

Information for: File # 2012-00182-RQM

Applicant: Aitkin County Highway Department

Corps Contact: Robert Maroney

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Phone: (651) 290-5766

Primary County: Aitkin County, Minnesota

**Section, Township, Range: Sections 25, 36 Township 47 North, Range 27 West,
Section 30, 31 Township 47 North, Range 26 West, Sections 6, 7 Township 46 North,
Range 26 West, and Section 1, Township 46 North, Range 27 West.**

Information Complete On: 44 February 2013

Posting Expires On: 6 October 2013

Authorization Type: LOP-05-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated water body and/or wetland impacts and compensatory mitigation requirements identified above. Approved jurisdictional determinations are posted on the St. Paul District web page at <http://www.mvp.usace.army.mil/>.

Project:

PROJECT DESCRIPTION AND PURPOSE: The proposed project is a reconstruction of an approximately 2.58 mile corridor of existing County State Aid Highway (CSAH) 12 from TH 47 in the north to CSAH 39 in the south. The purpose of the project is to upgrade CSAH 12 to current design standards pursuant to Minnesota Rule 8820. The project will

include guardrail improvement with slope flattening, resurfacing, culvert work, shoulder widening, turn lane construction and reconstruction.

WATERS OF THE UNITED STATES SUBJECT TO LOSS:

Aquatic resource types and quantities impacted by this project include 3.26 acres of wetlands and 50 lineal feet of Raspberry Creek. Wetland community types and quantities impacted by this project are: 0.68 acres of fresh meadow wetland community (Type 2); 0.07 acres of shallow marsh (Type 3); 1.18 acres of shrub carr wetland community (Type 6); 0.35 acres of hardwood swamp wetland community (Type 7) and 0.98 acres of open or coniferous bog (Type 8).

ALTERNATIVES CONSIDERED: The road design for this project was developed to minimize as much as possible the impacts to the adjacent properties and wetland by staying within the footprint of the existing road where feasible. Due to standard design criteria some impacts to the adjacent properties and wetland are unavoidable.

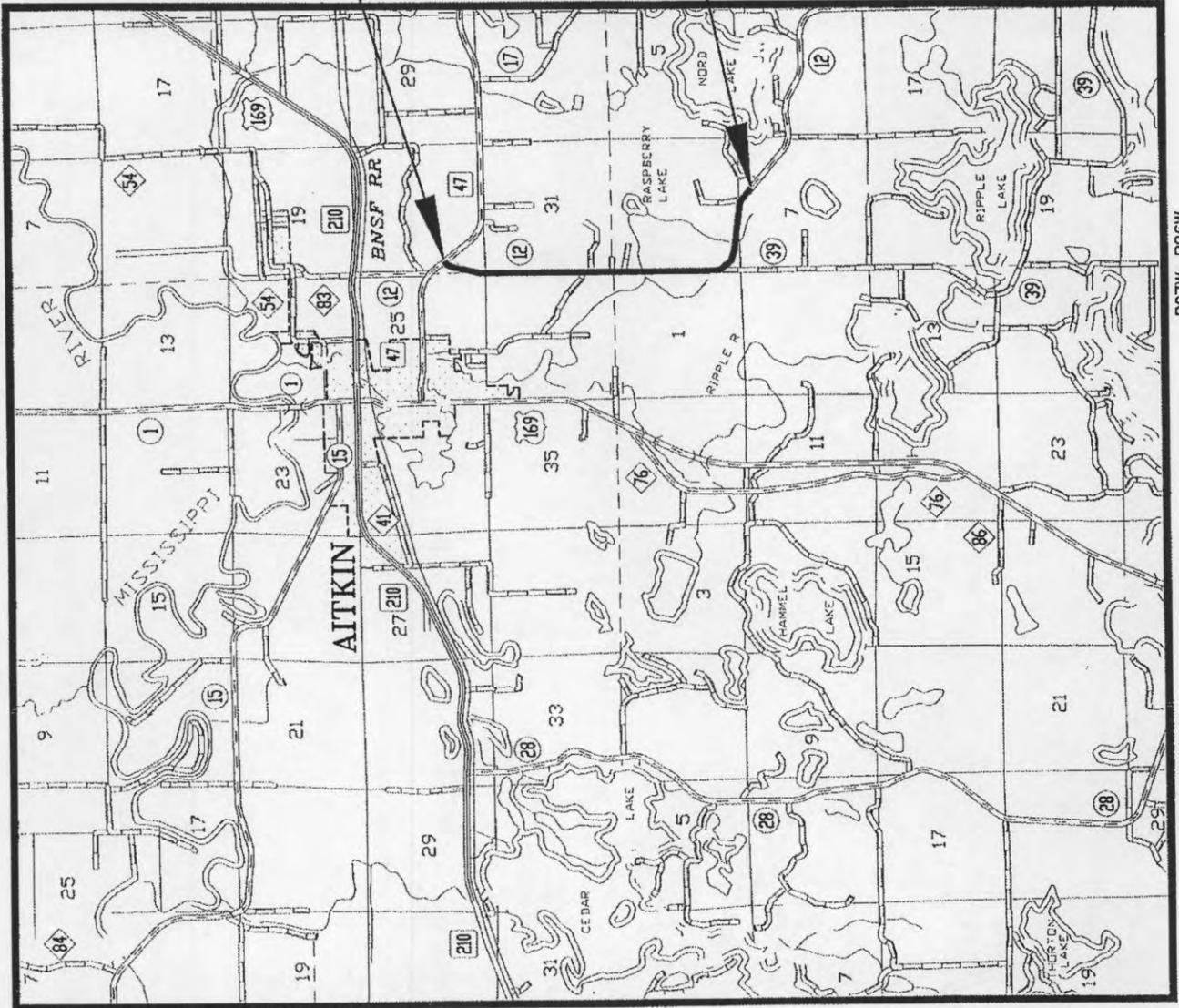
COMPENSATORY MITIGATION: Compensatory wetland mitigation credits for unavoidable wetland impacts from the project are proposed to be debited through the BWSR Road Replacement Program.

Drawings See attached.



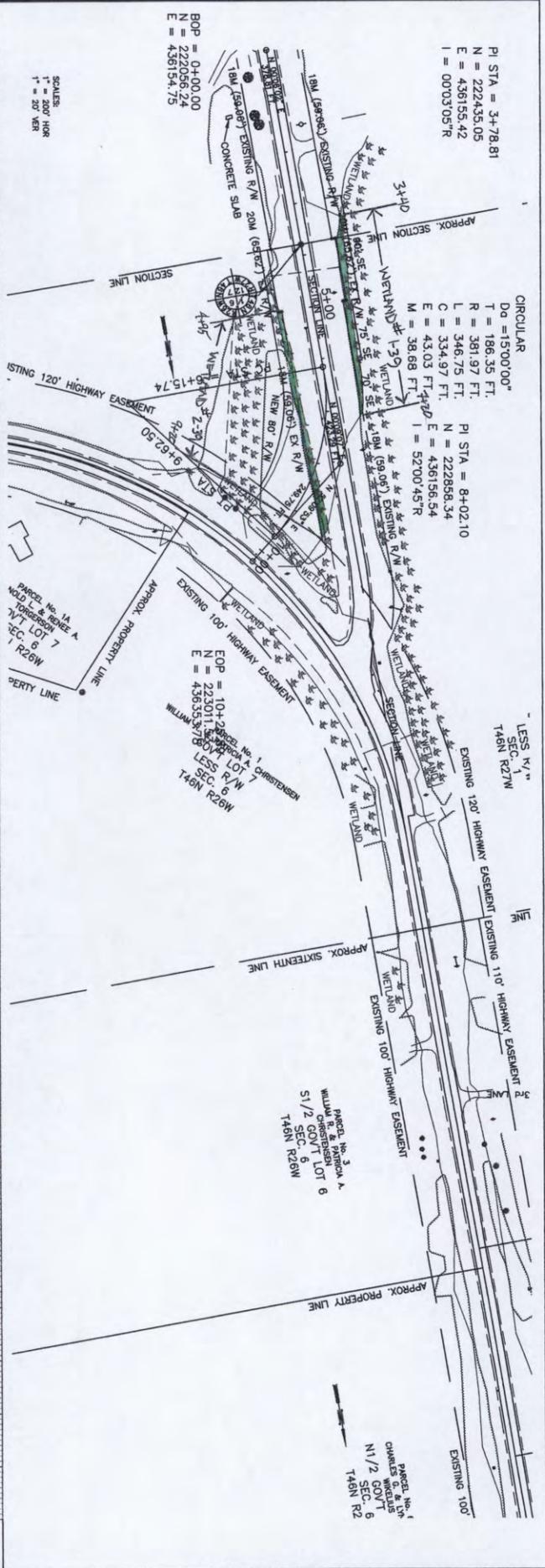
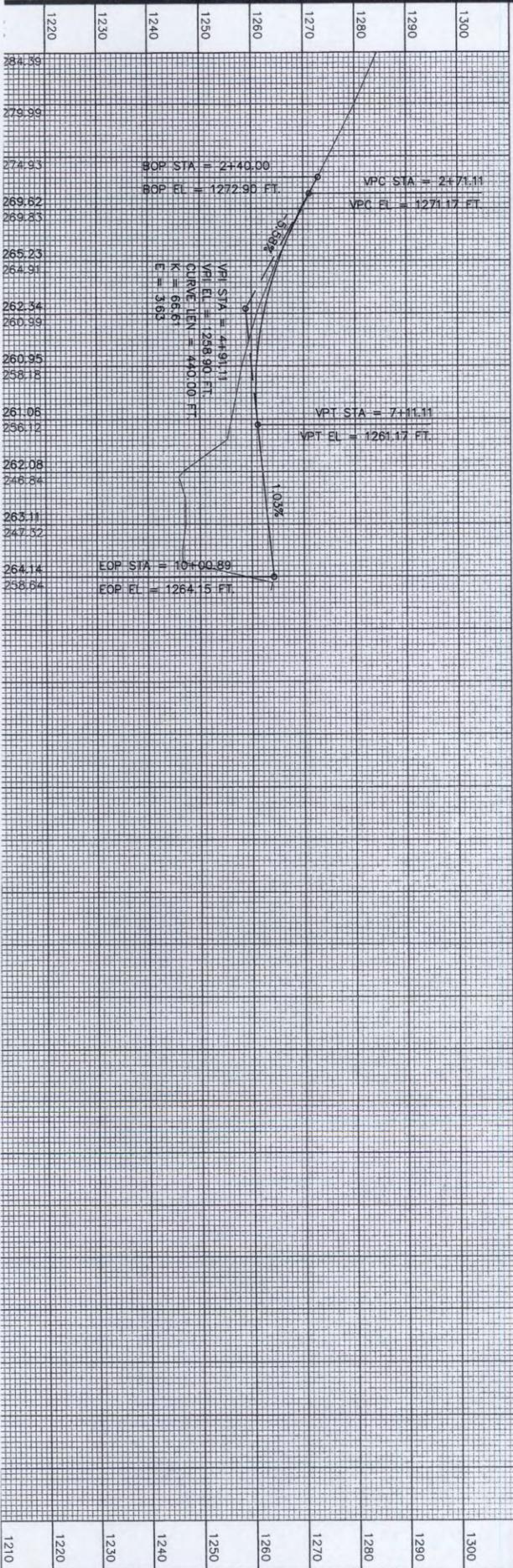
SAP 01-612-14
 END PROJECT
 STATION 239+08.25

SAP 01-612-14
 BEGIN PROJECT
 STATION 87+00

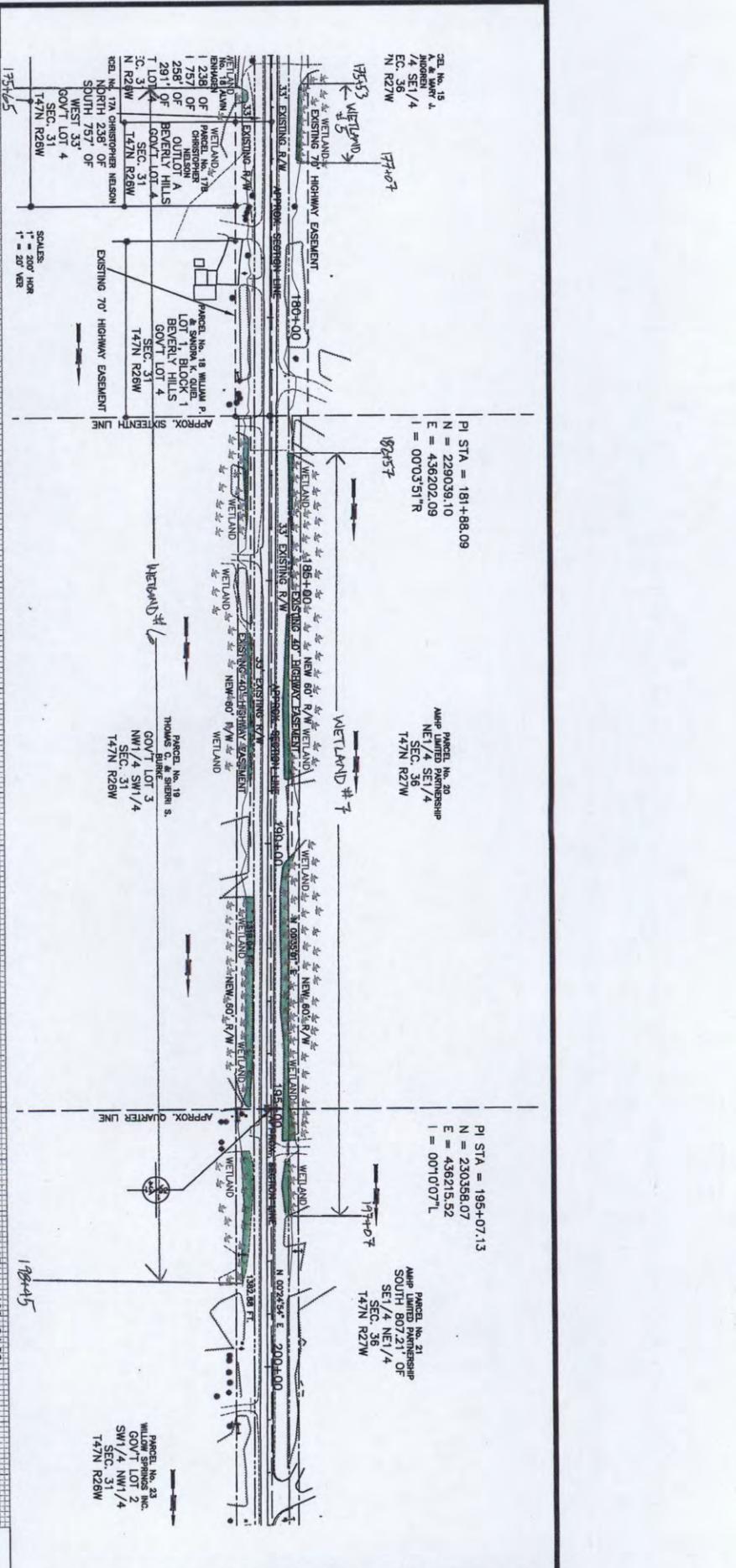


**IMPACT SUMMARY
SAP 001-612-014
CSAH 12**

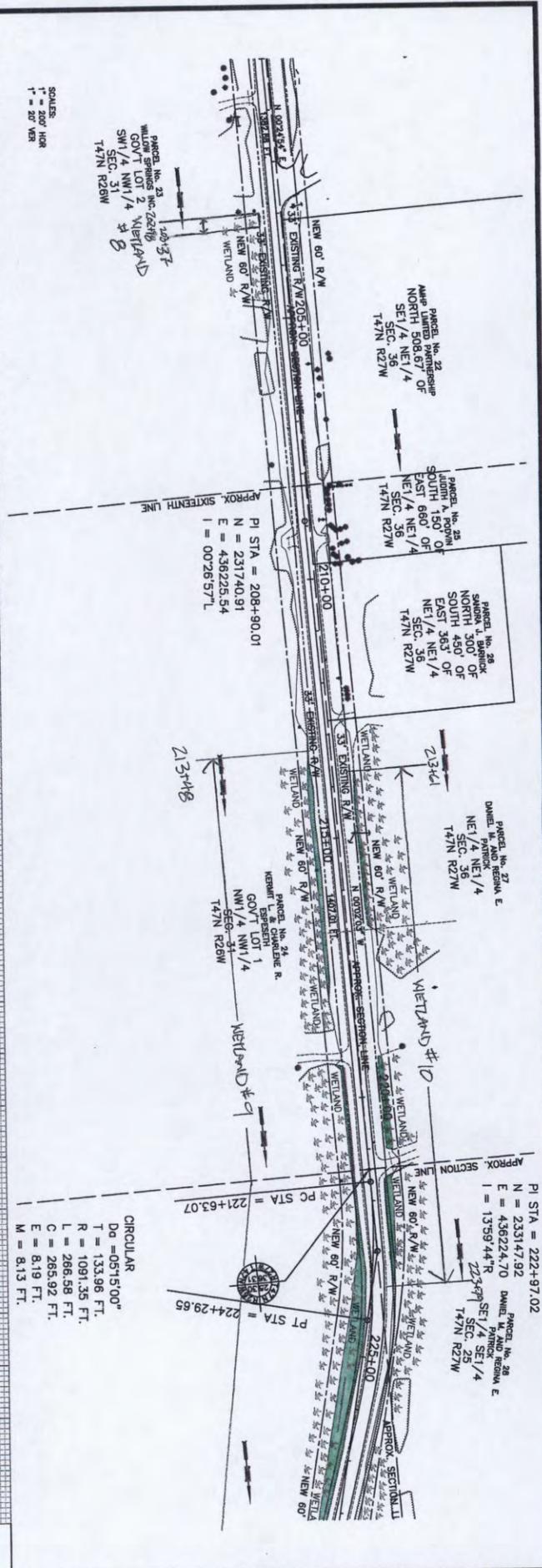
WETLAND NUMBER	ID OF WETLAND BASIN IMPACTED	WATERSHED NAME OR NO. MISS. RIV.-BRD. # 10	COUNTY	SECTION TWP, RNG	WETLAND TYPE	Wetland Circ. 39 Type Wetland Plant Community Type	SIZE OF WETLAND IMPACT	SIZE OF WETLAND BASIN
1	UPPER MISSISSIPPI RIVER BASIN	"	AITKIN	Sec 6 T46N - R26W	8	Bog	1067.34 sf 0.02 acres	1.29 acres
2	"	"	"	Sec 6 T46N - R26W	6	Shrub swamp	9304.88 sf 0.21 acres	16.78 acres
3	"	"	"	Sec 1 T46N - R27W	7 & 8	Wooded swamp Bog	2067.39 sf 0.05 acres	7.34 acres
4	"	"	"	Sec 31 T47N - R26W	6	Shrub swamp	1612.00 sf 0.04 acres	Not mapped by NWI
5	"	"	"	Sec 36 T47N - R27W	3	Shallow marsh	1196.55 sf 0.03 acres	0.37 acres
6	"	"	"	Sec 31 T47N - R26W	6 & 8	Shrub swamp Bog	13416.58 sf 0.31 acres	22.36 acres
7	"	"	"	Sec 36 T47N - R27W	6 & 8 7 & 8	Shrub swamp & bog Wooded swamp & bog	13698.31 sf 0.31 acres	5.88 acres 3.95 acres
8	"	"	"	Sec 31 T47N - R26W	7	Wooded swamp	55.45 sf 0.001 acres	Not mapped by NWI
9	"	"	"	Secs 30 & 31 T47N - R26W	6 & 8	Shrub swamp Bog	20771.05 sf 0.48 acres	26.4 acres
10	"	"	"	Secs 25 & 36 T47N - R27W	6 7 & 8	Shrub swamp Wooded swamp & bog	5999.08 sf 0.14 acres	15.1 acres 42.06 acres
11	"	"	"	Sec 30 T47N - R26W	6 & 8	Shrub swamp & bog	24400.58 sf 0.56 acres	1.18 acres 2.3 acres
12	"	"	"	Sec 30 T47N - R27W	2 2	Inland fresh meadows Inland fresh meadows	16151.13 sf 0.37 acres	1.47 acres
A	"	"	"	Sec 6 T46N - R26W	3	Shallow marsh	1952.24 sf 0.04 acres	0.35 acres
B	"	"	"	Sec 6 T46N - R26W	6	Shrub swamp	6298.08 sf 0.14 acres	1.56 acres
C	"	"	"	Sec 6 T46N - R26W	7 & 8	Wooded swamp Bog	8653.79 sf 0.20 acres	8.25 acres
1 on #39	"	"	"	Sec 1 T46N - R27W	7 & 8	Wooded swamp Bog	3720.43 sf 0.09 acres	25.35 acres
2 on #39	"	"	"	Sec 6 T46N - R26W	6	Shrub swamp	4884.09 sf 0.11 acres	1.56 acres
1 on #47	"	"	"	Sec 30 T47N - R26W	7 & 8	Wooded swamp Bog	5310.27 sf 0.12 acres	52.15 acres
2 on #47	"	"	"	Sec 30 T47N - R26W	2	Inland fresh meadows	1314.28 sf 0.03 acres	1.47 acres
						TOTALS:	141873.52 sf 3.26 acres	



1200	1244.78				
1200	1244.66				
1245.57		VPT STA = 176+28.52			
1245.24		VPT EL = 1245.94 FT.			
1246.97		VPC STA = 177+47.00			
1246.58		VPC EL = 1247.65 FT.			
1248.36		VPI STA = 178+97.00			
1247.99		VPI EL = 1249.80 FT.			
1249.48		CURVE LEN = 300.00 FT			
1249.11		K = 322.16			
1250.29		E = 0.35			
1250.00		VPC STA = 180+62.04			
1250.76		VPC EL = 1250.63 FT.			
1250.45		VPI STA = 181+14.54			
1250.46		VPI EL = 1251.05 FT.			
1250.28		CURVE LEN = 165.00 FT			
1249.49		K = 109.55			
1249.27		E = 0.31			
1248.56		VPC STA = 183+39.04			
1248.24		VPC EL = 1249.10 FT.			
1247.98		VPI STA = 184+39.04			
1247.68		VPI EL = 1248.10 FT.			
1247.72		CURVE LEN = 200.00 FT			
1247.34		K = 282.14			
1247.56		E = 0.19			
1247.13		VPC STA = 186+32.00			
1247.76		VPC EL = 1247.64 FT.			
1247.41		VPI STA = 187+32.00			
1247.76		VPI EL = 1247.91 FT.			
1248.24		VPC STA = 188+79.00			
1247.99		VPC EL = 1248.14 FT.			
1248.58		VPI STA = 189+79.00			
1248.25		VPI EL = 1248.65 FT.			
1248.58		CURVE LEN = 200.00 FT			
1248.68		K = 418.94			
1247.64		E = 0.12			
1248.71		VPC STA = 192+58.00			
1247.10		VPC EL = 1248.72 FT.			
1248.74		VPI STA = 193+58.00			
1247.97		VPI EL = 1248.75 FT.			
1248.87		CURVE LEN = 200.00 FT			
1248.58		K = 891.48			
1249.11		E = 0.06			
1248.81		VPC STA = 194+90.00			
1249.89		VPC EL = 1249.08 FT.			
1249.11		VPI STA = 196+97.00			
1251.58		VPI EL = 1245.80 FT.			
1250.18		CURVE LEN = 414.00 FT			
1254.12		K = 1129.5			
1253.54		E = 1.90			
1257.57		VPC STA = 199+04.00			
1257.13		VPC EL = 1257.73 FT.			
1261.05		VPI STA = 199+94.00			
1260.66		VPI EL = 1261.28 FT.			
1263.40		CURVE LEN = 165.00 FT			
1263.20		K = 89.06			
1264.41		E = 0.39			
1264.26		VPC STA = 200+76.50			
1264.26		VPC EL = 1262.95 FT.			
1263.99		VPI STA = 201+59.00			
1200	1263.99	VPI EL = 1264.85 FT.			
1210	1263.20	CURVE LEN = 189.00 FT			
1220	1264.41	K = 70.96			
1230	1264.26	E = 0.48			
1240	1264.26	VPC STA = 202+41.50			
1250	1263.99	VPC EL = 1264.42 FT.			



1200	1261.05		
1210	1260.66		
1220	1263.40	VPC STA = 200+76.50	VPT STA = 200+76.50
1230	1263.20	VPC EL = 1262.95 FT.	VPT EL = 1262.95 FT.
1240	1264.41		
1250	1264.26	VPT STA = 202+41.50	
1260	1264.26	VPT EL = 1264.42 FT.	
1270	1263.99	VPC STA = 203+75.00	
1280	1263.97	VPC EL = 1264.06 FT.	
1290	1263.51		
1290	1263.18		
1290	1262.76		
1290	1261.71		
1290	1261.50	VPT STA = 206+35.00	VPC STA = 206+60.15
1290	1259.65	VPT EL = 1261.04 FT.	VPC EL = 1260.52 FT.
1290	1259.45		
1290	1257.02		
1290	1256.69		
1290	1253.91		
1290	1253.66		
1290	1250.78		
1290	1250.42		
1290	1247.76		
1290	1247.60		
1290	1245.43		
1290	1245.19		
1290	1243.56		
1290	1243.44		
1290	1241.93		
1290	1241.43		
1290	1241.37		
1290	1241.12		
1290	1241.38		
1290	1241.11		
1290	1241.47		
1290	1241.15		
1290	1241.68	VPC STA = 218+00.00	VPT STA = 218+00.00
1290	1241.39	VPC EL = 1241.68 FT.	VPT EL = 1241.68 FT.
1290	1241.93		
1290	1241.70		
1290	1242.14	VPT STA = 220+00.00	
1290	1241.38	VPT EL = 1242.14 FT.	
1290	1242.33		
1290	1241.96	VPC STA = 221+00.00	VPC EL = 1242.33 FT.
1290	1242.49		
1290	1242.27		
1290	1242.58		
1290	1241.81		
1290	1242.65		
1290	1240.64		
1290	1242.71		
1290	1239.56		
1290	1242.77		
1290	1241.01		
1290	1242.83		
1290	1242.14		
1290	1242.90	VPC STA = 228+00.00	
1290	1242.41		
1290	1242.00		



SCALES:
 1" = 200' HOR
 1" = 20' VER

CIRCULAR
 Dc = 0515.00'
 T = 133.96 FT.
 R = 1091.35 FT.
 L = 266.58 FT.
 C = 265.92 FT.
 E = 8.19 FT.
 M = 8.13 FT.

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: _____

DATE: _____

JOHN WELF LIC. NO. 24340

1280	242.71		
1270	242.77		
1260	242.83		
1250	242.90		
1240	242.96		
1230	243.04		
1220	243.13		
1210	243.21		
1200	243.29		
1190	243.37		
1180	243.46		
1170	243.57		
1160	243.69		
1150	243.74		
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1120	243.74		
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1100	243.74		
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1050	243.74		
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730	243.74		
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440	243.74		
430	243.74		
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410	243.74		
400	243.74		
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270	243.74		
260	243.74		
250	243.74		
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110	243.74		
100	243.74		
90	243.74		
80	243.74		
70	243.74		
60	243.74		
50	243.74		
40	243.74		
30	243.74		
20	243.74		
10	243.74		
0	243.74		



SCALES:
 1" = 200' HOR
 1" = 20' VERT

EOP = 239+08.60
 N = 23439.68
 E = 436749.11

PI STA = 236+85.33
 N = 234496.51
 E = 436559.98
 I = 38°54'47"

AITKIN COUNTY HIGHWAY DEPT.
 CSAH NO. 12
 SAP 001-612-014

PLAN & PROFILE SHEET

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
 SIGNATURE: _____
 DATE: _____ JOHN WELLE LIC. NO. 24340

