

Field Book # 81



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Mark to do.
 Set Pipe in center of road at S.W.
 cor of B.K. 2 Plat A.

Set pipe @ S.E. cor Plat 2 East of bridge.
 " " " " south corner of Plat 5 2 = 135.5

S.W. Plat C.
 S.E. Plat A.
 S.W. Plat A.
 S.E. Plat B.
 Quarry

Set Pipe
 N 89° E 301.77
 S 10° E 118.77
 To B.S. on Red Rock

Make See Tie on Plat C. Canal
 Tie in the beginning & end of Plat
 C. Canal

Set corners on Taylor lots North
 of Lot 11 & East part Lot 10 Plat A
 B.K. 1

Survey lot 18 B.K. 1. Plat A.

Dizon's Set & ~~Reced~~ Number N 521's
Spool of wire. ~~Reced~~ do for cleaning.

Cloth for cleaning instruments. Recd.
duplicate office keys.

Survey 4.22.1812 plat c.
Get bearings of Plat C. Avenue.

Stake used for Goff's fence

Talk with Heck about drainage
canal on south side Central P.D.

Reed pipe in creek east of
barn.

Chuck Tramm & have the
two missing corners of lot 41
located.

Figure traverse around
the track south of Plot I

Get Topog. Maps started.

A. P. Clark



259.7 ft. East of Stone A. P. Clark
see note 2.18.11. 1812. 1811
and stone 3.12 ft south of land.

Crossing of Canal North of Suburban

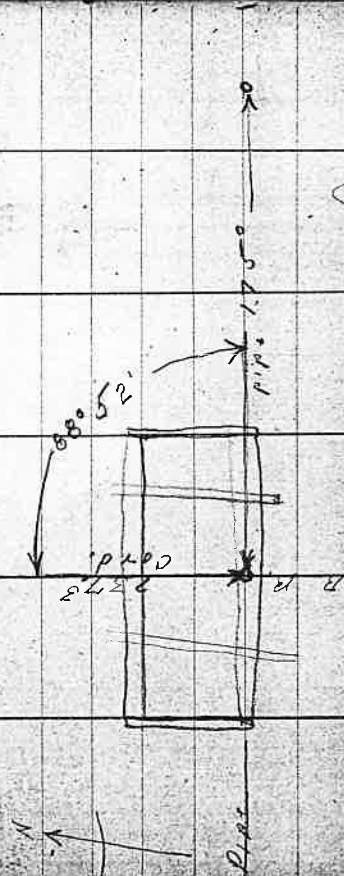
File 17A Taylor Orchard's.

{ No. 588 A.C.G. } { 48.25 from center of }
 { W. 6' } { road to Sta. 17 }
 depth 4.25 below base of rail - 18" stringers
 (Road crossing 96.5 wide)

4 piles on each side
 3" plank for bulkheads - no footing.

⊙ is 18" south of center of pipe

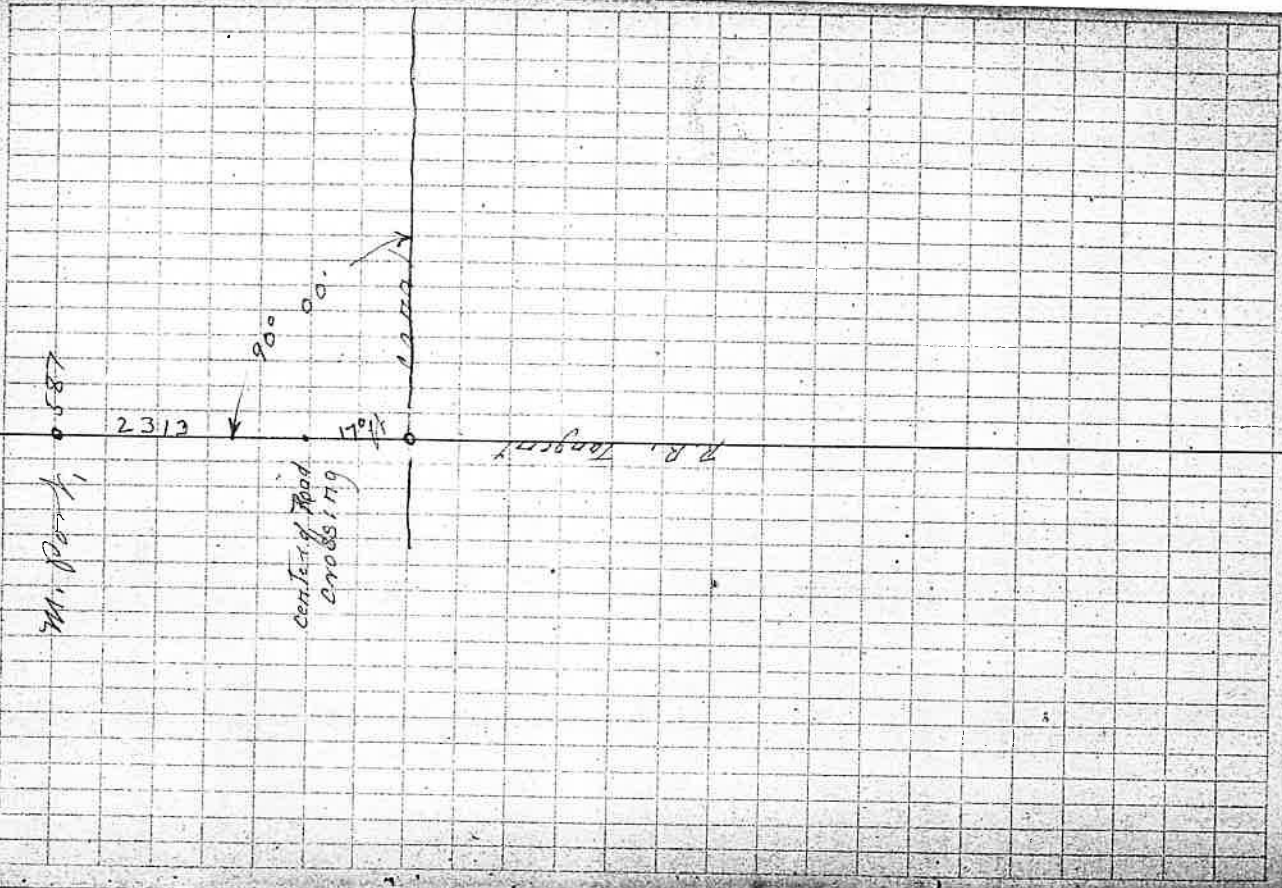
Sta 552+83.7 C.C. 3° R.



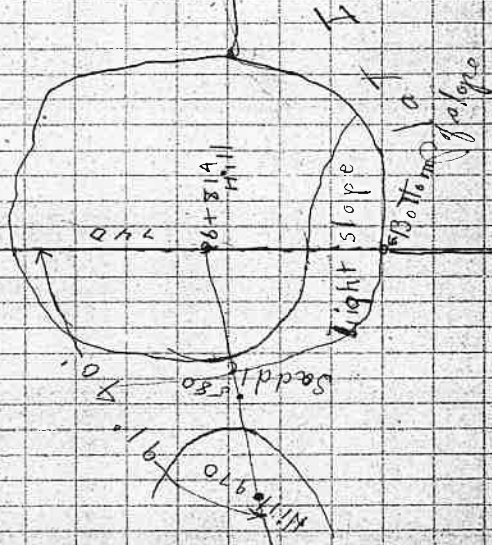
+ 8° 41' for 175° - Elev. 277 ft head.

Plot N. Canal Crossing.

1.



12-00
200



71.71 Strong Culvert

Sept. 6 Carpenter work 3.50
 labor ^{on culvert 4.25} for work 2.50 6.75
 team work 1.50
 nails 40
 12.15

Sept. 6. Sp. Johns - Lot 9 - Blk. 1 - Plat. A.
 Culvert 3.50

Sept. 6. Carpenter work 3.25
 labor 1.00
 team work 40
 nails 8.15

Lot. 7-8 - Blk. 1. Plat. A.

Culverts. The following for culvert ^{work}
 Sept. 20th - lumber 8.70
 " - labor 4.50
 " - Carpenter work 3.00
 " - team work 1.50
 17.70

Oct. 20 - Lot 9. Blk. 1 Plat. A.

Hammering culvert on west end
 lumber 1.56
 nails .15
 labor 1.75
 3.46

Drainage Culvert

Oct. 4th Lot. 5. Blk. 3. Plat. II 8.00
 Labor 40
 Nails 19.15
 Lumber 676ft @ .15 = 101.40
 185.55

Oct 11. ^{Oct 11. 18.00}
 Lot 15. Lot 21 Blk. 3. Plat. II one duplicate
 of the above. each 18.55

Brown 9 Raile
 Blk. 1 Plat. II.
 Culvert Oct. 26. A

labor 8.75
 Nails 50
 Lumber 908ft @ .15 = 136.20
 144.95

Bad sand slide on S. Bank of canal
at Puckin Center
Dewitt Lane washed out in
three places.

Weyers Park culvert to small
by 50%

Culvert in front of Douseys
to small by 50%.

Plumbers Bob's

Date	No	Person	Date Returned
Nov. 30 1910	1	Baipah.	
	1	Fleeser	
	1	Billings	
	1	Gilkey	
	1	Bruce	
	1	Rich	
	1	Hucks.	

Dec. 3rd 1910.

Flume Estimate

to cover T.N. of Henderson. land.

One coat of coal tar inside & out

8" bottom - 10" sides 2"x9" straps every

8' 2"x4" supports every 8'

Grade 0.01 per 16 ft.

35.00 - 40 ft. lumber @ 16¢

hauling

Carpenter work

Common labor

Coal tar

Nails

Engr.

56.00

9.00

24.00

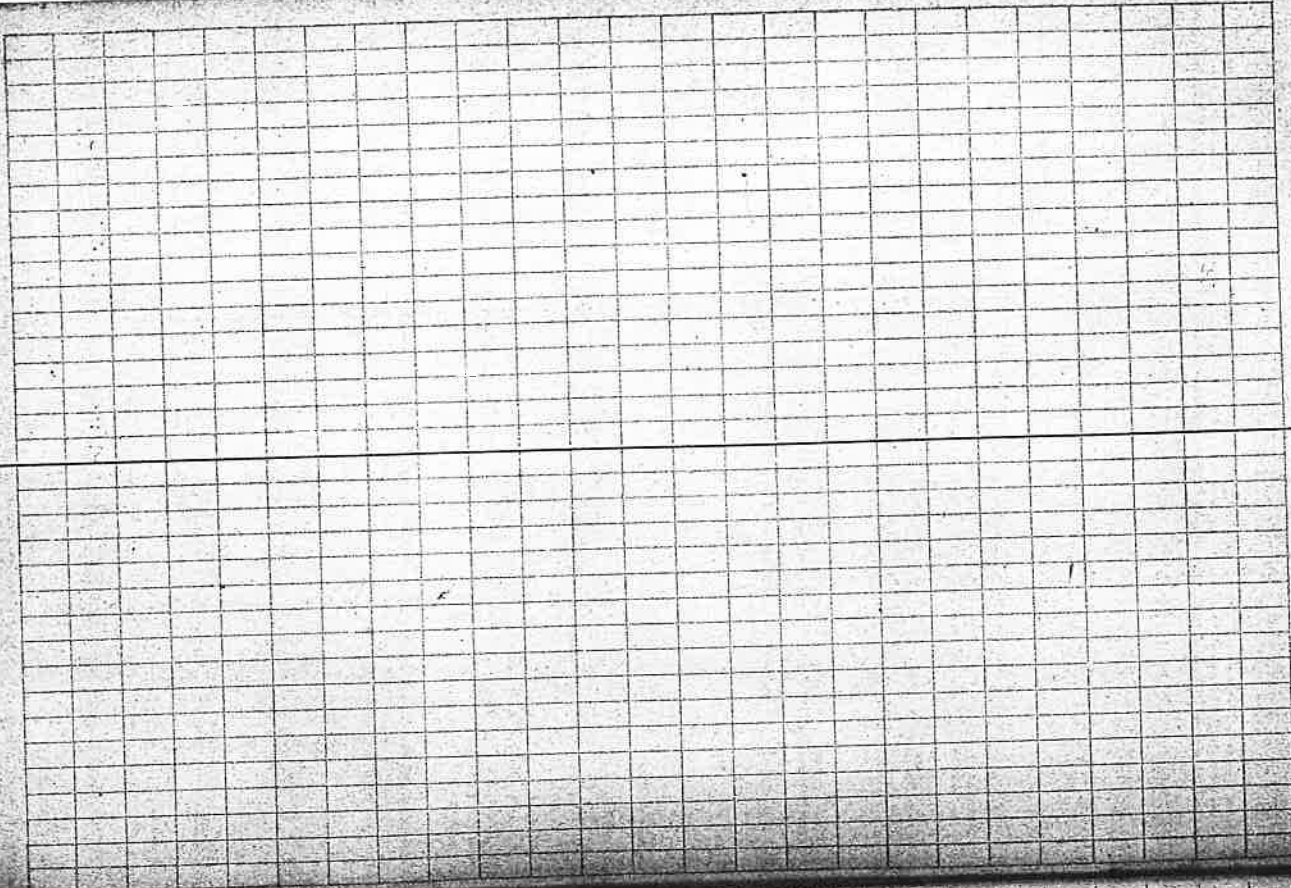
24.00

8.00

3.75

15.00

~~18~~ 9.75

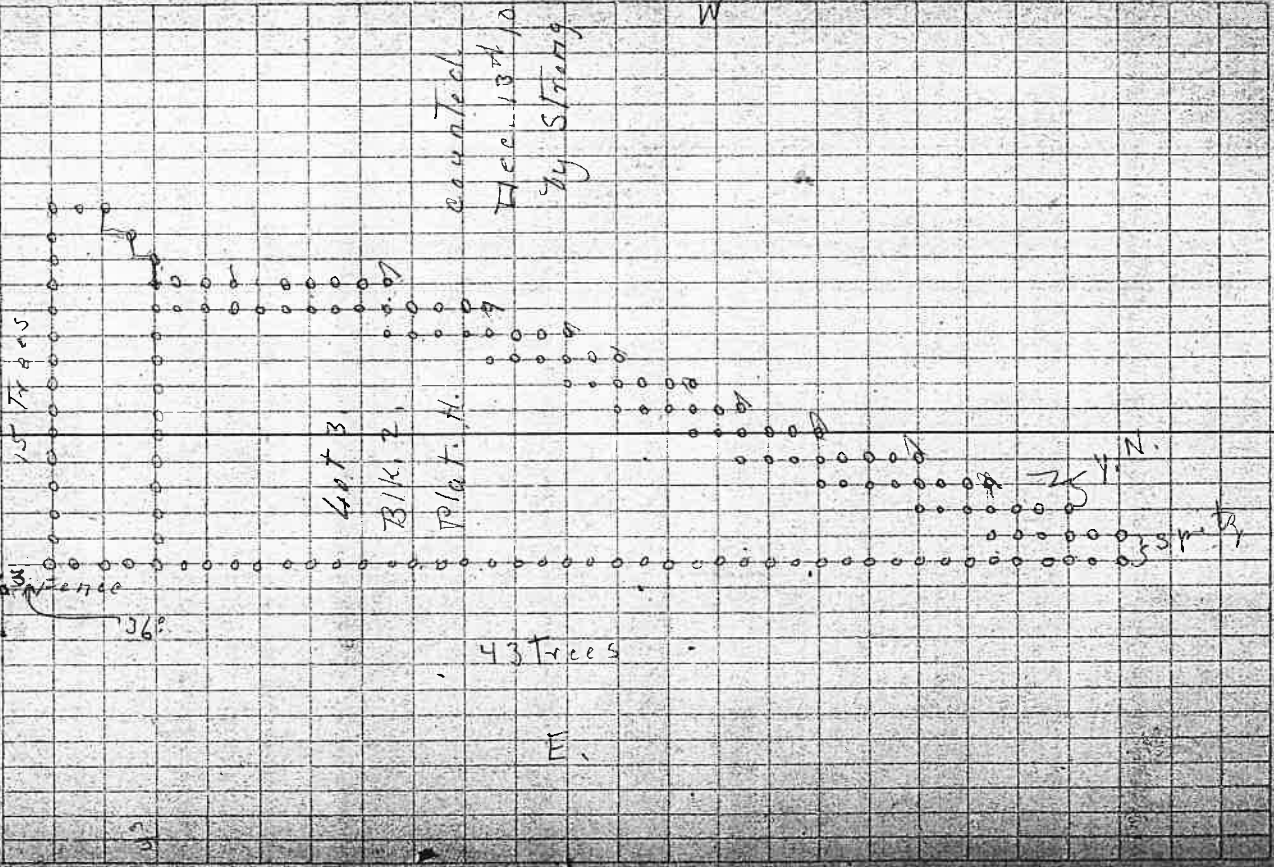


BIRTH AETS.

Date	Person	No.	Date Returned	No.
Dec. 5	Test.	3 B.		
"	Hilkey	3 B.		
"	Bruce	3 B.		
"	"	3 B.		
		1 Post		

SK

12th
S.E.



→

FF

Dec. 23rd.

Stumps in Plot D. Bk 2-485 should be pulled while ground is soft.

Land in rear of E 1/2 Lot 11 Bk 2. Plot A should be plowed & board so that more can be planted.

Land North of canal on west 15A Lot 6 Bk 1. Plot A is not quite all plowed, lot of old rails along fence interfere with plowing. This is contracted to plant to peaches.

Trees needed for family orchards

Dec. 29th 1910

Lot 6. B. 1. Plot A north of ditch the plowing starts from 15 to 20 ft. from fence on account of some old rails & stumps.

Dec. 29th

13

Foster Canyon Dam

100 ft high - 365 top width
35 bottom "

Ralph Needs

1 flat file 10 inch
1 axe -
2 pole saw handles
1 double bit handle

Order: 3 hand level

1 Engis scale

Dec. 29th 1910

Bottom of drain canal on north side of Central Ave quit west of DeWitt Lane culvert is high.

Dec. 29th 1910

Drains culvert should be lowered about 0.9

Dec. 29th 1910

Drain culvert in front of Walter

Danny Farm 0.5

Dec. 29th 1910

3 A. 1/2 S part of E 1/2 Lot 10 - B 2 P/O 170 to be plowed - 6 trees to set. about 20 stumps to pull.

Oregon Nurseries, Box
Orencia, Oregon

Rosser & Sturmen
Wood River

Ideal Nurseries
Wood River

W. F. E. Hurley
W. J. Bonham Jr.
Resident Manager,
Manufacturers Exchange Bldg.
Seattle, Wash.

clean stock.

Dec 31,
Morstell's Invoice
@ Fair Oaks.

Transit # 9213 (no attachment)

2 plant 2 bobs	3 blankets
1 good chair	2 quilts
6 marking pits	
2 flag poles	Bruce { 3 blankets
2 pole axes.	{ 2 quilts
1 double axe	W. Grath { 2 blankets
2 shovels	{ 2 blankets
1 hand saw	Martin { 2 blankets
1 hand axe	{ 1 quilt
1 hammer	Morstell { 4 blankets
1 square	{ 3 quilts
1 draw knife	
2 hammers	
5 coats	
1 crockery	

Tree Staking Cost. Dec. 31-1911

Dean May & Crew of 3 men.

From Dec. 1st to 31st inclusive
Cost \$120.00 Acres staked 124.25
cash per A. \$0.966

The above crew staked.

	Plots	Acres.
	Plat. A. - B.I.K. 2 - Lot 11.	4.00
"	" " 5 - " 3-4	15.00
"	" " 1 - " 5-7	11.60
"	" " 1 - " 8-9	17.06
"	" " 1 - " 10	14.90
"	" " 3 - " 1-3	20.00
"	" " 3 - " 4-5	20.00
"	" " 3 - 6	13.53
"	" " 4 - 4	7.22
"	" " 4 - 1/2 of 2	1.00
		<u>124.25</u>

Jan 3rd 1911

Plot No.	Location	Area (sq ft)	Notes	Feet
1	North road	859		758
2	"	1644		450
3	"	900		456
7	East on side	450		1150
6	"	450		1656
3	"	1453		370
7	South on road	484		187
8	"	484		330
9	"	484		330
10	"	484		330
11	East side	932		1637
16	Frontage on road	953		1751
15	"	1037		348
14	"	1063		388
13	"	12127		533
12	"			328
11	"			335
10	East side			533
				<u>11900</u>

Jan 3rd 1911

Plot No.	Location	Area (sq ft)	Notes	Feet
1	Road west side	859		
2	Road on west & south side	1644		
6	" west	900		
"	"	450		
"	"	450		
5	"	1453		
"	" on west & south	484		
"	1/2 road & 1/2 rear	484		
"	rear	484		
"	"	932		
"	"	953		
"	road front on North	1037		
"	"	1063		
4	" east	12127		

JAN. 3-1911

Fencing in Plot B

B/H.	Lot.	Feet.	Remarks	Feet.
4	1	2266	North road Frontage	2502
"	2	809	" "	256
"	3	330	" "	302
"	4	332	" "	440
"	5	422	" 9 east "	1739
"	6	1320	North road 9 east side	1015
"	7	990	South road 9 east side	1300
"	8	990	North road East 9 west side	1597
"	9	990	South " " "	2054
Flat Total				32524

JAN. 3-1911
Fencing in Plot B.

B/H.	Lot	Feet.	Remarks	Feet.
1	1	2266	All sides	
"	2	809	West & Rear	
"	3	330	Rear	
"	4	332	" "	
"	5	422	" "	
2	1	1320	W 9 N road frontage	
"	2	990	North road 9 East	
"	3	990	" " 9 W "	
"	4	990	North road	
"	5	1980	W 9 east road 9 south side	
"	6	660	West road Frontage	
"	7	330	on east side	
"	8	940	South road 9 west side	
"	9	990	" " 9 east "	
"	10	660	west side 9 north side	
3	1	1650	South west road, 4 side	
"	2	1320	North on road, east 9 south side	
"	3	330	West side	
"	6	990	North side 9 road frontage	
"	7	990	" " " "	
"	8	660	South road frontage	
"	9	660	" " " "	
"	10	660	" " " "	
				21319

Plat. II.

B/K.S. 2-4-5-

Jan. 10th
1911.

Field Party - 8 do.

Instrumenman -

5 men

team

~~125.00~~

375

40

540

120.00

8
30

4' x 4" x 5' rock cuts.

stakes & markers.

61 cor. pipes

4.00

4.00

8.00

136.00

287.1 N. cappr N. 0.473

Fee for filing plats:

Copied - 1-14-11

Section 7.

The fee for performing the above services shall be as follows, to wit: For approval by the county court, the county clerk shall collect \$1.00. For recording & indexing any plat or vacation of any plat, the recorder or county clerk, in whose office the deed records of the county are kept, shall charge as follows, to wit:

For plats containing twenty lots or less, \$4.00; for plats containing over twenty lots & less than thirty lots, \$7.00; for plats containing thirty lots & less than fifty lots \$8.50; for plats containing fifty lots and less than seventy five lots \$10.00; for plats containing twenty five lots & less than 100 lots \$12.00; for plats containing over 100 lots, in addition to the charge of \$2.00, he shall make a charge of three cents per lot for all lots lower one hundred.

Filed in office of the Secretary of State
Jan. 23-1909.

Jan 14th 1911.
Fencing in Plot F.

Plot.		Feet
1	W & N Road Front	1471
2 to 14	Inclusive 471' E each N Road Front	6126
15	N Road Front	400
16	E & S Road Front	1230
17	S Road Front	442
18	"	591
19 to 29	Inclusive 471' E each N Road Front	5183
30	S. & W. Road Front	1653
	Total for plot	17096

Jan 19th 1911.

Fencing in Plot II.

Blk. Lot		Feet.
1	W & S Road Front	2006
2	" " " "	686
3	" " " "	679
4	" " " "	713
5	" " " "	713
6	" " " "	713
7	" " " "	713
8	" " " "	2492
9	" " " "	672
10	" " " "	672
11	" " " "	672
12	" " " "	658
13	" " " "	658
14	" " " "	658
1	W & S Road Front	1232
2	" " " "	1254
3	" " " "	660
4	" " " "	830
5	" " " "	660
6	" " " "	752
7	" " " "	660
8	" " " "	700
9	" " " "	476

19929

JAN. 14th 1911

Bk. Lot.	Fencing in	Plat	Feet.
2	N Road Front	II	470
"	"	"	470
"	"	"	470
"	"	"	470
"	N/E	"	1470
"	E. Road Front	"	627
"	E. Road Front ^{8' roadway} & set back	ward	1081
"	E. Road Front	"	710
"	E. & S. Road Front	"	1365
4	South side	"	430
"	"	"	310
"	"	"	300
"	"	"	370
"	"	"	380
5	E. & S. Road Front	"	1049
"	S Road Front	"	281
"	"	" 8' wide side	702
"	West side	"	452
			<u>11407</u>
Plat Total			45920

JAN. 14th 1911

Bk. Lot.	Fencing in	Plat	Feet.
3	N Road Front	II	515
"	S	"	476
"	N	"	500
"	S	"	476
"	N	"	488
"	S	"	476
"	N	"	231
"	S	"	476
"	N	"	515
"	S	"	476
"	N	"	450
"	S	"	476
"	N	"	450
"	S	"	476
"	N	"	462
"	S & E	"	1657
"	N & E	"	1453
2	N & S Road Front & W side	"	1869
"	"	"	836
"	"	"	482
"	"	"	355
"	"	"	329
"	"	"	660
			<u>14584</u>

Jan. 14th 1911

Fencing in Plat. A.

Blk. Lot.	Feet.
1	1110
2	285
3	297
4	308
5	321
6	402
7	1210
8	656
9	1211
10	402
<hr/>	
Plat Total	6204

Plat G.

11 Road Front 300

Jan. 14th 1911

Fencing in Plat F.

Blk. Lot.	Feet.
1	2765
2	924
3	2191
4	3090
5	2011
6	1185
7	2418
8	2892
9	1344
10	1314
11	1331
12	1396
13	1320
14	1320
15	660
16	2623
17	1784
18	1072
19	1627
20	1623
21	1376
22	766
23	330

37356

Jan. 14th 1911.

BIK.	Lot	Fencing in	Plot	Feet
1	1	WNW Road	Front	1239
"	2	"	"	402
"	3	"	"	525
"	4	N	"	400
"	5	N	"	724
"	6	"	"	335
"	7	"	E	489
"	8	NS	Front	417
"	9	"	"	561
"	10	"	"	464
"	11	"	"	400
"	12	"	"	400
"	13	S & W	"	1718
2	1	N & W	"	489
"	2	N	"	400
"	3	N	"	649
"	4	W	"	350
"	5	"	"	350
"	6	N & S	"	156
"	7	S Road	Front	453
Plot Total				13921

BIK.	Lot	Fencing in	Plot	Feet
2	9	N. Road	Front	660
"	10	"	"	660
"	11	"	SE Side	1192
"	12	"	SW Side	1537
"	13	"	ES "	1306
"	14	"	EYS "	2770
Total for plot				8425
				45781

Jan 16th 1911

Fencing
Grand Total
Miles

211348
40.03

Free staking cost
Jan 8th to 15th inclusive

Jan 1st to 7th inclusive
Jan 17th to 19th crew cost per A. 59¢

Plat I	Cost work on Lot 4 BIK 2	407	5-1/4	2,00	5.00
"	"	"	"	9.00	2038
"	"	"	2-9/10	10.00	3083
"	"	"	1	5.00	staking 34.2 A.
"	"	"	16-1/2	9.87	cost, per A. 90¢
"	"	"	7	9.87	
"	"	"	8	9.87	
"	"	"	9	5.83	
"	"	"	15	10.06	
"	"	"	6	16.00	
"	"	"	14	7.20	
"	"	"	3	9.83	
"	"	"	2	5.50	
"	"	"	6	8.50	
"	"	"	6	107.66	

59¢ per A.
107.66
64.12
53830
102900
96894

Plat B	BIK 3 Plat II	407	5	800	
"	St. John for	"	2	620	
"	restaking lot 2	"	1	1000	
"	Plat B. BIK 1.	"	5	1000	
				3420	

Plat A	BIK 1	407	5	800	
"	"	"	2	620	
"	"	"	1	1000	
"	"	"	5	1000	
				3420	

Jan. 16 A

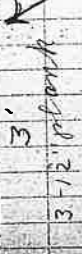
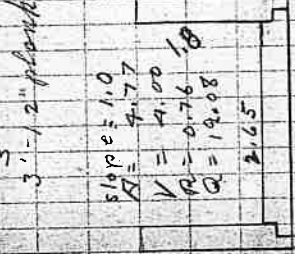
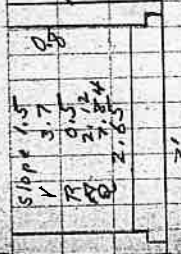
Tree Staking Cost.
Jan. 16 # to not inclusive

Lean May & Crew. 33.06 net
cost for staking
42.6 Ft.
cost per Ft. .776

Plat. I.	
B.K.	40t.
2	11.79
..	3
..	10.00
..	2.52
Plat. II.	
2	10.00
..	3
	8.29
	42.60

2.10

1000
slope per 1000
9.10 - Q = 9.33



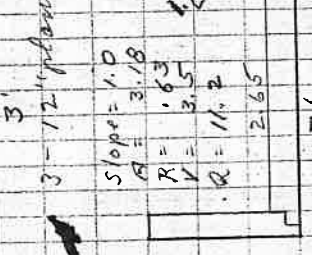
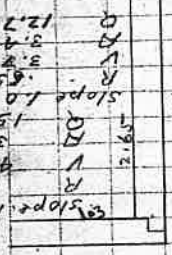
about 80 per cent in J.H.

For 1500 ft. to deliver 2 1/2 ft. in 1500 ft. or earlier
flows flow for 15 days of 7.75 sec. ft.

1/2 A ft per Ft. to be delivered in 1500 ft.
= 150 da.
= 1 da.
= 1 sec. from 1000 ft. to 100 ft.
= 1 sec. from 100 ft. to 10 ft.
= 1500 ft per sec for 150 da.
= 75 da.

145.2
0.0016805
0.009049
0.0025854
10031700

26

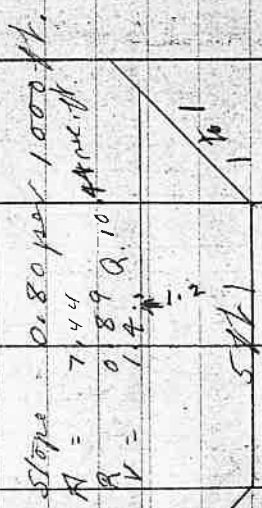
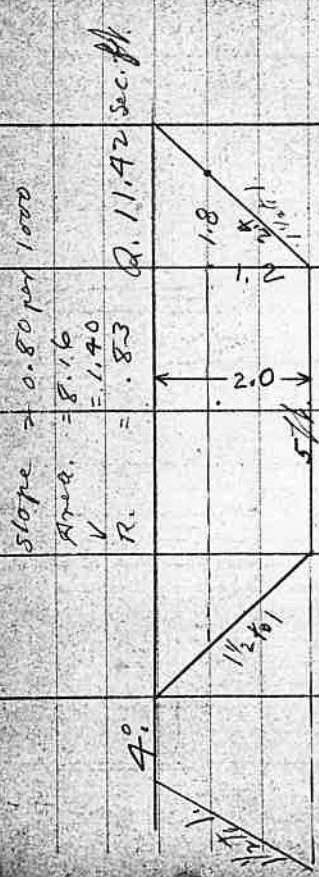


about 80 per cent in J.H.

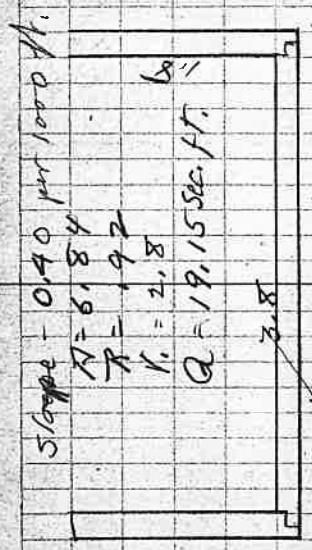
For 1500 ft. to deliver 2 1/2 ft. in 1500 ft. or earlier
flows flow for 15 days of 7.75 sec. ft.

1/2 A ft per Ft. to be delivered in 1500 ft.
= 150 da.
= 1 da.
= 1 sec. from 1000 ft. to 100 ft.
= 1 sec. from 100 ft. to 10 ft.
= 1500 ft per sec for 150 da.
= 75 da.

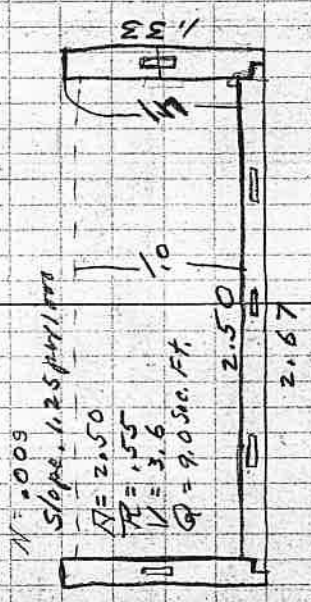
145.2
0.0016805
0.009049
0.0025854
10031700



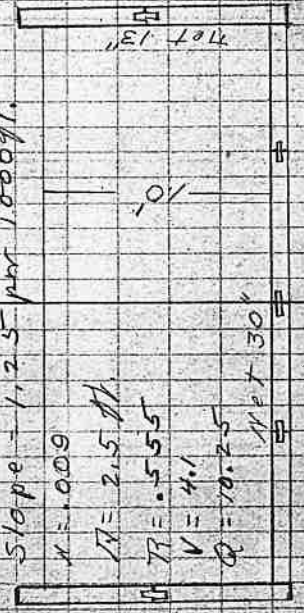
$\frac{1.00}{3.00} = \frac{1}{3}$
 $\frac{1.00}{4.00} = \frac{1}{4}$
 $\frac{1.00}{5.00} = \frac{1}{5}$



X section of Flume - 4 ft. 10. BIK. 1. Plat A.
Grade - 0.4 per 1000 ft.



40 Miners inches - 1 sec-ft.
in Oregon



use 2 x 8" material - surfaced - leaving working measurement of 1 3/4 x 7 1/2.

2-3-11

Highline Canal.

Sta 80+80 - 81+05 - Flume overdraw
no as to miss full storage &
can put water gate in flume.

2-10-11

Decided to put in fill
& large waste gate

Frisworths Manual
for 1911 - 25¢

~~Wm~~ Frisworth & Sons.

J. W. Ferris -

So. Angeles, California
San Seleveny.

Mr. W. M. Allen

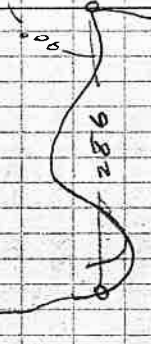
Dakota & Valley Road
Dundale

Cincinnati, Ohio
Ad. S. N.

2-7-11

Nelsonson,
Ad.

High.



DR. E. W. M.

204
Gravel pit

East Brady

DR. E. W. M.

Jan 22

Tree staking cost

Jan 22 to 28th inclusive

Dean May & Crew.

\$ 57.08

Total A

62.3

Cost per A .92¢

Plot.

Blk.

Lot

A.

B

5

7

7.4

"

"

6

7.4

"

"

5

7.0

"

"

4

5.8

"

"

3

6.2

"

"

2

5.6

"

1

2

7.5

"

3

1

10.0

I

5

7

5.4

62.3 A.

Jan 31st

Tree staking cost.

Jan. 30th to Feb. 4th inclusive

Dean May & Crew.

61.40

Total A.

65.00

Cost per A.

.945¢

Plot

Blk.

Lot

A.

I

5

4

10

"

6

10

10

"

6

9

10

B

3

10

10

F

—

8

10

B

2

W¹/₂ 3

5

F

—

1

10

65 A.

Feb 4 30

Smiths Demonstration

Feb. 8th 1911

After heavy rains apply $\frac{1}{2}$ lb
air slacked lime near each
tree, will stimulate growth for
early bearing

15th Aug top all the branches
about one fifth of seasons growth

Yellow Newtown - leaf is thicker
broader, more firm & greyish green
Spiky is thinner narrower &
yellowish green.

It is a help to paint large
cuts with white lead about few
days after making cut.

Catalogue No 6

Magnifico Grafted

Steel Plum

F. C. Eggleston, Sales Manager

714-715 Ideal Building

Denver Colorado U.S.A.

Drainage Notes

2-11-11.

Beginning at a point where central Ave. crosses the Bdry between Plat. A & Plat. B. Thence following the Ave. in S.W. direction to the irrigation & culvert, at S.E. cor. lot. 7 - B.K. 3. Plat. D. Between the above points the Francisco on north side of road is of sufficient size to carry the flood water, but the culverts are 50" & small.

At the S.E. cor. of lot. 7 - B.K. 3. Plat. D there should be a 18" x 72" (inside measurement) culvert just across Central Ave & a 5 ft. bottom canal constructed north to intersect the Plat. F. Drain Canal. From above intersection the Plat. F. Drain Canal should be deepened & widened to 6 ft. bottom. Where the Plat. F. Drain Canal crosses the Devils Lane the culvert is too small, it should have inside measurement of 24" x 84". The take away or continuation of Plat. F. Drain Canal over Devils Lane should be enlarged to six foot bottom with two to one side slopes & gradually deepened so as to increase the grade 50%.

Drainage Notes.

2-11-11

32

The old culvert in north side gutter at S.E. cor. lot. 7, B.K. 3. Plat. A. can be removed & used elsewhere & all water at this point turned south through above suggested canal.

There should be a gutter cut to grade on north side of Central Ave. from Plat. B to Devils Lane at which point a culvert 12" x 36" (inside measurement) should be put across Devils Lane. At the above junction one followed the north side gutter & culvert from S.E. cor. lot. 7 B.K. 3. Plat. D to & including the crossing in Meyers Park at lot 5 - B.K. 1. Plat. D. are of sufficient size to carry the flood waters. The culvert crossing Central Ave. in front of lot. 12 B.K. 1. Plat. D should be enlarged to 18" x 60" (inside measurement) & all water turned across at this point. The culvert crossing Central Ave. in front of lot. 1 B.K. 1. Plat. D should be enlarged to 18" x 60" (inside measurement) & all water turned across at this point. (Great page 32)

Drainage Notes.

2-11-14

If the above suggestions are followed, the drain canal & culvert along Central Ave from west edge of Plat D to Sutherland are sufficient to carry the flood waters.

The drain canal on west edge of Lot 9, B.H. 2 Plat N. should be extended north to Sutherland Creek which will relieve the necessity of a bridge on Central Ave in front of Lot 7, B.H. 1 Plat N. if this suggestion is followed a 12" pipe will carry all the water across Ave at point of present bridge.

Through B.H. 2, Plat D Sutherland Creek should be enlarged & straightened to carrying capacity of 8000 sec-ft.

All drainage should be caught in west gutter of Municipal street & carried south to Central Ave.

Irrigation Maintenance Work
for 1911.

Box of pipe cut by Plot E canal
along County road.

Can replace by tapping same
in low place, clean sand box.

34

Need - 12" x 5 plank ^{wide} #36 1/2 long box
@ Fair Oaks for strapping of canal
over Central Ave.

Need box - 1 by 4 plank crossing @ N. E. Cor
B. 2 - Two boxes if the road
width is to be made possible.

March 18th - 1911

Quentin

3-17 - True staking

625

New House just east of lanes
Parlor & dining room 14 x 24 1/2
Parlor 14 x 14 - open arch with
columns.

Feb. 6

Feb. 11

Tree Staking Cost.

Feb. 6 to Feb. 11th inclusive

Plot.	Blk.	Lot	Pl.
F		29	10
"		30	11.8
I	2	1	8.8
H	2	7	10.0
"	3	874	9.0
I	4	6	7.2
I	4	5	7.3
I	5	W ^{1/2}	5.0
D	4	E ^{1/2}	5.0

68.6 Total Pl.

61.30

6.00

55.30 Total Cost

806 Cost per Pl.

Hear n May 9 Crew.

Dec. 15th to Feb. 11th inclusive

Total Pl. Staked 504.61

Cost \$421.79

Cost per Pl. \$.836

W Hutney
Staking Lot 7 Blk. 2 Plot N.
\$9.50

John Denny

Staking on lot 12 Blk. 1 Plot D

\$6.00

Wendorn - Spitz & Y. N.

S 4 N 4.72 A Lot 8 Blk. 1, E

Lot 7 Blk. 2 Plot C.

Stake 415. Depts.

John Denny

Staking on lot 13 Blk. 1 Plot D

5.25

2-13-11

Frank
Conklin

1704

Lat-13 - B/L.C. 7 - P/197 I.

3-6-11 37

Profile Central Ave. from Babcock St to Front St

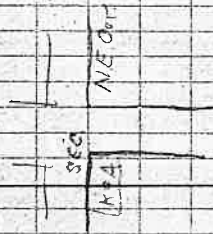
Sta	BS	HI	FS	Rad	Elev
BM 0+00	2.32	517.53		5.60	515.23
+30				5.75	512.9
+75				4.71	512.8
+100				4.59	513.0
+25				4.50	513.0
+50				4.67	512.9
+75				5.10	512.4
+100				4.10	513.4
+125				3.89	514.3
+150				3.40	514.1
+175				3.85	514.3
+200				2.90	514.6
+225				3.40	514.1
+250				3.55	514.0
+275				3.77	513.8
+300				3.75	513.8
South Side					
NE Corn 0+00				4.84	512.7
+50				4.60	512.9
+100				4.85	513.3
+150				3.85	513.7
+200				3.65	513.9
+250				3.25	514.3

NE Corn 484

SE 5.60

Front Alley 5.10

Edge of Walk
NE of
Ward I



Sta	BS	HI	FS	Rad	Elev.
3700		517.55		2.95	514.6
+50				2.70	514.8
4100				2.30	515.2

March 9th - 1911

Charge H. H. Strong
labor tearing down old barn

March 4	Mc Grath	2 10
" 5	" "	2 10
" 6	Mc Cornut	4 60
" 7	Mc Cornut	4 60
" 8	Mc Cornut	4 60
" 9	Mc Grath	2 10
		20 10

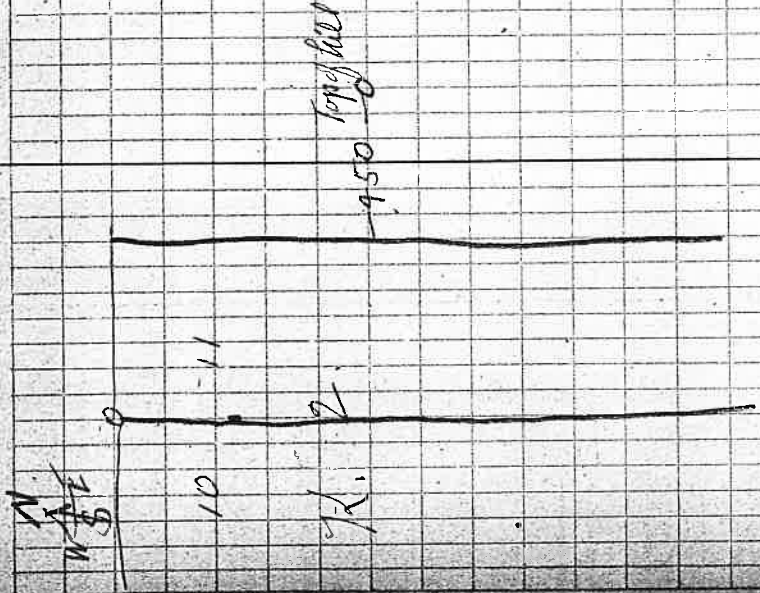
March 9th 1911

Cement blocks

8" x 8" x 20" - 5 1/2 / proportions
\$2.50 per hundred (Crish @ 12th 72)

Dave Mc Cullem - Saw Mill
Nauvorth, Oregon
Douglas County

B. H. Cooper - saw Mill
Cahland, Oregon
Douglas County



4-17-11

Price quoted by Luther Lin Hard Co., - they deal with Marshall Wells Hard. 6" = 18.75 - 8" = 42.00 - 10" = 62.00 F. O. B. Portland.

71. 2135 B. Brass mounted Globe Valve Standard make Steam press. 100.00

Pacific Hard. & Steel Co., Portland Oregon \$32.40

Horvath Hard. & Co., Portland. 28.40

Wester May Hard. Co., Portland

The Gould Co., Portland.

Willamette Steel & Iron Works, Portland, Oregon.

Albany Iron Works Albany Oregon.

4-15-11

Pass on for inspection 2 gal w heat 1 Carriage wheel repair lat

Sabbat Orchard - ditto for drainage 4-18-11

Woman Got w/pt 1. Sabbato

FEB. 1911.

Old worn wire fence, offered Evans

33 rds - 9-48 @ 45¢ 14.85

99 rds @ 12-57 @ 60¢ 59.40

33 " - 13-48 @ 60¢ 19.80

deduct 30% for depreciation cost. Selling price \$ 94.05
70 70 3.70
65.8350

70 rds - 12-57 @ 60 42.00 cost
deduct 30% for depreciation .30
12.60 selling

Power Canal Notes

4-18-11

1st sluic gate east of Power House to be tightened permanently.

Lot 6-5- Plot B. 1st lag out of canal.

En. lot 5. Bad leak - about 200 gal/long.

Lot # ^{work} sluic gate to be tightened - figure on this as permanent was to work

in lot 3.

Just east of mile Post 2 1/3 - bad leak, with

Foster canyon Flume - 6 wide - 200 long
 average height of water 2 ft. - East end, leaks

East of Foster Canyon Flume 1/2 mile - big
 leak. 300 ft long.

Where road & canal come together
 3/4 mile East of Foster Canyon. Rocky pt
 large leaks for 600 ft.

Next point east @ 19 1/2 Miles pas 2/1
 1000 ft gradual leak all way.

Just East 1/2 mile 1/2 ft road crossing
 logs & rebar out

Banks Creek. Head gate abutment needs
 repair.

Just east of banks creek. small leak
 all in one place.

(Woods in canal in need of uniform)
 (mud in the A section)

2500 linear ft of box to line the
 canal on different banks.

X section approx. 3' x 5'

18000 ft frame work every 5' 4" (4 x 6)
 60000 ft, 2 1/2 plank - 5' 9" milled for box.

Approximate cost. \$40000

April 26th 1911

Plat A BIK. 3. Lot 23925

Estimate for drainage

lower central ave. 171' for 1000 feet. @ 20.

2 open ditches 3 ft wide by 2 ft deep @ 150

750 ft. 8" tile @ 16¢ laid 120⁰⁰

2600" - 4" " @ 12¢ " 312⁰⁰

+ 10% for incidentals & commission

Total

450

620

62

682

4-28-11

Survey for line, the Brown land

and Old of Sec. 2 - T. 25S. R. 5W.

except the NW 1/4 N 1/2, 48054 A.

according to ~~Survey~~

Franz's Chick Houses are

36" x 24" high - 34" wide - 72" long.

4' eaves - door full height in center of

front & 17" wide. Across the front &

1' wide from top is an opening covered

by wire.

Line's bridge over Sutherland Creek.

27 @ 33' spans

posts are for poles - 5 large ones & 4 small ones

in each span.

County Lumber at May 1st 1911

Cooper Creek

1 - 12" x 12" x 21'

2 - 12" x 12" x 18'

5 - 12" x 12" x 16'

Bridge is 41' long.

4-29-11

28' span just west of Sutherland
Creek on South side of E.
28' span for Creek east.

May 2-1911

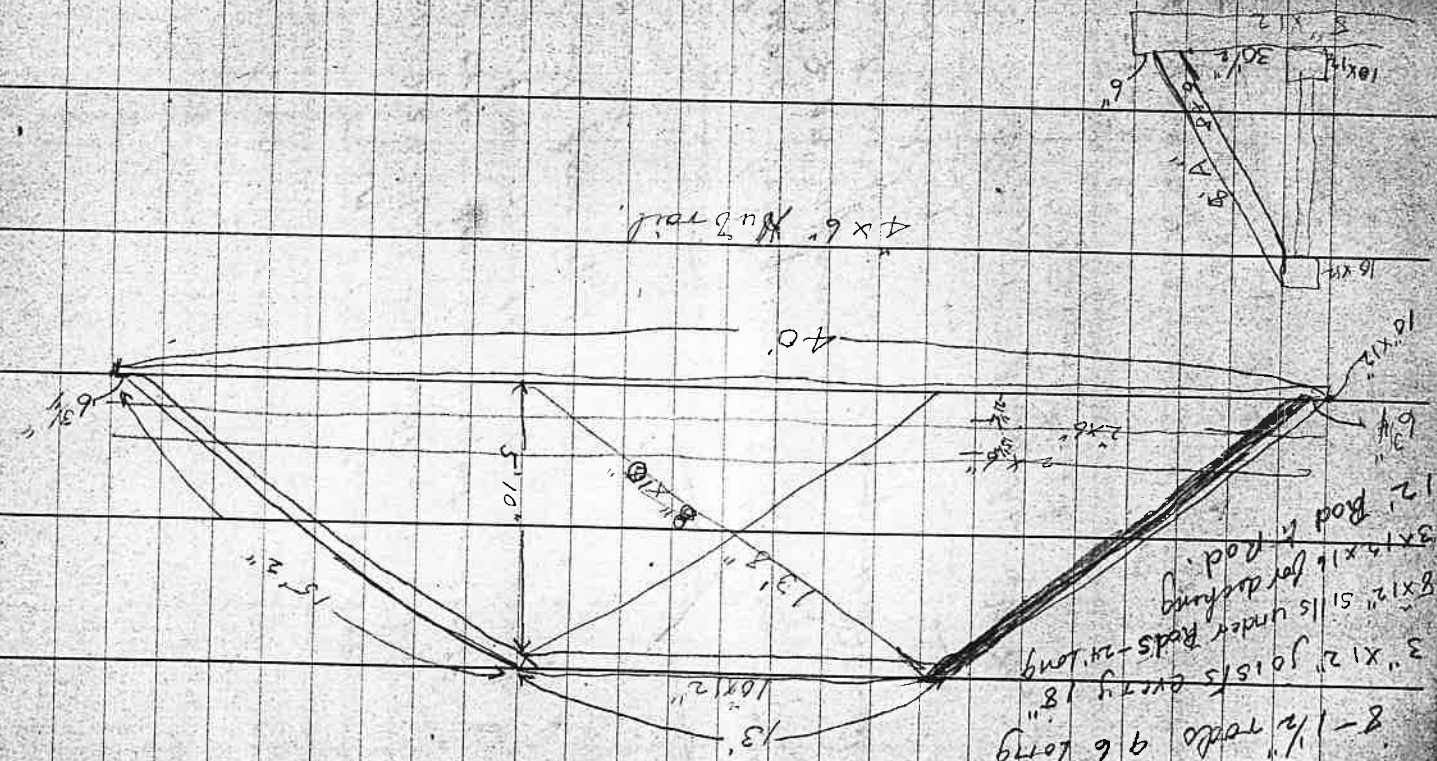
Number on hand at Cooper Cr.

- 1 - 12 x 12 x 24
- 6 - 10 x 12 x 16
- 2 - 3 1/2 x 12 x 26
- 5 - 8 x 10 x 16
- 1 - 8 x 12 x 24
- 2 - 6 x 8 x 14

Number on hand @ 2nd Creek, West of S. Creek

- 2 - 3 x 12 x 24
- 8 - 3 x 12 x 16
- 5 - 3 x 12 x 22
- 4 - 10 x 12 x 16
- 3 - 8 x 10 x 16
- 1 - 6 x 8 x 16
- 1 - 6 x 8 x 20
- 2 - 10 x 12 x 34
- 1 - 12 x 12 x 24
- 1 - 10 x 12 x 25
- 1 - 8 x 12 x 24
- 1 - 8 x 10 x 22
- 1 - 8 x 12 x 22
- 6 - 2 x 6 x 20
- 1 - 2 x 8 x 20
- 4 - 4 x 4 x 20

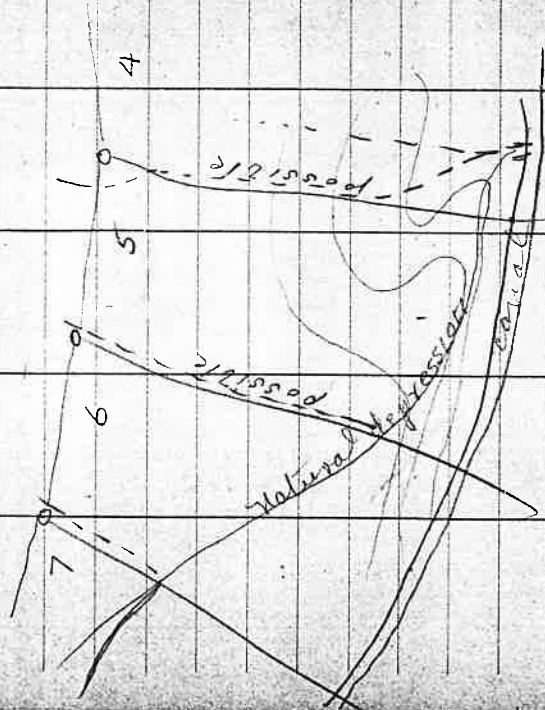
4-29-11



May 2nd 1910.

B/K, 5, Plat B.

Permanent water gate at 103.4 ft
east of Dry Line Plot. 4 & 5.



May 8th

Water Power Engineering
to Daniel W. Moody

worked by A. S. Hicks,

76 foot pound force raised one foot.

= $\frac{1}{62.5}$ or .016 foot cubic foot (of water)

The foot cubic foot (one cubic foot of water raised one foot

= 65.5 foot pounds.

= 7.48 foot gallons

The Horse power

= 1980000 foot pounds per hour

= 33000 foot pounds per minute

= 550 foot pounds per second

= 31680 foot cubic feet per hour

= 525 foot cubic feet per minute

= 8.8 foot cubic feet per second

= 746 watts

746 efficiency
from Potential source

Head 9 Tail Races

Turbine

Bearing

Shaft

Belt

Generator

Line Loss

Transformer

Losses from original energy subgrade
useful work

95

76

646

60.37

57.85

52.76

47.48

37.98

7.60

7.60

May 8th

Pelton Water Wheel Company
San Francisco California

May 1, 1911.

Syman.

B.K. 1. - Lat. 16 & 17. Plat C.

Creek. takes a strip 29th wide

off of the west end. These lots

are 287.3 Ft. wide. Lost average

of two lots = 0.38

May 1, 1911

North Side Canal Notes

Rock cut Northwest of Rocks

is 250 ft. concrete abutment

90 ft. basing

MAY 15-11. 47

FLUTE Watson South High Line
span 30 ft. can pull a support at 16'
10 ft. more for safety sta 218+25

54 ft span - 3 ~~right~~ ⁷⁻¹⁶ 1-22
12 " more for safety sta 200

16 ft. span } - very shallow
15 ft. more for safety } stream

(24' full span - 3-6x6 in water (and)
8 ft more for safety.

100 ft. on our side - creek span 24 ft.
sta. 118+75 - full length 40 ft - creek span 20 ft.

May 13th 1911

May 11. - Nicks & 9 men - 2 hrs.
" " - Johnson - 5
" 12 - Nicks & 9 men - 10 "
" " - Johnson - 10 "
" 13 - Nicks & 9 men - 5 "
" 13 - Johnson - 7 "
Nails. - 2.00

31.10
60.00

Lumber
Bridge over Road
Rosebury
County

May 16th
 Cost of Fir poles for
 bridges on north side of E.

32 - 30ft poles 16" x 10" - Cutting
 1 foreman - 2 da. @ 3⁰⁰ 600
 4 laborers - 2 da @ 1⁹⁵ 1560
 1 Team of Teamster - 2 da @ 4⁰⁰ 800

Hauling
 2 teams of 2 teamsters - 1/2 da @ 4⁰⁰ 1200
 1 foreman 1/2 da @ 3 450
 4 men 1 1/2 " @ 1⁹⁵ 1170

Total cost delivered on ground
 cost per pole = 57.80
 32 $\sqrt{57.80}$
 22
 258
 256
 20

Sawed timbers to do some work with
 cost. 1.70 delivered on the ground.

Grade 0.125 per 100 ft.
 South High drive Canal - 2.2x8 high by 4-2x8 wide
 5-2x8 wide by 3-2x8 high = 26.5 sec. ft.
 4-2x8 " " 3-2x8 " = 14.8 " "
 4-2x10 " " 3-2x8 " = 26.8 " "
 4-2x10 " " 2-2x8 " = 13.9 " "
 4-2x10 " " 2-2x10 " = 20.5 " "
 5006 A. @ .002 = 10.5 sec ft + 30% for loss = 14.3 sec ft.

Carpenters.

Edmond McCullum phone 28X3
the creek from Johnson, C.
Fair Oaks.

Mr Jembke & two boys.
Mr. Babcock.

Mr. Roe, J.

Nails - May 18.

60^d to 46^d 11
40^d " " 18
20^d " " 31.

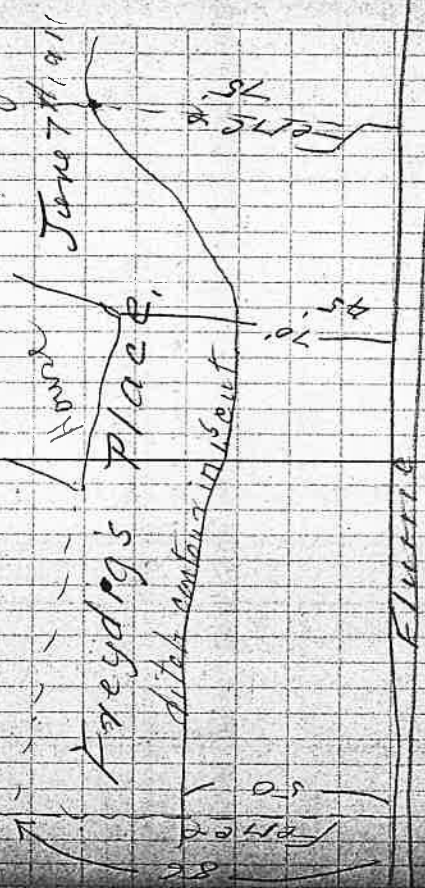
Blue Print Paper

Almon Sotin, Medium Thick
Rapid Printing.

Power Saw

Speed of machine 720
size of wire 7 strand aluminum
cable - 11/4 copper
Speed of wheel 320.

O. B. Helch, with General
Electric, Portland, Oregon



Cost to concrete June 7, 1911.

237 ft canal 3.7 bottom 9 15"
height 12 tbs cement

17 loads gravel

hauling cement 9 mt

crew 5 men 1 foreman - 300.

40.00
17.00
8.00
42.00
107.00

Per linear ft. 45¢
cement haul 3 mi.
gravel " 1 mi.

Drainage Notes, May 20th 1911

C. 2. 4th 10-11 south to salt creek enlarge gutter on east side of road.

Drain ditch through plots cleaned enlarged - Culvert covers road.

Drain Lymans Orchard tracks

Clear Main creek from end of dredging to bridge. Bridge in poor condition, need a little cleaning from bridge to Mill.

June 1st 1911

Roofing
 1/2 ply per cottage one 1.35
 1 " " " 1.75
 2 " " " 2.55

Iceberg lot.
 Sutherland's Truck Stems
 17 lights 12 x 16 c 31
 2-5 " 12 x 24 c 17
 2-5 " 16 x 18 c 17
 4-3 " 12 x 14 c 10

Prices June 7th 1911

Sutherland's Wood Stem
 Nails by ton 69.00
 Coal tar 50 gal. 7.75 by ton (3 1/2 M.)

Stems 9 c above with
 Nails by ton 3.35

Coal tar 50 gal. 8.25
 1" gal. iron pipe 8.75 per hundred ft
 good grade cotton hose 50 ft. 6.00

48 x 76 of Nails
 160 - 3 1/4 49 per #
 207 - 4 31
 400 - 5 18
 600 - 6 11

Portland Wood Pipe Co.
 33 Portland P. O. Box 7
 2" Head in 1/4 weight 8 1/2
 4" " " 12 3/4
 6" " " 16 1/2
 18" Freight 13 1/2
 59d

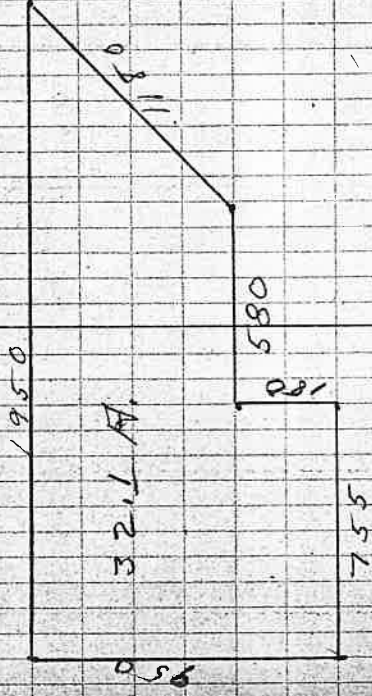
also pay car cost 8 1/2
 12 3/4
 16 1/2
 59d

County Foods.
purchase their steel culverts
from.

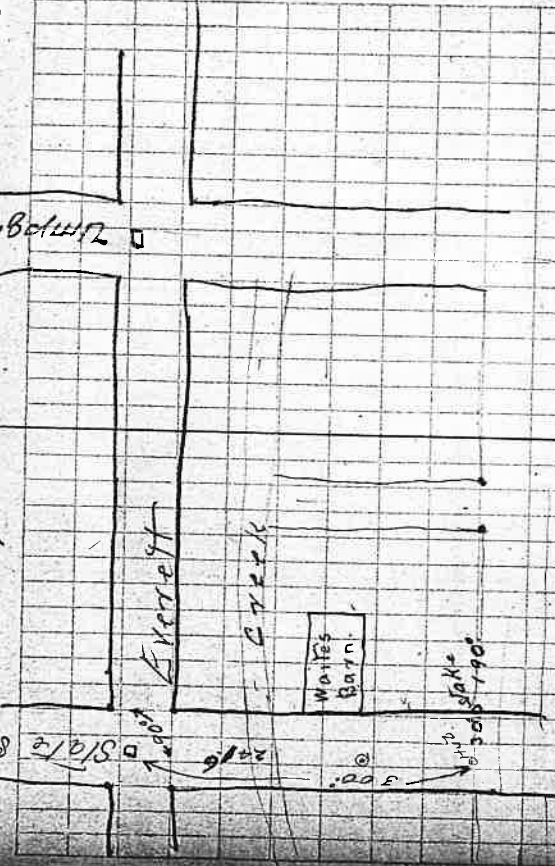
Ball & Co.

309-315 East Yamhill St.
Portland Oregon.

51
Aug 8th 1911.
F. H. M. W. H. A. H.



Location of Waites Barn



Sept 7th 1911 - P.M.

1 1/2 hrs
Strong - barometer
in house.

The Kenosha System of Water Supply
 Kenosha, Ill.
 New York Chicago
 50 Church St. 1212 W. Roosevelt St.
 Dealers Catalogue 719 G.

Engineering Work in
 Towns & small cities

Expert Wm. Cullough
 M. West. Soc. Eng.
 Technical Book Agency
 Chicago, Ill. S. S. F.
 1906

The Chicago Sewer Excavator
 Municipal Engineering &
 Contracting Co.
 Railway Exchange Chicago, Ill.
 New York Office 150 Nassau St.
 Catalogue No. 136

The Monthly Journal.
 Concrete Publishing Company
 50-40th - Bank Building
 Detroit, Mich.

3 - Nov. 14th 1911

J. -

4th 4. - North of Road
1441 ft.

Nov 16th 1911

7 Mile Post 588. in
south 1387 ft from south
property line of #1 Ave.

Oct. 16. th

Charge - N. W. Stone

1 form man @ 0.50

2 laborers @ 1.95 } 1 1/2 da.

1 beam @ 4.00 } En. Drainage

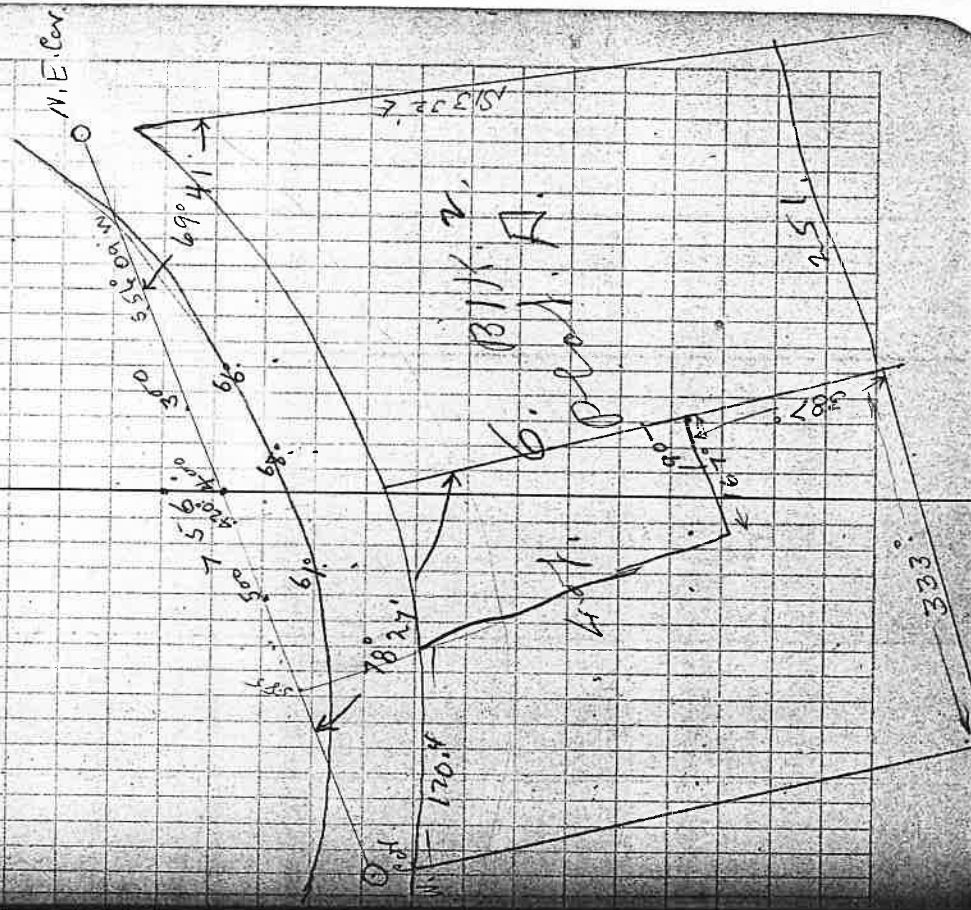
17.10

Oct. 17th 1911.

2 hours work with grader
on road 2.50

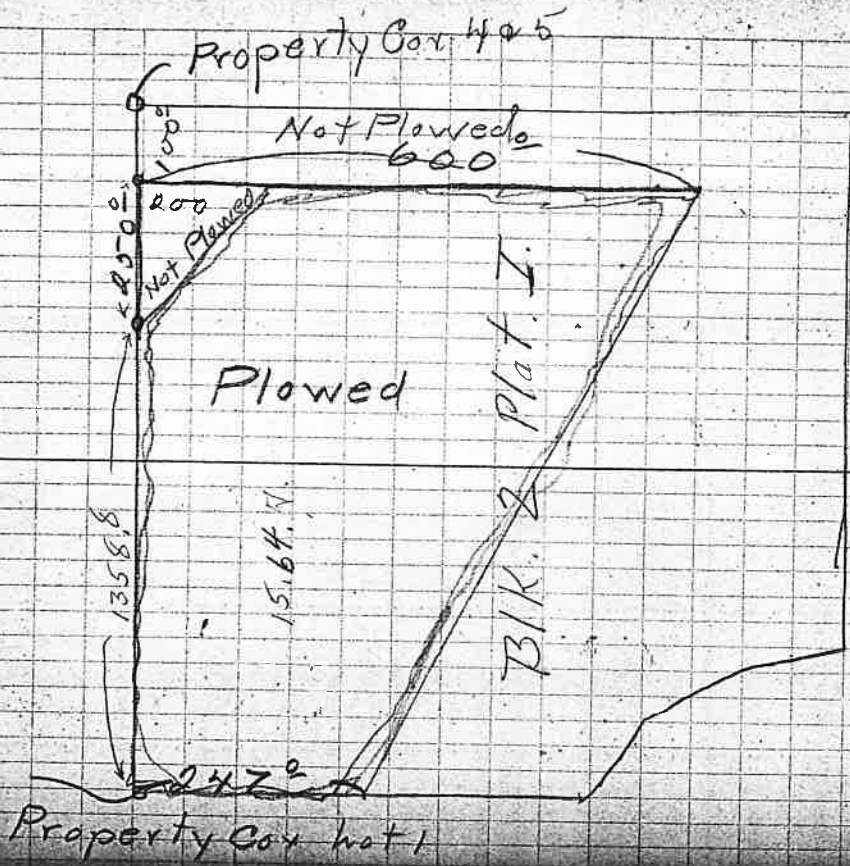
2.50

Nov. 18th 1959



Nov. 25th 1911

1910 Planting of
Potatoes



Dec. 13-19

Cost
Blue Prints.

Selling plates.

Overall 10" x 15" -

72 prints - labor 5 hrs -

" " 1 roll paper.

Cost per print, 0.44¢

Cost @ Rosburg 10¢ + 1 Express

L. E. Buxton
Portland, Ore.
Boston "Engineering contracts &
specifications" by J. B. Johnson C.E.
John Wiley & Sons

Norms Book Company
333 S. Main St.
Los Angeles Cal.

H. B. Floodman
346 S. Pine, Rosburg

Don't know gray purchase

16.50¢ - 1 yr old

\$20 to insure

1.15

Field Book No. 81

Pages 60 -77 Blank

2 min - 2:45 powder
2 min - 3:00 gunboring

Springing Hld.

pure	caps	powder	sticks	Test	Time	Mem	Result
8	2						
8	2	12		05	05	4	3 guns
				05	05	4	
				65		2	

TABLE IV. — Tangents and Externals to a 1° Curve.

Angle	Tangent	External	Angle	Tangent	External	Angle	Tangent	External
1°	50.00	.22	11°	561.70	29.50	21°	1061.9	97.57
10'	58.84	.30	10'	500.11	27.31	10'	1070.6	99.16
20	66.67	.39	20	508.53	28.14	20	1079.2	100.75
30	75.01	.49	30	576.95	29.97	30	1087.8	102.35
40	83.34	.61	40	585.36	29.82	40	1096.4	103.94
50	91.68	.73	50	593.79	30.68	50	1105.1	105.50
2°	100.01	.87	12°	602.21	31.56	22°	1113.7	107.04
10	108.35	1.02	10	610.64	32.45	10	1122.4	108.50
20	116.68	1.19	20	619.07	33.35	20	1131.0	110.00
30	125.02	1.36	30	627.50	34.26	30	1139.7	111.45
40	133.36	1.55	40	635.93	35.18	40	1148.4	112.95
50	141.70	1.75	50	644.37	36.12	50	1157.0	114.45
3°	150.04	1.96	13°	652.81	37.07	23°	1165.7	115.96
10	158.38	2.19	10	661.25	38.03	10	1174.4	117.42
20	166.72	2.43	20	669.70	39.01	20	1183.1	118.88
30	175.06	2.67	30	678.15	39.99	30	1191.8	120.33
40	183.40	2.93	40	686.60	40.99	40	1200.5	121.79
50	191.74	3.21	50	695.06	42.00	50	1209.2	123.20
4°	200.08	3.49	14°	703.51	43.08	24°	1217.9	124.60
10	208.43	3.79	10	711.97	44.07	10	1226.6	126.00
20	216.77	4.10	20	720.44	45.12	20	1235.3	127.40
30	225.12	4.42	30	728.90	46.18	30	1244.0	128.80
40	233.47	4.76	40	737.37	47.25	40	1252.8	130.20
50	241.81	5.10	50	745.85	48.34	50	1261.5	131.60
5°	250.16	5.46	15°	754.32	49.44	25°	1270.2	133.00
10	258.51	5.83	10	762.80	50.55	10	1278.9	134.40
20	266.86	6.21	20	771.29	51.68	20	1287.7	135.80
30	275.21	6.61	30	779.77	52.89	30	1296.5	137.20
40	283.57	7.01	40	788.26	53.97	40	1305.3	138.60
50	291.92	7.43	50	796.75	55.13	50	1314.0	140.00
6°	300.28	7.86	16°	805.25	56.31	26°	1322.8	141.40
10	308.64	8.31	10	813.75	57.50	10	1331.6	142.80
20	316.99	8.76	20	822.25	58.70	20	1340.4	144.20
30	325.35	9.23	30	830.76	59.91	30	1349.2	145.60
40	333.71	9.71	40	839.27	61.14	40	1358.0	147.00
50	342.08	10.20	50	847.78	62.38	50	1366.8	148.40
7°	350.44	10.71	17°	856.30	63.63	27°	1375.6	149.80
10	358.81	11.22	10	864.82	64.90	10	1384.4	151.20
20	367.17	11.75	20	873.35	66.18	20	1393.2	152.60
30	375.54	12.29	30	881.88	67.47	30	1402.0	154.00
40	383.91	12.85	40	890.41	68.77	40	1410.9	155.40
50	392.28	13.41	50	898.95	70.09	50	1419.7	156.80
8°	400.66	13.96	18°	907.49	71.42	28°	1428.6	158.20
10	409.03	14.58	10	916.03	72.76	10	1437.4	159.60
20	417.41	15.18	20	924.58	74.12	20	1446.3	161.00
30	425.79	15.80	30	933.13	75.49	30	1455.1	162.40
40	434.17	16.43	40	941.69	76.86	40	1464.0	163.80
50	442.55	17.07	50	950.25	78.26	50	1472.9	165.20
9°	450.93	17.72	19°	958.81	79.67	29°	1481.8	166.60
10	459.32	18.38	10	967.38	81.09	10	1490.7	168.00
20	467.71	19.06	20	975.96	82.55	20	1499.6	169.40
30	476.10	19.75	30	984.53	83.97	30	1508.5	170.80
40	484.49	20.45	40	993.12	85.43	40	1517.4	172.20
50	492.88	21.16	50	1001.7	86.90	50	1526.3	173.60
10°	501.28	21.89	20	1010.3	88.39	30	1535.3	175.00
10	509.68	22.62	10	1018.9	89.89	10	1544.2	176.40
20	518.08	23.38	20	1027.5	91.40	20	1553.1	177.80
30	526.48	24.14	30	1036.1	92.92	30	1562.1	179.20
40	534.89	24.91	40	1044.7	94.46	40	1571.0	180.60
50	543.29	25.70	50	1053.3	96.01	50	1580.0	182.00

37	66192	23775	125	116250	118
60715	66002	19000	125	116250	118
61+0.5	65986		125	116250	118
663	65977		125	116250	118
664	55969		125	116250	118
665	59661		125	116250	118
66	5953		125	116250	118
67	59445		125	116250	118
68	59379		125	116250	118
69	5929		125	116250	118
70	59121		125	116250	118
71	5913		125	116250	118
72	5905		125	116250	118
73	5897		125	116250	118
74	5889		125	116250	118
75	5881		125	116250	118
76	5873		125	116250	118
63	55977		125	116250	118
70	55921		125	116250	118
80	55841		125	116250	118
75	55835		125	116250	118
81	55825		125	116250	118

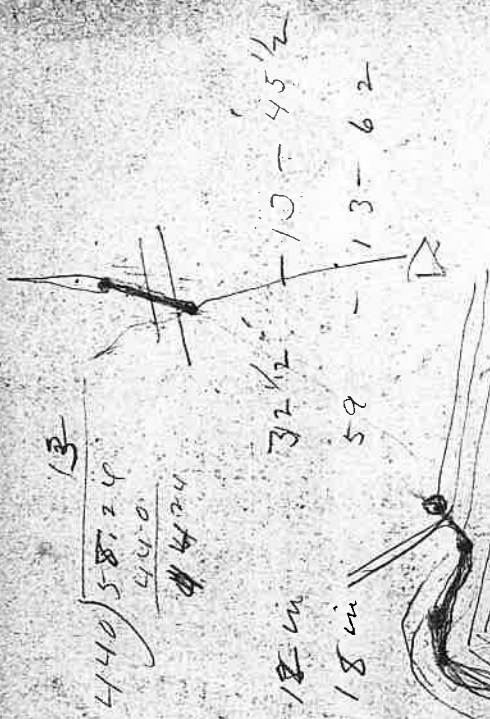
X

Natural Tangents

sec.	0'	10'	20'	30'	40'	50'	sec.	10'	20'	30'	40'	50'	sec.		
0	0000	0029	0058	0087	0116	0145	89	440	8391	8441	8491	8541	8591	8642	49
1	1075	0204	0233	0262	0291	0320	88	41	8603	8744	8796	8847	8899	8952	48
2	2049	0378	0407	0437	0466	0495	87	42	0504	9057	9110	9163	9217	9271	47
3	3024	0553	0582	0612	0641	0670	86	43	9355	9380	9435	9490	9545	9601	46
4	4009	0729	0758	0787	0816	0846	85	44	9657	9713	9770	9827	9884	9942	45
5	5075	0904	0934	0963	0992	1022	84	45	10000	10058	10117	10176	10235	10295	44
6	1051	1080	1110	1139	1169	1198	83	46	10355	10416	10477	10533	10599	10661	43
7	1228	1257	1287	1317	1346	1376	82	47	10724	10786	10850	10913	10977	11041	42
8	1405	1435	1465	1495	1524	1554	81	48	11101	11171	11237	11303	11369	11436	41
9	1584	1614	1644	1673	1703	1733	80	49	11504	11571	11640	11708	11778	11847	40
10	1763	1793	1823	1853	1883	1914	79	50	11918	11988	12059	12131	12203	12276	39
11	1944	1974	2004	2035	2065	2095	78	51	12349	12423	12497	12572	12647	12723	38
12	2126	2156	2186	2217	2247	2278	77	52	12876	12954	13032	13111	13190	13270	37
13	2309	2339	2370	2401	2432	2462	76	53	13270	13351	13432	13514	13597	13680	36
14	2493	2524	2555	2586	2617	2648	75	54	13764	13848	13934	14019	14106	14193	35
15	2679	2711	2742	2773	2805	2836	74	55	14281	14370	14460	14550	14641	14733	34
16	2867	2899	2931	2962	2994	3026	73	56	14826	14919	15013	15108	15204	15301	33
17	3057	3089	3121	3153	3185	3217	72	57	15399	15497	15597	15697	15798	15900	32
18	3249	3281	3314	3346	3378	3411	71	58	16003	16107	16212	16319	16426	16534	31
19	3443	3476	3508	3541	3574	3607	70	59	16643	16753	16864	16977	17091	17205	30
20	3640	3673	3706	3739	3772	3805	69	60	17321	17437	17556	17675	17797	17917	29
21	3839	3872	3906	3939	3973	4006	68	61	18040	18165	18291	18418	18546	18676	28
22	4040	4074	4108	4142	4176	4210	67	62	18807	18940	19074	19210	19347	19486	27
23	4245	4279	4314	4348	4383	4417	66	63	19626	19768	19912	20057	20204	20353	26
24	4452	4487	4522	4557	4592	4628	65	64	20503	20655	20809	20965	21123	21283	25
25	4663	4699	4734	4770	4806	4841	64	65	21445	21609	21775	21943	22113	22286	24
26	4877	4913	4950	4986	5022	5059	63	66	22460	22637	22817	22998	23183	23369	23
27	5095	5132	5169	5206	5243	5280	62	67	23559	23750	23945	24143	24342	24543	22
28	5317	5354	5392	5430	5467	5505	61	68	24751	24960	25172	25386	25602	25820	21
29	5543	5581	5619	5658	5696	5735	60	69	26051	26279	26511	26746	26985	27228	20
30	5774	5812	5851	5890	5930	5969	59	70	27275	27525	27800	28090	28394	28701	19
31	6009	6048	6088	6128	6168	6208	58	71	29042	29310	29600	29873	30178	30475	18
32	6240	6280	6320	6361	6402	6443	57	72	30777	31084	31413	31763	32141	32517	17
33	6474	6516	6557	6600	6641	6683	56	73	32700	33052	33429	33829	34243	34695	16
34	6715	6758	6800	6843	6887	6930	55	74	34874	35261	35663	36083	36520	36981	15
35	7024	7068	7113	7157	7201	7245	54	75	37321	37760	38208	38657	39130	39617	14
36	7265	7310	7355	7400	7445	7490	53	76	40108	40611	41126	41653	42193	42747	13
37	7536	7581	7627	7673	7720	7766	52	77	43315	43897	44494	45107	45736	46382	12
38	7813	7860	7907	7954	8002	8050	51	78	47046	47729	48430	49152	49894	50658	11
39	8098	8146	8195	8243	8292	8342	50	79	51446	52257	53093	53955	54843	55764	10

Natural Cotangents

sec.	0'	10'	20'	30'	40'	50'	sec.	10'	20'	30'	40'	50'	sec.		
80	5.6713	5.7694	5.8708	5.9758	6.0844	6.1970	0								
81	6.3158	6.4348	6.5606	6.6912	6.8269	6.9682	8								
82	7.1154	7.2687	7.4287	7.5958	7.7704	7.9530	7								
83	8.1443	8.3450	8.5555	8.7760	9.0098	9.2553	6								
84	9.5144	9.7882	10.078	10.385	10.7111	11.0595	5								
85	11.430	11.826	12.250	12.700	13.197	13.7274	4								
86	14.300	14.924	15.605	16.350	17.169	18.0753	3								
87	19.081	20.206	21.470	22.993	24.542	26.432	2								
88	28.030	31.242	34.368	38.169	42.904	49.104	1								
89	57.200	68.750	85.940	114.588	171.865	343.77	0								

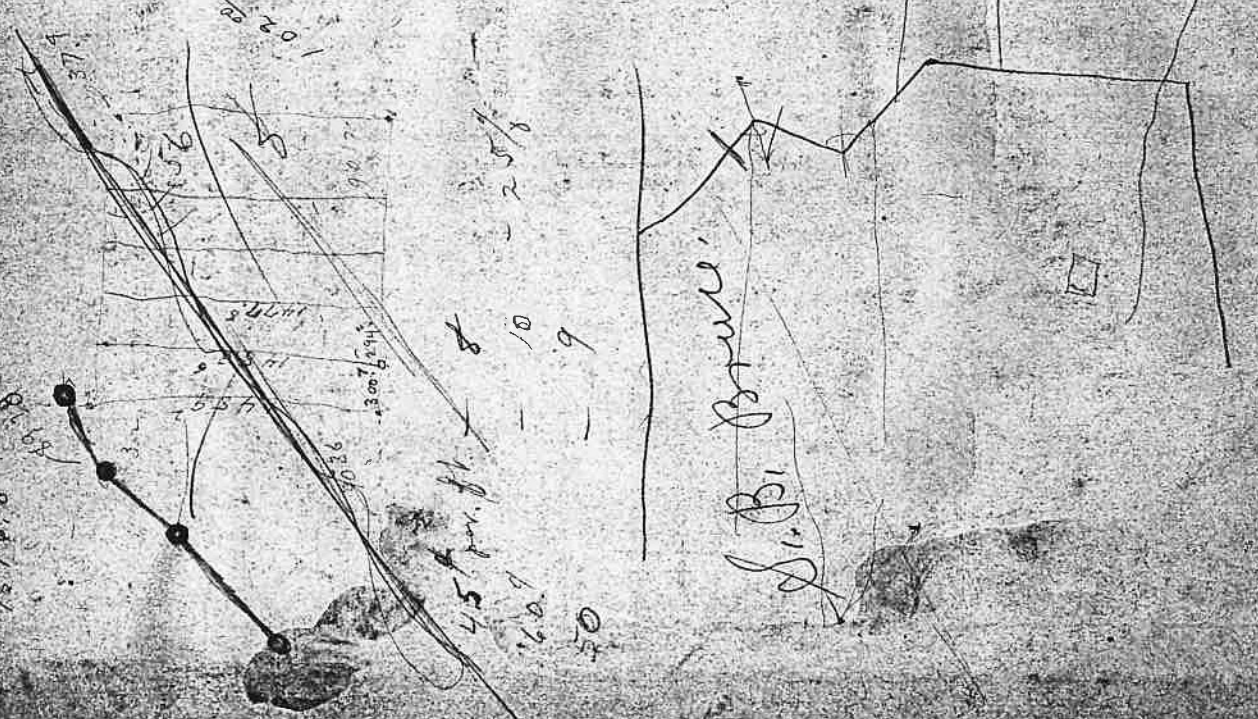


DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

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

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



112 23
111 88