

DIETZGEN  
INCORPORATED

---

ENGINEERS'  
CROSS SECTION  
BOOK  
No. 389 F

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CC 53

# EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and SURVEYING INSTRUMENTS  
Chicago New York San Francisco New Orleans Pittsburg Toronto

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
Roadway 16 feet wide. Side Slopes 1 on 1.  
For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.1	8.2	8.3	8.4	8.5	8.6	8.7	8.8	8.9	0
1	9.0	9.1	9.2	9.3	9.4	9.5	9.6	9.7	9.8	9.9	1
2	10.0	10.1	10.2	10.3	10.4	10.5	10.6	10.7	10.8	10.9	2
3	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9	3
4	12.0	12.1	12.2	12.3	12.4	12.5	12.6	12.7	12.8	12.9	4
5	13.0	13.1	13.2	13.3	13.4	13.5	13.6	13.7	13.8	13.9	5
6	14.0	14.1	14.2	14.3	14.4	14.5	14.6	14.7	14.8	14.9	6
7	15.0	15.1	15.2	15.3	15.4	15.5	15.6	15.7	15.8	15.9	7
8	16.0	16.1	16.2	16.3	16.4	16.5	16.6	16.7	16.8	16.9	8
9	17.0	17.1	17.2	17.3	17.4	17.5	17.6	17.7	17.8	17.9	9
10	18.0	18.1	18.2	18.3	18.4	18.5	18.6	18.7	18.8	18.9	10
11	19.0	19.1	19.2	19.3	19.4	19.5	19.6	19.7	19.8	19.9	11
12	20.0	20.1	20.2	20.3	20.4	20.5	20.6	20.7	20.8	20.9	12
13	21.0	21.1	21.2	21.3	21.4	21.5	21.6	21.7	21.8	21.9	13
14	22.0	22.1	22.2	22.3	22.4	22.5	22.6	22.7	22.8	22.9	14
15	23.0	23.1	23.2	23.3	23.4	23.5	23.6	23.7	23.8	23.9	15
16	24.0	24.1	24.2	24.3	24.4	24.5	24.6	24.7	24.8	24.9	16
17	25.0	25.1	25.2	25.3	25.4	25.5	25.6	25.7	25.8	25.9	17
18	26.0	26.1	26.2	26.3	26.4	26.5	26.6	26.7	26.8	26.9	18
19	27.0	27.1	27.2	27.3	27.4	27.5	27.6	27.7	27.8	27.9	19
20	28.0	28.1	28.2	28.3	28.4	28.5	28.6	28.7	28.8	28.9	20
21	29.0	29.1	29.2	29.3	29.4	29.5	29.6	29.7	29.8	29.9	21
22	30.0	30.1	30.2	30.3	30.4	30.5	30.6	30.7	30.8	30.9	22
23	31.0	31.1	31.2	31.3	31.4	31.5	31.6	31.7	31.8	31.9	23
24	32.0	32.1	32.2	32.3	32.4	32.5	32.6	32.7	32.8	32.9	24
25	33.0	33.1	33.2	33.3	33.4	33.5	33.6	33.7	33.8	33.9	25
26	34.0	34.1	34.2	34.3	34.4	34.5	34.6	34.7	34.8	34.9	26
27	35.0	35.1	35.2	35.3	35.4	35.5	35.6	35.7	35.8	35.9	27
28	36.0	36.1	36.2	36.3	36.4	36.5	36.6	36.7	36.8	36.9	28
29	37.0	37.1	37.2	37.3	37.4	37.5	37.6	37.7	37.8	37.9	29
30	38.0	38.1	38.2	38.3	38.4	38.5	38.6	38.7	38.8	38.9	30
31	39.0	39.1	39.2	39.3	39.4	39.5	39.6	39.7	39.8	39.9	31
32	40.0	40.1	40.2	40.3	40.4	40.5	40.6	40.7	40.8	40.9	32
33	41.0	41.1	41.2	41.3	41.4	41.5	41.6	41.7	41.8	41.9	33
34	42.0	42.1	42.2	42.3	42.4	42.5	42.6	42.7	42.8	42.9	34
35	43.0	43.1	43.2	43.3	43.4	43.5	43.6	43.7	43.8	43.9	35
36	44.0	44.1	44.2	44.3	44.4	44.5	44.6	44.7	44.8	44.9	36
37	45.0	45.1	45.2	45.3	45.4	45.5	45.6	45.7	45.8	45.9	37
38	46.0	46.1	46.2	46.3	46.4	46.5	46.6	46.7	46.8	46.9	38
39	47.0	47.1	47.2	47.3	47.4	47.5	47.6	47.7	47.8	47.9	39
40	48.0	48.1	48.2	48.3	48.4	48.5	48.6	48.7	48.8	48.9	40

**Example**—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be  $30.6 + (20 - 16) \div 2$  or 2 ft. added to  $30.6 = 32.6$ . For slopes of 1 on 1½ see inside of back cover.

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*Pulkrabek -  
Lineal Survey notes.*

*G. H. Jennings  
Survey notes beginning  
on page 37.*

*See sheet #1 for Index*

*T 60 R 26  
+  
T 59 R 26*

*Note: Pages 96 thru 126 were  
labeled as such in May 2012  
Mike Hayes*

Page No	Sec No	Sec No	Page No
		1	94
		2	-
38	9	3	92
42	8	4	82
46	17	5	86
50	16	8	42
54	10	9	38
58	7	10	54
		11	-
62	18	12	50
66	20	13	74
70	19	14	90
74 → 77	<del>13</del> 13	15	-
83	4	17	46
87	5	18	62
95	1	19	70

①

3

Dist. chs	Dep. Corrections							
	15'	30'	45'	700'	1915'	1930'	1945'	2000
1	.0044	.0087	.0131	.0175	.0218	.0262	.0305	.0349
20	.088	.18	.26	.35	.44	.52	.61	.70
40	.18	.35	.52	.70	.87	1.05	1.22	1.40
60	.26	.52	.79	1.05	1.31	1.57	1.83	2.10
80	.35	.70	1.05	1.40	1.74	2.10	2.44	2.80

	NW	NC	NE
	WC	C	EC
	SW	SC	SE
	E 7/10		

5/2

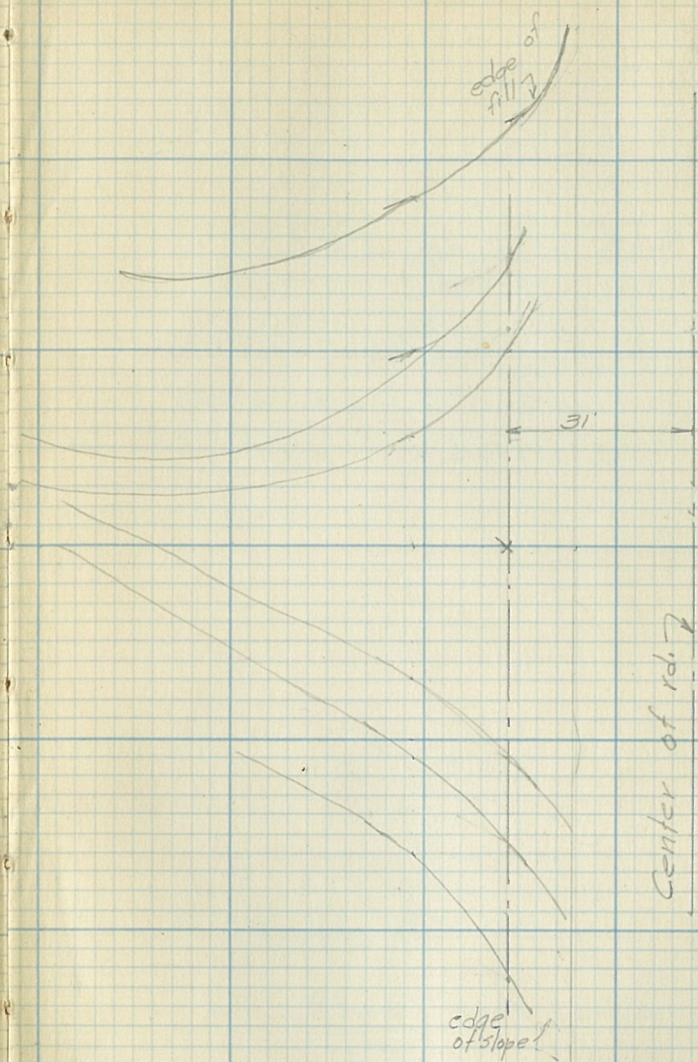
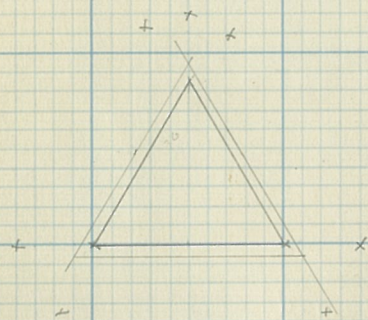
TWP.

6	5	4	3	2	1
7	8	9	10	11	12
13	14	15	16	17	18
19	20	21	22	23	24
25	26	27	28	29	30
31	32	33	34	35	36

- 0 Grassland & Barren
- 1 Brush
- 2 Muskeg
- 3 Birch
- 4 Cedar
- 5 J. Pine
- 6 W. Spruce
- 7 B. Sp. + Tam.
- 8 N. Pine
- 9 W. Pine
- A - Aspen
- B - Balsam
- C Cultivated
- M Mixed hardwood
- L Maple
- K Oak
- S Ash

$$\frac{.866}{3.464} = .25$$

3'



E. bet. 21+28

Va.  $12^\circ$

36.00 Creek 12 links runs S.E.

40.00 Margin of Lake

Set  $\frac{1}{4}$  sec. cor. in water

Birch Post  $3\frac{1}{2} \times 3\frac{1}{2}$

Nailed metal marker on Elm

14" D 300 links W 60 links N

S. thru center sec 21

Va  $7\frac{1}{2}^\circ$

20.00 Set  $\frac{1}{16}$  cor.

Lamrock post 3x3 3' h

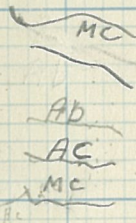
39.60 Creek 40 links runs W.

40.00 Set  $\frac{1}{4}$  sec. cor.

Birch Post  $3\frac{1}{2} \times 3\frac{1}{2}$  3' h

Continued S. at  $9^\circ$

sec. 21



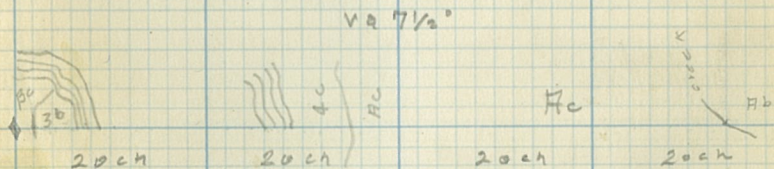
E. Random Between Sec 33 + 28

- From cor 32, 29, 28 + 33  
6.20 ch Margin of Lake  
Crossed by Triangulation  
22.80 Dist. Across  
29.00 ch. - E. margin of Lake  
40.00 - Established  $\frac{1}{4}$  corner in Hc type  
Topography - incline toward E.  
60.00 - Estab.  $\frac{1}{16}$  cor. Birch stake 3" dia.  
Hc Type standing 3' Above ground  
Topography Rolling  
76.00 Creek Bed Almost dry  
80.00 Estab. Corner Sec. 33, 34, 27 + 28  
Birch stake 3" dia.  
stands 4' Above ground  
3 ch. E. of Creek bed  
Topography Rolling

Found A squared N.P. 10" dia. 4 ch W + 2 ch  
N of our cor.

T60 K26

Sec 28



Sec 33

E. Random Between Sec 27/34

00.00 Approximate Cor. Sec 27, 28, 33, 34

20.00 Approx. 1/16 Cor. Set  
AC type  
Topography - Incline To E

40.00 Approx 1/4 cor. set  
Aspen Stake 3 1/2"  
Topography Rolling Toward N. E. & W.

54.32 Creek Running NE

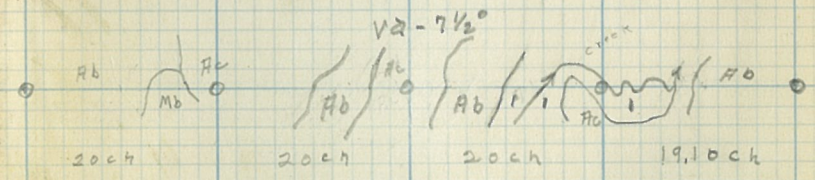
60.00 Estab. Approx 1/16 Cor  
open grassland; 25 ch. W. of creek  
Topography Level

79.10 Approx Sec Cor  
Cor. Sec's. 34, 35, 27, 26.  
Topography Rolling  
Incline toward W Aspen type  
soil Sandy

Evidence of Cor. None Except a  
Squared Aspen Tree which has been  
used for a cor. by settlers there  
Our line came to ch. S. of this  
Tree.

T60 R26

Sec 27



Sec 34



Our line 3°06' S of M.C.  
from a point on W shore

$$\frac{0.56}{2.3}$$

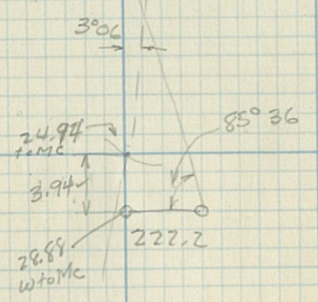
$$\frac{0.56}{2.5}$$

$$\frac{2.88}{1.06}$$

$$\frac{28.58}{3.94}$$

$$\frac{0.56}{1.25}$$

$$\begin{aligned} \log 222.2 &= 2.34674 \\ \log \tan 40.4 &= 8.88618 \\ \log 2888 &= 3.46056 \end{aligned}$$



$$\begin{aligned} \log \sin 3^{\circ}06' &= 8.73303 \\ \log 23.06 &= 1.36286 \\ \hline &= 0.09559 \end{aligned}$$

$$\begin{aligned} &2.34674 \\ &8.89274 \\ \hline &.45400 \end{aligned}$$

1.25 ch.

00.00  
1.70  
61.00

3654

E. Random Between Sec. 26/35

Cor. Sec's 34, 35, 26, 27

Johnson Linke Tr. Tr.  
Margin of Batson Lake

Crossed by Triangulation

Dist. 30.54 ch.  
Margin of Batson L.

(17)

T60R26

V. 12° N Between 27+28

0:00 - Cor. Sec. 27, 28, 33, 34

20:00 Set. APPROX  $\frac{1}{16}$  Cor

AC. TYPE

INCLINE TO SW and NE

39:36 ch - set approx  $\frac{1}{4}$  Cor

Border of swamp

INCLINE - south

void

60:00 ch - set APPROX  $\frac{1}{16}$  Cor

AC

Bb TYPE

Level Topog. apply.

19  
AC  
Bb

AC

AC

AC

AC

AC

AC

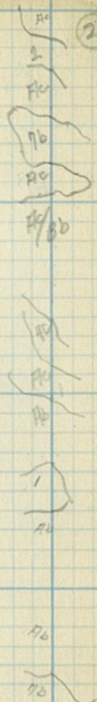
Va. 90  
2.00 - Cor. of S. Between Sec 27 & 28  
3.00 - River  
20.00 - Set Approx.  $\frac{1}{4}$  cor.  
Balsam Stake 4" Dia  
in Hc/Bb Type  
40.00 - Set Approx  $\frac{1}{4}$  Cor.  
Topography include To S.  
Birch Stake 4" Dia  
in Hc Type  
60.00 - Set Approx.  $\frac{1}{4}$  cor  
Open stake 3" Dia  
Hc Type  
Incline Toward S & E  
80.00 - Intersected S line 4.60 ch. w of cor

Va - should be  $13^{\circ}E$

VOID THIS  
RERN LINE

T60 R26

(27)



West. Middle section 28

Var 7 1/2

0:00 1/4 Cor. NW, SW; SE NE, Sec 28 / SWNW; NW, SW Sec 27

20:00 Ch. set approx to Cor.

Ab. Type

INCLINE TO West, South West, and North East.

(23)

1/2c  
1/2c AB AB ~~AB~~

Running E From w. 1/4 cor Sec 8

20.00 Estab. 1/16 cor  
Aspen stake 2 1/2" Dia.  
Highland - open - Scattered NP.

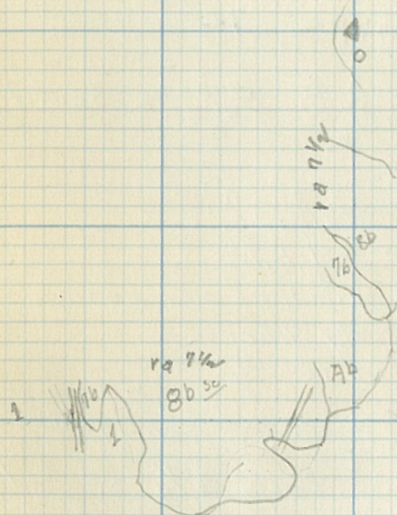
40ch Estab. 1/4 cor  
Aspen Stake 4 1/2" Dia.  
Highland brush - Aspen

Running N. From center 1/4 cor

20.00 Estab 1/4 cor  
Aspen stake 2 1/2"  
Open - Highland - scattered NP.

Running W From N 1/4 cor.

0.00 old corner stake



Running N From W 1/4 cor  
in Sec 15 T59 R26.

20.00 Estab. 1/16 cor.  
Bl. Sp. Stake 3 1/2"  
Swamp Type 7b

40.00 Found old (orig.) B.T. + Cor.  
Set by someone in 1933  
Cor. - Cedar stake 4"  
Swamp Type 7c

Running E Between Secs. 15 & 16

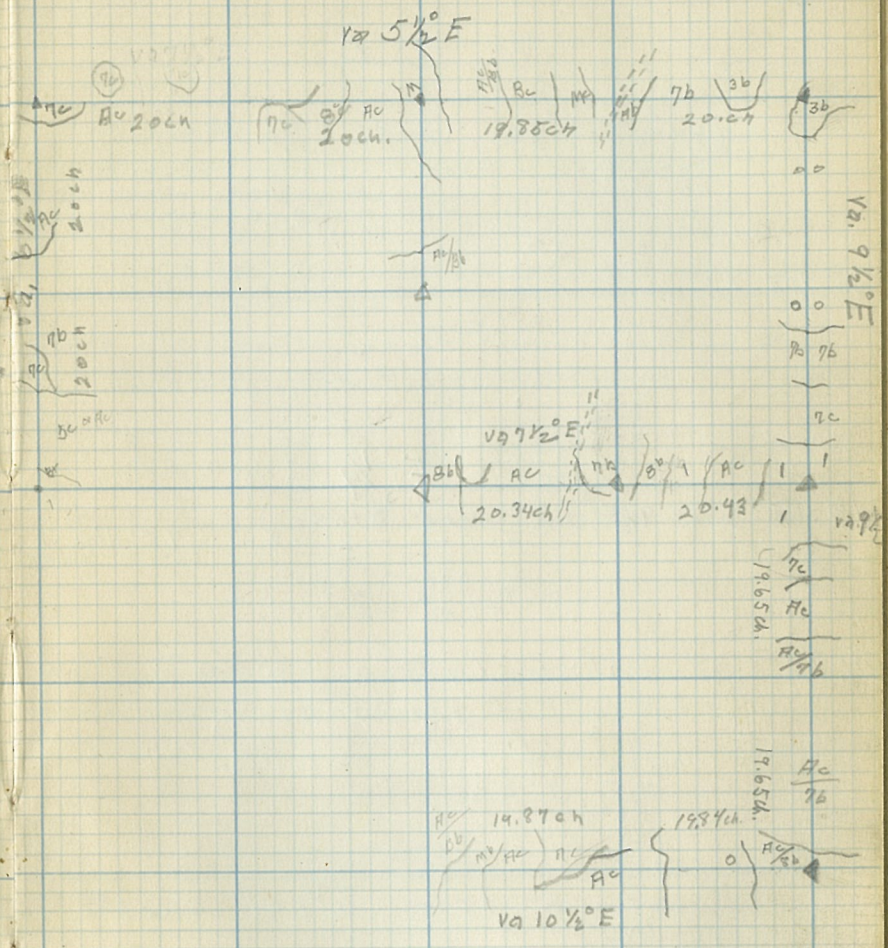
20.00 Estab. 1/16 cor.  
Ac Type  
Aspen stake 3"

40.00 Found 1/4 cor + 1 B.T.  
Put in a new birch cor. beside  
The one already there.  
Birch stake 3"

M-Type  
location Poster Ash - 14"  
.25 ch SW of cor.

Running S. From N 1/4 cor S. 15

N 1/4 sec. 15



T 59 NR 26 W Sec 15.

E From center of Sec 15  
Va.  $7\frac{1}{2}^{\circ}$  E

0400

20.34 found all cor. Stake on line

Condition - Poor  
No Scribing  
Set in ariel w Aspen cor. stake  
Dia. - 3 in.  
Ht. - 4 ft

40.43 Found old  $\frac{1}{4}$  cor. 43 ch N. of line

Condition Poor  
Placed New stake - Birch 3" - 4" High  
Metal Location Poster on a birch  
Dist. -  
Bearing -

S. from  $\frac{1}{4}$  E cor on S line

19.65 Va.  $9\frac{1}{2}^{\circ}$  E

Placed stake  
Aspen - 2" D.B.H. - 4.5' High  
Location Poster  
Aspen 4.5" D.B.H.  
5 Lks. SE of cor.

39.30 hit S line 94 lks W of cor

Found Cor. placed by Acquisition  
Crew and 4 B.T's.

Metal Location Poster  
N.P. - 9" D.B.H.  
Bearing  
Dist. - .21 ch.

Running E from  $\frac{5}{16}$  cor sec 15.

Va.  $10\frac{1}{2}^{\circ}$  E

19.87 Estab. E  $\frac{1}{16}$  cor.

Birch Stake - 3.5" 3.5' High

Location Poster

Birch Tree - 3" D.B.H.  
.08 ch. SW of cor

Running N From E  $\frac{1}{4}$  Cor. Va.  $9\frac{1}{2}^{\circ}$  E

16.00 Marshy Meadow

20.00 Estab.  $\frac{1}{16}$  Cor

Tam. Stake. 3" 4'

Metal Location Poster on a

Tamarack Tree N  $83^{\circ}$  E of Cor. 2 ch.

distant

36.00 Leave Marshy Meadow

39.40 Hit E & W line .22 ch E of Sec. Cor

Sec. Cor. in Good shape 24" High

1 W.P. B.T.

Metal Location Poster on W.P.  
17" Dia.

Dist. - .06 ch.  
Bearing -  $528^{\circ}$  W

N Line of Sec 14 brushed 12' Wide  
E Line of sec. 10 "

Va  $5\frac{1}{2}^{\circ}$  Running W From NE cor. Sec. 15

20.00 Estab.  $\frac{1}{16}$  Cor.

Dry B.S. Stake 3.5" - 4'

Metal Location poster Balsam 3"  
N  $15^{\circ}$  E .44 ch

39.85 Hit Center <sup>N35</sup> Sec. Line 1 ch. N of  $\frac{1}{4}$  cor

Followed line that had been brushed about  
6 yrs ago All the way

See I. H. Moore's book for SW  $\frac{1}{4}$

Sec 15



T59N R26W  
 7 Running S From N $\frac{1}{4}$  Cor Sec 14  
 0.00 Found  $\frac{1}{4}$  cor. Sec 11+14 1.02 ch. S.  
 of Transit Line  $V\alpha 9\frac{1}{2}^\circ$  TV $\alpha 10^\circ$

20.00 Estab  $\frac{1}{16}$  Cor  
 stake 2.5" Dia. 3.5' Ht  
 Location Poster  
 J.P. Dia. 8.5"  
 .50 ch SW of cor.

40.00 Estab.  $\frac{1}{4}$  Cor  
 Birch Stake 3" Dia. 3.5' Ht.  
 76 Type open  
 Location poster  
 .50 ch W+S of cor. on NE side  
 of Aspen 3.5" D.B.H.

Running E. From S. Cor 15-14-22-23  
 20.00 Estab.  $\frac{1}{16}$  cor.  
 STAKE 3" Dia. 4' HT.  
 .57 ch. N. of TRANSIT LINE

40.00 Estab.  $\frac{1}{4}$  Cor.  
 Aspen Stake 3" Dia 3.6' HT.  
 Location Poster.  
 .28 ch. N+W of cor. on S.E. side

Running W from center Sec 14  
 19.80 Hit W  $\frac{1}{16}$  cor.

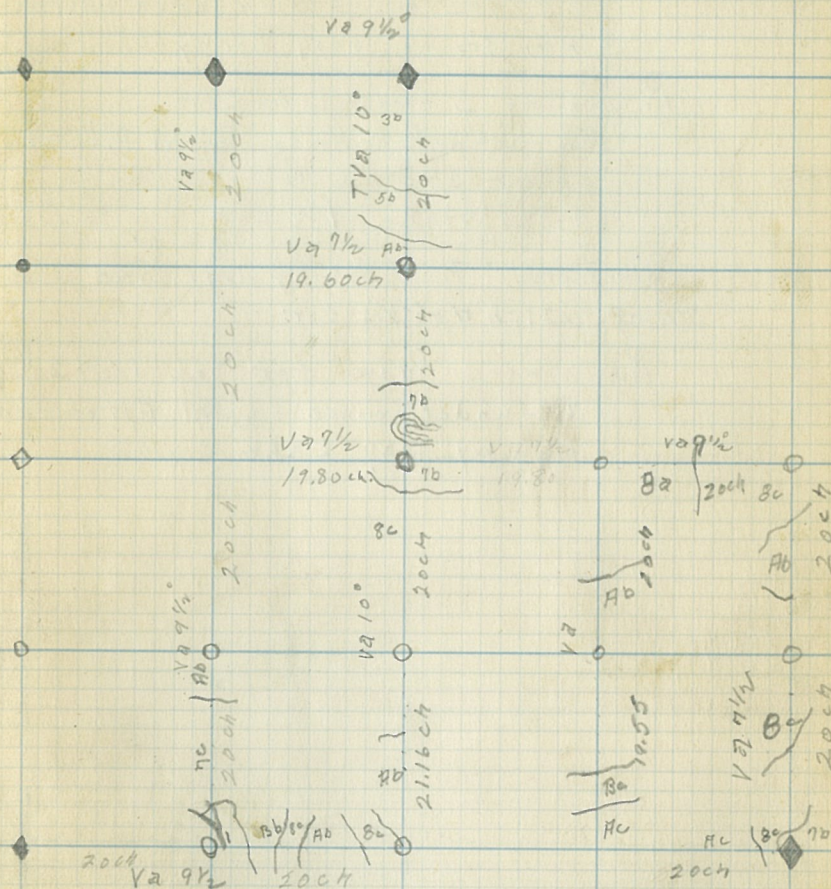
Running N from SE cor S. 14  
 20.00 Estab Approx  $\frac{1}{16}$  cor.

Birch Stake 2" dia. 36" HT  
 40.00 Estab Approx  $\frac{1}{4}$  cor.

Birch Post 4" dia 42" HT.  
 N $\frac{1}{4}$  corner.

T59N R26W Sec 14

(31)



Running W from E  $\frac{1}{4}$  cor  
20 ch Estab E  $\frac{1}{16}$  Cor Va  $9\frac{1}{2}$ "  
Birch stake 2" dia.  
S A Type Mixed with birch & Aspen  
High ground very Rocky

Running S from E  $\frac{1}{16}$  Cor  
20 00 Va - undetermined, local Attraction  
Estab SE  $\frac{1}{16}$  Cor  
Aspen stake  $1\frac{1}{2}$ " Dia

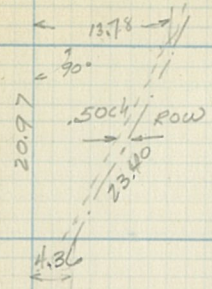
39 55 Intersected line Run by Day Lake  
Camp 1.31 ch W of  $\frac{1}{16}$  Cor.

Running W from cor Sec 13, 14 23, 24  
Va - undetermined - local Attraction  
Run by Day Lake Camp

Lot 2 Sec. 5 T60N, R26W. 41.77A.

20 ch E to W, 20.88 ch N to S.

9890 1.3215



$1099.42 = .9741$   
 $" 20.97 = \frac{1.3215}{9.6526}$

$\frac{13.78}{4.03}$   
 $17.81 \div 2 = 89.05$

$\log 20.97 = 1.3215$   
 $\log 89.05 = 1.9496$   
 $\log 186.7 = 2.2711$

Area to  $\frac{1}{2}$  Rd = 18.7 Acres.  
 " to Row = 17.6 "

36

SEC. 16 T14N R26W 4RM. 37

Va 9°15'E

3/4 1/80°

Va N12°30'E

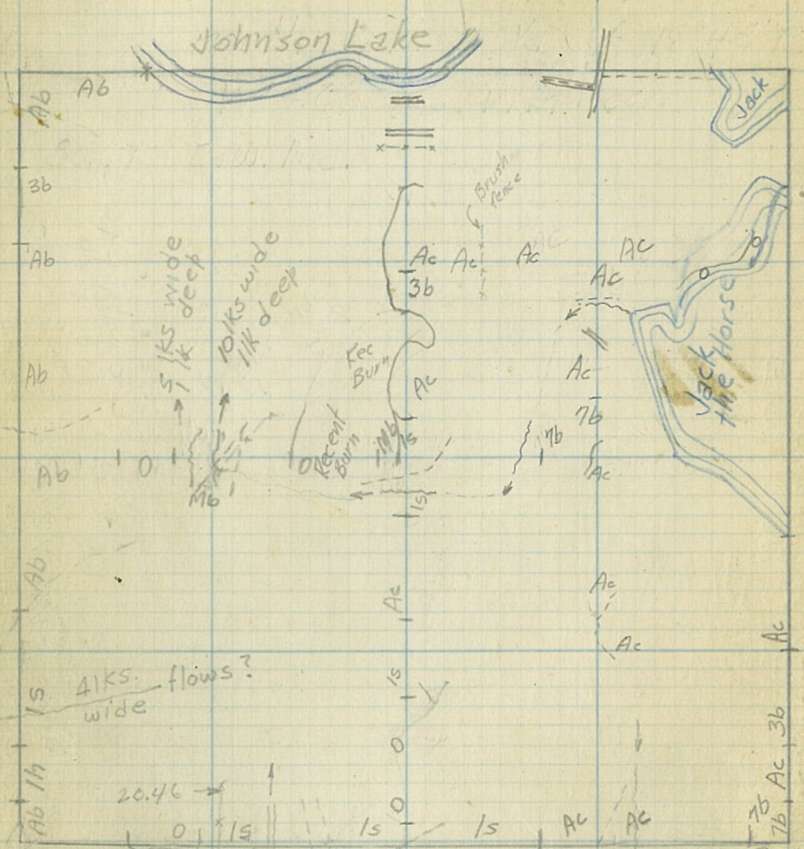
20.00

20.00

20.00

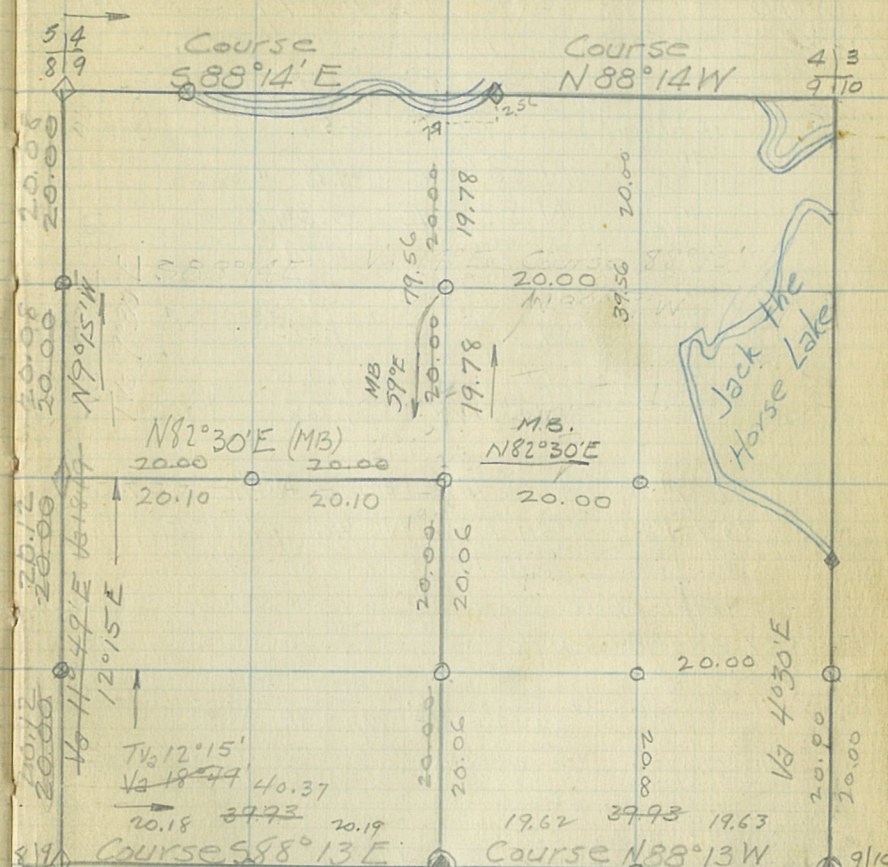
20.00

Sec 9.



G.L.O.W.T.  $\frac{9}{16}$   $\frac{1}{4}$   
 Sp. 5 N70W 23  
 " 6 S47E 28  
 G.L.O.W.T.  $\frac{89}{1716}$   
 W.Bir 9 N51W 17  
 " 8 S45W 32  
 Spruce 6 N63E 6  
 5 S34E 23

Sec. 9, T59N R26W 4 P.M.



G.L.O.W.T.-W  $\frac{1}{4}$   
 Cedar 4 N59E 19  
 " 5 S77W 30  
 G.L.O.MC.W.T.  
 W. shore J. lake  
 W Birch 9 S12  
 Willow 4 N75W 25  
 13.87 chs.

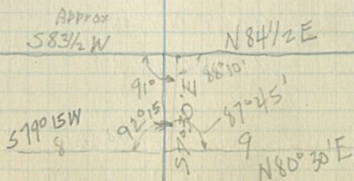
G.L.O.MC.  $\frac{71.92ch}{on Jack Horse}$   
 Tam. 6" S29W 45  
 Birch 10" N72W 90  
 G.L.O.MC.W.T.  
 E. shore J. lake  
 Poplar 5 S9W 10  
 Cedar 4 N62E 20  
 44.64

G.L.O.MC.W.T.  
 E. side of Pt. of land.  
 Poplar 6 S58W 23  
 " 4 N82E 7  
 G.L.O.MC.W.T.  
 W. side of Pt. of Land  
 Willow 4 S60W 18  
 Ash 4 N41W 20

Beginning at corner common  
 to 4, 5, 8 & 9. running  $S88^{\circ}14'E$   
 9.77 chains to meander cor.  
 thence  $S42^{\circ}E$  1.14 chs  
 thence  $S57\frac{1}{2}^{\circ}E$  3.87 "  
 " N  $83\frac{1}{2}^{\circ}E$  4.18 "  
 " N  $82^{\circ}E$  3.34 "  
 " N  $72^{\circ}E$  4.31  
 " N  $87\frac{1}{2}^{\circ}E$  1.96  
 " N  $89^{\circ}E$  1.33 Last Pt. 7/24  
 " N 1.20  
 19.29 to N line " N  $3\frac{1}{2}^{\circ}W$  1.68 M.C.

Mag. Bear. of line from NC  $\frac{1}{16}$  to C  $\frac{1}{4}$   
 $59^{\circ}E$  Ran from NC  $\frac{1}{16}$  N  $81^{\circ}E$   
 at 18 chs. fall 19.29 ch S of NE  $\frac{1}{16}$ .  
 Move line so that 18 falls 20 chs S of NE  $\frac{1}{16}$   
 Continuing line strike lake at 37 chs.

Ran to  
 11/26 N  
 Beg. at C  $\frac{1}{4}$  ran N  $79^{\circ}E$  Hit N & S line 19.34  
 1.20 chs N of 20 ch. point. Mag. Bear.  $82^{\circ}30'$   
 Beg. at NE  $\frac{1}{16}$  ran S 20 chs to tie line  
 running E of C  $\frac{1}{4}$  wh  
 Beg. at EC  $\frac{1}{16}$  ran S  $11^{\circ}E$   
 at 20 ch. run N  $75^{\circ}E$  and fall 22.14 N of  
 sec line 9+16 at 19.56



SECTION 9

chs. Beginning at corner  $17\frac{8}{16}$  ran N.  $\frac{1}{2}$   
 40.24  $11^{\circ}45'$  to probable G.L.O. corner.  
 No corner in but found trees which  
 were evidently G.L.O. W.T. Our line  
 .39 chs. E. T  $\frac{1}{2}$   $12^{\circ}15'$ . Ran N with  
 M.B. N  $74^{\circ}5'W$ . Line falls .95 chs. E. T  $\frac{1}{2}$   $9^{\circ}05'$   
 Placed N  $\frac{1}{16}$   $8\frac{9}{16}$  47 ch. W. of line and  
 60.32 ch. from  $17\frac{8}{16}$ .

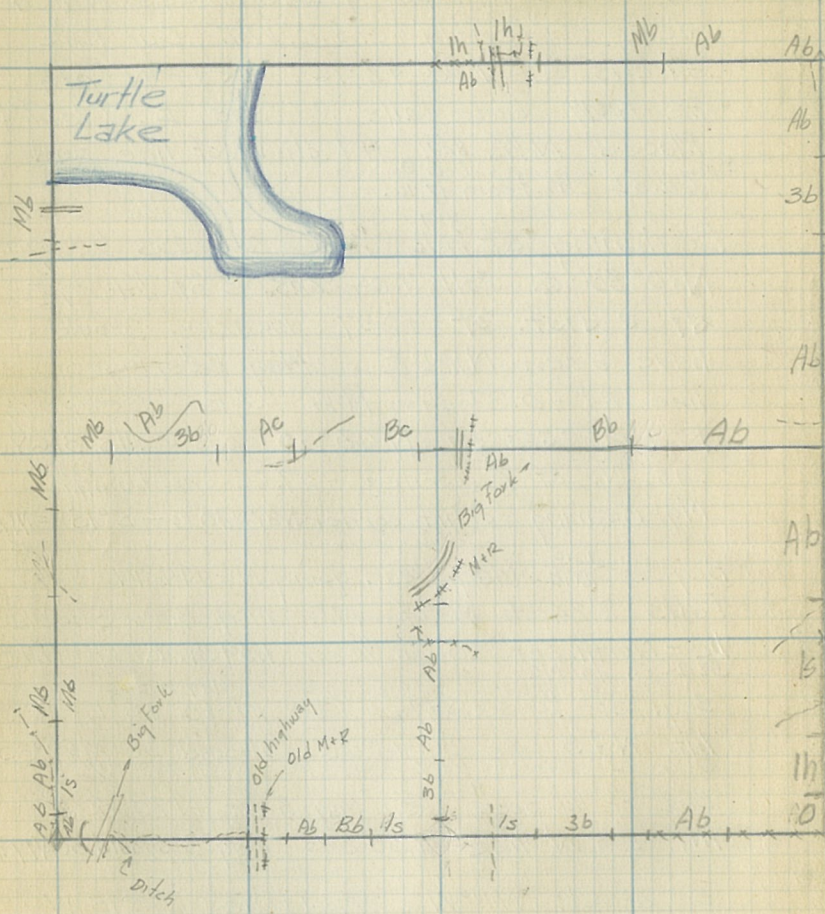
Beginning at  $17\frac{8}{16}$  ran compass bearing  
 N  $80^{\circ}30'E$ . Fall 1.04 chs. S of  $\frac{1}{4}$   $\frac{9}{16}$   
 at a dist. of 40.37. Bearing should  
 have been N  $82^{\circ}E$ . Mag. Bearing of  
 line at 40.37 chs. N  $71^{\circ}E$ . Bearing  
 to run east on N  $69^{\circ}30'E$ . Falls 3.69  
 chs. N. of Co. corner + 79.62 chs. from  $17\frac{8}{16}$   
 Mag. Bearing to hit corner N  $69^{\circ}30'E - 5^{\circ}15' = N64^{\circ}15'E$

46.5  
 11/26 N  
 Beg. at  $9\frac{10}{16}$  Mag. Bear. going N = N  $4^{\circ}W$ .  
 Falls 2.24 ch. W. of M.C. Mag. Bear. should  
 be - North. Set 20 ch:  $\frac{1}{16}$  cor 1.39 ch. E. of line  
 32.26 ch to M.C.  
 Beg. at  $\frac{1}{4}$  sec. 849. Ran N  $80^{\circ}15'E$   
 Int. N + S line 39.46 chs. Should be N  $82^{\circ}30'$   
 Beg. at  $\frac{1}{4}$  sec  $\frac{9}{16}$  Ran Mag. Bear N  $20^{\circ}30'W$   
 Int. E + W line 41.60 chs Mag. B. should be N  $19^{\circ}45'W$   
 B.S. at C  $\frac{1}{4}$  N  $11^{\circ}W$ . Should be N  $10^{\circ}15'W$   
 line falls W of M.C. 4.06 chs. at 77 chs. Should be 4.64  
 Line too far E .52 ch at 77 N  $11^{\circ}W$ .

Ran from MC at 44.64 to MC 67.03  
 fall .50 ch N of MC 67.03

SECTION 8

Sec. 8



$\frac{615}{78}$

1809

N84E

70.84

70.00  
20.08  
20.08

78° 58' E

20.08  
20.08

N54W

20.00  
20.39

718  
1817

GLONT 14 9/17  
40.01  
Tam 8545E 18  
" 4N 1W 17

$\frac{81.28}{45}$   
 $\frac{40.83}{45}$

$\frac{81.28}{12}$

$\frac{81.26}{42.08}$   
 $\frac{41.6}{20.84}$

58.00

70.84  
382W

$\frac{57030}{2008}$

20.08

20.00  
20.39

20.00  
20.32

20.00  
20.32

20.00  
20.12

20.00  
20.12

54  
89

20.00  
20.08

20.00  
20.08

20.00  
20.12

20.00  
20.12

819  
1716

N120.15'W

SEC. 8

44  
 Beg. at  $\frac{1}{4}$  cor between 8+9 ran  $580^{\circ}30'W$   
 19.92 chs. to line fence and fall south  
 0.90 ch. of <sup>fence cor.</sup> Mag. Bear. should be  $583^{\circ}W$ .

Beg. at fence cor. ran  $582^{\circ}30'W$  along  
 fence  
 Mag. Bearing should be  $581^{\circ}45'W$ .

Beg. at  $\frac{1}{4}$  cor. bet. 8+17 ran N. Mag. Bear.  $N8^{\circ}W$   
 Intersect E+W Line at 39.12

Beg. at Cor. <sup>7.8</sup> 17 ran N. Mag. Bear.  $N8^{\circ}W$ .

Line falls 0.75 ch. W of M.C. at 67.06  
 Should be Mag. Bear.  $N7^{\circ}30'W$ . Place  $\frac{1}{4}$  40.08  
 45 ch. E of line

Beg. at pt. 40.24 ch. N of  $\frac{1}{4}$  S  $8/19$  +  
 40.64 ch W of  $\frac{1}{4}$  S  $8/9$ . ran  $583^{\circ}W$ .  
 and at 81.28 ch strike line 39.81 ch N of 7.8, 17+18

Beg. at cor. S. 8, 9, 16, 17 chained W to  $\frac{1}{4}$  S  $8/17$  40.24 ch

81.28  
 40.24  
 41.04  
 20.52  
 20.52

SEC. 8

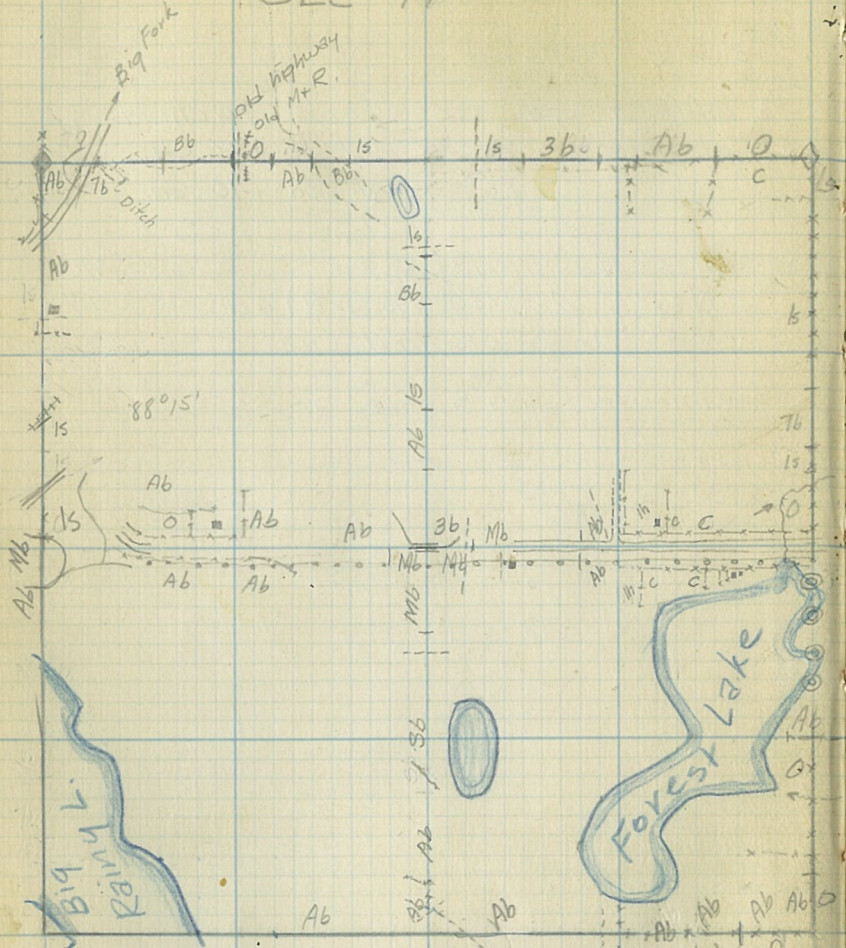
Re-run.  
 B.S. at 19.92 chs. -  $N81^{\circ}E$

Offset to fence cor. 90 ch. N.  
 Thence  $S 82^{\circ}30'W$  to 26 ch.  
 "  $S 86^{\circ}$  W to 40 ch.

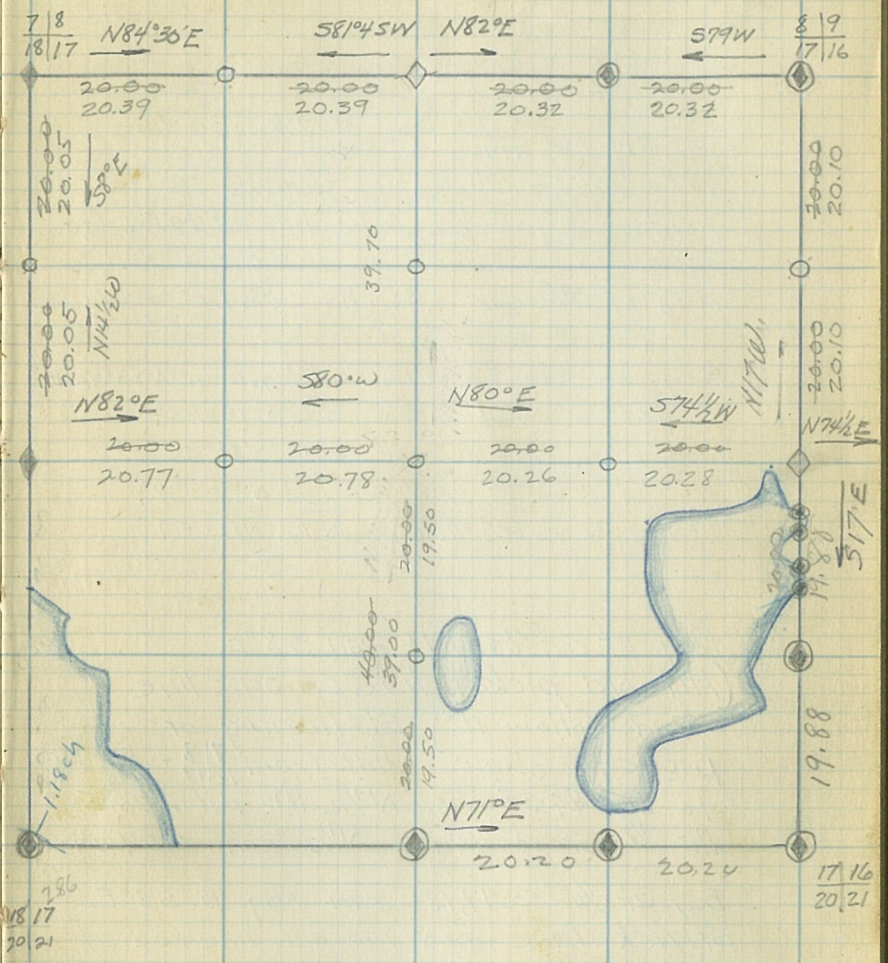
Offset 90 lks N	90
$N 82^{\circ}30'W$ ( $1^{\circ}30'$ too far N) 6 chs	.15
$N 86^{\circ}W$ ( $5^{\circ}$ too far N) 14 chs	1.22
	2.27
Intersect N+S line at 39.55	



SEC 17



G.L.O. 115+16  
Tam. 7 S77W28  
" 6 N68E 19



# SEC 17

Mag. Bear  
 Beg. at  $\frac{1}{4}$  Cor. 16/17 ran N  $17^{\circ}00'W$   
 ✓ on line made by Co. Surveyor. Hit  
 cor.  $\frac{819}{1716}$  40.20 chs.

Beg. at cor.  $\frac{819}{1716}$  ran 577W on line  
 made by Co. surveyor. Line falls  
 ✓ South of E  $\frac{1}{16}$  0.70 chs at 20.32 chs  
 continuing on same line to 40.64 fall  
 South of  $\frac{1}{4}$  cor 1.38 chs. Mag. B. should be  
 $579^{\circ}W$ .

Beg. at Cor. 7, 8, 17, 18 ran Mag. Bear. N  $83^{\circ}00'E$   
 Fall 0.57 chs N of  $\frac{1}{4}$  cor at 40.78 chs.  
 Mag. Det. should have been N  $83^{\circ}45'E$   
 ✓ (B.S. at  $\frac{1}{4}$  cor. [W] S  $81^{\circ}W$ . Should be S  $81^{\circ}45'W$ .)  
 ✓ (B.S. at  $\frac{1}{4}$  cor [E] N  $80^{\circ}E$  should be N  $82^{\circ}E$ )

Begin

Beg. at cor. 7, 8, 17, 18 ran  $58^{\circ}E$   
 (Hit old picket line on our line  
 and follow it.) Stationing of  
 pickets show dist. from  $\frac{819}{1716} + \frac{1}{4}$  17/18  
 to be 40.30 chs. N  $\frac{1}{16}$  R 17 put in 20.15  
 Hit  $\frac{1}{4}$  Cor at 40.11. N  $\frac{1}{16}$  off 0.09 chs.

Beg. at  $\frac{1}{4}$  sec 17, 18 ran Mag. B.  $58^{\circ}E$   
 Struck lake and placed line rod at  
 11.38 chs.

Beg. at  $\frac{1}{4}$  sec. 17+18 ran Mag. B. N  $82^{\circ}E$   
 Struck  $\frac{1}{4}$  sec 16+17 @ 82.09

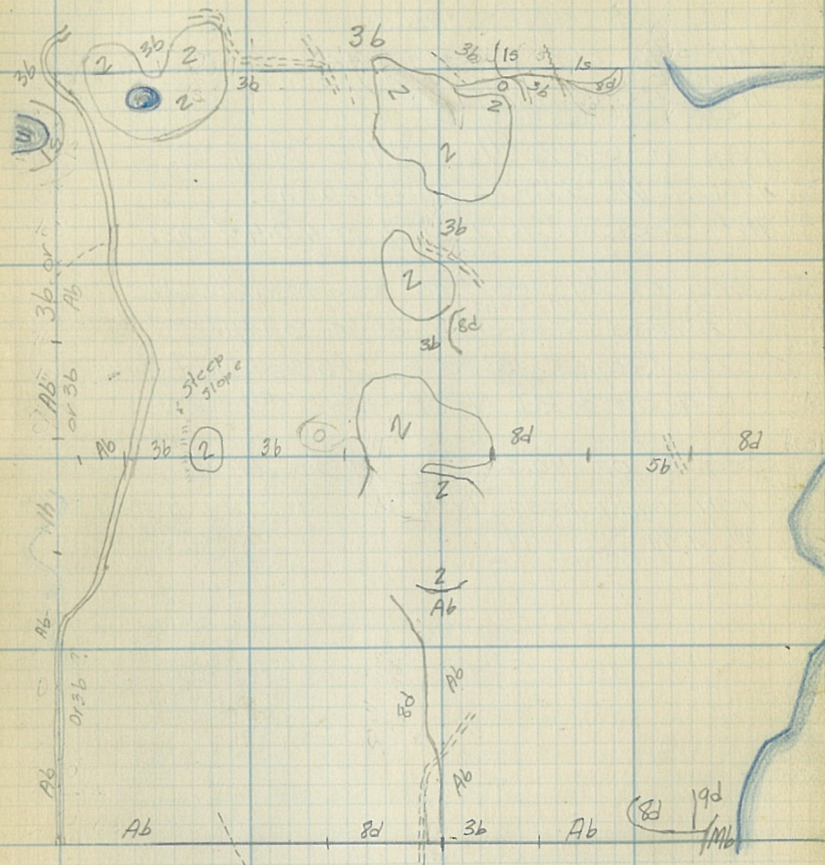
Beg. at  $\frac{1}{4}$  cor. 5 16+17 ran Mag. B. S  $15^{\circ}E$   
 Strike 2nd MC 6.73 chs.  
 " 3 MC 11.18  
 " 4 MC 13.66  
 Hit  $\frac{1}{16}$  cor at 19.90  
 Hit Sec " at 39.84

Beg. at Cor.  $\frac{1}{4}$  17/20 N  $71^{\circ}E$  Mag. B. on old line  
 Hit E  $\frac{1}{16}$  S 17+20 at 20.20 chs.  
 Hit Sec. Cor. 16, 17, 20, 21 at 40.44 chs.

Beg. at  $\frac{1}{4}$  sec  $\frac{17}{20}$  ran Mag. B. N  $22^{\circ}W$   
 Hit road <sup>at 39.00 chs.</sup> 42.80 ch. E. of  $\frac{1}{4}$  S 17/18. or 1.22 chs. E of  $\frac{1}{4}$   
 B.S. Rdg. S  $10^{\circ}30'E$ . (B.S. should be  $14^{\circ}30'$ )  
 Rdg. on  $\frac{1}{4}$  Rd. N  $80^{\circ}E$  & S  $79^{\circ}30'W$

Beg. at pt 40.50 E of  $\frac{1}{4}$  Sec. 17-18  
 ✓ ran mag. bear. N  $14^{\circ}W$ . at 39.70 ch fall 2.62  
 W of  $\frac{1}{4}$  Sec 8+17.

## Sec 12

21  
11/1219.80  
19.85

54°45'E

20.00  
20.10

N51°15'W

20.00  
20.10

N82°45'E

20.06

20.00  
19.96

N13°W

20.00  
19.96

20.025

11/12  
14/13

## Sec 12

T99R20

21  
11/1219.80  
19.85

54°45'E

20.00  
20.10

N51°15'W

20.00  
20.10

N82°45'E

20.06

20.00  
19.96

N13°W

20.00  
19.96

20.025

11/12  
14/1319.80  
19.85

20.05

19.80

N95°6'W

20.02

19.70

N56°8'S

20.00

20.00

20.025

20.025

64.00

116  
127

79.20

38.68

28.05

20.24

19.25

12/7  
13/18

Sec. 12

Beg. at Sec. Cor.  $\frac{11}{12}$  ran N on old  
 Co. Survey line M.B. N 14° 45' W  
 39.92 Fall 113 ch. W of  $\frac{1}{4}$  Cor S 11 & 12  
 Offset to  $\frac{1}{4}$  cor. and run North M.B. N 8° 30' W  
 1° 40' E of Co. Survey projected.  
 40.19 Fall .57 ch W of S. Cor  $\frac{21}{12}$   
 Mag. Bear. N 16° W.  
 39.92 Mag. Bear. should be N 7° 20' W

Sec. 12 TS 4 R 26

Beg. at  $\frac{1}{4}$  S 11 & 12 ran Mag. Bear. N 82° 30' E  
 (this line 90° from true line between  $\frac{1}{4}$  S 11 & 12  
 and Sec. Cor. 12, 11, 12 or 90° 50' from cut line)  
 23.40 Mag. B. = N 81° 30' E  
 70.00 " " N 81° 15' E  
 40.12 Fall .20 ch N of old Co. Cor.  
 79.74 Fall 0.60 ch N of  $\frac{1}{4}$  S 12-7

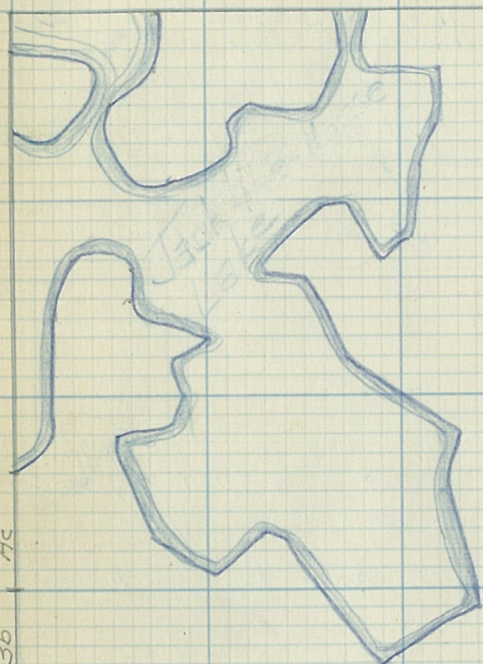
Beg. at Sec. Cor  $\frac{21}{12}$  ran E at an  
 angle of 89° 10' from our line from  $\frac{1}{4}$  S 11 & 12  
 (90° E. of true line bet.  $\frac{1}{4}$  S 11 & 12 & Sec. Cor 12, 11, 12)  
 Mag. Bear. N 74° 45' E

20.00 Mag. Bear N 87° 30' E  
 42.60 " " N 84° E  
 63.8 Strike Lake

Beg. at C  $\frac{1}{4}$  S 12 ran N. at an angle  
 of 90° 15' on a B.S. to  $\frac{1}{4}$  S 11 & 12. M. Bear. N 8° 30' W  
 40.02 Strike our line 40.18 E of  $\frac{21}{12}$ .  
 Beg. at C  $\frac{1}{4}$  S 12 ran S Mag. Bear. S 8° 30' E.

14.23 Swing 0° 37' W to miss tree N. Pine  
 16.06 " 0° 22' " of line  
 19.28 " 0° 38' E " " (A lks W. of line at 19.28  
 20.86 " 0° 00' " " (2 " W. " " at 20.86  
 26.20 " 1° 06' E " "  
 26.60 About 15 lks W of old N. Pine line trees.  
 27.40 Swing 0° 00' to original line.  
 40.43 Strike our line 39.40 ch E of  $\frac{11}{12}$

Sec 10



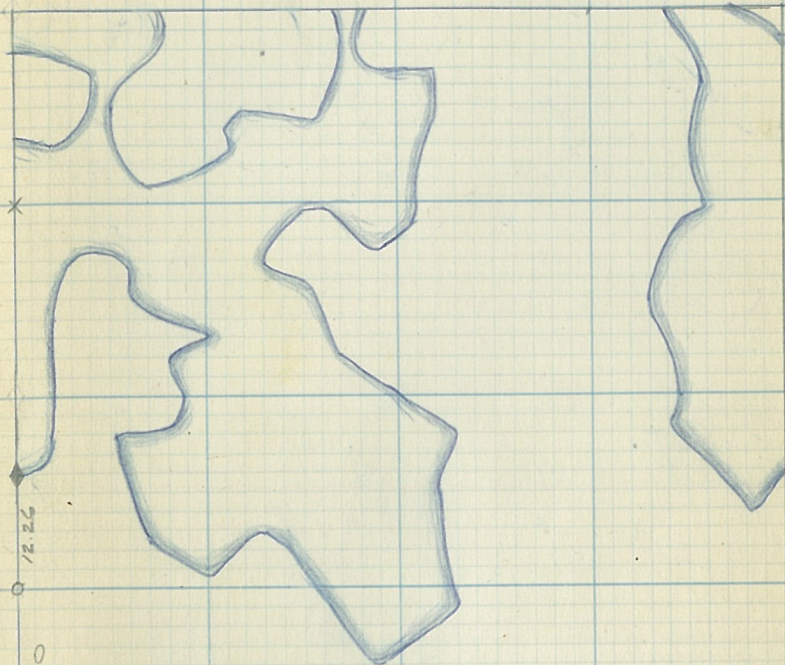
Ac

36

76 Ac

Sec 10

59.26



12.26

20.00

Sec. 10

Sec. 10 39-26

Beq. at S. Cor.  $\frac{3}{10}$  ran So + strike  
Lake + M.C. at 2.97 chs.

Sec. 7



Sec. 7

59-26



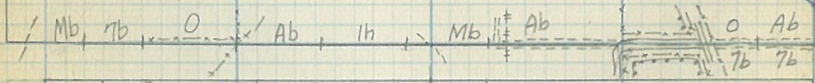
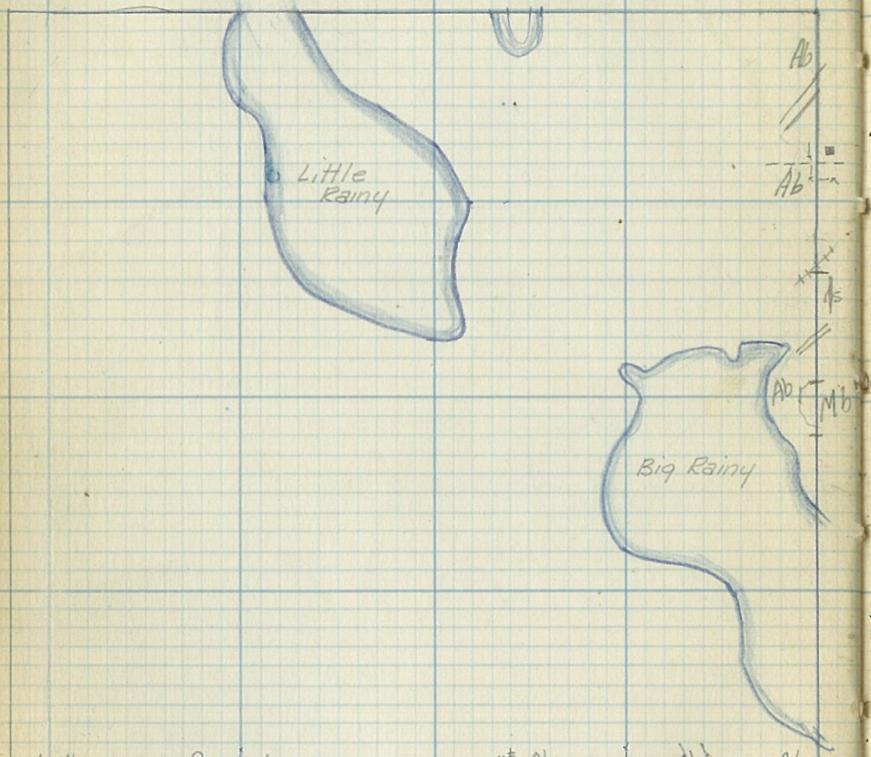
Sec. 7

Beq. at 7, 8, 17 & 18 ran Mag. B. S84W  
20.61 Struck fence

Sec. 7



Sec. 18

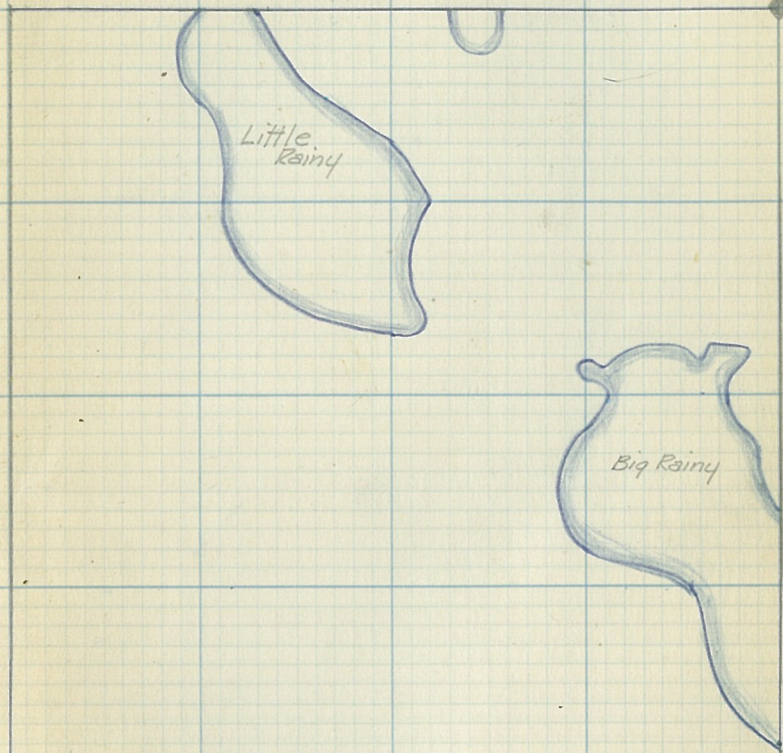


Cor.	Bearing trees				Cor.	Bearing trees			
	Spec.	D.B.H.	Bear.	Dist.		Spec.	D.B.H.	Bear.	Dist.

Sec. 18

63

59-26

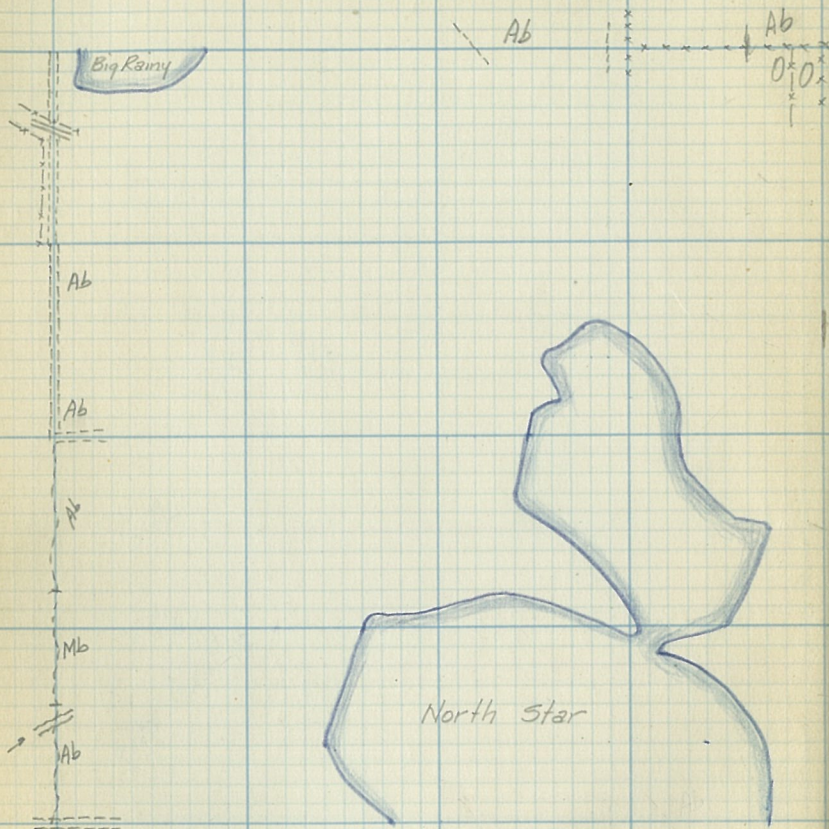


64

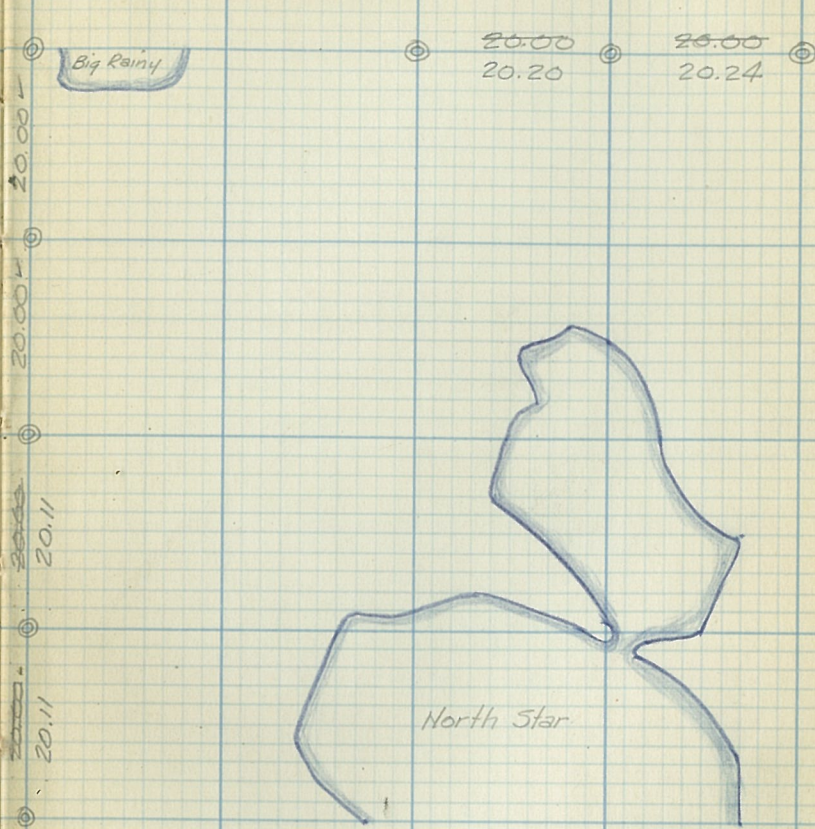
Beq. at  $\frac{1}{4}$  between 17 & 18  
ran Mag. Bear.  $582^{\circ}W$  struck  
lake at 5.70 chs. put stake 5.60 chs.

65

Sec 20

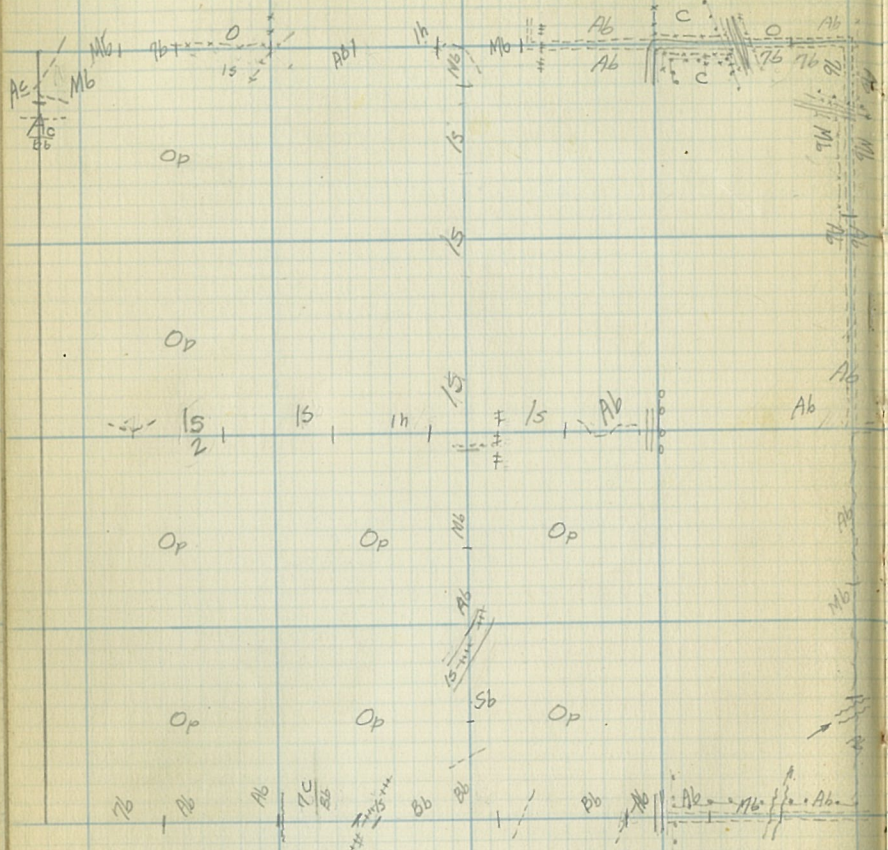


Sec 20



25.00	25.00
20.20	20.24

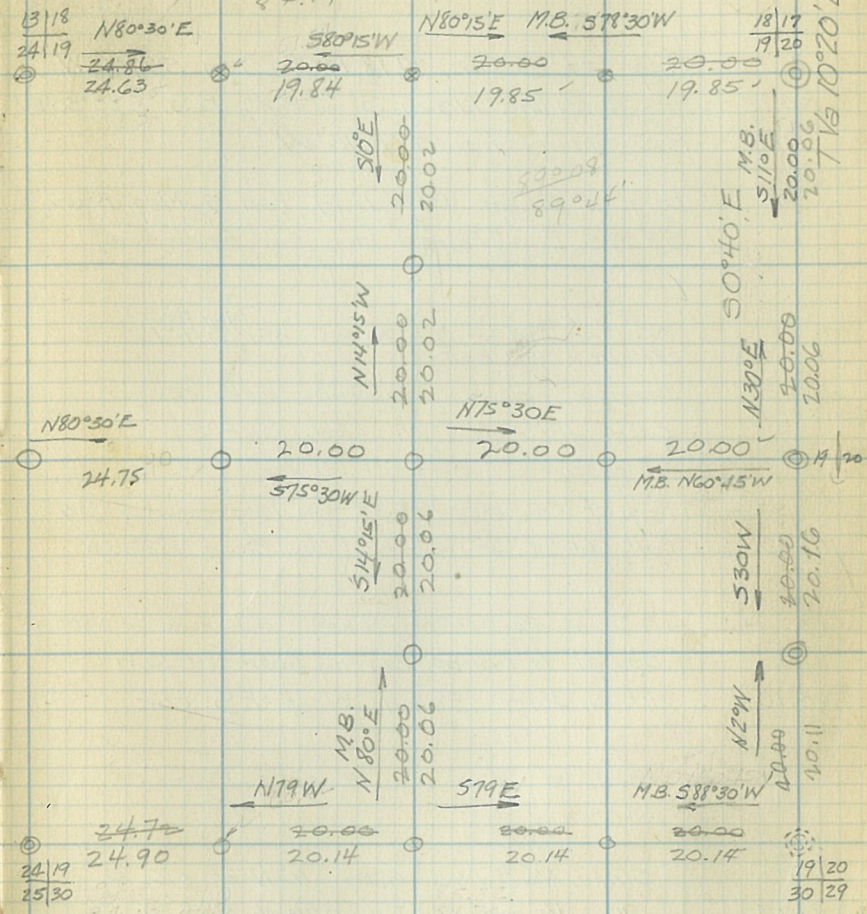
SEC 19



Bearing trees				Bearing trees					
Cor	Spec	DBH	Bear	Dist	Cor	Spec	DBH	Bear	Dist
24.19	B. Spruce	4	N40W	0.52					
25.30	B. "	5	S49W	0.71					
	"	5	N31E	0.46					
13.18	Sp. Stump	10	N4W	0.52					
24.19	Aspen	12	S58E	0.52					
	Sp. Stump	8	N52E	0.78					

39.70 ✓  
 22.24 ✓  
 61.94 ✓  
 22.25 ✓  
 54.19 ✓

Sec 19 *TSA 1926*



31.19 30 1/2 s.  
 32 115 = 56 lbs of ...  
 37

## Sec 19

84.19 Beg. at S. Cor. 17, 18, 19 + 20 ran  $577^{\circ}45'N$   
 hits range line 1.18 ch. S of cor. B.S.  $580^{\circ}30'W$   
 B.S. should be  $581^{\circ}15'W$ .

Beg. at S. Cor. 13, 24, 18, 19. ran S. Mag. Bear.  
 $58^{\circ}45'E$  (Found line had been run)

60.28 Beg. at S. Cor. 17, 18, 19, 20 ran <sup>(Mag. Bear)</sup>  $511^{\circ}E$   
 Struck  $1/16$  cor.

80.39 Struck rd. + probable sec. corner.  
 Backsight -  $N2^{\circ}W$ . (Rd.  $N88^{\circ}E$ )

85.32 Beg. at Cor. 19, 20, 29, 30 ran Mag. Bear  $588^{\circ}W$   
 Fall .64 S of corner. Mag. Bear.  $588^{\circ}30'W$

B.S. at  $1/4$  519, 30  $N80^{\circ}E$  B.S. should be  $N80^{\circ}30'E$

80.16 Beg. at  $1/4$  S. 19-30 Ran Mag. Bear  $N9^{\circ}15'W$   
 Hit N. line .38 ch. W of F.S. cor.

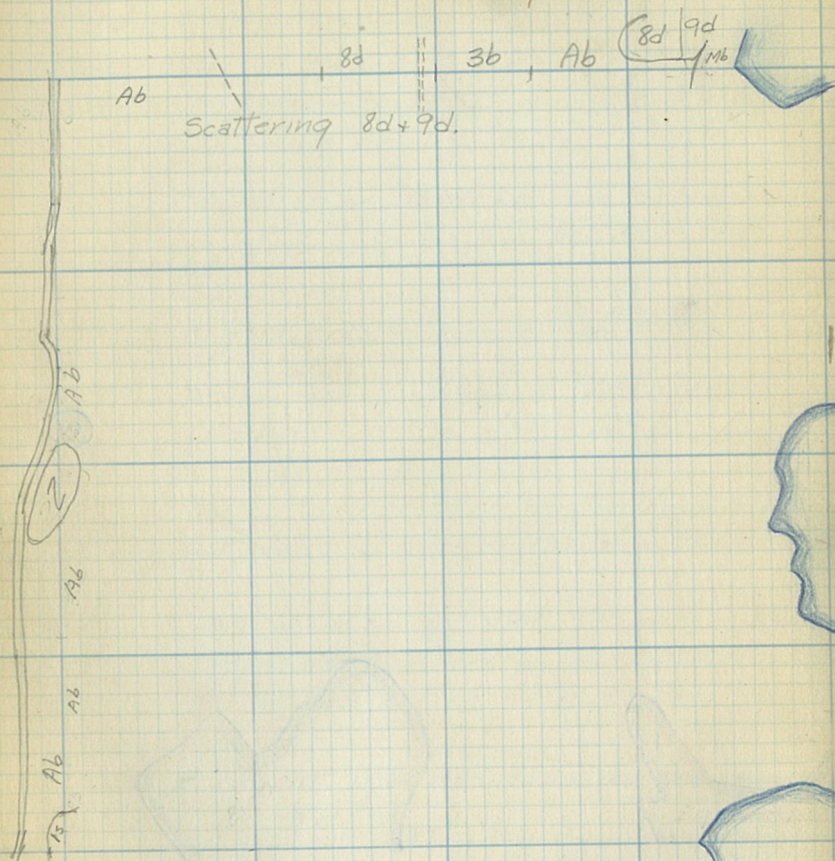
Beg. at  $1/4$  cor. Sec 19 + 20 ran Mag. Bear  
 $560^{\circ}30'W$ .

40.12 Strike N&S line 0.20 ch. N of  $C1/4$  19

84.75 "  $1/4$  cor 19 + 24 0.23 ch. N of Approx. Cor.

## Sec 19

T59R26



11 | 12  
14 | 13  
20.05  
V<sub>3</sub> 10°30'E

20.00  
20.08

20.00  
20.07

20.00  
20.07

20.00  
20.07

14 | 13  
23 | 24

N 10°5'E  
M.B.

19.81

19.81

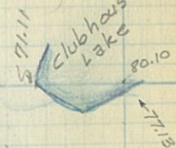
19.81

40.05

40.05

T 59 R 26

12 | 7  
13 | 18



44.60

22.50

53.60

5.65

79.25  
13 | 18  
24 | 19

## Sec. 13

Beq. at Sec. Cor. <sup>12/13</sup> 23/24 ran Mag. Bear  
N 7° 30' W

82.58 Strike Co. Survey line 67.05 ch E of <sup>10/11</sup> 15/14  
Void - Peran.

Beq. at Sec. Cor. <sup>14/13</sup> 23/24 ran Mag. Bear  
N 1° 30' E Course N 0° 51' W T<sub>1/2</sub> N 1° 15' E

64.75 Swing 1° 06' W to hit cor. Course N 1° 57' W

80.29 Strike cor. <sup>11/12</sup> 14/13  $15.54 \times .0192 = .30$  lks East.  
True Bearing should be N 1° 04' W. M.B.

Beq. at <sup>11/12</sup> 14/13 ran East (Mag. Bear. N 79° 30' E)

64 Mag. Bear N 49° 30' W

70.91 Struck Lake.

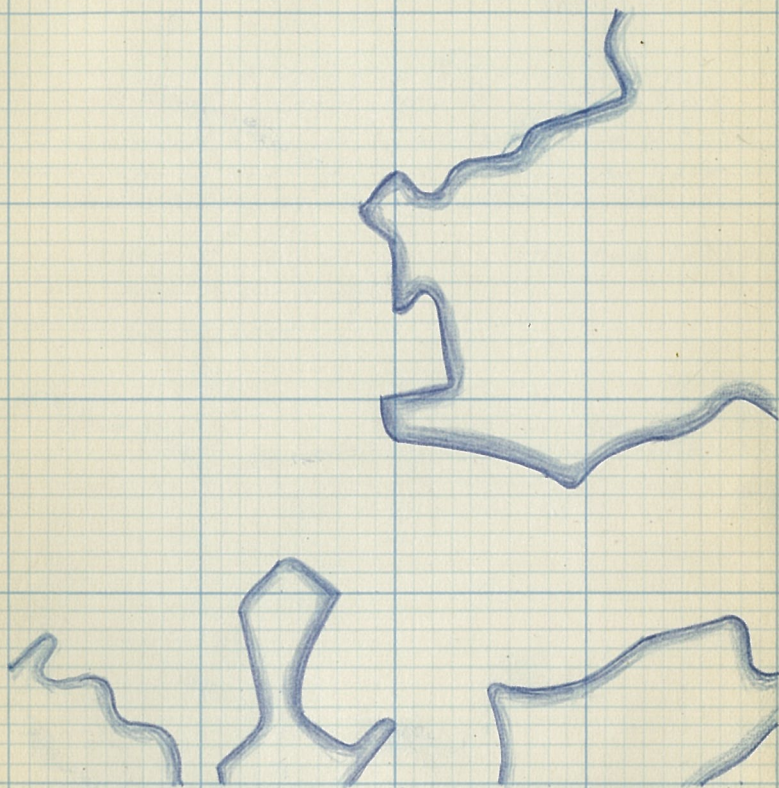
North on Co. Survey line from <sup>11/12</sup> 14/13. M. Bear N 14° 45' W

## Sec. 13

Approx Angle between our line  
going east and Co. line going North  
= 93° 10'

T-59826

Sec 24

Nearly  
all pur. or opt.

Sec. 24

59-26

19.81

19.81

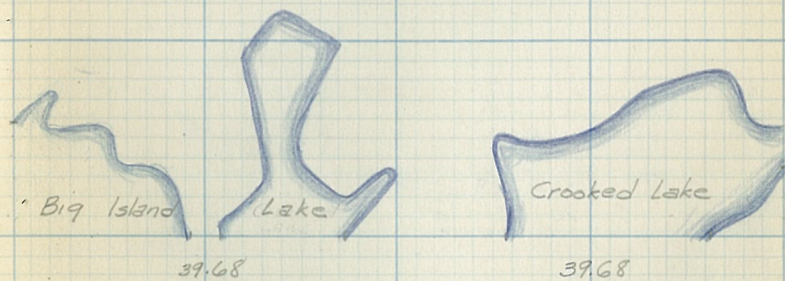
19.81

19.81

20.00

20.00

20.00

Three  
Island  
Lake

Big Island

Lake

Crooked Lake

39.68

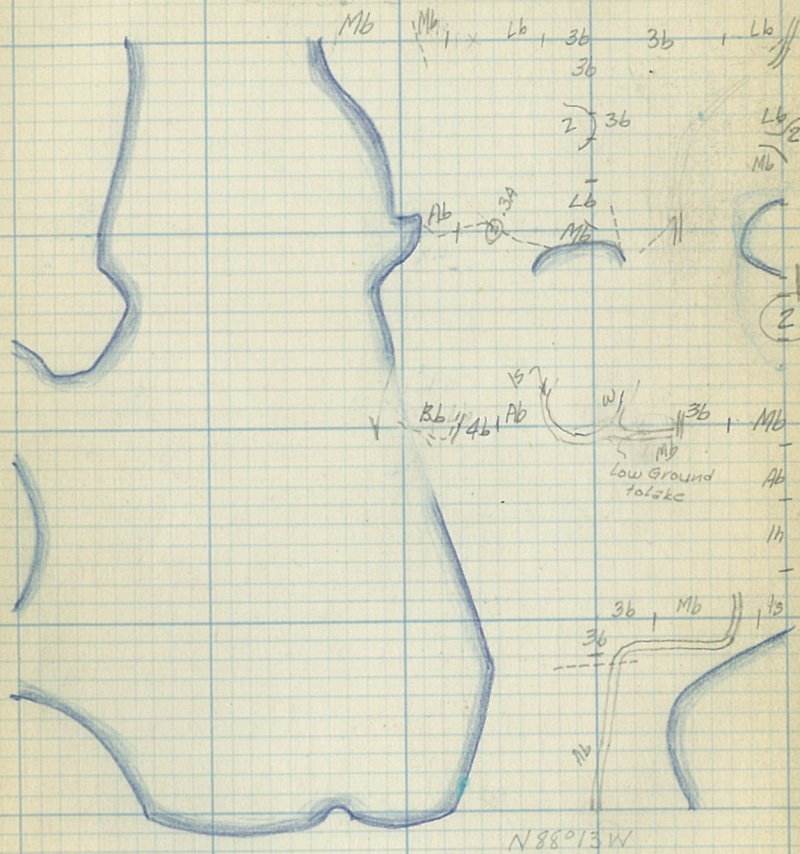
39.68



Sec. 24

Sec. 24

## Sec 4

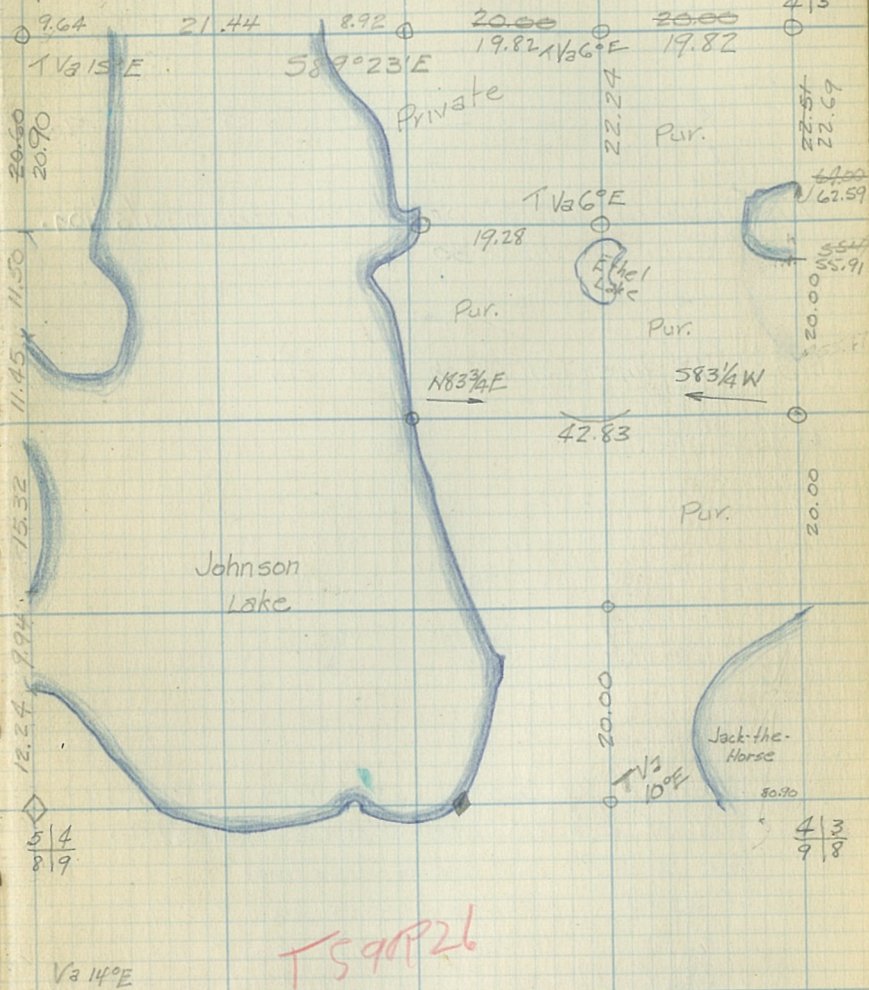


## Sec. 4

0.179  
4

32|33  
5|4

33|34  
7|3



## Sec. 4

Beq. at W 1/4 S4+9 ran N. T/Va 8°30'E  
40.00 Ran N 88°13'W. T/Va 10°E

North line between S 3+4. Beq.  
at M.C.

19.75 North shore of lake by triangulation.  
Course N 0°30'E.

81.73 Hit line 81.73 ch E of  $\frac{32}{54}$

Beq at 1/4 S 3+4 ran M.B. S 80° 3/4 W  
and at 43.84 strike lake (At 41.90  
line is 0°47' N of line to miss tree)

At 43.84 sighting across lake to 1/4 S 4+5  
L is 5° 02' N to cor. Dist about 36.4 chs

Void Re-run Line 2°18' N, M.B. S 83 1/4 W

T99R26

## Sec 4

Beq at Cor  $\frac{31}{65}$  ran E to Bevo lake  
and fall 1.25 ch. S. of M.C. which accord-  
ing to old G.L.O. notes was 49.00 chs. E. of  $\frac{33}{45}$  or 208.00 ch E of  $\frac{31}{65}$

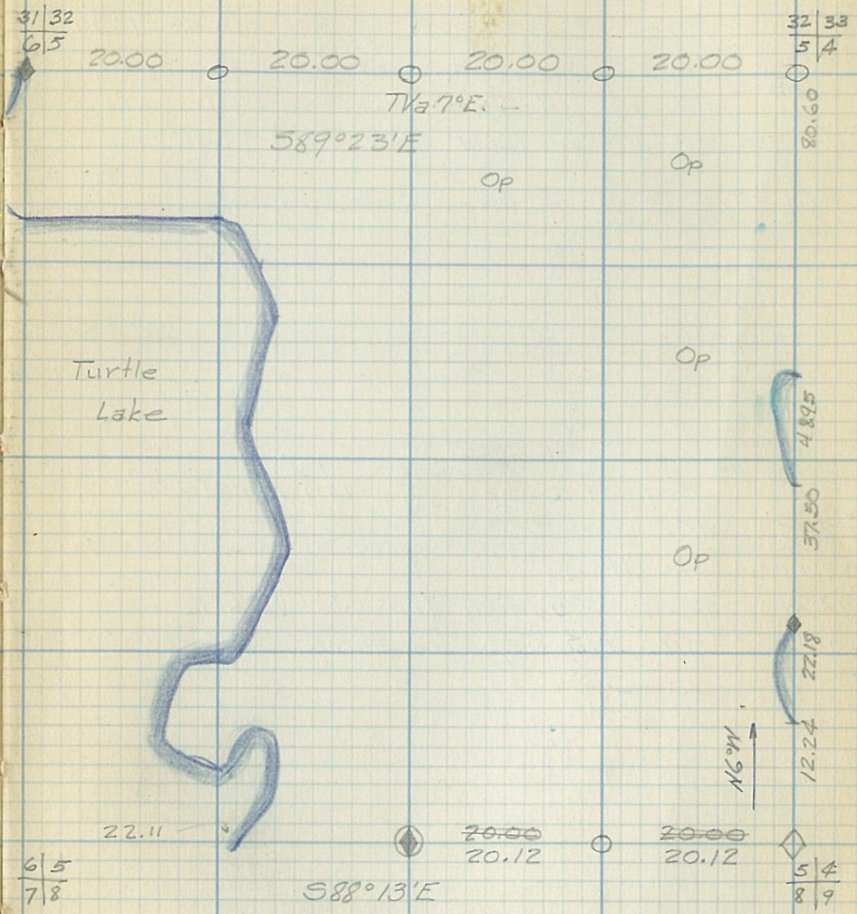
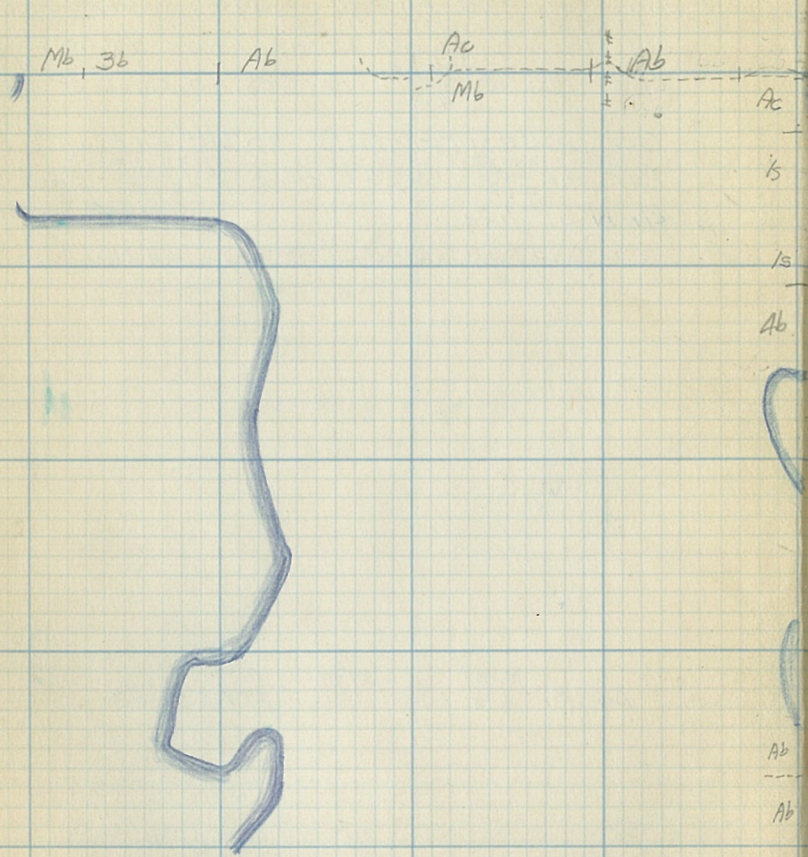
Our measurements 207.44 ch E of  $\frac{31}{65}$   
Put cor  $\frac{33}{45}$  159.57 ch E of  $\frac{31}{65}$  and .96  
ch. N. of line.

E 1/4 139.65 and  $3/4 \times 90 = .67$  ch N. of line

32	125
96	96
96	96
13	9 30
109	
30	30 x $\frac{20}{49}$
150	12
15	49/200
10	49
	100

Dist.  $\frac{30}{65}$  to  $\frac{35}{21}$  319.65 ch.

Sec. 5



## Sec. 5

Beq. at approx  $\frac{1}{4}$  S S, 32 ran  $N89^{\circ}24'W$   
Struck Sec. Cor.

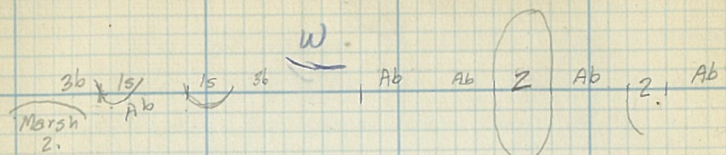
Beq. at approx  $\frac{1}{4}$  S S, 32 ran  $S89^{\circ}36'E$   
92.42 Struck lake (No corners found. Follows  
18.03 old rd. on approx. Town Line. Also old  
blazed line found near lake)

110.45 E. edge of lake (Triangulation)

Beq. at S. Cor  $\frac{54}{89}$  ran  $N6^{\circ}W(M.B.)$   
22.25 M.C.  
37.50 Lake (M.C.)  
48.84 Shore. Running True N  $\frac{1}{2}$   $6^{\circ}E$   
80.91 Hit F.S. Sec. Cor exact.

## Sec. 5

99-26



10	11
15	14

80.13

11	12
12	13

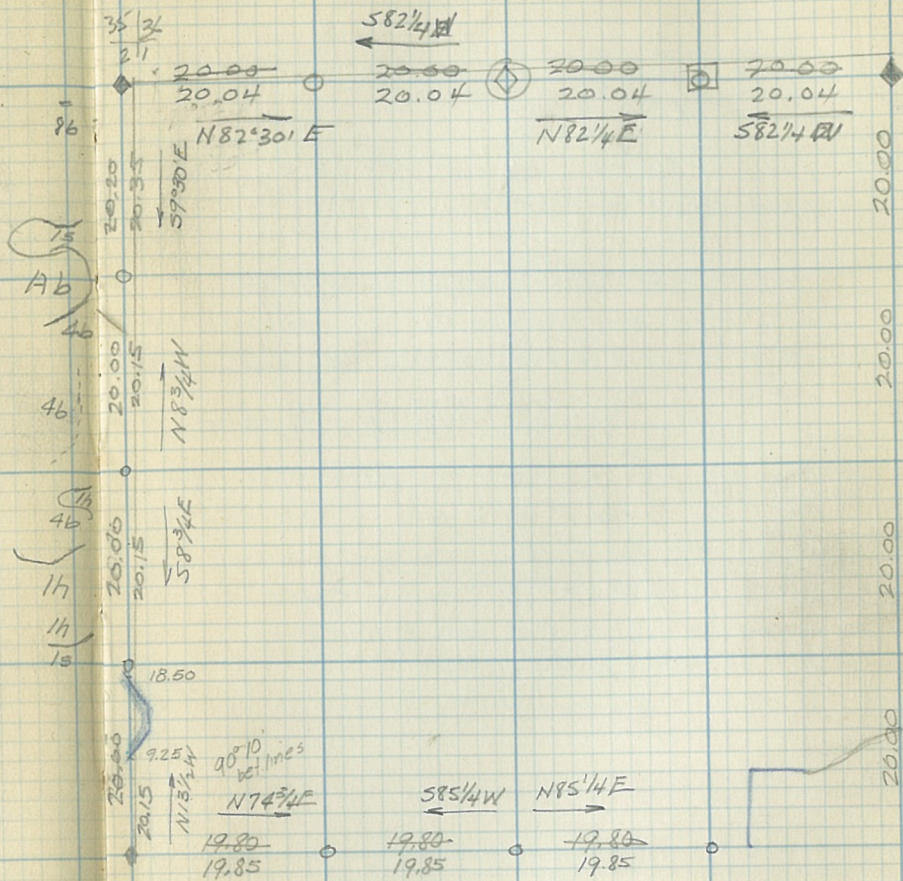
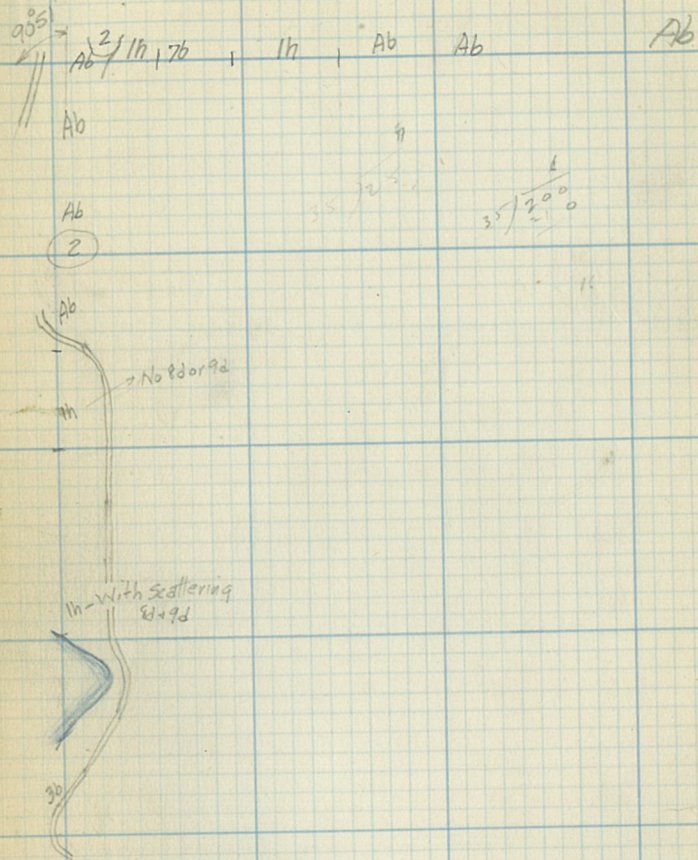
## Sec. 14

Beg. at Sec. Cor.

80.13

Fall 2.05 ch. N of Sec. Cor.  $\frac{1112}{1413}$ 

## Sec. 14





## Sec 1

Beq. at Sec. Cor.  $\frac{211}{1112}$  ran north (true)  
Mag. Bear. -  $N14\frac{3}{4}W$

5.60 Mag. Bear.  $N20^{\circ}W$   
10.00 Strike Lake (our line probably a little E of true line)  
20.00 N. Shore by Triangulation  
28 M. Bear. of line  $N10^{\circ}W$   
50.00 " " "  $N9^{\circ}W$

80.80 Fall 1.30 ch E of cor  $\frac{3536}{211}$  B.S. on line  $S80^{\circ}30'E$   
Line should be  $0^{\circ}51'W$ .

Beq. at Sec. Cor.  $\frac{3536}{211}$  ran at an angle of  
 $89^{\circ}09'$  with B.S. on our line bet. 1+2 + M.B.  $581^{\circ}W$   
At 72 swing 15' N to Miss w. Pine. 74 parallel to line  
At 80.16 Fall 2.16 ch N of cor.  
 $E11\frac{1}{2}$   $S13\frac{1}{2}$   $N80^{\circ}14'E$   $14 N80^{\circ}14'E$   $11\frac{1}{2}$  same

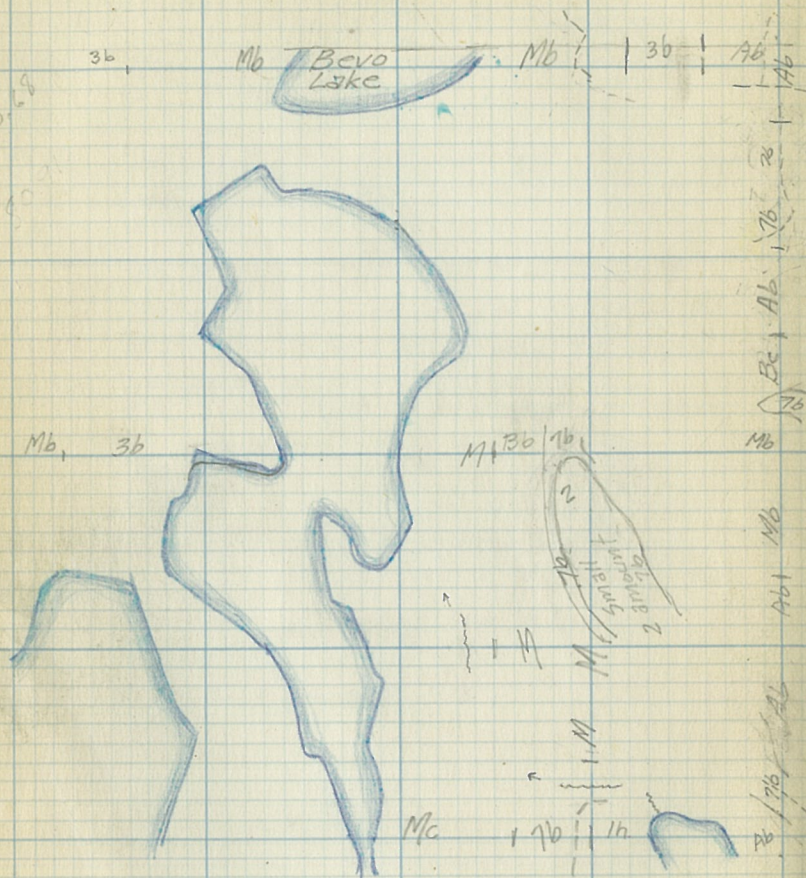
Beq. at  $\frac{36130}{116}$  ran  $S90^{\circ}$  with our line  
Mag. B.  $S9\frac{1}{4}E$  at 40 ch fall 1.62 ch  
W of  $1/4$  cor stake which is scribed. No B.T.  
M.B. should be  $511\frac{1}{2}E$ . Make an  
angle of  $2^{\circ}19'$  E of line to this point.

B.S. on line N to S. Cor.  $N13^{\circ}W$

39.86  $1/4$  M.B. of new line  $S15^{\circ}E$

Beq. at Sec. Cor.  $\frac{3536}{211}$  ran E at an L  
of  $90^{\circ}35'$  with our line bet 1+2.  
Mag. Bear -  $N80^{\circ}30'E$

## Sec 3



33 34 N81°45'E  
8.3 20.00  
19.90

S77°4'E

N7°30'W

N81°E

N8W

20.00  
S77½W

20.00

4 3  
9 10

40.45

## Sec 3

S81°W 34 35  
20.00 5 2  
20.06

S9°15'W

22.52

N8°45'W

20.00

S81°15'W

20.00

S8°45'E

S81°W  
25.40 to M.C.

N12°15'W

S77½W

20.28

3 3  
10 11

81.11

Beq. at M.C., which according  
to G.L.O. notes is 15.90 chs

E of  $\frac{4}{10}$ , ran Mag. Bear N $82^{\circ}15'E$ .

32.54 Fall 0.57 ch S of M.C.  $1^{\circ}57'$  too far S.

37.32 Pt on E shore

60.69 Reach Corner ( $\frac{1}{16}$ ) which is 19.08 chs  
from Sec Cor. 2, 3, 10, 11.

66.34 Strike M.C.

Beq. at Sec Cor  $\frac{3}{12}$  ran Mag. Bear  $577^{\circ}1/2'W$

and at 5.14 strike lake

T 99 R 26

62

38

Line going E. from  $\frac{3}{12}$  Mag. Bear. N $78^{\circ}E$

Beq. at  $\frac{3}{12}$  ran Mag. Bear. N $16^{\circ}1/2'W$   
44 Offset 1.74 ch N + angle  $2^{\circ}10'E$  of  
line from Cor.

81.82 Strike line 83.40 ch W of  $\frac{35}{211}$

83.40 Strike line ran east from M.C. at  
28.73 chs. from M.C. Void

Rerun above line making an  
angle of  $4^{\circ}25'E$  of above line N $12^{\circ}W$

82.52 Fall 0.39 ch W of cor  $\frac{31}{312}$  B.S.  $59^{\circ}30'E$

Beq. at  $\frac{1}{4}$  S2+3 ran  $90^{\circ}W$  of true N+S line  
or  $88^{\circ}45'$  from N pt of our line.

Mag. B.  $580^{\circ}W$  (47 ch. S of est. cor.)

38.30 Line is  $1^{\circ}00'N$  of true line to lake

40.60 Strike lake. 40.72 Cedar leaning over lake  
33.45 W shore 53.65 line stake M.B. 382W

Beq. at W.C.  $\frac{1}{16}$  ran S Mag. Bear  $310^{\circ}15'E$

39.85 Fall .20 ch E of E  $\frac{1}{16}$  53+10 B.S. on line

19.92 B.S. N $10^{\circ}15'W$  N $11^{\circ}30'W$

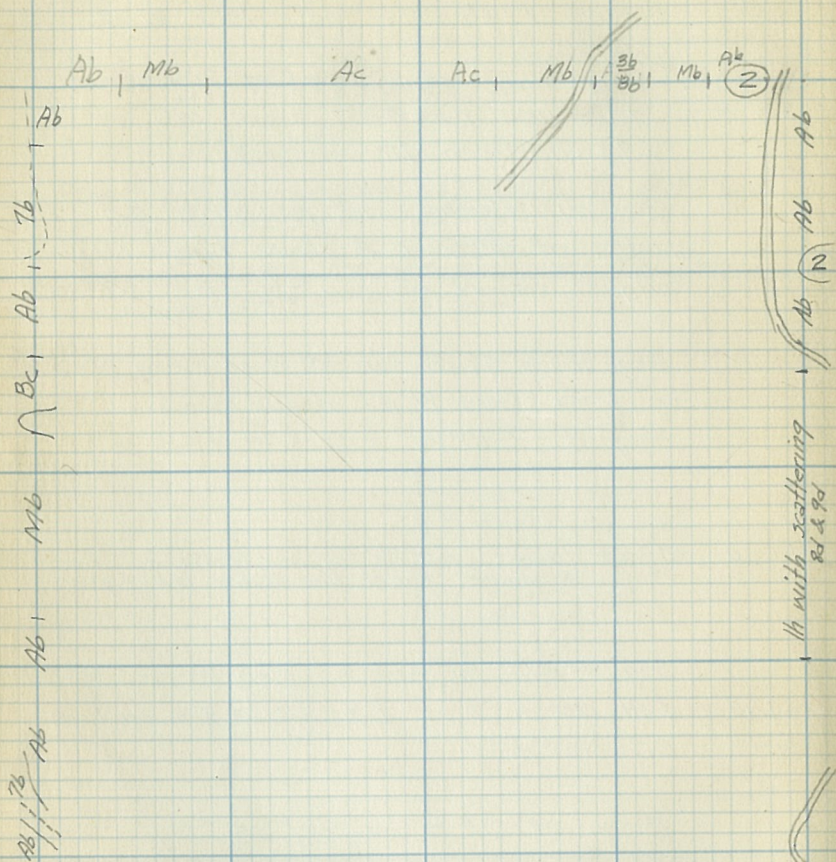
Beq. at SE  $\frac{1}{16}$  ran W at angle of  
 $88^{\circ}45'W$  of our brushed N line

Mag. Bear.  $580^{\circ}W$

25.40 Strike lake B.S. N $80^{\circ}E$

96

Sec 2

34 | 35  
3 | 2

N84E

20.00

20.00

20.00

20.00

80.00  
80.1535 | 36  
583W | 2120.20  
20.3520.00  
20.1520.00  
20.1520.00  
20.153 | 2  
10 | 112 | 1  
11 | 12

Sec. 2

94-26

97

98

## Sec 2.

Req. at  $\frac{35.36}{211}$  ran M.B.  $581^{\circ}W$   
and  $89^{\circ}09'$  with our line bet. 1 & 2

21.5 Swing  $1^{\circ}30'$  North of line to follow  
old blazed line which is 15 pcs. N.

M.B. of F.S. =  $582\frac{1}{2}W$

83.40 Strike N & S line 81.32 ch. N of S Cor  
Est. cor 80.15 ch W of  $\frac{35.36}{211}$  and 1.28  
ch N line at this pt.

Mag. Bear should be  $582^{\circ}15'W$ .

99

114

On picket line bet 58+17,  
 31 $\frac{3}{4}$  ch E of S. Cor Dev. line 7°30'  
 on old trail then N70°W 1 ch  
 then N80 W 1.0 ch (sharp slope to  
 right.) N45 W 2.85 ch. thence S32W  
 1.17 chs. (At the end of N65W 2.95 ch.  
 strike opening which was old R.R. yard.  
 then S32W 1.17 to other road. Then  
 S56°E 2.03 ch to line.

115

116



$$D = 50^{\circ}45' + 16'$$

$$h = 28^{\circ}20' + 16' + \dots$$

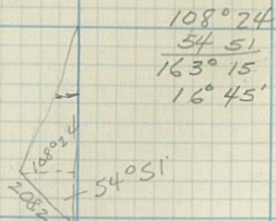
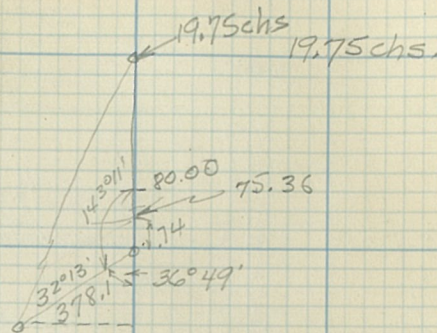


117

$$\frac{160}{207.44} \times .56 = .43$$

$$\begin{array}{r} 2.20412 \\ 9.74819 \\ \hline 3.95231 \\ 2.31689 \\ \hline 9.83542 \end{array}$$

$$\begin{array}{r} 2.20412 \\ .09589 \\ \hline 2.30001 \\ 2.31689 \\ \hline 1.98312 \end{array}$$



$$\begin{array}{r} \log 208.2 = 2.31848 \\ L \sin 54^{\circ}51' = 9.91257 \\ \hline 2.23105 \\ - \log \tan 16^{\circ}45' = 9.47852 \\ \hline \log 565.6 = 2.75253 \end{array}$$

$$\begin{array}{r} \log 208.2 = 2.31848 \\ L \cos 54^{\circ}51' = 9.76021 \\ \hline 101.8 \quad 2.07869 \end{array}$$

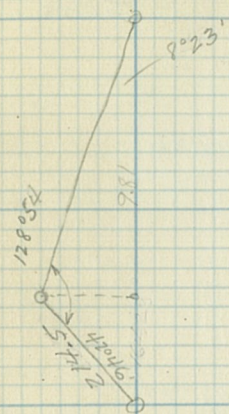
$$\begin{array}{r} 5.66 \\ 1.02 \\ \hline 6.69 \end{array}$$

$$\begin{array}{r} 55.91 \\ 1.59 \\ \hline 2.59 \end{array}$$

118

$$\begin{array}{r} 48.95 \\ 37.50 \\ \hline 11.45 \end{array}$$

$$\begin{array}{r} 11.45 \\ 1.64 \\ \hline 9.81 \end{array}$$

$$\begin{array}{r} 8^{\circ}48' \\ 46^{\circ}46' \\ 55\ 34 \\ \hline 124\ 26 \end{array}$$


$$\begin{array}{l} \log 223.7 = 2.34967 \\ \log \sin 42^{\circ}46' = 9.83188 \\ \hline 2.18155 \end{array}$$

$$\begin{array}{l} \log 223.7 = 2.34967 \\ \log \cos 42^{\circ}46' = 9.86577 \\ \hline 2.21544 \end{array}$$

$$\begin{array}{l} \log 2.18155 \\ \log 2.99167 \\ \hline 9.18988 \end{array}$$

$$\begin{array}{l} \log 214.5 = 2.33143 \\ \log \sin 42^{\circ}46' = 9.83188 \\ \hline 2.16331 \end{array}$$

$$\begin{array}{l} \log 214.5 = 2.33143 \\ \log \cos 42^{\circ}46' = 9.83188 \\ \hline 2.16331 \end{array}$$

$$\begin{array}{l} \log 1.46 \\ \log \tan 8^{\circ}23' = 9.16941 \\ \hline 2.99490 \end{array}$$

$$\begin{array}{r} 12.8054 \\ 11.40 \\ \hline 1.4054 \end{array}$$

$$\begin{array}{r} 1.46 \\ 9.88 \\ \hline 11.34 \end{array}$$

$$\begin{array}{r} 37.50 \\ 11.34 \\ \hline 48.84 \end{array}$$

119

$$\begin{array}{r} 99915 \\ 22 \\ \hline 199830 \\ 19983 \\ \hline 219830 \end{array}$$

$$\begin{array}{r} 58 \\ 374.4 \\ \hline 24016 \end{array}$$

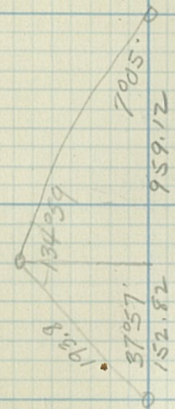
$$\begin{array}{r} 374.4 \\ 18.03 \\ \hline 392.43 \\ 9.31743 \\ \hline 1.25591 \end{array}$$

$$\begin{array}{r} 31.08 \\ 9.64 \\ \hline 21.44 \end{array}$$

$$\begin{array}{r} 12.42 \\ 18.03 \\ \hline 20.45 \end{array}$$

$$\begin{array}{r} 7^{\circ}05' \\ 134^{\circ}59' \\ 37^{\circ}57' \\ \hline 190^{\circ}01' \end{array}$$

$$\begin{array}{r} 959.12 \\ 152.82 \\ \hline 11.1194 \end{array}$$

$$\begin{array}{r} 11.15 \\ 11.12 \\ \hline 22.27 \end{array}$$


$$193.8 \times \sin 37^{\circ}57'$$

$$\begin{array}{l} \log 193.8 = 2.28735 \\ \log \sin 37^{\circ}57' = 9.78886 \\ \hline 2.07621 \end{array}$$

$$\begin{array}{l} \log 193.8 = 2.28735 \\ \log \cos 37^{\circ}57' = 9.89683 \\ \hline 152.82 \quad 2.18418 \end{array}$$

$$\begin{array}{l} 2.07621 \\ \log \tan 7^{\circ}05' = 9.09434 \\ \hline 959.12 \quad 2.98187 \end{array}$$





55. 117 S. of Cor.

157° 51'  
 158° 07' E W  
 158° 37'  
 14

1.17  
 38.83

158° 15'  
 30

going W

log 1.17 = .06819

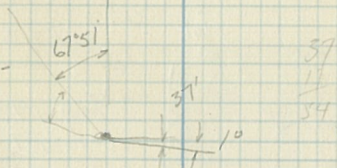
" 38.83 = 1.58917

1° 41' 8.47902

157° 04'  
 1° 41'  
 158° 45'

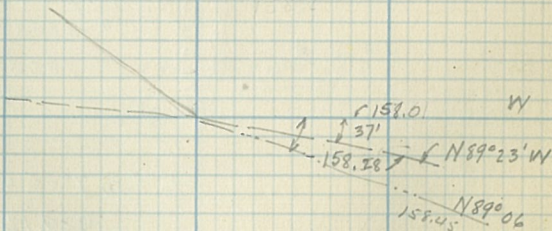
S

67° 51' Ar.  
 90  
 157° 51' E W  
 37  
 158° 29'



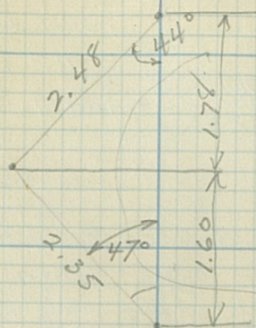
N 89° 47' W

158° 15' going E



N

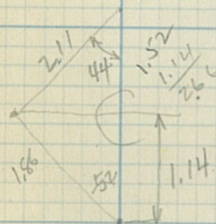
3.35  
 1.60  
 1.74  
 6.73



cos 47°

log 2.35 = .3711  
 log 47 = 9.8338  
 log 1.60 = .2049

log 2.48 = .3945  
 log 44 = 9.8569  
 1.78 = .2514



log 1.86 = .2695  
 log C 52 = 9.7893  
 .0588

3243  
 8569  
 1812

152

T 59N R 26W.

9/10 1933  
16/15

Poster on B. Spruce  
N side, Cor. N 0.40 ch.

G.L.O. notes

Tam. N 66° W 49  
Spruce N 42 E 15  
" N 22 E 45  
Tam. S 59 W 46

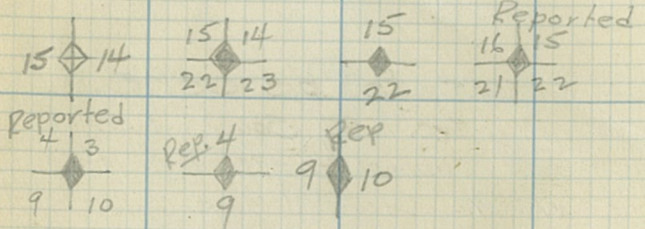
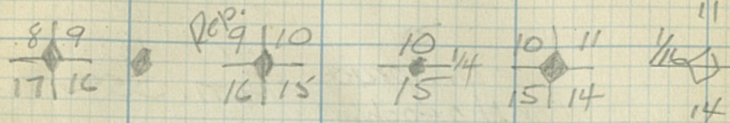
Things to be done.

- Move N 1/16 Sec. 16-17 South 0.151 Ks.
- Type map Chains 40-80 bet. 849.
- Check WC 1/16 Sec. 9. (Make Report)
- " EC 1/16 " 8
- Bet. 16 & 17. 1/16 cor. should be 20.10 not 20.25

140, 25  
160

Corners shown in

1/4 between 18 & 17 1/4



60 - 28.1
59 - 25.3
58 - 22.5
56 - 19.7
55 - 16.9
50 - 14.05
48 - 11.3

22.224
4.45
4.45
4.45
32.3
32.3
17.00
15.15
16.50
14.48

124  
4" Cedar  
W. Side

1 1/6 S 4233

20.45

4.55

40.30

4" W Birch

5450W 0.11

Top Edge of Slope to NE

North  
Mc  
E. Wood  
W. Side

NE 1/4

530W

0.13ch

3' MAPI

1/4 S 4233

17.85

4" Maple

10

South .25ch

1.74

5.10

132.50

118 sat 8419

22

59.54

59.54 x 118  
8419

04129.1

1113

12387

4129

4129

45915577

70050.83  
6736  
2690

2596  
12

0192  
125  
960

2024

2026  
1955

10020  
186

2216

1113

1113

1113

1113

1113

1113

1113

1113

2022

2022

2022

2022

2022

2022

2022

2022

2022

2022

## Corner Reports

Genuine G.L.O. ♦

Probable G.L.O. ◊

G.L.O. not located ○

County corners ©

Diamond Willow 174  
Ch. M of E. Rd. C 1/4 517.

401162  
14  
4052

h 430 20  
pl 430 50

126

22-53

100

54 1978

8 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40

no men

no women

no kids

52 + 2y + 1z = 1000

x + y + z = 100

50x + 20y + z = 1000

x + y + z = 100

49x + 19y = 900

0342

5700

4992

7068

1668

4240

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.  
 Roadway 16 feet wide. Side Slopes 1 on 1½  
 For Single Track Embankment.

H	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	H
0	8.0	8.2	8.3	8.5	8.6	8.8	8.9	9.1	9.2	9.4	0
1	9.5	9.7	9.8	10.0	10.1	10.3	10.4	10.6	10.7	10.9	1
2	11.0	11.2	11.3	11.5	11.6	11.8	11.9	12.1	12.2	12.4	2
3	12.5	12.7	12.8	13.0	13.1	13.3	13.4	13.6	13.7	13.9	3
4	14.0	14.2	14.3	14.5	14.6	14.8	14.9	15.1	15.2	15.4	4
5	15.5	15.7	15.8	16.0	16.1	16.3	16.4	16.6	16.7	16.9	5
6	17.0	17.2	17.3	17.5	17.6	17.8	17.9	18.1	18.2	18.4	6
7	18.5	18.7	18.8	19.0	19.1	19.3	19.4	19.6	19.7	19.9	7
8	20.0	20.2	20.3	20.5	20.6	20.8	20.9	21.1	21.2	21.4	8
9	21.5	21.7	21.8	22.0	22.1	22.3	22.4	22.6	22.7	22.9	9
10	23.0	23.2	23.3	23.5	23.6	23.8	23.9	24.1	24.2	24.4	10
11	24.5	24.7	24.8	25.0	25.1	25.3	25.4	25.6	25.7	25.9	11
12	26.0	26.2	26.3	26.5	26.6	26.8	26.9	27.1	27.2	27.4	12
13	27.5	27.7	27.8	28.0	28.1	28.3	28.4	28.6	28.7	28.9	13
14	29.0	29.2	29.3	29.5	29.6	29.8	29.9	30.1	30.2	30.4	14
15	30.5	30.7	30.8	31.0	31.1	31.3	31.4	31.6	31.7	31.9	15
16	32.0	32.2	32.3	32.5	32.6	32.8	32.9	33.1	33.2	33.4	16
17	33.5	33.7	33.8	34.0	34.1	34.3	34.4	34.6	34.7	34.9	17
18	35.0	35.2	35.3	35.5	35.6	35.8	35.9	36.1	36.2	36.4	18
19	36.5	36.7	36.8	37.0	37.1	37.3	37.4	37.6	37.7	37.9	19
20	38.0	38.2	38.3	38.5	38.6	38.8	38.9	39.1	39.2	39.4	20
21	39.5	39.7	39.8	40.0	40.1	40.3	40.4	40.6	40.7	40.9	21
22	41.0	41.2	41.3	41.5	41.6	41.8	41.9	42.1	42.2	42.4	22
23	42.5	42.7	42.8	43.0	43.1	43.3	43.4	43.6	43.7	43.9	23
24	44.0	44.2	44.3	44.5	44.6	44.8	44.9	45.1	45.2	45.4	24
25	45.5	45.7	45.8	46.0	46.1	46.3	46.4	46.6	46.7	46.9	25
26	47.0	47.2	47.3	47.5	47.6	47.8	47.9	48.1	48.2	48.4	26
27	48.5	48.7	48.8	49.0	49.1	49.3	49.4	49.6	49.7	49.9	27
28	50.0	50.2	50.3	50.5	50.6	50.8	50.9	51.1	51.2	51.4	28
29	51.5	51.7	51.8	52.0	52.1	52.3	52.4	52.6	52.7	52.9	29
30	53.0	53.2	53.3	53.5	53.6	53.8	53.9	54.1	54.2	54.4	30
31	54.5	54.7	54.8	55.0	55.1	55.3	55.4	55.6	55.7	55.9	31
32	56.0	56.2	56.3	56.5	56.6	56.8	56.9	57.1	57.2	57.4	32
33	57.5	57.7	57.8	58.0	58.1	58.3	58.4	58.6	58.7	58.9	33
34	59.0	59.2	59.3	59.5	59.6	59.8	59.9	60.1	60.2	60.4	34
35	60.5	60.7	60.8	61.0	61.1	61.3	61.4	61.6	61.7	61.9	35
36	62.0	62.2	62.3	62.5	62.6	62.8	62.9	63.1	63.2	63.4	36
37	63.5	63.7	63.8	64.0	64.1	64.3	64.4	64.6	64.7	64.9	37
38	65.0	65.2	65.3	65.5	65.6	65.8	65.9	66.1	66.2	66.4	38
39	66.5	66.7	66.8	67.0	67.1	67.3	67.4	67.6	67.7	67.9	39
40	68.0	68.2	68.3	68.5	68.6	68.8	68.9	69.1	69.2	69.4	40

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 41.9. For same slopes but other widths of roadbed correct above figures by one-half difference in width of roadbed; thus in example above for 20 ft. roadbed distance will be 41.9 + (20 - 16) ÷ 2 or 2 ft. added to 41.9 = 43.9. For slopes of 1 on 1 see inside of front cover.