

Dr. 8 - Bk. 158

OFFICE OF COUNTY ENGINEER
RAMSEY CO. MINN.

PLAN Survey

TURTLE LAKE ROAD

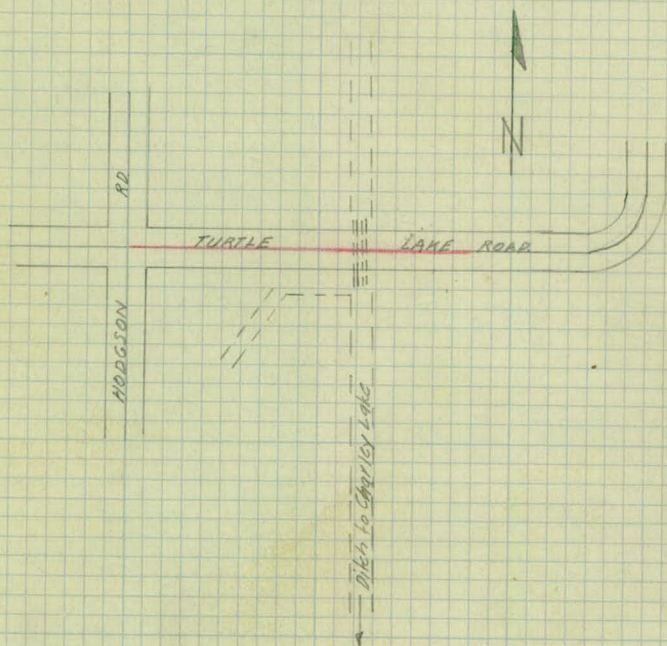
From Hodgson Rd To 1600' East

Road Acc't. No. 62

Date Filed 12-29-38

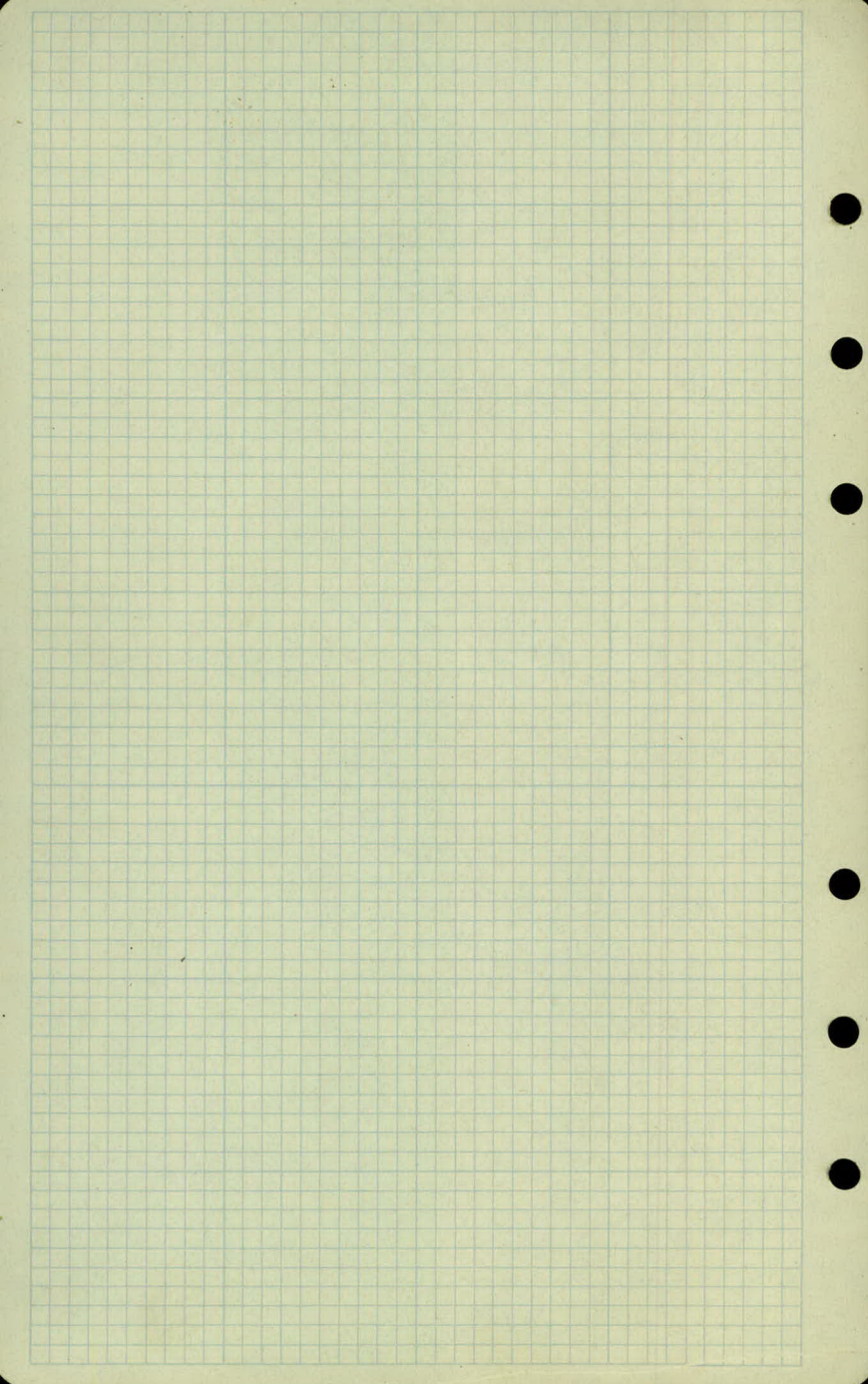
File

PLAN SURVEY
TURTLE LAKE ROAD
Hodgson Rd to 1600' East.



INDEX

- Align - P 1-2
- Topog - 3-6
- X sections - 7-11
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1

Alignment

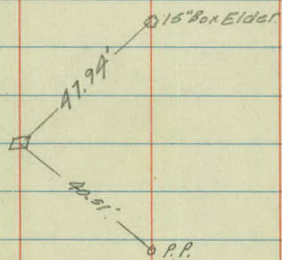
9 199.69 P.O.T. See Charley Lake Ditch Survey From A to Ditch

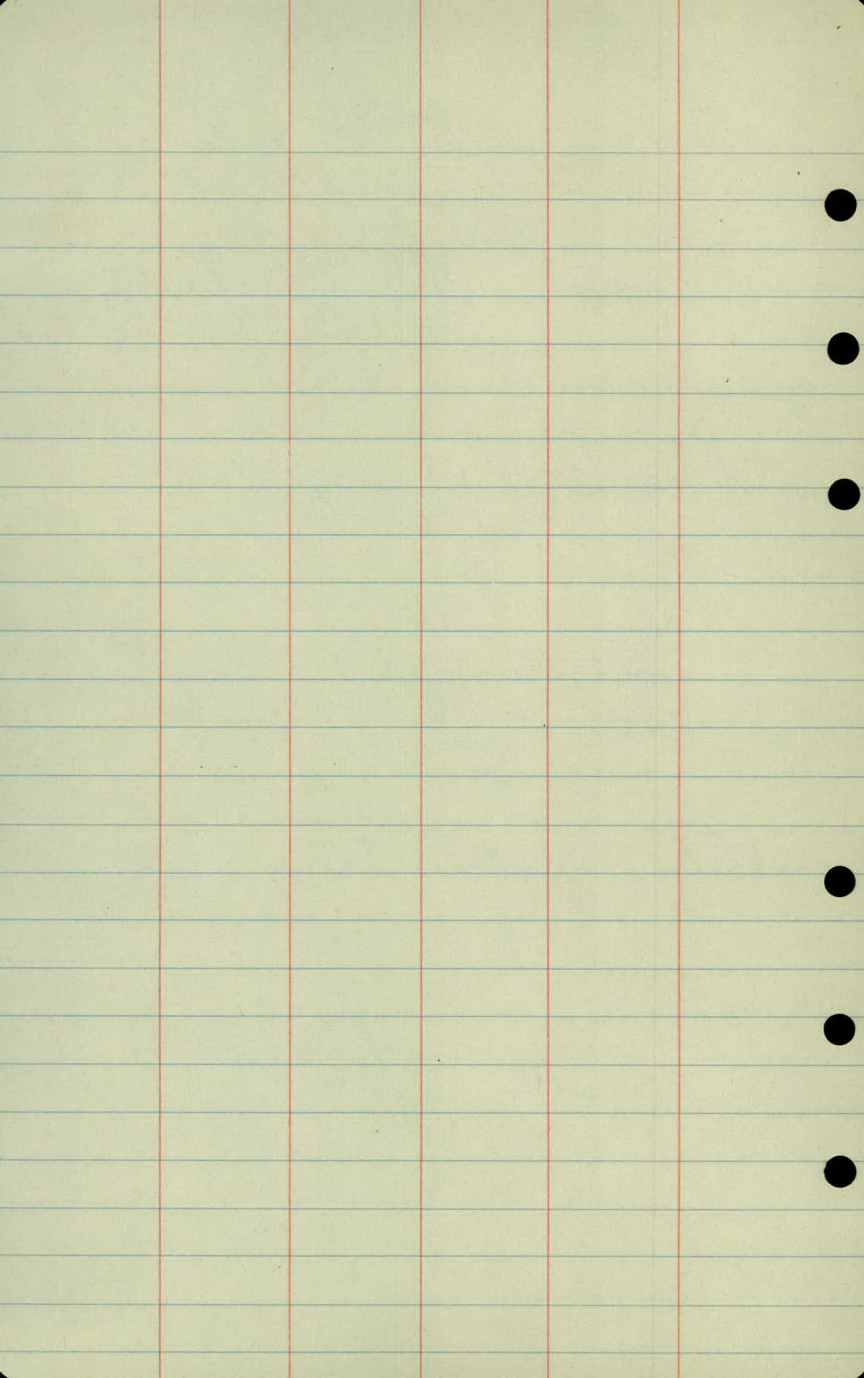
0 +00 = ~~to~~ Hodgson Rd

8/29/38
K.A.
L.C.
L.B.H.
M.J.G.

2

Nail





Topography

5

8'

8'

4

9'

8'

3

9'

8'

2

11'

8'

1

12'

8'

+50

10'

9'

0+00

+16

36'

77

176 Δ in Ditch - 19'

3' Bottom

805 Poo. & Willow Brush
102-PP-26'

170 Dog Swamp

805 Swamp

Fe-33'
191-8' Oak-32'

153-PP-27'

154-24' 80-32'

131-Ent.

Fe-34'

107-Fe Cor-32'
197-PP-27'

School Yard

153-Fe Cor-33'

149-PP-27'
132-Fe Cor-32'

+86- Tel. Line X5 A.
+70- High Tension Line X5 A.

12 7' 11'

11 5' 12'

10 7' 10'
+87- 36" X 340.14- 15' 19'
+93- 36" X 340.14- 15' 19'

9 7' 10'

8 8' 9'

7 8' 9'

6 8' 9'

+86-Ent.
+43-G.R.-80'
+60-Fc Col.-83'
+56-Rangate

+91-Ent.
+98-Fc Col.-30'
+53-P.P.-25'

+50-Ent.-15"x20" C.N.-1P'

+09-P.P.-25'

+68-8" Ramrack-22'

Fc-33'

+58-P.P.-25' End
Brush

+07-P.P.-25'
Brush-20'

Fc-33'

+50-Beg Brush-32'

+56-P.P.-26'

+03-Rangate to Dike

Fc-33'

17

16

5'

12'

15

6'

11'

14

6'

11'

13

100-High Tension Line 1.5 L
6' 12'

Fc-34'

Fc-34'

197-T.R-25'

115-End Woods-45'
Fc-40'

Fc-36'

153-Fc-41'

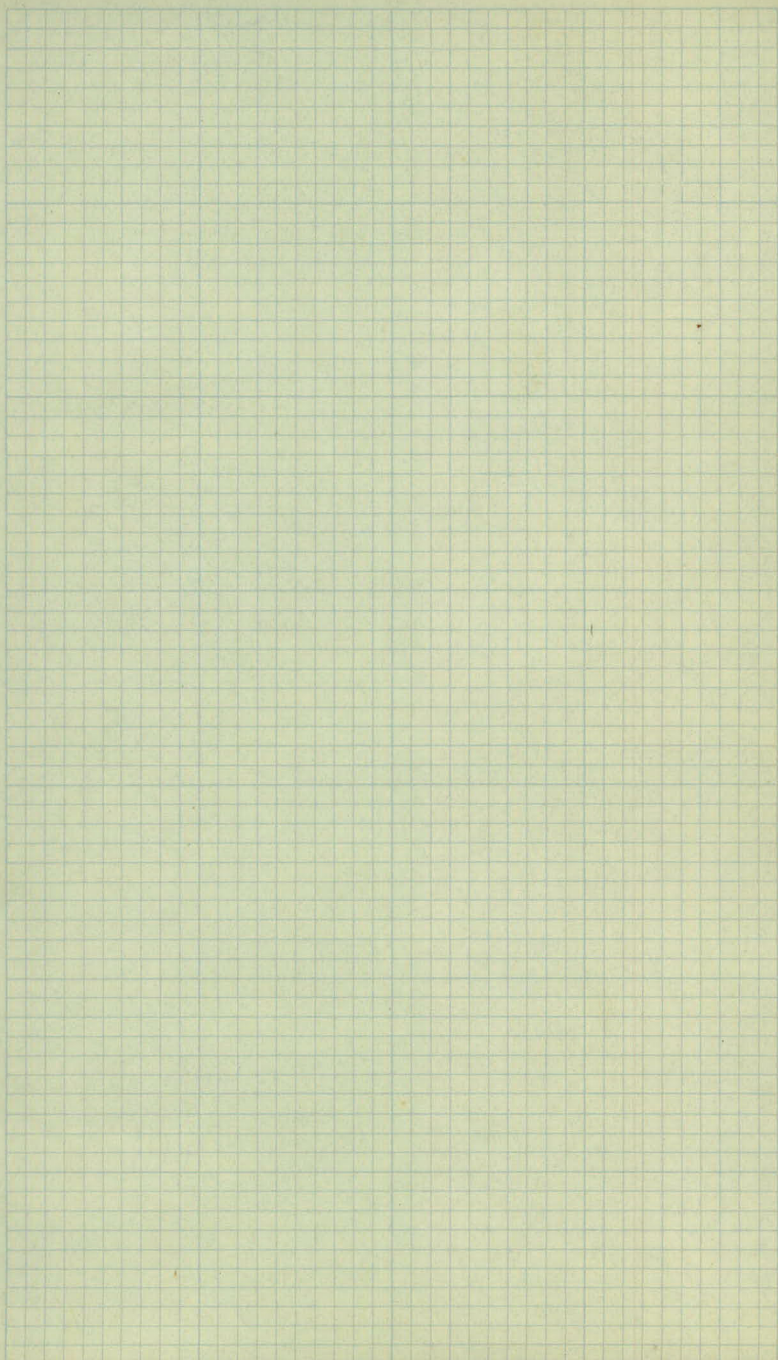
Fc-36'

178-Fc-25'

175-End Woods-46'

115-End Swamp

123-Fc Cor-35'
115-End Swamp



X sections

Sta	+	π	-	Elev.
B.M.	1.72	913.78		912.06

0+00				910.51
------	--	--	--	--------

+50				09.78
-----	--	--	--	-------

1				08.9
---	--	--	--	------

+78				08.0
-----	--	--	--	------

2				07.7
---	--	--	--	------

+50				07.0
-----	--	--	--	------

3				06.1
---	--	--	--	------

T.P.	3.57	909.62	7.79	906.05
------	------	--------	------	--------

+50				05.4
-----	--	--	--	------

4				04.8
---	--	--	--	------

+50				04.1
-----	--	--	--	------

5				02.9
---	--	--	--	------

Lt.

Lt.

Rt.

Top N.E. Cor. School Step

327
Must

$\frac{38}{33}$ $\frac{38}{20}$ $\frac{45}{17}$ $\frac{42}{10}$ $\frac{40}{8}$ $\frac{45}{8}$ $\frac{48}{12}$ $\frac{52}{27}$ $\frac{35}{32}$ L.O.

$\frac{43}{33}$ $\frac{47}{18}$ $\frac{55}{19}$ $\frac{54}{11}$ $\frac{49}{8}$ $\frac{53}{21}$ $\frac{66}{25}$ $\frac{61}{33}$

$\frac{47}{33}$ $\frac{48}{17}$ $\frac{63}{13}$ $\frac{61}{10}$ $\frac{58}{9}$ $\frac{62}{22}$ $\frac{76}{25}$ $\frac{69}{33}$

$\frac{47}{33}$ $\frac{53}{17}$ $\frac{68}{13}$ $\frac{65}{10}$ $\frac{61}{8}$ $\frac{64}{13}$ $\frac{61}{24}$ $\frac{57}{33}$ $\frac{95}{33}$

$\frac{22}{33}$ $\frac{74}{22}$ $\frac{76}{12}$ $\frac{73}{10}$ $\frac{68}{8}$ $\frac{72}{8}$ $\frac{73}{21}$ $\frac{72}{33}$

$\frac{67}{38}$ $\frac{83}{27}$ $\frac{78}{22}$ $\frac{83}{13}$ $\frac{81}{10}$ $\frac{77}{8}$ $\frac{81}{13}$ $\frac{88}{24}$ $\frac{104}{33}$ $\frac{103}{33}$

$\frac{130}{50}$ $\frac{138}{40}$ $\frac{52}{25}$ $\frac{61}{20}$ $\frac{53}{15}$ $\frac{47}{10}$ $\frac{42}{8}$ $\frac{45}{12}$ $\frac{49}{19}$ $\frac{68}{19}$ $\frac{68}{26}$ $\frac{58}{50}$

$\frac{13}{50}$ $\frac{29}{34}$ $\frac{61}{24}$ $\frac{69}{20}$ $\frac{55}{14}$ $\frac{52}{9}$ $\frac{48}{8}$ $\frac{51}{12}$ $\frac{55}{17}$ $\frac{75}{26}$ $\frac{75}{26}$ $\frac{61}{50}$

$\frac{73}{50}$ $\frac{75}{39}$ $\frac{81}{19}$ $\frac{63}{12}$ $\frac{57}{8}$ $\frac{55}{8}$ $\frac{60}{10}$ $\frac{65}{12}$ $\frac{84}{17}$ $\frac{84}{23}$ $\frac{94}{35}$ $\frac{97}{50}$

$\frac{103}{50}$ $\frac{103}{33}$ $\frac{100}{22}$ $\frac{96}{16}$ $\frac{76}{12}$ $\frac{70}{8}$ $\frac{67}{9}$ $\frac{72}{13}$ $\frac{78}{18}$ $\frac{98}{33}$ $\frac{88}{33}$ $\frac{96}{50}$

Sta	+	π	-	Elev.
5	+50			901.8
T.P.	3.55	903.97	720	900.42
6				004
	+50			899.3
7				98.9
	+50			98.3
8				98.6
T.P.	3.80	904.52	5.25	898.72
	+50			98.7
9				98.5
	+50			99.1
	+89			99.8
	+93			

Lt

E

Rt

$$\frac{100}{50} \quad \frac{22}{53} \quad \frac{103}{17} \quad \frac{87}{18} \quad \frac{81}{8} \quad \frac{78}{9} \quad \frac{81}{13} \quad \frac{86}{13} \quad \frac{104}{18} \quad \frac{101}{35} \quad \frac{101}{50}$$

$$L.O. \quad \frac{50}{35} \quad \frac{59}{17} \quad \frac{42}{11} \quad \frac{38}{7} \quad \frac{36}{7} \quad \frac{37}{9} \quad \frac{44}{13} \quad \frac{80}{18} \quad \frac{81}{21} \quad \frac{84}{23} \quad \frac{5.2}{50}$$

$$\frac{59}{33} \quad \frac{70}{18} \quad \frac{76}{16} \quad \frac{73}{13} \quad \frac{52}{10} \quad \frac{49}{6} \quad \frac{47}{7} \quad \frac{47}{12} \quad \frac{56}{12} \quad \frac{83}{17} \quad \frac{82}{19} \quad \frac{65}{20} \quad L.O.$$

$$L.O. \quad \frac{65}{33} \quad \frac{70}{23} \quad \frac{85}{20} \quad \frac{78}{14} \quad \frac{55}{10} \quad \frac{53}{8} \quad \frac{51}{8} \quad \frac{55}{12} \quad \frac{57}{12} \quad \frac{84}{16} \quad \frac{91}{17} \quad \frac{72}{23} \quad \frac{66}{39} \quad L.O.$$

$$\frac{67}{33} \quad \frac{73}{25} \quad \frac{80}{22} \quad \frac{93}{19} \quad \frac{86}{15} \quad \frac{62}{11} \quad \frac{60}{7} \quad \frac{57}{7} \quad \frac{58}{12} \quad \frac{60}{12} \quad \frac{86}{17} \quad \frac{91}{21} \quad \frac{75}{23} \quad L.O.$$

$$\frac{71}{33} \quad \frac{77}{21} \quad \frac{106}{19} \quad \frac{89}{16} \quad \frac{59}{11} \quad \frac{56}{7} \quad \frac{54}{7} \quad \frac{55}{12} \quad \frac{58}{12} \quad \frac{96}{16} \quad \frac{111}{21} \quad \frac{77}{23} \quad L.O.$$

$$\frac{77}{33} \quad \frac{83}{21} \quad \frac{98}{20} \quad \frac{92}{17} \quad \frac{77}{13} \quad \frac{63}{10} \quad \frac{61}{7} \quad \frac{58}{7} \quad \frac{60}{9} \quad \frac{63}{12} \quad \frac{79}{16} \quad \frac{104}{22} \quad \frac{83}{24} \quad L.O.$$

$$\frac{75}{33} \quad \frac{82}{21} \quad \frac{95}{18} \quad \frac{89}{16} \quad \frac{67}{11} \quad \frac{62}{7} \quad \frac{60}{7} \quad \frac{61}{8} \quad \frac{65}{12} \quad \frac{90}{16} \quad \frac{102}{21} \quad \frac{80}{25} \quad L.O.$$

$$\frac{72}{33} \quad \frac{75}{20} \quad \frac{87}{18} \quad \frac{83}{14} \quad \frac{59}{7} \quad \frac{56}{6} \quad \frac{54}{7} \quad \frac{56}{9} \quad \frac{58}{15} \quad \frac{92}{17} \quad \frac{96}{20} \quad \frac{74}{25} \quad \frac{81}{50}$$

$$\frac{86}{33} \quad \frac{72}{22} \quad \frac{84}{20} \quad \frac{87}{16} \quad \frac{56}{10} \quad \frac{50}{7} \quad \frac{47}{7} \quad \frac{50}{9} \quad \frac{68}{17} \quad \frac{67}{21} \quad \frac{86}{24} \quad \frac{85}{27} \quad \frac{66}{30} \quad \frac{75}{50}$$

95.6
(82)
conv

95.1
(94.3)
conv

Sta.	+	π	-	Elev.
		904.52		
9	+97			
10				899.9
T.P.			4.65	899.87
	+50			99.4
11				98.6
	+50			98.9
12				99.6
B.M.	10.26	911.0	3.78	900.74
	+50			901.0
13				01.9
	+50			03.4
14				03.1
T.P.	11.63	915.07	7.56	903.44
	+50			03.6

lt.

4

rt.

754/6
($\frac{906}{60N}$)

95.34/
($\frac{918}{60N}$)

$\frac{71}{33} \frac{70}{21} \frac{85}{18} \frac{83}{16} \frac{56}{11} \frac{49}{6} \quad \frac{46.5}{10} \frac{49}{10} \frac{55}{14} \frac{83}{19} \frac{83}{21} \frac{75}{23} \frac{71}{50}$

4. sta 10+00

$\frac{67}{33} \frac{72}{20} \frac{89}{18} \frac{81}{14} \frac{57}{10} \frac{52}{6} \quad \frac{49}{10} \frac{53}{13} \frac{55}{17} \frac{83}{20} \frac{86}{21} \frac{70}{50}$

$\frac{71}{33} \frac{82}{20} \quad \frac{103}{45} \frac{91}{12} \frac{68}{8} \frac{62}{5} \frac{59}{11} \frac{60}{11} \frac{64}{19} \frac{89}{18} \frac{89}{20} \frac{75}{22} \frac{69}{33} \frac{69}{50}$

$\frac{68}{33} \frac{75}{25} \frac{83}{21} \frac{104}{16} \frac{104}{14} \frac{62}{8} \frac{59}{5} \quad \frac{56}{10} \frac{57}{14} \frac{60}{17} \frac{89}{17} \frac{90}{19} \frac{75}{23} \frac{79}{50}$

$\frac{65}{33} \frac{73}{20} \frac{86}{18} \frac{86}{14} \frac{76}{11} \frac{52}{7} \quad \frac{49}{10} \frac{53}{13} \frac{60}{19} \frac{84}{16} \frac{83}{19} \frac{75}{21} \frac{74}{50}$

$\frac{12.7}{33} \frac{12.7}{22} \frac{12.8}{16} \frac{106}{10} \frac{103}{7} \frac{100}{9} \frac{101}{12} \frac{102}{15} \frac{116}{23} \frac{118}{23} \frac{115}{50}$

$\frac{11.7}{50} \frac{11.5}{33} \frac{12.0}{19} \frac{9.8}{10} \frac{9.5}{7} \frac{9.1}{11} \frac{9.4}{18} \frac{10.9}{30} \frac{11.7}{30} \frac{11.7}{50}$

$\frac{116}{50} \frac{119}{52} \frac{112}{14} \frac{93}{10} \frac{90}{7} \quad \frac{96}{9} \frac{89}{14} \frac{95}{19} \frac{109}{22} \frac{107}{23} \frac{102}{35} \frac{93}{50} \frac{82}{50}$

$\frac{66}{50} \frac{60}{31} \frac{100}{21} \frac{102}{15} \frac{84}{9} \frac{82}{6} \frac{79}{11} \frac{83}{14} \frac{86}{17} \frac{101}{21} \frac{99}{32} \frac{85}{35} \frac{28}{50} \frac{3.5}{50}$

$\frac{45}{50} \frac{49}{40} \frac{120}{26} \frac{133}{21} \frac{135}{17} \frac{131}{11} \frac{118}{6} \quad \frac{115}{10} \frac{118}{14} \frac{121}{17} \frac{131}{20} \frac{130}{33} \frac{3.8}{50} \frac{50}{50}$

Sta	+	X	-	Elev
		915.07		904.1
15				04.7
+50				05.3
16				
B.M.	3.52	904.54	14.35	900.72
I.P.	7.67	908.53	5.68	898.56
I.P.	6.18	912.92	1.79	906.74
B.M.			0.89	913.03

Lt.

R.

Rt.

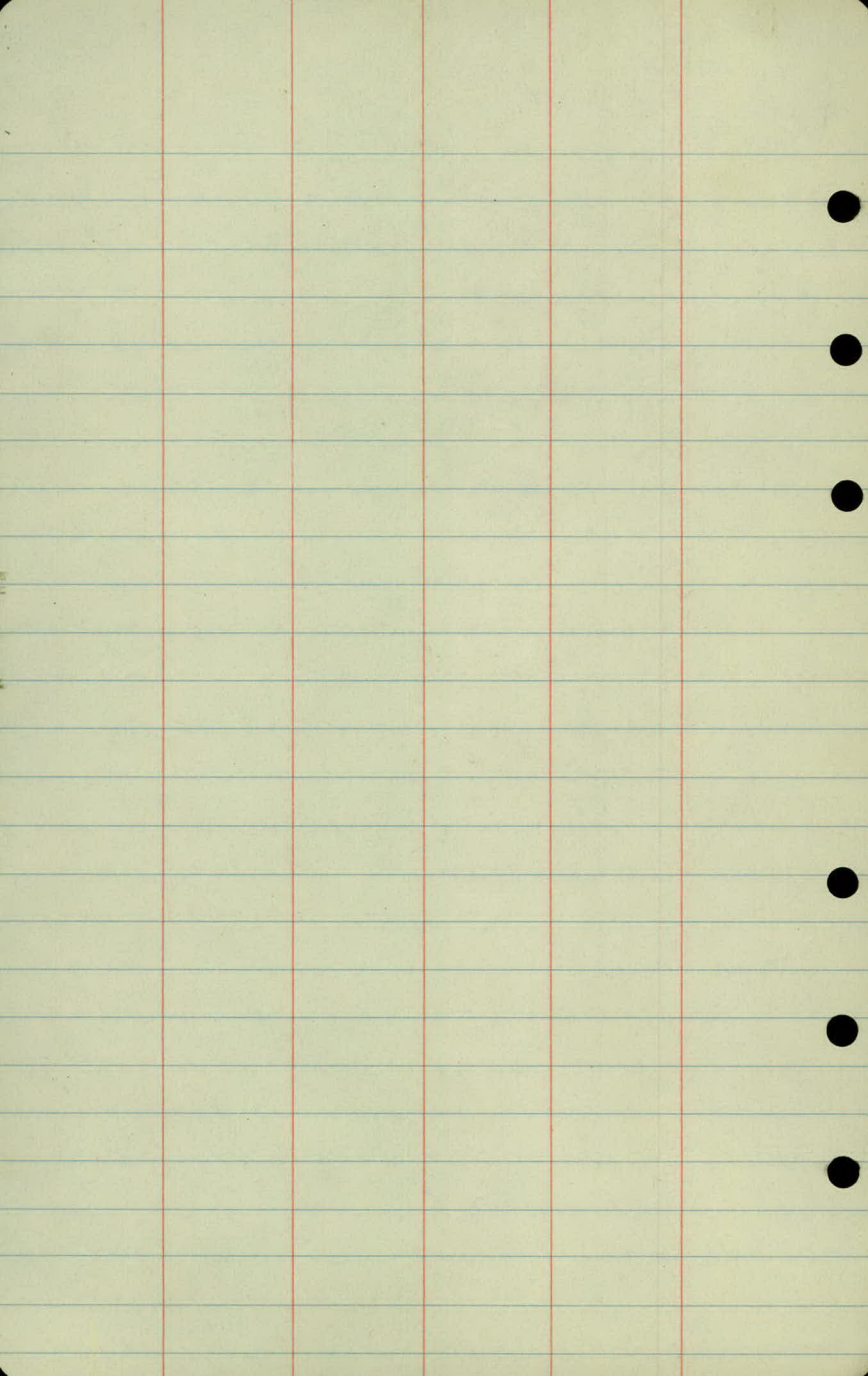
L.O. $\frac{38}{37}$ $\frac{105}{29}$ $\frac{127}{23}$ $\frac{127}{20}$ $\frac{113}{16}$ $\frac{114}{10}$ $\frac{113}{6}$ $\frac{110}{-}$ $\frac{113}{11}$ $\frac{113}{15}$ $\frac{123}{17}$ $\frac{124}{21}$ $\frac{23}{26}$ $\frac{30}{50}$

$\frac{34}{50}$ $\frac{40}{36}$ $\frac{117}{23}$ $\frac{122}{16}$ $\frac{118}{10}$ $\frac{111}{5}$ $\frac{108}{6}$ $\frac{109}{-}$ $\frac{107}{11}$ $\frac{108}{14}$ $\frac{117}{16}$ $\frac{117}{17}$ $\frac{28}{34}$ $\frac{29}{50}$

$\frac{53}{50}$ $\frac{53}{35}$ $\frac{103}{25}$ $\frac{115}{18}$ $\frac{116}{11}$ $\frac{105}{9}$ $\frac{102}{5}$ $\frac{98}{-}$ $\frac{102}{12}$ $\frac{104}{15}$ $\frac{116}{18}$ $\frac{116}{21}$ $\frac{46}{35}$ $\frac{49}{50}$

Na' in T.P. Rt. 12+53

N.E. Cor. School Ho. Stop.



Ditch Levels

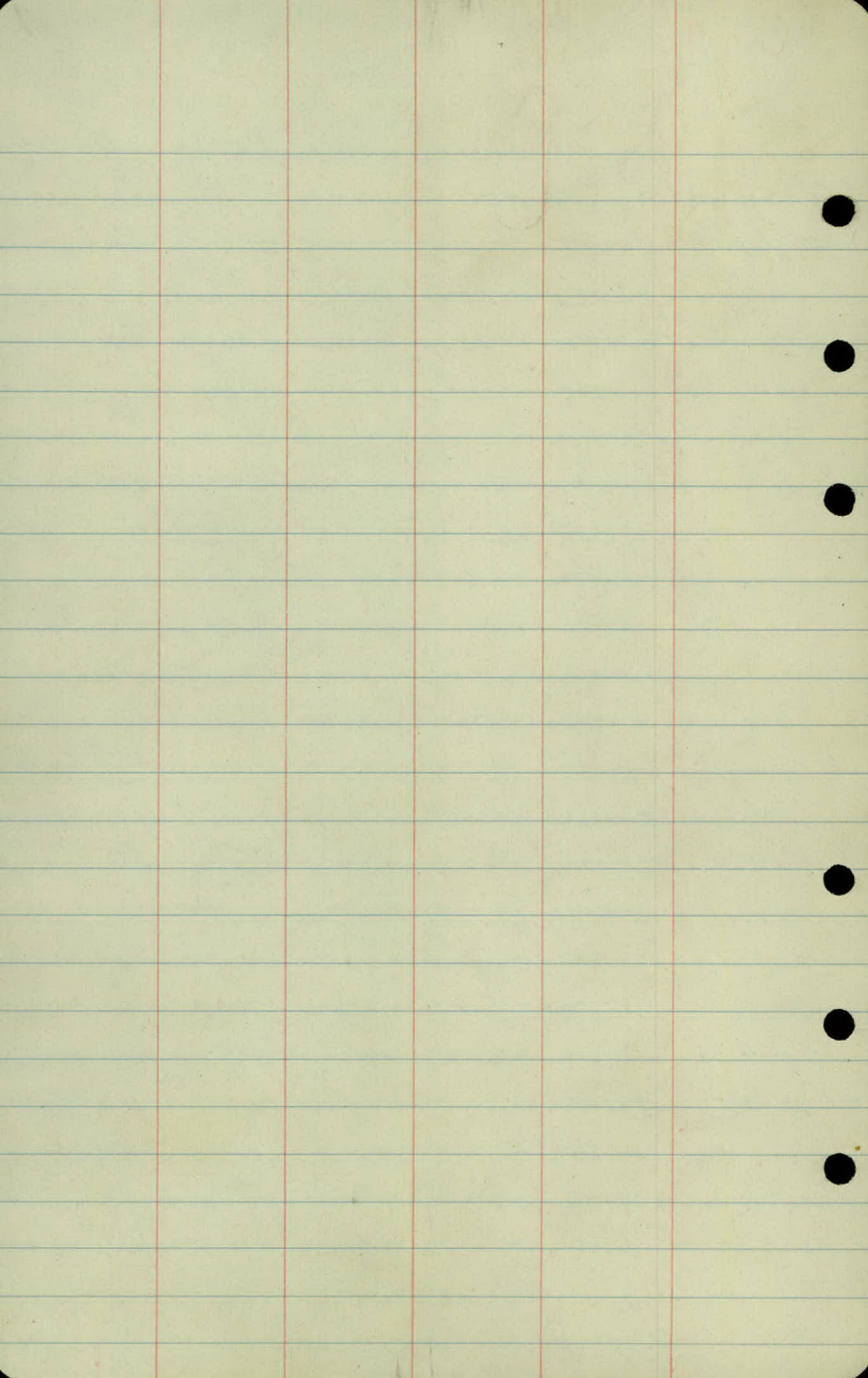
Rt. 9+94.69 = 0+00

Sta	I	T	-	Elev.
B.M.	4.88	905.60		900.72
1			10.1	95.5
2			9.9	95.7
3			10.0	95.67
4			10.5	95.1
I.P.	8.28	907.77	6.11	899.49
5			12.1	95.7
			12.1	
6			12.1	95.7
7			11.7	96.1
8			11.7	96.1
9			12.0	95.8
10			12.2	95.6
11			12.0	95.8

2. 549 10400

Sta.	+	T	-	Elev.
12			12.3	95.5
I.P.	5.92	905.41	828	899.49
B.M.			468	900.73

4.5 to 10:00



Charley Lake Ditch.

Sta	+	A	-	Elev
B.M.	1.67	912.90		912.23
T.P.			10.88	902.02
	19.5	1009.90		902.95
	6.37	1007.60	6.68	998.22
1				95.40
+50				95.38
2				95.36
+50				95.34
3				95.32
+50				95.30
4				95.28
+50				95.26
5				95.24
+50				95.22
T.P.	11.78	1008.99	7.39	997.21

N.E. Cor. School/Stop.

920

922

924 ✓

926 ✓

928 ✓

930 ✓

932 ✓

934 ✓

936 ✓

938 ✓

940

298.22
4.68
1004.90
1.90
902.95

1008.99

6

95.20

+50

95.18

7

95.16

+50

95.14

8

95.12

+50

95.11

9

95.10

+50

95.07

10

95.03

T.P

8.12

1005.76

11.99

99710

+50

95.00

11

94.96

+50

94.93

13.79 ✓

13.81 ✓

13.83 ✓

13.85 ✓

13.87 ✓

13.88 ✓

13.89 ✓

13.92 ✓

13.94 ✓

10.72 ✓

10.76 ✓

10.79 ✓

7005.72

12

94.89

+50

94.86

13

94.82

+50

94.79

14

94.75

T.P.

+50

8.45

1005.17

200

94.72

896.72

15

94.70

+50

94.68

16

94.65

+50

94.63

8.09

904.61

865

94.52

17

94.60

+50

94.58

108.9

10.86 ✓

10.90 ✓

10.93 ✓

10.97 ✓

10.45

10.97 ✓

10.99 ✓

10.52 ✓

10.59 ✓

10.01

10.03

05.72
94.72
10.97

906.52
8.65
915.17

357
4.60
111.0

15.17
4.60
10.57

15.17
4.63
10.54

10.15.17
10.45
99.72

904.61
809
896.52
8.65
905.17

918.42
899.72
896.72

9.00
1005.72

704.61

18

94.55

+50

94.53

19

94.50

+50

94.48

20

94.46

+50

94.43

21

94.39

+50

94.36

22

94.33

+43,

94.30

B.M.

3.00

701.61

Gr Rod,

10.06

10.08 ✓

10.11 ✓

10.13

10.16 ✓

10.18 ✓

10.22 ✓

10.25 ✓

10.28 ✓

10.31 ✓

Top Head wall 3 E. Cor.

B.M. 878.29 Top No. End. Culv