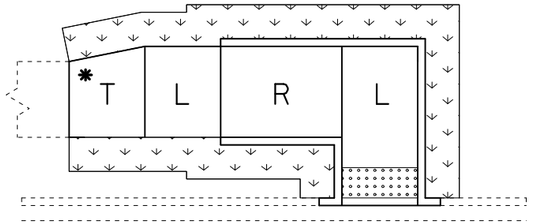
TYPE 2-F

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	10.0	10.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	15.5	17.1	–	20.4	23.1	–	25.5	28.9	
CONC. SIDEWALK SY	–	11.2	13.4	–	10.0	12.0	–	10.0	12.0	
TYPE 1 AGGREGATE SY	–	26.7	30.5	–	30.4	35.1	–	35.5	40.9	
ADA LINEAR GRADING LF	–	39.0	39.0	–	47.0	47.0	–	55.0	55.0	
SODDING SY	–	–	–	–	–	–	–	–	–	
HANDRAIL LF	–	–	–	–	–	–	–	–	–	SEE STANDARDS FOR LENGTH

NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



TYPE 2-A



TYPE 2-B

** 3.5' LANDING EXTENSION REQ'D. FOR INSTALLATION OF FUTURE OR NEW PED. PUSH BUTTON

NOTE: SEE STANDARDS FOR ALL PED. PUSH BUTTON LOCATIONS

– TRUNCATED DOMES

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

T – TRANSITION TO EXISTING SW

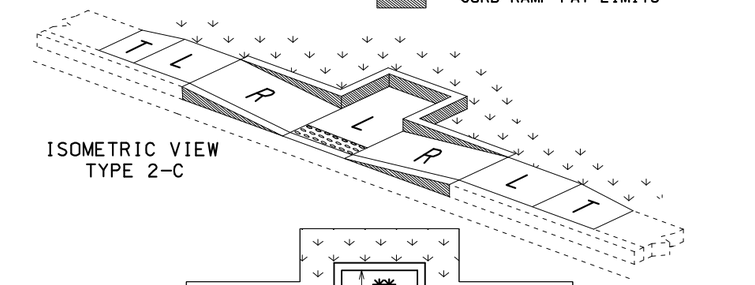
* – T IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK. (IT WILL BLEND THE EXIST XSLOPE INTO THE NEW LANDING XSLOPE)

L – LANDING

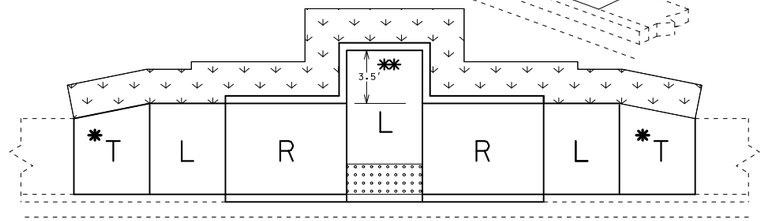
R – RAMP

– SOD SLOPE 6:1 MIN.

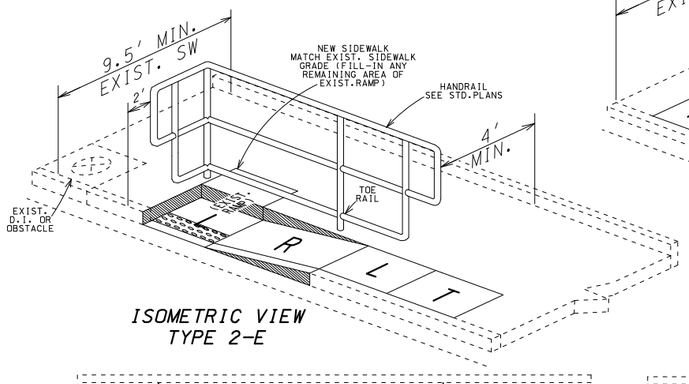
– CURB RAMP PAY LIMITS



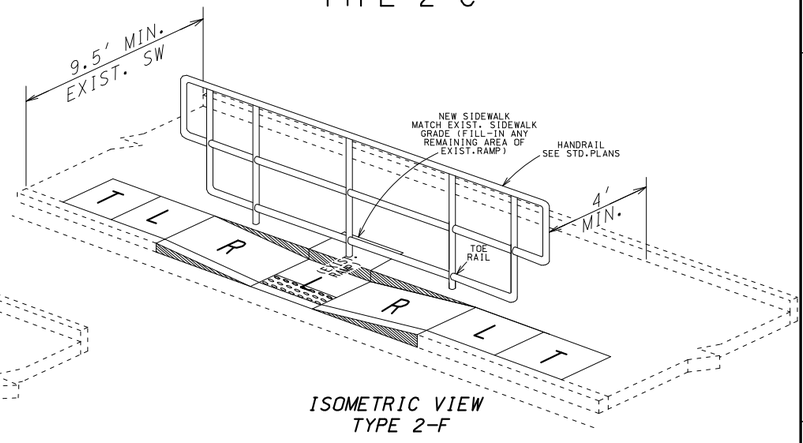
ISOMETRIC VIEW
TYPE 2-C



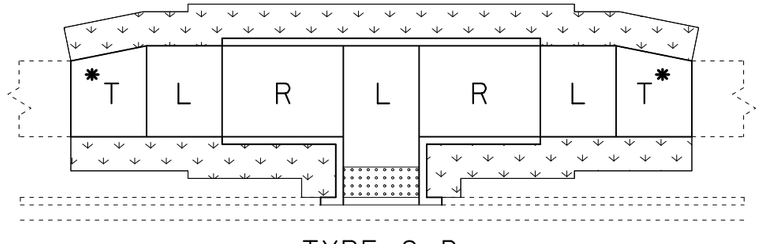
TYPE 2-C



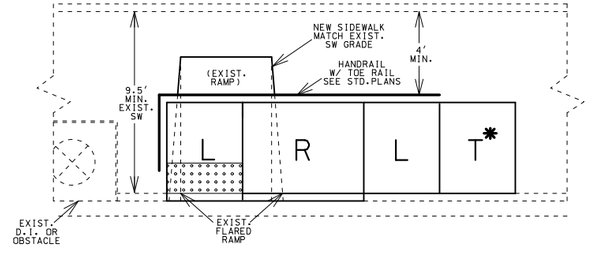
ISOMETRIC VIEW
TYPE 2-E



ISOMETRIC VIEW
TYPE 2-F



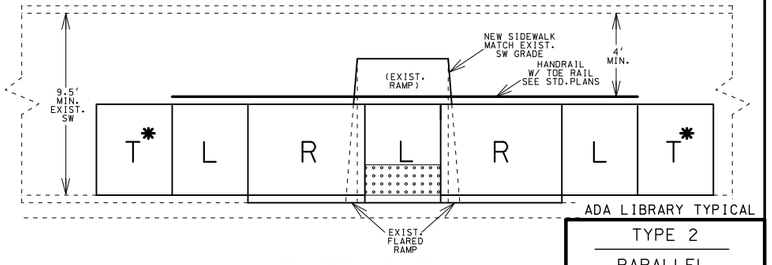
TYPE 2-D



TYPE 2-E

USE ONLY WHEN TYPE 2-F IS UNABLE TO BE CONSTRUCTED DUE TO AN EXIST. D.I. OR OTHER OBSTACLE

SEE STANDARDS FOR HANDRAIL SPECS



ADA LIBRARY TYPICAL

TYPE 2-F

SEE STANDARDS FOR HANDRAIL SPECS

TYPE 2
PARALLEL
CURB RAMPS

TYPICAL SHEET
14 OF 19

REVISED: 2025-05-30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:59:25 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

PARALLEL – TYPE 2 (cont'd.)

TYPE 2-G

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	12.0	12.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	15.7	18.0	–	20.8	23.7	–	25.8	30.2	
CONC. SIDEWALK SY	–	21.4	25.0	–	17.6	20.3	–	15.2	17.5	
TYPE 1 AGGREGATE SY	–	37.1	43.0	–	38.4	44.0	–	41.0	47.7	
ADA LINEAR GRADING LF	–	52.0	52.0	–	54.0	54.0	–	58.0	58.0	
SODDING SY	–	13.6	13.6	–	13.7	13.5	–	14.5	14.9	

TYPE 2-H

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	12.0	12.0	–	10.0	10.0	–	10.0	10.0	
CURB RAMP SY	–	15.7	18.0	–	21.0	24.5	–	26.9	31.4	
CONC. SIDEWALK SY	–	13.2	16.0	–	12.0	14.2	–	12.0	14.4	
TYPE 1 AGGREGATE SY	–	28.9	34.0	–	33.0	38.6	–	38.9	45.8	
ADA LINEAR GRADING LF	–	42.0	42.0	–	49.0	49.0	–	55.0	55.0	
SODDING SY	–	11.1	11.2	–	12.5	12.5	–	14.5	14.9	

T* – IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK.(IT WILL BLEND THE EXIST XSLOPE INTO THE NEW LANDING XSLOPE)

T – TRANSITION TO EXISTING SW

L – LANDING

R – RAMP

– SOD SLOPE 6:1 MIN.

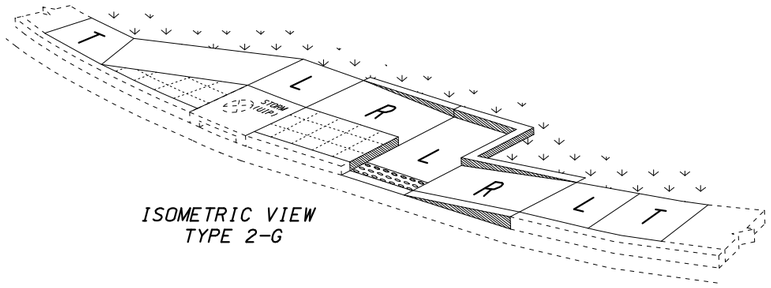
– TRUNCATED DOME LOCATION, IF DIST. IS <5' OR > 5'

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

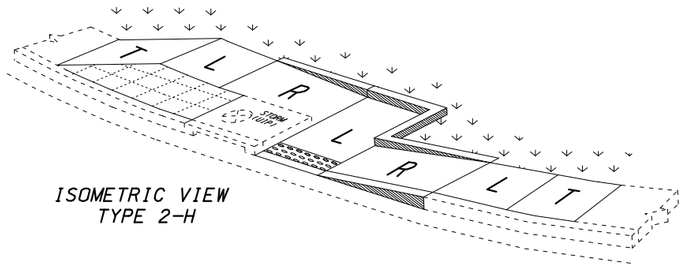
– CURB RAMP PAY LIMITS

– INCLUDED IN 4" CONC. SIDEWALK PAY LIMIT

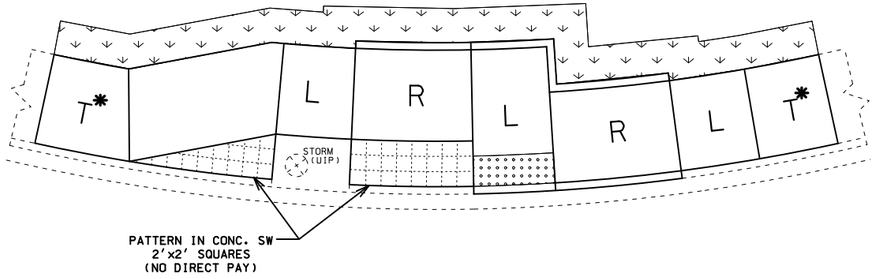
NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



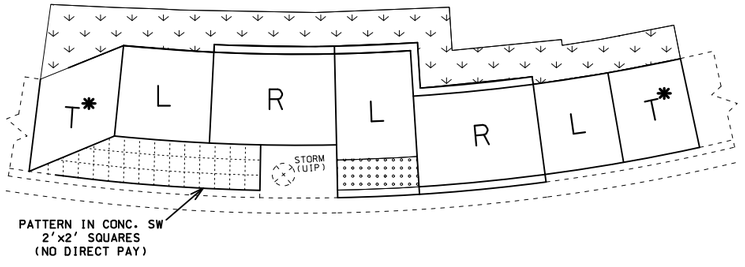
ISOMETRIC VIEW
TYPE 2-G



ISOMETRIC VIEW
TYPE 2-H



TYPE 2-G



TYPE 2-H

ADA LIBRARY TYPICAL

TYPE 2

PARALLEL
CURB RAMPS

TYPICAL SHEET
15 OF 19

REVISED: 2025-05-30

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 12:59:49 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE MM | STATE MO
DISTRICT SW | SHEET NO. 2
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

DIAGONAL – TYPE 3

TYPE 3-A

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	24.0	28.0	–	20.6	25.0	–	20.6	25.0	
CURB RAMP SY	–	24.4	27.0	–	26.9	31.2	–	32.2	37.4	
CONC. SIDEWALK SY	–	11.2	12.8	–	9.8	11.4	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	35.6	39.8	–	36.7	42.6	–	42.0	48.8	
ADA LINEAR GRADING LF	–	51.0	51.0	–	59.0	59.0	–	67.0	67.0	
SODDING SY	–	11.6	11.4	–	12.9	12.9	–	14.9	14.9	
4"SW OR MED STRIP SY	–	3.0	2.2	–	3.0	2.2	–	3.0	2.2	

TYPE 3-B

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	24.0	28.0	–	20.6	25.0	–	20.6	25.0	
CURB RAMP SY	–	22.0	26.3	–	25.9	31.2	–	31.2	37.4	
CONC. SIDEWALK SY	–	11.2	12.8	–	9.8	11.4	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	33.2	39.1	–	35.7	42.6	–	41.0	48.8	
ADA LINEAR GRADING LF	–	51.0	51.0	–	59.0	59.0	–	67.0	67.0	
SODDING SY	–	15.2	15.3	–	17.1	17.5	–	20.1	20.5	
4"SW OR MED STRIP SY	–	1.5	1.5	–	1.5	1.5	–	1.5	1.5	

TYPE 3-C

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	20.0	24.0	–	20.0	24.0	–	20.0	24.0	
CURB RAMP SY	–	20.7	26.8	–	25.1	31.5	–	30.4	37.7	
CONC. SIDEWALK SY	–	11.2	12.8	–	9.8	11.4	–	9.8	11.4	
TYPE 1 AGGREGATE SY	–	31.9	39.6	–	34.9	42.9	–	40.2	49.1	
ADA LINEAR GRADING LF	–	51.0	51.0	–	58.0	58.0	–	67.0	67.0	
SODDING SY	–	18.8	19.3	–	21.3	22.1	–	25.3	26.1	
4"SW OR MED STRIP SY	–	1.0	1.6	–	1.0	1.6	–	1.0	1.6	

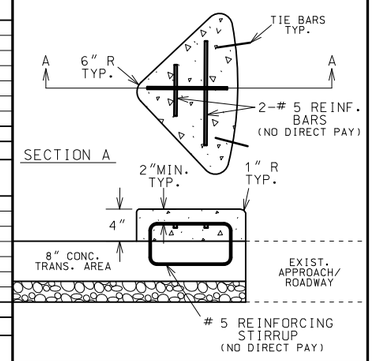
TYPE 3-D

LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	24.0	28.0	–	22.4	26.5	–	22.4	26.5	
CURB RAMP SY	–	15.9	19.1	–	17.7	21.4	–	20.4	24.5	
CONC. SIDEWALK SY	–	5.6	6.4	–	4.9	5.7	–	4.9	5.7	
TYPE 1 AGGREGATE SY	–	21.5	25.5	–	22.6	27.1	–	25.3	30.2	
ADA LINEAR GRADING LF	–	31.0	31.0	–	34.0	34.0	–	38.0	38.0	
SODDING SY	–	12.6	12.9	–	13.5	14.0	–	15.5	16.0	
4"SW OR MED STRIP SY	–	1.0	0.8	–	1.0	0.8	–	1.0	0.8	

TYPE 3-E

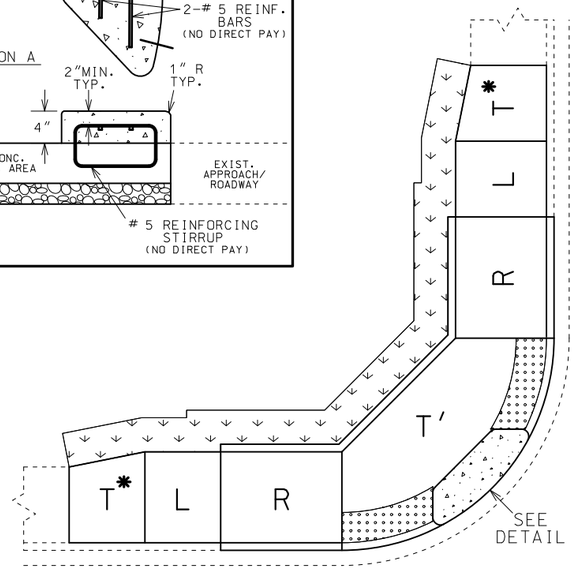
LENGTH (LF)	8			12			16			REMARKS
WIDTH (LF)	4	5	6	4	5	6	4	5	6	
TRUNCATED DOMES SF	–	20.0	24.0	–	20.0	24.0	–	20.0	24.0	
CURB RAMP SY	–	17.2	19.8	–	17.7	21.4	–	20.4	24.5	
CONC. SIDEWALK SY	–	8.4	10.7	–	7.3	9.4	–	7.3	9.4	
TYPE 1 AGGREGATE SY	–	25.6	30.5	–	25.0	30.8	–	27.7	33.9	
ADA LINEAR GRADING LF	–	30.0	30.0	–	35.5	35.5	–	39.5	39.5	
SODDING SY	–	12.4	12.4	–	12.9	13.3	–	14.9	15.3	
4"SW OR MED STRIP SY	–	1.6	1.6	–	1.6	1.6	–	1.6	1.6	

– DETAIL – 4" SIDEWALK OR 4" MEDIAN STRIP



T′ – IS TO BE 8" THICK AT ALL PAVED APPROACHES AND STREETS IF WITHIN THE RADIUS. PAID FOR AS CONCRETE CURB RAMP

NOTE:
QUANTITIES ARE CALCULATED BY AREA AND MAY NOT MATCH EXACT FIELD CONDITIONS.



TYPE 3-A

T – TRANSITION TO EXISTING SW OR PAVED APPROACH (LANDING PREFERED IF CONDITIONS ALLOW)

T* – IS STILL NEEDED EVEN IF THE EXISTING SIDEWALK IS THE SAME WIDTH AS THE NEW SIDEWALK.(IT WILL BLEND THE EXIST XSLOPE WITH THE NEW LANDING XSLOPE)

L – LANDING

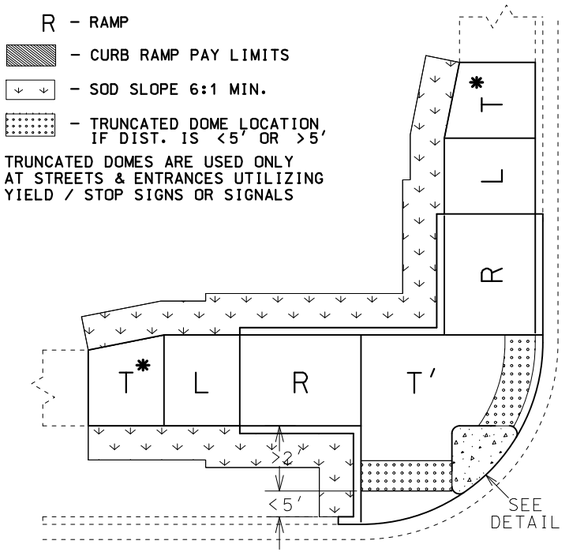
R – RAMP

– CURB RAMP PAY LIMITS

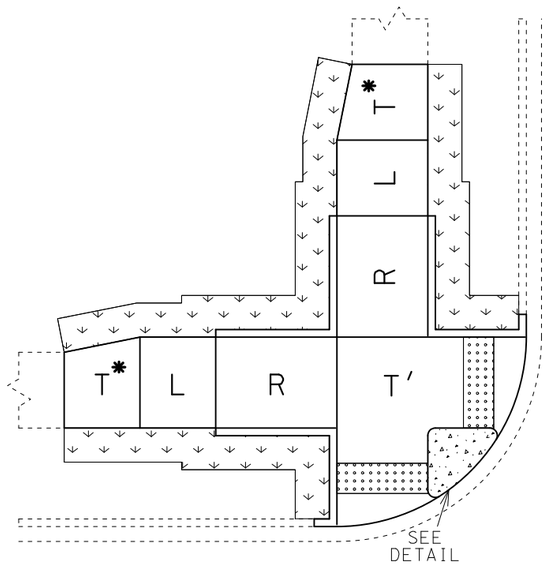
– SOD SLOPE 6:1 MIN.

– TRUNCATED DOME LOCATION IF DIST. IS <5′ OR >5′

TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING YIELD / STOP SIGNS OR SIGNALS

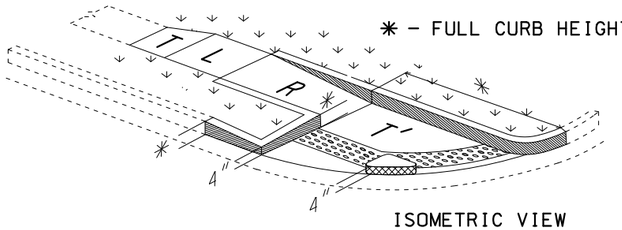


TYPE 3-B

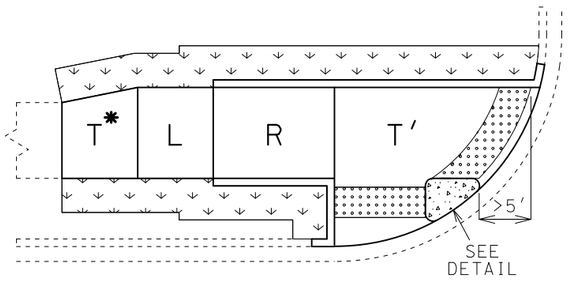


TYPE 3-C

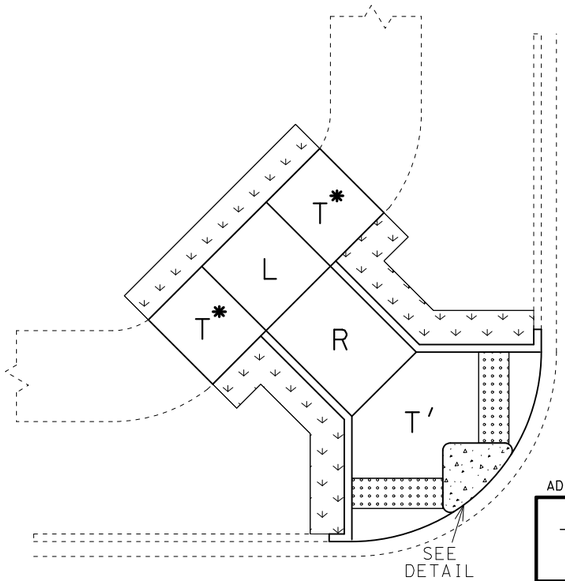
* – FULL CURB HEIGHT



ISOMETRIC VIEW
TYPE 3-D



TYPE 3-D



TYPE 3-E

REVISED: 2025-06-09

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:00:11 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ADA LIBRARY TYPICAL

TYPE 3
DIAGONAL CURB RAMPS

TYPICAL SHEET 16 OF 19

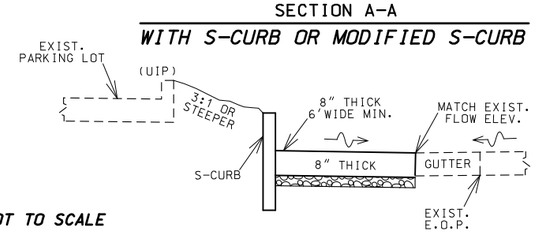
REVISED: 2022-05-16

NOTES FOR MODIFIED SIDEWALK:

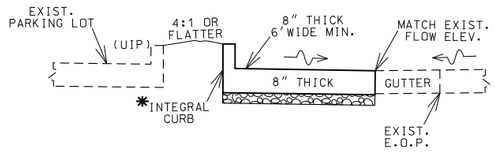
1. REMOVE EXIST. CURB & RAISED ISLAND WITHIN LIMITS SHOWN.
2. AREA INSIDE FINAL CURB TO BE REPAIRED OR REPLACED WITH EXISTING SURFACE MATERIAL. GRADE TO DRAIN.
3. CONSTRUCT 8" THICK CONC. SIDEWALK FLUSH WITH EXIST. CONC. PAVED APPROACH.
4. CONSTRUCT CURB ADJACENT TO MODIFIED SIDEWALK.
5. MODIFIED SIDEWALK PAID FOR AS 8" SIDEWALK.
6. 6' MINIMUM WIDTH.
7. NO DIRECT PAY FOR SAW CUTS AND TIE BARS (ON 12" CENTERS MAX.)
8. TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING STOP SIGNS OR SIGNALS.
9. X-SLOPE 1% PREFERRED (2% MAX.)
10. USE S-CURB IF CONSTRUCTING CURB ON R/W LINE.

✱ INTEGRAL CURB IS PAID FOR WITH THE 8" CONC. SIDEWALK PAY ITEM.
INTEGRAL CURB IS PAID AS 1' ADDITIONAL SIDEWALK WIDTH (EX. 6'SIDEWALK PAID AS 7')
(0.11 SY/LF OF CURB)

SECTION A-A
WITH S-CURB OR MODIFIED S-CURB



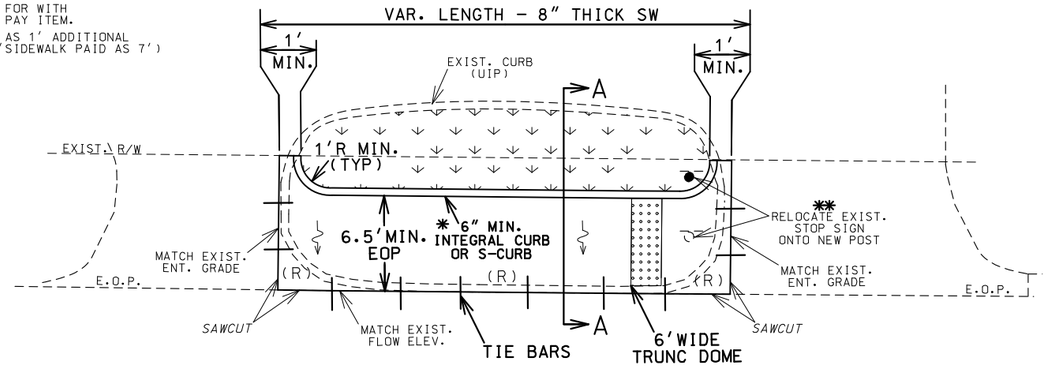
SECTION A-A
WITH INTEGRAL CURB



NOT TO SCALE

TYPICAL MODIFIED SIDEWALK
8" THICK

✱✱ TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING STOP/YIELD SIGNS OR SIGNALS.

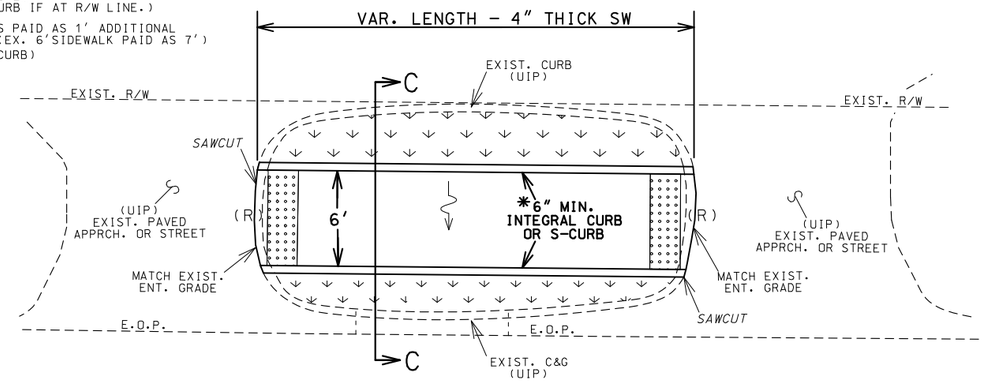


NOTES FOR CUT-THRU SIDEWALK:

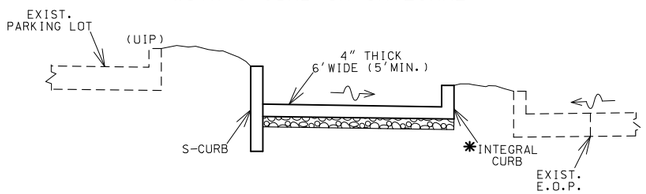
1. REMOVE EXIST. CURB & RAISED ISLAND WITHIN LIMITS SHOWN.
2. AREA INSIDE FINAL CURB TO BE REPAIRED OR REPLACED WITH EXISTING SURFACE MATERIAL. GRADE TO DRAIN.
3. CONSTRUCT 4" THICK CONC. SIDEWALK FLUSH WITH EXIST. CONC. PAVED APPROACH.
4. CONSTRUCT CURB ON BOTH SIDES ADJACENT TO SIDEWALK.
5. CUT-THRU SIDEWALK PAID FOR AS 4" SIDEWALK.
6. 6' PREFERRED WIDTH (5' MIN.)
7. SAW CUTS (NO DIRECT PAY).
8. TRUNCATED DOMES ARE USED ONLY AT STREETS & ENTRANCES UTILIZING STOP SIGNS OR SIGNALS.
9. X-SLOPE 1% PREFERRED (2% MAX.)
10. USE S-CURB IF CONSTRUCTING CURB ON R/W LINE.

TYPICAL CUT-THRU SIDEWALK

✱ INTEGRAL CURB IS PAID FOR AS 4" CONC. SIDEWALK PAY ITEM. S-CURB IS PAID FOR AS ITS OWN PAY ITEM.
(ALWAYS USE S-CURB IF AT R/W LINE.)
INTEGRAL CURB IS PAID AS 1' ADDITIONAL SIDEWALK WIDTH (EX. 6'SIDEWALK PAID AS 7')
(0.11 SY/LF OF CURB)



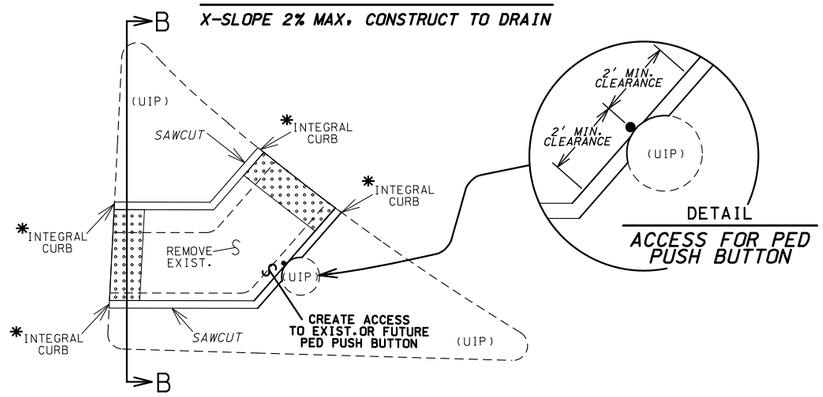
SECTION C-C
WITH S-CURB OR INTEGRAL



NOT TO SCALE

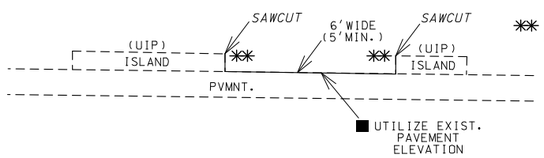
NOT TO SCALE

TYPICAL ISLAND CUT-THRU SIDEWALK
X-SLOPE 2% MAX. CONSTRUCT TO DRAIN



DETAIL
ACCESS FOR PED PUSH BUTTON

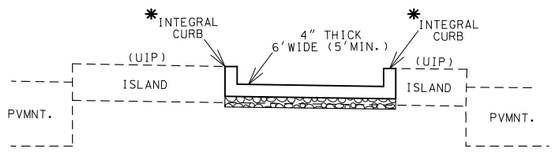
SECTION B-B
ISLAND CUT-THRU SIDEWALK FOR EXISTING 'PINNED-ON' ISLAND



■ SMALL QTY. HAS BEEN INCLUDED FOR 8" THICK SIDEWALK TO ADDRESS ANY UNFORSEEN PVMNT. REPAIRS OR DIFFERENCES IN ELEVATION. (UNDERRUN IF FIELD CONDITIONS DO NOT WARRANT)

✱✱ NO INTEGRAL CURB. AGGR. OR LIN. GRADING REQUIRED IF THE ISLAND IS 'PINNED-ON'

SECTION B-B
ISLAND CUT-THRU SIDEWALK



✱ INTEGRAL CURB IS PAID FOR WITH THE 4" CONC. SIDEWALK PAY ITEM.
INTEGRAL CURB IS PAID AS 1' ADDITIONAL SIDEWALK WIDTH (EX. 6'SIDEWALK PAID AS 7')
(0.11 SY/LF OF CURB)

ADA LIBRARY TYPICAL

MODIFIED SIDEWALK AND SIDEWALK CUT-THRUs

TYPICAL SHEET 17 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:00:33 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/24/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 2
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

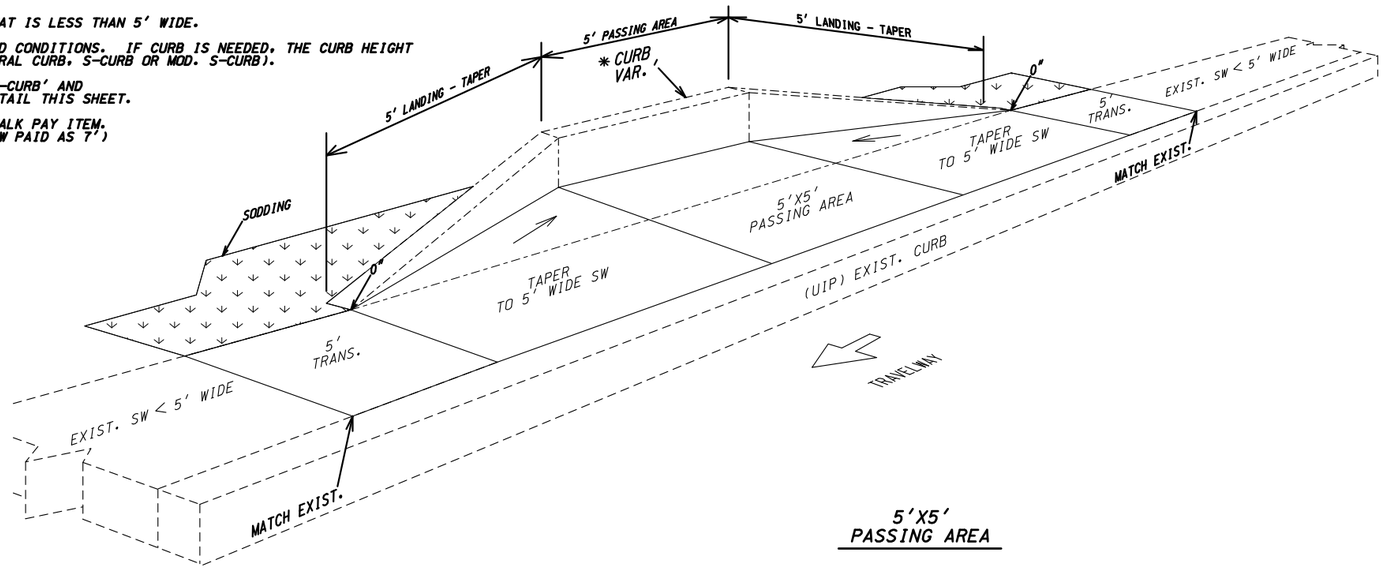
DESCRIPTION | DATE

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

REVISED: 2024-01-18

NOTES:

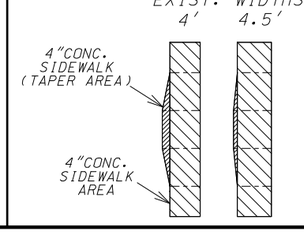
1. PASSING AREA REQUIRED EVERY 200' ON SIDEWALK THAT IS LESS THAN 5' WIDE.
2. * CURB MAY OR MAY NOT BE NEEDED DEPENDING ON FIELD CONDITIONS. IF CURB IS NEEDED, THE CURB HEIGHT WILL VARY DEPENDING ON FIELD CONDITIONS. (INTEGRAL CURB, S-CURB OR MOD. S-CURB).
3. S-CURB OVER 12" TALL IS PAID FOR AS 'MODIFIED S-CURB' AND REQUIRES REINFORCEMENT (NO DIRECT PAY). SEE DETAIL THIS SHEET.
4. ** INTEGRAL CURB IS PAID FOR IN THE 4" CONC. SIDEWALK PAY ITEM. PAID AS 1' ADDITIONAL SIDEWALK WIDTH. (EX. 6' SW PAID AS 7') (0.11 SY/LF OF CURB)



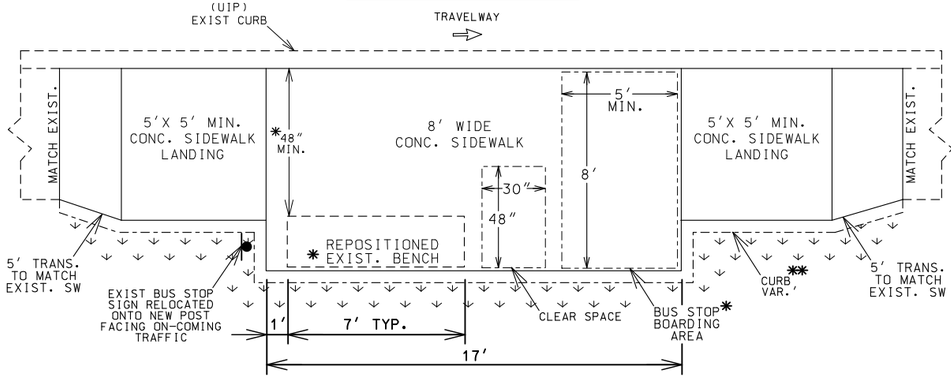
5'X5' PASSING AREA

NOT TO SCALE

QUANTITIES FOR PASSING AREAS				
EXISTING SW WIDTH			4'	4.5'
4" CONC. SIDEWALK (TAPER)		SY	1.3	0.7
TYPE 1 AGGREGATE		SY	1.3	0.7
4" CONC. SIDEWALK		SY	10.4	11.7
TYPE 1 AGGREGATE		SY	10.4	11.7
INTEGRAL CURB	**	SY	2.0	2.0
TYPE 1 AGGREGATE		SY	1.0	1.0
S-CURB		LF	17.2	16.0
MODIFIFED S-CURB		LF	17.2	16.0
SODDING		SY	53.0	53.0
LINEAR GRADING		LF	25.0	25.0



BUS STOP WITH BENCH



NOTES:

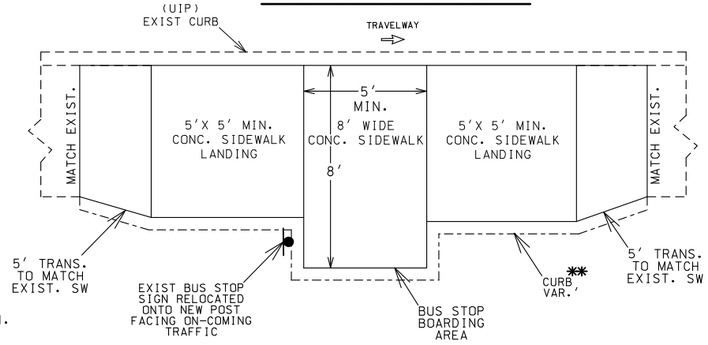
* 1. THE REPOSITIONED BENCH SHALL NOT BE PLACED ON THE 5'X8' BUS STOP BOARDING AREA. PLACE THE BACK OF THE BENCH AT THE BACK EDGE OF THE CONC. PAD TO PROVIDE MAX.CLEARANCE.

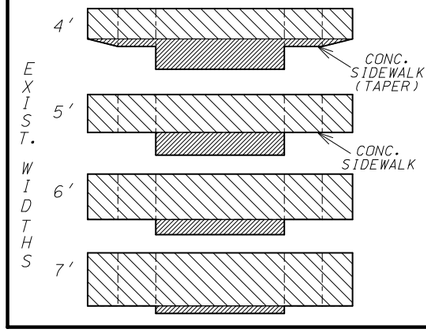
** 2. CURB USAGE DEPENDS ON FIELD CONDITIONS. IF CURB IS NEEDED DUE TO CUT, THE CURB HEIGHT WILL VARY DEPENDING ON FIELD CONDITIONS. (INTEGRAL CURB, S-CURB OR MOD. S-CURB).

3. S-CURB OVER 12" TALL IS PAID FOR AS 'MODIFIED S-CURB' AND REQUIRES REINFORCEMENT (NO DIRECT PAY). SEE DETAIL THIS SHEET.

*** 4. INTEGRAL CURB IS PAID FOR IN THE 4" CONC. SIDEWALK PAY ITEM. INTEGRAL CURB PAID AS 1' ADDITIONAL SIDEWALK WIDTH. (EX. 6'SW PAID AS 7') (0.11 SY/LF OF CURB)

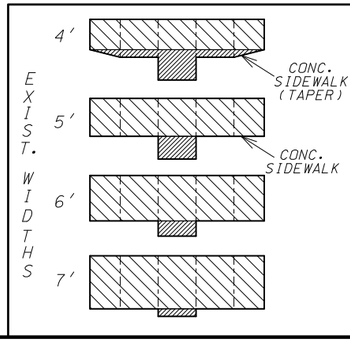
BUS STOP WITHOUT BENCH





QUANTITIES FOR BUS STOPS WITH BENCH					
EXISTING SW WIDTH			4'	5'	6'	7'
4" CONC. SIDEWALK (TAPER)		SY	9.3	5.8	3.9	1.9
TYPE 1 AGGREGATE		SY	9.3	5.8	3.9	1.9
4" CONC. SIDEWALK		SY	16.5	20.4	24.3	28.2
TYPE 1 AGGREGATE		SY	16.5	20.4	24.3	28.2
INTEGRAL CURB	***	SY	5.4	3.4	3.2	2.9
TYPE 1 AGGREGATE		SY	2.7	1.7	1.6	1.5
S-CURB		LF	43.5	27.0	25.0	23.0
MODIFIFED S-CURB		LF	43.5	27.0	25.0	23.0
SODDING		SY	10.6	10.4	9.8	9.4
LINEAR GRADING		LF	37.0	37.0	37.0	37.0

NOT TO SCALE



QUANTITIES FOR BUS STOPS – NO BENCH					
EXISTING SW WIDTH			4'	5'	6'	7'
4" CONC. SIDEWALK (TAPER)		SY	3.9	1.8	1.3	0.7
TYPE 1 AGGREGATE		SY	3.9	1.8	1.3	0.7
4" CONC. SIDEWALK		SY	10.4	12.9	15.5	18.0
TYPE 1 AGGREGATE		SY	10.4	12.9	15.5	18.0
INTEGRAL CURB	***	SY	3.8	2.0	1.8	1.6
TYPE 1 AGGREGATE		SY	1.9	1.0	0.9	0.8
S-CURB		LF	31.0	15.0	13.0	11.0
MODIFIFED S-CURB		LF	31.0	15.0	13.0	11.0
SODDING		SY	7.6	7.4	6.8	6.4
LINEAR GRADING		LF	25.0	25.0	25.0	25.0

ADA LIBRARY TYPICAL

PASSING AREAS AND BUS STOPS

TYPICAL SHEET 18 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:00:55 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

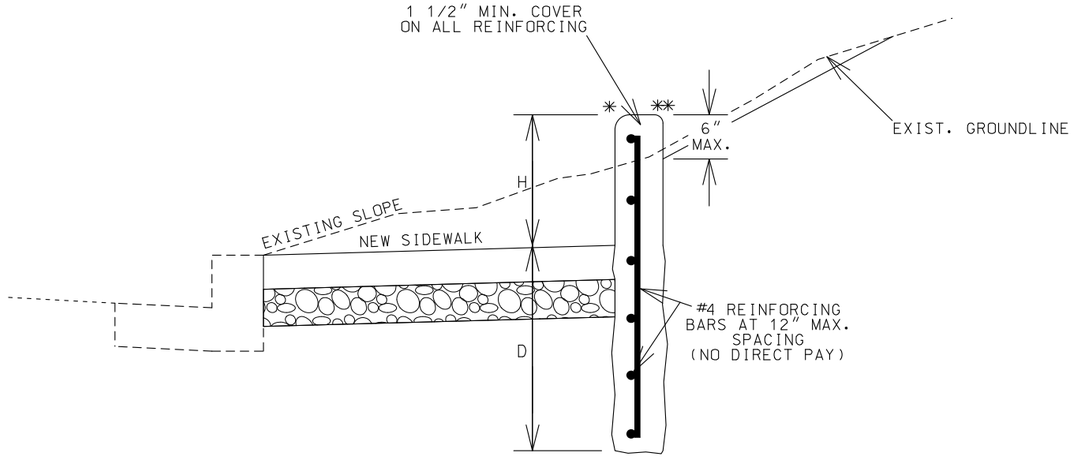
DESCRIPTION	DATE

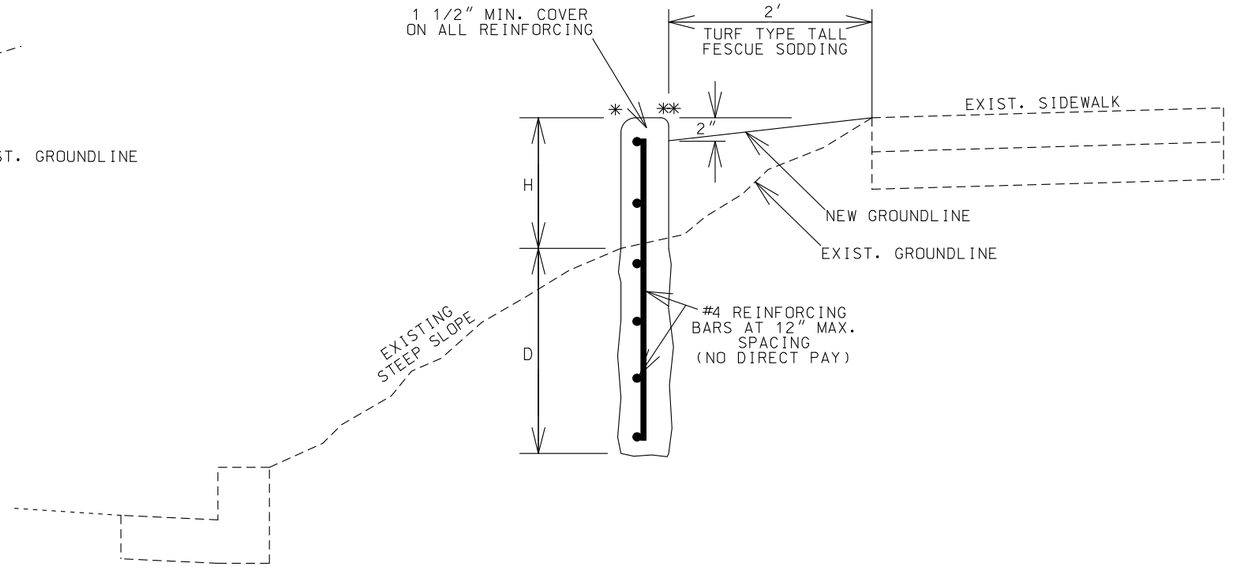
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

CREATED: 2023-11-16
REVISED: 2024-02-13

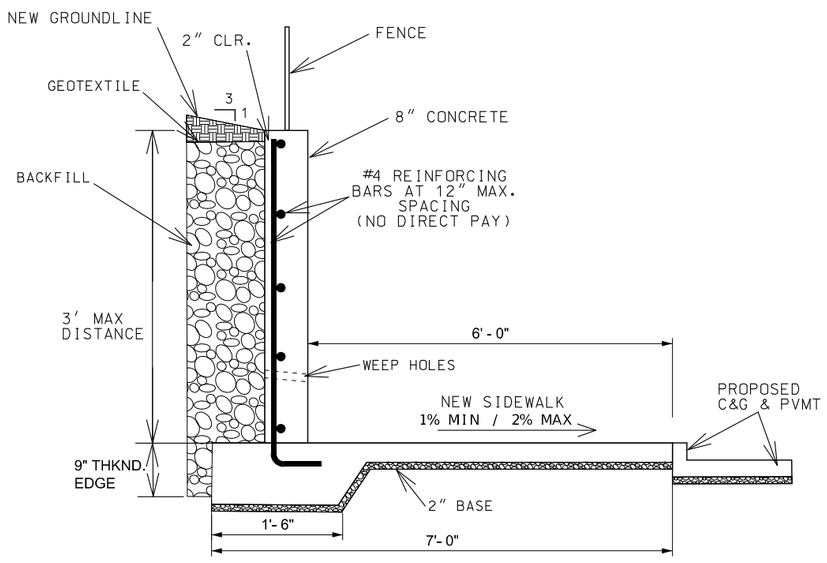
* ROUND TO 3/4" RADIUS
** ROUND TO 1/4" RADIUS
H = 2'-6" MAX. (30")
D = BURY DEPTH (FORMING NOT REQUIRED)
THIS SHALL BE 18 INCHES OR "H" WHICHEVER IS GREATER.
VERTICAL REINFORCING LENGTHS VARY AS NEEDED.
DEPTH MAY BE REDUCED IF KEYED 6" IN ROCK

MODIFIED S-CURB
> 12" TALL (2'-6" MAX.)





NOT TO SCALE



MODIFIED S-CURB
> 12" TALL (3'-0" MAX.)
POURED CONCRETE SIDEWALK WALL

NOT TO SCALE

ADA LIBRARY TYPICAL

MODIFIED S-CURB

TYPICAL SHEET
19 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/24/2025 1:01:15 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/24/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	2

COUNTY
GREENE

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J8S0836D

CONTRACT ID.

PROJECT NO.

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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)

REMOVAL OF IMPROVEMENTS

SHEET	STATION	STATION	ROUTE	LOCATION	DESCRIPTION	UNITS	TOTAL	REMARKS
5	177+65		EX. MM	LT	PULLBOX	EA	1	HAILE ST.
5	178+35		EX. MM	RT	PULLBOX	EA	1	HAILE ST.
5	178+44		EX. MM	LT	PULLBOX	EA	1	HAILE ST.
5	178+45		EX. MM	RT	SIGNAL BASE & MAST ARM	EA	1	HAILE ST.
5	178+56		EX. MM	LT	PULLBOX	EA	1	HAILE ST.
5, 6	178+56.38	184+62.55	EX. MM	RT	SANITARY SEWER 10" FORCE MAIN	LF	606	
6	184+62.55		EX. MM	RT	SANITARY SEWER MANHOLE	EA	1	
6	181+93.90	182+54.73	EX. MM	LT	15" CONCRETE PIPE ACROSS ENTRANCE	LF	61	PARCEL 2
6	181+93.58	182+54.24	EX. MM	LT	CONCRETE ENTRANCE	SY	150	PARCEL 2
6	181+77.58		EX. MM	LT & RT	SAWCUT	FT	45	CULVERT #1 REPLACEMENT
6	181+85.61		EX. MM	LT & RT	EX. 3'X2' R.C.B. & HEADWALLS	LF	50	
6	181+88.75		EX. MM	LT & RT	SAWCUT	FT	45	
6	182+91.63		EX. MM	LT	SIGN	EACH	1	SIGNAL AHEAD
6	183+65.04		EX. MM	LT	GRAVEL ENTRANCE	SY	49	PARCEL 4
6	183+82.30		EX. MM	LT	MAILBOX	EA	1	PARCEL 4
6	186+14.38	186+36.22	EX. MM	LT	12" C.M.P.	LF	22	PARCEL 5
6	186+25.72		EX. MM	LT	GRAVEL ENTRANCE	SY	36	PARCEL 5
6	186+39.50		EX. MM	LT	MAILBOX	EA	1	PARCEL 5
6	181+81.45		EX. MM	RT	SIGN	EA	1	OBJECT MARKER
7	190+57.69		EX. MM	LT & RT	EX. 4'X2' R.C.B. & HEADWALLS	LF	39	
7	190+54.58		EX. MM	RT	SIGN	EA	1	OBJECT MARKER
7	191+73.96		EX. MM	LT	GRAVEL ENTRANCE	SY	48	PARCEL 7
7	188+45.72	188+90.13	EX. MM	RT	18" R.C.P.	LF	48	ACROSS FARM ROAD 160
7	3+76.65		FR 160	LT	SIGN	EA	3	STOP & STREET NAME SIGNS
7	1+59.94		FR 160	RT	CONCRETE ENTRANCE	SY	91	PARCEL 6
7	1+81.63		FR 160	RT	MAILBOX	EA	1	PARCEL 6
10	16+62.00		PR. MM	RT	SANITARY SEWER MANHOLE	EACH	1	
14	39+51.34	39+91.25	PR. MM	RT	SIDEWALK	SY	33	
14	39+91.31		PR. MM	RT	PAVED ENTRANCE	SY	345	
14	39+93.79		PR. MM	LT	PAVED ENTRANCE	SY	224	
14	39+55.45	40+05.38	PR. MM	RT	CURB & GUTTER	LF	106	
14, 15	39+65.86	45+53.53	PR. MM	RT	SIDEWALK	SY	343	
14,15	40+54.31	46+49.29	PR. MM	RT	CURB & GUTTER	LF	610	
14, 15	40+31.70	45+53.99	PR. MM	LT	SIDEWALK	SY	341	
14, 15	39+61.22	46+47.55	PR. MM	LT	CURB & GUTTER	LF	699	
15	43+12.62		PR. MM	LT	CONCRETE ENTRANCE	SY	112	PARCEL 16
15	43+01.35		PR. MM	RT	PAVED ENTRANCE	SY	91	PARCEL 13/14
15	45+60.36		PR. MM	LT	EX. DROP INLET	EA	1	
15	45+60.64		PR. MM	RT	EX. DROP INLET	EA	1	
15	46+62.58	46+90.07	PR. MM	LT	ISLAND	SY	115	
15	46+67.19	46+89.24	PR. MM	RT	ISLAND	SY	32	
15	1+04.20		FR 103	LT	GRAVEL ENTRANCE	SY	700	PARCEL 17
15	238+40		US 60 WB	LT	PULLBOX	EA	1	FIBER
15	238+45		US 60 WB	LT	ITS CABINET	EA	1	US 60
15	238+50		US 60 WB	LT	SIGNAL CABINET	EA	1	US 60
15	238+55		US 60 WB	LT	POWER SUPPLY	EA	1	US 60
15	238+60		US 60 WB	LT	LIGHTING CONTROLLER	EA	1	US 60
15	239+00		US 60 WB	LT	SIGNAL BASE & MAST ARM	EA	1	US 60
15	238+90		US 60 WB	LT	PULLBOX	EA	1	US 60
15	239+00		US 60 EB	RT	SIGNAL BASE & MAST ARM	EA	1	US 60
15	239+45		US 60 EB	RT	SIGNAL BASE & MAST ARM	EA	1	US 60
15	239+70		US 60 WB	LT	SIGNAL BASE & MAST ARM	EA	1	US 60
16	3+99.14		FR 103	LT	GRAVEL ENTRANCE	SY	43	PARCEL 18
16	3+66.52	4+32.91	FR 103	LT	15" C.M.P. ACROSS ENTRANCE	LF	80	PARCEL 18
16	3+89.12		FR 103	RT	GRAVEL ENTRANCE	SY	79	PARCEL 17
16	3+54.62	4+25.16	FR 103	RT	15" C.M.P. ACROSS ENTRANCE	LF	82	PARCEL 17
18-19, 15	228+50.00	237+54.75	US 60 EB	RT	ASPHALT SHOULDER	SY	962	
19, 15	233+53.40	237+86.43	US 60 WB	RT	RAISED CONCRETE MEDIAN	SY	217	
19, 15	235+20.00	237+83.27	US 60 WB	LT	ASPHALT SHOULDER	SY	436	
19	233+30		US 60 WB	LT	PULLBOX	EA	1	FIBER
19	233+89.48		US 60 EB	LT	SIGN	EA	1	DO NOT ENTER
15, 20	240+53.21	243+09.40	US 60 WB	LT	ASPHALT SHOULDER	SY	61	
15, 20-21	240+04.55	243+07.86	US 60 EB	LT	RAISED CONCRETE MEDIAN	SY	292	
15, 20-21	241+96.90	248+18.97	US 60 EB	RT	ASPHALT SHOULDER	SY	659	
20	244+17		US 60 WB	LT	PULLBOX	EA	1	FIBER
20	244+73.75		US 60 EB	RT	ASPHALT ENTRANCE	SY	180	PARCEL 18
20	244+46.08	245+04.96	US 60 EB	RT	15" C.M.P. ACROSS ENTRANCE	LF	59	PARCEL 18
20	242+17.56		US 60 EB	LT	SIGN	EA	1	DO NOT ENTER, MOUNTED ON MEDIAN
20	243+97.72		US 60 EB	LT	SIGN	EA	1	ONE WAY, MOUNTED ON MEDIAN
20	245+03.56	247+28.67	US 60 WB	LT	ASPHALT SHOULDER	SY	204	
20	242+99.37		US 60 WB	LT	SIGN	EA	3	STOP & STREET NAME SIGNS
SS	US 60	8+46.51	FR 103	LT	ASPHALT PAVEMENT	SY	2269	OBLITERATE EX. FR 103. SEE SPECIAL SHEET FOR DETAILS
	254+45		US 60 WB	LT	PULLBOX	EA	1	FIBER

CLEARING AND GRUBBING

7 AC

SUMMARY OF QUANTITIES

SHEET 1 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/15/2025 12:19:45 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

REMOVAL OF IMPROVEMENTS (CONT.)

SHEET	STATION	STATION	ROUTE	LOCATION		UNITS	TOTAL	REMARKS
31	LM .083	LM 0.124	EX. MM	CL	ASPHALT PAVEMENT	SY	695	RAILROAD CLOSURE AT EX. MM & FARM ROAD 168
31	LM 0.317	LM 0.015	ORR/HAILE	CL	ASPHALT PAVEMENT	SY	346	RAILROAD CLOSURE AT ORR ST. & HAILE ST.
31	0.498	0.524	FR 170	CL	ASPHALT PAVEMENT	SY	401	RAILROAD CLOSURE AT US 60 & FARM ROAD 170
32	0.075	263.927 (US 60)	FR 164	CL	ASPHALT PAVEMENT	SY	1110	FR 1164 & US 60 TURN LANE
32	LM 264.04		US 60	MEDIAN	CROSSOVER - ASPHALT	SY	85	AT FARM ROAD 164
32	LM 265.57	LM 265.67	US 60	LT	ASPHALT SHOULDER	SY	962	WB SHOULDER - TRUCK PARKING AREA
32	LM 74.99	LM 75.09	US 60	RT	CONCRETE SHOULDER	SY	1136	EB SHOULDER - TRUCK PARKING AREA
1 LUMP SUM								

EARTHWORK

SHEETS	ROUTE	LOCATION	STATION		UNCLASSIFIED EXCAVATION	EMBANKMENT IN PLACE	COMPACTING EMBANKMENT	REMARKS
			FROM	TO	C.Y.	C.Y.	C.Y.	
5, 6	EX. MM	LT	178+52.88	184+03.25	169	159	154	WIDENING, LT
5, 6	EX. MM	RT	178+52.88	184+03.25	121	385	110	WIDENING, RT
6, 7	EX. MM	LT & RT	184+03.25	188+04.51	845		536	ROUNDABOUT, NORTH LEG APPROACH
7	FR160NW	RT	000+62.54	001+46.61	75		1	MM & FR 160, NW QUAD
7	FR160SW	LT & RT	001+17.74	002+90.94	191		112	MM & FR 160, SW QUAD
7	FR160NE	LT & RT	001+08.87	002+03.30	22	22	20	MM & FR 160, NE QUAD
7	FR160SE	LT & RT	000+78.67	001+70.71	173		44	MM & FR 160, SE QUAD
7	EX. MM	LT & RT	188+04.44	190+60.61	202	2478	183	MM & FR 160, ROUNDABOUT
7, 8	EX. MM	LT & RT	190+60.61	192+15.51	756		188	ROUNDABOUT, SOUTH LEG APPROACH
7, 8	EX. MM	LT	192+15.51	194+02.76	164		33	WIDENING, LT
7	FR 160	LT & RT	1+44.58	2+71.55	508		2	ROUNDABOUT, WEST LEG APPROACH
7, 9	PR. MM	LT & RT	1+12.25	2+50.00	316	69	287	ROUNDABOUT, EAST LEG
7, 9	PR. MM	LT & RT	2+50.00	8+17.75	598	38925	544	W/O BRIDGE
9	PR. MM	LT & RT	8+17.75	10+56.29	97	4483	88	WESTERN SPILL SLOPE & DITCH
9, 10	PR. MM	LT & RT	12+09.41	13+11.25	31	8560	29	EASTERN SPILL SLOPE
10-12	PR. MM	LT & RT	13+11.25	26+33.00	37	109806	33	E/O BRIDGE TO ENTRANCES
12-15	PR. MM	LT & RT	26+33.00	44+76.07	2403	17825	2184	TO PROFILE TIE-IN TO EXISTING STONE CREEK
15	PR. MM	LT	44+76.07	45+58.15	132		7	WIDENING, LT
15	PR. MM	RT	44+76.07	45+33.76	440		2	WIDENING, RT
15-17	FR 103	LT & RT	2+03.33	8+50.00	567		310	CONNECTION TO FARM ROAD 103
18-19, 15	US 60	RT	228+50.00	237+24.66	858		139	WIDENING, US 60 EB RT
19, 15	US 60	MEDIAN	231+85.40	237+99.94	651		45	WIDENING, US 60 EB MEDIAN
19, 15	US 60	LT	235+20.00	237+49.20	195		5	WIDENING, US 60 WB LT
15, 20-21	US 60	RT	240+77.93	248+18.97	481		61	WIDENING, US 60 EB RT
15, 20	US 60	MEDIAN	240+00.00	245+83.04	830		21	WIDENING, US 60 WB MEDIAN
15, 20	US 60	LT	241+02.32	247+28.68	953		5	WIDENING, US 60 WB LT
15	60NW	LT & RT	0+00.00	2+07.81	717		14	US 60 & MM, NW QUAD
15	60NE	LT & RT	0+00.00	2+07.95	249			US 60 & MM, NE QUAD
15	60SW	LT & RT	0+00.00	2+21.20	276		38	US 60 & MM, SW QUAD
15	60SE	LT & RT	0+00.00	2+07.95	381		20	US 60 & MM, SE QUAD
31A	FR 168	LT & RT	1+05.00	5+50.00	490		9	FR 168 REGRADE & PAVEMENT REPLACEMENT
				SUBTOTALS	13928	182712	5224	
				ROUNDING	937			ESTIMATED AT 500 C.Y. PER MILE
				TOTALS	14865	182712	5224	

LINEAR GRADING CLASS 1

SHEET	STATION	ROUTE	LOCATION	STA	REMARKS
6	182+24.74	EX. MM	LT	0.34	ENTRANCE 1, PARCEL 1
6	183+65.04	EX. MM	LT	0.39	ENTRANCE 2, PARCEL 4
6	186+25.72	EX. MM	LT	0.46	ENTRANCE 3, PARCEL 5
7	1+59.94	FR 160	RT	0.25	ENTRANCE 4, PARCEL 6
8	192+45.00	EX. MM	LT	0.31	ENTRANCE 5, PARCEL 7
12	26+33.00	PR. MM	LT	0.60	ENTRANCE 6, PARCEL 11
12	26+33.00	PR. MM	RT	0.59	ENTRANCE 7, PARCEL 11
13	32+93.00	PR. MM	LT	0.39	ENTRANCE 8, PARCEL 11
13	32+93.00	PR. MM	RT	0.47	ENTRANCE 9, PARCEL 11
14	39+93.79	PR. MM	LT	0.55	ENTRANCE 10, CITY ROAD
14	39+91.31	PR. MM	RT	0.56	ENTRANCE 11, CITY ROAD
15	43+12.62	PR. MM	LT	0.40	ENTRANCE 12, PARCEL 16
15	43+01.35	PR. MM	RT	0.29	ENTRANCE 13, PARCEL 13
16	5+28.14	FR 103	LT	0.57	ENTRANCE 14, PARCEL 18
16	5+28.14	FR 103	RT	0.87	ENTRANCE 15, PARCE 17
20	244+73.75	US 60 EB	RT	0.32	ENTRANCE 16, PARCEL 18
32	LM 265.57-265.67	US 60 WB	LT	5.28	REGRADING FOLLOWING SHOULDER REMOVAL
32	LM 74.99-75.09	US 60 EB	RT	5.28	REGRADING FOLLOWING SHOULDER REMOVAL
			TOTAL	17.9	

SUMMARY OF QUANTITIES
SHEET 2 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:26:34 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
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COUNTY
GREENE

JOB NO.
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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

TRUNCATED DOMES, CURB RAMP, SIDEWALK, TYPE 1 AGGREGATE, ADA LINEAR GRADING, TURF TYPE TALL FESCUE SODDING, CURBS

SHEET	STATION	STATION	LOCATION	LT RT	TRUNC. DOMES	CURB RAMP				SIDEWALK			4" TYPE 1 AGGR.	ADA LINEAR GRADING	SOD	REMARKS
										S.W. WIDTH	* PAY WIDTH	4" SDWLK.				
					SF	LENGTH	WIDTH	TYPE	SY	LF	LF	SY	SY	LF	SY	
5	178+22.98	178+37.42	EX. MM	LT	10.0	12	6	2-A	11.2	6	7	7.3	18.5	31.5	8.5	HAILE ST CROSSING CURB RAMP & LANDING
5	178+37.42	178+61.06	EX. MM	LT	13.0	8	6	2-C	18.9	6	7		18.9	36.7	9.4	N RTE MM CROSSING CURB RAMP
5-6	178+61.06	181+81.66	EX. MM	LT						6	6	204.3	204.3	320.6	53.5	SIDEWALK BETWEEN CURB RAMPS
6	181+81.66	182+01.56	EX. MM	LT		8	6	1-A	11.9	6	7		11.9	33.0	8.8	CURB RAMP N/O PAVED APPROACH
6	182+47.83	182+67.25	EX. MM	LT		7	6	1-A	11.5	6	7		11.5	31.5	8.5	CURB RAMP S/O PAVED APPROACH
6	182+67.25	183+42.64	EX. MM	LT						6	6	47.0	47.0	75.4	12.6	SIDEWALK BETWEEN STEEL PLATE AND CURB RAMP
6	183+42.64	183+57.20	EX. MM	LT		8	6	1-A	8.3	6	7		8.3	27.6	7.9	CURB RAMP N/O TYPE 1 DRIVEWAY
6	183+70.19	183+85.04	EX. MM	LT		8	6	1-A	8.3	6	7		8.3	27.9	7.9	CURB RAMP S/O TYPE 1 DRIVEWAY
6	183+85.04	186+04.72	EX. MM	LT						6	6	143.1	143.1	219.7	36.7	SIDEWALK BETWEEN CURB RAMPS
6	186+04.72	186+19.22	EX. MM	LT		8	6	1-A	8.2	6	7		8.2	27.5	7.9	CURB RAMP N/O TYPE 1 DRIVEWAY
6	186+32.23	186+46.73	EX. MM	LT		8	6	1-A	8.2	6	7		8.2	27.5	7.9	CURB RAMP S/O TYPE 1 DRIVEWAY
6-7	186+46.73	187+71.59	EX. MM	LT						6	6	79.1	79.1	124.9	20.9	SIDEWALK FROM CURB RAMP TO STEEL PLATE
7&9	0+44.63	5+67.75	PR. MM	LT						6	6	386.5	386.5	523.2	87.2	SIDEWALK FROM STEEL PLATE TO 5' W SIDEWALK
9	5+67.75	7+97.75	PR. MM	LT						5	5	131.6	131.6	230.0	38.4	BEGINNING OF 5' W SIDEWALK TO W BRIDGE APPRCH. PVMT.
10-11	13+31.25	20+78.13	PR. MM	LT						5	5	435.2	435.2	746.9	124.5	E BRIDGE APPRCH. PVMT. TO BEGIN. OF 10' MULTI-USE PATH
11-12	20+78.13	25+91.57	PR. MM	LT						10	10	588.4	588.4	513.5	85.6	BEGIN. OF 10' PATH TO CURB RAMP N/O PAVED APPRCH.
12	25+91.57	26+13.05	PR. MM	LT	32.9	8	10	1-A	21.1				21.1	34.5	9.0	CURB RAMP N/O PAVED APPROACH
12	26+51.62	26+73.34	PR. MM	LT	32.9	8	10	1-A	21.2				21.2	34.8	9.1	CURB RAMP S/O PAVED APPROACH
12-13	26+73.34	32+51.20	PR. MM	LT						10	10	642.1	642.1	577.9	96.4	SIDEWALK BETWEEN CURB RAMPS
13	32+51.20	32+73.04	PR. MM	LT	33.1	8	10	1-A	21.3	10	11		21.3	34.9	9.1	CURB RAMP N/O PAVED APPROACH
13	33+11.62	33+33.59	PR. MM	LT	33.4	8	10	1-A	21.5	10	11		21.5	35.0	9.1	CURB RAMP S/O PAVED APPROACH
13-14	33+33.59	39+39.21	PR. MM	LT						10	10	671.4	671.4	605.7	101.0	SIDEWALK BETWEEN CURB RAMPS
14	39+39.21	39+54.16	PR. MM	LT	19.8	8	10	1-B	14.1	10	11		14.1	28.0	8.0	CURB RAMP N/O PAVED APPROACH
14	39+93.04	40+07.75	PR. MM	LT	20.0	8	10	1-B	14.3	10	11		14.3	27.8	7.9	CURB RAMP S/O PAVED APPROACH
14-15	40+07.75	42+93.22	PR. MM	LT						10	10	294.0	294.0	285.5	47.6	SIDEWALK BETWEEN CURB RAMPS
15	42+93.22	43+08.21	PR. MM	LT	20.2	10	10	1-B	14.6	10	11		14.6	30.0	8.3	CURB RAMP N/O PAVED APPROACH
15	43+33.78	43+47.19	PR. MM	LT	20.2	8	10	1-B	14.8	10	11		14.8	26.5	7.7	CURB RAMP S/O PAVED APPROACH
15	43+47.19	46+20.22	PR. MM	LT						10	10	301.8	301.8	273.1	45.6	SIDEWALK BETWEEN CURB RAMPS
15	46+20.22	46+32.30	PR. MM	LT	20.0	8	10	1-B	14.4	10	11		14.4	25.1	7.5	US 60 RIGHT TURN LANE CROSSING CURB RAMP
10-11	12+10.58	21+01.17	N/O PR. MM	LT						10	10	1216.6	1216.6	890.6	148.5	MULTI-USE PATH N OF PROP. RTE MM, INCL. SECTION UNDER BRIDGE
5	178+15.91	178+52.61	EX. MM	RT	12.2	8	6	2-A	10.6	6	7	21.1	31.7	49.8	11.6	SIDEWALK AND CURB RAMP FOR NORTH RTE MM CROSSING
10	12+10.58	16+00.00	S/O PR. MM	RT						10	10	442.8	442.8	389.5	65.0	SIDEWALK S OF PROP. RTE MM, INCL. TRANSITION AREA
10-11	16+00.00	20+93.15	S/O PR. MM	RT						6	6	306.3	306.3	493.2	82.2	SIDEWALK S OF PROP. RTE MM
11-12	20+93.15	25+92.48	PR. MM	RT						6	6	320.2	320.2	499.4	83.3	SIDEWALK FROM S/O PATH TO CURB RAMP N/O PAVED APPRCH.
12	25+92.48	26+12.56	PR. MM	RT	23.7	8	6	1-A	11.9	6	7		11.9	33.1	8.8	CURB RAMP N/O PAVED APPROACH
12	26+54.76	26+74.91	PR. MM	RT	24.2	8	6	1-A	12.0	6	7		12.0	33.2	8.8	CURB RAMP S/O PAVED APPROACH
12-13	26+74.91	32+52.66	PR. MM	RT						6	6	385.2	385.2	577.8	96.3	SIDEWALK BETWEEN CURB RAMPS
13	32+52.66	32+72.56	PR. MM	RT	23.7	8	6	1-A	11.9	6	7		11.9	33.0	8.8	CURB RAMP N/O PAVED APPROACH
13	33+14.76	33+34.91	PR. MM	RT	24.2	8	6	1-A	12.0	6	7		12.0	33.2	8.8	CURB RAMP S/O PAVED APPROACH
13-14	33+34.91	39+59.25	PR. MM	RT						6	6	419.7	419.7	624.4	104.1	SIDEWALK BETWEEN CURB RAMPS
14	39+59.25	39+91.25	PR. MM	RT	27.9	12	6	1-E	24.3	6	7	15.9	40.2	49.0	11.5	CURB RAMP N/O PAVED APPRCH
14	40+38.46	40+64.77	PR. MM	RT	29.6	12	6	1-E	24.9	6	7	18.3	43.2	43.4	10.5	CURB RAMP S/O PAVED APPRCH
14-15	40+64.77	42+62.99	PR. MM	RT						6	6	139.4	139.4	198.3	33.1	SIDEWALK BETWEEN CURB RAMPS
15	42+62.99	42+83.93	PR. MM	RT		8	6	1-A	12.9	6	7		12.9	34.0	9.0	CURB RAMP N/O PAVED APPROACH
15	43+19.68	43+46.08	PR. MM	RT		8	6	1-A	15.4	6	7		15.4	39.4	9.9	CURB RAMP S/O PAVED APPROACH
15	43+46.08	46+13.66	PR. MM	RT						6	6	181.6	181.6	267.6	44.6	SIDEWALK BETWEEN CURB RAMPS
15	46+13.66	46+58.73	PR. MM	RT	12.1	9	6	2-C	20.0	6	7	18.7	38.7	58.6	13.1	CURB RAMP AND SIDEWALK US 60 LT TURN LANE CROSSING
			TOTAL		432.9	--	--	--	399.7	--	--	7417.6	7817.3	9363.7	1650.4	
			USE		433	--	--	--	399.7	--	--	7417.6	7818	9364	1651	

* PAY WIDTH INCLUDES INTEGRAL CURB CONC. WIDTH/HEIGHT.
SEE TYPICAL SHEET 12 FOR ALL PAY ITEM LIMITS.

SUMMARY OF QUANTITIES
SHEET 3 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:28:38 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

GUARDRAIL

BEGIN STA	END STA	LOCATION	MGS GUARDRAIL FT	MASH CRASHWORTHY END TERMINAL EA	MGS BRIDGE APPROACH TRANSITION "EXTENDED CURB" EA	REMARKS
3+54.51	7+97.75	NEW MM RT	350.0	1	1	
5+67.75	7+97.75	NEW MM LT	150.0	1	1	
13+31.03	18+11.25	NEW MM RT	387.5	1	1	
13+31.03	19+99.50	NEW MM LT	612.5	1	1	
		TOTAL	1500.0	4	4	ALL GUARDRAIL LENGTH IS ROUNDED UP TO THE NEAREST 12.5'
		USE	1500	4	4	

FENCING (CHAIN-LINK FENCE)

STATION	STATION	LOCATION	72" FENCE CHAIN-LINK LF	REMARKS
4+50.00	8+00.25	NEW MM LT	362	
13+28.25	20+50.00	NEW MM LT	748	
		TOTAL	1110	

ISLANDS, MEDIAN

STATION	STATION	LOCATION	AVG.	MEDIAN AREA	8" CONCRETE	4" CONCRETE	REMARKS
			LF	SF	SY	SY	
EXISTING MM							
178+92.00	188+46.51	LT & RT	VAR.	14464.1	1607.1		MEDIAN NORTH OF THE ROUNDABOUT
190+58.82	193+08.59	LT & RT	VAR.	2102.4	233.6		MEDIAN SOUTH OF THE ROUNDABOUT
188+92.94	190+04.88	LT & RT	VAR.	9852.0		1,094.7	ISLAND AT THE CENTER OF THE ROUNDABOUT
187+94.39	2+35.40	LT	VAR.	1648.1	183.1		ISLANDS ALONG THE RIGHT TURN LANE IN THE ROUNDABOUT
				SUBTOTAL	2023.8	1094.7	
FARMROAD 160							
45+69.65	24+74.29	LT & RT	VAR.	2352.4	261.4		ISLAND WEST OF THE ROUNDABOUT
				SUBTOTAL	261.4	0.0	
PROPOSED MM							
0+97.03	25+71.99	LT & RT	VAR.	18690.0	2076.7		MEDIAN EAST OF THE ROUNDABOUT TO ENT. 6-7
27+00.00	32+25.99	LT & RT	VAR.	2111.7	234.6		MEDIAN FROM ENT. 6-7 TO 8-9
33+59.00	39+31.51	LT & RT	VAR.	2293.4	254.8		MEDIAN FROM ENT. 8-9 TO ENT. 10-11
40+36.45	46+02.03	LT & RT	VAR.	2274.8	252.8		MEDIAN FROM ENT. 10-11 TO US60
46+50.72	46+76.58	LT & RT	VAR.	758.8	84.3		NORTH EAST ISLAND AT US60 INTERSECTION
46+21.17	46+78.58	LT & RT	VAR.	800.9	89.0		NORTH WEST ISLAND AT US60 INTERSECTION
				SUBTOTAL	2992.2	0.0	
US 60							
240+32.42	244+03.04	LT & RT	VAR.	3296.0	366.2		MEDIAN NORTH OF THE INTERSECTION AT US60
237+91.19	233+57.89	LT & RT	VAR.	3857.6	428.6		MEDIAN SOUTH OF THE INTERSECTION AT US60
				SUBTOTAL	794.8		
FARMROAD 103							
0+58.50	1+15.06	LT & RT	VAR.	987.1	109.7		SOUTH EAST ISLAND AT US60 INTERSECTION
0+58.50	0+86.35	LT & RT	VAR.	897.5	99.7		SOUTH WEST ISLAND AT US60 INTERSECTION
1+36.59	51+84.13	LT & RT	VAR.	1255.5	139.5		MEDAIN FROM US60 TO ENT. 14-15
				SUBTOTAL	348.9	0.0	
				TOTAL	6159.7	1094.7	
				USE	6160	1095	

MOBILIZATION

1 LUMP SUM

ADDITIONAL MOBILIZATION FOR SEEDING

4 EACH

SUMMARY OF QUANTITIES

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:29:01 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION | DATE

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

GUTTER, TYPE A

				NET LENGTH	4" TYPE 5 AGGR.	ROCK LINING		
SHEET	STATION	ROUTE	LOCATION	LF	SY	SIZE	CY	REMARKS
6	185+97.18	EX. MM	RT	6	2.3	1X4X12	2	
7	187+69.96	EX. MM	RT	6	1.7	1X4X12	2	
7	192+15.52	EX. MM	LT	9	3.5	1X4X12	2	
15	238+01.22	US 60 WB	LT	27	10.2	1X4X12	2	
			TOTALS	48	17.7		8	
			USE	48	18		8	

CONCRETE BARRIER

STATION	STATION	LOCATION	TYPE D LF	REMARKS
EXISTING MM				
192+05	192+32	LT & RT	45.3	CONCRETE BARRIER ON ENTRANCE 5 TO PROTECT UTILITY POLE
		TOTAL	45.3	
		USE	45	

MODIFIED TYPE A GUTTER AND STEEL PLATE

STA.	STA.	ROUTE	LOCATION	MODIFIED TYPE A GUTTER	STEEL PLATE
				LF	SF
180+20.74	180+25.74	EXIST. RTE. MM	LT	13.4	30.0
181+15.59	181+20.59	EXIST. RTE. MM	LT	13.3	30.0
182+67.25	182+72.25	EXIST. RTE. MM	LT	14.1	30.0
187+66.84	187+71.59	EXIST. RTE. MM	LT	12.6	30.0
			TOTAL	53.4	120.0
			USE	54	120

TOTAL PERMANENT EROSION CONTROL GEOTEXTILE

	STATION				
SHEET	FROM	TO	ROUTE	LOCATION	PERMANENT EROSION CONTROL GEOTEXTILE (SY)
7	190+34.39	191+55.00	EX. MM	RT	276.2
9	7+25.00	8+85.78	PR. MM	LT & RT	3139
10	12+21.75	15+00.00	PR. MM	LT & RT	6076
				TOTALS	9491

TYPE 3 ROCK DITCH LINER

	STATION				TYPE 3 ROCK DITCH LINER		BEDDING MATERIAL FOR ROCK DITCH LINER (CY)	PERMANENT EROSION CONTROL GEOTEXTILE (SY)
SHEET	FROM	TO	ROUTE	LOCATION	FURNISHING (CY)	PLACING (CY)		
7	190+34.39	191+55.00	EX. MM	RT	168.8	168.8	61.4	276.2
				TOTALS	169	169	61	-

TYPE 2 ROCK BLANKET

	STATION				TYPE 2 ROCK BLANKET		PERMANENT EROSION CONTROL GEOTEXTILE (SY)	
SHEET	FROM	TO	ROUTE	LOCATION	FURNISHING (CY)	PLACING (CY)		REMARKS
9	7+25.00	8+85.78	PR. MM	LT & RT	2051	2051	3139	WESTERN SPILL SLOPE
10	12+21.75	15+00.00	PR. MM	LT & RT	3971	3971	6076	EASTERN SPILL SLOPE
				TOTALS	6022	6022	-	

FULL DEPTH PAVEMENT REPAIR

					FURNISHING & PLACING CONC. MATERIAL	6" SUBGRADE COMPACTION	4" TYPE 1 OR 5 AGGREGATE		
		LENGTH	WIDTH	AREA	FOR FULL DEPTH PAVEMENT REPAIR	(PAVEMENT REPAIR)	(PAVEMENT REPAIR)	CRUSHED AGGREGATE	
SHEET	STA.	LF	LF	SF	SY	SY	SY	TONS	REMARKS
6	181+83.18	42.8	8	342.4	38.0	38.0	38.0	35.5	CROSS ROAD PIPE REPLACEMENT
15	46+07.68	53.7	6.5	349.05	38.8	38.8	38.8	90.5	CROSS ROAD PIPE INSTALLATION
				TOTALS	76.8	76.8	76.8	126.0	

SUMMARY OF QUANTITIES
SHEET 5 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
05/15/2025 12:29:26 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
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GREENE

JOB NO.
J8S0836D

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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)

WATERBORNE PVMT. MARKING PAINT

						TYPE L BEADS			TYPE P BEADS					
						6" SOLID YELLOW	6" SOLID WHITE	6" INTERM. WHITE	4" SOLID YELLOW		4" SOLID WHITE		4" INTERM. WHITE	
ROUTE	STATION	LOCATION	ROUTE	STATION	LOCATION				MED.	PVMT.	MED.	PVMT.		REMARKS
						LF	LF	LF	LF	LF	LF	LF	LF	
MM	178+56	RT 2'	MM	182+80	RT 2'							846.6		NB SOLID CENTER 8" PVMT. MARKING
MM	178+87	RT 30'	MM	184+30	52'							546.7		SB EOL FROM E HALIE ST. TO MERGE
MM	178+61	RT 16'	MM	188+46					1975.6		53.4			CENTER MED. FROM E HALIE ST TO RAB
MM	178+69		MM	178+92						93.6				NB/SB DSY WITH HASH B/W NB & SB
MM	180+30		MM	186+04									557.2	SB INTERM. CENTER PVMT. MARKING
MM	186+04	RT 30'	MM	187+67	44'							182.2		SB SOLID CENTER PVMT. MARKING
MM	182+80	RT 2'	MM	187+05	RT 1'								854.0	NB INTERM. CENTER PVMT. MARKING
MM	187+05	LT 13'	NEW MM	3+17	LT 33'							413.0		NB EOL AT RAB
MM	187+05	RT 1'	NEW MM	3+34	LT 19'					444.1		427.7		NB SPLIT PVMT. MARKING AROUND MED. AT RAB
MM	187+53	RT 58'	FR 160	23+85	LT 15'							317.0		SB EOL AROUND RAB TO FR 160
MM	187+67	RT 44'	MM	188+49	RT 63'							160.0		SB SPLIT PVMT. MARKING B/W TWO LANES
MM	187+93	LT 10'	NEW MM	2+37	LT 20'				271.3		279.1			NB MED. AROUND RAB
MM	188+54	RT 42'	MM	188+56	LT 24'							94.0		NB SOLID PVMT. MARKING IN FRONT OF NORTH MED. WITH SOLID WHITE GUIDERS
MM	188+55	RT 79'	MM	188+54	RT 42'								37.5	SB INTERM. PVMT. MARKING ON ENTRANCE TO RAB
FR 160	25+75	LT 3'	FR 160	24+16	LT 4'							407.3		WB SOLID PVMT. MARKING IN FRONT OF WEST MED. WITH SOLID WHITE GUIDERS TO DSY
FR 160	25+52	RT 69'	MM	189+82	RT 107'								39.0	WB INTERM. PVMT. MARKING ON ENTRANCE TO RAB
FR 160	23+85	LT 5'	FR 160	24+16	LT 5'					62.4				WB DSY TO PROJECT LIMITS
FR 160	24+72	RT 57'	FR 160	25+75	LT 1'				191.4		64.9			WB MED. ALONG FR 160
FR 160	23+85	RT 7'	MM	194+03	RT 13'							664.0		WB EOL FROM PROJECT LIMITS ALONG FR 160 TO PROJECT LIMITS ALONG EX. MM
MM	190+45	RT 43'	MM	194+03	CL					689.3		101.6		SB SOLID PVMT. MARKING IN FRONT OF SOUTH MED. WITH YELLOW GUIDERS TO DSY
MM	190+46	LT 18'	MM	190+31	LT 48'								34.1	SB INTERM. PVMT. MARKING ON ENTRANCE TO RAB
MM	190+59	RT 12'	MM	193+11	LT 4'				508.4		41.6			SB MED. TO THE PROJECT LIMITS ALONG SB EX. MM
MM	191+28	LT 12'	NEW MM	2+00	RT 37'							266.2		SB EOL AROUND RAB TO EB NEW MM
MM	188+99	RT 60'	MM	189+83	LT 53'					473.0				SOLID YELLOW PVMT. MARKING AROUND THE TRUCH APRON
MM	188+72	RT 43'	MM	189+07	RT 85'								54.9	INTERM. PVMT. MARKING B/W NORTH AND WEST LEGS IN RAB
MM	189+07	RT 85'	MM	189+52	RT 96'							46.5		SOLID PVMT. MARKING IN FRONT OF WEST LEG IN RAB
MM	189+52	RT 96'	MM	189+98	RT 81'								49.2	INTERM. PVMT. MARKING B/W WEST AND SOUTH LEG IN RAB
MM	189+98	RT 80'	MM	190+30	LT 14'							107.1		SOLID PVMT. MARKING IN FRONT OF SOUTH LEG IN RAB
MM	190+30	LT 14'	MM	190+03	LT 62'								54.8	INTERM. PVMT. MARKING B/W SOUTH AND EAST LEG IN RAB
NEW MM	0+74	LT 62'	NEW MM	0+90	LT 25'								37.4	EB INTERM. PVMT. MARKING ON ENTRANCE TO RAB
NEW MM	0+83	LT 25'	NEW MM	0+90	RT 37'							91.3		EB SOLID PVMT. MARKING IN FRONT OF EAST MED. WITH SOLID YELLOW GUIDERS
MM	190+03	LT 62'	NEW MM	2+79	RT 23'							208.0		EB SOLID CENTER PVMT. MARKING
NEW MM	0+98	RT 6'	NEW MM	25+72	RT 4'				4958.6		51.4			EB MED. ALONG NEW MM
NEW MM	3+34		NEW MM	8+29								501.5		EB SOLID WHITE CENTER PVMT. MARKING
NEW MM	8+29		NEW MM	13+31									501.9	EB DOTTED WHITE 8" PVMT. MARKING
NEW MM	2+76	RT 22'	NEW MM	38+61	RT 19'								889.3	WB INTERM. CENTER PVMT. MARKING
NEW MM	13+31	LT 19'	NEW MM	45+99	LT 19'								820.1	EB INTERM. CENTER PVMT. MARKING
NEW MM	7+98	LT 28'	NEW MM	13+31	LT 28'							533.0		OUTER SOLID WHITE LINE ON BRIDGE
NEW MM	7+98	RT 28'	NEW MM	13+31	RT 28'							533.0		OUTER SOLID WHITE LINE ON BRIDGE
NEW MM	0+23	RT 8'	NEW MM	25+72	RT 7'							170.0	62.3	EB LT TURN LANE PVMT. MARKING
NEW MM	27+00	RT 4'	NEW MM	32+26	LT 4'				1055.0					EB MED. ALONG NEW MM
NEW MM	27+00	LT 7'	NEW MM	30+13	LT 7'							213.0	97.9	WB LT TURN LANE PVMT. MARKING
NEW MM	29+13	RT 7'	NEW MM	32+26	RT 7'							213.0	99.7	EB LT TURN LANE PVMT. MARKING
NEW MM	33+59	RT 7'	NEW MM	39+30	LT 2'				1147.0					EB MED. ALONG NEW MM
NEW MM	33+59	LT 7'	NEW MM	36+84	LT 7'							225.0	96.5	WB LT TURN LANE PVMT. MARKING
NEW MM	40+36	RT 7'	NEW MM	46+04	LT 3'				1144.0					EB MED. ALONG NEW MM
NEW MM	35+84	RT 7'	NEW MM	39+30	RT 7'							244.9	100.5	EB LT TURN LANE PVMT. MARKING
NEW MM	38+61	RT 19'	NEW MM	42+79	RT 14'								430.0	EB INTERM. CENTER PVMT. MARKING
NEW MM	40+36	LT 7'	NEW MM	41+76	LT 7'							138.3	54.6	WB LT TURN LANE PVMT. MARKING
NEW MM	42+76	RT 13'	NEW MM	46+10	RT 13'							332.8		EB LT TURN LANE PVMT. MARKING TO 60
NEW MM	42+76	RT 25'	NEW MM	46+32	RT 25'							358.0		EB THROUGH LANE PVMT. MARKING TO FR 103
NEW MM	43+88	RT 37'	NEW MM	46+95	RT 37'							545.0		EB SPLIT RT TURN LANE
NEW MM	43+37		NEW MM	43+88									25.8	EB INTERM. PVMT. MARKING
NEW MM	45+95	RT 49'	NEW MM	46+95	RT 49'		156.0							SOLID PVMT. MARKING AROUND SOUTH WEST ISLAND
NEW MM	46+20	RT 55'	NEW MM	46+79	RT 55'						142.1			MED. PAINT ON SOUTH WEST ISLAND
US 60	240+41	LT 24'	US 60	239+57	LT 24'		201.0							SOLID PVMT. MARKING AROUND NORTH WEST ISLAND
US 60	240+16	LT 30'	US 60	239+60	LT 30'						129.4			MED. PAINT ON NORTH WEST ISLAND
US 60	240+41	LT 24'	US 60	245+83	LT 12'		542.2							SB RT TURN LANE PVMT. MARKING TO BEGINNING OF PVMT. MARKING AROUND ISLAND
US 60	240+08	LT 12'	US 60	245+83	LT 12'		575.0							SB SOLID THROUGH LANES LT PVMT. MARKING TO STOP BAR
US 60	240+08	RT 12'	US 60	244+03	RT 12'		395.0							SB SOLID THROUGH LANES RT PVMT. MARKING TO STOP BAR
US 60	240+08	CL	US 60	248+19	CL			202.8						SB INTERM. PVMT. MARKING TO STOP BAR
US 60	240+26	RT 24'	US 60	244+03	RT 24'		375.0							SB SOLID LT TURN LANE PVMT. MARKING TO STOP BAR
FOR MED. MARKING SPECIFICS LOOK AT PVMT. MARKING SHEETS					TOTALS	0.0	2244.2	202.8	11251.3	1762.4	761.9	8886.7	4896.7	
					USE	0	2,245	203	13,014		9,649		4,897	

SUMMARY OF QUANTITIES
SHEET 6 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:29:52 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/14/2025

ROUTE	STATE
MM	MO

DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

WATERBORNE PVMT. MARKING PAINT

ROUTE	STATION	LOCATION	ROUTE	STATION	LOCATION	TYPE L BEADS 6" SOLID YELLOW LF	TYPE L BEADS 6" SOLID WHITE LF	TYPE L BEADS 6" INTERM. WHITE LF	TYPE P BEADS 4" SOLID YELLOW MED. LF	TYPE P BEADS 4" SOLID YELLOW PVMT. LF	TYPE P BEADS 4" SOLID WHITE MED. LF	TYPE P BEADS 4" SOLID WHITE PVMT. LF	TYPE P BEADS 4" INTERM. WHITE LF	REMARKS
US 60	240+28	RT 36'	US 60	248+19	RT 49'	1580.0								SB SOLID YELLOW PVMT. MARKING AROUND MED.
US 60	240+30	RT 40'	US 60	244+07	RT 43'				763.0					SB MED. TO THE PROJECT LIMITS ALONG US 60
US 60	240+54	RT 61'	US 60	248+19	RT 61'			764.5						NB INTERM. CENTER PVMT. MARKING AFTER INTERSECTION
US 60	240+29	RT 81'	US 60	248+19	RT 73'		790.0							NB EOL ALONG 60 TO PROJECT LIMITS
NEW MM	46+10	RT 13'	US 60	240+54	RT 61'			60.3						CAT TRACK PVMT. MARKING B/W EB TO NB
FR 103	0+43	LT 31'	FR 103	1+42	LT 31'							256		SOLID PVMT. MARKING AROUND NORTH EAST ISLANDS
FR 103	0+58	LT 35'	FR 103	1+17	LT 35'						153.0			MED. PAINT ON NORTH EAST ISLAND
FR 103	1+42	LT 31'	FR 103	4+08	LT 27'							273.0		WB RT TURN LANE PVMT. MARKING TO BEGINNING OF PVMT. MARKING AROUND ISLAND
FR 103	1+06	LT 31'	FR 103	4+08	LT 17'							307.0		WB THROUGH LANE CENTER SOLID PVMT. MARKING TO STOP BAR
FR 103	1+06	LT 7'	FR 103	6+10	LT 5'							507.0		WB LT TURN LANE PVMT. MARKING TO THROUGH STOP BAR
US 60	237+63	LT 61'	FR 103	1+28	RT 5'								60.3	CAT TRACK PVMT. MARKING B/W WB TO SB
FR 103	1+28	RT 5'	FR 103	3+63	RT 7'							232.4		WB LT TURN LANE CENTER PVMT. MARKING
FR 103	1+35	RT 21'	FR 103	8+50	CL					1417.0				SOLID YELLOW PVMT. MARKING AROUND WB MED.
FR 103	1+35	RT 21'	FR 103	4+55	RT 21'				634.0					WB MED. ALONG FR 103
FR 103	1+30		FR 103	7+75								629.0		SW EDGE LINE
FR 103	240+29		FR 103	7+50								749.0		SW EDGE LINE
US 60	237+86	RT 24'	US 60	238+85	RT 24'		256.0							SOLID PVMT. MARKING AROUND SOUTH EAST ISLAND
US 60	238+11	RT 28'	US 60	238+66	RT 28'						145.0			MED. PAINT ON SOUTH EAST ISLAND
NEW MM	46+04	LT 19'	US 60	238+00	LT 23'								60.0	CAT TRACK PVMT. MARKING B/W NB TO EB
US 60	238+00	LT 19'	NEW MM	45+99	LT 23'								60.0	CAT TRACK PVMT. MARKING B/W NB TO WB
US 60	237+86	RT 23'	US 60	231+78	RT 12'		607.8							NB RT TURN LANE PVMT. MARKING TO BEGINNING OF PVMT. MARKING AROUND ISLAND
US 60	238+22	RT 12'	US 60	231+78	RT 12'		644.0							NB THROUGH LANE RT SOLID PVMT. MARKING
US 60	238+22	CL	US 60	228+50	CL			242.5						NB INTERM. CENTER PVMT. MARKING
US 60	238+22	LT 12'	US 60	233+58	LT 12'		464.0							NB LT TURN LANE PVMT. MARKING TO THROUGH STOP BAR
US 60	237+98	LT 23'	US 60	233+58	LT 24'		440.0							NB LT TURN LANE CENTER PVMT. MARKING TO STOP BAR
US 60	237+63	LT 61'	US 60	228+50	LT 61'			230.8						SB INTERM. CENTER PVMT. MARKING AFTER INTERSECTION
NEW MM	45+34	RT 88'	US 60	232+89	LT 95'		693.0							SB EOL ALONG 60 TO PROJECT LIMITS
US 60	237+98	LT 36'	US 60	228+50	LT 12'	1892.9								SOLID YELLOW PVMT. MARKING AROUND NB MED.
US 60	237+98	LT 45'	US 60	233+53	LT 43'				888.0					NB MED. ALONG US 60
US 60	236+06	LT 73'	US 60	232+89	LT 83'		317.0							SB RT TURN LANE PVMT. MARKING AFTER INTERSECTION
US 60	236+06		US 60	228+50			756.0							SW LANE LINE
US 60	228+50		FR 103	1+30			1059.0							EOL PVMT. MARKING FROM US60 TO FR 103
US 60	229+98		US 60	247+24									235.2	LT AND RT TURN LANE INTERM. PVMT. MARKING EXTENSION NB US60
US 60	244+03		US 60	247+29									174.5	LT AND RT TURN LANE INTERM. PVMT. MARKING EXTENSION SB US60
NEW MM	46+13	LT 90'	US 60	248+19	LT 90'		942.0							EDGE LINE ALONG US 60
FR 168	1+05		FR 168	5+50						890.0		890.0		DSY CENTERLINE AND SW EDGELINES
FOR MED. MARKING SPECIFICS LOOK AT PVMT. MARKING SHEETS					SUBTOTALS 2	3,473	6,969	1,299	4,592		4,141		590	
					SUBTOTALS 1	0	2,245	203	13,014		9,649		4,897	
					TOTALS	3,473	10,716		17,606		19,277			

REINFORCED CONCRETE BOX CULVERT

STATION	ROUTE	SKEW	FILL HEIGHT FT	SIZE	LENGTH FT	CLASS B-1 CONCRETE CY	REINFORCING STEEL LB	CLASS 4 EXCAVATION CY	REMARKS
191+42.35	EX. MM	0	1	DOUBLE 4' X 2'	60	49.9	6610	83	CULVERT #2
					TOTALS	49.9	6610	83	

SUMMARY OF QUANTITIES

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/13/2025 12:30:21 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

THERMOPLASTIC PVMT. MARKING

ROUTE	STATION	LOCATION	ROUTE	STATION	LOCATION	PREFORMED THERMOPLASTIC MARKING 24" YELLOW LF	24" WHITE LF	RT/LT ARROW EA	STRAIGHT ARROW EA	COMB. ARROW EA	WORD ONLY EA	YIELD TRIANGLES EA	REMARKS
MM	178+50	RT 53'	MM	178+50	52'		72.0						PED. CROSSINGS ACROSS SOUTH SIDE OF MM
MM	178+62	RT 53'	MM	184+30	52'		198.4						SB HASH B/W EOL AND EOP FROM E HALIE ST. TO MERGE
MM	178+56	LT 10'	MM	178+56	RT 2'		12.0						NB THROUGH LANE STOP BAR AT E HALIE ST.
MM	178+69		MM	178+92		15.0							NB/SB DSY WITH HASH B/W NB & SB
MM	178+69	RT 2'	MM	178+69	RT 14'		12.0						NB LT TURN LANE STOP BAR AT E HALIE ST.
MM	179+46	RT 9'	MM	179+58	RT 9'			1			1		NB LT TURN ARROW AND WORD ONLY AT E HALIE ST.
MM	180+66	RT 9'	MM	180+80	RT 9'			1			1		NB LT TURN ARROW AND WORD ONLY AT E HALIE ST.
MM	182+67	RT 9'	MM	182+80	RT 9'			1			1		NB LT TURN ARROW AND WORD ONLY AT E HALIE ST.
MM	185+94	RT 46'	MM	185+94	RT 63'			2		1			SB LT TURN ARROW, RT TURN ARROW AND, STRAIGHT ARROW BEFORE RAB
MM	187+45	RT 53'	MM	187+45	RT 35'			2		1			SB LT TURN ARROW, RT TURN ARROW AND, STRAIGHT ARROW BEFORE RAB
MM	187+53	RT 58'	FR 160	25+43	LT 20'		38.3						SB HASH B/W EOL AND EOP AROUND RAB TO FR 160
MM	187+67	RT 44'	MM	188+26	RT 48'		26.7						SB CHEVRONS B/W TWO SB LANES
MM	188+40	RT 74'	MM	188+45	RT 39'							8	SB YIELD TRIANGLES BEFORE RAB
MM	189+32	RT 129'	MM	189+39	RT 119'							4	WB YIELD TRANGLES BEFORE RAB
FR 160	24+41	RT 11'	MM	189+69	RT 114'		23.7						WB HASH B/W EOL AND EOP AROUND RAB TO SB EX. MM
MM	190+66	LT 20'	MM	190+59	LT 9'							4	SB YIELD TRIANGLES BEFORE RAB
MM	191+28	LT 12'	NEW MM	2+00	RT 37'		34.9						SB HASH B/W EOL AND EOP AROUND RAB TO EB NEW MM
MM	190+23	RT 1'	MM	190+42	RT 1'				1	1			STRAIGHT AND RT/LT ARROWS IN FRONT OF SOUTH
MM	189+44	LT 74'	MM	189+44	LT 74'					1			STRAIGHT AND RT/LT ARROWS IN FRONT OF EAST
MM	188+61	RT 18'	MM	188+61	RT 18'					1			STRAIGHT AND RT/LT ARROWS IN FRONT OF NORTH
MM	189+23	RT 80'	MM	189+23	RT 103'			1		1			STRAIGHT AND RT/LT ARROWS IN FRONT OF WEST
NEW MM	0+97	LT 33'	NEW MM	1+08	LT 21'							5	EB YIELD TRANGLES BEFORE RAB
NEW MM	3+39	LT 26'	NEW MM	3+54	LT 12'			1		1	1		EB LT/RT AND STRAIGHT ARROWS AND WORD ONLY
NEW MM	4+94	LT 23'	NEW MM	5+09	LT 10'			1		1	1		EB LT/RT AND STRAIGHT ARROWS AND WORD ONLY
NEW MM	24+91	LT 2'	NEW MM	24+91	LT 2'			2					EB LT TURN ARROW
NEW MM	27+79	RT 2'	NEW MM	27+79	RT 2'			2					WB LT TURN ARROW
NEW MM	31+46	LT 2'	NEW MM	31+46	LT 2'			2					EB LT TURN ARROW
NEW MM	34+38	RT 2'	NEW MM	34+38	RT 2'			2					WB LT TURN ARROW
NEW MM	37+16	LT 2'	NEW MM	38+61	LT 2'			2					EB LT TURN ARROW
NEW MM	41+07	LT 2'	NEW MM	41+07	LT 2'			2					WB LT TURN ARROW
NEW MM	39+53		NEW MM	39+94			47.8						STOP BAR AND PED. CROSSINGS AT ENTRANCE WEST OF 60
NEW MM	42+90		NEW MM	43+33			50.1						STOP BAR AND PED. CROSSINGS AT ENTRANCE WEST OF 60
NEW MM	43+88	RT 37'	NEW MM	46+41	RT 43'		124.4						EB CHEVORNS MARKS B/W SPLIT RT TURN LANE
NEW MM	42+97	RT 3'	NEW MM	45+47	RT 62'			8			6		EB LT/RT AND STRAIGHT ARROWS TO 60
NEW MM	46+10	RT 1'	NEW MM	46+10	RT 25'		24.0						EB LT TURN LANE STOP BAR AT 60
NEW MM	46+32	RT 25'	NEW MM	46+32	RT 37'		12.0						EB THROUGH LANE STOP BAR AT 60
NEW MM	46+27	RT 81'	NEW MM	46+72	RT 65'							8	EB YIELD TRANGLES BEFORE 60
NEW MM	46+29	RT 82'	NEW MM	46+34	RT 70'		36.0						EB PED. CROSSINGS B/W SIDE WALK AND SOUTH WEST ISLAND
NEW MM	46+64	RT 49'	NEW MM	46+64	LT 34'		102.0						EB PED. CROSSINGS B/W SOUTH WEST ISLAND AND NORTH WEST ISLAND
NEW MM	46+20		US 60	237+63			57.1						24" SOLID WHITE PVMT. MARKING B/W EOL & EOP ON THE SE QUADRANT
US 60	237+72		FR 103	1+63			39.8						24" SOLID WHITE PVMT. MARKING B/W EOL & EOP ON THE SW QUADRANT
NEW MM	46+22		US 60	240+72			33.5						24" SOLID WHITE PVMT. MARKING B/W EOL & EOP ON THE NE QUADRANT
US 60	240+84		FR 103	1+52			60.9						24" SOLID WHITE PVMT. MARKING B/W EOL & EOP ON THE NW QUADRANT
NEW MM	46+32	LT 62'	NEW MM	46+52	LT 54'		70.0						SB 10' PED. CROSSINGS B/W SIDE WALK AND NORTH WEST ISLAND
NEW MM	46+39	LT 72'	NEW MM	46+56	LT 63'							4	SB YIELD TRIANGLES BEFORE 60
US 60	240+11	LT 18'	US 60	245+83	LT 12'		314.2						SB CHEVRONS B/W THROUGH LANES AND RT TURN LANE
US 60	240+48	RT 18'	US 60	244+03	RT 18'		268.6						SB CHEVRONS B/W THROUGH LANES AND LT TURN LANE
US 60	240+87	LT 35'	US 60	243+75	RT 38'			6					SB LT/RT TURN LANE ARROWS
NEW MM	240+08	LT 12'	US 60	240+08	RT 12'		24.0						SB THROUGH LANE STOP BARS
NEW MM	240+26	RT 24'	US 60	240+26	RT 36'		12.0						SB LT TURN LANE STOP BARS
FR 103	0+64	LT 82'	FR 103	0+68	LT 63'							4	WB YIELD TRIANGLES BEFORE 60
FR 103	1+06	LT 31'	FR 103	1+06	LT 7'		24.0						WB THROUGH LANE STOP BARS
FR 103	1+28	LT 7'	FR 103	1+28	RT 17'		24.0						WB LT TURN LANE STOP BAR
FR 103	1+89	RT 14'	FR 103	3+55	LT 39'			6					WB LT/RT TURN LANE ARROWS
US 60	238+57	RT 76'	US 60	238+62	RT 58'							4	NB YIELD TRIANGLES BEFORE 60
US 60	238+22	RT 12'	US 60	238+22	LT 12'		24.0						NB THROUGH LANE STOP BAR
US 60	237+98	LT 36'	US 60	237+98	LT 12'		24.0						NB LT TURN LANE STOP BAR
US 60	238+14	RT 18'	US 60	232+13	RT 13'		329.9						NB CHEVRONS B/W RT TURN LANE AND THROUGH LANES
US 60	237+16	RT 33'	US 60	234+32	LT 38'			9					NB LT/RT TURN LANES ARROWS
US 60	235+58	LT 76'	US 60	232+89	LT 83'		159.6						SB CHEVRONS B/W RT TURN LANE AND THROUGH LANES AFTER INTESECTION
US 60	235+05	LT 90'	US 60	233+15	LT 90'			2					SB RT TURN LANE ARROWS AFTER INTERSECTION
NEW MM	46+13	LT 90'	US 60	248+19	LT 90'			2					EDGE LINE ALONG US 60
FOR MED. MARKING SPECIFICS LOOK AT PVMT. MARKING SHEETS					TOTALS	15.0	2207.9	55.0	1.0	8.0	11.0	41.0	
					USE	15	2,208	55	1	8	11	41	

SUMMARY OF QUANTITIES
SHEET 8 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:30:46 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO

DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

DRAINAGE PIPES & FLARED END SECTIONS

			GROUP A							HORIZ. ELLIP.	GROUP B							CL IV RCP	FLARED END SECTION, GRP B						F.E.S., GRP A	PRECAST CONC. F.E.S.		CLASS 3	
			15"	18"	21"	24"	30"	36"	42"	19"X30"	15"	18"	21"	24"	27"	30"	42"	30"	15"	18"	21"	24"	27"	30"	30"	36"	30"	ROCK LINING	EXCAVATION	
STATION	STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	CY	CY	REMARKS
180+00.00	181+00.00	EX. MM, RT										98.0																	15	DI TO DI
181+00.00	181+71.63	EX. MM, RT										70.0																	6	DI TO DI
181+71.63	181+81.88	EX. MM, RT										10.0																	1	DI TO TEE W/ X-ROAD PIPE
181+85.79	182+40.00	EX. MM, RT										54.0																	7	DI TO TEE W/ X-ROAD PIPE
181+79.59		EX. MM			84																								169	X-ROAD, CULVERT #1
181+83.49		EX. MM			84																								169	X-ROAD, CULVERT #1
182+24.74		ENTRANCE 1									45								2									2	9	ENTRANCE PIPE
183+65.04		ENTRANCE 2									13								2									2	4	ENTRANCE PIPE
186+25.72		ENTRANCE 3									11								2									2	3	ENTRANCE PIPE
2+49.61	2+70.54	FR160, LT										20																	24	DI TO TEE W/ X-ROAD PIPE
2+70.54	2+97.94	FR160, LT									40																		25	DI TO DI
2+58.25		FR160			76																1								46	X-ROAD
2+73.72	3+07.80	FR160, RT											26																16	DI TO DI
2+72.16	2+73.72	FR160, RT														3								1				4	2	DI TO FES
0+84.84	1+50.39	PR. MM, LT										70																	33	DI TO DI
1+50.39	1+50.45	PR. MM, LT								30																			16	DI TO DI, X-ROAD
1+50.45	1+50.46	PR. MM								69																			35	DI TO DI, X-ROAD
1+50.56	1+52.85	PR. MM, RT													7								1					3	3	DI TO FES
1+17.17	1+50.45	PR. MM, LT		32																									14	DI TO DI
1+50.56	2+15.01	PR. MM, LT										58																	23	DI TO DI
1+50.40	1+55.00	PR. MM, LT												9								1							4	DI TO FES
1+25.90	1+50.56	PR. MM, RT											19																16	DI TO DI
190+79.58	190+83.71	EX. MM, RT										9								1									11	DI TO FES
190+79.44	190+84.80	EX. MM, LT										12								1								2	9	DI TO FES
192+17.60	192+72.35	ENTRANCE 5									43								2									2	14	ENTRANCE PIPE
7+50.00		PR. MM, RT	30																											DI TO DI, X-ROAD
7+50.00	6+30.00	PR. MM, RT											112																0	DI TO DI
6+30.00	5+20.00	PR. MM, RT												102															0	DI TO DI
5+20.00	4+25.00	PR. MM, RT													88														0	DI TO DI
4+25.00	3+00.00	PR. MM, RT														116													0	DI TO DI
3+00.00		PR. MM, RT														21								1				4	14	DI TO FES
6+30.00		PR. MM, RT	30																											DI TO DI, X-ROAD
5+20.00		PR. MM, RT	30																											DI TO DI, X-ROAD
4+25.00		PR. MM, RT	30																											DI TO DI, X-ROAD
3+00.00		PR. MM, RT		40																									11	DI TO DI, X-ROAD
13+64.76		PR. MM	65																										0	DI TO DI, X-ROAD
13+64.76	15+20.00	PR. MM, RT										149																	0	DI TO DI
15+20.00	16+65.00	PR. MM, RT												138															1	DI TO MH
15+20.00		PR. MM	36																										0	DI TO DI, X-ROAD
16+65.00	17+25.00	PR. MM, RT											67																1	DI TO MH
17+25.00		PR. MM	36																										0	DI TO DI, X-ROAD
16+20.45		PR. MM					48											255						1		1	4	60	X-ROAD , CULVERT #3
18+25.00	19+25.00	PR. MM, RT										89																	0	DI TO DI
19+25.00	20+60.00	PR. MM, RT										123																	5	DI TO DI
20+60.00	21+95.00	PR. MM, RT												122															74	DI TO DI
21+95.00	23+30.00	PR. MM, RT												120															32	DI TO DI
23+30.00	24+65.00	PR. MM, RT												120															36	DI TO DI
24+65.00	25+00.49	PR. MM, RT												30															7	DI TO TEE W/ X-ROAD PIPE
19+25.00		PR. MM		36																									0	DI TO DI, X-ROAD
20+60.00		PR. MM		36																									3	DI TO DI, X-ROAD
21+95.00		PR. MM		36																									6	DI TO DI, X-ROAD
23+30.00		PR. MM			36																								2	DI TO DI, X-ROAD
24+98.39		PR. MM						130																	2			9	21	X-ROAD, CULVERT #4
		SUBTOTALS 1	257	180	280		48	130		99	152	762	224	641	95	140		255	8	2	1	1	1	2	1	2	1	34	947	

CONTRACTOR FURNISHED SURVEYING AND STAKING
1 LUMP SUM

SUMMARY OF QUANTITIES
SHEET 9 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:31:09 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-026645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

DROP INLETS

						PRECAST DROP INLET			CURVED VANE GRATE & FRAME		PRECAST CONC. MANHOLE FRAME & COVER			CLASS 3 EXCAVATION	
					DEPTH	2 X 2	2 X 4	3' X 2.5'	2 X 2	2 X 4	MANHOLE 72"	TYPE 3	TYPE 4		REMARKS
STATION	ROUTE	OFFSET	STRUCTURE ID	TYPE	"D"	LF	LF	LF	EA	EA	LF	EA	EA	CY	
180+00.00	EX. MM	53.8' RT	1-1D	D	3.0	3			1					1	1 - 18" OPENING
181+00.00	EX. MM	53.6' RT	1-2D	D	3.0	3			1					1	2 - 18" OPENINGS
181+71.63	EX. MM	53.4' RT	1-3D	D	3.2	3			1					1	2 - 18" OPENINGS
182+40.00	EX. MM	53.4' RT	2-1D	D	3.0	3			1					1	1 - 18" OPENING
188+32.03	EX. MM	92.2' RT	3-1D	D	2.9		3			1				4	1 -15" OPENING
188+50.30	EX. MM	134.0' RT	3-2T	4-T	3.3			12				2		6	1 - 15" OPENING & 1 - 18" OPENING
189+27.10	EX. MM	157.3' RT	3-3T	4-T	3.9			16				2		9	2 - 21" OPENINGS, 1 - 30" OPENING
189+47.57	EX. MM	133.2' RT	4-1D	D	3.8	4			1					2	1 -21" OPENING
188+43.50	EX. MM	69.5' LT	5-1T	4-T	3.4			12				2		7	1 -18" OPENING
1+50.40	PR. MM	53.9' LT	5-2T	4-T	3.3			12				2		7	1 -18" OPENING, 2 -24" OPENINGS
1+50.46	PR. MM	21.2' LT	5-3T	2-T	4.1			8				1		4	1 -18" OPENING, 2 -24" OPENINGS
1+17.15	PR. MM	30.3' LT	6-1A	A	2.9	3			1					2	1 -18" OPENING
1+50.56	PR. MM	50.0' RT	5-4T	4-T	3.4			12				2		6	1 -18" OPENING, 1 -21" OPENING, 1 -24" OPENING, 1 -27" OPENING
1+25.85	PR. MM	58.9' RT	8-1T	2-T	3.2			6				1		3	1 -21" OPENING
2+15.00	PR. MM	40.9' RT	7-1T	2-T	4.0			8				1		3	1 -18" OPENING
190+79.58	EX. MM	46.9' RT	9-1D	D	3.4	3			1					2	1 -18" OPENING
190+79.44	EX. MM	22.8' LT	10-1D	D	3.4	3			1					1	1 -18" OPENING
3+00.32	PR. MM	38.0' RT	11-6T	3-T	6.4			18				2		6	1 -18" OPENING, 2 -30" OPENINGS
3+00.00	PR. MM	4.5' RT	15-1T	3-T	5.1			15				2		2	1 -18" OPENING
4+25.00	PR. MM	32.5' RT	11-5T	2-T	7.7			16				1		1	1 -15" OPENING, 1 -27" OPENING, 1 -30" OPENING
4+24.94	PR. MM	0.6' RT	14-1T	3-T	5.9			18				2		0	1 -15" OPENING
5+20.00	PR. MM	32.5' RT	11-4T	2-T	7.6			16				1		0	1 -15" OPENING, 1 -24" OPENING, 1 -27" OPENING
5+20.00	PR. MM	0'	13-1T	2-T	5.8			12				1		0	1 -15" OPENING
6+30.00	PR. MM	32.5' RT	11-3T	2-T	7.5			16				1		0	1 -15" OPENING, 1 -21" OPENING, 1 -24" OPENING
6+30.00	PR. MM	0'	12-1T	2-T	5.7			12				1		0	1 -15" OPENING
7+50.00	PR. MM	32.5' RT	11-2T	2-T	6.9			14				1		0	1 -15" OPENING, 1 -21" OPENING
7+50.00	PR. MM	0'	11-1T	2-T	5.1			10				1		0	1 -15" OPENING
13+64.78	PR. MM	33.7' LT	16-1T	T	4.4			4				1		0	1 -15" OPENING
13+64.78	PR. MM	33.7' RT	16-2T	T	11.1			11				1		0	1 -15" OPENING, 1 -18" OPENING
15+20.00	PR. MM	35.5' RT	16-3T	2-T	23.1			46				1		0	1 -15" OPENING, 1 -18" OPENING, 1 -24" OPENING
15+20.00	PR. MM	3.0' LT	17-1T	2-T	19.7			40				1		0	1 -15" OPENING
16+65.00	PR. MM	76.6' RT	16-4MH	MH	11.0						11		1	2	1 -21" OPENING, 1 -24" OPENING, 2 -30" OPENINGS
17+25.00	PR. MM	3.0' LT	18-T	3-T	11.3			33				2		0	1 -15" OPENING
17+25.00	PR. MM	35.5' RT	18-2T	2-T	14.7			30				1		0	1 -15" OPENING, 1 -21" OPENING
18+25.00	PR. MM	35.5' RT	19-1T	3-T	5.4			15				2		0	1 -18" OPENING
19+25.00	PR. MM	35.5' RT	19-2T	3-T	5.6			18				2		0	3 -18" OPENINGS
19+25.00	PR. MM	3.0' LT	20-1T	3-T	4.2			12				2		0	1 -18" OPENING
20+60.00	PR. MM	35.5' RT	19-3T	3-T	4.9			15				2		3	2 -18" OPENINGS, 1 -24" OPENING
20+60.00	PR. MM	3.0' LT	21-1T	3-T	4.2			12				2		0	1 -18" OPENING
21+95.00	PR. MM	35.5' RT	19-4T	4-T	5.2			20				2		5	1 -18" OPENING, 2 -24" OPENINGS
21+95.00	PR. MM	3.0' LT	22-1T	3-T	4.2			12				2		1	1 -18" OPENING
23+30.00	PR. MM	35.5' RT	19-5T	4-T	6.3			24				2		3	2 -24" OPENINGS, 1 -21" OPENING
23+30.00	PR. MM	3.0' LT	23-1T	4-T	5.9			24				2		0	1 -21" OPENING
24+65.00	PR. MM	35.5' RT	19-6T	4-T	8.4			32				2		2	2 -24" OPENINGS
25+65.00	PR. MM	35.5' RT	24-1T	3-T	3.1			9				2		0	1 -15" OPENING
27+00.00	PR. MM	35.5' RT	24-2T	4-T	4.9			20				2		0	1 -15" OPENING, 1 -18" OPENING, 1 -21" OPENING
27+00.00	PR. MM	35.5' LT	25-1T	4-T	3.8			16				2		0	1 -18" OPENING
28+90.00	PR. MM	35.5' RT	24-3T	4-T	4.4			28				2		0	1 -18" OPENING, 1 -21" OPENING, 1 -24" OPENING
28+90.00	PR. MM	35.5' LT	26-1T	4-T	3.4			12				2		1	1 -18" OPENING
30+75.00	PR. MM	35.5' RT	24-4T	4-T	5.3			20				2		2	1 -18" OPENING, 1 -24" OPENING, 1 -27" OPENING
30+75.00	PR. MM	35.5' LT	27-1T	4-T	4.3			16				2		4	1 -18" OPENING
32+20.00	PR. MM	35.5' RT	24-5T	4-T	5.7			24				2		3	1 -24" OPENING, 2 -27" OPENINGS
32+20.00	PR. MM	35.5' LT	28-1T	4-T	4.9			20				2		5	1 -24" OPENING
34+20.00	PR. MM	35.5' RT	24-6T	4-T	6.5			28				2		2	1 -24" OPENING, 2 -27" OPENINGS
34+20.00	PR. MM	35.5' LT	29-1T	4-T	5.8			24				2		5	1 -24" OPENING
36+15.00	PR. MM	35.5' RT	24-7T	4-T	6.3			24				2		2	1 -27" OPENING, 2 -30" OPENINGS
36+15.00	PR. MM	35.5' LT	30-1T	4-T	4.8			20				2		2	1 -30" OPENING
				SUBTOTALS 1		25	3	842	8	1	11	79	1	111	

SUMMARY OF QUANTITIES
SHEET 10 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-29645
PROFESSIONAL ENGINEER
08/15/2025 12:20:24 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-29645

DATE PREPARED
8/12/2025

ROUTE MM | STATE MO
DISTRICT SW | SHEET NO. 3
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

DROP INLETS (CONT.)

						PRECAST DROP INLET			CURVED VANE GRATE & FRAME		PRECAST CONC.	MANHOLE FRAME & COVER		CLASS 3	
					DEPTH	2 X 2	2 X 4	3' X 2.5'	2 X 2	2 X 4	MANHOLE 72"	TYPE 3	TYPE 4	EXCAVATION	REMARKS
STATION	ROUTE	OFFSET	STRUCTURE ID	TYPE	"D"	LF	LF	LF	EA	EA	LF	EA	EA	CY	
37+76.00	PR. MM	32.5' RT	31-1D	D	3.8	4			1					1	1 -18" OPENING
37+76.00	PR. MM	32.5' LT	31-2D	D	4.6	5			1					2	2 -18" OPENINGS
39+25.00	PR. MM	32.5' LT	31-3D	D	6.0	6			1					4	2 -18" OPENINGS
40+95.00	PR. MM	32.5' LT	31-4D	D	7.4	7			1					5	2 -18" OPENINGS
42+70.00	PR. MM	32.5' LT	31-5D	D	6.5	7			1					4	3 -18" OPENINGS
42+70.00	PR. MM	2.3' LT	32-1T	2-T	7.3			14				1		7	1 -18" OPENING
44+45.00	PR. MM	32.5' LT	31-6D	D	6.6	7			1					4	2 -18" OPENINGS
44+45.00	PR. MM	62.5' RT	31-7D	D	8.0	8			1					6	2 -18" OPENINGS
45+97.45	PR. MM	76.2' RT	31-8T	4-T	8.2			32				1		18	1 -18" OPENING, 2 -42" OPENINGS
46+13.93	PR. MM	53.5' LT	33-2T	4-T	5.9			24				1		12	1 -18" OPENING, 2 -42" OPENINGS
46+38.52	PR. MM	79.4' LT	33-1T	4-T	4.8			20				1		9	1 -18" OPENING
				SUBTOTALS 2		44	0	90	7	0		4		72	
				SUBTOTALS 1		25	3	842	8	1	11	79	1	111	
				TOTALS		69	3	932	15	1	11	83	1	183	

DRAINAGE PIPES & FLARED END SECTIONS (CONT.)

			GROUP A							HORIZ. ELLIP.	GROUP B							CL IV RCP	FLARED END SECTION, GRP B						F.E.S., GRP A			PRECAST CONC. F.E.S.		CLASS 3	
			15"	18"	21"	24"	30"	36"	42"	19"X30"	15"	18"	21"	24"	27"	30"	42"	30"	15"	18"	21"	24"	27"	30"	15"	30"	36"	30"	ROCK LINING	EXCAVATION	
STATION	STATION	LOCATION	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	LF	EA	EA	EA	EA	EA	EA	EA	EA	EA	EA	CY	CY	REMARKS
25+65.00	27+00.00	PR. MM, RT									125																			0	DI TO DI
27+00.00	28+90.00	PR. MM, RT											180																	0	DI TO DI
28+90.00	30+75.00	PR. MM, RT												175																2	DI TO DI
30+75.00	32+20.00	PR. MM, RT													135															2	DI TO DI
32+20.00	34+20.00	PR. MM, RT													190															3	DI TO DI
34+20.00	36+15.00	PR. MM, RT													185															2	DI TO DI
36+15.00		PR. MM, RT														23								1					3	2	DI TO FES
27+00.00		PR. MM		68																										0	DI TO DI, X-ROAD
28+90.00		PR. MM		68																										0	DI TO DI, X-ROAD
30+75.00		PR. MM		68																										14	DI TO DI, X-ROAD
32+20.00		PR. MM				68																								14	DI TO DI, X-ROAD
34+20.00		PR. MM				68																								16	DI TO DI, X-ROAD
36+15.00		PR. MM, LT														18								1					3	FES TO DI
36+15.00		PR. MM					68																							10	DI TO DI, X-ROAD
37+76.00		PR. MM		63																										17	DI TO DI, X-ROAD
37+76.00	39+25.00	PR. MM, LT										144																		142	DI TO DI
39+25.00	40+95.00	PR. MM, LT										160																		249	DI TO DI
40+95.00	42+70.00	PR. MM, LT										165																		266	DI TO DI
42+70.00	44+45.00	PR. MM, LT										172																		252	DI TO DI
44+45.00		PR. MM		93																										134	DI TO DI, X-ROAD
44+45.00	45+97.55	PR. MM, RT										147																		277	DI TO DI
45+97.55	46+17.42	PR. MM, RT															40													93	DI TO EX. MANHOLE
42+70.00		PR. MM		28																										34	DI TO DI, X-ROAD
46+13.93	46+38.52	PR. MM, LT										26																		23	DI TO DI
46+13.93	46+14.39	PR. MM, LT															49													74	EX. MANHOLE TO DI
45+97.55	46+13.93	PR. MM							128																					248	DI TO DI, X-ROAD
5+28.14		ENTRANCE 14									87								2										2	27	ENTRANCE PIPE
5+28.14		ENTRANCE 15									73								2										2	23	ENTRANCE PIPE
244+74.44		ENTRANCE 16									71								2										2	22	ENTRANCE PIPE
230+61.84		US 60 EB	9																						1					3	CULVERT #5
		SUBOTALS 2	9	388		136	68		128		356	814	180	175	510	41	89		6					2	1				9	1952	
		SUBTOTALS 1	257	180	280		48	130		99	152	762	224	641	95	140		255	8	2	1	1	1	2		1	2	1	34	947	
		TOTALS	266	568	280	136	116	130	128	99	508	1576	404	816	605	181	89	255	14	2	1	1	1	4	1	1	2	1	43	2899	

SUMMARY OF QUANTITIES
SHEET 11 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:20:55 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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

STA	STA	ROUTE	LOCATION	NO. OF CHECKS	SILT FENCE	ROCK DITCH CHECK	CURB INLET CHECK	SEDIMENT REMOVAL	SEPARATION GEOTEXTILE	TYPE C BERM	REMARKS
				EA	LF	LF	LF	CY	SY	LF	
STAGE 1: PRE CONSTRUCTION											
189+13	190+60	EX MM	RT		197.0			1.97			
190+70	192+12	EX MM	RT		155.0			1.55			
0+73	10+79	NEW MM	RT		969.0			9.69			
11+99	39+43	NEW MM	RT		2650.0			26.5			
179+00		EX MM	RT	1		10		1	5		
180+50		EX MM	RT	1		10		1	5		
181+85		EX MM	RT	4		40		4	20		AROUND MANHOLE
182+30		EX MM	RT	1		10		1	5		
183+79		EX MM	RT	1		10		1	5		
185+04	188+04	EX MM	RT	4		40		4	20		100' SPACING
189+12		EX MM	RT	1		10		1	5		
190+41		EX MM	RT	1		10		1	5		
191+19		EX MM	RT	1		10		1	5		
192+18		EX MM	RT	1		10		1	5		
194+22		EX MM	RT	1		10		1	5		
195+35		EX MM	RT	1		10		1	5		
196+95		EX MM	RT	1		10		1	5		
197+95		EX MM	RT	1		10		1	5		
199+44		EX MM	RT	1		10		1	5		
200+12	204+62	EX MM	RT	4		40		4	20		150' SPACING
206+02		EX MM	RT	1		10		1	5		
207+41		EX MM	RT	1		10		1	5		
208+91		EX MM	RT	1		10		1	5		
212+11	215+16	EX MM	RT	3		30		3	15		
178+30		EX MM	LT	1		10		1	5		
178+50		EX MM	LT	1		10		1	5		
180+50		EX MM	LT	1		10		1	5		
183+20		EX MM	LT	1		10		1	5		
184+56		EX MM	LT	1		10		1	5		
185+55		EX MM	LT	1		10		1	5		
187+12		EX MM	LT	1		10		1	5		
187+86		EX MM	LT	1		10		1	5		
189+95		EX MM	LT	1		10		1	5		
190+41		EX MM	LT	1		10		1	5		
191+20		EX MM	LT	1		10		1	5		
192+19		EX MM	LT	1		10		1	5		
194+20		EX MM	LT	1		10		1	5		
196+44		EX MM	LT	1		10		1	5		
197+95		EX MM	LT	1		10		1	5		
199+45		EX MM	LT	1		10		1	5		
201+61		EX MM	LT	1		10		1	5		
203+11		EX MM	LT	1		10		1	5		
204+81		EX MM	LT	1		10		1	5		
206+00		EX MM	LT	1		10		1	5		
207+40		EX MM	LT	1		10		1	5		
208+90		EX MM	LT	1		10		1	5		
210+42		EX MM	LT	1		10		1	5		
212+11		EX MM	LT	1		10		1	5		
25+00		FR 160	LT	1		10		1	5		
			STAGE 1 SUBTOTAL 1		3971.0	550.0	0.0	94.7	275.0	0.0	

SUMMARY OF QUANTITIES
SHEET 12 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:21:24 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

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											
STA	STA	ROUTE	LOCATION	NO. OF CHECKS	SILT FENCE	ROCK DITCH CHECK	CURB INLET CHECK	SEDIMENT REMOVAL	SEPARATION GEOTEXTILE	TYPE C BERM	REMARKS
				EA	LF	LF	LF	CY	SY	LF	
STAGE 1: PRE CONSTRUCTION											
45+61		NEW MM	LT	1			1	0.1	5		
45+61		NEW MM	RT	1			1	0.1	5		
227+75	238+25	60	LT	15		150		15	75		75' SPACING
227+75	238+25	60	LT/RT	15		150		15	75		75' SPACING
227+75	238+25	60	RT	15		150		15	75		75' SPACING
230+34		60	LT/RT	1		10		1	5		AT EXISTING MEDIAN INLET
244+49		60	LT	1		10		1	5		
247+00		60	LT	1		10		1	5		
249+00		60	LT	1		10		1	5		
251+50		60	LT	1		10		1	5		
244+50		60	LT/RT	1		10		1	5		
247+50		60	LT/RT	1		10		1	5		
249+00		60	LT/RT	1		10		1	5		
252+50		60	LT/RT	1		10		1	5		
243+00		60	RT	1		10		1	5		
244+00		60	RT	1		10		1	5		
247+50		60	RT	1		10		1	5		
249+00		60	RT	1		10		1	5		
251+50		60	RT	1		10		1	5		
1+95		FR 103	LT	1		10		1	5		
3+09		FR 103	LT	1		10		1	5		
3+23		FR 103	LT	1		10		1	5		
4+70		FR 103	LT	1		10		1	5		
4+79		FR 103	LT	1		10		1	5		
7+65	10+65	FR 103	RT	3		30		3	15		150' SPACING
7+66	12+05	FR 103	LT	4		40		4	20		150' SPACING
STAGE 1 SUBTOTAL 2				0.0		710.0	2.0	71.2	365.0	0.0	

MULCHING
8.0 AC

SEEDING - COOL SEASON GRASSES
9.0 AC

TEMPORARY SEEDING
3.0 AC

SUMMARY OF QUANTITIES
SHEET 13 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:21:30 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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											
STA	STA	ROUTE	LOCATION	NO. OF CHECKS	SILT FENCE	ROCK DITCH CHECK	CURB INLET CHECK	SEDIMENT REMOVAL	SEPARATION GEOTEXTILE	TYPE C BERM	REMARKS
				EA	LF	LF	LF	CY	SY	LF	
STAGE 2: POST GRADING											
178+99		EX MM	RT	1				0			
180+50		EX MM	RT	1				0			
182+30		EX MM	RT	1				0			
183+80		EX MM	RT	1				0			
185+04		EX MM	RT	1		10		1	5		
186+04		EX MM	RT	1		10		1	5		
187+06		EX MM	RT	1		10		1	5		
188+03		EX MM	RT	1		10		1	5		
178+41		EX MM	LT	1		10		1	5		
178+51		EX MM	LT	1		10		1	5		
180+50		EX MM	LT	1		10		1	5		
183+21		EX MM	LT	1		10		1	5		
184+55		EX MM	LT	1		10		1	5		
185+55		EX MM	LT	1		10		1	5		
187+10	187+84	EX MM	LT	3		30		3	15		37.5' SPACING
191+01	192+16	EX MM	RT	3		30		3	15		60' SPACING
191+55		EX MM	LT	1		10		1	5		
193+05		EX MM	LT	1		10		1	5		
24+24	25+02	FR 160	RT	4		40		4	20		30' SPACING
1+08		NEW MM	LT	1		10		1	5		
1+88	2+50	NEW MM	LT	3		30		3	15		30' SPACING
3+45	7+18	NEW MM	LT	5		50		5	25		100' SPACING
1+14		NEW MM	RT	1		10		1	5		
2+00	9+98	NEW MM	RT	9		90		9	45		100' SPACING
7+98	8+89	NEW MM	LT/RT							265	
12+07	13+28	NEW MM	LT/RT							445	
21+50		NEW MM	LT	1		10		1	5		
24+50		NEW MM	LT	1		10		1	5		
27+50	36+50	NEW MM	LT	4		40		4	20		300' SPACING
39+50	44+30	NEW MM	LT	9		90		9	45		60' SPACING
39+48	46+40	NEW MM	RT		742.0						
236+75		60	LT	1		10		1	5		
237+50		60	LT	1		10		1	5		
237+87		60	LT	1		10		1	5		
240+78		60	LT	1		10		1	5		
241+16		60	LT	1		10		1	5		
241+50		60	LT	1		10		1	5		
244+50		60	LT	1		10		1	5		
247+00		60	LT	1		10		1	5		
229+25	237+50	60	RT	12		120		12	60		75' SPACING
240+40		60	RT	1		10		1	5		
242+50		60	RT	1		10		1	5		
245+50		60	RT	1		10		1	5		
1+27		FR 103	RT	1		10		1	5		
1+75		FR 103	RT	1		10		1	5		
4+45		FR 103	RT	1		10		1	5		
7+15		FR 103	RT	1		10		1	5		
8+15		FR 103	RT	1		10		1	5		
1+75		FR 103	LT	1		10		1	5		
4+45		FR 103	LT	1		10		1	5		
7+15		FR 103	LT	1		10		1	5		
8+15		FR 103	LT	1		10		1	5		
			STAGE 2 SUBTOTAL		742.0	870.0	0.0	87.0	435.0	710.0	

SUMMARY OF QUANTITIES
SHEET 14 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:22:34 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 3
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
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											
STA	STA	ROUTE	LOCATION	NO. OF CHECKS	SILT FENCE	ROCK DITCH CHECK	CURB INLET CHECK	SEDIMENT REMOVAL	SEPARATION GEOTEXTILE	TYPE C BERM	REMARKS
				EA	LF	LF	LF	CY	SY	LF	
STAGE 3: INLET PROTECTION											
180+02		EX MM	RT	1			1	0.1	5		
180+99		EX MM	RT	1			1	0.1	5		
181+72		EX MM	RT	1			1	0.1	5		
182+40		EX MM	RT	1			1	0.1	5		
185+97		EX MM	RT	1			1	0.1	5		
187+70		EX MM	RT	1			1	0.1	5		
190+79		EX MM	RT	1			1	0.1	5		
180+24		EX MM	LT	1			1	0.1	5		
181+19		EX MM	LT	1			1	0.1	5		
182+70		EX MM	LT	1			1	0.1	5		
185+98		EX MM	LT	1			1	0.1	5		
187+70		EX MM	LT	1			1	0.1	5		
190+80		EX MM	LT	1			1	0.1	5		
192+16		EX MM	LT	1			1	0.1	5		
25+33		FR 160	LT	1			1	0.1	5		
25+73		FR 160	LT	1			1	0.1	5		
25+09		FR 160	RT	1			1	0.1	5		
25+32		FR 160	RT	1			1	0.1	5		
0+82		NEW MM	LT	1			1	0.1	5		
1+16		NEW MM	LT	1			1	0.1	5		
1+50		NEW MM	LT	1			1	0.1	5		
1+52		NEW MM	LT	1			1	0.1	5		
3+01		NEW MM	LT	1			1	0.1	5		
4+24.6399		NEW MM	LT	1			1	0.1	5		
5+21		NEW MM	LT	1			1	0.1	5		
6+31		NEW MM	LT	1			1	0.1	5		
7+50		NEW MM	LT	1			1	0.1	5		
13+65		NEW MM	LT	1			1	0.1	5		
15+20		NEW MM	LT	1			1	0.1	5		
17+26		NEW MM	LT	1			1	0.1	5		
19+26		NEW MM	LT	1			1	0.1	5		
20+60		NEW MM	LT	1			1	0.1	5		
21+95		NEW MM	LT	1			1	0.1	5		
23+30		NEW MM	LT	1			1	0.1	5		
27+00		NEW MM	LT	1			1	0.1	5		
28+90		NEW MM	LT	1			1	0.1	5		
30+75		NEW MM	LT	1			1	0.1	5		
32+20		NEW MM	LT	1			1	0.1	5		
34+20		NEW MM	LT	1			1	0.1	5		
36+14		NEW MM	LT	1			1	0.1	5		
37+76		NEW MM	LT	1			1	0.1	5		
39+16		NEW MM	LT	1			1	0.1	5		
40+45		NEW MM	LT	1			1	0.1	5		
42+70		NEW MM	LT	1			1	0.1	5		
44+90		NEW MM	LT	1			1	0.1	5		
45+57		NEW MM	LT	1			1	0.1	5		
45+64		NEW MM	LT	1			1	0.1	5		
46+39		NEW MM	LT	1			1	0.1	5		
46+43		NEW MM	LT	1			1	0.1	5		
STAGE 3 SUBTOTAL 1					0.0	0.0	48.0	4.8	240.0	0.0	

SUMMARY OF QUANTITIES
SHEET 15 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
05/15/2025 12:23:08 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 3
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
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

STA	STA	ROUTE	LOCATION	NO. OF CHECKS	SILT FENCE	ROCK DITCH CHECK	CURB INLET CHECK	SEDIMENT REMOVAL	SEPARATION GEOTEXTILE	TYPE C BERM	REMARKS
				EA	LF	LF	LF	CY	SY	LF	
STAGE 3: INLET PROTECTION											
1+23		NEW MM	RT	1			1	0.1	5		
1+51		NEW MM	RT	1			1	0.1	5		
2+16		NEW MM	RT	1			1	0.1	5		
3+01		NEW MM	RT	1			1	0.1	5		
4+25		NEW MM	RT	1			1	0.1	5		
5+20		NEW MM	RT	1			1	0.1	5		
5+20		NEW MM	RT	1			1	0.1	5		
6+30		NEW MM	RT	1			1	0.1	5		
7+50		NEW MM	RT	1			1	0.1	5		
13+65		NEW MM	RT	1			1	0.1	5		
15+21		NEW MM	RT	1			1	0.1	5		
17+26		NEW MM	RT	1			1	0.1	5		
18+25		NEW MM	RT	1			1	0.1	5		
19+25		NEW MM	RT	1			1	0.1	5		
20+60		NEW MM	RT	1			1	0.1	5		
21+95		NEW MM	RT	1			1	0.1	5		
23+30		NEW MM	RT	1			1	0.1	5		
24+65		NEW MM	RT	1			1	0.1	5		
25+65		NEW MM	RT	1			1	0.1	5		
27+00		NEW MM	RT	1			1	0.1	5		
28+90		NEW MM	RT	1			1	0.1	5		
30+75		NEW MM	RT	1			1	0.1	5		
32+20		NEW MM	RT	1			1	0.1	5		
34+20		NEW MM	RT	1			1	0.1	5		
36+15		NEW MM	RT	1			1	0.1	5		
37+77		NEW MM	RT	1			1	0.1	5		
42+69		NEW MM	RT	1			1	0.1	5		
44+88		NEW MM	RT	1			1	0.1	5		
45+57		NEW MM	RT	1			1	0.1	5		
45+65		NEW MM	RT	1			1	0.1	5		
STAGE 3 SUBTOTAL 2					0.0	0.0	30.0	3.0	150.0	0.0	

EROSION CONTROL

STA	STA	ROUTE	LOCATION	NO. OF CHECKS	SILT FENCE	ROCK DITCH CHECK	CURB INLET CHECK	SEDIMENT REMOVAL	SEPARATION GEOTEXTILE	TYPE C BERM	REMARKS
				EA	LF	LF	EACH	CY	SY	LF	
STAGE 1 SUBTOTAL 1					3971.0	550.0	0.0	94.7	275.0	0.0	
STAGE 1 SUBTOTAL 2					0.0	710.0	2.0	71.2	365.0	0.0	
STAGE 2 SUBTOTAL					742.0	870.0	0.0	87.0	435.0	710.0	
STAGE 3 SUBTOTAL 1					0.0	0.0	48.0	4.8	240.0	0.0	
STAGE 3 SUBTOTAL 2					0.0	0.0	30.0	3.0	150.0	0.0	
TOTAL					4713	2130	80	261	1465	710	

SUMMARY OF QUANTITIES
SHEET 16 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:23:49 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

PAVED APPROACHES

STATION	STATION	LOCATION	PAVED APPROACH 8.00" SY	PAVED APPROACH 7.00" SY	TYPE 1 AGGR. BASE 4" THICK SY	REMARKS
EXISTING MM						
182+24.74	-	LT	170.8		170.8	ENTRANCE 1
183+65.04	-	LT		63.3	63.3	ENTRANCE 2
186+25.72	-	LT		73.1	73.1	ENTRANCE 3
192+45	-	LT	119.0		119.0	ENTRANCE 5 MUST BE PCCP
		SUBTOTAL	289.8	136.4	426.2	
FARMROAD 160						
1+59.94	-	LT		80.7	80.7	ENTRANCE 4
		SUBTOTAL	0.0	80.7	80.7	
PROPOSED MM						
26+33	-	LT	257.7		257.7	ENTRANCE 6
26+33	-	RT	233.5		233.5	ENTRANCE 7
32+93	-	LT	175.3		175.3	ENTRANCE 8
32+93	-	RT	207.2		207.2	ENTRANCE 9
39+93.79	-	LT	223.4		223.4	ENTRANCE 10
39+91.31	-	RT	256.8		256.8	ENTRANCE 11
43+12.62	-	LT	111.1		111.1	ENTRANCE 12
43+01.35	-	RT	94.0		94.0	ENTRANCE 13
		SUBTOTAL	1559.0	0.0	1559.0	
US 60						
244+73.75	-	RT	159.6		159.6	ENTRANCE 16
		SUBTOTAL	159.6	0.0	159.6	
FARMROAD 103						
5+28.14	-	LT	278.5		278.5	ENTANCE 14
5+28.14	-	RT	419.8		419.8	ENTANCE 15
		SUBTOTAL	698.3	0.0	698.3	
		TOTAL	2706.7	217.1	2923.8	
		USE	2707	218	2924	

CURB & GUTTER

STATION	STATION	LOCATION	TYPE B CURB & GUTTER	TYPE F CURB & GUTTER	6" TYPE A INTEGRAL CURB	REMARKS
			LF	LF	LF	
EXISTING MM (MM_EX)						
178+17.38	187+67.55	RT	965.8			C&G SB FROM BEGINNING OF PROJECT TO TYPE A GUTTER
178+22.98	187+66.84	LT	764.7			C&G SB FROM BEGINNING OF PROJECT TO MOD. TYPE A GUTTER
190+79.98	192+15.51	RT	140.8			C&G FROM INLET 9-1D TO END OF WIDENING
190+79.90	194+02.76	LT	259.7			C&G FROM INLET 10-1D TO END OF PROJECT
188+67.43	190+16.91	LT & RT		460.0		CURB AROUND TRUCK APRON
188+92.48	190+05.41	LT & RT			354.9	CURB AROUND CENTRAL ISLAND
FARM ROAD 160 BASELINE (FR160)						
2+00.25	3+00.65	LT	194.1			C&G FROM BEGINNING OF C&G TO TYPE A GUTTER
2+00.00	190+79.98 (MM_EX)	RT	259.3			C&G FROM BEGINNING OF C&G TO INLET 9-1D
PROPOSED MM (MM_PR)						
0+43.98	7+97.75	LT	831.3			FROM MOD. TYPE A GUTTER TO BRIDGE APPROACH SLAB
0+29.57	7+97.75	RT	787.9			FROM INLET 10-1D TO BRIDGE APPROACH SLAB
13+31.25	25+99.33	LT	1,229.3			FROM BRIDGE APPROACH SLAB TO ENTRANCE #6
13+31.25	26+00.66	RT	1,308.3			FROM BRIDGE APPROACH SLAB TO ENTRANCE #7
26+65.34	32+59.33	LT	594.0			FROM ENTRANCE #6 TO ENTRANCE #8
26+66.67	32+60.66	RT	594.0			FROM ENTRANCE #7 TO ENTRANCE #9
33+25.41	39+39.15	LT	610.1			FROM ENTRANCE #8 TO ENTRANCE #10
33+27.02	39+69.59	RT	647.7			FROM ENTRANCE #9 TO ENTRANCE #11
40+22.10	42+86.34	LT	252.3			FROM ENTRANCE #10 TO ENTRANCE #12
40+53.94	42+70.50	RT	227.6			FROM ENTRANCE #11 TO ENTRANCE #13
43+47.34	46+68.00	LT	414.0			FROM ENTRANCE #12 TO US 60
43+39.31	46+80.08	RT	401.3			FROM ENTRANCE #13 TO US 60
		TOTALS	10482	460	355	

SUMMARY OF QUANTITIES
SHEET 17 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:24:26 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

ALTERNATE PAVEMENT

				ALTERNATE PAVEMENTS		6" TYPE 5 AGGR. BASE	
			AVG. WIDTH	ALTERNATE A - 11" ASPHALT	ALTERNATE B - 9.5" PCCP		REMARKS
STATION	STATION	LOCATION	LF	SY	SY	SY	
EXISTING MM (MM_EX)							
178+17.05	184+02.67	RT	20	1308.0	1308.0	1308.0	HAILE ST. TO BEGINNING OF CONCRETE PAVEMENT
192+15.51	194+02.73	RT	VAR.	174.2	174.2	174.2	END OF CONCRETE PAVEMENT TO END OF PROJECT
PROPOSED MM (MM_PR)							
2+50.00	4+66.38	CL	VAR.	1496.3	1496.3	1496.3	END OF CONCRETE PAVEMENT TO CONSISTENT WIDTH
4+66.38	7+97.7500	CL	56	2061.9	2061.9	2061.9	TO BRIDGE APPROACH SLAB
13+31.25	14+45.75	CL	VAR.	757.2	757.2	757.2	FROM BRIDGE APPROACH SLAB TO CONSISTENT WIDTH
14+45.75	38+50	CL	62	16578.2	16578	16578.0	TO BEGINNING OF VARIABLE WIDTH
38+50	43+36.89	CL	VAR.	3529.2	3529.2	3529.2	TO BEGINNING OF SB RT TURN LANE
43+36.89	44+33.75	CL	VAR.	856.4	856.4	856.4	TO END FULL WIDTH SB RT TURN LANE
44+33.75	44+76.08	CL	92	432.7	432.7	432.7	TO TIE-IN WITH STONE CREEK RD
44+76.08	46+74.58	LT	VAR.	352.5	352.5	352.5	WIDENING TO US 60
44+76.08	46+94.12	RT	VAR.	1220.8	1220.8	1220.8	WIDENING TO US 60
FARM ROAD 103 (FR103_TIE)							
0+56.39	2+03.33	CL	VAR.	2459.3	2459.3	2459.3	FROM US 60 TO END OF RADIUS RETURN
2+03.33	4+09.75	CL	VAR.	2018.7	2018.7	2018.7	FROM RADIUS RETURN TO BEGINNING OF TAPER
4+09.75	4+98.06	CL	VAR.	735.7	735.7	735.7	BEGINNING TO END OF TAPER
4+98.06	8+50.00	CL	VAR.	1369.3	1369.3	1369.3	END OF TAPER TO END OF PROJECT
US 60 - STATIONING BASED ON WB (60_WB)							
228+50.00	231+78.02	EB, RT	VAR.	553.1	553.1	553.1	FROM BEGINNING OF PROJECT TO BEGINNING OF TAPER
231+78.02	233+58.02	EB, RT	VAR.	423.8	423.8	423.8	BEGINNING TO END OF TAPER
233+58.02	237+34.68	EB, RT	VAR.	1037.6	1037.6	1037.6	END OF TAPER TO SW RADIUS RETURN
240+51.43	241+75.16	EB, RT	4	55.0	55.0	55.0	4' WIDTH SHOULDER REPLACEMENT
241+75.16	248+18.97	EB, RT	VAR.	974.3	974.3	974.3	WIDENING TO END OF PROJECT
231+85.40	233+52.00	EB, MEDIAN	VAR.	279.7	279.7	279.7	WIDENING IN MEDIAN
233+52.00	237+99.94	EB, MEDIAN	36	1791.6	1791.6	1791.6	WIDENING/REPLACEMENT IN MEDIAN
240+00.00	244+10.00	WB, MEDIAN	36	1640.0	1640.0	1640.0	WIDENING/REPLACEMENT IN MEDIAN
244+10.00	245+83.04	WB, MEDIAN	VAR.	384.7	384.7	384.7	WIDENING IN MEDIAN
235+20.00	237+49.20	WB, LT	VAR.	494.4	494.4	494.4	VARIABLE WIDTH SHOULDER REPLACEMENT
241+02.31	243+09.39	WB, LT	8	184.1	184.1	184.1	4' SHOULDER + 4' WIDTH PAVEMENT REPLACEMENT
243+09.39	247+28.68	WB, LT	VAR.	617.1	617.1	617.1	TO END OF WB WIDENING
FARM ROAD 168 (FR168)							
243+09.39	247+28.68	WB, LT	VAR.	1201.1	1201.1	1201.1	PAVEMENT REPLACEMENT AND S.E. CORRECTION
			TOTALS	44986.9	44986.9	44986.9	
			USE	44986.9	44986.9	44986.9	

CONCRETE PAVEMENT

			9.5" PCCP	8.5" PCCP	6" TYPE 5 AGG BASE	4" TYPE 5 AGGR. BASE	
STATION	STATION	ROUTE	SY	SY	SY	SY	REMARKS
184+02.67	188+04.63	EX. MM	3418.8		3418.8		NORTH LEG
1+44.58	2+71.55	FARM ROAD 160	578.5		578.5		WEST LEG
190+60.61	192+15.51	EX. MM	757.2		757.2		SOUTH LEG
1+12.13	2+50.00	PR. MM	1363.7		1363.7		EAST LEG
188+04.63	190+60.61	EX. MM	3698.0		3698.0		ROUNDABOUT INTERIOR
188+68.10	190+15.75	EX. MM		742.1		742.1	TRUCK APRON
		TOTALS	9816.2	742.1	9816.2	742.1	

AGGREGATE BASE - PROJECT TOTAL

LOCATION	TYPE 1 4 IN	TYPE 5 4 IN	TYPE 5 6 IN	REMARKS
	SY	SY	SY	
REFER TO SEPARATE QUANTITY TABLES FOR STATIONING AND OTHER DETAILS				
PAVED APPROACHES	2923.8			
ALTERNATE PAVEMENT			44986.9	
CONCRETE PAVEMENT		742.1	9816.2	
SIDEWALK & CURB RAMPS	7817.3			
TYPE B CURB & GUTTER			4658.7	
TYPE A GUTTER		18		
TOTAL	10741.1	760.1	59461.8	
USE	10742	761	59462	

SUMMARY OF QUANTITIES
SHEET 18 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:25:04 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

LUMINAIRE, POLE AND EQUIPMENT

POLE I.D.	ALIGNMENT	STATION	OFFSET	30' M.H. TYPE AT POLE EA.	30' M.H. TYPE B POLE EA.	BRACKET ARM 4' EA.	BRACKET ARM 6' EA.	BRACKET ARM 8' EA.	BRACKET ARM 10' EA.	BRACKET ARM 12' EA.	BRACKET ARM 15' EA.	45' M.H. TYPE AT POLE EA.	BRACKET ARM 6' EA.	BRACKET ARM 15' EA.	LED TYPE "A" EA.	LED TYPE "B" EA.	LED TYPE "C" EA.	150 WATT HIGH PRESSURE SODIUM LUMINAIRE EA.	CABLE #10 AWG. 1 COND. POLE & BRACKET FT.	POLE FOUNDATION 30' M.H. EA.	POLE FOUNDATION 45' M.H. EA.	REMARKS
ROUTE MM AT HAILE STREET INTERSECTION AND CONTINUOUS LIGHTING																						
CIRCUIT #1 - HAILE STREET INTERSECTION																						
L1	ROUTE MM (EX.)	178+62.00	19.33' LT.	1		1									1				68	1		SE QUAD. ROUTE MM AND HAILE ST.
L2	ROUTE MM (EX.)	177+71.00	47.00' LT.	1			1								1				72	1		NE QUAD. ROUTE MM AND HAILE ST.
L3	ROUTE MM (EX.)	177+42.00	52.50' RT.	1			1								1				72	1		NW QUAD. ROUTE MM AND HAILE ST.
L4	ROUTE MM (EX.)	177+63.00	58.00' RT.	1			1								1				72	1		NW QUAD. ROUTE MM AND HAILE ST.
CIRCUIT #2 - CONTINUOUS LIGHTING S/O HAILE STREET																						
L5	ROUTE MM (EX.)	180+12.00	15.51' RT.	1		2									2				136	1		CENTER MEDIAN, 2 LUMINAIRES
L6	ROUTE MM (EX.)	181+57.00	15.33' RT.	1		2									2				136	1		CENTER MEDIAN, 2 LUMINAIRES
L7	ROUTE MM (EX.)	183+02.00	15.17' RT.	1		2									2				136	1		CENTER MEDIAN, 2 LUMINAIRES
L8	ROUTE MM (EX.)	184+47.00	20.94' RT.	1		2									2				136	1		CENTER MEDIAN, 2 LUMINAIRES
L9	ROUTE MM (EX.)	185+87.00	27.68' RT.	1		2									2				136	1		CENTER MEDIAN, 2 LUMINAIRES
SUB-TOTAL				9	0	11	3	0	0	0	0	0	0	0	14	0	0	0	964	9	0	
ROUNDABOUT & BRIDGE LIGHTING																						
CIRCUIT #1																						
L1	ROUTE MM (EX.)	188+25.50	91.50' RT.	1				1							1				76	1		
L2	FARM ROAD 160	24+39.00	35.00' LT.	1							1				1				90	1		
L3	ROUTE MM (EX.)	189+54.50	134.50' RT.	1		1									1				68	1		
L4	ROUTE MM (EX.)	190+50.00	71.00' RT.	1		1									1				68	1		
L5	ROUTE MM (EX.)	193+41.00	19.00' RT.	1		1									1				68	1		
CIRCUIT #2																						
L6	ROUTE MM (EX.)	187+27.00	23.91' RT.	1				2							2				152	1		CENTER MEDIAN, 2 LUMINAIRES
L7	ROUTE MM (EX.)	188+36.00	74.50' LT.	1					1						1				80	1		
L8	ROUTE MM	1+69.00	57.00' LT.	1			1								1				72	1		
L9	ROUTE MM (EX.)	190+46.00	85.50' LT.	1			1								1				72	1		
L10	ROUTE MM (EX.)	191+16.00	17.00' LT.	1		1									1				68	1		
CIRCUIT #3																						
L11	ROUTE MM	2+72.00	47.00' LT.	1			1								1				72	1		
L12	ROUTE MM	4+12.00	40.00' LT.	1			1								1				72	1		
L13	ROUTE MM	5+54.00	40.00' LT.	1			1								1				72	1		
L14	ROUTE MM	6+86.75	40.00' LT.	1			1								1				72	1		
L15	ROUTE MM	8+26.85	31.35' LT.		1	1									1				80			MOUNTED ON BRIDGE BARRIER CURB
L16	ROUTE MM	10+46.50	31.17' LT.		1	1									1				80			MOUNTED ON BRIDGE BARRIER CURB
L17	ROUTE MM	13+02.25	31.17' LT.		1	1									1				80			MOUNTED ON BRIDGE BARRIER CURB
CIRCUIT #4																						
L18	ROUTE MM	11+98.54	23.33' LT.															1				UNDERPASS LIGHTING
L19	ROUTE MM	11+98.54	16.33' RT.															1				UNDERPASS LIGHTING
SUB-TOTAL				14	3	7	6	3	1	0	1	0	0	0	18	0	0	2	1342	14	0	
ROUTE MM AT ROUTE 60 INTERSECTION																						
CIRCUIT #1																						
L1	ROUTE MM	45+90.00	81.00' RT.									1	1				1		102		1	
L2	ROUTE MM	40+06.00	48.00' LT.	1						1					1				84	1		
L3	ROUTE MM	39+61.00	45.50' RT.	1				1							1				84	1		
L4	ROUTE MM	33+29.00	44.00' RT.	1				1							1				84	1		
L5	ROUTE MM	32+56.00	48.00' LT.	1						1					1				84	1		
L6	ROUTE MM	26+70.00	44.00' RT.	1				1							1				84	1		
L7	ROUTE MM	26+03.00	48.00' LT.	1						1					1				84	1		
CIRCUIT #2																						
L8	ROUTE 60	238+56.00	34.00' LT.									1	1				1		102		1	
L9	ROUTE MM	46+57.25	41.50' LT.									1	1				1		102		1	
L10	ROUTE 60	240+46.00	56.00' LT.									1	1				1		102		1	
L11	ROUTE 60	245+34.00	47.00' LT.									1		1			1		120		1	
CIRCUIT #3																						
L12	FARM ROAD 103	1+50.00	71.00' LT.									1		1			1		120		1	
L13	ROUTE 60	239+75.00	34.00' RT.									1	1				1		102		1	
CIRCUIT #4																						
L14	FARM ROAD 103	0+76.00	61.00' RT.									1	1				1		102		1	
L15	FARM ROAD 103	4+85.25	55.00' RT.									1		1			1		120		1	
L16	ROUTE 60	237+78.00	63.50' RT.									1		1			1		120		1	
L17	ROUTE 60	232+28.00	47.50' RT.									1		1			1		120		1	
SUB-TOTAL				6	0	0	0	3	0	3	0	11	6	5	6	0	11	0	1716	6	11	
TOTAL				29	3	18	9	6	1	3	1	11	6	5	38	0	11	2	4022	29	11	

SUMMARY OF QUANTITIES
SHEET 19 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:26:05 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 3
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

PULLBOXES

PULLBOX NO.	ALIGNMENT	STATION	OFFSET	PULLBOX TYPE CONCRETE	TYPE I DRAIN	TYPE II DRAIN A	TYPE II DRAIN B	REMARKS
ROUTE MM AT HAILE STREET INTERSECTION								
1	ROUTE MM (EX.)	178+45.00	46.50' LT.	1	1			
2	ROUTE MM (EX.)	178+27.50	49.00' LT.	1	1			
3	ROUTE MM (EX.)	177+77.50	53.00' LT.	1	1			
4	ROUTE MM (EX.)	177+36.00	15.00' LT.	1	1			
5	ROUTE MM (EX.)	177+36.00	48.00' RT.	1	1			
6	ROUTE MM (EX.)	178+58.50	43.00' LT.	1	1			
7	ROUTE MM (EX.)	180+12.00	21.50' LT.	1			1	
SUB-TOTAL				7				
ROUNDABOUT & BRIDGE LIGHTING								
1	ROUTE MM (EX.)	188+00.00	91.00' RT.	1			1	
2	ROUTE MM (EX.)	24+60.00	22.30' LT.	1			1	
3	ROUTE MM (EX.)	24+60.00	24.60' RT.	1			1	
4	ROUTE MM (EX.)	187+22.50	66.80' RT.	1			1	
5	ROUTE MM (EX.)	187+22.50	24.20' RT.	1	1			
6	ROUTE MM (EX.)	187+22.50	23.50' RT.	1			1	
7	ROUTE MM	2+36.00	50.80' LT.	1			1	
8	ROUTE MM	2+36.00	40.60' RT.	1			1	
9	ROUTE MM	5+75.00	40.00' LT.	1			1	
10	ROUTE MM	7+95.60	40.00' LT.	1			1	
SUB-TOTAL				10				
ROUTE MM AT ROUTE 60 INTERSECTION								
1	ROUTE MM	46+10.50	92.50' RT.	1	1			
2	ROUTE MM	43+22.00	49.50' RT.	1	1			
3	ROUTE MM	42+81.50	49.50' RT.	1	1			
4	ROUTE MM	40+58.00	47.00' RT.	1	1			
5	ROUTE MM	40+58.00	39.00' LT.	1	1			
6	ROUTE MM	36+67.00	42.00' RT.	1	1			
7	ROUTE MM	32+64.00	45.00' RT.	1	1			
8	ROUTE MM	29+64.00	42.50' RT.	1	1			
9	ROUTE MM	26+70.00	47.00' LT.	1	1			
10	ROUTE MM	46+32.00	57.50' RT.	1	1			
11	ROUTE MM	46+54.00	41.50' LT.	1	1			
12	ROUTE 60 WESTBOUND	240+41.00	52.00' LT.	1			1	
13	ROUTE 60 EASTBOUND	240+41.00	38.00' RT.	1			1	
14	FARM ROAD 103	1+06.50	75.00' LT.	1			1	
15	FARM ROAD 103	1+00.00	40.00' LT.	1	1			
16	FARM ROAD 103	0+81.00	61.00' RT.	1	1			
17	ROUTE 60 EASTBOUND	238+41.00	78.50' RT.	1			1	
18	ROUTE 60 EASTBOUND	235+30.00	42.00' RT.	1			1	
SUB-TOTAL				18				
TOTAL				35				

RIGID CONDUIT

FROM	TO	CENTER TO CENTER FT.	4" CONDUIT TRENCHED FT.	4" CONDUIT PUSHED FT.	REMARKS
ROUTE MM AT HAILE STREET INTERSECTION					
POWER SUPPLY	CONTROLLER	10	18		
CONTROLLER	PULLBOX 1	7	10		
PULLBOX 1	PULLBOX 2	18	16		
PULLBOX 2	PULLBOX 3	51		49	
PULLBOX 4	PULLBOX 5	63		61	
CONTROLLER	PULLBOX 6	7	10		
PULLBOX 7	LIGHT 5	37		38	
LIGHT 5	LIGHT 6	145	149		
LIGHT 6	LIGHT 7	145	149		
LIGHT 7	LIGHT 8	145	149		
LIGHT 8	LIGHT 9	140	144		
SUB-TOTAL			645	148	
ROUNDABOUT & BRIDGE LIGHTING					
POWER SUPPLY	CONTROLLER	10	18		
CONTROLLER	PULLBOX 1	5	8		
PULLBOX 2	PULLBOX 3	47		45	
PULLBOX 4	PULLBOX 5	43		41	
PULLBOX 5	LIGHT 6	5		6	
PULLBOX 5	PULLBOX 6	48		46	
PULLBOX 7	PULLBOX 8	92		90	
SUB-TOTAL			26	228	
ROUTE MM AT ROUTE 60 INTERSECTION					
POWER SUPPLY	CONTROLLER	10	18		
CONTROLLER	PULLBOX 1	8	11		
PULLBOX 2	PULLBOX 3	42		40	
PULLBOX 4	PULLBOX 5	86		84	
PULLBOX 4	LIGHT 3	103	13	91	
LIGHT 4	PULLBOX 7	65	20	47	
PULLBOX 7	LIGHT 5	94		95	
LIGHT 6	PULLBOX 9	91		92	
PULLBOX 9	LIGHT 7	67	23	46	
PULLBOX 1	PULLBOX 10	41	3	36	
PULLBOX 10	LIGHT 8	42	43		
PULLBOX 10	PULLBOX 11	102		100	
PULLBOX 11	LIGHT 9	4	5		
PULLBOX 11	PULLBOX 12	77		75	
PULLBOX 12	PULLBOX 13	151		149	
PULLBOX 14	PULLBOX 15	36		34	
PULLBOX 15	LIGHT 13	38	39		
PULLBOX 15	PULLBOX 16	103		101	
PULLBOX 16	LIGHT 14	5	6		
PULLBOX 16	PULLBOX 17	35		33	
SUB-TOTAL			181	1023	
TOTAL			852	1399	

RIGID CONDUIT ON STRUCTURE

FROM	TO	CENTER TO CENTER FT.	2" RIGID STEEL CONDUIT ON STRUCTURE FT.	REMARKS
ROUNDABOUT & BRIDGE LIGHTING				
PULLBOX 10	NEMA JUNCTION BOX	412	413	FOR UNDERPASS LIGHTING
NEMA JUNCTION BOX	LIGHT 18	14	14	FOR UNDERPASS LIGHTING
LIGHT 18	LIGHT 19	40	40	FOR UNDERPASS LIGHTING
SUB-TOTAL			467	
TOTAL			467	

SUMMARY OF QUANTITIES

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:27:00 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

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)

CABLE						
FROM	TO	CENTER TO CENTER FT.	#2 AWG 1 CONDUCTOR FT.	#6 AWG 1 CONDUCTOR FT.	#8 AWG 1 CONDUCTOR FT.	REMARKS
ROUTE MM AT HAILE STREET INTERSECTION						
POWER SUPPLY	CONTROLLER	10	81			
CIRCUIT #1						
CONTROLLER	PULLBOX 1	7			66	
PULLBOX 1	PULLBOX 2	18			93	
PULLBOX 2	PULLBOX 3	51			198	
PULLBOX 4	PULLBOX 5	63			237	
CIRCUIT #2						
CONTROLLER	PULLBOX 6	7			66	
PULLBOX 7	LIGHT 5	37			150	
LIGHT 5	LIGHT 6	145			489	
LIGHT 6	LIGHT 7	145			489	
LIGHT 7	LIGHT 8	145			489	
LIGHT 8	LIGHT 9	140			471	
SUB-TOTAL			81	0	2748	
ROUNDABOUT & BRIDGE LIGHTING						
POWER SUPPLY	CONTROLLER	10	81			
CIRCUIT #1						
CONTROLLER	PULLBOX 1	5			60	
PULLBOX 2	PULLBOX 3	47			186	
CIRCUIT #2						
CONTROLLER	PULLBOX 1	5			60	
PULLBOX 4	PULLBOX 5	43			174	
PULLBOX 5	LIGHT 6	5			51	
PULLBOX 5	PULLBOX 6	48			189	
PULLBOX 7	PULLBOX 8	92			330	
CIRCUIT #3						
CONTROLLER	PULLBOX 1	5			60	
PULLBOX 4	PULLBOX 5	43			174	
PULLBOX 5	PULLBOX 6	48			189	
PULLBOX 10	LIGHT 15	40			162	
LIGHT 15	LIGHT 16	220			660	
LIGHT 16	LIGHT 17	256			768	
CIRCUIT #4						
CONTROLLER	PULLBOX 1	5			60	
PULLBOX 4	PULLBOX 5	43			174	
PULLBOX 5	PULLBOX 6	48			189	
PULLBOX 10	NEMA JUNCTION BOX	412			1326	
NEMA JUNCTION BOX	LIGHT 18	14			63	
LIGHT 18	LIGHT 19	40			147	
SUB-TOTAL			81	0	5022	
ROUTE MM AT ROUTE 60 INTERSECTION						
POWER SUPPLY	CONTROLLER	10	81			
CIRCUIT #1						
CONTROLLER	PULLBOX 1	8			69	
PULLBOX 2	PULLBOX 3	42			168	
PULLBOX 4	PULLBOX 5	86			306	
PULLBOX 4	LIGHT 3	103			357	
LIGHT 4	PULLBOX 7	65			237	
PULLBOX 7	LIGHT 5	94			330	
LIGHT 6	PULLBOX 9	91			321	
PULLBOX 9	LIGHT 7	67			243	
CIRCUIT #2						
CONTROLLER	PULLBOX 1	8			69	
PULLBOX 1	PULLBOX 10	41			165	
PULLBOX 10	LIGHT 8	42			165	
PULLBOX 10	PULLBOX 11	102			357	
PULLBOX 11	LIGHT 9	4			48	
PULLBOX 11	PULLBOX 12	77			279	
SUB-TOTAL 1			81	0	3114	

CABLE						
FROM	TO	CENTER TO CENTER FT.	#2 AWG 1 CONDUCTOR FT.	#6 AWG 1 CONDUCTOR FT.	#8 AWG 1 CONDUCTOR FT.	REMARKS
ROUTE MM AT ROUTE 60 INTERSECTION (CONTINUED)						
CIRCUIT #3						
CONTROLLER	PULLBOX 1	8			69	
PULLBOX 1	PULLBOX 10	41			165	
PULLBOX 10	PULLBOX 11	102			357	
PULLBOX 11	PULLBOX 12	77			279	
PULLBOX 12	PULLBOX 13	151			513	
PULLBOX 14	PULLBOX 15	36			150	
PULLBOX 15	LIGHT 13	38			153	
CIRCUIT #4						
CONTROLLER	PULLBOX 1	8		69		
PULLBOX 1	PULLBOX 10	41		165		
PULLBOX 10	PULLBOX 11	102		357		
PULLBOX 11	PULLBOX 12	77		279		
PULLBOX 12	PULLBOX 13	151		513		
PULLBOX 14	PULLBOX 15	36		150		
PULLBOX 15	PULLBOX 16	103		360		
PULLBOX 16	LIGHT 14	5		51		
PULLBOX 16	PULLBOX 17	35		147		
SUB-TOTAL			0	2091	1686	
ROUTE MM AT HAILE STREET INTERSECTION			81	0	2748	
ROUNDABOUT & BRIDGE LIGHTING			81	0	5022	
ROUTE MM AT ROUTE 60 INTERSECTION 1			81	0	3114	
ROUTE MM AT ROUTE 60 INTERSECTION (CONT.)			0	2091	1686	
TOTAL			243	2091	12570	

SUMMARY OF QUANTITIES

SHEET 21 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/15/2025 12:27:23 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

CABLE CONDUIT

FROM	TO	CENTER TO CENTER FT.	CABLE CONDUIT #6 AWG FT.	CABLE CONDUIT #8 AWG FT.	TYPE 1 TRENCHING FT.	REMARKS
ROUTE MM AT HAILE STREET INTERSECTION						
CIRCUIT #1						
PULLBOX 1	LIGHT 1	34		47	32	
PULLBOX 3	LIGHT 2	9		21	7	
LIGHT 2	PULLBOX 4	48		62	46	
PULLBOX 5	LIGHT 3	8		20	6	
LIGHT 3	LIGHT 4	30		42	28	
CIRCUIT #2						
PULLBOX 6	PULLBOX 7	308		336	306	
SUB-TOTAL			0	528	425	
ROUNDABOUT & BRIDGE LIGHTING						
CIRCUIT #1						
PULLBOX 1	LIGHT 1	30		43	29	
LIGHT 1	PULLBOX 2	121		138	120	
PULLBOX 2	LIGHT 2	25		38	24	
PULLBOX 3	LIGHT 3	92		108	91	
LIGHT 3	LIGHT 4	116		132	116	
LIGHT 4	LIGHT 5	306		331	306	
CIRCUIT #2						
PULLBOX 1	PULLBOX 4	98		115	96	
PULLBOX 6	LIGHT 7	127		145	126	
LIGHT 7	LIGHT 8	96		111	96	
LIGHT 8	PULLBOX 7	68		83	67	
PULLBOX 8	LIGHT 9	192		213	191	
LIGHT 9	LIGHT 10	84		99	84	
CIRCUIT #3						
PULLBOX 1	PULLBOX 4	98		115	96	
PULLBOX 6	PULLBOX 7	291		318	289	
PULLBOX 7	LIGHT 11	39		52	38	
LIGHT 11	LIGHT 12	146		164	146	
LIGHT 12	LIGHT 13	146		164	146	
LIGHT 13	PULLBOX 9	22		34	21	
PULLBOX 9	LIGHT 14	116		133	115	
LIGHT 14	PULLBOX 10	113		130	112	
CIRCUIT #4						
PULLBOX 1	PULLBOX 4	98		115	96	
PULLBOX 6	PULLBOX 7	291		318	289	
PULLBOX 7	PULLBOX 9	353		383	351	
PULLBOX 9	PULLBOX 10	229		253	227	
SUB-TOTAL			0	3735	3272	
ROUTE MM AT ROUTE 60 INTERSECTION						
CIRCUIT #1						
PULLBOX 1	LIGHT 1	25		37	24	
LIGHT 1	PULLBOX 2	273		298	272	
PULLBOX 3	PULLBOX 4	238		262	236	
PULLBOX 5	LIGHT 2	54		68	53	
LIGHT 3	PULLBOX 6	301		327	300	
PULLBOX 6	LIGHT 4	339		367	338	
PULLBOX 7	PULLBOX 8	301		328	299	
PULLBOX 8	LIGHT 6	295		321	294	
CIRCUIT #2						
PULLBOX 12	LIGHT 10	7		19	6	
LIGHT 10	LIGHT 11	494		529	494	
CIRCUIT #3						
PULLBOX 13	PULLBOX 14	59		74	57	
PULLBOX 14	LIGHT 12	49		63	48	
SUB-TOTAL 1			0	2693	2421	

CABLE CONDUIT

FROM	TO	CENTER TO CENTER FT.	CABLE CONDUIT #6 AWG FT.	CABLE CONDUIT #8 AWG FT.	TYPE 1 TRENCHING FT.	REMARKS
ROUTE MM AT ROUTE 60 INTERSECTION (CONTUNUED)						
CIRCUIT #4						
PULLBOX 17	LIGHT 15	381	411		380	
PULLBOX 17	LIGHT 16	72	87		71	
LIGHT 16	PULLBOX 18	258	282		257	
PULLBOX 18	LIGHT 17	308	323		307	
SUB-TOTAL			1103	0	1015	
ROUTE MM AT HAILE STREET INTERSECTION			0	528	425	
ROUNDABOUT & BRIDGE LIGHTING			0	3735	3272	
ROUTE MM AT ROUTE 60 INTERSECTION 1			0	2693	2421	
ROUTE MM AT ROUTE 60 INTERSECTION (CONT.)			1103	0	1015	
TOTAL			1103	6956	7133	

SUMMARY OF QUANTITIES
SHEET 22 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:27:49 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

POWER SUPPLY

ALIGNMENT	STATION	OFFSET	TYPE 2 EA.	REMARKS
ROUTE MM AND HAILE STREET INTERSECTION				
ROUTE MM (EXIST.)	178+45.00	53.00' LT.	1	
ROUNDABOUT & BRIDGE LIGHTING				
ROUTE MM (EXIST.)	188+05.00	101.00' RT.	1	
ROUTE MM AND ROUTE 60 INTERSECTION				
ROUTE MM	46+16.10	102.30' RT.	1	
		TOTAL	3	

CONTROL STATION

ALIGNMENT	STATION	OFFSET	BASE MOUNTED CONTROL STATION 240 VOLT, 4 CIRCUIT	BREAKER (AMPS) CIRCUIT MAIN	1A	1B	1C	1D	REMARKS
ROUTE MM AND HAILE STREET INTERSECTION									
ROUTE MM (EXIST.)	178+52.00	46.00' LT.	1	100	15	15	15	15	
ROUNDABOUT & BRIDGE LIGHTING									
ROUTE MM (EXIST.)	187+97.00	95.00' RT.	1	100	15	15	15	15	
ROUTE MM AND ROUTE 60 INTERSECTION									
ROUTE MM	46+07.16	98.94' RT.	1	100	15	15	15	15	
		TOTAL	3						

SANITARY SEWER RELOCATION

STATION	STATION	LOCATION	10" PVC LF	12" PVC LF	5' MANHOLE LF	20" STEEL CASING LF	REMARKS
178+56.38	184+65.55	EX. MM, RT	645.9		6.3	40	LOCATION #1
15+14.65	16+96.65	PR. MM, LT & RT		408.2	24.7	340	LOCATION #2
		TOTALS:	646	408	31	380	

GROUND IMPROVEMENTS

1 LUMP SUM

PORE PRESSURE MEASURING DEVICE

4 EA

PERMANENT ROAD CLOSURES

SHEET	LOCATION	MGS GUARDRAIL LF	MGS END ANCHOR EA	PSST - 2" POST LF	FLAT SHEET FL. SHF SF	2" CONCRETE 7-GA ANCHOR EA	REMARKS
31	FR 168 & EX. RTE. MM, NORTH	28	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
31	FR 168 & EX. RTE. MM, SOUTH	25	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
31	HAILE ST. & ORR ST., WEST	22	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
31	HAILE ST. & ORR ST., EAST	24	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
31	FR 170 & US 60, NORTH	26	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
31	FR 170 & US 60, SOUTH	29	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
32	FR 164 & US 60	22	2	36	9	4	4 TYPE OM4 SIGNS PER LOCATION
	TOTALS	176	14	252	63	28	

RED SIGNAL AHEAD SIGN WITH LED LIGHT

4 EACH

RAILROAD ENGINEERING

1 LUMP SUM

RAILROAD PLAN SUBMITTAL

1 LUMP SUM

CCTV CAMERA ASSEMBLY, INSTALLED

1 EACH

SUMMARY OF QUANTITIES
SHEET 23 OF 24

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:28:11 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 8/13/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 3
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

SIGN	SIZE IN.	AREA SQ.FT.	QTY EACH	TOTAL AREA SQ.FT.	QTY RELOC EACH	TOTAL RELOC SQ.FT.	SIGN NO.	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	1	16.00				MERGE (LEFT)
WO4-1aR	48X48	16.00	1	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						NEXT XX MILES (PLAQUE)
WO8-1	48X48	16.00						BUMP
WO8-2	48X48	16.00						DIP
WO8-3	48X48	16.00						PAVEMENT ENDS
WO8-4	48X48	16.00						SOFT SHOULDER
WO8-5	48X48	16.00						SLIPPERY WHEN WET (SYMBOL)
WO8-6	48X48	16.00						TRUCK CROSSING
WO8-6c	48X48	16.00						TRUCK ENTRANCE
WO8-7	36X36	9.00						LOOSE GRAVEL
WO8-7a	36X36	9.00						FRESH OIL / LOOSE GRAVEL
WO8-9	48X48	16.00						LOW SHOULDER
WO8-11	48X48	16.00						UNEVEN LANES
WO8-12	48X48	16.00						NO CENTER LINE
WO8-15	48X48	16.00						GROOVED PAVEMENT
WO8-15P	30X24	5.00						MOTORCYCLE (PLAQUE)
WO8-17L	48X48	16.00						SHOULDER DROP-OFF (SYMBOL LEFT)
WO8-17R	48X48	16.00						SHOULDER DROP-OFF (SYMBOL RIGHT)
WO8-17P	30X24	5.00						SHOULDER DROP-OFF (PLAQUE)
W10-1	42RND.	9.62						RAILROAD CROSSING
WO12-1	24X24	4.00						DOUBLE DOWN ARROW (SYMBOL)
WO12-2	48X48	16.00						LOW CLEARANCE (SYMBOL)
WO12-2x	24X18	3.00						LOW CLEARANCE (PLAQUE)
WO12-2a	84X24	14.00						OVERHEAD LOW CLEARANCE (FEET AND INCHES)
WO12-4	120X60	50.00						LOW CLEARANCE XX FT XX IN XX MILES AHEAD
WO12-5	120X60	50.00						WIDTH RESTRICTION XX FT XX IN XX MILES AHEAD
WO13-1	30X30	6.25						ADVISORY SPEED (PLAQUE)
WO16-2	30X24	5.00						XXX FEET (PLAQUE)
WO16-3	30X24	5.00						X MILE (PLAQUE)
WO20-1	48X48	16.00	10	160.00				ROAD/BRIDGE/RAMP WORK AHEAD
WO20-2	48X48	16.00	1	16.00				DETOUR AHEAD
WO20-3	48X48	16.00						ROAD CLOSED AHEAD
WO20-4	48X48	16.00	2	32.00				ONE LANE ROAD AHEAD
WO20-5	48X48	16.00	2	32.00				RIGHT/CENTER/LEFT LANE CLOSED AHEAD
WO20-5a	48X48	16.00						2 RIGHT/CENTER/LEFT LANES CLOSED AHEAD
WO20-6a	48X48	16.00	1	16.00				RIGHT/CENTER/LEFT LANE CLOSED
WO20-7a	48X48	16.00	2	32.00				FLAGGER (SYMBOL)
WO21-2	36X36	9.00						FRESH OIL
WO21-5	48X48	16.00	2	32.00				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 NO.	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	8	64.00				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	1	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	1	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 2-45, 2-50, 2-55, 2-60
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	2	12.50				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	4	8.00				SIDEWALK CLOSED
R9-11L	24X18	3.00	1	3				SIDEWALK CLOSED AHEAD, (ARROW LEFT) CROSS HERE
R9-11R	24X18	3.00						SIDEWALK CLOSED AHEAD, (ARROW RIGHT) CROSS HERE
R10-6	24X36	6.00						STOP HERE ON RED (45^ ARROW)
R11-2	48X30	10.00	4	40.00				ROAD CLOSED
R11-3a	60X30	12.50						ROAD CLOSED XX MILES AHEAD LOCAL TRAFFIC ONLY
R11-4	60X30	12.50	1	12.50				ROAD CLOSED TO THRU TRAFFIC
CONST-3A	60X48	20.00	2	40.00				FINE SIGN
CONST-3X	56X12	4.67	2	9.34				SPEEDING/PASSING (PLATE)
MISCELLANEOUS SIGNS								
CONST-5	48X36	12.00						POINT OF PRESENCE
CONST-5	96X48	32.00	3	96.00				POINT OF PRESENCE
CONST-8	48X36	12.00	4	48.00				WORK ZONE NO PHONE ZONE
DETOUR	60X36	15.00	8	120.00				

616-10.05 CONSTRUCTION SIGNS	TOTAL	979
616-10.10 RELOCATED SIGNS	TOTAL	

EFFECTIVE: 07-01-2025

ITEM NUMBER	TOTAL QTY	DESCRIPTION
6122008		IMPACT ATTENUATOR 40 MPH (SAND BARRELS)
6122009		IMPACT ATTENUATOR 45 MPH (SAND BARRELS)
6122010		IMPACT ATTENUATOR 50 MPH (SAND BARRELS)
6122012		IMPACT ATTENUATOR 55 MPH (SAND BARRELS)
6122014		IMPACT ATTENUATOR 60 MPH (SAND BARRELS)
6122017		IMPACT ATTENUATOR 65 MPH (SAND BARRELS)
6122019		IMPACT ATTENUATOR 70 MPH (SAND BARRELS)
6122020		REPLACEMENT SAND BARREL
6122030		IMPACT ATTENUATOR (RELOCATION)
6122040		WORK ZONE CRASH CUSHION (NARROW)
6122041		WORK ZONE CRASH CUSHION (RELOCATION)
6123001	1	TRUCK MOUNTED ATTENUATOR (TMA)
6161012		BUOYS (BOATS KEEP OUT)
6161013		BUOYS (NO WAKE)
6161014		SPECIAL SIGN ASSEMBLY (BOATS KEEP OUT)
6161020		CHANNELIZER (DRUM-LIKE)
6161022		CHANNELIZER (CONE)
6161025	244	CHANNELIZER (TRIM-LINE)
6161026		CHANNELIZER (VERTICAL PANEL)
6161030	15	TYPE 3 MOVEABLE BARRICADE
6161033	28	DIRECTION INDICATOR BARRICADE
6161040	1	FLASHING ARROW PANEL
6161047		TYPE 3 OBJECT MARKER
6161055		SEQUENTIAL FLASHING WARNING LIGHT
6161070		TUBULAR MARKER
6161095		RADAR SPEED ADVISORY SYSTEM
6161096		CHANGEABLE MESSAGE SIGN, COMMISSION FURNISHED/RETAINED
6161098A		CHANGEABLE MESSAGE SIGN WITHOUT COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6161099	6	CHANGEABLE MESSAGE SIGN WITH COMM. INTERFACE, CONTRACTOR FURNISHED/RETAINED
6162000A		WORK ZONE TRAFFIC SIGNAL SYSTEM
6162002	8	TEMPORARY LONG-TERM RUMBLE STRIPS
6173600D		TEMPORARY TRAFFIC BARRIER, CONTRACTOR FURNISHED/RETAINED
6173700B		TEMP. TRAFFIC BARRIER ANCHORED, CONTRACTOR FURNISHED/RETAINED
6173706		TEMP. TRAFFIC BARRIER STIFFNESS TRANSITION CONTRACTOR FURNISHED/RETAINED
6174000A		TEMP. TRAFFIC BARRIER HEIGHT TRANSITION, CONTRACTOR FURNISHED/RETAINED
6175010A		RELOCATING TEMPORARY TRAFFIC BARRIER
6175011B		RELOCATING TEMP. TRAFFIC BARRIER ANCHORED
6175013		RELOCATING TEMP. TRAFFIC BARRIER STIFFNESS
6175020A		RELOCATING TEMP. TRAFFIC BARRIER HEIGHT
6208064A		TEMPORARY RAISED PAVEMENT MARKER
9029400		TEMPORARY TRAFFIC SIGNALS
9029401		TEMPORARY TRAFFIC SIGNALS AND LIGHTING
6169902	8	ADA COMPLIANT MOVEABLE BARRICADE

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2006645
PROFESSIONAL ENGINEER
08/21/2025 5:55:34 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-2006645

DATE PREPARED: 8/20/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	3

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.:

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

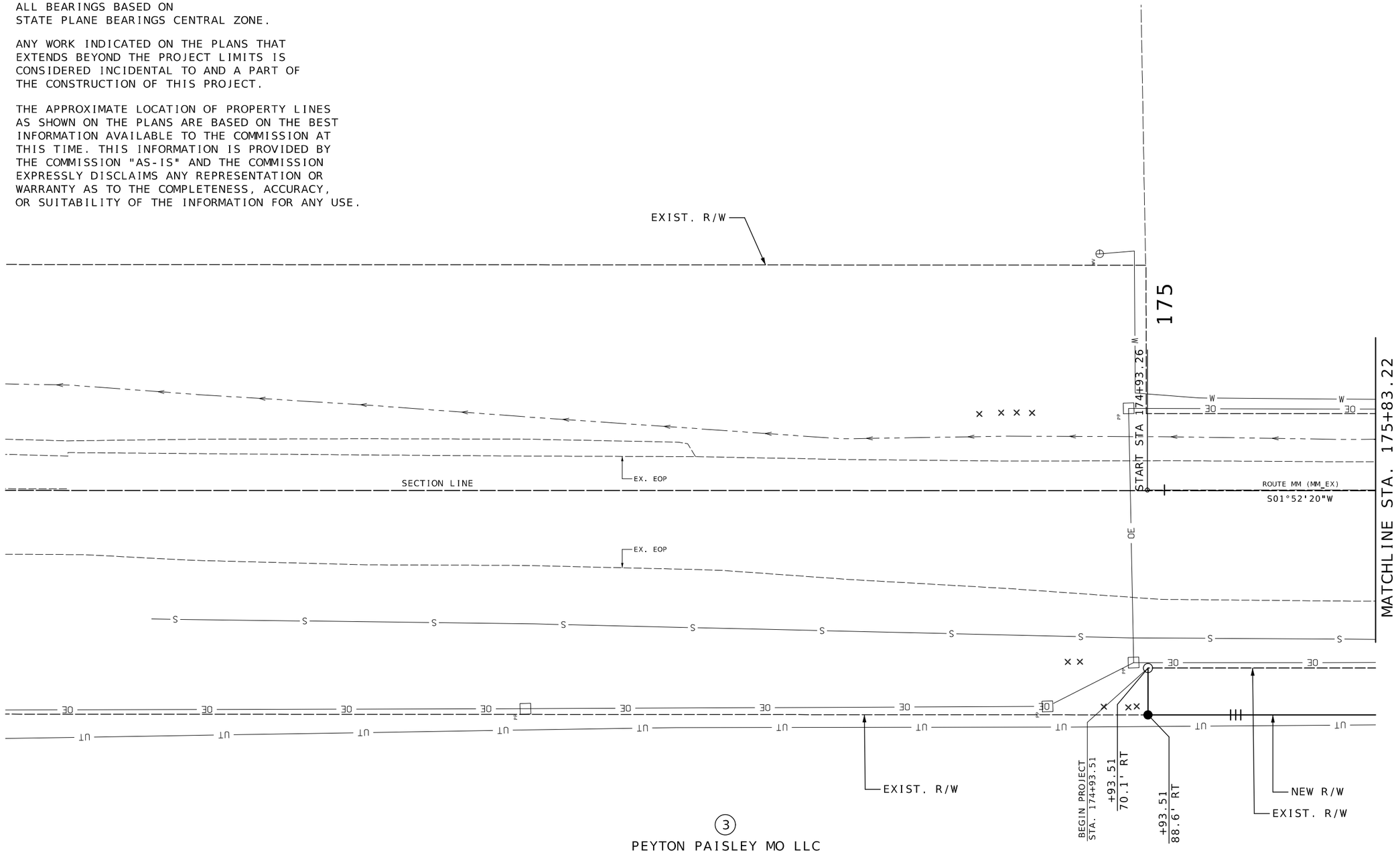
SUMMARY OF QUANTITIES

SHEET 24 OF 24

ALL BEARINGS BASED ON
STATE PLANE BEARINGS CENTRAL ZONE.

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.

THE APPROXIMATE LOCATION OF PROPERTY LINES 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.



3

PEYTON PAISLEY MO LLC

SEE SHEET 5

SCALE

0 20 40 60

PLAN SHEET
SHEET 1 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:23:52 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

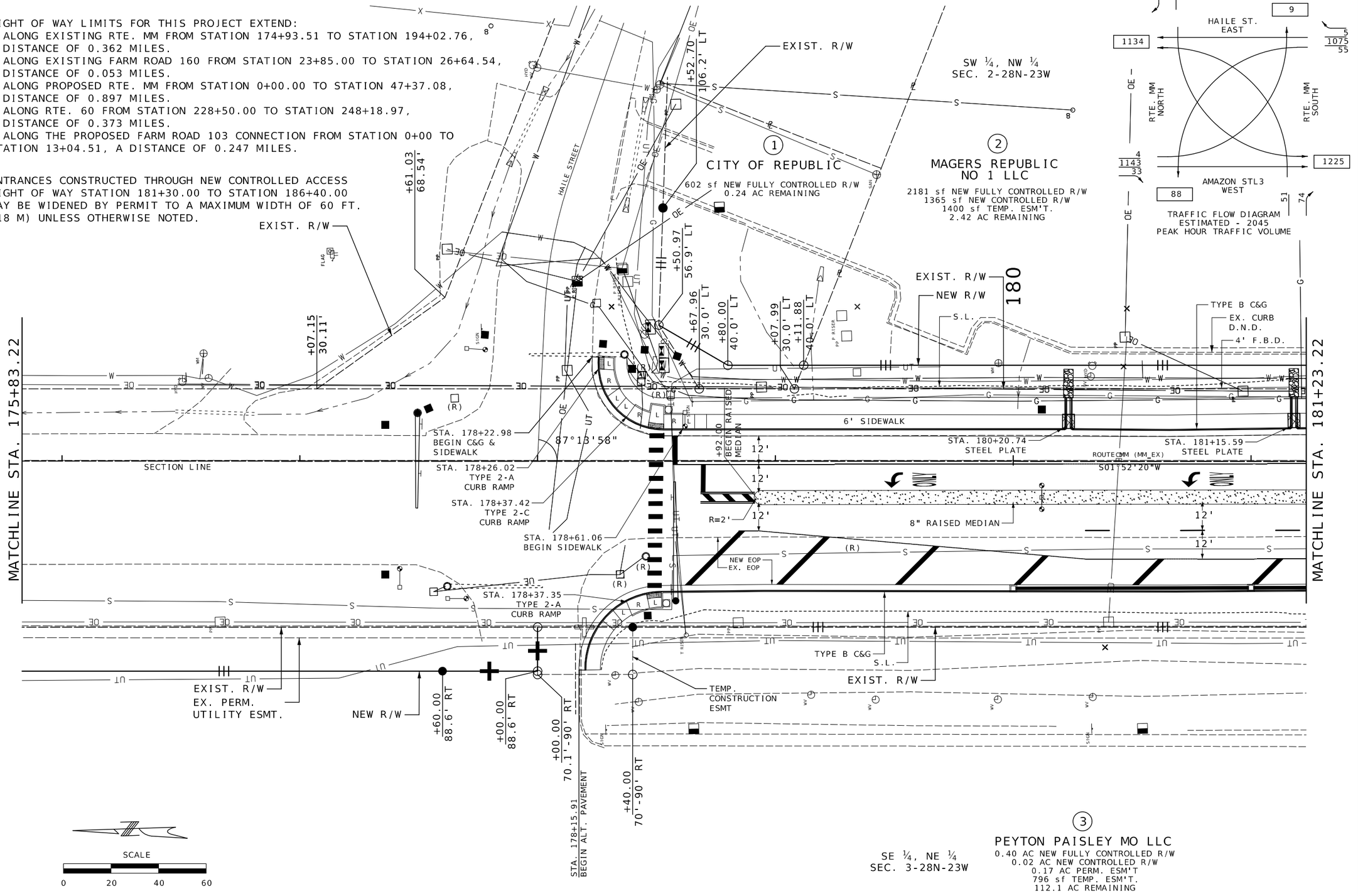
DATE PREPARED	7/25/2025
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	4
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION | DATE

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

RIGHT OF WAY LIMITS FOR THIS PROJECT EXTEND:
- ALONG EXISTING RTE. MM FROM STATION 174+93.51 TO STATION 194+02.76, A DISTANCE OF 0.362 MILES.
- ALONG EXISTING FARM ROAD 160 FROM STATION 23+85.00 TO STATION 26+64.54, A DISTANCE OF 0.053 MILES.
- ALONG PROPOSED RTE. MM FROM STATION 0+00.00 TO STATION 47+37.08, A DISTANCE OF 0.897 MILES.
- ALONG RTE. 60 FROM STATION 228+50.00 TO STATION 248+18.97, A DISTANCE OF 0.373 MILES.
- ALONG THE PROPOSED FARM ROAD 103 CONNECTION FROM STATION 0+00 TO STATION 13+04.51, A DISTANCE OF 0.247 MILES.

ENTRANCES CONSTRUCTED THROUGH NEW CONTROLLED ACCESS RIGHT OF WAY STATION 181+30.00 TO STATION 186+40.00 MAY BE WIDENED BY PERMIT TO A MAXIMUM WIDTH OF 60 FT. (18 M) UNLESS OTHERWISE NOTED.



PLAN SHEET
SHEET 2 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:32:13 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-2645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	5

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

(2)
MAGERS REPUBLIC
NO 1 LLC
SEE SHEET 5

(4)
ROY, ROBERT A.
1986 sf NEW CONTROLLED R/W
600 sf TEMP. ESM'T.
1.05 AC REMAINING

(5)
MITCHELL, BENJAMIN
1714 sf NEW CONTROLLED R/W
8518 sf NEW FULLY CONTROLLED R/W
600 sf TEMP. ESM'T.
1.47 AC REMAINING

SW ¼, NW ¼
SEC. 2-28N-23W

MATCHLINE STA. 181+23.22

MATCHLINE STA. 186+63.22

+30.00 40'-60' LT
+90.00 40'-60' LT
+60.00 40'-60' LT
+67.62 40.0' LT
+45.00 40'-60' LT
+75.00 40'-60' LT
+10.00 40'-60' LT
+40.00 40'-60' LT
+67.62 40.0' LT

182+24.74 - ENTRANCE 1
PAVED APPROACH
W=40' GR=2.6%
LG CL 1 = 0.4 STA

183+65.04 - ENTRANCE 2
PAVED APPROACH
W=12' GR=3.4%
LG CL 1 = 0.4 STA

186+25.72 - ENTRANCE 3
TYPE 1 DRIVEWAY
W=12' GR=2.6%
LG CL 1 = 0.5 STA

184+02.67
END ALT. PAVEMENT
BEGIN CONCRETE PAVEMENT

START STA. 0+00.00

185

TEMP. CONSTRUCTION ESMT
15" GRP B PIPE
(R) EX. ENTRANCE & CULVERT
EX. R/W
S.L.
NEW R/W
4' F.B.D.
STA. 183+70.19
TYPE 1-A CURB RAMP
EX. PERM. UTILITY ESMT.
TYPE B C&G
(R) EX. CULVERT
STA. 185+94.73
STEEL PLATE
6' SIDEWALK

STA. 181+81.66
TYPE 1-A CURB RAMP
STA. 182+67.25
TYPE 1-A CURB RAMP & SECTION LINE
STEEL PLATE
STA. 182+72.25
BEGIN SIDEWALK
STA. 183+42.64
TYPE 1-A CURB RAMP
STA. 183+85.04
TYPE 1-A CURB RAMP
BEGIN SIDEWALK
STA. 186+04.72
TYPE 1-A CURB RAMP
STA. 186+46.73
TYPE 1-A CURB RAMP
BEGIN SIDEWALK
ROUTE MM (MM_EX)
S01°52'20"W
ROUNDABOUT, NORTH LEG BASELINE (MM_Legs)
S03°33'46"W

(R) EX. BOX CULVERT & HEADWALL.
BUILD NEW 21" GRP A PIPES
(R) SIGN & HEADWALL
NEW EOP
EX. EOP
+26.56 (MM_EX)
+05.12 (MM_EX)
R=274'

+30.00 70.2' RT
S.L.
+82.70 74.7' RT
S.L.
4' F.B.D.
+75.00 70.0' RT
+98.30 (MM_EX)
+30.18 (MM_EX)
TYPE B C&G
+02.60 (MM_EX)
NEW R/W
EX. R/W
EX. PERM. UTILITY ESMT.
8" RAISED MEDIAN
EX. R/W
EX. PERM. UTILITY ESMT.
NEW 15' PERM. UTILITY ESMT.
+40.00 100.0' RT
+40.00 115.0' RT

(3)
PEYTON PAISLEY MO LLC
SEE SHEET 5

SE ¼, NE ¼
SEC. 3-28N-23W

SCALE
0 20 40 60

PLAN SHEET
SHEET 3 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2006645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:32:47 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-2006645

DATE PREPARED
8/13/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	6

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

MATCHLINE STA. 186+63.22

3
PEYTON PAISLEY MO LLC
SEE SHEET 5

SE ¼, NE ¼
SEC. 3-28N-23W

PI	2+36.34
PC	1+71.11
PT	2+99.57
Δ	24°32'2.7" (RT)
D	19°5'54.9"
L	128.46' (ARC)
T	65.23'
R	300.00'

EXIST. R/W
EX. PERM. UTILITY ESMT.
NEW R/W
NEW PERM. UTILITY ESMT
TYPE B C&G

EXIST. R/W
NEW R/W
STA. 187+66.84 STEEL PLATE
STA. 0+44.63 BEGIN SIDEWALK

5
MITCHELL, BENJAMIN
SEE SHEET 6

SW ¼, NW ¼
SEC. 2-28N-23W

EXISTING RTE. MM NORTH
FARM ROAD 160 WEST
PROPOSED RTE. MM EAST
EXISTING RTE. MM (BROOKLINE AVE) EAST
TRAFFIC FLOW DIAGRAM
ESTIMATED - 2045
PEAK HOUR TRAFFIC VOLUME

9
JUMP, GLADYS
2996 sf NEW FULLY CONTROLLED R/W
1.28 AC REMAINING

START STA 0+00.00
+39.95 280.2' RT
+85.00 35.0' LT
+00.00 35.0' LT
PC STA 1+71.11
+19.52 165.3' RT 4' F.B.D. S.L.
+93.20 68.4' LT
+00.00 55.0' LT
+66.73 101.0' RT
+75.00 85.0' RT
R=100'
1444.58 BEGIN CONCRETE PAVEMENT
+39.16 70.0'
R=105'
PC STA 4+06.38
+75.00 60.0' LT
R=189' R=2' R=225'
+10.00 110.0' LT
+28.98 104.7' LT
+13.22 68.1' LT
R=110' TYPE B C&G 4' F.B.D. S.L.
R=173' R=242'
+75.16 63.8' LT
2250.00 END CONCRETE PAVEMENT BEGIN ALT. PAVEMENT
¼ SECTION LINE
PC STA 2+90.77
PT STA 3+66.02
6' SIDEWALK
MATCHLINE STA. 4+10.00

U.I.P. EX. ENTRANCE & CULVERT
FARM ROAD 160 (FR160 Sec03)
S88°20'31"E
+91.82 280.0' RT
TEMP. CONSTRUCTION ESMT

U.I.P. EX. ENTRANCE & CULVERT
FARM ROAD 160 (FR160_Sec03)
S88°20'31"E
+85.00 16.9' - 30.0' RT
1+59.94 - ENTRANCE 4 PAVED APPROACH W=32' GR=+1.76% LG CL 1 = 0.3 STA
+40.00 16.9' - 40.0' RT
+55.00 51.2' - 70.0' RT
+00.00 85.0' RT
+88.80 95.4' RT
EXIST. R/W
NEW R/W
NEW PERM. UTILITY ESMT
R=175' S.L. 8' F.B.D. TYPE B C&G R=110' R=300'

BEGIN PROJECT
STA. 23+85.00 (FR160_Sec03)
STA. 1+34.80 (FR160)

START STA 2+00.00
END STA 2+47.36
8" CONCRETE ISLANDS
R=164' R=293' R=2'
89°47'06"
+91.00 80.0'
R=106'
PROPOSED FARM ROAD
48.39' RT
+51.00 30.0'
9°19'05"
+73.29 30.0' LT
R=126' R=150' R=2' R=56'
R=146'
PROPOSED ROUTE MM (MM_PR)
N89°33'15"E
R=97.5'
R=252'
8" CONCRETE ISLAND
R=263'
R=1146'
S84°04'
+54.51 BEGIN MGS GR
TYPE F CURB
TYPE A INTEGRAL CURB
190

6
PLEASANT, SAMSON N. ET AL.
0.59 AC NEW FULLY CONTROLLED R/W
0.13 AC PERM. ESM'T
998 sf TEMP. ESM'T.
9.41 AC REMAINING

NE ¼, SE ¼
SEC. 3-28N-23W
+00.00 75.0' RT
+06.75 88.5' RT
TYPE 3 ROCK DITCH LINER & 8" BEDDING
R=240'

(R) EX. BOX CULVERT & HEADWALLS
R=111' R=2' R=100'
R=225' TYPE B C&G 12' F.B.D. S.L.
R=90' 8" CONCRETE ISLAND

8
CITY OF REPUBLIC
6.60 AC NEW FULLY CONTROLLED R/W
0.00 AC REMAINING LT
0.00 AC REMAINING RT

NW ¼, SW ¼
SEC. 2-28N-23W
+72.84 202.5' RT

PI	3+28.43
PC	2+90.77
PT	3+66.02
Δ	6°22'8.7" (RT)
D	8°27'47.4"
L	75.26' (ARC)
T	37.67'
R	677.00'

+44.54 69.7' LT
+45.34 30.0' LT
NEW R/W
EXIST. R/W
192+15.51 END CONCRETE PAVEMENT BEGIN ALT. PAVEMENT
WRAP TYPE D BARRIER AROUND RADIUS TO STA. 192+05
LEAVE OPENING FOR DRAINAGE
+25.00 30.0' RT

7
MAGELLAN MIDSTREAM PARTNERS LP
0.34 AC NEW FULLY CONTROLLED R/W
0.16 AC NEW CONTROLLED R/W
25.70 AC REMAINING

SCALE
0 30 60 90

MATCHLINE STA. 192+35.38

PLAN SHEET
SHEET 4 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:33:20 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED 8/13/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	7

COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

7

MAGELLAN MIDSTREAM PARTNERS LP

SEE SHEET 6

NW ¼, SW ¼
SEC. 2-28N-23W

192+45.00 - ENTRANCE #5
PAVED APPROACH
W=20'
GR=-1.62%
R=30'
LG CL 1 = 0.31 STA

NEW R/W

S.L.

4'
F.B.D.

TYPE B
C&G

+10.58
3.9' LT

+50.00
55.0' LT

STA. 194+02.73
END WIDENING

END PROJECT
STA. 194+02.76

+00.00
30.0' LT

195

EXIST.
R/W

STA. 192+35.38

MATCHLINE STA

R=286'

ROUTE MM (MM_EX)
S01°52'20"W

SECTION LINE

+69.24
30.0' RT

EXIST.
R/W

8" CONCRETE ISLAND

NEW PERM.
UTILITY ESMT

NE ¼, SE ¼
SEC. 3-28N-23W

6

PLEASANT, SAMSON N. ET AL.

SEE SHEET 6

ADAMS, JOE E. ET AL.
(ADAMS FAMILY TR)

NO TAKING

EX. PERM.
UTILITY ESMT.

EX. PERM.
UTILITY ESMT.

SCALE

0 20 40 60

PLAN SHEET
SHEET 5 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:31:10 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	8

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MARSH, STEVEN E.
NO TAKING

CARTER, VIOLET
NO TAKING

SW ¼, NW ¼
SEC. 2-28N-23W

9
JUMP, GLADYS
SEE SHEET 7

8
CITY OF REPUBLIC
SEE SHEET 7

7
MAGELLAN MIDSTREAM PARTNERS LP
SEE SHEET 7

NW ¼, SW ¼
SEC. 2-28N-23W

NEW R/W
EX. PERM. UTILITY ESMT.
EX. R/W
NEW R/W
¼ SECTION LINE
+92.36 125.8' LT
+85.59 285.4' LT
+87.18 100.2' LT
+87.43 65.0' LT
+87.43 65.0' LT
+87.42 65.0' RT
+87.42 65.0' RT
+86.20 180.0' RT
+25.00 145.5' RT
+00.00 150.0' RT
+67.75 BEGIN MGS GR
+50.00
+17.75
+67.75
+00.25
TYPE 2 ROCK BLANKET
S.L.
8" RAISED MEDIAN
DOUBLE-FACED MGS GR (NO OUTSIDE BLOCK)
CHAIN LINK FENCE
TYPE B C&G
W WIDTH TRANSITION 6' TO 5'
5' SIDEWALK
6' SIDEWALK
PC STA 4+41.75
PT STA 7+87.66
MATCHLINE STA. 4+10.00
MATCHLINE STA. 12+20.00
R=1150'
R=1146'
PROPOSED ROUTE MM (MM_PR)
S 86°48'46" E
U.I.P.
EX. DOUBLE 48" CMP
TYPE B C&G
MGS GR
36" RCP
STA. 7+97.75 BEGIN BRIDGE APPROACH SLAB
STA. 8+17.75 BEGIN NEW BRIDGE
8' F.B.D.
S.L.
BNSF CHEROKEE SUBDIVISION
30
30

PI 6+16.03
PC 4+41.75
PT 7+87.66
Δ 17°15'49.6" (RT)
D 4°59'27.3"
L 345.90' (ARC)
T 174.27'
R 1,148.00'

SCALE
0 30 60 90

PLAN SHEET
SHEET 6 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:33:46 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/13/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	9

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

BROOKLINE FIRE PROTECTION DIST.
NO TAKING

¼ ¼ SECTION LINE

NEW R/W

EX. PERM. UTILITY ESMT.

S.L.

10' MULTI-USE PATH

+56.66 210.6' LT

+00.00 130.0' LT

STA. 18+22.71 EXTEND 10' MULTI-USE TRAIL TO LIMITS OF RIGHT-OF-WAY

STA. 13+31.25 BEGIN SIDEWALK

TYPE 2 ROCK BLANKET

TYPE B C&G

CHAIN LINK FENCE

8" RAISED MEDIAN

DOUBLE-FACED MGS GR (NO OUTSIDE BLOCK)

+99.50 END MGS GR

15

20

+28.75

14+46.13 PC

5' SIDEWALK

PROPOSED ROUTE MM (MM PR)

MATCHLINE STA. 12+20.00

MATCHLINE STA. 20+30.00

STA. 13+11.25 END NEW BRIDGE

STA. 13+31.25 END BRIDGE APPROACH SLAB

10' MULTI-USE PATH

+00.00

NEW R/W

S.L.

+90.00 139.21'

+90.00 154.21'

+20.00 146.22'

+20.00 131.22'

+00.00 105.0' RT

TYPE B C&G

MGS GR

±11.25 END MGS GR

6' SIDEWALK

SW WIDTH TRANSITION 10' TO 6'
SEE SHEET 46 FOR STATIONING

NE ¼, SW ¼
SEC. 2-28N-23W

PERM. DRAINAGE ESMT

EX. PERM. UTILITY ESMT.

SCALE
0 30 60 90

(10)

OZARK MOTOR & SUPPLY COMPANY

5.84 AC NEW FULLY CONTROLLED R/W
2.10 AC NEW CONTROLLED R/W
0.03 AC PERM. ESM'T
22.34 AC REMAINING LT
16.40 AC REMAINING RT

PI	21+01.51
PC	14+46.13
PT	25+96.68
Δ	68°32'54.7" (RT)
D	5°57'28.5"
L	1,150.54' (ARC)
T	655.38'
R	961.67'

PLAN SHEET
SHEET 7 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/15/2025 12:34:16 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/13/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	10

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

8" RAISED MEDIAN
TYPE B C&G
S.L.
NEW R/W
+00.00 LT 90.0' LT
+80.00 105.0' LT
STA. 21+01.17
BEGIN 10' W
MULTI-USE PATH
STA. 20+78.13
END 5' W
SIDEWALK
+50.00
10' MULTI-USE PATH
25
MATCHLINE STA. 20+30.00
PROPOSED ROUTE MM (MM_PR)
MATCHLINE STA. 25+70.00
6' SIDEWALK
+00.00 70.0' RT
+00.00 75.0' RT
NEW R/W
S.L.
TYPE B C&G
PERM. DRAINAGE ESMT
+80.00 85.0' - 105.0' RT
+25.00 88.6' - 108.6' RT

(10)
OZARK MOTOR & SUPPLY COMPANY
SEE SHEET 9

NE ¼, SW ¼
SEC. 2-28N-23W

SCALE
0 20 40 60

PLAN SHEET
SHEET 8 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:32:21 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	11

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

(10)
OZARK MOTOR
& SUPPLY COMPANY

SEE SHEET 9

(11)
3 LIPS LLC
4.58 AC NEW CONTROLLED R/W
433 sf TEMP. ESM'T.
17.22 AC REMAINING LT
18.20 AC REMAINING RT

SE ¼, SW ¼
SEC. 2-28N-23W

26+33.00 - ENTRANCE 6
PAVED APPROACH
W=36'
GR=11.5%
LG CL 1 = 0.60 STA

+50.00
90.0' LT

NEW R/W
8" RAISED MEDIAN
TYPE B C&G
S.L.

+00.00
70.0' LT

+12.68
7.0' LT

30

STA. 25+91.57
TYPE 1-A
CURB RAMP

+72.98
5.0' LT

STA. 26+73.34
TYPE 1-A
CURB RAMP
BEGIN SIDEWALK

+99.00
5.0' RT

10' MULTI-USE PATH

MATCHLINE STA. 25+70.00

PT STA 25+96.68

R=2'

PROPOSED ROUTE MM (MM_PR)

S01°44'14"W

R=2'

MATCHLINE STA. 31+10.00

STA. 25+92.48
TYPE 1-A
CURB RAMP

6' SIDEWALK

STA. 26+74.91
TYPE 1-A CURB RAMP
BEGIN SIDEWALK

S.L.

TYPE B C&G

NEW R/W

+13.32
7.0' RT

+00.00
75.0' RT

¼ ¼ SECTION LINE

26+33.00 - ENTRANCE 7
PAVED APPROACH
W=36'
GR=15.4%
LG CL 1 = 0.59 STA

+50.00
90.0' RT

NE ¼, SW ¼
SEC. 2-28N-23W

SE ¼, SW ¼
SEC. 2-28N-23W

SCALE
0 20 40 60

PLAN SHEET
SHEET 9 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 8:32:54 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	12

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

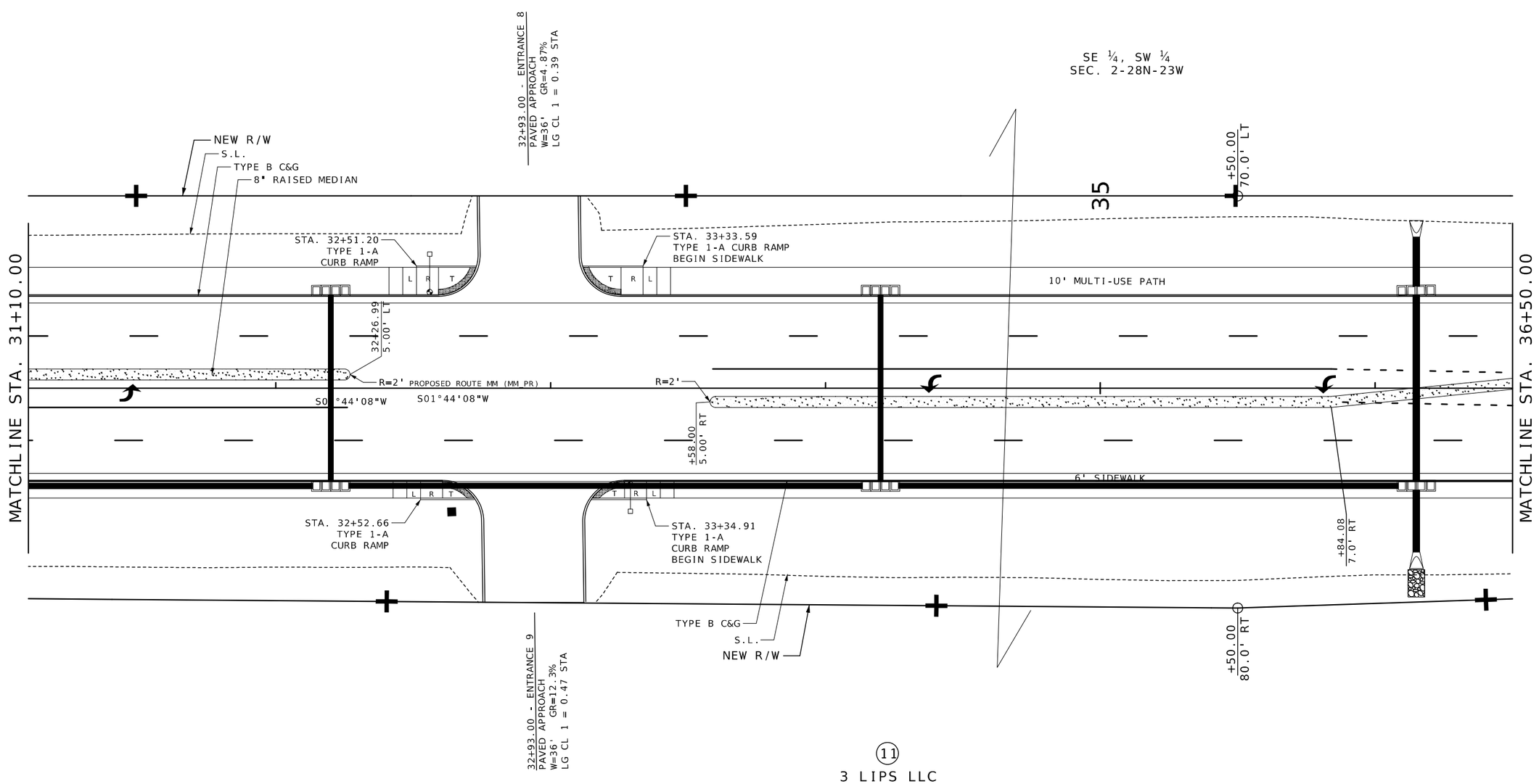
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



(11)

3 LIPS LLC

SEE SHEET 11

SCALE

0 20 40 60

PLAN SHEET
SHEET 10 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:33:15 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	13

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

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

PI 40+86.77
PC 38+57.88
PT 43+01.91
Δ 34°17'15.4" (LT)
D 7°43'18.4"
L 444.04' (ARC)
T 228.89'
R 742.00'

(11)
3 LIPS LLC
SEE SHEET 11

(12)
STONE CREEK DEVELOPMENT LLC
CONTROLLED ACCESS RIGHTS

SECTION LINE

TEMP. CONSTRUCTION ESMT

39+93.79 - ENTRANCE 10
PAVED APPROACH
W=36'
LG CL 1 = 0.55 STA
GR=+3.95%

+83.68 7.0' LT
NEW R/W
8" RAISED MEDIAN
TYPE B C&G
S.L.
10' MULTI-USE PATH
MATCHLINE STA. 36+50.00
+50.00 70.0' LT
+20.64 74.2' LT
+25.00 65.0' LT
+70.39 86.1' LT
+68.69 75.5' LT
+00.09 81.7' LT
+27.21 64.4' LT
+77.12 64.4' LT
STA. 39+39.21
TYPE 1-B
CURB RAMP
(R) EX ENTRANCE
40
R=25'
STA. 40+07.75
TYPE 1-B
CURB RAMP
BEGIN SIDEWALK
(R) EX. SIDEWALK
10' MULTI-USE PATH
S.L.
R=15'
R=25'
EXIST. 15' ESMT
EXIST. CITY R/W
TYPE B C&G
(R) EX. C&G
MATCHLINE STA. 41+60.00
PC STA 38+57.88
R=737'
R=739'
R=2'
+32.52 5.00' LT
+36.45 7.0' RT
PROPOSED ROUTE MM (MM_PR)
R=747'
R=751'
R=4'
(R) EX. C&G
6' SIDEWALK
(R)
R=25'
R=25'
STA. 39+59.25
TYPE 1-E
CURB RAMP
(R) EX. SIDEWALK
+80.69 9.0' RT
8" RAISED MEDIAN
TYPE B C&G
S.L.
EXIST. CITY R/W
EXIST. 20' ESMT
S.L.
TYPE B C&G
NEW R/W
+50.00 70.0' RT
+50.36 65.7' RT
+63.95 65.4' RT
+84.82 81.3' RT
+55.98 98.3' RT
+77.12 65.8' RT
STA. 40+64.77
TYPE 1-E
CURB RAMP
BEGIN SIDEWALK
STONE FALLS ROAD
39+91.31 - ENTRANCE 11
PAVED APPROACH
W=38'
LG CL 1 = 0.56 STA
GR=-5.16%

SE ¼, SW ¼
SEC. 2-28N-23W

(12)
STONE CREEK DEVELOPMENT LLC
CONTROLLED ACCESS RIGHTS

(13)
OIL INVESTMENTS REPUBLIC LLC

70 sf NEW CONTROLLED R/W
0.002 AC PERM. ESM'T.
1.80 AC REMAINING

NE ¼, NW ¼
SEC. 11-28N-23W

SCALE
0 20 40 60

PLAN SHEET
SHEET 11 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:33:44 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	14

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

MATCHLINE STA. 242+11.16 (60_WB)

660
1330
300
1800
US HWY 60 EAST
1440
140
350
20
PROPOSED RTE. MM NORTH
FARM ROAD 103 SOUTH
650
430
630
770
US HWY 60 WEST
1980
430
1010
40

TRAFFIC FLOW DIAGRAM
ESTIMATED - 2045
PEAK HOUR TRAFFIC VOLUME

21
ARVEST BANK
1089 sf NEW FULLY CONTROLLED R/W
0.03 AC PERM. ESM'T
1.27 AC REMAINING

EX. R/W
EX. PERM. UTILITY ESMT.
NEW R/W
NEW PERM. ESMT
+50.63
97.0' LT
+50.17
105.0' LT
TYPE A2 SHLDR
S.L.

NE ¼, NW ¼
SEC. 11-28N-23W

16
JTRP PROPERTIES LLC
2128 sf NEW FULLY CONTROLLED R/W
0.03 AC PERM. ESM'T
1.0 AC REMAINING

+52.44
65.0' LT
+52.89
57.0' LT
+00.00
65.0' LT
+32.00
92.0' LT
U.I.P. EX. MANHOLE
+62.76
105.0' LT
+71.51
90.4' LT
+80.00
75.4' LT
+96.58
75.5' LT
STA. 44+76.08
TIE INTO EX. GRADE

(R) ASPHALT SHOULDER
EX. US 60 WESTBOUND (60_WB)
EX. US 60 EASTBOUND (60_EB)
(R) EX. CONC. MEDIAN
4' F.B.D.
S.L.
TYPE A2 SHLDR
8" RAISED MEDIAN
EX. R/W
EX. PERM. UTILITY ESMT.
(R) EX. ENTRANCE
R=200'
R=100'
+29.04
(R) EX. CULVERT
8" CONC. ISLAND
(R) EX. ISLAND
END STA 47+37.08
START STA 0+00.00
239+22.49 US 60 WB
4406.58 RTE MM
(R) EX. FR 103 PAVEMENT. SEE SHEET 25 FOR DETAILS.
EX. FARM ROAD 103
¼ SECTION LINE
NE ¼, NW ¼
SEC. 11-28N-23W
PROPOSED FARM ROAD 103 CONNECTION (FR10B_TIE)
S32°33'07"E
239+30.50 FR 103 CONNECTION
+34.59
PC STA 2+31.74
MATCHLINE STA. 2+62.92

+75.00
64.4' LT
+01.48
64.4' LT
+50.00
67.1' LT
EXIST. 15' ESMT
EXIST. CITY R/W
8" RAISED MEDIAN
TYPE B C&G
STA. 44+20.22
TYPE 1-B CURB RAMP
NEW 10' MULTI-USE PATH
(R) EX. SIDEWALK
STA. 42+93.22
TYPE 1-B CURB RAMP
STA. 43+47.19
TYPE 1-B CURB RAMP & BEGIN SIDEWALK
(R) EX. 42" PIPE
(R) EX. SW & RAMP
(R) EX. C&G
(R) EX. I.D.
14' BUILD NEW 42" GRP A PIPE
PROPOSED ROUTE MM (MM PR)
U.I.P. EX. PIPE
(R) EX. ISLAND
(R) EX. SW & RAMP
(R) EX. C&G
U.I.P. EX. JUNCTION BOX
R=200'
8" CONC. ISLAND
R=100'
TYPE A GUTTER
R=2.5'
+93.41
R=200'
+25.00
125.0' RT
+10.23
128.8' RT
S.L.
4' F.B.D.
TYPE A2 SHLDR
R=200'
+00.00
62.0' RT
+97.62
72.0' RT
EX. PERM. UTILITY ESMT.
EX. R/W
NEW PERM. UTILITY ESMT.
NEW R/W
MATCHLINE STA. 41+90.00
PT STA 43+10.01
43+12.62 (@ EOP) WAIVED APPROACH 28' LG CL 1 = 0.4 STA
43+10.35 ENTRANCE 13 APPROACH 25% GR=+3 LG CL 1 = 0.4 STA
43+01.35 ENTRANCE 13 APPROACH 25% GR=-1.98% W=26' LG CL 1 = 0.29 STA
+73.62
85.7' RT
+75.00
65.7' RT
+47.85
100.0' RT
+50.00
80.0' RT
STA. 43+46.08
TYPE 1-A CURB RAMP
STA. 44+33.75
EXIST. 20' ESMT
EXIST. CITY R/W
STA. 42+62.99
TYPE 1-A CURB RAMP
TYPE B C&G
S.L.
NEW R/W
NEW 20' ESMT
+50.00
85.0' RT
+43.80
104.9' RT
STA. 46+13.66
TYPE 2-C CURB RAMP
+74.47
97.0' LT
+72.14
57.0' LT
6' SIDEWALK
(R) EX SIDEWALK
8" RAISED MEDIAN
TYPE A2 SHLDR
EX. PERM. ESMT.
EX. R/W

13
OIL INVESTMENTS REPUBLIC LLC
SEE SHEET 13

14
J & S STATE PROPERTIES LLC ET AL
1757 sf NEW FULLY CONTROLLED R/W
469 sf NEW CONTROLLED R/W
0.05 AC PERM. ESM'T
1.15 AC REMAINING

15
RIVER REGION COMMUNITY FED CREDIT UNION
2789 sf NEW FULLY CONTROLLED R/W
.05 AC PERM. ESM'T
1.04 AC REMAINING

17
REPUBLIC PARTNERS LLC
2.07 AC NEW FULLY CONTROLLED R/W
0.72 AC NEW CONTROLLED R/W
0.24 AC PERM. ESM'T
0.00 AC REMAINING LT
6.31 AC REMAINING RT

SCALE
0 30 60 90

MATCHLINE STA. 236+38.98 (60_WB)

PLAN SHEET
SHEET 12 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 6:34:42 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	15

COUNTY
GREENE

JOB NO.
J8S0836D

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)

5+28.14
ENTRANCE 14
PAVED APPROACH
W=40' GR=-4.08%
LG CL 1 = 0.57 STA

TEMP. CONSTRUCTION ESMT

(18)
VERMEER GREAT PLAINS INC.
CONTROLLED ACCESS RIGHTS
3049 sf TEMP. ESM'T.
5.0 AC REMAINING

(R) EX. CULVERTS & ENTRANCES

(R) EX. FR 103 PAVEMENT. SEE SPECIAL SHEET FOR DETAILS.

(R) NEW R/W

+55.00 68.9' LT

+90.00 56.8' LT

+88.50 89.2' LT

+50.00 86.7' LT

EX. FARM ROAD 103
S01°40'21"W

15" GRP A PIPE

R=25'

+69.40 36.0' LT

ROCK LINING 4'x12'

TYPE A2 SHLDR
"V" DITCH
S.L.

PROP. FARM ROAD 103 CONNECTION
(FR103_TIE)

1/4 SECTION LINE

7+20.73
U.I.P. EX. ENTRANCE
W=12' GR=+1.10%

STA 7+36.48

(20)
CHAMPIEUX, JIM
CONTROLLED ACCESS RIGHTS

NW 1/4, NE 1/4
SEC. 11-28N-23W

MATCHLINE STA. 2+62.92

R=723'

R=719'

R=2'

+55.19

R=25'

15" GRP A PIPE

8" CONCRETE MEDIAN
TYPE A2 SHLDR
"V" DITCH
S.L.

R=25'

ROCK LINING 4'x12'

EX. PERM. UTILITY ESMT.

PI 4+91.89
PC 2+31.74
PT 7+36.48
Δ 34°13'27.5" (RT)
D 6°46'50.0"
L 504.74' (ARC)
T 260.15'
R 845.00'

+16.05 18.6' RT

EXIST. R/W

MATCHLINE STA. 8+02.92

EX. PERM. UTILITY ESMT.

+98.66 100.4' RT

+00.00 85.0' RT

NEW R/W

NEW PERM. UTILITY ESMT.

+55.00 115.0' RT

5+28.14
ENTRANCE 15
PAVED APPROACH
W=40' GR=-0.5%
LG CL 1 = 0.87 STA

+54.72 131.0' RT

+00.00 110.4' RT

+14.47 110.8' RT

(17)
REPUBLIC PARTNERS LLC
SEE SHEET 14

NE 1/4, NW 1/4
SEC. 11-28N-23W

(19)
PIG FARM LLC
1.16 AC NEW CONTROLLED R/W
24.58 AC REMAINING

SCALE
0 20 40 60

PLAN SHEET
SHEET 13 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 6:35:49 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	16

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

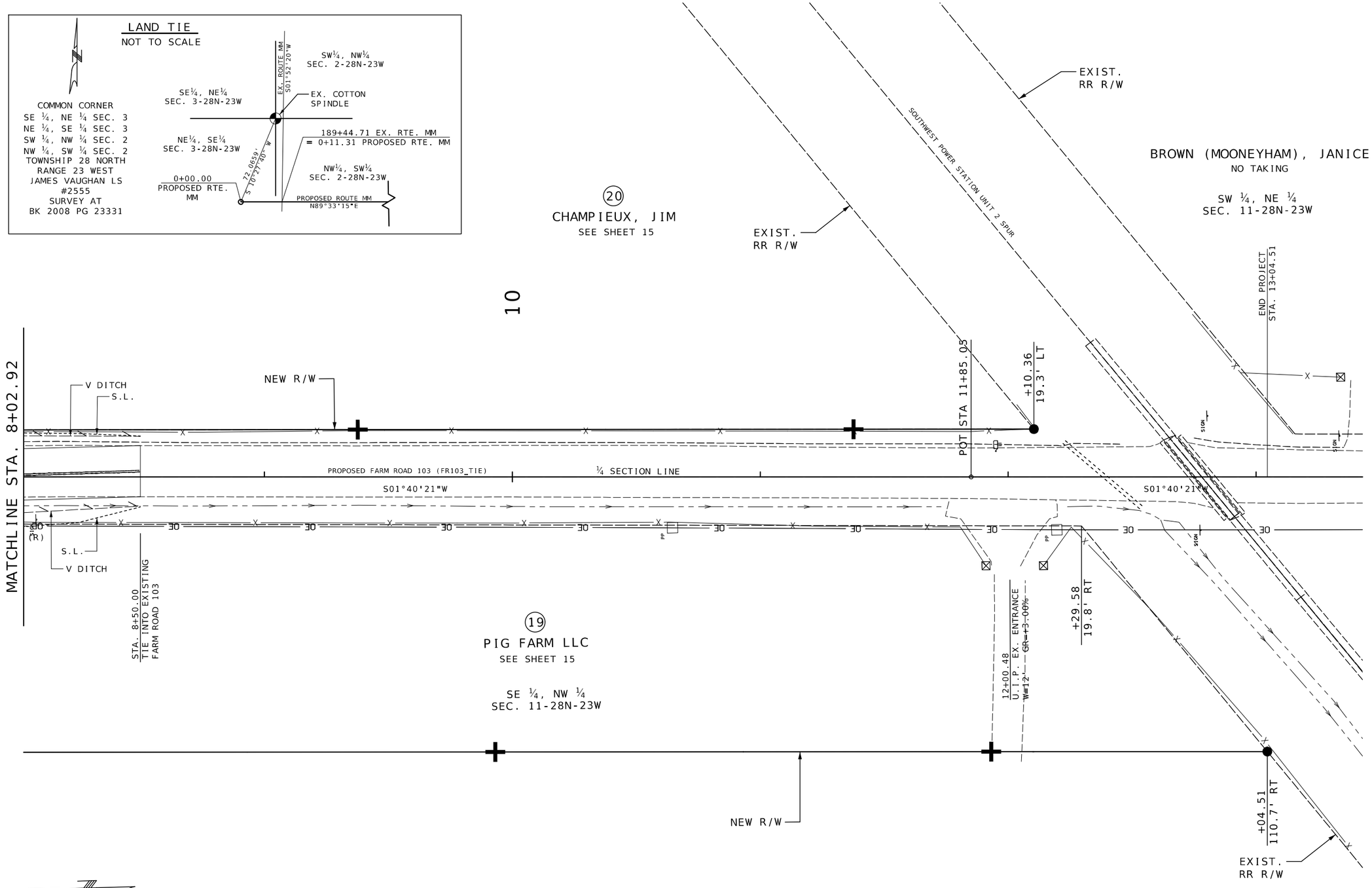
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

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

LAND TIE
NOT TO SCALE



SCALE
0 20 40 60

PLAN SHEET
SHEET 14 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 8:36:58 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	17

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

NOTES:

1. STATIONS & OFFSETS BASED ON EX. US 60 WESTBOUND ALIGNMENT

PINNACLE AT SC APARTMENTS LLC
NO TAKING

EX. PERM. UTILITY ESMT.
EXIST. R/W

230

START STA 228+00.00

START STA 228+00.00

MATCHLINE STA. 230+99.82

12'
EX. US 60 WESTBOUND (60_WB)
12'
12'
EX. US 60 EASTBOUND (60_EB)
12'
12' (R) ASPHALT SHOULDER

SIGN
UT
X
S
T RISER

EXIST. R/W

19
PIG FARM LLC
SEE SHEET 15

BEGIN PROJECT
STA. 228+50.00

+78.92
BEGIN NEW PAVEMENT

NE ¼, NW ¼
SEC. 11-28N-23W

EX. PERM.
UTILITY ESMT.

+98.02
BEGIN RT TURN LANE

TYPE A2 SHLDR
4' F.B.D. DITCH
S.L.
EXTEND EX. 15" R.C.P

17
REPUBLIC PARTNERS LLC
SEE SHEET 14

SCALE
0 20 40 60

PLAN SHEET
SHEET 15 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:38:15 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	18

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOTES:

1. STATIONS & OFFSETS BASED ON EX. US 60 WESTBOUND ALIGNMENT

STONE CREEK
DEVELOPMENT LLC

NO TAKING

(15)

RIVER REGION
COMMUNITY FED
CREDIT UNION

SEE SHEET 14

EX. PERM. UTILITY ESMT.

EXIST. R/W

8" CONCRETE MEDIAN

235

+20.00 BEGIN NEW PAVEMENT

4' F.B.D. DITCH

TYPE A2 SHLDR

S.L.

(R) ASPHALT SHOULDER

(R)

+52.00

+53.40

+57.89

+85.40

+02.57

MATCHLINE STA. 230+99.82

EX. US 60 WESTBOUND (60_WB)

N57°26'53"E

12'

12'

U.I.P. EX. SHLDR

S.L.

SIGN

(R)

R=4.5'

(R) EX. CONCRETE MEDIAN

12'

12'

12'

12'

12'

12'

MATCHLINE STA. 236+39.82

EX. US 60 EASTBOUND (60_EB)

N57°26'53"E

(R) ASPHALT SHOULDER

+00.00
85.0' RT

NEW R/W

EXIST. R/W

+50.00
93.0' RT

+58.02

TYPE A2 SHLDR
4' F.B.D. DITCH

S.L.

+70.00
93.0' RT

+70.00
103.0' RT

NEW PERM.
UTILITY ESMT.

EX. PERM.
UTILITY ESMT.

FLAG

(17)

REPUBLIC PARTNERS LLC

SEE SHEET 14

NE ¼, NW ¼
SEC. 11-28N-23W

SCALE

0 20 40 60

PLAN SHEET
SHEET 16 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07-28-2025 6:38:43 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	19

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOTES:

1. STATIONS & OFFSETS BASED ON EX. US 60 WESTBOUND ALIGNMENT

(21)
ARVEST BANK
SEE SHEET 14

NE ¼, NW ¼
SEC. 11-28N-23W

EX. PERM. UTILITY ESMT.
NEW PERM. UTILITY ESMT.
NEW R/W
EXIST. R/W

+83.38 97.0' LT
+88.82 105.0' LT
+86.41 57.0' LT
+91.83 65.0' LT

COMMERCIAL AVE.
¼ SECTION LINE

NW ¼, NE ¼
SEC. 11-28N-23W

MFA OIL CO.
NO TAKING

8" CONCRETE MEDIAN
TYPE A2 SHLDR
4' F.B.D.
S.L.

+03.28
245
+43.64
+28.68

(R) ASPHALT SHOULDER

EX. US 60 WESTBOUND (60_WB)
N57°26'53"E

+07.56

(R) CONCRETE MEDIAN

R=4.5'

EX. US 60 EASTBOUND (60_EB)
N57°26'53"E

(R) ASPHALT SHOULDER

MATCHLINE STA. 242+11.16

MATCHLINE STA. 247+51.16

+21.33
115.0' RT

OBLITERATE EXISTING CONNECTION TO US 60
(SEE SHEET 25 FOR DETAILS)

EXIST. R/W

EX. PERM. UTILITY ESMT.

15" GRP
A PIPE

244+73.75
ENTRANCE 16
PAVED APPROACH
W=50' GR=4.57%
LG CL 1 = 0.3 STA

ROCK LINING
4'x12'

S.L.
4' F.B.D.
TYPE A2 SHLDR

(18)
VERMEER GREAT PLAINS INC.
SEE SHEET 15

(20)
CHAMPIEUX, JIM
SEE SHEET 15

SCALE
0 20 40 60

PLAN SHEET
SHEET 17 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07-28-2025 6:40:10 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	20

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SW ¼, SE ¼
SEC. 2-28N-23W

NW ¼, NE ¼
SEC. 11-28N-23W

+45.65

OBLITERATE EXISTING
FARM ROAD 164
PAVEMENT

(R) EXISTING RIGHT
TURN LANE STRIPING

SCALE
0 20 40 60

MFA OIL CO.
NO TAKING

EXIST. R/W

FARM ROAD 164

250

+89.14

U.I.P. EX. CULVERT

MATCHLINE STA. 247+51.16

EX. US 60 WESTBOUND (60_WB)

12'
12'

END STA 252+00.00

EX. US 60 EASTBOUND (60_EB)

12'
12'

END STA 252+00.00

TYPE A2 SHLDR

S.L.

+00.00

END PROJECT
STA. 248+18.97

EXIST. R/W

20
CHAMPIEUX, JIM
SEE SHEET 15

PLAN SHEET
SHEET 18 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/29/2025 6:41:02 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	21

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

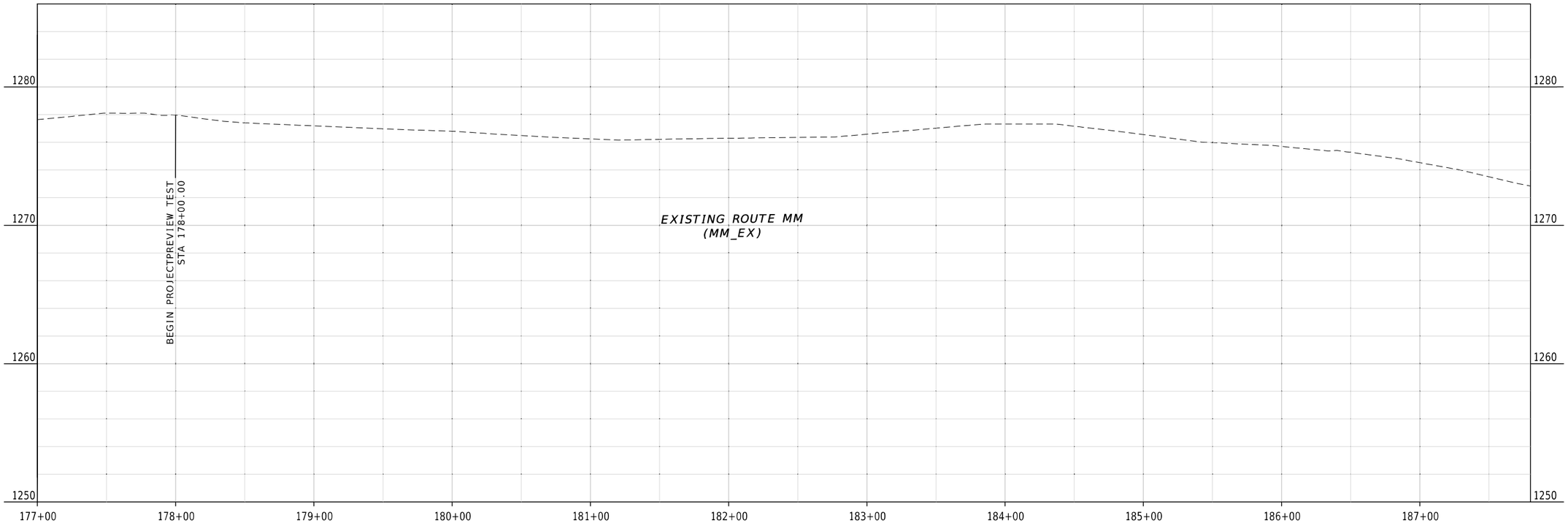
PROJECT NO.

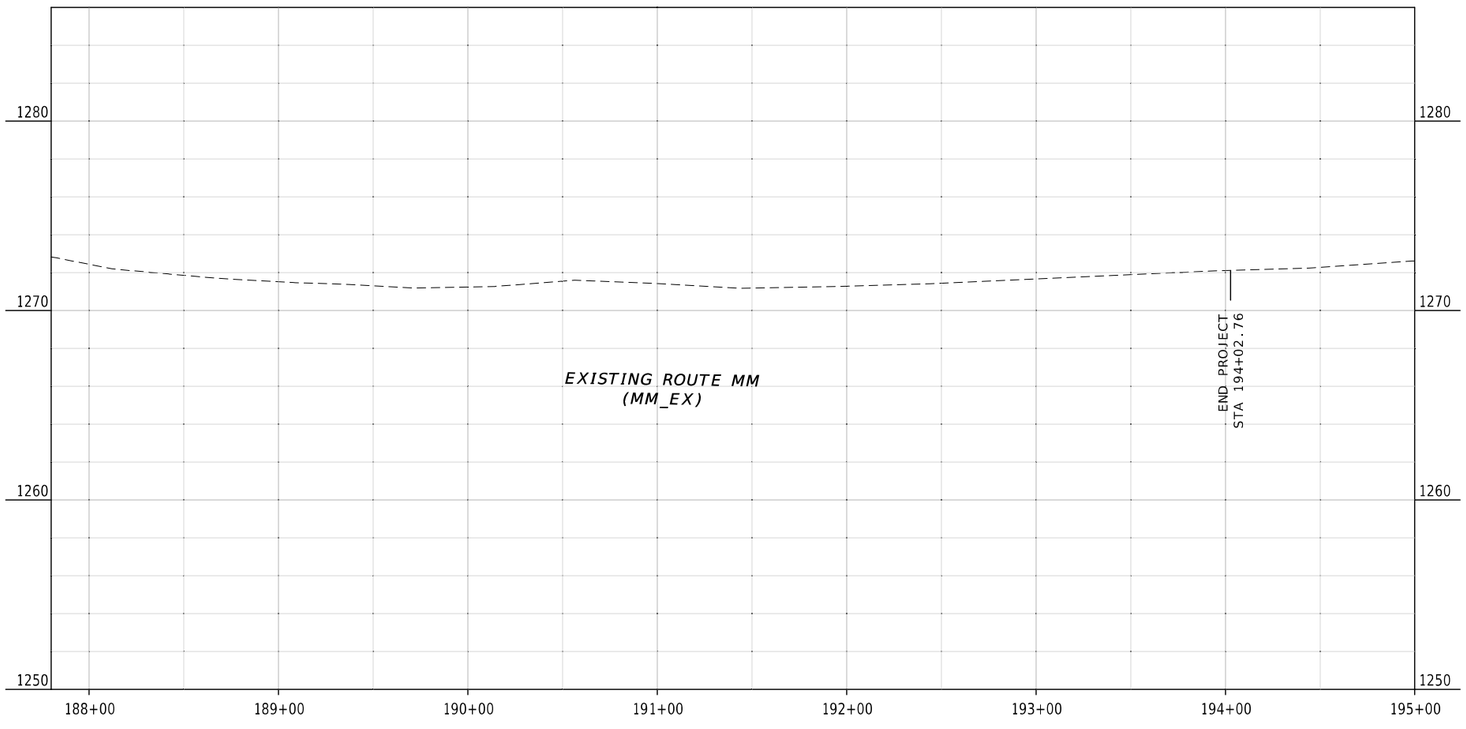
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





BM1: RR SPIKE AT
INTERSECTION OF FR 103 & FR 164
PROPOSED ROUTE MM
STA. 43+27.93
OFFSET: 612.92' LT
ELEVATION: 1267.52

BM2: BOLT AT INTERSECTION OF
RTE. MM & FR 160
PROPOSED ROUTE MM
STA. 0+13.64
OFFSET: 70.76' LT
ELEVATION: 1271.66

PROFILE SHEET
EXISTING ROUTE MM
SHEET 19 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:41:54 AM
WARNER D. SHERMANII - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	22

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

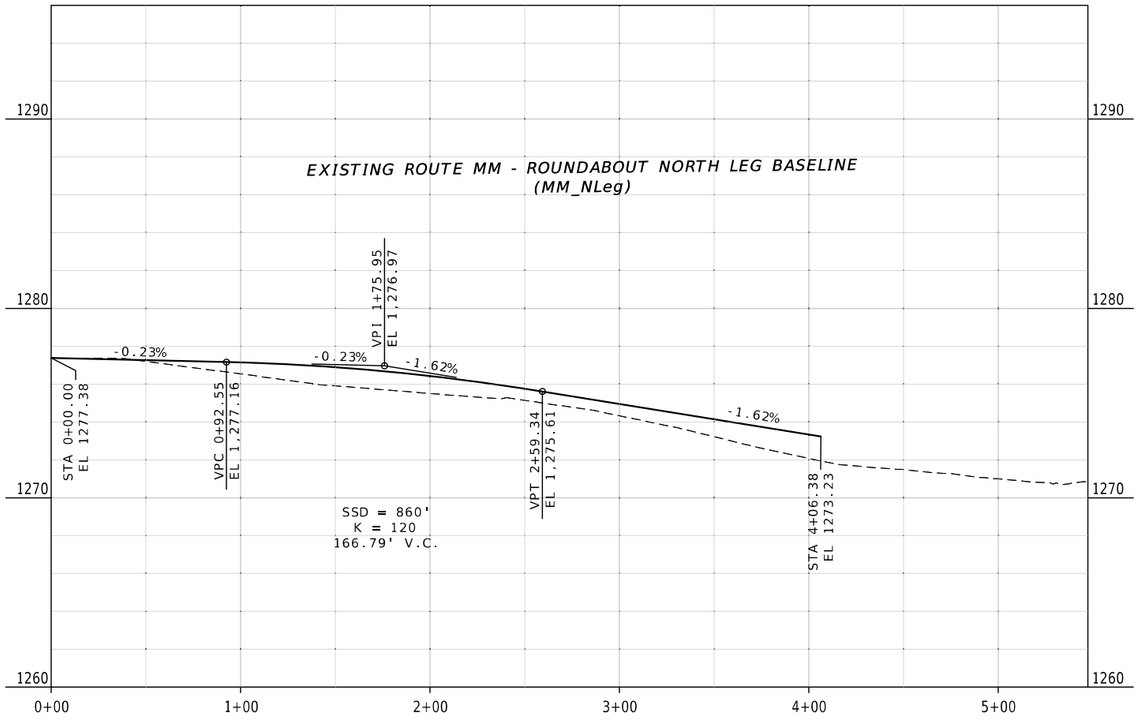
PROJECT NO.

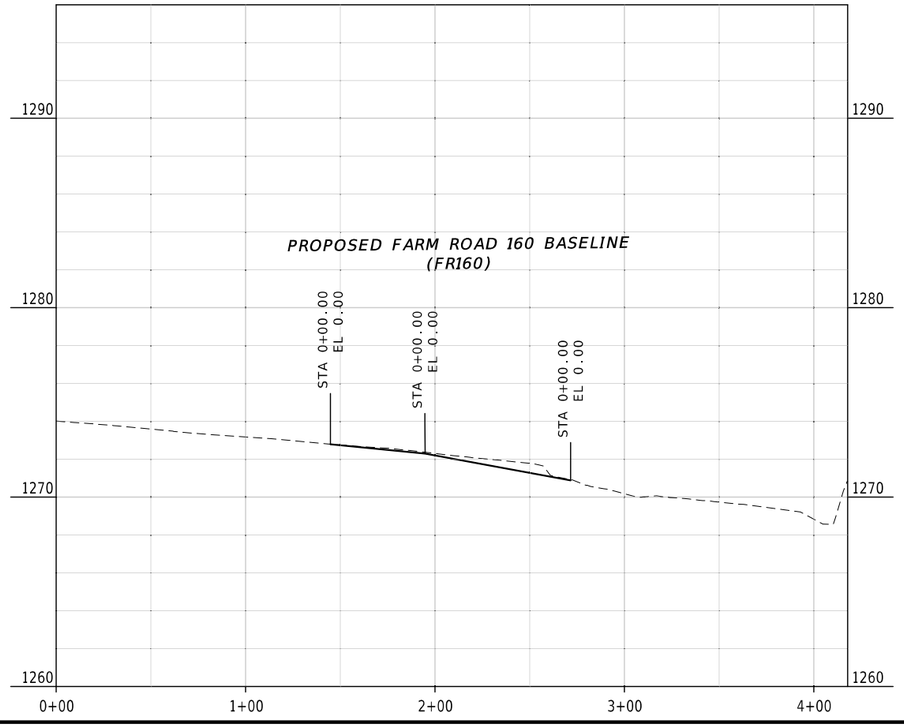
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





PROFILE SHEET
FARM ROAD 160
SHEET 20 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:42:19 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	23

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

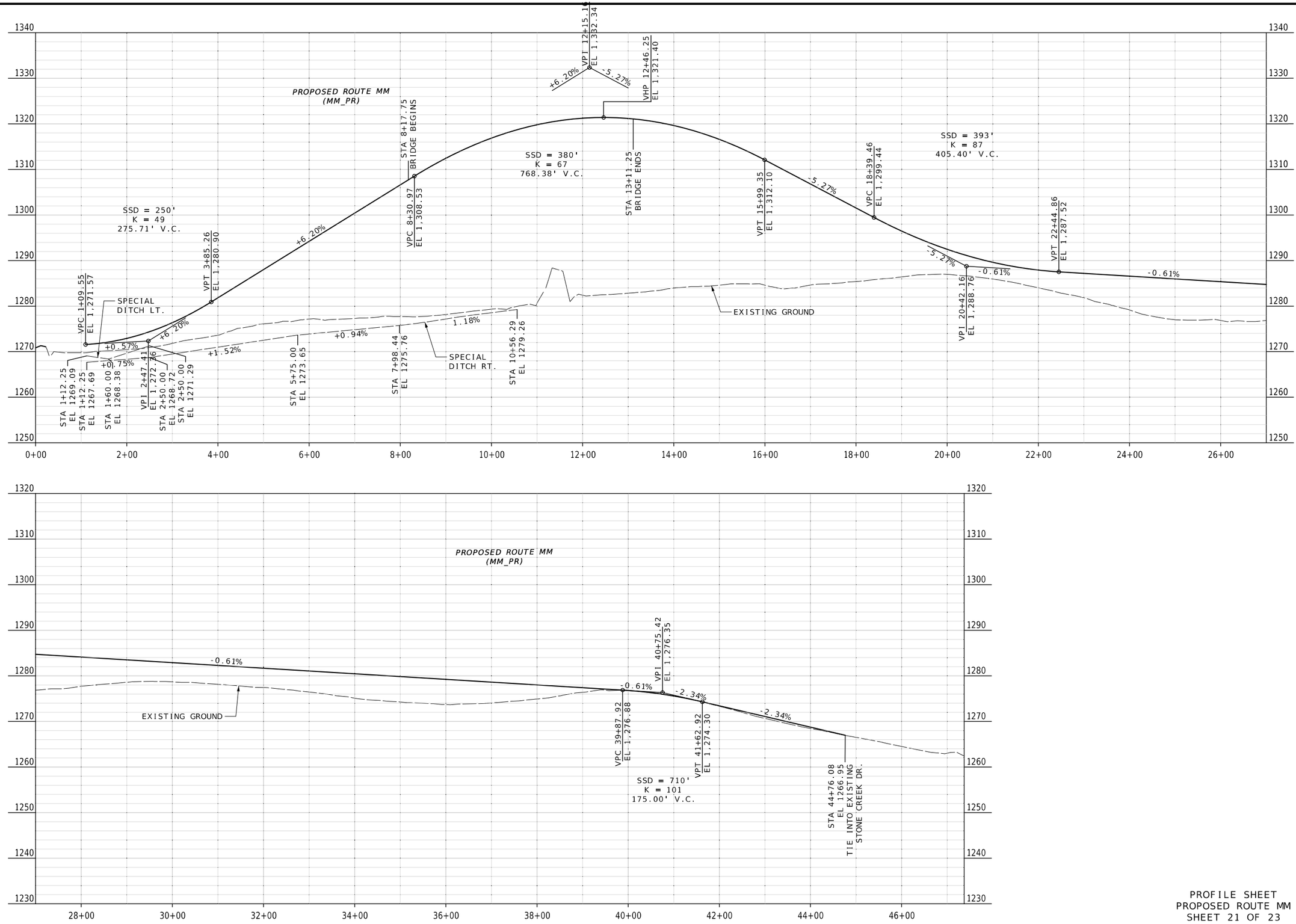
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



PROFILE SHEET
PROPOSED ROUTE MM
SHEET 21 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:42:44 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	24

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

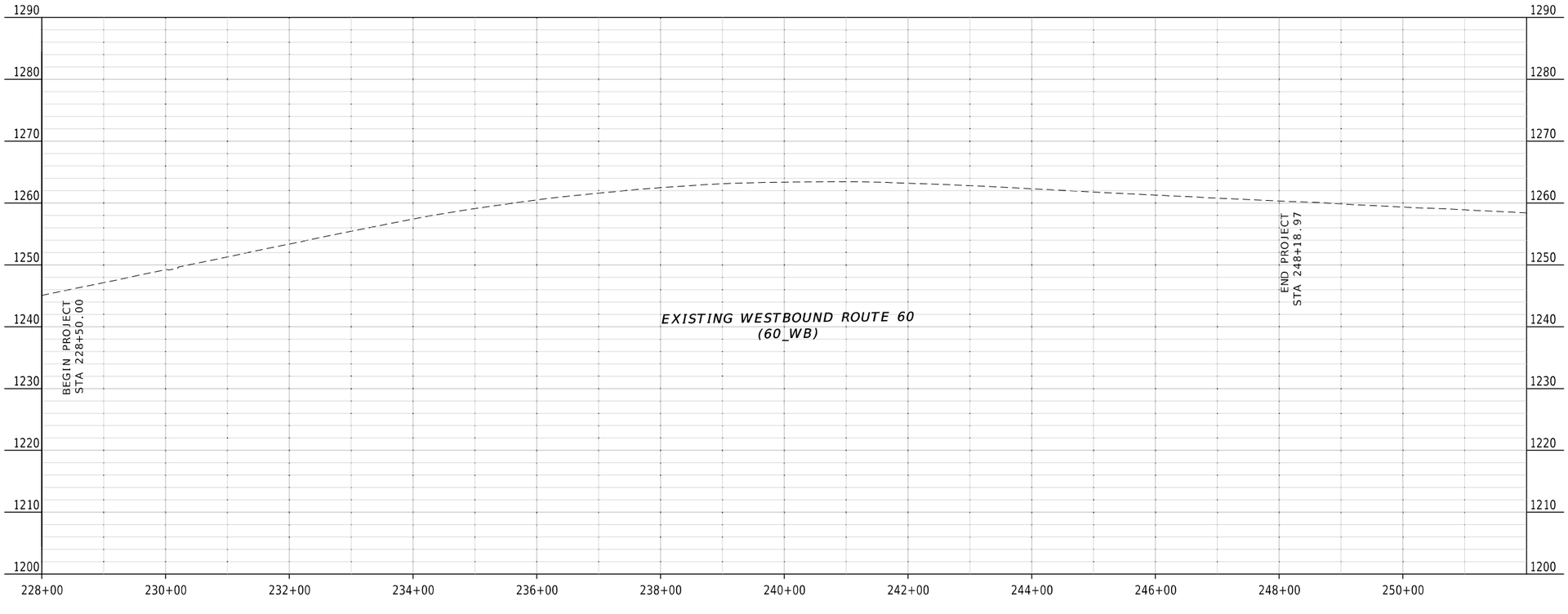
PROJECT NO.

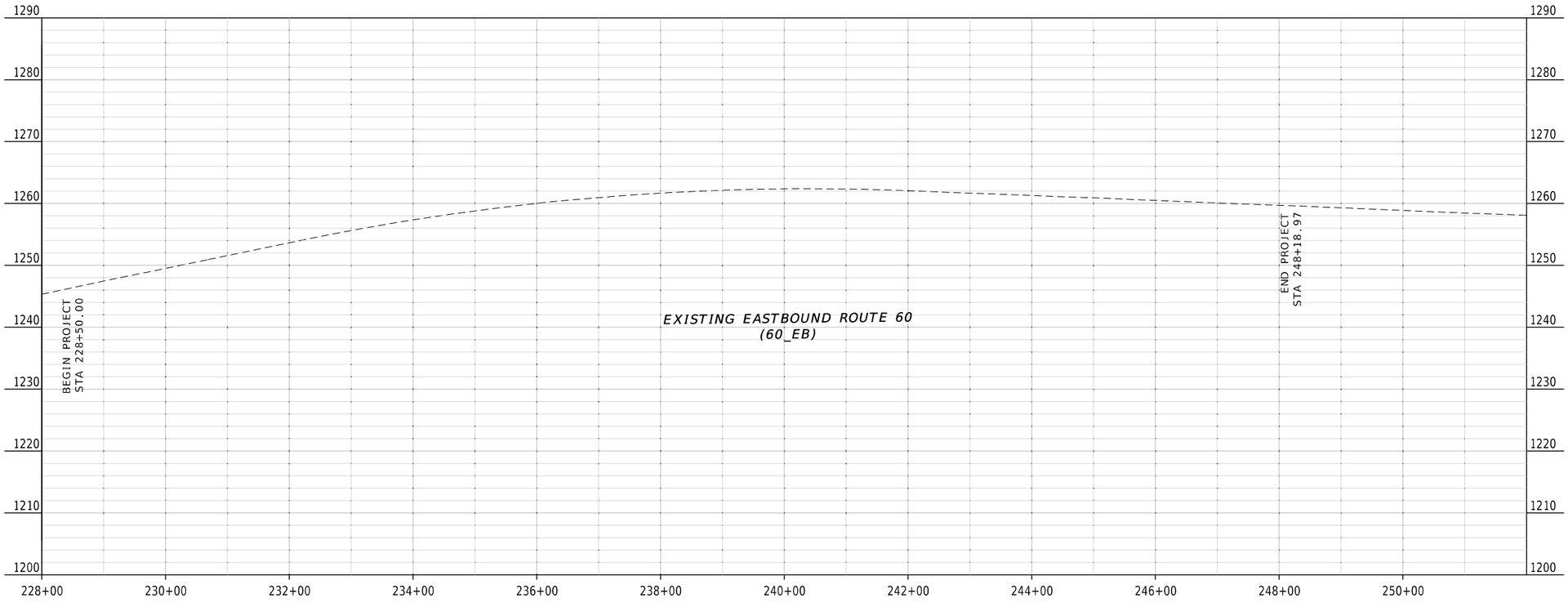
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





PROFILE SHEET
US 60, WB & EB
SHEET 22 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:43:08 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	25

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

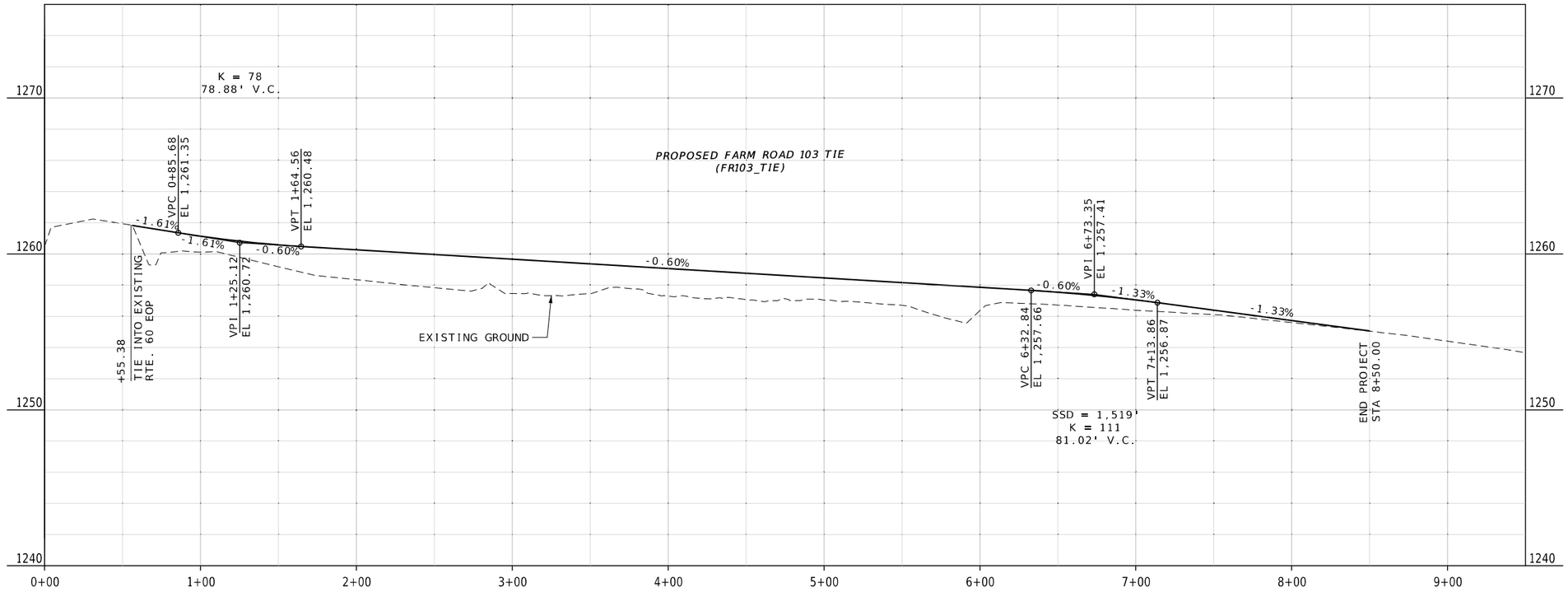
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



PROFILE SHEET
PROPOSED FARM ROAD 103
SHEET 23 OF 23

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:43:31 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	26

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

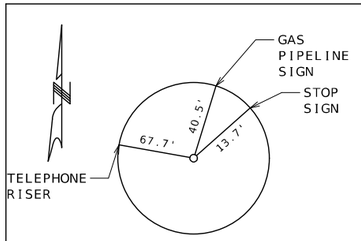
PROJECT NO.

BRIDGE NO.

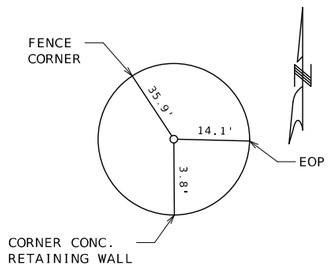
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

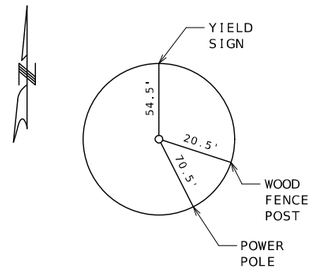
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



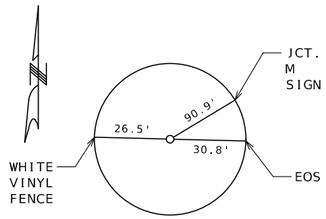
MODOT CP 800
3" MONUMENT ON 24" REBAR
STA. 210+75.53 43.69' LT.
C/L EX. RTE. 60 WB
N 480021.8659
E 1370955.5149
ELEVATION = 1247.80'



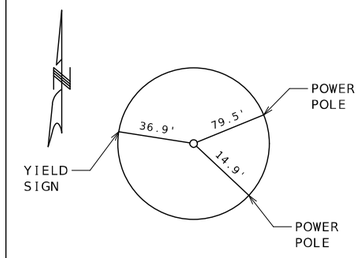
MODOT CP 801
3" MONUMENT ON 24" REBAR
N 479020.1874
E 1370925.1378
ELEVATION = 1237.81'



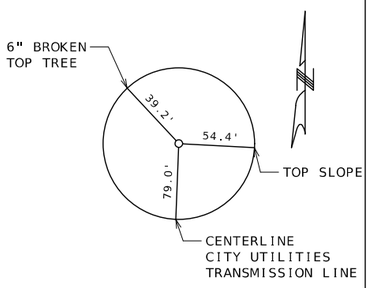
MODOT CP 802
3" MONUMENT ON 24" REBAR
N 476783.1034
E 1372312.4691
ELEVATION = 1222.15'



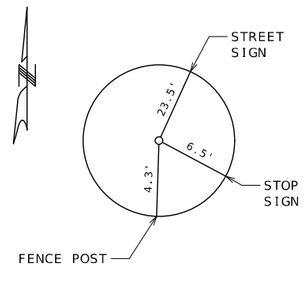
MODOT CP 803
3" MONUMENT ON 24" REBAR
N 475948.7473
E 1372168.7766
ELEVATION = 1208.41'



MODOT CP 804
3" MONUMENT ON 24" REBAR
N 479135.7829
E 1369882.6467
ELEVATION = 1258.17'



MODOT CP 805
3" MONUMENT ON 24" REBAR
STA. 222+29.99 296.82' LT.
C/L EX. RTE. MM
N 481503.2649
E 1370819.8997
ELEVATION = 1267.64'



MODOT CP 806
3" MONUMENT ON 24" REBAR
STA. 210+49.09 29.94' RT.
C/L EX. RTE. MM
N 482706.2642
E 1371032.9799
ELEVATION = 1274.71'

REFERENCE POINT SHEET
SHEET 1 OF 1

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 6:44:15 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	27

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES 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
HORIZONTAL DATUM	NAD 83
VERTICAL DATUM	NAVD 88
GEOID MODEL	Geoid09
ELEVATIONS DETERMINED BY	GPS
PROJECT PROJECTION FACTOR	1.00003846

REFERENCE CONTROL INFORMATION	
COORDINATE SYSTEM	MODIFIED STATE PLANE
CONTROL STATION	MODOT GNSS
DESIGNATION	GR 50
CORS_ID	N/A
PID	AC7191
LATITUDE	37-07-36.14280
LONGITUDE	93-25-13.31984
NORTHING (M)	143909.8510
EASTING (M)	418217.2540
ZONE	2402 (MO-Central)
PROJECT AVERAGE GRID FACTOR	0.99996154

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 #800
N 480040.3283 X 0.99996154 = N 480021.8659
E 1371008.244 X 0.99996154 = E 1370955.5149

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

COORDINATE POINT LISTING

SHEET NO	STATION	LOCATION	OFFSET (USFT)	MODIFIED STATE PLANE (GROUND) NORTHING (US SURVEY FT)	EASTING (US SURVEY FT)	ELEVATION (US SURVEY FT)	DESCRIPTION	GPK POINT ID
PROJECT CONTROL POINTS								
		RTE. 60		480,021.8659	1,370,955.5149	1,246.80	CONTROL - GPS #800	
		FR 101		479,020.1874	1,370,925.1378	1,236.81	CONTROL - GPS #801	
		RTE. M		476,783.1034	1,372,312.4691	1,221.15	CONTROL - GPS #802	
		RTE. ZZ		475,948.7473	1,372,168.7766	1,207.41	CONTROL - GPS #803	
		RTE. 60		479,135.7829	1,369,882.6467	1,257.17	CONTROL - GPS #804	
	222+29.99	EX. RTE. MM	296.8' LT	481,503.2649	1,370,819.8997	1,266.64	CONTROL - GPS #805	
	210+49.09	EX. RTE. MM	29.9' RT	482,706.2642	1,371,032.9799	1,273.71	CONTROL - GPS #806	
ALIGNMENTS								
EXISTING ROUTE MM (MM_EX) - J8S0836D_Civil_Geometry.dgn								
	174+93.26	EX. MM	0	486259.2138	1371179.0772	N/A	POB	
	210+88.30	EX. MM	0	482666.0958	1371061.6183	1275.4482	PC	
	212+29.30	EX. MM		482525.1684	1371057.0113	1274.1851	PI	
		EX. MM		482684.8400	1370488.2245		CC	
	213+64.82	EX. MM	0	482402.4325	1370987.6019	1,273.5401	PT	
	214+00.35	EX. MM	0	482371.5078	1370970.1133	1,273.2904	PI	
	238+02.99	EX. MM	0	480280.3818	1369786.9545	1,252.9067	POE	
SECTION LINE 03 (FR103_Sec03) - J8S0836D_Civil_Geometry.dgn								
	0+00.00	Section Line	0	484956.4173	1368470.0107	N/A	POB	
6	26+64.54	Section Line	0	484879.3230	1371133.4345	1,271.6571	POE	
EXISTING MM ROUNDABOUT NORTH LEG BASELINE (MM_NLeg) - J8S0836D_Roundabout_Geometry.dgn								
5	0+00.00	PR. MM BL	0	485354.9544	1371140.2635	1,277.3778	POB	
6	4+06.38	PR. MM BL	0	484949.3494	1371115.2465	1,273.2277	PI	
6	5+47.36	PR. MM BL	0	484808.455	1371120.3490	1,270.9437	POE	
PROPOSED FARM ROAD 160 BASELINE (FR160) - J8S0836D_Roundabout_Geometry.dgn								
6	0+00.00	PR. FR 160	0	484896.3093	1370719.4074	1,272.7934	POB	
6	1+71.11	PR. FR 160	0	484891.3586	1370890.4420	1,272.5302	PC	
6	2+36.34	PR. FR 160		484889.4713	1370955.6445	1,271.9230	PI	
		PR. FR 160		484591.4842	1370881.7620		CC	
6	2+99.57	PR. FR 160	0	484860.6801	1371014.1765	1,270.8828	PT	
6	4+17.89	PR. FR 160	0	484808.4550	1371120.3490	1,270.9437	POE	
PROPOSED ROUTE MM (MM_PR) - J8S0836D_Civil_Geometry.dgn								
6	0+00.00	PR. MM	0	484808.4550	1371120.3490	1,270.8409	POB	
6	2+90.77	PR. MM	0	484810.7170	1371411.1081	1,275.9593	PC	
6	3+28.44	PR. MM		484811.0100	1371448.7740	1,272.4843	PI	
		PR. MM		484133.7375	1371416.3747		CC	
6	3+66.02	PR. MM	0	484807.1228	1371486.2399	1,279.7505	PT	
8	4+41.76	PR. MM	0	484799.3076	1371561.5660	1,284.4066	PC	
8	6+16.03	PR. MM		484781.3230	1371734.9080	1,277.3185	PI	
		PR. MM		483657.4370	1371443.0946		CC	
8	7+87.66	PR. MM	0	484712.7057	1371895.1033	1,305.8462	PT	
9	14+46.13	PR. MM	0	484453.4411	1372500.3877	1,318.4192	PC	
9	21+01.51	PR. MM		484195.3960	1373102.8250	1,290.3997	PI	
		PR. MM		483569.4485	1372121.7426		CC	
11	25+96.68	PR. MM	0	483540.3205	1373082.9743	1,285.3745	PT	
13	38+57.88	PR. MM	0	482279.6962	1373044.7738	1,277.6759	PC	
13	40+86.77	PR. MM		482050.9110	1373037.8410	1,276.8489	PI	
		PR. MM		482257.2218	1373786.4334		CC	
14	43+01.92	PR. MM	0	481857.9785	1373160.9985	1,271.0374	PT	
14	47+37.08	PR. MM	0	481491.1730	1373395.1470	1,262.7357	POE	

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26845
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 6:44:35 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26845

DATE PREPARED: 7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	28

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

ALL PROJECT COORDINATES HAVE BEEN PROJECTED FROM THE MISSOURI STATE PLANE COORDINATE (SPC) SYSTEM OF 1983 USING AN AVERAGE PROJECT PROJECTION (GRID TO GROUND) FACTOR. TO GET BACK TO STATE PLANE COORDINATES 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
HORIZONTAL DATUM	NAD 83
VERTICAL DATUM	NAVD 88
GEOID MODEL	Geoid09
ELEVATIONS DETERMINED BY	GPS
PROJECT PROJECTION FACTOR	1.00003846

REFERENCE CONTROL INFORMATION	
COORDINATE SYSTEM	MODIFIED STATE PLANE
CONTROL STATION	MODOT GNSS
DESIGNATION	GR 50
CORS_ID	N/A
PID	AC7191
LATITUDE	37-07-36.14280
LONGITUDE	93-25-13.31984
NORTHING (M)	143909.8510
EASTING (M)	418217.2540
ZONE	2402 (MO-Central)
PROJECT AVERAGE GRID FACTOR	0.99996154

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 #800
N 480040.3283 X 0.99996154 = N 480021.8659
E 1371008.244 X 0.99996154 = E 1370955.5149

LINEAR UNIT CONVERSION

1 METER = 3.280833333 US SURVEY FEET (USFT)

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	GPK POINT ID
ALIGNMENTS (CONT.)								
PROPOSED FARM ROAD 103 CONNECTION (FR103_Tie) - J8S0836D_Civil_Geometry.dgn								
14	0+00.00	PR. FR 103	0	481491.1726	1373395.1466	1,262.7357	POB	
14	2+31.74	PR. FR 103	0	481295.8391	1373519.8365	1,260.0738	PC	
15	4+91.89	PR. FR 103		481076.5556	1373659.8147		PI	
		PR. FR 103		480841.1760	1372807.5820		CC	
15	7+36.48	PR. FR 103	0	480816.5143	1373652.2221	1,256.5706	PT	
16	11+85.05	PR. FR 103	0	480368.1341	1373639.1303	1,254.1927	PI	
	13+50.00	PR. FR 103	0	480203.2543	1373634.3162	1,254.1927	POE	
EXISTING ROUTE 60 WESTBOUND (60_WB) - J8S0836D_Civil_Geometry.dgn								
17	228+00.00	EX. 60 WB	0	480912.9104	1372432.5826	1,245.0600	POB	
14	239+22.49	EX. 60 WB	0	481516.8812	1373378.7356	1,263.1992	PI	
20	252+00.00	EX. 60 WB	0	482204.2614	1374455.5538	1,258.4011	POE	
EXISTING ROUTE 60 EASTBOUND (MM_EB) - J8S0836D_Civil_Geometry.dgn								
17	228+00.00	EX. 60 EB	0	480861.4932	1372465.4044	1,245.3548	POB	
14	239+22.49	EX. 60 EB	0	481465.4640	1373411.5575	1,262.2232	PI	
20	252+00.00	EX. 60 EB	0	482152.8442	1374488.3757	1,258.0747	POE	

COORDINATE POINT SHEET
SHEET 2 OF 2

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:45:03 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	29

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

EX. CLOSURE OF COMMERCIAL AVE. TO REMAIN IN PLACE

COMMERCIAL AVE.

REMOVE EXISTING CONNECTION TO US 60

NE ¼, NW ¼
SEC. 11-28N-23W

NW ¼, NE ¼
SEC. 11-28N-23W

18
VERMEER GREAT PLAINS INC.

U.I.P. EX. PAVEMENT

REMOVE EXISTING DRIVEWAY ON NEW R/W

17
REPUBLIC PARTNERS LLC

20
CHAMPIEUX, JIM

OBLITERATE EXISTING PAVEMENT BETWEEN US HWY 60 AND FARM ROAD 103 STA. 8+50.45

19
PIG FARM LLC

EXISTING PAVEMENT TO BE REMOVED

SCALE
0 60 120 180

FARM ROAD 103
STA. 8+50.45

SPECIAL SHEET
DEMOLITION DETAIL
SHEET 1 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:48:54 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/25/2025
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	30
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

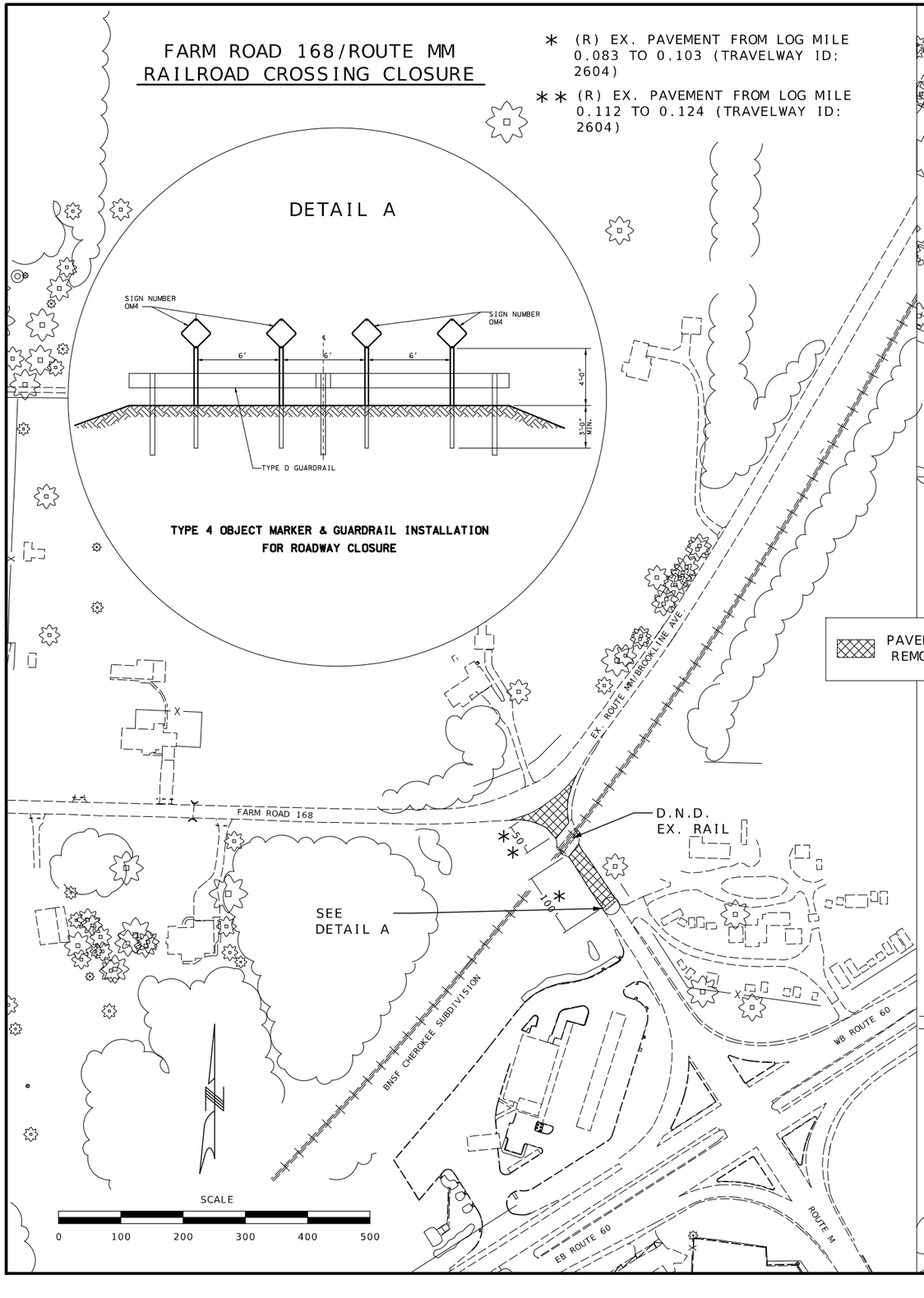
FARM ROAD 168/ROUTE MM
RAILROAD CROSSING CLOSURE

* (R) EX. PAVEMENT FROM LOG MILE 0.083 TO 0.103 (TRAVELWAY ID: 2604)

** (R) EX. PAVEMENT FROM LOG MILE 0.112 TO 0.124 (TRAVELWAY ID: 2604)

DETAIL A

TYPE 4 OBJECT MARKER & GUARDRAIL INSTALLATION FOR ROADWAY CLOSURE

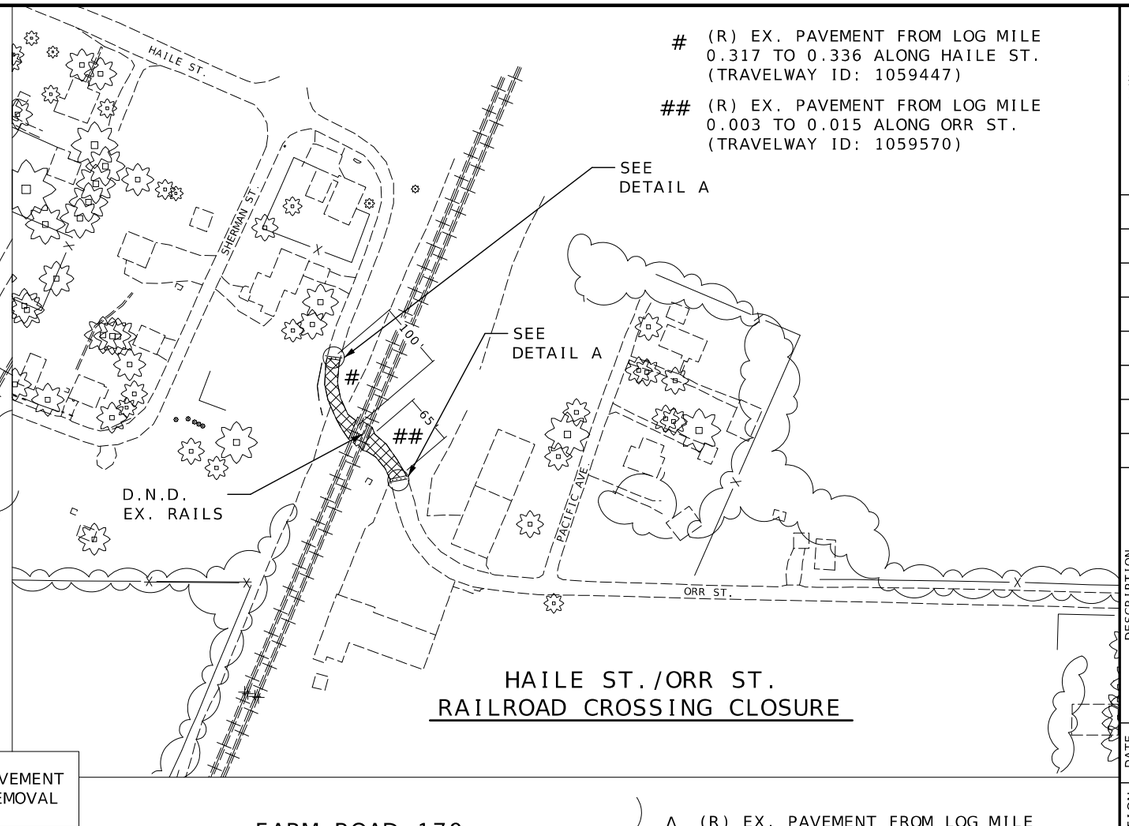


PAVEMENT REMOVAL

HAILE ST./ORR ST.
RAILROAD CROSSING CLOSURE

\# (R) EX. PAVEMENT FROM LOG MILE 0.317 TO 0.336 ALONG HAILE ST. (TRAVELWAY ID: 1059447)

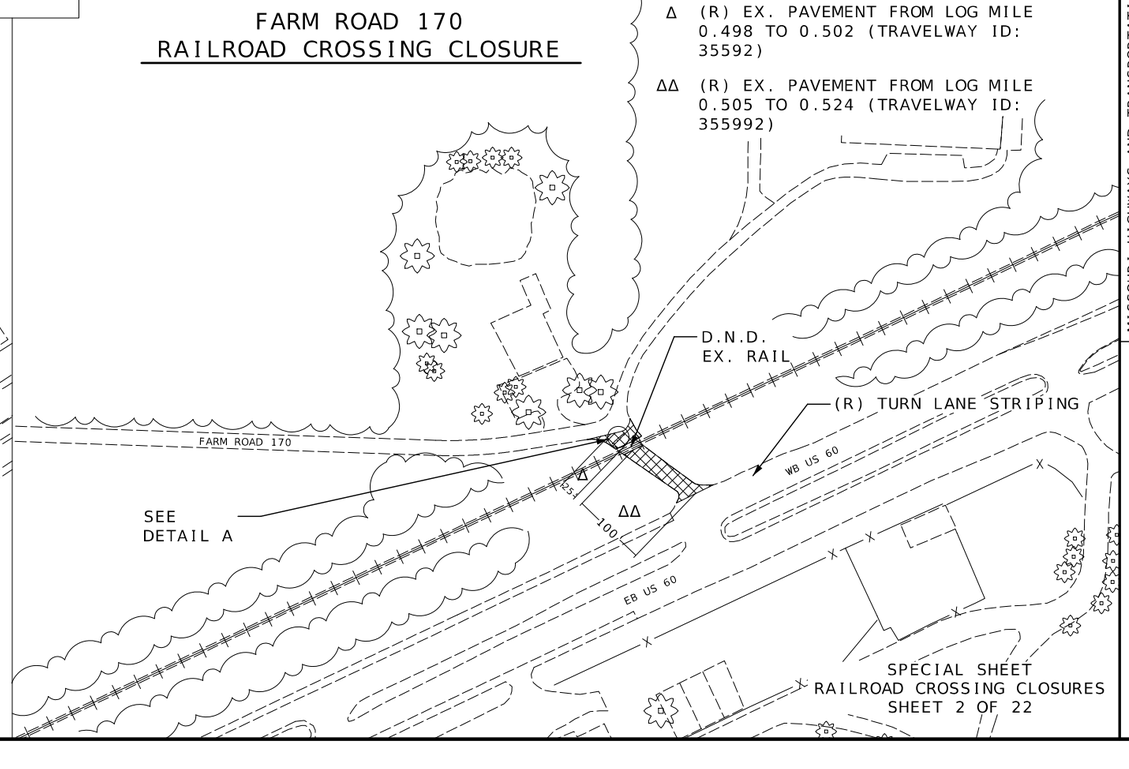
\#\# (R) EX. PAVEMENT FROM LOG MILE 0.003 TO 0.015 ALONG ORR ST. (TRAVELWAY ID: 1059570)



FARM ROAD 170
RAILROAD CROSSING CLOSURE

Δ (R) EX. PAVEMENT FROM LOG MILE 0.498 TO 0.502 (TRAVELWAY ID: 35592)

ΔΔ (R) EX. PAVEMENT FROM LOG MILE 0.505 TO 0.524 (TRAVELWAY ID: 355992)



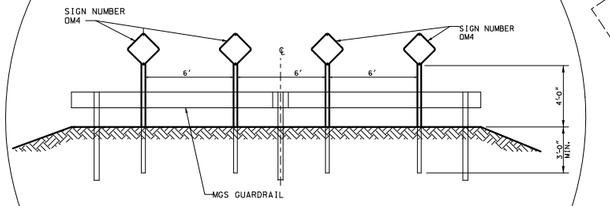
STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26845
PROFESSIONAL ENGINEER
07/29/2025 6:47:10 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26845

DATE PREPARED	7/25/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	31
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

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

DETAIL A



TYPE 4 OBJECT MARKER & GUARDRAIL INSTALLATION FOR ROADWAY CLOSURE

W1-2R

30 M.P.H.

W13-1P

W1-8

W1-2L

30 M.P.H.

W13-1P

STA. 5+50.00
END PAVEMENT REPLACEMENT

1+05.00
BEGIN PAVEMENT REPLACEMENT

PC STA 1+97.29
N:479,616.468
E:1,369,215.902

PI 3+25.59
PC 1+97.29
PT 4+34.37
Δ 54°20'2.0" (LT)
D 22°55'5.9"
L 237.08' (ARC)
T 128.30'
R 250.00'

PT STA 4+34.37
N:479,711.278
E:1,369,420.731

STA. 5+42.21

STA. 2+43.99

FARM ROAD 168 & (FR168)
S89°02'17"E

N36°37'41"E

T RISER

S.L.

ATT

SIGN

(R)

100'

60'

50'

OE

UT

PP

SCALE
0 20 40 60

PAVEMENT REMOVAL

PAVEMENT REPLACEMENT

NOTES:

1. NORTHING/EASTING REPORTED IN MODIFIED STATE PLANE COORDINATES.

2. NO WORK TO BE PERFORMED ON BNSF RIGHT-OF-WAY. CONTACT RAILROAD PRIOR TO REMOVALS.

3. REFER TO PLAN SHEET #31 AND TYPICAL SECTION SHEET #2 FOR ADDITIONAL DETAILS.

SEE DETAIL A

SPECIAL SHEET
PAVEMENT REMOVAL
AT FR 168
SHEET 2A OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/12/2025 11:27:42 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	31A

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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 REMOVAL

NOTES:

1. NORTHING/EASTING REPORTED IN MODIFIED STATE PLANE COORDINATES.

2. NO WORK TO BE PERFORMED ON BNSF RIGHT-OF-WAY. CONTACT RAILROAD PRIOR TO REMOVALS.

3. REFER TO PLAN SHEET #31 FOR ADDITIONAL DETAILS.

SCALE
0 40 80 120

KIT KETTELL TR.

STRINGER VET CLINIC

FARM ROAD 170

BETTY L. GOODWIN

COMMERCIAL PLASTICS CO. INC.

STA. 149+28.59

STA. 149+93.16

SEE DETAIL A

STA. 149+75.82

STA. 150+43.89

STA. 145+11.14

STA. 156+35.57

POT STA. 150+05.69
N 1476 925.120 (R)
E 1 305 673.382 (R)

REMOVE WB RIGHT TURN LANE EXISTING PAVEMENT & STRIPING. RETAIN 10' WIDTH OF EXISTING PAVEMENT FOR SHOULDER.

U.S. 60 & FR 170
N64°34'32"E

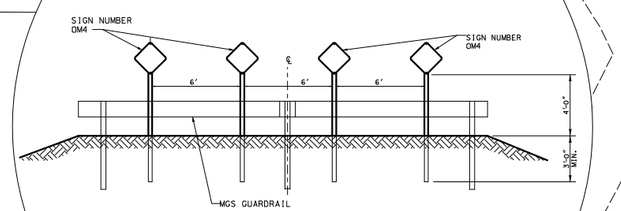
REMOVE EB LEFT TURN LANE EX. PAVEMENT, MEDIAN CROSSOVER, & STRIPING. RETAIN 4' WIDTH OF EXISTING PAVEMENT FOR SHOULDER.

RICHARTS STONE & GARDEN

JUST ONE MORE SPORTS BAR

PAUL JONES EXCAVATING

DETAIL A



TYPE 4 OBJECT MARKER & GUARDRAIL INSTALLATION FOR ROADWAY CLOSURE

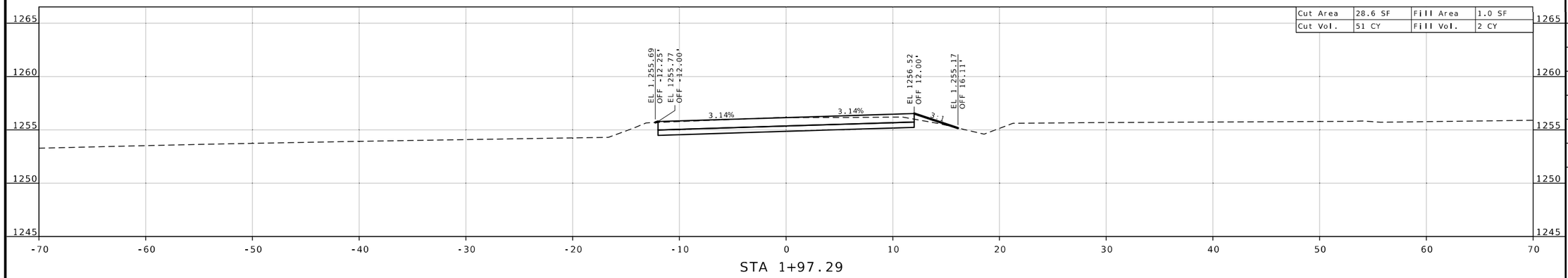
SPECIAL SHEET
PAVEMENT REMOVAL
AT FR 170
SHEET 2B OF 22

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:35:02 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

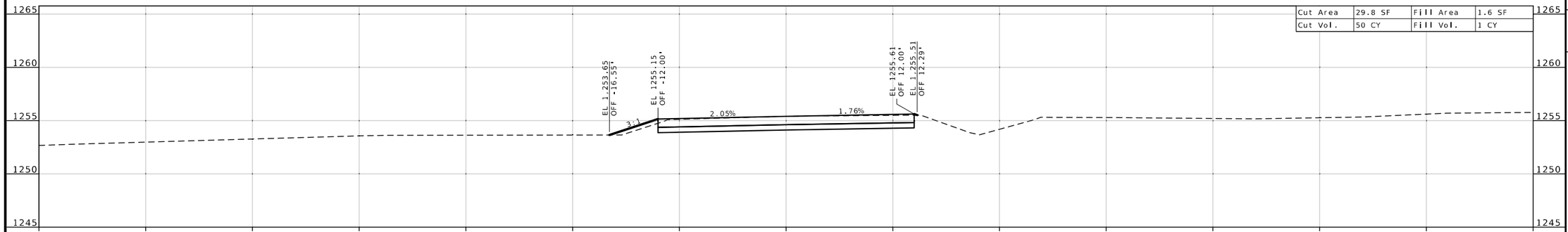
DATE PREPARED	8/12/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	31B
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

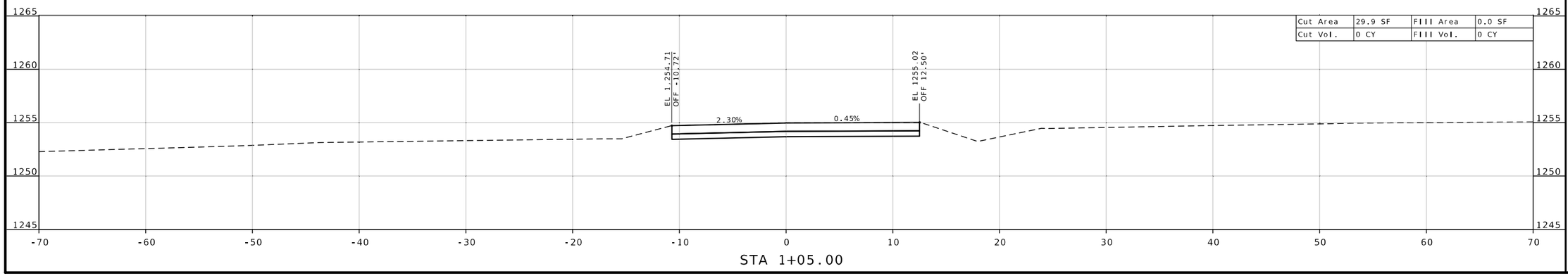
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



STA 1+97.29



STA 1+50.00



STA 1+05.00

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/15/2025 12:36:17 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	31C

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

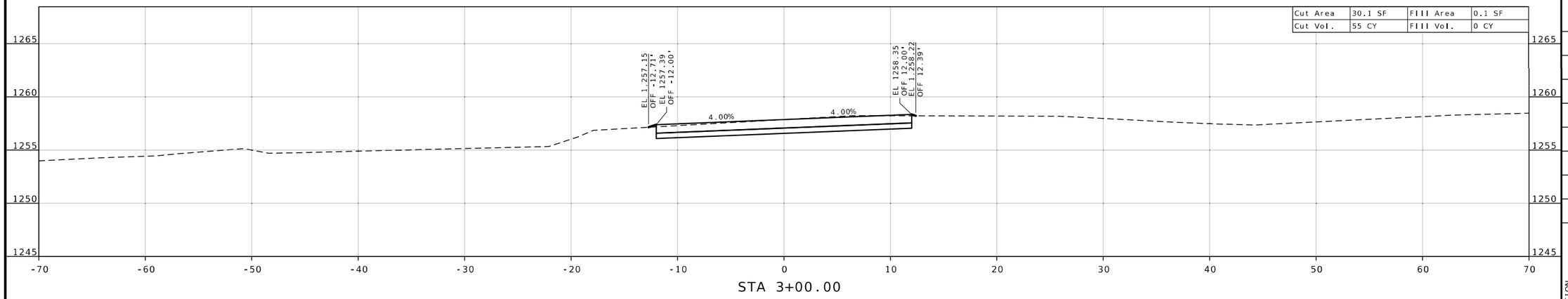
BRIDGE NO.

DESCRIPTION	DATE

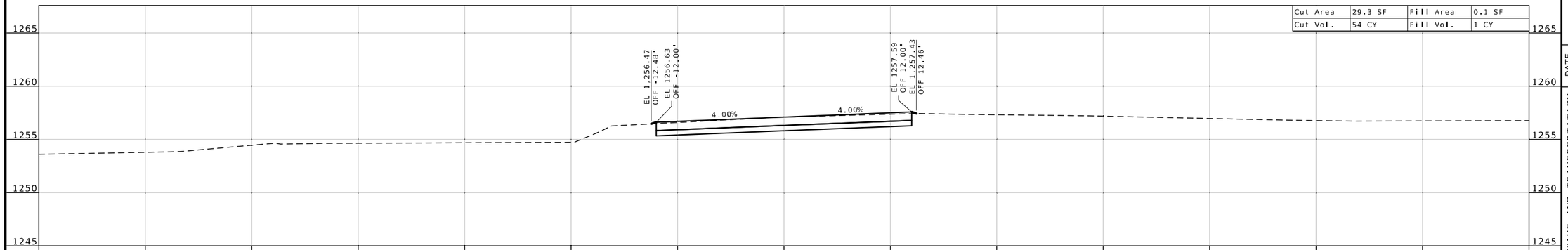
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

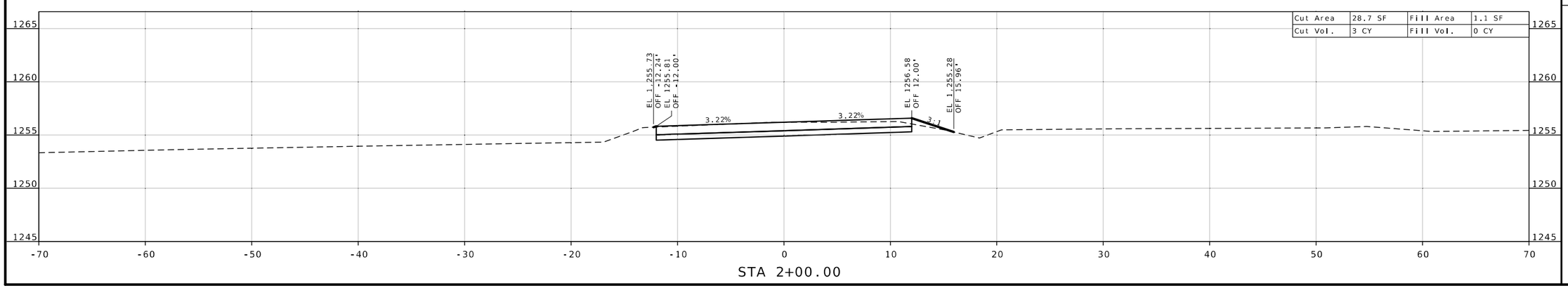
SPECIAL SHEET
FARM ROAD 168
CROSS SECTIONS



STA 3+00.00



STA 2+50.00



STA 2+00.00

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/15/2025 12:36:46 PM
WARNER D. SHERMAN II - CIVIL
MO PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	31D

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

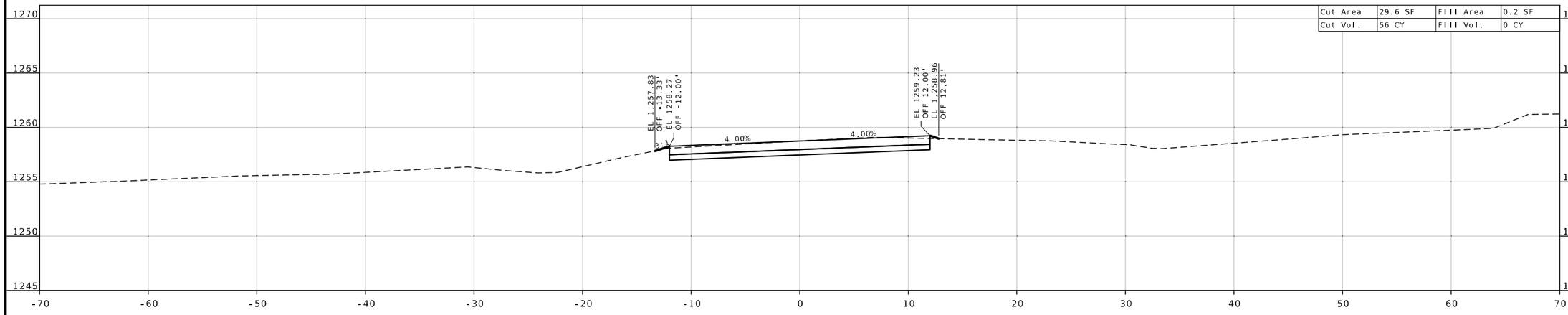
BRIDGE NO.

DESCRIPTION	DATE

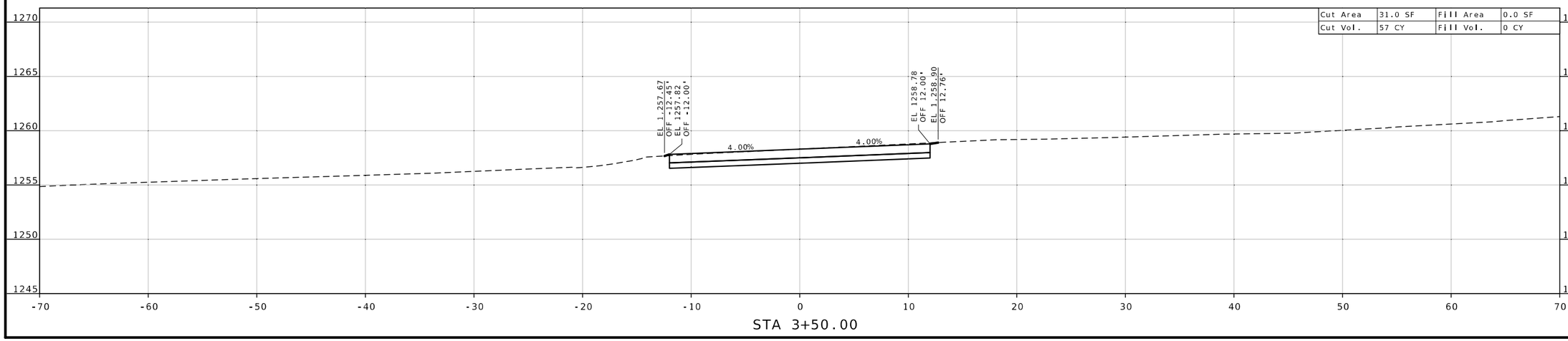
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEET
FARM ROAD 168
CROSS SECTIONS



STA 4+00.00



STA 3+50.00

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

08/15/2025 12:37:12 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	31E

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

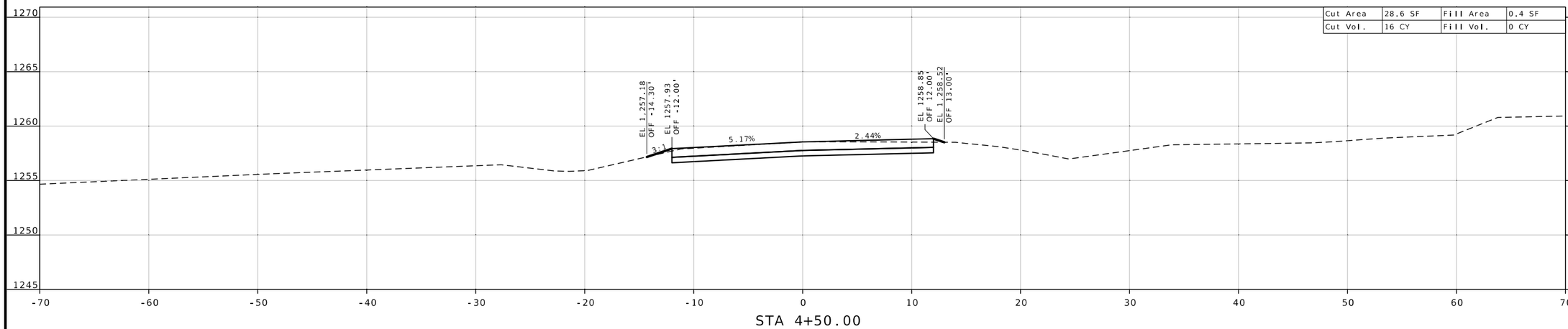
BRIDGE NO.

DESCRIPTION	DATE

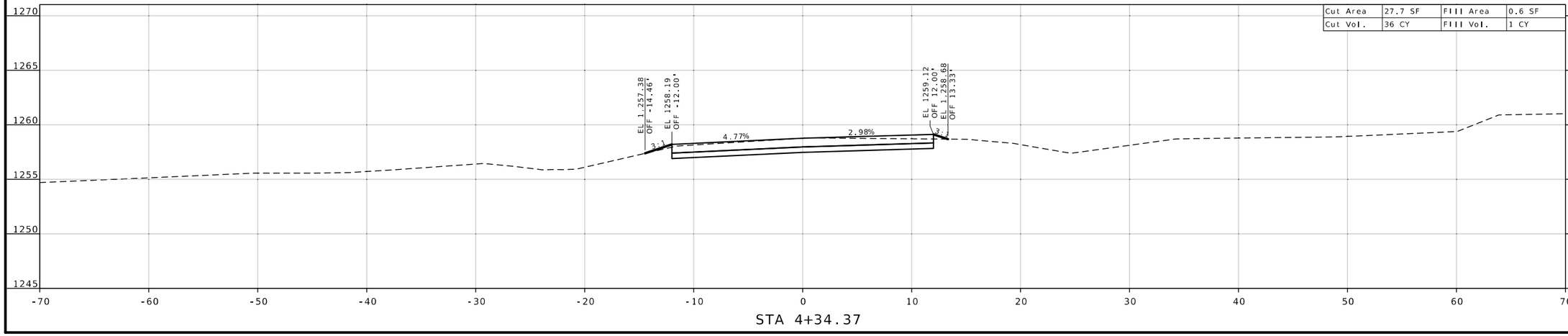
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEET
FARM ROAD 168
CROSS SECTIONS



STA 4+50.00



STA 4+34.37

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/15/2025 12:37:4C PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	31F

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

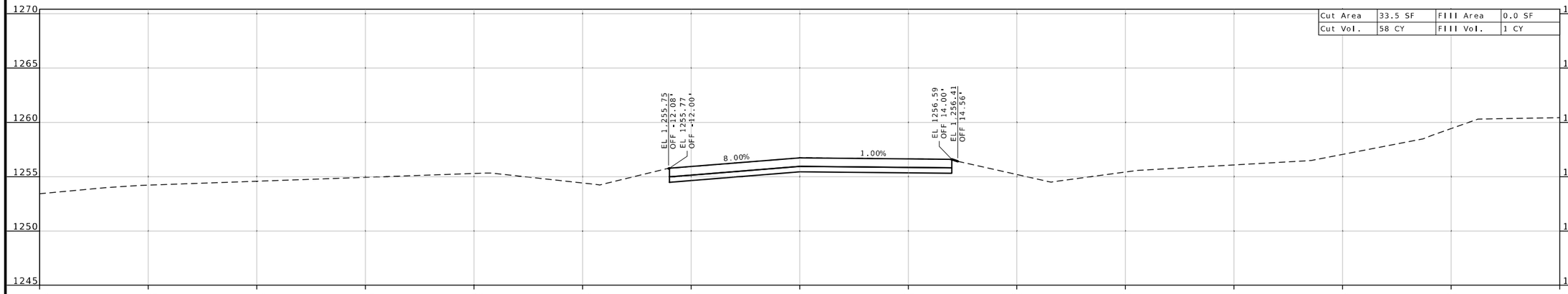
BRIDGE NO.

DESCRIPTION	DATE

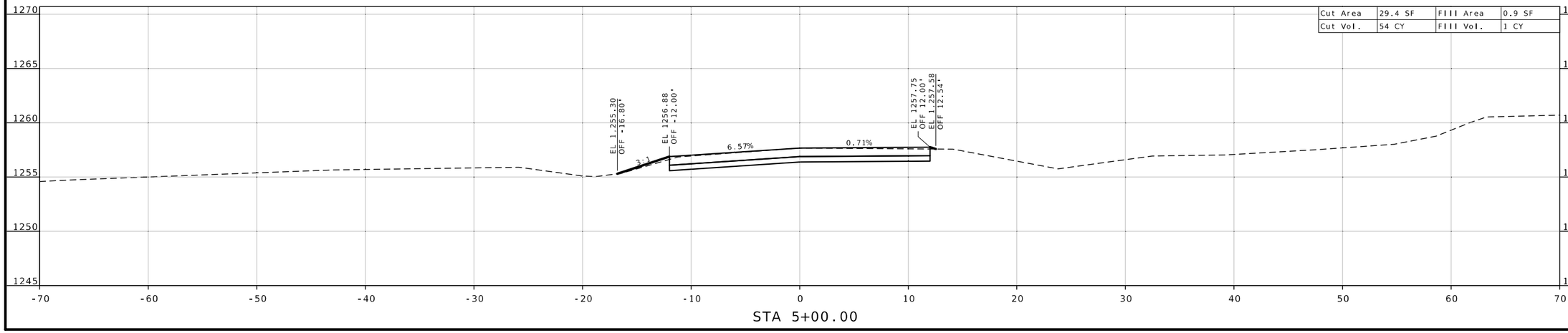
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPECIAL SHEET
FARM ROAD 168
CROSS SECTIONS



STA 5+50.00



STA 5+00.00

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/15/2025 12:38:07 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	31G

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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
FARM ROAD 168
CROSS SECTIONS

FARM ROAD 164

NOTES:

1. FARM ROAD 164 ACCESS FROM US 60 TO REMAIN OPEN UNTIL CONSTRUCTION OF NEW RTE. MM IS COMPLETE AND OPEN TO TRAFFIC.

(R) STRIPING & EX. PAVEMENT IN EXCESS OF 10' FROM EDGE OF TRAVELWAY. 10' OF EXISTING PAVEMENT TO BE RETAINED AS SHOULDER

(R) EX. FR 164 BETWEEN US 60 & MFA ENTRANCE

LOG MILE: 263.927
TWID: 7783 (US 60 WB)

LOG MILE: 264.04
TWID: 7783 (US 60 WB)

SEE DETAIL A

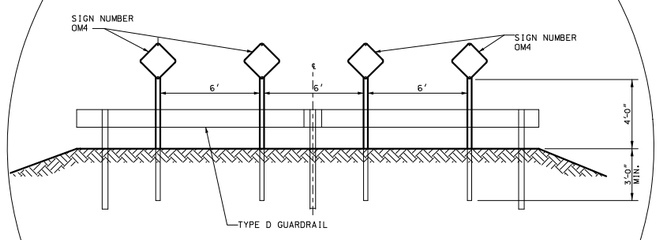
(R) EX. CROSSOVER
LOG MILE 264.04

LOG MILE: 0.075
TWID: 35399 (FARM RD 164)

TO BE REMOVED

SCALE
0 100 200 300 400 500

DETAIL A



TYPE 4 OBJECT MARKER & GUARDRAIL INSTALLATION FOR ROADWAY CLOSURE

U.S. HWY 60

(R) EX. PAVEMENT BEYOND EDGE OF SHOULDER

LOG MILE: 265.57
TWID: 7783 (US 60 WB)

LOG MILE: 265.67
TWID: 7783 (US 60 WB)

LOG MILE: 75.09
TWID: 7782 (US 60 WB)

LOG MILE: 74.99
TWID: 7782 (US 60 WB)

(R) EX. PAVEMENT BEYOND EDGE OF SHOULDER

TO BE REMOVED

SCALE
0 100 200 300 400 500

SPECIAL SHEET
CLOSURES & REMOVALS
SHEET 3 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

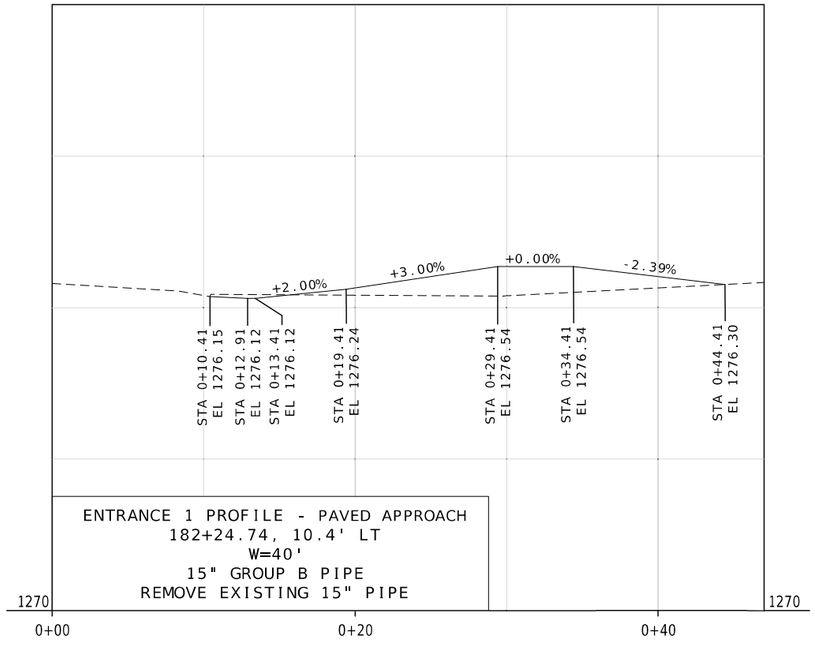
Warner Sherman
07/26/2025 6:48:14 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

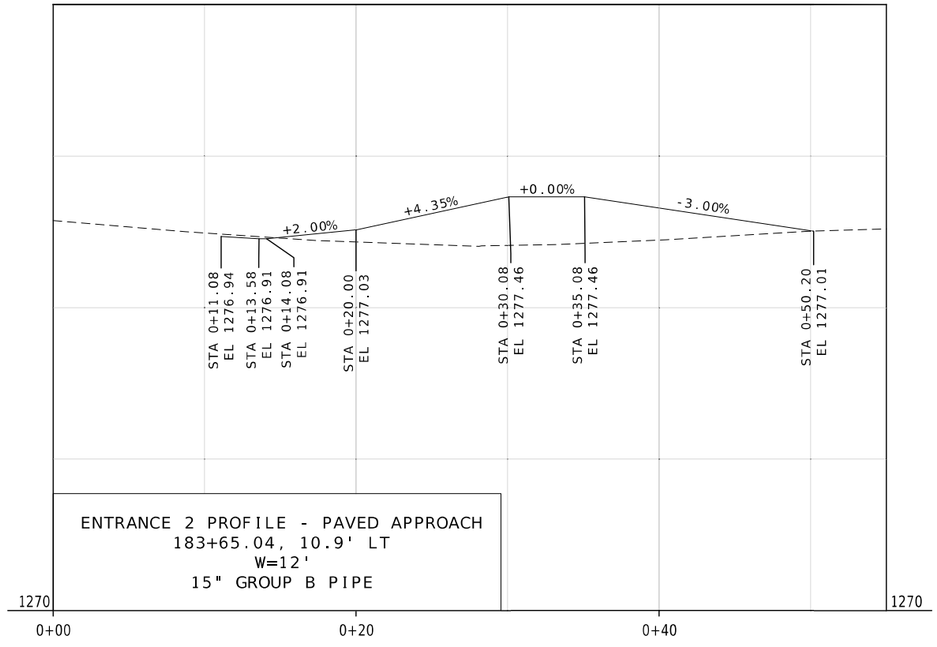
DATE PREPARED	
7/25/2025	
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	32
COUNTY	
GREENE	
JOB NO.	
J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

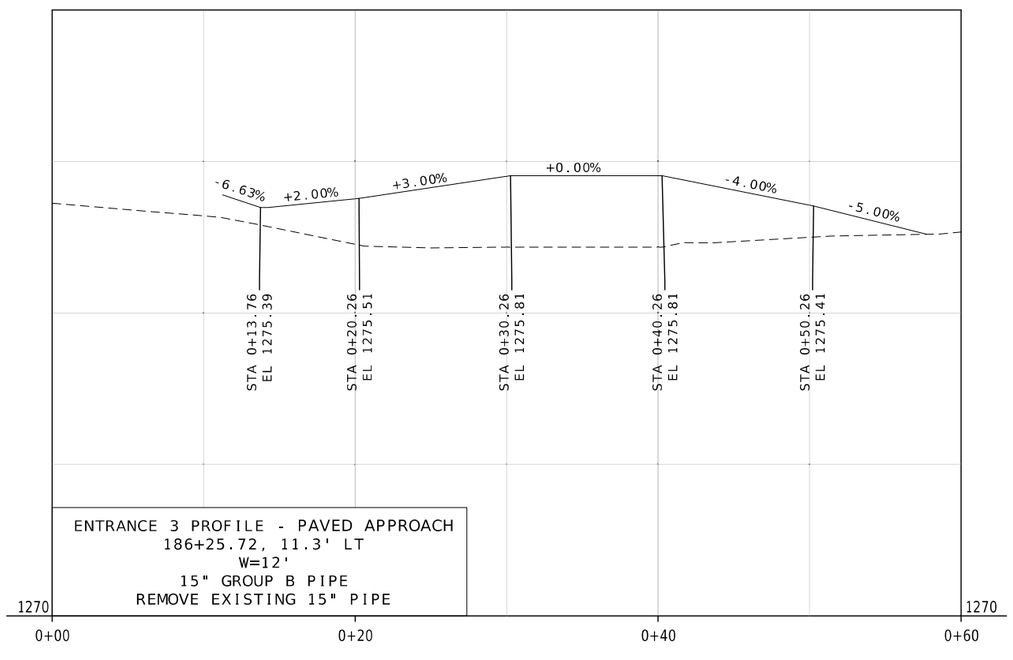
DESCRIPTION	DATE

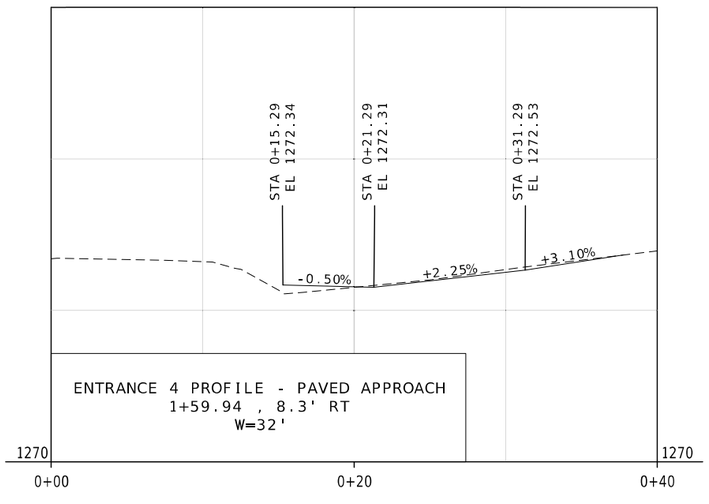
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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









SPECIAL SHEET
ENTRANCE PROFILE
SHEET 4 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:49:06 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	33

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

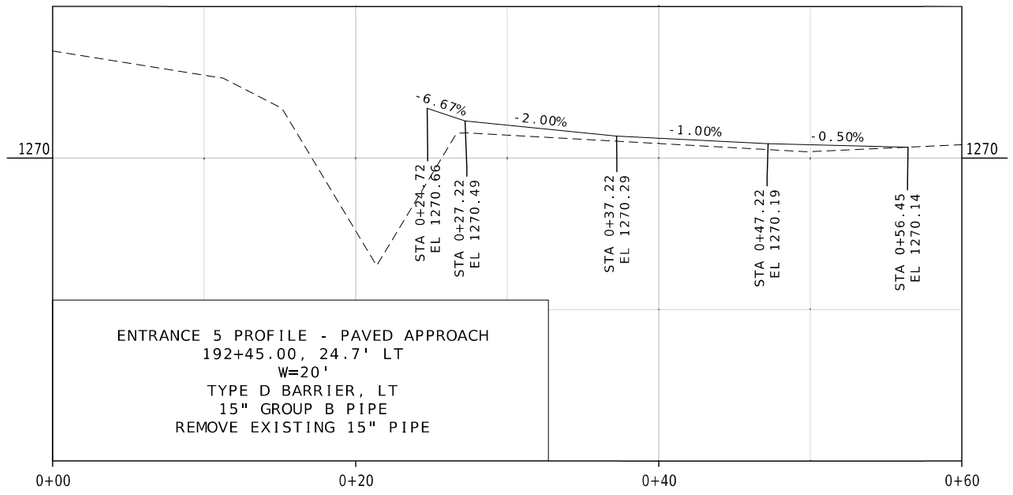
PROJECT NO.

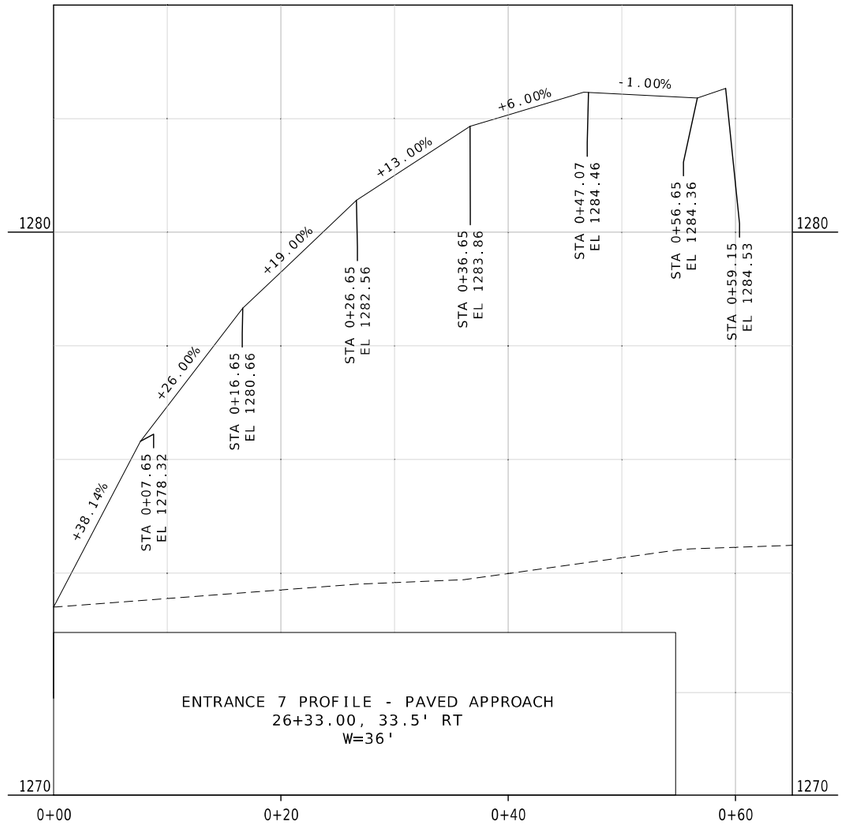
BRIDGE NO.

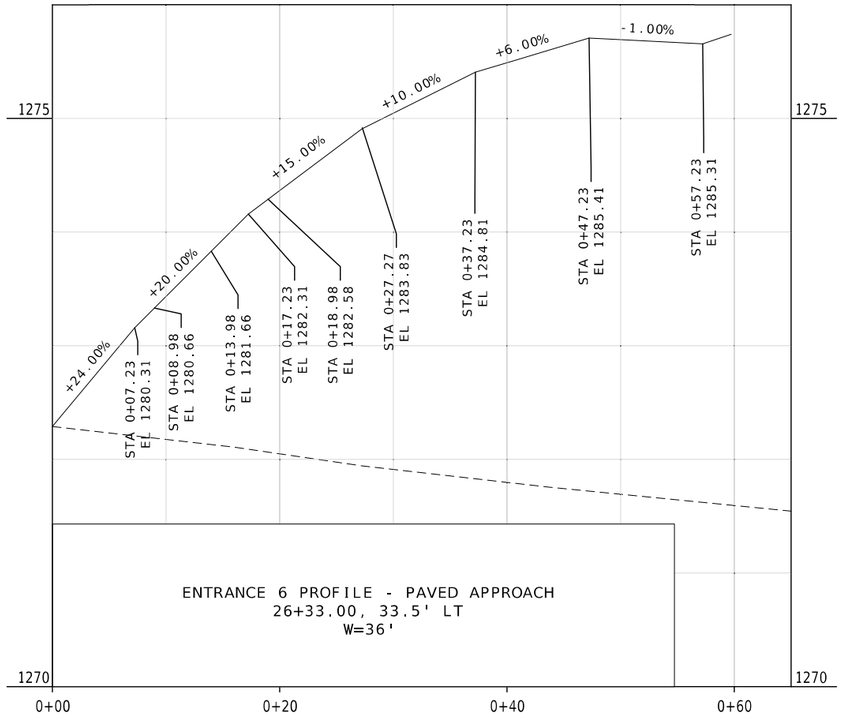
DESCRIPTION	DATE

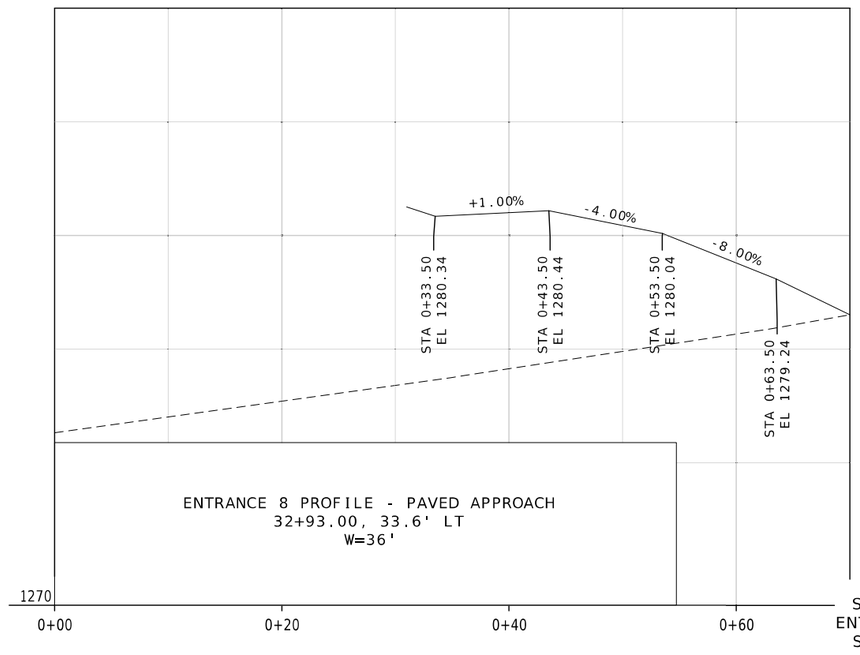
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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









SPECIAL SHEET
ENTRANCE PROFILE
SHEET 5 OF 22

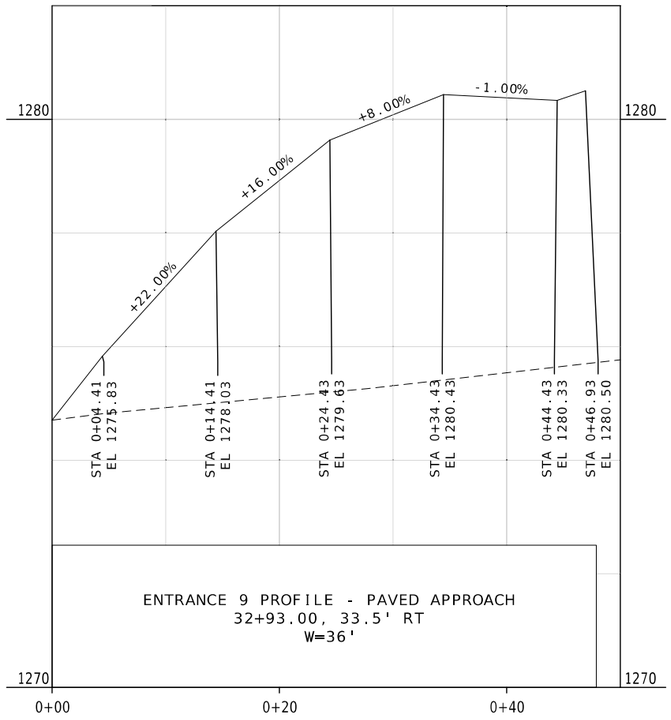
STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 6:49:32 AM
WARNER D. SHERMAN II - CIVIL
MO PE-26645

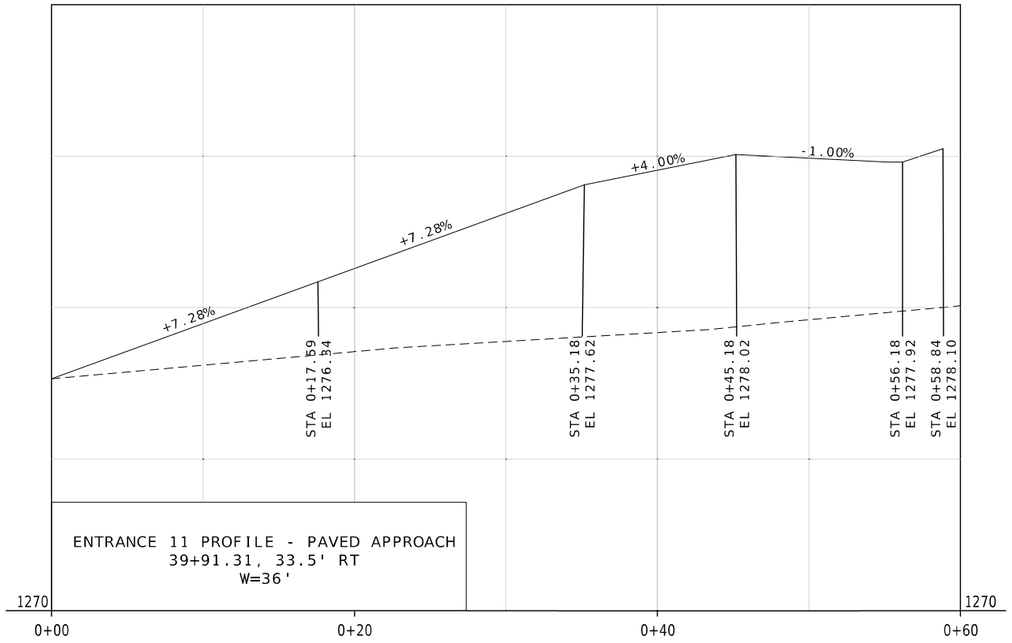
DATE PREPARED	
7/25/2025	
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	34
COUNTY	
GREENE	
JOB NO.	
J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

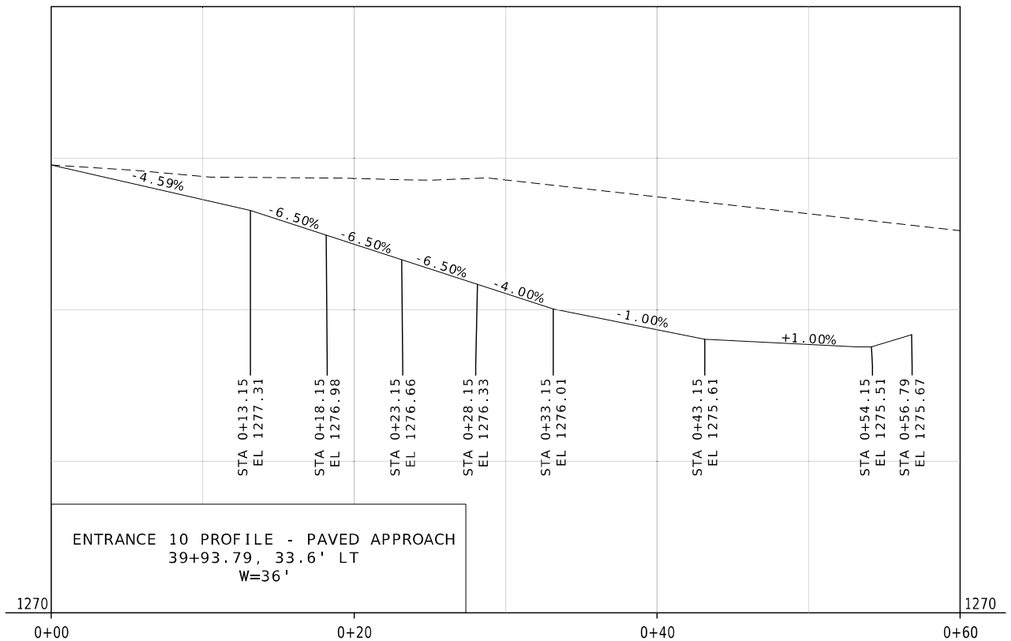
DESCRIPTION	DATE

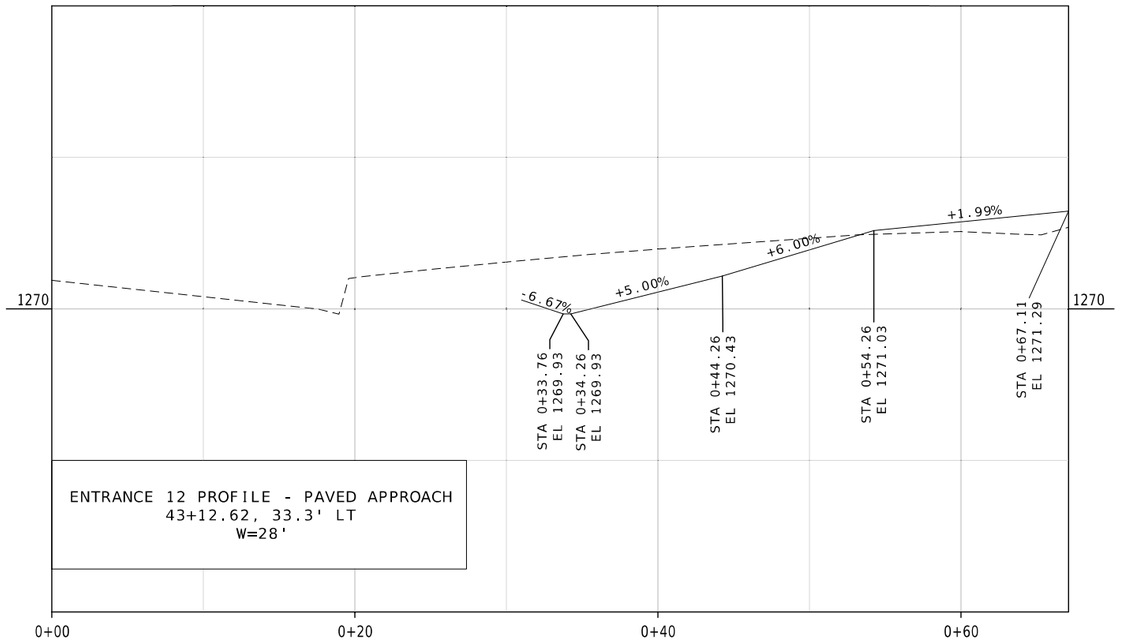
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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









SPECIAL SHEET
ENTRANCE PROFILE
SHEET 6 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:49:56 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	35

COUNTY
GREENE

JOB NO.
J8S0836D

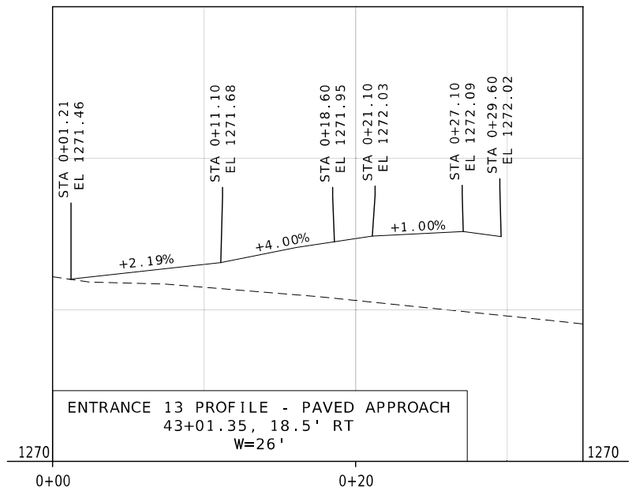
CONTRACT ID.

PROJECT NO.

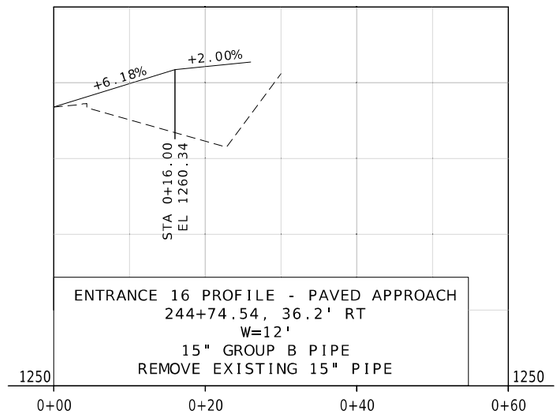
BRIDGE NO.

DESCRIPTION	DATE

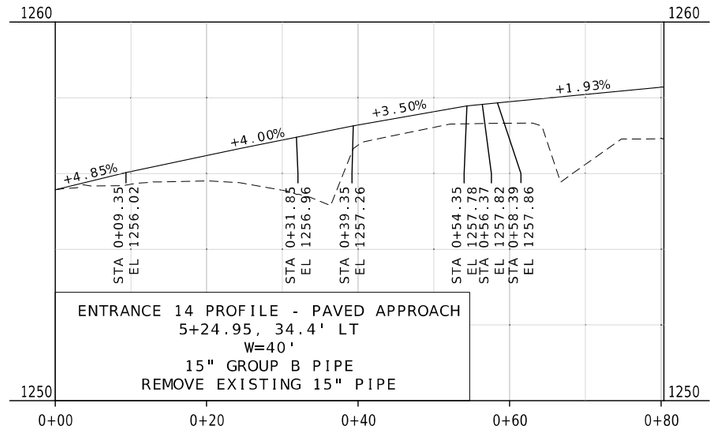
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



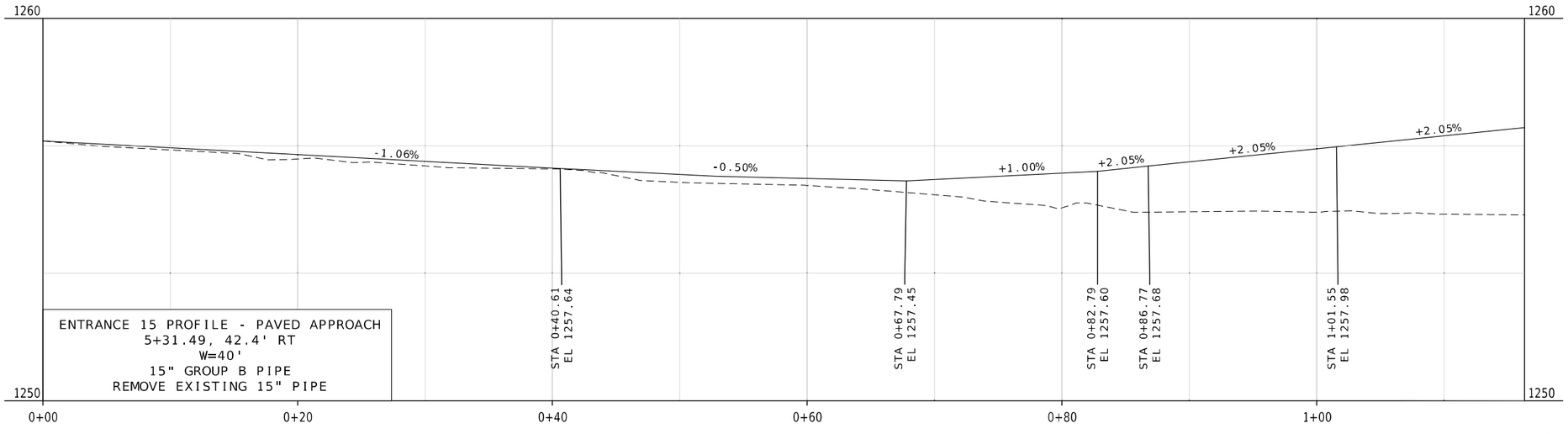
ENTRANCE 13 PROFILE - PAVED APPROACH
43+01.35, 18.5' RT
W=26'



ENTRANCE 16 PROFILE - PAVED APPROACH
244+74.54, 36.2' RT
W=12'
15" GROUP B PIPE
REMOVE EXISTING 15" PIPE



ENTRANCE 14 PROFILE - PAVED APPROACH
5+24.95, 34.4' LT
W=40'
15" GROUP B PIPE
REMOVE EXISTING 15" PIPE



ENTRANCE 15 PROFILE - PAVED APPROACH
5+31.49, 42.4' RT
W=40'
15" GROUP B PIPE
REMOVE EXISTING 15" PIPE

SPECIAL SHEET
ENTRANCE PROFILE
SHEET 7 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:50:28 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	36

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

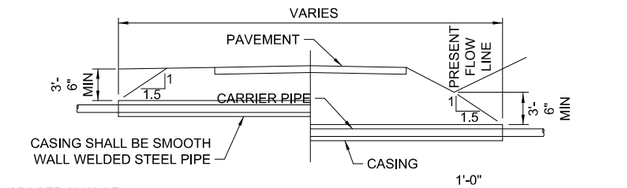
BRIDGE NO.

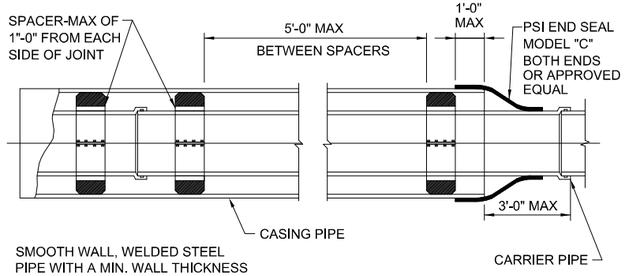
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

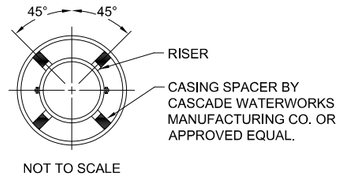
A CITY OF REPUBLIC STANDARD #4
BORING CASING PIPE AND END SEAL





SMOOTH WALL, WELDED STEEL PIPE WITH A MIN. WALL THICKNESS AS FOLLOWS WILL BE PERMITTED:

CASING DIAMETER (INCHES)	MINIMUM WALL THICKNESS
6	0.280
8, 10, 12, 14, 16	0.250
18, 20, 22	0.250
24, 26	0.281
30, 32, 34	0.312
36, 38, 40, 48	0.344

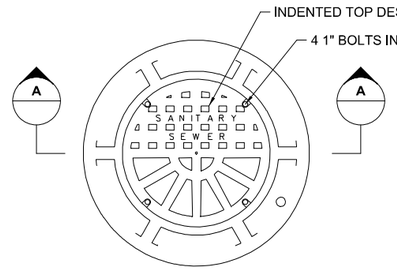


NOT TO SCALE

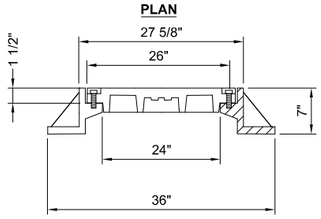
NOTES:

1. DEPTH OF BORING PIT SHALL BE AS REQUIRED.
2. THE DRILLED HOLE FOR THE CASING PIPE SHALL BE SLIGHTLY UNDERSIZED AND THE PIPE JACKED THROUGH TO ELIMINATE VOIDS BETWEEN PIPE AND HOLE.
3. BOTH ENDS OF CASING WILL BE SEALED AS PER MANUFACTURER'S RECOMMENDATION.
4. CASING PIPE SHALL BE NO SMALLER THAN 1.5 TIMES THE DIAMETER OF THE CARRIER PIPE.

B CITY OF REPUBLIC STANDARD #10
MANHOLE FRAME AND COVER - TYPE A



PLAN



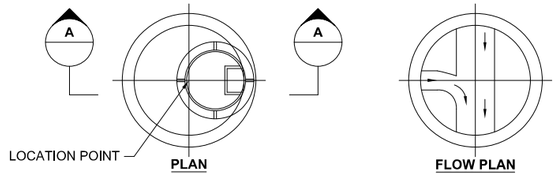
SECTION A

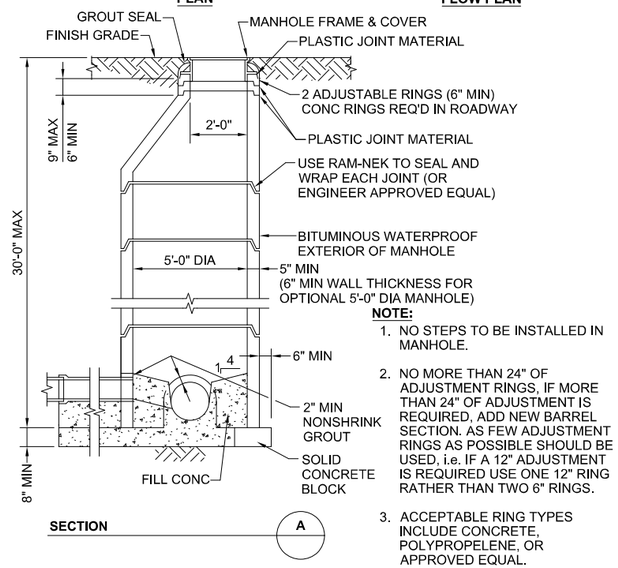
NOT TO SCALE

NOTE:

1. TYPE A WATERPROOF MANHOLE FRAME AND COVER FOR USE IN DRAINAGE AREAS.
2. NEENAH R-1916-F

C CITY OF REPUBLIC STANDARD #18
STANDARD MANHOLE DETAIL

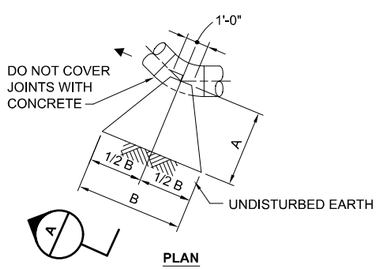


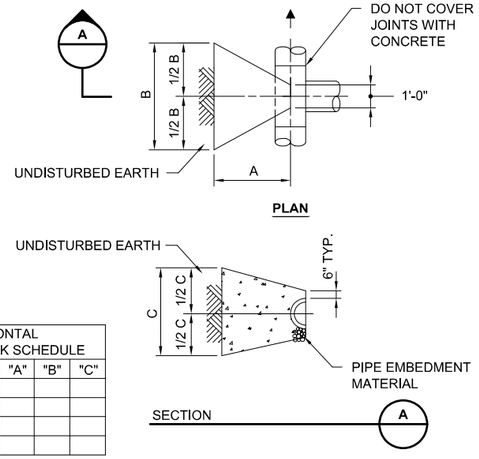


NOTE:

1. NO STEPS TO BE INSTALLED IN MANHOLE.
2. NO MORE THAN 24" OF ADJUSTMENT RINGS, IF MORE THAN 24" OF ADJUSTMENT IS REQUIRED, ADD NEW BARREL SECTION. AS FEW ADJUSTMENT RINGS AS POSSIBLE SHOULD BE USED, i.e. IF A 12" ADJUSTMENT IS REQUIRED USE ONE 12" RING RATHER THAN TWO 6" RINGS.
3. ACCEPTABLE RING TYPES INCLUDE CONCRETE, POLYPROPELENE, OR APPROVED EQUAL.

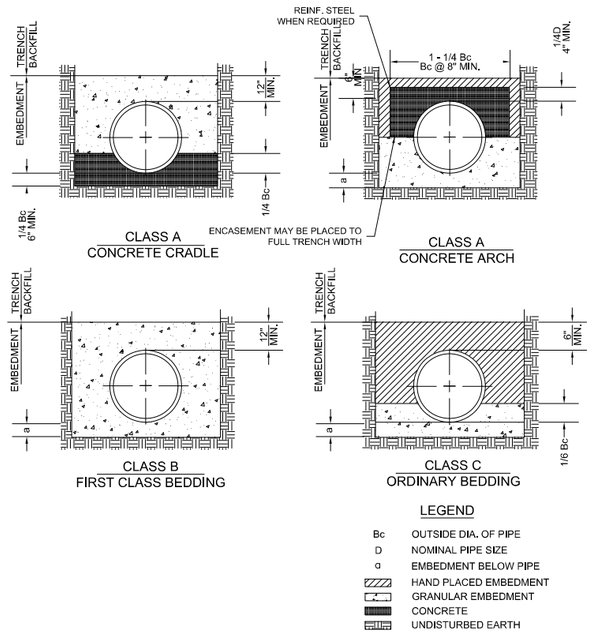
D CITY OF REPUBLIC STANDARD #23
THRUST BLOCK





HORIZONTAL THRUST BLOCK SCHEDULE				
SIZE	FITTING	"A"	"B"	"C"

E CITY OF REPUBLIC STANDARD #27
EMBEDMENT OF PIPE



LEGEND

Bc	OUTSIDE DIA. OF PIPE
D	NOMINAL PIPE SIZE
a	EMBEDMENT BELOW PIPE
	HAND PLACED EMBEDMENT
	GRANULAR EMBEDMENT
	CONCRETE
	UNDISTURBED EARTH

TABLE OF EMBEDMENT DEPTHS BELOW PIPE

SOIL TRENCH		
BEDDING CLASS	PIPE O.D.	a MIN.
A AND B	16" AND SMALLER	4"
A AND B	LARGER THAN 16"	1 / 4 O.D.
C	32" AND SMALLER	4"
C	LARGER THAN 32"	1 / 8 O.D.

ROCK TRENCH		
BEDDING CLASS	PIPE O.D.	a MIN.
A AND B	24" AND SMALLER	6"
A AND B	LARGER THAN 24"	1 / 4 O.D.
C	48" AND SMALLER	6"
C	LARGER THAN 48"	1 / 8 O.D.

SPECIAL SHEET
SANITARY SEWER DETAILS
SHEET 8 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 6:50:34 AM
WARNER D. SHERMAN II - CIVIL MO-PE-26645

DATE PREPARED 7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	37

COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION	DATE

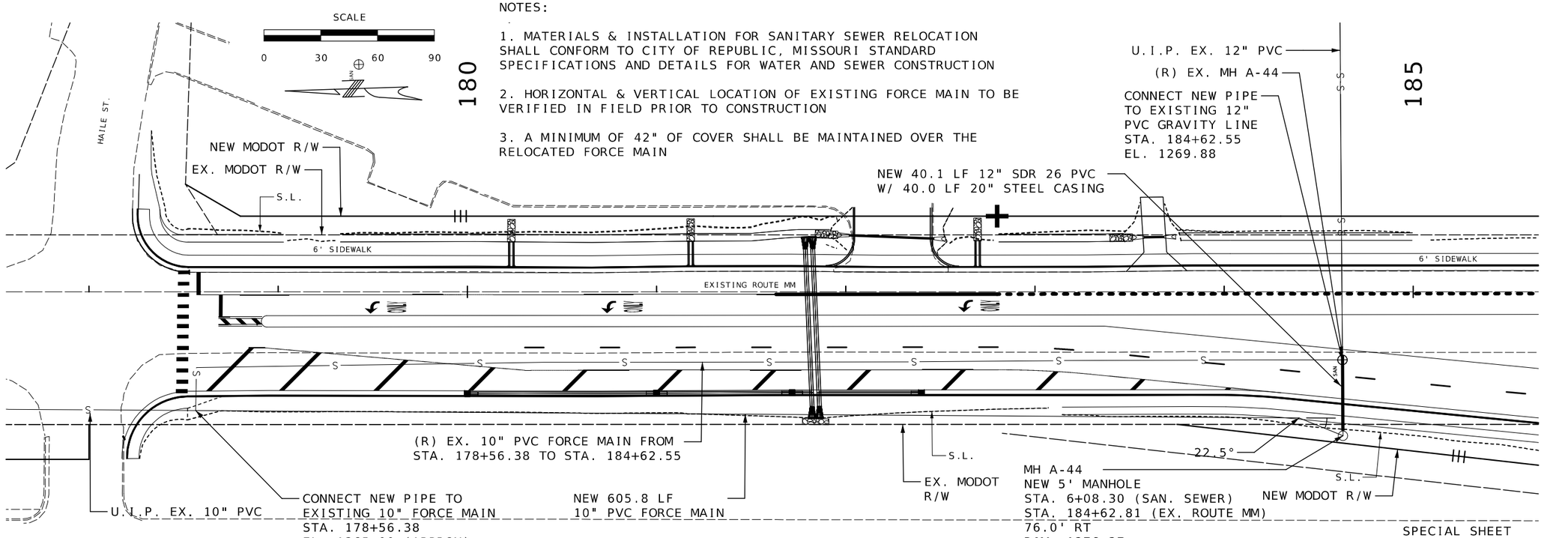
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

NOTES:

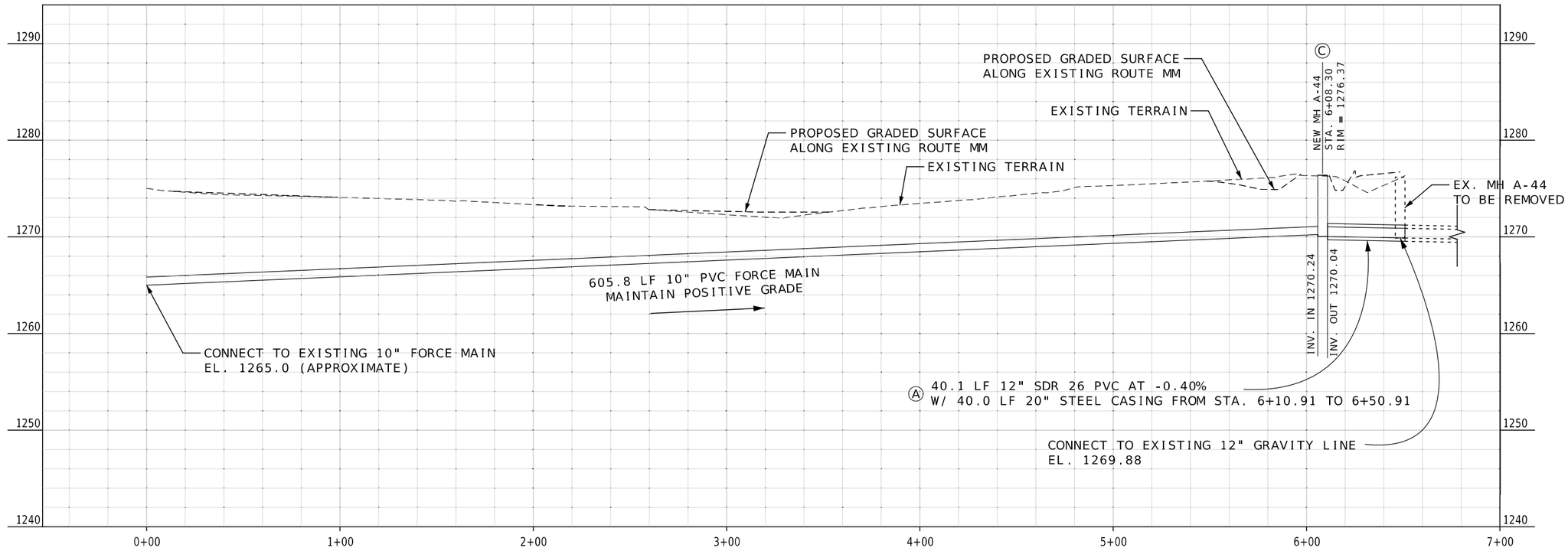
1. MATERIALS & INSTALLATION FOR SANITARY SEWER RELOCATION SHALL CONFORM TO CITY OF REPUBLIC, MISSOURI STANDARD SPECIFICATIONS AND DETAILS FOR WATER AND SEWER CONSTRUCTION

2. HORIZONTAL & VERTICAL LOCATION OF EXISTING FORCE MAIN TO BE VERIFIED IN FIELD PRIOR TO CONSTRUCTION

3. A MINIMUM OF 42" OF COVER SHALL BE MAINTAINED OVER THE RELOCATED FORCE MAIN



SPECIAL SHEET
SANITARY SEWER RELOCATION
LOCATION #1
SHEET 9 OF 22



STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 6:51:18 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/25/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	38
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION | DATE

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

EX. MH A-35 (U.I.P.)
CONNECT TO NEW 12" PVC PIPE
STA. 0+00.00 (SAN. SEWER)
STA. 15+14.65 (PR. ROUTE MM)
233.5' LT
RIM: 1285.84
INVERT IN: 1259.54
INVERT OUT: 1259.34

NEW MODOT R/W
S.L.

10' MULTI-USE PATH

ABANDON EX. 12" PVC SAN. SEWER

(R) EX. MH A-34

EX. 15' PERMANENT SANITARY SEWER EASEMENT

U.I.P. 12" PVC

NEW 408.2 LF
12" SDR 26 PVC
W/ 340.0 LF
20" STEEL CASING

PROPOSED ROUTE MM

6' SIDEWALK

MH A-34
NEW 5' MANHOLE
INTERCEPT EX. PIPE TO MH A-33
STA. 4+13.21 (SAN. SEWER)
STA. 16+96.65 (PR. ROUTE MM)
134.5' RT
RIM: 1282.88
INVERT IN: 1258.42
INVERT OUT: 1258.22

EX. MH A-33 (U.I.P.)
STA. 7+12.39 (SAN. SEWER)
STA. 18+67.63 (PR. ROUTE MM)
408.6' RT
RIM: 1278.85
INVERT IN: 1256.85
INVERT OUT: 1256.65

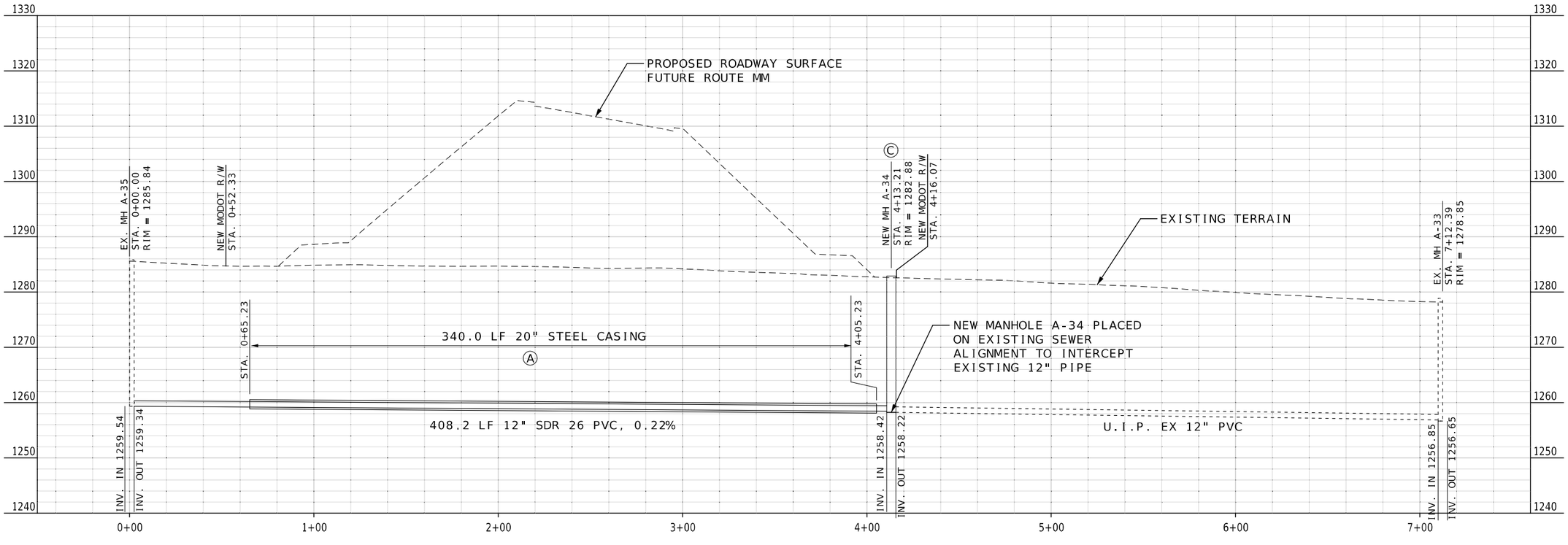
S.L.
NEW MODOT R/W

15

PC STA 14+46.13

SCALE
0 30 60 90

SPECIAL SHEET
SANITARY SEWER RELOCATION
LOCATION #2
SHEET 10 OF 22



STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/08/2025 8:46:54 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/6/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	39

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

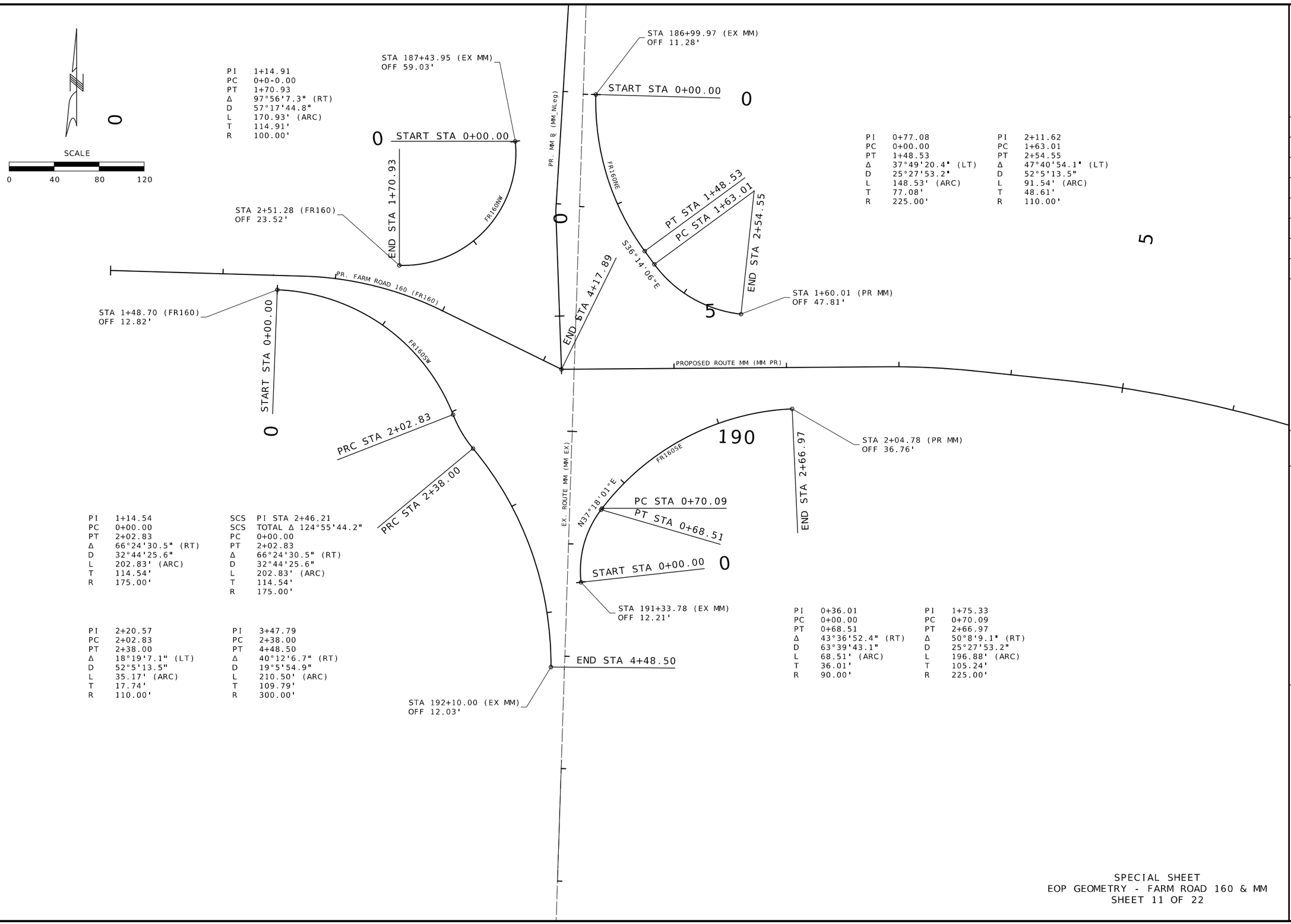
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



PI 0+14.91
PC 0+0-0.00
PT 1+70.93
Δ 97°56'7.3" (RT)
D 57°17'44.8"
L 170.93' (ARC)
T 114.91'
R 100.00'

PI 0+77.08
PC 0+00.00
PT 1+48.53
Δ 37°49'20.4" (LT)
D 25°27'53.2"
L 148.53' (ARC)
T 77.08'
R 225.00'

PI 2+11.62
PC 1+63.01
PT 2+54.55
Δ 47°40'54.1" (LT)
D 52°5'13.5"
L 91.54' (ARC)
T 48.61'
R 110.00'

PI 1+14.54
PC 0+00.00
PT 2+02.83
Δ 66°24'30.5" (RT)
D 32°44'25.6"
L 202.83' (ARC)
T 114.54'
R 175.00'

SCS PI STA 2+46.21
SCS TOTAL Δ 124°55'44.2"
PC 0+00.00
PT 2+02.83
Δ 66°24'30.5" (RT)
D 32°44'25.6"
L 202.83' (ARC)
T 114.54'
R 175.00'

PI 2+20.57
PC 2+02.83
PT 2+38.00
Δ 18°19'7.1" (LT)
D 52°5'13.5"
L 35.17' (ARC)
T 17.74'
R 110.00'

PI 3+47.79
PC 2+38.00
PT 4+48.50
Δ 40°12'6.7" (RT)
D 19°5'54.9"
L 210.50' (ARC)
T 109.79'
R 300.00'

PI 0+36.01
PC 0+00.00
PT 0+68.51
Δ 43°36'52.4" (RT)
D 63°39'43.1"
L 68.51' (ARC)
T 36.01'
R 90.00'

PI 1+75.33
PC 0+70.09
PT 2+66.97
Δ 50°8'9.1" (RT)
D 25°27'53.2"
L 196.88' (ARC)
T 105.24'
R 225.00'

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:52:15 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	40

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

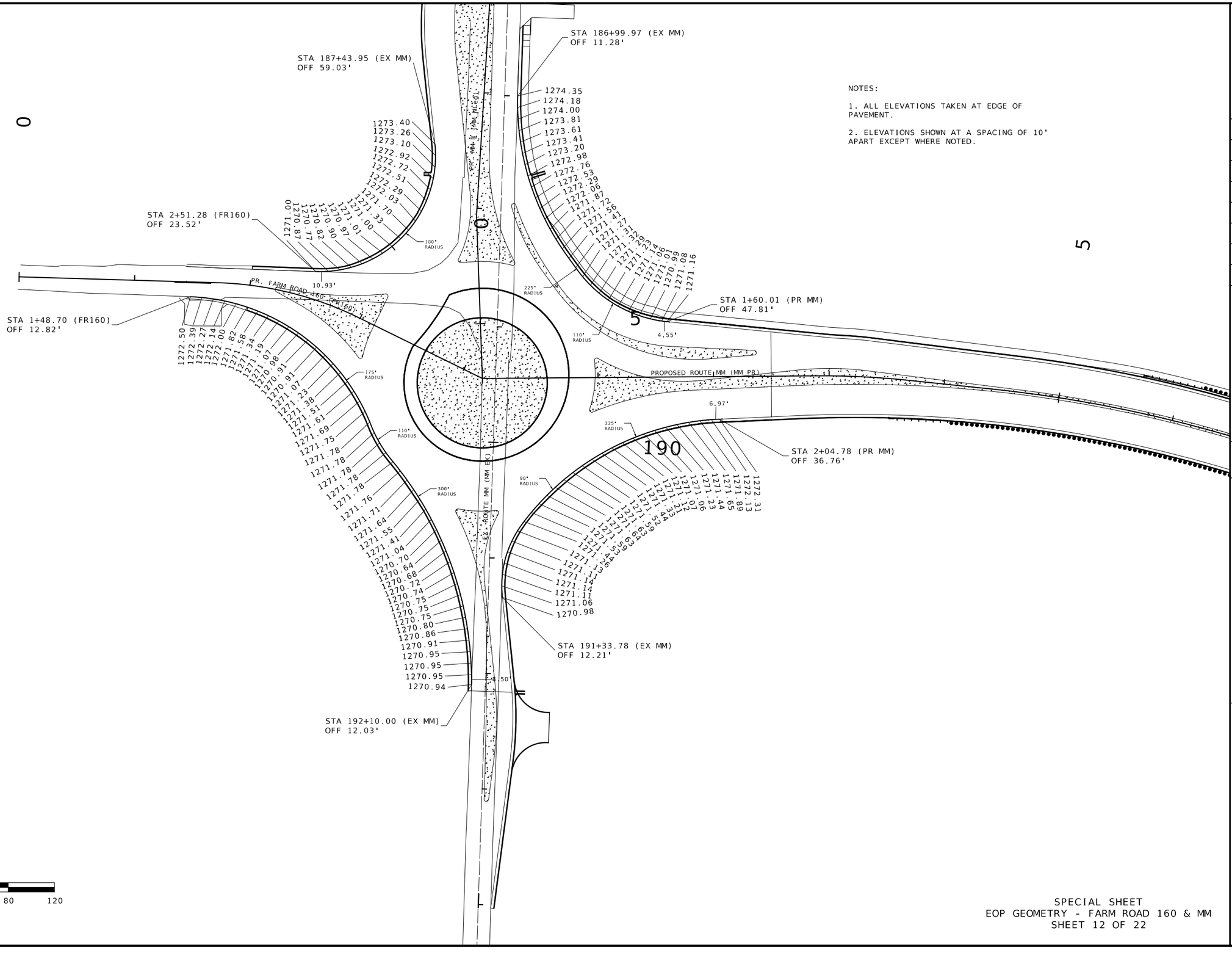
PROJECT NO.

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
EOP GEOMETRY - FARM ROAD 160 & MM
SHEET 11 OF 22



SPECIAL SHEET
EOP GEOMETRY - FARM ROAD 160 & MM
SHEET 12 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 6:52:48 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	41

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

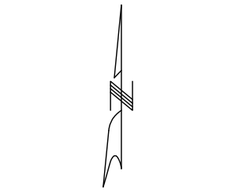
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



PI 0+43.91
PC 0+00.00
PT 0+86.45
Δ 24°45'58.6" (RT)
D 28°38'52.4"
L 86.45' (ARC)
T 43.91'
R 200.00'

PI 1+18.42
PC 0+94.51
PT 1+41.45
Δ 26°53'47.6" (RT)
D 57°17'44.8"
L 46.94' (ARC)
T 23.91'
R 100.00'

SCS PI STA 1+58.11
SCS TOTAL Δ 64°55'4.9"
PC 0+94.51
PT 1+41.45
Δ 26°53'47.6" (RT)
D 57°17'44.8"
L 46.94' (ARC)
T 23.91'
R 100.00'

PI 1+75.90
PC 1+41.45
PT 2+07.81
Δ 38°1'17.3" (RT)
D 57°17'44.8"
L 66.36' (ARC)
T 34.45'
R 100.00'

PI 0+63.71
PC 0+00.00
PT 1+13.45
Δ 65°0'0.1" (LT)
D 57°17'44.8"
L 113.45' (ARC)
T 63.71'
R 100.00'

PI 1+35.37
PC 1+20.69
PT 1+50.00
Δ 8°23'49.9" (LT)
D 28°38'52.4"
L 29.31' (ARC)
T 14.68'
R 200.00'

SCS PI STA 1+65.03
SCS TOTAL Δ 24°59'59.9"
PC 1+20.69
PT 1+50.00
Δ 8°23'49.9" (LT)
D 28°38'52.4"
L 29.31' (ARC)
T 14.68'
R 200.00'

PI 1+79.18
PC 1+50.00
PT 2+07.95
Δ 16°36'10.0" (LT)
D 28°38'52.4"
L 57.95' (ARC)
T 29.18'
R 200.00'

PI 1+58.22
PC 0+94.51
PT 2+07.95
Δ 65°0'0.1" (RT)
D 57°17'44.8"
L 113.45' (ARC)
T 63.71'
R 100.00'

PI 0+44.34
PC 0+00.00
PT 0+87.27
Δ 24°59'59.9" (RT)
D 28°38'52.4"
L 87.27' (ARC)
T 44.34'
R 200.00'

PI 0+44.34
PC 0+00.00
PT 0+87.27
Δ 24°59'59.9" (RT)
D 28°38'52.4"
L 87.27' (ARC)
T 44.34'
R 200.00'

PI 1+71.46
PC 1+07.75
PT 2+21.20
Δ 65°0'0.1" (RT)
D 57°17'44.8"
L 113.45' (ARC)
T 63.71'
R 100.00'

PROPOSED ROUTE MM (MM_PR)
S32°33'07"E

STA 45+58.15 (MM_PR)
OFF 31.00'

START STA 0+00.00
PT STA 1+13.45
PC STA 1+20.69
PCC STA 1+50.00
END STA 2+07.95

60NE
N82°26'53"E

STA 241+02.32 (60_WB)
OFF 36.00'

STA 45+33.76 (MM_PR)
OFF 61.00'

START STA 0+00.00
PT STA 0+86.45
PC STA 0+94.51
PCC STA 1+41.45
END STA 2+07.81

60NW
S07°33'49"E

STA 237+49.20 (60_WB)
OFF 24.00'

EX. US 60 WESTBOUND (60 WB)
N57°26'53.27"E

END STA 47+37.08
START STA 0+00.00

EX. US 60 EASTBOUND (MM EB)
N57°26'53.27"E

STA 240+77.92 (MM_EB)
OFF 24.00'

END STA 2+07.95
PC STA 0+94.51
PT STA 0+87.27
START STA 0+00.00

N07°33'07"W
350E

STA 2+03.33 (FR103_Tie)
OFF 43.00'

PROPOSED FARM ROAD 103 CONNECTION (FR103_Tie)
S32°33'07"E

PC STA 2+31.74

STA 237+24.67 (MM_EB)
OFF 36.00'

60SW
N82°26'53"E

START STA 0+00.00
PT STA 0+87.27
PC STA 1+07.75
END STA 2+21.20

STA 1+84.53 (FR103_Tie)
OFF 37.00'

235

SPECIAL SHEET
EOP GEOMETRY - U.S. 60 & MM
SHEET 13 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 6:53:13 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	42

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

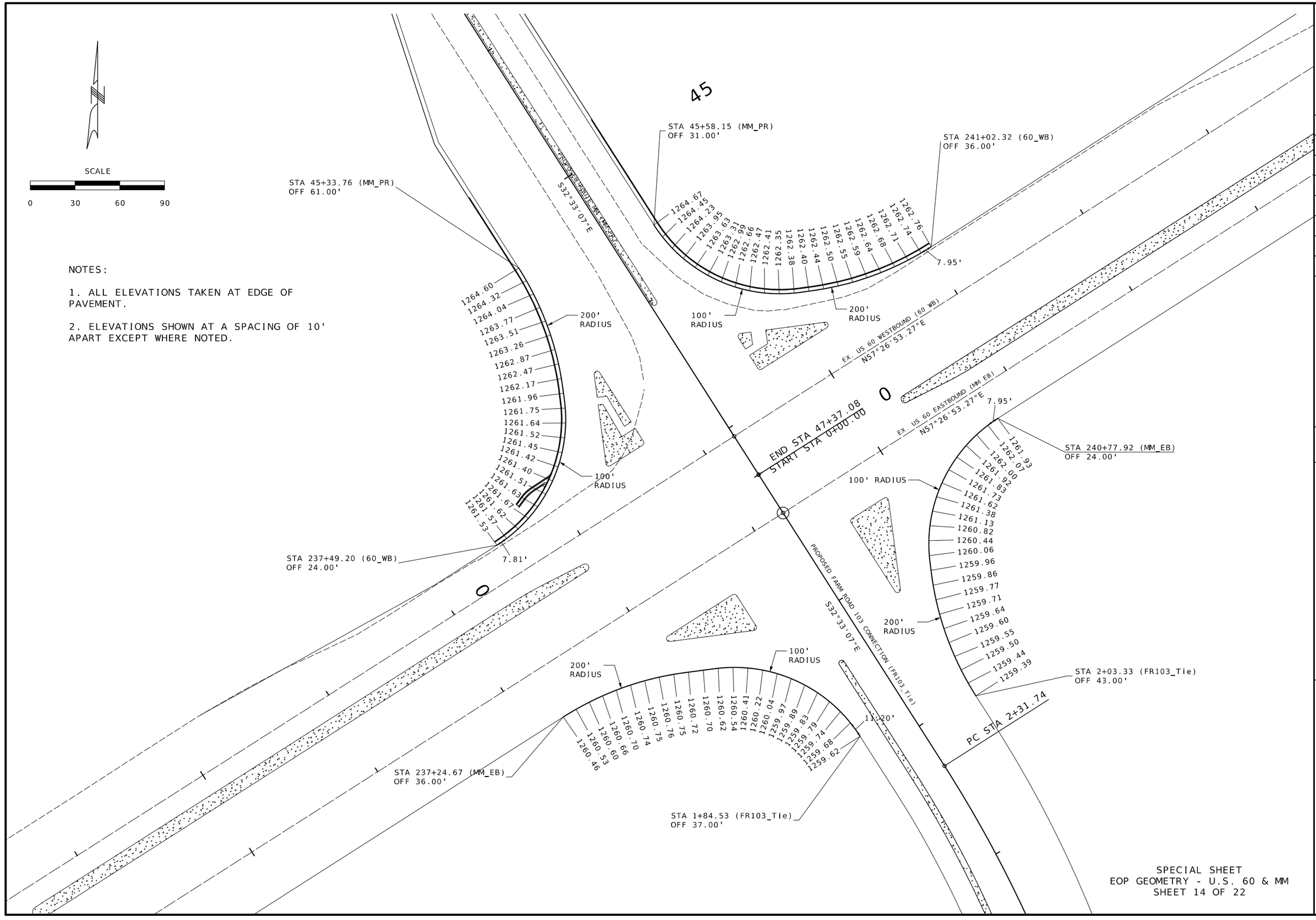
SCALE

0 30 60 90

NOTES:

1. ALL ELEVATIONS TAKEN AT EDGE OF PAVEMENT.

2. ELEVATIONS SHOWN AT A SPACING OF 10' APART EXCEPT WHERE NOTED.



SPECIAL SHEET
EOP GEOMETRY - U.S. 60 & MM
SHEET 14 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:53:36 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	43

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

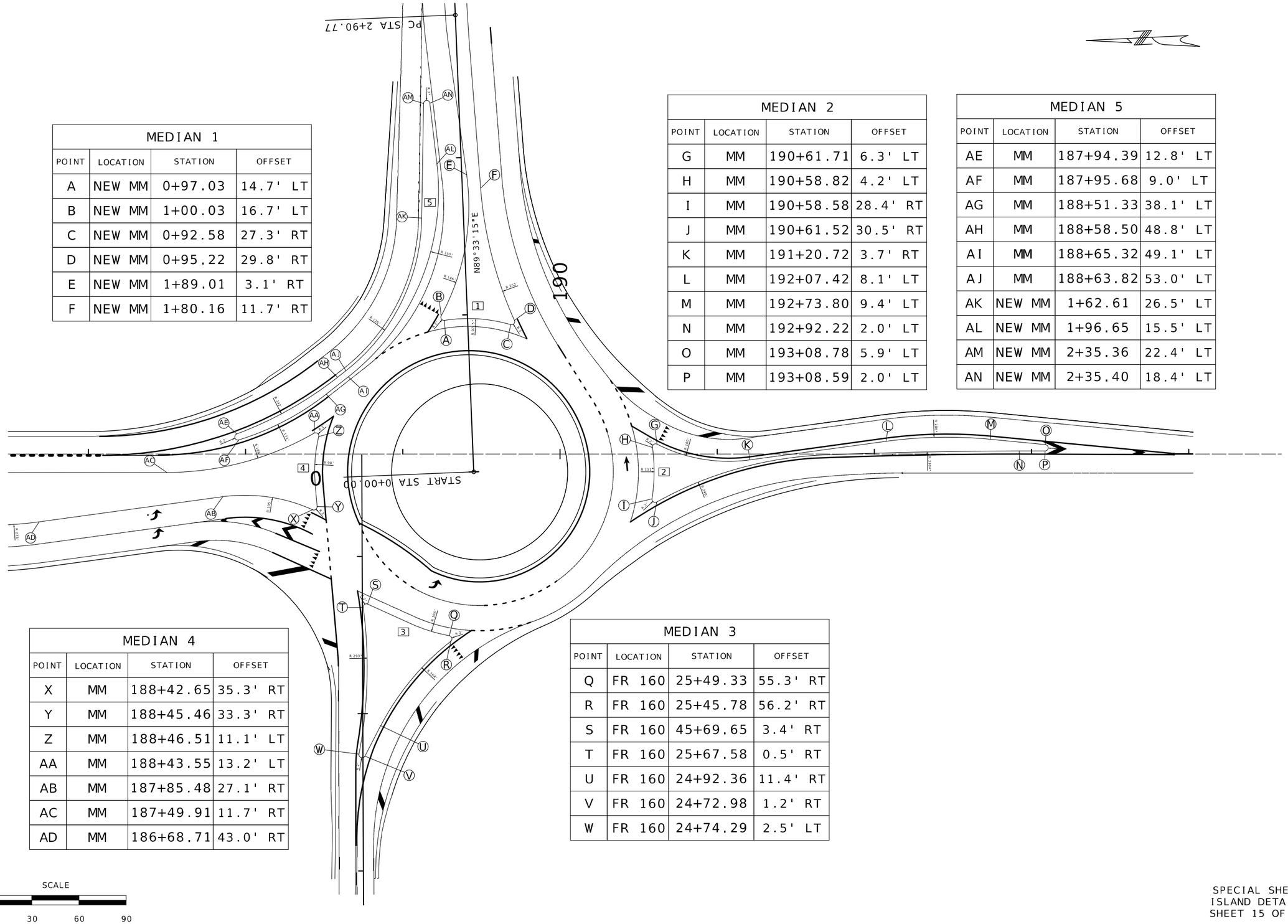
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



MEDIAN 1			
POINT	LOCATION	STATION	OFFSET
A	NEW MM	0+97.03	14.7' LT
B	NEW MM	1+00.03	16.7' LT
C	NEW MM	0+92.58	27.3' RT
D	NEW MM	0+95.22	29.8' RT
E	NEW MM	1+89.01	3.1' RT
F	NEW MM	1+80.16	11.7' RT

MEDIAN 2			
POINT	LOCATION	STATION	OFFSET
G	MM	190+61.71	6.3' LT
H	MM	190+58.82	4.2' LT
I	MM	190+58.58	28.4' RT
J	MM	190+61.52	30.5' RT
K	MM	191+20.72	3.7' RT
L	MM	192+07.42	8.1' LT
M	MM	192+73.80	9.4' LT
N	MM	192+92.22	2.0' LT
O	MM	193+08.78	5.9' LT
P	MM	193+08.59	2.0' LT

MEDIAN 5			
POINT	LOCATION	STATION	OFFSET
AE	MM	187+94.39	12.8' LT
AF	MM	187+95.68	9.0' LT
AG	MM	188+51.33	38.1' LT
AH	MM	188+58.50	48.8' LT
AI	MM	188+65.32	49.1' LT
AJ	MM	188+63.82	53.0' LT
AK	NEW MM	1+62.61	26.5' LT
AL	NEW MM	1+96.65	15.5' LT
AM	NEW MM	2+35.36	22.4' LT
AN	NEW MM	2+35.40	18.4' LT

MEDIAN 4			
POINT	LOCATION	STATION	OFFSET
X	MM	188+42.65	35.3' RT
Y	MM	188+45.46	33.3' RT
Z	MM	188+46.51	11.1' LT
AA	MM	188+43.55	13.2' LT
AB	MM	187+85.48	27.1' RT
AC	MM	187+49.91	11.7' RT
AD	MM	186+68.71	43.0' RT

MEDIAN 3			
POINT	LOCATION	STATION	OFFSET
Q	FR 160	25+49.33	55.3' RT
R	FR 160	25+45.78	56.2' RT
S	FR 160	45+69.65	3.4' RT
T	FR 160	25+67.58	0.5' RT
U	FR 160	24+92.36	11.4' RT
V	FR 160	24+72.98	1.2' RT
W	FR 160	24+74.29	2.5' LT

SCALE

0 30 60 90

SPECIAL SHEET
ISLAND DETAILS
SHEET 15 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:54:00 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26845

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	44

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

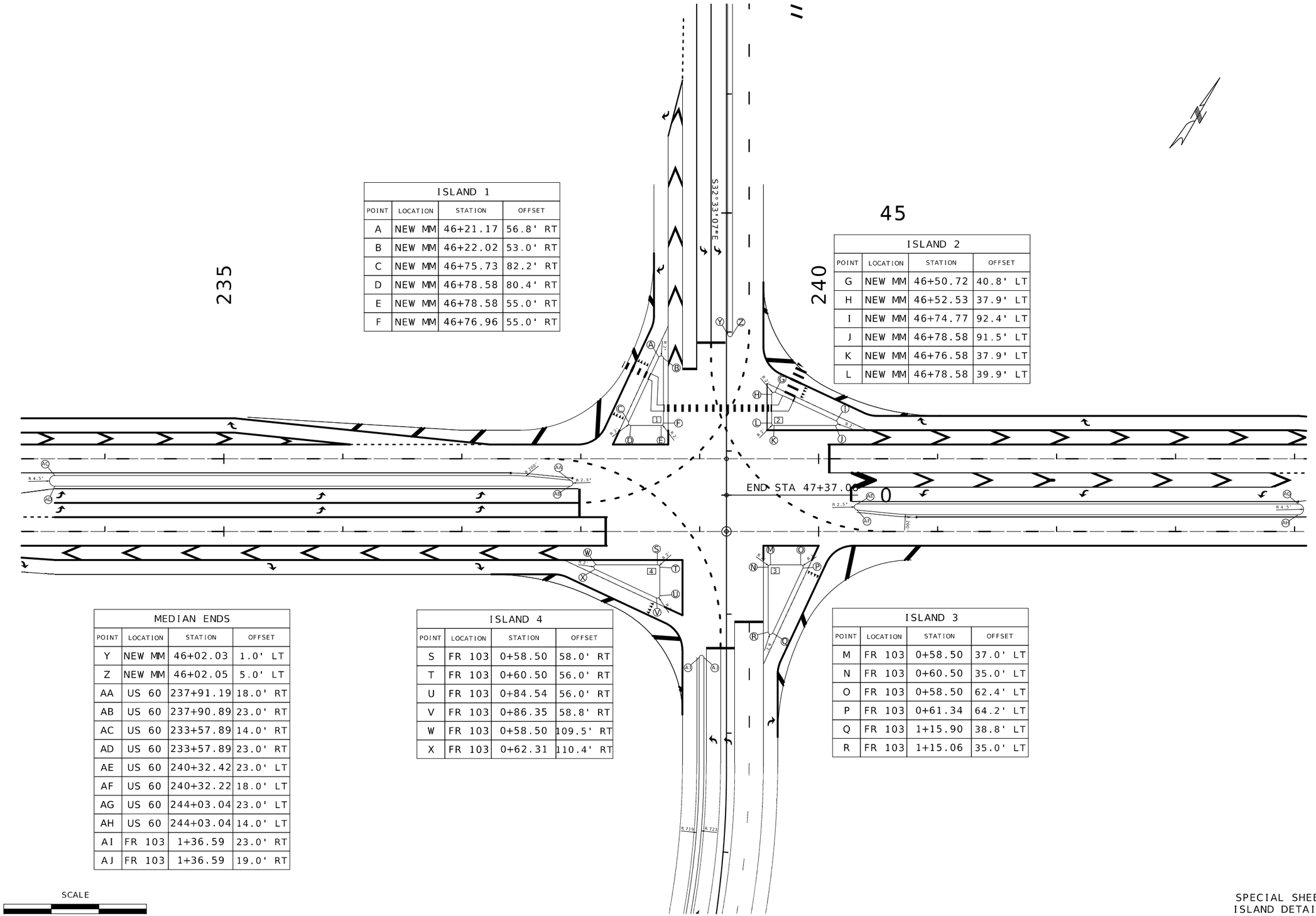
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT



ISLAND 1			
POINT	LOCATION	STATION	OFFSET
A	NEW MM	46+21.17	56.8' RT
B	NEW MM	46+22.02	53.0' RT
C	NEW MM	46+75.73	82.2' RT
D	NEW MM	46+78.58	80.4' RT
E	NEW MM	46+78.58	55.0' RT
F	NEW MM	46+76.96	55.0' RT

ISLAND 2			
POINT	LOCATION	STATION	OFFSET
G	NEW MM	46+50.72	40.8' LT
H	NEW MM	46+52.53	37.9' LT
I	NEW MM	46+74.77	92.4' LT
J	NEW MM	46+78.58	91.5' LT
K	NEW MM	46+76.58	37.9' LT
L	NEW MM	46+78.58	39.9' LT

MEDIAN ENDS			
POINT	LOCATION	STATION	OFFSET
Y	NEW MM	46+02.03	1.0' LT
Z	NEW MM	46+02.05	5.0' LT
AA	US 60	237+91.19	18.0' RT
AB	US 60	237+90.89	23.0' RT
AC	US 60	233+57.89	14.0' RT
AD	US 60	233+57.89	23.0' RT
AE	US 60	240+32.42	23.0' LT
AF	US 60	240+32.22	18.0' LT
AG	US 60	244+03.04	23.0' LT
AH	US 60	244+03.04	14.0' LT
AI	FR 103	1+36.59	23.0' RT
AJ	FR 103	1+36.59	19.0' RT

ISLAND 4			
POINT	LOCATION	STATION	OFFSET
S	FR 103	0+58.50	58.0' RT
T	FR 103	0+60.50	56.0' RT
U	FR 103	0+84.54	56.0' RT
V	FR 103	0+86.35	58.8' RT
W	FR 103	0+58.50	109.5' RT
X	FR 103	0+62.31	110.4' RT

ISLAND 3			
POINT	LOCATION	STATION	OFFSET
M	FR 103	0+58.50	37.0' LT
N	FR 103	0+60.50	35.0' LT
O	FR 103	0+58.50	62.4' LT
P	FR 103	0+61.34	64.2' LT
Q	FR 103	1+15.90	38.8' LT
R	FR 103	1+15.06	35.0' LT

SCALE
0 40 80 120

SPECIAL SHEET
ISLAND DETAILS
SHEET 16 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 6:54:24 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	45

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

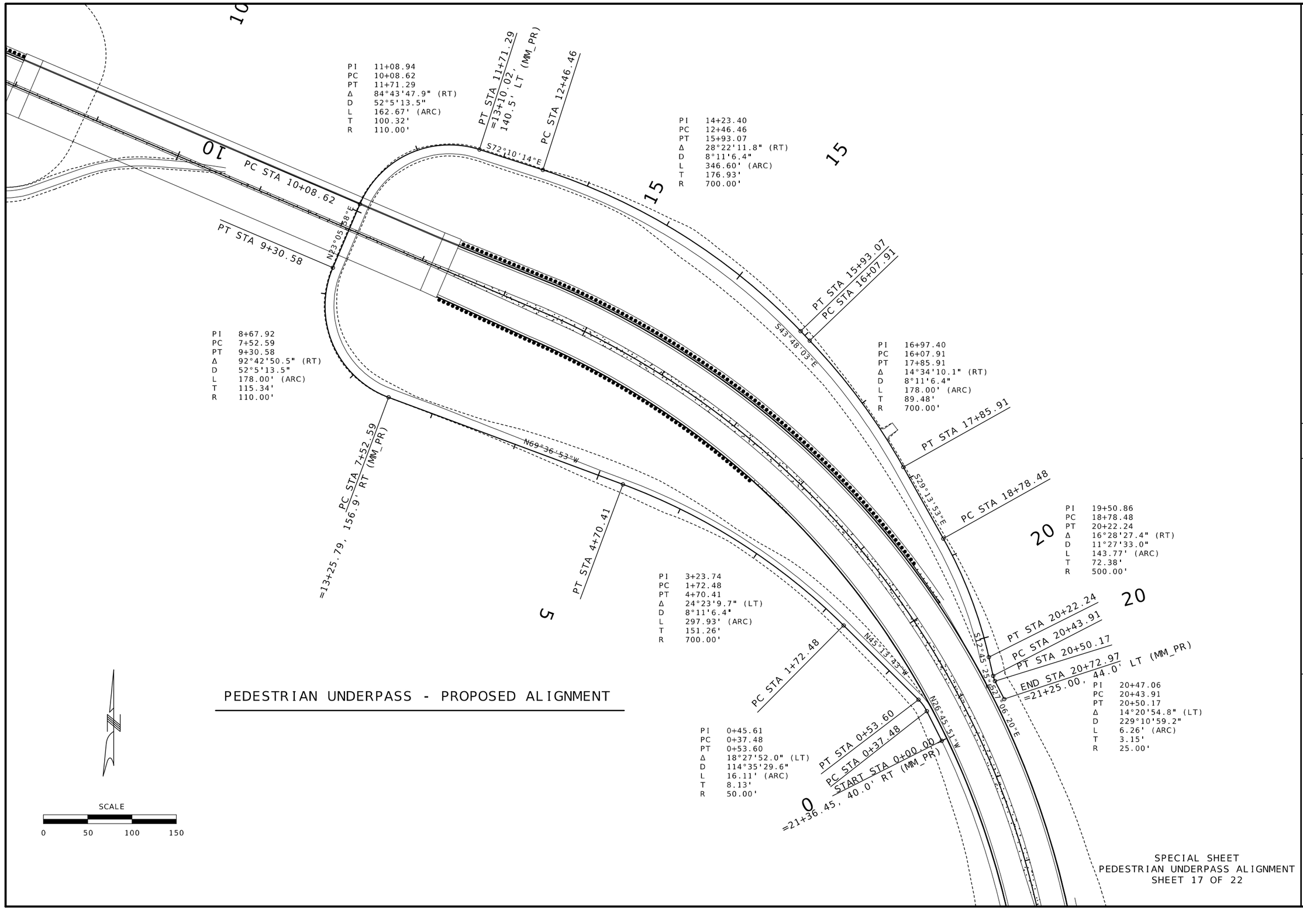
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



PEDESTRIAN UNDERPASS - PROPOSED ALIGNMENT

SPECIAL SHEET
PEDESTRIAN UNDERPASS ALIGNMENT
SHEET 17 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07-28-2025 6:54:50 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	46

COUNTY
GREENE

JOB NO.
J8S0836D

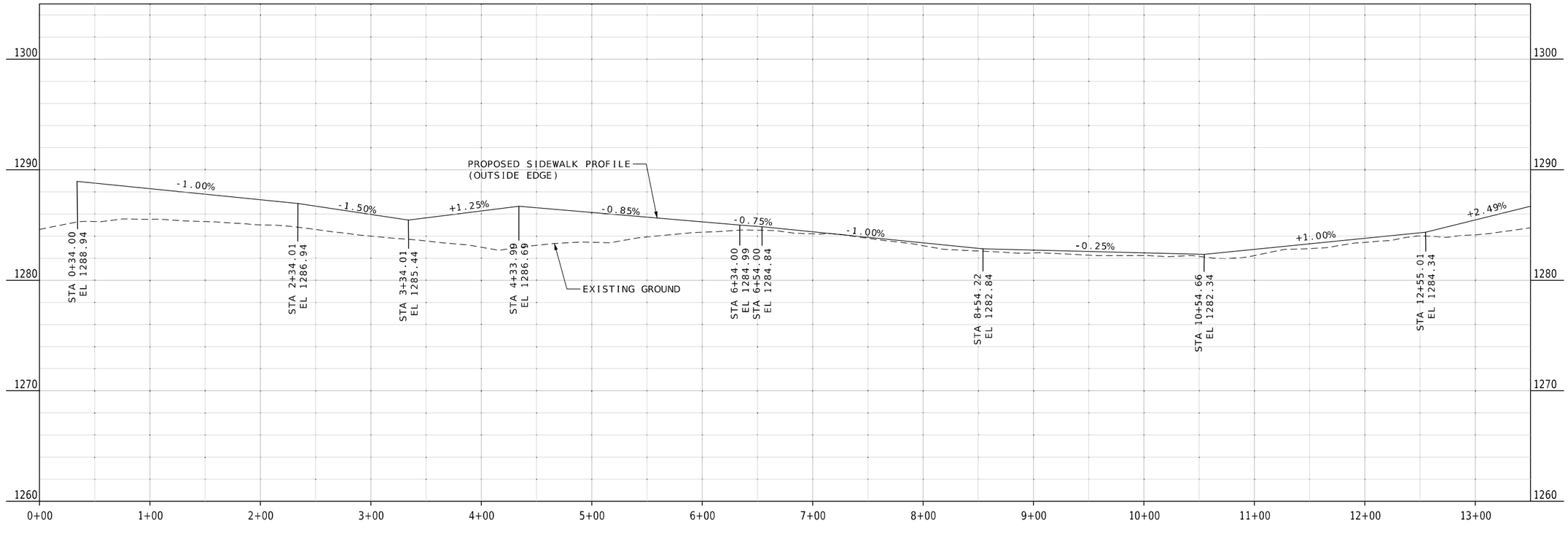
CONTRACT ID.

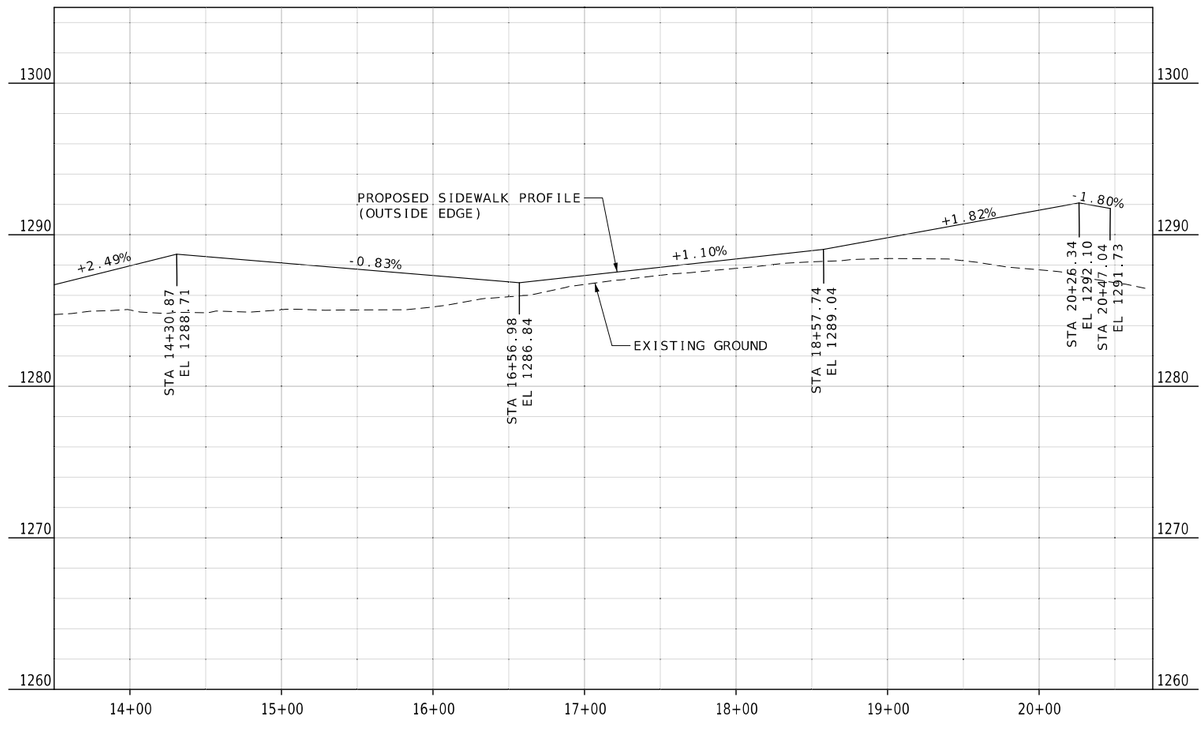
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

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





SPECIAL SHEET
PEDESTRIAN UNDERPASS PROFILE
SHEET 18 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:55:13 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	47

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

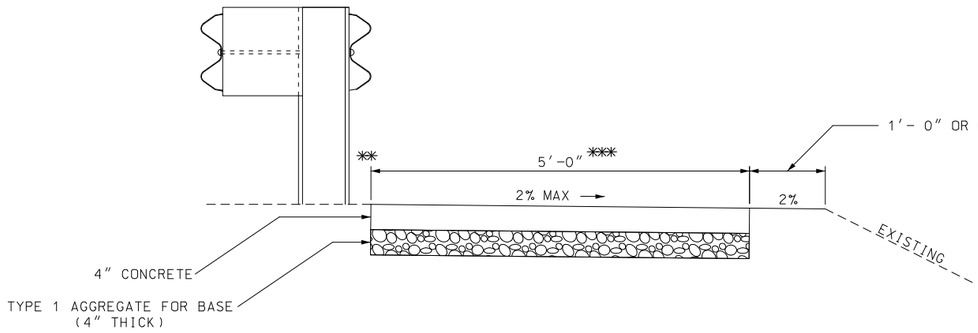
NOTES:

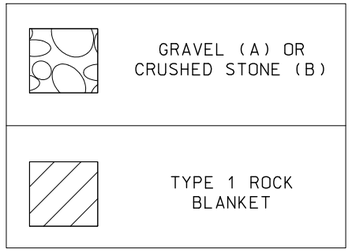
* HEIGHT OF CURB FOR SECTION TYPE 4-C CURB TYPE IS APPROVED BY ENGINEER IN THE FIELD TO MATCH FIELD CONDITION

** EDGE OF SIDEWALK AT EDGE OF GUARD RAIL EXCEPT WHEN HAVE SHOULDER BETWEEN GUARD RAIL AND THE SIDEWALK EDGE

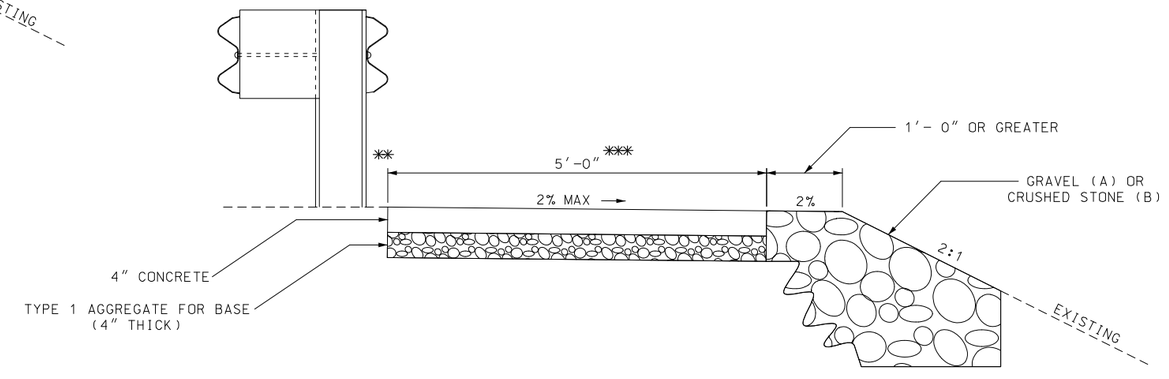
*** IF NONE OF THE SECTION TYPES ALLOWS FOR 5FT SIDEWALK, IT IS ACCEPTABLE TO REDUCE SIDEWALK WIDTH TO 4FT FOR A MAXIMUM OF 200FT IN LENGTH. AS APPROVED BY ENGINEER

TYPE 4-A



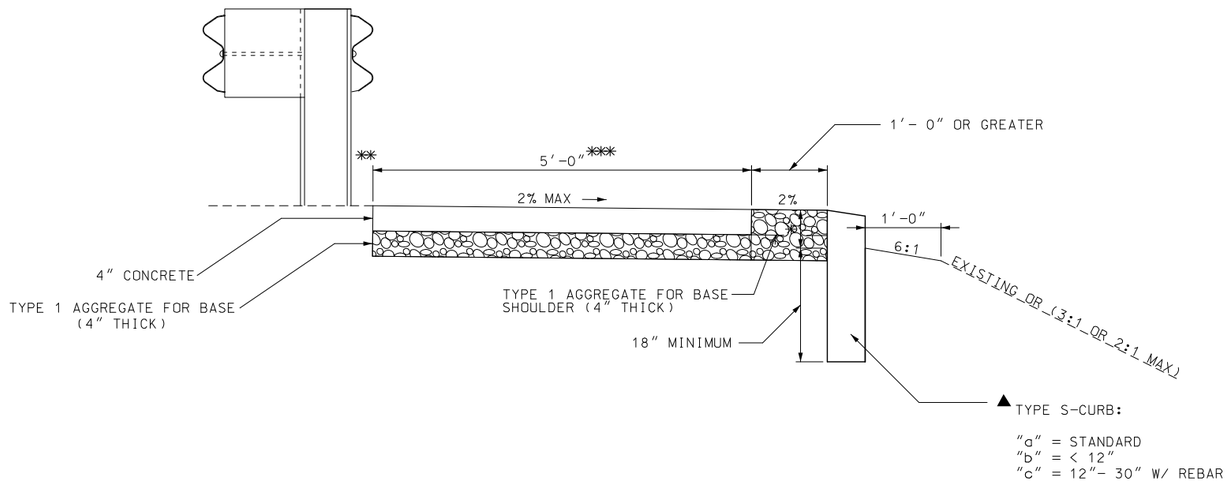


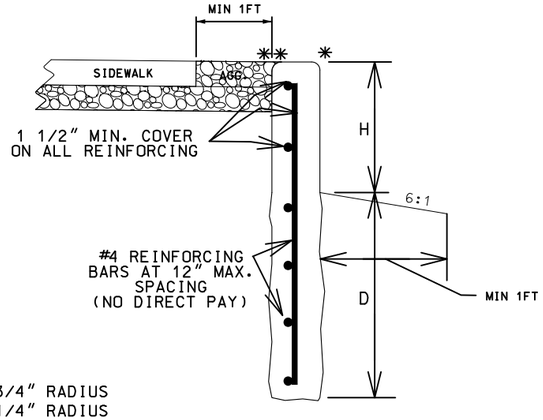
TYPE 4-B



TYPE 4-C

▲ TYPE 4-Ca, TYPE 4-Cb, TYPE 4-Cc





ROUND TO 3/4″ RADIUS
ROUND TO 1/4″ RADIUS
H = 12″ TO 2′-6″ MAX. (30″)
D = BURY DEPTH (FORMING NOT REQUIRED)
THIS SHALL BE 18 INCHES OR "H" WHICHEVER IS GREATER.
VERTICAL REINFORCING LENGTHS VARY AS NEEDED.
DEPTH MAY BE REDUCED IF KEYED 6″ IN ROCK

TYPE c MODIFIED S-CURB
> 12″ TALL (2′-6″ MAX.)

DRAWING NOT TO SCALE

SPECIAL SHEET
GUARD RAIL
SHEET 19 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 6:55:40 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	48

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

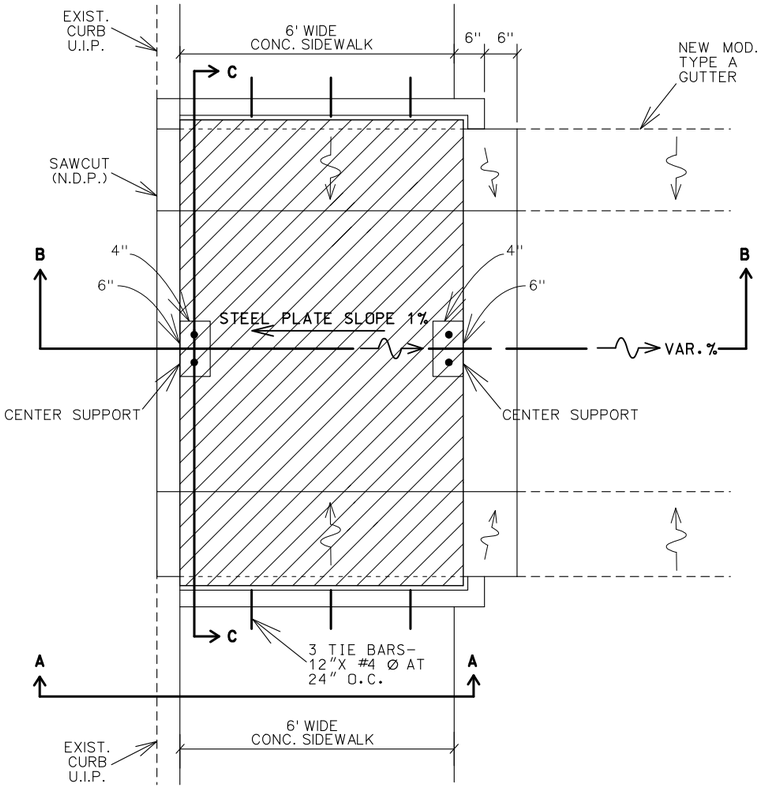
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

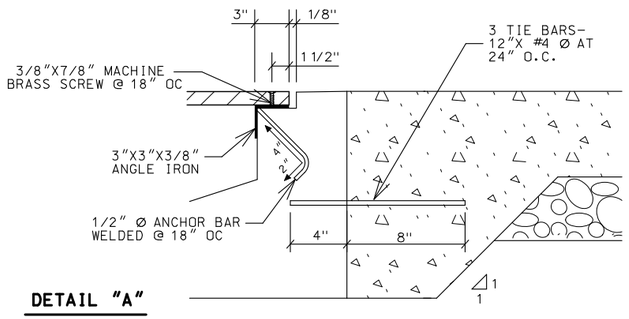
REVISED: 08-22-2023

NOTES:

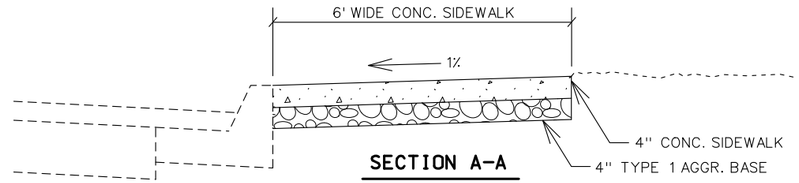
1. THE 1/2" STEEL SLIP-RESISTANT PLATE SHALL HAVE A MIN. STATIC COEFFICIENT OF FRICTION OF 0.6.
2. FLATHEAD BRASS MACHINE SCREWS 3/8" x 7/8". HOLES SHALL BE DRILLED AND TAPPED IN THE FIELD AT INTERVALS NOT TO EXCEED 18" CENTER TO CENTER (NO DIRECT PAY).
3. ALL REINFORCING STEEL BARS SHALL BE EPOXY COATED (NO DIRECT PAY).
4. ALL REINFORCING STEEL, ANCHOR BARS, ANGLE IRON, SCREWS, AND 'T' SUPPORTS SHALL BE INCIDENTAL (NO DIRECT PAY).

PLAN

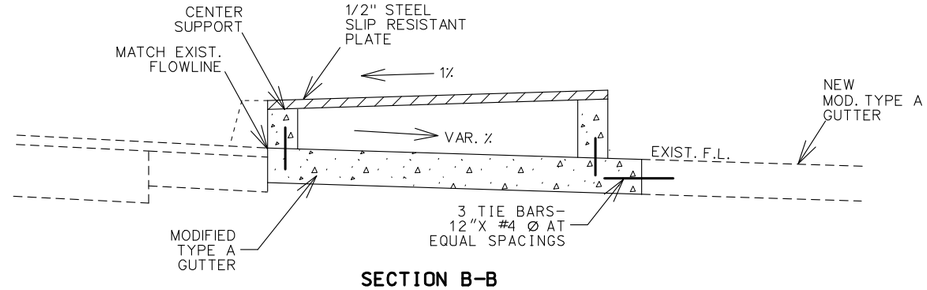




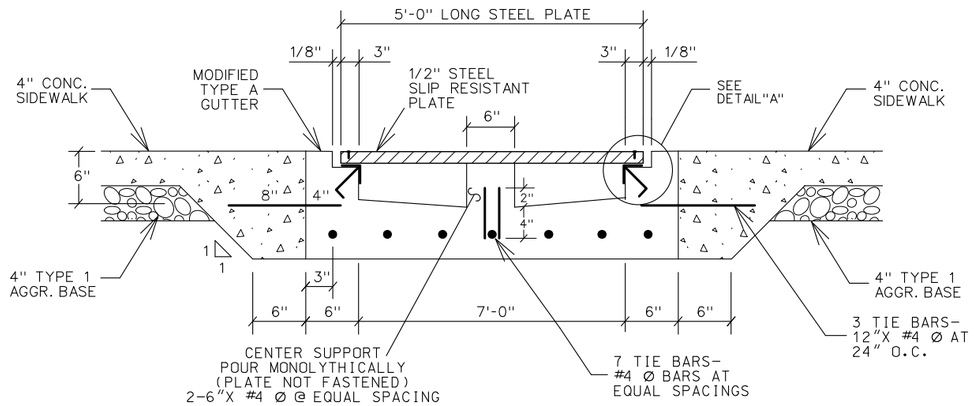
DETAIL "A"



SECTION A-A



SECTION B-B



SECTION C-C

STA. 180+20.74, 181+15.59, 182+67.25, 185+94.73, 187+66.84

MODIFIED TYPE A GUTTER W/ STEEL PLATE

NOT TO SCALE

SPECIAL SHEET
PLATE AWAY
20 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/20/2025 6:56:09 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	49

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

CENTER OF ROUNDABOUT
EX. RTE. MM: 189+48.91, 11.30' RT =
PR. RTE. MM: -0+00.15 3.75' RT =
FR 160: 4+19.43, 3.42' RT

CENTRAL ISLAND
R=56'

TRUCK APRON

ISOLATION JOINT

PROPOSED ROUTE MM

PR. RTE. MM
STA. 2+50.00

EX. RTE. MM
STA. 184+02.67

EX. RTE. MM
STA. 192+15.51

185

190

EXISTING ROUTE MM

EXISTING MM ROUNDABOUT NORTH LEG

12' SPACING

13.7'

12' TYP.

12.2 TYP.

8.5'

TRUCK APRON WIDTH VARIES

TRUCK APRON 5.8' TYP

ISOLATION JOINT

ISOLATION JOINT

ISOLATION JOINT

12' SPACING

PR. FARM ROAD 160
STA. 1+44.58

FARM ROAD 160

SCALE

0 30 60 90

SPECIAL SHEET
ROUNDABOUT JOINT LAYOUT
SHEET 21 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:56:35 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	50

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

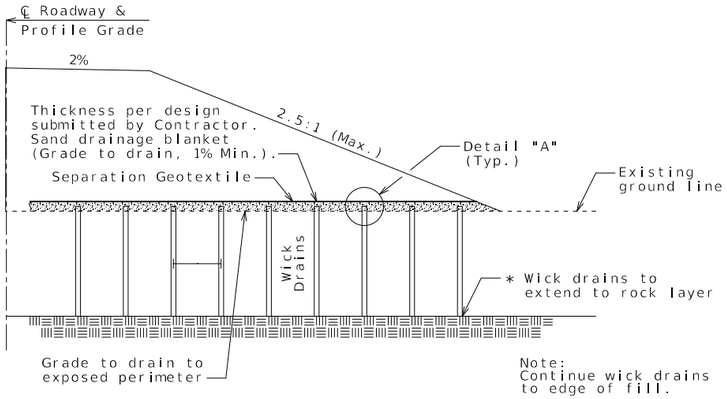
PROJECT NO.

BRIDGE NO.

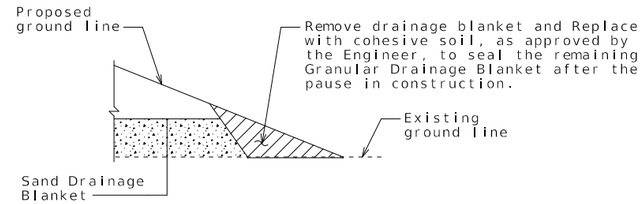
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

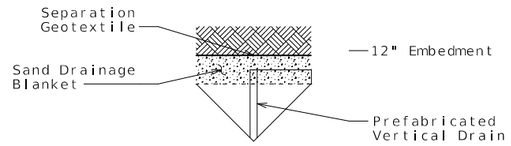
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



EMBANKMENT TYPICAL SECTION



SOIL CAP DETAIL



DETAIL "A"

STATION RANGES OF GROUND IMPROVEMENT PLACEMENT

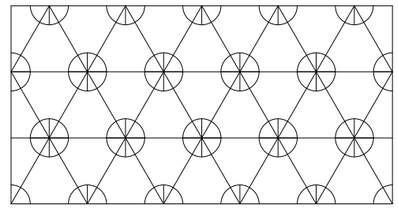
Sta. 4+50.00 to Sta. 8+85.00
Sta. 12+15.00 to Sta. 17+50.00

LEGEND

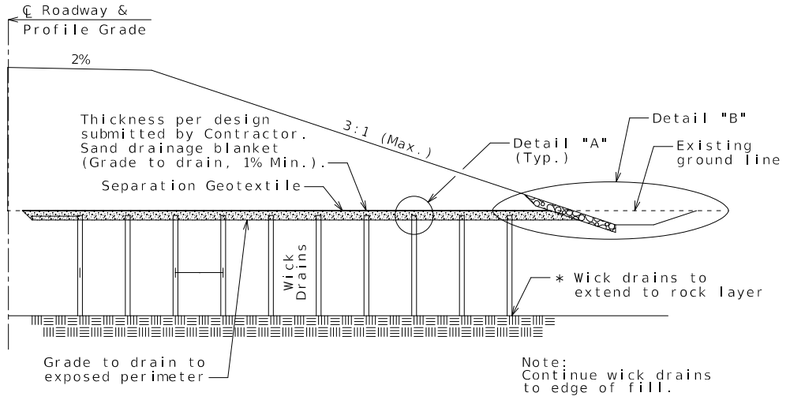
- Sand Drainage Blanket
- Rock Blanket and Ditch Liner
- Wick Drain
- Bedrock

Dim. A = Based on lateral spacing of prefabricated vertical drain design submitted by Contractor to the Engineer for review.

WICK DRAIN PLACEMENT



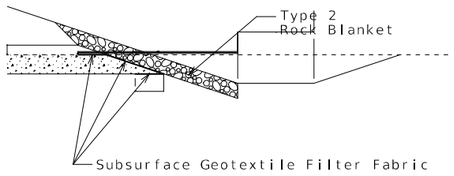
WICK DRAIN PLACEMENT



EMBANKMENT TYPICAL SECTION WITH DITCH

See Plan Sheets)

Fabric



DETAIL "B"

NOTES:

The ground improvements shall consist of a combination of Prefabricated Vertical Wick Drains, Separation Geotextile and Sand Drainage Blanket. All ground improvements shall conform to the specifications, job special provisions and in accordance with the approved shop drawings. Payment for furnishing all materials, labor and excavation necessary to construct the ground improvements and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract lump sum price for Ground Improvement.

The uniform triangular spacing of the PVD's will be as shown and shall be placed within the limits defined in the approved shop drawings. Contractor shall submit an engineered ground improvement design to the Engineer for review prior to commencing the ground improvements work.

The PVD's shall extend 1'-0" into the Granular Drainage Blanket and driven to refusal in rock. Where PVD's are installed, a Granular Drainage Blanket shall be installed at existing grade unless noted otherwise. This work shall consist of placement of aggregate on prepared subgrade to provide a drainage pathway for pore water from the PVD's to be discharged from beneath the embankment to daylight as shown on the plans or established by the Engineer. The drainage blanket will extend to the outside limits of the side and spill slopes as indicated on the Plans. The subgrade for the drainage blanket shall be graded at a slope to promote draingage toward the outer perimeter of the embankment. A layer of Separation Geotextile shall be placed on top of the Granular Drainage Blanket between the drainage blanket and embankment fill.

Following construction of the embankments, approach slab and pavement construction shall not begin until after proposed settlement waiting period after the embankment construction is complete, or until settlement is complete. Additionally, preboring is required for bridge end bents piles driving prior to the proposed settlement waiting period. Following the construction waiting period, an 5 foot horizontal bench shall be cut from the toe and embankment perimeter in order to cap the Granular Drainage Blanket with a cohesive soil and create a seal.

* Rock elevation varies, see boring data for depths to bedrock surface.

Notice and Disclaimer Regarding Boring Log Data:
The boring data, as well as any other boring logs or other factual records of subsurface data and investigations performed by the department for the design of the project, may be included in the Electronic Bridge Deliverables. They will also be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the district or elsewhere.

The Commission does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this project. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here or those available from the district, or on any other documentation not expressly warranted, which the contractor may obtain from the Commission.

SPECIAL SHEET
GROUND IMPROVEMENTS
SHEET 22 OF 22

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 6:56:59 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

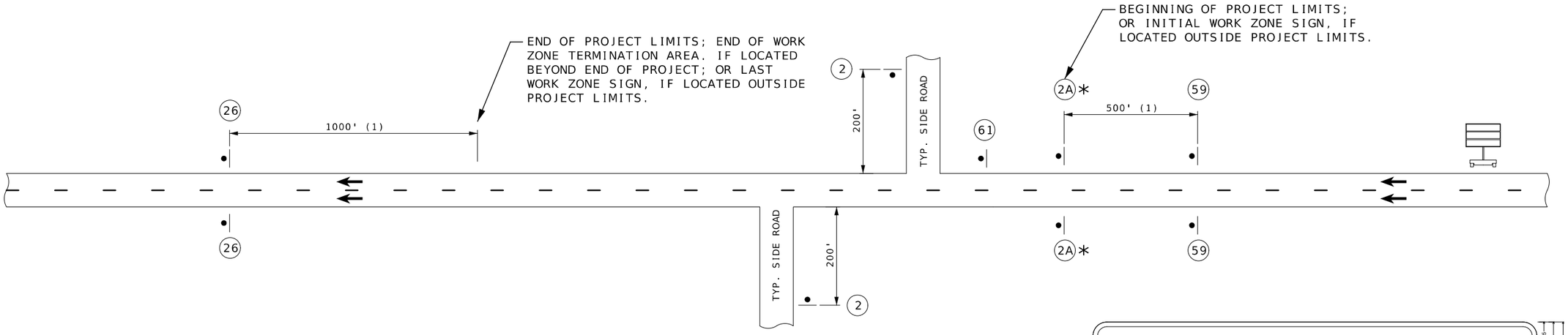
DATE PREPARED: 7/25/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 51
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

GENERAL NOTES:

1. ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
2. TEMPORARY SIGNING SHOWN IS FOR WORK ON ONE SIDE OF THE ROAD. FOR WORK ON THE OTHER SIDE, REVERSE ORDER OF THE SIGNS AND CHANNELIZERS.
3. SIGNING SHOWN SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
4. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER.
5. REFER TO STANDARD DRAWING 616.10, 619.10, AND 620.10 FOR ADDITIONAL DETAILS AND 903.03 FOR SIGN AND SIGN MOUNTING REQUIREMENTS.
6. SPEED LIMIT SIGNS INDICATING THE NORMAL SPEED LIMIT SHALL BE INSTALLED AT THE END OF THE WORK ZONE, PROVIDED NO FURTHER WORK ZONES WILL BE ENCOUNTERED WITHIN THE NEXT 1/2 MILE.
7. TEMPORARY SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED WHEN THE CONDITIONS REQUIRING REDUCED SPEEDS DO NOT EXIST.
8. NO DIRECT PAYMENT WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONSTRUCTION SIGNS, OR FLASHING ARROW PANEL.
9. ALL SIGNS SHALL BE PORTABLE MOUNT AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED. ALL TRAFFIC CONTROL ITEMS SHALL BE REMOVED FROM THE ROADWAY DURING NON-WORKING HOURS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING PROPER TRAFFIC CONTROL SETUPS THROUGHOUT CONSTRUCTION AS DESCRIBED IN THESE PLANS OR AS APPROVED BY THE ENGINEER.
11. WHERE MINIMUM LANE WIDTHS CANNOT BE ACHIEVED ON THE SIDE STREETS, THE CONTRACTOR SHALL CLOSE HALF OF THE APPROACH AND POSITION A FLAGGER AT EACH END OF THE WORK AREA. LOCATION TO BE DETERMINED BY THE ENGINEER. ADVANCE FLAGGER SIGNING SHALL BE INSTALLED AS OUTLINED IN THE MUTCD.
12. THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO ALL BUSINESSES AND STREETS. NO STREET OR ENTRANCE SHALL BE COMPLETELY BLOCKED.
13. SPACING & DISTANCES OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD & APPROVED BY THE ENGINEER.
14. TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
15. ADJUST ADVANCE WARNING SIGN SPACING TO AVOID SIGN PLACEMENT WITHIN THE LIMITS OF THE RAILROAD RIGHT OF WAY.



TYPICAL BEGINNING AND END OF PROJECT

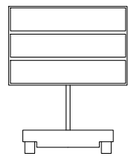
(DIVIDED HIGHWAY)

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

(2) CONST-5-96 SIGN IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE, THE SIGN MAY BE PLACED 500 FEET BEFORE SIGN CONST-7-72.

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

(4) CMS PLACEMENT SHALL BE APPROVED BY THE ENGINEER.



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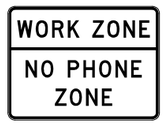
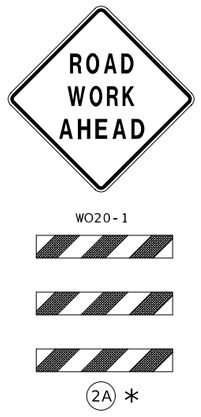
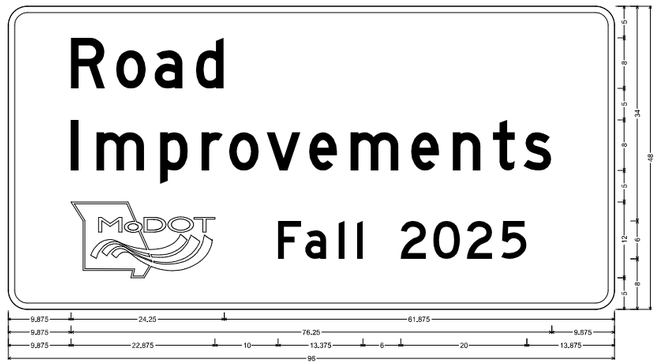


CONST-8

59 (3)

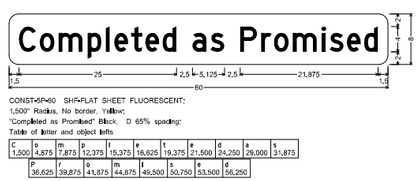


*SIGN 2A WITH AWRS MUST BE GROUND OR SKID MOUNTED.



CONST-5-96

61 (2)



NOT TO SCALE

TRAFFIC CONTROL SHEET 1 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:19:48 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	52

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

PROJECT NO.:

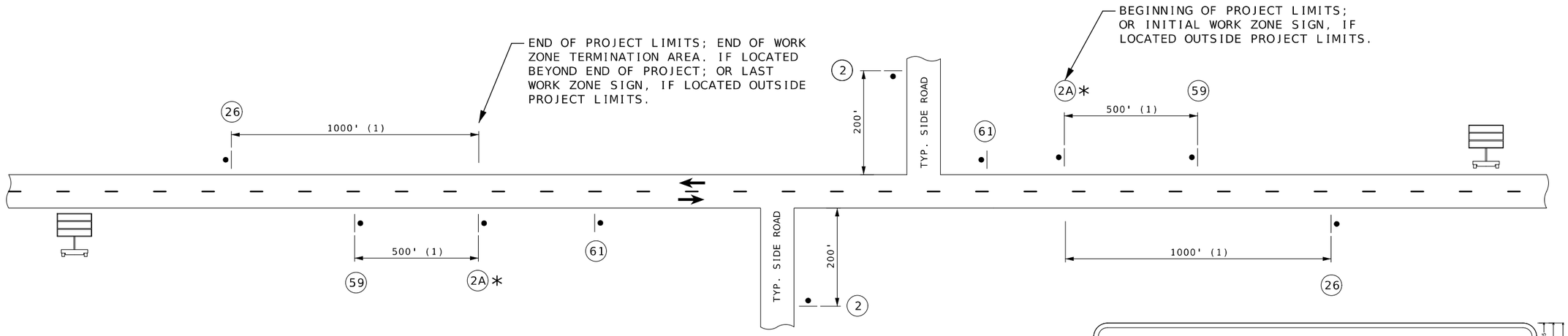
BRIDGE NO.:

DESCRIPTION | DATE

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

GENERAL NOTES:

1. ANY EXISTING SIGNS THAT CONFLICT WITH THE TRAFFIC CONTROL SIGNING SHALL BE COMPLETELY COVERED OR REMOVED.
2. TEMPORARY SIGNING SHOWN IS FOR WORK ON ONE SIDE OF THE ROAD. FOR WORK ON THE OTHER SIDE, REVERSE ORDER OF THE SIGNS AND CHANNELIZERS.
3. SIGNING SHOWN SHALL REMAIN IN PLACE UNTIL CONSTRUCTION IS COMPLETE.
4. ALTERNATE TRAFFIC CONTROL MAY BE USED AS NEEDED AT THE APPROVAL OF THE ENGINEER.
5. REFER TO STANDARD DRAWING 616.10, 619.10, AND 620.10 FOR ADDITIONAL DETAILS AND 903.03 FOR SIGN AND SIGN MOUNTING REQUIREMENTS.
6. SPEED LIMIT SIGNS INDICATING THE NORMAL SPEED LIMIT SHALL BE INSTALLED AT THE END OF THE WORK ZONE, PROVIDED NO FURTHER WORK ZONES WILL BE ENCOUNTERED WITHIN THE NEXT 1/2 MILE.
7. TEMPORARY SPEED LIMIT SIGNS SHALL BE COVERED OR REMOVED WHEN THE CONDITIONS REQUIRING REDUCED SPEEDS DO NOT EXIST.
8. NO DIRECT PAYMENT WILL BE MADE FOR THE RELOCATION OF CHANNELIZERS, CONSTRUCTION SIGNS, OR FLASHING ARROW PANEL.
9. ALL SIGNS SHALL BE PORTABLE MOUNT AND ARE TO BE MOVED AS WORK PROGRESSES, UNLESS OTHERWISE NOTED. ALL TRAFFIC CONTROL ITEMS SHALL BE REMOVED FROM THE ROADWAY DURING NON-WORKING HOURS.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING PROPER TRAFFIC CONTROL SETUPS THROUGHOUT CONSTRUCTION AS DESCRIBED IN THESE PLANS OR AS APPROVED BY THE ENGINEER.
11. WHERE MINIMUM LANE WIDTHS CANNOT BE ACHIEVED ON THE SIDE STREETS, THE CONTRACTOR SHALL CLOSE HALF OF THE APPROACH AND POSITION A FLAGGER AT EACH END OF THE WORK AREA. LOCATION TO BE DETERMINED BY THE ENGINEER. ADVANCE FLAGGER SIGNING SHALL BE INSTALLED AS OUTLINED IN THE MUTCD.
12. THE CONTRACTOR SHALL MAINTAIN PUBLIC ACCESS TO ALL BUSINESSES AND STREETS. NO STREET OR ENTRANCE SHALL BE COMPLETELY BLOCKED.
13. SPACING & DISTANCES OF TRAFFIC CONTROL DEVICES ARE APPROXIMATE. THE EXACT LOCATIONS SHALL BE DETERMINED IN THE FIELD & APPROVED BY THE ENGINEER.
14. TRAFFIC CONTROL SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
15. ADJUST ADVANCE WARNING SIGN SPACING TO AVOID SIGN PLACEMENT WITHIN THE LIMITS OF THE RAILROAD RIGHT OF WAY.



TYPICAL BEGINNING AND END OF PROJECT

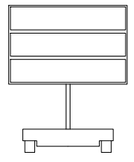
(UNDIVIDED HIGHWAY)

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

(2) CONST-5-96 SIGN IS PLACED IN A VISIBLE AREA WITHIN THE PROJECT LIMITS PROVIDED ITS PLACEMENT DOES NOT DISRUPT A SEQUENCE OF SIGNS. IF A VISIBLE LOCATION WITHIN THE PROJECT IS NOT AVAILABLE, THE SIGN MAY BE PLACED 500 FEET BEFORE SIGN CONST-7-72.

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

(4) CMS PLACEMENT SHALL BE APPROVED BY THE ENGINEER.



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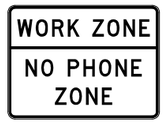
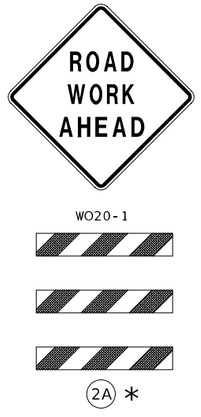


CONST-8

59 (3)



WO20-1

2A *

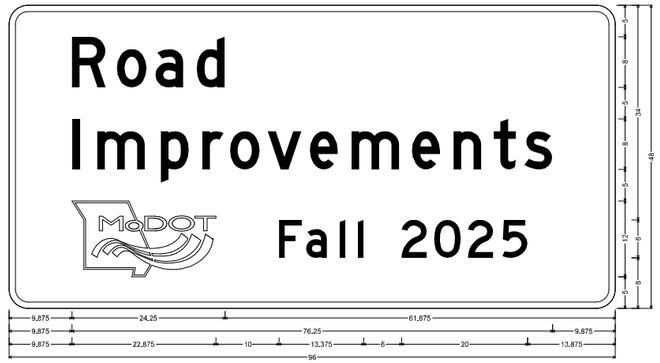
WO20-1

2

GO20-2

26

*SIGN 2A WITH AWRS MUST BE GROUND OR SKID MOUNTED.

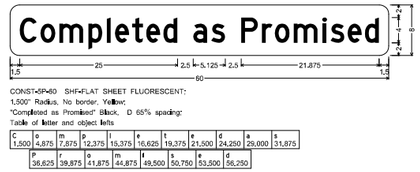


CONST-5-96 SH-FLAT SHEET:
3,000" Radius, 1,000" Border, White on, Blue:
"Road", D; "Improvements", D; "Fall 2025", D;
Table of letter and object lefts

R	o	a	d											
9,875	17,125	23,125	29,750											
I	m	p	r	o	v	e	m	e	n	t	s			
9,875	14,000	24,000	30,625	35,000	41,000	47,625	54,250	63,750	70,375	76,750	81,625			
🚧	F	a	l	l	2	0	2	5						
9,875	42,750	47,000	52,375	55,250	62,125	67,375	72,625	78,125						

CONST-5-96

61 (2)



CONST-SP-60 SHT-FLAT SHEET FLUORESCENT:
1,500" Radius, No border, Yellow:
"Completed as Promised" Black, D 65% spacing:
Table of letter and object lefts

C	o	m	p	l	e	t	e	d	a	s	
1,500	4,875	7,875	12,375	15,375	16,625	19,375	21,500	24,250	29,000	31,875	
P	r	o	m	i	s	e	d				
36,625	38,875	41,875	44,875	49,500	50,750	53,500	56,250				

NOT TO SCALE

TRAFFIC CONTROL SHEET 2 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:20:08 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	53

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SPEED	SIGN SPACING (FT)	TAPER LENGTH (FT)		OPTIONAL	CHANNELIZER SPACING (FT)	
PERMANENT POSTED (MPH)	DIVIDED HIGHWAYS (S)	SHOULDER(1) (T1)	LANE(2) (T2)	BUFFER LENGTH (FT) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	70	245	250	35	40
40-45	500	150	540	360	40	80
50-55	1000	185	660	495	50	80
60-70	SA - 1000 SB - 1500 SC - 2640	235	840	730	60	120

NOTES:

(1) SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.
(2) LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.
(3) NEXT XX MILES SIGN NOT REQUIRED FOR NARROW LANE SECTIONS LESS THAN ONE MILE.

WO20-1

(2)

WO21-5

(21)

WO5-1

(3)

WO7-3a

(43) *

CONST-3A

(53)

CONST-3X

(53A)

*OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT.

GO20-5aP

R2-1

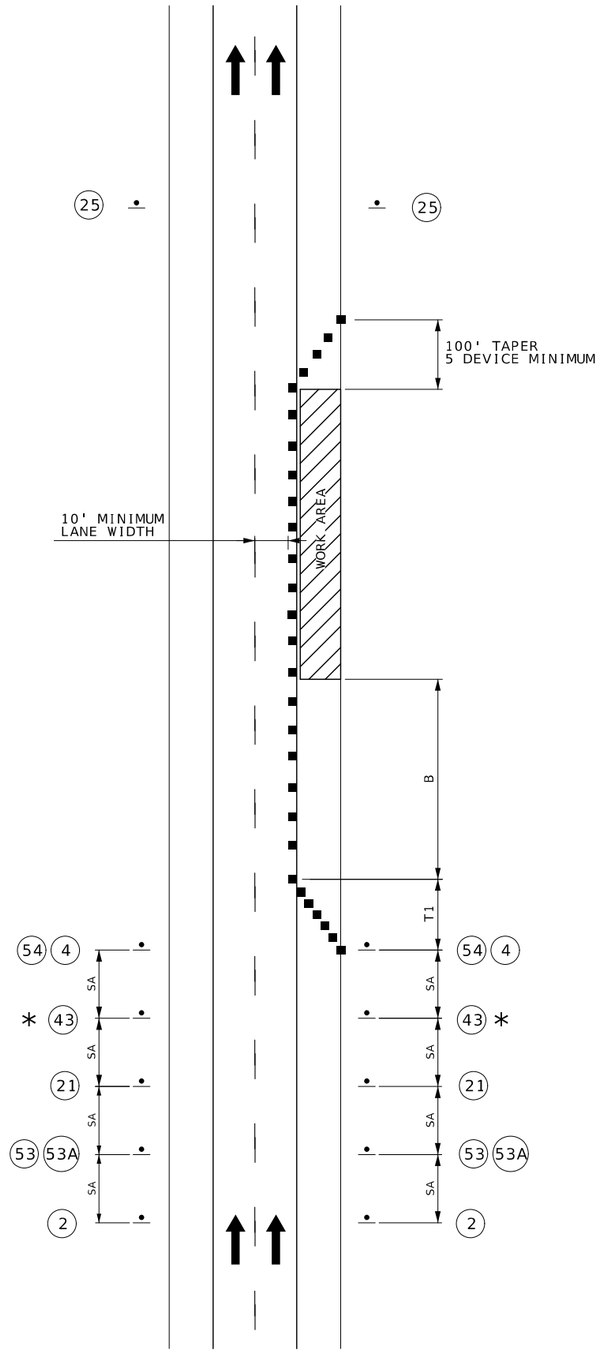
(54)
(4)

R2-1

(25)

(NORMAL SPEED)

SHOULDER WORK WITH MINOR TRAVELWAY ENCROACHMENT OR NO ENCROACHMENT (DIVIDED HIGHWAY)



NOT TO SCALE

TRAFFIC CONTROL
SHEET 3 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:22:05 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	54

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

SHOULDER WORK WITH MINOR TRAVELWAY ENCROACHMENT OR NO ENCROACHMENT (UNDIVIDED HIGHWAY)

SPEED	SIGN SPACING (FT)	TAPER LENGTH (FT)		OPTIONAL	CHANNELIZER SPACING (FT)	
PERMANENT POSTED (MPH)	UNDIVIDED HIGHWAYS (S)	SHOULDER(1) (T1)	LANE(2) (T2)	BUFFER LENGTH (FT) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	70	245	250	35	40
40-45	350	150	540	360	40	80
50-55	500	185	660	495	50	80
60-70	1000	235	840	730	60	120

NOTES:

(1) SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.
(2) LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.
(3) NEXT XX MILES SIGN NOT REQUIRED FOR NARROW LANE SECTIONS LESS THAN ONE MILE.

WO20-1

(2)

WO21-5

(21)

WO5-1

(3)

WO7-3a

(43) ∗

∗OMIT SIGN 43 FOR NO TRAVELWAY ENCROACHMENT.

GO20-5aP

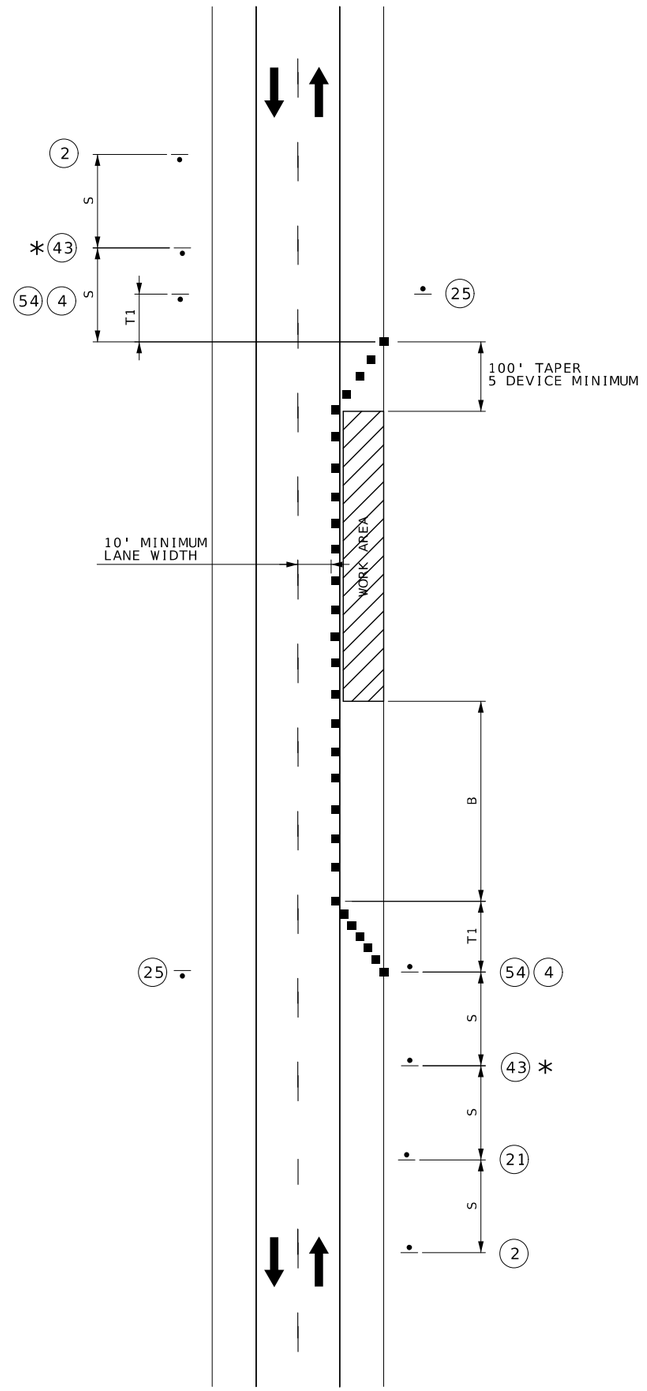
R2-1

(54)
(4)

R2-1

(25)

(NORMAL SPEED)



NOT TO SCALE

TRAFFIC CONTROL
SHEET 4 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:22:25 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	55

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

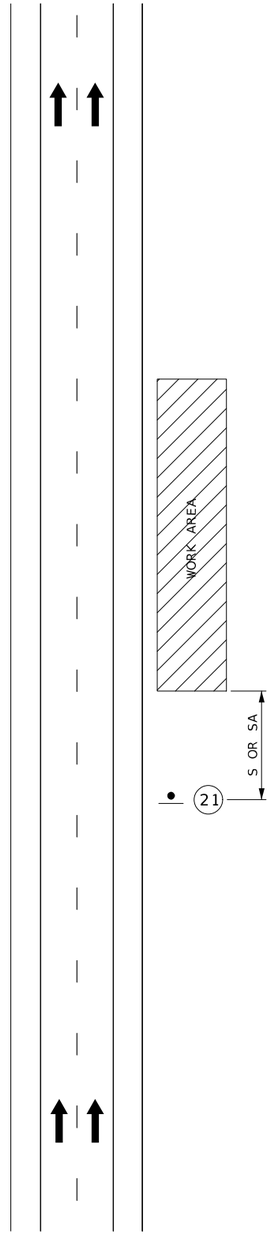
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

WORK BEYOND THE SHOULDER

(DIVIDED HIGHWAY)



SPEED	SIGN SPACING (FT) (1)
PERMANENT POSTED (MPH)	DIVIDED HIGHWAYS (S)
0-35	200
40-45	500
50-55	1000
60-70	SA - 1000 SB - 1500 SC - 2640

SPACING NOTES:

(1) SPACING BETWEEN SIGNS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS, AS APPROVED BY ENGINEER.

WO21-5

21

NOT TO SCALE

TRAFFIC CONTROL
SHEET 5 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:22:44 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	56

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

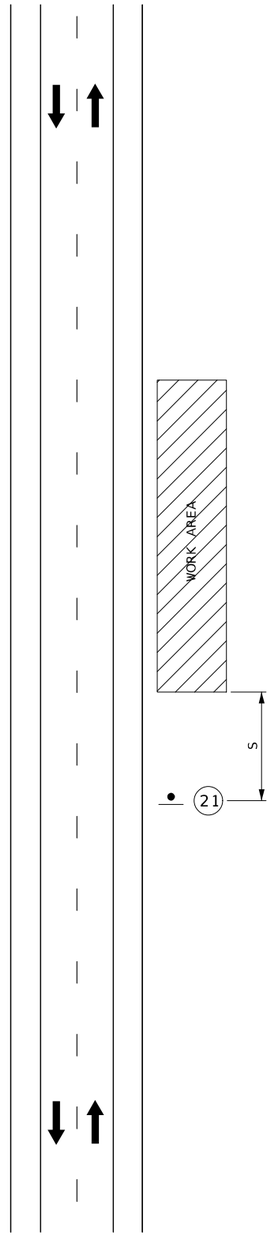
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

WORK BEYOND THE SHOULDER

(UNDIVIDED HIGHWAY)



SPEED	SIGN SPACING (FT) (1)
PERMANENT POSTED (MPH)	UNDIVIDED HIGHWAYS (S)
0-35	200
40-45	350
50-55	500
60-70	1000

SPACING NOTES:

(1) SPACING BETWEEN SIGNS MAY BE ADJUSTED AS NECESSARY TO MEET FIELD CONDITIONS, AS APPROVED BY ENGINEER.

WO21-5

21

NOT TO SCALE

TRAFFIC CONTROL
SHEET 6 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:23:05 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	57

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

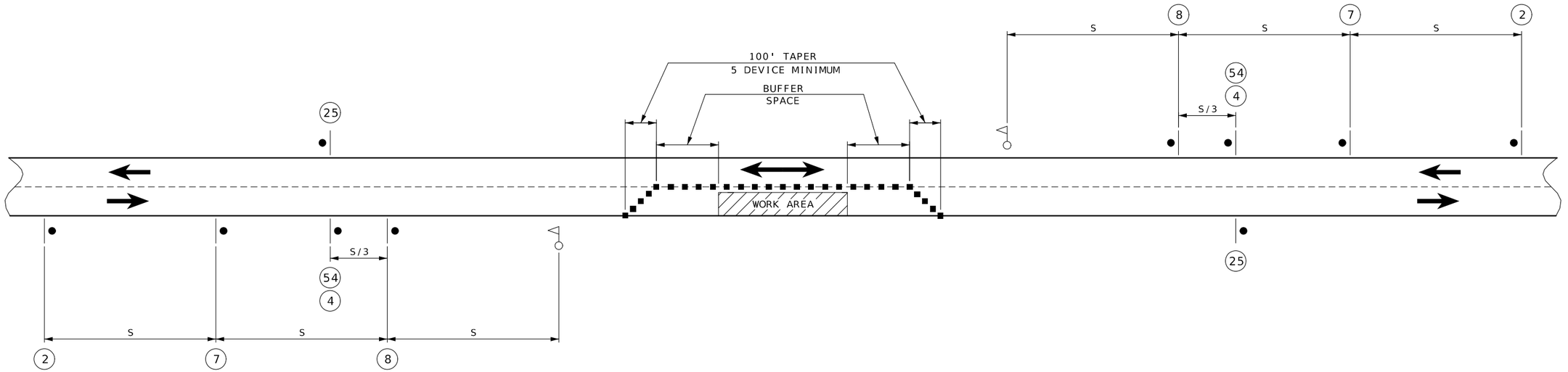
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



NOTES:

CHANNELIZING DEVICES LOCATED DOWNSTREAM OF THE ONE-LANE, TWO-WAY TAPER ARE OPTIONAL.
THESE DEVICES SHOULD BE ELIMINATED WHEN THEIR USE WILL REDUCE THE USABLE LANE WIDTH, INCLUDING ANY ACCEPTABLE SHOULDERS, TO LESS THAN 10' OR WILL SIGNIFICANTLY AFFECT THE RESURFACING OPERATION.

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

■ - CHANNELIZERS

- FLAGGER

IF USED AT NIGHT, THE FLAGGER STATIONS SHALL BE ILLUMINATED WITH AN AVERAGE MAINTAINED INTENSITY OF 0.6 FOOTCANDLES (6.5 LUX).

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

SPACING NOTES:

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

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

LANE CLOSURE USING FLAGGERS
(UNDIVIDED HIGHWAY)

NOT TO SCALE

TRAFFIC CONTROL
SHEET 7 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07-28-2025 1:23:26 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	58

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

SPEED	SIGN SPACING (FT)	TAPER LENGTH (FT)		OPTIONAL	CHANNELIZER SPACING (FT)	
PERMANENT POSTED (MPH)	DIVIDED HIGHWAYS (S)	SHOULDER(1) (T1)	LANE(2) (T2)	BUFFER LENGTH (FT) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	70	245	250	35	40
40-45	500	150	540	360	40	80
50-55	1000	185	660	495	50	80
60-70	SA - 1000 SB - 1500 SC - 2640	235	840	730	60	120

NOTES:

(1) SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.
(2) LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.

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.

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

WO20-1
2

WO20-5
5

WO20-6a
6

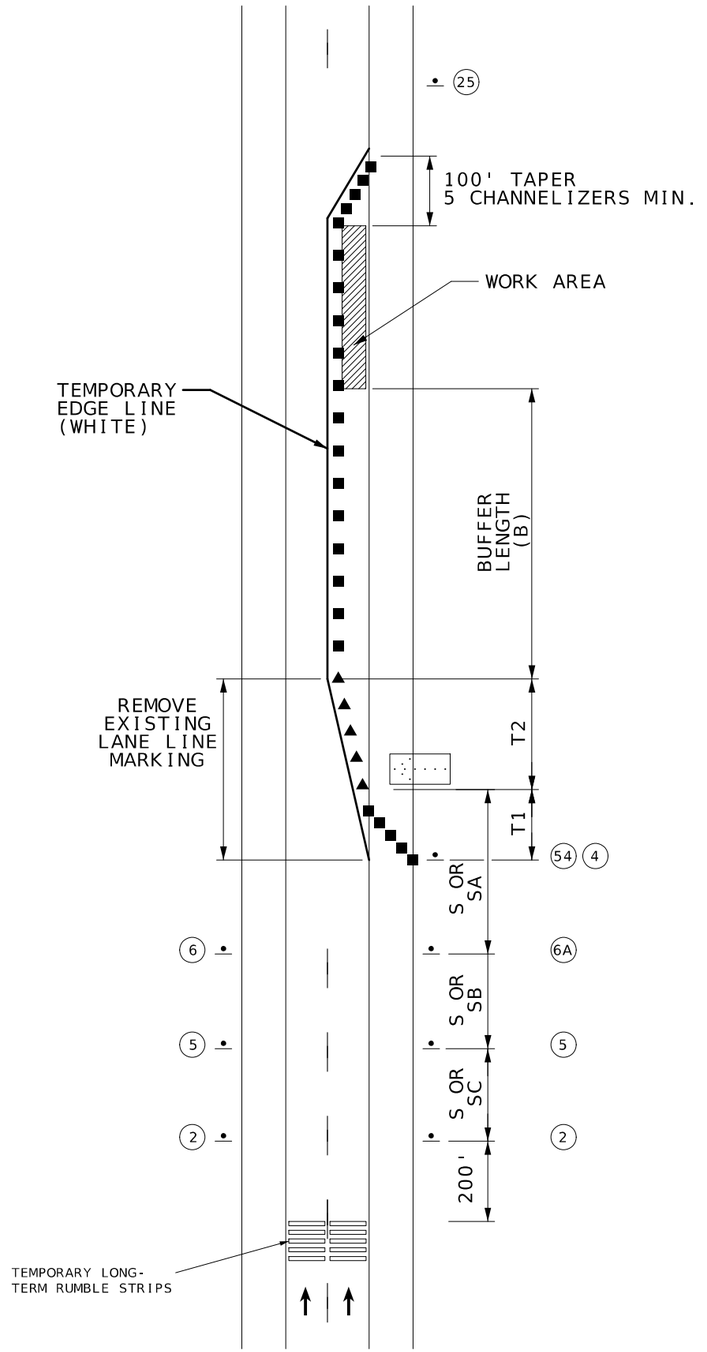
WO4-1aL
6A

GO20-5aP

R2-1
54
4

R2-1
25
(NORMAL SPEED)

STATIONARY LANE CLOSURE ON A DIVIDED HIGHWAY



NOT TO SCALE

TRAFFIC CONTROL
SHEET 8 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 1:23:47 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	59

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

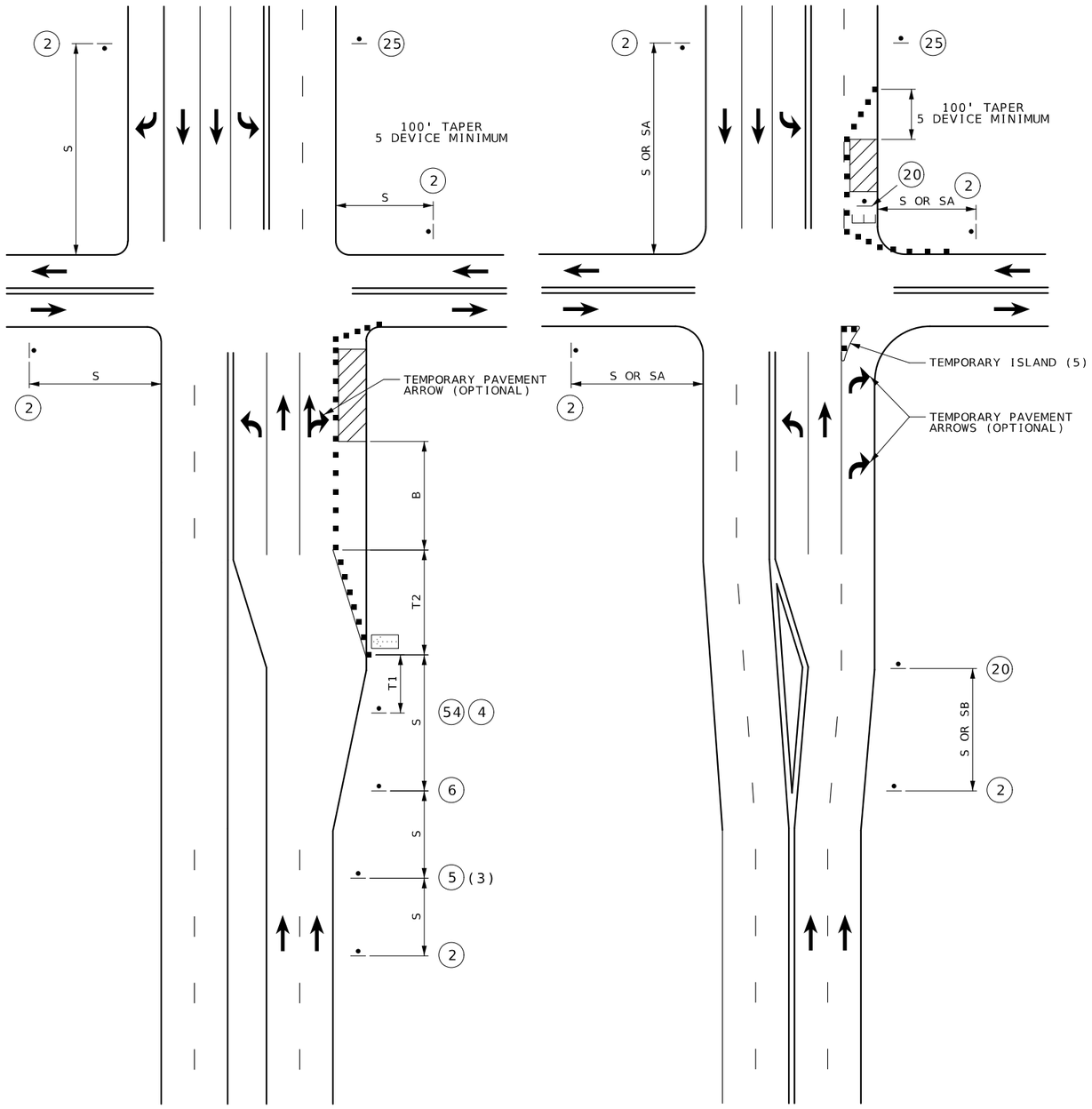
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



WORK ON NEAR OR FAR SIDE

WORK ON FAR SIDE ONLY (4)

SPEED	SIGN SPACING (FT)		TAPER LENGTH (FT)		OPTIONAL	CHANNELIZER SPACING (FT)	
PERMANENT POSTED (MPH)	UNDIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)	SHOULDER(1) (T1)	LANE(2) (T2)	BUFFER LENGTH (FT) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	200	70	245	250	35	40
40-45	350	500	150	540	360	40	80
50-55	500	1000	185	660	495	50	80
60-70	1000	SA - 1000 SB - 1500 SC - 2640	235	840	730	60	120

NOTES:

(1) SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.
(2) LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.

FOR SIGNALIZED INTERSECTIONS, ADJUSTMENTS MAY NEED TO BE MADE TO SIGNAL PHASING, TIMING, INDICATIONS OR DETECTOR SETTINGS.

REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.

PAVEMENT MARKING AND BARRICADES OPTIONAL FOR SHORT TERM OPERATIONS.

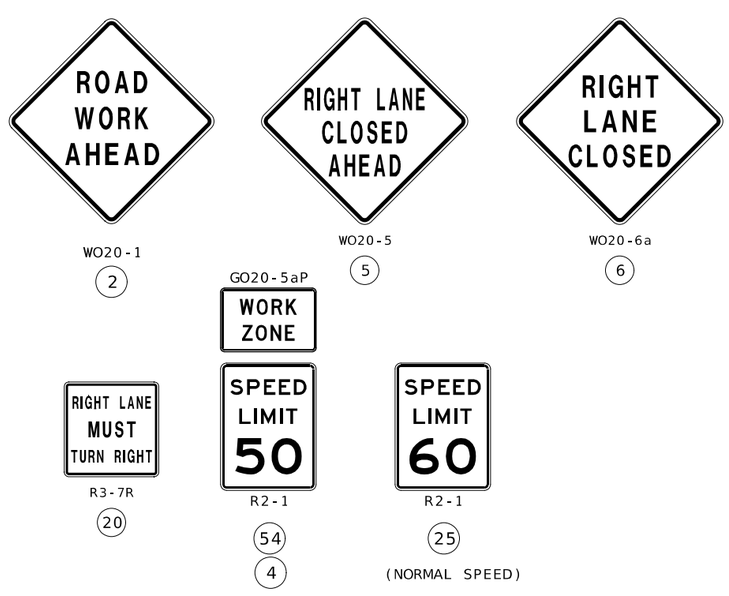
TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

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 SPACINGS ARE ONE-HALF OF THE SPACING.

(3) RIGHT LANE CLOSED AHEAD SIGN MAY BE OMITTED IN LOW SPEED URBAN AREAS WHERE THERE IS NOT SUFFICIENT SPACE FOR THE FULL SIGN SERIES.

(4) TYPICAL APPLICATION ONLY APPLIES WHERE A SIGNIFICANT PERCENTAGE OF THE APPROACH TRAFFIC TURNS RIGHT.

(5) TEMPORARY ISLAND MAY BE USED TO EMPHASIZE THE MANDATORY RIGHT TURN MOVEMENT WHERE THERE IS A SUFFICIENT RIGHT TURN RADIUS.



RIGHT LANE CLOSURE AT INTERSECTION

NOT TO SCALE

TRAFFIC CONTROL
SHEET 9 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:24:11 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	60

COUNTY
GREENE

JOB NO.
J8S0836D

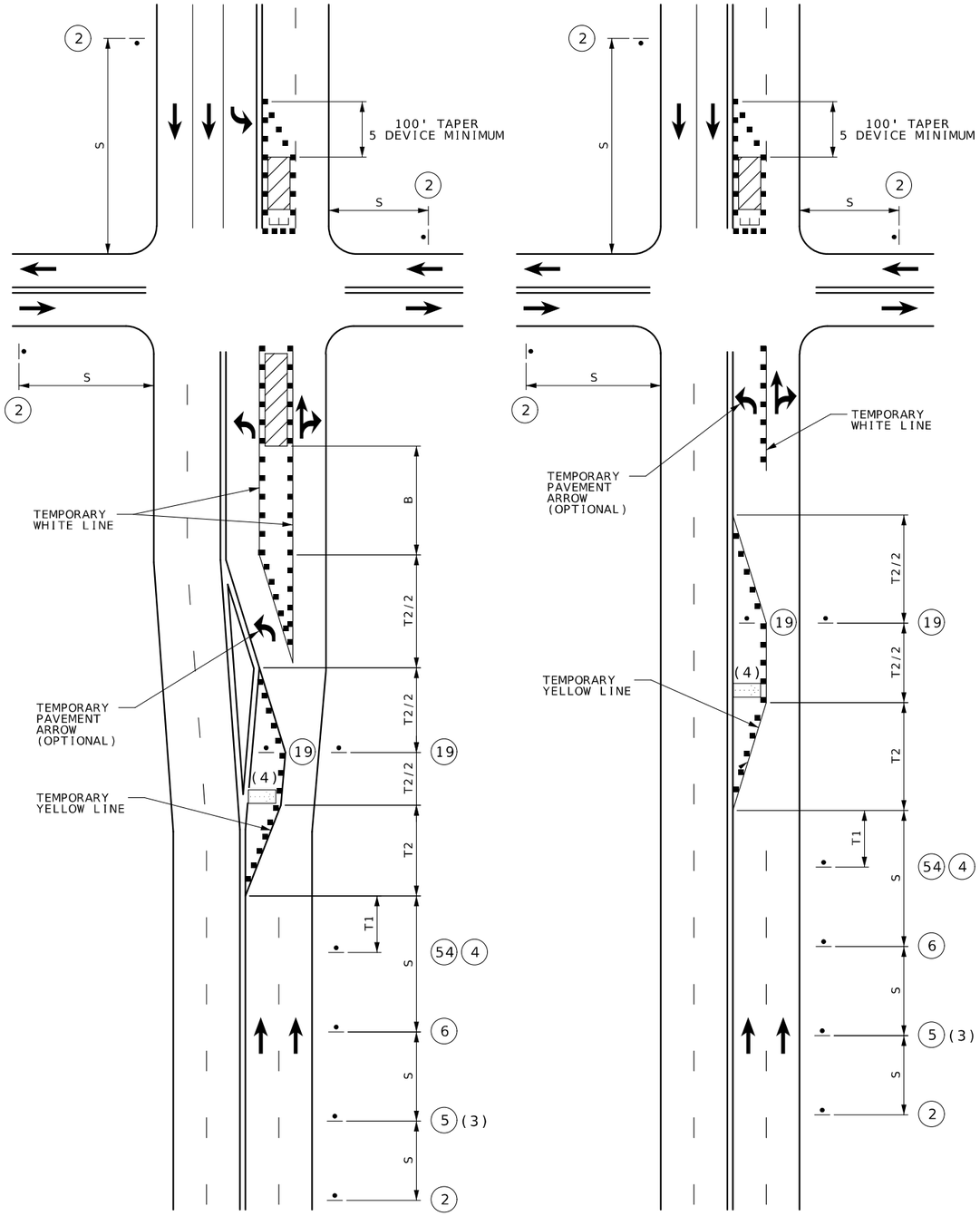
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



WORK ON NEAR OR FAR SIDE

WORK ON FAR SIDE ONLY

LEFT LANE CLOSURE AT INTERSECTION

SPEED	SIGN SPACING (FT)		TAPER LENGTH (FT)		OPTIONAL	CHANNELIZER SPACING (FT)	
PERMANENT POSTED (MPH)	UNDIVIDED HIGHWAYS (S)	DIVIDED HIGHWAYS (S)	SHOULDER(1) (T1)	LANE(2) (T2)	BUFFER LENGTH (FT) (B)	TAPERS	BUFFER/ WORK AREAS
0-35	200	200	70	245	250	35	40
40-45	350	500	150	540	360	40	80
50-55	500	1000	185	660	495	50	80
60-70	1000	SA - 1000 SB - 1500 SC - 2640	235	840	730	60	120

NOTES:

(1) SHOULDER TAPER LENGTH BASED ON 10 FT. (STANDARD SHOULDER WIDTH) OFFSET.
(2) LANE TAPER LENGTH BASED ON 12 FT. (STANDARD LANE WIDTH) OFFSET.

FOR SIGNALIZED INTERSECTIONS, ADJUSTMENTS MAY NEED TO BE MADE TO SIGNAL PHASING, TIMING, INDICATIONS OR DETECTOR SETTINGS.

REMOVE AND/OR MODIFY EXISTING PAVEMENT MARKING AS NEEDED.

PAVEMENT MARKING AND BARRICADES OPTIONAL FOR SHORT TERM OPERATIONS.

TEMPORARY PAVEMENT MARKING REQUIRED WITH LONG TERM LANE CLOSURES.

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 SPACINGS ARE ONE-HALF OF THE SPACING.

(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) FLASHING ARROW BOARD SHOULD BE LOCATED AT THE BEGINNING OF THE MERGING TAPER WHENMEDIAN WIDTH ALLOWS THIS PLACEMENT.

WO20-1
2

WO20-5
5

WO20-6a
6

R3-7L
19

GO20-5aP

R2-1
54
4

R2-1
25
(NORMAL SPEED)

NOT TO SCALE

TRAFFIC CONTROL
SHEET 10 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2644
PROFESSIONAL ENGINEER
07/28/2025 1:24:33 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	61

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

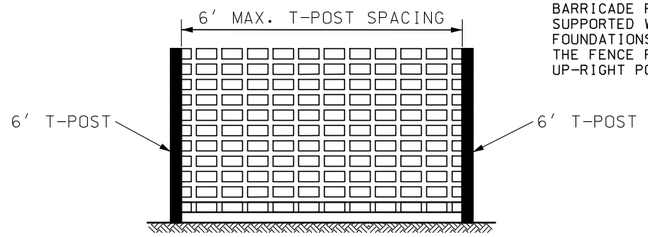
DATE

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

NOTES:

1. NO DIRECT PAYMENT WILL BE MADE FOR ORANGE SAFETY FENCE AS REQUIRED AROUND EXCAVATION OF SIDEWALK & CURB RAMP AREAS.
2. SEE JSP's FOR PEDESTRIAN TRAFFIC DEVICES.
3. WORKING AREAS SHALL BE GUARDED FROM PEDESTRIAN ACCESS BY BARRICADE FENCING 36" TO 48" IN HEIGHT WITH A GAP NO GREATER THAN 6" FROM THE GROUND AND HOLES NO GREATER THAN 4" IN ANY DIRECTION.
4. PEDESTRIAN ACCESS ON SIDEWALK SHALL BE PROVIDED WITH A WIDTH NOT LESS THAN 4' OF SMOOTH STABLE SURFACING ADJACENT TO BARRICADE FENCING FOR ACCESS TO THE MAIN BUILDING.
5. SIDEWALK RAMP CLOSURES FOR RECONSTRUCTION SHALL BE PERFORMED WITH ADA COMPLIANT MOVEABLE BARRICADES. TWO BARRICADES PER PEDESTRIAN APPROACH. ONE SIDEWALK CLOSED SIGN WILL BE PLACED UPON ONE BARRICADE FOR EACH APPROACH, NO MORE THAN ONE 5' SECTION OF SIDEWALK RAMP SHALL BE CLOSED LEADING TO THE MAIN BUILDING AT ANY TIME ADJACENT TO THE WORK AREA.

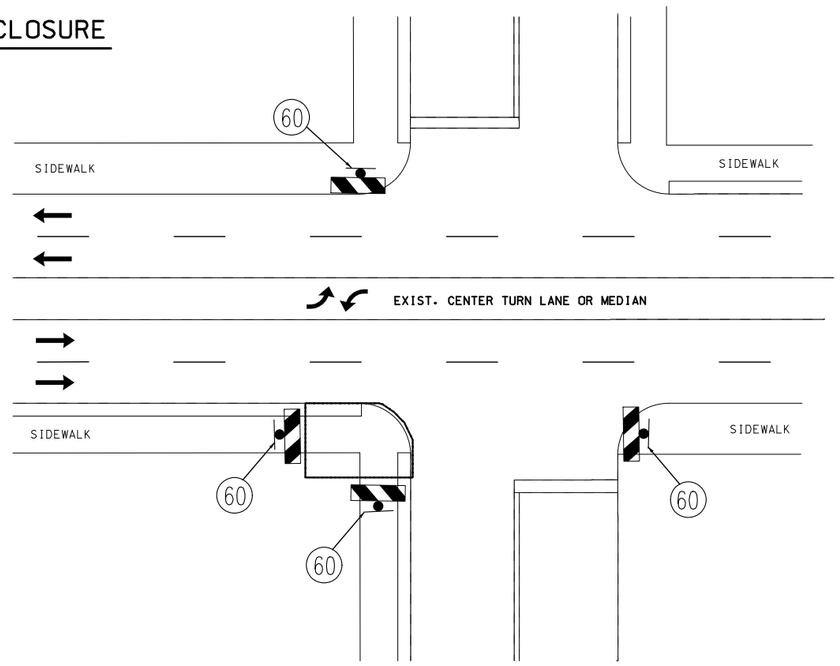
ORANGE PLASTIC SAFETY FENCE



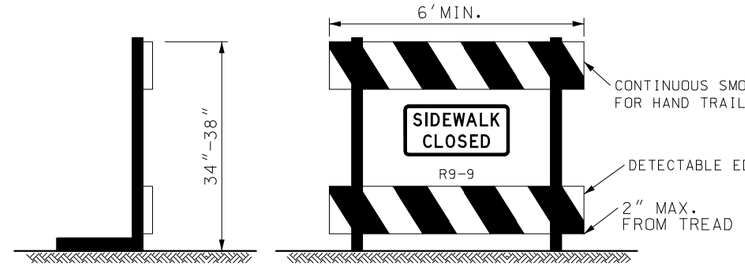
NO DIRECT PAY.
PLASTIC SAFETY NETTING USED FOR BARRICADE FENCING SHALL BE SUPPORTED WITH T-POST. ADEQUATE FOUNDATIONS, AND BALLAST SO THAT THE FENCE REMAINS TAUT AND IN AN UP-RIGHT POSITION.

MULTI-LANE TYPICAL SIDEWALK CLOSURE

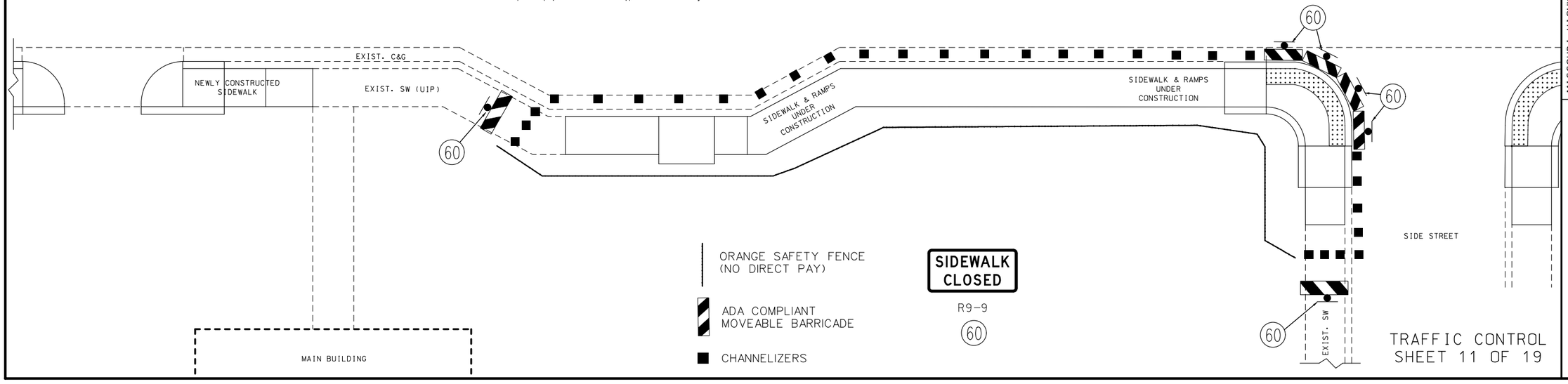
NOT TO SCALE



ADA COMPLIANT MOVEABLE BARRICADE



1. WARNING LIGHTS SHALL NOT BE ATTACHED TO ADA COMPLIANT BARRICADES.
2. CHEVRON RAILS ON THE ADA COMPLIANT BARRICADES MUST BE 8" WIDE MIN. AND MEET TYPE 3 RETRO-REFLECTIVE SHEETING AND COLOR CONTRAST BARRICADE RAILS AS SHOWN. THE TOP RAIL MUST PROVIDE A SMOOTH CONTINUOUS RAIL SURFACE SUITABLE FOR HAND TRAILING WITH NO SPLINTERS, BURRS, OR SHARP EDGES. A MINIMUM OF TWO 8" WIDE RAILS IS REQUIRED.
3. NO TRIPPING HAZARDS FROM THE BARRICADES ARE ALLOWED WITHIN THE PEDESTRIAN SPACE. THIS MEANS NO FEET OR BARS USED TO HOLD THE RAILS OR SUPPORT THE DEVICE ARE ALLOWED WITHIN THE WALKWAY. ALL FEET AND BALLASTS WILL NEED TO BE BEHIND THE DEVICE.
4. THE BARRICADE MUST BE THE FULL WIDTH OF THE CLOSED SIDEWALK.



TRAFFIC CONTROL
SHEET 11 OF 19

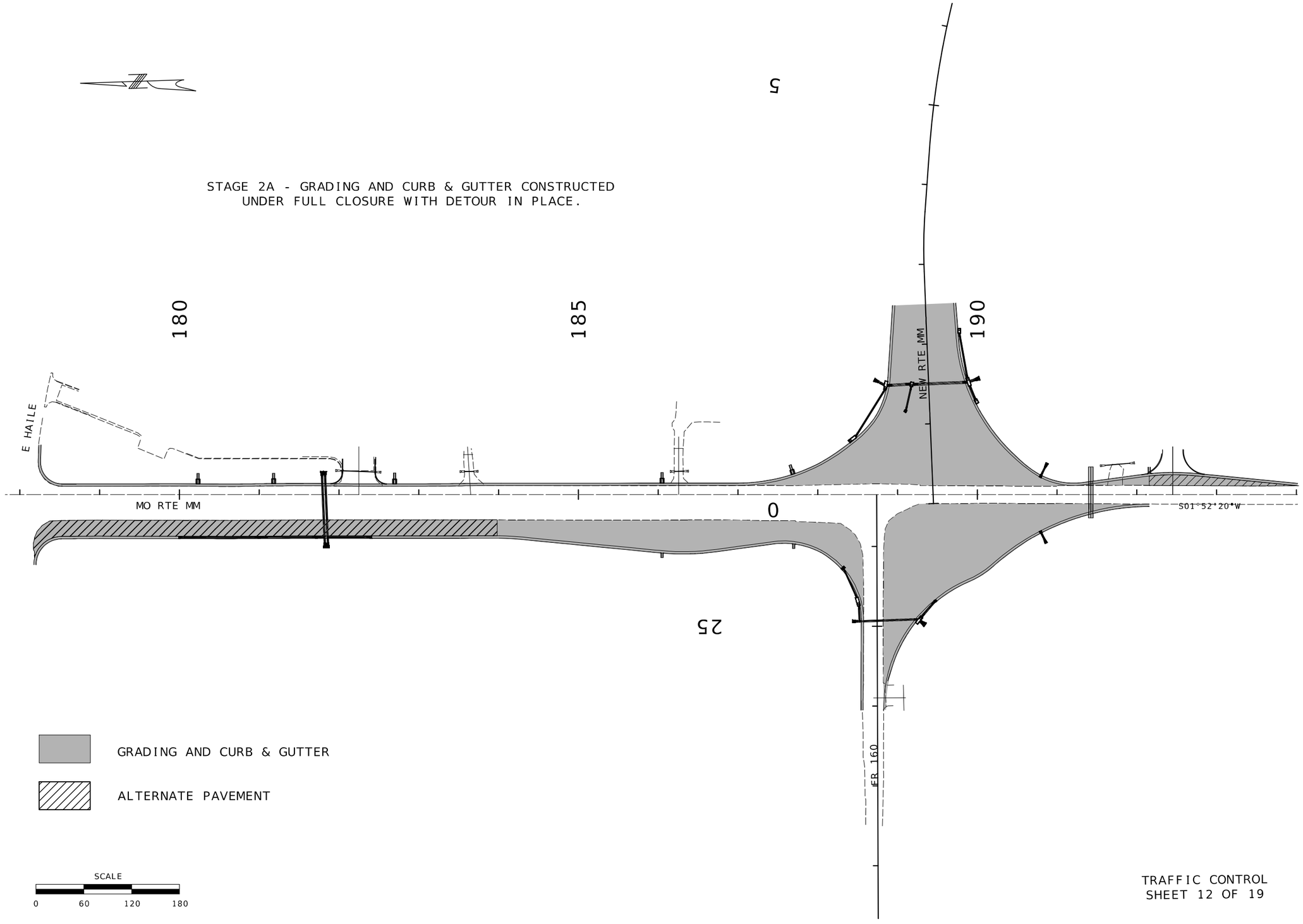
STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 1:24:54 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/28/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 62
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

STAGE 2A - GRADING AND CURB & GUTTER CONSTRUCTED
UNDER FULL CLOSURE WITH DETOUR IN PLACE.



GRADING AND CURB & GUTTER

ALTERNATE PAVEMENT

SCALE
0 60 120 180

TRAFFIC CONTROL
SHEET 12 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 1:25:16 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	63

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

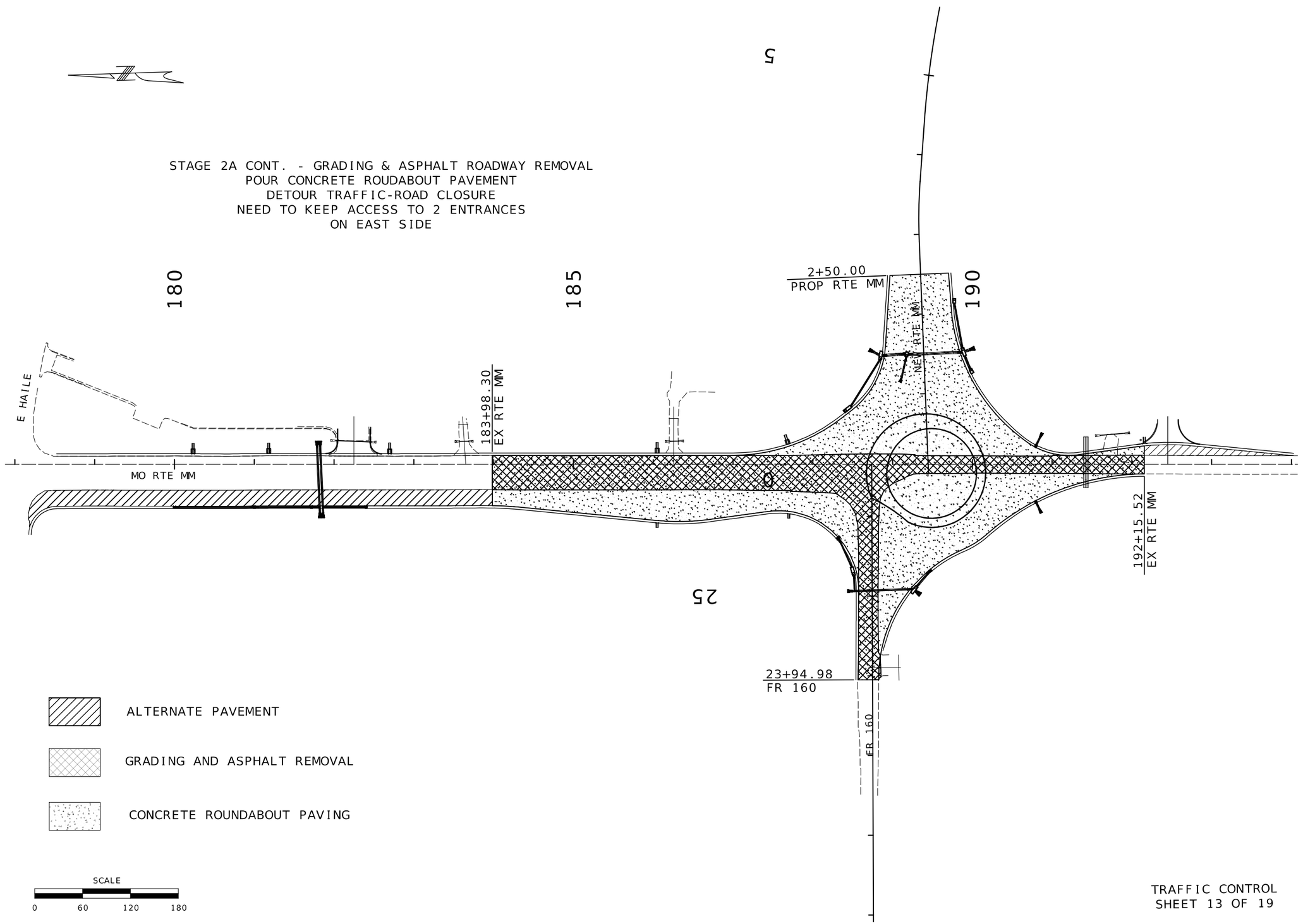
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

STAGE 2A CONT. - GRADING & ASPHALT ROADWAY REMOVAL
POUR CONCRETE ROUDABOUT PAVEMENT
DETOUR TRAFFIC-ROAD CLOSURE
NEED TO KEEP ACCESS TO 2 ENTRANCES
ON EAST SIDE



ALTERNATE PAVEMENT

GRADING AND ASPHALT REMOVAL

CONCRETE ROUNDABOUT PAVING

SCALE
0 60 120 180

TRAFFIC CONTROL
SHEET 13 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 1:25:40 PM
WARNER D. SHERMANII - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	64

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

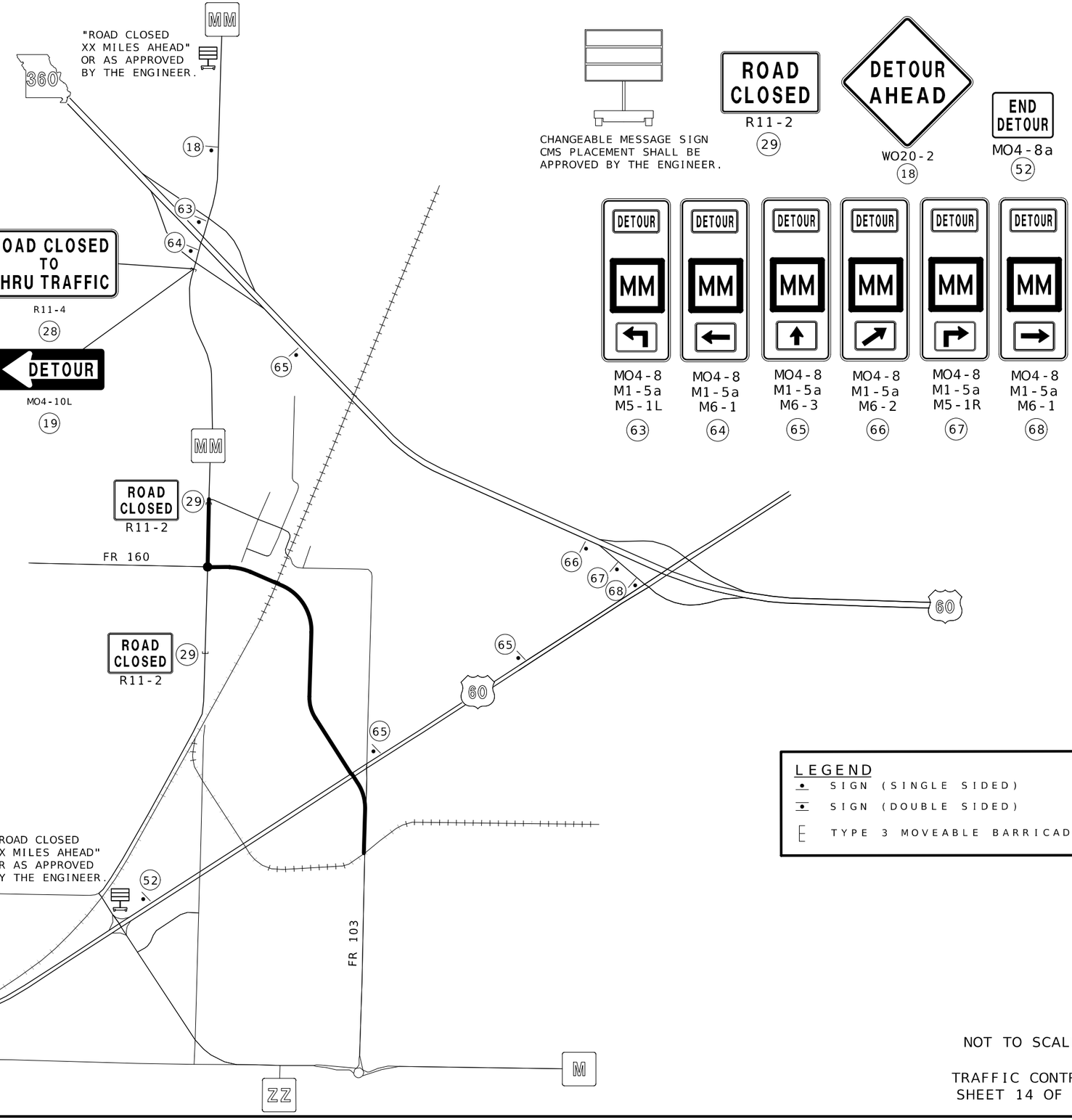
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STAGE 2 - DETOUR MAP



CHANGEABLE MESSAGE SIGN
CMS PLACEMENT SHALL BE
APPROVED BY THE ENGINEER.

R11-2
29

WO20-2
18

MO4-8a
52

MO4-8
M1-5a
M5-1L
63

MO4-8
M1-5a
M6-1
64

MO4-8
M1-5a
M6-3
65

MO4-8
M1-5a
M6-2
66

MO4-8
M1-5a
M5-1R
67

MO4-8
M1-5a
M6-1
68

LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- TYPE 3 MOVEABLE BARRICADE

NOT TO SCALE

TRAFFIC CONTROL
SHEET 14 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/29/2025 1:26:03 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	65

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

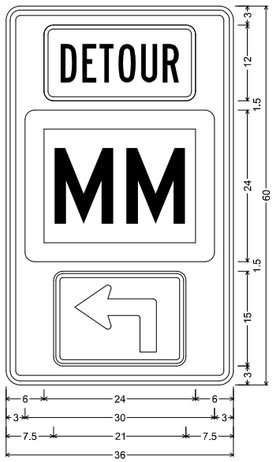
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

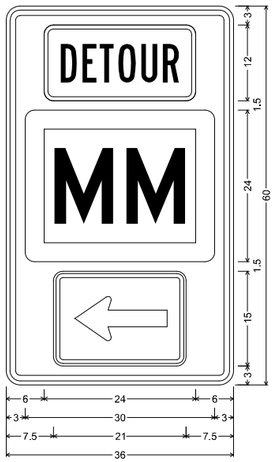
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

SIDE	6.000
MM	3.000
ARROW	7.500

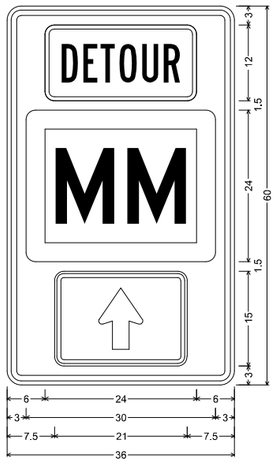
63



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

SIDE	6.000
MM	3.000
ARROW	7.500

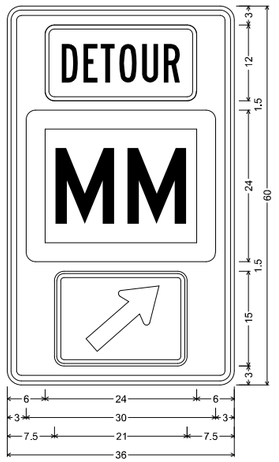
64



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

SIDE	6.000
MM	3.000
ARROW	7.500

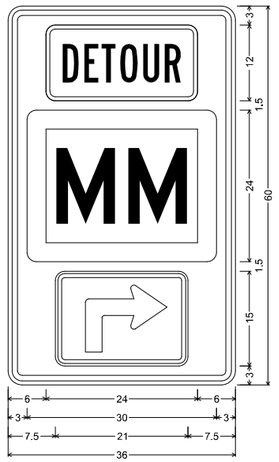
65



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

SIDE	6.000
MM	3.000
ARROW	7.500

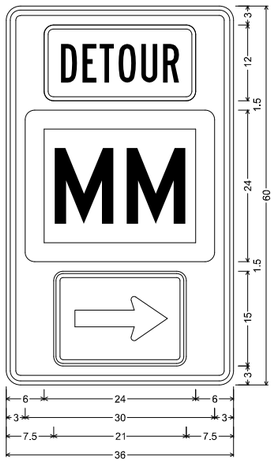
66



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

SIDE	6.000
MM	3.000
ARROW	7.500

67



MO4-12 SHF-FLAT SHEET FLUORESCENT;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, Orange;
Table of letter and object lefts

SIDE	6.000
MM	3.000
ARROW	7.500

68

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:26:33 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	66

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

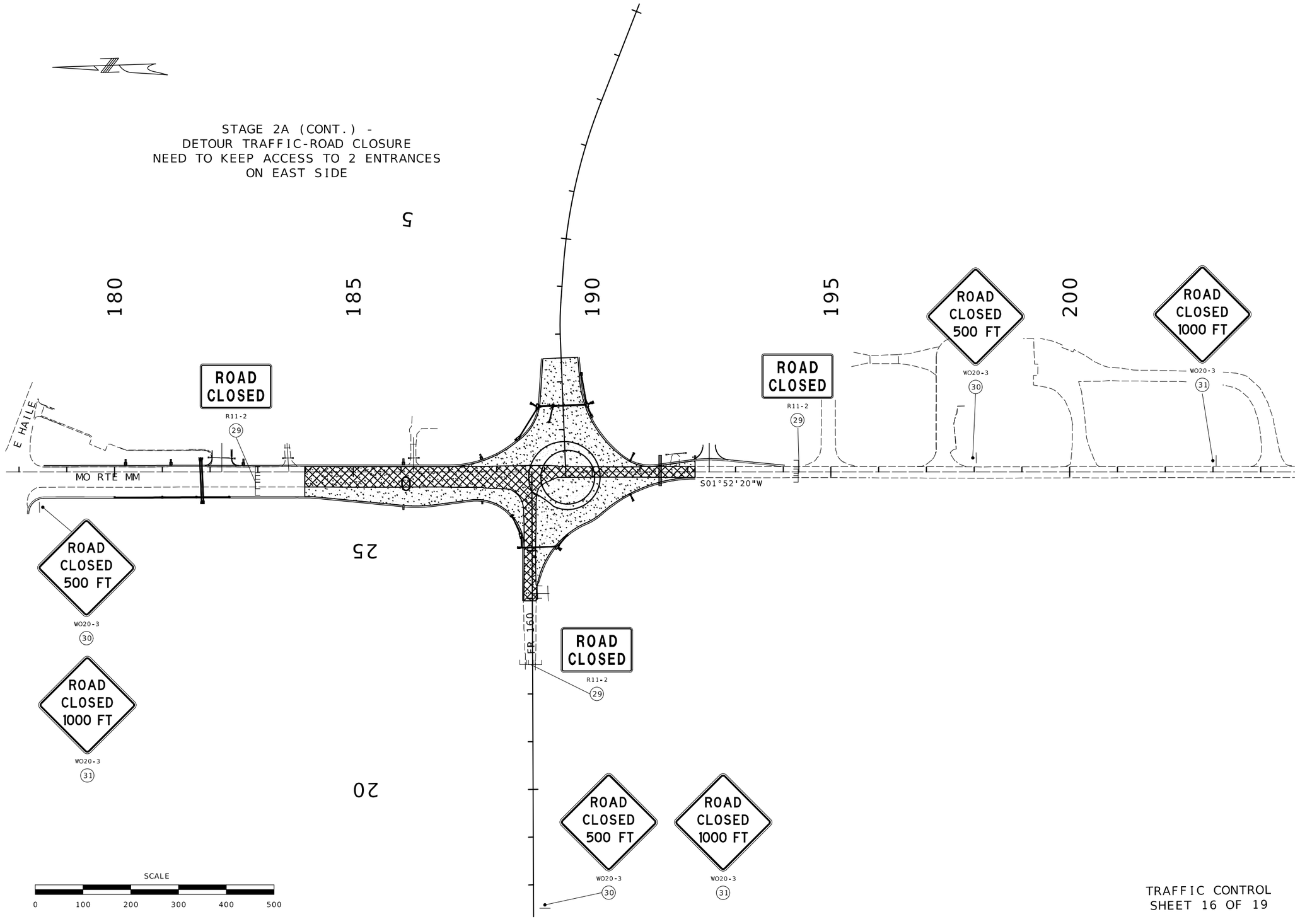
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

STAGE 2A (CONT.) -
DETOUR TRAFFIC-ROAD CLOSURE
NEED TO KEEP ACCESS TO 2 ENTRANCES
ON EAST SIDE



TRAFFIC CONTROL
SHEET 16 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:26:59 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	67

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

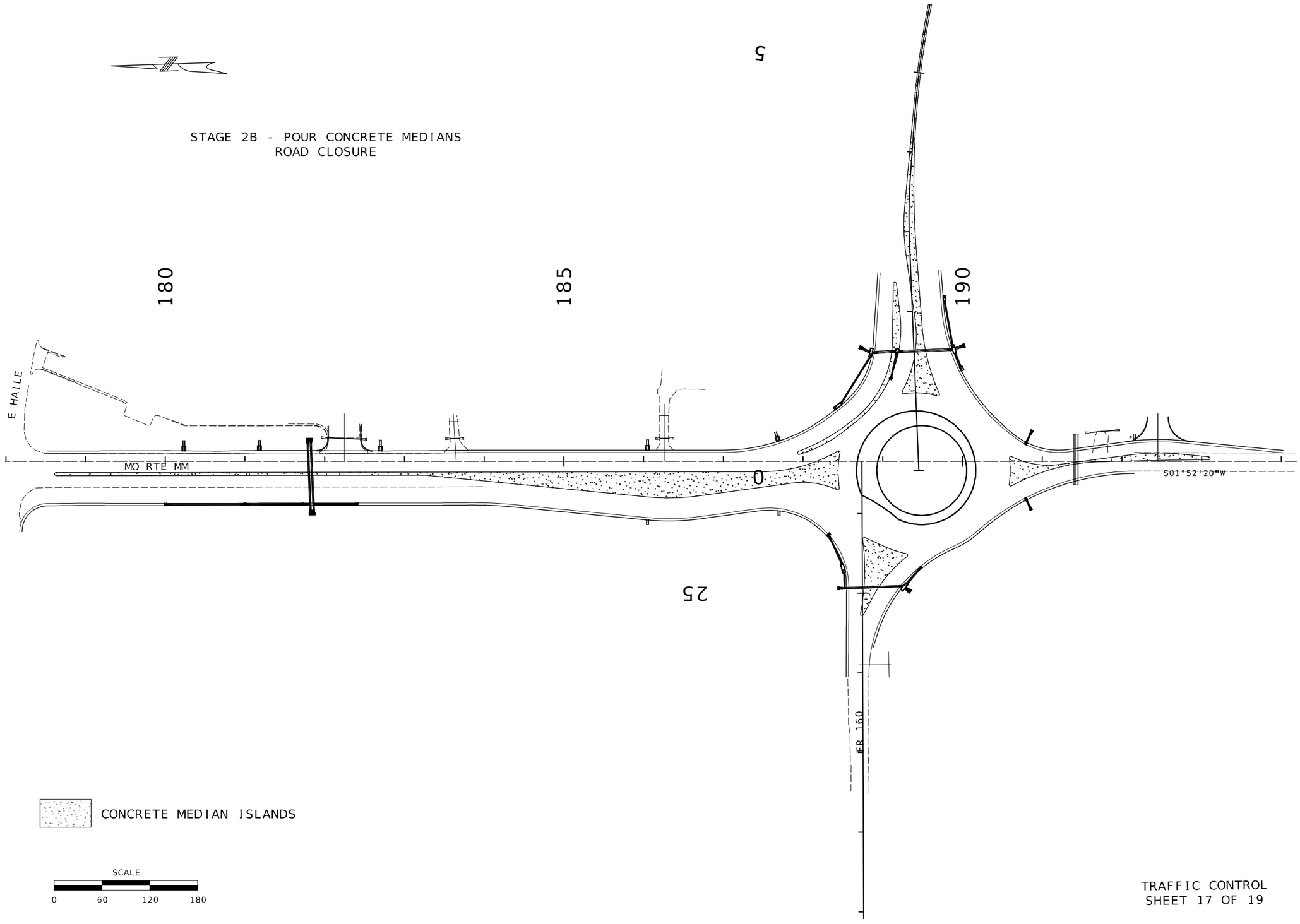
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

STAGE 2B - POUR CONCRETE MEDIANS
ROAD CLOSURE



CONCRETE MEDIAN ISLANDS

SCALE
0 60 120 180

TRAFFIC CONTROL
SHEET 17 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:27:24 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	68

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

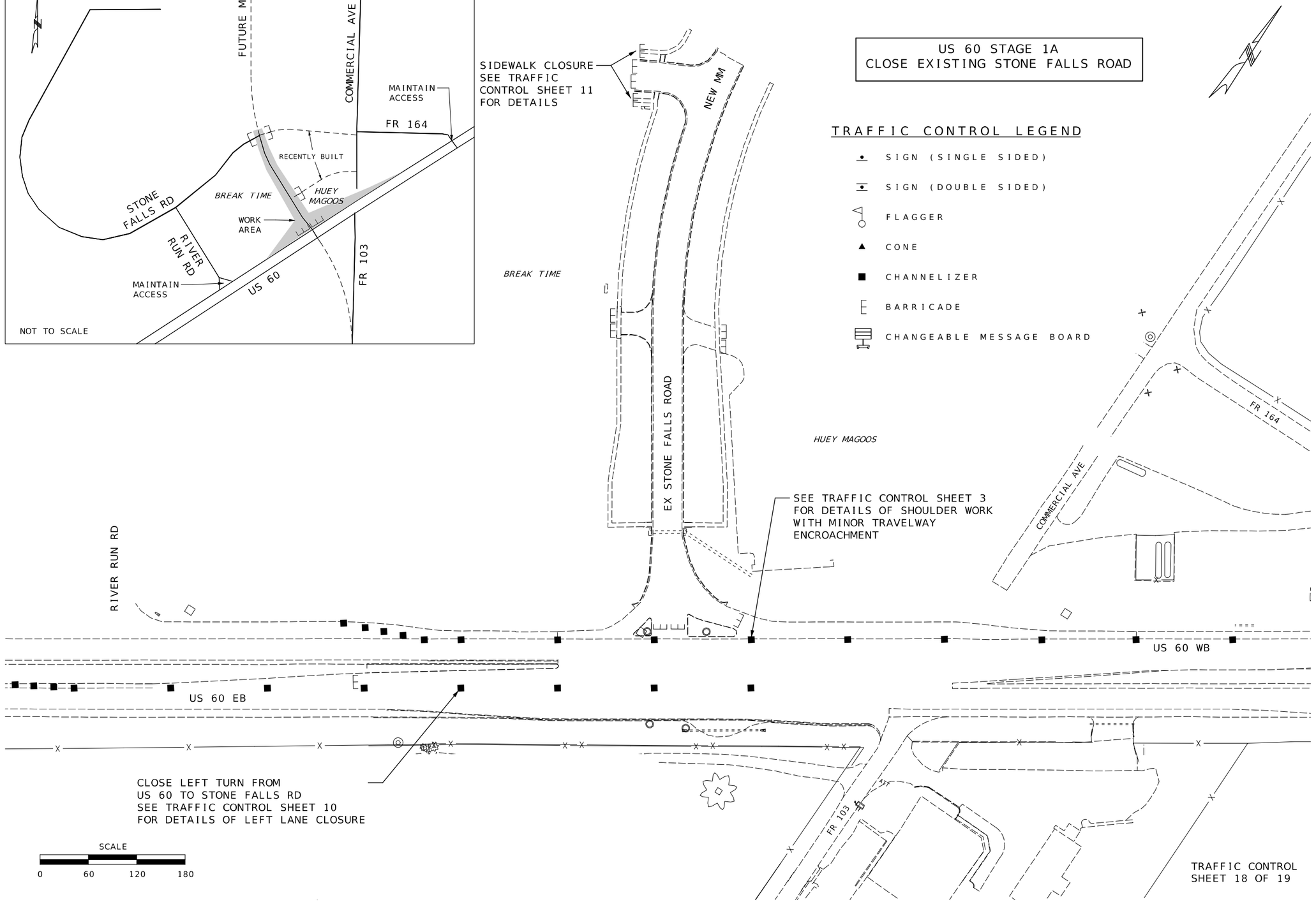
US 60 STAGE 1A
CLOSE EXISTING STONE FALLS ROAD

SIDEWALK CLOSURE
SEE TRAFFIC CONTROL SHEET 11 FOR DETAILS

BREAK TIME

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- CONE
- CHANNELIZER
- BARRICADE
- CHANGEABLE MESSAGE BOARD



TRAFFIC CONTROL SHEET 18 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:27:47 PM
WARNER D. SHERMANII - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	69

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

US 60 STAGE 1B
MAINTAIN CLOSURES FROM US 60 STAGE 1
REMOVE EXISTING SPAN WIRE SIGNALS
INSTALL NEW PERMANENT SIGNALS

RIVER RUN RD

EX STONE FALLS ROAD
NEW MM

COMMERCIAL AVE

CLOSE LEFT U-TURN LANE
SEE TRAFFIC CONTROL SHEET 3

US 60 WB

US 60 EB

CLOSE RIGHT TURN FROM US 60
TO FARM ROAD 103 AS NEEDED
SEE TRAFFIC CONTROL SHEET 3

STATE TRACTOR & EQUIPMENT COMPANY

NEW FR 103
TIE IN

FR 103

VERMEER GREAT PLAINS

CLOSE FR 103

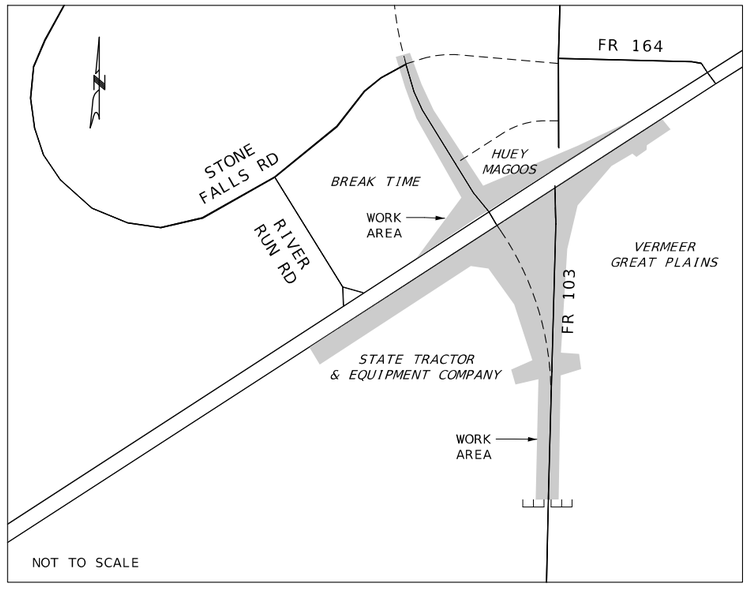
SAN

SIGN

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- SIGN (DOUBLE SIDED)
- FLAGGER
- CONE
- CHANNELIZER
- BARRICADE
- CHANGEABLE MESSAGE BOARD

SCALE
0 60 120 180



TRAFFIC CONTROL
SHEET 19 OF 19

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:28:11 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	70

COUNTY
GREENE

JOB NO.
J8S0836D

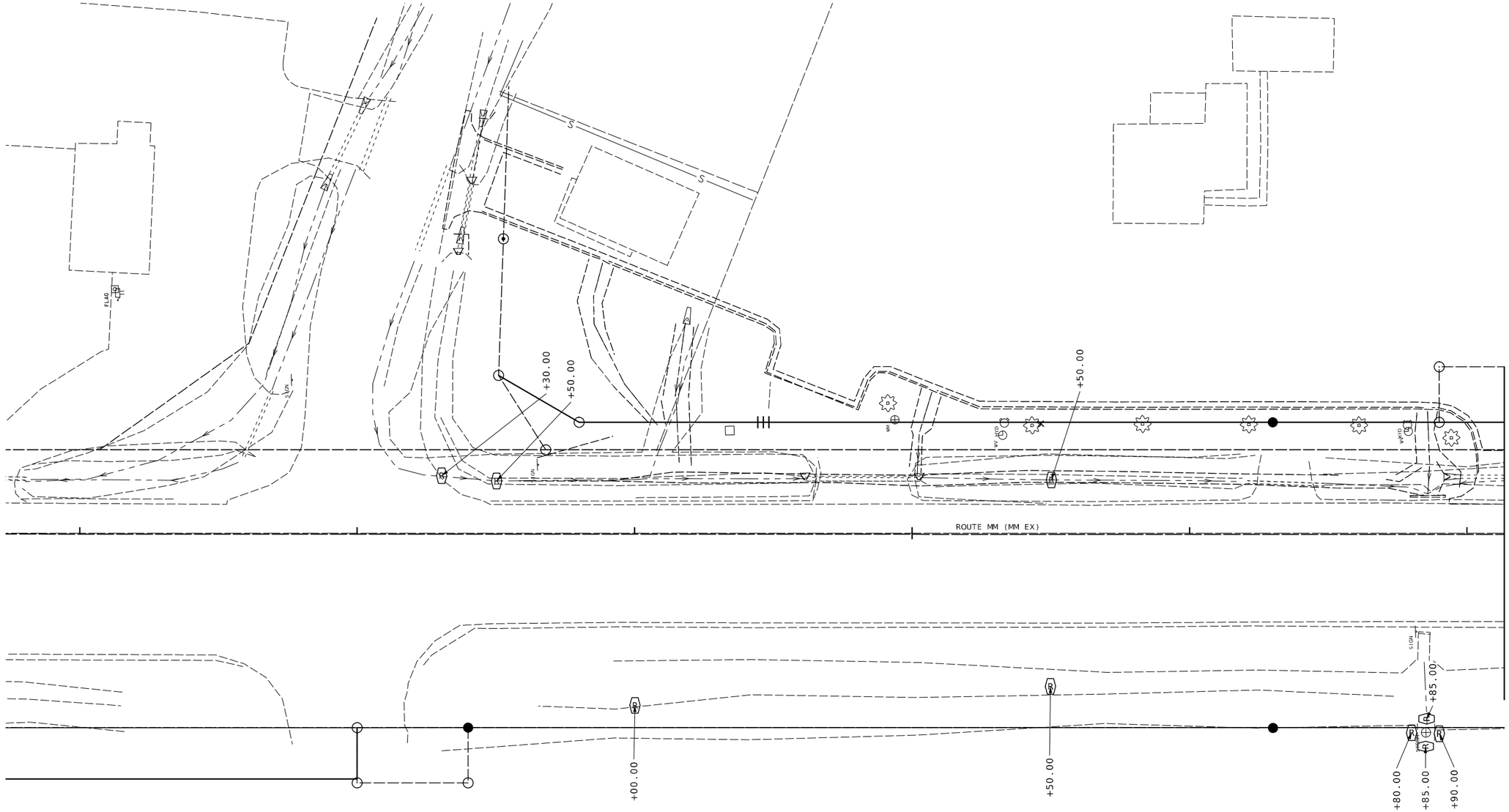
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 1 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:28:48 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	71

COUNTY
GREENE

JOB NO.
J8S0836D

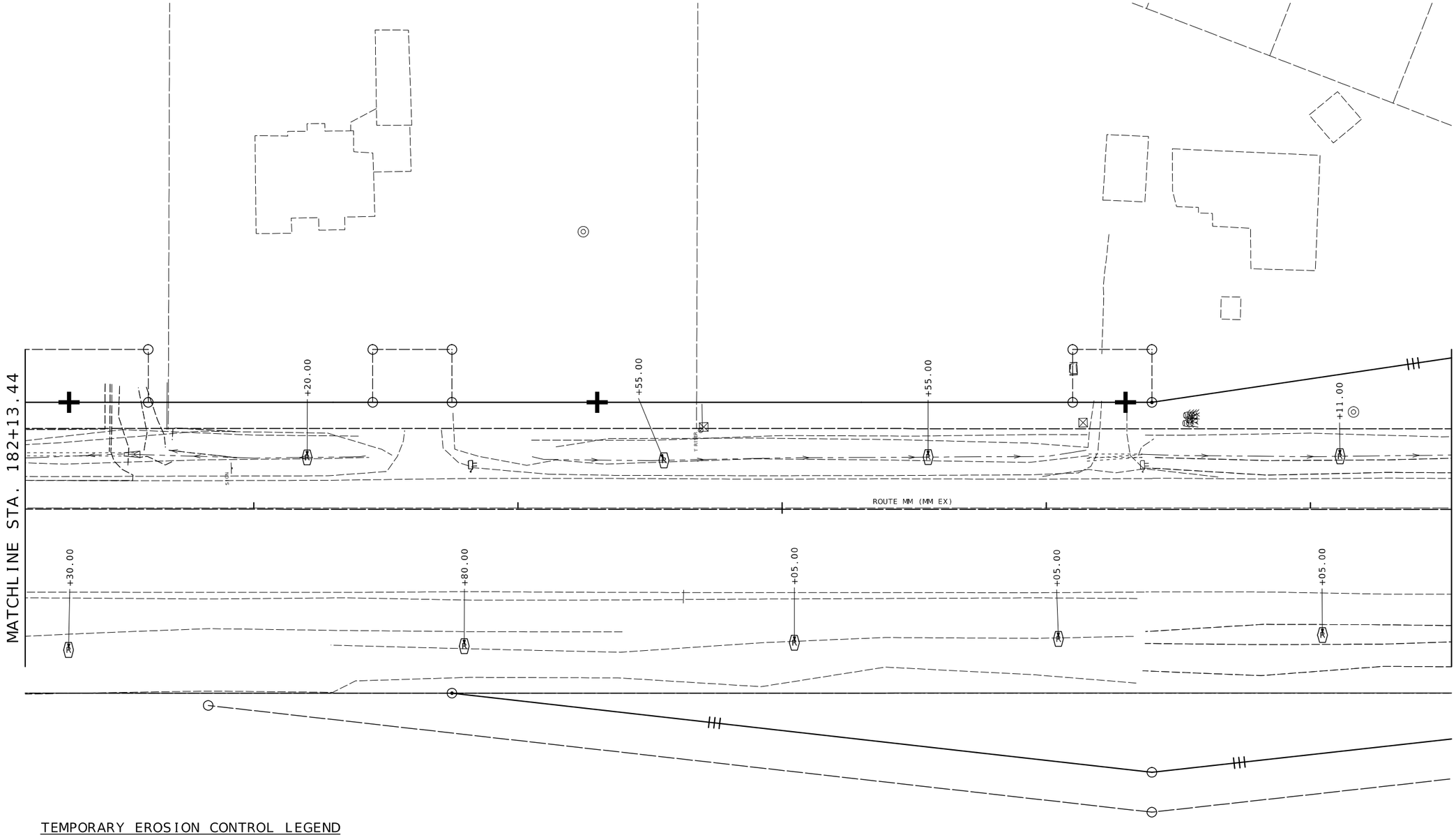
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 2 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:29:10 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	72

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

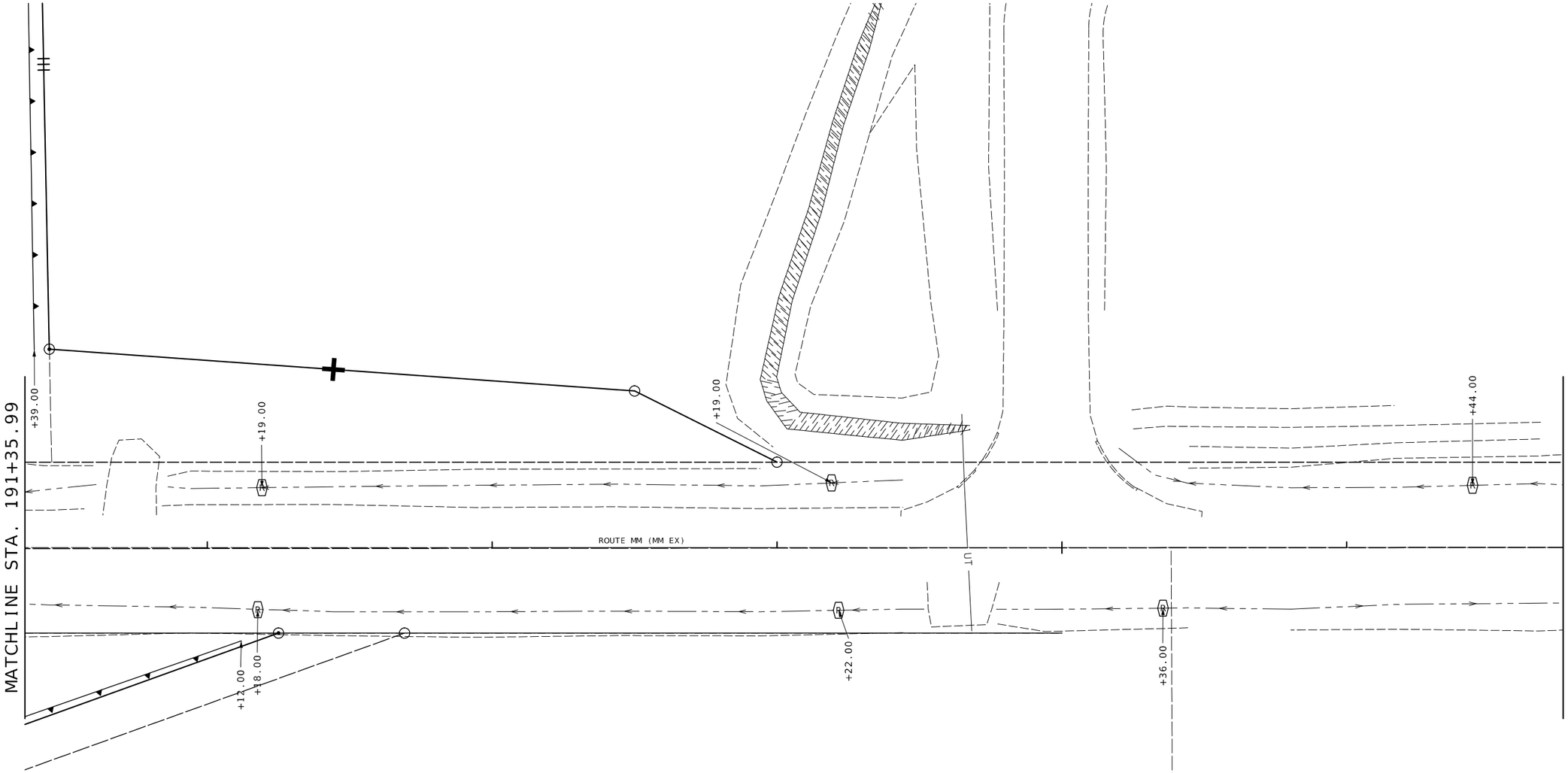
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 3 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:31:59 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	73

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE STA. 187+53.44

MATCHLINE STA. 23+50.77

MATCHLINE STA. 2+40.00

+04.58

+00.00

+86.20

+11.46

+41.94

PROPOSED ROUTE MM (MM_PR)

+94.77

ROUTE MM (MM EX)

+39.75

+41.18

+59.63

+69.58

+19.76

+20.45

MATCHLINE STA. 191+35.99

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 4 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:32:27 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	74

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 5 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:32:54 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	75

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

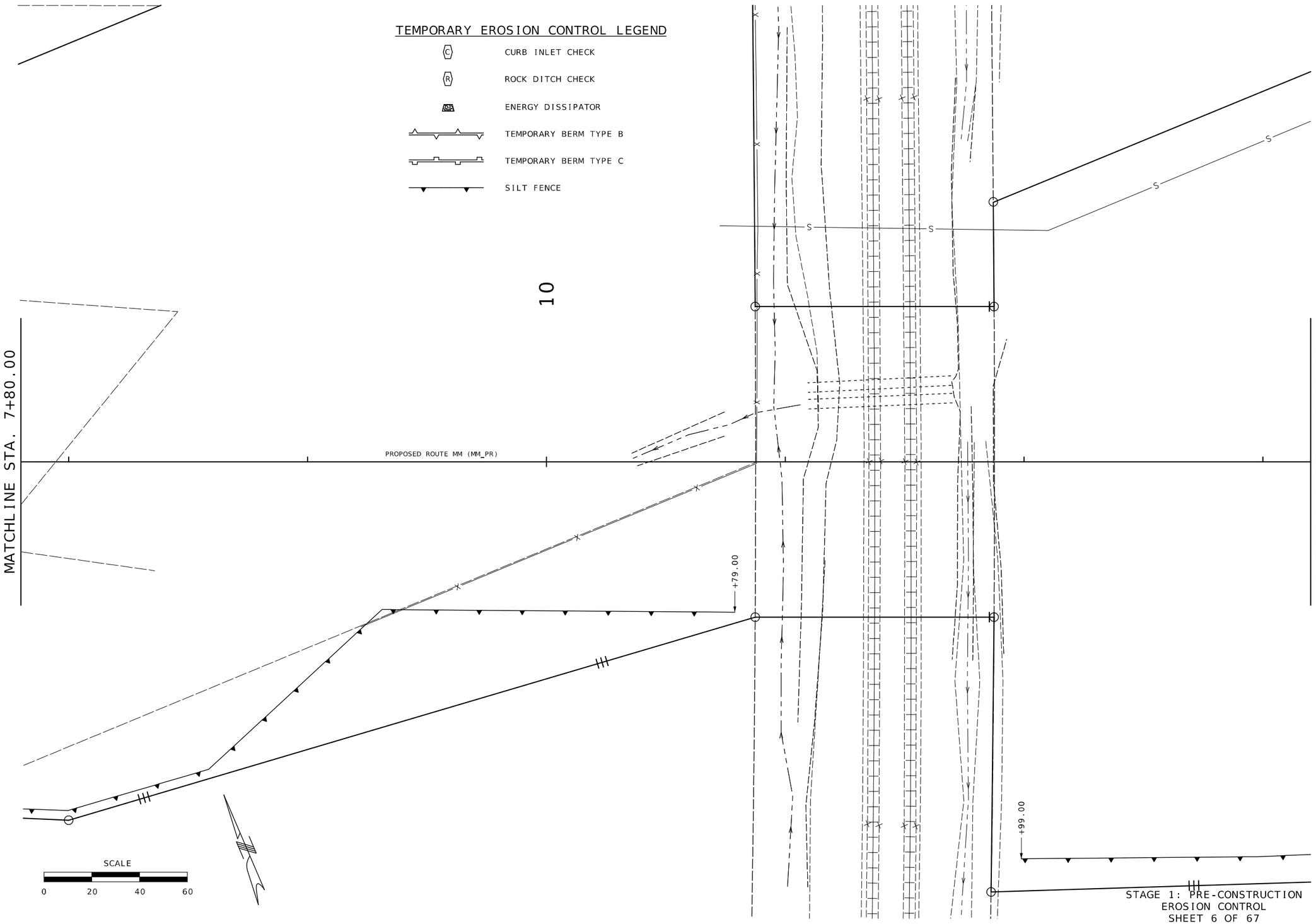
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

10



STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 6 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:33:18 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	76

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

15

STA. 13+20.00

MATCHLINE STA. 13+20.00

PROPOSED ROUTE MM (MM_PR)

STA. 18+60.00

MATCHLINE STA. 18+60.00

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 7 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2664S
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:33:38 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-2664S

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	77

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

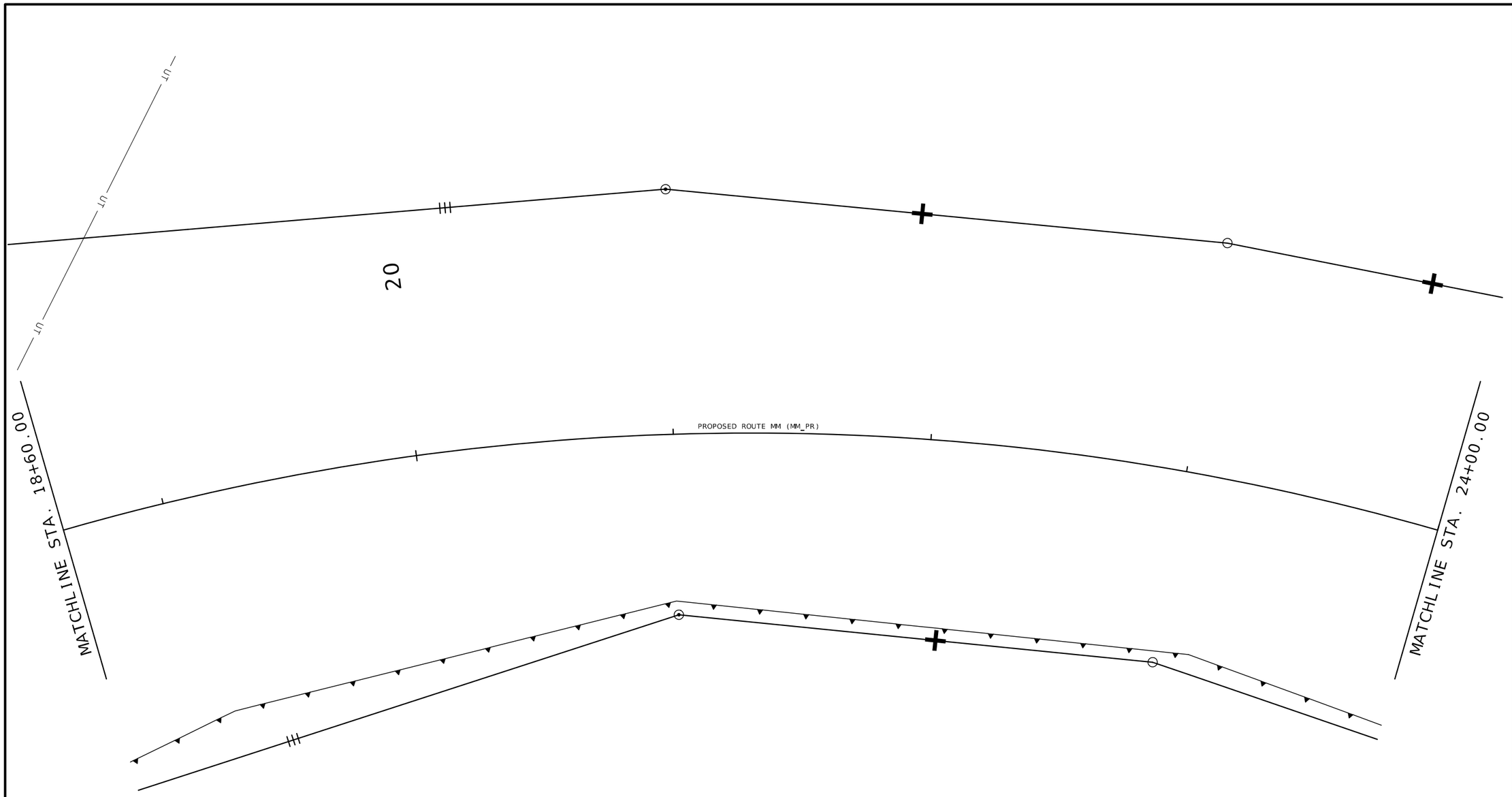
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 8 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:34:02 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	78

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

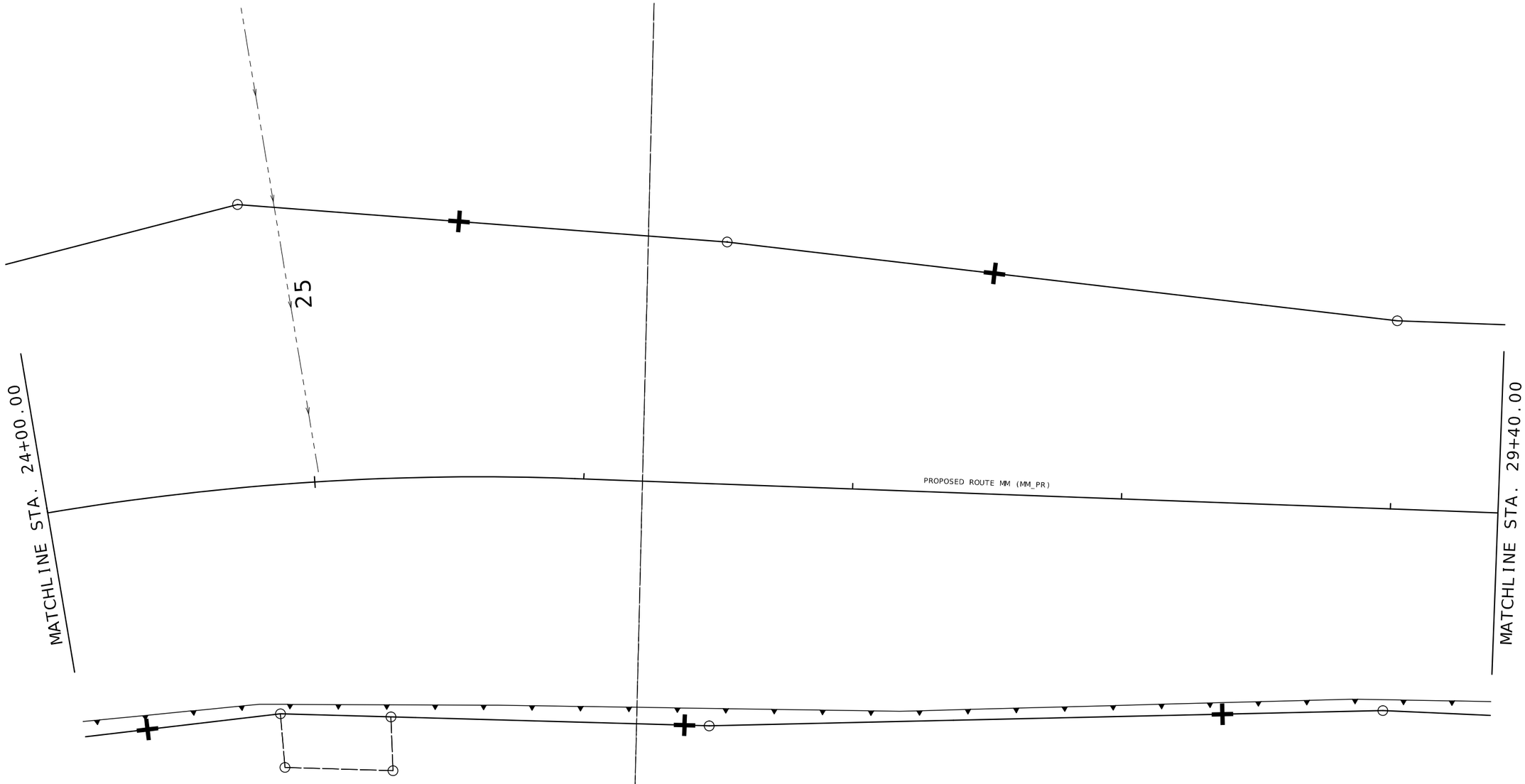
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 9 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:34:36 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	79

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

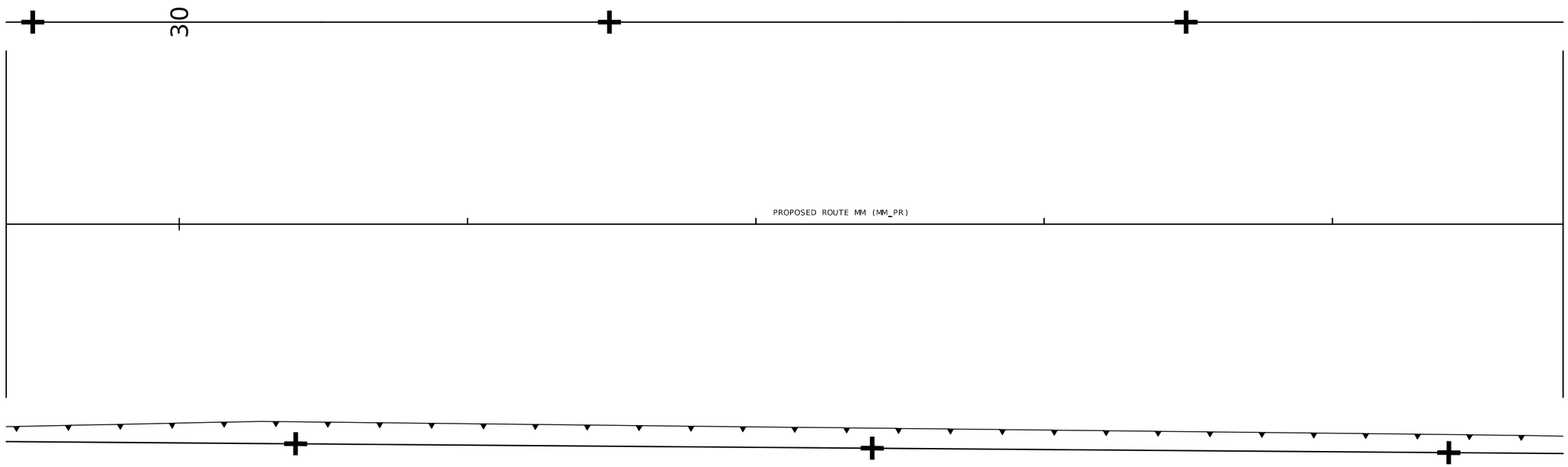
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 10 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:35:03 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	80

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

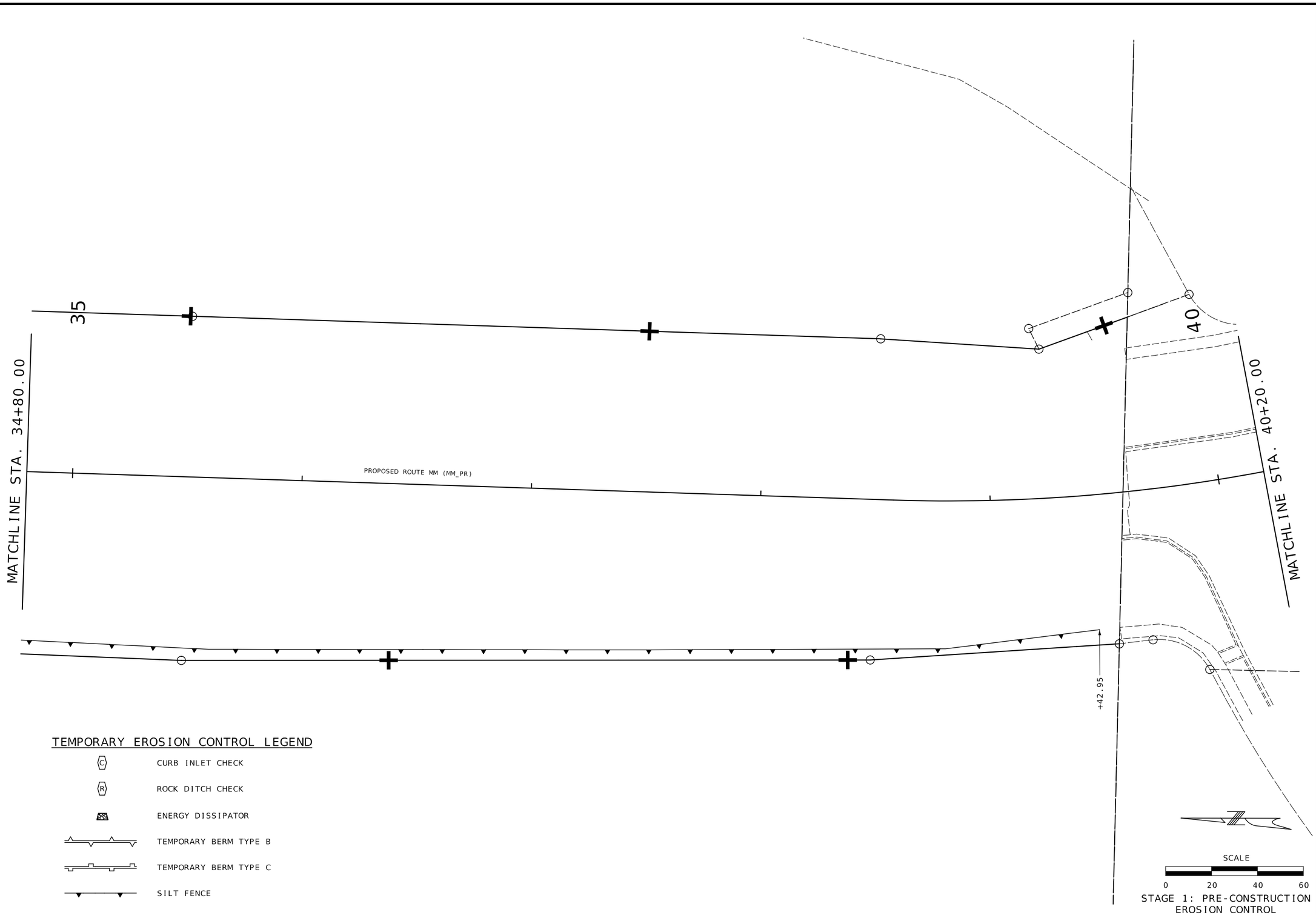
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 11 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:35:29 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	81

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

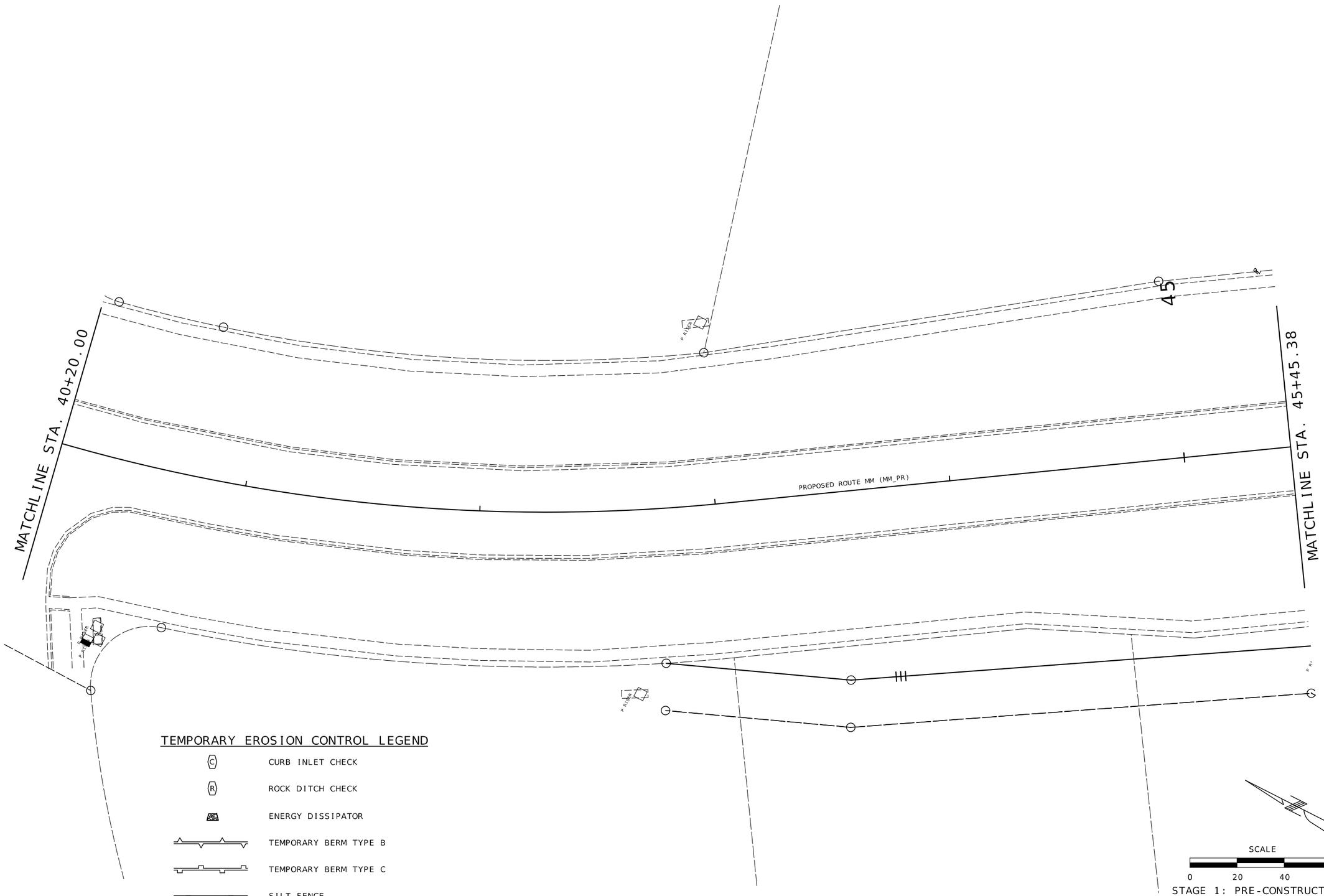
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT


MATCHLINE STA. 40+20.00
MATCHLINE STA. 45+45.38
PROPOSED ROUTE MM (MM_PR)
45
P RINGR
P RINGR
P RINGR

MATCHLINE STA. 241+13.62

MATCHLINE STA. 45+45.38

MATCHLINE STA. 3+48.67

MATCHLINE STA. 237+31.36

PROPOSED ROUTE MM (MM_PR)

PROPOSED FARM ROAD 103 CONNECTION (FR103_TIE)

EX. US 60 WESTBOUND (60_WB)

EX. US 60 EASTBOUND (60_EB)

STORM

+60.00

+60.00

+25.00

+25.00

+25.00

+50.00

+50.00

+50.00

1+95.08

3+22.92

3+08.87

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 13 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:36:16 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	83

COUNTY
GREENE

JOB NO.
J8S0836D

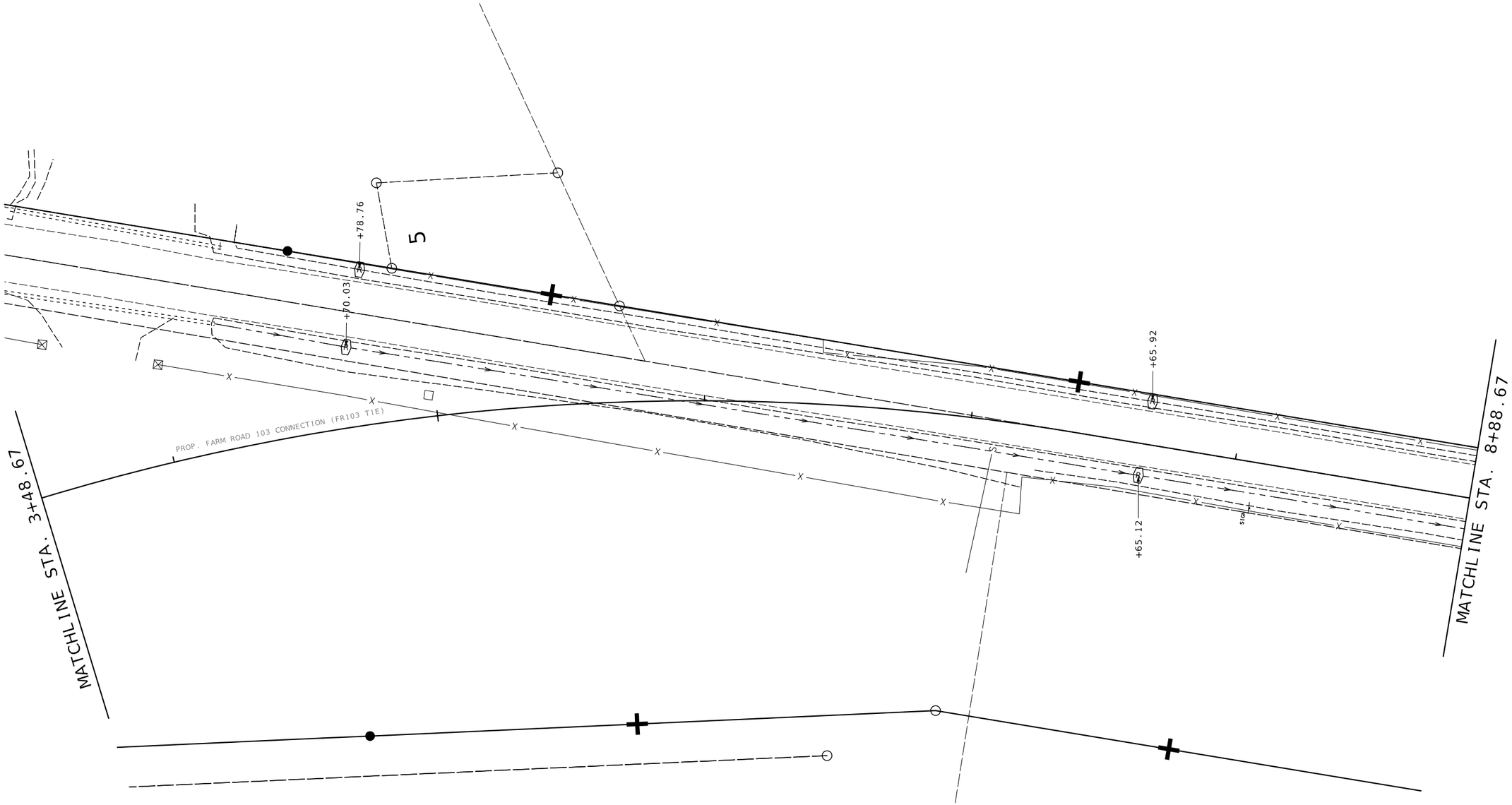
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 14 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:36:42 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	84

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

10

MATCHLINE STA. 8+88.67

+15.53

+66.17

+05.29

PROP. FARM ROAD 103 CONNECTION (FR103 TIE)

+15.12

+65.12

SEE SURVEY NOTES

SIGN

SIGN

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ED ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 15 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:37:02 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	85

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

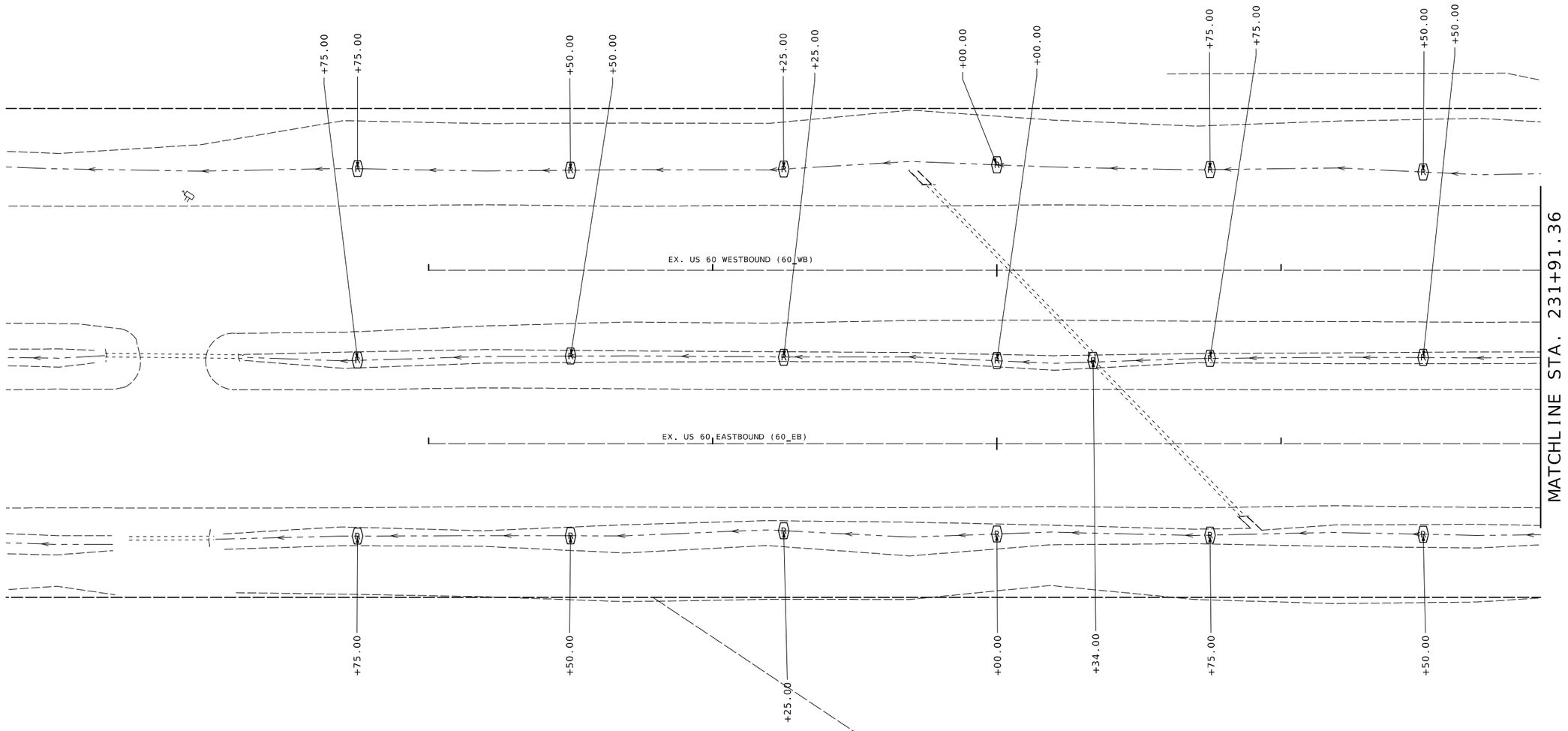
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 16 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07.28.2025 1:38:30 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	86

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

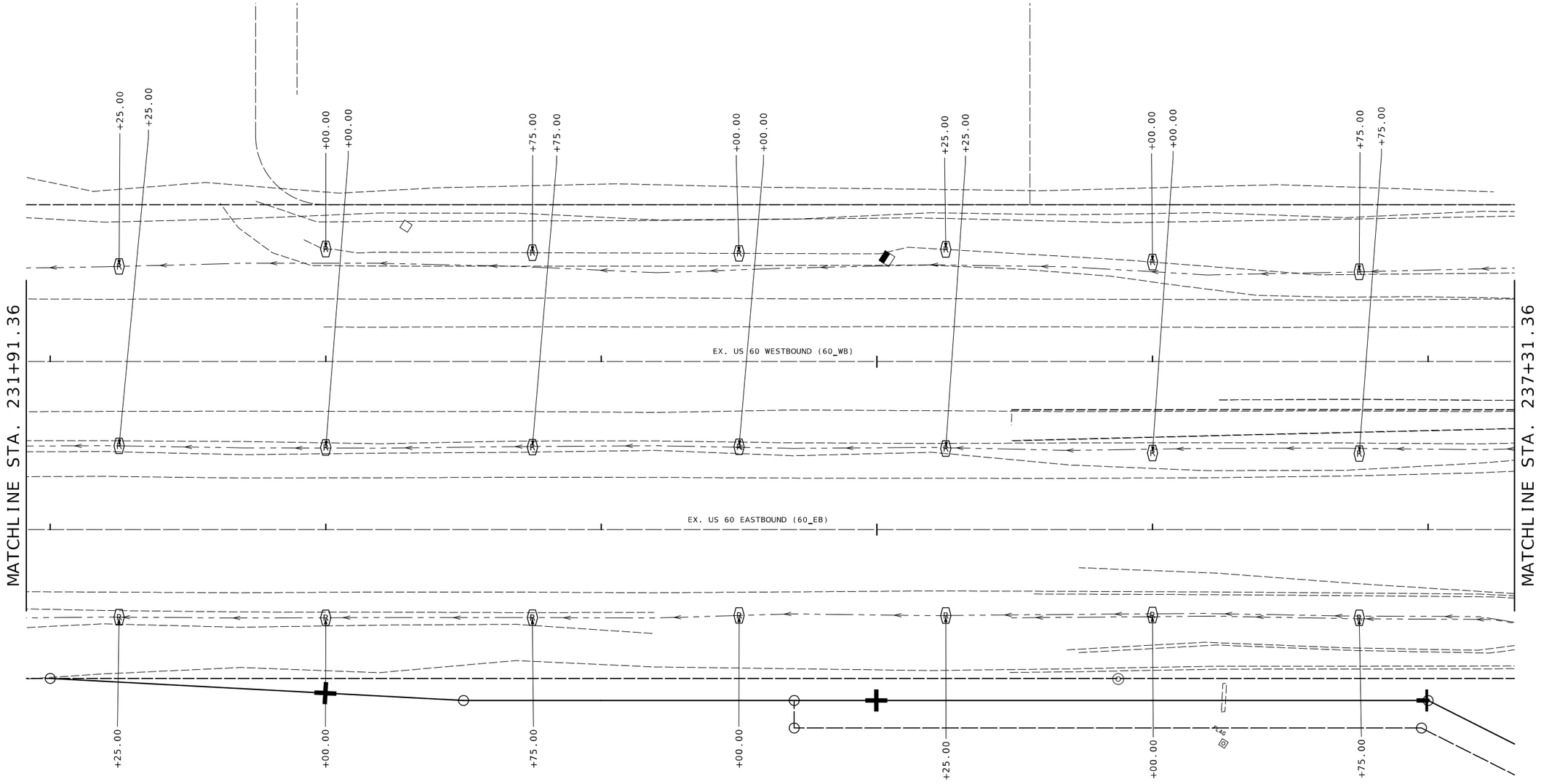
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 17 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:38:51 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	87

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

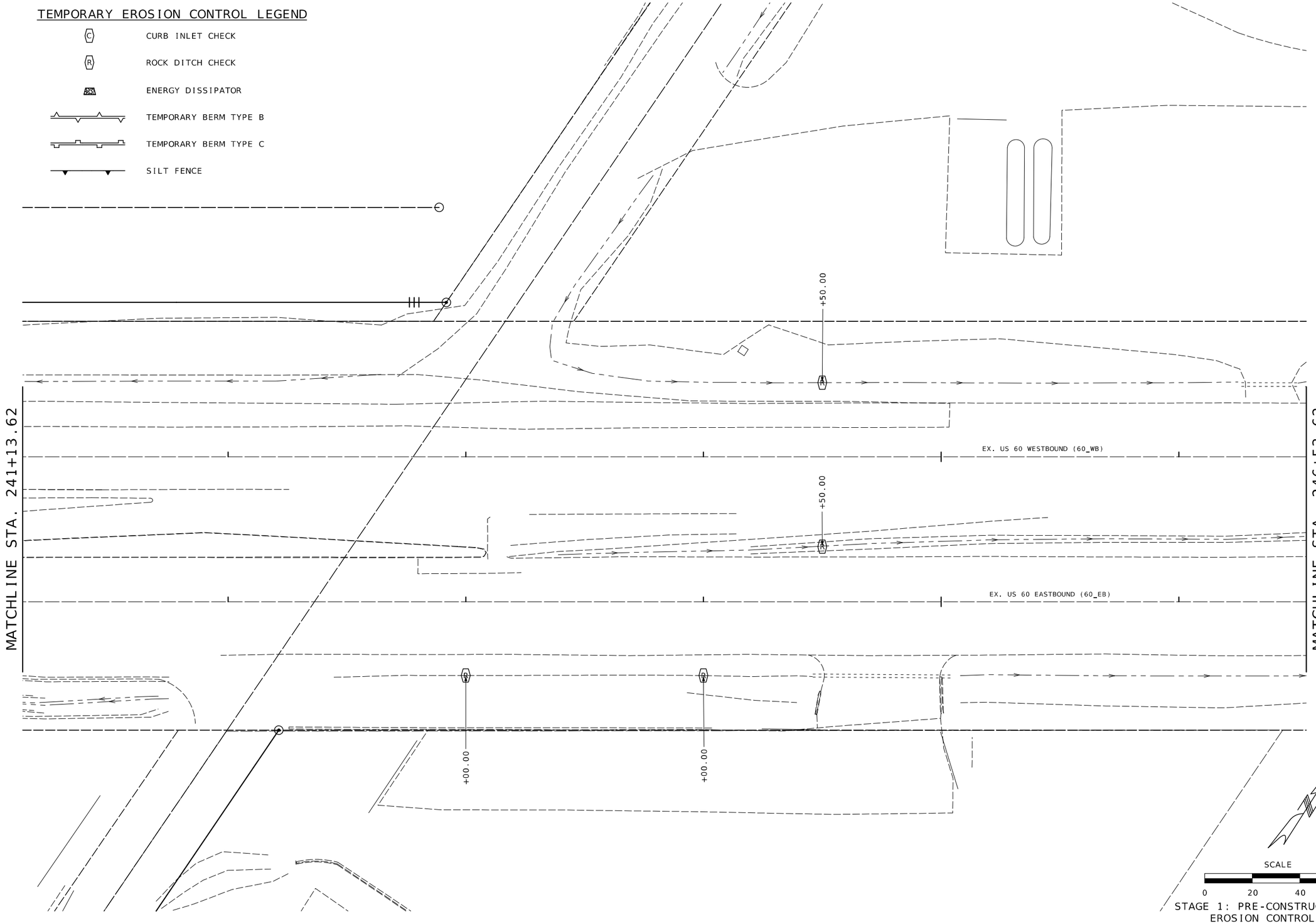
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE



STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 18 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:39:13 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	88

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

MATCHLINE STA. 246+53.62

MATCHLINE STA. 251+93.62

EX. US 60 WESTBOUND (60_WB)

EX. US 60 EASTBOUND (60_EB)

+00.00

+00.00

+00.00

+50.00

+50.00

+00.00

+50.00

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 19 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:39:38 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	89

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

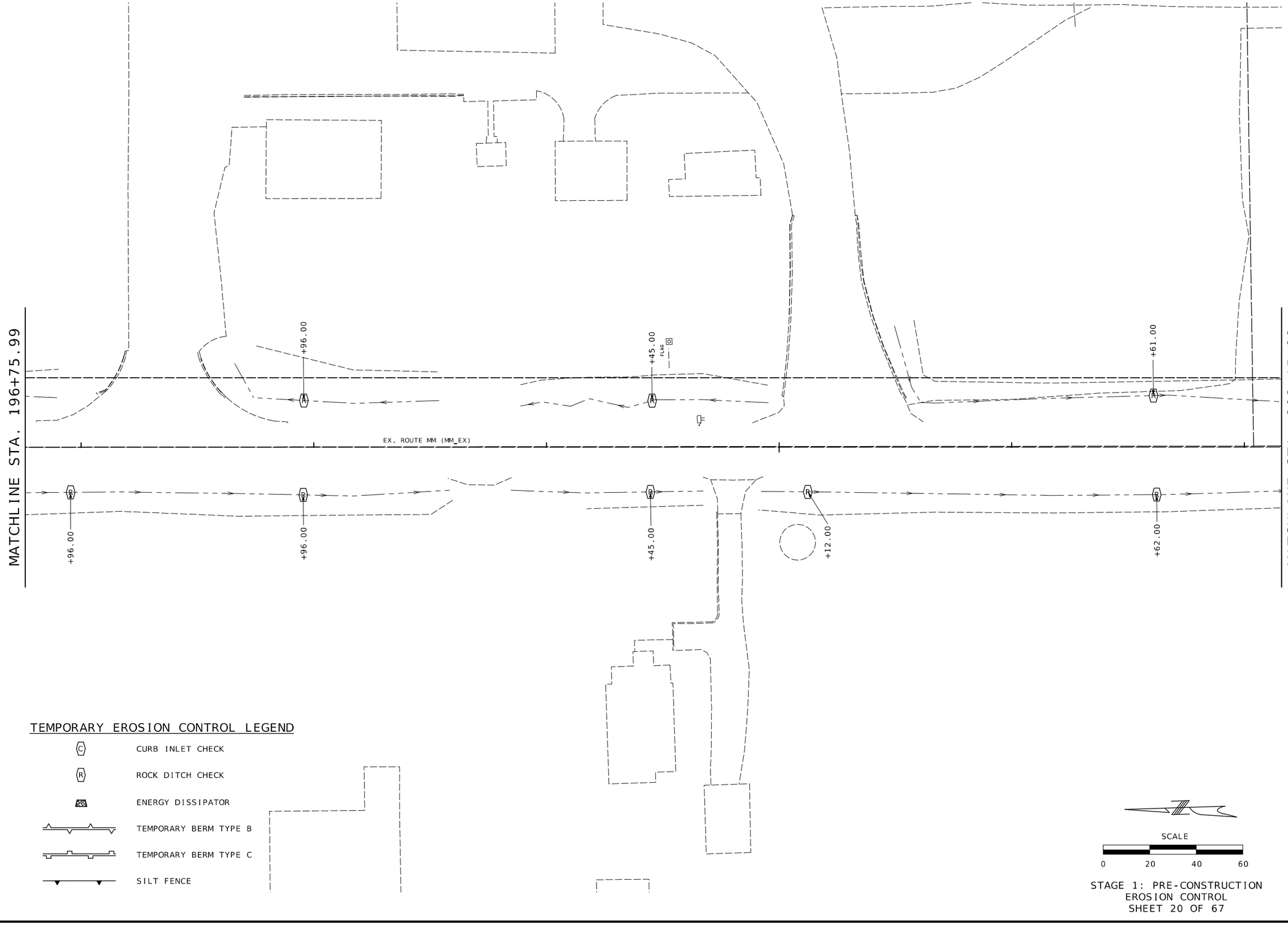
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 20 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:40:00 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	90

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

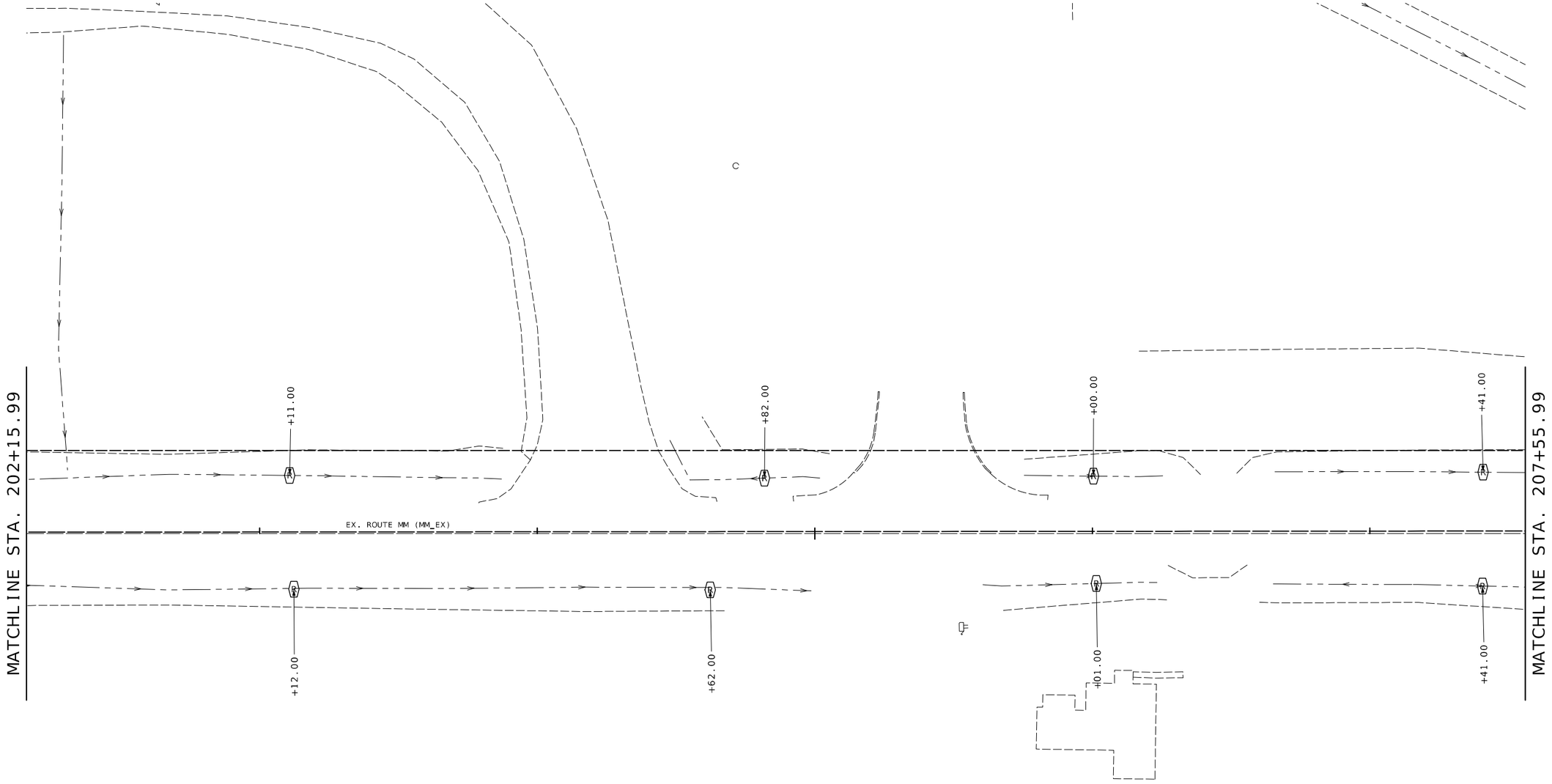
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 21 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:40:26 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	91

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

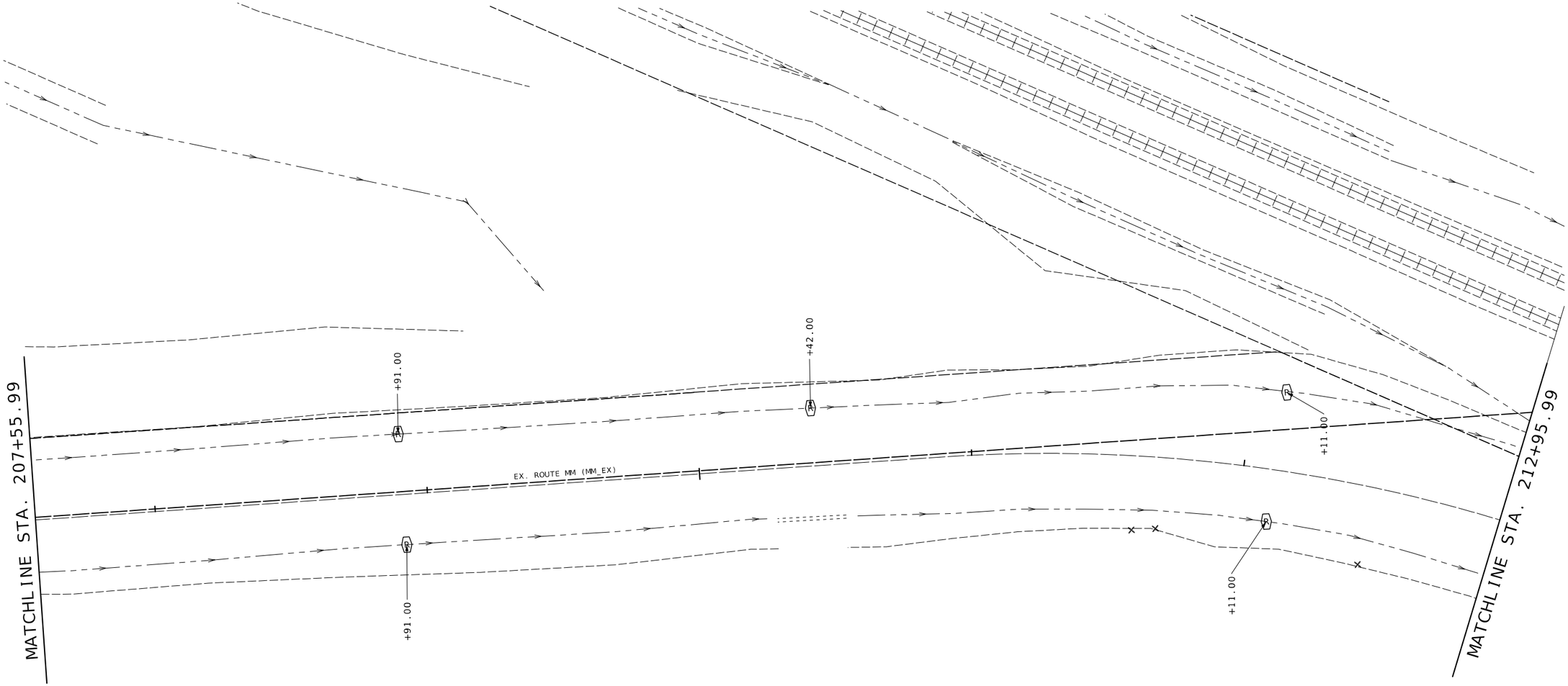
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 22 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:40:46 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	92

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

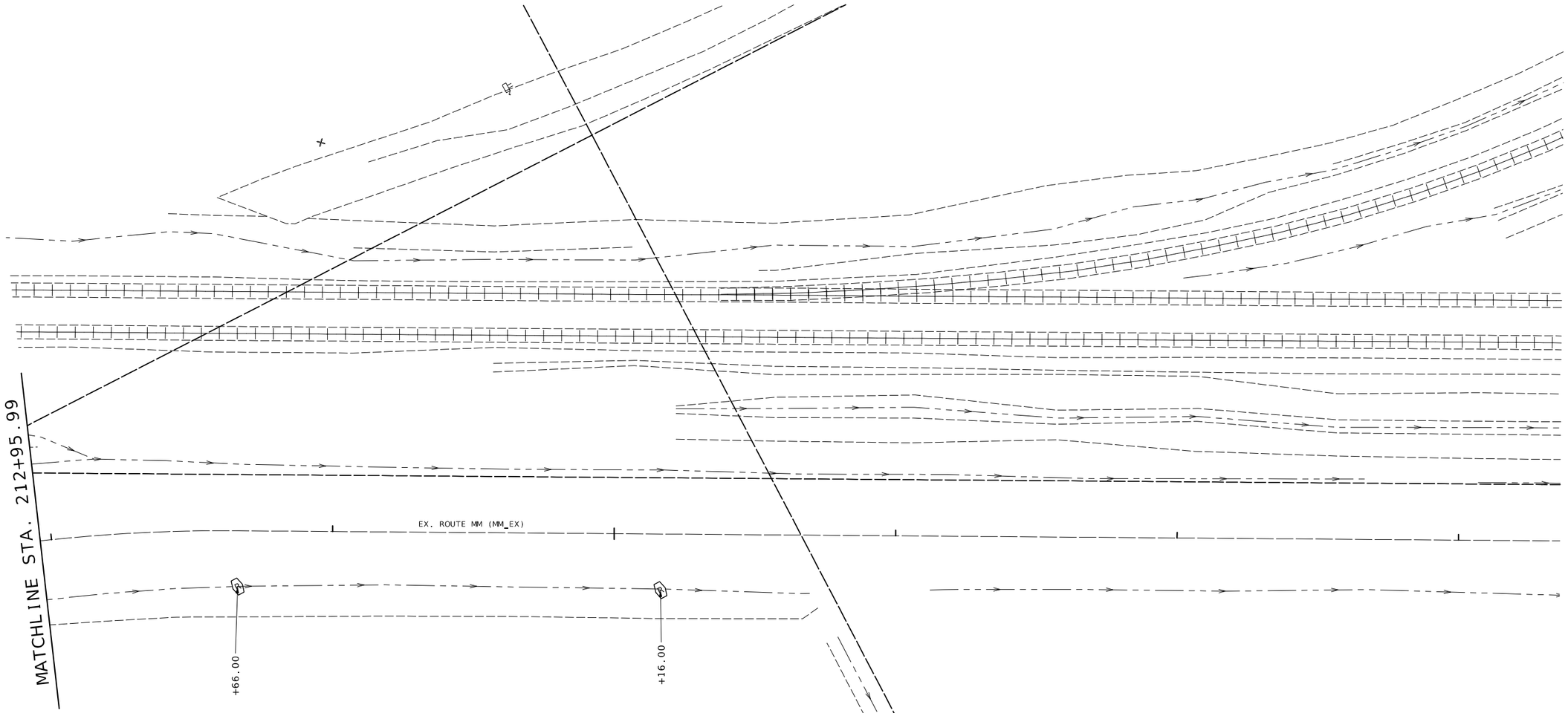
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 1: PRE-CONSTRUCTION
EROSION CONTROL
SHEET 23 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:41:07 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	93

COUNTY
GREENE

JOB NO.
J8S0836D

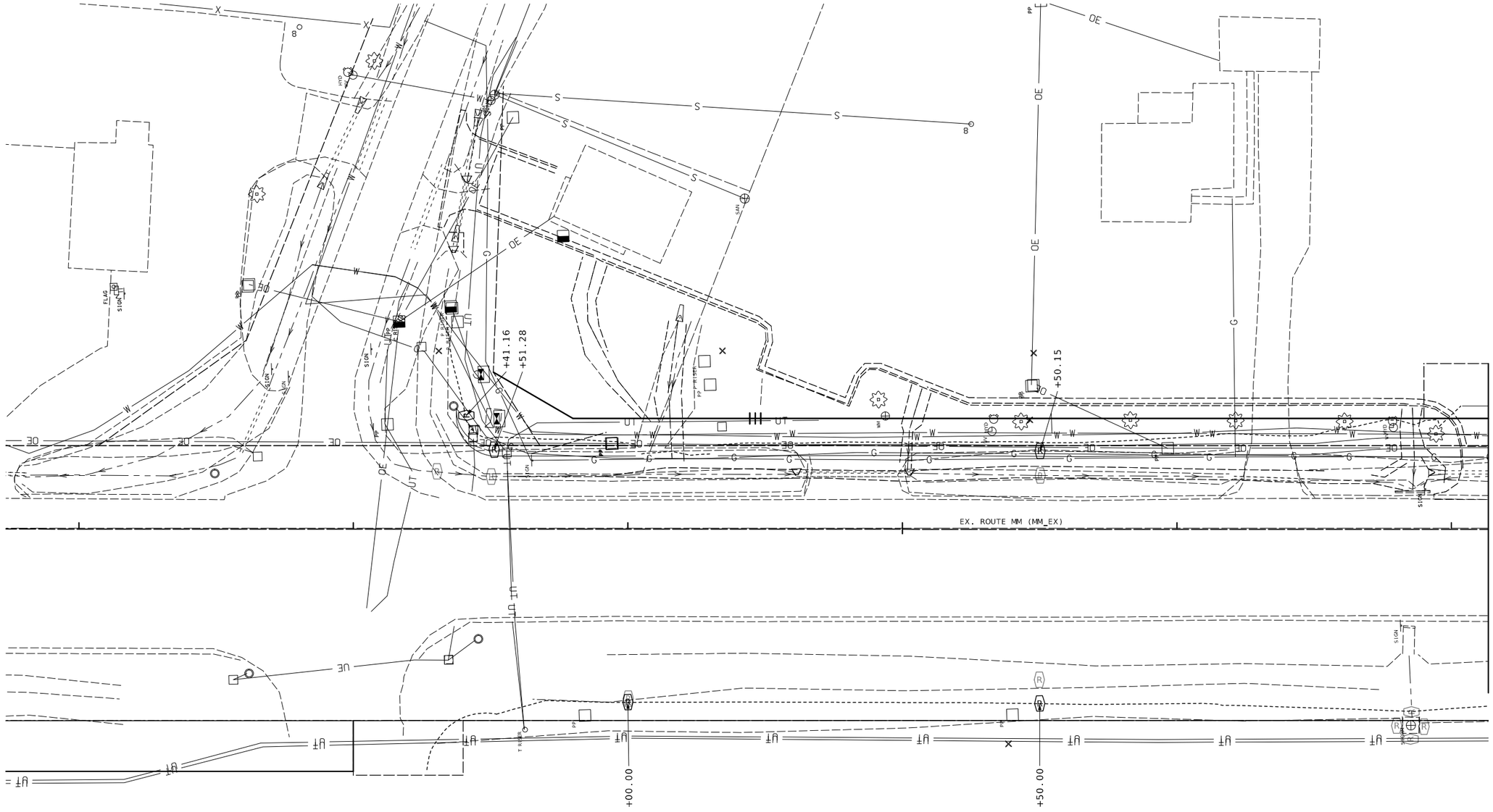
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 24 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:41:31 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	94

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

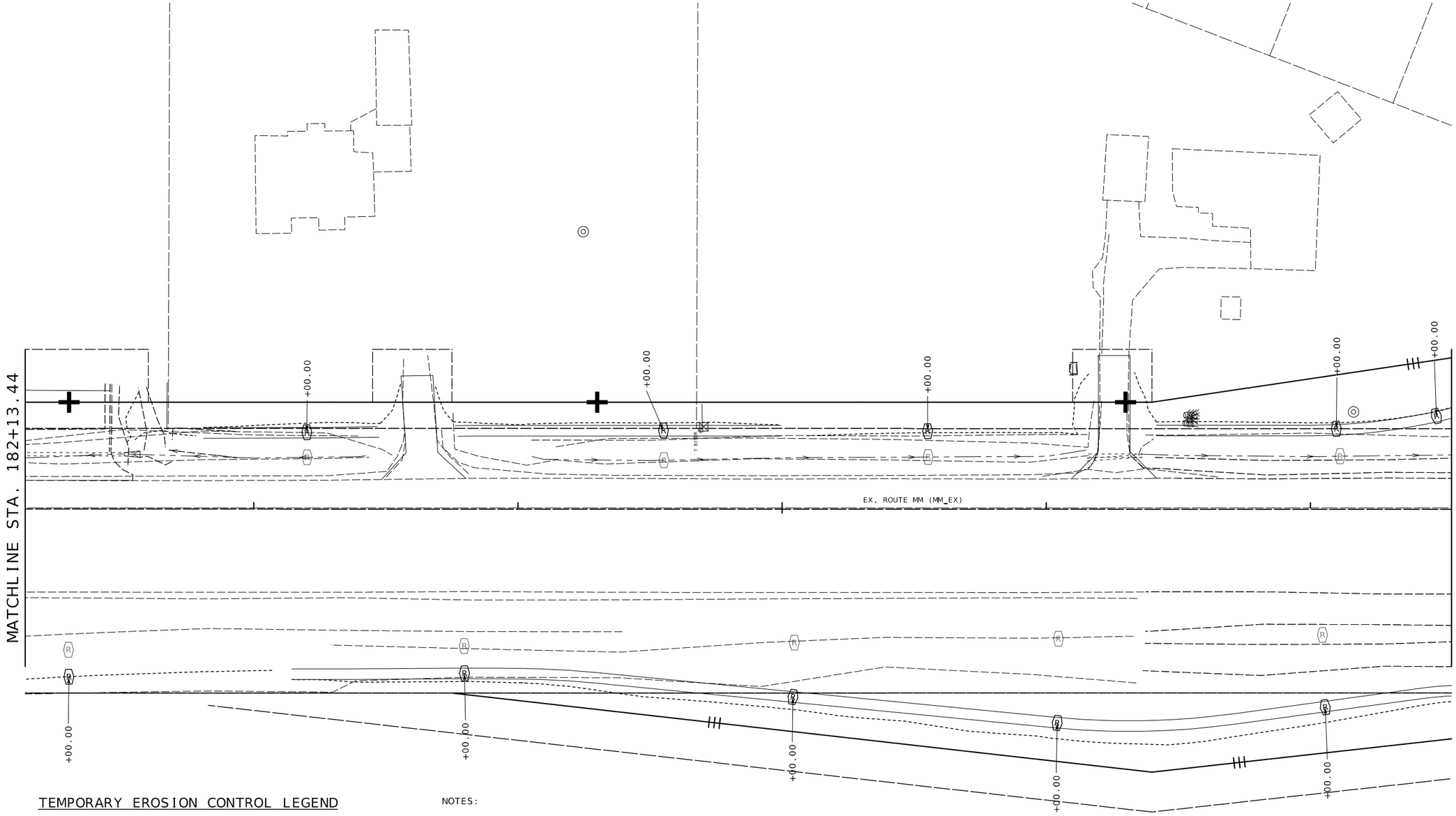
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING
EROSION CONTROL
SHEET 25 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:41:53 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	95

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

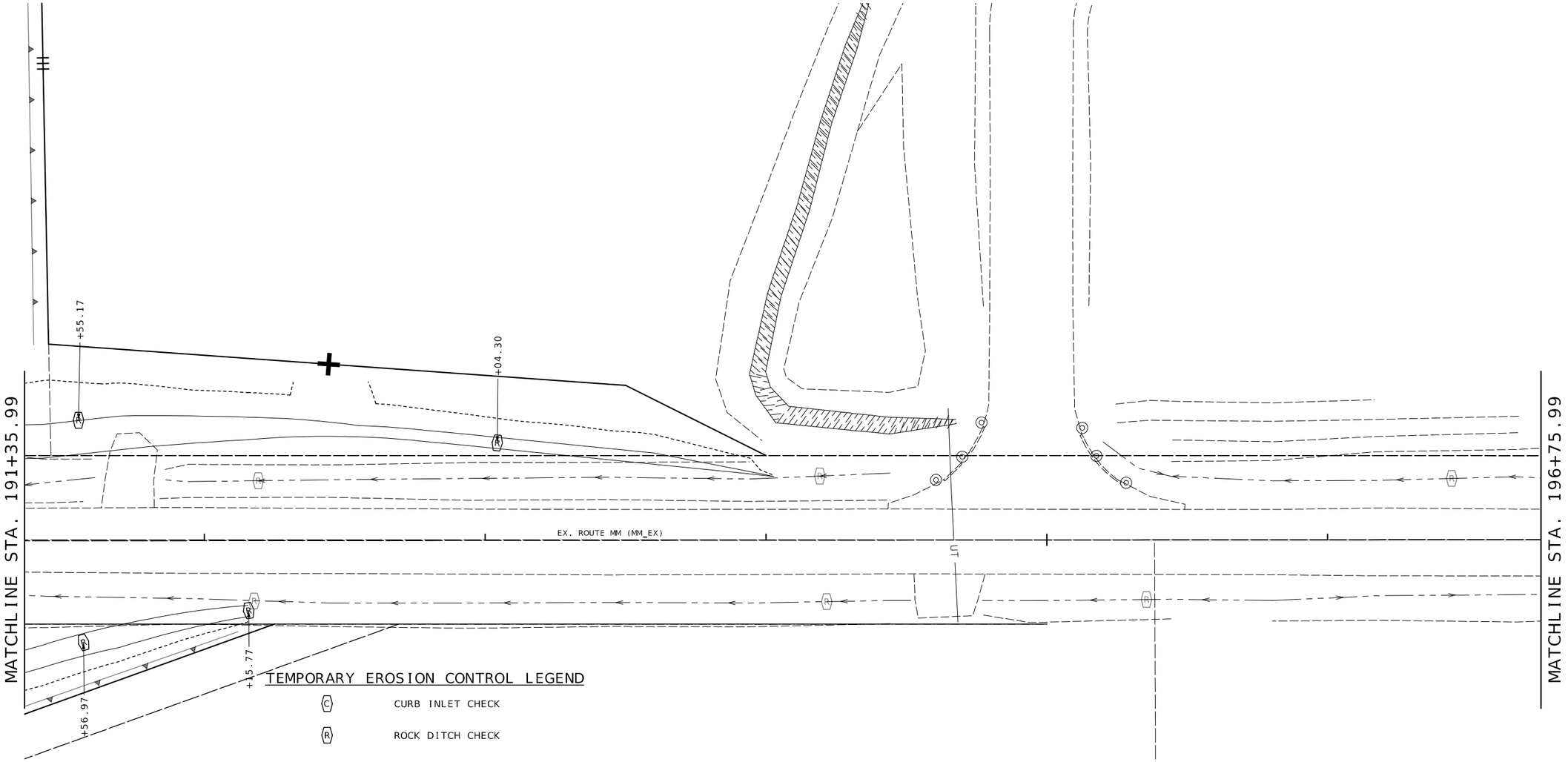
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 26 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:42:17 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	96

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

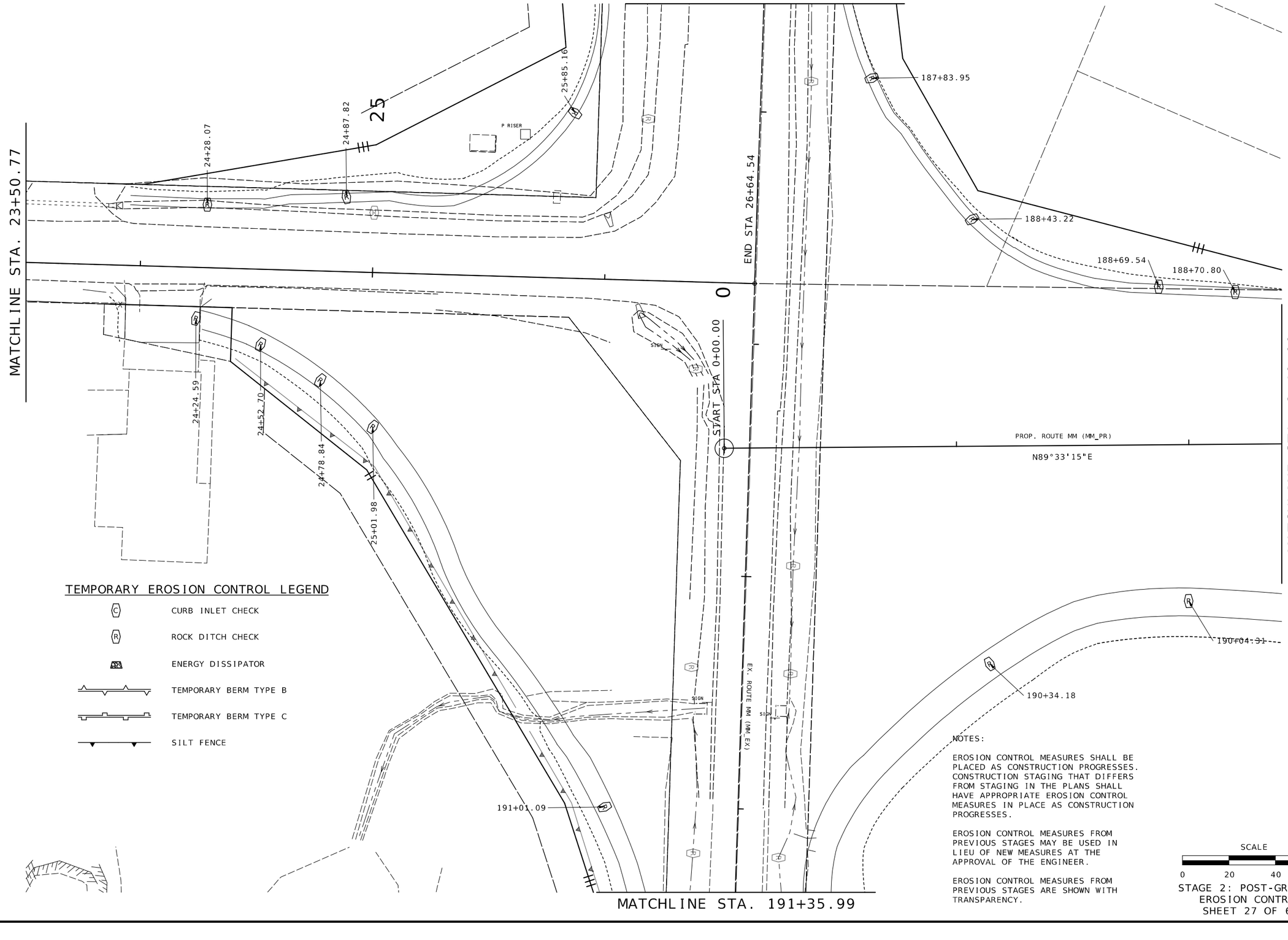
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 27 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:42:36 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	97

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

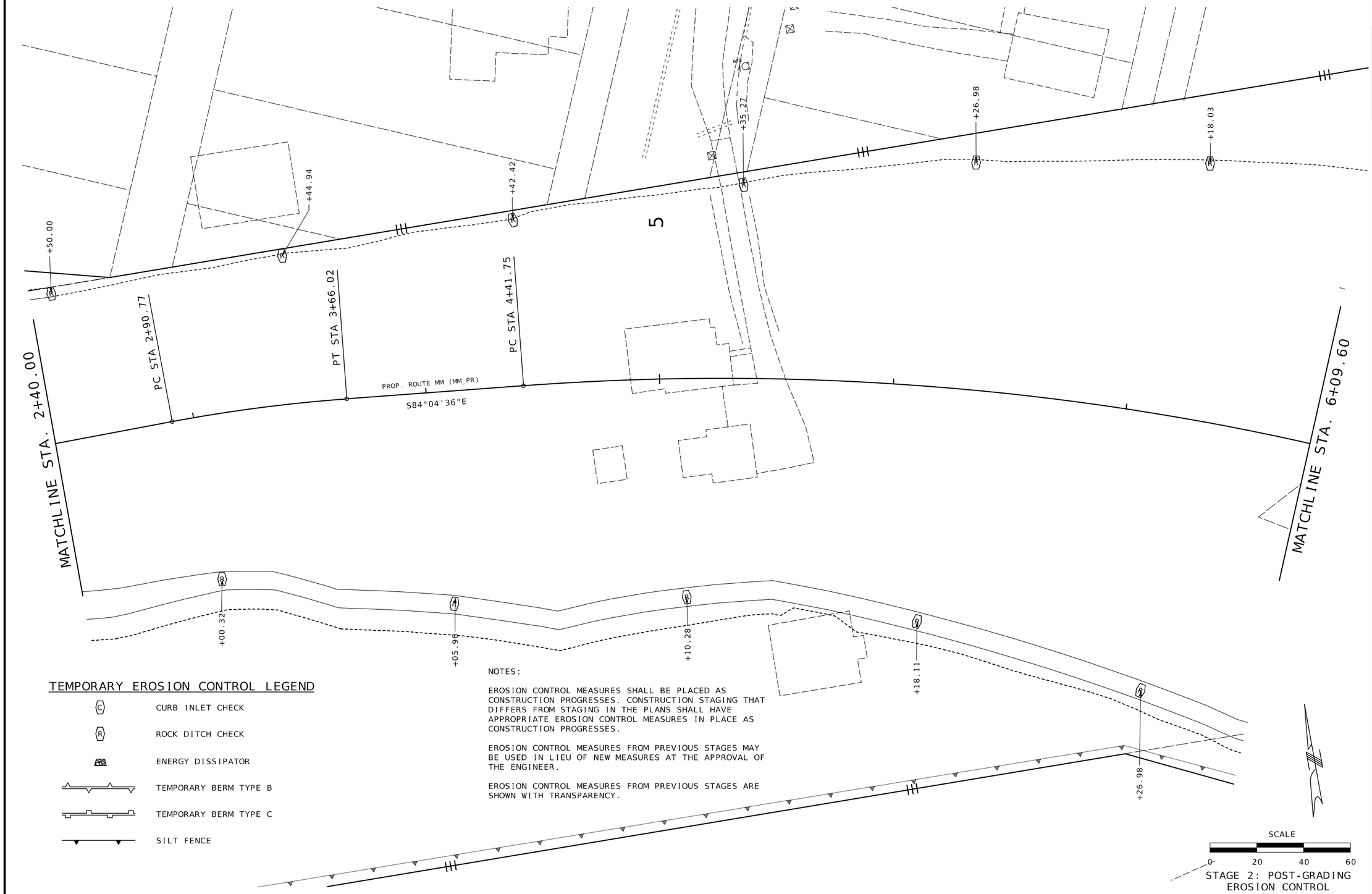
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING
EROSION CONTROL
SHEET 28 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:42:58 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	98

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

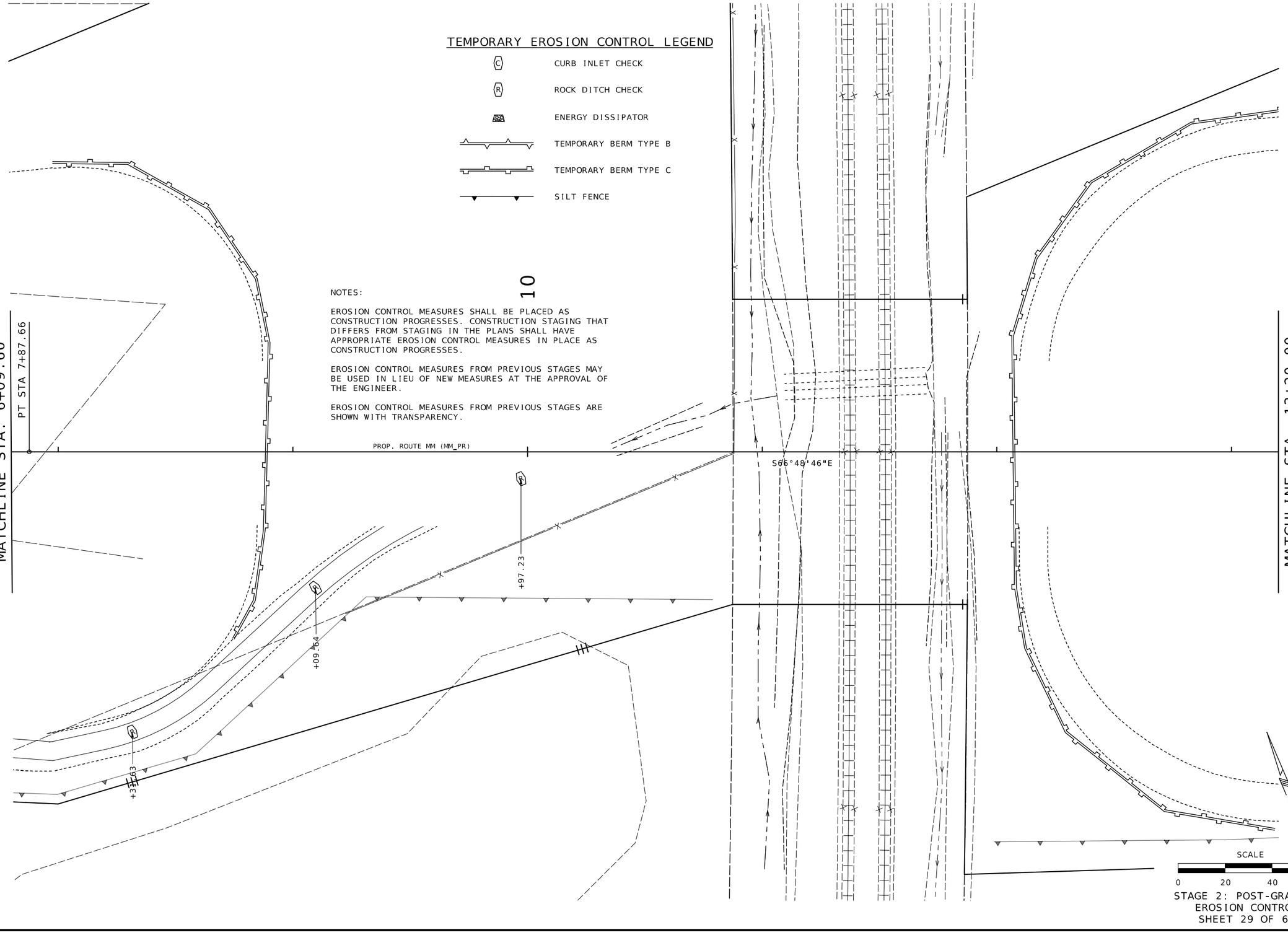
- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.



STAGE 2: POST-GRADING EROSION CONTROL
SHEET 29 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:43:26 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	99

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

15

PC STA 14+46.13

PROP. ROUTE MM (MM_PR)

MATCHLINE STA. 13+20.00

MATCHLINE STA. 18+60.00

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 30 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:44:56 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	100

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

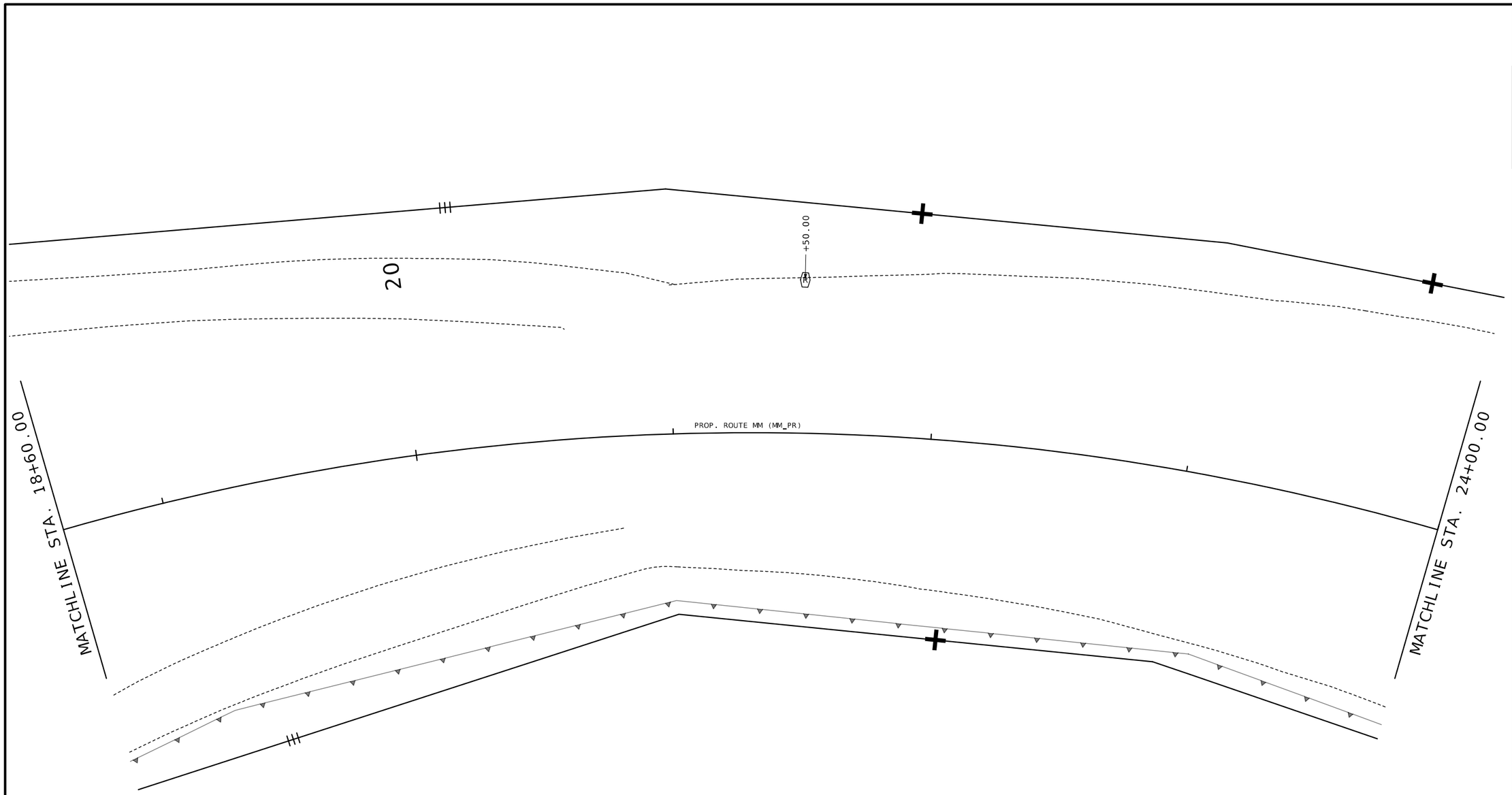
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING
EROSION CONTROL
SHEET 31 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:45:18 PM
WARNER D. SHERMAN II - CIVIL
MO PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	101

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

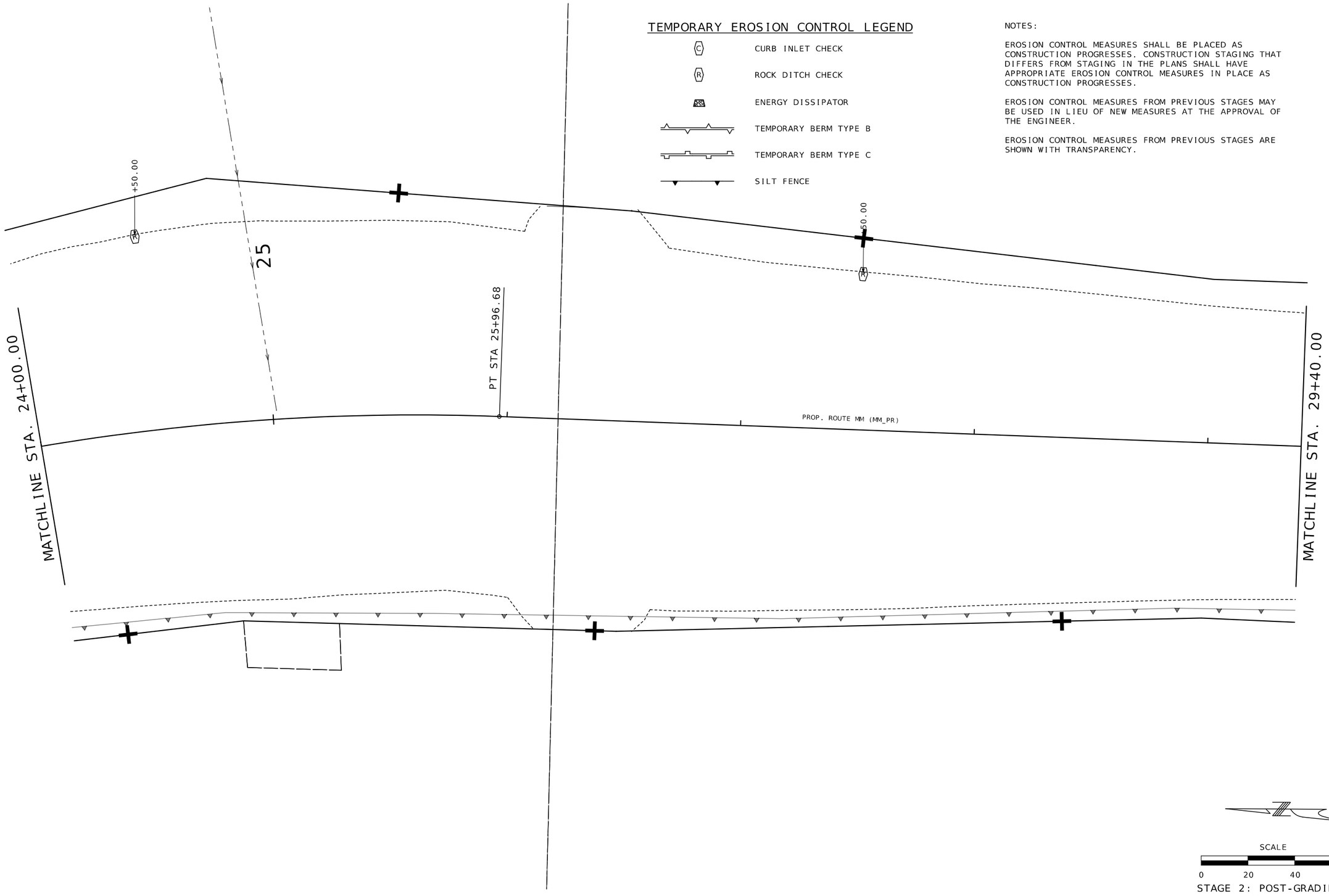
- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.



SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 32 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:45:41 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	102

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

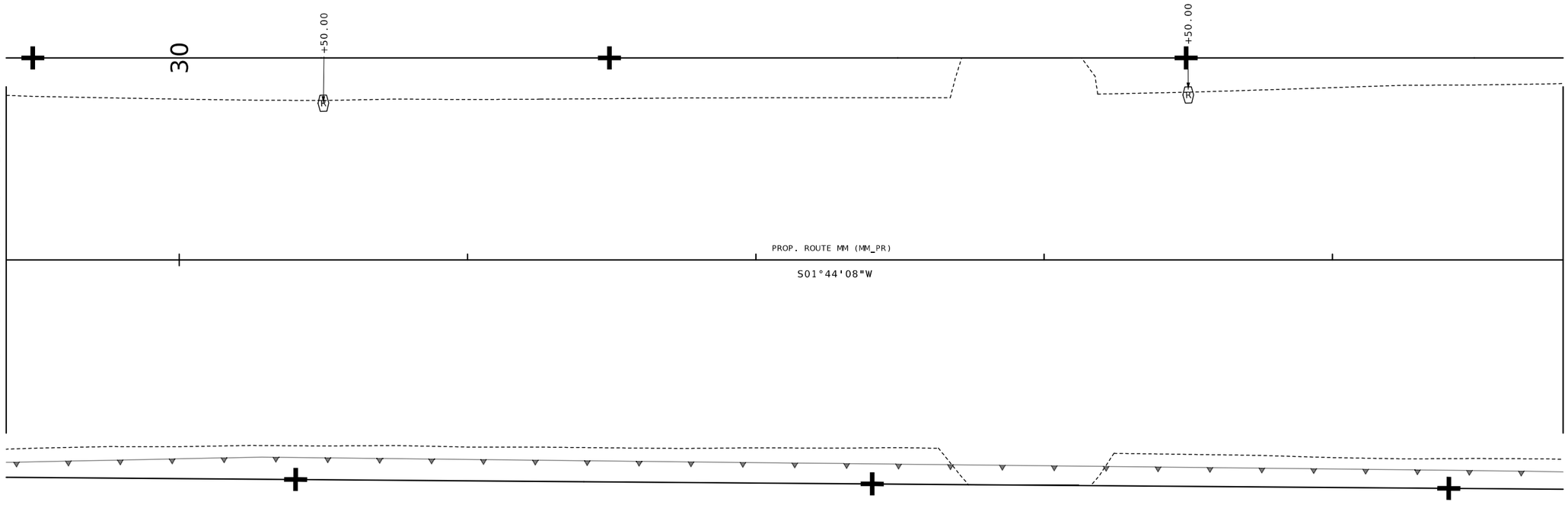
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 33 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:46:04 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	103

COUNTY
GREENE

JOB NO.
J8S0836D

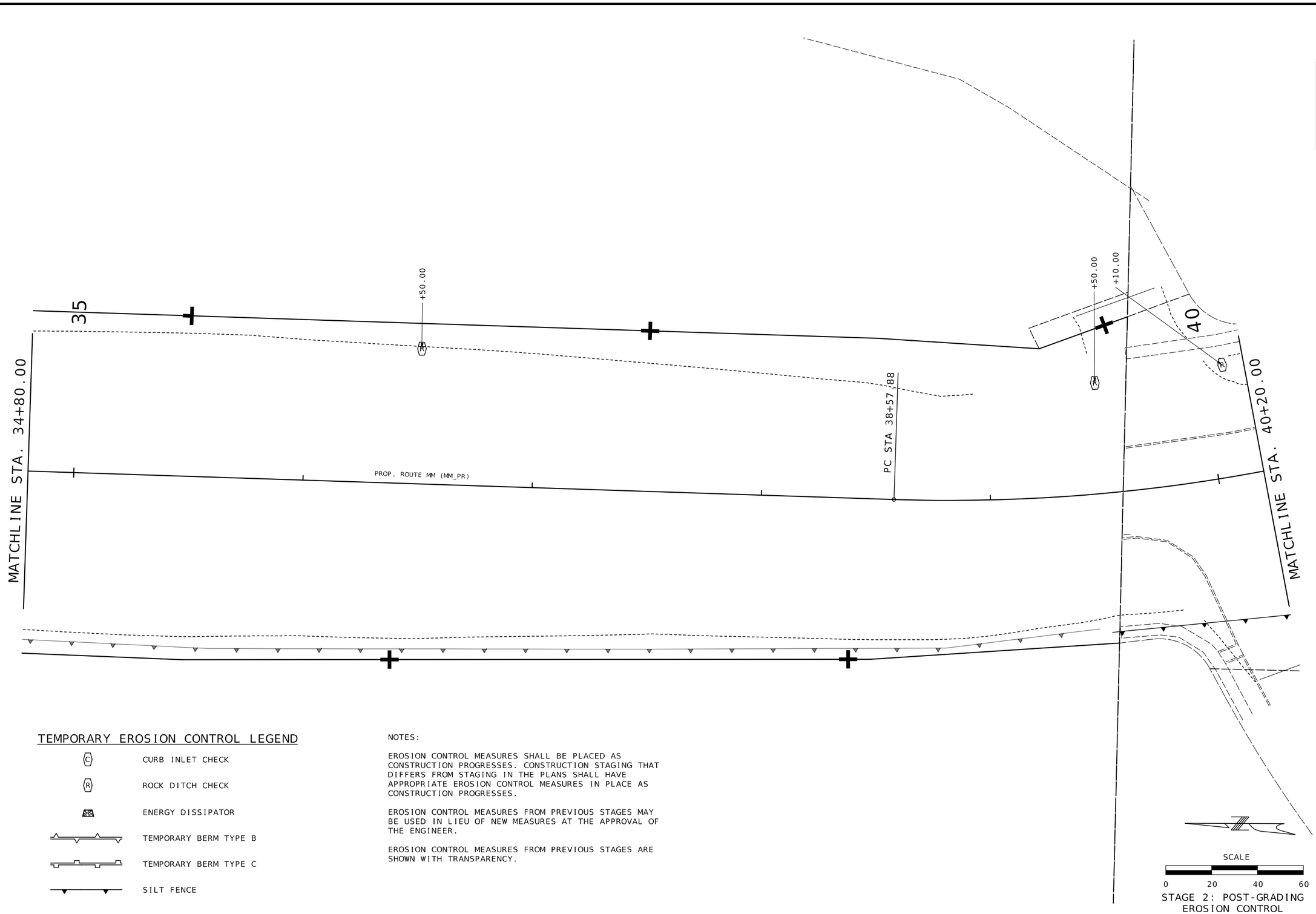
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 34 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:46:27 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	104

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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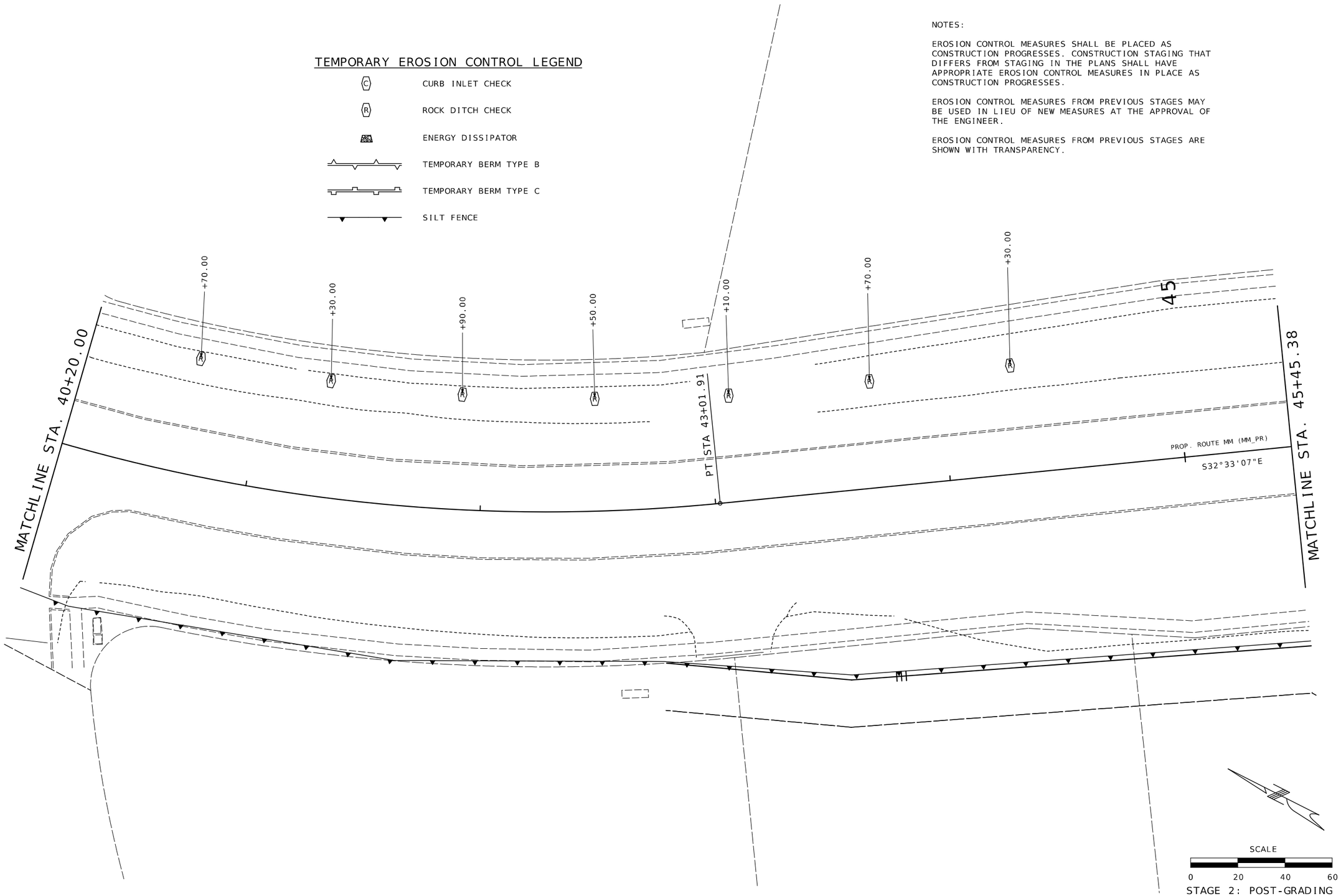

SCALE

0 20 40 60

STAGE 2: POST-GRADING
EROSION CONTROL
SHEET 35 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:46:47 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	105

COUNTY
GREENE

JOB NO.
J8S0836D

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)

MATCHLINE STA. 241+13.62

MATCHLINE STA. 45+45.38

MATCHLINE STA. 3+48.67

MATCHLINE STA. 237+31.36

46+55.68

STORM

EX. US 60 WESTBOUND (60_WB)

EX. US 60 EASTBOUND (60_EB)

END STA 47+37.08

START STA 0+00.00

0+75.05

1+07.86

1+75.00

PC STA 2+31.74

PROP. ROUTE MM (MM_PR)

PROP. FARM ROAD 103 (FR103_TIE)

S32°33'07"E

1+75.00

1+27.32

237+86.67

237+50.00

237+50.00

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

TEMPORARY EROSION CONTROL LEGEND

- C — CURB INLET CHECK
- R — ROCK DITCH CHECK
- ED — ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 36 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:47:16 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	106

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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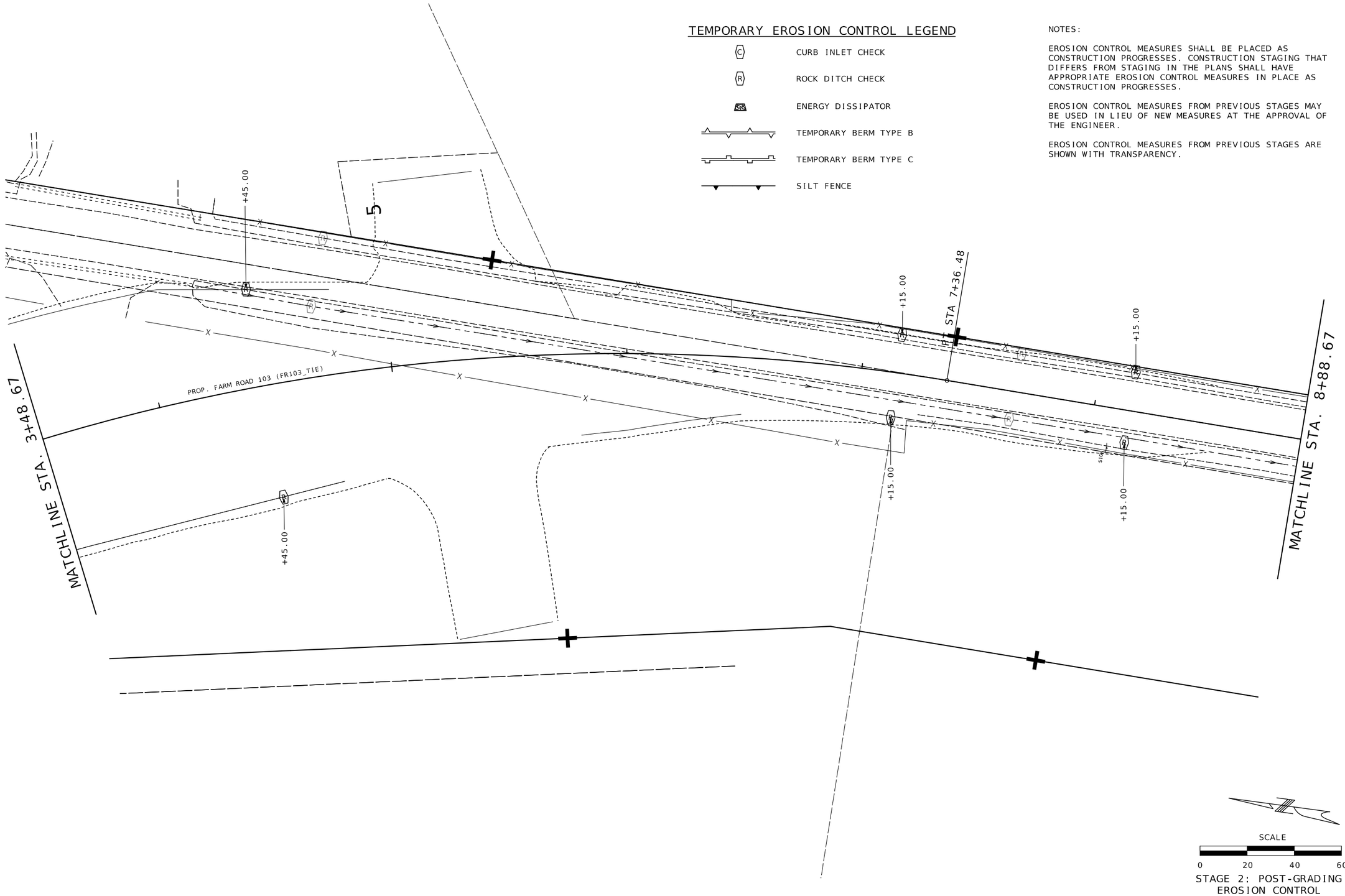


SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 37 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:47:39 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	107

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

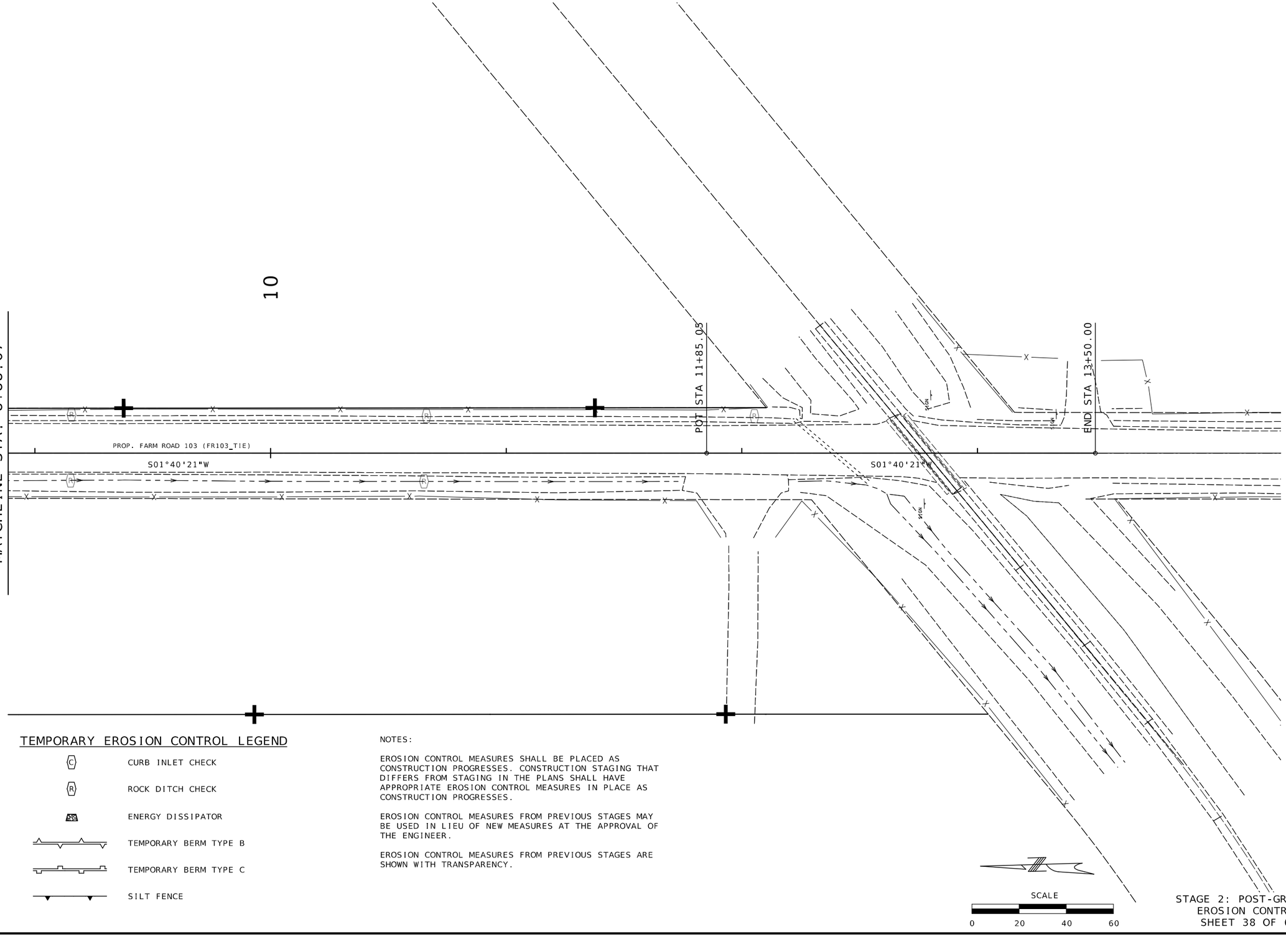
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 38 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:48:01 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	108

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

NOTES:

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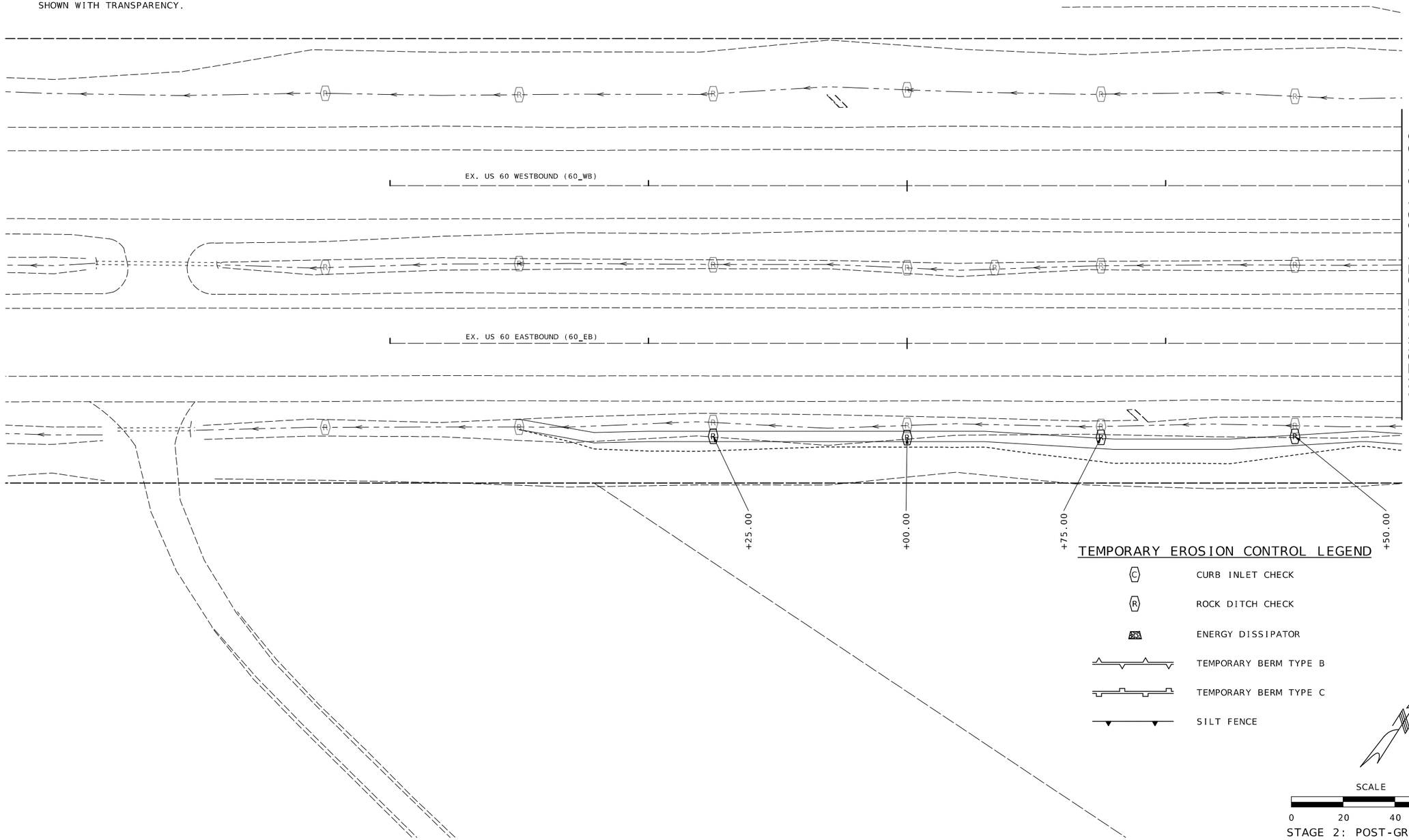


TEMPORARY EROSION CONTROL LEGEND

- C — CURB INLET CHECK
- R — ROCK DITCH CHECK
- ED — ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 39 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:48:22 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	109

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

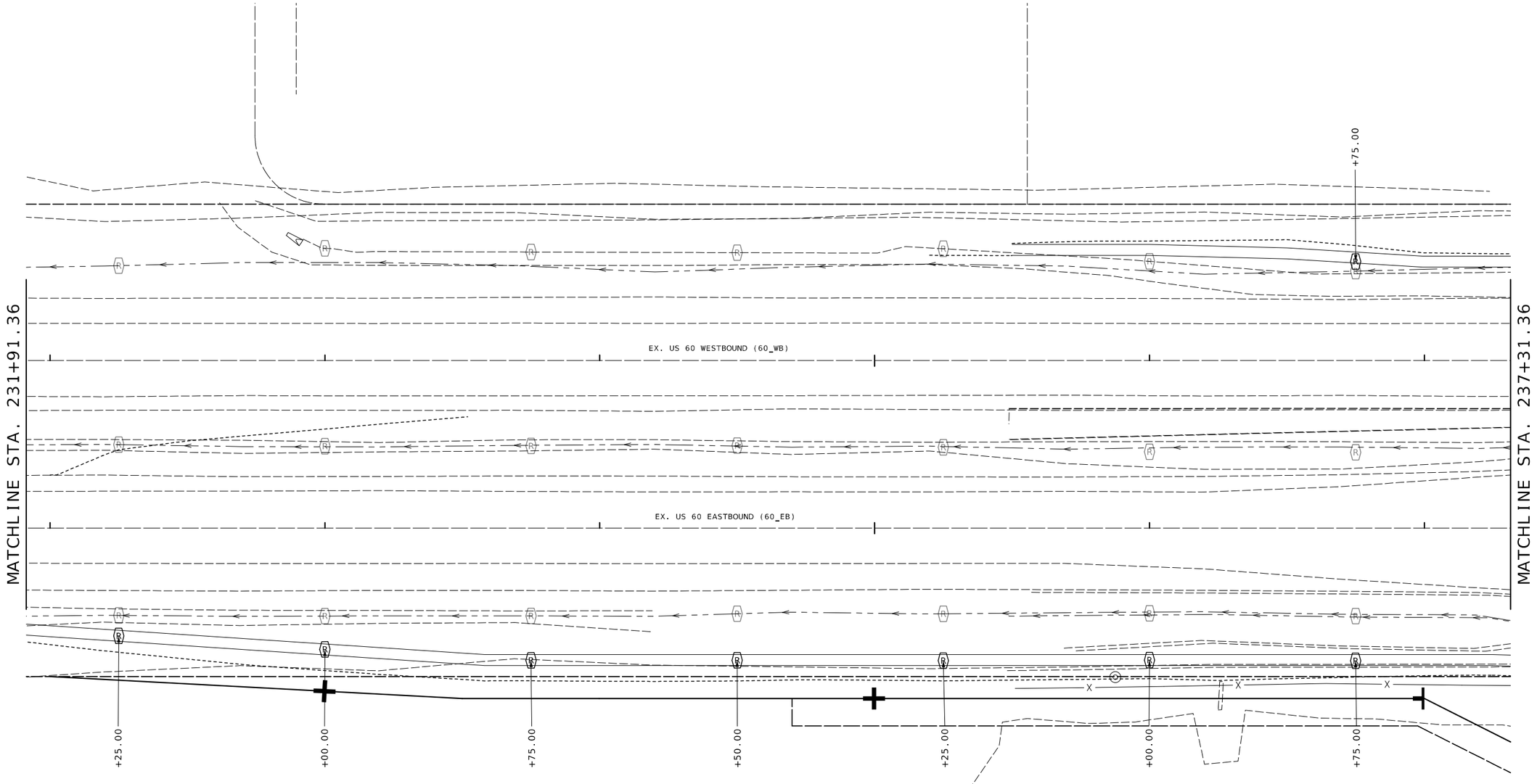
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE
0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 40 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:48:43 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	110

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

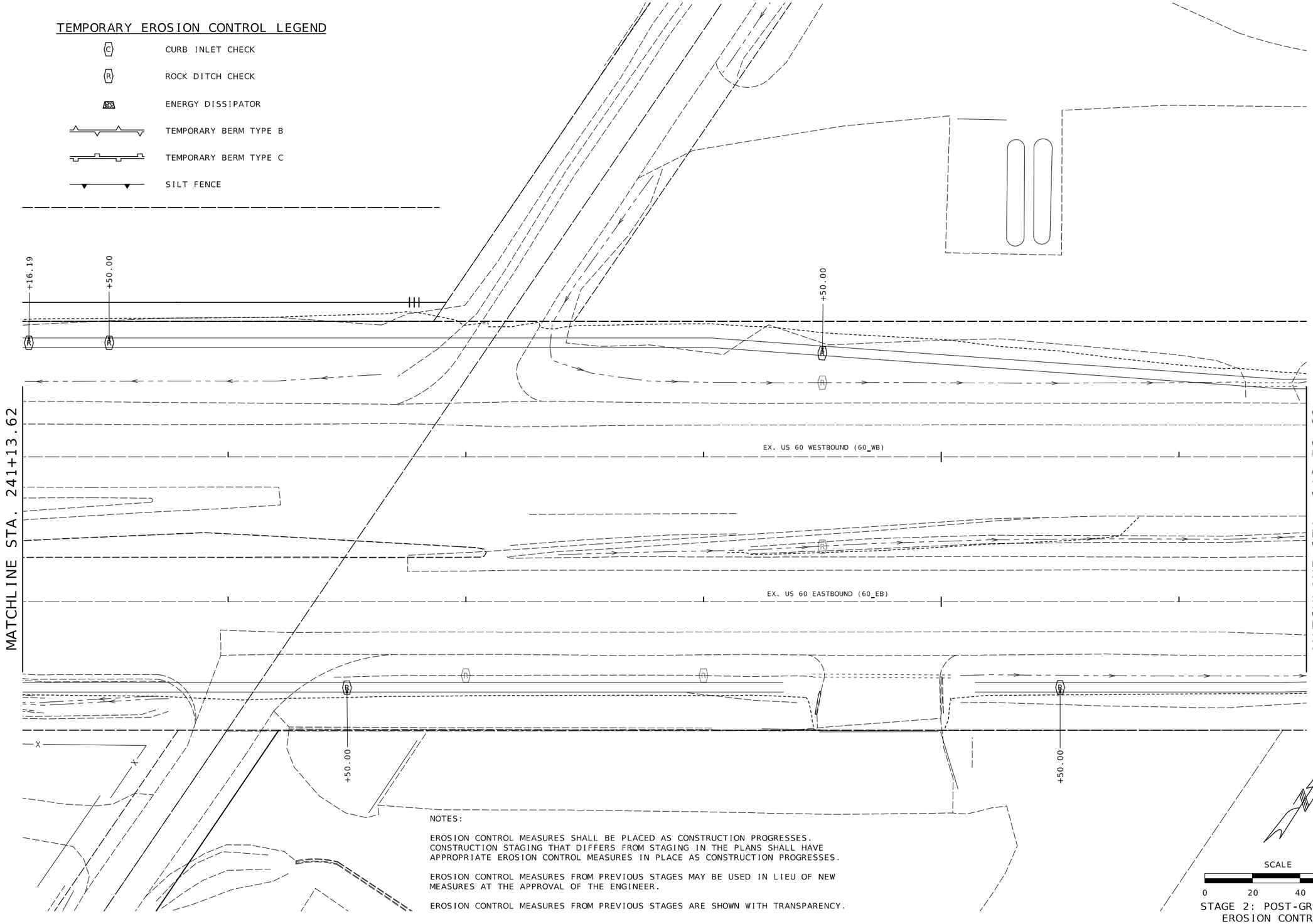
BRIDGE NO.

DESCRIPTION	DATE

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE



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SCALE

0 20 40 60

STAGE 2: POST-GRADING EROSION CONTROL
SHEET 41 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:49:04 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	111

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

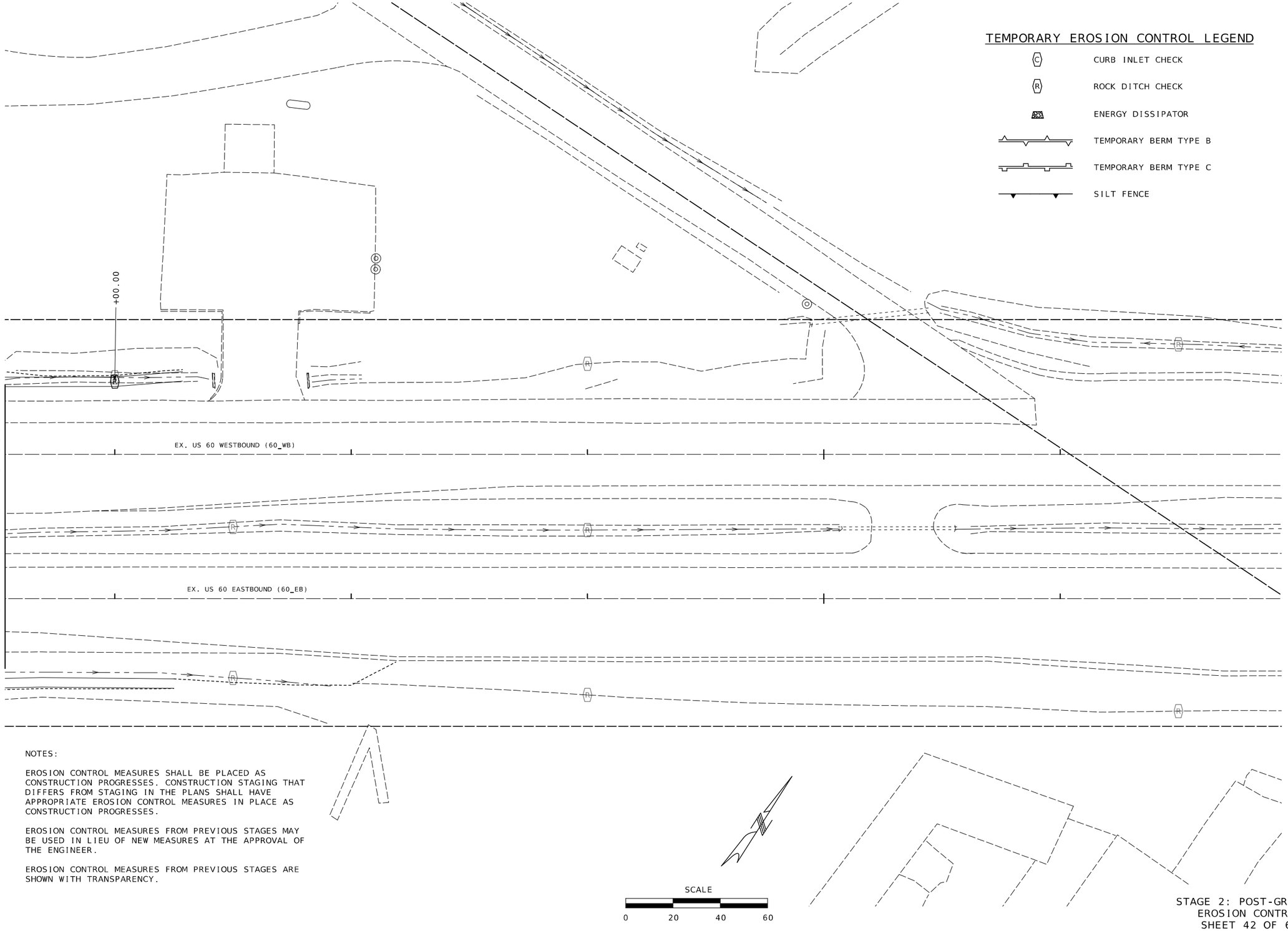
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 2: POST-GRADING
EROSION CONTROL
SHEET 42 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:49:55 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	112

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE STA. 187+53.44

MATCHLINE STA. 23+50.77

MATCHLINE STA. 2+40.00

MATCHLINE STA. 191+35.99

+70.19

+73.12

+34.11

+09.28

+33.26

+70.10

+48.20

+52.28

+16.67

+49.66

+15.23

+51.41

+95.07

+78.76

+79.28

END STA. 26+64.54

START STA. 0+00.00

EX. ROUTE MM (MM_EX)

PROP. ROUTE MM (MM_PR)

N89°33'15"E

SIGN

25

TEMPORARY EROSION CONTROL LEGEND

- C — CURB INLET CHECK
- R — ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES.

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION EROSION CONTROL
SHEET 43 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:50:30 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	113

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

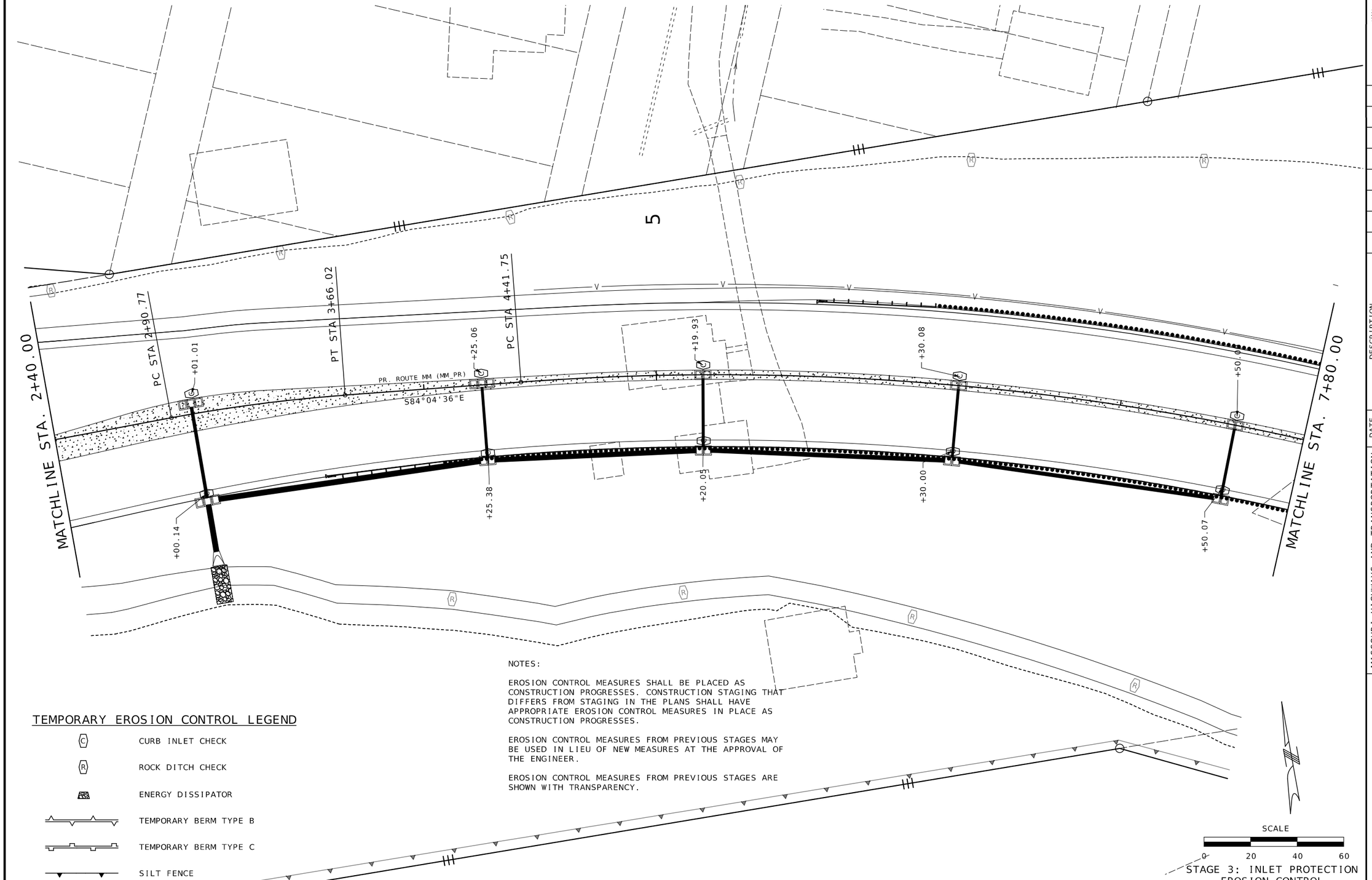
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION
EROSION CONTROL
SHEET 44 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:51:36 PM
WARNER D. SHERMAN II - CIVIL
MO PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	114

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

NOTES:

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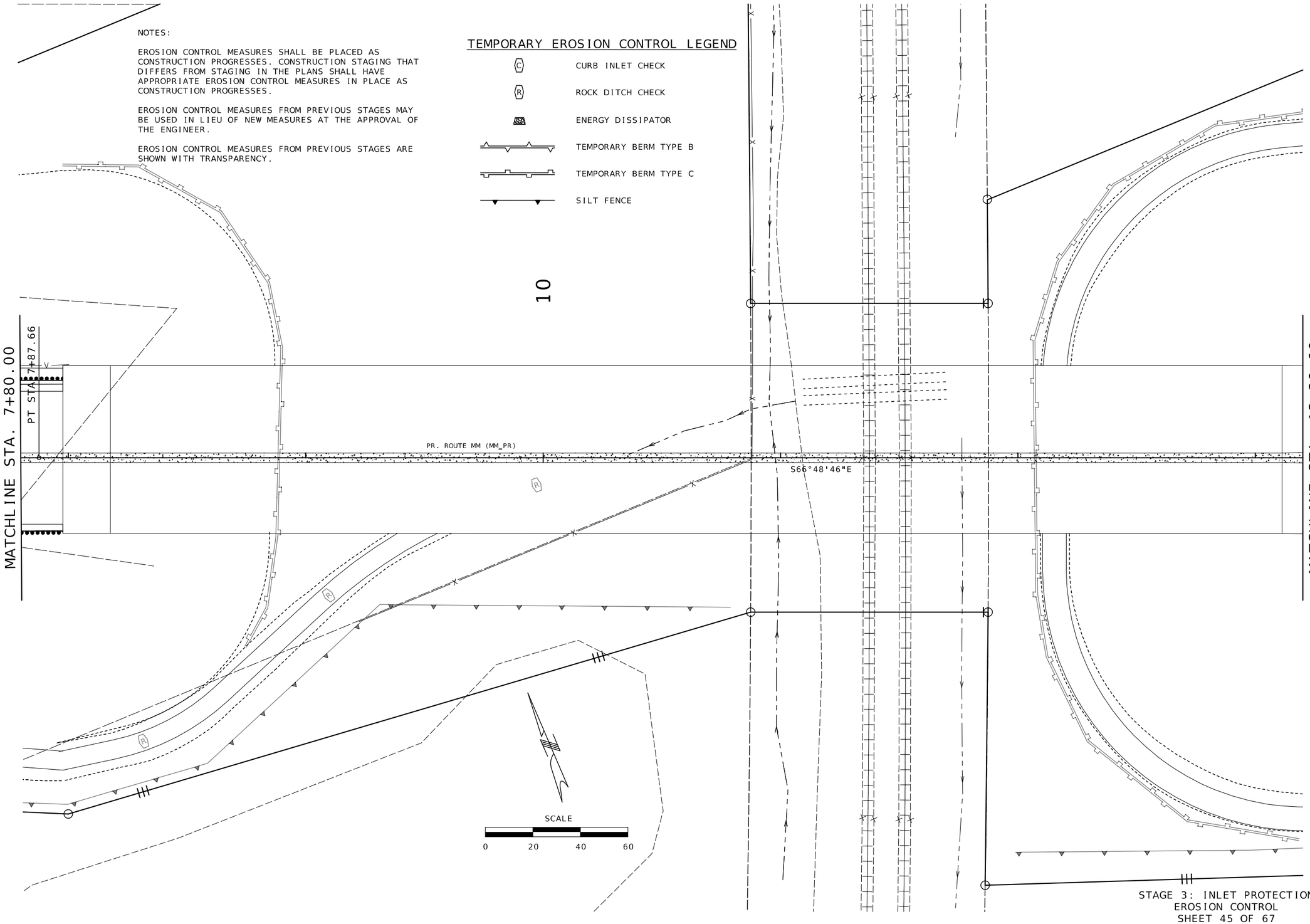
EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

10



STAGE 3: INLET PROTECTION EROSION CONTROL
SHEET 45 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:52:03 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	115

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

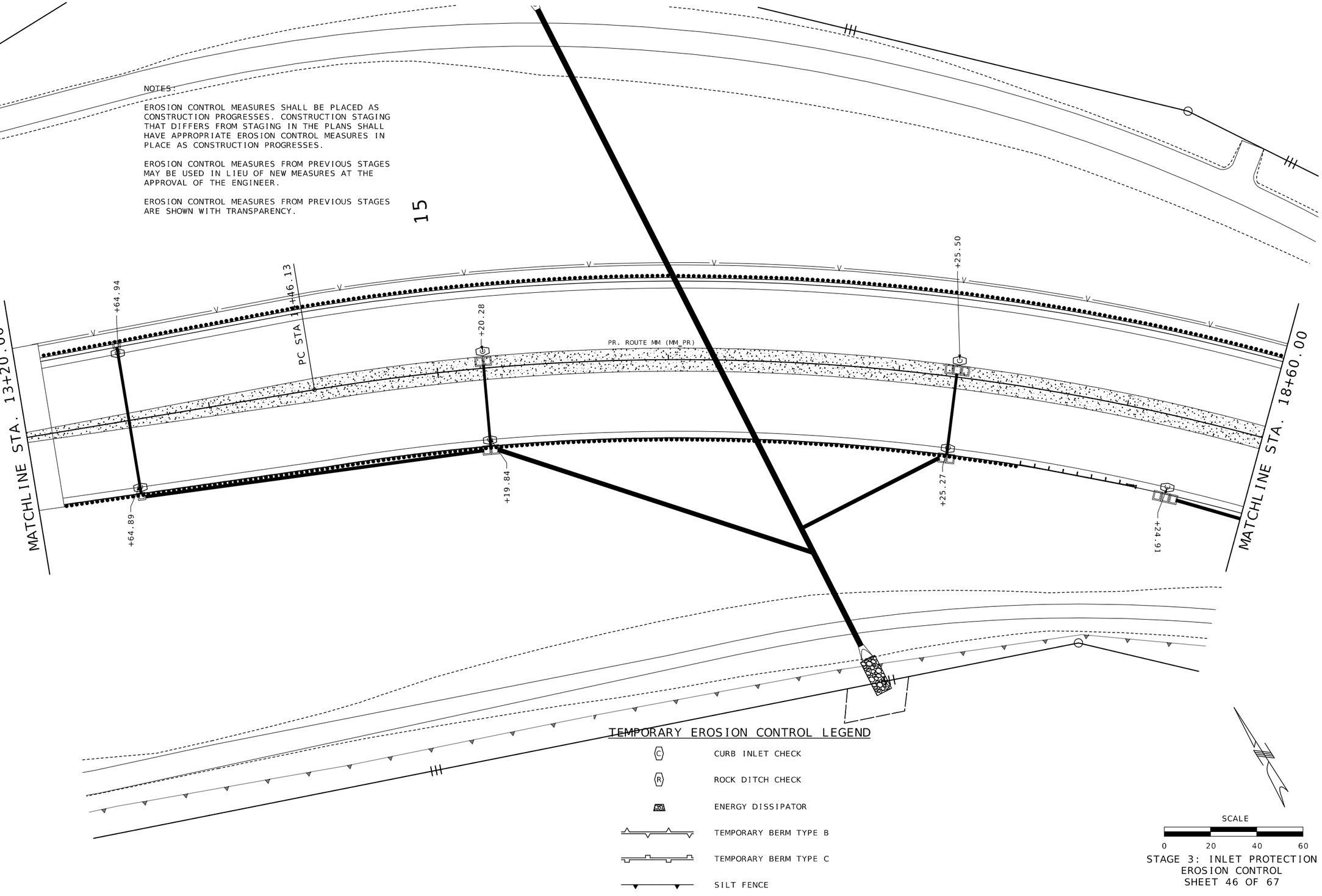
NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

15



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION
EROSION CONTROL
SHEET 46 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:53:02 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	116

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

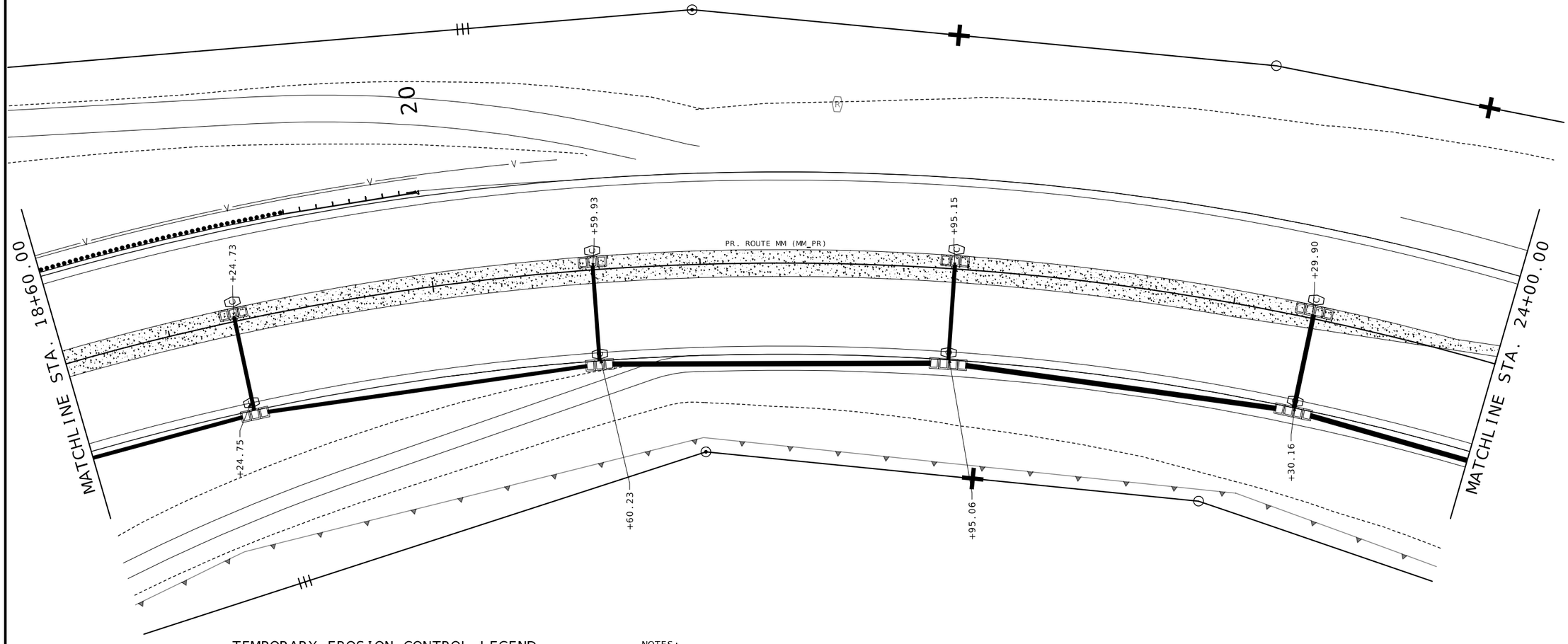
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION
EROSION CONTROL
SHEET 47 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:53:33 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	117

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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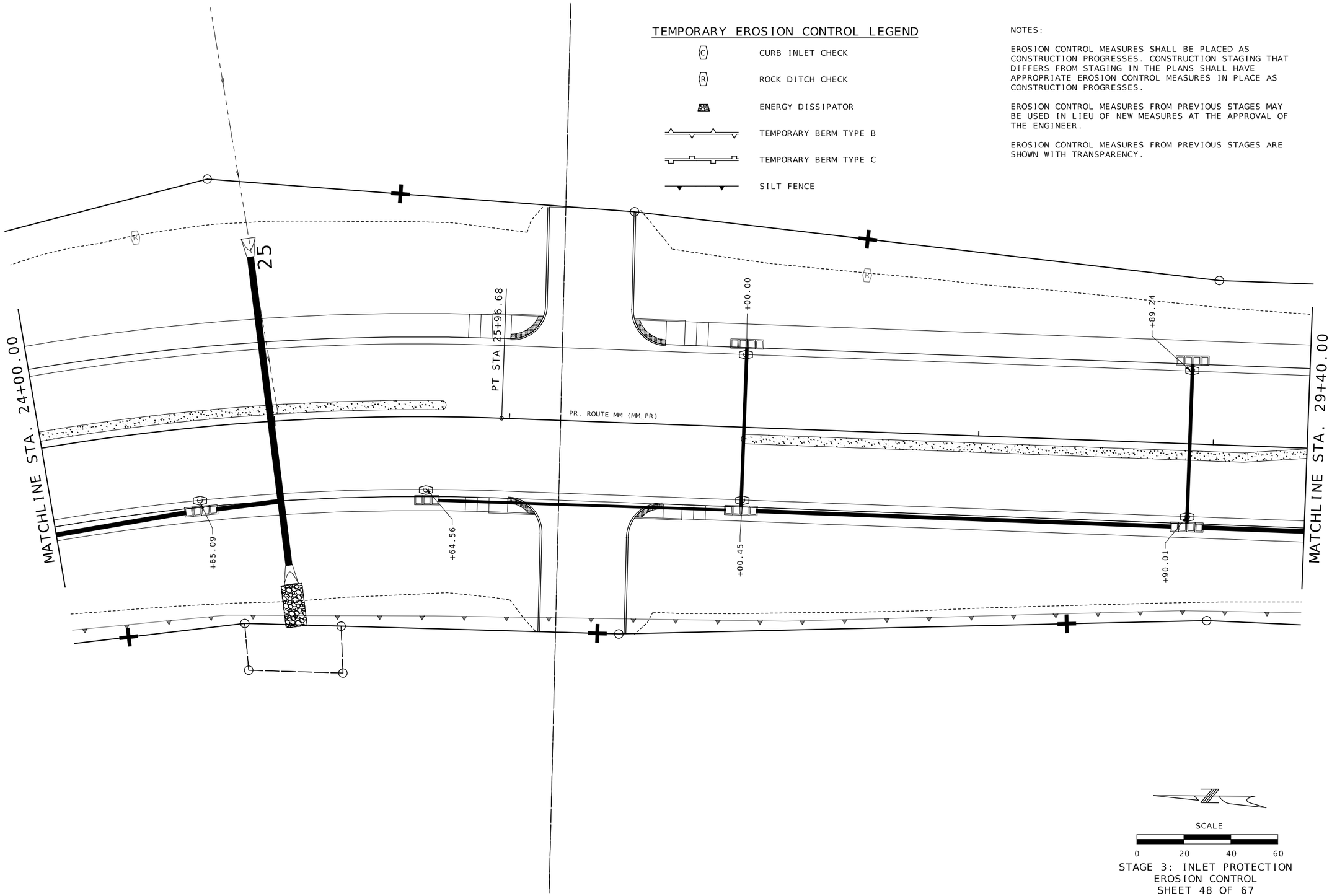


SCALE

0 20 40 60

STAGE 3: INLET PROTECTION
EROSION CONTROL
SHEET 48 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:53:53 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	118

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

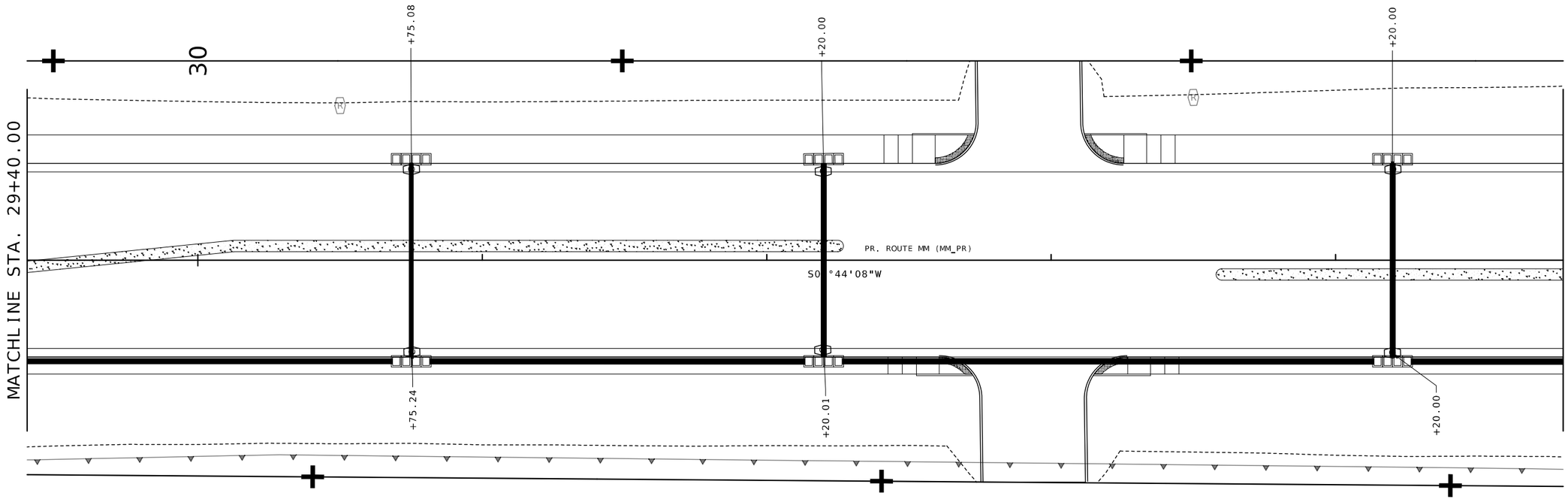
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION
EROSION CONTROL
SHEET 49 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:54:52 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	119

COUNTY
GREENE

JOB NO.
J8S0836D

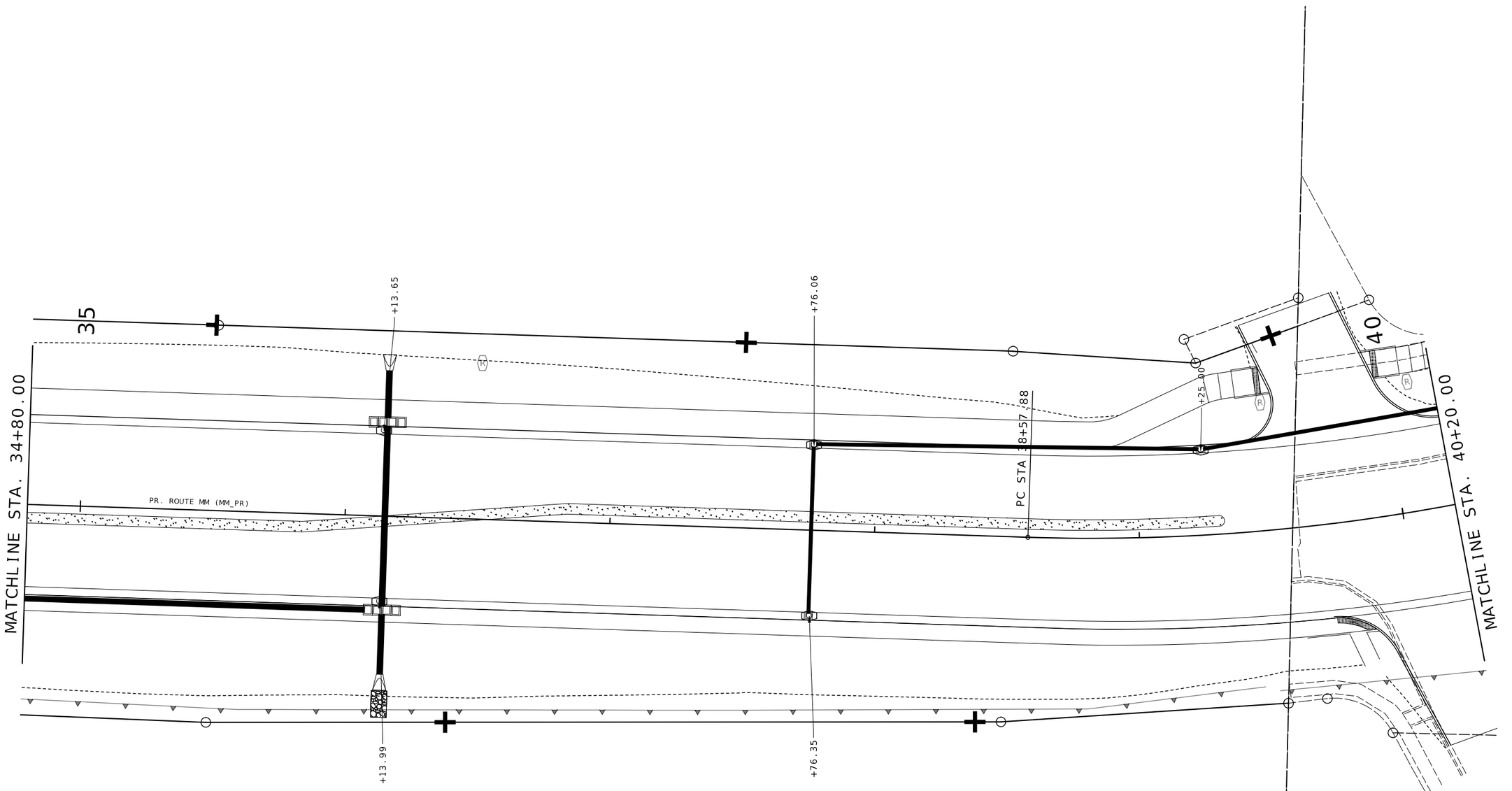
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION
EROSION CONTROL
SHEET 50 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:55:36 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/28/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	120
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MoDOT

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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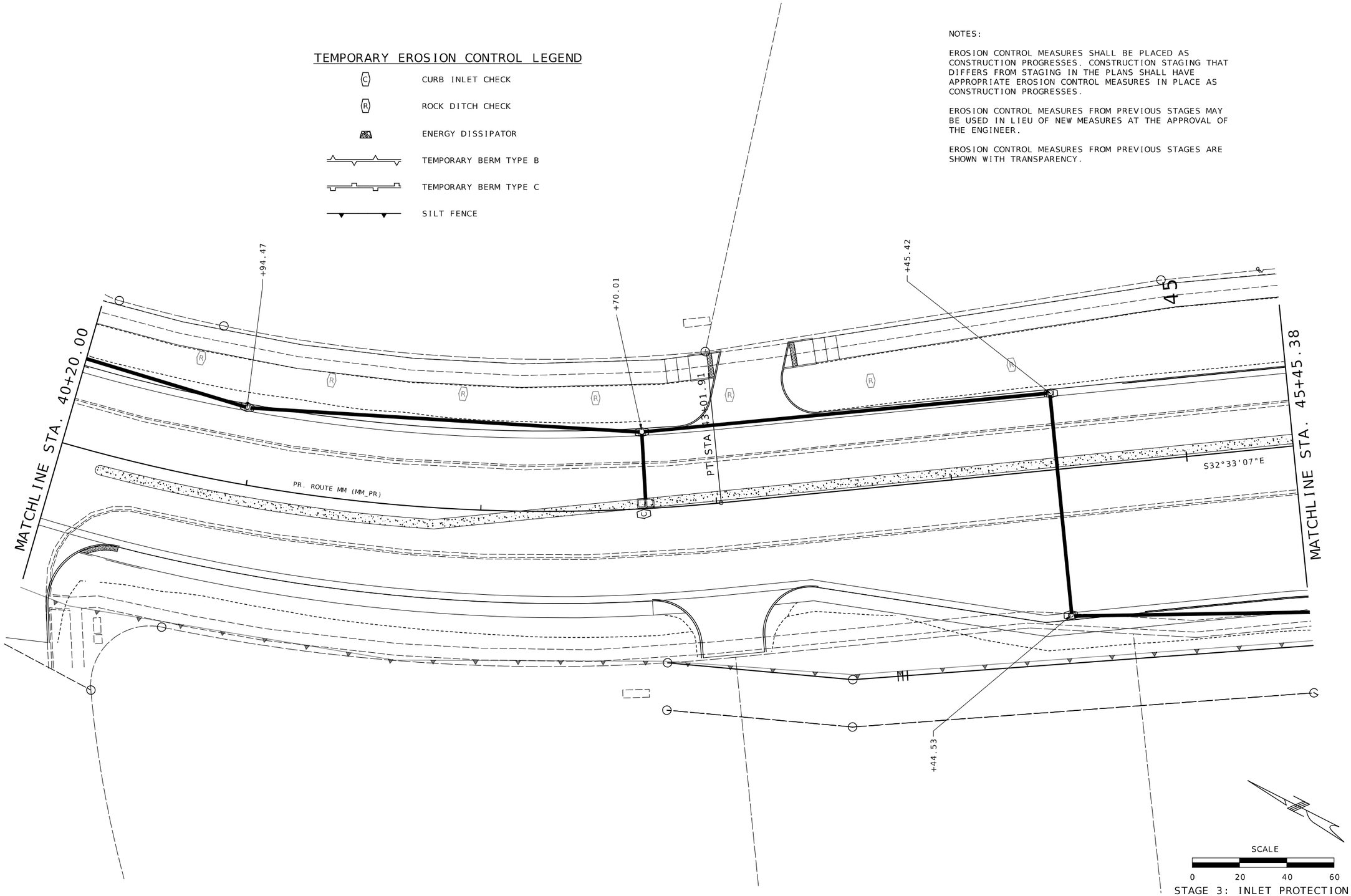


STAGE 3: INLET PROTECTION EROSION CONTROL
SHEET 51 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 1:56:25 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	121

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

MATCHLINE STA. 241+13.62

MATCHLINE STA. 45+45.38

MATCHLINE STA. 3+48.67

MATCHLINE STA. 237+31.36

NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

EX. US 60 WESTBOUND (60_WB)

EX. US 60 EASTBOUND (60_EB)

END STA 47+37.08

START STA 0+00.00

PC STA 2+31.74

PROP. FARM ROAD 103 CONNECTION (FR103_TIE)

S32°33'07"E

. ROUTE MM (MM_PR)

+12.23

+18.75

239+96.45

240+02.68

+94.36

+02.31

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 3: INLET PROTECTION EROSION CONTROL
SHEET 52 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 1:57:18 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	122

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

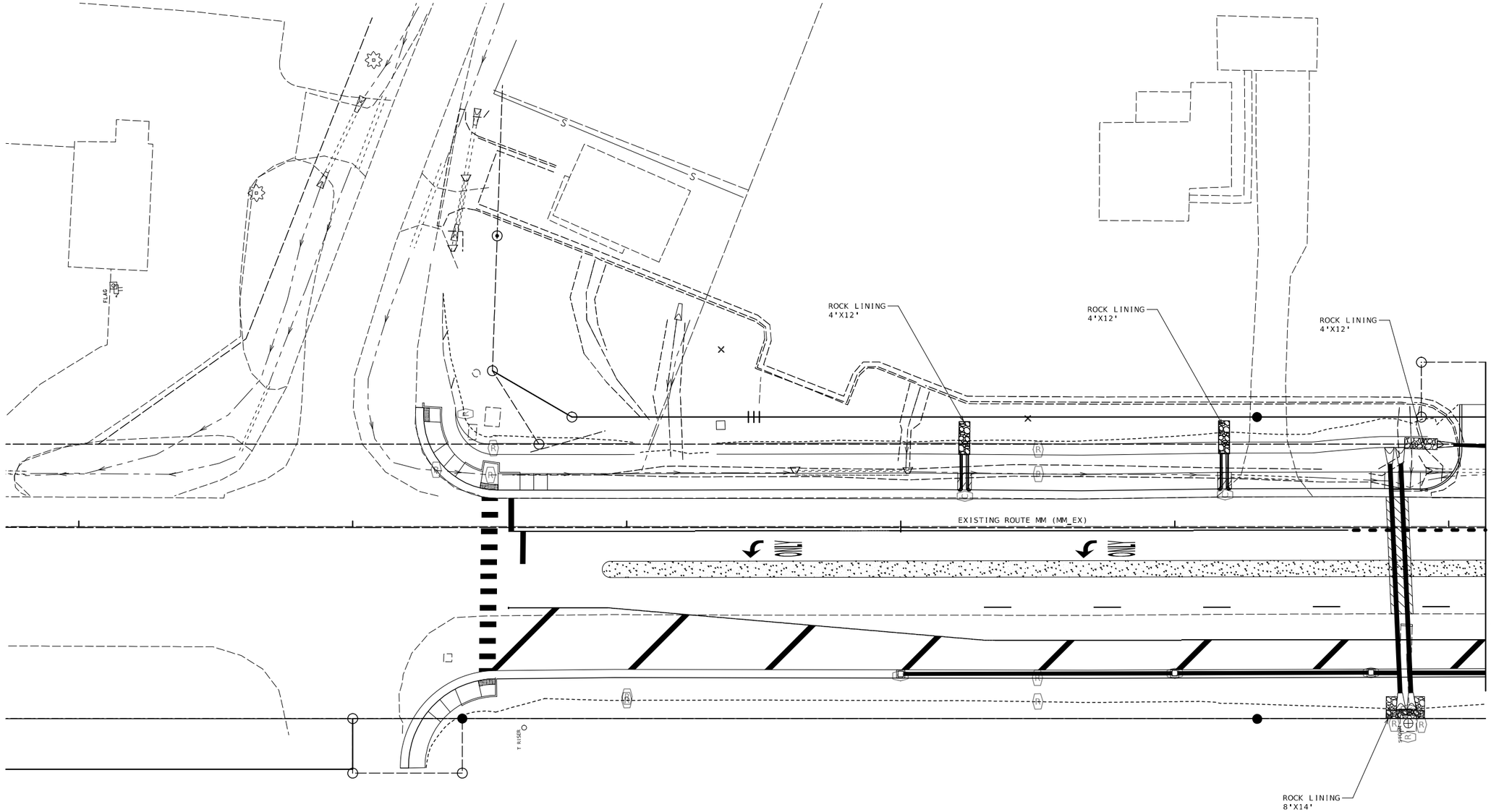
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 53 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:05:42 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	123

COUNTY
GREENE

JOB NO.
J8S0836D

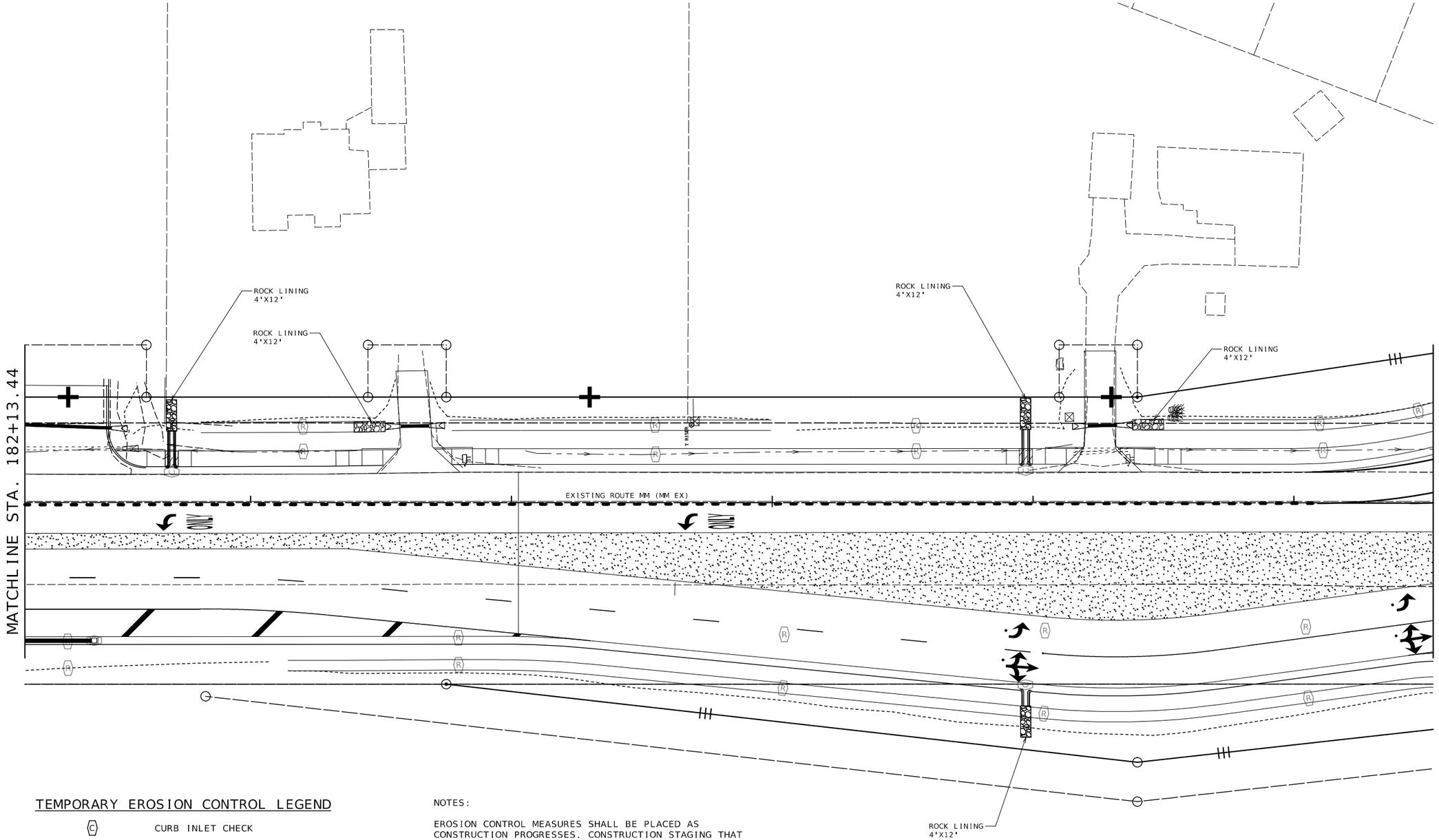
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION
EROSION CONTROL
SHEET 54 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:06:09 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	124

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

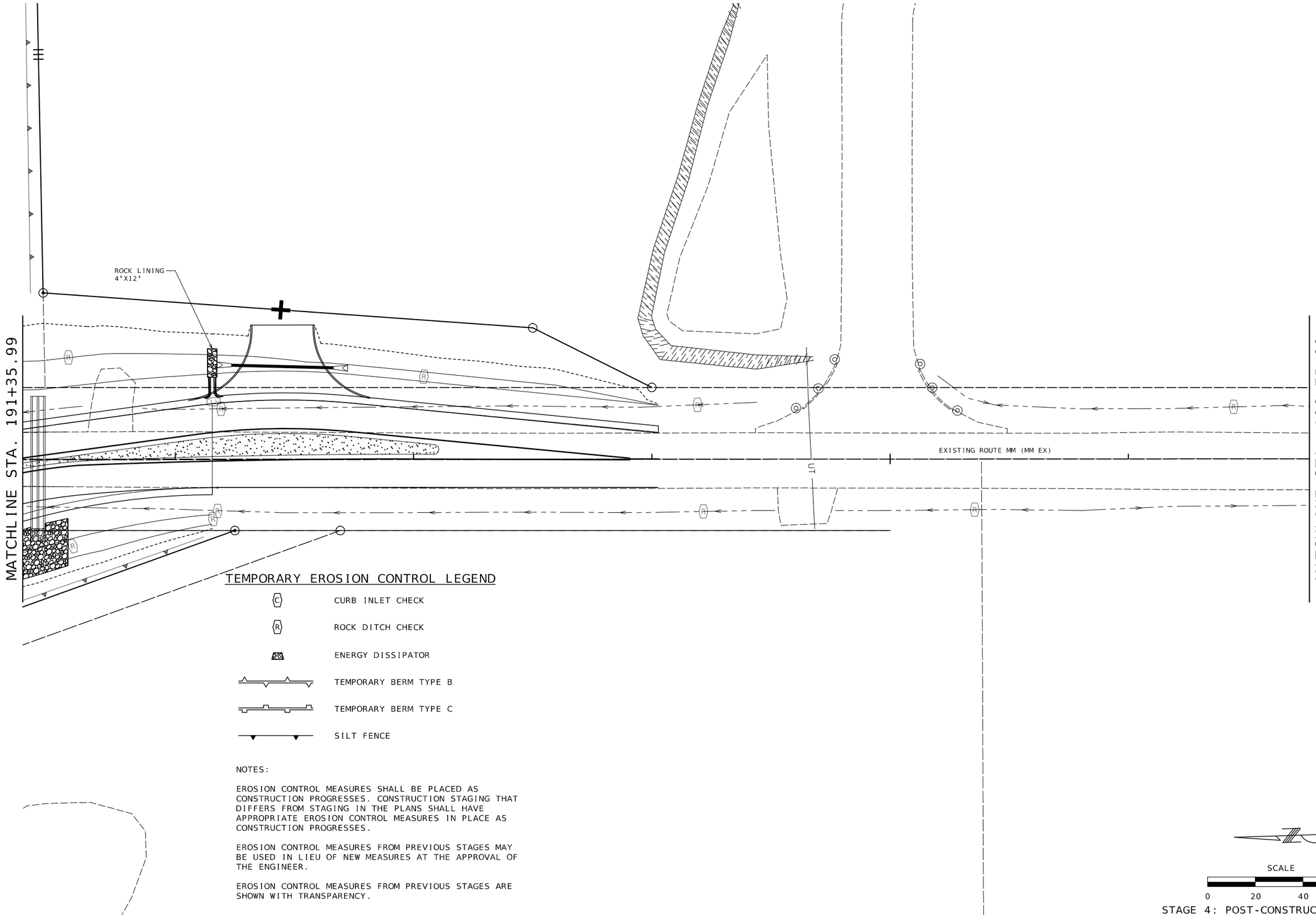
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 55 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:06:33 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	125

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

MATCHLINE STA. 187+53.44

MATCHLINE STA. 23+50.77

MATCHLINE STA. 2+40.00

ROCK LINING
4'X12'

ROCK LINING
4'X12'

ROCK LINING
7'X16'

ROCK LINING
6'X14'

ROCK LINING
4'X12'

TYPE 3 ROCK
DITCH LINER &
8" BEDDING

PROPOSED ROUTE MM (MM PR)

EXISTING ROUTE MM (MM EX)

START STA. 0+00.00

END STA. 26+64.54

N89°33'15"E

PP
P RISER

SIGN

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION
EROSION CONTROL
SHEET 56 OF 67

MATCHLINE STA. 191+35.99

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:07:00 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	126

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

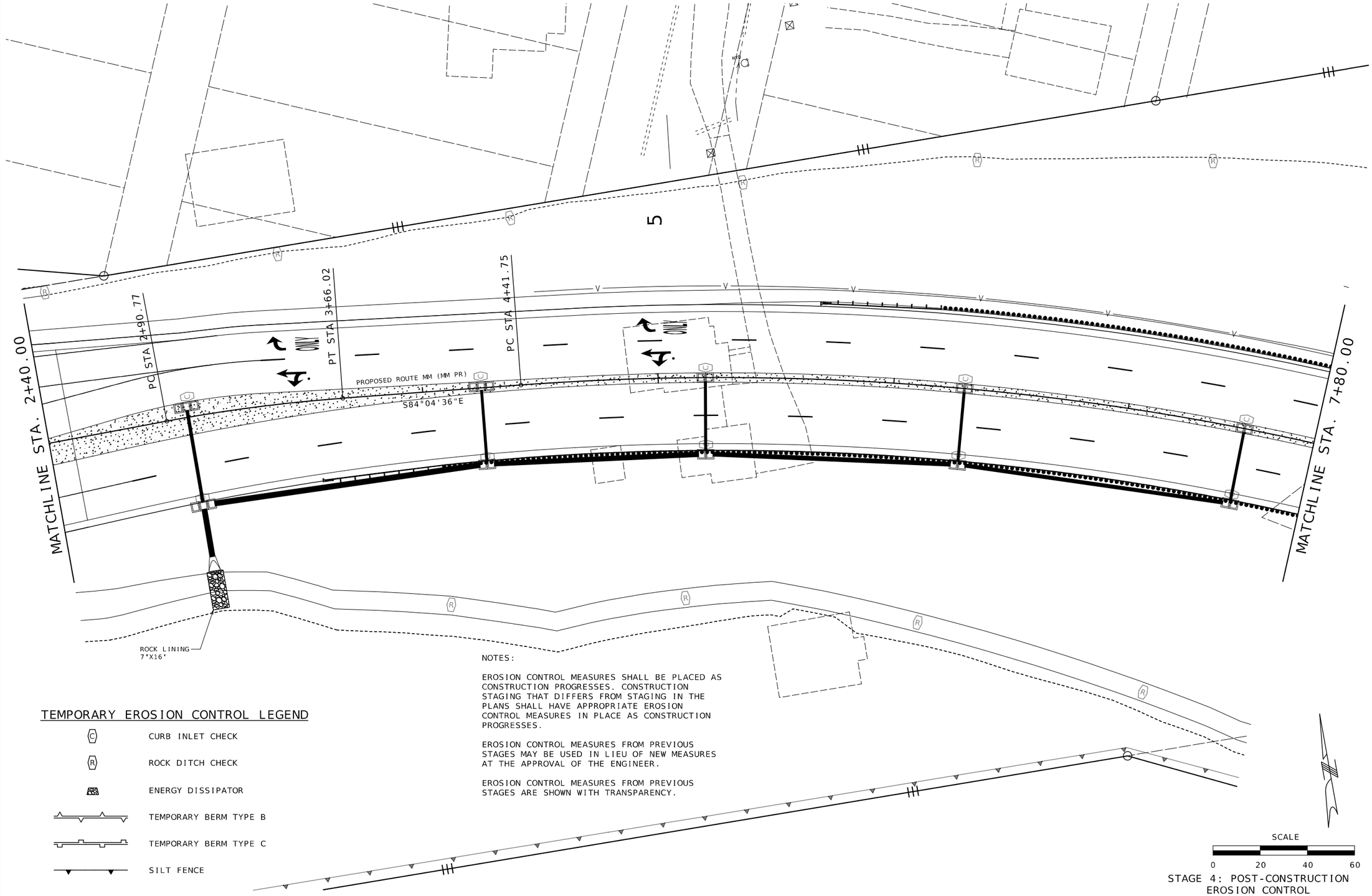
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 57 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:07:21 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	127

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

10

MATCHLINE STA. 7+80.00

PT STA 7+87.66

PROPOSED ROUTE MM (MM PR)

S66°48'46"E

MATCHLINE STA. 13+20.00

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 58 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

07/28/2025 2:07:42 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	128

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

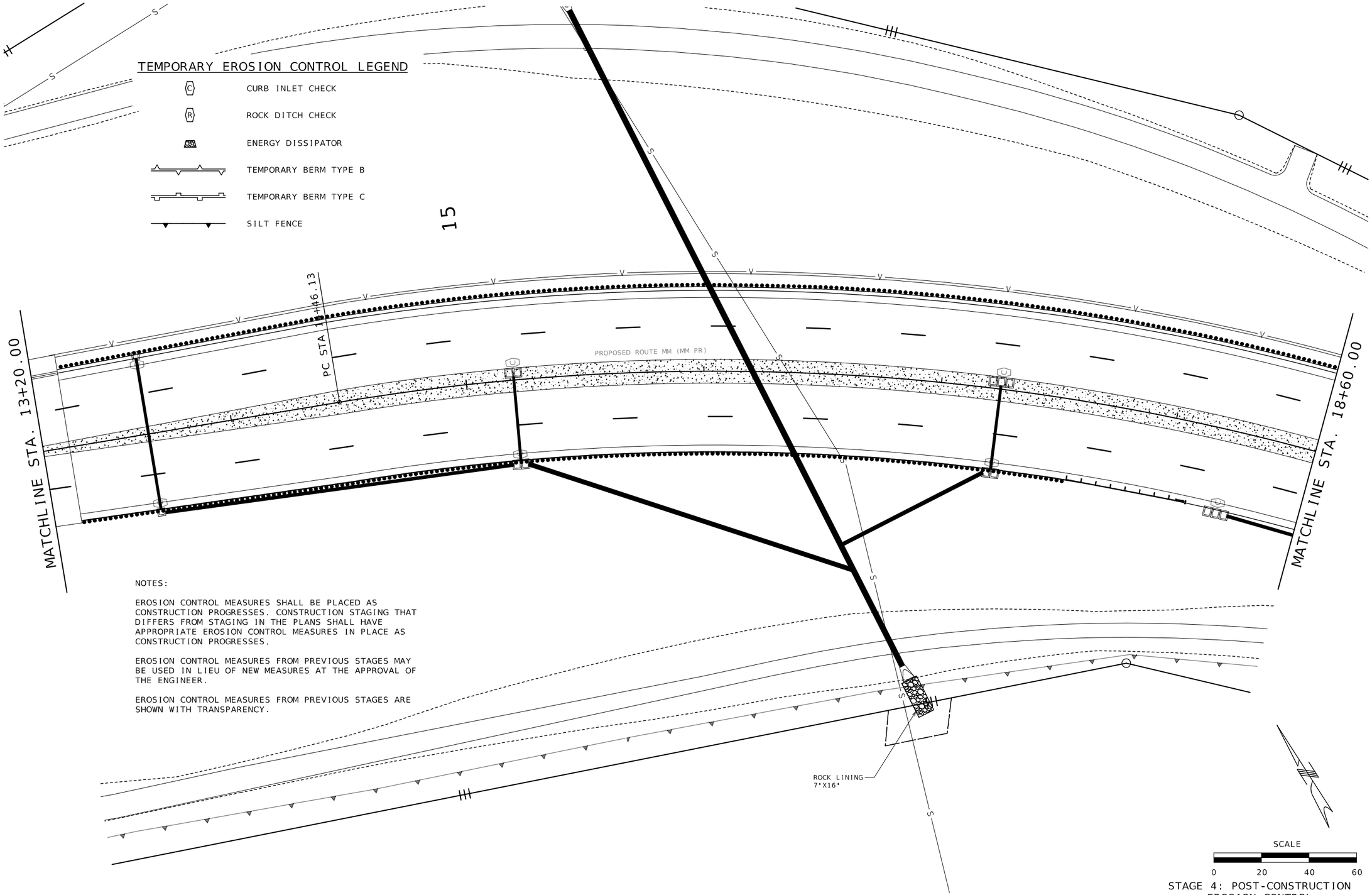
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE



NOTES:

EROSION CONTROL MEASURES SHALL BE PLACED AS CONSTRUCTION PROGRESSES. CONSTRUCTION STAGING THAT DIFFERS FROM STAGING IN THE PLANS SHALL HAVE APPROPRIATE EROSION CONTROL MEASURES IN PLACE AS CONSTRUCTION PROGRESSES.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES MAY BE USED IN LIEU OF NEW MEASURES AT THE APPROVAL OF THE ENGINEER.

EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 59 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:08:41 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	129

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

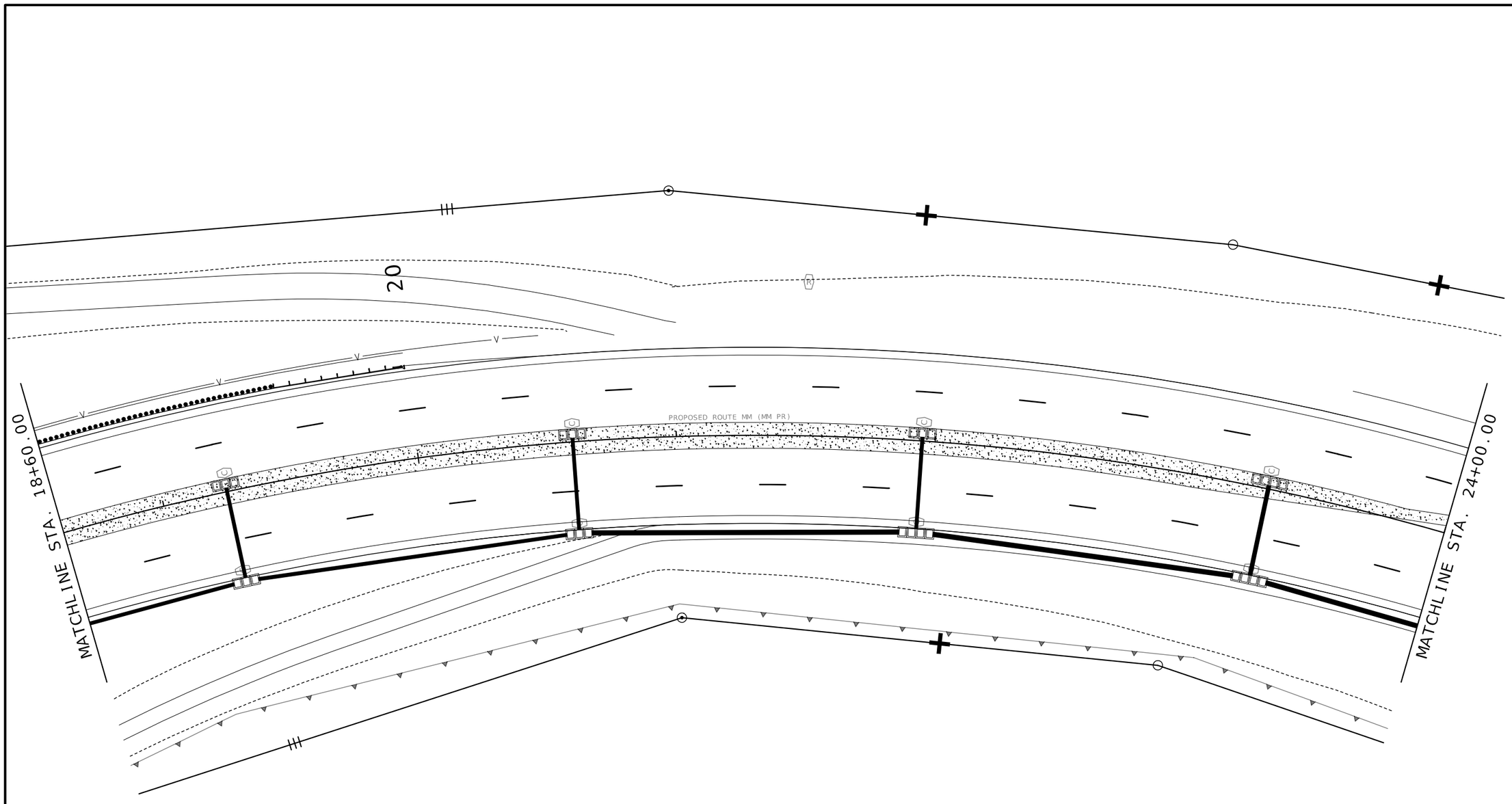
PROJECT NO.:

BRIDGE NO.:

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 60 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:09:11 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	130

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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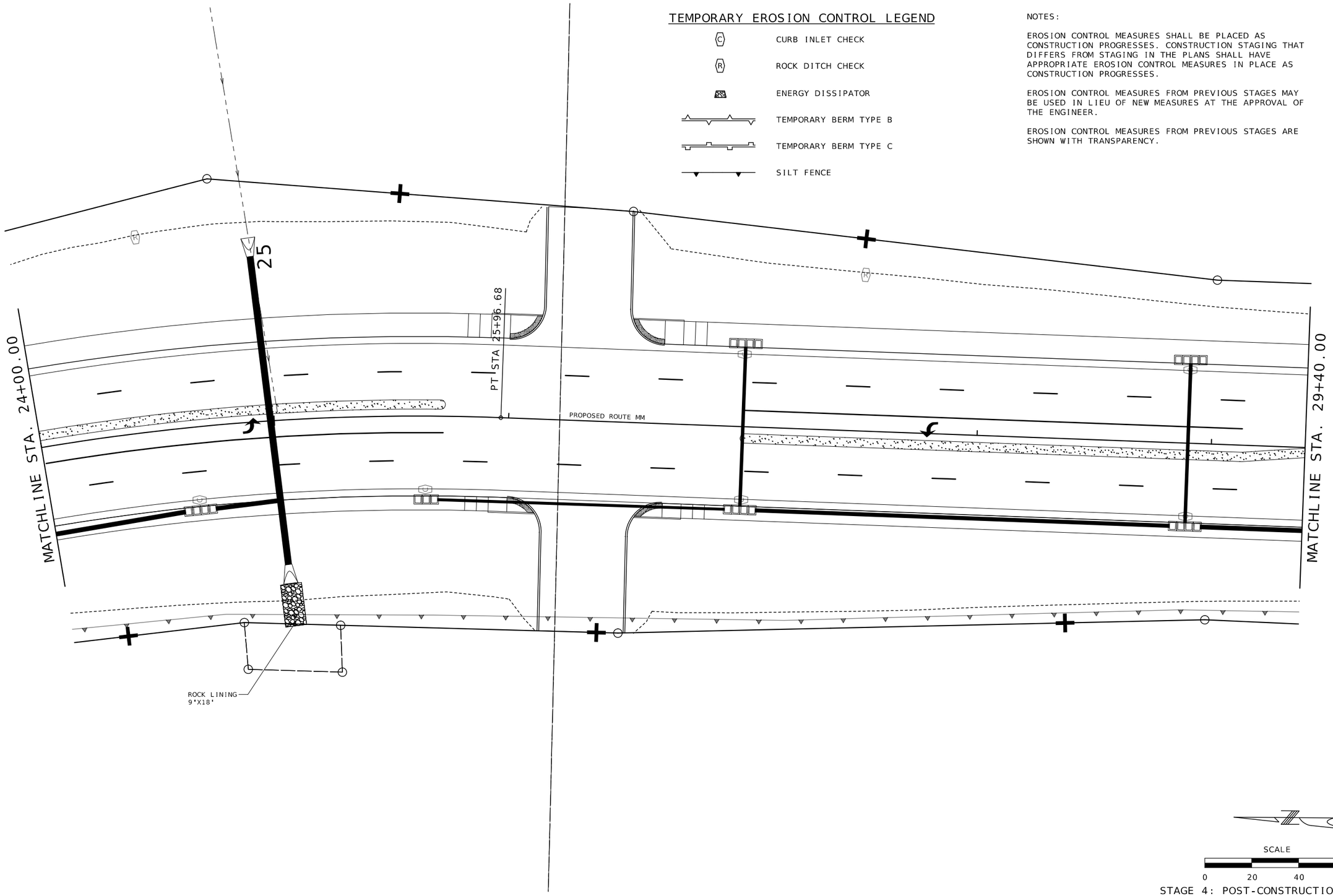


SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 61 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 2:09:44 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

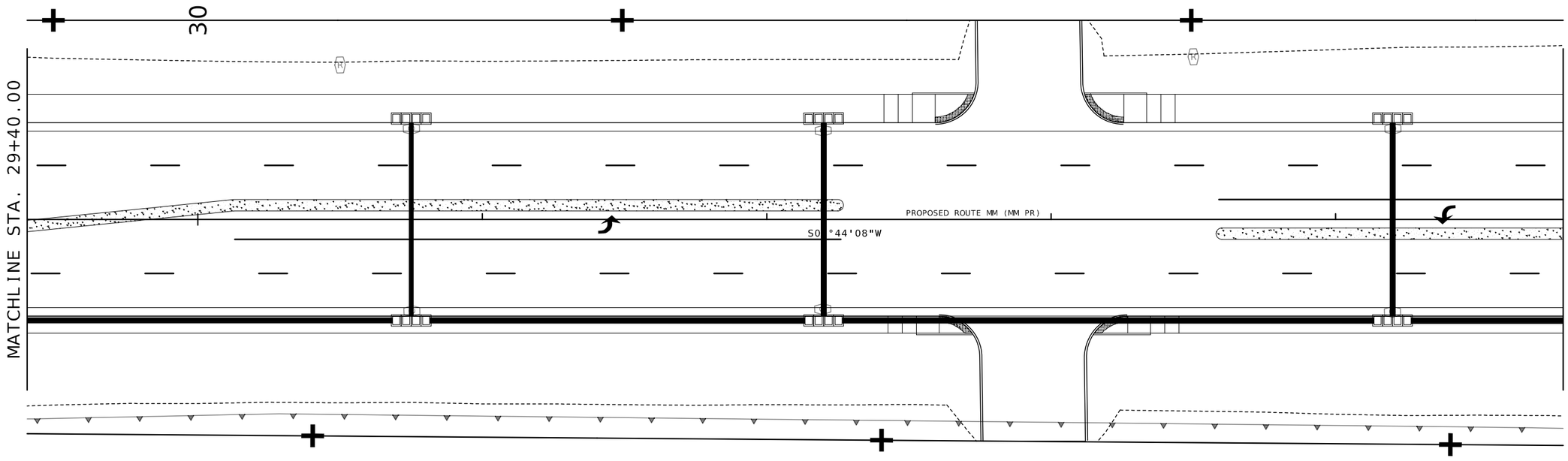
DATE PREPARED: 7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	131

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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



TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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EROSION CONTROL MEASURES FROM PREVIOUS STAGES ARE SHOWN WITH TRANSPARENCY.

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 62 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:10:12 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	132

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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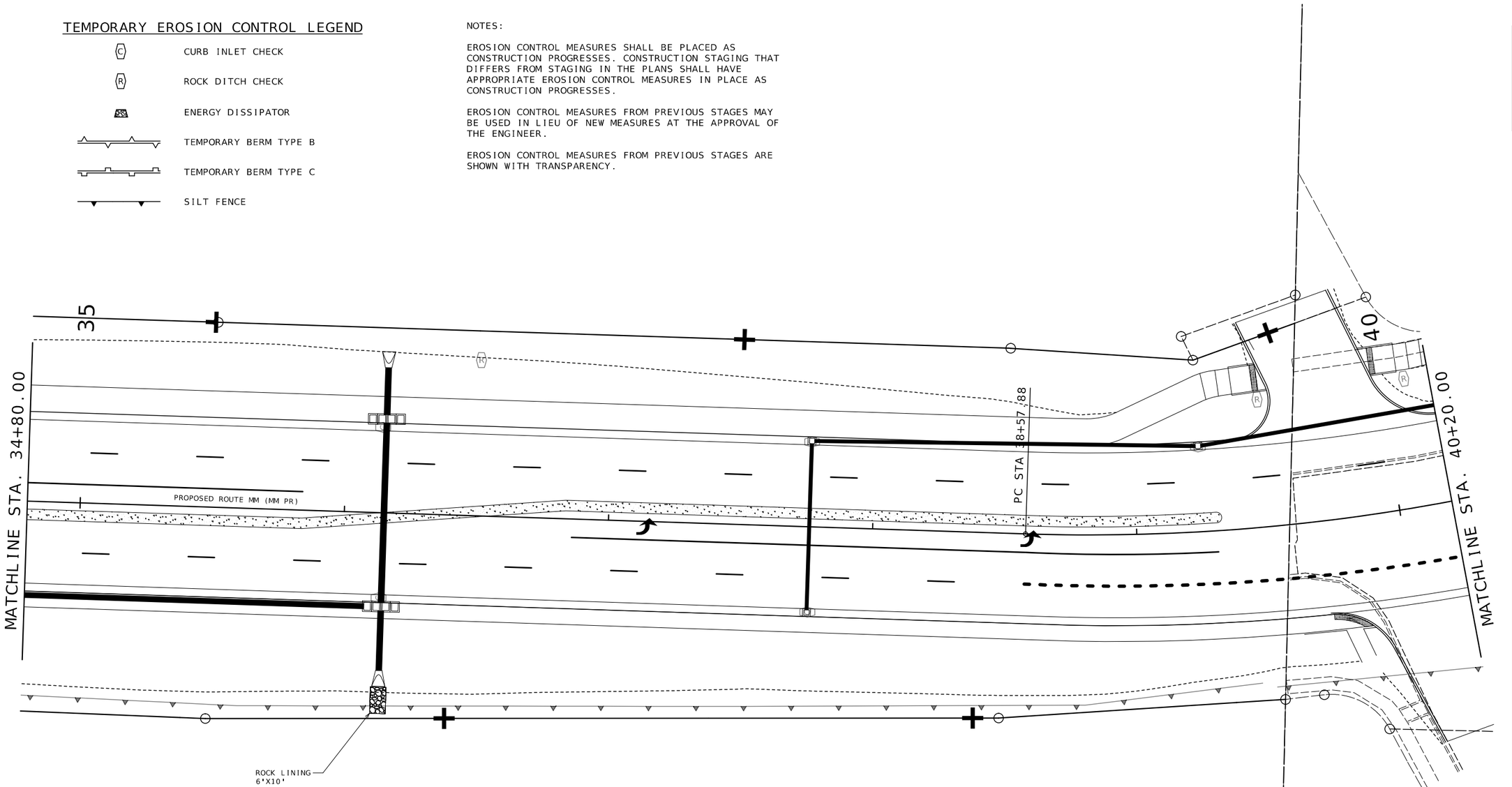

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 63 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:10:36 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED	7/28/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	133
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

NOTES:

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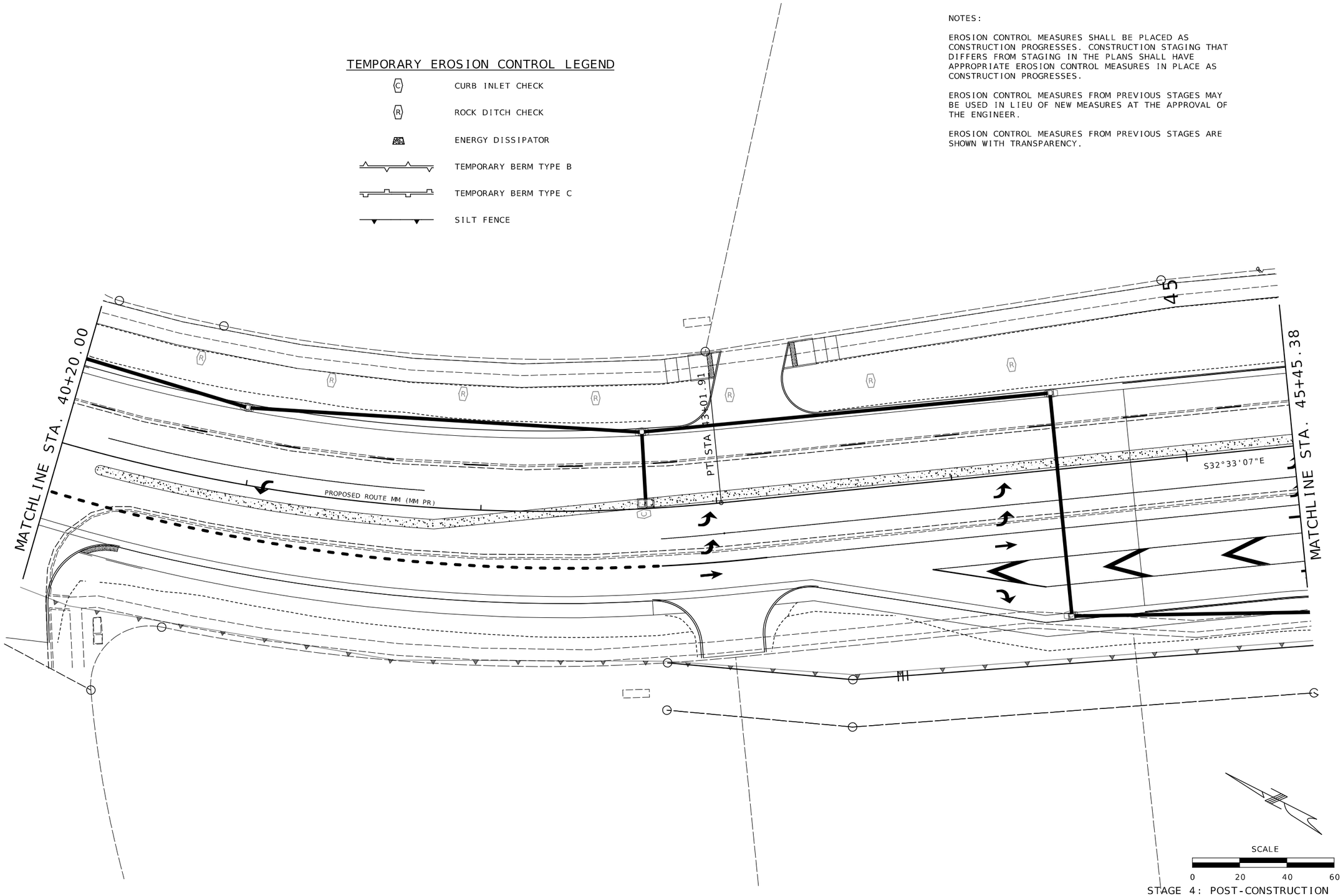

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 64 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:10:58 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	134

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE STA. 241+13.62

NOTES:

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MATCHLINE STA. 45+45.38

PROPOSED ROUTE MM (MM PR)

EX. US 60 WESTBOUND (60 WB)

END STA 47+37.08

START STA 0+00.00

EX. US 60 EASTBOUND (60 EB)

PC STA 2+11.74

PROP. FARM ROAD 103 CONNECTION (FR103_TIE)

MATCHLINE STA. 3+48.67

ROCK LINING
4'X12'

MATCHLINE STA. 237+31.36

TEMPORARY EROSION CONTROL LEGEND

- CURB INLET CHECK
- ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE
0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 65 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 2:11:20 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	135

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

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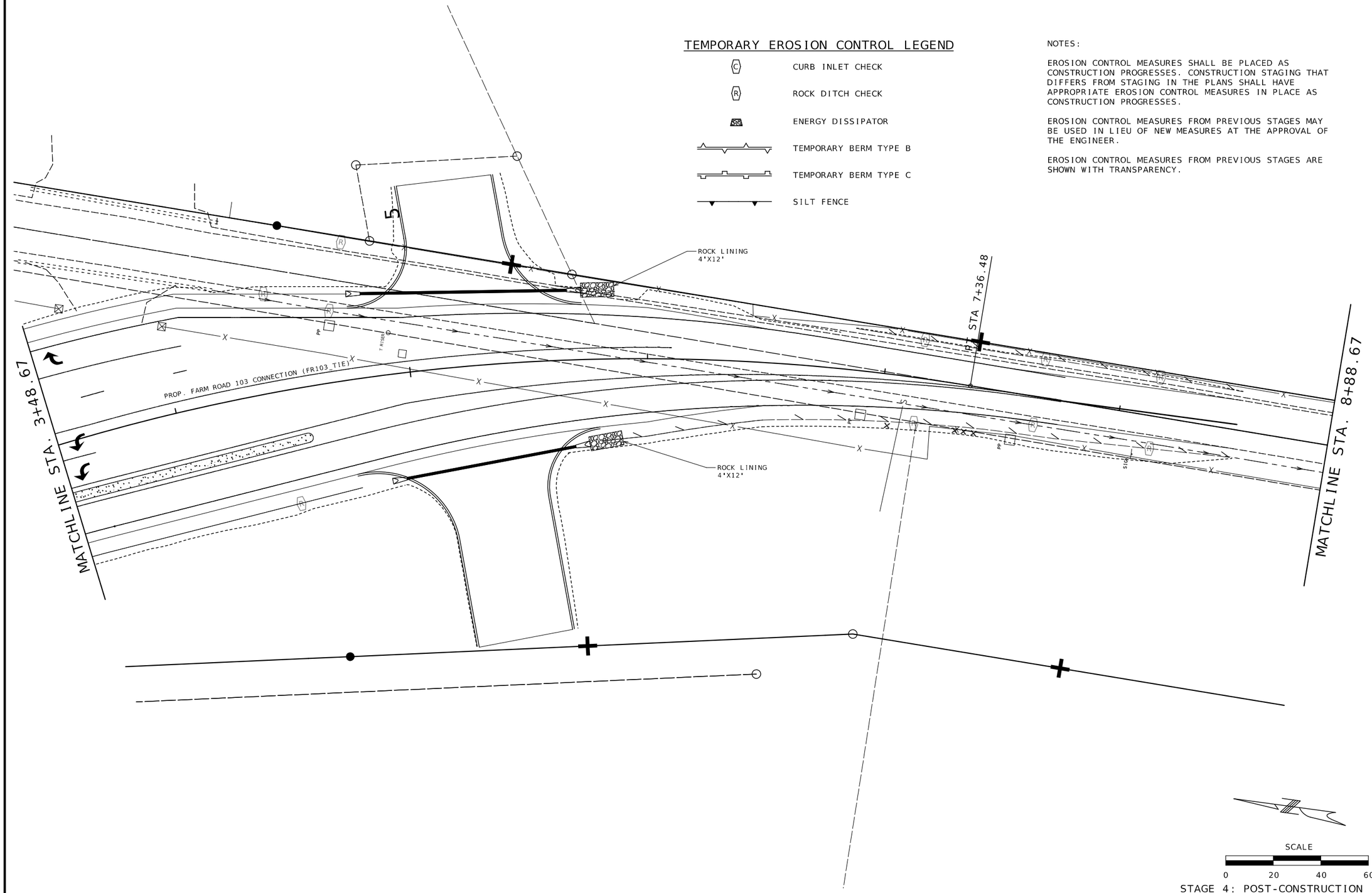


STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 66 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

07/28/2025 2:11:48 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	136

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

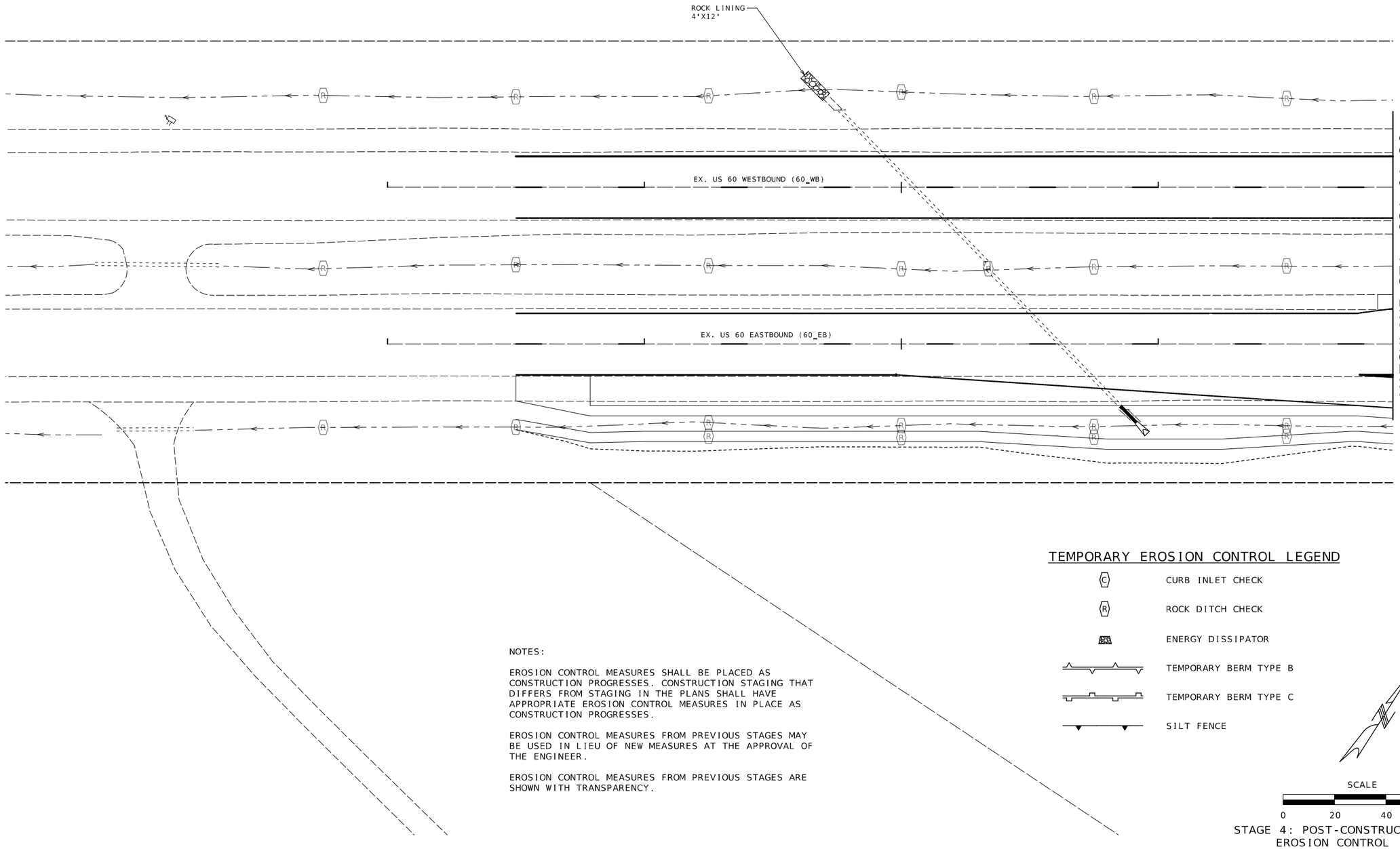
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



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TEMPORARY EROSION CONTROL LEGEND

- (C) CURB INLET CHECK
- (R) ROCK DITCH CHECK
- ENERGY DISSIPATOR
- TEMPORARY BERM TYPE B
- TEMPORARY BERM TYPE C
- SILT FENCE

SCALE

0 20 40 60

STAGE 4: POST-CONSTRUCTION EROSION CONTROL
SHEET 67 OF 67

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 2:12:12 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	137

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

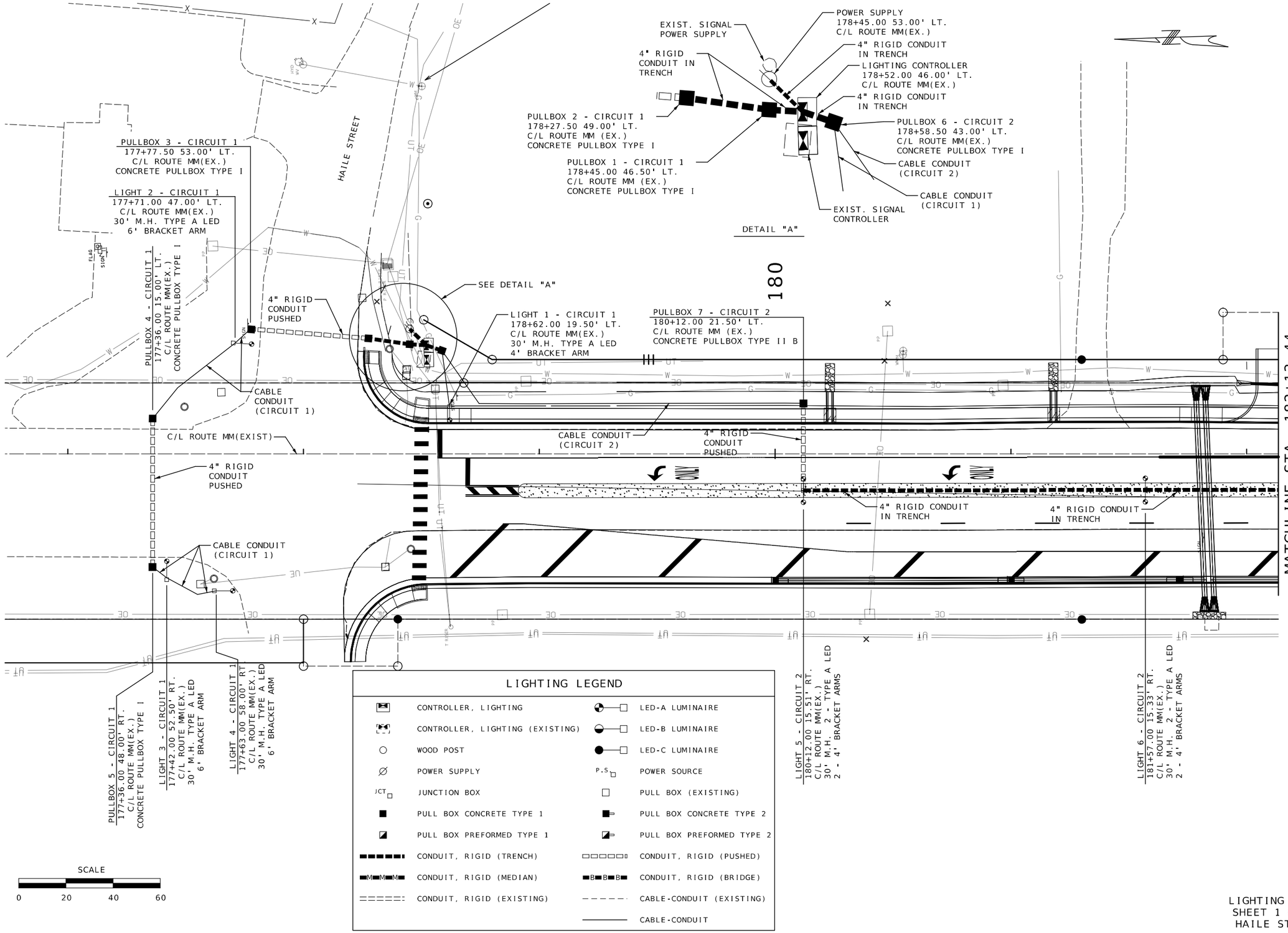
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

LIGHTING SHEET
SHEET 1 OF 15
HAILE STREET

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:57:23 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/25/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	138
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

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

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M M M	CONDUIT, RIGID (MEDIAN)	B B B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

185

MATCHLINE STA. 182+13.44

MATCHLINE STA. 187+53.44

C/L ROUTE MM (EX.)

N90°00'00"E

4" RIGID CONDUIT IN TRENCH

4" RIGID CONDUIT IN TRENCH

4" RIGID CONDUIT IN TRENCH

4" RIGID CONDUIT IN TRENCH

4" RIGID CONDUIT PUSHED

4" RIGID CONDUIT PUSHED

CABLE CONDUIT (CIRCUIT 2-4)

CABLE CONDUIT (CIRCUIT 2-4)

PULLBOX 6 - CIRCUIT 2-4
187+22.50 23.50' LT.
C/L ROUTE MM(EX.)
CONCRETE PULLBOX TYPE II B

LIGHT 6 - CIRCUIT 2
187+27.00 23.91' RT.
C/L ROUTE MM(EX.)
30' M.H. 2 - TYPE A LED
2 - 8' BRACKET ARMS

LIGHT 7 - CIRCUIT 2
183+02.00 15.17' RT.
C/L ROUTE MM(EX.)
30' M.H. 2 - TYPE A LED
2 - 4' BRACKET ARMS

LIGHT 8 - CIRCUIT 2
184+47.00 20.94' RT.
C/L ROUTE MM(EX.)
30' M.H. 2 - TYPE A LED
2 - 6' BRACKET ARMS

LIGHT 9 - CIRCUIT 2
185+87.00 27.68' RT.
C/L ROUTE MM(EX.)
30' M.H. 2 - TYPE A LED
2 - 12' BRACKET ARMS

PULLBOX 5 - CIRCUIT 2-4
187+22.50 24.20' RT.
C/L ROUTE MM(EX.)
CONCRETE PULLBOX TYPE I

PULLBOX 4 - CIRCUIT 2-4
187+22.50 66.80' RT.
C/L ROUTE MM(EX.)
CONCRETE PULLBOX TYPE II B

SCALE

0 20 40 60

LIGHTING SHEET
SHEET 2 OF 15
MM NORTH OF 160

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:57:49 AM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	139

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

MATCHLINE 187+53.44

CABLE CONDUIT (CIRCUITS 2-4)

SEE DETAIL "A"

PULLBOX 2 - CIRCUIT 1
24+60.00 22.30' LT.
C/L FARM ROAD 160
CONCRETE PULLBOX TYPE II B

LIGHT 2 - CIRCUIT 1
24+39.00 35.00' LT.
C/L FARM ROAD 160
30' M.H. TYPE A LED
15' BRACKET ARM

CABLE CONDUIT (CIRCUIT 1)

4" RIGID CONDUIT PUSHED

C/L FARM RD. 160

PULLBOX 3 - CIRCUIT 1
24+60.00 24.60' RT.
C/L FARM ROAD 160
CONCRETE PULLBOX TYPE II B

CABLE CONDUIT (CIRCUIT 1)

LIGHT 3 - CIRCUIT 1
189+54.50 134.50' RT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
4' BRACKET ARM

CABLE CONDUIT (CIRCUITS 2-4)

LIGHTING CONTROLLER
187+97.00 95.00' RT.
C/L ROUTE MM(EX.)

4" RIGID CONDUIT IN TRENCH

4" RIGID CONDUIT IN TRENCH

POWER SUPPLY
188+05.00 101.00' RT.
C/L ROUTE MM(EX.)

PP
P RISER

LIGHT 1 - CIRCUIT 1
188+25.50 91.50' RT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
8' BRACKET ARM

PULLBOX 1 - CIRCUITS 1-4
188+00.00 91.00' RT.
C/L ROUTE MM(EX.)
CONCRETE PULLBOX TYPE II B

CABLE CONDUIT (CIRCUIT 1)

DETAIL "A"

CABLE CONDUIT (CIRCUIT 1)

LIGHT 4 - CIRCUIT 1
190+50.00 71.00' RT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
4' BRACKET ARM

CABLE CONDUIT (CIRCUIT 1)

START STA. 0+00.00

C/L ROUTE MM(EX.)

CABLE CONDUIT (CIRCUITS 2-4)

LIGHT 7 - CIRCUIT 2
188+36.00 74.50' LT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
10' BRACKET ARM

CABLE CONDUIT (CIRCUITS 2-4)

LIGHT 8 - CIRCUIT 2
1+69.00 57.00' LT.
C/L ROUTE MM
30' M.H. TYPE A LED
6' BRACKET ARM

PULLBOX 7 - CIRCUITS 2-4
2+36.00 50.80' LT.
C/L ROUTE MM
CONCRETE PULLBOX TYPE II B

CABLE CONDUIT (CIRCUITS 2-4)

4" RIGID CONDUIT PUSHED

C/L ROUTE MM

N89°33'15"E

MATCHLINE STA. 2+40.00

CABLE CONDUIT (CIRCUIT 2)

LIGHT 9 - CIRCUIT 2
190+46.00 55.00' LT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
6' BRACKET ARM

CABLE CONDUIT (CIRCUIT 2)

LIGHT 10 - CIRCUIT 2
191+16.00 17.00' LT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
4' BRACKET ARM

PULLBOX 8 - CIRCUIT 2
2+36.00 40.60' RT.
C/L ROUTE MM
CONCRETE PULLBOX TYPE II B

MATCHLINE STA. 191+36.00

SCALE
0 20 40 60

LIGHTING SHEET
SHEET 3 OF 15
MM AND 160 ROUNDABOUT

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:58:13 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	140

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

MATCHLINE STA. 191+36.00

195

C/L ROUTE MM (EX.)

CABLE CONDUIT
(CIRCUIT 1)

LIGHT 5 - CIRCUIT 1
193+41.00 19.00' RT.
C/L ROUTE MM(EX.)
30' M.H. TYPE A LED
4' BRACKET ARM

SCALE
0 20 40 60

LIGHTING SHEET
SHEET 4 OF 15
ROUNDABOUT SOUTH LEG

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 6:58:39 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	141

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

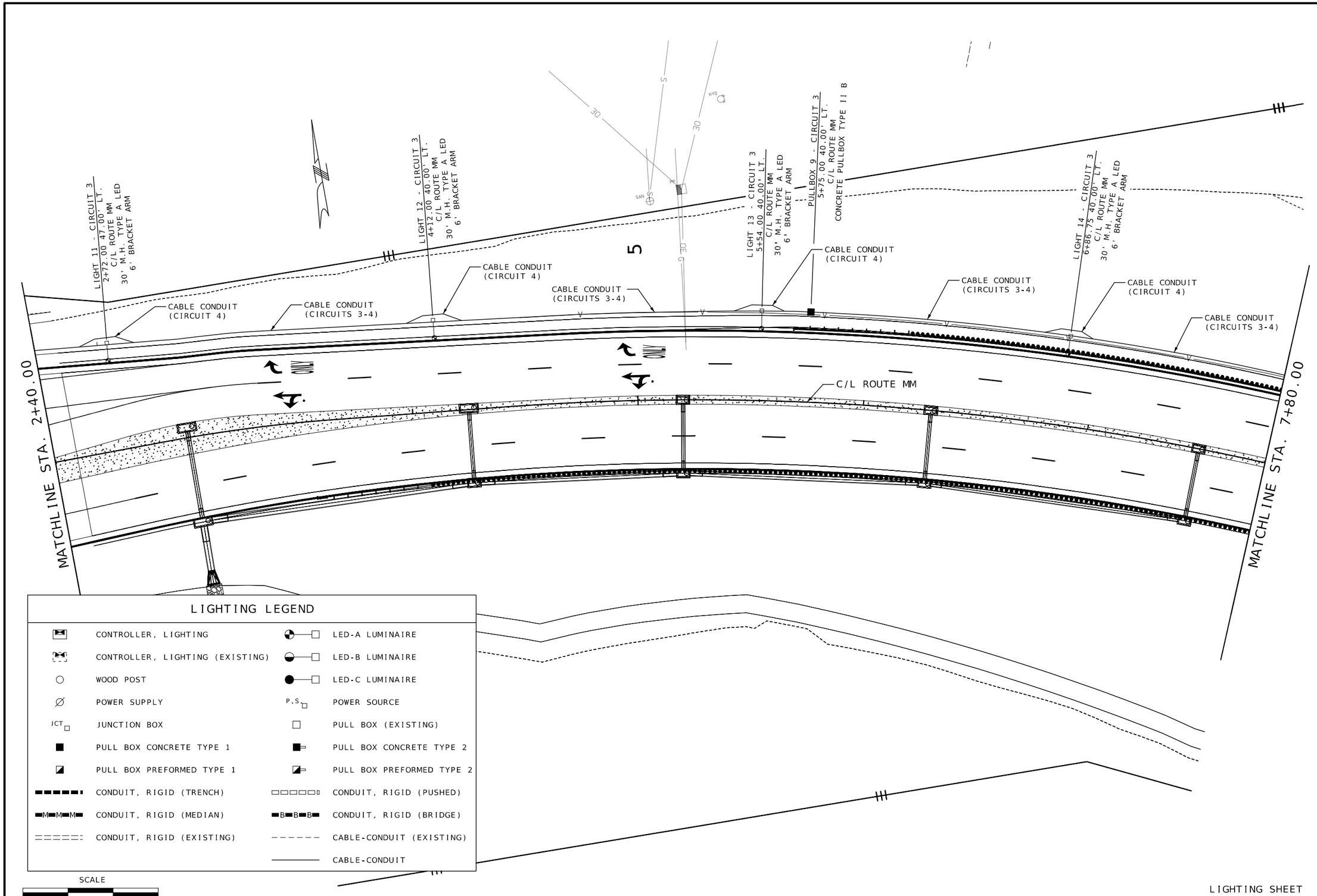
PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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



LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

SCALE

0 20 40 60

LIGHTING SHEET
SHEET 5 OF 15
ROUTE EAST LEG

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 6:59:07 AM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	142

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE STA. 7+80.00

PT STA 7+87.66

PULLBOX 10 - CIRCUITS 3-4
7+95.60 40.00' LT.
C/L ROUTE MM
CONCRETE PULLBOX TYPE II B

LIGHT 15 - CIRCUITS 3
8+26.85 31.35' LT.
C/L ROUTE MM
30' TYPE B POLE w/TYPE A LED
4' BRACKET ARM

10

LIGHT 16 - CIRCUITS 3
10+46.50 31.17' LT.
C/L ROUTE MM
30' TYPE B POLE w/TYPE A LED
4' BRACKET ARM

LIGHT 18 - CIRCUIT 4
11+98.54 23.33' LT.
C/L ROUTE MM
SEE LIGHTING SHEET 7 OF 15

LIGHT 17 - CIRCUITS 3
13+02.25 31.17' LT.
C/L ROUTE MM
30' TYPE B POLE w/TYPE A LED
4' BRACKET ARM

2" RIGID CONDUIT
ON STRUCTURE
(CIRCUIT 4)

CIRCUIT 3

C/L ROUTE MM

S66°48'46"E

LIGHT 19 - CIRCUIT 4
11+98.54 16.33' RT.
C/L ROUTE MM
SEE LIGHTING SHEET 7 OF 15

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
	150 WATT HIGH PRESSURE SODIUM LUMINAIRE		CABLE-CONDUIT

SCALE
0 20 40 60

LIGHTING SHEET
SHEET 6 OF 15
BRIDGE & UNDERPASS

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07-26-2025 6:59:32 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	143

COUNTY
GREENE

JOB NO.
JS0836D

CONTRACT ID.

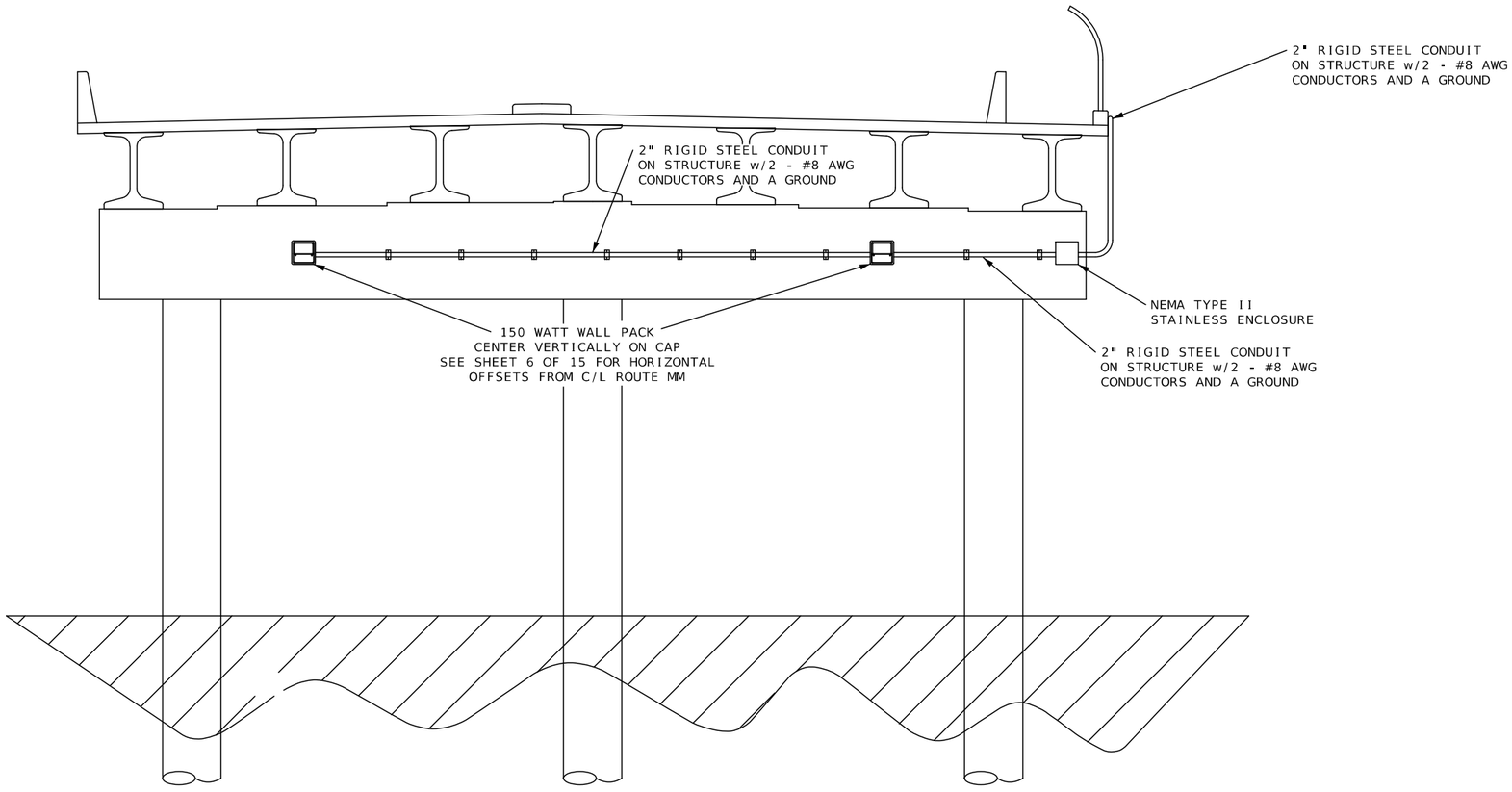
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

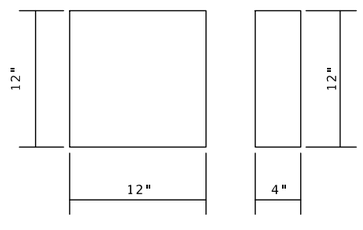
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

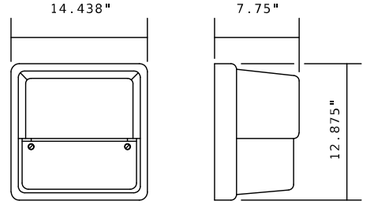


UNDERPASS LIGHTING NOTES:

1. EAST FACE INTERMEDIATE BENT 4.
2. CONDUIT SHALL BE SECURED TO THE CAP AND THE PEDESTRIAN CURB WITH CLAMPS AT NO MORE THAN 5 FOOT INTERVALS.
3. CONCRETE ANCHORS SHALL BE ACCORDANCE WITH FEDERAL SPECIFICATION FF-S-325, GROUP II, TYPE 4, CLASS I, AND SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 153, B 695-91 CLASS 50, OR CONSTRUCTED OF STAINLESS STEEL.
4. MINIMUM EMBEDMENT OF ANCHORS IN CONCRETE SHALL BE 1.75 INCHES.
5. NEMA TYPE II BOX SHALL BE SURFACE MOUNTED AND INSTALLED SUCH THAT COVERS ARE ACCESSIBLE.
6. IF THE CONDUIT CROSSES A BRIDGED EXPANSION JOINT, A CONDUIT EXPANSION FITTING SHALL BE USED.
7. NEMA BOX, EXPANSION FITTINGS, CAST CONDUIT FITTINGS AND ALL HARDWARE REQUIRED FOR CONDUIT INSTALLATION SHALL BE AT THE CONTRACTOR'S EXPENSE.
8. NEMA BOX SHALL BE A TYPE II, STAINLESS STEEL BOX.
9. CONDUCTORS SHALL BE SPLICED IN A NEMA ENCLOSURE OR LIGHTING FIXTURE ONLY.
10. CONDUIT ON STRUCTURE SHALL BE 2" RIGID STEEL, THREADED CONDUIT.
11. CONTRACTOR TO USE APPROPRIATE CAST CONDUIT FITTINGS (LB,LL,LR) AS NEEDED TO COMPLETE THE INSTALLATION. ALL CAST CONDUIT FITTINGS SHALL HAVE ACCESS PORTS WITH A NEOPRENE SEAL.



NEMA TYPE II JUNCTION BOX



GE WALL LIGHTER - 150 WATT

** MINIMUM DIMENSIONS PROVIDED

LIGHTING SHEET
SHEET 7 OF 15
UNDERPASS LIGHTING DETAIL

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 6:59:58 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	144

COUNTY
GREENE

JOB NO.
J8S0836D

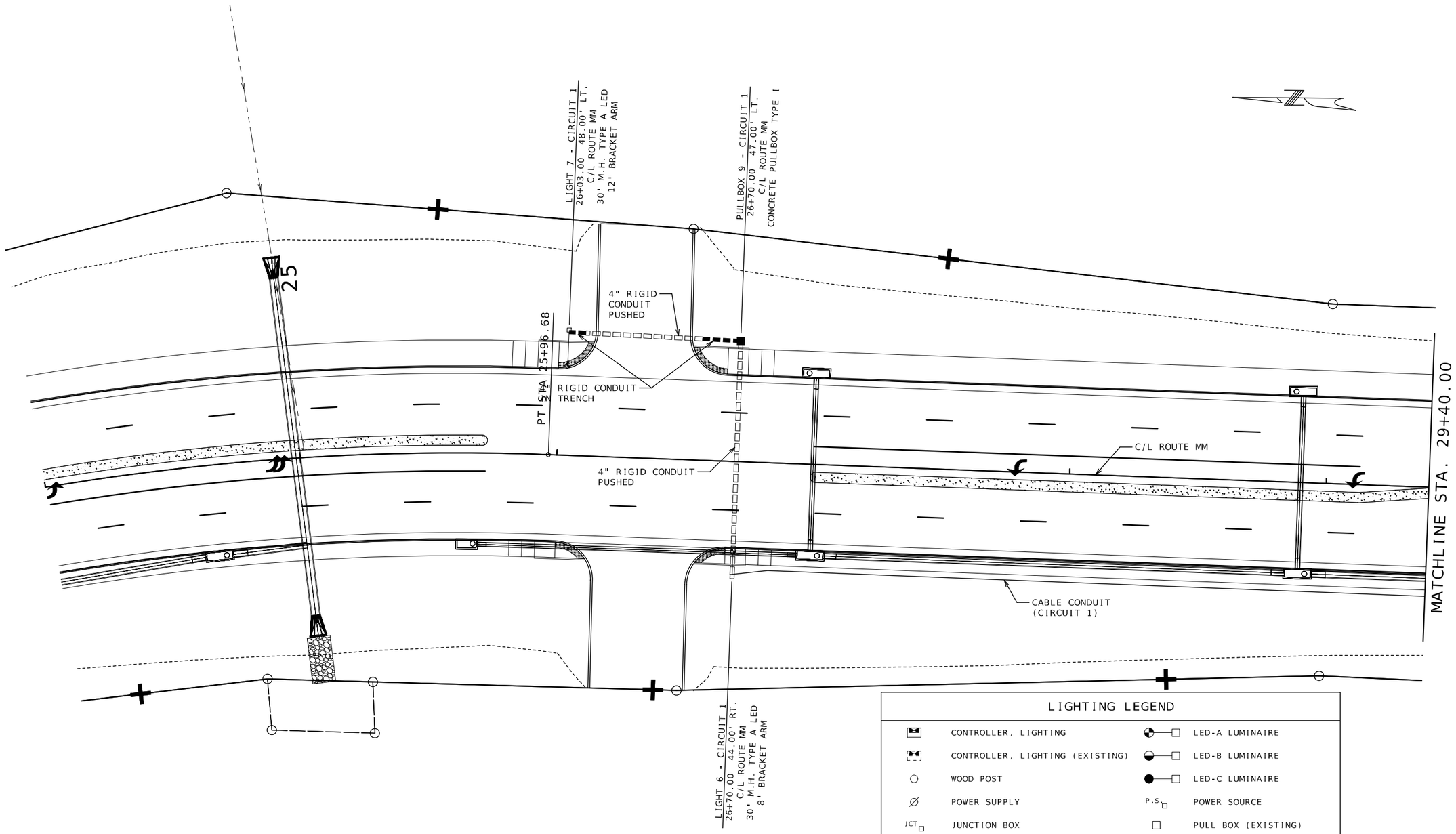
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M M M	CONDUIT, RIGID (MEDIAN)	B B B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

LIGHTING SHEET
SHEET 8 OF 15
NORTH OF 60

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:00:23 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	145

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

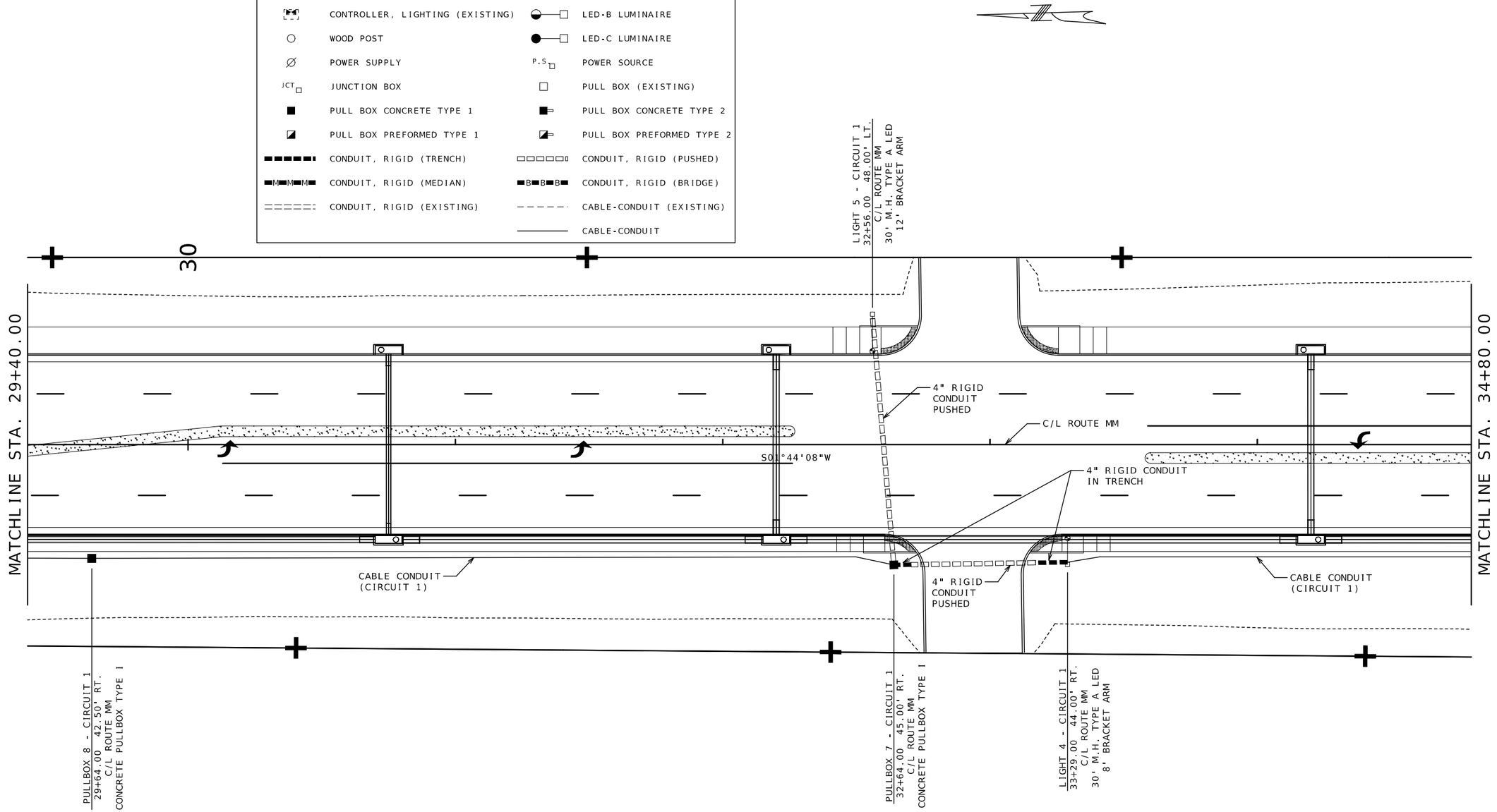
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT



SCALE

0 20 40 60

LIGHTING SHEET
SHEET 9 OF 15
NORTH OF 60

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:01:00 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	146

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

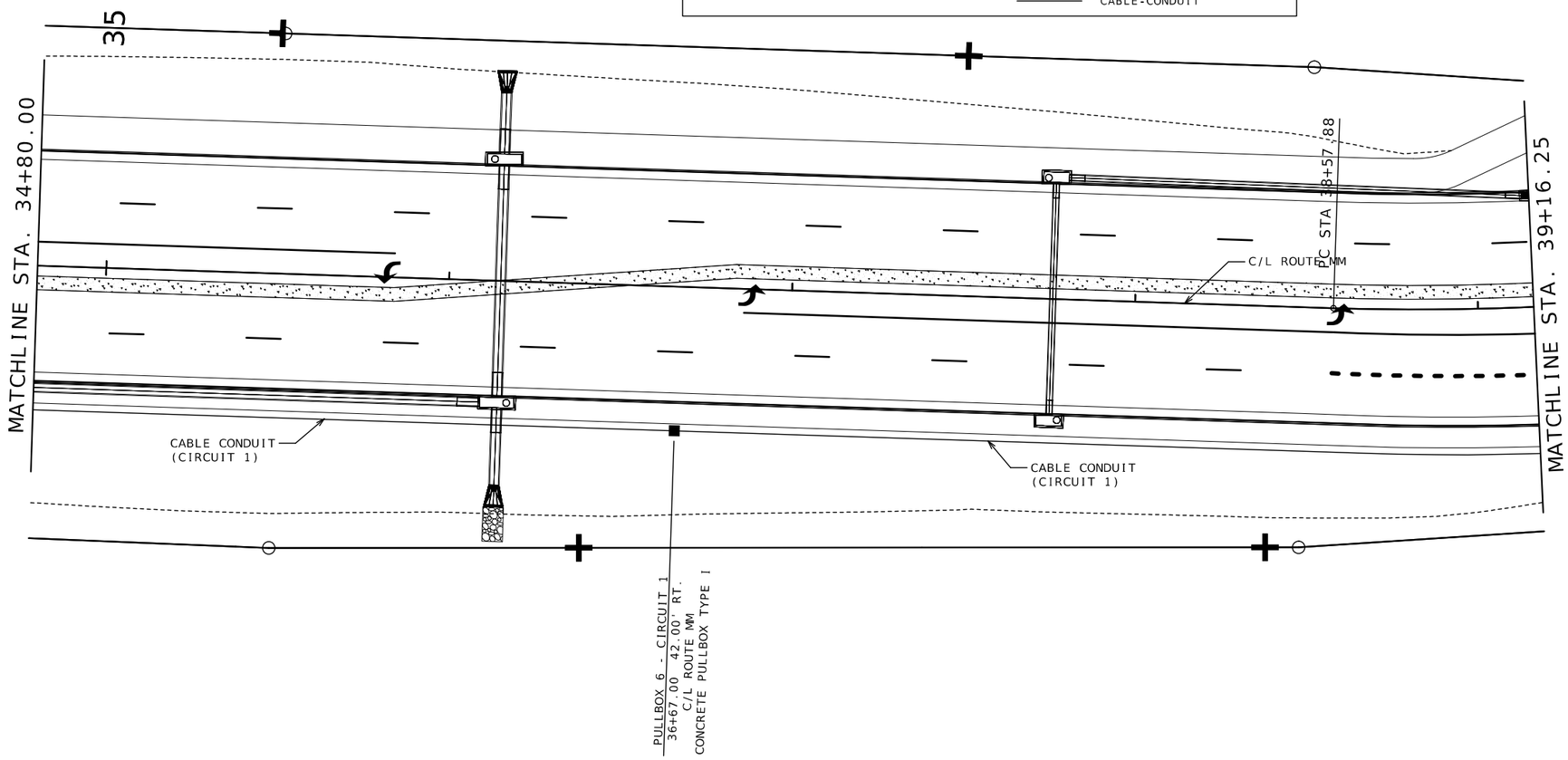
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT



SCALE

0 20 40 60

LIGHTING SHEET
SHEET 10 OF 15
NORTH OF 60

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:01:28 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	147

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

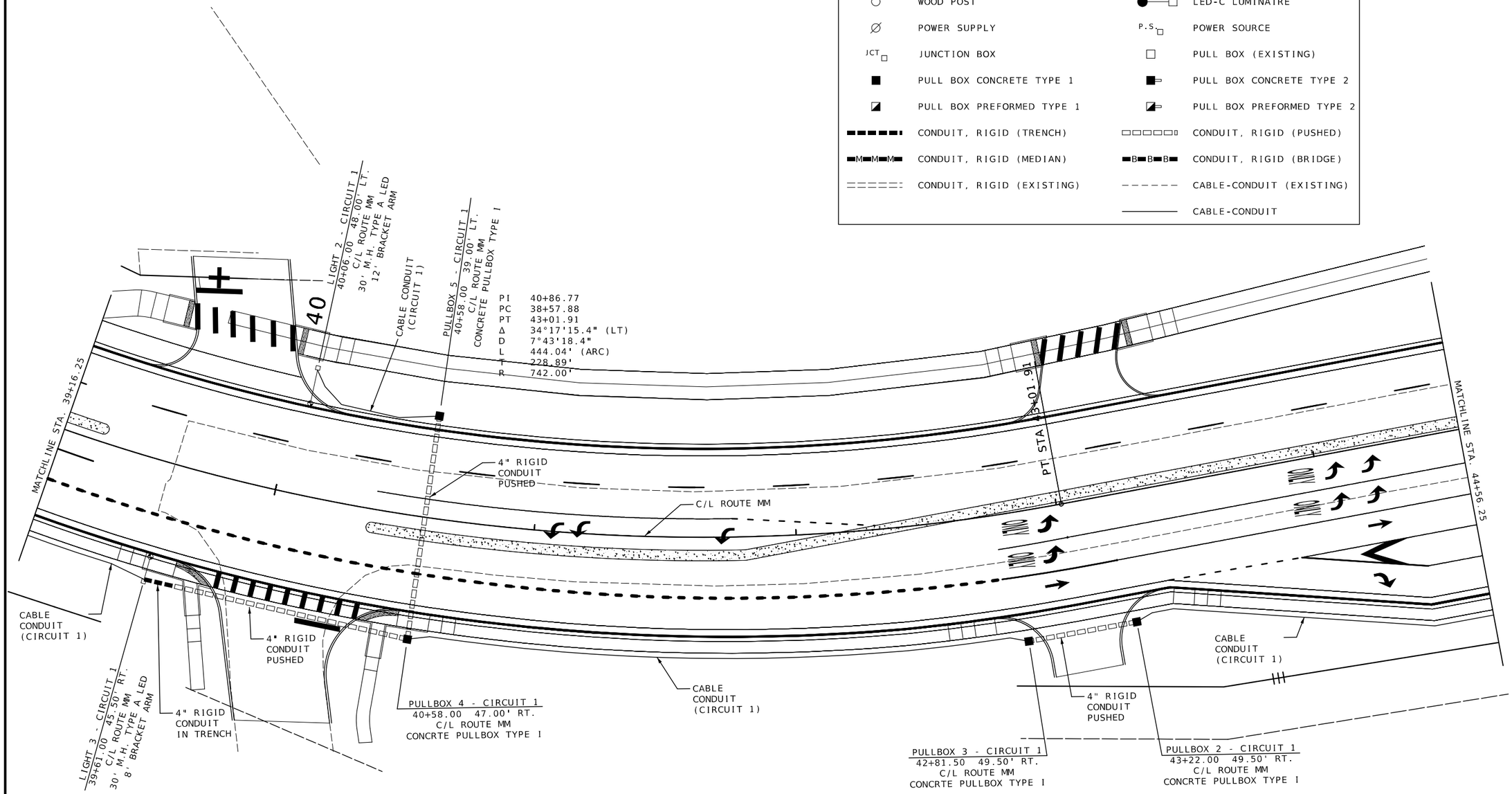
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT



SCALE

0 20 40 60

LIGHTING SHEET
SHEET 11 OF 15
NORTH OF 60

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:01:51 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	148

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.
X

PROJECT NO.
X

BRIDGE NO.
X

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE RTE 60 WB STA. 241+13.6197

LIGHT 9 - CIRCUIT 2
46+57.25 41.50' LT.
C/L ROUTE MM
45' M.H. TYPE C LED
6' BRACKET ARM

4" RIGID CONDUIT PUSHED

PULLBOX 11 - CIRCUIT 2-4
46+54.00 41.50' LT.
C/L ROUTE MM
CONCRETE PULLBOX TYPE I

4" RIGID CONDUIT IN TRENCH

DETAIL "B"

PULLBOX 12 CIRCUIT 2-4
240+41.00 52.00' LT.
C/L ROUTE 60 WESTBOUND
CONCRETE PULLBOX TYPE II B

LIGHT 10 - CIRCUIT 2
240+46.00 56.00' LT.
C/L ROUTE 60 WESTBOUND
45' M.H. TYPE C LED
6' BRACKET ARM

CABLE CONDUIT (CIRCUIT 2)

4" RIGID CONDUIT PUSHED

PULLBOX 13 - CIRCUIT 3-4
240+41.00 38.00' RT.
C/L ROUTE 60 EASTBOUND
CONCRETE PULLBOX TYPE II B

CABLE CONDUIT (CIRCUIT 3-4)

LIGHT 13 - CIRCUIT 3
239+75.00 34.00' RT.
C/L ROUTE 60
45' M.H. TYPE C LED
6' BRACKET ARM

PULLBOX 14 - CIRCUIT 3-4
1+06.50 75.00' LT.
C/L FARM ROAD 103
CONCRETE PULLBOX TYPE II B

PULLBOX 15 - CIRCUIT 3-4
1+00.00 40.00' LT.
C/L FARM ROAD 103
CONCRETE PULLBOX TYPE I

LIGHT 12 - CIRCUIT 3
1+50.00 71.00' LT.
C/L FARM ROAD 103
45' M.H. TYPE C LED
15' BRACKET ARM

4" RIGID CONDUIT PUSHED

CABLE CONDUIT (CIRCUIT 3)

4" RIGID CONDUIT IN TRENCH

C/L FARM ROAD 103

4" RIGID CONDUIT PUSHED

SEE DETAIL "C"

CABLE CONDUIT (CIRCUIT 4)

4" RIGID CONDUIT PUSHED

PULLBOX 17 - CIRCUIT 4
238+41.00 78.50' RT.
C/L ROUTE 60 EASTBOUND
CONCRETE PULLBOX TYPE II B

LIGHT 14 - CIRCUIT 4
0+76.00 61.00' RT.
C/L FARM ROAD 103
45' M.H. TYPE C LED
6' BRACKET ARM

4" RIGID CONDUIT IN TRENCH

PULLBOX 16 - CIRCUIT 4
0+81.00 61.00' RT.
C/L FARM ROAD 103
CONCRETE PULLBOX TYPE I

DETAIL "C"

CABLE CONDUIT (CIRCUIT 4)

LIGHT 16 - CIRCUIT 4
237+78.00 63.50' RT.
C/L ROUTE 60 EASTBOUND
45' M.H. TYPE C LED
15' BRACKET ARM

CABLE CONDUIT (CIRCUIT 4)

MATCHLINE MM PROP. STA. 44+56.2478

C/L ROUTE MM

SEE DETAIL"B"

4" RIGID CONDUIT PUSHED

4" RIGID CONDUIT IN TRENCH

4" RIGID CONDUIT PUSHED

CABLE CONDUIT (CIRCUIT 1)

LIGHT 1 - CIRCUIT 1
45+90.00 81.00' RT.
C/L ROUTE MM
45' M.H. TYPE C LED
6' BRACKET ARM

SEE DETAIL "A"

PULLBOX 10 - CIRCUIT 2-4
46+32.00 57.50' RT.
C/L ROUTE MM
CONCRETE PULLBOX TYPE I

LIGHT 8 - CIRCUIT 2
238+56.00 34.00' LT.
C/L ROUTE 60 WESTBOUND
45' M.H. TYPE C LED
6' BRACKET ARM

C/L ROUTE 60 WESTBOUND

C/L ROUTE 60 EASTBOUND

CABLE CONDUIT (CIRCUIT 1)

4" RIGID CONDUIT PUSHED

PULLBOX 1 - CIRCUIT 1-4
46+10.50 92.50' RT.
C/L ROUTE MM
CONCRETE PULLBOX TYPE I

4" RIGID CONDUIT IN TRENCH

LIGHTING CONTROLLER
46+07.16 98.94' RT.
C/L ROUTE MM

4" RIGID CONDUIT IN TRENCH

POWER SUPPLY
46+16.10 102.30' RT.
C/L ROUTE MM

DETAIL "A"

MATCHLINE RTE 60 EB STA. 237+31.3637

MATCHLINE FR103 STA. 2+59.1689

SCALE
0 20 40 60

LIGHTING SHEET
SHEET 12 OF 15
MM & 60

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/28/2025 7:02:18 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	149

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

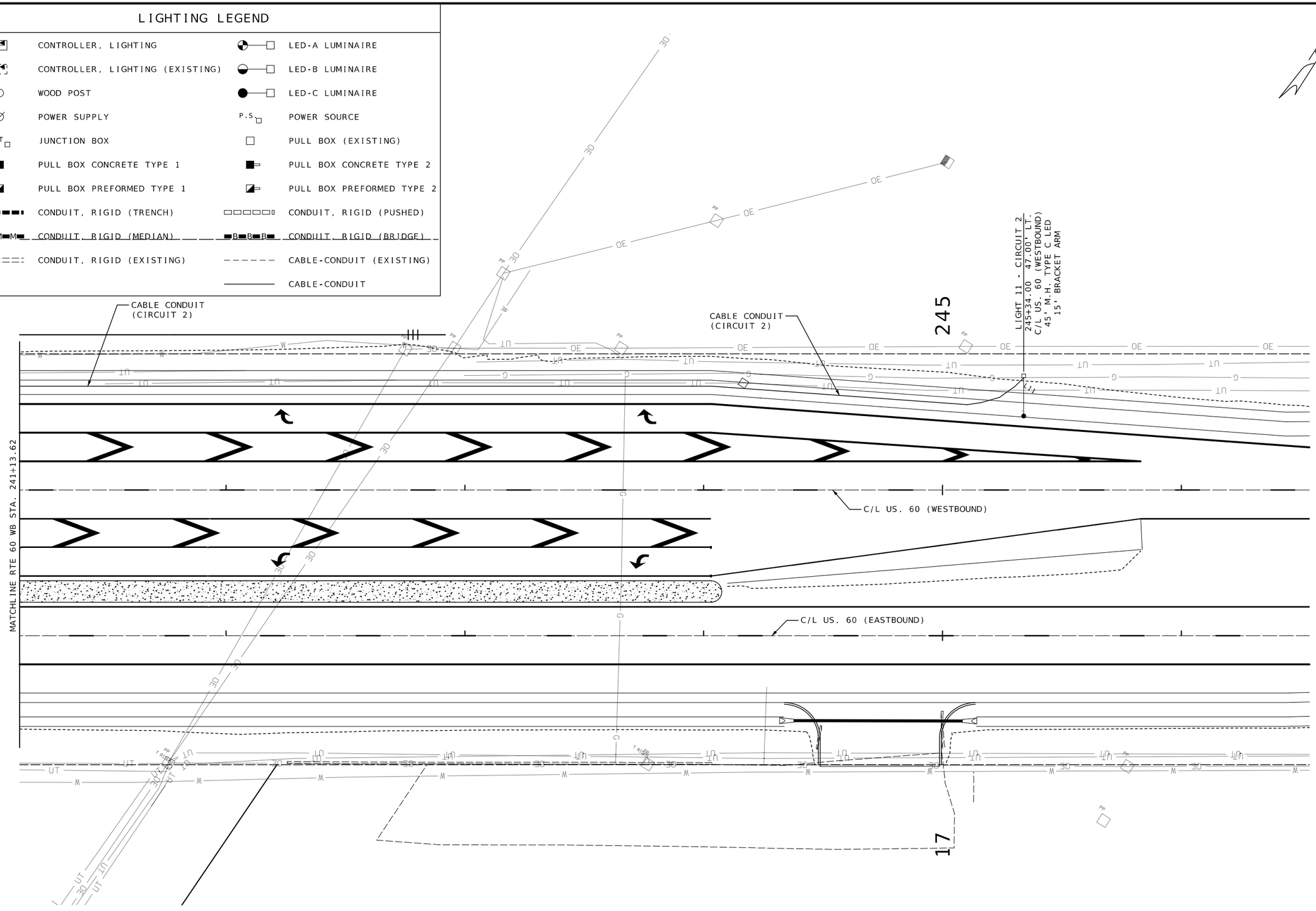
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M M M	CONDUIT, RIGID (MEDIAN)	B B B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT



SCALE

0 20 40 60

LIGHTING SHEET
SHEET 13 OF 15
MM & 60 EAST LEG

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

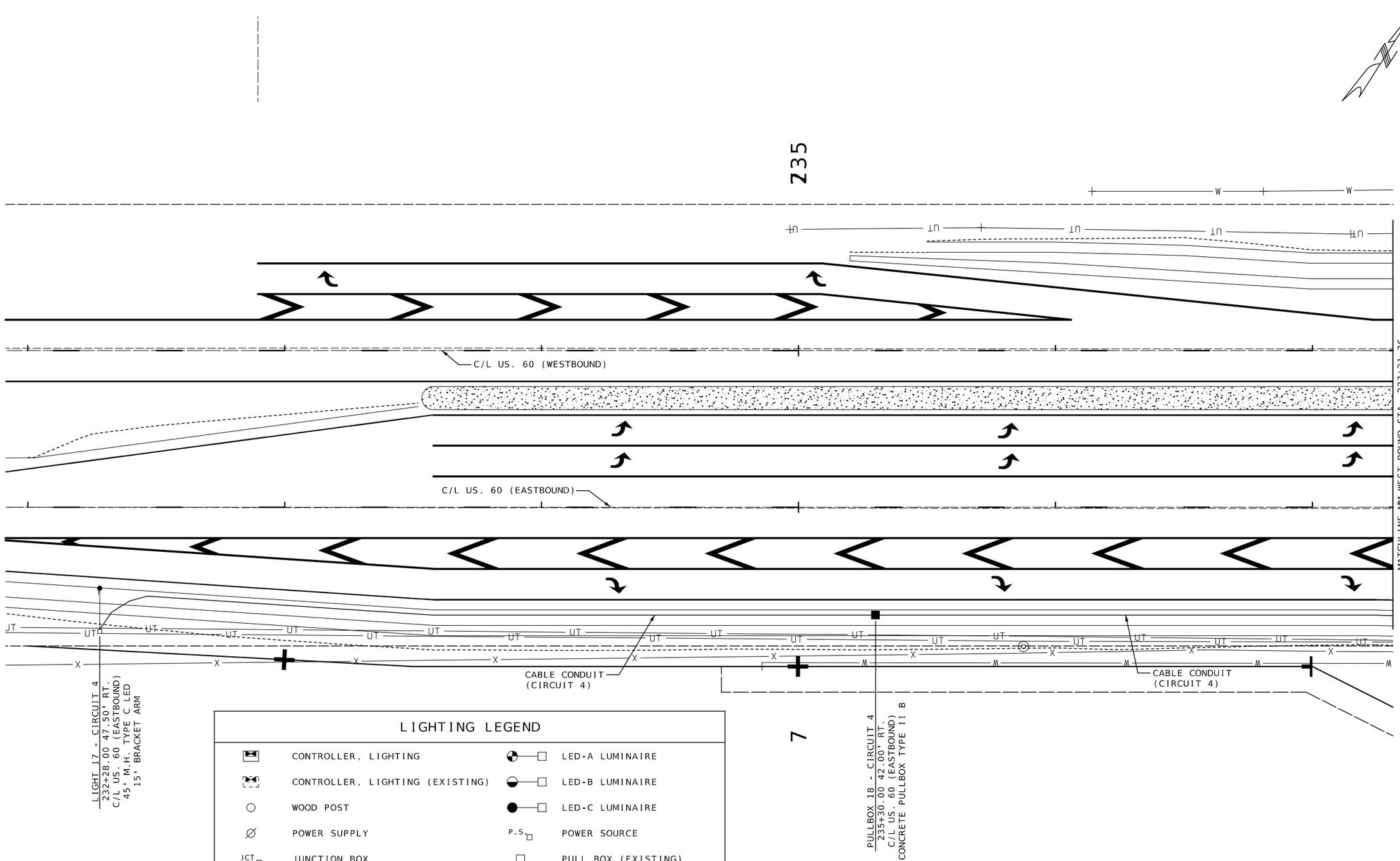
Warner Sherman
07/26/2025 7:02:43 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/25/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	150
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT.	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

SCALE
0 20 40 60

LIGHTING SHEET
SHEET 14 OF 15
60 & MM WEST LEG

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07-28-2025 7:03:08 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	151

COUNTY
GREENE

JOB NO.
J8S0836D

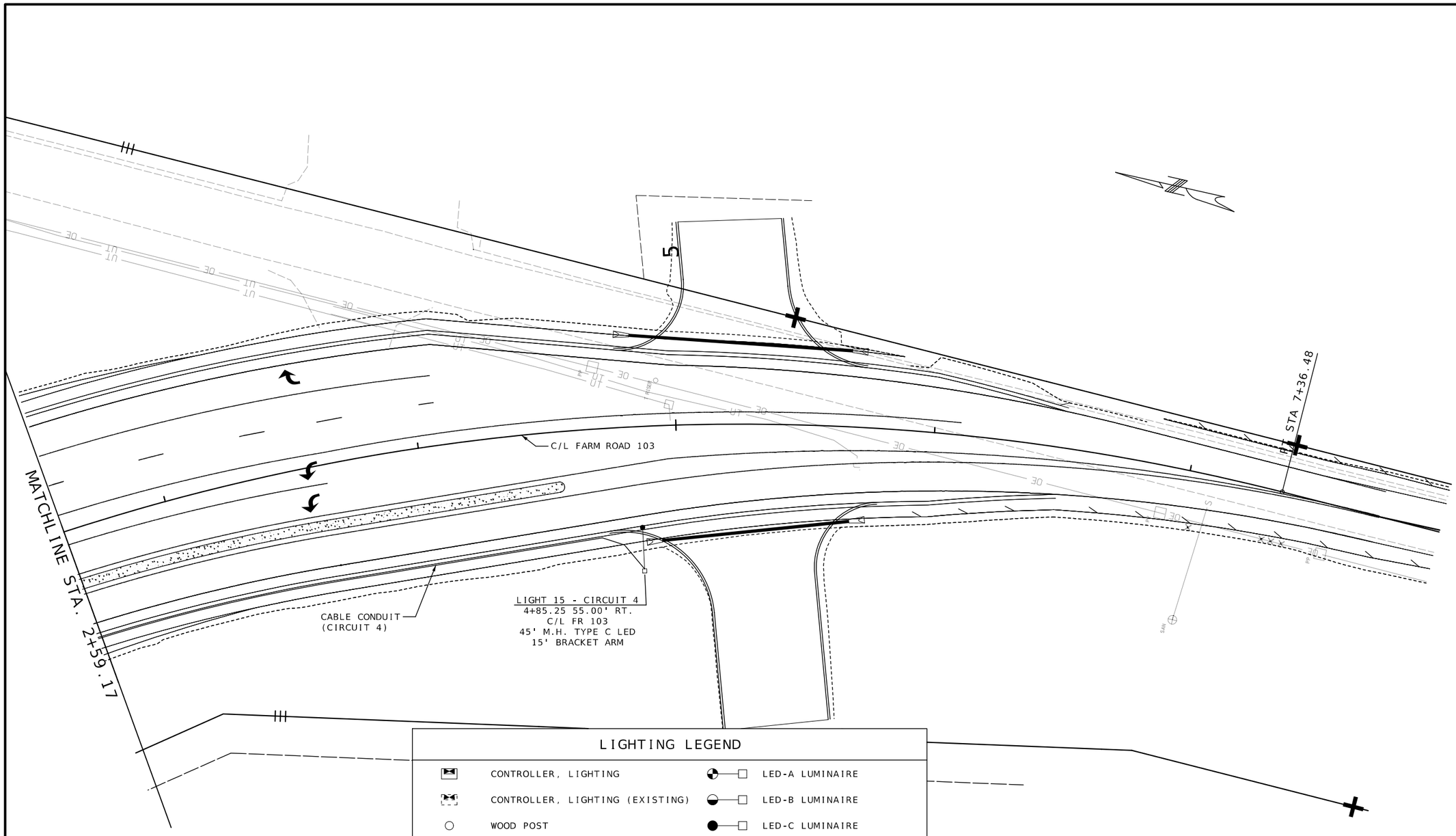
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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



LIGHTING LEGEND

	CONTROLLER, LIGHTING		LED-A LUMINAIRE
	CONTROLLER, LIGHTING (EXISTING)		LED-B LUMINAIRE
	WOOD POST		LED-C LUMINAIRE
	POWER SUPPLY	P.S.	POWER SOURCE
JCT	JUNCTION BOX		PULL BOX (EXISTING)
	PULL BOX CONCRETE TYPE 1		PULL BOX CONCRETE TYPE 2
	PULL BOX PREFORMED TYPE 1		PULL BOX PREFORMED TYPE 2
	CONDUIT, RIGID (TRENCH)		CONDUIT, RIGID (PUSHED)
M	CONDUIT, RIGID (MEDIAN)	B	CONDUIT, RIGID (BRIDGE)
	CONDUIT, RIGID (EXISTING)		CABLE-CONDUIT (EXISTING)
			CABLE-CONDUIT

SCALE
0 20 40 60

LIGHTING SHEET
SHEET 15 OF 15
FR 103

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:03:41 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	152

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

TRAFFIC SIGNALS LEGEND

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

DND WIRELESS RADIO ON CL POLE

UIP EX TYPE 2 POWER SUPPLY

UIP EX SIGNAL CONTROLLER

NEW R/W

EX R/W

HAILE STREET

EX 40' MAST ARM

EX 40' MAST ARM

EX RT MM

EX R/W

TEMP ESM'T

S01°52'20"

177

178

179

40 FT ARM

50 FT ARM

RL YL FYL L

R Y G

L FYL YL RL

G Y R 61

G Y R 62

R10-27a

R10-3eR W-DW

D3-1B

D3-1B

D3-18

EB

WB

SCALE

0 10 20 30

RADAR DETECTOR

RT MM AND HAILE STREET

INTERSECTION

SIGNAL SHEET
HAILE ST
SHEET 1 OF 16

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:04:14 AM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	153

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

| POST NUMBER | PULL BOX NUMBER | LOCATION APPROACH | STATION | OFFSET | BASE A 9 | A 9.5 | A 10 | A 10.5 | A 11 | A 12 | F 9 | F 9.5 | F 10 | F 10.5 | F 11 | F 12 | C | CONCRETE** (CU. YDS.) | PULL BOX PREFORMED 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. | TOP MOUNT POST 15 FT. | TYPE C & CL ARM LENGTH (FT.) 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. |
|---|---|---

CONDUIT (WITH #14 TRACER WIRE)

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET.	TRENCH				PUSHED			MEDIAN			ON STRUCTURE			REMARKS
			1"	2"	3"	4"		2"	3"	4"	2"	3"	4"	2"	3"		
SOURCE	∅	29			EX												3 POWER CABLES
∅	⋈	16			EX												3 POWER CABLES
⋈	1	13				16											
1	(1)	7				10											
1	2	104								102							JUMPER
2	(2)	14				17											
2	(3)	91								89							
(3)	(3)	6			EX												JUMPER
1	4	87								85							
4	(4)	5				8											
1	(5)	9			11												
2	(6)	23			24												
																	JUMPER
																	PED DETECTOR
																	PED HEAD
																	PED DETECTOR
																	PED HEAD
																	POLE 1
																	POLE 2
																	POLE 3
																	POLE 4
SUBTOTALS				35	51					276							
TOTALS				35	51					276							

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	POWER 1C #1	POWER 1C #9	2c #16	5c #16	7c #16	3c #16	RADAR DETECTION SENSOR	CONTROL 2c #12	POLE & BRACKET 1c #10	DETECTOR 1c #14 IN DUCT	DETECTOR 2c #14 LEAD-IN CABLE	FIBER SINGLE-MODE	FIBER MULTI-MODE	REMARKS
SOURCE	∅	29	216													3 POWER CABLES
∅	⋈	16		96												3 POWER CABLES
⋈	30	20					93									
⋈	81	20					80									
81	82	8					14									JUMPER
⋈	10	130					218									
⋈	61	130					206									
61	62	8					14									JUMPER
⋈	70	207					292									
⋈	41	207					282									
41	42	8					14									JUMPER
⋈	50	105					175									
⋈	21	105					162									
21	22	8					14									JUMPER
⋈	83	36			60											PED DETECTOR
⋈	(84)	36				60										PED HEAD
⋈	84	126			156											PED DETECTOR
⋈	(83)	126				156										PED HEAD
⋈	WB	19							59							POLE 1
⋈	NB	130							176							POLE 2
⋈	EB	213							265							POLE 3
⋈	SB	105							151							POLE 4
SUBTOTALS			216	96	216	216	1564		651							
TOTALS			220	100	220	220	1570		660#							

 # FOR INFORMATION ONLY

INTERSECTION ROUTE MM & HAILE

SIGNAL SHEET
HAILE ST
SHEET 3 OF 16

D-37B

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/28/2025 7:09:04 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED 7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	155

COUNTY GREENE

JOB NO. J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

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	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY
							SIGNALS	LIGHTING				
RT MM	UIP EXISTING FOR SIGNALS ONLY											

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH		COORDINATION INTERFACE *					TIME * CLOCK	NEMA CABINET TYPE *			CABINET TYPE *		2070 SOFTWARE *	
							TYPE		12C/7C HARDWIRE (1)		TIME BASE	CLOSED LOOP		FIBER							
APPROACH	STATION	OFFSET	NEMA	2070	NEMA	170	I	II	MASTER	LOCAL		NEMA	170			E	EV	DOUBLE	332	336S	OMNIEX	WAPITI
RT MM	UIP EXISTING																				

REMOVAL & REINSTALLATION OF EXISTING RADAR DETECTION SYSTEM

1 INTERSECTION – 1 LS

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		
	D3-1 ***	90 X 18	11.3		
2	D3-1B ***	54 X 18	6.8	13.5	2
	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
	R10-12	24 X 30	5.0		
1	R10-3eL**	9 X 15	0.9	**	**
1	R10-3eR**	9 X 15	0.9	**	**
			SUBTOTAL	28.5	4
			TOTALS	29	4

*** SEE SIGNING SHEET D-31 FOR STREET SIGN DETAILS.

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE				
		AUDIBLE PUSH BUTTON	INDUCTION LOOP (2)			RADAR
			STANDARD	DELAY/ EXTEND *	CALL UNIT *	
∅4/∅7	WB ON POST 1					1
∅2/∅5	NB ON POST 2					1
∅3/∅8	EB ON POST 3					1
∅1/∅6	SB ON POST 4					1
83	RT MM	1				
84	RT MM	1				
TOTAL		2	0	0	0	4#

FOR INFORMATION ONLY: RADAR TRAFFIC SIGNAL DETECTION. SEE JOB SPECIAL PROVISIONS

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

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

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

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

2070 INPUT FILE ASSIGNMENTS

	CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U														** FLASH SENSE
	L													(83) (84)	STOP TIME
"J"	U														
	L														

** TOTAL NUMBER OF 242 DC ISOLATOR MODULES = (2) 242 DC ISOLATOR MODULES

2070 OUTPUT FILE ASSIGNMENTS

FR1	PH1	PH2	2 PED	PH3	PH4	4 PED	MONITOR
	RL	R		RL	R		
FR2	YL	Y	PH 1 L	YL	Y	PH 3 L	
	FYL	G		FYL	G		
FR3	PH5	PH6	6 PED	PH7	PH8	8 PED	
	RL	R		RL	R	DW	
FR4	YL	Y	PH 5 L	YL	Y	PH 7 L	
	FYL	G		FYL	G	W	

NOTE: LEFT TURN "L" SHALL BE WIRED INTO PEDESTRIAN AMBER IN LOAD SWITCH

**FLASH SENSE & STOP TIME - (1) 242 DC ISOLATOR MODULE TO BE INSTALLED IN THE "I" 14 SLOT

ROUTE MM AND HAILE ST.
INTERSECTION

SIGNAL SHEET
HALIE ST
SHEET 4 OF 16

D-37C

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
08/15/2025 12:42:03 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/12/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	156

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

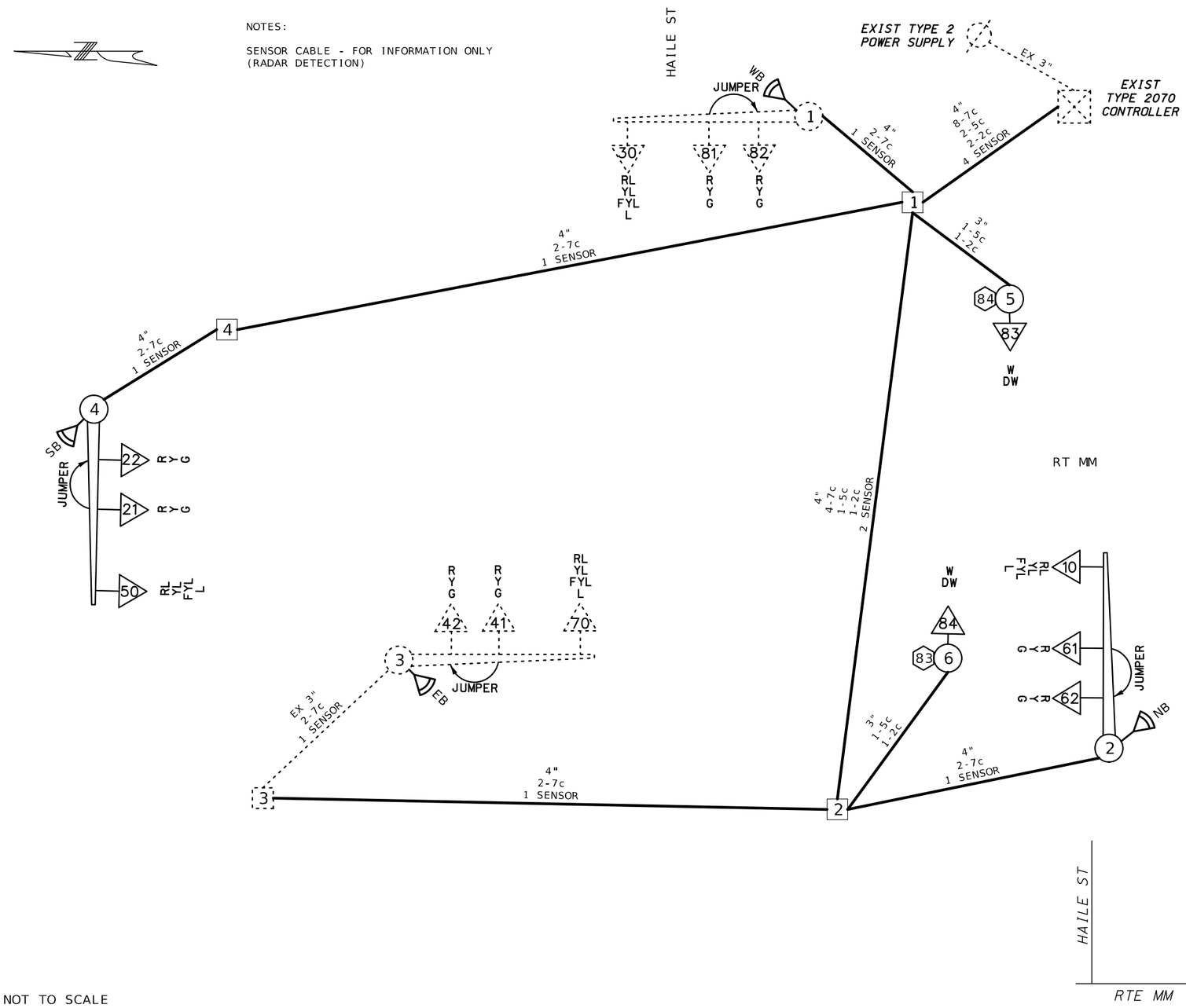
BRIDGE NO.

DESCRIPTION

DATE

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

WIRING DIAGRAM



NOT TO SCALE

NOT TO SCALE

LEGEND

- 3" CONDUIT CONTAINING CABLE WITH SIZE
- ----3"---- EXIST CONDUIT
- X-Xc EXISTING CABLE IN CONDUIT
- 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
- RADAR DETECTION
- X DETECTOR WITH NUMBER
- X SIGNAL HEAD WITH NUMBER
- SIGNAL CONTROLLER
- POWER SUPPLY
- LIGHTING CONTROLLER
- ITS FIBER OPTIC SPLICE CABINET
- PUSH BUTTON DETECTOR

ROUTE MM & HAILE ST

INTERSECTION

SIGNAL SHEET
HAILE ST
SHEET 5 OF 16

D-37D

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 7:05:52 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	157

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

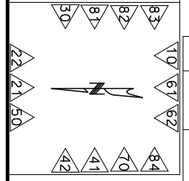
BRIDGE NO.

DESCRIPTION	DATE

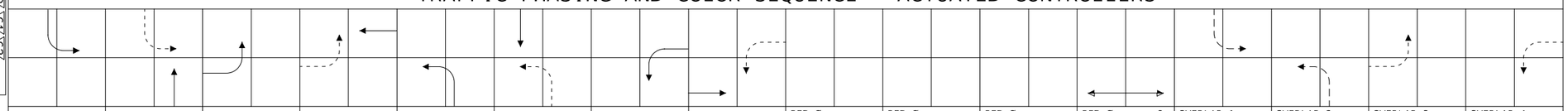
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

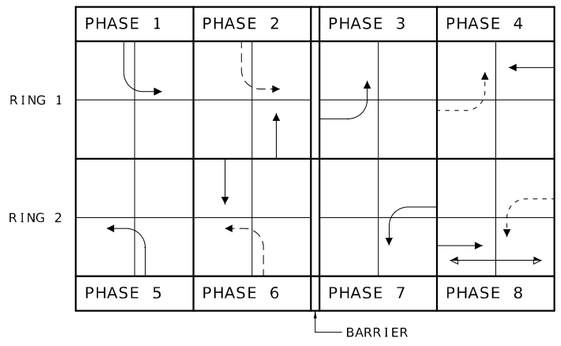
SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS



	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PED Ø OVERLAP	PED Ø OVERLAP	PED Ø OVERLAP	PED Ø 8 OVERLAP	OVERLAP 1	OVERLAP 2	OVERLAP 3	OVERLAP 4	
FACE NUMBERS	10	21 22 50	30	41 42 70	50	61 62 50	70	81 82 30				83 84					FACE NUMBERS
SIGNAL INDICATIONS R	RL	R R RL	RL	R R RL	RL	R R RL	RL	R R RL				DW DW					R
SIGNAL INDICATIONS Y	YL	Y Y YL	YL	Y Y YL	YL	Y Y YL	YL	Y Y YL				DW DW					Y
SIGNAL INDICATIONS FYA		FYL		FYL		FYL		FYL				FDW FDW					FYA
SIGNAL INDICATIONS G	L	G G	L	G G	L	G G	L	G G				W W					G
DETECTOR ASSIGNMENTS	10	21 22 50	30	41 42 50	50	61 62 50	70	81 82 30									DETECTOR ASSIGNMENTS
DETECTOR ASSIGNMENTS (PEDS. ONLY)												83 84					
OVERLAP PARENT PHASES													2	6	4	8	



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	
ALL PHASES	FR

CONTROLLER TYPE	2070

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF RTE MM

WITH HAILE ST

SIGNAL SHEET
HAILE ST
SHEET 6 OF 16

D-38A

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 7:06:16 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	158

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE 241+05.00

NEW R/W

EX. R/W

NEW PERM.
UTILITY ESMT.

FIBER REROUTE

240

END STA 47+37.08

EX US 60

62 FT ARM

55 FT ARM

PROP. RTE. MM

EX. FR 103

S32°33'07"E

CCTV CAMERA

NEW R/W

NEW PERM.
UTILITY ESMT.

RELOCATED LIGHTING CONTROLLER

RELOCATED TYPE 2 POWER SUPPLY

RELOCATED SIGNAL CONTROLLER

RELOCATED ITS CABINET

INSTALL PULLBOX
OVER EX CONDUIT

EX. R/W

NEW R/W

NEW PERM.
UTILITY ESMT.

SCALE
0 20 40 60

RADAR DETECTOR

MATCHLINE 237+30.00

SIGNAL SHEET
US 60 & RTE MM
SHEET 7 OF 16

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:06:40 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	159

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

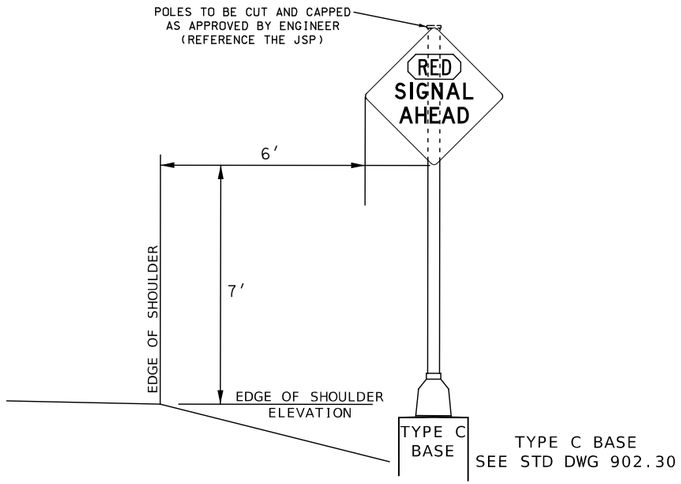
BRIDGE NO.

DESCRIPTION

DATE

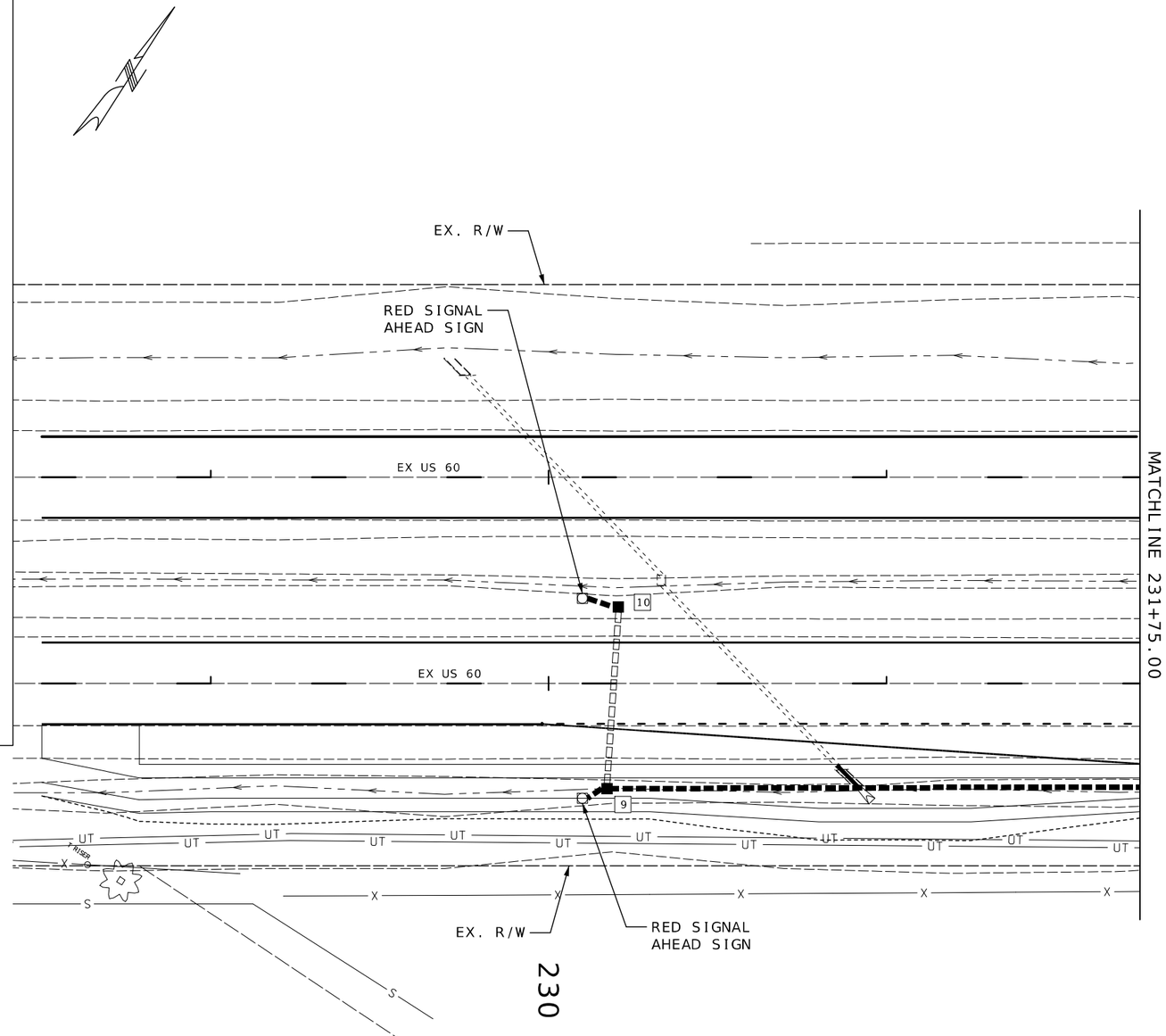
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



230+10
SECTION FACING SIGN

RED SIGNAL AHEAD SIGN
WITH LED LIGHT IS PAID
UNDER BID ITEM NO. 903-99.02, EACH
SEE SIGN DETAIL BELOW.
BASE CONCRETE, POST AND WIRING COVERED
IN SIGNAL QUANTITIES



SCALE
0 20 40 60

SIGNAL SHEET
US 60 & RTE MM
SHEET 8 OF 16

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 7:07:04 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	160

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

INSTALL PULLBOX
OVER EX CONDUIT
PULL EX FIBER
& TRACER WIRE
FROM EX ITS CABINET
BACK TO PB F1 AND REROUTE

EX. R/W

F1

MATCHLINE 231+75.00

MATCHLINE 237+30.00

EX US 60

EX US 60

NEW R/W

EX. R/W

NEW PERM.
UTILITY ESMT.

235

SCALE

0 20 40 60

SIGNAL SHEET
US 60 & RTE MM
SHEET 9 OF 16

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:07:33 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	161

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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

NEW R/W

EX. R/W

FR 103

FIBER REROUTE

EX US 60

EX US 60

EX. R/W

MATCHLINE 241+05.00

MATCHLINE 246+60.00

245

SCALE

0 20 40 60

SIGNAL SHEET
US 60 & RTE MM
SHEET 10 OF 16

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:07:58 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	162

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

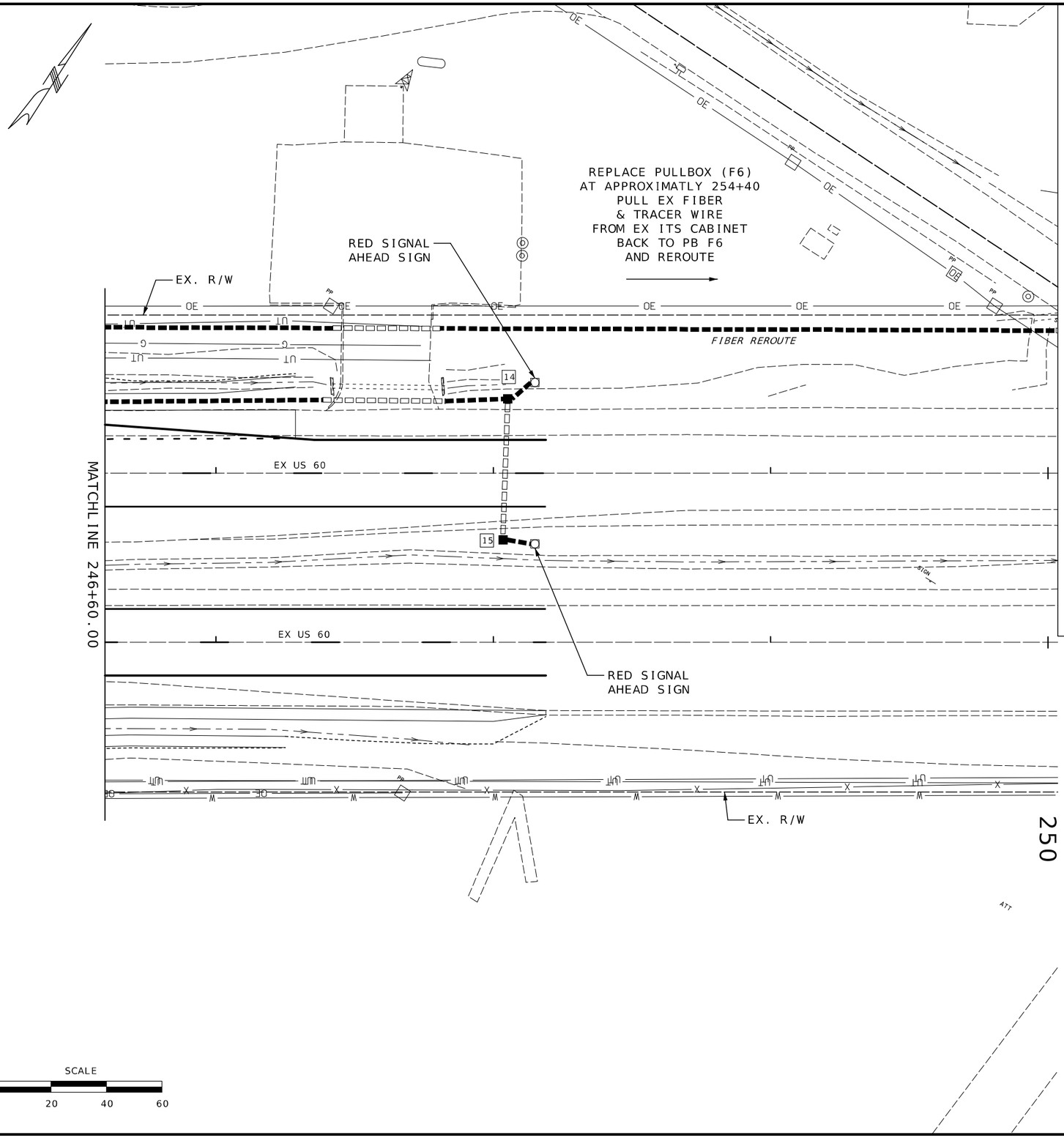
PROJECT NO.

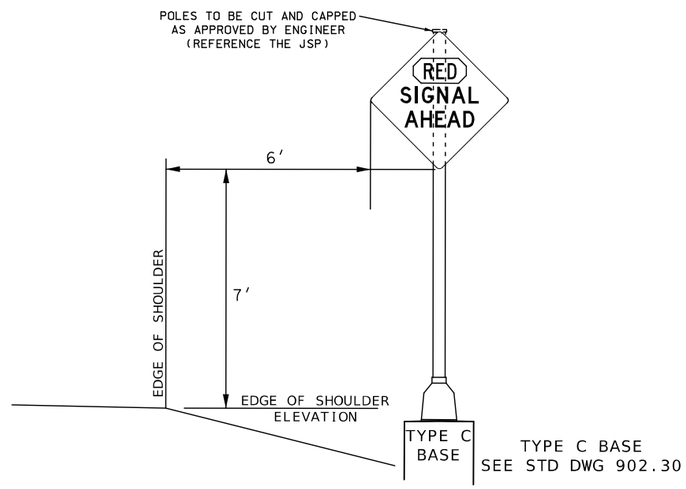
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





TYPE C BASE
SEE STD DWG 902.30

248+15
SECTION FACING SIGN

RED SIGNAL AHEAD SIGN
WITH LED LIGHT IS PAID
UNDER BID ITEM NO. 903-99.02, EACH
SEE SIGN DETAIL BELOW.
BASE CONCRETE, POST AND WIRING COVERED
IN SIGNAL QUANTITIES

SCALE
0 20 40 60

SIGNAL SHEET
US 60 & RTE MM
SHEET 11 OF 16

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 7:08:21 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	
7/25/2025	
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	163
COUNTY	
GREENE	
JOB NO.	
J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

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

| POST NUMBER | PULL BOX NUMBER | LOCATION: APPROACH | LOCATION: STATION | LOCATION: 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 | BASE: C | CONCRETE** (CU. YDS.) | PULL BOX: PREFORMED: CLASS 1 | CLASS 2 | CLASS 3 | CLASS 5 | PULL BOX: CONCRETE: STANDARD | DOUBLE, TYPE A | DOUBLE, TYPE B | DRAIN TYPE*: I | II: A | B | C | TOP MOUNT POST: 8 FT. | 15 FT. | TYPE C & CL: ARM LENGTH (FT.): 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. |
|---|---|---

CONDUIT (WITH #14 TRACER WIRE)

FROM	TO	CENTER TO CENTER DISTANCE	LOOP DET. 1"	TRENCH 2"	TRENCH 3"	TRENCH 4"	PUSHED 2"	PUSHED 3"	PUSHED 4"	MEDIAN 2"	MEDIAN 3"	MEDIAN 4"	ON STRUCTURE 2"	ON STRUCTURE 3"	REMARKS
SOURCE	∅	-													SEE JOB SPECIAL PROVISIONS
∅	BH	10			36										
BH	BH (115)	10			18										
BH	1	8				11									
1	2	41				39									
2	1	25			28										
2	5	15			16										
2	3	128				30			96						
3	2	22			25										
3	6	21			22										
2	5	164				23			125						
5	4	19			50										
5	4	104				116									
4	3	18			21										
5	6	40		38											
6	7	255		253											
7	8	250		305											
8	9	307		9											
9	RSA2	8		52											
9	10	54					12								
10	RSA1	11		41											
3	11	43		41											
11	12	253		251											
12	13	250		248											
13	14	286		239			45								
14	RSA3	12		13											
14	15	51					49								
15	RSA4	12		13											
F2	F2 (115)	24		27											
1	F3	161		92			67								
F3	F4	90		88											
F4	F5	353		351											
F5	F6	1029		904			123								
SUBTOTALS				2965	216	219		296		221					
TOTALS				2965	216	219		296		221					

CABLE

FROM	TO	CENTER TO CENTER DISTANCE	POWER 1C #8	CONTROL 2c #16	CONTROL 5c #16	CONTROL 7c #16	CONTROL 3c #16	CONTROL 2c #12	CONTROL 2c #12	POLE & BRACKET 1c #10	DETECTOR RADAR	DETECTOR 2c #14 LEAD-IN CABLE	FIBER CAT 6 ETHERNET CABLE	FIBER EXIST FIBER REROUTE	REMARKS
SOURCE	∅	-	-												SEE JOB SPECIAL PROVISIONS
∅	BH	10	78												
∅	BH (115)	19	105												
BH	BH (115)												66		3 CABLES
BH	70	74				175									ON POST 1
BH	41	74				153									ON POST 1
47	42					18									JUMPER ON POST 1
BH	44	63		93											
BH	43	63			93										
BH	17	197				297									
BH	50	197				295									
50	51					18									JUMPER ON POST 2
BH	21	197				273									
21	22					18									JUMPER ON POST 2
BH	43	196		232											
BH	44	196			232										
BH	52	231				317									
BH	10	231				315									
10	11					18									JUMPER ON POST 4
BH	61	231				293									
61	62					18									JUMPER ON POST 4
BH	30	334				447									
30	31					18									JUMPER ON POST 3
BH	81	334				425									
81	82					18									JUMPER ON POST 3
BH	RSA1	1072						1135							RED SIGNAL AHEAD
BH	RSA2	1129						1198							RED SIGNAL AHEAD
BH	RSA3	1019						1082							RED SIGNAL AHEAD
BH	RSA4	1070						1139							RED SIGNAL AHEAD
BH	SB	197									243				RADAR
BH	WB	197									243				RADAR
BH	EB	231									283				RADAR
BH	NB	231									283				RADAR
BH	1												90		SIGNAL CAMERA
BH (105)	F1													490	FIBER REROUTE
BH (115)	F6													1675	FIBER REROUTE
SUBTOTALS			183	325	325	3116		4554			1052		156	2165	
TOTALS			190	330	330	3120		4560			1060#		160	2170	

 # FOR INFORMATION ONLY

INTERSECTION US 60 & ROUTE MM

SIGNAL SHEET
US 60 & RTE MM
SHEET 13 OF 16 D-37B

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/29/2025 7:09:14 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED 7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	165

COUNTY GREENE

JOB NO. J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

UNINTERRUPTIBLE POWER SUPPLY

LOCATION			QUANTITY 902-99.02 EACH	REMARKS
APPROACH	STATION	OFFSET		
US 60/RTE MM	238+16	82' LT	1	MOUNT TO TYPE 2 POWER SUPPLY
SEE JOB SPECIAL PROVISIONS FOR MORE DETAIL				

POWER SUPPLY

LOCATION			POWER SUPPLY ASSEMBLY		CIRCUIT BREAKER TRIP RATING*				LIGHTING CONTROL * (ON POWER SUPPLY)(4)		SERVICE POLE		REMARKS
					CONTROLLER (3)		POWER SUPPLY DISCONNECT						
APPROACH	STATION	OFFSET	DRAWING 902.15	DRAWING	AUXILIARY BREAKER	CONT & SIGNAL LAMPS	MAIN BREAKER		120 VOLT CONTROL CABINET	MAIN BREAKER	CONTRACT FURNISH	UTILITY COMPANY	
							SIGNALS	LIGHTING					
US 60	238+20	90' LT	Type 2		15 Amps	30 Amps	40 Amps	40 Amps		15 Amps	CI. Ft.	LIBERTY UTILITIES	RELOCATE EXISTING POWER SUPPLY
			Type		Amps	Amps	Amps	Amps		Amps	CI. Ft.		

CONTROLLER ASSEMBLY AND AUXILIARY EQUIPMENT

LOCATION			SYSTEM MASTER (CLOSED LOOP)		ACTUATED		ON-OFF* SWITCH TYPE		COORDINATION INTERFACE *					TIME * CLOCK	NEMA CABINET TYPE *			2070 CABINET TYPE *		2070 SOFTWARE *	
									12C/7C HARDWIRE (1)		TIME BASE	CLOSED LOOP		FIBER							
APPROACH	STATION	OFFSET	NEMA	2070	NEMA	2070	I	II	MASTER	LOCAL		NEMA	170			E	EV	DOUBLE	332	336S	OMNI EX	WAPITI
US 60	238+16	82' LT				1															
US 60	238+11	74' LT												1							

NOTE: RELOCATE EXISTING SIGNAL CONTROLLER, CABINET, AND ITS CABINET

CONTRACTOR FURNISHED, CONTRACTOR INSTALLED RADAR DETECTION SYSTEM

1 INTERSECTION - 1 EA

DETECTOR SCHEDULE

DETECTOR NUMBER	APPROACH	TYPE				
		AUDIBLE PUSH BUTTON	INDUCTION LOOP (2)			RADAR
			STANDARD	DELAY/ EXTEND *	CALL UNIT *	
1	SB ON POST 2					1
4	WB ON POST 2					1
3	EB ON POST 4					1
2	NB ON POST 4					1
44	MM	1				
43	MM	1				
TOTAL		2	0	0	0	4#

FOR INFORMATION ONLY: RADAR TRAFFIC SIGNAL DETECTION. SEE JOB SPECIAL PROVISIONS

* ITEMS FOR WHICH SEPARATE PAYMENT WILL NOT BE MADE.

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

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

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

NOTE:
RADAR WILL BE USED FOR DETECTION

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 ***	48 X 18	6.0	12.0	2
2	D3-1B ***	66 X 18	8.3	16.5	2
	R10-3E	9 X 15	0.9		
	R10-11A	24 X 30	5.0		
	R10-13	36 X 24	6.0		
	R10-27A	30 X 36	7.5		
	R10-12	24 X 30	5.0		
1	R10-3eL**	9 X 15	0.9	**	**
1	R10-3eR**	9 X 15	0.9	**	**
			SUBTOTAL	28.5	4
			TOTALS	29	4

2070 INPUT FILE ASSIGNMENTS

	CHANNEL	1	2	3	4	5	6	7	8	9	10	11	12	13	14
"I"	U											** BBU FLASH			** FLASH SENSE
	L												(43) (44)		STOP TIME
"J"	U														
	L														

TOTAL NUMBER OF DETECTOR CARDS(2-CHANNEL) = (3) 242 DC ISOLATOR MODULES

2070 OUTPUT FILE ASSIGNMENTS

FR1	PH1	PH2	2 PED	PH3	PH4	4 PED	MONITOR
	RL	R		RL	R	DW	
FR2	YL	Y		YL	Y		
	L	G		L	G	W	
FR3	PH5	PH6	6 PED	PH7	PH8	8 PED	
	RL	R		RL	R		
FR4	YL	Y		YL	Y		
	L	G		L	G		

2070 AUXILIARY OUTPUT FILE

FR5						RSA SIGNS
						RSA 1/2
FR6						
						RSA 3/4

US 60 & ROUTE MM
INTERSECTION

SIGNAL SHEET
US 60 & RTE MM
SHEET 14 OF 16

D-37C

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 7:09:36 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED 7/25/2025

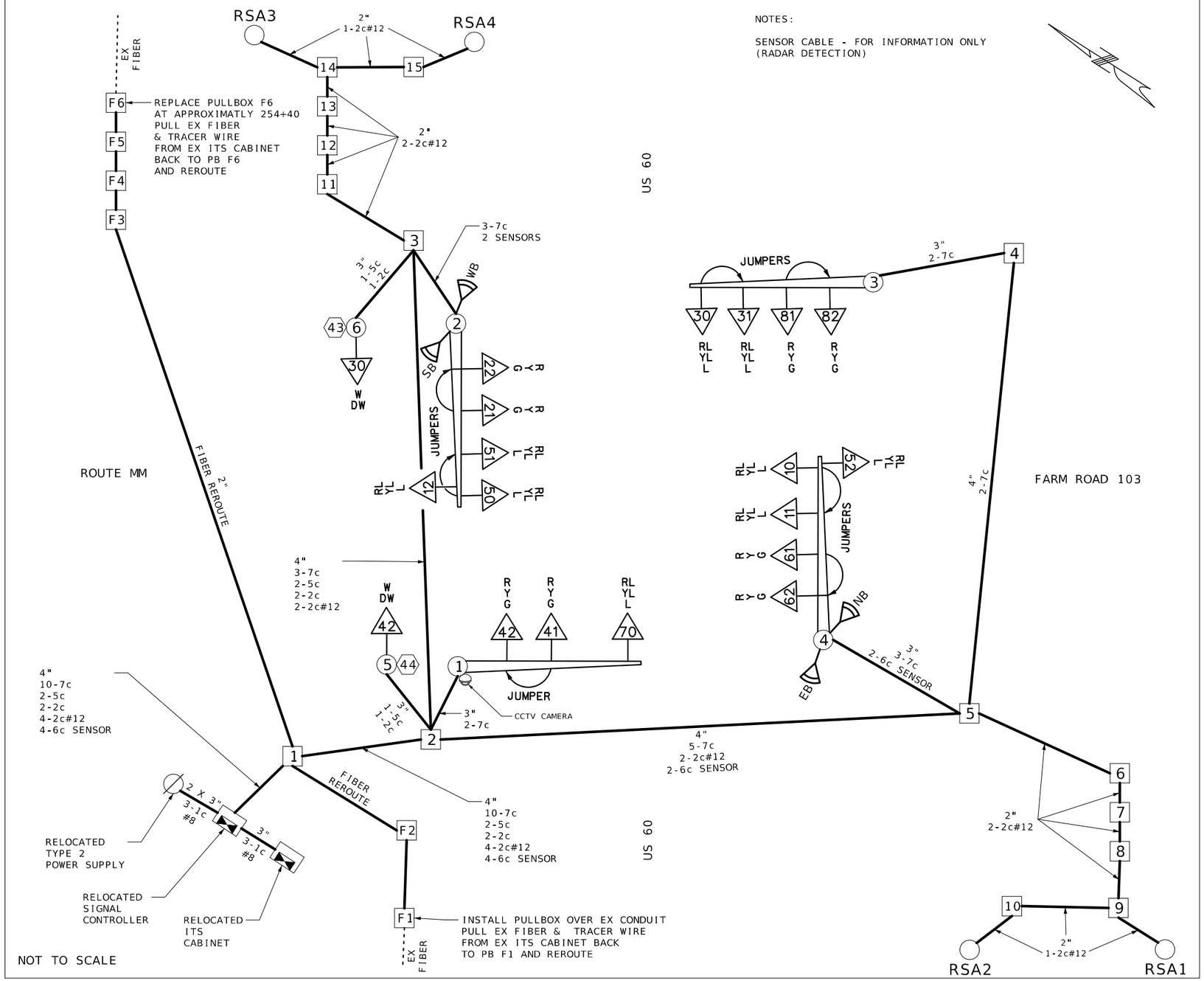
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	166

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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

WIRING DIAGRAM

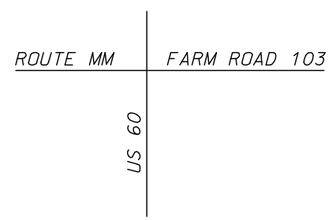


NOTES:

SENSOR CABLE - FOR INFORMATION ONLY
(RADAR DETECTION)

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
	RADAR DETECTOR



US 60 & ROUTE MM

INTERSECTION

SIGNAL SHEET
US 60 & RTE MM
SHEET 15 OF 16

D-37D

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 7:09:58 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	167

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

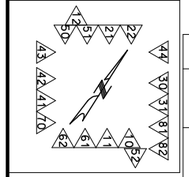
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

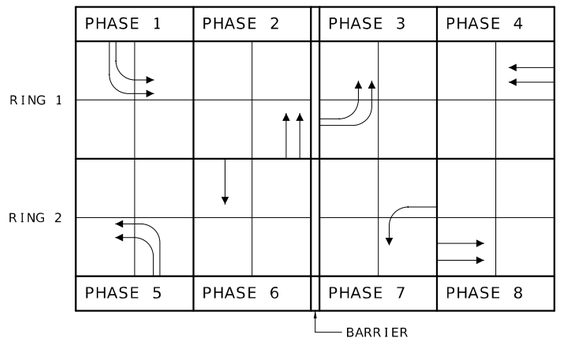
SIGNAL FACE LOCATION



TRAFFIC PHASING AND COLOR SEQUENCE - ACTUATED CONTROLLERS

	PHASE 1	PHASE 2	PHASE 3	PHASE 4	PHASE 5	PHASE 6	PHASE 7	PHASE 8	PED Ø OVERLAP	PED Ø 4 OVERLAP	PED Ø OVERLAP	PED Ø OVERLAP
FACE NUMBERS	10 11 12	21 22	30 31	41 42	50 51 52	61 62	70	81 82		43 44		
SIGNAL INDICATIONS R	RL RL RL	R R	RL RL	R R	RL RL RL	R R	RL	R R		DW DW		
SIGNAL INDICATIONS Y	YL YL YL	Y Y	YL YL	Y Y	YL YL YL	Y Y	YL	Y Y				
SIGNAL INDICATIONS FYL												
SIGNAL INDICATIONS G	L L L	G G	L L	G G	L L L	G G	L	G G		W W		
DETECTOR ASSIGNMENTS	10 11 12	21 22	30 31	41 42	50 51 52	61 62	70	81 82				
DETECTOR ASSIGNMENTS (PEDS. ONLY)										43 44		
OVERLAP PARENT PHASES												

FACE NUMBERS
SIGNAL INDICATIONS R
SIGNAL INDICATIONS Y
SIGNAL INDICATIONS FYL
SIGNAL INDICATIONS G
DETECTOR ASSIGNMENTS



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	
ALL PHASES	FR

CONTROLLER TYPE	2070

TRAFFIC SIGNAL CONTROL OPERATION

INTERSECTION OF US 60

WITH ROUTE MM

SIGNAL SHEET
US 60 & RTE MM
SHEET 16 OF 16

D-38A

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 7:10:19 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	168

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

SIGNING SHEET
SHEET 1 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:01:27 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	169

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

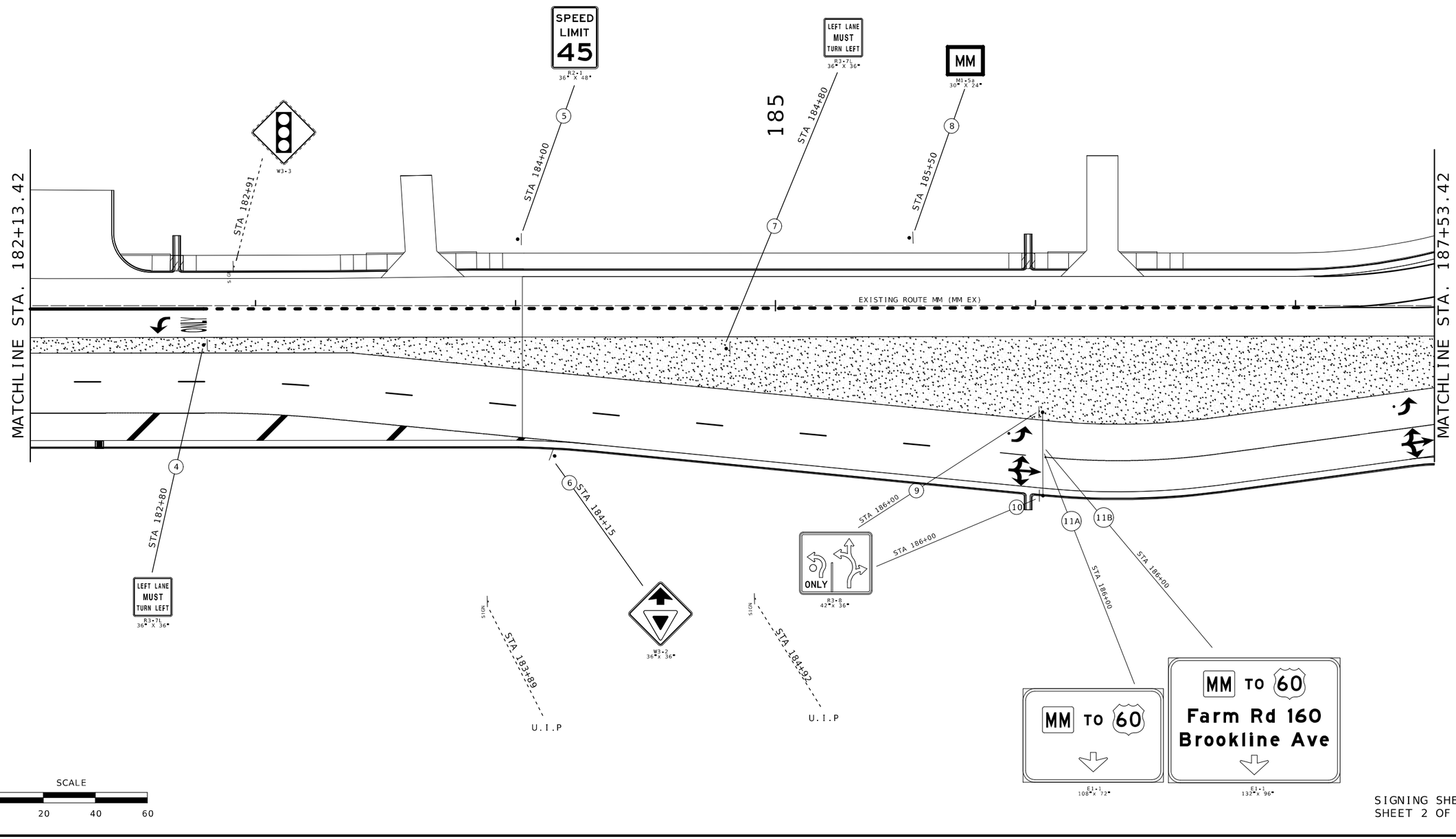
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SIGNING SHEET
SHEET 2 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:01:56 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	170

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SCALE

0 20 40 60

SIGNING SHEET
SHEET 3 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:02:20 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	171

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

MATCHLINE STA. 187+53.42

MATCHLINE STA. 2+65.00

MATCHLINE STA. 191+35.99

FARM ROAD 160 (FR160 Sec03)

PROPOSED ROUTE MM (MM PR)

N89°33'15"E

EXISTING ROUTE MM (MM EX)

START STA 09+60.00

25

190

YIELD
R1-2
60" x 60"

TO ALL TRAFFIC IN ROUNDABOUT
RO-1
36" x 30"

ONE WAY
R6-1R
54" x 18"

STOP
(R)

Farm Rd 160
D1-1d
84" x 18"

MM TO 44
Brookline Ave
NORTH
D1-1e
84" x 48"

MM TO 60
D1-1e
54" x 18"

Brookline Ave
SOUTH
D1-1d
84" x 24"

W4-3R
36" x 36"

W12-1
36" x 36"

QM1-3
18" x 18"

W3-2
36" x 36"

W2-6
36" x 36"

25
M.P.H.
W13-1P
24" x 24"

R4-7
24" x 30"

SIGN

STA 3+05
STA 22+05
STA 17+05
STA 2+25
STA 25+30
STA 25+45
STA 26+00
STA 26+30
STA 26+35
STA 25+75
STA 188+40
STA 188+10
STA 00+40
STA 1+10
STA 1+00
STA 2+35
STA 190+62
STA 190+55
STA 190+70
STA 190+60
STA 00+33
STA 1+00

20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 15 16 17 18 19

SCALE
0 20 40 60

SIGNING SHEET
SHEET 4 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:02:52 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	172

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

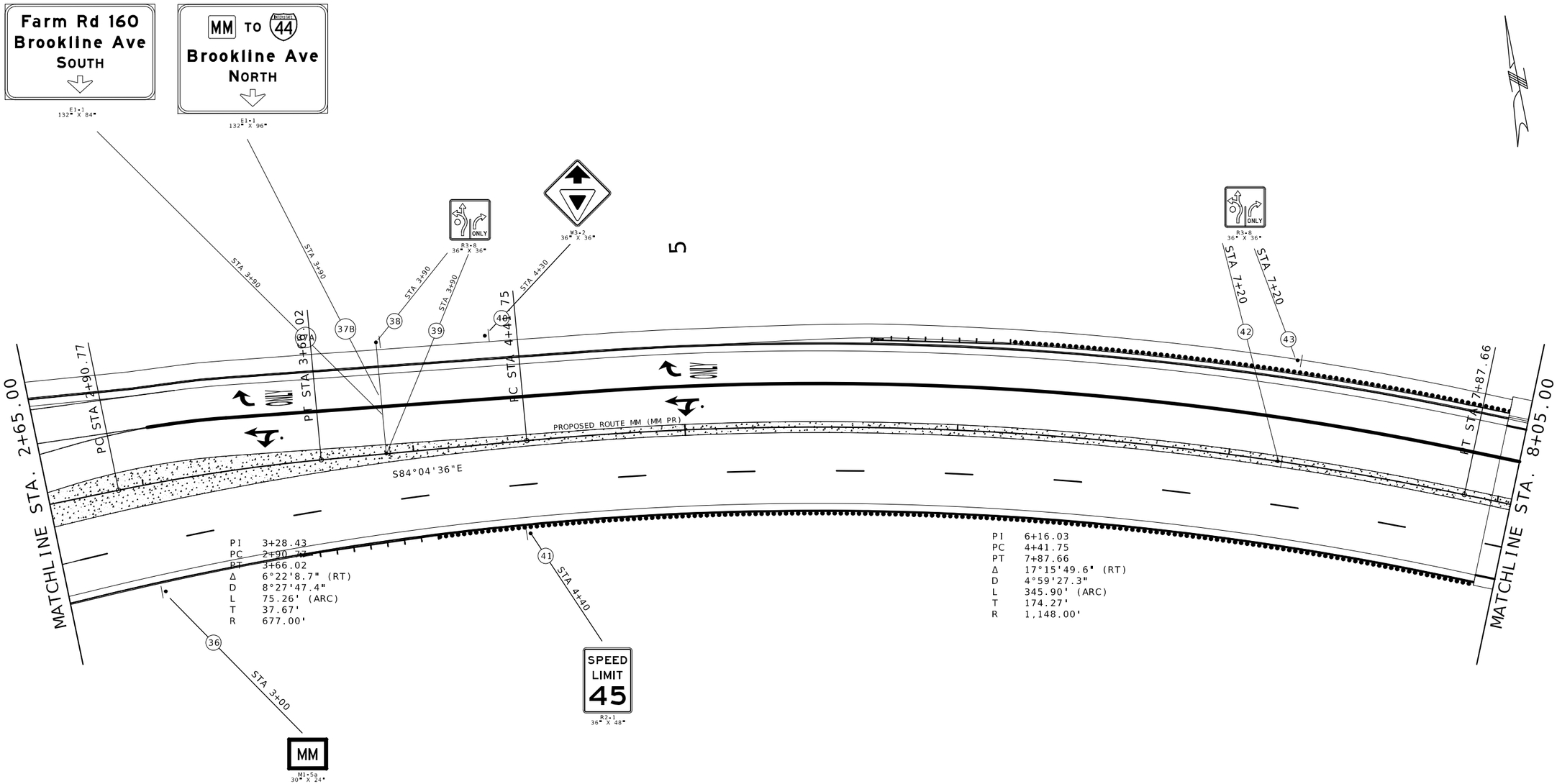
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SIGNING SHEET
SHEET 5 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:03:19 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	173

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

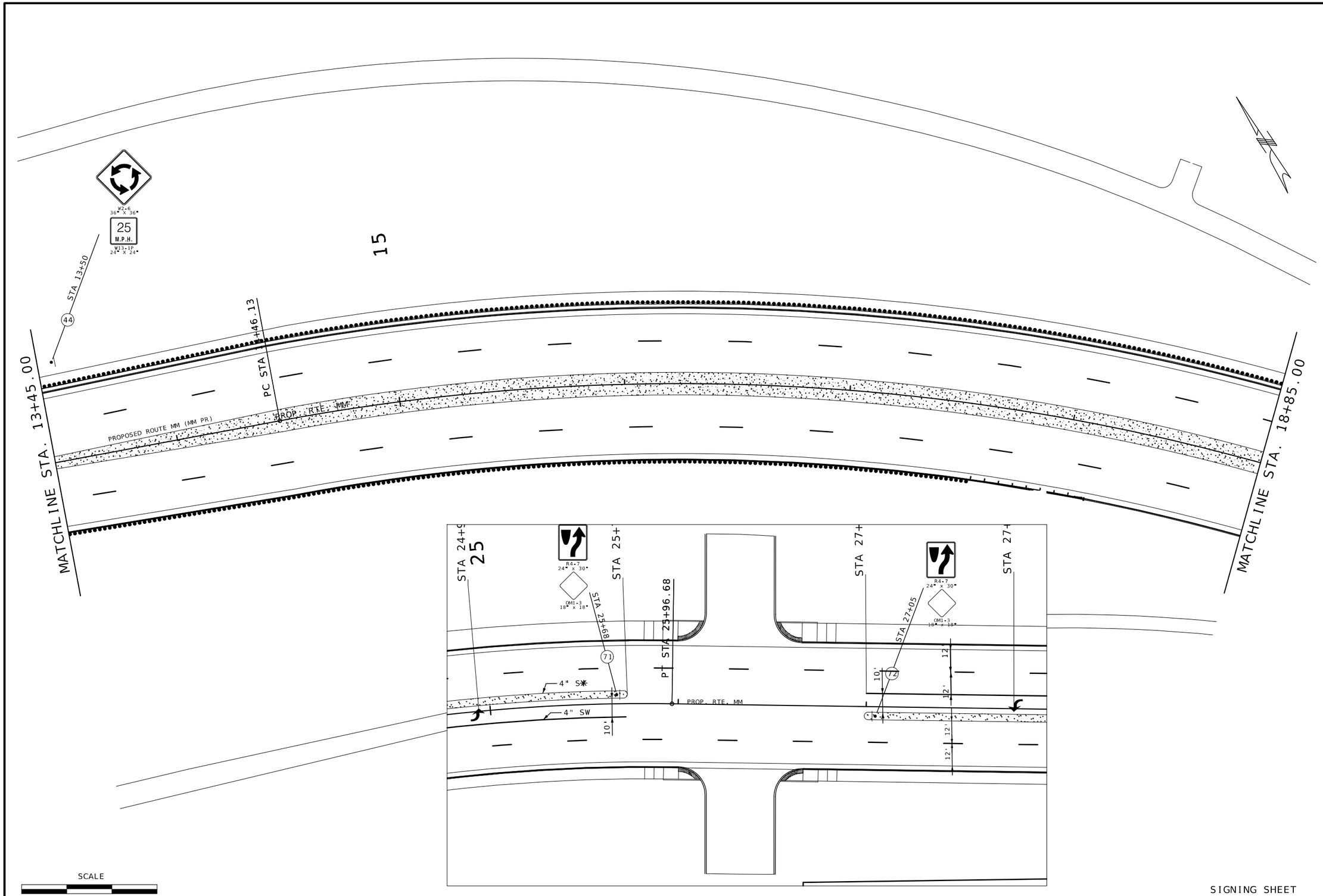
PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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



SIGNING SHEET
SHEET 6 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:03:51 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	174

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

30

35

MATCHLINE STA. 29+65.00

MATCHLINE STA. 35+05.00

MATCHLINE

MATCHLINE

R4-7
24" x 30"

OM1-3
18" x 18"

STA. 32+20

73

PROPOSED ROUTE MM (MM PR)

S01°44'08"W

74

STA 33+65

R4-7
24" x 30"

OM1-3
18" x 18"

SCALE

0 20 40 60

SIGNING SHEET
SHEET 7 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:04:15 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	175

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

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

SCALE

0 20 40 60

SIGNING SHEET
SHEET 8 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:04:39 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	176

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

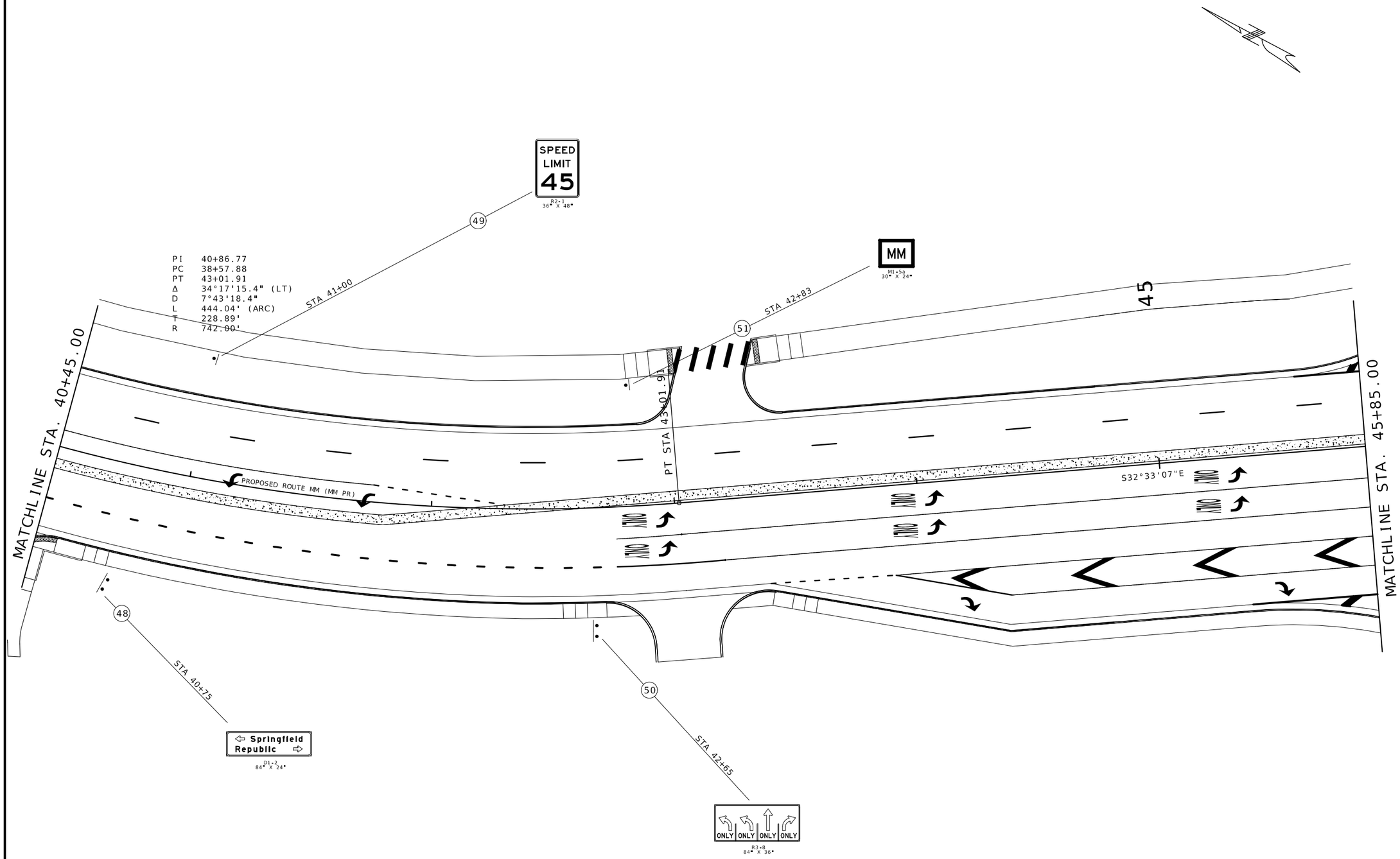
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SIGNING SHEET
SHEET 9 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:05:05 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	177

COUNTY
GREENE

JOB NO.
J8S0836D

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)

MATCHLINE STA. 241+13.62

MATCHLINE STA. 45+85.00

MATCHLINE STA. 3+88.82

MATCHLINE STA. 237+31.36

PROPOSED ROUTE MM (MM PR)

FARM ROAD 103 (FR103 TIE)

US 60 WB (60 WB)

US 60 EB (60 EB)

END STA 47+37.08

240

0

STA 240+10

STA 240+10

STA 240+35

STA 240+15

STA 1+15

STA 1+40

STA 238+45

STA 238+20

STA 237+90

STA 46+00

STA 46+25

STA 46+20

SCALE

0 20 40 60

SIGNING SHEET
SHEET 10 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:05:29 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	178

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

SCALE

0 20 40 60

SIGNING SHEET
SHEET 11 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:05:53 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	179

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

10

MATCHLINE STA. 9+28.82

FARM ROAD 103 (FR103 TIE)

U.I.P.

SIGN

SIGN

END OF PROJECT
13+04.61

SEE SURVEY NOTES

SIGN

U.I.P.

SCALE

0 20 40 60

SIGNING SHEET
SHEET 12 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:06:27 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	180

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

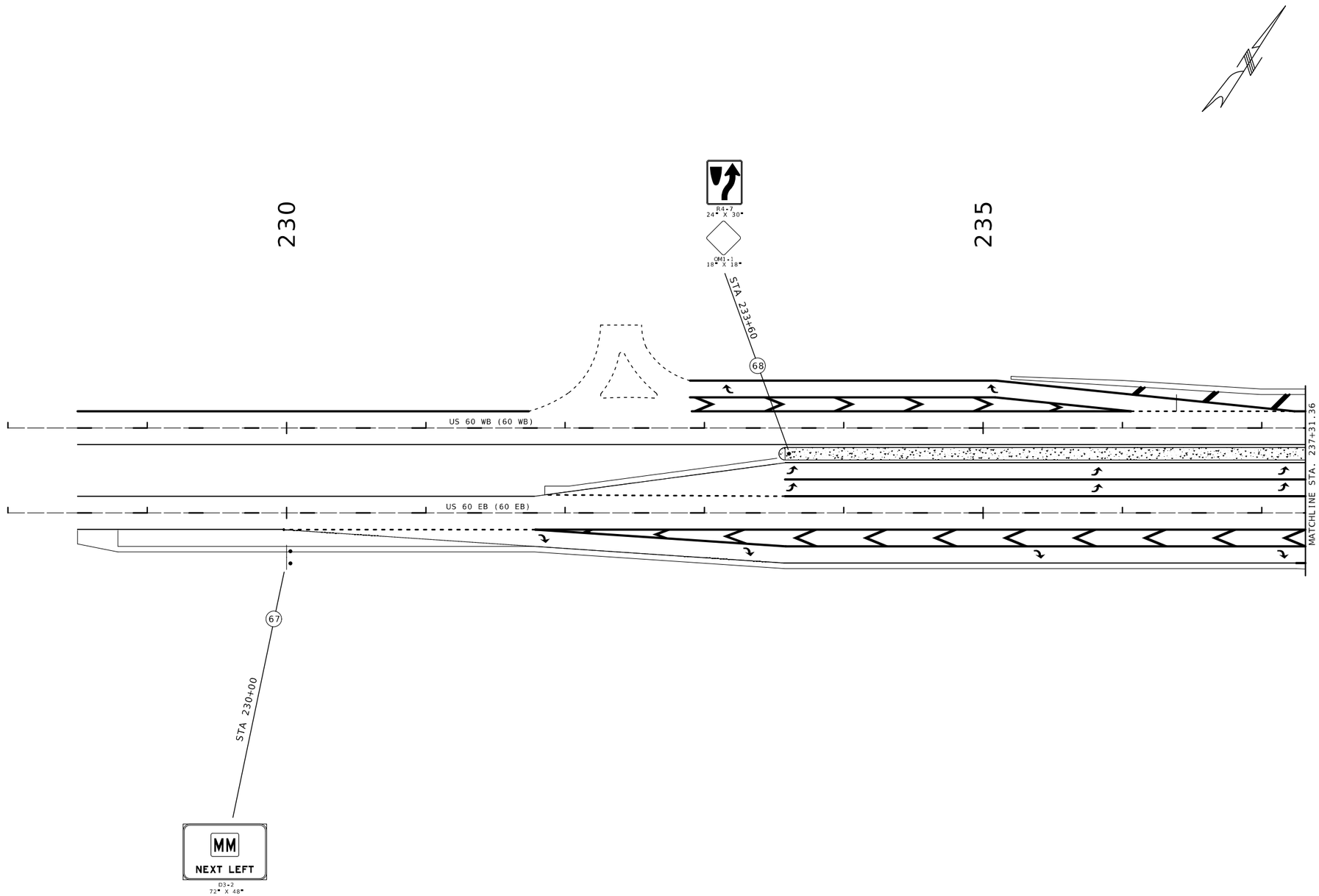
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SCALE

0 40 80 120

SIGNING SHEET
SHEET 13 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:06:50 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	181

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

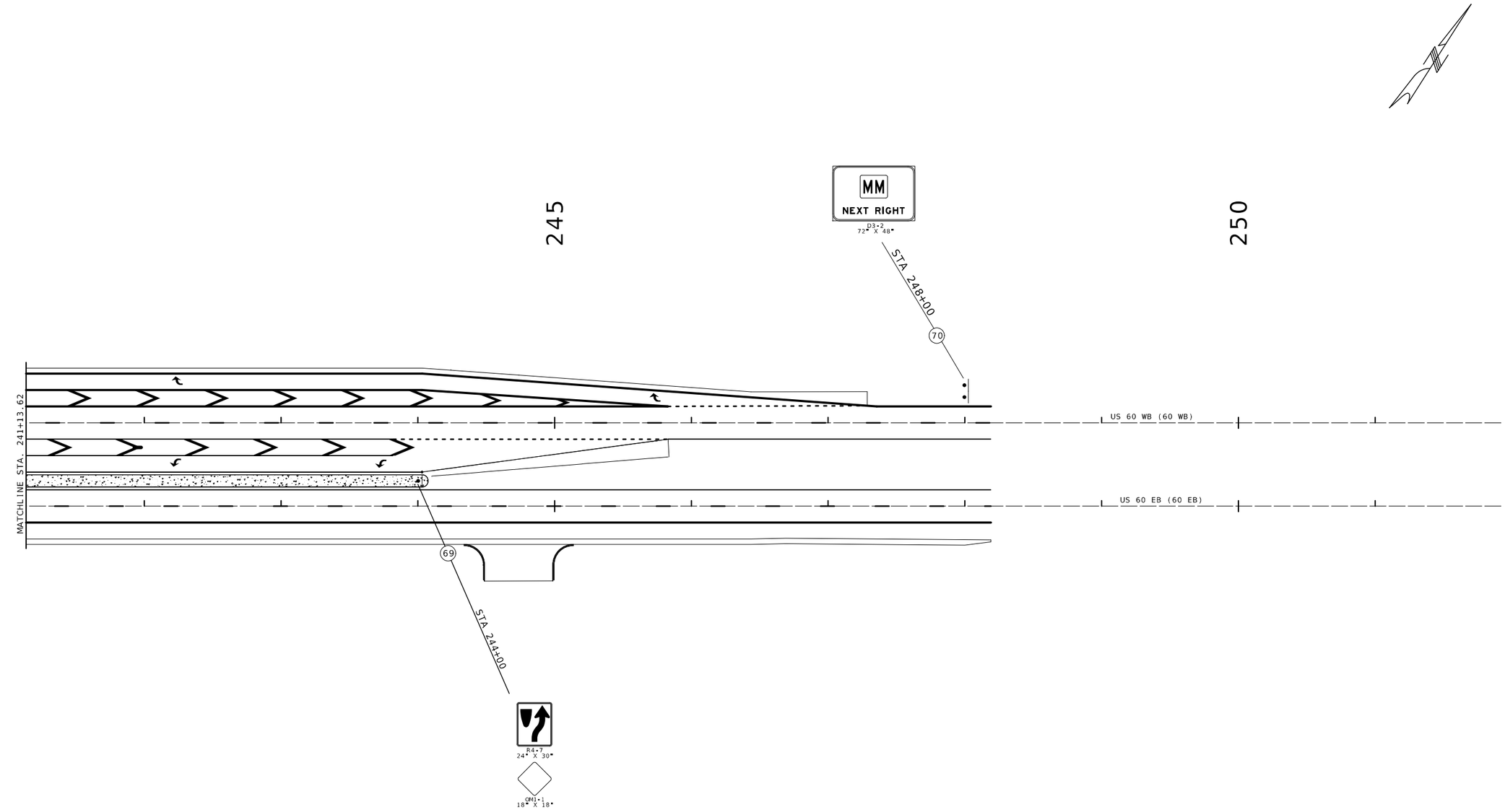
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SCALE

0 40 80 120

SIGNING SHEET
SHEET 14 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:07:14 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	182

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

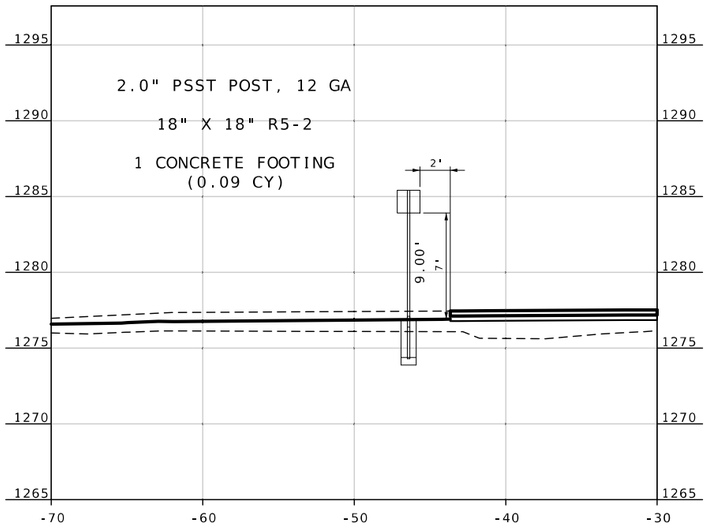
PROJECT NO.

BRIDGE NO.

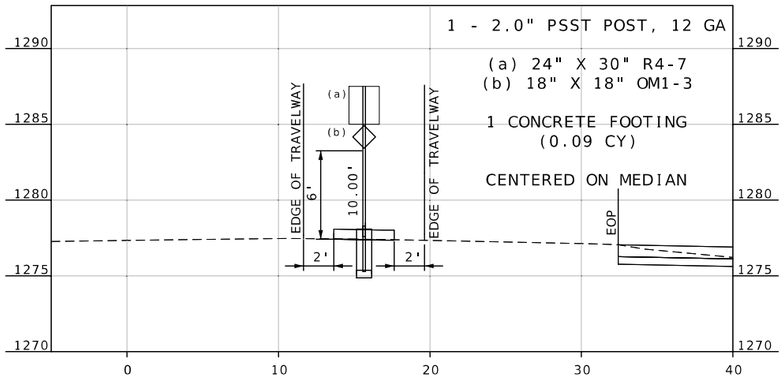
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

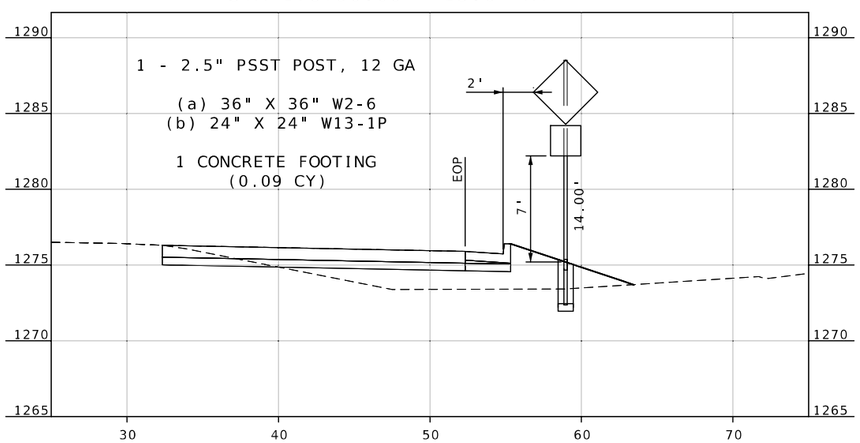
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



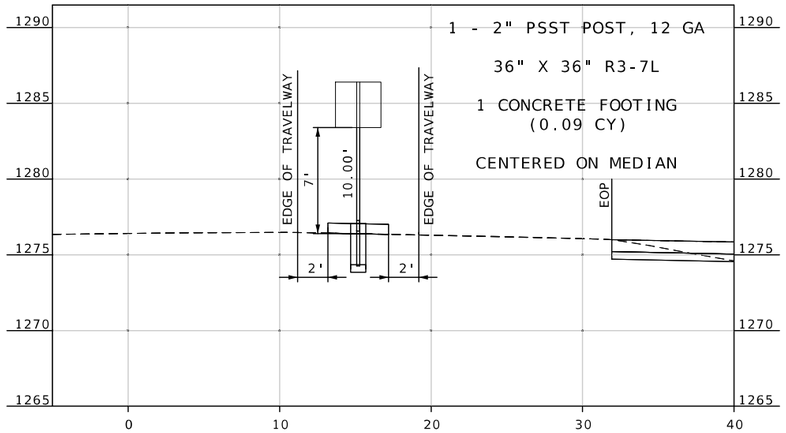
1 EXISTING ROUTE MM
STA 178+30.00 - 46.4' LT



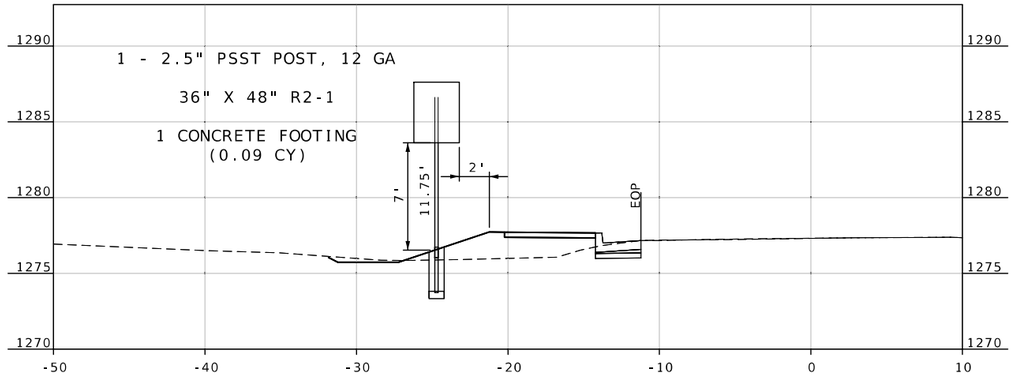
2 EXISTING ROUTE MM
STA 178+96.00 - 15.6' RT



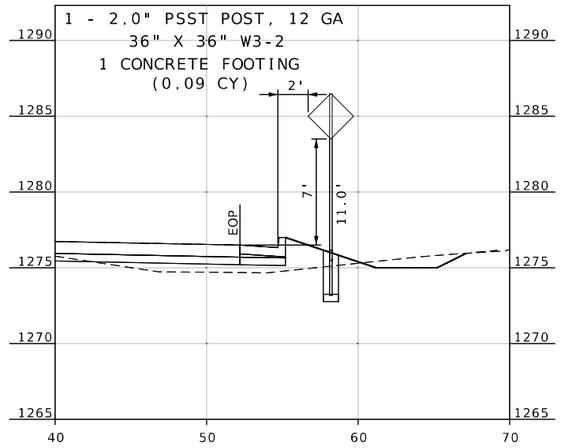
3 EXISTING ROUTE MM
STA 180+20.00 - 59.0' RT



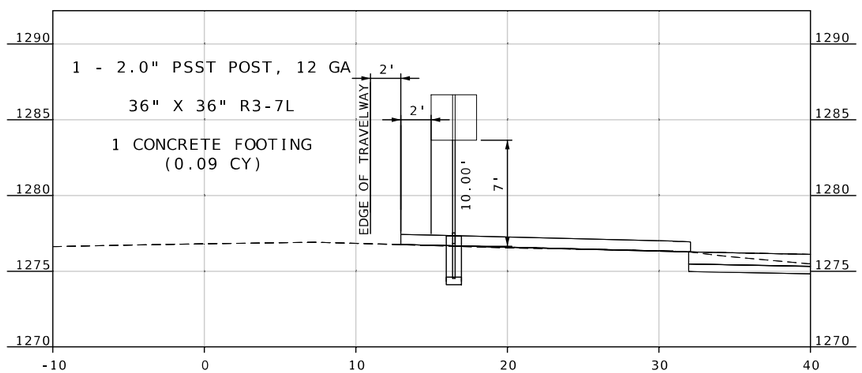
4 EXISTING ROUTE MM
STA 182+80.00 - 15.0' RT



5 EXISTING ROUTE MM
STA 184+00.00 - 24.7' LF



6 EXISTING ROUTE MM
STA 184+15.00 - 58.2' RT



7 EXISTING ROUTE MM
STA 184+80.00 - 16.5' RT

SIGNING SHEET
SHEET 15 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:07:37 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	183

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

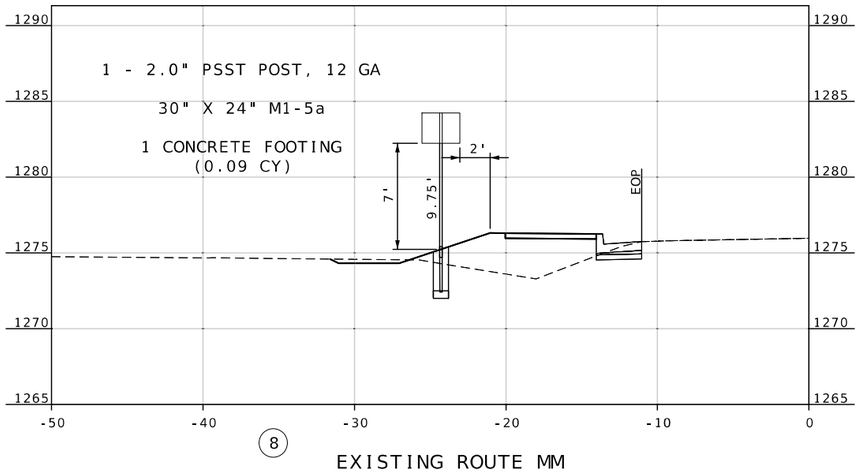
PROJECT NO.

BRIDGE NO.

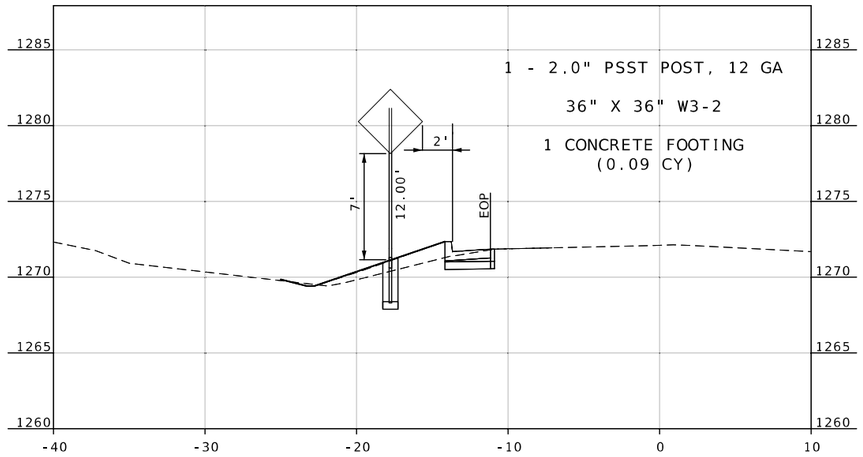
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

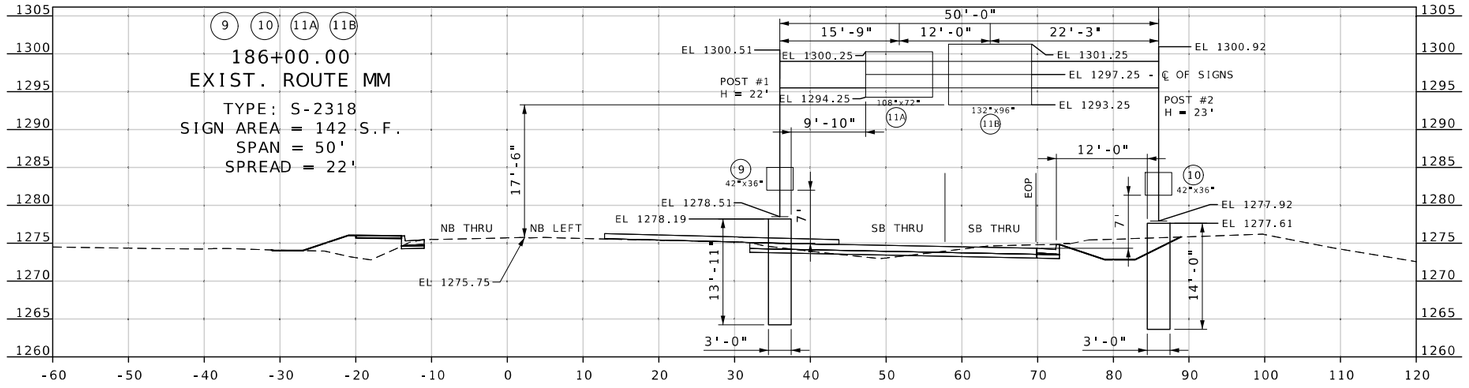
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

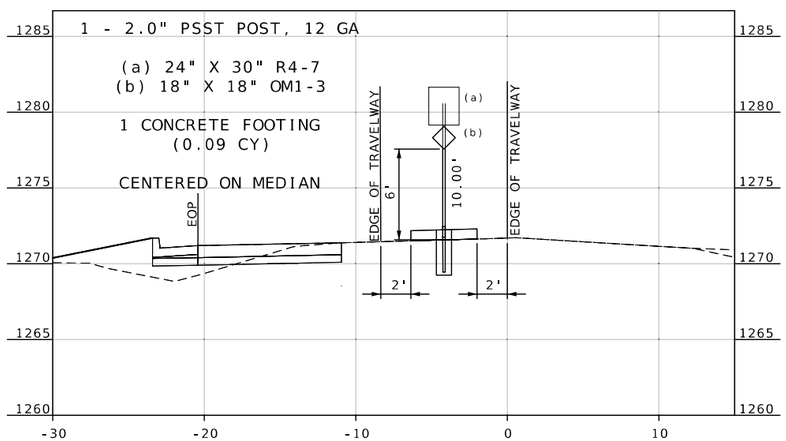


8 EXISTING ROUTE MM
STA 185+50.00 - 24.3' LT

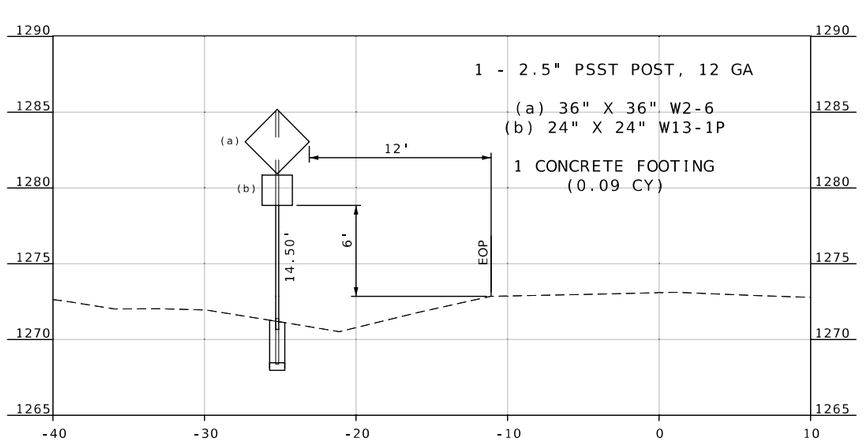


13 EXISTING ROUTE MM
STA 194+00.00 - 17.8' LT





12 EXISTING ROUTE MM
STA 193+05.00 - 4.2' LT



14 EXISTING ROUTE MM
STA 196+00.00 - 25.2' LT

SIGNING SHEET
SHEET 16 OF 28

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:07:59 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	184

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

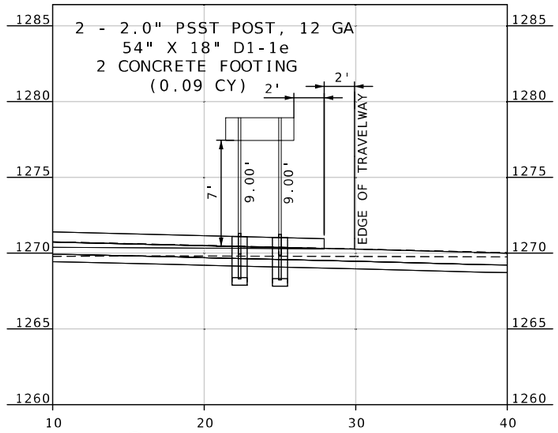
PROJECT NO.

BRIDGE NO.

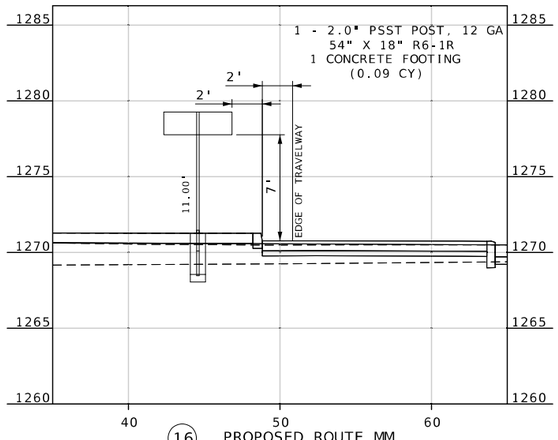
DESCRIPTION

DATE

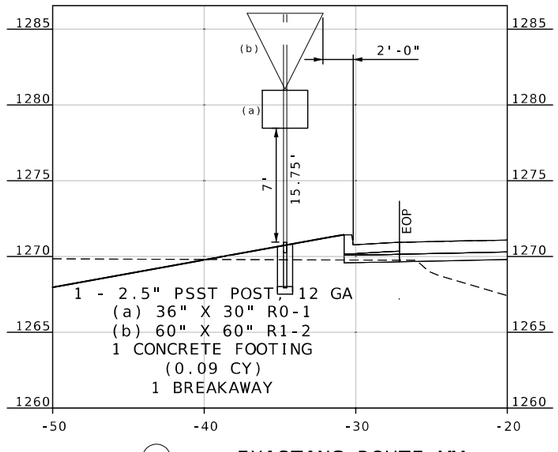
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



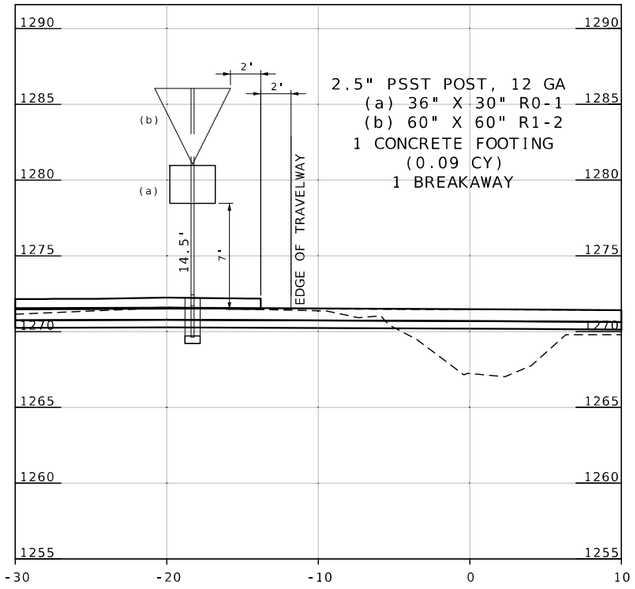
15 PROPOSED ROUTE MM
STA 1+00.00 - 23.3' RT



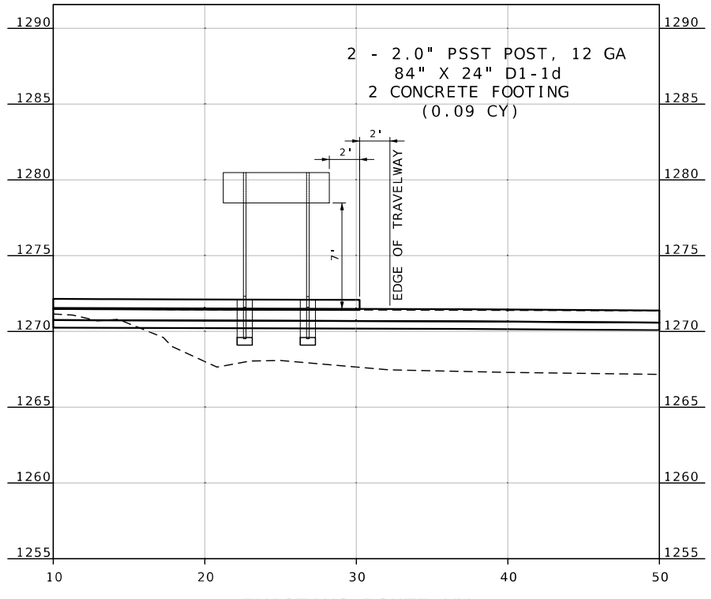
16 PROPOSED ROUTE MM
STA 0+33.00 - 44.6' RT



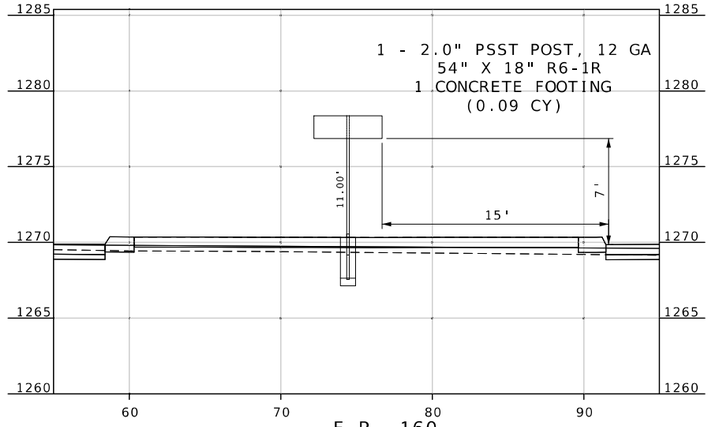
17 EXISTING ROUTE MM
STA 190+70.00 - 35.0' LT



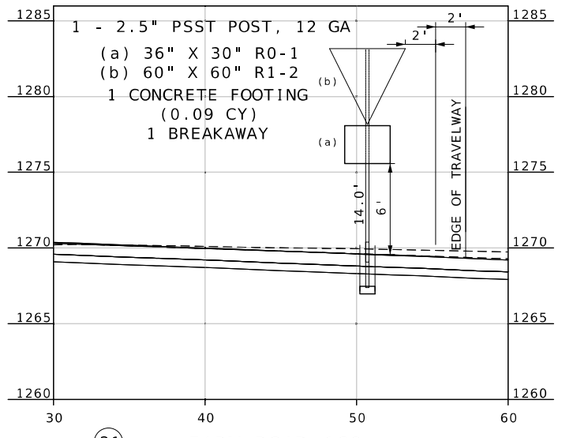
18 EXISTING ROUTE MM
STA 190+62.00 - 18.3 LT



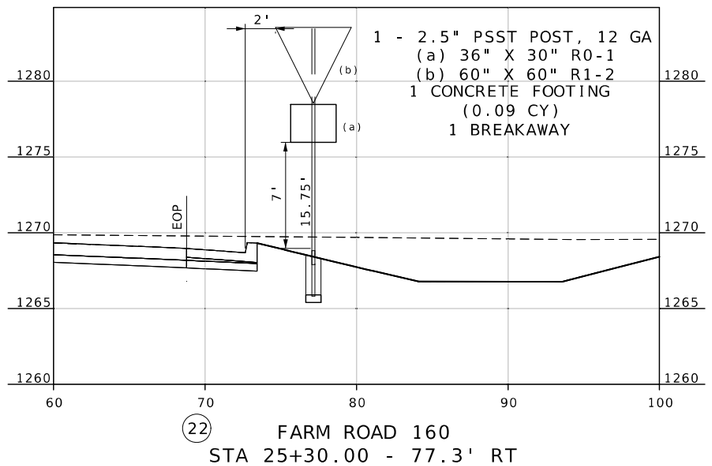
19 EXISTING ROUTE MM
STA 190+62.00 - 24.9' RT



20 F.R. 160
STA 26+00.00 - 75' RT



21 FARM ROAD 160
STA 25+45.00 - 50.7' RT



22 FARM ROAD 160
STA 25+30.00 - 77.3' RT

SIGNING SHEET
SHEET 17 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:08:20 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	185

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

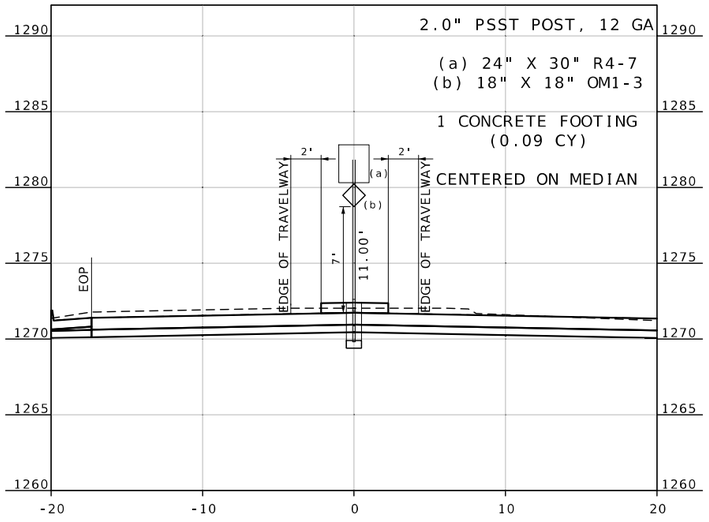
PROJECT NO.

BRIDGE NO.

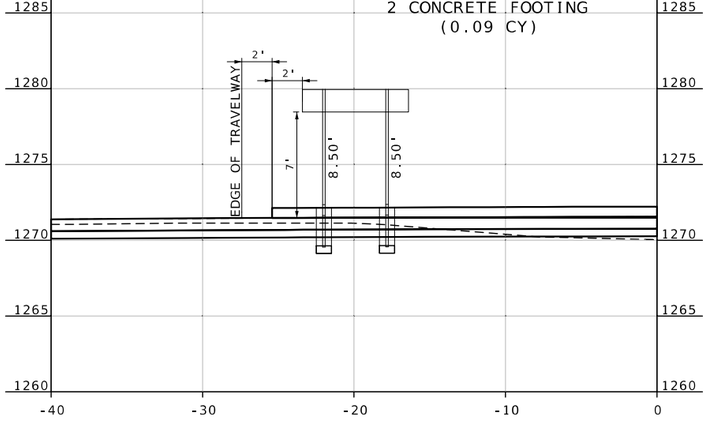
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

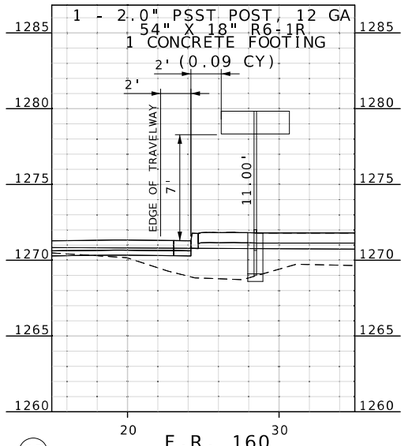
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



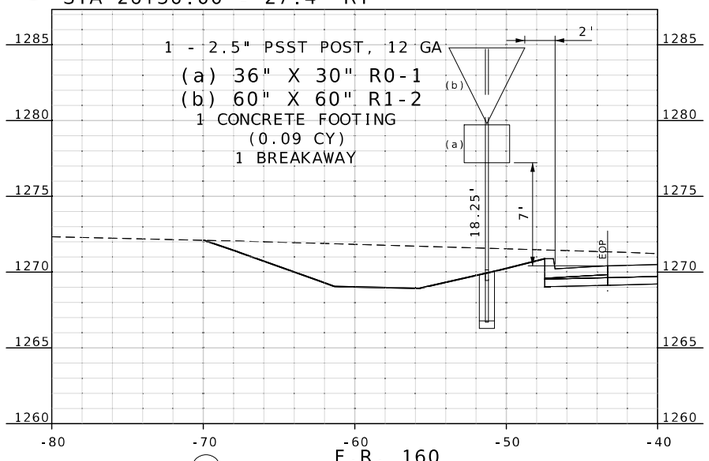
23 EXISTING ROUTE MM
STA 2+25.00 - 00.0' LT



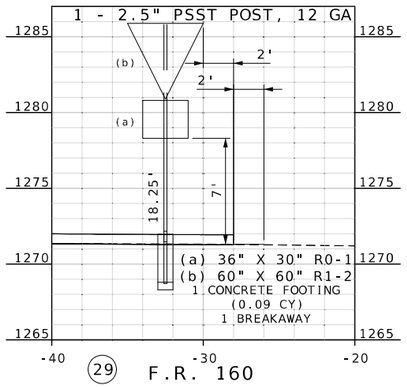
26 EXISTING ROUTE MM
STA 3+05.00 - 20.0' LT



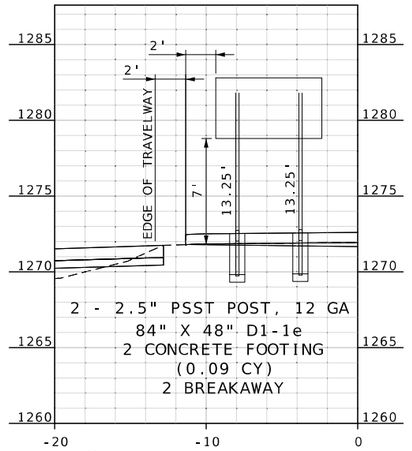
27 F.R. 160
STA 26+30.00 - 27.4' RT



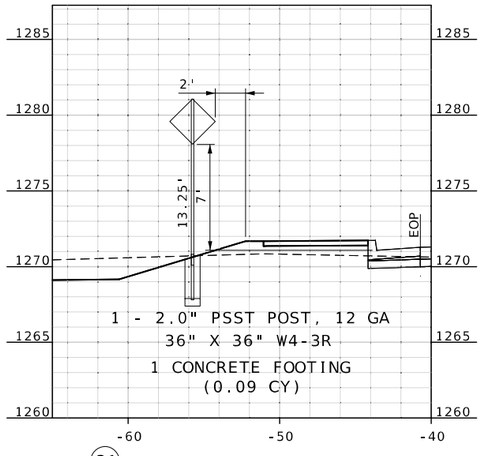
28 F.R. 160
STA 25+75.00 - 51.3' LT



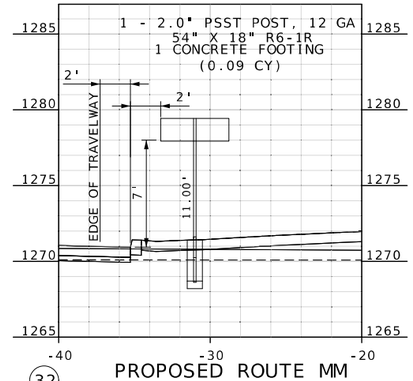
29 F.R. 160
STA 26+35.00 - 32.5' LT



30 EXISTING ROUTE MM
STA 188+40.00 - 5.9' LT



31 EXISTING ROUTE MM
STA 188+10.00 - 55.7' LT



32 PROPOSED ROUTE MM
STA 00+40.00 - 31.0' LT

SIGNING SHEET
SHEET 18 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:08:47 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	186

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

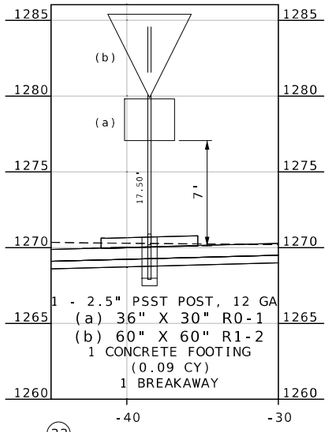
PROJECT NO.

BRIDGE NO.

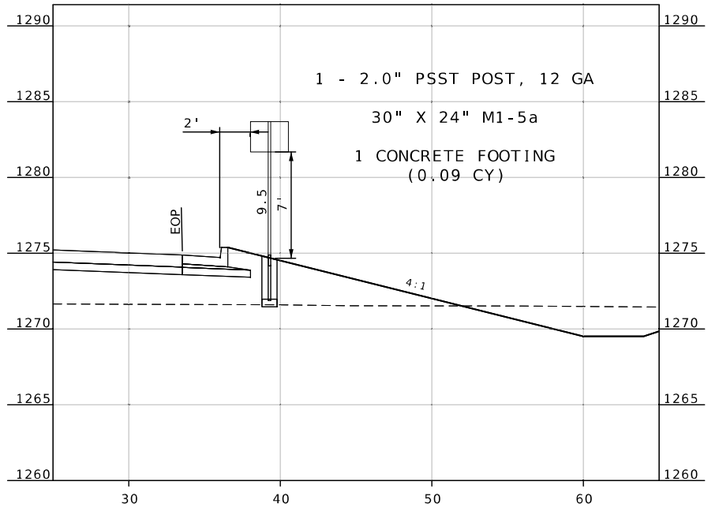
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

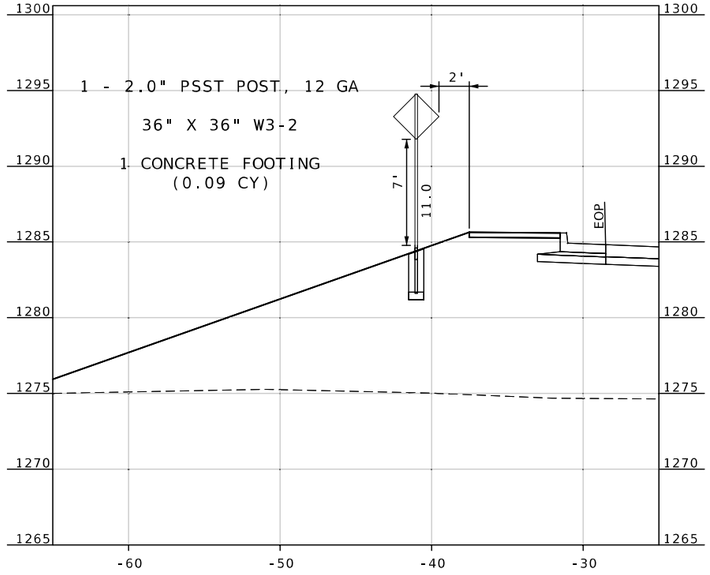
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



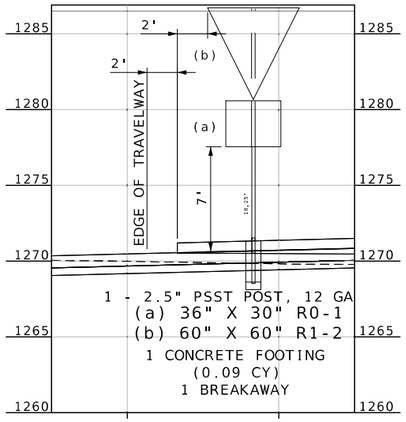
33 PROPOSED ROUTE MM
STA 1+10.00 - 38.5' LT



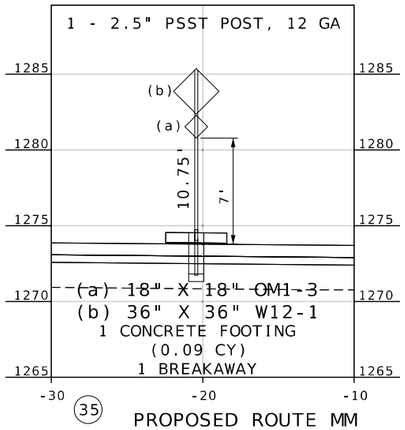
36 PROPOSED ROUTE MM
STA 3+00.00 - 39.3' RT



40 PROPOSED ROUTE MM
STA 4+30.00 - 41.0' LT



34 PROPOSED ROUTE MM
STA 1+00.00 - 11.7' LT

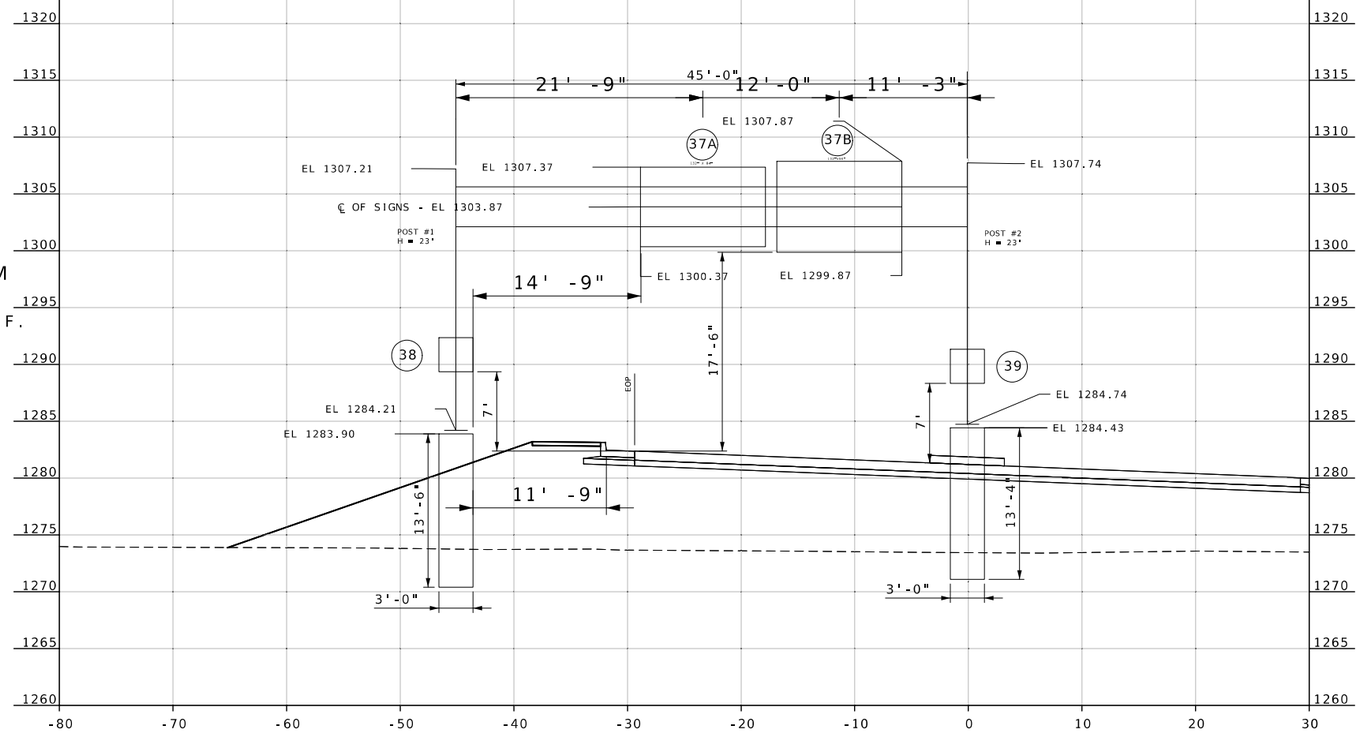


35 PROPOSED ROUTE MM
STA 2+35.00 - 20.7' LT

37A 37B 38 39

3+90.00
PROP. ROUTE MM

TYPE: S-2316.5
SIGN AREA = 165 S.F.
SPAN = 45'
SPREAD = 23'



SIGNING SHEET
SHEET 19 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:09:11 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	187

COUNTY
GREENE

JOB NO.
J8S0836D

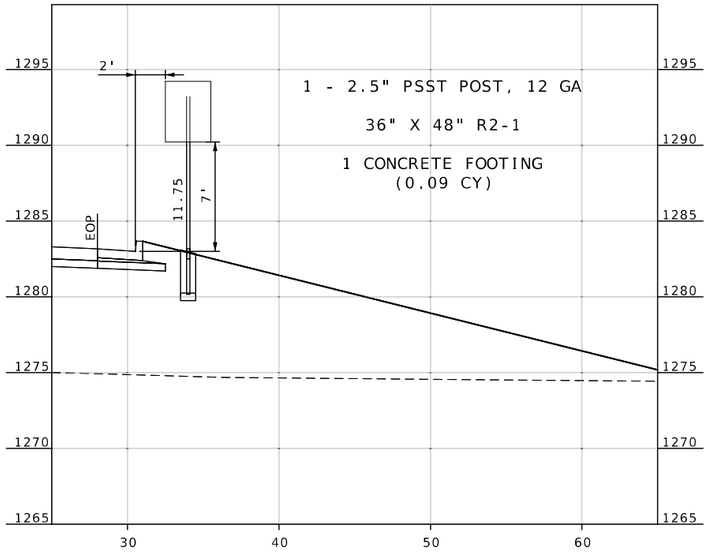
CONTRACT ID.

PROJECT NO.

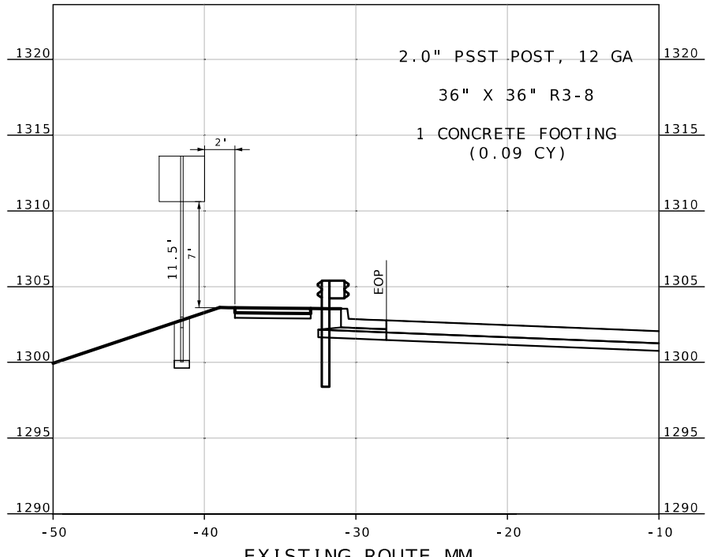
BRIDGE NO.

DESCRIPTION	DATE

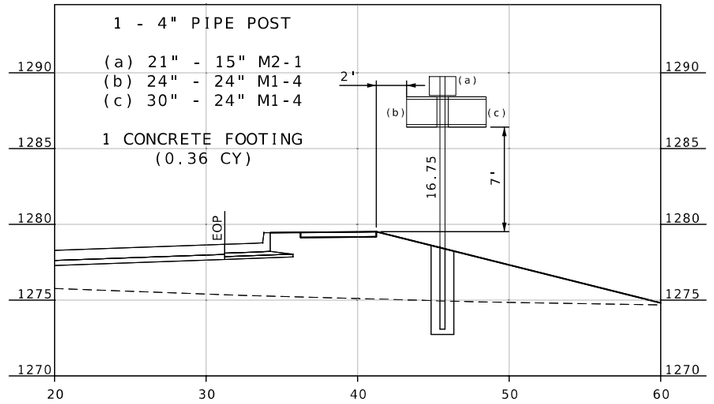
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



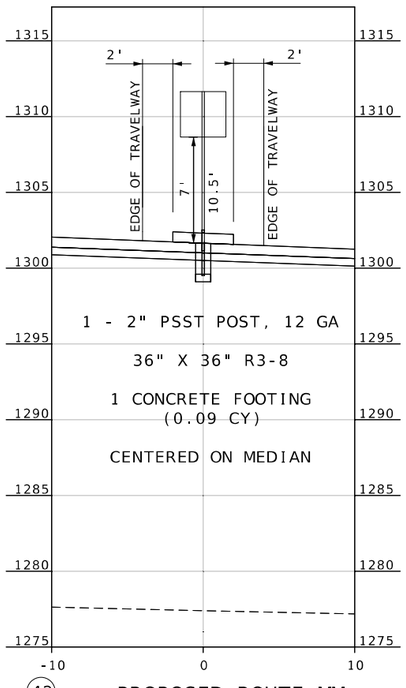
(41) PROPOSED ROUTE MM
STA 4+40.00 - 34.0' RT



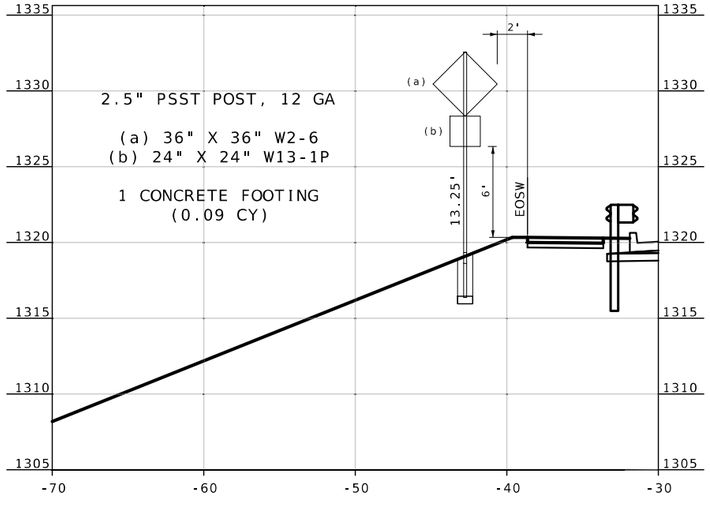
(43) EXISTING ROUTE MM
STA 7+20.00 - 41.5' LT



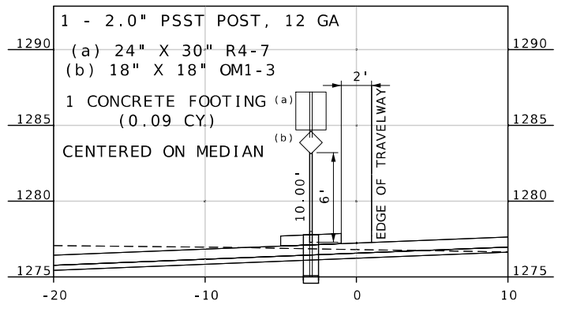
(45) PROPOSED ROUTE MM
STA 38+80.00 - 45.6' RT



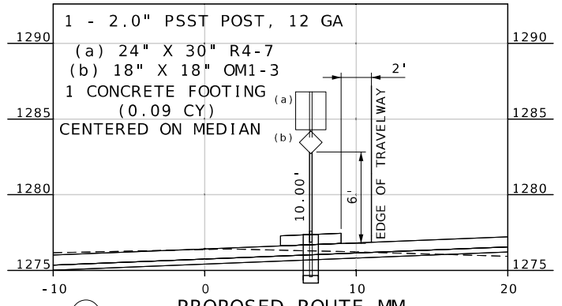
(42) PROPOSED ROUTE MM
STA 7+20.00 - CENTER LINE



(44) PROPOSED ROUTE MM
STA 13+50.00 - 42.7' LT



(46) PROPOSED ROUTE MM
STA 39+30.00 - 3.0' RT



(47) PROPOSED ROUTE MM
STA 40+40.00 - 7.0' RT

SIGNING SHEET
SHEET 20 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:09:31 PM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	188

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

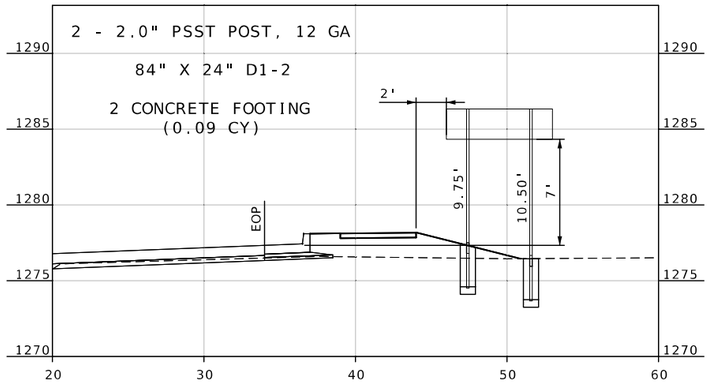
PROJECT NO.

BRIDGE NO.

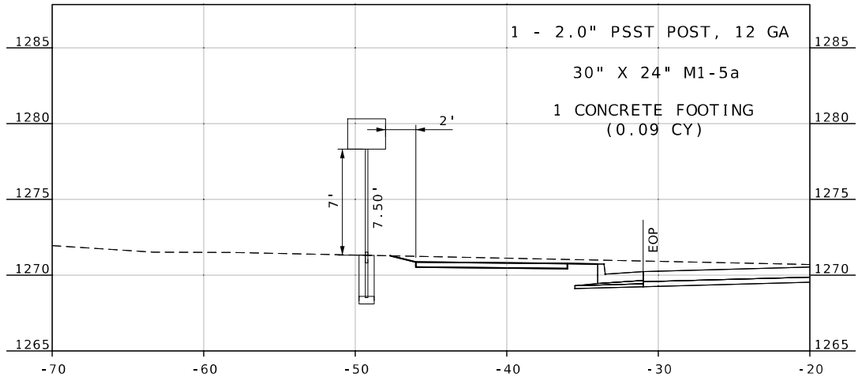
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

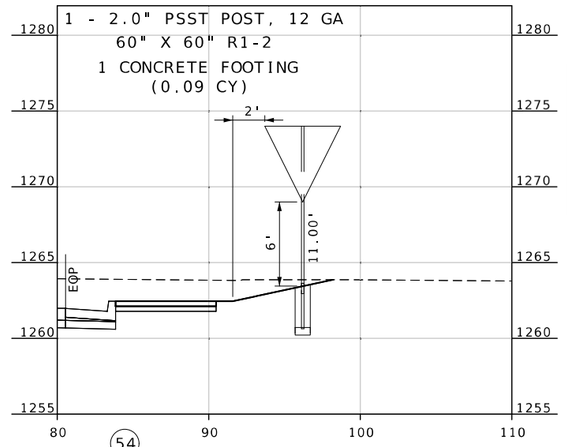
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



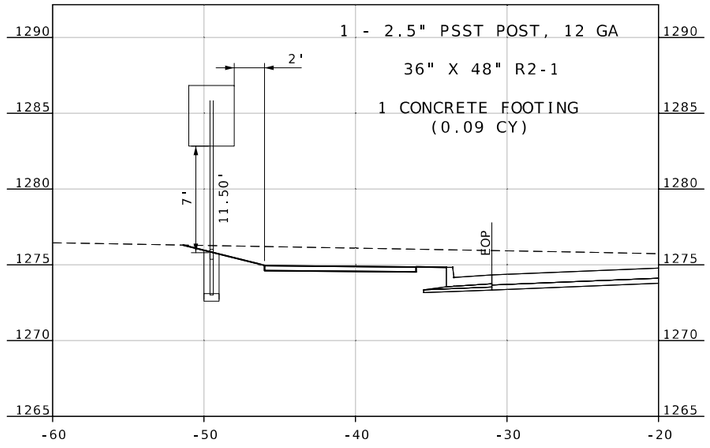
(48) PROPOSED ROUTE MM
STA 40+75.00 - 49.5' RT



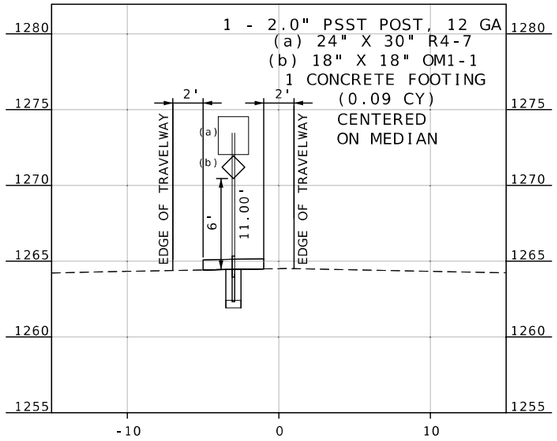
(51) PROPOSED ROUTE MM
STA 42+83.00 - 49.2' LT



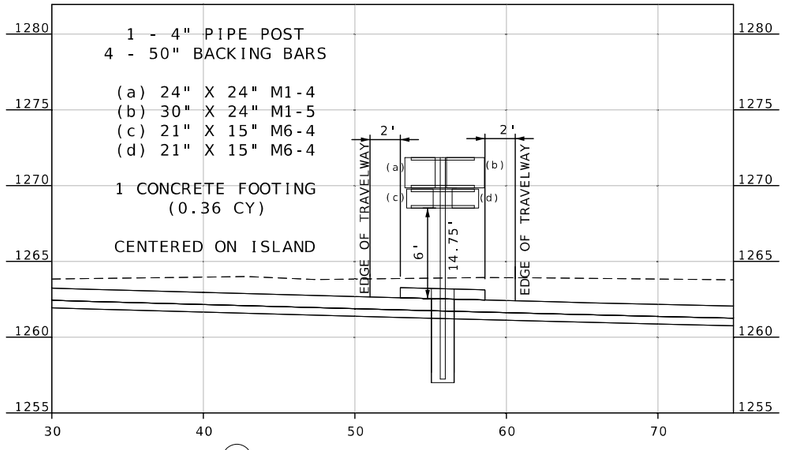
(54) PROPOSED ROUTE MM
STA 46+20.00 - 96.2' RT



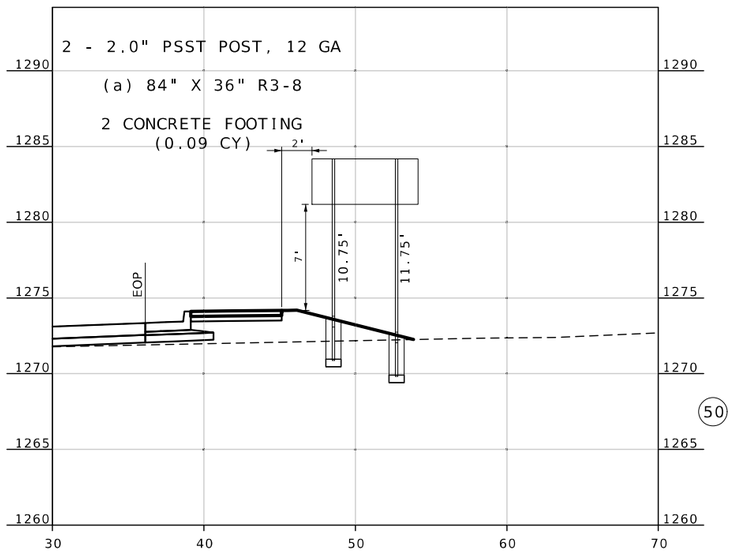
(49) PROPOSED ROUTE MM
STA 41+00.00 - 49.5' LT



(52) PROPOSED ROUTE MM
STA 46+00.00 - 3.0' LT



(53) PROPOSED ROUTE MM
STA 46+25.00 - 55.8' RT



(50) EXISTING ROUTE MM
STA 42+65.00 - 50.6' RT

SIGNING SHEET
SHEET 21 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:09:57 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	189

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

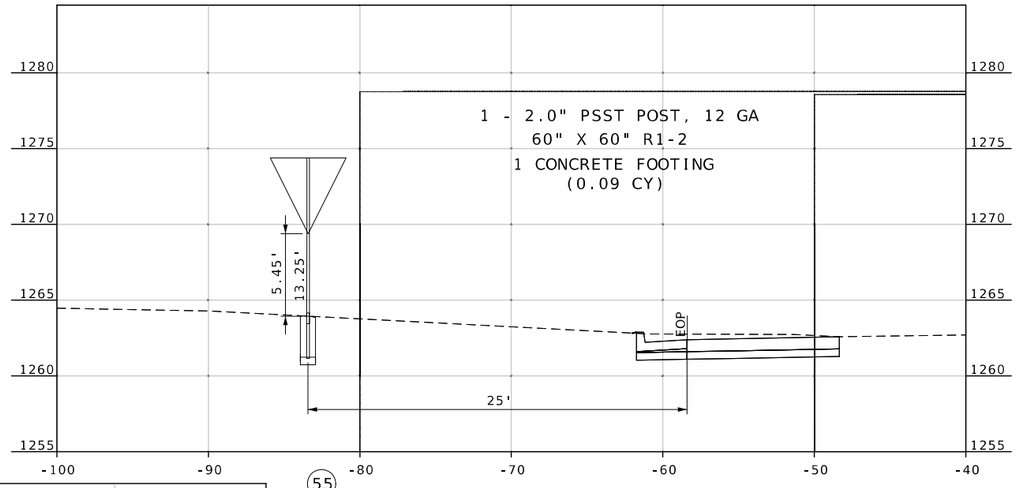
BRIDGE NO.

DESCRIPTION

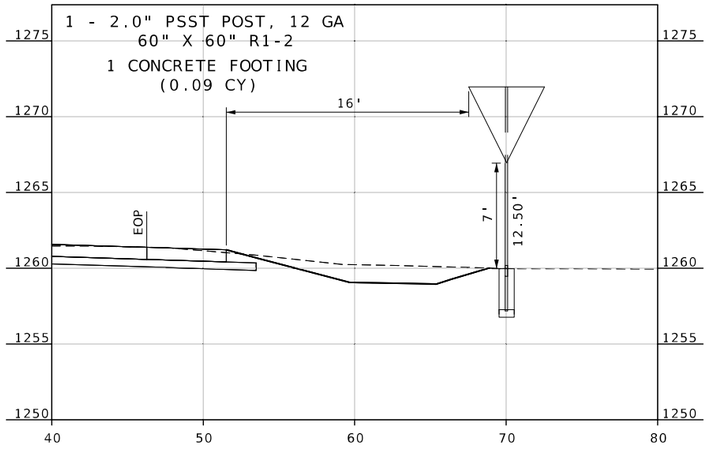
DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

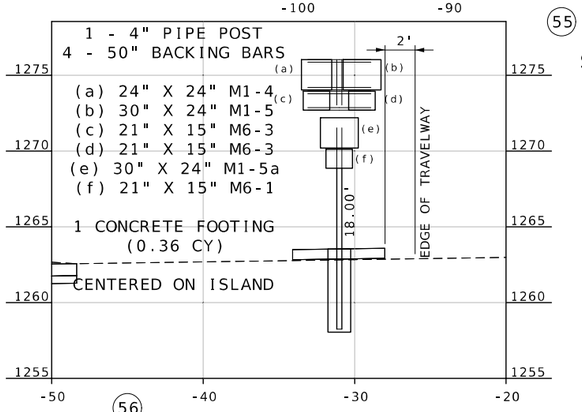
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



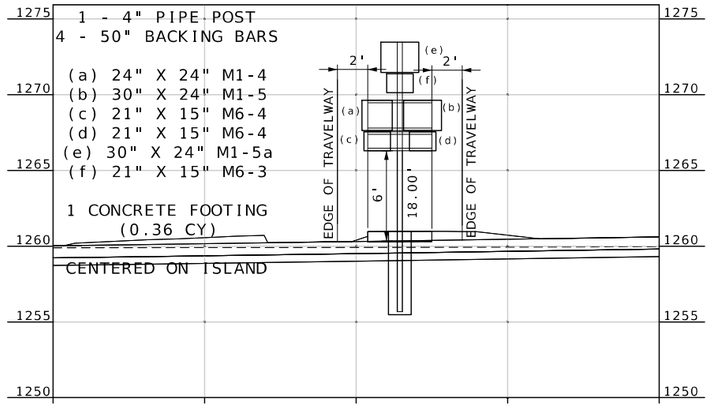
55
US 60 WB
STA 240+10.00 - 83.4' LT



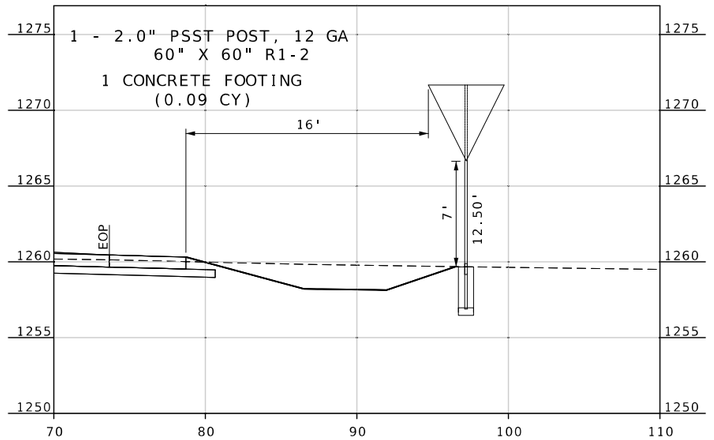
58
US 60 EB
STA 240+15.00 - 70.1' RT



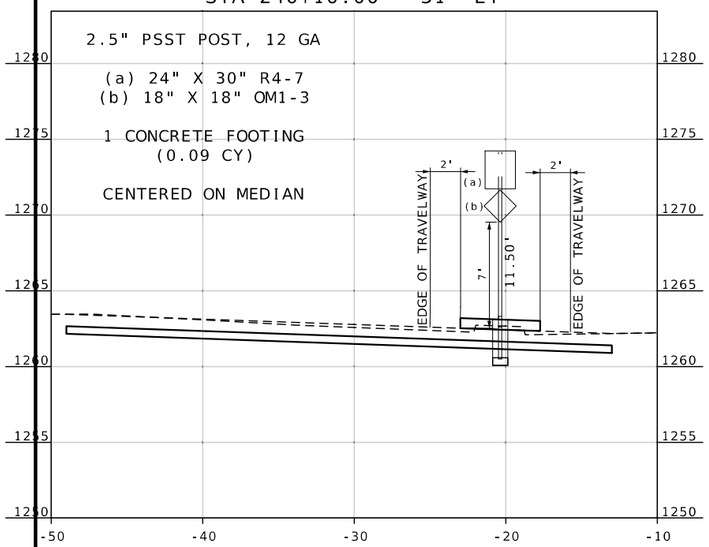
56
US 60 EB
STA 240+10.00 - 31' LT



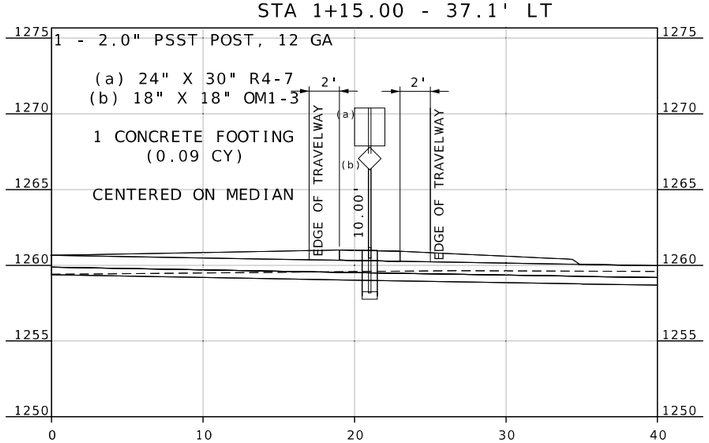
59
FARM ROAD 103
STA 1+15.00 - 37.1' LT



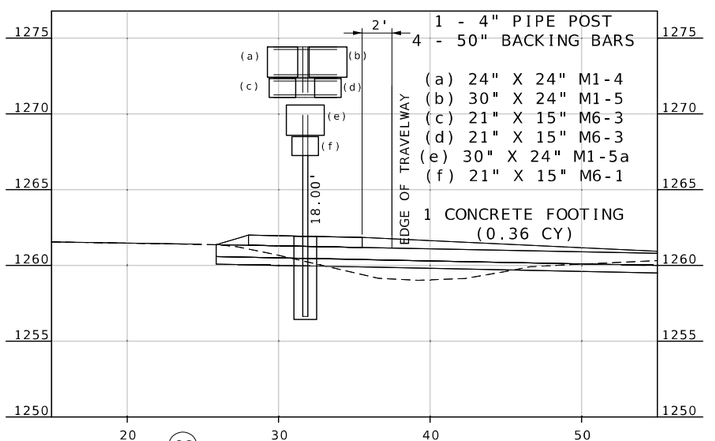
61
US 60 EB
STA 238+45.00 - 97.2' RT



57
EXISTING ROUTE MM
STA 240+35.00 - 20.4' LT



60
FARM ROAD 103
STA 1+40.00 - 21.1' RT



62
US 60 EB
STA 238+20.00 - 31.7' RT

SIGNING SHEET
SHEET 22 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:10:18 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	190

COUNTY
GREENE

JOB NO.
J8S0836D

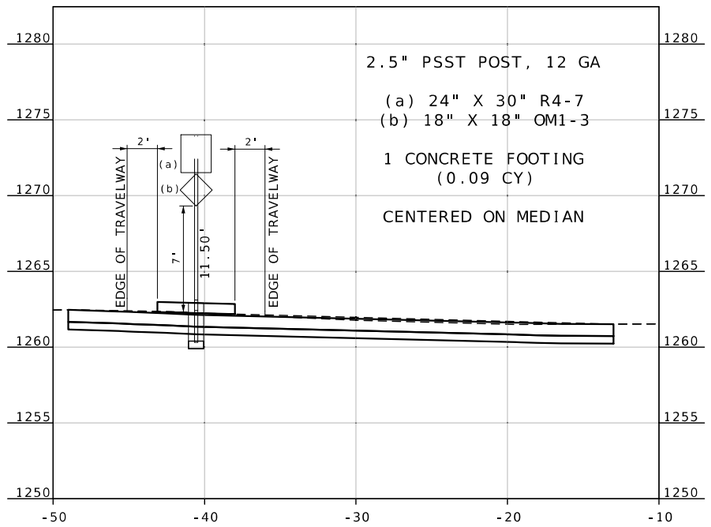
CONTRACT ID.

PROJECT NO.

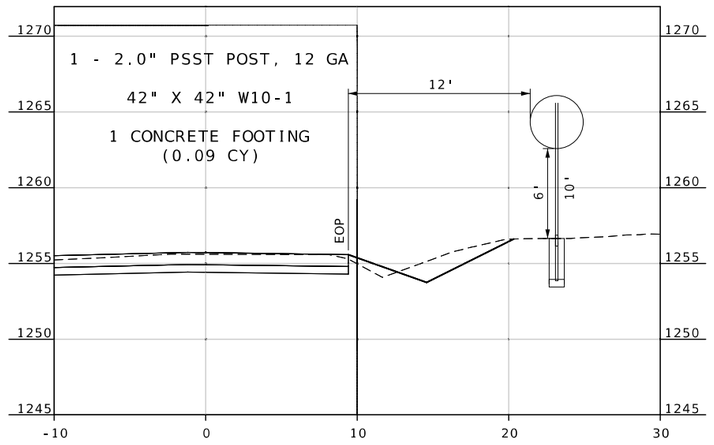
BRIDGE NO.

DESCRIPTION	DATE

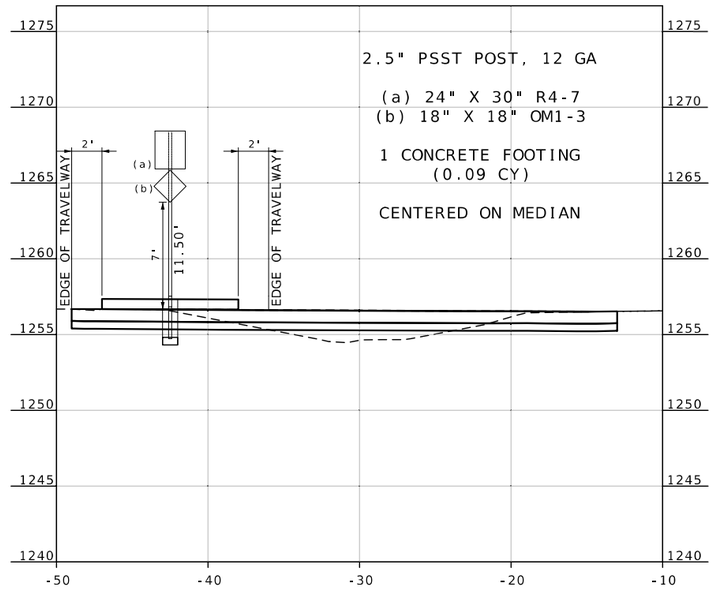
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



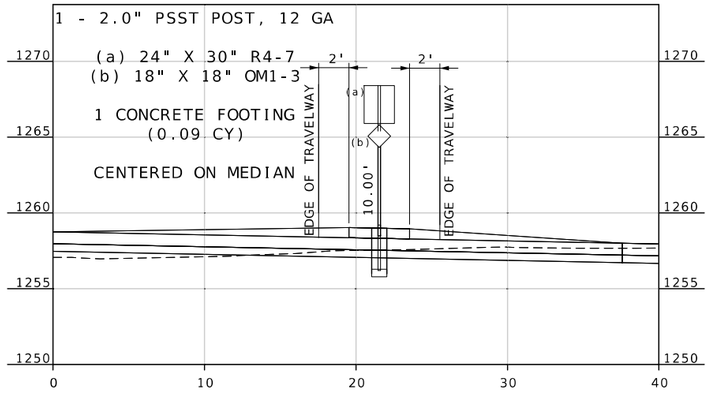
63 EXISTING ROUTE MM
STA 237+90.00 - 40.5' LT



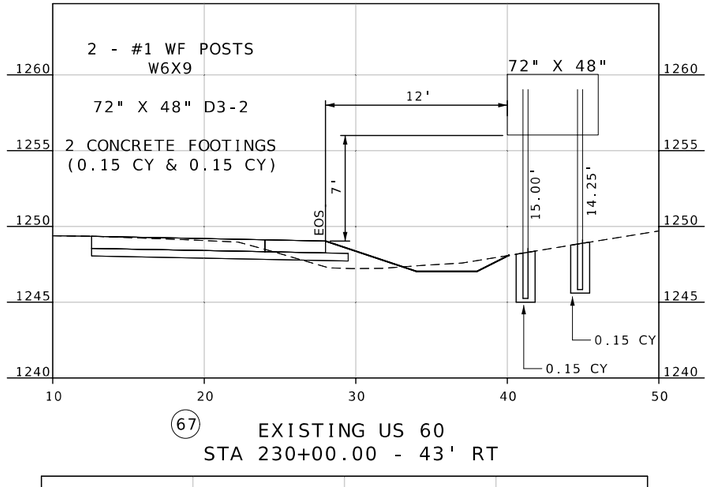
66 FARM ROAD 103
STA 8+00.00 - 23.2' RT



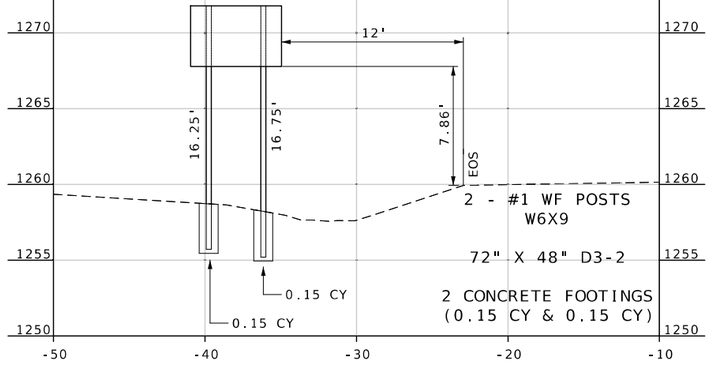
68 EXISTING ROUTE MM
STA 233+60.00 - 42.5' LT



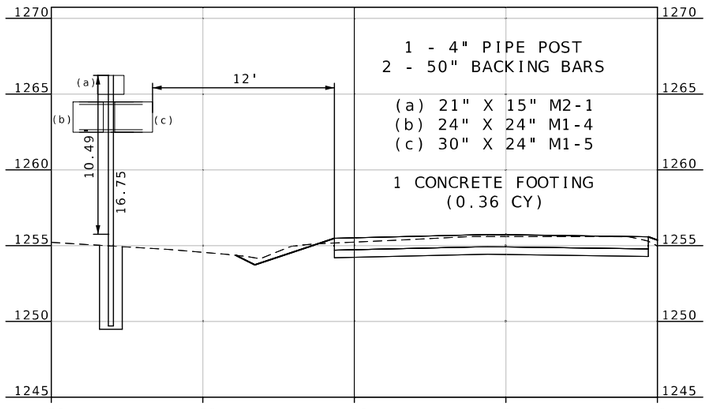
64 FARM ROAD 103
STA 4+50.00 - 22.3' RT



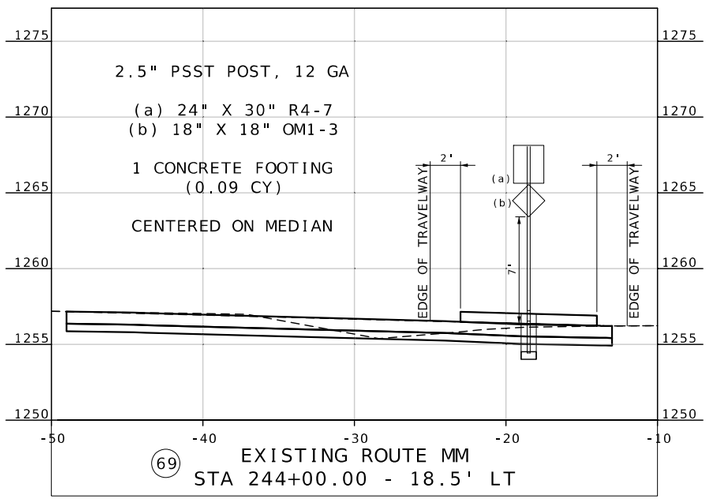
67 EXISTING US 60
STA 230+00.00 - 43' RT



70 EXISTING US 60
STA 248+00.00 - 37.4' LT



65 FARM ROAD 103
STA 8+00.00 - 26.1' LT



69 EXISTING ROUTE MM
STA 244+00.00 - 18.5' LT

SIGNING SHEET
SHEET 23 OF 30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:10:47 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	191

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

EFFECTIVE: 07-01-2022

SIGNS

902 SIGNAL SIGNS TABULATED ON D-37A SHEET

SIGN NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD	LOCATION	SIGN DTL. SHT. NO.
1	18" X 18"	178+30.00		EX MM, LT	
2	ASSEMBLY	178+96.00		IN MEDIAN	
3	ASSEMBLY	180+20.00		EX MM, RT	
4	36" X 36"	182+80.00		EX MM, RT	
5	36" X 48"	184+00.00		EX MM, LT	
6	36" X 36"	184+15.00		EX MM, RT	
7	36" X 36"	184+80.00		EX MM, RT	
8	30" X 24"	185+50.00		EX MM, LT	
9	42" X 36"	186+00.00		EX MM, RT	
10	42" X 36"	186+00.00		EX MM, RT	
11	VAR.	186+00.00		EX MM, RT	
12	ASSEMBLY	193+05.00		EX MM, LT	
13	36" X 36"	194+00.00		EX MM, LT	
14	ASSEMBLY	196+00.00		EX MM, LT	
15	54" X 18"	1+00.00		PR MM, RT	
16	54" X 18"	0+33.00		PR MM, RT	
17	ASSEMBLY	190+70.00		EX MM, LT	
18	ASSEMBLY	190+62.00		EX MM, LT	
19	84" X 24"	190+62.00		EX MM, RT	
20	54" X 18"	26+00.00		FR 160. RT	
21	ASSEMBLY	25+45.00		FR 160. RT	
22	ASSEMBLY	25+30.00		FR 160. RT	
23	ASSEMBLY	2+25.00		FR 160 BL	
24	36" X 36"	22+05.00		FR 160. RT	
25	ASSEMBLY	17+05.00		FR 160. RT	
26	84" X 18"	3+05.00		FR 160 BL. LT	
27	54" X 18"	26+30.00		FR 160. RT	
28	ASSEMBLY	25+75.00		FR 160. LT	
29	ASSEMBLY	26+35.00		FR 160. LT	
30	84" X 48"	188+40.00		EX MM, LT	
31	36" X 36"	188+10.00		EX MM, LT	
32	54" X 18"	0+40.00		PR MM, LT	
33	ASSEMBLY	1+10.00		PR MM, LT	
34	ASSEMBLY	1+00.00		PR MM, LT	
35	ASSEMBLY	2+35.00		PR MM, LT	
36	30" X 24"	3+00.00		PR MM, RT	
37	VAR.	3+90.00		PR MM, LT	
38	36" X 36"	3+90.00		PR MM, LT	
39	36" X 36"	3+90.00		PR MM, LT	
40	36" X 36"	4+30.00		PR MM, LT	
41	36" X 48"	4+40.00		PR MM, RT	
42	36" X 36"	7+20.00		PR MM, CL	
43	36" X 36"	7+20.00		PR MM, LT	
44	ASSEMBLY	13+50.00		PR MM, LT	
45	ASSEMBLY	38+80.00		PR MM, RT	
46	ASSEMBLY	39+30.00		PR MM, RT	
47	ASSEMBLY	40+40.00		PR MM, RT	
48	84" X 24"	40+75.00		PR MM, RT	
49	36" X 48"	41+00.00		PR MM, LT	
50	84" X 36"	42+65.00		PR MM, RT	
51	30" X 24"	42+83.00		PR MM, LT	
52	ASSEMBLY	46+00.00		PR MM, LT	
53	ASSEMBLY	46+25.00		PR MM, RT	
54	60" X 60"	46+20.00		PR MM, RT	
55	60" X 60"	240+10.00		US 60, LT	
56	ASSEMBLY	240+10.00		US 60, LT	
57	ASSEMBLY	240+35.00		US 60, MED	
58	60" X 60"	240+15.00		US 60, RT	
59	ASSEMBLY	1+15.00		FR 103, LT	
60	ASSEMBLY	1+40.00		FR 103, RT	
				SUBTOTAL	

CONCRETE FOOTINGS EMBEDDED

SIGN NO.	ITEM NO. 9031010
	CY
SUBTOTAL	1.44

STRUCTURAL STEEL POSTS *

SIGN NO.	POST DES NO.	POST NO.1	POST NO.2	POST NO.3	LBS PER FT	TOTAL ITEM NO. 9031210
		LF	LF	LF		LBS
SUBTOTAL						728

PIPE POSTS *

SIGN NO.	PIPE SIZE	POST NO.1	POST NO.2	LBS PER FT	TOTAL ITEM NO. 9031220
	IN.	LF	LF		LBS
45	4.00	16.75		10.79	180.73
53	4.00	14.75		10.79	159.15
56	4.00	18.00		10.79	194.22
59	4.00	18.00		10.79	194.22
SUBTOTAL					728

BACKING BARS **

2" X ⅜" BARS @ 2.55 LBS PER FT

SIGN NO.	NO. EACH	LGTH IN.	TOTAL LF	TOTAL LBS
45	2.00	100"	8.33'	21.25
53	4.00	200"	16.67'	42.51
56	4.00	200"	16.67'	42.51
59	4.00	200"	16.67'	42.51
SUBTOTAL				149

U-CHANNEL POST

SIGN NO.	ITEM NO. 9031250A
	LF
SUBTOTAL	386.5

PERFORATED SQUARE STEEL TUBE

SIGN NO.	2 IN. POST NO.1	2 IN. POST NO.2	2 IN. POST TOTAL ITEM NO. 9031270A	2 IN. POST ANCHORS DRIVEN 12-GA. ITEM NO. 9031271A	DRIVEN 7-GA. ITEM NO. 9031273A	CONCRETE 7-GA. ITEM NO. 9031274	2.5 IN. POST NO.1	2.5 IN. POST NO.2	2.5 IN. POST TOTAL ITEM NO. 9031280	2.25" INSERT (6 FT) ITEM NO. 9031272A	2.5 IN. POST ANCHORS DRIVEN 7-GA. ITEM NO. 9031281A	CONCRETE 7-GA. ITEM NO. 9031285	BREAK-AWAY ASSEMBLY ITEM NO. 9031241
	LF	LF	LF	EA	EA	EA	LF	LF	LF	EA	EA	EA	EA
1	9.00		9.00			1							
2	10.00		10.00			1							
3							14.00		14.00			1	
4	10.00		10.00			1							
5							11.75		11.75			1	
6	11.00		11.00			1							
7	10.00		10.00			1							
8	9.75		9.75			1							
9													
10													
11													
12	10.00		10.00			1							
13	12.00		12.00			1							
14							14.50		14.50			1	
15	9.00	9.00	18.00			2							
16	11.00		11.00			1							
17							15.75		15.75			1	1
18							14.50		14.50			1	1
19	9.50	9.50	15.00			2							
20	11.00		11.00			1							
21							14.00		14.00			1	1
22							15.75		15.75			1	1
23	11.00		11.00			1							
24	16.00		16.00			1							
25							16.00		16.00			1	
26	8.50	8.50	17.00			1							
27	11.00		11.00			1							
28							18.25		18.25			1	1
29							18.25		18.25			1	1
30							13.25	13.25	26.50			2	2
31	13.25		13.25			1							
32	11.00		11.00			1							
33							17.50		17.50			1	1
34							18.25		18.25			1	1
35							10.75		10.75			1	1
36	9.50		9.50			1							
37													
38													
39													
40	11.00		11.00			1							
41							11.75		11.75			1	
42	10.50		10.50			1							
43	11.50		11.50			1							
44							13.25		13.25			1	
45													
46	10.00		10.00			1							
47	10.00		10.00			1							
48	9.75	10.50	20.25			2							
49							11.50		11.50			1	
50	10.75	11.75	22.50			2							
51	7.50		7.50			1							
52	11.00		11.00			1							
53													
54	11.00		11.00			1							
55	13.25		13.25			1							
56													
57							11.50		11.50			1	
58	12.50		12.50			1							
59													
60	10.00		10.00			1							
SUBTOTAL			386.5			36			273.75			19	11

SIGN MOUNTING BRACKET FOR BARRIER WALL

ITEM NO. 903-99.02

REMARKS AND OTHER REQUIRED ITEMS

SIGN NO.	
9	ON TYPE S
10	ON TYPE S
11	ON TYPE S
37	ON TYPE S
38	ON TYPE S
39	ON TYPE S

* 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 (IN.)	WEIGHT LBS/FT	WEIGHT LBS/IN	STUB LENGTH	FOOTING DIA.	FOOTING DEPTH	CONCRETE 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

SIGNING SHEET
D-29 1_2
SHEET 24 OF 30

D-29

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:11:17 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE MM | STATE MO
DISTRICT SW | SHEET NO. 192
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO.

DESCRIPTION | DATE

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

EFFECTIVE: 07-01-2024

SIGNS

902 SIGNAL SIGNS TABULATED ON D-37A SHEET

SIGN NO.	SIGN SIZE	STATION	HORZ CLEAR IF NOT STD	LOCATION	SIGN DTL. SHT. NO.
61	48" X 48"	238+45.00		US 60, RT	
62	ASSEMBLY	238+20.00		US 60, RT	
63	ASSEMBLY	237+90.00		US 60 MED	
64	ASSEMBLY	4+50.00		FR 103, RT	
65	ASSEMBLY	8+00.00		FR 103, LT	
66	42" X 42"	8+00.00		FR 103, RT	
67	72" X 48"	230+00.00		US 60, RT	
68	ASSEMBLY	233+60.00		US 60 MED	
69	ASSEMBLY	244+00.00		US 60 MED	
70	72" X 48"	248+00.00		US 60, IT	
71	ASSEMBLY	25+68.00		PR MM, LT	
72	ASSEMBLY	27+05.00		PR MM, RT	
73	ASSEMBLY	32+20.00		PR MM, LT	
74	ASSEMBLY	33+65.00		PR MM, RT	

CONCRETE FOOTINGS EMBEDDED

ITEM NO. 9031010
CY
0.36
0.36
0.30

EFFECTIVE: 10-01-2016

STANDARD SIGN ASSEMBLIES

SIGN NUMBER	STATION	LOCATION	TYPE																												
			R5-2	R4-7	OM1-1	W2-6	W13-1P	R3-7L	R2-1	M1-5a	W3-2	R1-2	R6-1R	W12-1	W4-3R	M1-5	M1-4	M2-1	M3-3	M6-1	M6-4	W10-1	R0-1								
			SIGN DESCRIPTION, SIZES & NUMBER OF EACH																												
1	178+30.00	EX. MM, LT	1																												
2	178+96.00	EX. MM, RT		1	1																										
3	180+20.00	EX. MM, RT				1	1																								
4	182+80.00	EX. MM, RT						1																							
5	184+00.00	EX. MM, LT							1																						
6	184+15.00	EX. MM, RT									1																				
7	184+80.00	EX. MM, RT						1																							
8	185+50.00	EX. MM, LT								1																					
12	193+05.00	EX. MM, LT		1	1																										
13	194+00.00	EX. MM, LT									1																				
14	196+00.00	EX. MM, LT				1	1																								
16	00+33.00	PROP. MM, RT											1																		
17	190+70.00	EX. MM, LT										1												1							
18	190+62.00	EX. MM, LT										1												1							
20	26+00.00	F.R. 160, RT											1																		
21	25+45.00	F.R. 160, RT										1												1							
22	25+30.00	F.R. 160, RT										1												1							
23	2+25.00	F.R. 160, CL		1	1																										
24	22+05.00	F.R. 160, RT									1																				
25	17+05.00	F.R. 160, RT				1	1																								
27	26+30.00	F.R. 160, RT											1																		
28	25+75.00	F.R. 160, LT										1												1							
29	26+35.00	F.R. 130, LT										1												1							
31	188+10.00	EX. MM, RT													1																
32	00+40.00	PROP. MM, LT											1																		
33	01+10.00	PROP. MM, LT										1												1							
34	01+00.00	PROP. MM, LT										1												1							
35	02+35.00	PROP. MM, LT			1									1																	
36	03+00.00	PROP. MM, RT								1																					
40	04+30.00	PROP. MM, LT									1																				
41	04+40.00	PROP. MM, RT							1																						
44	13+50.00	PROP. MM, LT				1	1																								
45	38+80.00	PROP. MM, RT														1	1	1													
46	39+30.00	PROP. MM, LT		1	1																										
47	40+40.00	PROP. MM, RT		1	1																										
49	41+00.00	PROP. MM, LT							1																						
51	42+83.00	PROP. MM, LT								1																					
52	46+00.00	PROP. MM, LT		1	1																										
53	46+25.00	PROP. MM, RT														1	1				2										
54	46+20.00	PROP. MM, RT										1																			
55	240+10.00	US 60 WB, LT										1																			
56	240+10.00	US 60 WB, LT								1						1	1		2	1											
57	240+35.00	U.S. 60 EB, MED		1	1																										
58	240+15.00	U.S. 60 EB, RT										1																			
59	1+15.00	FR 103, LT								1						1	1		1		2										
60	1+40.00	FR 103, RT		1	1																										
61	238+45.00	U.S. 60 EB, RT										1																			
62	238+20.00	U.S. 60 EB, RT								1						1	1		2	1											
63	237+90.00	U.S. 60 WB, MED		1	1																										
64	4+50.00	F.R. 103, RT		1	1																										
65	8+00.00	F.R. 103, LT														1	1	1													
66	8+00.00	F.R. 103, RT																					1								
68	233+60.00	U.S. 60 EB, MED		1	1																										
69	244+00.00	U.S. 60 WB, MED		1	1																										
71	25+68.00	PR MM, LT		1	1																										
72	27+05.00	PR MM, RT		1	1																										
73	32+20.00	PR MM, LT		1	1																										
74	33+65.00	PR MM, RT		1	1																										
		TOTAL	1	16	17	4	4	2	3	6	4	12	4	1	1	6	6	2	5	2	4	1	8								

SIGN SUMMARY

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
NO TRUCKS	R5-2	1	18" X 18"		2.25'		
KEEP LEFT	R4-7	16	24" X 30"		80'		
OBJECT MARKER	OM1-3	17	18" X 18"		38.25		
ROUNDABOUT AHEAD	W2-6	4	36" X 36"		36'		
SPEED ADVISORY	W13-1P	4	24" X 24"		16'		
LEFT LANE MUST TURN LEFT	R3-7L	2	36" X 36"		18'		
SPEED LIMIT	R2-1	3	36" X 48"		36'		
ROUTE MARKER (MM)	M1-5a	6	30" X 24"		30'		
YEILD AHEAD	W3-2	4	36" X 36"		36'		
YEILD	R1-2	12	60" X 60"		300'		
ONE WAY	R6-1R	4	54" X 18"		27'		
DIVERGING LANES	W12-1	1	36" X 36"		9'		
MERGING LANES	W4-3R	1	36" X 36"		9'		
ROUTE MARKER (413)	M1-5	6	30" X 24"		30'		
ROUTE MARKER (60)	M1-4	6	24" X 24"		24'		
JCT	M2-1	2	21" X 15"		4.375'		
UP ARROW	M6-3	5	21" X 15"		10.9375'		
LEFT/RIGHT ARROW	M6-1	2	21" X 15"		4.375'		
DOUBLE HEADED ARROW	M6-4	4	21" X 15"		8.75'		
RAILROAD CROSSING	W10-1	1	36" X 36"		9'		
FISHHOOK LEFT/THROUGH/RIGHT	R3-8	2	42" X 36"				21'
MM TO 60	E1-1	1	108" X 72"				54'
MM TO 60/FARM RD 160/BROOKLINE AVE	E1-1	1	132" X 96"				88'
MM TO 60	D1-1e	1	54" X 18"				6.75'
BROOKLINE AVE SOUTH	D1-1d	1	84" X 24"				14'
FARM RD 160	D1-1d	1	84" X 18"				10.5'
MM TO 44/BROOKLINE AVE NORTH	D1-1e	1	84" X 48"				28'
FARM RD 160/BROOKLINE AVE SOUTH	E1-1	1	132" X 84"				77'
MM TO 44 BROOKLINE AVE NORTH	E1-1	1	132" X 96"				88'
FISHHOOK LEFT/THROUGH/RIGHT	R3-8	4	36" X 36"				36'
SPRINGFIELD/REPUBLIC	D1-2	1	84" X 24"				14'
LEFT/LEFT/THROUGH/RIGHT	R3-8	1	84" X 36"				21'
MM NEXT LEFT	D3-2	2	72" X 48"				48'
TO ALL TRAFFIC IN ROUNDABOUT	R0-1	8	36" X 30"		60'		
			TOTAL		726		506

* ORANGE, YELLOW & YELLOW/GREEN

SIGNING SHEET
D-30
SHEET 26 OF 30

D-30

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:12:05 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	194

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

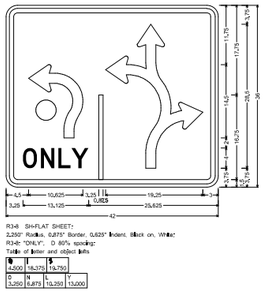
BRIDGE NO.

DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

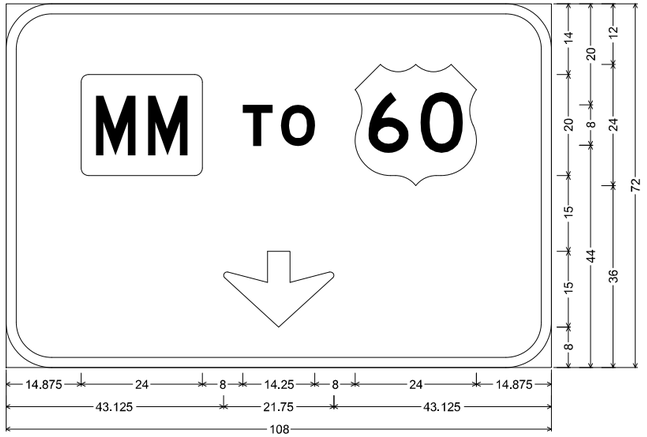
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



R3-8 SH-FLAT SHEET:
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, White;
R3-8c "ONLY", D 80% spacing;
Table of letter and object lefts

O	T	S
4.500	16.375	16.750
O	N	Y
5.250	6.875	10.250	13.000

SIGN NO.	9 - 10
STATION	186+00.00
ROADWAY	EXISTING ROUTE MM



E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
Rounded Rectangle 1.500" Radius;
"TO", E Mod; Down Arrow 22.000" 270^;
Table of letter and object lefts

□	T	O	60
14.875	46.875	54.500	69.125
43.125			

SIGN NO.	11A
STATION	186+00.00
ROADWAY	EXISTING ROUTE MM

E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
Rounded Rectangle 1.500" Radius;
"TO", E Mod; "Farm Rd 160", E Mod 95% spacing; "Brookline Ave", E Mod 95% spacing;
Down Arrow 22.000" 270^;
Table of letter and object lefts

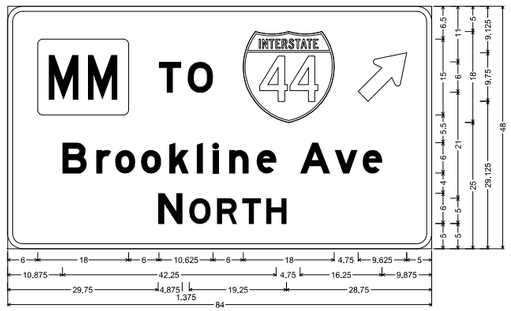
□	T	O	60
26.875	58.875	66.500	81.125

F	a	r	m	R	d	l	6	O
15.000	24.125	34.875	42.375	63.750	74.875	91.875	97.625	108.125

B	r	o	o	k	l	l	n	e	A	v	e
8.750	20.875	27.625	36.750	46.875	56.750	62.625	68.500	78.375	94.250	106.500	116.500

55.125

SIGN NO.	11B
STATION	186+00.00
ROADWAY	EXISTING ROUTE MM



D1-1e ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
Rounded Rectangle 1.000" Radius;
"TO", E Mod; Standard Arrow Custom 12.250" X 7.125" 45; "Brookline Ave", E Mod 90% spacing;
"NORTH", E Mod;
Table of letter and object lefts

□	T	O	60	
6.000	30.000	35.625	46.625	69.375

B	r	o	o	k	l	l	n	e	A	v	e
10.875	17.625	21.250	26.375	32.000	37.500	40.625	43.875	49.375	57.875	64.750	70.250

N	O	R	T	H
29.750	36.000	41.500	46.500	51.250

SIGN NO.	30
STATION	188+40.00
ROADWAY	EXISTING ROUTE MM

SIGNING SHEET
SHEET 27 OF 30

D-31

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:12:30 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	195

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

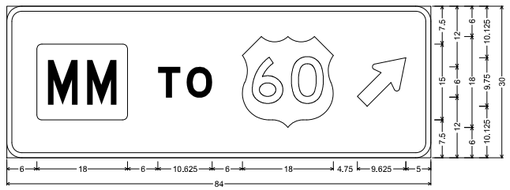
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

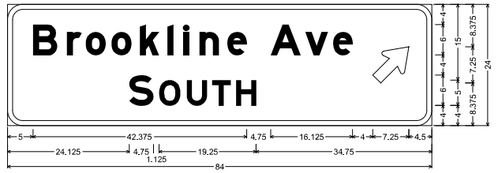
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



SIGN NO.	15
STATION	01+00.00
ROADWAY	PROPOSED ROUTE MM

D1-1e ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
Rounded Rectangle 1.000" Radius;
"TO", E Mod; Standard Arrow Custom 12.250" X 7.125" 45°;
Table of letter and object lefts

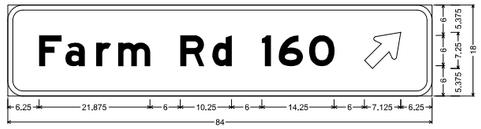
□ 6.000	T 30.000	O 35.625	60 46.625	69.375



SIGN NO.	19
STATION	190+56.00
ROADWAY	EXISTING ROUTE MM

D1-1d ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
"Brookline Ave", E Mod 90% spacing; "SOUTH", E Mod; Standard Arrow Custom 9.000" X 6.000" 45°;
Table of letter and object lefts

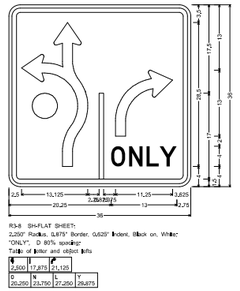
B 5.000	r 11.750	o 15.500	o 20.825	k 26.125	l 31.625	l 34.875	n 38.000	e 43.500	A 52.125	v 59.000	e 64.500	72.250
S 24.125	O 30.000	U 35.500	T 40.500	H 45.250								



SIGN NO.	26
STATION	25+60.00
ROADWAY	FARM ROAD 160

D1-1d ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
"Farm Rd 160", E Mod; Standard Arrow Custom 9.000" X 6.000" 45°;
Table of letter and object lefts

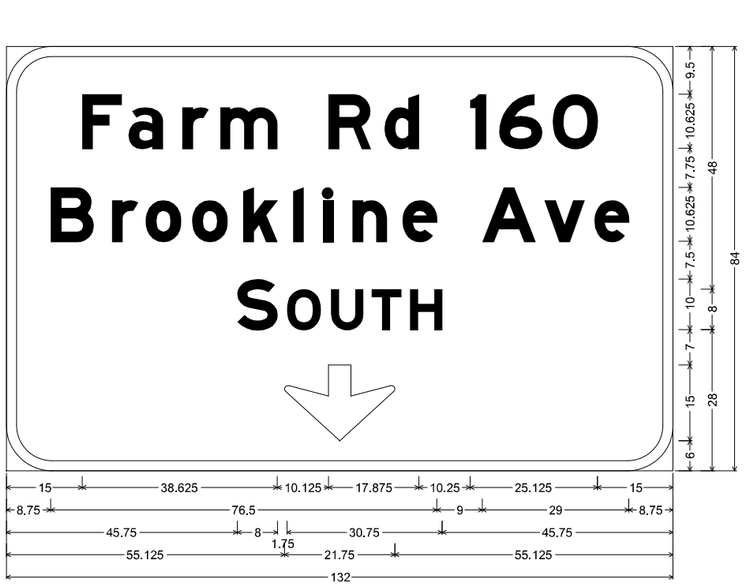
F 6.250	a 11.375	r 17.500	m 21.875	R 34.125	d 40.500	l 50.375	6 53.625	O 59.625	70.625



SIGN NO.	38 - 39 - 42 - 43
STATION	03+90.00
STATION	07+20.00
ROADWAY	PROPOSED ROUTE MM

R3-8 SH-FLAT SHEET;
2.250" Radius, 0.875" Border, 0.625" Indent, Black on, White;
"ONLY", D 80% spacing;
Table of letter and object lefts

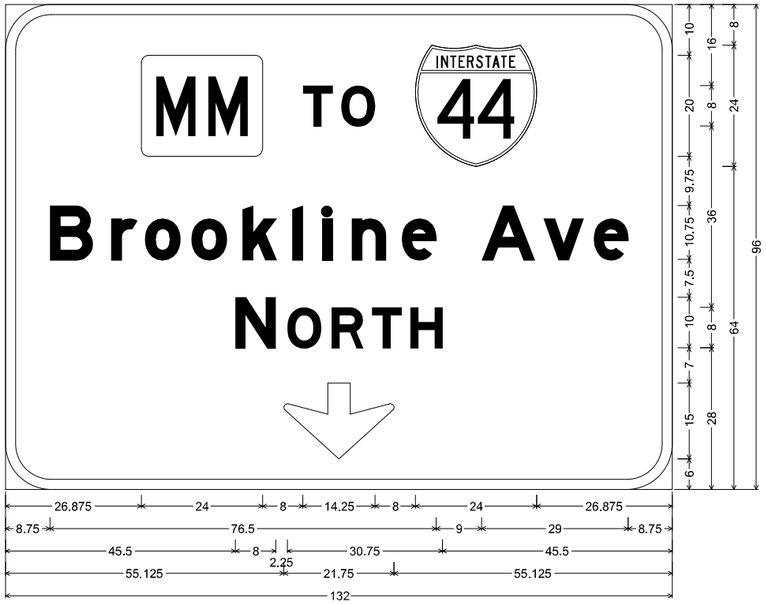
Y 2.500	I 17.875	21.125	
O 26.250	N 23.750	L 27.250	T 29.875



SIGN NO.	37A
STATION	03+90.00
ROADWAY	PROPOSED ROUTE MM

E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
"Farm Rd 160", E Mod 95% spacing; "Brookline Ave", E Mod 95% spacing; "SOUTH", E Mod;
Down Arrow 22.000" 270^;
Table of letter and object lefts

F 15.000	a 24.125	r 34.875	m 42.375	R 63.750	d 74.875	l 91.875	6 97.625	O 108.125	
B 8.750	r 20.875	o 27.625	o 36.750	k 46.875	l 56.750	l 62.625	n 68.500	e 78.375	A 94.250	v 106.500	e 116.500	
S 45.750	O 55.500	U 64.250	T 72.375	H 79.875								
55.125												



SIGN NO.	37B
STATION	03+90.00
ROADWAY	PROPOSED ROUTE MM

E1-1 ST-STRUCTURAL;
9.000" Radius, 2.000" Border, White on, Green;
Rounded Rectangle 1.500" Radius;
"TO", E Mod; Interstate 44 12.000" C; "Brookline Ave", E Mod 95% spacing; "NORTH", E Mod;
Down Arrow 22.000" 270^;
Table of letter and object lefts

□ 26.875	T 58.875	O 66.500	81.125									
B 8.750	r 20.875	o 27.625	o 36.750	k 46.875	l 56.750	i 62.625	n 68.500	e 78.375	A 94.250	v 106.500	e 116.500	
N 45.500	O 55.750	R 64.500	T 72.500	H 80.125								
55.125												

SIGNING SHEET
D-31
SHEET 28 OF 30

D-31

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:12:54 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	196

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

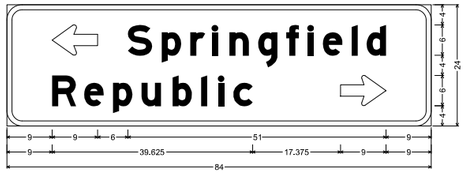
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

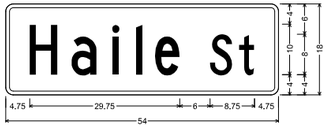
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



SIGN NO.	48
STATION	40+75.00
ROADWAY	PROPOSED ROUTE MM

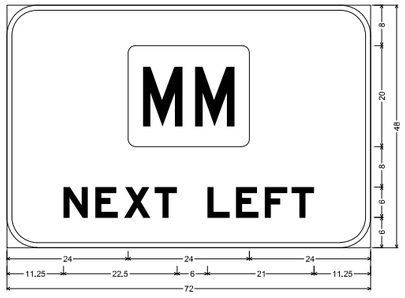
D1-2 ST-STRUCTURAL;
3.000" Radius, 1.000" Border, White on, Green;
Standard Arrow Custom 9.000" X 6.000" 180°; "Springfield", E Mod; "Republic", E Mod;
Standard Arrow Custom 9.000" X 6.000" 0°;
Table of letter and object lefts

⇦ 9.000	S 24.000	p 30.625	r 36.375	l 40.625	n 44.125	g 49.750	f 55.250	l 59.625	e 62.500	l 68.250	d 71.250
R 9.000	e 15.250	p 21.000	u 26.625	b 32.750	i 38.500	i 41.875	c 44.875	⇨ 66.000			



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

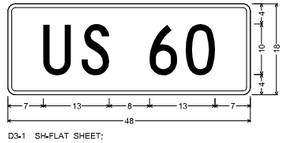
H 4.750	a 13.000	i 21.125	l 25.625	e 29.500	S 40.500	t 46.250



SIGN NO.	69
STATION	230+00.00
ROADWAY	US 60 EB

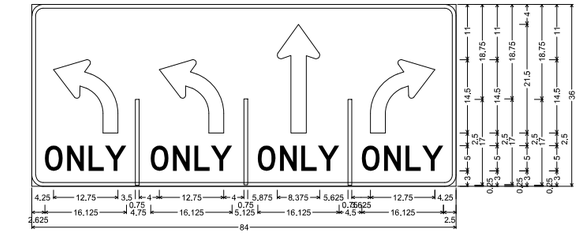
D3-2 ST-STRUCTURAL;
6.000" Radius, 1.000" Border, White on, Green;
Rounded Rectangle 1.500" Radius;
"NEXT LEFT", E Mod;
Table of letter and object lefts

□ 24.000							
N 11.250	E 17.500	X 23.250	T 29.250	L 39.750	E 45.375	F 51.125	T 56.375



D3-1 SH-FLAT SHEET;
1.500" Radius, 0.750" Border, White on, Green;
"US 60", C;
Table of letter and object lefts

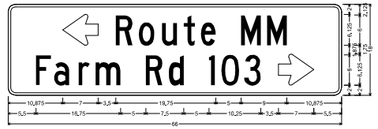
U 7.000	S 14.825	6 28.000	0 35.250



SIGN NO.	50
STATION	42+90.00
ROADWAY	PROPOSED ROUTE MM

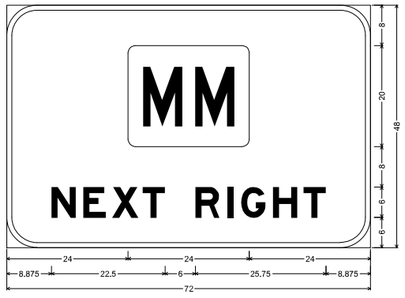
R3-8 ST-STRUCTURAL;
0.750" Border, Black on, White;
"ONLY", D 75% spacing; " ", D; "ONLY", D 75% spacing; " ", D; " ", D; "ONLY", D 75% spacing; " ", D; " ", D; "ONLY", D 75% spacing; " ", D;
Table of letter and object lefts

O 4.250	N 20.500	L 25.250	Y 48.625	67.000
O 2.825	N 7.000	L 11.250	Y 14.500	O 23.500	N 27.875	L 32.125	Y 35.500	I 42.000	O 44.750	N 49.125	L 53.375	Y 56.625
I 62.625	O 65.375	N 69.750	L 74.000	Y 77.250								



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180°; "Route MM", C; "Farm Rd 103", C;
Standard Arrow Custom 7.000" X 6.125" 0°;
Table of letter and object lefts

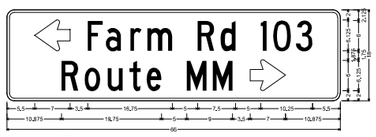
⇦ 5.875	F 21.375	a 25.875	r 30.500	m 34.750	8 38.125	e 41.125	K 51.250				
f 5.500	a 9.125	r 14.000	R 17.375	27.250	d 31.875	l 35.250	0 49.250	3 46.750	⇨ 53.500		



SIGN NO.	72
STATION	248+00.00
ROADWAY	US 60 WB

D3-2 ST-STRUCTURAL;
6.000" Radius, 1.000" Border, White on, Green;
Rounded Rectangle 1.500" Radius;
"NEXT RIGHT", E Mod;
Table of letter and object lefts

□ 24.000								
N 8.875	E 15.125	X 20.875	T 26.875	R 37.375	I 43.625	G 46.375	H 52.750	T 58.750



D3-1b SH-FLAT SHEET;
1.500" Radius, 0.500" Border, White on, Green;
Standard Arrow Custom 7.000" X 6.125" 180°; "Farm Rd 103", C; "Route MM", C;
Standard Arrow Custom 7.000" X 6.125" 0°;
Table of letter and object lefts

⇦ 5.500	f 15.000	a 18.625	r 24.500	m 27.875	R 37.750	e 42.375	l 50.250	0 52.750	3 57.250		
3 10.875	a 15.375	R 20.000	24.250	d 27.625	M 35.625	⇨ 46.750	46.125				

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:13:18 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	197

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

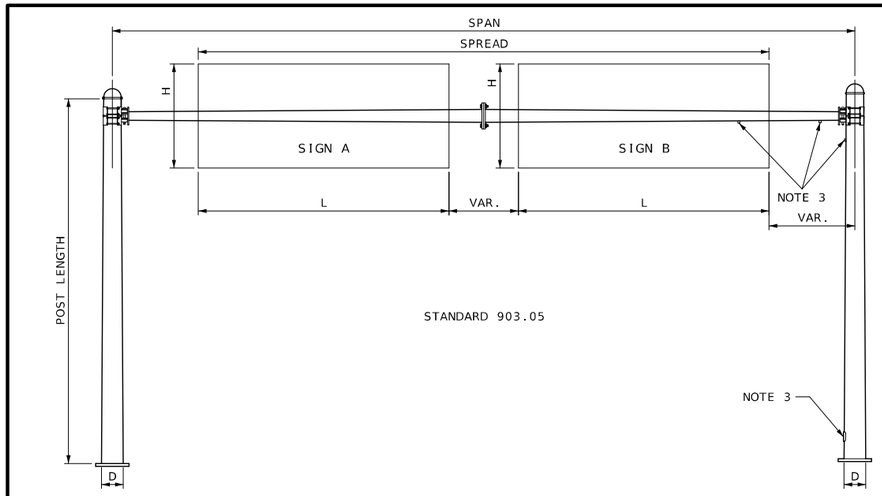
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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

EFFECTIVE: 04-01-2005

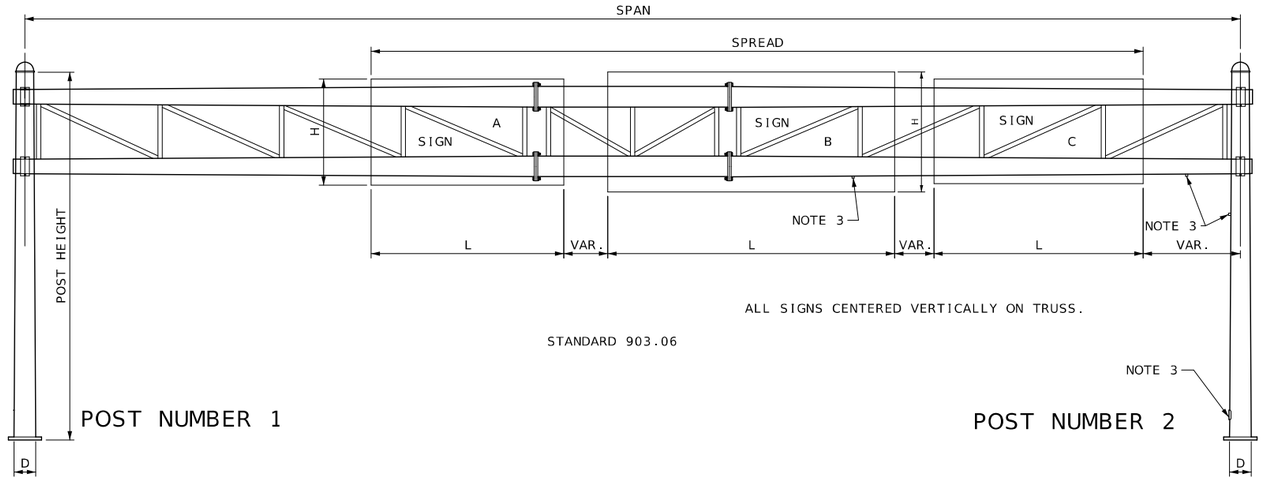


STANDARD 903.05

POST NUMBER 1

ONE TUBE - TYPE S

POST NUMBER 2



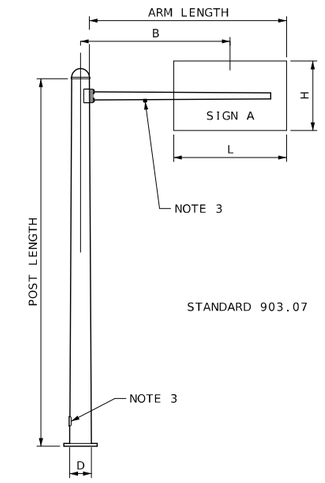
ALL SIGNS CENTERED VERTICALLY ON TRUSS.

STANDARD 903.06

POST NUMBER 1

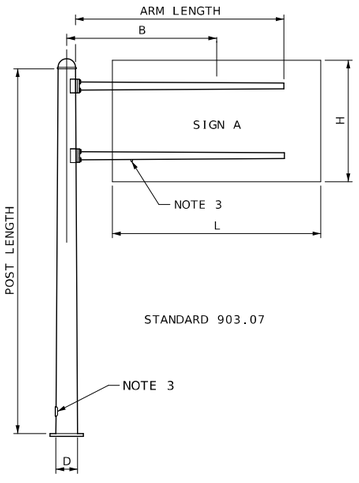
TWO TUBE - TYPE S

POST NUMBER 2



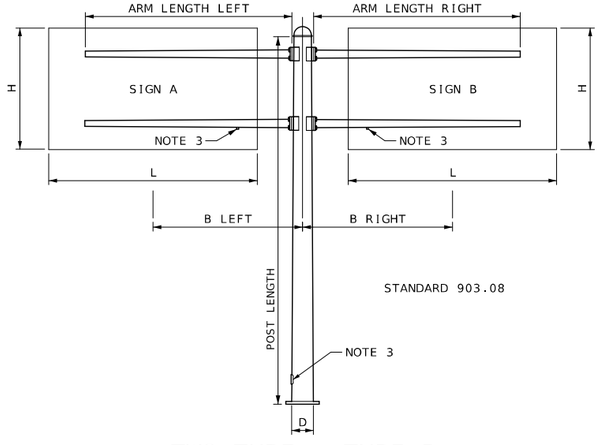
STANDARD 903.07

ONE TUBE - TYPE C



STANDARD 903.07

TWO TUBE - TYPE C



STANDARD 903.08

TWO TUBE - TYPE B

TUBULAR STEEL SUPPORT NUMBERING SYSTEM

THE FIRST SYMBOL (LETTER) INDICATES TYPE AS, C FOR CANTILEVER, B FOR BUTTERFLY, S FOR SPAN TYPE.

THE SECOND SYMBOL (NUMBER) INDICATES SINGLE (1) OR DOUBLE (2) MAST ARMS OR TRUSS.

THE THIRD SYMBOL (NUMBER) INDICATES GAGE - POST

7 = 7 GAUGE (.1793")	77 = 7 + 7 GAUGE (.3586")
3 = 3 GAUGE (.2500")	33 = 3 + 3 GAUGE (.5000")
0 = 0 GAUGE (.3125")	00 = 0 + 0 GAUGE (.6250")

THE FOURTH SYMBOL (NUMBER) INDICATES DIAMETER IN INCHES OF THE POST BASE.

THE FIFTH SYMBOL (NUMBER) INDICATES LENGTH IN FEET OF ARM OR SPAN.

EXAMPLE: DESIGN NUMBER B-20018-24 INDICATES BUTTERFLY TYPE, TWO ARMS, 2-PLY, O-GAUGE, 18" DIAMETER AT BASE OF POST & 24' MAST ARMS.

NOTES

1. ALL POSTS, BEAMS, MAST ARMS, ANGLES, BRACKETS & ETC. SHALL BE HOT DIP GALVANIZED AFTER FABRICATION.
2. SHOP DRAWINGS ARE NOT REQUIRED.
3. HANDHOLES AND 1¼" BLIND HALF COUPLINGS REQUIRED ON DESIGNATED POSTS. HANDHOLES SHALL BE PLACED ON RIGHT HAND SHOULDER SIDE OF TRUSSES.
4. STRUCTURES DESIGNED FOR TOTAL SIGN AREA COMMENSURATE WITH HEIGHT OF SIGN AND REQUIRED VERTICAL CEARANCE.
5. DESIGN SPECIFICATIONS: AASHTO STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES, AND TRAFFIC SIGNALS - 1985.

TUBULAR STEEL SUPPORT DESIGN DATA STANDARDS 903.05 THRU 903.08

SIGN NUMBER	STATION	LOCATION	STANDARD NUMBER	TYPE	SPAN OR ARM	B LENGTH	POST LENGTH NO. 1	POST LENGTH NO. 2	CONCRETE FOOTINGS	SIGN DATA: SPREAD	SIGN A L	SIGN A H	SPACE	SIGN B L	SIGN B H	SPACE	SIGN C L	SIGN C H	SPACE	SIGN D L	SIGN D H	SPACE	SIGN E L	SIGN E H	SPACE	TOTAL
					FT-IN.	FT-IN.	FT	FT	CU YDS	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	FT-IN.	SQ FT
11	186+00.00	EX. ROUTE MM	903.06L	S	50'		22'	23'	7.31	22'	9'	6'	2'-1"	11'	8'											142
37	3+90.00	PROP. ROUTE MM	903.06L	S	45'		23'	23'	7.02	23'	11'	7'	1'	11'	8'											165

SIGNING SHEET
D-34
SHEET 30 OF 30

D-34

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:13:49 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/27/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	198

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

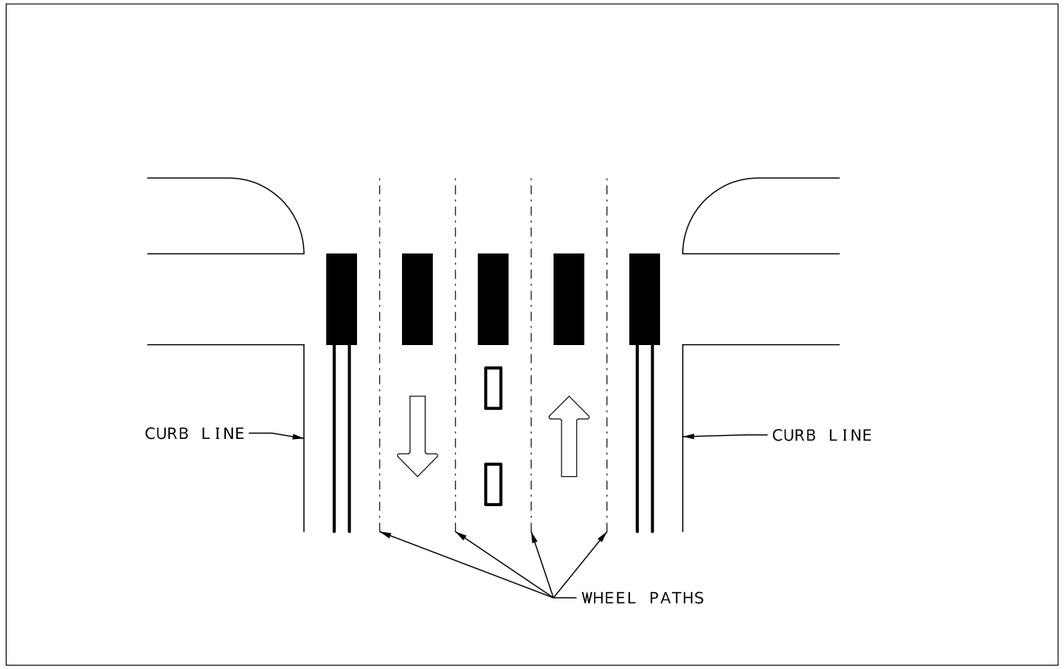
PROJECT NO.

BRIDGE NO.

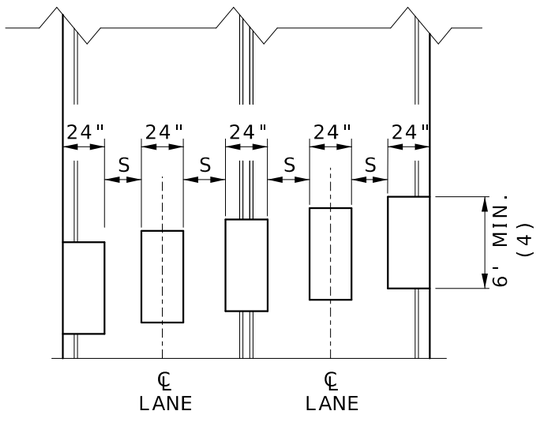
DESCRIPTION	DATE

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

PEDESTRIAN CROSSING EXAMPLE



NOTES:
SEE STANDARD PLANS 620.00 FOR SPACING REQUIREMENTS.
MIDBLOCK SPACING DOES NOT HAVE TO BE EQUAL THROUGHOUT THE CROSSWALK RUN.
SPACING CAN VARY TO ELIMINATE MIDBLOCKS BEING IN THE WHEEL PATH.
MIDBLOCKS SHOULD EXTEND FROM CURB TO CURB AND CAN BE PLACED IN THE GUTTER
HALF BLOCKS MAY BE USED AT CURBS WHERE FULL BLOCKS WILL NOT FIT.



"S" SPACING TO AVOID WHEEL PATHS BUT SHALL NOT EXCEED 48". IF SHOULDERS EXIST, THE PATTERN SHALL EXTEND TO THE CURB ADDING BARS AS NEEDED.

LONGITUDINAL BAR CROSSWALK	
NUMBER OF 10'-12' LANES	NUMBER OF 24" WHITE BARS
1	3
2	5
3	7
4	9
5	11

NOT TO SCALE

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:14:12 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED: 7/28/2025

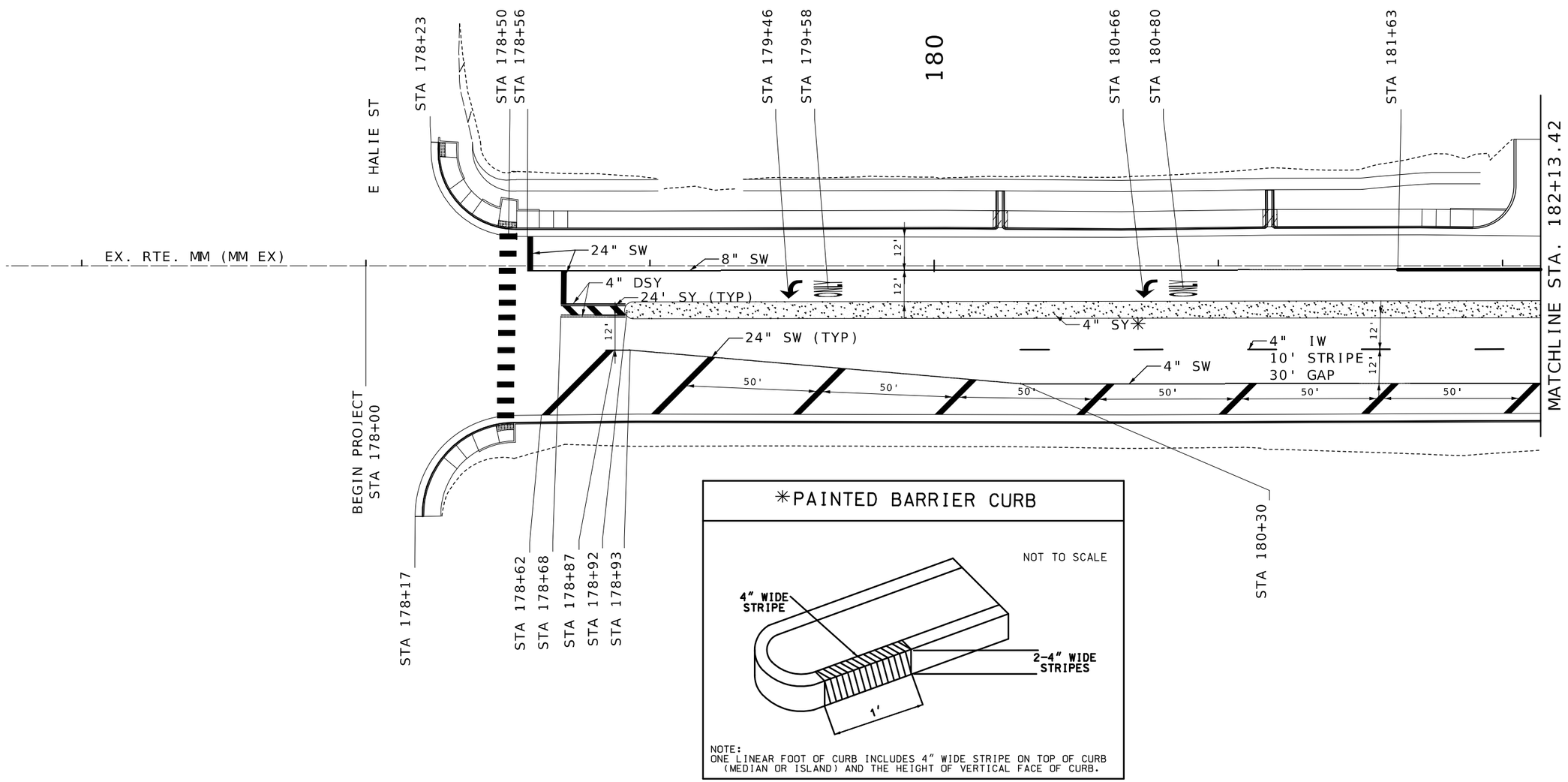
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	199

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION	DATE

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

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



✳PAINTED BARRIER CURB

NOT TO SCALE

NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 2 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:14:37 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	200

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

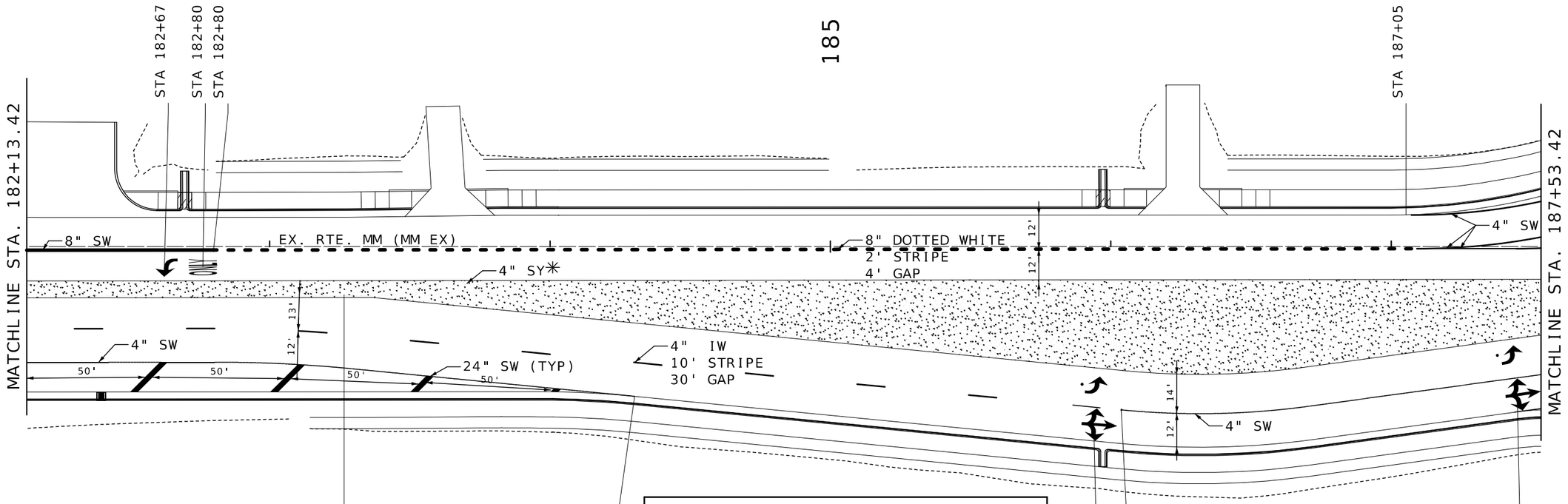
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

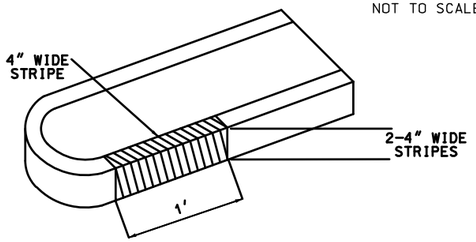
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 3 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:14:59 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	201

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION

DATE

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

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW

MATCHLINE STA. 187+53.42

STA 187+67

STA 188+43
STA 188+45
STA 188+54
STA 188+45
STA 188+72
STA 25+75
STA 188+76
STA 25+68

STA 187+93

STA 188+44
STA 188+46
STA 188+56
STA 188+61

STA 0+74
STA 0+90
STA 1+08
STA 0+98
STA 1+01
STA 1+00

STA 2+37
STA 2+50

STA 23+95
STA 24+72

STA 23+85
STA 24+16
STA 24+48

STA 189+07
STA 189+23
STA 189+23
STA 25+46
STA 25+48
STA 189+39
STA 189+44

STA 189+52

STA 189+82

STA 189+98

STA 190+23

STA 190+45

STA 190+59

STA 190+62

STA 191+28

STA 189+44
STA 0+95
STA 0+96
STA 0+93
STA 0+83
STA 190+03

STA 190+31
STA 190+30
STA 190+42

STA 190+62
STA 190+68

STA 2+00

MATCHLINE STA. 2+65.00

MATCHLINE STA. 191+36.00

FR 160

190

START STA. 09+80.00

EX. RTE. MM (MM EX)

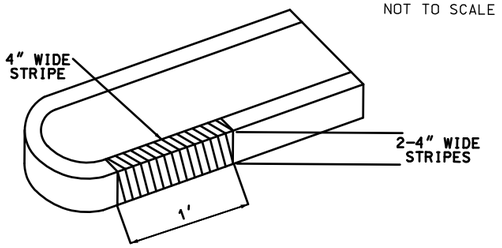
PROPOSED RTE. MM

N89°33'15"E

4" DSY
4" SY
4" SW
4" IW
8" IW
8" IW (TYP)
4" IW (TYP)
8" IW 2' STRIP BY 4' GAP
50'
30'
20'
14'
12'
16'
13'

✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 4 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:15:21 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	202

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

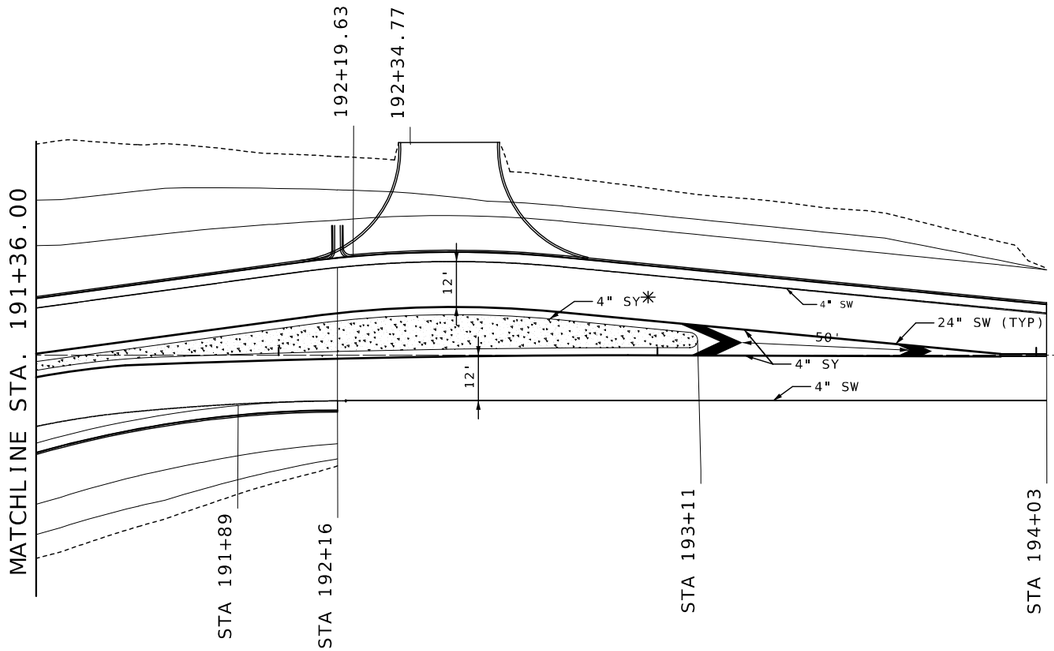
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

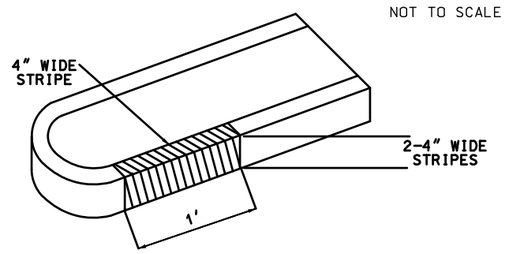
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 5 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:10:45 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	203

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

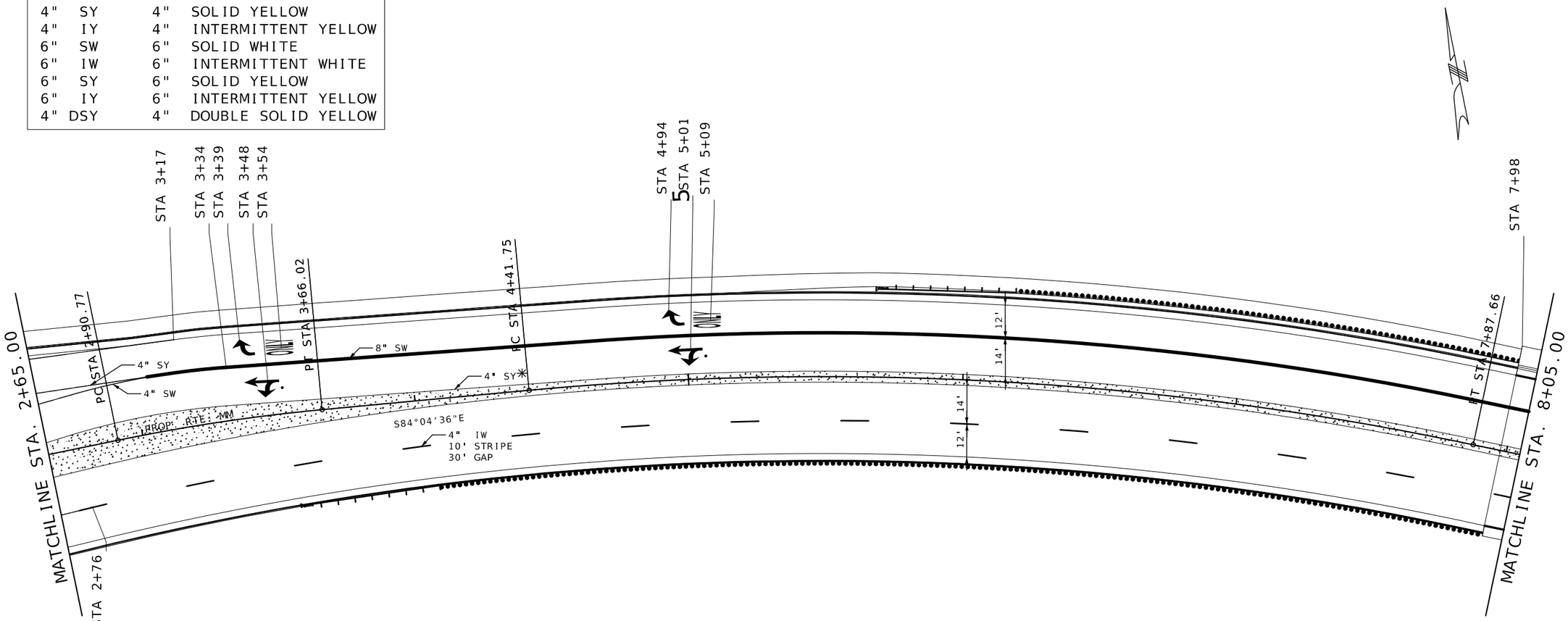
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

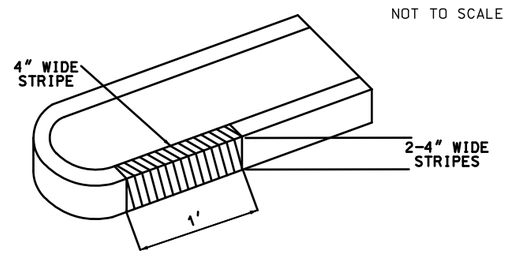
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 6 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:16:19 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	204

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

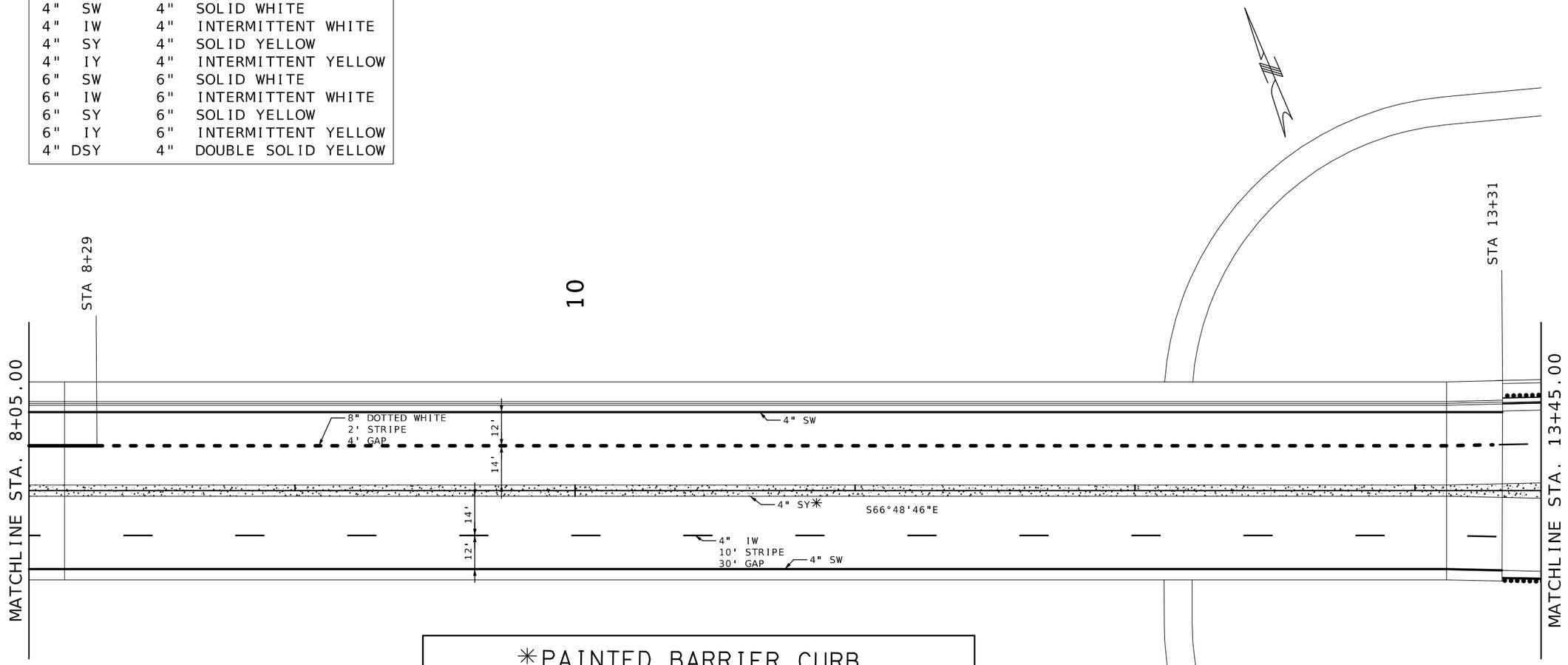
BRIDGE NO.

DESCRIPTION

DATE

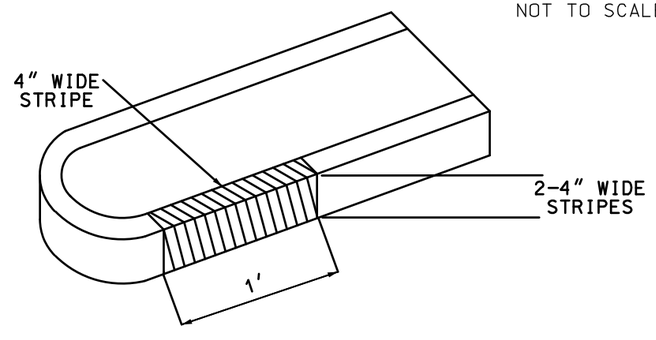
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 7 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:16:43 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	205

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

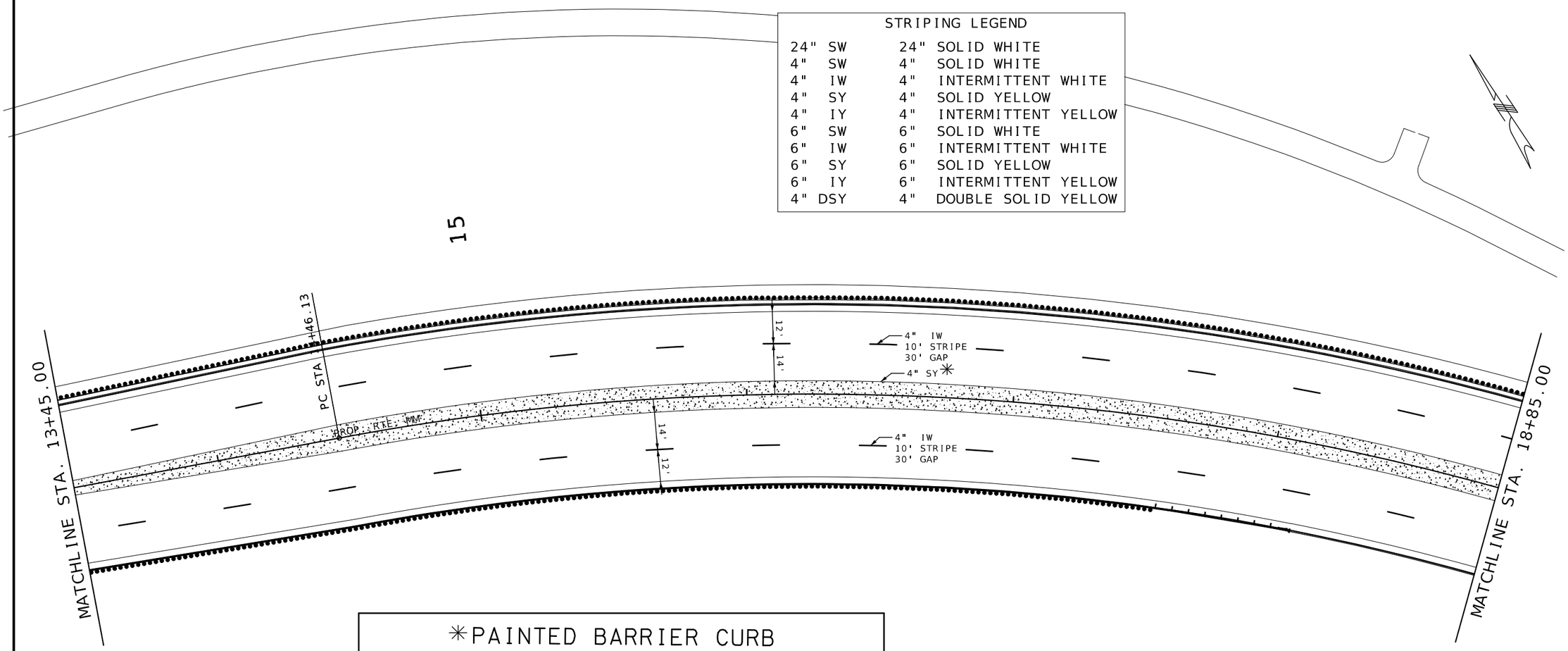
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

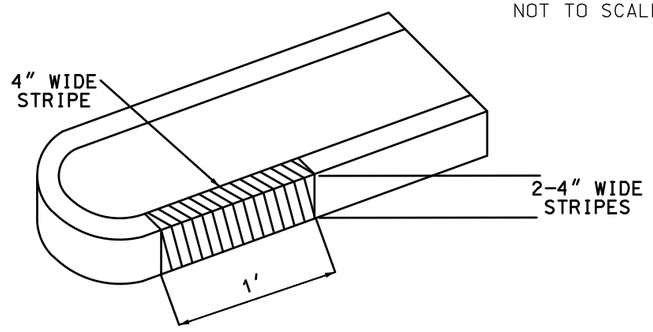
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 8 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:17:07 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	206

COUNTY
GREENE

JOB NO.
J8S0836D

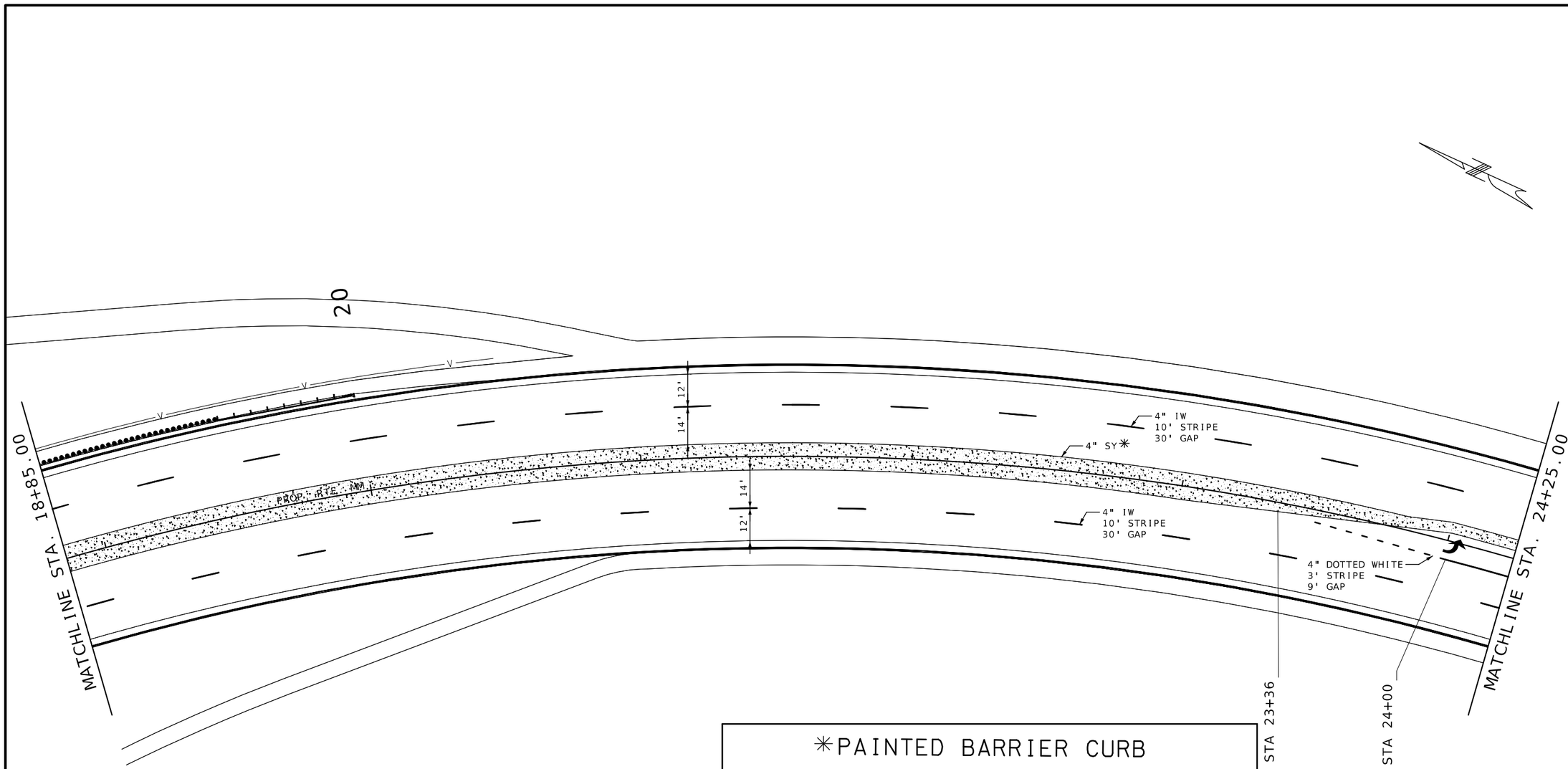
CONTRACT ID.

PROJECT NO.

BRIDGE NO.

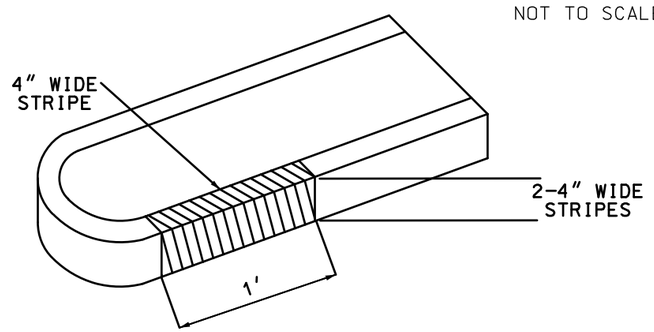
DESCRIPTION | DATE

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



✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 9 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-2645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:17:31 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-2645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	207

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

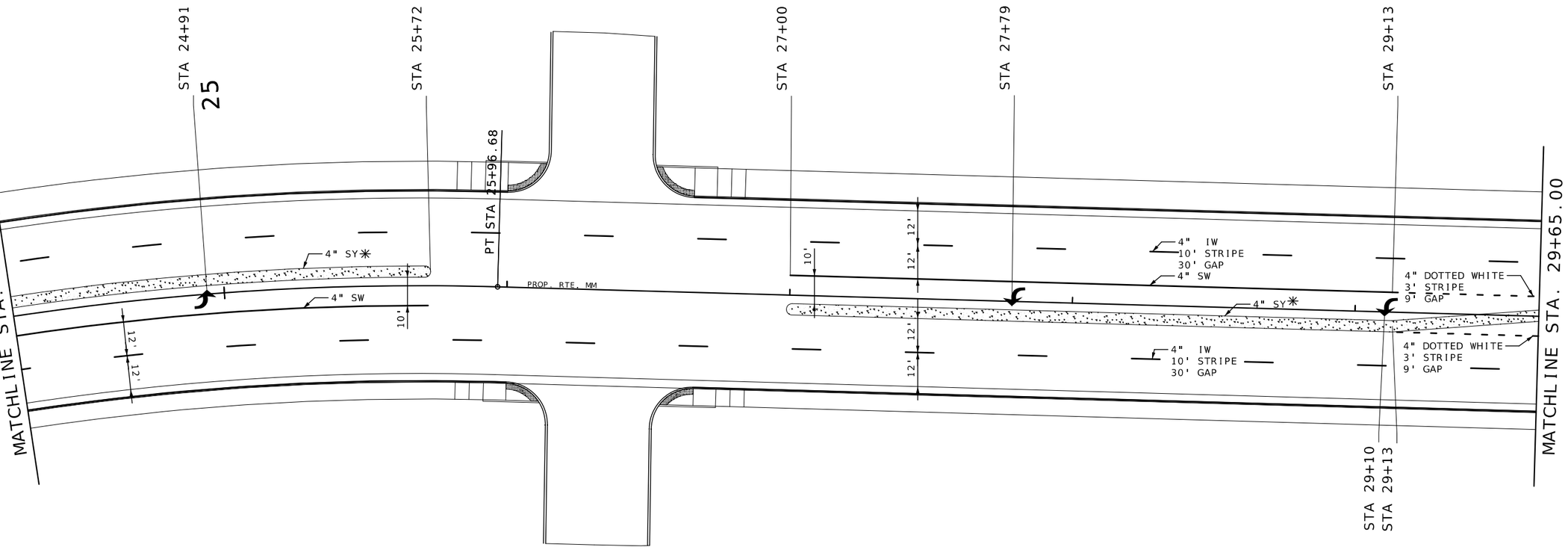
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

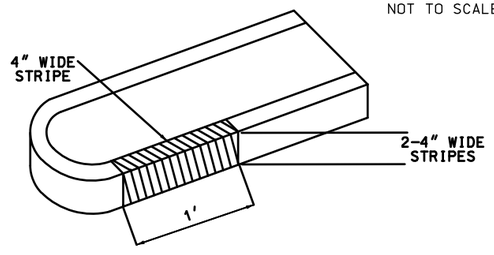
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 10 OF 17

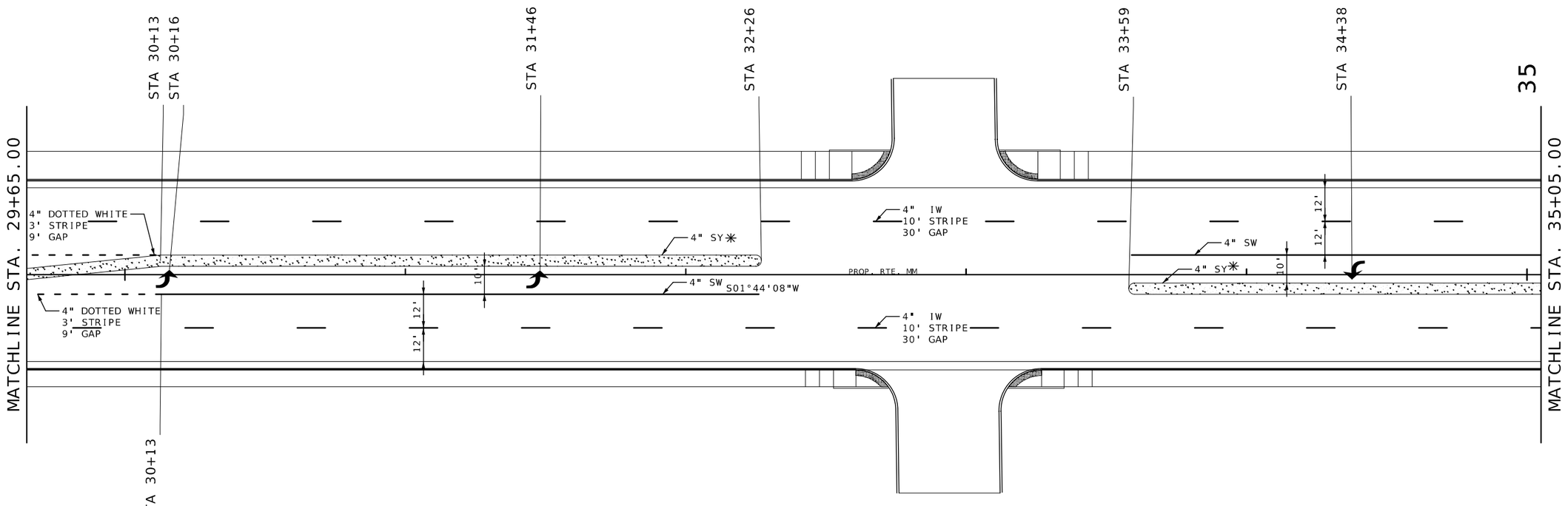
STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:17:50 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	
7/28/2025	
ROUTE: MM	STATE: MO
DISTRICT: SW	SHEET NO.: 208
COUNTY: GREENE	
JOB NO.: J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION | DATE

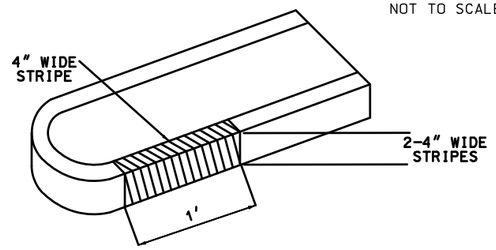
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE

0 20 40 60

PAVEMENT MARKING
SHEET 11 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:18:14 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	209

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

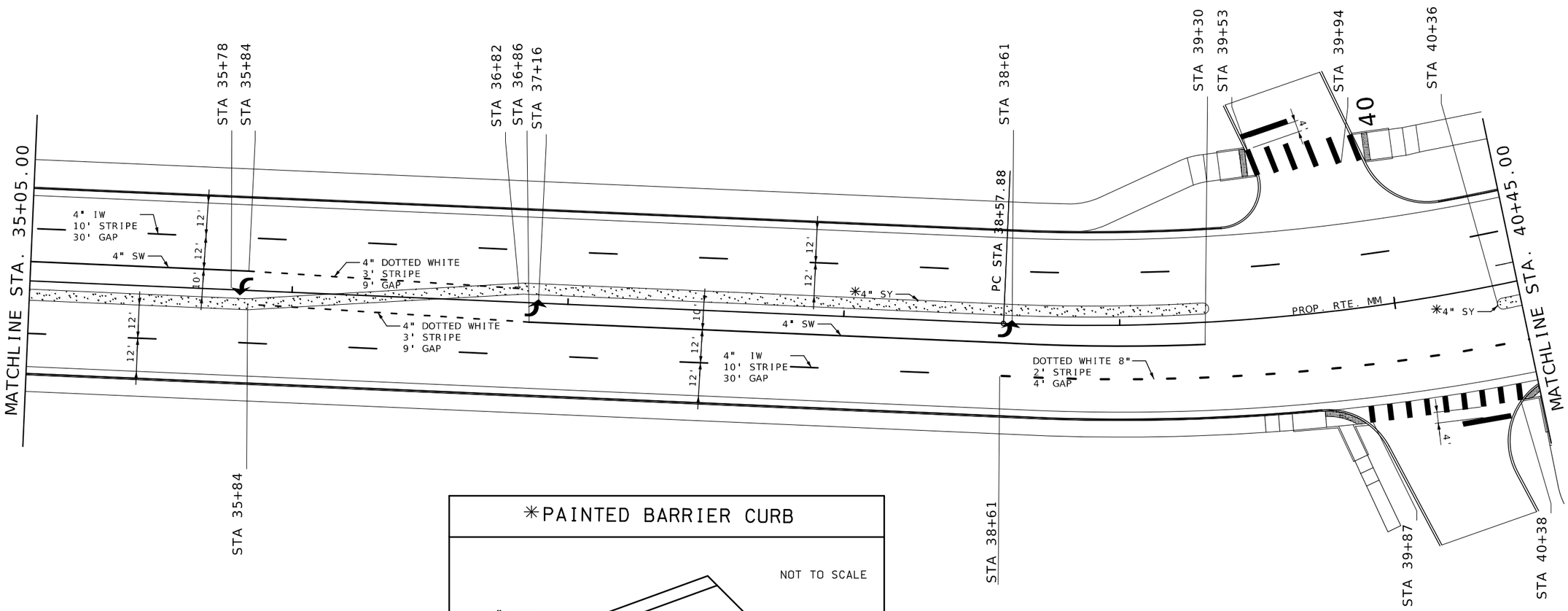
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

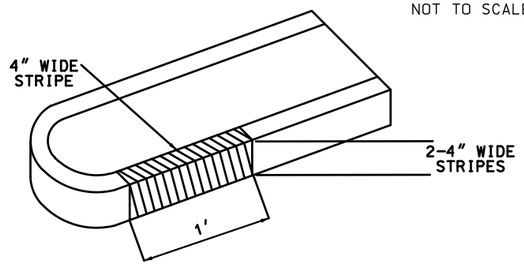
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 12 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:18:41 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	210

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

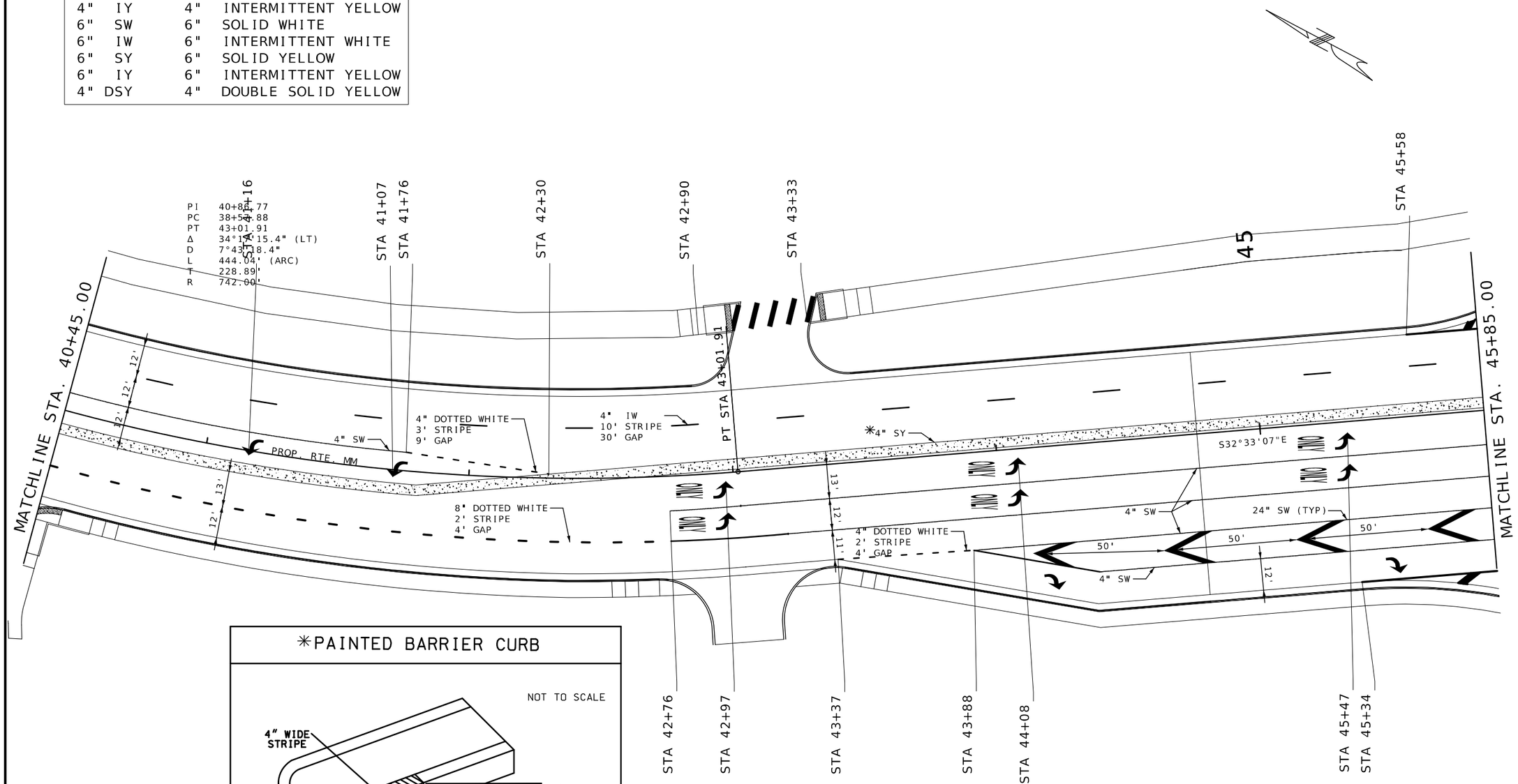
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

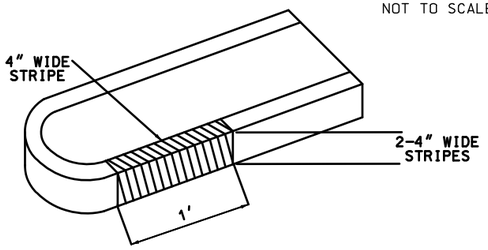
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE

0 20 40 60

PAVEMENT MARKING
SHEET 13 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:19:05 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	211

COUNTY
GREENE

JOB NO.
J8S0836D

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)

MATCHLINE STA. 241+13.62

STA 241+02
STA 240+86
STA 240+30
STA 240+26
STA 240+41
STA 240+08
STA 240+16
STA 239+60

STA 46+04
STA 46+39

240

STA 240+87
STA 240+54

STA 0+58
STA 0+96
STA 1+06
STA 1+17
STA 1+28
STA 1+35
STA 1+42
STA 1+89

STA 0+43

6" SW
6" SY
4" SY*
6" IW
4" SW*
24" SW (TYP)
6" IW
10' STRIPE
30' GAP
50'
12'

END STA 47+37.08
START STA 0+00.00
EX. US 60

PC STA 2+31.74

4" IW
6" IW
3' STRIPE
BY 9' GAP

PROP. RTE. MM
EX. FR 103

MATCHLINE STA. 45+85.00

MATCHLINE STA. 3+88.82

STA 238+85
STA 1+30
STA 238+66
STA 238+49
STA 238+22
STA 238+11
STA 237+98
STA 237+93
STA 237+86
STA 237+63
STA 237+49

STA 45+95
STA 46+10
STA 46+20
STA 46+32
STA 46+79
STA 46+95

STA 1+89
STA 3+54
STA 3+63

MATCHLINE STA. 237+31.36

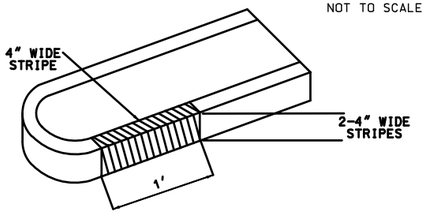
SCALE
0 20 40 60

STRIPING LEGEND

24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW

*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

PAVEMENT MARKING
SHEET 14 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/27/2025 8:19:29 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

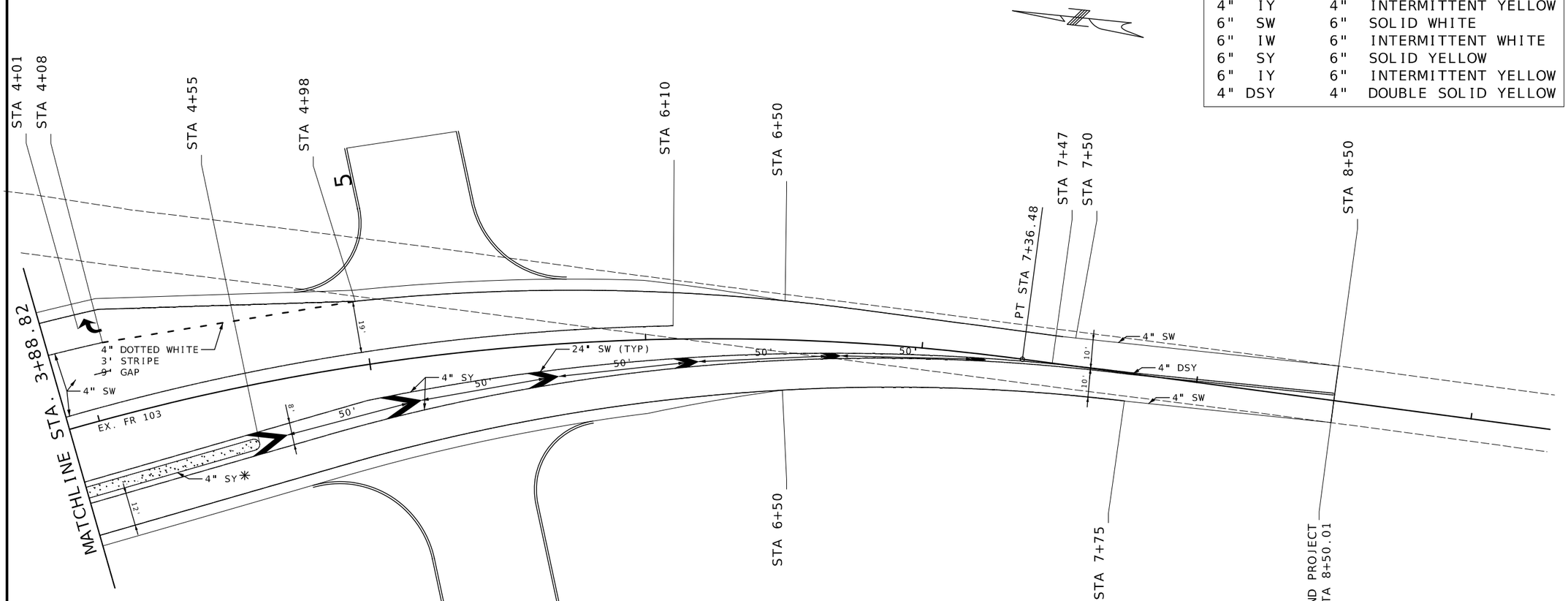
DATE PREPARED: 7/28/2025
ROUTE: MM
STATE: MO
DISTRICT: SW
SHEET NO.: 212
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION
DATE

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

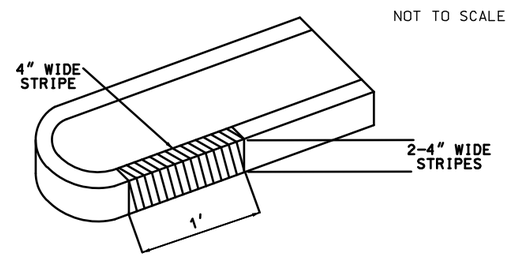
STRIPING LEGEND

24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE
0 20 40 60

PAVEMENT MARKING
SHEET 15 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-25645
PROFESSIONAL ENGINEER
Warner Sherman
07/27/2025 8:19:51 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-25645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	213

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

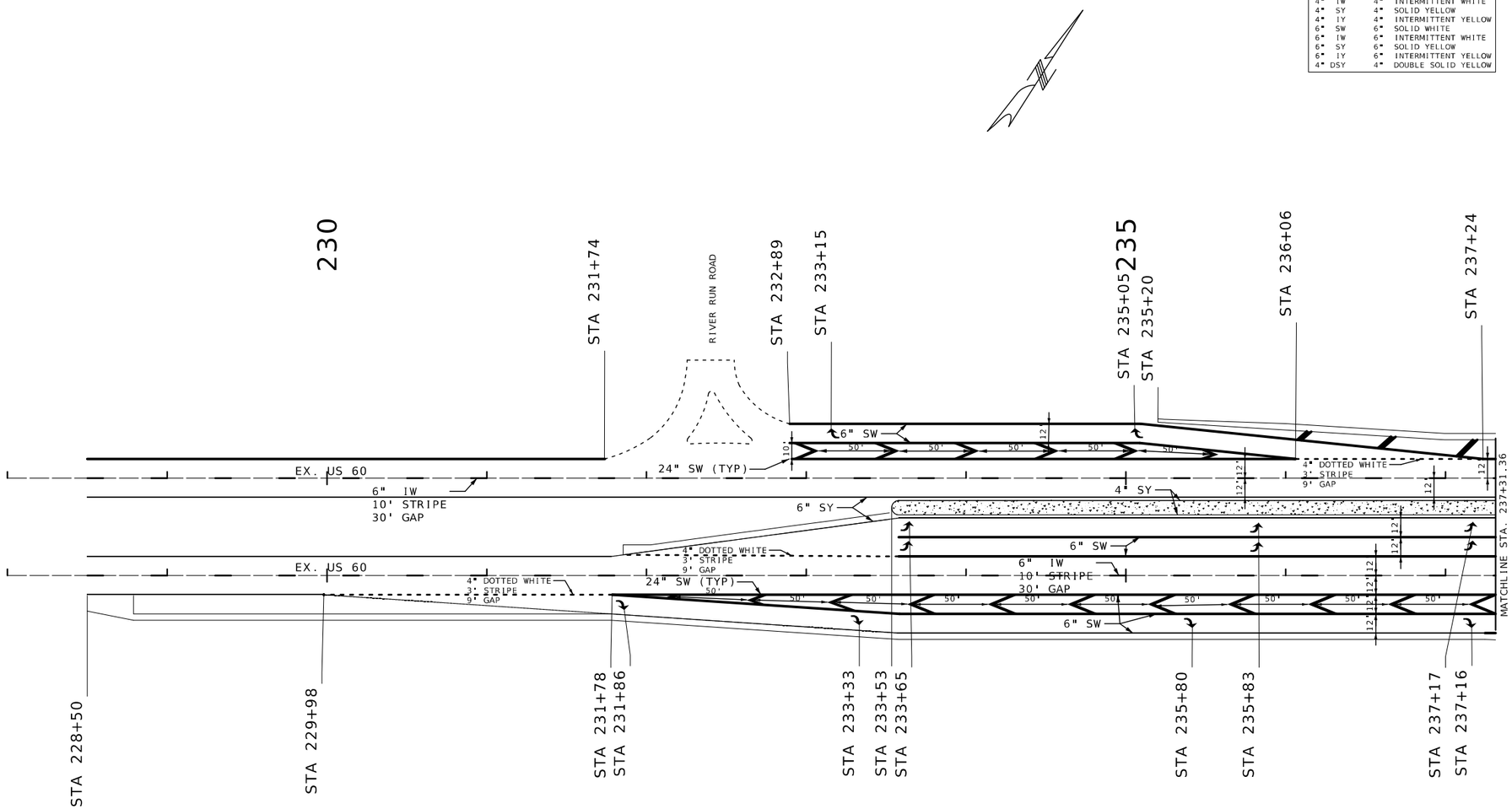
DESCRIPTION

DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

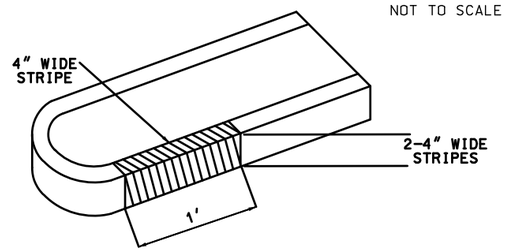
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



✳PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE

0 40 80 120

PAVEMENT MARKING
SHEET 16 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:20:21 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	214

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

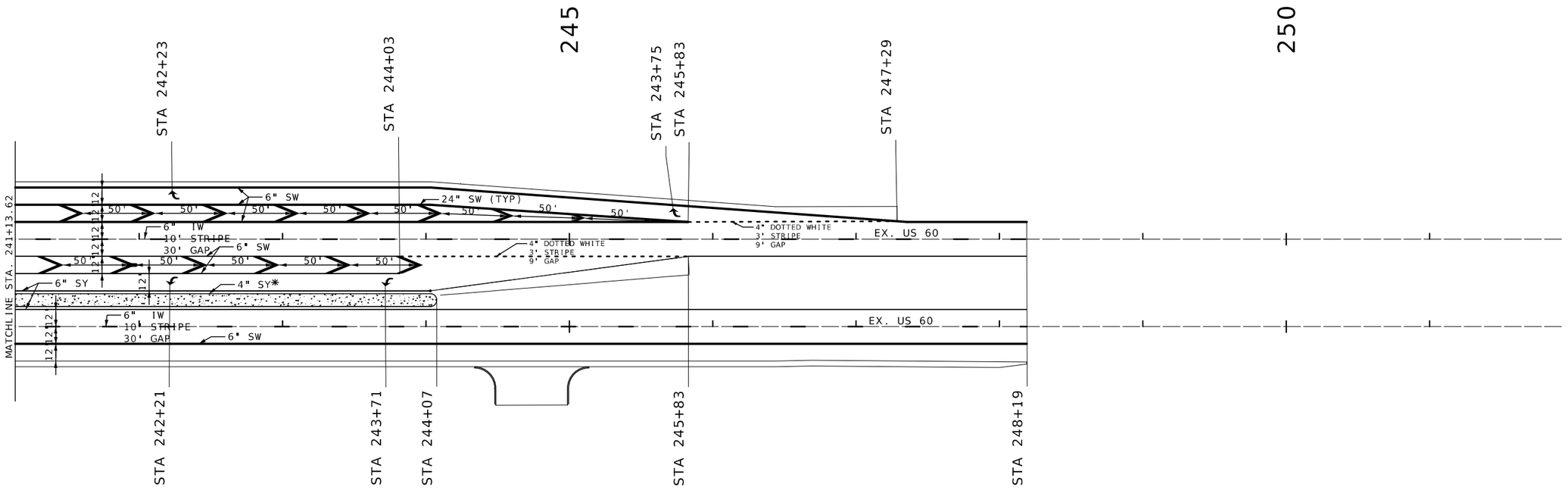
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

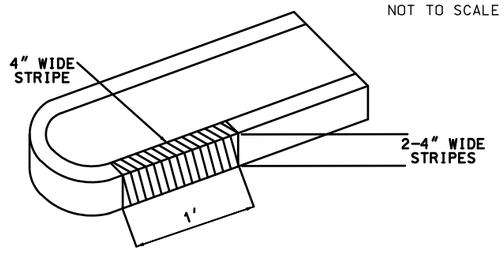
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

STRIPING LEGEND	
24" SW	24" SOLID WHITE
4" SW	4" SOLID WHITE
4" IW	4" INTERMITTENT WHITE
4" SY	4" SOLID YELLOW
4" IY	4" INTERMITTENT YELLOW
6" SW	6" SOLID WHITE
6" IW	6" INTERMITTENT WHITE
6" SY	6" SOLID YELLOW
6" IY	6" INTERMITTENT YELLOW
4" DSY	4" DOUBLE SOLID YELLOW



*PAINTED BARRIER CURB

NOT TO SCALE



NOTE:
ONE LINEAR FOOT OF CURB INCLUDES 4" WIDE STRIPE ON TOP OF CURB (MEDIAN OR ISLAND) AND THE HEIGHT OF VERTICAL FACE OF CURB.

SCALE

0 40 80 120

PAVEMENT MARKING
SHEET 17 OF 17

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/27/2025 8:20:44 PM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/28/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	215

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

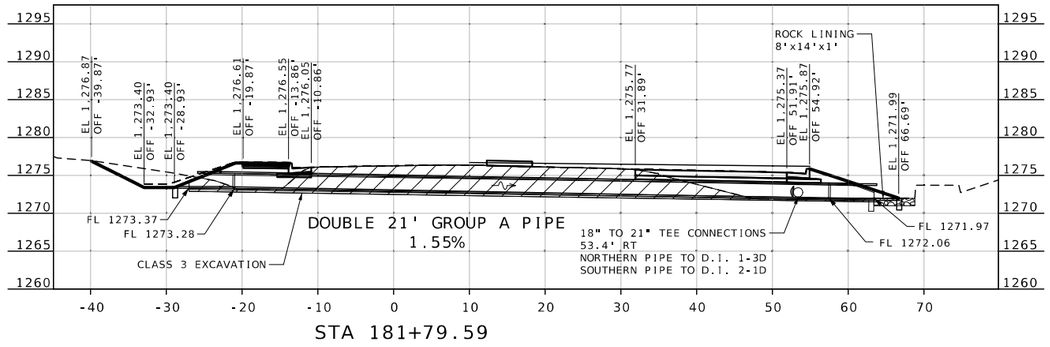
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

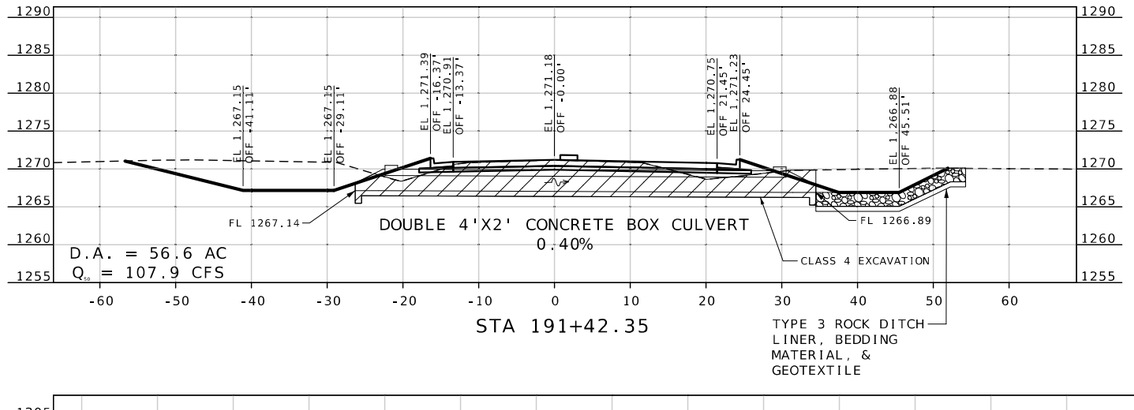
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)



CULVERT #1

EXISTING ROUTE MM
STA. 181+79.59

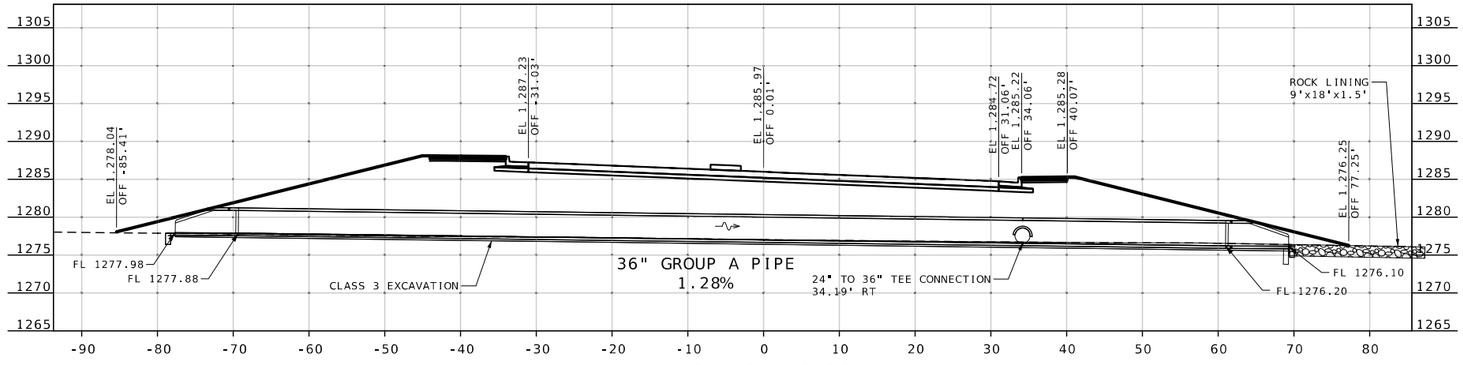
(R) EXIST. 3'x2' RCB
2° SKEW R.A.
2 -21" x 83.7' GROUP A PIPE
4 -21" GROUP A FES REQ'D
ROCK LINING = 3 CY CENTERED BETWEEN PIPES
CL 3 EXC = 338.2 CY



CULVERT #2

EXISTING ROUTE MM
STA. 191+42.35

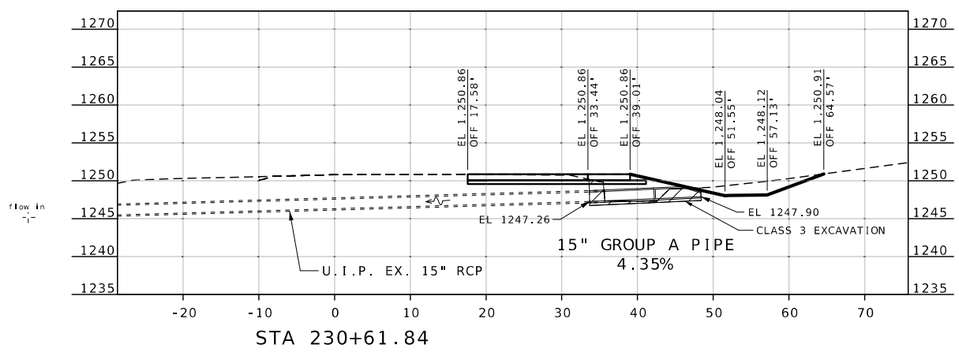
NO SKEW
DOUBLE 4' x 2' x 60' BOX CULVERT
WITH HEADWALLS & STRAIGHT WINGS LT. & RT.
CLASS B-1 CONCRETE (CULVERT) = 49.9 CY
REINFORCING STEEL (CULVERTS) = 6610 LBS
CLASS 4 EXCAVATION = 83.4 CY
ROCK DITCH LINER = 169 CY
DITCH LINER BEDDING = 61 CY
EROSION CONTROL GEOTEXTILE = 276 SY
SEE STANDARD PLANS 703.40H & 703.47A



CULVERT #4

PROPOSED ROUTE MM
STA. 24+98.39

3° SKEW R.A.
1 -36" x 130.3' GROUP A PIPE
2 -36" GROUP A FES REQ'D
ROCK LINING = 9 CY
CL 3 EXC = 20.7 CY



CULVERT #5

EXISTING ROUTE 60 (EB)
STA. 230+61.84

44° R.A.
(R) EX. HEADWALL & 2' OF EXISTING 15" RCP
EXTEND EX. 15" RCP
W/ 8.5' 15" GRP A PIPE RT.
1 -15" GRP A FES REQ'D
CL 3 EXC = 2.7 CY

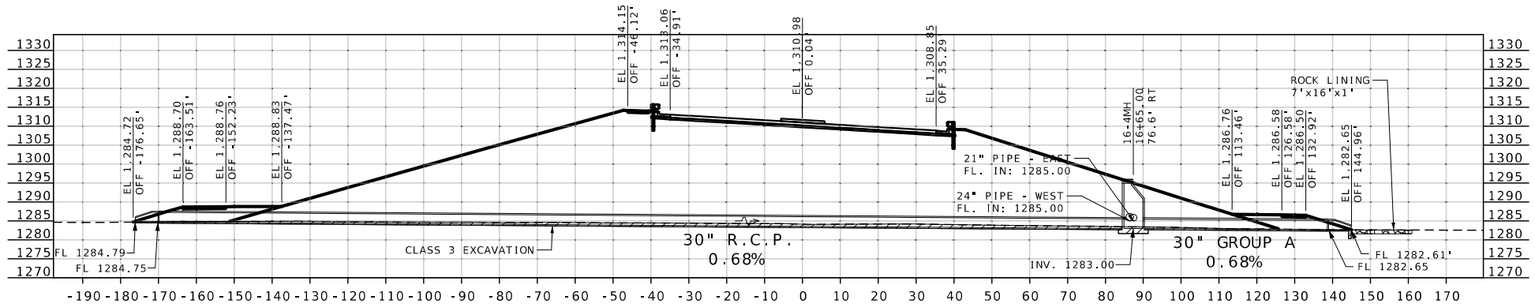
CULVERT SECTIONS SHEET
SHEET 1 OF 2

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
07/26/2025 7:10:46 AM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED: 7/25/2025
ROUTE: MM | STATE: MO
DISTRICT: SW | SHEET NO.: 216
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.:

DESCRIPTION | DATE

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



STA 16+20.45

CULVERT #3

PROPOSED ROUTE MM
STA. 16+20.45
28° SKEW R.A.
1 -30" x 255' CL IV R.C.P.
1 -30" x 48' GROUP A PIPE
72" PRECAST MANHOLE AND
TYPE 4 FRAME & COVER

1 -30" PRECAST CONC. FES REQ'D
1 -30" GROUP A FES REQ'D
ROCK LINING = 4 CY
CL 3 EXC = 60.0 CY

CULVERT SECTIONS SHEET
SHEET 2 OF 2

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
08/08/2025 8:48:11 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
8/6/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	217

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

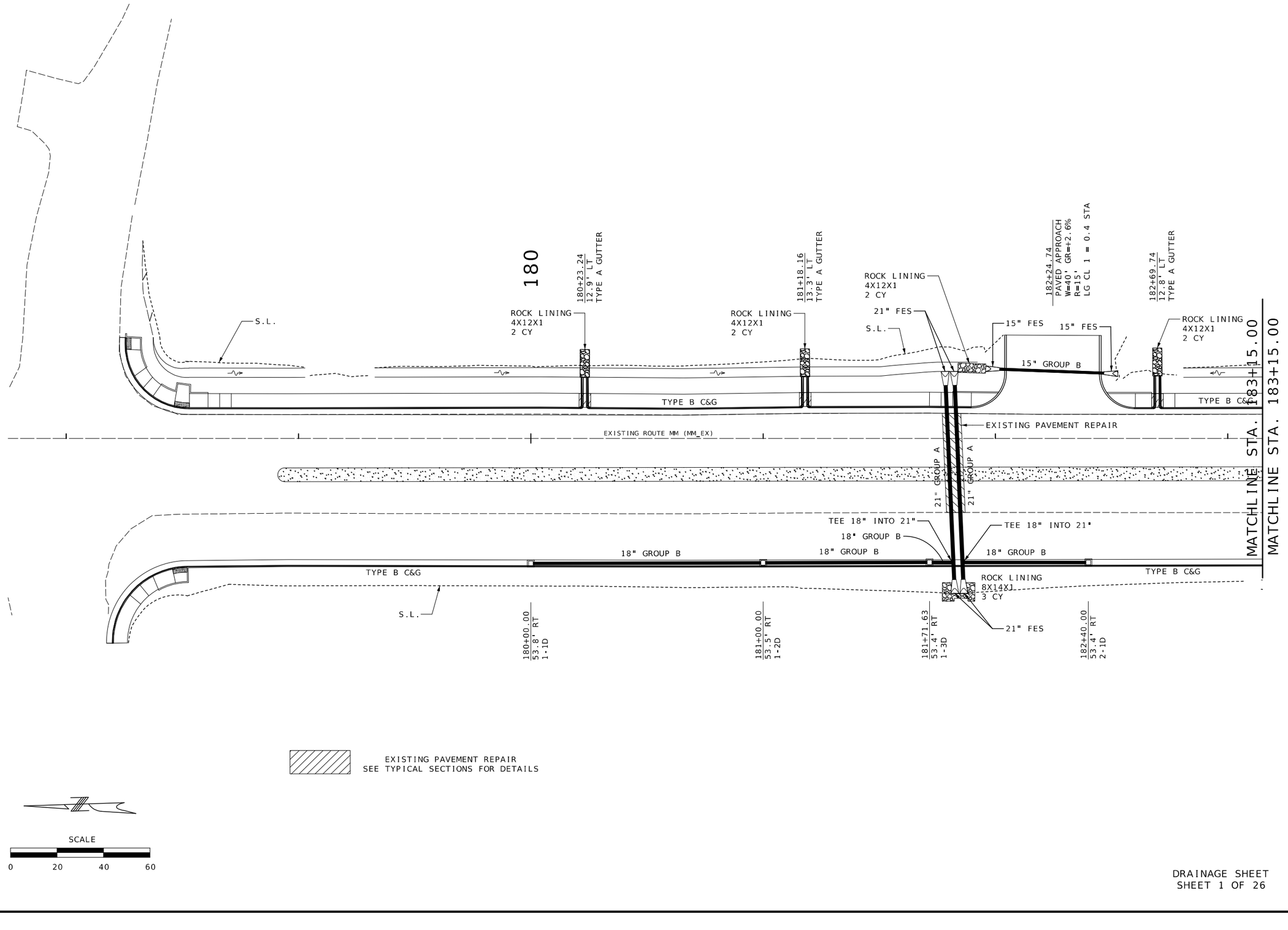
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



EXISTING PAVEMENT REPAIR
SEE TYPICAL SECTIONS FOR DETAILS

SCALE
0 20 40 60

DRAINAGE SHEET
SHEET 1 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 7:11:38 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	218

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

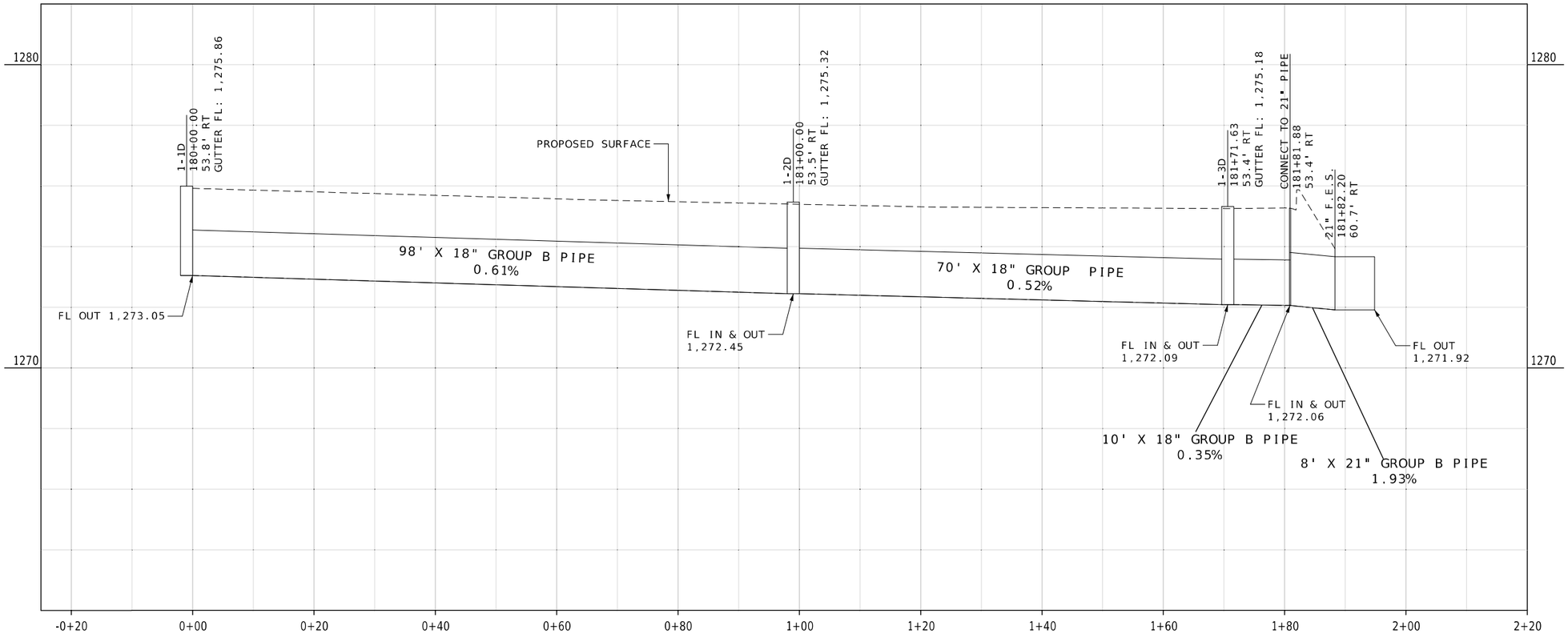
PROJECT NO.

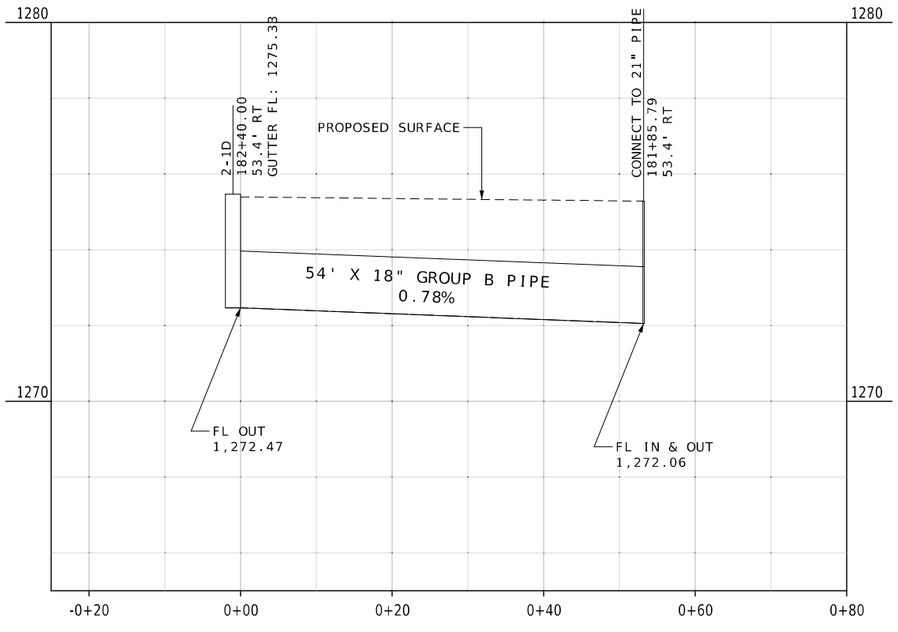
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 1 PROFILES
SHEET 2 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:12:07 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	219

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

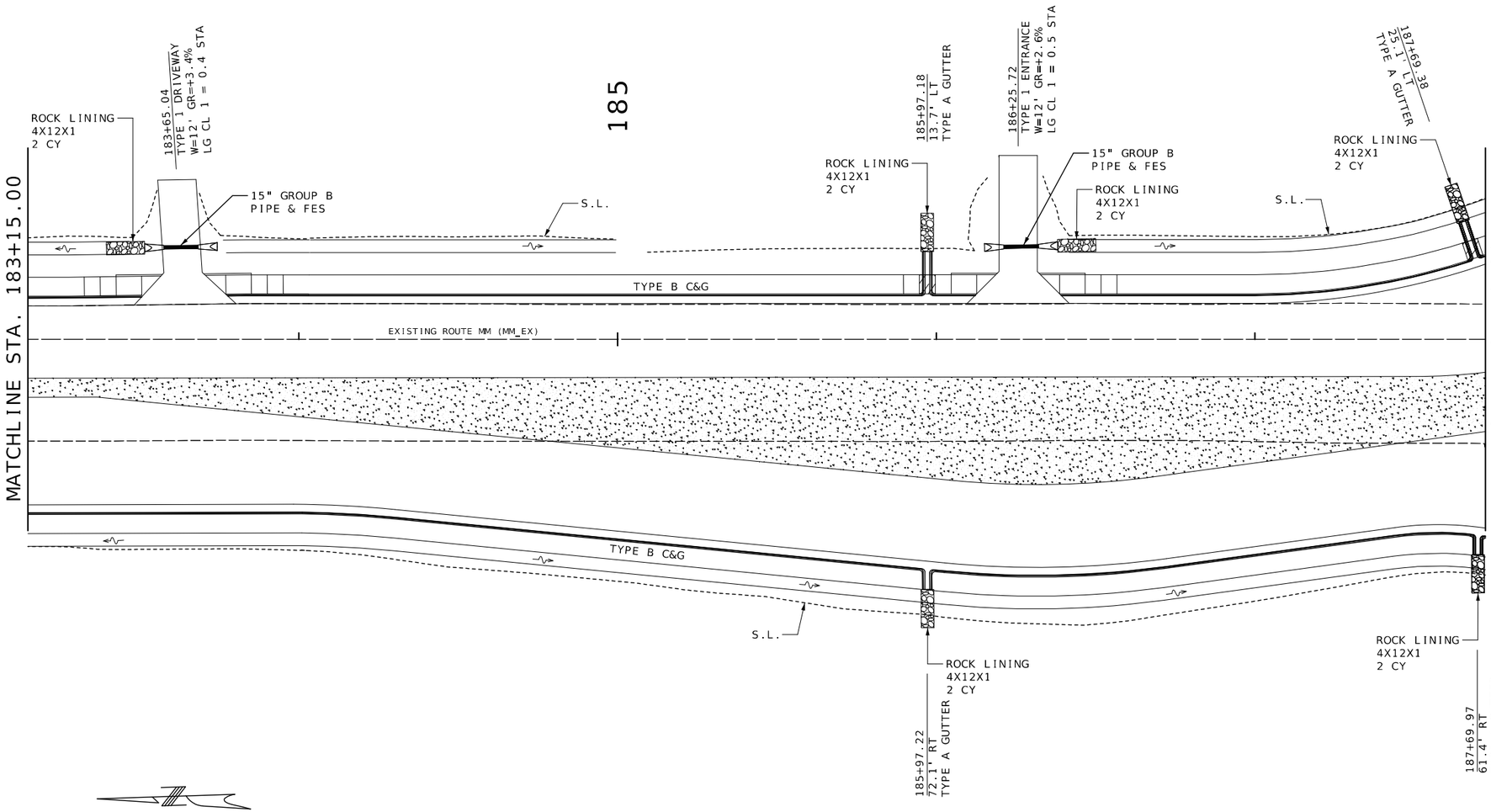
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DRAINAGE SHEET
SHEET 3 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/25/2025 7:12:37 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	220

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE STA. 187+72.31

188+32.03
92.2' RT
3-1D

188+50.30
134.0' RT
3-2T

21" FES

TEE 18" INTO 21"

S.L.

TYPE B C&G

15" GROUP B

18" GROUP B

21" GROUP A

SECTION 03 (FR160_Sec03)

FARM ROAD 160 B (FR160)

EXISTING ROUTE MM (CONSTRUCTION & MM_NLeg)

EXISTING ROUTE MM (MM_EX)

25

5

6

190

24+10.20 (SECTION 03)
TYPE 1 ENTRANCE
W=32' GR=+2.6%
LG CL 1 = 0.3 STA

30" GROUP B
PIPE & FES

ROCK LINING
7X16X1
4 CY

189+27.10
157.3' RT
3-3T

189+47.57
133.2' RT
4-1D

21" GROUP B

S.L.

TYPE B C&G

18" GROUP B
PIPE & FES

190+79.58
46.9' RT
9-1D

TYPE 3 ROCK DITCH LINER
& 8" BEDDING
STA. 190+40.88 TO
191+55.00

STA. 191+42.35
CONSTRUCT NEW DOUBLE
4'X2' REINFORCED
CONCRETE BOX CULVERT

SCALE
0 20 40 60

MATCHLINE STA. 191+54.88

STA. 188+64.21, 48.25' LT
LEAVE 1' OPENING FOR
DRAINAGE AT LOW POINT

188+43.50
69.5' LT
5-1T

1+17.15 (MM_PR)
30.3' LT
6-1A

S.L.

1+50.40
53.9' LT
5-2T

24" GROUP B
PIPE & FES

1+50.46
21.2' LT
5-3T

TYPE B C&G

18" GROUP B

19"X30" ELLIPTICAL
GROUP A

18" GROUP A

PROPOSED ROUTE MM ℄ (MM_PR)

19"X30" ELLIPTICAL
GROUP A

MATCHLINE STA. 2+70.00

18" GROUP B

21" GROUP B

27" GROUP B
PIPE & FES

ROCK LINING
6X14X1
3 CY

1+50.56
50.0' RT
5-4T

2+15.00
40.9' RT
7-1T

1+25.85 (MM_PR)
58.9' RT
8-1T

S.L.

TYPE B C&G

18" GROUP B
PIPE & FES

ROCK LINING
4X12X1
2 CY

190+79.44
22.8' LT
10-1D

DRAINAGE SHEET
SHEET 4 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:13:07 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	221

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

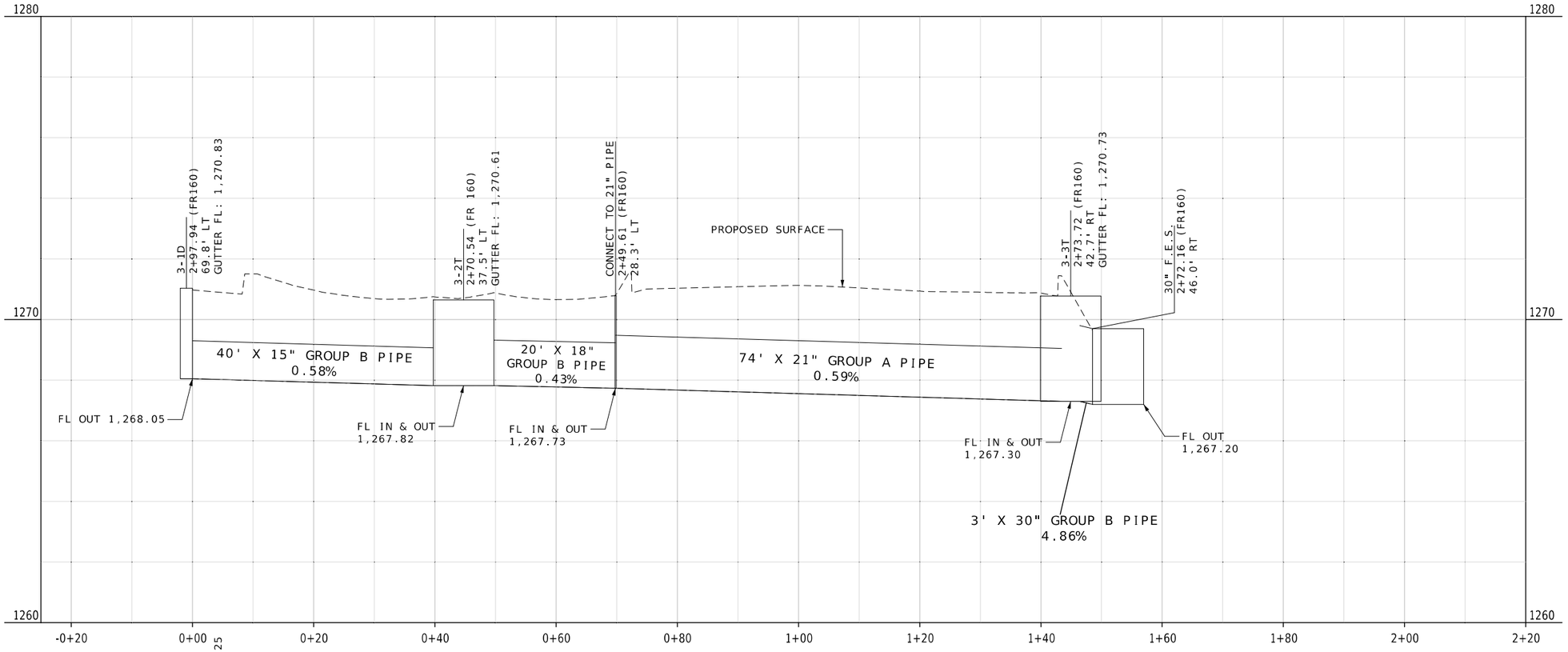
PROJECT NO.

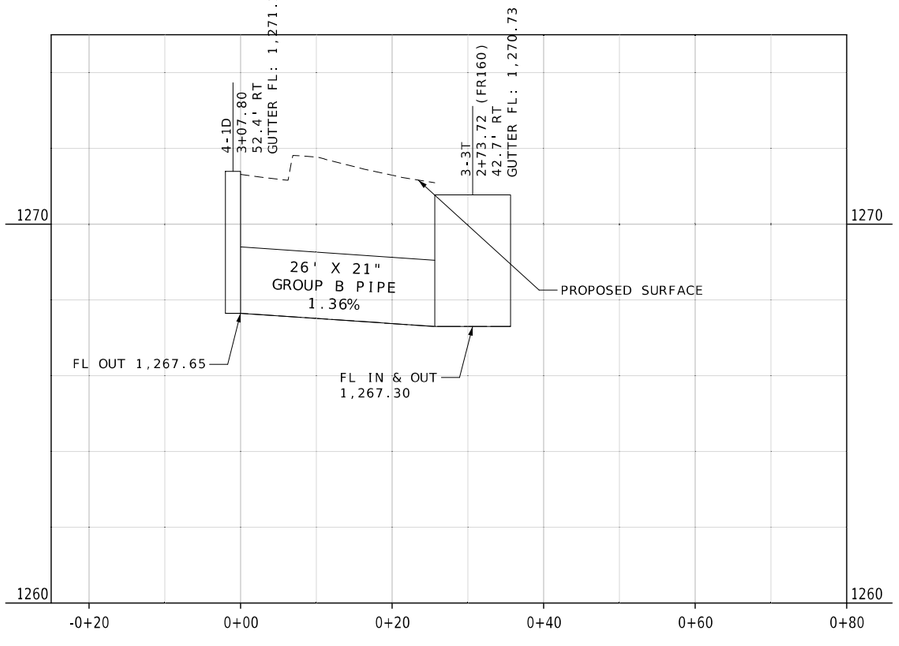
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 2 PROFILES
SHEET 5 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
Warner Sherman
07/26/2025 7:13:33 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	222

COUNTY
GREENE

JOB NO.
J8S0836D

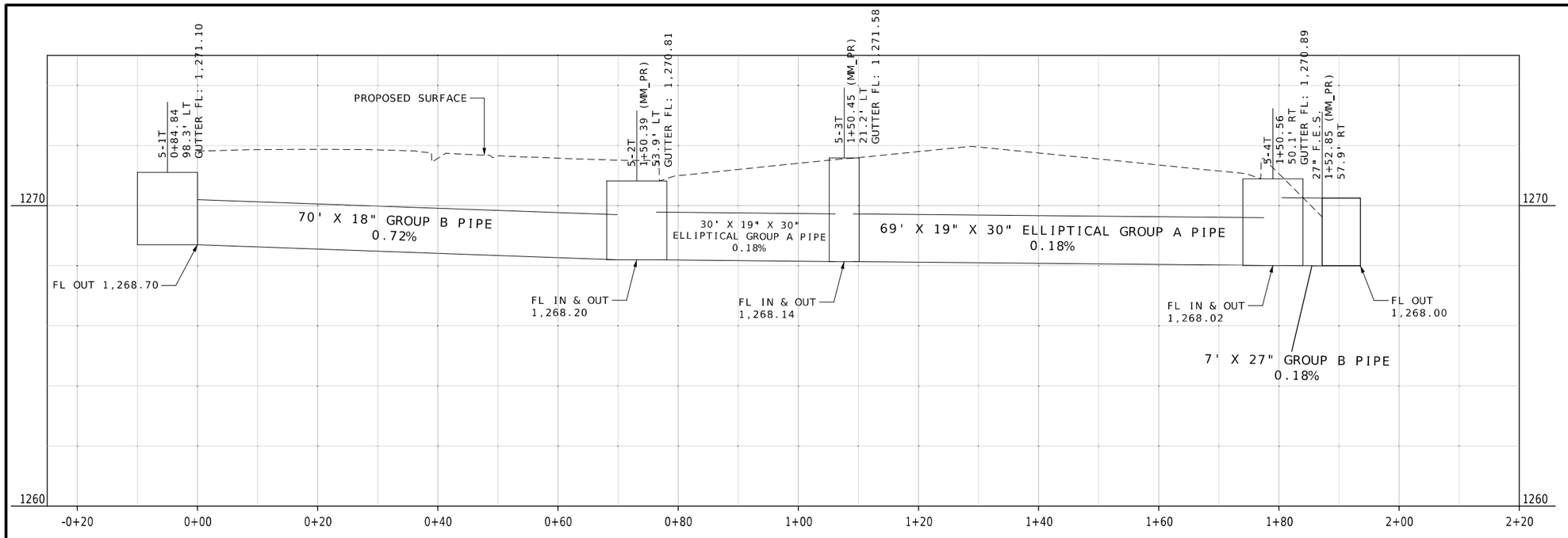
CONTRACT ID.

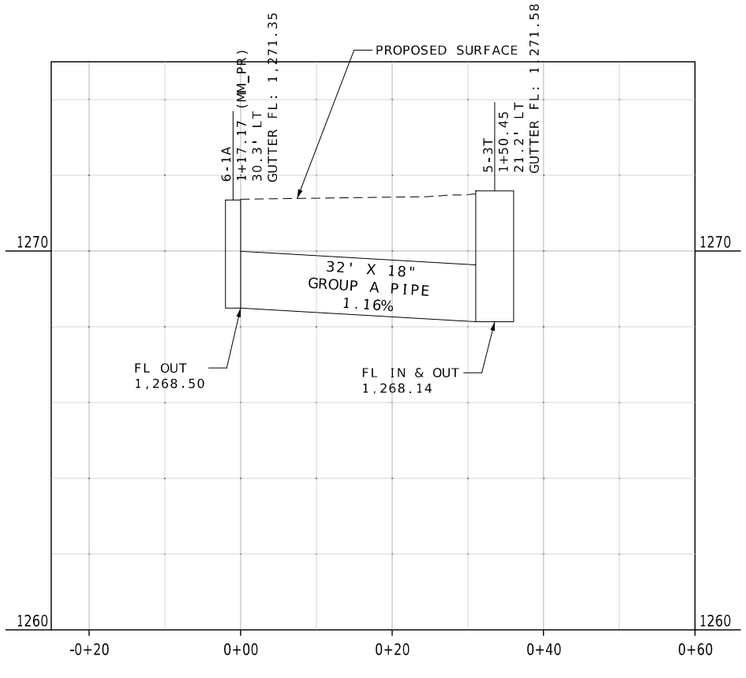
PROJECT NO.

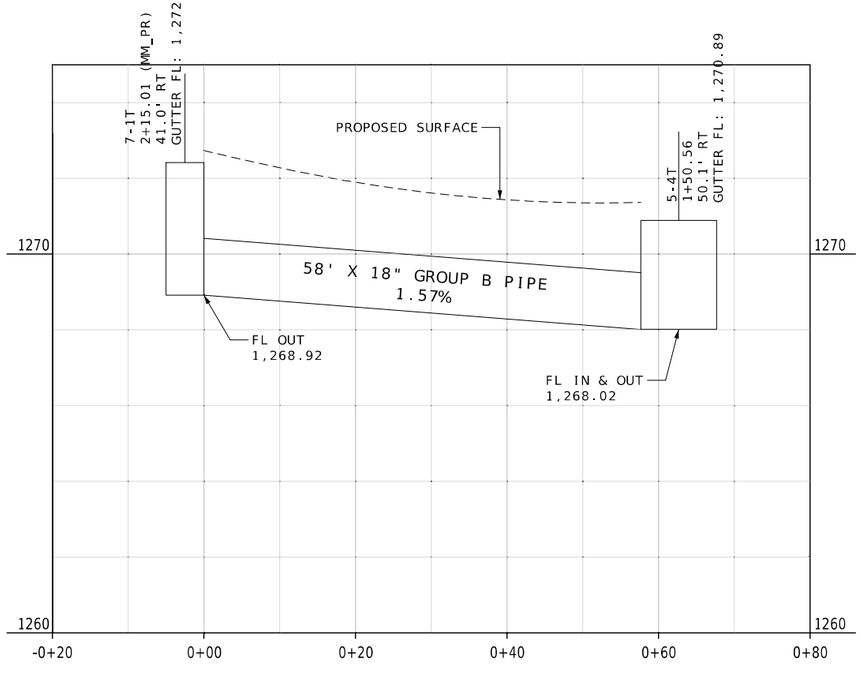
BRIDGE NO.

DESCRIPTION	DATE

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







DRAINAGE SHEET
NETWORK 3 PROFILES
SHEET 6 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:13:58 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	223

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

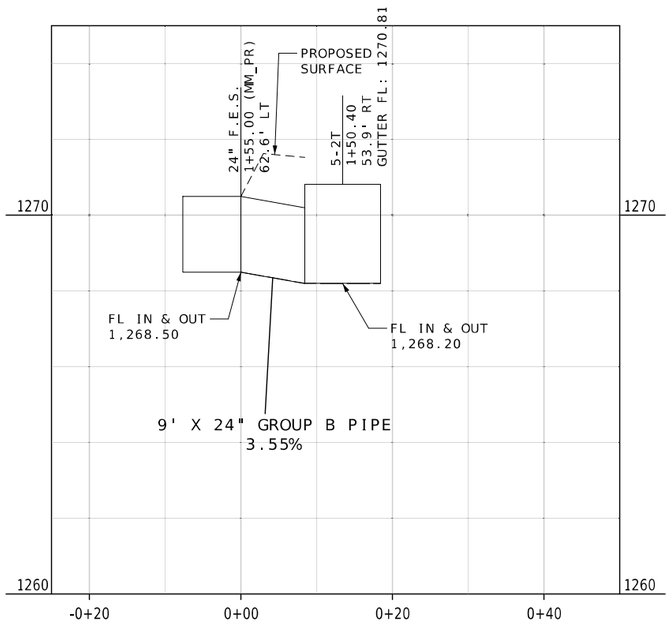
PROJECT NO.

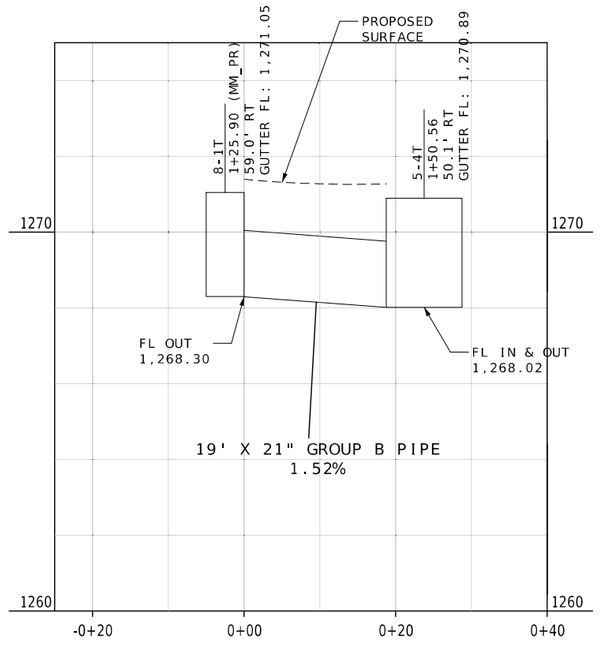
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 3 PROFILES
SHEET 7 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

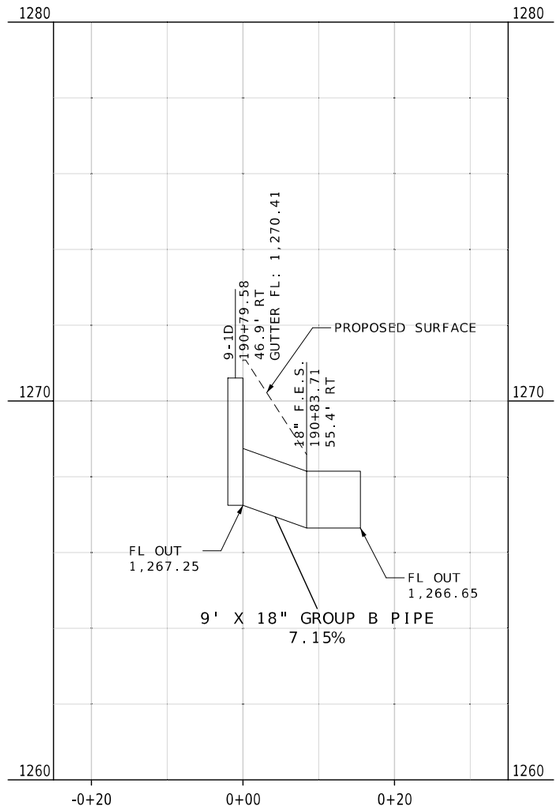
Warner Sherman
07/28/2025 7:14:25 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

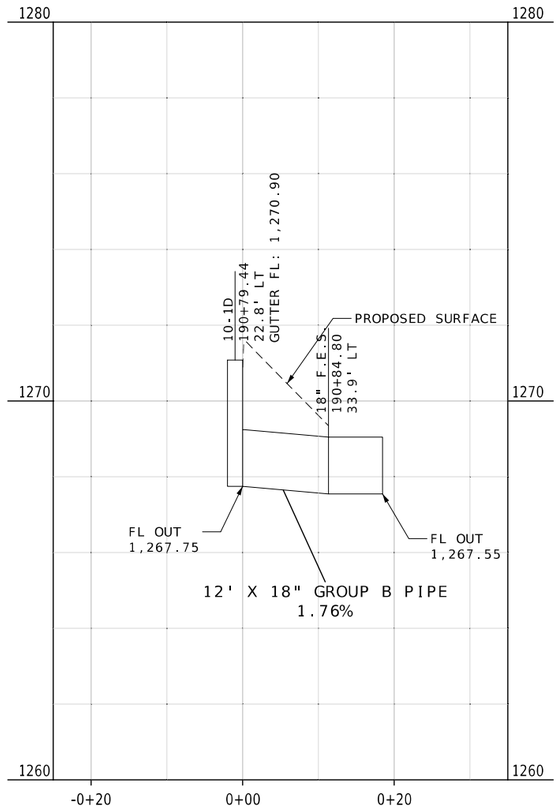
DATE PREPARED	7/25/2025
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	224
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 4 & 5 PROFILES
SHEET 8 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

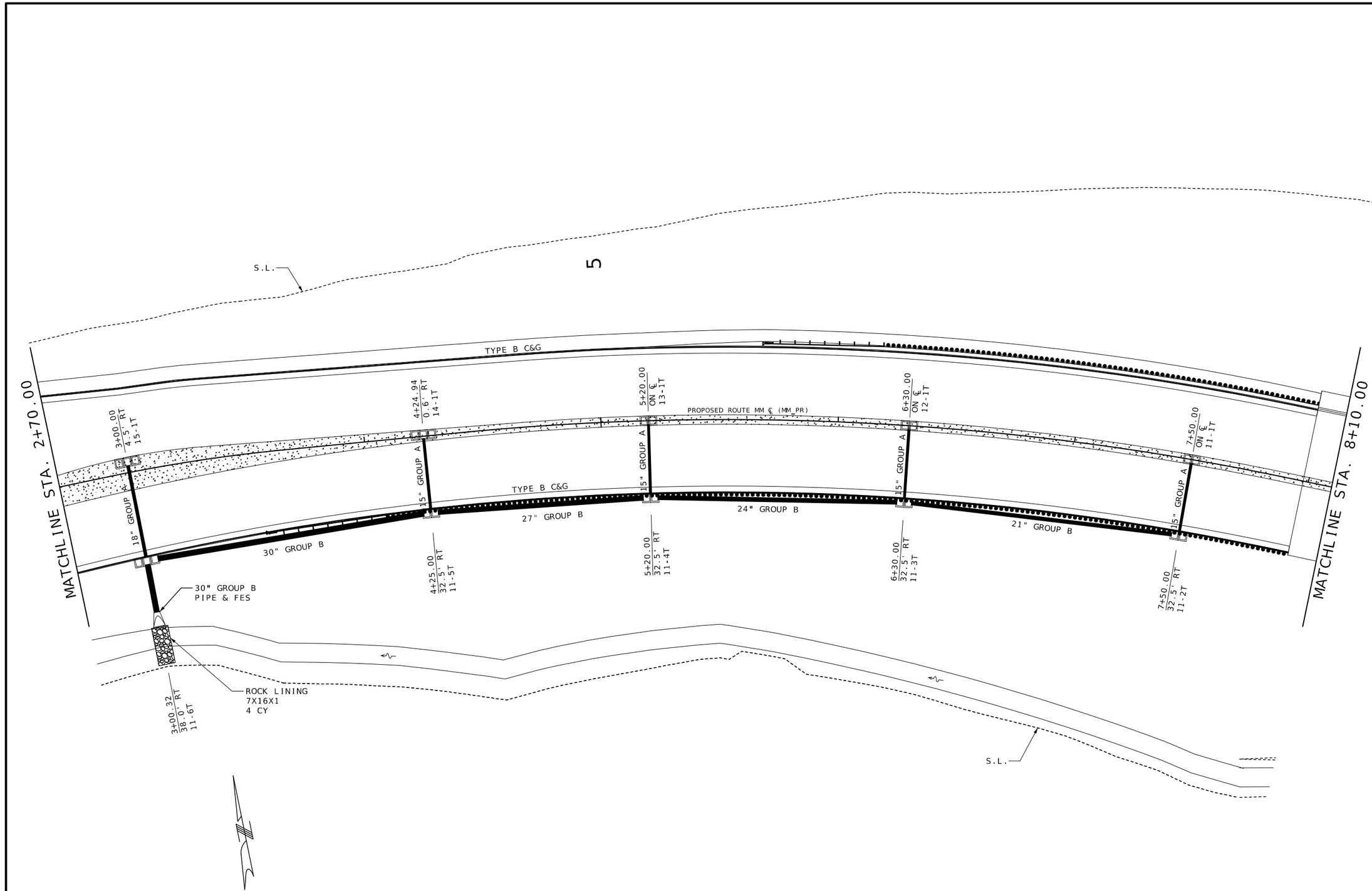
Warner Sherman
07/26/2025 7:14:54 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/25/2025
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	225
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DRAINAGE SHEET
SHEET 9 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:15:28 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	226

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

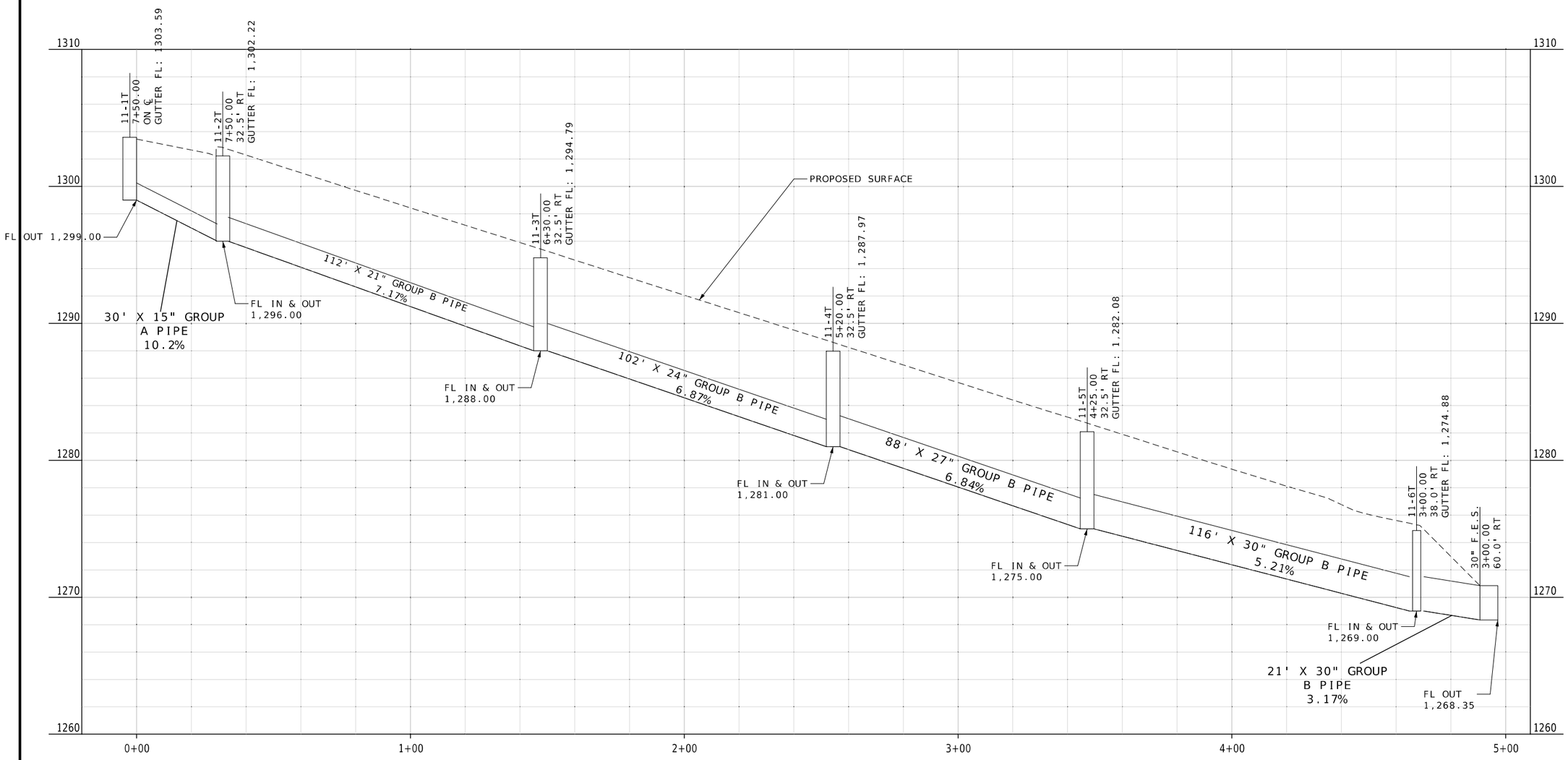
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DRAINAGE SHEET
NETWORK 6 PROFILES
SHEET 10 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:15:53 AM
WARNER D. SHERMAN II - CIVIL
MO PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	227

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

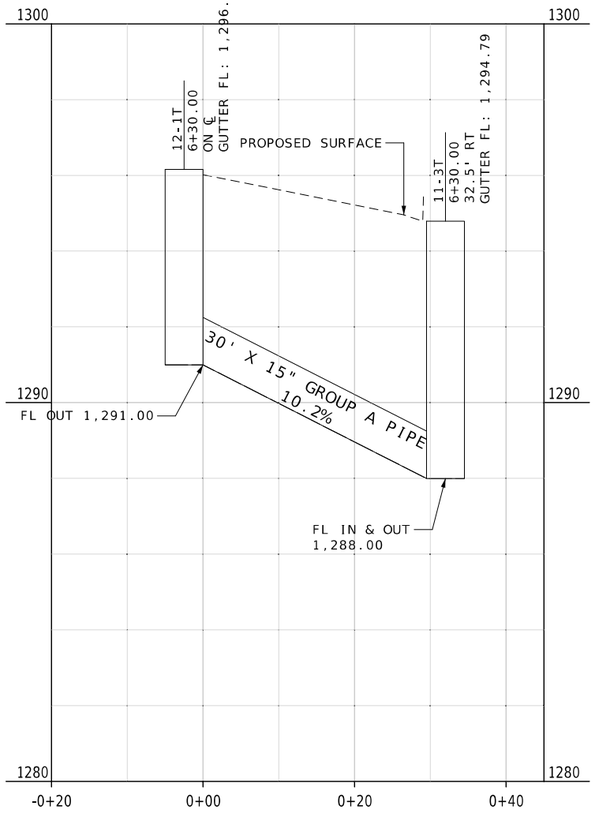
PROJECT NO.

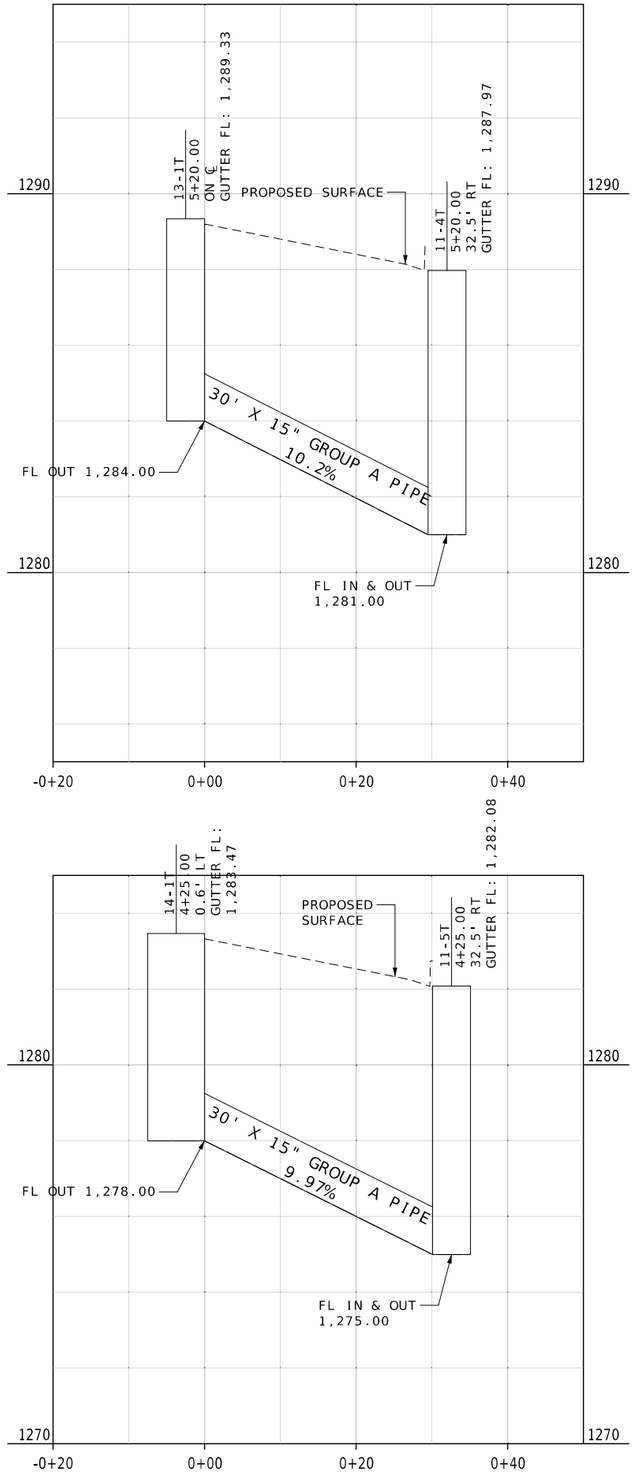
BRIDGE NO.

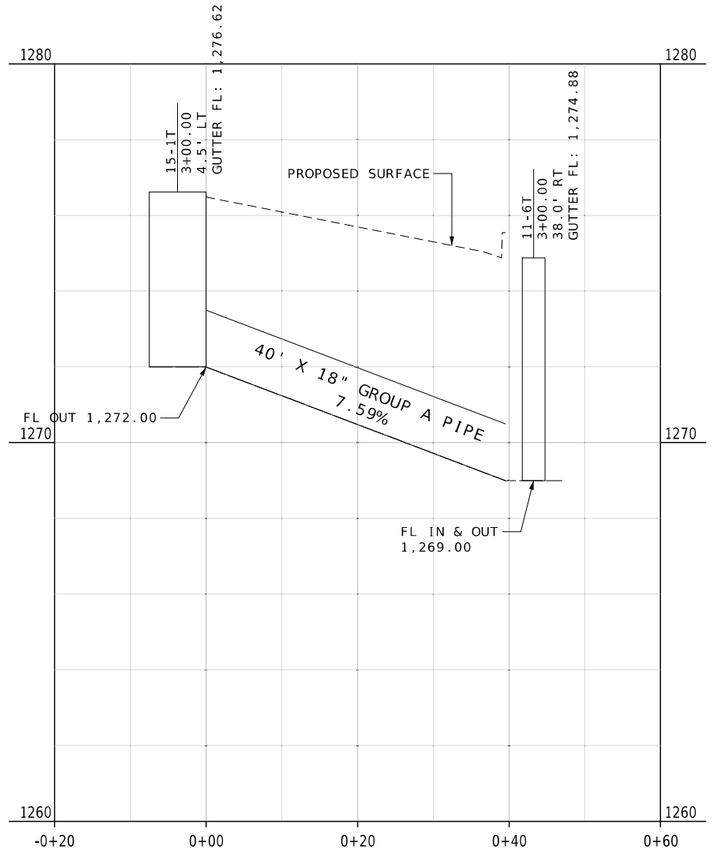
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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







DRAINAGE SHEET
NETWORK 6 PROFILES
SHEET 11 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:16:19 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	228

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

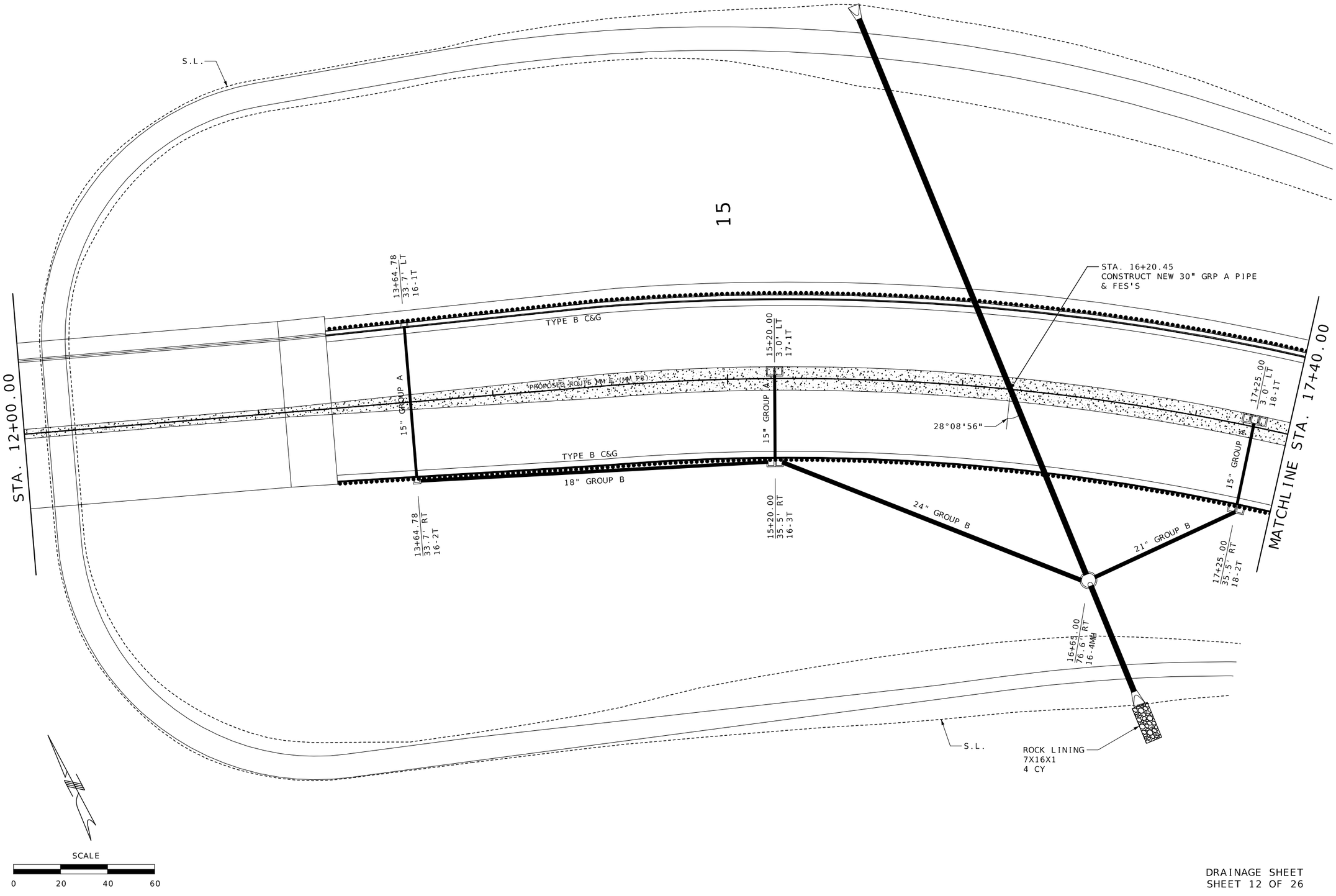
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DRAINAGE SHEET
SHEET 12 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

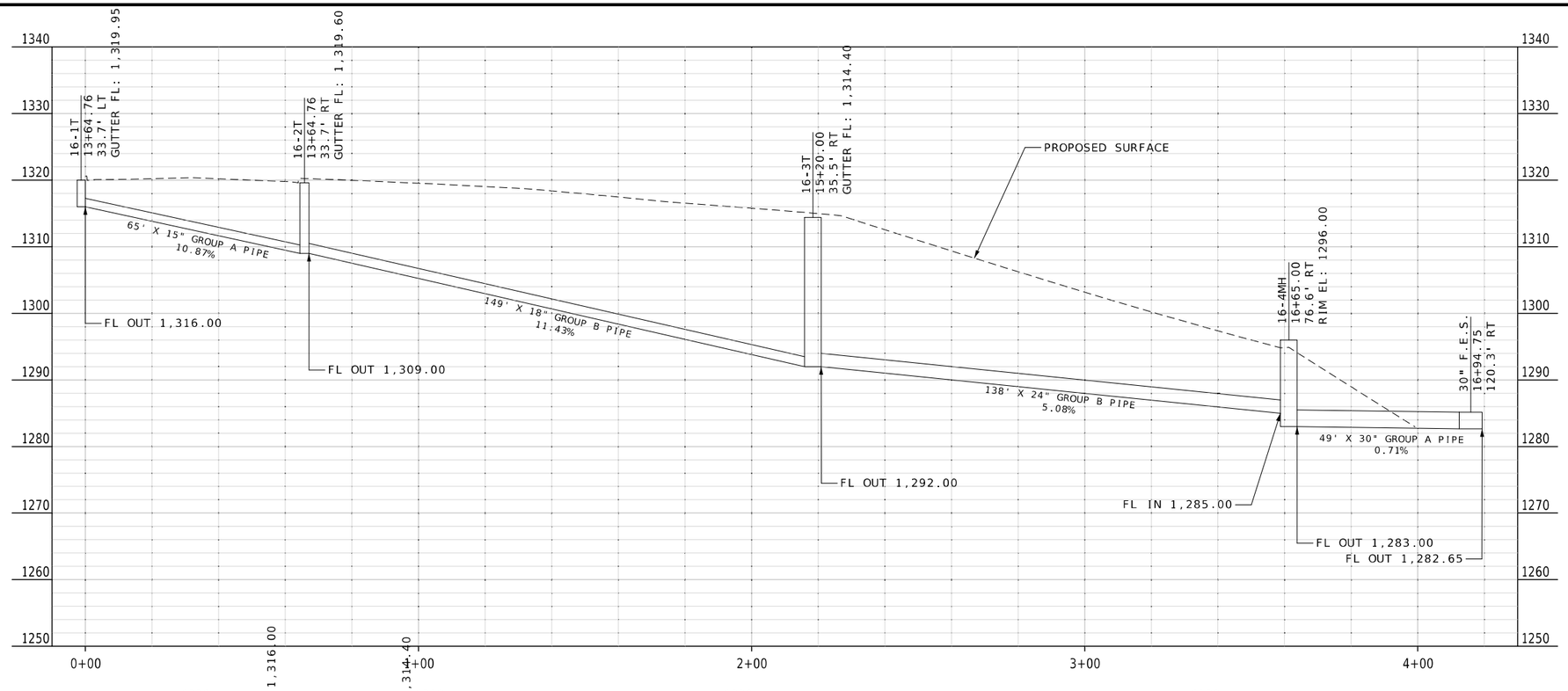
Warner Sherman
08/08/2025 8:48:53 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

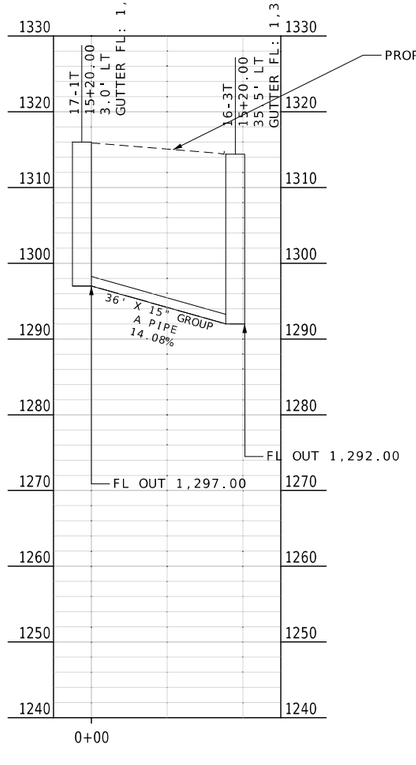
DATE PREPARED	8/6/2025
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	229
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

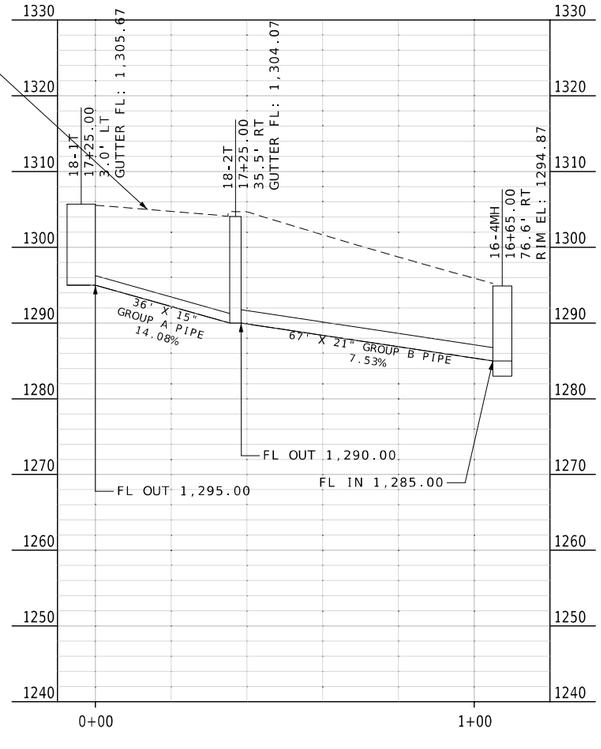
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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







DRAINAGE SHEET
NETWORK 7 PROFILES
SHEET 13 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN I
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
08/08/2025 8:49:35 AM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
8/6/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	230

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

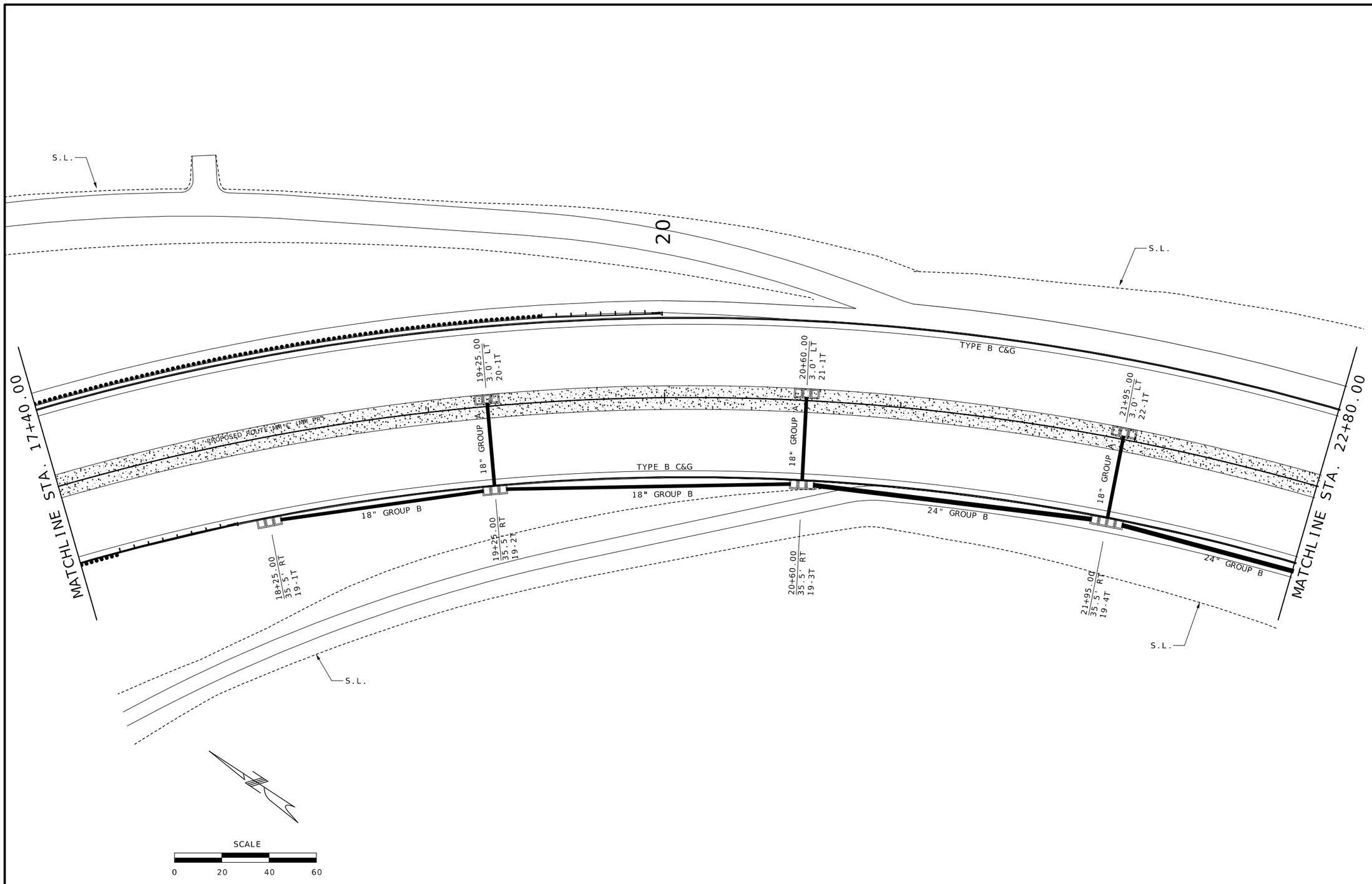
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DRAINAGE SHEET
NETWORK 8
SHEET 14 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:20:27 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	231

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

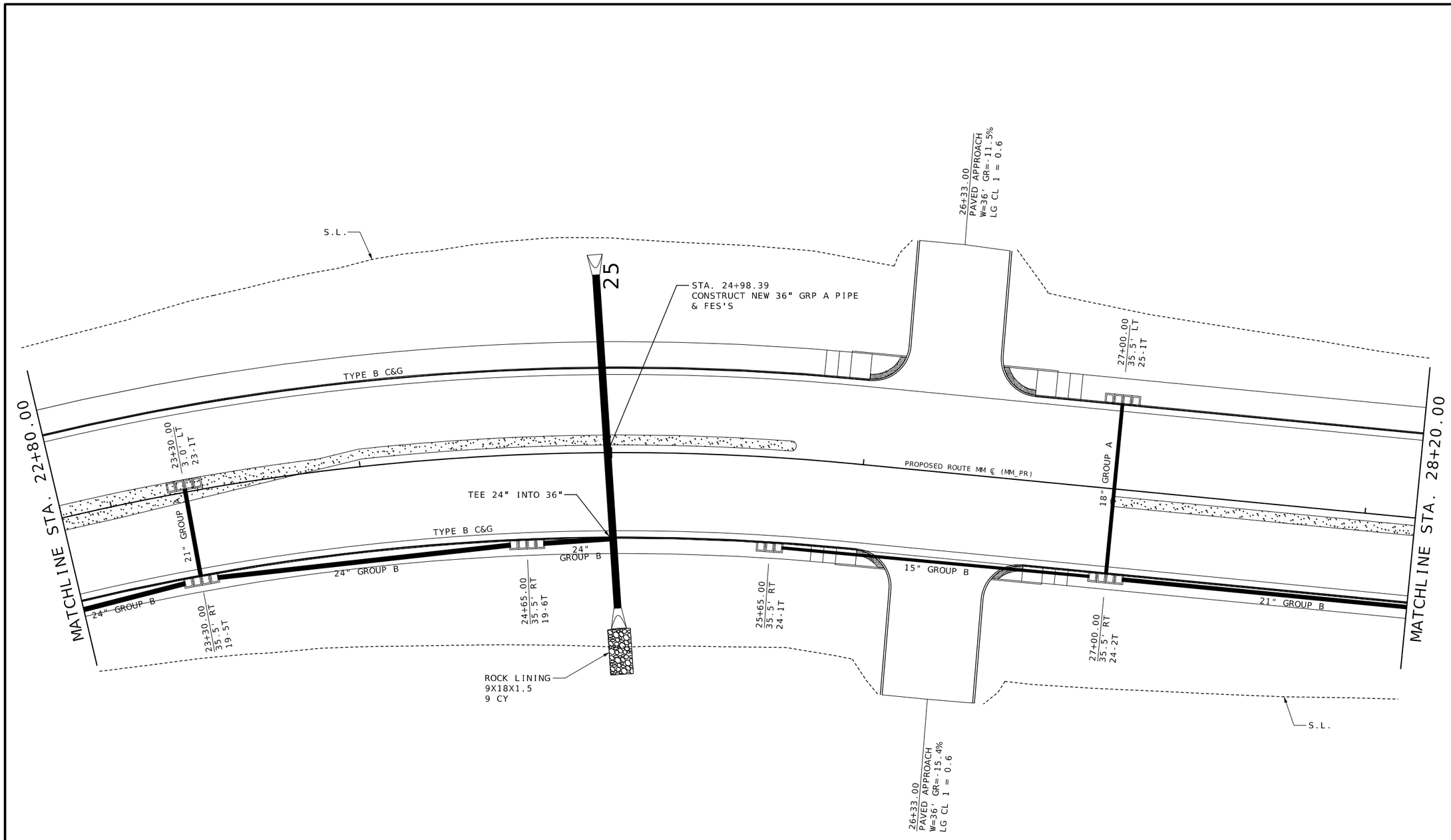
PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SCALE

0 20 40 60

DRAINAGE SHEET
NETWORKS 8 & 9
SHEET 15 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/29/2025 7:20:52 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	232

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

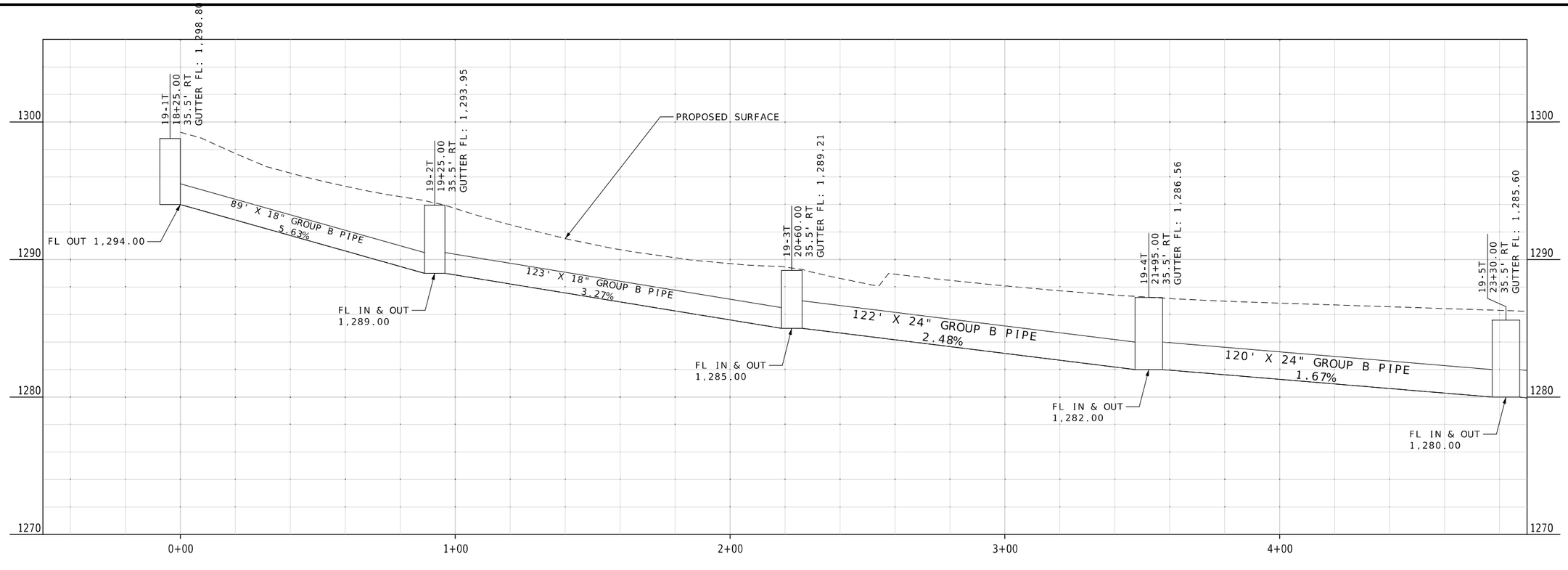
PROJECT NO.

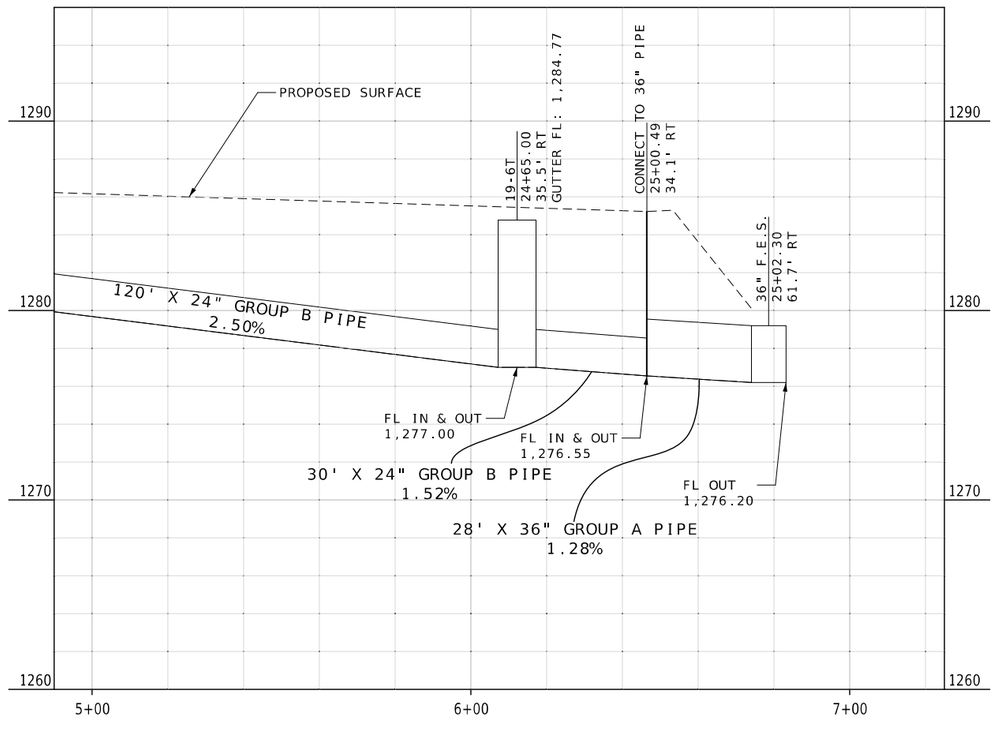
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 8 PROFILES
SHEET 16 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:21:14 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	233

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

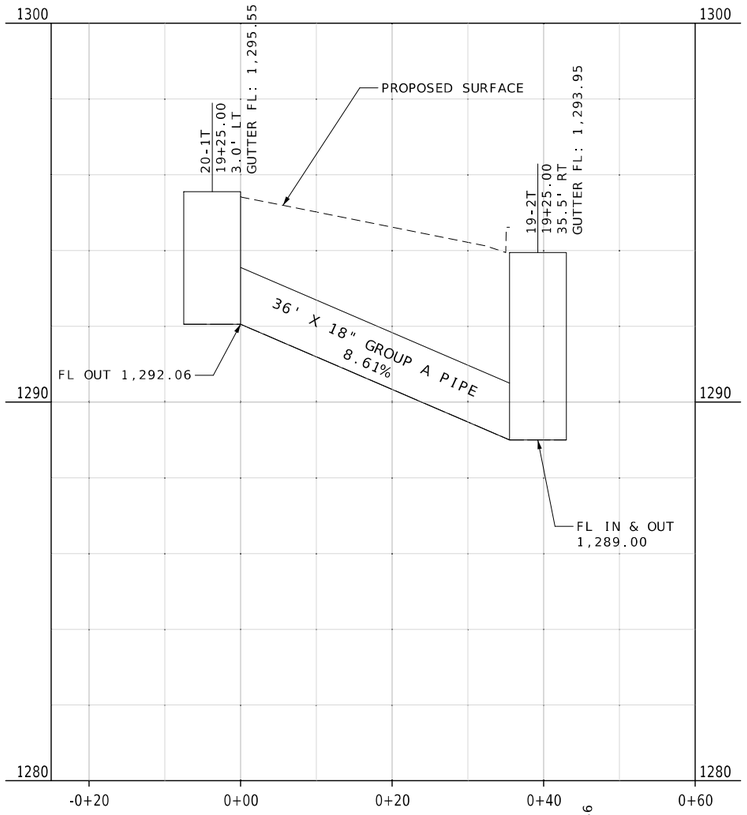
PROJECT NO.

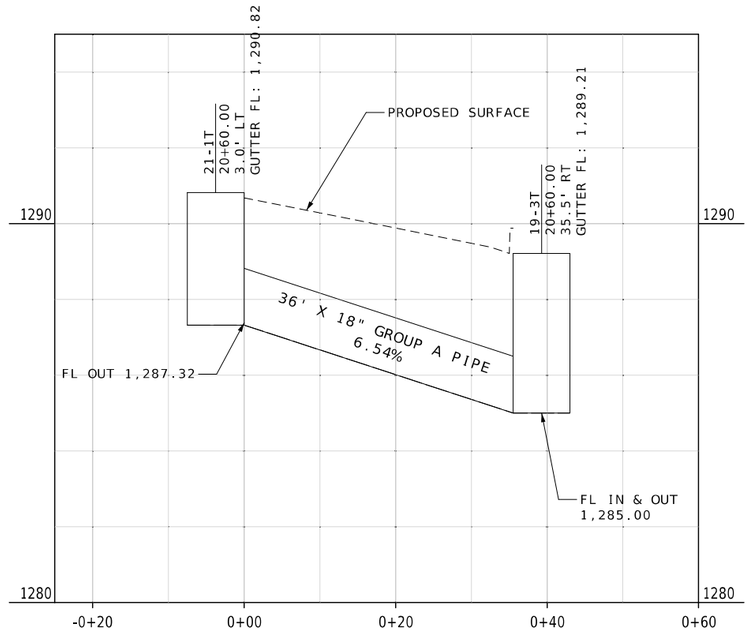
BRIDGE NO.

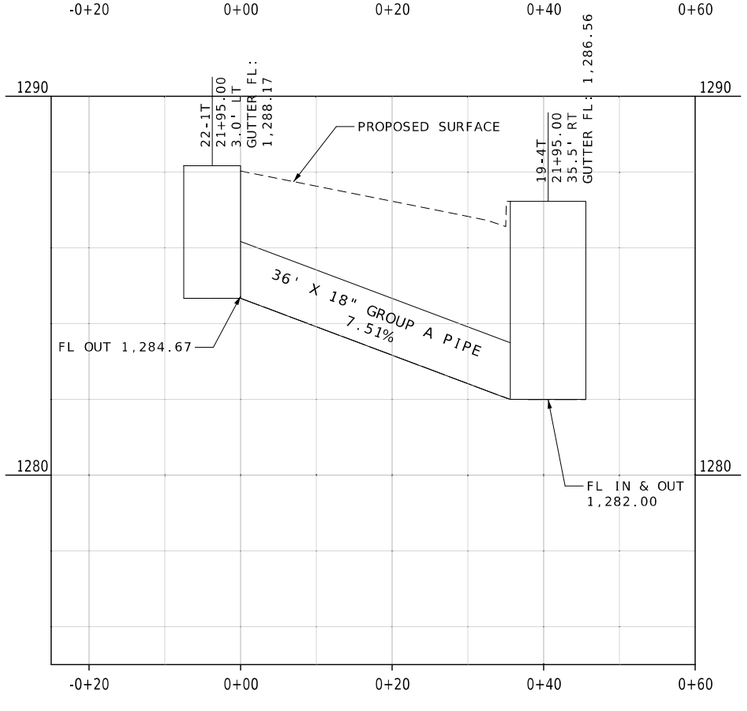
DESCRIPTION	DATE

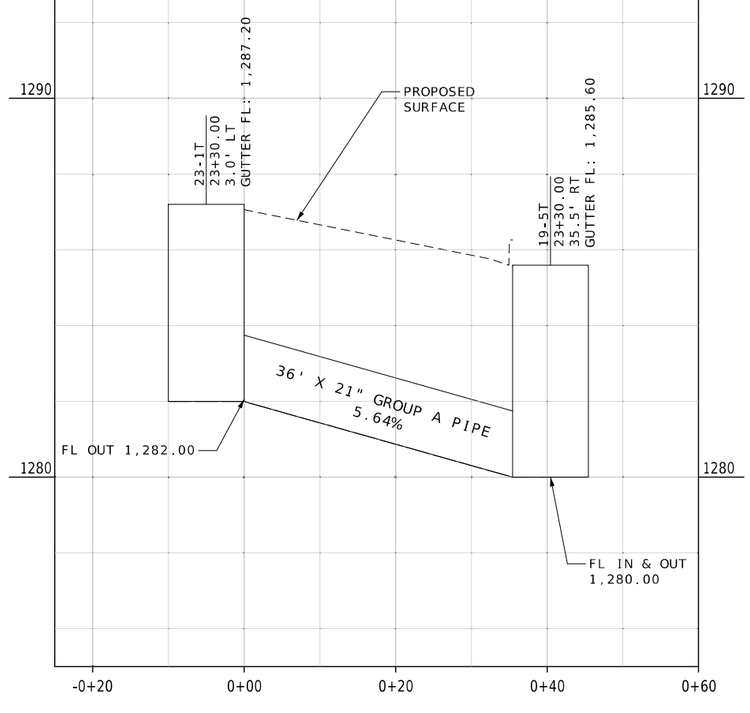
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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









DRAINAGE SHEET
NETWORK 8 PROFILES
SHEET 17 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:21:40 AM
WARNER D. SHERMAN II - CIVIL
MO PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	234

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

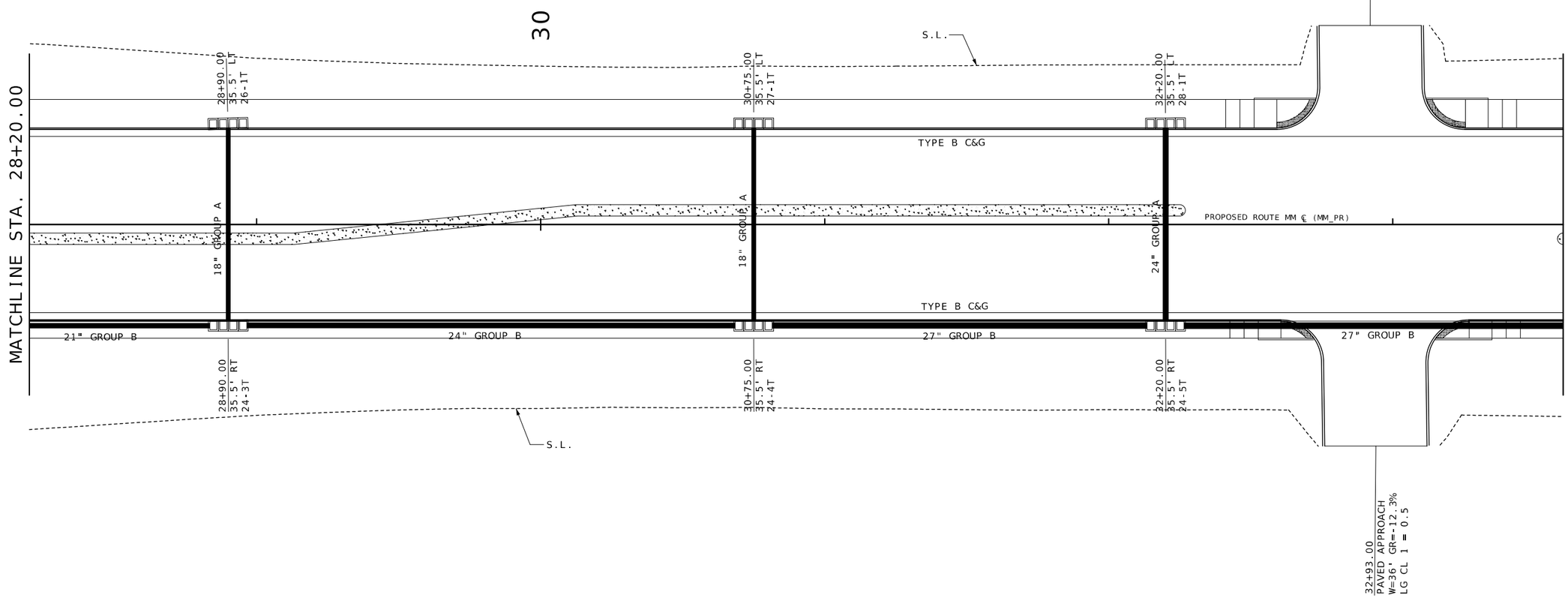
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



SCALE

0 20 40 60

DRAINAGE SHEET
NETWORK 9
SHEET 18 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:22:07 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	235

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

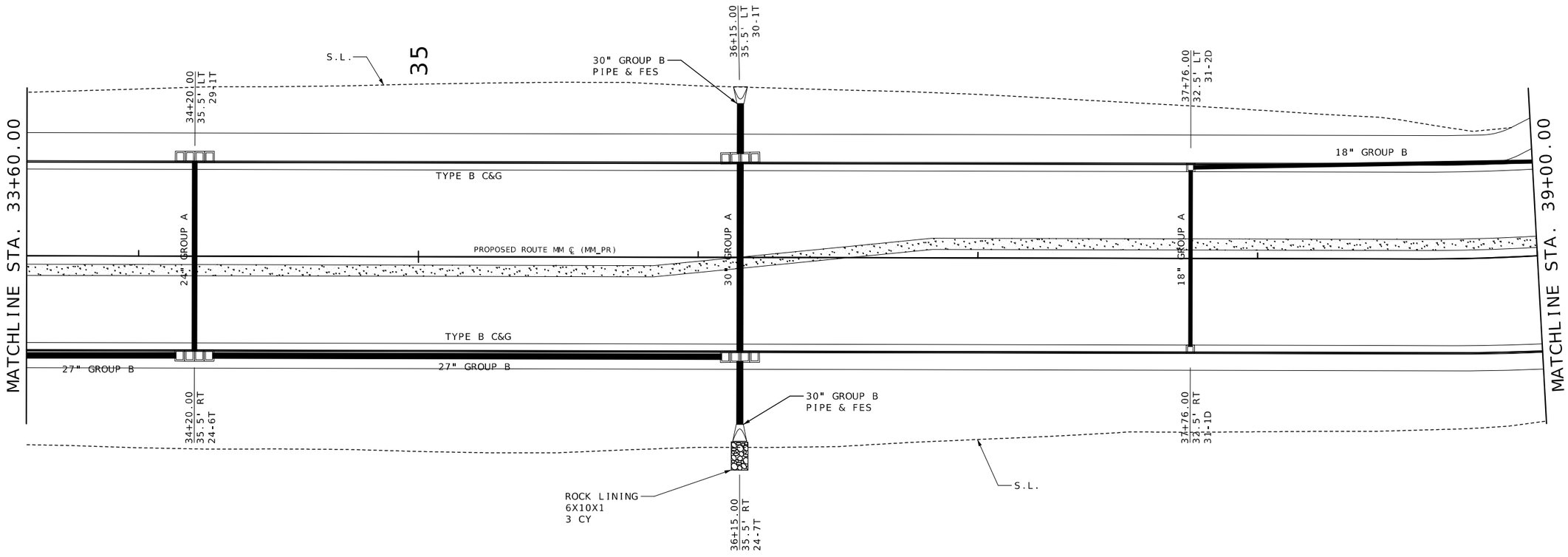
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



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DRAINAGE SHEET
NETWORKS 9 & 10
SHEET 19 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:22:37 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	236

COUNTY
GREENE

JOB NO.
J8S0836D

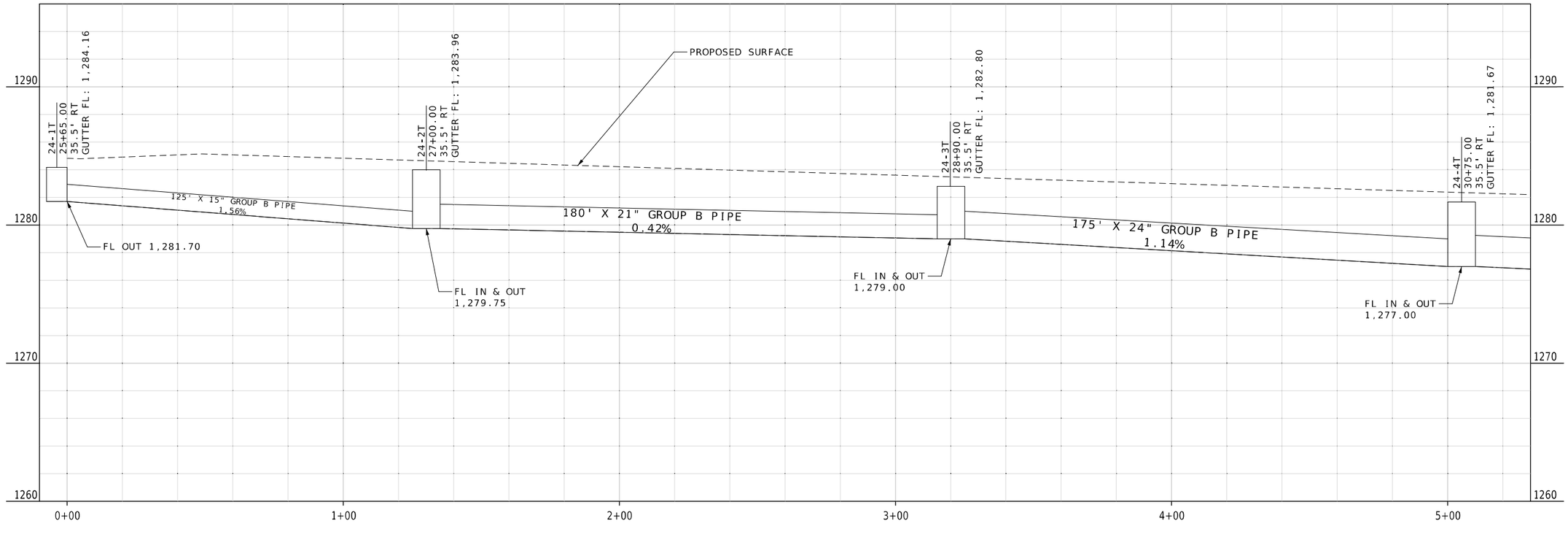
CONTRACT ID.

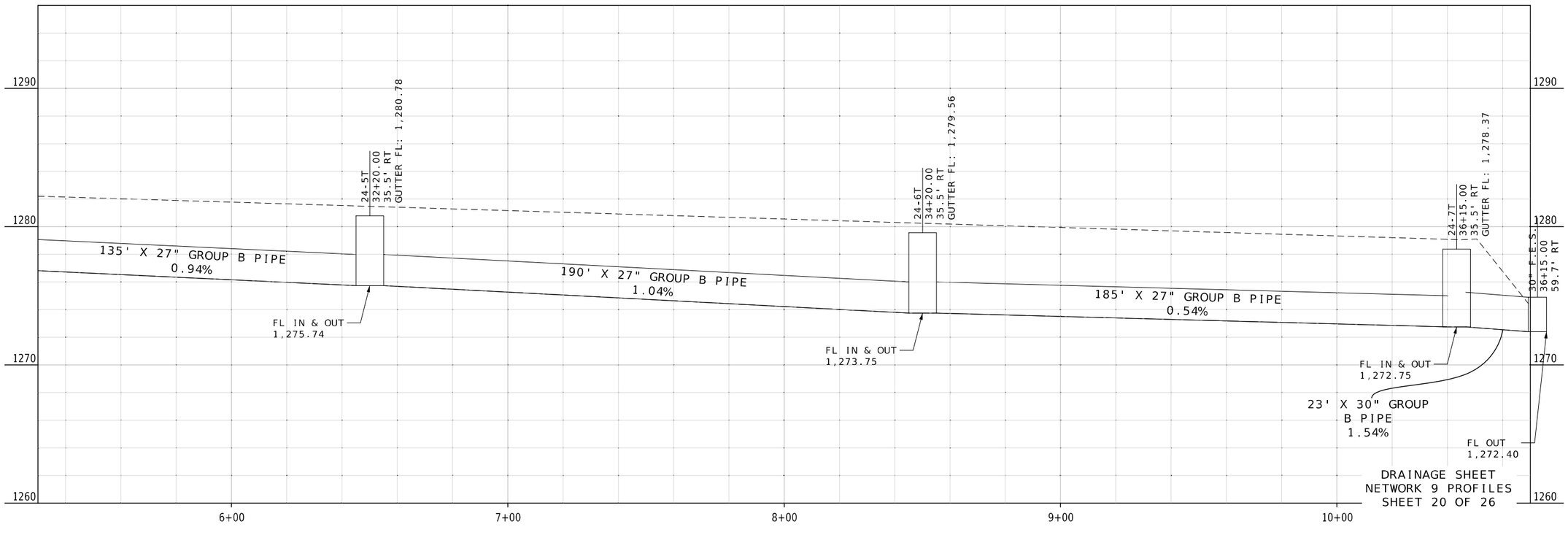
PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

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





DRAINAGE SHEET
NETWORK 9 PROFILES
SHEET 20 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:23:00 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	237

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

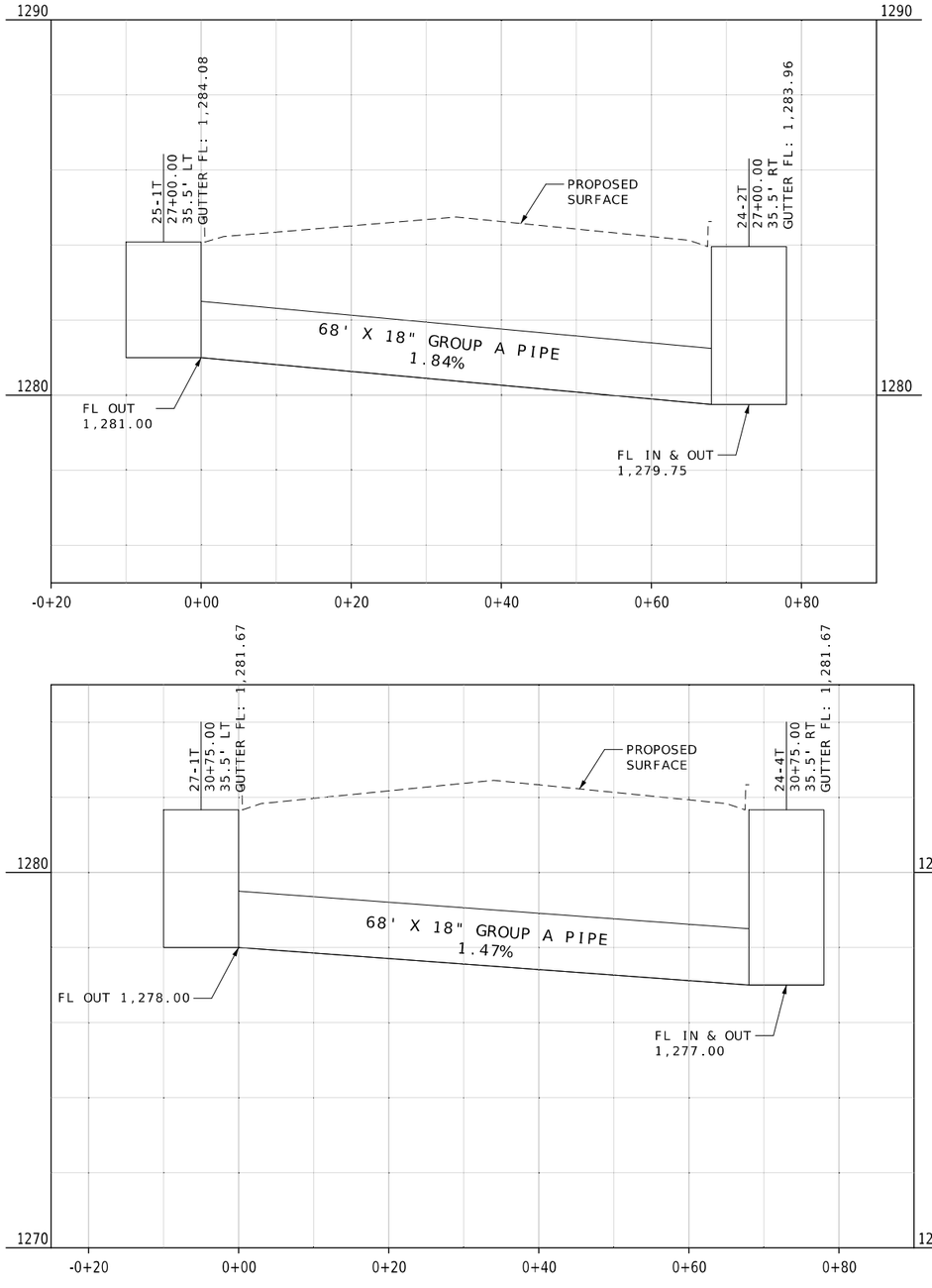
PROJECT NO.

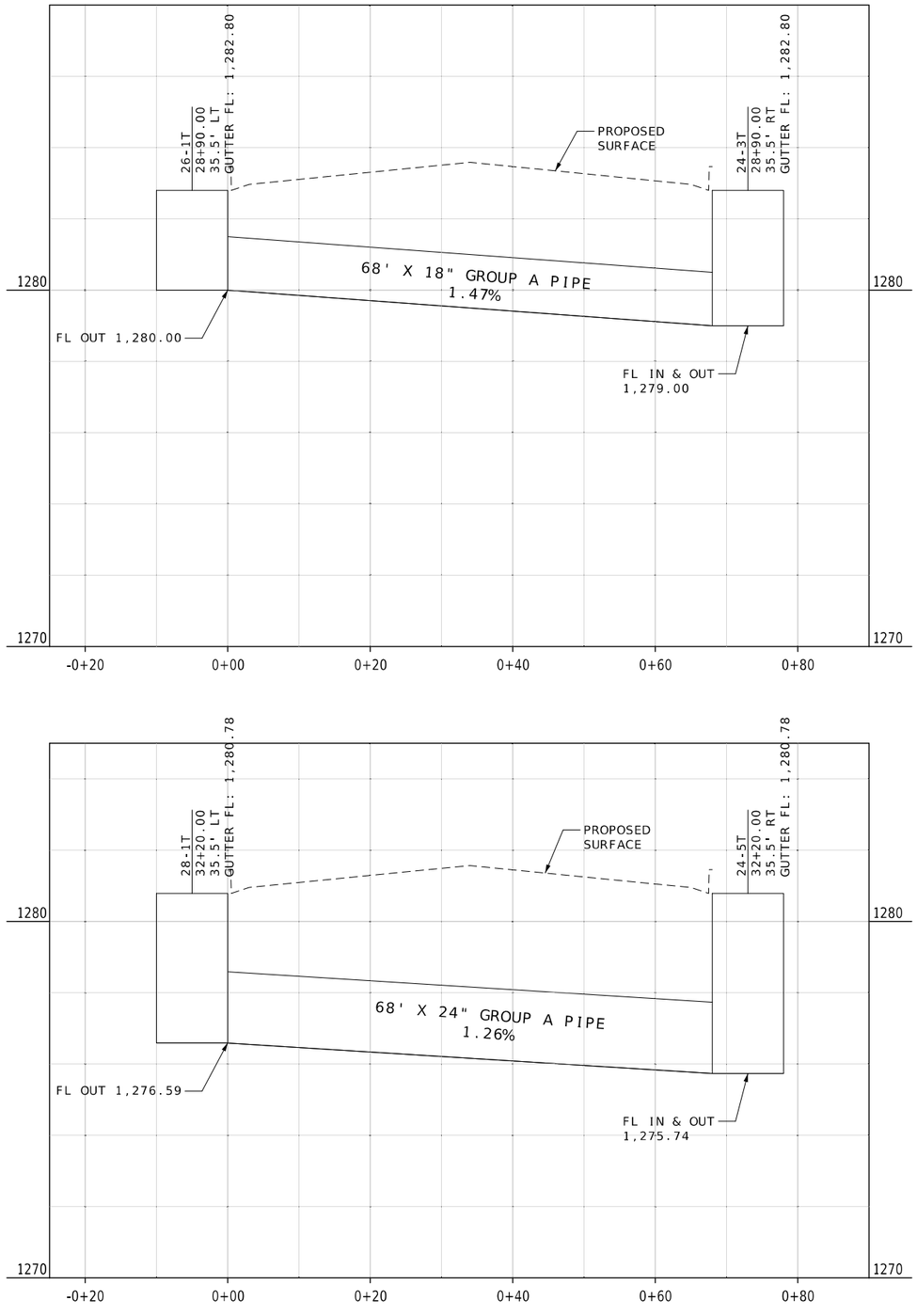
BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 9 PROFILES
SHEET 21 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER
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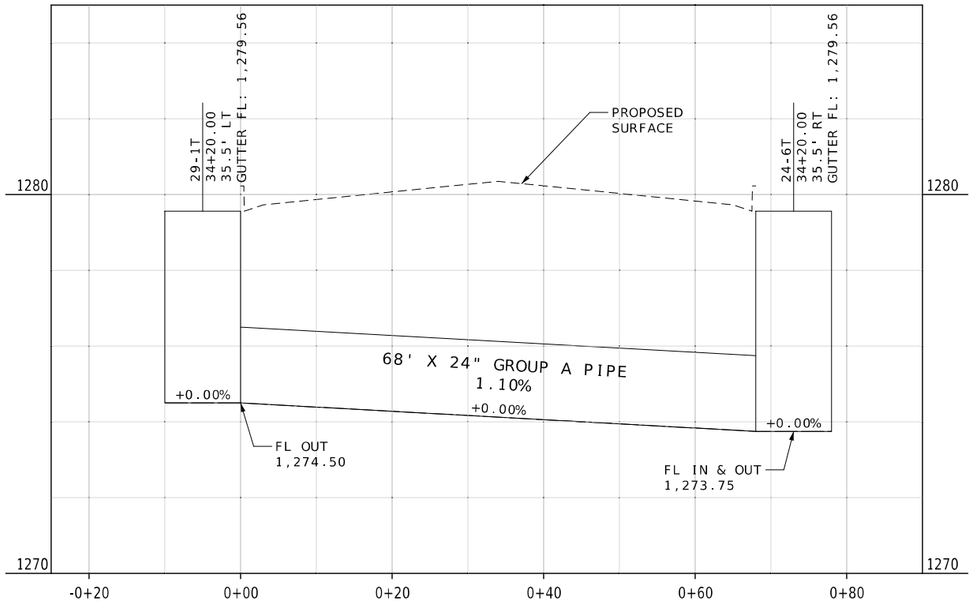
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

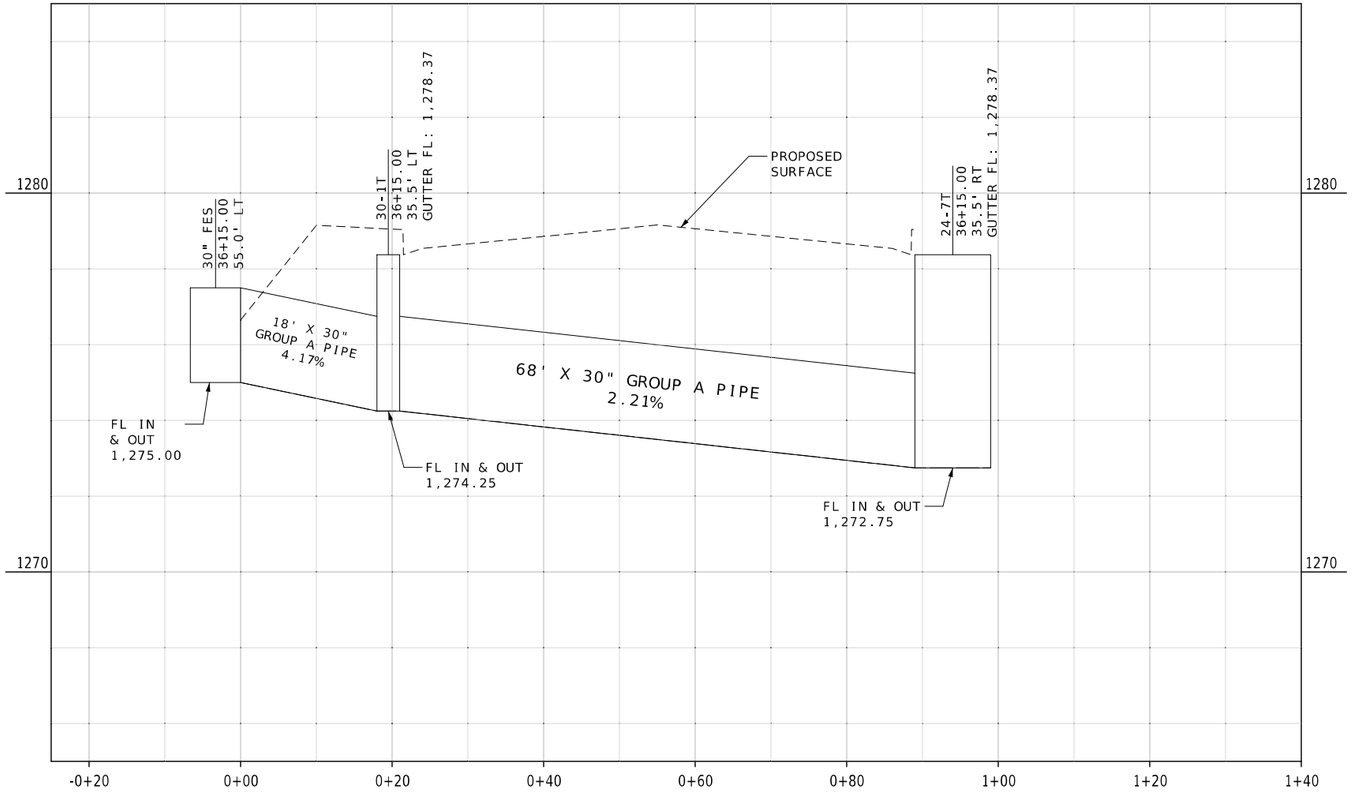
DATE PREPARED	
7/25/2025	
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	238
COUNTY	
GREENE	
JOB NO.	
J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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





DRAINAGE SHEET
NETWORK 9 PROFILES
SHEET 22 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/28/2025 7:23:47 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	239

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

MATCHLINE STA. 39+00.00

39+25.00
32.5' LT
31.3D

39+93.79
PAVED APPROACH
W=36' GR=+3.95%
LG CL 1 = 0.6 STA

18" GROUP A

S.L.

40+95.00
32.5' LT
31.4D

21" GROUP B

TYPE B C&G

42+70.00
32.5' LT
31.5D

43+12.62
PAVED APPROACH
W=28' GR=+3.25%
LG CL 1 = 0.4 STA

21" GROUP A

S.L.

MATCHLINE STA. 44+40.00

18" GROUP A

PROPOSED ROUTE MM ℄ (MM PR)

TYPE B C&G

S.L.

39+91.31
PAVED APPROACH
W=38' GR=-5.16%
LG CL 1 = 0.6 STA

S.L.

42+70.00
23' LT
32.1T

43+01.91
PAVED APPROACH
W=26' GR=-1.98%
LG CL 1 = 0.3 STA

S.L.

SCALE

0 20 40 60

DRAINAGE SHEET
NETWORK 10
SHEET 23 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:24:13 AM
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	240

COUNTY
GREENE

JOB NO.
J8S0836D

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)

STA. 241+13.62

MATCHLINE STA. 44+40.00

STA. 2+42.92

STA. 237+31.36

S.L.

(R) EXISTING PIPE

46+13.93
53.5' LT
33-2T

46+14.38
103.2' LT
EX. JB C-7

46+38.52
79.4' LT
33-1T

42" GROUP C

18" GROUP B

EXISTING ROUTE 60 WB ℄ (60_WB)

EXISTING ROUTE 60 EB ℄ (60_EB)

END STA 47+37.08
START STA 0+00.00

PC STA 2+31.74

44+45.00
32.5' LT
31-6D

TYPE B C&G

(R) EXISTING D.I.

PROPOSED ROUTE MM ℄ (MM_PR)

FARM ROAD 103 (FR103_Tie)

18" GROUP A

EXISTING 42" TO BE USED FOR UTILITY CONDUIT

(R) EXISTING D.I.

(R) EXISTING PIPE

42" GROUP A

44+45.00
62.5' RT
31-7D

45+97.45
76.2' RT
31-8T

46+17.40
112.0' RT
EX. JB C-6

46+64.16
120.0' RT
TYPE A GUTTER

ROCK LINING
4X12X1
2 CY

SCALE
0 20 40 60

DRAINAGE SHEET
NETWORK 10
SHEET 24 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
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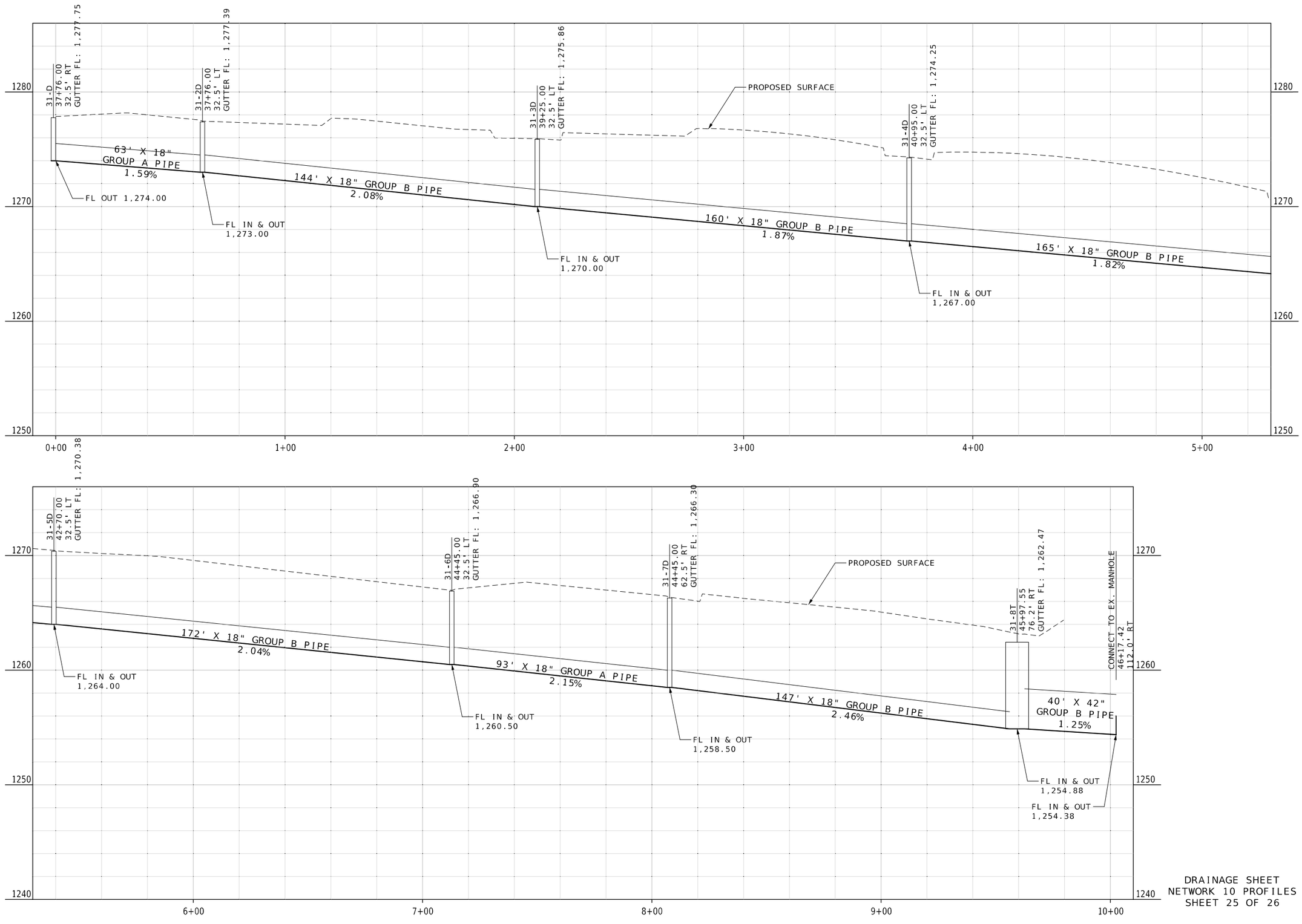
WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED	7/25/2025
ROUTE	MM
STATE	MO
DISTRICT	SW
SHEET NO.	241
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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



DRAINAGE SHEET
NETWORK 10 PROFILES
SHEET 25 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN II
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
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WARNER D. SHERMAN II - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	242

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

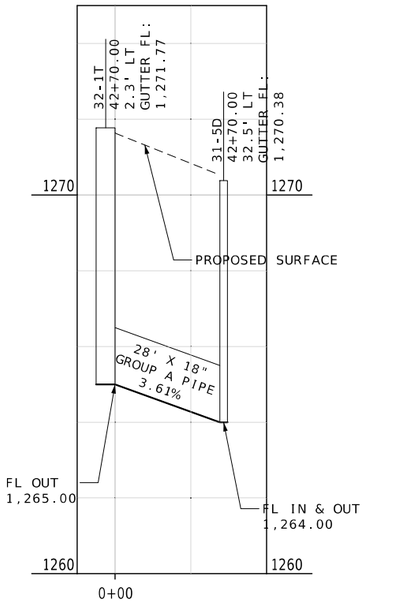
PROJECT NO.

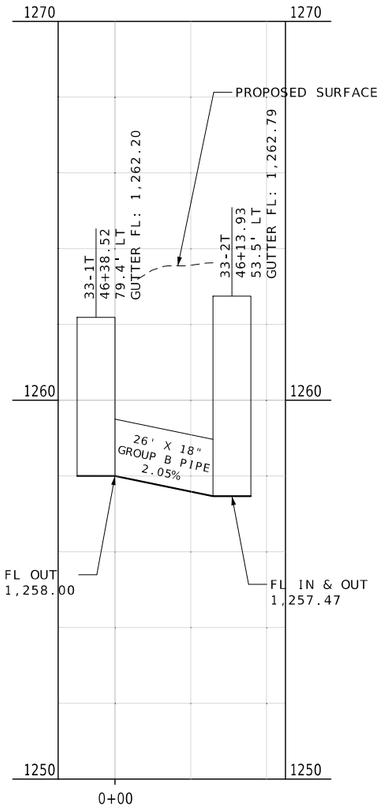
BRIDGE NO.

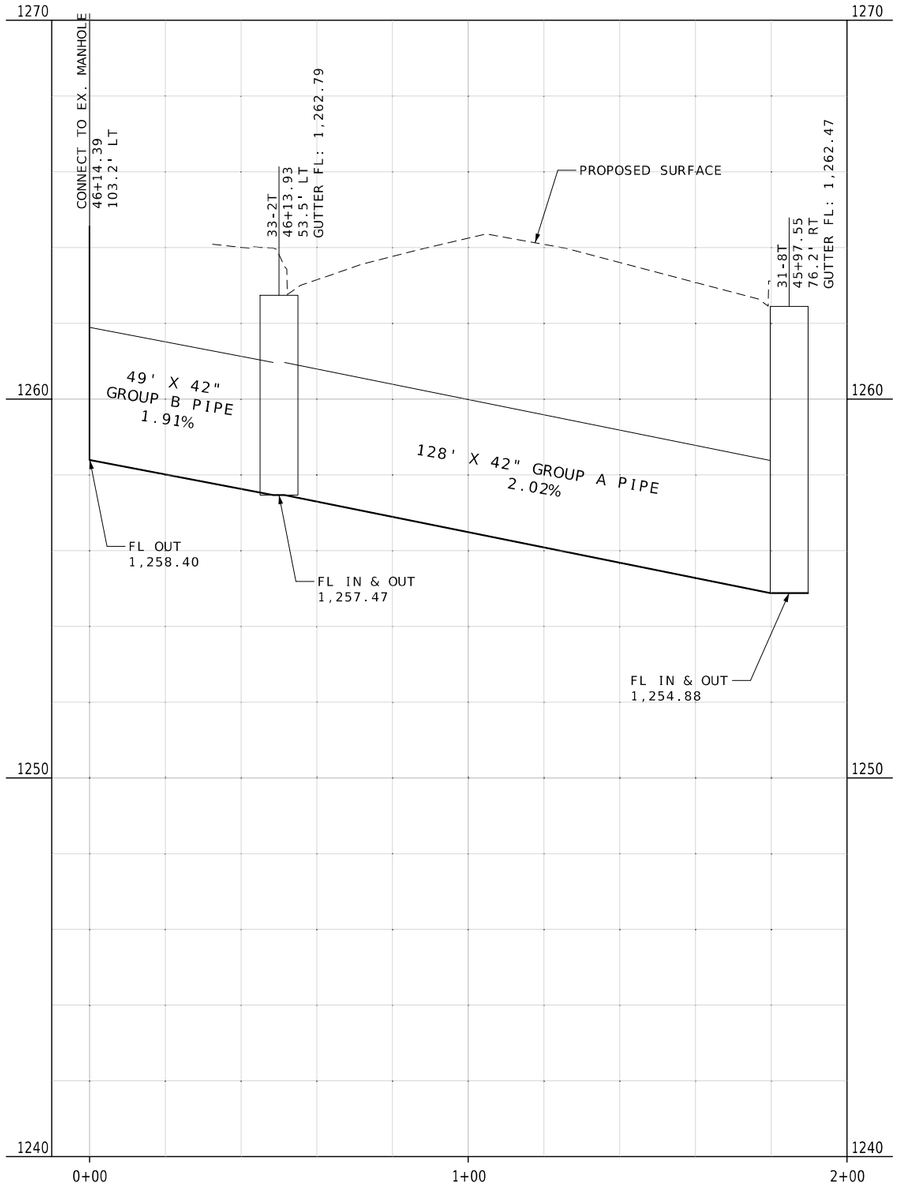
DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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







DRAINAGE SHEET
NETWORK 10
SHEET 26 OF 26

STATE OF MISSOURI
WARNER D. SHERMAN
NUMBER PE-26645
PROFESSIONAL ENGINEER

Warner Sherman
07/26/2025 7:26:02 AM
WARNER D. SHERMAN I - CIVIL
MO-PE-26645

DATE PREPARED
7/25/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
SW	243

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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

DESIGNED FOR

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

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

ENGINEERED BY

TOTH & ASSOCIATES

1550 E. REPUBLIC ROAD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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STATE OF MISSOURI
JOSHUA P. SIRB
NUMBER PE-2021019772
PROFESSIONAL ENGINEER

Digitally signed by Joshua P. Sirb
Date: 2025.07.24 14:48:35-05'00'
JOSHUA P. SIRB - ENGINEER
MO# PE-2021019772

MISSOURI ONE CALL SYSTEM
Call or Click Before You Dig!
1-800-DIG-RITE or 811
mo1call.com

PROJECT

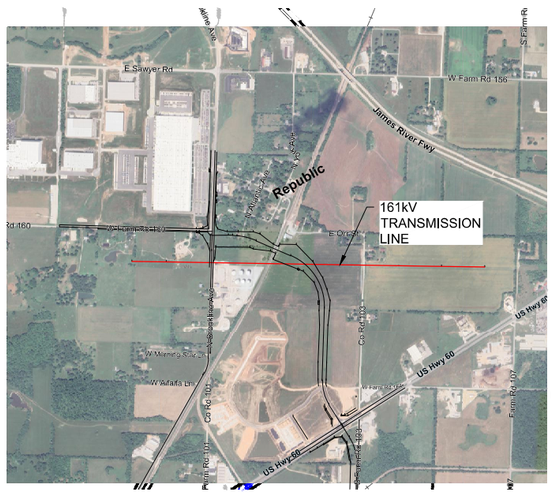
HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY
JOB NO. J8S0836D

TRANSMISSION LINE CHARACTERISTICS	
CONDUCTOR	1192.5 ACSR (GRACKLE)
RULING SPAN	682'
DESIGN TENSION	11,800 LBS
STRUCTURE RANGE	31-36
BASE STRUCTURE	THS-10X
TYPICAL EMBEDMENT	10% L + 4'
GUY WIRE	7/16" EHS
OHGW	DNO-12519

PROJECT LENGTH: 0.63 MILES

LOADING DESIGN:
2023 NESC 250B HEAVY DISTRICT
2023 NESC 250C EXTREME WIND (100 MPH)
2023 NESC 250D EXTREME ICE W/ CONCURRENT WIND

* THE INFORMATION SHOWN IN THIS TABLE SHALL BE TREATED AS GENERAL INFORMATION ABOUT THE OVERALL PROJECT AND SHALL NOT BE USED FOR CONSTRUCTION PURPOSES.



PROJECT PLAN

N

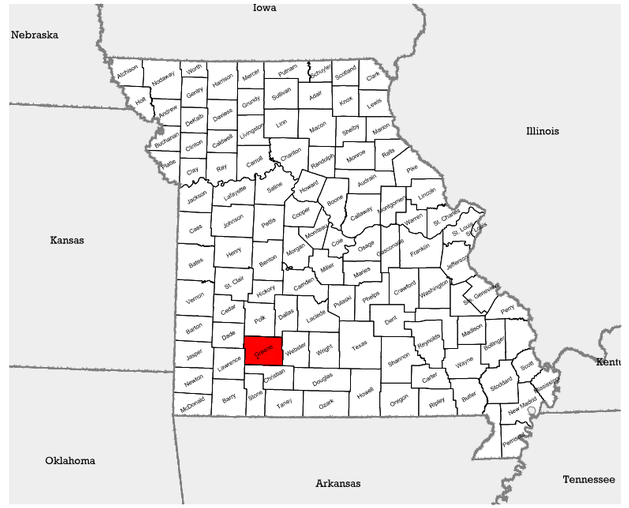
BASIS OF BEARING
NAD 83, MISSOURI STATE PLANE CENTRAL ZONE

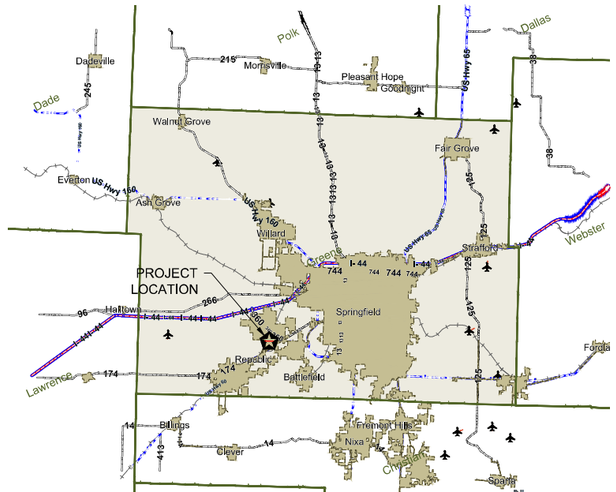
0 1/8 1/4

NOTE: DRAWING REPRODUCTION AND SCALING MAY CHANGE THE INDICATED GRAPHIC SCALES
H. SCALE: 1" = 1/4 Mile

LOCATION

GREENE COUNTY, MO





VICINITY MAP

0 3 6

NOTE: DRAWING REPRODUCTION AND SCALING MAY CHANGE THE INDICATED GRAPHIC SCALES
H. SCALE: 1" = 6 Miles

N

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DRAWING NO.	DESCRIPTION	DETAILS	DATE	REVISION	REVISION PURPOSE
COVER SHEET & INDEX					
MMR.T00.01	COVER SHEET	-	-	-	-
MMR.T00.02	SHEET INDEX	-	-	-	-
PLAN & PROFILES					
MMR.T02.01	LEGEND AND NOTES	-	-	-	-
MMR.T02.02	PLAN AND PROFILE	STA 5+00 TO 55+00	-	-	-
STRUCTURE DRAWINGS					
MMR.T04.01	STEEL TANGENT H-FRAME	THS-10X	-	-	-
MMR.T04.02	STEEL TANGENT DOUBLE DEADEND H-FRAME	THS-15D	-	-	-
ANCILLARY DRAWINGS					
MMR.T05.01	TANGENT STATIC ASSEMBLIES	TM-4A	-	-	-
MMR.T05.02	WOOD DEADEND STATIC ASSEMBLIES	TM-4G	-	-	-
MMR.T05.03	STEEL DEADEND STATIC ASSEMBLIES	TM-4G-ST	-	-	-
MMR.T05.04	GUYING ASSEMBLIES	TG-21	-	-	-
MMR.T05.05	SCREW ANCHOR	TA-3H	-	-	-
MMR.T05.06	OPGW ASSEMBLIES FIBER RACK SPLICE CASE	TM-FIB SPLICE	-	-	-
STEEL POLE SPECIFICATIONS					
MMR.T06.01	STEEL POLE SUMMARY	-	-	-	-
MMR.T06.02	THS-10X	PAGE 1 OF 2	-	-	-
MMR.T06.03	THS-10X	PAGE 2 OF 2	-	-	-
MMR.T06.04	THS-15D-1	PAGE 1 OF 2	-	-	-
MMR.T06.05	THS-15D-1	PAGE 2 OF 2	-	-	-
MMR.T06.06	THS-15D-2	PAGE 1 OF 2	-	-	-
MMR.T06.07	THS-15D-2	PAGE 2 OF 2	-	-	-
MMR.T06.08	TM-SD	PAGE 1 OF 2	-	-	-
MMR.T06.09	TM-SD	PAGE 2 OF 2	-	-	-
FOUNDATIONS					
MMR.T07.01	POLE FOUNDATION BACKFILL	TM-101	-	-	-
MMR.T07.02	DRILLED PIER SCHEDULE & DETAIL	TM-DP	-	-	-
MMR.T07.03	GUYING GUIDES	STR 35	-	-	-
CONDUCTOR					
MMR.T08.01	STRINGING CHARTS	-	-	-	-
MMR.T08.02	STRINGING CHARTS	-	-	-	-
MATERIAL LIST					
MMR.T09.01	MATERIAL LIST	-	-	-	-
MMR.T09.02	MATERIAL LIST	-	-	-	-

DATE	REVISION	#

TOTH & ASSOCIATES
1550 E. REPUBLIC ROAD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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DWN. BY: SRC
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/08/2025
SCALE: NONE
Graphic scale may change due to drawing reproduction

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MoDOT JEFFERSON CITY, MO
TITLE: SHEET INDEX
SHT NO: MMR.T00.02

C:\Users\src\Documents\Projects\Greene County\mmr 100 index.dwg 8.5 x 11 - 2:1(27.94) Plot by: Scott

ABBREVIATIONS

FEATURE ABBREVIATION	FEATURE DESCRIPTION
AGD	DRAINAGE (STORM) - ABOVE GROUND LINE
AGG	GAS LINE - ABOVE GROUND
AGPL	GENERAL PIPE - ABOVE GROUND
AGS	SANITARY LINE - ABOVE GROUND
AGW	WATER LINE - ABOVE GROUND
BC	BACK OF CURB
BH	BORE HOLE
BLDG	BUILDING
BLDGC	BUILDING CORNER
BM	BENCH MARK
BOL	BOLLARD
BRDG	BRIDGE
CC	CONCRETE CORNER
CD	CONDUIT
CEMT	CEMETERY
CF	CULTIVATED FIELD
CFE	CULTIVATED FIELD EDGE
CHIM	CHIMNEY
CL	CENTERLINE
CO	SANITARY CLEAN OUT
CP	CONTROL POINT
CTGD	CATTLE GUARD
DAI	DRAINAGE (STORM) - AREA INLET
DCI	DRAINAGE (STORM) - CURB INLET
DIT	DITCH
DJBX	DRAINAGE (STORM) - JUNCTION BOX
DRVA	DRIVEWAY ASPHALT
DRVC	DRIVEWAY CONCRETE
DRVCH	DRIVEWAY CHAT
DRVD	DRIVEWAY DIRT
EBX	ELECTRIC BOX
EMH	ELECTRIC MANHOLE
EMTRBX	ELECTRIC METER BOX
EOA	EDGE OF ASPHALT
EOC	EDGE OF CONCRETE
EOCH	EDGE OF CHAT
EOL	EDGE OF LANDSCAPING
EOW	EDGE OF WATER
EPB	ELECTRIC PULL BOX
EQ	EQUIPMENT
EXFMR	ELECTRIC TRANSFORMER
FC	FENCE CORNER
FCS	FENCE CORNER OF SUBSTATION
FE	FIELD ENTRANCE
FEN	FENCE
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FL	FLOWLINE
FLBXCUL	FLOWLINE - BOX CULVERT
FLCMP	FLOWLINE - CMP
FLPVC	FLOWLINE - PVC
FLRCP	FLOWLINE - RCP
FLUME	FLUME
FOBX	FIBER OPTIC - BOX
FPB	FLAG POLE BOTTOM
FPT	FLAG POLE TOP
GDRAIL	GUARDRAIL
GG	GROUND GRID
GM	GAS METER
GREG	GAS REGULATOR
GS	GROUND SHOT
GSLC	GROUND SHOT AT LINE CROSSING
GT	GATE
GUT	GUTTER
GV	GAS VALVE
HDW	HEADWALL
IPF	IRON PIN FOUND
IRRH	IRRIGATION SPRINKLER HEAD
IRRV	IRRIGATION VALVE
LP	LIGHT POLE
LSTA	LIFT STATION
MB	MAILBOX
MHD	MANHOLE - DRAINAGE (STORM)
MHFO	MANHOLE - FIBER OPTIC
MHS	MANHOLE - SANITARY
MHT	MANHOLE - TELEPHONE
MISC	MISCELLANEOUS
OE	OVERHEAD ELECTRIC
OE012	OVERHEAD ELECTRIC - 12-KV
OE035	OVERHEAD ELECTRIC - 35-KV

FEATURE ABBREVIATION	FEATURE DESCRIPTION
OE069	OVERHEAD ELECTRIC - 69-KV
OE07.2	OVERHEAD ELECTRIC - 7.2-KV
OE115	OVERHEAD ELECTRIC - 115-KV
OE138	OVERHEAD ELECTRIC - 138-KV
OE161	OVERHEAD ELECTRIC - 161-KV
OE230	OVERHEAD ELECTRIC - 230-KV
OE345	OVERHEAD ELECTRIC - 345-KV
OE500	OVERHEAD ELECTRIC - 500-KV
OE765	OVERHEAD ELECTRIC - 765-KV
OEATCH	OVERHEAD ELECTRIC ATTACHMENT
OEG	OVERHEAD GUYING
OES	OVERHEAD ELECTRIC STATIC
OFO	FIBER OPTIC - OVERHEAD
OT	TELEPHONE LINE - OVERHEAD
OTV	CABLE TV - OVERHEAD
PI	PI
POST	POST
PP	POWER POLE DISTRIB - EXISTING
PPA	POWER POLE DISTRIB ANCHOR - EXISTING
PPAN	POWER POLE DISTRIB ANCHOR - NEW
PPATCH	POWER POLE ATTACHMENT
PPN	POWER POLE DISTRIB - NEW
PPS	STUB POLE
PPSW	TRANSMISSION SWITCH POLE
PPT	TRANSMISSION POWER POLE
PPTA	TRANSMISSION POLE ANCHOR - EXISTING
PPTAN	TRANSMISSION POLE ANCHOR - NEW
PPTN	TRANSMISSION POWER POLE - NEW
PPXFMR	POWER POLE WITH TRANSFORMER
RIVER	RIVER
ROOFAP	ROOF APEX
ROOFEV	ROOF EAVE
ROW	RIGHT-OF-WAY
RRAP	RIP RAP
RRCL	RAILROAD CENTERLINE
RRMM	RAILROAD MILE MARKER
RRT	RAILROAD TRACK
RWALL	RETAINING WALL
S	STRUCTURAL STEEL
SHR	SHRUB
SIGN	SIGN
SIGNBB	BILLBOARD
SILO	SILO
SILOTP	SILO TOP
STK	CONSTRUCTION STAKING
STONE	STONE MONUMENT
STR	STREAM
TANK	TANK
TBX	TELEPHONE - BOX
TFCATCH	TRAFFIC SIGNAL OVERHEAD ATTACHMENT
TFCLITE	TRAFFIC SIGNAL POLE
TOB	TOP OF BANK
TOE	TOE OF SLOPE
TR	TELEPHONE - RISER
TRAIL	FOOT TRAIL
TRL	TREE LINE
TRSH	TRASH
TVBX	CABLE TV - BOX
TVR	CABLE TV - RISER/PEDESTAL
TWRB	POWER TOWER - BOTTOM
TWRT	POWER TOWER - TOP
UGD	DRAINAGE (STORM) - UNDER GROUND LINE
UGE	UNDERGROUND ELECTRIC
UGEM	UNDERGROUND ELECTRIC METER
UGFO	FIBER OPTIC - UNDER GROUND
UGFOM	UNDERGROUND FIBER OPTIC MARKER
UGG	GAS LINE - UNDER GROUND
UGGM	UNDER GROUND GAS MARKER
UGPL	GENERAL PIPE - UNDER GROUND
UGS	SANITARY LINE - UNDER GROUND
UGT	TELEPHONE LINE - UNDER GROUND
UGTM	UNDER GROUND TELEPHONE MARKER
UGTV	CABLE TV - UNDER GROUND
UGTVM	UNDERGROUND CABLE TV MARKER
UGW	WATER LINE - UNDER GROUND
UGWM	UNDERGROUND WATER METER
WA	SIDEWALK EDGE
WELL	WELL
WM	WATER METER
WV	WATER VALVE

LEGEND

- PROPOSED STRUCTURE
- EXISTING TRANSMISSION POLE
- EXISTING OVERHEAD OBSTACLE
- EXISTING SIGN
- RAILROAD TRACKS
- PI
- TOP OF BANK
- TOE OF SLOPE
- EXISTING TRANSMISSION ANCHOR
- EXISTING STUB POLE
- EXISTING DISTRIBUTION POLE
- EXISTING DISTRIBUTION ANCHOR
- EDGE OF PAVEMENT
- EXISTING GATE
- FLOWLINE/DITCH
- EDGE OF WATER
- EXISTING FENCE
- BENCHMARK
- IRON PIN/CONTROL
- CULTIVATED FIELD
- NEW CENTERLINE
- EXISTING CENTERLINE
- DITCH FLOWLINE
- FENCE LINE
- TREE LINE
- PROPERTY LINE
- COMMUNICATIONS LINE
- FIBER OPTIC LINE
- GAS LINE
- OVERHEAD ELECTRIC LINE
- WATER LINE

GENERAL TRANSMISSION NOTES

A. CONTRACTOR SHALL NOT REPOSITION STRUCTURES OR ANCHORS AND SHALL NOT MODIFY OTHER STRUCTURE APPURTENANCES WITHOUT DIRECT AND WRITTEN APPROVAL FROM THE OWNER OR ENGINEER.

B. INSULATORS SHALL BE AS SPECIFIED IN THE CONSTRUCTION DETAIL DRAWINGS. ALTERNATIVE INSULATORS MAY ONLY BE USED WITH WRITTEN APPROVAL FROM THE OWNER OR ENGINEER.

C. POLE EMBEDMENT LENGTHS IN FEET PROVIDED AT EACH STRUCTURE IN PLAN AND PROFILE.

D. REFER TO GUYING GUIDE DRAWINGS FOR DETAILS REGARDING THE PLACEMENT AND CONFIGURATION OF ANCHORING AND GUYS FOR GUYED STRUCTURES. ALL GUYS FOR DOWN GUYS AND OVERHEAD GUYS SHALL BE 7/16" EHS STEEL.

E. REFER TO STRINGING CHARTS FOR DETAILS ON TENSIONS TO STRING CONDUCTOR SECTIONS.

F. STRING OPGW PER MANUFACTURER RECOMMENDATIONS. WHEN DAMPERS ARE SPECIFIED, THE QUANTITY SHALL BE SPLIT EQUALLY BETWEEN THE AHEAD AND BACK SPAN UNLESS NOTED OTHERWISE. VERIFY OPGW REEL LENGTHS ARE ADEQUATE BEFORE STRINGING BETWEEN SPLICE LOCATIONS.

G. FOR ALL DEADEND ATTACHMENTS ON STEEL POLES, ATTACH TO TOP HOLE OF VANGS UNLESS NOTED OTHERWISE.

H. EXISTING CONDUCTORS SHOWN IN GRAY AND THEIR TENSIONS ARE ASSUMED BASED ON EXISTING PLAN AND PROFILE DRAWINGS PROVIDED AND LIDAR COLLECTED. EXISTING WIRE TENSIONS SHALL BE MAINTAINED AS MUCH AS POSSIBLE WHEN INSTALLING NEW STRUCTURES.

I. EXISTING STRUCTURES AND THEIR FACILITIES ARE ASSUMED BASED ON EXISTING PLAN AND PROFILE DRAWINGS PROVIDED AND LIDAR COLLECTED.

DESIGN INFORMATION				
RULING SPAN = 682`				
TRANSMISSION CONDUCTOR: SIZE = 1192.5 ACSR (GRACKLE) D, T, = 11,800-LBS (NESC HEAVY-INITIAL) CURVE SHOWN AT 212° F (FINAL)				
STATIC WIRE: SIZE = AC-43/49/654 (DNO-12519) (OPGW) D, T, = 5,800-LBS (NESC HEAVY-INITIAL) CURVE SHOWN AT -20° F (INITIAL)				
DISTRIBUTION: SIZE = N/A D, T, = N/A CURVE SHOWN AT N/A				

CLEARANCES			
GROUND	ROAD	RAILROAD	WATER
26`	35`	35`	N/A
LOADING			
STD = NESC HEAVY LOADING			
WIND	ICE	K	F
4-PSF	1/2-IN	0.3	0-DEG
R.O.W. WIDTH: N/A			

MISSOURI ONE CALL SYSTEM
CALL OR CLICK BEFORE YOU DIG!
1-800-DIG-RITE OR 811
MO1CALL.COM

DATE	REVISION

TOTH & ASSOCIATES
1550 E. REPUBLIC ROAD
SPRINGFIELD, MO 65804
PH: 417-888-0645 FAX: 417-888-0657
WWW.TOTHASSOCIATES.COM
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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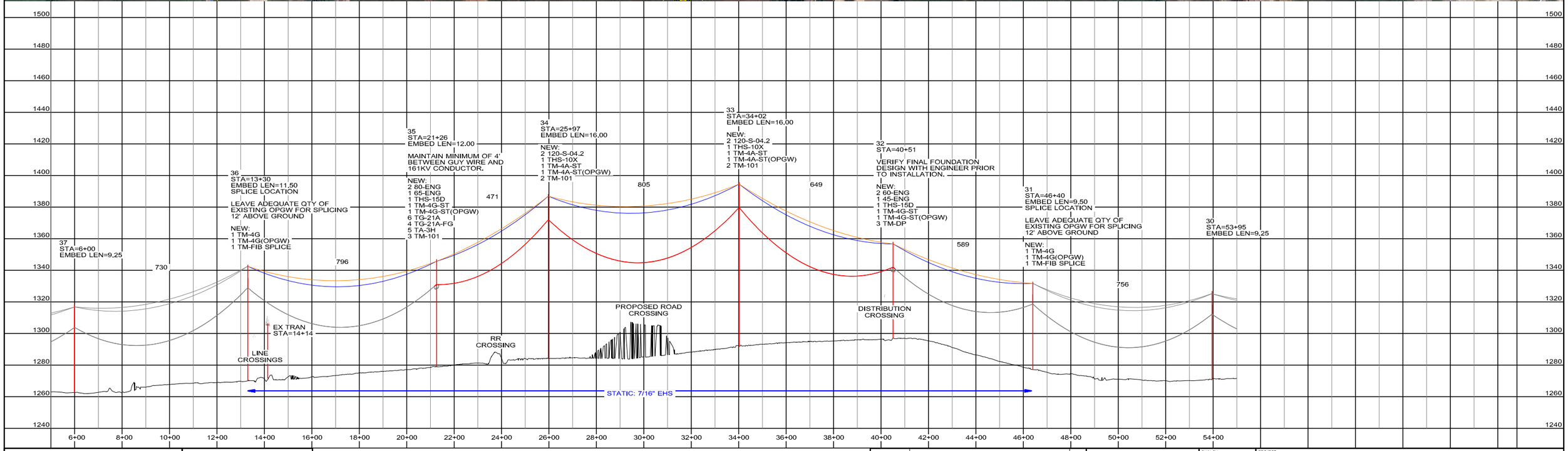
DWN. BY: JAS
CKD. BY: LBW
APPD. BY: JPS
DATE: 04/25/2025
SCALE: AS NOTED
GRAPHIC SCALE MAY CHANGE DUE TO DRAWING REPRODUCTION

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: LEGEND AND NOTES
SHT NO: MMR.T02.01

PLS-CADD DRAWING



DESIGN INFORMATION	
RULING SPAN = 682'	
TRANSMISSION CONDUCTOR:	
SIZE = 1192.5 ACSR (GRACKLE)	
D. T. = 11,800-LBS (NESC HEAVY-INITIAL)	
CURVE SHOWN AT 212° F (FINAL)	
STATIC WIRE:	
SIZE = AC-43/49/654 (DNO-12519) (OPGW)	
D. T. = 5,800-LBS (NESC HEAVY-INITIAL)	
CURVE SHOWN AT -20° F (INITIAL)	
DISTRIBUTION:	
SIZE = N/A	
D. T. = N/A	
CURVE SHOWN AT N/A	

CLEARANCES			
GROUND	ROAD	RAILROAD	WATER
26'	35'	35'	N/A

LOADING			
STD = NESC HEAVY LOADING			
WIND	ICE	K	F
4-PSF	1/2-IN	0.3	0-DEG

R.O.W. WIDTH: N/A

200.0 FT. HORIZ. SCALE
30.0 FT. VERT. SCALE

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OR 811
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NOTE: IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW AND UNDERSTAND THE "GENERAL TRANSMISSION NOTES" ON SHEET MMR.T02.01 PRIOR TO STARTING CONSTRUCTION.

DATE	REVISION

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DWN. BY:	JAS
CKD. BY:	LBW
APPD. BY:	JPS
DATE:	04/25/2025
SCALE:	AS NOTED

GRAPHIC SCALE MAY CHANGE DUE TO DRAWING REPRODUCTION

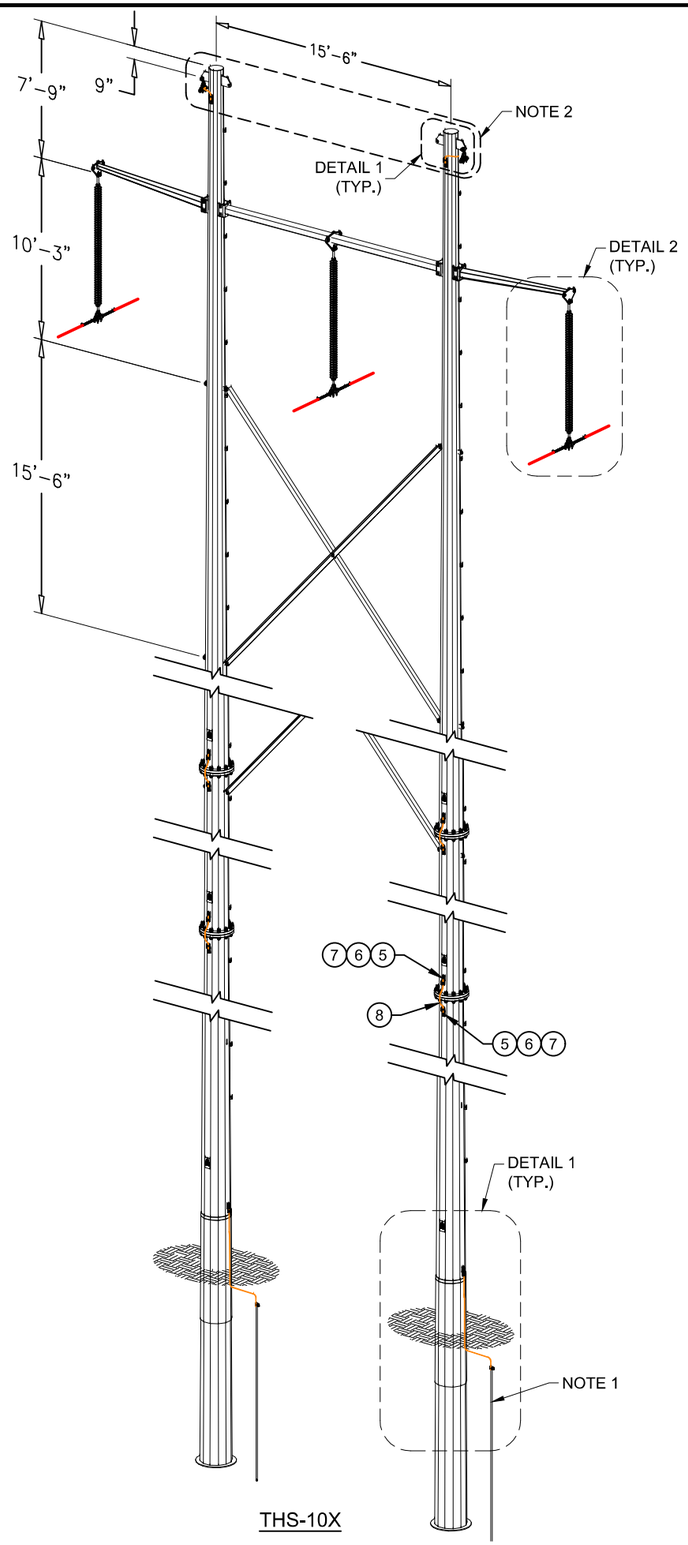
PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D

LOCATION: GREENE COUNTY, MO

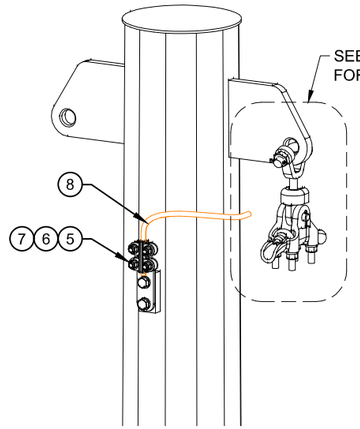
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: PLAN AND PROFILE STA. 5+00 TO 55+00

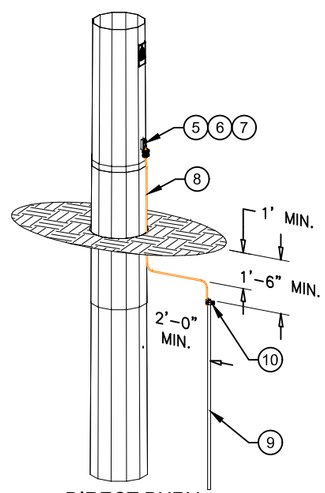
SHT NO: MMR.T02.02



THS-10X



DETAIL 1
STATIC SUSPENSION ASSEMBLY

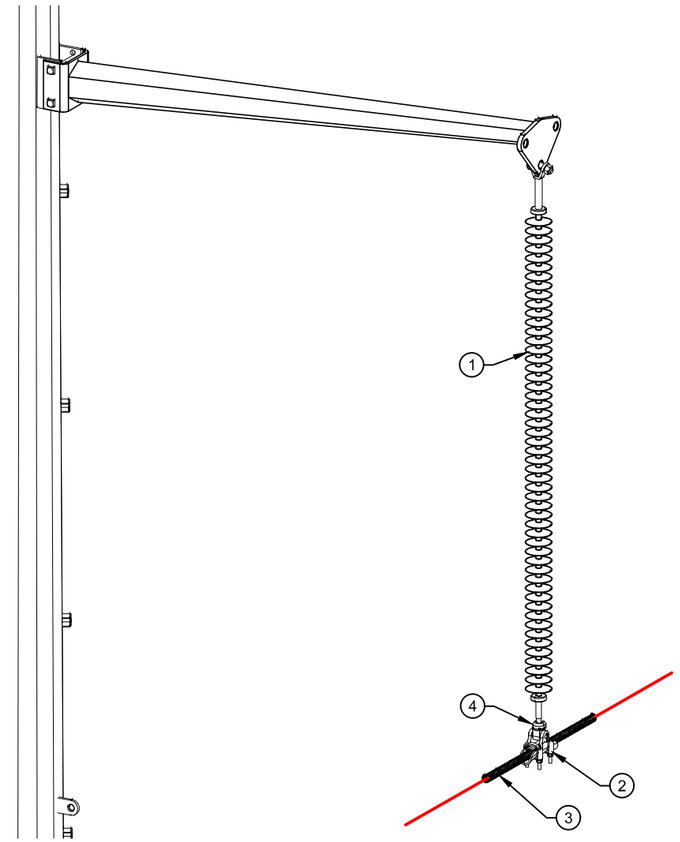


DIRECT BURY

DETAIL 3
POLE BASE GROUNDING

LIST OF MATERIALS

REF.	QTY	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	3	INSULATOR, SUSPENSION, Y-CLEVIS TO BALL, 50KIPS	HUBBELL	S050073S2010	9109902
2	3	CLAMP, SUSPENSION SHOE, 1.40-2.13", NONE, 25KIPS	HUBBELL	HAS213N	9109902
3	3	ARMOR ROD, AL, 1.328-1.390"	PREFORMED	AR-0146	9109902
4	3	SOCKET EYE, 36KIPS	HUBBELL	SA15503	9109902
5	12	2 HOLE NEMA PAD, BRONZE, TINNED	HUBBELL	SWL022B-TP	9109902
6	24	BOLT, 1/2" X 1" UNC, STAINLESS STEEL	-	-	9109902
7	24	LOCKWASHER, 1/2" STAINLESS STEEL	HUBBELL	HWSL500	9109902
8	A.R.	COPPER, 2/0, 7 STRAND, SOFT DRAWN, TINNED	-	-	9109903
9	2	GROUND ROD, COPPER CLAD, 3/4" X 10'	GALVAN	7510	9109902
10	2	CLAMP, GROUND ROD TO CABLE	HUBBELL	GC10303	9109902



DETAIL 2
CONDUCTOR SUSPENSION ASSEMBLY

NOTES:

1. GROUND ROD SHALL BE INSTALLED IN UNDISTURBED EARTH.
2. THE FOLLOWING MATERIALS ARE SPECIFIED SEPARATELY ON PLAN AND PROFILE DRAWINGS: POLES, STATIC/OPGW ASSEMBLIES, GUYING ASSEMBLIES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR POLE FOUNDATION UNITS.

DATE	REVISION	#

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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DWN. BY: NLF
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/08/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: THS-10X STEEL TANGENT H-FRAME

SHT NO: MMR.T04.01

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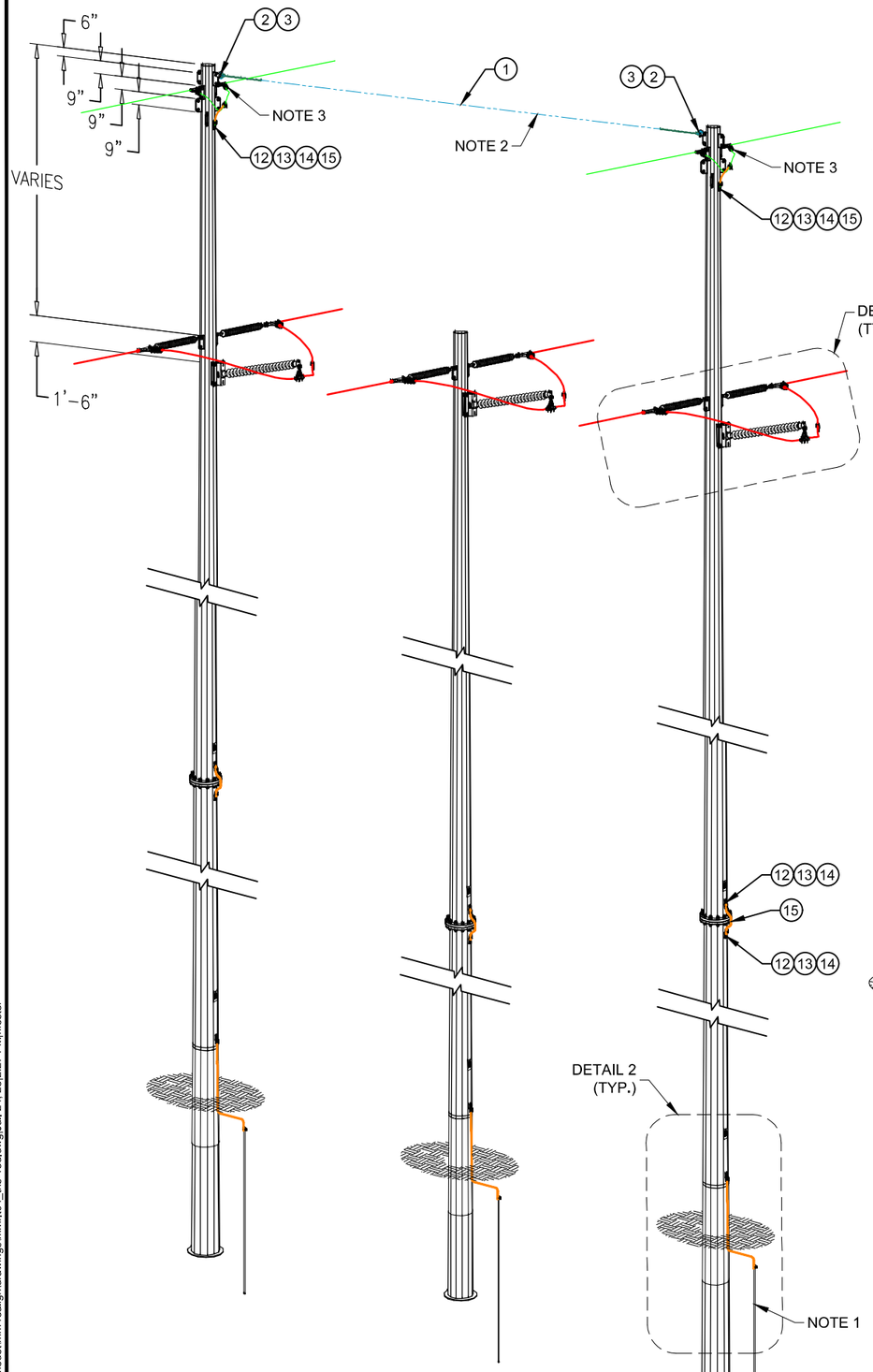
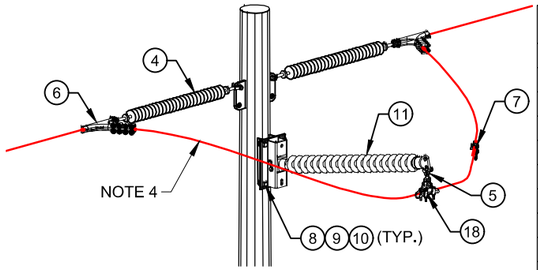
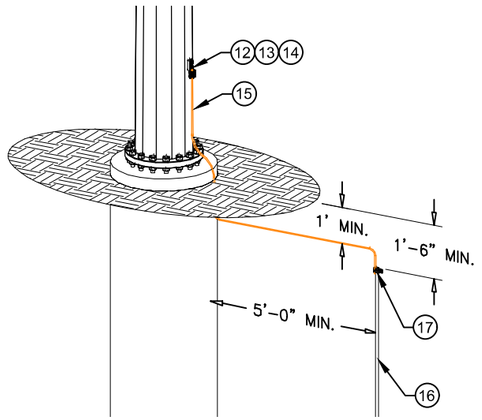
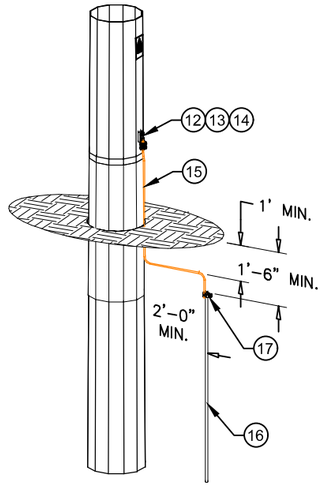




DETAIL 1
CONDUCTOR SUSPENSION ASSEMBLY



PIER FOUNDATION

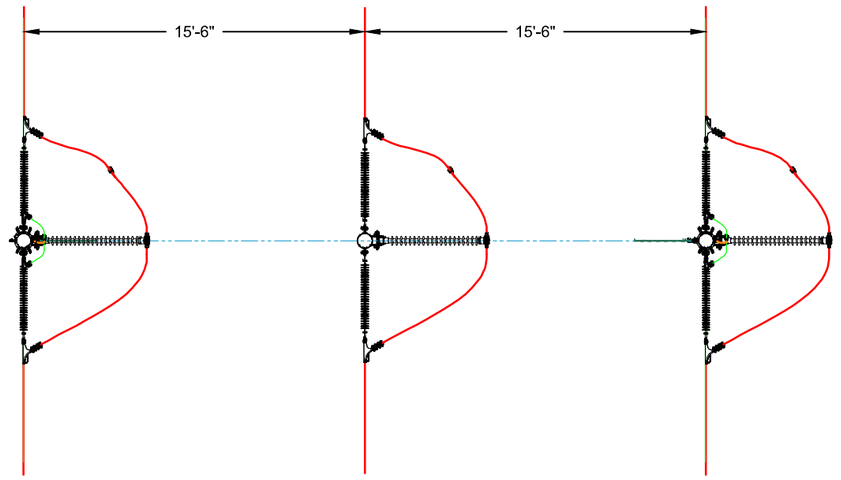


DIRECT BURY

DETAIL 2
POLE BASE GROUNDING

LIST OF MATERIALS

REF.	QTY	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	A.R.	GUY WIRE, 7/16" EHS	-	-	9109903
2	2	THIMBLE CLEVIS	MACLEAN	FSA-100-6	9109902
3	2	GUY GRIP DEAD END, 7/16"	PREFORMED	GDE-1108	9109902
4	6	INSULATOR, SUSPENSION, Y-CLEVIS TO BALL, 50KIPS	HUBBELL	S050073S2010	9109902
5	3	Y-CLEVIS BALL, 30 KIPS	PREFORMED	BYC-30	9109902
6	6	CLAMP, BOLTED, D.E. AND SOCKET EYE, 336 TO 1272 ACSR	HUBBELL	SD130SA15503	9109902
7	3	WEDGE CONNECTOR, GRACKLE TO DOVE	BURNDY	WCY128	9109902
8	12	BOLT, 7/8" X 3" LENGTH W/ NUT	HUGHES BROS.	B83-2	9109902
9	12	LOCKNUT, 7/8", MF TYPE	HUGHES BROS.	MF80	9109902
10	24	WASHER, ROUND, 7/8"	HUGHES BROS.	RW2-80	9109902
11	3	INSULATOR, POST, HORIZONTAL, W/ BASE	HUBBELL	P250065S0030	9109902
12	11	2-HOLE NEMA PAD, BRONZE, TINNED	HUBBELL	SWL022B-TP	9109902
13	22	BOLT, 1/2" X 1" UNC, STAINLESS STEEL	-	-	9109902
14	22	LOCK WASHER, 1/2", STAINLESS STEEL	HUBBELL	HWSL500	9109902
15	A.R.	COPPER, 2/0, 7 STRAND, SOFT DRAWN, TINNED	-	-	9109903
16	3	GROUND ROD COPPER CLAD, 3/4" X 10'	GALVAN	7510	9109902
17	3	CLAMP, GROUND ROD TO CABLE	HUBBELL	GC10303	9109902
18	3	CLAMP, SUSPENSION SHOE, 0.90-1.39", SOCKET, 25KIPS	HUBBELL	HAS139S	9109902



PLAN VIEW

NOTES:

1. GROUND ROD SHALL BE INSTALLED IN UNDISTURBED EARTH.
2. FOR GUYING ARRANGEMENTS, SEE GUYING GUIDES.
3. THE FOLLOWING MATERIALS ARE SPECIFIED SEPARATELY ON PLAN AND PROFILE DRAWINGS: POLES, STATIC/OPGW ASSEMBLIES, GUYING ASSEMBLIES, ANCHORS, AND ANY ADDITIONAL GROUNDING OR POLE FOUNDATION UNITS.
4. MAINTAIN MINIMUM OF 4 FEET BETWEEN JUMPER AND ANY DOWN GUYS.

DATE	REVISION	#

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www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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DWN. BY: NLF
CKD. BY: JAS
APP'D. BY: JPS
DATE: 05/09/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: THS-15D STEEL TANGENT DOUBLE DEADEND H-FRAME

SHT NO: MMR.T04.02

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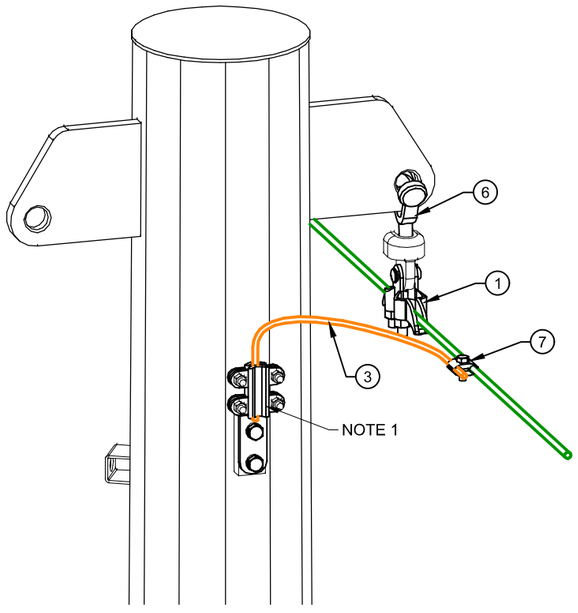
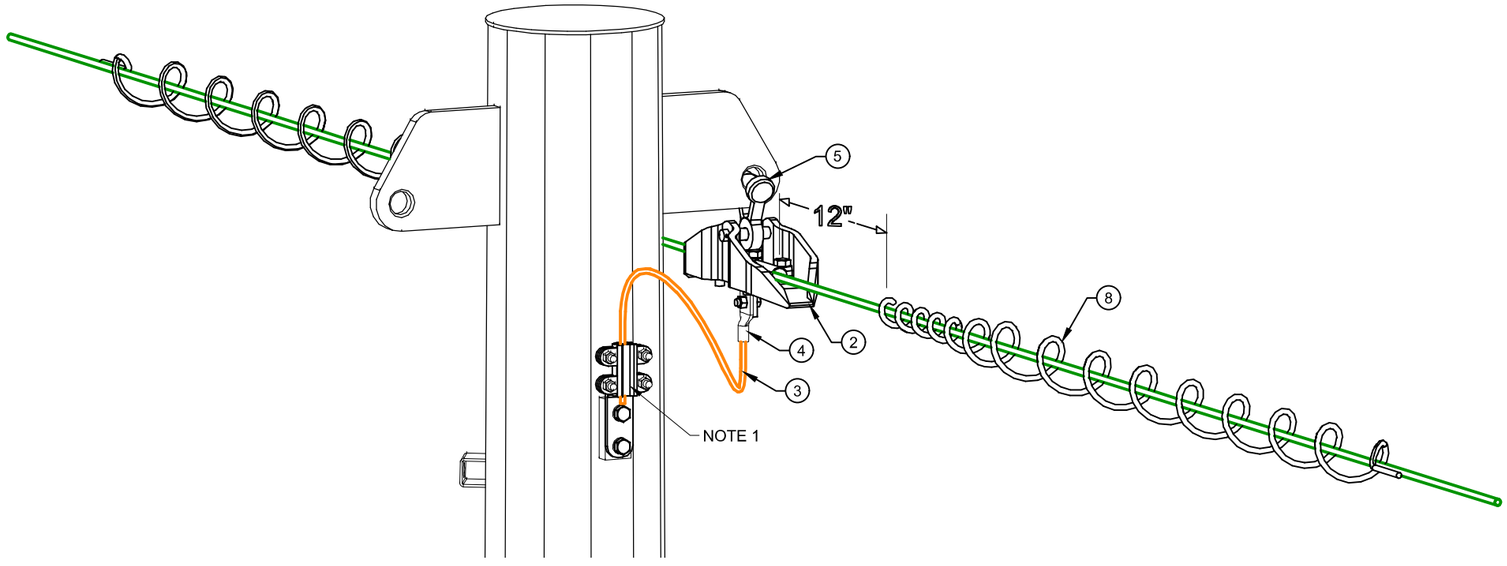
TM-4			LIST OF MATERIALS			
REF.	A-ST	A-ST(OPGW)	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	1	-	CLAMP, SUSPENSION	HUBBELL	MS46S	9109902
2	-	1	CLAMP, OPGW, SUSPENSION	AFL	SUME647/679	9109902
3	A.R.	A.R.	BONDING WIRE, COPPER, 2/0 STRANDED, TINNED	-	-	9109903
4	-	1	CLAMP, COMPRESSION, 2/0, 1 HOLE PAD	BURNDY	YRA26U	9109902
5	-	1	Y-CLEVIS EYE, 90°, 30 KIPS	HUBBELL	YCS059030	9109902
6	1	-	Y-CLEVIS BALL, 30KIP	PREFORMED	BYC-30	9109902
7	1	-	PARALLEL GROOVE CLAMP	HUBBELL	ST4	9109902
8	-	2	OPGW SPIRAL VIBRATION DAMPER, 0.564-0.770", 64" LENGTH	AFL	SVD564/770	9109902



TM-4A-ST



TM-4A-ST(OPGW)

NOTES:

1. GROUNDING PAD PROVIDED ON SEPARATE ASSEMBLY.

DATE	REVISION	#

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www.tothassociates.com
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DWN. BY:	NLF
CK'D. BY:	JAS
APP'D. BY:	JPS
DATE:	05/07/2025
PROJECT:	HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION:	GREENE COUNTY, MO
CLIENT:	MODOT JEFFERSON CITY, MO
TITLE:	TM-4A TANGENT STATIC ASSEMBLIES
SHT NO:	MMR.T05.01

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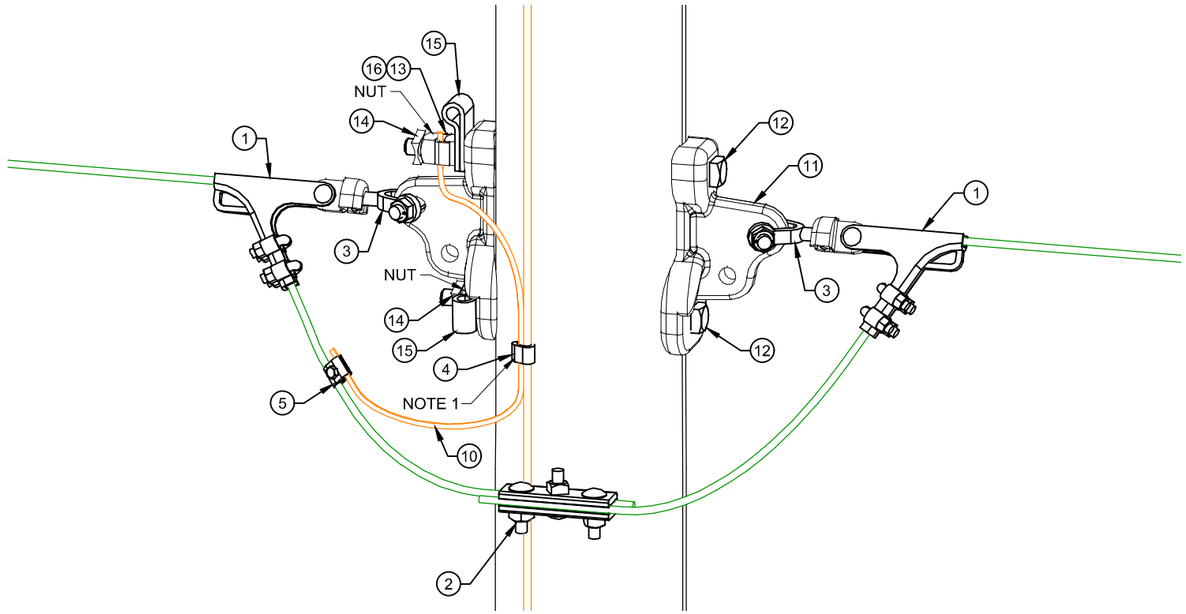
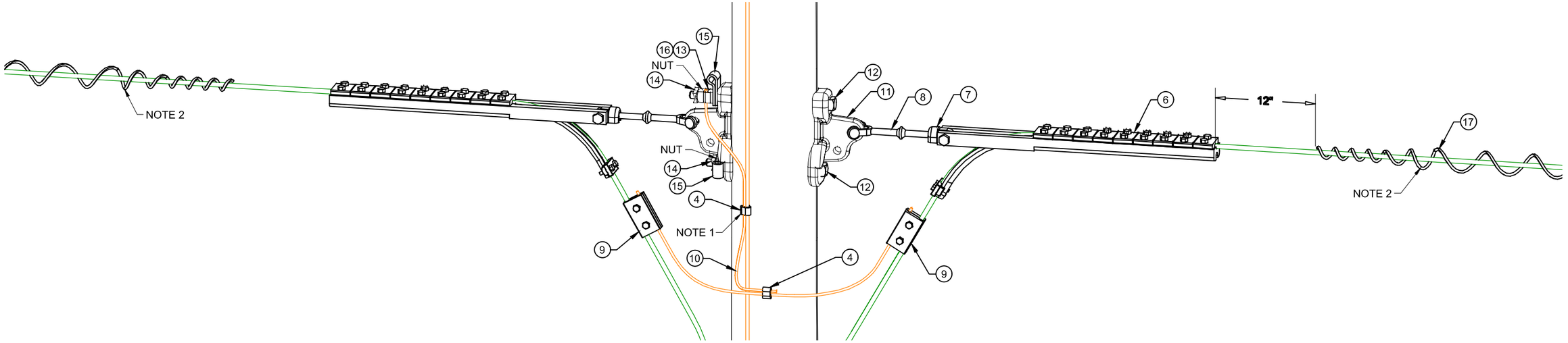


TM-4G

TM-4			LIST OF MATERIALS			
REF.	G	G(OPGW)	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	2	-	CLAMP, BOLTED DEADEND	HUBBELL	SWDE55S	9109902
2	1	-	3 BOLT CLAMP, 6"	MACLEAN POWER	J930	9109902
3	2	-	Y-CLEVIS BALL	PREFORMED	BYC-30	9109902
4	1	2	CONNECTOR, COMPRESSION, 6AWG - 2AWG	BURNDY	YGHC2C2	9109902
5	1	-	CLAMP, PARALLEL GROOVE, #6 SOL - 4/0 STR, CUT TO ST	HUBBELL	ST4	9109902
6	-	2	OPGW DEADEND, 0.650 - 0.659"	AFL	ODEC650/659G09	9109902
7	-	2	OPGW SOCKET EYE	AFL	SE-BDE	9109902
8	-	2	OPGW HOT LINE Y CLEVIS BALL	AFL	YCBHL	9109902
9	-	2	OPGW BONDING CLAMP, RUN: 0.646-0.660", TAP: 0.232-0.424"	AFL	OBC-N2-J1-2	9109902
10	A.R.	A.R.	COPPER, #4, 7 STRAND, SOFT DRAWN, TINNED	-	-	9109903
11	2	2	TEE, DOUBLE DEADEND, 42KIPS, GUY ATTACHMENT	HUBBELL	PSC2030528	9109902
12	2	2	BOLT, MACHINE, 7/8" X REQ'D LENGTH, W/ NUT	HUGHES BROTHERS	B8X-X	9109902
13	1	1	BONDING CLIP, 7/8"	HUGHES BROTHERS	2727.8	9109902
14	2	2	LOCKNUT, 7/8" CONCAVE MF	HUGHES BROTHERS	MF80	9109902
15	2	2	WASHER, SPRING CLIP, 7/8"	HUGHES BROTHERS	2702.8	9109902
16	1	1	NUT, 7/8"	HUGHES BROTHERS	N80	9109902
17	-	4	OPGW SPIRAL VIBRATION DAMPER, 0.564-0.770", 64" LENGTH	AFL	SVD564/770	9109902



TM-4G(OPGW)

NOTES:

1. ATTACH CLAMP TO POLE GROUND.
2. INSTALL TWO (2) VIBRATION DAMPERS PER SIDE. DAMPERS SHALL BE SPACED 12" APART.

DATE	REVISION	#

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MO# E-2004004242-D
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DWN. BY: NLF
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/09/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: TM-4G WOOD DEADEND STATIC ASSEMBLIES
SHT NO: MMR.T05.02

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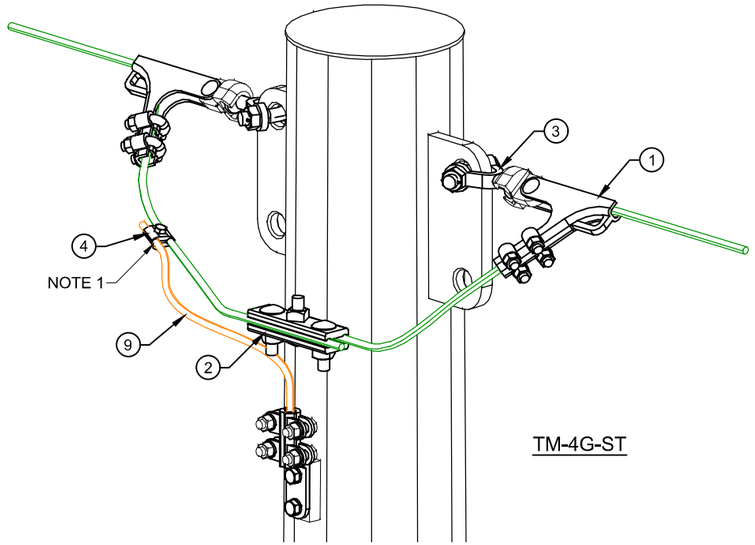
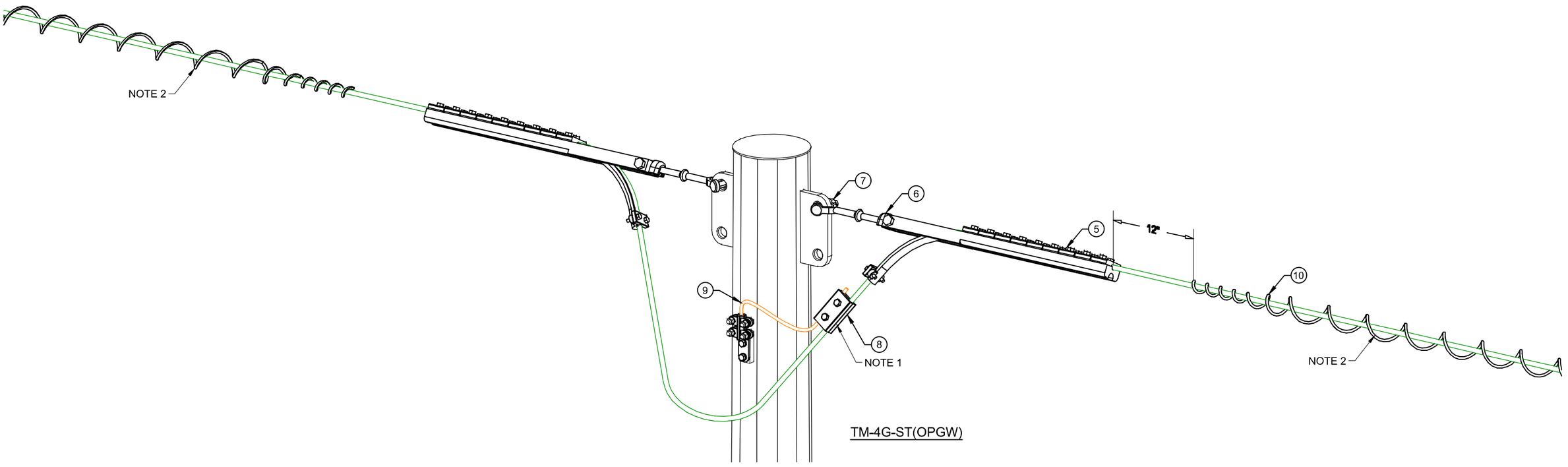


TM-4G-ST

TM-4			LIST OF MATERIALS			
REF.	G-ST	G-ST(OPGW)	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	2	-	CLAMP, BOLTED DEADEND	HUBBELL	SWDE55S	9109902
2	1	-	3 BOLT CLAMP, 6"	MACLEAN POWER	J930	9109902
3	2	-	Y-CLEVIS BALL	PREFORMED	BYC-30	9109902
4	1	-	CLAMP, PARALLEL GROOVE, #6 SOL - 4/0 STR, CUT TO ST	HUBBELL	ST4	9109902
5	-	2	OPGW DEADEND, 0.650 - 0.659"	AFL	ODEC650/659G09	9109902
6	-	2	OPGW SOCKET EYE	AFL	SE-BDE	9109902
7	-	2	OPGW HOT LINE Y CLEVIS BALL	AFL	YCBHL	9109902
8	-	1	OPGW BONDING CLAMP, RUN 0.646"-0.660", TAP 0.412"-0.424"	AFL	OBC-N2-W1-2	9109902
9	A.R.	A.R.	COPPER, 2/0, 7 STRAND, SOFT DRAWN, TINNED	-	-	9109903
10	-	4	OPGW SPIRAL VIBRATION DAMPER, 0.564-0.770", 64" LENGTH	AFL	SVD564/770	9109902



TM-4G-ST(OPGW)

NOTES:

1. ATTACH CLAMP TO POLE GROUND.
2. INSTALL TWO (2) VIBRATION DAMPERS PER SIDE. DAMPERS SHALL BE SPACED 12" APART.

DATE	REVISION	#

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CKD. BY: JAS
APP'D. BY: JPS
DATE: 05/09/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: TM-4G-ST STEEL DEADEND STATIC ASSEMBLIES

SHT NO: MMR.T05.03

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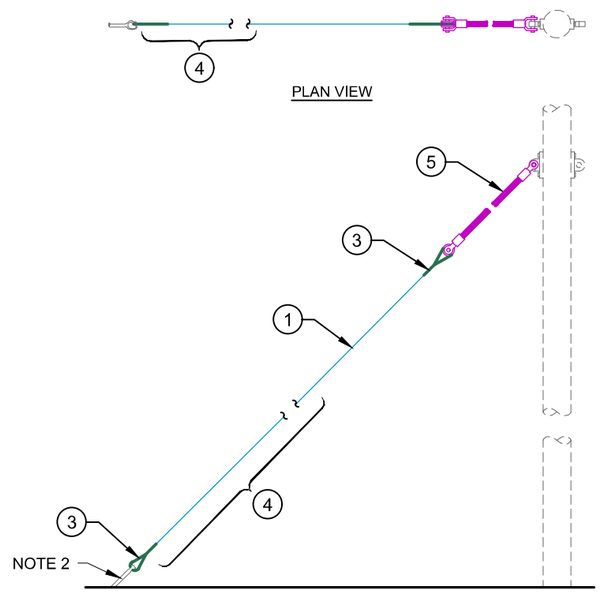
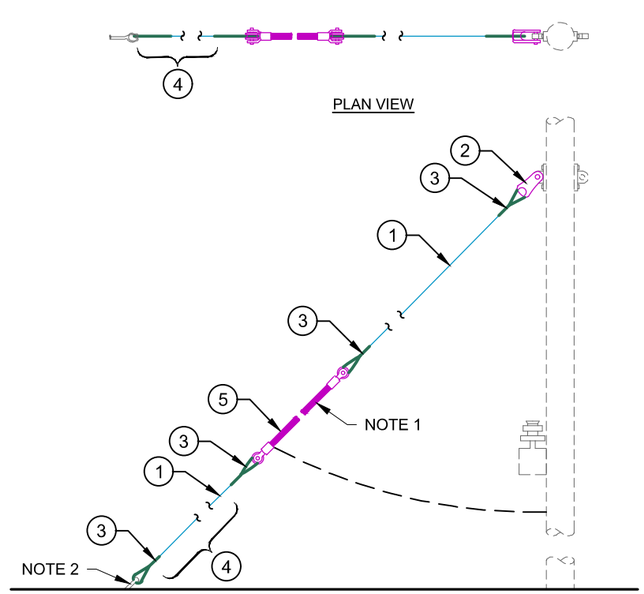
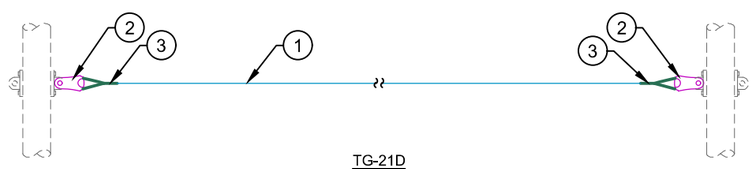
TG-21				LIST OF MATERIALS			
REF.	A	A-FG	D	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	A.R.	A.R.	A.R.	GUY WIRE, 7/16" EHS	-	-	9109903
2	-	1	2	THIMBLE CLEVIS	MACLEAN	FSA-100-6	9109902
3	2	4	2	GUY GRIP DEAD END	PREFORMED	GDE-1108	9109902
4	1	1	-	GUY GUARD	HUBBELL	96FRPMYEL	9109902
5	1	1	-	120" GUY STRAIN INSULATOR, CLEVIS-CLEVIS W/ LARGE GUY ROLLERS, 30 KIPS	CHANCE	GS30120CC2	9109902



TG-21A
SINGLE GUY TO ONE ROD
(SINGLE INSULATOR)



TG-21A-FG
SINGLE GUY TO ONE ROD
(SINGLE MIDSPAN INSULATOR)



TG-21D
OVERHEAD GUY

NOTES:

1. POSITION INSULATOR LINK SUCH THAT IF THE GUY WERE TO FALL AGAINST THE POLE, A LARGE PORTION OF THE INSULATING LINK WOULD BE BELOW THE LOWEST CONDUCTOR ATTACHED TO THE POLE.

2. REFERENCE GUYING GUIDE FOR EXACT GUY ORIENTATION AND CONFIGURATION BY STRUCTURE LOCATION.

DATE	REVISION	#

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DWN. BY:	NLF
CKD. BY:	JAS
APPD. BY:	JPS
DATE:	05/07/2025
PROJECT:	HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION:	GREENE COUNTY, MO
CLIENT:	MODOT JEFFERSON CITY, MO
TITLE:	TG-21 GUYING ASSEMBLIES
SHT NO:	MMR.T05.04

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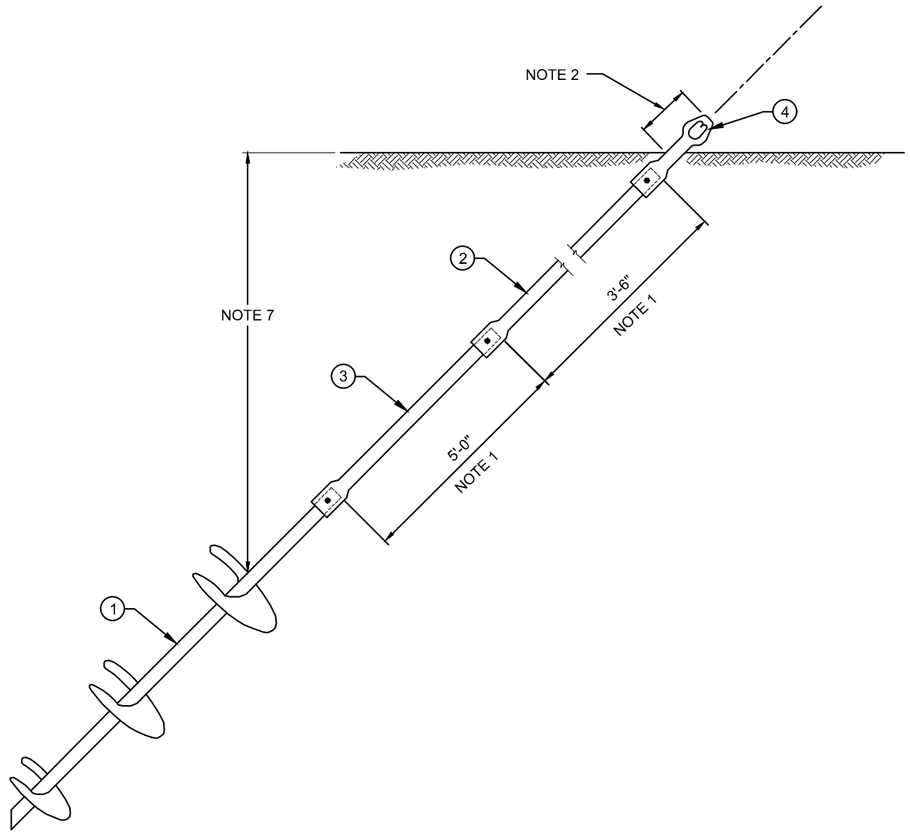

LIST OF MATERIALS					
REF.	QTY.	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	1	ANCHOR, POWER SCREW, TRIPLE HELIX, 10/12/14"	HUBBELL	012642EJN	9109902
2	1	ANCHOR, EXTENSION ROD, 3.5'L	HUBBELL	12655	9109902
3	A.R.	ANCHOR, EXTENSION ROD, SQUARE, 5'L	HUBBELL	12656	9109902
4	1	ADAPTOR, GUY, TRIPLE EYE	HUBBELL	C1020025	9109902

DESIGN PARAMETERS					
HOLDING CAPACITY (LBS.) VS. INSTALLATION TORQUE					
INSTALL TORQUE	2500	3000	3500	4000	4500
HOLDING CAPACITY (LBS.)	32,000	39,000	46,000	52,000	58,000
HOLDING CAPACITY (LBS.) VS. SOIL CLASS					
SOIL CLASS	CLASS 7	CLASS 6	CLASS 5	CLASS 4	CLASS 3
HOLDING CAPACITY (LBS.)	29,000	37,000	45,000	53,000	61,000

NOTES:

1. ADDITIONAL EXTENSION RODS (ITEM 2 OR 3) MAY BE REQUIRED TO ACHIEVE REQUIRED TORQUE DEPENDING ON SOIL CONDITIONS. FOLLOW MANUFACTURER'S INSTALLATION RECOMMENDATIONS.
2. RECOMMENDED PROJECTION OF GUY ADAPTER (ITEM 4) IS 8 INCHES AFTER STRAIN IS APPLIED. PROJECTION MAY BE INCREASED TO AVOID OVER-TORQUING OF THE SHAFT.
3. ANCHORS SHALL BE INSTALLED IN LINE WITH GUY WIRES. ANCHORS SHALL NOT BE INSTALLED CLOSER THAN 5', MEASURED IN LINE WITH GUYS OR MEASURED IN A SWEEPING ARC FROM THE ANGLE BI-SECT (WHEN "SPLIT-GUYS" ARE USED).
4. ANCHOR LEAD LENGTHS TO BE SPECIFIED ON GUYING GUIDES.
5. ANCHORS MUST MEET OR EXCEED THE INSTALLATION TORQUE SHOWN IN THE "DESIGN PARAMETERS" OF 3,500 FT-LBS BY MEANS OF A TORQUE METER . IF MINIMUM TORQUE IS NOT ACHIEVED CONSULT THE ENGINEER.
6. INSTALLATION SHALL INCLUDE AT LEAST ONE TRIPLE HELIX (ITEM 1) AND ONE 5' EXTENSION ROD (ITEM 3).
7. MINIMUM VERTICAL DISTANCE TO TOP FLIGHT SHALL BE 5X THE TOP FLIGHT DIAMETER.
8. CONTRACTOR TO RECORD TORQUE, LENGTHS, AND QUANTITES OF EXTENSIONS FOR EACH ANCHOR.

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APPD. BY: JPS
DATE: 05/07/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: TA-3H SCREW ANCHOR
SHT NO: MMR.T05.05

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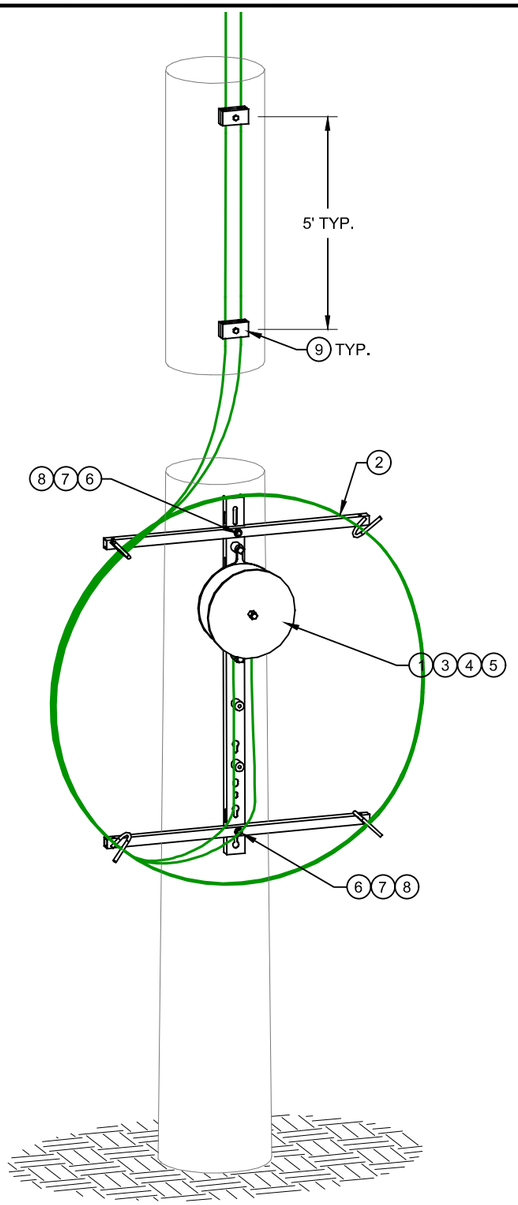

LIST OF MATERIALS

REF	QTY.	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	2	FURCATION KIT	AFL	SB01-FK	9109902
2	1	CABLE STORAGE SYSTEM	AFL	CB-44-3AL	9109902
3	1	SPLICE ENCLOSURE	AFL	SB01-72	9109902
4	2	CONNECTOR KITS	AFL	APCKE647/662	9109902
5	8	SPLICE PROTECTOR, 10 CT	AFL	SPS-60	9109902
6	2	BOLT, MACHINE, 5/8" X REQ'D LENGTH, W/ NUT	HUGHES BROTHERS	B6X-X	9109902
7	2	WASHER, SQUARE, CURVED, 5/8"	HUGHES BROTHERS	SCW3-60	9109902
8	2	LOCKNUT, 5/8", CONCAVE MF	HUGHES BROTHERS	MF60	9109902
9	10	OPGW DOWNLEAD CUSHION GRIP	AFL	FDOA-B6B6D	9109902

NOTES:

1. UNITS SHOWN SHALL INCLUDE ALL LABOR AND MATERIAL REQUIRED TO INSTALL THE FIBER, SPLICE ENCLOSURE, AND CABLE STORAGE SYSTEM.
2. SPLICE ENCLOSURES SHALL BE INSTALLED TWELVE FEET FROM GROUND LEVEL TO THE BOTTOM OF THE ENCLOSURE.
3. CONTRACTOR SHALL INSTALL OPGW SO THAT AFTER TESTING, A MINIMUM OF 150 FEET OF SPARE OPGW (MEASURED FROM GROUND LEVEL AT THE POLE TO THE END OF THE OPGW) IS LOOPED AND ATTACHED TO THE OPGW STORAGE DEVICE AND MOUNTED TO THE STRUCTURES AT ALL SPLICE POINTS. EACH LOOP SHALL HAVE A MINIMUM BENDING RADIUS OF 30 INCHES.
4. THE CONTRACTOR SHALL TEST THE OPGW ON THE REEL BEFORE INSTALLATION AND AFTER EACH REEL IS SAGGED AND CLIPPED IN. ALL FIELD TESTING SHALL BE WITNESSED BY SOUTHWESTERN'S FIELD REPRESENTATIVE(S) AND APPROVED BY SOUTHWESTERN. MEASUREMENTS SHALL BE TAKEN END TO END AFTER COMPLETE INSTALLATION OF EACH REEL OF OPGW. ATTENUATION MEASUREMENTS SHALL BE PERFORMED ON ALL FIBERS AT BOTH 1310 NM AND 1550 NM. AN OPTICAL TIME DOMAIN REFLECTOMETER (OTDR) SHALL BE USED FOR THE ATTENUATION MEASUREMENTS. THE OPTICAL LOSS MEASURED AT ANY STAGE ON ANY REEL SHALL NOT EXCEED 0.40 DB/KM AT 1310 NM AND 0.30 DB/KM AT 1550 NM. MICRO/MACRO BENDING DAMAGE TO THE OPGW WILL NOT BE ALLOWED.
5. THE CONTRACTOR SHALL NOT INSTALL OPGW WITHIN THE SPLICE ENCLOSURE. THE CONTRACTOR SHALL LEAVE THE CONNECTOR KITS FOR OPGW WITHIN THE SPLICE ENCLOSURE FOR SOUTHWESTERN'S USE. FOLLOWING THE CONTRACTOR'S INSTALLATION AND SOUTHWESTERN'S ACCEPTANCE OF OPGW TESTS, SOUTHWESTERN WILL INSTALL AND SPLICE THE OPGW WITHIN THE SPLICE ENCLOSURE.

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CKD. BY: JAS
APPD. BY: JPS
DATE: 05/06/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: TM-FIB SPLICE
OPGW ASSEMBLIES FIBER RACK SPLICE CASE

SHT NO: MMR.T05.06

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STRUCTURE DRAWING	STR #	LENGTH 'L' (ft)	EMBED DEPTH 'D' (ft)	CLASS	FINISH	JOINT	BID ITEM NO.
THS-10X	33	(2) 120	16	S-04.2	GALVANIZED	FLANGE	9109902
THS-10X	34	(2) 120	16	S-04.2	GALVANIZED	FLANGE	9109902
THS-15D-1	32	(2) 60 - (1) 45	PIER	ENGINEERED	GALVANIZED	FLANGE	9109902
THS-15D-2	35	(2) 80 - (1) 65	(2) 12 - (1) 10.5	ENGINEERED	GALVANIZED	FLANGE	9109902

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APP'D. BY: JPS
DATE: 05/06/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: STEEL POLE SPECIFICATIONS
STEEL POLE SUMMARY

SHT NO: MMR.T06.01

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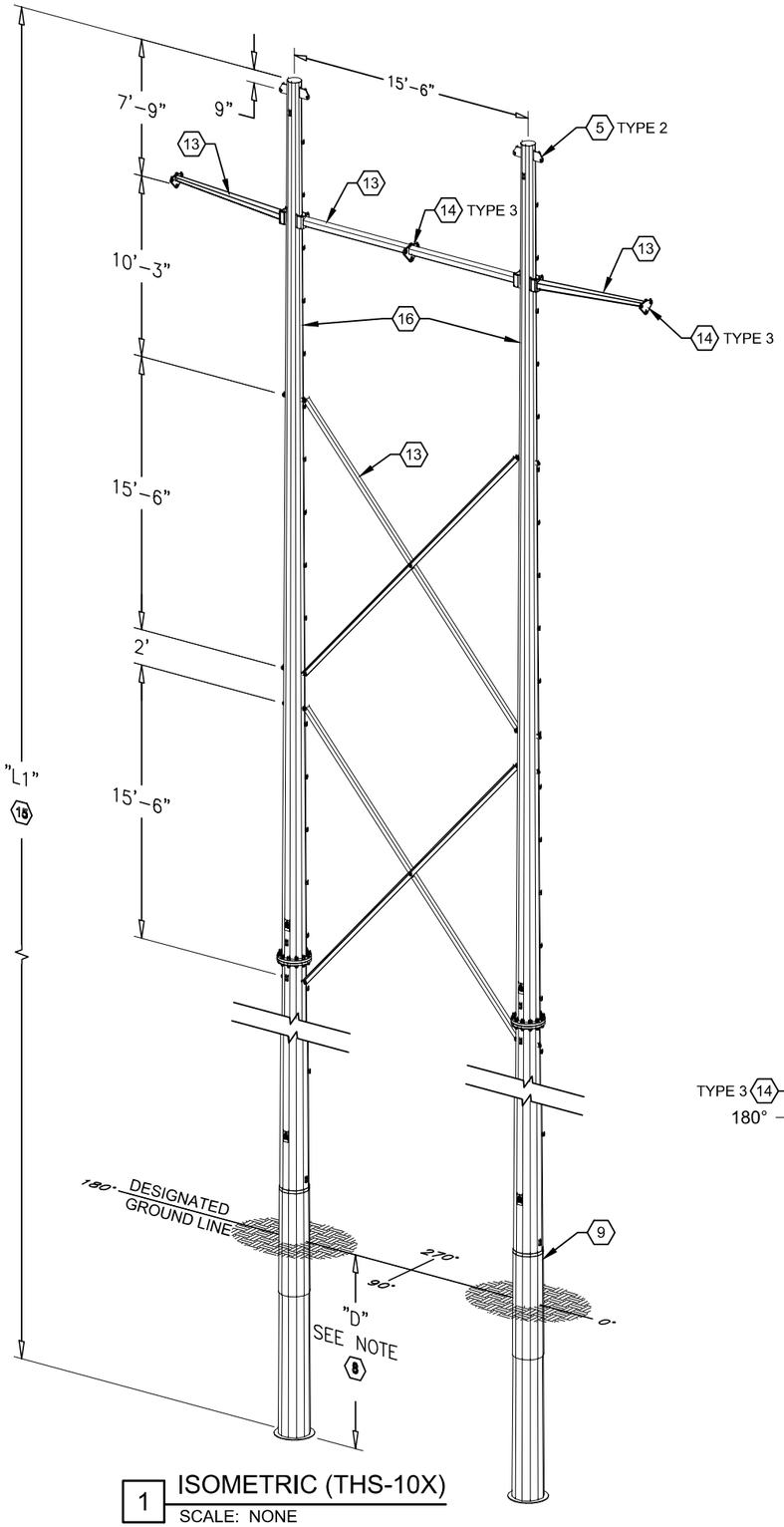


1 ISOMETRIC (THS-10X)
SCALE: NONE

GENERAL NOTES:

A. STRUCTURE SHALL BE GALVANIZED STEEL.

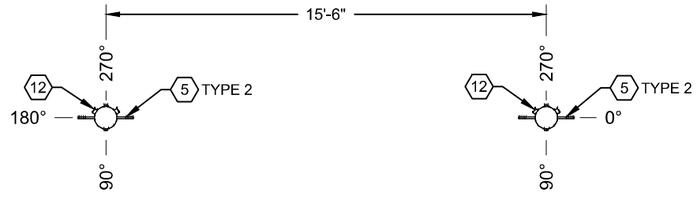
B. PLASTIC PLUGS SHALL BE INSTALLED IN ALL NUTS WELDED TO THE STRUCTURE AND ALL TAPPED HOLES.

C. TOLERANCES: SEE THE SPECIFICATIONS.

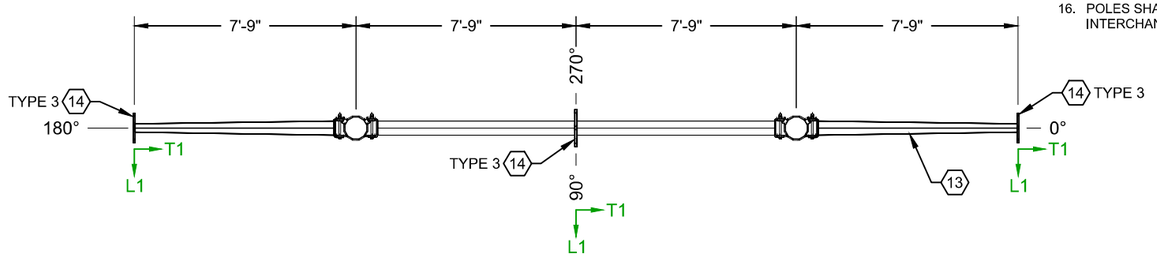
D. DESIGN AND FABRICATION OF STEEL POLES SHALL FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS FOUND IN RUS BULLETIN 1724E-204 - "SPECIFICATIONS FOR STEEL SINGLE POLE AND H-FRAME STRUCTURES" AND SHALL FURTHER FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS RELATING TO THE DRAWINGS/DETAILS IN THE CONSTRUCTION PLANS. SHOULD A DISCREPANCY EXIST BETWEEN THE TWO SPECIFICATIONS, THE MORE STRINGENT SPECIFICATION REQUIREMENT SHALL CONTROL.

E. STRUCTURAL SHAPES SHOWN ARE ILLUSTRATIVE IN NATURE. THE MANUFACTURER SHALL DETERMINE THE STRUCTURAL SHAPES AND DESIGN MEMBERS TO WITHSTAND THE LOADS SHOWN.

F. LOADINGS:
REFER TO STRUCTURE SCHEDULE ON PAGE 2 OF 2.



AT OHGW CONNECTION



AT CONDUCTOR CONNECTION

2 ATTACHMENT ORIENTATION
SCALE: NONE

KEYNOTES (00):

1. THE POLE TOP SHALL BE COVERED WITH A PERMANENTLY ATTACHED 3/16" STEEL PLATE POLE CAP. THE POLE SHALL BE DELIVERED WITH THE POLE CAP ATTACHED IN PLACE. REFER TO DETAIL "C" ON DRAWINGS TM-SD.
2. BOLTED FLANGED JOINTS SHALL BE DESIGNED TO WITHSTAND LOADS SPECIFIED IN THIS DRAWING AND IN THE SPECIFICATIONS. REFER TO DETAIL "E2" ON DRAWINGS TM-SD FOR DIMENSIONS.
3. NAMEPLATE SHALL BE LOCATED AS SHOWN. REFER TO DETAIL "A" ON DRAWINGS TM-SD FOR REQUIRED INFORMATION.
4. FOR 2-HOLE GROUNDING PLATE DETAIL, REFER TO DETAIL "B1" ON DRAWINGS TM-SD.
   (2) PADS, POLE TOP, 90°-270° AXIS.
   (2) PADS, EACH POLE JOINT.
   (2) PADS, POLE BOTTOM, 0-180° AXIS.
5. FOR STRAIN VANG DETAILING, REFER TO DETAIL "G1" ON DRAWINGS TM-SD.
6. FOR ALL MULTISIDED SECTIONS, A FLAT SIDE SHOULD BE ON THE 0-180° AXIS.
7. STRUCTURES SHALL BE DESIGNED TO ELIMINATE WATER AND REFUSE TRAPS.
8. BURY DEPTH DIMENSIONS "D" FROM POLE BUTT TO DESIGNATED GROUND LINE IS GIVEN AS FOLLOWS, (DIMENSION "L" IS THE LENGTH OF THE POLE):
   D = 4.0' + 0.10 (L)
9. GROUND COLLARS SHALL HAVE A MINIMUM THICKNESS OF 3/16" AND A LENGTH OF 4'. LOCATE COLLARS ON THE CENTERLINE OF THE DESIGNATED GROUND LINE.
10. WELD A MINIMUM 1/2" BEARING PLATE TO THE BASE. THE DIAMETER OF THE PLATE SHALL BE A MINIMUM OF THE POLE SHAFT BASE DIAMETER + 6". THE PLATE AND WELDED CONNECTION SHALL BE DESIGNED TO WITHSTAND AN UPLIFT OF 12 KIPS.
11. A "CORROCOTE" COATING SHALL BE APPLIED ON THE EXPOSED SURFACE FROM THE BUTT OF THE POLE TO 2" BELOW THE TOP OF THE GROUND COLLAR. THE "CORROCOTE" COATING SHALL BE FEATHERED AT THE TOP EDGE TO AVOID WATER ACCUMULATION.
12. PROVIDE STEP BOLT CLIPS WELDED TO THE SHAFT AT 1'-6" STAGGERED SPACING FROM 8'-0" ABOVE DESIGNATED GROUND LINE TO 2'-0" BELOW THE POLE TOP. STEP BOLTS SHALL BE LOCATED TO AVOID INTERFERENCE WITH OTHER ATTACHMENTS. REFER TO DETAILS "F1" ON DRAWINGS TM-SD FOR STEP BOLT DIMENSIONS AND ORIENTATION. DO NOT INCLUDE STEP BOLTS OR NUTS.
13. ALL ARMS, BRACES, BOLTS, ETC. SHALL BE PROVIDED WITH THE STRUCTURE AND BE DESIGNED TO WITHSTAND THE LOADS SHOWN BELOW:

LOAD	KIPS
T1	2.5
L1	1
V1	6

14. FOR END PLATE DETAILING, REFER TO DETAIL "J" ON DRAWING TM-SD. REFER TO STRUCTURE LOAD CHART ON SHEET 2 OF 2 FOR ARM STRENGTH.
15. REFERENCE DIMENSION DEFINED IN POLE SUMMARY SHEET, DRAWING SPS-001.
16. POLES SHALL BE DESIGNED SUCH THAT THE LEFT AND RIGHT POLES ARE INTERCHANGEABLE.

DATE	REVISION	#

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APP'D. BY: JPS
DATE: 05/06/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: STEEL POLE SPECIFICATIONS THS-10X (1 of 2)
SHT NO: MMR.T06.02

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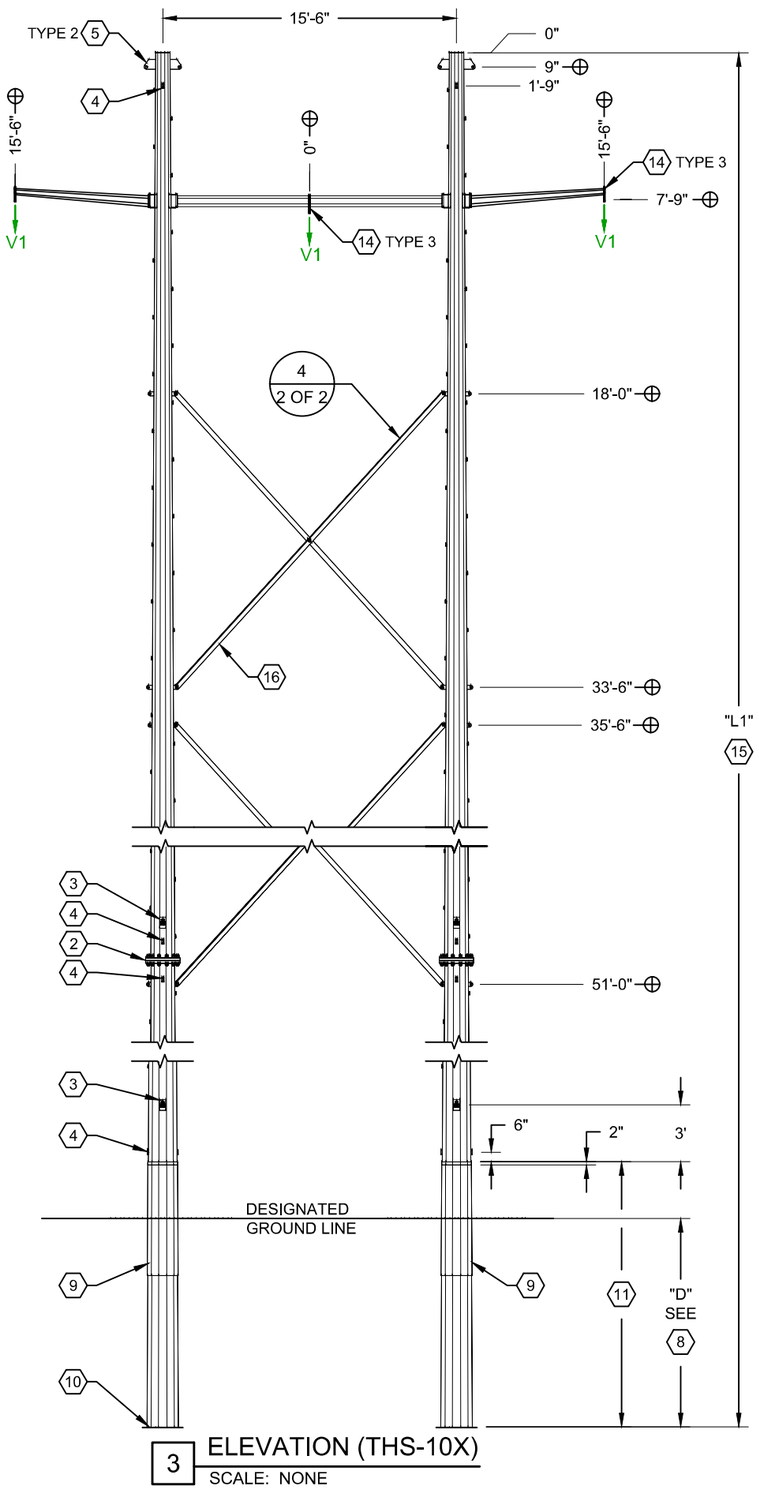
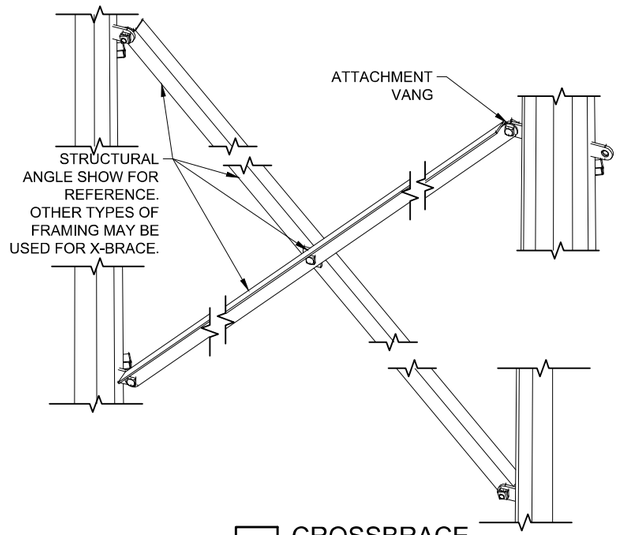


3 ELEVATION (THS-10X)
SCALE: NONE



4 CROSSBRACE
SCALE: NONE

GENERAL NOTE:

A. SEE SHEET 1 OF 2 FOR KEYNOTES (00).

STR #	LENGTH 'L' (ft)	EMBED DEPTH 'D' (ft)	CLASS
33	(2) 120	16	S-04.2
34	(2) 120	16	S-04.2

DATE	REVISION	#

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DATE: 05/06/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: STEEL POLE SPECIFICATIONS THS-10X (2 of 2)
SHT NO: MMR.T06.03

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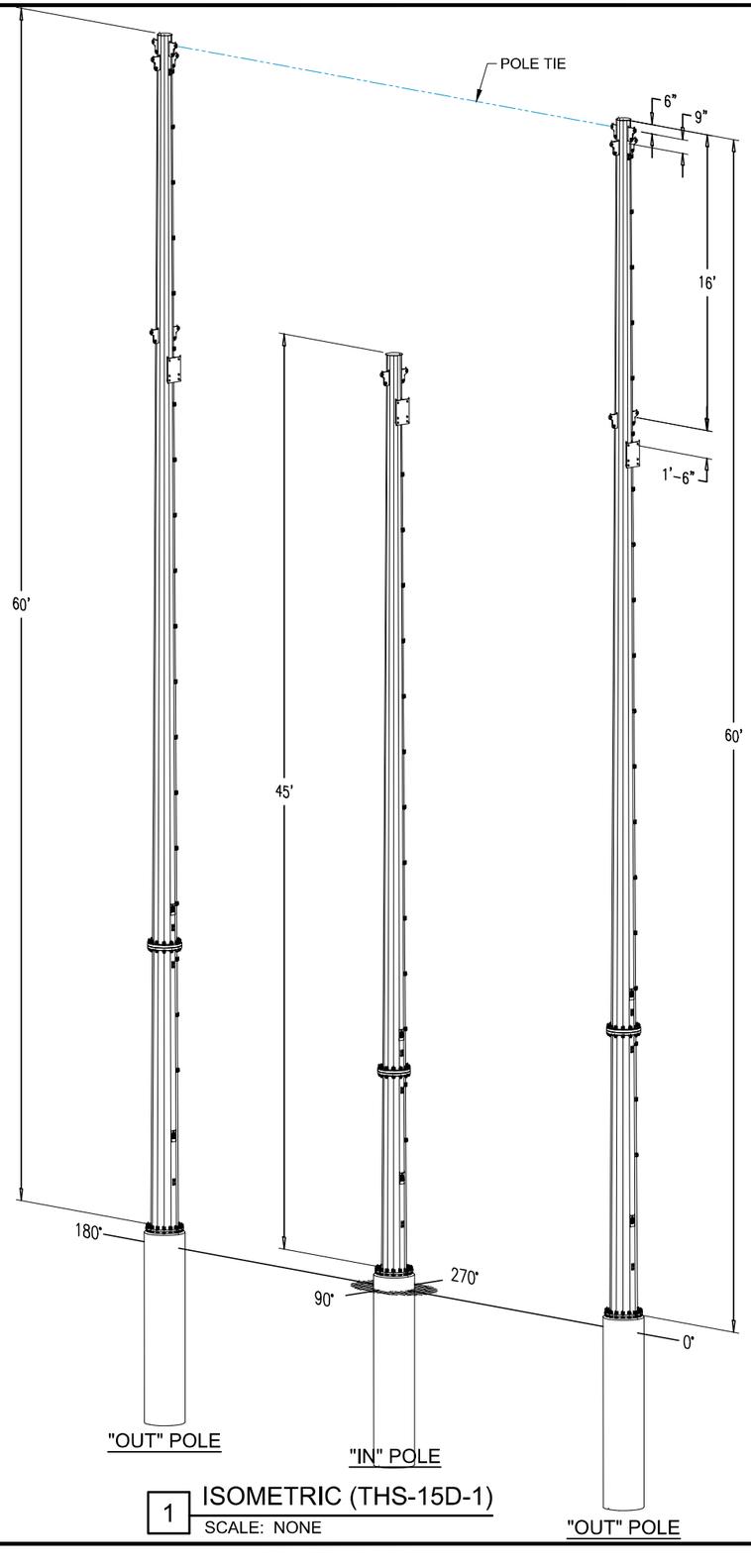


1 ISOMETRIC (THS-15D-1)
SCALE: NONE

GENERAL NOTES:

A. STRUCTURE SHALL BE GALVANIZED STEEL.

B. PLASTIC PLUGS SHALL BE INSTALLED IN ALL NUTS WELDED TO THE STRUCTURE AND ALL TAPPED HOLES.

C. TOLERANCES: SEE THE SPECIFICATIONS.

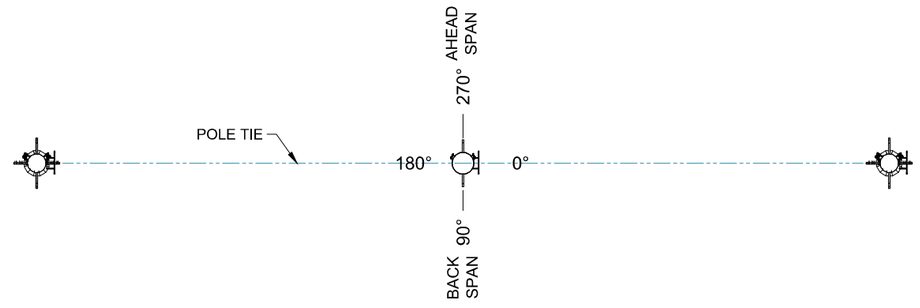
D. DESIGN AND FABRICATION OF STEEL POLES SHALL FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS FOUND IN RUS BULLETIN 1724E-204 - "SPECIFICATIONS FOR STEEL SINGLE POLE AND H-FRAME STRUCTURES" AND SHALL FURTHER FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS RELATING TO THE DRAWINGS/DETAILS IN THE CONSTRUCTION PLANS. SHOULD A DISCREPANCY EXIST BETWEEN THE TWO SPECIFICATIONS, THE MORE STRINGENT SPECIFICATION REQUIREMENT SHALL CONTROL.

E. STRUCTURAL SHAPES SHOWN ARE ILLUSTRATIVE IN NATURE. THE MANUFACTURER SHALL DETERMINE THE STRUCTURAL SHAPES AND DESIGN MEMBERS TO WITHSTAND THE LOADS SHOWN.

F. LOADINGS:
REFER TO STRUCTURE LOAD CHART ON PAGE 2 OF 2.

KEYNOTES ⟨00⟩:

1. THE POLE TOP SHALL BE COVERED WITH A PERMANENTLY ATTACHED 3/16" STEEL PLATE POLE CAP. THE POLE SHALL BE DELIVERED WITH THE POLE CAP ATTACHED IN PLACE. REFER TO DETAIL "C" ON DRAWINGS TM-SD.
2. BOLTED FLANGED JOINTS SHALL BE DESIGNED TO WITHSTAND LOADS SPECIFIED IN THIS DRAWING AND IN THE SPECIFICATIONS. REFER TO DETAIL "E2" ON DRAWINGS TM-SD FOR DIMENSIONS
3. NAMEPLATE SHALL BE LOCATED AS SHOWN. REFER TO DETAIL "A" ON DRAWINGS TM-SD FOR REQUIRED INFORMATION.
4. FOR 2-HOLE GROUNDING PLATE DETAIL, REFER TO DETAIL "B1" ON DRAWINGS TM-SD.
   (2) PADS, POLE TOP, 0°-180° AXIS.
   (2) PADS, EACH POLE JOINT.
   (2) PADS, POLE BOTTOM, 0-180° AXIS.
5. FOR STRAIN VANG DETAILING, REFER TO DETAIL "G1" ON DRAWINGS TM-SD.
6. FOR ALL MULTISIDED SECTIONS, A FLAT SIDE SHOULD BE ON THE 0-180° AXIS.
7. STRUCTURES SHALL BE DESIGNED TO ELIMINATE WATER AND REFUSE TRAPS.
8. ANCHOR BOLT CAGE SHALL BE DESIGNED AND SUPPLIED AS PART OF THIS POLE TYPE.
9. PROVIDE STEP BOLT CLIPS WELDED TO THE SHAFT AT 1'-6" STAGGERED SPACING FROM 8'-0" ABOVE DESIGNATED GROUND LINE TO 2'-0" BELOW THE POLE TOP. STEP BOLTS SHALL BE LOCATED TO AVOID INTERFERENCE WITH OTHER ATTACHMENTS. REFER TO DETAILS "F1" ON DRAWINGS TM-SD FOR STEP BOLT DIMENSIONS AND ORIENTATION. DO NOT INCLUDE STEP BOLTS OR NUTS.
10. MOUNTING PLATE FOR THE POST INSULATOR SHALL BE IN THE BISECT OF THE VANGS. REFER TO DETAIL "K" ON DRAWINGS TM-SD.



2 GUYING PLAN
SCALE: NONE

DATE	REVISION	#

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1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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DWN. BY: NLF
CK'D. BY: JAS
APP'D. BY: JPS
DATE: 05/08/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: STEEL POLE SPECIFICATIONS THS-15D-1 (1 of 2)
SHT NO: MMR.T06.04

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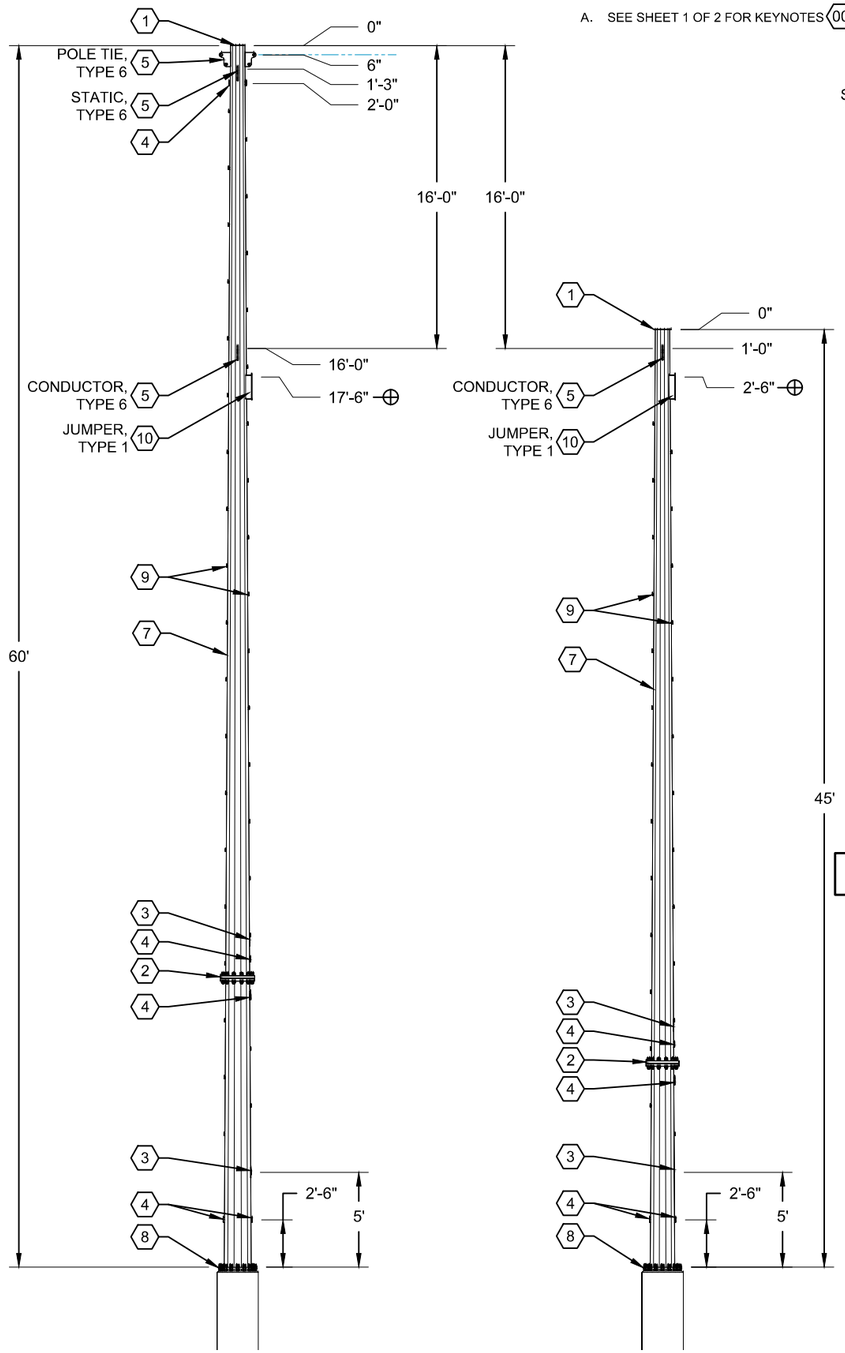
GENERAL NOTE:

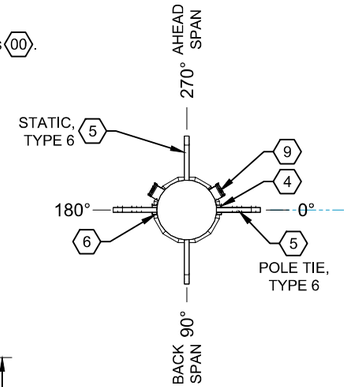
A. SEE SHEET 1 OF 2 FOR KEYNOTES (00).



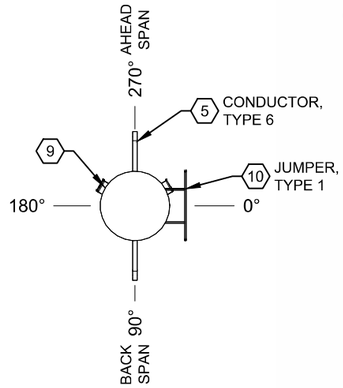
FACING 90°
("OUT" POLE)

FACING 90°
("IN" POLE)

3 ELEVATION (THS-15D-1)
SCALE: NONE

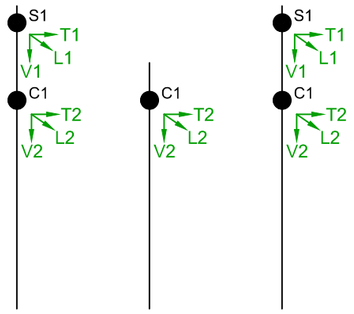


AT STATIC CONNECTIONS
(FEATURING "OUT" POLE)



AT PHASE CONNECTIONS

4 ATTACHMENT ORIENTATION
SCALE: NONE



5 LOADING TREE

	LOAD CASE	RULE 250B GRADE B NA-	RULE 250C GRADE B NA-	RULE 250D GRADE B NA-	60 DEGREES NA-	RULE 250B GRADE B NA- FC BK	RULE 250C GRADE B NA- FC BK	RULE 250D GRADE B NA- FC BK
	WEATHER DESCRIPTION	4 PSF, 0.5" ICE @ 0°F	25.6 PSF, 0" ICE @ 60°F	4.096 PSF, 1" ICE @ 15°F	0 PSF, 0" ICE @ 60°F	4 PSF, 0.5" ICE @ 0°F	25.6 PSF, 0" ICE @ 60°F	4.096 PSF, 1" ICE @ 15°F
S1	T1	-1270	-1055	-955	-67	-542	-567	-485
	L1	-343	49	130	-492	9859	5276	8818
	V1	1139	264	1813	308	229	-127	509
C1	T2	-1335	-1650	-872	3	-791	-1095	-513
	L2	9147	5479	6713	3754	21617	12325	17937
	V2	1662	468	2358	569	394	-153	687
	WIND LOAD ON POLE (PSF)	4	25.6	4.096	0	4	25.6	4.096
	DEFLECTION LIMIT (% OF POLE HEIGHT)	10	No Limit	No Limit	1.5	10	No Limit	No Limit
	OVERLOAD CAPACITY FACTORS							
	WIND	2.5	1.1	1.1	1	2.5	1.1	1.1
	TENSION	1.65	1.1	1.1	1	1.65	1.1	1.1
	VERTICAL	1.5	1.1	1.1	1	1.5	1.1	1.1

CONDUCTOR IDENTIFICATION		
	S1	C1
NAME	DNO-12519	Grackle ACSR
SIZE (AWG OR KCMIL)	---	1192.5
STRANDING	48 Fiber	54/19
DIAMETER	0.654	1.338
BARE WT. (LBS/FT)	0.423	1.533
WIRES IN BUNDLE	1	1
WEATHER CASE	NESC 250B HEAVY	NESC 250B HEAVY
CONDITION	INITIAL RS	INITIAL RS
TENSION(S) (LBS)	5,600	11,800

STRUCTURE CHARACTERISTICS	
STRUCTURE	32
LENGTH (L)	60, 45, 50
EMBED (D)	PIER
LINE ANGLE (θ)	0°

DATE	REVISION	#

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CKD. BY: JAS
APPD. BY: JPS
DATE: 05/08/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: STEEL POLE SPECIFICATIONS THS-15D-1 (2 of 2)
SHT NO: MMR.T06.05

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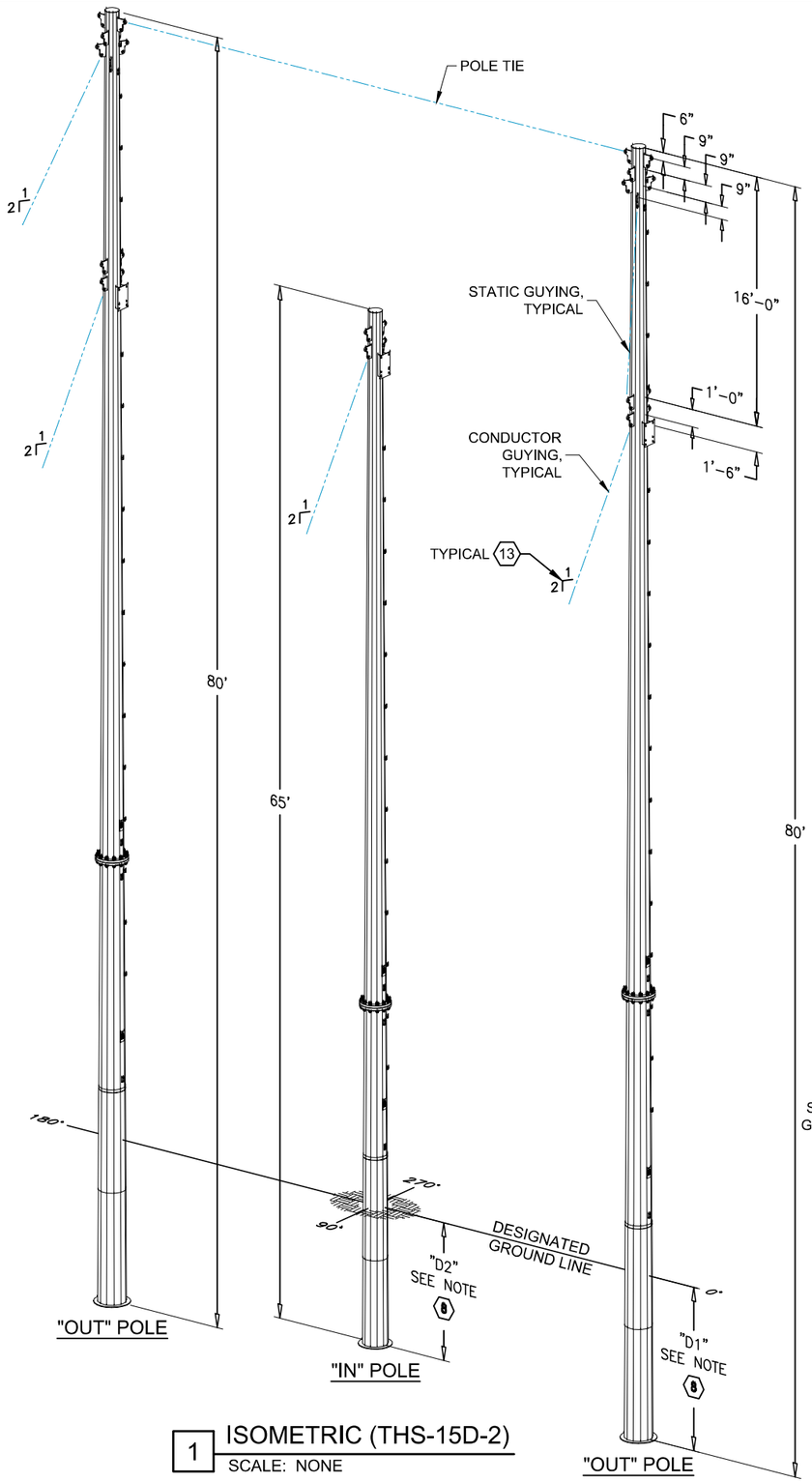
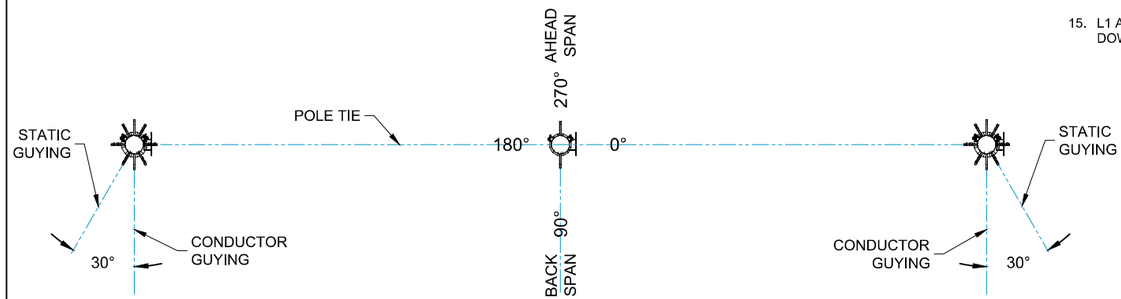


1 ISOMETRIC (THS-15D-2)
SCALE: NONE



2 GUYING PLAN
SCALE: NONE

GENERAL NOTES:

A. STRUCTURE SHALL BE GALVANIZED STEEL.

B. PLASTIC PLUGS SHALL BE INSTALLED IN ALL NUTS WELDED TO THE STRUCTURE AND ALL TAPPED HOLES.

C. TOLERANCES: SEE THE SPECIFICATIONS.

D. DESIGN AND FABRICATION OF STEEL POLES SHALL FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS FOUND IN RUS BULLETIN 1724E-204 - "SPECIFICATIONS FOR STEEL SINGLE POLE AND H-FRAME STRUCTURES" AND SHALL FURTHER FOLLOW ALL REQUIREMENTS AND SPECIFICATIONS RELATING TO THE DRAWINGS/DETAILS IN THE CONSTRUCTION PLANS. SHOULD A DISCREPANCY EXIST BETWEEN THE TWO SPECIFICATIONS, THE MORE STRINGENT SPECIFICATION REQUIREMENT SHALL CONTROL.

E. STRUCTURAL SHAPES SHOWN ARE ILLUSTRATIVE IN NATURE. THE MANUFACTURER SHALL DETERMINE THE STRUCTURAL SHAPES AND DESIGN MEMBERS TO WITHSTAND THE LOADS SHOWN.

F. LOADINGS:
REFER TO STRUCTURE LOAD CHART ON PAGE 2 OF 2.

KEYNOTES ⟨00⟩:

1. THE POLE TOP SHALL BE COVERED WITH A PERMANENTLY ATTACHED 3/16" STEEL PLATE POLE CAP. THE POLE SHALL BE DELIVERED WITH THE POLE CAP ATTACHED IN PLACE. REFER TO DETAIL "C" ON DRAWINGS TM-SD.
2. BOLTED FLANGED JOINTS SHALL BE DESIGNED TO WITHSTAND LOADS SPECIFIED IN THIS DRAWING AND IN THE SPECIFICATIONS. REFER TO DETAIL "E2" ON DRAWINGS TM-SD FOR DIMENSIONS.
3. NAMEPLATE SHALL BE LOCATED AS SHOWN. REFER TO DETAIL "A" ON DRAWINGS TM-SD FOR REQUIRED INFORMATION.
4. FOR 2-HOLE GROUNDING PLATE DETAIL, REFER TO DETAIL "B1" ON DRAWINGS TM-SD.
   (2) PADS, POLE TOP, 0°-180° AXIS.
   (2) PADS, EACH POLE JOINT.
   (2) PADS, POLE BOTTOM, 0-180° AXIS.
5. FOR STRAIN VANG DETAILING, REFER TO DETAIL "G1" ON DRAWINGS TM-SD.
6. FOR ALL MULTISIDED SECTIONS, A FLAT SIDE SHOULD BE ON THE 0-180° AXIS.
7. STRUCTURES SHALL BE DESIGNED TO ELIMINATE WATER AND REFUSE TRAPS.
8. BURY DEPTH DIMENSIONS "D" FROM POLE BUTT TO DESIGNATED GROUND LINE IS GIVEN AS FOLLOWS, (DIMENSION "L" IS THE LENGTH OF THE POLE):
   D = 4.0' + 0.10 (L)
9. GROUND COLLARS SHALL HAVE A MINIMUM THICKNESS OF 3/16" AND A LENGTH OF 4'. LOCATE COLLARS ON THE CENTERLINE OF THE DESIGNATED GROUND LINE.
10. WELD A MINIMUM 1/2" BEARING PLATE TO THE BASE. THE DIAMETER OF THE PLATE SHALL BE A MINIMUM OF THE POLE SHAFT BASE DIAMETER + 6". THE PLATE AND WELDED CONNECTION SHALL BE DESIGNED TO WITHSTAND AN UPLIFT OF 12 KIPS.
11. A "CORROCOTE" COATING SHALL BE APPLIED ON THE EXPOSED SURFACE FROM THE BUTT OF THE POLE TO 2" BELOW THE TOP OF THE GROUND COLLAR. THE "CORROCOTE" COATING SHALL BE FEATHERED AT THE TOP EDGE TO AVOID WATER ACCUMULATION.
12. PROVIDE STEP BOLT CLIPS WELDED TO THE SHAFT AT 1'-6" STAGGERED SPACING FROM 8'-0" ABOVE DESIGNATED GROUND LINE TO 2'-0" BELOW THE POLE TOP. STEP BOLTS SHALL BE LOCATED TO AVOID INTERFERENCE WITH OTHER ATTACHMENTS. REFER TO DETAILS "F1" ON DRAWINGS TM-SD FOR STEP BOLT DIMENSIONS AND ORIENTATION. DO NOT INCLUDE STEP BOLTS OR NUTS
13. VERTICAL POLE LOADING IS THE SUM OF THE FOLLOWING: VERTICAL LOADS SHOWN AND LOADS DEVELOPED IN GUYS WITH 2(V):1(H) LEADS TO SUPPORT TENSION LOADS SHOWN. LOADS SHOWN ARE ULTIMATE LOADS.
14. MOUNTING PLATE FOR THE POST INSULATOR SHALL BE IN THE BISECT OF THE VANGS. REFER TO DETAIL "K" ON DRAWINGS TM-SD.
15. L1 AND L2 LOADS APPLIED IN DIRECTION OF "AHEAD SPAN" OPPOSING DOWN GUYS.

DATE	REVISION	#

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DWN. BY: NLF
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/07/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: STEEL POLE SPECIFICATIONS THS-15D-2 (1 of 2)
SHT NO: MMR.T06.06

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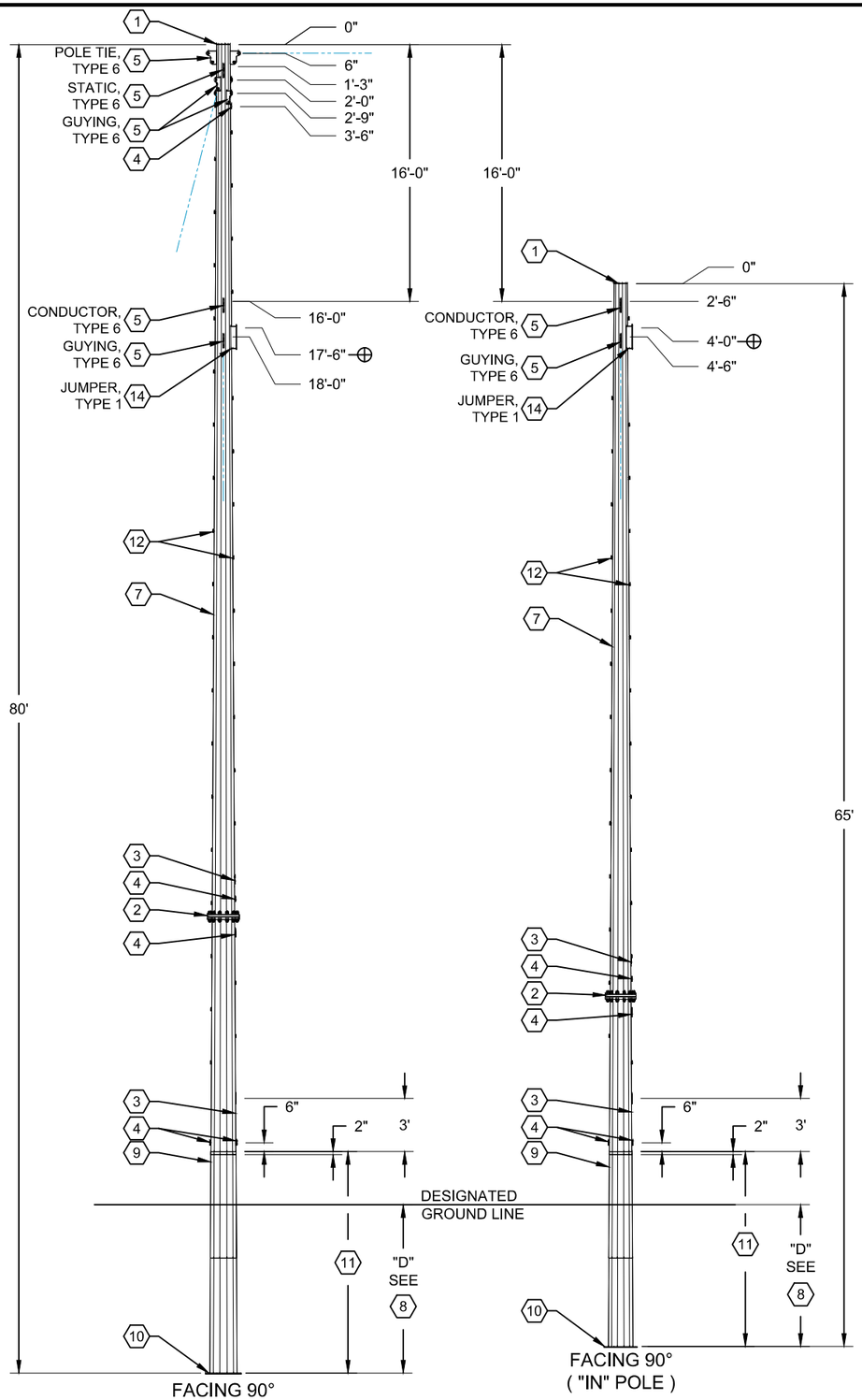


3 ELEVATION (THS-15D-2)
SCALE: NONE

	LOAD CASE	RULE 250B GRADE B NA-	RULE 250C GRADE B NA-	RULE 250D GRADE B NA-	60 DEGREES NA-	RULE 250B GRADE B NA- FC AH	RULE 250C GRADE B NA- FC AH	RULE 250D GRADE B NA- FC AH
	WEATHER DESCRIPTION	4 PSF, 0.5" ICE @ 0°F	25.6 PSF, 0" ICE @ 60°F	4.096 PSF, 1" ICE @ 15°F	0 PSF, 0" ICE @ 60°F	4 PSF, 0.5" ICE @ 0°F	25.6 PSF, 0" ICE @ 60°F	4.096 PSF, 1" ICE @ 15°F
S1	T1	-1289	-1090	-979	-57	-540	-466	-410
	L1	-814	-597	-193	-512	-10367	-5517	-8807
	V1	631	-99	1231	128	-184	-346	-19
C1	T2	-1324	-1643	-873	4	-583	-872	-374
	L2	-8724	-5101	-6414	-3597	-22686	-12816	-18637
	V2	684	-168	1355	191	-568	-705	-352
	WIND LOAD ON POLE (PSF)	4	25.6	4.096	0	4	25.6	4.096
	DEFLECTION LIMIT (% OF POLE HEIGHT)	10	No Limit	No Limit	1.5	10	No Limit	No Limit

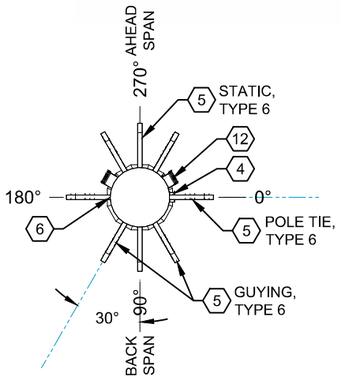
OVERLOAD CAPACITY FACTORS							
WIND	2.5	1.1	1.1	1	2.5	1.1	1.1
TENSION	1.65	1.1	1.1	1	1.65	1.1	1.1
VERTICAL	1.5	1.1	1.1	1	1.5	1.1	1.1

CONDUCTOR IDENTIFICATION		
	S1	C1
NAME	DNO-12519	Grackle ACSR
SIZE (AWG OR KCMIL)	---	1192.5
STRANDING	48 Fiber	54/19
DIAMETER	0.654	1.338
BARE WT. (LBS/FT)	0.423	1.533
WIRES IN BUNDLE	1	1
WEATHER CASE	NESC 250B HEAVY	NESC 250B HEAVY
CONDITION	INITIAL RS	INITIAL RS
TENSION(S) (LBS)	5,600	11,800

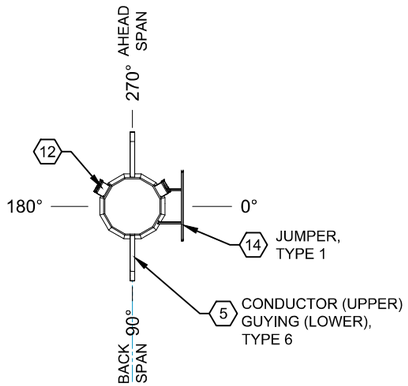
STRUCTURE CHARACTERISTICS	
STRUCTURE	35
LENGTH (L)	80, 65, 80
EMBED (D)	12', 10.5', 12'
LINE ANGLE (Θ)	0°

GENERAL NOTE:

A. SEE SHEET 1 OF 2 FOR KEYNOTES (00).

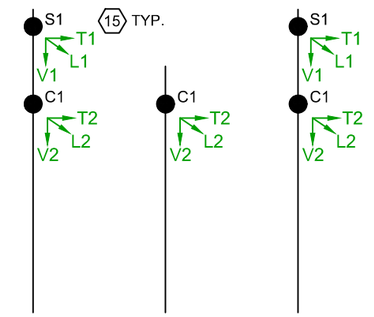


AT STATIC CONNECTIONS (FEATURING "OUT" POLE)



AT PHASE CONNECTIONS

4 ATTACHMENT ORIENTATION
SCALE: NONE



5 LOADING TREE

DATE	REVISION	#

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY: MO# E-2004004242-D
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DWN. BY: NLF
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/07/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: STEEL POLE SPECIFICATIONS THS-15D-2 (2 of 2)
SHT NO: MMR.T06.07

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XXXXXXXXXX
STRUCTURE NUMBER

XX/XXXX
MONTH & YEAR

XXX' XXXX
LENGTH & CLASS OF POLE

XXX,XXX LBS
ULTIMATE MOMENT
CAPACITY OF THE POLE.

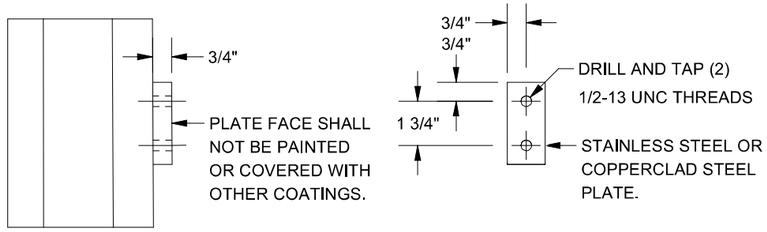
XXX,XXX LBS
POLE WEIGHT

NAMEPLATES SHALL BE LOCATED ON EACH POLE SHAFT AS SHOWN. EACH SHAFT SHALL HAVE DUPLICATE NAMEPLATES MOUNTED ON OPPOSITE FACES. NAMEPLATES SHALL CONTAIN THE FOLLOWING MINIMUM INFORMATION:

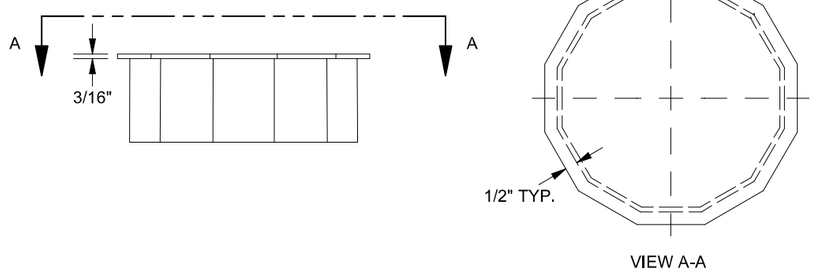
- STRUCTURE NUMBER
- DRAWING NUMBER
- MONTH AND YEAR OF FABRICATION
- LENGTH & CLASS OF POLE
- ULTIMATE MOMENT CAPACITY OF POLE
- POLE WEIGHT

DAVIT ARMS SHALL HAVE NAMEPLATES IDENTIFYING THEIR MANUFACTURER PART NUMBER OR IDENTIFICATION ON OPPOSITE FACES.

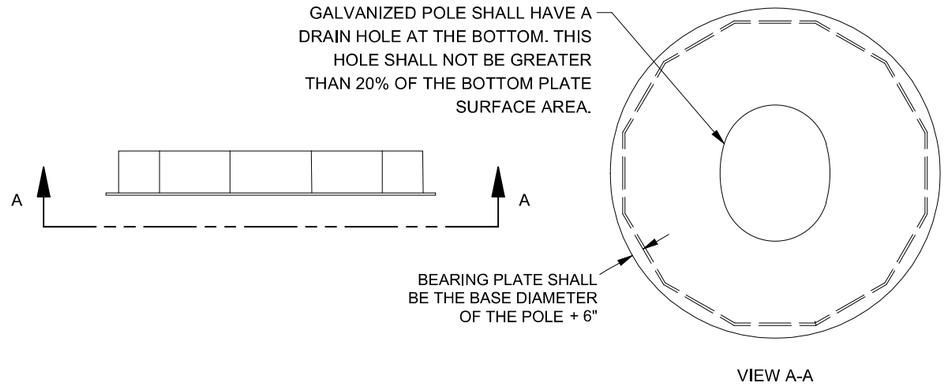
A NAMEPLATE
SCALE NONE:



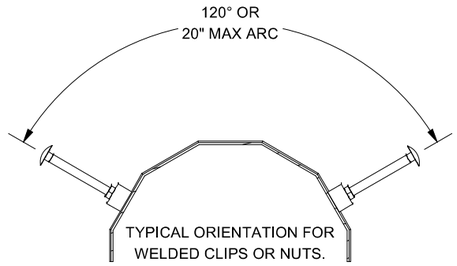
B1 2-HOLE GROUNDING PLATE
SCALE: NONE

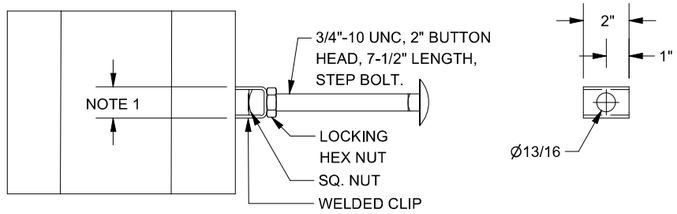


C POLE CAP
SCALE: NONE



D BEARING PLATE
SCALE: NONE

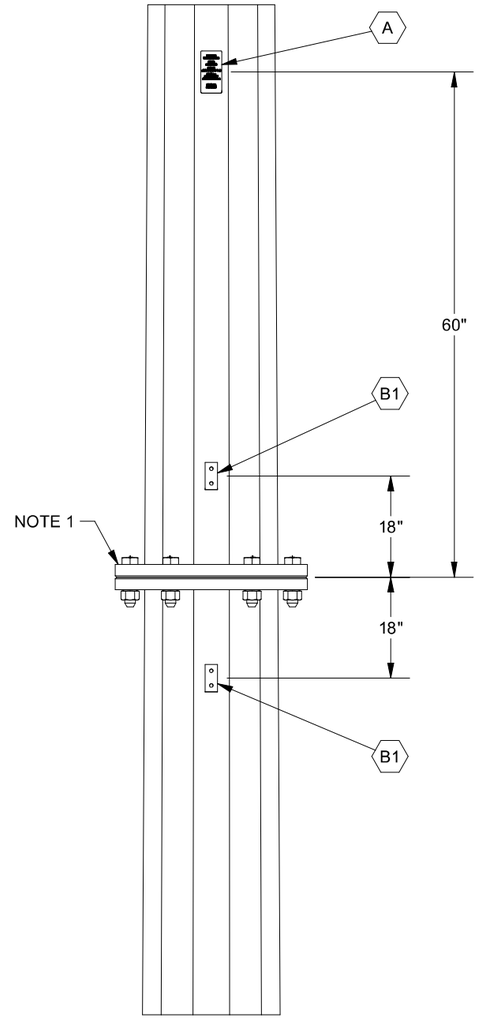




NOTE:

1. STEP BOLT CLIP SHALL BE DESIGNED AND FABRICATED TO PREVENT SQUARE NUT ROTATION WHILE STEP BOLT IS INSTALLED.
2. STEP BOLTS SHALL NOT BE SUPPLIED FOR ALL STEEL POLES. REFER TO GENERAL SPECIFICATIONS FOR ANY ADDITIONAL INFORMATION.

F1 STANDARD STEP BOLT WITH WELDED CLIP
SCALE: NONE



NOTE:

1. MANUFACTURER TO DESIGN.

E2 FLANGE JOINT
SCALE: NONE

DATE	REVISION	#

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LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: STEEL POLE SPECIFICATIONS TM-SD (1 of 2)
SHT NO: MMR.T06.08

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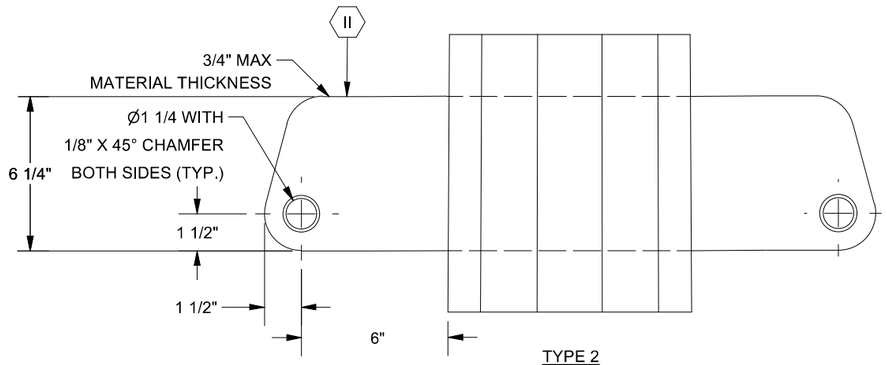
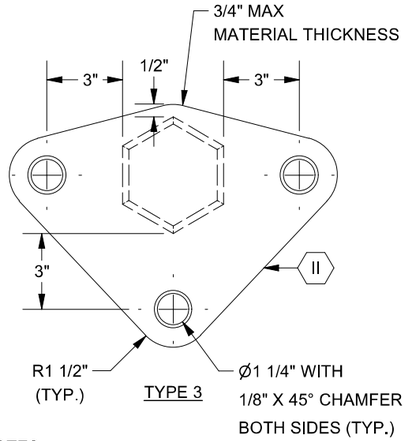


TYPE 2



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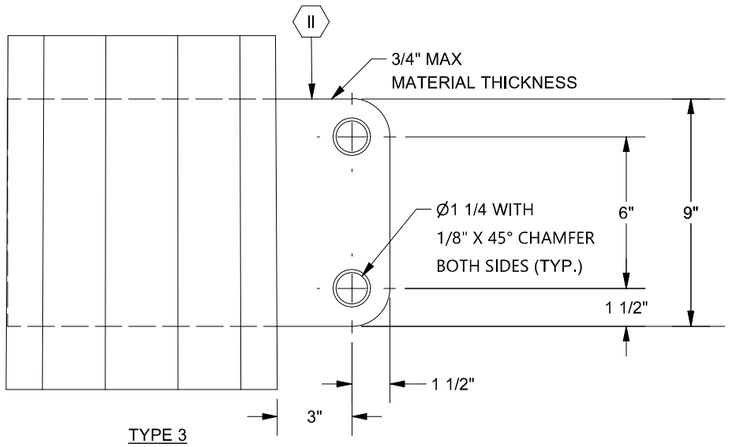

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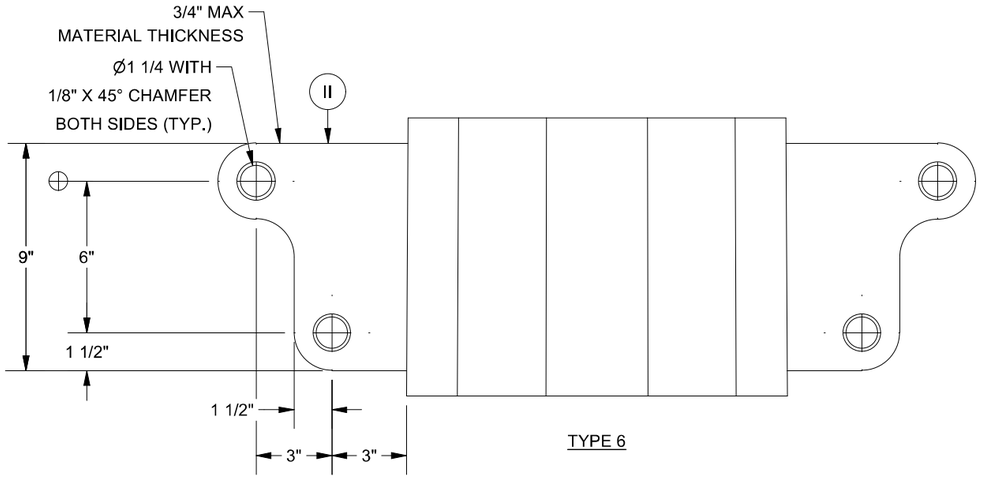


TYPE 6

NOTE:

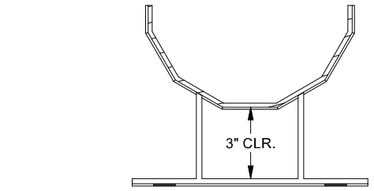
1. VANG AND HOLE REQUIRED TO HOLD 40,000 # (ULTIMATE) IN ANY DIRECTION (IN PLANE) PER ATTACHMENT.

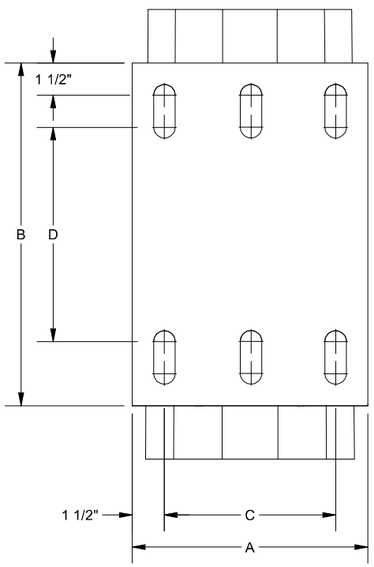
G1 STRAIN VANG
FOR CONDUCTOR, OHGW, & GUYING
SCALE: NONE

NOTES:

1. END AND HOLE REQUIRED TO HOLD 25,000 # (ULTIMATE) IN ANY DIRECTION (IN PLANE) PER END PLATE ONLY.
2. THE STRENGTH AND RISE OF THE ARM SHALL BE DESIGNED FOR THE LOADS SHOWN ON THE POLE DRAWING.

J END PLATES
FOR CONDUCTOR & OHGW
SCALE: NONE



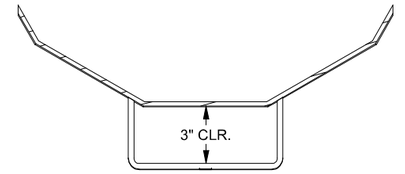


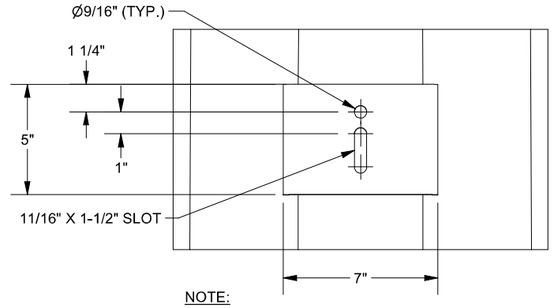
INSULATOR MOUNTING PLATE DIMENSIONS					
REF.	A	B	C	D	SLOT
TYPE 1	11"	16"	8"	10"	1" X 1 1/2"
TYPE 2	12"	18"	9"	13"	1" X 1/2"

NOTES:

1. POST INSULATOR MOUNTING PLATE REQUIRED TO HOLD 1,500 #.
2. FOR LARGE ANGLE STRUCTURES SHALL BE IN BISECT OF VANGS UNLESS NOTED OTHERWISE. SEE POLE DRAWING FOR STRUTURE LINE ANGLE.

K POST INSULATOR
MOUNTING PLATE
SCALE: NONE





NOTE:

1. AUXILIARY MOUNTING BRACKET REQUIRED TO HOLD 500 #.

N AUXILIARY
MOUNTING BRACKET
SCALE: NONE

DATE	REVISION	#

TOTH & ASSOCIATES
1550 E REPUBLIC RD
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www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D
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DWN. BY:	NLF
CK'D. BY:	JAS
APP'D. BY:	JPS
DATE:	05/06/2025
PROJECT:	HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION:	GREENE COUNTY, MO
CLIENT:	MODOT JEFFERSON CITY, MO
TITLE:	STEEL POLE SPECIFICATIONS TM-SD (2 of 2)
SHT NO:	MMR.T06.09

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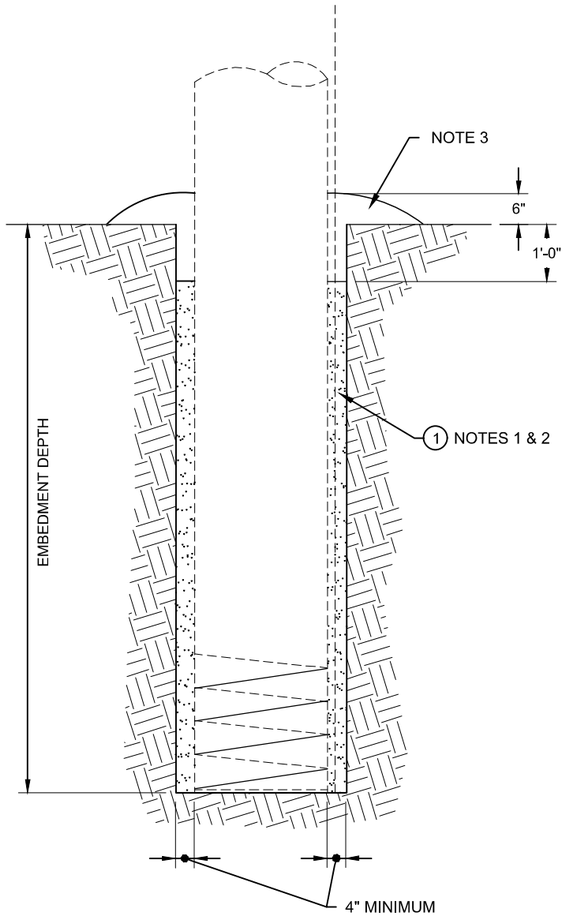
LIST OF MATERIALS

REF.	QTY	DESCRIPTION	MANUFACTURER	PART NO.	BID ITEM NO.
1	A.R.	IMPORTED BACKFILL			9109907



GRADUATION FOR IMPORTED GRANULAR BACKFILL

SIZE OF GRAVEL (OR) CRUSHED STONE	SIZE OF MESH (IN.)
100% BY WEIGHT TO PASS 1" SCREEN	1.00
60% - 90% BY WEIGHT TO PASS 1/2" SCREEN	0.5
40% - 60% BY WEIGHT TO PASS NO. 4 SCREEN	0.187
25% - 50% BY WEIGHT TO PASS NO. 8 SCREEN	0.0937
20% - 40% BY WEIGHT TO PASS NO. 16 SCREEN	0.0469
15% - 30% BY WEIGHT TO PASS NO. 40 SCREEN	0.0165

NOTES:

1. GRADATION FOR IMPORTED BACKFILL IS SHOWN IN THE TABLE. THE AGGREGATE SHALL BE WELL MIXED IN A STOCK PILE, AND PNEUMATICALLY PLACED AND TAMPED IN 6 INCH LIFTS.
2. THE SPECIFICATION FOR AGGREGATE GIVEN IN THE TABLE IS MINIMUM. IN AREAS WHERE SMALLER FINES ARE AVAILABLE AT COMPARABLE COST, IT IS RECOMMENDED THAT THE ENGINEER SPECIFY SMALLER FINES.
3. WELL TAMPED NATIVE BACKFILL SHOULD BE PLACED AROUND THE POLE AS SHOWN.
4. ALL BURIED METALS MUST BE CONSISTENT WITH GOOD CORROSION PREVENTION PRACTICES. SIMILAR OR COMPATIBLE METALS SHOULD BE USED FOR BEARING PLATES, POLE GROUND WIRE AND GROUND CONNECTORS.

DATE	REVISION	#

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www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D

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DWN. BY: NLF
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/08/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO

TITLE: TM-101 POLE FOUNDATION BACKFILL
SHT NO: MMR.T07.01

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ABBREVIATION LEGEND:

AB	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
AWS	AMERICAN WELDING SOCIETY
BRG	BEARING
CIP	CAST IN PLACE
CL	CENTER LINE
CONC	CONCRETE
CONT	CONTINUOUS
DIA	DIAMETER
EL	ELEVATION
EQ	EQUAL
EW	EACH WAY
FDN	FOUNDATION
FTG	FOOTING
FT	FEET
GA	GAGE
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
IN	INCH
INFO	INFORMATION
KSI	KIPS PER SQUARE INCH
L	LENGTH
LB	POUNDS
LONG	LONGITUDINAL
MAX	MAXIMUM
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MTL	METAL
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DIAMETER
P/C	PRECAST
PCF	POUNDS PER CUBIC FOOT
PLF	POUNDS PER LINEAR FOOT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
RE	REFER TO
REINF	REINFORCING
SIM	SIMILAR
T&B	TOP AND BOTTOM
TO	TOP OF
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE

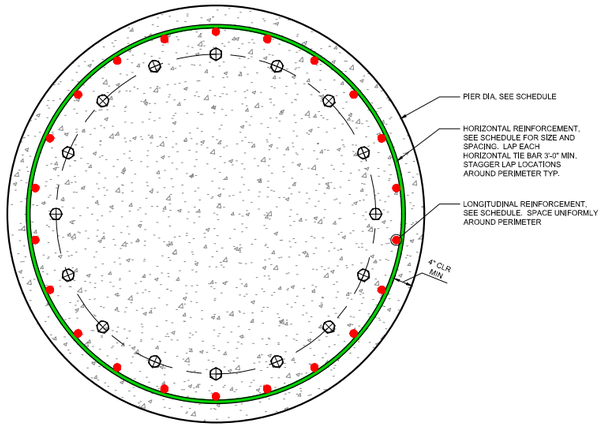
NOTES:

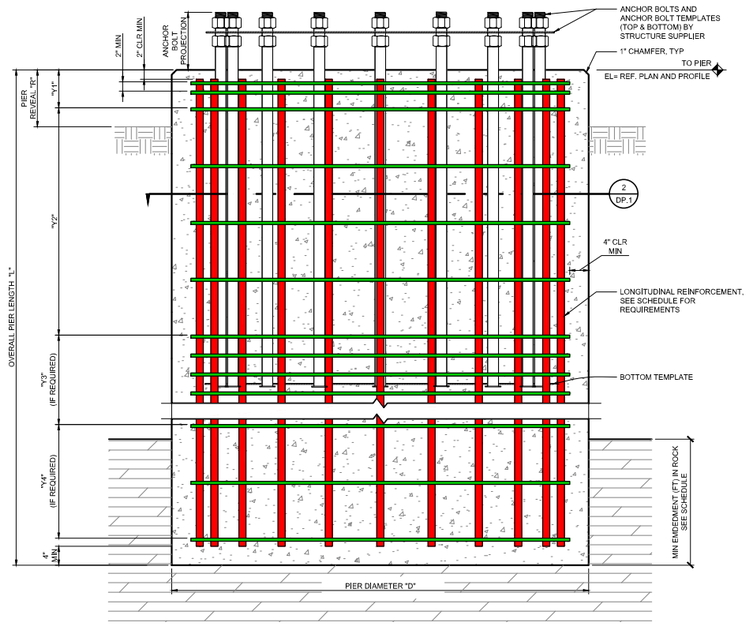
1. ALL FOUNDATIONS SHALL UTILIZE A 4,500 PSI CONCRETE MIXTURE.
2. ALL REINFORCEMENT SHALL BE ASTM A615 GRADE 60 STEEL BARS.
3. A MINIMUM OF 4" OF CLEAR SPACE SHALL BE MAINTAINED FROM OUTERMOST REINFORCING STEEL.
4. SHEER REINFORCEMENT SHALL BE PLACED AT 2" BELOW THE TOP OF THE FOUNDATION AND THEN 4" BELOW THAT. REGULAR SHEAR REINFORCEMENT SHALL BE SPACED AT A MAXIMUM OF 12" BELOW THE TOP 2 TIES.
5. REFER TO VENDOR DRAWINGS FOR INFORMATION ON ANCHOR BOLT CAGE ASSEMBLIES. THE CONTRACTOR IS RESPONSIBLE FOR CROSS-CHECKING ANCHOR BOLT DIMENSIONS WITH VENDOR DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THAT THE CORRECT ANCHOR BOLT CAGE IS BEING INSTALLED IN THE CORRECT HOLE. CONTACT THE ENGINEER OR OWNER REPRESENTATIVE IF THERE IS ANY UNCERTAINTY.
6. OFFSETS, REFERENCE/ALIGNMENT POINTS (R.P.'S) AND ELEVATION BENCH MARKS (B.M.'S) ARE FIELD STAKED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALIGNMENT OF THE ANCHOR BOLT CAGE. (ORIENTATION MARK, V-NOTCH) PRIOR TO CONCRETE POURING. CONTACT THE ENGINEER OR OWNERS REPRESENTATIVE IF THERE IS ANY UNCERTAINTY AND/OR THE STAKES ARE DISTRIBUTED OR MISSING.
7. FOUNDATION INSTALLATION SHALL BE IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS.
8. IF SOIL CONDITIONS OTHER THAN ASSUMED FOR SITES ARE ENCOUNTERED, CONTACT THE ENGINEER BEFORE PROCEEDING WITH THE EXCAVATION.
9. THE PRESENCE OF GROUNDWATER AND/OR GRANULAR SOILS IN THE EXPLORATORY BORINGS INDICATES CASING AND/OR DEWATERING EQUIPMENT WILL BE REQUIRED. IN NO CASE SHALL CONCRETE BE PLACED IN MORE THAN 3 INCHES OF WATER UNLESS THE TREMIE METHOD IS USED.
10. THE CONTRACTOR SHALL REVIEW AND BE FAMILIAR WITH THE GEOTECHNICAL ENGINEERING REPORT PREPARED FOR THE PROJECT SITE (TBD).
11. PROVIDE TEMPORARY SHORING AND BRACING OF ALL STRUCTURAL AND MISCELLANEOUS ELEMENTS UNTIL CONCRETE HAS OBTAINED 80% OF DESIGN STRENGTH.
12. SHOP DRAWINGS SHALL BE SUBMITTED INDICATING COMPLETE INFORMATION REQUIRED FOR CONSTRUCTION OF THE REINFORCED CONCRETE ELEMENTS. SHOP DRAWINGS SHALL INCLUDE LAYOUT AND DIMENSIONS OF REINFORCING INCLUDING ANY OPENINGS, CONVENTIONAL REINFORCEMENT DETAILS, CONNECTION DETAILS, PROCEDURES AND SEQUENCES ETC.
13. WHEN PLACING CONCRETE IN HOT WEATHER, REFER TO ACI 305R. WHEN PLACING CONCRETE IN COLD WEATHER, REFER TO ACI 306.1. SEE PROJECT SPECIFICATIONS FOR ADDITIONAL INFORMATION.
14. TOP OF PIER SHALL BE DOMED A MINIMUM OF 1" TO FACILITATE PROPER WATER DRAINAGE.
15. EMBEDMENT DEPTH/REVEAL SHALL BE MEASURED FROM CENTER OF PIER.
16. MINIMUM EMBEDMENT DEPTH SHALL BE PIER LENGTH SHOWN ON PIER SCHEDULE MINUS 1'-0".
17. CONTRACTOR SHALL VERIFY TOP OF CONCRETE ELEVATION WITH ENGINEER PRIOR TO CONSTRUCTION.
18. PIERS SHALL BE LOCATED AND ORIENTED AS DIRECTED BY THE OWNER.
19. SOME PIERS SUBJECT TO AGGRESSIVE SOIL CONDITIONS. REFERENCE CORROSIVITY TESTING TABLE IN GEOTECH REPORT FOR RESULTS. ADD CORROSION INHIBITING ADMIXTURE AS REQUIRED TO THE MIX DESIGN.

FOUNDATION SCHEDULE

STRUCTURE INFORMATION					GROUND LINE REACTIONS			SURVEY ELEVATION		PIER DIMENSIONS (BID ITEM NO. 9109907)						ANCHOR BOLT DIMENSIONS					LONGITUDINAL REINFORCING (BID ITEM NO. 9109903)		HORIZONTAL SHEAR TIE REINFORCING (BID ITEM NO. 9109903)															
																							"Y1"			"Y2"			"Y3"			"Y4"								
STR NO.	VENDOR DRAWING NO.	POLE HEIGHT	BORE LOG	ALLOWABLE END BEARING (PSF)	SHEAR (KIPS)	MOMENT (FT-KIPS)	VERTICAL (KIPS)	GROUND ELEVATION (FT)	TOP OF CONCRETE ELEVATION (FT)	QTY	PIER DIAMETER (FT) "D"	OVERALL LENGTH (FT) "L"	MINIMUM EMBEDMENT DEPTH IN ROCK (FT)	PIER REVEAL (FT) "R"	NEAT CONCRETE VOLUME (CU-YD)	VENDOR DRAWING NO.	LENGTH (IN)	QTY & BAR SIZE	BOLT CIRCLE DIA. (IN) "BC"	PROJECTION (IN)	LENGTH (FT)	QTY & BAR SIZE	LENGTH (IN)	QTY & BAR SIZE	O.C. SPACING (IN)	LENGTH (FT)	QTY & BAR SIZE	O.C. SPACING (IN)	LENGTH (IN)	QTY & BAR SIZE	O.C. SPACING (IN)	LENGTH (FT)	QTY & BAR SIZE	O.C. SPACING (IN)	LENGTH (FT)	QTY & BAR SIZE	O.C. SPACING (IN)
STR 32 L	TBD	60	B-01	20000	33	1585	30	1296.9	1297.9	1	7.0	22	13.5	1.0	31.36	TBD	TBD	TBD #18J	47 1/8	TBD	21.5	24 #14	8	3 #6	REF ELEV.	14	28 #6	6	7	7 #8	12						
STR 32 C	TBD	45	B-01	20000	23	973	30	1296.9	1297.9	1	7.0	22	13.5	1.0	31.36	TBD	TBD	TBD #18J	40 1/8	TBD	21.5	24 #14	8	3 #6	REF ELEV.	14	28 #6	6	7	7 #8	12						
STR 32 R	TBD	60	B-01	20000	33	1585	30	1296.9	1297.9	1	7.0	22	13.5	1.0	31.36	TBD	TBD	TBD #18J	47 1/8	TBD	21.5	24 #14	8	3 #6	REF ELEV.	14	28 #6	6	7	7 #8	12						

* THIS DRWAING SHALL BE USED FOR BID PURPOSES ONLY. FINAL DESIGN WILL BE DEPENDENT ON ANCHOR BOLT DIMENSIONS TO BE PROVIDED BY THE STEEL MANUFACTURER.





GENERAL NOTES:

1. CONTRACTOR SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF WORK, INCLUDING SAFETY OF PROPERTY AND PERSONS. THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT JUST DURING NORMAL WORKING HOURS.
2. THE CONTRACT DOCUMENTS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INCLUDE CONSTRUCTION MEANS AND METHODS. CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURES DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT ARE NOT LIMITED TO BRACING, SHORING FOR CONSTRUCTION LOADS, TEMPORARY STRUCTURES, AND PARTIALLY COMPLETED WORK. OBSERVATION VISITS BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE OBSERVATION OF THE ABOVE ITEMS.
3. THE STRUCTURE IS STABLE ONLY IN ITS COMPLETED FORM. TEMPORARY SUPPORT OF THE STRUCTURE DURING CONSTRUCTION SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MEANS AND METHODS OF CONSTRUCTION.
5. CONTRACT DOCUMENTS SHALL NOT BE REPRODUCED FOR USE AS SHOP DRAWINGS.
6. TOTH AND ASSOCIATES, INC. SHALL NOT BE RESPONSIBLE IN ANY WAY FOR CONSTRUCTION MEANS METHOD TECHNIQUES, PROCEDURES, OR SEQUENCES OR FOR SAFETY PROGRAMS AND PRECAUTIONS. THESE ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

DATE	REVISION	#

TOTH & ASSOCIATES
1550 E REPUBLIC RD
SPRINGFIELD, MO 65804
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CERTIFICATE OF AUTHORITY: MO# E-2004004242-D

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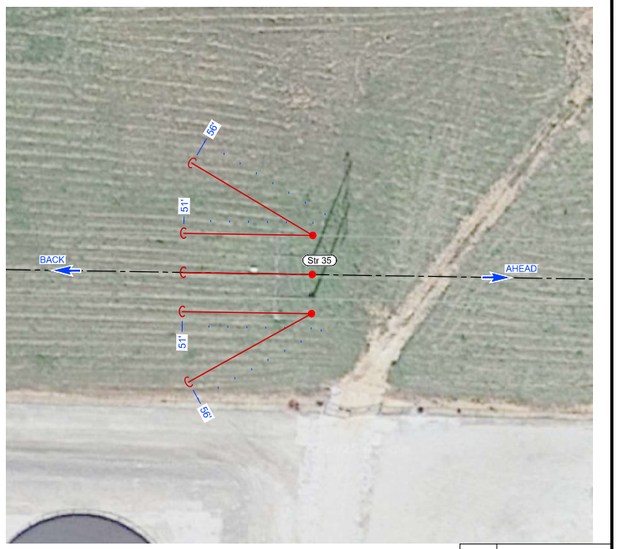
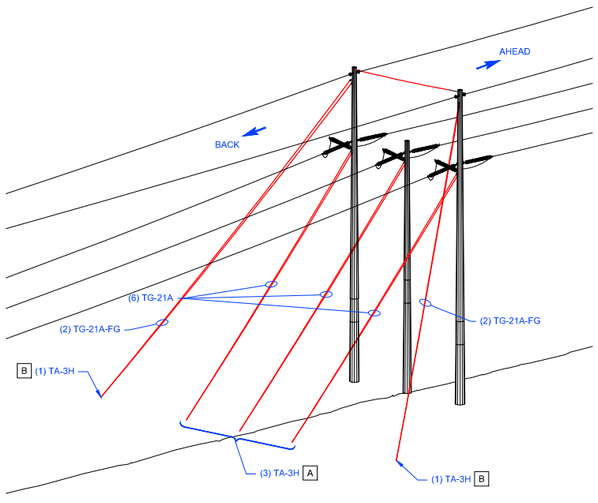
DWN. BY: NLF
CKD. BY: JAS
APPD. BY: KDH
DATE: 05/07/2025

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: TM-DP
DRILLED PIER SCHEDULE & DETAIL
SHEET NO. MMR.T07.02

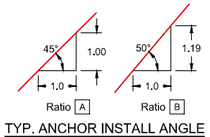


STRUCTURE # 35

QTY.	UNIT
6	TG-21A
4	TG-21A-FG
5	TA-3H



ISOMETRIC VIEW
SCALE: NONE



TYP. ANCHOR INSTALL ANGLE
SCALE: NONE

NOTES:

1. LEAD LENGTH SHALL NOT BE ADJUSTED UNLESS APPROVED BY THE OWNER OR ENGINEER.
2. FINAL ANCHOR LOCATIONS SHALL NOT BE SPACED LESS THAN 5,0 FEET APART.
3. MAINTAIN MINIMUM OF 4 FEET BETWEEN GUY WIRE AND 161kV CONDUCTOR.

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H. SCALE: 1" = 30'

DATE	REVISION	#

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DWN. BY: SRC
CKD. BY: JAS
APPD. BY: JPS
DATE: 05/08/2025
SCALE: NONE
Graphic scale may change due to drawing reproduction

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: GUYING GUIDES STRUCTURE 35
SHT NO.: MMR.T07.03

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CONDUCTOR:	7/16" EHS STEEL (BID ITEM NO. 9109903)
STR RANGE:	(32 - 31)
RULING SPAN:	587 FT
DESIGN TENSION:	4500 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
580	7.57	7.84	8.12	8.39	8.67	8.95	9.23	9.51	9.79	10.07	10.35
590	7.83	8.12	8.40	8.69	8.98	9.26	9.55	9.84	10.14	10.42	10.71
SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
580	8.23	8.38	8.52	8.67	8.81	8.95	9.08	9.22	9.36	9.49	9.62
590	8.37	8.52	8.67	8.81	8.96	9.10	9.24	9.38	9.52	9.65	9.79
	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	2217	2140	2067	1999	1935	1875	1819	1765	1714	1667	1622

CONDUCTOR:	7/16" EHS STEEL (BID ITEM NO. 9109903)
STR RANGE:	(35 - 32)
RULING SPAN:	682 FT
DESIGN TENSION:	4750 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
470	5.23	5.38	5.53	5.69	5.84	5.98	6.14	6.29	6.43	6.58	6.73
480	5.45	5.62	5.77	5.93	6.09	6.24	6.40	6.56	6.71	6.86	7.02
490	5.68	5.85	6.02	6.18	6.35	6.51	6.67	6.83	6.99	7.15	7.31
500	5.92	6.09	6.26	6.44	6.61	6.77	6.94	7.11	7.28	7.45	7.62
510	6.16	6.34	6.52	6.70	6.87	7.05	7.22	7.40	7.58	7.75	7.92
520	6.40	6.59	6.77	6.96	7.15	7.33	7.51	7.70	7.88	8.05	8.24
530	6.65	6.85	7.04	7.23	7.42	7.61	7.80	7.99	8.18	8.37	8.56
540	6.90	7.11	7.31	7.51	7.71	7.90	8.10	8.30	8.49	8.69	8.88
550	7.16	7.37	7.58	7.79	8.00	8.20	8.40	8.61	8.81	9.01	9.22
560	7.42	7.64	7.86	8.07	8.29	8.50	8.71	8.93	9.13	9.34	9.55
570	7.69	7.92	8.14	8.36	8.59	8.80	9.02	9.25	9.46	9.68	9.90
580	7.96	8.20	8.43	8.66	8.89	9.12	9.34	9.57	9.80	10.02	10.25
590	8.24	8.48	8.72	8.96	9.20	9.43	9.67	9.91	10.14	10.37	10.61
600	8.52	8.78	9.02	9.27	9.52	9.75	10.00	10.25	10.49	10.73	10.97
610	8.81	9.07	9.32	9.58	9.84	10.08	10.34	10.59	10.84	11.09	11.34
620	9.10	9.37	9.63	9.90	10.16	10.42	10.68	10.94	11.20	11.45	11.71
630	9.40	9.68	9.94	10.22	10.49	10.76	11.03	11.30	11.56	11.82	12.09
640	9.70	9.98	10.26	10.55	10.83	11.10	11.38	11.66	11.93	12.20	12.48
650	10.00	10.30	10.59	10.88	11.17	11.45	11.74	12.03	12.31	12.59	12.87
660	10.31	10.62	10.91	11.22	11.51	11.80	12.10	12.40	12.69	12.98	13.27
670	10.63	10.94	11.25	11.56	11.87	12.16	12.47	12.78	13.08	13.38	13.68
680	10.95	11.27	11.59	11.91	12.22	12.53	12.85	13.16	13.47	13.78	14.09
690	11.27	11.61	11.93	12.26	12.59	12.90	13.23	13.55	13.87	14.19	14.51
700	11.60	11.95	12.28	12.62	12.95	13.28	13.61	13.95	14.28	14.60	14.93
710	11.94	12.29	12.63	12.98	13.33	13.66	14.01	14.35	14.69	15.02	15.36
720	12.27	12.64	12.99	13.35	13.70	14.05	14.40	14.76	15.10	15.45	15.80
730	12.62	12.99	13.35	13.72	14.09	14.44	14.81	15.17	15.53	15.88	16.24
740	12.97	13.35	13.72	14.10	14.48	14.84	15.21	15.59	15.95	16.32	16.69
750	13.32	13.71	14.10	14.48	14.87	15.25	15.63	16.01	16.39	16.76	17.14
760	13.68	14.08	14.47	14.87	15.27	15.65	16.05	16.44	16.83	17.21	17.60
770	14.04	14.46	14.86	15.27	15.68	16.07	16.47	16.88	17.28	17.67	18.07
780	14.41	14.83	15.25	15.67	16.09	16.49	16.90	17.32	17.73	18.13	18.54
790	14.78	15.22	15.64	16.07	16.50	16.92	17.34	17.77	18.18	18.60	19.02
800	15.16	15.60	16.04	16.48	16.92	17.35	17.78	18.22	18.65	19.07	19.51
810	15.54	16.00	16.44	16.90	17.35	17.78	18.23	18.68	19.12	19.55	20.00
SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
470	6.84	6.94	7.04	7.13	7.23	7.32	7.41	7.50	7.59	7.67	7.76
480	6.98	7.09	7.19	7.28	7.38	7.47	7.57	7.66	7.75	7.83	7.92
490	7.13	7.23	7.34	7.44	7.53	7.63	7.72	7.82	7.91	8.00	8.09
500	7.28	7.38	7.48	7.59	7.69	7.78	7.88	7.98	8.07	8.16	8.25
510	7.42	7.53	7.63	7.74	7.84	7.94	8.04	8.14	8.23	8.32	8.42
520	7.57	7.68	7.78	7.89	8.00	8.10	8.20	8.30	8.39	8.49	8.58
530	7.71	7.83	7.93	8.04	8.15	8.25	8.35	8.46	8.55	8.65	8.75
540	7.86	7.97	8.08	8.19	8.30	8.41	8.51	8.62	8.72	8.81	8.91
550	8.00	8.12	8.23	8.33	8.46	8.56	8.67	8.78	8.88	8.98	9.08
560	8.15	8.27	8.38	8.50	8.61	8.72	8.83	8.93	9.04	9.14	9.24
570	8.29	8.42	8.53	8.65	8.76	8.87	8.98	9.09	9.20	9.30	9.41
580	8.44	8.56	8.68	8.80	8.92	9.03	9.14	9.25	9.36	9.47	9.57
590	8.59	8.71	8.83	8.95	9.07	9.19	9.30	9.41	9.52	9.63	9.74
600	8.73	8.86	8.98	9.11	9.23	9.34	9.46	9.57	9.68	9.79	9.90
610	8.88	9.01	9.13	9.26	9.38	9.50	9.62	9.73	9.85	9.96	10.07
620	9.02	9.15	9.28	9.41	9.53	9.65	9.77	9.89	10.01	10.12	10.23
630	9.17	9.30	9.43	9.56	9.69	9.81	9.93	10.05	10.17	10.28	10.40
640	9.31	9.45	9.58	9.71	9.84	9.96	10.09	10.21	10.33	10.45	10.57
650	9.46	9.60	9.73	9.86	9.99	10.12	10.25	10.37	10.49	10.61	10.73
660	9.60	9.75	9.88	10.02	10.15	10.28	10.40	10.53	10.65	10.77	10.90
670	9.75	9.89	10.03	10.17	10.30	10.43	10.56	10.69	10.82	10.94	11.06
680	9.90	10.04	10.18	10.32	10.46	10.59	10.72	10.85	10.98	11.10	11.23
690	10.04	10.19	10.33	10.47	10.61	10.74	10.88	11.01	11.14	11.26	11.39
700	10.19	10.34	10.48	10.62	10.76	10.90	11.03	11.17	11.30	11.43	11.56
710	10.33	10.48	10.63	10.77	10.92	11.05	11.19	11.33	11.46	11.59	11.72
720	10.48	10.63	10.78	10.93	11.07	11.21	11.35	11.49	11.62	11.75	11.89
730	10.62	10.78	10.93	11.08	11.23	11.37	11.51	11.65	11.78	11.92	12.05
740	10.77	10.93	11.08	11.23	11.38	11.52	11.67	11.81	11.95	12.08	12.22
750	10.91	11.08	11.23	11.38	11.53	11.68	11.82	11.97	12.11	12.24	12.38
760	11.06	11.22	11.38	11.53	11.69	11.83	11.98	12.13	12.27	12.41	12.55
770	11.21	11.37	11.53	11.69	11.84	11.99	12.14	12.29	12.43	12.57	12.71
780	11.35	11.52	11.68	11.84	11.99	12.14	12.30	12.45	12.59	12.73	12.88
790	11.50	11.67	11.83	11.99	12.15	12.30	12.45	12.61	12.75	12.90	13.04
800	11.64	11.81	11.98	12.14	12.30	12.46	12.61	12.77	12.92	13.06	13.21
810	11.79	11.96	12.13	12.29	12.46	12.61	12.77	12.93	13.08	13.22	13.37
	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	2137	2047	1991	1938	1888	1841	1796	1753	1713	1675	1638

CONDUCTOR:	7/16" EHS STEEL (BID ITEM NO. 9109903)
STR RANGE:	(36 - 35)
RULING SPAN:	795 FT
DESIGN TENSION:	5000 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
790	15.07	15.42	15.76	16.10	16.44	16.78	17.13	17.46	17.79	18.13	18.46
800	15.45	15.81	16.16	16.51	16.86	17.21	17.56	17.90	18.25	18.59	18.93
SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
790	11.61	11.74	11.87	12.00	12.13	12.25	12.38	12.50	12.62	12.73	12.85
800	11.76	11.89	12.02	12.15	12.28	12.41	12.53	12.65	12.78	12.90	13.01
	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	2067	2020	1977	1934	1894	1856	1818	1784	1751	1718	1688

CONDUCTOR:	DNO-12519 (BID ITEM NO. 9109903)
STR RANGE:	(32 - 31)
RULING SPAN:	587 FT
DESIGN TENSION:	5600 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
580	5.22	5.52	5.84	6.18	6.54	6.92	7.32	7.72	8.13	8.55	8.96
590	5.40	5.71	6.04	6.40	6.77	7.16	7.57	7.98	8.41	8.85	9.29
SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
580	6.83	7.02	7.23	7.44	7.65	7.87	8.09	8.31	8.53	8.75	8.96
590	6.95	7.15	7.35	7.57	7.78	8.00	8.23	8.45	8.68	8.90	9.11
	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	3410	3224	3047	2877	2719	2570	2432	2306	2188	2080	1982

DATE	REVISION	#

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DATE: 05/09/2025
SCALE: NONE
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PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D
LOCATION: GREENE COUNTY, MO
CLIENT: MODOT JEFFERSON CITY, MO
TITLE: STRINGING CHARTS
SHT NO: MMR.T08.01

O:\Missouri\modot\mm - mo\grid\drawings\mmr_t08_stringing.dgn,Jul 10, 2025 2:54 PM,Kristin

CONDUCTOR:	DNO-12519 (BID ITEM NO. 9109903)
STR RANGE:	(35 - 32)
RULING SPAN:	682 FT
DESIGN TENSION:	5800 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
470	3.82	4.02	4.23	4.44	4.66	4.88	5.11	5.34	5.56	5.79	6.02
480	3.99	4.19	4.41	4.63	4.85	5.09	5.33	5.57	5.80	6.04	6.28
490	4.15	4.37	4.59	4.83	5.07	5.31	5.56	5.80	6.05	6.30	6.55
500	4.32	4.55	4.78	5.03	5.27	5.52	5.78	6.04	6.30	6.56	6.82
510	4.50	4.73	4.98	5.23	5.49	5.75	6.02	6.29	6.55	6.82	7.09
520	4.68	4.92	5.17	5.44	5.71	5.98	6.26	6.53	6.81	7.09	7.37
530	4.86	5.11	5.37	5.65	5.93	6.21	6.50	6.79	7.08	7.37	7.66
540	5.04	5.30	5.58	5.86	6.15	6.44	6.75	7.05	7.35	7.65	7.95
550	5.23	5.50	5.79	6.08	6.38	6.69	7.00	7.31	7.62	7.93	8.25
560	5.43	5.73	6.00	6.31	6.62	6.93	7.26	7.58	7.90	8.23	8.55
570	5.62	5.91	6.22	6.53	6.86	7.18	7.52	7.85	8.19	8.52	8.86
580	5.82	6.12	6.44	6.76	7.10	7.43	7.78	8.13	8.48	8.82	9.17
590	6.02	6.33	6.66	7.00	7.34	7.69	8.06	8.41	8.77	9.13	9.49
600	6.23	6.55	6.89	7.24	7.60	7.96	8.33	8.70	9.07	9.44	9.82
610	6.44	6.77	7.12	7.48	7.85	8.22	8.61	8.99	9.37	9.76	10.15
620	6.65	6.99	7.36	7.73	8.11	8.50	8.90	9.29	9.68	10.08	10.48
630	6.87	7.22	7.59	7.98	8.37	8.77	9.18	9.59	10.00	10.41	10.82
640	7.09	7.45	7.84	8.24	8.64	9.05	9.48	9.90	10.32	10.74	11.17
650	7.31	7.69	8.08	8.50	8.92	9.34	9.78	10.21	10.65	11.08	11.52
660	7.54	7.92	8.34	8.76	9.19	9.63	10.08	10.53	10.98	11.43	11.88
670	7.77	8.17	8.59	9.03	9.47	9.92	10.39	10.85	11.31	11.78	12.24
680	8.00	8.41	8.85	9.30	9.75	10.22	10.70	11.18	11.65	12.13	12.61
690	8.24	8.66	9.11	9.57	10.05	10.52	11.02	11.51	12.00	12.49	12.98
700	8.48	8.91	9.38	9.85	10.34	10.83	11.34	11.84	12.35	12.85	13.36
710	8.72	9.17	9.65	10.14	10.64	11.14	11.67	12.18	12.70	13.22	13.75
720	8.97	9.43	9.92	10.42	10.94	11.46	12.00	12.53	13.06	13.60	14.14
730	9.22	9.69	10.20	10.72	11.25	11.78	12.33	12.88	13.43	13.98	14.53
740	9.47	9.96	10.48	11.01	11.56	12.10	12.67	13.24	13.80	14.37	14.93
750	9.73	10.23	10.76	11.31	11.87	12.43	13.02	13.60	14.17	14.76	15.34
760	9.99	10.51	11.05	11.62	12.19	12.77	13.37	13.96	14.55	15.15	15.75
770	10.26	10.79	11.35	11.92	12.51	13.11	13.72	14.33	14.94	15.56	16.17
780	10.53	11.07	11.64	12.24	12.84	13.45	14.08	14.71	15.33	15.96	16.59
790	10.80	11.35	11.94	12.55	13.17	13.80	14.44	15.09	15.73	16.37	17.02
800	11.07	11.64	12.25	12.87	13.51	14.15	14.81	15.47	16.13	16.79	17.46
810	11.35	11.94	12.56	13.19	13.85	14.50	15.19	15.86	16.53	17.21	17.90

SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
470	5.85	5.99	6.15	6.30	6.46	6.61	6.76	6.91	7.05	7.20	7.34
480	5.97	6.12	6.28	6.44	6.59	6.75	6.91	7.06	7.21	7.35	7.50
490	6.10	6.25	6.41	6.57	6.73	6.89	7.05	7.20	7.36	7.50	7.65
500	6.22	6.38	6.54	6.71	6.87	7.03	7.19	7.35	7.51	7.66	7.81
510	6.34	6.51	6.67	6.84	7.01	7.17	7.34	7.50	7.66	7.81	7.96
520	6.47	6.63	6.80	6.97	7.14	7.31	7.48	7.65	7.81	7.96	8.12
530	6.59	6.76	6.93	7.11	7.28	7.45	7.62	7.79	7.96	8.12	8.28
540	6.72	6.89	7.06	7.24	7.42	7.59	7.77	7.94	8.11	8.27	8.43
550	6.84	7.02	7.20	7.38	7.56	7.73	7.91	8.09	8.26	8.42	8.59
560	6.97	7.14	7.33	7.51	7.69	7.87	8.06	8.23	8.41	8.58	8.75
570	7.09	7.27	7.46	7.64	7.83	8.01	8.20	8.38	8.56	8.73	8.90
580	7.21	7.40	7.59	7.78	7.97	8.15	8.34	8.53	8.71	8.88	9.06
590	7.34	7.53	7.72	7.91	8.11	8.30	8.49	8.67	8.86	9.04	9.21
600	7.46	7.65	7.85	8.05	8.24	8.44	8.63	8.82	9.01	9.19	9.37
610	7.59	7.78	7.98	8.18	8.38	8.58	8.78	8.97	9.16	9.34	9.53
620	7.71	7.91	8.11	8.31	8.52	8.72	8.92	9.12	9.31	9.50	9.68
630	7.84	8.04	8.24	8.45	8.65	8.86	9.06	9.26	9.46	9.65	9.84
640	7.96	8.16	8.37	8.58	8.79	9.00	9.21	9.41	9.61	9.80	10.00
650	8.09	8.29	8.50	8.72	8.93	9.14	9.35	9.56	9.76	9.96	10.15
660	8.21	8.42	8.63	8.85	9.07	9.28	9.50	9.70	9.91	10.11	10.31
670	8.33	8.55	8.77	8.99	9.20	9.42	9.64	9.85	10.06	10.26	10.46
680	8.46	8.67	8.90	9.12	9.34	9.56	9.78	10.00	10.21	10.42	10.62
690	8.58	8.80	9.03	9.25	9.48	9.70	9.93	10.15	10.36	10.57	10.78
700	8.71	8.93	9.16	9.39	9.62	9.84	10.07	10.29	10.51	10.72	10.93
710	8.83	9.06	9.29	9.52	9.75	9.98	10.22	10.44	10.66	10.88	11.09
720	8.96	9.18	9.42	9.66	9.89	10.12	10.36	10.59	10.81	11.03	11.25
730	9.08	9.31	9.55	9.79	10.03	10.26	10.50	10.73	10.96	11.18	11.40
740	9.21	9.44	9.68	9.92	10.17	10.40	10.65	10.88	11.11	11.34	11.56
750	9.33	9.57	9.81	10.06	10.30	10.55	10.79	11.03	11.26	11.49	11.71
760	9.45	9.69	9.94	10.19	10.44	10.69	10.93	11.18	11.41	11.64	11.87
770	9.58	9.82	10.07	10.33	10.58	10.83	11.08	11.32	11.56	11.80	12.03
780	9.70	9.95	10.20	10.46	10.72	10.97	11.22	11.47	11.71	11.95	12.18
790	9.83	10.08	10.34	10.60	10.85	11.11	11.37	11.62	11.86	12.10	12.34
800	9.95	10.20	10.47	10.73	10.99	11.25	11.51	11.76	12.01	12.26	12.50
810	10.08	10.33	10.60	10.86	11.13	11.39	11.65	11.91	12.16	12.41	12.65

	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	3057	2907	2764	2630	2505	2393	2286	2188	2099	2015	1940

CONDUCTOR:	DNO-12519 (BID ITEM NO. 9109903)
STR RANGE:	(36 - 35)
RULING SPAN:	795 FT
DESIGN TENSION:	6000 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
790	11.60	12.11	12.62	13.15	13.67	14.20	14.73	15.25	15.78	16.30	16.82
800	11.89	12.41	12.94	13.48	14.02	14.56	15.11	15.64	16.18	16.71	17.25

SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
790	10.19	10.41	10.62	10.84	11.06	11.27	11.48	11.68	11.88	12.07	12.27
800	10.31	10.54	10.76	10.98	11.20	11.41	11.62	11.83	12.03	12.23	12.42

	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	2846	2727	2616	2511	2414	2326	2241	2165	2092	2026	1963

CONDUCTOR:	1192.5 ACSR (GRACKLE) (BID ITEM NO. 9109903)
STR RANGE:	(35 - 32)
RULING SPAN:	682 FT
DESIGN TENSION:	11800 LBS (NESC 250B HEAVY)

SPAN (FT)	MID SPAN SAG (FT)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
470	5.55	5.77	6.00	6.23	6.47	6.70	6.93	7.16	7.39	7.62	7.85
480	5.78	6.02	6.26	6.50	6.75	6.99	7.23	7.47	7.71	7.95	8.19
490	6.03	6.28	6.53	6.78	7.03	7.29	7.54	7.79	8.04	8.29	8.53
500	6.28	6.53	6.79	7.06	7.32	7.59	7.85	8.11	8.37	8.63	8.88
510	6.53	6.80	7.07	7.34	7.62	7.89	8.17	8.44	8.71	8.98	9.24
520	6.79	7.07	7.35	7.63	7.92	8.21	8.49	8.77	9.05	9.33	9.61
530	7.05	7.34	7.63	7.93	8.22	8.52	8.82	9.11	9.40	9.70	9.98
540	7.32	7.62	7.93	8.23	8.54	8.85	9.16	9.46	9.76	10.06	10.36
550	7.59	7.91	8.22	8.54	8.86	9.18	9.50	9.81	10.13	10.44	10.75
560	7.87	8.20	8.52	8.85	9.18	9.52	9.85	10.17	10.50	10.82	11.14
570	8.16	8.49	8.83	9.17	9.51	9.86	10.20	10.54	10.88	11.21	11.55
580	8.45	8.79	9.14	9.50	9.85	10.21	10.56	10.91	11.26	11.61	11.95
590	8.74	9.10	9.46	9.83	10.19	10.56	10.93	11.29	11.65	12.02	12.37
600	9.04	9.41	9.79	10.16	10.54	10.93	11.30	11.68	12.05	12.43	12.79
610	9.34	9.73	10.11	10.50	10.90	11.29	11.68	12.07	12.46	12.85	13.22
620	9.65	10.05	10.45	10.85	11.26	11.67	12.07	12.47	12.87	13.27	13.66
630	9.96	10.38	10.79	11.20	11.62	12.05	12.46	12.88	13.29	13.70	14.11
640	10.28	10.71	11.13	11.56	11.99	12.43	12.86	13.29	13.71	14.14	14.56
650	10.61	11.04	11.48	11.93	12.37	12.82	13.27	13.71	14.15	14.59	15.02
660	10.94	11.39	11.84	12.30	12.76	13.22	13.68	14.13	14.58	15.04	15.48
670	11.27	11.74	12.20	12.67	13.15	13.62	14.10	14.56	15.03	15.50	15.96
680	11.61	12.09	12.57	13.05	13.54	14.03	14.52	15.00	15.48	15.96	16.44
690	11.95	12.45	12.94	13.44	13.94	14.45	14.95	15.45	15.94	16.44	16.92
700	12.30	12.81	13.32	13.83	14.35	14.87	15.39	15.90	16.41	16.92	17.42
710	12.66	13.18	13.70	14.23	14.76	15.30	15.83	16.36	16.88	17.41	17.92
720	13.02	13.55	14.09	14.64	15.18	15.74	16.28	16.82	17.36	17.90	18.43
730	13.38	13.93	14.49	15.05	15.61	16.18	16.74	17.29	17.84	18.40	18.94
740	13.75	14.32	14.89	15.46	16.04	16.62	17.20	17.77	18.34	18.91	19.47
750	14.12	14.71	15.29	15.88	16.47	17.07	17.67	18.25	18.84	19.42	20.00
760	14.50	15.10	15.70	16.31	16.92	17.53	18.14	18.74	19.34	19.95	20.53
770	14.89	15.50	16.12	16.74	17.37	18.00	18.62	19.24	19.86	20.47	21.08
780	15.28	15.91	16.54	17.18	17.82	18.47	19.11	19.74	20.38	21.01	21.63
790	15.67	16.32	16.97	17.62	18.28	18.95	19.60	20.25	20.90	21.55	22.19
800	16.07	16.73	17.40	18.07	18.75	19.43	20.10	20.77	21.43	22.10	22.76
810	16.48	17.16	17.84	18.53	19.22	19.92	20.61	21.29	21.97	22.66	23.33

SPAN (FT)	3 WAVE TIME (SEC)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
470	7.04	7.19	7.33	7.47	7.61	7.74	7.88	8.01	8.13	8.26	8.38
480	7.19	7.34	7.48	7.63	7.77	7.91	8.04	8.18	8.31	8.43	8.56
490	7.34	7.49	7.64	7.79	7.93	8.07	8.21	8.35	8.48	8.61	8.74
500	7.49	7.64	7.80	7.94	8.09	8.24	8.38	8.52	8.65	8.79	8.91
510	7.64	7.80	7.95	8.10	8.25	8.40	8.55	8.69	8.82	8.95	9.09
520	7.79	7.95	8.11	8.26	8.41	8.57	8.71	8.86	9.00	9.14	9.27
530	7.94	8.10	8.26	8.42	8.58	8.73	8.88	9.03	9.17	9.31	9.45
540	8.09	8.26	8.42	8.58	8.74	8.90	9.05	9.20	9.34	9.49	9.63
550	8.24	8.41	8.58	8.74	8.90	9.06	9.22	9.37	9.52	9.68	9.81
560	8.39	8.56	8.73	8.90	9.06	9.23	9.38	9.54	9.69	9.84	9.98
570	8.54	8.72	8.89	9.06	9.22	9.39	9.55	9.71	9.86	10.02	10.16
580	8.69	8.87	9.04	9.22	9.39	9.56	9.72	9.88	10.04	10.19	10.34
590	8.84	9.02	9.20	9.37	9.55	9.72	9.89	10.05	10.21	10.37	10.52
600	8.99	9.17	9.36	9.53	9.71	9.89	10.06	10.22	10.38	10.54	10.70
610	9.14	9.33	9.51	9.69	9.87	10.05	10.22	10.39	10.56	10.72	10.88
620	9.29	9.48	9.67	9.85	10.03	10.21	10.39	10.56	10.73	10.89	11.05
630	9.44	9.63	9.82	10.01	10.20	10.38	10.56	10.73	10.90	11.07	11.23
640	9.59	9.79	9.98	10.17	10.36	10.54	10.73	10.90	11.08	11.25	11.41
650	9.74	9.94	10.14	10.33	10.52	10.71	10.89	11.07	11.25	11.42	11.59
660	9.89	10.09	10.29	10.49	10.68	10.87	11.06	11.24	11.42	11.60	11.77
670	10.04	10.25	10.45	10.65	10.84	11.04	11.23	11.41	11.59	11.77	11.95
680	10.19	10.40	10.60	10.81	11.01	11.20	11.40	11.58	11.77	11.95	12.12
690	10.34	10.55	10.76	10.96	11.17	11.37	11.56	11.75	11.94	12.13	12.30
700	10.49	10.70	10.92	11.12	11.33	11.53	11.73	11.93	12.11	12.30	12.48
710	10.64	10.86	11.07	11.28	11.49	11.70	11.90	12.10	12.29	12.48	12.66
720	10.79	11.01	11.23	11.44	11.65	11.86	12.07	12.27	12.46	12.65	12.84
730	10.94	11.16	11.38	11.60	11.82	12.03	12.24	12.44	12.63	12.83	13.02
740	11.09	11.32	11.54	11.76	11.98	12.19	12.40	12.61	12.81	13.00	13.20
750	11.24	11.47	11.70	11.92	12.14	12.36	12.57	12.78	12.98	13.18	13.37
760	11.39	11.62	11.85	12.08	12.30	12.52	12.74	12.95	13.15	13.36	13.55
770	11.54	11.78	12.01	12.24	12.46	12.69	12.91	13.12	13.33	13.53	13.73
780	11.69	11.93	12.16	12.40	12.62	12.85	13.07	13.29	13.50	13.71	13.91
790	11.84	12.08	12.32	12.55	12.79	13.02	13.24	13.46	13.67	13.88	14.09
800	11.99	12.23	12.48	12.71	12.95	13.18	13.41	13.63	13.85	14.06	14.27
810	12.14	12.39	12.63	12.87	13.11	13.35	13.58	13.80	14.02	14.24	14.44

	HORIZONTAL TENSION (LBS)										
	0°F	10°F	20°F	30°F	40°F	50°F	60°F	70°F	80°F	90°F	100°F
	7635	7333	7052	6791	6547	6317	6106	5910	5727	5554	5395

DATE	REVISION	#

TOTH & ASSOCIATES
1550 E. REPUBLIC ROAD
SPRINGFIELD, MO 65804
Ph: 417-888-0645 Fax: 417-888-0657
www.tothassociates.com
CERTIFICATE OF AUTHORITY:
MO# E-2004004242-D

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DWN. BY:	SRC
CKD. BY:	JAS
APPD. BY:	JPS
DATE:	05/09/2025
SCALE:	NONE

Graphic scale may change due to drawing reproduction

PROJECT: HWY MM 161KV TRANSMISSION MODIFICATION: GREENE COUNTY JOB NO. J8S0836D

LOCATION: GREENE COUNTY, MO

CLIENT: MODOT JEFFERSON CITY, MO

TITLE: STRINGING CHARTS

SHT NO.: MMR.T08.02

G:\missouri\mod\dcm mod\proj\stringing charts\JAS 10_23\T08 Prof.dwg, 5/9/2025 2:21:56 PM, Adobe PDF

HWY MM 161KV TRANSMISSION MODIFICATION
GREENE COUNTY JOB NO. J8S0836D
MATERIAL LIST
MMR.T09.01-2
07/18/2025

BID ITEM NO.	ESTIMATED QTY.	UNIT	MATERIAL DESCRIPTION	CATEGORY	VENDOR	PART NO.			
9109903	4500	FT	OPGW, 48 CT. FIBER, DNO-12519	CONDUCTOR	-	-			
9109903	4500	FT	7/16" EHS FOR STATIC	CONDUCTOR	-	-			
9109903	7000	FT	1192.5 ACSR GRACKLE	CONDUCTOR	-	-			
9109902	4	EA	STANDARD CLASS STEEL POLE: 120-S-04.2	POLE, STL	-	-			
9109902	1	EA	ENGINEERED STEEL POLE: 45-ENG	POLE, STL	-	-			
9109902	2	EA	ENGINEERED STEEL POLE: 60-ENG	POLE, STL	-	-			
9109902	1	EA	ENGINEERED STEEL POLE: 65-ENG	POLE, STL	-	-			
9109902	2	EA	ENGINEERED STEEL POLE: 80-ENG	POLE, STL	-	-			
9109902	7	EA	INSULATOR, POST, Y-CLEVIS TO BALL, 25KIPS	INSULATOR	HUBBELL	P250065S0030			
9109902	19	EA	INSULATOR, SUSPENSION, Y-CLEVIS TO BALL, 50KIPS	INSULATOR	HUBBELL	S050073S2010			
9109902	5	EA	CONNECTOR KITS	OPGW	AFL	APCKE647/662			
9109902	3	EA	CABLE STORAGE SYSTEM	OPGW	AFL	CB-44-3AL			
9109902	21	EA	OPGW DOWNLEAD CUSHION GRIP	OPGW	AFL	FDOA-B6B6D			
9109902	3	EA	CLAMP, SUSPENSION	OPGW	HUBBELL	MS46S			
9109902	5	EA	OPGW BONDING CLAMP, RUN: 0.646-0.660", TAP 0.232-0.246"	OPGW	AFL	OBC-N2-J1-2			
9109902	3	EA	OPGW BONDING CLAMP, RUN: 0.646-0.660", TAP 0.412-0.424"	OPGW	AFL	OBC-N2-W1-2			
9109902	9	EA	OPGW DEADEND, 0.650-0.659"	OPGW	AFL	ODEC650/659G09			
9109902	3	EA	SPLICE ENCLOSURE	OPGW	AFL	SB01-72			
9109902	5	EA	FURCATION KIT	OPGW	AFL	SB01-FK			
9109902	9	EA	OPGW SOCKET EYE	OPGW	AFL	SE-BDE			
9109902	17	EA	SPLICE PROTECTOR, 10CT	OPGW	AFL	SPS-60			
9109902	3	EA	CLAMP, OPGW, SUSPENSION	OPGW	AFL	SUME647/679			
9109902	21	EA	OPGW SPIRAL VIBRATION DAMPER, 0.564-0.770", 64" LENGTH	OPGW	AFL	SVD564/770			
9109902	9	EA	CLAMP, BOLTED DEADEND	OPGW	HUBBELL	SWDE55S			
9109902	9	EA	OPGW HOT LINE Y-CLEVIS BALL	OPGW	AFL	YCBHL			
9109902	3	EA	Y-CLEVIS EYE, 90°, 30 KIPS	OPGW	HUBBELL	YCS059030			
9109902	3	EA	CLAMP, COMPRESSION, 2/0, 1 HOLE PADE	OPGW	BURNDY	YRA26U			
9109903	880	FT	7/16" EHS, 7-STRAND, EHS GUY WIRE	GUY	-	-			
9109902	11	EA	GUY GUARD	GUY	HUBBELL	96FRPMYEL			
9109902	6	EA	ANCHOR, POWER SCREW, TRIPLE HELIX, 10/12/14" X 7'-0"	GUY	HUBBELL	012642EJN			
9109902	6	EA	ANCHOR, EXTENSION ROD, SQUARE, 3'-6"	GUY	HUBBELL	12655			
9109902	11	EA	ANCHOR, EXTENSION ROD, SQUARE, 5'-0"	GUY	HUBBELL	12656			
9109902	6	EA	ADAPTOR, GUY, TRIPLE EYE	GUY	HUBBELL	C1020025			
9109902	9	EA	GUY THIMBLE-CLEVIS, #40,000, 3/4" PIN, 1" GROOVE	GUY	MACLEAN	FSA-100-6			
9109902	34	EA	GUY GRIP, PREFORMED, 7/16"	GUY	PREFORMED	GDE-1108			
9109902	11	EA	120" GUY STRAIN INSULATOR, CLEVIS-CLEVIS W/ LARGE GUY ROLLERS, 30 KIPS	GUY	CHANCE	GS30120CC2			
9109903	21	FT	#4 COPPER, SOFT DRAWN, ASTM B3	GROUNDING	-	-			
9109903	168	FT	2/0 WIRE, 7 STRAND, TINNED COPPER	GROUNDING	-	-			
9109902	11	EA	GROUND ROD, COPPER CLAD, 3/4" X 10'	GROUNDING	GALVAN	7510			
9109902	11	EA	CLAMP, GROUND ROD TO CABLE	GROUNDING	HUBBELL	GC10303			
9109902	5	EA	3 BOLT CLAMP, 6", ST TO ST	GROUNDING	MACLEAN POWER	J930			
9109902	7	EA	CLAMP, PARALLEL GROOVE, #6 SOL - 4/0 STR, CU TO ST	GROUNDING	ANDERSON	ST4			
9109902	49	EA	2 HOLE, NEMA PAD, BRONZE, TINNED	GROUNDING	HUBBELL	SWL022B-TP			
9109902	7	EA	CONNECTOR, COMPRESSION, 6AWG - 2AWG	GROUNDING	BURNDY	YGHC2C2			
9109902	97	EA	BOLT, 1/2" X 1" UNC, STAINLESS STEEL	FASTENER	-	-			
9109902	9	EA	WASHER, SPRING CLIP, 7/8"	FASTENER	HUGHES BROS.	2702.8			
9109902	9	EA	BONDING CLIP, 7/8"	FASTENER	HUGHES BROS.	2727.8			
9109902	26	EA	BOLT, 7/8" X 3" LENGTH W/ NUT	FASTENER	HUGHES BROS.	B83-2			
9109902	5	EA	BOLT, MACHINE, 5/8" X 16", W/ NUT	FASTENER	HUGHES BROS.	B616-6			
9109902	5	EA	BOLT, MACHINE, 5/8" X 18", W/ NUT	FASTENER	HUGHES BROS.	B618-6			
9109902	5	EA	BOLT, MACHINE, 5/8" X 20", W/ NUT	FASTENER	HUGHES BROS.	B620-6			
9109902	9	EA	BOLT, MACHINE, 7/8" X 12", W/ NUT	FASTENER	HUGHES BROS.	B812-6			
9109902	9	EA	BOLT, MACHINE, 7/8" X 14", W/ NUT	FASTENER	HUGHES BROS.	B814-6			
9109902	9	EA	BOLT, MACHINE, 7/8" X 16", W/ NUT	FASTENER	HUGHES BROS.	B816-6			
9109902	17	EA	Y-CLEVIS BALL, 30 KIPS	FASTENER	PREFORMED	BYC-30			
9109902	7	EA	CLAMP, SUSPENSION SHOE, 0.90-1.39", SOCKET, 25KIPS	FASTENER	HUBBELL	HAS139S			
9109902	7	EA	CLAMP, SUSPENSION SHOE, 1.40-2.13", NONE, 25KIPS	FASTENER	HUBBELL	HAS213N			
9109902	97	EA	LOCK WASHER, STAINLESS STEEL, 1/2"	FASTENER	HUBBELL	HWSL500			
9109902	5	EA	LOCKNUT, 5/8", CONCAVE MF	FASTENER	HUGHES BROS.	MF60			

DWG NO.
MMR.T09.01

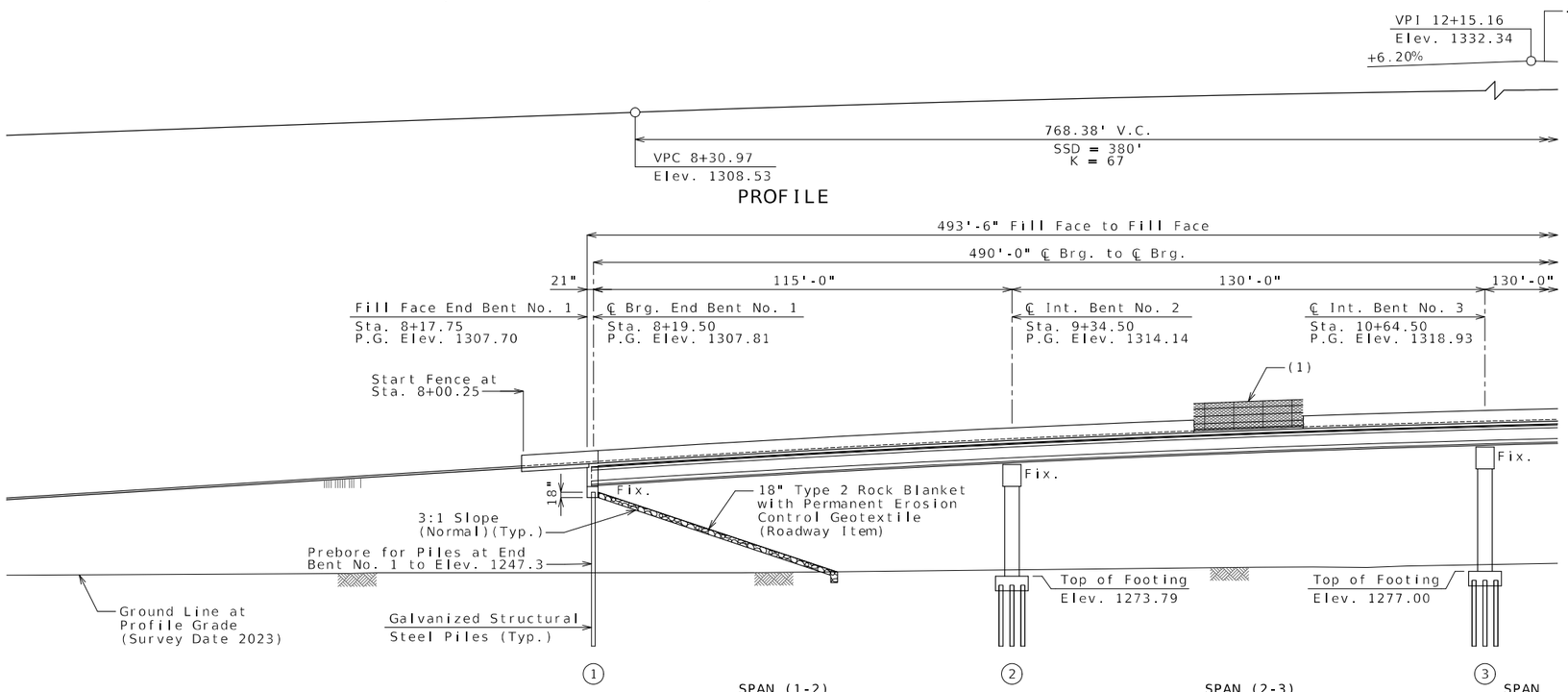
HWY MM 161KV TRANSMISSION MODIFICATION
GREENE COUNTY JOB NO. J8S0836D
MATERIAL LIST
MMR.T09.01-2
07/18/2025

BID ITEM NO.	ESTIMATED QTY.	UNIT	MATERIAL DESCRIPTION	CATEGORY	VENDOR	PART NO.			
9109902	34	EA	LOCKNUT, 7/8", MF TYPE	FASTENER	HUGHES BROS.	MF80			
9109902	5	EA	NUT, 7/8"	FASTENER	HUGHES BROS.	N80			
9109902	9	EA	TEE, DOUBLE DEADEND, 42KIPS, GUY ATTACHMENT	FASTENER	HUBBELL	PSC2030528			
9109902	51	EA	WASHER, ROUND, 7/8"	FASTENER	HUGHES BROS.	RW2-80			
9109902	7	EA	SOCKET EYE, 36KIPS	FASTENER	HUBBELL	SA15503			
9109902	5	EA	WASHER, SQUARE, CURVED, 5/8"	FASTENER	HUGHES BROS.	SCW3-60			
9109902	13	EA	CLAMP, BOLTED, D.E. AND SOCKET EYE, 336-1272 ACSR	FASTENER	HUBBELL	SD130SA15503			
9109902	7	EA	WEDGE CONNECTOR, GRACKLE TO DOVE	FASTENER	BURNDY	WCY128			
9109902	7	EA	ARMOR ROD, AL, 1.328-1.390"	MISC.	PREFORMED	AR-0146			
9109902	452	EA	STEP BOLTS, 3/4" X 6.5"	MISC.	VALMONT	-			
9109907	10	CU-YD	IMPORTED BACKFILL, TM-101	FOUNDATION	-	-			
9109907	95	CU-YD	NEAT CONCRETE VOLUME, TM-DP	FOUNDATION	-	-			
9109903	1548	FT	LONGITUDINAL REINFORCING, #14 BAR	FOUNDATION	-	-			
9109903	2611	FT	HORIZONTAL REINFORCING, #6 BAR	FOUNDATION	-	-			

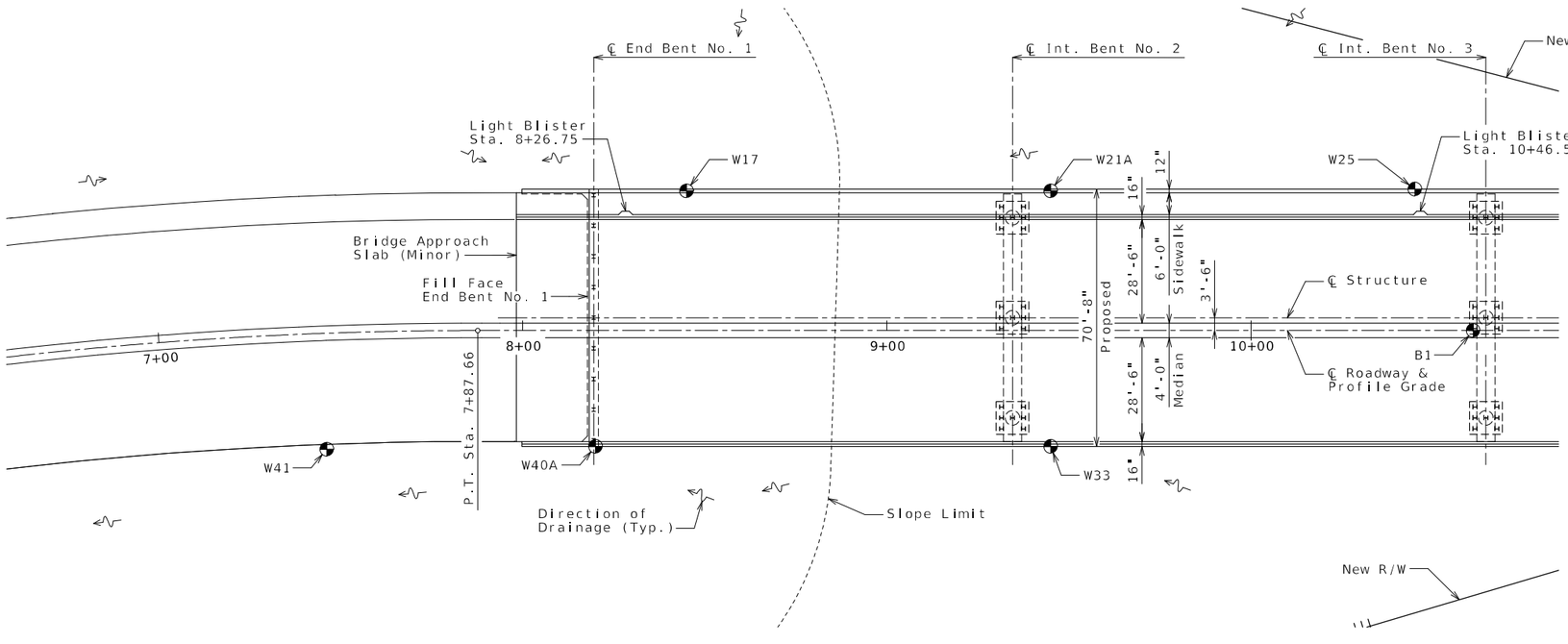
DWG NO.
MMR.T09.02

(115'-130'-130'-115') PRESTRESSED CONCRETE NU-GIRDER SPANS

SEC/SUR 2 TWP 28N RGE 23W



PART GENERAL ELEVATION



PART PLAN

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

NOTES:

Indicates loacation of borings.

For notice and disclaimer regarding boring log data, see Sheet No. 3.

Roadway fill shall be completed to the final roadway section and up to the elevation of the bottom of the concrete beam within the limits of the structure and for not less than 25 feet in back of the fill face of the end bents before any piles are driven for any bents falling within the embankment section. See Special Provisions for ground improvements requirements.

(1) Continuous Chainlink Fence
8'-0" Curved Top on 12" Ped. Curb
All fence openings shall be less than 2"

BM1: Railroad Spike at Intersection of FR 103 & FR 164
Sta. 43+29.39, 612.92' LT
Elev. 1267.52

BM2: Bolt at Intersection of Rte. MM & FR 160
Sta. 0+13.57, 70.78' LT
Elev. 1271.66

SUPERELEVATION DATA
Sta. 7+59.51, Full Super 4%
Sta. 8+02.47, Reverse Crown
Sta. 8+45.43, Level Crown
Sta. 8+88.39, Normal Crown

CURVE DATA
PI 6+16.03
PC 4+41.75
PT 7+87.66
Δ 17°15'49.6" (RT)
D 4°59'27.3"
L 345.90' (ARC)
T 174.27'
R 1,148.00'

BRIDGE: ROUTE MM OVER BNSF R.R.

ROUTE MM FROM ROUTE 60 TO ROUTE 360
ABOUT 0.7 MILE NORTH OF ROUTE 60
BEGINNING STATION 8+17.75

Designed: July 2024
Detailed: July 2024
Checked: July 2024

Sheet No. 1 of 63

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	1

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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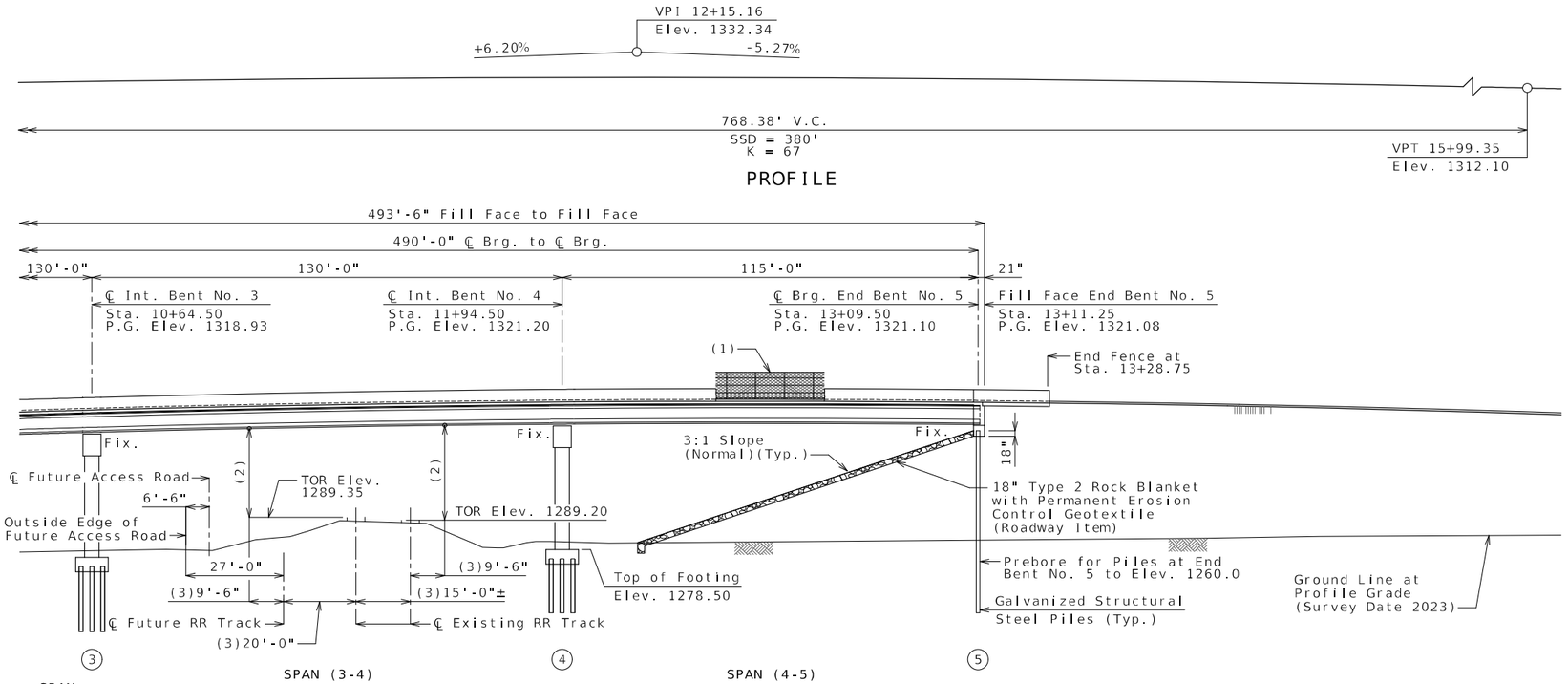
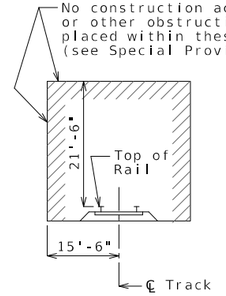




MINIMUM CONSTRUCTION CLEARANCES
(Normal to Railroad
(Not to Scale)

NOTES:

Indicates location of borings.

For notice and disclaimer regarding boring log data, see Sheet No. 3.

(1) Continuous Chainlink Fence
8'-0" Curved Top on 12" Ped. Curb
All fence openings shall be less than 2"

(2) Final Vertical Clearance from top of rails to bottom of superstructure shall be at least 23'-6". Track elevations should be verified in the field prior to construction to determine if the final vertical clearance shown will be obtained. Estimated Min. Vertical Clearance = ± 23.8'.

(3) Perpendicular to ℄ RR Tracks

SUPERELEVATION DATA
Sta. 13+42.44, Normal Crown
Sta. 13+86.88, Level Crown
Sta. 14+31.33, Reverse Crown
Sta. 14+75.77, Full Super 4%

CURVE DATA
PI 21+01.51
PC 14+46.13
PT 25+96.68
Δ 68°32'54.7" (RT)
D 5°57'28.5"
L 1,150.54' (ARC)
T 655.38'
R 961.67'

Heartland Division
Cherokee Subdivision
Milepost:247.050
Line Segment: 1002
Latitude: 37.160775
Longitude: -93.420562

Detailed: July 2024
Checked: July 2024

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority
No.: 000165
BMcD Project No. 163491

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	2

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

GENERAL NOTES:

DESIGN SPECIFICATIONS:

2020 AASHTO LRFD Bridge Design Specifications (9th Ed.)
2011 AASHTO Guide Specifications for LRFD Seismic Bridge Design (2nd Ed.)
and 2014 Interim Revisions (Seismic Details)
Seismic Design Category = B
Design earthquake response spectral acceleration coefficient at 1.0 second period, S_{D1} = 0.193g
Acceleration Coefficient (effective peak ground acceleration coefficient), A_S = 0.135g

DESIGN LOADING:

Vehicular = HL-93
Future Wearing Surface = 35 lb/sf
Earth = 120 lb/cf
Equivalent Fluid Pressure = 45 lb/cf (Min.)
Superstructure: Simply-Supported, Non-composite for dead load.
Continuous Composite for live load.

DESIGN UNIT STRESSES:

Class B Concrete (Substructure)	f'c = 3,000 psi
Class B-1 Concrete (Type D Barrier and Concrete Curb)	f'c = 4,000 psi
Class B-2 Concrete (Superstructure, except Prestressed Girders, Type D Barrier and Concrete Curb)	f'c = 4,000 psi
Reinforcing Steel (ASTM A706 Grade 60)	fy = 60,000 psi
Structural Steel HP Pile (ASTM A709 Grade 50)	fy = 50,000 psi

For prestressed girder stresses, see Sheets No. 24 thru 27.

NEOPRENE PADS:

Neoprene bearing pads shall be 60 durometer and shall be in accordance with Sec 716.

JOINT FILLER:

All joint filler shall be in accordance with Sec 1057 for preformed sponge rubber expansion and partition joint filler, except as noted.

REINFORCING STEEL:

All superstructure reinforcing steel shall be galvanized unless otherwise specified. Specification, materials, zinc coating process and construction practice shall be in accordance with ASTM A1094/A1094M-18.

At the contractor's option, superstructure reinforcing steel may be textured epoxy-coated steel reinforcing bars. Shop drawings will be required with approval by the engineer.

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

Minimum clearance between galvanized piles and uncoated (plain) reinforcing steel including bar supports shall be 1 1/2". Nylon, PVC, or polyethylene spacers shall be used to maintain clearance. Nylon cable ties shall be used to bind the spacers to the reinforcement.

Galvanized reinforcing steel shall not come in contact with uncoated reinforcing steel or prestressing strands. Nylon, PVC, or polyethylene spacers shall be used where necessary. Nylon cable ties shall be used to bind the spacers to the reinforcement.

MBS refers to mechanical bar splices. Mechanical bar splices shall be in accordance with Sec 706 or 710.

TRAFFIC HANDLING:

Vertical clearance for BNSF Railroad during construction shall be 21'-6" minimum over a 15'-6" wide horizontal opening on each side of ℄ of existing tracks.

Structure to be closed during construction.

STAY-IN-PLACE TRANSPARENT FORMS:

See special provisions for transparent form requirements.

Maximum actual weight of transparent forms allowed shall be 5 psf assumed for girder loading.

NOTICE AND DISCLAIMER REGARDING BORING LOG DATA:

The locations of all subsurface borings for this structure are shown on the plan sheets for this structure. The boring data for all locations indicated, as well as any other boring logs or other factual records of subsurface data and investigations performed by the department for the design of the project, are shown on Sheets No. 53 thru 62 and may be included in the Electronic Bridge Deliverables. They will also be available from the Project Contact upon written request. No greater significance or weight should be given to the boring data depicted on the plan sheets than is given to the subsurface data available from the district or elsewhere.

The Commission does not represent or warrant that any such boring data accurately depicts the conditions to be encountered in constructing this project. A contractor assumes all risks it may encounter in basing its bid prices, time or schedule of performance on the boring data depicted here or those available from the district, or on any other documentation not expressly warranted, which the contractor may obtain from the Commission.

Estimated Quantities

Item		Substr.	Superstr.	Total
Class 1 Excavation	cu. yard	345		345
Bridge Approach Slab (Minor)	sq. yard		305	305
(96 in.) Curved Top Pedestrian Fence (Structures)	linear foot		529	529
Galvanized Structural Steel Piles (12 in.)	linear foot	945		945
Galvanized Structural Steel Piles (14 in.)	linear foot	1,208		1,208
Dynamic Pile Testing	each	5		5
Pre-Bore for Piling	linear foot	918		918
Pile Point Reinforcement	each	81		81
Class B Concrete (Substructure)	cu. yard	532.7		532.7
Type D Barrier	linear foot		1,062	1,062
Slab on Concrete NU-Girder (with Transparent Forms)	sq. yard		3,867	3,867
Raised Median Barrier	sq. foot		2,139	2,139
Concrete Curb (Bridge Rail)	linear foot		493	493
NU 63, Prestressed Concrete NU-Girder	linear foot		3,425	3,425
Reinforcing Steel (Bridges)	pound	88,910		88,910
Mechanical Bar Splice	each	60		60
Conduit System on Structure	lump sum		1	1
Steel Intermediate Diaphragm for P/S Concrete Girders	each		48	48
Slab Drain	each		20	20
Slab Drain with Grate	each		3	3
Drainage System (On Structure)	lump sum		1	1
Vertical Drain at End Bents	each	2		2
Laminated Neoprene Bearing Pad	each		21	21
Laminated Neoprene Bearing Pad (Tapered)	each		35	35

All concrete above the construction joint in the end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder (with Transparent Forms).

All reinforcement in the end bents is included in the Estimated Quantities for Slab on Concrete NU-Girder (with Transparent Forms).

All reinforcement in the intermediate bent concrete diaphragms except reinforcement embedded in the beam cap is included in the Estimated Quantities for Slab on Concrete NU-Girder (with Transparent Forms).

All concrete above the intermediate beam cap, except for barriers, is included in the Estimated Quantities for Slab on Concrete NU-Girder (with Transparent Forms).

Cost of L4x4 ASTM A709 Grade 36 HP pile anchors and 3/4-inch diameter ASTM F3125 Grade A325 Type 1 bolts, complete in place, will be considered completely covered by the contract unit price for Galvanized Structural Steel Piles (12 in.) and Galvanized Structural Steel Piles (14 in.).

Estimated Quantities for Slab on Concrete NU-Girder (with Transparent Forms)

Item		Total
Class B-2 Concrete	cu. yard	1,221
Reinforcing Steel (Galvanized)	pound	349,190
Reinforcing Steel (Bridges)	pound	330

All superstructure reinforcement shall be galvanized except for Strand Tie Bars (#5-H110, #5-H43, #5-H44 & #5-H510).

The table of Estimated Quantities for Slab on Concrete NU-Girder (with Transparent Forms) represents the quantities used by the State in preparing the cost estimate for concrete slabs. The area of the concrete slab will be measured to the nearest square yard longitudinally from end of slab to end of slab and transversely from out to out of bridge slab (or with the horizontal dimensions as shown on the plan of slab). Payment for transparent forms, conventional forms, all concrete and galvanized or uncoated reinforcing steel will be considered completely covered by the contract unit price for the slab. Variations may be encountered in the estimated quantities but the variations cannot be used for an adjustment in the contract unit price.

Method of forming the slab shall be as shown on the plans and in accordance with Sec 703. All hardware for forming the slab to be left in place as a permanent part of the structure shall be coated in accordance with Transparent Form manufacturer.

Slab shall be cast-in-place using transparent forms. Precast prestressed panels will not be permitted. See Special Provisions.

Type of Reinforcing Steel	Type Use (✓)
Galvanized Steel Reinforcing Bars	
Textured Epoxy Coated Steel Reinforcing Bars	

MoDOT Construction personnel will indicate the type of reinforcing steel uesd.

GENERAL NOTES & QUANTITIES

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 3
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

RAILROAD GENERAL NOTES:

These Railroad General Notes are not all inclusive of BNSF Railway requirements. Refer to the BNSF Railway Special Provisions for all additional requirements and coordination information.

Railroad review and approval of any shoring, erection, demolition, and false-work to build this structure is required. Allow a minimum of four weeks for the review and approval of each submittal and each re-submittal.
(Section 3.10 UPPR/BNSF Guidelines for Railroad Grade Separation Projects)

Prior to excavation in BNSF Right-of-Way the Contractor shall call and notify the following:
(Section 4.10 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)
BNSF Signal/Telecommunications Engineering:
"Call Before You Dig"
1-800-533-2891
BNSF Grade Crossings:
1-800-832-5452

The proposed grade separation project shall not increase the quantity and/or characteristics of the flow in the Railroad's ditches and/or drainage structures.
(Section 5.8 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

The Contractor must submit a proposed method of erosion and sediment control and have the method approved by the Railroad.
(Section 4.6 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

All shoring systems that impact the Railroad's operations and/or support the Railroad's embankment shall be designed and constructed per current UPRR/BNSF Guidelines for Temporary Shoring.
(Section 4.4.2 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

All demolitions within the Railroad's Right-of-Way and/or demolition that may impact the Railroad's tracks or operations shall be in compliance with the Railroad's demolition requirements.
(Section 4.4.3 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

Erection over the Railroad's Right-of-Way shall be designed to cause no interruption to the Railroad's operation, enabling the track(s) to remain open to traffic per the Railroad's requirements.
(Section 4.4.4 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

Railroad requirements do not allow work within 50 feet of track centerline when a train passes the work site and all personnel must clear the area within 25 feet of the track centerline and secure all equipment.

False-work clearances shall comply with minimum construction clearances.
(Section 4.4.1; 4.4.5; 5.3 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

All permanent clearances shall be verified before project closing.
(Plan No. 711100 Sheet 1 UPRR/BNSF Guidelines for Railroad Grade Separation Projects)

Vegetation on or adjacent to ROW shall not become a fire hazard or obstruction to inspection.

TRACK PROTECTION SHORING NOTES:

All dimensions are measured perpendicular to ℄ Track.

The Contractor shall provide and install track protection shoring before commencing excavation.

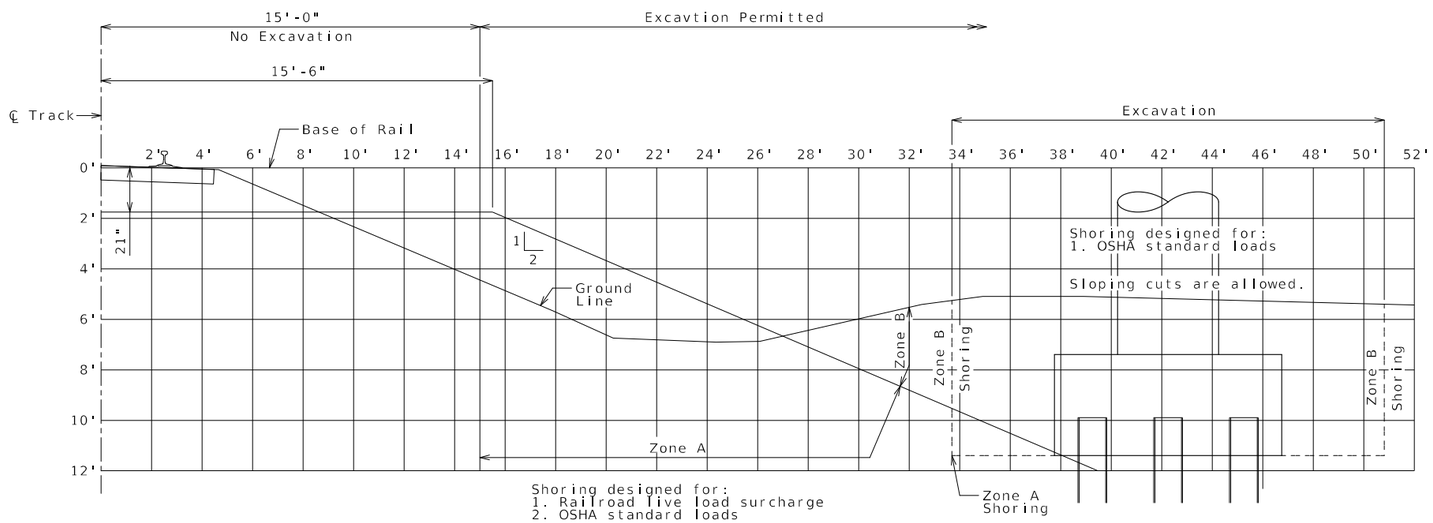
Prior to the start of excavation, the Contractor shall submit detailed plans indicating the nature and extent of the track protection shoring proposed for approval by the Railroad. Installation of track protection shoring shall not happen until the plans have been approved by the Railroad.

Design and construction of the shoring shall comply with the 2021 UPRR/BNSF Guidelines for Temporary Shoring and the AREMA Specifications for Design and Construction of Shoring Adjacent to Active Railroad Tracks.

The Contractor shall monitor the track, ground, and shoring for movement to ensure proper performance of the shoring system and safe operations of trains. A top of rail monitoring plan must be included with the detailed shoring plans. A maximum of 1/4" is acceptable horizontal or vertical movement of the rail for shoring within 25' of the ℄ Track.

For all excavations within Zone A, track protection shoring plans must be accompanied by the design calculations. Both the plans and calculations shall be stamped by a Professional Engineer registered in the State of Missouri.

Payment for shoring plans, calculations,installation and removal of shoring shall be considered subsidiary to the Class 1 Excavation.



TRACK PROTECTION SHORING REQUIREMENTS

Detailed: March 2025
Checked: March 2025

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

RAILROAD NOTES

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	4

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority
No.: 000165
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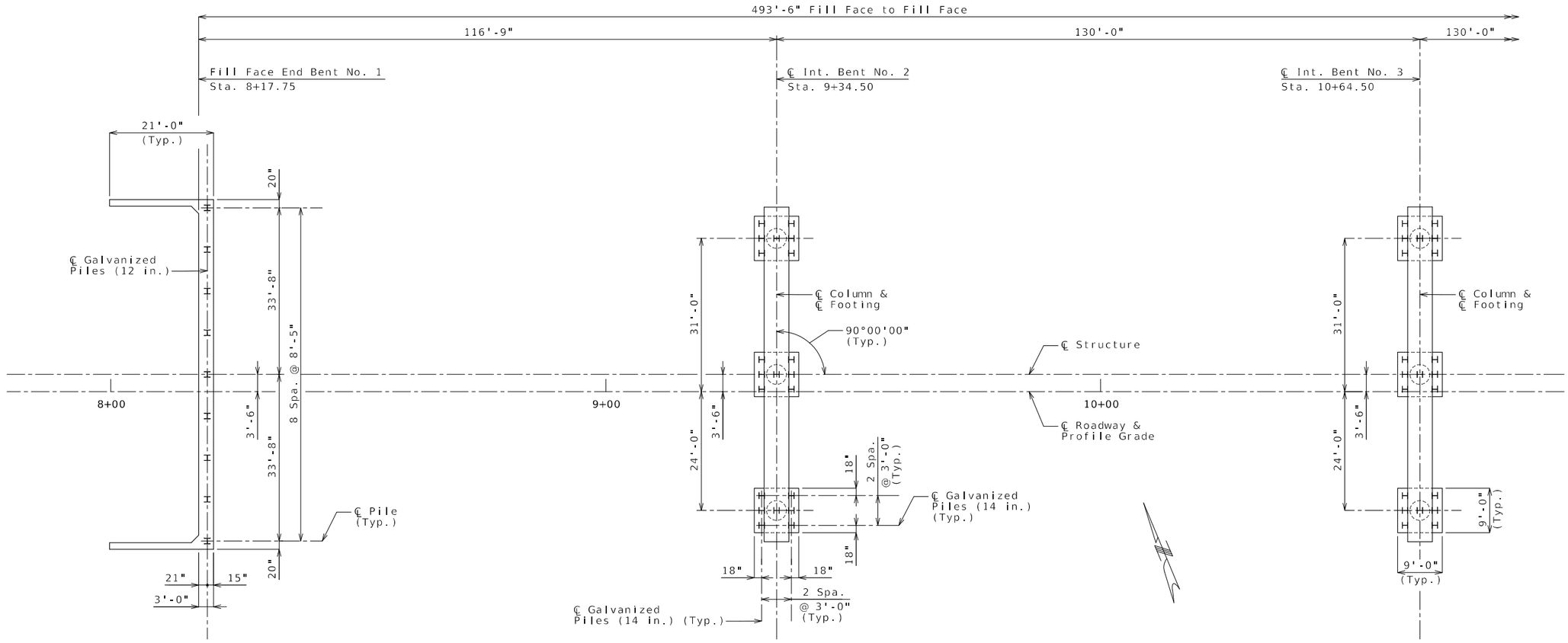

SPAN (1-2) SPAN (2-3) PART SPAN (3-4)

SUBSTRUCTURE LAYOUT

Foundation Data							
Type	Design Data		Bent Number 1	2	3	4	5
Load Bearing Pile	Pile Type and Size		HP 12x53	HP 14x73	HP 14x73	HP 14x73	HP 12x53
	Number	ea	9	21	21	21	9
	Approximate Length Per Each	ft	52	20	20	18	53
	Pile Point Reinforcement	ea	All	All	All	All	All
	Min. Galvanized Penetration (Elev.)	ft	Full Length	Full Length	Full Length	Full Length	Full Length
	Pile Driving Verification Method		DT	DT	DT	DT	DT
	Resistance Factor		0.65	0.65	0.65	0.65	0.65
	Minimum Nominal Axial Compressive Resistance	kip	460	620	570	620	460

DT = Dynamic Testing.

Minimum Nominal Axial Compressive Resistance = $\frac{\text{Maximum Factored Loads}}{\text{Resistance Factor}}$

Manufactured pile point reinforcement shall be used on all piles in this structure.

Pile point reinforcement need not be galvanized. Shop drawings will not be required for pile point reinforcement.

Prebore for piles at Bents No. 1 and 5 to elevations 1247.3 and 1260.0, respectively, unless auger refusal encountered at elevation within vicinity. See Special Provisions for ground improvements requirements. Preboring may be omitted with approval by the engineer after the settlement waiting period.

HP piles are anticipated to be driven to refusal on rock. Review all borings for depth of rock and restrict driving as appropriate to comply with hard rock driving criteria in accordance with Sec 702. When pile refusal on rock occurs, as approved by the engineer, the minimum nominal axial compressive resistance is verified and no additional pile driving verification method is required.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 5 of 63

SUBSTRUCTURE LAYOUT

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

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DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	5

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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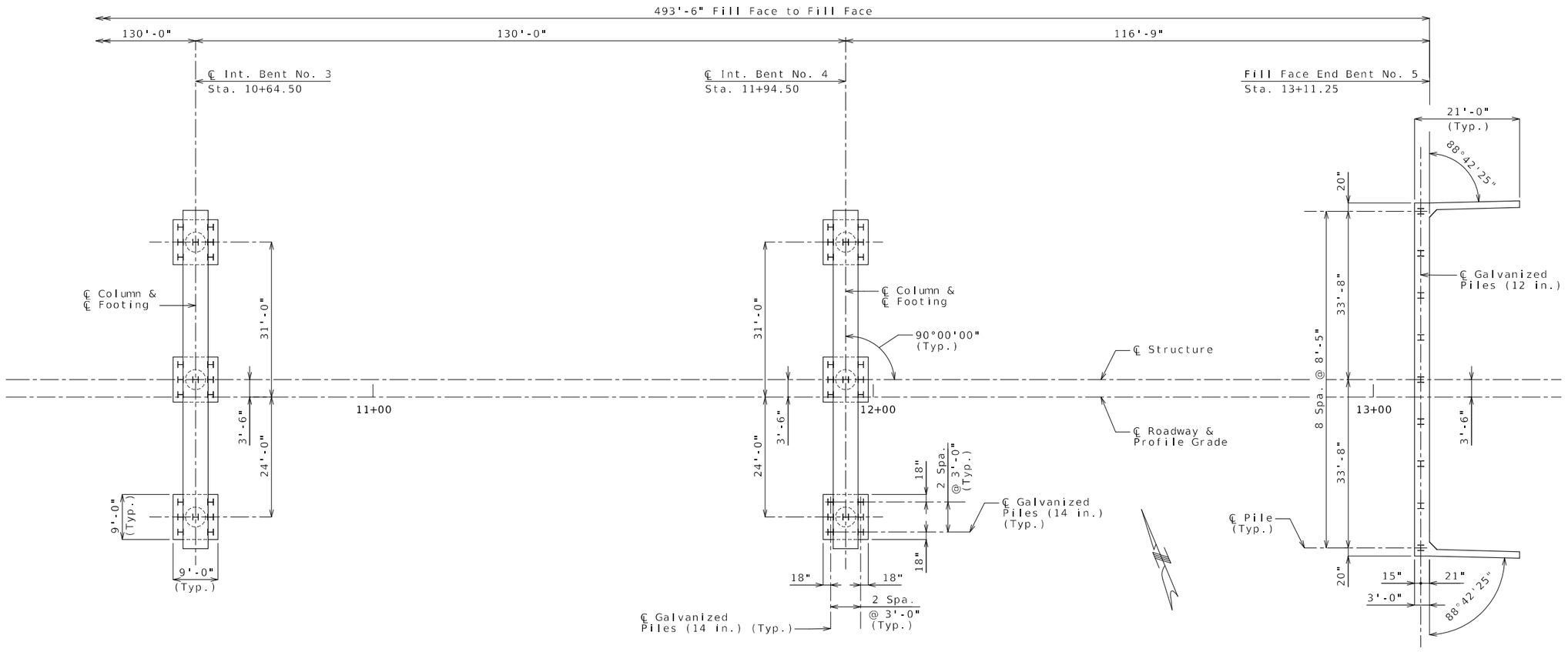
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



PART SPAN (2-3) SPAN (3-4) SPAN (4-5)

SUBSTRUCTURE LAYOUT

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	6

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

DESCRIPTION	DATE

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105 WEST CAPITOL
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Certificate of Authority
No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

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

Sheet No. 6 of 63

SUBSTRUCTURE LAYOUT

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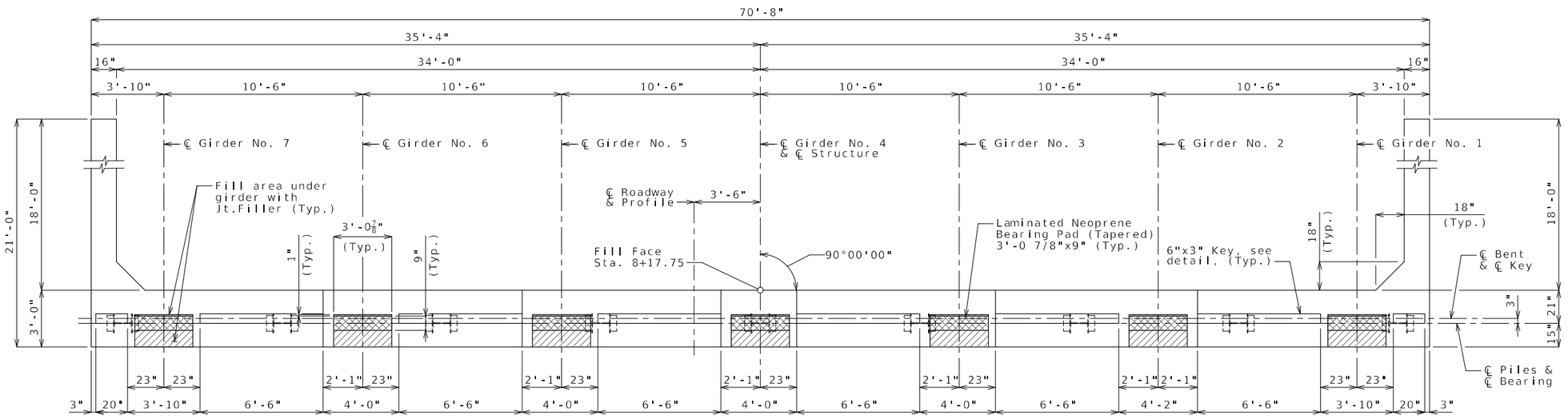
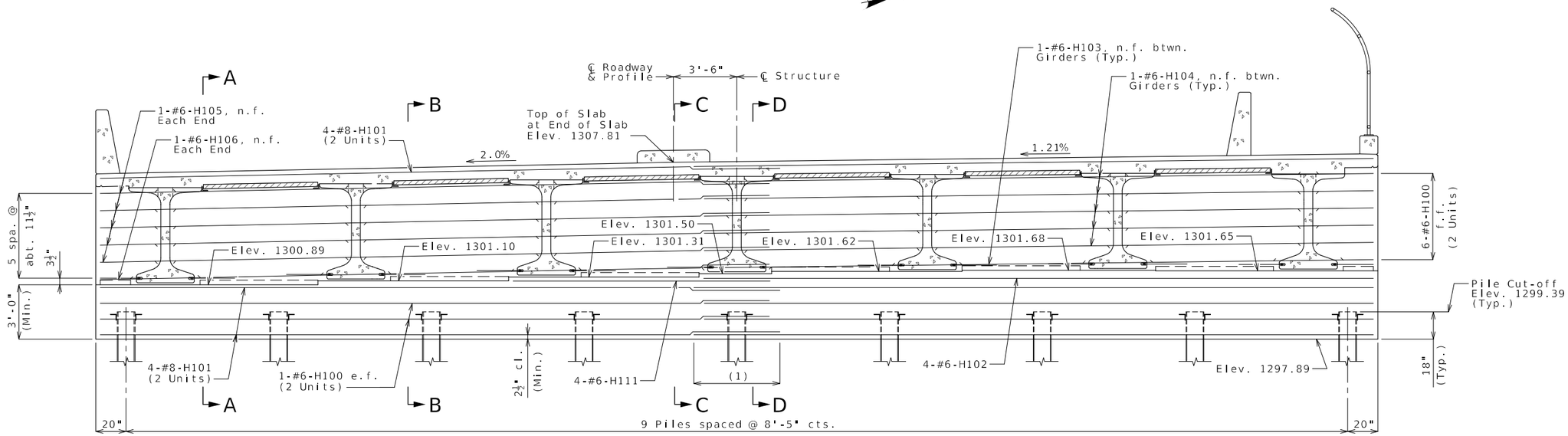


PLAN OF BEAM



SECTION NEAR END BENT

NOTES:

Strands at end of the girders shall be field bent, or if necessary, cut in field to maintain 1 1/2 inch minimum clearance to fill face of end bent.

Reinforcing steel shall be shifted to clear piles. U bars shall clear piles by at least 1 1/2 inches.

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

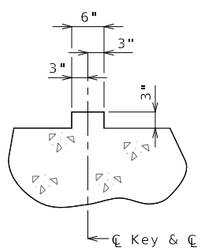
For Sections A-A, B-B, C-C & D-D, see Sheet No. 9.

e.f. denotes each face
f.f. denotes far face
n.f. denotes near face

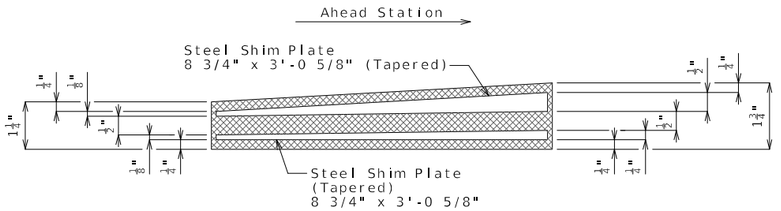
For details of Vertical Drain at End Bents, see Sheet No. 11.

(1) Minimum Lap #6 Bars = 3'-7"
Minimum Lap #8 Bars = 4'-9"

Work this sheet with Sheets No. 8, 9 & 10



SECTION THRU KEY



TYPICAL SECTION THRU LAMINATED BEARING PAD (TAPERED) 9" X 3'-0 7/8"

END BENT NO. 1 PLAN & ELEVATION

Detailed: July 2024
Checked: July 2024

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

Sheet No. 7 of 63

THOMAS M. GREER
NUMBER PE-2010800206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 7
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION
DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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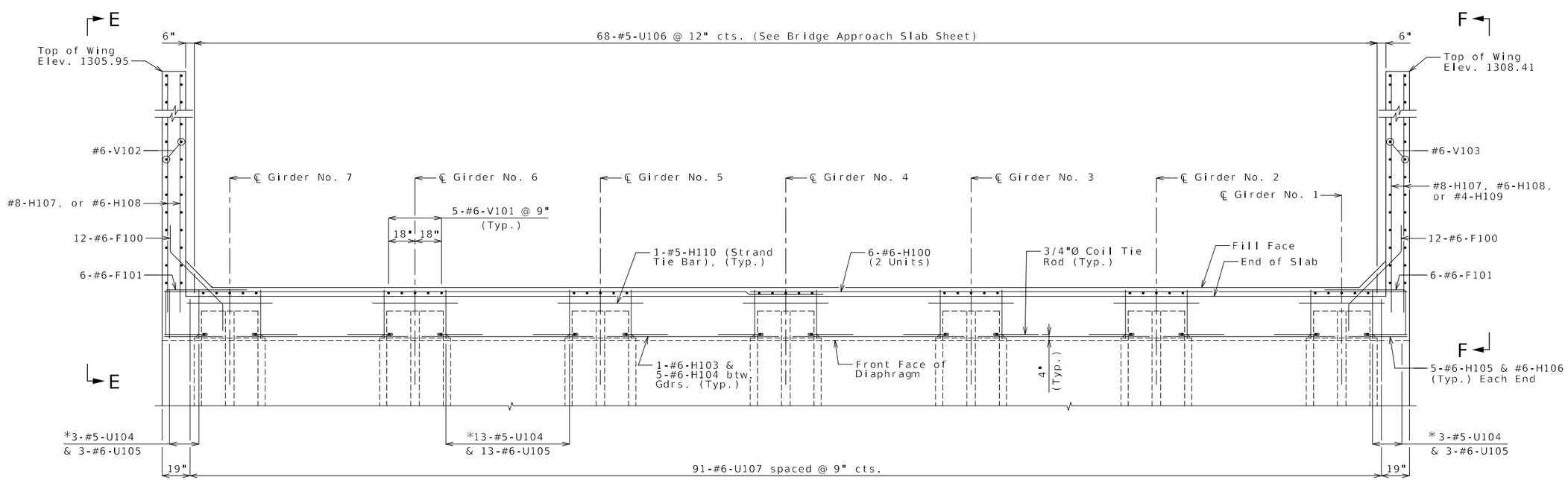
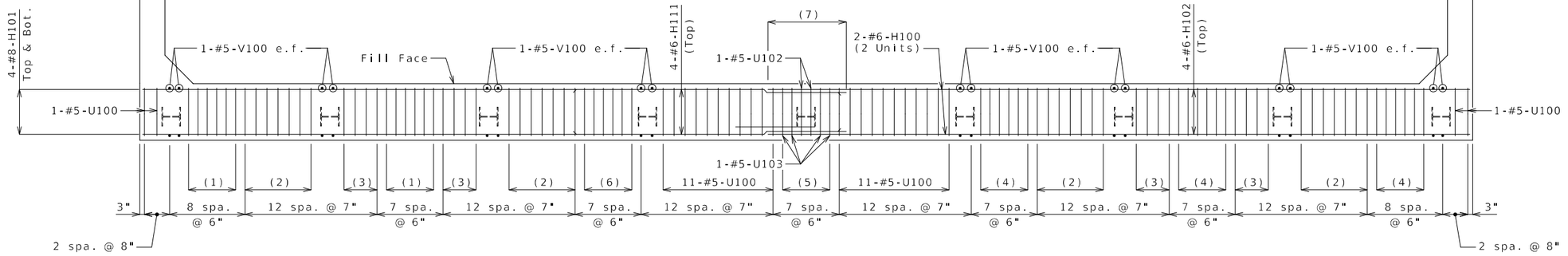


PART PLAN

∗ Space bars to match #5-V100 & #5-U100 bars.



PLAN OF BEAM SHOWING REINFORCEMENT

(Steps and Keys not shown for clarity)

(1) 6-#5-U101

(2) 7-#5-U100

(3) 4-#5-U100

(4) 6-#5-U103

(5) 5 Spaces @ 6"

(6) 6-#5-U109

(7) Minimum Lap #6 Bars = 3'-7"
Minimum Lap #8 Bars = 4'-9"

NOTES:

For location of coil tie rods and #5-H110 (strand tie bar), see Sheets No. 24 & 25.

For Elevations E-E and F-F, see Sheet No. 9.

The #6-F100 bars shall be bent in the field to clear girders.

e.f. denotes each face.

Work this sheet with Sheets No. 7, 9 & 10.

END BENT NO. 1 REINFORCING DETAILS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
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NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

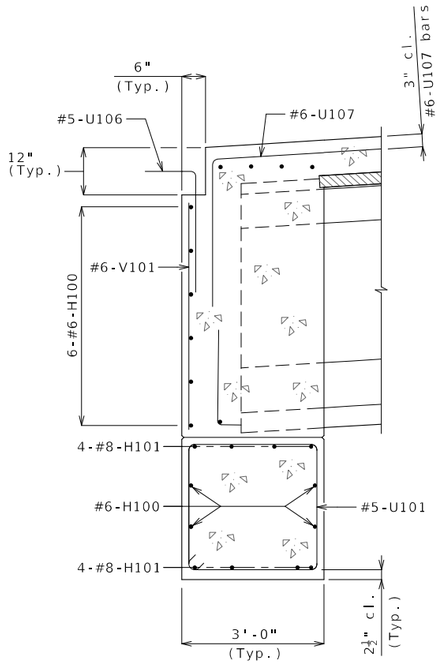
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 8
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

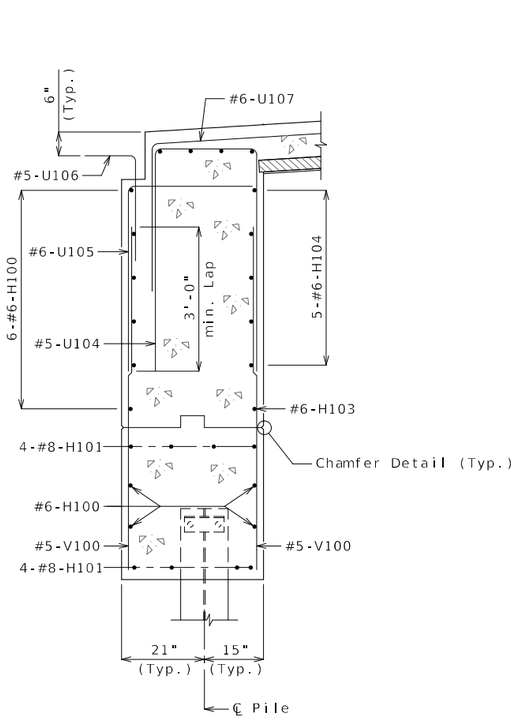
DESCRIPTION	DATE

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

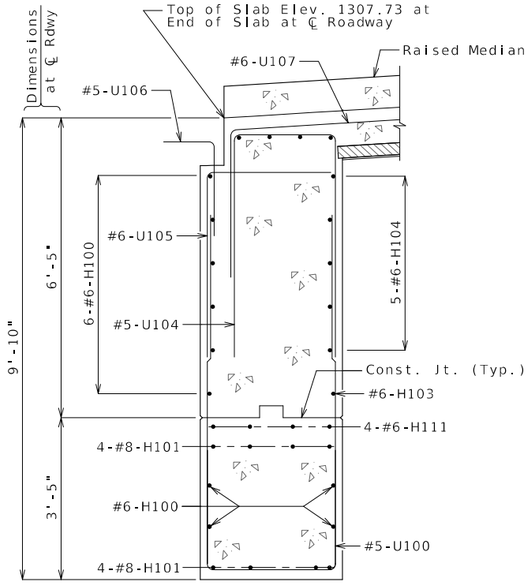
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



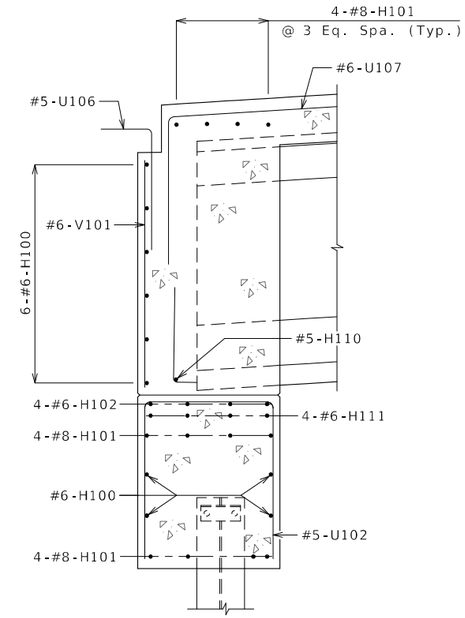
SECTION A-A



SECTION B-B



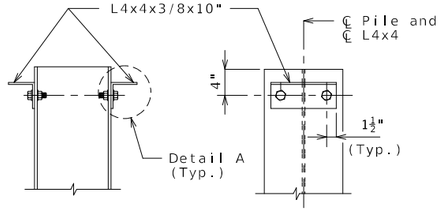
SECTION C-C



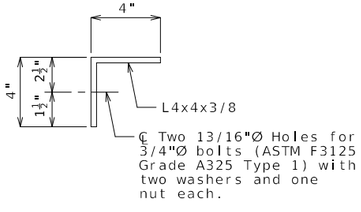
SECTION D-D

Substructure Quantity Table for Bent No. 1		
Item		Quantity
Galvanized Structural Steel Piles (12 in.)	linear foot	469
Dynamic Pile Testing	each	1
Pre-Bore for Piling	linear foot	459
Pile Point Reinforcement	each	9
Class B Concrete (Substructure)	cu. yard	33.2

These quantities are included in the Estimated Quantities table on Sheet No. 3.



DETAILS OF HP PILE ANCHORS



DETAIL A

Angles shall be coated with a minimum of two coats of non-aluminum epoxy mastic primer to provide a dry film thickness of 4 mils minimum, 8 mils maximum, or galvanized in accordance with Sec 1081. Bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

NOTES:

For location of Sections A-A, B-B, C-C, & D-D, see Sheet No.7.

Slab and raised median reinforcing not shown in Sections A-A, B-B, C-C & D-D for clarity.

END BENT NO. 1 SECTIONS

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 9
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

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

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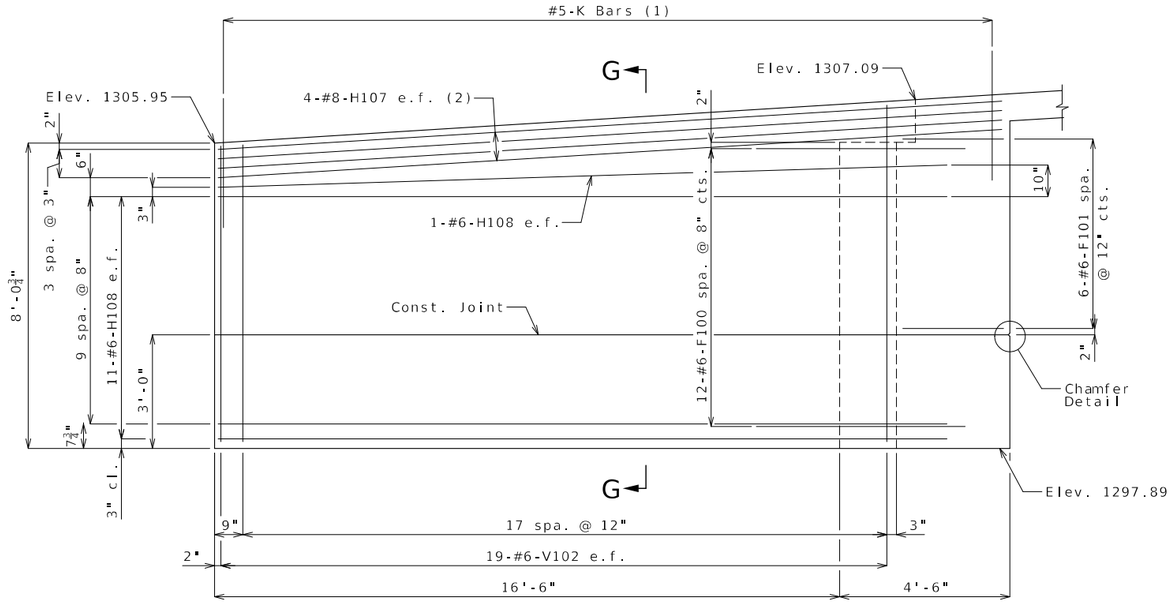
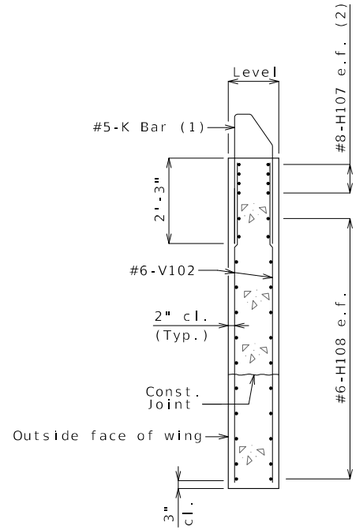
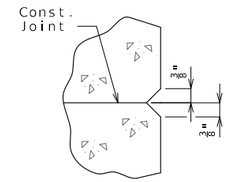


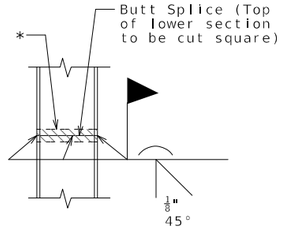
ELEVATION E-E
(South Wing)



SECTION G-G

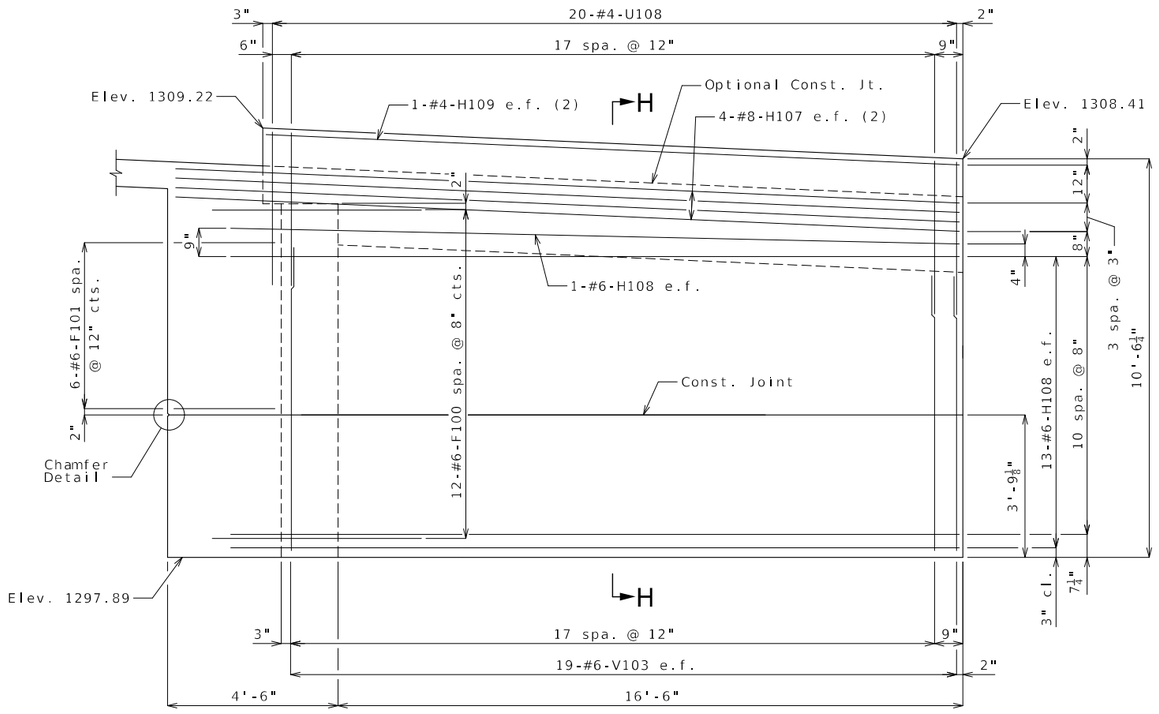


CHAMFER DETAIL

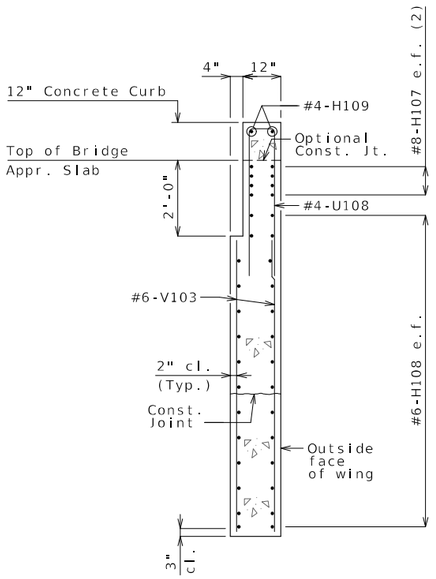


STEEL PILE SPLICE
(If required)

* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.



ELEVATION F-F
(North Wing)



SECTION H-H

NOTES:

e.f. denotes each face.

(1) For reinforcement of the Type D Barrier at the End Bent, see Sheet No. 40.

(2) Place parallel to top of wing.

END BENT NO. 1 WING DETAILS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

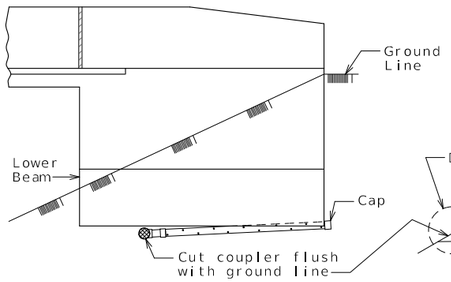
DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 10
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

REV.	DESCRIPTION	DATE

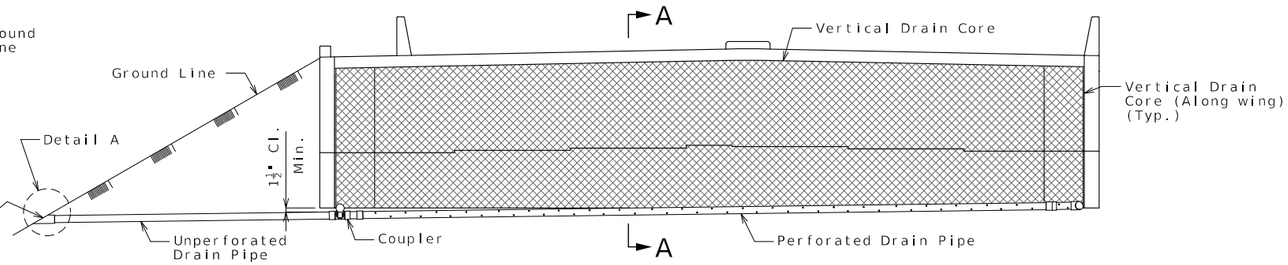
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

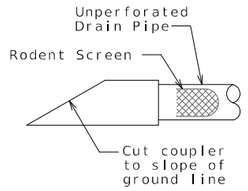
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



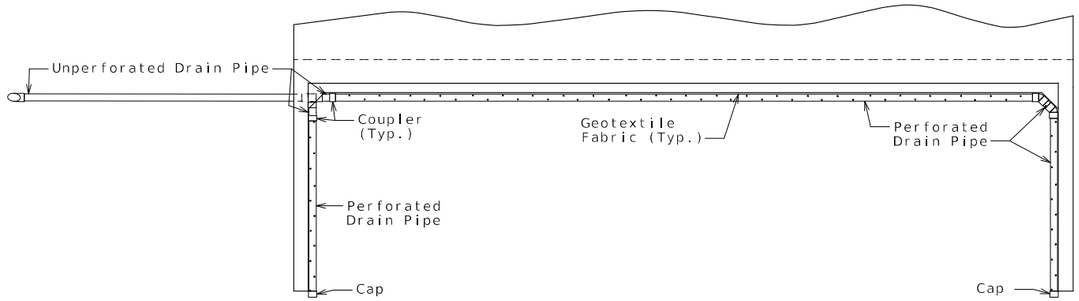
ELEVATION OF WING



ELEVATION OF END BENT

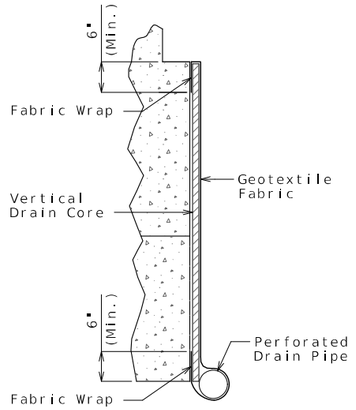


DETAIL A



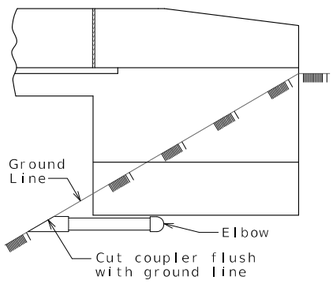
PLAN OF END BENT

(End Bent 5 shown, End Bent 1 similar)

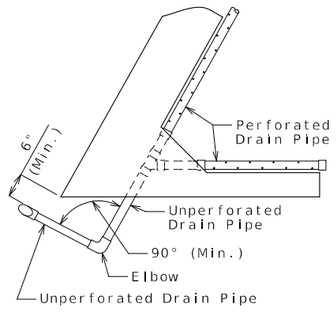


PART SECTION A-A

(Section thru wing similar)



ELEVATION OF WING



PART PLAN

OPTIONAL TURNED DRAIN

(Use only when straight drain is not practical.)

General Notes:

All drain pipe shall be sloped 1 to 2 percent.

Drain pipe may be either 6-inch diameter corrugated metallic-coated steel pipe underdrain, 4-inch diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4-inch diameter corrugated polyethylene (PE) drain pipe.

Drain pipe shall be placed at fill face of end bent and inside face of wings. The pipe shall slope to lowest grade of ground line, also missing the lower beam of end bent by a minimum of 1 1/2 inches.

Perforated pipe shall be placed at fill face side and inside face of wings at the bottom of end bent and plain pipe shall be used where the vertical drain ends to the exit at ground line.

VERTICAL DRAIN AT END BENTS

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	11

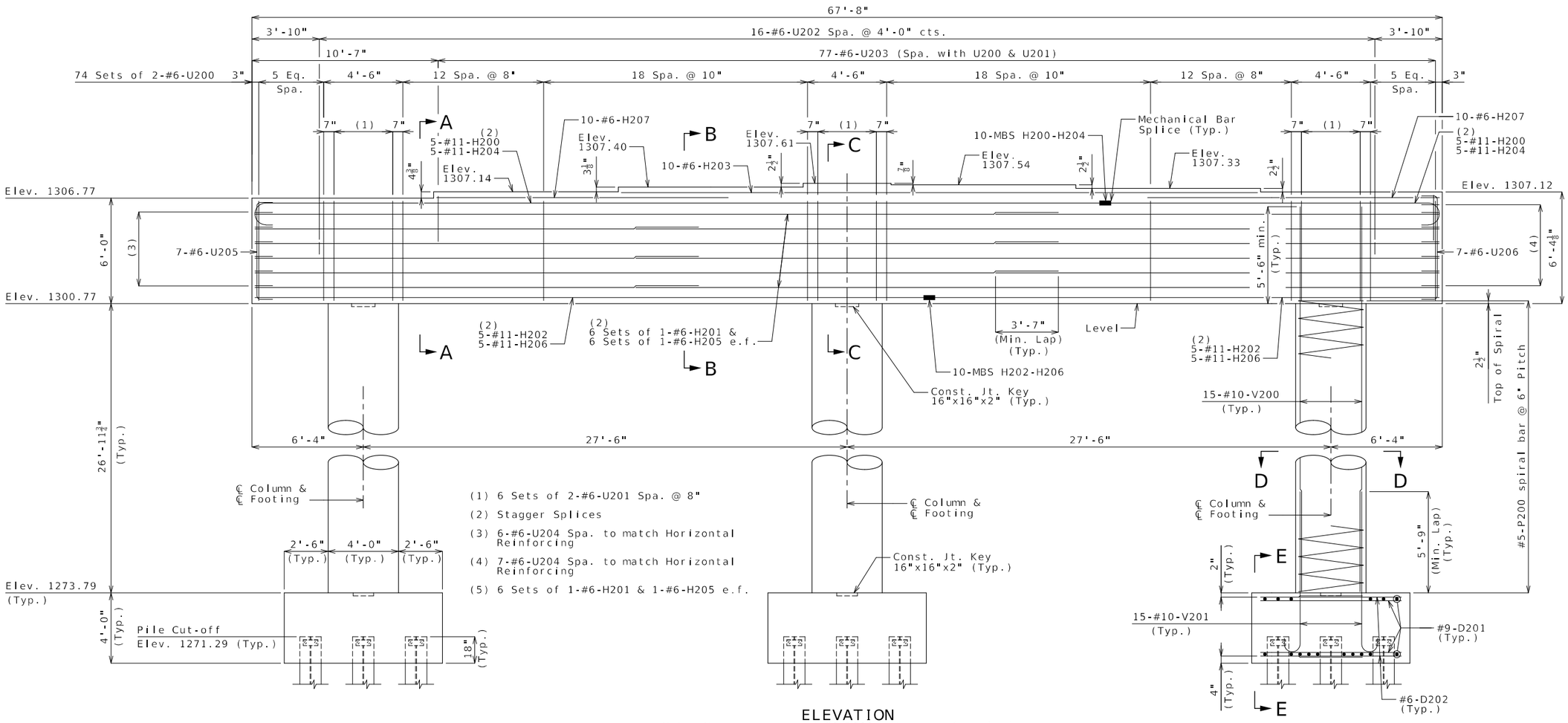
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



(1) 6 Sets of 2-#6-U201 Spa. @ 8"

(2) Stagger Splices

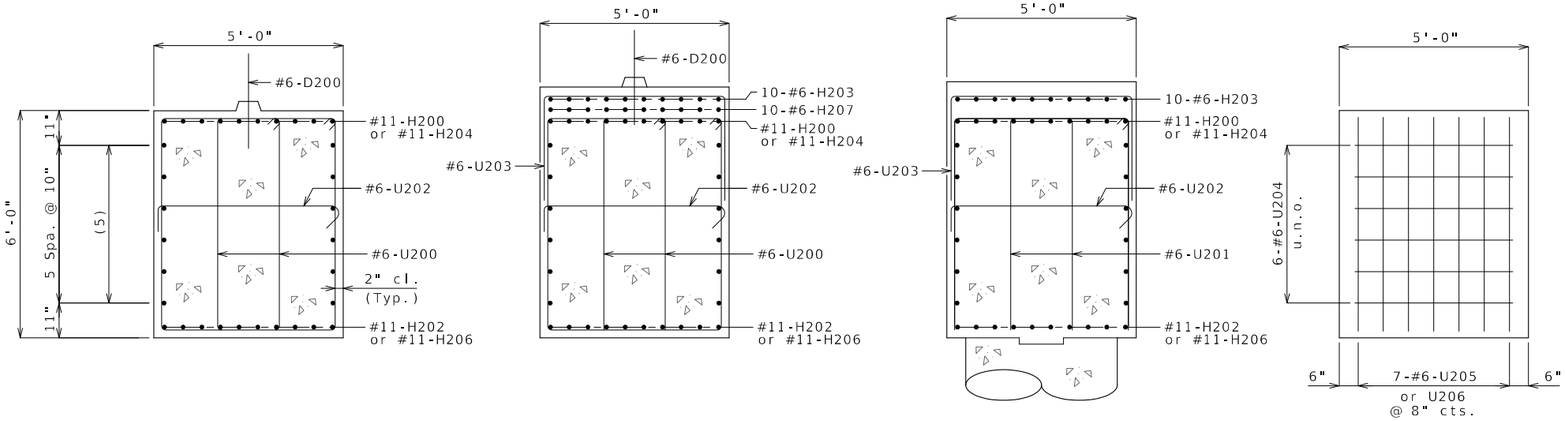
(3) 6-#6-U204 Spa. to match Horizontal Reinforcing

(4) 7-#6-U204 Spa. to match Horizontal Reinforcing

(5) 6 Sets of 1-#6-H201 & 1-#6-H205 e.f.

ELEVATION

Note: Keys on beam and #6-D200 not shown for clarity.



SECTION A-A

SECTION B-B

SECTION C-C

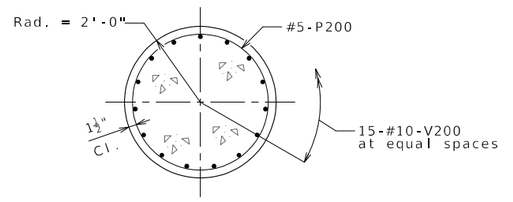
END VIEW

Note:

Work this sheet with Sheets No.13 & 18.

e.f. denotes each face
e.e. denotes each end
u.n.o. denotes unless noted otherwise

For Section E-E and Plan of Footing Reinforcement, see Sheet No. 18.



SECTION D-D

DETAILS OF INTERMEDIATE BENT NO. 2

Detailed: July 2024
Checked: July 2024

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

Sheet No.12 of 63

THOMAS M. GREER
NUMBER PE-2010000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	12

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

PROJECT NO.:

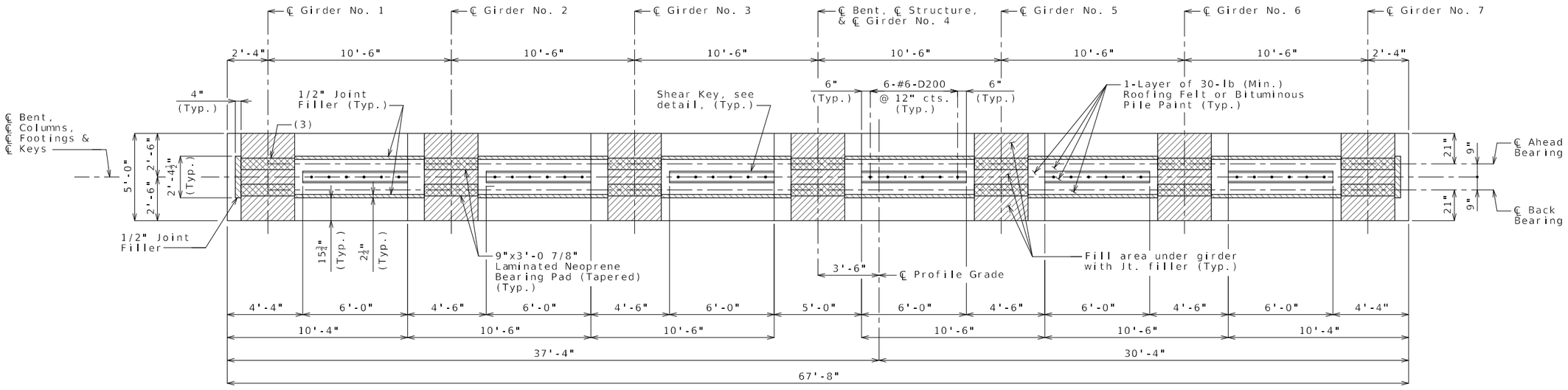
BRIDGE NO.: A9472

DATE	DESCRIPTION

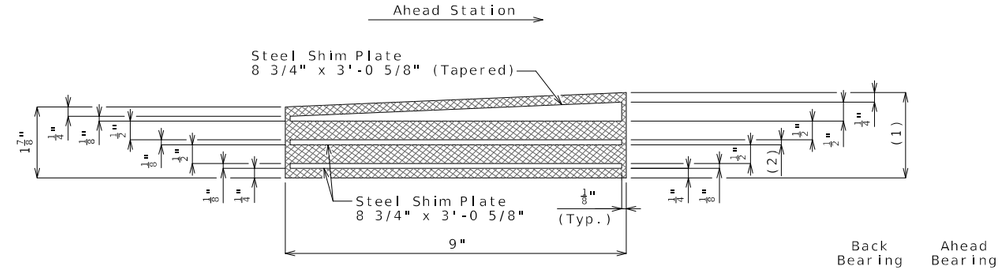
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

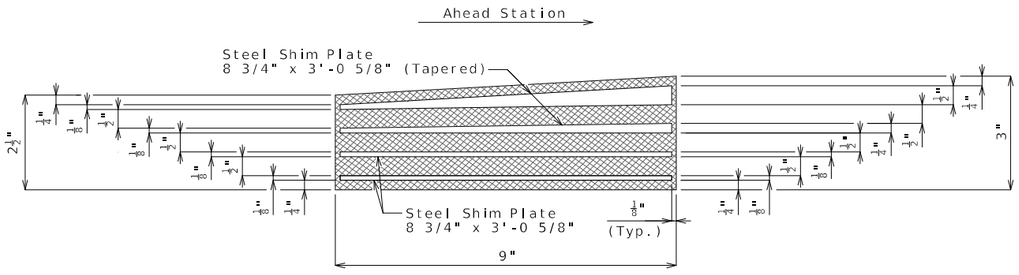


PLAN OF BEAM
(Columns and Footings not shown for clarity)

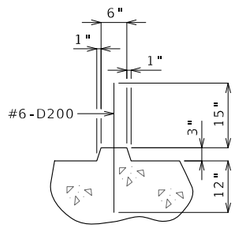


	Back Bearing	Ahead Bearing
(1)	2 1/4"	2 3/8"
(2)	1/8"	1/4"

TYPICAL SECTION THRU LAMINATED BEARING PAD (TAPERED) 9" X 3'-0 7/8"



(3) SECTION THRU LAMINATED BEARING PAD (TAPERED) AT GIRDER 1 9" X 3'-0 7/8"



SECTION THRU KEY

Note:

For beam steps 2 inches or more, use 2 1/4 x 1/2 inch joint filler up vertical face.

Work this sheet with Sheets No.12 & 18.

Substructure Quantity Table for Bent No. 2		
Item		Quantity
Class 1 Excavation	cu. yard	115
Galvanized Structural Steel Piles (14 in.)	linear foot	414
Dynamic Pile Testing	each	1
Pile Point Reinforcement	each	21
Class B Concrete (Substructure)	cu. yard	155.1
Reinforcing Steel (Bridges)	pound	29,820
Mechanical Bar Splice	each	20

These quantities are included in the Estimated Quantities table on Sheet No. 3.

Detailed: July 2024
Checked: July 2024

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

DETAILS OF INTERMEDIATE BENT NO. 2

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 13
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

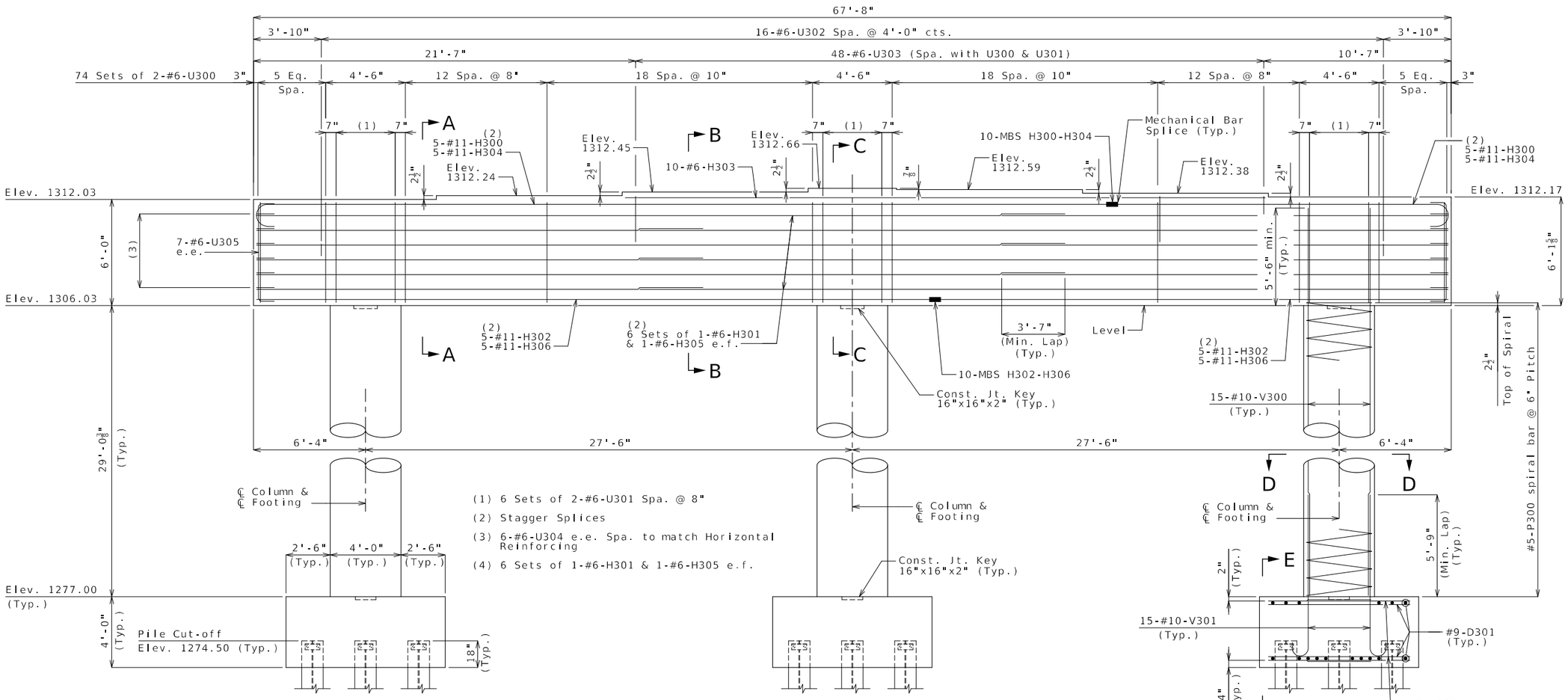
DESCRIPTION | DATE

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_012_J8S0836D.dgn 9:00:46 AM 7/10/2025



(1) 6 Sets of 2-#6-U301 Spa. @ 8"

(2) Stagger Splices

(3) 6-#6-U304 e.e. Spa. to match Horizontal Reinforcing

(4) 6 Sets of 1-#6-H301 & 1-#6-H305 e.f.

ELEVATION

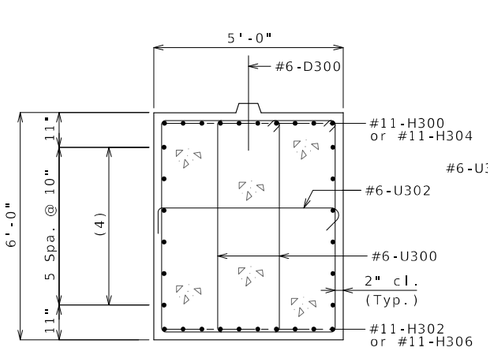
Note: Keys on beam and #6-D300 not shown for clarity.

Note:

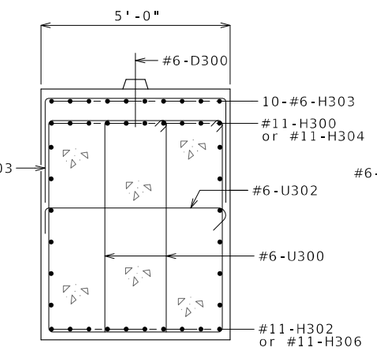
Work this sheet with Sheets No.15 & 18.

e.f. denotes each face
e.e. denotes each end

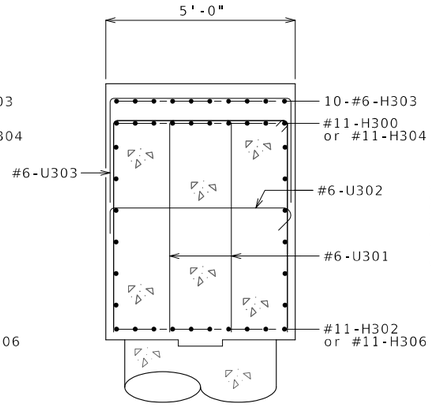
For Section E-E and Plan of Footing Reinforcement, see Sheet No. 18.



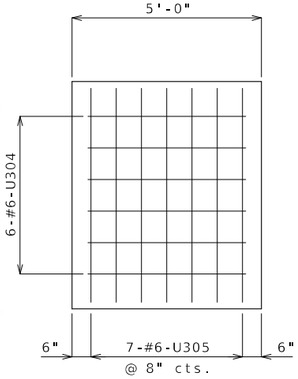
SECTION A-A



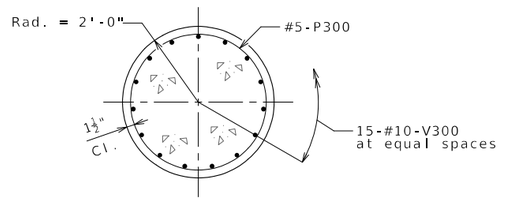
SECTION B-B



SECTION C-C



END VIEW



SECTION D-D

DETAILS OF INTERMEDIATE BENT NO. 3

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

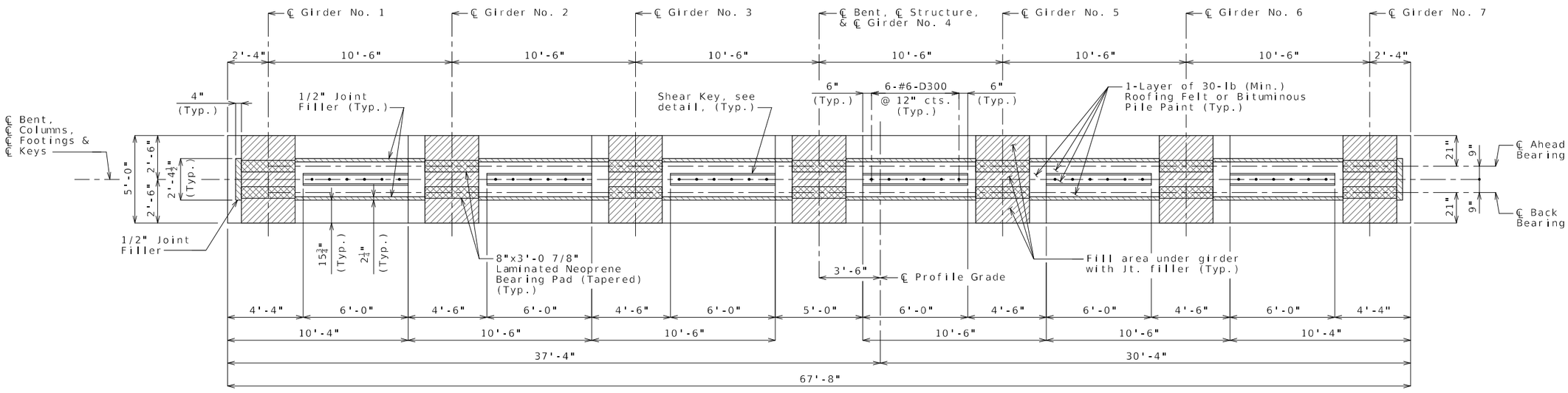
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED	7/10/2025
ROUTE	MM
STATE	MO
DISTRICT	BR
SHEET NO.	14
COUNTY	GREENE
JOB NO.	J8S0836D
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	A9472

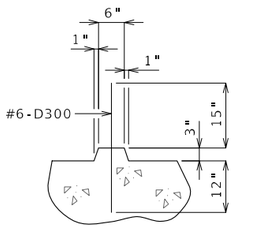
DATE	DESCRIPTION

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

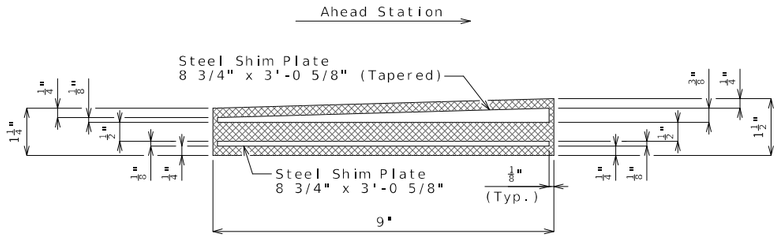
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491
BURNS McDONNELL



PLAN OF BEAM
(Columns and Footings not shown for clarity)



SECTION THRU KEY



TYPICAL SECTION THRU LAMINATED BEARING PAD (TAPERED) 9" X 3'-0 7/8"

Note:

For beam steps 2 inches or more, use 2 1/4 x 1/2 inch joint filler up vertical face.

Work this sheet with Sheets No. 14 & 18.

Substructure Quantity Table for Bent No. 3		
Item		Quantity
Class 1 Excavation	cu. yard	115
Galvanized Structural Steel Piles (14 in.)	linear foot	416
Dynamic Pile Testing	each	1
Pile Point Reinforcement	each	21
Class B Concrete (Substructure)	cu. yard	155.8
Reinforcing Steel (Bridges)	pound	29,430
Mechanical Bar Splice	each	20

These quantities are included in the Estimated Quantities table on Sheet No. 3.

DETAILS OF INTERMEDIATE BENT NO. 3

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

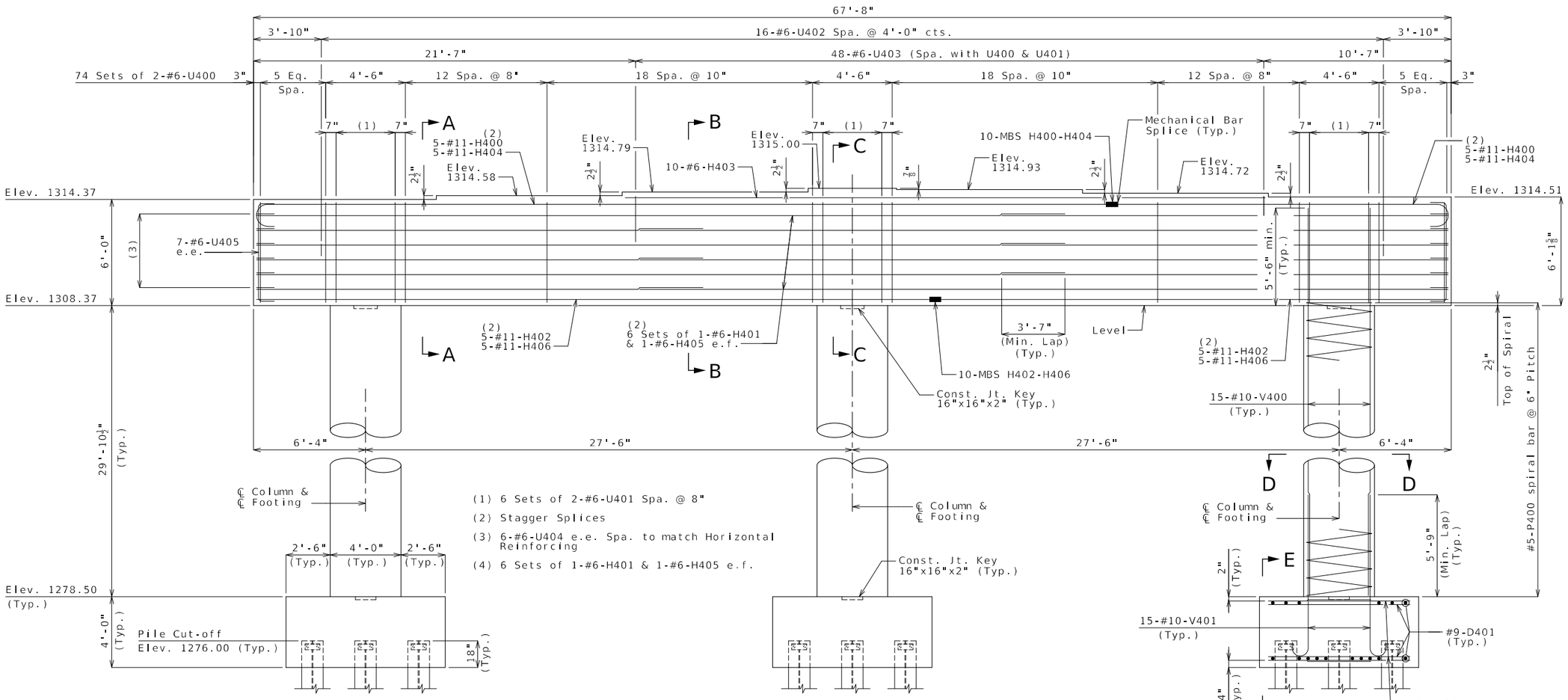
DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 15
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



ELEVATION

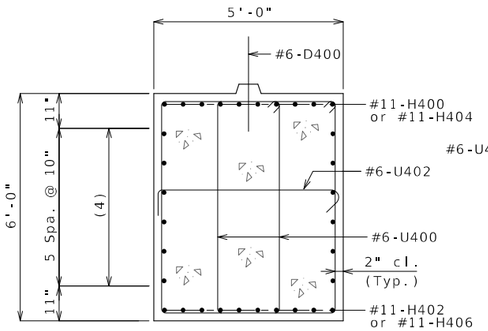
Note: Keys on beam and #6-D400 not shown for clarity.

Note:

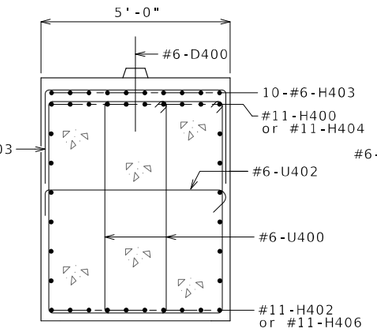
Work this sheet with Sheets No. 17 & 18.

e.f. denotes each face
e.e. denotes each end

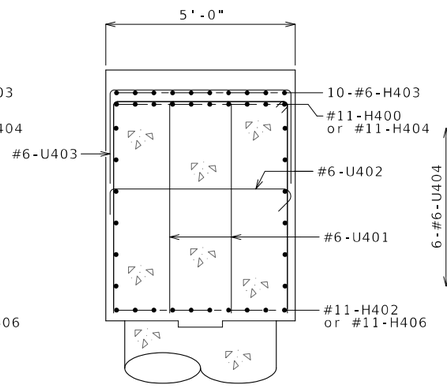
For Section E-E and Plan of Footing Reinforcement, see Sheet No. 18.



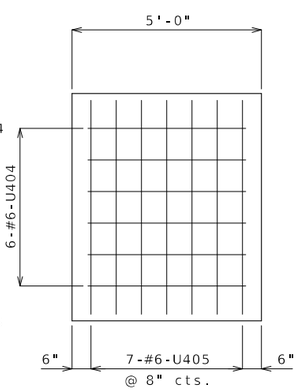
SECTION A-A



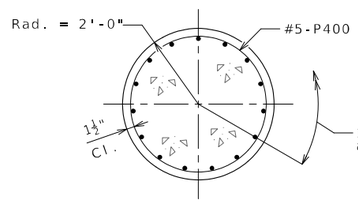
SECTION B-B



SECTION C-C



END VIEW



SECTION D-D

DETAILS OF INTERMEDIATE BENT NO. 4

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

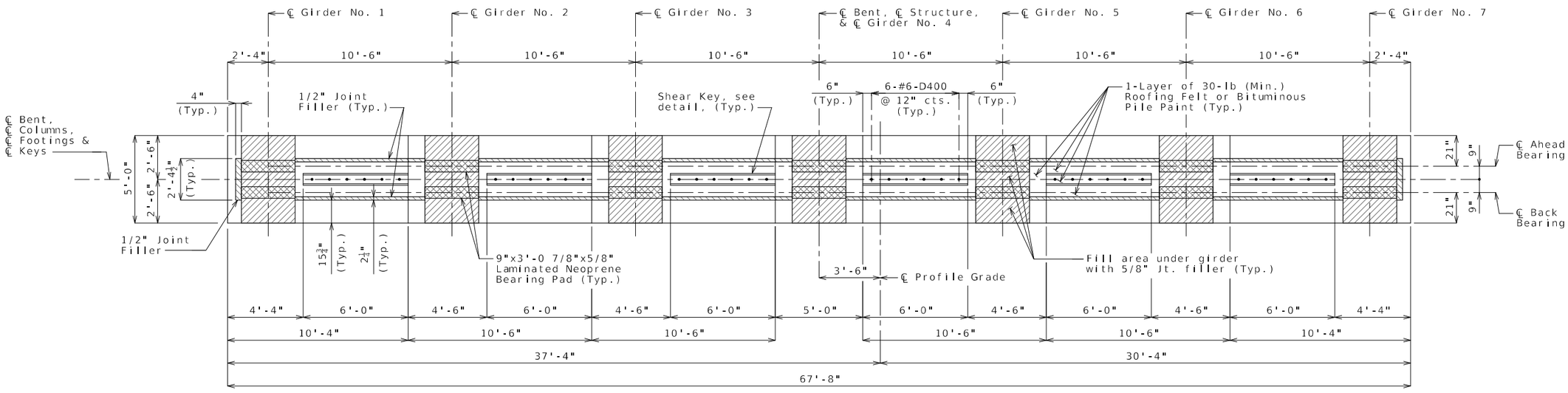
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 16
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

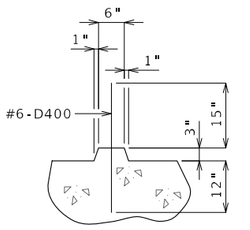
DESCRIPTION | DATE

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

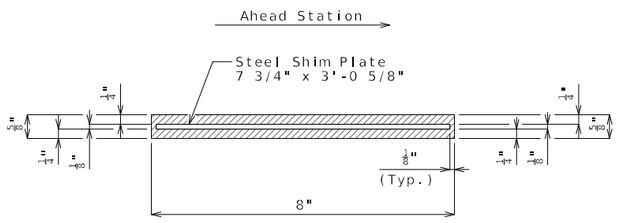
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



PLAN OF BEAM
(Columns and Footings not shown for clarity)



SECTION THRU KEY



TYPICAL SECTION THRU LAMINATED BEARING PAD 8" X 3'-0 7/8"

Note:

For beam steps 2 inches or more, use 2 1/4 x 1/2 inch joint filler up vertical face.

Work this sheet with Sheets No. 16 & 18.

Substructure Quantity Table for Bent No. 4		
Item		Quantity
Class 1 Excavation	cu. yard	115
Galvanized Structural Steel Piles (14 in.)	linear foot	378
Dynamic Pile Testing	each	1
Pile Point Reinforcement	each	21
Class B Concrete (Substructure)	cu. yard	157.0
Reinforcing Steel (Bridges)	pound	29,660
Mechanical Bar Splice	each	20

These quantities are included in the Estimated Quantities table on Sheet No. 3.

DETAILS OF INTERMEDIATE BENT NO. 4

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

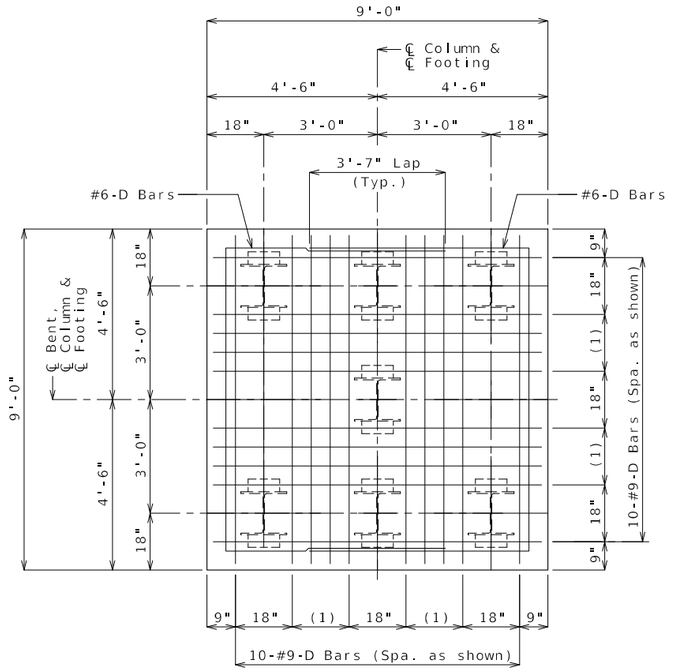
DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 17
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION | DATE

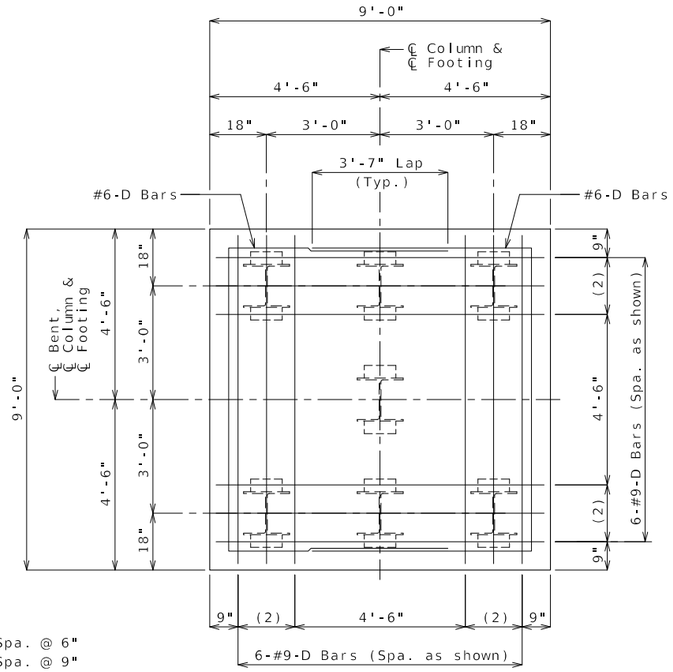
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

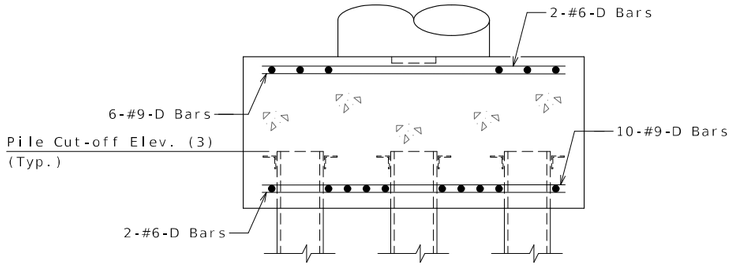


PLAN OF FOOTING SHOWING
BOTTOM REINFORCEMENT BENTS NO. 2, 3, & 4



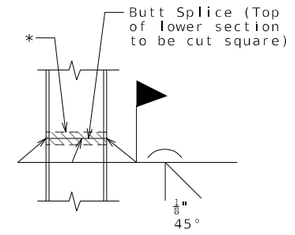
(1) 3 Spa. @ 6"
(2) 2 Spa. @ 9"

PLAN OF FOOTING SHOWING
TOP REINFORCEMENT BENTS NO. 2, 3, & 4



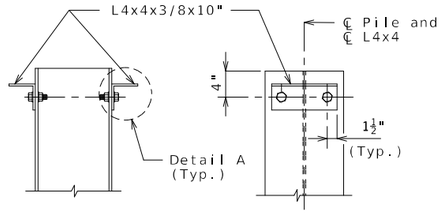
SECTION E-E

(3) Bent 2 - Elev. 1271.29
Bent 3 - Elev. 1274.50
Bent 4 - Elev. 1276.00

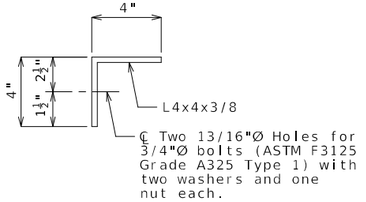


STEEL PILE SPLICE
(If required)

* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.



DETAILS OF HP PILE ANCHORS



DETAIL A

Angles shall be coated with a minimum of two coats of non-aluminum epoxy mastic primer to provide a dry film thickness of 4 mils minimum, 8 mils maximum, or galvanized in accordance with Sec 1081. Bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

NOTE:

Work this sheet with Sheets No. 12 thru 17.

DETAILS OF INTERMEDIATE BENTS NO. 2, 3, & 4

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 18
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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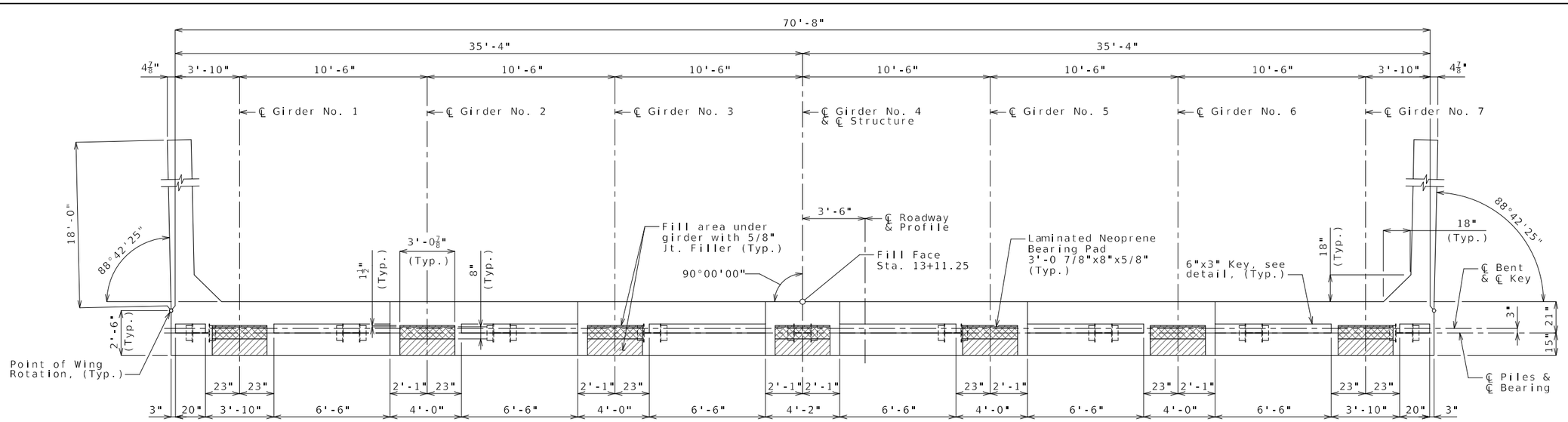
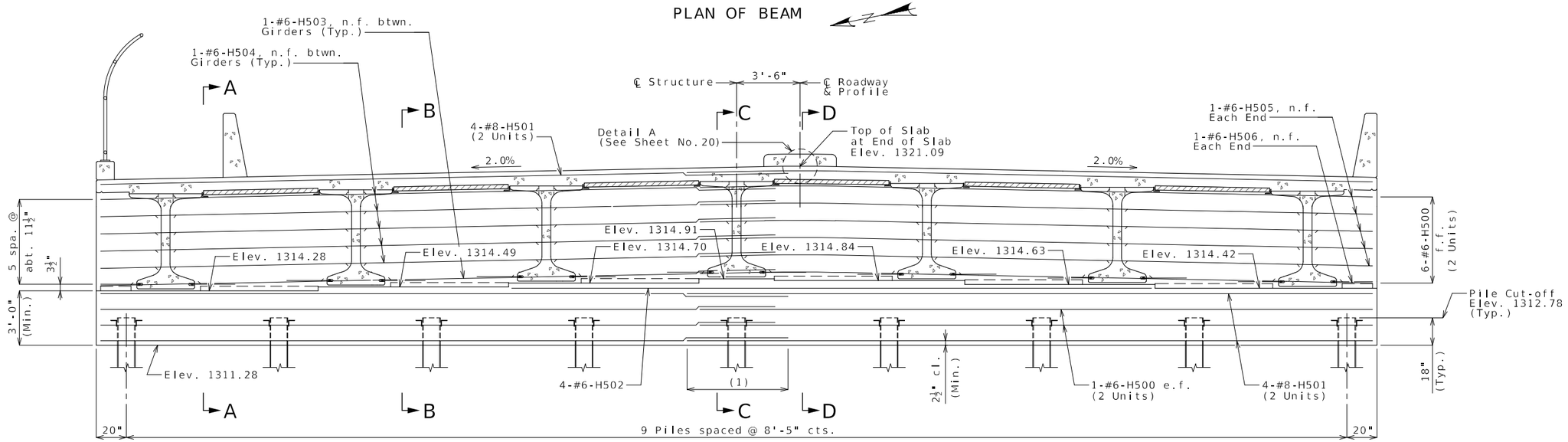


PLAN OF BEAM



SECTION NEAR END BENT

NOTES:

Strands at end of the girders shall be field bent, or if necessary, cut in field to maintain 1 1/2 inch minimum clearance to fill face of end bent.

Reinforcing steel shall be shifted to clear piles. U bars shall clear piles by at least 1 1/2 inches.

All concrete in the end bent above top of beam and below top of slab shall be Class B-2.

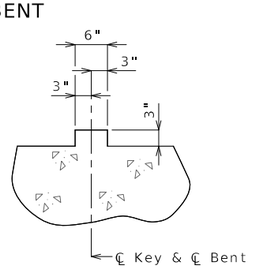
For Sections A-A, B-B, C-C & D-D, see Sheet No. 21.

e.f. denotes each face
f.f. denotes far face
n.f. denotes near face

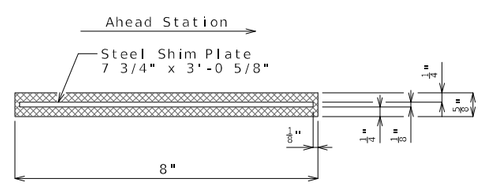
For details of Vertical Drain at End Bents, see Sheet No. 11.

(1) Minimum Lap #6 Bars = 3'-7"
Minimum Lap #8 Bars = 4'-9"

Work this sheet with Sheets No. 20, 21 & 22.



SECTION THRU KEY



TYPICAL SECTION THRU LAMINATED BEARING PAD 8" X 3'-0 7/8"

END BENT NO. 5 PLAN & ELEVATION

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

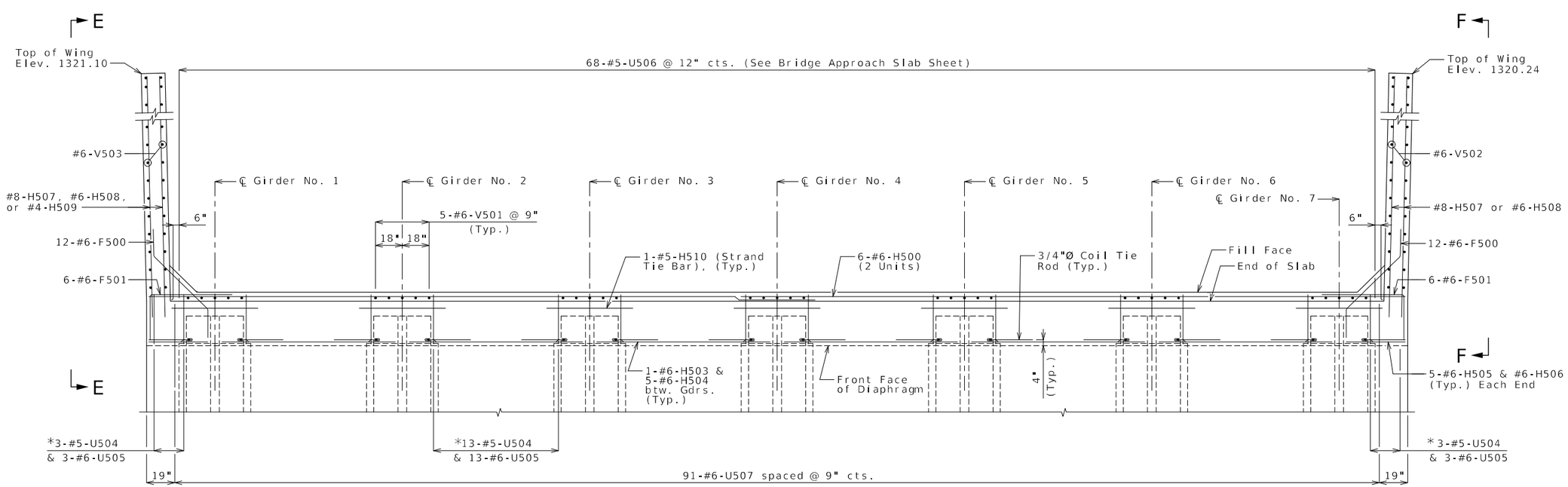
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 19
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION	DATE

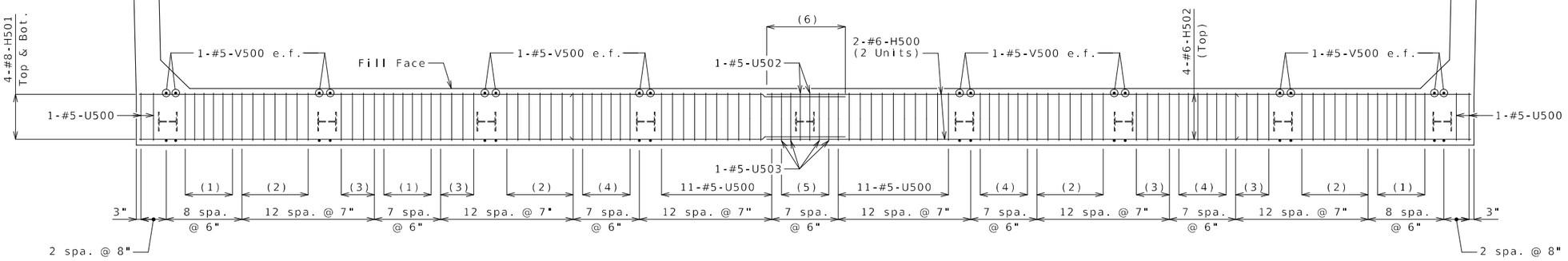
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



PART PLAN

∗ Space bars to match #5-V500 & #5-U500 bars.



PLAN OF BEAM SHOWING REINFORCEMENT

(Steps and Keys not shown for clarity)

(1) 6-#5-U501

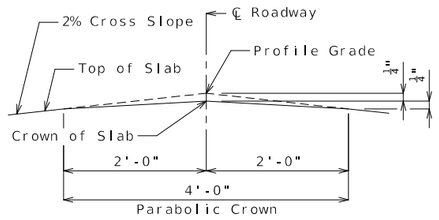
(2) 7-#5-U500

(3) 4-#5-U500

(4) 6-#5-U503

(5) 5 Spaces @ 6"

(6) Minimum Lap #6 Bars = 3'-7"
Minimum Lap #8 Bars = 4'-9"



DETAIL A

NOTES:

For location of coil tie rods and #5-H510 (strand tie bar), see Sheets No.24 & 25.

For Elevations E-E and F-F, see Sheet No.22.

The #6-F500 bars shall be bent in the field to clear girders.

For location of Detail A, see Sheet No.19.

e.f. denotes each face.

Work this sheet with Sheets No.19, 21 & 22.

END BENT NO. 5 REINFORCING DETAILS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	20

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

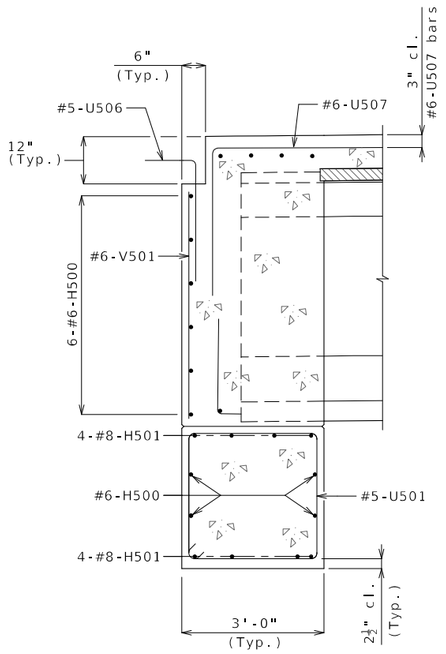
BRIDGE NO.
A9472

DESCRIPTION	DATE

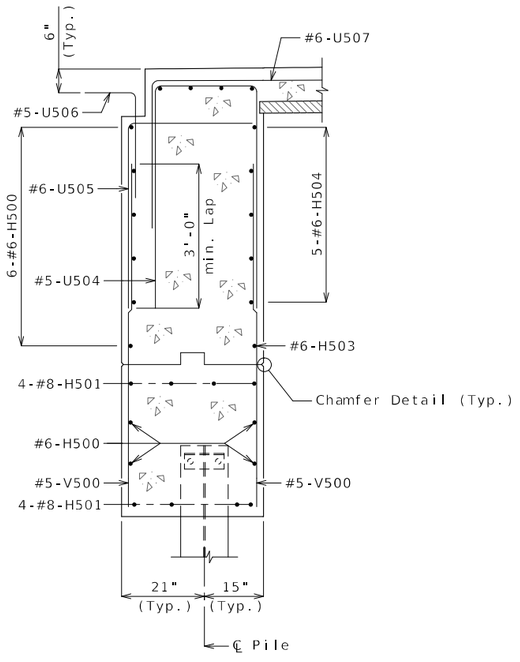
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

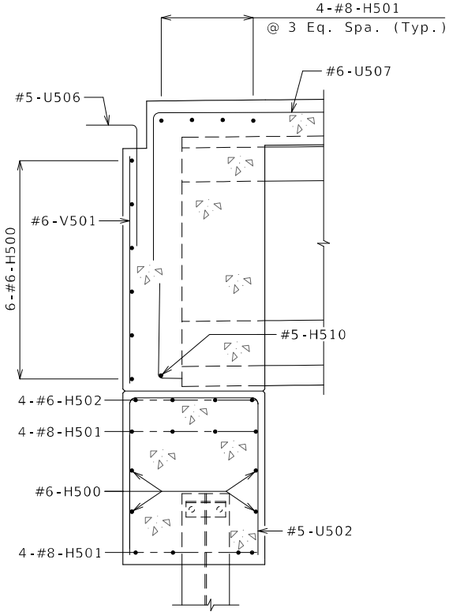
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



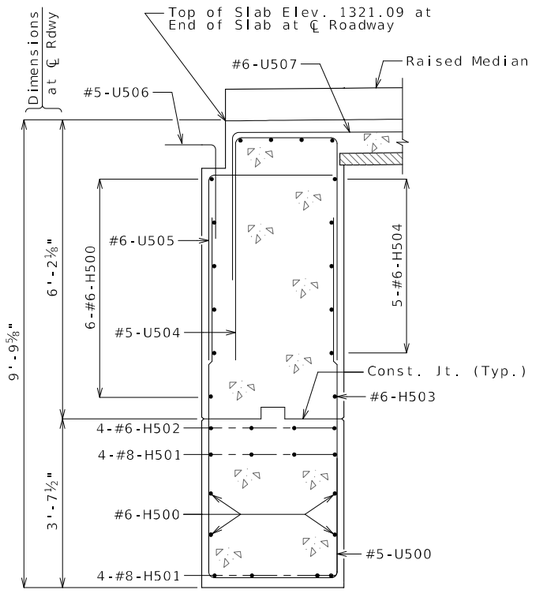
SECTION A-A



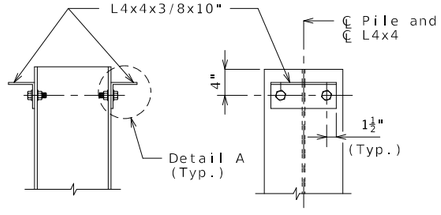
SECTION B-B



SECTION C-C



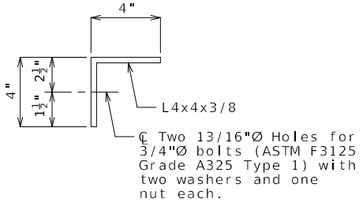
SECTION D-D



DETAILS OF HP PILE ANCHORS

Substructure Quantity Table for Bent No. 5		
Item		Quantity
Galvanized Structural Steel Piles (12 in.)	linear foot	476
Dynamic Pile Testing	each	1
Pre-Bore for Piling	linear foot	459
Pile Point Reinforcement	each	9
Class B Concrete (Substructure)	cu. yard	31.6

These quantities are included in the Estimated Quantities table on Sheet No. 3.



DETAIL A

Angles shall be coated with a minimum of two coats of non-aluminum epoxy mastic primer to provide a dry film thickness of 4 mils minimum, 8 mils maximum, or galvanized in accordance with Sec 1081. Bolts, washers and nuts shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

NOTES:

For location of Sections A-A, B-B, C-C, & D-D, see Sheet No.19.

Slab and raised median reinforcing not shown in Sections A-A, B-B, C-C & D-D for clarity.

END BENT NO. 5 SECTIONS

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	21

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

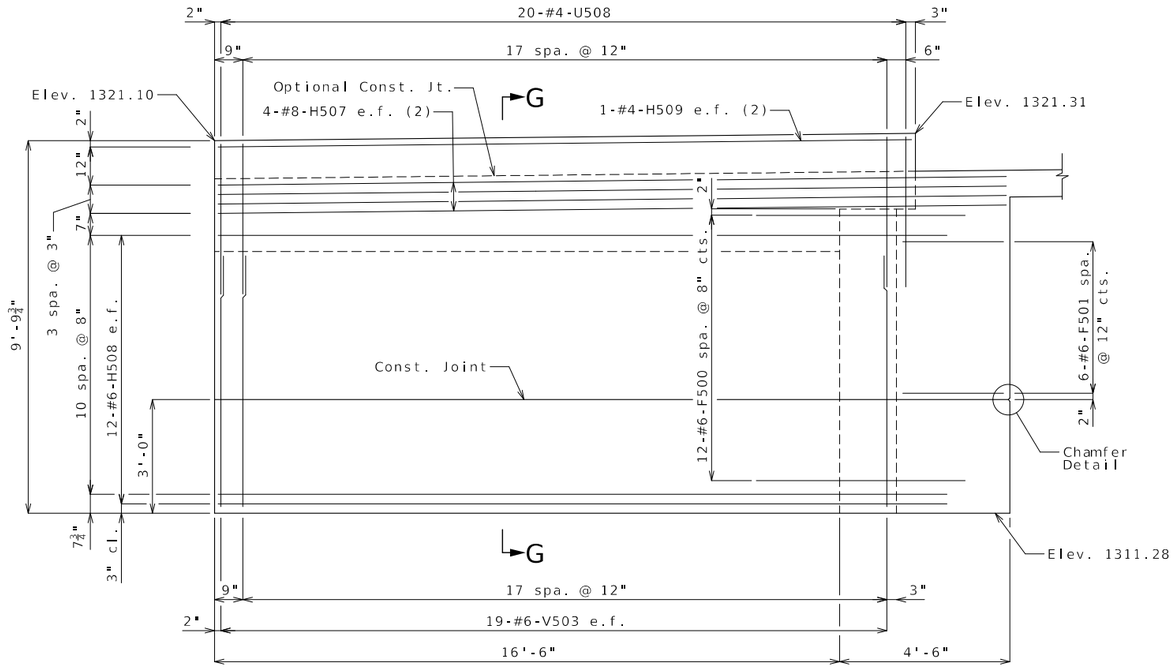
BRIDGE NO.
A9472

REV.	DESCRIPTION	DATE

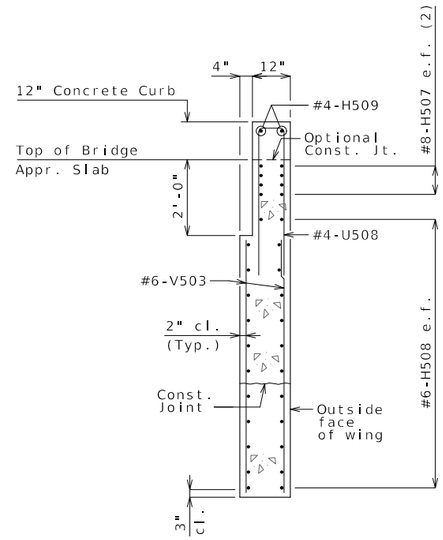
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

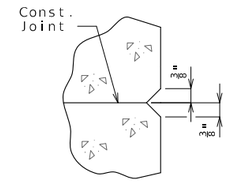
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



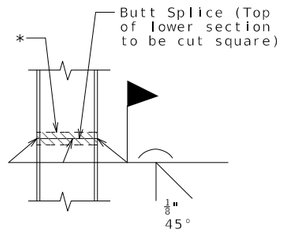
ELEVATION E-E
(North Wing)



SECTION G-G

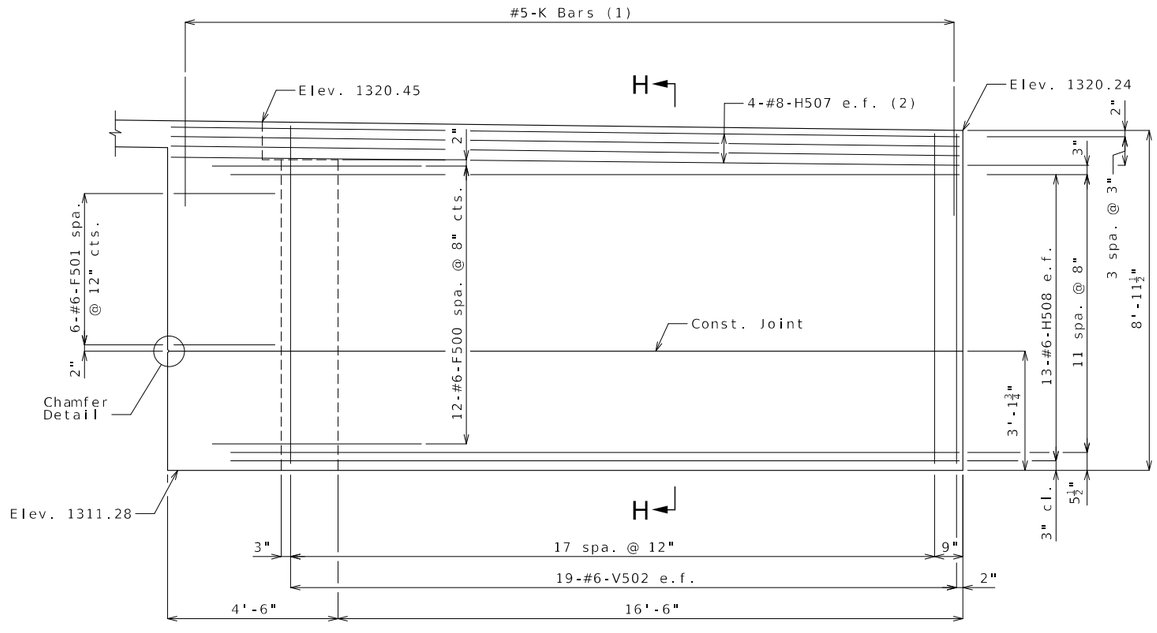


CHAMFER DETAIL

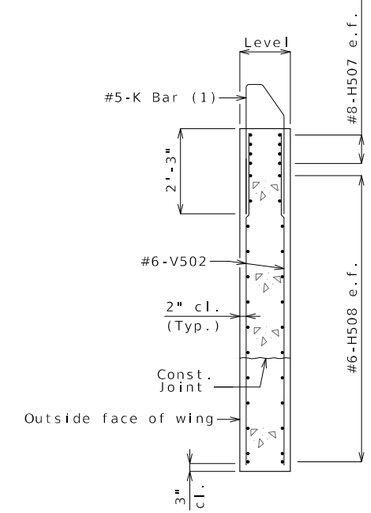


STEEL PILE SPLICE
(If required)

* Galvanizing material shall be omitted or removed one inch clear of weld locations in accordance with Sec 702.



ELEVATION F-F
(South Wing)



SECTION H-H

NOTES:

e.f. denotes each face.

(1) For reinforcement of the Type D Barrier at the End Bent, see Sheet No.40.

(2) Place parallel to top of wing.

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	22

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

DESCRIPTION	DATE

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

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816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

REV.

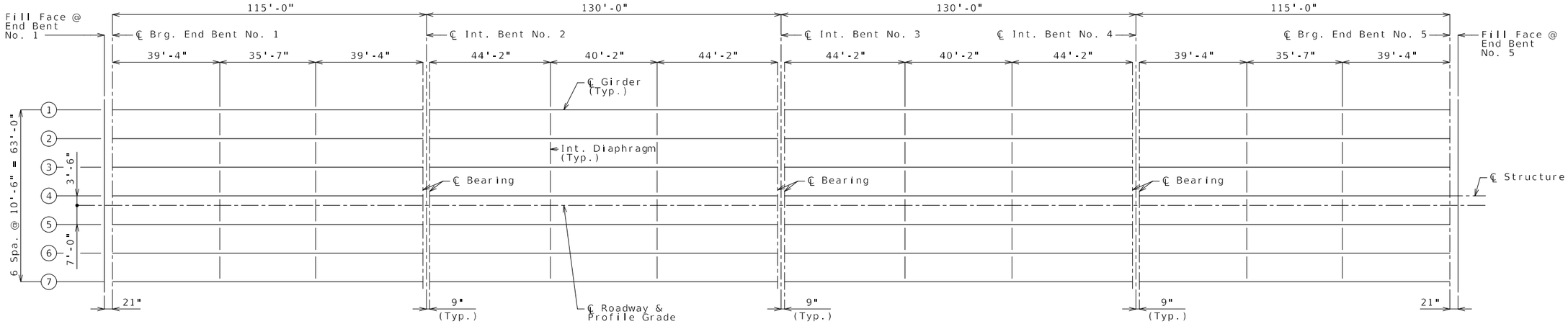
Detailed: July 2024
Checked: July 2024

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

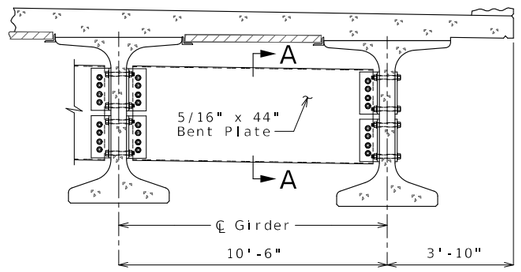
Sheet No. 22 of 63

END BENT NO. 5 WING DETAILS

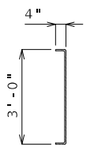
c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_021_J8S0836D.dgn 9:01:39 AM 7/10/2025



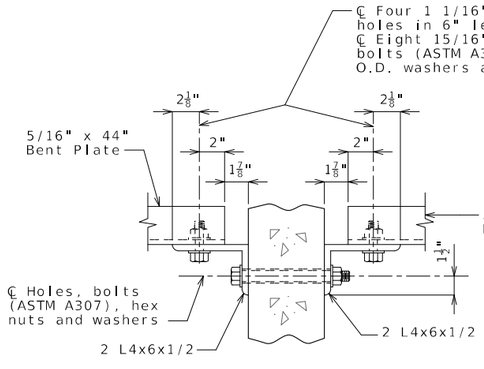
PLAN SHOWING LOCATION OF INTERMEDIATE DIAPHRAGMS



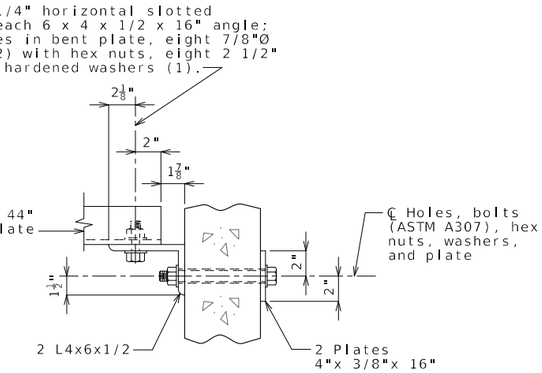
PART SECTION SHOWING INTERMEDIATE DIAPHRAGMS



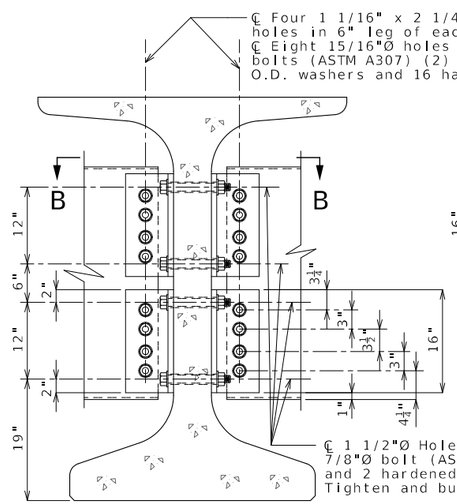
SECTION A-A



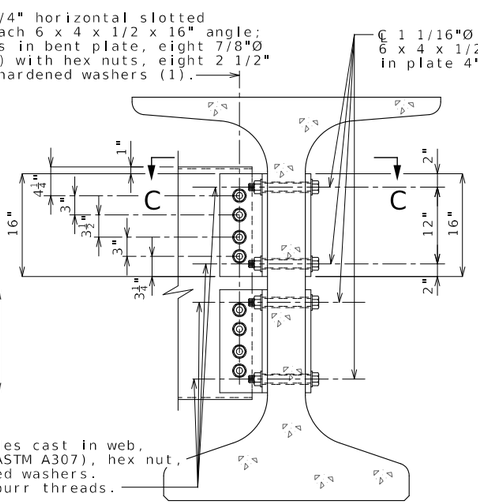
SECTION B-B



SECTION C-C



SECTION THRU INT. GIRDER AT DIAPHRAGM



SECTION THRU EXT. GIRDER AT DIAPHRAGM

STEEL DIAPHRAGM NOTES:

(1) In lieu of 2 1/2" outside diameter washers, contractor may substitute a 3/16" (Min. thickness) plate with four 15/16"Ø holes and one hardened washer per bolt.

(2) Bolts shall be tightened to provide a tension of one-half that specified in Sec 712 for high strength bolt installation. ASTM F3125 Grade A325 Type 1 bolts may be substituted for and installed in accordance with the requirements for the specified ASTM A307 bolts.

All diaphragm materials including bolts, nuts, and washers shall be galvanized.

Fabricated structural steel shall be ASTM A709 Grade 36 except as noted.

Payment for furnishing and installing steel intermediate diaphragms will be considered completely covered by the contract unit price for Steel Intermediate Diaphragm for P/S Concrete Girders.

Shop drawings will not be required for steel intermediate diaphragms and angle connections.

FRAMING PLAN AND STEEL INTERMEDIATE DIAPHRAGMS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
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IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

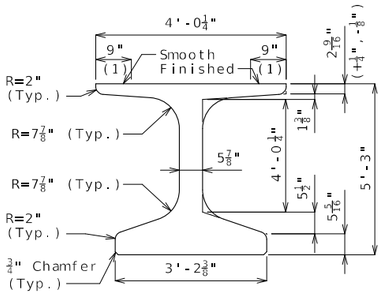
DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 23
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION	DATE

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

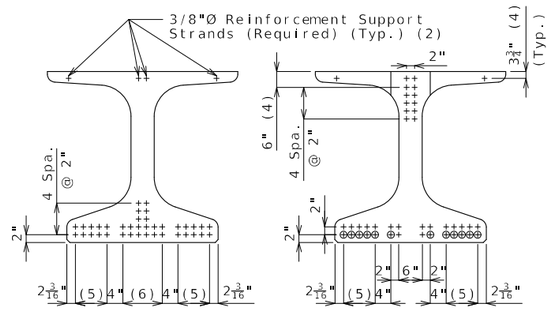
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.



DIMENSIONS
AT MID-SPAN

(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



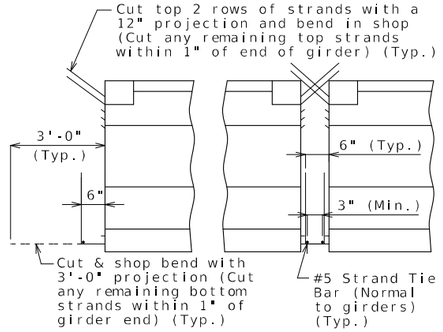
℄ GIRDER END OF GIRDER

STRAND ARRANGEMENT

+ Indicates prestressing strand.

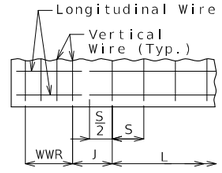
o Indicates cut & shop bend with 3'-0" projection.

(5) 4 Spa. @ 2"
(6) 5 Spa. @ 2"



END BENT INTERMEDIATE BENT

STRANDS AT GIRDER ENDS

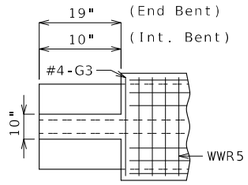


WELDED WIRE PLACEMENT

S = Vertical wire spacing

L = Length of WWR mats

J = Distance between WWR mats



INTERIOR GIRDER AT ALL BENTS & EXTERIOR GIRDER AT END BENT

TOP FLANGE BLOCKOUT

Bill of Reinforcing Steel

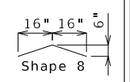
Bars Each Girder

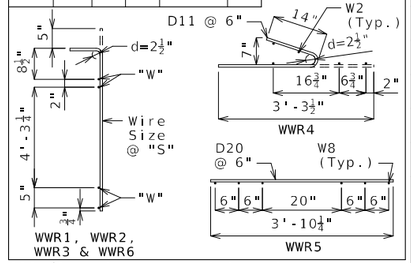
No.	Size/Mark	Length	Shape
136	3 G1	2'-10"	8
2	4 G3	3'-10¼"	20

Welded Wire Each Girder

Mark	Size	S	W	L	J
WWR1	D31	4"	W12	9'-4"	7"
WWR2	D31	12"	W12	14'-0"	14"
WWR3	D31	16"	W12	30'-8"	--
WWR6	D31	2"	W12	16"	4¼"

Bending Diagrams





All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1", unless otherwise shown.

All bar reinforcement shall be Grade 60.

WWR shall not be epoxy coated.

General Notes:

Concrete for prestressed beams shall be Class A-1 with f'c = 10000 psi and f'ci = 7000 psi.

Use 38 strands, 0.6"Ø Grade 270, with an initial prestress force of 1670 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior girders are the same except: coil ties, application of bond breaker, coil inserts for slab drains and holes for steel intermediate diaphragms.

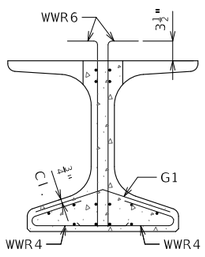
For Girder Camber Diagram, see Sheet No. 32.

The 1 1/2"Ø holes shall be cast in the web for steel intermediate diaphragms. Drilling is not allowed. For location of holes and details of steel intermediate diaphragms, see Sheet No. 23.

For location of coil inserts at slab drains, see Sheets No. 34 and 35.

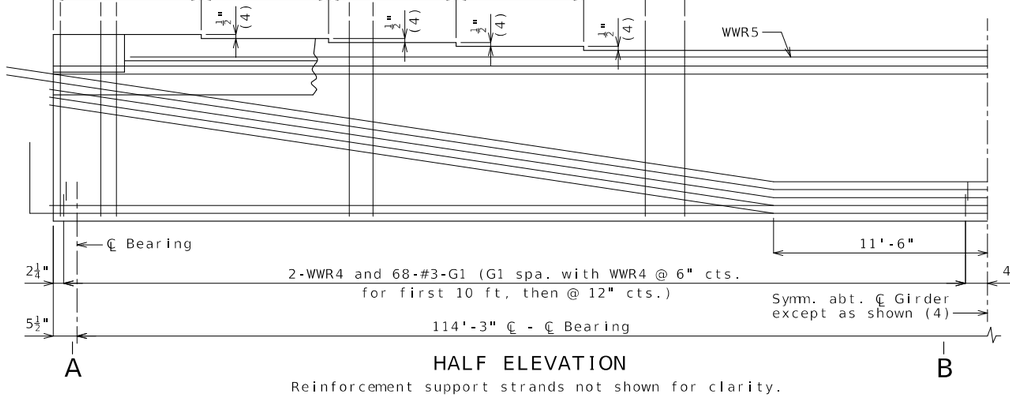
For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 8, 20 and 28.

Alternate bar reinforcing steel details are provided and may be used. The same type of reinforcing steel shall be used for all girders in all spans.



SECTION A-A

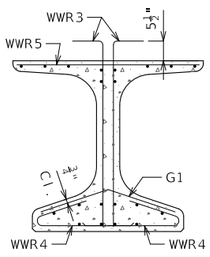
Strands not shown for clarity.



HALF ELEVATION

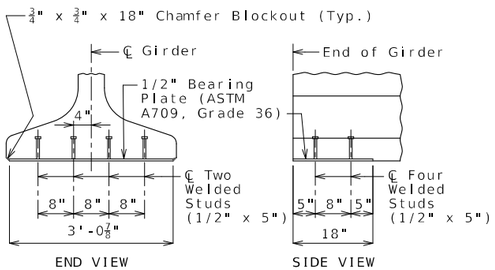
Reinforcement support strands not shown for clarity.

(4) Girder steps are only present in Span (1-2).



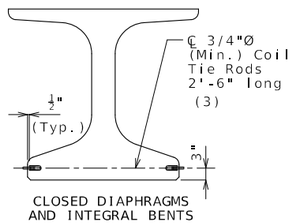
SECTION B-B

Strands not shown for clarity.



END VIEW SIDE VIEW

BEARING PLATE



CLOSED DIAPHRAGMS AND INTEGRAL BENTS

COIL TIES

Exclude coil tie at exterior face of exterior girders except at integral end bents.

(3) 2'-3" at exterior face of exterior girders at end bents

Detailed: July 2024
Checked: July 2024

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

Sheet No.24 of 63

NU-GIRDERS
SPANS (1-2) and (4-5)

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	24

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.: A9472

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
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Certificate of Authority No.: 000165

BMcD Project No. 163491

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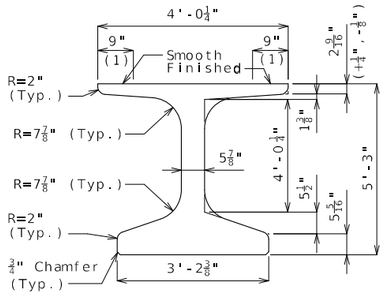
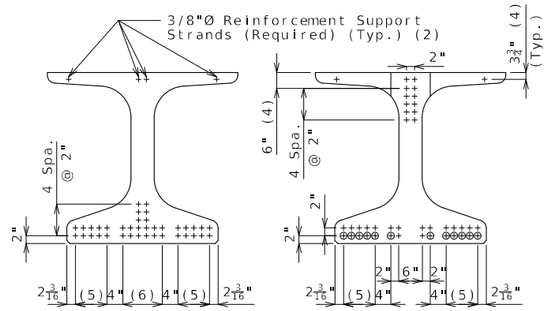
(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.



DIMENSIONS
AT MID-SPAN

(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



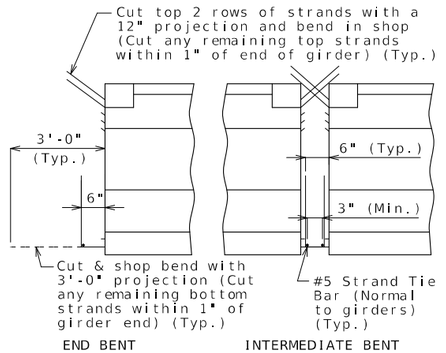
℄ GIRDER END OF GIRDER

STRAND ARRANGEMENT

\+ Indicates prestressing strand.

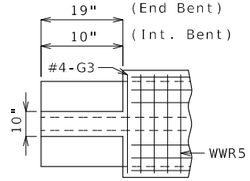
o Indicates cut & shop bend with 3'-0" projection.

(5) 4 Spa. @ 2"
(6) 5 Spa. @ 2"



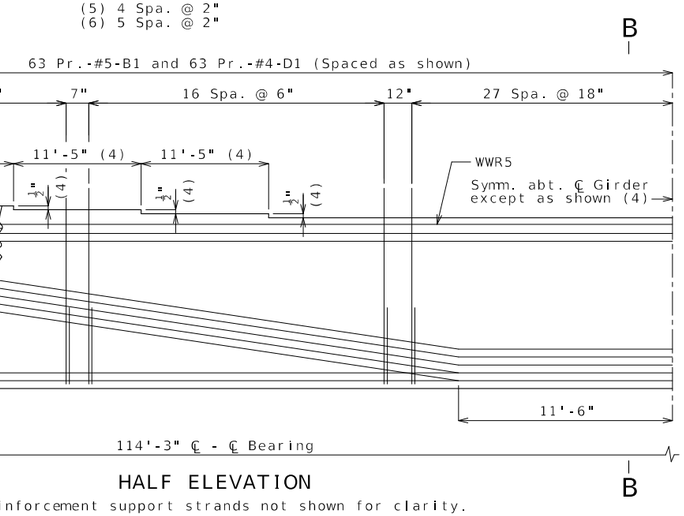
END BENT INTERMEDIATE BENT

STRANDS AT GIRDER ENDS



INTERIOR GIRDER AT ALL BENTS
& EXTERIOR GIRDER AT END BENT

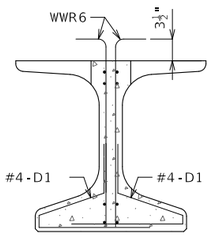
TOP FLANGE BLOCKOUT



HALF ELEVATION

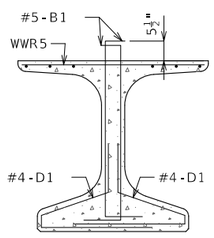
Reinforcement support strands not shown for clarity.

(4) Girder steps are only present in Span (1-2).



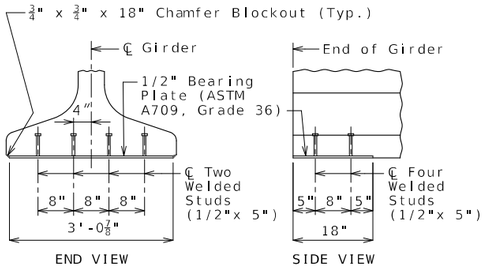
SECTION A-A

Strands not shown for clarity.



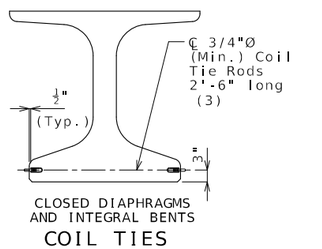
SECTION B-B

Strands not shown for clarity.



END VIEW SIDE VIEW

BEARING PLATE



CLOSED DIAPHRAGMS AND INTEGRAL BENTS

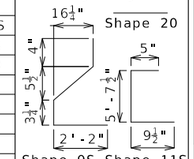
COIL TIES

Exclude coil tie at exterior face of exterior girders except at integral end bents.

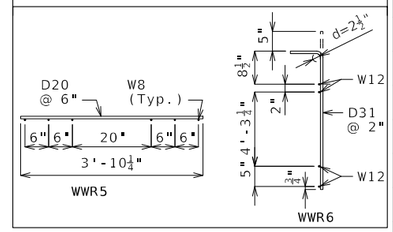
(3) 2'-3" at exterior face of exterior girders at end bents

Bill of Reinforcing Steel - Each Girder			
No.	Size/ Mark	Length	Shape
250	5 B1	6'-8"	11S
250	4 D1	4'-0"	9S
2	4 G3	3'-10¼"	20

Bending Diagrams



Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be one inch.

All bar reinforcement shall be Grade 60.

The two D1 bars may be furnished as one bar at the fabricator's option.

All B1 bars shall be epoxy coated.

General Notes:

Concrete for prestressed girders shall be Class A-1 with f'c = 10000 psi and f'ci = 7000 psi.

Use 38 strands, 0.6"Ø Grade 270, with an initial prestress force of 1670 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior girders are the same except: coil ties, application of bond breaker, coil inserts for slab drains and holes for steel intermediate diaphragms.

For Girder Camber Diagram, see Sheet No. 32.

The 1 1/2"Ø holes shall be cast in the web for steel intermediate diaphragms. Drilling is not allowed. For location of holes and details of steel intermediate diaphragms, see Sheet No. 23.

For location of coil inserts at slab drains, see Sheets No. 34 and 35.

For location of coil ties at concrete diaphragms and integral bents, see Sheets No. 8, 20 and 28.

Alternate bar reinforcing steel details are provided and may be used. The same type of reinforcing steel shall be used for all girders in all spans.

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	25

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

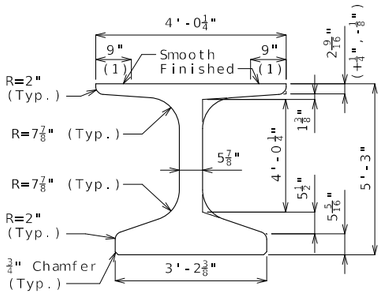
Detailed: July 2024
Checked: July 2024

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

NU-GIRDERS (ALT. REINFORCEMENT) SPANS (1-2) and (4-5)

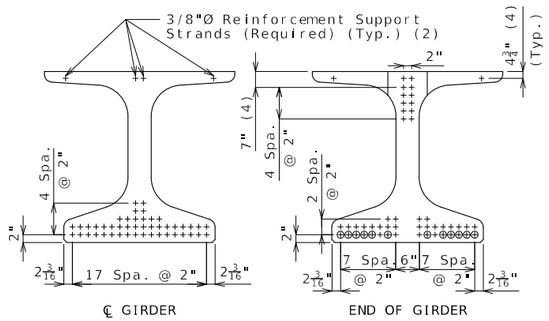
c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_024_J8S0836D.dgn 9:01:58 AM 7/10/2025

(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.



DIMENSIONS
AT MID-SPAN

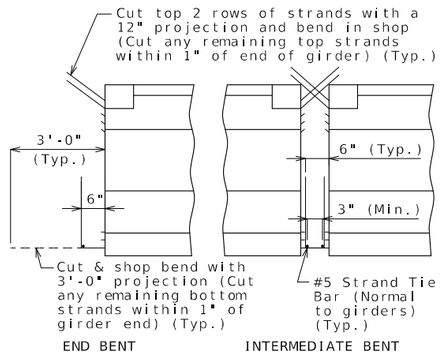
(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



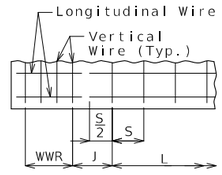
STRAND ARRANGEMENT

+ Indicates prestressing strand.

o Indicates cut & shop bend with 3'-0" projection.



STRANDS AT GIRDER ENDS



WELDED WIRE PLACEMENT

S = Vertical wire spacing

L = Length of WWR mats

J = Distance between WWR mats

Bill of Reinforcing Steel

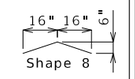
Bars Each Girder

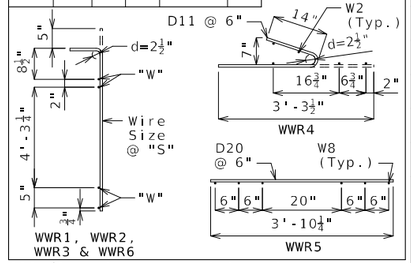
No.	Size/Mark	Length	Shape
150	3 G1	2'-10"	8
2	4 G3	3'-10¼"	20

Welded Wire Each Girder

Mark	Size	S	W	L	J
WWR1	D31	4"	W12	10'-8"	6"
WWR2	D31	12"	W12	20'-0"	13"
WWR3	D31	16"	W12	30'-8"	--
WWR6	D31	2"	W12	16"	3¾"

Bending Diagrams





All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be 1", unless otherwise shown.

All bar reinforcement shall be Grade 60.

WWR shall not be epoxy coated.

General Notes:

Concrete for prestressed beams shall be Class A-1 with f'c = 10000 psi and f'ci = 7000 psi.

Use 46 strands, 0.6"Ø Grade 270, with an initial prestress force of 2021 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior girders are the same except: coil ties, application of bond breaker, coil inserts for slab drains and holes for steel intermediate diahpragms.

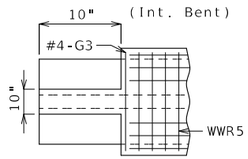
For Girder Camber Diagram, see Sheet No. 32.

The 1 1/2"Ø holes shall be cast in the web for steel intermediate diaphragms. Drilling is not allowed. For location of holes and details of steel intermediate diaphragms, see Sheet No. 23.

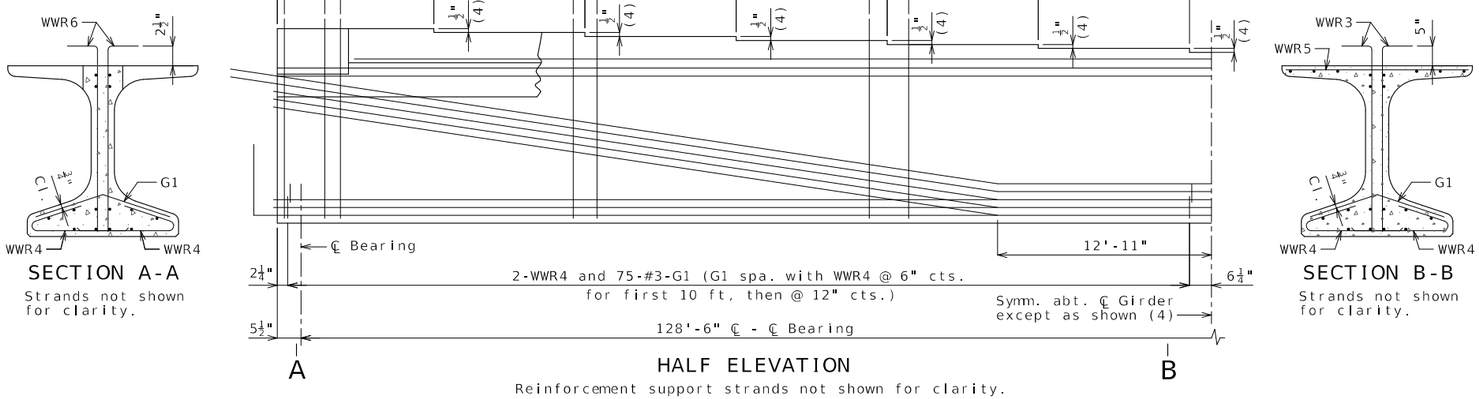
For location of coil inserts at slab drains, see Sheets No. 34 and 35.

For location of coil ties at concrete diaphragms, see Sheet No. 28.

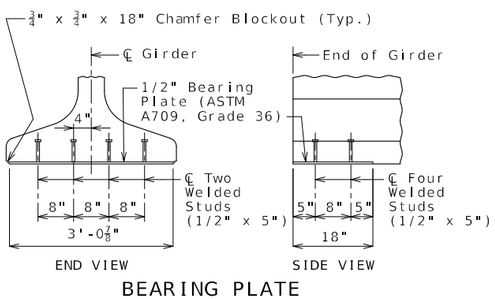
Alternate bar reinforcing steel details are provided and may be used. The same type of reinforcing steel shall be used for all girders in all spans.



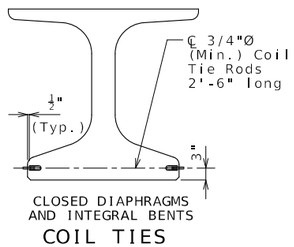
TOP FLANGE BLOCKOUT



(4) Girder steps are only present in Span (2-3). Girder steps start at Bent No. 2 and are not symmetrical about CL Girder.



BEARING PLATE



CLOSED DIAPHRAGMS AND INTEGRAL BENTS

COIL TIES

Exclude coil tie at exterior face of exterior girders.

NU-GIRDERS
SPANS (2-3) and (3-4)

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 26
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION | DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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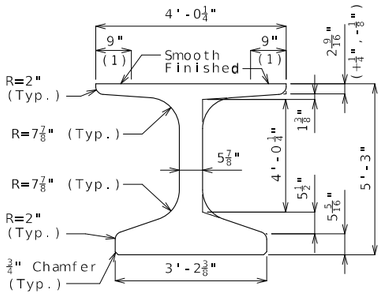
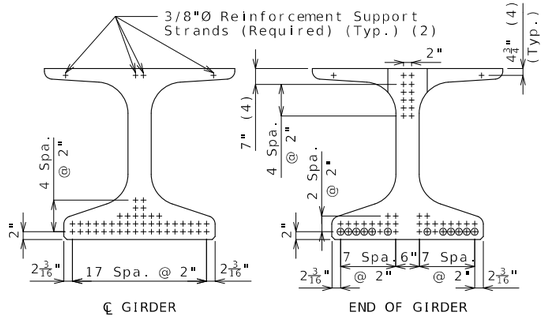
(1) Fabricator shall apply a bond breaker to this region excluding where joint filler will be applied.



DIMENSIONS
AT MID-SPAN

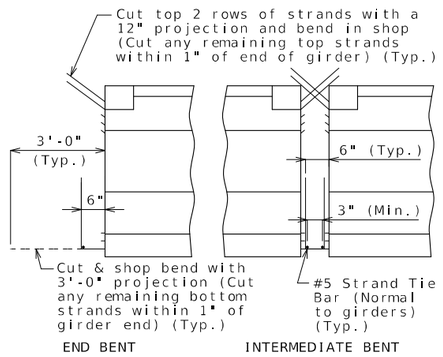
(2) Outer strands tensioned to 2.02 kips/strand and inner strands to 8 kips/strand. Placed symmetrical about ℄ Girder. May be moved laterally in pairs.



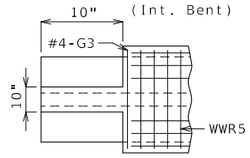
STRAND ARRANGEMENT

+ Indicates prestressing strand.

○ Indicates cut & shop bend with 3'-0" projection.



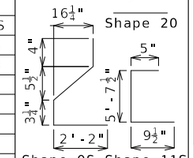
STRANDS AT GIRDER ENDS



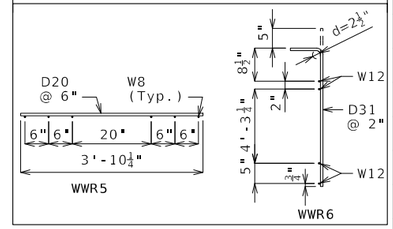
TOP FLANGE BLOCKOUT

Bill of Reinforcing Steel - Each Girder			
No.	Size/ Mark	Length	Shape
310	5 B1	6'-8"	11S
310	4 D1	4'-0"	9S
2	4 G3	3'-10¼"	20

Bending Diagrams



Welded Wire Reinforcement - Each Girder



All dimensions are out to out.

Hooks and bends shall be in accordance with the CRSI Manual of Standard Practice for Detailing Reinforced Concrete Structures, Stirrup and Tie Dimensions.

Actual bar lengths are measured along centerline of bar to the nearest inch.

Minimum clearance to reinforcing shall be one inch.

All bar reinforcement shall be Grade 60.

The two D1 bars may be furnished as one bar at the fabricator's option.

All B1 bars shall be epoxy coated.

General Notes:

Concrete for prestressed girders shall be Class A-1 with f'c = 10000 psi and f'ci = 7000 psi.

Use 46 strands, 0.6"Ø Grade 270, with an initial prestress force of 2021 kips.

Pretensioned members shall be in accordance with Sec 1029.

Fabricator shall be responsible for location and design of lifting devices.

Exterior and interior girders are the same except: coil ties, application of bond breaker, coil inserts for slab drains and holes for intermediate diaphragms.

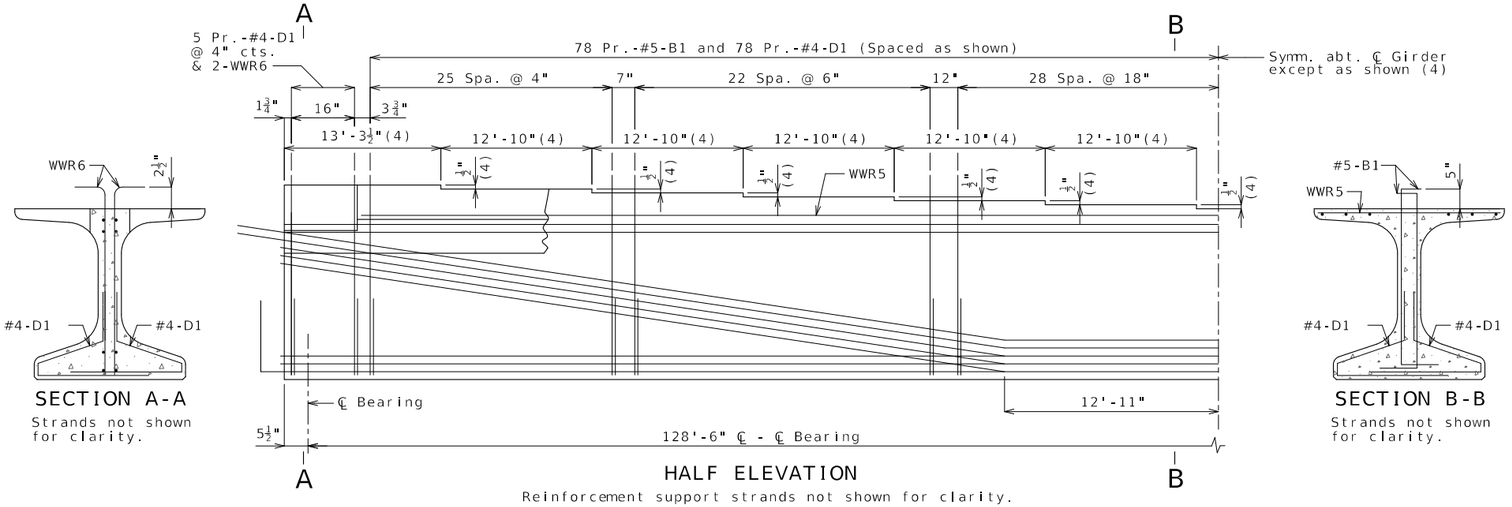
For Girder Camber Diagram, see Sheet No. 32.

The 1 1/2"Ø holes shall be cast in the web for steel intermediate diaphragms. Drilling is not allowed. For location of holes and details of steel intermediate diaphragms, see Sheet No. 23.

For location of coil inserts at slab drains, see Sheets No. 34 and 35.

For location of coil ties at concrete diaphragms, see Sheet No. 28.

Alternate bar reinforcing steel details are provided and may be used. The same type of reinforcing steel shall be used for all girders in all spans.

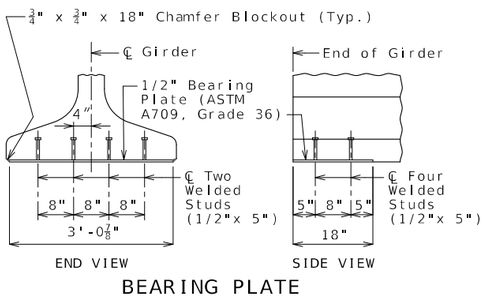


SECTION A-A
Strands not shown for clarity.

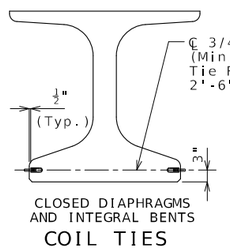
SECTION B-B
Strands not shown for clarity.

HALF ELEVATION
Reinforcement support strands not shown for clarity.

(4) Girder steps are only present in Span (2-3). Girder steps start at Bent No. 2 and are not symmetrical about CL Girder.



BEARING PLATE



CLOSED DIAPHRAGMS AND INTEGRAL BENTS

COIL TIES

Exclude coil tie at exterior face of exterior girders.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 27 of 63

NU-GIRDERS (ALT. REINFORCEMENT) SPANS (2-3) and (3-4)

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 27
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

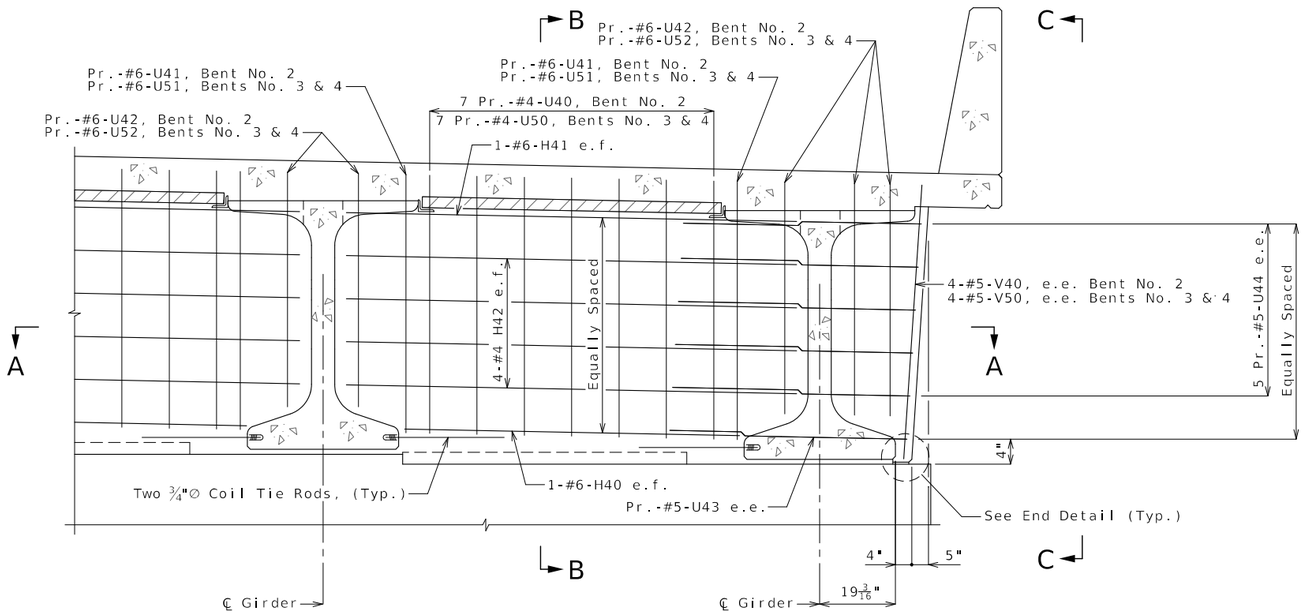
DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

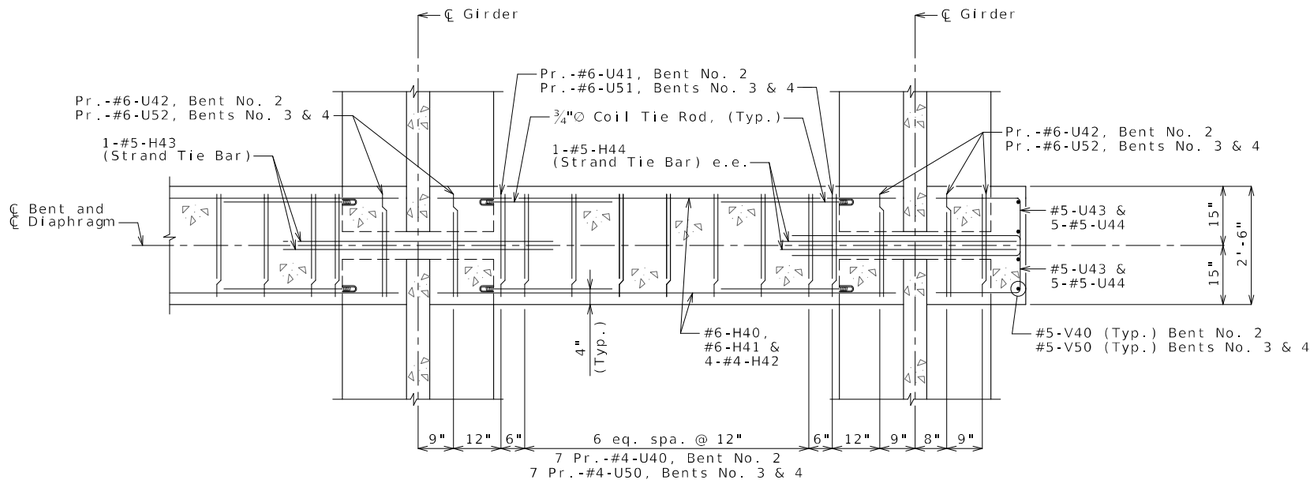
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

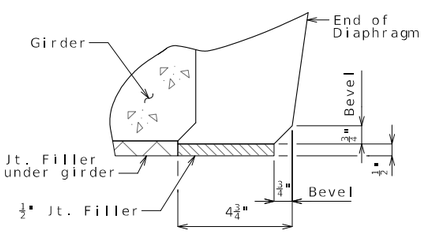
c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_026_J8S0836D.dgn 9:02:09 AM 7/10/2025



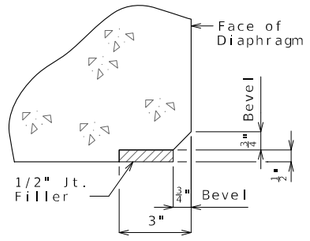
TYPICAL PART SECTION NEAR INTERMEDIATE BENT



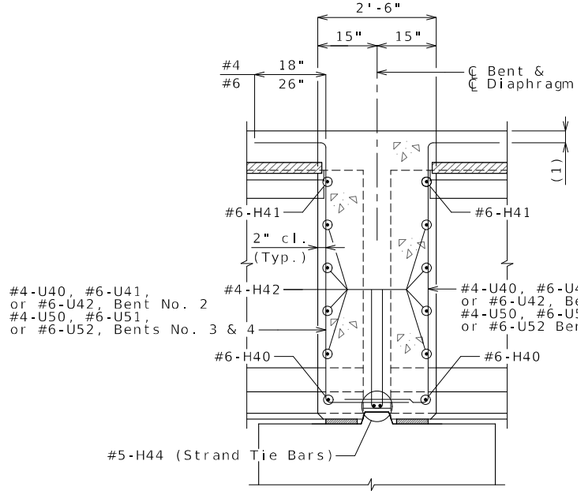
SECTION A-A



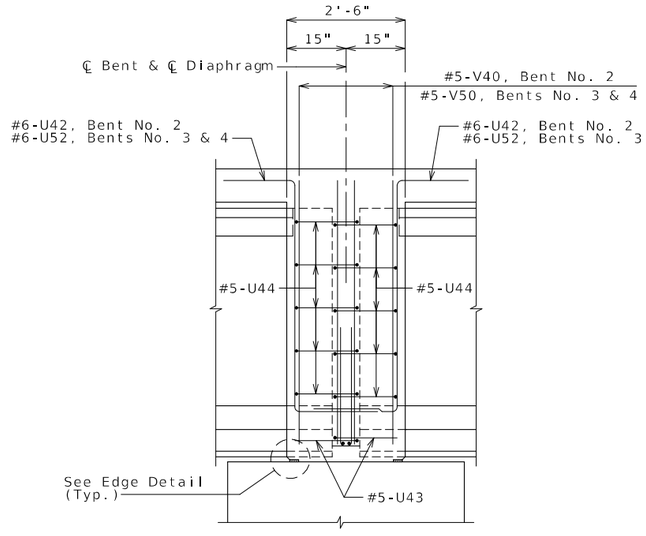
END DETAIL



EDGE DETAIL



SECTION B-B
(1) 3¼" (#4) & 3" (#6)



ELEVATION C-C

NOTES:

Diaphragms at intermediate bents shall be built vertical.

Slab reinforement and fence not shown for clarity.

e.f. denotes each face
e.e. denotes each end

For location and details of Coil Tie Rods, see Sheets No. 24 thru 27.

For location of joint filler, see Sheets No. 13, 15, and 17.

For location of strand tie bars, see Sheets No. 24 thru 27.

CONCRETE DIAPHRAGM DETAILS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

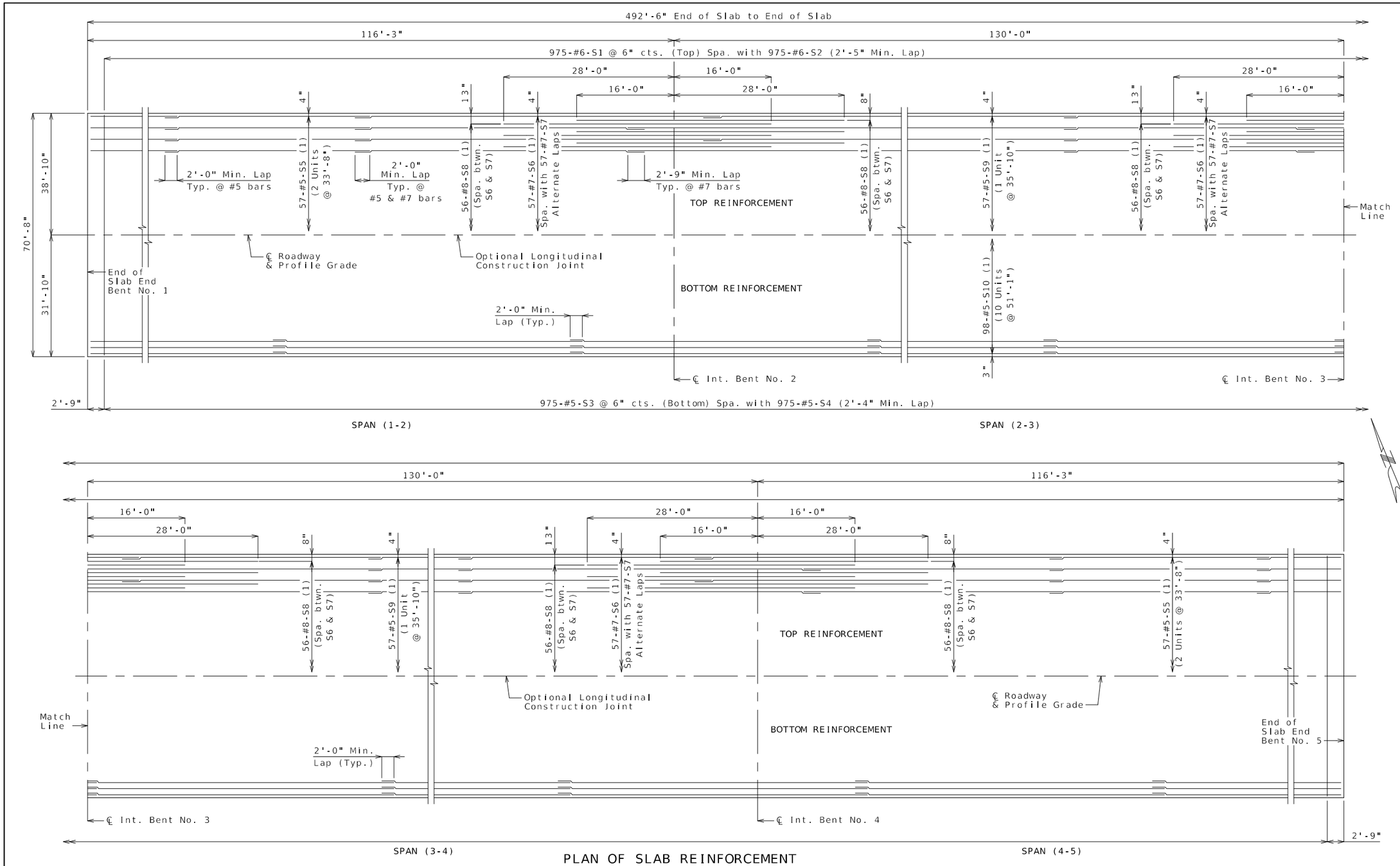
DATE PREPARED 7/10/2025
ROUTE MM | STATE MO
DISTRICT BR | SHEET NO. 28
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



PLAN OF SLAB REINFORCEMENT

NOTES:

Longitudinal slab dimensions shown are horizontal.

For Details and Reinforcement of Type D Barrier not shown, see Sheets No. 37 & 38.

For Details of 8" Raised Median Barrier, see Sheet No. 41.

For Details of Pedestrian Curb, see Sheet No. 42.

For Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 32.

For Theoretical Bottom of Slab Elevations, see Sheet No. 33.

For Slab Pouring Sequence, see Sheet No. 31.

(1) For spacing of longitudinal bars not shown, see Slab Section & Details on Sheet No. 30.

For Details and Locations of Slab Drains, see Sheets No. 34 & 35.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 29 of 63

SLAB PLAN

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	29

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION	DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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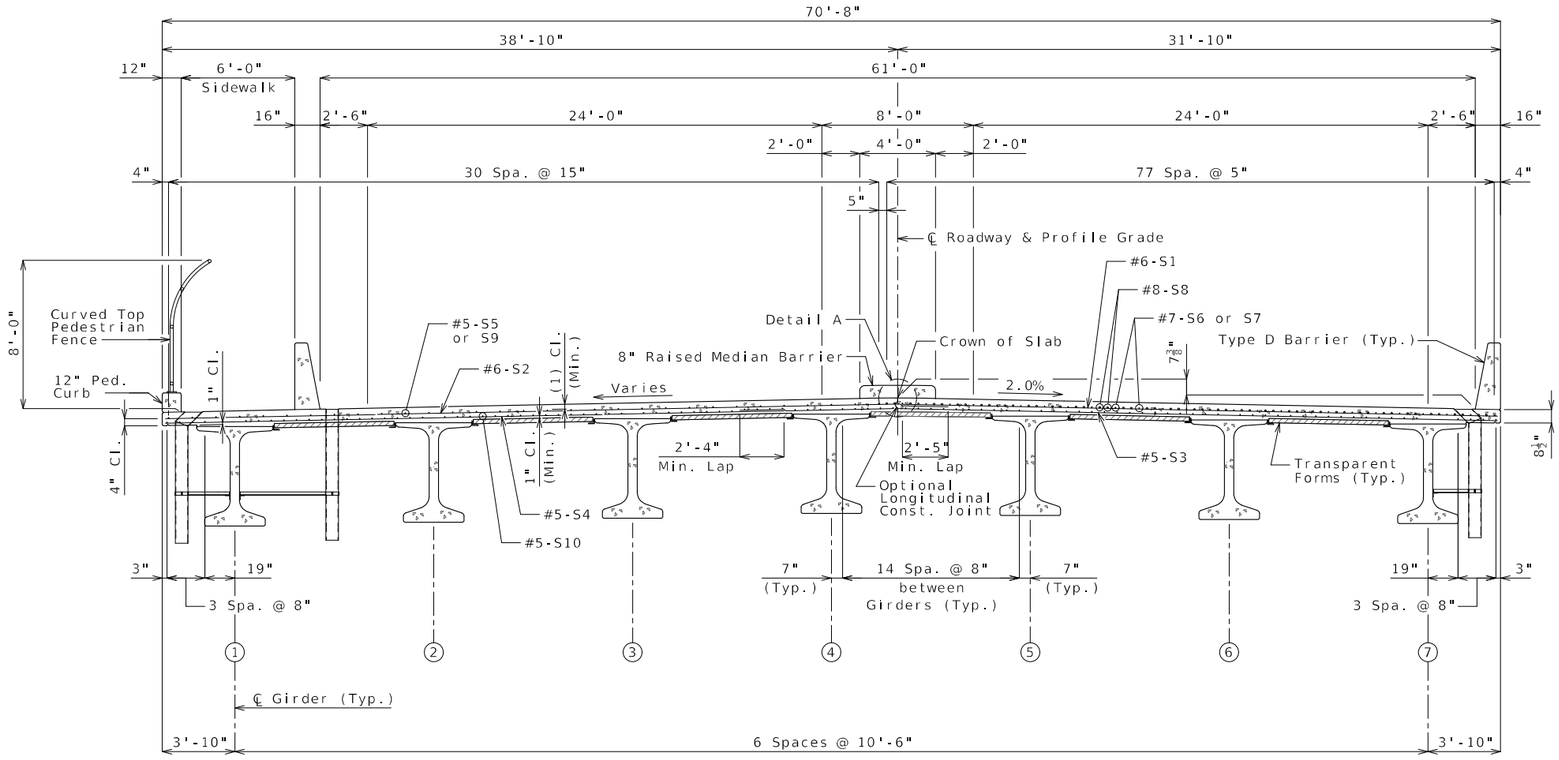
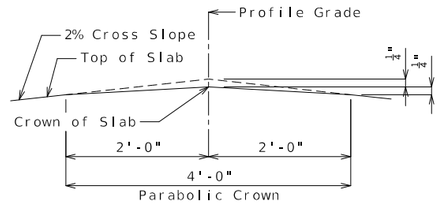


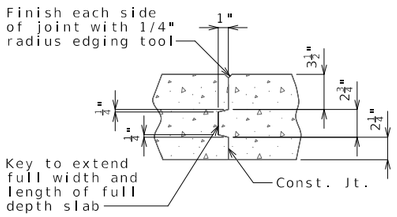
PART SECTION NEAR MIDSPAN

PART SECTION NEAR INTERMEDIATE BENT

SECTION THRU SLAB

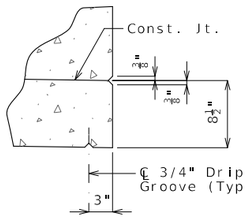


DETAIL A

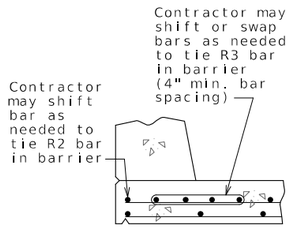


FULL DEPTH SLAB

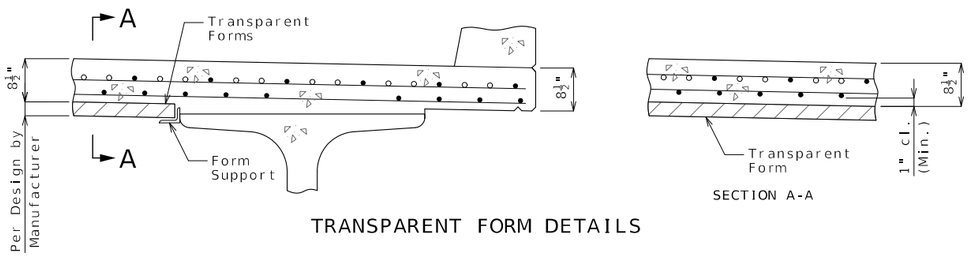
SLAB CONSTRUCTION JOINT



DETAIL B



OPTIONAL SHIFTING TOP BARS AT BARRIER



SECTION A-A

TRANSPARENT FORM DETAILS

NOTE:

See Special Provisions for transparent form requirements.

For reinforcement of barrier not shown, see Sheets No. 37 and 38.

For details of 8" Raised Median Barrier, see Sheet No. 41.

For details of Pedestrian Curb, see Sheet No. 42.

For Girder Camber Diagram and Theoretical Slab Haunching Diagram, see Sheet No. 32.

For Theoretical Bottom of Slab Elevations, see Sheet No. 33.

For Plan of Slab Showing Reinforcement, see Sheet No. 29.

For Slab Pouring Sequence, see Sheet No. 31.

For details of Pedestrian Fence, see Sheet No. 44.

(1) $3\frac{1}{8}$" (#5), $2\frac{7}{8}$" (#7), $2\frac{3}{4}$" (#8)

Detailed: July 2024
Checked: July 2024

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

Sheet No. 30 of 63

SLAB SECTION & DETAILS

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	30

COUNTY: GREENE

JOB NO.: J8S0836D

CONTRACT ID.:

PROJECT NO.:

BRIDGE NO.: A9472

DESCRIPTION	DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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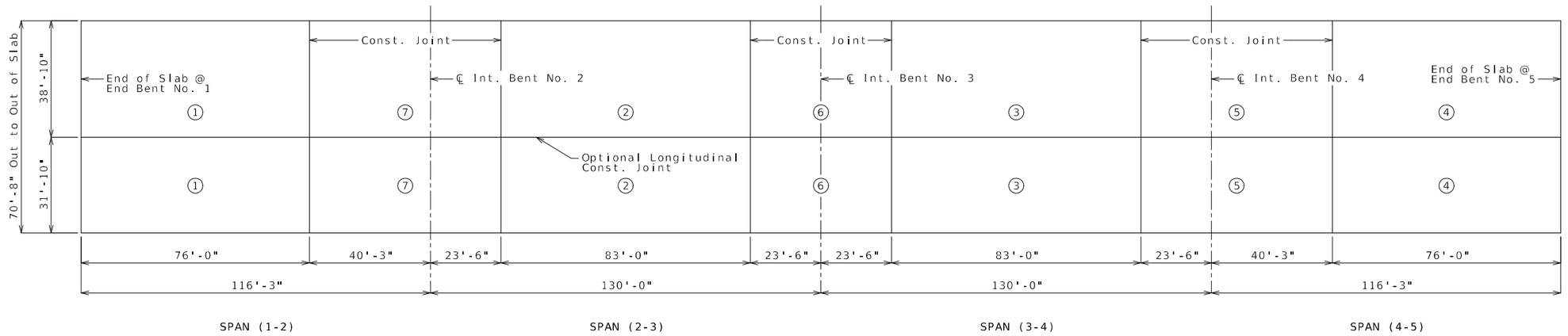

	Sequence of Pours							Min. Rate of Pour Cu. Yds./Hr.
	Direction							With Retarder
Basic Sequence	1	2	3	4	5	6	7	25
	→							
Alternate pours to the basic skip sequence are subject to the approval of the engineer in accordance with Sec 703.								
Alternate A Pours	1	7 + 2		6 + 3		5 + 4		25
	End to 7	1 to 6		2 to 5		3 to End		
Alternate B Pours	1 + 7 + 2		6 + 3		5 + 4			25
	End to 6		2 to 5		3 to End			
Alternate C Pours	1 + 7 + 2			6 + 3 + 5 + 4				25
	End to 6			2 to End				
Alternate D Pours	1 + 7 + 2 + 6 + 3 + 5 + 4							25
	End to End							

The contractor shall furnish an approved retarder to retard the set of concrete to 2.5 hours, and shall pour and satisfactorily finish the slab pours at the rate given.

The concrete diaphragm at the intermediate bents and integral end bents shall be poured a minimum of 30 minutes and a maximum of 2 hours before the slab is poured.

The longitudinal construction joint may be omitted with the approval of the engineer. When the longitudinal construction joint is omitted, the minimum rate of pour for alternate pouring sequences shall be increased by a factor of 1.82.

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	31

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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
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816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

SLAB POURING SEQUENCE

Detailed: July 2024
Checked: July 2024

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

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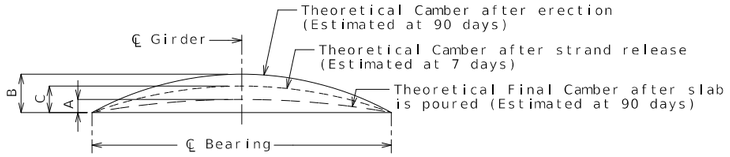


Girder	Span (1-2)			Span (2-3)			Span (3-4)			Span (4-5)		
	A	B	C	A	B	C	A	B	C	A	B	C
Exterior	$2\frac{1}{8}$"	$3\frac{5}{8}$"	$2\frac{1}{8}$"	$3\frac{1}{8}$"	$5\frac{3}{8}$"	$3\frac{1}{8}$"	$3\frac{1}{8}$"	$5\frac{3}{8}$"	$3\frac{1}{8}$"	$2\frac{1}{8}$"	$3\frac{5}{8}$"	$2\frac{1}{8}$"
Interior	2"			$2\frac{3}{4}$"			$2\frac{3}{4}$"			2"		

GIRDER CAMBER DIAGRAM

Conversion Factors for Girder Camber (Estimated at 90 days):

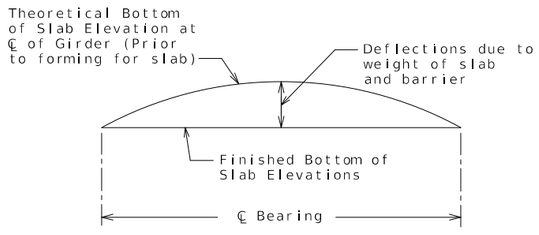
0.1 pt. = 0.314 x 0.5 pt.
0.2 pt. = 0.593 x 0.5 pt.
0.3 pt. = 0.813 x 0.5 pt.
0.4 pt. = 0.952 x 0.5 pt.

| | | |

Theoretical Bottom of Slab Elevations at Centerline of Girder (Prior to forming for slab) (Estimated at 90 days)

Girder Number	Span (1-2) (114'-3" ℄ Brg. - ℄ Brg.)										
	℄ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ Brg.
1	1307.52	1308.08	1308.63	1309.15	1309.64	1310.10	1310.53	1311.11	1311.66	1312.19	1312.70
2	1307.40	1308.02	1308.63	1309.21	1309.75	1310.27	1310.76	1311.33	1311.88	1312.41	1312.91
3	1307.27	1307.95	1308.61	1309.25	1309.85	1310.42	1310.96	1311.54	1312.09	1312.62	1313.12
4	1307.14	1307.88	1308.60	1309.29	1309.95	1310.58	1311.17	1311.75	1312.30	1312.83	1313.33
5	1306.96	1307.71	1308.45	1309.16	1309.84	1310.49	1311.10	1311.68	1312.23	1312.76	1313.26
6	1306.75	1307.50	1308.24	1308.95	1309.63	1310.28	1310.89	1311.47	1312.02	1312.55	1313.05
7	1306.54	1307.29	1308.02	1308.73	1309.40	1310.05	1310.66	1311.25	1311.80	1312.33	1312.84
	Span (2-3) (128'-6" ℄ Brg. - ℄ Brg.)										
	℄ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ Brg.
1	1312.77	1313.41	1314.03	1314.60	1315.14	1315.64	1316.09	1316.50	1316.87	1317.20	1317.50
2	1312.98	1313.63	1314.25	1314.84	1315.38	1315.87	1316.32	1316.73	1317.09	1317.42	1317.71
3	1313.19	1313.84	1314.46	1315.05	1315.59	1316.08	1316.53	1316.94	1317.30	1317.63	1317.92
4	1313.40	1314.05	1314.67	1315.26	1315.80	1316.29	1316.74	1317.15	1317.51	1317.84	1318.13
5	1313.33	1313.98	1314.60	1315.19	1315.73	1316.22	1316.67	1317.08	1317.44	1317.77	1318.06
6	1313.12	1313.77	1314.39	1314.98	1315.52	1316.01	1316.46	1316.87	1317.23	1317.56	1317.85
7	1312.91	1313.55	1314.17	1314.74	1315.28	1315.78	1316.23	1316.64	1317.01	1317.34	1317.64
	Span (3-4) (128'-6" ℄ Brg. - ℄ Brg.)										
	℄ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ Brg.
1	1317.54	1317.94	1318.30	1318.63	1318.92	1319.16	1319.37	1319.53	1319.65	1319.73	1319.78
2	1317.75	1318.16	1318.53	1318.86	1319.15	1319.40	1319.60	1319.76	1319.87	1319.95	1319.99
3	1317.96	1318.37	1318.74	1319.07	1319.36	1319.61	1319.81	1319.97	1320.08	1320.16	1320.20
4	1318.17	1318.58	1318.95	1319.28	1319.57	1319.82	1320.02	1320.18	1320.29	1320.37	1320.41
5	1318.10	1318.51	1318.88	1319.21	1319.50	1319.75	1319.95	1320.11	1320.22	1320.30	1320.34
6	1317.89	1318.30	1318.67	1319.00	1319.29	1319.54	1319.74	1319.90	1320.01	1320.09	1320.13
7	1317.68	1318.08	1318.44	1318.77	1319.06	1319.30	1319.51	1319.67	1319.79	1319.87	1319.92
	Span (4-5) (114'-3" ℄ Brg. - ℄ Brg.)										
	℄ Brg.	.10	.20	.30	.40	.50	.60	.70	.80	.90	℄ Brg.
1	1319.79	1319.91	1320.00	1320.07	1320.10	1320.11	1320.08	1320.03	1319.94	1319.83	1319.69
2	1320.00	1320.12	1320.22	1320.29	1320.33	1320.34	1320.31	1320.25	1320.16	1320.04	1319.90
3	1320.21	1320.33	1320.43	1320.50	1320.54	1320.55	1320.52	1320.46	1320.37	1320.25	1320.11
4	1320.42	1320.54	1320.64	1320.71	1320.75	1320.76	1320.73	1320.67	1320.58	1320.46	1320.32
5	1320.35	1320.47	1320.57	1320.64	1320.68	1320.69	1320.66	1320.60	1320.51	1320.39	1320.25
6	1320.14	1320.26	1320.36	1320.43	1320.47	1320.48	1320.45	1320.39	1320.30	1320.18	1320.04
7	1319.93	1320.05	1320.14	1320.21	1320.24	1320.25	1320.22	1320.17	1320.08	1319.97	1319.83

Elevations are based on a constant slab thickness of 8 1/2" and include allowance for theoretical dead load deflections due to weight of slab (including transparent forms) and barrier.



TYPICAL SLAB ELEVATIONS DIAGRAM

Detailed: July 2024
Checked: July 2024

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

Sheet No. 33 of 63

THEORETICAL BOTTOM OF SLAB ELEVATIONS

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

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DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	33

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION	DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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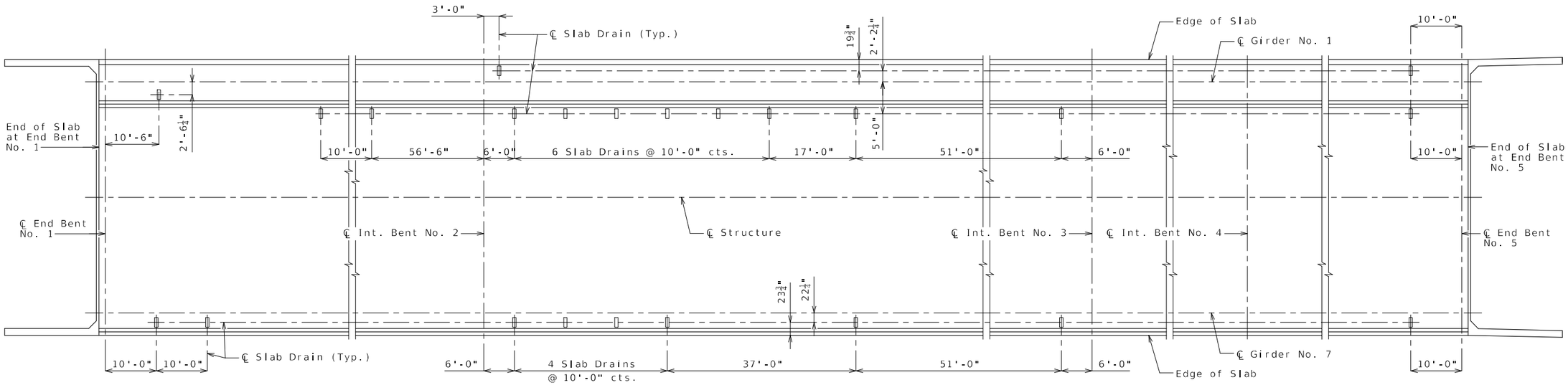
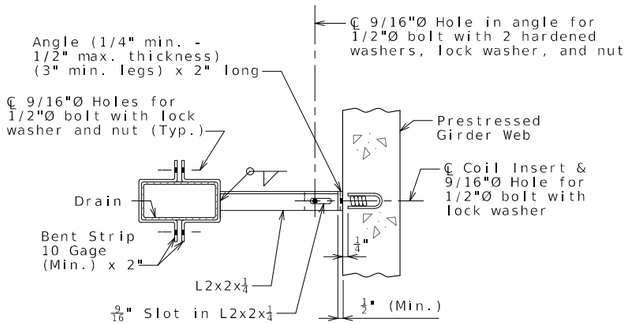
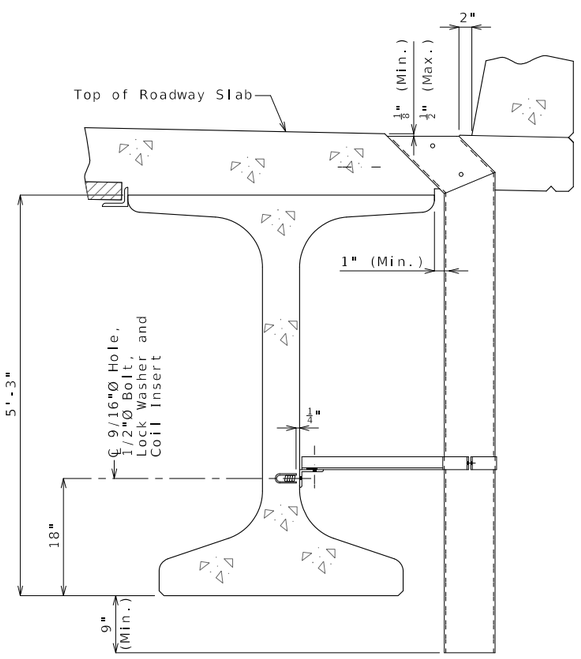


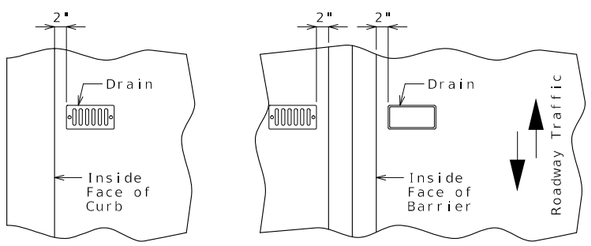
PLAN OF SLAB SHOWING SLAB DRAIN LOCATIONS



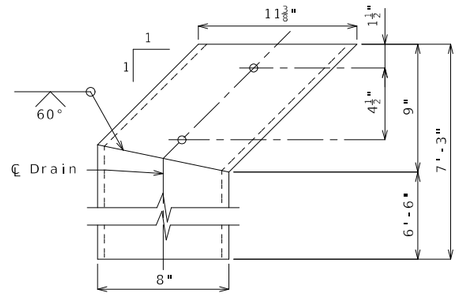
PART SECTION SHOWING BRACKET ASSEMBLY



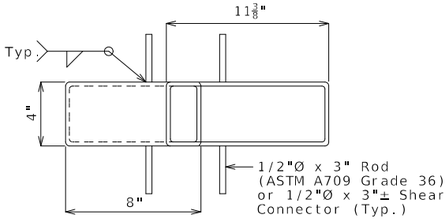
ROADWAY DRAIN SECTION AT GIRDER 7



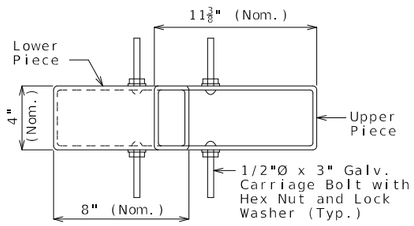
PART PLAN OF SLAB AT DRAIN



ELEVATION OF DRAIN



PLAN OF STEEL DRAIN OPTION



PLAN OF FRP DRAIN OPTION

SLAB DRAIN DETAILS SHEET 1 OF 2

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

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DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 34
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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DATE	DESCRIPTION

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

Burns & McDonnell Engineering Co., Inc.
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Certificate of Authority No.: 000165
BMcD Project No. 163491

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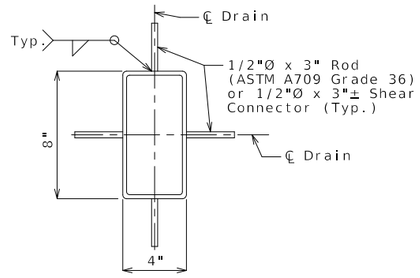
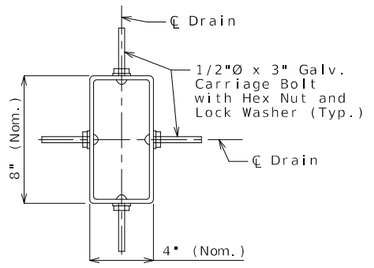
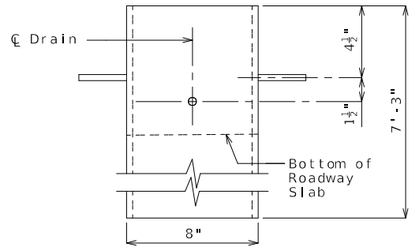


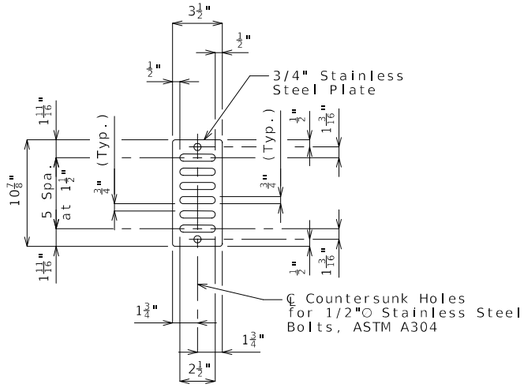
PLAN OF ROADWAY STEEL DRAIN OPTION



PLAN OF ROADWAY FRP DRAIN OPTION

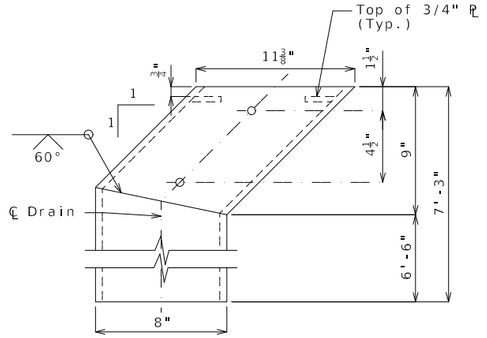


ELEVATION OF ROADWAY DRAIN

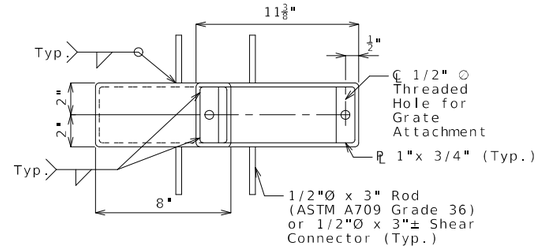


PLAN OF SIDEWALK GRATE

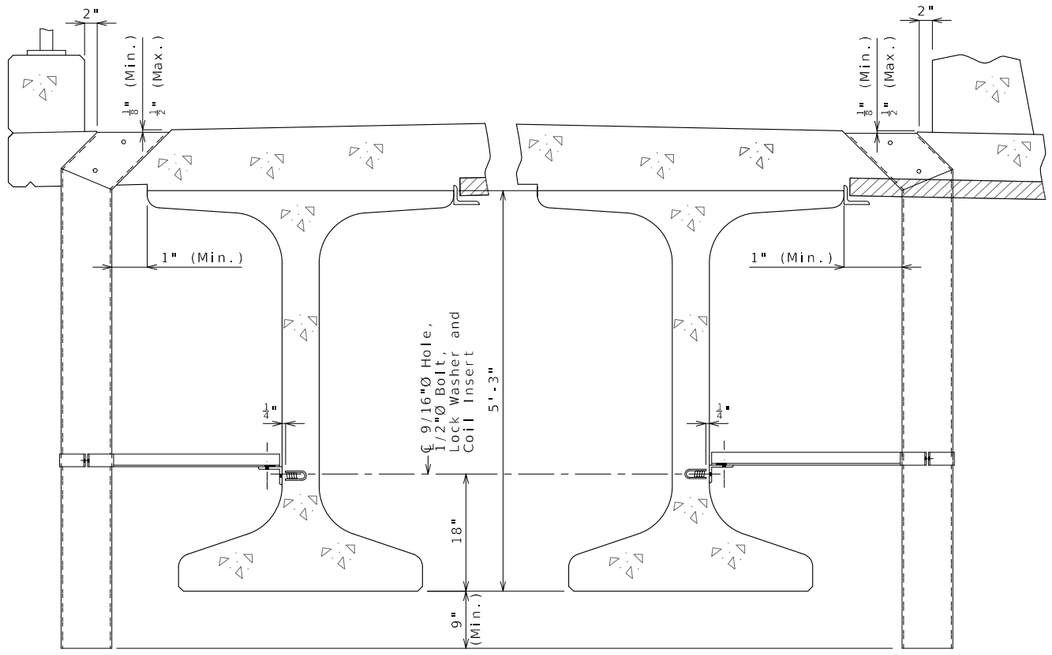
Grate shall be 3/4" Stainless Steel Plate, ASTM A240. Openings shall be machined from a solid plate. Bevel edges of plate as required and verify fit.



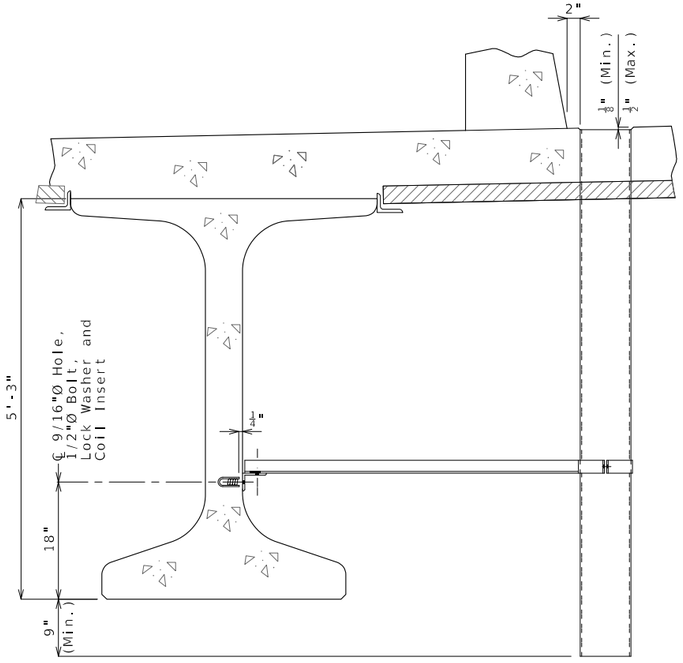
ELEVATION OF SIDEWALK DRAIN



PLAN OF SIDEWALK DRAIN



SIDEWALK DRAIN SECTION AT GIRDER 1



ROADWAY DRAIN SECTION AT GIRDER 1

General Notes:

Contractor shall have the option to construct either steel or FRP slab drains. All drains shall be of same type.

Slab drain bracket assembly shall be ASTM A709 Grade 36 steel.

Locate drains in slab by dimensions shown in Sidewalk Drain Section at Girder 1, Roadway Drain Section at Girder 1 or Roadway Section at Girder 7.

Reinforcing steel shall be shifted to clear drains.

The coil inserts and bracket assembly shall be galvanized in accordance with ASTM A123.

All bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

All 1/2"Ø bolts shall be ASTM A307.

Shop drawings will not be required for the slab drains and the bracket assembly.

The coil insert required for the bracket assembly attachment shall be located on the prestressed girder shop drawings.

Coil inserts shall have a concrete pull-out strength (ultimate load) of at least 2,500 pounds in 5,000 psi concrete.

The bolt required to attach the slab drain bracket assembly to the prestressed girder web shall be supplied by the prestressed girder fabricator.

Notes for Steel Drain:

Slab drains may be fabricated of either 1/4" welded sheets of ASTM A709 Grade 36 steel or from 1/4" structural steel tubing ASTM A500 or A501.

Outside dimensions of drains are 8" x 4".

The drains shall be galvanized in accordance with ASTM A123.

Notes for FRP Drain:

Drains shall be machine filament-wound thermosetting resin tubing meeting the requirements of ASTM D2996 with the following exceptions:

Shape of drains shall be rectangular with outside nominal dimensions of 8" x 4".

Minimum reinforced wall thickness shall be 1/4 inch.

The resin used shall be ultraviolet (UV) resistant and/or have UV inhibitors mixed throughout. Drains may have an exterior coating for additional UV resistance.

The color of the slab drain shall be gray (Federal Standard #26373). The color shall be uniform throughout the resin and any coating used.

The combination of materials used in the manufacture of the drains shall be tested for UV resistance in accordance with ASTM D4329 Cycle A. The representative material shall withstand at least 500 hours of testing with only minor discoloration and without any physical deterioration. The contractor shall furnish the results of the required ultraviolet testing prior to acceptance of the slab drains.

At the contractor's option, drains may be field cut. The method of cutting FRP slab drain shall be as recommended by the manufacturer to ensure a smooth, chip free cut.

Both upper and lower drain pieces shall be rigidly connected to each other. Drain flow shall not be obstructed. Approval of the engineer is required.

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	35

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

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

Sheet No. 35 of 63

SLAB DRAIN DETAILS SHEET 2 OF 2

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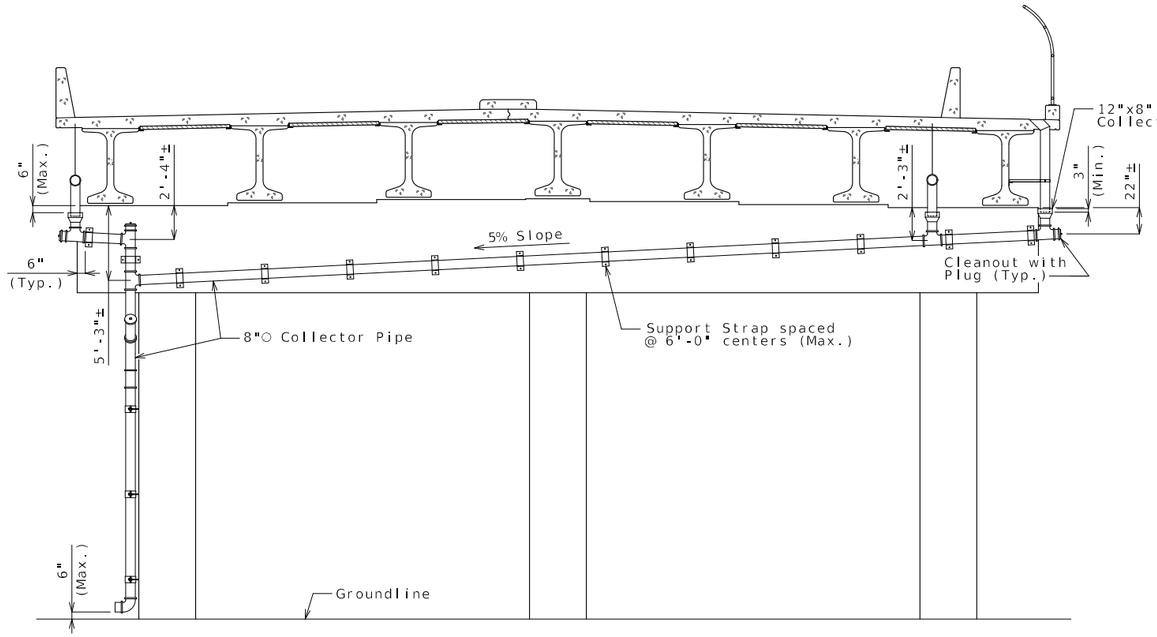
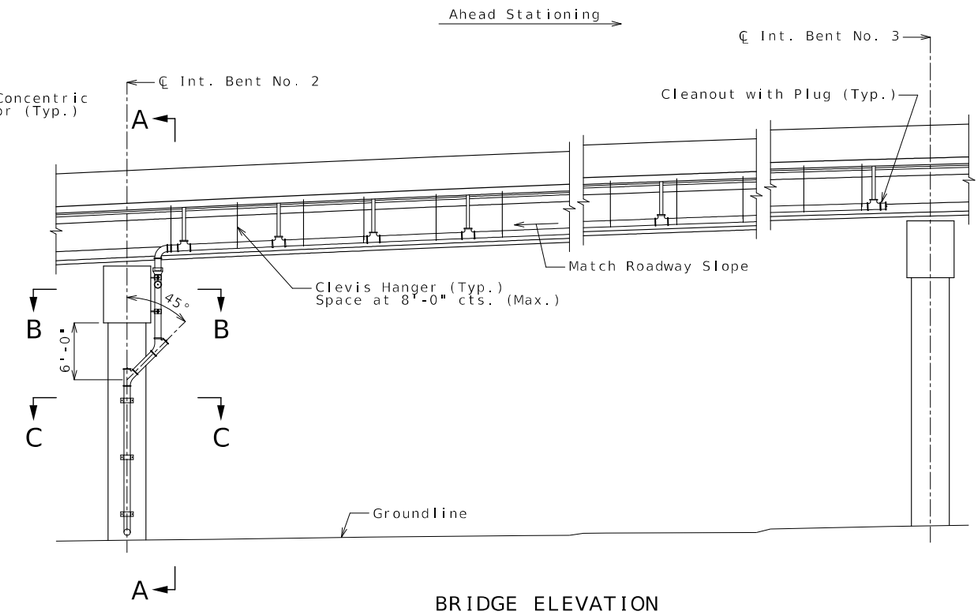
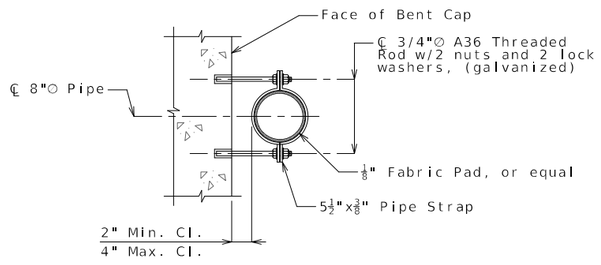


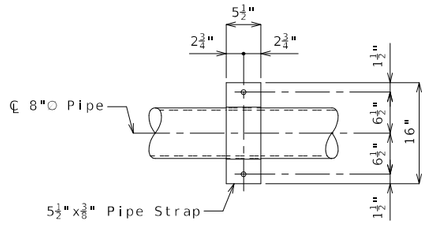
SECTION A-A



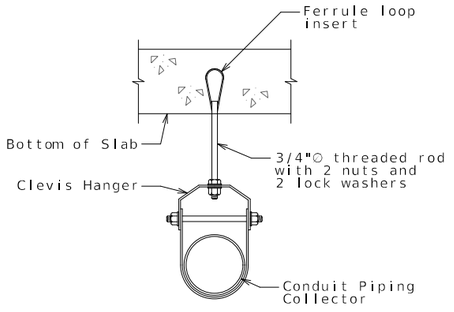
BRIDGE ELEVATION
(South Side of bridge shown, North Side similar)



SECTION B-B

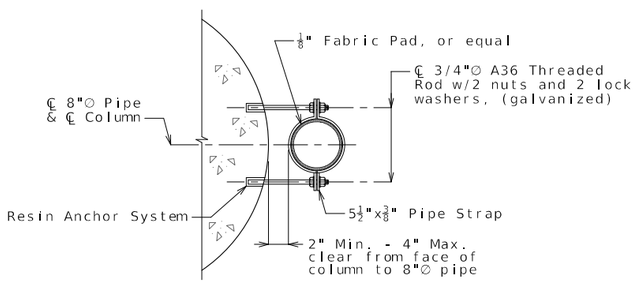


Strap Elevation

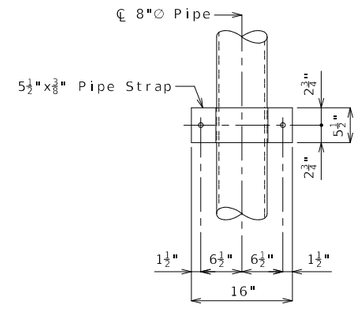


CLEVIS HANGER DETAIL

Pipe hanger assemblies shall be composed of a galvanized heavy duty clevis hanger supported by a 3/4" diameter A36 galvanized threaded steel rod and a galvanized threaded insert cast into the bottom of the concrete slab. The cast-in-place insert shall have a minimum safe working tensile capacity of 2,000 pounds. The hanger assemblies shall be spaced at a maximum of 8'-0" on center. Galvanizing shall be in accordance with ASTM A153 and ASTM A123 as appropriate.



SECTION C-C



Strap Elevation

NOTES:

Pipe supports shall be ASTM A709 Grade 36 steel and shall be galvanized in accordance with ASTM A123.

All threaded rods, clevis hangers, bolts, hardened washers, lock washers and nuts shall be galvanized in accordance with ASTM A153.

All pipes, elbows, saddles, fittings and all other drainage components shall be Reinforced Thermosetting Resin Pipe (RTRP) meeting the requirements of ASTM Specification D2996 with a minimum short time rupture strength Hoop Tensile Stress of 30 ksi.

For drain details and general notes, see Sheets No. 34 and 35.

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

Payment for the work necessary to complete the drainage system, including all material (bracket assemblies, pipe supports, concrete anchorages, drain pipes), labor, tools, equipment and incidentals, will be considered completely covered by the contract lump sum price for Drainage System (On Structure).

Detailed: July 2024
Checked: July 2024

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

DRAIN SYSTEM DETAILS

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/10/2025
ROUTE MM | STATE MO
DISTRICT BR | SHEET NO. 36
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9472

DESCRIPTION | DATE

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MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
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Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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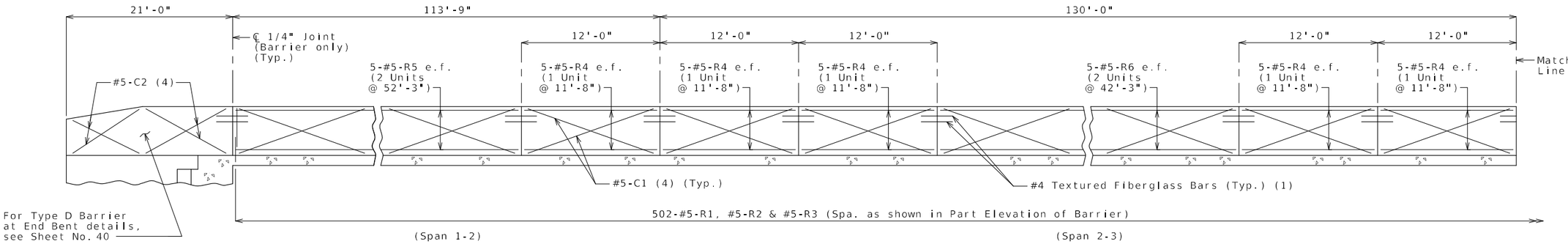
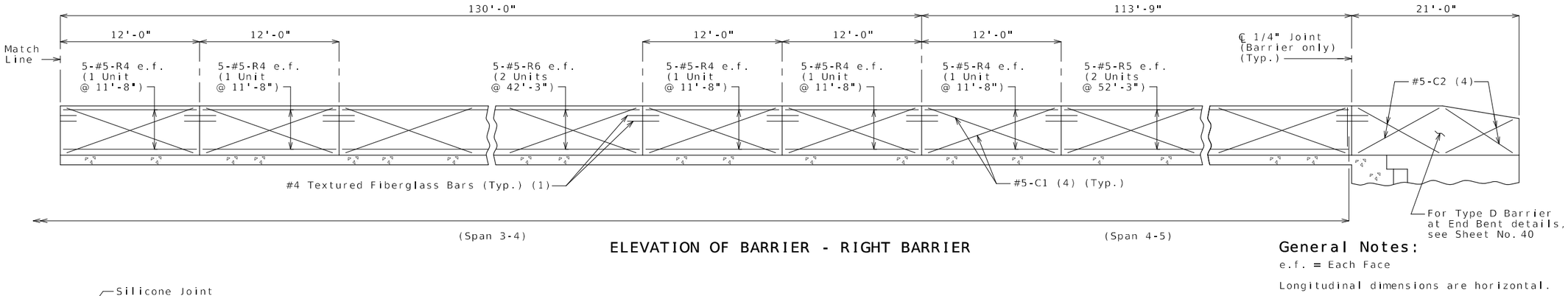
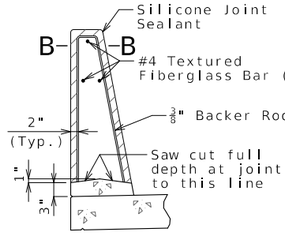
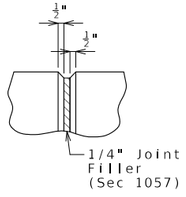




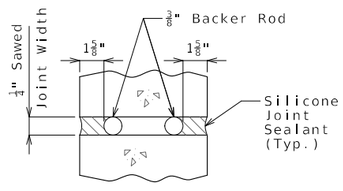
ELEVATION OF BARRIER - RIGHT BARRIER



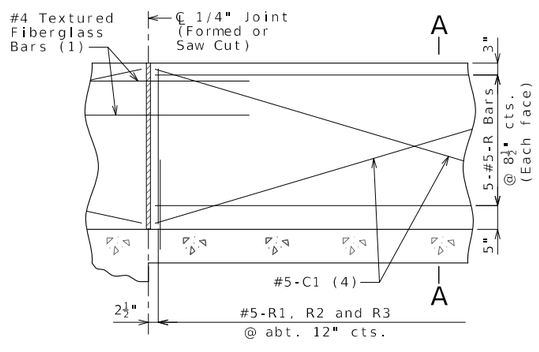
SECTION THRU SAW CUT JOINT



PART ELEVATION AT FORMED JOINT

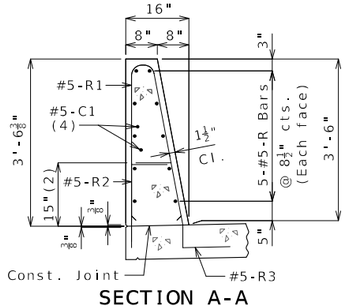


SECTION B-B



PART ELEVATION OF BARRIER

(1) Four feet long, centered on joint, slip-formed option only

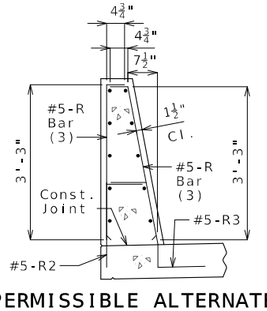


SECTION A-A

Use a minimum lap of 2'-7" for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.52 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

(3) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)

(4) Slip-formed option only.

General Notes:

e.f. = Each Face

Longitudinal dimensions are horizontal.

Conventional forming or slip forming may be used. Saw cut joints may be used with conventional forming.

Top of barrier shall be built parallel to grade and barrier joints (except at end bents) normal to grade.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Type D Barrier per linear foot.

Concrete in barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot for each structure, measured along the outside top of slab from end of wing to end of wing for Right Barrier.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Joint sealant and backer rods shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

For slip-formed option, both sides of barrier shall have a vertically broomed finish and the top shall have a transversely broomed finish.

RIGHT TYPE D BARRIER

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI · THOMAS M. GREER · NUMBER PE-2018000206 · PROFESSIONAL ENGINEER

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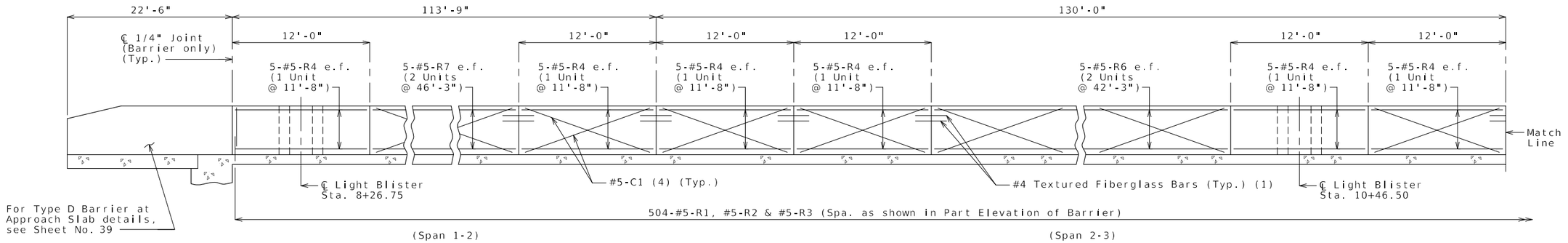
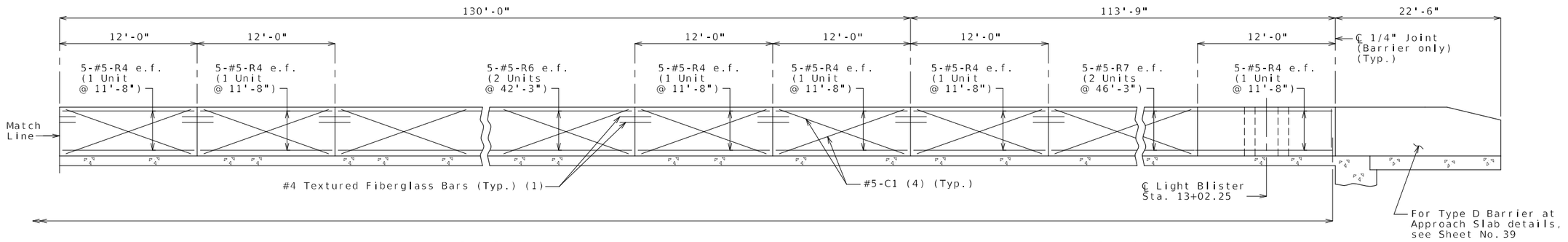
DATE PREPARED	
7/10/2025	
ROUTE: MM	STATE: MO
DISTRICT: BR	SHEET NO.: 37
COUNTY: GREENE	
JOB NO.: J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.: A9472	

DESCRIPTION	DATE

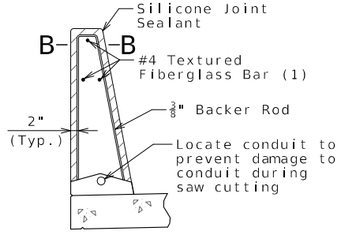
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

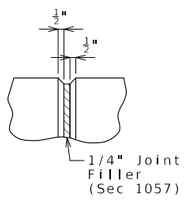




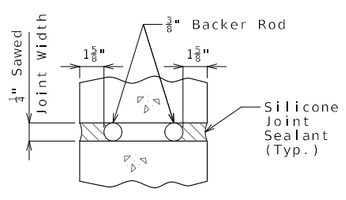
ELEVATION OF BARRIER - LEFT BARRIER



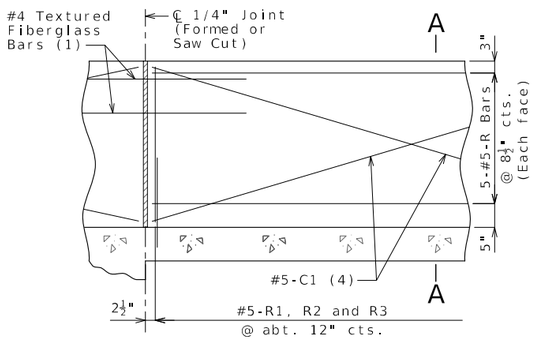
SECTION THRU SAW CUT JOINT



PART ELEVATION AT FORMED JOINT

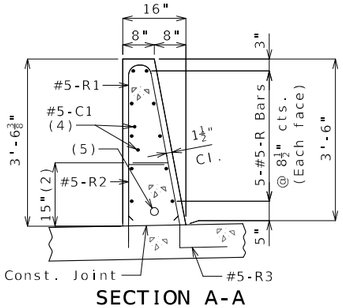


SECTION B-B



PART ELEVATION OF BARRIER

(1) Four feet long, centered on joint, slip-formed option only

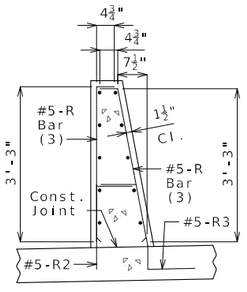


SECTION A-A

Use a minimum lap of 2'-7" for #5 horizontal barrier bars.

The cross-sectional area above the slab is 3.52 square feet.

(2) To top of bar



R-BAR PERMISSIBLE ALTERNATE SHAPE

(3) The R1 bar may be separated into two bars as shown, at the contractor's option, only when slip forming is not used. (All dimensions are out to out.)

(4) Slip-formed option only.

(5) 2" Ø conduit in Left Barrier, see Sheet No. 43.

General Notes:

e.f. denotes Each Face

Longitudinal dimensions are horizontal.

Conventional forming or slip forming may be used. Saw cut joints may be used with conventional forming.

Top of barrier shall be built parallel to grade and barrier joints (except at end bents) normal to grade.

All exposed edges of barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Type D Barrier per linear foot.

Concrete in barrier shall be Class B-1.

Measurement of barrier is to the nearest linear foot for each structure, measured along the outside of barrier from end of approach slab to end of approach slab for Left Barrier.

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Joint sealant and backer rods shall be in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

For slip-formed option, both sides of barrier shall have a vertically broomed finish and the top shall have a transversely broomed finish.

LEFT TYPE D BARRIER

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

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DATE PREPARED 7/10/2025
ROUTE MM | STATE MO
DISTRICT BR | SHEET NO. 38
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9472

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)
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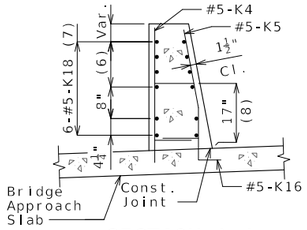
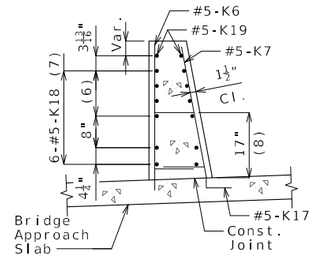
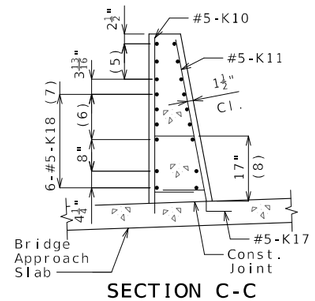
Certificate of Authority No.: 000165
BMcD Project No. 163491



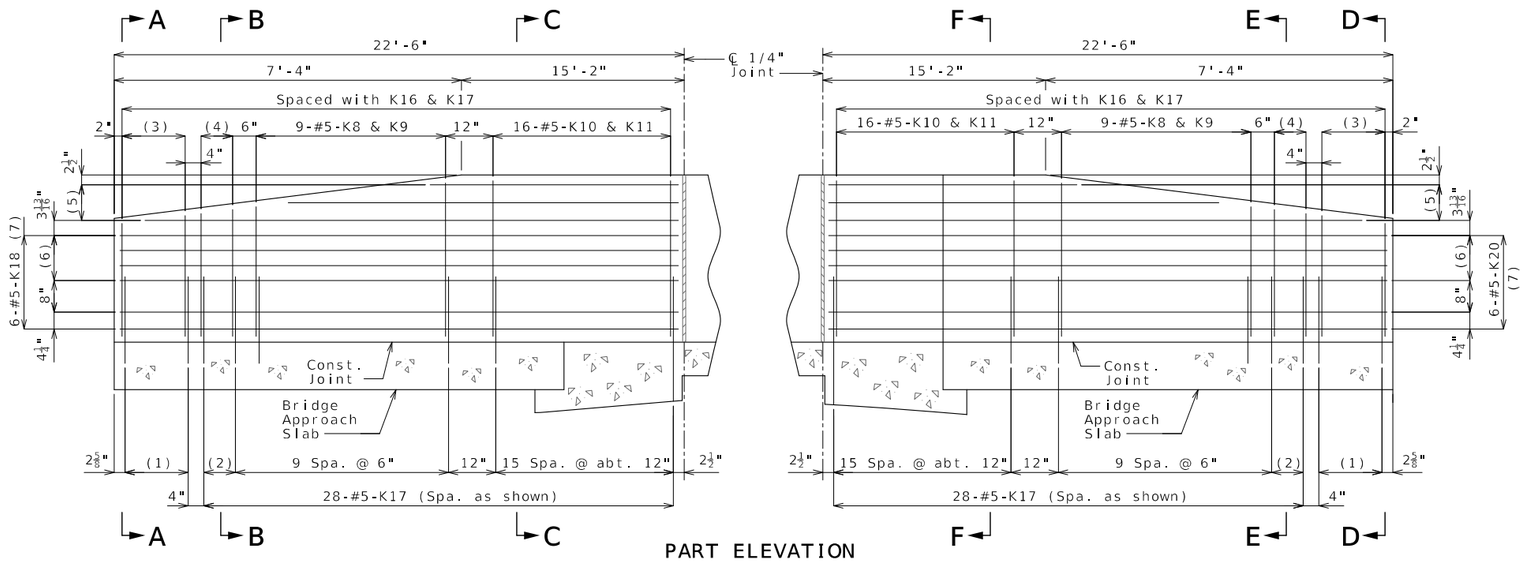
SECTION A-A



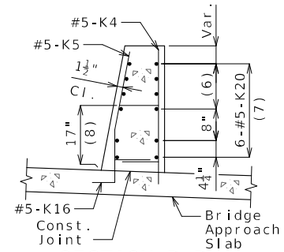
SECTION B-B



SECTION C-C



PART ELEVATION
(Looking at Front Face of Left Barrier)



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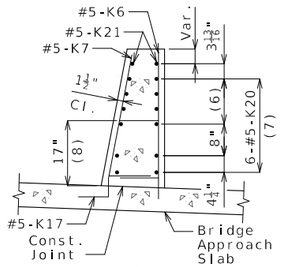
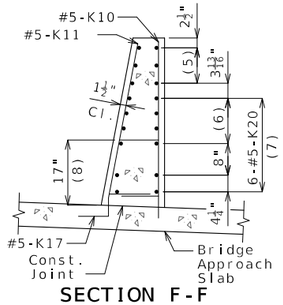
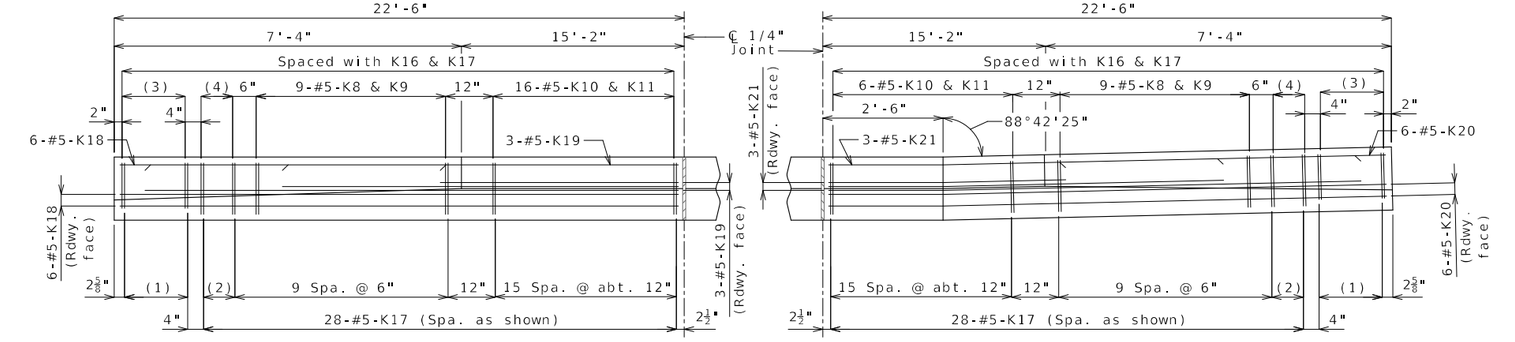


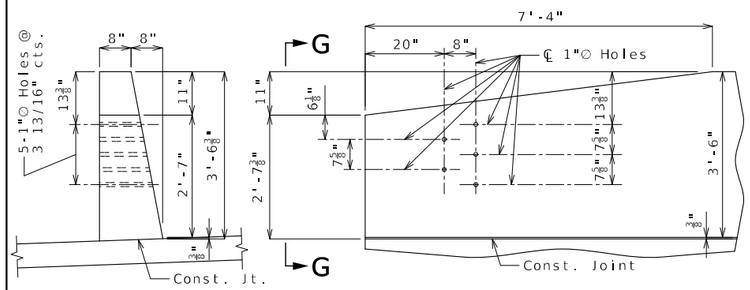
SECTION E-E



SECTION F-F

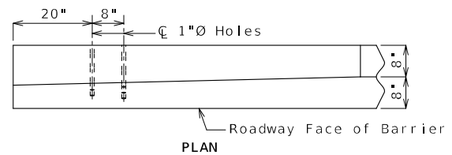


PART PLAN
(Left barrier shown)



ELEVATION G-G

ELEVATION



PLAN

DETAILS OF GUARD RAIL ATTACHMENT

(1) 5-#5-K16 @ 4" cts.

(2) 2 spaces @ 4"

(3) 5-#5-K4 & K5

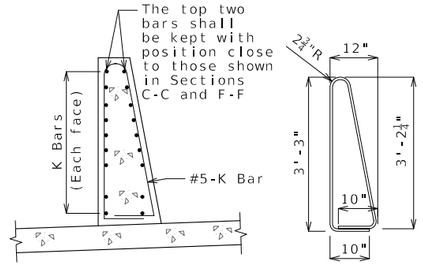
(4) 3-#5-K6 & K7

(5) 3-#5-K19 or K21 @ 4½" cts., each face

(6) 3 spaces @ 3 13/16"

(7) Spaced as shown, each face

(8) To top of bar



K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE

(Other K bars not shown for clarity)

The K10-K11 bar combination may be furnished as one bar as shown, at the contractor's option.

All dimensions are out to out.

General Notes:

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2".

Detailed: July 2024
Checked: July 2024

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

Sheet No. 39 of 63

TYPE D BARRIER AT APPROACH SLABS

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	39

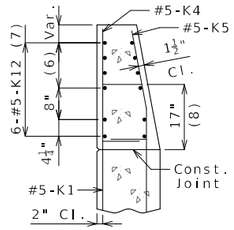
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION | DATE

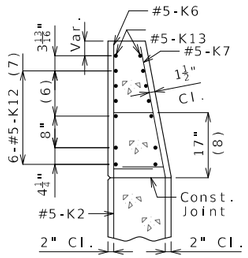
IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

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

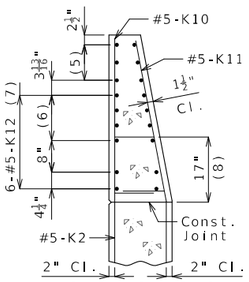
Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491



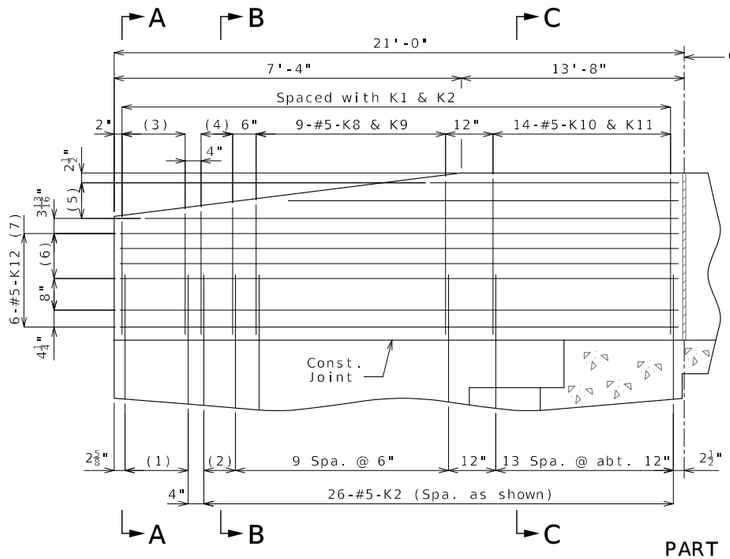
SECTION A-A

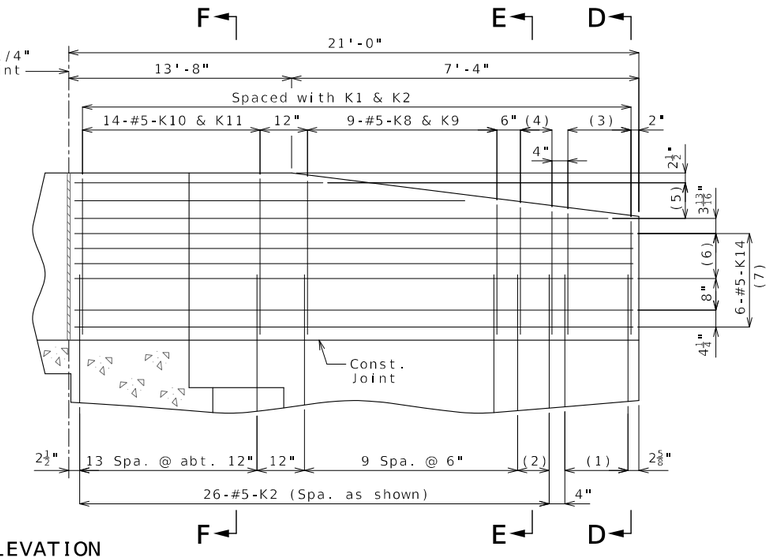


SECTION B-B

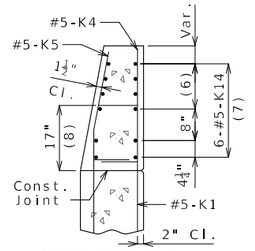


SECTION C-C

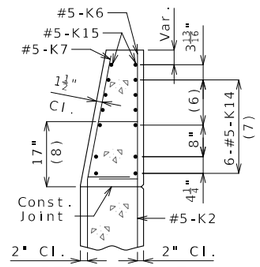




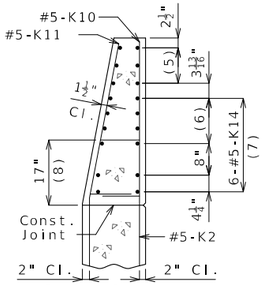
PART ELEVATION
(Looking at Front Face of Right Barrier)



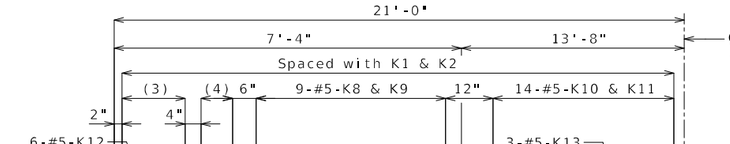
SECTION D-D

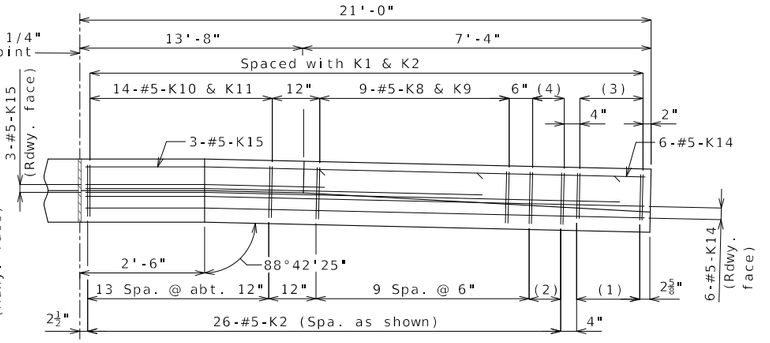


SECTION E-E

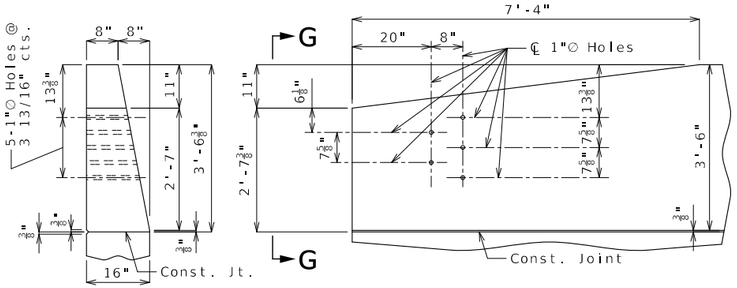


SECTION F-F



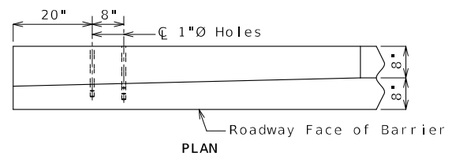


PART PLAN
(Right barrier shown)



ELEVATION G-G

ELEVATION



PLAN

DETAILS OF GUARD RAIL ATTACHMENT

(1) 5-#5-K1 @ 4" cts.

(2) 2 spaces @ 4"

(3) 5-#5-K4 & K5

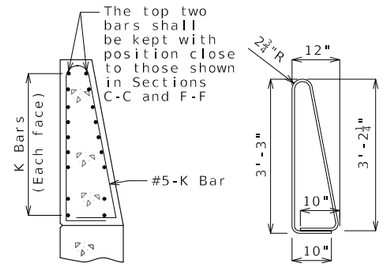
(4) 3-#5-K6 & K7

(5) 3-#5-K13 or K15 @ $4\frac{1}{2}$" cts., each face

(6) 3 spaces @ $3\frac{13}{16}$"

(7) Spaced as shown, each face

(8) To top of bar



K10-K11 BAR PERMISSIBLE ALTERNATE SHAPE
(Other K bars not shown for clarity)

The K10-K11 bar combination may be furnished as one bar as shown, at the contractor's option.

All dimensions are out to out.

General Notes:

Concrete traffic barrier delineators shall be placed on top of the barrier as shown on Missouri Standard Plan 617.10 and in accordance with Sec 617. Delineators on bridges with two-lane, two-way traffic shall have retroreflective sheeting on both sides. Concrete traffic barrier delineators will be considered completely covered by the contract unit price for Type D Barrier.

Reinforcing Steel:
Minimum clearance to reinforcing steel shall be 1 1/2" except as shown for bars embedded into end bent.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 40 of 63

TYPE D BARRIER AT END BENTS

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	40

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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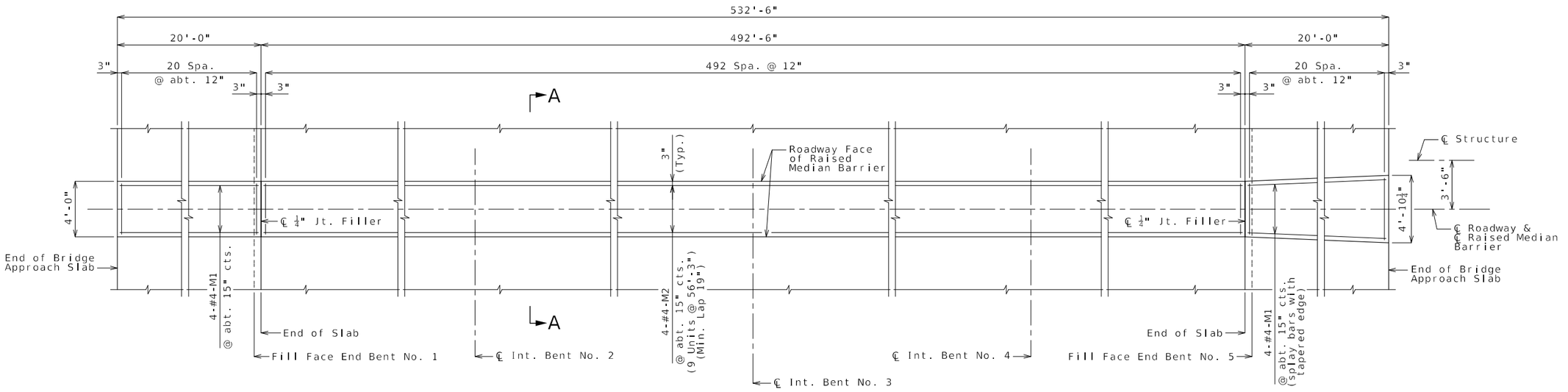
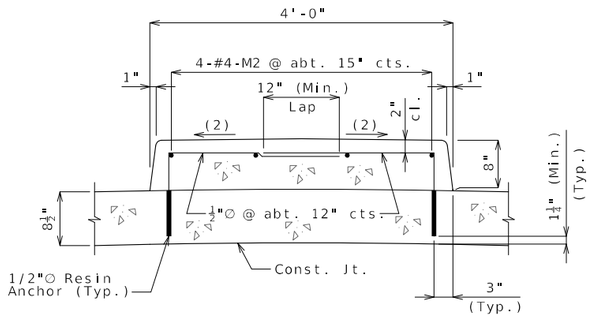
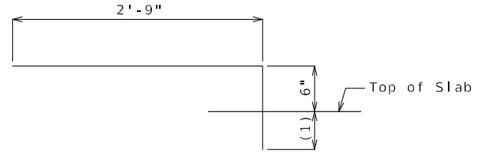


PART PLAN OF SLAB SHOWING RAISED MEDIAN BARRIER



SECTION A-A

(2) Slope 1/8" per ft. Sta. 8+88.39 to 13+42.44, otherwise match superelevation



DETAILS OF RESIN ANCHOR SYSTEM
(1,070 required) (Field Bend)

(1) Manufacturer's recommended embedment length (5" minimum)

NOTES:

Longitudinal dimensions are horizontal.

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

Cost of furnishing and installing the resin anchor systems, complete in place, will be considered completely covered by the contract unit price for Raised Median Barrier.

The minimum embedment depth in concrete with f'c = 4,000 psi for the resin anchor systems shall be that required to meet the minimum ultimate pullout strength in accordance with Sec 1039 but shall not be less than 5".

Top of raised median barrier shall be built parallel to grade with barrier curb joints (except at end bents) normal to grade.

All exposed edges of raised median barrier shall have either a 1/2-inch radius or a 3/8-inch bevel, unless otherwise noted.

Concrete in the raised median barrier shall be Class B-2.

Payment for the work necessary to complete the Raised Median Barrier, including all material, labor, tools, equipment and incidentals, will be considered completely covered by the contract unit price for Raised Median Barrier per square foot.

Measurement of raised median barrier is to the nearest square foot measured transversely between roadway faces of raised median barrier and longitudinally from end of approach slab to end of approach slab.

For Section Thru Slab, see Sheet No. 30.

DETAILS OF RAISED MEDIAN BARRIER

Detailed: July 2024
Checked: July 2024

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

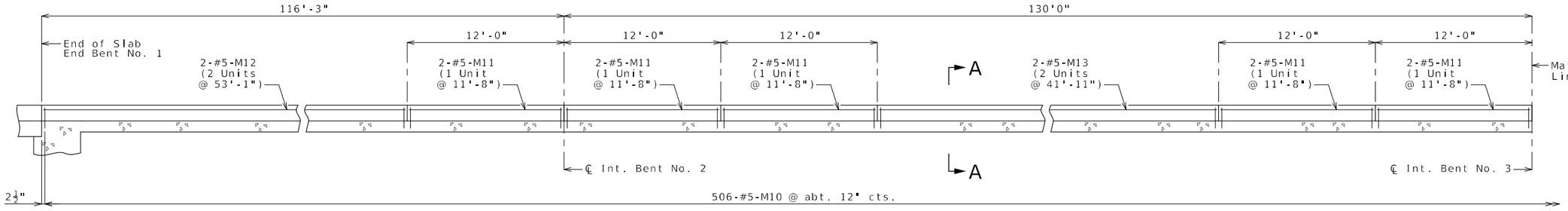
DATE PREPARED 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	41

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

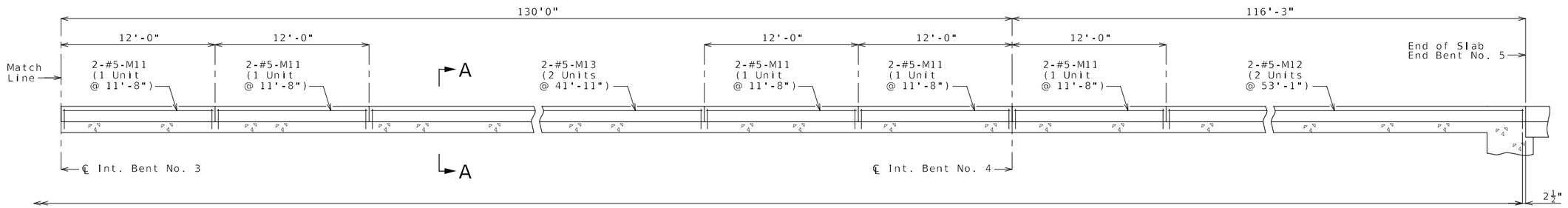
DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.



(Span 1-2)

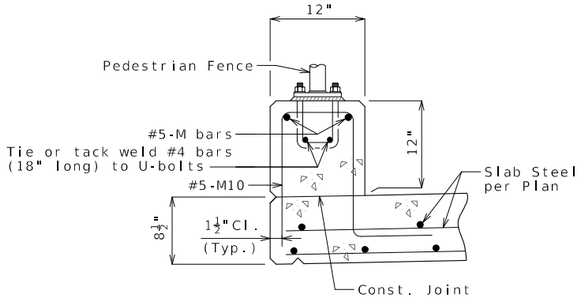
(Span 2-3)



(Span 3-4)

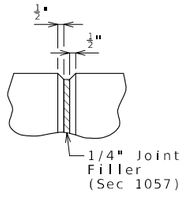
(Span 4-5)

ELEVATION OF PEDESTRIAN CURB



SECTION A-A

The cross-sectional area above the slab = 1.01 sq. ft.



PART ELEVATION AT FORMED JOINT

NOTES:
Longitudinal dimensions are horizontal at outside top of slab, unless noted otherwise.

Use a minimum lap of 2'-0" for #5 horizontal curb bars.

All exposed edges of curb shall have either a 1/2 inch radius or a 3/8 inch bevel, unless otherwise noted.

Top of curb shall be built parallel to grade with curb joints (except at end bents) normal to grade.

Concrete in the curb shall be Class B-1.

Payment for all concrete and reinforcement, complete in place, will be considered completely covered by the contract unit price for Concrete Curb (Bridge Rail) per linear foot.

Measurement of the curb is to the nearest linear foot for each unit, measured along the ouside of curb from end of slab to end of slab.

For details of fence post spacing, see Sheet No. 45.

DETAILS OF PEDESTRIAN CURB

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	42

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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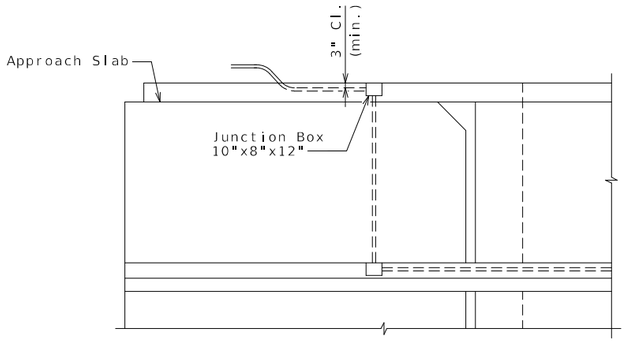
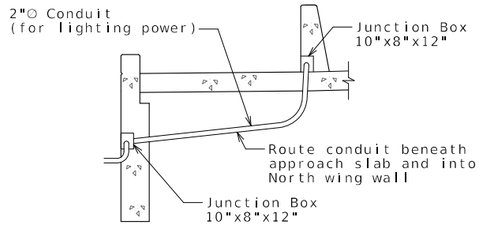
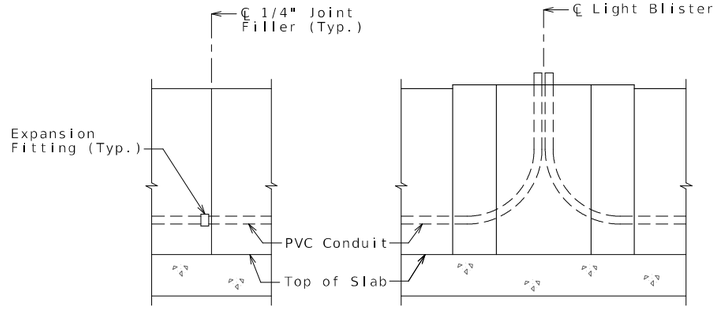


PART PLAN OF LEFT BARRIER
(End Bent 1 Shown, End Bent 5 Similar)

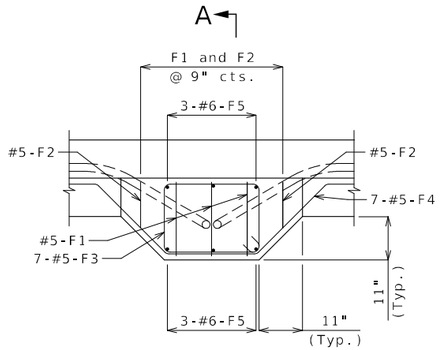


PART SECTION OF LEFT BARRIER

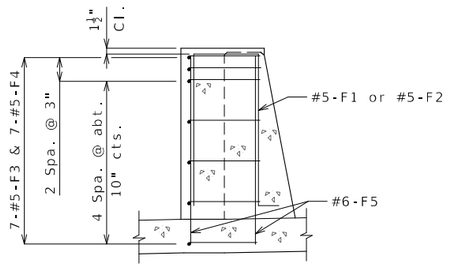


ELEVATION
AT BARRIER JOINT

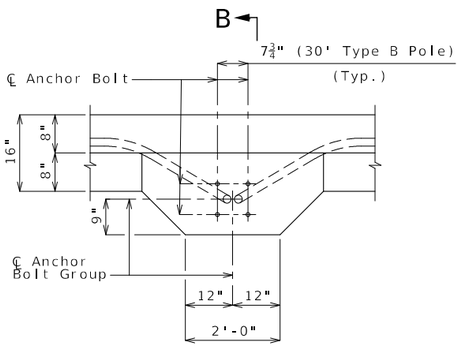
LIGHT BLISTER
ELEVATION
(Pedestrian Face Shown)



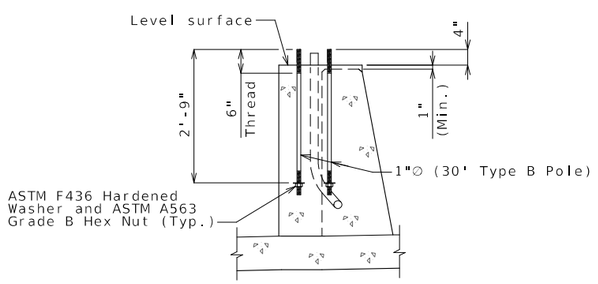
LIGHT BLISTER
PART PLAN



SECTION A-A



LIGHT BLISTER
PART PLAN



SECTION B-B

NOTES:

All conduit shall be rigid non-metallic schedule 40 heavy wall PVC (polyvinyl chloride plastic) with 3" minimum cover in concrete. Each section of conduit shall bear the Underwriters' Laboratories, Inc., (UL) label.

Shift reinforcing steel in field where necessary to clear conduit.

Expansion fittings shall be placed at all filled joints and set in accordance with the manufacturer's requirements and based on air temperature at the time of setting given an estimated total expansion movement of 1 inch at filled joints using a maximum temperature range of 120°F and a maximum temperature of 110°F.

Drainage shall be provided at low points or other critical locations of all conduits and all juction boxes in accordance with Sec 707. All conduits shall be sloped to drain where possible.

All juction boxes shall be PVC molded in accordance with Sec 1062 and designed for flush mounting. The conduit terminations shall be permanent or separable. The terminations and covers shall be of watertight construction and shall meet requirements for NEMA 4 enclosure.

Payment for furnishing and installing Conduit System, complete in place, will be considered completely covered by the contract lump sum price for Conduit System on Structure.

Placement of junction boxes and covers, complete in place, shall be flush with the sidewalk face of the barrier curb. Junction boxes and covers may be recessed up to 1/4".

Anchor bolts and nuts shall be in accordance with ASTM A449. Anchor bolts, nuts, and washers shall be galvanized in accordance with AASHTO M 232 (ASTM A153), Class C.

Cost of furnishing and placing anchor bolts for light standard will be considered completely covered by the contract unit price for other items.

Light standards, wiring and fixtures shall be furnished and installed by others.

Top of light standard supports shall be made horizontal; anchor bolts shall be placed vertically.

For details of light standards and wiring (Rdwy. Items), see roadway lighting plans.

For Details of Left Barrier Curb (Type D), see Sheet No. 38.

LIGHT POLE SUPPORT AND CONDUIT DETAILS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	43

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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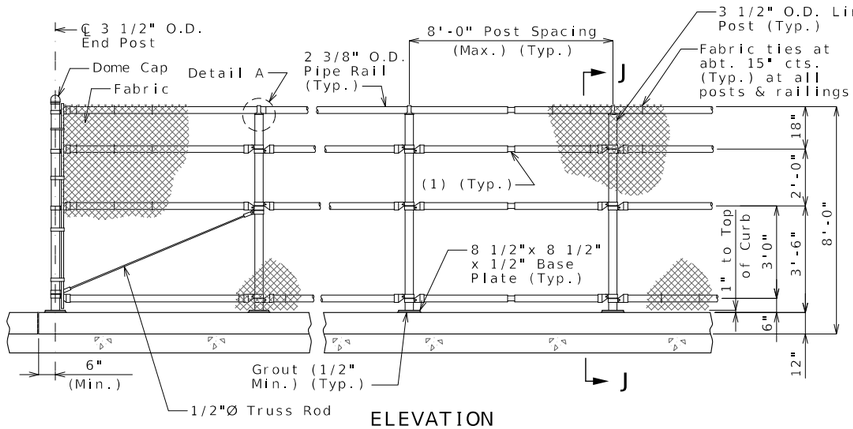
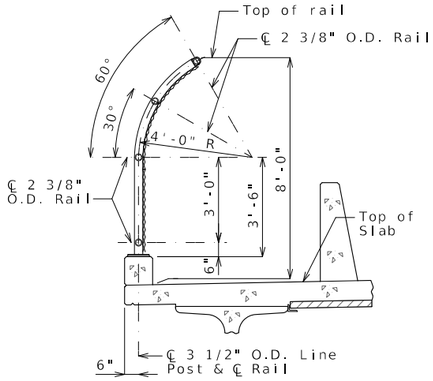
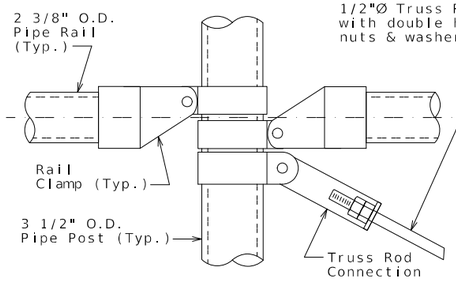


ELEVATION

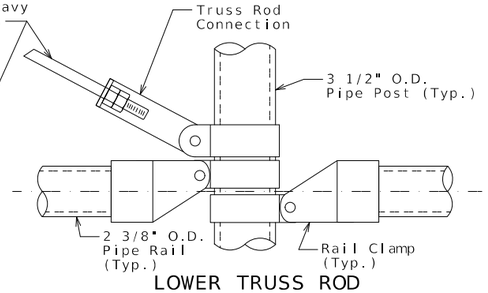
(1) 3/8" Gap for splice at about 30'-0" centers with at least one splice gap between pull or end posts.



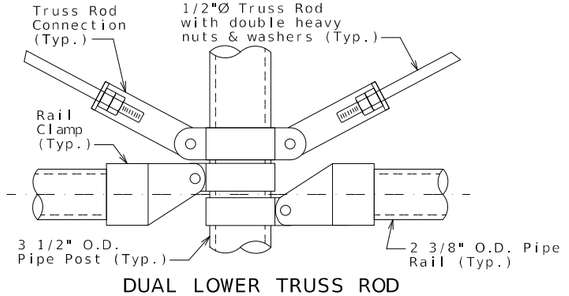
SECTION J-J



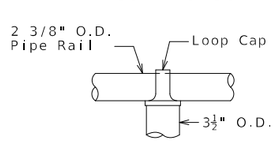
UPPER TRUSS ROD CONNECTION DETAIL



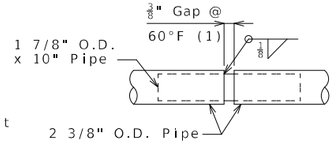
LOWER TRUSS ROD CONNECTION DETAIL



DUAL LOWER TRUSS ROD CONNECTION DETAIL

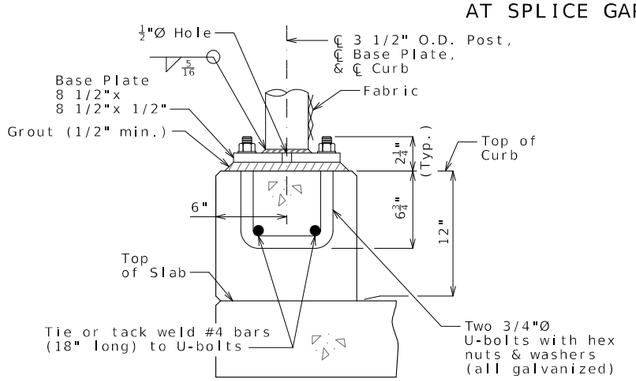


DETAIL A



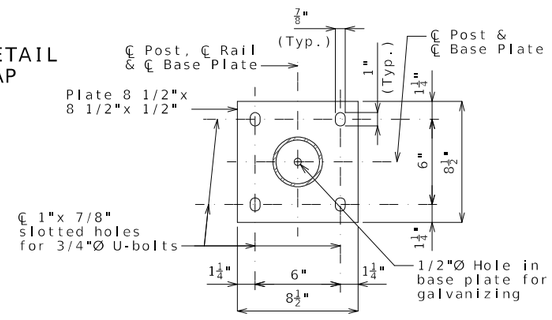
TYPICAL RAIL DETAIL AT SPLICE GAP

Note: At the contractor's option, manufacturer-approved expansion coupling may be used in lieu of detail shown. No additional payment will be made for this substitution.



POST CONNECTION (TYPICAL)

Note: Base plate shall be welded to the post prior to galvanizing the post with base plate.



PLAN OF BASE PLATE

GENERAL NOTES:

Pedestrian chain link fence shall be in accordance with Sec 1043 except all fabric shall have the top and bottom edges knuckled and pipe members shall be in accordance with ASTM F1043, high strength grade (minimum yield = 50 ksi) heavy industrial steel pipe Group 1A.

All posts shall be vertical. Grout shall be placed under the post base plates in accordance with Sec 1066.

Payment for furnishing, galvanizing and erecting the fence and frame complete in place will be considered completely covered by the contract unit prices for (96 in.) Curved Top Pedestrian Fence (Structures) per linear foot.

Dimensions of pedestrian chain link fence are measured horizontally.

The maximum spacing allowed between pull posts and end posts is 100 feet. Post brace and 1/2-inch diameter truss rod are required for panels adjacent to pull post and end posts only. Connect the lower end of truss rod to bottom of pull posts and end posts to which the stretcher bar is attached.

Rail clamps, dome cap, bands, tie wires, stretcher bars and truss rod connections shall be in accordance with the manufacturer's recommendations. The truss rod and truss rod connections shall have a minimum capacity of 2000 pounds. Dome cap shall fit tightly.

Expansion joints shall be placed in the horizontal pieces at not more than 30-foot centers and at all joint filler locations in the curb with a minimum gap of 3/8 inch at 60 degrees F.

Steel for truss rods shall be ASTM A709 Grade 36. Steel for base plates shall be ASTM A709 Grade 50.

(96 in.) Curved Top Pedestrian Fence will be measured to the nearest linear foot for each structure, measured along the centerline fence from end of fence to end of fence.

Contractor shall submit complete detailed shop drawings in accordance with Sec 1080.

All base plates, U bolts, hex nuts and washers shall be galvanized in accordance with ASTM A123 and Sec 1081.

U bolts shall be ASTM F1554 Grade 36.

Chain link wire fabric shall be 9 gage minimum, 2-inch diamond mesh.

The chain link fence shall be built in accordance with Sec 607 & Sec 1043.

For details of pedestrian curb, see Sheet No. 42.

For details of fence post spacing, see Sheet No. 45.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 44 of 63

DETAILS OF PEDESTRIAN CHAIN LINK FENCE

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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

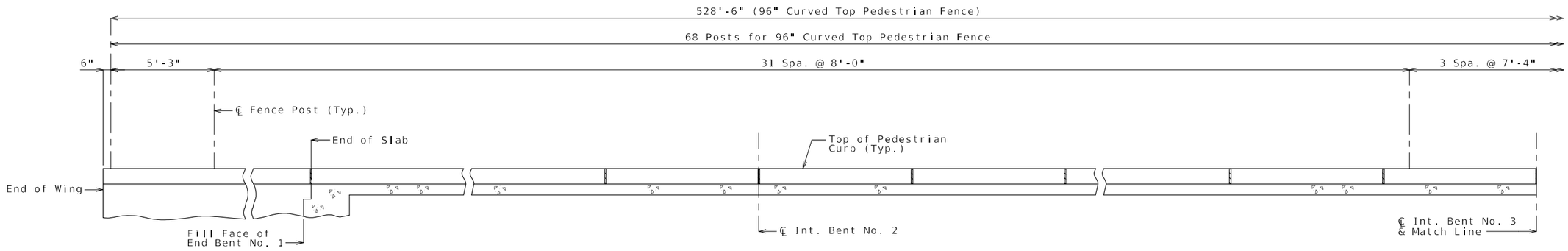
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

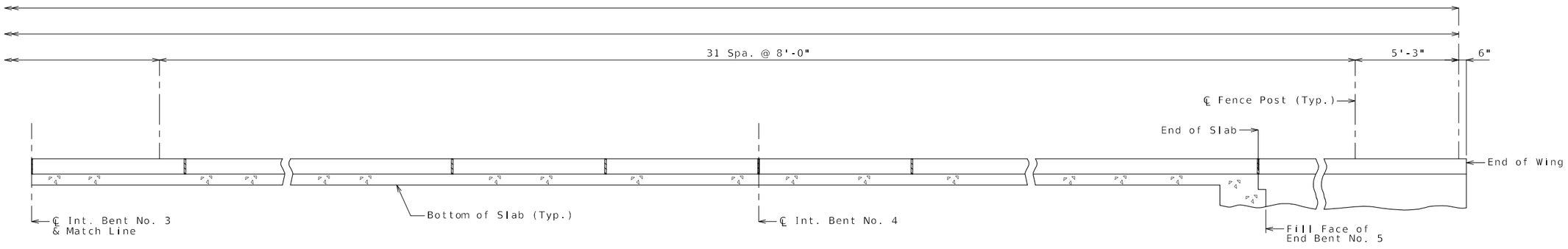
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 44
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION	DATE

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.





ELEVATION NEAR LEFT EDGE OF SLAB SHOWING FENCE POST SPACING

NOTES:
Longitudinal dimensions are horizontal.

Work this sheet with Sheets No. 10, 22, 42, and 44.

DETAILS OF FENCE POST SPACING

Detailed: July 2024
Checked: July 2024

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

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	45

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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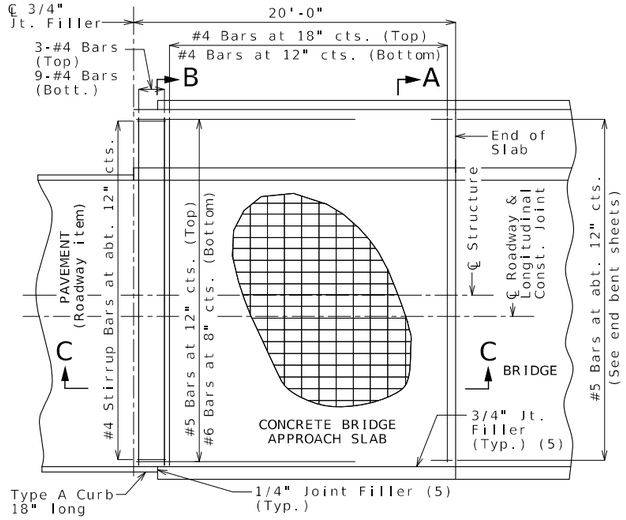
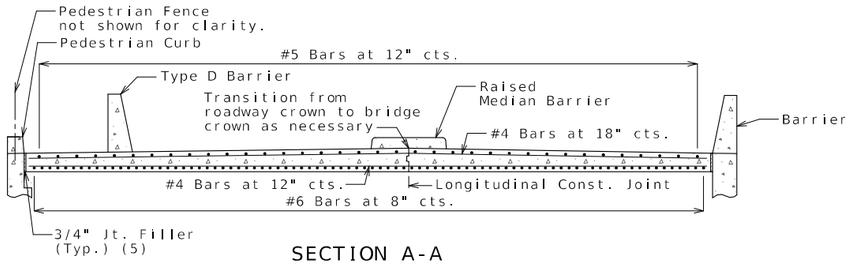
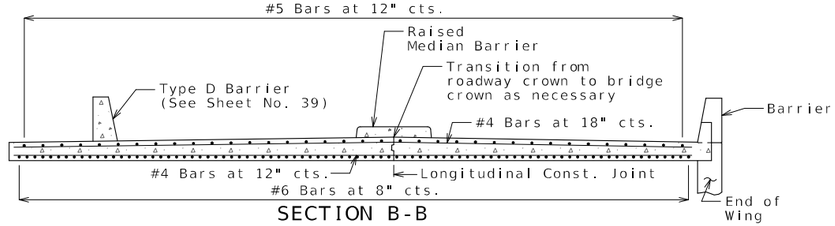


PART PLAN OF SQUARED STRUCTURE

(Raised median barrier not shown for clarity, see Sheet No. 41.)

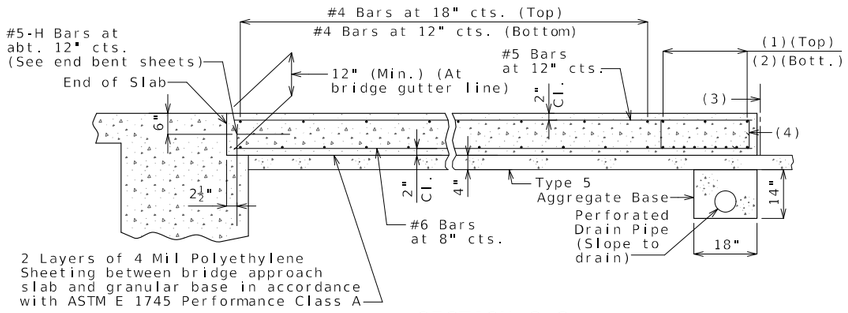


SECTION A-A



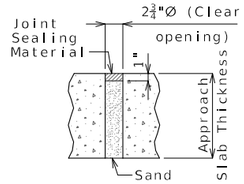
SECTION B-B

The contractor shall crown the bottom of the approach slab to match the crown of the roadway surface.



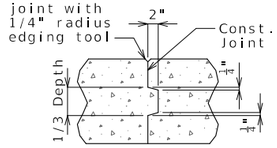
SECTION C-C

(Integral end bent)

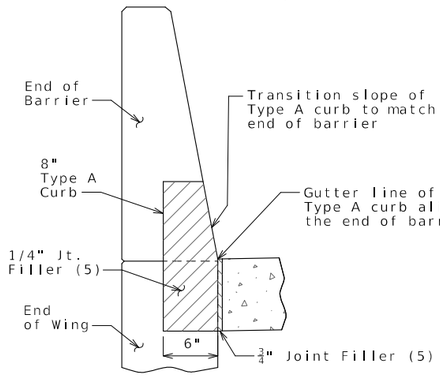


UNDERSEAL ACCESS HOLE DETAIL

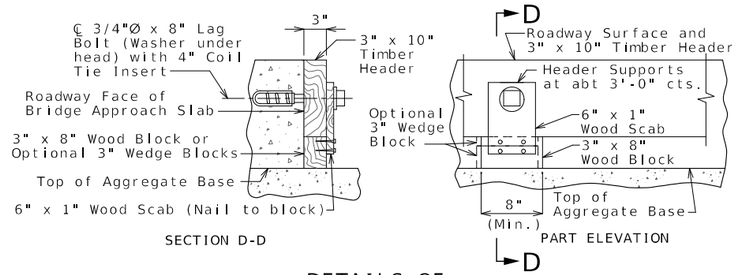
(If required)



CONSTRUCTION JOINT DETAIL



SECTION BETWEEN CURB AND BARRIER



DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.

General Notes:

The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab.

All concrete for the bridge approach slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Longitudinal construction joints in bridge approach slab shall be aligned with longitudinal construction joints in bridge slab.

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

The reinforcing steel in the bridge approach slab shall be continuous. The transverse reinforcing steel may be made continuous by providing a minimum lap splice of 23 inches for #4 bars, or by mechanical bar splice.

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

Payment for furnishing all materials, labor and excavation necessary to construct the concrete bridge approach slab, including the timber header, underdrain, Type 5 aggregate base, joint filler, and all other appurtenances and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.

See Missouri Standard Plan 609.00 for details of Type A curb.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4" diameter corrugated polyethylene (PE) drain pipe.

(1) 3-#4 Bars

(2) 9-#4 Bars

(3) ℄ 3/4" Jt. Filler

(4) #4 Stirrup Bars at abt. 12" cts.; 2'-0"x 8" (Min.) out to out; Actual length = 5'-10" (Min.); 90° stirrup hook at bottom; Stirrup height (8") and actual length vary due to crown.

(5) Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 46 of 63

BRIDGE APPROACH SLAB (MINOR) WEST

THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED	
7/10/2025	
ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	46
COUNTY	
GREENE	
JOB NO.	
J8S0836D	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
A9472	

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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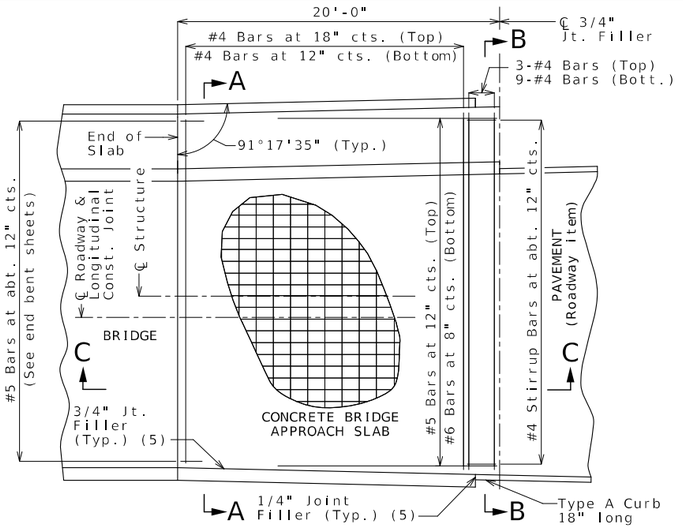
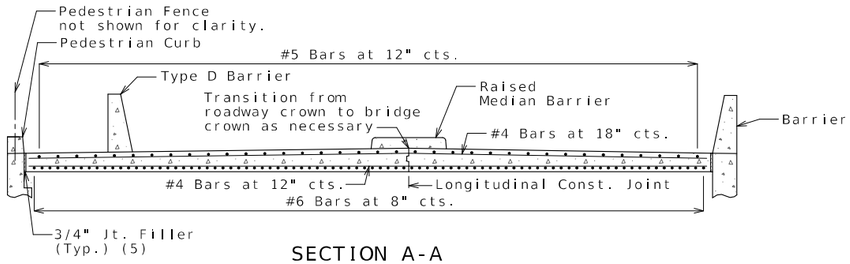
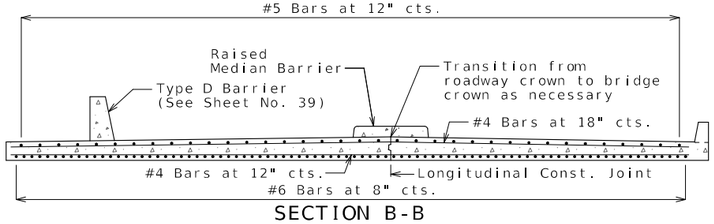


PART PLAN OF SQUARED STRUCTURE

(Raised median barrier not shown for clarity, see Sheet No. 41.)

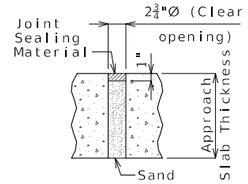


SECTION A-A



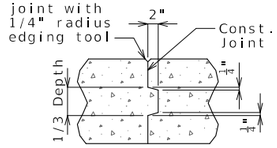
SECTION B-B

The contractor shall crown the bottom of the approach slab to match the crown of the roadway surface.

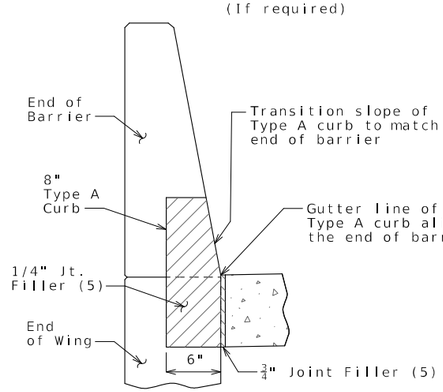


UNDERSEAL ACCESS HOLE DETAIL

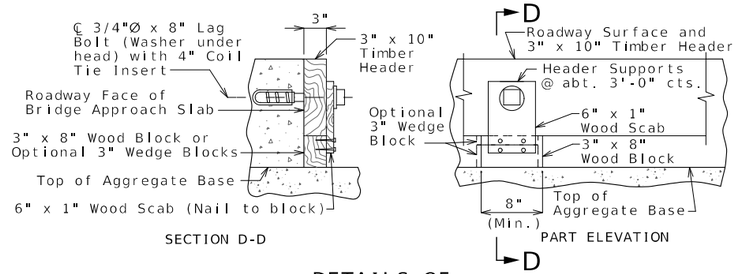
(If required)



CONSTRUCTION JOINT DETAIL

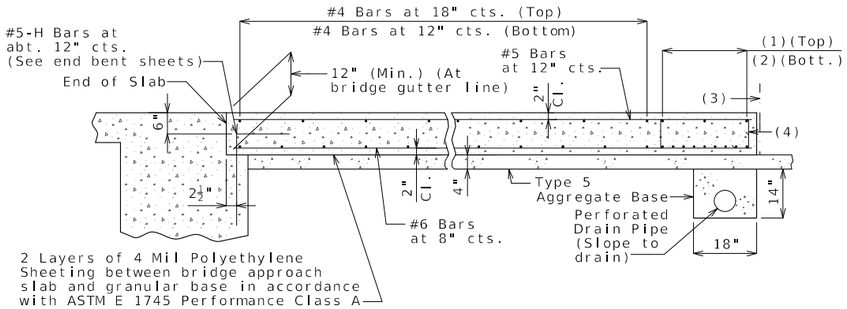


SECTION BETWEEN CURB AND BARRIER



DETAILS OF TIMBER HEADER

Remove timber header when concrete pavement is placed.



SECTION C-C

(Integral end bent)

General Notes:

The contractor shall pour and satisfactorily finish the bridge slab before placing the bridge approach slab.

All concrete for the bridge approach slab shall be in accordance with Sec 503 (f'c = 4,000 psi).

The reinforcing steel in the bridge approach slab shall be epoxy coated Grade 60 with fy = 60,000 psi.

Longitudinal construction joints in bridge approach slab shall be aligned with longitudinal construction joints in bridge slab.

Minimum clearance to reinforcing steel shall be 1 1/2", unless otherwise shown.

The reinforcing steel in the bridge approach slab shall be continuous. The transverse reinforcing steel may be made continuous by providing a minimum lap splice of 23 inches for #4 bars, or by mechanical bar splice.

All joint filler shall be in accordance with Sec 1057 for preformed fiber expansion joint filler except as noted.

Payment for furnishing all materials, labor and excavation necessary to construct the concrete bridge approach slab, including the timber header, underdrain, Type 5 aggregate base, joint filler, and all other appurtenances and incidental work as shown on this sheet, complete in place, will be considered completely covered by the contract unit price for Bridge Approach Slab (Minor) per square yard.

See Missouri Standard Plan 609.00 for details of Type A curb.

Drain pipe may be either 6" diameter corrugated metallic-coated pipe underdrain, 4" diameter corrugated polyvinyl chloride (PVC) drain pipe, or 4" diameter corrugated polyethylene (PE) drain pipe.

(1) 3-#4 Bars

(2) 9-#4 Bars

(3) ℄ 3/4" Jt. Filler

(4) #4 Stirrup Bars at abt. 12" cts.;
2'-0"x 8" (Min.) out to out;
Actual length = 5'-10" (Min.);
90° stirrup hook at bottom; Stirrup height (8") and actual length vary due to crown.

(5) Seal joint between vertical face of approach slab and wing with sealant in accordance with Sec 717 for silicone joint sealant for saw cut and formed joints.

THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 47
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION	DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

BRIDGE APPROACH SLAB (MINOR) EAST

Detailed: July 2024
Checked: July 2024

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

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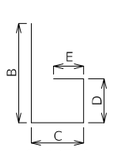
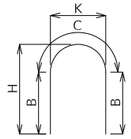
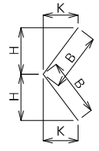


SHAPE 6
or 6S



SHAPE 7



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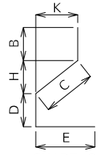

SHAPE 9
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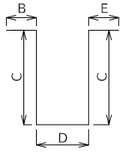

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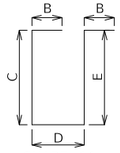

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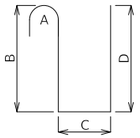
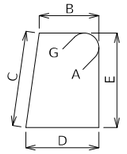
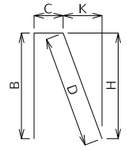


SHAPE 12



SHAPE 13S



SHAPE 14
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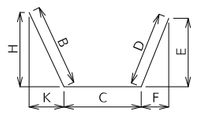
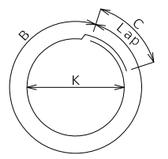
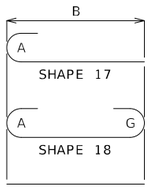


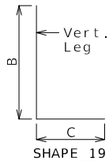
SHAPE 15
or 15S



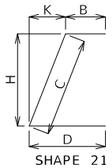
SHAPE 16



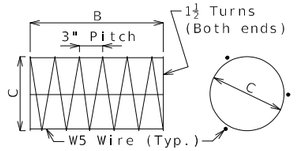
SHAPE 17
SHAPE 18
SHAPE 20



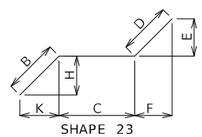
SHAPE 19
or 19S



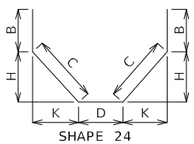
SHAPE 21
or 21S



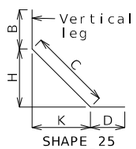
SHAPE 22



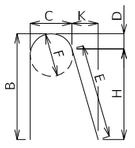
SHAPE 23
or 23S



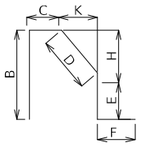
SHAPE 24
or 24S



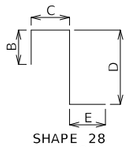
SHAPE 25
or 25S



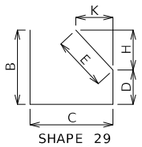
SHAPE 26



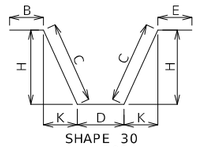
SHAPE 27S



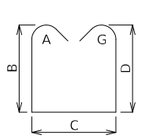
SHAPE 28
or 28S



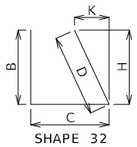
SHAPE 29
or 29S



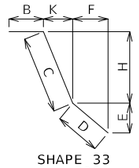
SHAPE 30
or 30S



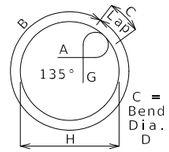
SHAPE 31S



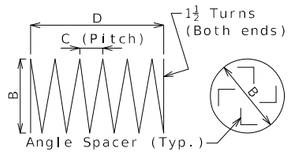
SHAPE 32
or 32S



SHAPE 33
or 33S



SHAPE 34S



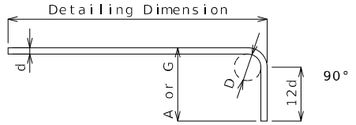
SHAPE 35 (1)

SHAPE 36

Finished Bend Diameters D and Hook Dimensions

Standard Pin Bend Shapes

Size	Case	D	A or G		J
			90°	180°	180°
#4	1	3"	8"	6"	4"
#5	1	3¾"	10"	7"	5"
#6	1	4½"	12"	8¼"	6"
#7	2	5¼"	14"	9¾"	7"
	3	7"	15"	11½"	8¾"
#8	2	6"	16"	11"	8"
	3	8"	17"	13¼"	10"
#9	1	9½"	19½"	15½"	11¾"
#10	1	10¾"	22"	17½"	13¼"
#11	1	12"	24½"	19½"	14⅞"
#14	1	18¼"	31¼"	27½"	21⅜"
#18	1	24"	41½"	36¼"	28½"

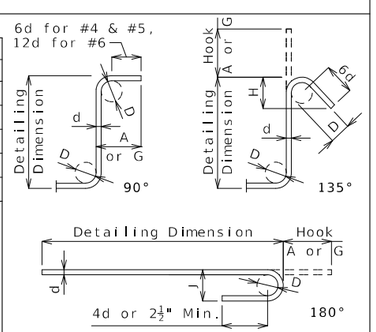


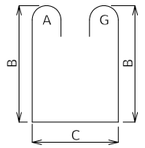
Stirrup Pin Bend Shapes (S)

Size	Case	D	A or G			H	J
			90°	135°	180°	135°	180°
#4	2	2"	4¼"	4½"	5"	2⅞"	3"
	3	3"	5"	5¼"	6"	3"	4"
#5	2	2½"	5¾"	5¾"	5¾"	3⅝"	3¾"
	3	3¾"	6¼"	6½"	7"	3⅞"	5"
#6	1	4½"	12"	7¾"	8¼"	4⅝"	6"

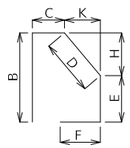
Applicable for all grades of steel.

Case 1 applies to all reinforcement. Case 2 applies to all reinforcement except for galvanized bars. Case 3 applies to galvanized bars only.





SHAPE 37S



SHAPE 38S

BENDING DIAGRAMS

All dimensions are out to out.

Shapes ending with an S shall be bent in accordance with stirrup pin bend shapes.

Unless otherwise noted, finished bending diameter D is the same for all bends of a shape.

(1) Shall be a deformed or plain spiral bar or wire.

Four angle or channel spacers are required for each column spiral. Spacers are to be placed on inside of spirals. Length and weight of column spirals do not include splices or spacers.

Reinforcing Steel Totals (Pounds)

	Size	Substructure		Superstructure				Entire Bridge	
				Slab					
		Plain	Galv.	Plain	Galv.	Barrier	Slip Form	Plain	Galv.
By Size	W5	0	0	0	0	0	0	0	0
	4	0	0	0	2,787	1,458	0	0	4,245
	5	6,623	0	328	147,162	30,261	943	6,951	178,366
	6	25,851	0	0	118,449	106	0	25,851	118,555
	7	0	0	0	36,350	0	0	0	36,350
	8	0	0	0	44,437	0	0	0	44,437
	9	8,322	0	0	0	0	0	8,322	0
	10	26,142	0	0	0	0	0	26,142	0
	11	21,966	0	0	0	0	0	21,966	0
	14	0	0	0	0	0	0	0	0
	18	0	0	0	0	0	0	0	0
By Type		88,904	0	328	349,185	31,825	943	89,232	381,953

All superstructure reinforcing steel shall be galvanized unless otherwise specified.

Products used to repair damaged zinc coating shall not contain aluminum.

Superstructure reinforcing steel total does not include 1/2"∅ resin anchors, see Sheet No. 41.

At the contractor's option, superstructure reinforcing steel may be textured epoxy-coated steel reinforcing bars. Shop drawings will be required with approval by the engineer.

BENDING DIAGRAMS AND REINFORCING STEEL TOTALS

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 48
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165

BMcD Project No. 163491

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		SUBSTRUCTURE													
		INT. BENT 2													
36	6 D200	Beam		20		2 6.000							2 6	2 6	135
96	9 D201	Footing		20		8 6.000							8 6	8 6	2774
12	6 D202	Footing		10			5 9.000	8 0.000					19 6	19 2	345
10	11 H200	Beam		17		48 0.000							49 7	49 7	2634
12	6 H201	Beam		20		45 7.000							45 7	45 7	822
10	11 H202	Beam		20		38 0.000							38 0	38 0	2019
10	6 H203	Beam		20		36 2.000							36 2	36 2	543
10	11 H204	Beam		17		19 4.000							20 11	20 11	1111
12	6 H205	Beam		20		25 3.000							25 3	25 3	455
10	11 H206	Beam		20		29 4.000							29 4	29 4	1558
20	6 H207	Beam		20		16 7.000							16 7	16 7	498
3	5 P200	Column		35		3 9.000	6.000	27 2.250					676 6	667 2	2088
148	6 U200	Beam		13S		3 2.000	5 8.000	3 2.000	5 8.000				19 0	18 6	4112
36	6 U201	Beam		10S			5 8.000	3 2.000					14 6	14 2	766
16	6 U202	Beam		31S		4 8.000	12.000						6 4	6 2	148
77	6 U203	Beam		10S			2 9.000	4 9.000					10 3	9 11	1147
13	6 U204	Beam		10S			12.000	4 6.000					6 6	6 2	120
7	6 U205	Beam		10S			12.000	5 6.000					7 6	7 2	75
7	6 U206	Beam		10S			12.000	5 10.125					7 10	7 6	79
45	10 V200	Column		20		32 5.750							32 6	32 6	6293
45	10 V201	Column		17		9 5.000							10 10	10 10	2098
		INT. BENT 3													
36	6 D300	Beam		20		2 6.000							2 6	2 6	135
96	9 D301	Footing		20		8 6.000							8 6	8 6	2774
12	6 D302	Footing		10			5 9.000	8 0.000					19 6	19 2	345
10	11 H300	Beam		17		48 0.000							49 7	49 7	2634
12	6 H301	Beam		20		45 7.000							45 7	45 7	822
10	11 H302	Beam		20		38 0.000							38 0	38 0	2019
10	6 H303	Beam		20		36 2.000							36 2	36 2	543
10	11 H304	Beam		17		19 4.000							20 11	20 11	1111
12	6 H305	Beam		20		25 3.000							25 3	25 3	455
10	11 H306	Beam		20		29 4.000							29 4	29 4	1558
3	5 P300	Column		35		3 9.000	6.000	29 3.000					725 2	715 1	2237
148	6 U300	Beam		13S		3 2.000	5 8.000	3 2.000	5 8.000				19 0	18 6	4112
36	6 U301	Beam		10S			5 8.000	3 2.000					14 6	14 2	766
16	6 U302	Beam		31S		4 8.000	12.000						6 4	6 2	148
48	6 U303	Beam		10S			2 9.000	4 9.000					10 3	9 11	715
12	6 U304	Beam		10S			12.000	4 6.000					6 6	6 2	111
14	6 U305	Beam		10S			12.000	5 6.000					7 6	7 2	151
45	10 V300	Column		20		34 6.500							34 7	34 7	6697
45	10 V301	Column		17		9 5.000							10 10	10 10	2098
		INT. BENT 4													
36	6 D400	Beam		20		2 6.000							2 6	2 6	135
96	9 D401	Footing		20		8 6.000							8 6	8 6	2774
12	6 D402	Footing		10			5 9.000	8 0.000					19 6	19 2	345
10	11 H400	Beam		17		48 0.000							49 7	49 7	2634
12	6 H401	Beam		20		45 7.000							45 7	45 7	822
10	11 H402	Beam		20		38 0.000							38 0	38 0	2019
10	6 H403	Beam		20		36 2.000							36 2	36 2	543
10	11 H404	Beam		17		19 4.000							20 11	20 11	1111
12	6 H405	Beam		20		25 3.000							25 3	25 3	455
10	11 H406	Beam		20		29 4.000							29 4	29 4	1558
3	5 P400	Column		35		3 9.000	6.000	30 1.000					744 10	734 6	2298

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B ft in.	C ft in.	D ft in.	E ft in.	F ft in.	H ft in.	K ft in.	Nom. Length ft in.	Actual Length ft in.	Weight lb
		INT. BENT 4 CONT.													
148	6 U400	Beam		13S		3 2.000	5 8.000	3 2.000	5 8.000				19 0	18 6	4112
36	6 U401	Beam		10S			5 8.000	3 2.000					14 6	14 2	766
16	6 U402	Beam		31S		4 8.000	12.000						6 4	6 2	148
48	6 U403	Beam		10S			2 9.000	4 9.000					10 3	9 11	715
12	6 U404	Beam		10S			12.000	4 6.000					6 6	6 2	111
14	6 U405	Beam		10S			12.000	5 6.000					7 6	7 2	151
45	10 V400	Column		20		35 4.500							35 5	35 5	6858
45	10 V401	Column		17		9 5.000							10 10	10 10	2098
		SUPERSTRUCTURE													
		END BENT 1													
24	6 F100	Wing	G	23S		2 2.875	4 5.000	14.000	9.875	9.875	19.000	19.000	7 10	7 9	279
12	6 F101	Diaphragm	G	6S		5 5.000	2 7.000						8 0	7 10	141
8	6 H100	Beam & Diaph.	G	20		37 0.000							37 0	37 0	445
16	8 H101	Beam	G	20		37 7.000							37 7	37 7	1606
4	6 H102	Beam	G	20		36 11.00							36 11	36 11	222
6	6 H103	Diaphragm	G	20		7 0.000							7 0	7 0	63
30	6 H104	Diaphragm	G	20		9 5.000							9 5	9 5	424
10	6 H105	Diaphragm	G	20		3 2.000							3 2	3 2	48
2	6 H106	Diaphragm	G	20		23.000							0 23	0 23	6
16	8 H107	Wing	G	20		20 6.000							20 6	20 6	876
52	6 H108	Wing	G	20		19 8.000							19 8	19 8	1536
2	4 H109	Wing	G	20		18 2.000							18 2	18 2	24
7	5 H110	Strand Tie		20		6 2.000							6 2	6 2	45
4	6 H111	Beam	G	20		14 2.000							14 2	14 2	85
70	5 U100	Beam	G	10S			2 9.000	7 5.000					12 11	12 8	925
12	5 U101	Beam	G	13S		2 9.000	2 8.000	2 9.000	2 8.000				11 11	11 7	145
2	5 U102	Beam	G	10S			3 2.000	2 9.000					9 1	8 10	18
22	5 U103	Beam	G	13S		2 9.000	3 2.000	2 9.000	3 2.000				12 11	12 7	289
84	5 U104	Diaphragm	G	10S			2 3.000	4 7.000					9 1	8 10	774
84	5 U105	Diaphragm	G	19S		4 3.000	2 8.000						6 11	6 10	599
68	5 U106	Diaphragm	G	19S		2 0.000	15.000						3 3	3 2	225
91	5 U107	Diaphragm	G	19S		3 3.000	4 7.000						7 10	7 9	736
20	4 U108	Wing	G	10S			4 10.000	8.000					10 4	10 2	136
6	5 U109	Beam	G	13S		2 9.000	3 0.000	2 9.000	3 0.000				12 7	12 3	77
32	5 V100	Beam	G	20		7 8.000							7 8	7 8	256
35	6 V101	Diaphragm	G	20		4 9.000							4 9	4 9	250
38	6 V102	Wing	G	20	2	7 2.000							7 2	7 2	
		Inc. = 0.500"				8 0.000							8 0	8 0	433
38	6 V103	Wing	G	20		7 3.000							7 3	7 3	414
		END BENT 5													
24	6 F500	Wing	G	23S		2 2.875	4 5.000	14.000	9.875	9.875	19.000	19.000	7 10	7 9	279
12	6 F501	Diaphragm	G	6S		5 5.000	2 7.000						8 0	7 10	141
8	6 H500	Beam & Diaph.	G	20		37 0.000							37 0	37 0	445
16	8 H501	Beam	G	20		37 7.000							37 7	37 7	1606
4	6 H502	Beam	G	20		35 4.000							35 4	35 4	212
6	6 H503	Diaphragm	G	20		7 0.000							7 0	7 0	63
30	6 H504	Diaphragm	G	20		9 5.000							9 5	9 5	424
10	6 H505	Diaphragm	G	20		3 2.000							3 2	3 2	48
2	6 H506	Diaphragm	G	20		23.000							0 23	0 23	6
16	8 H507	Wing	G	20		20 6.000							20 6	20 6	876
50	6 H508	Wing	G	20		19 8.000							19 8	19 8	1477
2	4 H509	Wing	G	20		18 2.000							18 2	18 2	24
7	5 H510	Strand Tie		20		6 2.000							6 2	6 2	45
70	5 U500	Beam	G	10S			2 9.000	7 3.000					12 9	12 6	913
18	5 U501	Beam	G	13S		2 9.000	2 8.000	2 9.000	2 8.000				11 11	11 7	217
2	5 U502	Beam	G	10S			3 2.000	2 9.000					9 3	9 0	19
22	5 U503	Beam	G	13S		2 9.000	3 3.000	2 9.000	3 3.000				13 1	12 9	293
84	5 U504	Diaphragm	G	10S			2 3.000	4 7.000					9 1	8 10	774
84	5 U505	Diaphragm	G	19S		4 3.000	2 8.000						6 11	6 10	599

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 48.

Detailed: July 2024
Checked: July 2024

Codes:
C = Required coatings, where E = Epoxy Coated and G = Galvanized.
SH = Required shape, see bending diagrams.
V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All bars shall be Grade 60.

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

Sheet No. 49 of 63

BILL OF REINFORCING STEEL

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025
ROUTE: MM
STATE: MO
DISTRICT: BR
SHEET NO.: 49
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight
		END BENT 5 CONT.													
68	5 U506	Diaphragm	G	19S		2 0.000	15.000						3 3	3 2	225
91	5 U507	Diaphragm	G	19S		3 3.000	4 7.000						7 10	7 9	736
20	4 U508	Wing	G	10S			4 10.000	8.000					10 4	10 2	136
32	5 V500	Beam	G	20		7 3.000							7 3	7 3	242
35	6 V501	Diaphragm	G	20		4 9.000							4 9	4 9	250
38	6 V502	Wing	G	20		8 8.000							8 8	8 8	495
38	6 V503	Wing	G	20		6 6.000							6 6	6 6	371
		INT. DIAPHRAGMS													
36	6 H40	Diaphragm	G	20		7 0.000							7 0	7 0	379
36	6 H41	Diaphragm	G	20		9 5.000							9 5	9 5	509
144	4 H42	Diaphragm	G	20		9 9.000							9 9	9 9	938
30	5 H43	Strand Tie		20		5 9.000							5 9	5 9	180
12	5 H44	Strand Tie		20		4 8.000							4 8	4 8	58
84	4 U40	Diaphragm	G	28S			2 2.000	5 10.000	18.000				9 6	9 3	519
24	6 U41	Diaphragm	G	28S			2 2.000	5 10.000	2 2.000				10 2	9 10	354
32	6 U42	Diaphragm	G	28S			2 2.000	5 2.000	2 2.000				9 6	9 2	441
12	5 U43	Diaphragm	G	6S		4 5.000	15.000						5 8	5 6	69
60	5 U44	Diaphragm	G	6S		4 5.000	15.000	16.000					7 0	6 9	422
8	5 V40	Diaphragm	G	20		6 1.000							6 1	6 1	51
168	4 U50	Diaphragm	G	28S			2 2.000	5 7.000	18.000				9 3	9 0	1010
48	6 U51	Diaphragm	G	28S			2 2.000	5 7.000	2 2.000				9 11	9 7	691
64	6 U52	Diaphragm	G	28S			2 2.000	4 11.000	2 2.000				9 3	8 11	857
16	5 V50	Diaphragm	G	20		5 9.000							5 9	5 9	96
		SLAB													
975	6 S1	Slab	G	20		31 5.000							31 5	31 5	46008
975	6 S2	Slab	G	20		41 5.000							41 5	41 5	60653
975	5 S3	Slab	G	20		40 3.000							40 3	40 3	40931
975	5 S4	Slab	G	20		32 6.000							32 6	32 6	33050
228	5 S5	Slab	G	20		33 8.000							33 8	33 8	8006
171	7 S6	Slab	G	20		60 0.000							60 0	60 0	20971
171	7 S7	Slab	G	20		44 0.000							44 0	44 0	15379
336	8 S8	Slab	G	20		44 0.000							44 0	44 0	39473
114	5 S9	Slab	G	20		35 10.00							35 10	35 10	4261
980	5 S10	Slab	G	20		51 1.000							51 1	51 1	52214
		BARRIER													
10	5 K1	Barrier	G	27S		3 8.000	9.250	5.375	3 2.750		5.250	1.000	8 1	7 10	82
52	5 K2	Barrier	G	27S		3 8.000	9.250	14.500	2 5.750		14.250	2.750	8 2	7 10	425
20	5 K4	Barrier	G	19S	4	2 4.250	10.000						3 2	3 1	
		Inc. = 0.500"				2 6.250	10.000						3 4	3 3	66
20	5 K5	Barrier	G	38S	4			18.500	9.500	8.250	18.000	4.000	3 0	2 11	
		Inc. = 0.500"						20.500	9.500	8.250	20.000	4.500	3 2	3 1	63
12	5 K6	Barrier	G	19S		2 6.750	10.000						3 5	3 3	41
12	5 K7	Barrier	G	21S		2 6.625		10.000			2 6.000	6.250	3 5	3 3	41
36	5 K8	Barrier	G	19S	4	2 8.500	10.000						3 7	3 5	
		Inc. = 0.750"				3 2.500	10.000						4 1	3 11	138
36	5 K9	Barrier	G	21S	4	2 8.500	10.000				2 7.750	6.750	3 6	3 5	
		Inc. = 0.750"				3 2.500	10.000				3 1.750	7.750	4 1	3 11	138
60	5 K10	Barrier	G	19S		3 3.000	10.000						4 1	3 11	245
60	5 K11	Barrier	G	21S		3 3.000	10.000				3 2.250	7.750	4 1	3 11	245
12	5 K12	Barrier	G	20		20 9.000							20 9	20 9	260
6	5 K13	Barrier	G	20	2	20 0.000							20 0	20 0	
		Inc. = 3'-0"				14 0.000							14 0	14 0	107
12	5 K14	Barrier	G	20		20 9.000							20 9	20 9	260
6	5 K15	Barrier	G	20	2	20 0.000							20 0	20 0	
		Inc. = 3'-0"				14 0.000							14 0	14 0	107
10	5 K16	Barrier	G	27S		2 2.000	9.250	5.375	20.750	12.000	5.250	1.000	6 1	5 9	60
56	5 K17	Barrier	G	27S		2 2.000	9.250	14.500	20.750	12.000	14.250	2.750	6 11	6 6	380

Bill of Reinforcing Steel

No. Req.	Size/ Mark	Location	Codes C	SH	V	Dimensions B	C	D	E	F	H	K	Nom. Length	Actual Length	Weight
		BARRIER CONT.													
12	5 K18	Barrier	G	20		22 3.000							22 3	22 3	278
6	5 K19	Barrier	G	20	2	21 6.000							21 6	21 6	
		Inc. = 3'-0"				15 6.000							15 6	15 6	116
12	5 K20	Barrier	G	20		22 3.000							22 3	22 3	278
6	5 K21	Barrier	G	20	2	21 6.000							21 6	21 6	
		Inc. = 3'-0"				15 6.000							15 6	15 6	116
1006	5 R1	Barrier	G	26		3 3.000	5.500	2.250	3 1.375	5.500	3 0.750	6.750	6 11	6 10	7170
1006	5 R2	Barrier	G	19S		20.500	9.500						2 6	2 4	2448
1006	5 R3	Barrier	G	27S			9.500	15.250	5.000	12.000	15.000	3.000	3 6	3 3	3410
220	5 R4	Barrier	G	20		11 8.000							11 8	11 8	2677
40	5 R5	Barrier	G	20		52 3.000							52 3	52 3	2180
80	5 R6	Barrier	G	20		42 3.000							42 3	42 3	3525
40	5 R7	Barrier	G	20		46 3.000							46 3	46 3	1930
		SLIP FORM													
70	5 C1	Slip Form	G	20		12 0.000							12 0	12 0	876
8	5 C2	Slip Form	G	20		8 0.000							8 0	8 0	67
		RAISED MEDIAN													
8	4 M1	Median	G	20		19 8.000							19 8	19 8	105
36	4 M2	Median	G	20		56 3.000							56 3	56 3	1353
		PEDESTRIAN CURB													
506	5 M10	Curb	G	28S		17.000	9.000	17.000	6.000				4 1	3 8	1935
20	5 M11	Curb	G	20		11 8.000							11 8	11 8	243
8	5 M12	Curb	G	20		53 1.000							53 1	53 1	443
8	5 M13	Curb	G	20		41 11.00							41 11	41 11	350
		LIGHT BLISTER													
9	5 F1	Light Blister	G	28S		3 3.000	14.000	3 3.000	6.000				8 2	7 9	73
6	5 F2	Light Blister	G	28S		3 3.000	7.250	3 3.000	6.000				7 7	7 3	45
21	5 F3	Light Blister	G	13S		22.500	14.500	22.500	14.500				7 3	6 10	150
21	5 F4	Light Blister	G	30S		2 10.000	20.500	22.500	2 10.000		14.500	14.500	11 0	10 10	237
18	6 F5	Light Blister	G	20		3 11.000							3 11	3 11	106

Nominal lengths are based on out to out dimensions shown in bending diagrams and are listed to the nearest inch for fabricator's use. Actual lengths are measured along centerline bar to the nearest inch. Weights are based on actual lengths.

For bending diagrams and steel reinforcing totals, see Sheet No. 48.

Detailed: July 2024
Checked: July 2024

Codes:
C = Required coatings, where E = Epoxy Coated and G = Galvanized.
SH = Required shape, see bending diagrams.
V = Sets of varied bars and number of bars of each length. Bar dimensions vary in equal increments between dimensions shown on this line and the following line and the actual length dimension shown on this line and the following line vary by the specified increment.

All bars shall be Grade 60.

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

Sheet No. 50 of 63

BILL OF REINFORCING STEEL

THOMAS M. GREER NUMBER PE-2018000206 PROFESSIONAL ENGINEER STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	50

COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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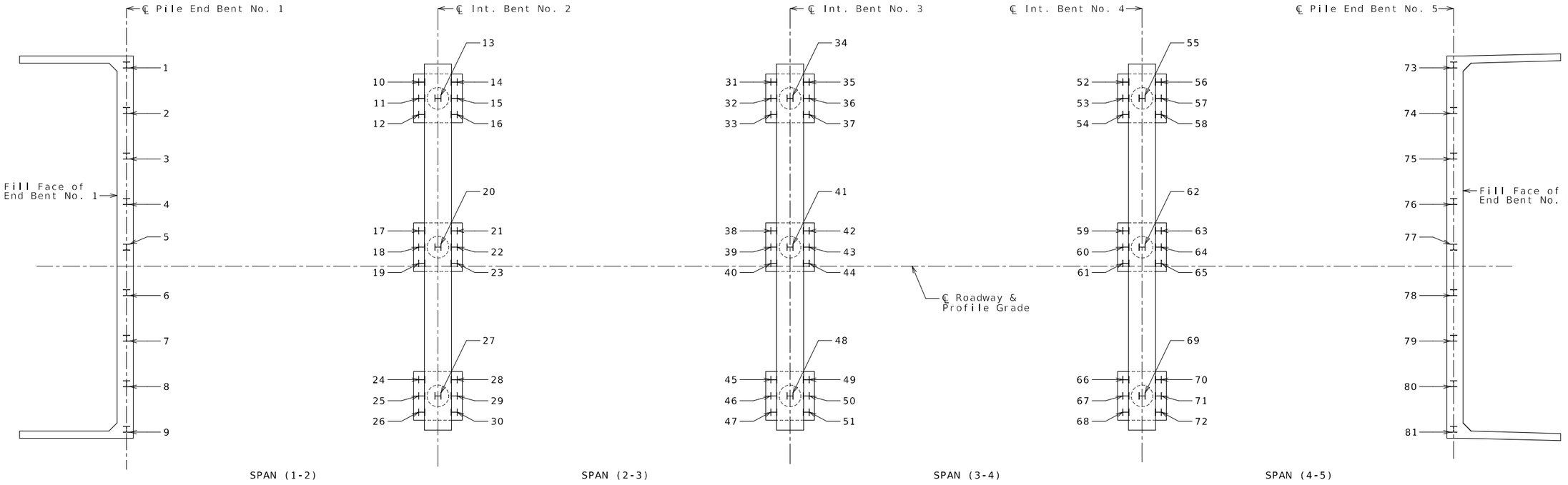

PLAN SHOWING PILE NUMBERING FOR RECORDING AS-BUILT PILE DATA

Note:

Work this sheet with Sheet No. 52.

Detailed: July 2024
Checked: July 2024

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

Sheet No. 51 of 63

AS BUILT FOUNDATION DATA

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	51

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

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As-Built Pile Data

Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
End Bent No. 1 (HP 12x53)					
1					
2					
3					
4					
5					
6					
7					
8					
9					
Intermediate Bent No. 2 (HP 14x73)					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

As-Built Pile Data

Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
Intermediate Bent No. 3 (HP 14x73)					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					

As-Built Pile Data

Pile No.	Length in Place (ft)	PDA Nom. Axial Compressive Resistance (kips)	PDA End of Drive Blow Count (blows/in.)	Actual End of Drive Blow Count (blows/in.)	Remarks
Intermediate Bent No. 4 (HP 14x73)					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
End Bent No. 5 (HP 12X53)					
73					
74					
75					
76					
77					
78					
79					
80					
81					

Note:
Indicate in remarks column:
A. Pile type and grade
B. Batter
C. Driven to practical refusal
D. PDA test pile
E. Minimum tip elevation controlled
(Use when actual blow count is less than PDA blow count due to minimum tip elevation requirement. A plus sign (+) shall be placed after the PDA nominal axial compressive resistance value indicating actual value is higher than PDA value.)

This sheet to be completed by MoDOT construction personnel.

Work this sheet with Sheet No. 51.

AS BUILT FOUNDATION DATA

Detailed: July 2024
Checked: July 2024

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

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 52
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION | DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Missouri Department of Transportation
Construction and Materials

BORING NO. W40A
Page 1 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station:
Offset: between requested points 39 and 40
Elevation: 1277.2
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: Rig #360485

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484685.3
Easting: 1371878
Requested Northing:
Requested Easting:
Equipment: PPI_CME 55LC ,
Location Note:
Hammer Efficiency: 84.7%

Route: MM
Location:
Operator: PPI
Date of Work: 03/13/24-03/13/24
Depth to Water:
Depth Hole Open:
Time Change:
Drilling Method: Continuous Flight Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-2.0' Dark brown, LEAN CLAY with organics, moist, (roots)							
		2.0-5.0' Red, FAT CLAY, moist	1275						
5		5.0-8.5' Red, FAT CLAY scattered gravel, moist to wet							
			1270						
		8.5-20.3' Red, FAT CLAY, wet							
10									
			1265						
15									
			1260						
20		20.3-22.5' Red, GRAVELLY FAT CLAY, wet							
			1255						
		22.5-25.0' Red, FAT CLAY, wet							
25									

LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:47 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

Missouri Department of Transportation
Construction and Materials

BORING NO. W40A
Page 2 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station:
Offset: between requested points 39 and 40
Elevation: 1277.2
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: Rig #360485

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484685.3
Easting: 1371878
Requested Northing:
Requested Easting:
Equipment: PPI_CME 55LC ,
Location Note:
Hammer Efficiency: 84.7%

Route: MM
Location:
Operator: PPI
Date of Work: 03/13/24-03/13/24
Depth to Water:
Depth Hole Open:
Time Change:
Drilling Method: Continuous Flight Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		25.0-25.1' Limestone							
			1250						
		Bottom of borehole at 28.1 feet.							

LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:47 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	53

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 53 of 63

BORING DATA

c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_052_J8S0836D.dgn 9:04:56 AM 7/10/2025

Missouri Department of Transportation
Construction and Materials

BORING NO. W33 (O-24-07)
Page 1 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9473 **Skew:** **Location:**
Bent: **Logged By:** Duncan Noack **Operator:** Bradley Wadlow
Station: 8+23.6 **Northing:** 484621.5 **Date of Work:** 03/05/24-03/05/24
Offset: **Easting:** 1372027.2 **Depth to Water:** 17.0
Elevation: 1278.4 **Requested Northing:** **Depth Hole Open:**
Requested Station: **Requested Easting:** **Time Change:** 1 hour
Requested Offset: **Equipment:** Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, NQ
Requested Elevation: **Location Note:**
Drill No.: G-9462 **Hammer Efficiency:** 81% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-1.0' Dark brown, LEAN CLAY with organics, moist, (roots) 1.0-4.5' Reddish brown mottled light gray, LEAN CLAY trace gravel, very stiff, moist, FeMn concretions present	1275		80		Direct Shear Results Phi' = 32.5° c' = 248 psf MC = 23.1% γ_{moist} = 124.5 pcf	PP = 2.50 tsf Torvane = 0.75 tsf	MC = 21.7% LL = 38 PL = 19 γ_{sat} = 126 pcf(1)
5		4.5-9.5' Reddish brown, LEAN CLAY to fat clay, with gravel, scattered cobbles, very stiff, moist, FeMn concretions present			100	4-8-7 (20)		PP = 2.00 tsf	LL = 48 PL = 22 MC = 18.8% γ_{sat} = 132 pcf(1)
			1270		80	5-5-7 (16)		PP = 3.00 tsf	MC = 28.1% γ_{sat} = 122 pcf(1)
10		9.5-15.0' Red, FAT CLAY trace cobbles, stiff to very stiff, moist to wet, friable			100		Direct Shear Results Phi' = 23° c' = 588 psf MC = 50.7% γ_{moist} = 108.4 pcf	PP = 2.50 tsf Torvane = 1.60 tsf	LL = 110 PL = 42 MC = 52.8% γ_{sat} = 106 pcf(1)
			1265		100	2-3-4 (9)		PP = 1.75 tsf	MC = 54.9% γ_{sat} = 105 pcf(1)
15		15.0-22.5' Red, FAT CLAY trace cobbles, soft to medium stiff, moist to wet, friable			84		Qu Test Results UCS = 1.86 ksf MC = 59.8% γ_{moist} = 104.6 pcf	PP = 2.00 tsf Torvane = 1.00 tsf	MC = 57.3% γ_{sat} = 104 pcf(1)
			1260		100	0-2-3 (7)		PP = 0.75 tsf	MC = 55.6% γ_{sat} = 104 pcf(1)
20					100	0-0-3 (4)		PP = 0.75 tsf Torvane = 0.50 tsf	MC = 61.2% γ_{sat} = 102 pcf(1)
25		22.5-26.8' Reddish brown, CLAYEY GRAVEL scattered cobbles, loose, wet, fine grained 22.5-23.5' boulder	1255						

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:47 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

Missouri Department of Transportation
Construction and Materials

BORING NO. W33 (O-24-07)
Page 2 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9473 **Skew:** **Location:**
Bent: **Logged By:** Duncan Noack **Operator:** Bradley Wadlow
Station: 8+23.6 **Northing:** 484621.5 **Date of Work:** 03/05/24-03/05/24
Offset: **Easting:** 1372027.2 **Depth to Water:** 17.0
Elevation: 1278.4 **Requested Northing:** **Depth Hole Open:**
Requested Station: **Requested Easting:** **Time Change:** 1 hour
Requested Offset: **Equipment:** Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, NQ
Requested Elevation: **Location Note:**
Drill No.: G-9462 **Hammer Efficiency:** 81% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		22.5-26.8' Reddish brown, CLAYEY GRAVEL scattered cobbles, loose, wet, fine grained 22.5-23.5' boulder *(continued)*			13	4-1-0 (1)			
		26.8-31.8' Fossiliferous Limestone, gray, thin bedded to medium bedded, strong rock, moderately weathered to slightly weathered, coarse grained	1250		98 (98)		Qu Test Results UCS = 830 ksf MC = 0% γ_{moist} = 161.8 pcf		
30		Bottom of borehole at 31.8 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:47 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER
STATE OF MISSOURI

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	54

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 54 of 63

BORING DATA

c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_053_J8S0836D.dgn 9:05:10 AM 7/10/2025

Missouri Department of Transportation
Construction and Materials

BORING NO. W21A
Page 1 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station: 5+11.4
Offset:
Elevation: 1278.7
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9402

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484686
Easting: 1372054.9
Requested Northing:
Requested Easting:
Equipment: Mobile B-31 ,
Location Note:
Hammer Efficiency:

Route: MM
Location:
Operator: Justin Reynolds
Date of Work: 03/06/24-03/06/24
Depth to Water:
Depth Hole Open:
Time Change:
Drilling Method: Continuous Flight Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-2.0' Brown, LEAN CLAY with organics, moist, (roots)							
		2.0-8.5' Reddish brown, FAT CLAY, moist	1275						
5									
		8.5-9.0' Red, GRAVELLY FAT CLAY	1270						
10		9.0-24.0' Red, FAT CLAY with gravel							
			1265						
15									
			1260						
20									
			1255						
25		24.0-25.0' Red, GRAVELLY FAT CLAY							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:46 - Z:\SG\GINTPROJECT FILES\J8S0836D-A9472.GPJ

Missouri Department of Transportation
Construction and Materials

BORING NO. W21A
Page 2 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station: 5+11.4
Offset:
Elevation: 1278.7
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9402

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484686
Easting: 1372054.9
Requested Northing:
Requested Easting:
Equipment: Mobile B-31 ,
Location Note:
Hammer Efficiency:

Route: MM
Location:
Operator: Justin Reynolds
Date of Work: 03/06/24-03/06/24
Depth to Water:
Depth Hole Open:
Time Change:
Drilling Method: Continuous Flight Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		25.0-27.3' Red, FAT CLAY with gravel							
		27.3-27.6' Limestone, highly weathered							
		27.6-27.7' Limestone							
		Bottom of borehole at 27.7 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:46 - Z:\SG\GINTPROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	55

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 55 of 63

BORING DATA

c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_054_J8S0836D.dgn 9:05:24 AM 7/10/2025

Missouri Department of Transportation
Construction and Materials

BORING NO. W25 (O-24-08)
Page 1 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station: 6+11.4
Offset:
Elevation: 1280.2
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9462

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484647.1
Easting: 1372147
Requested Northing:
Requested Easting:
Equipment: Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, NQ
Location Note:
Hammer Efficiency: 81%

Route: MM
Location:
Operator: Bradley Wadlow
Date of Work: 03/05/24-03/05/24
Depth to Water: 4.0
Depth Hole Open: 7
Time Change: 7 days
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0			1280						
		0.0-1.9' Brown, LEAN CLAY with organics, moist, (roots)							
		1.9-5.1' Reddish brown mottled gray, LEAN CLAY, stiff, moist, FeMn concretions present			100	2-3-6 (12)		PP = 2.00 tsf	LL = 45 PL = 22 MC = 23.6% γ_{sat} = 126 pcf(1)
5			1275						
		5.1-9.3' Red, FAT CLAY to fat clay, scattered coarse sand, with gravel, stiff, moist, FeMn concretions present, friable			100	2-4-7 (15)		PP = 1.25 tsf	MC = 22.3% γ_{sat} = 128 pcf(1)
					94		Qu Test Results UCS = 3.09 ksf MC = 26% γ_{moist} = 124.4 pcf	PP = 3.00 tsf Torvane = 0.80 tsf	LL = 53 PL = 25 MC = 24.7% γ_{sat} = 125 pcf(1)
10		9.3-15.1' Red, GRAVELLY FAT CLAY, very stiff, moist	1270						
					93	3-11-11 (30)			MC = 23.8% γ_{sat} = 126 pcf(1)
					47	9-14-11 (34)			MC = 29.0% γ_{sat} = 121 pcf(1)
15			1265						
		15.1-19.5' Red, FAT CLAY trace gravel, stiff to very stiff, moist			100	4-7-11 (24)		PP = 2.50 tsf	MC = 44.5% γ_{sat} = 110 pcf(1)
					100	2-3-3 (6)		PP = 1.50 tsf	MC = 49.5% γ_{sat} = 107 pcf(1)
20		19.5-23.4' Red, FAT CLAY trace gravel, medium stiff to stiff, moist	1260						
					100	2-3-3 (6)		PP = 1.00 tsf	MC = 51.1% γ_{sat} = 107 pcf(1)
					73	1-10-13 (31)		PP = 0.75 tsf	MC = 51.5% γ_{sat} = 106 pcf(1)
25		23.4-25.2' Red, GRAVELLY FAT CLAY, very stiff, moist to wet							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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Missouri Department of Transportation
Construction and Materials

BORING NO. W25 (O-24-08)
Page 2 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station: 6+11.4
Offset:
Elevation: 1280.2
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9462

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484647.1
Easting: 1372147
Requested Northing:
Requested Easting:
Equipment: Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, NQ
Location Note:
Hammer Efficiency: 81%

Route: MM
Location:
Operator: Bradley Wadlow
Date of Work: 03/05/24-03/05/24
Depth to Water: 4.0
Depth Hole Open: 7
Time Change: 7 days
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25			1255		33	15/0.3", 10/0"			
		25.2-35.2' Fossiliferous Limestone, gray, thin bedded to medium bedded, very strong rock to extremely strong rock, moderately weathered to slightly weathered, coarse grained			100 (100)		Qu Test Results UCS = 1740 ksf MC = 0% γ_{moist} = 165.3 pcf		
30			1250						
					100 (100)		Qu Test Results UCS = 2370 ksf MC = 0% γ_{moist} = 166.4 pcf		
35		Bottom of borehole at 35.2 feet.	1245						

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:46 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 56
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION | DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 56 of 63

BORING DATA

c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_055_J8S0836D.dgn 9:05:36 AM 7/10/2025

Missouri Department of Transportation
Construction and Materials

BORING NO. B1 (O-24-06)
Page 1 of 2

Job No.: J8S0836D-A9472
Design: A9472
Bent: 1
Station: 10+61.0
Offset:
Elevation: 1279.7
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9462

County: Greene
Skew:
Logged By: Collin Walsh
Northing: 484605.1
Easting: 1372146.4
Requested Northing:
Requested Easting:
Equipment: Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, NQ
Location Note:
Hammer Efficiency: 81%

Route: MM
Location:
Operator: Bradley Wadlow
Date of Work: 03/04/24-03/04/24
Depth to Water: 17.8
Depth Hole Open:
Time Change: At Time of Drilling
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-1.5' Brown, LEAN CLAY trace gravel, trace organics, moist							
		1.5-5.4' Reddish brown mottled gray, LEAN CLAY trace gravel, stiff, moist, friable							
5			1275		92		Qu Test Results UCS = 3.56 ksf MC = 23.4% γ_{moist} = 125.9 pcf	PP = 1.25 tsf Torvane = 0.90 tsf	MC = 22.7% γ_{sat} = 127 pcf[1] LL = 39 PL = 20
		5.4-7.0' CLAYEY GRAVEL, dense, moist			67	10-18-17 (47)			MC = 22.2% γ_{sat} = 128 pcf[1]
		7.0-17.8' Reddish brown, ELASTIC SILT trace gravel, soft to medium stiff, moist							
10			1270		100	0-1-2 (4)		PP = 0.25 tsf	MC = 56.0% γ_{sat} = 104 pcf[1]
			1265		96		Qu Test Results UCS = 1.33 ksf MC = 52.5% γ_{moist} = 105.3 pcf	PP = 1.00 tsf Torvane = 0.35 tsf	MC = 53.1% γ_{sat} = 106 pcf[1] LL = 98 PL = 48
15					100	1-2-3 (7)		PP = 0.75 tsf	MC = 60.8% γ_{sat} = 102 pcf[1]
		17.8-24.6' GRAVEL with lean clay, medium dense, wet	1260						
20					33	7-7-5 (16)			
			1255						
25									

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE -MODOT_20151118.GDT - 5/28/24 12:44 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

Missouri Department of Transportation
Construction and Materials

BORING NO. B1 (O-24-06)
Page 2 of 2

Job No.: J8S0836D-A9472
Design: A9472
Bent: 1
Station: 10+61.0
Offset:
Elevation: 1279.7
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9462

County: Greene
Skew:
Logged By: Collin Walsh
Northing: 484605.1
Easting: 1372146.4
Requested Northing:
Requested Easting:
Equipment: Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, NQ
Location Note:
Hammer Efficiency: 81%

Route: MM
Location:
Operator: Bradley Wadlow
Date of Work: 03/04/24-03/04/24
Depth to Water: 17.8
Depth Hole Open:
Time Change: At Time of Drilling
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		24.6-30.0' Limestone, gray, medium bedded, strong rock, slightly weathered, medium grained *(continued)*			50	23/0.2', 10/0'			
					100 (100)		Qu Test Results UCS = 983 ksf MC = 0% γ_{moist} = 164.8 pcf		
30		Bottom of borehole at 30.0 feet.	1250						

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE -MODOT_20151118.GDT - 5/28/24 12:44 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	57

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

DESCRIPTION	DATE

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

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 57 of 63

BORING DATA

c:\bmcd_lib\pw_connect\trn\d0153329\B_A9472_056_J8S0836D.dgn 9:05:47 AM 7/10/2025

Missouri Department of Transportation
Construction and Materials

BORING NO. B2
Page 1 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9472 **Skew:** **Location:**
Bent: 2 **Logged By:** Matthew Kistler **Operator:** PPI
Station: 12+09.0 **Northing:** 484546.8 **Date of Work:** 03/19/24-03/19/24
Offset: **Easting:** 1372282.4 **Depth to Water:** 22.7
Elevation: 1282.1 **Requested Northing:** **Depth Hole Open:** 22.7
Requested Station: **Requested Easting:** **Time Change:** 10 hours
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, Shelby Tube, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-2.4' Light to dark brown, LEAN CLAY with organics, medium stiff to soft, moist, Farm field	1280						
		2.4-7.5' Light gray mottled brownish red, LEAN CLAY, stiff, moist			80	1-2-5 (10)		PP = 1.50 tsf	MC = 22.2% γ_{sat} = 128 pcf(1) LL = 37 PL = 19
5					85		Direct Shear Results Phi' = 23.6° c' = 726 psf MC = 27.5% γ_{moist} = 119.9 pcf	PP = 1.50 tsf Torvane = 0.38 tsf	MC = 28.4% γ_{sat} = 122 pcf(1)
		7.5-10.1' Dark brownish red, LEAN CLAY to fat clay, stiff, moist	1275		100	2-3-4 (10)		PP = 2.00 tsf	MC = 27.4% γ_{sat} = 123 pcf(1) LL = 48 PL = 20
10		10.1-13.9' Dark brownish red, LEAN CLAY to fat clay, trace fine gravel, stiff to very stiff, moist, Subangular 10.5' start of scattered FeMn concretions			100	2-5-6 (16)		PP = 1.75 tsf	MC = 27.0% γ_{sat} = 123 pcf(1)
			1270		100	3-3-10 (18)		PP = 2.50 tsf	MC = 25.1% γ_{sat} = 125 pcf(1)
15		13.9-16.0' Dark brownish red, GRAVELLY ELASTIC SILT, very stiff, moist, scattered LS fragments			97	7-9-6 (21)		PP = 2.00 tsf	MC = 31.0% γ_{sat} = 119 pcf(1)
		16.0-23.6' Dark brownish red, ELASTIC SILT, stiff to very stiff, moist	1265						
					100	2-3-4 (10)		PP = 2.75 tsf	MC = 46.6% γ_{sat} = 108 pcf(1) LL = 86 PL = 41
20					100	2-2-4 (8)		PP = 1.50 tsf	MC = 55.3% γ_{sat} = 105 pcf(1)
			1260						
					80	7-3-4 (10)			
25		23.6-24.1' Dark brownish red, ELASTIC SILT trace chert, stiff, moist			0 100	13/0.0', 10/0'			

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:44 - Z:\SG\GINTPROJECT FILES\J8S0836D-A9472.GPJ

Missouri Department of Transportation
Construction and Materials

BORING NO. B2
Page 2 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9472 **Skew:** **Location:**
Bent: 2 **Logged By:** Matthew Kistler **Operator:** PPI
Station: 12+09.0 **Northing:** 484546.8 **Date of Work:** 03/19/24-03/19/24
Offset: **Easting:** 1372282.4 **Depth to Water:** 22.7
Elevation: 1282.1 **Requested Northing:** **Depth Hole Open:** 22.7
Requested Station: **Requested Easting:** **Time Change:** 10 hours
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, Shelby Tube, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		24.1-35.6' Limestone, light gray, medium bedded, very strong rock, slightly weathered *(continued)*			(87)				
			1255		100 (100)		Qu Test Results UCS = 1540 ksf MC = 0% γ_{moist} = 165.4 pcf		
30									
			1250		100 (94)		Qu Test Results UCS = 1170 ksf MC = 0% γ_{moist} = 164.1 pcf		
35		Bottom of borehole at 35.6 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:44 - Z:\SG\GINTPROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/10/2025
ROUTE MM | STATE MO
DISTRICT BR | SHEET NO. 58
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 58 of 63

BORING DATA

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Missouri Department of Transportation
Construction and Materials

BORING NO. E35A
Page 1 of 1

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 8+40.9 **Northing:** 484557.2 **Date of Work:** 03/27/24-03/27/24
Offset: **Easting:** 1372356.4 **Depth to Water:**
Elevation: 1282.6 **Requested Northing:** **Depth Hole Open:**
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** PPI_CME 55LC ,
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Continuous Flight Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-2.1' Light to dark brown, LEAN CLAY							
		2.1-4.7' Dark reddish brown, LEAN CLAY	1280						
5		4.7-5.5' Dark reddish brown, LEAN CLAY with fine gravel							
		5.5-10.4' Dark brownish red, FAT CLAY scattered fine gravel, stiff	1275						
10		10.4-21.8' Dark brownish red, ELASTIC SILT, soft, wet	1270						
15			1265						
20		21.8-22.4' Limestone, highly weathered	1260						
		22.4-22.9' ELASTIC SILT, very soft							
		22.9-23.0' Limestone, slightly weathered							
		23.0' auger boring terminated after augers deflected off a pinnacle or boulder							
		Bottom of borehole at 23.0 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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Missouri Department of Transportation
Construction and Materials

BORING NO. E39
Page 1 of 3

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 9+40.9 **Northing:** 484518.8 **Date of Work:** 03/18/24-03/19/24
Offset: **Easting:** 1372448.8 **Depth to Water:** 12.7
Elevation: 1283.5 **Requested Northing:** **Depth Hole Open:** 13.9
Requested Station: **Requested Easting:** **Time Change:** At Time of Drilling
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-1.5' Light to dark brown, LEAN CLAY with organics, scattered cobbles, medium stiff, moist, Farm field							
		1.5-4.4' Light tannish brown to light brown, GRAVELLY LEAN CLAY, hard, moist, Cherty	1280		73	13-18-18 (51)			MC = 14.5% γ_{sat} = 138 pcf (1)
5		4.4-9.8' Dark brownish red, ELASTIC SILT with fine to coarse gravel, stiff to very stiff, moist, Subangular			80	6-6-6 (17)			MC = 23.5% γ_{sat} = 127 pcf (1)
			1275		40	4-4-4 (11)			MC = 27.5% γ_{sat} = 123 pcf (1)
10		9.8-12.3' Dark brownish red, ELASTIC SILT trace fine gravel, stiff, moist			100	2-3-4 (10)		PP = 1.50 tsf	MC = 45.1% γ_{sat} = 110 pcf (1) LL = 93 PL = 44
		12.3-13.4' Tannish brown, SAND, dense, wet, Medium to coarse	1270		100	3-7-42/0.4'			
15		13.4-13.9' Fossiliferous Limestone, Completely to highly weathered 13.4-13.9' crinoid fossils present			0	10/0.0'	Qu Test Results UCS = 2050 ksf MC = 0% γ_{moist} = 164.6 pcf		
		13.9-37.3' Fossiliferous Limestone, light gray, medium bedded to thick bedded, very strong rock to extremely strong rock, moderately weathered to slightly weathered, Med-coarse grained			100 (100)				
			1265		100 (95)		Qu Test Results UCS = 1280 ksf MC = 0% γ_{moist} = 165 pcf		
20									
			1260		100 (100)				
25									

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	59

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 59 of 63

BORING DATA

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Missouri Department of Transportation
Construction and Materials

BORING NO. E39
Page 2 of 3

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 9+40.9 **Northing:** 484518.8 **Date of Work:** 03/18/24-03/19/24
Offset: **Easting:** 1372448.8 **Depth to Water:** 12.7
Elevation: 1283.5 **Requested Northing:** **Depth Hole Open:** 13.9
Requested Station: **Requested Easting:** **Time Change:** At Time of Drilling
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		13.9-37.3' Fossiliferous Limestone, light gray, medium bedded to thick bedded, very strong rock to extremely strong rock, moderately weathered to slightly weathered, Med-coarse grained *(continued)*	1255		100 (100)				
30		32.0-32.5' brachiopod fossils present	1250		100 (100)				
35		37.3-42.3' Chert, light grayish white, thin bedded, slightly weathered	1245		100 (88)				
40		42.3-50.3' Fossiliferous Limestone, light gray, medium bedded, slightly weathered, Cherty, Med-coarse grained	1240		100 (100)				
45			1235		100 (100)				
50									

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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Missouri Department of Transportation
Construction and Materials

BORING NO. E39
Page 3 of 3

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 9+40.9 **Northing:** 484518.8 **Date of Work:** 03/18/24-03/19/24
Offset: **Easting:** 1372448.8 **Depth to Water:** 12.7
Elevation: 1283.5 **Requested Northing:** **Depth Hole Open:** 13.9
Requested Station: **Requested Easting:** **Time Change:** At Time of Drilling
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
50		Bottom of borehole at 50.3 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:45 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER
THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED 7/10/2025
ROUTE MM | STATE MO
DISTRICT BR | SHEET NO. 60
COUNTY GREENE
JOB NO. J8S0836D
CONTRACT ID.
PROJECT NO.
BRIDGE NO. A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 60 of 63

BORING DATA

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Missouri Department of Transportation
Construction and Materials

BORING NO. E27
Page 1 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 6+32.8 **Northing:** 484492.4 **Date of Work:** 03/19/24-03/20/24
Offset: **Easting:** 1372328.7 **Depth to Water:** 21.6
Elevation: 1282.4 **Requested Northing:** **Depth Hole Open:** 21.9
Requested Station: **Requested Easting:** **Time Change:** 11 hours
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, Shelby Tube, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-2.3' Light to dark brown, LEAN CLAY with organics, medium stiff, moist, Farm field	1280						
		2.3-4.9' Light gray mottled brownish red, LEAN CLAY, medium stiff to stiff, moist			80	1-2-4 (8)		PP = 1.50 tsf	MC = 27.3% γ_{sat} = 123 pcf(1)
5		4.9-9.7' Dark brownish red, FAT CLAY, with fine gravel, stiff to very stiff, moist	1275		37			PP = 1.00 tsf	MC = 25.6% γ_{sat} = 124 pcf(1) LL = 50 PL = 22
		8.1' scattered FeMn concretions			100	2-2-5 (10)		PP = 2.25 tsf	MC = 26.7% γ_{sat} = 123 pcf(1)
10		9.7-12.6' Dark brownish red, GRAVELLY ELASTIC SILT, stiff, moist			100	5-5-4 (13)		PP = 1.50 tsf	MC = 27.1% γ_{sat} = 123 pcf(1)
		12.6-21.1' Dark brownish red, ELASTIC SILT trace fine gravel, medium stiff to stiff, moist	1270		100	2-3-3 (8)		PP = 2.00 tsf	MC = 48.8% γ_{sat} = 108 pcf(1) LL = 90 PL = 41
15					85			PP = 0.75 tsf Torvane = 0.38 tsf	MC = 60.3% γ_{sat} = 102 pcf(1)
			1265		100	1-2-3 (7)		PP = 1.50 tsf	MC = 55.2% γ_{sat} = 105 pcf(1)
20					100	1-2-27 (41)		PP = 2.00 tsf	MC = 51.0% γ_{sat} = 107 pcf(1)
		21.1-21.8' Dark brownish red, GRAVELLY ELASTIC SILT, hard, moist, Cherty	1260		0	13/0.0'			
		21.8-23.7' Limestone, light gray, highly weathered to moderately weathered			85 (48)		Qu Test Results UCS = 1040 ksf MC = 0% γ_{moist} = 165.5 pcf		
25		23.7-30.3' Limestone, light gray, medium bedded, very strong rock, slightly weathered							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

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Missouri Department of Transportation
Construction and Materials

BORING NO. E27
Page 2 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 6+32.8 **Northing:** 484492.4 **Date of Work:** 03/19/24-03/20/24
Offset: **Easting:** 1372328.7 **Depth to Water:** 21.6
Elevation: 1282.4 **Requested Northing:** **Depth Hole Open:** 21.9
Requested Station: **Requested Easting:** **Time Change:** 11 hours
Requested Offset: **Equipment:** PPI_CME 55LC ,Split-Spoon Sampler, Shelby Tube, NQ
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		23.7-30.3' Limestone, light gray, medium bedded, very strong rock, slightly weathered *(continued)*	1255		100 (100)				
30		Bottom of borehole at 30.3 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:44 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2010000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	61

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 61 of 63

BORING DATA

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Missouri Department of Transportation
Construction and Materials

BORING NO. E23A
Page 1 of 1

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9474 **Skew:** **Location:**
Bent: **Logged By:** Matthew Kistler **Operator:** PPI
Station: 5+32.7 **Northing:** 484451.7 **Date of Work:** 03/27/24-03/27/24
Offset: **Easting:** 1372420.1 **Depth to Water:**
Elevation: 1283.4 **Requested Northing:** **Depth Hole Open:**
Requested Station: **Requested Easting:** **Time Change:**
Requested Offset: **Equipment:** PPI_CME 55LC ,
Requested Elevation: **Location Note:** On Stake
Drill No.: Rig #360485 **Hammer Efficiency:** 84.7% **Drilling Method:** Continuous Flight Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-1.9' Light to dark brown, LEAN CLAY							
		1.9-3.7' Dark reddish brown, LEAN CLAY trace cobbles	1280						
5		3.7-11.4' Dark brownish red, FAT CLAY scattered fine gravel, medium stiff to soft							
			1275						
10		11.4-11.9' Limestone, highly weathered							
		11.9-12.3' FAT CLAY, soft							
		12.3-13.3' Limestone, highly weathered	1270						
		13.3-13.5' Limestone, slightly weathered							
		13.5' auger refusal Bottom of borehole at 13.5 feet.							

LETTER BOREHOLE - MODOT_20151118.GDT - 5/28/24 12:44 - Z:\SG\GINT\PROJECT FILES\J8S0836D-A9472.GPJ

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

* Persons using this information are cautioned that the materials shown are determined by the equipment noted and accuracy of the "log of materials" is limited thereby and by judgement of the operator. THIS INFORMATION IS FOR DESIGN PURPOSES ONLY.

Missouri Department of Transportation
Construction and Materials

BORING NO. W17 (O-24-09)
Page 1 of 2

Job No.: J8S0836D-A9472 **County:** Greene **Route:** MM
Design: A9473 **Skew:** **Location:**
Bent: **Logged By:** Duncan Noack **Operator:** Bradley Wadlow
Station: 4+11.4 **Northing:** 484725.4 **Date of Work:** 03/06/24-03/06/24
Offset: **Easting:** 1371962.8 **Depth to Water:** 16.1
Elevation: 1278.2 **Requested Northing:** **Depth Hole Open:**
Requested Station: **Requested Easting:** **Time Change:** At Time of Drilling
Requested Offset: **Equipment:** Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, Rock Bit
Requested Elevation: **Location Note:**
Drill No.: G-9462 **Hammer Efficiency:** 81% **Drilling Method:** Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
0		0.0-1.0' Brown, LEAN CLAY with organics, moist, (roots)							
		1.0-8.1' Reddish brown mottled gray, LEAN CLAY scattered gravel, stiff, moist, FeMn concretions present	1275		76		Qu Test Results UCS = 2.37 ksf MC = 29.7% γ_{moist} = 122.2 pcf	PP = 1.75 tsf Torvane = 0.60 tsf	MC = 24.3% γ_{dst} = 126 pcf[1)]
5					76		Direct Shear Results Phi' = 29.4° c' = 382 psf MC = 21.4% γ_{moist} = 124.2 pcf	PP = 1.50 tsf Torvane = 0.50 tsf	MC = 27.5% γ_{dst} = 123 pcf[1)]
		8.1-16.1' Red, GRAVELLY FAT CLAY, stiff to very stiff, wet to moist	1270		80	2-8-14 (30)		PP = 1.25 tsf	MC = 30.1% γ_{dst} = 120 pcf[1)]
10					73	6-12-10 (30)			MC = 27.2% γ_{dst} = 123 pcf[1)]
			1265		100	6-15-9 (32)		PP = 1.50 tsf	MC = 34.9% γ_{dst} = 116 pcf[1)]
15					73	9-14-9 (31)		PP = 2.00 tsf	MC = 43.4% γ_{dst} = 111 pcf[1)] LL = 83 PL = 37
		16.1-27.3' Red, ELASTIC SILT scattered gravel, stiff, moist, with seams of gravel	1260		40	3-5-6 (15)		PP = 1.00 tsf	MC = 41.2% γ_{dst} = 112 pcf[1)]
20					76			PP = 1.00 tsf Torvane = 0.60 tsf	MC = 54.8% γ_{dst} = 105 pcf[1)] LL = 97 PL = 45
			1255		100	37/0.4", 10/0"		PP = 1.25 tsf	MC = 57.4% γ_{dst} = 104 pcf[1)]
25									

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N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846
Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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THOMAS M. GREER
NUMBER PE-2018000206
STATE OF MISSOURI
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
7/10/2025

ROUTE	STATE
MM	MO
DISTRICT	SHEET NO.
BR	62

COUNTY
GREENE

JOB NO.
J8S0836D

CONTRACT ID.

PROJECT NO.

BRIDGE NO.
A9472

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)

Burns & McDonnell Engineering Co., Inc.
9400 Ward Parkway
Kansas City, Missouri 64114
816-333-9400
Certificate of Authority No.: 000165
BMcD Project No. 163491

Detailed: July 2024
Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 62 of 63

BORING DATA

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Missouri Department of Transportation
Construction and Materials

BORING NO. W17 (O-24-09)
Page 2 of 2

Job No.: J8S0836D-A9472
Design: A9473
Bent:
Station: 4+11.4
Offset:
Elevation: 1278.2
Requested Station:
Requested Offset:
Requested Elevation:
Drill No.: G-9462

County: Greene
Skew:
Logged By: Duncan Noack
Northing: 484725.4
Easting: 1371962.8
Requested Northing:
Requested Easting:
Equipment: Acker Soil XLS ,Split-Spoon Sampler, Shelby Tube, Rock Bit
Location Note:
Hammer Efficiency: 81%

Route: MM
Location:
Operator: Bradley Wadlow
Date of Work: 03/06/24-03/06/24
Depth to Water: 16.1
Depth Hole Open:
Time Change: At Time of Drilling
Drilling Method: Hollow Stem Auger

Depth (ft)	Graphic	Description	Elevation (ft)	Sample Type	REC % (RQD %)	Blow Counts (N_{60})	Shear Data	Field Tests	Index Tests
25		16.1-27.3' Red, ELASTIC SILT scattered gravel, stiff, moist, with seams of gravel *(continued)*			100	2-2-10 (16)		PP = 1.00 tsf	MC = 49.6% γ_{wet} = 107 pcf(1)
		27.3-35.8' Red, FAT CLAY with sand, scattered gravel, very soft to soft, wet	1250		80	7-1-1 (3)		PP = 0.00 tsf	MC = 79.4% γ_{wet} = 96 pcf(1) LL = 81 PL = 35
30					67	5-3-4 (9)		PP = 0.00 tsf	MC = 55.8% γ_{wet} = 104 pcf(1)
			1245						
35		35.8-40.9' Cherty Limestone, gray, moderately weathered to slightly weathered			0	13/0.3', 10/0'			
			1240						
40		Bottom of borehole at 40.4 feet.							

N_{60} = (Em/60)Nm N_{60} - Corrected N value for standard 60% SPT efficiency; Em - Measured hammer efficiency in percent; Nm - Observed N-value; (1) = Assumed, (2) = Actual

Coordinate System: Modified U.S. State Plane 1983 **Coordinate Zone:** Missouri Central **Coordinate Proj. Factor:** 1.00003846

Coordinate Datum: NAD 83 (CONUS) **Coordinate Units:** U.S. Survey Feet

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LETTER BOREHOLE - MODOT 20151118.GDT - 5/28/24 12:46 - Z:\SG\GINTPROJECT FILES\J8S0836D-A9472.GPJ

STATE OF MISSOURI
THOMAS M. GREER
NUMBER PE-2018000206
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED: 7/10/2025
ROUTE: MM | STATE: MO
DISTRICT: BR | SHEET NO.: 63
COUNTY: GREENE
JOB NO.: J8S0836D
CONTRACT ID.:
PROJECT NO.:
BRIDGE NO.: A9472

DESCRIPTION | DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
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Checked: July 2024

Note: For locations of borings, see Sheets No. 1 and 2.
Note: This drawing is not to scale. Follow dimensions.

Sheet No. 63 of 63

BORING DATA

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