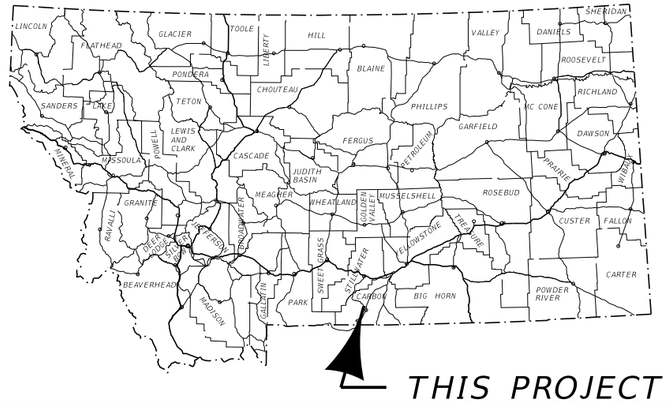
AWARD COPY



MONTANA DEPARTMENT OF TRANSPORTATION

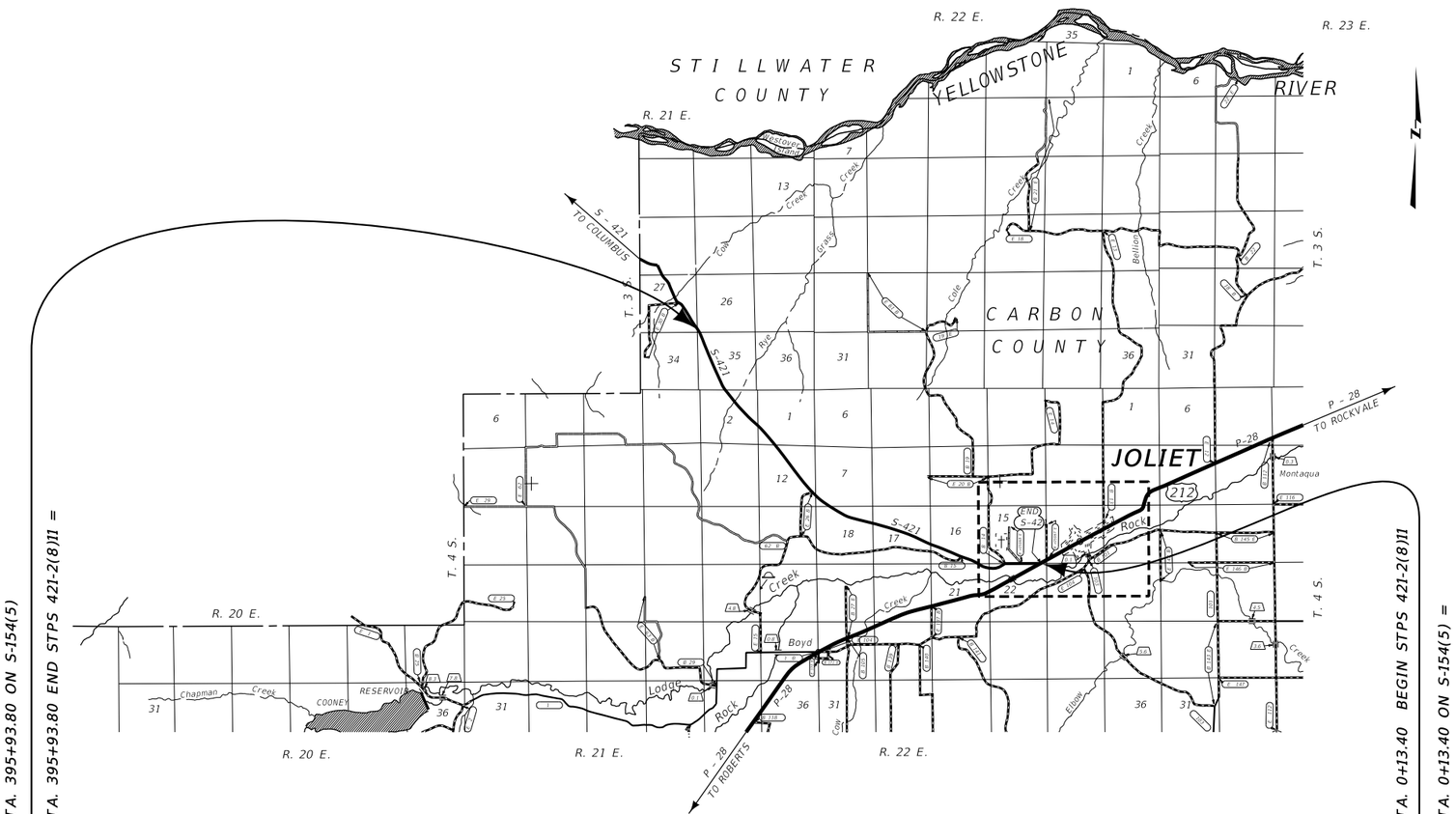
FEDERAL AID PROJECT STPS 421-2(8)11
SEAL & COVER, GUARDRAIL, MASTIC CRACK FILL
JCT US 212-NORTHWEST (S-421)
CARBON COUNTY

PROJECT DESIGN DATA		
PRESENT 2019	A.D.T. =	710
LETTING 2020	A.D.T. =	730
DESIGN 2040	A.D.T. =	1,300
	D.H.V. =	180
	TRUCKS =	11 %
	V. =	50 MPH
	18 KIP ESAL'S =	55 DAILY
	GROWTH RATE =	2.9 % ANNUALLY

LETTING DATE - _____

SURFACING SOURCES -
CONTRACTOR FURNISHED

LENGTH 7.5 MILES



ASSOCIATED PROJECT AGREEMENT NUMBERS	
R / W	
I.C.	
P. E.	STPS 421-2(7)11

3	MONTANA Department of Transportation	C:\DGN\9802000rdtl001.dgn	DESIGNED BY	J. BROTZLER	4/14/2020
2		2/3/2022	REVIEWED BY	K. SHUCK	4/19/2021
		2:10:33 PM CPS - U3825	CHECKED BY		

ROAD PLANS

UPN 9802000

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NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD
CRACK FILLING	= 1.0 LBS. PER LN. FT.

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.

AS-BUILTS

FOR HORIZONTAL ALIGNMENT AND STATIONING, REFER TO THE FOLLOWING "AS-BUILT" PROJECT(S):
RTS 421-2(1)11
S-154(5)

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.

STATIONING - REFERENCE POSTS

STATIONING ON THIS PROJECT RUNS FROM EAST TO WEST.
REFERENCE POSTS RUN FROM WEST TO EAST.

LINEAR DATA

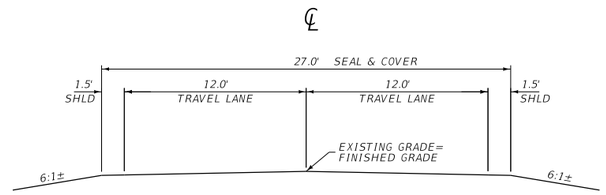
LENGTH OF ROADWAY		2 LANE RURAL	39,414.5 ft
TOTAL LENGTH OF	STPS 421-2(8)11	2 LANE RURAL	39,414.5 ft

AWARD COPY

TYPICAL SECTION NO. 1

MAINLINE

0+13.40 TO 395+93.80



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER				SEAL	
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	 300		square yards PER STATION tons PER STATION		300 0.54	

3 2	MONTANA Department of Transportation	C:\DGN\9802000rdtyp001.dgn 2/3/2022 2:10:48 PM CPS - U3829	DESIGNED BY REVIEWED BY CHECKED BY	J. BROTZLER K. SHUCK	4/14/2020 4/19/2021	ROAD PLANS CARBON COUNTY	JCT US 212-NORTHWEST (S-421) UPN 9802000	STPS 421-2(8)11 3

AWARD COPY

SUMMARY

SURFACING

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE square yards COVER TYPE 1	BITUNIMOUS MATERIAL tons EMULSIFIED ASPHALT CHFRS-2P	REMARKS
0+13.40									
5+33.20 BK	6+21.00 AH				87.80	EQUATION			
35+98.90 BK	36+02.60 AH				3.70	EQUATION			
52+01.10 BK	52+24.60 AH				23.50	EQUATION			
101+13.40 BK	101+63.40 AH				50.00	EQUATION			
291+68.00 BK	291+68.90 AH				0.90	EQUATION			
	395+93.80	39,580.40	39,414.50				118,244	212.8	TYP. NO. 1
						BEGINNING OF PROJECT	109	0.2	SEE DETAIL
TOTAL		39,580.40	39,414.50	~	165.90		118,353	213.0	

CRACK FILLING

STATION FROM	STATION TO	linear feet CRACK FILLING - MASTIC	pounds CRACK FILLING - MASTIC	REMARKS
0+13.40	395+93.80	22,599	22,599	MASTIC CRACK FILLING
TOTAL		#	22,599	

FOR INFORMATION ONLY

GUARDRAIL

STATION FROM	STATION TO	linear feet REMOVE AND SALVAGE GUARDRAIL LEFT	linear feet REMOVE AND SALVAGE GUARDRAIL RIGHT	linear feet MGS GUARDRAIL LONG POSTS # LEFT	linear feet MGS GUARDRAIL LONG POSTS # RIGHT	each MASH W-BEAM TERMINAL SECTION LEFT	each MASH W-BEAM TERMINAL SECTION RIGHT	REMARKS
NEW RAIL								
35+20.08	40+51.33			462.5		2		
47+07.03	51+38.28			362.5		2		
110+09.58	113+90.83			312.5		2		
329+09.38	335+15.63				537.5		2	
330+34.38	338+15.63			712.5		2		
REMOVE RAIL								
35+09.40	40+62.00	552.6						
47+00.00	51+45.30	445.3						
109+99.90	114+00.50	400.6						
329+00.00	335+25.00		625.0					
330+25.00	338+25.00	800.0						
SUBTOTAL		2,198.5	625.0	1,850.0	537.5	8	2	
TOTAL		2,823.5		2,387.5		10		

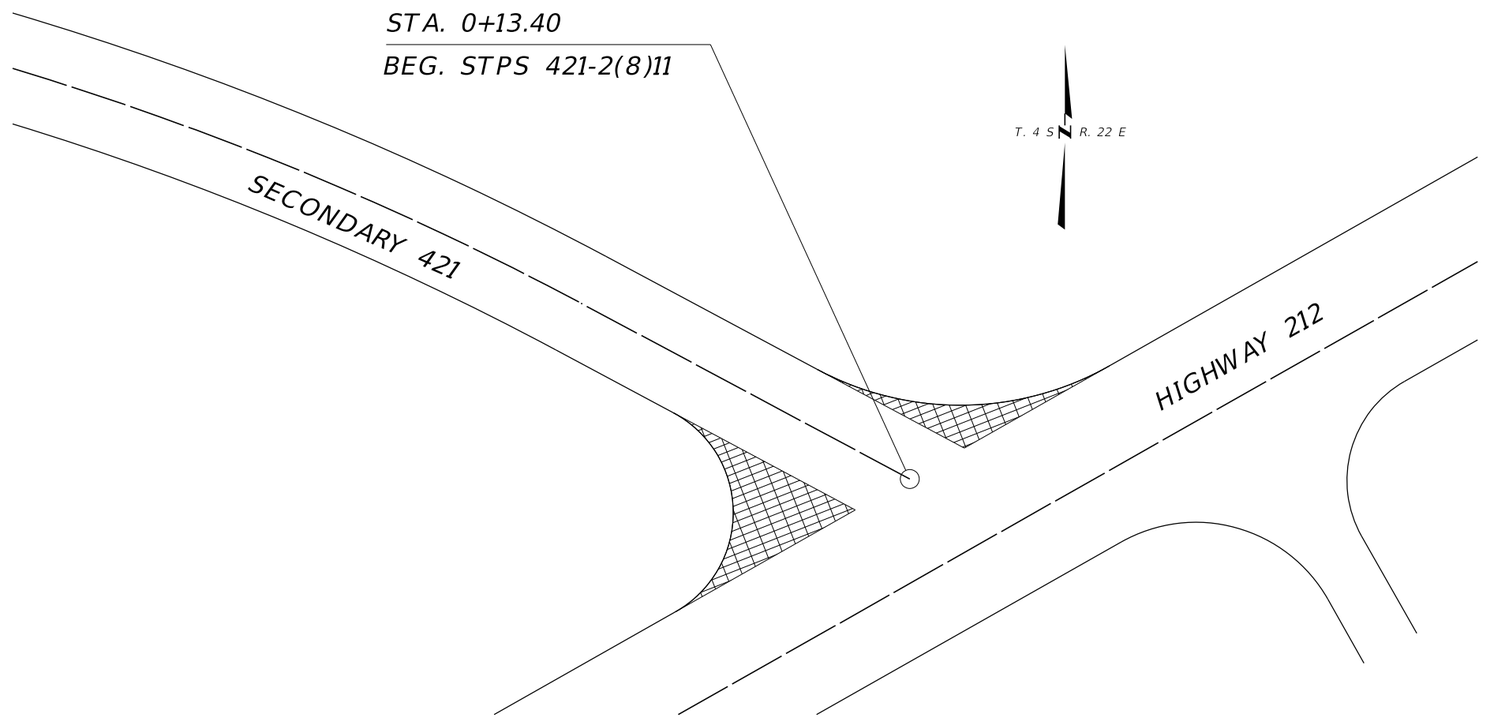
USE STEEL POSTS

GUARDRAIL END SECTION WIDENING

STATION FROM	STATION TO	each WIDENING SECTIONS LEFT	each WIDENING SECTIONS RIGHT	REMARKS
34+81.45	35+54.45	1		
40+16.95	40+89.96	1		
46+68.40	47+41.40	1		
51+03.90	51+76.91	1		
109+70.95	110+43.95	1		
113+56.45	114+29.46	1		
328+70.75	329+43.75		1	
334+81.25	335+54.26		1	
329+95.75	330+68.75	1		
337+81.25	338+54.26	1		
SUBTOTAL		8	2	
TOTAL		10		

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION	FINAL APPLICATION	TOTAL
STRIPING - WHITE PAINT	gallon	268		268
STRIPING - YELLOW PAINT	gallon	125		125
WHITE PAINT - WORDS AND SYMBOLS	gallon	1		1
STRIPING - WHITE EPOXY	gallon		358	358
STRIPING - YELLOW EPOXY	gallon		167	167
WHITE EPOXY - WORDS AND SYMBOLS	gallon		2	2
FINAL SWEEP AND BROOM	cr mile			7.5



SEAL & COVER AREA INCLUDED IN SURFACING FRAME = 109 SY

ADDITIONAL SURFACING AREAS DETAIL

NO SCALE

3	MONTANA Department of Transportation	C:\DGN\9802000rddet001.dgn	DESIGNED BY	T. LESNIK	10/22/2020	ROAD PLANS	JCT US 212-NORTHWEST (S-421)	STPS 421-2(8)11
2		2/3/2022	REVIEWED BY	K. SHUCK	4/19/2021			
		2:11:12 PM CPS - U3829	CHECKED BY			CARBON COUNTY	UPN 9802000	5

AWARD COPY



MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT STPS 308-1(35)7
CRACK SEALING, SEAL & COVER
BEARCREEK-EAST (S-308)
CARBON COUNTY

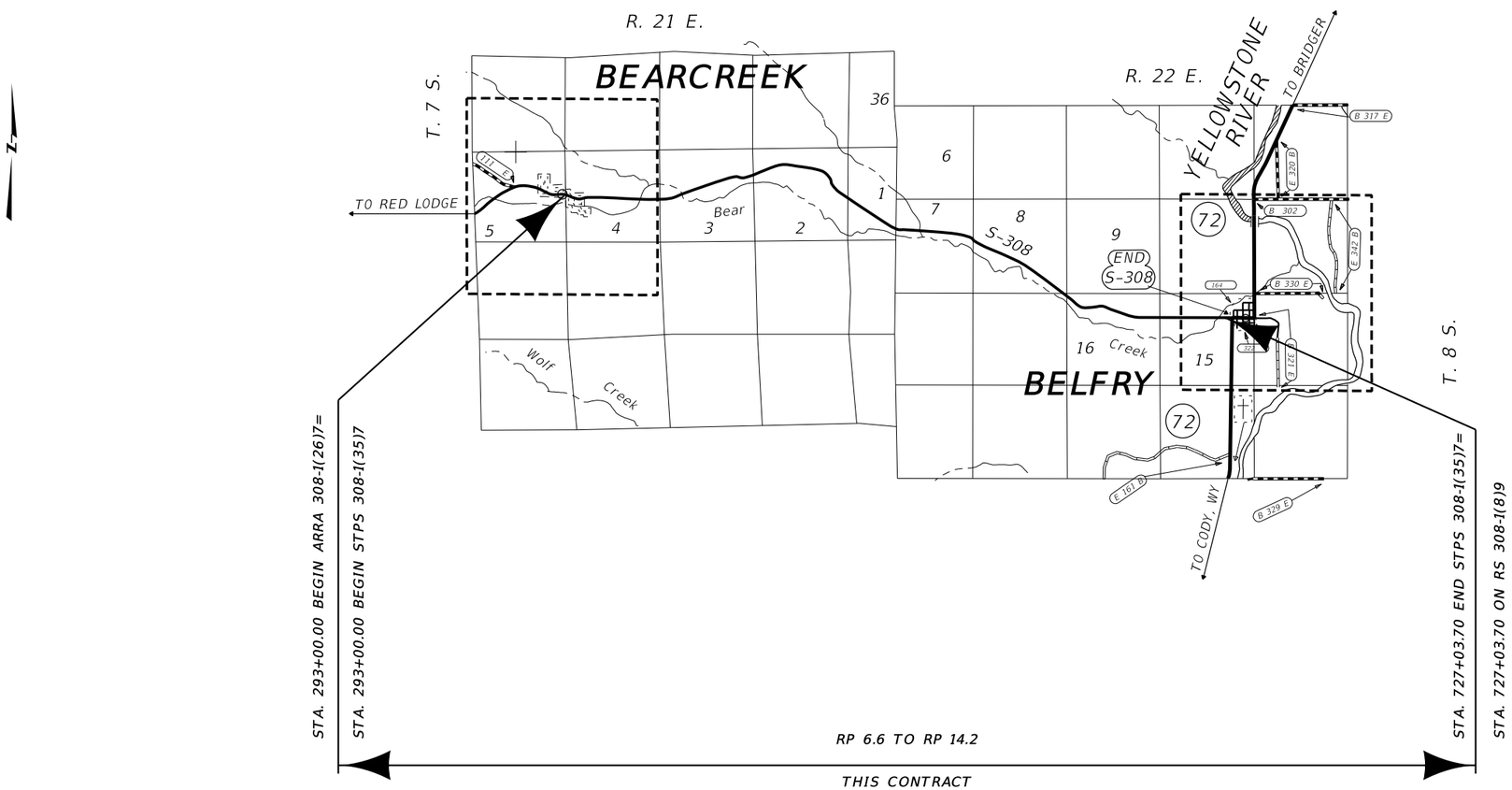
PROJECT DESIGN DATA		
PRESENT	2019	A.D.T. = 830
LETTING	2021	A.D.T. = 840
DESIGN	2041	A.D.T. = 1,030
		D.H.V. = 130
		TRUCKS = 2.9%
		V. = 60 MPH
		18 KIP ESAL'S = 10
		GROWTH RATE = 1.0%

LETTING DATE - _____

LENGTH 7.6 MILES

SURFACING SOURCES -
CONTRACTOR FURNISHED

CARBON COUNTY



3	MDT	MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9799000rdtl001.dgn	DESIGNED BY	S. TWO CROW	4/15/2020	ROAD PLANS
2			8/16/2021	REVIEWED BY	S. BAKER	4/21/2021	
			4:04:56 PM CPS - U3829	CHECKED BY	J. FLEMING	7/2/2021	CARBON COUNTY

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CRACK SEALING	5

NOTES

BASIS OF PLAN QUANTITIES

(QUANTITIES FOR ESTIMATING PURPOSES ONLY)

BITUMINOUS MATERIAL	= 8.5 LBS. PER GAL.
SEAL	= 0.42 GAL. PER SQ.YARD
COVER	= 25 LBS. PER SQ.YARD

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 MAY EXIST 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.

AS-BUILTS

FOR HORIZONTAL ALIGNMENT AND STATIONING,REFER TO THE FOLLOWING "AS-BUILT" PROJECT(S):

S-3(4) (RECONSTRUCTION - 1949)
S-3(5) (RECONSTRUCTION - 1951)
TQS 308-1(2)4 (RECONSTRUCTION - 1978)
RS 308-1(8)9 (RECONSTRUCTION - 1987)
RS 308-1(8)9 (RECONSTRUCTION - 1988)
RS 308-1(12)6 (RECONSTRUCTION - 1992)

LINEAR DATA

LENGTH OF ROADWAY CARBON COUNTY		2 LANE RURAL	40,402.50 ft
TOTAL LENGTH OF	STPS 308-1(35)7	2 LANE RURAL	40,402.50 ft

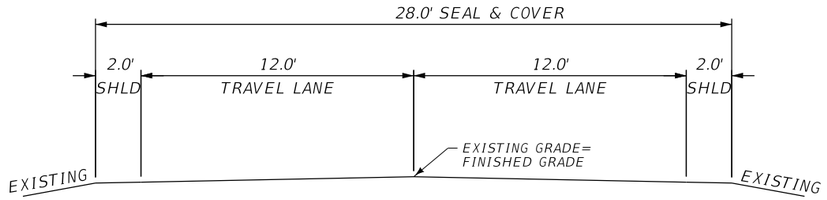
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TYPICAL SECTION NO. 1

SECONDARY HIGHWAY 308

293+00.00 TO 727+03.70 TYP. NO. 1

℄



QUANTITIES						
UNIT	AGGREGATE		UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX		ASPHALT CEMENT	SEAL	
AREA square feet cubic yards PER STATION tons PER STATION square yards PER STATION	311		square yards PER STATION tons PER STATION gals PER STATION		311 0.56	

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9799000rdtyp001.dgn	DESIGNED BY	S. TWO CROW	4/15/2020	ROAD PLANS	BEARCREEK-EAST (S-308) / STPS 308-1(35)7
2		8/16/2021	REVIEWED BY	S. BAKER	4/21/2021		
		4:05:10 PM CPS - U3829	CHECKED BY	J. FLEMING	7/2/2021	CARBON COUNTY	UPN 9799000 / 3

SUMMARY

SURFACING

STATION FROM	STATION TO	linear feet GROSS	linear feet NET	linear feet +	linear feet -	FOR	AGGREGATE sq. yards COVER TYPE 1	BITUMINOUS MATERIAL tons EMULSIFIED ASPHALT CHFRS-2P	REMARKS
293+00.00									
422+82.50 BK	452+77.00 AH				2,994.50	EQUATION			
484+72.40 BK	484+84.60 AH				12.20	EQUATION			
494+47.80 BK	494+39.60 AH			8.20		EQUATION			
538+99.30 BK	538+96.40 AH			2.90		EQUATION			
566+13.20 BK	566+15.40 AH				2.20	EQUATION			
580+31.80 BK	580+33.60 AH				1.80	EQUATION			
590+40.80 BK	590+37.90 AH			2.90		EQUATION			
605+56.40 BK	605+59.00 AH				2.60	EQUATION			
648+75.00 BK	648+75.90 AH				0.90	EQUATION			
679+80.30 BK	679+81.30 AH				1.00	EQUATION			
	727+03.70	43,403.70	40,402.50				125,652	226.3	TYP. NO. 1
TOTAL		43,403.70	40,402.50	14.00	3,015.20		125,652	226.3	

PAVEMENT MARKINGS

ITEM	UNIT	INTERIM APPLICATION #	FINAL APPLICATION	TOTAL
STRIPING - WHITE PAINT	gallon	275		275
STRIPING - YELLOW PAINT	gallon	104		104
WORDS & SYMBOLS - WHITE PAINT	gallon	2		2
STRIPING - WHITE EPOXY	gallon		367	367
STRIPING - YELLOW EPOXY	gallon		138	138
WORDS & SYMBOLS - WHITE EPOXY	gallon		2	2
FINAL SWEEP AND BROOM	course mile			7.6

BASED ON 1 APPLICATION.

CRACK SEALING *

STATION FROM	STATION TO	CRACK SEALING pounds	CRACK SEALING linear feet	REMARKS
293+00.00	727+03.70	4246	8,491	SECONDARY HIGHWAY 308
TOTAL		4246	#	

* SEE DETAIL SHEET
\# FOR INFORMATION ONLY

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DETAIL

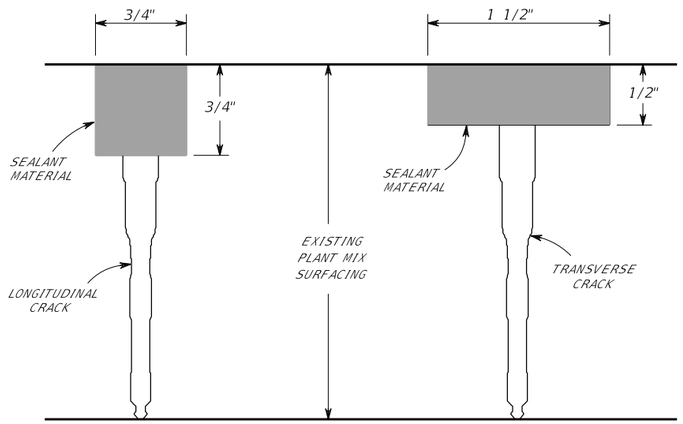
CRACKS 1/8" TO 1" WIDE

LONGITUDINAL CRACK

ROUT 3/4" WIDE x 3/4" DEEP
PRIOR TO APPLYING SEALANT

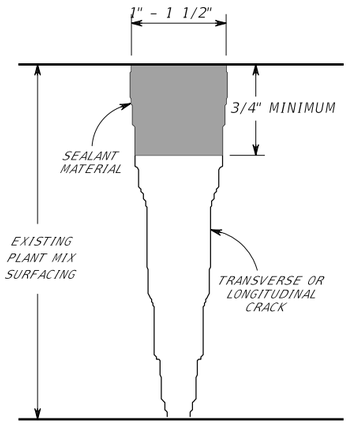
TRANSVERSE CRACK

ROUT 1 1/2" WIDE x 1/2" DEEP
PRIOR TO APPLYING SEALANT



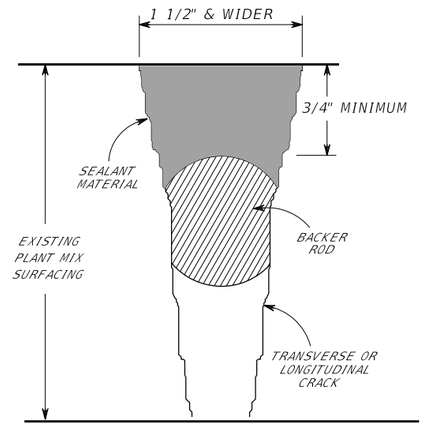
CRACKS 1" TO 1 1/2" WIDE

NO ROUTING REQUIRED



CRACKS 1 1/2" WIDE & LARGER

NO ROUTING REQUIRED
INSTALL BACKER ROD MATERIAL
PRIOR TO APPLYING SEALANT



NOTE: SEE STANDARD SPECIFICATIONS

CRACK SEALING DETAILS

NO SCALE

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	C:\DGN\9799000rddet001.dgn	DESIGNED BY	S. TWO CROW	9/8/2020	ROAD PLANS	BEARCREEK-EAST (S-308)	STPS 308-1(35)7
2		8/16/2021	REVIEWED BY	S. BAKER	4/21/2021			
		4:05:32 PM CPS - U3829	CHECKED BY	J. FLEMING	7/2/2021	CARBON COUNTY	UPN 9799000	5