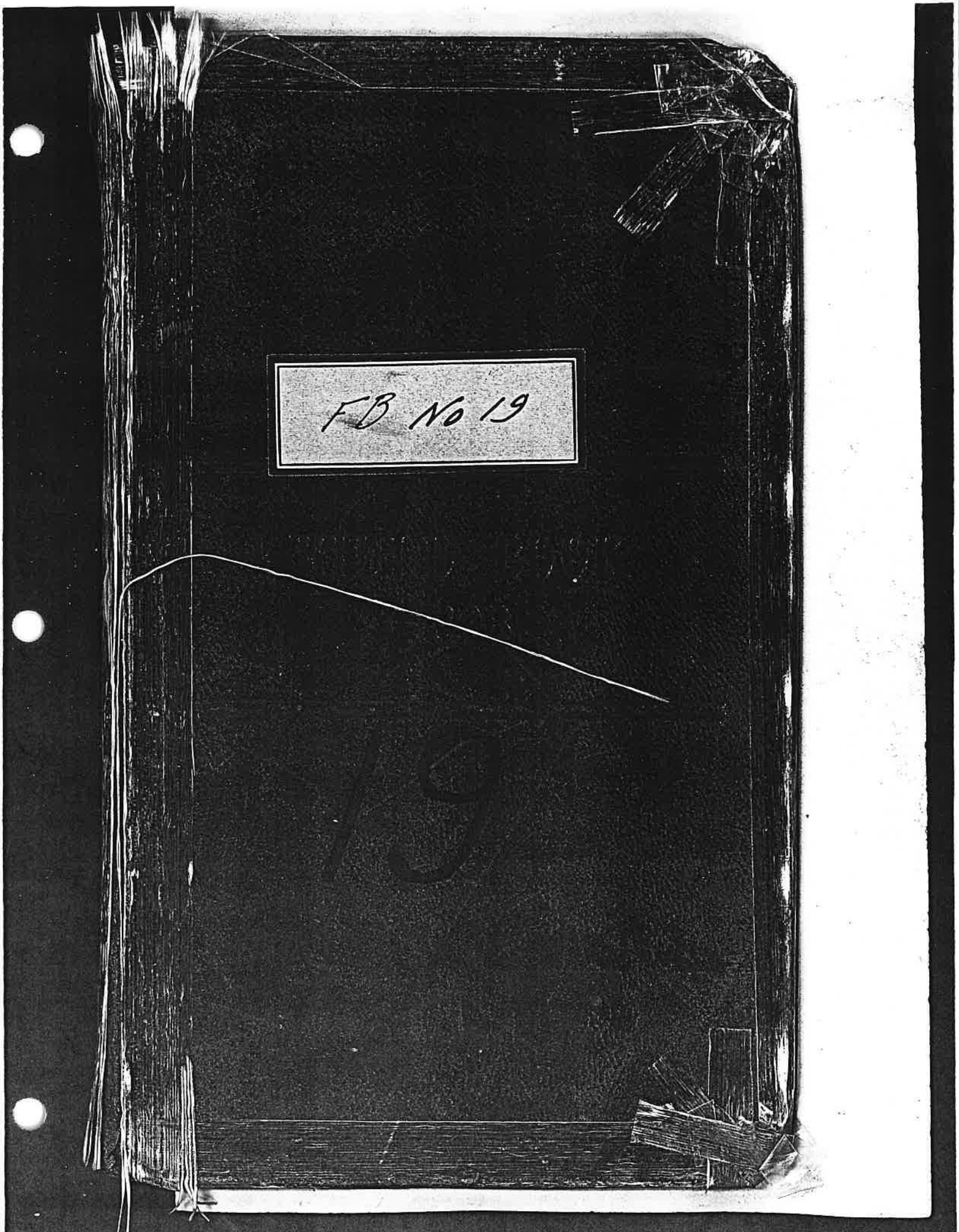
Field Book # 19


FB No 19

05-0001

Levels from Swaneroods to Cemetary

J. W. McArthur Level
M. B. Germond Rod
Ivan Oakes, Recorder

B.M.	B.S	F.S.	Elev	H.I.
B.M.4				505.27
	.72		504.99	
01	.14	12.37	493.62	493.76
02	.81	12.75	481.01	481.82
03	.18	12.50	468.82	469.00
04	.96	12.30	456.70	457.66
05	7.42	.62	457.04	464.46
BM.5	10.68	2.89	461.57	472.25
01	10.83	.66	471.59	482.42
02	9.63	.60	481.82	491.45
B.M.6	.14	5.28	486.17	486.31
01	1.31	12.25	474.06	475.37
02	6.34	3.97	471.40	477.74
BM.7	0.35	6.78	471.16	471.51
01	51	12.42	459.09	459.60
02	2.00	12.09	447.51	449.51
03	2.57	11.54	437.97	440.54
B.M.(8)		9.94	430.60	
04	.22	12.09	428.45	428.67
	1.33	9.22	419.45	420.78
	8.36	6.4	414.38	422.74
	9.86	4.84	417.90	427.71
	8.56	0.33	427.38	435.94
		1.38	434.56	

Fir Post on East Slope of hill. near fence

Fir Post on top of hill near fence.

At S.W. corner of Cemetary. 14" from fence

Fir stake 1"x2" SW corner ploughed ground
1 2 fence posts dist. on E fence line

Sta	+ B.S.	− F.S.	H.I.	Elev
B.M.	1.82	4.05		449
	2.54	4.75		
	4.31	4.08		
	10.05	6.22		
	11.40	0.68		
	11.48	0.72		
	9.05			
BM(1)		7.70		471.72
	4.11	1.16		
	4.07	10.64		
B.M(2)	6.18	2.78		473.02
	8.18	3.95		
BM(3)	3.62	4.14		
BM(5)		6.91		

Dec 15th 1905

Time & Azimuth of Adj. line

By sun. 3/15 PM

By Friction

Hr	Time min.	sec.	H	V	
2	4	37	211° 24'	29° 6' 30"	Direct
2	14	15	214° 19' 30"	28° 11'	Reversed.

By Timing Sun

2	20	12	215° 18' 30"	26° 39"	Direct
4	17				
2	35	32			
	+23		219° 40'	26° 8'	Reversed.

$\phi = 44^\circ\ 02'\ 50''$

$A = 176^\circ\ 07'\ 24''$ | $175^\circ\ 57'\ 50''$ (2)

$\Delta T = 12^m\ 30^s$ | $\Delta T = 12^m\ 28^s$

$12^\circ\ 39'\ 36''$ — $12^\circ\ 39'\ 28''$

McArthur observer

Oakes Recorder

$E = 14'\ 20''$

$S.D = 16'\ 13''$

$\delta = 12^\circ\ 39'\ 11''$

A

$\Delta T.$

$14^m\ 04^s$

Time & Az by Venus

Time	H	V
$5^h 17^m 10^s$	225° 25′	45° 24′ 15″
$5^h 21^m 05^s$	226° 35′	44° 55′ 50″
$5^h 25^m 20^s$	228° 46′ 45″	44° 01′ 30″
$31^m 50^s$	229° 48′	43° 35′

— Jupiter —

54^m 30′	222° 15′ 30″	49° 12′ 45″
58 20	223 30′ 00″	48 48 30″

Az. by Polaris

Time	H	V
7 h 35	2° 36′	44° 54′ 45″
7h 7min 36sec	2° 34′	44 53′
7h 13m 13s	2° 31′ ~~45~~ 30″	44° 52′ 30″
7 h 16 31	2° 30 30	4440 51′

Time & A. by α Geminorum.

Time	H	V
7h 33m 42s	102° 30′	62° 4′
7 37 46	103° 21′	58 30′
7 42 15	104 23′	59 28
7 47 7	105 32′ 15	60 19
7 51 ~~48~~		
7 52 50		

5354

7/15-06

$\delta = +9^\circ\ 08'\ 00''$ $r = -50''$

$\phi = 44^\circ\ 02'\ 58''$

A	ΔT =
$176^\circ\ 14'\ 45''$	$19^m\ 44^s$

	A	ϕ
Direct	$176^\circ\ 08'\ 15''$	$44^\circ\ 03''\ 15''$
Rev	$176^\circ\ 08'\ 45''$	03 30
Rever.	$176^\circ\ 09'\ 45''$ (?)	04 30
Direct	$176^\circ\ 09'\ 45'$	04 00
Av	$176^\circ\ 9'\ 07''$	$44^\circ\ 03'\ 50''$

		ΔT
Direct,	$176^\circ\ 12'\ 30''$	$-17^m\ 36^s$
R		
R		
D		

$\Delta T = 2 - 38 - 18$

Transit of β Orionis

$5^h 51^m 48^s$

Tr. of γ Orionis

1	8-59' 00"	
2	8-00' 3"	
3	8-	
4	8-0' 1.5"	
5	8-3 2"	$52^\circ 3' 30''$

T- of Ori.

1		
2	8-7'30"	
3	8-8'30"	
4	8-9' 30"	
5	8-10 29"	$45^\circ 35' 45''$

Tr of ε Orionis

1		
2		
6	8-12' 47"	
4	8-13' 46"	$44^\circ 41' 15''$
5	8-14' 45"	

2/16 05

Time & Lat. by Transits of —

β Eridani

1	7			0	1
2					
3		Impractical			
4					
5					

β Orionis

1					
2					
3	7	~~14~~	~~02~~		
4		20	02		
5		24	03		

δ Orionis

1		41	42		
2		42	~~42~~		
3		43	42	45° 1'	30° 2'
4		44	44		
5		45	42.5		

Circle at 176° 09'

45° 57' 50" 0007

9 18 50

357 39 0

5-00

Set to 40° 46'

5-208

~~Set to 39° 02'~~ ~~2 09 03~~

5-24

~~Set to 45° 36~~

~~2h 16m 32s~~

κ Orionis

	h	m	s	°	′
1					
2				V	
3					
4					
5					
		α Orionis			
1	8				
2				V	
3	8	09	59.5	36°	16′ 05′
4		11	00.5		
5		12	02		
1					
2				V	
3					
4					
5					
1					
2					
3					
4					
5					

5-40

set to 39°16'

5-47

~~set to 53° 21~~

0° on Mark

Az. by Polaris.

Time h	m	s	H °	'	V °	'	
8	19	04	182°	13' 45"	+ 44°	31' 15"	
8	22	23	182°	13' 30'	+ 44°	30' 30"	
	2		V Check on mark				
	25'	45'	182	13' 00'	+44°	29' 45"	
	28	25'	182	12 30	+44°	28' 15"	
			V Check on mark				

Time by ~~B Gem~~ moon

h	m	s	°	'	
8	32	15	30	30	Direct
8	34	02	30°	49-15	R Direct
8	35	56	31°	09-45	D Rev.
8	37	20	31°	23-45	R

α Canis Minoris

	h	m	s
1	9	05	29
	9	06	31
2	9	07	32
4	9	08	34
5	9	09	38

av 9-07-33

Ø

44° 02'	30"
03	00
03	15
02	30
2'	49"

Direct { 176° 11' 30"
Rev. { 176° 11' 30"

Rev. { 176° 11' 30"
Direct { 176° 11' 30"

α Canis

Az

T = 8h 34' 53
h = 30° 56' 35

δ = 12° 25' 42"
Ø = 44° 02' 45"
ΔT = 2h 26m 23s

Ret on 29-27

45° 59' 26"
1 42
Ø = 45° 57' 44"
89 59 60
Ø = 44° 02' 16

ΔT
2026' 34"
2 26 23
2h 26m 28s

Av Ø = 44° 02' 49"

Az.

180° 1° 29'
178° 31'

Orient by Polaris

Time 5:20
Az 178° 30'
Alt. 44° ~~47~~ 37'

α Orionis 1/26-05

Obs	Time		
	h	m	s
1	7	45	30
2	7	46	30
3		47	30
4		48	30
5		49	30½

53° 21' 30"

Polaris

T.	Az	Alt
7-56-30	178° 25' 20"	44° 30'
	178 25	
	20"	

Ø = 44 02' 23", α. Orionis
Ø 44° 03' 00" α Ursa Major
Ø 44° 02' 33" α Canis "

Ø = 44° 03'
(90°-Ø) = 45° 57'
1 15
44° 42

44° 48'
1
44 47
10 15
14° 52

43° 15
40 30
3

45° 57
9° 42
36° 15

Set to 53° 21'
5° 43'

δ = 7 - 23 - 10

7 47 - 30
5 50 08
2 04 45
1h 57m 27s Az. @ or
2
1h 57m 29s

Alt @ 44° 02' 30" = Ø

Transit of α Canis Majoris — Sirius — 05

No	h	m	s	
1	8	36	14	
2	8	37	16	
3	8	38	18	29° 23' 40"
4		39	20	
5		40	23	

Alt of — α Arietis —

Time h	m	s	°	Alt '	"	
8	55	55	26	53	00	8
8	58	16.5	26	27	30	
8	59	47	26	11	00	
9	0	58	25	58	00	

Alt of — δ Leonis —

9	9	8	36	21	00
9	11	6	36	41	00
9	12	43	36	59	00
9	14	41	37	19	45

−16° 35' −27

Set 29° 23'

6 − 38

8−38−18
6 40 58
1−57−20 Az our

29 22
16 35
45 57 −25

Sketch as

dir. ΔT
Rec 1−57−11
dir.
Rec

D ΔT
R 1h 57m 19s
θ
R

as ΔT, by alt.

1 −57−19
1 −57−11
1 −57 −15

ΔT
1 57 23
1 57 29
1h 57m 26s

α = 2h 01m 48s
δ = +23° 00' 45"
h = 26° 20' 30"
T = 8h 58m 44s

δ = +21° 02' 28"
α = 11h 07m 05s
h = 36° 48' 55"
T = 9h 11' 54s

B. + S. Dumpy Level

Cooper Levelman
Moulton Rodman

Levels on Base Line

Sta	+	H.I.	−	Elev.
E. Post.	0.810	446.692		445.882
T.P.	1.128	436.432	11.478	35.214
3.			3.734	32.608
~~T.P.~~	1.838	25.970	12.210	24.132
—				
9			4.481	21.489
12 T.P.	3.900	24.769	5.101	20.869
15			4.262	20.507
18 T.P.	3.994	24.178	4.585	20.184
21 ~~T.P.~~			4.691	19.487
24 T.P.	4.417	23.405	5.190	18.988
27 ~~T.P.~~			4.601	18.804
30 T.P.	4.034	22.329	5.110	18.295
33 ~~T.P.~~			3.453	18.876
36 T.P.				
39				
~~42 T.P.~~				

{Sta 6 knocked out

Value of Graduation

1 div = { 34' 29"
34' 29'

Log 1 div = 1.537630

1 small div. = approx. 20.7 sec, or same value as striding Div. on Level.

± G = 4° 30'

83 1934 1916 88 59 180 91°

Astronomical work

Pairs of stars for zenith distances.

Star	α (approx)	δ (approx)
ν Orionis	6h 2m 10s	14° 46' 38"
22 Camelop.	6 8m 25	69 21 20"

Star	α	δ
σ Canis Major	6h 40m 58s	−16° 35' 25"
χ Draconi	18h 22 43	+72° 41' 24"
	6 22 43	
σ Canis Minor	7−34−20	5−28−7

4h 4 02 30

8 8 5

March 1 − 05

ΔT = . . . approx

$a_2 - a_1 \angle 20^m$

$\delta_2 + \delta_1 - 88° 05' \angle \pm 4' 30''$

(2) 4th mag } Pretty faint
6 " " }

60 − 43 − 48
64 − 41 − 30

−1.4 mag
4 mag. (Faint)

29 21 45
26 44 15

3
2

9/1-05

Orient b α U.M.

Time	Az	
5-32 (sidereal)	178-30-15"	44° 37' 00"

κ Orionis

	h	m	s	
1	5	17	23	
2		18	22.5	36° 16" 15
3		19	21.5	
4		20	23.0	
5		21	23.0	

α Orionis

	h	m	s
2	5	25	08.5
3		26	07.5
4		27	07.5

6 - 26 = 8
5 - 50 - 2
1 - 36 - 6

36 16 15
1 18
36 - 15 - 00
+ 9 42 30
45 57 30

7 - 19 - 22
5 - 43 - 15
1 - 36 - 07

5-43-15
Set to 36° - 14'

5 - 48 - 15

Warner

Φ = { 44° 02' 30" κ Orionis
44° 02' 30" α Polaris

ΔT = { 1-36-07 κ Orionis
1-36-06 α Orionis

1-25-4-07 0014

5 32 00
1 25
4-07

5 28
5 46
326
34 06
32
33 30

44 36
38 30

45 57 30
9 43
36° 14

45 57 30
9 23 23
53 21

α Arietes

Time	az	alt
7-33-12	86-22-07	37°55' 00"
7-39 56	87-35 00	36°41 15'

~~7 33 12 86° 22° 07~~

7-05

α Arietis

Time h	m	s	Alt °	'	"
7	45	48	35°	37	30
7	48	09	35°	13	15
7	50	14	34	51	00
7	53	19	34	17	15
			139	59	00
			34		

Polaris 7.58

Time 8-00 (Approx)

Az °	'	"	Alt °	'	"
178	22	30	44	21	45
178	22		44	20	45

α Arietis

°	'	"	°	'	"
92	19	00	31	49	30
92	37	45	31	28	00

Warner Dir.

Rev.

Aurielus Dir

Rev

8 00 00
1 36
6 24
1 25
4 59

66 20 15
44 19 45
44 20 45
0 30

44-20-15

cal ΔT = 1-35-01 18
ΔT = 1-35-59

α 2h-1m-48s
T = 7h-49m-22s
h = +34° 58' 23"
δ = +23° 00' 44"
φ = +44° 02' 30"

t = 4h 11m 35"

4-11-35
2 1 48
6 13 23
7 49 22
1 35 59

Polaris
(approx) φ = 44° 02' 15"

Or. by Polaris

	Az	Alt
~~5-15-30~~	~~178-32-30~~	~~41 42'~~
5-48-23	178-26-15	

Lat by $(z_1 - z_2)$

ν Orionis set 6°43'48"
G = 0.630
22 Camelop raise 4° = 8 div
G = 7.521 6.891

	G.
x Draconi	1.190
α Canis Major	5.759

α arietas

Az	Alt.
94°55'	29°00'
94 56 40	
1'40"	

At △ on Campus Mar. 3/05

7.521
0.630
6.891 = moulton { 44° 02' 49.8" ,,0016

$\delta_1 = 107-18-41$
$\delta_2 = -16-35-28$
$90-43-13$
$[z_1 - z_2 + r] = 2-37-44$
$2\,|88-05-29$
$44°\ 02-44.5"$

$\delta = 23°-00'-45"$
$h = 28°-58'-15"$
$\phi = 44°-02'-45"$

5-45 Orient by Polaris 178°-26'-30" 44°37

Lat. by (z, -z)

Star	G	G
γ Orionis	0.800	0.797
22 Camelop.	7.671	7.660
		6.863
		8.40 (z) 13
	G	
X Draconi	0,528	
α Canis Majoris	5.079	Cloudy.
50 Draconis		
25 Camelop		Too hazy to see
β Canis min.		

3/4-05

90 00
82 36
7 24
44 07
51 27

44° 46' 38"
69 21 20

84 07 58
3 56 40.3
2.5

88 04 40.8 Φ = 44° 02' 20.4

Level

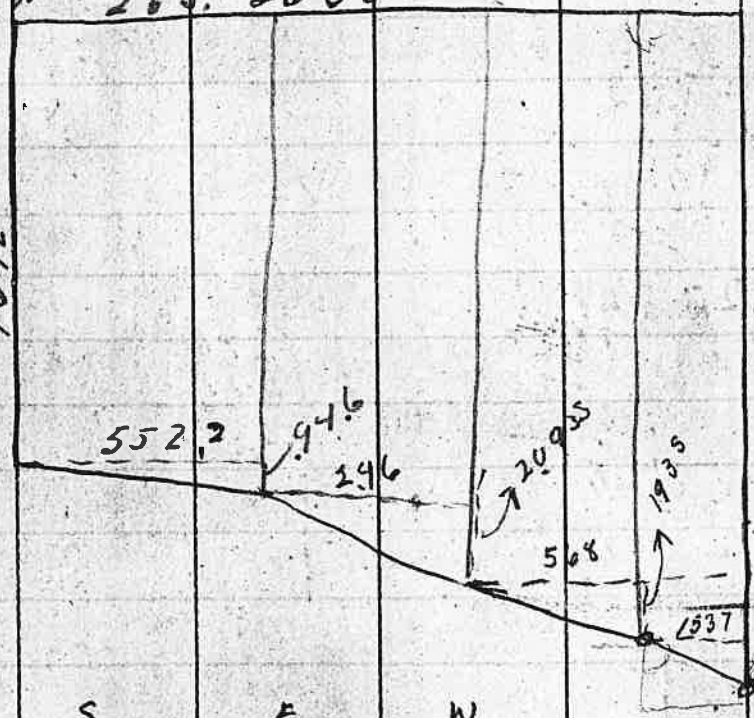
W 4.00 S 1.00
1.8 4.8 AZ. 0° 49'

16
1092
30
3276 00
43560 304920
226800

Bearing of chord Since
from Point of Curve
By Gunby Local
Transit.
Set ofs by observation a
Line at 3 poles apart 4 ft Bot.

~~On~~	~~69°~~	~~47'~~	~~E~~
N	69°	49	E
	69	47	E

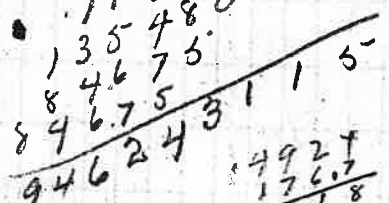
N 10½ E. 50.54 = 76.56 ch.
W 60 735.2.
S 62½ W 265. 3650

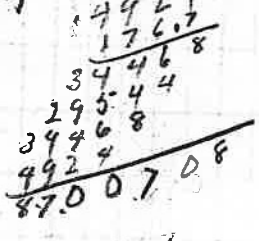


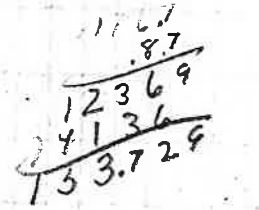
N	S	E	W
1092	1597.5		
94.6	94.6		
209.3	209.3		
193.5	10		
8.7			
1677.9			

S 80 15 E	558.75	up Co Road
S 49 30 E	322.00	" " "
S 71 12 E	600.00	" " "
S 60 30 E	176.70	
N 00 00	10.920 ft	up line
E	3656.0	
S a little E	3360	
S " " W	1296.	
S E	2112.5	

at 20 ± 35 distance this bears N 31 E







N 1092

S 1597.5 27 87 193 209 94.6 1756 1639.5 16.1

E 3650 3650 36324 17.6

W 4056 2112.5 153.7 568 246 5522 3632.4

6022214 2509153.25 629231.90 3186135.5 847740

50687470 43560 271271 261360 99114 87120 1994.70

1589 87 1676 1584 3260 16325 1537 114276 48975 91625 11325 2309 5.25

1597.5

1589 87

127.31 acres
127.29

950

25091525 6022214 62 16204 75 1429

3641 1644

1676 27 1649

21 1537 564 246 5522 1519.9 21125 36324

1187 209 1396 1187 2583 1291.5 240.7 90405 7490 5160 25830

1698 35 1633 1876 3309 1664

1092 95 1187 1092 2279 1139.5 5522 22790

5522 22790 22790 56975 56975 629231.90 3186135.5 847740.0

1396 193 1589 1396 2985 1492.5 328 119400 89550 74625 746250

1649 1676 1

250 16129 1440 8871 8640 2310 1440

3641 1164 14564 15205 21846 3141

6022214

6) 950 42 290 264 260 1/4

Irrigation Engineering

Gage Readings	Width of Weir	Discharge	Depth of Water on Stake		
.83	24"	2.96			
.70	38 7/16"	1.42	3 7/8		
.66	"	1.56	3 3/8		
.76	"	2.49	4 5/8		
.67	"	1.28	2 7/8		
.62	"	.977	2 7/16		
.60		.674	1 13/16		
.56		.528	1 5/8		
.51	"		1 5/16		

5 05	chs	first	stake	11.4
8,10	"	2	"	18.3
11 95	"	3	"	27,0
14 50	"	4	"	32,77
18 26		5	"	41,1
20,50		6		46.33
22 87		7		51,7
25 89		8	wood	58 51
28 28				63.9

1.80 fell N at 11 o'clock on E side sec 21

Measurements of Well East of Judkin

Cross Section of Stream

0020

Right Bank = 0.0

0.0	1.0	1.75	2.0	3.0	4.0	5.0	6.0
.55	.710	.875	1.23	1.18	.833	.646	.250

39.80

2287
2226
13722
4574
4574
5.16862

.0226
5.05
1130
1130
11.41130

5.85114

24.26
2226
16156
1615
5663

11.90
226
7170
2390
2390
27.0070

63.9124

.4600
2960
10400
7960
24400
23880
520

.5.05
2226
1010
46.3300

.0226
5.05
1130
1130
11.41130

.0226
1406
8306
.1

11

02.26

11.5
.77
805
2030 805
226 8.05
12300
4100
4100

16.2
21
870
021
205
1620

1430
226
8700
2900
2900
32.7700

14.26
2.2
4057
3652
41.09

Notes on Home-Orchard Work. June + July '08

M.C. notes

Block 11

	Shore	M.C.
North side Lot 4	9 Chs	13 Ch
Bet. Lots 3 and 4	10. "	13 "
" " 2 " 3	13 "	16,5 "
" " 2 " 5	5 "	8.5 "
East side Lot 5 = 501 Ks. from		Corner of road to M.C.

Block 12

South side Lot 5 =	4,5 "	5.25 "
Bet Lots 3 + 5 =	5.0 "	6.00 "

Block 7

Bet lots 8 + 9	12.15 "	17.50
North side Lot 8	12.85	17.50

Block 6

Bet Lot 6 + 7	13.75	16.00

Block 3

Bet. lots 3 + 4		14.50
" " 1 + 3.		6,25
" " 4 + 5		10,25
S. Side Lot, 5	10.00	13.00
E Side " 1		10.00

Block 1

Bet Lots 1+2

M.C.

3.75

Swale & Hills notes

Hit Swale on line bet. Ls 1 + 5			Bk	11	at 5.00 chs	Running East	
" " " " " " 4 + 5			"	10	" 5.00 "	" West	
" " " South side Lot 5			"	10	" 6.50 "	" "	
" " at N. West Corner Lot				4. Bk 10			
" " on North side Lot 1				Bk 11	at 3.40 chs	" E	125 wide
" " " Line bet Ls 5 + 12				Bk 7	" 6.50 "	" West	+ Swale
" " " " " " 5 + 12				" 7	" 2.25 "	" E	150 Wide
" " " S. Side Lot 9				Bk 6	" 8.00 "	" West	+ Swale
" " " line bet Lot 4 + 9				" 6	" 9.00 "	" "	100 Wide Swale
" " " North side Lot 4				" 6	" 5.50 "	" "	100 Wide Swale
" " " Line bet Lots 1 + 3				Bk 3	" 1.00 "	" N	100 Lks

Hills

Hit	Hill	on	Line	bet	Lots	4	7	Bk 9	at 4.5	Chs	running E.
"	"	"	"	"	"	6	7	" 13	" 7.5	"	" N.
"	"	on	N. Side		"		7	" 13	" 7.5	"	" E
"	"	"	S	"	"		9	" 8	" 5.5	"	" E
"	"	"	Line	bet	"	4	13	" 13	" 7.0	"	" E
"	"	"	"	"	"	4	7	" 5	" 9.0	"	" E
"	"	"	"	"	"	7	8	" 5	" 8.0	"	" N
"	"	"	S. Side		"	7		" 4	" 2.0	"	" E
"	"	"	Line	bet	"	5	6	" 4	" 5.5	"	" "

Gully Running E + W

Hit Gully on Line bet. Lots 6 + 7
" " " " West side " 7
" " " South side " 6
" " " Line bet " 4 + 7
" " " S Side " 5
" " " " " 5
" " " E. " " 2
" " " Line bet " 5 + 6
" " " S Side " 7

Near House

B'K 8 at 8.00 chs running N
" 8 " 7.25 " " N
" 5 " 9.00 " " E
" 5 " 2.25 " " E
" 1 " .50 " E also
" 1 " 4.50 " E
" 2 " 7.00 " N Either course
B 4 " 5.00 " E on gully to Riv
B'K 4 " 1.00 " E

D.L.C. House in the N part
Farm House in N.E Cor
" Barn " S.W. "
Racing " " S E "

Lot 8 B'K 6 7 ch N of S Side
Lot 8 B'K 8
" 7 " 8
" 16 " 7

Survey of Co. Road Down [illegible] Deer Creek Sec 21 Tp 27 S., R 4 W.

P. ¼ cor bet 21 & 22 from N 86 E 1.00

Witness (Red Fir 8" Brs N 17½ E 52
W. Oak 14" " S 74 W 59

Begin Survey 135 ft N of Center of Wagon Bridge crossing Deer Ck in above Sec, Tp. & R.

Point		
0	S 62° 00' W	2.18
1	S 40° 00' W	1.21
2	S 61° 00' W	1.52
3	S 45° 30' W	1.18
4	S 49° 15' W	.83
5	S 82 00 W	1.65
6	N 82° 15' W	6.21
7	N 67 45 W	3.25
8	S 77 30 W	2.72
9	N 76° 15' W	2.15
10	S 73 15 W	4.37
11	S 76 45 W	2.59
12		29.86

S & C

		35 47 24 55 59 33 14 17	L 8 127.84 Rds on Oden
Point	S 75 15 W	2.10	Leave Oden's T. Enter Mrs Redseker
13			
	S 78 30 W	2.76	
14			
	N 88°00'W	3.34	
15			
	S 63 30 W	8.14	
16			
	S 77 00 W	2.05	
17			
	S 83 00 W	6.33	Decr Cr. at 5.90 on this course
18			
	S 75 15 W	5.87	
19			
	S 67 00 W	4.86	
20			
	N 83 00 W	15.64	.97 mile
21			
	S 89 00 W	4.50	
22			
	N 87 45 W	6.19	
23			
	N 89 00 W	10.83	
24			
	N 69 00 W	5.76	
25			
		3225	

		7 8,5 8	3225
	N 7 8 00 W		2,44
26			
	S 87 30 W		10,04
27			
	S 88 00 W		2,53
28			
	N 84 00 W		15.07
29			
	N 48 00 W		6,84
30			
	N 60 15 W		9.41
31			
	N 71 45 W		11.93
32			
	N 73 00 W		15.59
33			
	N 86 30 W		3.05
34			
	N 1° 15 W		18.54
35			
36			
37			
38			

330,92 on 0028 Redseker

E Line Willis Cl

Leave Redseker ^ Enter Leecke

7 0 4 8 Rods

Leeke to Rose at 5 05

6 7 4 4

Rose to ~~Pooke~~ Masters

40,72

1,42 to mile post

1.77 on course Master to Bretzke

→ Bretzke to McCoy

to E Line of present Road

to N.W. corn Mr Nellie Claim

Buckhorn Creek Road

0		
	S 64° 30' W.	19.00
1		
	S 88 30 W	2.25
2		
	N 78 15 E	3.65
3		
	N 20 15 E	13.81
4		
	N 11 15 E	8.01
5		
	N 14 00 E	2.25
6		
	N 18 30 E	23.24
7		
	N 76 15 E	
8		
	N 34 15 E	6.50
9		
	N 42 00 E	8.05
10		
	N 49 30 E	23.70
11		
	N 69 30 E	11.42 5.09
12		

Began at intersection of Tp Line and present County Road

Beginning here for new road 755 lks Rt Haines Line Fence or N Side Co Road

Cross Buckhorn at 11.45

at 11.05 Tp Cor Brs. E 200, N 5 3/4 E 4.92

391 Rt Buckhorn

N 23 1/4 E 11 Tp from the front

N C° E 8.05

Haines to Bldg

			1.33
	N 81	15 E	10.04
10			553
	N 64	00 E	2200
11	N 47	30 E	2.24
12	N 41	45 E	3.00
13	N 22	00 E	2.58
14	N 12	00 E	450
15	N 6	00 E	6.00
16	N 8	45 W	21.50
17	N 2	30 E	8.65
18	N 11	15 W	1.60
19	N 15	30 W	3.55
20	N 10	00 W	9.00
21	N 6	30 W	4.86
22	N 11	00 E	3.40

240

7200

L 40
300
2.85

900
243
6.15

0030

1800 Cross Buckhorn

Blakely to Shrum - end of course

= 2 mile

		14.41
-	N 21 00 E	6.99
23		
	N 14 45 E	4.06
24		
	N 10 00 E	2.45
25		
	N 8 00 W	3.26
26		
	N 9° 0' E	6.65
27		
	N 8° 15 W	2.92
28		
	N 5° 00 W	2.82
29		
	N 18 30 E	14.70
30		
	N 22 00 W	3.64
31		
	N 6 00 E	11.22
32		
	S 66 00 E	1.87
33		
	S 45 00 E	5.03
34		
	S 74 00 E	10.8
35		3
	S 59 00 E	3.5

1 3.26 80000 97.82
83 00

0031

↗ 1.81 π Eprom

= 3 mile

π 3.5 Shmi Watson

		17.82	
36			
	S 80 30 E	4.66	
37			
	S 73 30 E	11.40	
38			
	S 80 00 E	5.67	
39			
	S 78 15 E	5.49	
40			
	S 54 00 E	6.21	
41			
	S 32 30 E	5.60	
42			
	S 21 00 E	5.54	
43			
	S 6 30 E	6.82	
44			200
	S 1° 00 E	12.79	
45		2 00	
	S 7° 00 W	5 35	4 mile
46		(4 35)	
	S 16 00 W	5.42	
47			
	S 14 00 E	6.64	
48			
	S 34 15 E	4.79	

200

	S 49 00 E		4.03	
49				
	S 74 00 E		3.90	
50				
	N 85 00 E		4.93	
21				
	S 50 00 E	.66		To Wit A Tree Blaze 20

535

Scotts Valley & Shoestring Roads

Set Stake from which { alder 5 S 20 ½ W 76
maple 20 N 6 ½ W 85

0			
	S 39 00 E	4.21	
1			
	S 57 30 E	3.30	
2			
	S 75 30 E	3.54	
3			
	S 86 00 E	2.00	
4			
	N 52 00 E	3.08.70 lks	Hait Creek on this course
5			
	N 74 00 E	2.71	
6			
	S 66 00 E	3.04	
7			
	S 62 00 E	1.18	
8			
	N 23 00 E	98.25	to bridge on new road on this course
9			
	N 25 15 W	3.91	
10			
	N 41 30 E	1.60	
11			
	N 42 30 E	2.60	
12		33 15	

	N 76 00 E		33.15
			3.39
13			
	S 74 00 E		4.49
14			
	S 53 00 E		6.52
15			
	S 32 00 W		1.68
16			
	S 10 00 E		2.39
17			
	S 50 30 E		6.23
18			
	S 69 00 E		2.80
19			
	S 63 00 E		2.13
20			
	N 89 00 E		4.03
21			
	S 63 00 E		1.63
22			
	S 34 30 E		2.84
23			
	N 84 00 E		2.02
24			
	S 62 30 E		2.77
25			
			76.11

0035

41.76

37.50

S 32 22 E 2.70

tan A = 1/x

x tan A = y

S 32° 22' E

.0646

.6338

.064655

.064655

.064655

.07543

				76.11
	S 89	00 E		2.23
26				
	S 37	00 E		1.03
27				
	S 32	30 W		4.71
28				(4.08)
	S 12	00 E		4.21
29				
	S 38	00 W		4.45
30				
	S 23	00 W		3.13
31				
	S 21	00 E		1.69
32				
	S 26	00 E		2.64
33				
	E	00	00	1.65
34				41.25
35				
	H. R. Parks		Chainman	
36	E. W. Letson		Axman	
37				
38				

3.84
2.23
1.61
1.03
.61

Stream at 50 lks on this course

Marked B. Oak tree 6" B. 70m

Set 3 chs crossed T line on this course

270
1.13
2.583

To Cottage Grove Road
Set post from which { R B Cedar 12" dia S 80 E 124
W Oak 4 " S 13 W 56

2.583 | 7 | 5 | 15.5178 | 14 | 13 | 12 | 11 3/4"

.06465
1.76
2.17387930
45585
6465
.11369280

2.217
1.80
41

Aug 22 08

Waites
~~Cooper~~ Survey

.0646 50. 0037

Began at B K oak tree on C.E. Roberts Surv.

thence W .64 lks to cor of Survey

" W 7.15 to interior cor

" S 3.84 " " " "

" N 44° 23' W 16.61

" N 6 8 34 W 12.20

" N 52 20 W 17.26

" S 00 00 27.05

0

1 80

2

3

4 from point 1

5

6 Set iron pin { W oak 14 S 29° 10' W 2.78
B " 10 S 23 28 W 2.31

7 W. Red oak tree 5" { W oak 7 N 45 51' E 32
W " 6 S 75 E 30

31.72
41.76
32.76

Survey for C.E. Amsbary

Aug 25 '08

10-49-14.9

10-42-21.1	+ 36	= 10-42-57.1	12
41 29.4	+ 36	= 10-42-05.4	1
40 37.7	+ 84	= 10-41-16.7	2
39 46.0	+ 52	= 10-40-38.0	3
38 54.3	+ 111	= 10-40-05.3	4
38 02.6	+ 158	= 10-40-00.6	5

Lat 43° 02' 36"

Beg on Survey at the N.W. Corner of Sec 24 V = 22.54 E

East on Bldy Sec 24 at

38.08 fell 60 lks N of 1/4 corner V 26.36

Set over on Cor. 1/4 corner thence East at

24.71 Intersect Tp line at 15.34

N of 1/4 Corner for Sec 24 & Sec

Intersect on my line

5214 40.00
3
1564

T29S., R4W. Secs. 24 & 25 Aug 25
Aug 26

10-28-24.23
2 36.24

10 25 319 + 1.58 = 10-27-49.9 = 7
321
24 998 + 1.11 = 10-26-106 = 8
321
24 077 + 02 = 10 24-397 = 9
321
23 156 + 39 = 10-23-546 = 10
321
22 235 + 36 = 10-22-59.5 = 11
321
21 314 + 36 = 10-22-074 = 12
321
20 393 + 36 = 10-21-153 = 1
321
19 472 + 39 = 10-20-262 = 2
321
18 551 + 02 = 10-19-471 = 3
321
18 030 + 111 = 10-19-140 = 4
321
17 109 + 158 = 10 19-08 = 5

Began at 1/4 cor on E side 24 & 21 18
thence N on T line at
15.34 hit ~~from~~ point due E of 1/4 corner on
N Bdy of Sec 24 at
39.63 hit 93 lbs W. of NE cor of
Sec 24

Began at 1/4 cor on E side Sec 24
thence S on T line at
39.02 fell 30 lbs E of SE cor of Sec
24

62.57
15765

Began at S E cor of sec 24 thence W on S bdy of sec 24 at
65.00 Set temp.

Aug 27

10	7	317			
	2	377			
10	4	570	+ 1,58 =	10 -	
		523			
	4	017	+ 111 =	10 -	
		528			
	3	094	+ 52 =		
		523			
	2	771	+ 39		
		527			
	1	247	+ 36		
		524			
	0	323	+ 36		
		524			
9	59	399	+ 31		
		024			
	58	475	+ 39		
		524			
	57	531	+ 52		
		527			
	57	007	+ 111		
		52			
	56	083	+ 158		

10	- 6	- 52,0	7	
10	- 5	127	8	
10	- 4	- 014	9	
10	- 2	- 56,1	10	
10	- 2	0 0 7	11	
10	1	058	12	
10	00	+ 59	1	
10	59	265	2	
10	- 58	451	3	
10	- 58	11	4	
10	58	6	4	

Began at N W corner of sec 24
thence South at
55.00 Intersect my line on S bdy
of sec 24 at 62.57 from
S.E. cor of sec.
Error in closing = 4 lks S and
8 lks W
Continues on

52.55
21 80

South on time line at 8000 set tempo. No old corner could be found at.

Con time on south at 4000 set tempo search no corner could be found. After diligent

Aug 28

9.46 25.5

9 42 337	+ 111 = 9	42 047	8
42 007	+ 52 = 9	42 52.7	9
41 077	+ 39 = 9	41 467	10
40 147	+ 31 = 9	40 507	11
39 207	+ 31 = 9	39 577	12
38 287	+ 31 = 9	39 047	1
37 351	+ 39 = 9	38 147	2
36 427	+ 52 = 9	37 347	3
35 497	+ 111 = 9	37 007	4
34 567	+ 138 = 9	36 347	5

94.20
78.96
7885
251.81
2439
237.42

39.63
1534
2429

9420
78.96
39.02
1534
21,152
60
21812
160
5812

6333
1332
80
33

Continue on South. Rainy weather at 8000 Set tempo No corner could be found after did not search

Aug 29

9 - 25 - 4.9

3333
21 36 + 111 = 9 - 22 - 47.8
333
20 433 + 62 = 9 - 21 353.9
333
19 500 + 39 = 9 - 20 290.10
333
18 667 + 86 = 9 - 19 - 427.11
333
18 024 + 31 = 9 18 384.22
333
17 091 + 26 = 9 17 451.1
333
16 158 + 89 = 9 16 548.2
333
15 225 + 52 = 9 16 1453

53.7
9
48 33 0040

Continue on South at
62.55 but 19.20 chs. E of corner
of Sec 35+36.

I run random line E from 1/4 cor
on S bdy of Sec. 35 at
38.60 fill on corner of 35+36

Aug 30

I run random line S from
1/4 cor bet secs 22+23 at
40 chs set tempo and made
deligent search but no corner in
evidence.

9-63-453

8-55-4 2 0 + 3 = 8-56-18 = 1
5 6 3 3
5 3 7
54 4 8 8 + 39 = 8-55-27.3 2
5 3 7
53 5 4 6 + 52 = 8-54-46.6 3
5 3 7
53 0 0 9 + 111 = 8-54 11.9 4
5 3 7
52 0 7 2 + 158 = 8 54 052 5

thence from this tempo on due E
at 40 made search no corner.
thence continue East at
80.00 intersected random line on
W side of Sec 24 at 4.05 chs N of
80.00 ch tempo

Aug 31 1908

8-42-12.1

5	24 3		
8-26-	4 7 8	+39 =	8-37-268 = 18
	54		
35	5 3 8	+31 =	8-36-298 = 11
	54		
34	5 9 8	+21 =	8-35-358 = 12
	54		
34	0 5 8	+36 =	8 34 41 8 = 1
	54		
33	1 1 8	+39 =	8 33 50 8 2
	54		
32	1 7 8	+52 =	8 33 09 8 3
	24		
31	2 3 8	+111 =	8 32 39 4
	34		
30	2 9 8	+158	8 32 27 8 5

E

Run Random from corner
of Secs 19, 20, 29, & 30. V 21° 18'
& corner was gone but B.T.s Still
standing at
40.00 Made search for corner
but none in evidence
767.50 fell 83 lks N of corner set
By Briggs
80.00 Set temp
Continue on E at
4000 Set temp

E Side

Began at 1/4 Cor on Sec 24. which I reestablish as follows

W oak 6"x6"x3' from which Witness Cor. B.T bears as follows

Yel pine 40" S 20° W 210

W oak 18" dia S 15° 45' E 77

thence S 78 46 W thro Center of Sec 24 at 28.76 set tmps for Cen of Sec.

Began at 1/4 corner on N. side of Sec 24 and reestablish as follows (R)

W oak post 5"x5"x3' from which

Red cedar 5" bears S 44° 30' W 22.5 lks

" fir 8" N 11° 30' E 24

Burned tree standing but decayed

thence S 9° 30' W at 21.15 fell 2 lks E of tmps for center Stone

This make error in closing 2 lks E and 7 lks N

Continue on course at 38.45 Set 4"x4" post for Witness Cor 4"x4"x3'

Maple 16 dia N 25° 25' W 4.74

" 12 " S 40 38 E 5.36

Sept 3 50.04
22 0 16

7-36-43.K

	03.6	+ 1.11 =	7	34	47.8
33	55 0				14
32	08 6	+ 52 =	7	33	006.9
31	55 13 6	+ 29 =	7	31	526 10
30	55 6 18 6	+ 32 =	7	31	54.0 11
29	55 0 23 0	+ 16 =	7	30	590 12
28	55 28.0	+ 31 =	7	29	040 1
27	55 0 33 0	+ 39 =	7	28	120 2
26	55 0 34 0	+ 62 =	7	27	30 3
25	55 2 43 0	+ 111 =	7	26	54 4

(R) I set for 1/4 Cor on the S Side of Sec 24
Con post 4"x4"x3' from which
W fir 6" dia S 45 12E 22
Maple 6" dia N 3148 W 6

Set for S W Corner of Sec 24
Cedar post 6"x6"x3' from which
Red Fir 26" dia N 56 45E 13
" Cedar 16 S 25 42E 38

W fir 5" S 44 30 W 53
Madrone N 16 30 W 27

for 1/4 cor on W side 24
set yew post 4" x 4" x 3'
W fir 17 N 71 30 E 60
" " 7 S 52 30 W 54

At 27.05 chs from the Cor 1/4 cor on the East Side 24 I crossed the S bdy of Crags A.L.R
thence W 15.93 ch S W corner of Claim

for the N.E. cor of Amlay's 20 Acres Ltd
W cab post 4" x 4' x 3'
Red fir 9 N 56 40 E 14
" " 9 S 83 W 24

Post for center of Sec 24
Cedar post 4" x 4" x 3'
R fir 20 N 36 00 E 24
" Cedar 6 S 13 30 E 23
" Pine 14 S 46 45 W 51
" fir 10 N 52 30 W 24

I run on Center course.
Westerly across Sec 24 at
9.4 C½ thence westerly in course I run
Set for S W Cor of 20 acres.
Print
Wash post
Red cedar 6 N 42 3/4 E 36
" " S 60 3/4 E 17
C
Continue on on westerly course at
18.93 from Center of Section.
Set Cedar post 4" x 4" x 3'

Red cedar 6 N 27 35 E 179
" fir 12 S 81 10 E 271

From this I run S 7° 26' W
16.15 to S W Cor of the NE¼ of
SW ¼ Sec 24.
Set post Cedar 4" x 4" x 3'
Red cedar 15" S 41° W 63
" fir 12 N 68° 40' W 41

Trans from the NE cor of 20 A
prvey. S 84 51 W at
9.73 chs set fir post 4"x4"x3"
Red cedar 10 N 7° 30' E 20
" " 6 S 6 1/2 E 10

Run W at
9.65 fell 8 lks N of corner
Runs S 1 fall on tree at 14.64

Survey W. R. Taylor

7	14	-39.2						
7	13	41.3						
	10	57.9	+	1.11	=	7	12	08.94
	10	55.3						
		02.6	+	.92	=	7	10	54.69
		55.3						
	9	07.3	+	.39	=	7	9	41.3 10
		55.3						
	8	20.0	+	.36	=	7	8	48.0 11
		55.3						
	7	16.7	+	.31	=	7	7	32.7 12
		55.3						
	6	21.4	+	.36	=	7	6	07.41
		55.3						
	5	26.1	+	.39	=	7	6	05.12
		55.3						
	4	30.8	+	.42	=	7	5	22.3
		55.3						
	3	35.5	+	.111	=	7	4	46.54
		55.3						
	2	40.2	+	1.08	=	7	4	38.2

53.33
½
221 32
180

T 29-4R 3R
d 37 ? 0

Iset for corner of Clam 37
at 12.50 S by N = corner in
cedar post 4" x 4" x 8'
R.B. cedar L N 57° 45' W 53
" " " S S 54 25 W 102

12.54
9.65
6270
7534
11286
121.021 0

14.64
12.50
2722
26
16332
5444
70772
12102
82.874

9.65
04
.3860
0386

14.64
12.50
2722
26
1632
6444
70772
70110
12
82.87

1250
465
6250
7500
11250
12.06250
03861
12.1011

at 26.10 W of the S E
Corner of D T Craig Claim J
fill 6/6 ths N of a Rock set
as a Corner but Tree marked
from which Rock Ins a red fir
20" dia N 26° 20" W 1.15

at 26.18 on S Side of
D. T. Craigs Claim from S E
Corner Post Cedar Post 4" x 4" x 3'
Sugar Pine ~~18~~ 8" dia S 2° ~~40~~ W 65
Red fir 28" (Old Blaze) N 47 30 W 58

Survey for C. C. Smith.

North bet Sec 20 & 21.

40.00 Post from which

Laurel 25" dia N 39 W 60 lbs

W oak 24" " N 40 E 75 "

80.00 Set post 16, 17, 20, & 21

B. oak 7" dia N 30° W 35

" " 8 " N 47 E 197

" " 2 " S 77 E 150

N 89 47 W bet sec 16 & 21 of Stone Mound Raised

39.70 Set q/c post from which a

West on true line bet 21 & 28

40.00 Set 1/4 stake

A. B oak 6" dia S 15 W 259 lbs

" " " 12" " N 55 E 50 "

S on E bdy Sec 21

40.00 Set 1/4 stake post

Cedar ~~fir~~ 8" dia S 83 E 19 lbs

Red fir 36 " S 58 W 52 "

57.59
5739
633.49
10
83

Lat. of mid of sec 21 = 43° 17' 22"

3-28-23.5
10 3 5
3-17-50 0 + 102 = 3-18-52 3
5 7 6
16 5 2 4 + 50 = 3-17-424 4
5 7 6
15 5 4 8 + 44 = 3-16-38.8 5

Run E on random line from 1/4 corner on W side sec 21. Line run across to establish center of sec. at 40.00 Set stake. Discontinued chaining and on E side sec ran fell 180 lks N of 1/4 corner on E side.

Run Random line thro cen of sec 21 North from 1/4 corner on south side of sec. Began chaing at cent of sec.

39.95 J fell 64 lks E of corner J described on 1/4 on North of sec 21

5789
3
17367

2-42-12.2

2	5 27					
2-39	785	+3.22	= 2-	42-	40,5	7
38	579 206	+144	= 2-	40-	046	8
37	579 227	+113	= 2-	38-	40,7	9
36	579 248	+1,00	= 2-	37-	248	10
35	579 269	+02	= 2-	36-	18,9	11
34	579 290	+52	= 2-	35-	210	12
33	579 311	+52	= 2-	34	231	1
32	579 332	+1,00	= 2-	33	33,2	2
31	579 353	+113	= 2-	32	46,33	
30	579 374	+1,44	= 2-	32	21,44	
29	579 395	+3,22	= 2	33	01.55	

3 mm random N89+7W from 1/4 on N
at 33,75 St tempo on ridge
at 41,32 fell 2.37 S of corner

5821
3220
48

2-	14	-1,4				
	6	42				
2	12	194	+322	= 2-	13	-114
	11	56 214	+1	= 2	12,	2142
	16	56 234	+113	= 2	11	36,43
	9	56 254	+1,44	= 2	11	04 4
	6	56 274	+322	= 2	11	49 4

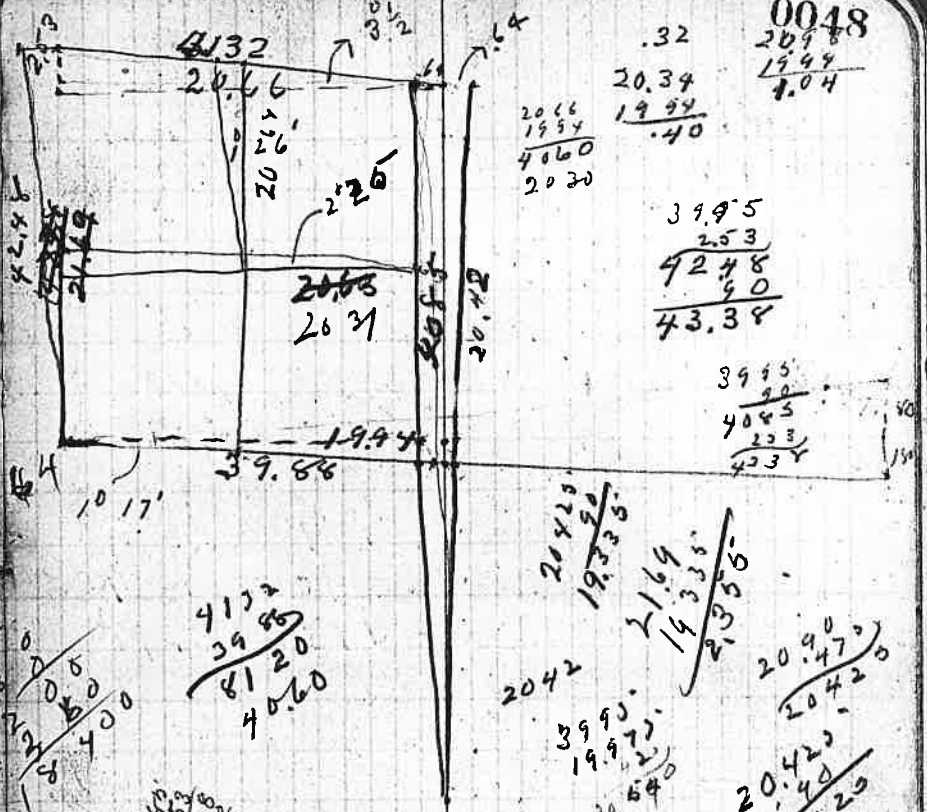
3 tools for position of 1/4 corner
N Side Sec 21
2 old post lying on ground (R)
From this position ties
Red cedar 16 S 70° 20' W 22
" " 24 N 65 40 E 44

N bet 16 + 17
4000 set 1/4 post
Red fir 5" S 11 W 13
" " 6 N 15 E 19
4175 trail
6325 "
54.75 N wagon

1.22
4.53
7.74
17.68
8.91
5.63
10 51

Sept 17

2-19-1.4



Inv stab 1/4 cor on W side Sec
21 as follows
Sand stone 4 x 6 x 18 W
Red fir 15" dia N 62° 34 lks 83
" " 13 " N 70 56 E 109

I set for cor center of sec 21
Iron post 4" x 4" x 3' Drove Pile Brk
W oak 8" dia N 61° 07' W 3.03
Red fir 18 " S 37° 44' E 4.59
B oak 14 " S 31° 15' W 5.90
None in other corner
Mkd root of Red fir 36" dia
NE
I ~~set~~ for corner of S E 1/4 of N W 1/4
Sec 21 from which
Maple 36 S 45° 30' E 22
W fir 15 N 38° 10' W 34

Set for S W cor. of S.E. 1/4 of N W 1/4 Sec 21
Cedar post 4" Sq.
Cedar 14 dia br S 54 10 W 1.19 Set
ash 12 " " N 32 30 W 1.01

Thence N 1° 26' W at
1970 intersect old line Roller W set to Iron post
Red fir 16 S 65 30 E 43
Maple N 9° 15 W 33 1/2

50
18
16
30
114

233
1.165
1291
1456
291
1943
291 60
2038
291 41.64
2,324 3996
1.76
88

39.86
85
4073
16
4157

41,32
1994
1.38
102
170

41.64
1994
1.70
85
16
69
1994
2063

1994
20,28

3972

140
35
1994
49
42.3

41.32
19.94

85
16
67
3994
4061

13
6
78
16
1.94

17200
16264
9360
8 1248
1 2340

20.66
32
2098
1994
1.04 00
8332
20680
21830

4161
4074
20.37

39.95
1.26
45
41.66
20.83
30
113

118

3994
66
3994
46
4063
2 4063
20,31

Inv. sec for for 16 17 20 & 21

Oak W. 5" x 5" x 3'

Red fir 14" dia bks N 62° 25' E 38

W. oak 6 " " S 33 42 E 35

" " 14 " " S 98 00 W 17

Innate other trees standing in good condition

Bank 12 Mixed N 30 W 36

Red fir 22" dia N 15 W 14 lbs } conf for 9-10

Bank 4 " N 38 E 44 " } 5+16

Sugar pine 14 " S 85 E 24 "

Red fir 6 " S 41 W 10 "

40.10 Set qr post from which

W oaks 14" dia S 85 E 100 lbs

" " 8 " N 62 W 79 "

N magnesia 325 lbs mile

Sept. 18

1-55-47,8

6-46 5

1-44-51 0 + 52 = 1-49-53.0 11

48 98 0 3 0 + 52 = 1 48 35 0 12

47 58 1 0 4 9 + 1.52 = 1 47 56 9 1

46 3 5 1 + 1 00 = 1 47 08 8 2

45 3 5 1 + 143 = 1 46 31 7 3

44 2 8 7 + 144 = 1 45 54 6 4

43 2 8 1 + 322 = 1 46 32 5 5

1 2 5

58.22 4
232.88 13
52.9

W. A. Smith

58.12 7 0050
406.84
52.9

I reset Cor. Cedar post 5" x 5" x 3ft
W fir 14 dia N 38° 00' E 1.03
Red fir 4 " N 32 00 W 14
Pine stub standing 24
Red fir 4 " S 73° 33' W 27

Sept 19 '66

1 = 32 - 31.7

28	384	+ 1.44 =	1 - 30	228	= 8
27	406	+ 113 =	1 - 28	530	= 9
26	424	+ 100 =	1 - 27	424	= 10
25	442	+ 52 =	1 - 26	362	= 11
24	460	+ 32 =	1 - 25	348	= 12
23	478	+ 52 =	1 - 24	398	1
22	496	+ 1 =	1 - 23	496	2
21	514	+ 113 =	1 - 23	614	3
20	532	+ 144 =	1 - 22	372	4
19	550	+ 322 =	1 - 23	170	5

5 8 31
4
2 3 3 24

1	9		3 3					
	3		3 2					
1	6		0 1	+	144	= 1 − 7	64	8
			5 3					
	4		1 5	+	143	= 1	34	9
			8 3					
	3		5 5	+	100	= 1	23	10
			8 3					
	2		4 2	+	52	= 1	16.2	11
	1		8 3					
			5 4	+	52	= 1	9.2	12
	0		2 7	+	52	= 1	1.9.2	1

26 − 3

N 89 31 W hit 9 + 16

3962½ B obs 16" dia S 25° E 310

" " 15" " N 54 W 359

56.50 N Impera

Sept 21

0	45		5 2 9					
	2		5 5					
	42		5 7 7	+	3.22	= 0 −	46 −	19.7 7
			5 8 4					
	41		5 9 3	+	144	= 0	43	48.3 8
			5 7 4					
	41		0 0 9	+	113	= 0	42	13.9 9
			5 6 4					
	40		0 2 5	+	1	= 0	41	02.5 10
			5 5 4					
	39		0 4 1	+	52	= 0	39	56.1 11
			5 5 4					
	38		0 5 7	+	52	= 0	38	51.7 12
			5 5 4					
	37		5 7 3	+	52	= 0	37	46.3 1
			5 7 4					
	36		0 8 9	+	100	= 0	37	0 8.9 2
			5 7 4					
	35		1 5	+	1.13	0 0	36	24.5 3

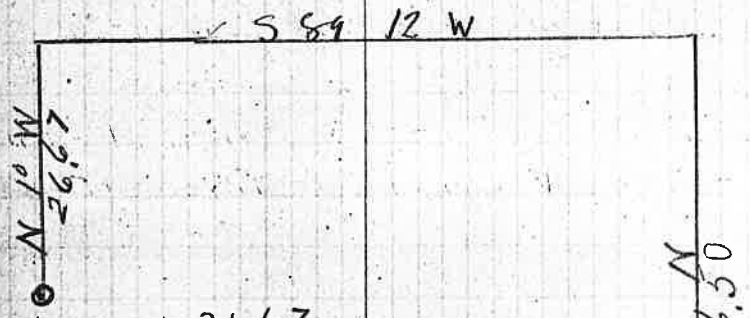
58 39
17515

Survey for Smick Sept 23 08

Point 0

Began at S.W. cor of tract, in cen. of Roseburg-Deer Creek Co Road

Point		
0	N 1° 00 W along Clover Creek Road	26.67
	N 54 30 E " " Rose D. Cr.	~~2.74~~ 4.20
1	N 73° 15 E " "	6.06
2	N 64 30 E " "	7.15
3	N 75 45 E " "	15.62
4	S S 65 30 E " "	5.42
5	N	16.50



Field Notes For The Laraut Tract Sept 29

Began chaning at N.E. cor and run West along North side of Tract at

1 2 15
60 2/3
11 54 1/3

30.00 Set painted stake
69.00 Hit Swale
79.50 Hit M.C. on Umpqua River

Began on N side of Main Nard. S boulavard in Co Road at a point
37.00 West of NE cor of Tract. at and this point
9.75 S. from fence set first stake on 10 chs from cor of road S 1/2 W
9.85 " " Stake No 2 set Stake No 2 for N side Lake
.30 " " " " 2 " " " 3 " 5 " "
9 85 " " " " 3 " " 4 " 6 " " Lot
9,69 2/3 " " " " 4 " " 5 " 8 " " E & W Boulavard.
.60 2/3 " " " " 5 " " 6 " 8 " " " " 500 chs hit dry Creek
9 69 1/3 " " " " 6 " " 7 " " " " Lot
7 75 Hit Swale " " 8 " N " " lane
8.50 Leave " 8 " N " " lane
9.85 S from Stake No 7 " " 9 " S " " " set here
.30 " " " " 8 " " 10 " " " " lot M C Stake
9.45 " " " " 9 " "
2.20 " " " "
60 2/3 N " M C set Stake for N side Boulavard

Beginning at the intersection
of the N side of the E+W Boulevard with
The West side of " N+S " we
run west at

9.69 2/3	set lot stake No 1
17.70	Hit Swale 1.50 wide
19.69 2/3	Set lot " No 2 at
9.00	set temp stake
11.50	Hit M.C. of River

East from above intersection at

9.62 2/3	set lot stake No 1
13.00	Hit forest
10.00	Set lot stake No 2
10.00	" " " No 3
8 13	Hit fence on E side

West but lot lots 3+6 B 3
Hit swale 2.00 chs 2.50 wide
N Set lots 3+4 B 3
Hit swal 7.00 chs 5.00 wide
W lot lots 4+5 B 3
Hit M.C. at 2.08
On N side Lot 4 B 3
leave swale at 1.50 going W and hit
M C at 4 17 5

9.69 2/3
10.00
10 00
1 30
31, 1 4 2

250 Hit dry Creek

On N side L 6 B 2 but brook at
.50 lks running N.
This brook runs due N. and is branch
of creek noted in B 3. They branch
N 2.00 of S.E. Cor Lot 6 B 2

On S side L 5 B 2 but MC
at 3.00 chs
Good big springs in B 4 L 3
B 1 L 6

On S side Lot 2 B 4 but
forest at .50 lks going E.
Forest runs clear for 4 chs then
turns N.E.
On S side lot 2 B 1 but for
est at 8 chs.
On S side lot 7 B 1 " "
at 8.00 chs. forest ends in
an E side lot 7 B 1 to the
E line
On line but lot 1 & 8 B 1
but fence at 7.00 ch runs
runs E
Run S from point but
lots 1 & 8 B 1 &

307
31
2.77

1600
2
123

0055

Run South from ~~A SE~~ NE
Cor lot 1 B4 13 lks to jog
at 7.17 ch E on W bdy lot
1 B4 lot fence
jog extends E 2.86

on lot line lost lots 4 & 5
B4 lot fence at 9.10 ch runs
E, lost set stake at 10 on

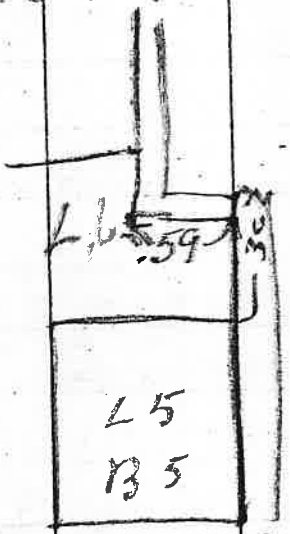
Nat forest at 5 chs on N side
lot 5 B5 runs E

Nat fence at 7.43 chs runs
E lost Lot 1 & B5

Nat Scale at 4 chs on S side
lot 5 B5 Scale 100 wide
Runs E

Set E bdy at 3.07 chs on runs
East on S side lot 6 B5
Runs N from SE Cor Lot 6 B5
59 lks to N side 2 ft road
thence E 7.23 to SE cor lot
6 B5

Hit forest at 5 chs runs E
on S side lot 7 B 5
Hit fence on S side lot 6 B 5
at 7.30 runs E also crossed
.50 lks N of corner old fence
on E bdy runs S 10 from 2 ft
lane 10.85 ch trail on E
side L 1 B 8.



11 chs to fence lot L 5 & 6
B 8

On S side lot 2 B 6 hit Swamp
& swale at 4.50 runs W
Swale 1½ chs wide
on S side lot 3 B 6 set
stake at full 10 chs runs
W. Same on N side

From SW cor lot 3 B6 set
Stake at 60 2/3
at 1.50 lbs
thru on SW Cor

From SW Cor Lot 6 B 3 runs
Boulevard thru covers 1.50 lbs
East

On line bet lots 1 & 2 B 7 set
Stake for N side Boulevard at
11.50 lbs

Set secondary swale at 1.00
lbs or thereabouts

Set secondary swale at .10 lbs
on S side lot 5 B6 100 lbs
Wide runs N 1° W

Runs W 4.05 on S side lot
4 B 6 to Riverside Road
Ground

Notes for Riverside Boulevard

Began at S. W Cor of Lot 3 B 6
thence S 7° 10' E 637 2/3
" S 42 00 E 22.50
at 8.21½ ch on this course
hit S.W. cor. lot 4 B 6
" S 75° 25' E 4.645 to
S.E. Cor lot 2 B 7

1150
66
9900
9900
108900

0057

223
66
1330
1330
14.830

2973

S 42° E

$\cos A = \frac{y}{x}$

$y = x \cos A$

$x = \frac{y}{\cos A}$

$x = \frac{20}{.7431}$

.7431) 20.000 (26.91
14862
51380
44586
67940
66879
10610
7431
31790

.66) 26.914 (40.8
264
214
8

Notes on Ditch Line for auxiliary Ditch on Ridge Oct. 9 1904

Stat.	B.S	F.S.		
30.	5 - 7¼			
25		2 - 3¼"	3 - 4	
	6 - 7¾			
20		2 - 6¼	4 - 1½	
	4 - 3¼			
15		5 - 1½		- 10¼
	4 - 9½			
10		2 - 11½	1 - 10	
	7 - 10½			
5		3 - 10½	4 -	
	8 - 9¼			
0		6 - 4½	2 - 5	
B.M.				
	37 - 11½	23' - 1½"		
	23 - 1½			
	14 - 10" = 178" = 5¾" per station			
	7 - 5½			
	7 - 4½ = 88.			

4½" to stat. 20
8¾ from 20 to 30

Lower end at fork

End of ditch

Sta	Elev.	Cut	Bottom Grade of	
0	100.	20 1/2"	98 3 1/2"	Top of stake near ditch
1			97 10" 1/4	
2			97 5"	
3			96 11 3/4	
4			96 6 1/2	
5			96 1 1/4	
6			95 8"	
7			95 2 3/4	
8			94 9 1/2	
9			94 4 1/4	
10			93 11	
11			93 5 3/4	
12			93 0 1/2	
13			92 7 1/4	
14			92 2	
15			91 8 3/4	
16			91 3 1/2	
17			90 10 1/4	
18			90 5	
19			89 11 3/4	
20			89 6 1/2	

21
22
23
24
25

26
27
28
29
30

89	1 1/4
88	8
88	2 3/4
87	9 1/2
87	4 1/4
86	11
86	5 3/4
86	0 1/2
85	7 1/4
85	2

Oct 9 '08

6061

Notes on Survey for Orchard

Preliminary

Began at N.E. cor. Thos. Sutherlin Donation Land Claim
Thence South at
22.50 Swale Creek
42.20 To New Fence L point No 1
Thence W along New Fence at
35.80 Swale Creek
36.40 To L point No 2
Thence S 82° W at
18.35 to L point No 3
Thence S 59° 40' W at
6.06 to L point No 4
Thence S 47 30' W at
4.50 to L point No 5
Thence S 54° 00 W at
7.75 to L point No 6
Thence S 62° 10 W at
17.70 to L point No 7

Thence	S 66° - 35' W to L pt	8	8.91
"	S 52° - W. " " "	9	5.63
"	N 88° - W "	10	10.52
"	N 87° - 30' W " "	11	8.10

Tracts Sutherlin L & W Co

Measurements

Plat - A -

Sutherlin Fruit Lands

Valley

Continued

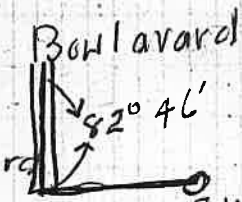
Lethbridge 2nd Add W, Co

Leave creek- thence N 20°-30' W 16.06 to
N. line of boulevard. 25 ft N. of pole line
Total distance to cor of 20 acre tract 42.15.

Oct 10 '08 Accurate or Final Survey
Began at N.E. Cor. of Thos. Sutherlin D.L.C.
Run South toward S.E. Cor 20.00 Chs set Δ-1 in center of E & W Boulavard
" S. 78° 00' W 10.00 " " Δ-2
" " " " " 10.00 " " Δ-3
" " " " " 10.00 " " Δ-4
" " " " " 10.00 " " Δ-5
" " " " " 10.00 " " Δ-6
" " " " " 10.00 " " Δ-7
" " " " " 5.00 " " Δ-7½

Turned To Left from this point on to
Δ-10 L = 21° 41⅔ Dist = 22.95¼ Chs.

Notes on W. end of Tract
Began at S.W Cor. of Tract or Δ-0
Run N 20° 30' W 15.65 Chs set Δ-1 in center of E & W Boulavard
" N 76 44' E 5.00 " " Δ-2
" N " " " 5.00 " " Δ-3
" " " " " 5.00 " " Δ-4
" " " " " 5.00 " " Δ-5



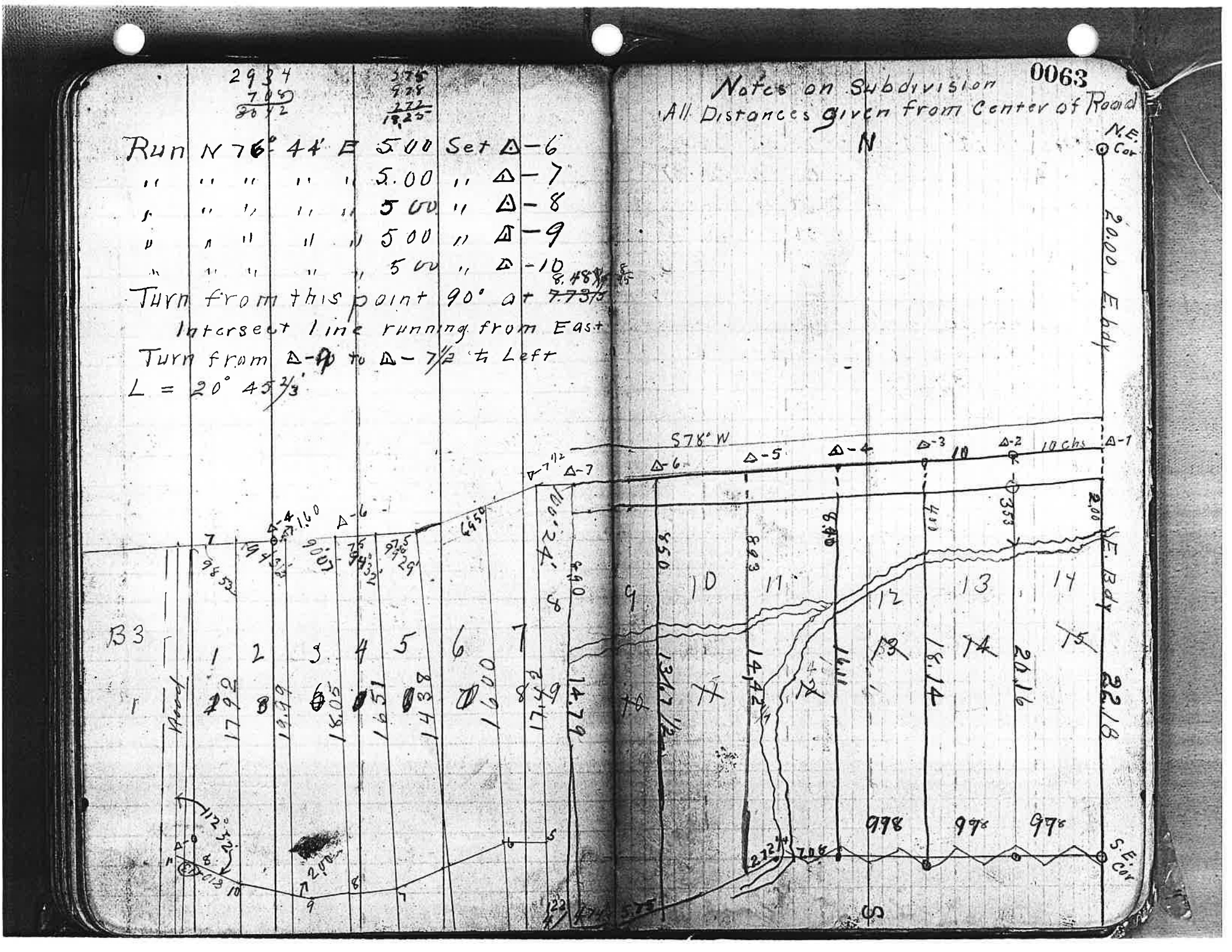
2934
708
2042

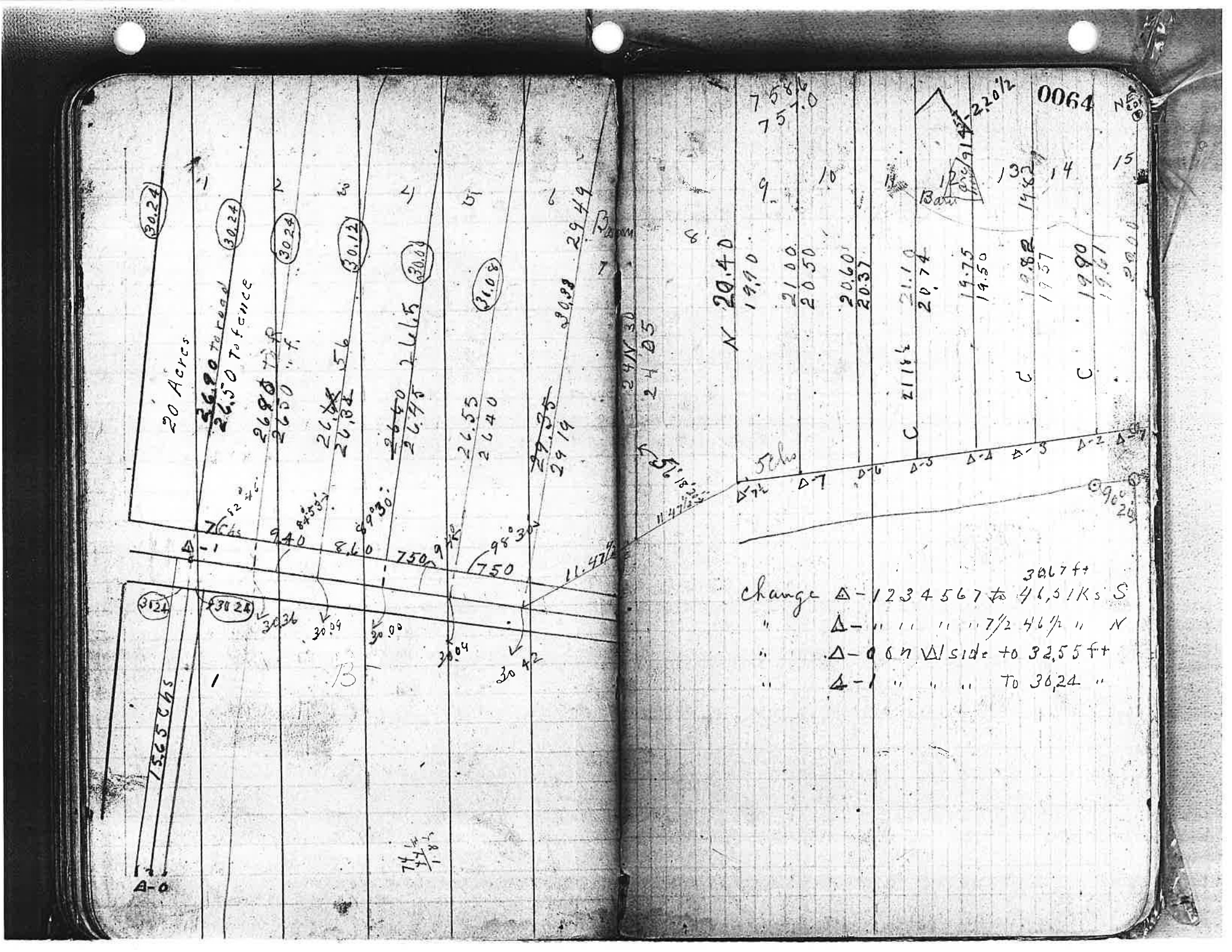
375
278
272
1825

Run N 76° 44' E 5.00 Set Δ-6
" " " " " 5.00 " Δ-7
" " " " " 5.00 " Δ-8
" " " " " 5.00 " Δ-9
" " " " " 5.00 " Δ-10 8.48

Turn from this point 90° at ~~7.73~~
Intersect line running from East
Turn from Δ-9 to Δ-7½ to Left
L = 20° 45 2/3'

Notes on Subdivision
All Distances given from Center of Road

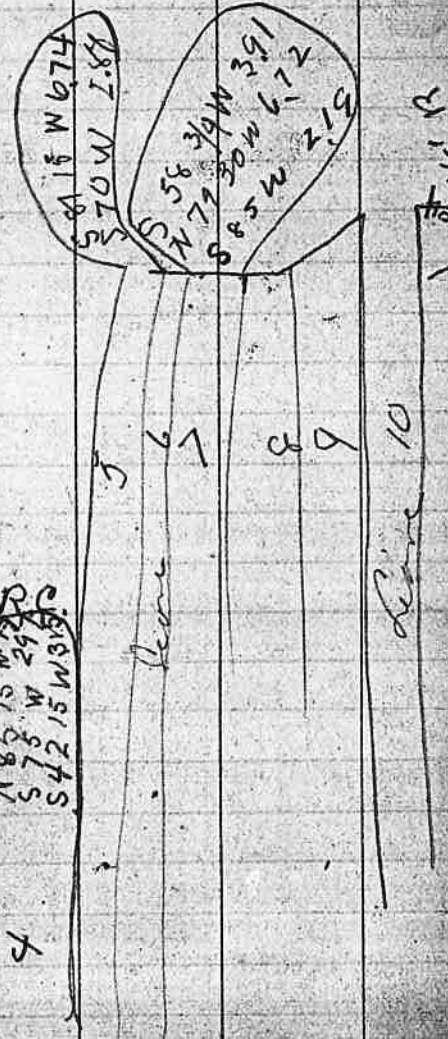



20 Acres
30.24
30.24
30.24
30.12
30.00
31.08
29.49
26.80 to fence
26.50 to fence
26.56
26.82
26.40
26.55
26.35
24.05
24.15
24.19
N 20.40
19.90
21.00
20.50
20.60
20.37
21.10
20.74
19.75
19.50
19.82
19.37
19.90
19.47
0064
Change Δ-1 2 3 4 5 6 7 to 46,51 Ks S
" Δ- " " " " 7½ 46½ " N
" Δ- 6 on W side to 32,55 ft
" Δ-1 " " " To 30,24 "

25-33
28' 7
1163

0065

Sta	Def	Point	Curve 5° 22 Rt
0	0.	BC	Δ = 41 31 20
+50	1° 21' 30"		
1	2 41		
+50	4° 01' 30"		
2	5-22		
+50	6° 42' 30"		
3	8° 03'		
+50	9° 23' 30"		
4	10 44		
+50	12 04 30		
5	13 25		
+50	14° 45' 30"		
6	16 06		
+50	17 26 30		
7	18 47		
+50	20 07 30		
+732	20 45 40	PRC	



Notes on Work West of Private Bo

Δ-1 77° 04' W From Δ-1 at

5 Chs set Δ-2

" " " Δ-3

" " Δ Δ-4

Turn to Creek 11 to Road 700 ft for W side L 1 15

5 chs set Δ-5 on this line but Creek at 1.

" " " Δ 6-5 chs set Δ-7

1 " Hit Wagon Road

4.50 " end of Road

5 Set Δ-8

" " Δ-9

Warehouse bears N 10 W from

Δ-9

at 5 chs set Δ-10

" " " " Δ-11

" 191 chs Hit RR

warehouse bears N 8 W 4.0 E

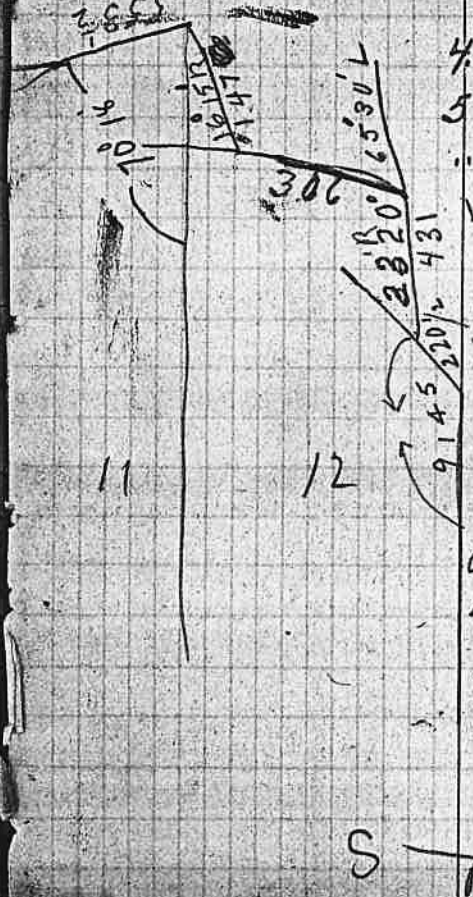
from Δ-11

at 142 but R of W from

Δ-11

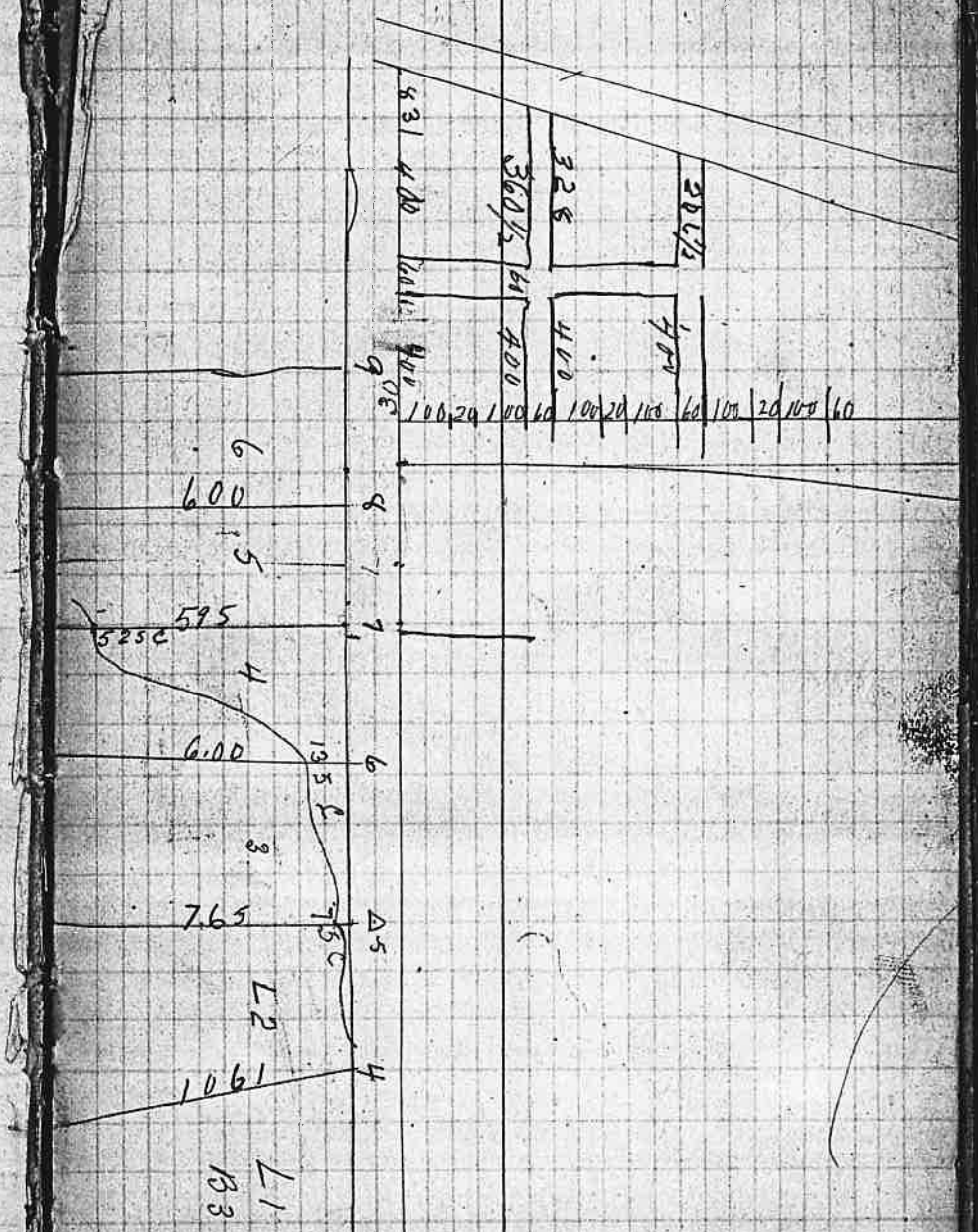
Turned from Back to

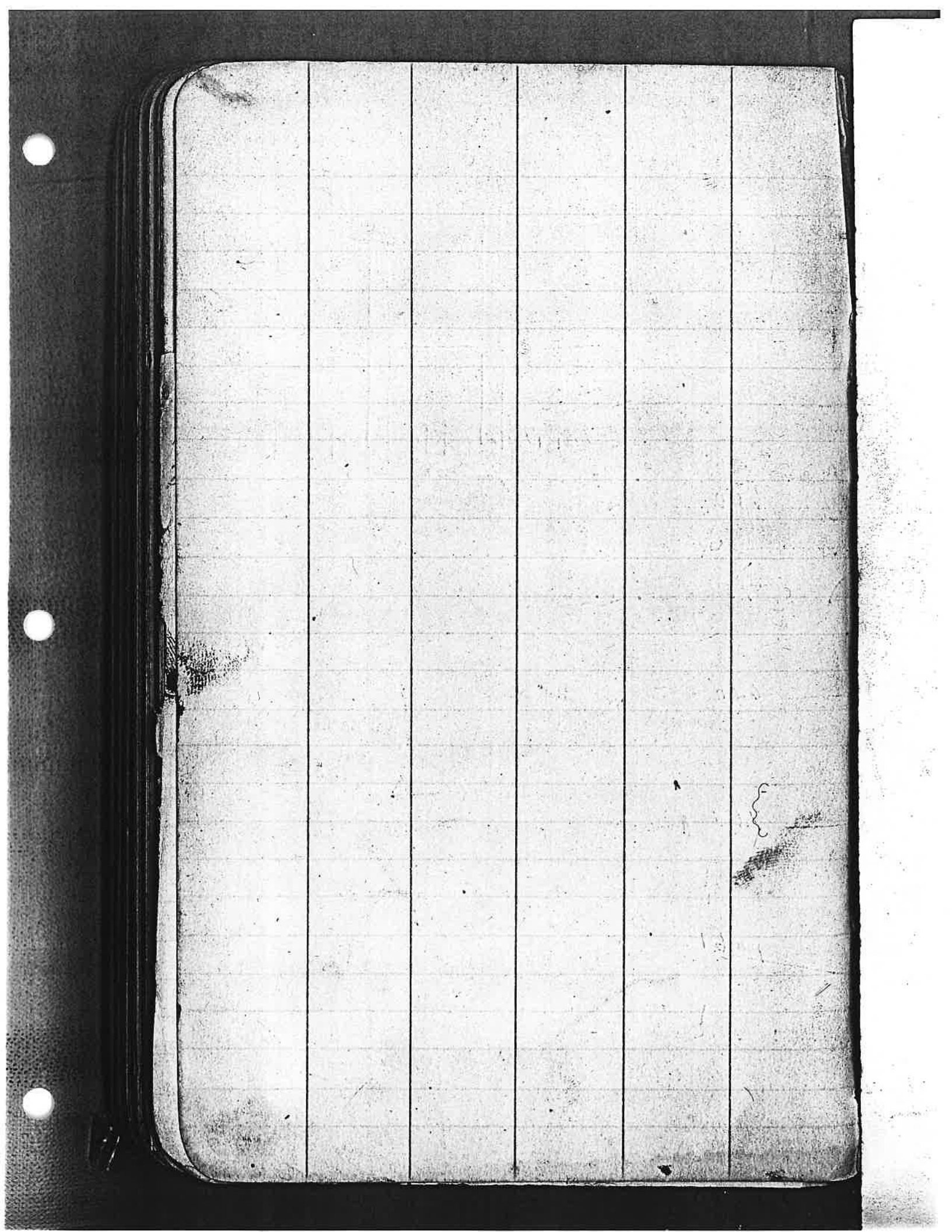
RR & Left = 61°

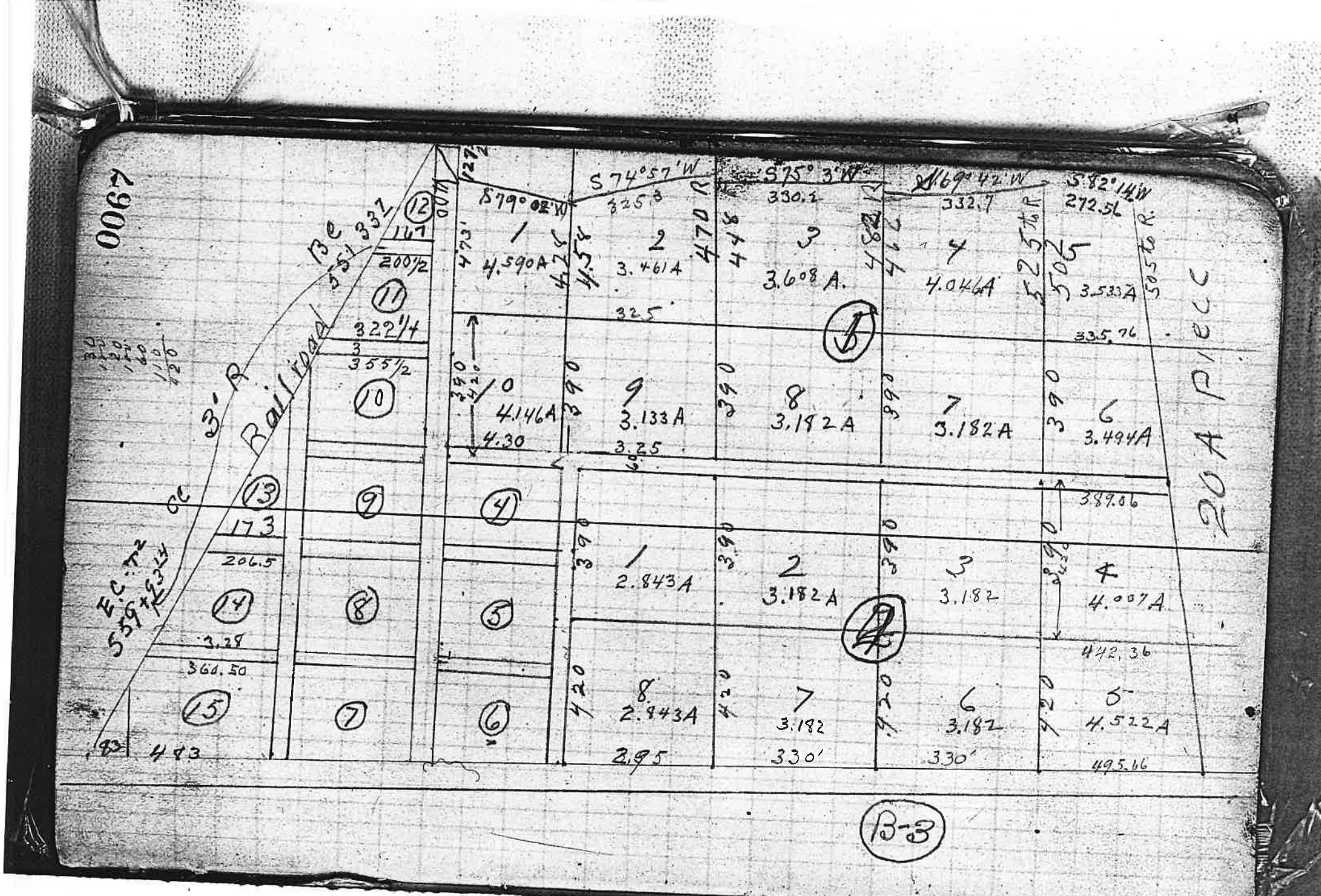


Notes for Sutherlin Tour

Beginning at a point 1.25 ft on Boul
westerly from Point Δ-8
Thence turn 90° and run Northerly
for West side St A at
30 B cor
1.30 Alley } 3 times
2.80 St. E & W






0067
S79° 02' W
S74° 57' W
S75° 3' W
S69° 42' W
S82° 14' W
325.8
330.2
332.7
272.5L
1
4.590A
2
3.461A
3
3.608 A.
4
4.046A
5
3.533A
325
335.76
10
4.146A
9
3.133A
8
3.192A
7
3.182A
6
3.494A
3.25
389.06
1
2.843A
2
3.182A
3
3.182
4
4.007A
442.36
8
2.843A
7
3.182
6
3.182
5
4.522A
2.95
330'
330'
495.66
3-R Railroad
50A PIECE
B-3

Field Book No. 19

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May 31 1961

Prof McAlister

Tel.	On Mark Hor. Circle		On Spica W E Vert.	Hor.	On Polaris Vert.	Hor.
D	3°	06'.8	34 34	305 ~~58~~	42 54	137 35
R	3	07.5	34 55	309 12	42 54	137 43
	6	14.3	68 8.9	614 62		27 ≠ 78
	3	07.1	34 44.5	307 31	42 54	137 39
	137	39.0	1.4	137 39	1	
	134	31.9	34 43	169 52	42 53	
	∠ Pol. & Mark		h'	D	h	
			35° 08'	311° 47'	42 54	137 44.5
			35 17	314 33	42 54	137 51
			70 25	626 20		95.5
	3	07.1	35 12.5	313 10	42 54	137 47.7
	137	47.7	1.4	137 47.7	1	
	134	40.6	35 11	175 22.3	42 53	
	∠ Pol. & Mark		h'	D	h	

Computations 0070

$\sin A = \frac{\cos\delta}{\cos\delta'} \times \frac{\cos h'}{\cos h} \sin(A+D)$

1st Observation

log K = 8.32825

log cos h' = 9.91487

8.24311

log cos h = 9.86495

8.37816

log sin D = 9.24386

7.62352

A_1 = 0° 14'.4 = 1st approximation

8.37816

9.25574 = log sin of 169° 38' which is 169° 53'

7.62390 −14.4

A_2 = 0° 14'.8 = 2nd approximation

$A_1 + A_2$ = W. ∴ Azi of Mk = 184 31.9 + 14.8

= 134° 46'.7

log K = 8.32825

log cos h' = 9.91289

8.24064

log cos h = 9.86495

8.37569

log sin D = 8.90730

7.28298

A_1 = 0° 06'.6 = 1st approximation

8.37569

8.91701

7.29270

A_2 = 06'.7 2nd approximation

Az = 134° 40.6 + 06.7 = 184° 47.3

Field Book No. 19

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cos .7920
7214

5	45	23
1	24	23
4	21	

$\frac{9}{60} \times 21$

84
2
87
107
609
87
93.09

180
1 33 15
178° 26' 30"

.9120)420.000000(423.39
3648
3520
1824
1696
2400
2280
1200
1140
600
540
60

5 40
20
27
42

$\frac{60}{9030}$ (60.48
5424
4560
3780
5400

2C = 2πrad in 1°

For 420' - 423.40ft
" 6. 30"
" 3°3.15

0073

1	24	15
2	48	30
4	12	45
5	37	
7	00	
8	24	
9	48	
11	17	
12	40	
12	36	
14	00	
15	24	
16	51	
18	12	
19	36	
21	00	

1	24	
2	48	
4	12	
5	36	
6	48	
8	12	
9	36	
10	48	
12	12	
13	36	
14	48	
16	12	
17	36	

0 1
0 2 1
18 3 2
4 2
13 7

9920 / 390 0000 | 393.14
29760
92400
89280
31400
29760
16400
9920
6480