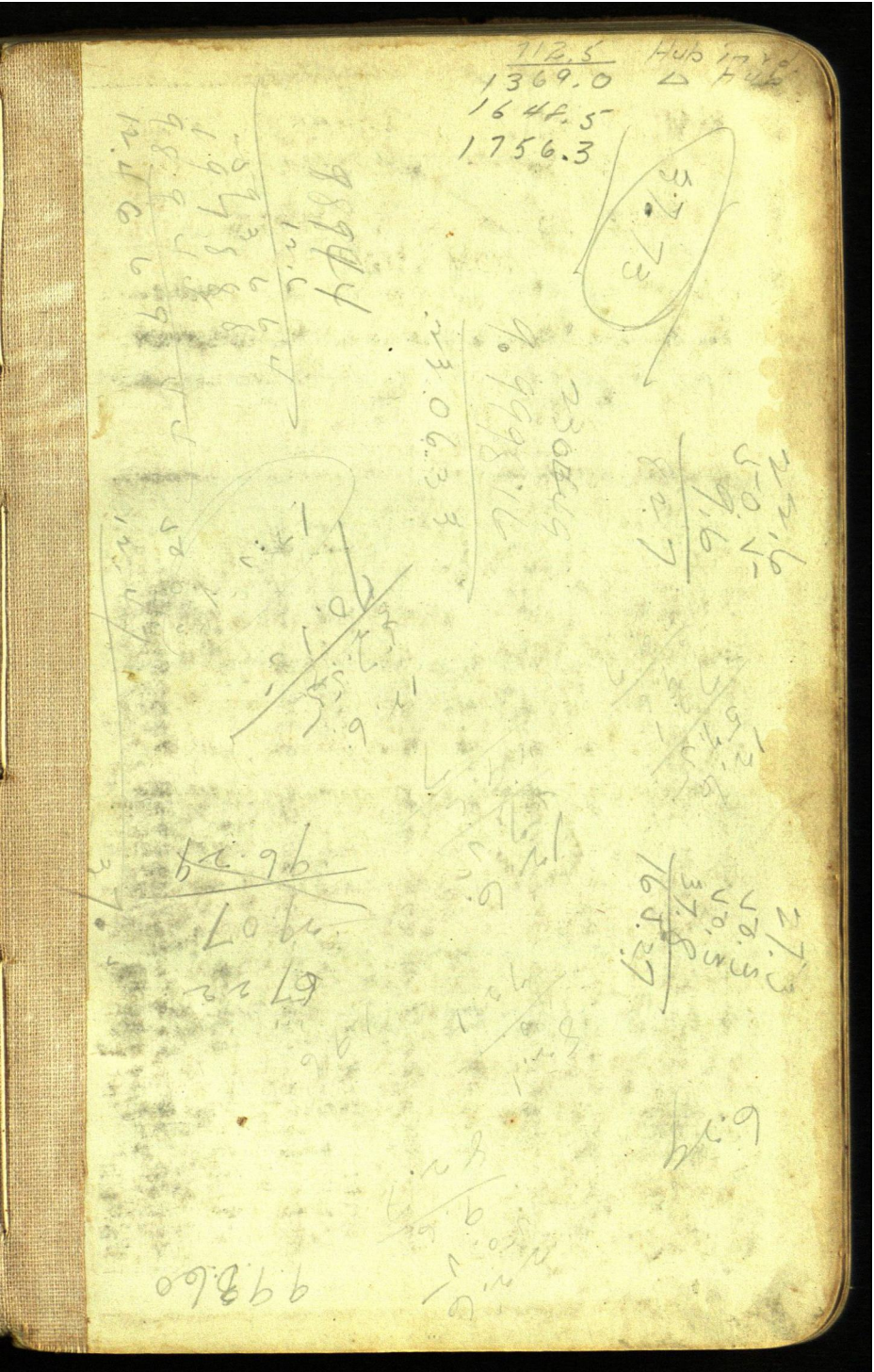
178

MINING



INDEX

S. 25-26-141-31 + 30-141-30 subdiv.
Continued from F.B. # 80
page 1 to 12

1

S. 25 - 141 - 31.

June 15, 1921.
E.B. Horst, with car and E.A. McPherson, drive to Ten Mile lake to check chaining and angles of sec. 25 141-31 which we find O.K. We are driven out by rain at 3 p.m.

E.B. Horst.

June 18, 1921
Horst + McPherson, work on N.W. Cor. Sec. 26, 141-31 where we look for the Original sec. cor. to secs. 22-23-26-27. We decide to continue the random line bet. secs. 22-27 W. to sec. cor, 21-22 27-28 for further information and leave the outfit at N.W. Cor. Sec. 26.

E.B. Horst.

June 20, 1921.

Horst & McPherson,

Work in office compiling Notes of previous Surveys in S.E. Cor. of Twp. 141-31 and S.W. Cor. Twp. 141-30 for use in work on Secs. 25-26-141-31 & 30-141-30.

E.B. Horst.

3

25-24-141-31
30-141-30

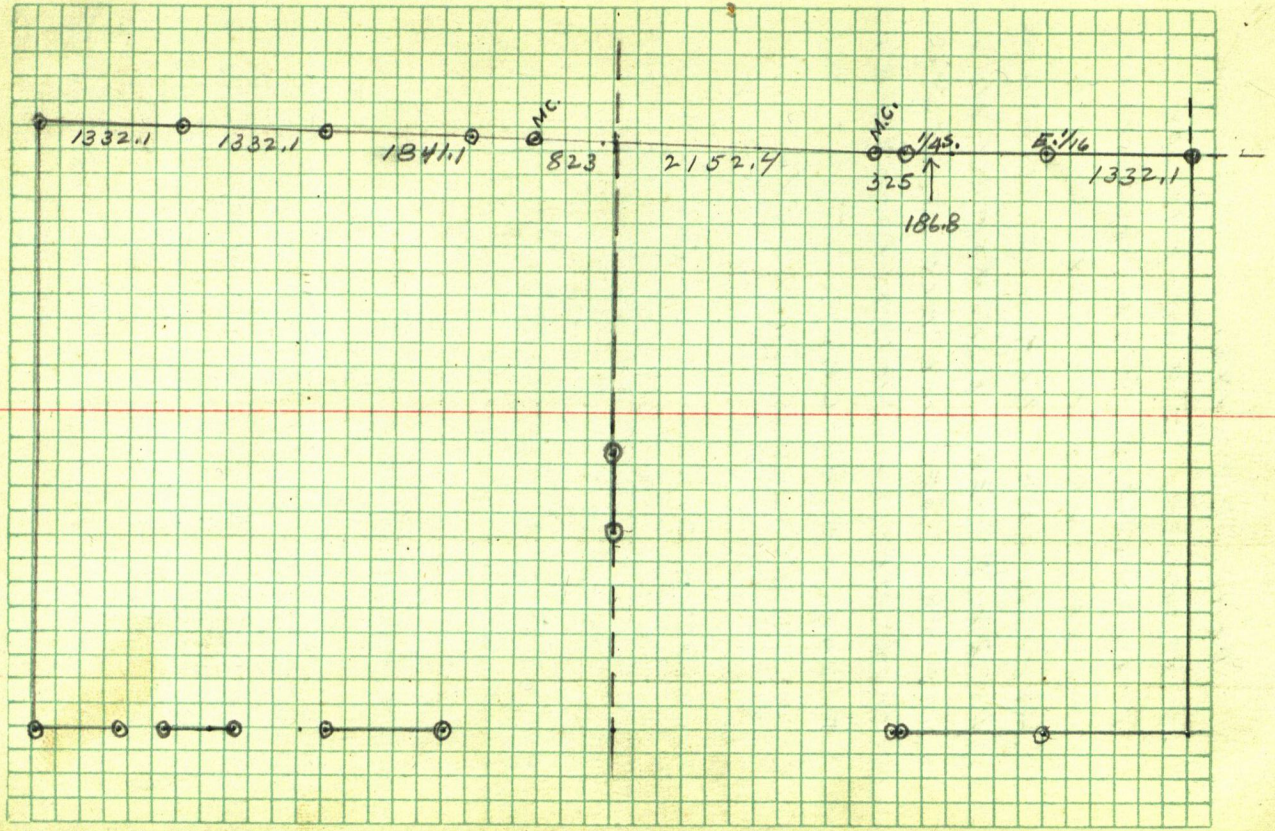
Tues. June 21, 1921

After having tried to find a place to board and failed and having tried to borrow a tent and failed, I apply to R.E. Delury to rent one of his cottages

5 S. 25-24-141-31.
" 30-141-30.

June 22, 1921.

E. B. Horst + E. A. McPherson
Begin at sta. 8009.7 W. of
Portage Lake and bet. secs. 22/27
being a point 111.4 S. of the US.MC.
on East. side of Gadball Lake.
I sight W. across lake and set a
Point on line, cross over. sight E.
turn L. 110°00' chain out 243.6 ft.
set over this pt. interior angle =
50°03' Distance over Lake =
630.6 ft.
at 8640.3 leave lake
" 8800. Neck of swp.
" 8971.5 Tack in 8" W.P. stump.
" 9025 cut Tamck swp.
" 9515 lv. swamp.
" 9740.0 set Hub on E. side N.+S. Rd.
" 9827.5 Fall 76 ft. N. of the
original U.S. Sec. Cor. To secs.
21-22-27-28 being a 4"x4"x48" stake.
Return to Bob Delurys
Cottage for overnight.
E B Horst.


1332.1
1332.1
1841.1
M.C.
823
2152.4
M.C.
1/4 S.
325
186.8
E. 1/16
1332.1

7

S. 30-141-30

June 23, 1921

E.B. Horst, E.A. McPherson
Ray Gobel, Bob Aylsworth
make an all day search
for the sec. cor., and accessories,
19-20-29-30 and for evidence
of the sec. line bet. secs. 29-30
but are unable to locate any
thing of value.

E.B. Horst.

S. 25 - 141 - 31.

8

June 24, 1921

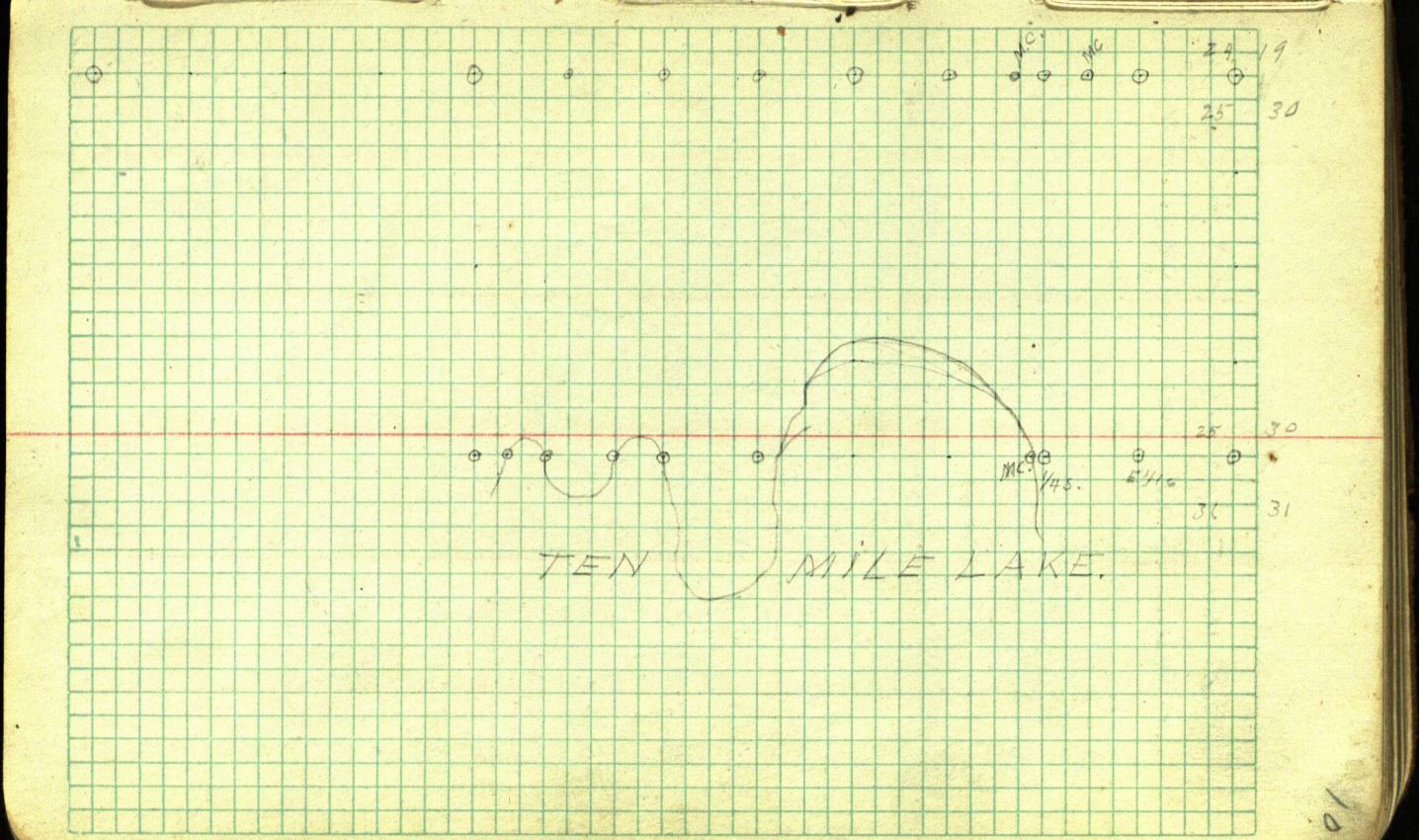
E. B. Hurst, E. A. McPherson, Ray Cable and Robt. Aylesworth, set T.M.s. on N. line of sec. 25 - 141 - 31.

At sta. 325 ft. E. of the U.S.M.C. on E. side of Portage Lake and on the true sec. line I set a 2" x 48" T.M. for M.C. on W. side of small lake. 1/4 S. Cor. falls E. 186.8 ft. in water. We go E. of this lake and on true sec. line at sta. 1+00. ft. E. of U.S.M.C. I set a 2" x 48" T.M. for M.C. This point is 5°38.2 ft. E. of 1/4 S. Cor. at sta. 18+43.9 ft. E. of U.S.M.C. I set a 2½ x 30" Capped T.M. at true E. 1/4 S. Cor. between Secs. 24 - 25 - 141 - 31.

Return to Camp.

E. B. Hurst.

July 7,-8, 1921
E. B. Horst, Mc. Pherson & R. Gobel
setting I.M.s. in Sec. 25-141-91.
Gobel works ½day July 7.


MC.
MC.
24
19
25
30
25
30
MC. 1/45.
E 1/16
36
31
TEN MILE LAKE.

26-141-31

Dec. 19-1921.

E.B. Horst, & Ben Beach, resume survey of sec. 26-141-31.

We get notes & Plats of previous surveys, and preliminary work on this section and make arrangements with R.E. Delury to use his Cottage at Crescent Beach for a camp at $1.00 per day including stove, dishes & bedding.

Dec. 20, 1921.

Horst & Ben Beach get groceries at J.P. Bilbens to the amt. of $28.36 and hire a car & trailer from Grindalls Garage to take us & outfit to Crescent Beach.

We arrive at 3 P.M.

C.D. Beach came over 8 A.M. and cut wood & built fires.

E.B. Horst.

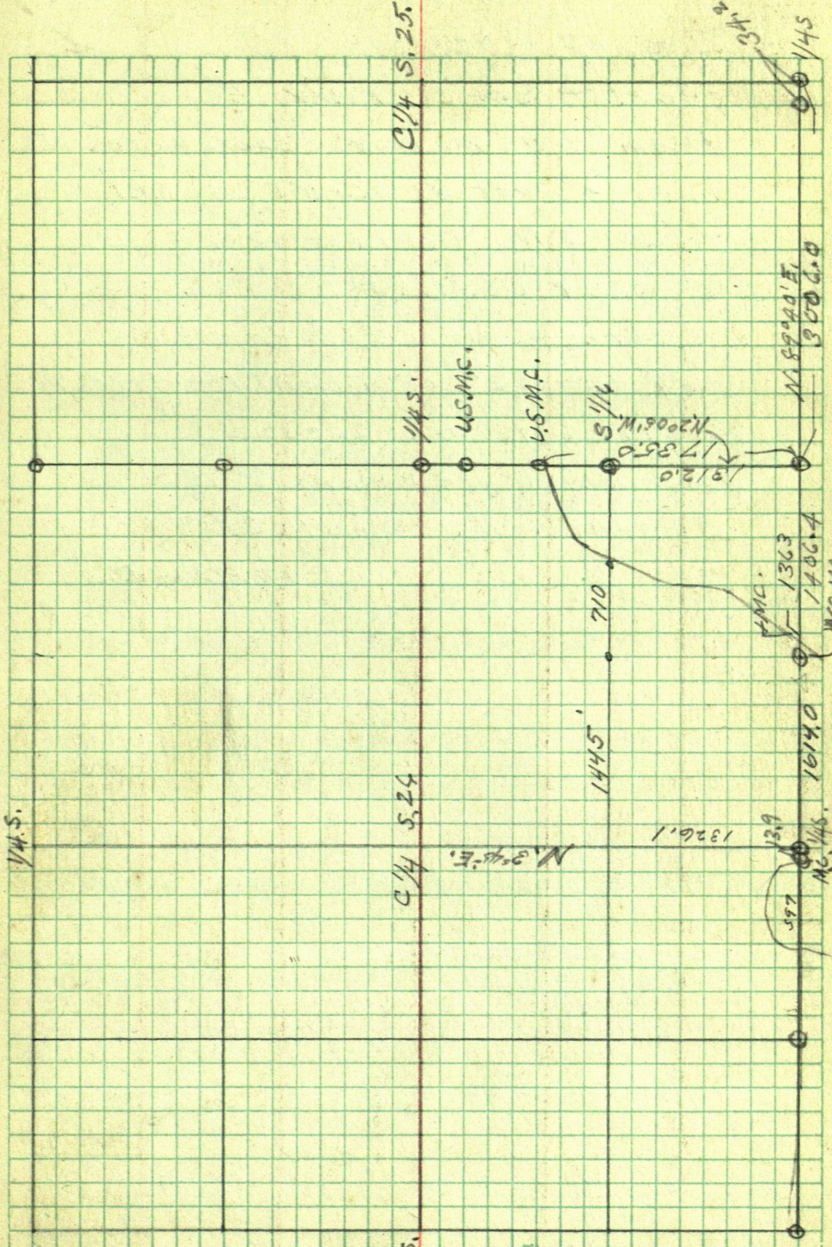
S. 26-141-31. Time Sheet. Jan. 1922

1921 Dec.	19	20	21	22	23	24	25	26	27	28	29	30	31.	1	2	3	4	5	6	
														Jan meet.						
E.B. Horst,	1	1	1	1	1	0	0	0	1	1	1	1	0	0	1	1	1 (Feast meeting)	1		-13 days. 91.00
B.M. Beach.	1	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1				12- 42.00
C.D. Beach.	0	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1				11- 38.50
(Cottage)	0	1	1	1	1	0	0	0	1	1	1	1	1	0	1	1	1			11- 11.00

15

26-141-31.

Dec. 21, 1921
Horst-Beach & Beach.
Begin at 1/4 S. Cor. Secs. 25-36
Chain W. across Ten Mile Lake
at 34.2 W. M.C.
at 3006.0 set Temp pt. for sec.
Cor. on ice.
Temp. pt = 0.00 W.
at 1363.0 M.C. on W. side Lake
bet. Secs. 26-35
at 1406.4 Temp. W.C.M.C.
We chain from Temp. Sec. Cor.
N. bet. secs. 25-26
at 1312.0 set pt. for S. 1/16 S. Cor.
at 1735.0 LM. at MC. Secs. 25-26.
E.B. Horst.


C 1/4 S. 25
1/4 S.
U.S.M.C.
U.S.M.C.
S 1/16
N 20°06' W.
1735.0
1312.0
N 89°40' E.
3006.0
1/4 S.
34.8
710
1363
1406.4
MC.
W.C.M.C.
1445
1614.0
3020.4
C 1/4 S. 24
N 3°45' E.
1326.1
13.9
MC. 1/4 S.
597
1/4 S.
1/4 S.

17 26-14E-31

Dec. 22-1921

Horst + same Crew.

Begin at U.S.M.C. # 8 + chain W. on sec. line at 28 ft. W. W.C. M.C. We set a 2x48" I.M. continue W. at 1628 U.S.M.C. # 9. [W side of T.M. Lake bay

We chain E. from M.C. # 9 — 13.9 ft. and set A 2"x 48" I.M. at the true 1/4 S. cor. bet. secs. 26-35 from which we run N. 3°30'E. on a random d. about 3500 ft.

E.B. Horst.

Dec. 23 1921.

Horst + Same crew continue ℄ N. 3°30' E. and chain what we run yesterday.

at 300 N. ent. SWp. N.E. + SW.
" 800 " run a. land E. end of highland
at 1000 " SWp. extends W. again.
" 1300 " set stake Mkd. + leave SWp.
" 2175 " ent open SWp. NE. SW.
" 2600 " set stake Mkd. (2640 - N.)
" 2675 " Lv swp. NE SW.
" 4000 " set stake Mkd 4000 - N.
" 5316 " set a P.I. △ on random sec. line at sta. 1950 - W. of M.C. at portage Lake
or 108.6 ft. W. of pt. for true ¼ sec. cor. bet. secs. 23/26.

Crew leaves to celebrate Xmas.

I call Grindalls garage at 8:00 P.M. and have car come after me and go to Walker. E.B. Horst.

19

26-141-31

Dec. 24-26, 1921.
E. B. Horst, Working in office
Making preliminary Plat of
Sec. 18, 142-31

E. B. Horst.

Dec. 27, 1921.

E.B. Horst, B.M. Beach,
leave Walker for Ten Mile Lake
and go to Camp. Where we find
C.H. Beach.
We go to Portage Lake and set
Temp. corners on ice for all Pts.
that fall in Portage Lake.
Being the N.E. cor. S. 26. at 823 W of MC.

N 1/16	–	S 25-26	S. 1314.
1/4 S	–	S 25-26	S. 2628.
M.C.	–	S " – "	S. 2916.0

We walk to M.C. between secs. 26-35 near
the SW. cor. sec. 26 and run the courses
and distances given in U.S. Meander
Notes for the purpose of tying to the
U.S.M.C. between secs. 34-35.
We begin at MC. S. 26-35

		(chs)			
thence	S. 32° W.	11.00 chs.	= 726.0 ft.		
"	S. 25° E.	7.00 "	= 462	"	
"	S. 65° E.	7.00 "	= 462	"	
"	S. 10° W.	7.00 "	= 462	"	
"	S. 44° W.	10.00	= 660	at 550 wet shore. Pt. is 590 ft. S + about 40 ft E.	
"	S. 70° W.	10.00	= 660	qv 14.	

26-14-31.

Dec. 28-1921.

We set I.M. on S. line of sec. 26. at M.C. #10 set I.M. 2"x48"

" M.C. #11 " " "

" M.C. #12 " " "

From M.C. #12 Chain E. 283.5 ft. and run N. 4°00' E. 208 ft and set S.M.C. on Pebble point I.M. W.½ S.M.C. We walk W. on sec. line to P.I. Δ at 5487.4 - S. and 747.8 - W. of M.C. #12 and chain W. 223.9 ft. to the Cor. to Secs. 26-27-34-35 where we set a 2"x48" I.M. E.B. Hoeft.

Dec. 29-1921

Same crew.

Begin at the 1/4 S. pt. on portage Lake (on ice) and run N. 84°30' W. (var. 8°45' Mag. brg.) on a random E+W. ℄.

at 530 ft. W. leave Lake.
at 625 " " set temp. S.M.L.
" 1441.7 " " Mark old pine snag.
" 2400.0 " " ent. swp.
" 2815.0 " " P.I. on N+S rand. ℄ at 2664.2 - N.

Continue W. and fall 24.8 ft. N. of the true 1/4 sec. cor. between secs. 26/27 Which We establish by chaining N. 211.6 ft. from △ 3049.4 - S then W. 82.8 ft. at 90° to random sec. line.

E.B. Horst.

26-141-31.

Friday Dec. 30-1921.
Same crew.
Go to Sta. 4162.6-S on random line bet. secs 26-27 where we chain W. at 90° to random line 154.3 ft. and set the S.1/16 S. cor. (Wood post) from which we run S. 89°30' E. (Mag.) and int. the N+S.℄ 26 ft. N. of the C.S.1/16 S. cor. set true C.S.1/16 from which we run S. 89°30' E. (Mag.)
at 1445.0 set true S.E. 1/16 S. cor. at E set S.M.C. on Lake shore.
Intersect the stake at the S. 1/16 S cor. on ice.
E.B. Horst, goes to Walker to make plats for Commrs. Meeting
E.B. Horst.

Dec. 30, 1921

E. B. Hurst in office on sec. 18-142-31

B. M. & C. H. Beach in sec. 26, 141-31 running lines.

Begin at the W. 1/16 cor. secs. 26-35 and run N. 4°00' E. (Mag. brg.) on the W 1/16 line. and int. the ~~Sec.~~ line bet. 23/26 at 92 ft. W. of the true W 1/16 S. cor.

E. B. Hurst

By B. M. Beach.

25 26-14-1-31.

Jan. 2, 1922

B.M. & C.B. Beach,
Set the true C.N. 1/16 S. 26
from which We run E. on Mag.
brg. on N. 1/16, line
at 1379 E int S.R.H. #80
" E set. SMC.
" E fall 1.4 ft. S. of
N. 1/16 pt. on Portage Lake.

We go to the C.N. 1/16 and run W.
on N. 1/16 line and fall 13.0 ft.
S. of the true N. 1/16, bet. Secs.
26-27-14-1-31. E.B. Horst.
by B.M. Beach.

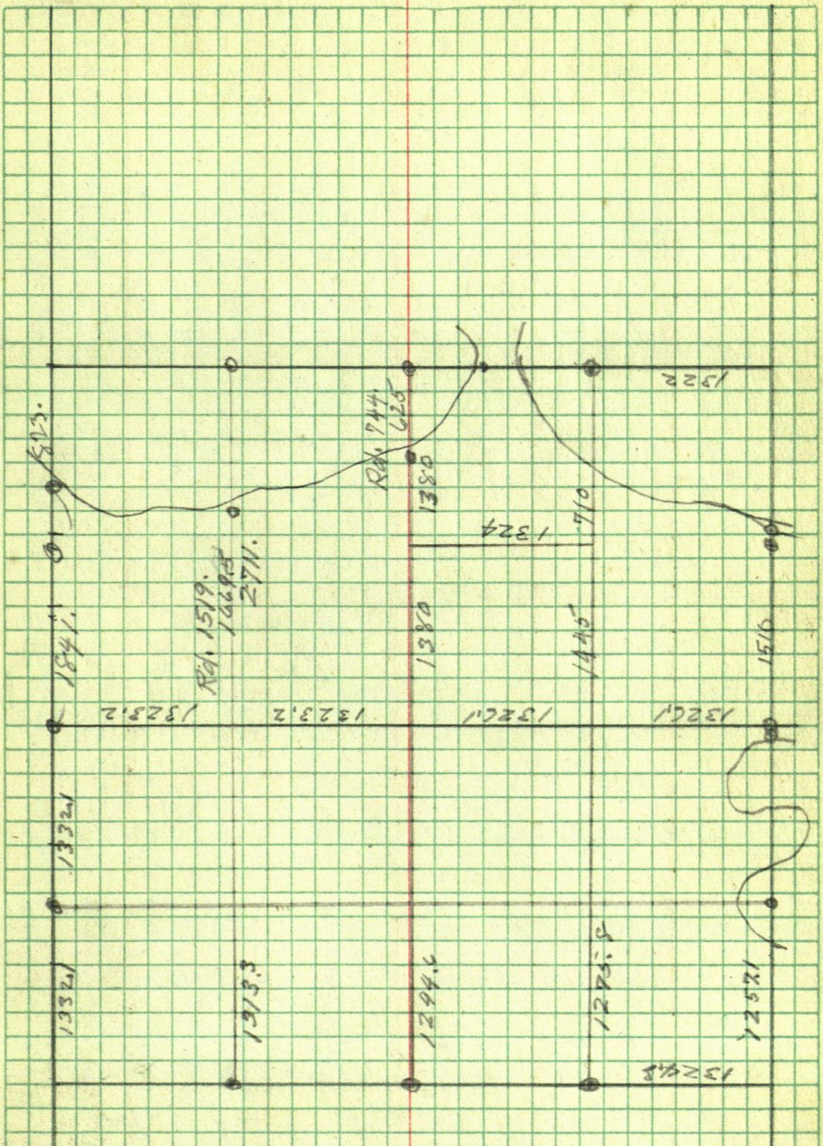
Jan. 3, 1922

Same crew, setting 2x48" I.M.s. at all remaining Pts. not previously set and completing survey of Sec. 26-14W-31.

We return to Wake by Ford car from Grindall's garage.

E.H.B.

By B.M. Beach.


1322
1324
710
1380
1841
1510
1380
1323.2
1323.2
1326.1
1326.1
1332.1
1332.1
1313.3
1324.8

Time sheet: Sec. 30-141-30

1922 Jan.	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27
E.B. Horst.	1	1	1	1	1	1	0	1	1	1	1	1	1/2	0	1/2	1/2			
B.M. Beach	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1				
C.H. Beach	0	0	0	1	1	1	0	1/2	0	0	0	0							
Guy Gobtc.	0	0	0	1	1	1	0	1	1	1	1	1/2							
Alb. Thomas.	0	0	0	0	1	1	0	1	1	1	1	1/2							

S-30-141-30

Mon. Jan, 9, 1922

E.B, Horst, & B.M. Beach on S. 30 141-30

E.B, Horst, getting Notes & plats. B.M. Beach goes to Ten Mile Stg. Via train to see about boarding place. We can not be accomodated within reach of our work so we will rent R.E. Melurys Cottage again.

E.B Horst.

Tue. Jan 10, 1922

E.B. Horst, & B.M. Beach Move to Camp. at Ten Mile Lake.

E.B. Horst.

Jan. 11, 1922

We work on Lat & Dep. and fig. corrections all day. In eve we go to get some axemans wood. E.B Horst.

Thur. Jan. 12, 1922.

E.B. Horst, B.M. Beach, C.D. Beach
and Guy Goble.
Begin at the 1/4 S. cor. (IM) bet.
secs. 30-31-141-30
and sight S. 87°01'E. on random
sec. line then run N. 0°21'E. on
random ℄ s. 30. (rand. ℄ s. 31 - S. 0°12'E)

at	260	lv swp.
"	327	County Road on old grade
"	520	swp. ent.
	630	lv swp.
	870	ent. swp.
	1158	lv swp.
	1300	Stake.
	1575	ent swp.
	1743	lv swp.
	2600	stake.
	3557	ent swp.
	4000	stake
	4050	lv swp.
	4688	ent. swp.
	4900	lv swp.
	5240	ent swp.
	5409	1/4 S. bet. secs. 19-30

Sets. W. 36.3 ft. (set wood post)

S.–30–141–30

We go W. to Sta. 1395 E.
on random sec line bet. 19-30
and sight S. 89°30' E. on sec line
then run S 0°33' W. on random
W. 1/16 line Sec. 30 about 1/4 mile

E.B. Mast.

S-30-14W-30

36

Fri. Jan. 13, 1922

Same crew & Gilbert Thomas.
Continue W'ly line S. 0° 33' W.
and Intersect the Sec. Line at
23.6 ft. W. of the W. 1/16 S. cor. Secs. 30/31

P.M. We go to random sec. line
between secs. 29-30 at sta 2640
S. and chain S. 14.8 ft. and W. 135.2
ft. and set the true 1/4 S. 29-30.
Run N. 89° 26' W. on rand. & S. 30.

at.	216	W.	Cr. swp.
	420	"	ent. swp. S. 75° W & N.E.
"	1350	"	set. temp. stake.
"	1400	"	Cr. swp.
"	1700	"	Road. N+S.
by R.M.B. "	2170	"	ent. swp. N+S.
"	2390	"	Cr. " N+S.
"	2649.4	"	P.I. on N. + S. &, at

Sta. 2728.8 - N.

"	3230	"	ent. swp. S. 75° W. + N. 75 E.
"	3828	"	Cr swp.
"	4039.8	"	P.I. on W. 1/4 line. (Rand.)
"	4178.		old U.S. Brd. + Agency Trail.)

E.B. Hart.

37 S-30-141-30.

Sat. Jan. 14, 1922.

E. B. Herst. & same crew.
Continue E. & W. Q W. to sec. line
at 4212 W. ent. swp. N. & S.
" 4675 " cor. Swp.
" 5492.8 " the 1/4 s. cor. bet
secs. 25-30 sets N. 20.6 (I.M. 5 1/2 x 30")

We go to the temp. E. 1/16 S. cor
bet. secs. 30-31 and chain E. 0.6 ft.
and N. 32 ft. and set wood post
for true E. 1/16 S. cor.
thence N. 0° 41' E. on random E. 1/16
Sec. line 5. 30.
Set P.I. on E. & W. CL. at sta. ~~1333.7~~
1333.7 — W. From this P.I. I Chain
N. 5.0 ft and set wood post for the
true C.E. 1/16 S. cor. s. 30.
Continue E. 1/16 line N.
and fall 9.6 ft. W. of true E. 1/4
S. cor. bet. secs. 19-30.

E. B. Horst.

Fair. Mon. Jan. 16, 1922.
E.B. Horst & same crew
go to the random sec. line bet.
Secs. 29-30 at sta 135+7.4 -S.
and chain W. 67.6 ft. and set
wood post for the true N.¼16 S.Cor.
from which meRun N. 89°30' W.
set p.l. on E.¼16 line.
Int. N+S. & at sta. 4091.5 -N.
continue same line N. 89°30' W.
and fall 35.0 ft. N. of the I.M. at the
N. ¼16 S.Cor. bet. Secs. 30-25 on Range line.

C.H. Beach leaves at noon on acct. of
sickness due to exposure on Sat.
Jan. 14, when the entire crew were
wet on acct. of a thaw and nearly
froze to death when wind came up and
temp. fell. E.B. Horst.

P.S. E.B.H. goes to Walker for Lathrop
dope. E.B.H.

39

30-141-30.

Jan. 17, 1922.

E.B. Horst in Walker getting Lothrop plat. + other dope, B.M. Beach in charge of crew, sets the true C.S. 1/16 S. cor. and thence S. 89° 44' E. on S. 1/16 line. set P.I. on E. 1/16 line. Fall 35.7 ft. N. of the true S. 1/16 S. cor. bet. secs. 29-30. Return to C.S. 1/16 cor. and run N. 89° 30' W. on S. 1/16 line about 1/4 mile, ~~B.T.~~

E.B. Horst.
By B.M.B.

S-30-141-30.

40

Wed. Jan. 18, 1922.

High Wind and heavy snow storm
E. B. Horst returns from Walker in
Grindall's Car. with trailer & I.M.S.
B.M.S. & crew setting I.M.s at follow
ing places.

W.¼ bet. Secs. 19-30
¼ S. " " " "
E.¼ " " " "
Sec. Cor. Secs. 19-20-29-30.
N.¼ bet. Secs. 29-30.
¼ S. " " "
C.E. ¼ S.
C. ¼ S.
C.S. ¼ S.
E.¼ bet. Secs. 30-31
W.¼ " " "

E.B.H. setting A.P.s on S.R.H.

E.B. Horst.

30-141-30.

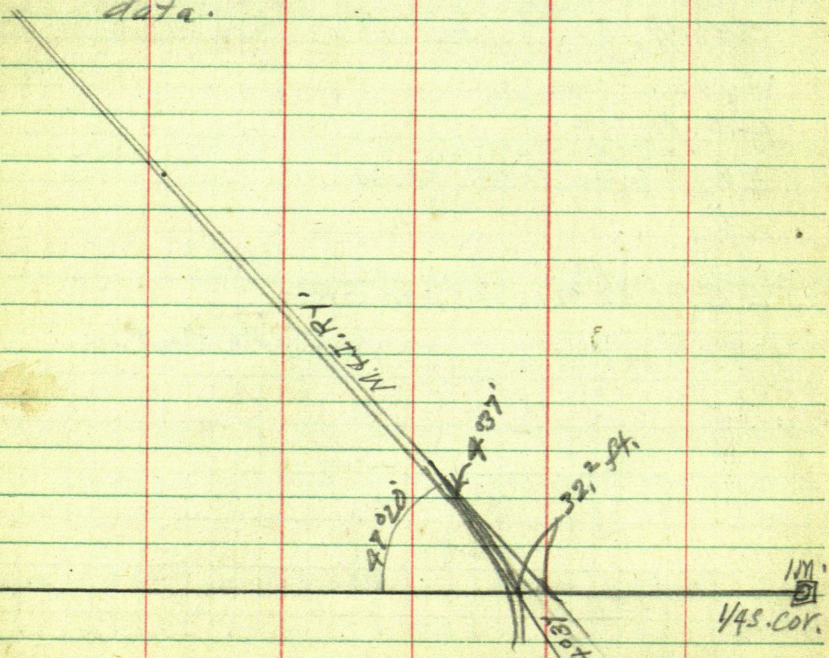
Thur. Jan. 19, 1922

E B Horst, B.M. Beach, Guy Gobel & Albert Thomas,

Complete the S 1/16 line W. of N. & S. ℄. and fall {2.0 S. of true 1/16 S. cor. / 11.1 ft. S. of} I.M. which is not at its true pt. for the S 1/16 bet. secs 25-30.

This I.M. goes. S. 9.1 and W. 13.0 ft. from where it now stands to true 1/16 cor.

I go to p.i. of M.+I. Ry & true S. line of sec. 30 and take following data.



S.R.H. Traverse in Sec. 30

S. line = N. 88° 30' W.

From apt. in Road 57.3 ft E of NW c.

Thence N 46° 40' W. 170.5 ft.

N. 55° 55' W. 847.6 "

N. 87° 05' W. 352.3

S. 80° 06' W. 246.8

N. 72° 00' W. 165.0

To Random W. Boundary at

684.0 ft. N.

R.R. W 346.

C.R.R.

White Pine Beach.

Survey in Lot 2, Sec. 12:-

From the 1/4 sec. cor. 11 + 12 (I.M.) T140N R31W, run line along East side of Long Beach platted lots.
545.2' Intersect M.C. (I.M.)

TRAVERSE.-

From M.C. thence set plates on 0° and sight back on line to 1/4 sec. cor. and turn angle to right on B. vernier of

R. 22°38'	- Dist. 165.7'	- hub	H.P. 1
R 14° 49'	" 82.7'	"	" 2
L 11°49'	" 163.1'	"	" 3
L 5°58'	" 298.0'	"	" 4
R 4° 40'	" 231.8'	"	" 5

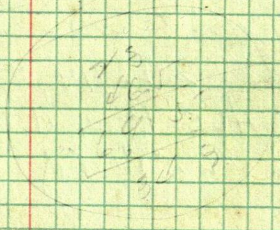
+R 63°42' - 49.6' to S.M.C. on N 1/16 line.

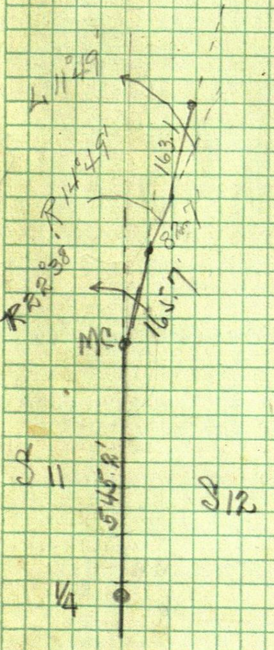
Owners -

R.P. Johnson - Belle Johnson, his wife
H.E. " - single
S.P. " - Bertha ", his wife

Survey Commenced - July 7th '23
C.E. Steadland - Transit
G.A. Bacon - Ass't.
140-31 - Weather - cloudy - showers - Low humidity

- Monday July 9th -
C. Steadland - Transit
G. " Chain.



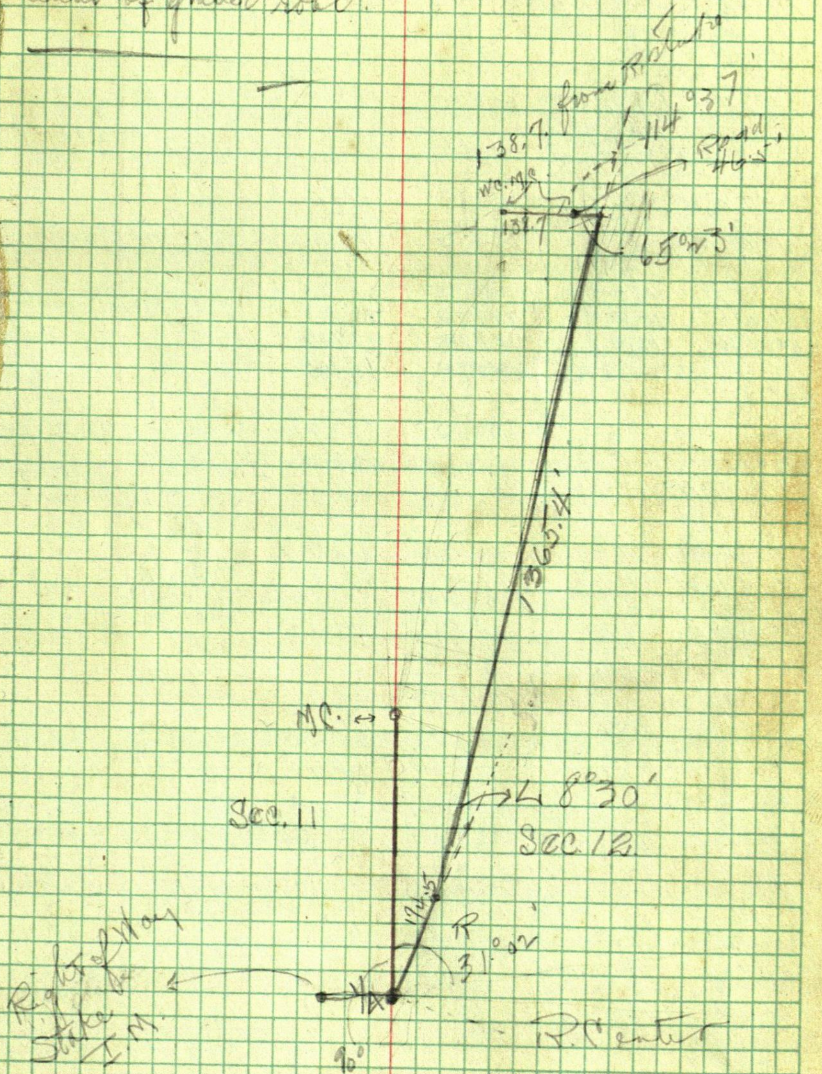


L 5°58' - 98.0'
R 4°26' - 31.9
R 63°4' - 49.6'

47 July 7-23

From 1/4 sec. cor. 11 & 12. T 140 - R 31
sight on N.S. 11 & 12 and turn
angle R 31°02 to pt. in Road.
Dist. 174.5.
Thence ∠ L 8°30' to pt. in Road Dist. 1365.4'
at intersection of N 1/16 line.
Thence ∠ L 114°37' along N 1/16
line. @ 46.5' 1½" I.M. Right of way stake
@ 185.2" 1½" I.M. S.M.C.

Temp hub in Road on N 1/16 line
Should move 5.3' West to
center of graded road.



49

		Sin.	Cos.	N	S
S. 34°36' W	46.2'	56784	82314		38.
North	497.9 498.2			497.9 498.2	
N. 22°38' E.	165.7	38483	92299	152.94	
N. 37°27' E.	82.7	60807	79388	65.65	
N. 25°38' E	163.1	43261	90158	147.05	
N. 19°40' E.	298.0	33655	94167	280.62	
N. 24°06' E.	231.8	40833	91282	211.59	
87°55'		99934	.03374	6.84	
N. 87°48' E.	188.3	99926	03839	7.23	
22°18'	1430.7	37946	92521	1363.28	1322.41
S. 22°14' W	1430.7	37838	92565	1363.0	1368.95
22°12'		37784	92587		1324.48
		37811	92576		1362.52
22°14'		37838	92565		
				N	S
N. 63°02' W		891.27	45347		
N. 62°53' W	167.3	89008	4558	76.34	
N. 19°40' E.	270'	33655	94167	254.25	
87°55'	231.8 188.3	03635	99934	211.59 6.84 7.23	
S. W	592.7	37838	92565	549.41 5.37 549.04	548.63 379.14 377.20
407.5	S. 22°14' W				38.04
46.2	S. 34°36' W				
498.2	North			498.2	
10	W. 22°38' E			9.23	
				507.45 415.24 92.21	415.2 417.14

E	W
	26.23
63.77 ✓	
50.29 ✓	
70.55 ✓	
100.29 ✓	
94.65 ✓	
188.16	

567.71 | 544.8
570.03
26.23
540 53
566.78

E	W
	149.09
90.86	
94.65	
188.16	

373.67
149.09
224.58

149.09
224.26
155.97
154.19
26.23
180.42
3.85
176.57
182.20

3.85

1363.28
38.04
1325.24

567.71
26.23
~~543.48~~
541.48

.4101
132524) 543480
530096
133840
132524
131600 ✓

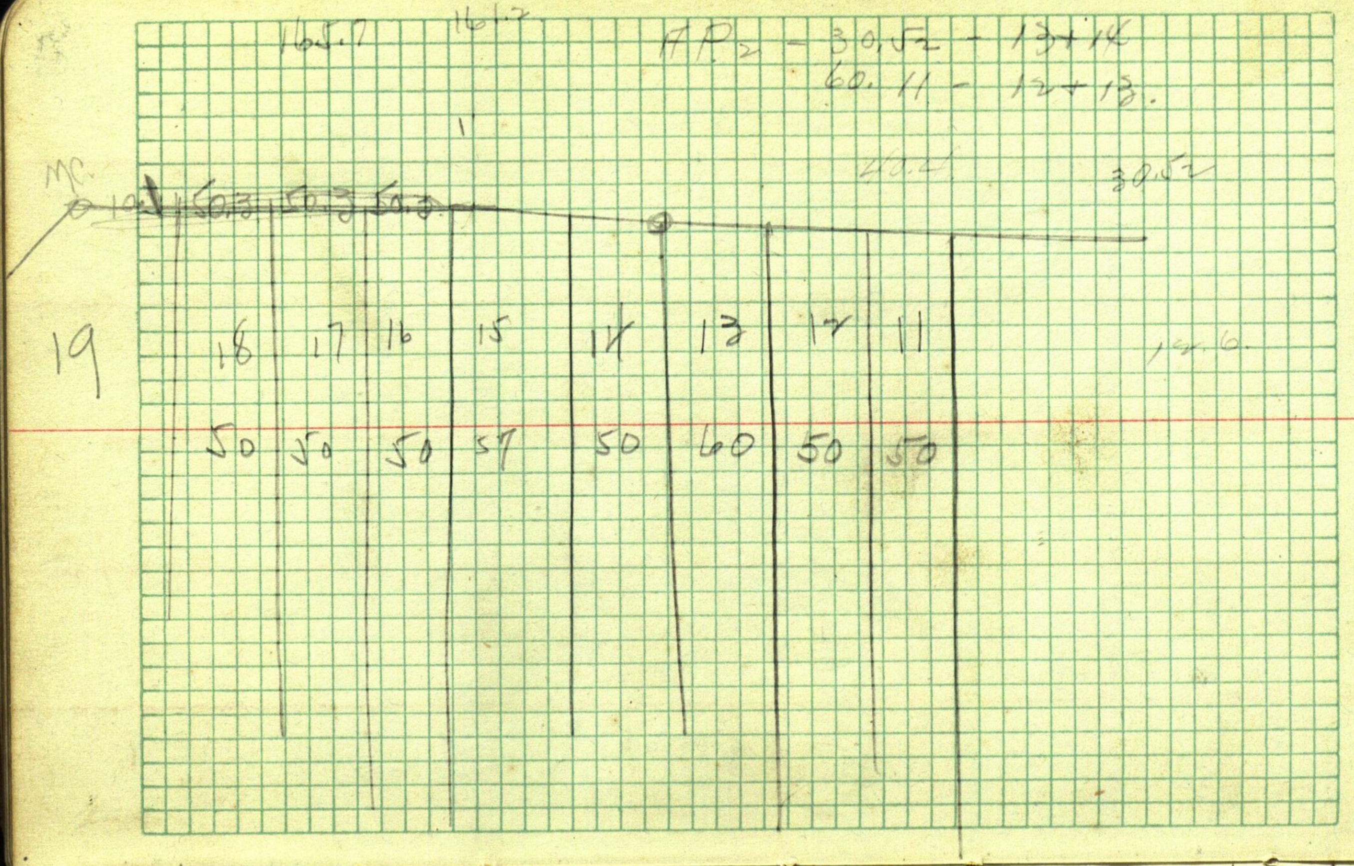
4086
132524) 541480
530096
1138400
1060192
782080

67.6
65.5
2.1

22014

140876
54941) 224580
219764
481600
439528
420720
384587
361330

1430



19
MC.
165.7
161.7
AP2 – 30.52 – 13+14
60.11 – 12+13.
50.3
50.3
50.3
30.52
18
17
16
15
14
13
12
11
50
50
50
57
50
60
50
50

653
676
7.1

37°37'
22°14'
15°23

22°38'
22°14'
24'

96417
63
289251
578502
6074271

60.7
4.8
65.5

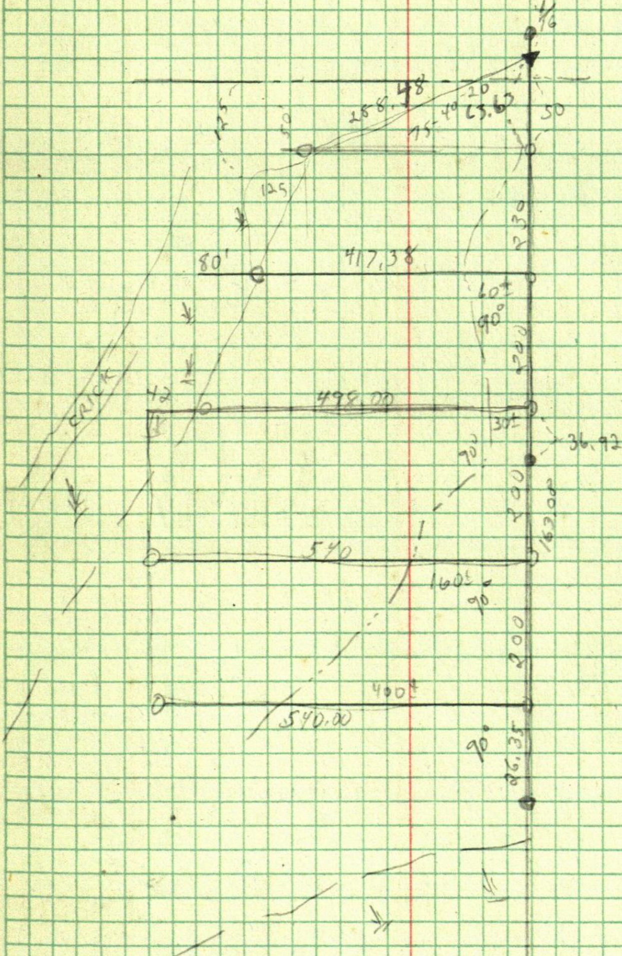
4.8

55

RAY HOUSE

75-40-5K
151-26-36

75-40-20

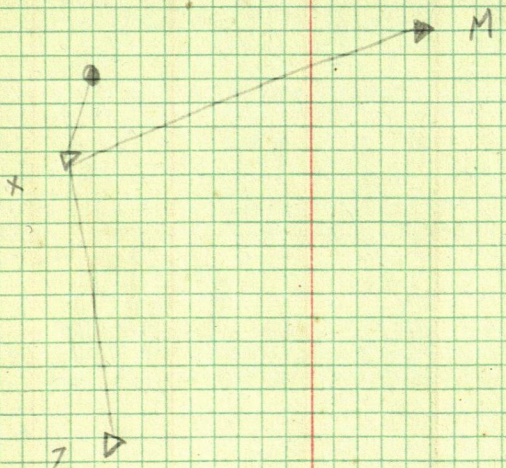

4/6
288.48
75-40-20
63.65
50
125
80'
417.38
230
60±
90°
200
CRICK
42
498.00
30±
36.92
90°
200
163.00
540
160±
90°
200
400±
540.00
90°
26.35

57

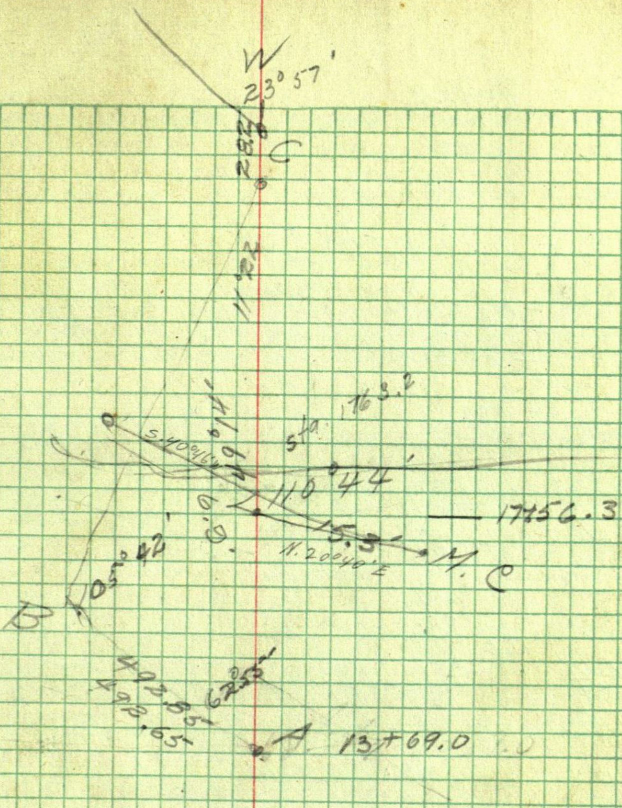
IVAN FISHER

π @ X BS M

118-31-40		88-01-48	440.11
Z 237-03	118-31-30	90-27-42	258.42

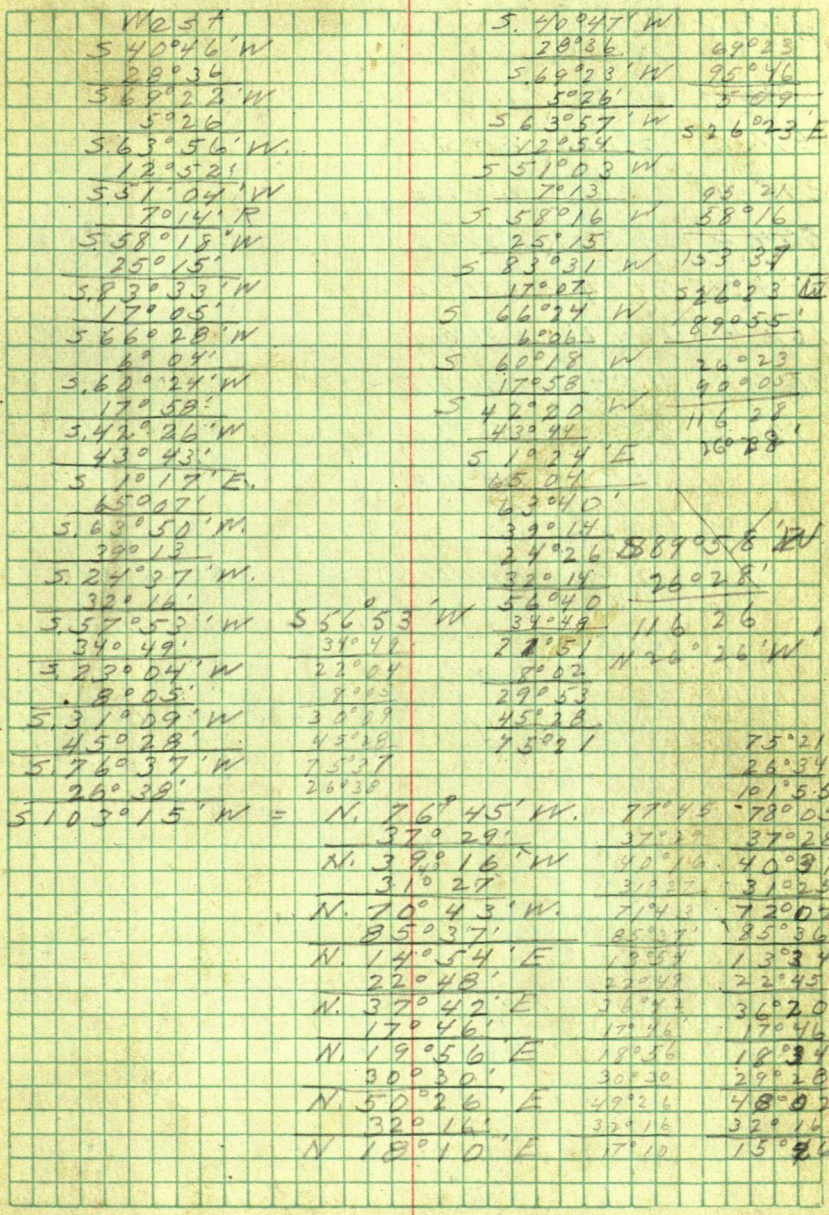

M
X
Z

Std.	
712.5	Hub in rd.
1369.0	△ Hub
1648.5	Hub on brink of hill
1756.3	Stake opp. M.C.


W
23°57'
C
11°22'
Sta. 1163.2
110°44'
1456.3
15.5
N. 20°40' E
M. C
B
05°42'
492.85
492.65
67°55'
A
13+69.0

69

Sta	Defl. L		
M.C	49°14'	49°13'	22°L to P point
	40°46'	offset	
	27°59' 10"	S.40°46'W	
0-1 600.0	28°35" R	Crossing R Line @ 49°14'	
1-2 600.0	5°26' L	S.69°22'W	
	12°54'	L. 554' to M.C.	
2-3 300.0	12°52' L	S.63°56'W	
3-4 200.0	7°13'	S.51°04'W	Rodd
	7°14' R		
4-5 200.0	25°15" R	S.58°18'W	
5-6 250.0	17°07' L	S.83°33'W	
	17°05" L		
6-7 100.0	6°06' L	S.66°28'W.	
7-8 396.1	6°04' L	S.60°24'W	
	17°58' L		
8-9 368.65	43°44'	S.42°26'W.	
	43°43' L		
93.3	65°04'	S.1°17'E	
	65°07' R		
84.4	39°14'	S.63°50'W	
	39°13' L		
167.85	32°14'	S.24°37'W	
	32°16' R		
191.4	34°49' L	S.56°53'W	
196.4	8°02'	S.22°04'W	
	8°05' R		
200.05	45°28' R	S.30°09'W	
	8°45' R	To hub in Marks Rodd	
297.9	26°34'		
	26°38' R	S.75°37'W.	
139.0	37°28'		
	37°29' R	N.77°45'W	
101.7	31°25'		
	31°27' L	N.40°16'W	
212.1	85°36½'		
	85°37' R	N.71°43'W	
262.5	22°43½'		
	22°46' R	N.13°54'E.	
144.4	17°41' L	N.36°42'E.	
83.8	29°28'		
	30°30' R	N.18°56'E	
79.05	32°16' L	N.49°26'E	



	Defl. Angle			
239.5	15°52′ 15°51′L	N.17°10′E		
86.4	38°29′ 38°32′R	N.1°19′E.	N. 1°19′E. 90°10′	
411.6	8°55′ 8°58′R	N.39°51′E		
215.7	23°48′ 23°46′L	N.48°49′E	59°37′ to ⊙ M.C.	
574.4	29°37′ 29°39′R	N.25°03′E		
169.05	21°22½′ 21°24′R	N.54°42′E		
162.4	19°42′ 19°37′L	N.76°06′E		
165.0	11°04′R	N.56°29′E		
170.6	23°58′ 23°57′R.	N. 67°33′E		
		S.88°30′E.		

set up on A ∡ S.W 1°52′ center

6°36′ chimney

sta 18 ö+12′ crack 40′ to 20°13′ cottage

Thunder Lake 120°52′ west

91°55′ east to

100°57′

N.18°10'E.	17°10	N.15°46 E
15°51'	15°51	15°52
N. 2°19'E.	1°19	N 0°06' W
38°32'	38 32	38°29
N.40°51'E	39°51	38°23
8°58	8 58	8°55
N.49°49'E	48°49	47°18
23°46'	23°46	23°48
N.26°03'E	25 03	23°30
29°39'	29°39	29°37
N 55°42'E.	54°42	53°07
21°24'	21°24	21°22 1/2
N 77°06'E	76°06	74°29 1/2
19°37'	19°37	19°42
N.57°29'E	56 29	54°47
11°04'	11°04	11°04
N 68°33'E	67 33	65 51
23°57'	23°57	23 57
N 92°30'E.	91°30	N 89°48' E

South
89°45
N. 89°45'E
12'
N 89°57'E.

Combs house
Bluhm's house
Pinewood
side of point
crack " " "
" " "

90°10'
0°06'
89°56'E
S.89°

S 26°28' W
S 89°56' W.
63°28

N. 0°06' W
90°10
89°44'
12'
89°56

201.2' from #5 200' from #1

102.8' Hub 163.3'

34.2 1128.8 ∡ 26°15'

137.0 1570.3

481.75

237.0 13.3 N = N53°45'E

321.2 Hub

15.55

436.75

20.3

30

09.7

9.7

40.3

30.07

44229) 13.3000

132687

313000

1.1173

89493) 100000

89493

105070

89493

155770

89493

652770

626451

26319

26844

268

55.86

1.1173

40.3

33519

446920

45.02719

1.1173

9.7

78211

100557

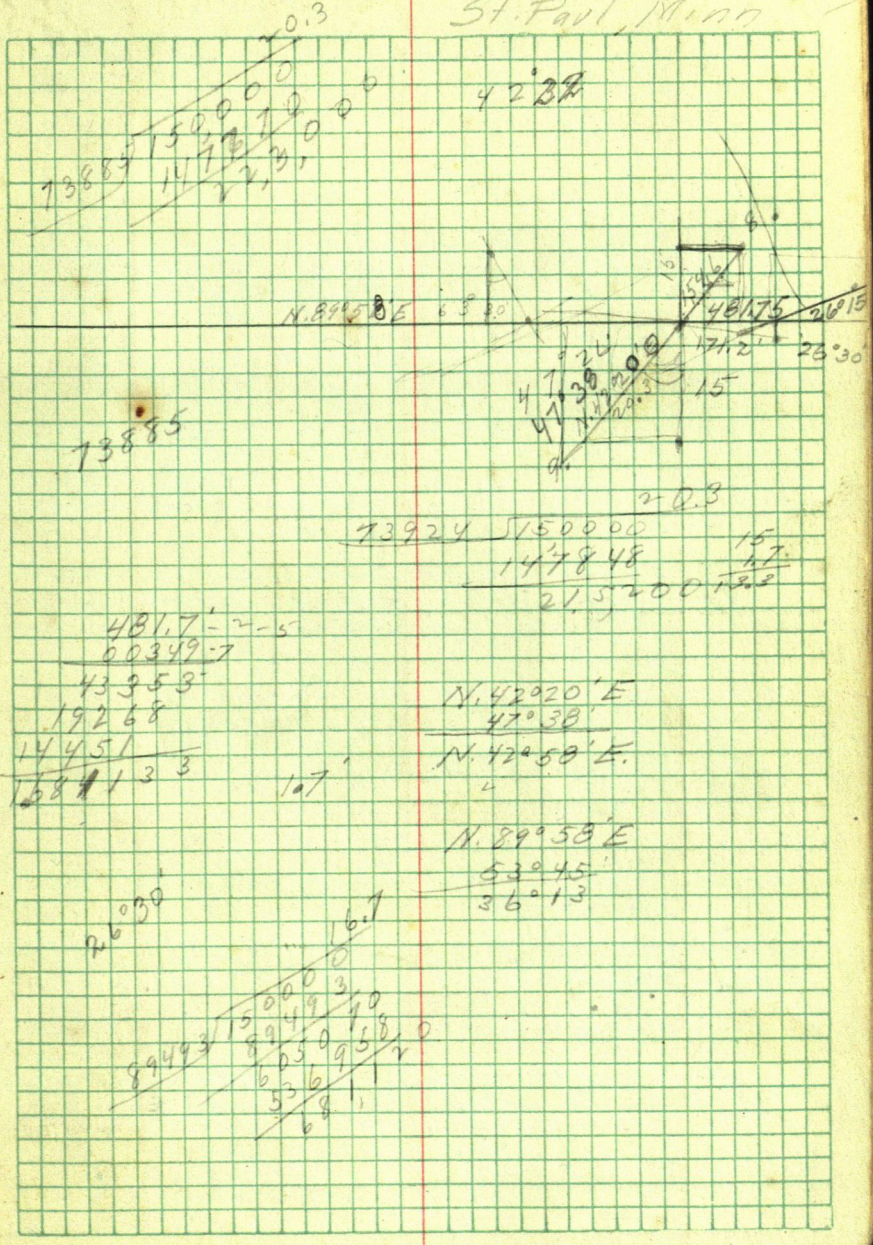
10.83781

1.1173

3.586

16.759

R. Gibbs 610 Globe Bldg
St. Paul, Minn.



2630

2.00423
30
60.12690

67.2
89493) 601269
536958
643110
626451
166590

67.22
3.8
63.42

LOTS 2-3 SEC 28 142-31

162-24
324-47-30

162-23-45

132.33 @ 15-51
90.09 @ 5-35

162-25
324-51

162-25-30

256.63
249.39

150-19
300-38-30

150-19-15

1001.39
389.45
150
88.70
238.70

165-41
331-23

165-41-30

73-09-30
146-18

73-09

144.45
101.26

100-04
200-09

100-04-30

215.0
146.60
361.60

116-49
233-39

116-49-30

92-55
185-49-30

92-54-45

π @ 1 BB 2

TURN RT

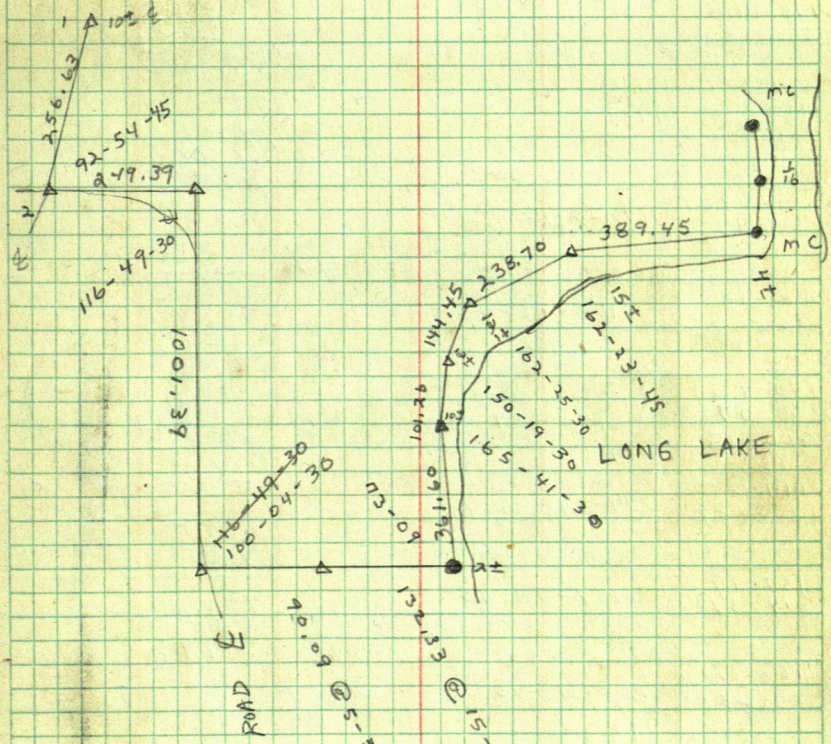
SWAMP

298' @ 141-34
235' @ 153-19
108' @ 154-18
50' @ 86-51
150' @ 32-36
470' @ 109-43

119-07 @ E 600'
350' @ 60-41
350' @ 50-47

ROAD ℄

RAY OLSON RON, DOUG 8/16/78



171-03 342-06-30	171-03-15	
126-09 252-19	126-09-30	
54-08 108-15	~~100~~ 54-07-30	
175-14-30 350-28-30	175-14-15	
44-55 89-50	44-55	
167-23 334-45	167-22-30	
163-13 326-25-30	163-12-45	
~~150-12~~ 150-07-30 300-15	150-07-30	
144-25 288-49	144-24-30	
157-19 314-37-30	157-18-45	
163-01-30 ~~326-03-30~~ 163-00 326-00	163-01-45 163-00	
146-34-30 293-08	146-34	

300
300
130
730
− 3.24
726.76

108
240
340
− 10.17
329.83

100
− 4.45
95.55

70
100
170
− 6.92
163.08

180
8.85
171.15

110
− 4.0
106.0

140
− 6.90
133.10

170
− 8.73
161.27

160
+ .25
160.25

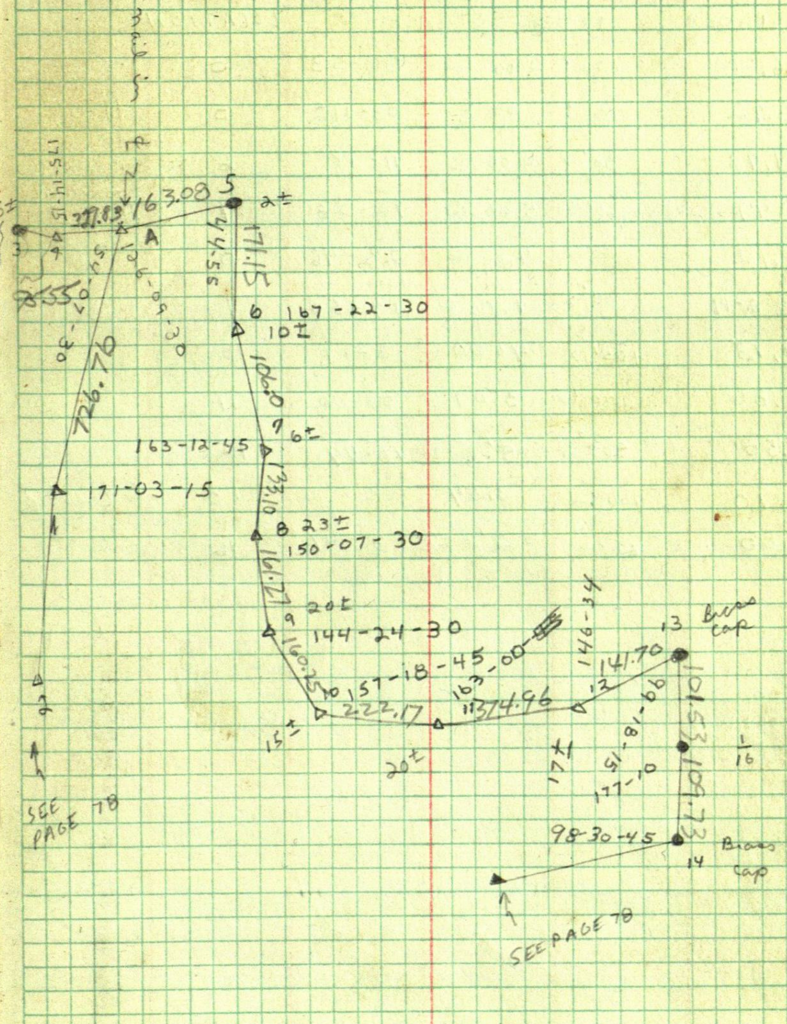
230
− 7.83
222.17

300
80
380
− 5.04
374.96

150
− 8.3
141.70

110
− 8.47
101.53

120
− 10.27
109.73

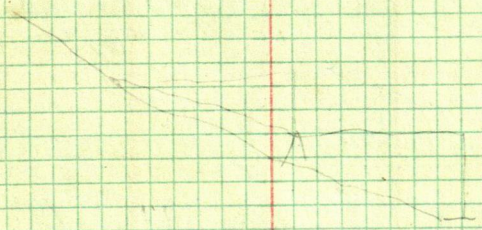


5
163.08
A
171.15
6 167-22-30
10±
7 6±
163-12-45
171-03-15
8 23±
150-07-30
161.27
9 20±
144-24-30
160.25
10 157-18-45
222.17
15±
20±
374.46
12
141.70
13
Brass cap
101.53
109.73
1/16
98-30-45
14
Brass cap
177-10
SEE PAGE 78
SEE PAGE 78
726.70

81

SHORELINE ELEV

WATER	~~100±~~ SETBACK			LOCATION	
6.88	100'	2.00 @	00-53	3	8-
6.72	105'	2.00 @	03-42	5	11-
9.92	50'→	4.00 @	11-08	6	← 50' Back from rail instead of 18' 18- 100 20
8.49	60'→	5.00 @	12-28	7	
10.12	30'→	4.00 @	23-46	8	
13.0 @ 2-19	60'→	7.00 @	19-50	9	24
9.13	105'→	4.00 @	3-11	10	10
9.86	100'→	3.07 @	00-00	11	6
5.50	50±'→	5.00 @	10-44	12	9
6.70	100'→	3.64	00-	13	4 Brass Cap
7.88	60'→	2.00 @	2-41	1/16	8.7-



99-18

198-36-30

99-18-15

177-10
354-20

177-10

98-31
197-01-30

98-30-45

50

1.5) 72

S 0°43' W

90°15' S.E.
80°45' S.W X

231-16
102-33

231-16-30

128-43-30
257-26-40

128-43-20

128-23-50
276-48-00

128-24

177-46-45
355-33

177-46-30

192-14
04-28

182-14

~~88-26~~
~~177-11-30~~
~~88-35-30~~
88-35-45
177-11

88-35-30

269-08-55
178-18

269-09
~~270-07~~

163-27
326-54-40

163-27-20

163-30-20
327-01-05

163-30-32

300
300
300
300
15 300
18 300
1950
- 9.14
194086

430
- 1.13
428.87

410
-.37
409.63

56.84
300
150
150
300
300
180
1380
- .7
1379.30

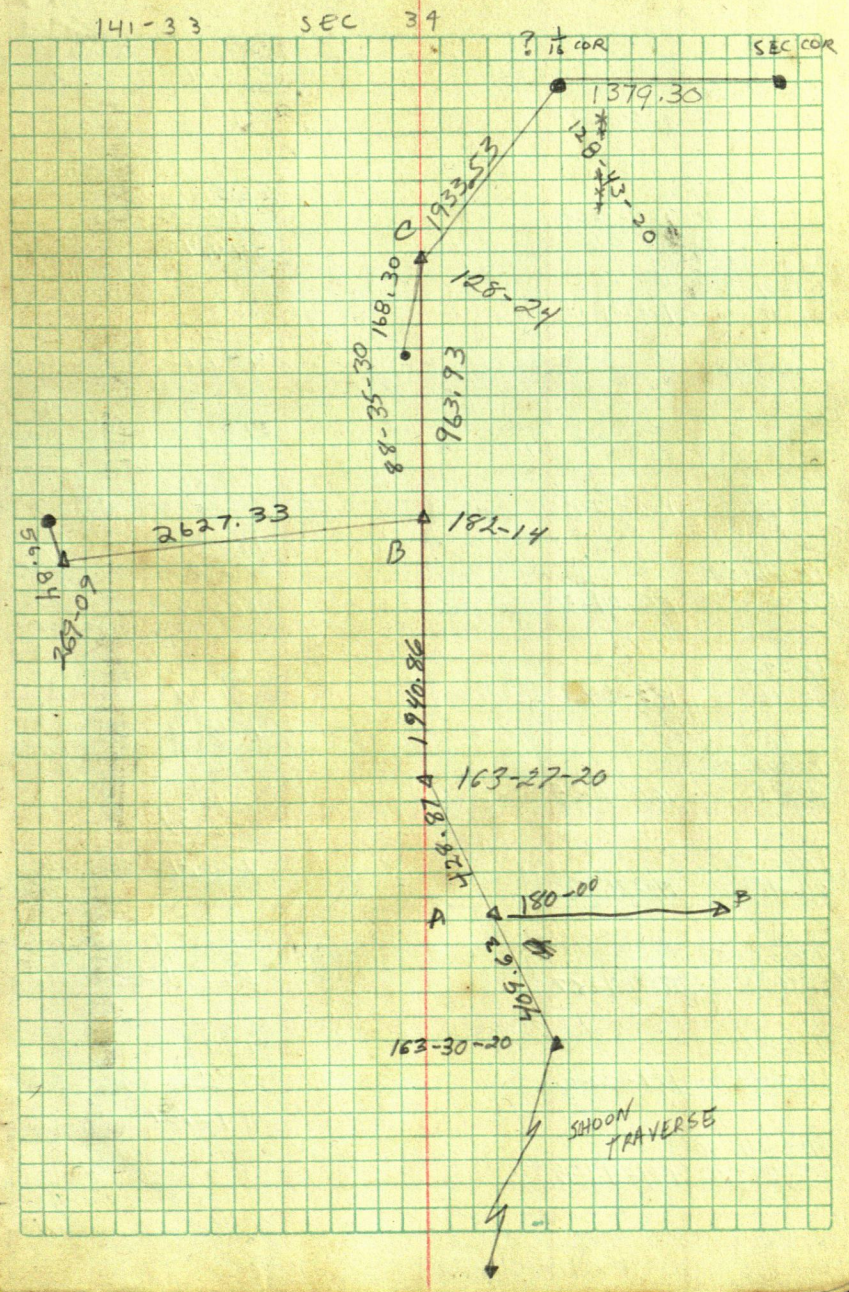
300 600
300 900
300 1200
300 1500
300 1800
140 1940
- 66.4
1933.5

170
-1.70
168.3

970
-2.07
963.93

600

2400
230
2630
-2.67
2627.33



252-07-20
144-15 252-07-30

184-55-40
09-51-40 184-55-50

183-21-30
06-43-30 183-21-45

86-00
172-00

182-22
04-44-30 182-22-15

178-41-50
357-23-46 178-41-50

192-34
65-08 182-34

168-11-25
336-23-10 168-11-35

192-21-40
24-43 192-21-30

176-03-50
352-08-15 176-04-07

177-26-30
354-54-10 177-27-05

191-44-40
23-29-30 191-44-45

210
-6.47
203.53

250
-5.55
244.45

460
-.85
459.15

370
-3.50
366.50

190
-2.0
188.0

200
-1.94
198.06

240
-6.57
233.43

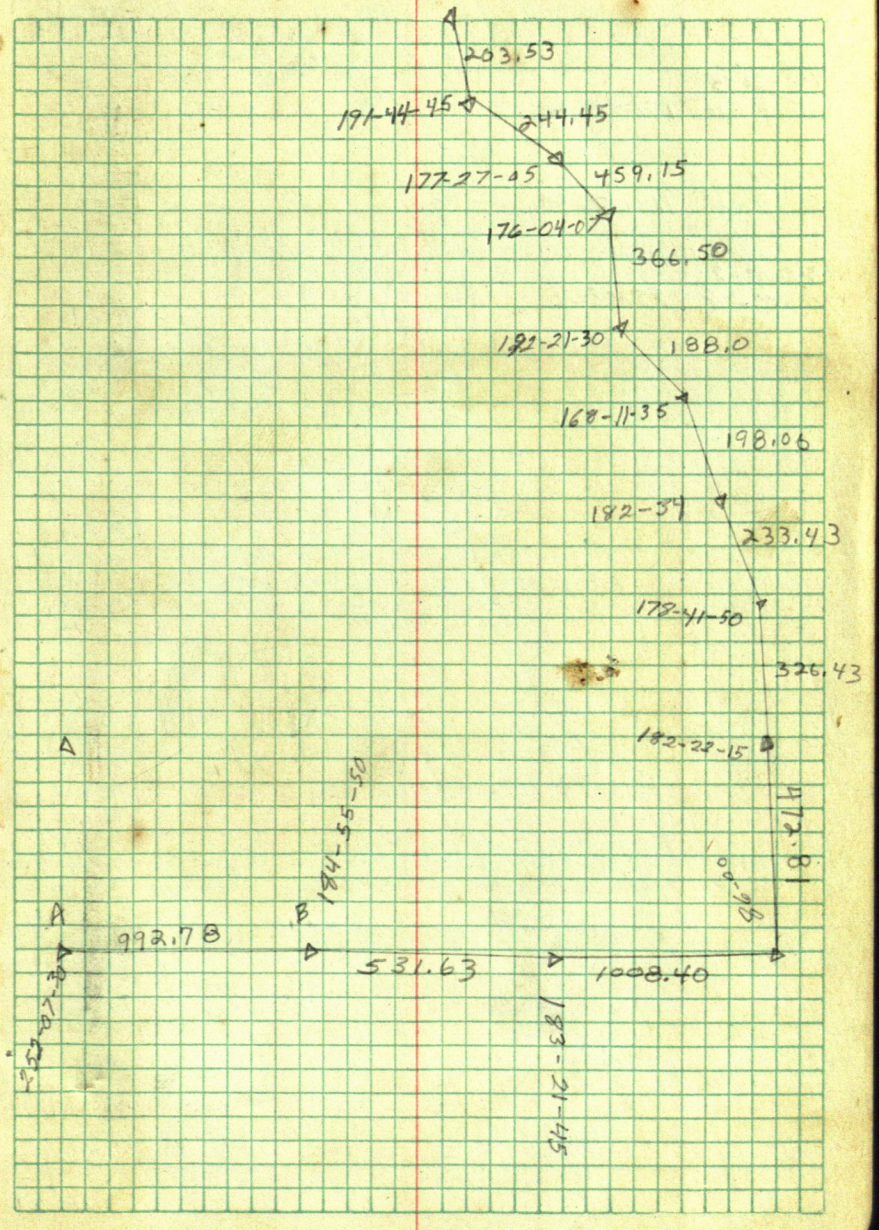
370
+3.57
326.43

480
-7.19
472.81

300.0
300.0
300.0
100.0
1,000
-7.22
992.78

300
200
300 800
210
1010.
-1.60
1008.40

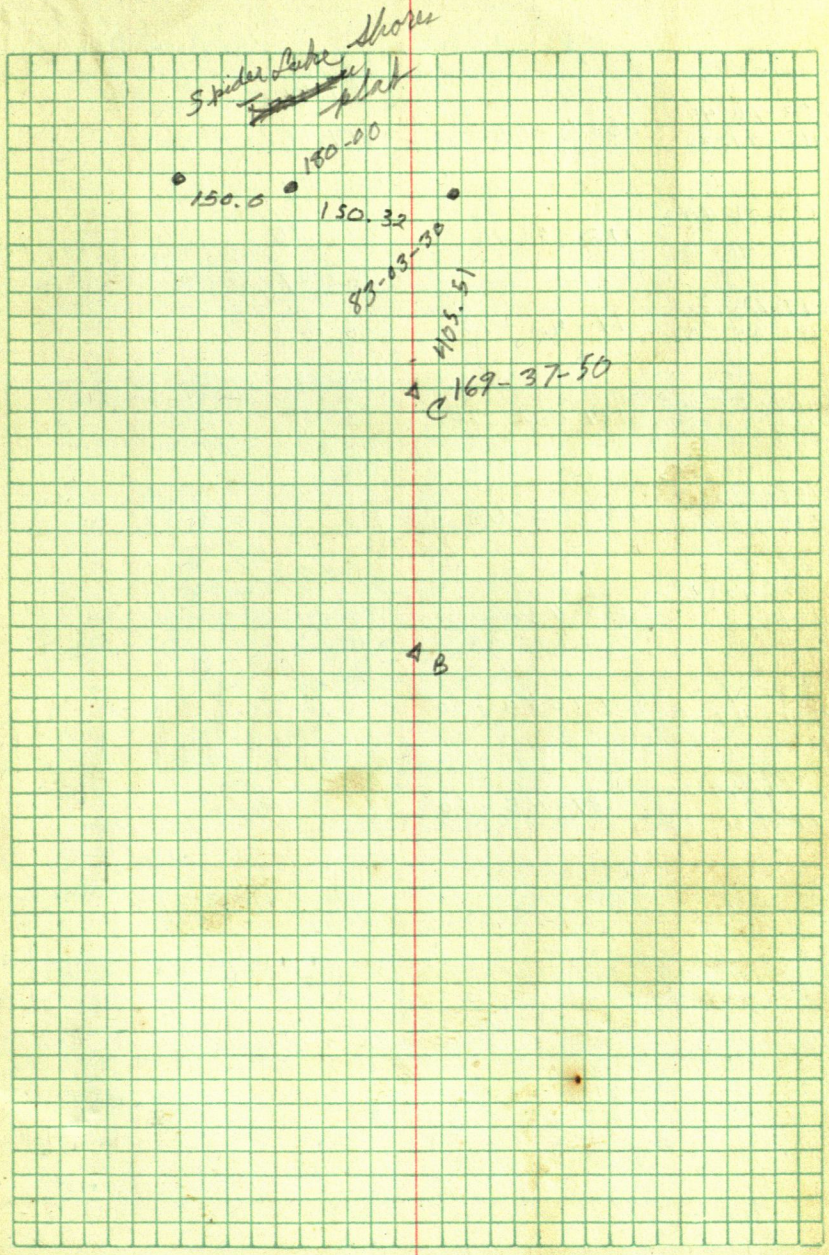
300
240
540.
-8.37
531.63



~~190-21-30~~
~~20-44-10~~ ~~176-28-05~~

169-38
339-15-40 169-38-50

83-03-20
166-06-40 83-03-30



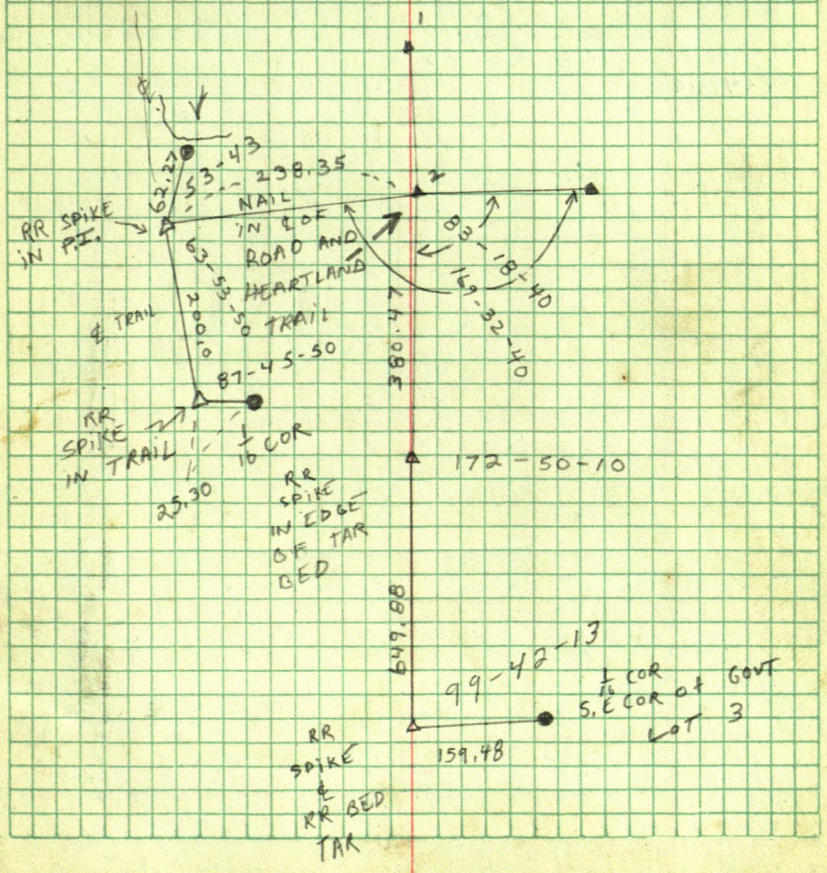
RON, KEN

90-57-55		159.48
83-18-45 166-37-20	83-18-40	649.88
		380.47
172-49-40 345-40-20	172-50-10	238.35
		62.27
99-42-30 199-24-25	99-42-13	200.0
		25.30
169-32-05 339-05-20	169-32-40	
169-32 339-05-20	169-32-40	
53-43-40 107-26	53-43-00.	
63-54 127-47-40	83-53-50	
87-45-20 175-31-40	87-45-50	

RAY OLSON 10/3/78
10/4/78

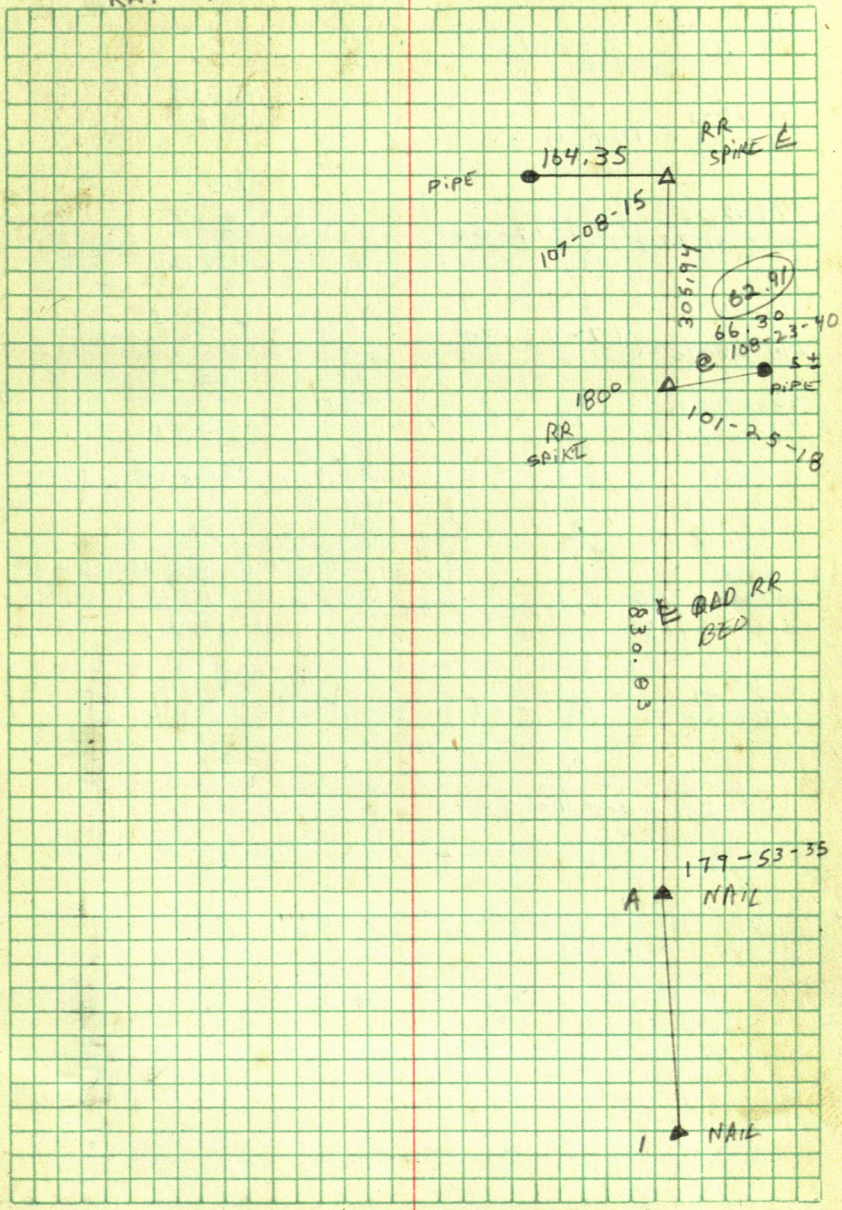
SEC 28

142-31



107-08-20 214-16-30	107-08-15	119.35 55.0 164.35
101-25-35 202-50-80	101-25-00	305.94
101-25-55 202-50-35	101-25-18	66.30 @ 108-23-40
179-52-50 359-47-20	179-53-40	830.83
179-53-05 359-47-10	179-53-35	

RAY OLSON



104-08-45
208-18

104-09

149-18-50
298-39

149-19-30

149-18-20
298-39-40

149-19-50

97-27-30
194-53-48

97-26-50

136-48-30
273-37-20

136-48-40

155-33-20
311-06-45

155-33-23

109-29-40
218-59-15

109-29-38

120-29
240-58

120-29

42-40-40
85-22-10

42-41-05

188.50
@ 78-03-40

172.0
+.99
172.99

210.05

188.23

362.81

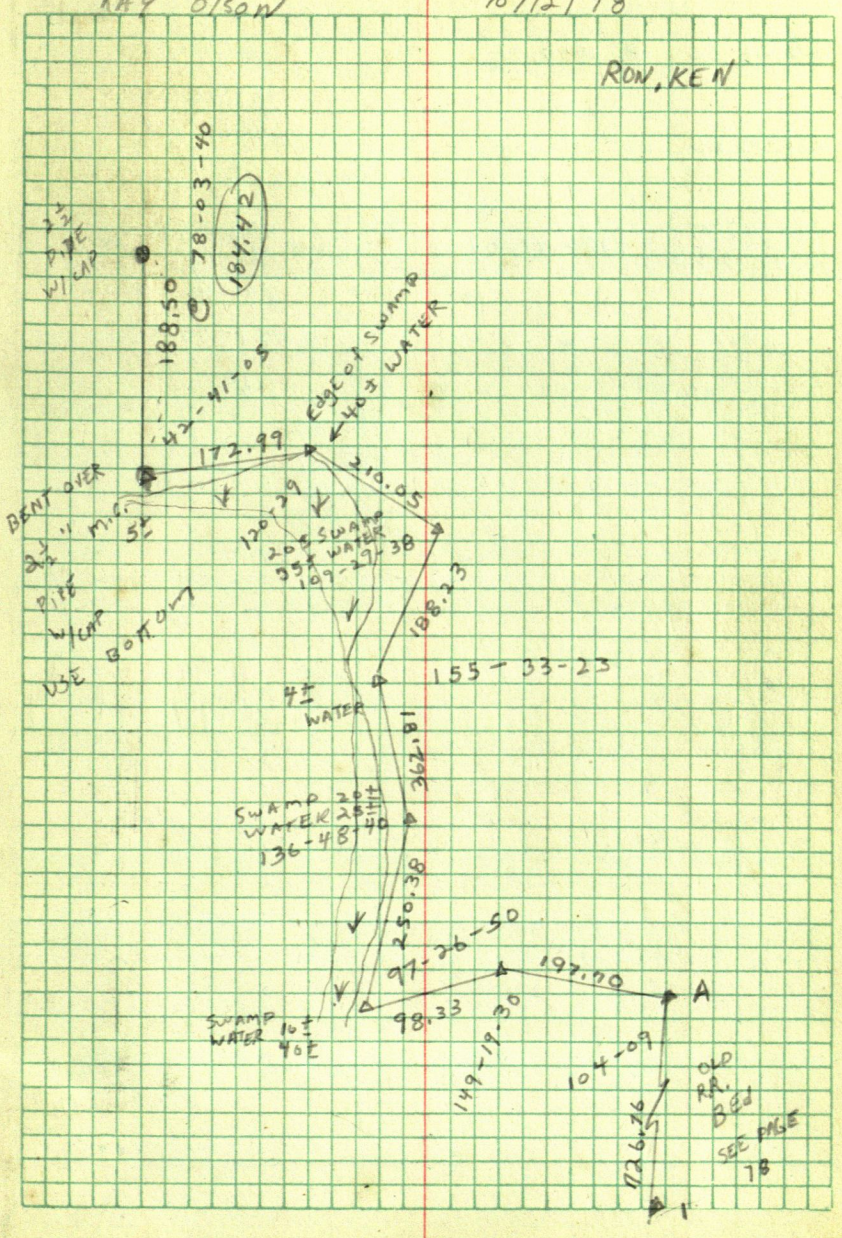
250.38

98.33

82.70
115.0
197.70

RAY OLSON 10/12/78

RON, KEN



165-26-52 @ 1057.38

265-09-05

179-49-01
359-38-03 179-49-01

99-42-13
165-26-52
264 68 65

265-09-05

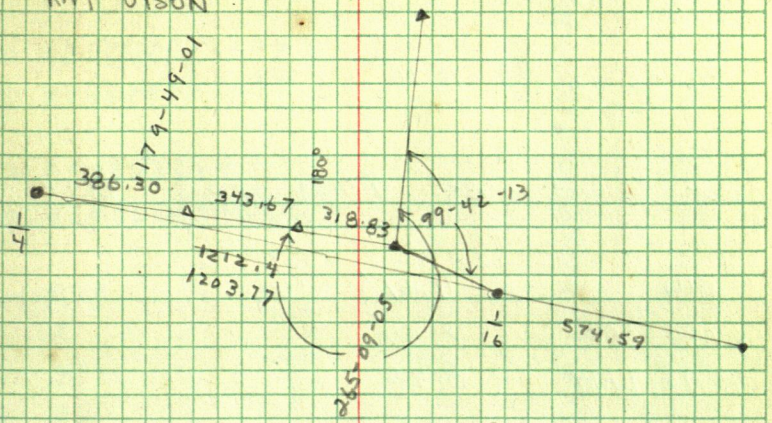
359-59-60
265-09-05
94-50-55
359-59-60

265

1 1 ,
386.30
343.67
318.83
1048.80

RON-KEN 11/30/78

RAY OISON



156-05-12 @ 10.18

π @ $\frac{1}{16}$ BS BRASS CAP LEFT

Bm	4.27'
LAKE MAY	8.54
LONG LAKE	8.45

2

KAY
OISON

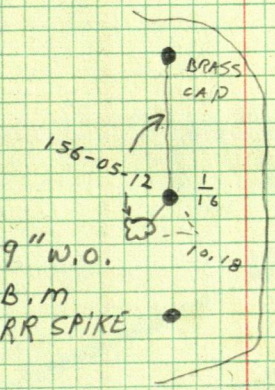
```
                    Z
1207•251            S
4906•048            S
      64            S
      32            S
       6            S
       4            S
  238•35            S

 102•4808944        A◊
-215•1938446        a◊

1309•7318944        B◊
4690•8541554        b◊
                    V
       0            S
      38            S
      16            S
       2            S
     200            S

-199•9876400        A◊
   2•2261600        a◊

1109•7442544        B◊
4693•0803154        b◊
                    V
      87            S
       7            S
      34            S
       1            S
    25•3            S

   1•2684888        A◊
  25•2681801        a◊

1111•0127432        B◊
4718•3484955        b◊
                    Z
```

```
1309•732            S
4690•854            S
      61            S
      44            S
      54            S
       1            S
   62•27            S

  29•4752242        A◊
  54•8522045        a◊

1339•2072242        B◊
4745•7062045        b◊
```

RAY OLSON 12/22/78

RON, KEN

LAKE MAY



91-31-42
29

183-03-06
02-48

91-31-33

341.46
45
386.46

177-17-37
354-34-25

177-17-12

544.45
- 1.57
542.88

177-17-24
354-34-34

177-17-17

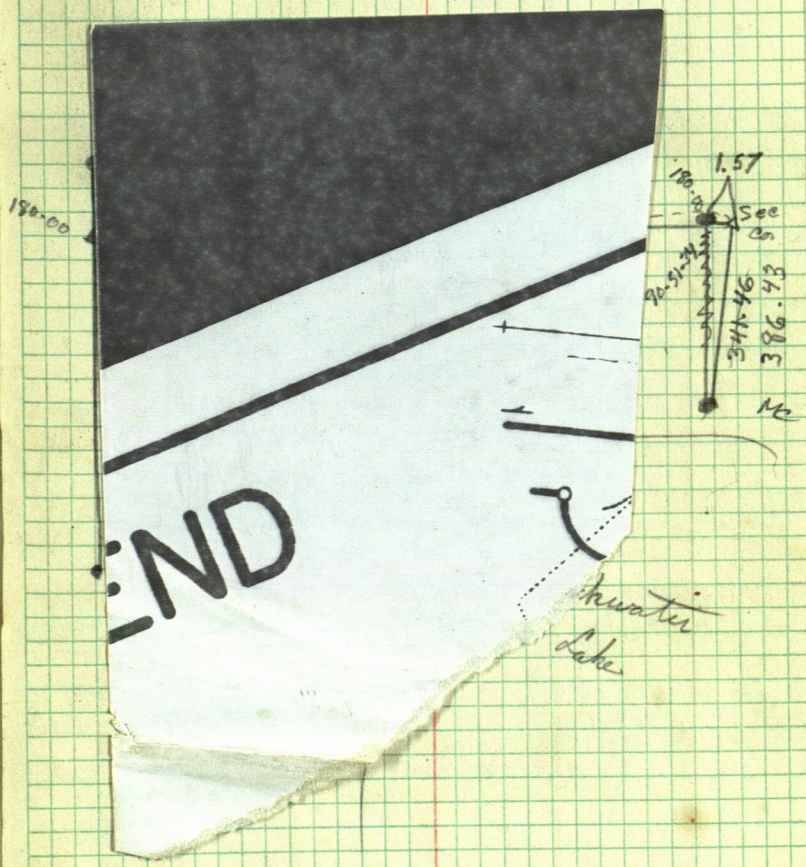
504.54
- 1.57
502.97

90-51-36
181-43-08

90-51-34

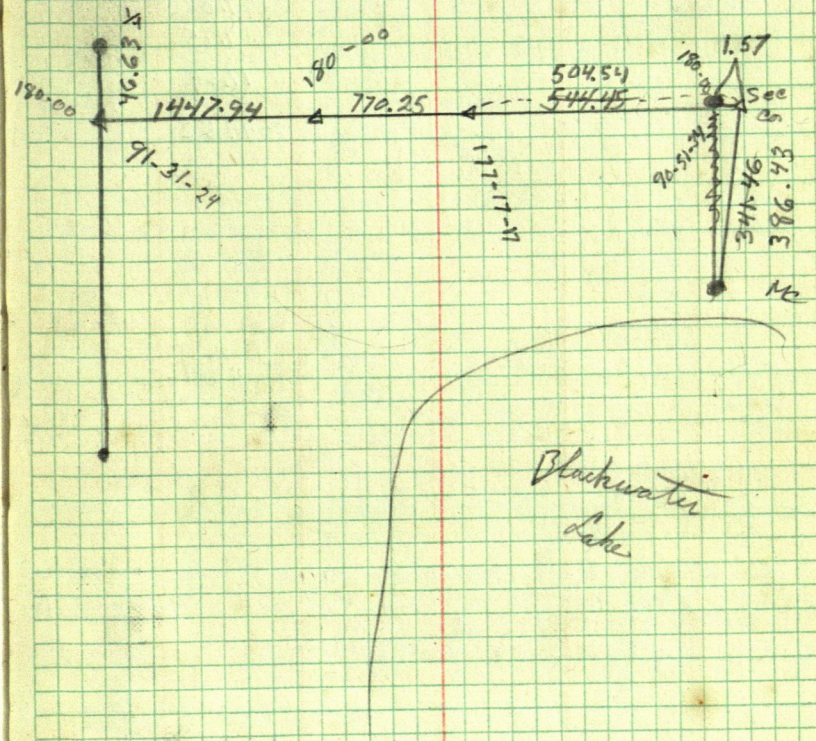
Paul Ron Ken

Pine Haven



Paul Ron Ken

Pine Haven



RON, KEN, PAUL

110-31-57
221-03-30

110 - 31 - 45

406.13
440.58
66.39
913.10

35
31.90

159-47-54
319-35-18

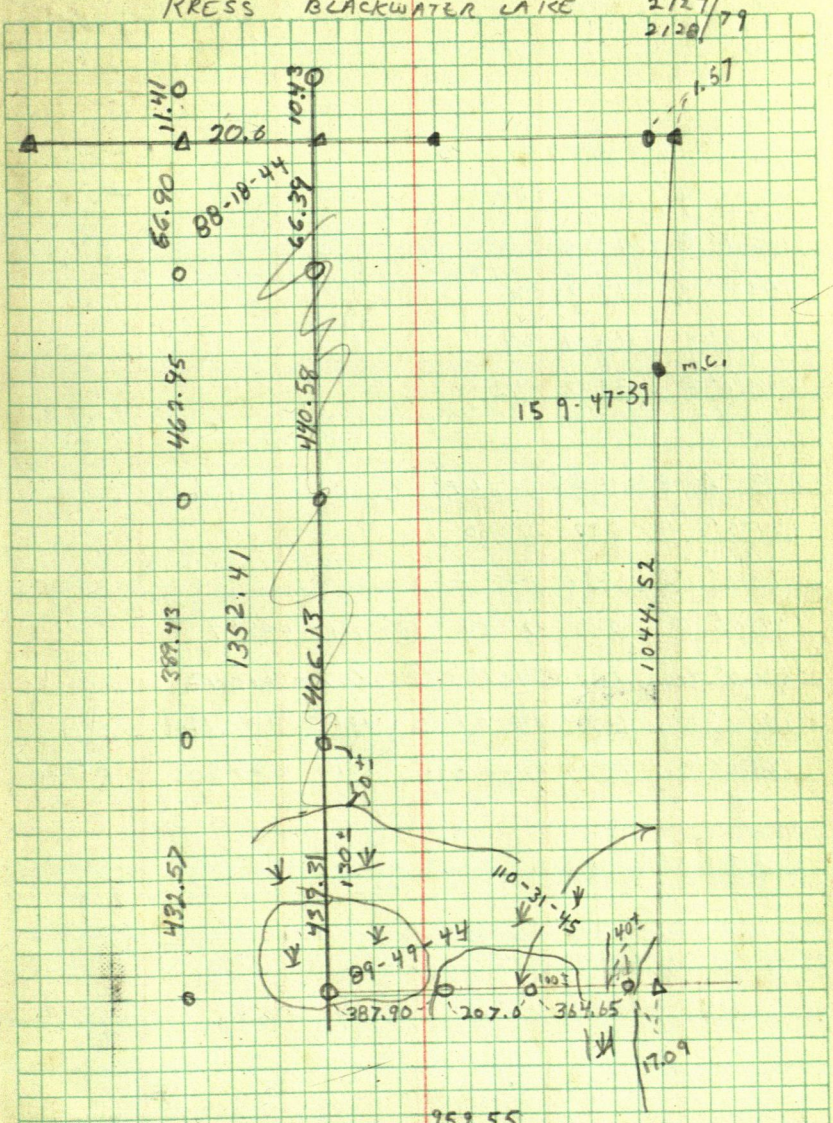
159-47-39

1351.85
919.28
432.57
66.90
462.95
389.43
919.28

1352.41
913.10
439.31

387.90
207.0
364.65
17.09
1044.52

KRESS BLACKWATER LAKE 2127/ 2128/79



RON, PAUL, KEN 2/28/79

T @ S ¼ BS A RT

21.0' @ 54-10-54

102.0' @ 43-45-00

163.0' @ 47-39-06

177.0' @ 43-51-24

190.0' @ 39-31-42

T @ A BS S¼ LT.

121.0' @ 297-27-50

93.0' @ 294-52-02

34.0' @ 252-38-24 @ 111-48-54

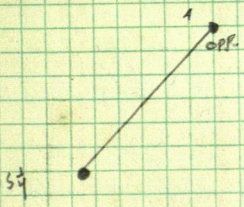
68.0' @ 180-54-15 @ 107-06-42

104.0' @ 167-04-37 @ 101-45-12

96.0' @ 181-13-03 @ 101-53-50 R'=30'

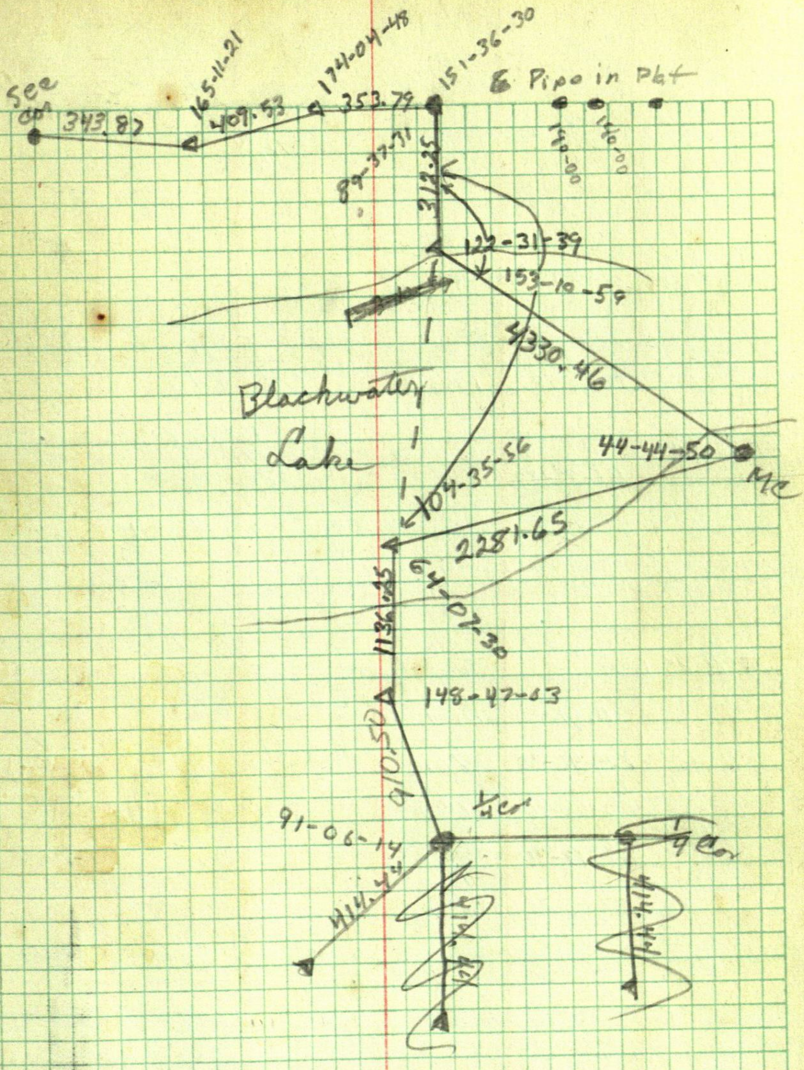
ROSE ANDERSON

SEE BOOK # 177



~~Fred Erickson~~
George Trotter

165-11-32		50	Paul Ron Fox
330-22-42	165-11-21	40	312.25
174-04-20		200	200
348-08-48	174-04-24	200	200
		200	200
		200	200
		200	200
89-37-32		200	200
179-15-02	89-37-31	200	200
		100	130.46
		200	
		200	
122-31-42			
245-03-18	122-31-39		4330.46
206-49-20		200	200
53-38-44		200	11050
153-10-58			
306-21-48	153-10-59		
44-45			
89-29-40	44-44-50		
104-36-04			
209-11-52	104-35-56		
64-07-26			
128-15	64-07-30		
148-47-06			
297-34-06	148-47-03		
91-06-15			
182-12-28	91-06-14		

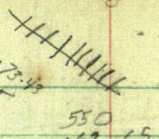

See Cor
343.87
165-11-21
409.53
174-04-48
353.79
151-36-30
Pipe in Plat
140.00
140.00
89-37-31
312.35
122-31-39
153-10-59
4330.46
Blackwater Lake
44-44-50
Mc
104-35-56
2281.65
1136.25
64-07-30
148-47-43
910.50
1/4 Cor
91-06-14
414.44
1/4 Cor

179-24-26
358-48-06 179-24-03
179-24-12
358-41-46 179-23-53

179-44-50
359-29-21 179-44-41

98-04-10
196-08-24 98-04-12 185.46

161-32-42
323-05-18 161-32-39



550
162.65
712.65

2130.76
573.43
2704.19

1932.63
712.65
2650.28

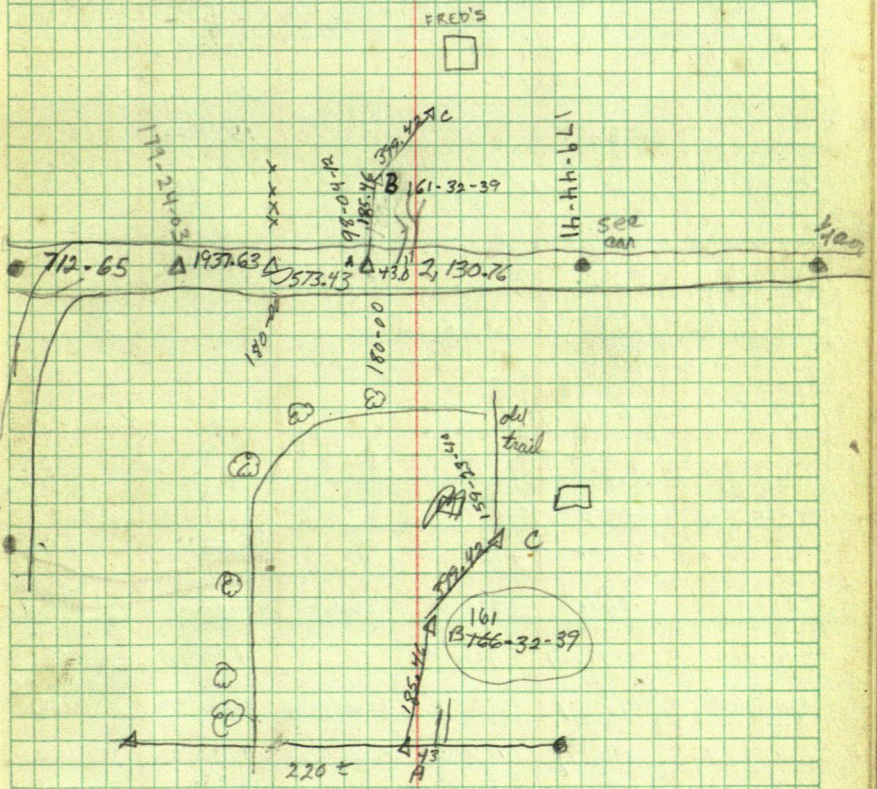
399.47

T @ BS B

Angle	Dist
124-46-30	76.0
82-23-06	365.0
62-13-30	384.0
37-38-02	427.6

Tree line

George Trotter



RON, KEN 3/15/79

179-53-48
359-47-26 179-53-43

183-07-45
06-15-03 183-07-32

111-36-50
223-13-45 111-36-52 136.75@ 261-32-54 135.26

1064.66

62-09-20
124-18-54 62-09-27 1310.60

1419.08

216-34-36
73-08-33 216-34-17 822
433-08-33 52.60
874.60

439.0

97-09-01
194-19-54 97-09-57 2341.20

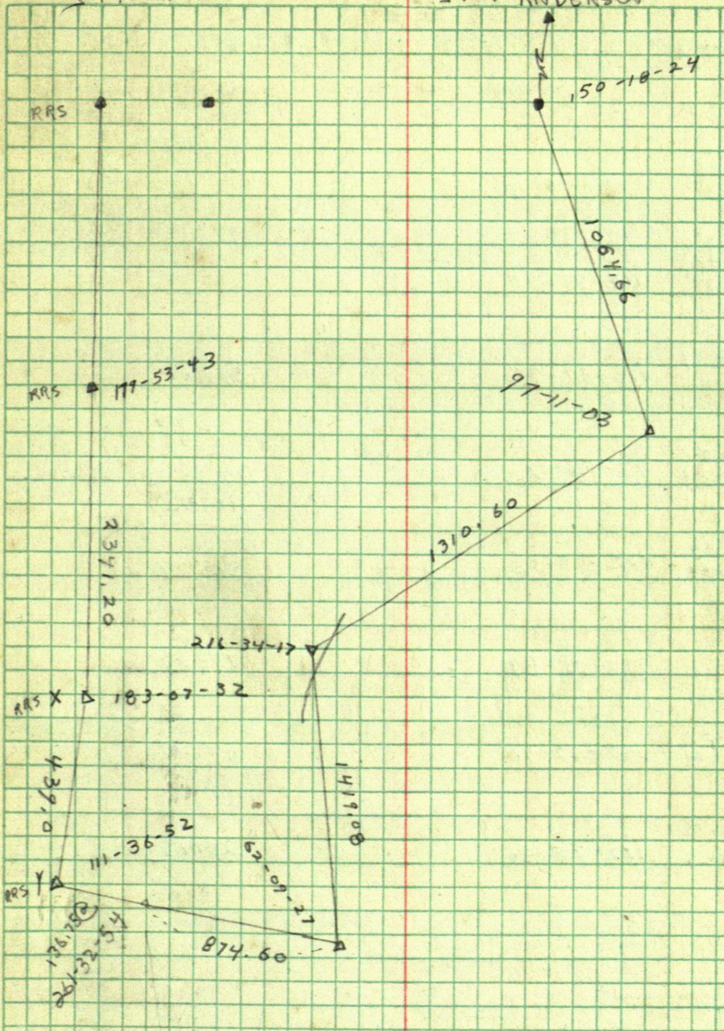
97-11-12
194-22-06 97-11-03

150-18-36
300-36-48 150-18-24

→ TIME SCHEDULE ←

CREW	DATE	START	LUNCH	FINISH	
RON-KEN	3/14/79	1:00 P.M.	—	4:45 P.M.	WED.
RON-KEN	3/15/79	9:00 A.M	12:00-12:45	5:00 P.M.	THURS.
RON-KEN	3/16/79	10:00 A.M.	12:00-12:45	4:45 P.M.	FRI.
RON-KEN-PAUL	3/20/79	9:45 A.M.	12:10-1:00	4:40 P.M.	TUES
RON-KEN-PAUL	3/21/79	9:30 A.M.	11:50-12:45	5:00 P.M.	WED.
RON-PAUL	3/22/79	2:30 P.M	—	4:30 P.M.	THURS
RON-PAUL	3/23/79	9:15 A.M.	12:30	—	FRI

547-3130 JIM ANDERSON



RON - KEN 3/16/79

106-47-59

X

DISTANCES

184-15-27
08-30-36 184-15-18

164-48-38
329-37-21 164-48-40

175-27-39
350-55-06 175-27-33 518.95

93-53-22
187-46-33 93-53-17 117.33 @ 109-36-48
110.52

182-53-39
05-47-06 182-53-33 515.24

192-22-57
~~124-45-18~~ ~~192-22-39~~ 773.07
384-45-18 R.B.

192-22-54
27-45-32 192-22-46 477.64

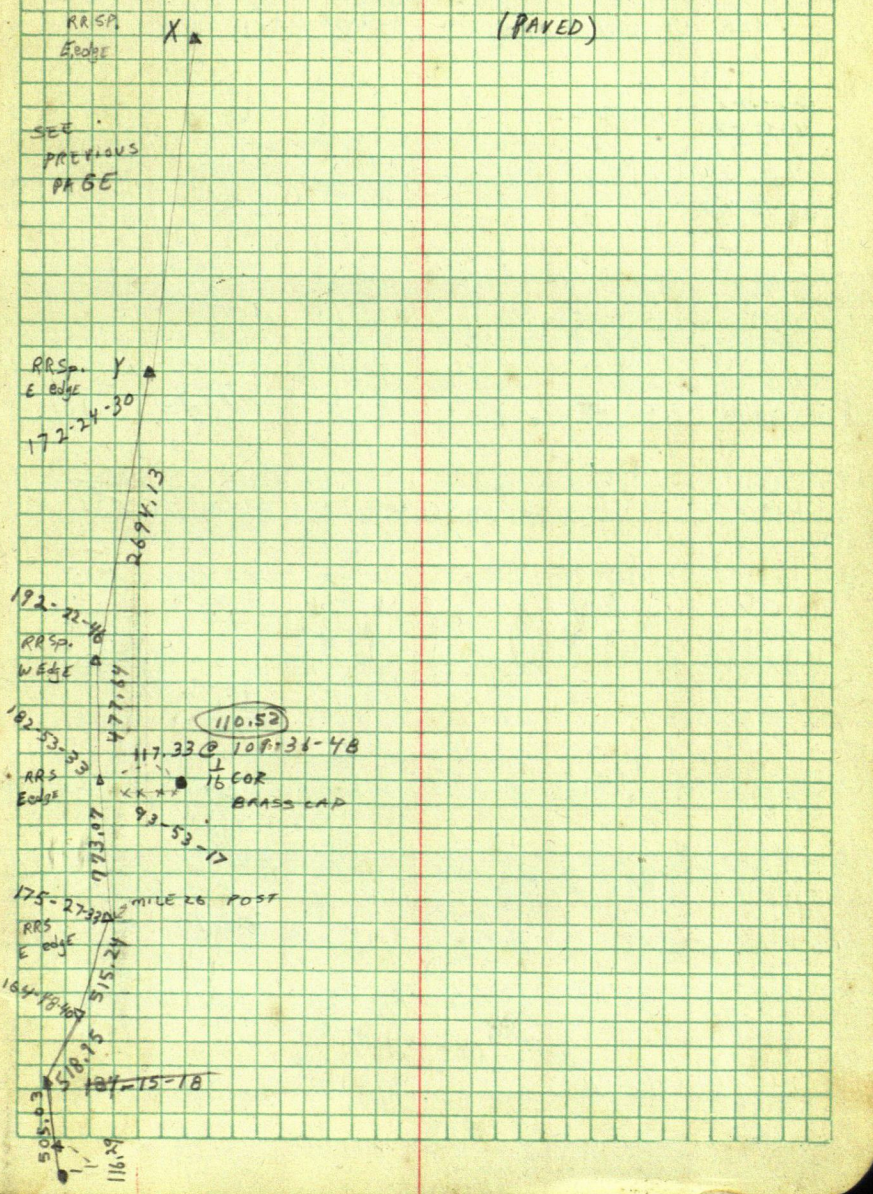
172-24-35
344-48-59 172-24-30 2674.13

184-15-18

JIM ANDERSON

TRAVERSE down HEARTLAND SNO-TRAIL

(PAVED)



RON-KEN-PAUL

N. LINE BRG 70-52-54-4

~~TRA~~ W. LINE BRG 3-36-25-1

155-01-27
310-02-50

155-01-25

65-16-20

95.55

119.05

79.27 @ 106-42-18

+ 56.80

+ 70.00

65.0 @ 66-09

64-~~45-36~~

89-60
66-09
23-51

64-75-80
64-45-36
30-44

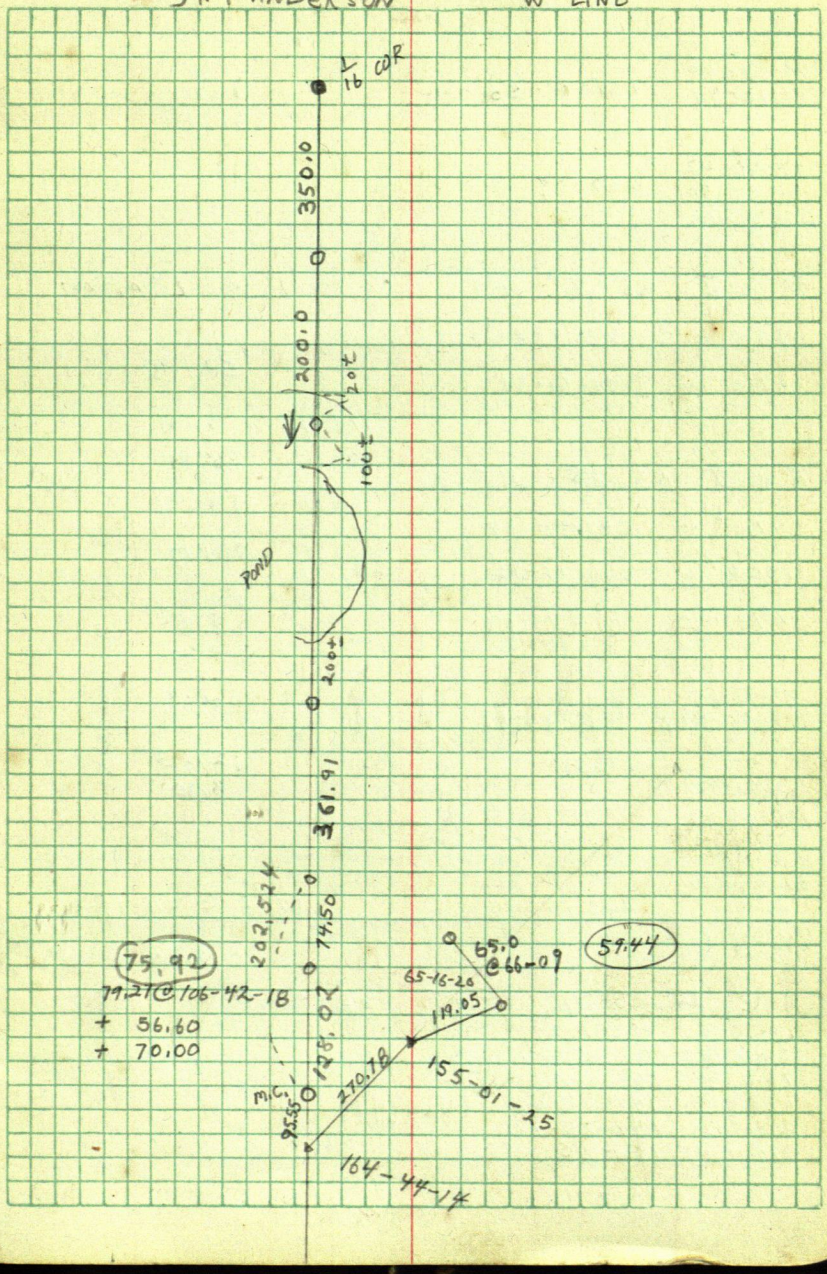
.915
65
4575
5490
59.475

30
.03
.90

59.48

.59
.90
0°
.531

361.91


JIM ANDERSON
W LINE
1/16 COR
350.0
200.0
20±
100±
POND
200±
361.91
202.52
74.50
75.92
79.21 @ 106-42-18
+ 56.60
+ 70.00
125.07
M.C.
25.56
270.78
155-01-25
164-44-14
65.0
@ 66-09
65-16-20
19.05
59.44

JIM ANDERSON

150-07-00
300-13-51

150-06-56

207-40-02
55-19-50
415-19-50

207-39-55

Π @ II BS I RT

178.0' @ 00-19-30

67.0' @ 04-59-30

Π @ II BS III RT

47.0' @ 351-00-54

156.0' @ 356-17-45

273.0' @ 01-43-09

83-26-25
166-52-27

83-26-14

94-04-06
188-08-12

~~94-04-06~~
95-23-42

220-48-06
81-36

220-48-00

441-36-00

Π @ III BS IV RT.

135.0 @ 00-51-27
28.0 @ 57-26-15
76.0 @ 140-08-03
143.0 @ 142-18-09
213.0 @ 139-25-06
310.0 @ 136-45

ROAD TRAVERSE

370
147.70
517.70

ROAD & LOCATION

361.91

172.11 41.91
86.22 305.34
80.20 530.41
68.23
23.41 181.17

200.0
8.82
208.82

279.29

127.93
8.90

23.38

67.05 @ 248-19-30

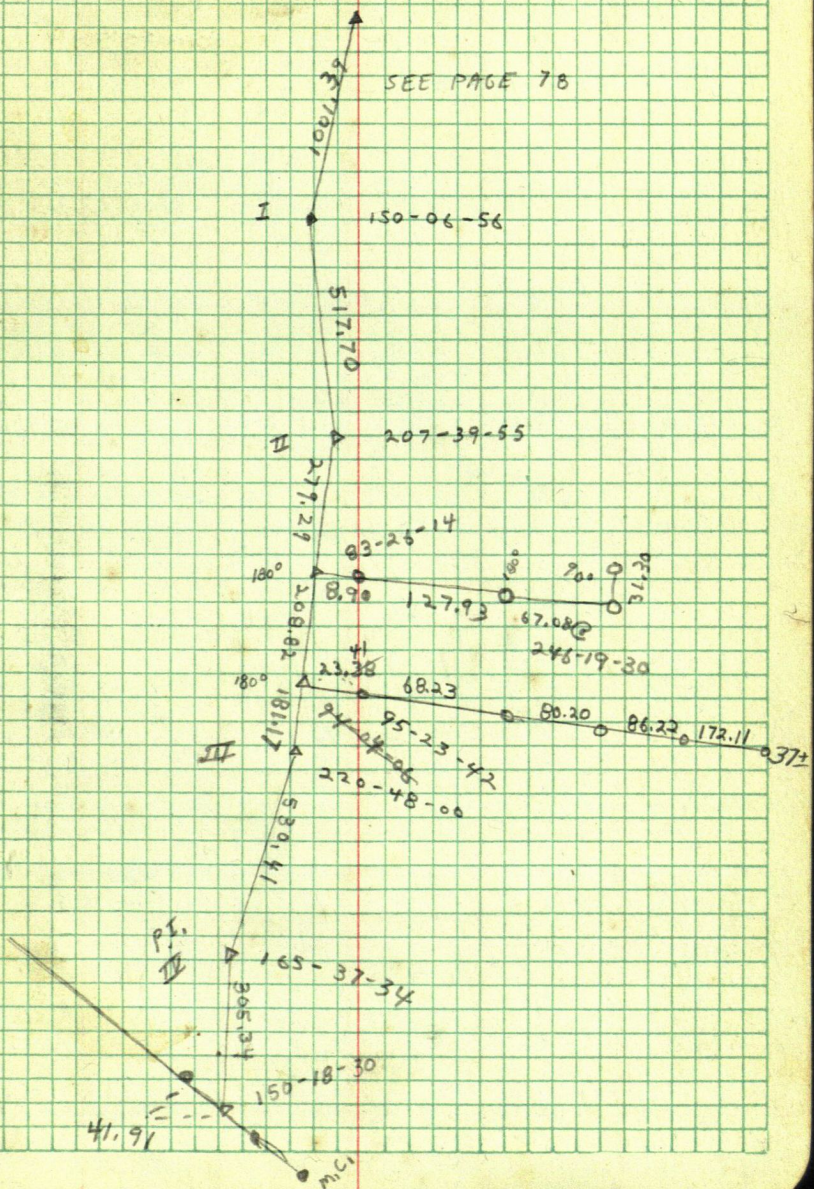
31.30 @ 90°

℄ ROAD

3/21/79

RON-KEN-PAUL

SEE PAGE 78



ANDERSON

165-37-45
331-15-08

165 - 37 - 34

NAIL LKSH. 99,74 @ 109-00-10

- 13,35

NAIL TO PIPE

150-18-30
300-37

150 - 18 - 30

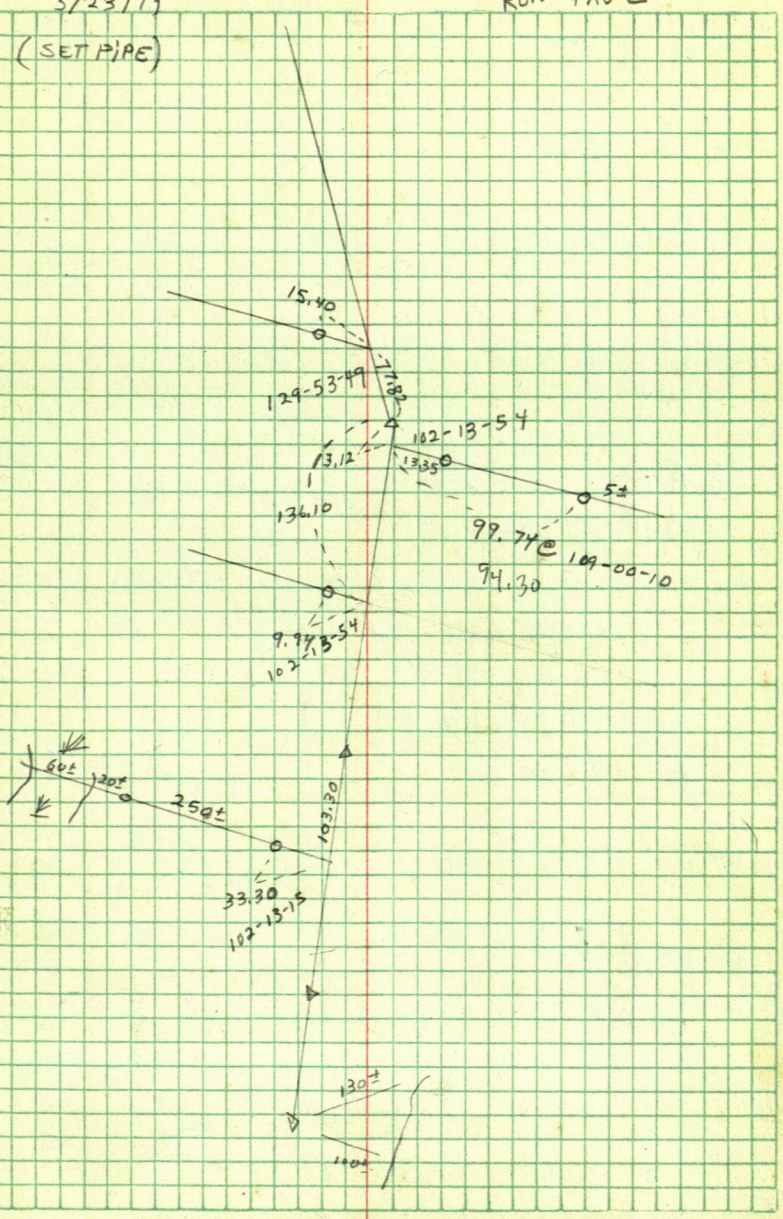
33,30

250' 20' TO MARSH
80'

3/23/79

RON - PAUL

(SET PIPE)



SAYER

180-00-25
00-40 | 180-00-20 | 730
138.1
868.1

190-20-36
20-40-40 | 190-20-20

120.0
200.0
139.10
459.10
868.1
1327.20

169-25-17
338-50-03 | 169-25-02

~~164-07-50~~
185-14-40
10-28-50 | 185-14-25 | 206.30
233.40

331.05

TRAA

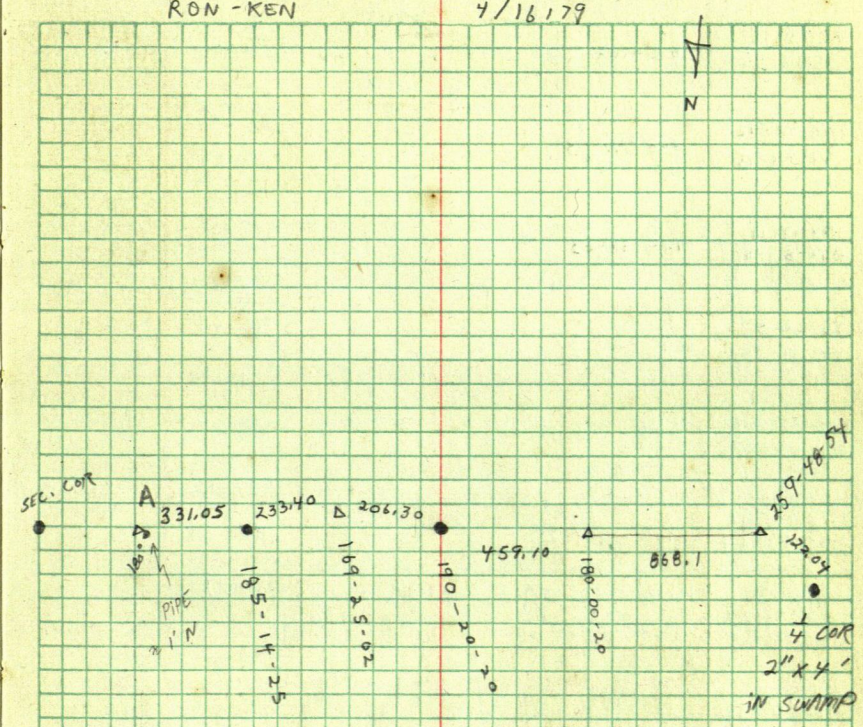
DISTANCE TO SEC COR

VERT.	DIST		122,044 @ 259-48-54
91-58-28	583.32F	(582.97)	
	177.799M		

81-00-00
161-59-42 | 80-59-51

1352.984
2 | 2705.969
60 4
10 19
16

RON - KEN 4/16/79

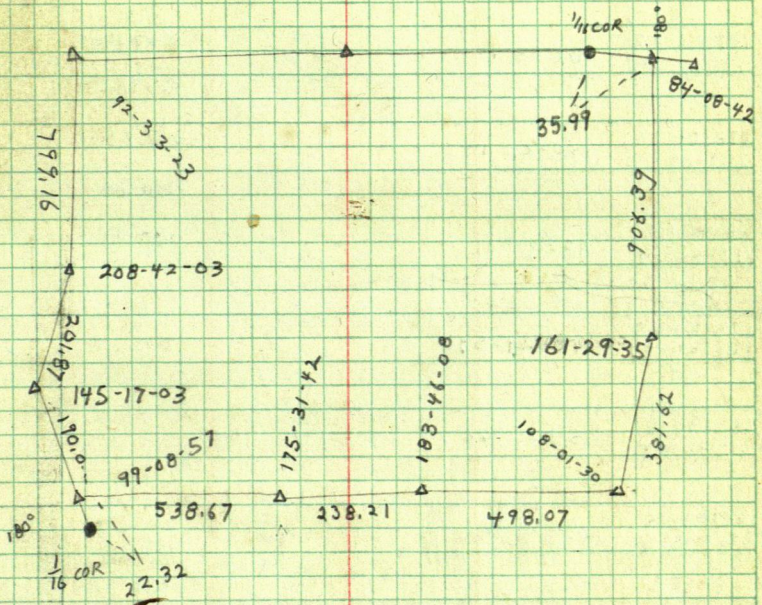


SAYER

92-33-36 185-06-45	92-33-23	799.16
		201.87
208-42-12 57-24-06 417	208-42-03	190.0'
		470
145-17-11 290-34-06	145-17-03	+ 68.67
		538.67
99-08-54 198-17-54	99-08-57	
		238.23
175-32-07 351-03-24	175-31-42	498.07
		381.62
175-32-07 351-03-24	175-31-42	906.39
		35.99
183-46-27 07-32-15	183-46-08	
115-33-12 2		
108-01-35 214-03	108-01-30	
84-08-54 168-17-24	84-08-42	
161-29-48 322-59-09	161-29-35	

RON-KEN

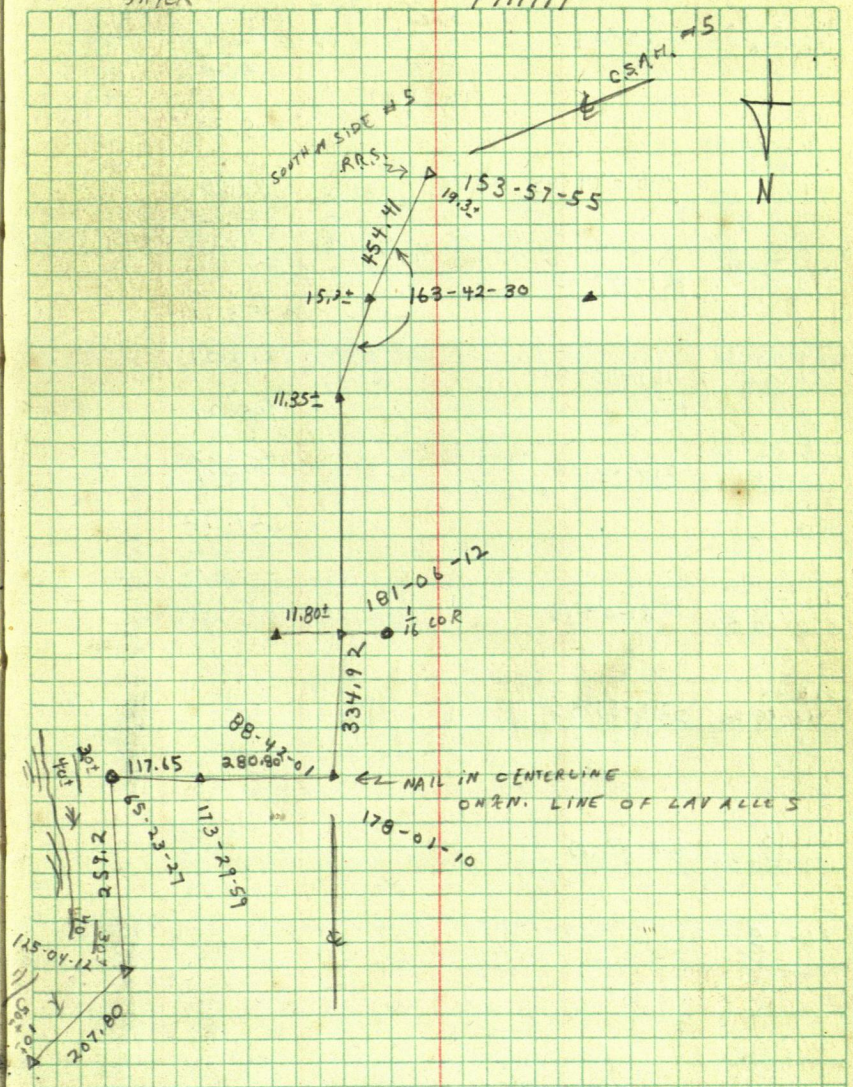
4/17/79



163-42-43 327-25-00	163-42-30	200.0
		454.41
		19.3
153-57-54 307-55-50	153-57-55	15.3
		11.35
181-06-22 02-12-24	181-06-12	207.80
		259.2
178-01-20 356-02-20	178-01-10	117.65
		280.80
88-42-03 177-24-02	88-42-01	334.92
173-30-20 346-59-57	173-29-59	
65-23-18 130-46-54	65-23-27	
125-04-15 250-08-24	125-04-12	

SAYER

4 119179

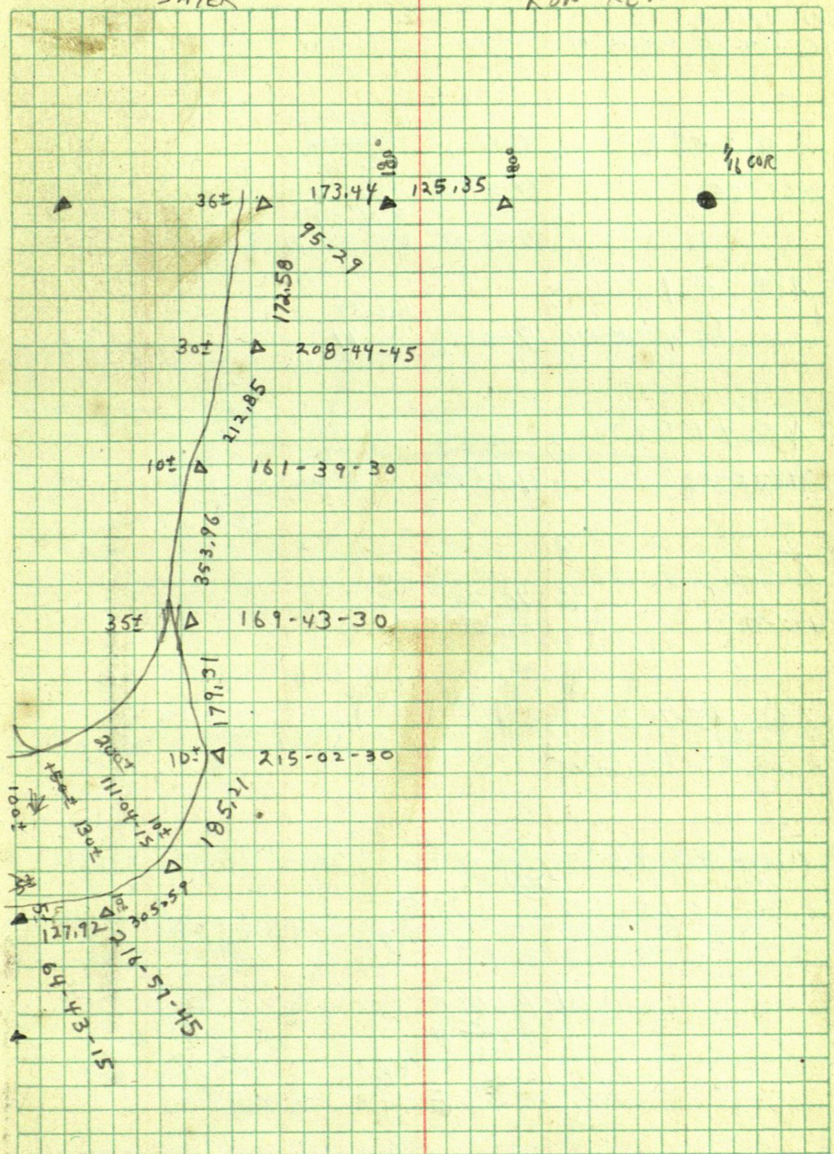


4123/179

95-28-30 190-58	95-29	173.44	459.10
		36±	209.44
			668.54
208-45 57-28-30		125.35	334.27
360 417	208-44-45	172.58	459.10 334.27
		212.85	125.35
161-39-30 323-19	161-39-30	~~3~~	
		353.96	
~~169~~-43-30 339-27	169-43-30	179.31	
		185.21	
215-02-30 70-05	215-02-30	305.59	
360 430		127.92	
111-04 222-08-30	111-04-15		
216-58 73-55-30	216-57-45		
360 433			
64-43 129-26-30	64-43-15		
86-25			

SAYER

RON-KEN



81-00-00
161-59-42 80-59-51

Δ @ 2 BS 3 (3) VCAT Dist
159.45 F
9-05-56 91-24-36 48.594 M
(1) 342.31 F
91-29-48 104.338 M

Δ @ 2 BS 1 (4) 161.87
168-03-42
336-07-12 168-03-36 91-01-24 49.344

Δ @ 4 BS 2 (2)
248-00-32 14.52

(6)
Δ @ 4 BS 5 (5) 76.73
192-39-42

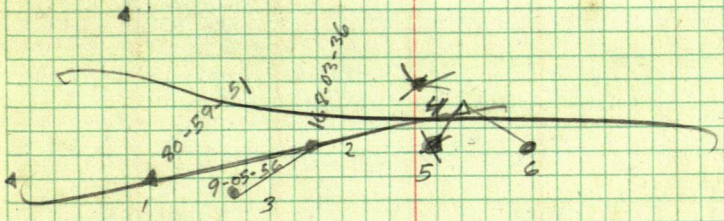
Δ @ 1 BS 7
89-15-34
178-30-50 89-15-25 1/16

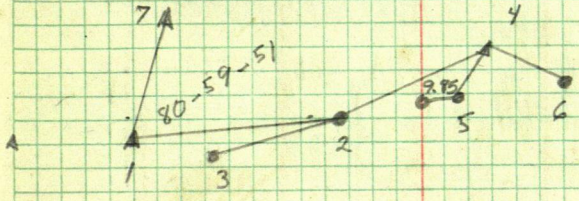
Δ @ 8 BS PI
108-23-30 (PI)
216-46-54 108-23-27 93.82 F
28.599 M

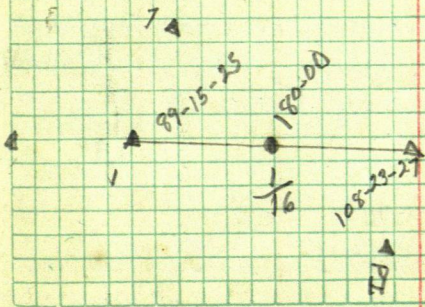
(1) 161.61 F
49.260 M

(1/16) 72.85 F

161.61
72.85
88.76
161.61


80-59-51
9-05-56
16-03-36
1
2
3
4
5
6


7
80-59-51
3.85
1
2
3
4
5
6

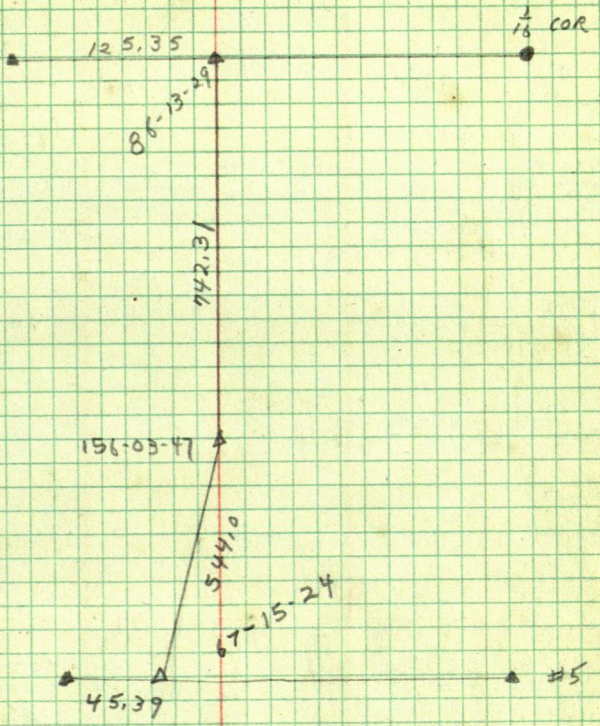

7
89-15-25
180-00
8
1
1/16
105-39-27
HD

RUN, KEN

86-13-33 172-26-57	86-13-29	742.31
156-03-48 312-07-33	156-03-47	544.0
		45.39
67-15-24 134-30-48	67-15-24	

544.0
742.31
1286.31

SAYER 5/17/79



Jim MiERS

179-11-30 358-27-00			199.82	200.0 @	2-25
				+ 92.76	
179-14 358-28	179-14	122-57 245-55	122-57-30	156.45 @	9-50
179-13-48 358-27-48	179-13-54			195.90	
~~189-34~~ ~~372-39~~		143-26-30 286-52	143-26	335.79	
183-06 06-12	183-06			@ 200' - 6' from Shore to line	
		183-05-24 06-10-24	183-05-12		
71-25 142-50	71-25			90.30	
				127.25	
82-22-30 164-45	82-22-30			239.0 80.0 319.0 14.53 333.53	
192-11 384-22	192-11				
131-16 262-32	131-16			141.28	
				136.30	
61-08-30 122-17	61-08-30			135.12	
~~200-59~~ 154-01-30 308-03	154-01-30				

TO ABS BRT

CABIN

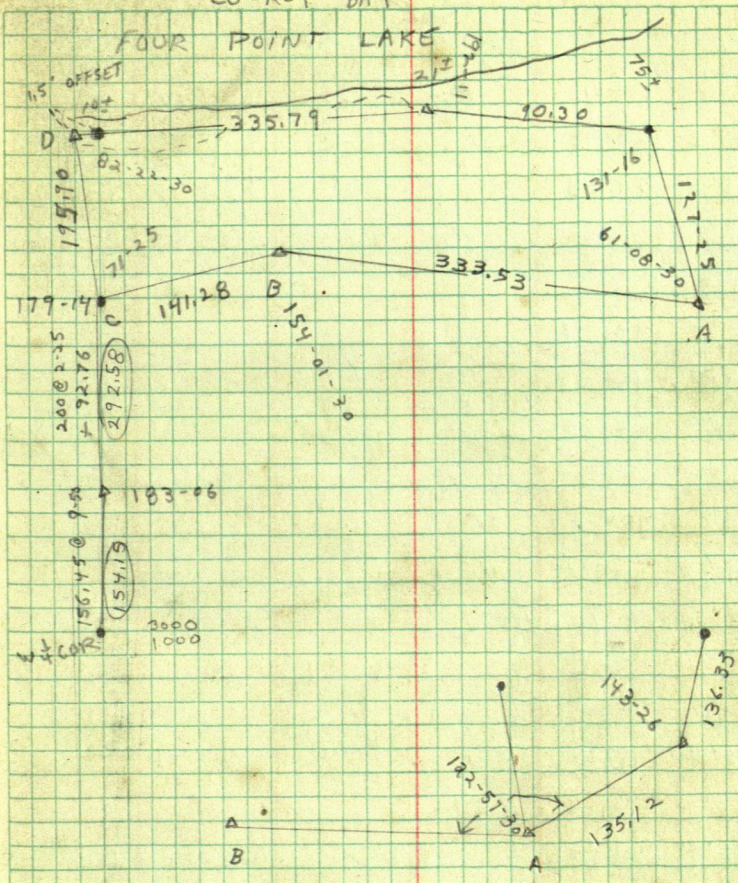
1 113.0' @ 18-47

2 92.0' @ 25-07

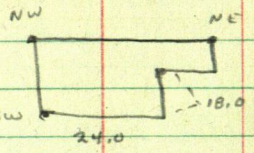
3 110.0' @ 38-24

W-ROY BAY

FOUR POINT LAKE



	T @ B	BS A	RT	
	OFFICE			
1	NE 110' @	15-11		
2	NW 49.0' @	23-43		
3	SW 68.0' @	54-53		
	GARAGE			
4	82.0' @	131-18	SE	
5	71.0' @	151-18	NE	
6	89.0' @	153-52	NW	
	"			
7	62.0' @	154-27	SE	
8	62.0' @	165-38	NE	
9	18' DEEP TO WEST			
	HOUSE			
9	63.0' @	179-35	SW	
10	39.0' @	181-40	SE	
11	47.0' @	209-30		
12	38.0' @	219-13		
13	70.0' @	241-50	NE	
	SHED			
14	100.0' @	~~271~~ 277-00	SW	8X8



T @ B BS A RT

SHED

1	58.0' @	~~277-00~~ ~~281-20~~ 281-20	~~SW~~ ~~SW~~ SW	5X5

SHED

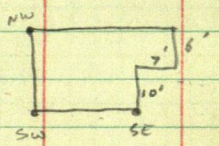
2	105.0' @	~~280-59~~ 290-00	SE	8X8

GAS TANK

3	63.0'	289-15 ~~280-57~~	CENTER	3X8

CABIN

4	107' @	301-45	NW	
5	92' @	309-15	SW	
6	102' @	318-30 ~~319-10~~	SE	



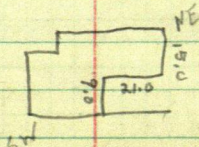
CABIN

7	175.0' @	335-10	NW
8	163.0' @	349-00	SW
9	184.0' @	350-05	

T @ D BS C LEFT

CABIN

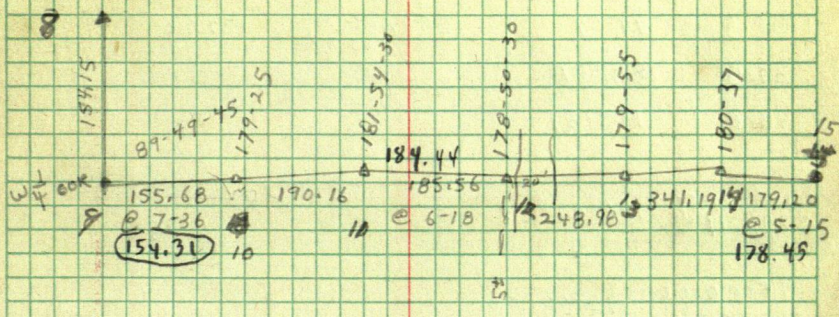
1	38.0' @	6-08	SW
2	22.0' @	14-23	
3	26.0' @	28-55	
4	19.0' @	42-50	
5	43.0' @	66-45	NE

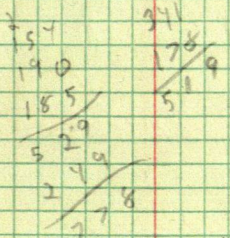


				6/29/79	
89-50 179-~~39~~-30	89-49-45				
179-25 358-50	179-25			155.68 @	7-36
				190.16	
181-55 363-49	181-54-30			185.56 @	6-18
				248.98	
178-50-30 357-41	178-~~35~~ 50-30				
				190.0 151.19 341.19	
179-55 359-50	179-55				
				179.20 @	5-15
180-37 361-14	180-37				
∧@ ~~8~~ BSB ~~Ver~~		Ver			
		7. 91-44-24	-292.88 89.240	292.645	
		9. 97-32-36	155.41 47.372	154.065	
∧@ 10 BS 9					
		9. 96-34-08	155.31 47.340	154.29	
		11. 91-27-06	190.26 57.997	190.199	
∧@ 12 BS 11					
		11. 84-31-36	185.21 56.447	184.366	
		13. 84-52-09	249.68 76.103	248.679	
∧@ 14 BS 13					
		13. 88-03-42	341.40 104.060	341.20	
		15. 85-06-54	179.11 54.594	178.454	

JIM MEIER

RON, KEN, DOUG





RON-ISEN

150-16-18
300-32-42

150-16-21

135.40

206.68

253.30

	π @ A	B S B	RT	
1	60.0	79-54	GARAGE	137.05
2	37.5	89-36		
3	48.0	109-31		

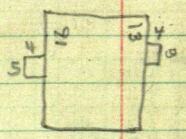
146-09-57
292-19-53

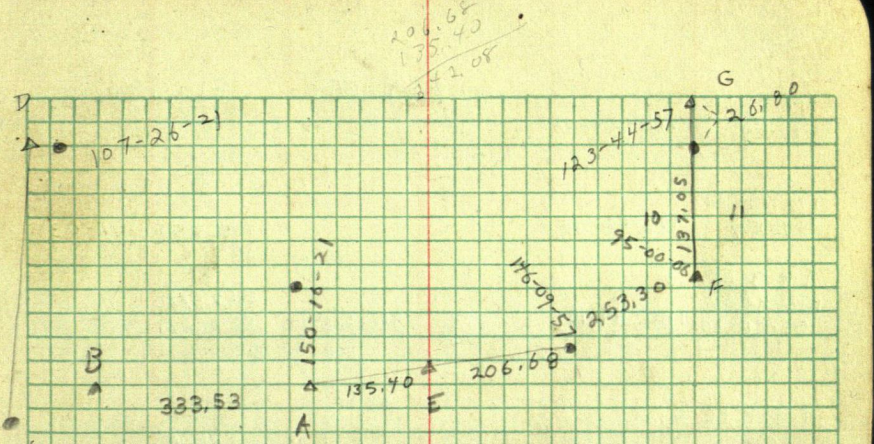
146-09-57

95-00-06
190-00-11

95-00-06

	π @ E	B S A	RT	
1	68.0	02-59	GARAGE	
2	47.0	05-31		
3	54.0	25-23		
4	134.5	37-19	HOUSE	
5	115.0	43-48		
6	146.0	57-04		
7	70.0	94-54	HOUSE	
8	112.5	94-54		
9	71.5	107-55		





T @ G BS F

123-45-04
247-29-57 – 123-44-57

F. @ 87-55-50 – F. 832.72 / M. 253.813 — 832.18

D. @ 90-03-33 – F. 163.85 / M. 49.945 — 163.85

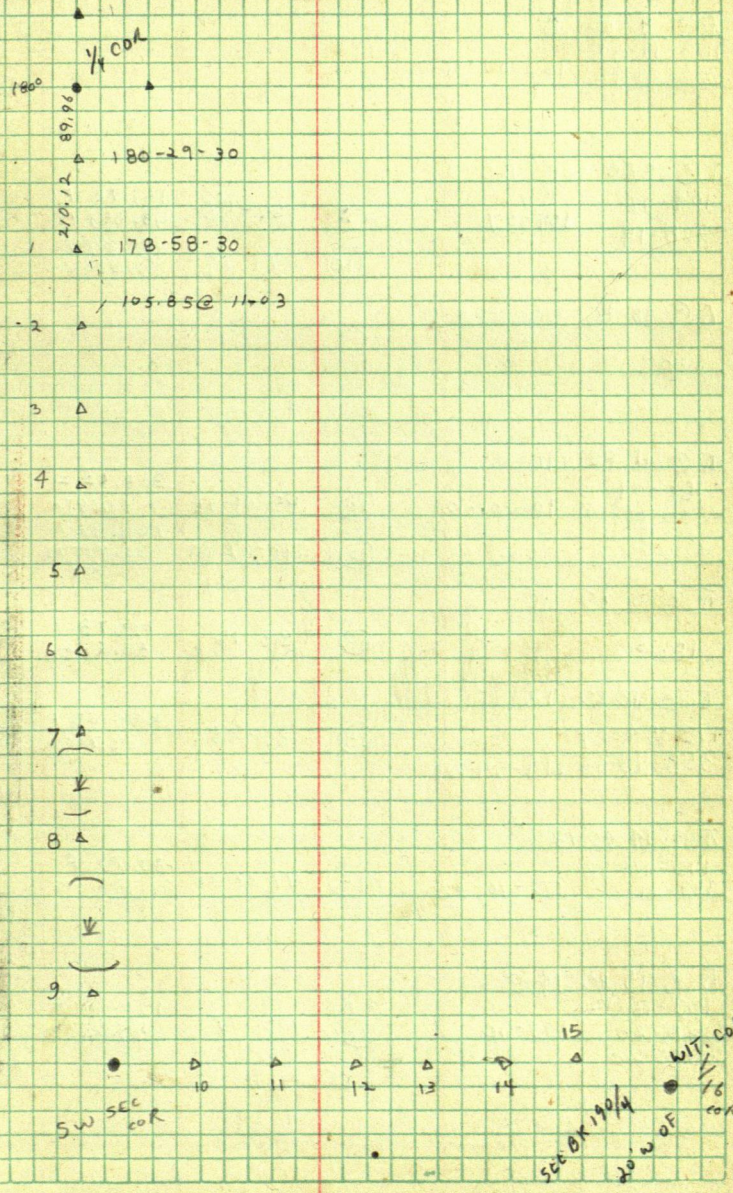
T @ D BS B

107-26-42
214-52-42 — 107-26-21

LU-ROY BAY — JIM MEIERS

180-30 360-59	180-29-30			89.96	
				210.12	
178-58-30 357-57	178-58-30			105.85 @	103.89 11-03
T @ 2 BS	1				
180-44-30 01-28-30	180-44-15	③	95-50	289.57 F 88.260 M	288.071
T @ 3 BS	2				
180°		④	87-59	347.05 F 105.809 m	346.835
T @ 4 BS	3				
180-06-27 0-12-52	180-06-26	⑤	82-27	316.86 F 96.575 m	314.113
T @ 5 BS	4	⑥	82-55		
179-57 359-53-30	179-56-45	⑥	82-55	136.69 F 41.665 m	135.647
T @ 6 BS	5				
180°		⑦	98-51	209.02 F 63.708 M	206.532
T @ 7 BS	6				
180°		⑧	94-24	366.14 F 111.610 M	365.061
T @ 8 BS	7			415.47	415.47
180°		⑨	90-09	415.47 F 126.638 M	

RON-KEN 8/7/79


1/4 COR
180°
89.96
210.12
180-29-30
178-58-30
105.85 @ 11.03
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
WIT. COR
1/16 COR
SEC BK 190/4
20 W OF
SW SEC COR

8/17/79 RON-KEN

T @ 9 BS 8
163-19-42
326-39-12 163-19-36

T @ SEC COR BS 9
104-07-09
208-14 104-07 (9) 91-55 161.94 F 49.353 m 161.849
(10) 274-14 170.04 F 51.832 m 169.576

T @ 10 BS SEC COR
180°

T @ 11 BS 10
180-01-15
00-02-24 180-01-12 (10) 85-06-45 308.55 F 94.097 m 307.428
(12) 273-27-30 108.97 F 33.~~372~~ 215 m 108.772

T @ 12 BS 11
180° (13) 93-15 197.73 F 60.268 m 197.412

T @ 13 BS 12
179-54-24
359-48-48 179-54-24 (14) 81-26 294.39 F 89.730 m 291.406

T @ 14 BS 13
179-40-48
359-21-03 179-40-32 (15) 97-36-30 87.79 F 26.758 m 87.018

T @ 15 BS 14
199-10-12
38-20 199-10 (1/16) 105-47 146.28 F 44.587 m 140.764
398-20

Main

A @ 1/6 BS 1

88-58-56

		2.	737.26	737.190
175-57-46	87-58-58	90-47-18	224.722	737.216

A @ 2 BS 1/6

		3.	423.31	423.307
	180-00	90-12-12	129.025	423.315

A @ 3 BS 2

69-06-18

138-12-32	69-06-16			

A @ 4 BS 3

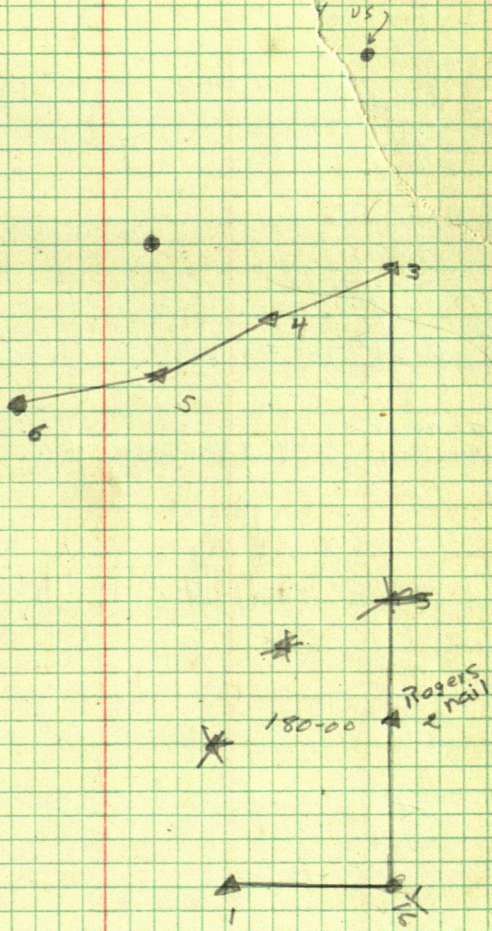
		3	194.68	194.791
153-38-34		88-16-10	59.397	194.785
		5.	311.31	
307-16-48	153-38-24		99.887	

A @ 5 BS 4

168-45-20

337-30-06	168-45-03			

Paul Davy Zero



Δ @ 1/6 BS 1

88-58-56

175-57-46 87-

Δ @ 2 BS 1/6

Δ @ 3 BS
69-06-1
138-19

180-07-04
360-14-24 180-07-12

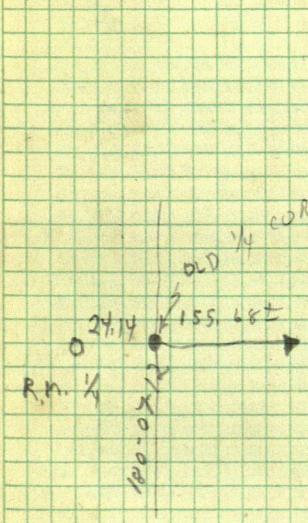
174-44-18
349-28-12 174-44-06

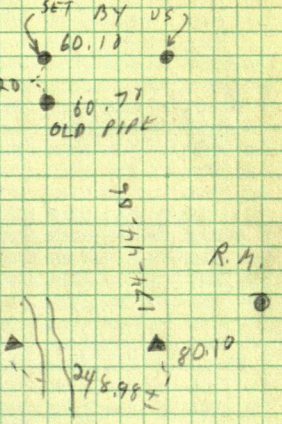
JIM MEIER

(SET BY USER)

	V
60.7	S
60.03	S
1.2	S
30.0464025	AΩ
0.0006897	AΩ
	V
123.0000000	aΩ
28.0000000	aΩ
0.6196800	aΩ
0.0000000	aΩ
56.0000000	aΩ
41.8016400	aΩ
55.0000000	aΩ
35.0000000	aΩ
17.5786800	aΩ

JIM MEIER


OLD 1/4 COR
24.14
155.68±
R.M. 1/4
180-0 N/S


SET BY US
60.10
1.20
60.71
OLD PIPE
80-0 N/S
R.M.
80.10
246.98±

10.60	4" ASH	S 70 E
93.66	7" ASH	S 20 W
21.75	7" ASH	N 20 E

1 62°55'

1 @ 2 95°46' 250'

@ 5 to 4 L to R 95°21' 250'

Hut Turn 90°

.99815
30.52
199630
499075
299445
50
3046353 80

.98944
30.52
197888
494720
296832
50.00
301977088

98944.) 19.540
197888
98944
964560
890496
740640
890 3 6
692608
480320

19.8

19.75

67.71

9.995390
1.829304
~~11.824694~~
.826075
9.995390
1.830685

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.