MONTANA DEPARTMENT OF TRANSPORTATION

FEDERAL AID PROJECT HSIP 206-1(8)1
SF 119-SLOPE FLATTEN S-206
GRADE, GRAVEL, PL. MIX SURF & GUARDRAIL
FLATHEAD COUNTY

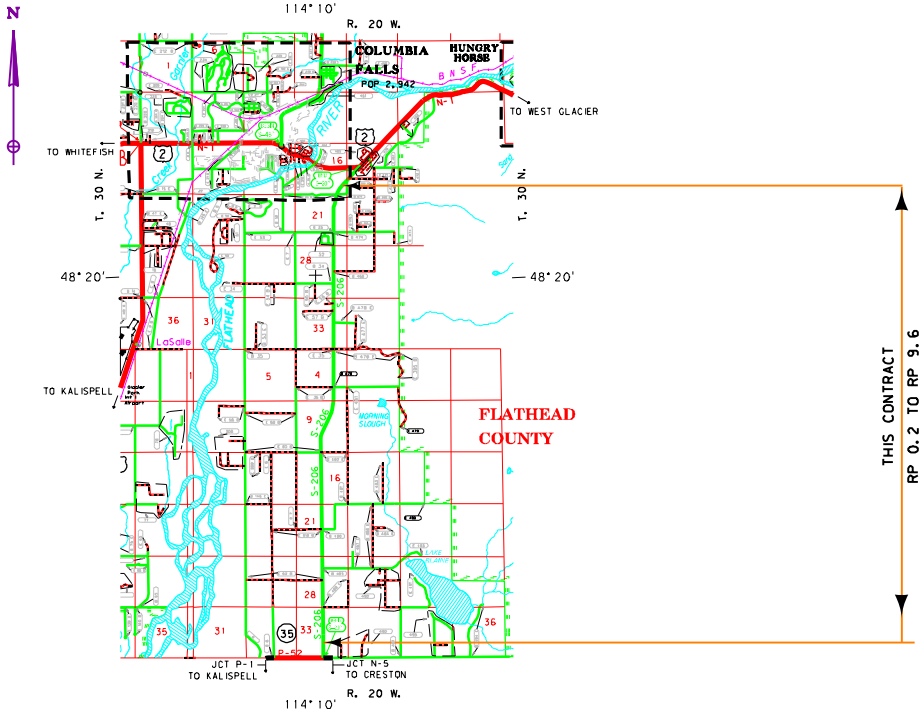
SURFACING SOURCES -
CONTRACTOR FURNISHED

LENGTH 9.4 MILES

PROJECT DESIGN DATA

PRESENT 2014	A.D.T.	= 4,420
LETTING 2016	A.D.T.	= 4,650
DESIGN 2036	A.D.T.	= 7,610
	D.H.V.	=
	TRUCKS	=
	V.	=
	18 KIP ESAL'S	=
	GROWTH RATE	=

LETTING DATE -



RELATED PROJECTS

ASSOCIATED PROJECT AGREEMENT NUMBERS

R/W & I.C.	
P.E.	HSIP 206-1(8)1

MONTANA DEPARTMENT OF TRANSPORTATION

APPROVED : _____ 20 ____

MICHAEL T. TOOLEY
DIRECTOR OF TRANSPORTATION

BY _____
HIGHWAYS ENGINEER

LESLY-RAE TRIBELHORN 8714PE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

APPROVED :

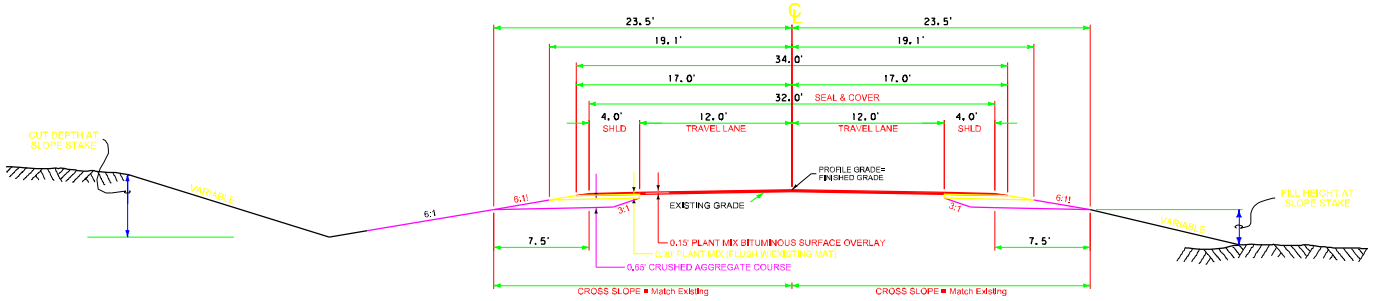
_____ _____
DIVISION ADMINISTRATOR DATE

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY	A. Cabrera	11/10/2015	ROAD PLANS
2		$DATE$	REVIEWED BY			UPN 7884000
1		$TIME$ Susernames	CHECKED BY			

TYPICAL SECTION NO. 1

MAINLINE

109+75.00	TO	183+28.00	
183+28.00	TO	183+00.00	TRANS. TYP. NO. 1 TO TYP. NO. 2
186+72.00	TO	601+17.55	



QUANTITIES

UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX	CR. AGG. COURSE		ASPHALT CEMENT	SEAL	AGG. TREATMENT
AREA square feet		8.60	10.75	square yards PER STATION		356	158
cubic yards PER STATION		31.9	39.8	tons PER STATION	4.26	---	---
tons PER STATION	---	61.5	73.6				
square yards PER STATION	356						

SURFACING SECTION DESIGN BASED ON THE TOP 2 FEET OF SUBGRADE HAVING AN R-VALUE OF ____.

* FILL SLOPES	
0' - 10'	6:1
10' - 20'	4:1
20' - 30'	3:1
OVER 30'	2:1

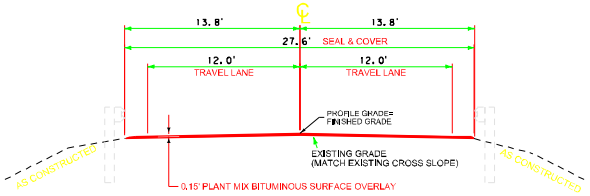
* BACK SLOPES	
0' - 5'	6:1
5' - 10'	4:1
10' - 15'	3:1
15' - 20'	2:1
OVER 20'	1.5:1

* SEE CROSS SECTIONS FOR DEVIATIONS

TYPICAL SECTION NO. 2

MAINLINE

183+00.00	TO	186+00.00	
186+00.00	TO	186+72.00	TRANS. TYP. NO. 2 TO TYP. NO. 1



QUANTITIES

UNIT	AGGREGATE			UNIT	BITUMINOUS MATERIAL		
	COVER	PLANT MIX	CR. AGG. COURSE		ASPHALT CEMENT	SEAL	AGG. TREATMENT
AREA square feet		4.19	---	square yards PER STATION		356	---
cubic yards PER STATION		18.3	---	tons PER STATION	1.06	---	---
tons PER STATION	---	---	---				
square yards PER STATION	307						

SURFACING SECTION DESIGN BASED ON THE TOP 2 FEET OF SUBGRADE HAVING AN R-VALUE OF ____.

3 2 1

MDT MONTANA DEPARTMENT OF TRANSPORTATION

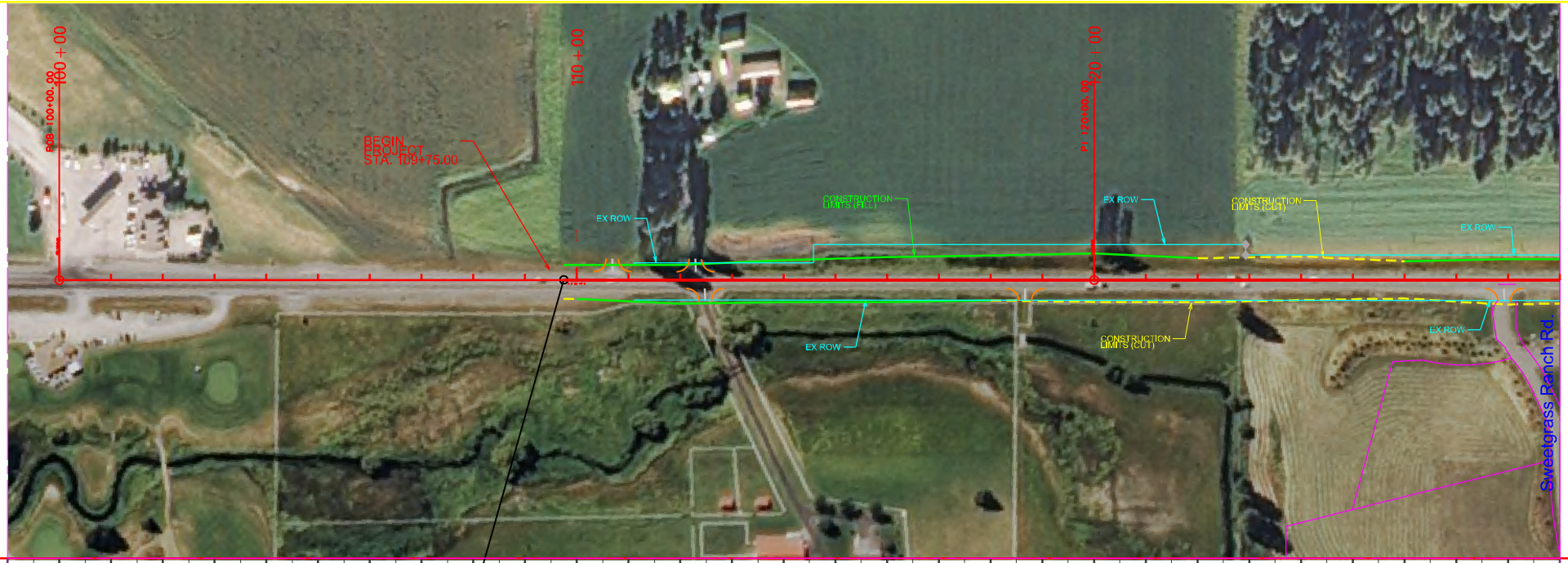
$FILEABBREV$ | $DATE$ | $TIME$ $username$

DESIGNED BY A. Cabrera 11/12/2015
REVIEWED BY
CHECKED BY

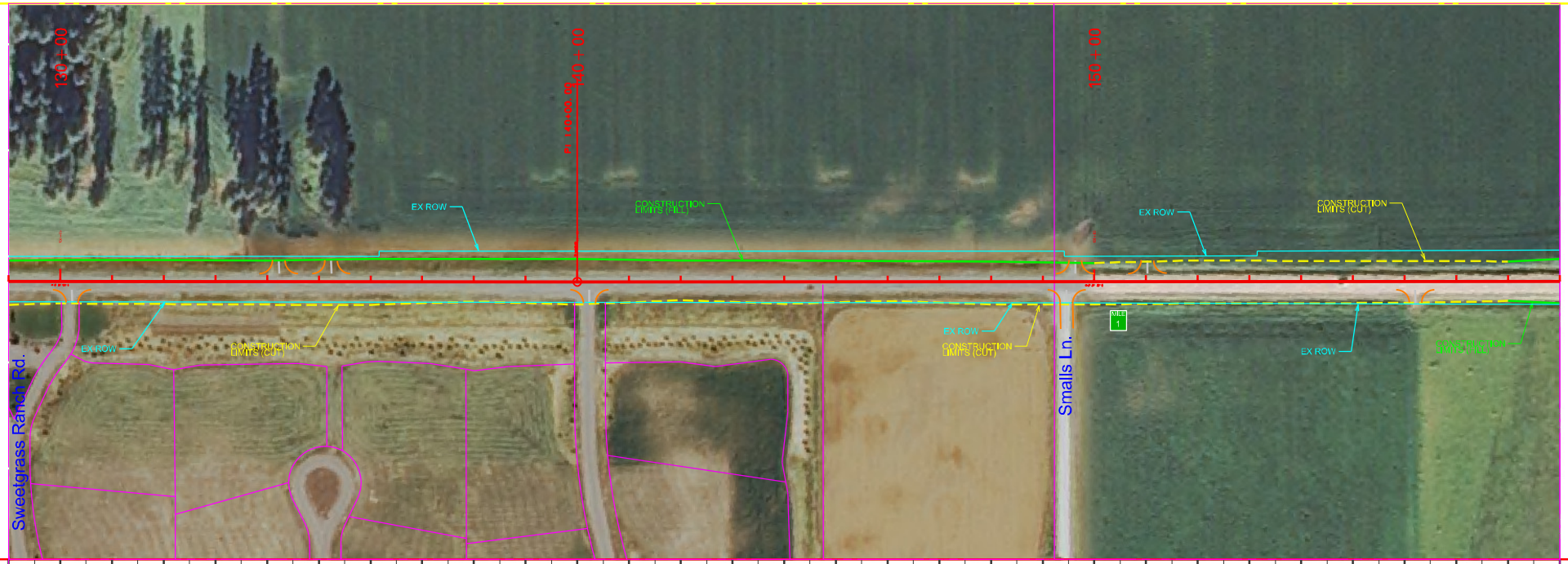
ROAD PLANS
FLATHEAD COUNTY

SF 119:SLOPE FLATTEN S-206
CSF : 0.99948837 0.2 TO 5.0
CSF : 0.99951665 5.0 TO 9.6
UPN 7884000

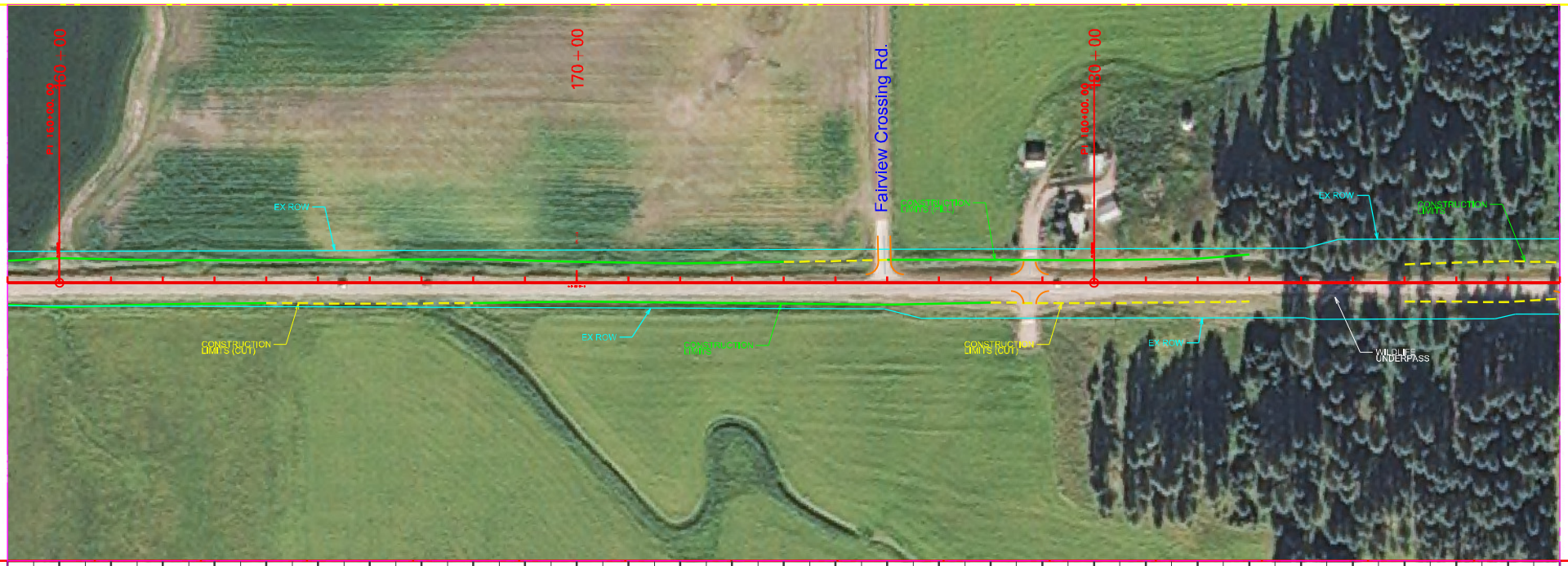
HSIP 206:11811



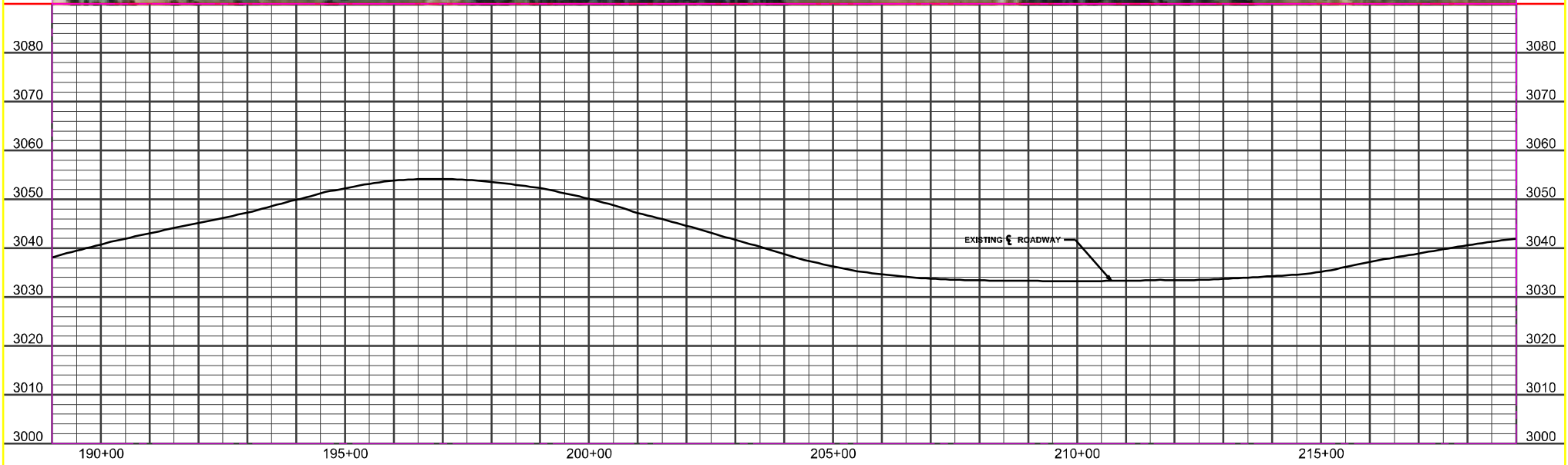
MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREVS	DESIGNED BY A. Cabrera 11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206		HSIP 206-1(81)
	$DATES	REVIEWED BY			CSF = 0.99948837 0.2 TO 5.0		
	$TIMES $username$	CHECKED BY	FLATHEAD COUNTY		CSF = 0.99951665 5.0 TO 9.6	UPN 7884000	PLP 1



MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811
	$DATE$	REVIEWED BY		FLATHEAD COUNTY		CSF = 0.99948837 0.2 TO 5.0 CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 2
	$TIME$ $username$	CHECKED BY					

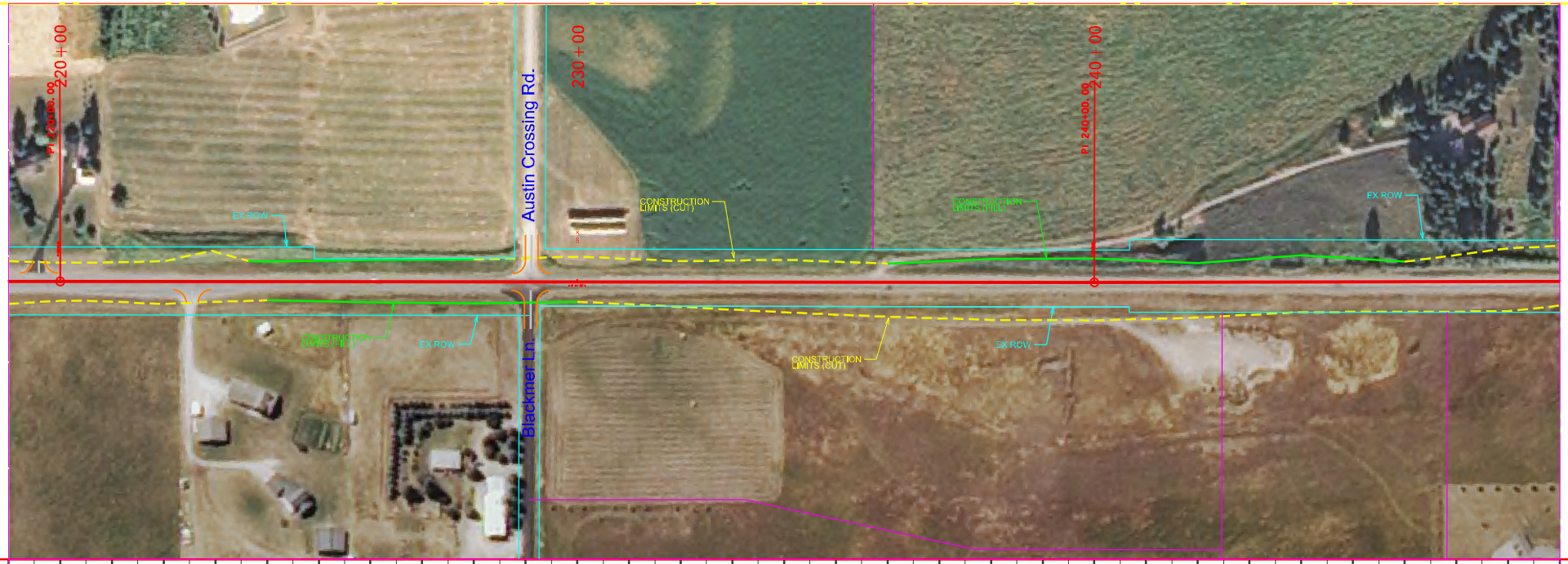


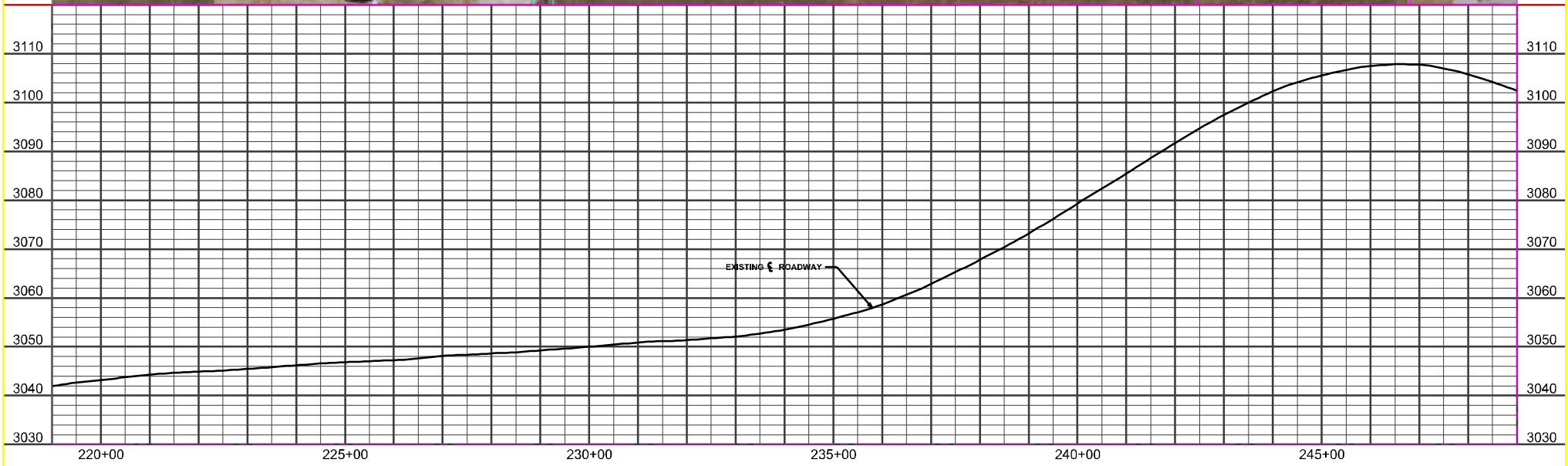
MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREVS	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811
	$DATES	REVIEWED BY				CSF = 0.99948837 0.2 TO 5.0	
	$TIME$ $usernameS	CHECKED BY		FLATHEAD COUNTY		CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 3



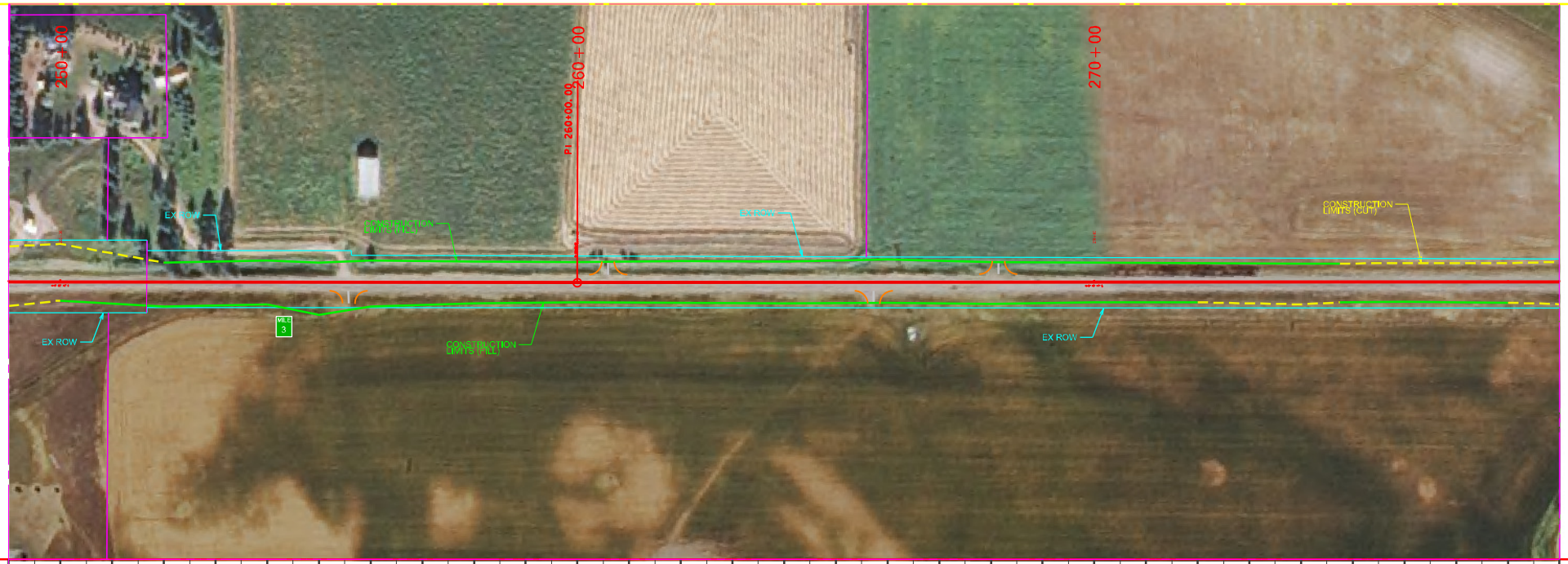
3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(83)
2		$DATE$	REVIEWED BY			CSF = 0.99948837 0.2 TO 5.0	
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 4

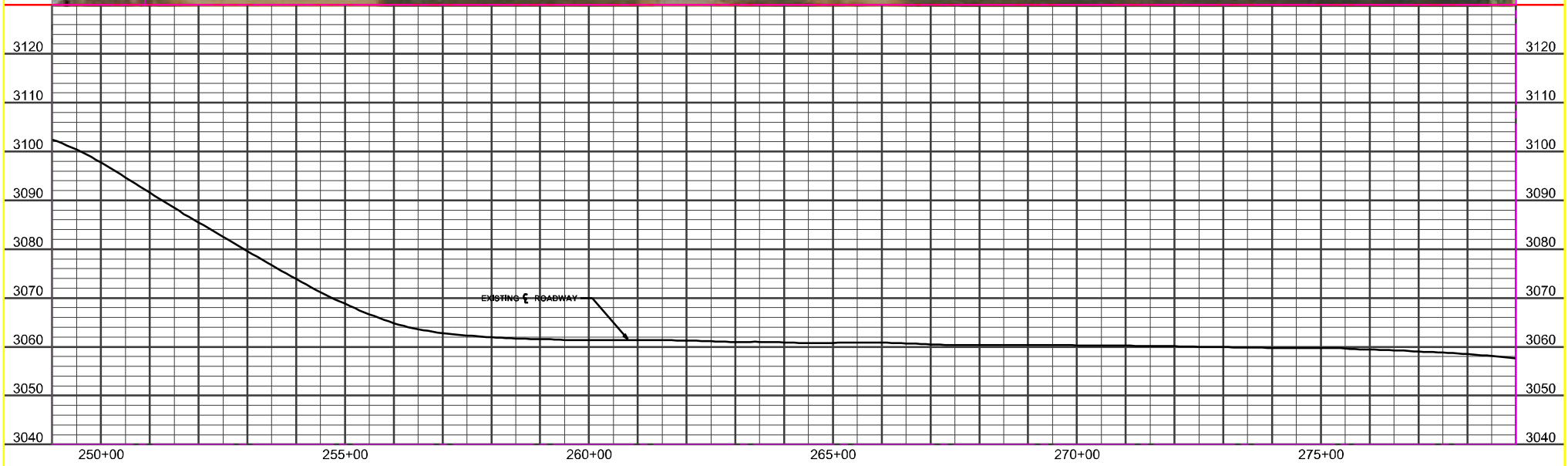
PRELIMINARY



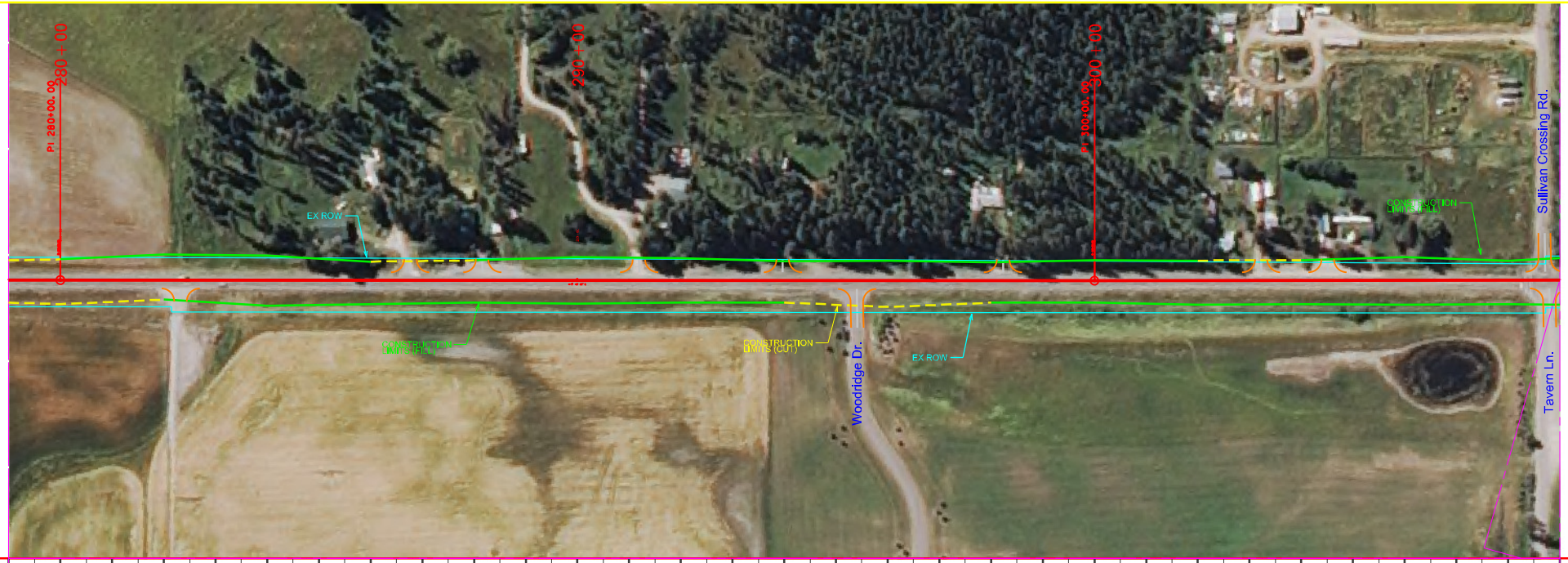


MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(81)
	$DATE$	REVIEWED BY		FLATHEAD COUNTY		CSF = 0.99948837 0.2 TO 5.0 CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 5
	$TIME$ Susername$	CHECKED BY					



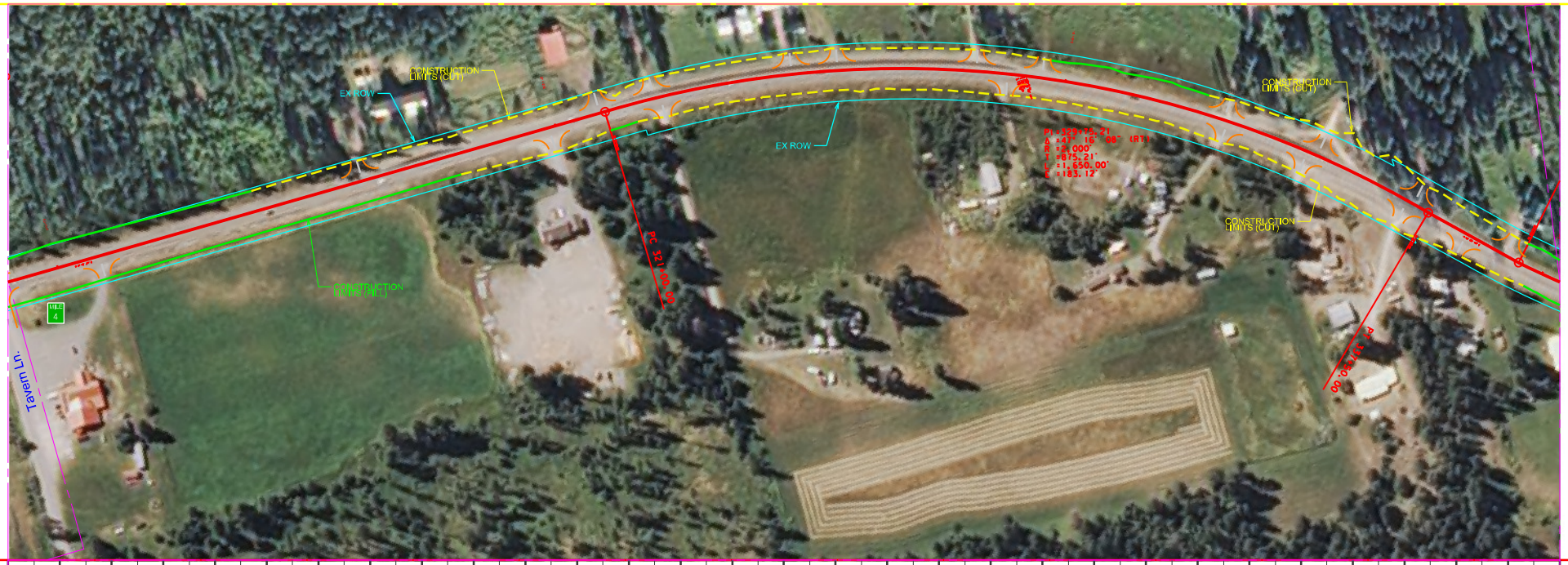


3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(81)
2		$DATE$	REVIEWED BY		PRELIMINARY	CSF = 0.99948837 0.2 TO 5.0	
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 6



3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(83)
2		$DATE$	REVIEWED BY				
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99948837 0.2 TO 5.0 CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 7

PRELIMINARY



3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811)
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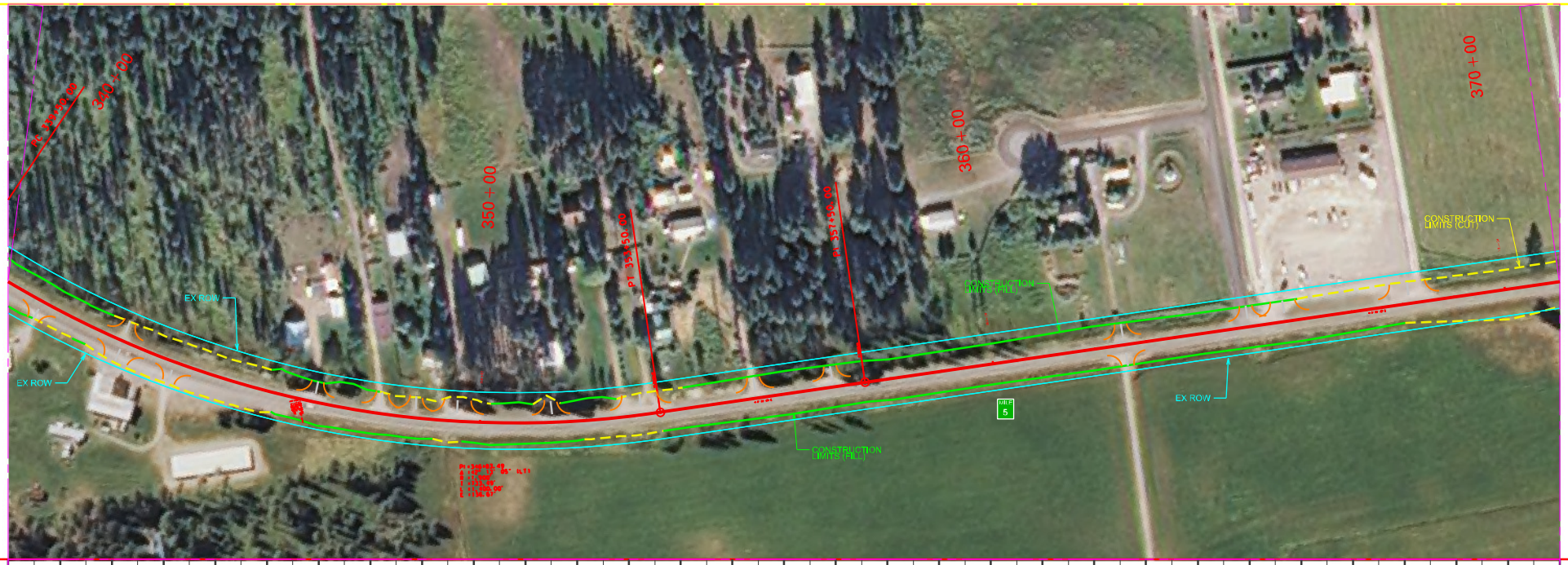
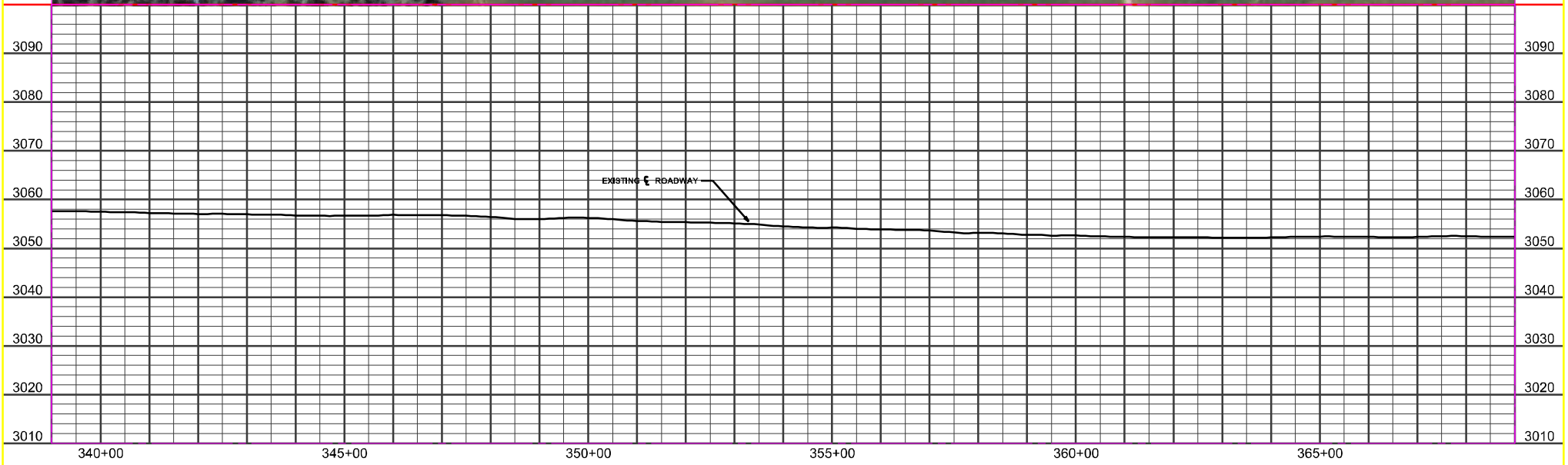
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 8





MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(83)
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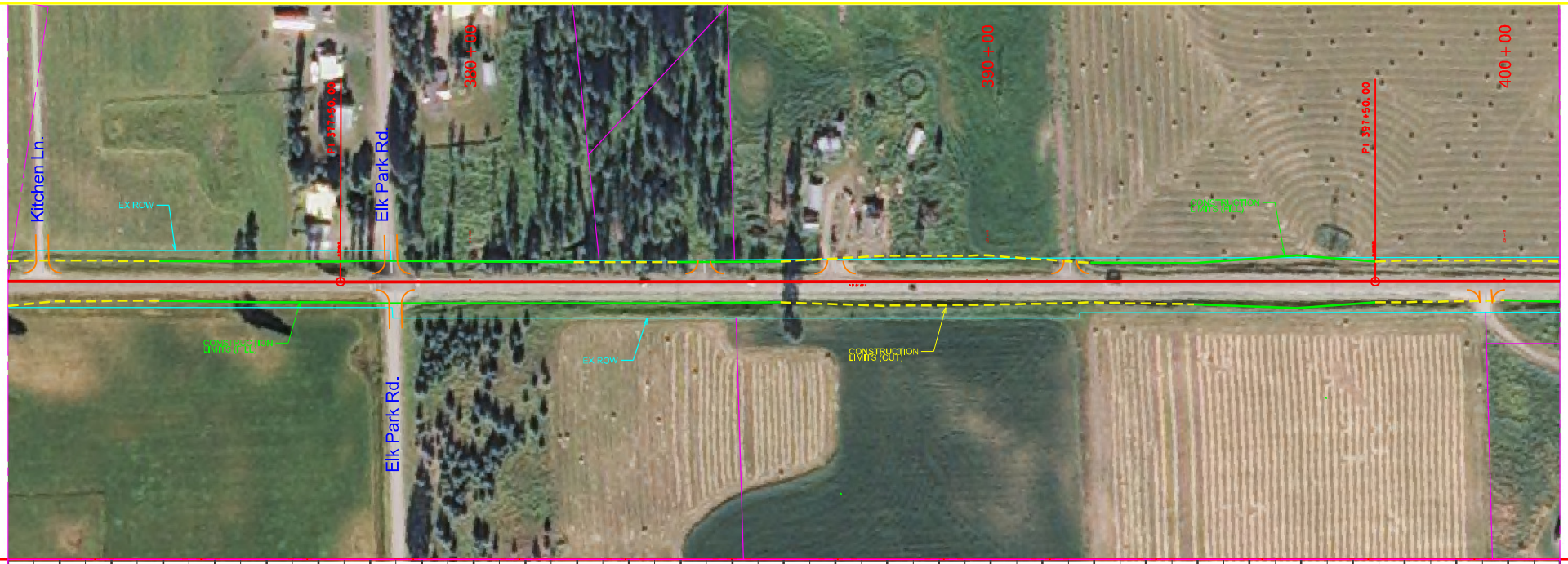
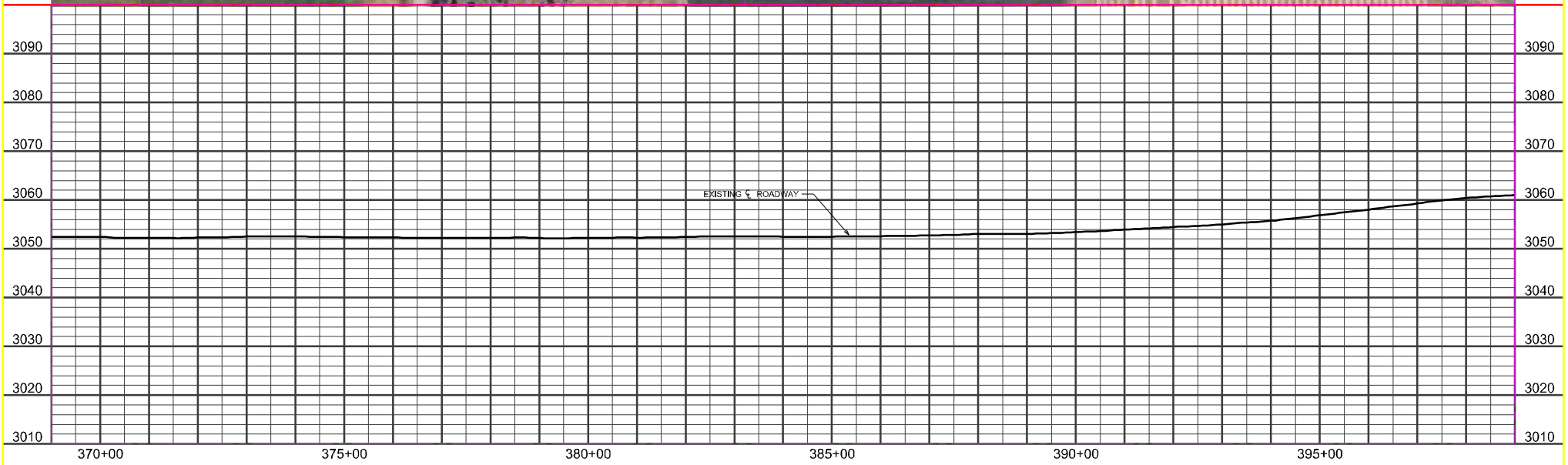
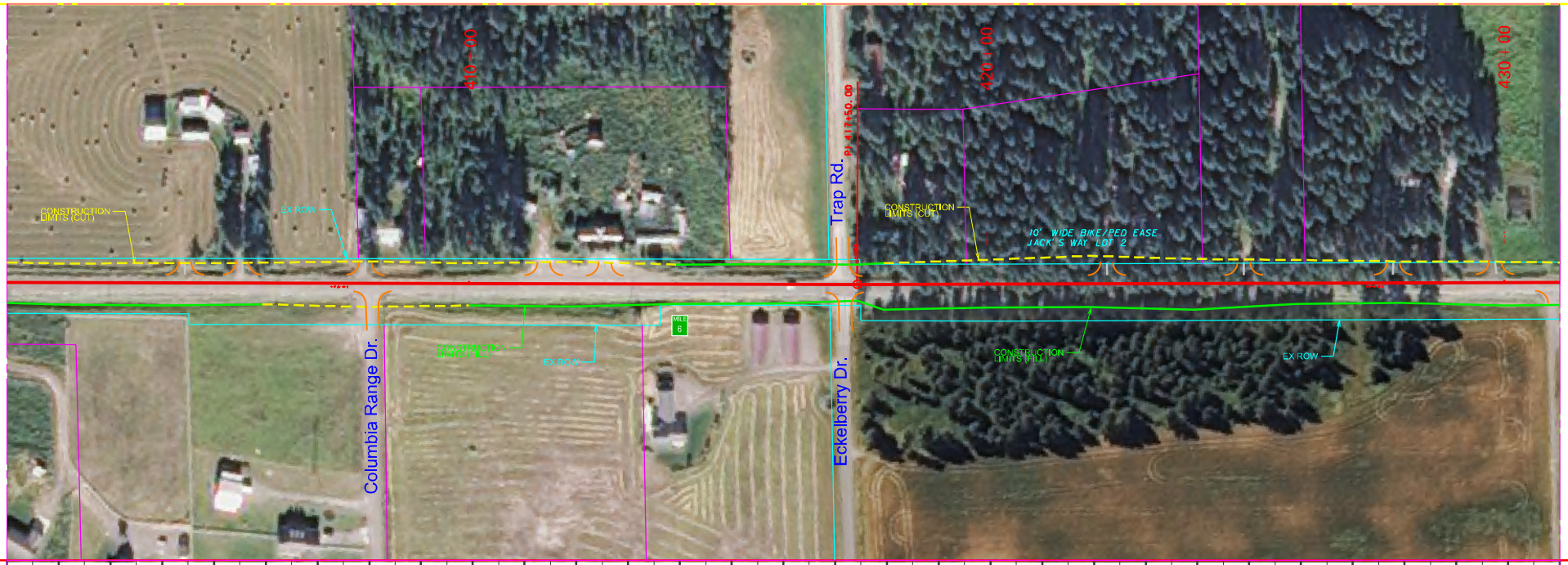
	$TIME$ $username$	CHECKED BY					





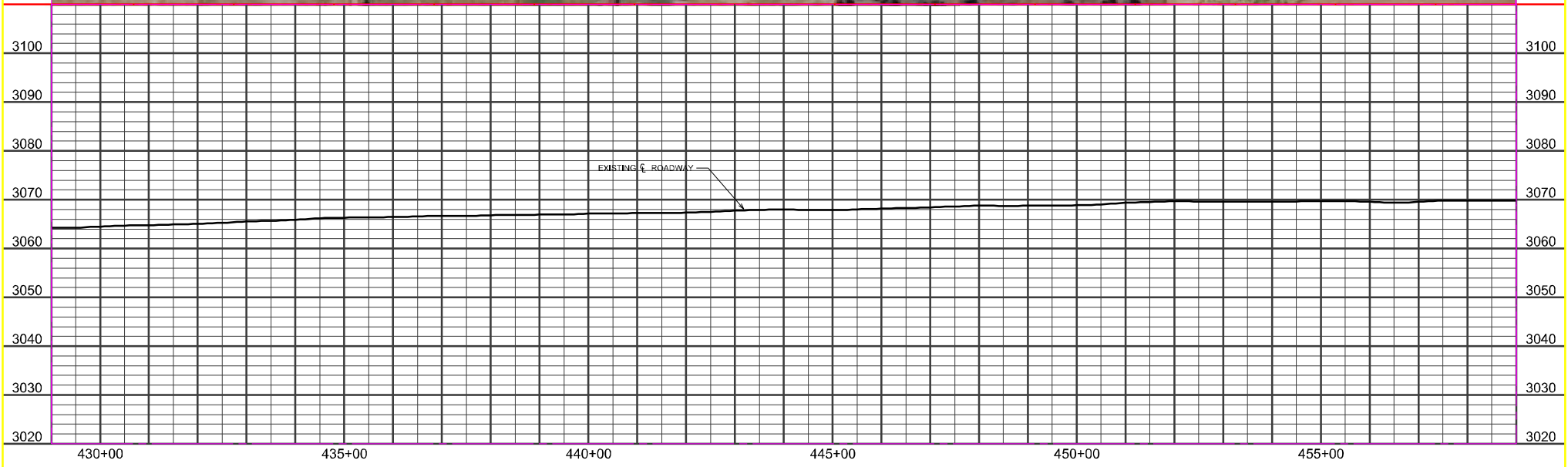
3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-11811
2		$DATE$	REVIEWED BY			CSF = 0.99948837 0.2 TO 5.0	
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 10

PRELIMINARY



3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(83)
2		$DATE$	REVIEWED BY				
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99948837 0.2 TO 5.0 CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 11

PRELIMINARY



MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREVS	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811
	$DATES	REVIEWED BY		FLATHEAD COUNTY		CSF = 0.99948837 0.2 TO 5.0 CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 12
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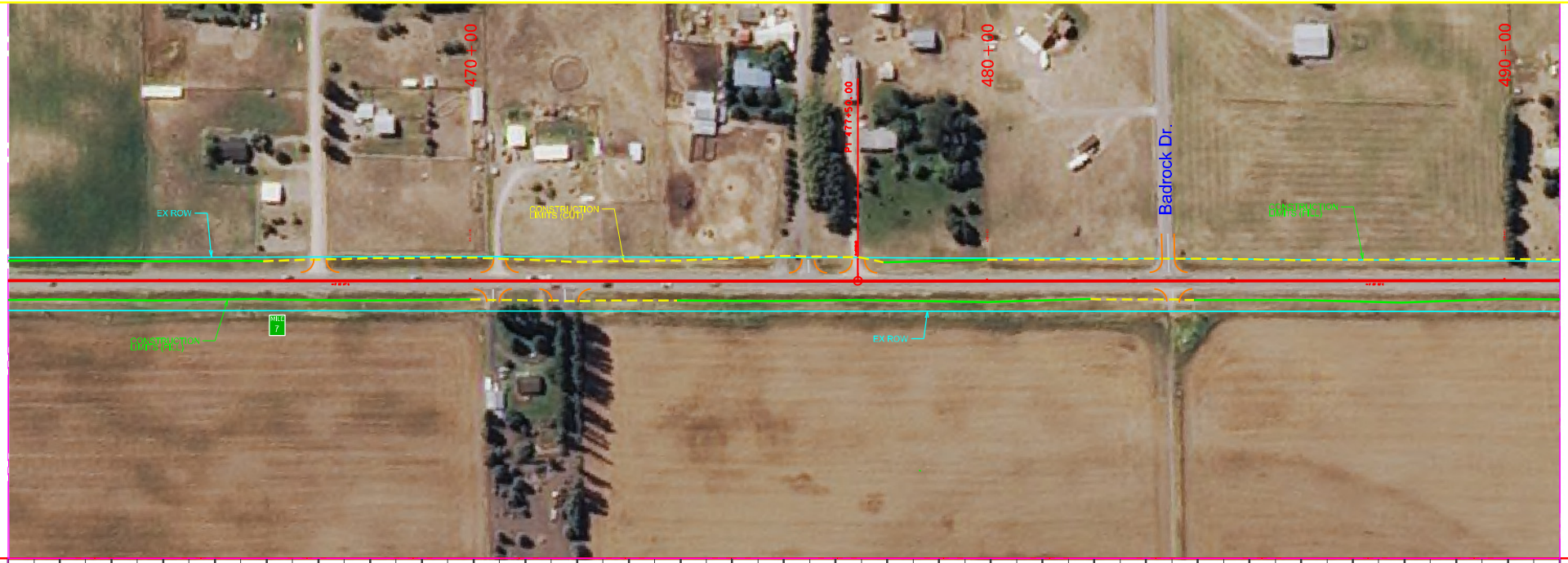

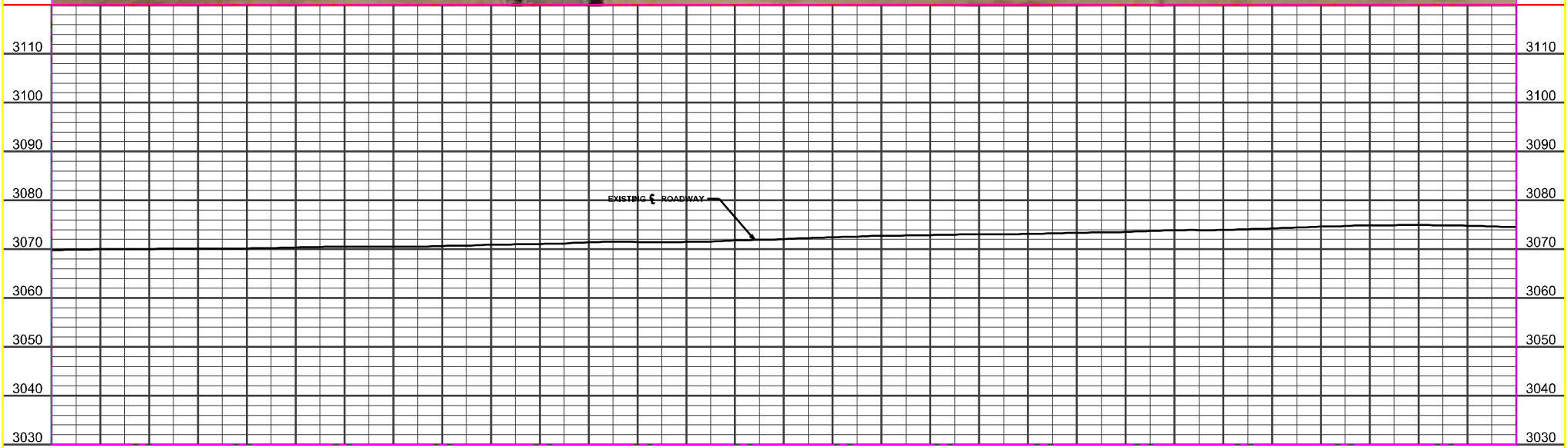

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(8)1
2		$DATE$	REVIEWED BY			CSF = 0.99948837 0.2 TO 5.0	
1		$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 13

PRELIMINARY

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811)
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1		$TIME$ Susername$	CHECKED BY		FLATHEAD COUNTY	CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 14

PRELIMINARY

3	MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(83)
2		$DATE$	REVIEWED BY			CSF = 0.99948837 0.2 TO 5.0	
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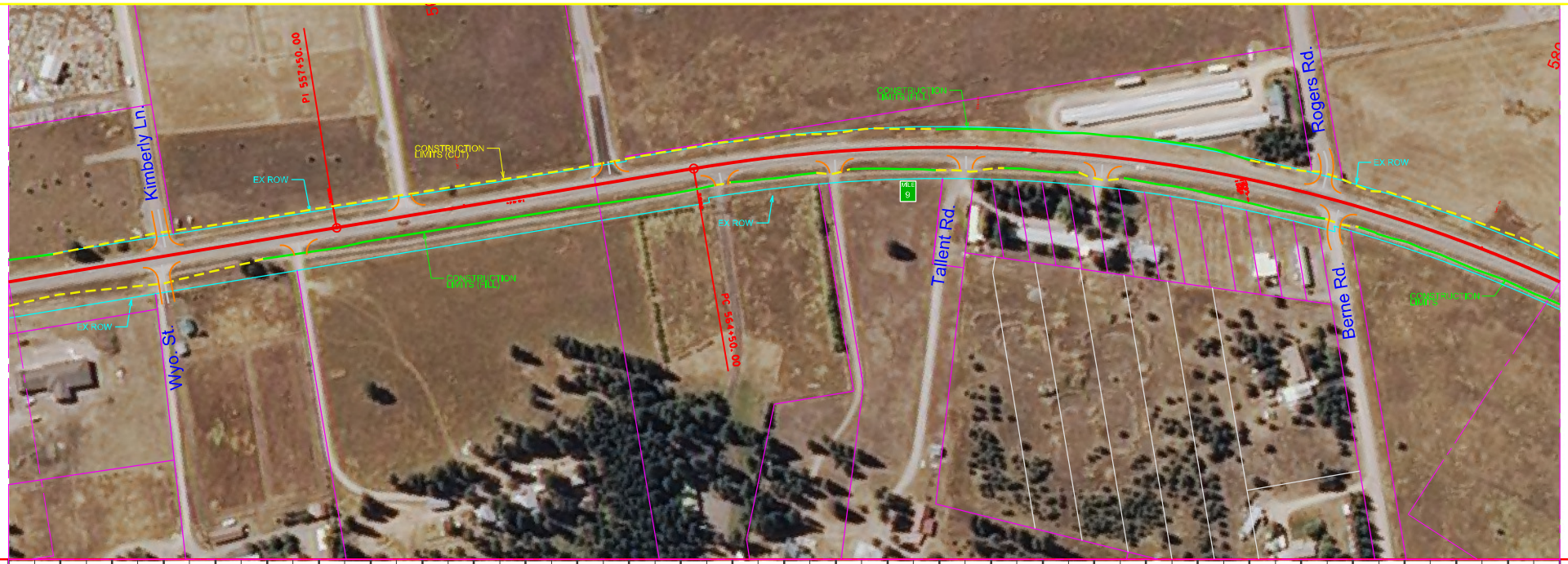
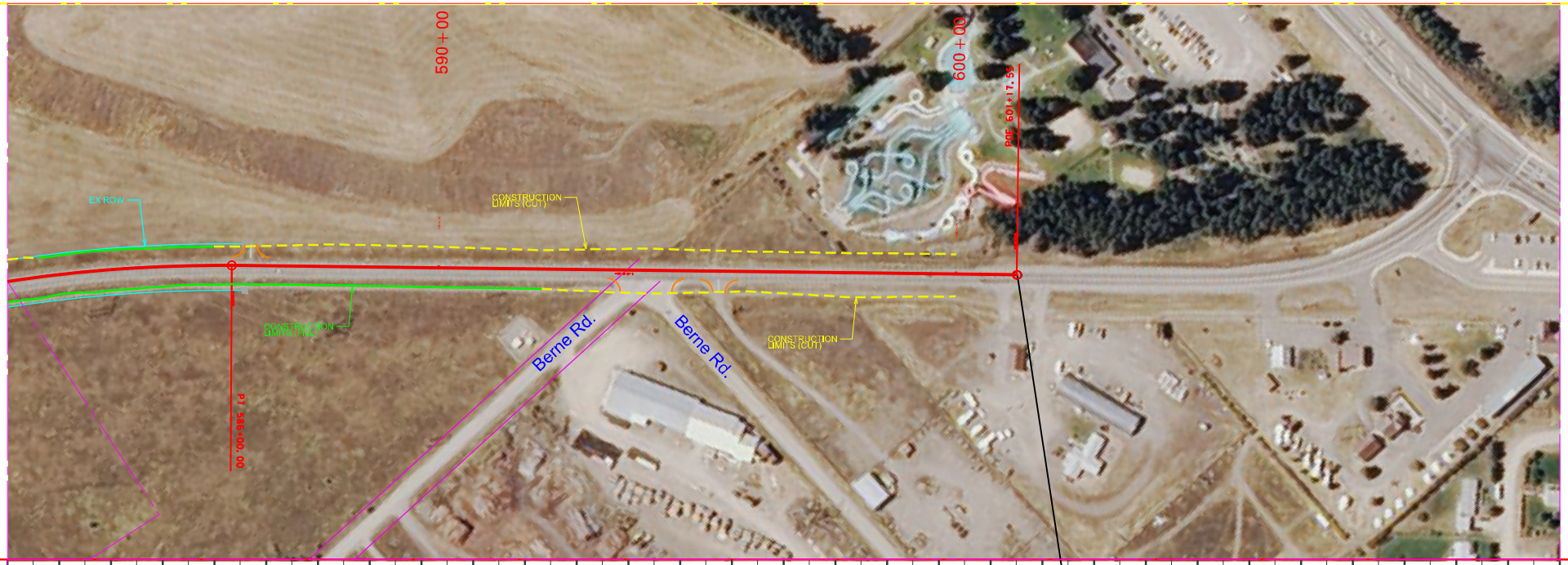
PRELIMINARY



MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811
	$DATE$	REVIEWED BY				CSF = 0.99948837 0.2 TO 5.0	
	$TIME$ $username$	CHECKED BY		FLATHEAD COUNTY		CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 16



MDT MONTANA DEPARTMENT OF TRANSPORTATION	$FILEABBREV$	DESIGNED BY A. Cabrera	11/10/2015	ROAD PLANS	PRELIMINARY	SF 119-SLOPE FLATTEN S-206	HSIP 206-1(811)
	$DATE$	REVIEWED BY		FLATHEAD COUNTY		CSF = 0.99948837 0.2 TO 5.0 CSF = 0.99951665 5.0 TO 9.6 UPN 7884000	PLP 17
	$TIME$ $username$	CHECKED BY					