

18

FIELD BOOK

400

18
18
INDEX

Page

- 2 Survey of grade in Blacksmith Fork Canyon
- 16 Water measurements for A. Kohler
- 12+15 Survey for Cache County
- 12 SE corner of Sec. 12 T 11N, R 1 W
- 12 NE Corner of Sec. 19 T 11N, R 1 W
- 12 SE corner of Sec. 12 T 11N, R 1 W
- 18 NE corner of Sec. 25 T 13N, R 1 W
- 22 SW corner of Sec. 13 T 11 N, R 1 W
- 28 Survey for Hugh Stuart in Clarkston
Sec. 26 T 14 N, R 2 W
- 32 Sec. 21 T 14 N, R 2 W
- 34 Survey for P. Maughn
- 36 Description for N. C. Neilson
Sec. 32 T 11 N, R 1 E
- 42 Survey for Pipe line for Lewiston
Sugar Factory, Sec. 12 T 14 N, R 1 E
Sec. 10 T 14 N, R 1 E
- 48 Survey for Geo Linquist
- 50 Survey for Logan City in Block 18
- 52 Survey for Ed Anderson
- 53 Blacksmith Fork Canyon
- 58 Survey for Lewiston School Dist.
Sec. 8 T 14 N, R 1 E
- 62 Survey of Drain, Preston
- 66 Survey for Nephi Miller
- 89 Co.Op. Drug, Commercial Block
- Agreement Copy, end of book
Sec. Sec. 11 T 10 N, R 1 E

60
Eugene Schaub
County Surveyor
May 9/07

Page

2

16

12+15

12

12

12

18

22

28

32

34

36

42 Su

48

50

52

53

58

62

66

89

18 3/ 24 6
216 276

1 6 5 4 3 2 1

12 7 8 9 10 11 12

18 17 16 15 14 13

19^x 20 21 22 23 24

2350

15.7
10.2

Sur of Grade in Blacksmith fork Canyon

Sta BS FS on Cle. HI

Bm 4638

50775 512.388

11+00

Bm

2.125

510.463

11+11.2
1211+9.4
17

12+5.1

13+6.2

12+6.2

14+7.2

15+4.9
15

16+8.2

16+8.2

17+6.2

16+8.2

17+4.3
30

17+6.2

17+6.2

17+6.2

18+4.2

10+3.7
50

10+8.7

11+3.7

sewer for
Lerdo

21.8
1.02

42

5.2

4.56

5.58

4.56

1.02

gr

507.75

4638

12.388

RR

RR

14.87

76.02

C

-13

+

curve

HI

Cut

L

R

on Hub S of PI, 9+21.6

on Hub. near Sta 11 (on S)

11.59

5135

560°E

410 710

1.4

3342

450 5.9

5/4/07

6.7

5400

560°E

521°10E

447

6.7

580°E

10.8

13.6

3.4

2006

7°40

19°22

438

463

457

on curve

just 6.5 ft

typical

7.96

PC 12°L

21.88 2d.

P.T.

PC 8°R

on curve

#

Sta BS FS m Ele HI C.C. R.C. R.R. RR on

10+37 3.730

10+37

0

10+57

10+57

11+37

11+48

12+30

13+00

13+62

13+62

14+87

14+87

14+87

15+50

16+02

16+02

16+87

16+87

16+87

17+32

17+62

17+62

17+92

18+42

FS

m

Ele

HI

C.C.

R.C.

R.R.

RR

on

9.702

7.449

1.91

14.25

R.S.

0.960

(1.74)

11.1040

3.550

510.463

496.828

495.013

17.365

17.2775

17.1900

17.0910

17.0035

16.9160

16.8075

14.5545

14.3340

19.6100

19.5015

19.4088

21.7500

21.6013

18.4588

18.3101

18.2314

18.1789

10.625

10.5725

10.5190

10.4650

504.491

497.606

511.740

517.216

497.8072

515.806

516.266

514.526

505.162

508.712

498.227

514.193

511.940

516.266

514.526

505.162

508.712

498.227

C.C.

R.C.

R.R.

RR

on

2.4

5.8

3.14

4.4

1.5

7.4

3.1

17.5

14.2

2

3

2.12

2.00

7.91

10.2

13.74

9.1

7.58

7.00

7.1055

7.4

15.5

9.9

17.5

31.25

24.75

14.2

11.6

7.0749

7.075

8.5

9.1

514.193

9.702

504.491

7.449

511.940

496.77

510.463

3.730

510.193

496.828

17.365

on hub near Sta 11

on grade

22 1957 9.45

14.85 7.1

11.40 3.45

13.95 8

16.60 9.42

17.25 9.90

15.30 9.7

6.92

on T.P.R. S.

0.55

6.85

on city by state n of Sta 16+87

14.2

6.66

17.9

11.104

2.50

8.46

on hub

on hub upper S.

2.50

8.46

3.35

56

Observations

Ob.

Sat. May 11, 1907

B. S. Fork Canyon

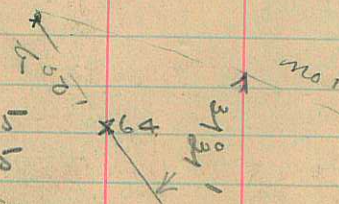
No

$L^3 L = 31^{\circ} 31'$

$h = 33^{\circ} 05'$

Mag. course of Sun $S 84^{\circ} 20' E$

Time 8.20 am



No.

$L^3 L = 30^{\circ} 25'$

$h = 34^{\circ} 15'$

Mag. course of Sun

Time 8.25 am

$S 83^{\circ} 15' E$

Ob. near the South $\frac{1}{4}$ cor
of sec. 2, in township 10 N.
Range one east.

Sat May 11, 1907

Mouth of Blacksmith fork
Canyon.

County Work May 11 1907

Ob. on NE cor

$h = 50^{\circ} 24'$

sec 19. T. 10 N. R. 1 E.

cos A = $\frac{L^3 L}{L^3 L} - \frac{L^3 L}{L^3 L}$
 $\cos h \times \cos L$

Greenwich = $17^{\circ} 39' 27''$

$D = \text{for } 1 h = 29.19''$

42°

$698, 60''; 21.6; x$

41.5960

1830

41.4130

$111^{\circ} 53'$

$1746 2000$

$292 75000$

10175

149380

209132

29276

522830

111

6660

52

6717

6200

41202

26000

5200

4500

7000

1296.0×69.8
 698
 5980
 5584
 3960
 3390

$\text{Lat} = 41^{\circ} 21' 30''$

$\text{Long } 111^{\circ} 52' =$

$D = 17^{\circ} 42' 36.3$

$\log 5457 = 0.73695$

$39.19 = 1.59318$

2.33013

$\log 60 = 1.77815$

6.55198

$3.56''$

60

3360

17.38627

3.336

35291

$17^{\circ} 39' 2.7$

3336

$17^{\circ} 42' 36.3$

28

Ob. continued

$$\begin{aligned} \text{Cor } \left\{ \begin{aligned} \text{LO} &= 17^\circ 42' 36.3 \\ \text{Lat} &= 41^\circ 41' 30 \\ h &= 50^\circ 23' 31'' \end{aligned} \right. \end{aligned}$$

$$\text{Log } \sin 50^\circ 23' 31'' =$$

$$\text{Log } \sin 17^\circ 42' 36 = \bar{T}.48287$$

$$\text{Log } \cos 50^\circ 23' = \bar{T}.80462$$

$$\text{Log } 41^\circ 41' = \bar{T}.87326$$

$$= .06382$$

$$\text{Log } \tan 41^\circ 41' = 8904 = \bar{T}.94959$$

$$\text{Lat } 50^\circ 23' = 0.31911$$

$$\begin{aligned} &= 1.8565 \\ &\quad .6382 \\ &\quad 1.2183 \\ &\quad .63822 \\ &\quad .01856 \\ &1.6197 \end{aligned}$$

$$\text{No } h = 59^\circ 43'$$

S 44° 05' E Sun Dir. May

L to College Smoke stake

97° 11'

11 am

29

$$7698 - 7703 = 5 = D$$

$$3035 - 3040 = 5 = D$$

$$0027; 400'' \text{ in } 26.$$

$$\begin{aligned} &36 \\ &162 \\ &81 \\ &10072.600 \\ &600.00016 \\ &3720 \\ &3600 \end{aligned}$$

$$\begin{aligned} &6383 \quad 8890 \\ &6377 \quad 8805 \\ &7470 \end{aligned}$$

$$7464$$

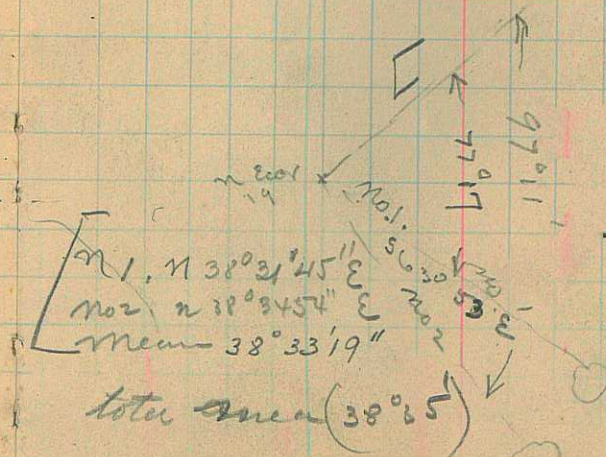
$$\begin{aligned} &12131 \\ &12059 \\ &100.72 \end{aligned}$$

$$.0072$$

$$0072; 10' \text{ in } 3$$

$$\begin{aligned} &1021.6 \quad 13 \\ &21 \quad .0072 \\ &3.0072 \\ &1.0026 \\ &2059 \\ &26 \\ &1.2085 \end{aligned}$$

College smoke stake



1110

$$\begin{array}{r}
 h = 56^{\circ} 51' \\
 L = 84^{\circ} 4' \\
 10.30
 \end{array}
 \begin{array}{r}
 56.51 \\
 56.5060 \\
 24 \\
 \hline
 56.5036
 \end{array}$$

$$\begin{array}{r}
 h = 57^{\circ} 32' \\
 L = 86^{\circ} 09'
 \end{array}
 \quad 5/18/07$$

$$\begin{array}{r}
 T_0 \quad 10^{\circ} 30' \\
 \log 7.457 \\
 g = 19^{\circ} 21' 16.8 \\
 D \text{ for 1 hour } 33.74 \\
 19^{\circ} 21' 16.8 \\
 \quad 3.20 \\
 \hline
 19^{\circ} 24' 36.8''
 \end{array}$$

$$\begin{array}{r}
 \text{No. 2} \\
 \log \sin 19^{\circ} 24' 36'' \quad T. 52153 \\
 \log \cos 57^{\circ} 32' \quad T. 72982 \\
 \quad T. 79171 \\
 \log 41^{\circ} 41' 30'' \quad T. 87316 \\
 \quad T. 91855
 \end{array}$$

$$\begin{array}{r}
 .82900 \\
 \log \cos 57^{\circ} 32' \quad 0.19637 \\
 \log \sin 41^{\circ} 41' 30'' \quad T. 94973 \\
 \quad 0.14610
 \end{array}$$

$$\begin{array}{r}
 55^{\circ} 11' 10'' \quad 1.39980 \\
 86^{\circ} 09' \quad 82900 \\
 \hline
 1.412010 \quad .57080
 \end{array}$$

$$\begin{array}{r}
 472 \quad 5213.5 \quad 184 \quad 7.457 \\
 \hline
 14 \\
 486 \quad 52153
 \end{array}$$

$$\begin{array}{r}
 \log 5.957 = 0.77503 \\
 \log 3374 = 1.52815 \\
 \quad 2.30318 \\
 \quad 1.77815 \\
 \quad 0.52503 \\
 \quad 3.35 \\
 \quad 60 \\
 \hline
 2000
 \end{array}$$

$$\begin{array}{r}
 \log \sin 19^{\circ} 24' 36'' = T. 52153 \\
 \log \cos 56^{\circ} 50' 36'' = T. 73795 \\
 \quad T. 78358 \\
 \log \cos 41^{\circ} 41' 30'' \quad T. 87316 \\
 \quad 1.91042 \\
 \quad .81362
 \end{array}$$

$$\begin{array}{r}
 \log \tan 56^{\circ} 50' 36'' = 0.18486 \\
 \log \tan 41^{\circ} 41' 30'' = T. 94973 \\
 \quad 0.13459 \\
 \quad 1.36330 \\
 \quad 81362 \\
 \quad .54968
 \end{array}$$

$$\begin{array}{r}
 56^{\circ} 39' 20'' \\
 84 42 \\
 141 31 20 \quad .1795960 \\
 179.5960 \\
 141 20 16 \\
 38 39 50 \\
 38 34 54 \\
 38 31 45 \\
 3(16'9'') \\
 56 \\
 \hline
 3(114104)1.49 \\
 38 34 \quad 3835
 \end{array}$$

5/18/07

3885
3835
50

see sketch over

40.00
0.00
39.92

131

Sur for Cachu Co
on college road road
Beg at NE cor Sec 19

Angles

List Course L R
39°25'

80 N50N

80

Mag 17°07' E

College Machine art, Snake
stake bear N 38°35' E from
this cor
from Snake Snake, stake
L 39°18' app. sec. line

R 48°20' To College Snake

{ note list from NW cor
of SW 1/4 sec 19 to cor of NW
of 39.92 feet short of cor

Beg at stake on Meridian
SE cor Sec 12 T11N, R1W

1996

N

3977

5503

7828

7982

which is N of stone set 3 years ago
to corner from
to fence S side lane R. 2+4
to line fence
to center of O.S.L. R.R. track
to good cor over the Meridian
file W. 035 chains

16

no.

1 8"

2 7"

3 8"

4 8"

Water measurements for a Roller

size of tube = 19 x 16 x 9.5
dia. Depth

NE RR cut

4.64

4.1 3.2 .9 4.94

4.1 3.8 .3 4.54 3.6 1

4.1 3.3 .8 4.54 3.8 4.1

4.1 4.00 .1 4.54 4.40 .2

4.1 3.60 .5

4.1 3.30 .6

4.1 3.50 .6

4.1 4.64 .6

5.53
4.64
.89

cut

4.1
3.2
.9

4.1
3.3

4.54

4.64

4.80

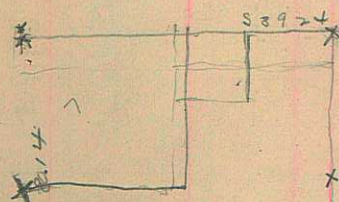
4.54

3.54

.70

6.00
1.20
8.00
3.30

171



2 3 08
MEZ. 63

Sw for Cache County
May 23/07

Beg at the SE cor of NE ⁴ sec
25 Tp 13 N R 1 W
Run

Sw Cours - angle R

4.367 N 32° W

40 " " 90° 10'

.25 S 89° 17' W

40.545

60.46.

60.72

80.20

89.49

20.51

40.52

40.42

32
90.11
90.43
179.60
40.43
89.17
32
89.49

(8.08 ch to side st)

Set it at pt 4.367 ch BS to both cor
to brow of hill (stake)

to fence E side road

to stake on divi. fence line

to divi fence S

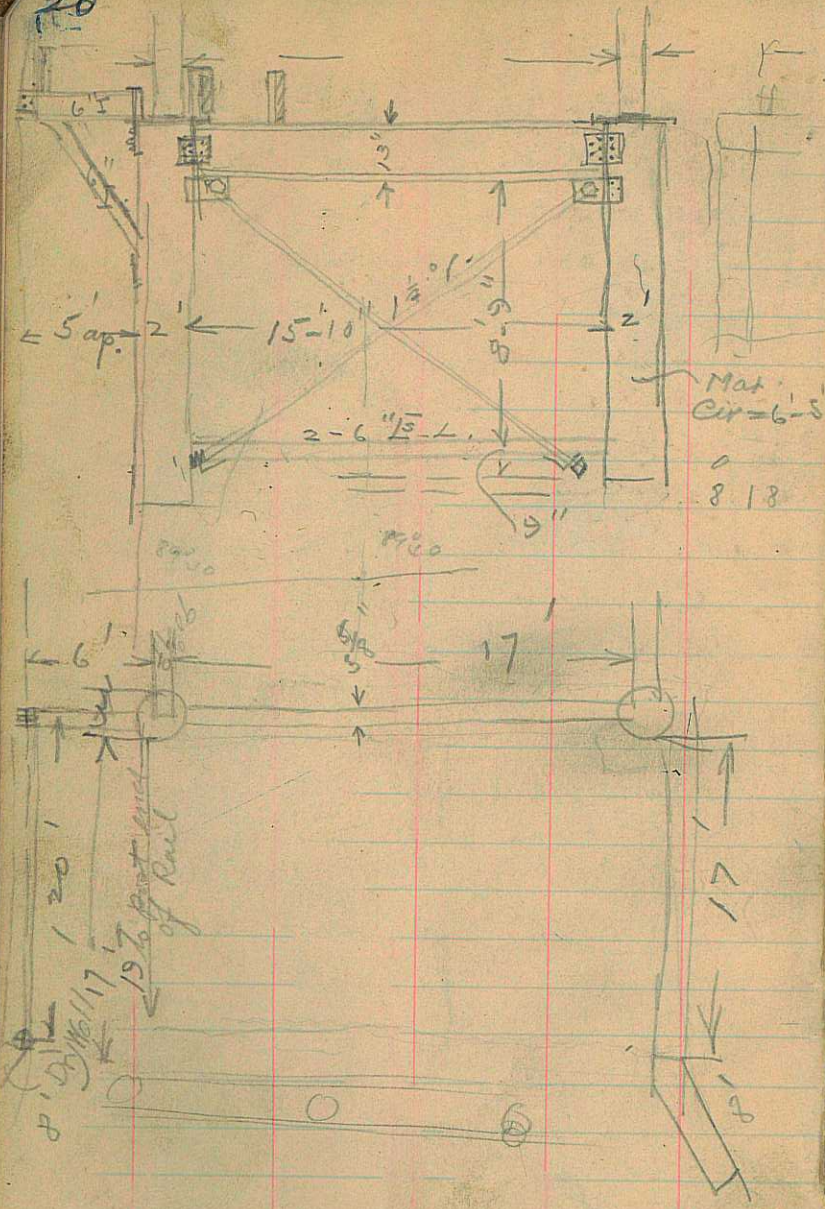
to " " N

{ to pt .02 ch E of divi fence Rock
marked 1/4 found moved.

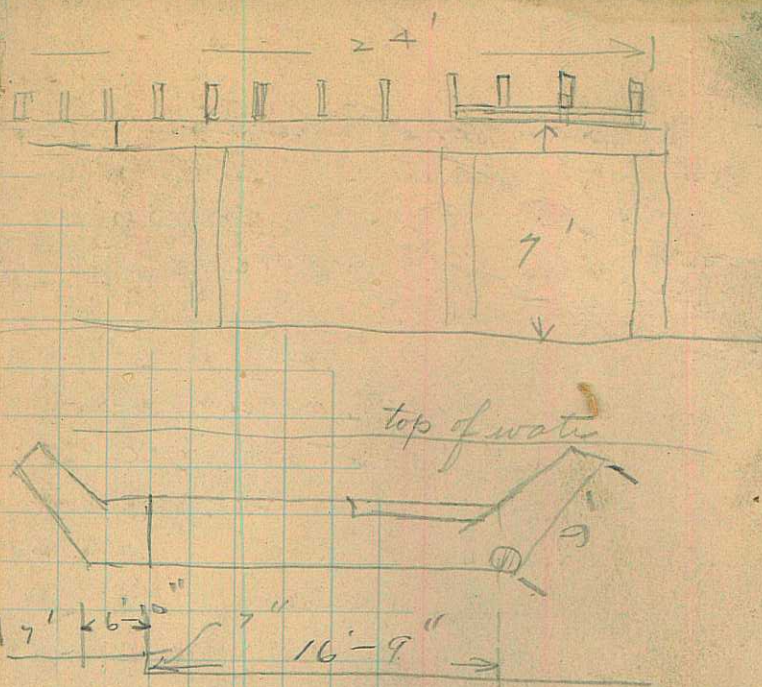
to fence

{ to divi fence No rock found
fell west of intersection pt .29

20



21



Bill to L. C. Budge in
favor of J. E. Wilson for \$38.00

May 30/07

Luv for Cache Co.

Continued.

Beg again on random
cor of Sec 13 Tp 11
N. R. 1 W.

which is $89^{\circ}13'W$ from the
SE cor sec 13 80.49 chain.
not (dist. set 5 links E of
said random cor.)

Dist. Course $\angle$ angle
90°20

0.23 $N 71^{\circ}W$

0.52

20.13

40.34

40.10

40.34

 $89^{\circ}51'$ 0.15 $N 89^{\circ}24'E$

39.69

40.15

39.69

Beg again at pt 40.34 $N 71^{\circ}W$
of random cor. which pt is
the correct line Run E + W
over

8913	17960
9020	17933
17933	27

8913	$N 89^{\circ}24'E$
9020	27
33	$N 89^{\circ}24'E$
	27
	89 51

BS to SE cor sec 13

to large post said to be cor
to fence going west

(to line from Run E + W)
to full 0.105 E of fence R N + S
to center line

to fence S. side of Road Run E + W
check within 1' full 0.15 ch n. of ^{on corner} 1

to E side road on the N.

to in line with W side Road N + S.

to " " E side " " "

full .24 N of Sec 14 St + .26 S of N
Side St.

29

List Course

an/pe
L R

40.84 n27W

0.267

~~20.15~~

20.15

30

39.31

39.31

39.80

39.80

89°43'

40.29

$$\begin{array}{r} 90\ 30 \\ S\ 89\ 24\ W \\ \hline 1.06 \end{array}$$

S 1°06' E

89 24

90 30

$$\begin{array}{r} .0145 \\ 80 \\ \hline .11200 \end{array}$$

100 38

44
35
1490 35
1 06
29

23

start to peg over

{ to in line with the N side St. R. 8+0
 { full .35 E of W side st + .4 ch W of
 { E side st

to in line with div. fence on the W

{ full 38 link E of W side Road
 { and 10 " W of E " "

stake S side Co. Road

to center stake of old New Road

{ This center stake is practically
 { on S. Side of old Road Hanson
 { Survey

to line of New Road

to old cor highfill .17 ch East.

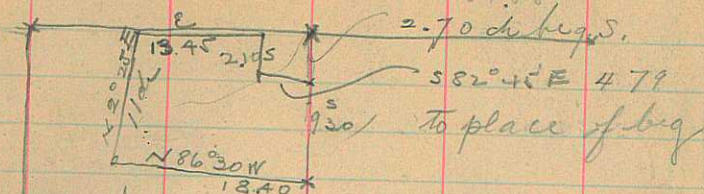
Noti. Set on Mar. 1/4 cor of Sec 13
 R 90°30 full S. on W 1/4 cor about
 19 links

{ set on S E cor of 13

{ angle R 90°35' to Post 2d to
 { the cor. S 89°29' W

Set at a pt 11 link N of S E cor
 13 R 90°29' to post as above

24



1.992
4.79
8.928
6.944
3.968
4.75168
1.365
1.870 →

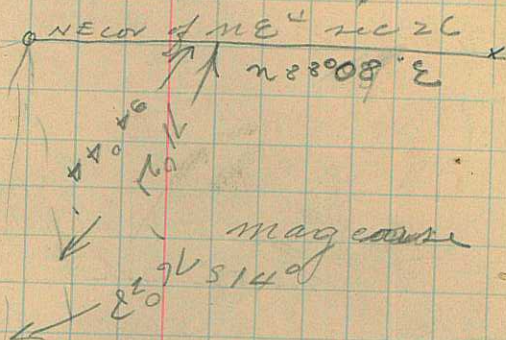
may 5/07 27
No 1. O b. for H. Stuart
h = 69° 36'
Time 12
L R from NE cor 26 71° 21'

No. 2

h = 70° 00'

time 72

L R 76° 28'



2411 x 466.5

No 3. h = 70° 14'
L R 80° 11'

28

Surr for Hugh Stuart

Clarkston

Beg at NE cor Utah

of NW Sec 26

3.85 n88°10'E

14.65

40.03

Beg at SE cor Sec 26

40.43 388°NW

64.17 " " 2°

80

No definite cor found

Beg again on the

NE cor of NW Sec 26 T14N

R2W : FS to NE cor Sec 26

90°21

51°31'E

Thence

329 E L

350

358

nw Beg again NE cor of

18.20 388°NW

18.40

19.21

Thence S 22°25'W with
reference to sec line

3.58

10.68

3.50
21
3.298808
9150
79528808
11026
834

14.65

10.68

3.97

8808

9025

17329

11026

8808

2218

29

10.68

3.85

10.80

10.68

17060

17829

131

1921

1840

.81

to cor

to Stone fell in S.
in lot. townsiteNote: This NE cor
of NW Sec 26 bears S 22°18'E
0.30 ch from SE cor of
NW Sec 26. This stone marked
by R. H. Stuart from Sept. 5, 1882
to 1/4 mi S.

M. H. 1885 to stone 40.17

To fence on S.R.S. 17/88
H Stuart SE cor
to on N R mto Stuart's NW cor
to " cor of fence

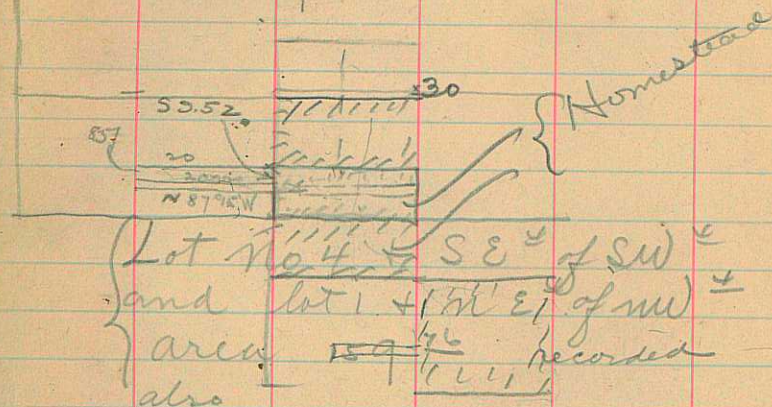
30

Surv for Hugh Stuart
con4 (94)
23

31

R

Tp 14 N R 1 W



Beg. at the NE cor of SE 1/4 of
 SE 1/4 Sec 25 Tp 14 N R 2 W
 59.52 chain to center of C. Row
 N 87° 15' W 20.02 chains,
 N 8.57 chains
 E 20 chains to big
 containing 18.08 acres.
 not recorded

32

Reg at SE cor 2025

Tp 14 R 2W

Llin Corner Langle's R

20 N

4020

40.20-6

37.81 S E

90°40'

33

90°26'

to fence
to fence

to fence

90.40	42
14	09
90°26	33078
	312004230

180

156

240

234

60

+11 00423

1.51851

78

1.89209

3.62642

-00423

34

Lur for D Maughan

Beg at NW cor of SW

of n E sec. 3

Lur corner L R

2.87 n
12.59

1.30 n 90
8.00 E 18° 53
33.3
505.5 S 45° 22 W
n 49° 16

3.54

FS to

234000
210771
232290
210771
21519

6.70257
33.3

4876
4522
354

146 66
132 221
140
152
90 80
4522
13522

66
8
6126
54916 W 528
1250
354
1624

116.3 2.92357
100.6
226.9
75.01
297.91
47.27
339.18

388.00
1163
504.30

528
504.3
231

5043

23.7
23.7

49° 16
4.008h
5.35
4523

71° 007

459

18° 53'

459 1.57
314 2.92357
1450
1413

370
314
560
471
8960
71.07
1853
71.07
8960

62.44

23.7 23.4
23.7 1.01282

300
23.7
660
468
1920
1872
480

1.3
66
78
78
85.8
62.4
23.4

35
35.5
66
1998
1998
1978

111111

33.3 66
83.3 505
4300

36

Les. for N.E. Neire

Began at pt 13.12 ch. N of
SE cor of Sec 32. Tp
11 N R 1 E. Thence

N. 8.40 ch. to the north bank
of a water ditch.

Thence in a westerly direction
along the bank of said ditch
2 $\frac{10}{100}$ chains.

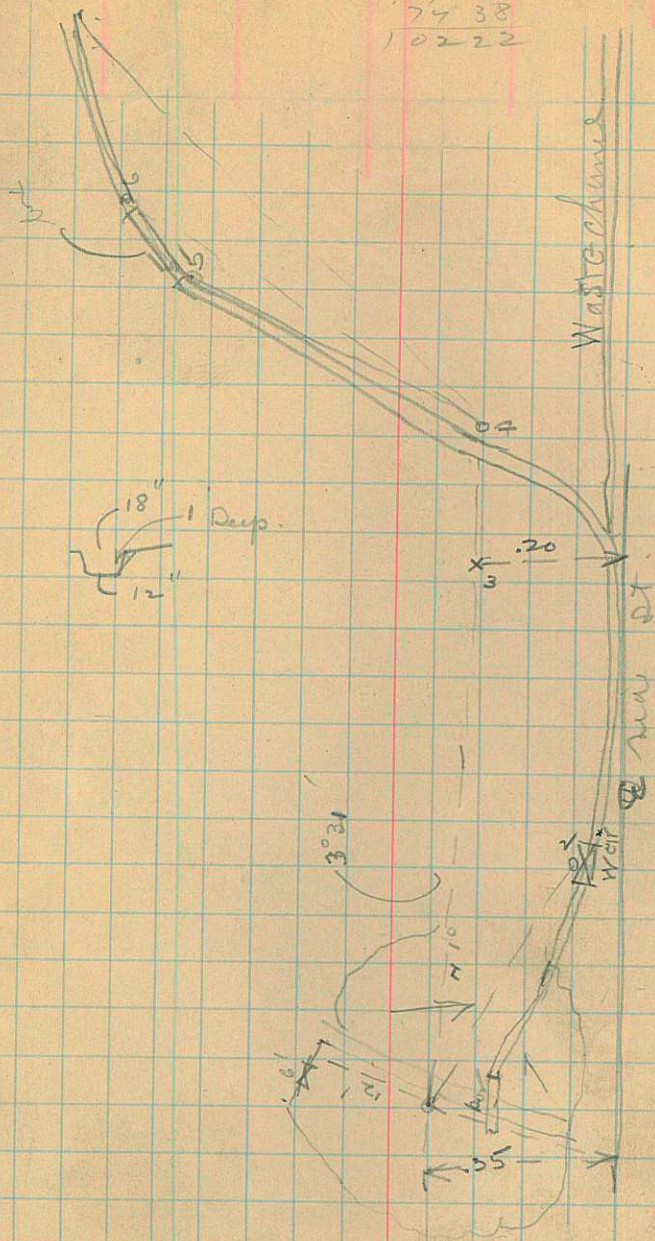
Thence South 6 $\frac{40}{100}$ chains

Thence in a south-easterly
direction 3 chains to beg.
area $\frac{1}{160}$

Spring dweller at a pt
which bears N $77^{\circ}38'W$
2443.3 ft from the SE cor
sec 32. 2d. Tp. & Range

17960
7438
10222

87



See over

38

Line for N.E. Nelson

Dist	No.	Cours	L	R	HI
ch.	1				
	2	N 30° 42' E		30° 42'	4.74
1.225	3	N 3° 31' E			
1632	4	N 3° 31'	59° 41'		5.00
	5	N 56° 10' W			
	6	N 52° 35' W	56° 10'		
	7	N 46° 50' W	44° 21'		
2.242	8	N 38° 10' W	41° 45'		
3.24	9	N 57° 05' W	18° 55'		
0.632	10	N 9° 32' W		48° 48'	
0.208	11	S 32° E		155° 43'	
3.18	12	N 38° W	30° 10'		
1.45	13	N 2° E		39° 43'	
2.05	14	N 73° 35'	140° 04'	72° 08'	
	14		68° 26'		

See over

4.00

474

3.18-2.5

39

Station angle
 0 L - +
 on Spring
 4.00+74 40° 42' at weir

0.20 E to Litch

133 to No 1

5.42 5.00

5.495 5.00

5.93 5.00

5.965 5.00 47'

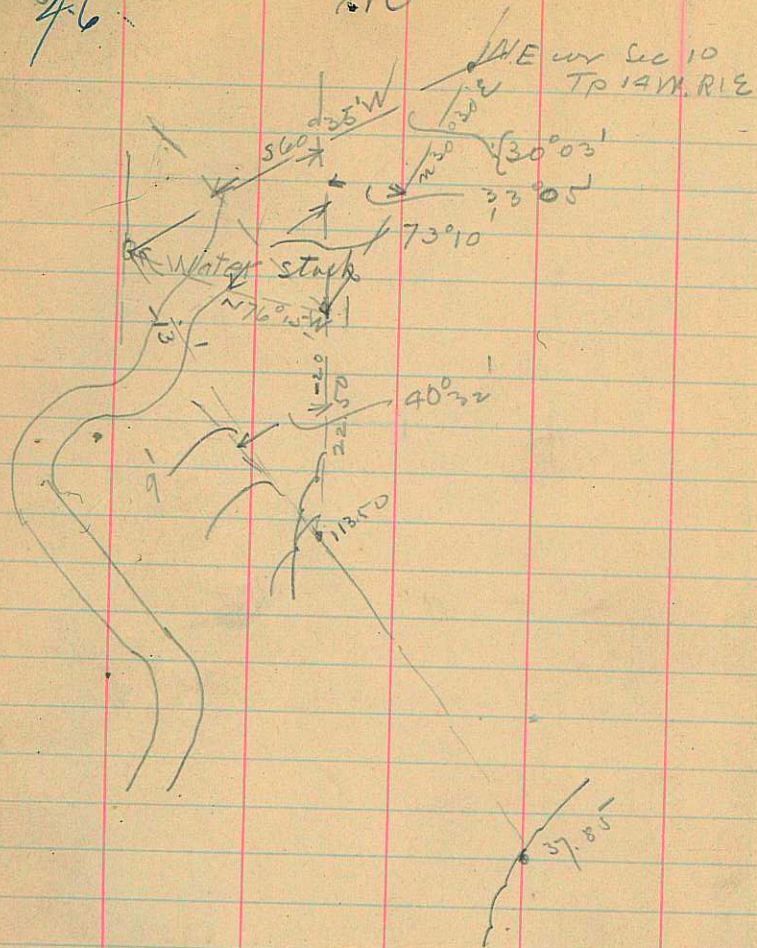
which is SE cor of Nelson's land

2.90 to end of ditch

14 is .015 ch. S of S. Side of S. RR
 across Right of way . . . 80 ch. wide
 Note said lot 14 is also 5.8'
 N 46° 35' W from Nelson's E
 line.

46

n



47

98 Sur for Geo Linguit
 June 17/07
 Sta B3 FS um 86 HI
 0 6.03 100.00

5.425

438

10.41 6.910

12.335

0

0

0

99.3

100.00

99.8

99.1

98.075

Water Other test

5.83

6.52

1.66

5.85

Notes: 7.5 ch from Spring
 to SW cor of house

by pass

mean d = 3' 4"
 8

Spring

No. 3" 3"

2" 3"

flow in main ditch about
 112 sec per foot

98.07
 1.92
 96.15

100.00 6.03
 1.925 5.425
 98.075 .605

6.05
 1.2
 12.10
 6.05
 7.260

12.335
 1.925

on Water which should be .20 Lane

6.52
 1.66
 4.86

bottom of ditch cha

present H₂O

where H₂O should be

bottom a outlet water channel

H₂O at Hatching in Creek

On the Water at Spring
 on available tail H₂O

on head available

on floor in hatching

H₂O measurement

— feed to Hatching

8'

No. 1 tan

8"

7"

6"

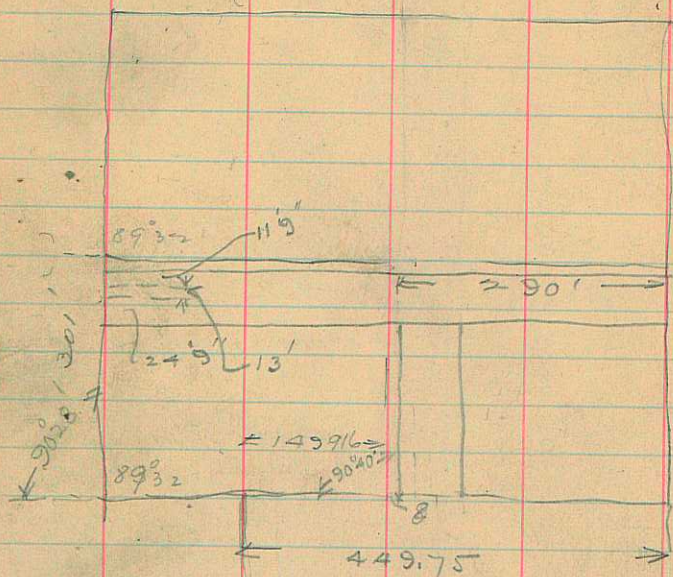
7"

mean d = 5' 1/2"
 width 7' 1/2"

6:0

6/17/07

Sur for Logan City
in Bk 18, Logan City Sur



58

$$\begin{array}{r} 3 \overline{) 449.75} \\ 149.916 \\ \hline 148.50 \\ 1.42 \end{array}$$

$$\begin{array}{r} 17060 \\ 9028 \\ \hline 8932 \end{array}$$

$$\begin{array}{r} 149.916 \\ 2 \\ \hline 84 \end{array}$$

$$\begin{array}{r} 149.916 \\ 2 \\ \hline 299.932 \end{array}$$

$$\begin{array}{r} 300.00 \\ 299.93 \\ \hline .07 \end{array}$$

$$\begin{array}{r} 149.916 \\ 3 \\ \hline 449.7 \end{array}$$

$$\begin{array}{r} 4950 \\ 1175 \\ \hline 75 \end{array}$$

$$\begin{array}{r} 379 \\ 119 \\ \hline 496 \end{array}$$

62

Surv for Ed Anderson

Sta	BS.	BS.	FS	inn	RR
0	2.40		321	321	on back
94.25				3.968	
193.8				4.77	
143.75				4.367	on
143.75				1367	4.53

on Carbon 2nd cor B.R. 3.00 B.
on nail in post NE cor B.2.

4.53					
1.37					
3.16					
3.16 above top of 3.21					
4.367					
5					
3.867					
2.50					
1.367					

94.2

.00805

4710

7536

758.310

3.21

3968

Surv up

Sta	BS.	FS.	inn	Cl	HT
16+57	1.6650			514.526	516.111
		11.770		504.421	
	1.390				505.811
26+54		5.23		500.581	
26+54		5.68	lowest	500.131	on grade
26+54	4.290				504.871
		2.59		502.281	
	6.16				508.441

Blacksmith fork June 25/07
Center Center RR cut RR cut RR cut RR cut RR cut RR cut

By on cliff
west of rd. stuff.

on the built
grade
from pt. 45 to high
longer with ref.
to first grade

to high

on grade

This is a
copy.

31+50		6.992	500.99		3.545	3.447
31+50		see over				
		7.916	500.525		3.545	4.371
		check				
50+50	5.603			500.581	506.181	
	5.100	3.660	1	502.524		

Sta	Course	Angle L R	HI	RR or	Cut
31+50	n 72° 05' E	1016'	452	7.96	B5 over which line bears 570° 55' 41" 30+100 + about 100 -1

Sta	BS	FS	UM	Elev	RI	RR or	Cut
31+50				504.896	507.624		
31+50			7009	500.525			on center line cut 4.37
31			7.1865				on grade
29+50			0.875				
29			7.2740				
29			0.875				
28+50			7.3615				
28			0.875				5.50 1.8
28			7.4490				5.46
28			0.875				
27+50			7.5365				
27			0.875				
27			7.6240				7.40
27			0.875				
27			7.7115				

Sta	Course	Angle L R	HI	RR or	Cut
31+50	n 72° 05' E	1016'			
32+96		830'	4.38	7.98	3.6
33+77	n 81° 15' E				
32+52					
33+40					
33+77					

$$E = R \left(\frac{\cos I}{2} - 1 \right)$$

$$E = 1.7' \text{ Can } D = 44.31$$

$$10^\circ R.$$

$$P.T. \times$$

$$2.84$$

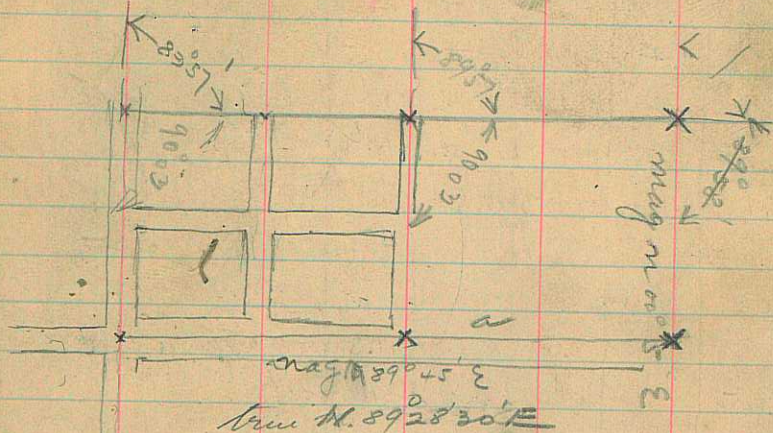
7° 42' 4.21 7.05
see over
for cross section
notes

56

57

Sta	BS	FS	um	Elev	HI	Center Rm R	C. Cut	P. Road	R.C.	Route	C. file
31+50	11.670		on grade 16.044	504.896	516.540		4.37	4.30	11.7	9'	
32			0.875								
32+50			15.9525			13.	2.9	5.20	10.7	10'	
			0.875								
32+96			15.8650			13.46	2.4	5.20	10.5	10.5	
			0.865								
33+50			15.7845			11.18	4.6	2.6	13.2	11'	on curve
			0.945								
33+77			15.6900			11.72		3.87	11.8	11'	
			0.472								
33+77			15.6428			11.68	3.96	3.653	11.990		TP
33+77		3.653		512.913							on P cut
33+77	4.750		16.7400		517.663						
			0.1277								
34+50			16.6123			17.58		8.57	8.04	11.5	1'
			0.875								
35			16.5248			17.25		8.60	6.92	11'	0.7'
			0.875								
35+50			16.4373			13.	3.4	4.25	12.2	11.2	
35+50+ em			1.690	515.973							edge of large rock on small projection on
36			16.3498	501.314		70.27					on grade

Sur for Lewiston
School Dist.



Begin at NE cor. Loc. 8, T₁₄N
R₁E

Course

10.90	S
12.33	S
22.43	S
23.17	S
23.93	
23.49	S

Beq. at NE cor sec 9

No 1 Ob. 23 ch S. of
NE cor. Sec 8
Ob. 3 pm TR 14 N R 1 E
h = $54^{\circ}19'$
L^s L to long line a $160^{\circ}32'$

No. 2 39 mm
 $h = 53^\circ 30'$
 $L^s L. = 161^\circ 44'$
 NE cor. Sec 9. 568

June 29/07

* on lat $41^{\circ}58'24''N$
long $111^{\circ}50'42''$
 $D = 23^{\circ}15'57''$

to in line with N. Si. Se R W

" S. Li "

$$1 \quad \text{---} \quad n \quad \text{---}$$

To pole

to N. W. Sugar factory Road

$$\begin{array}{r} 2393 \\ 2317 \\ \hline 76 \end{array}$$

60.5

Bag at pt 23 ch 5
 of NE cor sec 8 Tp 14. N R 1

E 58°45' E

11.25 58°45' E

22.25

17.75

$$\begin{array}{r} 18.5 \\ 24 \\ \hline 660 \\ 3300 \\ \hline 396.0 \end{array} \quad \begin{array}{r} 396.06 \\ 38 \\ \hline 358 \end{array}$$

$$\begin{array}{r} 40 \\ 24 \\ \hline 16 \end{array} \quad 61$$

22.25

2.50

17.75

6.50

11.25

to center of St.

to center of St.

to in line with W side Bldg.

62

Sur of drain
at Preston 1/8/07

Sta BS FS in Ole H/L

0

+50

1.00

1+36

1+85

40

2+28

9+63

12+88

9.766

19ch

17ch

12.88

12+50

12

11+50

11

10+50

10+50

16+00

9+50

9

8+50

8+50

8

5.656

2.721

4.66

100.283 110.049

7.113 102.956

2.93 107.126

on hole
107.328

112.754

108.094

113.750

2.88
1.66
1.32
3.4

R. In. Row Tab Out

10.0499

11.42

9.9070

1.1863

9.7207

1.1863

9.5344

1.1863

9.3481

1.1863

9.1618

11.8668

1.1863

11.6805

1.1863

11.4942

1.1863

11.3079

1.1863

11.1216

12.1176

1.1863

11.9312

8.38

1.53

2.721

6.4408

3.46

8.03

3.83

9.43

4.66

6.4616

5.656

6.43

5.50

6.43

9.50

3.30

63

6.6

19.8

19.8

22.7

11+22 H/L

0.3727

.38

29816

11.181

14.1626

pt of LS 2 10.3727

old Stake lower

end

100.283

9.766

110.049 110.049

2.93 7.113

107.119 102.936

107.126 8.01

107.119 8.38

.007 1.53

9.16

2.72

6.4408

5.426

11.8668

1.1863

11.49

3.46

8.03

11.1216

6.4616

5.6560

12.1176

11.9312

5.4

11.31

5.83

11.43

6x
Sta

BS

FS

un

Ele

HT

R_{dr}

R_{Hub}

Ent

8

7+50

7

6+50

6

5+50

5

4+50

4

3+50

3

3

2+50

2+25

1+85

1+26

1

0

3.35

1.910

111.84

115.19

8.213

10013
5
10.50

113.75
1.191
114.85
1.1519

185
136
49

22
12
10

372.70
149080

372.70
186350

66

113.75

11.9313

5.50

6.43

11.7450

6.13

5.61

11.5887

6.38

5.18

11.3724

5.50

5.87

11.1861

4.96

6.22

10.9998

4.42

6.58

10.8135

4.20

6.50

10.6272

4.65

6.00

10.4409

3.64

6.81

10.2546

3.9

7.35

10.0683

1.91

8.1583

11.5083

3.35

8.1583

11.3220

3.30

8.02

11.2288

3.50

7'8 3/4

11.0797

3.77

7.21

10.8934

3.92

6.97

10.7593

3.71

7.04

10.5720

2.57

8

10.3867

2.03

8.35

11.9313

109.589

5.50

107.328

6.43

8.226

11.74

192.754

6.13

109.634

5.61

109.589

11.56

2.045

6.38

2.2

5.18

2.4

11.37

10.99

5.50

6.58

5.87

10.81

11.18

4.30

4.96

6.50

6.22

112.754

10.99

4.66

11.00

108.094

4.42

5.686

6.58

113.750

10.62

10.441

4.65

103.309

5.90

11.5083

10.25

37.27

2.9

888

7.35

29816

12.88

29816

8.88

10.0683

8.1583

3309575

11.32

11.08

8.02

7.31

11.23

10.75

7.70

7.04

10.89

10.38

3.92

2.03

6.97

8.35

top floor in School
top of 4" pipe

66

Sur for Nephir
Miller Jan 11/07

Set at a pt. 88 ch W of center
RR track and 10 ch S of
NE cor lot 5 Blk 11. Logan
Island Sur

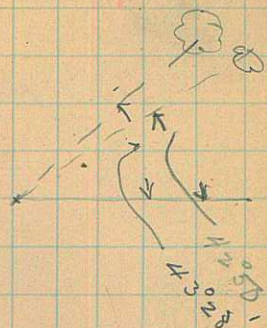
I begin at as above des.

Dist	Course	Angle	R
70.45	N 88° 50' W	90° 16'	
10.50	" "		
10.23	S 30° 10' W	58° 35'	
11.12	S 53° 0' E	6° 07'	
1.80	S 51° 45' E	59° 55'	
0.33	N 68° 10' E		
1.80	S 51° 45' E	47° 43'	
0.506	S 49° 15' E	63° 36'	
1.15	S 67° 50' E	61° 00'	
2.895	N 51° 10' E	156° 38'	
U 5.91 L 5.20	S 22° W		
2.895	N 51° 10' E	138° 06'	
U 5.76 L 5.20	S 92° 20' W		
2.895	N 51° 10' E	121° 06'	
U 5.60 L 5.20	S 7° 45' E		

67

see sketch 10.68

time 4 o'clock
ob. h = 10° 22' N. 1
ob. h = 9° 55' N. 2



proposed Road
of 34 ft. to fence on west side of
to average E Bank
to pt as decided on by Miller & Co.
to west bank slough

end of this line is N. 4 from 3 to 4 a Str
to River Bank N. 5

H. I. 5.20
to 9

To 10

To 11

116.5 N
02.3 T
02.5 IH

90
607
17960
9607
8353

$$\begin{array}{r} 1065 \\ 1.8 \\ \hline 8520 \\ 1065 \\ \hline 14170 \end{array}$$

69

30

angle

Dist Course L R
2.895 N 51° 10' 22° 52'

X N 74° E

2.895 N 51° 10' 26° 53'

2.70 N 24° 20' E 70° 25'

5.03 S 85° 05' E

5.80 S 85° 05' E

15.922 S 46° E 16° 35'

12.77 S 59° 30' E

5.80 S 85° 05' E

0.45 N 46° W +

13.74 N 44° 20' W

4.34 N 5° W

18.62

(magat)

(243° E)

40° 28'

Begin again

at pt. N 88° 50' W from pt a

BS along line of 10.45

1012

10.64 S 88° 45' W

16.00 " " 90° 45'

S 2° E

Set at pt 16 cl w of C

BS to C

8328

5.91 S 52° 30' W

4.74 N 87° 10' E

11.85 S 72° 55' E

20° 21'

55 46 35 50 70 5.80
17960 6235 24 17 77
4433 243 6443 5.03
21.135 27 43 4433 8505
6743 11210 4445
4028
4437

71

to pt in center of RR bridge also

to 1-

{to end of line at River and 50 at 1- of center RR track

to center of bridge

along RR track

to 1/2 way cor Post near Sugar Works

along center of track

R. 112° 16' Ex secant. Dist = 0.877 ch

to in line with N side of tract.

to beg.

Note: in stake 6' S was found T also

2' N of pt 10.45 N 88° 50' W of line

to find N & S

to post on decided line

along decided line

to post ... land Dist = 4.74 - .75

to pt 2 on Canal Bank

Set at pt S of Hay
stack which is .75 ch E of

F5 to g and R U. Stand. HI

9.05 51° E 91°38
105°40

3.53 N 75°20' W 65°26

7.14 539°30' W 00 00

4.00 539°20' W 12°52

4.35 526°05' W 122°11

1.04 15 N 31°10' W 97°30

551°30' W

16 584° W 64°54

17 589°35' W 8°20

18

1.00 N 36°10' 00 00

3. ch N 21°10' W 43°12

2 N 74°30' W 36°06

2.60 19 569°35' W 53°30

511° W

20 524°10' W 35°17

19

21 N 74°30' W

19 N 8°15' W

4.70 23 N 35°45' E 144°49

1.77 25 N 40°30' W 35°19

46 26 N 44°30' W

10.49 10.52 N 20° E

589°50' E

45°10

89°21

to Bank River

along NW bk. River end of line .75 ch C

5.16

6.15 5.16

5.96 5.16

5.76 5.16

4.90

5.645 4.90

5.57 4.90

5.50 4.90

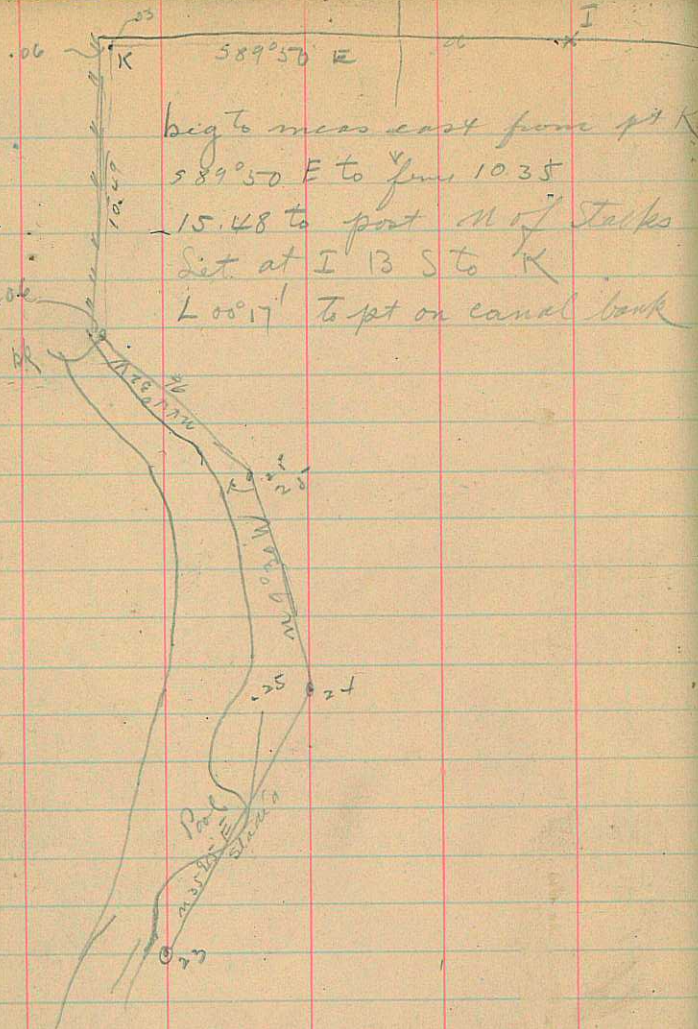
5.06 5.00

5.06 4.243

of this pt is 6 inch SE of fence
to pt
to fence E + W

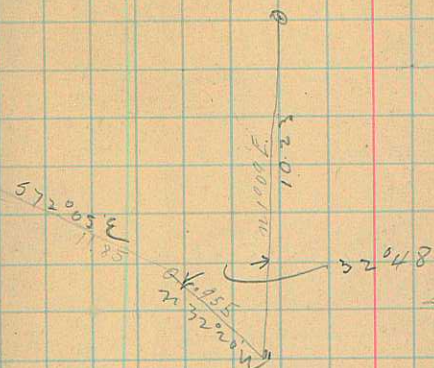
[illegible]

75



2470
 2432
 48

77



$$h = \frac{v^2}{2g} + f \frac{L}{d} \frac{v^2}{2g} + m \frac{v^2}{2g}$$

$$h d 2g = d v^2 + f L v^2 + m d v^2$$

$$h d 2g = v^2 \left(d + \frac{f L}{d} + m d \right)$$

$$h d 2g = v^2 \left(1.5 + \frac{f L}{d} \right)$$

$$v = \frac{802}{d} \sqrt{\frac{h d 2g}{1.5 + \frac{f L}{d}}}$$

$$\sqrt[3]{\frac{31416}{.785}}$$

$$\begin{array}{r} 1841 \\ 84 \\ 1925 \\ .02 \\ 38.50 \end{array}$$

$$\begin{array}{r} 1.5 \\ 40.00 \end{array}$$

$$\log 40 = 1.602060$$

$$\log 1.16 = 0.064458$$

$$\log 20.6 = 1.313867$$

$$2 \log 1.16 = 0.128916$$

$$\log 8.02 = 0.904174$$

$$\log 5 = 0.698970$$

$$\begin{array}{r} 472.94 \\ 13.54 \\ 486.48 \\ 7.08 \\ 479.40 \end{array}$$

$$\log 52' = 2.179713$$

$$594 2.773786$$

$$0.953499$$

$$\begin{array}{r} 0.02181 \\ 2.00 \\ 4.36200 \end{array}$$

$$493.56$$

$$\begin{array}{r} .00378 \\ 200 \\ .75600 \end{array}$$

$$\begin{array}{r} 484.56 \\ 436 \end{array}$$

$$480.20$$

$$\begin{array}{r} .07116 \\ 400 \\ 28.46400 \end{array}$$

$$479.45$$

$$\begin{array}{r} .01716 \\ 400 \\ 6.86400 \end{array}$$

$$450.99$$

$$479.45$$

$$488.33$$

$$360$$

$$484.73$$

$$472.54$$

$$472.94$$

$$\begin{array}{r} 500 \\ 479.40 \\ 10.60 \end{array}$$

$$\log 5 = 0.698970$$

$$\log 134 = 0.127105$$

$$\log 7854 = 1.895091$$

$$6.52$$

$$0.814502$$

$$\begin{array}{r}
 500.40 \\
 493.56 \\
 \hline
 6.44 \\
 .7 \\
 \hline
 574 \\
 570 \\
 \hline
 400 \\
 380 \\
 \hline
 3.02 \\
 20.601925 \\
 1.
 \end{array}$$

363

$$\begin{array}{r}
 6\frac{1}{2} \quad 479.4 \\
 363 \\
 \hline
 116.4
 \end{array}$$

1841

$$\begin{array}{r}
 9963 \\
 1841 \\
 \hline
 8122 \\
 .02 \\
 \hline
 162.40
 \end{array}$$

$$\begin{aligned}
 \log 38.50 &= 1.586461 \\
 \log 1.16 &= \frac{0.064458}{1.522003} \\
 &= 33.27 \\
 &\quad 1.5- \\
 &\quad 34.77
 \end{aligned}$$

$$\log 20.6 = 1.313867$$

$$\log 34.77 = 1.541205$$

$$2 \sqrt{1.772662}$$

$$T. 886331$$

$$0.904174$$

$$0.790505$$

$$\log 8.02$$

$$\begin{array}{r}
 \sqrt{116} \\
 1.5 + .02 \times 8100 \\
 1
 \end{array}$$

$$8122$$

$$.02$$

$$162.44$$

$$1.5$$

$$163.94$$

$$\log 116 = 2.064458$$

$$\log 164 = 2.214844$$

$$2 \sqrt{1.849614}$$

$$T. 924807$$

$$0.904174$$

$$0.828981$$

$$\log 78.4 T. 895091$$

$$0.724072$$

$$5.30$$

$$116.0/8100$$

$$8100/143$$

$$35000$$

$$32400$$

$$26000$$

$$116.00/8100$$

$$8100/1.43$$

$$35000$$

$$32400$$

$$26000 \quad 1.43$$

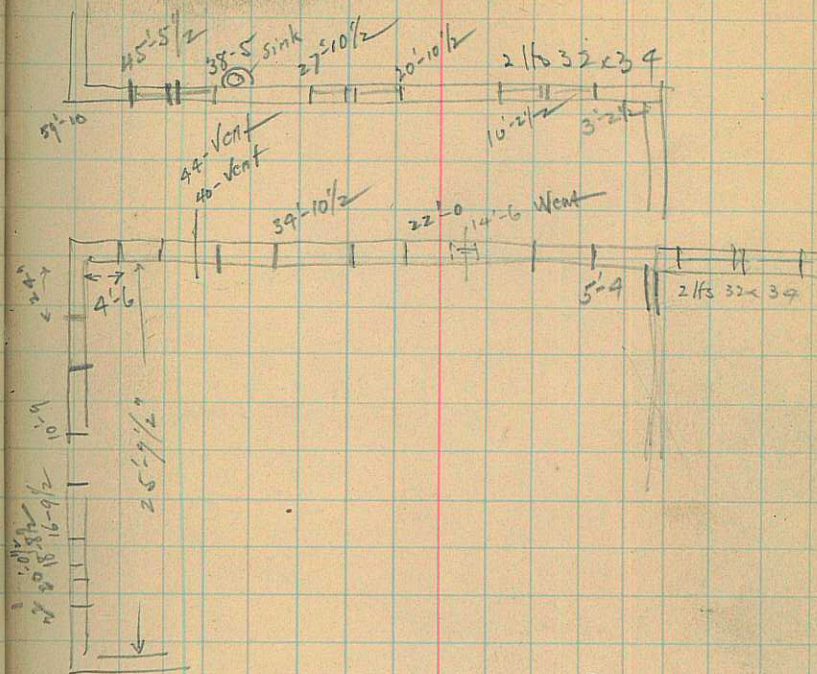
Wraith 25'-6"
4'-8"

4-8

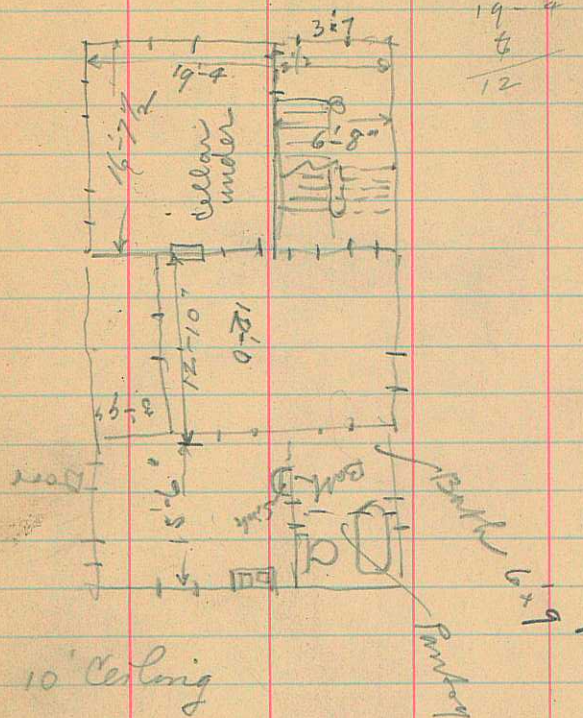
20-16

10

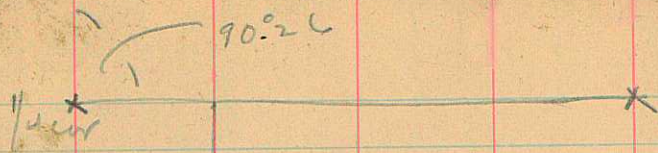
Co-Op. Drug. Oct 7th 1912
Commercial Block 89



Mrs Sloan. Oct 12-1912



Basin. Wd. frame Per
under Diag. 9'-10" 2'-10" Sandy



360
60
21600

90.26

SE cor of Sec 25

49
40
4 | 89
22.25

6.40

43
2
45
11.25

3727
362
22362
1181
341

6.85
5.85

107.047
104.897
2.150

6
9.35

9.1618
2.721
6.4408
110.049
2.721
107.328

$$\begin{array}{r} 49.5'' \\ 73.4'' \\ \hline 24 \end{array}$$

$$\begin{array}{r} 165 \\ 20 \\ \hline 330.0 \end{array}$$

$$\begin{array}{r} 25.88 \\ 11 \\ \hline 36.88 \end{array}$$

$$\begin{array}{r} 40.00 \\ 36.56 \\ \hline 344 \end{array}$$

$$\begin{array}{r} 10.68 \\ 25.88 \\ \hline 36.56 \end{array}$$

$$\begin{array}{r} 3300 \\ 93 \\ \hline 52 \\ \hline 47.5 \end{array}$$

$$\begin{array}{r} 16.56 \\ 22.65 \\ \hline 39.21 \end{array}$$

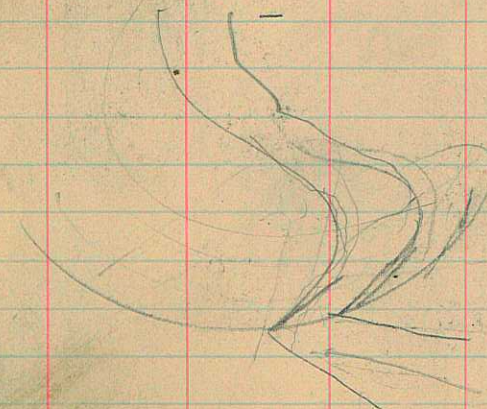
2212

2260

x 11ch @ 25.88 x

1256

x



$$\begin{array}{r} 930 \\ 270 \\ \hline 1200 \end{array}$$

$$\begin{array}{r} 6760 \\ 701.1107.50 \\ \hline 100750.15 \\ \hline 3600 \end{array}$$

20

$$\begin{array}{r} 20.00 \\ 50.00 \\ \hline 70.00 \end{array}$$

62.5

3125

625

9.375

187500

2250

2200

$$\begin{array}{r} 200080.3 \\ 1606.2478 \\ \hline 3940 \\ 312 \\ \hline 6250 \\ 5221 \\ \hline 6600 \end{array}$$

9150

1.25

9025

33

33

99

99

1089

1250.25

12339.25

16

88

739

724

1.525

1.424

10100

7

$$\begin{array}{r} 654321 \\ 789101112 \\ 181716151413 \\ 192021222324 \\ 302428272625 \\ 313233343536 \end{array}$$

35.5

35.5

1775

1775

1065

1250.25

48.21

12

42

2.52

12° curve
P.I. 1922'

0.1045
2.942
941

$$\log 50 = \begin{array}{r} 1.69897 \\ 1.01912 \\ \hline 0.67987 \end{array}$$

= 47.85

$$\log \begin{array}{r} 0.67987 \\ T.22557 \\ \hline 1.90544 \end{array}$$

Tan = 80.43

$$\begin{array}{r} 1000 \\ 9858 \\ \hline .0142 \end{array}$$

$$\log R = 2.67987$$

$$\log 0.442 = 2.15229$$

$$\hline 0.83216$$

6.8

6° curve R = 956'

$\log R = 2.98047$

8° I = 11°54

T = 75.3

41 = 41

2.2	1732	515.206
12	1287	0.96
14.2	45	516.266
18.23	517.216	517.216
102	19.4088	517.216
2.25	497.8072	517.216
12.00	19.40	517.216
14.25	17.49	517.216
17.50	17.5	517.216
31.75	85	517.216
27	875	517.216
29.05	1400	517.216
14.5	14875	517.216
175	31.60	517.216
5250	650	517.216
31.75	2510	517.216
31.25	1250	517.216
1562	45	517.216
18.31	875	517.216
18.23	700	517.216
8.02	18.27	517.216
1.021	14.17	517.216
5	18.18	517.216
4	18.18	517.216
12	18.18	517.216
5.9	18.18	517.216
16.8	18.18	517.216
7.68	18.18	517.216
8.42	18.18	517.216
7.69	18.18	517.216
7.4	18.18	517.216
17.32	18.18	517.216
6	18.18	517.216
11.22	18.18	517.216

II

59 710 12
470 47

940
273
6.67

2°10'

2 40°40' = .0814
90
7.3260

43 6°40' .11.61
4 80
40
489
22.25
7°40' .13.34
15 13.6
6670 10.0
9338 3.6
10.0050

19.59 570.463
41 5.56
1549 515.823
174 4.9683
5 18.993
175
13
525
875
.09275

13.4 710
36
1.20

115

6°46

4.600115
46.0004

517.216 7.763
1.91 13.38
515.306 13.48
16.78

x
16.8
511.940 3.1
14.34 13.7
497.606 13.6

511.940 3.60
2 3.55
511.740
5.476
517.216
497.606
19.610

14.50 12.00
963 439
2(9.87 7639
4.98 19
5 10.5
5 8.5
5 4.2

11178
115
5880
1178
1178
13440

0.0349 = 2°
15
0.0366
85
1830
2928
3.1110

14.9
19.00
1.9
17.50
19.610

18.42
175
9210
12894
1842
3.22350
495.013
3.223
498.236

May 9/07

Agreement.

Copy

43
2
45
44
439
22.2

We Joseph Monson,
James I. Shepard,
D. C. Budge,
Thomas L. Daniels, and
Eugene Schaub and
Karl Schaub agree
to pay Barnard White
Ten and 00 dollars for
~~all land owned by~~
~~the said Mr. White,~~
~~over which shall be~~
~~built a grade to~~
~~construct upon it, a~~
~~pipe line for Power~~
~~Purposes.~~

516.266
11.104
505.162
355
508.712
10.485
498.227

10.48
8.46
2.02

3550
7.075
10.625

17530
5250

8.50
2.125

516.266
1.74

514.526

10.62
2.15

10.48
3.35

27.13

516.266
11.104

20.47
4.23

3.56

505.162

1842

.00175

355

9220

508.712

12892

10.485

1842

498.227

3.22360

495.013

498.236

per acres as shall be
form a right of way
enough to construct
up it a grade for the
purpose of laying a
pipe for power purposes
Said right of way
running over the
NE¹ sec. 11 Tp. 10 N
R. 1 E.

The said Mr. Whites
Reserves the right to
travel over said pipe
at practical points

Eugene Schaub
Engr.

$$\begin{array}{r} 7.96 \\ 275 \\ \hline 5.21 \end{array}$$

$$\begin{array}{r} 1236 \\ 521 \\ \hline 1957 \\ 1736 \\ \hline 2.21 \end{array}$$

$$\begin{array}{r} 1736 \\ 945 \\ \hline 7.91 \\ 3.95 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 26.175 \\ .0875 \\ \hline \end{array}$$

43
4
4
48
2

$$\begin{array}{r} 1719 \\ 345 \\ \hline 2(13.7) \\ 6.87 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 17.19 \\ 11.40 \\ \hline 5.79 \end{array}$$

$$\begin{array}{r} 12.00 \\ 285 \\ \hline 1485 \\ 173 \\ \hline 7.1 \\ 10.2 \\ \hline 5.1 \\ 5 \end{array}$$

$$\begin{array}{r} 17.27 \\ 1485 \\ \hline 2.42 \end{array}$$

$$\begin{array}{r} 82 \\ 25 \\ \hline 57 \\ 1137 \\ \hline 11.94 \end{array}$$

$$\begin{array}{r} 1709 \\ 8 \\ \hline 9.09 \\ 4.54 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 12.00 \\ 285 \\ \hline 1485 \\ 173 \\ \hline 7.1 \\ 10.2 \\ \hline 5.1 \\ 5 \end{array}$$

$$\begin{array}{r} 12.95 \\ 195 \\ \hline 1395 \\ 17.09 \\ \hline 13.95 \\ 3.14 \end{array}$$

$$\begin{array}{r} 12.00 \\ 5.25 \\ \hline 17.25 \\ 16.91 \\ \hline .34 \end{array}$$

$$\begin{array}{r} 12.00 \\ 4.6 \\ \hline 16.60 \\ 17 \\ \hline 10.18 \end{array}$$

$$\begin{array}{r} 17.00 \\ 16.6 \\ \hline 4 \\ 17 \\ \hline 9.42 \end{array}$$

$$\begin{array}{r} 16.40 \\ 9.40 \\ \hline 27.80 \\ 3.50 \\ \hline 16.80 \end{array}$$

$$\begin{array}{r} 2(16.82) \\ 3.41 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 2(17.58) \\ 3.79 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 16.80 \\ 8.40 \\ \hline 27.90 \\ 3.9 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 17.5 \\ 6.2 \\ \hline 3.50 \\ 10.50 \\ \hline 10.850 \end{array}$$

$$\begin{array}{r} 12.00 \\ 3.30 \\ \hline 15.30 \end{array}$$

$$\begin{array}{r} 16.80 \\ 9.70 \\ \hline 27.10 \\ 3.50 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 17.5 \\ 12.6 \\ \hline 10.50 \\ 3.50 \\ \hline 17.5 \end{array}$$

$$\begin{array}{r} 17.5 \\ 12.6 \\ \hline 10.50 \\ 3.50 \\ \hline 17.5 \end{array}$$

$$\begin{array}{r} 16.80 \\ 15.30 \\ \hline 1.50 \end{array}$$

$$\begin{array}{r} 16.8075 \\ 9702 \\ \hline \end{array}$$

$$\begin{array}{r} 514.193 \\ 16.8075 \\ \hline 497.3855 \end{array}$$

$$\begin{array}{r} 7.1055 \\ 7.449 \\ \hline 14.5545 \end{array}$$

$$\begin{array}{r} 511.94 \\ 498.1055 \\ \hline 13.8345 \end{array}$$

$$\begin{array}{r} 511.940 \\ 497.3855 \\ \hline \end{array}$$

$$\begin{array}{r} 1433 \\ 692 \\ \hline 7.41 \\ 67 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 145545 \\ 1433 \\ \hline 2(1433) \\ 7.16 \\ \hline 5 \end{array}$$

$$\begin{array}{r} 1433 \\ 2 \\ \hline 14.13 \\ 5.476 \\ \hline 19.606 \end{array}$$

$$\begin{array}{r} 511.94 \\ .2 \\ \hline 511.74 \\ 5.476 \\ \hline 517.216 \end{array}$$

1921

1930

1830

66

10

6.60

33
33
99
99
1089
1084

7.10
5.94
1.16
38
1553
1403

1487
165
1602

3.25
2.75
0

86
92

578
516
6200
5556
644

3799
119
496

04071
2640

04071X
2640
162800
24426
8142
10747400

8960
225
8735

4666
11
100

5.84
11.84

1400
1150
216



8213
1.80
10,013
1,453
10,463

115.19
10.46
104.73