

1875

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and

MICROFILMED SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

Distances from Center of Roadway for Cross-Sectioning
 Roadway 66 ft. 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

INDEXED

*to page # 71
 except page # 36*

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.

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 $1\frac{1}{2}$ see inside of back cover.
 Copyright, 1914, by Eugene Dietzgen Co.

Chi

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100

20-30 x Sect Harbor Drive at Lowell St
Intersection

1500 Greene St

Erivanda to Bolinas

Moore

Begg +

Bunch

8-3-48

Ref 1641-53

1668-52

1589-37

T.P. 413

See 7424-L
7425-L

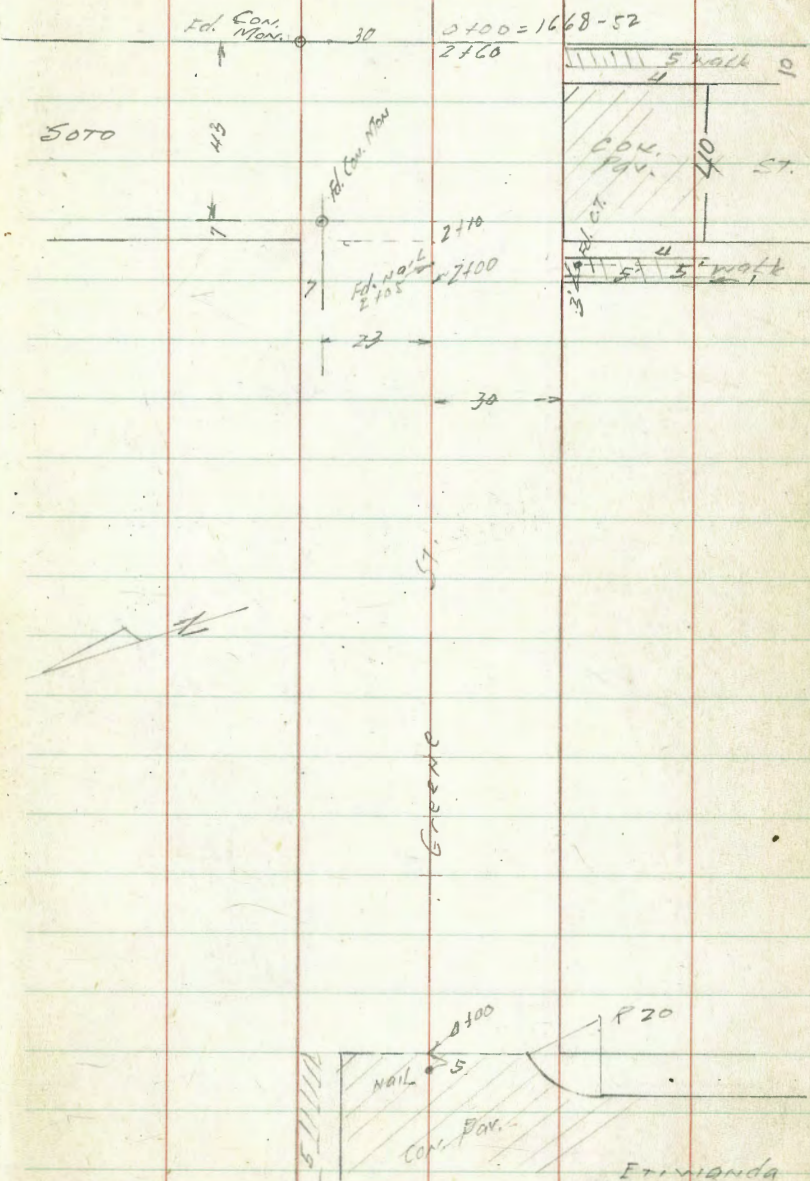
W/O 25001

INDEXED

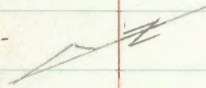
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Indexed

W.K.



W.O. 60290



Fd. Hub
1172

N sec.
N sec.

172

10

20

Lat

0100

Grid
Levels

6160

Castelar

Fd. Cont. Mon.

7100

43

7

2.5
2.5

250

2100?

Greene

2100?

1172

90

D etc.

C

B sec.

A sec.

20

20

20

Fd. Cont. Mon.

30

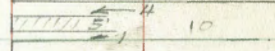
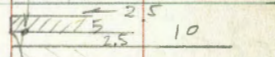
30

220

0100

SATO St.

15'



Cont. Mon. Belinas

15cc Greene St
ETIWANDA to Bolinas

0+50

0+39

PPole 1A' RT P4489

0+12

0+10

FLLE Bc99

0+00

ELY ETIWANDA

0-5

0-10

SWBP 1069

50.40

39.71

Greene St
ETIWANDA
1589-37

43.5

43.6

42.8

43.5

44.1

45.8

46.2

46.3

48.07

6.7

6.8

7.6

6.9

6.3

4.6

4.2

4.1

2.33

30

22

18

16

24

30

31

Top

Brick Wall

42.05

8.35

33.3

4.3 walk

41.6

41.1

40.1

44.7

40.6

41.7

42.3

43.2

8.35

8.8

9.3

10.3

9.7

9.8

8.7

8.1

7.2

33.3

30

21

20

17.5

21

28

30

4.3 walk

40.18

40.06

40.45

40.20

40.25

40.20

40.74

40.8

10.22

10.30

9.90

10.20

10.15

10.20

9.66

9.6

30

20

20

10.20

20

22.8

22.8

30

sdw

cb

91

20

20

91

cb

end

39.90

39.25

40.05

40.17

40.00

40.57

10.50

11.15

10.35

10.22

10.40

9.83

20

20

20

20

20.8

20.8

cb

21

cb

39.79

39.14

39.92

40.06

40.55

39.95

10.61

11.26

10.48

10.30

9.85

10.55

20

20

20

20

40

40

cb

91

20

40

cb

50.00

+87.7 west edge of drive way

46.4	46.2	46.6	47.19	49.06	49.27	49.53
4.0	4.2	3.8	3.21	1.34	1.13	0.87
30	18		1.54	22.7	30	36.7

Garage

+83

46.3	45.6	46.3	46.2	47.8	48.56	48.63
4.1	4.8	4.1	4.2	2.6	1.84	1.77
30	18		14	20	27.4	304

Walk

1.28 top bot step

+94 east edge drive

+87.7 west " "

+83

+77 beg of corra walkt end of wall

45.8	45.0	45.7	45.8	30.7	13.50	48.4
4.6	5.4	4.7	4.6	3.1	1.9	1.9
30	18	4.9	14	20.3	20.4	48.4

50.40 floor

50.40

5 walk

202 walk

Protect fence + brnck. wall

13.50

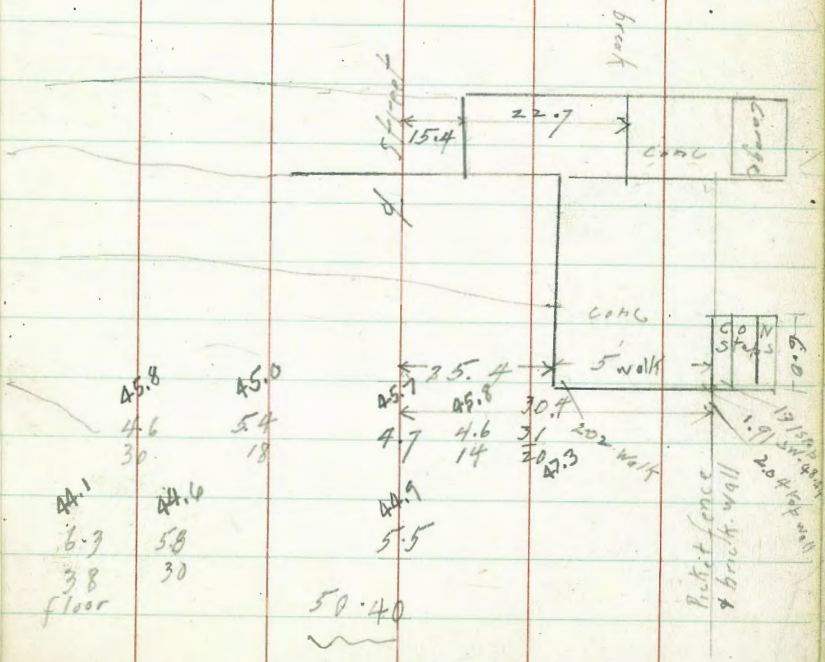
20.4

5.00

+67 38-Lt Sing garage

50.40

She
G
E
1



TP 6.32 64.86 1.74 58.54 ✓

7+00 West line Soto to South

1+97 29'A P Pole P 44551

1+50

1+11⁸ East edge of conc drive

+ 7.5

1+043 West edge of conc drive

TP 10.65 60.28 0.77 49.63 ✓

0+94 See sketch

50.40

5 (10) Tact Soto & Green SW

55.5 55.4 55.8 56.3 57.3 58.4
4.8 4.9 4.5 4.0 3.0 1.9
30 27 18 23 30

50.9 50.8 51.6 51.4 52.9 54.1
9.4 9.5 8.7 8.9 7.4 6.2
30 19 16 21 30

48.2 47.9 48.6 48.3 49.8 50.6 51.04
12.1 12.4 11.7 12.0 10.40 9.60 9.24
30 18 16 24.0 30 30

Notes Red. by R.E. Caburn
8-9-48

47.7 47.8 48.0 47.7 49.60 50.5 51.05
12.6 12.5 12.9 12.6 10.68 9.8 9.23
30 19 16 24.0 30 37
West edge
conc drive 30

60.28 ✓

47.0 46.5 47.2 47.33 49.10 49.95 49.55
3.4 3.9 3.2 3.07 1.30 1.05 0.85
30 18 15.4 22.7 30 36.7
50.40 ✓ edge of drive 30

2+50 cont'd

2+50 curb line to South

2+30 f of Soto to South

2+10 cont'd

2+10 Soto West Line to North
also curb line to South

64.86

57.9	59.8	59.1	58.56	59.30	61.55
7.1	5.1	5.8	6.30	5.56	3.31
30	20	30	30	30	85
			9	cb	9
					cb

64.86	64.16
0.70	0.70
130	130
cb	9

57.3	58.49	58.1	58.38	61.56	64.12
7.6	6.37	6.8	6.50	3.30	0.74
30	20	20	30	85	130
	M/min		Par		

64.11	63.46	61.50
0.75	1.40	3.36
130	130	85
cb	9	cb

50.3	56.7	56.7	57.66	58.29	60.90
8.6	8.2	8.2	7.20	6.57	3.96
30		20	30	30	85
			9	cb	9

64.86

1+72

70.6	71.4	71.2	71.2	71.2	71.0	72.8	73.0
3.8	3.2	3.2	3.2	3.4	1.6	1.4	
30	30	24	17	20	27	30	

1+35

68.8	68.8	69.2	69.2	70.9	71.37
5.6	5.6	5.2	5.2	3.5	30L
30	16		19	25	30

23' walk

1+00

66.3	66.3	69.1	67.6	70.0
8.1	8.1	7.3	6.8	4.4
30	17		18	30

0+50

69.2	62.9	63.9	64.1	65.7	66.2
11.2	11.5	10.5	10.3	8.7	8.2
30	16		18	23	30

TP. 11.32 74.39 ✓ 1.79 63.07 ✓

74.39 ✓

0+00
2+60 East line of Soto to South

64.86

59.7	60.1	59.3	60.4	60.4	60.9	60.9
5.2	4.8	5.6	4.5	4.5	4.0	4.0
30	23	19		18	20	20

64.86

TP 0.96 73.43 73.45

F1641/54 end of curb E line of Bolinas from
F/1545/58

R+60²⁰ E line Bolinas

73.0	73.1	71.5	71.9	72.6	73.7	73.6
1.4	1.3	2.9	2.5	1.8	1.1	0.8
30	27	19		18	20	30

R+50²⁰ curb line Bolinas

73.3	71.9	72.3	72.92	73.43	73.31	73.97
1.1	2.5	2.1	1.47	0.96	1.08	0.42
30	17		30	30	50	50
			9	06	9	06

R+30²⁰ E Bolinas

72.4	73.09	72.91	73.48
2.0	1.30	1.48	0.91
30	14	30	50
	7m	PA	PA

R+10²⁰ curb line Bolinas

71.5	72.3	72.7	72.6	72.55	73.22	73.09	73.74
2.9	2.1	1.7	1.8	1.84	1.17	1.30	0.45
30	16		24	30	30	50	50
				9	06	9	06

R+00²⁰ W. Line Bolinas

71.4	72.3	72.1	72.4	72.3	73.2	73.3
3.0	2.1	2.3	2.0	2.1	1.2	1.1
30	19	15		21	26	30

74.39

74.39

+ III - March F10
 5000 Soro St.
 Greene to Castellan

1+00

INDEXED

0+99 P. POLE P2320
 17' LEFT

0+89.5 ϕ 7.8' CON. DRIVE
 24.3' LEFT

0+68 ϕ 3' CON. WALK
 246' LEFT

0+50 BEG. PICKET FENCE 25' LEFT

0+40 ϕ DRIVEWAY 8' CON. 24.4' LEFT

Floyd Bunch

0+00 only Greene

5 ϕ 10' RR. 2.97

61.51

58.54

SW Cor
 Soro &
 Greene
 P. 5

INDEXED
 W.K.

50.3	50.6	50.9	50.5	51.3	52.0	53.5	54.6	55.1
11.2	10.9	10.6	11.0	10.2	9.5	8.0	6.9	6.4
35	25	15	12		18	20	25	35

50.33	51.41	51.3	51.9	52.4	54.0	54.5	55.4
11.18	10.10	10.2	9.6	9.1	7.5	7.0	6.1
45	24.3	15		19	21	25	35

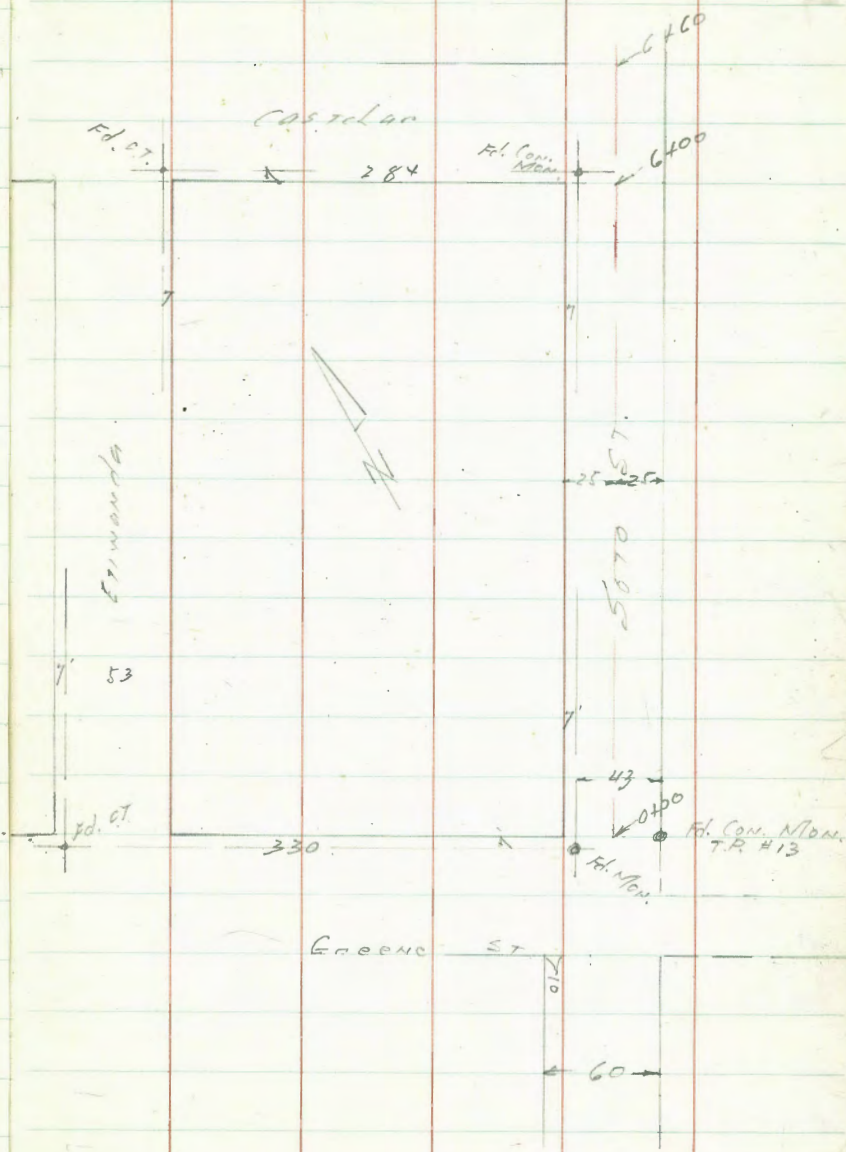
52.41	52.62	52.4	53.2	53.4	55.5	56.0	56.8
9.10	8.89	9.1	8.3	8.1	6.0	5.5	4.7
35	24.6	15		19	22	25	35

54.24	52.81	54.22	54.2	54.5	54.3	56.6	57.8	58.3
7.24	8.70	7.29	7.3	7.0	6.7	4.9	3.7	3.2
58	45	24.4	15		19	20	25	35
GAR.								

50.3	51.2	58.0	59.6
5.2	4.2	3.5	1.9
25		21	25

page 5

61.51



+ HI - EL.

2+18 @ 3' CON. WALK - 25' LEFT

1+89 DBL. CON. RIBBON DRIVE - 2'
7' WIDE - 25' LEFT

1+69 @ 3' CON. WALK
24.9' LEFT

1+50 END PICKET FENCE
25' LEFT

I.P. 1.92 51.71^v 11.72 49.79^v

1+21 @ WALK - 3' CON.
25' LEFT

1+01 TEL. POLE
17' LEFT
61.51^v

44.40	44.74	44.9	44.3	45.0	45.5	46.1	46.5	47.1
7.31	6.97	6.8	7.4	6.7	6.2	5.6	5.2	4.6
35	25	18	12		19	21	25	35

45.90	46.11	46.1	45.9	46.5	47.1	47.8	48.4	49.3
5.81	5.60	5.6	5.8	5.2	4.6	3.9	3.3	2.4
35	25	15	12		19	20	25	35

47.21	47.36	47.4	47.0	47.7	48.1	49.3	49.9	50.3
1.50	4.35	4.3	4.7	4.0	3.6	2.4	1.8	1.4
35	24.9	15	12		18	19	25	35

47.6	48.3	48.6	48.0	48.7	49.6	51.0	51.4	51.7
4.1	3.4	3.1	3.7	3.0	2.1	0.7	0.3	0.0
35	25	15	12		18	20	25	35

51.71^v

49.94	49.99	50.1	49.5	50.2	50.9	52.4	53.3	53.7
11.57	11.52	11.4	12.0	11.3	10.6	9.1	8.2	7.8
35	25	15	14		19	21	25	35

61.51^v

T. P. 1.39 41.66 11.44 40.27

3+28 ϕ 2.5' CON WALK
25.4' LEFT

3+10 ϕ 2' DBL CONG. RIBBON - 7' OVERALL
25' LEFT

2+90 ϕ 2' DBL CONG. RIBBON - 7' OVERALL
25.2' LEFT

2+69 ϕ 3' CON WALK
25' LEFT

2+50 P. POLE 17.2' LEFT
P 2350

2+40 2' DBL CON RIBBON - 7' OVERALL
25.2' LEFT

51.71 ✓

12

39.91	39.47	39.8	39.5	39.7	39.9	40.5	41.1
12.40	12.29	11.9	12.2	12.0	11.8	11.2	10.6
40	25.4	15	12		20	25	35

39.55	39.95	40.5	40.2	40.6	40.6	41.1	41.4	42.0
12.16	11.76	11.2	11.5	11.1	11.1	10.6	10.3	9.7
40	25	15	12		20	21	25	35

40.61	41.20	41.3	40.9	41.4	41.5	42.1	42.3	43.5
11.10	10.51	10.4	10.8	10.3	10.2	9.6	9.4	8.2
40	25.2	15	12		21	22	25	35

41.71	42.09	42.4	42.0	42.4	42.7	43.6	43.8	44.4
10.00	9.62	9.3	9.7	9.3	9.0	8.1	7.7	7.3
35	25	15	12		19	21	25	35

42.86	43.62	43.8	43.4	43.9	44.2	45.3	45.4	46.0
8.85	8.09	7.9	8.3	7.8	7.5	6.9	6.3	5.7
40	25.2	16	12		19	21	25	35

51.71 ✓

4+50

4+38

END OF LATH FENCE
25' LEFT

4+35

12" DIA. TREE
17' LEFT.

4+19

12" DIA. TREE
17' LEFT

4+00

3+57

3" DIA. MON. TREE
17' LEFT

3+50

P. POLE P2360 - BEG LATH FENCE
16.6' LEFT 25' LEFT

3+38

4" DIA EUC. TREE
16' LEFT41.66 ✓

36.3

36.2

35.9

39.7

35.8

35.7

35.7

5.4

5.5

5.8

6.0

5.9

6.0

6.0

35

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36.1

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37.1

37.2

37.3

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38.5

39.1

39.1

38.9

39.0

38.9

39.3

39.9

3.2

2.6

2.6

2.8

2.7

2.8

2.4

1.8

35

25

15

12

20

25

35

41.66 ✓

5+65 2" DIA. PEPPER - 17' LEFT

5+50 P. POLE JP 2389
15.8' LEFT

5+47 12" DIA. OLIVE - 16' LEFT

5+33 12" DIA. OLIVE - 16' LEFT

5+20 12" DIA. OLIVE - 16' LEFT

5+08 12" DIA. OLIVE - 16' LEFT

5+00

4+81 12" DIA OLIVE - 16' LEFT

4+68 14" DIA. OLIVE
10' LEFT

4+54 15" DIA. OLIVE
16' LEFT
41.66

34.1	34.3	34.2	32.8	32.8	33.1	33.2	33.5
7.6	7.4	7.5	8.9	8.9	8.6	8.5	8.2
35	25	14	7		15	25	35

35.2	35.1	35.0	34.3	34.3	34.5	34.3	34.4
6.5	6.6	6.7	7.4	7.4	7.2	7.4	7.3
35	25	13	7		15	25	35

41.66

+ H1 - L C R

2.93 58.56 58.54
0.02

P.5
SW COR
SOTO + GREENE
5410 R.P. TX

T.P. 10.42 61.49 1.86 51.07

T.P. 11.60 52.93 0.33 41.33

G+60

30.7 30.7 25.7 20.7 24.7 25.5 26.7
11.0 11.0 16.0 21.0 17.0 16.2 15.0
35 32 25 15 25 25 35

G+50

31.1 29.2 24.7 28.4 30.7 30.7
10.6 12.5 17.0 13.3 11.0 11.0
30 25 15 25 25 35

G+40

31.8 27.0 31.9 31.1 31.1
9.9 14.7 9.8 10.6 10.6
25 15 25 35 35

G+30 d CASTELAR

31.6 32.1 31.7 31.5
10.1 9.6 10.0 10.2
25 25 35 35

G+00 SO. L OF CASTELAR

31.9 31.6 31.4 31.4 32.1 32.1
9.8 10.1 10.3 10.3 9.6 9.6
35 25 15 25 25 35

41.66 ✓

41.66 ✓

20' Grid Levels, NELY. Con.

Sketch prv.

Greene and Soto

INDEXED

10' RP
BM
Sw Con

12.74

71.28

58.54 ✓

Greene
Soto

Sec. A^v = E Greene

0+0	EL Soto	10.9	60.4
+20		9.6	61.7
+40		8.1	63.2
+60		6.7	64.6
+80		5.4	65.9
1		4.1	67.2
+20		3.0	68.3
+40		1.8	69.5
+60		0.8	70.5
1+72		0.1	71.2
Sec B ^v			
0+0	EL Soto	11.3	60.0
+20		10.2	61.1
+40		9.2	62.1
+60		7.0	64.3

+80		5.8	65.5
1		4.4	66.9
+20		3.0	68.3
+40		1.6	69.7
+60		0.7	70.6
1+72		0.0	71.3

Sec C^v = 10' N of NLY Greene

0+0	EL Soto	12.1	59.2
+20		10.6	60.7
+40		9.6	61.7
+60		7.9	63.4
+80		6.9	64.4
1		5.6	65.7
+20		4.3	67.0
+40		2.8	68.5
+60		1.9	69.4
1+72		1.5	69.8

Sec D^v

0+0	EL Soto	13.3	58.0 ✓
-----	---------	------	--------

7/28 ✓

Sec D ✓			
0720	12.0	59.3	
140	10.3	61.0	
160	9.3	62.0	
180	7.9	63.4	
1	6.5	64.8	
120	5.4	65.9	
140	3.9	67.4	
160	2.3	68.0	
1772	2.6	68.7	

Sec E ✓

070 EL Soro	14.1	57.2	
120	13.1	58.2	
140	11.9	59.4	
160	10.7	61.1	
180	9.0	62.3	
1	7.6	63.7	
120	6.3	65.0	
140	5.0	66.3	
160	4.4	67.1	
1772	3.3	68.0	

7/28 ✓

T.P	3.56	<u>67.13</u>	7.71	63.57 ✓
Sec F ✓				
070 EL Soro			11.0	56.1
120			10.3	56.8
140			9.1	58.0
160			7.7	59.4
180			5.8	61.3
1+00			4.3	62.8
120			3.5	63.6
140			1.8	65.3
160			0.7	66.4
1772			0.0	67.1

Sec G ✓

070			12.5	54.6
120			11.6	55.5
140			10.4	56.7
160			9.0	58.1
180			7.3	59.8
1			5.9	61.2
120			3.7	63.4
140			2.6	64.5
160			1.8	65.3
1772			1.1	66.0

6713 ✓

Sec H

0+0	EL Soto	13.7	53.4
+20		12.4	54.7
+40		11.4	55.7
+60		9.9	57.2
+80		8.3	58.8
1		6.7	60.4
+20		5.2	61.9
+40		3.4	63.7
+60		2.0	65.1
1+72		1.1	66.0

Sec I

0+0		14.6	52.5
+20		13.1	54.0
+40		12.3	54.8
+60		11.0	56.1
+80		9.2	57.9
1+00		7.8	59.3
+20		6.3	60.8
+40		4.7	62.4
+60		1.9	65.2
1+72		1.6	65.5

6713 ✓

Sec J

0+00		15.9	51.2
+20		13.9	53.2
+40		13.1	54.0
+60		12.1	55.0
+80		10.4	56.7
1		8.8	58.3
+20		7.1	60.0
+40		5.8	61.3
+60		3.7	63.4
1+72		2.7	64.4

TP 0.28 65.13 2.28 64.85 ✓

Sec K 0+0

0+20		15.3	49.8
+40		13.8	51.3
+60		12.1	53.0
+80		10.9	54.2
1+00		9.7	55.4
+20		8.3	56.8
+40		6.6	58.5
+60		5.2	59.9
1+72		2.9	62.2
		1.8	63.3

18

Sec L ✓

65.13 ✓

/

Sec N = 250

65.13 ✓

19

0 + 0 = FL 5070 16.9 48.2

0 + 00 N of E Greene 18.2 46.9

+ 20 15.3 49.8

+ 20 17.7 47.4

+ 40 14.1 51.0

+ 40 17.0 48.1

+ 60 12.8 52.3

+ 60 16.0 49.1

+ 80 11.4 53.7

+ 80 14.0 51.1

1 + 00 9.7 55.4

1 + 00 12.2 52.9

+ 20 7.7 57.4

+ 20 10.3 54.8

+ 40 7.1 58.0

+ 40 9.7 55.4

+ 60 5.1 60.0

+ 60 7.2 57.9

1 + 72 3.1 62.0

1 + 72 6.0 59.1

Sec M. ✓

0 + 00 17.5 47.6

+ 20 16.7 48.4

+ 40 15.3 49.8

+ 60 14.2 50.9

+ 80 13.0 52.1

1 + 00 11.9 53.2

+ 20 9.8 55.3

+ 40 9.0 56.1

+ 60 6.5 58.6

1 + 72 4.7 60.4

6.58 58.55 58.54

.01

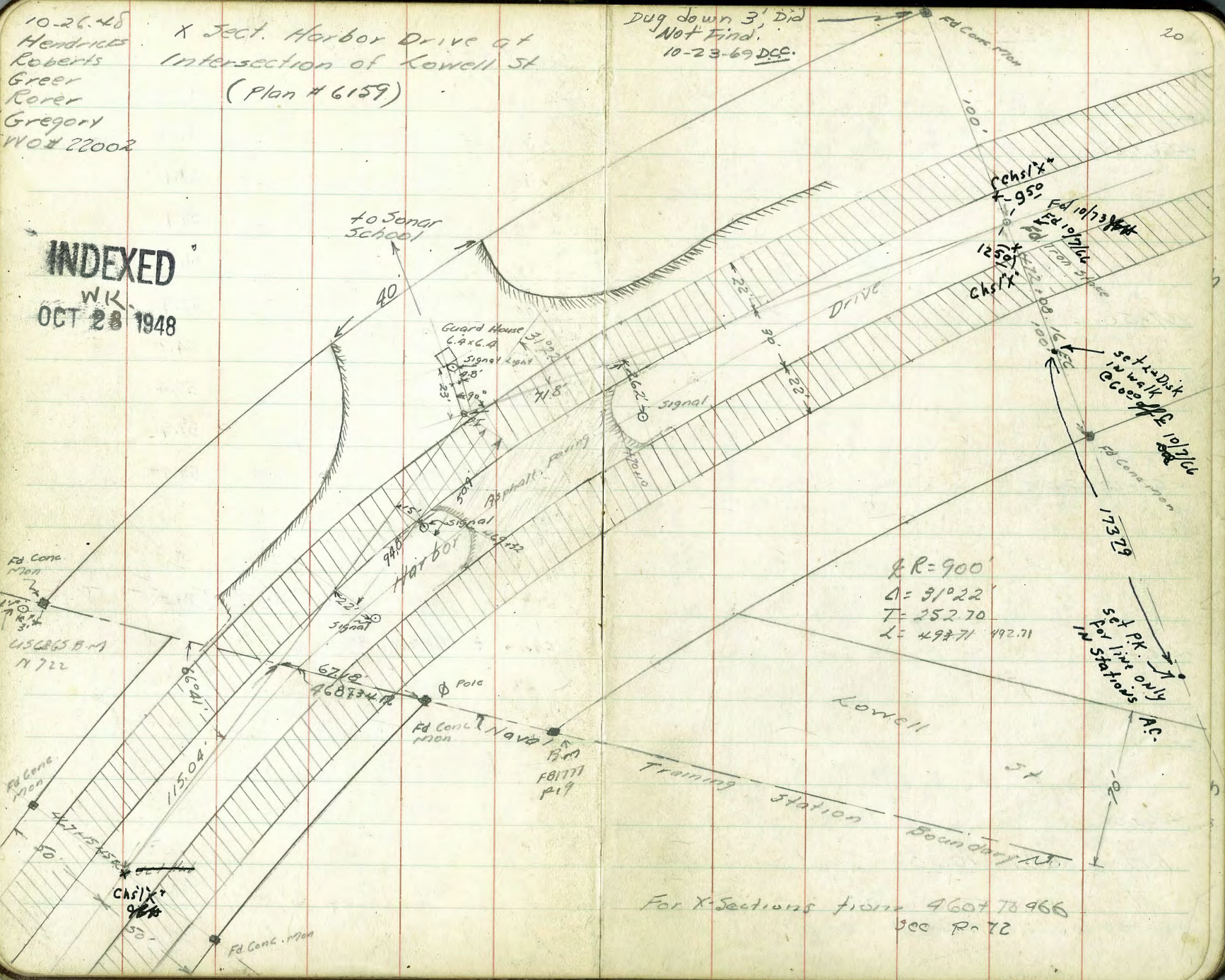
check to starting 01

10-26-48
Hendricks
Roberts
Greer
Rorer
Gregory
WO# 22002

X Sect. Harbor Drive at
Intersection of Lowell St
(Plan # 6159)

Dug down 3' Did
Not Find.
10-23-69 DCC.

INDEXED
W.K.
OCT 28 1948



For X Sections from 4607 to 4666
see R-72

468+00

6.1 7.1 7.2 7.02 AA 6.00 5.9 5.9 5.9 5.75 5.7 3.2 3.5 3.5 5.1
 38 38 38 38 38 38 38 38 38 38 38 38 38 38
 50 45 39 37 26 15 13 13 15 26 37 43 45 51

467+50

6.1 6.1 6.3 6.3 6.03 5.9 5.9 5.0 5.8 5.0 5.0 3.1 3.1 3.1 5.1
 38 38 38 38 38 38 38 38 38 38 38 38 38 38
 48 46 37 26 15 13 13 15 26 37 43 46 49 52

467+15.45 BC

6.0 6.10 7.0 6.66 6.30 5.98 5.9 5.1 5.2 5.07 5.73 5.35 5.1 5.1 5.3
 48 47 44 37 26 15 13 13 15 26 37 43 46 51
 50 47 44 37 26 15 13 13 15 26 37 43 46 51

Reduced
 1.3 correct

466+50

5.6 5.6 5.9 5.85 5.83 5.8 5.3 5.5 5.7 5.75 5.09 5.1 5.1 5.5
 47 45 43 42 42 42 42 42 42 42 42 42 42 42
 50 46 37 26 15 13 13 15 26 37 43 45 49

466+00

5.6 5.6 5.59 5.65 5.79 5.8 5.5 5.6 5.59 5.53 5.90 5.1 5.0 5.5
 47 47 47 47 47 47 47 47 47 47 47 47 47 47
 50 43 37 26 15 13 13 15 26 37 43 47 49

B.M 6.87 10.30 3.43

OA Conc Mon 35.17 519 16+3391 FB 1777 P19

460+00 to 466+00 Sec P. 72-75

10.30
 71

469+32 Beg Asphalt Paving

469+175 Light Signal 75 Lt.

468+76 Light Signal 8.5 Rt.

469+69 Power Pole 53' Rt.

TP 3.87 9.38 4.79 5.51

469+00

468+50

468+33 Beg. Approach to Senior School

10.30

6.3 6.6A 10.9 6.8 6.08 5.65 A.50
 3.1 3.74 2.39 2.79 3.70 3.72 88 A.11 A.35 5.1 3.7 2.9 3.1 3.1
 74 72 47 37 26 15 7 15 26 37 44 59 77

5.65
 3.73
 75
 Top Conc. Slab

A.62
 4.56
 85
 Cox Slab

9.38

1.8 1.5 6.17 1.20 6.18 A 6.63 5.10 5.1 A.5 A.5 A.1 3.91 3.36 3.10 3.0 3.28
 2.5 2.8 3.53 3.0 3.52 4.5 4.7 4.8 5.1 5.8 5.8 5.8 6.39 6.24 7.3 7.3 7.6
 67 58 56 47 37 26 15 13 11 13 15 26 37 46 50 60 63

6.90 1.4 1.9 1.2 6.93 6.35 5.12 1.8 1.1 A.5 A.12 3.55 3.20 A.80
 3.2 2.5 2.4 3.1 3.32 3.95 4.58 4.6 5.5 5.6 5.72 6.18 6.75 7.2 5.5
 60 55 49 47 37 26 15 13 13 15 26 37 44 50

1.5 1.2 7.06
 2.8 3.1 3.24
 4.7 4.5 2.7
 Paving

10.30

471+00

6.82	6.87	6.13	5.11	6.11	5.83	5.02	5.9	5.8	5.10	6.1	3.33	2.1	2.6	2.1
250	255	325	327	327	325	425	425	525	524	554	605	660	688	723
61	55	53	45	37	26	15	13		13	15	26	37	45	88

470+50

1.5	1.08	6.26	6.56	6.25	5.68	5.1A	5.10	4.1	4.1	3.18	3.18	2.1	2.1	2.2
223	230	312	280	313	320	424	424	523	523	520	590	649	70	72
61	55	52	45	37	26	15	13		13	15	26	37	45	75

470+26 Light Signal 2' E.

A.39
504
8'
Top Conc 3146

470+10 Edge Asphalt Paving

6.1A	6.13	5.73	6.82	6.10	5.86	5.30	4.1	3.16	3.1	3.60	3.05	2.1	2.1	3.1
324	285	325	256	298	322	408	496	562	524	578	633	62	71	55
83	74	70	46	37	26	15		7	15	26	37	44	64	75

469+70 Approach to Senior School

5.12	5.1	1.17	6.80	6.92	6.53	5.93	5.16	5.39	3.82	3.1	3.69	5.19	3.08	1.1	1.1	3.1
216	251	221	258	246	255	345	392	488	556	515	569	619	630	67	62	55
89	82	53	52	45	37	26	15		8	15	26	37	39	44	58	69

9.15
7

9.38
7

B.17			4.99	2.77 2.75	2.51 2.75
TP	5.50	7.76 7.66	4.62	2.26	
TP	4.91	6.88	4.81	1.97	
TP	4.51	6.78	5.40	2.27	
TP	5.41	7.67	7.12	2.26	

472+08.16 EC.

471+50

9.38
T

(State Elev)
544y BP Rosecrans & Garrison (City Elev)

On Iron Pipe 472+08.16 ✓

51.0	51.2	51.6	51.1	51.6	A	A	A	3	7	6	6	2.6	80	7	9	5
353	356	356	357	402	402	402	402	50	6	52	52	6.2	6.58	62	75	72
61	55	52	44	37	26	15	13			13	15	26	37	45	73	89

6.78	6.67	5.68	6.18	5.1	A	A	A	1	4	4	4	5	8	2.90	2.5	1.9	8
260	271	350	320	359	402	402	402	52	55	55	55	6.0	6.58	62	75	76	
61	55	52	45	37	26	15	13			7	13	13	26	37	45	70	89

9.38
T

X Sect. Scott St. from Lowell
100' SWly.

0189.5 R 2.0 Conc. Split Drive

INDEXED
WK
DEC 20 1948

0172 R 3' Conc. Walk 12 9 4

0150

0130

0124 Power Pole #D34988T 18' Lt.

0121 Reg. Frame Bldg. 345 Rt.

0100 W. Line Lowell St.

Bm. 3.77 5.72

1.95

0.35
5.37 5.25
35 17.5

0.48
5.24 5.21
35 13.9

0.26 0.2 0.12 0.59
5.5 5.1 5.5 5.6 5.3 5.3 5.03 4.85 2.68
35 15 13.11 13 17 19 34

0.2 0.1 0.2 0.39 0.68 0.63 0.83 2.46
5.5 5.0 5.5 5.38 5.04 5.09 4.89 2.26
35 16 12 10 13 18 34.5

0.1 0.1 0.59 0.92 0.99 0.79 2.1 2.16
5.5 5.0 5.8 4.80 4.28 4.95 3.3 3.1
35 26 9 13 19 30 44

Top of C.L. 219.5 FB1777 P-11

5.72

431
CE Rim 17.4. & Scott & Lowell 1.41 1.41

F121777 P.11

1400

	0.1	0.3	0.08	0.60	0.66	3.07
55	54	54	53	506	265	
25	10	9		17	34	

01945 & 2' Core Split Drive

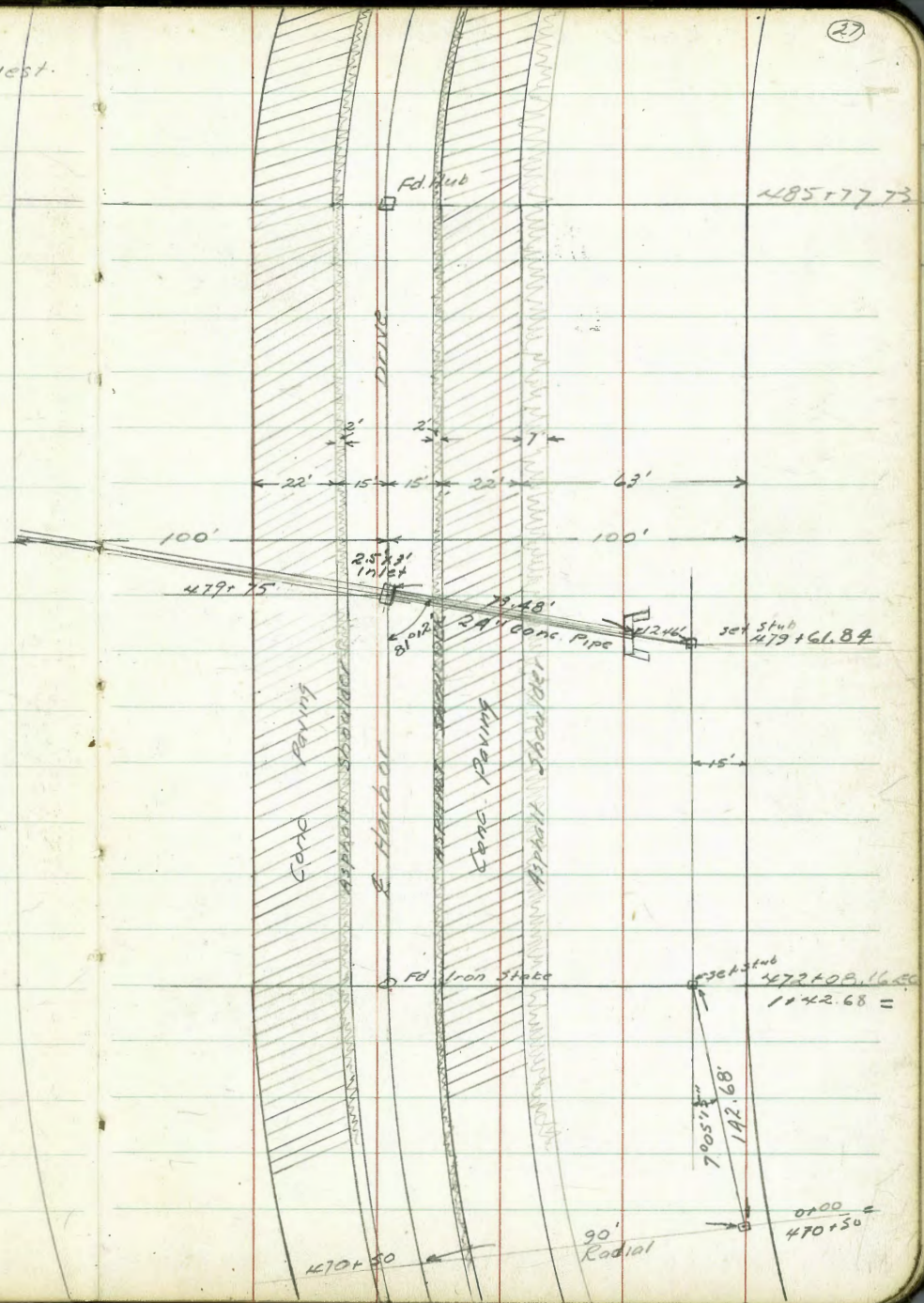
	0.36	0.17
536	525	
25	13.5	

572

12-17-48 X Sections for Drainage
 Hendrick on Harbor Drive Lowell St to West.
 Bramby
 Greer
 Rover
 W04 22002

INDEXED
 WK
 DEC 20 1948

(27)



485+77.73

100'
 479+75

set stub
 479+61.84

set stub
 472+08.16
 1142.68 =

7'005"
 142.68'

90' Radial
 470+50

Levels on Harbor Drive

473+00

472+08.16 EC.
1+42.68 =

0+79 Top of Dyke

0+69 Top of Dyke

0+00
470+50 = (see sketch)

B.17 4.95 8.38

3.43

Harbor Drive
 $\begin{matrix} 3.82 & 3.80 & 2.8 & 3.52 & 3.66 \\ \times 5 & \times 5 & \times 5 & \times 5 & \times 5 \\ 15 & 13 & 13 & 13 & 15 \end{matrix}$

A.50
 $\begin{matrix} 1.3 & 3.2 & 3.6 & 3.66 \\ \times 5 & \times 5 & \times 5 & \times 5 \\ 15 & 13 & 13 & 15 \end{matrix}$

offset
 line
 $\begin{matrix} 2.1 & 1.5 & 3.3 & 3.7 \\ \times 5 & \times 5 & \times 5 & \times 5 \\ 15 & 6 & 7 & 15 \end{matrix}$

1.9
 $\begin{matrix} 1.6 & 1.9 & 3.5 \\ \times 5 & \times 5 & \times 5 \\ 15 & 6 & 7 & 15 \end{matrix}$

1.9
 $\begin{matrix} 1.9 & 3.5 & 3.7 \\ \times 5 & \times 5 & \times 5 \\ 15 & 1 & 15 \end{matrix}$

1.9
 $\begin{matrix} 1.8 & 3.7 & 3.7 \\ \times 5 & \times 5 & \times 5 \\ 15 & 1 & 15 \end{matrix}$

5.5 1.00
 $\begin{matrix} A.7 & A.1 & 3.96 & 2.2 & 2.1 & 2.8 & 2.8 & A.00 & 3.8 \\ \times 5 & \times 5 & \times 5 & \times 5 & \times 5 & \times 5 & \times 5 & \times 5 & \times 5 \\ 15 & 13 & 13 & 15 & 15 & 7 & 4 & 3 & 15 \end{matrix}$

8.38

On Conc. Men on 100' Ft. Naval Training Sta.
Boundary line) (4684 34.12 p 20 this bk)

478+00

Harbor
DRIVE

2.72 2.63 2.0 2.59 2.69
 x26 x25 x1 x29 x27
 15 13 13 15

Offset
LINE

0.8 0.2 0.8 0.8 3.1 A
 C3 C2 C3 x3 32
 15 8 9 15

477+00

2.81 2.16 2.2 2.78 2.83
 x27 x22 x2 x30 x25
 15 13 13 15

1.4 0.8 0.5 1.0 3.3 3.1
 52 C3 C5 C5 33 40
 15 4 7 8 15

476+00

2.96 2.22 2.3 2.91 2.99
 x12 x15 x8 x27 x29
 15 13 13 15

1.5 0.6 1.1 2.1 2.0
 55 C5 C0 x2 41
 15 5 6 15

T.P. 5.65 7.08 6.95 1.42

475+00

3.16 3.19 2.1 3.11 3.17
 523 524 C3 527 521
 15 13 13 15

2.08
 1.8 0.9 1.1 2.6 2.8
 C5 75 73 58 55
 15 6 7 15

474+00

3. A 3.1 2. A 3.3A 3.1
 x25 x27 C0 504 x27
 15 13 13 15

1.9 1.2 1.1 2.9 3.4
 C5 72 73 55 50
 15 6 7 15

8.38

8.38

Harbor Drive

Offset Line

(30)

BM			3.47	2.74	2.75
T.P.	4.33	6.21	4.65	1.88	
T.P.	5.06	6.53	5.61	1.47	

479+61.8x (Parallel to Pipe)

479+54 Top of Dyke

479+52 Toe of Dyke

479+28

479+00

J.W.H. RR. Rosecrans & Garrison

2.68	2.62	1.5	2.59	2.66	1.71	1.03	0.48	1.8	1.5	2.9	2.8
440	445	5	440	442	537	811	72	53	55	73	99
15.18	17.15		13.15	15.18	12.64	12.64	7	4		9	11

H.W. FL Pipe

2.0	1.9	0.1	0.1	0.1	1.1	1.1	0.1	1.9
51	52	70	79	75	53	60	71	90
15	13	9	6	1		8	13	14

2.00	1.9	0.3	0.8	0.3	2.1	0.0	2.0
51	52	68	72	72	50	71	91
20	13	10	6		1	14	15

1.0	0.8	0.1	0.6	0.7	2.6	2.9	3.5
61	63	72	72	63	45	42	34
15	9	7		12	14	15	23

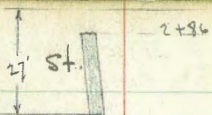
2.65	2.56	1	2.60	2.65
440	440	53	440	440
15-13			13	15

1.0	0.5	0.0	0.9	0.1	2.9	2.8
61	65	71	75	70	42	42
15	9		4	10	11	15

7.08

7.08
7

Gamma



2+93.17 = c.f.

2+18.15 = c.f.

3.5' Cold lay walk

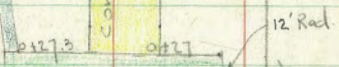
St

43rd



2+57

con. Pav



2+00 = c.f.

City Boundary

Delta

R=30'

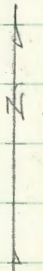
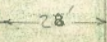
2+19.6

2+26.5

12' Rad

2+42.6

AC. Pav



(3)

6+10.87
Hub = 60' RP.

60'

c.f.

Beta St 25

100

Spike
100' RP.

25

Line to Pipe -
Banjo

4+90



St

43rd

3.5' Cold lay walk

53'

3+23

Gamma St.

c.f.

2+93.17



S.L. Ocean Vista
Gardens ?

50' 40'

40' 40'

st

43rd

6+66



House

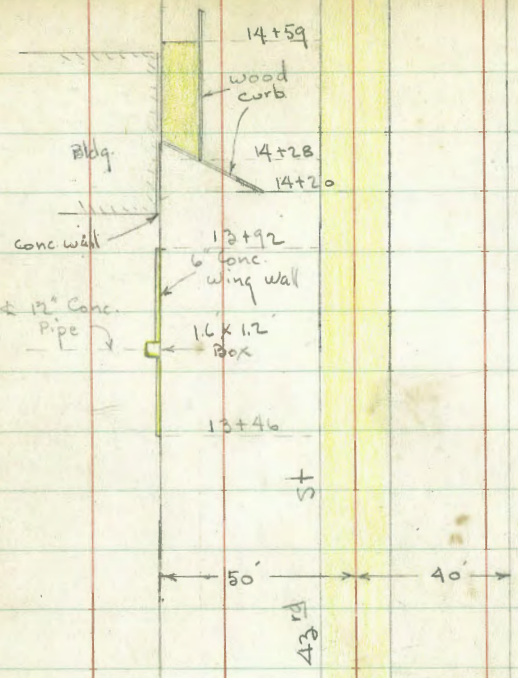
NL Beta

9+95.5

curb ?

Private Dirt
Drive = 17'

9+74



14+59

Wood
curb

14+28

14+20

Bldg

conc wall

13+92

6' conc
wing wall

12" Conc.
Pipe

16' x 12'
Box

13+40

st

50' 40'

43rd

Prop. R = 25'
cb. R = 35'

c.l.
Rough

11+20.7

Alpha St

H.C. Pavc

0

5.7

40

cross

150'
To
Cross

5.7 x

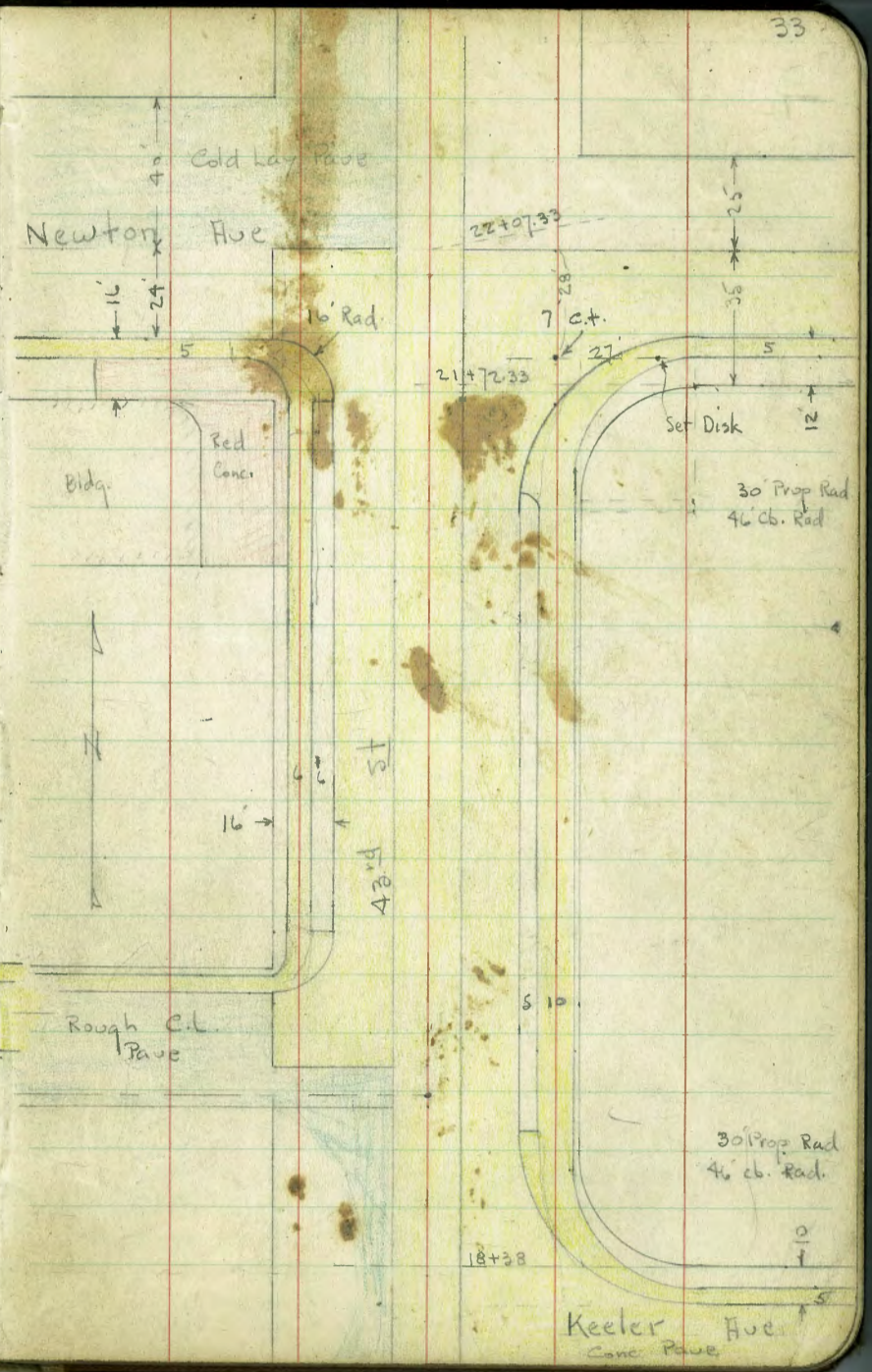
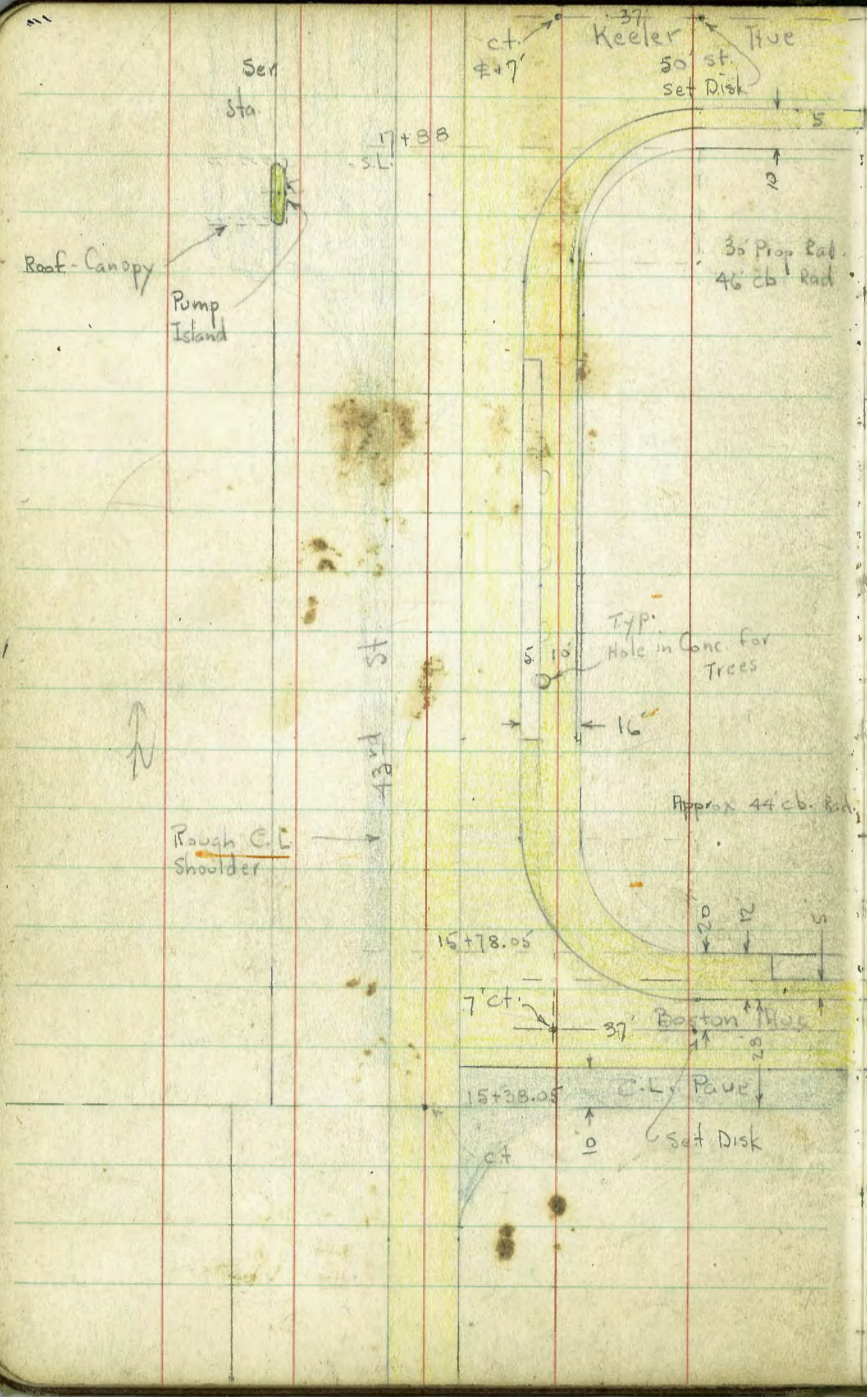
100'

c.t.
10+37.12 = S.L.

10'

Rough
c.l.

10+19
10+11.5



National Ave

Conc. Pump Island

Bldg

25+80.87

Cold Lay
Pass

25+40.87

conc

Guard
Rail

House

24+81

Dirt Dr

Ser. Sta.

24+52

24+40

Bldg

24+15

40 40

Rough C.L. Pavc

(43
25)

2.5' C.L. walk

Drive - Conc

22+87

23+00

25'
25'

28+66.65
L. Lagan

Set Hub.

90° 12'

28+36.65

Store

Ave. 7' shoulder
of Rough C.L.

BC = 27+47.10

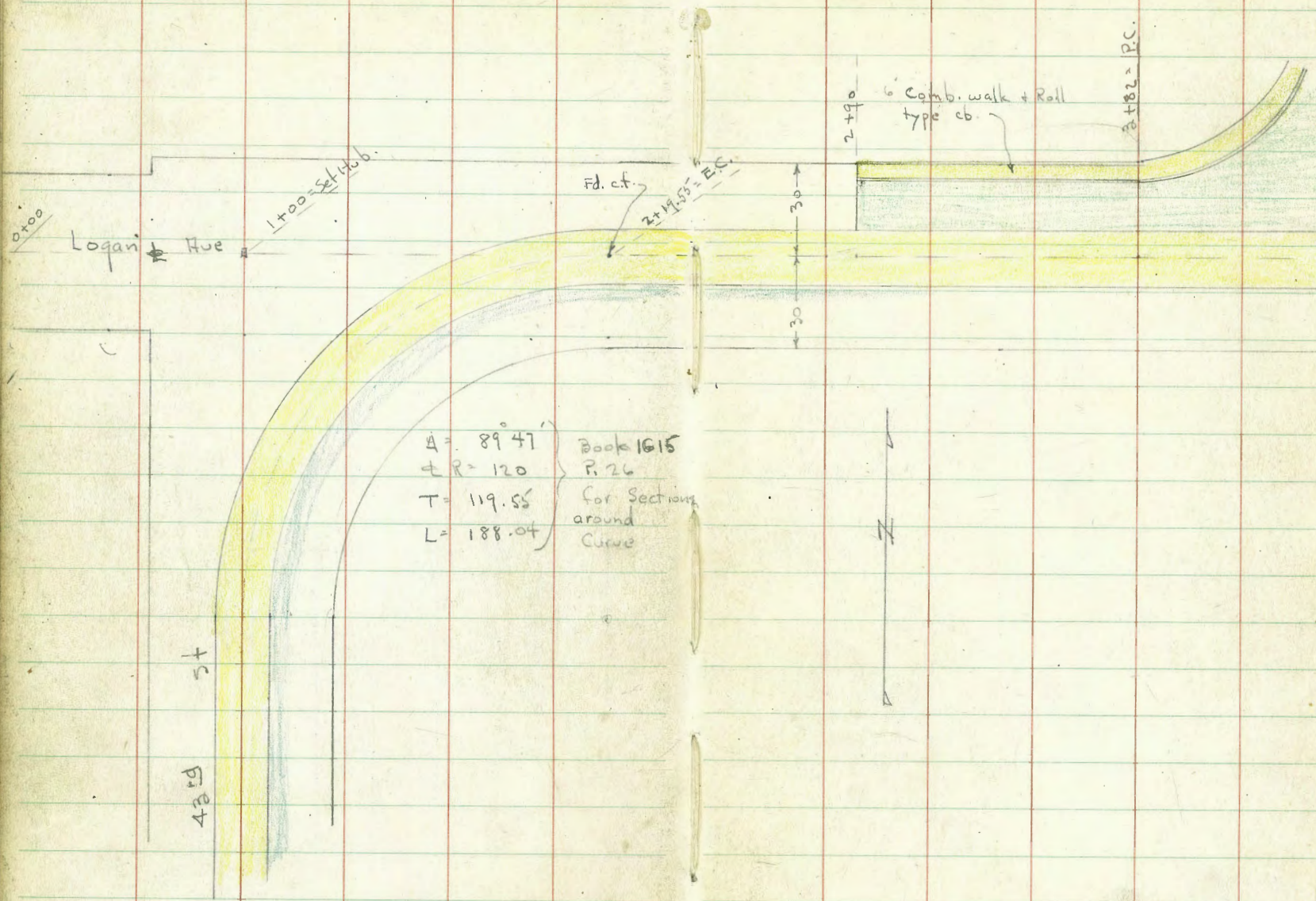
30 30



C.L. Parking
for Ser. Sta.

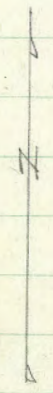
26+20.87

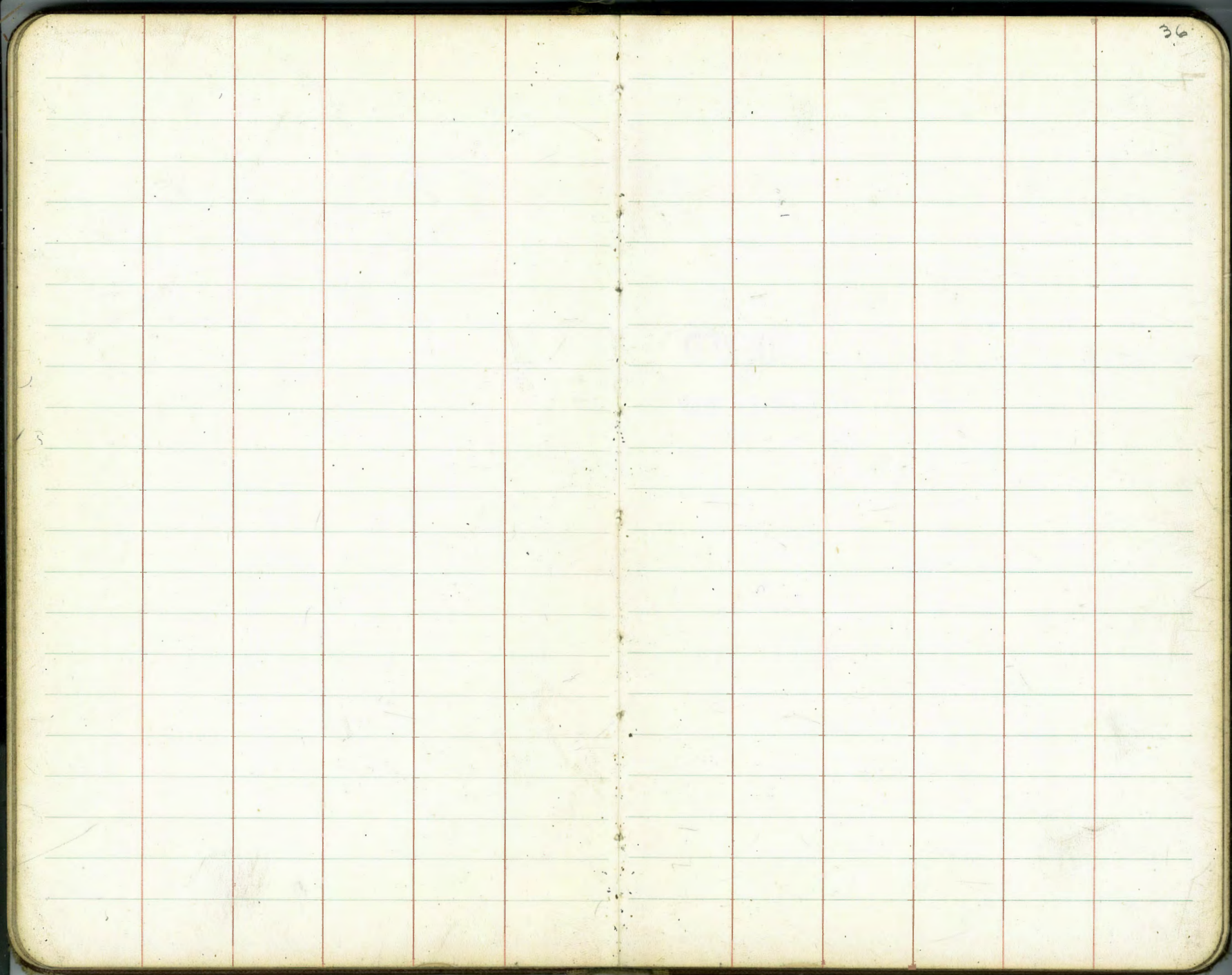
National Ave



$A = 89.47$
 $R = 120$
 $T = 119.55$
 $L = 188.04$

Book 1615
 P. 26
 for Sections
 around
 Curve





36

X-Sect. 43rd St from City Boundary
 = Delta St. - to Logan St. - 80' Row.

W.O. 22020

1-31-49

Osborne
 Hardin
 Hatch

12' Rad.
 0+27 = end of cb. on Rt + 0.3 ahead = end of cb. on Lt.
 shots along edge of Pav

☉ of Ret. on N.E. Cor.

0+15 = P.C. of 12' Rad. Ret. on Rt

INDEXED

WK

FEB 16 1949

0+00 = Boundary + ☉ Delta to E.

12.01	63.86	11.59	51.85
0.36	64.44	12.92	63.08
0.67	76.00	12.07	75.33
0.26	88.40	5.99	88.14
		1.80	92.33
5.08	94.13	0.39	89.05
9.71	89.44	1.44	79.73
B.M.	8.70	81.17	72.47

Lt.

Rt.

57.0	57.6	58.02	57.35	57.55	57.62	57.68	57.57	57.49	57.33	58.00	55.4	54.8
6.9	6.3	5.84	6.51	6.31	6.24	6.18	6.29	6.37	6.53	5.86	8.5	9.1
50	40	28	28	17	6		12	20	28	28	40	50
		Top end cb	Top cut.				edge of Pav. Pave to #.		Top cut.	Top end cb		
							7.28 cut.	6.64 Top				
										7.93 40 cut.	7.28 40 Top end cb.	
54.5	56.05	55.77	56.12	56.18	56.23	56.06	55.66	55.50	55.50			
9.4	7.4	8.09	7.74	7.68	7.63	7.80	8.20	8.36	8.36			
40	29	29	15	6		12	28	40	40			
	Top cut.	Top cut.					edge Pave					

63.86

SW. Nail in Pole - Delta

Nail in Pole - Beta - S.W.

Top Hyd. - E. side - Alpha

Nail Pole - S.W. Boston

N.W. B.P. Keeler + 43rd

6+02.9 = sly. of 16' Coldlay Pavc along Beta.

5+85.87 = S.L. Beta to E.

5+83-36.5 Lt. = ± P. pole # P 75848

5+82-36.5 Lt. = ± P. pole # 517366

5+50

5+35 - 49.9 Lt. = ± 7.5' Conc. Dr.

5+00

check B.M.	Beta S.W. Nail	4.10	88.14	✓
------------	----------------	------	-------	---

T.P.	7.00	92.24	1.87	85.24
------	------	-------	------	-------

4+95-49.7 Lt. = ± 7.5' Conc. Dr.

4+90-42.8 Lt. = end of Ely. of 35' Cold Lay Walk

4+64-35.3 Rt. = ± 3' Conc walk

5 87.0
50

5 87.2
50

5 86.7
50

5 87.0
50

5 86.0
40

5 85.2
25

6 85.49
50
edge

6 85.39
85

6 85.3
11.9
edge

7 85.1
25

7 85.2
40

7 84.8
50

0.5
42.8
end walk

+0.06
87.17
Dr.

+0.03
87.14
49.7 = Dr

87.11

3.33
35.3
walk

3.36
33.7
walk at porch

5 87.0
50

5 87.2
50

5 86.7
50

5 87.0
50

5 86.0
40

5 85.2
25

6 85.49
50
edge

6 85.39
85

6 85.3
11.9
edge

7 85.1
25

7 85.2
40

7 84.8
50

0.5
42.8
end walk

+0.06
87.17
Dr.

+0.03
87.14
49.7 = Dr

87.11

3.33
35.3
walk

3.36
33.7
walk at porch

5 87.0
50

5 87.2
50

5 86.7
50

5 87.0
50

5 86.0
40

5 85.2
25

6 85.49
50
edge

6 85.39
85

6 85.3
11.9
edge

7 85.1
25

7 85.2
40

7 84.8
50

0.5
42.8
end walk

+0.06
87.17
Dr.

+0.03
87.14
49.7 = Dr

87.11

3.33
35.3
walk

3.36
33.7
walk at porch

5 87.0
50

5 87.2
50

5 86.7
50

5 87.0
50

5 86.0
40

5 85.2
25

6 85.49
50
edge

6 85.39
85

6 85.3
11.9
edge

7 85.1
25

7 85.2
40

7 84.8
50

0.5
42.8
end walk

+0.06
87.17
Dr.

+0.03
87.14
49.7 = Dr

87.11

3.33
35.3
walk

3.36
33.7
walk at porch

6+86 - 40.5 Rt = Beg. 8" Conc. wall

6+80 - 30.1 Rt = Nly of Conc. Dr.

N.S. 4' walk

6+66 - 30.1 Rt = sly. of 14' Conc. Dr. = end of

6+52 - 30.1 Rt = 3' Conc. E+W. walk

6+37.5 - 36' Rt. Beg. Wly. of 4' Conc. walk

6+35.87 = N.L. Beta

6+18.9 = Nly. of Pavc along Beta

6+10.87 = 4' Beta

	Lt.	#	Rt.	#
87.1	87.2	87.2	88.14	88.24
5.1	5.0	5.0	4.10	4.00
50	40	25	4.3	4.00
			edge	
			3.89	88.35
			13.5	87.95
			edge	25.1
			25.1	87.87
			20.1	88.05
			36	88.16
			36	4.08
			55	55
			floor	
			Gar.	
			4.39	87.85
			30.1	87.80
			30.1	87.81
			4.4	87.81
			36	4.43
			36	4.0
			Cor. walk	
86.6	86.9	87.2	87.89	87.20
5.5	5.0	5.0	4.35	4.2
50	40	25	4.6	4.35
			edge	13.3
			edge	50
			4.8	87.89
			4.7	87.89
			4.39	87.85
			13.5	87.74
			edge	50
			25	87.2
			4.0	87.3
			5.1	87.1
			50	87.5
			100	86.8
86.6	87.1	87.1	87.64	87.71
5.4	5.1	5.1	4.60	4.53
50	40	25	4.8	4.63
			edge	13
			edge	50
			5.1	87.1
			4.0	87.2
			50	87.0
			100	86.3

92.24

2.8
40.5 = Top
Wall

4.88
1.13
53 = walk
at Porch

4.0
4.5
4.088
40 = Dr.

4.29
4.37
4.19
36
Wly.
Walk

4.8
25
4.0
50
100

5.0
4.0
5.1
50
100

5.1
4.0
50
100

8+71 - 37.8 Lt. Ely. of 7' Conc. Dr. + Sly. of

8+50 - sly of 3' E+W. Conc. Walk

8+27 - 36.9 Lt. = Reg Ely. of 5' Conc. walk

8+00

7+77 - 36' Lt. = P. pole # 40 89 81 H

7+50

7+36 - 42.5 Lt. = 3' Conc. walk

7+36 - 40.8 Rt. = end wall

7+23 - 40.3 Rt. = E of 10' Conc. Dr.

7+00

1.67 66.6 floor gar.	1.89 42.8 89.48 walk Dr.	1.96 37.8 Ely walk	1.96 90.28				
2.38 60.3 walk at Porch.	2.76 87.3 25	2.09 90.24 6.4 edge	1.89 90.39	1.92 90.32 11.3 edge	2.50 90.2	1.9 90.7	1.9 90.5
	2.77 41.9	3.11 87.13 36.9 Car Walk					
3.9 50	3.8 40	3.6 88.6 25	2.58 89.66 5.6 edge	2.43 89.81	2.51 89.73 12.2 edge	2.6 89.6	2.3 89.9
4.0 50	4.3 40	4.1 88.1 25	3.16 89.08 4.9 edge	3.08 89.16	3.16 89.08 12.9 edge	3.4 88.8	3.3 88.9
	4.26 71.5 walk at Porch	4.86 87.98	4.10 42.5 = walk			3.2 89.0	1.68 40.8 = Top wall
4.7 50	4.6 40	4.7 87.5 25	3.65 88.59 3.9 edge	3.57 88.67	3.11 40.3 Dr.	2.88 63 = floor Gar.	1.92 90.32 40.7
			92.24				

of Private Dr.
 9+95.6 - 45' Rt. = Wly. of 6" cb along N. side

9+84 - 45' Lt. = ± 2.5 Conc. walk

9+80

9+74 - 45' Rt. = Wly. of 6" cb. along Private Dr.

9+50

9+20 - 43.9 Lt. = ± 2.5 Conc. walk

Check B.M. Top F.H.	2.42	92.31	92.33	P. 37
T.P.	3.51	94.73	91.22	= Nail in 516318 Pole

9+00 - = along sly. of 7' Conc. Dr. on Lt.

8+87 - 30' Rt. = ± Guy Pole # 516318 H

8+87 - 41.5' Lt. = ± P pole # P75847

8+86 - 38.2 Lt. = end Ely. of Walk

	Lt.	#	Rt.	43
3.26	91.37		30	291.91
65 = walk		90.97	45	55
3.76			8	Top cb.
45 = walk				
3.8	90.9		30	
50			45	
4.1	90.6		8	
40				
4.3	90.4		30	
25			45	
3.78	90.95		8	
8.6				
edge				
3.63	91.10		30	
			45	
3.74	90.97		8	
9.3				
edge				
3.4	91.3		30	
25			45	
3.3	91.4		8	
40				
3.3	91.4		30	
50			45	
5.5			8	
Top				
cb.				
2.64	92.09		30	
55			45	
Top			8	
cb.				
3.2	91.5		30	
50			45	
3.5	91.2		8	
40				
4.0	90.7		30	
25			45	
3.53	91.20		8	
8.2				
edge				
3.44	91.29		30	
			45	
3.58	91.15		8	
9.7				
edge				
3.6	91.11		30	
25			45	
3.3	91.4		8	
40				
3.3	91.4		30	
50			45	
3.2	91.5		8	
50				
3.53				
60				
walk				
3.71	43.9 = walk			
1.51	90.73			
71.6				
Floor				
Gar.				
1.55	90.71			
43.5				
Dr.				
1.8	90.4			
40				
1.6	90.6			
25				
1.45	90.79			
7.4				
edge				
1.2	90.95			
9				
1.39	90.85			
10.5				
edge				
1.5	90.7			
25				
1.1	91.1			
40				
1.0	91.2			
50				
1.69	90.55			
43.2				
Car walk				
1.80	90.88			
38.2				
92.24				

T.P. 0.16 92.47 2.42 92.31

10+97.12 = N.L. Alpha

10+87.12 = U. cb.

10+67.12 = Φ

10+47.12 = S. cb.

10+37.12 = S.L. Alpha to W. + -25.2 Rt = Φ F.H.

10+13- 8.9 Lt. = ^{sly} edge of H.C. Pav^(shots below) at edge of Conc. pave

+ 4.5 Lt = Φ P. pole # JP 175790 Pav^{on Lt.}

10+11.5 = P.C. of 25' Ret. + edge of H.C.
 40' Lt. Red.

87.88
 87.23
 6.69
 88.72
 6.01 6.70
 25 125
 Top gut
 4.37
 45.7
 Cor. walk
 90.26

49.6 Top	49.6 90.4	48.0 86.93	25.8 86.95	7.7 87.01	8.8 87.24	92.47 7.40	7.50 87.23	7.8 86.9	6.6 88.1	6.7 88.0	6.6 88.1
88.06 Top	88.06 90.4	87.44 80	87.48 25	87.46 18	87.72 88	87.85 6.88	87.71 7.02	87.4 5.3	88.8 20	88.0 4.6	88.6 5.0
88.27 Top	88.30 90.4	88.29 80	88.30 25	88.67 18	88.78 88	88.55 6.18	88.55 8.9	81.1 6.6	88.8 20	88.6 4.7	88.6 5.0
89.06 Top	88.41 90.4	88.87 80	88.99 25	88.99 18	89.44 88	89.78 5.9	89.38 8.9	89.8 6.6	90.0 20	89.6 4.7	89.6 5.0
89.53 Top	89.78 90.4	89.02 80	89.23 25	89.23 18	89.67 88	89.68 5.15	89.64 8.9	89.8 6.6	90.5 20	89.7 4.7	89.8 5.0
5.20 Top	5.95 90.4	5.71 40	5.50 25	5.50 18	5.29 88	5.93 4.93	5.09 9	5.4 16	4.5 25	9.0 4.0	9.0 5.0
90.22 Top	89.53 90.4	89.72 80	89.23 25	89.23 18	89.67 88	89.80 4.93	89.64 9	89.2 16	90.2 25	9.0 4.0	9.0 5.0
90.23 Top	90.37 90.4	90.32 80	90.23 25	90.23 18	90.67 88	90.37 4.93	90.32 9	90.2 16	90.2 25	9.0 4.0	9.0 5.0
90.23 Top	90.37 90.4	90.32 80	90.23 25	90.23 18	90.67 88	90.37 4.93	90.32 9	90.2 16	90.2 25	9.0 4.0	9.0 5.0

13+44- 36.5' Lt. = Tel. pole - # 408977-H
 13+00- 40.3' Rt. = fence

T.P. 4.68 84.34 12.81 79.66

12+50
 12+46- 26.5' Rt. = Euc. pole # 447851-H

12+45- 41.4' Lt. = Tel. pole # 516316-H

12+08- 40.2' Rt. = Reg. High wire fence

12+12- 46' Lt. = 3' Conc. walk

12+08 -36' Lt. = P. pole # P 75846

12+00

11+66- 49.1' Lt. = Fly. of 6" Conc. Brick wall

11+60

11+22- 41.5' Lt. = Tel. Pole # 516317-H

11+20.7 = opp. P.C. of Ret. on Lt. + = edge of AC
 Pavé

75.2	75.3	79.5	79.9	79.13	79.22	79.08	79.6	79.5	80.1	80.3	45
9.1	9.0	4.8	5.4	5.2	5.12	5.26	4.7	4.8	4.2	4.0	
	4.0	25	15	edge		edge	17	25	40	50	
80.9	80.4	79.5	80.2	80.72	81.24	80.91	81.0	81.0	81.6	81.6	
11.6	12.1	13.0	12.3	11.75	11.56	11.56	11.5	11.5	10.9	10.9	
50	40	33	25	88	92	15	25	40	50	50	
				edge		edge					
83.36	83.32	83.32	83.32	83.32	83.32	83.32	83.32	83.32	83.32	83.32	
9.11	9.11	9.11	9.11	9.11	9.11	9.11	9.11	9.11	9.11	9.11	
83.4	83.2	82.4	82.7	82.77	82.88	82.87	82.5	83.3	83.8	85.5	
9.1	9.3	10.1	9.8	9.70	9.59	9.60	10.0	9.2	8.7	7.0	
50	40	29	25	edge	edge	edge	15	20	40	50	
	86.54	86.54	83.7	83.7	82.8	82.8	82.5	83.3	83.8	85.5	
	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	
	Top wall	Top wall	ground	ground	ground	ground	ground	ground	ground	ground	
84.8	84.2	83.7	84.1	84.50	84.62	84.56	84.1	84.9	85.5	86.4	
7.7	8.3	8.8	8.4	7.97	7.85	7.91	8.4	7.6	7.0	6.1	
50	40	32	25	edge	edge	edge	15	20	40	50	
86.36	86.22	85.58	85.86	85.99	86.31	86.19	85.8	86.4	87.3	87.3	
6.11	6.25	6.89	6.61	6.48	6.30	6.16	6.24	5.6	5.2	5.2	
45.7	40	40	25	18	8.8	9	6.5	20	40	50	
cor.	Top	put			edge	edge					
walk	end	cb.									
					92.47						

14+25

14+20 - 23.7 Lt = Fly of 6" Wood cb + Guard Rail

14+12 - 50' Lt = Cor. 10" Conc. Ret. wall for Bldg.

14+00 - 40.9 Rt. = fence

13+92 - 50' Lt. = end Conc. wing wall

13+77 - 41.5 Lt. = ± Tel. pole 514315-H

13+75

13+61 - 51.6 Lt. = Box in wing wall inlet of 10" Conc pipe at 16x12

13+57.8 - 26 Rt. = ± Inlet of 10" Tile Drain

13+55.4 - 26.4 Lt. = ± outlet of 12" Conc. Drain under Road.

13+50

13+46 - 50 Lt. = Beg 6" Conc wing wall to 10" Conc. Drain

5.79, 1.5	7.77, 6	7.81, 1	7.85, 5	7.89, 4	7.90, 5	7.93, 5	7.95, 2	7.97, 4
5.0	5.0	4.0	5.8	5.4	5.29	5.37	4.8	4.4
Top wall				edge		edge		
5.15	7.9, 1.9	10.9	7.3, 4					
5.0		5.0						
Top wall		ground						
12.5	11.3	7.1	5.4	5.7	5.58	5.72	5.0	6.2
5.0	4.0	3.6	2.4	1.0	8.8	9.1	2.5	3.0
					edge	edge		
13.5	7.0, 5.6	7.0, 6	7.8, 5	7.8, 5	7.8, 5	7.8, 8	7.8, 8	7.8, 4
6.0	6.9, 4	6.9, 4	6.9, 4	6.9, 4	6.9, 4	6.9, 4	6.9, 4	6.9, 4
13.57								
Top wall								
13.78	13.7	13.7	5.8	6.0	5.8	5.9	5.5	9.5
5.0	5.0	4.0	2.3	1.5	8.8	9.2	2.3	2.0
Top wall					edge	edge		
17.03	6.7, 3.1	7.0, 4.7						
5.1, 6								
FL Inlet								
12.87	7.3, 1.9	12.87						
Top Box								
9.5								
2.6								
FL Inlet								
11.15								
26.4								
FL outlet								
7.0, 4.9	7.1, 6	7.8, 5	6.0	7.8, 4	7.8, 5	7.8, 4	7.8, 9	7.5, 1
7.1, 6								
13.85	12.7	5.8	6.0	5.9	5.7	5.8	5.4	9.3
5.0	4.0	2.3	1.5	8.8	9.2	9.2	2.3	2.0
Top wall				edge		edge		
13.9								
5.0								
Top wall								
84.34								

15+38.05 = S.L. of Boston
 15+28 - 37.3 + 42' Lt. = Dead man
 15+23 - 27' Rt. = Guy Pole
 15+20
 15+14 - 28' Rt. = Dead man
 15+09 - 46.5 Lt. = Tel. pole # 5163 14-H
 15+09 - 37.5 Lt. = P. pole # 75845
 15+00
 14+71 - 39.5 - end of wood cb.
 14+75 - 40.8 Rt. = end of fence
 14+59 - 40' Lt. = end of Conc. slab.
 14+50
 14+34 - 50' Lt. = Beg. Wly. of Conc. slab along
 wood cb. along edge
 14+28 - 40' Lt. = Beg. Fly. of Conc. slab - with 6x6

5.03
 39.5
 Top
 cb.

Bldg.

+ floor of Bldg.

84.34

5.5	5.4	5.2	4.9	5.0	4.10	4.87	4.9	4.6	4.3	2.9
100	50	40	25	edge	edge	edge	edge	edge	edge	edge
77.8	78.9	79.1	79.4	79.27	79.24	79.42	79.4	79.7	80.0	81.4
79.3	79.5	79.2	79.42	79.53	79.41	79.4	81.0	82.0	82.5	
5.0	4.8	5.1	4.92	4.81	4.93	4.9	3.3	2.3	1.8	
50	40	25	edge	edge	edge	20	25	40	50	
79.2	79.3	79.1	79.50	79.57	79.36	79.5	82.0	82.7	82.9	
5.1	5.0	5.2	4.84	4.77	4.94	4.8	2.3	1.6	1.4	
50	40	25	8.9	edge	edge	18	25	40	50	
79.08	79.10	79.9								
5.26	5.24	5.4	39.4	got along						
50	40		cb.							
Cor. Conc.										
79.11	79.08	78.8	79.30	79.37	79.32	79.3	79.6	79.8	79.8	
5.23	5.30	5.5	5.04	4.97	5.02	5.0	2.7	2.5	2.5	
50	40	39.4	8.1	edge	edge	18	25	40	50	
Conc.	Conc.	got	along wood							
			cb.							
79.26	79.26	79.26								
4.98	5.0	5.39								
50	40	40								
Conc.	Conc.	Conc.								

R. 47

17+72 - 38.9' Lt. = \pm + Ely. of 3' Conc. Pump Island
17+64 29.5 Rt. = \pm of 36" Palm
17+60.5 = P.C. of inside of walk

T.P. 8.70 78.17 11.89 72.45 72.47 on B.M. starting BM.

17+52 - P.C. 46' Rad Ret. on Rt

17+32.8 = Beg. Solid walk on Rt

17+32.5 - 28.5 Rt. = \pm 6" Conc. Mail Box Post

17+20 - 30' Lt. = \pm P. pole # J.P. 75555

17+18 - 27.5 Rt. = \pm 50" Palm

17+05 - 27.6 Rt. = \pm P. pole # P 75554

17+05 - 49.8 Lt. = \pm 4' Conc. Steps to Porch

17+00

16+71 - 30' Rt. = \pm 40" Palm

16+50

Station	50	40	28	20	89	20	9	94	Top	Walk
17+72	9.2	9.1	8.9	8.13	8.17	8.17	8.54	8.36	24	94
17+64	75.1	75.2	75.4	76.21	76.36	76.17	76.80	75.98	24	94
17+60.5								77.69	24	94
T.P.	78.17	78.17	78.17	78.17	78.17	78.17	78.17	77.72	29.2	29.2
17+52	75.1	75.2	75.4	76.21	76.36	76.17	76.80	75.98	24	94
17+32.8								77.69	24	94
17+32.5								76.72	29.2	29.2
17+20								76.61	29.2	29.2
17+18								76.61	29.2	29.2
17+05								77.34	29.2	29.2
17+05								77.56	29.2	29.2
17+00								77.00	29.2	29.2
16+71								77.66	29.2	29.2
16+50								77.25	29.2	29.2

Handwritten notes in right margin:
15' long
Top of slab.
Rt
49
Starting BM.
edge
walk
edge
walk
walk
walk

T.P. 4.86 77.33 870 72.47

18+28- Cont.

18+24- N. cb

18+13- #

17+98- Cont.

17+98- S. cb.

17+88- S.L. of Keeler to F.

4.9
50

4.5
50

3.6
50

3.3
50

4.4
40

3.9
40

3.5
40

3.2
40

4.1
28

3.7
28

3.3
28

3.1
28

3.50
9.2
edge

3.08
9.2
edge

2.77
9.2
edge

2.59
9.2
edge

3.46
9

3.0
9

2.7
9

2.52
9

3.40
9

3.5
9

2.72
9

2.56
9

3.81
24

3.4
24

3.5
24

2.96
24

3.19
40

2.68
40

2.36
40

2.17
40

2.90
55

2.08
55

2.00
55

1.63
40

2.55
70

1.76
70

1.09
70

1.44
52

2.15
70

1.07
70

1.23
70

1.44
52

73.3

73.8

74.1

74.67

74.72

74.77

74.36

74.98

75.27

75.52

76.02

77.33

76.59

76.5

78.17

4

#

81

50

129
100
Top

75.52
70
Top

76.02
70
Top

100
100
put

100
100
put

76.54
40
Top

76.73
40
Top

76.94
40
Top

76.17
55
Top

76.48
70
Top

76.74
70
Top

77.31
put

77.88
put

75.02
24

75.81
40

76.17
55

76.48
70

76.74
70

75.02
24

75.81
40

76.17
55

76.48
70

76.74
70

75.02
24

75.81
40

76.17
55

76.48
70

76.74
70

19+16.12 = N.L. of Keeler to Lt.

19+14.12 = along Nly. of 5' Comb. walk on Lt.

19+09.12 = N. cb. of Keeler to Lt

19+09 = 28.5' Rt. = ± 40" Palm

18+91.12 = S.L. of Conc. pave on Lt.

18+83 = 29' Rt. = ± 4' Pepper

18+80

Solid walk bet cb + Reg. walk

18+74 = opp. PC of 40 Rad Ret on Rt. = end of

18+56 = 29' Rt. = ± 5' Palm

18+55 = 29.4' Lt. = ± Tel. pole # 408986 - H

18+42 = 29.5' Rt. = ± P. pole # 78016

18+28 = N.L. Keeler - to Rt.

4.9	4.4	4.52	4.5	5.22	5.0	4.64	4.53	4.72	5.18	4.64	4.54	4.41
50	40	36.5	26.7	26.1	24	9	9	9	23.8	23.8	29	39
		edge	Top	put					put	Top		walk
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							
		Top	put	put	put							
	72.47											
	72.61											
4.72	4.44	4.72	4.61	5.18	5.18							
50	40	29.7	29.7	29.7	29.7							

20+94 - 28' Rt. = ± 3' Palm

20+87 = end Solid Conc. on Lt.

20+50 -

20+48 - 28' Rt. = ± 4' Palm

20+40.8 - Beg. Solid Conc. Back of cb. on Lt.

20+36 = ± of 10' Conc. Dr. on Rt.

20+24 - 28.3 Rt. = ± 24" Magnolia

20+01 - 28.5 Rt. = ± 40" Palm

20+00

19+95 - 28.5 Lt. = ± Tel. pole = 400963

19+88 - 28.3 Rt. = ± P. pole - N=±

19+80 = ± 10' Conc. Dr. on Rt.

19+55 - 28.3' Rt. = ± 40" Palm

19+50

7+
48

19+47 = 23.8 Rt. = ± 2.5' Conc. walk in parking

19+27 = ± of 10' Conc. Dr. on Rt.

19+25.12 = P.C. of 16' Rad. Ret. on Lt.

Station	Description	Point	Value	Point	Value	Point	Value
8.28	8.31	8.47	8.53	8.58	8.63	9.06	
40.4	36	30	24	24	24	9.06	
Conc	walk	walk	Top	Top	Top	Top	
68.05	68.94	68.86	68.78	68.27			
69.90	69.80	69.68	69.59	69.07	69.79	69.86	69.76
7.43	7.53	7.65	7.74	8.29	7.54	7.41	7.57
40.4	36	30	24	24	9	9	9
Conc	walk	walk	Top	Top	Top	Top	Top
7.29	7.30	7.41	7.56	8.03			
40.4	36	30	24	24			
Conc	walk	walk	Top	Top			
floor of							
blddy							
7.71	7.14	6.77	6.49				
23.8	29	39	50				
got	walk	walk	Dr.				
70.8	71.00	70.85	70.76	70.21	70.79	70.89	70.85
5.5	6.33	6.48	6.57	7.12	6.54	6.44	6.49
40	36	30	24	24	9	9	9
walk	walk	walk	Top	Top	Top	Top	Top
71.8	72.04	72.02	71.87	71.27	71.91	71.98	71.84
5.5	5.29	5.31	5.46	6.06	5.42	5.35	5.49
38	36	30	24	24	9	9	9
walk	walk	walk	Top	Top	Top	Top	Top
71.84	71.93	71.98	71.84	71.93	71.98	71.98	71.84
6.48	6.44	6.49	6.44	6.44	6.44	6.44	6.44
23.8	23.9	23.9	23.9	23.9	23.9	23.9	23.9
got	got	got	got	got	got	got	got
71.44	71.54	71.54	71.54	71.54	71.54	71.54	71.54
5.89	5.79	5.79	5.79	5.79	5.79	5.79	5.79
29	29	29	29	29	29	29	29
walk	walk	walk	walk	walk	walk	walk	walk
71.03	71.05	71.05	71.05	71.05	71.05	71.05	71.05
6.30	6.28	6.28	6.28	6.28	6.28	6.28	6.28
29	29	29	29	29	29	29	29
walk	walk	walk	walk	walk	walk	walk	walk
72.07	72.17	72.17	72.17	72.17	72.17	72.17	72.17
5.26	5.16	5.16	5.16	5.16	5.16	5.16	5.16
29	39	39	39	39	39	39	39
walk	walk	walk	walk	walk	walk	walk	walk
72.52	72.49	72.45	72.42	72.52	72.52	72.52	72.52
4.81	4.84	4.88	5.41	4.81	4.81	4.81	4.81
36	30.1	2.4	2.4	9	9	9	9
walk	PC.	Top	Top	Top	Top	Top	Top
72.92	72.92	72.92	72.92	72.92	72.92	72.92	72.92
4.81	4.81	4.81	4.81	4.81	4.81	4.81	4.81
9	9	9	9	9	9	9	9
7.33	7.33	7.33	7.33	7.33	7.33	7.33	7.33
5.47	4.77	4.66	4.80	4.81	4.81	4.81	4.81
20.8	28.8	39	100	100	100	100	100
got	walk	walk	on Dr.	on Dr.	on Dr.	on Dr.	on Dr.

21+72.33 = S.L. Newton to E.

21+67.33 = S.L. Newton to W. = PC. 16' Rad Ret.

21+50 - 27' Lt. = 4' Palm

21+40 - 26.8' Lt. = 4' Tel pole # 408987 - H

21+39 - 27.4' Rt. = 4' Palm

21+38.33 = PC. of 46' Rad. Ret. on Rt.

21+22 = Beg Solid walk Back of Reg. walk on Lt.

21+16 - 28' Rt. = 30' Magnolia - large roots

21+03 - 26.4' Rt. = 4' P. pole # 178402

Newton
Set BM. - Nail in pole - NW. 7.20 64.87

T.P. 4.76 72.07 10.02 67.31

21+00

	Lt.	Rt.	Rt.	53
4.62	4.77	5.00	5.52	4.83
48	37.5	25.1	25.1	9
	edge	Top	put.	
67.70	67.17	67.07	66.96	66.50
4.37	4.90	5.00	5.11	5.57
48	36	30	24.3	24.3
Conc.	walk	PC	PC	put.
68.26	67.79	67.67	67.62	67.92
3.91	4.26	4.40	4.45	4.95
54.9	36	30	24.2	24.2
	walk	walk	Top	put.
68.28	68.14	68.03	68.00	67.58
3.79	3.93	4.04	4.07	4.53
54.1	36	30	24.2	24.2
Conc. at Cor.	walk	walk	Top	put.
68.53	68.56	67.97	68.75	68.95
8.7	8.72	8.40	8.87	9.36
40	36	30	24.2	24.2
			Top	put.
				9
				8.58
				8.58
				8.67
				9
				77.33
				72.07
				68.66
				9
				68.20
				9.13
				24
				8.64
				24
				Top
				8.69
				8.53
				29
				walk
				8.34
				39
				68.99
				67.45
				67.30
				24
				9.13
				66.85
				66.77
				4.53
				67.54
				39
				100
				67.92
				68.31
				37.6
				49.8
				edge

53

22+47.33 = N.L. Newton to W.

22+32.33 = N.L. Newton to E.

T.P. 453 69.40 7.20 64.87

22+10 - to Rt. = ± Tel. pole # 434663-H

22+10-22 Rt. = ± Deadman

22+08.5 27.8 - Rt. = ± P. pole # 74331

22+07.5 - 45' Rt. = ± 3' Palm

By Ctd. Lay from Here N.
Note: Conc. strip in E is covered

22+07.33 = ± Newton to W. = edge of Conc Pav

21+84.33 Cont.

21+84.33 = S.cb. 1 To E.

21+83.33 = S.cb. Newton to W.

51	64.2	51	63.7
45	69.9	50	64.7
45	64.9	40	64.7
45	65.0	28	69.8
43	65.1	17	64.6
37	65.62	9	65.17
32	65.74	4	65.12
38	65.56	9	65.12
40	65.4	16	65.0
22	67.1	22	67.0
22	67.5	28	67.3
40	67.8	40	67.7
50	68.1	40	68.0
50	65.9	50	65.9
40	66.1	40	66.1
40	66.23	40	66.23
40	66.36	40	66.36
40	66.16	40	66.16
40	66.0	40	66.0
40	67.3	40	67.3
40	68.13	40	68.13
50	68.7	50	68.7
7.6	64.5	7.6	64.5
50	65.9	50	65.9
45	65.77	45	65.77
28	65.60	28	65.60
28	65.97	28	65.97
9	66.26	9	66.26
5	66.43	5	66.43
5	66.16	5	66.16
6	68.01	6	68.01
40	67.94	40	67.94
10	68.55	10	68.55
10	69.38	10	69.38
8.3	65.8	8.3	65.8
52	66.78	52	66.78
55	67.04	55	67.04
56	66.05	56	66.05
59	66.26	59	66.26
50	67.03	50	67.03
55	67.01	55	67.01
56	66.91	56	66.91
54	66.53	54	66.53
40	67.45	40	67.45
40	67.67	40	67.67
40	68.31	40	68.31
40	68.68	40	68.68

24+00

7.9	8.0	8.3	9.1	8.24	8.19	8.29	8.3	6.6	6.6	6.0	5.9
50	40	28	16	89	8	89	16	22	22.5	40	50
6/15	6/14	6/11	6/13	6/16	6/21	6/11	6/11	6/2.8	6/3.0	6/3.4	6/3.5
			got	edge		edge	edge	edge	Wly. walk		

23+80 - 19.8 Rt = ± 2' Conc. Steps

23+68 - 18' Rt = ± 4" Palm

23+50

23+21 - 39.5 Rt = ± 19" Acacia

23+20 - 21.5 Rt = ± 3" Acacia Heavy wire fence

23+09 - 39.8 Lt = end Low Wire fence + Beg. High

23+00

22+98 - 29.2 Lt = ± Tel. pole # 408988-H

22+91 - 25' Rt = ^{Beg.} Wly. of 35' Coldlay walk

Low Portion Covered with C.L. Conc. Pavc - See sketch
22+87 = ± 8' Conc. Dr on Rt. with flange to

22+76 - 39.6 Lt = ± 3' Conc. walk = end of Cover on Conc. Strip

22+48 - 39.8 Lt = Beg. wire fence

6.2	6.1	7.0	7.1	6.80	6.69	6.79	6.6	5.6	5.1	4.7	4.4
50	40	28	17	89	6.69	9	16	22	25.7	40	50
6/2.6	6/2.7	6/2.4	6/1.7	6/2.60	6/2.71	6/2.62	6/2.5	6/2.2	6/2.3	6/2.7	6/2.5
			got	edge		edge	edge	edge	Wly. walk		
5.6	5.5	5.6	6.1	5.54	5.43	5.58	5.8	4.1	3.7	3.2	2.8
50	40	28	15	89	5.43	9	16	22	25	40	50
6/3.8	6/3.9	6/3.8	6/3.3	6/3.86	6/3.97	6/3.82	6/3.6	6/5.3	6/5.7	6/6.2	6/6.6
			got	edge		edge	edge	edge	Wly. walk		
6.4	6.5	5.1	5.4	5.00	4.86	5.03	5.3	3.1	2.7	2.2	1.9
50	40	28	15	9	9	15	20	28	40	50	
6/4.9	6/4.54	6/4.3	6/4.00	6/4.40	6/4.54	6/4.37	6/4.1	6/4.3	6/4.7	6/7.2	6/7.5
			got	edge		edge	edge	edge	Wly. walk		
4.9	4.86	5.1	5.4	5.00	4.86	5.03	5.3	3.1	2.7	2.2	1.9
50	40	28	15	9	9	15	20	28	40	50	
walk at bench	walk		got	edge		edge	edge	edge	Wly. walk		
					69.40						

check E.C. of in Logan 1.85 64.97 64.96

T.P. 8.40 66.82 4.39 58.42

26+75

26+59.8 - 26.3 Lt = E Guy. Pole # 417129-H

26+55 - 9' Lt = end of Curved Conc. edge

26+50

26+20.87 = N.L. National

26+08.5 - 29.8 Rt = end = Cor. Conc. Slab. for Ser. Sta.

26+05

26+03 - 41.2 Rt = E Pole # 76842

26+01.5 - 39.8 Rt = end wly of Pump Island

25+89.9 = N. edge of Conc. Strip

25+80.87 = E National

25+79 - 39.8 Rt = W.L. of 32 Conc. Pump Island

Book 1615
Page 30

	Book 1615 Page 30	Lt.	Rt.	58
check E.C. of in Logan	1.85	64.97	64.96	
T.P.	8.40	66.82	4.39	58.42
26+75				
26+59.8 - 26.3 Lt = E Guy. Pole # 417129-H				
26+55 - 9' Lt = end of Curved Conc. edge				
26+50				
26+20.87 = N.L. National				
26+08.5 - 29.8 Rt = end = Cor. Conc. Slab. for Ser. Sta.				
26+05				
26+03 - 41.2 Rt = E Pole # 76842				
26+01.5 - 39.8 Rt = end wly of Pump Island				
25+89.9 = N. edge of Conc. Strip				
25+80.87 = E National				
25+79 - 39.8 Rt = W.L. of 32 Conc. Pump Island				

3+35

2+90 = Req. 6' Comb. cb + Walk on Lt + H.K. Pav

2+55

T.P. 8.17 73.93 1.06 65.76

2+19.55 = E.C.

2+00

1+71.4 = £ at edge of Pav

1+55 = 14' Lt = £ + Olive

	Lt	H	H	Rt
4.88	4.97	5.23	5.21	5.17
31.	26.6	25.7	21	20.7
edge	Top	edge	edge	edge
6.36	6.67	6.74	6.67	6.67
30.8	26.3	24.8	21.9	20.7
edge	cb + walk	edge	edge	edge
8.36	8.26	7.8	7.69	8.22
40	30	28	29	30
65.76	66.57	66.1	66.34	65.71
40	30	28	29	30
64.0	64.4	65.1	65.33	63.8
2.8	2.4	1.7	1.4	2.0
40	30	20	30	30
63.1	63.7	64.9	64.78	62.9
40	30	15	20	30
60.4	61.5	62.8	64.0	62.0
40	30	20	12	30
63.77	63.7	63.77	63.77	63.1
40	30	20	10	30
63.08	63.42	63.42	63.42	61.5
40	30	20	10	30
62.0	62.9	63.0	63.0	61.3
40	30	20	30	30
62.0	62.1	62.1	62.1	62.1
40	30	20	30	30
62.4	62.4	62.4	62.4	62.4
40	30	20	30	30

66.82

check starting B.M. 1.65 72.46 72.47

T.P. 9.61 74.11 0.61 64.50

T.P. 205 65.11 10.87 63.06

3+82 = P.C. of Reto on Lts

3.25
31
edge walk

70.59
26.6
Top
P.C.

3.58
25.1
9.4

70.35
9
edge

3.78
9
edge

70.05
9
edge

3.71
9
edge

70.22
9
edge

3.84
9
edge

70.09
9
edge

4.1
20

69.8

4.2
30

69.7

3.8
40

70.1

72.93

Lt.

R.

R.

62

Walker Johnson Pope Crawford
 LOCATION - PROPOSED SEWER "A" Line
 To Garbage Hopper - Proposed
 in Pueblo Lot 283
 (Levels on Page 65)

20468
 W.O. 60870

INDEXED

WIK
 JUL 14 1949

4+18.86 = P.O.T. set 2"x12" Hub.

Fd. Pipe & City Disk

3+17.32 = A.P.T. 3°38'30" set 2"x12" Hub

opposite
 Bridge to
 Goddard Plant

Bridge to
 Goddard Plant

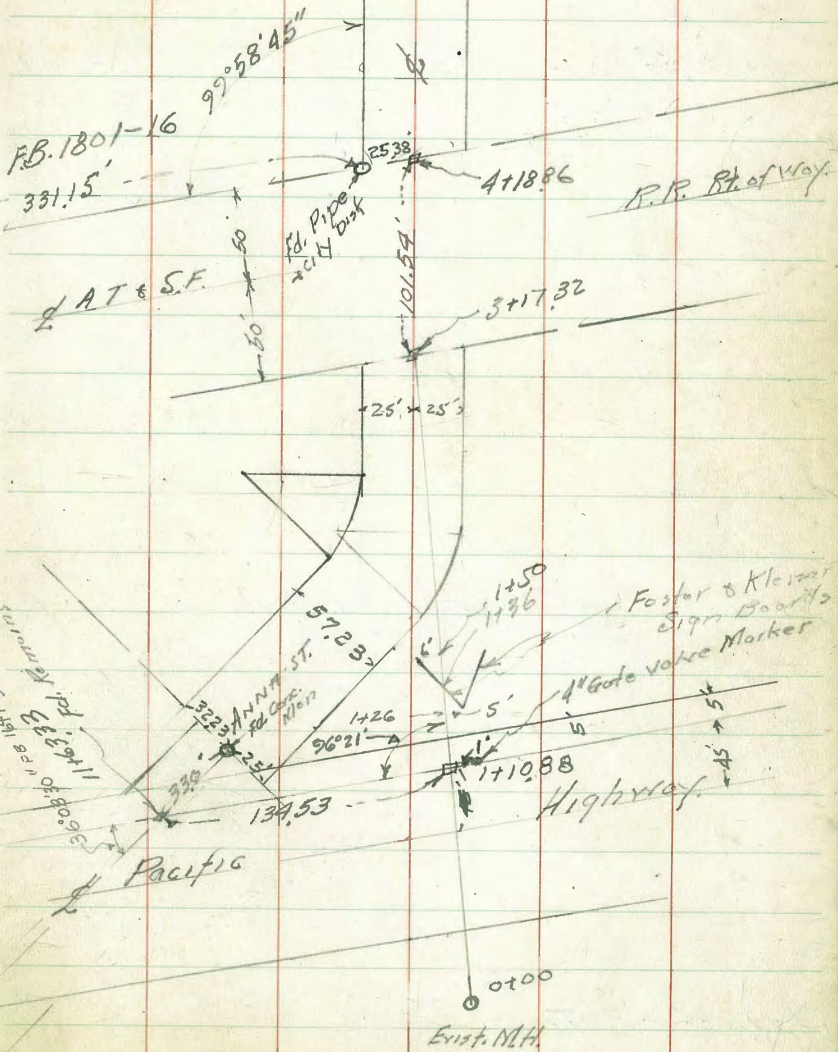
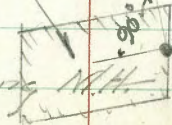
22+14.16 FB1647-3

Fd. 2"x12" Hub
 FB1647-3

Fd. 2"x12" Hub
 FB1647-3

45+5'

0+00 = Existing M.H.



Proposed Sewer Location
To Garbage Hopper

12+12.54 = Δ Lt. 95°07'

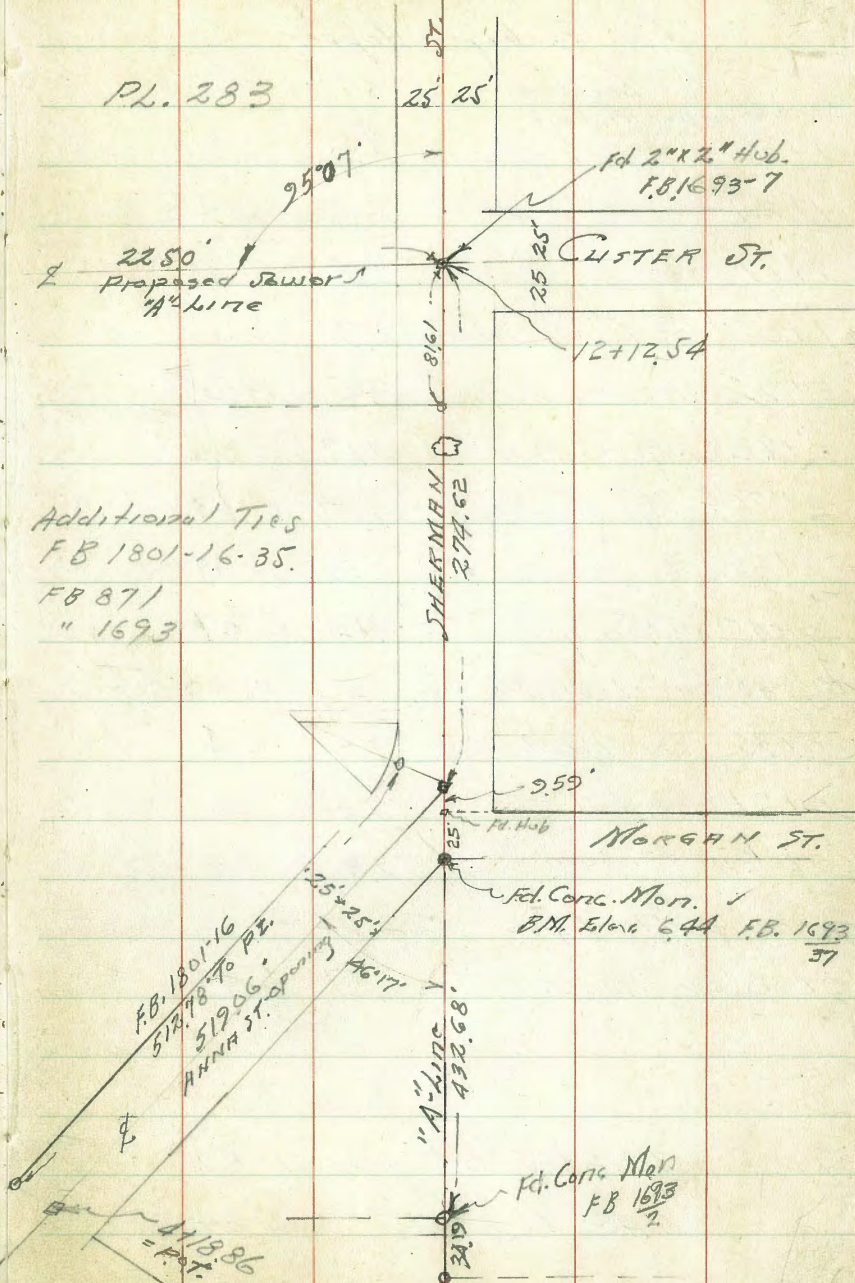
14+37.54
= End.

9+37.92 = Δ 46°17' Lt. set Hub

Alex S.F.R.R.

4+18.86 = POT.

PL. 283



Levels Proposed Sewer
To Garbage Hopper

Location P-63-64

Correction Lower Ft. Page

1+36	8.0	7.0
1+21	6.6	8.4
1+17	8.7	6.3
1+09 = Toe Fill - Natural Ground	8.9	6.1
0+95 Shoulder Hwy.	0.8	14.2
0+92 = Edge oil Pav.	1.17	13.83
0+86.4 edge Pav.ing	0.87	14.13
0+65.7 2 "	0.59	14.41
0+45 on Pav.ing	0.73	14.27
0+40 on oil shoulder Hwy.	1.0	14.0
0+35 on Shoulder Hwy.	0.6	14.4
0+21 = Toe Fill	9.0	6.0
0+03 on Ground	2.8	5.2
0+00 on Flow line	22.94	-7.94
0+00 on Run MH	8.77	6.23

15.00

2.79

TR	3.23	15.00	3.15	11.77
	7.48	13.92		6.44

Walker
Johnsons
Pope
Christford
7-12-49

65

Cont. P. 66

6+00	5.5	8.48
5+50 Nat. Ground	5.5	8.48
5+00	4.6	9.38
4+50	3.1	10.88
T.P. 221 13.98		
4+18.86 = P.O.T. on Hub	3.23	11.77
4+00	2.1	12.9
3+70.40 = E. Rail	0.76	14.24
3+65.68 = W. Rail S. Gate Fe	0.79	14.21
3+17.52 = ART 3° 38'	3.79	12.21
3+00	3.3	11.7
2+50	5.0	10.0
2+15 = Edge Road	6.8	8.2
2+00	7.9	7.1
1+71	7.7	7.3

Fill 6.3
Above
Nat. Ground

6.7 Fill
Above Nat. Ground

3' Fill

15.00

B.M. Conc. Man Sketch P. 64

Sewer Levels

Proposed Line to Garbage Hopper

Cont. on lower Mt. Page

11+87	4.6	7.45	
11+50	5.6	6.45	
11+15.5 $\frac{1}{2}$ 36" Loc Tree			on Line
11+00	4.9	7.15	
10+50	7.0	5.05	
10+00	6.7	5.35	
T.P. 5.39 12.05			
9+37.92 Alt. 46' 17"	7.32	6.66	on Hub
9+00	7.2	6.78	
8+30	8.5	5.48	
8+00	7.4	6.58	
7+79	8.0	5.98	
7+69	8.4	5.58	
7+50	6.4	7.58	
7+25	5.3	8.68	
7+00	5.6	8.38	
6+50	4.9	9.08	

13.98

				0.01
				9.58
Chk 2. Cont. Floor 2978.3 FB. 169363 3.90				2.59
T.P. 12.01 13.49 10.57			1.48	
14+37.54 = End on Hub		4.53	7.52	
14+00		4.2	7.85	
13+50		4.3	7.75	
13+00		4.9	7.15	
12+50		5.2	6.85	
12+12.54 Alt 25' 07"		4.60	7.45	on Tack. Not the High Point of Hub.
12+00		4.5	7.55	

Cont. from Mt. Page 12.05

Location Proposed Sewer
= 8" Line To Serve Garbage Hopper
- holds p. 70

Walker
Johnson
Pope
Clairford
8-1-49

140 20468

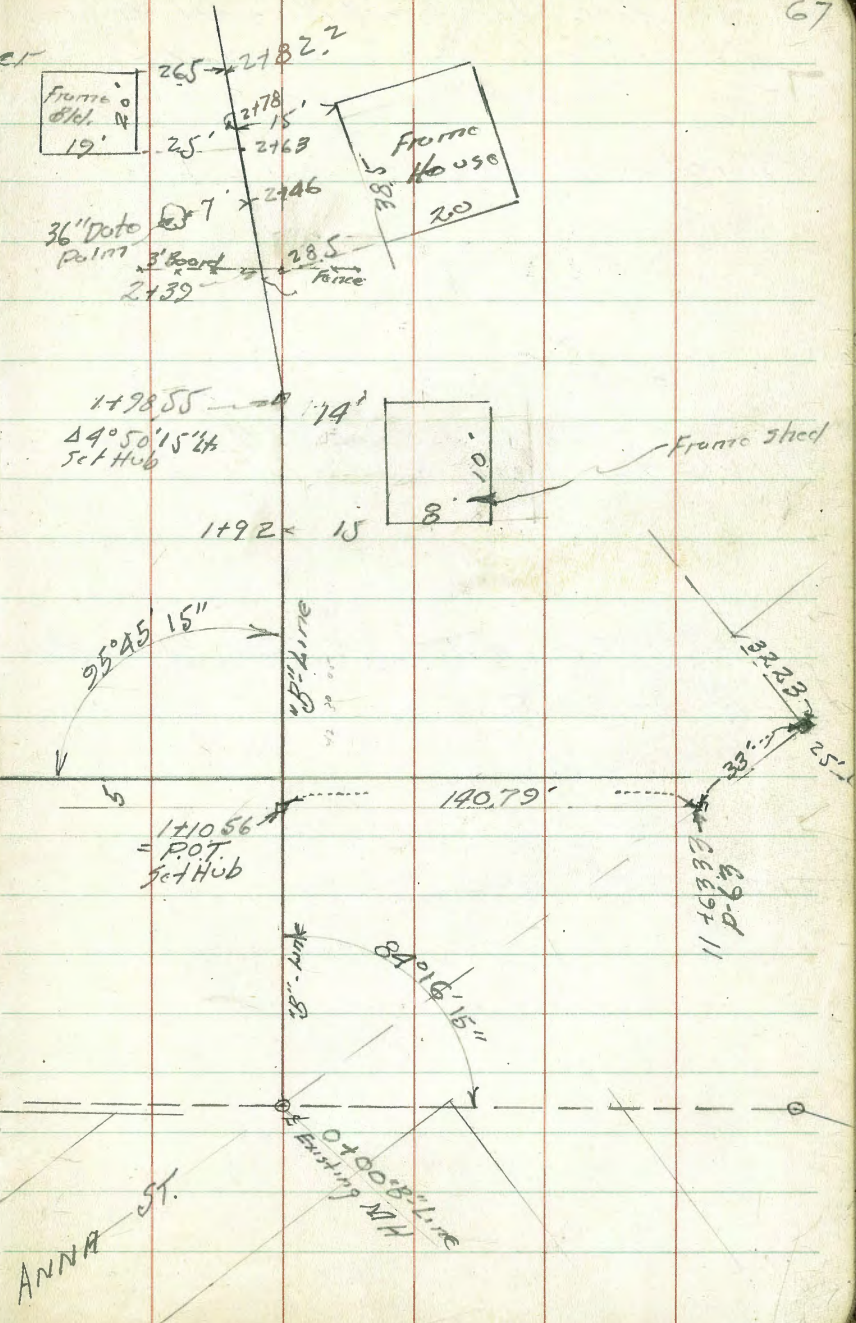
INDEXED
W. K.
AUG 2 1949

1498.55 Δ Lt 4° 50' 15"

E 9-d
45.66 + 0.82
90 H.P.

Pacific Highway

0+00 = Existing M.H. = Approx. E Anna St



ANNA ST.

0+00 8" Line
Existing M.H.

Location Proposed Sewer
 18" Line To Proposed
 - Garbage Hopper

6+01.00 = A.R. 7°26'15" set Hub.

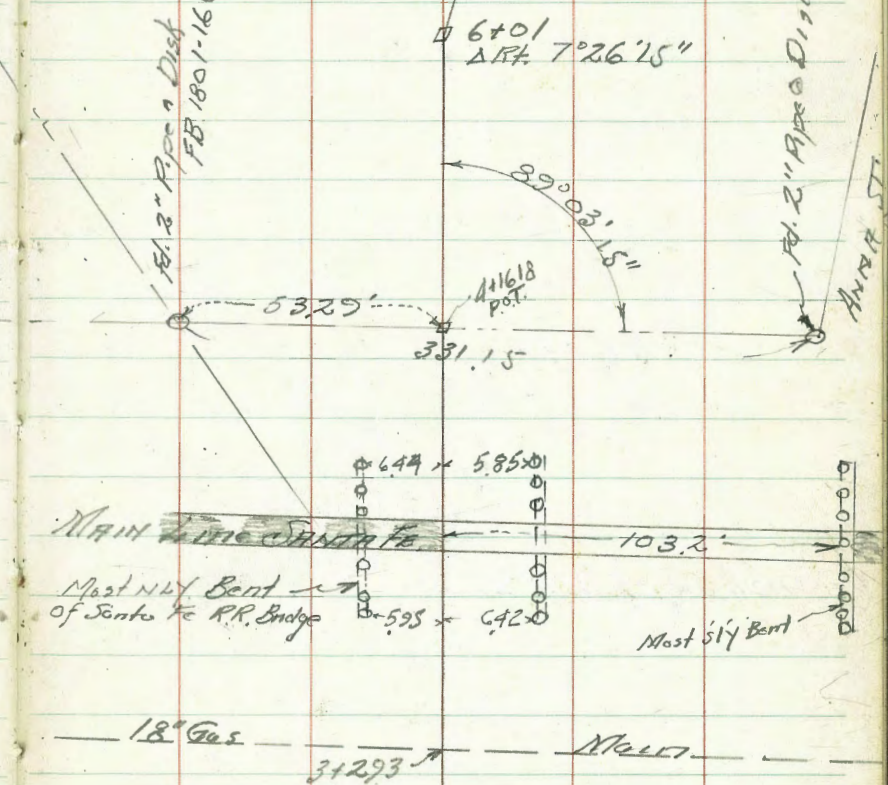
Set 2" x 2" x 10" Redwood Hub
 4+16.18 = Intersection Pueblo lot line

3+65.03 = P.O.T. set Nail on stringer between ties

3+64.24 = W. Rail Santa Fe

3+29.3 = Int. 18" Gas Main

PL. 282



~~MAIN LINE CHANGE~~

Mast N.Y. Bent
 of Santa Fe RR. Bridge

Mast S.W. Bent

18" Gas

WELL

Walker Levels Proposed Sewer
 Johnson "B" Line - To Garbage Hopper
 Pope
 Crawford Location P-67-69
 8-1-49

2+25	10.5	4.13
2+12	10.5 N edge	18" Pepper
2+12	7.3 ft. edge	24" Pepper Tree
1+98.5 SALT	8.21	5.72
1+50	9.3	5.30
1+50	6' RT - Nearly all dead	Quince Bush
1+28	6' RT = 2' olive tree	(Nearly all)
1+42	Partly dead Quince Tree on line	
1+14	4 strand Barbwire Fence	
1+10.56	P.O.T. on Hub	2.71 4.92
0+95	1.2	13.43
0+86.8	1.36	13.27
	4 Paving	1.18 13.45
0+47.5	on Paving	1.92 13.21
0+33	1.64	12.99
0+00	on Flow Line	2.24 -7.81 (-7.72 = Plin)
0+00	on Rim MH. (South side)	5.72 8.91
8.40	14.63	6.23

T.P.	8.28	12.19	10.33	3.91
4+16.18	P.O.T. on Hub	10.33	3.91	
4+00		11.6	2.64	
3+80		9.8	4.44	
3+64.3	on Rail	0.58	13.66	
3+64.3	Under Bridge on Ground	9.9	4.34	
3+38		10.6	4.24	
3+29.8	on Top 18" Gas Main	12.50	1.74 = 51. Top Pipe	
3+15		7.3	6.94	
3+00		7.0	7.24	
2+79		6.0	8.24	
2+76		4.8	9.44	
2+78	15' RT -	2.71	11.53	Floor House
2+74.5	6' RT = N edge	24" Pepper Tree		
2+58	4' Board Fence			
2+51		4.9	9.34	
		8.1	6.14	
T.P.	9.83	14.24	10.22	4.41
2+40		10.2	4.43	
		14.63		
E.M. on Rim Existing MH 0+00 P-65				

			<u>001</u>
10+04.52 = 1413754 P66	4.66	7.52	7.53
2+50	44	7.79	
2+00	44	7.79	
8+50	53	6.89	
8+00	64	5.79	
7+50	56	6.59	
7+00	58	6.39	
6+50	55	6.69	
6+01 Δ Rt. on H. 6	6.16	6.03	
5+50	71	5.09	
4+96	71	5.09	
4+50	79	4.29	

1219

Walker X-Sections Harbor Drive
 McCaff. from 460+00 to 466+00 = side str.
 G. Pope
 Crawford
 H. 1-49

Signal
 ○ = Light Post

■ = Conc. Pav.

NO 22002

INDEXED

JUN 20 1951

Sta 460+00 to 466+00 Scale, 1" = 30'

466+00 to 472+08.5 P. 21-29

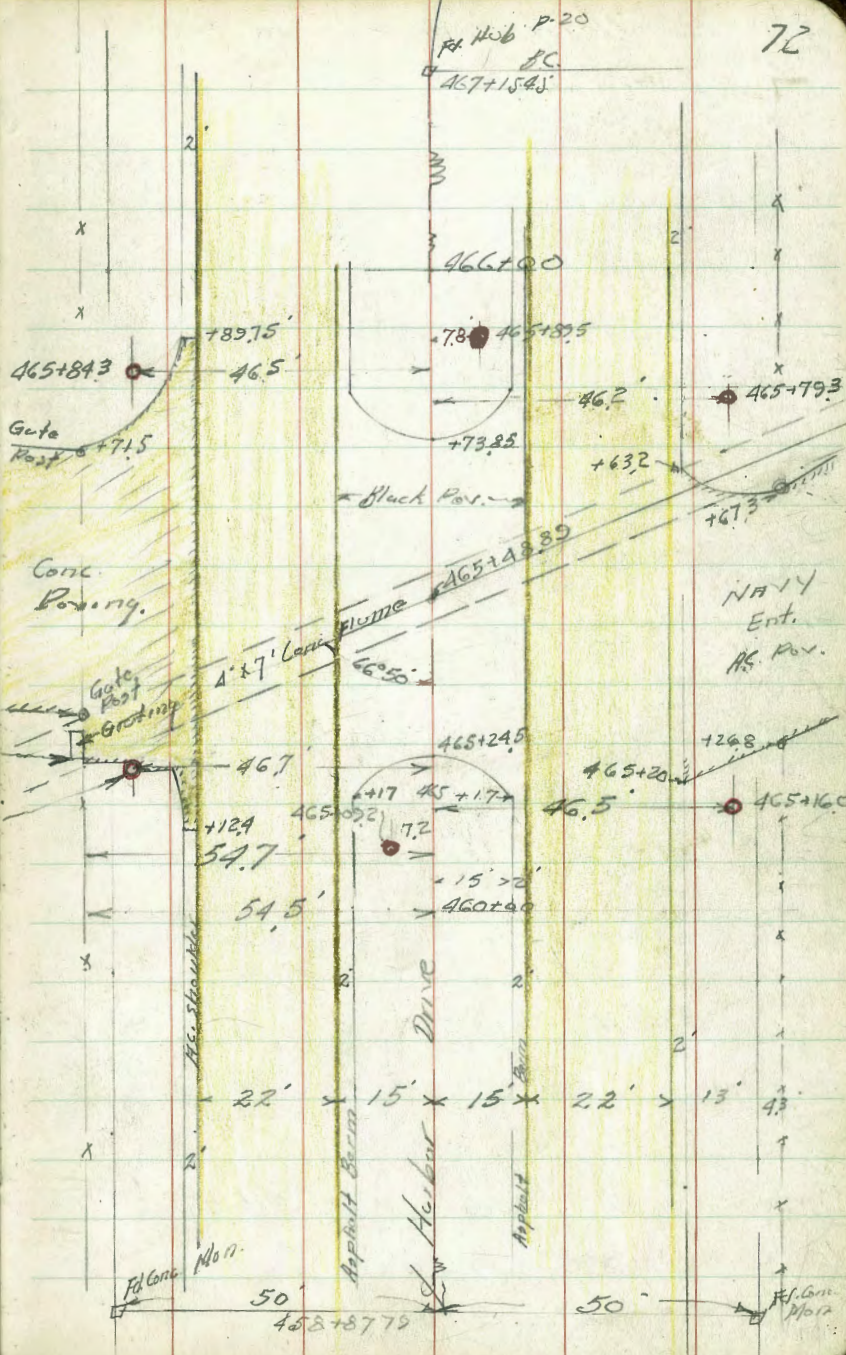
Janet
 Johnson
 Ent.

Conc.
 Paving.

NAVY
 Ent.
 AS. Pav.

+30.8
 465+22.9

465+22.4



Pl. No. 6 P. 20
 467+15.45

72

Fd Conc No. 11

50' 468+87.79

50' Fd Conc No. 12

X-Section Harbor Drive
from Station 460100

462+50

463+00

Notes Reduced
H-3-49
H. Hunt

461+50

464+00

460+50

460+00

TR 4.38 9.45 5.89 5.07
7.53 10.96 3.43

Lit. L Rt. 73

A.B 5.0 5.4 A.9 A.95 5.10 5.0 A.1 5.0 5.1 A.9² A.8 5.3 A.8 A.4
4.6 4.4 4.0 4.5 4.50 4.32 4.4 5.3 4.4 4.28 4.53 4.6 4.1 4.6 4.8
5.4 4.9 4.7 4.5 3.7 1.5 1.0 1.0 1.5 3.7 4.0 4.7 4.9 5.4

A.4 A.8 5.4 A.8 A.80 4.01 A.8 3.4 A.9 3.05 4.80 A.6 5.4 A.4 A.5
4.8 4.6 4.1 4.6 4.65 4.44 4.6 5.5 4.5 4.40 4.65 4.8 4.2 4.8 4.9
5.4 4.9 4.7 4.5 3.7 1.5 1.0 1.0 1.5 3.7 4.5 4.7 4.9 5.4

A.4 A.1 5.4 A.4 A.10 A.90 A.4 3.1 A.9 A.95 A.64 A.6 5.0 A.5 A.4
5.0 4.7 4.2 4.8 4.75 4.55 4.7 5.7 4.5 4.50 4.72 4.2 4.4 4.9 5.0
5.4 4.9 4.7 4.5 3.7 1.5 1.0 1.0 1.5 3.7 4.5 4.7 4.9 5.4

A.2 A.6 5.1 A.4 A.54 4.71 A.4 3.1 A.7 A.81 A.51 A.4 A.9 A.3 A.4
5.2 4.8 4.3 4.8 4.82 4.68 4.8 5.7 4.7 4.64 4.94 5.0 4.5 5.1 5.0
5.4 4.9 4.7 4.5 3.7 1.5 1.0 1.0 1.5 3.7 4.5 4.7 4.9 5.4

A.1 A.5 5.0 A.4 A.43 A.69 A.4 3.1 A.4 A.66 A.47 A.3 A.8 A.2 A.1
5.3 4.9 4.4 5.0 5.02 4.76 4.8 5.7 4.8 4.79 5.08 5.1 4.6 5.2 5.3
5.4 4.9 4.7 4.5 3.7 1.5 1.6 0 1.0 1.5 3.7 4.5 4.7 4.9 5.4

A.0 A.4 A.8 4.2 4.31 4.55 A.5 3.1 A.6 A.62 4.29 A.4 A.8 A.2 A.2
5.4 5.0 4.6 5.2 5.14 4.90 4.9 5.7 4.8 4.83 5.16 5.0 4.6 5.2 5.2
5.4 4.9 4.7 4.5 3.7 1.5 1.0 1.0 1.5 3.7 4.5 4.7 4.9 5.4

2.45

B.M. on Conc. Mon. Sketch P. 20

P. 21

Harbor Dr. X-Sections

465+48.89 = Existing 7' x 4' Flume Diag. Sec

Conc.

465+24.5

465+00

T.P. 5.35 11.04 376 5.62

464+50

464+0

463+50

463+00

945

Lt. 5.06 0.15
 5.98 10.87
 Groding 59.6
 59.6
 Flume 4' x 7' Conc. Box
 0.66
 10.38
 118.0
 Flume 4' x 7' Box

5.10 5.98 6.52 6.74 6.76 6.76 6.44 6.2 6.2 6.7
 5.24 5.86 5.62 5.30 5.28 5.28 5.28 5.8 5.8 5.7
 54 47 37 15 15 15 37 44 47 54

5.0 5.4 5.0 5.4 5.6 5.1 5.4 5.0 5.6 5.7 5.4 5.1 5.6 5.2 5.1
 5.0 5.8 5.2 5.6 5.53 5.33 5.4 6.0 5.2 5.26 5.58 5.3 5.4 5.8 5.9
 54 49 47 45 37 15 10 10 15 37 45 47 49 54

11.04

5.0 5.4 5.4 5.3 5.43 5.45 5.4 4.4 5.5 5.1 5.42 5.1 5.6 5.0 5.0
 4.4 4.1 3.5 4.1 4.02 3.80 4.0 5.0 3.3 3.78 4.02 4.3 3.8 4.4 4.4
 54 49 47 45 37 15 10 10 10 15 37 45 47 49 54

4.9 5.3 5.0 5.2 5.34 5.35 5.3 4.3 5.4 5.53 5.32 5.1 5.1 5.1 5.0
 4.5 4.1 3.6 4.2 4.11 3.90 4.1 5.1 4.0 3.92 4.13 4.3 3.7 4.3 4.4
 54 49 47 45 37 15 10 10 10 15 37 45 47 49 54

4.0 5.1 5.1 5.2 5.20 5.43 5.1 4.2 5.4 5.49 5.19 5.0 5.4 5.1 5.0
 4.6 4.3 3.7 4.2 4.25 4.02 4.3 5.2 4.2 4.06 4.26 4.4 3.8 4.3 4.4
 54 49 47 45 37 15 10 10 10 15 37 45 47 49 54

4.8 5.1 5.5 5.0 5.06 5.29 5.0 4.2 5.1 5.26 5.01 4.9 5.5 5.0 4.9
 4.6 4.3 3.9 4.4 4.39 4.16 4.4 5.2 4.3 4.19 4.41 4.5 3.9 4.4 4.5
 54 49 47 45 37 15 10 10 10 15 37 45 47 49 54

9.45

Harbor Dr. Cross Sections

L

R

75

466+00 Chk Pac. P-21

5.50

5.72

5.60

5.58

5.46
37

5.32
15

5.44
15

5.66
37

+725.
465+73.85

5.59

5.53

5.75

5.76

5.69

5.46

5.2

5.0

5.1

5.45
54

5.51
37

5.29
15

5.28

5.35
15

5.58
37

5.8
45

5.2
49

5.3
54

465+50

5.47

5.42

5.52

5.73

5.81

5.77

5.44

5.25

5.66

5.61

5.57
64

5.62
37

5.52
37

5.31
15

5.23

5.27
15

5.60
37

5.79
44

5.48
54

5.33
64

11.04

Additions of Loyal's Harbor Drive
at Loyal St.
State & Stationing Sketch, page 20

Dec. 20. 49
S. 1500?
Hardin
Hatch
Shepard

2

pt

76

472+0

INDEXED
JUN 20 1951

3.68
4.58
15 Edge
37

2.79
5.47
37-Edge Pav

+50

3.75
4.51
15

2.80
5.16
37

471+0

3.85
4.41
15

2.78
5.18
37

+50

3.97
4.29
15

2.90
5.26
37

470+0

4.15
4.11
15-Edge Pav

3.07
5.19
37-Edge Pav

BM

6.00

8.26

2.26

on Pipe
472+0.8615
Page 24

8.26

474

3.41
4.86
15-
5.89
26

3.30
4.96
26
0.07
26

3.11
5.09
37
Edge
26

+50

3.56
4.71
15

3.39
4.87
26

3.29
4.99
37

473 +0

3.66
4.60
15

3.52
4.79
26

3.36
4.90
37

472+50

3.61
4.65
15

3.26
5.00
26

3.07
5.19
37

472+08 1/2 EC.

3.72

3.25

2.82

4.59
15-
Edge
Polym

5.01
26
0.07
26

5.44
37-
Edge
Pol.

8.26

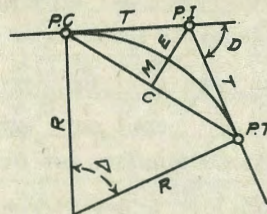
8.26

An open notebook with two blank, lined pages. The pages are cream-colored with light blue horizontal ruling and vertical red margin lines. The number '78' is written in the top right corner of the right page. The notebook is bound in the center, and the pages are slightly aged.

The image shows an open notebook with two facing pages. Both pages are cream-colored and feature light blue horizontal ruling. Vertical red lines create margins on both sides of each page. The right page is numbered '79' in the top right corner. The notebook is bound in the center, and the pages appear slightly aged with some minor discoloration and faint smudges. The notebook is placed on a white surface.

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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CURVE FORMULAS

$$\text{Radius} = R = \frac{50}{\sin \frac{D}{2}} \quad (1) \quad \text{Degree of Curve} = D \text{ and } \sin \frac{D}{2} = \frac{50}{R} \quad (2)$$

$$\text{Tangent} = T = R \tan \frac{\Delta}{2} \quad (3) \quad \text{Length of Curve} = L = 100 \frac{\Delta}{D} \quad (4)$$

$$\text{Middle ordinate} = M = R(1 - \cos \frac{\Delta}{2}) \quad (5) = R \text{vers } \frac{\Delta}{2} \quad (6)$$

$$\text{External} = E = T \tan \frac{\Delta}{4} \quad (7) = R + \cos \frac{\Delta}{2} - R \quad (8) = R \text{exsec } \frac{\Delta}{2} \quad (9)$$

$$\text{Long Chord} = C = 2 R \sin \frac{\Delta}{2} \quad (10) \quad \Delta = \text{Central Angle}$$

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.—Sta. 161+60.35 to find Sta. of P. C. and P. T. $\Delta=62^\circ 10'$ $D=8^\circ 20'$. From Table IV for 1° curve $T=3454.1$ and $\div 8\frac{1}{3}=414.49$ ft. From Table V correction= $.36$ or $T=414.85$ ft. P. C.—Sta. P. I.— $T=157+45.50$. Also from (4) $L=746.00$ and P. T.—Sta. P. C.+ $L=164+91.50$.

Offsets.—Tangent offsets vary (approximately) directly with D and with square of the distance. Thus tangent offset for Sta. 158 on above curve is 2.16 ft. found as follows. From Table III tangent offset for 100 ft.—7.27 ft. Distance= 158 —Sta. P. C.— 54.50 , hence offset= $7.27 (54.50 \div 100)^2=2.16$ ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus $(54.50)^2 \div (2 \times 688.26)=2.16$ ft.

Deflections.—Deflection angle= $\frac{1}{2} D$ for 100 ft., $\frac{1}{4} D$ for 50 ft., etc. For c ft.—(in minutes) $.3 \times C \times D^\circ$ or—defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve—.3 $\times 54.5 \times 8\frac{1}{3}=136.2'$ or $2^\circ 16.2'$, or= $2.50 \times 54.5=136.2'$ from Table III. For Sta. 159 deflection angle= $2^\circ 16.2' + 8^\circ 20' \div 2=6^\circ 26.2'$, etc.

Externals.—May be found in similar manner to tangents. Thus E for curve above is 115.37. For from Table IV for 1° curve $E=960.6$ for $8^\circ 20'=960.6 \div 8\frac{1}{3}=115.27$ and from Table V correction= $.10$ or $E=115.37$ ft. Or suppose $\Delta=32^\circ$ and E is measured and found to be 42 ft. What is D ? From Table IV $E=230.9$ and $\div 42=5.5$ or $D=5^\circ 30'$.

TABLE I.—MINUTES IN DECIMALS OF A DEGREE.

1'	.0167	11'	.1833	21'	.3500	31'	.5167	41'	.6833	51'	.8500
2	.0333	12	.2000	22	.3667	32	.5333	42	.7000	52	.8667
3	.0500	13	.2167	23	.3833	33	.5500	43	.7167	53	.8833
4	.0667	14	.2333	24	.4000	34	.5667	44	.7333	54	.9000
5	.0833	15	.2500	25	.4167	35	.5833	45	.7500	55	.9167
6	.1000	16	.2667	26	.4333	36	.6000	46	.7667	56	.9333
7	.1167	17	.2833	27	.4500	37	.6167	47	.7833	57	.9500
8	.1333	18	.3000	28	.4667	38	.6333	48	.8000	58	.9667
9	.1500	19	.3167	29	.4833	39	.6500	49	.8167	59	.9833
10	.1667	20	.3333	30	.5000	40	.6667	50	.8333	60	1.0000

TABLE II.—INCHES IN DECIMALS OF A FOOT.

1/16	1/32	1/8	3/16	1/4	5/16	3/8	1/2	5/8	3/4	7/8
.0052	.0078	.1250	.0156	.0208	.0260	.0313	.0417	.0521	.0625	.0729
1	2	3	4	5	6	7	8	9	10	11
.0833	.1667	.2500	.3333	.4167	.5000	.5833	.6667	.7500	.8333	.9167

TABLE III.—RADI, ORDINATES AND DEFLECTIONS.

Deg.	Radius	Mid. Ord.	Tan Offset	Def. for 1 Foot	Deg.	Radius	Mid. Ord.	Tan Offset	Def. for 1 Foot
0° 10'	34377.5	.036	.145	0.05'	7°	819.02	1.528	6.105	2.10'
20	17188.8	.073	.291	0.10	20	781.84	1.600	6.395	2.20
30	11459.2	.109	.436	0.15	30	764.49	1.637	6.540	2.25
40	8594.42	.145	.582	0.20	40	747.89	1.673	6.685	2.30
50	6875.55	.182	.727	0.25	8	716.78	1.746	6.976	2.40
1 10	5729.65	.218	.873	0.30	20	688.16	1.819	7.266	2.50
20	4911.15	.255	1.018	0.35	30	674.69	1.855	7.411	2.55
30	4297.28	.291	1.164	0.40	40	661.74	1.892	7.556	2.60
40	3819.83	.327	1.309	0.45	9	637.28	1.965	7.846	2.70
50	3437.87	.364	1.454	0.50	20	614.56	2.037	8.136	2.80
2 10	3125.36	.400	1.600	0.55	30	603.80	2.074	8.281	2.85
20	2864.93	.436	1.745	0.60	40	593.42	2.110	8.426	2.90
30	2644.58	.473	1.891	0.65	10	573.69	2.183	8.716	3.00
40	2455.70	.509	2.036	0.70	20	546.44	2.292	9.150	3.15
50	2292.01	.545	2.181	0.75	30	521.67	2.402	9.585	3.30
3 10	2148.79	.582	2.327	0.80	40	499.06	2.511	10.02	3.45
20	2022.41	.618	2.472	0.85	11	478.34	2.620	10.45	3.60
30	1910.08	.655	2.618	0.90	20	459.28	2.730	10.89	3.75
40	1809.57	.691	2.763	0.95	30	441.68	2.839	11.32	3.90
50	1719.12	.727	2.908	1.00	40	425.40	2.949	11.75	4.05
4 10	1637.28	.764	3.054	1.05	12	410.28	3.058	12.18	4.20
20	1562.88	.800	3.199	1.10	30	396.20	3.168	12.62	4.35
30	1494.95	.836	3.345	1.15	40	383.07	3.277	13.05	4.50
4 20	1432.69	.873	3.490	1.20	13	370.78	3.387	13.49	4.65
30	1375.40	.909	3.635	1.25	20	359.27	3.496	13.92	4.80
40	1322.53	.945	3.718	1.30	30	348.45	3.606	14.35	4.95
50	1273.57	.982	3.926	1.35	40	338.27	3.716	14.78	5.10
5 10	1228.11	1.018	4.071	1.40	14	319.62	3.935	15.64	5.40
20	1185.78	1.055	4.217	1.45	19	302.94	4.155	16.51	5.70
30	1146.28	1.091	4.362	1.50	20	287.94	4.374	17.37	6.00
40	1109.33	1.127	4.507	1.55	21	274.37	4.594	18.22	6.30
50	1074.68	1.164	4.653	1.60	22	262.04	4.814	19.08	6.60
6 10	1042.14	1.200	4.798	1.65	23	250.79	5.035	19.94	6.90
20	1011.51	1.237	4.943	1.70	24	240.49	5.255	20.79	7.20
30	982.64	1.273	5.088	1.75	25	231.01	5.476	21.64	7.50
40	955.37	1.309	5.234	1.80	26	222.27	5.697	22.50	7.80
50	929.57	1.346	5.379	1.85	27	214.18	5.918	23.35	8.10
7 10	905.13	1.382	5.524	1.90	28	206.68	6.139	24.19	8.40
20	881.95	1.418	5.669	1.95	29	199.70	6.360	25.04	8.70
30	859.92	1.455	5.814	2.00	30	193.18	6.583	25.88	9.00

NOTE. Chord Deflection=2 times tangent deflection.

TABLE IV.—TANGENTS AND EXTERNALS TO A 1° CURVE.

Central Angle	Tangent	External	Central Angle	Tangent	External	Central Angle	Tangent	External
1°	50.00	.22	11°	551.70	26.50	21°	1061.9	97.57
10'	58.34	.30	10'	560.11	27.31	10'	1070.6	99.16
20	66.67	.39	20	568.53	28.14	20	1079.2	100.75
30	75.01	.49	30	576.95	28.97	30	1087.8	102.35
40	83.34	.61	40	585.36	29.82	40	1096.4	103.97
50	91.68	.73	50	593.79	30.68	50	1105.1	105.60
2 10	100.01	.87	12	602.21	31.56	22	1113.7	107.24
20	108.35	1.02	10	610.64	32.45	10	1122.4	108.90
30	116.68	1.19	20	619.07	33.35	20	1131.0	110.57
40	125.02	1.36	30	627.50	34.26	30	1139.7	112.25
50	133.36	1.55	40	635.93	35.18	40	1148.4	113.95
3 10	141.70	1.75	50	644.37	36.12	50	1157.0	115.66
20	150.04	1.96	13	652.81	37.07	23	1165.7	117.38
30	158.38	2.19	10	661.25	38.03	10	1174.4	119.12
40	166.72	2.43	20	669.70	39.01	20	1183.1	120.87
50	175.06	2.67	30	678.15	39.99	30	1191.8	122.63
4 10	183.40	2.93	40	686.60	40.99	40	1200.5	124.41
20	191.74	3.21	50	695.06	42.00	50	1209.2	126.20
3 20	200.08	3.49	14	703.51	43.03	24	1217.9	128.00
30	208.43	3.79	10	711.97	44.07	10	1226.6	129.82
40	216.77	4.10	20	720.44	45.12	20	1235.3	131.65
50	225.12	4.42	30	728.90	46.18	30	1244.0	133.50
5 10	233.47	4.76	40	737.37	47.25	40	1252.8	135.35
20	241.81	5.10	50	745.85	48.34	50	1261.5	137.23
3 30	250.16	5.46	15	754.32	49.44	25	1270.2	139.11
40	258.51	5.83	10	762.80	50.55	10	1279.0	141.01
50	266.86	6.21	20	771.29	51.68	20	1287.7	142.93
6 10	275.21	6.61	30	779.77	52.89	30	1296.5	144.85
20	283.57	7.01	40	788.26	53.97	40	1305.3	146.79
30	291.92	7.43	50	796.75	55.13	50	1314.0	148.75
4 20	300.28	7.86	16	805.25	56.31	26	1322.8	150.71
30	308.64	8.31	10	813.75	57.50	10	1331.6	152.69
40	316.99	8.76	20	822.25	58.70	20	1340.4	154.69
50	325.35	9.23	30	830.76	59.91	30	1349.2	156.70
6 20	333.71	9.71	40	839.27	61.14	40	1358.0	158.72
30	342.08	10.20	50	847.78	62.38	50	1366.8	160.76
5 30	350.44	10.71	17	856.30	63.63	27	1375.6	162.81
40	358.81	11.22	10	864.82	64.90	10	1384.4	164.86
50	367.17	11.75	20	873.35	66.18	20	1393.2	166.95
6 10	375.54	12.29	30	881.88	67.47	30	1402.0	169.04
20	383.91	12.85	40	890.41	68.77	40	1410.9	171.15
30	392.28	13.41	50	898.95	70.09	50	1419.7	173.27
7 10	400.66	13.99	18	907.49	71.42	28	1428.6	175.41
20	409.03	14.58	10	916.03	72.76	10	1437.4	177.55
30	417.41	15.18	20	924.58	74.12	20	1446.3	179.72
40	425.79	15.80	30	933.13	75.49	30	1455.1	181.89
50	434.17	16.43	40	941.69	76.86	40	1464.0	184.08
8 10	442.55	17.07	50	950.25	78.26	50	1472.9	186.29
20	450.93	17.72	19	958.81	79.67	29	1481.8	188.51
30	459.32	18.38	10	967.38	81.09	10	1490.7	190.74
40	467.71	19.06	20	975.96	82.53	20	1499.6	192.99
50	476.10	19.75	30	984.53	83.97	30	1508.5	195.25
9 10	484.49	20.45	40	993.12	85.43	40	1517.4	197.53
20	492.88	21.16	50	1001.7	86.90	50	1526.3	199.82
3 40	501.28	21.89	20	1010.3	88.39	30	1535.3	202.12
40	509.68	22.62	10	1018.9	89.89	10	1544.2	204.44
50	518.08	23.38	20	1027.5	91.40	20	1553.1	206.77
6 30	526.48	24.14	30	1036.1	92.92	30	1562.1	209.12
40	534.89	24.91	40	1044.7	94.46	40	1571.0	211.48
50	543.29	25.70	50	1053.3	96.01	50	1580.0	213.86

TABLE IV.—TANGENTS AND EXTERNALS TO A 1° CURVE.

Central Angle	Tangent	External	Central Angle	Tangent	External	Central Angle	Tangent	External
91°	5830.5	2444.9	101°	6950.6	3278.1	111°	8336.7	4386.1
10'	5847.5	2457.1	10'	6971.3	3294.1	10'	8362.7	4407.6
20	5864.6	2469.3	20	6992.0	3310.1	20	8388.9	4429.2
30	5881.7	2481.5	30	7012.7	3326.1	30	8415.1	4450.9
40	5898.8	2493.8	40	7033.6	3342.3	40	8441.5	4472.7
50	5916.0	2506.1	50	7054.5	3358.5	50	8468.0	4494.6
92	5933.2	2518.5	102	7075.5	3374.9	112	8494.6	4516.6
10	5950.5	2531.0	10	7096.6	3391.2	10	8521.3	4538.8
20	5967.9	2543.5	20	7117.8	3407.7	20	8548.1	4561.1
30	5985.3	2556.0	30	7139.0	3424.3	30	8575.0	4583.4
40	6002.7	2568.6	40	7160.3	3440.9	40	8602.1	4606.0
50	6020.2	2581.3	50	7181.7	3457.6	50	8629.3	4628.6
93	6037.8	2594.0	103	7203.2	3474.4	113	8656.6	4651.3
10	6055.4	2606.8	10	7224.7	3491.3	10	8684.0	4674.2
20	6073.1	2619.7	20	7246.3	3508.2	20	8711.5	4697.2
30	6090.8	2632.6	30	7268.0	3525.2	30	8739.2	4720.3
40	6108.6	2645.5	40	7289.8	3542.4	40	8767.0	4743.6
50	6126.4	2658.5	50	7311.7	3559.6	50	8794.9	4766.9
94	6144.3	2671.6	104	7333.6	3576.8	114	8822.9	4790.4
10	6162.6	2684.7	10	7355.6	3594.2	10	8851.0	4814.1
20	6180.2	2697.9	20	7377.8	3611.7	20	8879.3	4837.8
30	6198.3	2711.2	30	7399.9	3629.2	30	8907.7	4861.7
40	6216.4	2724.5	40	7422.2	3646.8	40	8936.3	4885.7
50	6234.6	2737.9	50	7444.6	3664.5	50	8965.0	4909.9
95	6252.8	2751.3	105	7467.0	3682.3	115	8993.8	4934.1
10	6271.1	2764.8	10	7489.6	3700.2	10	9022.7	4958.6
20	6289.4	2778.3	20	7512.2	3718.2	20	9051.7	4983.1
30	6307.9	2792.0	30	7534.9	3736.2	30	9080.9	5007.8
40	6326.3	2805.6	40	7557.7	3754.4	40	9110.3	5032.6
50	6344.8	2819.4	50	7580.5	3772.6	50	9139.8	5057.6
96	6363.4	2833.2	106	7603.5	3791.0	116	9169.4	5082.7
10	6382.1	2847.0	10	7626.6	3809.4	10	9199.1	5107.9
20	6400.8	2861.0	20	7649.7	3827.9	20	9229.0	5133.3
30	6419.5	2875.0	30	7672.9	3846.5	30	9259.0	5158.8
40	6438.4	2889.0	40	7696.3	3865.2	40	9289.2	5184.5
50	6457.3	2903.1	50	7719.7	3884.0	50	9319.5	5210.3
97	6476.2	2917.3	107	7743.2	3902.9	117	9349.9	5236.2
10	6495.2	2931.6	10	7766.8	3921.9	10	9380.5	5262.3
20	6514.3	2945.9	20	7790.5	3940.9	20	9411.3	5288.6
30	6533.4	2960.3	30	7814.3	3960.1	30	9442.2	5315.0
40	6552.6	2974.7	40	7838.1	3979.4	40	9473.2	5341.5
50	6571.9	2989.2	50	7862.1	3998.7	50	9504.4	5368.2
98	6591.2	3003.8	108	7886.2	4018.2	118	9535.7	5395.1
10	6610.6	3018.4	10	7910.4	4037.8	10	9567.2	5422.1
20	6630.1	3033.1	20	7934.6	4057.4	20	9598.9	5449.2
30	6649.6	3047.9	30	7959.0	4077.2	30	9630.7	5476.5
40	6669.2	3062.8	40	7983.5	4097.1	40	9662.6	5504.0
50	6688.8	3077.7	50	8008.0	4117.0	50	9694.7	5531.7
99	6708.6	3092.7	109	8032.7	4137.1	119	9727.0	5559.4
10	6728.4	3107.7	10	8057.4	4157.3	10	9759.4	5587.4
20	6748.2	3122.9	20	8082.3	4177.5	20	9792.0	5615.5
30	6768.1	3138.1	30	8107.3	4197.9	30	9824.8	5643.8
40	6788.1	3153.3	40	8132.3	4218.4	40	9857.7	5672.3
50	6808.2	3168.7	50	8157.5	4239.0	50	9890.8	5700.9
100	6828.3	3184.1	110	8182.8	4259.7	120	9924.0	5729.7
10	6848.5	3199.6	10	8208.2	4280.5	10	9957.5	5758.6
20	6868.8	3215.1	20	8233.7	4301.4	20	9991.0	5787.7
30	6889.2	3230.8	30	8259.3	4322.4	30	10025.0	5817.0
40	6909.6	3246.5	40	8285.0	4343.6	40	10059.0	5846.5
50	6930.1	3262.3	50	8310.8	4364.8	50	10093.0	5876.1

TABLE V.—CORRECTIONS FOR TANGENTS AND EXTERNALS.

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table IV) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.03	.06	.09	.13	.16	.19	.22	.25	.28	.31	.34	.38	.42	.46
15°	.04	.10	.14	.19	.24	.29	.34	.39	.45	.51	.58	.63	.68	.74
20°	.06	.13	.19	.26	.32	.39	.45	.51	.58	.65	.72	.79	.84	.90
25°	.08	.16	.24	.33	.40	.49	.58	.67	.75	.83	.90	.99	1.06	1.14
30°	.10	.19	.29	.39	.49	.59	.69	.79	.89	.99	1.09	1.20	1.29	1.39
35°	.11	.22	.34	.47	.58	.69	.79	.81	.92	1.04	1.29	1.42	1.54	1.66
40°	.13	.26	.40	.53	.67	.80	.93	1.06	1.20	1.34	1.49	1.64	1.79	1.94
45°	.15	.30	.44	.60	.76	.91	1.06	1.21	1.37	1.52	1.70	1.87	2.04	2.21
50°	.17	.34	.51	.68	.85	1.02	1.19	1.36	1.54	1.72	1.91	2.10	2.29	2.48
55°	.19	.38	.57	.76	.95	1.14	1.32	1.52	1.72	1.92	2.14	2.35	2.56	2.77
60°	.21	.42	.63	.84	1.05	1.27	1.49	1.71	1.94	2.17	2.38	2.60	2.83	3.07
65°	.23	.46	.69	.93	1.16	1.40	1.64	1.88	2.13	2.38	2.63	2.88	3.13	3.39
70°	.25	.51	.76	1.02	1.28	1.54	1.80	2.06	2.33	2.60	2.88	3.16	3.44	3.72
75°	.27	.56	.83	1.12	1.40	1.69	1.98	2.27	2.57	2.87	3.16	3.47	3.78	4.09
80°	.30	.61	.91	1.22	1.53	1.84	2.15	2.46	2.78	3.10	3.44	3.78	4.12	4.46
85°	.33	.66	1.00	1.33	1.68	2.02	2.36	2.70	3.05	3.40	3.77	4.14	4.55	4.89
90°	.36	.72	1.09	1.45	1.83	2.20	2.57	2.94	3.32	3.70	4.10	4.50	4.91	5.32
95°	.39	.79	1.19	1.55	2.00	2.40	2.80	3.20	3.61	4.02	4.40	4.98	5.38	5.83
100°	.43	.86	1.30	1.74	2.18	2.62	3.06	3.50	3.95	4.40	4.88	5.37	5.85	6.34
110°	.51	1.03	1.56	2.08	2.61	3.14	3.67	4.21	4.76	5.31	5.86	6.43	7.01	7.60
120°	.62	1.25	1.93	2.52	3.16	3.81	4.45	5.11	5.77	6.44	7.12	7.80	8.50	9.22

FOR EXTERNALS ADD

Central Angle	DEGREE OF CURVE													
	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°	55°	60°	65°	70°
10°	.001	.003	.004	.006	.007	.008	.009	.011	.012	.014	.015	.017	.018	.020
15°	.003	.007	.010	.014	.018	.023	.027	.032	.035	.039	.043	.047	.051	.054
20°	.006	.011	.017	.022	.028	.034	.038	.045	.051	.057	.063	.070	.076	.083
25°	.009	.018	.027	.036	.046	.056	.065	.074	.083	.093	.106	.120	.127	.135
30°	.013	.025	.038	.051	.065	.078	.090	.103	.116	.129	.149	.170	.179	.188
35°	.018	.035	.054	.072	.086	.109	.131	.153	.175	.197	.213	.230	.247	.264
40°	.023	.046	.070	.093	.117	.141	.172	.203	.234	.265	.277	.290	.315	.341
45°	.030	.060	.093	.119	.153	.184	.216	.254	.289	.325	.351	.378	.411	.445
50°	.037	.075	.116	.151	.189	.227	.266	.305	.345	.384	.425	.467	.508	.550
55°	.046	.093	.142	.188	.236	.283	.332	.381	.420	.479	.530	.582	.641	.700
60°	.056	.112	.168	.225	.283	.340	.398	.457	.516	.575	.636	.697	.774	.851
65°	.067	.135	.204	.273	.343	.412	.483	.554	.625	.697	.771	.845	.922	1.01
70°	.080	.159	.240	.321	.403	.485	.568	.652	.735	.819	.906	.994	1.08	1.17
75°	.095	.182	.286	.383	.480	.578	.678	.777	.877	.977	1.07	1.18	1.29	1.39
80°	.110	.220	.332	.445	.558	.671	.787	.903	1.02	1.13	1.25	1.38	1.50	1.62
85°	.128	.259	.391	.524	.657	.790	.926	1.06	1.20	1.34	1.47	1.62	1.76	1.91
90°	.149	.299	.450	.603	.756	.910	1.07	1.22	1.38	1.54	1.70	1.87	2.03	2.20
95°	.174	.350	.522	.706	.885	1.06	1.25	1.43	1.62	1.80	1.99	2.18	2.38	2.53
100°	.200	.401	.604	.809	1.01	1.22	1.43	1.64	1.85	2.06	2.28	2.50	2.73	2.96
110°	.268	.536	.806	1.08	1.35	1.63	1.91	2.20	2.48	2.76	3.05	3.35	3.66	3.96
120°	.360	.721	1.08	1.45	1.82	2.19	2.57	2.95	3.33	3.72	4.11	4.50	4.91	5.32

479
 X857 50.25 ← 3 25 10/107

479 + 75
 + 61.78

43rd + Logan S. 18
 E.C.C.T. 64.96 - 65.03 Bank

U.W. Man - Newton. 64.9 - 64.30

U.W. W.P. Keeler 72.47

Handwritten calculations and notes:

572
 1672
 22.24

945
 77
 868

1417
 877
 72.94

943792
 27462
 12713.54

1424
 636
 788
 614
 14.02

788
 199
 737
 763
 1.74

0.7424

6478 200
 4700.21

DISTANCES FROM CENTER OF ROADWAY FOR
 CROSS-SECTIONING.

Roadway 16 feet wide. Side Slopes 1 on 1 1/2
 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.