

1713

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
Roadway 16 feet wide. Side Slopes 1 on 1.
For Single Track Embankment.

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

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

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1713-2
1691-43.56
2176-44
1692-68

1713

CITY ENGINEER'S OFFICE

25
53
50
78

39

This Field Book is manufactured of a High Grade 50% Rag Paper having a WATER RESISTING SURFACE, and is sewed with Bing Special Enamel Waterproof thread.

Made in U. S. A.

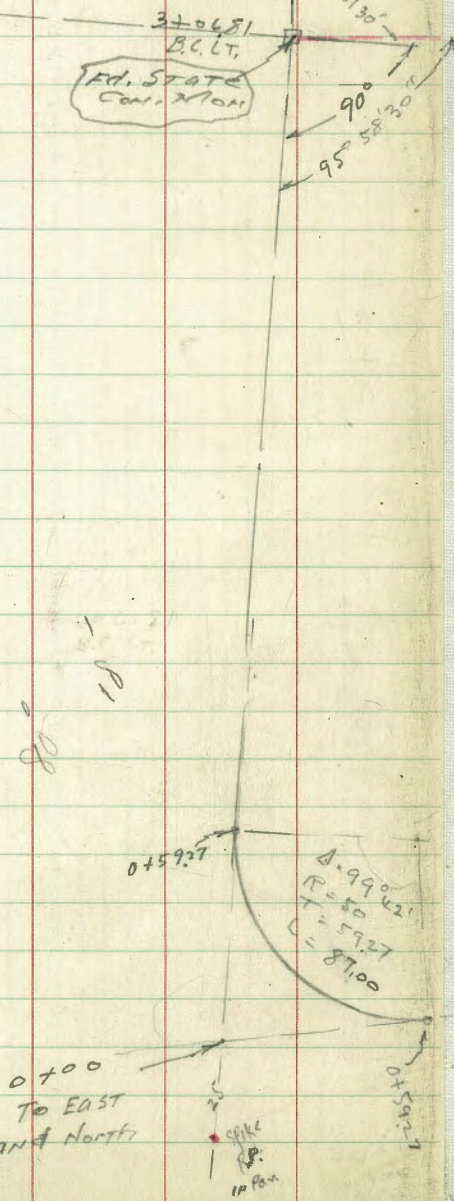
2066-2

Levels for County Parking Lot.
 WEST of Existing Center Lane

C. Moore
 San Antonio
 Bc99
 11-29-46.

ELY Harbor Drive
 R=1600

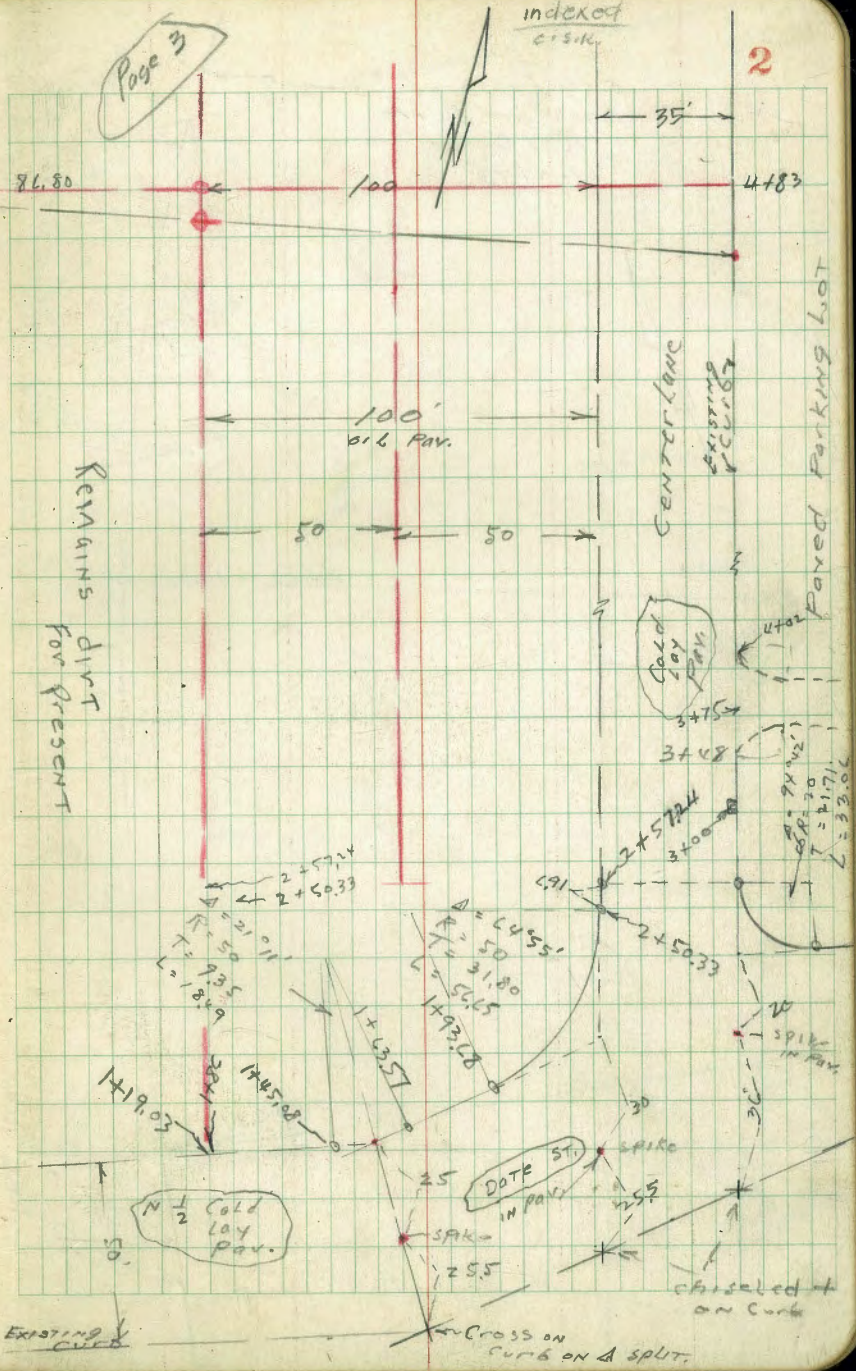
ED. STATE
 CON. X 1001



Page 3

indexed
 01516

2



Remains for Present

Center Lane
 Existing Pavement

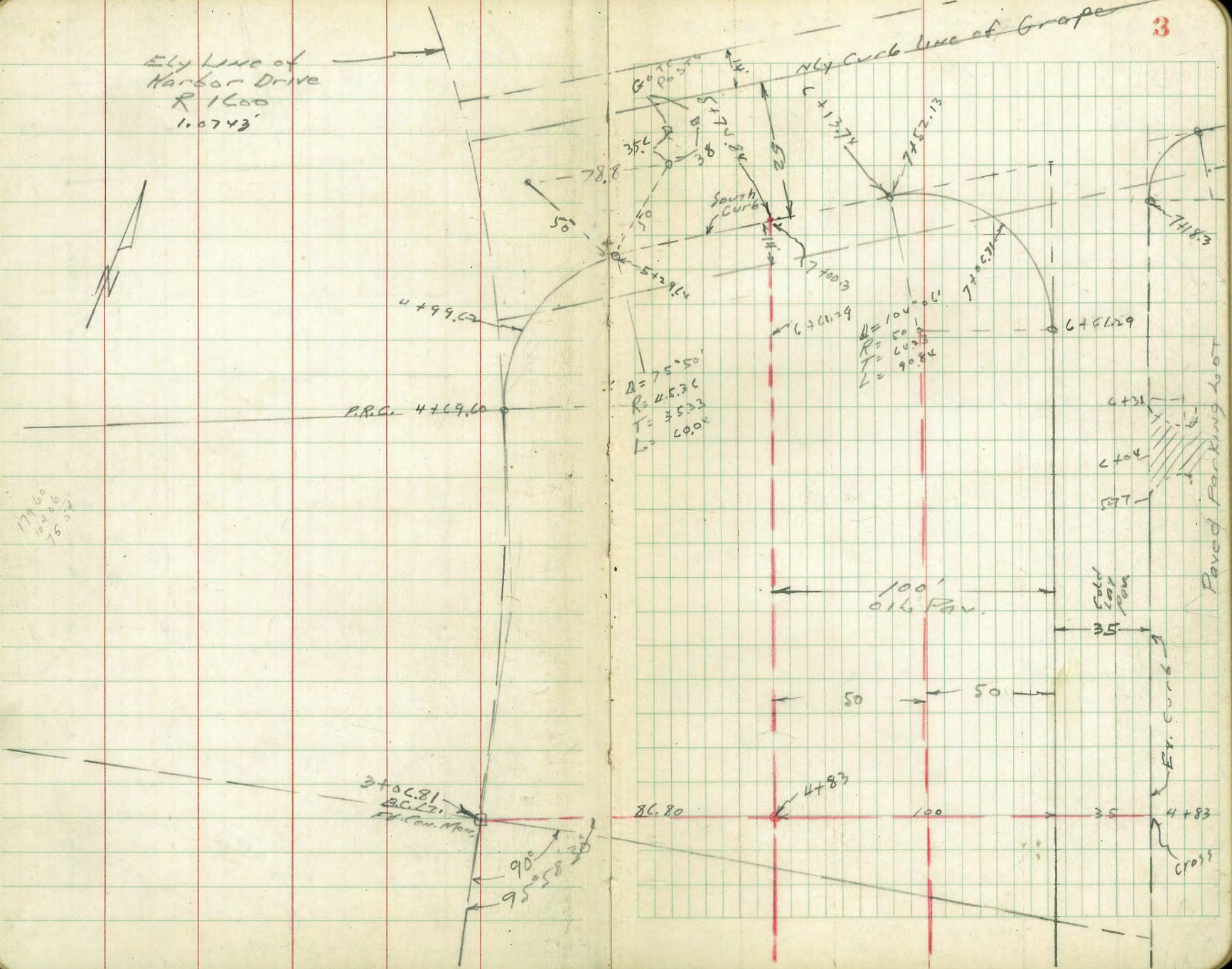
Paved Parking Lot

Existing CURB

Cross on Curb on a Split

Ely Line of Harbor Drive
R 1600
1.0743

Nly Curb line of Grape



174.60
104.86
75.54

B = 75° 50'
R = 45.76
T = 35.33
L = 60.00

B = 104° 06'
R = 50
T = 64.73
L = 90.84

Paved Parking lot

100'
Oil Pav.

50 50

86.80 100 35 4+83

CROSS

Levels on Co. Park Lot.

1 + 63.57 = E.C.

1 + 45.08 B.C.L.T

1 + 19.03 = 100' Line

0 + 59.27 = E.C.

0 + 00 = P.I.

999
assumed
H.I.

N.C.B. DATA.

Grade

$$\begin{array}{r} 999 \\ 5.30 \\ \hline 4.69 \checkmark \end{array}$$

$$\begin{array}{r} 999 \\ 5.20 \\ \hline 4.79 \checkmark \end{array}$$

$$\begin{array}{r} 999 \\ 5.07 \\ \hline 4.72 \checkmark \end{array}$$

$$\begin{array}{r} 999 \\ 4.97 \\ \hline 5.02 \checkmark \end{array}$$

$$\begin{array}{r} 999 \\ 4.76 \\ \hline 5.23 \checkmark \end{array}$$

$$\begin{array}{r} 999 \\ 4.44 \\ \hline 5.55 \checkmark \end{array}$$

B.L.
N.L. DATE

4

$$\begin{array}{r} 490 \\ 5.05 \end{array}$$

$$\begin{array}{r} 424 \\ 5.27 \end{array}$$

$$\begin{array}{r} 424 \\ 5.23 \end{array}$$

$$\begin{array}{r} 450 \\ 5.29 \end{array}$$

$$\begin{array}{r} 463 \\ 5.56 \end{array}$$

$$\begin{array}{r} 420 \\ 5.79 \end{array}$$

$$\underline{999}$$

$$\begin{array}{r} 435 \\ 4.38 \\ \hline 5.05 \end{array}$$

$$\begin{array}{r} 425 \\ 4.32 \\ \hline 5.12 \end{array}$$

$$\begin{array}{r} 425 \\ 4.32 \\ \hline 5.12 \end{array}$$

$$\begin{array}{r} 455 \\ 4.27 \\ \hline 5.22 \end{array}$$

$$\begin{array}{r} 430 \\ 4.09 \\ \hline 5.21 \end{array}$$

$$\begin{array}{r} 480 \\ 5.19 \\ \hline 5.25 \end{array}$$

$$\begin{array}{r} 510 \\ 4.89 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 545 \\ 4.82 \\ \hline 5.16 \end{array}$$

$$\begin{array}{r} 505 \\ 4.75 \\ \hline 5.10 \end{array}$$

$$\begin{array}{r} 503 \\ 4.92 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 484 \\ 4.84 \\ \hline 5.0 \end{array}$$

$$\begin{array}{r} 450 \\ 4.39 \\ \hline 5.0 \end{array}$$

100' Lane

E 50' Lane of Park Lo

W.L. Lane

5

37x8

$\frac{520}{4.73}$

5.20

3100

$\frac{520}{4.79}$

4.94

2 + 5774 E.C. on RT 51

$\frac{514}{4.85}$

Center Lane

4.64

2 + 50.33 = EC on WL

$\frac{510}{4.89}$

999
41.90
582

4.60

2 + 22 E Curve

999
4.54
5.45

1 + 9368 BC LT

999
4.91
5.09

5.1
4.67
1.00

4.25
4.75
50

4.10
5.89

4.25
6.35
17.5

5.20
4.29
1.00

4.80
5.19
5

6.10
6.22

6.25
6.29
17.5

8x8

6.51
35 = Top grate

5.15
5.24
1.00

5.10
5.29

5.10
5.99

4.25
6.23
17.5

4.77
5.24
1.00

5.10
5.39
50

5.10
5.79

5.10
6.09
17.5

4.50
5.47

4.25
5.23
25

5.10
4.59
25

5.10
5.39

4.25
5.23
25

4.60
5.09
50

999
6.11
2

100'
LINE

E 50'
& LOT

5+77

$\frac{4.68}{5.31}$ 5.30

5+38

$\frac{4.92}{5.07}$ 5.50

5+00

$\frac{5.10}{4.89}$ 5.58

4+83 cross

$\frac{5.15}{4.84}$ 5.57

assumed EL.
30.5'
STATE COM.
MON.
SCTBM.
6.94
186.80

4+42.5

$\frac{5.24}{4.75}$ 5.54

4+02

$\frac{5.28}{4.71}$ 5.41

WIL LANE

6

$\frac{4.86}{5.13}$ $\frac{4.40}{4.59}$ $\frac{4.73}{5.26}$ $\frac{4.10}{5.39}$
100 50 175

$\frac{4.88}{5.11}$ $\frac{4.60}{4.39}$ $\frac{4.62}{5.37}$ $\frac{4.55}{5.24}$
100 50 175

$\frac{5.01}{4.92}$ $\frac{5.59}{4.40}$ $\frac{4.43}{5.56}$ $\frac{4.43}{5.56}$
100 50 175

$\frac{5.06}{4.93}$ $\frac{5.36}{4.33}$ $\frac{4.38}{5.51}$ $\frac{4.10}{5.59}$
100 50

$\frac{5.16}{4.83}$ $\frac{5.70}{4.29}$ $\frac{4.23}{5.36}$ $\frac{4.21}{5.28}$
100 50 175

$\frac{5.20}{4.29}$ $\frac{5.44}{4.35}$ $\frac{4.30}{5.69}$ $\frac{3.98}{5.01}$
100 50 175

299

50' Lane
& Lot.

= 100' Lane = Sub. Grape

7 + 52.13 = C + 127x = E.C. Sub Grape

7 + 06.71 ← Curve Lt.

100' Lane 50' Lane

6 + 61.29 B.C. on Lt. of 8 Lane $\frac{4.10}{5.89}$ 4.03

6 + 31 $\frac{4.32}{5.67}$ 4.80

Sub. Line Grape

7

720
71
679

32x
679
25' x = 8 Grape
or
Pav.

720
71
679

700
599
W.L. 8 Lanes

420
529
100

415
582
50

425
524

483
510
175

444
555
100

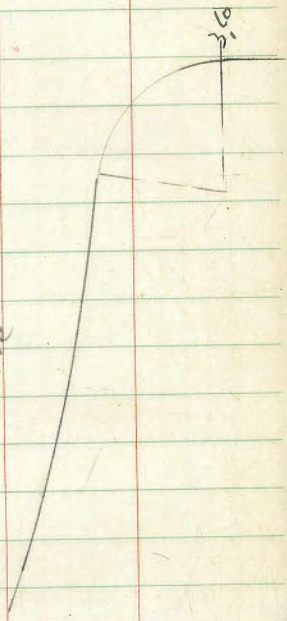
482
527
50

453
746

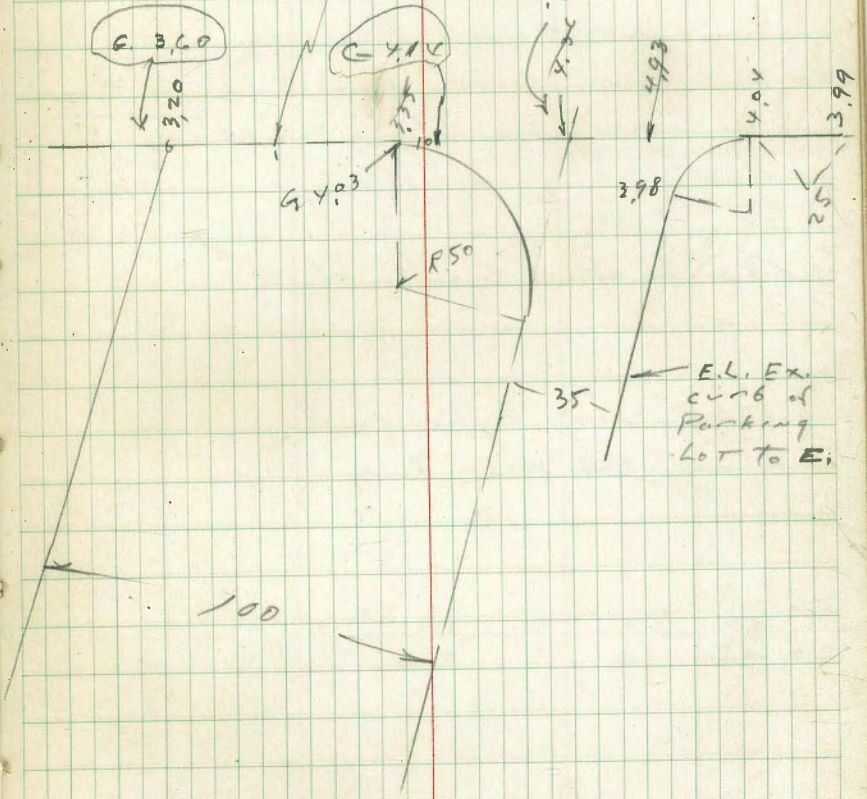
427
522
275

999

Harbor Drive



348 ← E Grape
 oil Pav.
 324 ← oil Pav.
 E Grape
 S of Grape



C. Moore x sec of Emerson St. 70' wide
Summer 1908

Beag Rosecrans to Willow

5-4-46. See Sketch 1605-39.

no change of Rosecrans

0+97 see sketch, 1592-37 also p. 47

no edge Triple Con. Bk. Dr.

0+83 = E. edge of Triple Con. Bk. Dr.

0+80 End Picket fence

0+57 Beag. Picket fence

0+50

0+27 see 1605-39

0+00 = Willy Rosecrans

T.P. 1.41 15.63 12.57 14.22

Set spike B.M. Soly Con Tel. P. Evergreen + Emerson 6.85 19.94 ✓

Sw. B.P. 1.68 2.79 25.11 Evergreen Fenclow

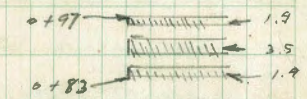
Indexed
C.S.K. LT

E

RT.

9

6.67
1.94
35



6.86
8.77
35

Fence
34.5

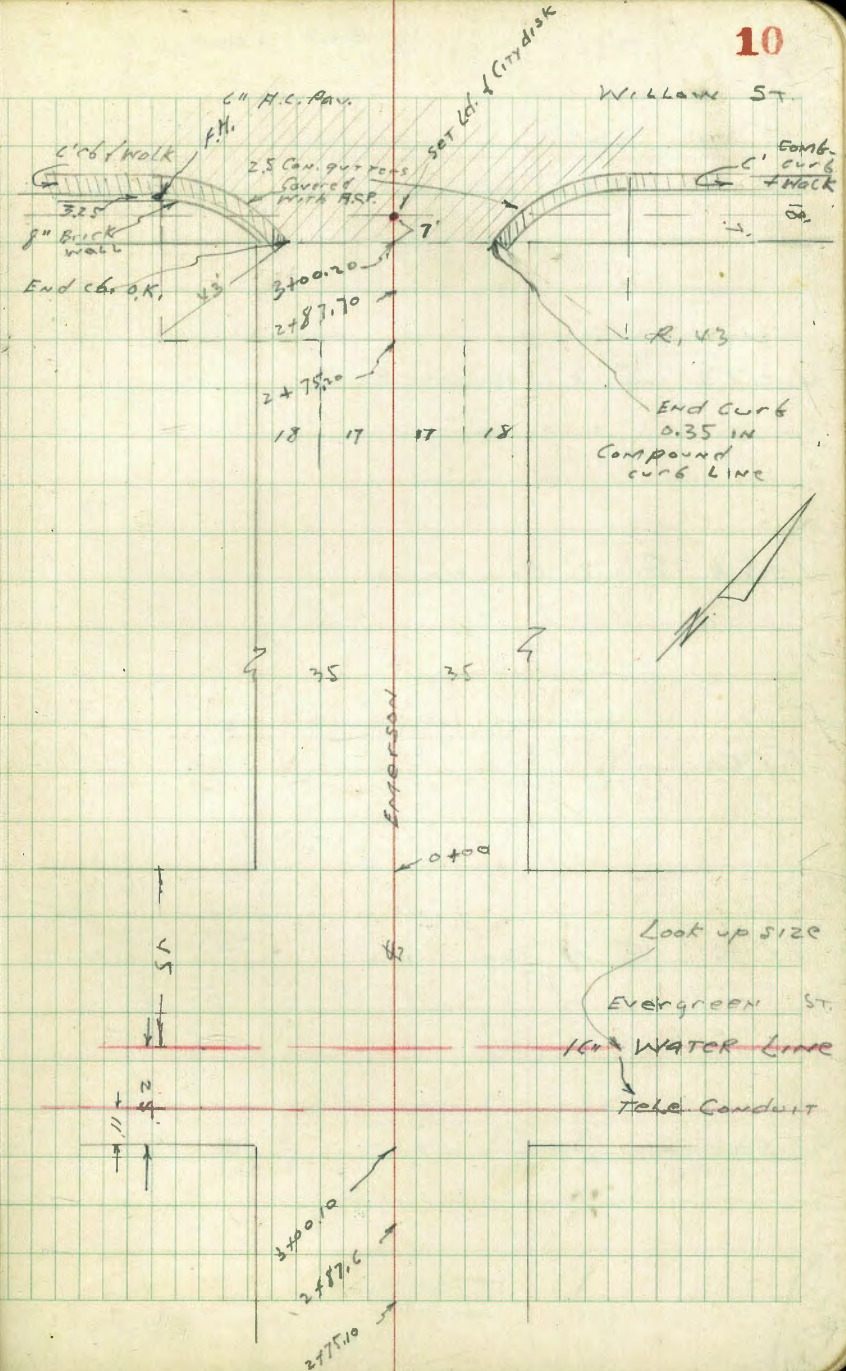
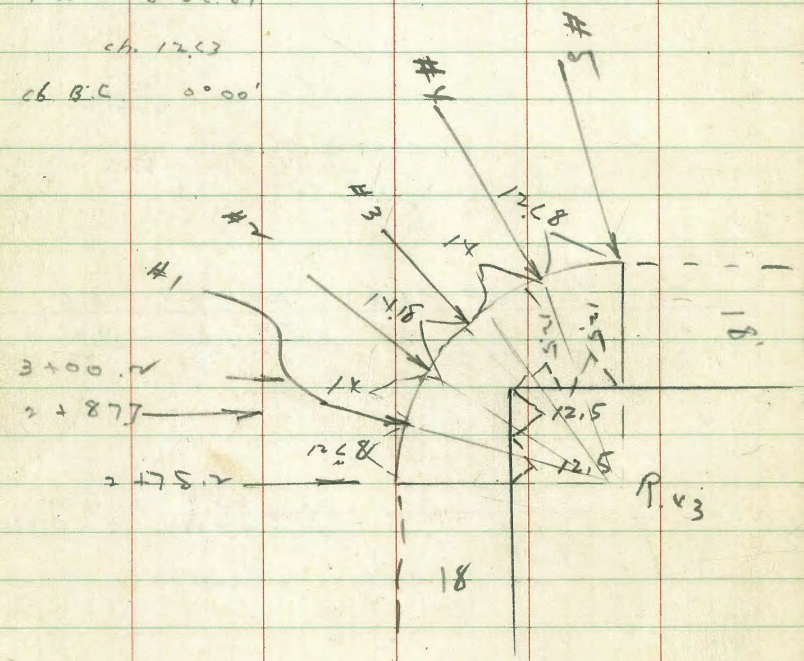
Fence
33.6

7.2	7.2	6.5	6.9	6.0	6.7	6.6
8.4	8.4	9.1	8.7	9.5	8.9	9.0
35	25	12		10	18	35

7.02	6.04
8.51	9.59
18	18
06	06

15.63

5 - E.C. $45^{\circ}00.0$
 ch. 12.63
 4 - $30^{\circ}33.0$
 ch. 13.91
 2 - $27^{\circ}13.33$
 ch. 14.12
 2 - $17^{\circ}21.50$
 ch. 13.91
 1 - $8^{\circ}21.87$
 ch. 12.63
 cb B.C. $0^{\circ}00'$



2 + 00

9.7	9.1	8.6	9.0	8.7	7.2	8.8
5.9	6.5	7.0	6.1	6.9	6.4	6.8
35	14	10		11	14	35

1 + 73 R 3' Con walk

8.51
<u>7.17</u>
35

1 + 58 R 7' Con. drive

8.08
<u>7.55</u>
35

1 + 50

8.4	8.2	8.0	8.1	7.8	7.8	7.8
7.5	7.6	7.9	7.5	7.8	7.8	7.8
35	20	14		14	25	35

1 + 05 R 10' Con. drive

8.06
<u>7.57</u>
35.5

1 + 00

8.0	7.7	7.4	7.6	7.3	7.5	7.1
7.6	7.7	RR 8.4	8.0	8.3	8.1	8.5
35	25	24.6	14	16	17	35

15.63

15.43

2 + 75.18 c6 B.C

2 + 71 E 3' Con. walk S Both sides

2 + 50 Beg. Picket fence

2 + 48

2 + 41.7 E 7' Con. Dr.

2 + 22 E 3' con. walk S Both sides

15.63

Lr

←

Rt.

12

11.6	11.4	10.1	10.5	10.0	10.8	10.3
4.0	4.2	5.5	5.1	5.6	4.8	5.3
35	18	10		13	18	35

12.01
3.62
35.2

10.44
5.19
35

35.2

11.1	10.8	9.9	10.1	9.5	8.9	10.19
4.5	4.8	5.7	5.5	5.1	5.7	5.42
35	20	12		10	20	35.25

E 14' Con. Dr.

11.11
4.52
35.5

10.71
4.92
36.1

9.46
5.17
34.8

15.63

July 1/4

♀ Locust

Fly 1/4

Fly 06. Locust

E. 6. + 9' Coc. Picket fence or 9' in ST.

3 + 00.18 = Fly Locust ST = ^{70' wide} 18' cbs
8.5 1/25

2 + 77

15.63

LT

♀

R+

13

12.0	11.8	12.0	12.0	12.0
<u>3.0</u>	<u>3.8</u>	3.6	<u>3.6</u>	<u>3.6</u>
35	16		16	35

11.8	11.5	11.8	11.8	11.8
<u>2.8</u>	<u>4.1</u>	3.8	<u>3.8</u>	<u>3.8</u>
35	16		16	35

11.3	11.0	11.6	11.5	11.6
<u>4.3</u>	<u>4.6</u>	<u>4.0</u>	<u>4.1</u>	<u>4.0</u>
35	16		16	35

12.73	12.4	12.1	11.0	11.4	11.0	11.6	11.5
<u>3.90</u>	<u>3.7</u>	<u>3.5</u>	<u>4.6</u>	4.7	<u>4.6</u>	<u>4.0</u>	<u>4.1</u>
135	35	17	11		13	19	35

TOP
Curb
ENDFence Cur
34.5

12.2	11.2	10.5	10.9	10.6	11.1	10.8
<u>3.4</u>	<u>4.2</u>	<u>5.1</u>	4.7	<u>5.0</u>	<u>4.5</u>	<u>4.8</u>
35	12	10		13	15	35

R.P.
21.8

15.63

0 + 50

Top of end 5" \rightarrow 1.28
 Con. Wall 35.3

0 + 30 ϕ 2' Con. Walk on S \perp ϕ of 4.5' Walk

0 + 25

W by Locust = 0 + 00

w c. + 15.5 = 35.1 LT. to Beg. picket fence
 w c. + 13.5 = 30' LT. to P.F.

W by curb Locust

W by 1/4 + C

15.63
 $\frac{1}{2}$

	13.9	13.5	13.0	13.4	13.0	13.2	14.25	13.5
End fence	1.7	2.1	2.6	2.7	2.6	2.4	1.38	2.1
	35.3	35	14	13	12	13	29.1	35

Top
 S. end 5"
 Con. Wall

	13.93	13.60
one N,	1.70	2.03
	35.2	29.9

	13.7	13.3	12.5	13.1	12.6	13.2	13.4
	1.9	2.3	3.1	2.5	3.0	2.4	2.2
	35	16	14		12	14	35

	13.2	12.9	12.0	12.5	12.2	12.5	12.8
	2.4	2.7	3.6	3.1	3.4	3.1	2.8
	35	16	17		11	12	35

	13.41	12.9	12.7	11.8	12.2	12.2	12.1
	2.22	2.7	2.9	3.8	3.4	3.4	3.5
	13.5	35	18	13	16	16	35

Top
 Curb
 End.

	12.0	11.8	12.1	12.1	12.0
	2.6	3.8	3.5	3.5	3.6
	35	16		16	35

15.63
 $\frac{1}{2}$

1+27 E 3' Con. walk

1+09.6 E do. Con. Ridgepole 7' wide over

1+06 E 11' Con. Dr.

T.P. 7.28 21.81 1.10 14.53

1+00

0+88 E 2' Con. walk

0+57.5 E 8' Con. Dr.

15.63

14.94
6.87
35

14.88
6.93
35

~~14.54
7.17
35.4~~

14.54
7.27
35.2

21.81

14.4		14.2	14.2	13.7	14.0	14.3
<u>1.7</u>	P.P.	<u>1.4</u>	<u>1.4</u>	<u>1.9</u>	<u>1.6</u>	<u>1.3</u>
35	20	14	14	14	13	35

14.48
1.65
35

14.25
1.38
35

15.03

2 + 00

1 + 82 ± 3 Can. walk

1 + 72.5 ± 3.8 Can. walk

1 + 56.5 ± 7.5 Can. do.

1 + 54 ± 7.5 Can. do.

1 + 50

21.81

16.5	16.7	16.2	16.6	16.2	16.7	17.2	17.98
5.3	P.P.	5.1	5.4	5.2	5.6	5.1	4.1
35	27.7	14	12		12	14	35
							3.83
							35

S. end of
Can. wall

16.20

5.61

35.7

16.50

5.31

35

15.39

6.12

35.8

16.02

5.79

35

15.24.6

35

15.3

4.5

13

14.8

7.0

12

15.2

6.6

15.0

6.8

15

15.8

6.0

35

LH Can. wall
35

21.81

S. end of Can.
wall 27 High

Nail Tel. Pole
SE. Emerson

P. 9

T.P. 9.00 28.94 1.87 19.94 19.94

2 + 0.10 = Ely Evergreen = 70' wide
18' cbs
8.5 1/4 s

+ 89 21.2 LT to Tel. P.

2 + 75.10 c6 BC.

2 + 50 Hand Top 7" 3.34
Con. wall 35

2 + 33.5 E 3' Con. wall

2 + 10 E 7' Con. dr.

2 + 66.5 E 8.7 Con. dr.

21.81

LT

E

R.

17

20.1	20.1	19.5	19.8	19.3	20.3	20.9
1.7	1.7	2.3	2.0	2.5	1.5	0.9
35	20	11		14	17	35

18.8	18.8	18.5	18.4	18.7	19.4	19.7
3.0	3.0	3.3	2.9	3.1	2.4	2.1
35	15	13		13	20	35

17.8	18.0	17.5	17.9	17.8	18.2	s. end	18.7
4.0	3.8	4.3	3.9	4.0	3.6	Hedge	3.1
35	16	13		12	14	25	35

17.13
4.58
35.7

17.70
4.11
34.2

16.75
5.06
37.7

21.81

No 1/4

E Evergreen

E 1/4

E 6. #7 Top 14" Water Line

E 6

E.L. Evergreen # 11 Top Tel. Cond.

28.94

20.4	20.5	20.8	21.1	21.2
8.5	8.4	8.1	7.8	7.7
35	18		18	35

20.2	20.3	20.6	20.7	20.8
8.7	8.6	8.3	8.2	8.1
35	18	M.H. R.M.	18	35

20.1	20.0	20.3	20.2	20.6
8.8	8.9	8.4	8.7	8.3
35	18		18	35

$$\frac{17.33}{11.61}$$

70

20.4	19.8	20.2	19.9	20.4	20.5
8.5	7.1	8.7	7.9	8.5	8.4
35	15		15	20	35

$$\frac{16.73}{12.21}$$

10

28.94

0 + 98 24' Lt. P.P.

0 + 95

0 + 79

0 + 50

0 + 25 6 E.C.

Wily Evergreen = 0 + 00

W 6 Evergreen

28.94

Lt

L

Rt

19

27.0	27.1	26.0	26.0	26.7	26.50
1.9	1.8	2.9	2.9	2.7	2.44
35	20	7		18	34.7 = W. edge

Con.
dn.

26.2	26.0	25.8	25.0	24.8	25.5	26.51
2.7	2.9	3.1	3.9	4.1	3.4	2.43
35	25	7	4		10	34.7 = E. edge

Con.
dn.

24.3	23.9	24.2	23.2	23.2	24.1	24.1	25.2	25.1
4.6	5.0	4.7	5.7	5.7	4.8	4.8	3.7	3.8
35	17	5	3		10	24	28	35

23.1	23.0	23.3	22.1	22.3	23.0	23.1	23.8	24.2
5.8	5.9	5.6	6.8	6.6	5.9	5.8	5.1	4.7
35	18	4	2		9	28	31	35

4' wide
Brick Walk

22.3	22.3	22.1	21.5	21.5	22.0	22.2	23.1	22.9
6.6	6.6	6.8	7.4	7.4	6.9	6.7	5.8	6.0
35	25	10	5		18	27	29	35

20.5	20.5	21.1	21.2	21.5
8.4	8.4	7.8	7.7	7.4
35	18		18	35

28.94

1+16.5 E 3' Con. walk

1+15

1+12.5 Reg. picket fence

1+10.2 4" Con. wall

1+10

T.P. 8.01 36.66 0.29 28.55

1+04 Reg. picket fence 35' LT.

1+03

28.94

Lt

C

Rt

20

29.62

7.04

33

29.6	29.6	28.3	27.3	27.5	27.1	28.8	29.11	29.11	29.2
7.1	7.1	8.4	9.4	9.2	8.6	7.9	7.55	7.55	7.5
35	25	10	5		16	29	29	31	35

Con. wall

Fence

33

8.26	8.08
32	35

Tap Con. wall
or Wedge dr.

29.7	29.5	28.0	26.9	27.1	27.7	28.2	28.31
7.0	7.2	8.7	9.8	9.1	9.0	8.50	8.35
35	25	10	5		18	29	35

Wedge low dr.

36.66

28.4	28.7	27.8	27.2	26.2	26.6	27.1	27.99	28.17
7.05	7.02	1.1	1.7	2.7	2.2	1.8	0.95	0.77
35	25	18	7	3		17	29	35

E. edge
Con. dr.

28.94

2 + 1.0 30' LT, 5" di. Acacia tree
2 + 5.0 " " " " "

	38.8	38.7											
2 + 4.5	7.7	7.8											
	65	48											

	37.3	37.2	37.9	42.1	41.4	40.1	38.6	39.3	37.2	36.4	37.0		
2 + 2.5	9.2	9.3	8.5	4.4	5.1	6.4	7.9	2.7	9.3	10.1	9.5		
	55	87	35	26	18	5		16	20	35	55		

2 + 0.5 30' LT = 12" di. Acacia tree

2 + 0.0 End wire fence 35' LT.

T.P. 11.33 46.48 1.51 35.15

1 + 7.5	33.5	33.3	32.9	32.6	33.1	32.6	32.3	32.4					
	3.7	3.4	3.8	4.1	3.6	4.1	4.4	4.3					
	45	35	20	7	36	20	35	45					

1 + 5.0 S. end Bd fence on lot line 33' R

1 + 4.0 end picket fence

1 + 29.5 end picket fence

36.66

	42.9	46.0	46.1	45.4	41.7	41.3	44.3	44.3	38.9	38.2	39.9		
	3.0	0.5	10.4	1.1	4.8	5.7	2.2	2.2	7.6	8.3	8.6		
	35	26	18	4		4	10	15	30	35	55		

	35.2	35.2	35.2	34.8	35.4	35.0	34.1	34.3					
	11.3	11.3	11.3	11.7	11.1	11.5	12.4	12.2					
	45	35	22.5	11		20	35	45					

	35.2	35.2	35.2	34.8	35.4	35.0	34.1	34.3					
	11.3	11.3	11.3	11.7	11.1	11.5	12.4	12.2					
	45	35	22.5	11		20	35	45					

46.48

	33.5	33.3	32.9	32.6	33.1	32.6	32.3	32.4					
	3.7	3.4	3.8	4.1	3.6	4.1	4.4	4.3					
	45	35	20	7	36	20	35	45					

31.0 31.0 30.3 30.5 30.4 29.6 29.6

	5.7	5.7	6.4	6.7	6.3	7.1	Gross	7.1					
Req. wire fence	35	20	7		18	25	26	32	35				

Fence 33

	29.45	29.48	29.49										
	7.1	7.21	7.17										
	28.7	30.7	35										

end conv. walk
Wedge
333 conv.
walk

36.66

3 + 09.2 on Pav.

3 + 00.2 = Ely Willow St. on Pav.

2 + 99.9

2 + 87.7

T.P. 7.52 59.97 1.67 52.51

2 + 75.20 ch. B.C.

M.L. House

2 + 57

T.P. 8.05 54.12 0.41 46.07

46.48

54.88	54.71	54.47	54.17	54.13	53.93	53.70
5.09	5.26	5.50	5.70	5.84	6.04	6.27
25	17	8.5		8.5	17	25

54.49	53.82	53.72	53.53	53.39	53.15	52.86	52.60	53.17
5.48	6.15	6.25	6.44	6.58	6.82	7.11	7.37	6.80
25	25	17	8.5		8.5	17	25	25
06	97						97	06

55.1	55.1	54.0	53.9	54.0
4.9	4.9	6.0	6.1	6.0
35	25		25	35

55.5	55.1	55.2	53.9	53.1	52.5	52.9	48.5	48.5	47.0	44.9
4.5	4.6	4.8	6.1	6.9	7.5	7.1	11.5	11.5	13.0	15.1
40	35	28	18		13	26	35	36	45	55

59.97

48.4	49.5	50.1	52.3	51.3	51.4	47.6	51.5	50.9	44.6	42.1	41.6
5.7	4.6	4.0	1.8	2.8	2.7	6.5	2.6	2.7	9.5	13.0	12.5
53	50	35	17		6	10	14	23	35	40	55

43.0	44.4	42.4	42.4	46.4	47.5	47.7	44.1	46.8	45.4	39.7	37.4	38.5
11.1	9.7	11.7	11.7	5.7	4.6	1.4	10.0	7.2	8.7	14.4	14.7	15.6
52	50	35	34	22	13		9	15	24	35	45	55

54.12

same ~~16~~ Levels on
 515-46. Con. drives on Emerson St.
 Rosecrans to Willow

2 + 41.7 E 7' Con. dr.

T.P. 5153 1502 3.09 9.49

1 + 58 E 7' Con. dr. no garage

1 + 05 E 10' Con. dr.

0 + 97 W. edge Rib. dr.

0 + 83 E. edge Con. Rib. drive

W.L. Rosecrans = 0 + 00

Top cb. end 5.56 12.58 7.02

SW EMERSON
 + ROSECRANS
 P. 9

Lr

Pt.

24

11.69	11.52
3.33	3.50
43.5	60
900	40

15.02

7.64

4.94

85

dr.

9.15	8.67	8.39
3.43	3.91	4.19
105.5	87.5	60
900	dr.	dr.

6.72

7.02

5.86

5.56

41

60

Rib

900

6.90

7.02

5.70

5.56

41

60

Rib

900

12.58

1 + 56.5 £ 7.5 Can. do.

1 + 54 £ 7.5 Can. do.

T.P. 4.09 20.27 2.46 16.181 + 09.6 £ do. can. do. 7' overall
2' ribbons

1 + 06 £ 11 Can. do. drive No garage

0 + 57.5 £ 8' Can. do.

T.P. 4.99 18.6x 6.37 13.65

0 + 00 = WLY LOCUST ST

2 + 48 £ 14' Can. do.

15.02

<u>15.81</u>
4.46
9.47
dr.
✓ 900.

<u>16.66</u>	<u>17.80</u>
3.61	2.47
8.5	106.5
dr.	900.

20.27

<u>15.13</u>	<u>14.89</u>
3.51	3.75
60	37
900.	rib. do.

15.03

<u>3.61</u>
8.5
dr.

<u>15.03</u>	<u>14.75</u>
3.61	3.89
79.0	76.6
900.	dr.

18.6x

<u>9.46</u>	<u>9.65</u>
5.50	5.07
8.5	112
dr.	900.

15.02

1+10 W. edge Con. dr.

1+03 E. edge Con. dr.

0+95 W. edge Con. dr.

0+79 E. edge Con. dr.

Spike B.M. 11.74 31.68 19.94WLy Evergreen = 0+00T.P. on B.M.
Spike, P.P.
S.E. Emerson
Evergreen2.03 19.95 19.94
0.01

2+10 E 7' Con. dr.

2+06.5 E 8.7 Con. dr.

T.P. 5.23 21.98 3.52 16.75
20.2731.68
3.70
27.98 = 27.99.
0.01

P. 20

16.50 16.43
5.48 5.55
10.5 10.2
900. dr.21.98

28.75 R+ 29.89 26

2.93 1.79
47 117 gar.
dr.28.66 29.89
30.2 139
47 117
dr. gar.26.75
4.75
44.7
dr. + gar.26.72
4.96
44.7
dr. + gar.31.6818.12 18.40
3.86 3.58
5.8 61.5
dr. gar.

Indexed
C.S.K.

Levels on Locust St. =

70' wide
18' cbs
8.5' h/s

C.S. = Dickens to Fenelon

5-18-40.

1 # 372 E 8' Con. H.P. on

1 # 244 S. edge Con. H.P. on

1 # 00

0 # 25

0 # 00 = Wly Dickens = edge Pix.

T.P. 3.65 17.29 6.99 13.64

S.E. Spike on P.P. 0.69 20.63

19.94
EMERSON
Evergreen

LT = Wly

E

RT

27

2.45 3.08 3.19
4.23 35 30
900
76.

4.54 4.58 4.45
25.4 35 45.7
900.76

13.41

3.88 4.2 3.9 4.0 4.3 4.5 4.53
Top end 97 8 8 97 Top end
Ex. C6

2.26 3.2 3.4 3.3 3.4 3.6 2.82
Top 17 97 8.5 8.5 97 Top 17
C6

1.80 2.29 2.28 2.39 2.59 2.85 2.43
25 25 12.5 12.5 25 25
06 97 97 06

17.29

Contd. P. 30

0 + 39.5

0 + 25

0 + 20

0 + 12

0 + 00 = Nly EMERSON ST.

1 + 74.5 = 25.5 S of S. L. EMERSON

3.63
35
Brick Walk

1 + 38.2 N. edge CON. APPROX

17.29

Lt

Q

Pt

28

40.5
37.8
Corr. Con.
Walk

42	5.2	5.2	5.5	5.8	6.0	6.5
35	17	8		8	17	35

5.97
3x.C
Cor. Walk

5.8x
39.1

3.95
37.8
Cor. Con.
Walk

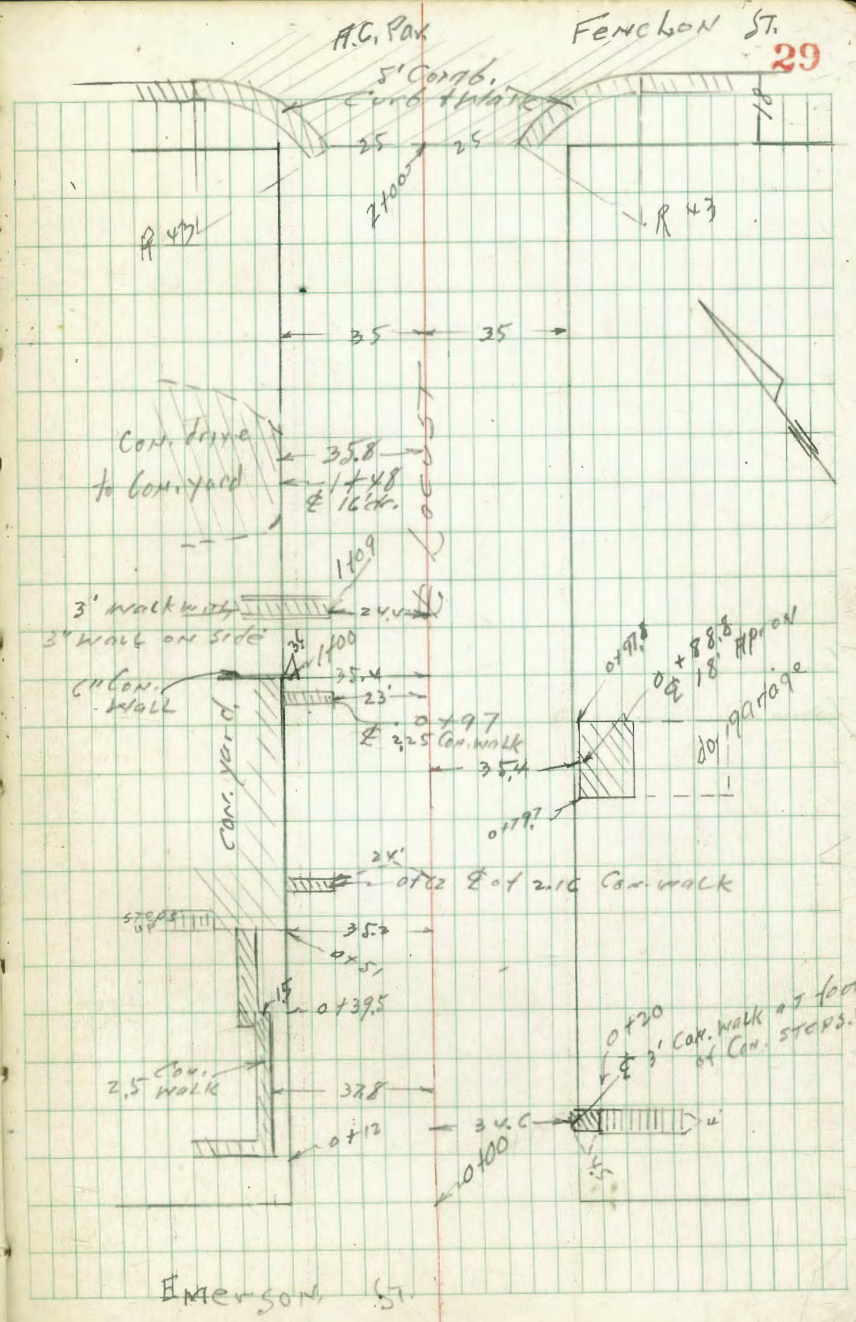
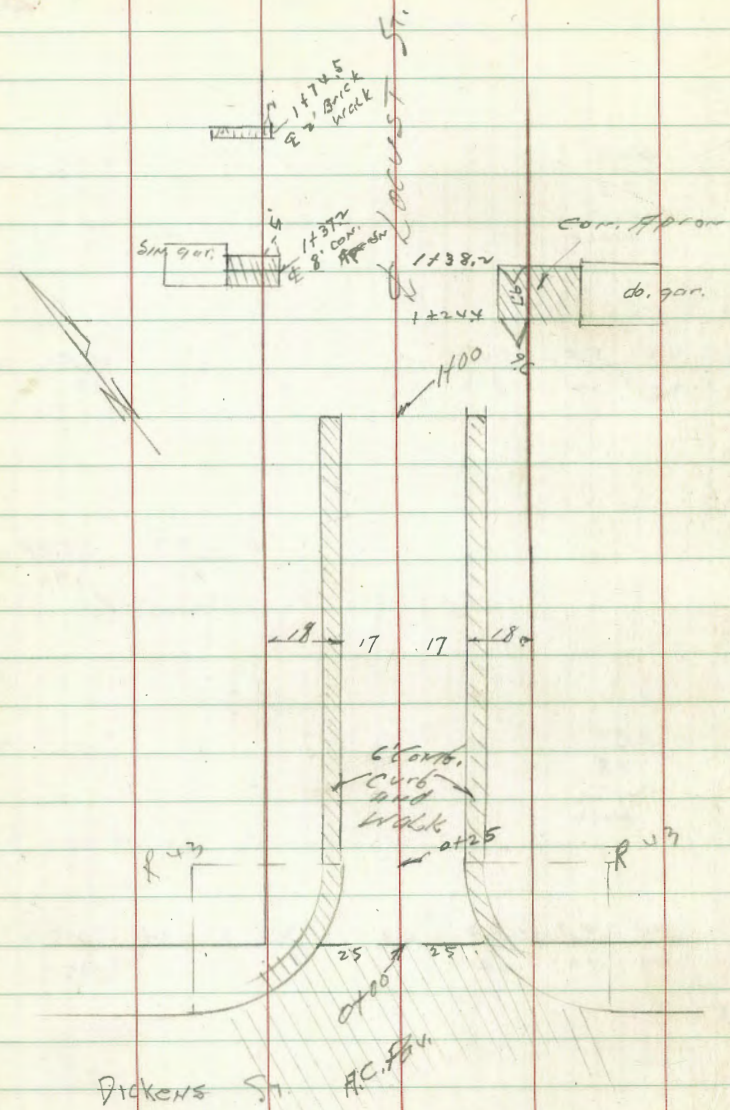
3.76	4.1	4.9	4.9	4.9	5.3	5.6	4.2	4.6
33	17	16	8		8	14	17	35

Brick Walk

3.08	3.8	4.6	4.2	4.4	4.6	4.8	4.0	4.55	4.50	4.41
35	17	97	8		8	12	14	25.3	35	45.3

Corr. APPROX

17.29



L+00

T.P. 5.18 16.79 5.48 11.51

0 + 97.8 N edge Con. apron

0 + 97

0 + 79.7 = S edge Con apron

0 + 62

0 + 51

17.29

LT

R

R

30

3.89	2.47	5.0	5.1	5.3	5.6	5.7	4.7
35.4	31.4	17	8		8	17	35
3rd Con.	TOP						
WALK	WALK						

16.79

6.33	6.28
35.4	44.2
Con.	apron
	900 ft.

4.95

35.4	23
Con.	WALK
WALK	

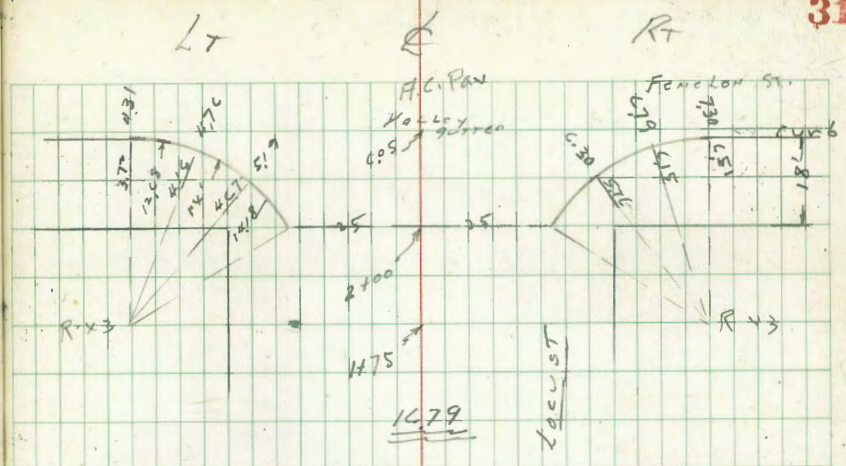
6.36	6.27
35.4	44.2
Con.	apron
	900 ft.

4.38	4.86	5.5	5.6	5.8	6.0	6.3	6.7
35.4	24	17	8		8	17	35
Con.	Con.						
WALK	WALK						

4.28
35.4
Con. Con.
WALK

17.29

check to SW BP	Evergreen	1.58	25.11	25.11	0.00
Z.P.	Fenelon	11.58	24.69	14.8	15.11
			16.72		



2 ± 00 S.W. Fenelon St. edge Pan.

4.81	5.33	5.45	5.59	5.83	6.11	5.07
25	25	1.5		12.9	25	25
Top	06	95			97	Top 06.

1 x 75

3.6	4.7	4.8	x.8	5.0	4.6	5.5
35	17	8		8	17	35

1 x 8 & 16' Con. drive

3.08	3.38	4.46	5.0	4.9	5.7	5.3	5.5
57.8	45.8	35.8	17		8	17	35
do.	co	appt.					
Top							

1 x 09 & 3' Con walk

4.46	4.70
35	24.4
ON CON WALK	

16.72

16.79

Walter
Hendricks
Hunley
Corey
6-24-46

CROSS SECTION - GEORGIA ST.

80' wide
20' curbs 16' 1/4"

From Myrtle St. South.

8M
NW 8P
Myrtle
1/2 Indian

	3.65	297.70		294.05
TP	2.59	292.98	7.31	290.39
	0-25			

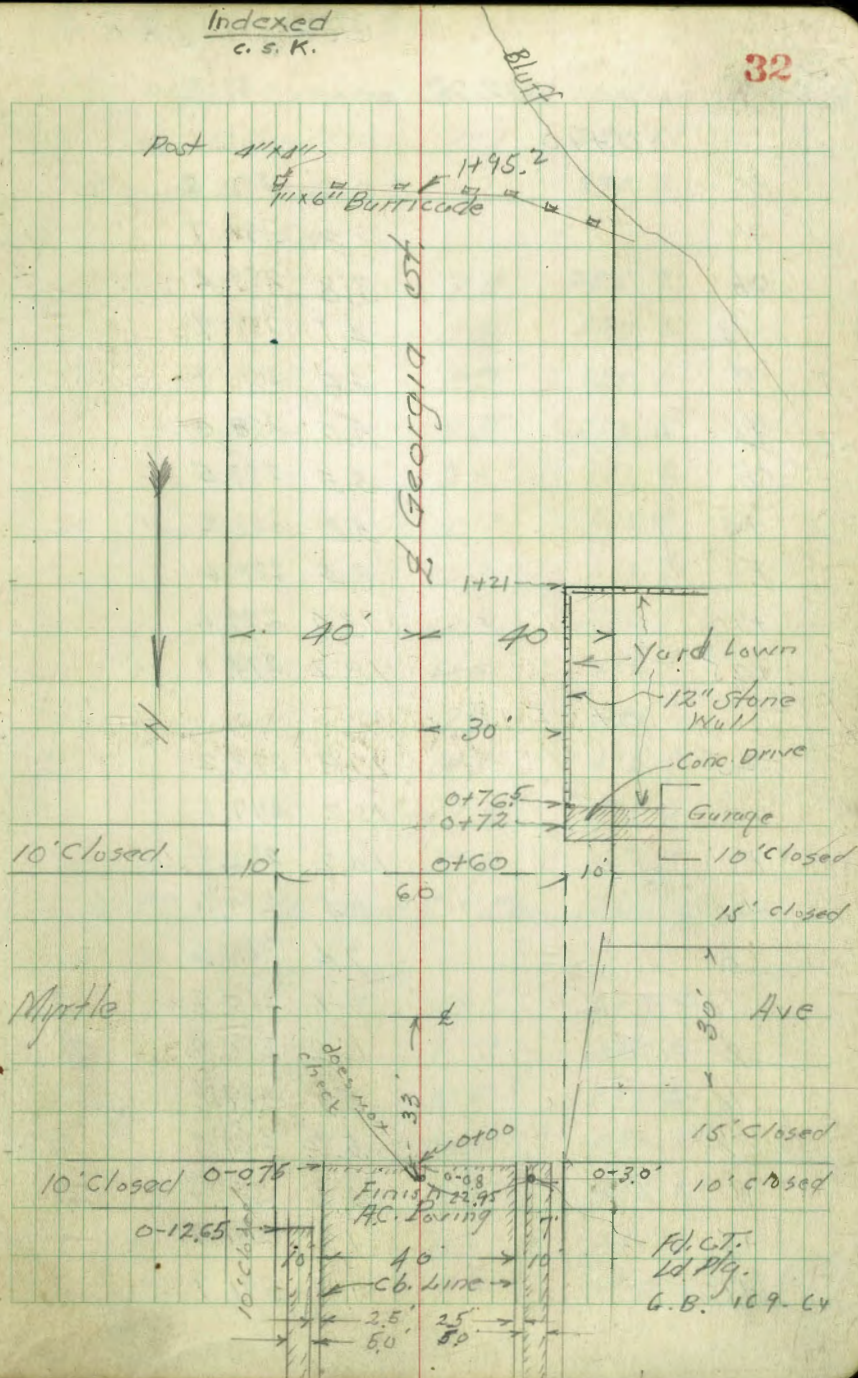
W		2.7		290.3
cb.		2.92		290.06
Gut. on Paving		3.58		289.40
1/4	"	3.47		289.51
1/2	"	3.50		289.48
1/4	"	3.96		289.03
Gut. "		4.74		288.25
Top cb.		4.14		289.85
F		3.9		289.1

Sections - This Intersection 60'
0-0.8 = South edge Paving 16' cbs 16' 1/4"

E on Ground		7.3		285.7
" " Wall		3.87		289.11
cb = 0-75		3.93		289.05
Gut. on Pav.		4.50		288.48
1/4	"	3.82		289.16
1/2	"	3.39		289.59
1/4	"	3.21		289.77
Gut.		3.32		289.66
+2.5 on Walk		2.61		290.37
+7.5		2.47		290.51
W		1.9		291.1
+10		+0.7		292.8

Indexed
c.s.K.

32



Georgia St

292.98

0+10

W-10	+0.2	292.8
W	1.3	291.7
cb.	3.8	289.2
1/4	4.1	288.9
1/4	4.6	288.4
1/4	5.0	288.0
cb.	5.5	287.5
+4	5.8	287.2
E	8.4	284.6
+10	13.4	279.6
+25	18.2	274.8

0+25

-25	19.8	273.2
-10	15.2	277.8
E	10.2	282.8
+4	8.4	284.6
cb.	7.4	285.6
1/4	7.1	285.9
1/4	6.6	286.4
1/4	5.9	287.1
cb.	5.2	287.8
W	2.2	290.8
+5	1.3	291.7
+10	1.1	291.9

292.98

33

0+30.2 = N. edge Conc. Ret Wall on W 2' Buck
or 12" Null

111	291.87	
Ground at Wall	2.7	290.3

0+50

-10	7.3	285.7
W	7.8	285.2
+2	7.9	285.1
+5	9.5	283.5
cb.	9.8	283.2
1/4	10.1	282.9
1/4	10.8	282.2
1/4	10.9	282.1
cb.	14.6	281.4
+4	11.9	281.1
E	14.7	278.3
+9	17.5	275.5
+25	19.3	273.7

0+52.5 35' W of E = Elec. Pole (H.K. Lamp)

0+56

-25	19.6	273.4
-7	17.7	275.3
E	19.8	278.2
cb.	17.2	280.8
1/4	14.9	281.1
1/4	14.8	281.2
1/4	14.2	278.8
		281.8

222.98

Georgia St.

cb.	11.0	282.0
+3	10.9	282.1
W	8.8	284.2
+10	8.3	284.7
T.P.	1.42	281.47

-12.93

280.05 ✓

0+59		
-25	1.8	279.7
W	0.5	281.0
cb.	0.1	281.4
'14	0.4	281.1
♀	0.9	280.6
'14	1.1	280.4
cb.	1.2	280.3
E	4.2	277.3
+7	6.3	275.2
+25	8.2	273.3

0+72 = ♀ Conc. Drive on W. 10' east
8' wide

0+70 20' cbs
10' '14 from Here - South

-20'	2.5	272.0
E	7.7	273.8
+10	6.7	274.8
cb.	4.1	277.4
'14	3.6	277.9
♀	3.0	278.5

281.47

34

'11	2.2	279.3
cb	1.9	279.6
+10 on Drive	2.56	278.91
+20	2.51	278.96
0+76.5 = beg. 12" Stone Wall on W 10' st		
on wall	1.87	279.60
Base "	2.4	279.1
+100		
-5 in yard	2.8	278.7
W " "	2.8	278.7
+10	2.9	278.6
" on Wall	2.38	279.09
+14	5.0	276.5
+20 = cb	5.6	275.9
'14	5.9	275.6
♀	6.6	274.9
'14	7.0	274.5
cb	7.6	273.9
E	8.9	272.6
+10	9.9	271.6
+18	12.4	269.1
+20	14.5	267.0
1421.3 = End Above 12" Stone Wall 9' in st		
on Wall	3.06	278.41

28147

Georgia St.

1+25

-25	16.0	265.5
-15	12.3	269.2
E	10.6	270.9
cb.	9.2	272.3
1/4	8.7	272.8
2	8.4	273.1
1/4	8.1	273.4
cb.	8.2	273.3
W	8.5	273.0
+10	8.7	272.8

1+50

-10	10.8	270.7
W	10.3	271.2
cb.	9.9	271.6
1/4	10.0	271.5
2	9.9	271.6
1/4	10.1	271.4
cb.	10.3	271.2
E	10.9	270.6
+6	12.0	269.5
+25	17.5	264.0

1+75

T.P.	2.59	271.64	1242	269.05
T.P.	3.23	272.28	259	269.05 on Rock

Note: Section 1490 P-56

272,28

35

1+75

-25	9.3	263.0
E	8.3	269.0
cb.	2.2	270.1
1/4	2.1	270.2
2	1.8	270.5
1/4	1.5	270.8
cb.	1.5	270.8
W	1.9	270.4
+10	3.1	269.2

2+00

W	10	Curly	22.0	250.3
77	10	Bluff	6.5	265.8
78	10	Bluff		
cb.			4.9	267.4
1/4			4.0	268.3
2			3.6	268.7
1/4			3.7	268.6
cb.			4.0	268.3
E			4.7	267.6
+25			10.4	261.9

2+25

-25	12.0	260.3
E	7.7	264.6
cb.	7.4	264.9
1/4	6.9	265.4
+6	6.7	265.6

27228

Georgia St.

2	74	269.9	
1/4	86	263.7	
cb.	11.8	260.5	
+2 on Bluff.	13.5	258.8	
+3 in Canyon	28.5	248.8	
T.P. 12.96	284.63	0.61	271.67
T.P. 12.78	295.82	1.59	283.04
chk starting B.M.	178	294.04	

Walker Party

7-3-46 Additional Sections - Georgia St.

B.M.
on Rocks
P. 35

1.28	270.33	262.05	
chk. Ground 2700	1.6	268.7	
	2709		
-25'	2.0	261.3	
E-3'	4.2	264.5	266.1
E	3.8	264.9	266.5
cb.	3.0	265.7	267.3
1/4	2.5	266.2	267.8
2	2.6	266.1	267.7
1/4	3.6	265.1	266.7
cb	5.0	263.7	265.3
+10 on Bluff	6.1	262.6	264.2
+11 in Canyon	22.1	246.6	248.2
	2719		
W+13 in Canyon	22.1	246.6	248.2
+14 on Bluff	9.1	259.6	261.2

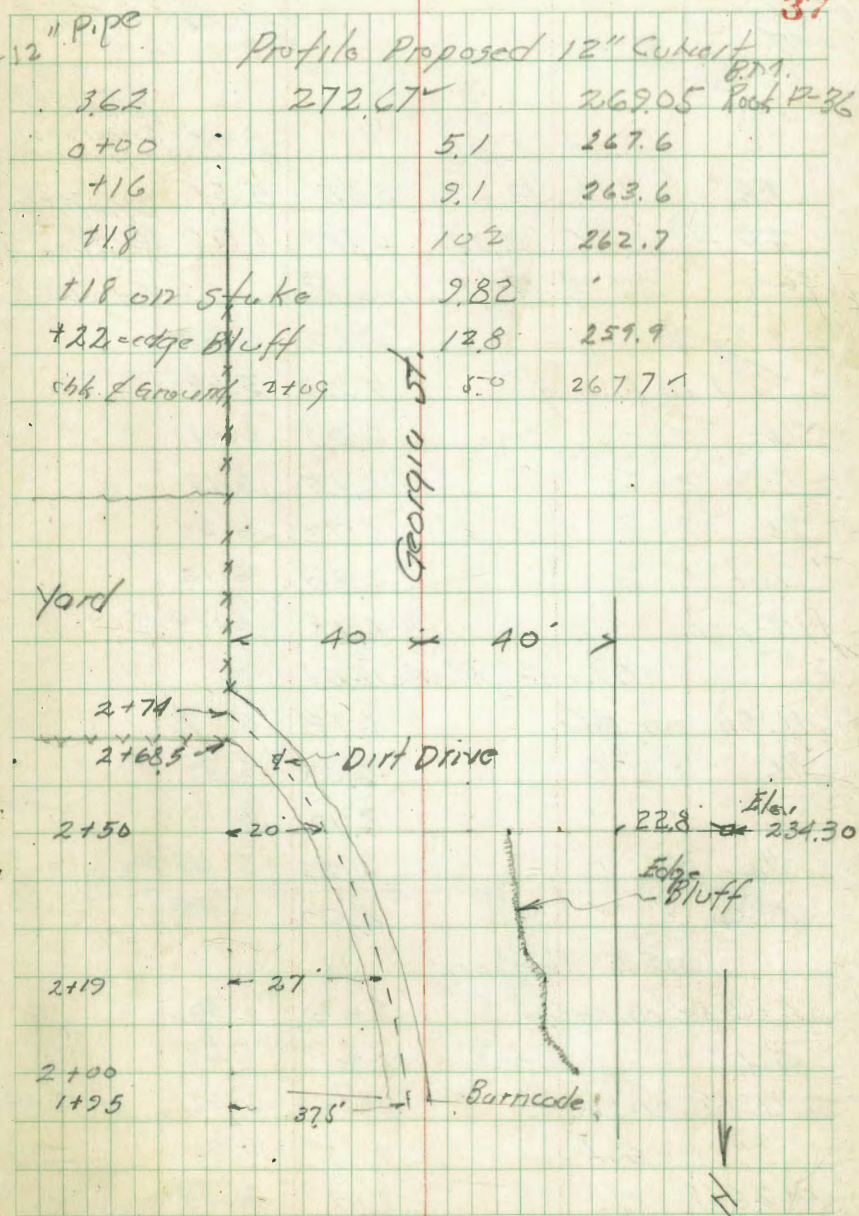
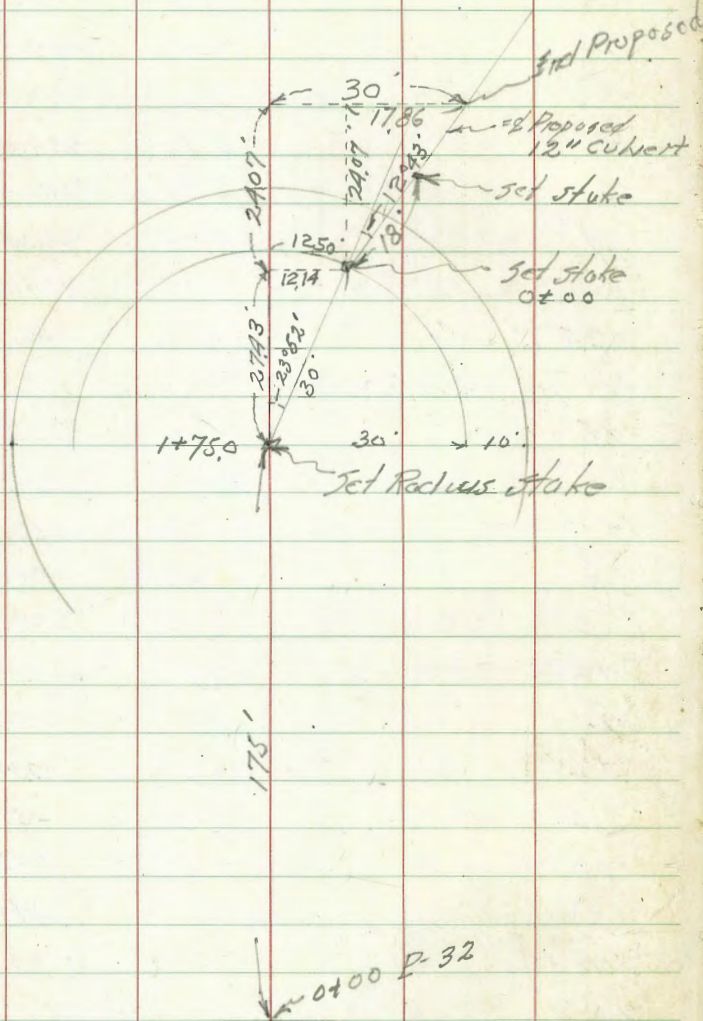
2+19

27033

36

Wcb	7.2	261.5	263.1
W 1/4	5.8	263.2	264.8
2	4.4	264.3	265.9
+2	3.9	264.8	266.4
1/4	4.1	264.6	266.2
cb	4.3	264.4	266.0
1/4'	5.0	263.7	265.3
E	4.7	264.0	265.6
+25	9.9	258.8	260.4
	2750		
-25	13.0	255.7	257.3
E	10.6	258.1	259.7
+10	4.0	257.7	259.3
cb.	10.4	258.3	259.9
1/4	10.1	258.6	260.2
+6	13.9	254.8	256.4
2	14.5	254.2	255.8
+2	14.9	254.8	255.4
1/4	17.3	251.4	253.0
+8 = Bluff.	19.6	249.1	250.7
+9 = Canyon 10' East of E 2750 on Axis Transit	27.6	241.1	242.7
	6.41	263.92	42 Transit Stake Elev.
VA Slope Horiz. Diff Elev			
-19°10' Rod	441 77.09	72.8	25.21 +41 Rod 234.30 -296.2
Above Stake	22.8' west of W Line	at sta. 2750	

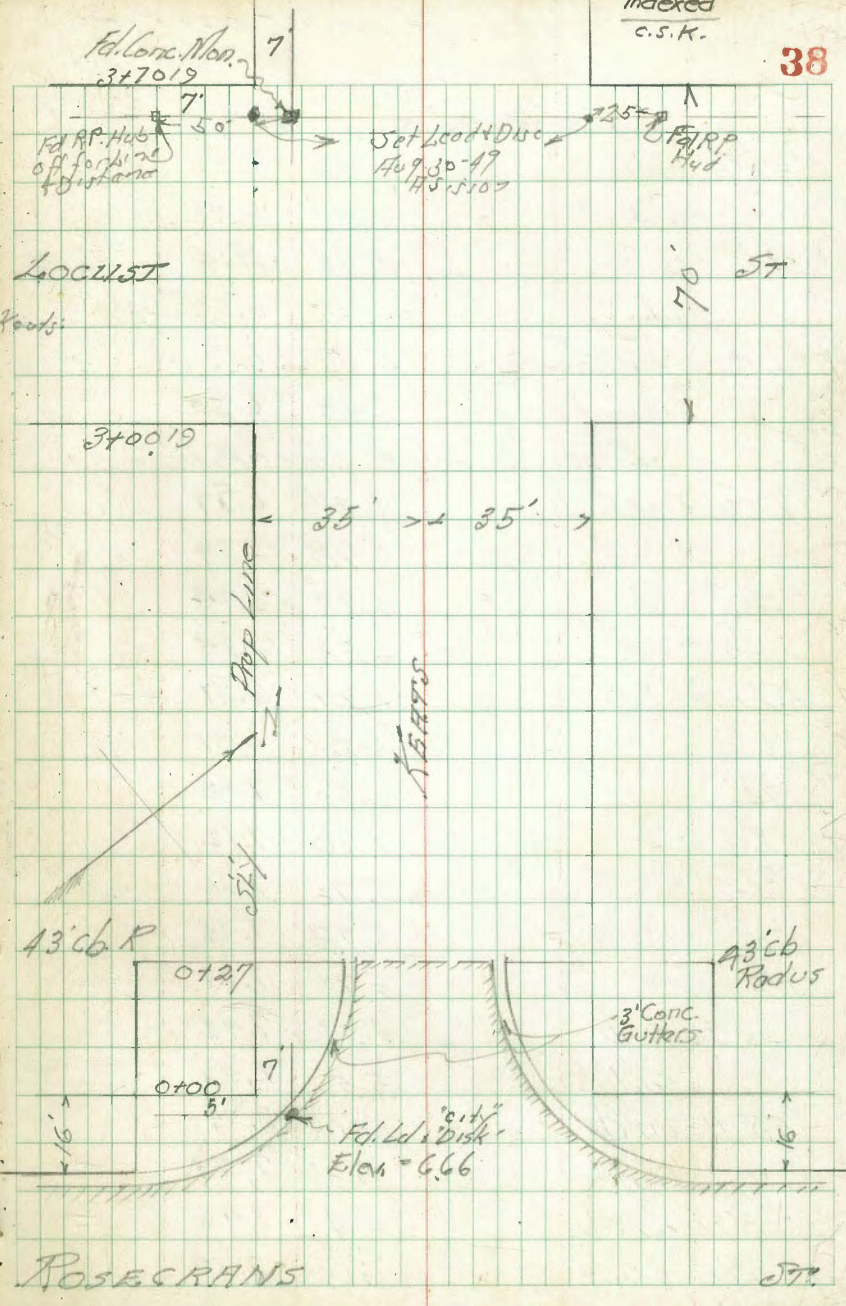
Georgia St.
Cont. from P. 36



Walker
Hendricks
Hunt
Carey
7.3.46

CROSS SECTION - HEATS ST.
70' Wide
18" cbs. 8.5' / 45'

	6.11	8.86	2.75		R.M. SWBP Rosecrans & Garrison
T.P.	7.12	12.63	3.35	5.51	Left Dist N.W. 1/4 Cor. Rosecrans & Heats
T.P.	6.26	12.92	5.97	6.66	
27' E. E.L.V. Little Rosecrans - End cb. Returns					
S. Top cb.		6.62		6.30	
" Gut. on Paring.		7.23		5.69	
1/4 " "		6.21		6.01	
1/2 " "		6.75		6.17	
1/4 " "		6.72		6.20	
Gut " "		6.80		6.12	
N Top cb.		6.18		6.79	
E Line Rosecrans					
N cb on Par.		6.13		6.79	
1/4 " "		6.08		6.84	
1/2 " "		6.12		6.80	
1/4 " "		6.24		6.68	
S cb " "		6.50		6.42	
S E Return					
B.C. cb Ret. on Keats.		6.62		6.30	
Gut		7.23		5.69	
+12.68 on cb.		6.40		6.52	
" " Gut		7.02		5.90	
+26.68 " cb.		6.08		6.84	
" " Gut		6.72		6.20	



Keats St. Cont. from P. 38

12.92

SE Return Cont. from P. 38

+40.86 on cb.	5.89	7.33
" " Gut.	6.51	6.91
+54.86 " cb	5.78	7.14
" " Gut. on cb.	6.40	6.52
+67.54 = E.C. on Rosecrans	5.79	7.13
" on Gut.	6.42	6.50

East cb line Rosecrans

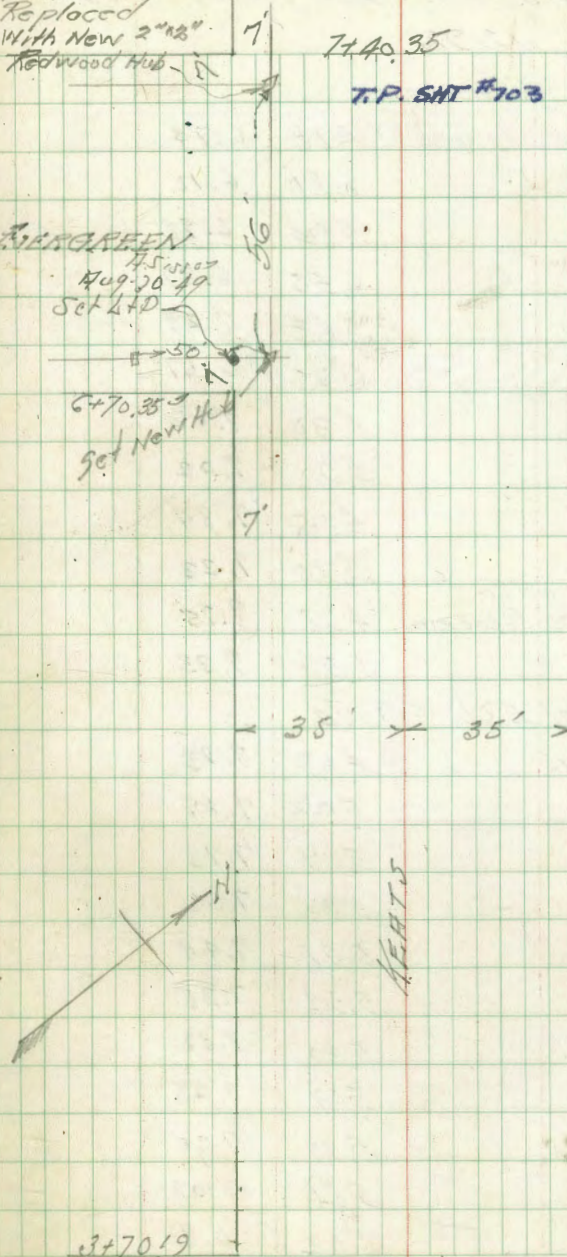
-100' on cb	6.33	6.59
" " Gut.	6.93	5.99
-50' " cb	5.98	6.94
" " Gut.	6.58	6.34
Shine Post	6.21	6.71
cb. "	6.01	6.91
1/4 "	5.90	7.02
2 "	5.80	7.12
1/4 "	5.76	7.16
cb "	5.73	7.19
NL "	5.71	7.21
cb E.C. cb	4.97	7.95
Gut	5.59	7.33
50' N on cb	4.78	8.14
" " Gut	5.38	7.54
100' N on cb	4.46	8.46
" " " Gut.	5.05	7.87

old
Fol. Hub
Replaced
With New 2" x 2"
Redwood Hub

EVERGREEN

4.5.1907
409.20-29
Set 2 x D

6+70.35
Set New Hub



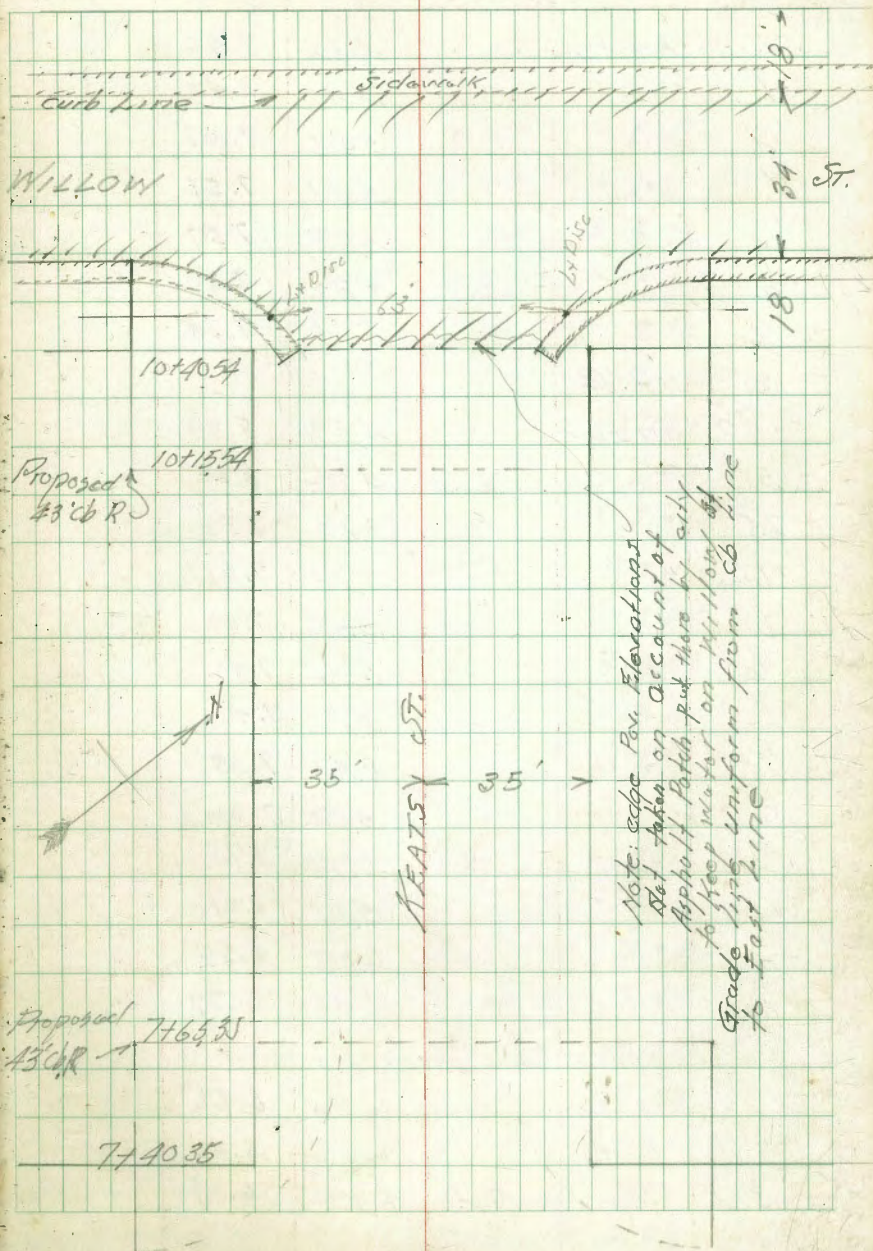
Also, cb. Returns
FB 1649

Keats St. Cont. from P. 39

12.92

N.E. Return

BC. Cb Pat. on Keats curb	6.18	6.74
" " Gut	6.80	6.12
+12.68 on Cb	5.94	6.98
" " Gut	6.55	6.37
+26.68 " Cb	5.63	7.29
" " Gut	6.25	6.67
+40.68 on Cb	5.30	7.62
" " Gut	5.90	7.02
+54.86 " Cb	5.08	7.84
" " Gut	5.70	7.22
+67.54 = Cb EG. on Rosecrans	4.97	7.95
" " on Gut	5.59	7.33
17' W of E Cb. " E 1/4		
-100' on Pav.	4.63	8.23
-50' " "	5.03	7.89
-25' " "	5.19	7.73
N.L. " "	5.36	7.56
Cb " "	5.48	7.44
1/4 " "	5.54	7.38
2 " "	5.60	7.32
1/2 " "	5.67	7.25
Cb " "	5.72	7.20
St. " "	5.84	7.08
+25 " "	6.02	6.90
+50 " "	6.20	6.72
+100 " "	6.53	6.39



	12.92	Keats St.
E. Rosecrans		
Shine on Pav.	5.66	7.26
cb " " "	5.52	7.40
1/4 " " "	5.45	7.47
2 " " "	5.41	7.51
1/4 " " "	5.35	7.57
cb " " "	5.30	7.62
N.L. " " "	5.18	7.74
N 1/4		
-100' on Pav.	4.59	8.33
-50' " " "	4.92	8.00
-25' " " "	5.10	7.82
N.L. " " "	5.24	7.68
cb " " "	5.40	7.52
1/4 " " "	5.46	7.46
2 " " "	5.52	7.40
1/4 " " "	5.57	7.35
cb " " "	5.62	7.30
SL " " "	5.74	7.18
+25' " " "	5.91	7.01
+50' " " "	6.08	6.84
+100' " " "	6.43	6.39
West cb. Rosecrans		
-100' on cb.	6.30	6.62
" " " Gcut.	6.90	6.02
3' E + Edge Conc. Gcut.	6.83	6.09

	12.92	Keats St.
W. cb. Rosecrans Cont. from Opp. Page 41		
-50' on cb	6.01	6.91
" " " Gcut	6.61	6.31
3' E on "	6.51	6.41
SL " Pav.	6.11	6.81
cb " " "	5.96	6.96
1/4 " " "	5.87	7.05
1/2 " " "	5.81	7.11
1/4 " " "	5.75	7.17
cb " " "	5.71	7.21
N.L. " " "	5.58	7.34
+50' on cb.	4.84	8.04
" " " Gcut	5.44	7.48
3' E " " "	5.37	7.55
+100' " cb.	4.51	8.41
" " " Gcut.	5.11	7.81
3' E " " "	5.03	7.89
N.W. Ret. on cb.		
B.C. on Rosecrans	4.98	7.94
" " " Gcut	5.60	7.32
3' E	5.44	7.48
B.C.	5.03	7.89
+12.68 on cb.	5.03	7.89
" " " Gcut	5.66	7.26
3' Lt. on "	5.60	7.32
+26.68 on cb.	5.13	7.79
" " " Gcut	5.76	7.16
3' Lt. " " "	5.68	7.24

12.92

Keats SA

NW Ret. Cont. from P. 41

+40.86 on cb	5.23	7.69
" " Gut	5.87	7.05
3' L "	5.84	7.08
+54.86 on cb	5.17	7.75
" " Gut	5.80	7.12
on cb. 3' L	5.78	7.14
+67.54 cb EC on Keats	5.12	7.80
" on Gut	5.76	7.16
3' L	5.69	7.23

SW Ret.

BC. on Rosecrans on cb	5.77	7.15
" Gut	6.44	6.48
3' R	6.34	6.58
+126.8 on cb	5.76	7.16
" " Gut	6.39	6.53
3' R "	6.29	6.63
+26.68 on cb	5.79	7.13
Gut.	6.46	6.52
3' R	6.22	6.70
+40.68 on cb	5.75	7.17
" " Gut	6.34	6.58
3' R "	6.17	6.75
+54.86 on cb.	5.71	7.21
Gut	6.34	6.58
3' R "	6.12	6.80

12.92

SW Ret. Cont.

42

cb EC cb	5.62	7.30
Gut.	6.23	6.69
3' R	6.12	6.80
OT100 = NW Line Rosecrans		
E	5.0	7.92
cb. on Pav.	5.78	7.14
1/4 " "	5.87	7.05
2 " "	5.95	6.97
1/4 " "	5.99	6.93
cb. " "	6.07	6.85
Line	5.6	7.3
OT27		
-5	5.1	7.8
SL	4.9	8.0
cb.	5.62	7.30
Gut. on Pav	6.23	6.69
1/4 " "	5.94	6.98
2 " "	5.81	7.11
1/4 " "	5.74	7.18
Gut.	5.76	7.16
cb.	5.12	7.80
N	4.5	8.4
+5	4.4	8.5
OT50		
-5	4.0	8.9
N	4.0	8.9

12.22

Keats St

cb.		4.2	8.7
+4		4.0	8.9
+5		4.5	8.4
'14		4.3	8.6
⊘		4.2	8.7
'14		4.4	8.5
+3		4.7	8.2
cb.		4.4	8.5
SL.		4.8	8.1
+5		5.0	7.9
	1700		
-5		3.5	9.4
SL.		3.5	9.4
+11 = Power Pole			
cb.		3.5	9.4
+3'		3.1	9.8
'14		3.1	9.8
⊘		2.9	10.0
'14		2.9	10.0
+3		3.0	9.9
+4		2.7	10.2
⊘		3.6	9.3
N.L.		3.1	9.8
+5		2.8	10.1
T.P.	802 18.60 ✓	2.34	10.58 ✓
	1750		
-5'		7.2	11.4
ix		7.4	11.2

1750

18.60

ncb.		8.1	10.5
+4		7.9	10.7
+5		8.2	10.4
'14		8.1	10.5
⊘		8.1	10.5
'14		8.3	10.3
cb.		8.3	10.3
SL.		8.5	10.1
+5		8.6	10.0
	1781 = 3' Conc. Walk on South Line		
Skine on Walk		8.20	10.4
10'5 " "		8.20	10.4
	1790.5 = 8' Conc. Drive on South on Line		
Skine on Drive		8.35	10.25
+15' " " at Garage		8.20	10.40
	2100		
5		8.27	10.4
5		8.2	10.4
cb.		8.0	10.6
'14		7.8	10.8
⊘		7.7	10.9
'14		7.7	10.9
+2		7.7	10.9
+3		7.1	11.5
cb.		7.5	11.1
N		7.0	11.6
+5		7.0	11.6

43

18.60

Keats St.

2+50 = E Power Pole on South 10.5' in st

-5	6.5	12.1
N	6.5	12.1
cb.	7.0	11.6
+6	6.8	11.8
1/4	7.2	11.4
2	7.3	11.3
1/4	7.3	11.3
cb.	7.6	11.0
S.L.	7.7	10.9
+5	7.8	10.8

2+75.19 = BC. Proposed 43' Radius

-5	7.0	11.6
S.L.	7.1	11.5
cb.	7.1	11.5
1/4	7.0	11.6
2	6.9	11.7
1/4	7.0	11.6
+1	6.5	12.1
cb.	6.6	12.0
N	6.2	12.4
+5	6.2	12.4

3+00.19 = E Line Locust St

-5	5.7	12.9
N	5.9	12.7
cb.	6.1	12.5
+6	5.9	12.7
1/4	6.6	12.0

3+00.19

18.60

44

2	6.5	12.1
1/4	6.6	12.0
+6	6.9	11.7
cb.	6.6	12.0
S.L.	6.9	11.7
+5	6.9	11.7

3+18.19 = E cb Locust

-5	6.4	12.2
5	6.3	12.5
cb.	6.2	12.4
+2	6.6	12.0
1/4	6.2	12.4
2	6.0	12.6
1/4	6.0	12.6
+1	5.7	12.9
cb.	5.7	12.9
N	5.4	13.2
+5	5.4	13.2
+200' on cb Ret. at base of 2.94	15.66	15.66
S.E. Ret on cb	1.99	16.61

3+26.69

-5	5.3	13.3
N	5.4	13.2
cb.	5.6	13.0
1/4	5.8	12.8
2	5.8	12.8
1/4	6.0	12.6

S.E. Ret.
Lorrell

3+2669 18.60

Keats St.

1/4+6	6.5	12.1
cb.	6.2	12.4
S	6.4	12.2
+5	6.6	12.0

3+3519

-5	6.7	11.9
S	6.6	12.0

cb.	6.3	12.3
1/4	5.9	12.7

2 on Pitt Street NH	5.46	12.14
---------------------	------	-------

1/4	5.5	13.1
cb.	5.6	13.0
N	5.4	13.2
+5	5.4	13.2

3+4369

-5	5.3	13.3
----	-----	------

N	5.2	13.4
---	-----	------

cb.	5.4	13.2
-----	-----	------

1/4	5.2	13.4
-----	-----	------

2	5.4	13.2
---	-----	------

1/4	5.8	12.8
-----	-----	------

cb.	6.1	12.5
-----	-----	------

S	6.5	12.1
---	-----	------

+5	6.8	11.8
----	-----	------

3+5219

-5	6.6	12.0
----	-----	------

S	6.4	12.2
---	-----	------

18.60

Keats St.

45

5cb	6.0	12.6
1/4	5.7	12.9
2	5.4	13.2
1/4	5.1	13.5
cb.	5.2	13.4
N	4.9	13.7
+5	4.8	13.8

3+7019 = 1412 line locust

-5	3.3	15.3
N	3.4	15.2
+10	4.7	13.9
cb.	4.8	13.8
+7	4.5	14.1
1/4	4.9	13.7
2	5.2	13.4
cb.	5.5	13.1
3	5.6	13.0
S	6.1	12.5
+5	6.2	12.4

3164 Power Pole on South 4.5' in st.

3+85 = 3' Conc. on South, on line		
S. line on Walk	6.02	12.58
+10' " "	6.11	12.49

4+12 = 7' Conc. Drive

S. line on Drive	5.46	13.16
+25' " " at Garage	6.10	

	1860	Keats St.	
4+00			
-5		5.7	12.9
S		5.7	12.9
+13		5.1	13.5
cb.		5.4	13.2
1/2		5.1	13.5
2		4.8	13.8
1/4		4.6	13.8
+1		4.2	14.4
cb.		4.3	14.3
+15		3.8	14.8
N on Linn		3.1	15.5
+5 " "		2.9	15.7
4+25			
S Line on 2' Conc. Ribbon	5.42	13.18	
+25 " DRIVE	5.90	12.70	
4+30			
S Line on 2' Conc. "	5.41	13.19	
+25 " DRIVE	5.84	12.76	
4+50			
-5		2.3	16.3
N		2.3	16.3
cb.		3.2	15.4
1/4		3.3	15.3
+2		3.8	14.8
2		3.9	14.7
1/4		4.2	14.4
cb.		4.5	14.1
+0		4.1	14.5

	1860	46	
+7		4.6	14.0
S Linn		4.9	13.7
+5 " "		5.0	13.6
4+54 = 2' 3' Conc. Walk on S			
S Line on Walk	4.70	13.90	
+10 " "	4.76	13.84	
T.P. 10.92 25.40	4.12	14.48	
4+85.7 = 2' 3' Conc. Walk on South			
S Line on Walk	10.49	14.91	
+10 " "	10.68	14.82	
5+00			
-5 on Linn	10.3	15.1	
S " "	10.2	15.2	
+15	9.9	15.5	
cb.	10.2	15.2	
1/4	9.7	15.7	
2	9.5	15.9	
+6	9.5	15.9	
1/4	9.1	16.3	
cb.	8.6	16.8	
N on Linn	7.9	17.5	
+5 " "	7.7	17.7	
4+186.8 = 2' 3' Conc. Walk on N			
N on Walk	8.26	17.14	
+10 " "	7.78	17.62	
5+12.5 = 2' 9.5' Conc. Drive on N. Linn			
N Line on Drive	7.77	17.63	
+28.5 " " at Gorge	6.50	18.90	

2540

Keats CT

5+18 = 2 Parcel Pole on S	10.3	17.8
5+11 = 2 Conc. Ribbon on South		
SL on Drive	9.77	15.63
+15 " " "	10.22	15.18
5+16 = 2 " "		
SL + 2.5 S.S. Line on Ribbon	9.77	15.63
+ 15 " " "	10.21	15.19
5+25 = 2 2' Ribbon on South		
SL + 2 on Ribbon	9.46	15.94
+15	9.66	15.74
5+30		
SL on Ribbon	9.31	16.09
+15 " " "	9.57	15.83
5+54.5 = 2 ^{3'} Conc. Walk on S		
SL + 0.3 on Walk	8.28	17.12
" + 10' " "	8.41	16.99
5+50		
-5	6.4	19.0
5 =	6.6	18.8
cb.	6.7	18.7
+7	6.8	18.6
1/4	7.1	18.3
+1	7.7	17.7
2	7.6	17.8
1/4	7.7	17.7
cb.	8.2	17.3
+3	7.7	17.7

2540

47

+7	8.3	17.1
SL.	8.4	17.0
+5 on Lawn	8.6	16.8
5+86 = 2 3' Conc. Walk on S 0.1' Back		
SL + 0.1' on Walk	7.18	18.22
+10	7.57	17.83
6+100		
-5 on Lawn	6.7	18.7
5 " "	6.6	18.8
+13 " "	6.1	19.3
cb.	6.3	19.1
1/4	5.8	19.6
2	5.6	19.8
+7	5.5	19.9
1/4	5.1	20.3
cb.	4.8	20.6
N	4.5	19.9
+5	4.5	19.9
6+11 = 2 2' Conc. Ribbon on S		
SL on Ribbon	5.86	19.54
+15 " "	6.50	18.90
6+16 = 2 2' Conc.		
SL on Ribbon	5.88	19.52
+15 " "	6.40	19.00
6+20 = 2 2' Conc. Ribbon on South		
SL on Ribbon	5.89	19.51
+35 " " = 8k	5.96	19.49
+15 " "	6.37	19.03

	6 + 25 = E Conic. Ribbon 2540		
SL	on Ribbon	5.77	19.63
+15	" "	6.31	19.09
	6755 = E 3' Conc Walk on South		
SL	on Walk	5.08	20.40
+10	" "	5.13	20.27
	6740 = E 3A' Conc Walk 4.4' in st on N		
N + 46'	on	2.86	22.59
54 NNL		2.61	22.79
	6745.35		
-5	on Lower	2.5	22.9
N	" "	2.6	22.8
cb		2.5	21.9
+5		3.4	22.0
1/4		4.2	21.2
E		4.3	21.1
1/4		4.6	20.8
cb		5.0	20.4
+2	Lower	4.8	20.6
SL	on "	5.3	20.1
+5	" "	5.4	20.0
	6770.35 = E Pine Evergreen		
-5	on Lower	4.8	20.6
5	" "	4.7	20.7
+16	" "	4.1	21.3
cb		4.4	21.0
1/4		3.8	21.6
E		3.4	22.0

	2540	Keats	48
1/4		3.2	22.2
+1		2.9	22.5
cb		2.8	22.6
N on Lower		2.3	23.1
+5 " "		2.2	23.2
	6788.35 cb		
-5		1.6	23.8
N		1.7	23.7
cb		1.8	23.6
+5		1.9	23.5
1/4		2.6	22.8
E		2.8	22.6
1/4		3.3	22.1
cb		3.6	21.8
+2		3.4	22.0
SL		3.7	21.7
+5		3.8	21.6
	6779.7 = E Power Pole 10.7 in st on South		
	6796.85 1/4		
-5		3.8	21.6
5		3.6	21.8
cb		3.2	22.2
1/4		2.9	22.5
E		3.6	22.8
1/4		2.3	23.1
cb		2.0	23.4
N		1.4	24.0
+5		1.3	24.1

2540
740535 = E Evergreen

Feats of

-5	0.8	24.6
N	0.9	24.5
cb.	1.5	23.9
1/4	1.9	23.5
L	2.2	23.2
1/4	2.5	22.9
cb.	2.9	22.5
S	3.2	22.2
+5	3.3	22.1

741385 = 1/4

S	3.0	22.4
S	2.9	22.5
cb.	2.5	22.9
1/4	2.1	23.3
L	1.8	23.6
1/4	1.7	23.7
cb.	1.4	23.9
N	1.1	24.3
+5	1.0	24.4

742235 cb

-5	0.9	25.0
N	0.7	24.7
cb.	0.9	24.5
+6	1.2	24.2
1/4	1.7	23.7

2540

R	14	24.0	49
1/4	17	23.7	
cb.	23	23.1	
+2	21	23.3	
5/4	22	23.2	
+5	24	23.0	
T.P. 10.50	34.79	11.1	24.29
chk spike in pole	12.54	22.25	SE Locust + Evergreen
		22.23	FR 1649.47
			0.02 diff.

744035 WILY line Evergreen

-5	10.6	24.2
S	10.5	24.3
+16	10.3	24.5
cb.	10.8	24.0
1/4	10.1	24.7
L	10.0	24.8
1/4	10.1	24.7
cb.	9.3	25.5
N on	8.3	26.5
+5	8.1	26.7

746535 74578 E. 3' Conc Walk

N Line on Walk	6.86	27.93
+10 " "	6.97	28.32
746535		
-5 on Lower	6.3	28.5
N " "	6.4	28.4

	3479	Keats St.	
N +12		6.5	28.3
N cb.		7.2	27.6
+7		8.5	26.3
1/4		8.5	26.3
L		8.3	26.5
1/4		8.5	26.3
cb.		8.8	26.0
+6		7.2	27.6
SL		7.3	27.5
+5		7.2	27.6
	8+00 = 0.8' East of L	7' Conc. Drive	on North
-5		5.2	29.6
S.L.		4.9	29.9
+12		4.3	30.5
+16		6.0	28.8
cb.		5.9	28.9
1/4		5.9	28.9
L		5.8	29.0
1/4		5.8	29.0
cb.		4.8	30.0
N		3.45	31.4
+1' on Drive		3.35	31.44
+18" " "		2.04	32.75
T.P.	8.10	41.99	0.90 33.89
	8+40.5 = Parcel Pole on S.	10.1	in st.
	8+61.5 = 3' Conc. Walk on South		
S. Line on Walk		2.74	32.25
+10 " "		2.89	32.10

	4199		50
	8+86 = 7' Conc. Drive on South	9.2	Back
5+02 on Walk	8.70	33.29	
+20 " "	9.31	32.68	
	8+50		
-5' on Lawn	10.2	31.8	
SL + " "	10.2	31.8	
+11	10.1	31.9	
cb.	10.5	31.5	
1/4	10.1	31.9	
L	9.8	32.2	
1/4	10.0	32.0	
+7	8.8	33.2	
cb.	8.6	33.4	
+5 Lawn	7.7	34.3	
N on "	7.0	35.0	
+5 " "	6.9	35.1	
	8+45.2 = 8' Conc. Drive		
N +0.5 Drive	7.26	34.73	
+15 on "	6.83	35.16	
	8+66 = 5' Conc. Walk on N	11' in st.	
-10' on Walk	6.13	35.86	
N " "	6.51	35.48	
+11 " End "	6.87	35.12	
	8+96 = 7' Conc. Walk on N	0.6	Back
N-0.6 on Drive	5.07	36.92	
-15 " "	4.65	37.34	

41.99

Keats St.

	9+165	3' Conc. Walk on N on Linc		
N	on Walk	4.45	37.54	
+10	" "	4.05	37.94	
	9+00			
-5	on Linc	4.8	37.2	
N		5.0	37.0	
+16		6.3	35.7	
cb.		6.6	35.4	
+8		7.5	34.5	
1/4		7.2	34.8	
1/2		7.0	35.0	
1/4		7.4	34.6	
cb.		7.8	34.2	
+3	on	7.6	34.4	
+9		7.9	34.1	
S.L.		8.1	33.9	
+0.4	on E. 7' Conc. Drive	8.05	33.95	
+15	" Drive	8.35	33.65	
	9+50			
-5		5.7	36.3	
5		5.6	36.4	
+10		5.2	36.8	
+15		4.4	37.6	
cb.		4.8	37.2	
1/4		4.0	38.0	
1/2		3.7	38.3	
1/2		4.0	38.0	

41.99

51

	11+4'		4.3	37.7
	Ncb.		3.7	38.3
	N on Linc		2.8	39.2
	+5 " "		2.6	39.4
	9+46	3' 7' Conc. Drive	0.8' Back on N	
	N+0.8	on Drive	2.78	39.21
	+15	" "	2.36	39.63
	9+67	3' 9' Conc. Walk on N		
	N+0.5		1.59	40.40
	+10		1.21	40.78
	T.R. 11.98	51.79	2.18	39.81
	9+90	Panel Pole on S	2.7	in St.
	9+55	Requaring 6" Conc. Wall on South	1' Back	
	9+55	on Wall	13.84	37.95
	"	Ground	14.9	36.9
	9+63	on Wall	12.76	39.03
	"	Ground	14.3	37.5
	9+71.5	on Wall	11.75	40.04
	"	Ground	13.3	38.5
	9+79.7	on Wall	11.11	40.68
	"	Ground	12.6	39.8
	9+89	on Wall	11.03	40.76
	"	Ground	11.6	40.2
	on South	Conc. Wall		
	9+55			
	9+63			
	9+71.5			
	9+79.7			
	9+89			

5179

Keats A.

-5		10.6	41.2
N		10.8	41.0
cb.		11.5	40.3
+2		11.8	40.0
+5		12.3	39.5
'14		12.0	39.8
8		11.7	40.1
'14		12.6	39.8
cb.		12.7	39.1
+3		12.0	39.8
5		12.3	39.5

9+90

-5 on lower		11.0	40.8
5		10.9	40.9
+17'		10.7	41.1
cb.		11.5	40.3
'14		10.8	41.0
8		10.6	41.2
'14		10.9	40.9
+2		11.0	40.8
+5		10.2	41.6
cb.		10.7	41.5
N on lower		10.2	41.6
+5		10.2	41.6

10+100

-5		8.8	43.0
----	--	-----	------

5179

N		8.7	43.1	52
cb.		8.7	43.1	
+2		9.0	42.8	
+5		10.1	41.7	
'14		10.1	41.7	
8		9.8	41.9	
'14		10.1	41.7	
8		10.7	41.1	
+2		9.9	41.9	
5 on lower		10.2	41.6	
+5 " "		10.1	41.7	
10+15.54				
-5 on lower		9.1	42.7	
8		9.1	42.7	
+16		8.9	42.9	
cb.		9.4	42.4	
'14		8.9	42.9	
8		8.6	43.2	
+6		8.6	43.2	
'14		9.0	42.8	
cb.		7.9	43.9	
+3		7.5	44.3	
E		7.8	44.0	
+5		7.9	43.9	
10+40.54 = E Line Willow				
-5		5.6	46.2	
N		6.1	45.7	

51.79

Keats St.

+25 on Walk	6.10	45.7
cb. Rot.	6.41	45.38
Gut.	7.21	44.58
cb on Ground	7.1	44.7
"	6.2	44.9
♀	7.1	44.7
"	7.3	44.5
cb.	7.7	44.1
+ Gut.	8.33	43.46
+ = cb. Rot.	7.62	44.17
cb +94 on Walk	7.40	44.39
♂	7.4	44.4

10 + 47.54

♂ cb. on Pav	7.50	44.29
" " "	7.82	44.47
♀ " "	7.11	44.68
" " "	6.93	44.86
H. cb " "	6.81	44.98 ✓

NE Return Keats - Willow

BC. on Willow on cb	5.08	46.71
" Gut	5.86	45.93 ✓
+12.68 on cb	5.49	46.36
" " Gut	6.21	45.58
+26.68 = cb	5.74	46.05
" " Gut.	6.45	45.34

51.79

SE Rot.

53

85 on Willow on cb	7.98	43.81
" " Gut.	8.80	42.99
+12.68 on cb.	7.59	44.20
" " Gut.	8.38	43.41
+26.68 = cb	7.39	44.40
" " Gut	8.04	43.75
10 + 58.54 = E. cb Willow		
-100 on cb	3.13	48.66
" " Gut.	3.26	47.83
-50 on cb.	4.43	47.36
" " Gut.	5.19	46.60
N " Pav	6.09	45.70
cb " " "	6.40	45.39
" " " "	6.59	45.20
♀ " " "	6.77	45.02
" " " "	6.89	44.90
cb " " "	7.10	44.69
SL " " "	7.64	44.15
+50 on cb	8.94	42.85 ✓
" " Gut.	8.77	42.02
+100 " cb. in Drive		
" " Gut.	11.68	40.11
10 + 67.04 = E. " "		
-100 on Pav.	11.00	40.79
-50 " "	9.06	42.73

10+764 5179

Keats St.

-25' on Pav.	8.09	43.70
S " "	7.37	44.42
cb " "	6.85	44.94
1/4 " "	6.68	45.11
2 " "	6.57	45.22
1/4 " "	6.35	45.44
cb " "	6.17	45.62
N " "	5.76	46.03
+25' " "	5.25	46.54
+50' " "	4.67	47.12
+100' " "	3.44	48.35

10+75.54 = S Willow

-100' " "	3.11	48.68
-50' " "	4.28	47.51
-25' " "	4.22	46.87 ✓
N " "	5.56	46.23
cb " "	5.94	45.85
1/4 " "	6.14	45.65
2 on Rim MH	6.31	45.48
1/4 " Pav.	6.46	45.33
cb " "	6.65	45.14
S " "	7.16	44.63
+25' " "	7.75	44.04
+50' " "	8.65	43.14
+100' " "	10.62	41.17

10+84.04 = W 1/4 5179

-100' on Pav.	10.37	41.42
50 " "	8.47	43.32
-25 " "	7.54	44.25
S " "	6.98	44.81 ✓
cb " "	6.60	45.19
1/4 " "	6.39	45.40
2 " "	6.16	45.63
1/4 " "	5.97	45.82 ✓
cb " "	5.78	46.01
N " "	5.38	46.41
+25' " "	4.71	47.08
+50' " "	4.10	47.69
+100' " "	2.90	48.89

10+92.54 = W, cb Willow

-100' on cb	2.17	49.62
" " Gut.	3.02	48.77
-50' on cb	3.36	48.43
" " Gut.	4.23	47.56
-25' " cb in Drive	4.84	
" " Gut.	4.84	46.95 ✓
N " cb	4.68	47.11
" " Gut.	5.39	46.40
cb " cb	5.00	46.79
" " Gut.	5.74	46.05
1/4 " cb	5.22	46.57
" " Gut.	5.90	45.89

54

5179

Kents St.

2 on cb.	544	46.35
" Gut	615	45.64
1/4 - cb.	560	46.19
Gut	629	45.50
cb on cb.	580	45.99
" Gut	647	45.32
St. " cb	621	45.58
" " Gut.	624	44.85
+25' on cb	676	45.03
" Gut.	755	44.24
+50' " cb	775	44.04
" " Gut.	858	43.23
+100' on cb	964	42.15
" " Gut.	1048	41.31
TR 0.67 32.29	1247	39.32 ✓
TR 2.74 30.04	1269	27.30 ✓
chk Spike in Pole	778	22.26 ✓
SE Kents & Evergreen P49		22.23
		0.03

Field work
Completed 7-5-46

58

Walker
Hendricks
Becker
9-4-46

Georgia St.
Cont. from P-35

56

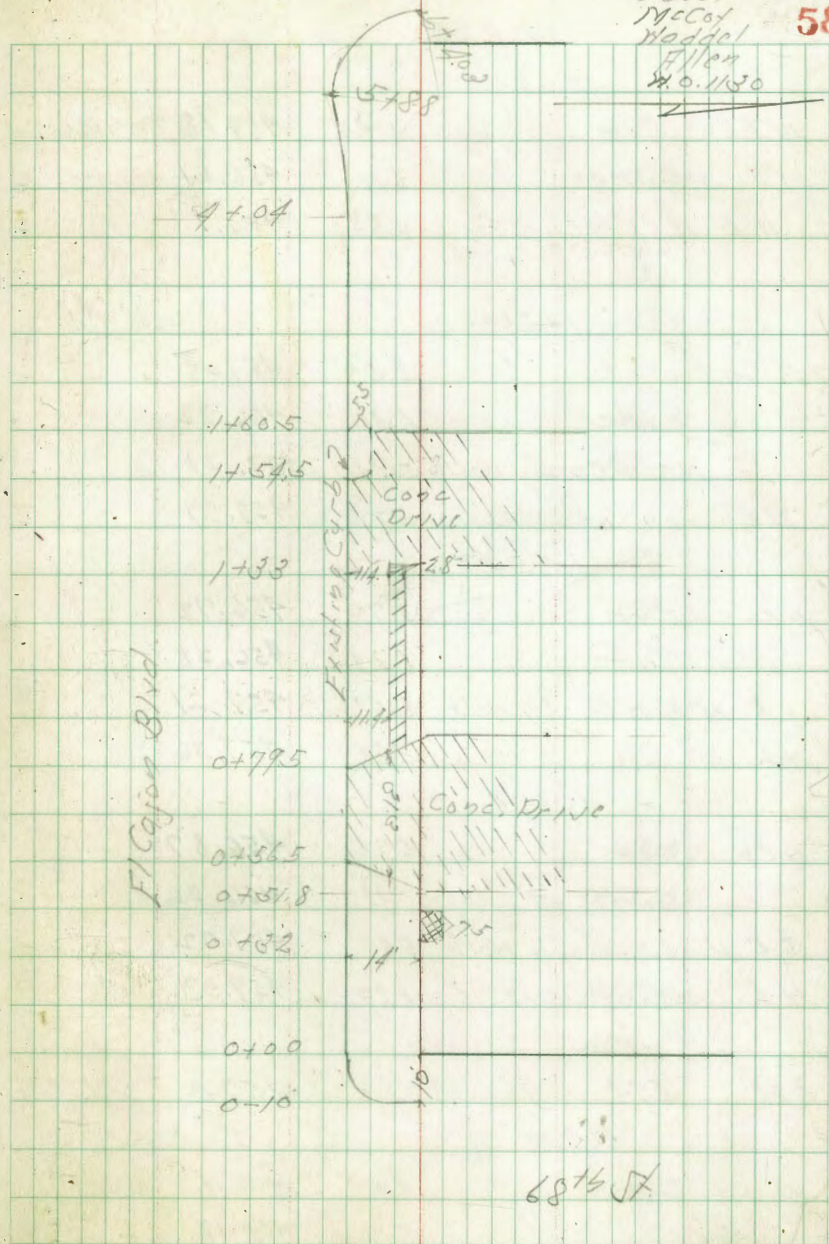
	Hand Level	
5.15	274.2	269.05
chk. Ground orocultart	6.7	267.5 P-37
E-15	9.3	264.9
E	6.0	268.2
+10	5.1	269.1
+20	5.0	269.2
+30	4.8	269.4
+40 = L	4.6	269.6
L+10	4.9	269.3
+20	4.2	270.0
+30	5.0	269.2
+35	5.4	268.8
6' South = Bluff	6.7	267.5
L+40 = WL.	5.8	268.4
6' South = Bluff	7.3	266.9
WL+5'	6.5	267.7
6' South "	9.1	265.1
WL+10	8.3	265.9
6' " "	10.5	263.7
WL+34	17.1	257.1
7' " "	21.1	253.1

Levels North Curb Line of El Cajon Blvd
West of 68th St. 67th St.

Station	Description	Elevation	Notes
BM 5.28		462.68	SW BP 457.40 El Cajon 68th St
0+10	N.C.B. 68th St		
14'	H of N.C.B. El Cajon	5.74	456.94 = Top C.B.
0+0	N.C.B. 68th St		
N.C.B.	Top Curb	5.14	457.54
"	Gutter	5.84	456.84
0+32			
N.C.B.	Top Curb	5.34	457.34
"	Gutter	5.98	456.70
H.L. El Cajon		4.98	457.70 on Conc. Walk
0+51.8			
N.C.B.	Top C.B.	5.32	457.36
"	Gutter	6.00	456.68
H.L.	El Cajon Drive	4.91	457.77
0+56.5			
N.C.B.	Top	5.33	457.35
"	Gutter	6.01	456.67
5.8	H of N.C.B.	5.06	457.62
H.L.		4.91	457.77
0+79.5			
N.C.B.	Top	5.42	457.26
"	Gutter	6.12	456.56
5.8	H of N.C.B.	5.11	457.57
H.L.		4.95	457.73

67th St. Dec. 2-46
Sutton
McCoy
Waddell
Ellen
H.O. 1/1/50

58



68th St

F1 Cajon Blvd 68th to 67th St.

462.68

0+85

HCB Top	5.44	457.18 ²⁴	Add 0.06
Gutter	6.11	456.51 ⁵⁷	
H.L. H of HCB Fly Walk	4.88	457.74 ⁸⁰	

1+33

HCB Top	5.57	457.05
Gutter	6.30	456.32
H.L. H of HCB Fly Walk	5.31	457.31
H.L. on Conc Walk	5.25	457.37

1+54.5

HCB Top	5.70	456.92
Gutter	6.34	456.28
5.5 H of HCB Fly Walk	5.41	457.21
H.L.	5.26	457.36

1+60.5

HCB Top	5.75	456.87
Gutter	6.36	456.26
5.5 H of HCB Fly Walk	5.40	457.22
H.L. on Conc Drive	5.29	457.33

BM 3.93 461.33 457.40

2+0

HCB Top	4.52	456.81
Gutter	5.16	456.17

SMRP
F1 Cajon +
68th St

59

461.33

2+50

HCB Top	4.77	456.56
Gutter	5.57	455.96

3+0

HCB Top	4.97	456.36
Gutter	5.57	455.96

3+50

HCB Top	5.01	456.32
Gutter	5.90	455.63

4+04 = Approx. C6 BC.

HCB Top	5.21	456.12
Gutter	5.82	455.51

4+50

HCB	5.40	455.93
Gutter	6.01	455.32

5+05

HCB	5.74	455.59
Gutter	6.30	455.03

HCB	5.91	455.42
Gutter	6.55	454.78

5+88 = PRC

HCB	6.22	455.11
Gutter	6.78	454.55

Notes Reduced 12-4-46
C.A. Smith

461.33

6.14

Cb Top 6.64 454.69

Gutter 7.26 454.07

TP 4.40 460.07 5.66 455.67

6.40.3 - NY Cb

Cb Top 6.43 453.64

Gutter 7.11 452.96

BM 6.31 453.76

SW BP
Elevation
459.55
453.70

BM 2.70 457.37

SW BP
Elevation
458.15
457.40

TABLE VI.—CORRECTIONS FOR SUB-CHORDS AND LONG CHORDS.

FOR SUB-CHORDS ADD										Excess of arc per 100 ft.	LONG CHORDS				
D	10	20	30	40	50	60	70	80	90		D	200	300	400	500
4°	.00	.00	.01	.01	.01	.01	.01	.01	.00	.02	1	199.99	299.97	399.92	499.85
6	.00	.01	.01	.02	.02	.02	.02	.01	.01	.05	2	199.97	299.88	399.70	499.39
8	.01	.02	.02	.03	.03	.03	.03	.02	.01	.08	3	199.93	299.73	399.32	498.63
10	.01	.02	.03	.04	.05	.05	.05	.04	.02	.13	4	199.88	299.51	398.78	497.57
12	.02	.04	.05	.06	.07	.07	.07	.05	.03	.18	5	199.81	299.24	398.10	496.20
14	.02	.05	.07	.08	.09	.10	.09	.07	.04	.25	6	199.73	298.90	397.26	494.53
16	.03	.06	.09	.11	.12	.12	.12	.09	.05	.33	7	199.63	298.51	396.28	492.57
18	.04	.08	.11	.14	.15	.16	.15	.12	.07	.41	8	199.51	298.05	395.14	490.31
20	.05	.10	.14	.17	.19	.20	.18	.15	.09	.51	9	199.38	297.54	393.86	487.75
22	.06	.12	.17	.21	.23	.24	.22	.18	.10	.62	10	199.24	296.96	392.42	484.90
24	.07	.14	.20	.25	.28	.28	.26	.21	.12	.74	12	198.90	296.63	389.12	478.34
26	.09	.17	.24	.29	.32	.33	.31	.25	.15	.88	14	198.51	296.06	385.22	470.65
28	.10	.19	.27	.34	.37	.38	.36	.29	.17	1.00	16	198.05	292.25	380.76	461.86
30	.11	.22	.31	.39	.43	.44	.41	.33	.19	1.15	18	197.54	290.21	375.74	452.02
32	.13	.25	.36	.44	.49	.50	.47	.38	.22	1.31	20	196.99	287.04	370.17	441.15
34	.15	.28	.40	.50	.55	.57	.53	.43	.25	1.48	22	196.32	285.44	364.06	429.30
36	.17	.32	.45	.56	.62	.64	.59	.48	.28	1.66	24	195.63	282.71	357.43	416.53
38	.19	.36	.51	.62	.70	.71	.66	.53	.31	1.88	26	194.87	279.76	350.30	402.89
40	.21	.40	.56	.69	.77	.79	.73	.59	.35	2.06	28	194.00	276.59	342.69	388.42
42	.23	.44	.62	.76	.85	.87	.81	.65	.38	2.23	30	193.13	273.20	334.61	373.20
44	.25	.48	.65	.84	.94	.96	.89	.72	.42	2.50	32	192.25	269.61	326.06	357.28
46	.27	.52	.75	.92	1.02	1.05	.98	.78	.46	2.74	34	191.26	265.81	317.12	340.73
48	.30	.57	.81	1.00	1.12	1.14	1.06	.86	.50	2.99	36	190.21	261.80	307.77	323.61
50	.32	.62	.89	1.09	1.21	1.24	1.15	.93	.55	3.24	38	189.10	257.60	298.03	305.99
52	.35	.67	.96	1.18	1.31	1.35	1.25	1.01	.59	3.52	40	187.94	253.21	287.94	287.94
54	.38	.73	1.04	1.28	1.42	1.46	1.35	1.09	.64	3.80	42	186.72	248.63	277.51	269.54
56	.41	.78	1.12	1.38	1.53	1.57	1.46	1.17	.69	4.09	44	185.44	243.87	266.78	250.85
58	.44	.84	1.20	1.48	1.65	1.69	1.57	1.20	.74	4.40	46	184.10	239.93	255.78	231.95
60	.47	.91	1.29	1.59	1.76	1.81	1.68	1.35	.80	4.72	48	182.71	233.83	244.61	212.92

NOTE.—When a chord of less than 100 ft. is used the corrections given in the above table should be added to the nominal length of chord to get the length which should be used in order that the 100 ft. points will check with those obtained by using the standard 100 ft. chord. Thus in locating a 14° curve by 25 ft. chords measure 25'.06 for each chord. Long chords are useful in passing obstacles.

TABLE VII.—MIDDLE ORDINATES FOR RAILS IN FEET.

Deg. of Curve	LENGTH OF RAILS							Deg. of Curve	LENGTH OF RAILS.						
	32	30	28	26	24	22	20		32	30	28	26	24	22	20
1°	.022	.020	.016	.013	.011	.009	.008	16°	.386	.313	.273	.236	.200	.170	.139
2	.045	.038	.034	.029	.025	.021	.017	17	.378	.333	.290	.252	.213	.180	.148
3	.067	.058	.051	.044	.037	.031	.026	18	.400	.351	.306	.265	.225	.190	.156
4	.089	.079	.069	.060	.050	.042	.035	19	.423	.371	.324	.280	.238	.201	.165
5	.112	.099	.086	.074	.063	.053	.044	20	.445	.392	.341	.296	.250	.212	.174
6	.134	.117	.102	.088	.076	.064	.052	21	.466	.410	.357	.309	.262	.222	.182
7	.156	.137	.120	.104	.088	.074	.061	22	.487	.430	.375	.325	.275	.233	.191
8	.179	.158	.137	.119	.100	.085	.070	23	.509	.450	.390	.338	.287	.243	.199
9	.201	.175	.153	.133	.112	.095	.078	24	.531	.469	.408	.354	.299	.253	.208
10	.223	.196	.171	.148	.125	.106	.087	25	.552	.486	.424	.367	.311	.263	.216
11	.245	.216	.188	.163	.139	.117	.096	26	.573	.506	.441	.382	.323	.274	.225
12	.268	.236	.206	.179	.151	.128	.105	27	.594	.524	.457	.396	.335	.284	.233
13	.290	.254	.222	.192	.163	.138	.113	28	.618	.545	.475	.411	.348	.294	.242
14	.312	.275	.239	.207	.175	.148	.122	29	.638	.564	.491	.424	.361	.303	.250
15	.334	.295	.257	.223	.188	.159	.131	30	.660	.583	.508	.438	.374	.313	.259

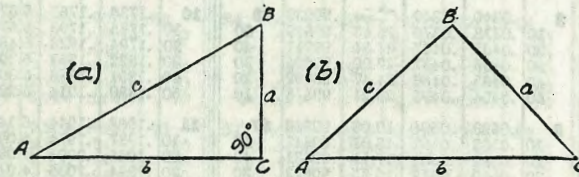
SLOPE REDUCTIONS.

When distances are measured on a slope they may be reduced to the equivalent horizontal distance by the following approximate rule:— subtract from the slope distance the square of the rise divided by twice the slope distance. Thus for a slope distance of 250.3 ft. and a rise of 15 ft. correction=15²÷2×250.3=.45 (by slide rule) or horizontal distance=250.3—.45=249.85. When vertical angle=V. A. is measured horizontal distance=slope distance—slope distance (1—Cos. V. A.). Thus for slope distance of 248.7 ft. and V. A. of 4° 20' from Table VIII Cos=.99714 and correction=1—.99714=.00286 per foot or total of .286×2½ (near enough)=.57 and horizontal distance=248.7—.57=248.13 ft.

See fig. (a).

TRIGONOMETRICAL FORMULAS.

- sin. $A = \frac{a}{c}$
- cos. $A = \frac{b}{c}$
- tan. $A = \frac{a}{b}$
- cot. $A = \frac{b}{a}$
- sec. $A = \frac{c}{b}$
- cosec. $A = \frac{c}{a}$



FORMULA FOR SOLVING TRIANGLES.

Given	Sought.	Right triangles. See fig. (a).
a, c	A, B, b	$\sin. A = \frac{a}{c}, \cos. B = \frac{a}{c}, b = \sqrt{(c+a)(c-a)}$
a, b	A, B, c	$\tan. A = \frac{a}{b}, \cot. B = \frac{a}{b}, c = \sqrt{a^2 + b^2}$
A, a	B, b, c	$B = 90^\circ - A, b = a \cot. A, c = \frac{a}{\sin. A}$
A, b	B, a, c	$B = 90^\circ - A, a = b \tan. A, c = \frac{b}{\cos. A}$
A, c	B, a, b	$B = 90^\circ - A, a = c \sin. A, b = c \cos. A$
Given	Sought.	Oblique triangles. See fig. (b).
A, B, a	b	$b = \frac{a \sin. B}{\sin. A}$
A, a, b	B	$\sin. B = \frac{b \sin. A}{a}$
a, b, c	A - B	$\tan. \frac{1}{2}(A - B) = \frac{(a - b) \tan. \frac{1}{2}(A + B)}{a + b}$
a, b, c	A	$\left\{ \begin{array}{l} \text{If } s = \frac{1}{2}(a + b + c), \sin. \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{bc}} \\ \cos. \frac{1}{2}A = \sqrt{\frac{s(s-a)}{bc}}, \tan. \frac{1}{2}A = \sqrt{\frac{(s-b)(s-c)}{s(s-a)}} \\ \sin. A = \frac{2\sqrt{(s-a)(s-b)(s-c)s}}{bc} \end{array} \right.$
A, B, C, a	area	$\text{area} = \frac{a^2 \sin. B \sin. C}{2 \sin. A}$
A, b, c	area	$\text{area} = \frac{1}{2} bc \sin. A$
a, b, c	area	$s = \frac{1}{2}(a + b + c), \text{area} = \sqrt{s(s-a)(s-b)(s-c)}$

DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1½
For Single Track Embankment.

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

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

MADE IN U.S.A.

+.66645
.166

1092
292
13.84

5.7
25
2.7
4.8
2.1

250