

PROJECT NAME	FLORENCE - EAST
COUNTY	RAVALLI
PROJECT ID	STPS 203-1(28)10
UPN	10538000

DESIGNED BY	09/2025
F. COBARRUBIAS	
REVIEWED BY	12/2025
J. DOLD	
CHECKED BY	12/2025
J. CERECK	
10538000RDTTL001.DWG	

MONTANA Department of Transportation	ROAD PLANS
3/2/2026 10:16 AM	

MONTANA DEPARTMENT OF TRANSPORTATION

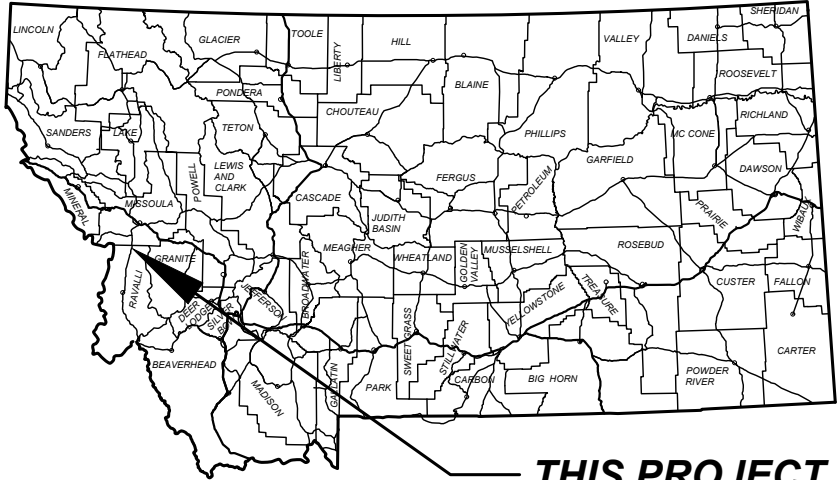
FEDERAL AID PROJECT STPS 203-1(28)10

PLANT MIX OVERLAY, SEAL & COVER, FOG SEAL

FLORENCE - EAST

RAVALLI COUNTY

LENGTH 2.1 MILES



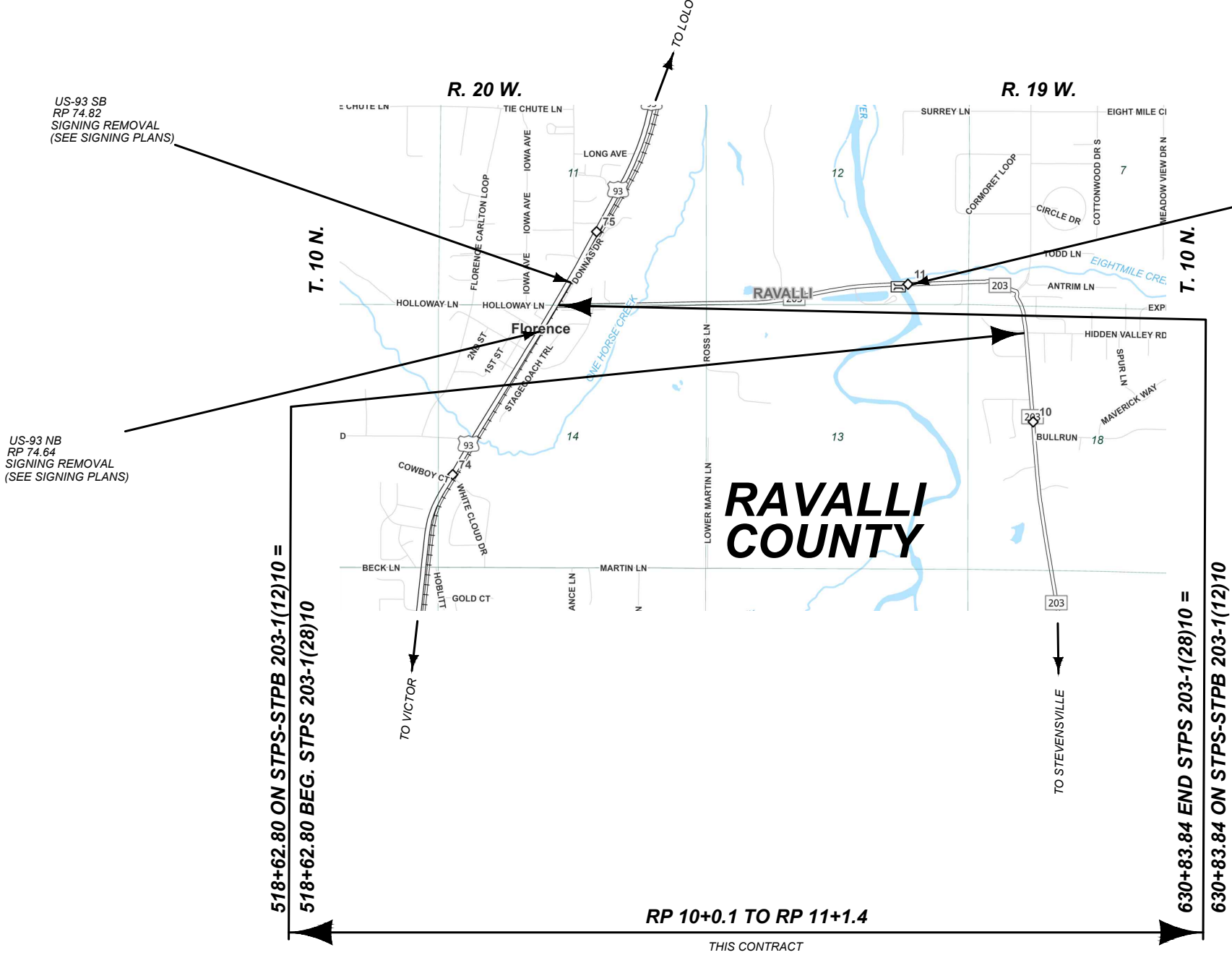
PROJECT DESIGN DATA

PRESENT	2024	A.A.D.T. = 7,120
LETTING	2026	A.A.D.T. = 7,270
DESIGN	2046	A.A.D.T. = 9,050
		D.H.V. = 990
		TRUCKS = 1.5%
		V. = 60 MPH
		18 KIP ESAL'S = 54 DAILY
		ANNUAL GROWTH RATE = 1.1%

RELATED PROJECTS

HSIP 32164(2)

SURFACING SOURCES -
CONTRACTOR FURNISHED



STA. 561+65.03
RP 10.68
MDT STR. ID. 06364
NBI S00203010+06401
53.2' X 378.05' BR. IN PL.
BITTERROOT RIVER
(NOT THIS CONTRACT)

MONTANA DEPARTMENT OF TRANSPORTATION	
APPROVED BY:	
HIGHWAYS ENGINEER	
Signed by:	5/1/2026
David Holien	DATE
4FA8874BB4E5415...	

NOTES

2

TABLE OF CONTENTS, NOTES & APPROACHES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

STPS 203-1(28)10

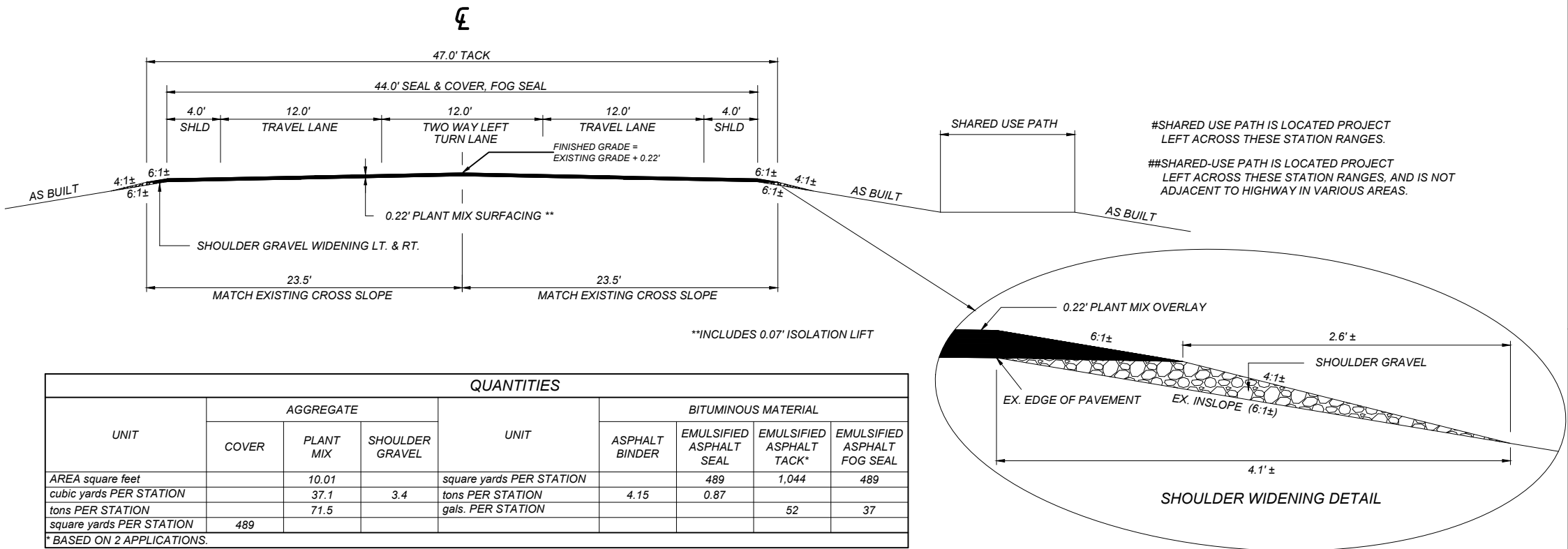
11/11/11

10/2025	
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3/3/2026 10:16 AM

TYPICAL SECTION NO. 1

MAINLINE



518+62.80 TO 527+05.00
527+05.00 TO 528+25.00 TRANS. TYP. NO. 1 TO TYP. NO.2
#550+70.00 TO #557+76.00 THEN TYP. NO. 13
##565+54.05 TO ##616+62.00
##616+62.00 TO ##617+48.00 TRANS. TYP. NO. 1 TO TYP. NO.15

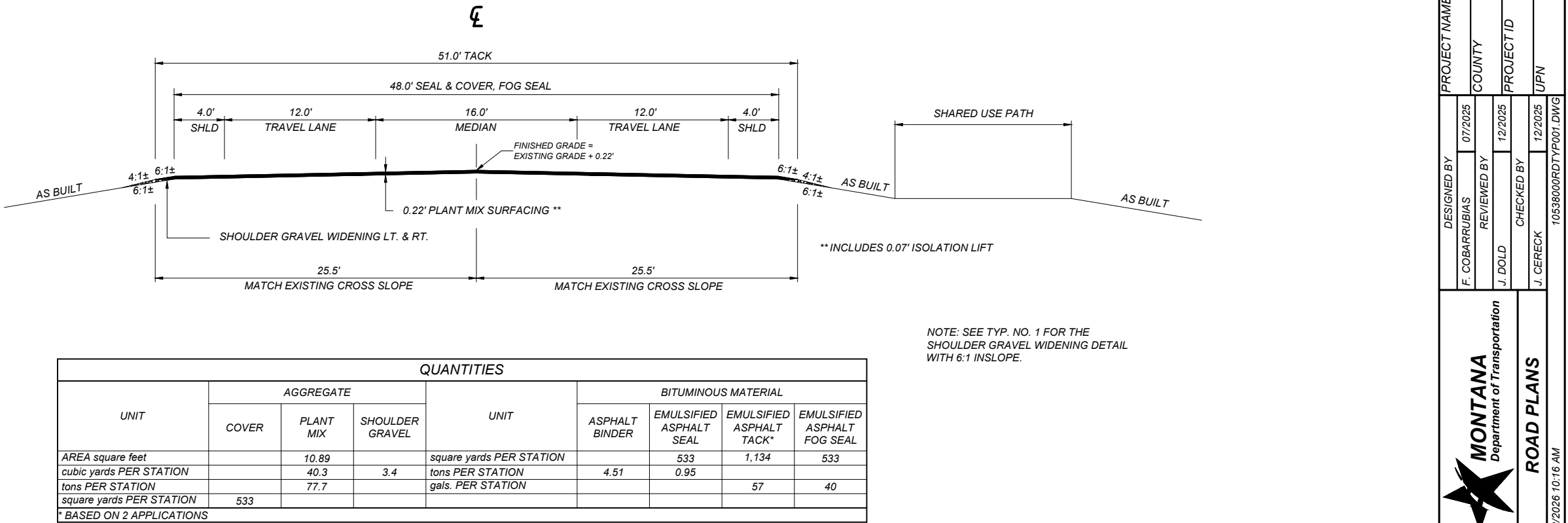
SHEET NO.

3

TYPICAL SECTION

TYPICAL SECTION NO. 2

MAINLINE



528+25.00 TO 529+06.59
529+06.59 TO 529+80.59 TRANS. TYP. NO. 2 TO TYP. NO. 3
530+76.59 TO 531+00.00
531+00.00 TO 532+80.00 TRANS. TYP. NO. 2 TO TYP. NO. 4

PROJECT NAME FLORENCE - EAST

COUNTY RAVALLI

PROJECT ID STPS 203-1(28)10

UPN 10538000

DESIGNED BY F. COBARRUBIAS

REVIEWED BY J. DOLD

CHECKED BY J. CERECK

10538000RDTYP001.DWG

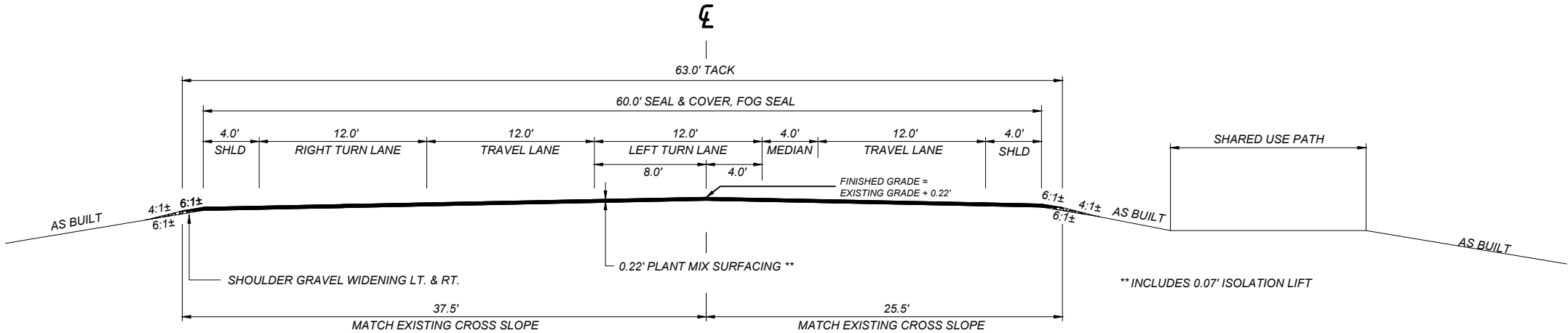
MONTANA Department of Transportation

ROAD PLANS

3/2/2026 10:16 AM

TYPICAL SECTION NO. 3

MAINLINE



QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	SHOULDER GRAVEL		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		13.53		square yards PER STATION		667	1,400	667
cubic yards PER STATION		50.1	3.4	tons PER STATION	5.60	1.19		
tons PER STATION		96.6		gals. PER STATION			70	50
square yards PER STATION	667							
* BASED ON 2 APPLICATIONS								

NOTE: SEE TYP. NO. 1 FOR THE SHOULDER GRAVEL WIDENING DETAIL WITH 6:1 INSLOPE.

529+80.59

529+80.59

TO 530+76.59

ONLY

TRANS. TYP. NO. 3 TO TYP. NO. 2

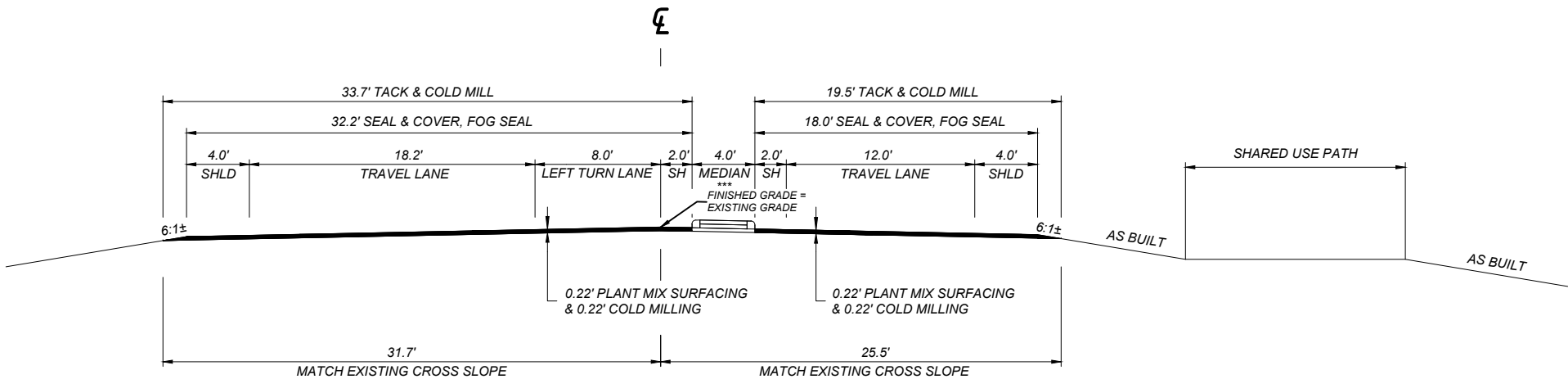
SHEET NO.

4

TYPICAL SECTION

TYPICAL SECTION NO. 4

MAINLINE



QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		11.37	square yards PER STATION		558	1,182	558
cubic yards PER STATION		42.1	tons PER STATION	4.70	1.00		
tons PER STATION		81.1	gals. PER STATION			59	42
square yards PER STATION	558						
* BASED ON 2 APPLICATIONS							

*** NO WORK WILL OCCUR UNDER RAISED MEDIANS. DO NOT DISTURB RAISED MEDIANS.

532+80.00

532+80.00

TO 534+00.00

ONLY

TRANS. TYP. NO. 4 TO TYP. NO. 5

FLORENCE - EAST

PROJECT NAME

COUNTY

RAVALLI

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10538000

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J. DOLD

CHECKED BY

J. CERECK

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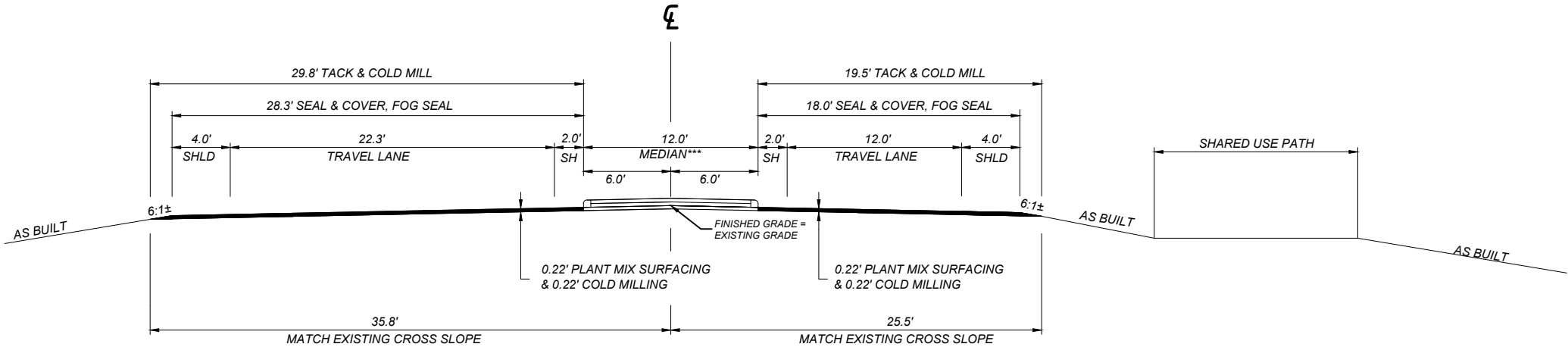


ROAD PLANS

3/2/2026 10:16 AM

TYPICAL SECTION NO. 5

MAINLINE

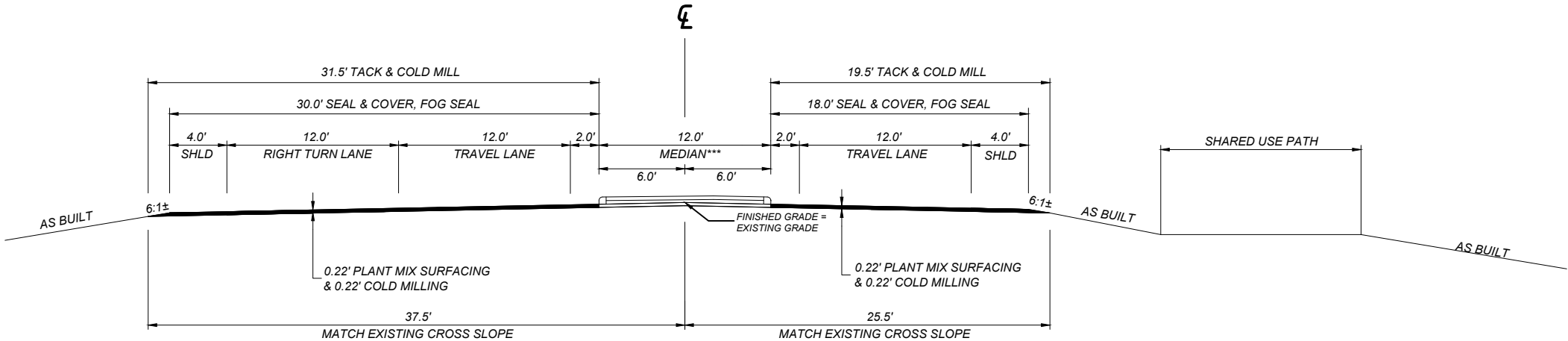


*** NO WORK WILL OCCUR UNDER RAISED MEDIANS. DO NOT DISTURB RAISED MEDIANS.

QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		10.52	square yards PER STATION		514	1,096	514
cubic yards PER STATION		39.0	tons PER STATION	4.36	0.92		
tons PER STATION		75.2	gals. PER STATION			55	39
square yards PER STATION	514						
* BASED ON 2 APPLICATIONS							

TYPICAL SECTION NO. 6

MAINLINE



*** NO WORK WILL OCCUR UNDER RAISED MEDIANS. DO NOT DISTURB RAISED MEDIANS.

QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		10.89	square yards PER STATION		533	1,134	533
cubic yards PER STATION		40.3	tons PER STATION	4.51	0.95		
tons PER STATION		77.7	gals. PER STATION			57	40
square yards PER STATION	533						
* BASED ON 2 APPLICATIONS							

SHEET NO.

5

TYPICAL SECTION

FLORENCE - EAST

RAVALLI

STPS 203-1(28)10

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DESIGNED BY

07/2025

REVIEWED BY

12/2025

CHECKED BY

12/2025

10538000RDTYP001.DWG

MONTANA

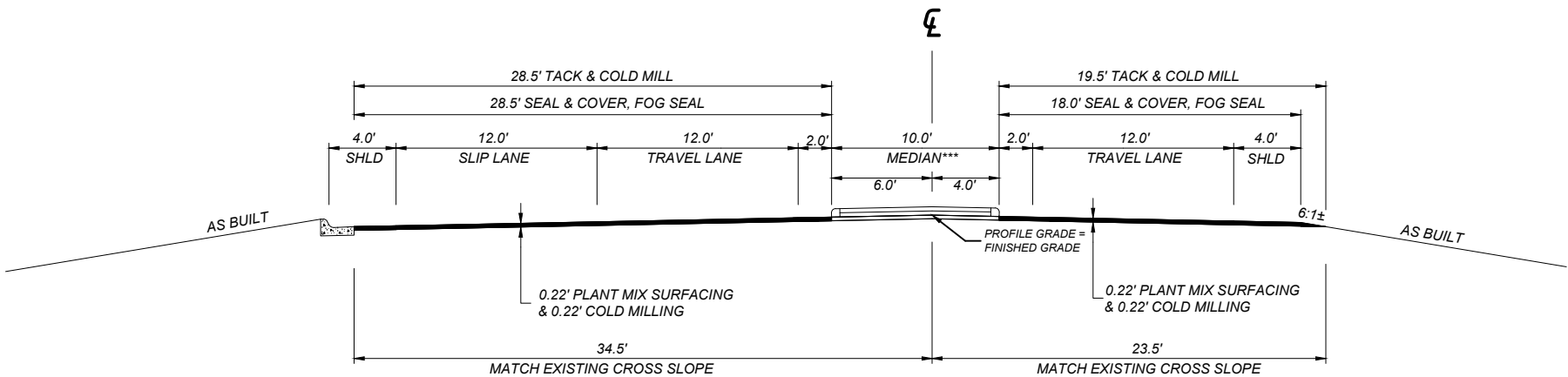
Department of Transportation

ROAD PLANS

3/2/2026 10:16 AM

TYPICAL SECTION NO. 7

MAINLINE

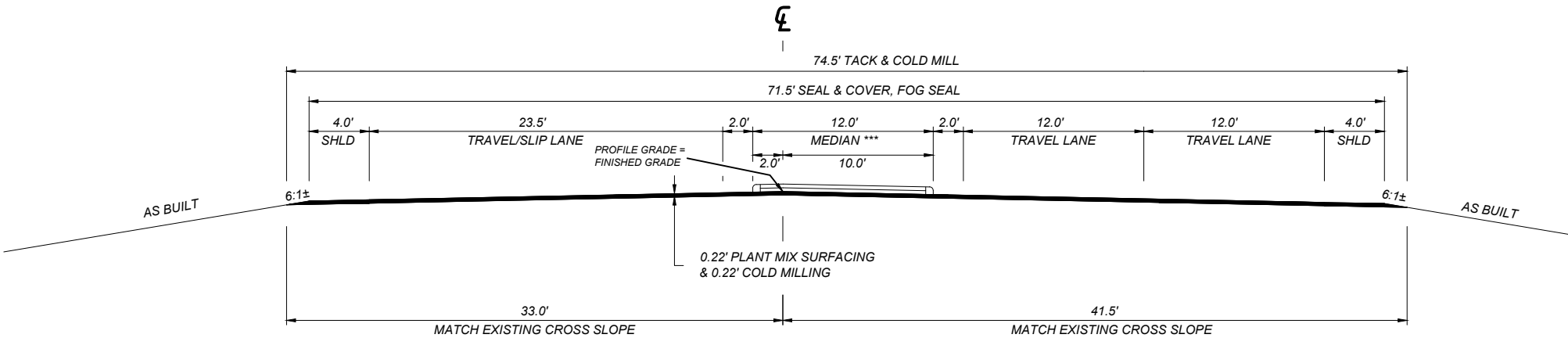


***NO WORK WILL OCCUR UNDER
RAISED MEDIANS. DO NOT
DISTURB RAISED MEDIANS.

QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		10.40	square yards PER STATION		517	1,066	517
cubic yards PER STATION		38.5	tons PER STATION	4.30	0.92		
tons PER STATION		74.2	gals. PER STATION			53	39
square yards PER STATION	517						
* BASED ON 2 APPLICATIONS							

TYPICAL SECTION NO. 8

MAINLINE



***ASPHALT OVERLAY, SEAL AND COVER, AND FOG
SEAL UNDER THE RAISED MEDIAN IS INCLUDED IN
THE TYPICAL SECTION QUANTITIES, AND THEN
DEDUCTED FROM THE QUANTITIES IN THE
ADDITIONAL SURFACING FRAME BETWEEN
539+49.00 AND 541+56.70
NO WORK WILL OCCUR UNDER RAISED MEDIANS.
DO NOT DISTURB RAISED MEDIANS.

QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		16.06	square yards PER STATION		794	1,656	794
cubic yards PER STATION		59.5	tons PER STATION	6.65	1.42		
tons PER STATION		114.7	gals. PER STATION			83	60
square yards PER STATION	794						
* BASED ON 2 APPLICATIONS							

SHEET NO.

6

TYPICAL SECTION

FLORENCE - EAST

COUNTY

RAVALLI

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DESIGNED BY

F. COBARRUBIAS

07/2025

REVIEWED BY

J. DOLD

12/2025

CHECKED BY

J. CERECK

12/2025

10538000RDTYP001.DWG



ROAD PLANS

3/2/2026 10:16 AM

541+02.75
541+02.75 TO 541+56.70 ONLY
TRANS. TYP. NO. 9 TO TYP. NO. 10

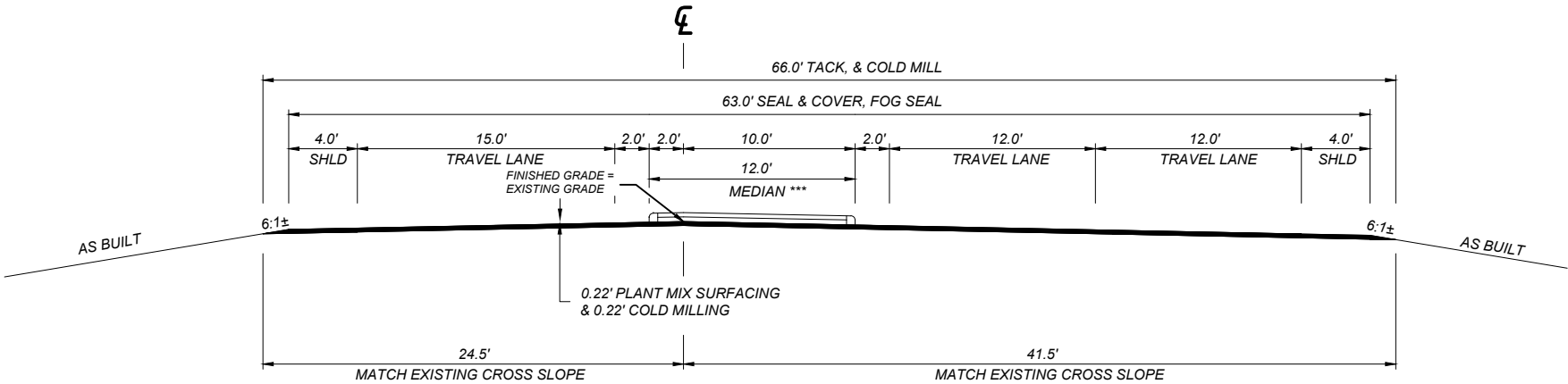
SHEET NO.

7

TYPICAL SECTION

TYPICAL SECTION NO. 9

MAINLINE



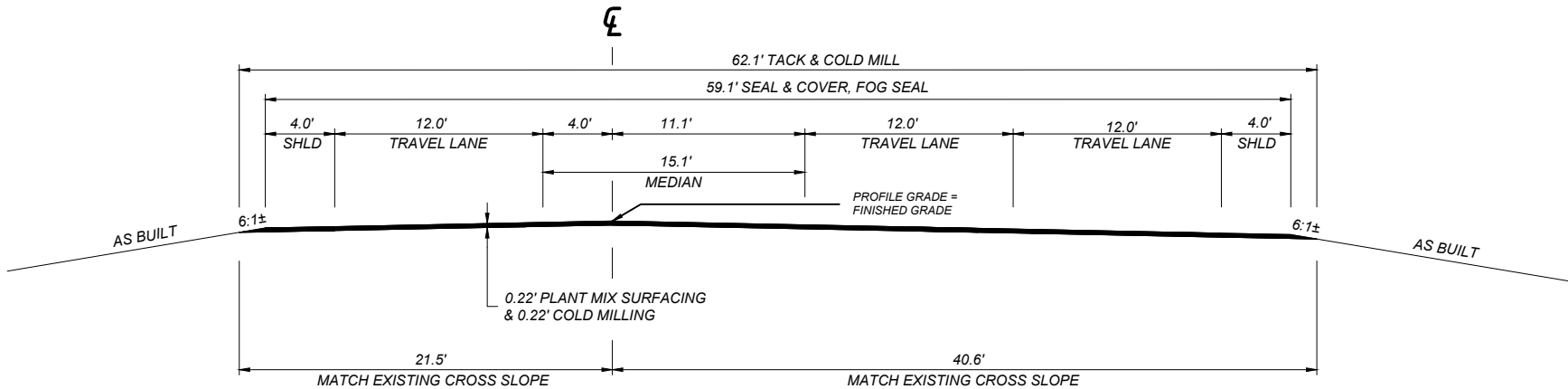
QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		14.19	square yards PER STATION		700	1,466	700
cubic yards PER STATION		52.6	tons PER STATION	5.88	1.25		
tons PER STATION		101.4	gals. PER STATION			73	53
square yards PER STATION	700						
* BASED ON 2 APPLICATIONS							

***ASPHALT OVERLAY, SEAL AND COVER, AND FOG SEAL UNDER THE RAISED MEDIAN IS INCLUDED IN THE TYPICAL SECTION QUANTITIES, AND THEN DEDUCTED FROM THE QUANTITIES IN THE ADDITIONAL SURFACING FRAME BETWEEN 539+49.00 AND 541+56.70 NO WORK WILL OCCUR UNDER RAISED MEDIANS. DO NOT DISTURB RAISED MEDIANS.

541+56.70
541+56.70 TO 543+42.75 ONLY
TRANS. TYP. NO. 10 TO TYP. NO. 11

TYPICAL SECTION NO. 10

MAINLINE



QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		13.33	square yards PER STATION		657	1,380	657
cubic yards PER STATION		49.4	tons PER STATION	5.52	1.17		
tons PER STATION		95.2	gals. PER STATION			69	49
square yards PER STATION	657						
* BASED ON 2 APPLICATIONS							

FLORENCE - EAST

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12/2025

CHECKED BY

12/2025

10538000RDTYP001.DWG



ROAD PLANS

5/22/2025 1:38 PM

543+42.75
543+42.75 TO 544+62.75 ONLY
TRANS. TYP. NO. 11 TO TYP. NO. 12

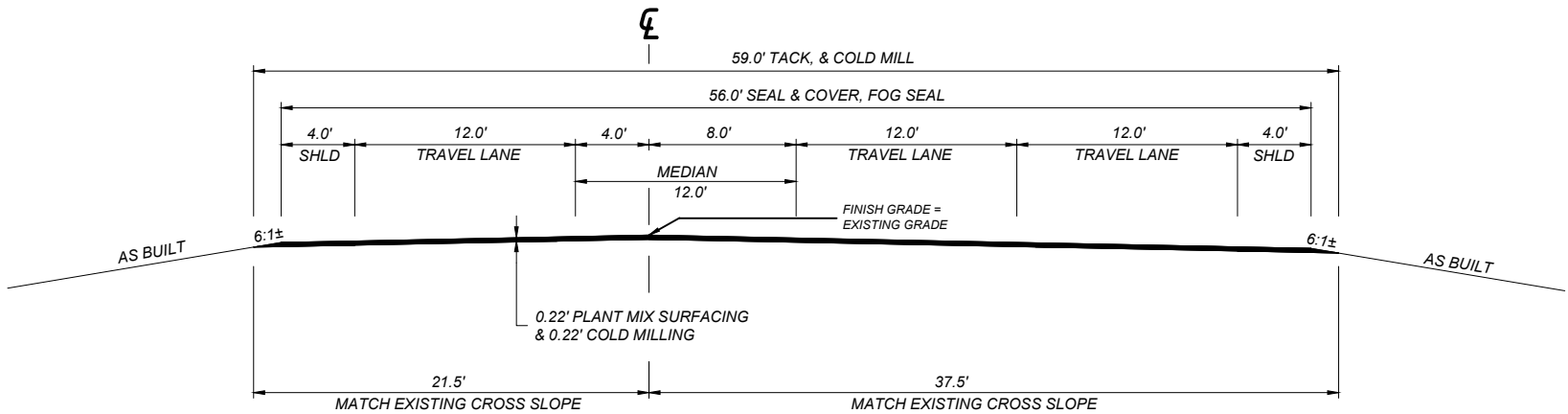
SHEET NO.

8

TYPICAL SECTION

TYPICAL SECTION NO. 11

MAINLINE

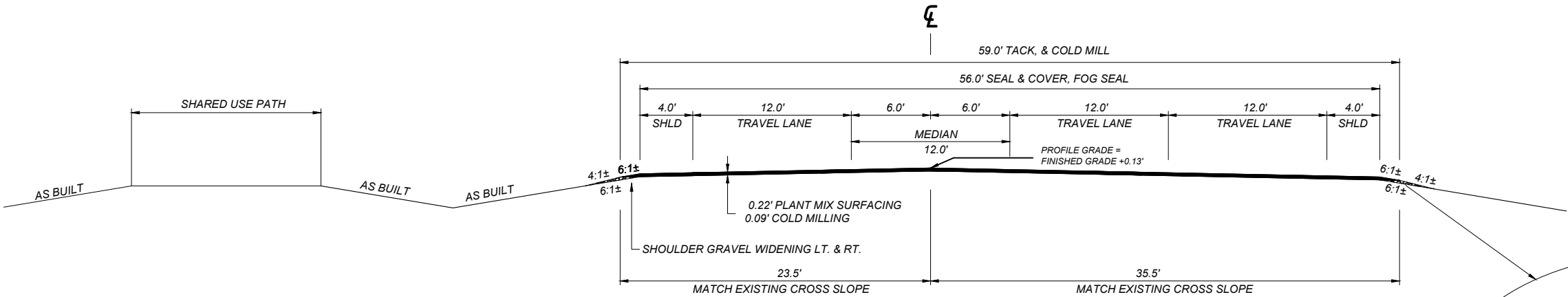


QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK* EMULSIFIED ASPHALT FOG SEAL
AREA square feet		12.65	square yards PER STATION		622	1,312
cubic yards PER STATION		46.9	tons PER STATION	5.24	1.11	
tons PER STATION		90.4	gals. PER STATION			66
square yards PER STATION	622					47
* BASED ON 2 APPLICATIONS						

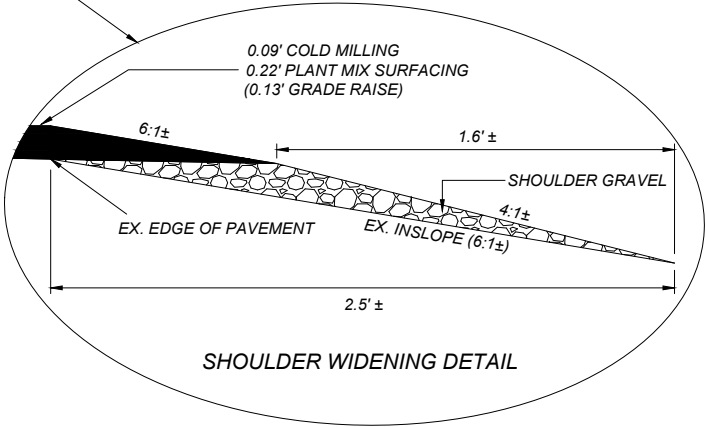
TYPICAL SECTION NO. 12

MAINLINE

544+62.75
544+62.75 TO 550+70.00 ONLY
TRANS. TYP. NO. 12 TO TYP. NO. 1



QUANTITIES							
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX	SHOULDER GRAVEL		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK* EMULSIFIED ASPHALT FOG SEAL
AREA square feet		12.65		square yards PER STATION		622	1,312
cubic yards PER STATION		46.9	2.5	tons PER STATION	5.24	1.11	
tons PER STATION		90.4		gals. PER STATION			66
square yards PER STATION	622						47
* BASED ON 2 APPLICATIONS							



FLORENCE - EAST

RAVALLI

STPS 203-1(28)10

10538000

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REVIEWED BY
J. DOLD

12/2025

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J. CERRECK

12/2025

10538000RDTYP001.DWG

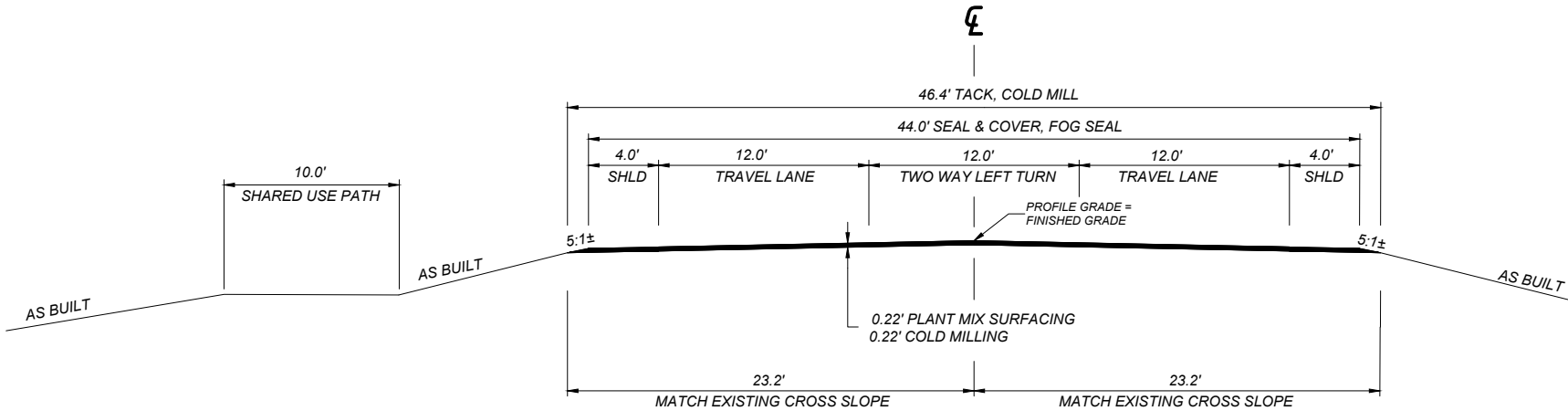
MONTANA
Department of Transportation

ROAD PLANS

3/2/2026 10:16 AM

TYPICAL SECTION NO. 13

MAINLINE



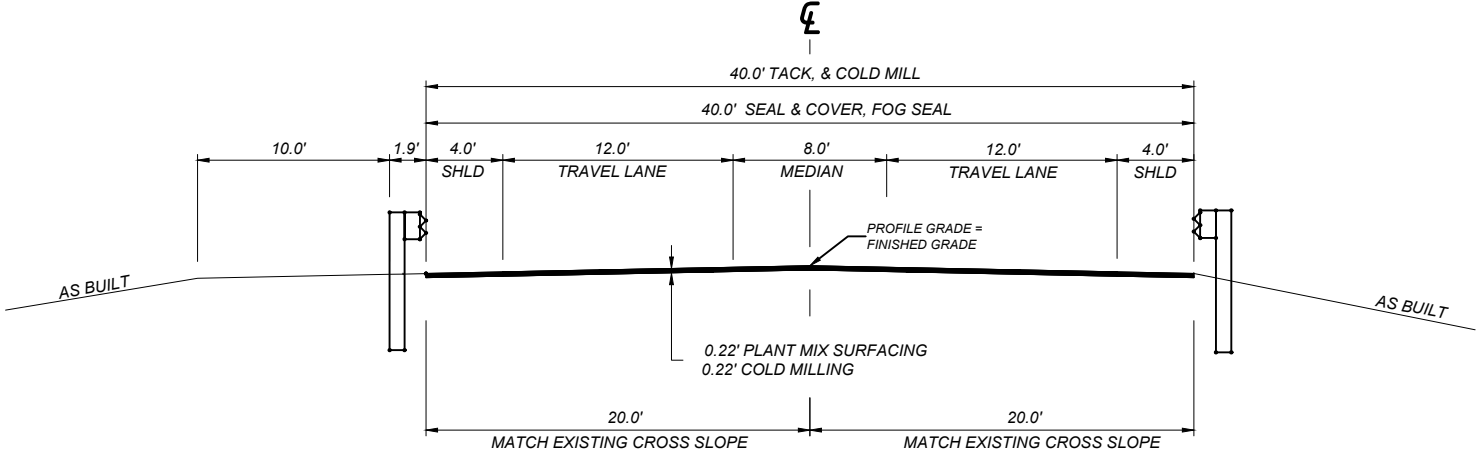
QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK* EMULSIFIED ASPHALT FOG SEAL
AREA square feet		9.94	square yards PER STATION		489	1,032 489
cubic yards PER STATION		36.8	tons PER STATION	4.11	0.87	
tons PER STATION		70.9	gals. PER STATION		52	37
square yards PER STATION	489					
* BASED ON 2 APPLICATIONS						

557+76.00 TO 558+27.00
558+27.00 TO 559+47.00
564+82.00 TO 565+54.05

TRANS. TYP. NO. 13 TO TYP. NO. 14
THEN TYP. NO. 1

TYPICAL SECTION NO. 14

MAINLINE



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK* EMULSIFIED ASPHALT FOG SEAL
AREA square feet		8.80	square yards PER STATION		444	888 444
cubic yards PER STATION		32.6	tons PER STATION	3.64	0.79	
tons PER STATION		62.8	gals. PER STATION		44	33
square yards PER STATION	444					
* BASED ON 2 APPLICATIONS						

559+47.00 TO 559+76.00
563+54.05 BE TO 563+62.00
563+62.00 TO 564+82.00

TRANS. TYP. NO. 14 TO TYP. NO. 13

SHEET NO.

9

TYPICAL SECTION

FLORENCE - EAST

RAVALLI

STPS 203-1(28)10

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PROJECT NAME

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DESIGNED BY

07/2025

REVIEWED BY

12/2025

CHECKED BY

12/2025



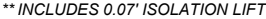
ROAD PLANS

9/24/2025 3:28 PM

617+48.00 TO 622+78.00
622+78.00 TO 623+50.00 TRANS. TYP. NO. 15 TO TYP. NO. 16

10

TYPICAL SECTION



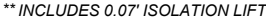
#TWLTL IS SYMMETRIC ABOUT CL
(6' LT/RT OF CL) FROM 617+48 TO 620+28, AND THEN
THE TWLTL IS OFFSET 3' LT. & 9' RT. OF CL FROM
621+78 TO 622+78.

NOTE: SEE TYP. NO. 1 FOR THE
SHOULDER GRAVEL WIDENING DETAIL
WITH 6:1 INSLOPE.

623+50.00 TO 625+71.07
625+71.07 TO 626+81.07 TRANS. TYP. NO.16 TO TYP. NO. 17

10

TYPICAL SECTION



NOTE: SEE TYP. NO. 1 FOR THE
SHOULDER GRAVEL WIDENING DETAIL
WITH 6:1 INSLOPE. RT.

FLORENCE - EAST

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DESIGNED BY

F. COBARRUBIAS	07/2025
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1 DO/D	12/2025
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1 СЕБЕК	12/2025
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MONTANA

Department of Transportation

ROAD PLANS

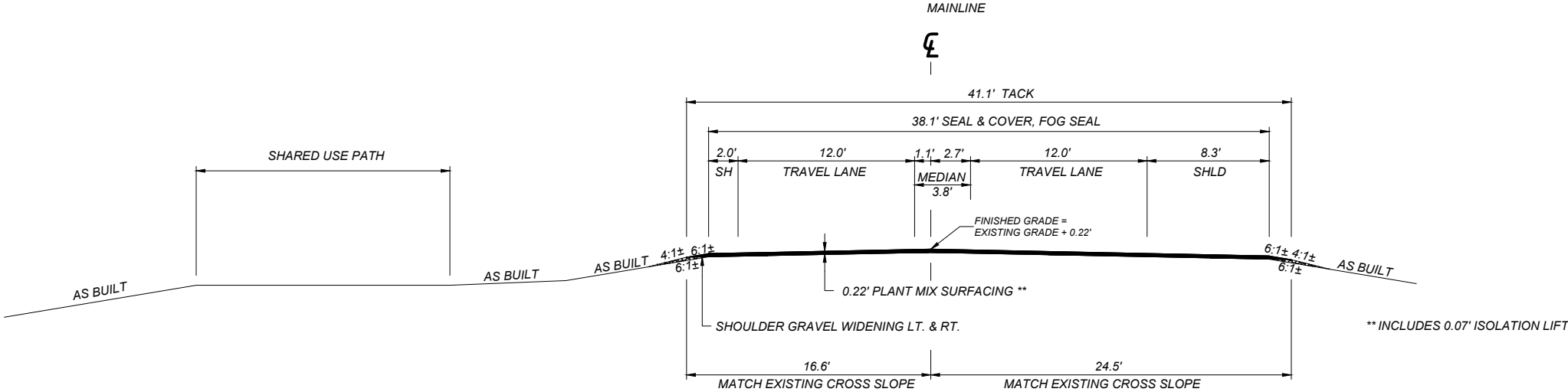
3/2/2026 10:16 AM

TYPICAL SECTION NO. 17

626+81.07
626+81.07 TO 627+45.07 ONLY
TRANS. TYP. NO. 17 TO TYP. NO. 18

SHEET NO.
11

TYPICAL SECTION



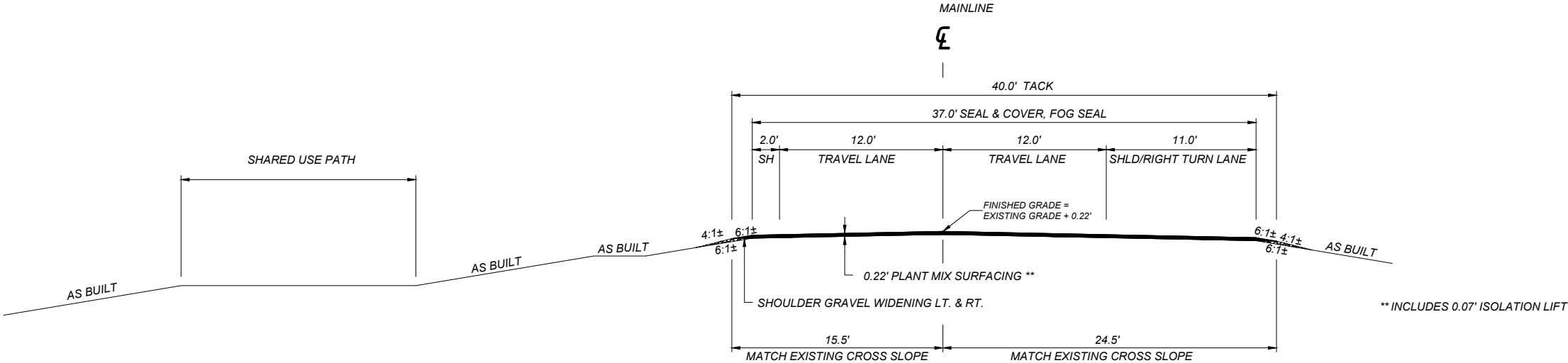
QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	SHOULDER GRAVEL		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		8.71		square yards PER STATION		423	914	423
cubic yards PER STATION		32.3	3.4	tons PER STATION	3.61	0.76		
tons PER STATION		62.3		gals. PER STATION			46	32
square yards PER STATION	423							
* BASED ON 2 APPLICATIONS								

NOTE: SEE TYP. NO. 1 FOR THE SHOULDER GRAVEL WIDENING DETAIL WITH 6:1 INSLOPE.

TYPICAL SECTION NO. 18

627+45.07 TO 628+97.07
628+97.07 TO 629+16.77 TRANS. TYP. NO. 18 TO TYP. NO. 19

FLORENCE - EAST
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QUANTITIES								
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX	SHOULDER GRAVEL		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		8.47		square yards PER STATION		411	888	411
cubic yards PER STATION		31.4	3.4	tons PER STATION	3.51	0.73		
tons PER STATION		60.5		gals. PER STATION			44	31
square yards PER STATION	411							
* BASED ON 2 APPLICATIONS								

NOTE: SEE TYP. NO. 1 FOR THE SHOULDER GRAVEL WIDENING DETAIL WITH 6:1 INSLOPE.

NOTE: THE ROADWAY IS IN A TAPER MILL AND OVERLAY FROM 626+83.84 (0.0' COLD MILLING) TO 628+83.84 (0.22' COLD MILLING). SEE DETAILS AND COLD MILLING SUMMARY FRAME FOR COLD MILLING DETAILS AND QUANTITIES.

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F. COBARRUBIAS	
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J. CERECK	
10538000RDTYP001.DWG	



MONTANA
Department of Transportation

ROAD PLANS

3/2/2026 10:16 AM

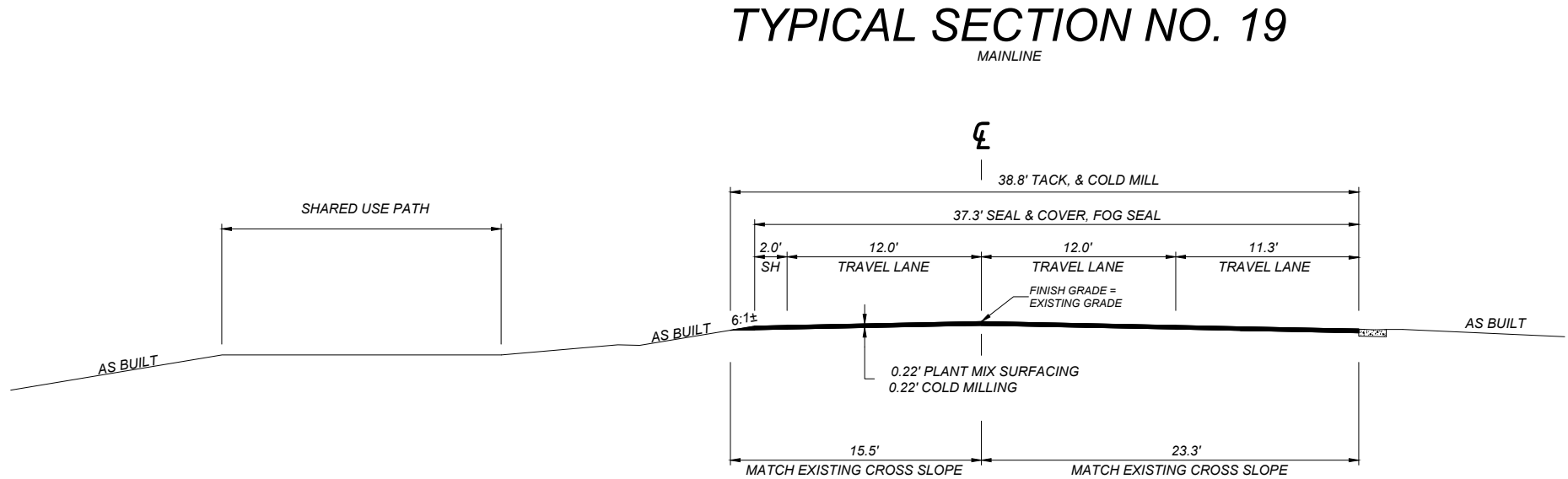
629+16.77
629+16.77

ONLY
TRANS. TYP. NO. 19 TO TYP NO. 20

TO 629+44.54

SHEET NO.
12

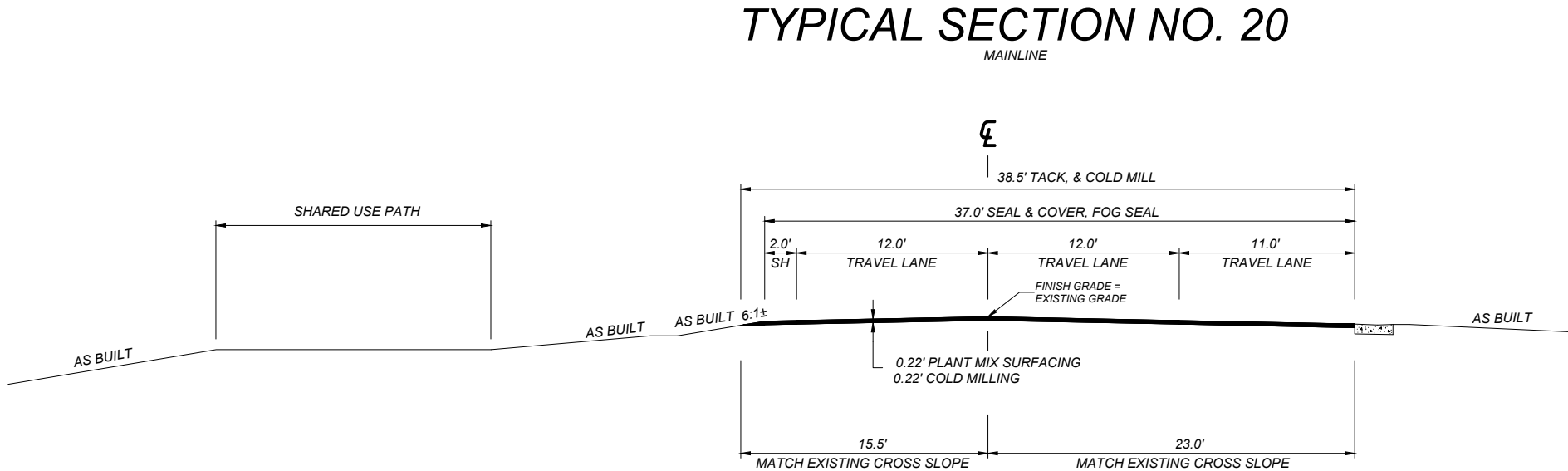
TYPICAL SECTION



QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		8.37	square yards PER STATION		414	862	414
cubic yards PER STATION		31.0	tons PER STATION	3.47	0.74		
tons PER STATION		59.8	gals. PER STATION			43	31
square yards PER STATION	414						
* BASED ON 2 APPLICATIONS							

629+44.54

ONLY, THEN TO TYP. NO. 21



QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		8.31	square yards PER STATION		411	856	411
cubic yards PER STATION		30.8	tons PER STATION	3.45	0.73		
tons PER STATION		59.4	gals. PER STATION			43	31
square yards PER STATION	411						
* BASED ON 2 APPLICATIONS							

DESIGNED BY
F. COBARRUBIAS
07/2025

REVIEWED BY
J. DOLD
12/2025

CHECKED BY
J. CERECK
12/2025

PROJECT NAME
FLORENCE - EAST

COUNTY
RAVALLI

PROJECT ID
STPS 203-1(28)10

UPN
10538000

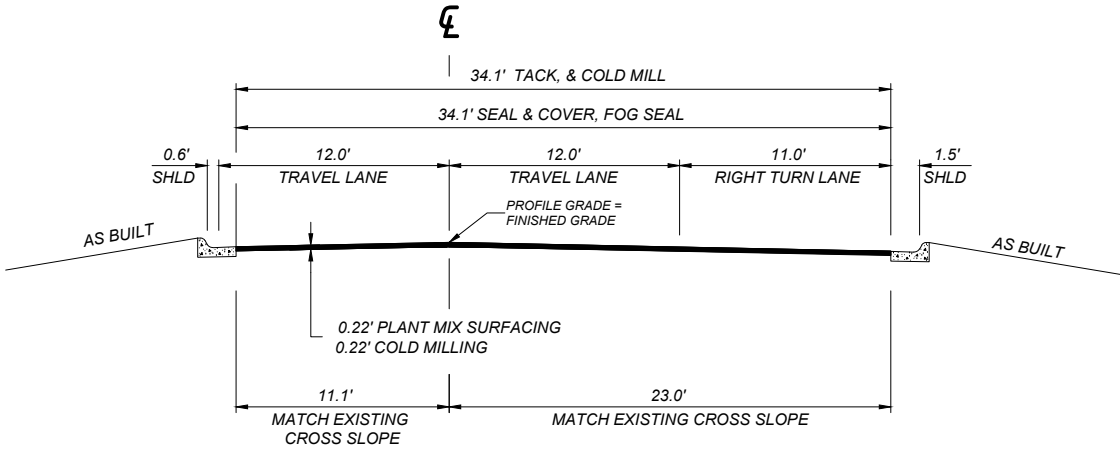
MONTANA
Department of Transportation

ROAD PLANS

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3/2/2026 10:16 AM

629+44.54 TO 630+83.84

TYPICAL SECTION NO. 21
MAINLINE



QUANTITIES							
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL			
	COVER	PLANT MIX		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT TACK*	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		7.50	square yards PER STATION		379	758	379
cubic yards PER STATION		27.8	tons PER STATION	3.11	0.68		
tons PER STATION		53.6	gals. PER STATION			38	28
square yards PER STATION	379						
* BASED ON 2 APPLICATIONS							

SHEET NO.

13

TYPICAL SECTION

PROJECT NAME
FLORENCE - EAST

COUNTY
RAVALLI

PROJECT ID
STPS 203-1(28)10

UPN
10538000

DESIGNED BY
F. COBARRUBIAS

REVIEWED BY
J. DOLD

CHECKED BY
J. CERECK

10538000RDTYP001.DWG



ROAD PLANS

3/2/2026 10:16 AM

SUMMARY

SHEET NO.

14

SUMMARY

SURFACING																
STATION		linear feet				FOR	tons	AGGREGATE				BITUMINOUS MATERIAL				REMARKS
		GROSS	NET	+	-		HYDRATED LIME	sq. yards	tons	cu. yards		tons		gals.		
								COVER TYPE 2	PLANT MIX SURF - 1/2 IN	CRUSHED AGG. COURSE	SHOULDER GRAVEL	ASPHALT BINDER PG 58H-34	EMULSIFIED ASPHALT SEAL CHFRS-2P	EMULSIFIED ASPHALT TACK	EMULSIFIED ASPHALT FOG SEAL	
FROM	TO															
518+62.80	527+05.00	842.20	842.20					4,118	602		29	35.0	7.3	438	312	TYP. NO. 1
527+05.00	528+25.00	120.00	120.00					613	90		4	5.2	1.1	65	46	TRANS. TYP. NO. 1 TO TYP. NO. 2
528+25.00	529+06.59	81.59	81.59					435	63		3	3.7	0.8	47	33	TYP. NO. 2
529+06.59	529+80.59	74.00	74.00					444	64		3	3.7	0.8	47	33	TRANS. TYP. NO. 2 TO TYP. NO. 3
529+80.59	530+76.59	96.00	96.00					576	84		3	4.9	1.0	61	43	TRANS. TYP. NO. 3 TO TYP. NO. 2
530+76.59	531+00.00	23.41	23.41					125	18		1	1.1	0.2	13	9	TYP. NO. 2
531+00.00	532+80.00	180.00	180.00					982	143		3	8.3	1.8	104	74	TRANS. TYP. NO. 2 TO TYP. NO. 4
532+80.00	534+00.00	120.00	120.00					643	94			5.4	1.2	68	49	TRANS. TYP. NO. 4 TO TYP. NO. 5
534+00.00	534+50.00	50.00	50.00					262	38			2.2	0.5	28	20	TRANS. TYP. NO. 5 TO TYP. NO. 6
534+50.00	535+75.27	125.27	125.27					658	95			5.5	1.2	69	49	TRANS. TYP. NO. 6 TO TYP. NO. 7
535+75.27	539+49.00	373.73			373.73	ROUNDAABOUT										
539+49.00	541+02.75	153.75	153.75					1,149	166			9.6	2.1	120	87	TRANS. TYP. NO. 8 TO TYP. NO. 9
541+02.75	541+56.70	53.95	53.95					366	53			3.1	0.7	38	28	TRANS. TYP. NO. 9 TO TYP. NO. 10
541+56.70	543+42.75	186.05	186.05					1,190	173			10.0	2.1	126	89	TRANS. TYP. NO. 10 TO TYP. NO. 11
543+42.75	544+62.75	120.00	120.00					746	108		2	6.3	1.3	79	56	TRANS. TYP. NO. 11 TO TYP. NO. 12
544+62.75	550+70.00	607.25	607.25					3,373	492		18	28.5	6.0	358	255	TRANS. TYP. NO. 12 TO TYP. NO. 1
550+70.00	557+76.00	706.00	706.00					3,452	505		24	29.3	6.1	367	261	TYP. NO. 1
557+76.00	558+27.00	51.00	51.00					249	36			2.1	0.4	27	19	TYP. NO. 13
558+27.00	559+47.00	120.00	120.00					560	80			4.7	1.0	58	42	TRANS. TYP. NO. 13 TO TYP. NO. 14
559+47.00																
559+76.00 BE	563+54.05 BE				378.05	BRIDGE										
	563+62.00	415.00	36.95					164	23			1.3	0.3	16	12	TYP. NO. 14
563+62.00	564+82.00	120.00	120.00					560	80			4.7	1.0	58	42	TRANS. TYP. NO. 14 TO TYP. NO. 13
564+82.00	565+54.05	72.05	72.05					352	51			3.0	0.6	37	27	TYP. NO. 13
565+54.05	616+62.00	5,107.95	5,107.95					24,978	3,652		174	212.0	44.4	2,656	1,890	TYP. NO. 1
616+62.00	617+48.00	86.00	86.00					430	63		3	3.6	0.8	46	32	TRANS. TYP. NO. 1 TO TYP. NO. 15
617+48.00	622+78.00	530.00	530.00					2,708	395		18	22.9	4.8	286	201	TYP. NO. 15
622+78.00	623+50.00	72.00	72.00					388	56		2	3.3	0.7	41	29	TRANS. TYP. NO. 15 TO TYP. NO. 16
623+50.00	625+71.07	221.07	221.07					1,253	181		7	10.5	2.2	130	95	TYP. NO. 16
625+71.07	626+81.07	110.00	110.00					545	79		4	4.6	1.0	58	41	TRANS. TYP. NO. 16 TO TYP. NO. 17
626+81.07	627+45.07	64.00	64.00					267	39		2	2.3	0.5	29	20	TRANS. TYP. NO. 17 TO TYP. NO. 18
627+45.07	628+97.07	152.00	152.00					625	92		5	5.3	1.1	67	47	TYP. NO. 18
628+97.07	629+16.77	19.70	19.70					81	12			0.7	0.1	9	6	TRANS. TYP. NO. 18 TO TYP. NO. 19
629+16.77	629+44.54	27.77	27.77					115	17			1.0	0.2	12	9	TRANS. TYP. NO. 19 TO TYP. NO. 20
629+44.54	630+83.84	139.30	139.30					528	75			4.3	0.9	53	39	TYP. NO. 21
						ADDITIONAL SURFACING		-216	195	1	9	11.3	-0.3	105	822	
TOTAL		11,221.04	10,469.26		751.78		111	52,719	7,914	1	314	459.4	93.9	5,716	4,817	

FLORENCE - EAST

RAVALLI

STPS 203-1(28)10

10538000

PROJECT NAME

COUNTY

PROJECT ID

UPN

DESIGNED BY

F. COBARRUBIAS

REVIEWED BY

J. DOLD

CHECKED BY

J. CERECK


105380000RD\SUN001.DWG



ROAD PLANS

PFR

SUMMARY

 MONTANA Department of Transportation		DESIGNED BY	PROJECT NAME	
		F. COBARRUBIAS	FLORENCE - EAST	
		REVIEWED BY	COUNTY	
		J. DOLD	RAVALLI	
		CHECKED BY	PROJECT ID	
ROAD PLANS		J. CERECK	UPN	
		10538000RDSUM001.DWG		
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SUMMARY

PAVEMENT MARKINGS				
ITEM	UNIT	INTERIM APPLICA-TION #	FINAL APPLICA-TION	TOTAL
STRIPING - WHITE PAINT	gallon	186		186
STRIPING - YELLOWPAINT	gallon	130		130
WORDS & SYMBOLS - WHITE PAINT	gallon	50		50
WORDS & SYMBOLS - YELLOWPAINT	gallon	48		48
STRIPING - WHITE EPOXY	gallon		124	124
STRIPING - YELLOWEPOXY	gallon		88	88
WORDS & SYMBOLS - WHITE EPOXY	gallon		32	32
WORDS & SYMBOLS - YELLOWEPOXY	gallon		32	32
YELLOWCURB EPOXY	gallon		42	42
TEMPORARY STRIPING	linear feet			33,218
STRIPING - 4 IN WHITE - HIGH PERF TAPE	linear feet			10,550
STRIPING - 4 IN YELLOW- HIGH PERF TAPE	linear feet			4,950
STRIPE GROOVING (LONGITUDINAL ONLY)	linear feet			14,262
STRIPE GROOVING (WORDS & SYMBOLS)	square feet			526

BASED ON 2 APPLICATIONS.

RUMBLE STRIPS					
STATION		miles		gals	REMARKS
		SINUSOIDAL RUMBLE STRIPS		EMULSIFIED ASPHALT FOG SEAL #	
		CENTERLINE *	INTERMITTENT SHOULDER		
FROM	TO				
518+62.80	533+95.00		0.3	33	RT
548+76.00	556+80.00		0.1	16	LT
590+44.00	622+45.00	0.5		57	CENTERLINE
590+54.00	622+41.00		0.6	68	LT
SUBTOTAL		0.5	1.0	174	
TOTAL		1.5		~	

FOR INFORMATION ONLY, INCLUDE IN THE COST OF RUMBLE STRIPS
* INSTALL CENTERLINE RUMBLE STRIPS (CLRS) IN LEFT-TURN LANE ONLY AREAS (ONE SIDE), AND STRIPED MEDIAN AREAS (BOTH SIDES).
OMIT CLRS ALONG ALL TWO-WAY LEFT TURN LANE SECTIONS.

GUARDRAIL @																		
STATION		linearfeet								each								REMARKS
		REMOVE GUARDRAIL		MGS GUARDRAIL		RAISE GUARDRAIL #		MGS INTERSECTING ROADWAY TERMINAL SECTION		MASH W-BEAM TERMINAL SECTION		MGS ONE-WAY DEPARTURE TERMINAL SECTION		BRIDGE APPROACH SECTION TYPE 1		GUARDRAIL END SECTION WIDENING		
		LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT	
NEW/RAISE RAIL																		
575+12.25	581+62.25				68.7		587.5		62.5				1					* 24' RADIUS IRT - EAST SIDE & 8' RADIUS, 12.5' CURVE LENGTH SHOP BENT MGS GUARDRAIL - WEST SIDE **
578+60.88	582+85.83			56.2		300.0				2						2		*
585+35.76	585+88.86				65.6								1		1			* 24' RADIUS, 37.5' CURVE LENGTH SHOP BENT MGS GUARDRAIL, WITH 1-WAY DEPARTURE TERMINAL SECTION **
585+22.78	586+09.25			28.1						1					1		1	*
586+88.86	587+76.34				28.1						1				1		1	*
587+29.25	589+91.73			28.1		175.0				1					1		1	*
REMOVE RAIL																		
575+12.25	581+62.25		143.7															
578+48.35	582+98.35	150.0																
585+35.76	585+85.76		100.0															
585+35.25	586+09.25	75.0																
586+85.76	587+67.76		75.0															
587+29.25	590+04.25	100.0																
SUBTOTAL		325.0	318.7	112.4	162.4	475.0	587.5	~	62.5	4	1	~	2	2	2	4	1	
TOTAL		643.7		274.8		1,062.5		62.5		5		2		4		5		

RAISE GUARDRAIL EXCLUDES TRANSITIONS AND TERMINAL SECTIONS. UNBOLT W-BEAM AND BLOCK FROM GUARDRAIL POST AND SET ASIDE, PLACE PLANT MIX OVERLAY, AND RAISE AND RE-BOLT W-BEAM AND BLOCK IN THE UPPER GUARDRAIL
* INCLUDES ONE OR TWO 28.1' LONG MGS TO METAL GUARDRAIL TRANSITIONS. SEE DETAILED DRAWING NO. 606-20.
** ON GUARDRAIL NOT PAID AS MGS INTER. ROADWAY TERM. SECT., USE SHOP BENT MGS GUARDRAIL, FOLLOWED BY A ONE-WAY DEPARTURE TERMINAL SECTION. USE W-BEAM END SECTION BUFFER (RWE06a-b) TO MATCH EX. CONDITIONS.
@ FOR ALL GUARDRAIL REPLACEMENTS WHERE NEW POSTS ARE BEING INSTALLED, CALL 811 AND LOCATE ALL UTILITIES PRIOR TO INSTALLING NEW POSTS.

CRACK SEALING							
STATION		TRANSVERSE & LONGITUDINAL CRACK SEALING					REMARKS
		CRACK SEALING		MASTIC CRACK FILLING			
FROM	TO	pounds	linear feet	pounds	linear feet	area (sq ft)	
S-203							
518+62.80	630+83.84	4,025	5,750	8,172	91	786	
SHARED-USE PATH							
518+62.80	629+46.04	925	1,322	85	50		
TOTAL		4,950	#	8,257	#	#	

FOR INFORMATION ONLY

SHEET NO.

16

SUMMARY

PROJECT NAME
FLORENCE - EAST

COUNTY
RAVALLI

PROJECT ID
STPS 203-1(28)10

UPN
10538000

DESIGNED BY
F. COBARRUBIAS

10/2025

REVIEWED BY
J. DOLD

12/2025

CHECKED BY
J. CERECK

12/2025

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ROAD PLANS

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SUMMARY

SHEET NO.

17

SUMMARY

COLD MILLING *					
STATION		sq. yards		REMOVE BITUMINOUS PAVEMENT	REMARKS
		COLD MILLING			
		0.22'	0.22' - 0.00'		
FROM	TO				
518+62.80	520+62.80		1,044		47' WIDTH
530+80.00	531+00.00		113		51' WIDTH
531+00.00	532+80.00		1,042		51' TO 53.2' WIDTH
532+80.00	534+00.00	683			53.2' TO 49.3' WIDTH
534+00.00	534+50.00	279			49.3' TO 51' WIDTH
534+50.00	535+75.27	689			51' TO 48' WIDTH
539+49.00	541+02.75	1,200			74.5' TO 66' WIDTH
541+02.75	541+56.70	384			66' TO 62.1' WIDTH
541+56.70	543+42.75	1,252			62.1' TO 59' WIDTH
543+42.75	544+62.75		787		59' WIDTH
544+62.75	545+42.75		517		59' TO 57.4' WIDTH
555+51.00	557+51.00		1,044		47' WIDTH
557+51.00	557+76.00	131			47' WIDTH
557+76.00	558+27.00	263			46.4' WIDTH
558+27.00	559+47.00	576			46.4 TO 40' WIDTH
559+47.00	559+76.00 BE	129			40' WIDTH
563+54.05 BE	563+62.00	35			40' WIDTH
563+62.00	564+82.00	576			40' TO 46.4' WIDTH
564+82.00	565+54.05	371			46.4' WIDTH
565+54.05	566+04.05	261			47' WIDTH
566+04.05	568+04.05		1,044		47' WIDTH
626+83.84	627+45.07		276		41.1' TO 40' WIDTH
627+45.07	628+83.84		617		40' WIDTH
628+83.84	629+16.77	144			40' TO 38.8 WIDTH
629+16.77	629+44.54	119			38.8' TO 38.5' WIDTH
629+44.54	630+83.84	528			34.1' WIDTH
			160		7 - FARM FIELD APPROACHES
			582		17 - PRIVATE APPROACHES
			221		7 - PUBLIC APPROACHES
		142			S-203 & US-93 INTX. RADIUS CHAMFERS LT. & RT.
		-358			# RAISED MEDIAN QUANTITY REDUCTION
531+10.00	531+25.00			19	SUP PAVEMENT REMOVAL N. OF APPLE VALLEY WAY. SEE DETAIL
SUBTOTAL		7,404	7,447	19	
TOTAL		14,851		19	

* SEE DETAILS

COLD MILLING QUANTITIES ARE DEDUCTED UNDER THE RAISED MEDIAN AREAS IN TYPICALS 8 AND 9. CUMULATIVE AREAS FROM THE 2 SEPARATE RAISED MEDIAN AREAS TOTALS 358 SQYD.

CONCRETE BARRIER RAIL				
STATION		each		REMARKS
		RESET CONCRETE BARRIER RAIL		
		LEFT	RIGHT	
FROM	TO			
585+88.86	586+88.86		10	*
586+09.25	587+29.25	12		*
SUBTOTAL		12	10	
TOTAL		22		

* SEE DETAIL.

CURB								
STATION		linear feet						REMARKS
		CONCRETE CURB AND GUTTER		REMOVE CURB AND GUTTER #		MEDIAN CONCRETE CURB	REMOVE MEDIAN CURB #	
		LEFT	RIGHT	LEFT	RIGHT	TYPE A		
FROM	TO							
529+80.00	531+00.00					120.0	120.0	LT.- NORTH OF APPLE VALLEY WAY.*
630+24.00	630+40.00		26.2		15.3			SPANNING ACROSS REMOVED RAILROAD AT-GRADE CROSSING - NE CORNER S-203 & US-93. SEE DETAIL.
630+49.00	630+83.00	34.4		20.3				SPANNING ACROSS REMOVED RAILROAD AT-GRADE CROSSING - SE CORNER S-203 & US-93. SEE DETAIL.
SUBTOTAL		34.4	26.2	20.3	15.3	120.0	120.0	
TOTAL		60.6		~		120.0	~	

FOR INFORMATION ONLY, INCLUDE IN THE COST OF CONCRETE CURB AND GUTTER AND MEDIAN CONCRETE CURB TYPE A.

* SEE DETAIL.

SIDEWALK									
STATION		sq. yards						linear feet	REMARKS
		CONCRETE SIDEWALK		DETECTABLE WARNING DEVICES		REMOVE ASPHALT/SIDEWALK #		WIDTH	
		4"		TYPE 1					
FROM	TO	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT		
529+75.00		3.7		2.2		3.7		11.0	APPLE VALLEY WAY *
630+17.00	630+40.00		12.8				12.8	VARIES	SPANNING ACROSS REMOVED RAILROAD AT-GRADE CROSSING & INTO SIDEWALK - NE CORNER S-203 & US-93. SEE DETAIL.
630+71.00	630+89.00	12.1				12.1		10.0	SPANNING ACROSS REMOVED RAILROAD AT-GRADE CROSSING - SE CORNER S-203 & US-93. SEE DETAIL.
SUBTOTAL		15.8	12.8	2.2	~	15.8	12.8	~	
TOTAL		28.6		2.2		~		~	

* SEE DETAIL.

FOR INFORMATION ONLY - INCLUDE IN THE COST OF CONCRETE SIDEWALK.

REVEGETATION #			
STATION		lump sum	REMARKS
		REVEGE- TATION	
FROM	TO		
518+62.80	630+83.84	1	FOR GUARDRAIL END SECTION WIDENING, SHOULDER GRAVEL WIDENING FOR ASPHALT OVERLAY, & SIDEWALK REPLACEMENT
TOTAL		1	

SEE SPECIAL PROVISION

PROJECT NAME

FLORENCE - EAST

COUNTY

RAVALLI

PROJECT ID

STPS 203-1(28)10

UPN

10538000

DESIGNED BY

F. COBARRUBIAS

10/2025

REVIEWED BY

J. DOLD

12/2025

CHECKED BY

J. CERECK

12/2025

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ROAD PLANS

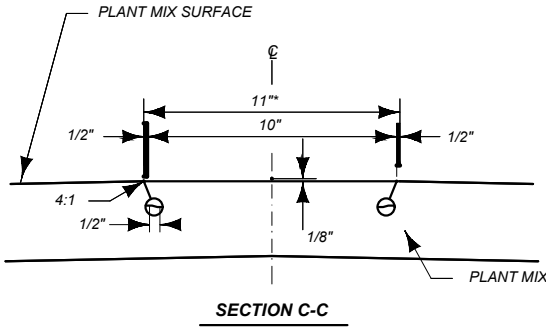
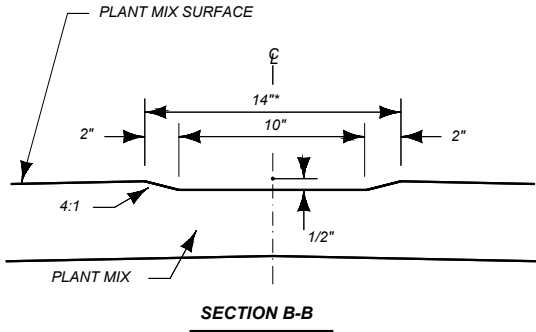
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24" SINUSOIDAL CENTERLINE
RUMBLE STRIP 10" WIDE
TAPERED GROOVE
DETAIL

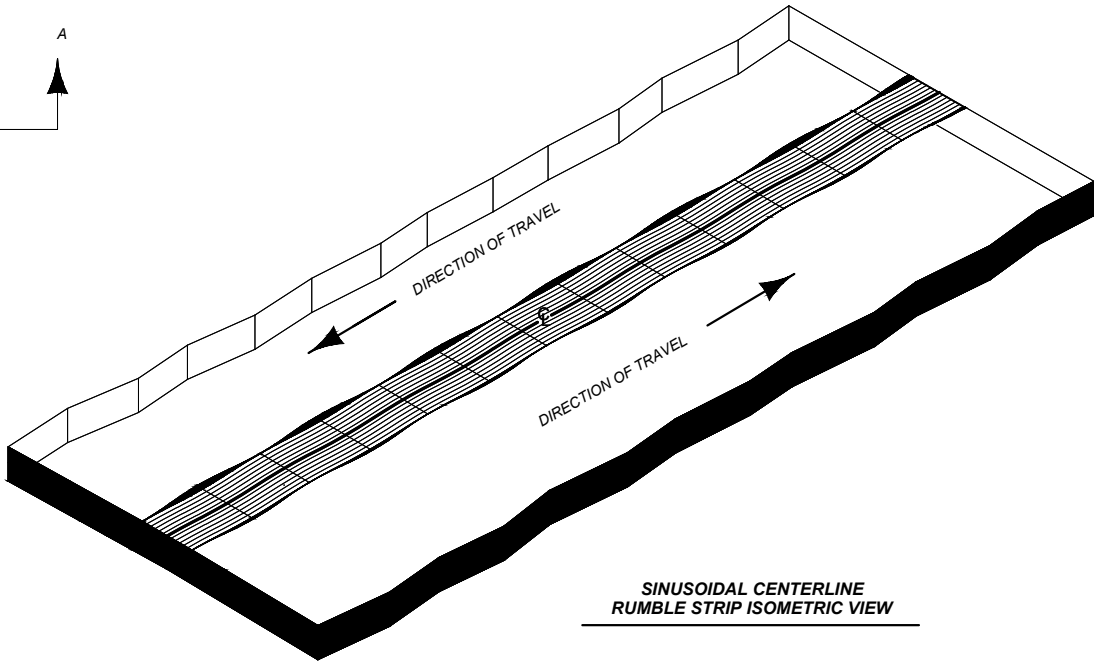
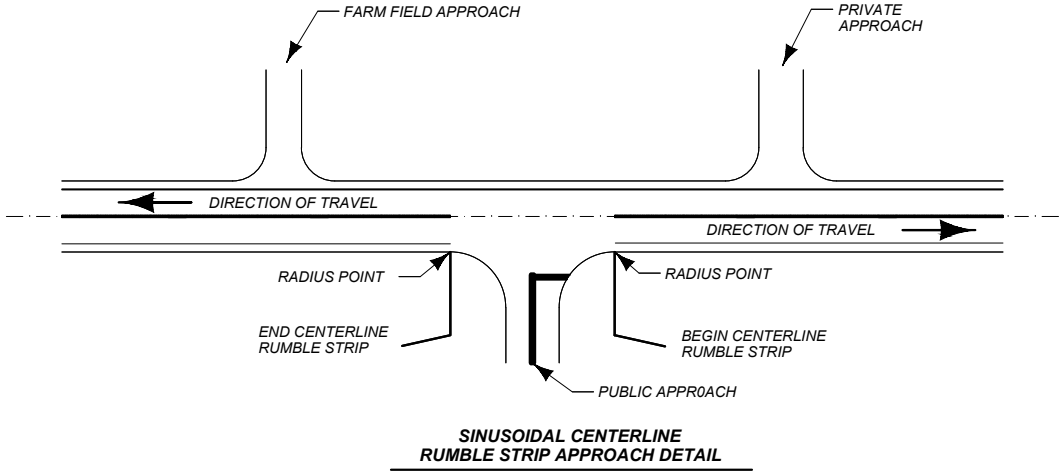
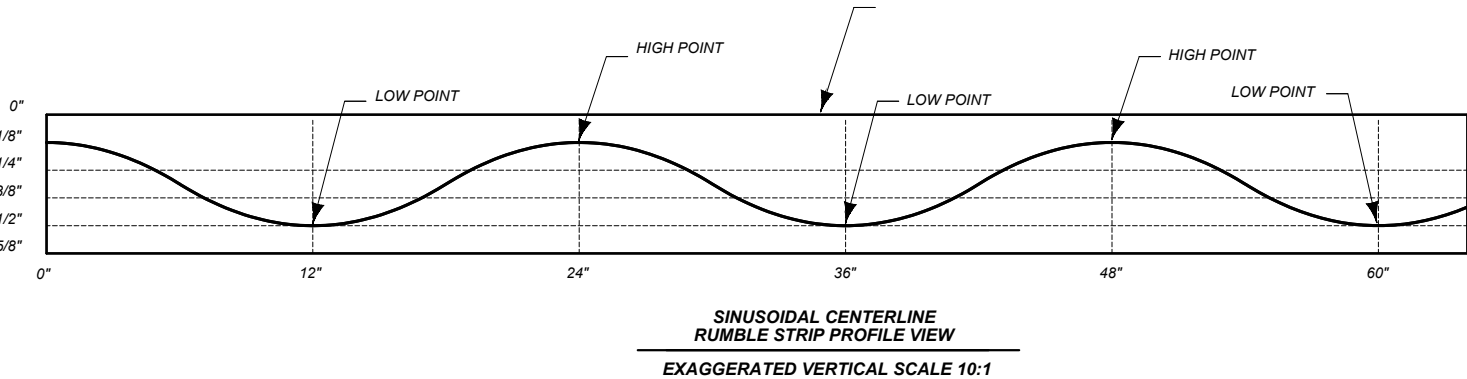
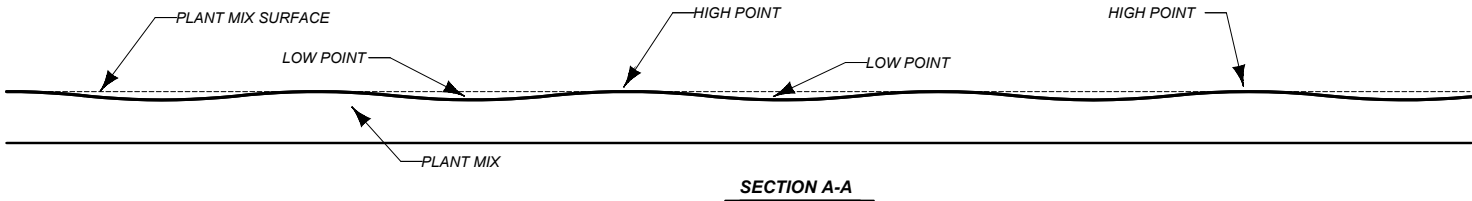
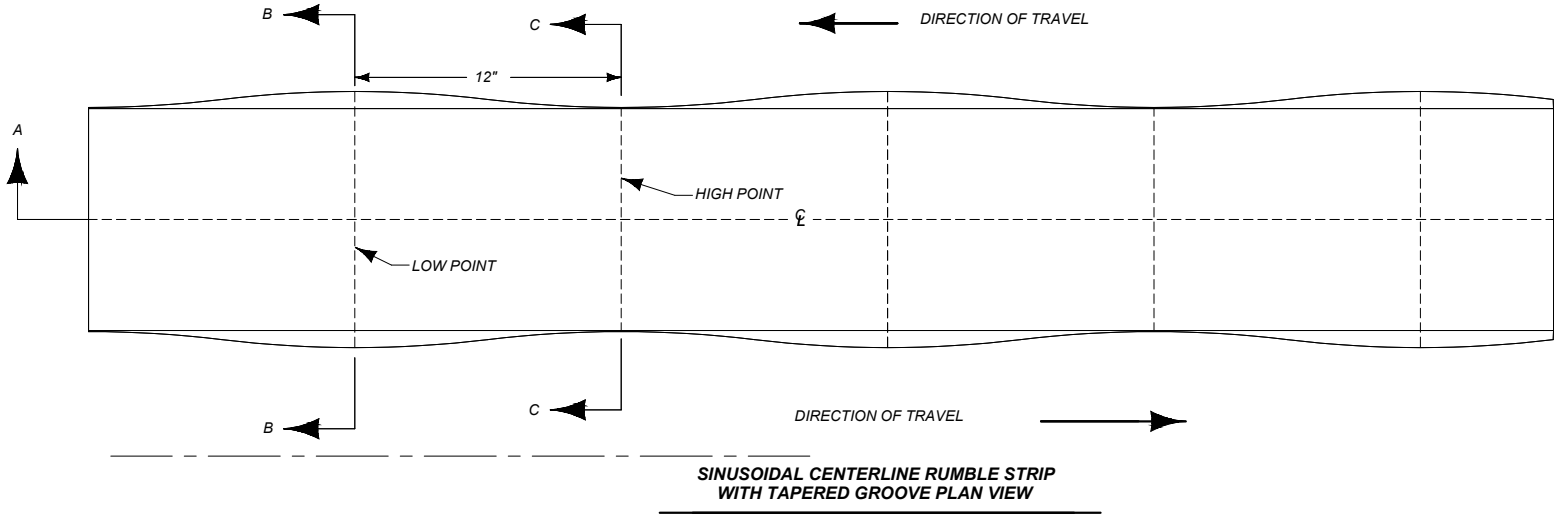
PROJECT NAME
FLORENCE - EAST
COUNTY
RAVALLI
PROJECT ID
STPS 203-1(28)10
UPN
10538000

DESIGNED BY
F. COBARRUBIAS
10/2025
REVIEWED BY
J. DOLD
12/2025
CHECKED BY
J. CERECK
12/2025
10538000RDET001.DWG

MONTANA
Department of Transportation
ROAD PLANS
3/2/2026 10:16 AM




* TOP WIDTH MAY VARY DEPENDING ON PAVEMENT SURFACE IRREGULARITIES.

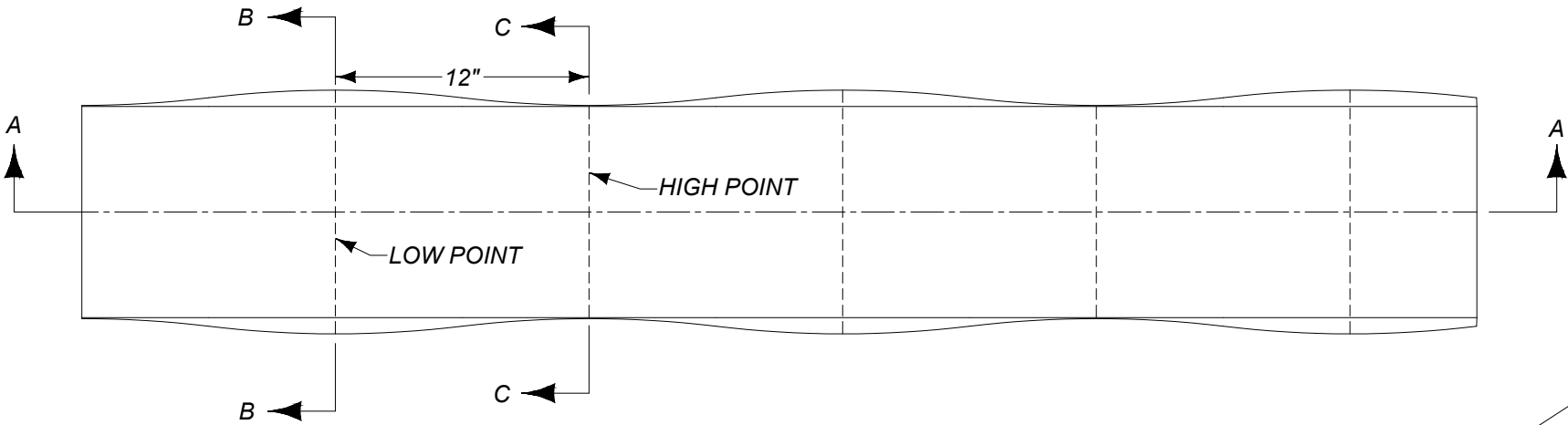


NOTES:
BREAK SINUSOIDAL CENTERLINE RUMBLE STRIPS FOR PUBLIC APPROACHES ONLY.
INSTALL SINUSOIDAL CENTERLINE RUMBLE STRIPS ACROSS LEFT TURN LANES AND STRIPED MEDIANS.
DO NOT INSTALL SINUSOIDAL CENTERLINE RUMBLE STRIPS ON CONCRETE BRIDGE DECKS AND CONCRETE BRIDGE APPROACH SLABS.
DO NOT INSTALL SINUSOIDAL CENTERLINE RUMBLE STRIPS IN AREAS POSTED AT 45 MPH OR LESS.
ROUTES WITHIN DESIGNATED CITY OR URBAN LIMITS USE ENGINEERING JUDGEMENT ON A CASE BY CASE BASIS TO DETERMINE IF SINUSOIDAL CENTERLINE RUMBLE STRIP INSTALLATION IS APPROPRIATE.
MINIMUM VERTICAL MILLING DEPTHS AND DIFFERENCE BETWEEN MILLING HIGH POINTS AND LOW POINTS SHOWN IN DETAIL. ADDITIONAL 1/8" DEPTH OF MILLING IS ALLOWABLE ON INSTALLATION OF SINUSOIDAL CENTERLINE RUMBLE STRIP.
SEE DETAILED DRAWING 620-30 FOR CENTERLINE RUMBLE STRIP PAVEMENT MARKING INFORMATION.
OMIT CENTERLINE RUMBLE STRIPES IN AREAS WHERE TWO WAY LEFT TURN LANES ARE PRESENT UNLESS SPECIFIED IN PROJECT PLANS AND/OR SPECIAL PROVISIONS. CENTERLINE RUMBLE STRIPES MAY BE INSTALLED THROUGH TWO WAY LEFT TURN LANES ON A CASE BY CASE BASIS AS A RESULT OF SAFETY ENGINEERING ANALYSIS DEMONSTRATING NEED.

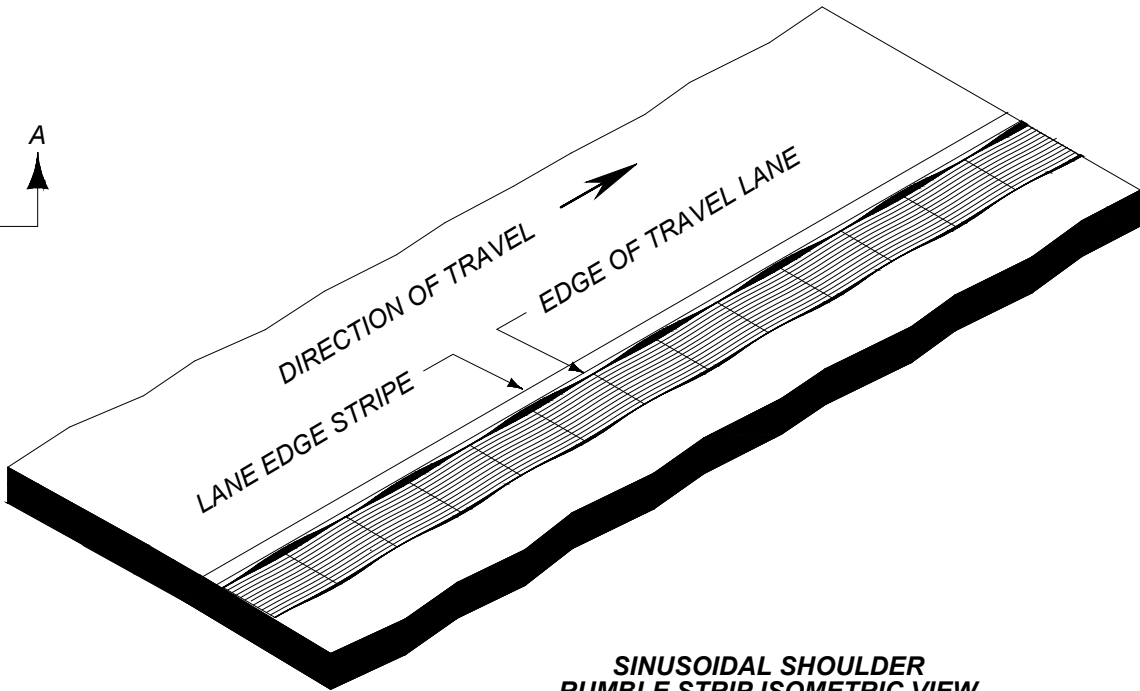
SINUSOIDAL SHOULDER RUMBLE STRIPS
DETAIL

PROJECT NAME	FLORENCE - EAST		
COUNTY	RAVALLI		
PROJECT ID	STPS 203-1(28)10		
UPN	10538000		

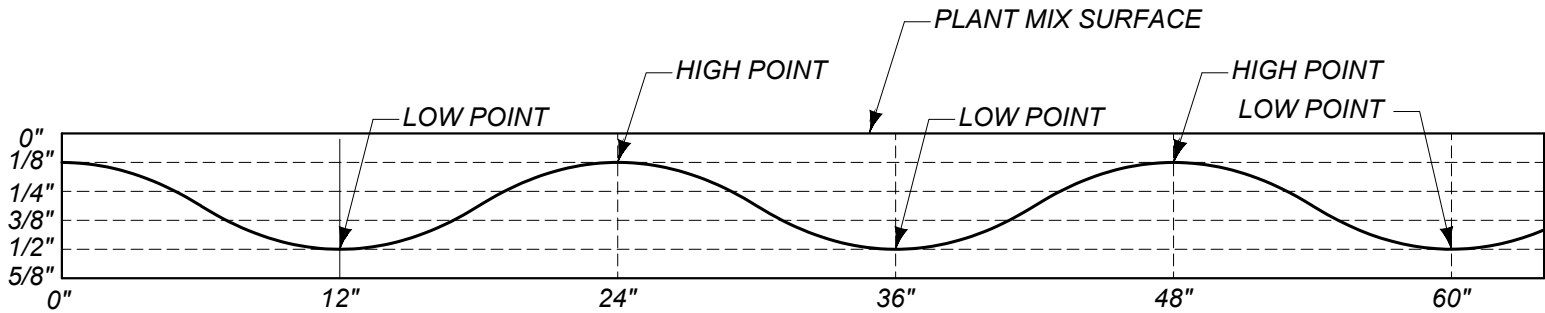
 MONTANA Department of Transportation	ROAD PLANS	
	DESIGNED BY	12/2025
	REVIEWED BY	12/2025
	CHECKED BY	12/2025
	10538000RDET009.DWG	
	12/23/2025 8:42 AM	



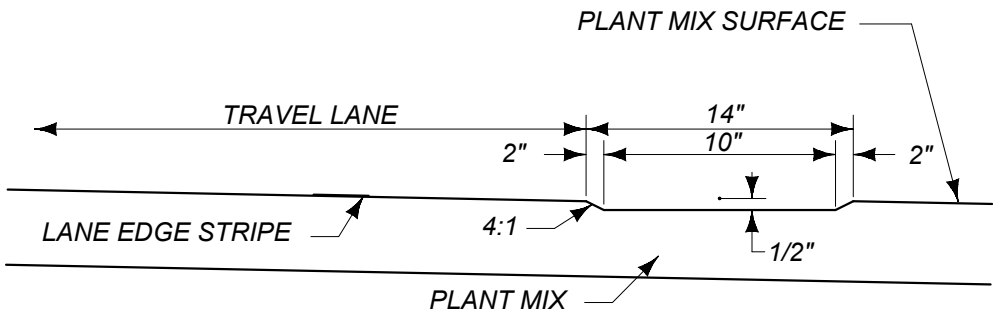
SINUSOIDAL SHOULDER RUMBLE STRIP
WITH TAPERED GROOVE PLAN VIEW



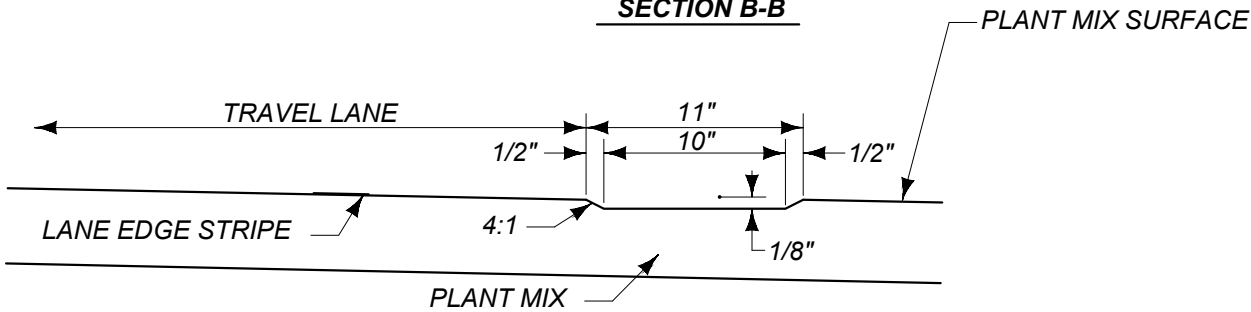
SINUSOIDAL SHOULDER RUMBLE STRIP ISOMETRIC VIEW



SECTION A-A



SECTION B-B



SECTION C-C

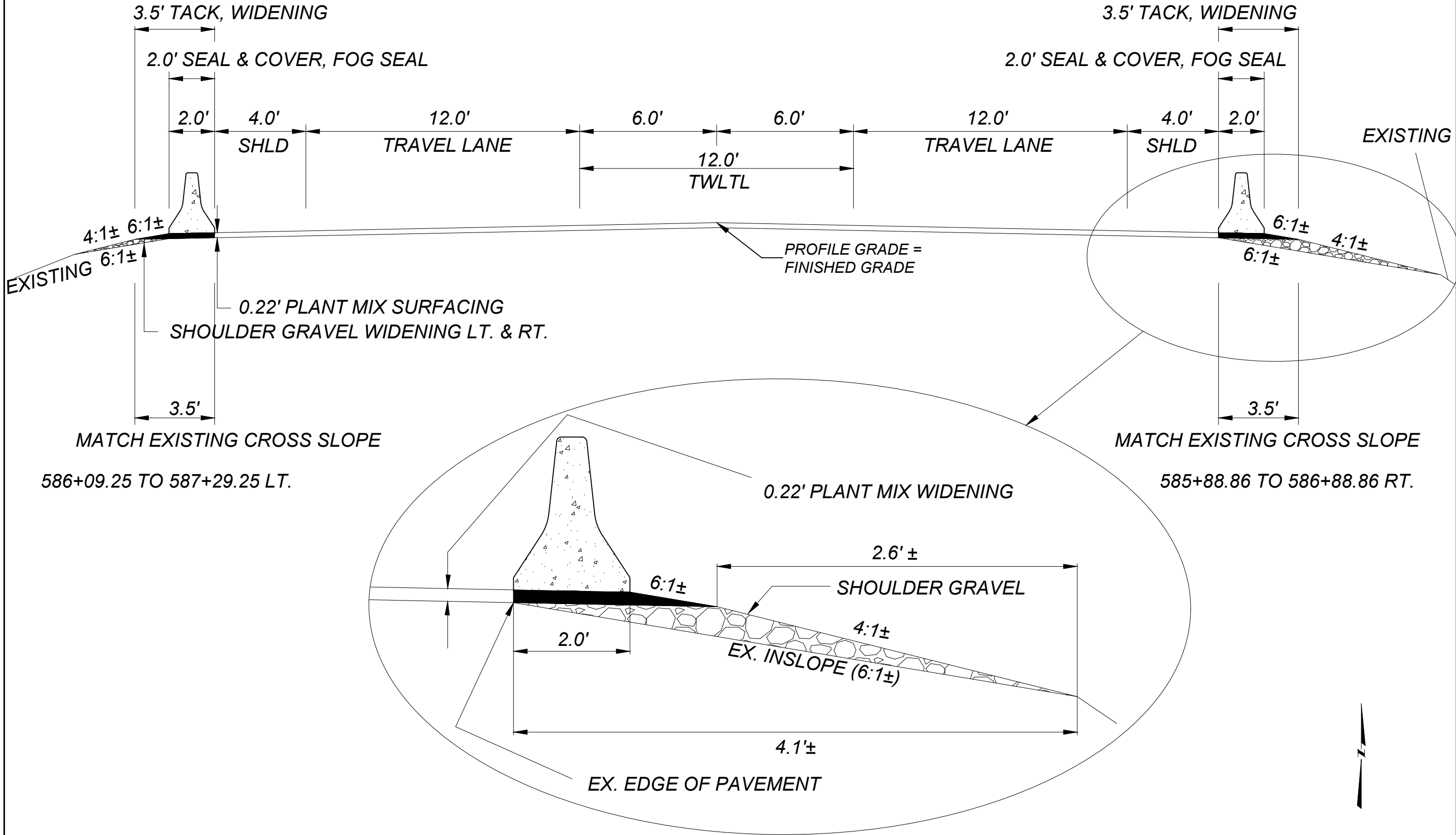
NOTES:

SEE DETAIL DRAWING 411-03 FOR REQUIREMENTS FOR INTERMITTENT RUMBLE STRIP SPACING AND DISCONTINUING RUMBLE STRIPS AT PUBLIC APPROACHES, INTERSTATE RAMPs AND GUARDRAIL RUNS.

DO NOT INSTALL SINUSOIDAL SHOULDER RUMBLE STRIPS ON CONCRETE BRIDGE DECKS AND CONCRETE BRIDGE APPROACH SLABS.

MINIMUM VERTICAL MILLING DEPTHS AND DIFFERENCE BETWEEN MILLING HIGH POINTS AND LOW POINTS SHOWN IN DETAIL. ADDITIONAL 1/8\"/>

4



SHEET NO.

20

PMS WIDENING
UNDER CBR
DETAIL

PROJECT NAME

FLORENCE - EAST

COUNTY

RAVALLI

PROJECT ID

STPS 203-1(28)10

UPN

10538000

DESIGNED BY

F. COBARRUBIAS

REVIEWED BY

J. DOLD

CHECKED BY

J. CERRECK

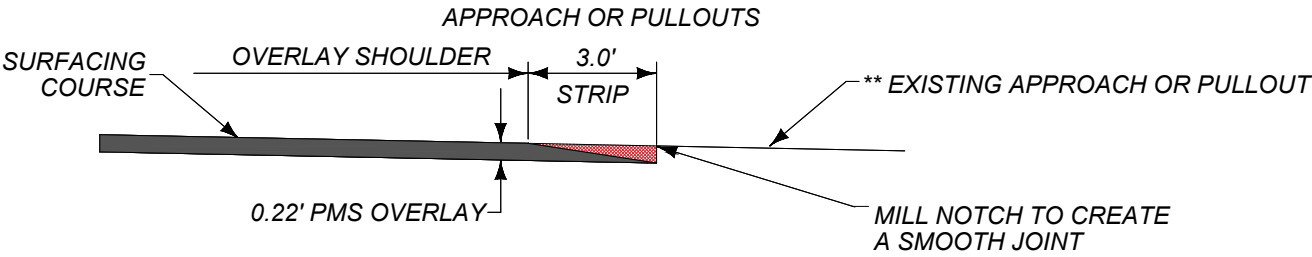
MONTANA
Department of Transportation

ROAD PLANS

3/2/2026 10:17 AM

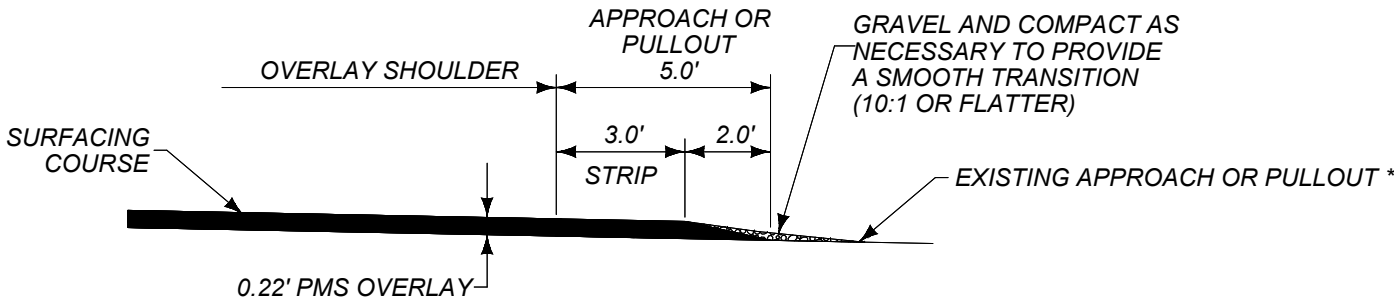
USE METHOD TO BEST FIT FIELD CONDITIONS

OPTION 1 FOR PRIVATE/FARM FIELD & PULLOUTS

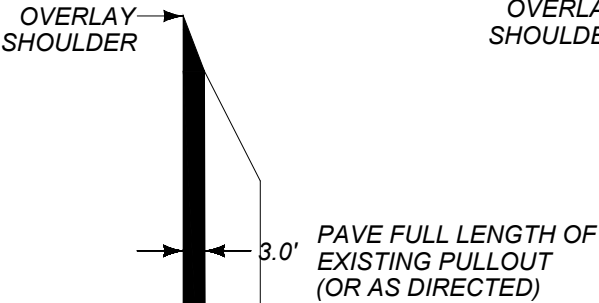


** COLD MILL NOTCH IF EXISTING APPROACH/PULLOUT IS PAVED. THE FINAL COLD MILLING DISTANCES & DEPTH TO BE DETERMINED BY THE MDT PROJECT MANAGER.

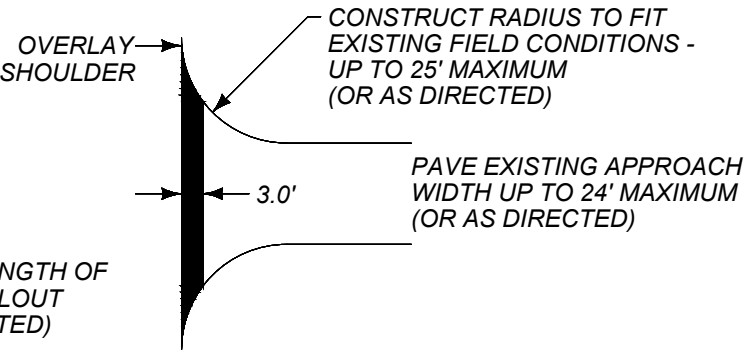
OPTION 2 FOR PRIVATE/FARM FIELD & PULLOUTS



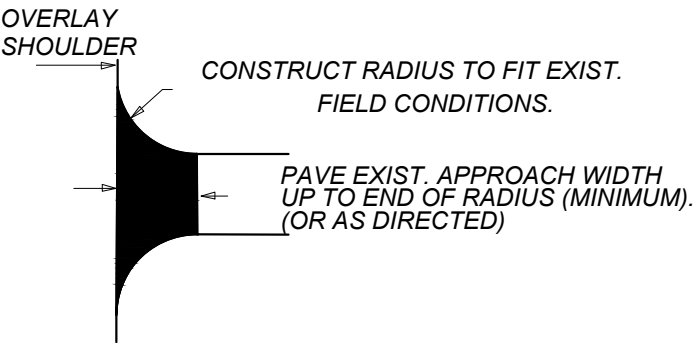
PULLOUTS



PRIVATE/FARM FIELD

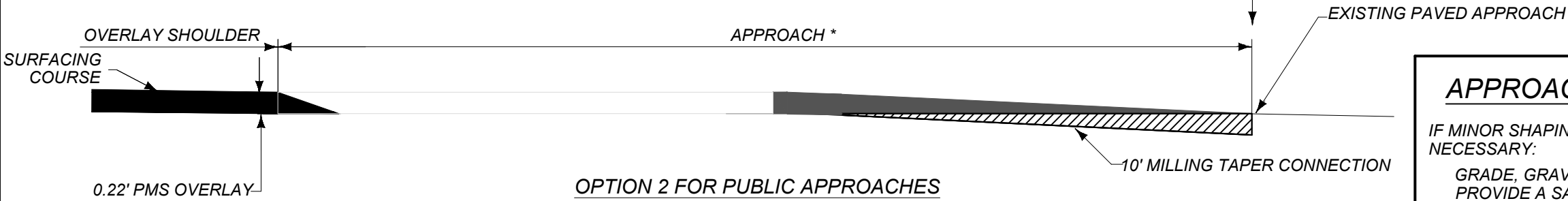


PUBLIC APPROACH

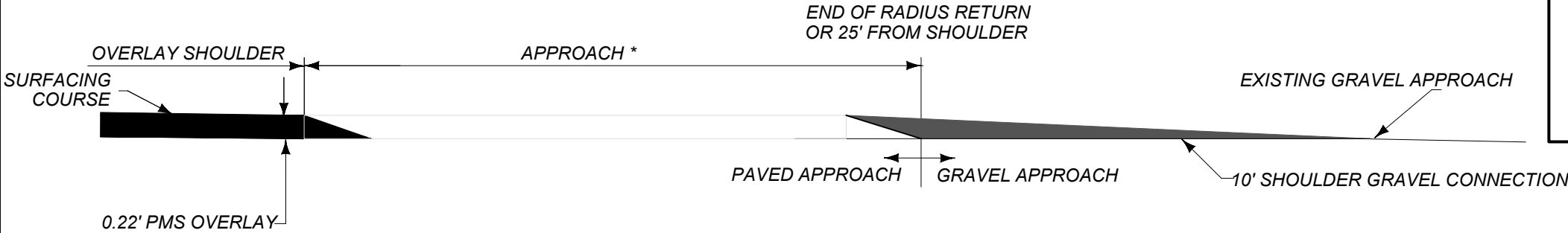


END OF RADIUS RETURN
OR 25' FROM SHOULDER

OPTION 1 FOR PUBLIC APPROACHES



OPTION 2 FOR PUBLIC APPROACHES



APPROACH PAVING PREPARATION

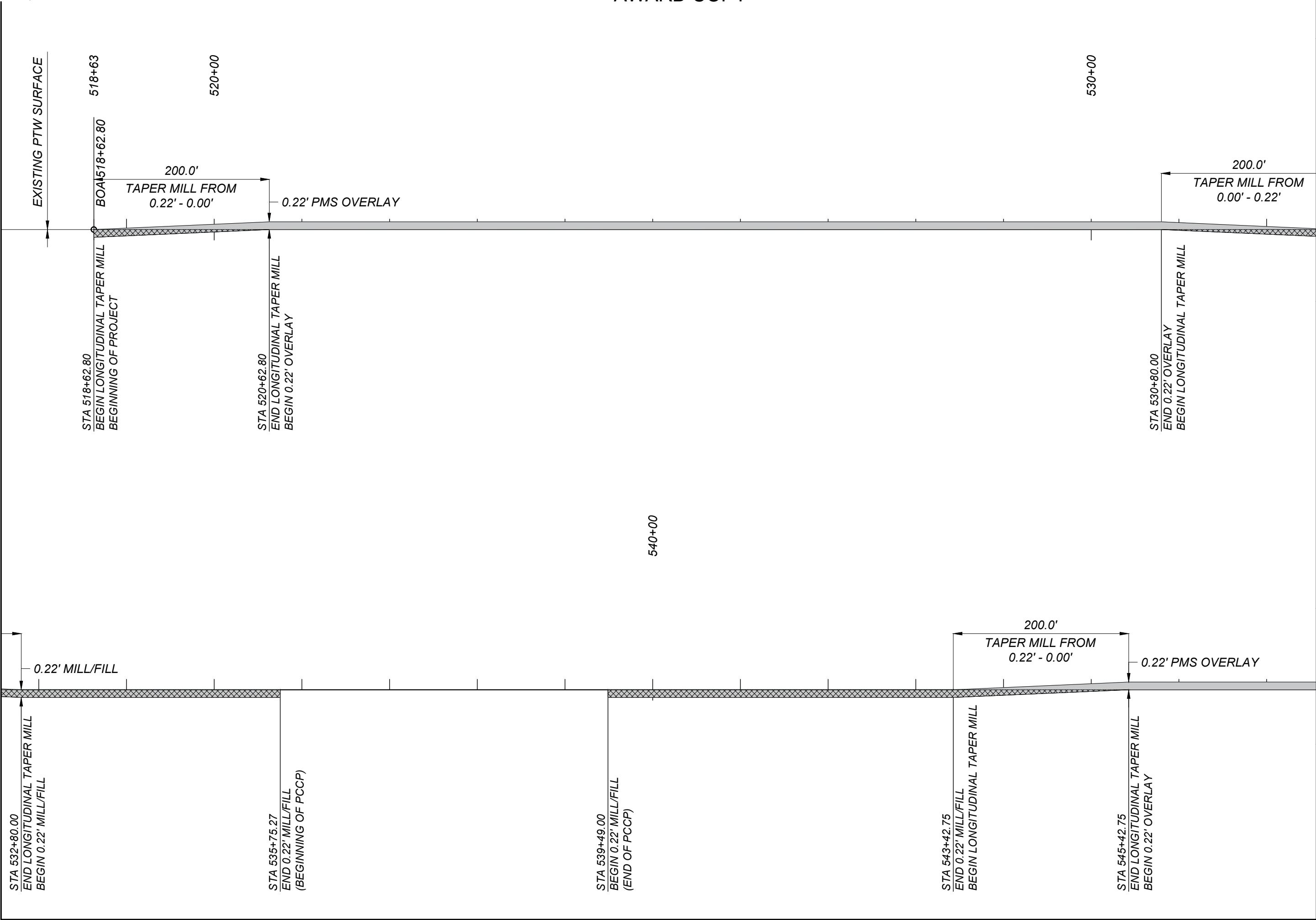
IF MINOR SHAPING OF EXISTING APPROACHES IS NECESSARY:
GRADE, GRAVEL AND COMPACT AS NEEDED TO PROVIDE A SATISFACTORY PAVING SURFACE AND AS DIRECTED BY PROJECT MANAGER.


GRAVEL USED FOR APPROACH PREPARATION IS MEASURED AND PAID FOR AS SHOULDER GRAVEL.

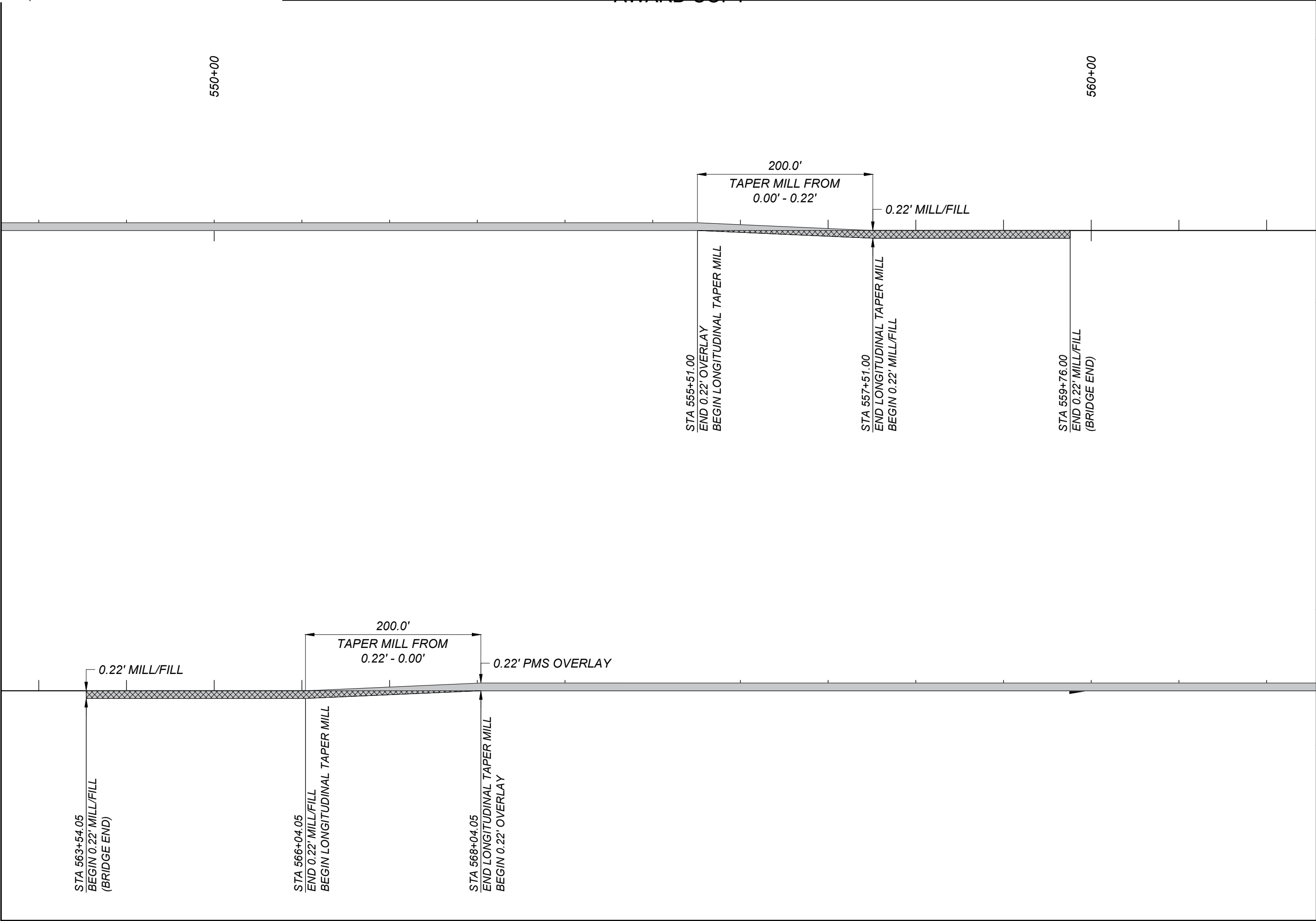
INCLUDE ALL OTHER WORK FOR APPROACH PAVING PREPARATION IN THE CONTRACT UNIT PRICE PER TON OF PLANT MIX.


NOTE: APPROACH DETAIL ONLY APPLIES WITHIN THE OVERLAY SECTION ONLY

*APPROACH AND PULLOUTS PAVING LENGTH AND MILLING TAPER LENGTH IS STATED ELSEWHERE IN THE PLANS (APPROACHES AND PULLOUTS TABLE) OR AS DIRECTED BY PROJECT MANAGER.



SHEET NO.		22		LONGITUDINAL TAPER MILL, MILL/FILL, & OVERLAY PROFILE VIEW DETAIL	
 ROAD PLANS		PROJECT NAME			
		FLORENCE - EAST			
		COUNTY			
DESIGNED BY		COUNTY		PROJECT ID	
L. HARK		09/2025		RAVALLI	
REVIEWED BY		12/2025		STPS 203-1(28)10	
J. DOLD		12/2025		UPN	
CHECKED BY		12/2025		10538000	
J. CERECK		12/2025		10538000	
3/2/2026 10:17 AM		10538000RDET004.DWG			

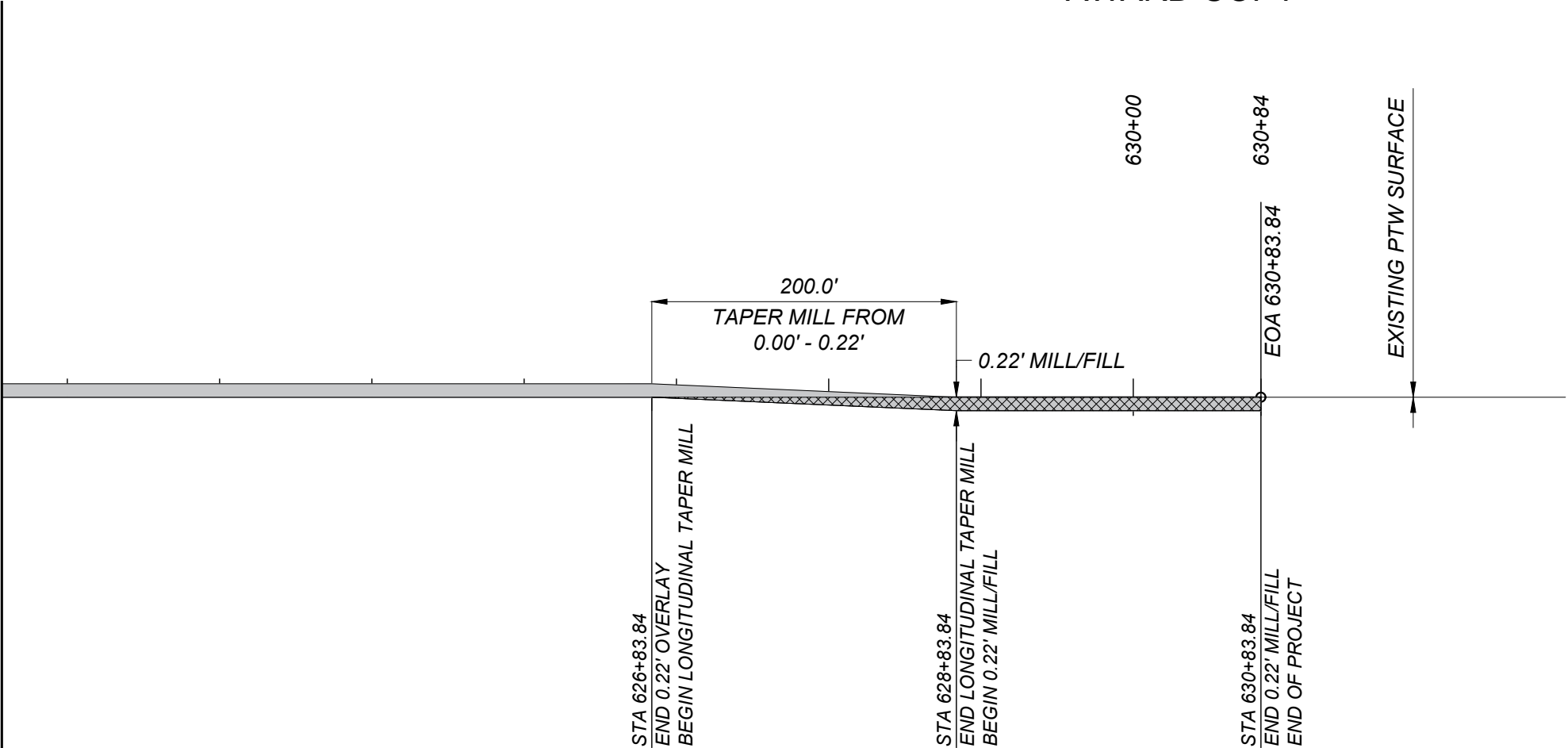



<div><div><div>MONTANA</div><div>Department of Transportation</div></div></div> <div>ROAD PLANS</div> <div>3/2/2026 10:17 AM</div>		DESIGNED BY	PROJECT NAME	
		L. HARK	FLORENCE - EAST	
		REVIEWED BY	COUNTY	RAVALLI
		J. DOLD	PROJECT ID	STPS 203-1(28)10
		CHECKED BY	UPN	10538000
		10538000RDEET004.DWG		

SHEET NO.

23

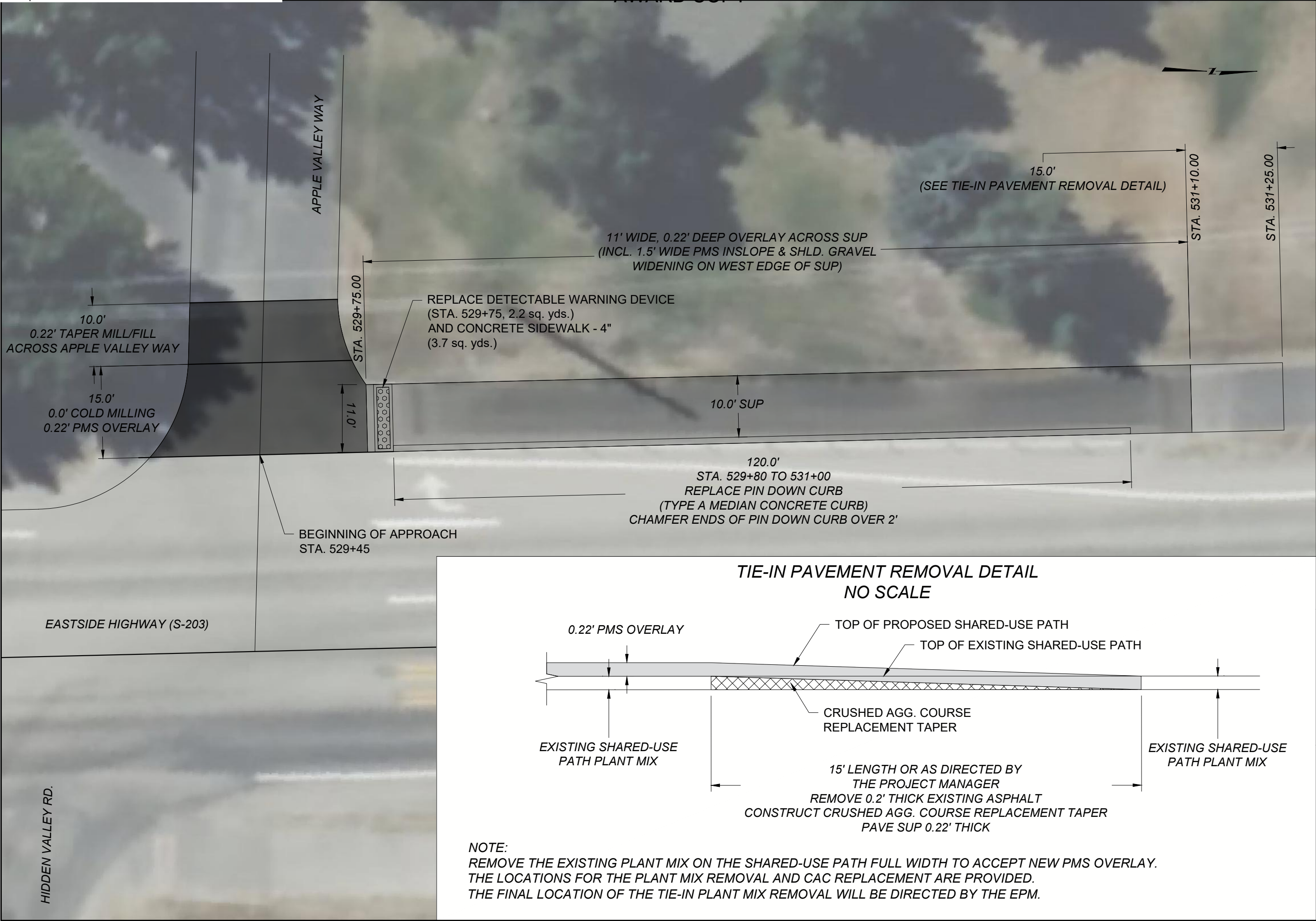
LONGITUDINAL TAPER MILL,
MILL/FILL, & OVERLAY
PROFILE VIEW
DETAIL



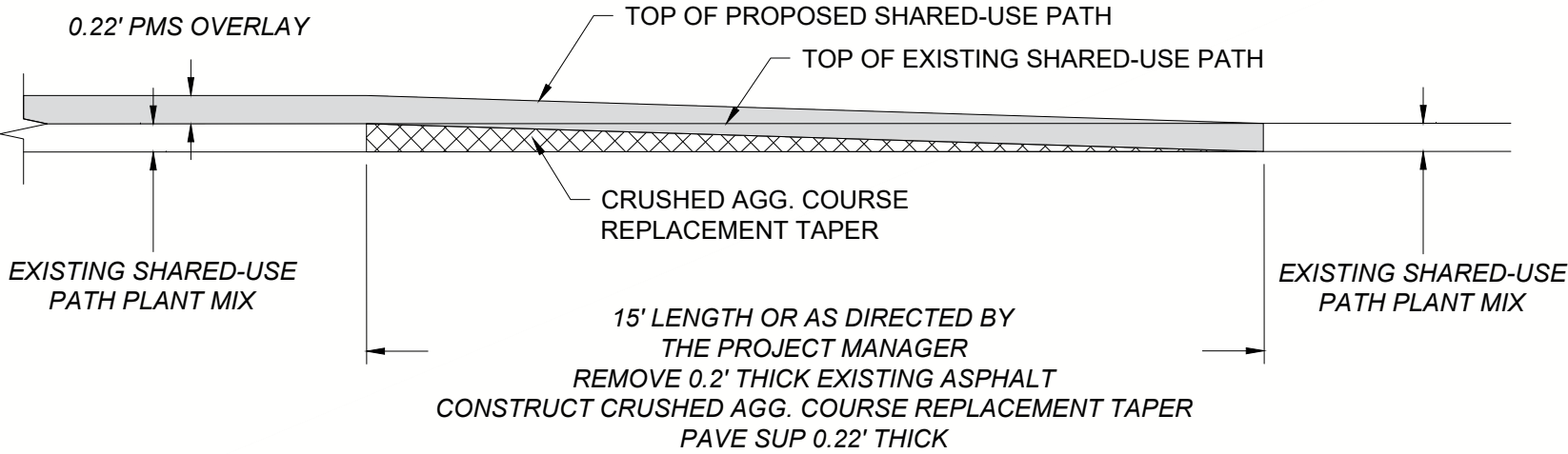
<div><div>MONTANA Department of Transportation</div></div> <div>ROAD PLANS</div>			DESIGNED BY		PROJECT NAME	
			L. HARK		FLORENCE - EAST	
			09/2025		COUNTY	
			REVIEWED BY		RAVALLI	
			J. DOLD		PROJECT ID	
12/2025		STPS 203-1(28)10				
CHECKED BY		UPN				
J. CERECK		10538000				
12/2025		10538000				
10538000RDEET004.DWG						
3/2/2026 10:17 AM						

SHEET NO.
24

LONGITUDINAL TAPER MILL,
MILL/FILL, & OVERLAY
PROFILE VIEW
DETAIL



TIE-IN PAVEMENT REMOVAL DETAIL
NO SCALE




NOTE:
REMOVE THE EXISTING PLANT MIX ON THE SHARED-USE PATH FULL WIDTH TO ACCEPT NEW PMS OVERLAY.
THE LOCATIONS FOR THE PLANT MIX REMOVAL AND CAC REPLACEMENT ARE PROVIDED.
THE FINAL LOCATION OF THE TIE-IN PLANT MIX REMOVAL WILL BE DIRECTED BY THE EPM.

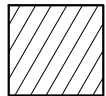
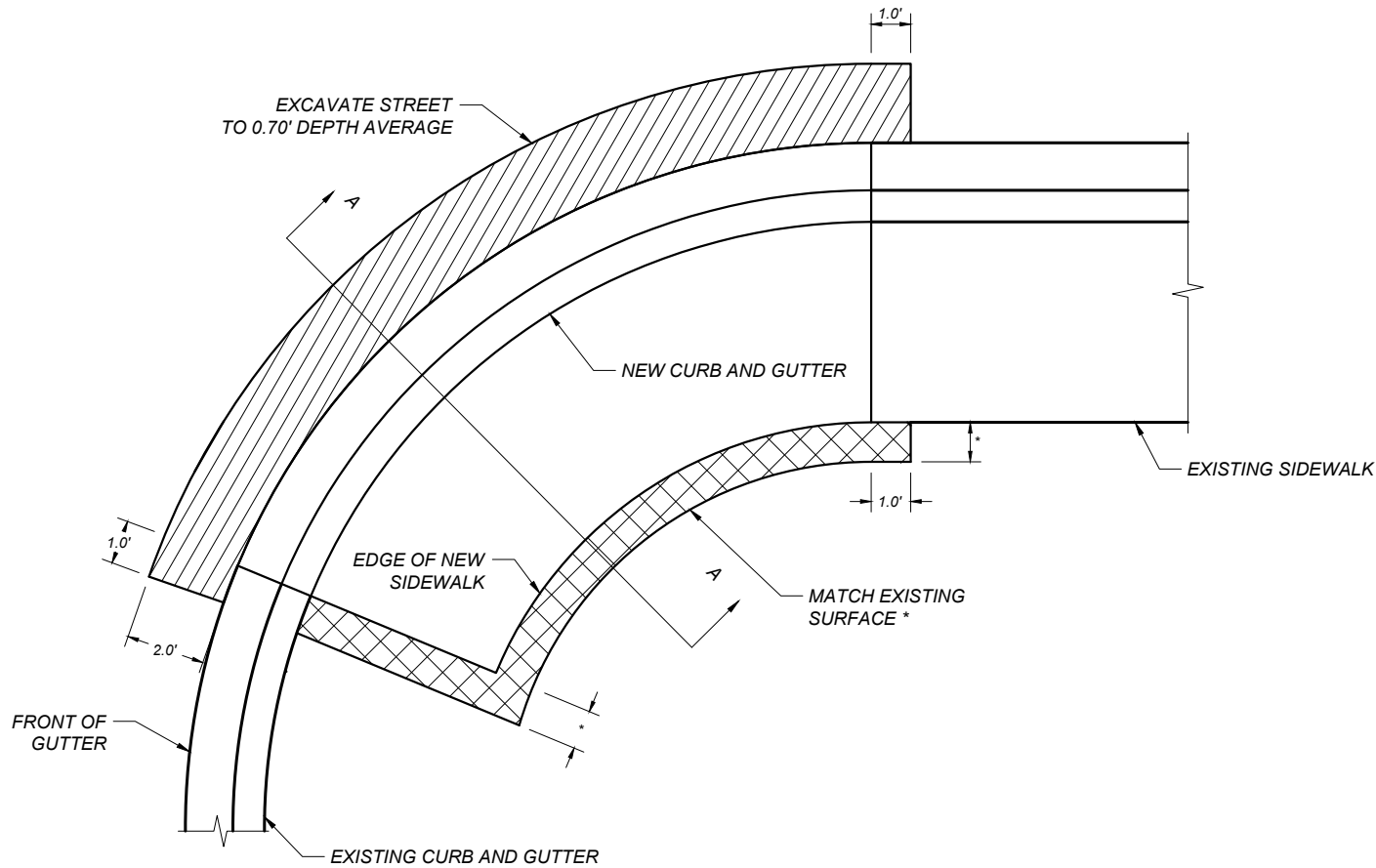
SHEET NO.		25	
APPLE VALLEY WAY & SHARED-USE PATH (SUP) OVERLAY & CONNECTION DETAIL			
PROJECT NAME	FLORENCE - EAST	DESIGNED BY	L. HARK
COUNTY	RAVALLI	REVIEWED BY	J. DOLD
PROJECT ID	STPS 203-1(28)10	CHECKED BY	J. CERECK
UPN	10538000	10538000RDET005.DWG	
MONTANA Department of Transportation		ROAD PLANS	
		3/2/2026 10:17 AM	



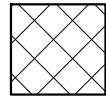
NOTE: REPLACE CONCRETE CURB AND GUTTER WITH FULL HEIGHT CURBING, AND TAPER THE CURB HEIGHT DOWN AT BOTH ENDS TO MATCH EXISTING CURB AND GUTTER CONFIGURATIONS. MATCH EXISTING LOCATION AND ELEVATIONS FOR SIDEWALK REPLACEMENTS.

SHEET NO.		26		
<div></div> <div>MONTANA Department of Transportation</div> <div>ROAD PLANS</div> <div>10/30/2025 2:00 PM</div>		PROJECT NAME		FLORENCE - EAST
		COUNTY		RAVALLI
		PROJECT ID		STPS 203-1(28)10
		UPN		10538000
		10538000RDE007.DWG		
DESIGNED BY		F. COBARRUBIAS	10/2025	
REVIEWED BY		J. DOLD	12/2025	
CHECKED BY		J. CERECK	12/2025	

CURB REPLACEMENT
DETAIL



MAXIMUM CONSTRUCTION LIMITS FOR REMOVAL OF EXISTING CURB AND GUTTER AND PLACEMENT OF FORMS FOR NEW CURB AND GUTTER.

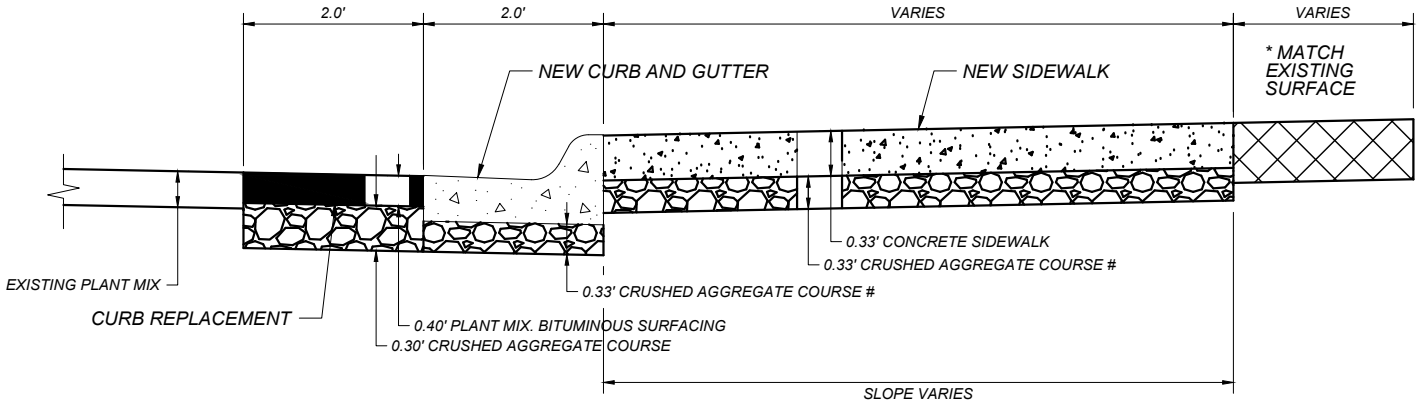


MAXIMUM CONSTRUCTION LIMITS FOR REMOVAL OF EXISTING GRASS/LANDSCAPING AND PLACEMENT OF FORMS FOR NEW SIDEWALK.

* NOTE: REPLACE SURFACING BEHIND NEW SIDEWALK TO MATCH EXISTING SURFACING, INCLUDING BUT NOT LIMITED TO: GRASS, LANDSCAPING, ASPHALT, CONCRETE, GRAVEL, ETC.

WHEN ADJACENT TO GRASS ONLY REMOVE TO A WIDTH OF 1.0' AND REPLACE WITH SOD. WHEN ADJACENT TO LANDSCAPING REPLACE WITH EQUIVALENT AS INSTRUCTED BY PROJECT MANAGER.

NOTE: ITEMS ARE NOT MEASURED FOR PAYMENT AND INCLUDED IN THE COST OF NEW SIDEWALK OR CURB AND GUTTER.



SECTION A-A

PROJECT NAME

FLORENCE - EAST

COUNTY

RAVALLI

PROJECT ID

STPS 203-1(28)10

UPN

10538000

DESIGNED BY

F. COBARRUBIAS

REVIEWED BY

J. DOLD

CHECKED BY

J. CERECK

10538000RDEET008.DWG



ROAD PLANS

11/07/2025 10:51 AM

NOTES AND ABBREVIATIONS:

MOUNTING HEIGHT REQUIREMENTS: MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08

SEE LOCATION AND SPECIFICATION SHEETS FOR PORTIONS OF PROJECT NOT INCLUDED WITHIN SIGNING PLAN SHEETS.

SIGNING AND PAVEMENT MARKING LOCATIONS ARE APPROXIMATE. PROJECT MANAGER TO FIELD ADJUST AS NECESSARY.

ADOPT A HIGHWAY: IF SIGNS N7-1/N7-1P EXIST, CONTRACTOR WILL CONFIRM THAT THE GROUP NAME ON THE SIGN(S) EXISTING AT THE TIME OF CONSTRUCTION CORRESPONDS TO THE GROUP NAME ON THE SIGN(S) SHOWN IN PLANS. IF NAME IS DIFFERENT, PROJECT MANAGER WILL CONTACT TRAFFIC & SAFETY BUREAU SIGNING SECTION WITH THE CORRECT NAME AND A NEW SIGN DESIGN WILL BE PROVIDED.

HORIZONTAL ALIGNMENT: THE ALIGNMENT SHOWN IN THE PLANS IS NOT A RE-CREATION OF THE AS-BUILT ALIGNMENT AND DOES NOT SUPERSEDE THE EXISTING. THE INTENT OF THE SHOWN ALIGNMENT IS TO ASSIST IN LAYING OUT SIGNING ELEMENTS.

RSFO = REPLACE SIGN FACE ONLY

FY = FLUORESCENT YELLOW SHEETING REQUIRED

MBB = MOUNT BACK TO BACK

✕ = STANDARD BREAKAWAY DEVICE:

- FOR WOOD POST SEE DETAILED DRAWING 619-20.
- FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.

▲ = SINGLE SQUARE TUBE REQUIRED. MOUNTED IN HEAVY DUTY STUB.

★ = TELESKOPEDED SQUARE TUBES (2-1/4" & 2-1/2") WITH SLIP BASE BREAKAWAY REQUIRED. MOUNTED IN HEAVY DUTY STUB.

BGR = BEHIND GUARDRAIL

SUP = SHARED USE PATH

BBR = BACKBRACING REQUIRED:

- FOR WOOD POLE SEE DET. DWG 619-22
- FOR STEEL POST 2" X 2" X 1/4" REQUIRED. SEE DET. DWG 619-16
- FOR STRUCTURAL STEEL POST 2 3/4" X 2 3/8" EXTRUDED "T" SECTION BACKBRACE REQUIRED. SEE DET. DWG 619-19
- FOR CANTILEVER POST, SEE DET. DWG 619-18
- FOR GUIDE SIGN PANELS, USE EXTRUDED "T" SECTION BACKBRACE. SEE DET. DWG 619-04

USE HARDWARE MEETING REQUIREMENTS OF SECTION 704

SUMMARY
SIGNING & DELINEATION QUANTITIES

MATERIAL	TOTAL	UNIT
SIGNS-ALUM REFL SHEET XI	588.1	SQFT
SIGNS-ALUM SHEET INCR XI	32.0	SQFT
REMOVE SIGN	73	EACH
REMOVE SIGN-GUIDE	2	EACH
POSTS-STEEL U SIGN	40	LB
POSTS-TUBULAR STEEL-SQ-PERF	560	LB
POLES-TREATED WOOD 4 IN	37	EACH
POLES-TREATED WOOD 5 IN	6	EACH
POLES-TREATED WOOD 6 IN	1	EACH
SQ TUBLR SLIP BASE BKWY-3 IN (76MM)	3	EACH
DELINEATOR TYPE 1	149	EACH
DELINEATOR TYPE 2	8	EACH
DELINEATOR-FLEX SURF MTD WH	23	EACH
DELINEATOR-FLEX SURF MTD YLW	11	EACH

DELINEATION SUMMARY

SYMBOL	DESIGN	TOTAL
⊥	A	106
⊥	C	8
⊥	D	26
⊥	F	17
▲	White FLEX SURF MTD	23
▲	Yellow FLEX SURF MTD	11

SHEET NO.

S1

SIGNING NOTES AND
SUMMARY FRAMES

PROJECT NAME

FLORENCE - EAST

COUNTY

RAVALLI

PROJECT ID

STPS 203-1(28)10

UPN

10538000

DESIGNED BY

7/2025

L MOREY

REVIEWED BY

8/2025

N THOLT

CHECKED BY

8/2025














N STYREN

10538000SISUM001.DWG



SIGNING PLANS

2/9/2026 3:59 PM

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES														ADDITIONAL INFORMATION		SHEET NO.			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES)			FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D / MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET		FEET					CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)			STEEL POST (LBS.)				# OF BREAKAWAYS	REMOVE		RESET		SIGN IMAGE	REMARKS		
				W	X	H			TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED)						SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	6" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST			SIGN	GUIDE	SIGN				GUIDE
													X	Y	Z																					
13+85	L	USE AS IS	D3-1 (Huck) (2x)																																SIGN LOCATIONS AND SPECIFICATIONS	
			R1-1																																	
16+10	L	NEW	W11-1	30	X	30			10.0	4" Treated Wood Pole		5.1	3.0	12.7						6.3	14														SIGN LOCATIONS AND SPECIFICATIONS	
			W16-1P	18	X	12													1.5																	
17+70	R	USE AS IS	R3-9j																																	SIGN LOCATIONS AND SPECIFICATIONS
17+70	L	USE AS IS	R3-9k																																	
21+45	L	REPLACE	R2-1 (60)	24	X	30			10.0	4" Treated Wood Pole		5.0	3.0	12.3					5.0	14							1									
22+45	L	REPLACE	D3-2 (Apple) (2x)	30	X	24			6.0	4" Treated Wood Pole		5.0	3.0	13.8					10.0	14							1								SIGN LOCATIONS AND SPECIFICATIONS	
			R1-1	30	X	30													5.2																	
24+90	R	REPLACE	W2-6	30	X	30	FY		2.0 outside SUP	4" Treated Wood Pole		6.6	3.0	11.6					6.3	12							1								SIGN LOCATIONS AND SPECIFICATIONS	
			W16-8P (8 Mile)	30	X	18	FY												3.8																	
26+70	R	RSFO	R3-9k	24	X	42													7.0								1									SIGN LOCATIONS AND SPECIFICATIONS
26+70	L	RSFO	R3-9j	24	X	42													7.0								1									

DESIGNED BY

L MOREY

7/2025

REVIEWED BY

N THOLT

8/2025

CHECKED BY

N STYREN

8/2025

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MONTANA

Department of Transportation

SIGNING PLANS

2/9/2026 3:59 PM

PROJECT NAME

FLORENCE - EAST

COUNTY


RAVALLI

PROJECT ID

STPS 203-1(28)10

UPN

10538000



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8/2025

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N STYREN















8/2025

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MONTANA
Department of Transportation

SIGNING PLANS

2/9/2026 3:59 PM

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION		SHEET NO.				
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	W X H PANEL SIZE (INCHES)	FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D / MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	FEET				CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)			STEEL POST (LBS.)				REMOVE		RESET	SIGN IMAGE	REMARKS						
									SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED)				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	6" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN					GUIDE	SIGN	GUIDE		
												X																						Y	Z
35+95	M	REPLACE	R6-1R	48 X 18			2.0	2.0" Tubular Stl-Square		7.0	3.0	10.0			▲		6.0								1				REMOVE R6-4, NEW R6-1R						
35+95	M	REPLACE	R6-1R	48 X 18			2.0	2.0" Tubular Stl-Square		7.0	3.0	10.0			▲		6.0								1				REMOVE R6-4, NEW R6-1R						
36+58	M	REPLACE	M3-1P	24 X 12			2.0	2.25" 2.5" Tubular Stl-Square		7.0	3.0	11.4			★		2.0								1	1									
			M1-12 (203)	24 X 24												4.0																			
			M6-2R	21 X 15												2.2																			
36+60	M	REPLACE	D3-1 (Eastside) (2x)	36 X 12		MBB	2.0	2.0" Tubular Stl-Square		7.0	3.0	12.1			▲		6.0								1										
			R1-2	36 X 36												3.9																			
36+60	M	RSFO	R1-2	36 X 36												3.9								1											
38+00	R	REPLACE	M3-1P	24 X 12			10.0	4" Treated Wood Pole		5.0	3.0	12.9				2.0	14								1										
			M1-12 (203)	24 X 24												4.0																			
39+10	L	RSFO	R3-8.5	48 X 48												16.0								1											
40+40	R	REPLACE	W4-2R	36 X 36			10.0	4" Treated Wood Pole		5.0	3.0	14.1				9.0	16							1											
41+70	R	RSFO	R3-9j	24 X 42												7.0								1											
42+45	L	RSFO	R3-9k	24 X 42												7.0								1											

DESIGNED BY
L MOREY

7/2025

REVIEWED BY
N THOLT

8/2025

CHECKED BY
N STYREN

8/2025

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MONTANA

Department of Transportation

SIGNING PLANS

PROJECT NAME
FLORENCE - EAST

COUNTY
RAVALLI


PROJECT ID
STPS 203-1(28)10

UPN
10538000

SIGN LOCATIONS AND SPECIFICATIONS

















S4

2/9/2026 3:59 PM



SIGNING PLANS

2/9/2026 3:59 PM

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION		SHEET NO.
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	W X H PANEL SIZE (INCHES)	FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	FEET				CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)			STEEL POST (LBS.)				REMOVE		RESET		SIGN IMAGE	REMARKS	
									SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	X Y Z SUPPORT LENGTH (ESTIMATED)				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	6" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN GUIDE	SIGN GUIDE				
83+65	R	REPLACE	D3-1 (Klements) (2x)	36 X 12			2.0	4" Treated Wood Pole		5.0	3.0	12.2			BGR	6.0		14							1						
			R1-1	30 X 30												5.2															
98+25	L	REPLACE	R5-3	24 X 24			2.0 outside SUP	4" Treated Wood Pole		4.0	3.0	9.5				4.0		10							1						
98+55	L	REPLACE	D3-1 (Ross) (2x)	24 X 12			6.0	4" Treated Wood Pole		5.0	3.0	10.2				4.0		12							1						
99+15	L	REPLACE	R5-3	24 X 24			2.0 outside SUP	4" Treated Wood Pole		4.0	3.0	9.5				4.0		10							1						
110+90	R	NEW	D10-2 (12) (2X)	10 X 27			4.0	2.0lb Steel U Post		4.0	3.0	10.0				3.8							20								
118+50	R	REPLACE	D3-1 (Schrage) (2x)	36 X 12			6.0	4" Treated Wood Pole		5.0	3.0	12.8				6.0		14							1						
			R1-1	30 X 30												5.2															
119+40	L	REPLACE	R2-1 (60)	24 X 30			2.0 outside SUP	4" Treated Wood Pole		7.0	3.0	13.0				5.0		14							1						
120+40	R	RSFO	R3-9k	24 X 42												7.0									1						
120+90	L	REPLACE	R3-9j	24 X 42			2.0 outside SUP	4" Treated Wood Pole		7.0	3.0	14.0				7.0		14							1						
121+25	L	REPLACE	R5-3	24 X 24			2.0 outside SUP	4" Treated Wood Pole		4.0	3.0	9.5				4.0		10							1						
121+35	L	REPLACE	W14-2aL W14-2aR	36 X 9			6.0	4" Treated Wood Pole		7.0	3.0	15.7				4.5		16							1						
			D3-1 (Wildlife) (2x)	36 X 12												6.0															
			R1-1	30 X 30												5.2															
121+90	L	REPLACE	R5-3	24 X 24			2.0 outside SUP	4" Treated Wood Pole		4.0	3.0	9.5				4.0		10							1						

DESIGNED BY

L MOREY

REVIEWED BY

N THOLT

CHECKED BY

N STYREN

7/2025

8/2025

8/2025

10538000\S\SUM001.DWG

MONTANA

Department of Transportation

SIGNING PLANS

FLORENCE - EAST

RAVALLI

STPS 203-1(28)10

10538000

SIGN LOCATIONS AND SPECIFICATIONS

S6

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION		SHEET NO.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	W X H PANEL SIZE (INCHES)	FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	FEET				CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)			STEEL POST (LBS.)				REMOVE		RESET	SIGN IMAGE	REMARKS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							

DESIGNED BY

L MOREY

REVIEWED BY

N THOLT

CHECKED BY

N STYREN

PROJECT NAME

FLORENCE - EAST

COUNTY

RAVALLI

PROJECT ID


STPS 203-1(28)10

UPN

10538000













MONTANA

Department of Transportation



SIGNING PLANS

2/9/2026 3:59 PM

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES														ADDITIONAL INFORMATION	
STATION / R.P.	LFT / MDN / RGT / OH ACTION		SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES)		FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D / MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	FEET				CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)			STEEL POST (LBS.)				REMOVE		RESET		SIGN IMAGE	REMARKS	
										SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	X SUPPORT LENGTH (ESTIMATED)				SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.		6" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN GUIDE	SIGN GUIDE			
151+10	SUP	REPLACE	W1-6R	24	X 12			2.0 from SUP	4" Treated Wood Pole		4.0	3.0	10.7				2.0		12								1					Sign for SUP, see map for location
152+70	L	RSFO	R3-8.7	48	X 42												14.0									1						
152+95	L	RSFO	W11-2	36	X 36	FY											9.0									1						
			W16-7PL	30	X 21	FY											4.4															
153+05	R	RSFO	W11-2	36	X 36	FY											9.0									1						
			W16-7PL	30	X 21	FY											4.4															
153+55	R	REPLACE	D3-1 (Antrim) (2x)	30	X 12		MBB	6.0	4" Treated Wood Pole		5.0	3.0	12.8				5.0		14							1						
			R1-1	30	X 30												5.2															
153+75	L	REPLACE	R1-5L	36	X 36			10.0	4" Treated Wood Pole		5.0	3.0	12.9				9.0		14							1						
154+15	R	REPLACE	R2-1 (50)	24	X 30			10.0	4" Treated Wood Pole		5.0	3.0	12.3				5.0		14							1						
154+35	L	REMOVE SIGN	M1-12 (203)																							1						
			M6-4P																													

SHEET NO.
S8

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME
FLORENCE - EAST

COUNTY
RAVALLI

PROJECT ID
STPS 203-1(28)10

UPN
10538000

DESIGNED BY
L MOREY

7/2025

REVIEWED BY
N THOLT

8/2025

CHECKED BY
N STYREN















8/2025

10538000\SJUM001.DWG

MONTANA
Department of Transportation

SIGNING PLANS

2/9/2026 3:59 PM

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES														ADDITIONAL INFORMATION					
STATION / R.P.	LFT / MDN / RGT / OH ACTION		SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES)			FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D	MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	FEET			CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)			STEEL POST (LBS.)				REMOVE		RESET		SIGN IMAGE	REMARKS				
				SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH						SUPPORT LENGTH (ESTIMATED)						SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	6" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN			GUIDE			
												X	Y	Z																						
154+80	L	NEW	M3-3P	21	X	15		BBR		10.0	2.25" 2.5" Tubular Stl-Square		5.0	3.0	11.7				★																	
			M1-12 (203)	24	X	24		BBR										4.0																		
			M5-3PL					BBR																												
			M3-1P					BBR																												
			M1-12 (203)					BBR																												
			M6-2PR					BBR																												
155+90	L	REMOVE SIGN	M2-1P																								1									
			M1-12 (203)																																	
155+90	L	REPLACE	W2-6	30	X	30				10.0	4" Treated Wood Pole		5.6	3.0	13.9						6.3		14							1				REMOVE old assembly at approx. 154+70, place new assembly at approx. 155+90		
			W16-8P (Eastside)	42	X	8														2.3																
US 93 (past end of project limits)																																				
A		REMOVE SIGN	W10-2R																									1						Railroad no longer present		
			W10-5PR																																	
B		REMOVE SIGN	W10-2L																									1						Railroad no longer present		
			W10-5PL																																	
PROJECT TOTALS																		588.1	32.0	482	100	16			560		40	3	73	2						

SHEET NO.
S9

SIGN LOCATIONS AND SPECIFICATIONS

DESIGNED BY
L MOREY

REVIEWED BY
N THOLT


CHECKED BY
N STYREN

PROJECT NAME
FLORENCE - EAST

COUNTY
RAVALLI

PROJECT ID
STPS 203-1(28)10

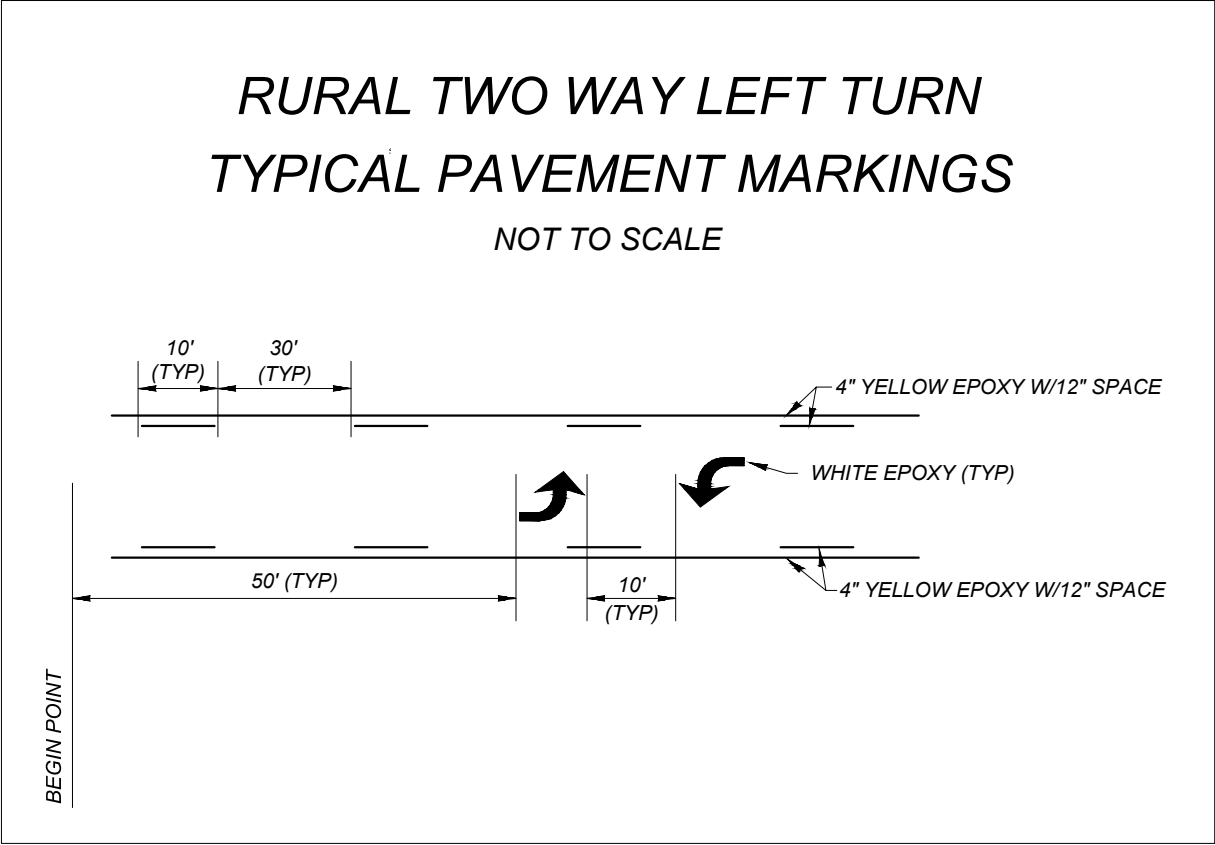
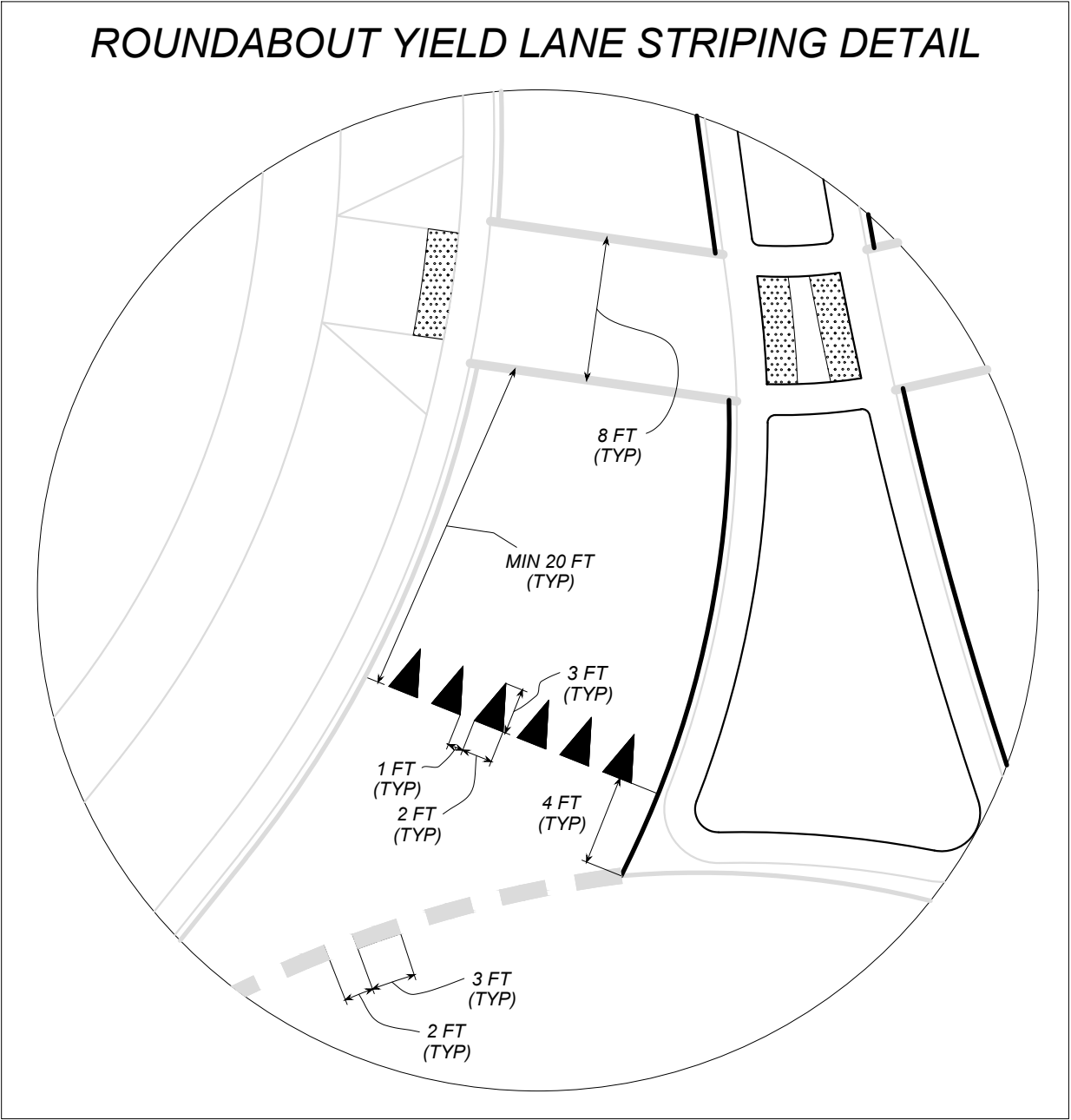
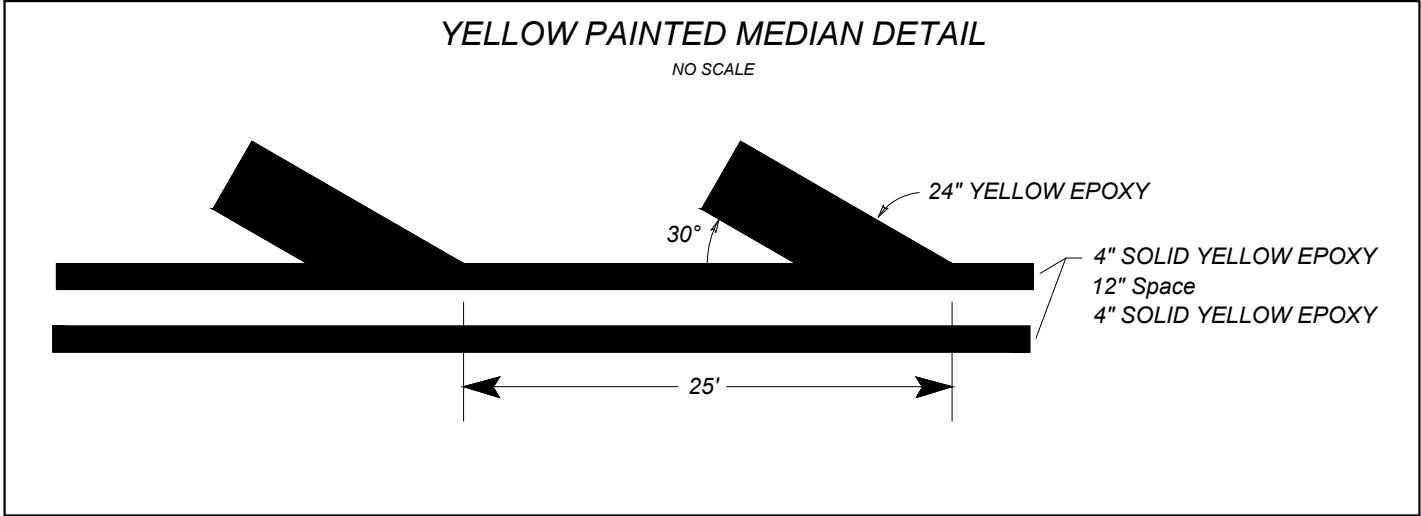
UPN
10538000




MONTANA
Department of Transportation

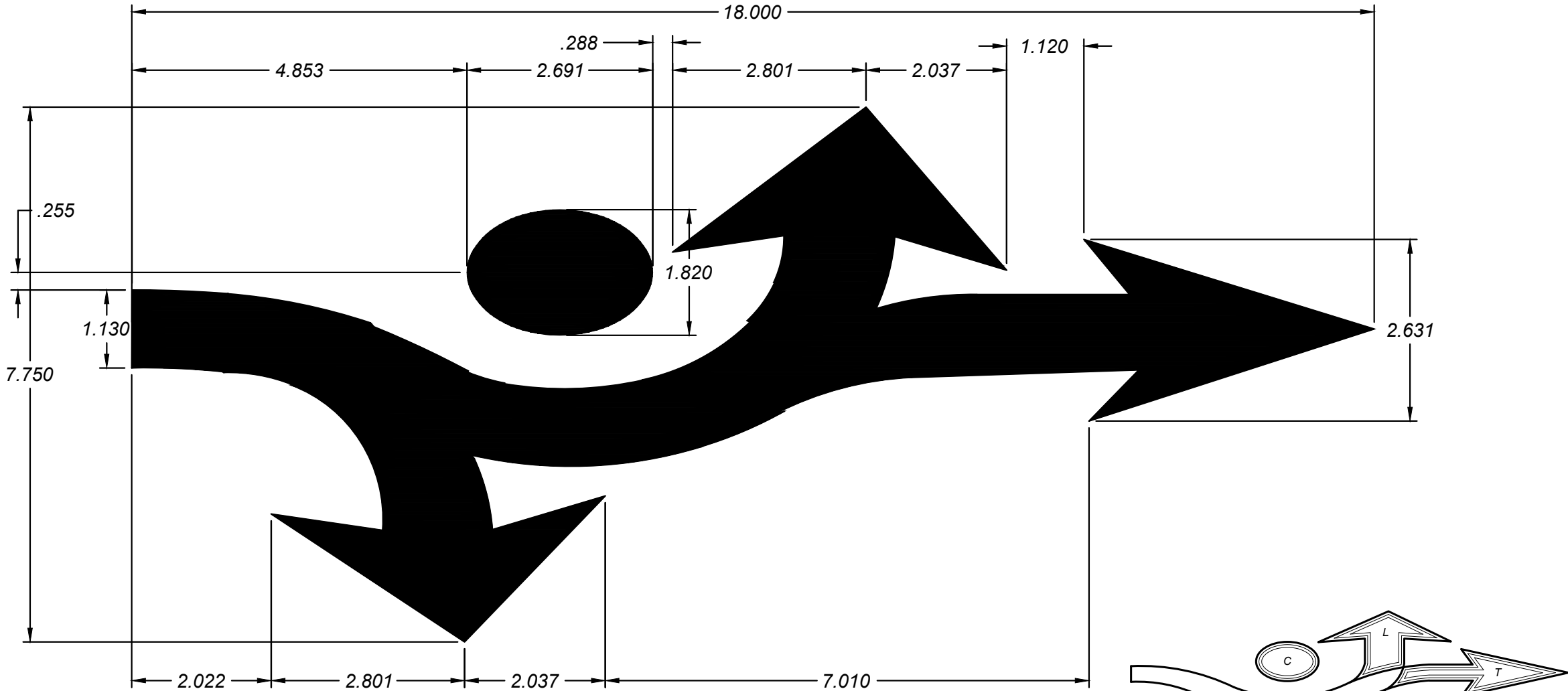
SIGNING PLANS

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 MONTANA Department of Transportation	DESIGNED BY		PROJECT NAME	
	L MOREY	7/2025	FLORENCE - EAST	
	REVIEWED BY		COUNTY	RAVALLI
	N THOLT	8/2025	PROJECT ID	STPS 203-1(28)10
CHECKED BY		8/2025	UPN	10538000
N STYREN		10538000\$JUN001.DWG		
SIGNING PLANS		2/9/2026 3:59 PM		

PAVEMENT MARKINGS - ROUNDABOUT TRAFFIC ARROWS
NO SCALE



TYPE LC
18.07 FT²
PAINT 0.16 GAL./EA.
EPOXY 0.23 GAL./EA.



TYPE TC
18.56 FT²
PAINT 0.17 GAL./EA.
EPOXY 0.23 GAL./EA.



TYPE LTC
24.19 FT²
PAINT 0.22 GAL./EA.
EPOXY 0.30 GAL./EA.



TYPE TRC
23.07 FT²
PAINT 0.21 GAL./EA.
EPOXY 0.29 GAL./EA.



TYPE LTRC
28.70 FT²
PAINT 0.26 GAL./EA.
EPOXY 0.36 GAL./EA.



TYPE T
15.07 FT²
PAINT 0.14 GAL./EA.
EPOXY 0.19 GAL./EA.



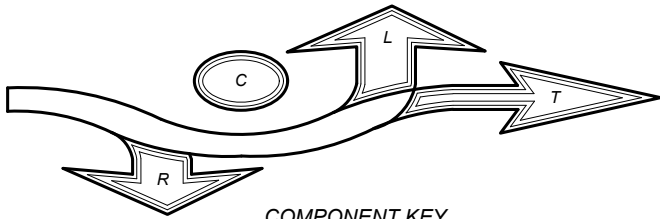
TYPE LT
20.69 FT²
PAINT 0.19 GAL./EA.
EPOXY 0.26 GAL./EA.



TYPE TR
19.58 FT²
PAINT 0.18 GAL./EA.
EPOXY 0.24 GAL./EA.

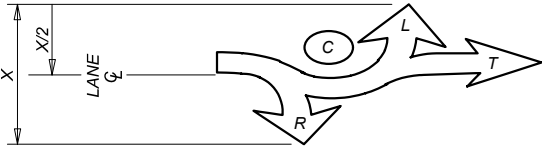


TYPE LTR
20.69 FT²
PAINT 0.23 GAL./EA.
EPOXY 0.32 GAL./EA.



COMPONENT KEY

THE LABELED AREAS ABOVE CORRESPOND TO THE PORTIONS NEEDED FOR EACH TYPE OF ROUNDABOUT TRAFFIC ARROW. FOR EXAMPLE: THE ROUNDABOUT TRAFFIC ARROW TYPE TRC REQUIRES THE "T", "R", AND "C" AREAS. (THROUGH, RIGHT, CENTER)



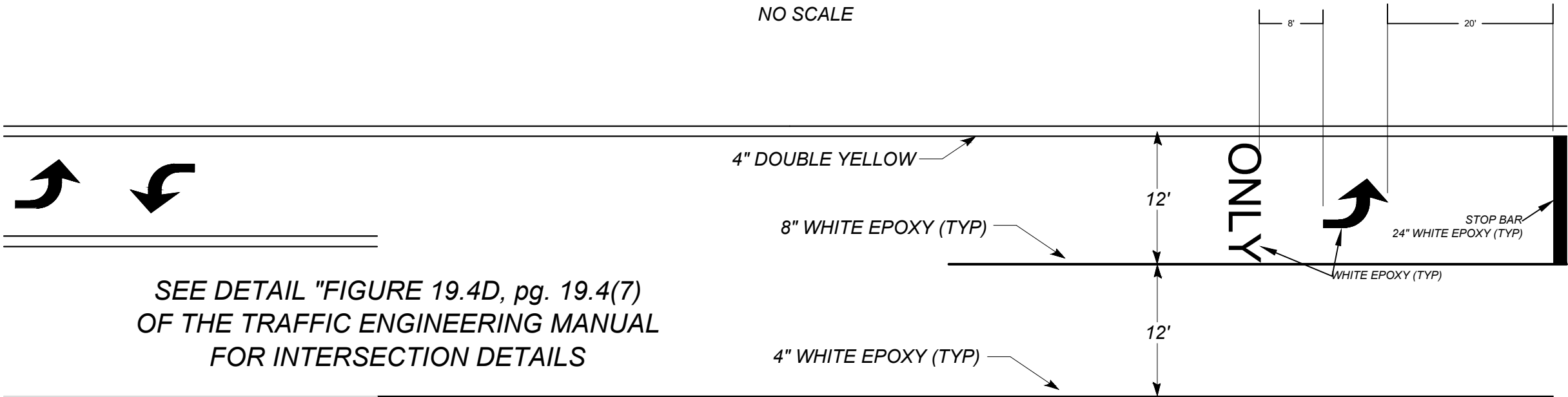
ROUNDABOUT TRAFFIC ARROW TYPE LTRC


PLACE THE FISH HOOK ARROW IN ADVANCE OF THE ROUNDABOUT CENTERED IN THE LANE IN WHICH IT IS TO BE PLACED

	DESIGNED BY		PROJECT NAME	
	L MOREY	7/2025	FLORENCE - EAST	
	REVIEWED BY		COUNTY	RAVALLI
	N THOLT	8/2025	PROJECT ID	STPS 203-1(28)10
SIGNING PLANS	CHECKED BY		UPN	10538000
	N STYREN	8/2025	UPN	10538000
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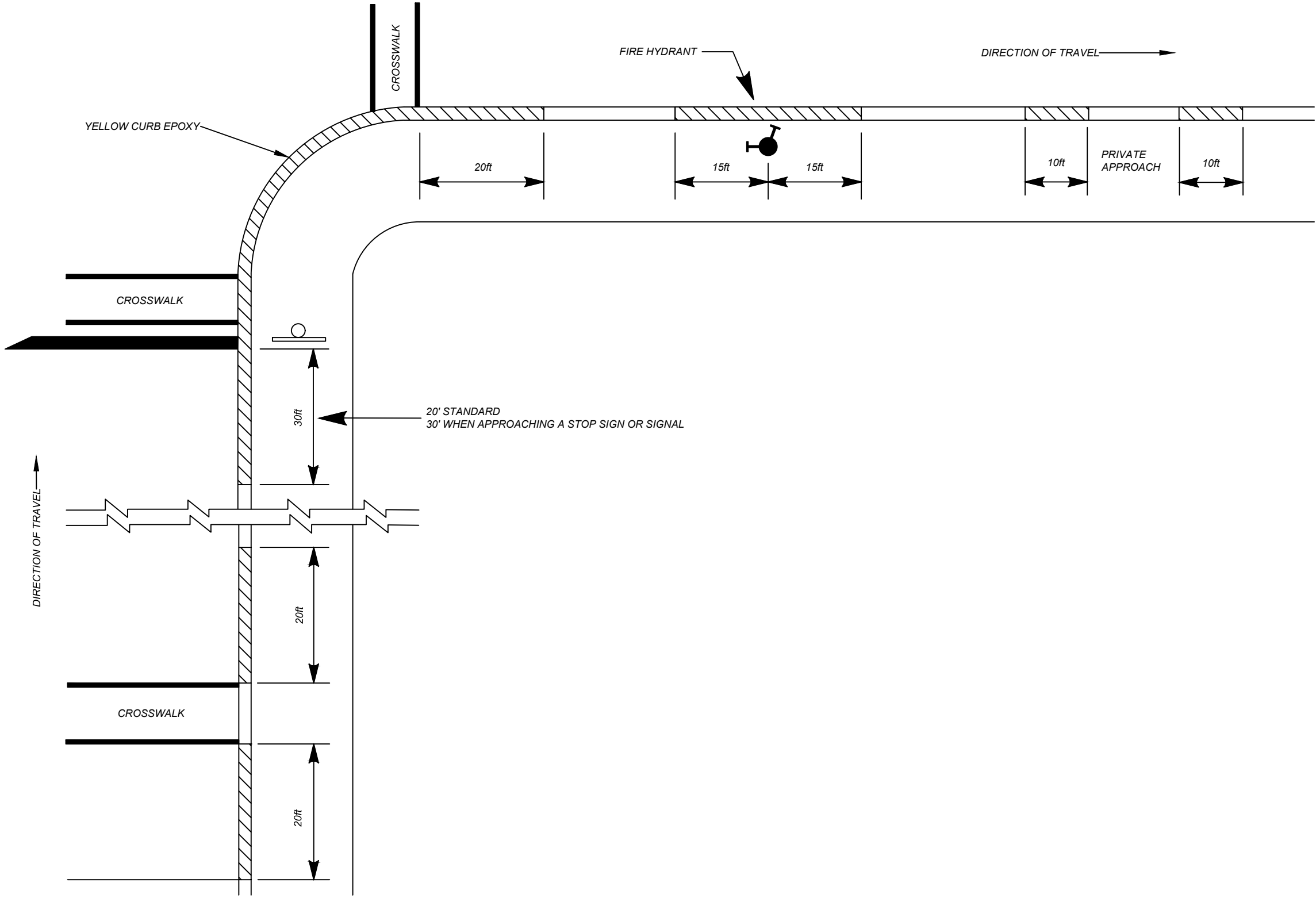
TYPICAL PAVEMENT MARKINGS
TWLTL / TURN LANE WORDS & SYMBOLS

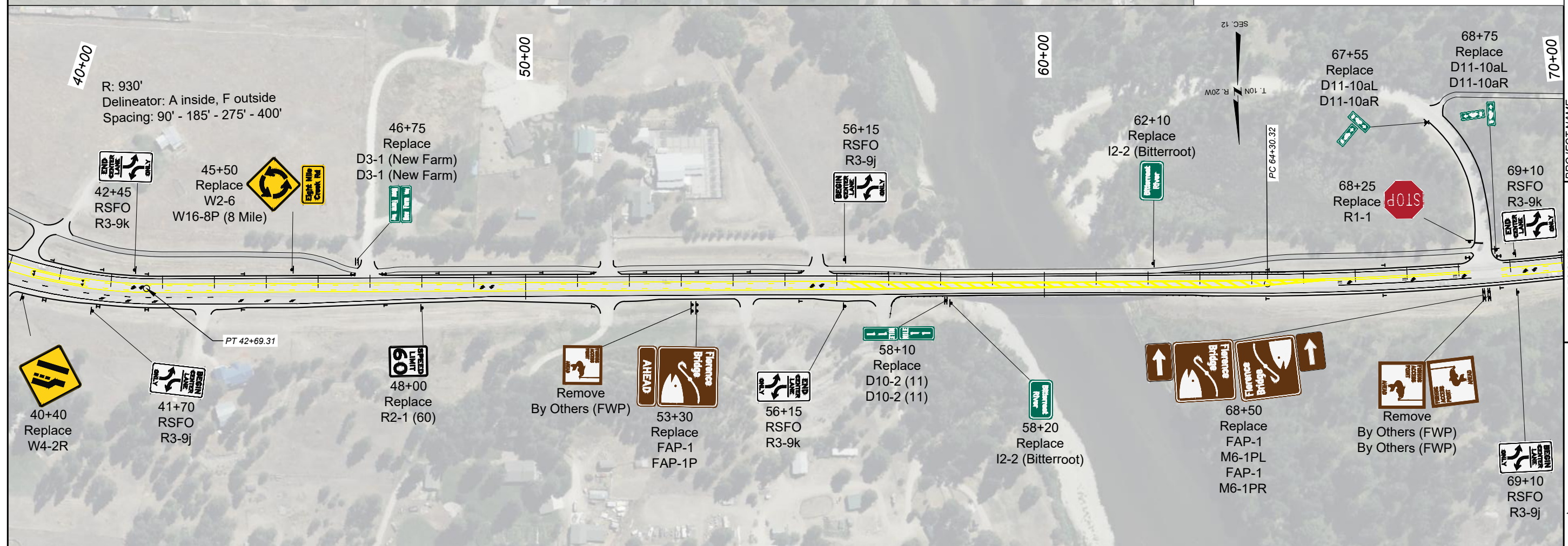
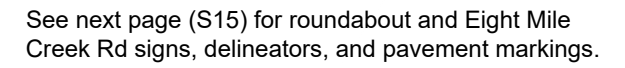
NO SCALE



 MONTANA Department of Transportation	DESIGNED BY		PROJECT NAME	
	L. MOREY	7/2025	FLORENCE - EAST	
	REVIEWED BY		COUNTY	
	N. THOLT	8/2025	RAVALLI	
SIGNING PLANS	CHECKED BY		PROJECT ID	
	N. STYREN	8/2025	STPS 203-1(28)10	
	10638000\S\SUN001.DWG		UPN	
2/9/2026 3:59 PM		10538000		

TYPICAL CURB MARKINGS





S14

PLAN SHEET

100

137444

STPS 203-1(28)10

10538000

COUNTY

REVIEWED BY	8/2025
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N THOLT	8/2025
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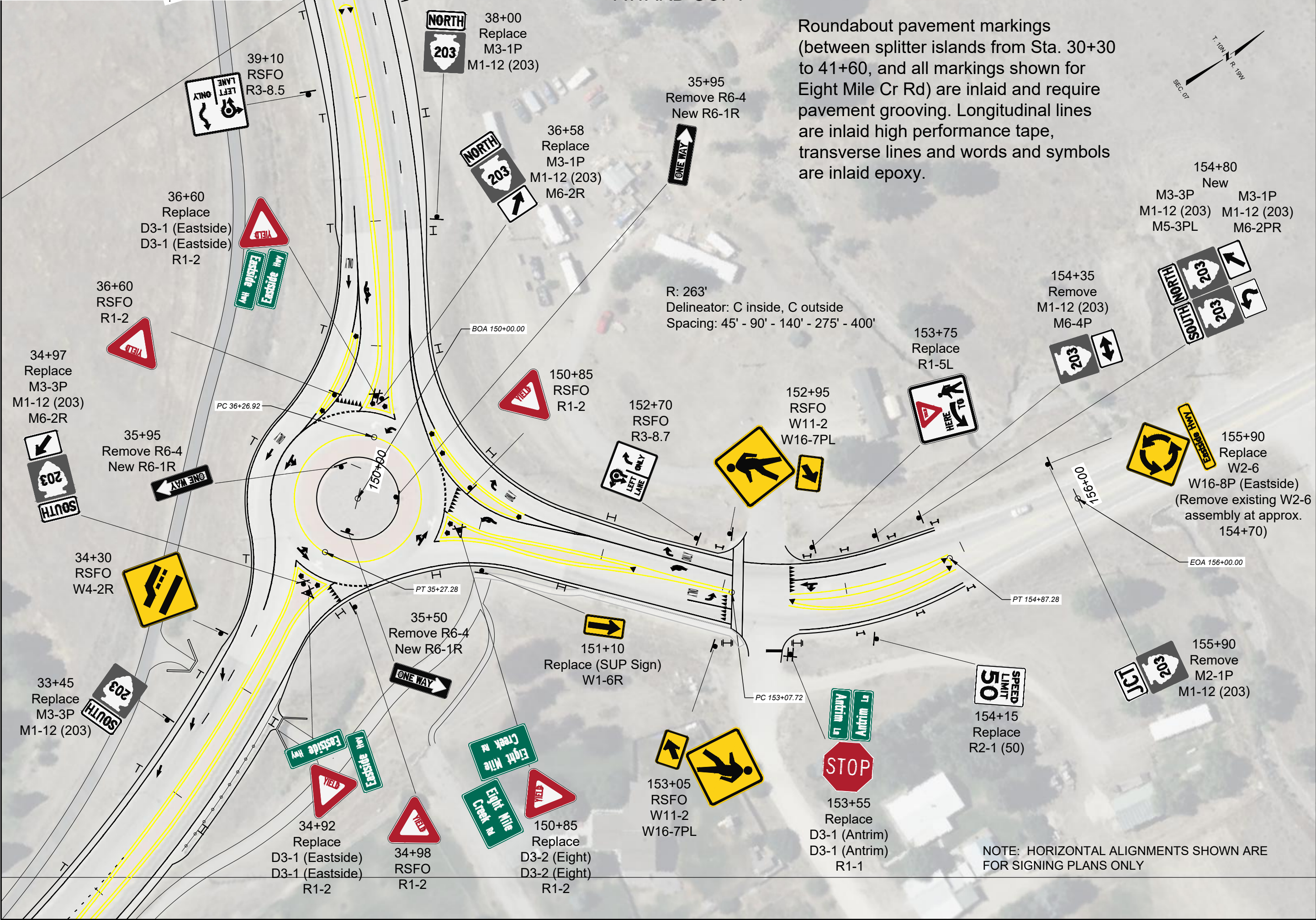
CHECKED BY	
N STYREN	8/2025



MONTANA
Department of Transportation

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16

PLAN SHEET

RAVALLI

10538000

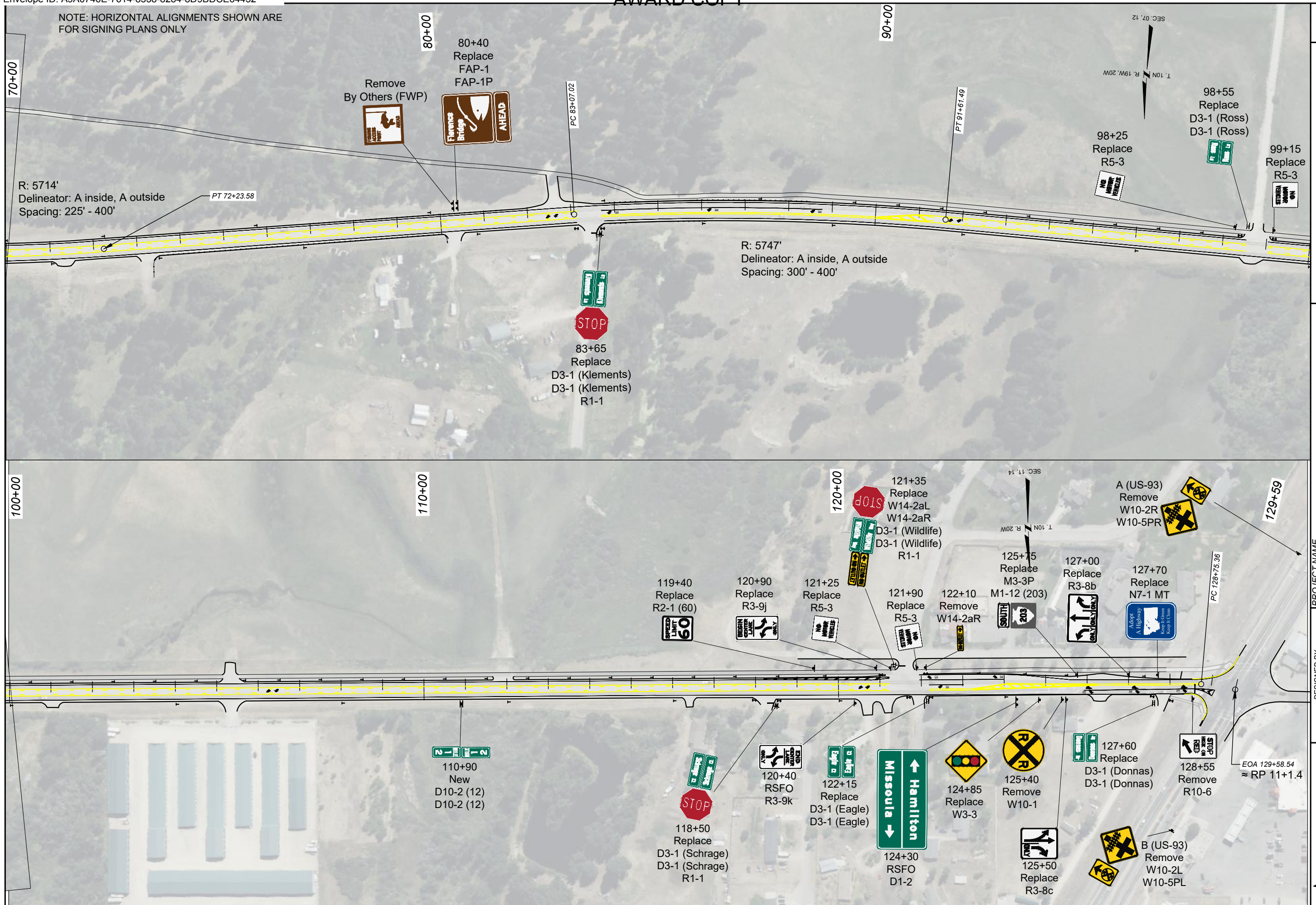
PROJECT

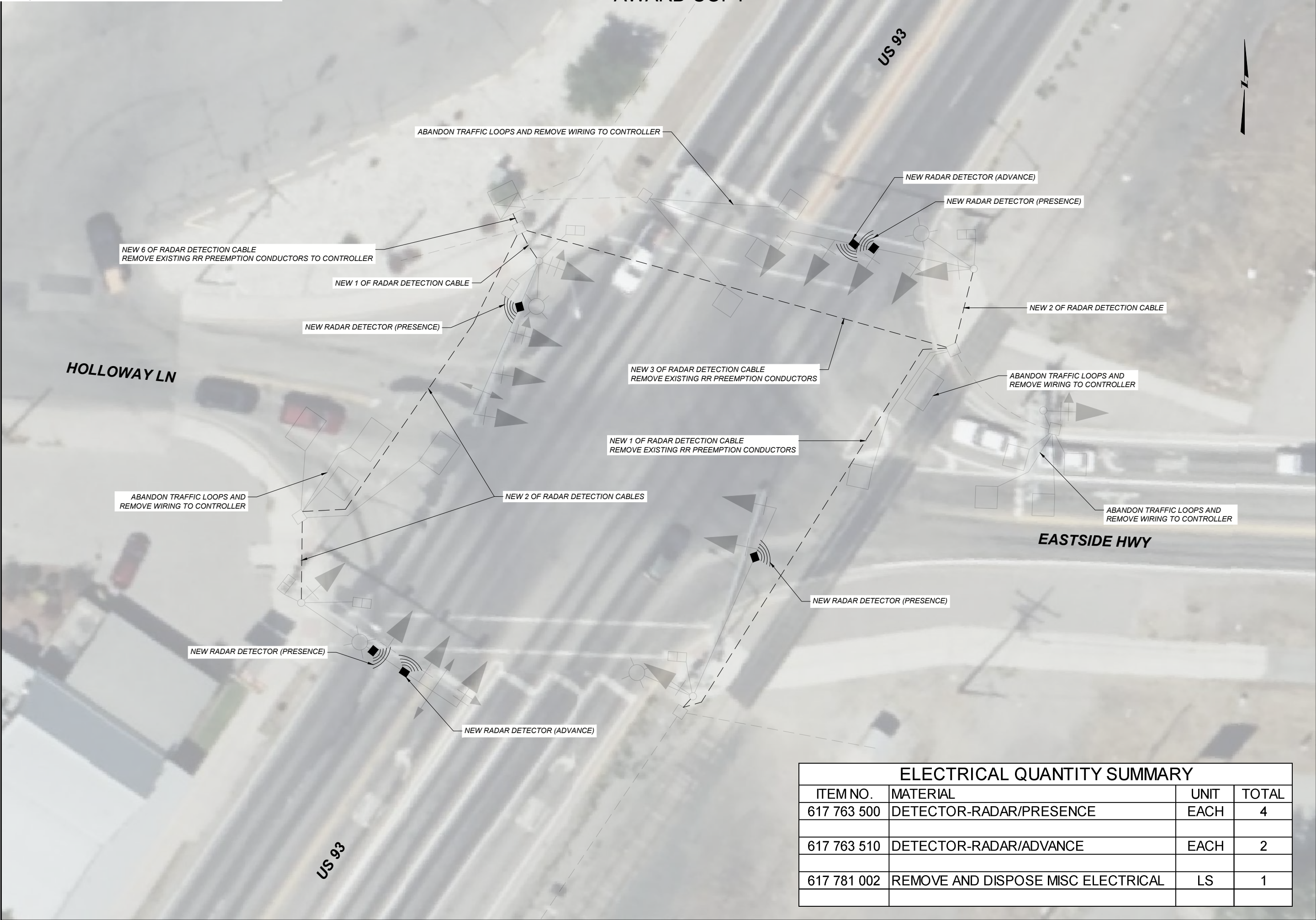
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MONTANA
Department of Transportation

2/9/2026 5:03 PM





ELECTRICAL QUANTITY SUMMARY			
ITEM NO.	MATERIAL	UNIT	TOTAL
617 763 500	DETECTOR-RADAR/PRESENCE	EACH	4
617 763 510	DETECTOR-RADAR/ADVANCE	EACH	2
617 781 002	REMOVE AND DISPOSE MISC ELECTRICAL	LS	1

SHEET NO.

E1

ELECTRICAL PLANS

PROJECT NAME

FLORENCE - EAST

COUNTY

RAVALLI

PROJECT ID

STPS 203-1(28)10

UPN

10538000

DESIGNED BY

D. BLOCK

8/22/25

REVIEWED BY

D. CUNNINGHAM

8/22/25

CHECKED BY

10538000ELMAP002.DWG

2/10/2026 10:14 AM

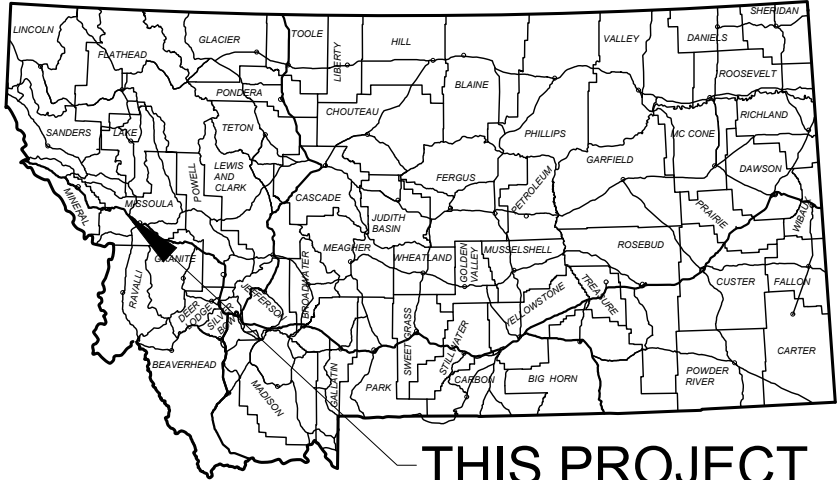
MONTANA

Department of Transportation

ELECTRICAL PLANS

MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT HSIP 32164(2)
CURVE WARNING WITH ILLUMINATION
SF 199 BECKWITH ST MSLA CNTY
MISSOULA COUNTY



THIS PROJECT

PROJECT DESIGN DATA

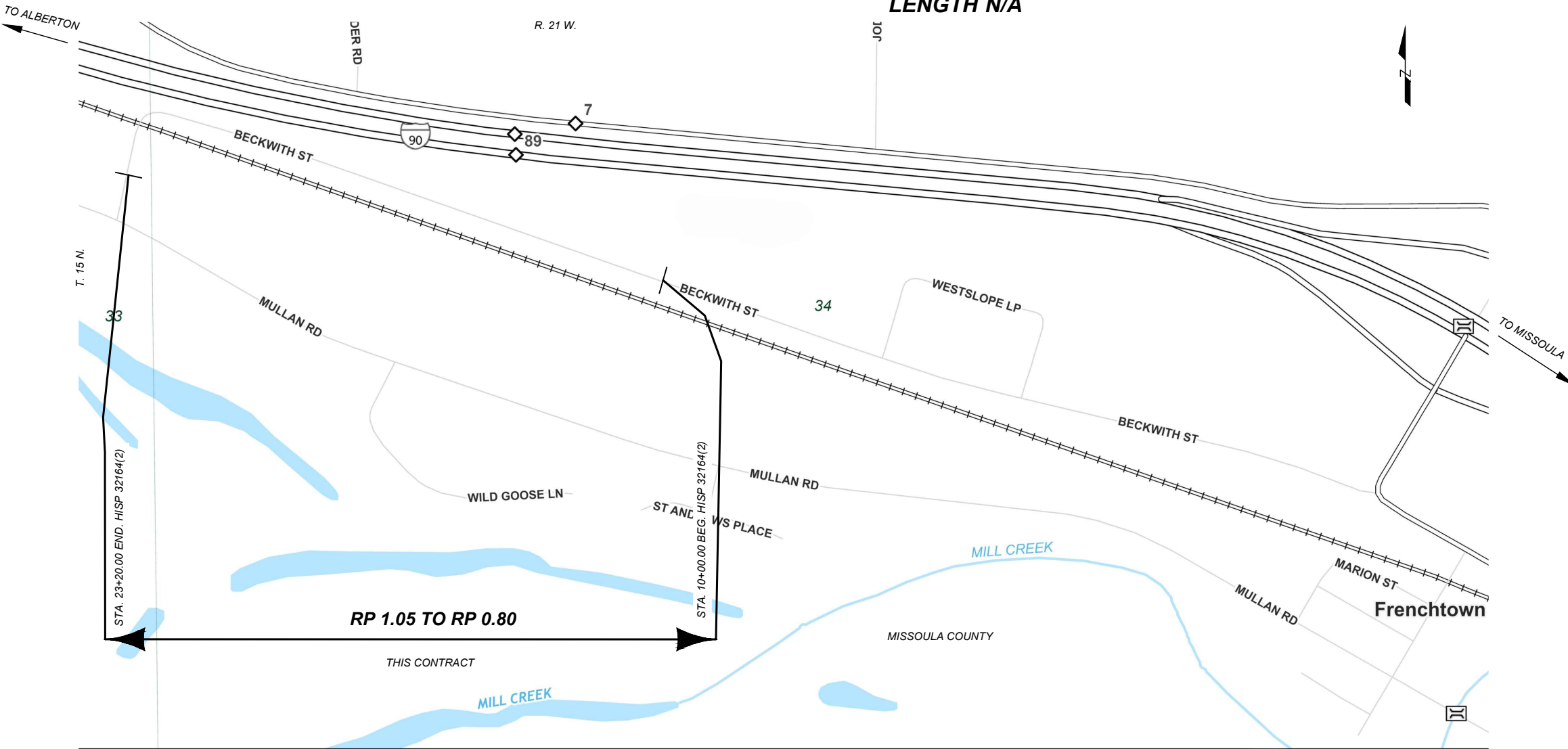
PRESENT	2023	A.D.T. = 620
LETTING	2024	A.D.T. = 630
DESIGN	2044	A.D.T. = 830
		D.H.V. = 130
		TRUCKS = 4.6%
		V. = 50 MPH
		18 KIP ESAL'S = 14 DAILY
		ANNUAL GROWTH RATE = 1.4%

ASSOCIATED PROJECT
AGREEMENT NUMBERS

R/W	
I. C.	
P. E.	HSIP 32164(1)

RELATED PROJECTS

STPS 203-1(28)10



MONTANA DEPARTMENT OF TRANSPORTATION	
APPROVED BY: TRAFFIC AND SAFETY ENGINEER	
Signed by: Gabe B. Pribe 4895FFA73587466...	5/1/2026 DATE

TABLE OF CONTENTS

	<u>SHEET NO.</u>
<i>TITLE SHEET</i>	<i>1</i>
<i>TABLE OF CONTENTS</i>	<i>2</i>
<i>NOTES</i>	<i>2</i>
<u>SIGNING PLANS</u>	
<i>SUMMARY</i>	<i>S1</i>
<i>SPECIFICATIONS</i>	<i>S2</i>
<i>DETAILS</i>	<i>S3</i>
<i>PLANS</i>	<i>S4</i>
<u>ELECTRICAL PLANS</u>	
<i>SUMMARY</i>	<i>E01</i>
<i>DETAILS</i>	<i>E01 - E04</i>
<i>PLANS</i>	<i>E05</i>
<i>FENCE PLANS</i>	<i>E06</i>

NOTES

UTILITIES

CALL THE UTILITIES UNDERGROUND LOCATION CENTER (811) OR OTHER NOTIFICATION SYSTEM FOR THE MARKING AND LOCATION OF ALL LINES AND SERVICES BEFORE EXCAVATING. ALL CLEARANCES OR DEPTHS PROVIDED FOR UTILITIES ARE FROM EXISTING GROUND LINE.

WETLANDS

WETLANDS MAY EXIST ADJACENT TO THE ROADWAY AND BEYOND THE PROJECT LIMITS. A WETLAND DELINEATION HAS NOT BEEN COMPLETED FOR THIS PROJECT. IMPACTS TO WETLAND AREAS ARE NOT ANTICIPATED IN ASSOCIATION WITH THE PROPOSED WORK. NO PERMITS HAVE BEEN OBTAINED. ANY ACTION IMPACTING WETLAND AREAS WITHOUT THE APPROPRIATE PERMITTING IS THE RESPONSIBILITY OF THE CONTRACTOR.

SHEET NO.

2

TABLE OF CONTENTS
AND NOTES

PROJECT NAME
SF 199 BECKWITH ST MSLA CNTY

COUNTY

MISSOULA

PROJECT ID

HSIP 32164(2)

UPN

10353000



ELECTRICAL

2/19/2026 9:16 AM

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NOTES AND ABBREVIATIONS:

MOUNTING HEIGHT REQUIREMENTS: MOUNTING HEIGHTS SHOWN REFER TO THE BOTTOM OF THE MAJOR PANEL. SEE DETAILED DRAWINGS 619-00 & 619-08

SEE LOCATION AND SPECIFICATION SHEETS FOR PORTIONS OF PROJECT NOT INCLUDED WITHIN SIGNING PLAN SHEETS.

SIGNING AND PAVEMENT MARKING LOCATIONS ARE APPROXIMATE. PROJECT MANAGER TO FIELD ADJUST AS NECESSARY.

HORIZONTAL ALIGNMENT: THE ALIGNMENT SHOWN IN THE PLANS IS NOT A RECREATION OF THE AS-BUILT ALIGNMENT AND DOES NOT SUPERSEDE THE EXISTING. THE INTENT OF THE SHOWN ALIGNMENT IS TO ASSIST IN LAYING OUT SIGNING ELEMENTS.


- RSFO = REPLACE SIGN FACE ONLY
- FY = FLUORESCENT YELLOW SHEETING REQUIRED
- CAM = CHEVRON ANGLE MOUNT (SEE DET. DWG 619-24)
- X = STANDARD BREAKAWAY DEVICE:
 - FOR WOOD POST SEE DETAILED DRAWING 619-20.
 - FOR STRUCTURAL STEEL SEE DETAILED DRAWING 619-13.












SUMMARY SIGNING & DELINEATION QUANTITIES		
MATERIAL	TOTAL	UNIT
SIGNS-ALUM REFL SHEET XI	89.2	SQFT
REMOVE SIGN	6	EACH
POLES-TREATED WOOD 4 IN	2	EACH
POLES-TREATED WOOD 5 IN	3	EACH

PAVEMENT MARKINGS			
ITEM	UNIT	FINAL APPLICA- TION	TOTAL
STRIPING - WHITE EPOXY	gallon	13	13
STRIPING - YELLOW EPOXY	gallon	13	13
WORDS & SYMBOLS - WHITE EPOXY	gallon	4	4

SHEET NO.
S1

SIGNING NOTES AND
SUMMARY SHEET

<div><div><div>MONTANA</div><div>Department of Transportation</div></div></div>	DESIGNED BY		PROJECT NAME	
	S. ERETH	08/2025	SF199 BECKWITH ST MSLA CNTY	
	REVIEWED BY		COUNTY	
	N. THOLT		MISSOULA COUNTY	
<div>SIGNING PLANS</div>	CHECKED BY		PROJECT ID	
	N. STYREN	08/2025	HSIP 32164(2)	
	UPN		10353000	
	10353000SISUM001.DWG			
2/12/2026 12:10 PM				

SIGN LOCATION			PANEL SPECIFICATIONS				SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION				
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES)			FY OR FYG	BACKBRACING REQ'D / 1 OR 2 ANGLE IRONS REQ'D	MOUNT BACK TO BACK / CHEVRON ANGLE MOUNT	FEET		FEET				CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET		SIGN IMAGE	REMARKS
										SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED)						# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE										
				W	X	H							X	Y	Z									SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST		
15+00	L	RSFO	R2-1	24	X	30												5.0									1						
17+00	R	RSFO	W1-1L	48	X	48	FY											16.0									1				* SEE ELECTRICAL PLANS FOR SUPPORT		
		RSFO	W13-1P	24	X	24	FY											4.0															
18+00	R	REPLACE	W10-1	36	X	36	FY			10.0		4" Treated Wood Pole		5.0	3.0	12.9				7.1		14						1					
18+46	R	NEW	W1-8 (2x)	24	X	30	FY		CAM	10.0		5" Treated Wood Pole		5.0	3.5	12.8			X	10.0			14										
18+86	R	NEW	W1-8 (2x)	24	X	30	FY		CAM	10.0		5" Treated Wood Pole		5.0	3.5	12.8			X	10.0			14										
19+09	R	REMOVE SIGN	W1-6L																								1						
19+24	R	NEW	W1-8 (2x)	24	X	30	FY		CAM	10.0		5" Treated Wood Pole		5.0	3.5	12.8			X	10.0			14										
21+25	L	REPLACE	W10-1	36	X	36	FY			10.0		4" Treated Wood Pole		5.0	3.0	12.9				7.1		14						1					
22+10	L	RSFO	W1-1R	48	X	48	FY			10.0										16.0								1					
		RSFO	W13-1P	24	X	24	FY													4.0													
PROJECT TOTALS																	89.2		28	42							6						

SHEET NO.
S2

SIGN LOCATIONS AND SPECIFICATIONS

PROJECT NAME
SF199 BECKWITH ST MSLA CNTY

COUNTY
MISSOULA COUNTY

PROJECT ID
HSIP 32164(2)

UPN
10353000

DESIGNED BY
S. ERETH

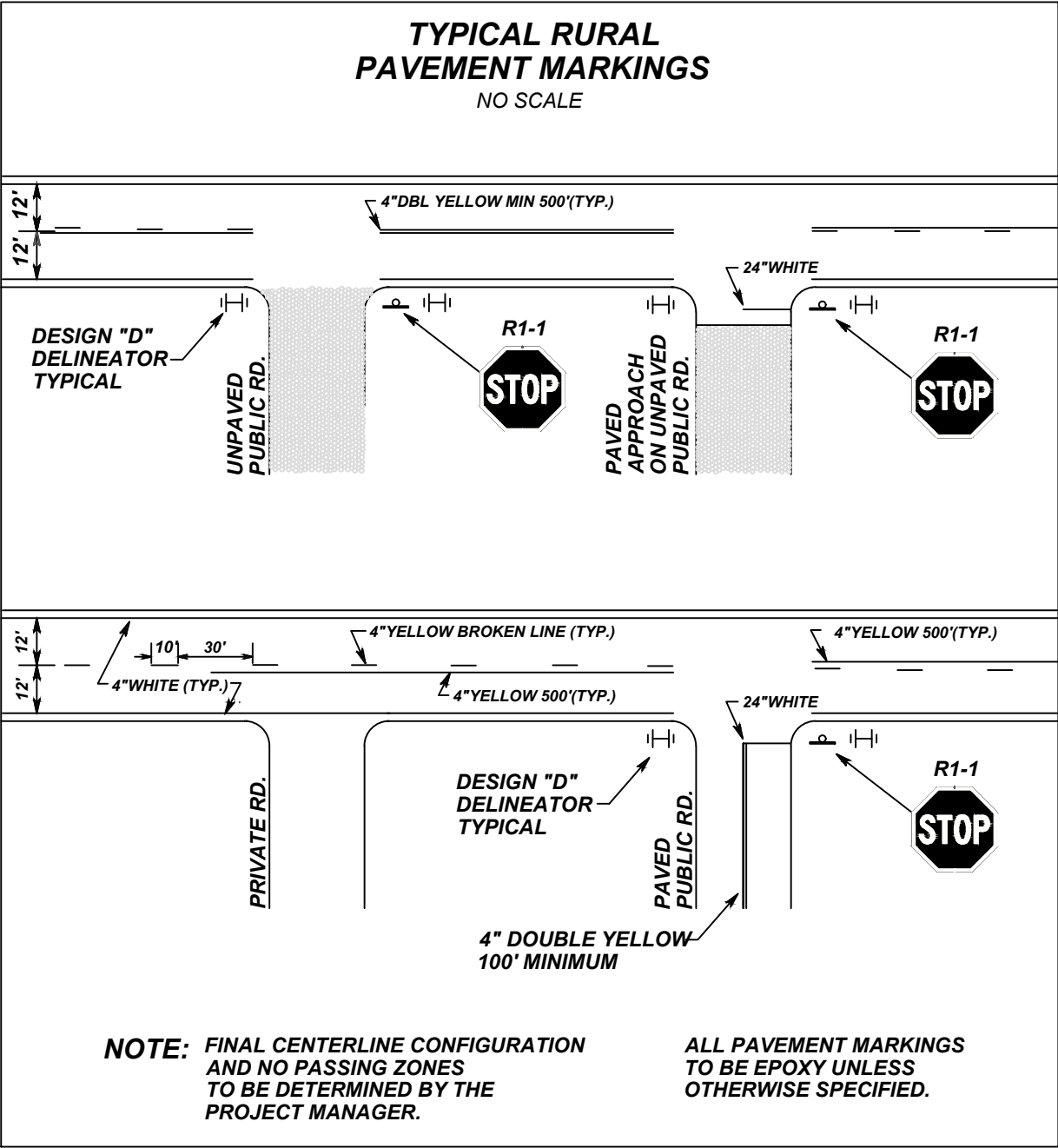
REVIEWED BY
N. THOLT

CHECKED BY
N. STYREN

MONTANA
Department of Transportation

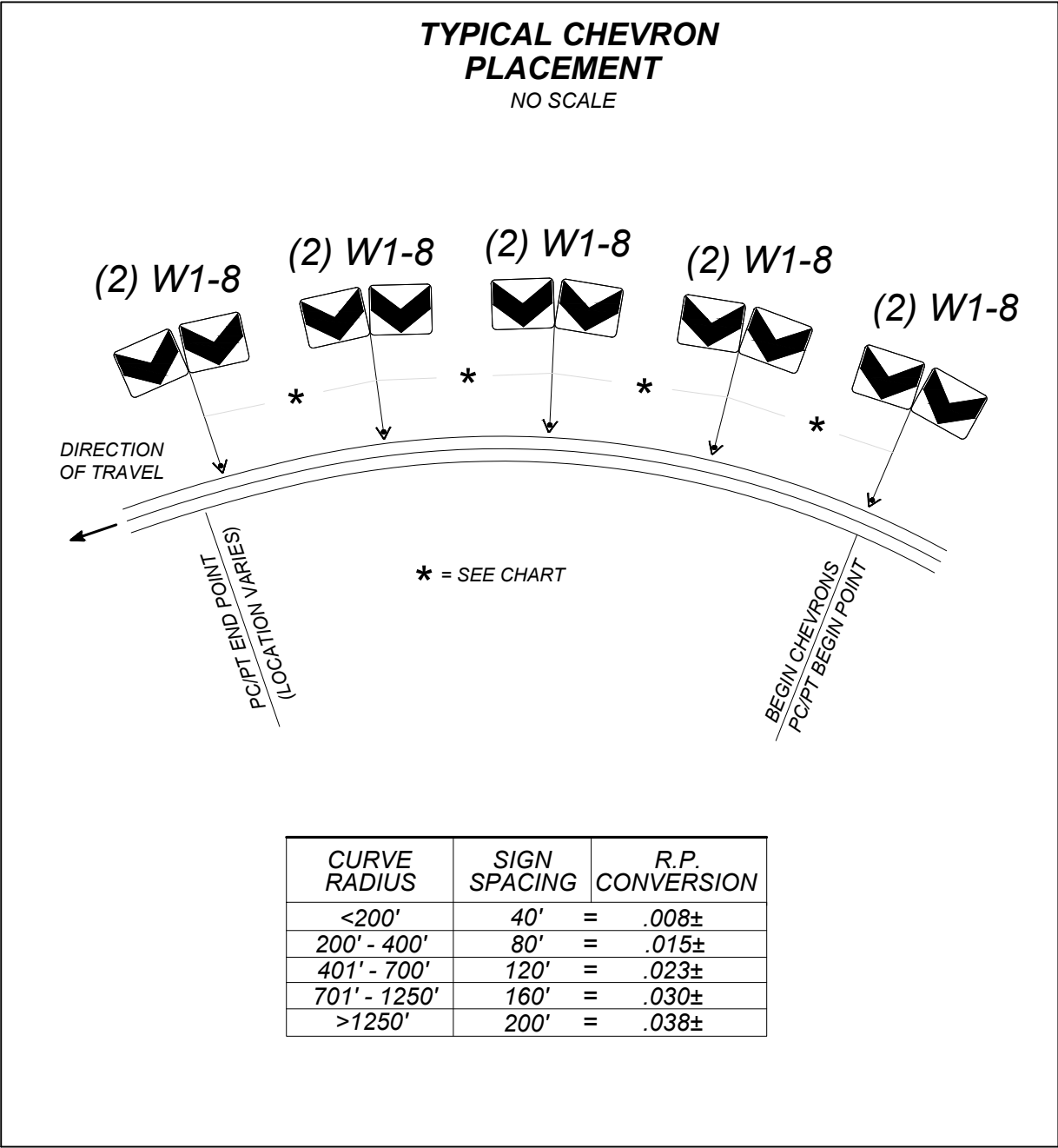
SIGNING PLANS

2/12/2026 12:10 PM



NOTES:

- ① SEE CENTERLINE RUMBLE STRIPS DTL. DWG. NO. 411-05 FOR ADDITIONAL INFORMATION.
- ② ALL PAVEMENT MARKINGS ARE TO CONFORM TO THE REQUIREMENTS OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" PUBLICATIONS, FROM THE FEDERAL HIGHWAY ADMINISTRATION.
- ③ SEE CENTERLINE PAVEMENT MARKINGS FOR RURAL HIGHWAYS MEMO DATED JUNE 18, 2019 FOR APPLICATION METHODOLOGY
- ④ DASHED LINES WILL HAVE A 10:30 SKIP IN RURAL LOCATIONS, AND A 9:15 SKIP IN URBAN LOCATIONS



NOTES:

- ① SEE SPECIFICATION SHEET FOR CHEVRON PLACEMENT.
- ② USE BEGINNING OF CURVE LOCATION AS REFERENCE POINT TO INSTALL CHEVRONS ON OUTSIDE OF CURVE IN DIRECTION OF TRAVEL.

SHEET NO.

S3

SIGNING DETAIL SHEET

PROJECT NAME
SF199 BECKWITH ST MSLA CNTY

COUNTY
MISSOULA COUNTY

PROJECT ID
HSIP 32164(2)

UPN
10353000

DESIGNED BY
S. ERETH

REVIEWED BY
N. THOLT

CHECKED BY
N. STYREN

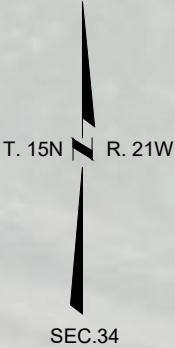
10353000SISUN001.DWG



SIGNING PLANS

2/12/2026 12:10 PM

NOTE: HORIZONTAL ALIGNMENT
SHOWN IS FOR SIGNING PLANS ONLY.



SHEET NO.

S4

SIGNING PLAN SHEET

PROJECT NAME
SF 199 BECKWITH ST MSLA CNTY

COUNTY

MISSOULA

PROJECT ID

HSIP 32164(2)

UPN

10353000

DESIGNED BY

S. ERETH 08/2025

REVIEWED BY

N. THOLT 08/2025

CHECKED BY

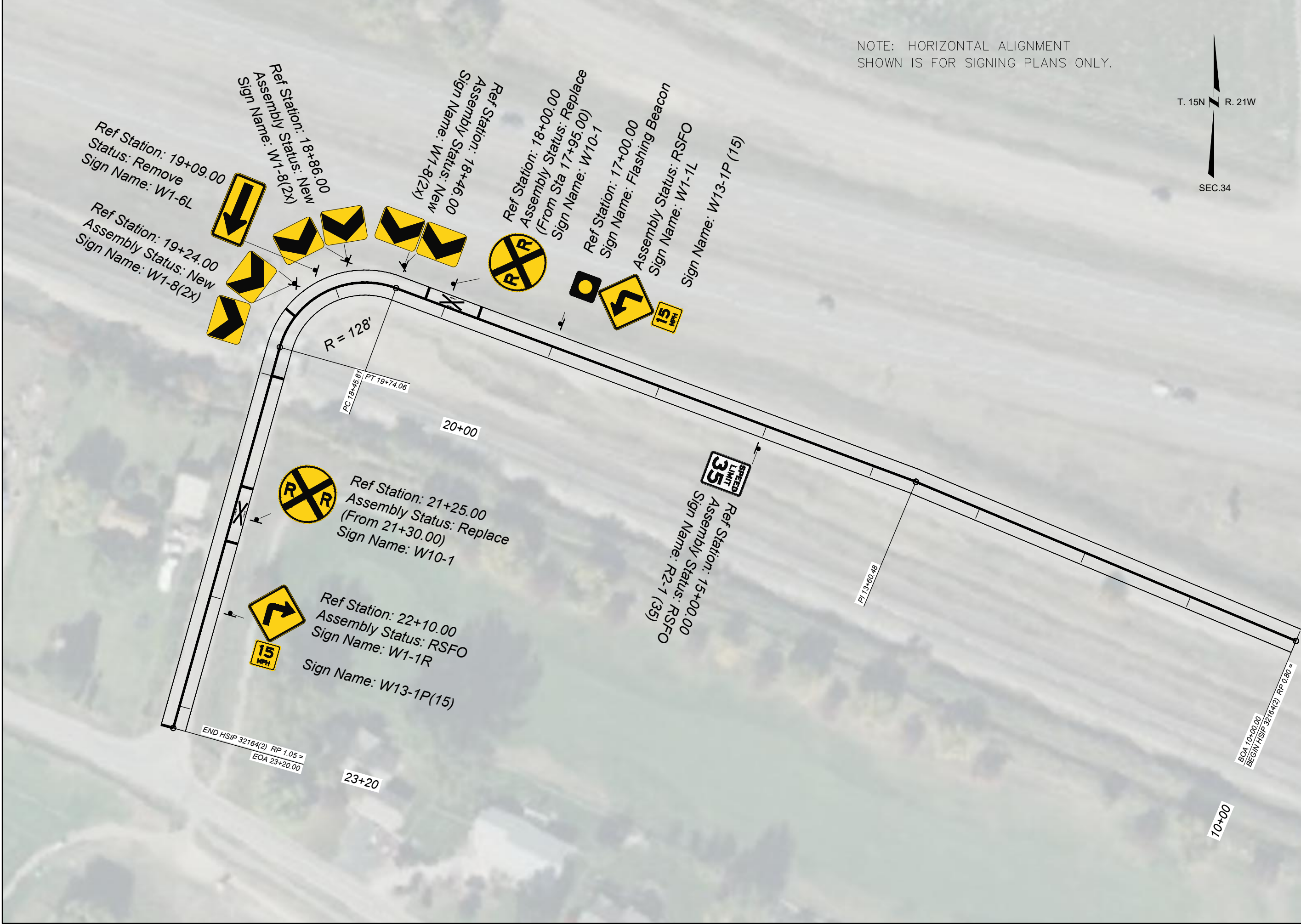
N. STYREN 08/2025

IGNING PLANS



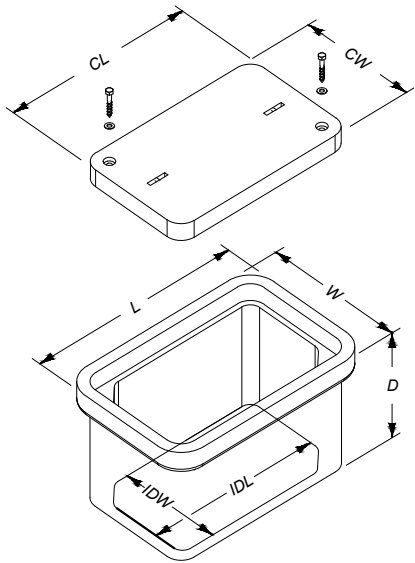
SIGNING PLANS

2/12/2026 12:11 PM

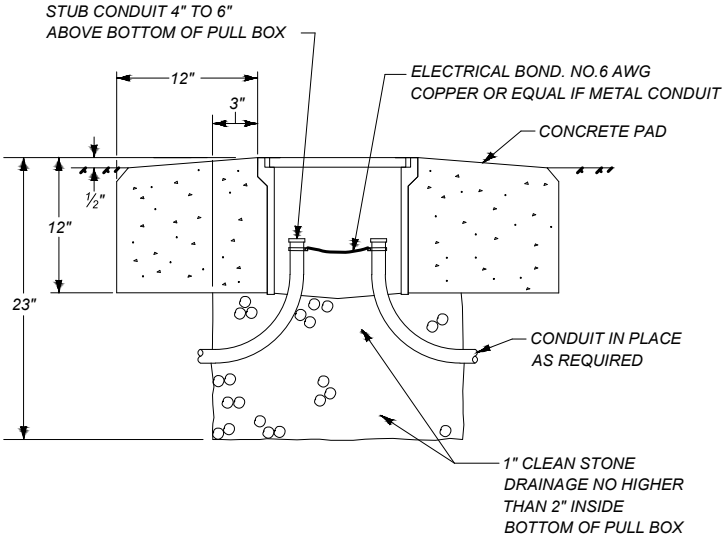


ELECTRICAL QUANTITY SUMMARY

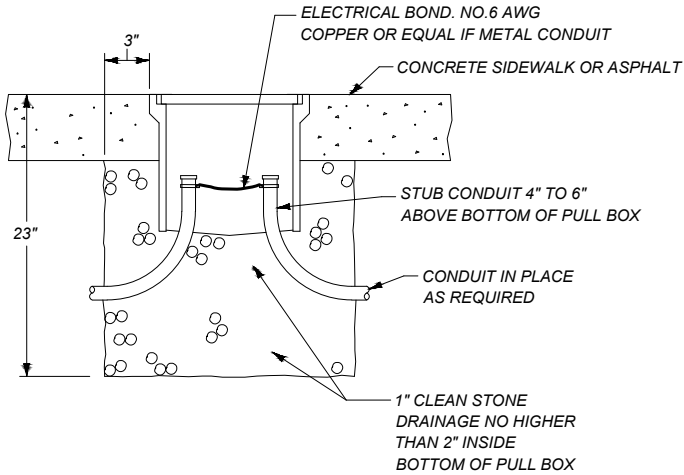
ITEM NO.	MATERIAL	UNIT	TOTAL
616343920	CONDUIT-PLASTIC 2 IN	LNFT	198
616343924	CONDUIT-PLASTIC 2 1/2 IN	LNFT	207
616783007	PULL BOX-COMPOSITE TYPE 2	EACH	2
617000000	FOUNDATION-CONCRETE	CUYD	1
617033214	CABLE-COPPER 3AWG14-600V	LNFT	444
617123108	CONDUCTOR-COPPER AWG8-600V	LNFT	1316
617123110	CONDUCTOR-COPPER AWG10-600V	LNFT	405
617183056	STANDARD-STL TYPE 10-A-500-6	EACH	1
617303300	HIGH EFFICACY LUMINAIRE LED	EACH	1
617333100	SERV ASSEMBLY	EACH	1
617483110	SIG-TRAF 1 COL-1 WAY 12	EACH	1
617673200	SIG STANDARD TYPE 1-200	EACH	1



PULL BOX - COMPOSITE MINIMUM DIMENSIONS		
TYPE 1	TYPE 2	TYPE 3
L = 20"	L = 25"	L = 32"
W = 13"	W = 15"	W = 19"
D = 12"	D = 12"	D = 12"
IDL = 17"	IDL = 21"	IDL = 28"
IDW = 10"	IDW = 11"	IDW = 15"
CL = 18"	CL = 23"	CL = 30"
CW = 11"	CW = 13"	CW = 17"



PULL BOX INSTALLED IN DIRT



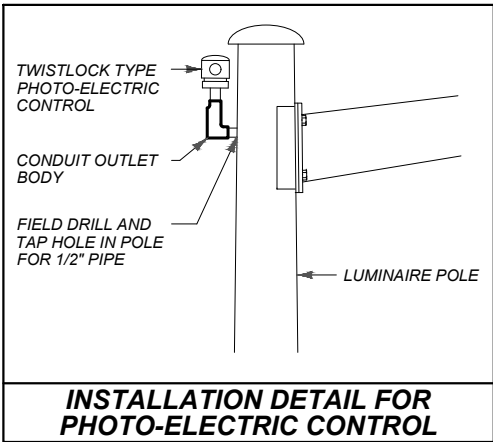
PULL BOX INSTALLED IN A SIDEWALK OR ASPHALT

PULL BOX-COMPOSITE

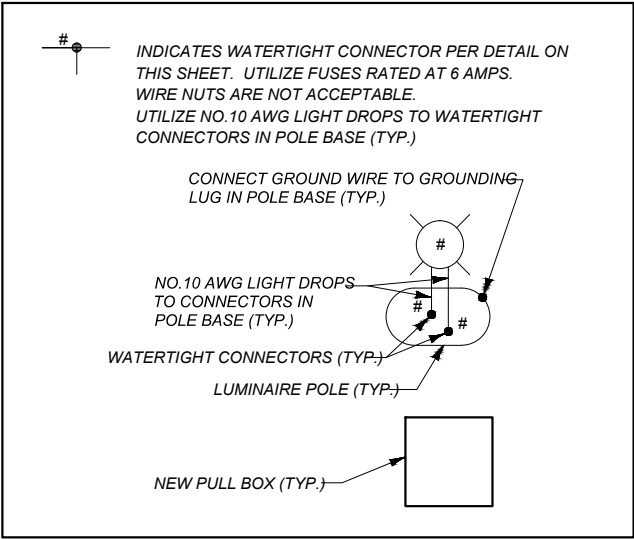
TYPE 1,2 & 3
NO SCALE

PB2

REVISED: 15-APR-2014



INSTALLATION DETAIL FOR
PHOTO-ELECTRIC CONTROL



SHEET NO.

E01

ELECTRICAL DETAILS

PROJECT NAME
SF 199 BECKWITH ST MSLA CNTY

COUNTY

MISSOULA

PROJECT ID

HSIP 32164(2)

UPN

10353000

DESIGNED BY
BEN MOELLER
3/13/2025

REVIEWED BY
DANIEL CUNNINGHAM
12/10/2025

CHECKED BY

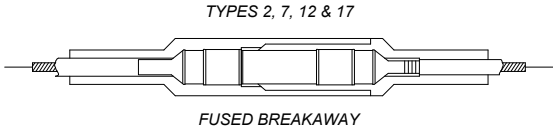
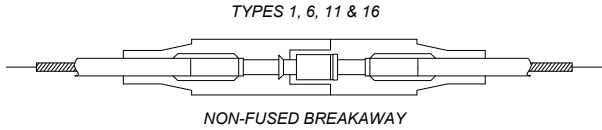
10353000ELPRE001.DWG



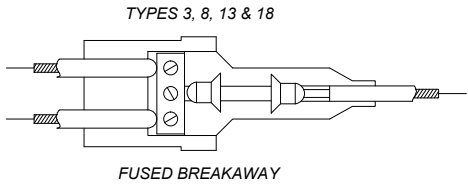
ELECTRICAL

2/19/2026 9:21 AM

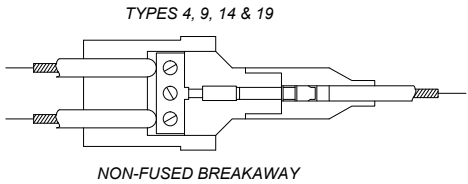
WATERTIGHT CONNECTORS



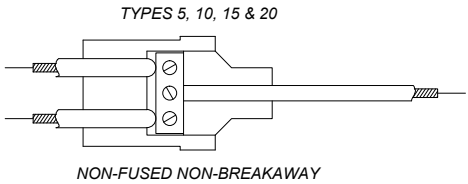
IDENTITY NO.	DESCRIPTIVE SYMBOL & WIRE SIZES
1	8 8
2	8 10
3	8 10
4	8 8
5	8 8
6	6 6
7	6 10
8	6 10
9	6 6
10	6 6
11	4 4
12	4 10
13	4 10
14	4 4
15	4 4
16	10 10
17	10 10
18	10 10
19	10 10
20	10 10
21	VARIES VARIES



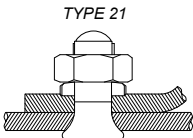
PROVIDE A PLUG AND RECEPTACLE HOUSED IN WATER-RESISTANT, SYNTHETIC RUBBER CAPABLE OF BURIAL IN THE GROUND OR INSTALLATION IN SUNLIGHT. THE HOUSING, CONSISTING OF 2 SECTIONS, PROVIDES A WATERTIGHT SEAL AROUND THE CABLE AND A WATERTIGHT SEAL BETWEEN THE TWO SECTIONS AT THE POINT OF DISCONNECTION. SUPPLY EACH KIT WITH SUFFICIENT SILICONE COMPOUND TO LUBRICATE METAL PARTS AND THE RUBBER HOUSINGS FOR EASY ASSEMBLY.



WHERE INDICATED, CRIMP A COPPER PIN AND A COPPER RECEPTACLE TO THE CABLE. THE RECEPTACLE IS TO ESTABLISH CONTACT PRESSURE WITH THE PIN THROUGH THE USE OF A COPPER BERYLLIUM SPRING AND BE EQUIPPED WITH A DISPOSABLE MOUNTING PIN. THE PIN IS TO BE CONSTRUCTED OF AT LEAST HALF-HARD MATERIAL. THE CRIMPING PORTION IS TO BE FULLY ANNEALED WHILE THE REST OF THE PIN IS MAINTAINED IN ITS ORIGINAL STATE OF HARDNESS. THE RECEPTACLE IS TO BE FULLY ANNEALED. THE PIN AND RECEPTACLE ARE TO LOCK TOGETHER SO THE CONNECTION IS MAINTAINED WHEN A MINIMUM FORCE OF 20 POUNDS TENSION IS APPLIED TO THE ATTACHED CABLES.



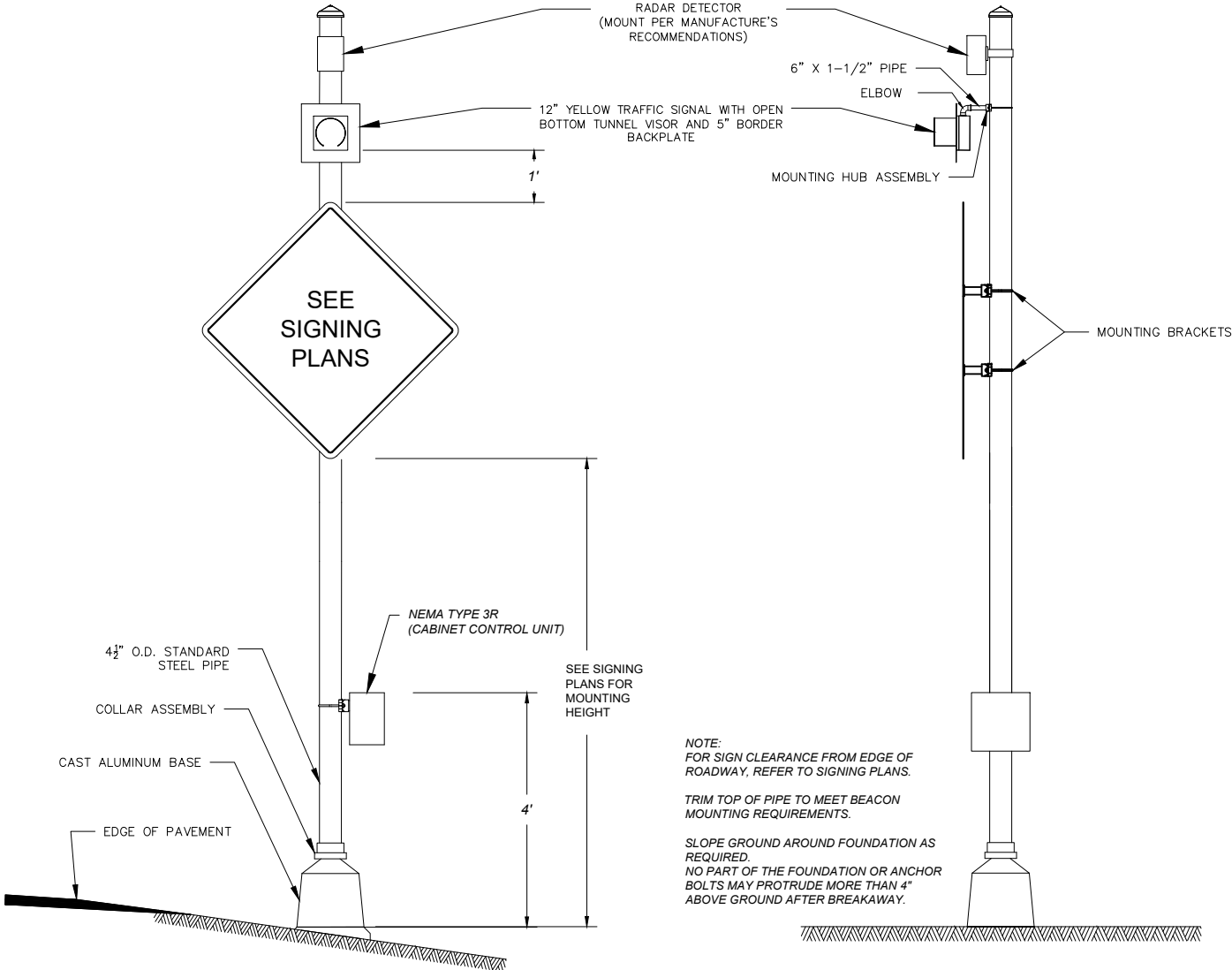
PROVIDE FUSED CONNECTOR KITS CONTAINING A PAIR OF SPRING LOADED 90% CONDUCTIVITY CONTACTS FOR GRIPPING A STANDARD MIDGET FERRULE TYPE FUSE. THE CONTACTS MUST BE FULLY ANNEALED AND ADAPTED TO BE CRIMPED TO THE CABLE.



COPPER SPLIT BOLT -
MAKE WATERTIGHT USING
SELF ADHERING MASTIC

WATERTIGHT CONNECTORS

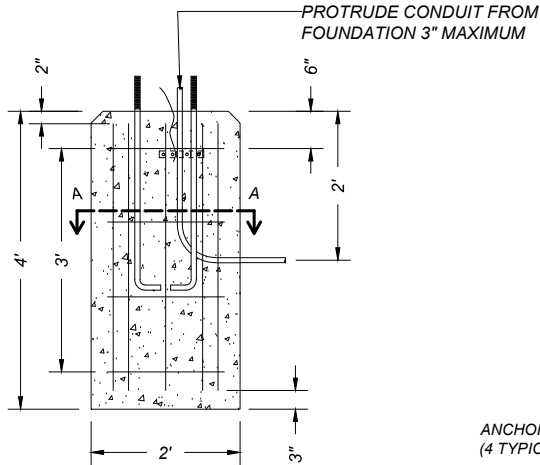
NO SCALE



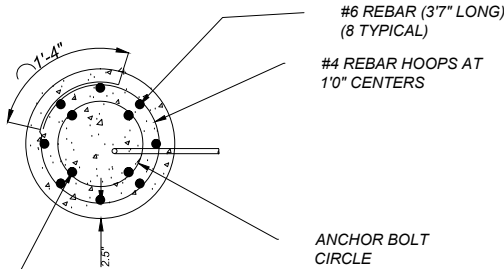
NOTE:
FOR SIGN CLEARANCE FROM EDGE OF
ROADWAY, REFER TO SIGNING PLANS.

TRIM TOP OF PIPE TO MEET BEACON
MOUNTING REQUIREMENTS.

SLOPE GROUND AROUND FOUNDATION AS
REQUIRED.
NO PART OF THE FOUNDATION OR ANCHOR
BOLTS MAY PROTRUDE MORE THAN 4\"/>



USE GRADE 60 REINFORCING STEEL



ANCHOR BOLT
(4 TYPICAL)

SECTION A-A

TYPE I-200

PROJECT NAME
SF 199 BECKWITH ST MSLA CNTY

COUNTY

MISSOULA

PROJECT ID

HSIP 32164(2)

UPN

10353000

DESIGNED BY
BEN MOELLER

REVIEWED BY
DANIEL CUNNINGHAM

CHECKED BY

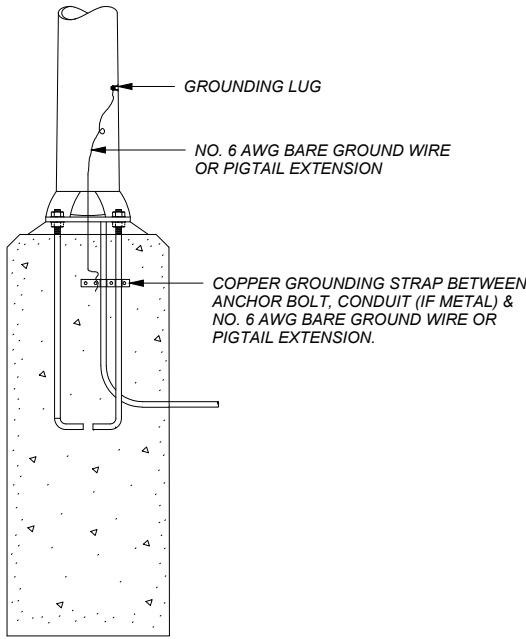
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ELECTRICAL

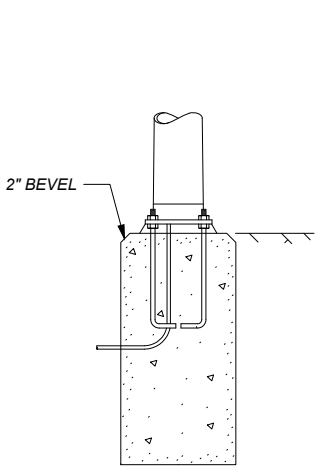
2/19/2026 9:16 AM

WELDING INSPECTION:
INSPECT PER APPLICABLE MDT STANDARD SPECIFICATIONS.

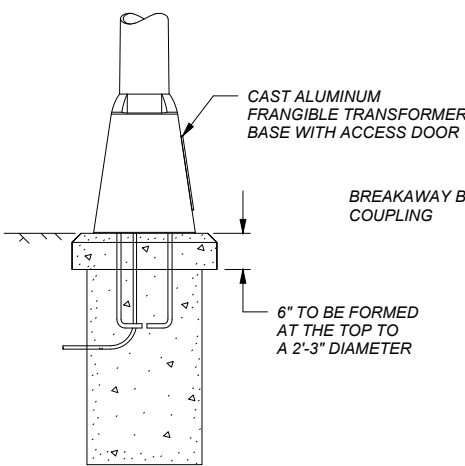


TYPICAL OF ALL FOUNDATIONS

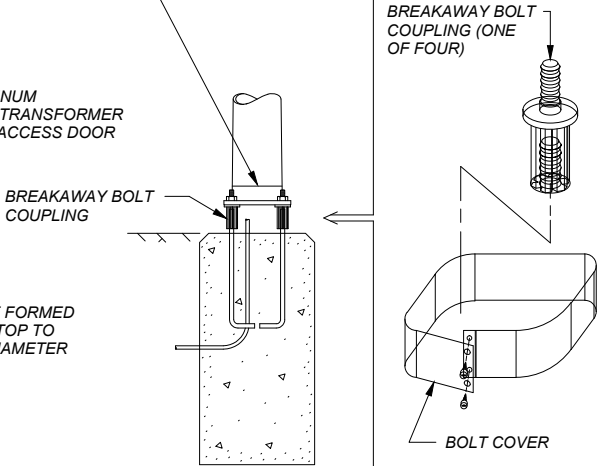
CJP WELD WITH BACKER RING
(TYP. ALL BASE CONNECTION)
SEE DETAIL 4.4 IN TABLE 11.9.3.1-1



ANCHOR
(DOUBLE NUT
CONNECTION REQUIRED)

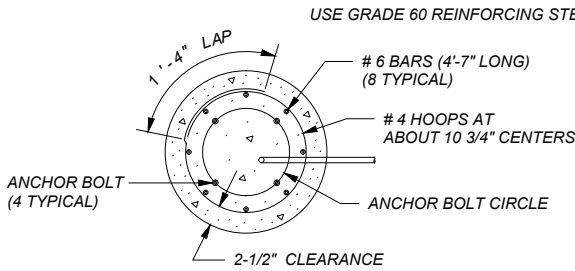


TRANSFORMER
(BREAKAWAY TYPE)

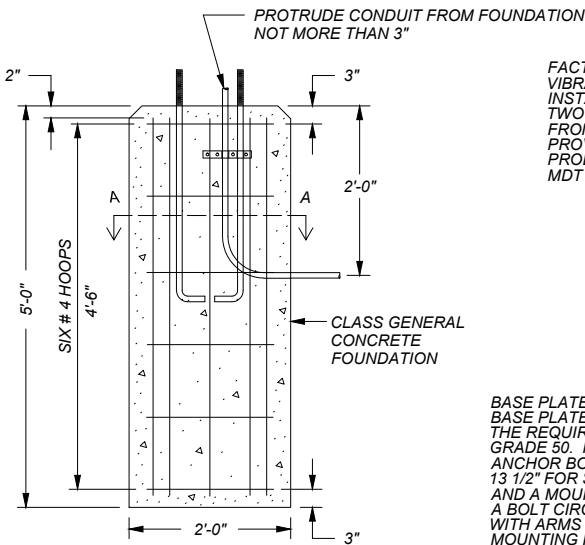


BOLT COUPLING
(BREAKAWAY TYPE)

BASE TYPES FOR LUMINAIRE STANDARDS

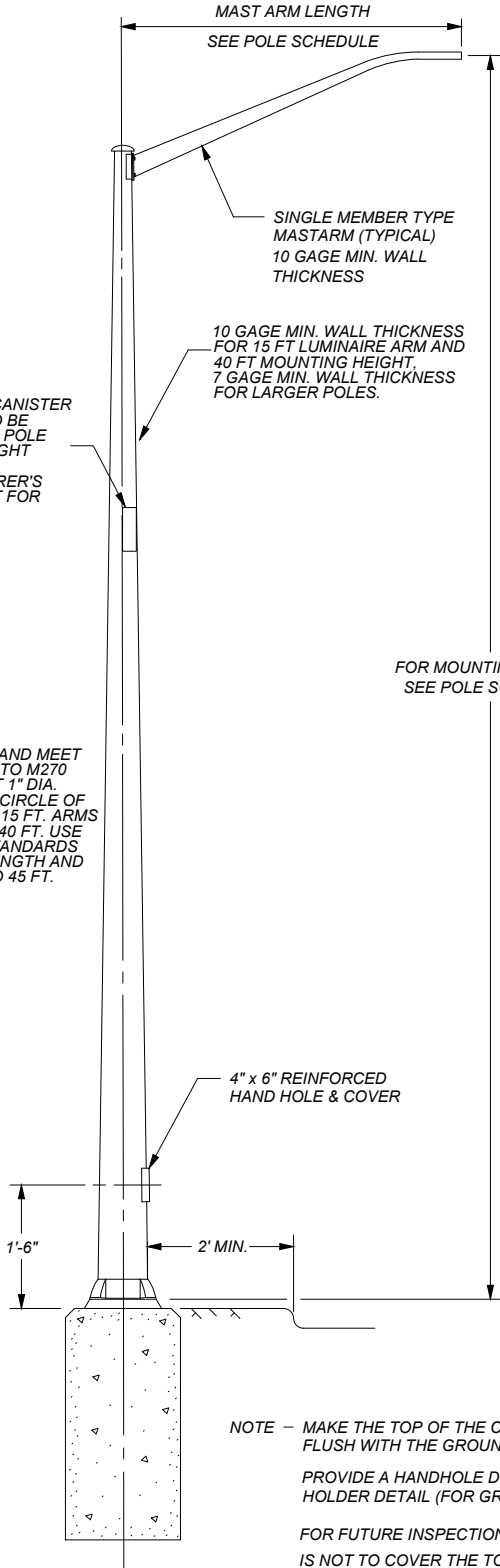


SECTION A-A



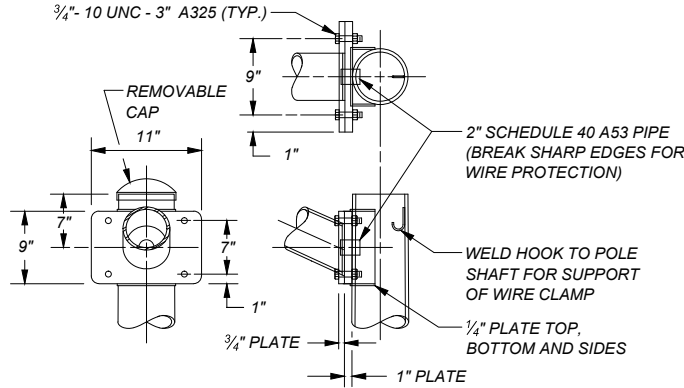
FACTORY INSTALLED CANISTER
VIBRATION DAMPER TO BE
INSTALLED INSIDE THE POLE
TWO THIRDS POLE HEIGHT
FROM THE BASE.
PROVIDE MANUFACTURER'S
PRODUCT DATA SHEET FOR
MDT APPROVAL.

BASE PLATE REQUIREMENTS:
BASE PLATES TO BE 1" THICK AND MEET
THE REQUIREMENTS OF AASHTO M270
GRADE 50. HOLES TO ACCEPT 1" DIA.
ANCHOR BOLTS WITH A BOLT CIRCLE OF
13 1/2" FOR STANDARDS WITH 15 FT. ARMS
AND A MOUNTING HEIGHT OF 40 FT. USE
A BOLT CIRCLE OF 15" FOR STANDARDS
WITH ARMS UP TO 25 FT. IN LENGTH AND
MOUNTING HEIGHTS OF UP TO 45 FT.



TYPE 10-A POLE

LUMINAIRE ARM CONNECTION
REQUIRES 4 BOLT DESIGN WITH
A325 BOLTS, NUTS AND WASHERS
(FULLY TENSIONED)
TUBE TO PLATE CONNECTION
TO BE SOCKET TYPE CONNECTION
WITH TWO FILLET WELDS PER 14.4.4.6
OF THE SPECIFICATIONS.



NOTE - FOR ARMS BETWEEN 16 FT. AND 25 FT. IN LENGTH, USE AN 11" SQUARE
PLATE WITH A BOLT SPACING OF 9" VERTICAL AND 9" HORIZONTAL

DESIGN, FABRICATE, ERECT, AND INSPECT STANDARDS IN ACCORDANCE
WITH THE CURRENT EDITION AASHTO LRFD SPECIFICATIONS FOR STRUCTURAL
SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC
SIGNALS (AND ANY AMENDMENTS THERETO).

DESIGN PARAMETERS:

DESIGN WEIGHT = DEAD LOAD, ICE.

DESIGN AREA = AREA WITH MAXIMUM WIND LOAD (WIND IS
PERPENDICULAR TO STANDARD, AS SHOWN).

DIRECTIONAL FACTOR Kd = 0.95, GUST FACTOR = 1.14 DRAG
COEFFICIENTS LRFD TABLE 3.8.7-1

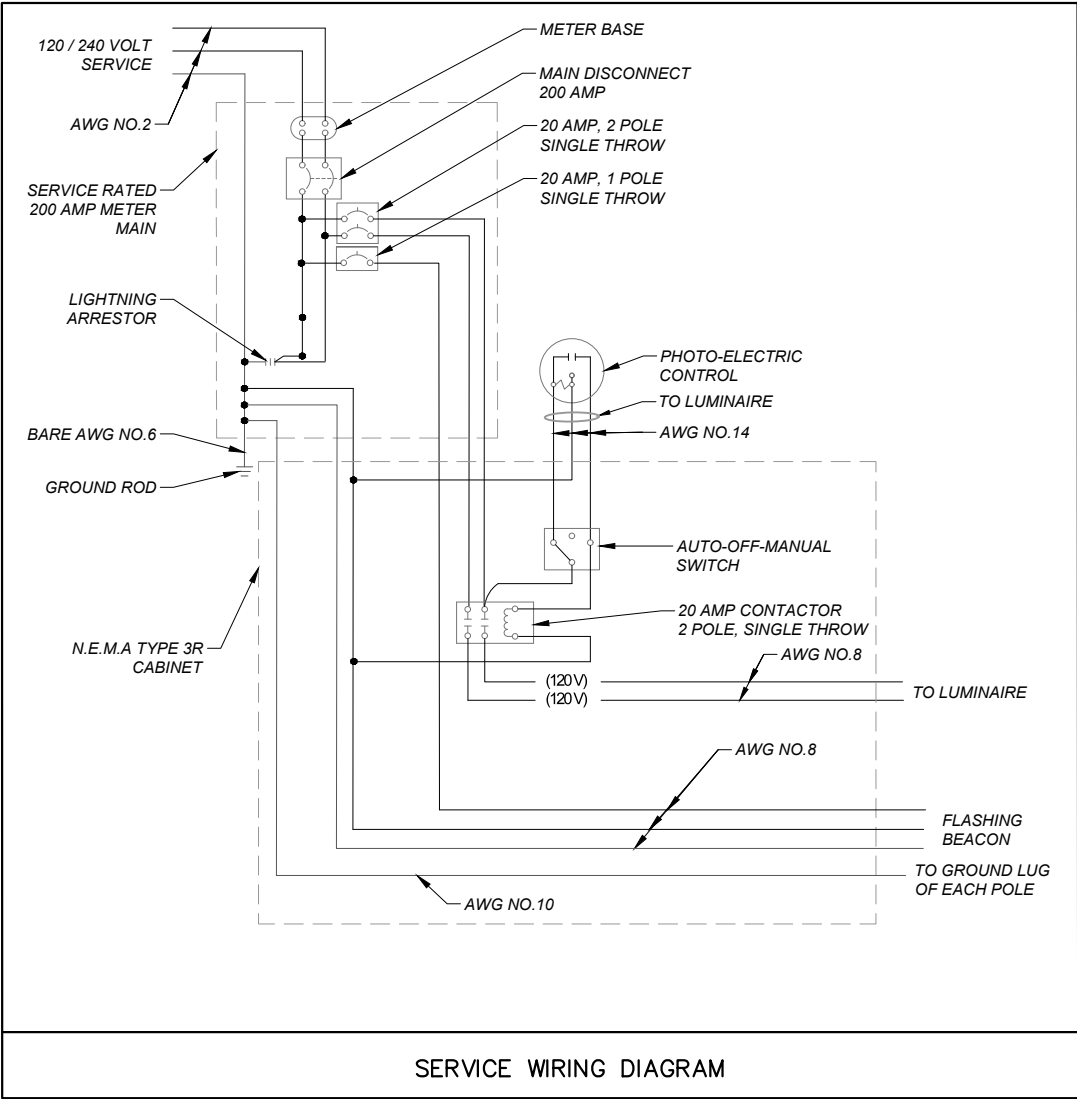
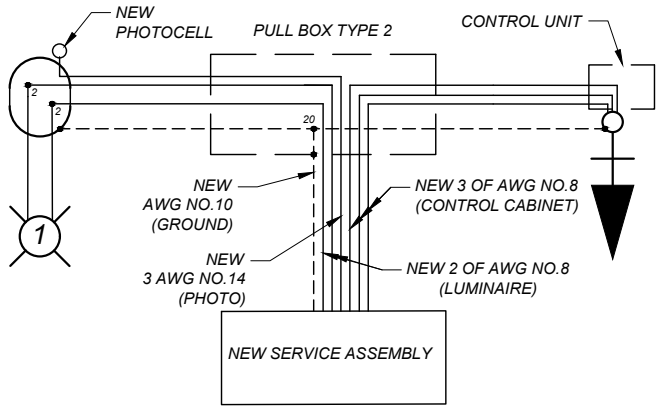
HEIGHT AND EXPOSURE FACTOR Kz
zg = TAKEN AS 900 FEET FOR EXPOSURE C
d = 9.5
z = 16 FEET

DESIGN WIND VELOCITY 700 YEAR MRI BASIC WIND SPEED
(115 MPH)

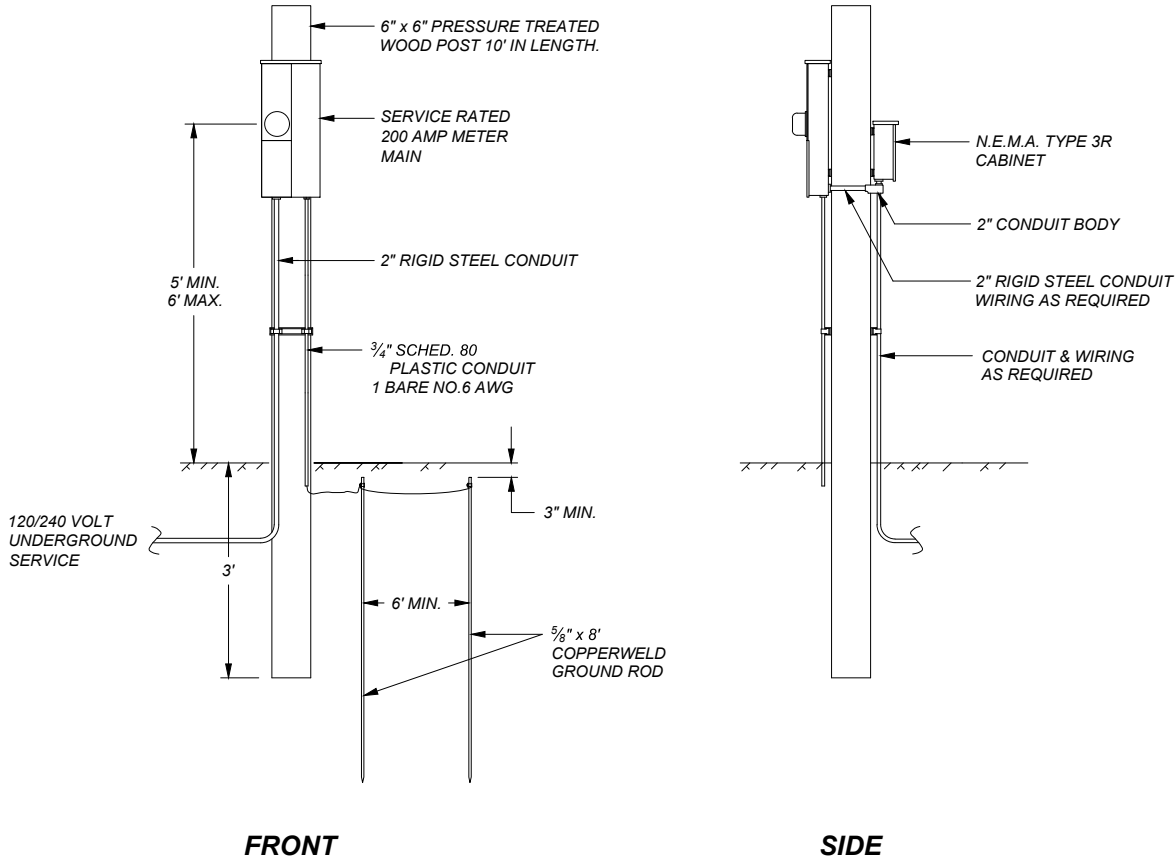
TYPE 10-A LUMINAIRE STANDARDS,
POLE BASES & FOUNDATION DETAILS

NO SCALE

NOTE - INSTALL AND PRETENSION ANCHOR BOLTS
PER THE SPECIFICATIONS
MARK TOP OF ANCHOR BOLT WITH
MATERIAL GRADE PER ASTM F 1554 S3



DETAIL - CONTROL CABINET
(no scale)




UNDERGROUND SERVICE ASSEMBLY DETAIL

UNDERGROUND SERVICE
ASSEMBLY DETAIL
NO SCALE

SHEET NO.

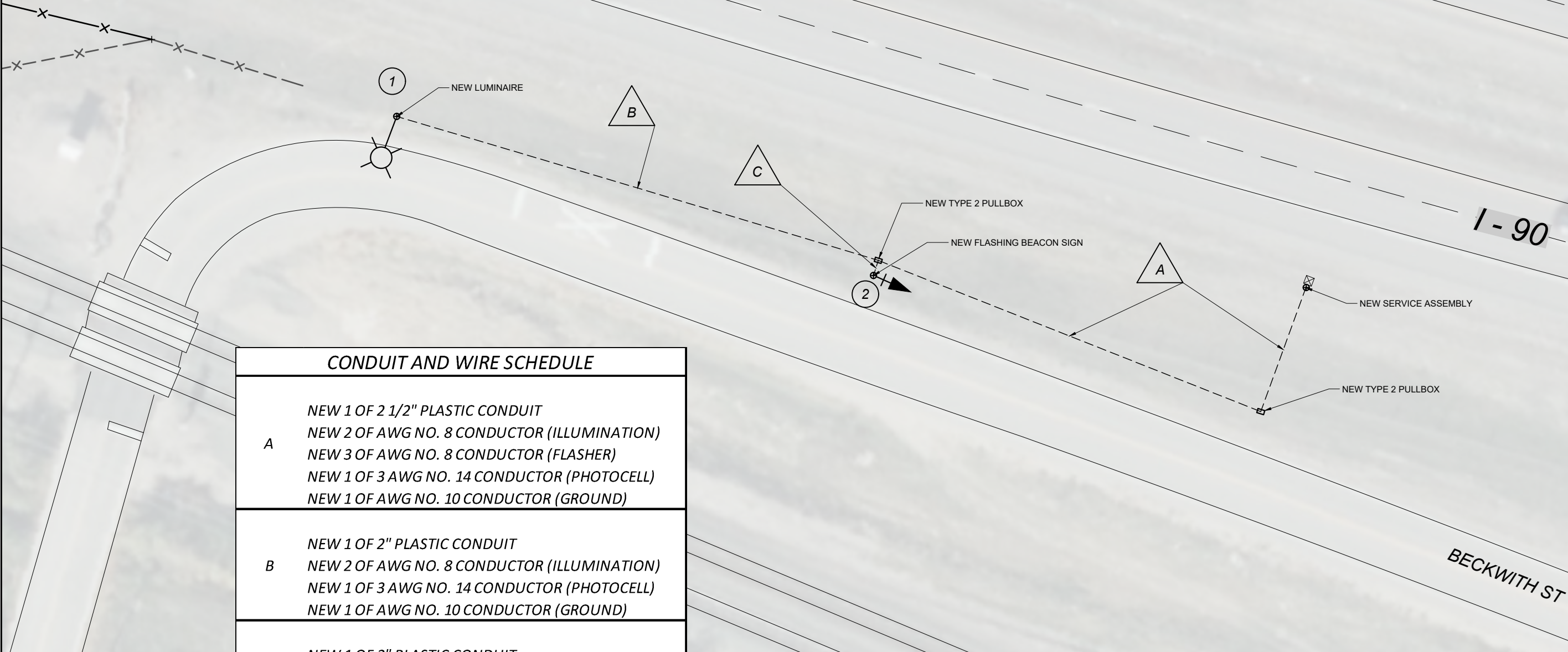
E04

ELECTRICAL DETAILS

	DESIGNED BY		PROJECT NAME
	BEN MOELLER		SF 199 BECKWITH ST MSLA CNTY
	REVIEWED BY		COUNTY
	DANIEL CUNNINGHAM		MISSOULA
ELECTRICAL	CHECKED BY		PROJECT ID
			HSIP 32164(2)
			UPN
			10353000
2/19/2026 9:16 AM			
10353000ELPRE001.DWG			

POLE SCHEDULE												
POINT #	DESCRIPTION	ITEM #	TYPE	TYPE POLE	FOUNDATION DIA X DEPTH	LUMINAIRE MASTARM	LUMINAIRE HEIGHT	LUMINAIRE TYPE	NORTHING	EASTING	LONGITUDE	LATITUDE
1	LUMINAIRE	617183056	10-A-500-6	BREAKAWAY	2' X 5'	15'	40'	LED	1045663.684	784838.1955	W114° 15' 04.23"	N047° 01' 11.13"
2	FLASHING BEACON	617673200	TYPE I-200	BREAKAWAY	2' X 4'				See Signing Plans for location			

NOTE: Minor adjustments of pole locations are allowed in the field.



CONDUIT AND WIRE SCHEDULE	
A	NEW 1 OF 2 1/2" PLASTIC CONDUIT NEW 2 OF AWG NO. 8 CONDUCTOR (ILLUMINATION) NEW 3 OF AWG NO. 8 CONDUCTOR (FLASHER) NEW 1 OF 3 AWG NO. 14 CONDUCTOR (PHOTOCELL) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)
B	NEW 1 OF 2" PLASTIC CONDUIT NEW 2 OF AWG NO. 8 CONDUCTOR (ILLUMINATION) NEW 1 OF 3 AWG NO. 14 CONDUCTOR (PHOTOCELL) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)
C	NEW 1 OF 2" PLASTIC CONDUIT NEW 3 OF AWG NO. 8 CONDUCTOR (FLASHER) NEW 1 OF AWG NO. 10 CONDUCTOR (GROUND)

PROJECT NAME
SF 199 BECKWITH ST MSLA CNTY

COUNTY

MISSOULA

PROJECT ID

HSIP 32164(2)

UPN

10353000

DESIGNED BY

BEN MOELLER

REVIEWED BY

DANIEL CUNNINGHAM

CHECKED BY

12/10/2025

10353000ELPRE001.DWG



ELECTRICAL

2/19/2026 9:16 AM

FENCE MATERIAL QUANTITIES			
ITEM NO.	MATERIAL	UNIT	TOTAL
607100149	FARM FENCE-TYPE F3W-32 IN WW	LNFT	230
607100380	FARM FENCE-PANEL/DOUBLE FW	EACH	2



FENCE PANEL SCHEDULE							
POINT #	DESCRIPTION	ITEM #	TYPE	NORTHING	EASTING	LONGITUDE	LATITUDE
3	WEST POST	607100380	DOUBLE PANEL	1045735.54'	784563.08'	W114° 15' 08.26"	N047° 01' 11.67"
4	EAST POST	607100360	DOUBLE PANEL	1045689.08'	784757.53'	W114° 15' 05.41"	N047° 01' 11.33"

NOTE: Point locations are estimates of the fence tie in locations.