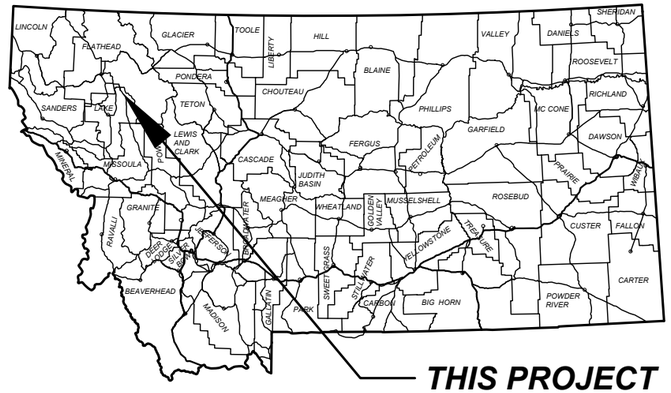
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MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT STPP 83-3(7)59
PAVING FABRIC, PLANT MIX OVERLAY, SEAL & COVER
SWAN LAKE - N & S
LAKE & FLATHEAD COUNTIES

LENGTH 11.2 MILES

PROJECT DESIGN DATA
NORTH SECTION RP. 77.6 TO RP. 82.7

PRESENT	2024	A.D.T. =	2,130
LETTING	2026	A.D.T. =	2,170
DESIGN	2046	A.D.T. =	2,650
		D.H.V. =	360
		TRUCKS =	5.0%
		V. =	60 MPH
		18 KIP ESAL'S =	51 DAILY
		ANNUAL GROWTH RATE =	1.0%

PROJECT DESIGN DATA
SOUTH SECTION RP. 58.9 TO RP. 65.2

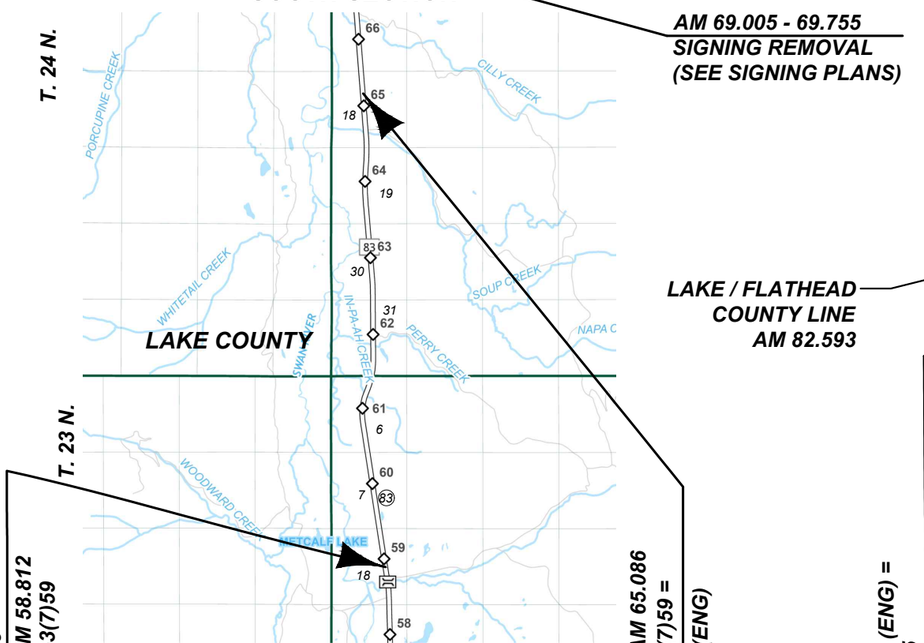
PRESENT	2024	A.D.T. =	1,260
LETTING	2026	A.D.T. =	1,280
DESIGN	2046	A.D.T. =	1,570
		D.H.V. =	220
		TRUCKS =	8.4%
		V. =	60 MPH
		18 KIP ESAL'S =	49 DAILY
		ANNUAL GROWTH RATE =	1.0%

SURFACING SOURCES -
CONTRACTOR FURNISHED

TO SWAN LAKE

SOUTH SECTION

AM 69.005 - 69.755
SIGNING REMOVAL
(SEE SIGNING PLANS)



STA. 947+70.00 (MET) =
ON BR 83-2(11)59
RP 58+0.888 = AM 58.812
BEGIN STPP 83-3(7)59

RP 65+0.170 = AM 65.086
END STPP 83-3(7)59 =
STA. 682+82.00 (ENG)
ON FHP 15-G

THIS CONTRACT
RP 58.888 TO RP 65.170

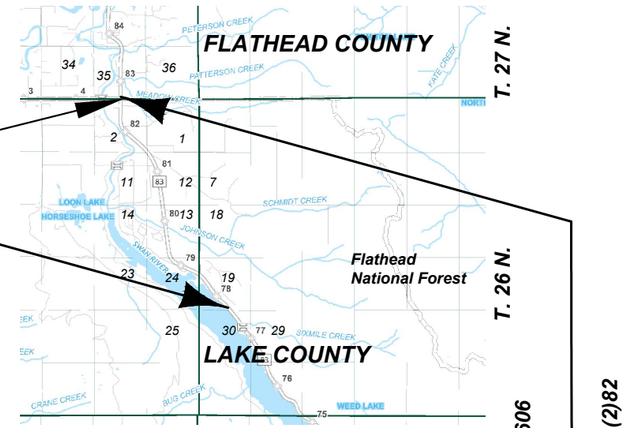
AM 45.967 - 56.500
SIGNING REMOVAL & NEW
SIGNING UPGRADES
(SEE SIGNING PLANS)

TO BIGFORK

AM 84.000 - 90.200
SIGNING REMOVAL & NEW
SIGNING UPGRADES
(SEE SIGNING PLANS)

NORTH SECTION

LAKE / FLATHEAD
COUNTY LINE
AM 82.593



STA. 21+24.00 (ENG) =
ON F 83-2(1)65
RP 77+0.553 = AM 77.633
BEGIN STPP 83-3(7)59

RP 82+0.661 = AM 82.606
END STPP 83-3(7)59 =
STA. 446+37.50 (ENG)
ON RTF-HES-BRF 83-3(2)82

THIS CONTRACT
RP 77.553 TO RP 82.661

N

SHEET NO. 1

TITLE SHEET

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	DATE
F. COBARRUBIAS	1/8/2025
REVIEWED BY	DATE
J. DOLD	06/2025
CHECKED BY	DATE
J. CERECK	06/2025

MONTANA
Department of Transportation

ROAD PLANS

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SUMMARY/DETAIL	E1

NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

COMP. AGGREGATE WEIGHT	= 3700 LBS. PER CUBIC YARD
COMP. WEIGHT OF PL. MIX BIT. SURF.	= 3855 LBS. PER CUBIC YARD
ASPHALT BINDER - GRADE S - 1/2" AGG.	= 6.0% OF PL.MIX BIT.SURF.
HYDRATED LIME	= 1.4% OF PL.MIX BIT.SURF.
ASPHALT BINDER	= 3.0% OF RECYCLED PL.MIX (50% RAP)
BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
EMULSIFIED ASPHALT - TACK (ALL OTHER SURFACES)	= 0.05 GAL. PER SQ.YARD (UNDILUTED)
EMULSIFIED ASPHALT - TACK COAT - PAVING FABRIC	= 0.25 GAL. PER SQ.YARD
EMULSIFIED ASPHALT - FOG SEAL (S & C)	= 0.075 GAL. PER SQ.YARD (UNDILUTED)
EMULSIFIED ASPHALT - FOG SEAL (RUMBLE STRIPS)	= 0.10 GAL. PER SQ.YARD (UNDILUTED)
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD
CRACK SEALING	= 0.7 LBS. PER LINEAR FOOT
MASTIC CRACK FILLING	= 1.7 LBS. PER LINEAR FOOT
MASTIC CRACK FILLING	= 10.2 LBS. PER SQ. FOOT

AS BUILTS

FHP 15 G
STPP 83-2(7)48
S 65(4)
F 83-2(1)65
RTF-HES-BRF 83-3(2)82

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.

ACCUMULATED MILEAGE

THIS PROJECT IS BASED OFF ACCUMULATED MILEAGE (AM) IN LIEU OF STATIONING OR REFERENCE POSTS. SEE PROJECT LIMITS ON LOCATION MAP.

APPROACHES # (FOR INFORMATION ONLY)

ACCUMULATED MILEAGE	TYPE	linear feet	EXISTING SURFACING	feet	PROPOSED SURFACE	AGGREGATE		BITUMINOUS MATERIAL		sq. yards	REMARKS
						tons	cu. yards	tons	gallons		
		LENGTH		PMS THK.		PLANT MIX BIT. SURF. GRADE S-1/2"	SHOULDER GRAVEL	ASPHALT BINDER PG 58H-34	EMULSIFIED ASPHALT TACK	COLD MILLING 0.00' TO 0.20'	
MT-83 (SOUTH SECTION)											
AM 59.501	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
AM 59.666	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
AM 59.681	FARM FIELD	3.0	PMS	0.20	SEE DETAIL	2.7		0.16	1.1	22.6	RT
AM 60.146	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
AM 60.651	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 60.791	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
AM 61.346	FARM FIELD	3.0	PMS	0.20	SEE DETAIL	2.7		0.16	1.1	22.6	RT
AM 61.356	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
AM 61.646	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 62.496	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 62.782	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 63.376	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 63.889	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 64.975	FARM FIELD	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
SUBTOTAL	FARM FIELD					41	2	2.5	19	45	SOUTH SECTION
AM 61.056	PRIVATE	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		RT
AM 61.926	PRIVATE	3.0	GRAVEL	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
AM 63.327	PRIVATE	3.0	PMS	0.20	SEE DETAIL	2.7		0.16	1.1	22.6	LT
AM 64.596	PRIVATE	3.0	PMS MILLINGS	0.20	SEE DETAIL	3.0	0.2	0.18	1.4		LT
SUBTOTAL	PRIVATE					12	1	0.7	5	23	SOUTH SECTION
AM 61.918	PUBLIC	25.0	PMS	0.20	SEE DETAIL	13.2		0.79	5.4	31.4	RT CENTER LOOP RD
AM 64.587	PUBLIC	25.0	PMS/GRAVEL	0.20	SEE DETAIL	13.2	1.0	0.79	5.4		RT SOUP CREEK RD
SUBTOTAL	PUBLIC					26	1	1.6	11	31	SOUTH SECTION

SEE ADDITIONAL SURFACING & COLD MILLING FRAMES FOR QUANTITY TOTALS. SEE DETAIL

SHEET NO. 2

TABLE OF CONTENTS
NOTES

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: F. COBARRUBIAS 1/10/2025
REVIEWED BY: J. DOLD 06/2025
CHECKED BY: J. CERECK 06/2025

MONTANA Department of Transportation

ROAD PLANS

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PULLOUTS / MCS SCALE SITE # (FOR INFORMATION ONLY)

ACCUMULATED MILEAGE		TYPE	linear feet		EXISTING & PROPOSED SURFACING	feet	AGGREGATE		BITUMINOUS MATERIAL				sq. yards		REMARKS
			FULL WIDTH (CHIP SEAL WIDTH)	COLD MILLING & PAVING WIDTH		PMS. THK.	sq. yards	tons	tons		gallons		COLD MILLING	REMOVE BITUMINOUS PAVEMENT	
FROM	TO						COVER TYPE 1	PLANT MIX BIT. SURF. GRADE S-1/2"	ASPHALT BINDER PG 58H-34	EMULSIFIED ASPHALT SEAL CHFRS-2P	EMULSIFIED ASPHALT TACK	EMULSIFIED ASPHALT FOG SEAL	0.00' TO 0.20'	0.20'	
MT-83 (SOUTH SECTION)															
AM 59.195	AM 59.263	PULLOUT	20.0	3.0	PMS	0.20	511.1	14.9	0.89	0.91	5.9	38.3	118.2		LT
AM 64.865	AM 64.934	PULLOUT	20.0	3.0	PMS	0.20	511.1	14.9	0.89	0.91	5.9	38.3	118.2		LT
SUBTOTAL		PULLOUTS					1,022	30	1.8	1.8	12	77	236	~	SOUTH SECTION
MT-83 (NORTH SECTION)															
AM 80.472	AM 80.602	MCS SCALE SITE		SEE DETAIL	PMS	0.20		323.4	19.40		125.9			2,517.0	RT
SUBTOTAL		MCS SCALE SITE					~	323	19.4	~	126	~	~	2,517	NORTH SECTION

SEE ADDITIONAL SURFACING & COLD MILLING FRAMES FOR QUANTITY TOTALS. SEE DETAIL.

ACCUMULATED MILEAGE

FROM	TO	LENGTH (miles)
MT-83 (SOUTH SECTION)		
58.0	59.0	1.00
59.0	60.0	1.00
60.0	61.0	1.00
61.0	62.0	0.99
62.0	63.0	1.01
63.0	64.0	1.00
64.0	65.0	1.00
65.0	66.0	0.87
MT-83 (NORTH SECTION)		
77.0	78.0	1.04
78.0	79.0	0.92
79.0	80.0	0.96
80.0	81.0	0.96
81.0	82.0	0.98
82.0	83.0	0.99

SHEET NO. 3

PULLOUTS / MCS SCALE SITE
ACCUMULATED MILEAGE

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: F. COBARRUBIAS 06/2025
REVIEWED BY: J. DOLD 06/2025
CHECKED BY: J. CERECK 06/2025

MONTANA Department of Transportation
ROAD PLANS

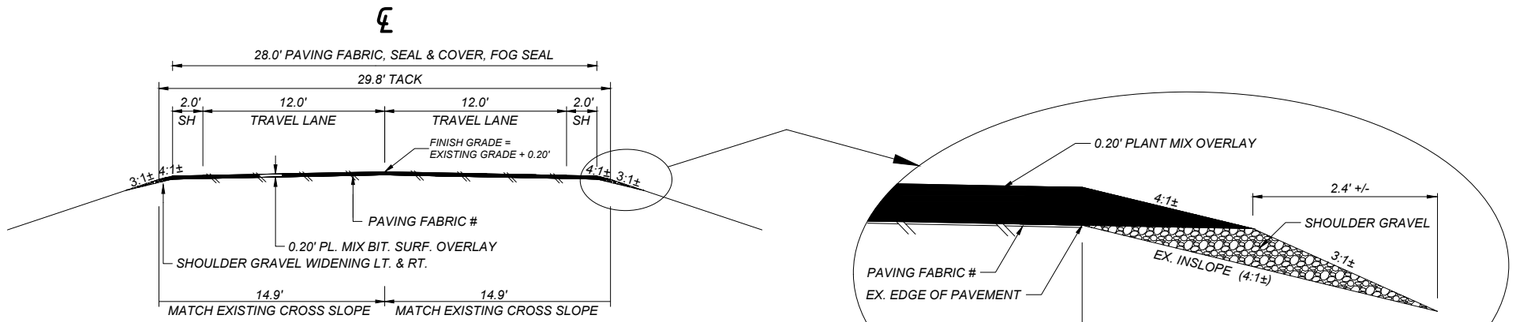
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TYPICAL SECTION NO. 1

MT-83 (SOUTH SECTION)

SOUTH SECTION
AM 58.812 TO AM 64.615 THEN TYP. NO. 2



QUANTITIES									
UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL				PAVING FABRIC
	COVER	PLANT MIX	SHOULDER GRAVEL		ASPHALT BINDER	EMULSIFIED ASPHALT SEAL	ASPHALT TACK PAVING FABRIC*	EMULSIFIED ASPHALT FOG SEAL	
AREA square feet		5.78		square yards PER STATION		311	331	311	311
cubic yards PER STATION		21.4	2.4	tons PER STATION	2.47	0.56			
tons PER STATION		41.2		gals. PER STATION			83	23	
square yards PER STATION	311								

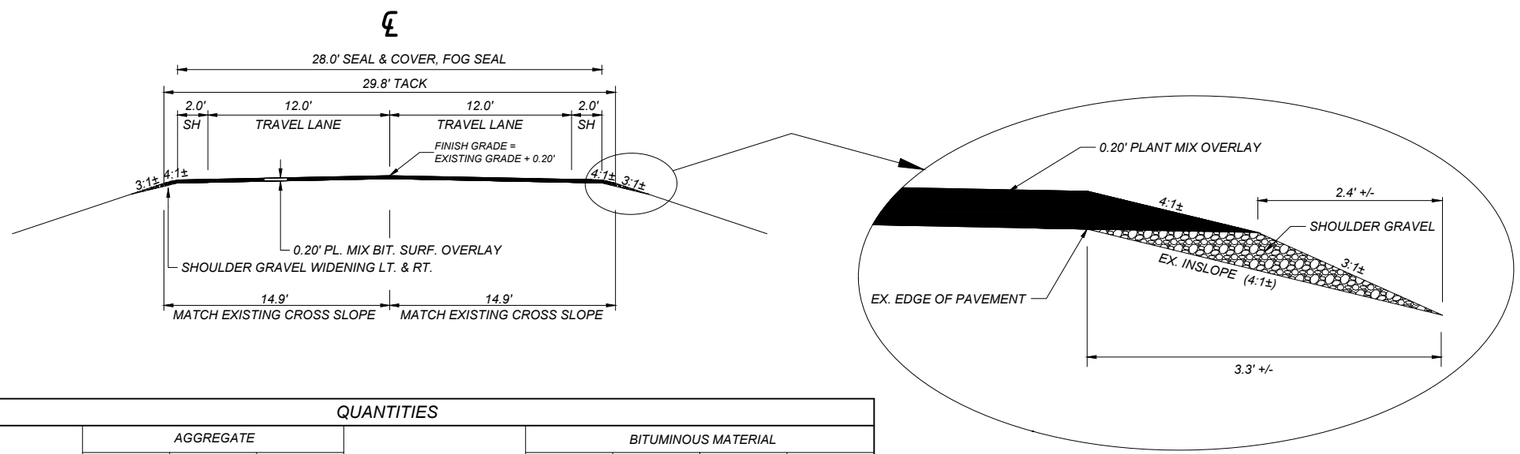
PLACE PAVING FABRIC BELOW PLANT MIX SURF. OVERLAY ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SEE SPECIAL PROVISION.

* BASED ON 1 APPLICATION OF ASPHALT TACK UNDER THE PAVING FABRIC USING AN APPLICATION RATE OF 0.25 GAL./SQ.YD. AND INCLUDED IN THE COST OF THE PAVING FABRIC.

TYPICAL SECTION NO. 2

MT-83 (SOUTH SECTION)

SOUTH SECTION
AM 64.615 TO AM 65.086



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		5.78		square yards PER STATION		311	331	311
cubic yards PER STATION		21.4	2.4	tons PER STATION	2.47	0.56		
tons PER STATION		41.2		gals. PER STATION			17	23
square yards PER STATION	311							

* BASED ON 1 APPLICATION

SHEET NO.
4

TYPICAL SECTIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	DATE	REVIEWED BY	DATE	CHECKED BY	DATE
F. COBARRUBIAS	06/2025	J. DOLD	06/2025	J. CERECK	06/2025

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MONTANA
Department of Transportation

ROAD PLANS

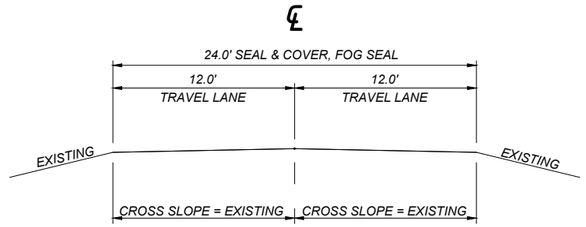
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TYPICAL SECTION NO. 3

MT-83 (NORTH SECTION)

NORTH SECTION
AM 77.633 TO AM 77.735 THEN TYP. NO. 4



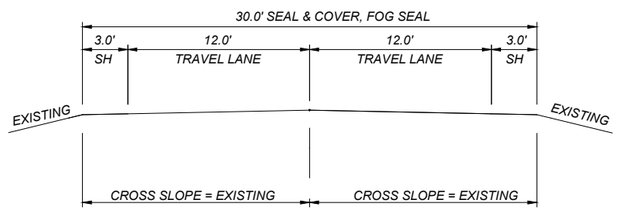
QUANTITIES				
UNIT	AGGREGATE	UNIT	BITUMINOUS MATERIAL	
	COVER		EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		square yards PER STATION	267	267
cubic yards PER STATION		tons PER STATION	0.48	
tons PER STATION		gals. PER STATION		20
square yards PER STATION	267			

TYPICAL SECTION NO. 4

MT-83 (NORTH SECTION)

NORTH SECTION
AM 77.735 TO AM 82.381
AM 82.381 TO AM 82.466

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



QUANTITIES				
UNIT	AGGREGATE	UNIT	BITUMINOUS MATERIAL	
	COVER		EMULSIFIED ASPHALT SEAL	EMULSIFIED ASPHALT FOG SEAL
AREA square feet		square yards PER STATION	333	333
cubic yards PER STATION		tons PER STATION	0.59	
tons PER STATION		gals. PER STATION		25
square yards PER STATION	333			

SHEET NO.
5

TYPICAL SECTIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY		REVIEWED BY		CHECKED BY	
F. COBARRUBIAS	06/2025	J. DOLD	06/2025	J. CERECK	06/2025

MONTANA
Department of Transportation

ROAD PLANS

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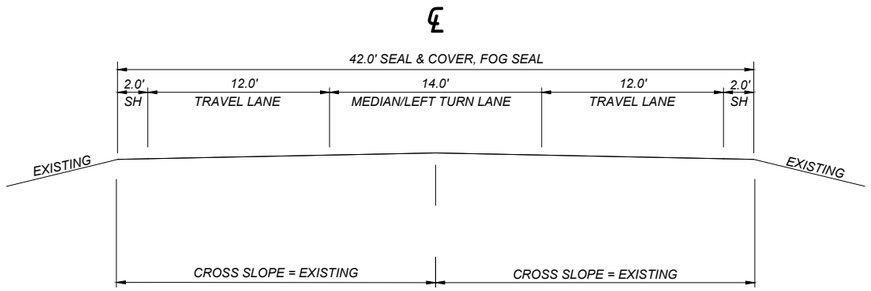
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TYPICAL SECTION NO. 5

MT-83 (NORTH SECTION)

NORTH SECTION
AM 82.466 TO AM 82.606



QUANTITIES				
UNIT	AGGREGATE COVER	UNIT	BITUMINOUS MATERIAL EMULSIFIED ASPHALT SEAL	BITUMINOUS MATERIAL EMULSIFIED ASPHALT FOG SEAL
AREA square feet		square yards PER STATION	467	467
cubic yards PER STATION		tons PER STATION	0.83	
tons PER STATION		gals. PER STATION		35
square yards PER STATION	467			

SHEET NO.
6

TYPICAL SECTIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: F. COBARRUBIAS 06/2025
REVIEWED BY: J. DOLD 06/2025
CHECKED BY: J. CERECK 06/2025

MONTANA
Department of Transportation

ROAD PLANS

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SUMMARY

SURFACING

ACCUMULATED MILEAGE FROM	TO	linear feet GROSS	NET	+	-	FOR	tons HYDRATED LIME	AGGREGATE sq. yards COVER TYPE 1	tons PLANT MIX BIT. SURF. GR. S - 1/2"	cu. yards SHOULDER GRAVEL	BITUMINOUS MATERIAL tons ASPHALT BINDER PG 58H-34	tons EMULSIFIED ASPHALT SEAL CHFRS-2P	gals. EMULSIFIED ASPHALT TACK	gals. EMULSIFIED ASPHALT FOG SEAL	REMARKS
MT-83 (SOUTH SECTION)															
AM 58.812	AM 64.615	30,639.84	30,639.84					95,290	12,624	735	756.8	171.6	#	7,047	TYP. NO. 1
AM 64.615	AM 65.086	2,486.88	2,486.88					7,734	1,025	60	61.4	13.9	423	572	TYP. NO. 2
						ADDITIONAL SURFACING		1,022	109	4	6.6	1.8	47	77	
SUBTOTAL		33,126.72	33,126.72	~	~		~	**104,046**	**13,758**	**799**	**824.8**	**187.3**	**470**	**7,696**	**SOUTH SECTION**
MT-83 (NORTH SECTION)															
AM 77.633	AM 77.735	538.56	538.56					1,438				2.6		108	TYP. NO. 3
AM 77.735	AM 82.381	24,530.88	24,530.88					81,688				144.7		6,133	TYP. NO. 4
AM 82.381	AM 82.466	448.80	448.80					1,795				3.2		135	TRANS. TYP. NO. 4 TO TYP. NO. 5
AM 82.466	AM 82.606	739.20	739.20					3,452				6.1		259	TYP. NO. 5
						ADDITIONAL SURFACING			323		19.4		126		
SUBTOTAL		26,257.44	26,257.44	~	~		~	**88,373**	**323**	~	**19.4**	**156.6**	**126**	**6,635**	**NORTH SECTION**
TOTAL		**59,384.16**	**59,384.16**	~	~		**197**	**192,419**	**14,081**	**799**	**844.2**	**343.9**	**596**	**14,331**	

SEE PAVING FABRIC SUMMARY FRAME

ADDITIONAL SURFACING (INCLUDED IN SURFACING FRAME)

ACCUMULATED MILEAGE FROM	TO	linear feet GROSS	NET	+	-	FOR	tons HYDRATED LIME	AGGREGATE sq. yards COVER TYPE 1	tons PLANT MIX BIT. SURF. GR. S - 1/2"	cu. yards SHOULDER GRAVEL	BITUMINOUS MATERIAL tons ASPHALT BINDER PG 58H-34	tons EMULSIFIED ASPHALT SEAL CHFRS - 2P	gals. EMULSIFIED ASPHALT TACK	gals. EMULSIFIED ASPHALT FOG SEAL	REMARKS
MT-83 (SOUTH SECTION)															
						14 - FARM FIELD APPROACHES			41	2	2.5		19		
						4 - PRIVATE APPROACHES			12	1	0.7		5		
						2 - PUBLIC APPROACHES			26	1	1.6		11		
						2 - PULLOUTS		1,022	30		1.8	1.8	12	77	
SUBTOTAL							~	**1,022**	**109**	**4**	**6.6**	**1.8**	**47**	**77**	**SOUTH SECTION**
MT-83 (NORTH SECTION)															
						1 - MCS SCALE SITE			323		19.4		126		
SUBTOTAL		~	~	~	~		~	~	**323**	~	**19.4**	~	**126**	~	**NORTH SECTION**

CRACK SEALING *

ACCUMULATED MILEAGE FROM	TO	TRANSVERSE & LONGITUDINAL, MASTIC PATCH AREAS CRACK SEALING pounds	CRACK SEALING linear feet	MASTIC CRACK FILLING pounds	MASTIC CRACK FILLING linear feet	MASTIC CRACK FILLING area (sq ft)	REMARKS
MT-83 (SOUTH SECTION)							
AM 58.812	AM 64.615	2,142	3,059	4,861	501	393	
SUBTOTAL		**2,142**	**3,059**	**4,861**	**501**	**393**	**SOUTH SECTION**
MT-83 (NORTH SECTION)							
AM 77.633	AM 82.606	9,454	13,506	958	414	25	
SUBTOTAL		**9,454**	**13,506**	**958**	**414**	**25**	**NORTH SECTION**
TOTAL		**11,596**	**#**	**5,819**	**#**	**#**	

* SEE DETAIL SHEET
# FOR INFORMATION ONLY
NOTE: NO CRACK SEALING OR MASTIC CRACK FILLING WILL BE INCLUDED FROM AM 64.615 - AM 65.086.

SHEET NO. 7

SUMMARIES

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	DATE	REVIEWED BY	DATE	CHECKED BY	DATE
F. COBARRUBIAS	06/2025	J. DOLD	06/2025	J. CERECK	06/2025

10542000RDSUM001.DWG

MONTANA Department of Transportation

ROAD PLANS

1/9/2025 4:01 PM

AWARD COPY

SUMMARY

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICATION	TOTAL
		NORTH AND SOUTH SECTIONS		
STRIPING - WHITE PAINT	gallon	600		600
STRIPING - YELLOW PAINT	gallon	284		284
STRIPING - WHITE EPOXY	gallon		513	513
STRIPING - YELLOW EPOXY	gallon		242	242
TEMPORARY STRIPING	linear feet	53,370		53,370

BASED ON 2 APPLICATIONS FOR SOUTH SECTION, AND 1 APPLICATION FOR NORTH SECTION.

PAVING FABRIC

ACCUMULATED MILEAGE		sq. yards	gals.	REMARKS
		MISCELLANEOUS ITEMS - SQYD	ASPHALT TACK PAVING FABRIC *	
FROM	TO			
AM 58.812	AM 64.615	95,290	25,431	
TOTAL		95,290	~	SOUTH SECTION

* ASPHALT TACK USED UNDER PAVING FABRIC IS SHOWN FOR INFORMATION ONLY, AND IS INCLUDED IN THE COST OF THE PAVING FABRIC. SEE SPECIAL PROVISION.

REVEGETATION *

ACCUMULATED MILEAGE		lump sum	REMARKS
		REVEGETATION	
FROM	TO		
AM 58.812	AM 65.086	1	FOR SHOULDER GRAVEL WIDENING
TOTAL		1	SOUTH SECTION

* SEE SPECIAL PROVISION.

COLD MILLING *

ACCUMULATED MILEAGE		sq. yards		REMARKS
		COLD MILLING	REMOVE BITUMINOUS PAVEMENT	
FROM	TO	0.00' TO 0.20'	0.20'	
MT-83 (SOUTH SECTION)				
AM 58.812	AM 58.852	662		LONGITUDINAL TAPER MILLING CONNECTION
AM 65.046	AM 65.086	662		LONGITUDINAL TAPER MILLING CONNECTION
		45		14 - FARM FIELD APP. TRANSVERSE TAPER MILLING
		23		4 - PRIVATE APP. TRANSVERSE TAPER MILLING
		31		2 - PUBLIC APP. TRANSVERSE TAPER MILLING
		236		2 - PULLOUTS TRANSVERSE TAPER MILLING
SUBTOTAL		1,660	~	SOUTH SECTION
MT-83 (NORTH SECTION)				
			2,517	1 - MCS SCALE SITE
SUBTOTAL		~	2,517	NORTH SECTION
TOTAL		1,660	2,517	

* SEE DETAILS

RUMBLE STRIPS

ACCUMULATED MILEAGE		miles	gals	REMARKS
		SINUSOIDAL RUMBLE STRIPS	EMULSIFIED ASPHALT FOG SEAL #	
FROM	TO	CENTERLINE		
AM 58.812	AM 65.086	6.3	739	
SUBTOTAL		6.3	739	SOUTH SECTION
TOTAL		6.3	~	

FOR INFORMATION ONLY, INCLUDE IN THE COST OF RUMBLE STRIPS

EQUIPMENT

ACCUMULATED MILEAGE		hours	REMARKS
		MOTOR GRADER *	
FROM	TO		
MT-83 (SOUTH SECTION)			
AM 58.812	AM 65.086	10	
TOTAL		10	

* FOR MINOR GRADING OF THE SURFACING INSLOPE.

SHEET NO. 8

SUMMARIES

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	F. COBARRUBIAS	06/2025
REVIEWED BY	J. DOLD	06/2025
CHECKED BY	J. CERECK	06/2025

MONTANA Department of Transportation

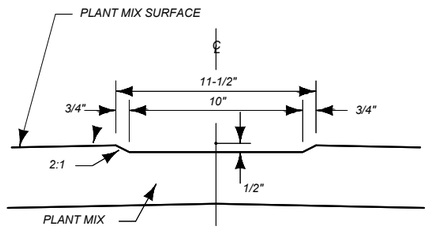
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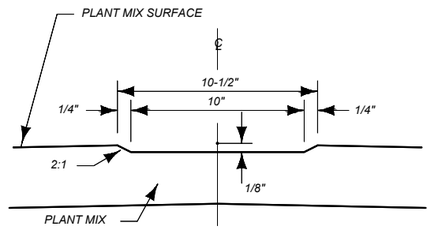
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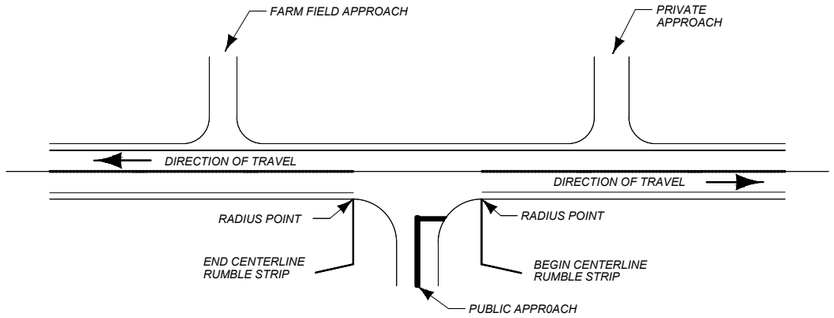
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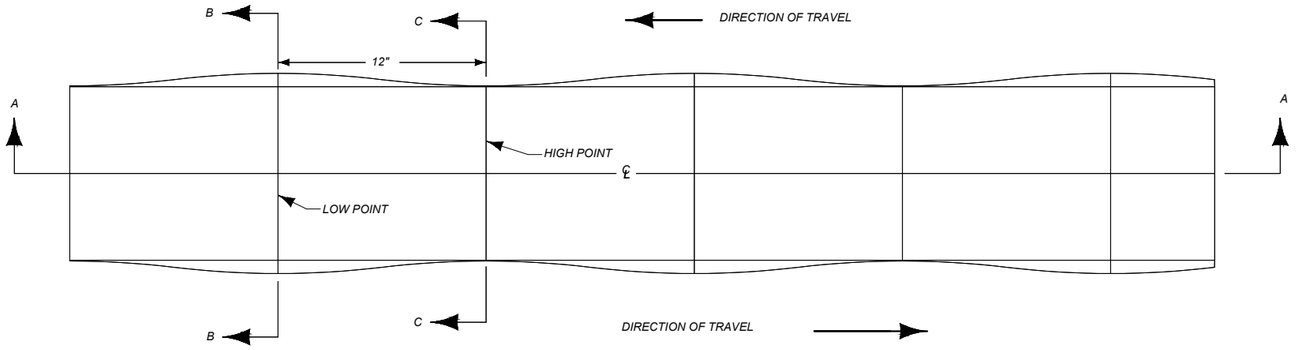
SECTION B-B



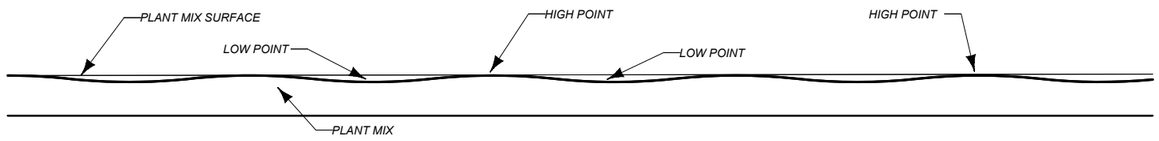
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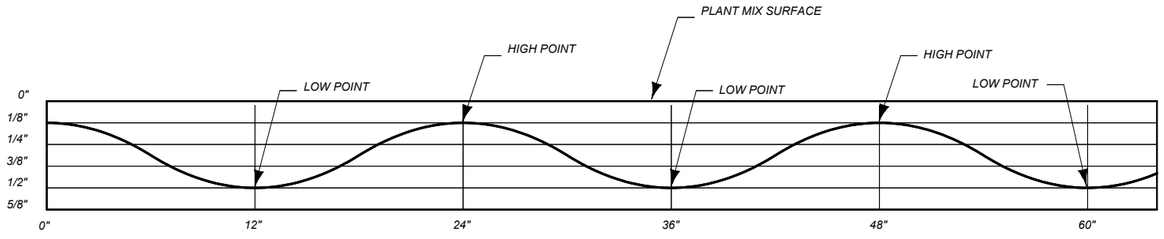
SINUSOIDAL CENTERLINE RUMBLE STRIP APPROACH DETAIL



SINUSOIDAL CENTERLINE RUMBLE STRIP WITH TAPERED GROOVE PLAN VIEW

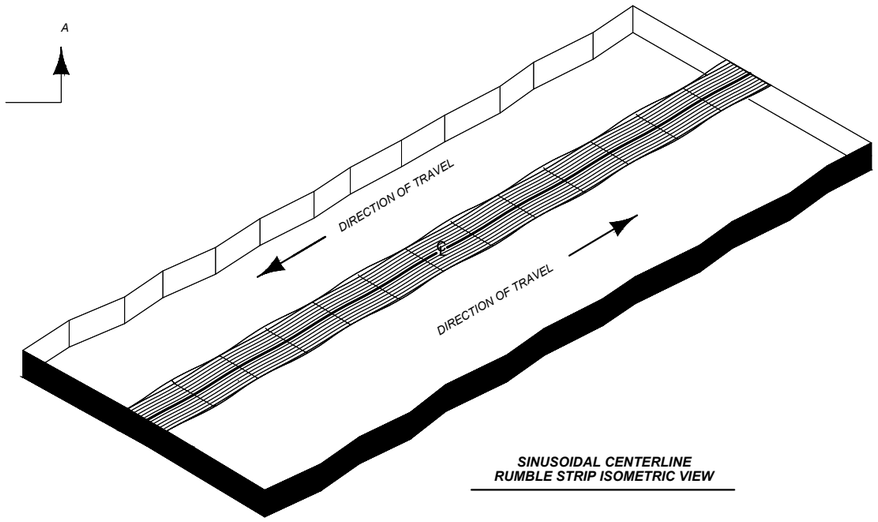


SECTION A-A



SINUSOIDAL CENTERLINE RUMBLE STRIP PROFILE VIEW

EXAGGERATED VERTICAL SCALE 10:1



SINUSOIDAL CENTERLINE RUMBLE STRIP ISOMETRIC VIEW

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.

SHEET NO.
9

SINUSOIDAL CENTERLINE
RUMBLE STRIPS
DETAIL
NO SCALE

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	F. COBARRUBIAS	06/2025
REVIEWED BY	J. DOLD	06/2025
CHECKED BY	J. CERECK	06/2025

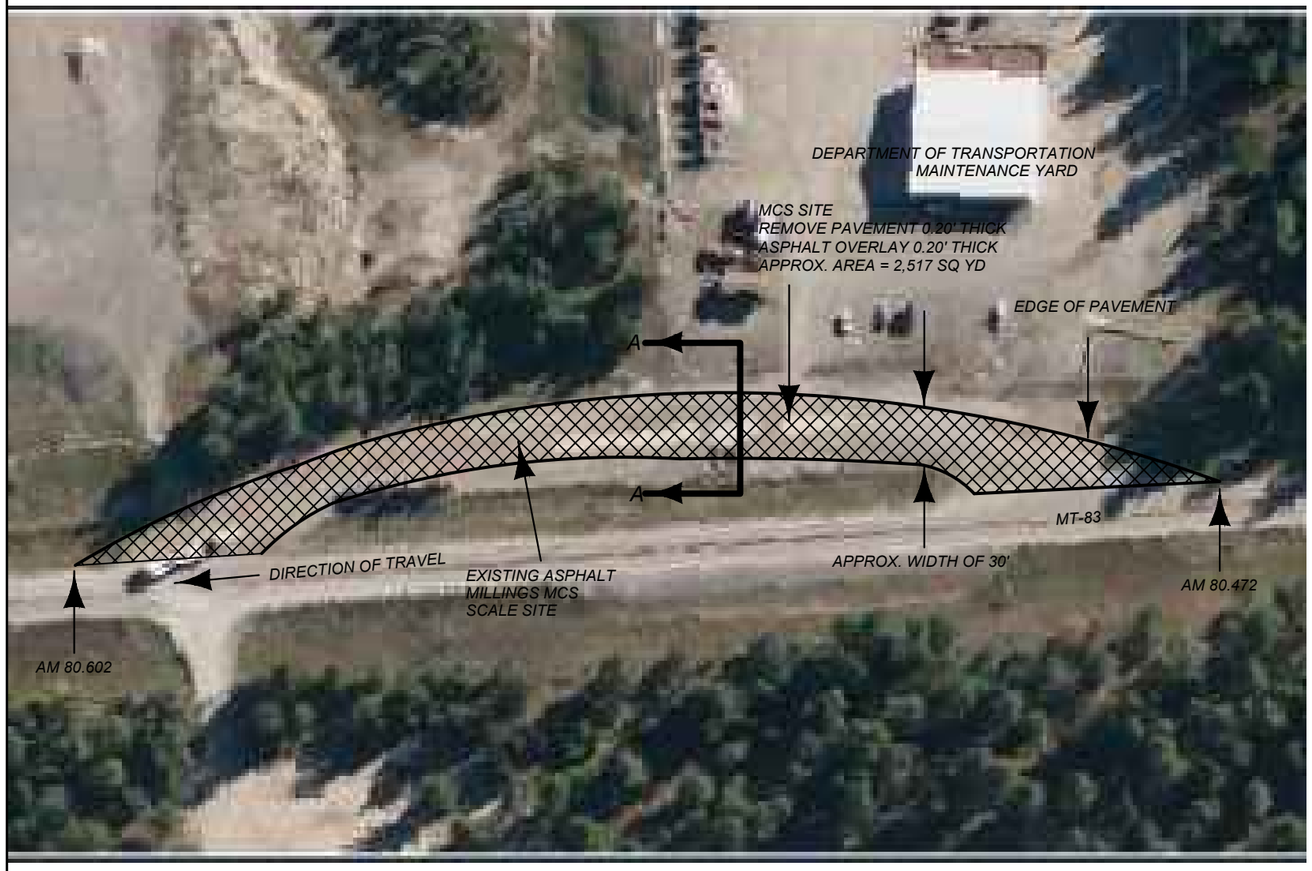
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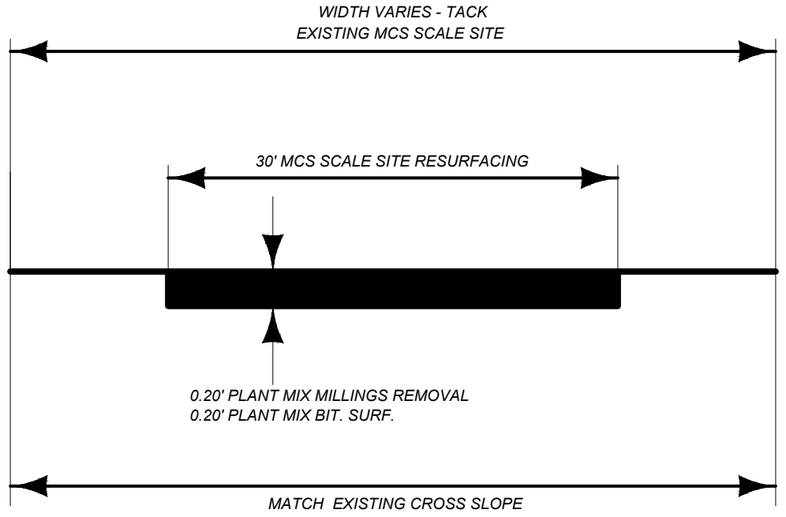
MONTANA
Department of Transportation

ROAD PLANS

6/18/2025 9:00 AM

DETAIL





SECTION A-A

NOTE: REPAVE THE EXISTING MCS SCALE SITE TO THE APPROXIMATE LIMITS AS OUTLINED IN THE PLANS, OR AT THE DISCRETION OF THE PROJECT MANAGER.

REMOVAL OF EXISTING ASPHALT MILLINGS PAID AS REMOVE BITUMINOUS PAVEMENT BY THE SQUARE YARD. MULTIPLE REMOVAL METHODS ARE ALLOWABLE, INCLUDING BUT NOT LIMITED TO: COLD MILLING, AND SAW CUT AND REMOVAL BY EXCAVATION.

SHEET NO. 10

MCS SCALE SITE (AM 80.537)
RESURFACING
DETAIL
NO SCALE

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	F. COBARRUBIAS	06/2025
REVIEWED BY	J. DOLD	06/2025
CHECKED BY	J. CERECK	06/2025

MONTANA Department of Transportation

ROAD PLANS

7/31/2025 9:11 AM

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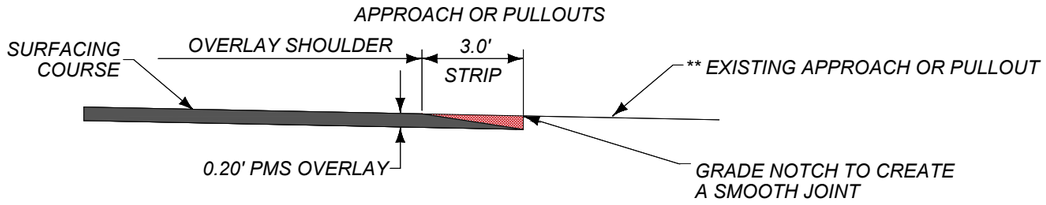
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DETAIL

APPROACHES & PULLOUTS PAVING CONNECTIONS

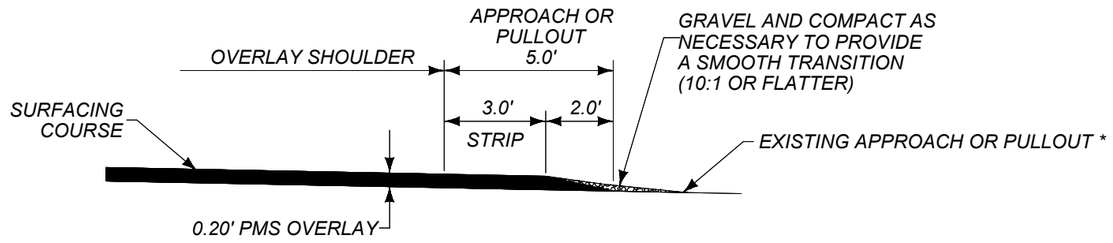
USE METHOD TO BEST FIT FIELD CONDITIONS

OPTION 1 FOR PRIVATE/FARM FIELD & PULLOUTS

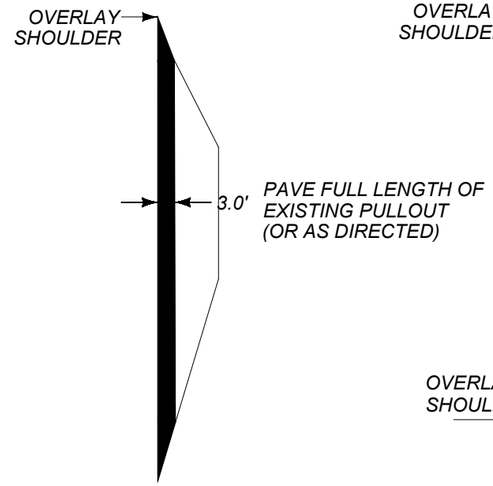


** COLD MILL NOTCH IF EXISTING APPROACH/PULLOUT IS PAVED. THE FINAL COLD MILLING DISTANCES & DEPTH TO BE DETERMINED BY THE MDT PROJECT MANAGER.

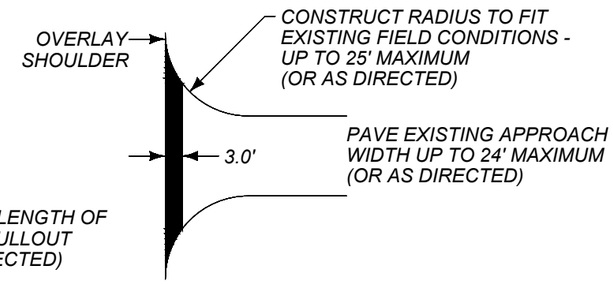
OPTION 2 FOR PRIVATE/FARM FIELD & PULLOUTS



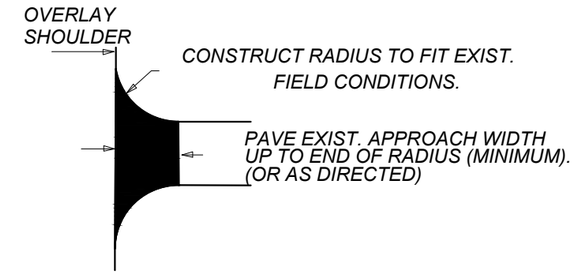
PULLOUTS



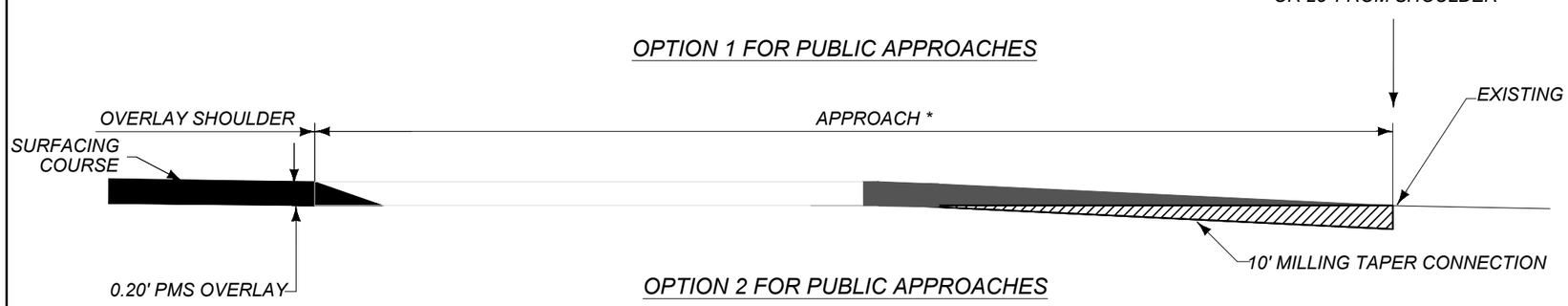
PRIVATE/FARM FIELD



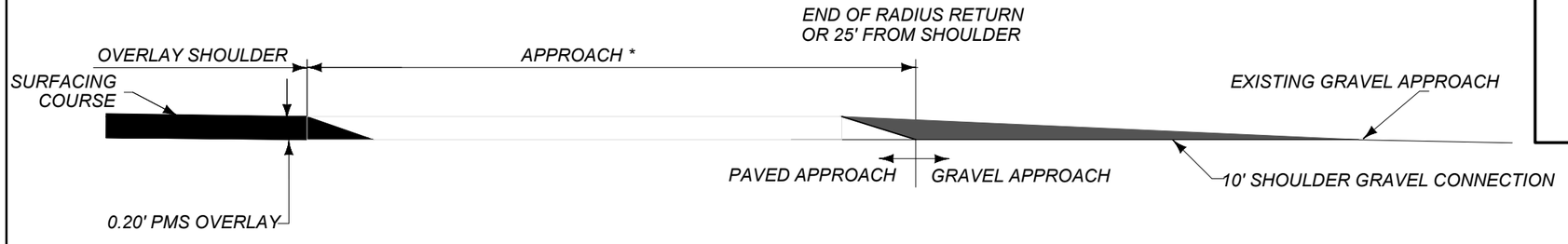
PUBLIC APPROACH



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 CUBIC YARD OF PLANT MIX.

NOTE: APPROACH DETAIL ONLY APPLIES WITHIN THE OVERLAY SOUTH SECTION FROM AM 58.812 TO 65.086.

*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. 11

APPROACHES & PULLOUTS PAVING CONNECTIONS DETAIL NO SCALE

PROJECT NAME SWAN LAKE - N & S
COUNTY LAKE & FLATHEAD COUNTIES
PROJECT ID STPP 83-3(7)59
UPN 10542000

DESIGNED BY	06/2025	REVIEWED BY	06/2025	CHECKED BY	06/2025
F. COBARRUBIAS		J. DOLD		J. CERECK	

10542000RDDET004.DWG

MONTANA Department of Transportation

ROAD PLANS

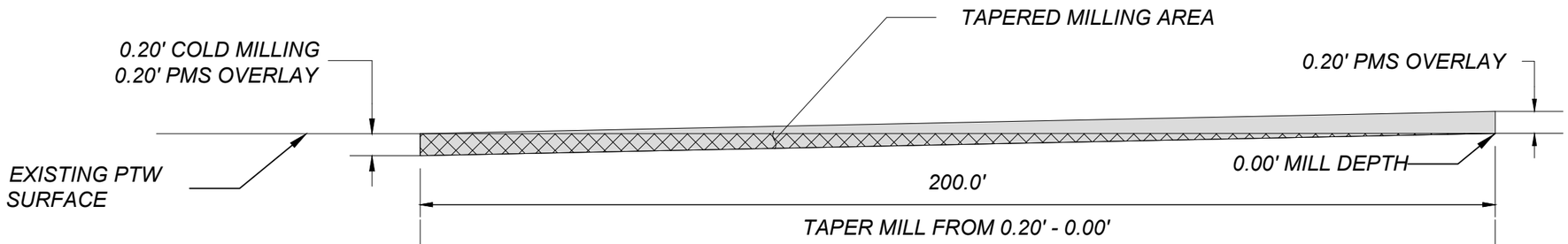
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DETAIL

LONGITUDINAL TAPER MILLING CONNECTIONS

(REVERSE DETAIL FOR OPPOSITE END)



AM 58.812	AM 65.086	AM 58.852	AM 65.046
0.20' MILL	0.20' MILL	0.00' MILL	0.00' MILL

SHEET NO. 12

LONGITUDINAL TAPER MILLING CONNECTIONS DETAIL NO SCALE

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	F. COBARRUBIAS	06/2025
REVIEWED BY	J. DOLD	06/2025
CHECKED BY	J. CERECK	06/2025

MONTANA Department of Transportation

ROAD PLANS

7/31/2025 9:11 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.

SIGN POSTS SYMBOLS SHOWN ARE FOR REFERENCE ONLY TO SHOW EXISTING SIGNS THAT REQUIRE NO ACTION.

SIGNING LOCATIONS ARE APPROXIMATE. ENGINEERING 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, ENGINEERING PROJECT MANAGER WILL CONTACT TRAFFIC & SAFETY BUREAU SIGNING SECTION WITH THE CORRECT NAME AND A NEW SIGN DESIGN WILL BE PROVIDED.

✕ = 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.

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

■ = FRANGIBLE SIGN POST. BREAKAWAY DEVICE REQUIRED.

1 AIR = 1 OR 2 ANGLE IRONS REQUIRED
2 AIR = 2 1/2" x 2 1/2" x 3/8" x 6'-4" (37 lbs.EACH)
IF Y POST DOES NOT REACH TOP 6" OF PANEL, 2 ANGLE IRONS REQUIRED.

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

FY = FLUORESCENT YELLOW SHEETING REQUIRED

FYG = FLUORESCENT YELLOW-GREEN SHEETING REQUIRED

BGR = BEHIND GUARDRAIL

MBB = MOUNT BACK TO BACK

RSFO = REPLACE SIGN FACE ONLY

SUMMARY
SIGNING & DELINEATION QUANTITIES

MATERIAL	TOTAL	UNIT
SIGNS-ALUM REFL SHEET XI	645.9	SQFT
SIGNS-ALUM SHEET INCR XI	220.6	SQFT
REMOVE SIGN	67	EACH
REMOVE SIGN-GUIDE	10	EACH
POSTS-STEEL U SIGN	264	LB
POSTS-STEEL STRUCTURAL SIGN	138	LB
POLES-TREATED WOOD 4 IN	456	LNFT
POLES-TREATED WOOD 5 IN	332	LNFT
FRANG SIGN POST BKWY - S3 X 5.7 (S75X8)	2	EACH
DELINEATOR TYPE 1	408	EACH

DELINEATION SPECIFICATIONS		
SYMBOL	DESIGN	TOTAL
⊣	A	378
⊣⊣	D	30

SHEET NO.
S1

SIGN SUMMARY

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

10542000SUMZ01.DWG

7/24/2025 9:55 AM

SIGN LOCATION			PANEL SPECIFICATIONS		SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES											ADDITIONAL INFORMATION	
					FEET		FEET									PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
45.967	R	REMOVE SIGN	W11-3																								1					
		REMOVE SIGN	W7-3aP																													NEXT 23 MILES
51.200	R	NEW	W11-3*	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	15.4				X		9.0			16										STATIC SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 2 MILES
52.500	L	NEW	W11-3*	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	15.4				X		9.0			16										STATIC SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 2 MILES
54.000	R	NEW	W11-3	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	15.4				X		9.0			16										STATIC SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 2 MILES
55.907	R	REMOVE SIGN	W11-3																								1					
		REMOVE SIGN	W7-3aP																													NEXT 13 MILES
56.500	L	NEW	W11-3*	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	15.4				X		9.0			16										STATIC SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 2 MILES
58.950	R	NEW	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5			14										
58.990	L	REPLACE	D2-2	102 X 36				25.0	S3x5.7 Structural Steel	5.1	5.0	3.5	11.7	12.4						25.5					138		2		1				Seeley Lake 44 JCT MT 200

SHEET NO. S2

SIGN SUMMARY

PROJECT NAME SWAN LAKE - N & S
COUNTY LAKE COUNTY
PROJECT ID STPP 83-3(7)59
UPN 10542000

DESIGNED BY R. TEIXEIRA 07/2025
REVIEWED BY J. STASZCUK 07/2025
CHECKED BY

MONTANA Department of Transportation

SUMMARY SHEETS

7/24/2025 9:55 AM

10542000SIUMZ01.DWG

AWARD COPY

SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES											ADDITIONAL INFORMATION	
								FEET		FEET									PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
58.990	R	RSFO	D2-3	96 X 48																32.0								1			Swan Lake 12 Bigfork 33 Kalispell 50	Swan Lake 12 Bigfork 33 Kalispell 50
59.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1					MILE 59
60.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1					MILE 60
60.020	L	RSFO	N7-1 MT	36 X 48															12.0								1					
		USE AS IS	N7-1P MT																												SWAN RIVER STATE FOREST	Swan River State Forest
60.030	L	REPLACE	M3-3P	24 X 12				12.0	4" Treated Wood Pole		5.0	3.0	12.9						2.0		14						1					SOUTH	
			M1-5	24 X 24															4.0											MONTANA 83	MT 83
60.040	R	REPLACE	M3-1P	24 X 12				12.0	4" Treated Wood Pole		5.0	3.0	12.9						2.0		14						1					NORTH	
			M1-5	24 X 24															4.0											MONTANA 83	MT 83
60.220	L	REMOVE SIGN	W11-3																								1					
		REMOVE SIGN	W7-3P																												NEXT 43 MILES	Next 43 Miles
60.650	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1					NO PASSING ZONE	
61.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1			MILE 61		MILE 61

SHEET NO.
S3

SIGN SUMMARY

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

7/24/2025 9:55 AM

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SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET				FEET							PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
61.910	R	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14							1				NO PASSING ZONE	
62.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 62	MILE 62
62.030	R	NEW	D3-1 (2x)	42 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						7.0		14										Center Loop Rd	Center Loop Rd
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2								1			STOP	
62.410	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14							1				NO PASSING ZONE	
62.800	R	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14							1				NO PASSING ZONE	
62.860	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14							1				NO PASSING ZONE	
63.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 63	MILE 63
63.410	R	RSFO	W14-3	48X48X36	FY	BBR													5.5								1				NO PASSING ZONE	
63.420	L	REPLACE	R1-1	30 X 30				6.0	4" Treated Wood Pole		5.0	3.0	11.5						5.2		12						1				STOP	
64.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 64	MILE 64
64.000	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14							1				NO PASSING ZONE	
64.580	R	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14							1				NO PASSING ZONE	
64.630	R	REPLACE	N6-2	36 X 24				12.0	4" Treated Wood Pole		5.0	3.0	11.8						6.0		12							1				Soup Creek	Soup Creek
64.640	L	REPLACE	N6-2	36 X 24				12.0	4" Treated Wood Pole		5.0	3.0	11.8						6.0		12							1				Soup Creek	Soup Creek

SHEET NO.
S4

SIGN SUMMARY

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

7/24/2025 9:55 AM

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SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET										PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
64.690	R	NEW	D3-1 (2x)	42 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						7.0		14										Soup Creek Rd	Soup Creek Rd
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2								1				STOP	
64.920	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1				NO PASSING ZONE	
64.990	R	RSFO	N7-1 MT	36 X 48															12.0								1				ADOPT A HIGHWAY KEEP IT GREEN KEEP IT CLEAN	
65.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 65	MILE 65
65.050	R	REMOVE SIGN	W8-8																								1				ROUGH ROAD	
69.005	L	REMOVE SIGN	W11-3A																								1				WILDLIFE CROSSING	WILDLIFE CROSSING
		REMOVE SIGN	W7-3aP																												NEXT 20 MILES	NEXT 20 MILES
69.755	L	REMOVE SIGN	W11-3																								1					
		REMOVE SIGN	W7-3aP																												NEXT 53 MILES	NEXT 53 MILES
77.580	R	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1				NO PASSING ZONE	
77.600	L	REPLACE	W3-5	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	14.7				X		9.0			16					1				SPEED LIMIT 60	Reduced Speed Limit Ahead 60 MPH
77.820	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1				NO PASSING ZONE	
78.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 78	MILE 78
78.210	R	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1				NO PASSING ZONE	

sanbell

SHEET NO.
S5

SIGN SUMMARY

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

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SIGN LOCATION			PANEL SPECIFICATIONS		SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES										ADDITIONAL INFORMATION	
					FEET		FEET									PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
78.300	R	REPLACE	D3-1 (2x)	36 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						6.0		14						1				Big Rock Dr	Big Rock Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2											STOP	
78.300	L	RSFO	W14-3	48X48X36	FY	BBR													5.5								1				NO PASSING ZONE	
78.470	L	REPLACE	S3-1	36 X 36	FYG			12.0	5" Treated Wood Pole		5.0	3.5	14.7				X		9.0			16					1					
78.800	L	RSFO	W14-3	48X48X36	FY	BBR													5.5								1				NO PASSING ZONE	
78.900	L	REPLACE	D3-1 (2x)	42 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						7.0		14						1				Swan Cove Dr	Swan Cove Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		NEW	R1-1	30 X 30															5.2											STOP	
78.920	L	RSFO	W14-3	48X48X36	FY	BBR													5.5								1				NO PASSING ZONE	
79.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8							22	1				MILE 79	MILE 79
79.030	L	REPLACE	D3-1 (2x)	36 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						6.0		14						1				Sunburst Dr	Sunburst Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2											STOP	
79.480	R	REPLACE	D8-1	60 X 48				15.0	5" Treated Wood Pole	3.0	7.0	3.5	16.7	17.1			X			20.0		36					1				WEIGH STATION 1 MILE	WEIGH STATION 1 MILE

sonbell

SHEET NO.
S6

SIGN SUMMARY

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

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SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET			FEET							PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
79.740	L	REPLACE	D3-1 (2x)	42 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						7.0		14						1				Swan Ridge Dr	Swan Ridge Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2											STOP	
79.790	R	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1				NO PASSING ZONE	
79.840	L	REPLACE	D3-1 (2x)	30 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						5.0		14						1				Wapiti Ln	Wapiti Ln
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2											STOP	
79.900	L	REPLACE	D3-1 (2x)	42 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						7.0		14						1				Windhaven Rdg	Windhaven Rdg
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		NEW	R1-1	30 X 30															5.2											STOP	
80.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 80	MILE 80
80.010	R	RSFO	N7-1 MT	36 X 48															12.0								1				ADOPT A HIGHWAY KEEP IT GREEN KEEP IT CLEAN	
		USE AS IS	N7-1P MT																												HONEY IN HAND SPA	Honey in Hand Spa

sanbell

SHEET NO.
S7

SIGN SUMMARY

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

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SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS											SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET		FEET									PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
80.230	R	NEW	D3-1 (2x)	30 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						5.0		14										Cougar Tr	Cougar Tr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0												MT Hwy 83	MT Hwy 83
		NEW	R1-1	30 X 30															5.2												STOP	
80.280	R	USE AS IS	FWP-1																												GAME CHECK STATION 500 FT. AHEAD ALL HUNTERS MUST STOP	HINGED SIGN
80.370	R	RSFO	D8-2R	66 X 36																16.5									1		WEIGH STATION NEXT RIGHT	
			D8-2P MT	66 X 18																8.3											CLOSED	"OPEN/CLOSED" HINGED SIGN
80.390	R	USE AS IS	FWP-2																												GAME CHECK STATION 1000 FT AHEAD ALL HUNTERS MUST STOP	HINGED SIGN
80.460	R	REPLACE	D8-3R	48 X 42				12.0	5" Treated Wood Pole	2.4	7.0	3.5	15.8	16.1			X			14.0		34							1			WEIGH STATION	
80.650	L	REPLACE	D8-3L	48 X 42				12.0	5" Treated Wood Pole	2.4	7.0	3.5	15.8	16.1			X			14.0		34							1			WEIGH STATION	
80.750	L	REPLACE	D8-2L	66 X 36				15.0	5" Treated Wood Pole	3.3	5.0	3.5	15.3	15.8			X			16.5		32							1			WEIGH STATION NEXT LEFT	
			D8-2P MT	66 X 18																8.3											CLOSED	"OPEN/CLOSED" HINGED SIGN
81.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 81	MILE 81
81.000	R	NEW	W11-3*	36 X 36				12.0	See Electrical Detail For Support Info		5.0								9.0													FLASHING SIGN
		NEW	W7-3aP	24 X 18															3.0												NEXT 3 MILES	NEXT 3 MILES

sanbell

SHEET NO.
S8

SIGN DESIGN CALCULATIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

7/24/2025 9:55 AM

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AWARD COPY

SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET			FEET							PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
81.090	L	REPLACE	D3-1 (2x)	42 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						7.0		14						1				s Ferndale Dr	S Ferndale Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2											STOP	
81.340	R	REPLACE	D3-1 (2x)	36 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						6.0		14						1				Red Owl Rd	Red Owl Rd
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2											STOP	
81.410	L	REMOVE SIGN	D3-1																								1				Halverson Dr	Halverson Dr
		USE AS IS	R2-1																													SPEED LIMIT 35
81.420	R	NEW	D3-1 (2x)	36 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						6.0		14										Halversen Dr	Halversen Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0											MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2								1			STOP	
81.690	L	REPLACE	D8-1	60 X 48				15.0	5" Treated Wood Pole	3.0	7.0	3.5	16.7	17.1			X			20.0		36						1			WEIGH STATION 1 MILE	WEIGH STATION 1 MILE
81.890	L	REPLACE	W14-3	48X48X36	FY	BBR		12.0	4" Treated Wood Pole		5.0	3.0	13.8						5.5		14						1				NO PASSING ZONE	
81.960	R	REPLACE	S3-1	36 X 36	FYG			12.0	5" Treated Wood Pole		5.0	3.5	14.7				X		9.0			16					1					
81.980	R	USE AS IS	N7-1 MT																												ADOPT A HIGHWAY KEEP IT GREEN KEEP IT CLEAN	

sanbell

SHEET NO.
S9

SIGN DESIGN CALCULATIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

7/24/2025 9:55 AM

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SIGN LOCATION			PANEL SPECIFICATIONS		SIGN ASSEMBLY SPECIFICATIONS												SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET				FEET							PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
81.980	L	USE AS IS	N7-1 MT																												
		USE AS IS	N7-1P MT																											HONEY IN HAND SPA	Honey in Hand Spa
82.000	R	REPLACE	D10-2 (2x)	10 X 27			MBB	10.0	2.0lb Steel U Post		4.0	3.0	10.7						3.8						22		1				MILE 82	MILE 82
82.140	R	REPLACE	D3-1 (2x)	36 X 12			MBB	6.0	4" Treated Wood Pole		5.0	3.0	13.7						6.0		14						1				Halversen Dr	Halversen Dr
		NEW	D3-1 (2x)	36 X 12			MBB												6.0												MT Hwy 83	MT Hwy 83
		REPLACE	R1-1	30 X 30															5.2												STOP	
82.300	L	REPLACE	S3-1	36 X 36	FYG			12.0	5" Treated Wood Pole		5.0	3.5	14.7				X		9.0			16					1					
82.430	R	REPLACE	M2-1P	21 X 15				12.0	4" Treated Wood Pole		5.0	3.0	13.1						2.2		14						1				JCT	
			M1-12 MT	24 X 24															4.0												209	MT 209
82.540	R	RSFO	W2-2L	36 X 36															9.0								1					
			W16-2P	30 X 18															3.8												600 FT	600 Feet

sanbell

SHEET NO.
S10

SIGN DESIGN CALCULATIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	R. TEIXEIRA	07/2025
REVIEWED BY	J. STASZCUK	07/2025
CHECKED BY		

MONTANA Department of Transportation

SUMMARY SHEETS

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AWARD COPY

SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET		FEET								PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
82.560	R	RSFO	D1-2	84 X 42															24.5								1				Echo Lake Straight Bigfork Left
			D9-8	24 X 24														4.0													
			D9-7	24 X 24														4.0													
			M6-1PL	21 X 15														2.2													
			M6-1PL	21 X 15														2.2													
82.590	L	RSFO	N6-3	42 X 24														7.0									1					Lake County
82.620	R	RSFO	M1-12 MT	24 X 24		BBR												4.0									1					MT 209
			M1-5	24 X 24		BBR												4.0													MT 83
			M6-1PL	21 X 15		BBR												2.2													
			M6-3P	21 X 15		BBR												2.2													
82.650	L	RSFO	R1-1	48 X 48														13.3									1					
82.650	R	RSFO	W1-7a MT	72 X 42	FY	BBR													21.0									1				
82.670	L	RSFO	M1-5	24 X 24		BBR												4.0									1					MT 83
			M1-12 MT	24 X 24		BBR												4.0													MT 209
			M6-3P	21 X 15		BBR												2.2													
			M6-1PR	21 X 15		BBR												2.2													

sanbell

SHEET NO.
S11

SIGN DESIGN CALCULATIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

SUMMARY SHEETS

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AWARD COPY

SIGN LOCATION			PANEL SPECIFICATIONS					SIGN ASSEMBLY SPECIFICATIONS										SIGN ASSEMBLY QUANTITIES												ADDITIONAL INFORMATION	
								FEET										PANEL (SQ. FT.)		WOOD POLE (LNR. FT.)		STEEL POST (LBS.)					REMOVE		RESET			
STATION / R.P.	LFT / MDN / RGT / OH	ACTION	SIGN NO. (MUTCD / MT)	PANEL SIZE (INCHES) W X H	FY OR FYG	BACKBRACING REQ'D / ANGLE IRON REQ'D	MOUNT BACK TO BACK	CLEARANCE / OFFSET (SHOULDER TO EDGE OF SIGN)	TYPE OF SUPPORT	SUPPORT SPACING	MOUNTING HEIGHT	FOUNDATION DEPTH	SUPPORT LENGTH (ESTIMATED) X	Y	Z	CANTILEVER	BREAKAWAY TYPE	BEHIND GUARDRAIL	SHEET ALUMINUM	SHEET ALUMINUM INCREMENT	4" TOP DIA.	5" TOP DIA.	ROUND TUBULAR	SQUARE TUBULAR	STRUCTURAL STEEL	"U" POST	# OF BREAKAWAYS	SIGN	GUIDE	SIGN	GUIDE	SIGN IMAGE	REMARKS
84.000	L	NEW	W11-3*	36 X 36				12.0	See Electrical Detail For Support Info		5.0								9.0													FLASHING SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 3 MILES
85.083	R	REMOVE SIGN	W11-3																								1					
88.800	R	NEW	W11-3*	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	15.4				X		9.0			16										STATIC SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 2 MILES
90.200	L	NEW	W11-3*	36 X 36				12.0	5" Treated Wood Pole		5.0	3.5	15.4				X		9.0			16										STATIC SIGN
		NEW	W7-3aP	24 X 18															3.0													NEXT 2 MILES
																		PROJECT TOTALS	645.9	220.6	456	332			138	264	2	67	10			

SHEET NO.
S12

SIGN DESIGN CALCULATIONS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

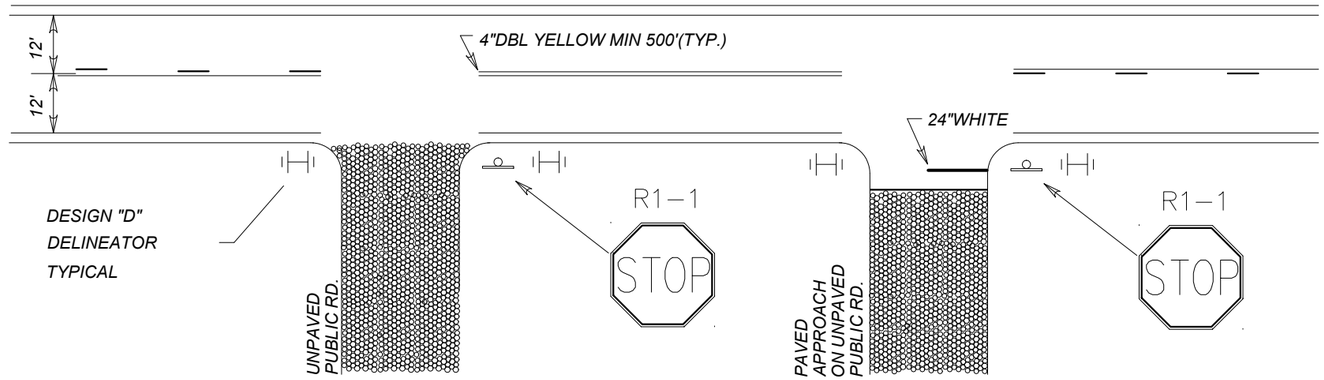
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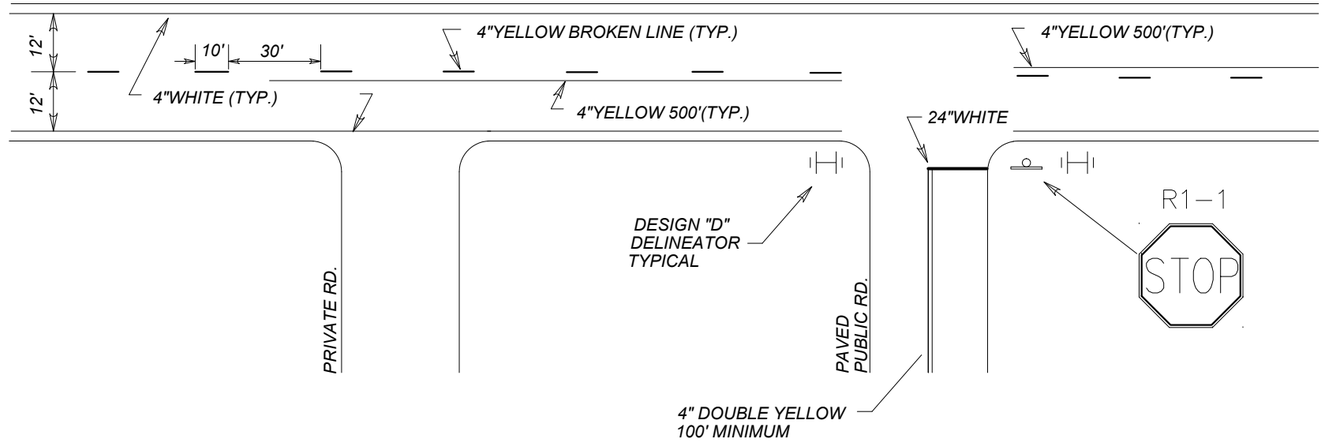
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TYPICAL PAVEMENT MARKINGS

NO SCALE





NOTE: FINAL CENTERLINE CONFIGURATION AND NO PASSING ZONES TO BE DETERMINED BY THE PROJECT MANAGER.

ALL PAVEMENT MARKINGS TO BE EPOXY UNLESS OTHERWISE SPECIFIED.

SHEET NO.
S13

SIGN DETAILS

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE COUNTY
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY: R. TEIXEIRA 07/2025
REVIEWED BY: J. STASZCUK 07/2025
CHECKED BY:

MONTANA Department of Transportation

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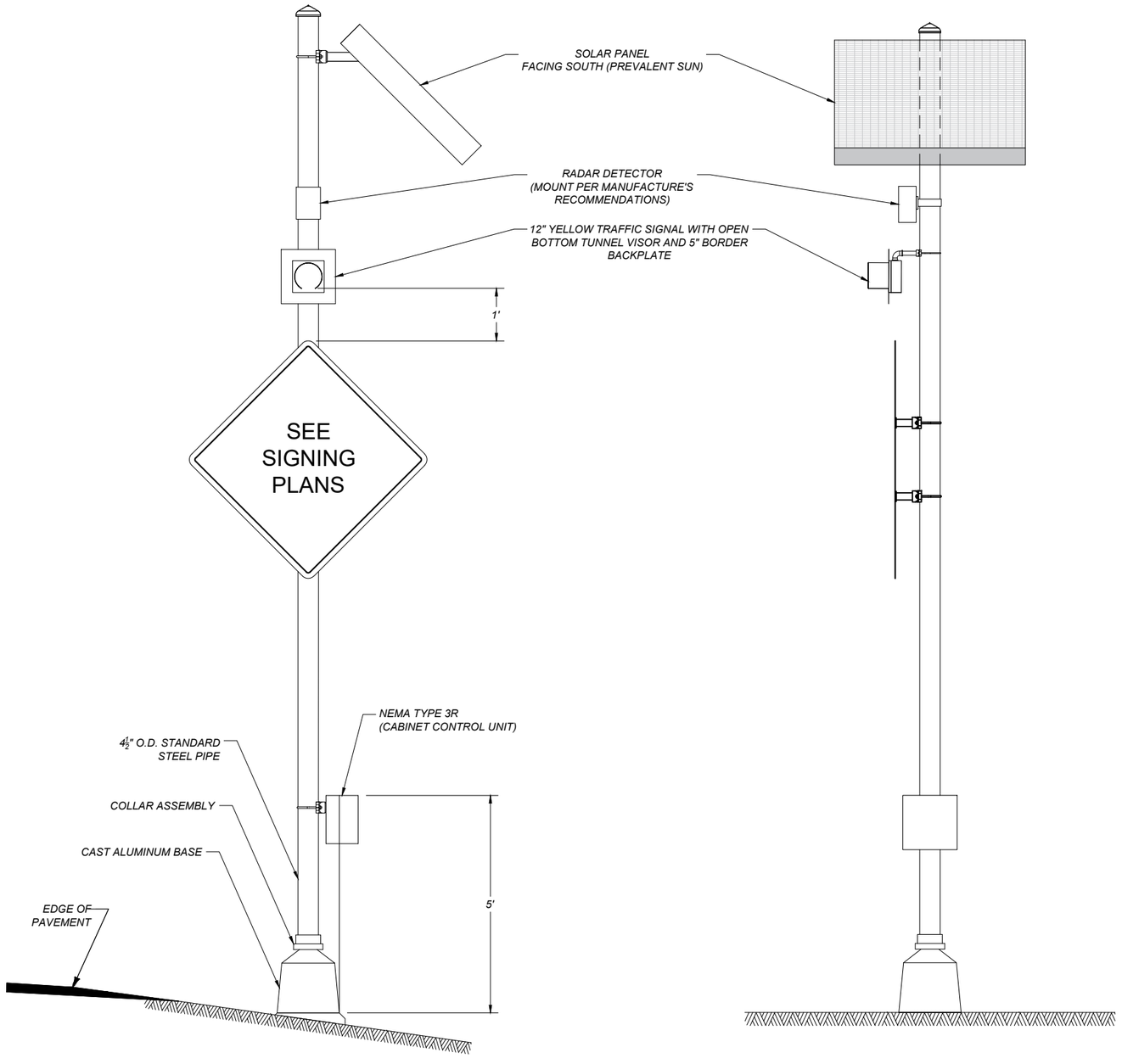
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DETAIL

RADAR ACTIVATED SOLAR WARNING BEACON

NO SCALE

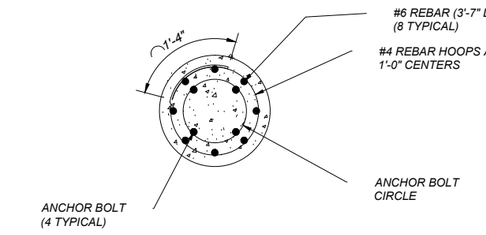
SEE SIGNING PLANS FOR LOCATIONS



ELECTRICAL QUANTITIES

ITEM NO.	MATERIAL	UNIT	TOTAL
617000000	FOUNDATION CONCRETE	CUYD	1
617523010	SOLAR SIGNAL-TRAFFIC 1-COL 1-WAY 12	EACH	2
617673200	SIG STANDARD TYPE I-200	EACH	2

USE GRADE 60 REINFORCING STEEL



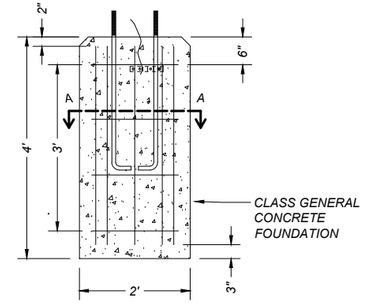
SECTION A-A

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 PROTUDE MORE THAN 4" ABOVE GROUND AFTER BREAKAWAY.



TYPE I-200

SHEET NO.
E1

RADAR ACTIVATED SOLAR WARNING BEACON DETAIL AND SUMMARY (NO SCALE)

PROJECT NAME: SWAN LAKE - N & S
COUNTY: LAKE & FLATHEAD COUNTIES
PROJECT ID: STPP 83-3(7)59
UPN: 10542000

DESIGNED BY	M. CORNYN	05/2025
REVIEWED BY	J. DOLD	06/2025
CHECKED BY	D. CUNNINGHAM	06/2025

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MONTANA
Department of Transportation

ELETRICAL PLANS

6/17/2025 4:16 PM