

Book # 51 - Dr. #8

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

_____ DITCH _____ Survey

Judicial ditch No. 1

om _____ To _____

Road Acc't. No. _____

Date Filed. *10-19-31*

File _____

WASHINGTON CO
RAMSEY COUNTY

HORTON'S BRANCH DITCHES
LEADING INTO

JUDICIAL DITCH #1
WHICH EMPTYS INTO BALD EAGLE LAKE.

$\Delta 27$ $\Delta R4$

5+92

$\Delta 36^{\circ} 30'$ Lt

4+45

$\Delta 45^{\circ} 25'$ Lt

3+31

Ctr Driveway.

+45

$65^{\circ} 10'$ Rt.

5+41² = 0+00 "A." Ditch $92^{\circ} 00'$ Lt.

0+00 = Main Ditch from B.E. Lake.
N 65° E

2-12" x 12" water tanks



Sta.

Angle Lt A. Pt.

2+57

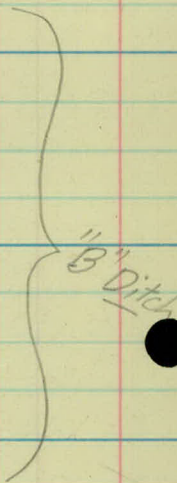
36" x 48" P.3

1+05.0

$\Delta 35^{\circ}15'$

0+00

"B" line = $42^{\circ}15'$ Lt



26+30

End Ditch. $\frac{P}{W}$ S.T.H. #1

18+69

10" x 15" Tile Dr. in Ditch

14+75 = 0+00 "B" line

End X Dr under S.T.H. #1

Sta.	+	41 ✓	-	Main Ditch
B.M.	0.78	100.78		100.00 Assumed.
0+80	Edge Lake	9.55	91.23 ✓	
0+00				92.1

+50				91.6
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1				91.6
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T.P.	10.43	102.76 ✓	8.45	92.33 ✓
+50				91.7

2				92.1
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+50				92.1
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3				92.0
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B.M.	3.55	102.07 ✓	4.24	98.52 ✓
+26			11.70	90.37 ✓
+66			11.80	90.27 ✓
+80				92.3

4+02			11.80	90.27 ✓
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T.P.	8.98	110.04 ✓	1.01	101.06 ✓
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			0.42	109.62 ✓
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T.P.	7.79	104.21 ✓	13.62	96.42 ✓
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			13.40	90.81 ✓
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+70				92.5
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Left $\neq$ Right
18" Oak 35' R or 25'

Elev. water. B.E. Lake.

$$\frac{7.0}{20} \quad \frac{7.0}{10} \quad \frac{8.0}{5} \quad 8.1 \quad \frac{7.5}{7} \quad \frac{5.2}{10} \quad \frac{5.2}{15}$$

$$\frac{4.0}{15} \quad \frac{4.7}{8} \quad \frac{8.2}{4} \quad 9.2 \quad \frac{9.0}{3} \quad \frac{2.5}{11} \quad \frac{2.5}{15}$$

$$\frac{1.0}{15} \quad \frac{2.6}{12} \quad \frac{8.7}{4} \quad 9.2 \quad \frac{8.7}{3} \quad \frac{2.7}{10} \quad \frac{2.0}{15}$$

$$\frac{5.4}{12} \quad \frac{5.8}{8} \quad \frac{10.6}{3} \quad 11.1 \quad \frac{10.2}{3} \quad \frac{6.2}{7} \quad \frac{6.0}{10}$$

$$\frac{7.0}{10} \quad \frac{7.4}{6} \quad \frac{10.4}{2} \quad 10.7 \quad \frac{10.0}{4} \quad \frac{7.0}{11} \quad \frac{7.0}{15}$$

$$\frac{8.7}{15} \quad \frac{7.0}{11} \quad \frac{10.4}{3} \quad 10.7 \quad \frac{10.4}{2} \quad \frac{7.7}{7} \quad \frac{7.2}{12}$$

$$\frac{6.8}{10} \quad \frac{6.8}{7} \quad \frac{10.2}{3} \quad 10.8 \quad \frac{10.4}{3} \quad \frac{6.4}{7} \quad \frac{6.4}{10}$$

S.E. cor. Hd. w. of E. Hd. wall

W. end Culv. under Hugo Rd.

E. " " " " "

$$\frac{4.5}{11} \quad \frac{5.8}{7} \quad \frac{9.6}{3} \quad 9.8 \quad \frac{9.6}{4} \quad \frac{6.4}{7} \quad \frac{5.0}{12}$$

W. end Culv. under Ry. Ry.

= Elev. E. rail

E. end

$$\frac{8.1}{15} \quad \frac{8.1}{12} \quad \frac{11.6}{5} \quad 11.7 \quad \frac{11.4}{4} \quad \frac{7.4}{10} \quad \frac{6.8}{15}$$

H1. ✓
104.21

4 + 90.1 13.77 90.44 ✓

5 + 10.5 4.38 99.83 -

+ 30 13.60 90.61 -

+ 41 91.5

X Sec. 'A' Ditch

0 + 00 = 5 + 41 of Main Ditch 91.5

+ 09 92.6

+ 50 73.0

1 94.2

+ 50 93.9

2 94.2

+ 50 94.4

3 ✓ 95.1 ✓

T.P. 3.23 101.53 5.91 98.30

+ 25 7.0 94.53

+ 37 6.8 99.73

W end Culv under S.T.H. #1

£ S.T.H. #1

E. end Culv. under S.T.H. #1

£ "H" Ditch $\frac{11.6}{8}$ $\frac{12.7}{4}$ 12.7 $\frac{12.4}{3}$ $\frac{11.5}{7}$ $\frac{9.8}{10}$ $\frac{9.0}{15}$

Culv. $\frac{13.0}{9}$ 12.7 $\frac{12.4}{4}$ $\frac{11.3}{5}$ $\frac{10.0}{7}$ $\frac{10.0}{15}$

$\frac{4.5}{1.6}$ $\frac{10.2}{5}$ $\frac{11.7}{4}$ 11.6 $\frac{11.6}{3}$ $\frac{9.8}{5}$ $\frac{9.6}{10}$

$\frac{9.5}{10}$ $\frac{9.5}{1}$ 11.2 $\frac{9.5}{1}$ $\frac{9.5}{6}$

$\frac{9.6}{10}$ $\frac{9.6}{2}$ $\frac{9.8}{1}$ 10.0 $\frac{10.0}{1}$ $\frac{9.2}{2}$ $\frac{9.2}{6}$

$\frac{9.6}{2}$ 10.3 $\frac{9.3}{2}$

$\frac{9.0}{3}$ 10.0 $\frac{9.0}{2}$

$\frac{8.6}{2}$ 9.8 $\frac{8.4}{2}$

$\frac{7.2}{4}$ 9.1 $\frac{8.0}{3}$

W. end Culvts under Road
E end.

✓
101.53

3 + 50

94.7

4

94.7

+ 50

94.7

5

94.5

+ 50

94.7

6

94.4

+ 50

94.5

7

94.4

+ 50

94.6

8

94.8

+ 50

94.7

9

95.1

+ 50

94.6

L4

L5

L7

$$\frac{2.7}{6} \quad 6.8 \quad \frac{3.4}{6}$$

$$\frac{4.7}{6} \quad 6.8 \quad \frac{5.3}{5}$$

$$\frac{4.6}{5} \quad 6.8 \quad \frac{4.8}{4}$$

$$\frac{4.4}{4} \quad 7.0 \quad \frac{5.0}{4}$$

$$\frac{5.0}{4} \quad 6.8 \quad \frac{5.0}{4}$$

$$\frac{5.2}{5} \quad 7.1 \quad \frac{5.0}{5}$$

$$\frac{5.0}{5} \quad 7.0 \quad \frac{5.2}{3}$$

$$\frac{5.4}{5} \quad 7.1 \quad \frac{5.4}{4}$$

$$\frac{5.0}{4} \quad 6.9 \quad \frac{5.0}{3}$$

$$\frac{5.0}{4} \quad 6.7 \quad \frac{5.0}{3}$$

$$\frac{5.3}{4} \quad 6.8 \quad \frac{5.3}{3}$$

$$\frac{5.3}{4} \quad 6.4 \quad \frac{5.1}{4}$$

$$\frac{5.0}{4} \quad 6.9 \quad \frac{5.4}{3}$$

✓
101.53

10 94.7

+50 94.8

11 95.0

+50 95.1

12 95.2

T.P. 5.23 101.24 ✓ 552 ✓ 96.01

+50 95.2

13 95.1

+50 95.2

14 95.1

+50 95.1

15 95.4

+50 94.8

16 94.8

Lt ~~4~~ Rt

$$\frac{4.5}{4} \quad 6.8 \quad \frac{4.8}{3}$$

$$\frac{5.0}{4} \quad 6.7 \quad \frac{4.7}{4}$$

$$\frac{4.6}{4} \quad 6.5 \quad \frac{4.5}{4}$$

$$\frac{4.7}{5} \quad 6.4 \quad \frac{4.4}{4}$$

$$\frac{4.3}{4} \quad 6.3 \quad \frac{4.3}{4}$$

$$\frac{3.0}{5} \quad 6.0 \quad \frac{4.0}{4}$$

$$\frac{4.0}{5} \quad 6.1 \quad \frac{4.0}{4}$$

$$\frac{4.6}{5} \quad 6.0 \quad \frac{3.6}{4}$$

$$\frac{4.4}{4} \quad 6.1 \quad \frac{4.4}{4}$$

$$\frac{4.5}{4} \quad 6.1 \quad \frac{4.1}{4}$$

$$\frac{5.0}{8} \quad 5.8 \quad \frac{4.6}{8}$$

$$\frac{4.5}{5} \quad 6.4 \quad \frac{4.4}{4}$$

$$\frac{4.7}{4} \quad 6.4 \quad \frac{5.1}{3}$$

✓
10124

+50

95.1

17

94.6

+50

94.8

18

95.0

+50

95.2

62

63

94.94-

77

64

94.84-

19

95.1

+50

95.0

20

95.0

+50

✓
5.25 101.02

5.47

✓
95.77

95.2

T.P.

21

95.2

+50

95.1

22

95.0

Left. $\neq$ Right

$$\frac{4.5}{4} \quad 6.1 \quad \frac{4.5}{3}$$

$$\frac{4.7}{4} \quad 6.6 \quad \frac{5.0}{3}$$

$$\frac{4.6}{3} \quad 6.4 \quad \frac{4.7}{4}$$

$$\frac{4.7}{4} \quad 6.2 \quad \frac{4.4}{4}$$

$$\frac{4.5}{4} \quad 6.0 \quad \frac{4.8}{4}$$

S. end culv.

= 10" x 15' tile

N. end Culv.

$$\frac{4.6}{4} \quad 6.1 \quad \frac{4.7}{3}$$

$$\frac{4.8}{2} \quad 6.2 \quad \frac{4.9}{2}$$

$$\frac{4.6}{3} \quad 6.2 \quad \frac{4.8}{3}$$

$$\frac{4.7}{3} \quad 6.0 \quad \frac{4.8}{3}$$

Top Stake Sta. 20+00

$$\frac{4.3}{3} \quad 5.8 \quad \frac{4.5}{3}$$

$$\frac{4.7}{3} \quad 5.9 \quad \frac{4.7}{3}$$

$$\frac{4.4}{3} \quad 6.0 \quad \frac{5.0}{3}$$

✓
101.02

+50

94.9

23

95.2

+50

95.5

24

95.6

+50

95.7

25

95.6

+50

95.8

26

96.0

+30

End Ditch

96.2

X Sections "B"

B.M. 7.07 102.84 95.77

0+00 = 14+75 "A" Line 95.4

+18 Ctr of Culv. in Ditch 15' x 20' C.M. 95.1

+50

95.1

1

95.4

Lt. 4 Rf

$$\frac{4.5}{4} \quad 6.1 \quad \frac{4.6}{4}$$

$$\frac{4.0}{4} \quad 5.8 \quad \frac{4.8}{3}$$

$$\frac{3.8}{3} \quad 5.5 \quad \frac{4.5}{3}$$

$$\frac{3.8}{3} \quad 5.4 \quad \frac{4.1}{2}$$

$$\frac{3.7}{3} \quad 5.3 \quad \frac{4.5}{2}$$

$$\frac{4.0}{2} \quad 5.4 \quad \frac{4.6}{2}$$

$$\frac{4.2}{2} \quad 5.2 \quad \frac{4.6}{2}$$

$$\frac{4.0}{2} \quad 5.0 \quad \frac{4.5}{2}$$

$$\frac{4.8}{out} \quad 4.8 \quad \frac{4.8}{out}$$

Top Sta. Sta. 20+00

$$- \frac{6.3}{5} \quad 7.4 \quad \frac{6.6}{3} \quad \frac{6.2}{8}$$

E end 8.2 Flowline Yl. end 8.0

$$\frac{6.6}{3} \quad 7.7 \quad \frac{6.6}{3}$$

$$\frac{6.6}{4} \quad 7.4 \quad \frac{5.8}{3}$$

10284

+50

95.1

2

95.1

+50

95.0

+57

Inv. E. end X Drain 95.2

3 +05

Inv. W. end X Drain 95.3

Left. £ RIGHT

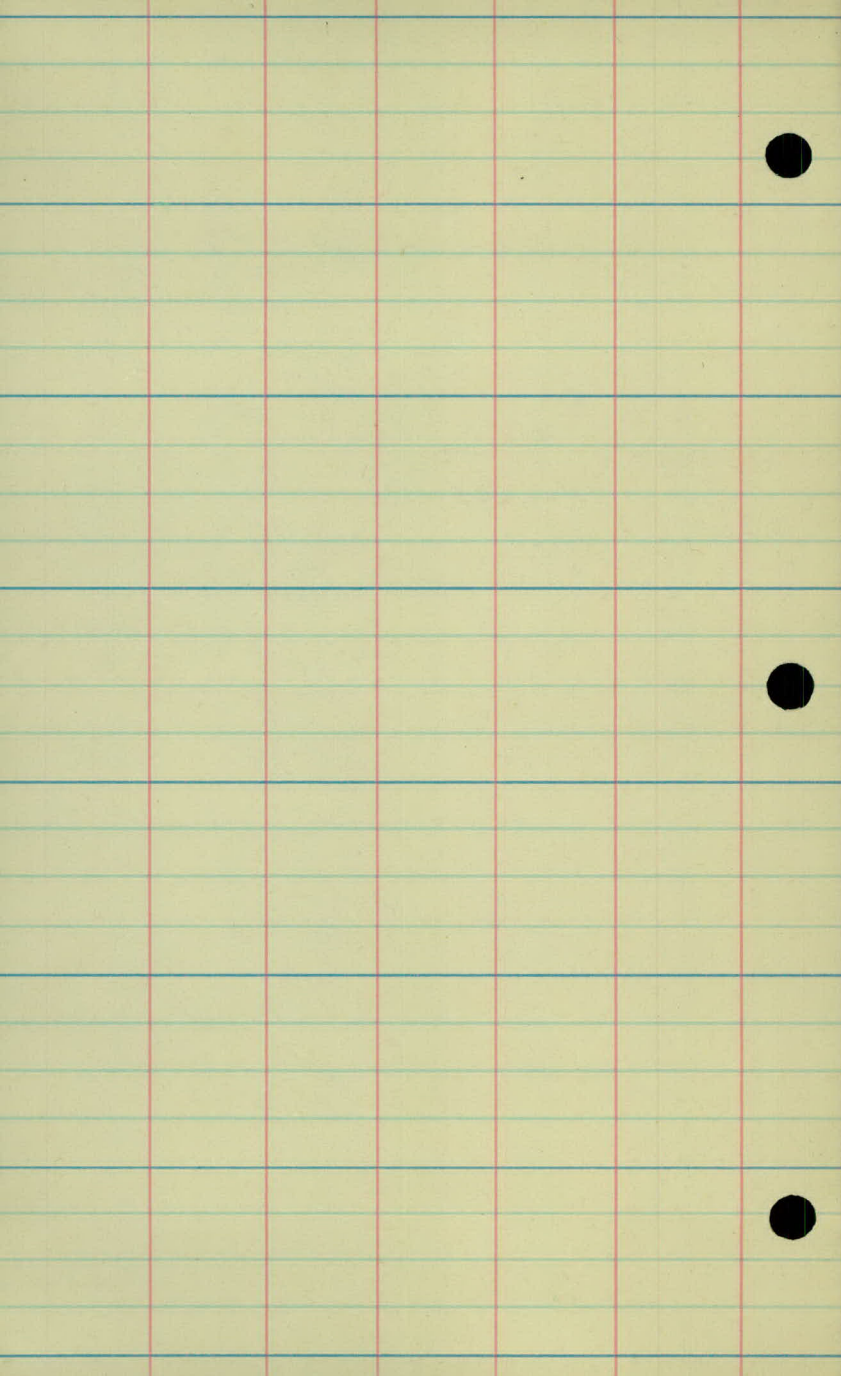
$$\frac{4.7}{6} \quad 7.7 \quad \frac{5.4}{4}$$

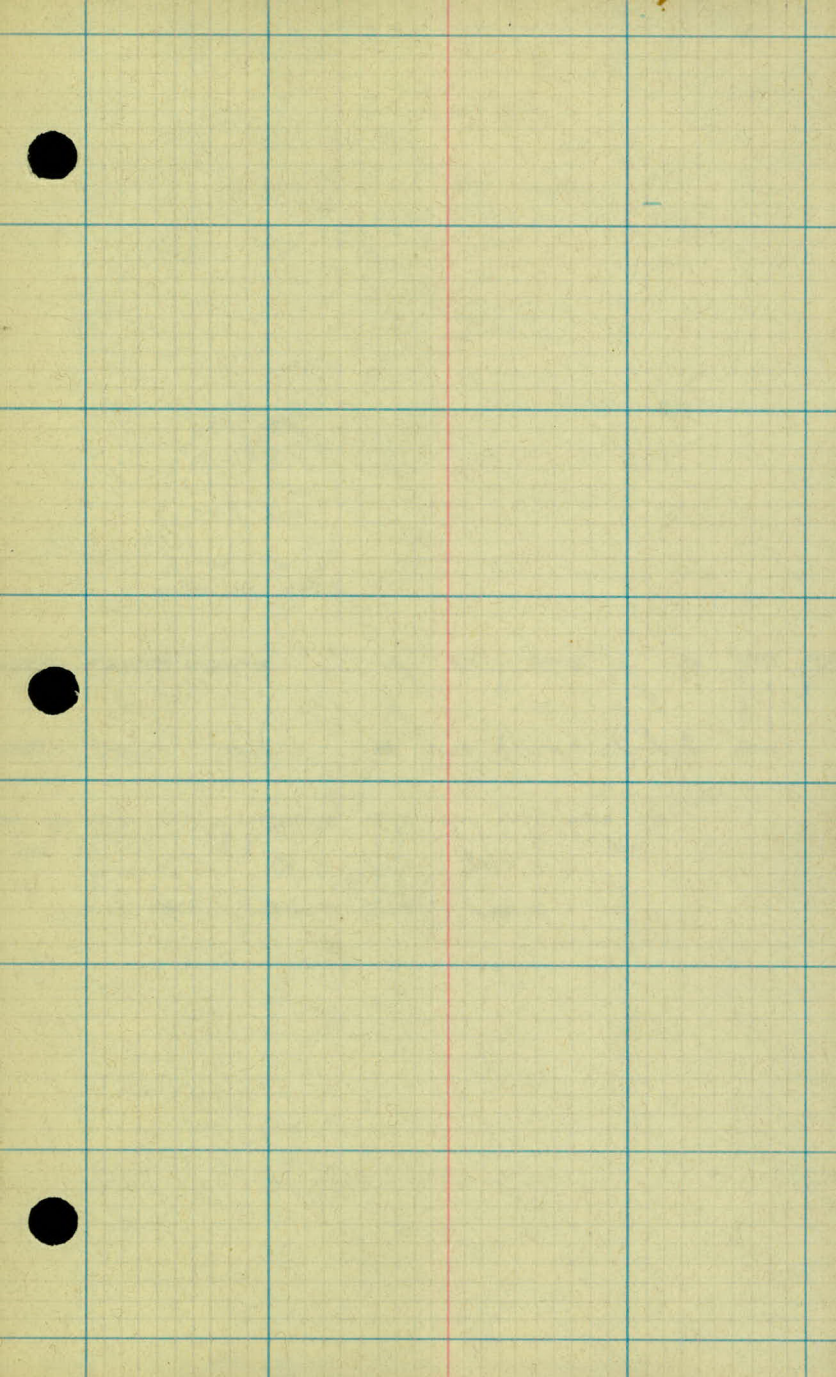
$$\frac{6.0}{5} \quad 7.7 \quad \frac{6.4}{3}$$

$$\frac{7.2}{10} \quad 7.8 \quad \frac{7.2}{10}$$

7.6

7.5





Culv. under S.T.H. #1

Culv. under Ry. ^{0.75}

✓ 10.5
29.5
40.0

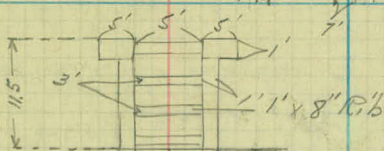
Hugo Road Old S.T.H. #1

0+00 Main Ditch from BE Lake

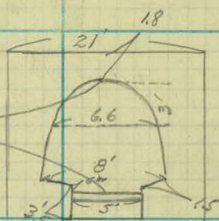
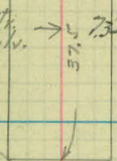
5+10.5 Ctr
S.T.H. #1



6'x6'x39' Conc Box
Culv.

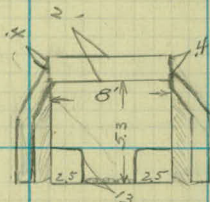
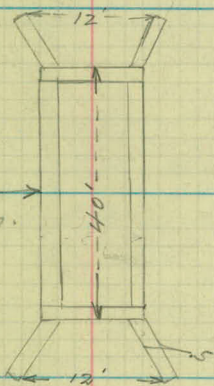


4+21.25 Ctr
Ry. Ry. Culv.

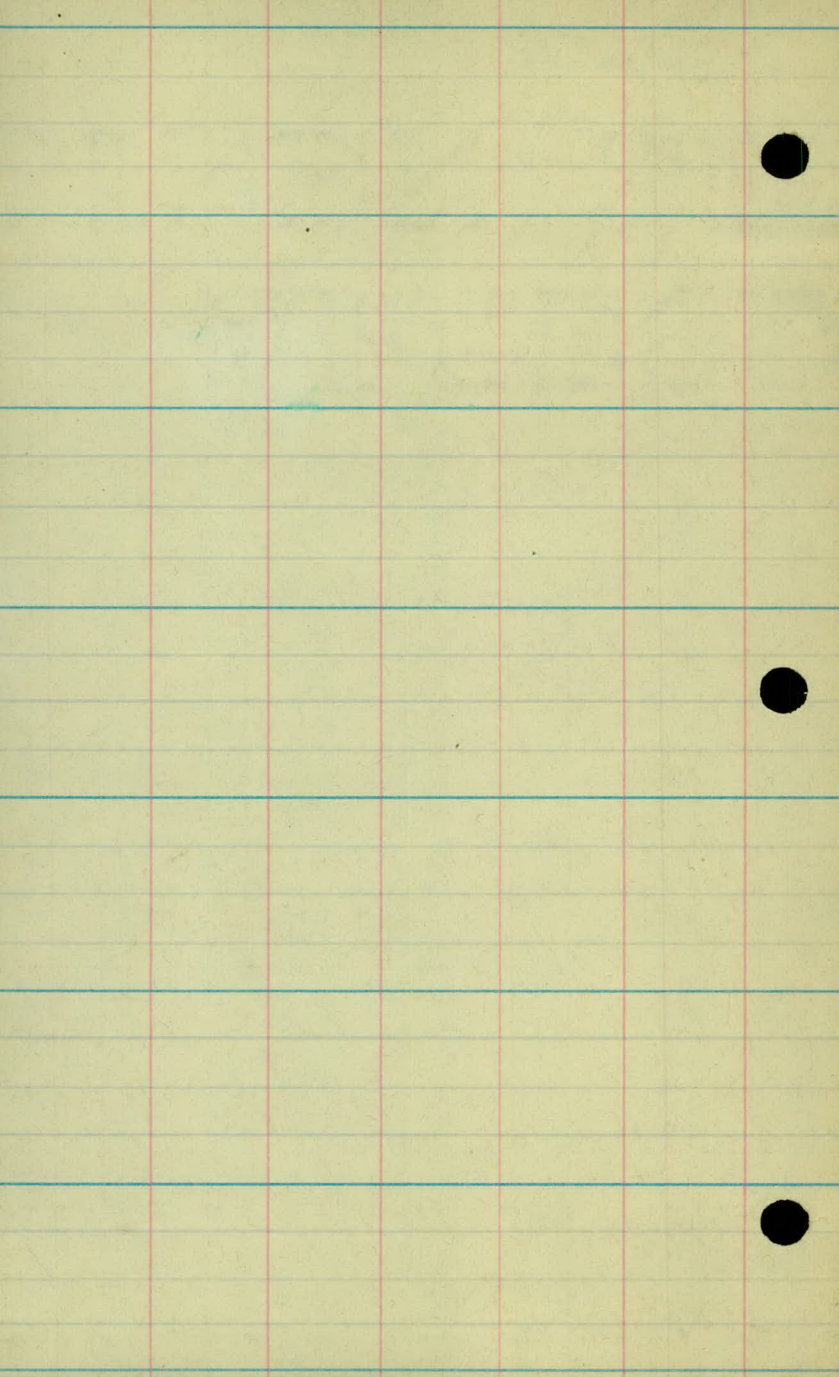


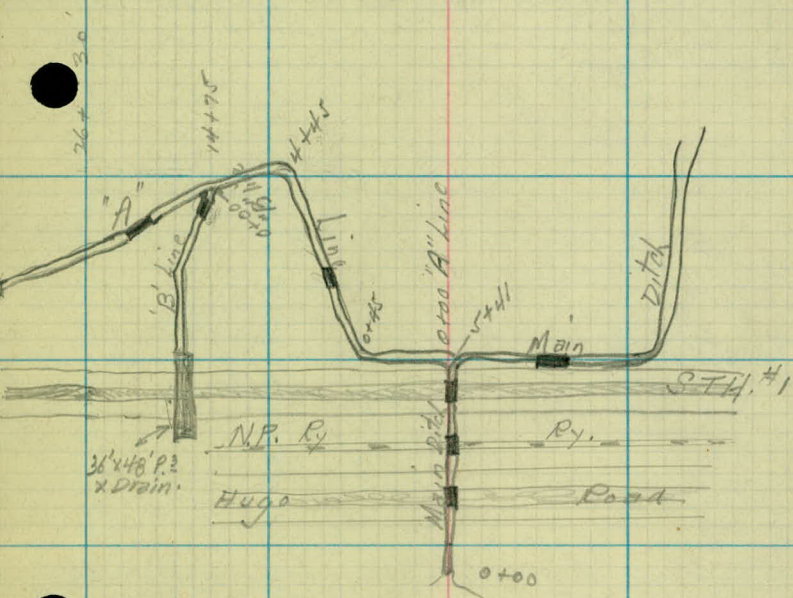
DO.

3+46 Ctr
Rock Bottom.



6"x5.5' Wing walls





Bald Eagle Lake

