

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

Road Map Survey

NO. BIRCH LAKE BLVD.

From Centerville Rd. To Bald Eagle Ave.

Road Acc't. No. 11

Date Filed.....

File.....

ALIGNMENT NOTES

N. BIRCH LAKE BOULEVARD

12-29-39

Church:
Gallagher
McGarry
Smith

Sta. Pt. Ang. Lt. Ang. Rt.

20+47.41 P.C. 5° Curve Right

1947.26

Equation $3+10.8 = 200.15$

3+10.80 P.T. 2° 34' 45° 04'

3+00 7° 15' 42° 30'

2+50 7° 15' 36° 15' $I = 90° 08'$

2+00 7° 15' 29° 00' $T = 200.15$

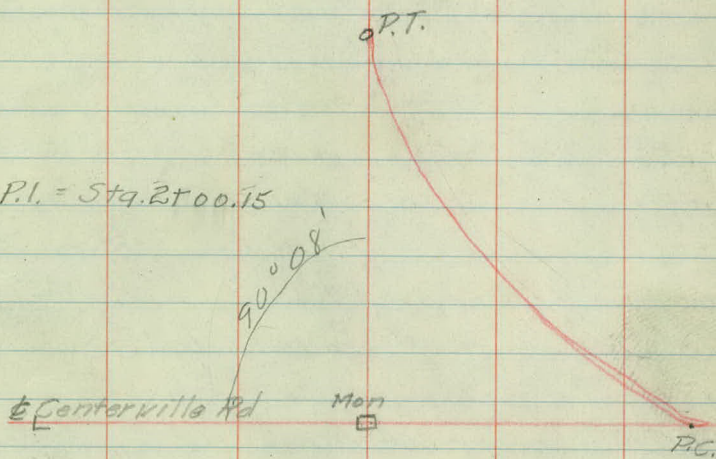
~~3+00.15~~ P.I. 7° 15' 21° 45' $L = 310.80$

1+00 7° 15' 14° 30' $R = 199.69$

0+50 7° 15' 7° 15'

0+00 P.C. 29° Curve Right

P.I. = Sta. 2+00.15



Sta. Pt. Ang. Lt. Ang. Rt.

33+17.23	P.T.	1°23.8'	20°17'	
33+00		4°2.5'	18°53.2'	I = 40°34'
32+50		4°2.5'	14°50.7'	T = 131.42
32+00		4°2.5'	10°48.2'	L = 250.93
31+50		4°2.5'	6°45.7'	R = 355.59
31+00		2°43.2'	2°43.2'	

30+66.35 P.C. 16°10' Curve Left

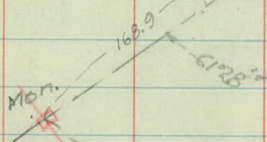
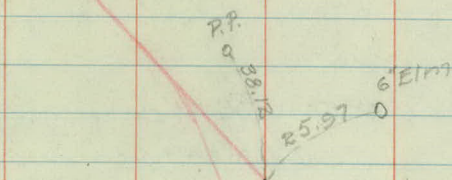
26+80.66 Int. with Sec. Line

- - 450.63 - -

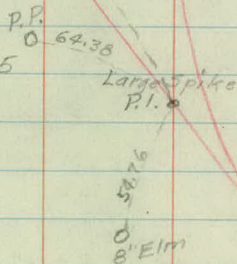
26+15.721	P.T.	0°23.6'	14°12.5'	
26+00		2°30'	13°48.9'	
25+00		2°30'	11°48.9'	I = 28°25'
24+00		2°30'	8°48.9'	T = 290.24
23+00		2°30'	6°18.9'	L = 568.31
22+00		2°30'	3°48.9'	R = 1146.28
21+00		1°18.9'	1°18.9'	

20+47.41 P.C. 5° Curve Right

P.I. = Sta. 31+97.77



P.I. = Sta. 23+37.65



Large spike
P.I.

Sta.	Pt.	Ang Lt.	Ang Rt.	
43+20.67	P.T.	0°57.8'	9°47.5'	
43+00		2°20'	8°49.7'	$I = 19°35'$
42+50		2°20'	6°29.7'	$T = 106.06$
42+00		2°20'	4°09.7'	$L = 209.88$
41+50		1°49.7'	1°49.7'	$R = 614.56$ ✓
41+10.79	P.C.	9°20' Curve Right (Chords 50.05)		

40+89.02 Int. With E & W $\frac{1}{4}$ Line Sec. 15

38+42.14	P.T.	2°23.3'	17°39.5'	
38+00		2°50'	15°16.2'	
37+50		2°50'	12°26.2'	$I = 35°19'$
37+00		2°50'	9°36.2'	$T = 161.20$
36+50		2°50'	6°46.2'	$L = 311.63$
36+00		2°50'	3°56.2'	$R = 506.38$
35+50		1°06.2'	1°06.2'	(Chords 50.05)
35+30.51	P.C.	11°20' Curve Left		

$$\begin{array}{r}
 127.83 \\
 106.06 \\
 \hline
 21.77 \\
 44 + 10.79 \\
 \hline
 21.77 \\
 \hline
 11089.02
 \end{array}$$

End. G.R. Post

24.4

T.P.

41.28

P.I.
Ditch in
Paving

P.I. = Sta. 42 + 16.85

47°52'

Est. Line 500.15

18" Birch

9.500

Spike in Ground.

24.8

28" Cottonwood

P.I. = Sta. 36 + 91.71

Sta. Pt. Ang. Lt. Ang. Rt.

52+64.44	P.T.	1°26.6'	18°38.5'	
52+50		5°00'	17°11.9'	I = 37°17'
52+00		5°00'	12°11.9'	T = 97.13
51+50		5°00'	7°11.9'	L = 186.42
51+00		2°11.9'	2°11.9'	R = 287.94 ✓

50+78.02 P.C. 20° Curve Left.

48+65.65 Intersection with E & W $\frac{1}{4}$ Line Sec 15

47+81.70	P.T.	4°29.3'	50°05'	
47+50		7°05'	45°35.7'	
47+00		7°05'	38°30.7'	
46+50		7°05'	31°25.7'	
46+00		7°05'	24°20.7'	
45+50		7°05'	17°15.7'	I = 100°10'
45+00		7°05'	10°10.7'	T = 244.2
44+50		3°05.7'	3°05.7'	L = 353.57
44+28.13	P.C. 28°20' Curve Right			R = 204.3
	(chords 50.38)			

P.I. = 51+75.15

14" Elm

659.71

T.P.
2626.0

P.I. Spike

E+W 1/4 Line Sec. 15

70°51'

Triple Oak

74.03

98.13

12" Oak

P.I. = 46+72.33

Spike

Sta. Pt. Ang. Lt. Ang. Rt.

98.47

58+19.84	P.T.	0°59.5'	10°05'	I = 20°10'
58+00		2°30'	9°05.5'	T = 102.02
57+50		2°30'	6°35.5'	L = 201.67
57+00		2°30'	4°05.5'	R = 573.69 ✓
56+50		1°35.5'	1°35.5'	
56+18.17	P.C.	10° Curve Left.		

24.30

24.10

55+94.07	P.T.	1°06.1'	6°47'	
55+50		1°15'	5°40.9'	I = 13°34'
55+00		1°15'	4°25.9'	T = 136.35
54+50		1°15'	3°10.9'	L = 271.33
54+00		1°15'	1°55.9'	R = 1146.28 ✓
53+50		0°40.9'	0°40.9'	
53+22.74	P.C.	5° Curve Left.		

52.6444

5.830

5.8130

640.

P.I. = 57 + 20.19 16" Willow 45.0
 19.23 T.P.
 P.I. Batt. in Parov. H.

P.I. = 54 + 59.09

28.83 14" Birch

53.10

T.P.

Sta. Pt. Ang. Lt. Ang. Rt.

1576.15

$I = 8^{\circ}30'$

$T = 53.26$

64+29.27 P.T. $1^{\circ}10.1'$ $4^{\circ}15'$ $L = 106.33$

64+00 $2^{\circ}00'$ $3^{\circ}04.9'$ $R = 716.78$ ✓

63+50 $1^{\circ}04.9'$ $1^{\circ}04.9'$

63+22.94 P.C. 8° Curve Right.

3157.74

$I = 9^{\circ}20'$

60+07.20 P.T. $0^{\circ}22.7'$ $4^{\circ}40'$ $T = 44.61$

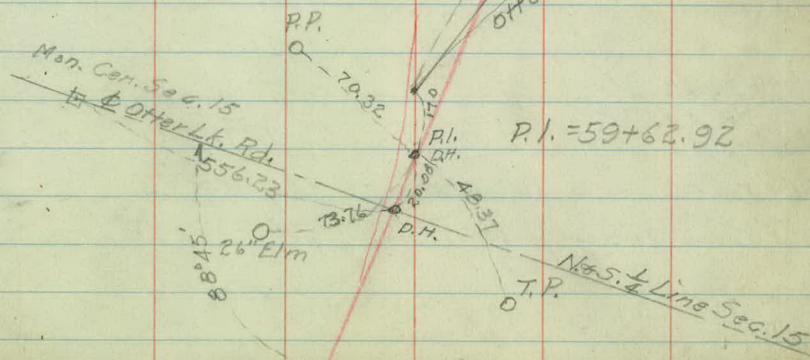
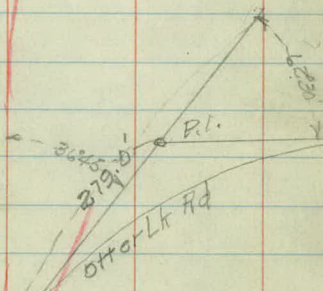
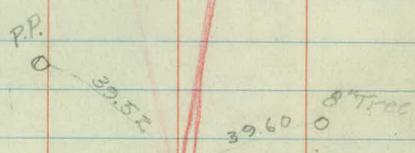
60+00 $2^{\circ}37.5'$ $4^{\circ}17.3'$ $L = 88.89$

59+50 $1^{\circ}39.8'$ $1^{\circ}39.8'$ $R = 546.44$ ✓

59+18.31 P.C. $10^{\circ}30'$ Curve Left.

98.47

P.I. = 63+76.20



Sta.	Pt.	AngLt.	AngRt.
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112+23.12			
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107+12.45	P.O.T.		
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85+83.19	Int. F. Line	Sec. 15	
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$$I = 14^{\circ} 57'$$

$$T = 62.76$$

85+38.69			
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$$7^{\circ} 28.5'$$

$$L = 124.58$$

85+00			
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$$5^{\circ} 09.2'$$

$$R = 478.34$$

84+50			
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$$2^{\circ} 09.2'$$

84+14.11			
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P.C.

12° Curve Right

283.25

$$I = 15^{\circ} 03'$$

$$T = 63.18$$

81+30.83			
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P.T.

$$7^{\circ} 31.5'$$

81+00			
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$$5^{\circ} 40.5'$$

$$L = 125.41$$

80+50			
-------	--	--	--

$$2^{\circ} 40.5'$$

$$R = 478.34$$

80+05.43			
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P.C.

12° Curve Left.

Men. Center Sec. 14

E. Line Sec. 15

Sec. Line
Nail On Bald Eagle

389.77

L.P. 36.61

90° 00'

338.04

90° E. Men.
Sec. 15H.V.D.
142.24

32.05

4" Popple

P.I.
D.H. in Permit.

$$P.I. = 84 + 76.87$$

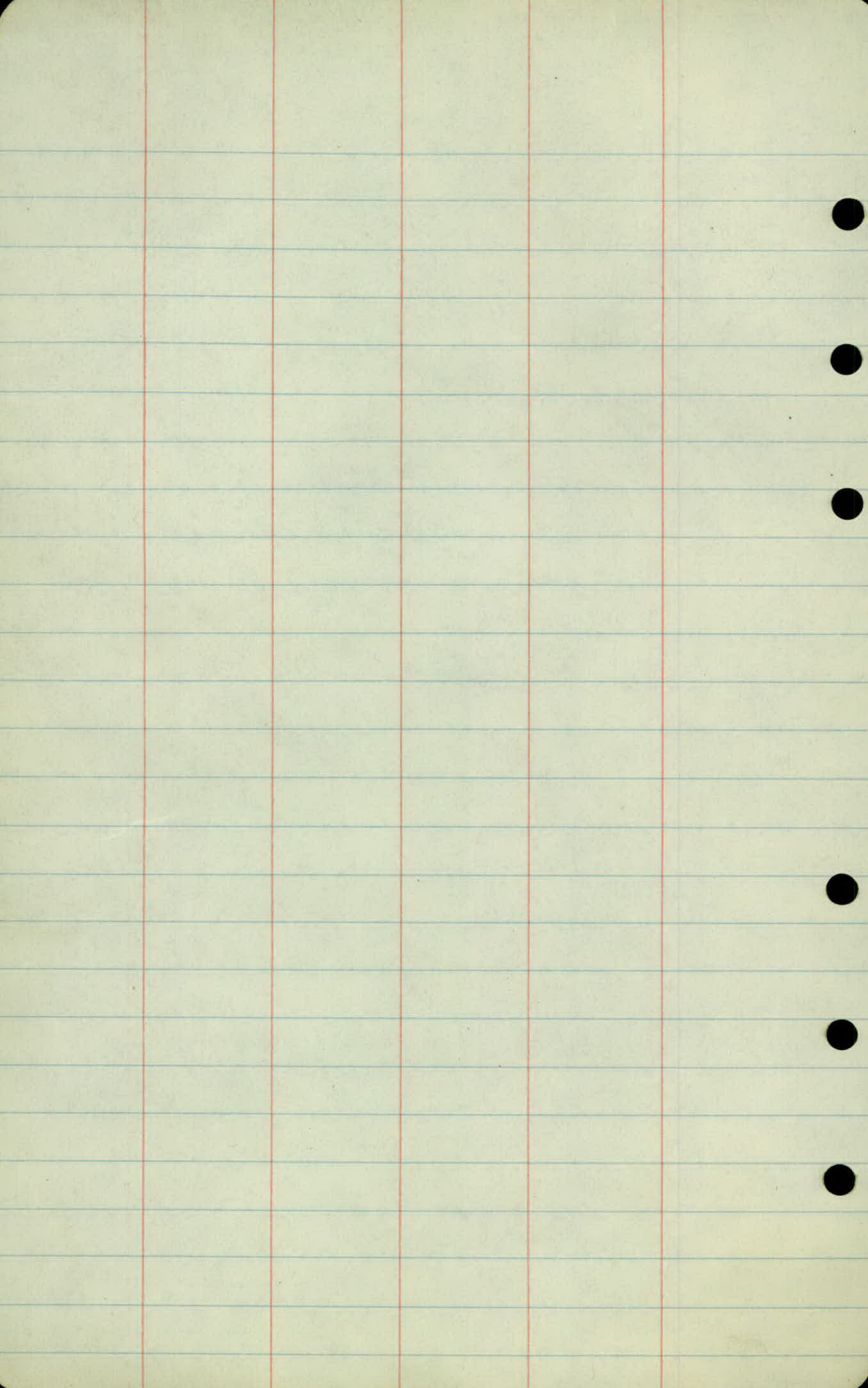
1271.5 F.P.

P.I.

Edge Cont.

$$P.I. = 80 + 68.60$$

$$\begin{array}{r} 85 \ 38.69 \\ + 14.53 \\ \hline 85 + 23.19 \end{array}$$



TOPOGRAPHY

N. BIRCH LAKE BLVD.

Acct #11.

12-29-39

Crew:

Church &
Gallagher

McGarry
Smith

15+50 Drive

18+52 24" Conc. Culv.

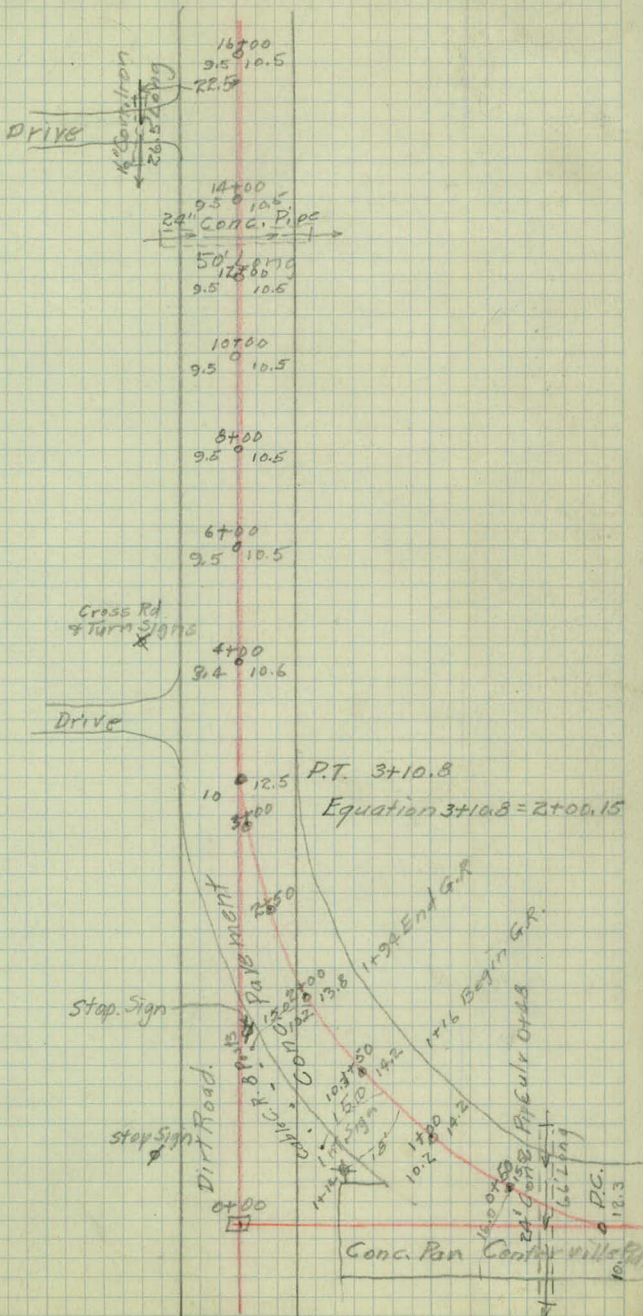
4+10 Cross Rd & Turn Signs 15.5

2+20 Drive

16.5 0+79 Stop Sign

0+37 Stop Sign

17.7



16.0 30+80 End Guard Rail

15.0 30+42 Slow Sign

14.0 30+21 Begin Guard Rail

29+33 Drive

17.0 28+56 Curve Sign

27+12 End Culv.

26+86 Drive

26+17 Drive

26+06 Begin Culv.

23+64 Drive

18.0 17+91 Winding Rd. Sign

11.2 102 P.C. 30+66.35
 • slow Sign
 • cable Guard Rail
 • 6 Posts

16' x 11' 11" Long
 18' Long
 ← 21.5
 CURVE Sign

26+15.72 P.T.

27+00

26+00

14.0 10.0

25+00

10.0 9.6

24+00

10.0 10.0

22' →

23+00

9.8 10.4

22+00

9.6 10.5

21+00

9.6 10.5

P.C. 20+14.74

20+00

9.5 10.5

Winding Rd.
 & Sign

18+00

9.5 10.5

16' x 11' 11" Long
 22' Long
 Drive

16' x 11' 11" Long
 Drive
 2
 Drive

40+03 Begin Guard Rail 14.4

39+68 End Guard Rail 14.3

16.0 32+09 Begin Guard Rail

31+96 Drive

16.0 31+83 End Guard Rail

31+50 Begin Guard Rail 16.5

15.0 31+02 Begin Guard Rail

30+91 Drive

23 Posts Sta 40+03.4

40+00
10.0 10.0

39+00
10.0 10.0

10.8 10.0

38+00
12.0 10.6

37+50
11.5 11.0

37+00
11.0 11.5

36+50
11.4 11.3

P.T. 38+42.14

Cable Guard Rail
67 Posts Sta 31+50 to 39+68

36+00
11.7 11.0

35+50
11.8 10.3

11.2 10.0

34+00
10.0 10.0

11.0 10.6

33+00
12.0 10.4

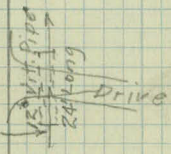
32+50
12.0 11.4

32+00
12.0 12.0

31+50
11.9 11.6

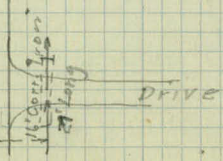
P.C. 35+30.51 Left

P.T. 33+17.28



Cable Guard Rail 8 Posts

31+00
12.0 10.7



50+12 Drive

50+12 Drive

49+82 Turn Sign

18.0

49+72 End Guard Rail

14.0

14.0 49+21 End Guard Rail

15.0 49+90 Spillway

47+17 Spillway

45+38 Begin Guard Rail 16.0

45+16 Drive

16.0 45+18 Begin Guard Rail

~~45+16 Drive~~

42+39 End Guard Rail 16.0

42+19 12" Corrugated Iron Drain

15.0 41+32 End Guard Rail

Drive

Turn
Sign

50+00

10.0 10.

12" Cor
12' Long Spillway
P.T.

47+81.7

10.3 12.0

47+50

11.2 13.5

12" Cor Iron
12' Long Lake

47+00

12.3 12.9

46+50

13.0 12.5

46+00

13.0 12.0

45+50

12.5 10.8

Drive

12" Cor
12' Long
36' Long

45+00

22'

44+50

11.4 11.7

44+28.13

9.8 12.0

P.G. Right

43+20.67 P.T.

10.7 10.5

42+00

11.0 10.7

42+50

11.5 11.0

12" Cor Iron
12' Long Lake

42+00

11.6 11.0

41+50

11.2 11.0

P.G. 41+10.79 Right

23 Posts
Cable Guard Rail12" Cor Iron
12' Long

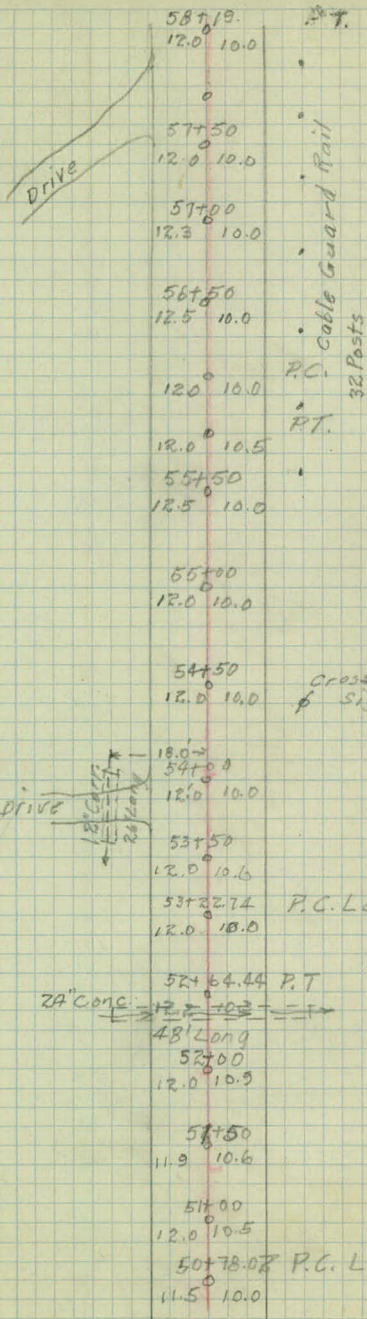
57+80 Drive

14.5 55+66 Begin Guard Rail

20.0 54+46 Cross. Rd Sign

53+97 Drive

52+62 24" Conc Pipe Culv.



65+60 Drive

64+71 Drive

63+86 Cross Rd. Sign 200

62+53 Drive

62+29 Drive

62+18 End Guard Rail 14.0

60+85 Curve Sign 16.5

60+10 24" Conc. Pipe Culv

60+00 Begin Guard Rail 16.0

59+80 Otter Lk Rd To South

59+87.12 Intersection of Otter Lake Rd To North

19.0 59+48 Intersection Sign

14.5 59+34 End Guard Rail

58+36 Slow Sign 16.5

66+0.0

10.0 10.0

24"

10' Cor
24' Long

DRIVE

15' Cor
24' Long

64+29.27

10.4 10.0

P.T.

64+00

GROSS Rd
sign

10.0 10.0

63+22.34

10.0 10.0

P.C.

23'

DRIVE

19 Posts
Cable Guard Rd. Cor.
30' Long

22'

15' Cor
22' Long

DRIVE

61+00

10.0 10.0

Otter Lake Rd.

Pump
House

Curve
sign

24" Cons. Pipe

60+00

19 Posts

48' Long

60+07.20

11.5 10.0

P.T.

Otter Lake Rd.

59+50

10.0

Intersection
Sign

59+18.31

P.C.

10.0 10.0

Slow Sign

92+43.30 Intersection Kreck Ave

91+50 Drive

90+18 Drive

88+24 Winding Rd. Sign 17.6

87+06 Drive

86+89 Drive

85+84 30" Corc. Pipe Culv

Krech Ave

60' Wide
Gravel

DRIVE

winding
& Rd
sign

DRIVE

DRIVE

DRIVE

Ditch

30" Conc. Pipe

48' Long

Ditch

85+38.69 P.T.

10.0 11.0

85+00

10.0 12.0

84+50

10.0 12.0

84+14.11

P.C.

10.0 11.0

82+0

10.0 10.0

81+30.83

P.T.

11.0 10.0

81+00

12.0 11.0

80+50

12.0 11.0

80+05.42

P.C.

11.0 10.0

107+73 Catch Basin R20

107+48 Drive

107+25 Drive

107+08 Drive

13.0 104+87 Catch Basin

104+59.25 Intersec. Campbell Ave

19.0 102+83 Catch Basin

102+36 Drive

102+20 Drive

101+24 Drive

100+48 Drive

100+31 Drive

98+88.25 Intersection Wood Ave

95+46 Storm Sewer Conn

94+72 Drive

93+44 Drive



Drive

Drive

Campbell Ave.

60' wide

Drive

Drive

Drive

Wood Ave

30' wide

12" Carr Iron

Drive

Drive



catch
Basin

1" Drive

Drive

Drive

16.0 112+00 Catch Basin

21.0 111+80 Stop Sign

109+93 Drive

109+38 Drive

109+21 Drive

108+64 Drive

Bald Eagle Ave

C.B.
O
stop
sign

Drive

Drive

Drive

