

1856

# 1856

## 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

CITY ENGINEER'S OFFICE

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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 1½ see inside of back cover.

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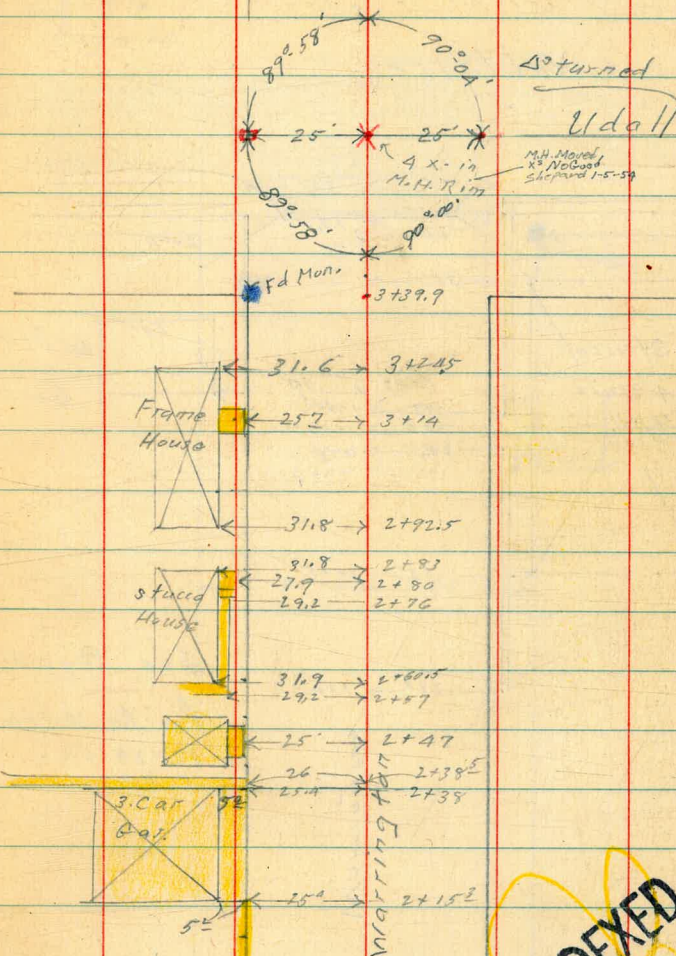
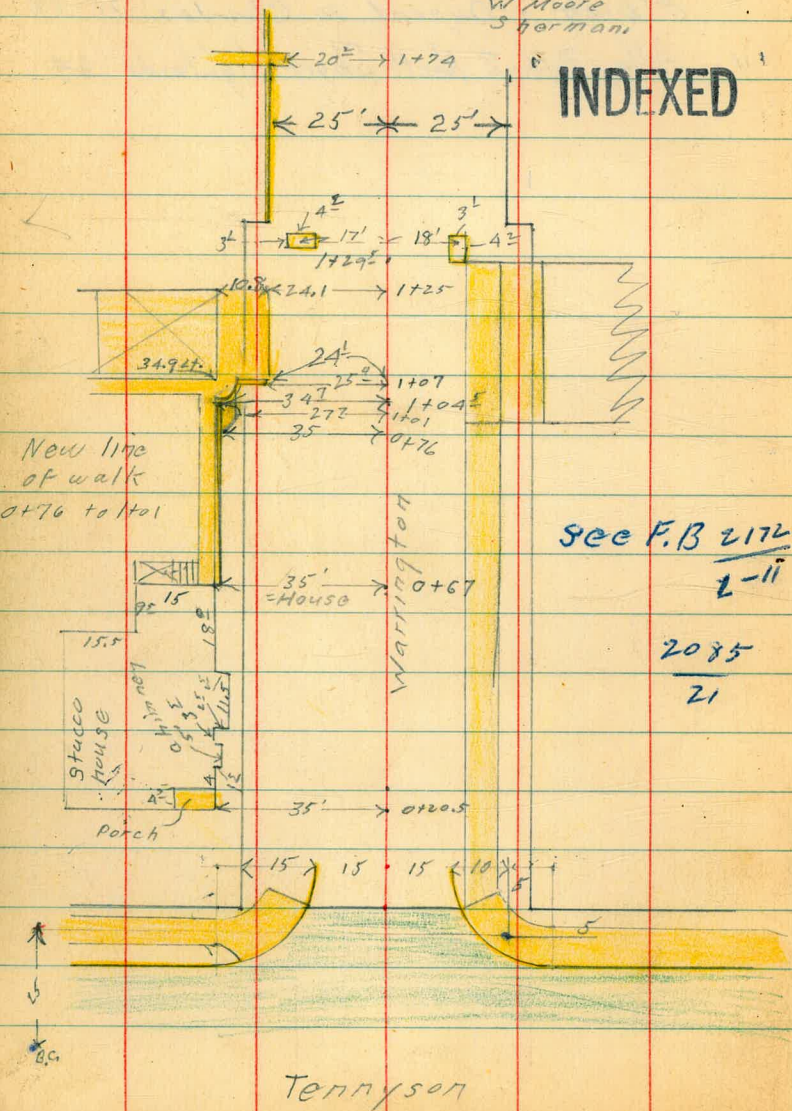
X-See. Warrington	Tennyson to Voltaire	} 2-20
" Uddall	Warden, to Poinsettia	
" Albion - Dupont to Charles.		21-28
" Alley Bk 8 North Shore Highlands		69

X-sec. Warrington (Tennyson to Vellaire)  
 " Udall - Poinsettia

5-24-48  
 W.O. 25001

Sommermeier  
 McCoy &  
 W Moore  
 S German

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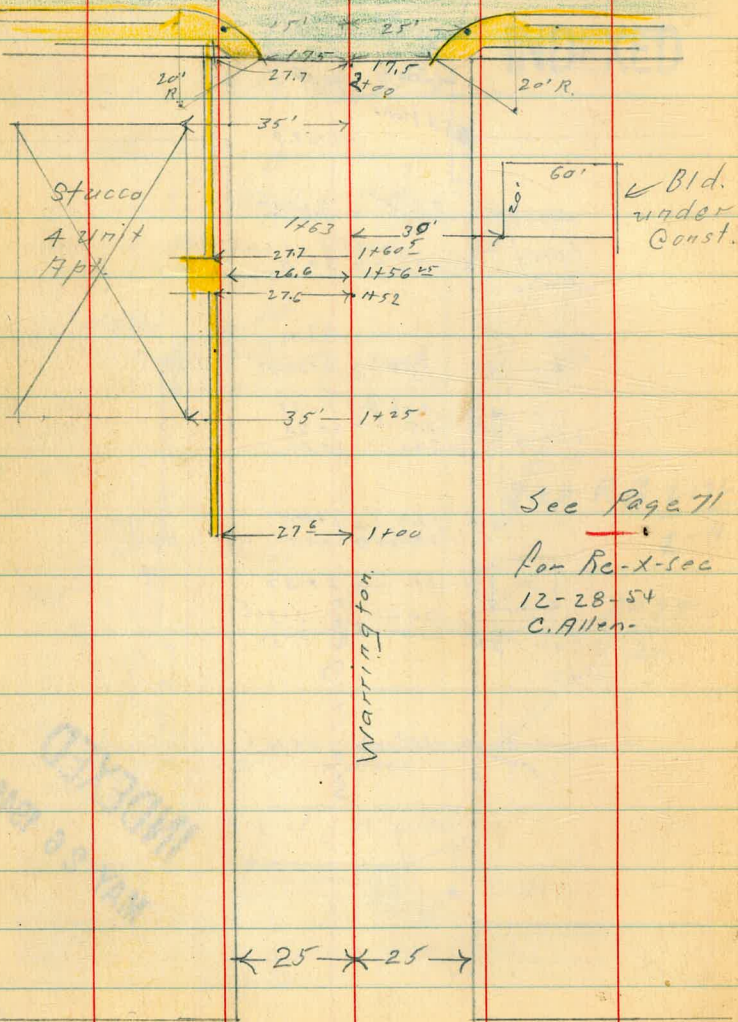


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 MAY 26 1948

Warrington

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Voltaire

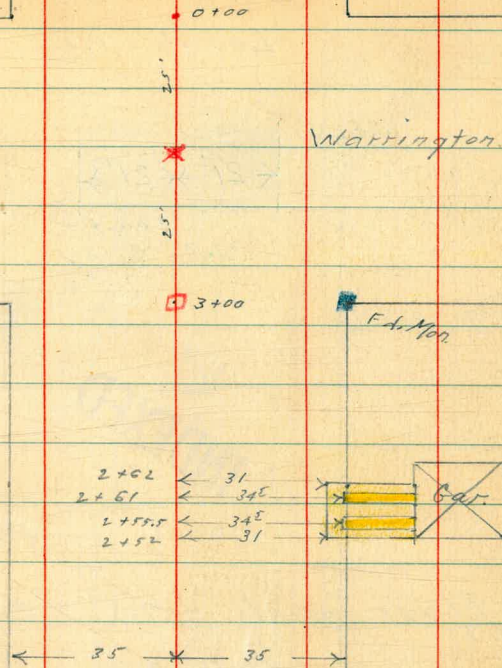


Udall St.

3

Levels  
Page 16

Warrington



Wardens

Sight 35' off Mon. Wells + Udall.

Udall St.

Levels - P. 10

← 21' \* 21' →

2+70.5

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New levels this section

5-18-53

Page 69

0+00

Warrington

Poinsettia Dr.  
A.C. Pave.

Split  
of  
cbs.

5+58 = Ob. B.C.

5+05  
Ob. B.C.

5+05

10' ob.  
1x1x2  
22x35  
grate

← 21' → 4+17

Levels Warrington

Sketch Pgs 2+3

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0-10 = Nly Cl. line Tennyson Sep. 06.

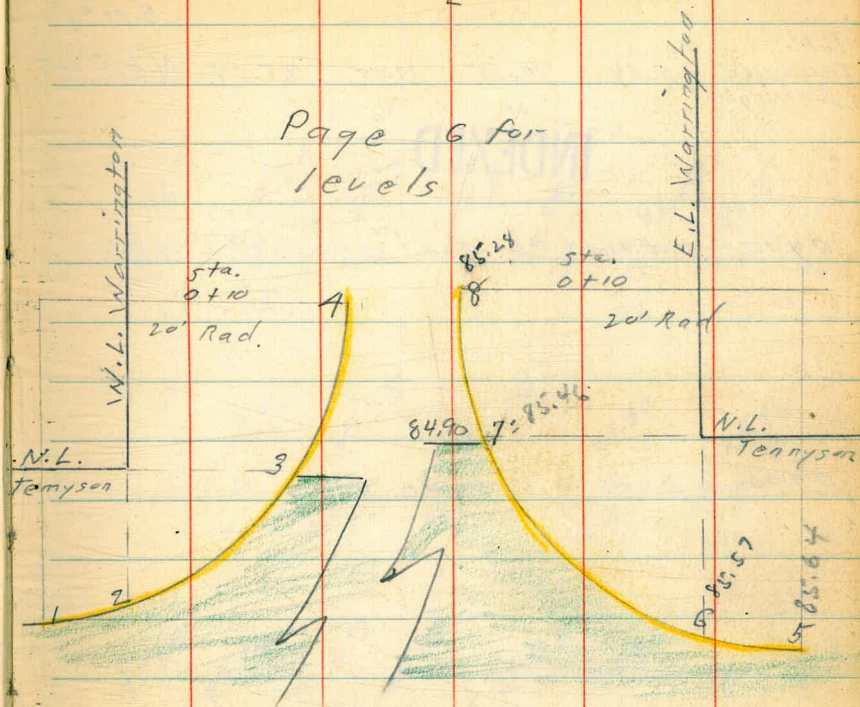
0-10<sup>1</sup> = Nly gutter line Tennyson

Alicia + Tennyson 0.97 96.72 - 95.75 N.W.B.P. = (Wly, B.P.) 0 96.72

E

5

Page 6 for levels



86.52	86.04	85.64	86.36
10.20 100	10.58 35 EC	11.07 35 EC	10.34 100
85.95	85.41	85.17	85.63
10.77 100	11.31 35	11.30 30	11.09 15
			11.13
			11.31 15
			11.58 30
			11.57 35
			10.90 100

(Wly, B.P.) 0 96.72

WARRINGTON

B.M. #1

T.P.  
Tennyson  
Warrington 4.68 90.25 11.15 85.57 N.E. 5' Lt.

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0+10 = End. Cl. Returns. 15' Lt. + Rt.

0+00 = End. A.C. pave.

N.E. Return.

Curb. Ret's.  
Tennyson +  
Warrington

See  
FB 2172  
2-11

N.W. Return.

⊕

6

86.3 85.8A 85.2 85.5 8A.8 86.28 86.5 86.1  
10.4 10.88 11.5 11.2 11.9 10.44 10.2 10.6  
30 15 15 15 15 15 20 30  
cc. Encl. cc. Encl. cc.

85.92 85.25 85.30 8A.90 85.46  
10.80 11.47 11.42 11.82 11.26  
17.6 17.6 Pav. 17.6 17.6  
cc. cc. cc. cc. cc.

85.6A 85.16 85.57 85.13 85.46 8A.90 85.28 8A.8  
11.08 11.56 11.15 11.57 11.26 11.82 11.44 11.9  
3 4 6 6 7 7 8 8  
cc. cc. cc. cc. cc. cc. cc. Dirt.  
B.C. Encl. Pav.

86.05 85.41 86.03 85.42 85.92 85.25 85.8A 85.2  
12.67 11.31 10.69 11.30 10.84 11.47 10.88 11.5  
cc 7 cc 2 cc 3 4 cc 4  
B.C. cc. cc. cc. Encl. Pav. cc. Dirt



WARRINGTON

INDEXED

1+04<sup>5</sup> 34<sup>1</sup> Lt. = B.C. 4" wall (2<sup>E</sup> Rad.) (P. 2)<sup>see</sup>

T.P. BM #1  
P. 6 4.46 90.03 4.168 85.57

0+67 Cont.

also = End House 35' Lt.  
Conc. walk. (Runs N. + S.)

0+67 34<sup>1</sup> Lt. = Start 4" wall (N. + S.) + 2' wide

36' Lt. =  $\Phi$  porch (4' wide Conc.)

0+23 33<sup>5</sup> Lt. =  $\Phi$  4' Conc. steps to porch

0+20<sup>5</sup> 35' Lt. = S.E. Cor. Stucco House.

90.25

$\Phi$

7

85.80 84.26 83.4  
6.23 5.77 6.6  
3.5 34.7 34.7  
on Top Base  
walk wall wall

90.03

87.2 87.2 84.66 84.91  
3.1 3.1 5.59 5.34  
80 35 35.0 34.7  
Ord House walk Top  
Floor level wall

84.4 84.6 84.1 85.0 85.4 86.1 85.9 85.9  
5.9 5.7 5.6 5.3 4.9 5.2 4.4 4.4  
34.7 34.7 30 15 15 18 30  
Base Ord.  
wall.

81.8 86.17  
3.07 4.08  
36 33.5  
on porch Bottom  
step

90.25

WARRINGTON

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1725 Cont.

342 Lt. = End double car.

1725 24<sup>1</sup> Lt. = End (N.E. Cor.) Conc. Dr.

1707<sup>1</sup> Cont.

34.9 Lt. = start double car.

1707<sup>1</sup> 24<sup>1</sup> Lt. = start conc. drive

1707 Cont. 35<sup>1</sup> Lt. = End of walk.

see Page 2

1707

(Page 2)  
32<sup>1</sup> Lt. = E.C. Wall, - 33 Lt. = E.C. walk

25<sup>1</sup> Lt. = E. End E+W. wall

90.03

83.71  
6.29  
34.9  
Drive +  
Bar. Floor.

83.61  
6.42  
27  
Drive +  
Ord.

83.58  
6.45  
25.4  
ndrive

83.36

6.67  
24.1  
Drive

84.8

5.2  
24.1  
Ord.

84.9

5.1  
22

85.1

4.9  
15

85.2

4.8

85.1

4.9  
15

84.3

5.7  
20

84.8

5.2  
30

40

83.80

6.23  
34.9  
Drive  
+ Bar. Floor.

83.65

6.38  
26.8  
Dirty  
Come Dr.

83.63

6.40  
25.1  
Drive

83.93

6.60  
24.1  
S.E. Cor  
Drive

84.6

5.4  
24.1  
Ord

85.0

5.0  
22

84.4

5.6  
15

85.2

4.8

85.1

4.9  
15

84.4

5.6  
20

84.8

5.2  
30

83.80

6.23  
37  
on walk

83.4

6.6  
32.4  
Base  
wall

84.3

5.72  
32.4  
Top wall E.C.

84.19

5.84  
25.4  
Top  
wall

84.2

5.8  
25.4  
Ord

83.6

6.4  
25.4  
Base  
wall

90.03

INDEXED

2+153 Conc. drive to triple Gar.  
25' Lt. = End 7" Conc. wall. start

88.19	83.9	85.0	84.9	85.1	84.8	86.0	86.7
1.84	6.1	5.0	5.1	4.9	5.2	4.0	3.3
25.4	25.4	25	15		18	25	35
Top wall	Base wall	Grd					

1+74 thru conc. wall.  
20' Lt. = 3' wide conc. walk

84.99	84.59	85.1	85.1	84.8	85.2	85.4
5.04	5.44	4.9	4.9	5.2	4.8	4.6
24.8	20.2	20.2		20	25	40
walk	walk	Grd.				
line of wall						
4 Grds level						

1+41 24' Lt. = start 7" wide Conc. wall

87.81	83.8	84.8
2.22	6.2	5.2
24.1	24.1	24.1
Top wall	Base wall	Ord

1+40 = Subdivision line

84.6	84.7	84.8	85.1	85.0	84.4	85.2
5.4	5.3	5.2	4.9	5.0	5.6	4.8
30	25	15		15	20	30

1+27

83.4	84.8	85.1	85.2	85.1	84.3	84.8	85.2
6.6	5.2	4.9	4.8	4.9	5.7	5.2	4.8
100	30	15		15	20	30	40

90.03

90.03

Warrington  
INDEXED

2+60<sup>E</sup> 31<sup>3</sup> Lt. = S.E. Cor. House.

Conc. walk

2+57 29<sup>2</sup> Lt. = S.E. Cor. 28' wide N. + S. ly.

83.9	84.3	85.13	85.1 <sup>7</sup>	85.6	86.8	87.3	87.9
$\frac{6.6}{95}$	$\frac{5.7}{40}$	$\frac{4.91}{29.2}$	4.3	$\frac{4.4}{15}$	$\frac{3.2}{20}$	$\frac{2.7}{25}$	$\frac{2.1}{40}$
	Ord.	walk + Ord.					

2+53 = End single Bar.

85.38  
 $\frac{4.65}{28}$   
Bar. Floor

2+47 25' Lt. =  $\Phi$  8' wide Conc. drive to Bar

85.37      85.23  
 $\frac{4.66}{28}$        $\frac{4.80}{25}$   
Bar. Floor

2+41 29' Lt. = start single Bar. Conc. Floor.

85.37	85.1	84.9	85.4	85.1	86.5	86.9	87.4
$\frac{4.66}{28}$	$\frac{4.9}{25}$	$\frac{5.1}{20}$	4.6	$\frac{4.7}{15}$	$\frac{3.5}{20}$	$\frac{3.1}{25}$	$\frac{2.6}{40}$
Bar. Floor							

2+38<sup>E</sup> 26' Lt. =  $\Phi$  1' wide E. + W. Conc. wall

85.38	83.9	84.6
$\frac{4.65}{26}$	$\frac{6.1}{26}$	$\frac{5.4}{26}$
Top wall	Base wall	Ord.

2+38 25<sup>4</sup> Lt. = End drive to triple Bar.

30<sup>5</sup> Lt. = End Bar.

85.16	84.6 <sup>1</sup>	84.6	84.9	85.3	85.1	86.5	87.0
$\frac{4.87}{30.6}$	$\frac{5.42}{25.4}$	$\frac{5.4}{25}$	$\frac{5.1}{23}$	4.7	$\frac{4.7}{15}$	$\frac{3.5}{20}$	$\frac{3.0}{25}$
Bar. Floor	End Dr.	Ord	Ord				

90.03

90.03

T.P. 4.30 93.20 1.13 88.90  
 S.W. Conc.  
 Mon. Udall S.S. 2.38 87.65 B.M. #2  
 + Warrington

3+39<sup>2</sup> = S. line Udall

3+24<sup>5</sup> 31<sup>5</sup> Lt. = N.E. Cor. Frame house

27<sup>2</sup> Lt. = 6' wide porch.

3+19 25<sup>2</sup> Lt. = 6' wide Conc. steps

2+92<sup>5</sup> 31<sup>8</sup> Lt. = S.E. Cor. Frame House.

2+83 31<sup>8</sup> Lt. = N.E. Cor. house.

2+80 27<sup>2</sup> Lt. = 6' wide porch.

2 steps to porch

2+76 29<sup>2</sup> Lt. = End walk + bottom of

90.03

88.0 88.7 88.8 89.2  
 $\frac{2.0}{25}$  1.3  $\frac{1.2}{10}$   $\frac{0.8}{25}$

88.17 87.03 86.4 86.82  
 $\frac{1.86}{27.7}$   $\frac{2.00}{25.7}$   $\frac{2.6}{25.7}$   $\frac{2.21}{25}$   
 Porch Top of Bottom of Bottom of Grd  
 step

88.3 86.0 85.9 86.7 86.9 86.7 87.7 87.8  
 $\frac{1.7}{31.8}$   $\frac{4.0}{31.9}$   $\frac{4.1}{25}$  3.3  $\frac{3.1}{10}$   $\frac{3.3}{15}$   $\frac{2.3}{20}$   $\frac{2.2}{25}$   
 House Floor Grd.

86.6 86.61  
 $\frac{3.2}{31.9}$   $\frac{3.42}{27.9}$   
 House Floor

86.38  
 $\frac{4.65}{29.2}$   
 walk

90.03

Warrington

1705

INDEXED

1700 Cont.

1700

0750

0700  
A1092 Nly. line Udall

37749 = t Udall

73.20

£

12

89.7	87.7	87.9	87.7	88.9	90.0
$\frac{3.5}{25}$	$\frac{5.7}{14}$	5.5	$\frac{5.7}{15}$	$\frac{4.3}{25}$	$\frac{3.2}{90}$

90.1	90.1
$\frac{3.1}{75}$	$\frac{3.1}{90}$

90.06	89.8	89.9	87.6	87.9	87.7	89.7	89.5
$\frac{3.14}{27.6}$	$\frac{3.4}{27.5}$	$\frac{3.3}{25}$	$\frac{5.6}{14}$	5.3	$\frac{5.5}{15}$	$\frac{3.5}{25}$	$\frac{+1.3}{27}$

S.E. cor  
2' wide  
walk

90.5	90.2	88.9	88.8	88.6	90.0	89.2	87.3
$\frac{2.7}{50}$	$\frac{3.0}{25}$	$\frac{4.3}{13}$	4.4	$\frac{4.6}{14}$	$\frac{3.2}{24}$	$\frac{+1.0}{25}$	$\frac{0.9}{75}$

90.1	88.6	89.1	89.0	89.3	89.1	87.1
$\frac{2.5}{25}$	$\frac{4.6}{20}$	4.1	$\frac{4.2}{14}$	$\frac{3.9}{16}$	$\frac{3.8}{22}$	$\frac{0.8}{25}$

89.3	90.0	90.1
$\frac{3.9}{25}$	3.2	$\frac{3.1}{25}$

93.20

T.P. 5.45 91.92 6.73 86.47

1+99<sup>1</sup> 175 Lt + Rt. = start Curb.  
+99<sup>2</sup> = start A.C. Paving

INDEXED

1+98

Bldg 20 x 60

1+63 30' Rt. = S.W. Cor. Bldg. under Const.

1+60<sup>5</sup> 27<sup>3</sup> Lt. = S.E. Cor. 2' wide N.+S. Conc. Walk

1+56<sup>25</sup> 26<sup>E</sup> Lt. = 8<sup>E</sup> wide steps + porch

1+52 26<sup>E</sup> Lt. = S.E. Cor. Porch + steps  
27<sup>E</sup> Lt. = N.E. Cor. 2' wide N.+S. Conc. Walk

93.20

86.45 85.87 85.51 84.81 85.41  
6.75 7.33 7.69 8.33 7.79  
175 175  
End of. 2 3. End of.

86.1 85.9 85.5 85.1 87.0  
6.5 7.3 7.7 8.1 6.2  
25 16 15 25

88.5 89.27  
4.7 3.93  
30 30  
End Top. Foundation  
Forms

87.50 87.5  
5.40 5.7  
27.6 27.6  
Walk. Grd

87.2 87.8  
3.0 5.4  
26.6 26.5  
Top porch Grd.

88.39 88.00 88.0 86.3 86.2 86.3 86.3 86.6  
4.81 5.2 5.2 6.9 7.0 6.9 4.9 4.6  
29.6 27 25 14 14 25 50  
Walk + Bottom of steps

Warrington

# INDEXED

S. E. cl. Ret.

S. W. cl. Ret.

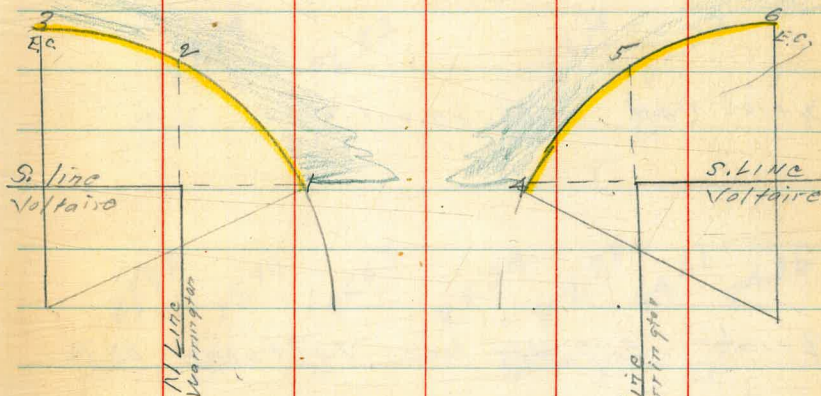
Returns - Voltairc + Warrington

3+00 = Sly. line Voltairc

91.92

84.87	85.39	84.41	85.04	84.06	84.68
$\frac{7.05}{4}$	$\frac{6.53}{4}$	$\frac{7.51}{5}$	$\frac{6.88}{5}$	$\frac{7.86}{6}$	$\frac{7.24}{6}$
G	CC	G	CC	G	CC E.C.

85.81	86.44	85.82	86.42	85.99	86.67
$\frac{6.05}{1}$	$\frac{5.48}{1}$	$\frac{6.10}{2}$	$\frac{5.50}{2}$	$\frac{5.93}{3}$	$\frac{5.25}{3}$
G	CC	G	CC	G	CC E.C.



86.68	86.79	85.87	85.77	85.52	85.28	89.87	85.39	85.42
$\frac{5.24}{27.7}$	$\frac{5.48}{17.7}$	$\frac{6.05}{17.7}$	$\frac{6.15}{75}$	$\frac{6.40}{75}$	$\frac{6.64}{75}$	$\frac{7.05}{175}$	$\frac{6.53}{175}$	$\frac{6.5}{25}$
E. Edges W. work	CC	G				G	CC	CC

91.92



INDEXED

S.E.B.P.  
Poinsettia (old villa Dr)  
+ Voltaire

2.00 96.38 (96.35)

T.P. 8.35 78.38 1.49 90.03

T.P. 9.49 91.52 7.89 82.03

3+10<sup>1</sup> Cont. pavement

87.79 86.83 83.14 82.22  
 $\frac{4.13}{100}$   $\frac{5.09}{65}$   $\frac{8.78}{65}$   $\frac{9.70}{100}$

3+10<sup>L</sup> = S. gutter line Voltaire on Pav.

85.95 85.79 86.65 85.24 84.78 84.11 81.06  
 $\frac{5.97}{35}$   $\frac{6.13}{25}$   $\frac{6.37}{15}$   $6.68$   $\frac{7.14}{15}$   $\frac{7.57}{25}$   $\frac{7.86}{35}$

3+10 = S. cb. line Voltaire on cb.

86.50 87.54 86.67 84.69 83.81 82.88  
 $\frac{3.42}{100}$   $\frac{4.38}{65}$   $\frac{5.25}{35}$   $\frac{7.23}{35}$   $\frac{8.11}{65}$   $\frac{9.04}{100}$   
 C.E.C. C.E.C.

91.92

91.92

Udall - Worden - East.  
Sketch Ps. 3+4

T.P. 10.31 92.79 0.85 82.48

1+00

INDEXED

0+50

0+15

0+00 = Ely. line Worden

0-25 = E Worden

0-50 = W. Line Worden

T.P. 5.22 83.33 11.92 78.11

S.W. Corr.  
Udall +  
Warringford 2.38 90.03 - 87.65

87.7  
+4.4  
55

83.3  
0.0  
35

91.8  
1.5

87.8  
2.5  
35

79.5  
3.8  
90

88.1  
+5.1  
70

81.6  
1.7  
35

79.9  
3.4

78.8  
4.5  
11

75.6  
2.7  
35

74.6  
8.7  
72

74.8  
3.5  
90

86.3<sup>?</sup>  
+2.0  
60

82.9  
0.4  
35

79.9  
3.4  
10

77.9  
5.5

70.8  
12.5  
30

71.0  
12.3  
35

75.7  
7.6  
75

74.9  
3.4  
95

71.6  
3.7  
60

71.2  
4.1  
35

71.3  
1.0  
10

71.1  
5.9

71.1  
11.9  
25

70.6  
12.7  
35

80.1  
3.2  
50

81.1  
3.2  
75

79.4  
3.9  
50

78.1  
4.6  
35

77.6  
5.7  
10

75.4  
7.9

69.9  
13.4  
16

69.1  
14.2  
29

72.7  
10.6  
35

79.8  
3.5  
48

80.0  
3.3  
75

79.5  
3.8  
75

79.1  
4.2  
35

77.8  
5.5  
15

71.5  
11.8

69.0  
14.3  
10

67.9  
15.4  
35

76.2  
5.1  
52

74.5  
3.8  
75

83.33

# INDEXED

2+55E 34' RT. = 2' wide Conc. Ribbon

2+52 Cont.

in front of garage.

2+52 31' RT. = Rough grout wall + slab

2+50

2+00

1+50

92.79

86.65	86.71
6.14	6.02
34.5	49.5
2' Ribbon	3rd floor
D.F.	

8A.1	8A.2
8.7	8.6
49.5	49.5
Base wall	End West of wall

86.1	85.9	86.6	86.8
6.7	6.9	6.2	6.0
Top Slab	31	35	49.5
	Base slab	0.2	on slab + wall

90.2	90.4	90.8	87.9	87.9	87.9	86.8	86.6	8A.1
2.6	2.4	2.0	4.9	4.9	4.9	6.0	7.3	8.7
50	35	21	8		7	9	35	50

90.8	90.9	86.6	86.8	83.3	82.2
2.0	2.4	4.2	7.1	9.5	10.6
75	50	35		35	75

81.9	83.5	81.6
7.9	7.3	11.2
35		35

92.79

## INDEXED

1+00

see page 69

for 0+00 to 2+64

0+50

0+00 = E. line Warrington

T.P. 9.05 97.96 3.88 88.91

3+00 = W. line Warrington

2+62 31' RT. = End grout slab

2+61 34' RT. =  $\phi$  2' wide conc. ribbon92.79

92.8	93.4	92.7
$\frac{5.2}{3.5}$	4.6	$\frac{5.6}{3.5}$

93.1	91.7	91.3
$\frac{7.7}{3.5}$	6.3	$\frac{6.7}{3.5}$

92.4	90.2	89.2
$\frac{3.6}{3.5}$	7.8	$\frac{8.8}{3.5}$

97.96

90.6	89.3	88.0
$\frac{2.2}{3.5}$	3.5	$\frac{4.8}{3.5}$

86.5	86.6	86.7
$\frac{6.3}{31}$	$\frac{6.2}{34.5}$	$\frac{6.1}{50}$
	at Ribbon Ord.	

86.67	86.78
$\frac{6.12}{34.5}$	$\frac{5.99}{49.5}$
Ribbon	Bar
	Floor

92.79

Udall

T.P. 7.03 97.26 7.73 90.23

3+50

INDEXED

3+00

Grd. & pavement the same Elev.  
21' Lt + 21' Rt. = start curbs.

2+70 $\Sigma$  = start A.C. Pave.

2+35

See page 69

2+00

1+50

97.96

19

90.30	89.70	90.11	90.33	90.34	90.11	90.75
$\frac{7.66}{21}$	$\frac{8.26}{21}$	$\frac{7.85}{105}$	$\frac{7.63}{105}$	$\frac{7.62}{105}$	$\frac{7.85}{21}$	$\frac{7.21}{21}$
06	0				0	06

90.87	90.26	90.67	90.91	90.95	90.68	91.25
$\frac{7.09}{21}$	$\frac{7.70}{21}$	$\frac{7.29}{105}$	$\frac{7.05}{105}$	$\frac{7.21}{105}$	$\frac{7.28}{21}$	$\frac{6.71}{21}$
06	0				0	06

91.1	91.28	90.69	90.91	91.16	91.15	90.92	91.54	92.2
$\frac{6.9}{35}$	$\frac{6.68}{21}$	$\frac{7.27}{21}$	$\frac{7.05}{105}$	$\frac{6.80}{105}$	$\frac{6.81}{105}$	$\frac{7.09}{21}$	$\frac{6.42}{21}$	$\frac{5.8}{35}$
0rd.	06	0.				0.	06	0rd
	0rd						0rd	0rd

90.8	90.8	91.3	93.1
$\frac{7.2}{35}$	$\frac{7.2}{35}$	$\frac{6.7}{22}$	$\frac{4.9}{35}$

91.0	91.3	92.7
$\frac{7.0}{35}$	$\frac{6.7}{35}$	$\frac{5.3}{35}$

91.4	92.8	93.5
$\frac{6.6}{35}$	$\frac{5.2}{35}$	$\frac{4.5}{35}$

97.96

INDEXED

S.E.B.P.  
Poinsettia  
+ voltaire 0.88 96.38 (96.35)

5+58 21' RT. = Cl. B.C.

93.11 92.87 92.81 92.77 92.60 92.27 92.82  
 $\frac{4.15}{35}$   $\frac{4.39}{21}$   $\frac{4.45}{105}$  4.49  $\frac{4.60}{105}$   $\frac{4.99}{21}$   $\frac{4.44}{21}$   
 G G G G G G G

5+05 21' LT. = Cl. B.C.

91.20 91.53 91.66 91.64 91.43 91.00 91.67  
 $\frac{5.06}{21}$   $\frac{5.23}{21}$   $\frac{5.60}{105}$  5.62  $\frac{5.83}{105}$   $\frac{6.26}{21}$   $\frac{5.59}{21}$   
 Cl. B.C. G G G G G G G

4+60

90.58 89.99 90.30 90.43 90.43 90.18 90.88  
 $\frac{6.68}{21}$   $\frac{7.27}{21}$   $\frac{6.96}{105}$  6.83  $\frac{6.83}{105}$   $\frac{7.08}{21}$   $\frac{6.38}{21}$   
 G G G G G G G

4+17 21' LT. =  $\Phi$  10' opening - curb inlet

89.00 89.75 88.79 89.23 89.51 89.67 89.59 90.16  
 13.26  $\frac{7.51}{21}$   $\frac{8.52}{21}$   $\frac{8.03}{105}$  7.75  $\frac{7.59}{105}$   $\frac{7.67}{21}$   $\frac{7.10}{21}$   
 Invert Box G G G G G G G

4+00

89.80 88.91 89.41 89.64 89.77 89.63 91.28  
 $\frac{7.46}{21}$   $\frac{8.35}{21}$   $\frac{7.95}{105}$  7.62  $\frac{7.49}{105}$   $\frac{7.63}{21}$   $\frac{6.98}{21}$   
 G G G G G G G

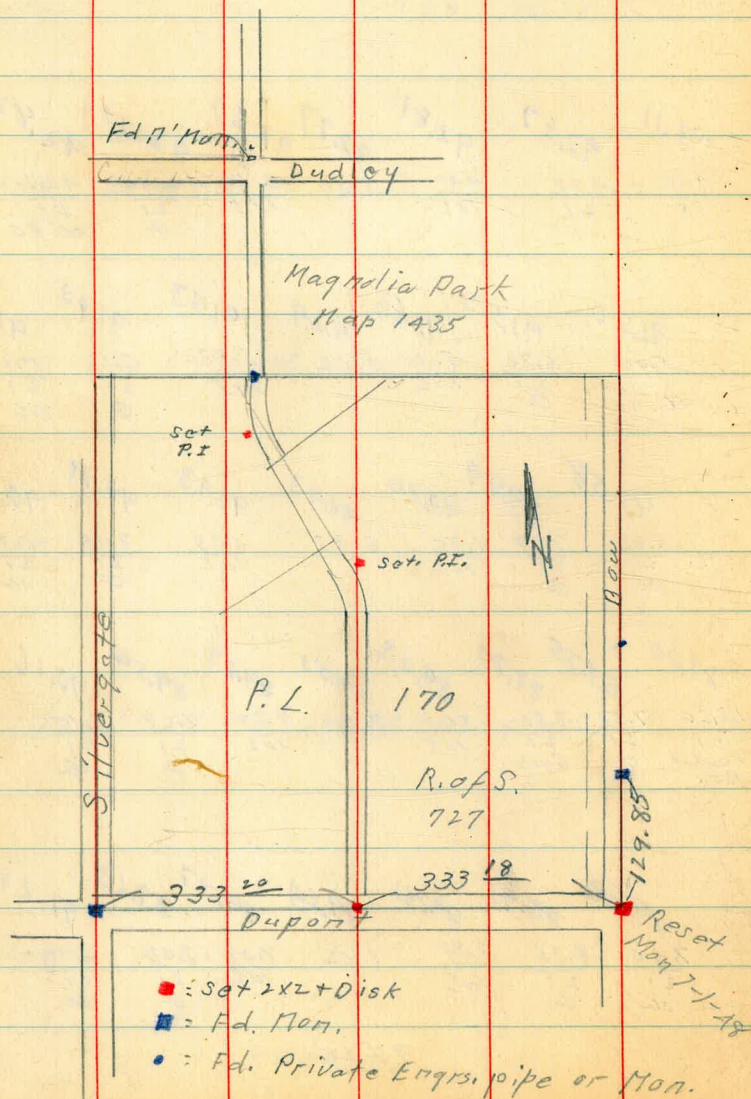
97.26

97.26

X-Sec Albion St. Dupont to Charles

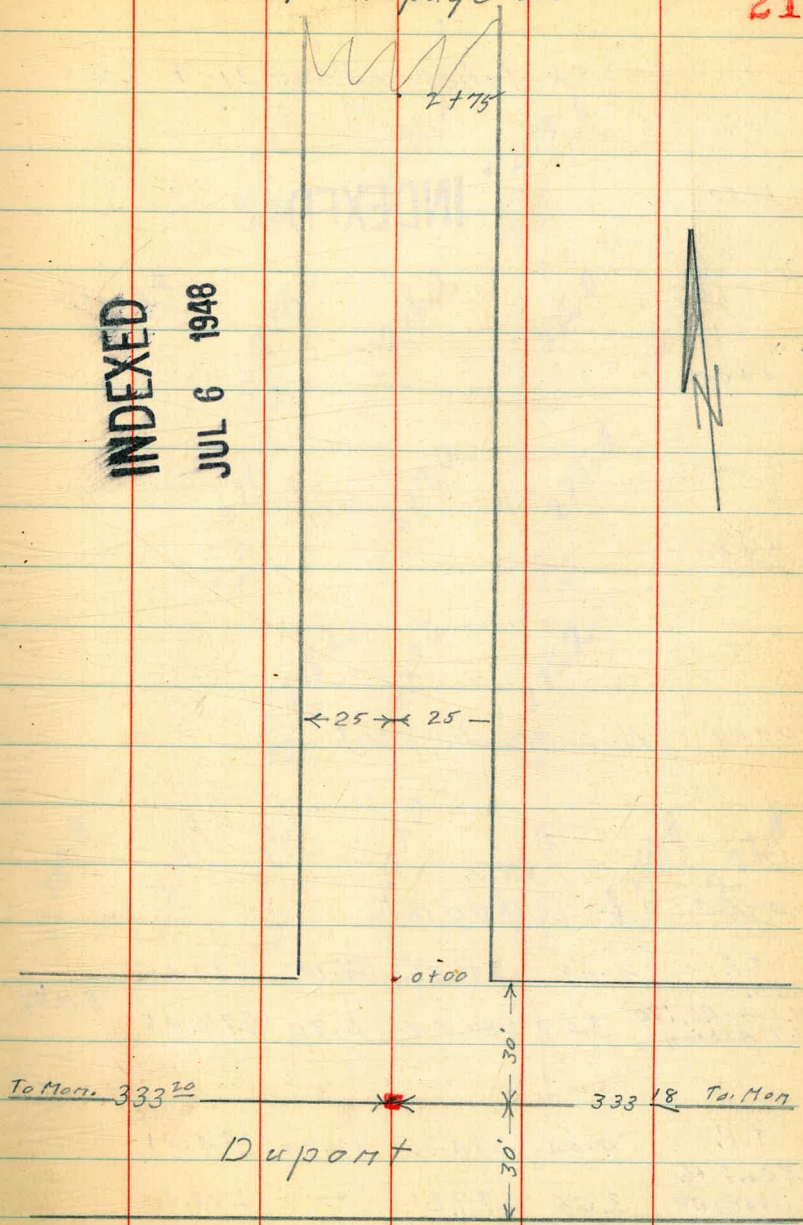
7-1-48  
W.O. 25001

Sommermeier  
E. Melton  
F. Finney  
W. Duncan



Cont. on page 26

INDEXED  
JUL 6 1948



INDEXED

1+50

1+00

0+50

0+00 = N. Line Dupont

0-30 = E Dupont

T.P.	4.48	281.92	3.10	277.44
Mon. N. Line Pl. 170 W. 7' Albion	3.09	280.54	6.90	277.45

B.M.#1

T.P.	0.04	284.35	12.94	284.31
B.P. East of Silvergate	3.65	277.25	-	293.60
75'S. S. Line Dudley				

$\frac{1.0}{100}$	$\frac{4.4}{25}$	$\frac{3.6}{25}$	5.2	5.7	$\frac{8.3}{25}$	10.1
280.9	277.5	278.3	276.1	276.2	273.6	271.8
$\frac{3.9}{25}$	274.0	278.0	277.0	275.4		
$\frac{3.7}{25}$	278.2	277.2	275.2			
$\frac{0.1}{150}$	279.7	276.1	277.0	275.7	274.0	272.4
		$\frac{3.8}{25}$	4.9	$\frac{6.2}{25}$	$\frac{7.9}{75}$	$\frac{9.5}{150}$
			281.92			



Albion St

INDEXED

4+03 L = Mid Curve

3+64.91 = B.C. Lt.

3+29 2/1

T.P. 4.40 280.43 5.89 276.03

3+00

2+50

2+00

281.92

276.1  
 $\frac{4.3}{25}$

275.1  
5.3

279.0  
 $\frac{6.4}{25}$

279.9  
 $\frac{0.5}{100}$

276.3  
 $\frac{4.1}{25}$

275.9  
5.0

279.6  
 $\frac{5.8}{25}$

270.8  
 $\frac{9.6}{100}$

276.6  
 $\frac{3.8}{25}$

275.9  
4.5

275.5  
 $\frac{5.4}{25}$

280.43

280.2  
 $\frac{1.7}{100}$

276.9  
 $\frac{5.0}{25}$

276.2  
5.7

275.0  
 $\frac{6.2}{25}$

280.5  
 $\frac{11.4}{100}$

277.3  
 $\frac{4.6}{25}$

276.2  
5.7

275.5  
 $\frac{6.4}{25}$

280.1  
 $\frac{1.8}{100}$

277.5  
 $\frac{4.4}{25}$

276.3  
5.6

279.5  
 $\frac{2.4}{25}$

270.7  
 $\frac{11.2}{100}$

281.92

Albion St

# INDEXED

6400  
B.M. #1  
P. 22                      4.12    277.46

5472    15' RT. }  
         15' LT } = Start. Conc. Curbs

5469<sup>04</sup> = E.C. = N. line P.L. 1170

5430<sup>23</sup> Mid curve

4491<sup>42</sup> = B.C. Lt. = (L.S. 2236 - Pipe)

T.P.            4.61    281.58    3.46    276.97

4442<sup>48</sup> = E.C.

280.43

277.72	277.1	276.8	275.9	276.57
$\frac{3.86}{15}$	$\frac{4.5}{15}$	4.8	$\frac{5.7}{15}$	$\frac{5.01}{CR}$

277.5	276.9
$\frac{4.08}{15}$	$\frac{5.16}{15}$
Top. of	Top. of

278.3	276.7	275.4
$\frac{3.3}{25}$	4.7	$\frac{6.2}{25}$

278.3	276.6	275.4
$\frac{3.3}{25}$	5.0	$\frac{6.2}{25}$

280.5	277.5	276.1	274.6	272.8
$\frac{14}{100}$	$\frac{7.1}{25}$	5.5	$\frac{7.0}{25}$	$\frac{8.8}{100}$
		291.58		

276.1	274.8	274.0	271.9
$\frac{4.3}{25}$	5.6	$\frac{6.4}{25}$	$\frac{8.5}{100}$

Albion St.  
cent. p. 27' **IND**

7+83<sup>±</sup> sly gutter line Dudley

7+83 sly ob. line Dudley

T.P. ctr.  
N.E. ob. Ret 11.14 289.18 3.54 278.04

7+73<sup>±</sup> = ob. Ret. B.C. As built

7+50

7+00

C+50

281.58

25

285.1  
 $\frac{3.5}{100}$

281.6  
 $\frac{7.6}{50}$

279.6  
 $\frac{2.6}{25}$

277.9  
11.3

276.2  
 $\frac{13.0}{25}$

274.5  
 $\frac{14.7}{50}$

270.6  
 $\frac{18.6}{100}$

286.24  
 $\frac{2.94}{100}$

287.25  
 $\frac{6.93}{50}$

280.31  
 $\frac{8.97}{25}$   
O.C. EC.

277.38  
 $\frac{11.88}{25}$   
O.C. EC.

275.49  
 $\frac{13.69}{50}$

271.7  
 $\frac{17.5}{100}$

289.18  
reversed

277.77  
 $\frac{3.91}{15}$   
O.C. EC.

276.9  
 $\frac{4.7}{15}$

278.1  
3.5

278.6  
 $\frac{3.0}{15}$

279.49  
 $\frac{2.09}{15}$   
O.C. EC.

279.28  
 $\frac{2.30}{15}$   
O.C.

278.3  
 $\frac{3.3}{15}$

277.9  
3.7

276.7  
 $\frac{4.9}{15}$

277.55  
 $\frac{4.03}{15}$   
O.C.

278.66  
 $\frac{2.92}{15}$   
O.C.

277.7  
 $\frac{3.7}{15}$

277.4  
4.2

276.3  
 $\frac{5.3}{15}$

277.14  
 $\frac{4.44}{15}$   
O.C.

278.44  
 $\frac{3.34}{15}$   
O.C.

277.4  
 $\frac{4.2}{15}$

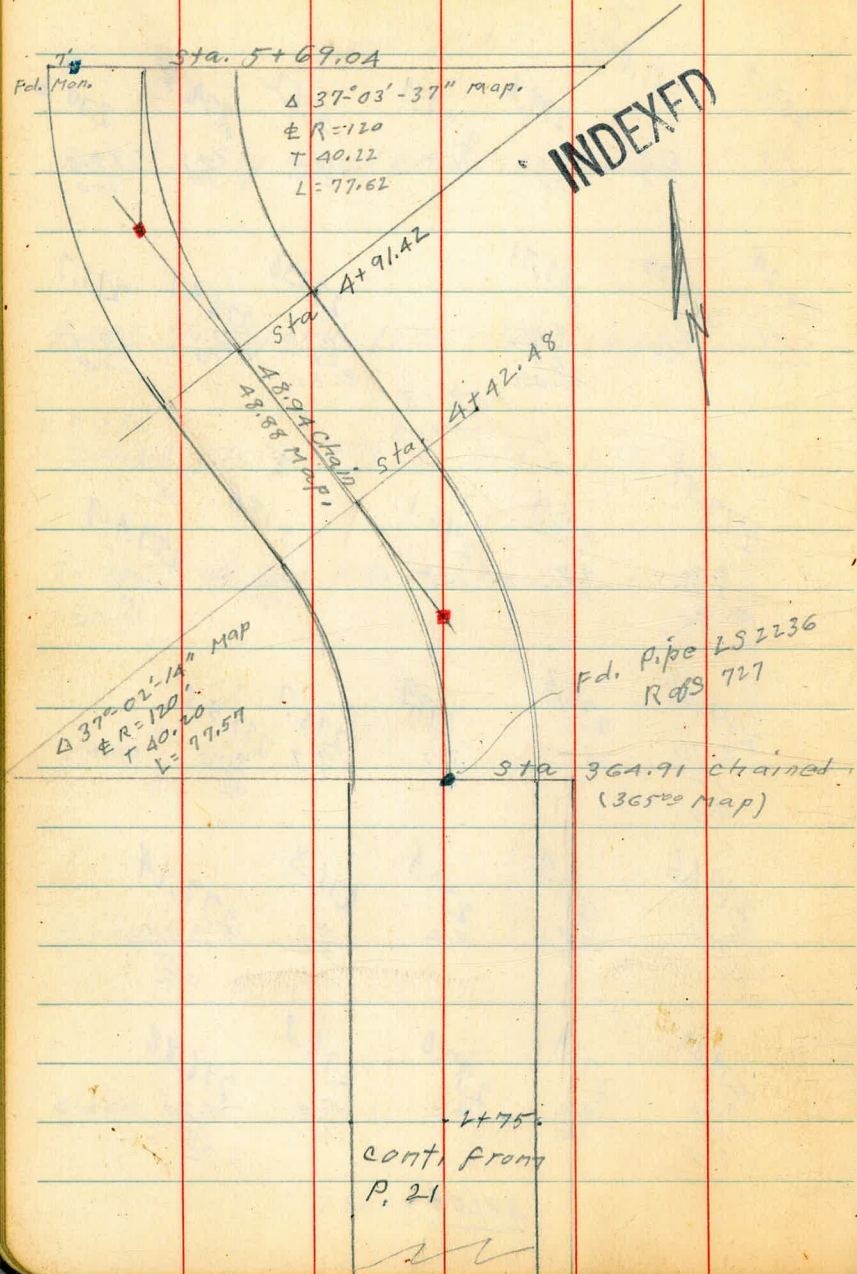
277.0  
4.6

276.2  
 $\frac{5.4}{15}$

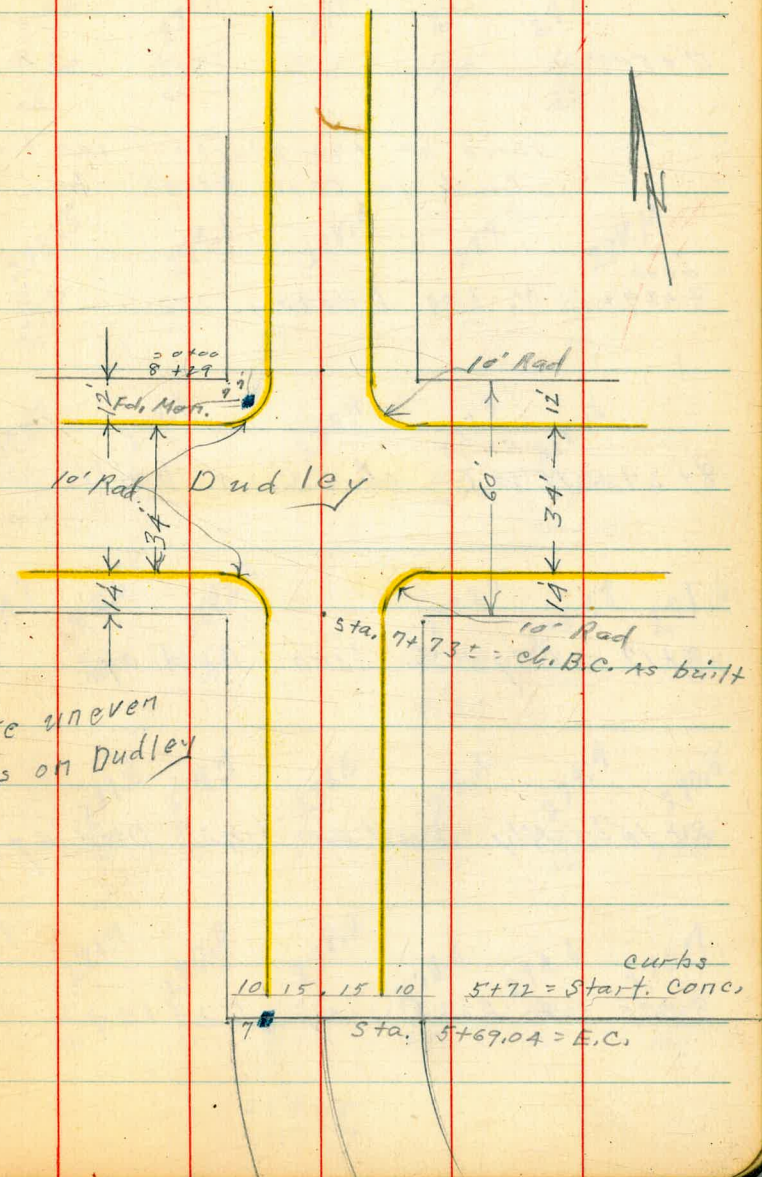
276.88  
 $\frac{4.70}{15}$   
O.C.

281.58

Albion St.



Charles St.



0+50

some of the plaster top broken.  
curb in this block has

0+00  
8+29 = N. line Dudley

0+00  
8+27 15' 11.7" c.  
15' 4" = ch. E.C. as built.

8+17 Nly. Ch. line Dudley

8+16<sup>2</sup> = Nly Gutter line Dudley

8+00 = £ Road way Dudley

279.29	278.5	278.3	277.0	277.79
9.94	10.7	10.9	14.2	11.39
15	15		15	15
66			66	66

279.85	279.1	278.9	277.3	278.19
9.88	10.1	10.8	14.9	11.24
25	15		15	15
66			66	66

279.87	279.1	278.9	277.3	278.16
9.31	10.1	10.8	11.9	11.02
15	15		15	15
66 E.C.				66 E.C.

286.7	282.55	280.69	277.29	275.38	271.6
2.71	6.63	8.47	11.94	13.80	17.6
100	50	25	25	50	100
		66 B.C.	66 B.C.		

286.0	281.8	279.9	278.5	276.2	274.9	270.8
3.2	7.4	9.3	10.7	13.0	14.8	18.4
100	50	25		25	50	100

286.1	281.9	280.0	278.2	278.4	274.6	270.7
3.1	7.3	9.2	11.0	12.8	14.6	18.5
100	50	25		25	50	100

289.18

orig B.M.  
P. 22                      6.87    293.62    293.60

T.P.                      6.25    300.51    0.63    294.26  
B.P. # Charles  
E. Ch. Silvergate            SS                      2.26    292.63    292.70

T.P.                      12.36    294.99    0.04    292.53

2+15 = ± Traveled road on Charles

1+95    15' R+2 } End curbs.  
          15' L+2 }

T.P.                      5.39    282.57    12.00    277.18

1+50

1+00

289.18

281.27  
1.3  
100

278.17  
4.4  
50

275.57  
7.0

273.07  
9.5  
50

271.27  
11.3  
100

278.57  
4.0  
50

277.67  
4.9  
25

277.17  
3.40  
75  
W. END

276.37  
6.2  
15

276.17  
6.4

275.57  
7.2  
15

276.17  
6.4  
15  
End  
of  
top. broken

274.97  
7.6  
25

272.47  
10.1  
50

282.57

277.84  
11.34  
15  
of

276.9  
12.3  
15

277.2  
12.0

276.1  
13.1  
15

276.77  
12.41  
15  
of

278.6  
10.69  
15  
of

277.68  
11.5  
15

278.0  
11.2

276.7  
12.5  
15

277.33  
11.85  
15  
of

289.18

8-26-48

x 5 EC Alley Orange To Trojan  
Between 50<sup>th</sup> & AlamedaHardin  
Decker  
Rohr  
25001

Blk. 38, Fairmount Add.

INDEXED

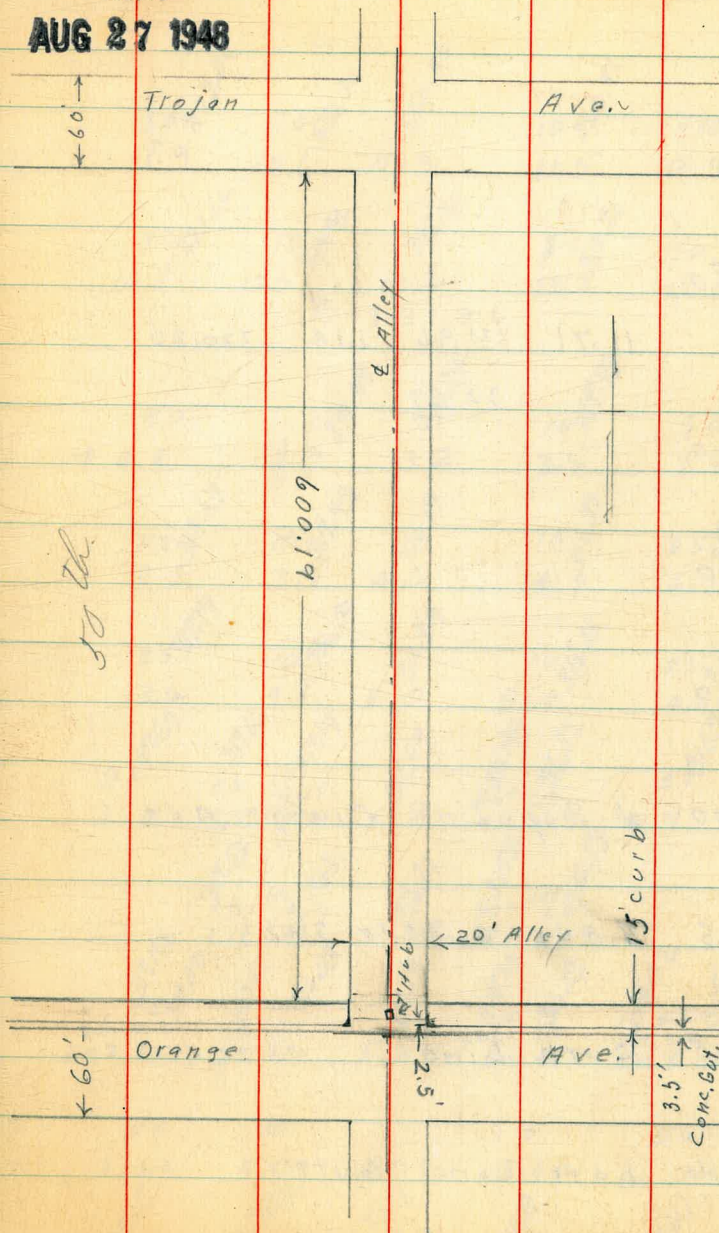
W.K.

AUG 27 1948

29

check B.M.

N.W. 50 <sup>th</sup> Trojan		2.04	376.18	376.16	
T.P.	9.24	378.22	0.02	368.98	+0.02
T.P.	12.63	369.00	0.42	356.37	
T.P.	12.87	356.79	0.16	343.92	
T.P.	12.31	344.08	0.19	331.77	
T.P.	11.71	331.96	1.14	320.25	
T.P.	4.27	321.39	6.27	317.12	5' Pit in Pole E Side Alley
	1.30	323.39	11.22	322.09	
	0.36	333.31		332.95	4 <sup>th</sup> Orange S.E. B.P.



2+00

Lt.

±

Rt

30 323.06  
8.9 10.6 11.3  
10 321.36  
320.66

10 320.41  
11.5

30 322.36  
9.6

1+50

30 321.16  
10.8 12.5 13.2  
10 319.44  
318.76

10 318.71  
13.2

30 319.86  
12.1

11.71 331.96 1.14 320.25

↑ 3 319.6

T.P.

321.39

1+00

50  
+ 0.4 10 319.49  
1.9 3 2

10 317.89  
3.5

50 317.59  
3.8

0+50

25 318.69  
2.5 10 317.49  
3.9 4 316.79

10 316.99  
4.4

25 317.19  
4.2

0+10

25 317.79  
3.6 10 316.59  
7.8 5 314.39

10 316.19  
5.2

25 316.59  
4.8

0+00 N. Prop. Line Orange Ave

50 319.39  
2.0 50 317.49  
3.73 4.2 4.8  
317.49  
Gut. 316.59

50 316.49  
4.9 4.57 5.9  
316.82  
Gut. 316.19

50 315.79  
5.9  
316.59

0-12.5 N. Edge Gutter Slab

50 318.96  
3.86 10 316.11  
3.86 4.68 5.08  
317.53  
Gut. 316.31

50 315.88  
5.41 4.67  
315.88  
Gut. 316.12

50 315.42  
6.97 6.09  
315.42

0-15 curb line

50 318.00  
2.43 3.39 3.81 4.86 5.20  
317.58  
Gut. 316.19

50 315.83  
5.50 4.70  
315.83  
Gut. 316.19

50 315.30  
6.97 6.09  
315.30

0-18.6 Edge conc. Gutter

50  
3.24 4.67 5.01  
318.15  
↑ 316.72  
321.39  
316.58

10  
5.40  
315.99

50  
6.79  
314.60



4+50

12.87 356.79 0.16 343.92

T.P.

0.16 344.08

4+07 12.2 Lt. 1 Car Garage dirt Floor

4+06

3+50

12.31 344.08 0.19 331.77

T.P.

331.96

3+19 ♀ 1 Car Garage Lt. No Apron

3+00

2+60 0.5 Rt ES.M.H.

2+50

80 341.09 Lt  
 15.7 11.8 30 344.99  
 10 345.89  
 10 9 10.9 345.89 Rt  
 10 346.79  
 30 347.29  
 10.3 9.5

356.79

12.2  
 Gar Floor 3.6 340.78  
 30 339.78  
 4.6 339.78  
 10 340.08  
 4.0 339.84  
 30 334.78  
 9.3 10 334.68  
 9.4 9.8 334.28  
 10 340.28  
 3.8 3.8  
 10 335.78  
 9.6 8.5  
 30 335.58  
 30 341.28

344.08

10.2 331.56  
 Gar Floor 0.40  
 30 329.96  
 2.0 10 329.06  
 2.9 3.3 328.66  
 10 329.26  
 2.7 30 329.66  
 2.3

30 326.16  
 5.8 10 325.46  
 6.5 0.5  
 7 324.24 6.82  
 7.7 10 323.76  
 8.2 30 325.36  
 6.6  
 3 31.96

2.04 376.18 376.16

378.22

+1.02

6+30.22 E Trojan

6+14.22 S. Curb Line Trojan Ave

6+00.22 S Line Trojan Ave

T.P. 9.24 378.22 0.02 368.98

369.00

5+90

5+60

5+25

TP 12.63 369.00 0.42 356.37

356.79

5+00

Lt.

E

Rt.

N.W. B.P. Trojan 50+4

50 362.62

9.6

50 362.62

15.6

50 362.62

21.9

50 357.30

11.7

30 356.90

12.1

50 356.16

18.4

60 376.19

10.6

50 369.32

8.9

50 369.32

10.5

50 369.32

11.1

50 369.70

17.0

10 361.50

7.5

10 365.40

13.6

10 357.99

4.8

10 369.62

8.9

10 369.62

8.8

10 369.62

9.4

10 368.30

10 369.70

10 362.40

6.6

10 356.20

12.8

10 352.19

4.6

50+4

8 369.62

8 369.72

8 369.72

8 369.22

9 369.22

9 0

0 368.30

0 362.40

6 362.40

6 362.40

12 369.00

369.00

356.79

10 369.82

8.4 369.92

10 369.92

8.3 369.22

10 369.22

9.0

10 368.40

0 363.30

10 363.30

5.7 363.30

10 356.10

12.3

10 353.09

3.7

50 370.02

8.2 369.92

50 369.92

8.5 369.92

30 369.32

8.9

30 368.10

0 363.40

30 363.40

5.6 363.40

30 357.40

11.6

30 353.49

3.3

9-14-48  
 Hendricks  
 Roberts  
 Lorer  
 W/O #80116

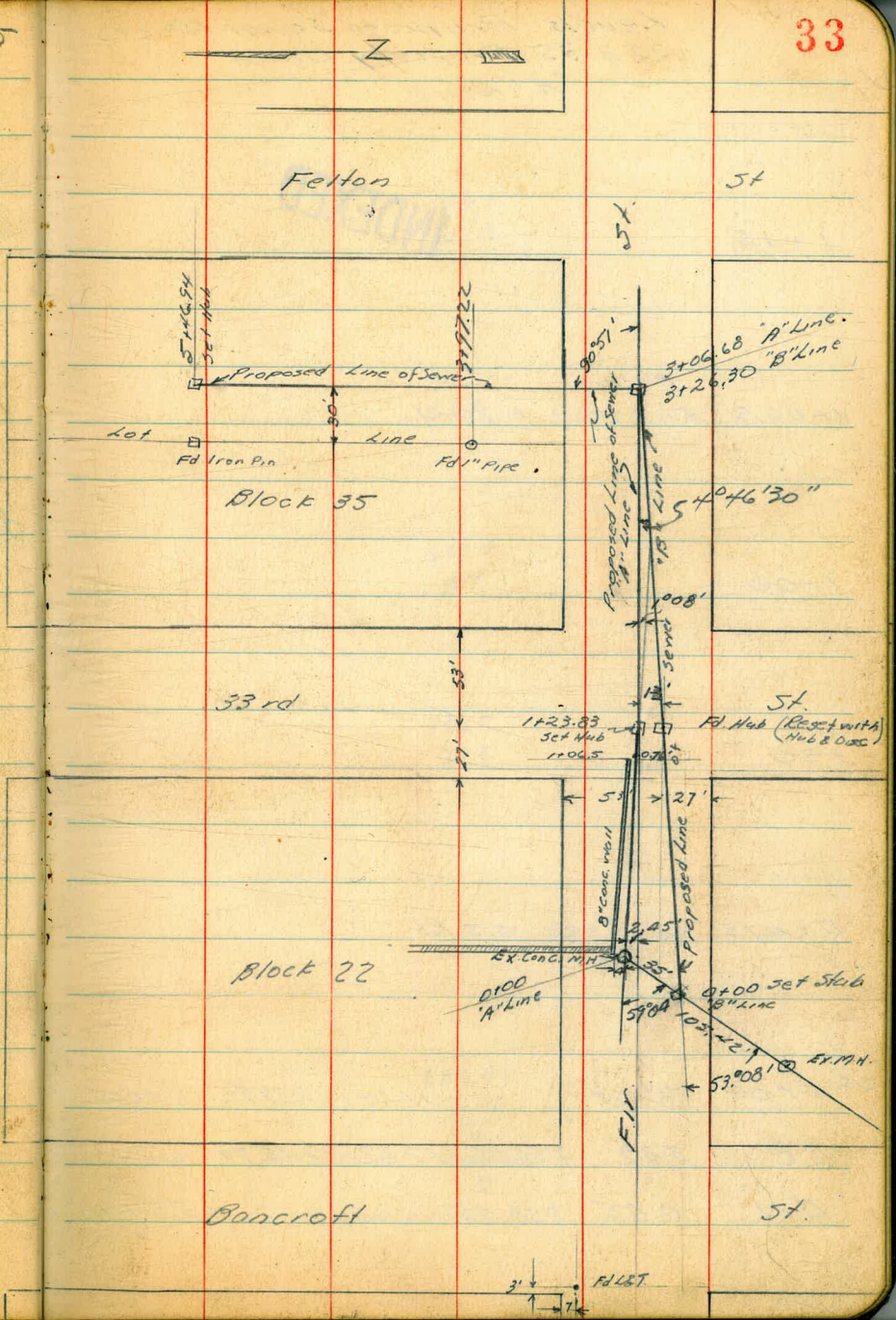
Proposed Sewer Blocks 22 & 35  
 Property Union

INDEXED  
 W.K.  
 SEP 15 1948



St.

Grape



F.I.L.S.T.

Levels Proposed Sewer Blocks  
 22 & 35 Property Union  
 "A" Line

INDEXED

1+15

246.9

~~42~~

8" CONC.

1+06.5 End Wall 0.76 Lt

248.1

~~30~~

1+00

247.7

~~34~~

+50

246.9

~~42~~

0+47.5 6" Tree 0.5 Rt.

CK 0+00 FL. MH. 11.14 239.92 240.00

239.92

11.14

T.P. 5.33 251.06 12.82 245.73

FL

Rim M.H. 0+00 251.06

T

B.M. 0.85 258.55 257.70

HWBP Fir & Bancroft.

(A" Line Cont'd)

3 + 46.68

T.P. 1276 254.75 9.07 241.99

3 + 06.68 L.Lt 90° 51'

+ 75

+ 50

2100

+ 50

112383 Hub 1° 08' Lt.

251.06  
T

35

4

240.2

10' 14.5  
50

on Hub. 3 + 06.68

254.75

241.99

907

Hub.

244.8

6.3

246.3

8

247.5

26

246.8

2.3

246.57

4.49

Hub.

251.06  
T

(A" Line Cont'd)

6703 Back Edge House 4.5 ft.

254.0	253.0	254.5	246.5
08	18	10 <sup>3</sup>	8 <sup>3</sup>
	45	Floor	Floor
	Gr.		Basement

5+46.94 End

254.56	246.8
09	8 <sup>0</sup>
	50

5100

251.9	248.8	245.8
28	6 <sup>0</sup>	9 <sup>0</sup>
	34	50

4150

250.0	243.8
48	11 <sup>0</sup>
	50

4+27

249.4	243.7
54	11 <sup>0</sup>
	50

4+00

247.4	243.1
74	11 <sup>0</sup>
	50

3+72

245.8	243.3	242.3
9 <sup>0</sup>	11 <sup>0</sup>	12 <sup>0</sup>
	28	50

254.75

254.75  
71

B.M. 6.16 277.04 276.96

T.P. 8.49 283.20 2.95 274.71

T.P. 12.70 277.66 0.73 264.96

T.P. 11.13 265.69 0.19 254.56

254.75

J.V.B.P. 32nd & Grape

+88

242.3

8<sup>8</sup>

+84

243.6 238.0 235.4

7<sup>5</sup> 13<sup>4</sup> 15<sup>7</sup>

13 20

+70

242.0 237.6

9<sup>1</sup> 13<sup>5</sup>

20

+45

233.0 229.6

18<sup>1</sup> 21<sup>5</sup>

10

+21

232.9

18<sup>2</sup>

+10

231.5

19<sup>6</sup>

0+00

227.1

24<sup>0</sup>

25106 from P-34  
A

25106  
A



+72

246.8	245.7
<del>4<sup>3</sup></del>	<del>5<sup>4</sup></del>
	20

+50

245.9
<del>5<sup>2</sup></del>

+40

245.8	245.1
<del>5<sup>3</sup></del>	<del>6<sup>0</sup></del>
	10

+25

247.7	247.6	242.5
<del>3<sup>4</sup></del>	<del>2<sup>5</sup></del>	<del>8<sup>6</sup></del>
	7	15

+21

244.2	241.9	240.2
<del>6<sup>8</sup></del>	<del>9<sup>2</sup></del>	<del>10<sup>9</sup></del>
	13	26

1 +04

244.3	242.3	237.7
<del>6<sup>8</sup></del>	<del>8<sup>8</sup></del>	<del>13<sup>4</sup></del>
	11	20

0193

243.8	243.1	237.8
<del>7<sup>3</sup></del>	<del>8<sup>0</sup></del>	<del>13<sup>3</sup></del>
	4	14

25106

25106  
T

3+06 68 A" Line  
2+26.30 =

9.07 241.99 P.35

241.99  
9.07

2+00

244.3  
6.8

+80

245.9  
5.2

+50

246.7  
4.4

2+00

246.9  
4.2

251.06

251.06

INDEXED  
MAR 21 1946

FILE

Walker  
Johnson  
Pope  
Riley  
1-26-49

CROSS SECTION: Birch St.  
from Rigel to Boston

NO 31194

INDEXED  
WK  
JAN 27 1949

41

PLUTO ST.

(Fd. 1" 21" Redwood) # 5+7378  
FB 1684  
52

Set 2" x 2" x 10"  
Redwood Hub  
& Disk

DOT.  
4+13.83

BIRCH ST

3+86.5

244

3+81.8

30.7

6" Conc. Tile  
Ret. Wall

BOSTON PAVEN

27'

53'

0+00

RIGEL

Fd. Granite Mortar ST.

INDEXED

0+20

0+00 Beg. Lath Fence on Lt 0.7 inst

0-10

0-17 = WLY Edge Porring

0-30 = E Rigel St.

0-17 15' Lt on c'oads <sup>M.M.</sup> 7.86 17.64  
Grav

T.P. 7.09 25.50 0.45 18.41

on P.O.T. Hub 4+13.83 P-41 5.97 12.89

T.P. 12.89 18.86 4.02 5.97

3.17 9.99 6.82

Kim 12/7

Lt.

R

FT

42

4.5 50	4.7 40	4.9 33	5.6 17	6.3 17	6.0 19	4.8 23	5.1 40	4.7 50
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

5.0 50	5.0 40	5.3 23	6.4 17	6.8 17	6.8 20	5.5 23	5.6 40	5.0 50
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

5.7 50	5.6 40	5.8 25	7.0 20	7.0 20	7.0 26	6.9 28	5.5 40	5.4 50
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

7.24 82	7.43 53	7.27 20	7.26 20	7.23 20	7.05 40	6.71 65	6.18 90
------------	------------	------------	------------	------------	------------	------------	------------

6.74 90	7.07 65	7.31 40	7.45 20	7.36 20	7.11 20	6.74 40	6.18 65	5.52 90
	Por.	Por.	Por.	Por.	Por.	Por.	Por.	Por.

25.50

B.M.  
SE. BP National Ave and 34th St.

Birch Street Cross Sections

Lt.

L

Rt.

1+98.5 = 28' Rt = Elec. Pole # 3460

1+50 = <sup>wood</sup> Reg. fence 39.8' Rt.

INDEXED

1+00

0+98.5 = West side Garage on Lt.

0+91 = E Garage on Lt Dirt Floor

0+84 = East edge Single Car. on Lt 39.5' Lt.

0+73.5 W side Ribbon Drive

0+67 = East side Corrs. Ribbon Drive

0+50 Elec. Pole # 3480 27.8' Rt = L Pole 39.5' Lt - fence 25.50

19.1	18.2	17.7	18.0	19.4	19.4	20.0	21.4	22.2
74	73	78	75	61	61	56	41	33
50	40	36	35	19		20	40	50
6.1	6.2	5.4	5.7	5.6	5.0	5.0	3.3	3.3
50	40	18	16	21	21	40	50	50
	60.9.3							
	39.5							
20.8	20.1	20.2	20.0	19.9	20.4	21.1	22.2	22.4
47	54	53	55	56	51	44	33	31
48	40	17	15	19	19	24	40	50
							in lawn	in lawn
						21.98	22.08	
					352		342	
					40		50	
					on Drive		on Drive	
					22.06	22.18		
					344	332		
					40	50		
					on South end	on Drive		
21.0	21.2	21.1	20.2	19.7	20.8	21.7	22.2	22.1
4.5	4.3	4.4	5.3	5.8	5.2	3.8	3.3	3.4
50	40	25	17	25.50	18	24	40	50

Birch Street - Cross Sections

2+68 = 2.5' Conc. Walk on R

2+76 = 2.9' Conc. Walk

INDEXED

2+50 = Reg. 3' Conc. Tile Fence on Lt 40.5' Lt.

2+40 = 12' Conc. Drive 40.4' Lt.

E. edge 0.2' Above L  
W. " 0.2 below L

2+15 = 3' Conc. Walk on Lt

2+09 = West Drive on Rt

Conc.

2+02 = East edge Conc. Drive on Rt

2+00

25.50

Lt

Rt

Rt

44

17.1	17.06	17.38	21.29	22.13
8.4	8.44	8.12	42.1	33.7
50	50	40.4	37.5	50
on Walk	on Walk	on Walk	on Walk	on Walk

17.1	17.7	17.9	18.4	18.9	20.6	21.9	22.8
8.4	7.8	7.6	7.1	6.6	4.9	3.6	2.7
50	40	20		17	29	40	50

17.31	17.58
8.19	7.92
50	40.4
on Drive	on Drive

17.55	17.64
7.95	7.86
50.4	40.7
on Walk	on Walk

20.21	21.56	22.75
52.9	3.94	2.75
24.7	35	50
Rough Drive	Reg. Finish Drive	on Drive

20.05	21.60	22.68
54.5	3.90	2.80
24.7	35	50
Reg. Drive Rough	on Drive Finish	on Drive

17.2	17.2	18.2	18.4	19.0	20.4	21.9	22.6
8.3	7.9	7.3	6.9	6.5	5.1	3.6	2.9
50	40	19		17	28	40	50

25.50

Birch St. - Cross Sections

3+78

INDEXED

3+50 = Beg. 2.5' Picket Fence 36.1 Rt

3+40

3+44 = 8' Conc. Drive on Lt Level Access

3+17 = 2.8' Conc. Walk on Lt.

on Hub P.O.T.  
4+1383

T.P. 5.24 18.81 12.63 12.87

3+02

3+00

25.50

45

14.1	14.4	14.1	14.2	14.1	13.9	14.6	15.7	16.4	15.8	15.3
4.7	4.4	4.7	4.6	4.7	4.9	4.2	3.1	2.4	3.0	3.5
50	40	38	20		13	17	32	34	40	50

15.4	15.4	15.2	15.4	15.5	16.9	17.4	17.4	17.4
3.4	3.2	3.6	3.4	3.3	1.9	1.4	1.4	1.4
50	41	17		17	36.1	40	50	

15.27	15.7	15.7	15.9	16.1	17.5	17.7	17.9
3.54	3.1	3.1	2.9	2.7	1.3	1.1	0.9
50	40	24		19	33	40	50
Drive							

15.27	15.53
3.54	3.28
50	41
DRIVE	DRIVE

16.48	16.75
2.33	2.06
48	41
onwalk	onwalk

1881

16.5	17.0	17.0	17.5	17.9	18.1	17.8	17.8
2.0	2.5	2.5	2.0	2.6	2.4	2.7	2.9
50	40	28		17	25	40	50

16.6	17.0	17.1	17.6	18.0	19.4	20.5	21.1	21.5
2.7	2.5	2.1	2.9	2.5	2.1	2.0	2.1	2.2
50	40	28		17	25	38	40	50

25.50

Birch St -  
Cross Sections

INDEXED

4+32

4+20

4+13

4+05

4+02.5 = 9' Elec Pole # 3420 28.2' Rt

3+93 = 9' 16' Frame House 72.7' Rt = House

2.3 x 7.8  
Conc. Porch

3+87

3+86

46

Lt.

Rt.

Rt.

6.5 62	12.3	8.9 40	9.4 37	10.5 25	10.6 92	10.2 9	8.6	10.2 15	8.4 5	5.8 25	5.7 40	5.9 78
13.3 55 60	11.3 7.5 58	10.9 7.9 40	12.7 6.1 25	12.5 6.3 9	11.5 7.3	10.3 8.5 25	10.3	12.5 33	6.3 12.5	6.3 40	5.8 50	6.0 128 9.1 100
13.5 53 60	11.5 7.3 50	11.4 7.4 40	12.9 5.9 24	13.0 5.8 5	12.2 6.6	11.2 7.6 16	11.2	10.8 8.0 40	9.5 9.3 46	6.5 12.3 60	7.1 11.7 88	
11.8 70 55	11.7 6.9 40	11.7 6.9 37	13.4 5.4 25	13.6 5.2 18	13.4 5.4 9	12.8 6.3 16	12.8	12.5 6.3 16	11.6 7.2 25	11.3 7.5 40	10.9 7.9 50	10.3 8.5 60
						11.24 7.57 70.4 Porch			11.24 7.57 72.7 on Conc. Porch			
	13.1 5.7 50	13.5 5.3 40	13.8 5.0 27	13.7 5.1 15	13.3 5.5 15	12.1 6.7 24	11.5 7.3 40	10.9 7.9 50				
	13.3 5.5 50	13.5 5.3 40	13.8 5.0 27	13.7 5.1 15	13.5 5.3 15	12.7 6.1 24	11.5 4.48 244 on Top 6" Conc. Tilewall	15.13 368 29 on wall	15.08 373 on wall	15.05 376 on wall		



Birch St. - Cross Sections

INDEXED

				0.04
chk. Starting BM	317		6.82	6.78
T.P.	402	9.95	3.81	5.93
6+03	18.5' Lt = Pole Anchor.			
6+00 ±	= ELY Line Photo St.			
5+99	8.8' Lt = Pole Anchor.			
5+80	30.9' Rt of Elec Pole NO Number			
5+50				
T.P.	378	2.74	12.85	5.96
5+00				
4+60				
4+50				

1881

6.0  
12.8  
70

	Lt.	ℓ		Rt.	
					47
	4.9	5.1	5.0	5.2	
	4.8	4.6	4.7	4.5	
	80	40	20	26	40
					80
	5.5	5.6	5.8	5.9	
	4.2	4.1	3.9	3.7	
	80	40	20	20	40
					40
					5.2
					3.9
					80
	5.7	6.1	6.2	5.8	
	13.1	12.7	12.6	13.0	
	80	40	20	20	40
					62
	5.3	5.9	6.0	6.4	
	13.5	12.9	12.8	12.2	
	80	40	20	16	40
					70
	6.0	7.0	6.1	6.7	
	12.8	11.8	12.7	12.1	
	70	32	16	16	22
					40
					5.4
					71

1881

X - Sect. Rigel Street from  
Cottonwood to Acacia Str.

Roberts  
W. Moore  
Clark  
2-11-49  
W.O. 31194

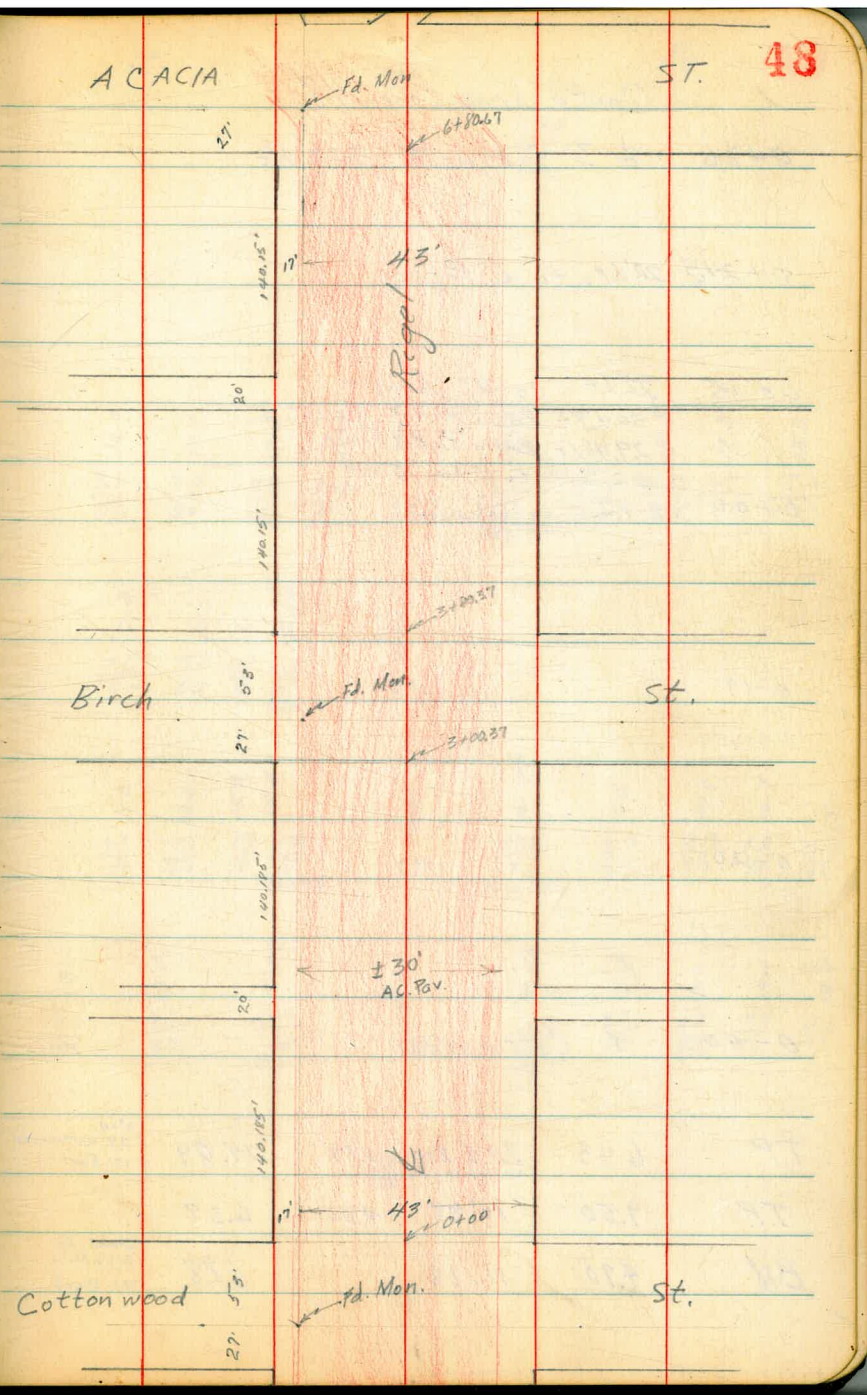
F.B. 1177, 1736

T.P. 421

INDEXED  
WIK  
FEB 15 1949

ACACIA

ST. 48



Cont'd from Page 48

0+26 & 3' Sidewalk 306' Rt

0+24.5 22' Lt to 6" Pepper

0+15 22' Lt to 8" Acacia  
 { 30.4' Rt. Begin Picket Fence  
 29.4' Lt. Begin Picket Fence  
 22.3' Lt to 6" Acacia Tree  
 0+00 E. Prop. Line Cottonwood

0-19

0-20

0-40 & Cottonwood

T.P. 6.43 20.52 1.79 14.09

T.P. 9.50 15.88 4.80 6.38

BM 4.90 11.18 6.28

Mon.  
27' Cottonwood  
17' Rigel

Chisel Sq.  
Su. Ob. Main  
W.L. Rigel

Lt.

&

Rt

49

1.39  
30  
conc.

16.7	17.1	17.5	16.60	17.37	17.15	18.3	18.5	18.3	15.3
3.8	3.4	3.0	3.92	3.15	3.39	2.7	2.0	2.7	5.2
50	30	16	14 Edge AC.		16' Edge AC.	25	30	50	100

12.0	15.8	16.1	15.84	16.62
2.5	4.7	4.1	4.8	3.90
100	50	18	15 Edge AC.	

11.2	13.4	15.3	15.82	16.01	16.28	17.5	17.8	16.7	15.1
9.3	7.1	5.2	4.70	3.91	4.24	3.0	2.7	3.8	5.4
100	50	18	15 Edge AC.		17 Edge AC.	29	50	78	100

11.2	13.4	15.09	15.82	16.01	15.52	16.8	17.0	16.1	14.4
9.3	7.1	5.13	4.70	3.91	5.00	3.7	3.0	4.4	6.1
100	50	15 Edge AC.			14 Edge AC.	35	50	78	100

20.52

Cont'd from Page 49

1700

$\frac{4.3}{50}$

$\frac{20.9}{30}$

$\frac{4.4}{17}$

$\frac{4.90}{14}$   
Edge AC.

$\frac{20.42}{182}$

$\frac{5.19}{155}$   
Edge AC

$\frac{4.9}{30}$

$\frac{20.3}{30}$

$\frac{5.1}{43}$

50

0+92 22' Lt 14" Acacia

0+79 22' Lt. 10" Pepper

T.P. 5.80 25.24 1.08 19.44

25.24

0+77<sup>5</sup> 16' Lt to face Water Meter.

$\frac{0.0}{16}$

0+62<sup>5</sup> 21<sup>2</sup>' Lt. to 24" Acacia

$\frac{0.9}{50}$

$\frac{0.9}{30}$

$\frac{0.7}{16}$

$\frac{1.66}{13}$   
Edge AC.

$\frac{1.34}{19.18}$

$\frac{1.62}{15}$   
Edge AC.

$\frac{0.9}{21}$

$\frac{0.9}{30}$

$\frac{1.1}{50}$

0+50

0+47 30<sup>6</sup>' Rt End Picket Fence

0+36 22' Lt to 10" Acacia

0+28 20<sup>2</sup>' Lt to Center P.Pole #450709 \*JP2090

20.52

20.52

Cont'd From Page 50

T.P. 5.03 25.84 4.43 20.81 Nail in P  
PA 3304

1+40<sup>18</sup> N. Alley Line

1+38 31.5' Lt to S.E. Cor. House

1+36<sup>5</sup> 21' Lt. to Center P. Pole # P2052

1+32 22' Lt. to 2" Pepper

1+19<sup>5</sup> 29.6' Lt. End Picket Fence  
S.W. Cor. of House 31.5' Lt.

1+17 3' Sidewalk 30.3' Lt.

1+15 3' Sidewalk 30.7' Rt

1+09 22' Lt to Center Pepper

1+05 23' Rt to Water Meter

25.24

Lt.

Rt

Rt. 51

20.2	21.2	20.9	20.72	20.79	20.43	20.3	19.8	17.3
5.0	4.0	4.3	4.52		4.81	4.9	5.4	7.9
100	50	30	13.8	4.45	13.3	30	30	100
			Edgr. AC.		Edgr. AC.			

21.34  
3.90  
20.3  
conc

20.41  
4.83  
20.7  
conc.

20.11  
2.07  
18.04

25.24

Cont'd from Page 51

3+00.31 West Line Birch  
22' Lt to Power Pole #P2000

1+96 Fire Hydrant 22<sup>2</sup>' Rt to Center

2+50

2+00

1+97 Begin Board Fence 30<sup>3</sup>' Rt

1+91 End Porch 33' Lt.

1+69<sup>5</sup> End Lath Fence Begin Porch 33<sup>2</sup>' Rt

Begin Lath Fence 33<sup>3</sup>' Rt.

1+60<sup>18</sup> E. Line Alley - Begin Lath Fence 30<sup>1</sup>' Lt.

1+42 33<sup>4</sup>' Rt to Center P. Pole #PA3304

25.84

	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.	4.
20.0	20.2	19.6	19.6	17.62	17.73	17.30	17.3	16.0	14.4	14.3		
52	50	5.6	5.6	7.62	7.94	7.94	7.9	9.2	10.8	10.9		
100	50	30	23	14	15	15	16	30	50	100		
				Edge AC	7.51	Edge AC						

20.8	20.4	19.5	17.99	18.37	17.59	17.8	16.9	16.2
4.4	4.8	5.7	7.25	6.87	7.65	7.4	8.3	9.0
50	30	22	15	14.5	14.5	16	30	50
			Edge AC		Edge AC			

21.6	20.9	19.7	19.17	19.95	18.95	19.2	18.7	18.4
3.6	4.3	5.5	6.07	5.79	6.29	6.0	6.5	6.8
50	30	20	14.6	14.6	14.6	16	30	50
			Edge AC		Edge AC			

20.2	21.0	20.8	20.5	20.06	20.12	19.80	19.9	19.3	18.5	16.5
50	42	44	47	5.1	5.12	5.44	5.3	5.9	6.7	8.7
100	50	30	21	14.5	14.3	14.3	15	30	50	100
				Edge AC		Edge AC				

25.84

Cont'd From Page 52

3763

37518  $\phi$  4" x 54' SDG + E G. NH 20<sup>3</sup>/<sub>4</sub> Lt to Edge

Check

8.85

17.92 = 17.64

See P942  
This Book  
Mod. on Birch

3740.37  $\phi$  Birch

3722

3717

T.P. 7.01 26.67 6.18 19.66

End Board Fence 29<sup>3</sup>/<sub>4</sub> Rt

3701 End Picket Fence 30<sup>3</sup>/<sub>4</sub> Lt.

25.84

20.6	19.84	19.0	18.50	18.57	17.82	17.0	16.2	53
$\frac{6.1}{100}$	$\frac{6.9}{50}$	$\frac{7.7}{30}$	$\frac{8.17}{14.5}$	$\frac{8.1857}{8.10}$	$\frac{8.85}{16}$	$\frac{9.7}{30}$	$\frac{10.5}{50}$	$\frac{11.6}{100}$
			Edge AC		Edge AC			

18.80

$\frac{7.87}{20.3}$

in NH

20.1	19.5	19.9	18.40	18.28	17.38	16.9	16.2	15.9
$\frac{6.6}{100}$	$\frac{7.2}{50}$	$\frac{7.8}{30}$	$\frac{8.27}{13.5}$	$\frac{8.39}{14.28}$	$\frac{9.29}{16}$	$\frac{9.8}{30}$	$\frac{10.5}{50}$	$\frac{11.8}{100}$
			Edge AC		Edge AC			

20.2	20.2	19.1	18.29					
$\frac{6.5}{100}$	$\frac{6.5}{50}$	$\frac{7.6}{30}$	$\frac{8.38}{14}$					
			Edge AC					

20.7	20.6	20.3	19.9	18.3	18.25			
$\frac{6.0}{100}$	$\frac{6.1}{50}$	$\frac{6.4}{30}$	$\frac{6.8}{22}$	$\frac{8.1}{19}$	$\frac{8.42}{14}$			
					Edge AC			

26.67

25.84

Cont'd From Page 53

Both Wall + walk 31 1/2 Lt.  
End Conc. Wall Begin 4 1/2 Conc. Walk TP to Right

4+75 } 20 5/8 Lt. Meter Box  
21.47 21.96

4+61 } 31 1/2 Lt. to Conc. Wall  
31 Lt. Begin Picket Fence  
5.2 4.71  
31 1/2 31 1/2  
Bott. TOP

4+54 ♀ Conc. Drive 16 1/2 Lt 15' Wide - 27 Lt 7' Wide

4+42 ♀ Double Garage 59 Lt

4+31 End Lath Fence 30 1/2 Lt

4+09 22.8 Lt to P. Pole # J.P. 1990 # 450707H

3+80.37 } Begin Lath Fence 30 1/2 Lt  
Begin Lath Fence 30' Rt  
East Line Birch

3+66

26.67

Lt

♀

Rt

54

22.57	22.1	21.54
41.4	36	51.3
31 1/2	31 1/2	20.5
Top	Bott	Meter
22.83	21.50	20.99
3.84	5.17	5.68
60	33	27
Floor	conc.	conc
Garage		conc
	16 1/2	

22.5	22.3	20.9	19.79	20.47	20.08	20.7	20.8
4.2	4.4	5.8	6.88	6.20	6.58	6.0	5.9
59	50	30	14	Edge AC	16.5	30	50
					Edge AC		

22.1	20.7	20.1	20.0	18.60	18.93	18.19	17.2	18.1	18.4	17.9
4.6	6.0	6.6	6.7	8.07	7.14	8.4	9.5	8.6	8.3	8.8
100	50	30	18	14	Edge AC	16.5	21	30	50	100
						Edge AC				

21.0	20.9	20.2	20.2	18.6	18.52	17.90	16.7	16.8	17.0
5.7	5.8	6.5	6.5	8.1	8.15	8.77	10.0	9.9	9.7
100	50	30	23.5	19.5	14.5	16	30	50	100
					Edge AC	Edge AC			

26.67



Cont'd From Page 54

6700

5747  $\frac{1}{2}$  Single Garage 53 $\frac{1}{2}$  Lt.

T.P. 8.05 31.67 3.05 23.62

5740 $\frac{5}{2}$  E. Line Alley

5720 $\frac{5}{2}$  W. Line Alley

5719 $\frac{5}{2}$  End Lath Fence 29 $\frac{1}{2}$  Rt.  
End Picket Fence 31 $\frac{1}{2}$  Lt End Conc. Walk 3 $\frac{1}{2}$  Lt.

5717 $\frac{5}{2}$  22 $\frac{1}{2}$  Lt to Center P. Pole # P1952

5710 Water Meter Box 24 $\frac{1}{2}$  Rt Rod = 3.82

5700

26.67

Lt.

R

Rt. 55

$\frac{26.0}{5.7}$	$\frac{26.3}{5.4}$	$\frac{24.5}{5.2}$	$\frac{25.35}{6.31}$	$\frac{25.87}{5.80}$	$\frac{25.94}{5.73}$	$\frac{26.5}{5.2}$	$\frac{26.4}{5.3}$	$\frac{25.9}{5.8}$
50	30	17	13.5	5.80	16	22	30	50
			Edge AC.		Edge AC.			

$\frac{24.95}{6.72}$   
53 $\frac{1}{2}$   
conc.

31.67

$\frac{24.5}{2.2}$	$\frac{23.8}{2.9}$	$\frac{23.7}{3.0}$	$\frac{23.32}{3.35}$	$\frac{24.07}{2.60}$	$\frac{23.86}{2.81}$	$\frac{24.0}{2.7}$	$\frac{22.9}{3.8}$	$\frac{20.9}{5.8}$
100	50	30	14.5	2.60	17	30	50	100
			Edge AC		Edge AC			

$\frac{24.1}{2.6}$	$\frac{23.8}{2.9}$	$\frac{23.7}{3.0}$	$\frac{23.4}{3.0}$	$\frac{22.59}{4.08}$	$\frac{23.14}{3.53}$	$\frac{22.8}{3.9}$	$\frac{22.5}{4.2}$	$\frac{20.4}{6.3}$
100	50	30	19	14.5	17	30	50	100
				Edge AC.	Edge AC			

$\frac{24.03}{2.62}$   
31 $\frac{1}{2}$   
conc.

$\frac{23.5}{3.2}$	$\frac{23.3}{3.4}$	$\frac{22.9}{3.8}$	$\frac{21.60}{5.07}$	$\frac{22.52}{4.15}$	$\frac{22.32}{4.35}$	$\frac{22.6}{4.1}$	$\frac{22.7}{4.0}$
50	30	17	15	4.15	17	30	50
			Edge AC		Edge AC.		

26.67

Cont'd From Page 55

Check			4.85	6.27 = 6.28	Starting BM
T.P.	4.60	11.12	6.75	6.52	
T.P.	0.92	13.27	12.78	12.35	
T.P.	6.16	25.13	12.70	18.97	

7+2067  $\phi$  Acacia

	27.9	28.2	28.39	29.00	28.95	28.3	28.0	27.9
	$\frac{3.8}{100}$	$\frac{3.5}{50}$	$\frac{3.28}{37}$	2.67	$\frac{2.72}{1}$	$\frac{3.4}{30}$	$\frac{3.7}{50}$	$\frac{3.8}{100}$
			Edge AC.		Edge AC.			

6+8067 W. Line Acacia

	27.8	28.1	28.0	28.2	26.97	27.95	27.93	27.6	26.7	26.1
	$\frac{3.9}{100}$	$\frac{3.6}{50}$	$\frac{3.7}{30}$	$\frac{3.5}{21}$	$\frac{4.70}{16.3}$	3.72	$\frac{3.74}{16.4}$	$\frac{4.1}{30}$	$\frac{5.0}{50}$	$\frac{5.6}{100}$
					Edge AC.		Edge AC.			

6+80 Power Pole 20' Lt to Center #P1900

6+51  $\phi$  Conc. Walk. 2' Wide 29.9' Rt

	27.5	27.7	27.8	26.28	27.08	27.50	27.86	27.94	28.44	
	$\frac{4.2}{50}$	$\frac{4.0}{30}$	$\frac{3.9}{18}$	$\frac{5.39}{12.9}$	4.59	$\frac{4.17}{17.5}$	$\frac{3.81}{29.9}$	$\frac{4.0}{29.9}$	$\frac{3.73}{38.5}$	$\frac{3.23}{38.5}$
				Edge AC.		Edge AC.	conc.	diff	conc.	Porch

31.67

31.67

X- Sect. 20' Alley - in Block 86  
 Morena<sup>609</sup> - Owners claim No Alley in Blk.

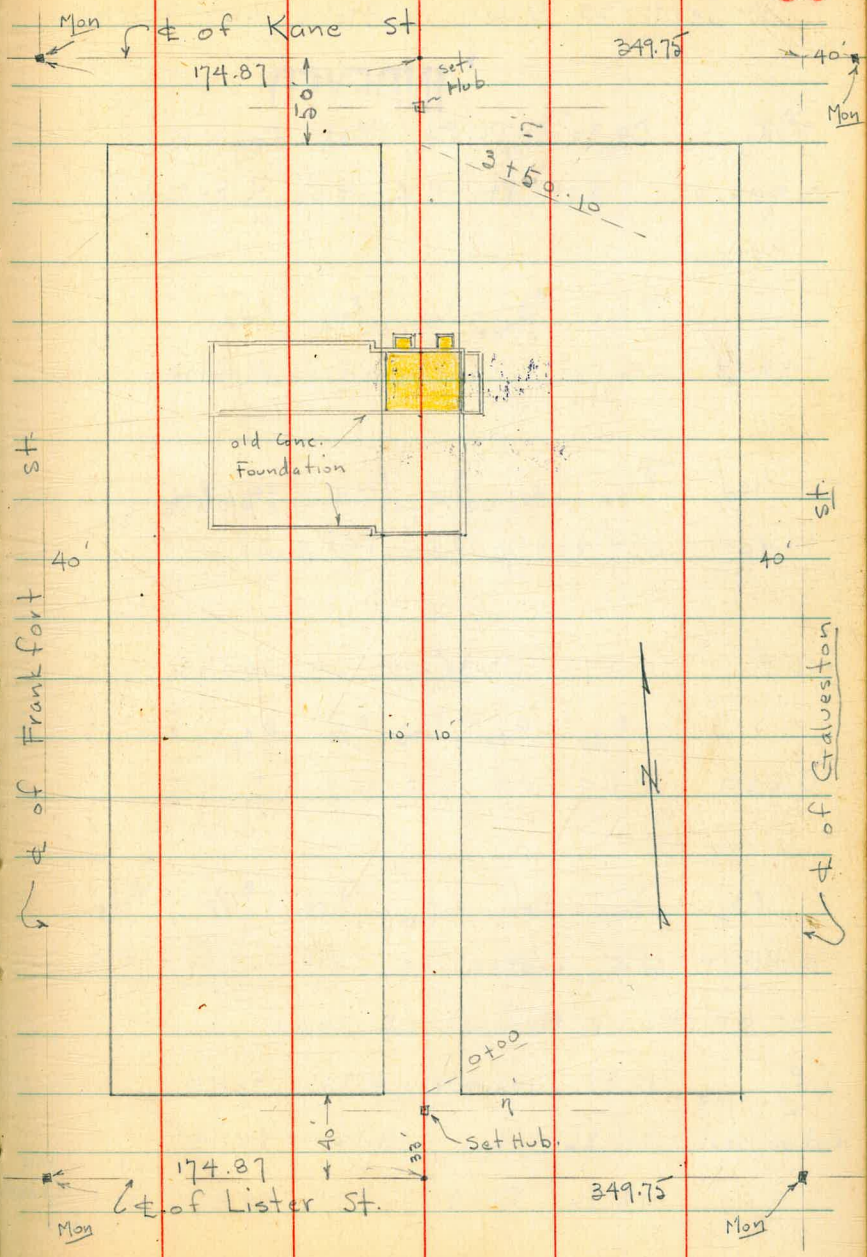
# 3493

5-17-49

W.O. 25001

Osborne  
 Hardin  
 Hatch  
 Shepard

**INDEXED**  
 WK  
 MAY 18 1949



X-Sect. 20' Alley in Block 86 - Morena

**INDEVEN**

T.P. 10.95 122.52 0.78 111.57

2+00.05 - 0.10 Rt. = 1/2" Pipe L.S. 2001

fence to w.

1+50 - 0.10 Lt. = end fence + Planting

0.10 Lt. = Beg. bath fence - planting in Alley

1+00 - 0.07 Rt. = 1/2" Pipe - L.S. 2001

T.P. 11.57 112.35 0.64 100.78

0+50

0+00 = N.L. Lister

0-00.04 - 1/2" Rt. Pipe L.S. 2001

T.P. 10.98 101.42 6.85 90.44

C-8.08

Red on stub. - Mt. 36

11.16

86.13

12.92 97.29

84.37 =

spike in Pole  
sw. Frankfurt  
+ Lister

Lt.

Rt.

Rt.

58

110.7

110.2

108.9

108.5

108.7

106.7

1.6

2.1

3.4

3.8

3.6

5.6

15

10

10

15

15

50

106.6

106.3

106.1

105.9

106.0

5.7

6.0

6.2

6.4

6.3

15

10

10

10

15

103.3

102.8

102.7

102.5

102.0

101.8

100.1

9.0

9.5

9.6

9.8

10.3

10.5

12.2

25

15

10

10

10

15

40

112.35

99.0

98.7

97.7

97.0

96.7

2.4

2.7

3.7

4.4

4.7

15

10

10

10

15

95.6

93.0

92.5

91.3

90.7

90.5

85.3

5.8

8.4

8.9

10.1

10.7

10.9

16.1

50

15

10

10

10

15

50

101.42

2+72.2 - 2.7 Rt. = Cor. of 8" Conc. wall  
 1.4 Lt. = Cor. of 8" Conc. wall

2+69 = Nly. of 12" wall

2+68 = sly. of 12" Conc. wall = edge of Conc. floor.

2+53.1 = Nly. of 12" wall = Beg. Conc. floor

2+52.1 = sly. of 12" Conc. found wall

2+22 = Nly. of wall

2+21 = 11.3 Rt. = Cor. sly. of 12" Conc. foundation wall  
 5.9 Lt. = s.w. Cor. found.  
 + 2' N.

	Lt.	±	Rt.	
	116.86	116.86	116.4	116.76
	5.66	5.66	6.1	5.76
+ ground	6.7 =	1.4		2.7
	Wly. Cor. Top.	Top		Top
	116.83	111.20	116.87	115.4
	5.69	11.32	5.65	7.1
+ ground	6.1	6.1 =	1.4 =	ground
	Top of 8" N+S. wall	Conc. floor.	Ely. of 8" wall to N.	Top-wly. of 8" wall
	116.7	117.54	117.46	109.64
	5.8	4.98	5.06	12.88
	12.7	12.7	9	9
	Top Cor. Joys 2' N.	Top of wall N+S.	floor.	Top Conc. floor.
	116.2	116.2	117.51	109.64
	6.3	6.3	5.01	12.88
	15	9.5	9.0	9.0
	ground	Wly. ground	Ely. of wall	Cor. Conc. floor.
	117.50	115.4	114.4	117.44
	5.02	7.1	8.1	5.08
	10	10	ground	Top wall
	Top wall			ground
	112.5	111.6	111.4	111.4
	10.0	10.9	11.1	10
	10	ground		
	115.6	117.56	112.4	117.58
	6.9-ground	4.96	10.1	11.1
	5.9 = Cor.	13.4	13.4	ground
	2' N.	Top wall at Joq-2' N.	ground	Top wall
			122.52	
				110.2
				12.3
				11.3
				ground at Cor.

= C7.01-on Mt. 80'			8.21	93.91	- checked
	2.76	102.12	11.54	99.36	
T.P.	0.55	110.54	12.53	109.99	

2+50.10 = S.L. of Kane

3+25

3+00

2+75

110.3	114.7	115.0	115.9	116.6	116.9	118.4
12.2	7.8	7.5	6.6	5.9	5.6	4.1
50	15	10		10	15	50

118.6	118.9	118.9	118.9	118.7
3.9	3.6	3.6	3.6	3.8
15	10		10	15

116.8	119.1	119.5	118.9	118.6	118.3	117.1
5.7	3.4	3.0	3.6	3.9	4.2	5.4
40	15	10		10	15	50

117.8	117.6	117.2	116.4	116.2
4.7	4.9	5.3	6.1	6.3
15	10		10	15

122.52

Location + Levels for Prop. Ret. wall  
 for House on S. Side of 20' Alley  
 at 30<sup>th</sup> - Alley Block 324 - Reed +  
 Daleys Add. - 0.25' excepted on both  
 sides for Pave. See Plan 7335-L

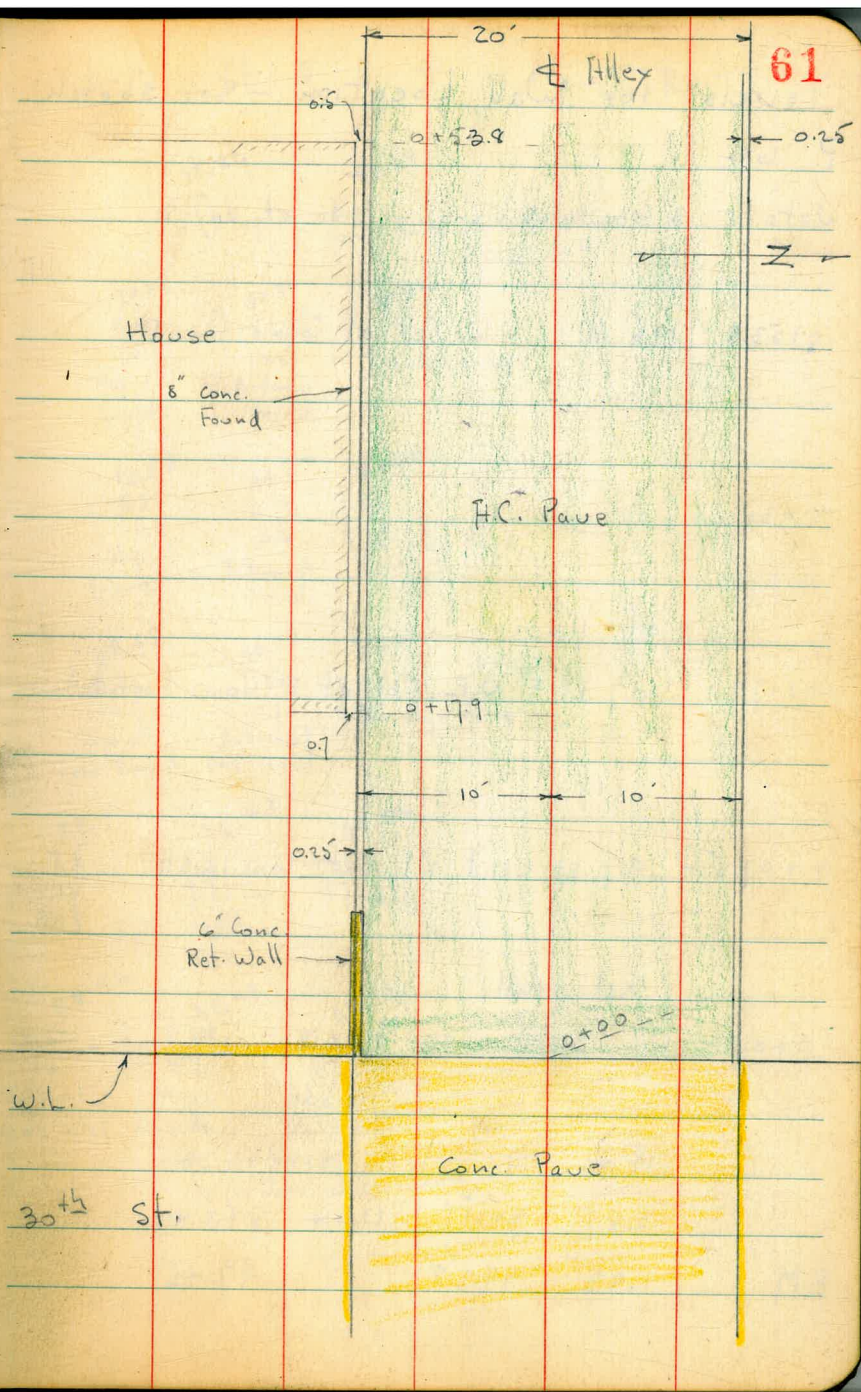
**INDEXED**

M.K.

W.O. 3140 AUG 19 1949

7-26-49

F. Osborne



Levels for Wall Location - See sketch

P. 62

Note: - 3" Conc. wall along W. side of House

0+53.8 - 10.5 Lt. = N.W. Cor. of Conc. found.

0+35

of House

0+17.9 - 10.7 Lt. = N.E. Cor. of 8" Conc. foundation

0+07.5 - 9.7 Lt. = end Nly. of Conc. wall

Ret. wall

0+00 = W.L. 30<sup>th</sup> - 9.7' Lt. = Beg. Nly. of 6" Conc.

	12.06	97.39 ✓	6.78	85.33 ✓
	3.87	92.11 ✓	11.04	88.24 ✓
B.M.	1.83	99.28 ✓		97.45

Lt. = S

Rt. = N. 62

93.26	92.29
4.13	5.10
10.5 = Top	10.5 = Bottom + Nly. of 3" Conc. wall

92.72	91.74	91.36
4.67	5.65	6.03
10.5	10.5	9.75 = edge Pave
Top of found.	Bottom of found.	

92.58	90.47	89.58
4.81	6.72	7.81
10.6	10.6	9.75 = edge Pave
Top found.	Bottom of found.	

92.63	90.05	87.91
4.76	7.34	9.47
10.7	10.7	9.75 = edge Pave
Top of Conc. found.	Bottom of Conc. found.	

89.9	88.42	86.76
7.5	8.97	10.63
15	9.7 = Top wall	9.7 = Pave
dir		

88.46	88.42	86.17
8.93	8.97	11.22
15	9.7	9.7
Top of N+S. wall	Top of N. Side wall	edge of Pave + face of 6" Conc. wall
		97.39



Set Nail in Pole  
opp. 0+25

8.18

89.21 ✓

1+00 = end.

0+85

0+60

95.1

1.7

15

94.9

2.5

10.5

94.90

2.49

9.75 = edge pave

95.1

2.3

15

95.1

2.3

11.2

93.9

3.5

10.5

93.84

3.58

9.75 = edge pave

93.3

4.1

15

93.0

4.4

11.2

92.0

5.4

10.8

91.93

5.46

9.75 = edge pave

97.39

8/18/49

X-Section Alley Bk. 8  
North Shore Highlands

W.O. 25020

Sub. div. Map  
#1969 sheet 4McCoy  
Allen  
Prorer

INDEXED

W.K.  
AUG 19 1949Notes Reduced  
& Plotted Profile  
#4036  
McClannan  
8-30-49Bench levels from  
Chalcedony + Gresham (see  
G-259-23)

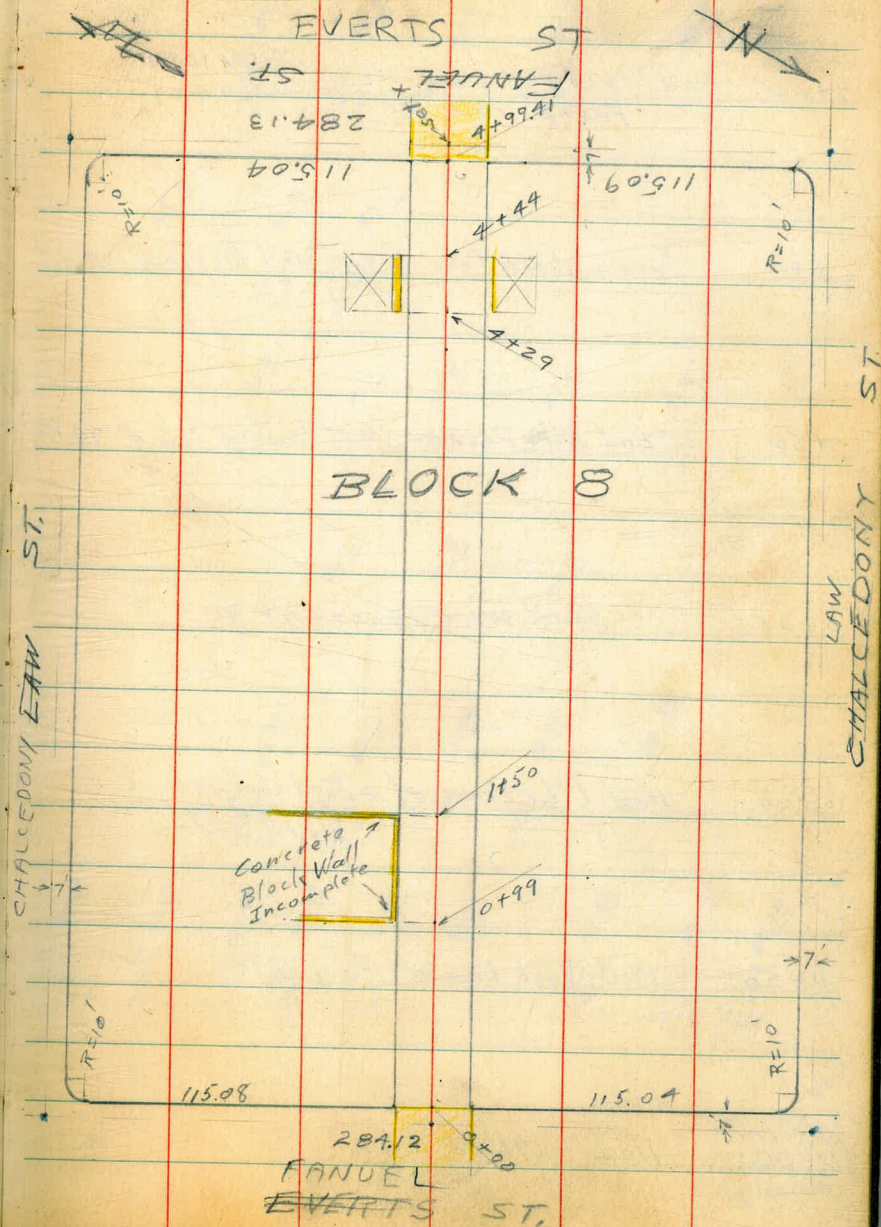
(TP #12) NW. Lt. T Chalcedony & Gresham	3.36	92.70			89.34
TP #1	4.32	90.67	6.35	86.35	
TP #2 SE. B.M. NE. 7/4 Chalcedony & Fannell	11.02	96.28	5.41		85.26
TP #3	2.72	89.80	9.20	87.08	
TP #4	3.01	85.92	6.89	82.91	
TP #5 SE. B.M. NE. 7/4 Chalcedony & Everts	5.92	85.03	6.81		79.11
TP #6	6.94	87.81	3.66	81.37	
(TP #2) NE. 7/4 Chalcedony + Fannell	7.11	92.37	2.55		85.26 (89.34) 89.33
N.W. Lt. T Chalcedony & Gresham			3.04		

11.5

E

11.5

64



Alley Blk & No. Shore Highlands  
(cont)

1+00 Pole 8.5 Left.  
Fence 10.0 Rt

SIPA 1280  
434467-H

+99 Incomplete Conc. Block wall Begins 10.4 Lt

+50 End Wire Fence - Start Board Fence 9.9 Rt

0+25 Start Wire Fence 9.8 Rt

0+00 West P.L. Fanel - Part of Curb is  
Pushed out 0.1  
both Sides

0-20 West Curb line of Fanel

See pg 64  
NE. 71 Lt  
Chalcedony  
& Gresham  
Fanel

11.02 96.28

85.26

LT = S

R

RT = N

65

89.5  
 $\frac{6.8}{2.1}$  90.5  
5.8 90.9  
5.4 90.7  
 $\frac{5.6}{1.0}$  90.6  
 $\frac{5.7}{2.1}$

94.6  
1.7 90.4  
10.4 5.9  
Top 10.4  
Wall Grd.  
89.1  
7.2  
10.4  
Footings

90.4  
 $\frac{5.9}{2.1}$  91.1  
5.2 91.5  
4.8 91.6  
 $\frac{4.7}{1.0}$  91.7  
 $\frac{4.6}{2.1}$

91.2  
 $\frac{5.1}{1.0}$  91.3  
5.0 92.0  
 $\frac{4.3}{1.0}$

88.87  
7.41 88.75  
9.9 7.53  
Cb. 6.1 7.74  
88.54  
7.38  
9.9  
Gut 6.83  
9.9  
Cb.

87.83  
8.45 87.20  
3.0 9.08  
Curb Gut  
88.48  
7.80 87.83  
1.2 8.15  
Cb Gut  
87.91  
8.37  
1.0  
Gut  
88.23  
8.05  
88.00  
7.68  
1.0  
Gutter  
88.68  
7.60  
1.2  
Gut  
89.34  
6.94  
1.2  
Curb  
89.07  
6.57  
2.5  
Cb.  
89.71

(96.28)

+99 End Board Fence - Start Rail Fence 9.5' RT

+50

End Rail Fence - Start Board Fence 9.9 RT

+49 " Board " - Start Lath & Wire " 10.0 Lt

3+00

End Board Fence - Start Rail Fence 9.8 RT

" Wire Fence - Start Board " 10.2 Lt

+50

Pole 8.5' Lt { S.J.P.A. 12 1/2  
434466 H

2+49

Start Board Fence 9.9 RT

" Wire " 9.9 Lt

T.P. #3

272 89.80 920 87.08

2+00

1+50

End Conc. Blk. Wall 10' Lt

1+49

End Board Fence 10.3 RT

96.28

Lt

Rt

RT

83.5  
6.3  
2.5

84.0  
5.8  
1.0

84.5  
5.3

84.7  
5.1  
1.0

85.2  
4.6  
2.5

83.4  
6.7  
2.5

84.2  
5.6  
1.0

85.1  
4.7

85.6  
4.2  
1.0

86.0  
3.8  
2.5

85.0  
4.8  
2.5

85.8  
4.0  
1.0

86.1  
3.7

87.0  
2.8  
1.0

87.4  
2.4  
2.5

(89.80)

86.8  
9.4  
2.5

87.0  
9.3  
1.0

87.8  
8.5  
9

87.8  
8.5

88.2  
8.1  
1.0

88.5  
7.8  
2.5

88.5  
7.8  
2.5

93.37  
2.91  
1.0

88.1  
8.2  
1.0

89.2  
7.1  
1.0

89.2  
7.1

89.5  
6.8  
1.0

89.6  
6.7  
1.5

Top Wall  
Footing  
Grd.

(96.28)

5100 End Lath + Wire Fence 11.9 Lt

+98 Pole 8.6 Lt { J.P.A. 1202  
734464

+90 End Cyclone Fence 10.7 Rt

+70

+50 Start Lath + Wire Fence 10.0 Lt.  
" Cyclone Fence 10.0 Rt

+44 End 2 Car Garage 13.2 Rt.  
" 2 " " 14.7 Lt

+29 Begin 2 Car Garage 13.1 Rt  
" 2 " " 14.7 Lt

+20 End Rail Fence 9.7 Rt

+01 Pole 8.8 Lt { J.P.A. 1222  
734465 H

+100 End Lath + Wire Fence 10' Lt

89.80

Lt.

±

Rt

67

$\frac{82.5}{7.3}$	$\frac{82.9}{6.9}$	$\frac{83.3}{6.5}$	$\frac{83.8}{6.0}$	$\frac{84.2}{5.6}$
$\frac{25}{25}$	$\frac{10}{10}$	$\frac{10}{10}$	$\frac{10}{10}$	$\frac{25}{25}$

$\frac{84.07}{5.73}$	$\frac{83.69}{6.11}$	$\frac{83.5}{6.3}$	$\frac{83.7}{6.1}$	$\frac{84.1}{5.7}$	$\frac{84.3}{5.5}$	$\frac{84.88}{4.92}$
$\frac{14.7}{5.73}$	$\frac{12.9}{6.11}$	$\frac{10}{6.3}$	$\frac{10}{6.1}$	$\frac{10}{5.7}$	$\frac{13.0}{5.5}$	$\frac{13.2}{4.92}$
Floor	conc.	Apron			Grd.	Floor

$\frac{84.11}{5.69}$	$\frac{83.97}{5.83}$	$\frac{83.7}{6.1}$	$\frac{83.9}{5.9}$	$\frac{84.2}{5.6}$	$\frac{84.95}{4.85}$	$\frac{84.30}{5.1}$
$\frac{14.7}{5.69}$	$\frac{12.4}{5.83}$	$\frac{10}{6.1}$	$\frac{10}{5.9}$	$\frac{10}{5.6}$	$\frac{13.1}{4.85}$	$\frac{13}{5.1}$
Floor	Apron				Floor	Grd.

(No Apron)

$\frac{83.7}{6.4}$	$\frac{83.9}{5.9}$	$\frac{84.1}{5.7}$	$\frac{84.4}{5.4}$	$\frac{84.7}{5.1}$
$\frac{25}{25}$	$\frac{10}{10}$	$\frac{10}{10}$	$\frac{10}{10}$	$\frac{25}{25}$

(89.80)

Note: Alley Curbs (as well as curb returns at Street Intersections) where backed up by Sidewalks, push out and break off. A better Joint between walk + Curb is needed.

(see Pg. 64 for Bench Check)

TP# 5  
Set BM NE. T. J.  
Chalcedony  
& Everts

6.81

79.11

T 85.92

5+19.91 East Curblino Everts

TP #4

3.01

85.92

6.89

82.91

4+99.91 East P.L. Everts - Begin P.C. Paring

LT = S

RT = N

68

82.00	81.29	82.32	81.66	81.69	81.92	82.15	82.24	82.89	82.44	83.16
3.92	4.63	3.60	4.26	4.23	4.00	3.77	3.68	3.03	3.48	2.76
25	25	12	12	10		10	12	12	25	25
Cb.	Gut	Cb	Gut				Gut	Cb	Gut	Cb.
		BC.						BC		

(85.92)

82.60	82.31	81.98	82.55	82.98
7.20	7.99	7.82	7.25	6.82
10	10	Par.	9.85	9.85
Cb	Gut	7.4	Gut.	Cb.
		GR		End

(89.80)

Udall St levels  
 sketch page A 5/18/53  
 C.H.S.

1+10

1+00

0+50

0+10

0+00 = Ely line Warrington

Soil sample from 50' East of E. line Warrington  
 10' So. of  $\frac{1}{2}$  Udall

8.50

96.15

87.65

Udall St.

69

INDEXED  
 Law

MAY 20 1953

912	922	922	922	922	922
5.10	3.5	3.5	3.5	3.5	3.5
38	15		20	35	
931	928	922	923	922	925
3.1	3.4	3.5	3.7	3.5	3.7
35	10		19	23	35
922	919	915	915	908	914
3.3	4.3	4.7	4.7	5.4	4.8
35	9	8		20	35
921	912	903	903	898	
3.7	5.0	5.9	5.9	6.4	
35	8	7		35	
897	902	892	895	892	894
6.3	6.0	6.5	6.7	6.5	6.8
35	12	9		7	20
					893
					6.9
					35

96.15

S.W. prop. Man Warrington + Udall  
 Page 11

See page 19.

2+70<sup>E</sup> = start A.C. Pavc.

2+64 34<sup>E</sup> = ~~4~~ level 10' wide  
 Conc. drive

2+50

2+33- } 51<sup>E</sup> Lt. = ~~4~~ Bldg.  
 slab. to 22' wide Bldg.  
 49<sup>E</sup> Lt. = ~~4~~ 3' wide doorway.

2+00

B+50

B+45 51' Lt. = ~~4~~ 25' Conc. slab floor  
 under Const.  
 w/

91.99  
 4.16 4.10 1.11  
 34<sup>E</sup> 35 50  
 on drive  
 92.05  
 95.04

90.3  
 5.9 5.5 4.8  
 35 20 20  
 91.4  
 4.8 3.6  
 20 35

90.15  
 6.00  
 49<sup>E</sup>  
 Conc. slab

90.3  
 5.9 5.3 4.5  
 35 20 24  
 92.4  
 3.8 3.2  
 24 35

89.9  
 6.3 4.6 3.6  
 35 18 21  
 92.5  
 3.4 3.0 2.9  
 21 22 35

89.85  
 6.30  
 51  
 Floor

96.15



Re X-sec Warrington ST - Udall ST to  
 Voltaire ST. WO# 32507  
 12-28-54 - C. Allen, D. Sisson, C. Powell

See Sketch Page 2

25<sup>3</sup> LT = end Curb Return  
 35<sup>1</sup> RT = BC, 20' CB Rad  
 0-14 To RT = Curb Line Udall ST to Sly.

35<sup>2</sup> LT = BC, 20' CB Ret  
 0-17 To LT = Curb Line Udall to Nly.

0-35 Sewer Manhole on Line

35<sup>2</sup> LT = CB BC - 20' Radius  
 0-53 - To Left = Curb Line Udall to Nly (P)

0-56 } 25<sup>3</sup> LT = end Curb Return  
 35<sup>5</sup> RT = Curb BC  
 = Curb Line Udall to Sly.

0-59 25<sup>1</sup> RT = end Curb Return - Type G Gutter  
 Udall ST Now under Construction

0-70 = Wly (P) Line Udall ST

BM

BM#2 Page 11

8765

LT

±

RT

71

INDEXED  
 JER  
 DEC 29 1954

87<sup>00</sup>  
 25<sup>3</sup>  
 T.C.

86<sup>50</sup>  
 25<sup>3</sup>  
 PUT

8782  
 35<sup>1</sup>  
 PUT  
 BC

8828  
 35<sup>1</sup>  
 T.C.  
 BC

86<sup>70</sup>  
 35<sup>2</sup>  
 T.C.  
 BC

86<sup>08</sup>  
 35<sup>2</sup>  
 PUT  
 BC

87<sup>2</sup>  
 15

87<sup>±</sup>

87<sup>63</sup>  
 25<sup>1</sup>  
 A.C.

86<sup>3</sup>  
 25

87<sup>38</sup>

87<sup>24</sup>  
 25<sup>1</sup>  
 edge  
 A.C. PARC

85<sup>72</sup>  
 35<sup>2</sup>  
 T.C.  
 BC

85<sup>24</sup>  
 35<sup>2</sup>  
 PUT  
 BC

85<sup>3</sup>  
 25

86<sup>9</sup>  
 12

87<sup>4</sup>

86<sup>9</sup>  
 16

86<sup>81</sup>  
 25<sup>1</sup>  
 edge  
 A.C.

8598  
 25<sup>3</sup>  
 T.C.

8553  
 25<sup>3</sup>  
 PUT

8683  
 35<sup>5</sup>  
 PUT  
 BC

8735  
 35<sup>5</sup>  
 T.C.  
 BC

8648  
 25<sup>1</sup>  
 PUT

8697  
 25<sup>1</sup>  
 T.C.

87<sup>6</sup>  
 25

87<sup>2</sup>  
 18

87<sup>±</sup>  
 16

87<sup>7</sup>

87<sup>6</sup>  
 10

87<sup>4</sup>  
 15

88<sup>3</sup>  
 25

direct elevation Rod used - all elevations  
 are True elevations

0+50

0+45 - 37 1/2 LT = Jogan stucco house

0+43 - 27° LT = 2' wide Conc walk

0+30 - 27° LT = 2' wide Conc walk

0+15 - 4 1/2 LT = begin 2 unit stucco duplex

0+01

16" RT = 2.8" Tel Pole # 430645 H  
 0+00 = Ely (?) Line Udall ST

0-11 - 25 1/4 RT = end 20' curb Radius

LT

Z

RT

72

90 1/2	89 8	88 1/2	88 2	87 7	88 1/2	91 7	91 8
37 1/2	25	17		12	13	25	50
9 1/2 at House							

90 1/2	91 3/4
37 1/2	37 1/2
9 1/2 at House	Floor

90 3/4	90 0 8	89 5 9
37 1/2	27 2	27 2
Porch on walk	Top step	Lower step

90 2 5	89 9 7	89 4 8
37 1/2	27 2	27 2
Porch on walk	Top step	Lower step

91 3 2	90 2
44 2	44 2
Floor	9 1/2 at House

91 1/4	91 3/4
33	50

88 5	87 2	87 6	87 7	88 6	89 1	89 8
25	18		13	14	25	31

89 4	89 3	88 6	87 1	87 6	87 7	88 1	89 3
50	35	25	18		16	25	50

86 6	87 2	86 7	87 5	87 5	87 5 6	88 0 3	88 7
50	25	18		15	25 1/2	25 1/2	50
					9 1/2	Tic,	

True elev.

1760<sup>E</sup> 27<sup>3</sup> LT = SE COR 2' wide WALK  
WALK

8780  
276  
WALK 276  
9-

1756 - 26<sup>6</sup> LT = 2 8<sup>5</sup> wide Steps + Porch

90<sup>2</sup> 87<sup>8</sup>  
265 265  
TOP Gr  
Porch

26<sup>6</sup> LT = SE COR Porch + Steps

1752 - 27<sup>6</sup> LT = NE COR 2' Wide WALK

8839 88<sup>2</sup> 87<sup>8</sup> 86<sup>4</sup> 86<sup>3</sup> 86<sup>2</sup> 87<sup>7</sup> 88<sup>6</sup>  
27<sup>6</sup> 27 25 14 14 25 50  
WALK + Bottom Steps

1705

89<sup>7</sup> 87<sup>7</sup> 87<sup>6</sup> 87<sup>6</sup> 88<sup>4</sup> 89<sup>1</sup>  
25 14 16 25 50

See SKETCH Page 3

27<sup>6</sup> = begin 2' wide side walk TP to Prisp

21<sup>2</sup> LT = 2 12" Power Pole # P2130

1700 - 16<sup>6</sup> RT = 2 10" Tel Pole # 458031 H

90<sup>2</sup> 90<sup>5</sup> 89<sup>4</sup> 87<sup>6</sup> 87<sup>7</sup> 87<sup>5</sup> 89<sup>5</sup> 91<sup>3</sup> 91<sup>7</sup>  
50 27<sup>6</sup> 25 17 12 23 25  
WALK

0788 25<sup>2</sup> LT = end Conc Drive

8996 8960 8832  
52<sup>2</sup> 38<sup>2</sup> 25<sup>2</sup>  
Floor Brk in Drive

0772 - 25<sup>2</sup> LT = begin Conc Drive

8995 8958 8831  
52<sup>2</sup> 38<sup>2</sup> 25<sup>2</sup>  
Floor Brk in Drive

Direct elev. Rod.

1+94- 16<sup>8</sup> RT =  $\pm$  8" Tele Pole # 430647H-

Section from here on are as

shown on Pages 13+14-

1+84- 21<sup>6</sup> RT =  $\pm$  Telephone Co. Manhole

1+71- 21<sup>8</sup> LT =  $\pm$  dead man.

1+65- 21<sup>8</sup> LT =  $\pm$  10" anchor pole (Power co)

1+63- 20<sup>8</sup> RT = begin Stucco Bldg.

87<sup>08</sup>

21<sup>6</sup>

Rim MH.

80<sup>7</sup>

89<sup>33</sup>

30<sup>8</sup>

30<sup>8</sup>

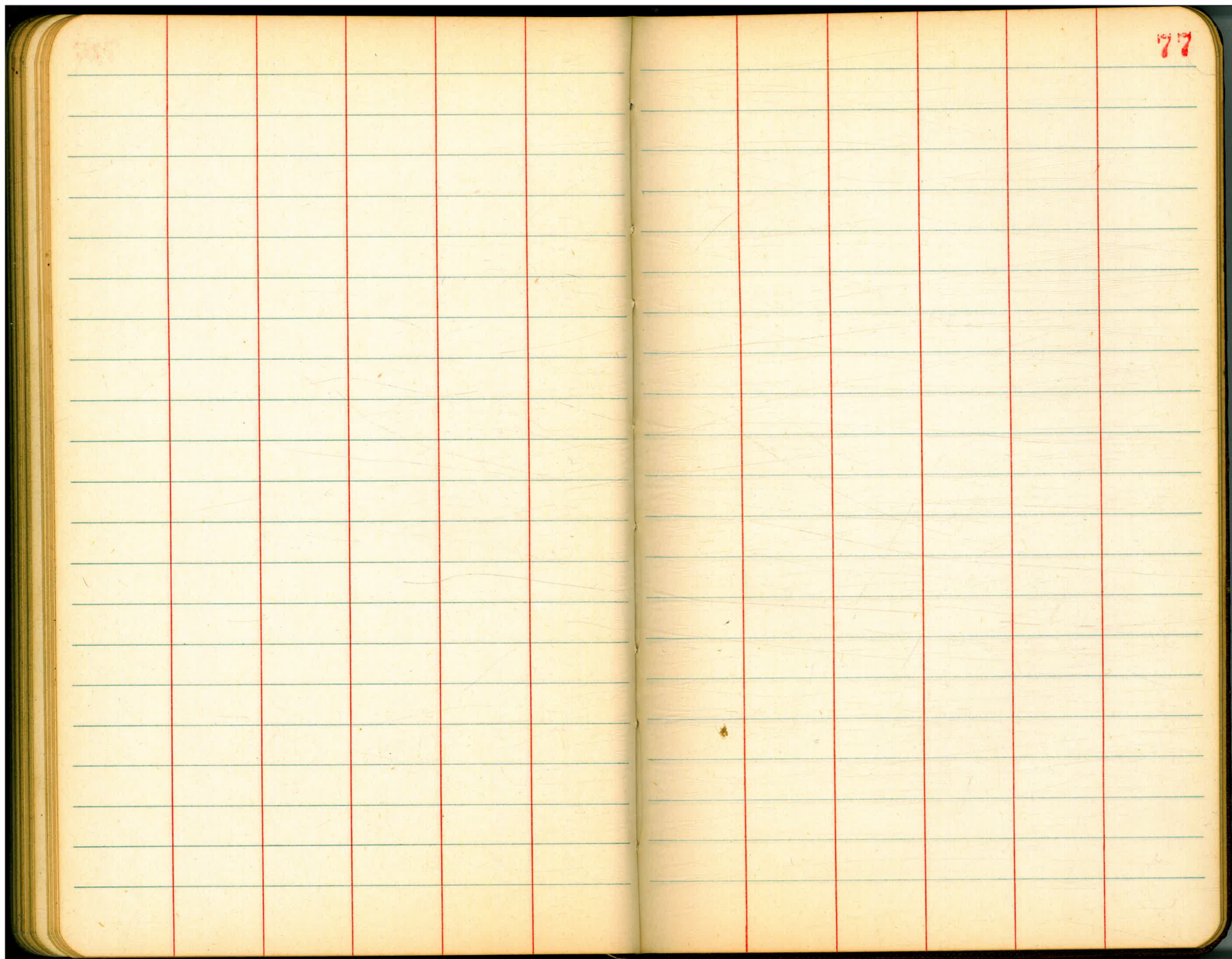
7<sup>2</sup>

Floor

Direct elev Rod used













Sewer Flow Meter to North Island  
in Police yard.

Grate seat  
in meter house (or Tile) 4.52 12.95  
in Police yard.

T.P. 5.30 17.47 3.71 12.17  
Rod.: 368 Rim  
Boat 12.20 15.88 15.88 - 0.00 Invert  
15.88 M.H.

Grate seat  
in meter house in Police yard. (or Tile) 4.52 5.41 El. top of  
tile

T.P. 5.30 9.93 3.71 4.63

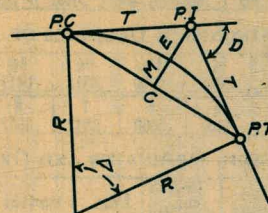
Invert Boat of 12.20 15.88 - 7.54 El.  
Kathner.  
Rim. M.H. SW. Harbor 3.68 4.66 El. Rim

T.P. 6.87 8.34 5.73 1.47

sw.B.R. India + Market 4.78 7.20 2.42

## DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

Copyright, 1914, by Eugene Dietzgen Co., New York City



15.88  
8.30  
7.54

### CURVE FORMULAS

- Radius= $R = \frac{50}{\sin \frac{D}{2}}$  (1) Degree of Curve= $D$  and  $\sin \frac{D}{2} = \frac{50}{R}$  (2)  
Tangent= $T = R \tan \frac{\Delta}{2}$  (3) Length of Curve= $L = 100 \frac{\Delta}{D}$  (4)  
Middle ordinate= $M = R(1 - \cos \frac{\Delta}{2}) = R \text{vers} \frac{\Delta}{2}$  (5) (6)  
External= $E = T \tan \frac{\Delta}{4} = R \div \cos \frac{\Delta}{2} - R$  (7) (8)  $= R \text{exsec} \frac{\Delta}{2}$  (9)  
Long Chord= $C = 2 R \sin \frac{\Delta}{2}$  (10)  $\Delta = \text{Central Angle}$

### 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  $1^\circ$  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 =  $158 - \text{Sta. P. C.} = 54.50$ , hence offset =  $7.27 \frac{(54.50 \div 100)^2}{100} = 2.16$  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 = def. 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 =  $2^\circ 16.2' + 8^\circ 20' + 2 = 6^\circ 26.2'$ , etc.

**Externals.**—May be found in similar manner to tangents. Thus  $E$  for curve above is 115.37. For from Table IV for  $1^\circ$  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  $D = 5^\circ 30'$ .

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  $41.9 + (20 - 16) \div 2$  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.

120°56  
179 60  
59 04

55 8  
47  
102 8

12  
6/10  
5.33  
187  
2403

790

140 15  
380 37  
520 52

179 60  
530 8  
265 2