

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

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

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

Example—If point is 22.6 ft. above grade, how far should it be from center line to be a slope stake point? Ans. from Table 30.6. For same slopes but other widths of roadbed, correct above figures by one-half difference in width of roadbed; thus in example above, for 20 ft. roadbed distance will be $30.6 + (20 - 16) \div 2$ or 2 ft. added to 30.6 = 32.6. For slopes of 1 on 1½ see inside of back cover.
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1846

INDEXED

to page #61

27
85
40
40

99
19
20

W. Cor
Post.

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.

INDEX.

Berkeley Hts - Bench Marks ⁰Page 1

Wightman St Sewer Const 2-5

Rogers + San Fernando St
Sewer Prelim 39

Reed - Ingraham - Orsham 46-54
62+6#

W Cor
POST

Berkeley Hts.

Sewer B.M.^s

NW 1/4 12.5 328.22

315.57

6" and
52"

T.P. 9.37 337.54 0.05 328.17

T.P. 410. (336.77) 4.87 332.67

SW
T.P. spike 1280 (348.25) 1.32 335.45 30d
335.45

spike SW P.T. Wightman + 52nd

T.P. 1.52 (354.05) 0.72 347.53

T.P. 8.18 (360.27) 1.96 352.09

Set B.M. 226 358.01 nail

Top fence Post # 5366 Wightman SW Cor Post

T.P. 214 353.79 8.62 351.65

T.P. 123 344.24 10.78 343.01

check to spike SW Pole
52nd + Wightman 8.79 335.45 335.45

INDEXED
WK.
OCT 14 1948

1

WIGHTMAN Sewer Cuts

Morse
Boyer 4-22-48
Green
Roberts

W.O. 31135

Cuts C'rt. up Edgewood

149480

145275 A 90°03'20" Rt MH 47
WIGHTMAN + 52nd

150

0400 Ex. M.H.

(33677) ← Hl. from P1

F.G.

Tie Pt. R.P.'s in 1749-V-12

INDEXED

N.K.

OCT 14 1948

326.50
10.27
4.14
C 6.73

325.24
11.53
4.72
C 6.81

322.60
14.17
7.35
C 6.82

320.10
16.67
10.08
C 6.59

317.60
19.17
12.97
C 6.20

5 + 86.85

5 + 36.85

M.H. #9

2 + 86.85

4 + 36.85

(354.05) H.I.P.I

3 + 86.85

3 + 36.85

2 + 86.85

(348.25) H.I.P.I

2 + 36.85 A

Lt. M.H. #8

336.77 H.I.P.I

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OCT 1 1984

Here on 8' ft offsets
up flow

Wightman
Sand
E

338.26
15.79
5.19
C 10.60

336.76
17.29
5.95
C 12.24

335.26
18.79
5.76
C 13.03

333.76
20.29
5.55
C 14.74

332.26
15.99
1.38
C 14.61

330.76
17.29
4.97
C 12.52

329.26
18.99
9.70
C 9.29

327.76
9.01
2.44
C 6.57

5 + 80 + 80.85

346.96
 $\frac{13.31}{6.02}$
 C 7.29

5 + 30 9 + 30.85

346.56
 $\frac{13.71}{6.55}$
 C 7.05

4 + 80 + 80.85

(360.27) H.I.P.I

346.16
 $\frac{14.11}{7.11}$
 C 7.00

4 + 30 8 + 30.85 M H 210 near Shiloh Rd.

345.76
 $\frac{8.29}{2.00}$
 C 6.29 T.P.P.I

3 + 80 + 80.85

344.26
 $\frac{9.79}{2.81}$
 C 6.98

3 + 30 7 + 30.85

342.76
 $\frac{11.29}{3.91}$
 C 7.38

2 + 80 + 80.85

341.26
 $\frac{12.79}{6.15}$
 C 6.64

2 + 30 6 + 30.85

(354.05) = H.I.P.I.

339.76
 $\frac{14.29}{8.31}$
 C 5.98

13 + 34.85 D.E.

12 + 86.85

12 + 36.85

+ 86.85

11 + 36.85 M.H. # 11

+ 86.85

10 + 36.85

(360.27) H.P.!

$$\begin{array}{r} 349.74 \\ 10.53 \\ 5.50 \\ \hline C 4.99 \end{array}$$

$$\begin{array}{r} 349.36 \\ 10.91 \\ 4.58 \\ \hline C 6.33 \end{array}$$

$$\begin{array}{r} 348.96 \\ 11.31 \\ 5.33 \\ \hline C 5.98 \end{array}$$

$$\begin{array}{r} 348.56 \\ 11.71 \\ 3.83 \\ \hline C 7.88 \end{array}$$

$$\begin{array}{r} 348.16 \\ 12.11 \\ 4.00 \\ \hline C 7.51 \end{array}$$

$$\begin{array}{r} 347.76 \\ 12.51 \\ 5.32 \\ \hline C 7.19 \end{array}$$

$$\begin{array}{r} 347.36 \\ 12.91 \\ 5.33 \\ \hline C 7.58 \end{array}$$

Alignment & Levels along Prop. Sewer to
 O.W. Cottons Sub. in N. 1/2 lot 1202 - along Linda
 Vista Rd. - from Chesterton Dr.

2484

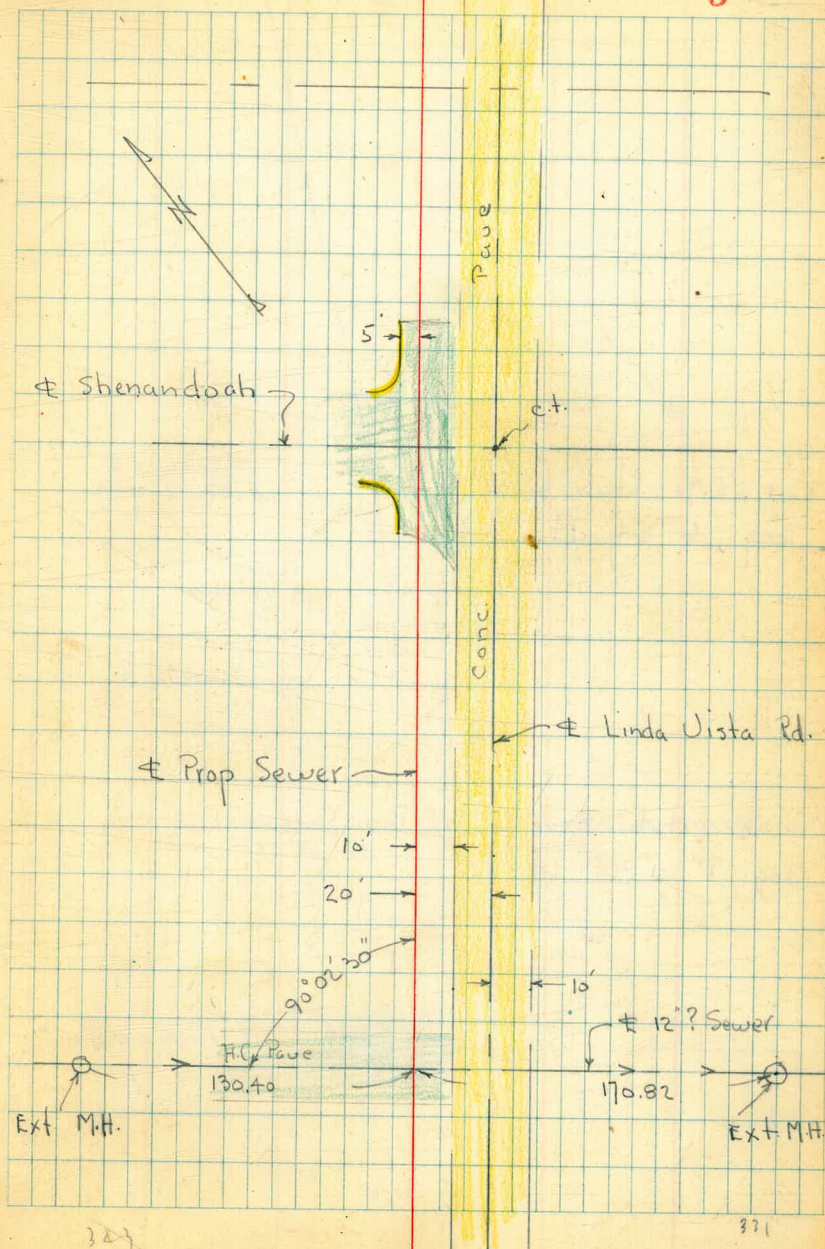
W.O. 60278

7-8-48

Osborne
 Hardin
 Duncan

INDEXED
 JUL 12 1948

0+00 = \pm of Existing Sewer in \pm of
 Chesterton Dr.

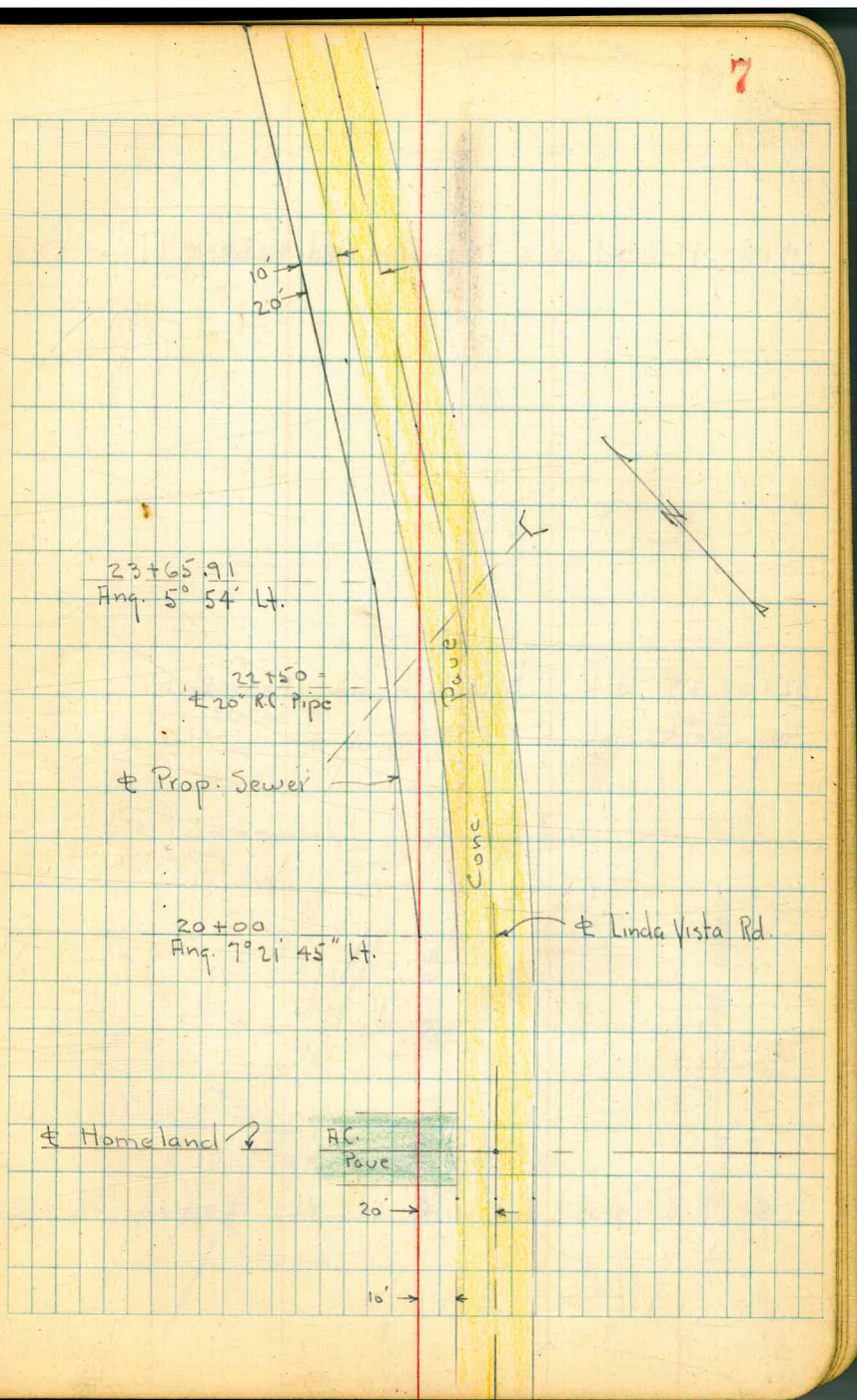


324

321

23+65.91 = stub Near E.C.
Ang. $5^{\circ} 54'$ Lt.

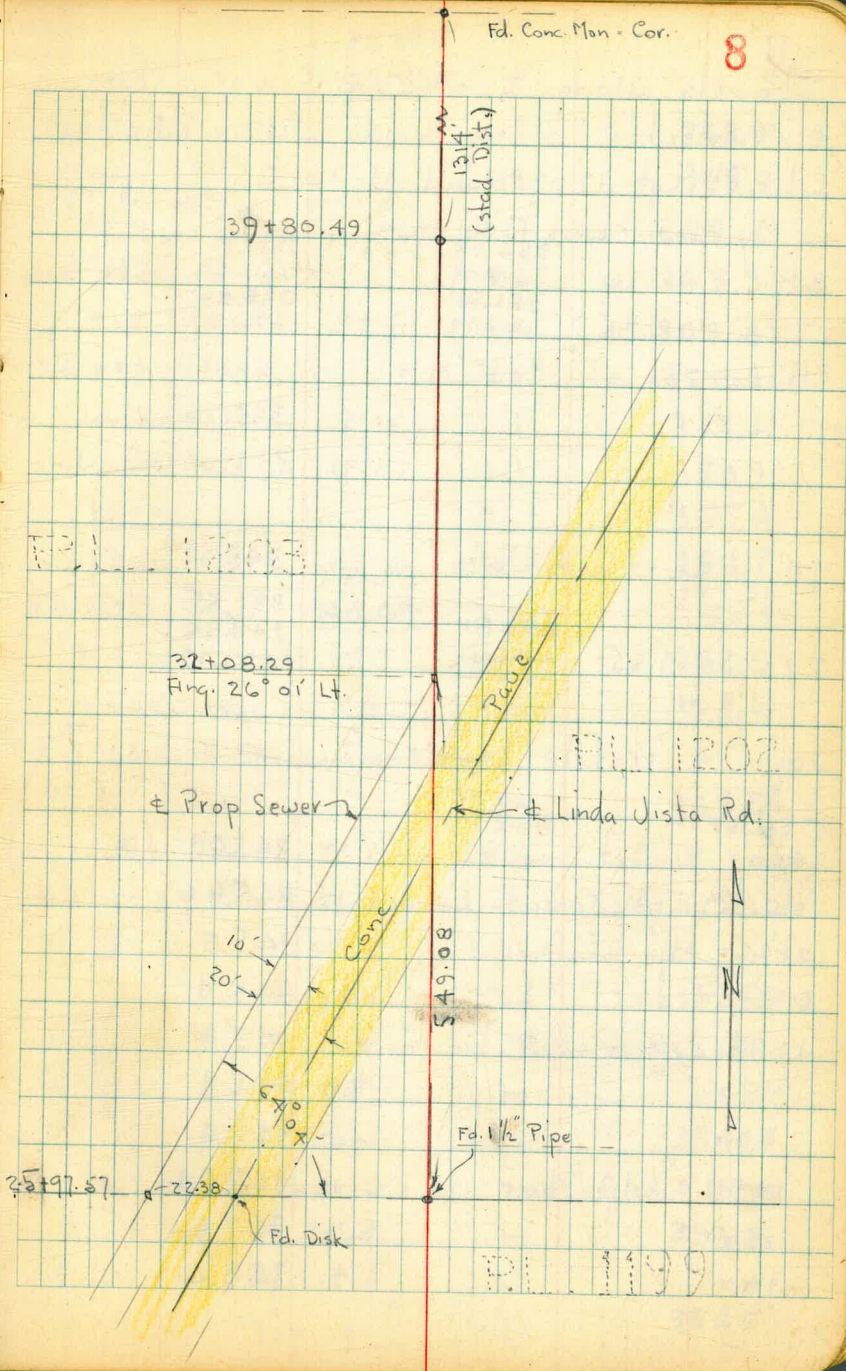
20+00 = stub. Near P.C. of Pauc Curve
Ang. $7^{\circ} 21' 45''$ Lt.



39+80.49 = End at 2" Pipe Assumed to be Middle of Sect.

32+08.29 = Stub - Int. with E.L. P.L. 1203
Ang 26° 01' Lt.

25+97.57 = stub - Int with S.L. P.L. 1203



P.L. 1203

32+08.29
Ang. 26° 01' Lt.

P.L. 1202

Prop. Sewer

Linda Vista Rd.

10'
20'

Cone

549.08

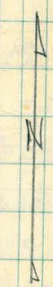
Fd. 1 1/2" Pipe

25+97.57

2238

Fd. Disk

P.L. 1199



Levels along \pm of Prop. Sewer - from
 \pm Chesterton - along Linda Vista Rd to
 E.L. Pl. Lot 1203 - and N. to \pm

My Elev. seems to be wrong

See 1729-P.38

B.M.	2.86	356.78		353.92	DC BT Shenandoah & Linda Vista
		354.09		351.23	
T.P.	2.95	351.91		348.96	
		349.22	7.82	346.27	

Elev. of F.L. of Ext. M.H. in Chesterton Dr.

M.H. to E.	6.15	345.76	Top
	20.91	331.00	Flowline

M.H. to W. of Linda Vista	8.50	343.41	Top
	20.36	331.55	Flowline

T.P.	4.85	353.81	20.36	331.55
		351.12	2.95	348.96
				346.27

Begin \pm Profile Levels

12" Sewer	Pave			
0+00 = \pm Ext.	on H.C.	8.33	345.48	\pm
10' Rt = edge	Conc. Pave	8.15	345.66	
0+22 = edge	H.C. Pave	8.30	345.5	
0+50 = dirt		8.4	345.4	
1+00		8.0	345.8	
+50		7.0	346.8	
2+00		6.4	347.4	
10' Rt = edge	Pave	6.11	347.64	
+50		5.9	347.9	
3+00		5.4	348.4	

353.81

351.12

9

3+50		4.9	348.9
4+00		4.9	348.9
+50		4.7	349.1
5+00		4.5	349.3
+50		4.0	349.8
6+00 = \pm		3.4	350.4
10' Rt = Conc.		2.71	351.1
6+50		2.9	350.9
7+00		2.4	351.4
7+50		2.1	351.7
T.P.	9.65	361.23	351.58
		358.54	348.99
8+00		8.7	352.5
8+08 = edge	H.C. Pave	8.60	352.6
8+60.2 = \pm Shenandoah Rd =			
\pm		7.99	353.24
10' Rt = Conc.		7.70	
8+14 - 5' Lt = end	cb. around Bus Stop - S. side		
5' Lt.	gut.	8.34	
	Top cb.	7.68	353.55
8+96 - 5' Lt = PC	cb. around Ret. - N. side		
5' Lt.	gut.	7.70	
	Top	6.96	354.27
9+26 - end	H.C. Pave + 5' Lt. = end of cb.		
\pm	= edge of Pave	7.43	353.8
5' Lt.	gut.	7.51	
	Top cb.	6.73	354.5

361.23

~~358.54~~

10+00		6.5	354.7
+50		5.8	355.4
11+00 - #		5.1	356.1
10' Rt = Conc.		4.90	356.3
12+00		3.4	357.8
+50		2.3	358.9
13+00		1.2	360.0
+50		0.2	361.0
T.P.	2.17	<u>364.10</u>	<u>360.93</u>
		0.30	358.24
14+00		2.1	362.0
+50		1.7	362.4
15+00 - #		1.5	362.6
10' Rt = edge Conc.		1.90	362.2
15+50		1.9	362.2
16+00		2.7	361.4
+50		4.4	359.7
17+00		6.4	357.6
+50		7.9	356.2
18+00		10.1	353.0
18+13.5 = edge H.C. Pavc		10.42	353.72
18+29.8 = # Homewood Dr.			
#		10.60	353.5
10' Rt = edge Conc.		10.71	353.4
18+45 = edge H.C. Pavc		10.97	353.13
19+00		12.0	352.1

364.10

~~361.41~~

10

19+50		355.54	12.8	351.3
T.P.	4.63	<u>352.85</u>	2.19	350.91
				348.22
20+00 = Ang. Pt. - #			4.9	350.6
9:1' Rt = edge Conc.			4.70	350.8
20+50			5.5	350.0
21+00 - #			6.0	349.5
16.5' Rt = edge Conc.			5.27	350.27
21+50			6.2	349.3
22+00 - #			6.2	349.3
18.1' Rt = edge			5.82	349.72
		Approx. loc. of 20'		
22+50 = RC. Culvert			5.9	349.6
23+00 - #			5.2	350.3
15.4' Rt = edge			4.37	351.17
23+65.91 = Ang. Pt.			4.09	350.45 on Stub
24+00 - #			3.4	352.1
10' Rt = edge			2.03	352.5
24+50			2.6	352.9
25+00			1.8	353.7
25+50			0.8	354.7
B.M. = spike in Pile		367.49		354.46
T.P.	13.03	<u>364.80</u>	1.08	351.77
W. of 25+17				
25+97.57 = Int. PL. line			12.32	355.17 on Stub
26+50			11.2	356.29
27+00 - #			10.1	357.39
10' Rt = edge Conc.			9.60	

367.49
~~364.80~~

27+50		9.1	358.4	
28+00		7.9	359.6	
27+91 - 0.5' Rt. = ± Guy Pole	4433 01 - H			
28+50		7.3	360.2	
29+00		6.2	361.3	
+50		5.7	361.9	
30+00	±	3.9	363.6	
5' Rt. = shoulder		5.1	362.4	
10' Rt. = edge Pavc		4.75	362.7	
30+50		2.9	364.6	
31+00	±	4.0	363.5	
10' Rt. = edge		4.11	363.4	
31+50		4.0	363.5	
32+08.29 = Hng. Pt.	367.16	4.13	363.4	on Stub.
T.P.	3.80	364.47	4.13	363.4 360.67
32+50		4.7	362.5	
32+72 - 7.7 Rt. = ± P. pole #	178646			
33+00		5.5	361.7	
+50		5.6	361.6	
34+00		5.6	361.6	
+50		7.1	360.1	
35+00		8.2	359.0	
+50		8.1	359.1	
36+00		8.4	358.8	

367.16

11

~~364.47~~

36+50		8.1	359.1	
37+00		6.7	360.5	
T.P.	5.72	364.47	6.00	361.2 358.47
37+50		5.3	361.6	
38+00		5.7	361.2	
+50		4.9	362.0	
39+00		4.3	362.6	
+50		3.0	363.9	
39+90.49 = end at 2" Pipe = ± P.L.				364.76 362.07
Top Pipe		2.12		
10' Lt.		2.4		
10' Rt.		2.0		

Alleys. Blk 11 + 14
 Monte Vista Tract.

Cass - North. Between Agate + Archer.

10-13-48
 W.O. 25001

Sommereyer
 McCoy X
 Allen
 Jones

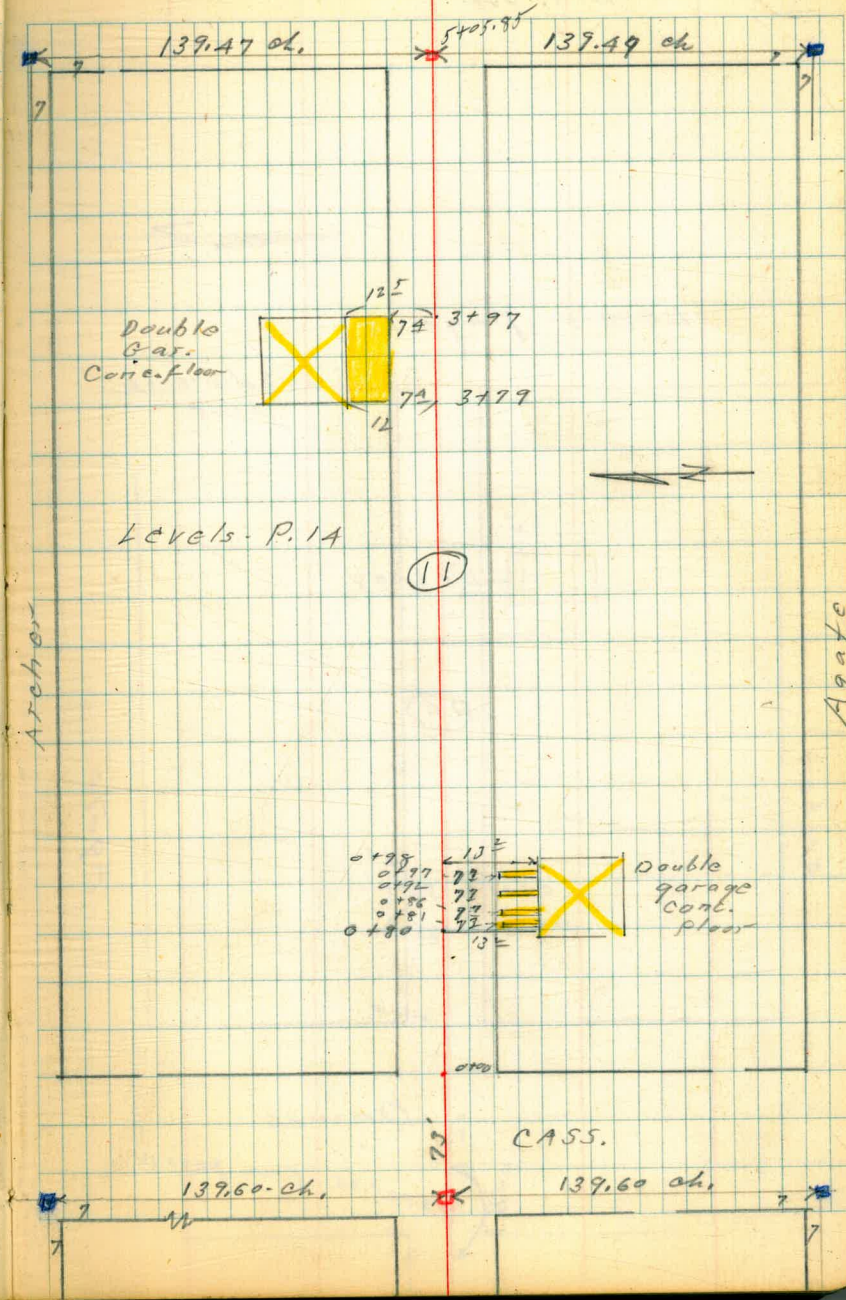
INDEXED
 WK.
OCT 14 1948

■ = Fed. Plan

□ = set. 1/2 hub + disk

Dawes

12

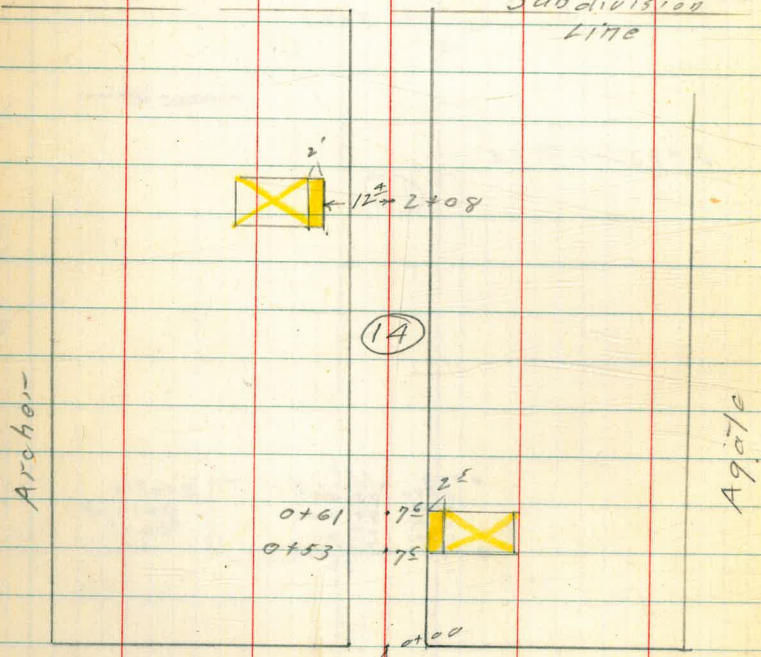


BK. 1A

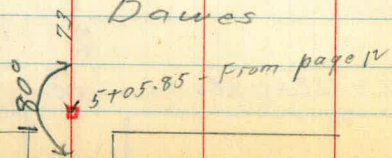


Levels - page 18

Subdivision
Line



Daves



0+86 7² Rt. = £ 2nd ribbon.

Cont. ribbons to double Car.

0+81 7² Rt. = £ First of four 2' wide

0+80 13² Rt. = N.W. Cor. double Car. ^{floor.} con c.

0+50

Reduced
1-25-99

0+00

0-40 = £ Cass

Anchor
£ Cass 4.24 167.30 — 163.06 S.W. 7' Mer.

163.97	164.13
$\frac{3.33}{75}$	$\frac{3.17}{135}$
£ Ribbon	at Car.

163.98	164.14
$\frac{3.32}{75}$	$\frac{3.16}{135}$
£ ribbon	at Car.

164.13
$\frac{3.17}{135}$
Car. floor

163.3	163.3	163.2
$\frac{4.0}{75}$	4.0	$\frac{4.1}{75}$

163.3	161.8	161.5	161.5	159.3
$\frac{4.0}{75}$	$\frac{5.5}{75}$	5.8	$\frac{5.8}{75}$	$\frac{8.0}{75}$

162.6	161.2	159.9	157.8	156.1
$\frac{4.7}{100}$	$\frac{6.1}{50}$	7.4	$\frac{9.5}{50}$	$\frac{11.2}{100}$

167.30

T.P. 4.29 167.22 4.37 162.93

1+45 19³ Lt. = \pm Sing. Gar. Dirt floor.

F.P.

1+18 11' Lt. = \pm 4' wide Conc. walk

1+00

0+98 13³ Rt. = N.E. cor double Gar.

0+97 7² Rt. = \pm 4th + last 1' wide ribbon

0+92 7² Rt. = \pm 3rd ribbon

167.30

164.90

$\frac{2.4}{192}$
Gar. floor

165.06 164.99
 $\frac{2.24}{132}$ $\frac{2.31}{118}$
walk \pm walk
at steps.

165.6 164.8 164.6 164.5 162.2
 $\frac{1.7}{50}$ $\frac{2.5}{75}$ 2.7 $\frac{2.8}{75}$ $\frac{5.1}{50}$

164.10
 $\frac{3.20}{132}$
Gar. floor

164.03 164.10
 $\frac{3.27}{72}$ $\frac{3.20}{132}$
 \pm Ribbon at Gar

164.04 164.10
 $\frac{3.26}{72}$ $\frac{3.20}{132}$
 \pm Ribbon at Gar

167.30

3+00

2+55 15² Lt. = Φ Sing. Gar. dirt floor

2+50

2+06 27 Lt. = Φ Sing. Gar. Dirt. floor

2+00

1+50

167.22

163.2	162.1	162.0	161.8	159.8
$\frac{4.0}{50}$	$\frac{5.1}{75}$	5.2	$\frac{5.4}{75}$	$\frac{7.4}{50}$

162.5
 $\frac{4.7}{15}$
 Gar. Floor

162.0	161.9	161.7
$\frac{5.2}{75}$	5.3	$\frac{5.5}{75}$

164.1
 $\frac{3.1}{27}$
 Gar. Floor

165.0	163.2	162.8	162.6	160.7
$\frac{2.2}{50}$	$\frac{4.0}{75}$	4.4	$\frac{4.6}{75}$	$\frac{6.5}{50}$

164.5	164.2	163.9
$\frac{2.7}{75}$	3.0	$\frac{3.3}{75}$

167.22

4+00

T.P. 3.38 164.55 6.05 161.17

3+97 7th Lt. = End Conc. Apron to ^{Gar.} double

3+79 7th Lt. = start Conc. apron to double Gar.

3+50 10' Lt. = S.E. Cor. Gar. (west front.)

3+40

3+28 10' Lt. = S.W. Cor. Sing Gar. West Front.

167.22

163.7 162.0 161.8 161.3 160.65 158.35
 $\frac{9.9}{50}$ $\frac{2.6}{22}$ $\frac{2.8}{75}$ 3.3 $\frac{3.9}{75}$ $\frac{6.2}{50}$

164.55

163.20 162.70 162.2 161.3 160.8
 $\frac{4.02}{125}$ $\frac{4.52}{72}$ $\frac{5.0}{74}$ 5.9 $\frac{6.4}{75}$
 Gar. floor. Apron End.

163.19 162.84 162.4 161.9 160.8
 $\frac{4.03}{125}$ $\frac{4.38}{72}$ $\frac{4.8}{74}$ 5.8 $\frac{6.4}{75}$
 Gar. floor Apron End.

163.3 162.9 162.92 161.7 159.5
 $\frac{3.9}{40}$ $\frac{4.3}{75}$ 4.8 $\frac{5.5}{75}$ $\frac{7.7}{50}$

163.0 162.5 162.2
 $\frac{4.2}{75}$ 4.7 $\frac{5.0}{75}$

163.4 162.9
 $\frac{3.8}{15}$ $\frac{4.3}{10}$
 Floor & door west front at cor. of Gar.

167.22

North end Bldg. sided up)
 (= Former Gar. door. Ent. now to south)

0+53 7⁵ Rt. = Conc. Apron to frame Gar.

0+50

sketch - page 13

= 0+00 por. BIK 14.

5+78⁸⁵ = East. line Dawes.

5+38⁸⁵ \neq Dawes

5+05⁸⁵ 07 Hub. 6.58 BM. #1

4+98⁸⁵ = W.L. Dawes.

4+50

164.55

158.1	158.51
6.50	6.04
<u>76</u>	<u>102</u>
Apron	1 + Bldg.

158.5	158.0	157.8	157.7	155.7
6.1	6.6	6.8	6.9	8.9
<u>50</u>	<u>75</u>		<u>75</u>	<u>50</u>

158.9	157.7	157.6	157.5	155.3
5.7	6.9	7.0	7.1	9.3
<u>50</u>	<u>75</u>		<u>75</u>	<u>50</u>

161.9	150.0	158.4	155.8	153.5
2.7	4.6	6.2	8.8	11.1
<u>100</u>	<u>50</u>		<u>50</u>	<u>100</u>

160.6	159.1	158.9	158.1	155.9
4.0	5.5	5.7	6.5	8.7
<u>50</u>	<u>75</u>		<u>75</u>	<u>50</u>

160.8	160.3	159.3
3.8	4.3	5.3
<u>75</u>		<u>75</u>

164.55

2+20 18' Lt. = \pm Sing Gar. Dirt floor

Gar. Conc. floor.

2+08 12' Lt. = \pm 8' wide Apron to Sing

2+00

1+50

1+00

T.P. 10.09 170.00 4.64 159.91

0+61 = 7' Ent. = End unused apron

now the back of the garage.
This apron not in use as it is
164.55

166.2
 $\frac{3.8}{18}$
Gar. floor

165.4
 $\frac{4.6}{75}$

165.0
50

164.7
 $\frac{5.3}{75}$

166.30
 $\frac{3.70}{144}$
Gar. floor

166.10
 $\frac{3.90}{124}$
Apron

166.5
 $\frac{3.5}{50}$

164.9
 $\frac{5.1}{75}$

164.0
60

163.8
 $\frac{6.2}{75}$

161.4
 $\frac{8.6}{50}$

164.9
 $\frac{5.6}{50}$

162.8
 $\frac{7.2}{75}$

162.5
7.5

162.5
 $\frac{7.5}{75}$

160.0
 $\frac{10.0}{50}$

161.1
 $\frac{8.9}{50}$

160.5
 $\frac{9.5}{75}$

160.3
9.7

159.7
 $\frac{10.3}{75}$

158.0
 $\frac{12.0}{50}$

170.00

158.10
 $\frac{6.45}{75}$
Apron

158.51
 $\frac{6.04}{102}$
at Bldg

164.55

SW. 4' Mat
Dawes + Archer.

2.16 164.29 ✓ 164.29

T.P. 9.23 166.45 12.78 157.22

2+61 = Approx. Sub. line

170.00

169.5 166.5 165.9 165.9 162.6
 $\frac{0.5}{50}$ $\frac{3.5}{75}$ 4.1 $\frac{4.1}{75}$ $\frac{7.7}{50}$

170.00

X-Sept. Hancock - from Bandini to W. Witherby.
75' st. - Divt - Graded.

1+00 - 38.5 Rt. = end Bldg.

0+95 - 35.2 Lt. = end fence

0+50.

0+47 - 27' Rt. = ♀ P. pole # 500913-H

0+43 - 31.6 Lt. = ♀ P. pole # 2109

10.16 22.85 9.75 12.69

T.P.

0+00 = W.L. Bandini - 38.8' Rt. = Beg. Bldg.

0-40 = on Sewer M.H. - 36.5' Lt. = Wire fence

Set B.M. 3.70 18.74 = spike in

9.75 22.44

check B.M. on 7' Man. 12.30 12.69 = 12.73

0.82 24.99 12.61 24.17 from Below

B.P. in cb. 9.05 36.78 27.73

B.M. on N.E. 7' 2.45 12.73

B.M. S.E. 7' ct. 12.71 15.18 2.47

Kurtz & Coutts

Lt. = S

♀

Rt. = N. 22

11.8	12.9	14.1	14.8	15.0	18.0	17.8	18.6	18.5
11.0	9.9	8.7	8.0	7.8	4.8	5.0	4.2	4.2
50	37.5	20		18	22	30	37.5	38.5
12.7	13.7	14.7	15.8	16.0	19.2	19.9	22.2	+ Bldg
10.1	9.1	8.1	7.0	6.8	3.6	2.9	0.6	
50	37.5	20		17	21	30	37.5	

22.85

13.7	14.7	16.0	16.8	17.1	19.5	20.6	21.0	20.84
8.7	7.7	6.4	5.6	5.3	2.9	1.8	1.4	+ 1.60
50	37.5	22		16	23	30	38.8	Flood Bldg
16.1	17.0	17.67	17.6	19.4	20.9	20.5	20.5	
6.3	5.4	4.77	4.8	3.0	2.1	+ 1.9		
37.5	15	on Rim	14	20	37.5	37.5	37.5	37.5

S.E. Pole - Hancock + Bandini

22.44

Hancock & Coutts

Moore + Witherby

Hancock & Coutts

Lt. # Rt.

3+50

3+14.7 = edge of A.C. Pavc - Rods along edge
see sketch for angle

3+00

2+50

2+40 - 32' Lt. = P. pole # 2187

2+38 - 27' Rt. = Tel. pole - # 406894 - H

2+00

1+50

1+21 - 26.5' Rt. = Tel. pole # 406893 - H

1+15 - 32.3' Lt. = P. pole # 2171

6.65 50	9.56 37.5	6.42 37.5	9.79 50	6.10 20	10.11 20	5.60 20	10.61 20	5.09 20	11.12 20	4.36 37.5	11.85 37.5	3.75 50	12.46 50
6.90 50	9.31 37.5	6.63 37.5	9.58 37.5	6.24 20	9.87 20	5.95 20	10.26 20	5.84 20	10.37 20	10.30 Cor.			
7.3 50	8.9 37.5	7.0 37.5	9.2 37.5	6.2 20	10.0 20	5.6 20	10.6 20	5.4 20	10.8 20	3.8 37.5	12.4 37.5	3.5 50	12.7 50
7.1 50	9.1 37.5	6.9 37.5	9.3 37.5	6.1 20	10.1 20	5.8 20	10.4 20	4.9 20	11.3 20	3.8 37.5	12.4 37.5	3.4 50	12.8 50
6.9 50	9.3 37.5	6.6 37.5	9.6 37.5	5.8 20	10.4 20	5.6 20	10.6 20	4.7 20	11.5 20	3.7 37.5	12.5 37.5	3.4 50	12.8 50
6.6 50	9.6 37.5	6.4 37.5	9.8 37.5	5.8 20	10.4 20	5.5 20	10.7 20	5.3 20	10.9 20	3.7 37.5	12.5 37.5	3.0 50	13.2 50

16.21

7- Sect. Couts from N. rail of North Track
of Main line R.R. - to Moore.

0+80 = \pm Ditch

0+70

0+57.8 = N. rail at E.L.

0+47.9 = N. rail at \pm

0+35.8 = N. rail of 2nd spur Track on W.L.

0+30 - ignored rails for Section

0+26 - 34 Rt. = \pm P. pole # 3775

0+22.1 = N. rail at W.L.

0+21 = N. rail at \pm

0+18.9 = N. rail of Spur Track at E.L.

0+09

to Hancock
See Sta. on lines for angle of Track - cuts Normal

0+00 = N. rail of W. Track - Rods on Track

B.M. = Mon. 9.63 22.32

12.69

Lt. W. \pm

Rt. = E. 25

9.2	9.5	9.3	9.4	10.8	10.2	10.1	10.0
13.1 50	12.8 40	13.0 20	13.9	11.5 10 = end of Ditch	12.1 20	12.2 40	12.3 50
7.9	7.9	10.1	10.4	10.9	10.1	10.2	
14.4 50	14.4 40 \pm Ditch	12.2 20	11.9	12.4 20	12.2 40	12.1 50	
			10.09				
	10.15						
	12.17 40 = Top Rail		12.23 Top Rail			12.00 40 = Top Rail + end of A.C. Pave	
9.7	9.7	9.9	10.1	10.2	10.59	10.70	
12.6 50	12.6 40	12.4 20	12.2	12.1 20	11.73 40 edge A.C.	11.62 50 on Pave	
	11.94 40 Top rail		10.38				
			11.94 Top rail				
						11.74 40 = Top Rail + Top Rail To 11.62	
9.5	9.5	9.2	9.1	9.3	9.7		
12.8 50	12.8 40	13.1 20	13.2	13.0 20	12.6 40		
	10.89		10.92		11.03		
	11.43 40 0+022 Top Rail		11.40 22.32		11.29 40 = 0-022 Top rail		

1+47- 40.8' Lt. = end of Bldg. + sly. of ^{40.} Drive to yard

1+29- 27.8 Rt = \perp P. pole # 3841

1+25'

1+07- 40.8' Lt. = Beg. Bldg.

T.P. 12.35' 34.17 0.50 21.82

1+00 - Beg. rough oil pave

0+50

0+00 = N.L. Hancock

See Hancock for Int.

1+33.87 = S.L. Hancock

1+10

9.33 40.8 = on Dr.	21.4	21.4	21.8	22.4	22.4	22.7	22.2	21.3	21.2
12.8 40.8. edge oil at Bldg.	12.8	12.8	12.4	11.8	11.8	11.5	12.0	13.0	13.0
23.53	40	40	20	20.4	6 edge oil	20	29	40	50
10.59 40.8 floor	13.8	20.4	40.8 ground.						
19.6	19.6	19.8	34.17	19.9	19.9	19.9	19.9	19.3	
2.7 50	2.7 40	2.7 20	2.7 20	2.4 edge oil	2.4 20	2.4 40	2.4 40	3.0 50	
6 20	15.6	15.8	15.7	15.8	15.8	16.2	16.3		
6 40	6.5	6.5	6.5	6.5	6.5	6.5	6.5		
13.9	13.0	13.1	13.1	13.2	13.2	13.4			
9.4 40	9.3 20	9.2	9.2	9.1 20	9.1 20	9.1 40	9.1 50		
10.1	10.0	10.0	10.0	10.1	10.1	10.3			
12.2 40	12.3 20	12.3	12.3	12.2 20	12.2 40	12.0 40			
9.7	9.7	9.7	9.9	10.2	9.8	10.0			
12.6 50	12.6 40	12.6 20	12.4	12.1 20	12.5 40	12.5 50	10.0 50		

check starting B.M. 11.07 27.73 ✓ 27.73

1+02.70 = S.L. Moore = ^{± end wall} edge of H.C. Pavc + curbs

1+90

T.P. 6.80 38.80 2.17 32.00

1+75

1+59- 41.5' Lt. ± Beg. 8" Conc. wall = Nly. of Dr.

1+50

32.00	31.79	32.24	32.57	32.85	32.90	32.89
6.80	7.01	6.56	6.23	5.92	5.90	5.81
25.9	25.9	13	13	26.1	26.1	26.1
Top cb.	put.			put.	Top cb.	
32.60	32.1	31.4	32.0	32.8	34.0	33.2
5.20	6.7	7.4	6.8	6.0	4.8	5.6
40.1	40.1	23		23	37	40
Top wall	oil			edge oil		50
30.60	29.7	30.0	38.80	31.0	31.4	26.3
3.57	4.5	4.2	40.2	3.2	2.8	7.9
40.2	40.2	20	0	16	29	40
Top wall	oil			edge oil		42
28.20	25.51					35.7
5.97	8.66					8.7
41.5	41.5 = on Drive					50
Top wall						
23.41	25.0	25.4	25.8	26.0	27.0	26.8
10.76	9.12	8.8	8.4	8.2	7.2	7.4
50	40	20	5	20	27	40
Dr.			edge			50
			34.17	oil		

Walker
Johnson
Crawford
10-6-49

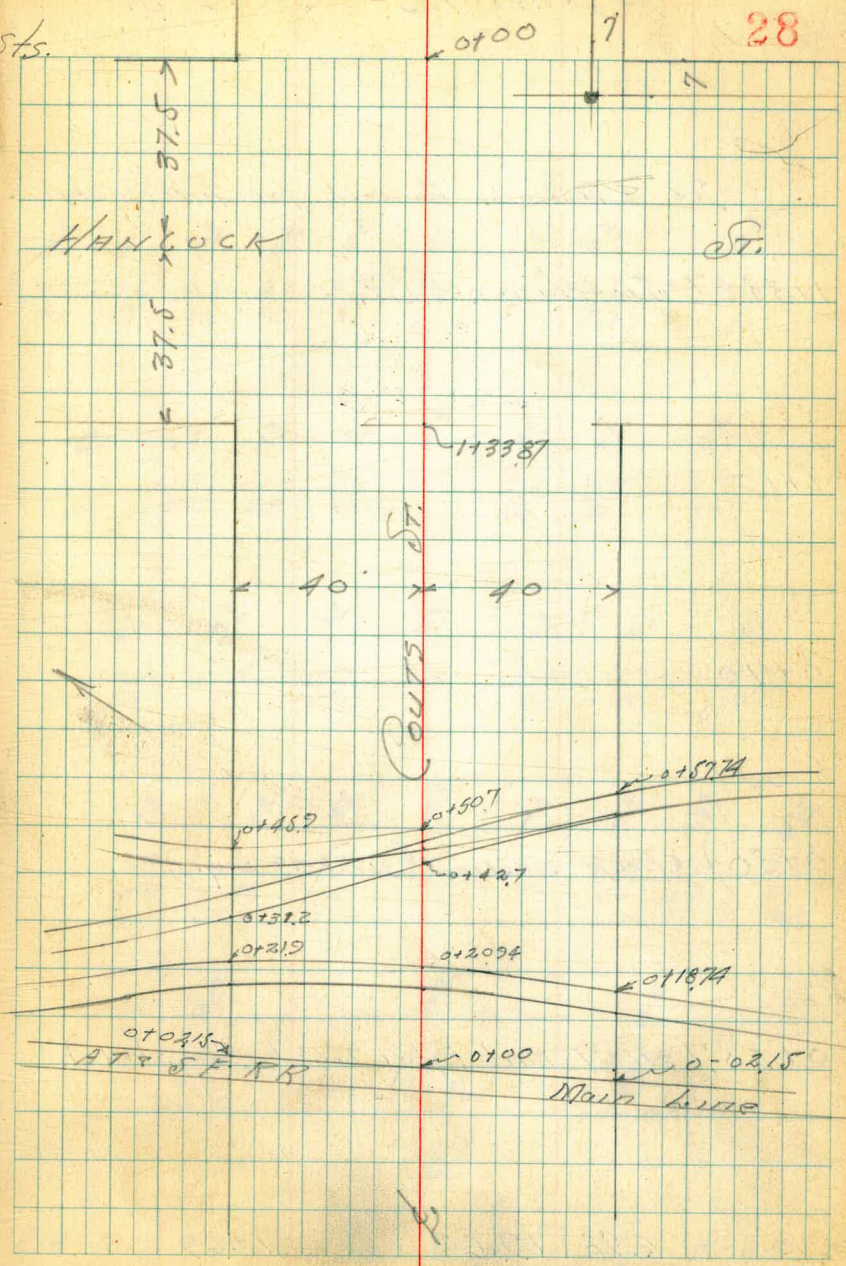
Re-Cross Section Portion - Couts
Street Between Kurtz ^{And} Moore Sts.
140.25001

Original Sections
P 21-27

INDEXED

M.K.
OCT 7 1949

Notes Reduced
McClaren 10/17/49



X-Sections - Coats St.

See X Sections Hancock for Intersections

1+33.87 = Sk. Hancock St.

1+10

0+70

(0+30) Check Section (see P-25 0119.)

0+50.7 - N.Y. Rail Spot Track See sketch

6.98 19.67

12.69

Lt.

R

Rt.

29

$\frac{10.1}{96}$ 40	$\frac{10.1}{96}$ 25	$\frac{10.5}{92}$ 20	$\frac{10.6}{91}$ 12	$\frac{10.0}{97}$ 8	$\frac{10.1}{96}$		$\frac{10.2}{95}$ 20	$\frac{10.2}{94}$ 40
$\frac{9.6}{10.1}$ 50	$\frac{9.7}{10.0}$ 40	$\frac{9.7}{10.0}$ 23	$\frac{10.1}{96}$ 20	$\frac{10.0}{97}$	$\frac{10.2}{95}$ 20	$\frac{10.1}{96}$ 40	$\frac{10.2}{97}$ 50	
$\frac{9.2}{10.4}$ 50	$\frac{9.2}{10.5}$ 40	$\frac{9.8}{99}$ 20	$\frac{10.4}{93}$	$\frac{9.9}{98}$ 20	$\frac{10.1}{96}$ 40	$\frac{10.2}{95}$ 50		
$\frac{9.8}{99}$ 50	$\frac{9.6}{10.1}$ 40	$\frac{10.0}{97}$ 20	$\frac{10.2}{95}$	$\frac{10.2}{95}$ 20	$\frac{10.5}{92}$ 40	$\frac{10.64}{903}$ 402 Rail	$\frac{10.75}{892}$ 50 Rail	
$\frac{10.08}{959}$ 40 Top Rail			$\frac{10.27}{940}$ Top Rail			$\frac{10.35}{932}$ 40 Top Rail		
			19.67					

BM. NE 7' Mon. Hancock & Coats P-25

Couts

1700

T.P. 1063 2987 043 1924

0792

0775

0750

0725

0700 = N.W. Hancock

1967

L.H.

L.

Rt.

30

19.7	19.3	19.7	19.8	19.8	20.0	20.0	19.9	19.9
102	106	102	101	101	99	99	100	105
50	43	40	20	2987	6	20	40	80

14.3	14.3
54	54
50	43

13.6	13.6	16.2	16.1	15.9	16.1	16.6	15.6	15.1	15.0
6.1	6.1	3.6	7.6	3.8	3.6	3.1	4.1	4.6	4.7
50	13	40	20		20	33	40	42	50

13.4	13.4
6.3	6.3
50	43

13.2	13.6	14.6	14.4	14.4	14.5	14.2	13.9	14.0
6.4	6.1	5.1	5.3	5.3	5.2	5.5	5.8	5.7
50	43	40	20		20	40	43	50

12.8	12.9	13.1	13.1	13.5
6.9	6.8	6.6	6.6	6.7
40	20		20	40

1967

Couts X-Section

Lt.

Rt.

Rt.

31

No Change in ground from orig. Section → from 1+25 to 2+02.7 = El. Moore - P. 27

		4.68	12.69 - P. 29
Chk. Starting BM		12.67	
0.24	17.35	12.76	17.11
		0.24	

1+59 = NLY end Drive on Lt.

1+47.7 = Beg. A.C. Drive on Lt.

1+25

2.987

22.14	22.51	25.50	25.85
773	736	437	402
72	57	41.5	40
17 Drive	Brk. in Drive	17 Dr.	17 Dr.

23.28	23.55	24.84
649	632	503
67	49	40
10 Dr.	Brk. in Dr.	on Drive

21.2	21.8	22.2	22.7	22.3	21.3	21.1	21.3
87	81	76	72	76	86	88	86
40	20		20	29	33	40	50

2.987

Re Cross Section - Portion Hancock St.
Between Bondini's & Witherby
original sections P. 22-24

INDEXED

OCT 7 1949

W.K.

3701 25 = E.L. Coats

notes reduced
McClannan
10-7-49

2+50

2+00

1+50

1+00

468 17.37

12.69

Lt.

£

Rt.

32

10.3	10.3	10.7	11.3	12.6	13.5	13.6
7.1 50	7.1 37.5	6.7 20	6.1	4.8 20	3.9 37.5	3.8 50
9.8	10.4	10.9	11.9	12.5	13.3	13.7
7.6 50	7.2 37.5	6.5 20	5.5	4.9 15	4.1 17	3.7 37.5
10.3	10.8	12.1	12.7	13.1	14.4	14.8
7.1 50	6.6 37.5	5.3 20	4.7	4.3 17	3.0 19	2.8 37.5
11.3	11.9	12.9	13.8	14.0	14.8	15.7
6.1 50	5.5 37.5	4.5 20	3.6	3.4 18	2.6 20	1.7 37.5
11.8	13.0	14.1	14.2	15.1	16.1	17.9
5.6 50	4.4 37.5	3.3 20	2.5	2.3 18	1.07 22	1.05 30
			17.37			1.07 37.5
B.M. Man P. 29						

Hancock St.

T.P. 0.00 7.71 266 7.71

Other sections Ahead Same as p. 24

3+00

2+50

2+14 = West end Lumber Shed on Rt.

2+00

1+56 = West end Bld. S. Car Garage & Loading Platform
17.37

Lt.

L.

Rt.

34

10.5	10.7	10.5	10.8	11.2	11.6	12.0
6.9	7.0	6.9	6.6	6.2	5.8	5.4
50	37.5	20		20	37.5	50
10.9	10.7	10.7	11.0	11.1	12.1	12.2
6.5	6.7	6.7	6.4	6.3	5.3	5.2
50	37.5	20		20	28	37.5
						12.6
						4.8
						37.2
						Ground
						13.07
						4.30
						37.2
						Proposed
						Conc. Floor
11.3	10.9	10.7	11.1	11.7	12.7	13.08
6.1	6.5	6.7	6.9	5.7	4.7	4.29
50	37.5	20		20	37.2	37.2
						Proposed
						at Bld.
						Conc. Floor
						17.37

Walker E. Profile Levels - Proposed Drain
 Johnson on Cuts - from Kurtz
 Crawford to Moore St.
 10-6-49 20581

Cont. p. 36

2100	INDEXED	4.8	10 ⁵⁸
1750		6.9	9 ³⁸
1726	OCT 7 1949	5.1	10 ²⁸
1710 W Rail		5.20	10 ¹⁸
1704 = W Rail		5.13	10 ²⁵
1700		5.5	9 ⁸⁸
+83.78 = W Rail		5.20	10 ¹⁸
+77		6.2	9 ¹⁸
+74		5.0	10 ³⁸
+63 W Rail		4.52	10 ⁸⁶
+48.46 = W Rail		4.47	10 ²¹
+46		5.1	10 ²⁸
+38		7.3	8 ⁰⁸
+29.33 W Rail		6.68	8 ²⁰
0122		7.8	7 ⁵⁸

TR 767 18.38 0.00 771

07.00 on Hub

771 from p. 34

Lt. Lt. Rt. 35

-1.32	1.33	3.83	1.09	-2.55
9.10	6.38	3.88	6.67	10.26
319.3 Lt.	319.3 Lt.	on Hub.	Grading	Flow/line
Flow	Lt		360 ft	360 ft
Box Culvert	Top Box Culvert	7.71	Grading	below
				Got in
				See sketch
				p. 36

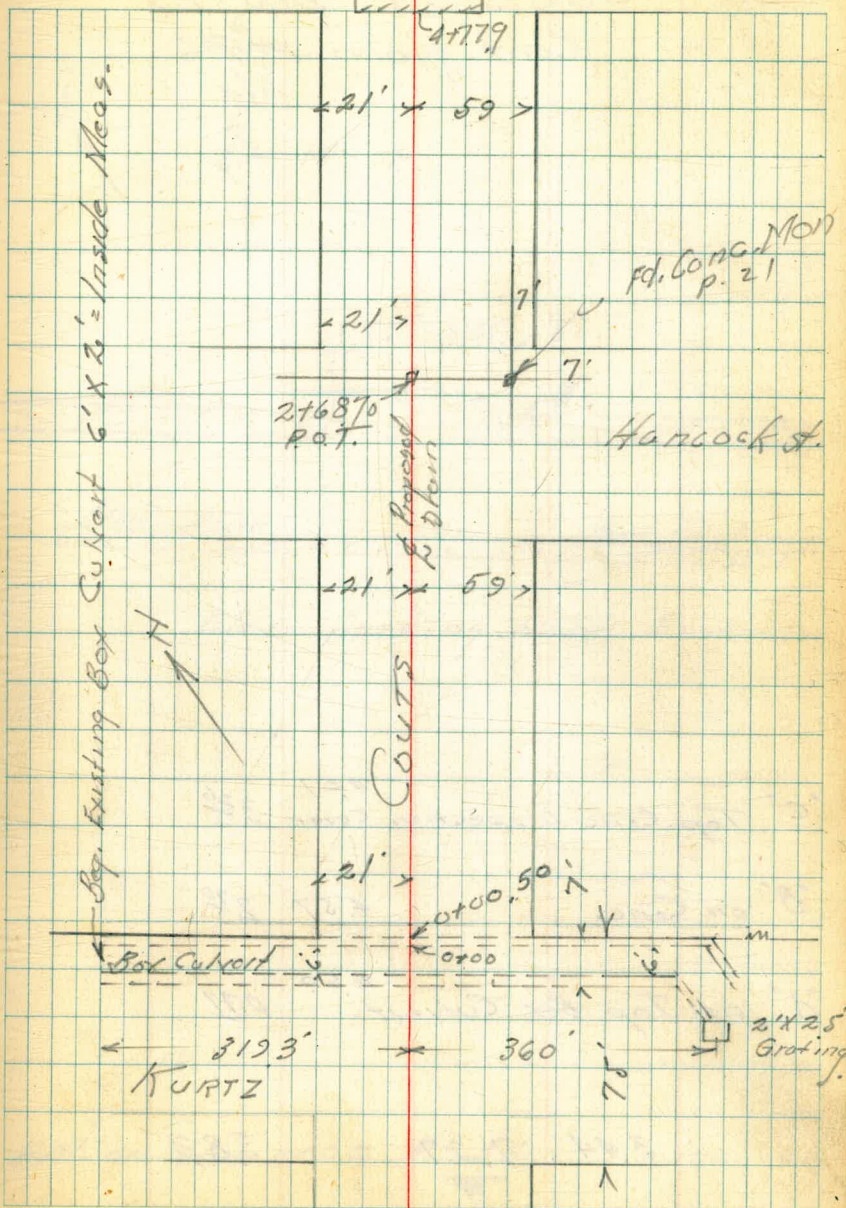
Proposed Drain - Courts St.

See p. 37
Location of inlet at Courts

chk Top cb 2102.7 on W p. 27	5.62	32.02	32.02
4198.6	5.77	31.87	
4177.9 = S edge Pot.	5.61	32.03	
4162	6.5	31.4	
4150	7.9	29.74	
TP 11.62 37.64	0.56	36.02	
4124	1.7	24.88	
4100	4.8	21.78	
3150	8.7	17.88	
TP 12.09 26.58	0.89	14.49	
3100	1.0	14.38	
2168.7 on Hub = Pot.	3.08	12.70	
2150	3.5	11.88	

15.38

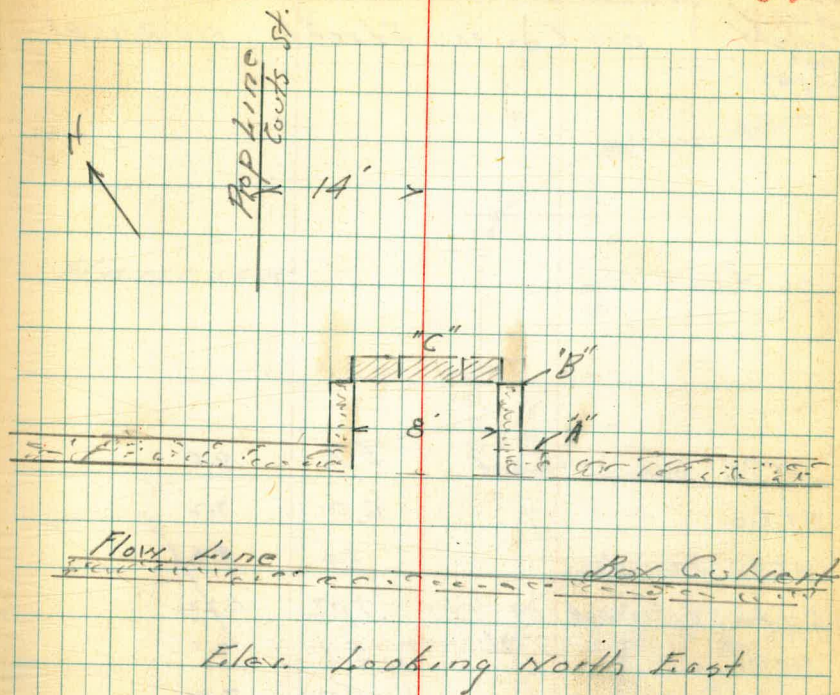
4198.6 Moore St. 36



Costs of Drain
Cont. from P-36

"C" Top Conc. Inspection Cover	4.01	3.26
"B" on Conc.	4.57	2.20
"A" on Top Box Culvert	6.50	0.77
	3.44	7.27
		3.83

37



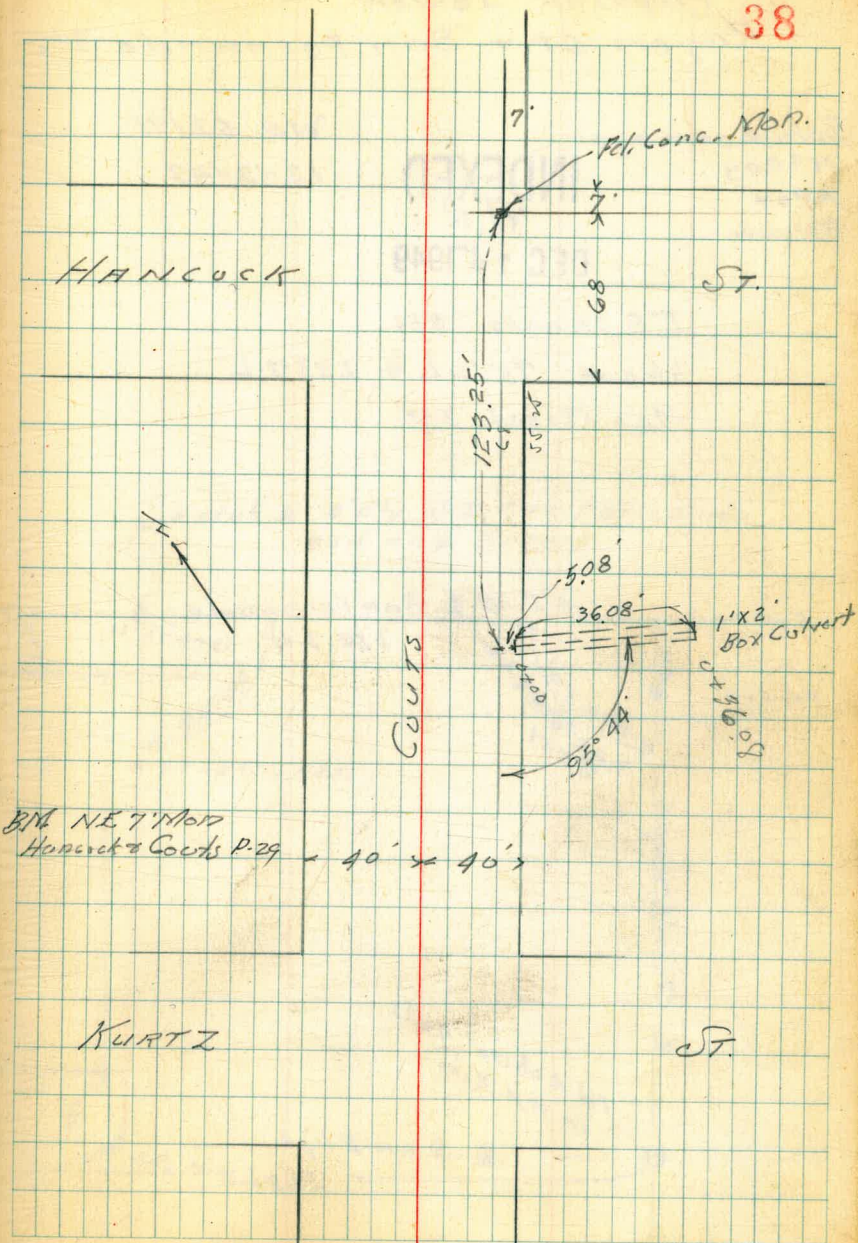
B.M. on Hub 0100 P-35

Walker
 116 Coy
 Crawford
 Popo
 11-1-49

Location Existing Box Culvert
 on Courts Street 11020581

0+96	Natural Ground	5.7	9.5
0+66	" "	6.0	9.2
0+35	Ground	5.4	9.8
0+36.08	Flow Line	7.02	8.22
0+01		5.1	10.1
0+00	Flow Line	7.38	7.86
0-10	in Ditch	7.0	8.2
(0-10)	2' Rt & Lt.	4.8	10.9
	2.55 15.24		12.69

38



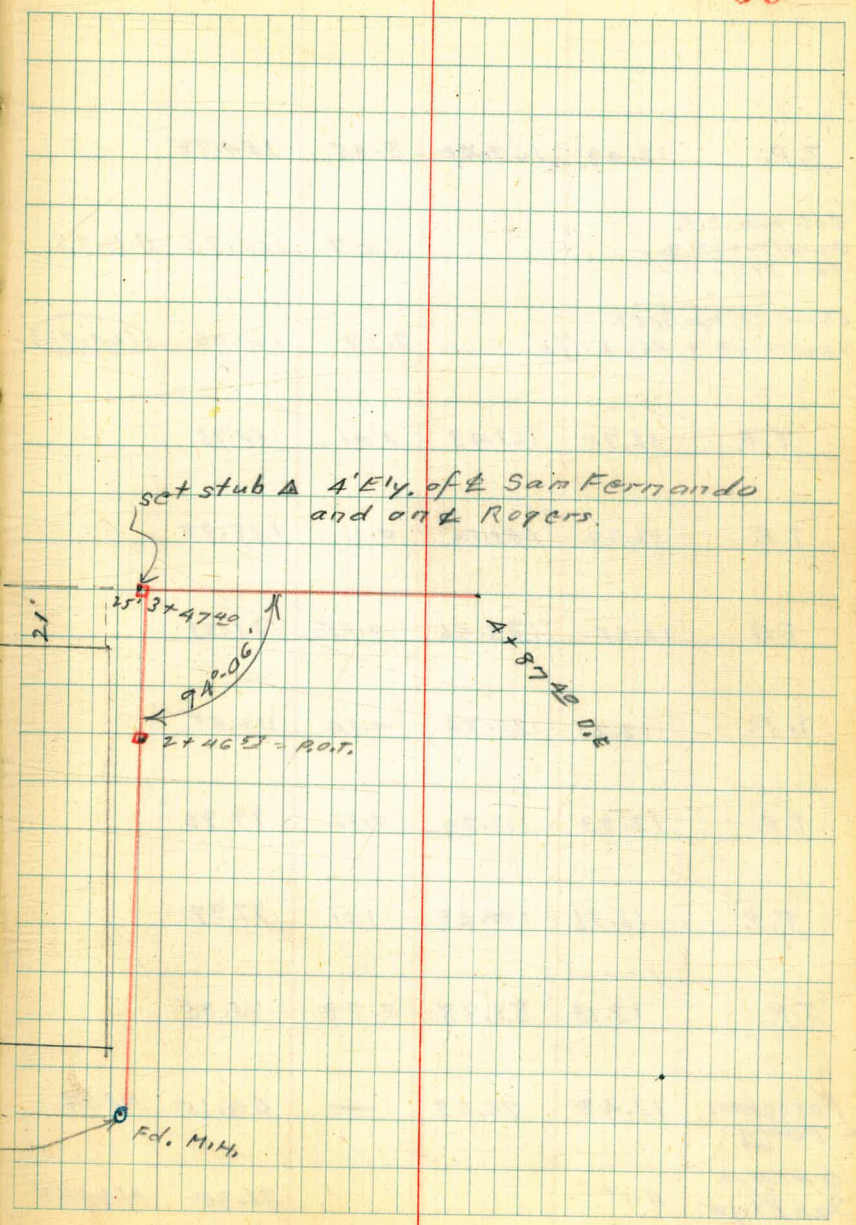
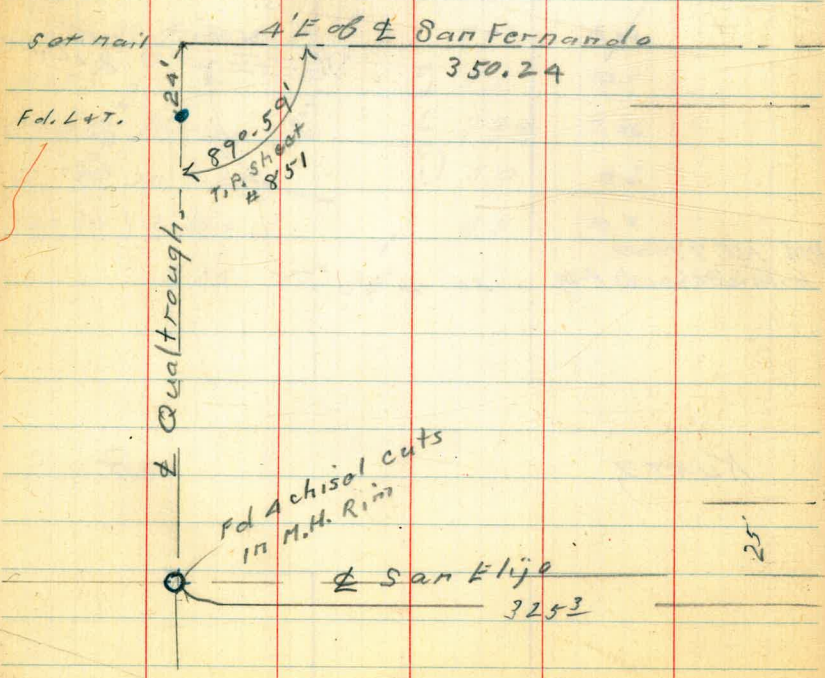
Proposed Sewer
Rogers St + San Fernando St,

Summermeier
McCoy
Allen
Bunch

W.D. 62171
12-12-49

INDEXED
W.K.
DEC 14 1949

T.P. sheets 851
Sheet 7512-L & 2337-L
Map Misel 37



Sewer - Rogers St.

12/14/19

40

T.P.	12.47	167.45	8.45	154.98
------	-------	--------	------	--------

Set. N.W.B.P.
Qualtrough +
San Elijo

			3.07	160.36	B.M.#1
--	--	--	------	--------	--------

Check S.E. Top. Hyd. T.
Qualtrough + San Elijo

			3.37	160.06	(160.02)
--	--	--	------	--------	----------

T.P.	12.70	163.43	0.41	150.73
------	-------	--------	------	--------

T.P.	12.79	151.14	0.11	138.35
------	-------	--------	------	--------

T.P.	12.65	138.46	0.05	125.81
------	-------	--------	------	--------

T.P.	13.21	125.86	0.14	112.65
------	-------	--------	------	--------

T.P.	12.83	112.79	0.32	99.96
------	-------	--------	------	-------

T.P.	12.31	100.28	1.01	87.97
------	-------	--------	------	-------

T.P.	13.13	88.98	0.78	75.85
------	-------	-------	------	-------

Rosecrans + Perry	12.48	76.63	—	64.15	N.E.B.P.
----------------------	-------	-------	---	-------	----------

OWEN A San Elijo	out.			71.30	N.W.B.P.
---------------------	------	--	--	-------	----------

T.P. 12.87 179.81 0.51 166.94

1+03 65' Rt. = S.E. Cor. Conc. block house

1+00

+60

+59 1' Lt. = deadman

+50

0+27² 1¹ Rt. = So. Edge pole. P. 698

(This walk in poor cond.)

0+17 End Comb. walk + cl.

0+12 No. 0.3 Rt. = End N.+S. cl.

line Rogers.

0+00 = ctr. M.H. \neq San Elijo + Approx. Sly

167.45

162.6 160.1 165.4 166.1 160.0 160.0

4.9 6.4 2.1 1.4 7.5 7.5
 12 18 38 65 85
 Cond. Floor
 at house

162.3 160.8 166.0
 5.2 6.7 2.5
 11
 Too
 steps Traveled
 Road.

156.8

10.7

Grd. on Lt. is higher
 than ±

156.3

11.2

156.6

10.9

155.98

11.47

156.1

156.1

11.4

11.4

02

155.57

147.39

11.88

30.00

Rim

A.E.

167.45

House.
of new 4" Lateral from
2+54 37' Lt. = end of present Const.

2+45 Top. of Fill

2+36 14' Lt. = End ditch being dug for
sewer lateral.
Lt. of $\frac{1}{2}$.

2+29 start of new fill for Lot on

T.P. 12.17 202.89 1.24 190.72

2+12

2+00

T.P. = Nail in
pole # 93595H (1+7A) 12.38 191.96 0.23 179.58 B.M. #2

1+75 56' Rt. = End house (Cor. garage)

1+7A 7' Lt. = Nly. edge pole # 93595H

1+50 59' Rt. = general sly. line of house

179.81

196.03 1979 199.8
6.86 5.0 5.1
37 37
Existing Ord
New lateral.

198.2 198.8 198.8 196.7 195.3
4.7 4.1 4.1 6.2 7.6
25 2 8 50
Top Top
Fill Fill

198.6 198.1 191.6 191.1
4.3 4.8 11.3 11.8
25 17 25
Top of Top
Fill Fill

202.89

186.8 184.4
5.2 7.6
50

183.7
8.3

191.96

176.2 175.7 167.8 168.8
3.6 4.1 12.0 11.0
25 29 56
Ord. + Floor

170.2 170.0 167.5 169.1
7.6 7.8 12.3 10.7
22 23 59

179.81

Floor level
Top deck

Set B.M. on L+T.

± equal trough

5'E of Fly line San Fernando

5.26 197.78 B.M. #3

T.P. 3.51 203.04 9.50 199.53

A+87± Dead end

A+50

A+00

3+47± Δ 85°-54' Rt.

3+35

T.P. 6.62 209.03 0.48 202.41

3+00

2+70

202.89

203.1	198.9	194.9	182.0
5.9	<u>10.1</u>	<u>14.1</u>	<u>27.0</u>
	50	75	110

←
↓
203.2
5.8

gch. on left is
higher than ±

203.6	202.2	195.6
5.4	<u>6.8</u>	<u>13.4</u>
	50	90

200.2 204.32
8.8 4.71
100
Along ±
San Fernando.

204.2
4.8
209.03

201.9
1.0

201.3
1.6

202.89

Rogers St

12/15/49

44

T.P.	0.51	66.90	12.55	66.39
T.P.	0.16	78.94	12.89	78.78
San Elijo + Owens. Chisel X in Wly. Co. Rot. N. line Owens			0.32	91.35 B.M. # 4
T.P.	0.37	91.67	13.02	91.30
T.P.	0.26	104.32	12.62	104.06
T.P.	0.27	116.68	12.92	116.44
T.P.	0.50	129.36	12.88	128.86
T.P.	0.43	141.74	12.68	141.31
T.P.	0.34	153.99	13.01	153.65
Check B.M. #1 - P. 40			6.30	160.36 (160.36)
T.P.	1.30	166.66	12.83	165.36
T.P.	0.50	178.19	12.89	177.69
T.P.	0.22	190.58	12.68	190.36
		<u>203.04</u>		

Rogers St.

45

N.E.B.P. Parry + Rosecrans (orig B.M. - P 40)	3.28	$\frac{-0.02}{64.17}$	(64.15)
--	------	-----------------------	---------

T.P.	12.27	67.45	0.68	54.98
------	-------	-------	------	-------

S.E.B.P. Owens + Rosecrans	-	-	7.54	48.12	(48.07)
-------------------------------	---	---	------	-------	---------

T.P.	11.83	55.66	13.07	53.83
		66.90		

CROSS SECTION REED AVE.
from Ingraham to Gresham

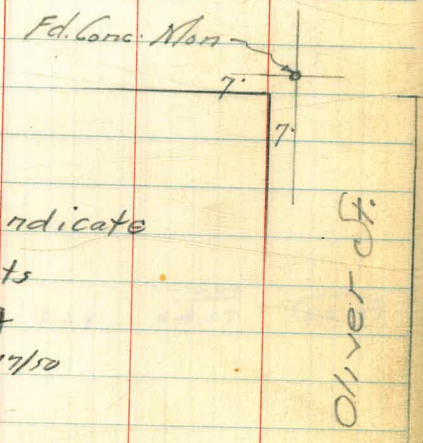
Walker
F. Gregory
G. Pope
K. Sisson

NO 25020

1-16-50

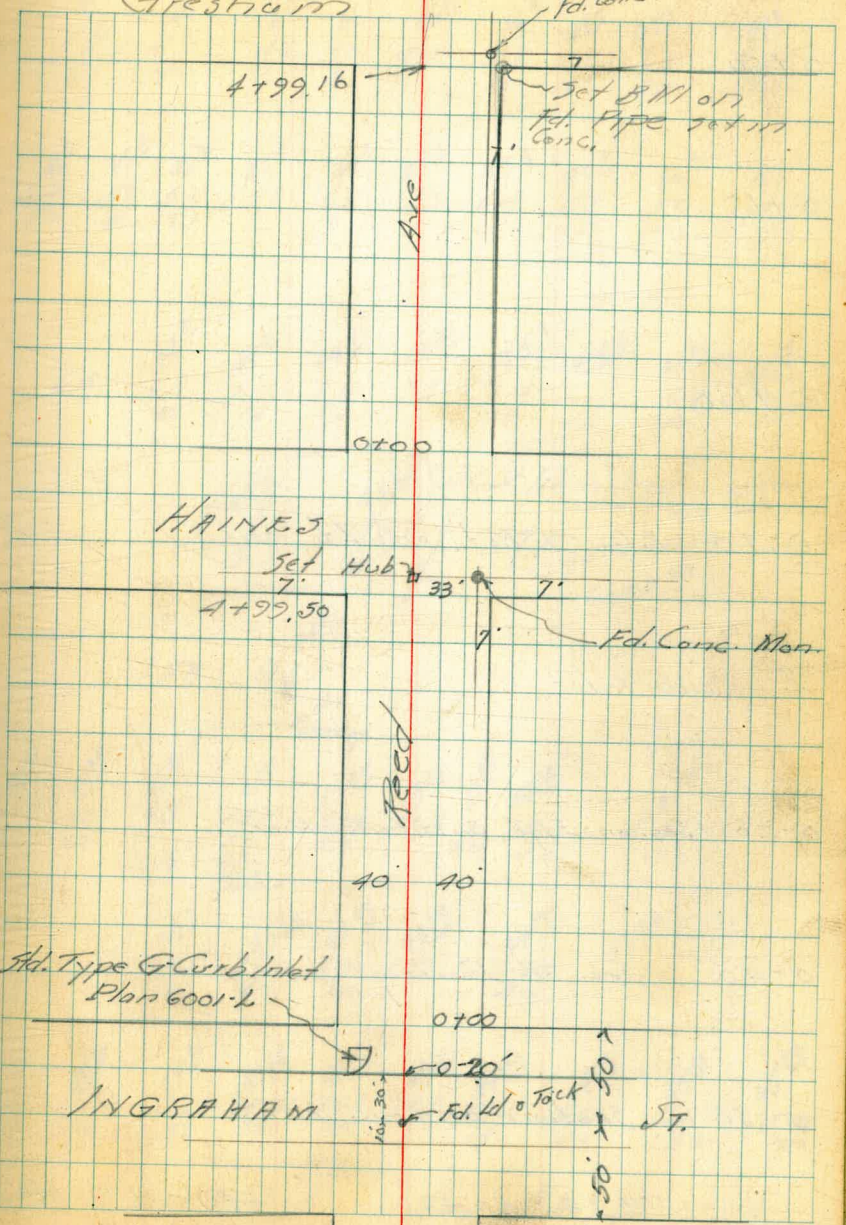
INDEXED
W.K.
JAN 17 1950

Note:
Stations in red indicate
new improvements
see pages 62+64
C.H.S. 10/17/50



over of.

Gresham



Reed Ave - Cross Sections

0+50

0+15

0+00

0-10 = E.C. Cb Ret. on Lt.

↳ Curb Inlet

0-20 = Sec. on Edge Trust, Conc. Pav.

0-40 Sec. on Paving

0-50 Section on Conc. Pav.

7.43

51.58

44.15

Lt.

46 ^{1/2} 4.9 50	46 ¹ 4.9 40	47 ^{1/2} 4.2 11	46 ^{1/2} 5.0 8	46 ^{3/4} 4.8 14	46 ^{3/4} 4.8 16	47 ³ 4.3 16	47 ² 3.7 40	47 ^{1/2} 3.8 50
--------------------------------	------------------------------	--------------------------------	-------------------------------	--------------------------------	--------------------------------	------------------------------	------------------------------	--------------------------------

46 ^{3/4} 5.4 50	45 ^{3/4} 5.8 40	46 ^{3/4} 5.4 21	45 ^{3/4} 5.8 10	45 ¹ 6.5 9	45 ³ 6.3 15	45 ³ 6.4 18	45 ² 5.7 18	46 ^{1/2} 5.0 40	47 ^{1/2} 4.5 50
--------------------------------	--------------------------------	--------------------------------	--------------------------------	-----------------------------	------------------------------	------------------------------	------------------------------	--------------------------------	--------------------------------

6.8	44 ^{3/4} 6.8 40	44 ^{1/2} 7.0 14	44 ³ 7.3 10	44 ³ 7.3 15	44 ⁶ 7.0 18	45 ¹ 6.5 18	45 ² 6.4 40	45 ² 5.9 50
-----	--------------------------------	--------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------

Removed storm
drain, New Drain
... gutter above
curb??

7.58
837
↳ inlet
on Grooving

44 ^{1/2} 7.7 100	43 ^{1/2} 8.27 40	43 ^{3/4} 7.62 30 Top 6 E.C.	43 ^{1/2} 8.37 30 E.C. inlet	43 ^{3/4} 8.34 23	43 ^{5/8} 8.03 20	44 ^{1/8} 7.40 40	45 ¹⁰ 6.48 100
---------------------------------	---------------------------------	--	--	---------------------------------	---------------------------------	---------------------------------	---------------------------------

45 ¹¹ 6.47 100	43 ^{3/4} 7.66 40	43 ^{6/8} 7.96 20	43 ^{3/4} 7.59 40	44 ^{3/4} 6.74 40	45 ^{6/2} 5.26 100
---------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------------	----------------------------------

45 ³⁰ 6.28 100	44 ^{1/2} 7.27 50	43 ^{3/4} 7.63 30	43 ^{5/8} 7.13 20	44 ⁵ 7.43 18	44 ^{1/2} 7.12 40	44 ^{3/2} 6.61 40	45 ¹¹ 6.47 50	45 ²² 5.86 100
---------------------------------	---------------------------------	---------------------------------	---------------------------------	-------------------------------	---------------------------------	---------------------------------	--------------------------------	---------------------------------

Reed +
S.M. & Ldy Task Ingraham F.B. 1590-58
51.58

Reed Ave - Cross Sections

TP 504 5307 3.55 48.03

~~2+32~~ + 2 + 43 RT

2+35 = 4.3' Conc. Walk on Lt

2+34 RT

2+18 = 4.3' Conc. Walk on Lt

1+83 RT

(1+76) 3.5' Conc. Walk on Lt
Not taken in order but OK

2+00

1+69 RT

1+60 RT

1+50

1+46 RT

1+11 = 4.3' Conc. Walk on Lt

1+00

51.58

0+78 = 4.3' Conc. Walk on Lt

Lt

Rt

RT 48

47²³
3.85
50

47¹³
3.85
40

47²³
3.75
50
on walk

47¹³
3.75
40
on walk

48¹¹
3.47
50
walk

48⁰⁹
3.50
39.7
walk

47 ²³ 3.8 58	47 ¹³ 3.8 40	48 ⁵ 3.1 4	48 ³ 3.3 11	48 ⁸ 2.8	48 ⁵ 3.1 10	47 ⁹ 3.7 12	48 ⁷ 2.9 14	48 ⁶ 3.0 40	48 ⁰ 2.8 50
-------------------------------	-------------------------------	-----------------------------	------------------------------	------------------------	------------------------------	------------------------------	------------------------------	------------------------------	------------------------------

48 ² 3.4 50	48 ³ 3.3 40	48 ⁴ 3.2 14	48 ³ 3.3 11	48 ² 2.7	48 ⁴ 3.2 12	48 ⁸ 2.8 15	49 ¹ 2.5 40	49 ² 2.1 50
------------------------------	------------------------------	------------------------------	------------------------------	------------------------	------------------------------	------------------------------	------------------------------	------------------------------

48⁵
3.53
50
on walk

47²¹
3.67
40.2
on walk

47 ⁶ 4.0 50	47 ⁶ 4.0 40	48 ¹ 3.5 13	47 ⁶ 3.8 10	48 ³ 3.4	48 ¹ 3.5 12	48 ⁸ 2.8 21	48 ⁵ 3.1 40	48 ⁸ 2.8 50
------------------------------	------------------------------	------------------------------	------------------------------	------------------------	------------------------------	------------------------------	------------------------------	------------------------------

47¹⁵
4.43
50
on walk

47²³
4.25
40.2
walk.

51.58

Reed Ave - Cross Sections

4+36 = Reg. Conc. Drive on Rt

4+00

3+50

3+00.5 to 3+49.5 = Conc. Tile Wall

3+00.5 to 3+50

3+00

2+94

2+85 = Reg. Conc. Drive

~~2+70 on Rt.~~

2+71 = 40' Conc. Walk

2+70 Rt

2+50

5307

Lt. 2 Rt 49

						48 ¹ 490 40.7	48 ²⁰ 467		
47 ¹ 50	47 ² 40	47 ³ 31	46 ⁸ 15	46 ⁴ 13	46 ² 6.2	46 ⁸ 21	47 ³ 23	47 ³ 40	47 ² 50
	46 ⁹ 50	47 ¹ 40	46 ⁸ 15	46 ³ 13	47 ² 6.1	46 ⁸ 14	47 ³ 18	47 ³ 40	47 ³ 50
	47 ² 52.5 39.8			47 ² 51.9 39.8					
				3+00.5 = 51.9 39.8					
47 ² 50	47 ³ 40	47 ³ 16	47 ¹ 15	47 ² 5.7	46 ⁸ 6.3	47 ³ 13	47 ³ 40	47 ³ 50	
	47 ³ 570 50		47 ³ 576 40						
	47 ³ 569 50		47 ³ 575 40						
	47 ³ 552 50		47 ³ 570 40						
54 50	47 ³ 40	47 ² 15	47 ⁶ 13	48 ⁹ 5.1	47 ⁴ 5.7	47 ² 15	48 ² 40	48 ³ 50	

5307

Reed Ave - Cross Sections

5+73 29.5' Rt - Elec. Pole #J.P. 4258

5+68 - 14" Pepper Tree 29.5' Rt

5+53.7 = L. MH

= 0+00 ahead

5+79.5 back

5+39.5
= L. Haines

4+99.5 = E. Line Haines St.

4+77 = 2' 3' Conc. Walk

4+62.5 = End Drive on Rt

4+55 = Beg. Conc. Drive on Rt

4+50

4+44.5

53.07

Lt.

L

Rt.

50

48⁹¹
410
Pim
Sensor MH.

46 ²	47 ²	48 ²	49 ⁵	50 ⁵
6.9	5.4	4.2	3.6	2.6
100	40		40	100

45 ⁹¹	47 ⁶	47 ⁸	48 ⁴	48 ⁵	48 ²	48 ²	50 ²
7.1	5.5	5.3	5.0	4.6	4.7	4.2	2.7
100	50	40	18		22	40	100

48 ⁵⁵	48 ⁹⁵
15.2	4.2
40.3	50
on walk	on walk

48 ³²	48 ⁶⁷
4.75	4.40
40.3	50

48 ³⁴	48 ⁶⁵
4.73	4.42
40.3	50

47 ¹	47 ⁵	47 ²	47 ⁵	47 ²	48 ³	48 ³
6.0	5.6	5.9	5.6	5.7	4.8	4.6
50	40	12		20	40	50

48 ¹⁵	48 ³²
4.92	4.69
40.4	50
on drive	on drive

53.07

Reed Ave - Cross Sections

1+60 = End Conc. Ribbon Drive

1+53 = Beg. Conc. Ribbon Drive 0.2 R

T.P. 0.98 41.06 12.99 40.08

1+50 = End 3' Lath

1+00

0+70

0+35

0+02 10' R 12" Gus. Cap

53.07

0+00 = White Haines Ct.

0+02 = Beg. 39' R - Lath Fence

5+77 = Elec. Pole Arc. Camp # J-4248 42.5 Lt.

Lt.

ft.

40.52

ft.

40.59

0.54
40

0.47
50
DRIVE

40.56

0.50
40
DRIVE

40.59
0.47
50
DRIVE

41.06

41 ^{1/2} 12.1 58	40 ^{3/4} 12.6 40	39 ^{1/2} 13.5 37	40 ^{1/2} 13.1 23	40 ^{1/2} 13.0	40 ⁰ 13.1 21	40 ^{3/8} 13.3 40	39 ^{1/4} 12.4 40	40 ^{1/4} 12.4 50
---------------------------------	---------------------------------	---------------------------------	---------------------------------	---------------------------	-------------------------------	---------------------------------	---------------------------------	---------------------------------

43 ^{3/4} 9.2 50	44 ^{1/2} 9.1 40	43 ^{1/2} 9.6 33	45 ^{1/4} 9.7	43 ^{3/4} 9.3 21	44 ^{3/8} 8.3 40	44 ^{3/8} 8.8 50
--------------------------------	--------------------------------	--------------------------------	--------------------------	--------------------------------	--------------------------------	--------------------------------

45 ^{1/2} 7.9 50	45 ^{1/2} 7.7 40	45 ^{3/8} 7.8	45 ^{3/8} 7.3 23	46 ^{3/8} 6.8 40	47 ^{3/8} 5.9 50
--------------------------------	--------------------------------	--------------------------	--------------------------------	--------------------------------	--------------------------------

46 ^{3/4} 6.6 50	46 ^{1/2} 6.4 40	47 ^{3/8} 5.8	47 ^{1/2} 5.4 30	48 ^{1/2} 4.5 40	48 ^{1/2} 4.2 50
--------------------------------	--------------------------------	--------------------------	--------------------------------	--------------------------------	--------------------------------

48^{1/2}
4.45
10
12" Gus. Cap.

46 ^{3/4} 6.9 100	46 ^{3/8} 6.2 58	47 ^{3/8} 5.9 40	47 ^{3/8} 5.2 26	48 ^{3/8} 4.6	48 ^{3/8} 4.3 24	49 ^{1/4} 4.0 40	49 ^{3/4} 3.8 50	50 ^{1/4} 2.7 100
---------------------------------	--------------------------------	--------------------------------	--------------------------------	--------------------------	--------------------------------	--------------------------------	--------------------------------	---------------------------------

53.07

Reed Ave - Cross Sections

$\frac{0.01}{}$
 NE 7' Holmes Rd 47.98
 Chk. BM. Conc. Man 524 47.99
 T.P. 1269 53.23 0.52 40.54

on Pipe set in Conc.
 Set BM. N.E. Cor. Gresham 791 33.15

4+99.16 - Eline Gresham St

4+94 27' Lt 5" Acacia

4+81 = 4' Conc. Walk

4+88 22.5' Lt - 4" Fire Hydt.

$\frac{4106}{17}$

Lt.

Rt.

Rt.

54

HAVE NO Record of this
 but is Marked on Post Nearby 47.98

31 ⁶ / ₈	32 ⁰ / ₈	31 ⁹ / ₈	31 ² / ₈	32 ⁰ / ₈	32 ⁸ / ₈	33 ⁵ / ₈	33 ² / ₈
25	21	22	29	21	83	791	7.0
50	40	16	12		36	46	50

on Pipe
 in Conc.
 - 1st Cor

32 ⁹⁵ / ₈	33 ²² / ₈
8.11	7.80
40	50

4106

X- Sect. Aurora St. for Grade Est.
50' St. - Not Graded.
See Map 1804 - Sunshine Gardens

4902
W.O. 25020

INDEXED
N.R.
FEB 10 1950

2-9-50

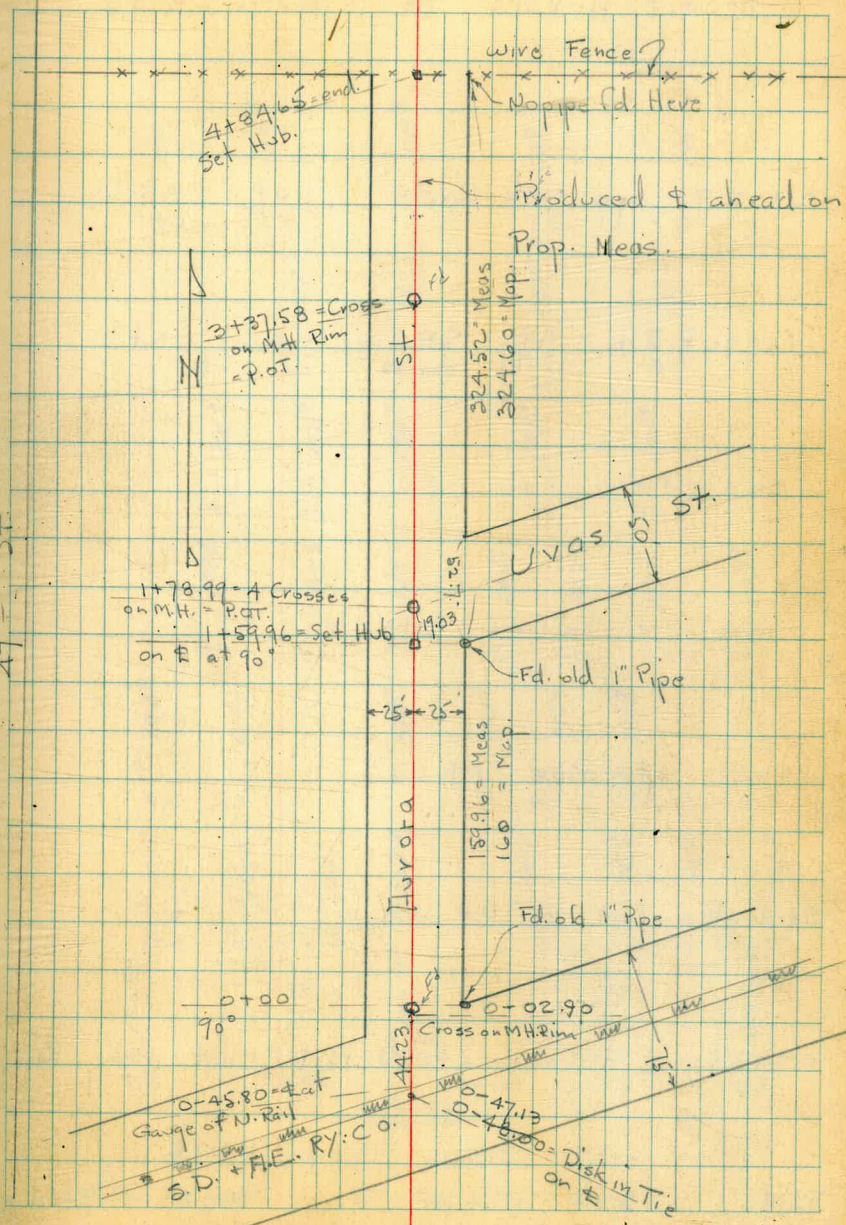
7 Osborne
Hardin
Hatch
Shepard

Levels next page

also Uvas Street

INDEXED
MAY 2 1953

47+5 St



check Starting B.M. 1.39 120.95 - 120.96

Unless Easement is granted thru lot to N.

Note: Uvas St. is the only outlet.

5+10 = Profile Sect.

4+84.65 = end = Hub. on Sub. Line

4+50

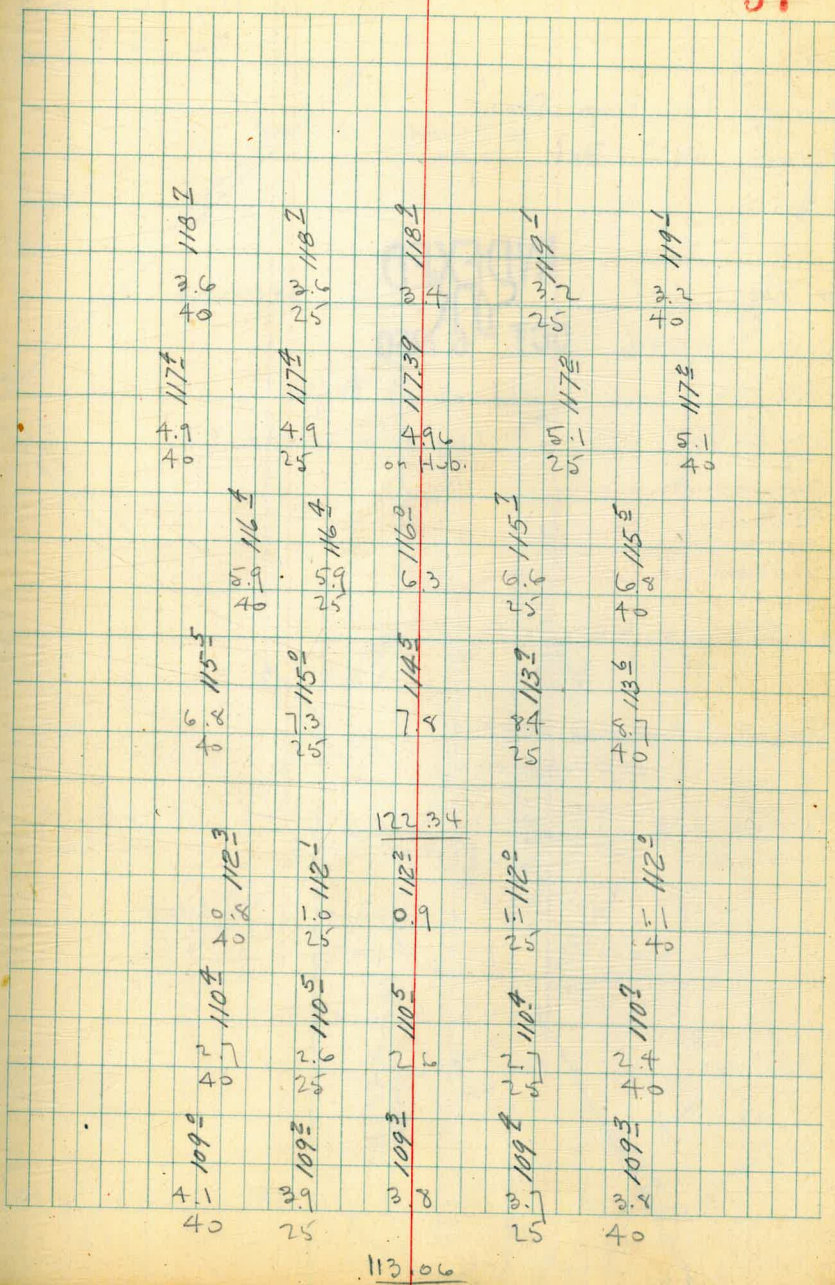
4+00

T.P. 11.08 122.34 1.80 111.26

3+50

3+00

2+50



Survey for Prop Drain
 across 54th Bet. Trojan
 + Orange

4767

W.O. 20682

INDEXED
 S.M.K.
 OCT 6 1950

10-4-50

Osborne
 Hardin
 Hatch
 Hochhead

Ld. + ct. 0.09 West

City Disk 0.16 W

75.18

PI. = Ld. + ct.

75.28

Ld. + ct.

Nly. Line Lot 12
 Map 895 D

3+00 = Stub.

Ld. + ct. = \pm Trojan
 Line from Here to P.I.

Lot 12

Fd. Ld + ct. = \pm Trojan 58

Line

40' 25'

St.

54th

20' strip
 Conc. Pav

SEE P. 64
 FOR TIES

\pm of Water about 2' from
 Edge of Pav

0+59.69 = Cross on \pm (was 84)

0+50.86 = Cross.

\pm of Nly. \pm Exist. 10"
 24" C.I. pipe Sewer

4' of 2
 24" C.I. pipes

Inlet Box
 + 2' x 3'
 Grate

27' apart
 6" Conc.
 Handwell

0+00
 Stub

0+00

46'
 39'

46'

118.5' to New Cross

0.09 W. of Line from P.I. ct.

Fd. Ld. + ct. = PC.
 T.P. Sheet 3661-A

\pm Prop
 Drain

75.18 to P.I. Ld + ct.

Levels along \pm of Prop Drain - See Sketch
P. 58-

0+59.84 = \pm Drain + \pm 54th

M.H. to N. + to S. along 54th - Not Live.
0+50 - 8' Rt. = \pm Sewer M.H. - Note: Stubs in

0+46 = edge Conc Pavc

0+44 - 5' Lt. = \pm of Hole over water pipe

on Headwall
Check Private B.M. = cross 5.82 346.47 346.45 =

54th - for pipe loc. See sketch
0+40.3 - 0.5' Rt. = S.E. Cor. of 8" Headwall - Normal to

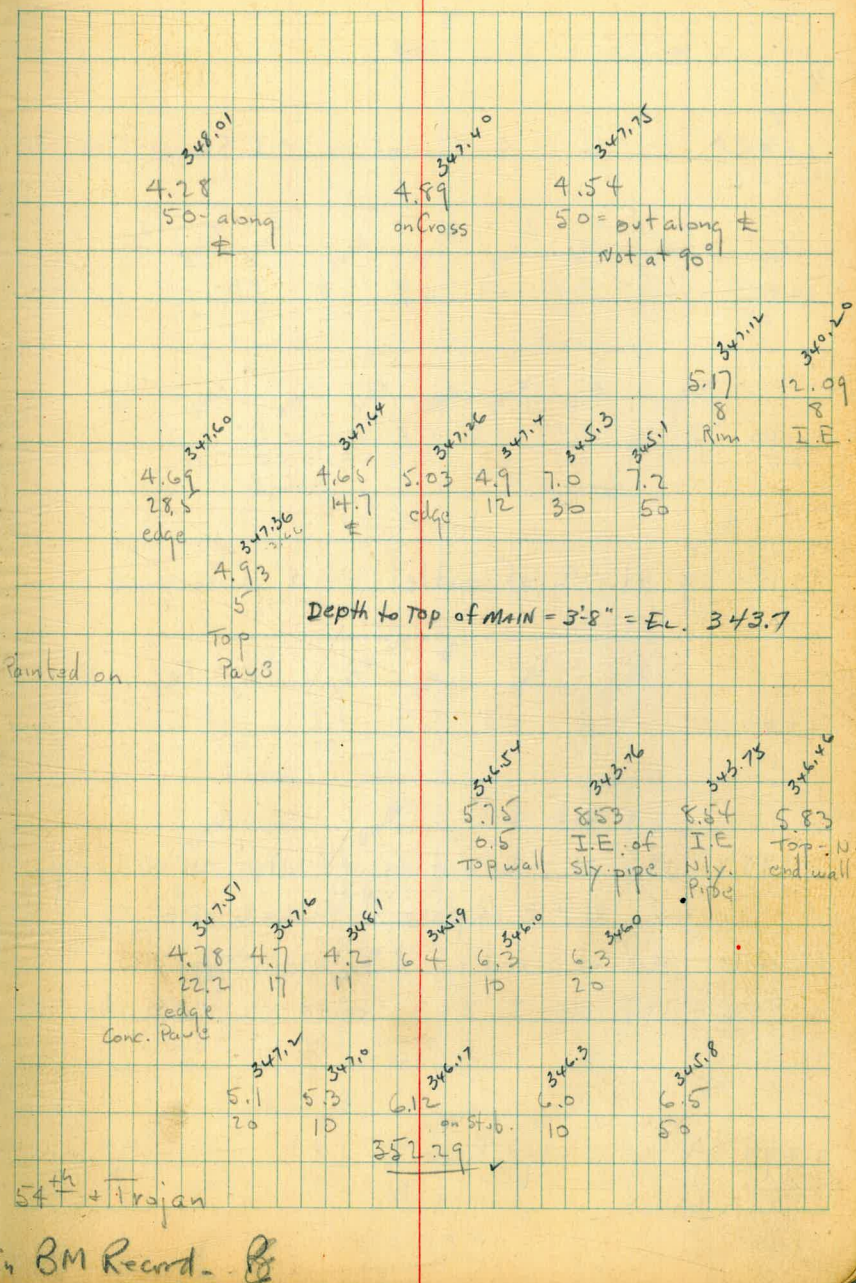
0+25

0+00

B.M. 0.62 352.29

351.67 = \pm Loc. 54th + Trojan

Not in BM Record.



1+53 = \pm Wash from Rt.

1+45 = 5.2 Rt. = \pm Top of 4" C.I. Sewer Clean out.

1+35

1+20

1+15 = 29' Rt. = \pm of outlet of 18" C.I. pipe

1+00

2.3' Bet \pm 's

0+98.2 = 18.5' Lt. = \pm outlet of Nly. 24" C.I. pipe

0+97 = 2.5' Rt. = \pm P. pole # 70406

N. end. = 4.4' at S. end = 5.7' Long. = Box.

0+77.4 = 19.7' Lt. = \pm 2x3' Grate - 2.3' wide at

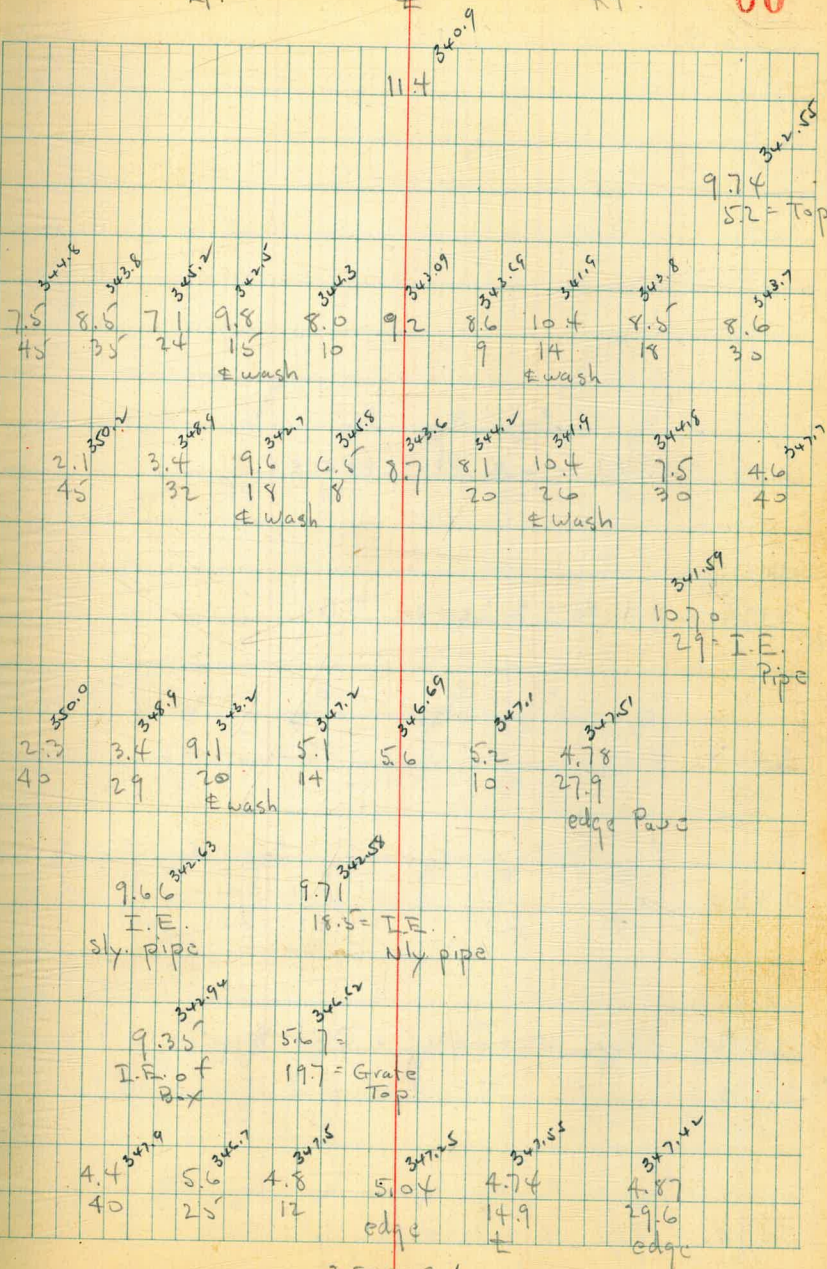
0+73.6 = wly. edge Pavc

Lt.

\pm

Rt.

60



Notes Reduced 10-7-50

3+50 - End. - 5' Rt. = fence

3+24 - 8.8 Rt. = ± Sewer M.H.

3+00

2+50

2+20 - Cross wire fence + 5' Rt. Beg. wire fence

2+10

1+70

10.1	12.3	13.4	13.1	13.0	12.1
50	35	40	40	10	40
340.2	340.0	339.9	339.2	339.3	340.2

340.65
11.64
8.8 Rt

9.8	11.6	12.1	12.01	12.1	12.6
40	25	10	on stab.	10	30
342.5	340.7	340.3	340.25	340.2	339.7

9.2	10.9	11.2	11.0	11.1	11.4
40	25	10	10	10	40
343.1	341.4	341.1	341.3	341.2	340.9

10.3	10.7	10.7	10.9	10.7	11.1	10.4
40	20	10	10	10	25	45
344.0	341.6	341.6	341.4	341.6	341.2	341.9

7.9	10.0	10.0	11.1	10.6	10.0	9.8
40	20	6	3	3	15	30
344.4	342.3	342.3	341.2	341.7	342.3	343.4

± Wash
352.29

Reed - Ingraham to Gresham.

Sommermeyer
B899
Allen10-17-50
W.O.

See Pages 46 to 54 for original notes.

Reed should be cross sectioned for
all torn up, due to construction ofyardage at a later date as it now is
storm drain.T.P. 1.14 52.21 1.50 51.072+34 38³ Rt. = start Conc drive1+83 40³ Rt. = 3' wide Conc. walk1+69 40⁴ Rt. = End Conc. Dr.1+60 40⁴ Rt. = start Conc. drive1+46 40³ Rt. = 4' wide Conc. walk8.42 52.57 44.15

±

62

49.37	48.40	48.88
4.20	4.17	3.69
382	40	57
		Bar.

45.95	44.54
3.62	3.03
408	65

44.25
3.32
403

44.19	50.07
3.38	2.50
403	67
Drive	Bar. floor

44.03	44.92
3.04	2.65
40.3	53
walk	

52.57

B.M. ± L+T. Ingraham + Reed P-47

Reed

2+89- P52
 check walk 39³ Rt' 3.34 35.55 35.52 ^{0.03}

3+13 40' Rt. = end Conc. drive

3+05 40' Rt. = start Conc. drive

T.P. 2.62 38.89 11.31 36.27

2+18 40³ Lt. = end Conc. drive

2+10 40⁴ Lt. = start Conc. drive

T.P. 0.15 47.58 4.78 47.43

0+00 = Wly line Haines (P. 51)

5+39^E = ~~Wly~~ Haines (Page 50)

2+70 45^E Rt. = ~~Wly~~ 3' wide Conc. walk

2+43 38² Rt. = end Conc. drive

34.46
 $\frac{4.41}{40}$ 34.87
 $\frac{4.06}{56}$ 35.06
 $\frac{3.81}{60}$ 35.27
 Car Floor

34.50
 $\frac{4.39}{40}$ 34.89
 $\frac{4.10}{56}$ 35.13
 $\frac{3.76}{60}$ 35.39
 Car Floor

34.46
 $\frac{11.10}{79}$ 35.56
 $\frac{11.31}{404}$ 36.87

36.45
 $\frac{12.10}{59}$ 36.26
 $\frac{11.30}{402}$ 37.56
 Car Floor

47.58

44.59
 $\frac{3.62}{455}$ 45.21
 $\frac{4.65}{52}$ 45.86

45.19
 $\frac{3.92}{387}$ 45.81
 $\frac{3.88}{40}$ 46.29
 $\frac{55}{60}$ 46.84
 Car

52.21

Tie Culvert \pm P. 58

Sommormeyer

2/27/57

X = cut cross in pave

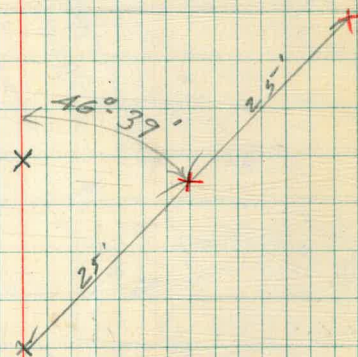
0+59.69 Fd. X in Pave.

0+50.86 Fd X in Pave.

0+00 = stub see p. 58

Ties
(Cont. from P 58)

64



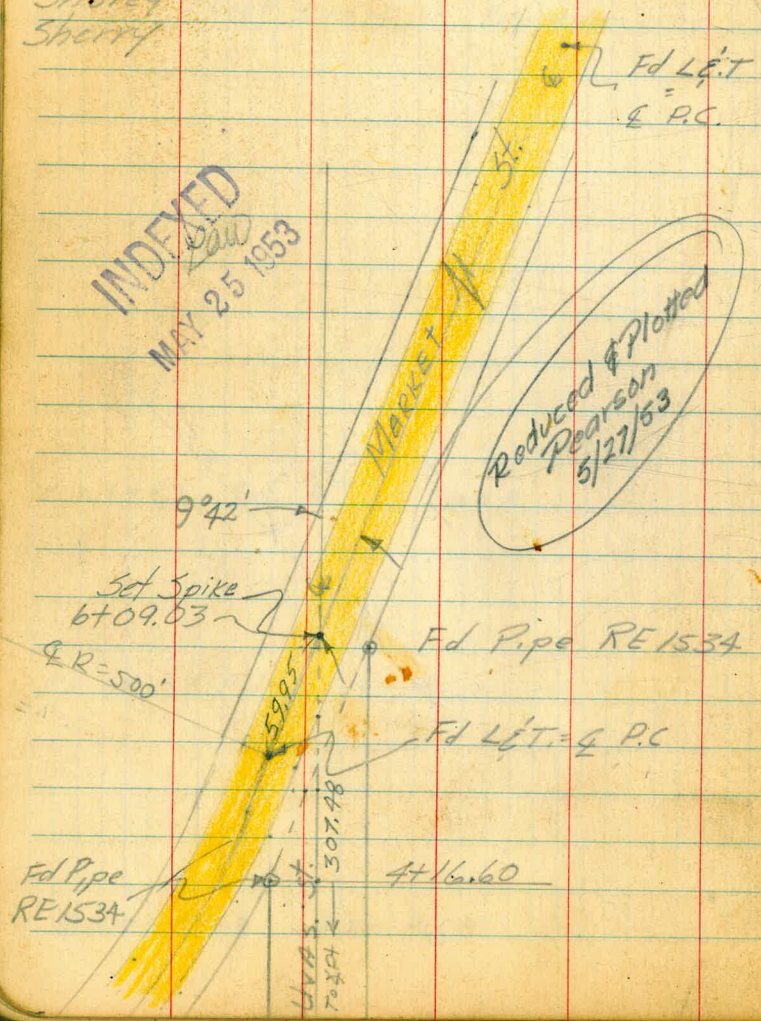
X Sect. UVAS St. for Grade Est.
 50' St. Partially Graded
 See Map. 1804 - Sunshine Gardens
 also closing Street 4-49.

5/21/53
 Hoffman
 Shores
 Sherry

W.O. # 25020

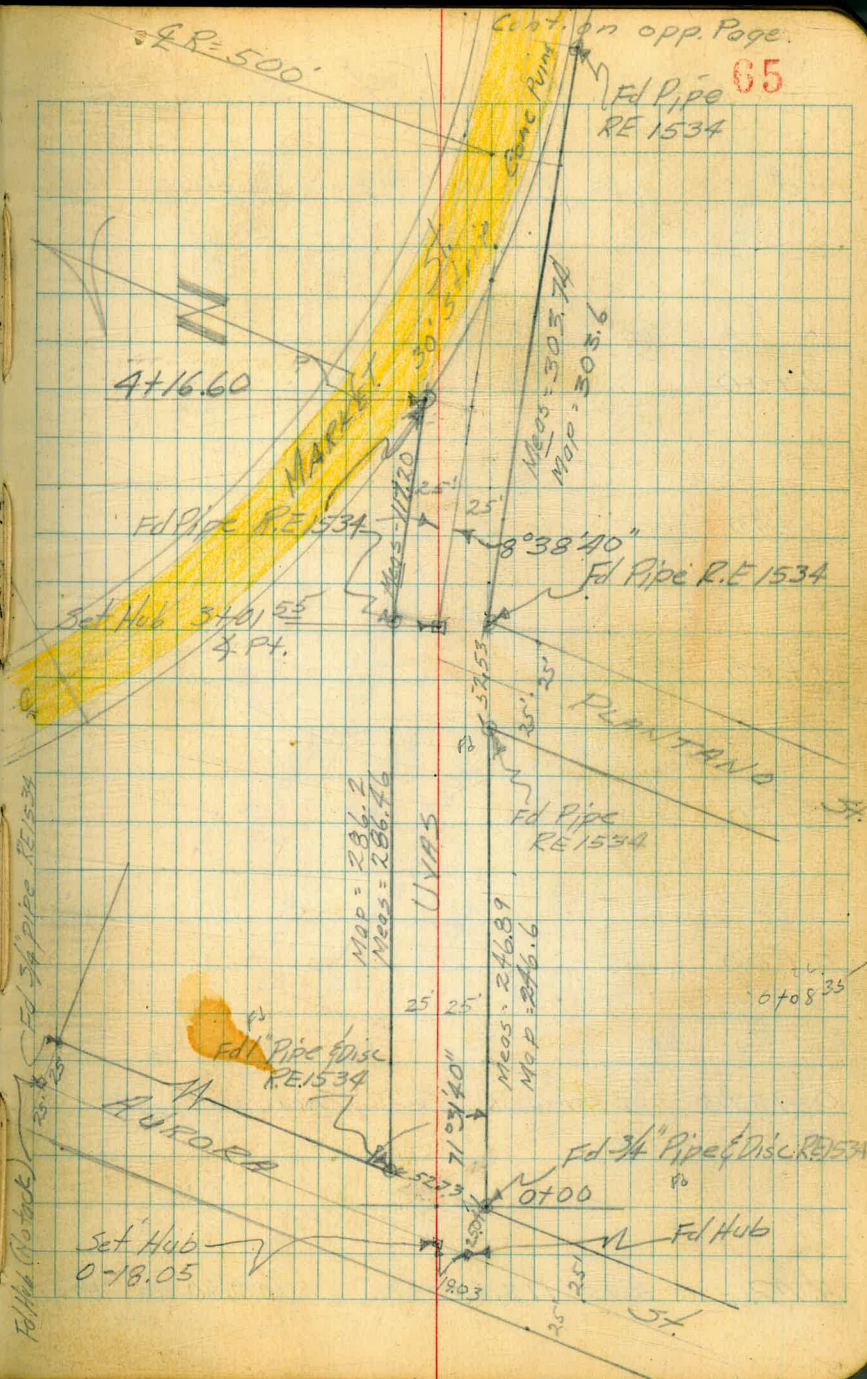
INDEXED
 MAY 25 1953

Reduced & Plotted
 Pearson
 5/27/53



± R. 500'

on opp. Page.
 Fd Pipe RE 1534 **65**



X Sects Uvas St. Sketch P-65

T.P. 11.47 124.79 0.23 113.32

2+50

2+00

1+50

1+00

0+50

0+00

0-18.05 4 Aurora Sec. Taken on Diag.

B.M. 5.95 113.55

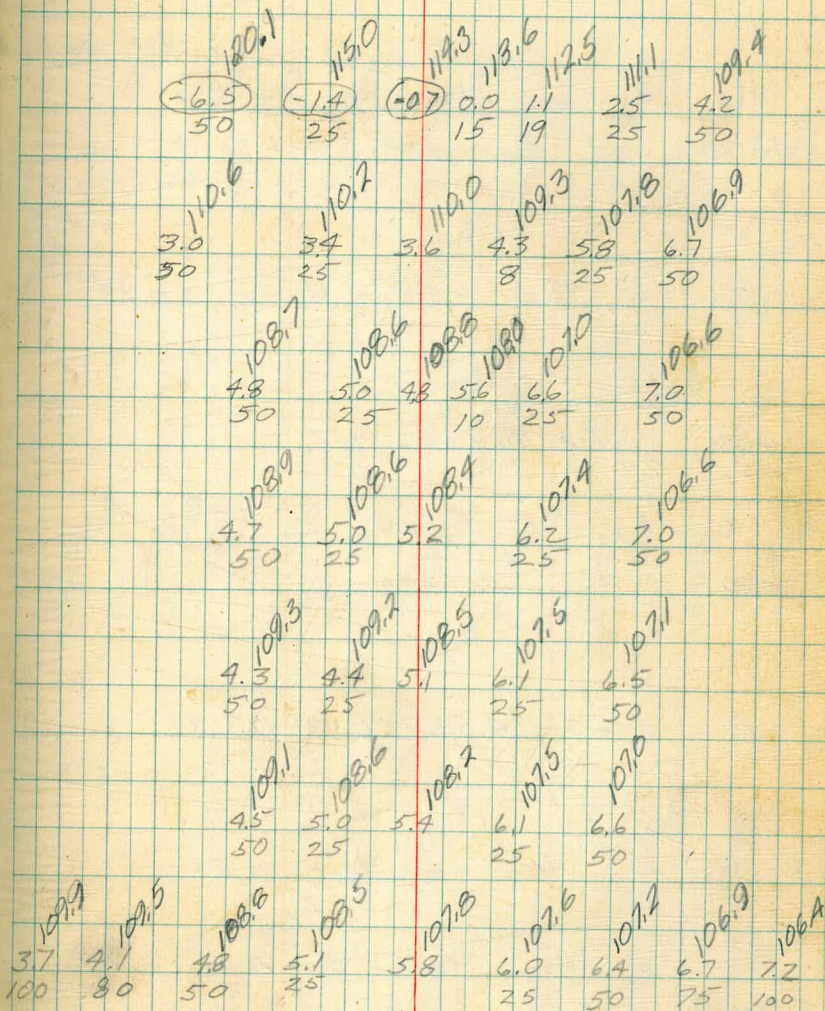
107.60 = H16

66

Lt. = N

Q

Rt. = S.



113.55

S. Line Uvas & Aurora
See Pg-56

X' Sect. Uvas St

Building Not Parallel to
1 Story Building Attached
& Garage Ramp

4+00

3+70

Top of Cut Bank on Rt

3+60

Toe of Cut Bank on Rt.

3+50

T.P.

10.60 134.56 0.83 123.96

3+05

Top cut Bank on Rt

3+01⁵⁵

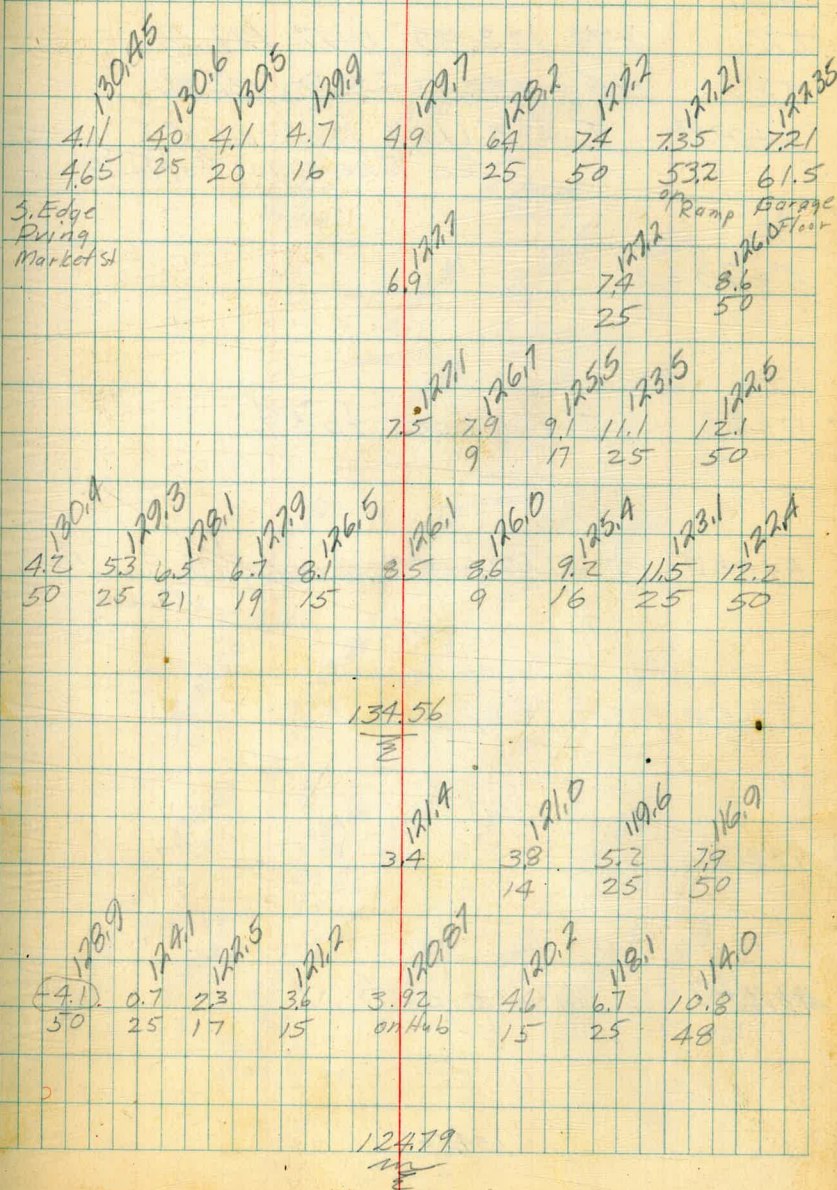
sec taken 90° to Forward Tang.
& Ph (also toe cut Bank on Rt.)

124.79

Lt

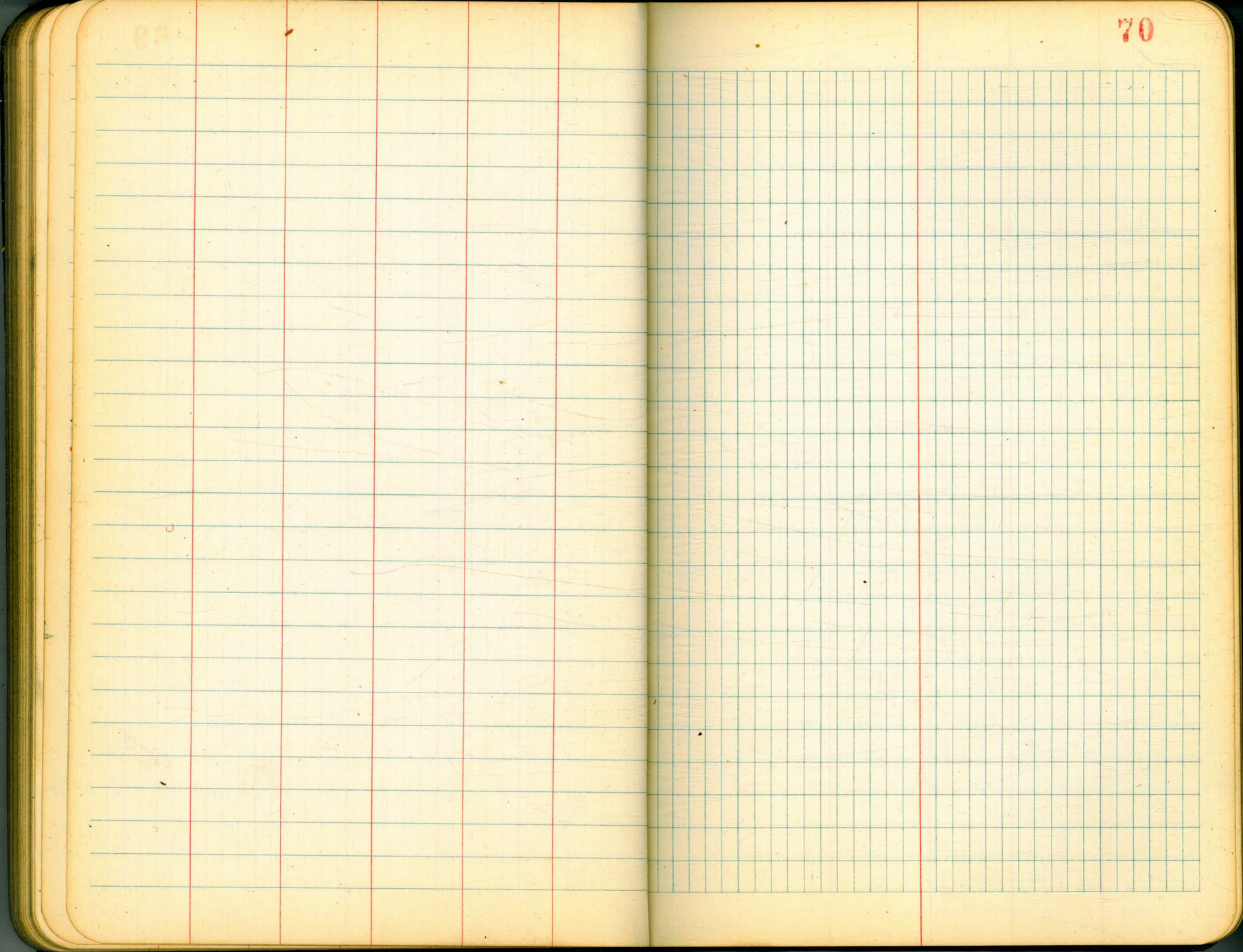
Rt

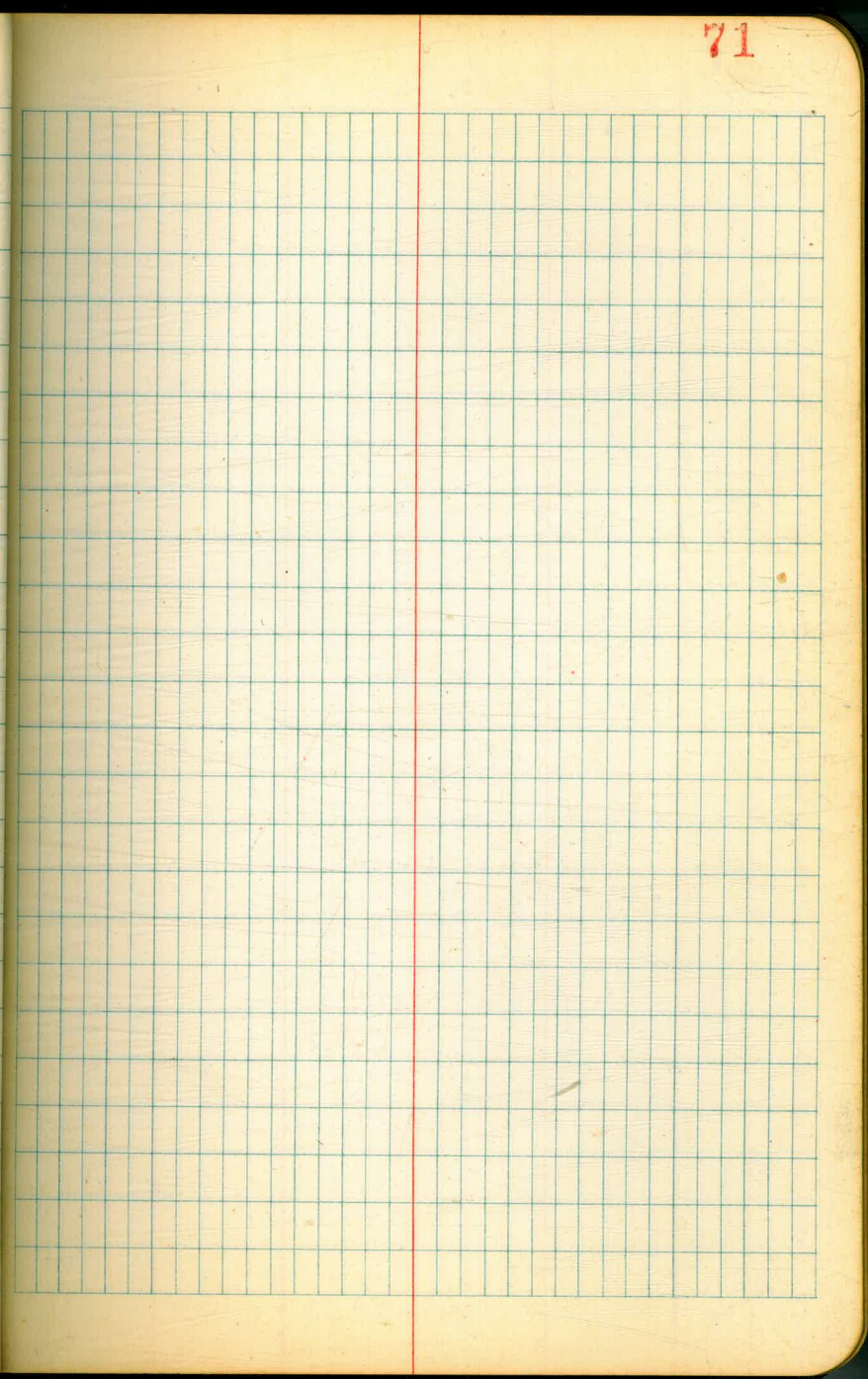
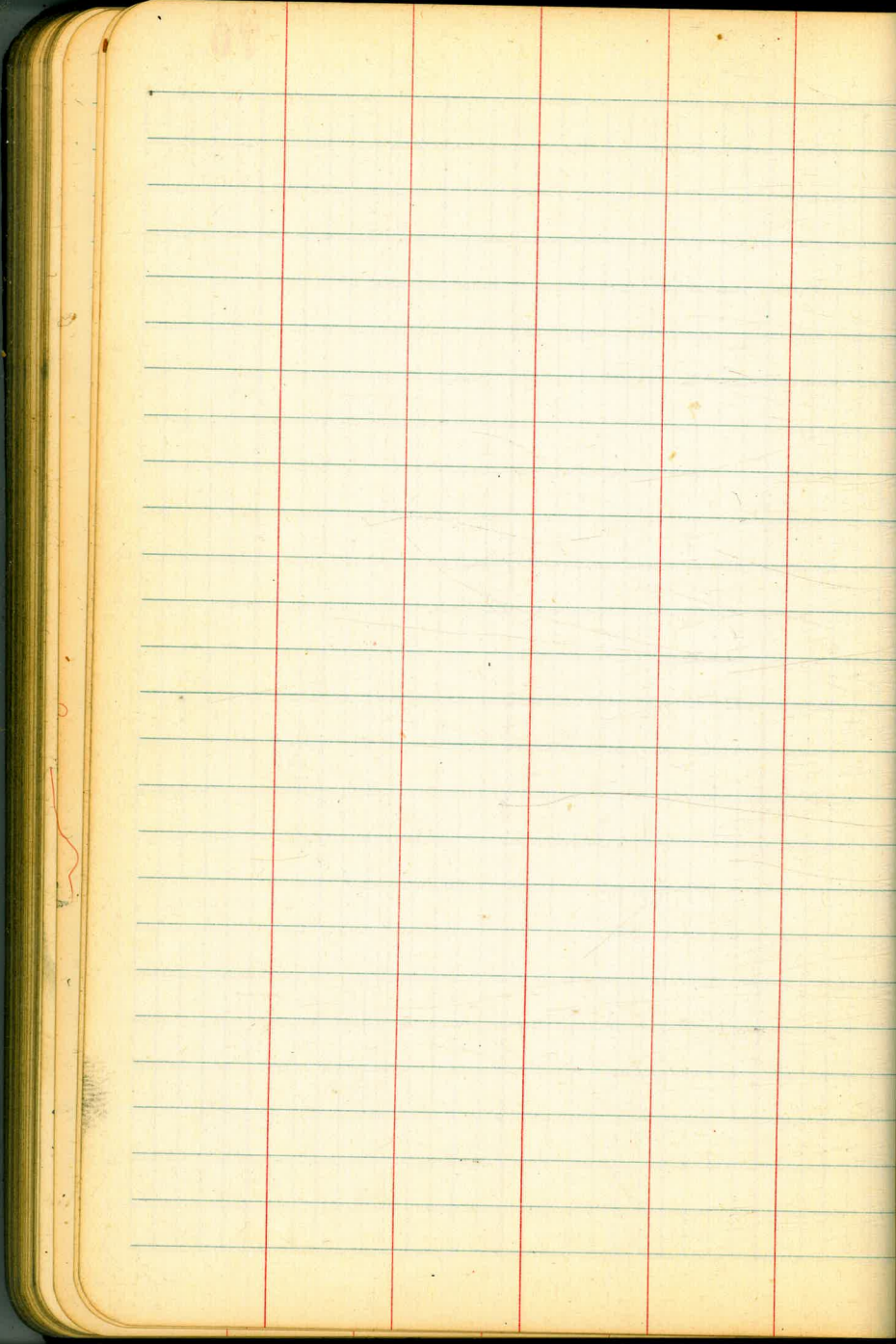
67



A table with 4 columns and 20 rows. The columns are defined by three vertical red lines. The first column is the widest, followed by two narrower columns, and the fourth is the narrowest. The rows are defined by horizontal blue lines.

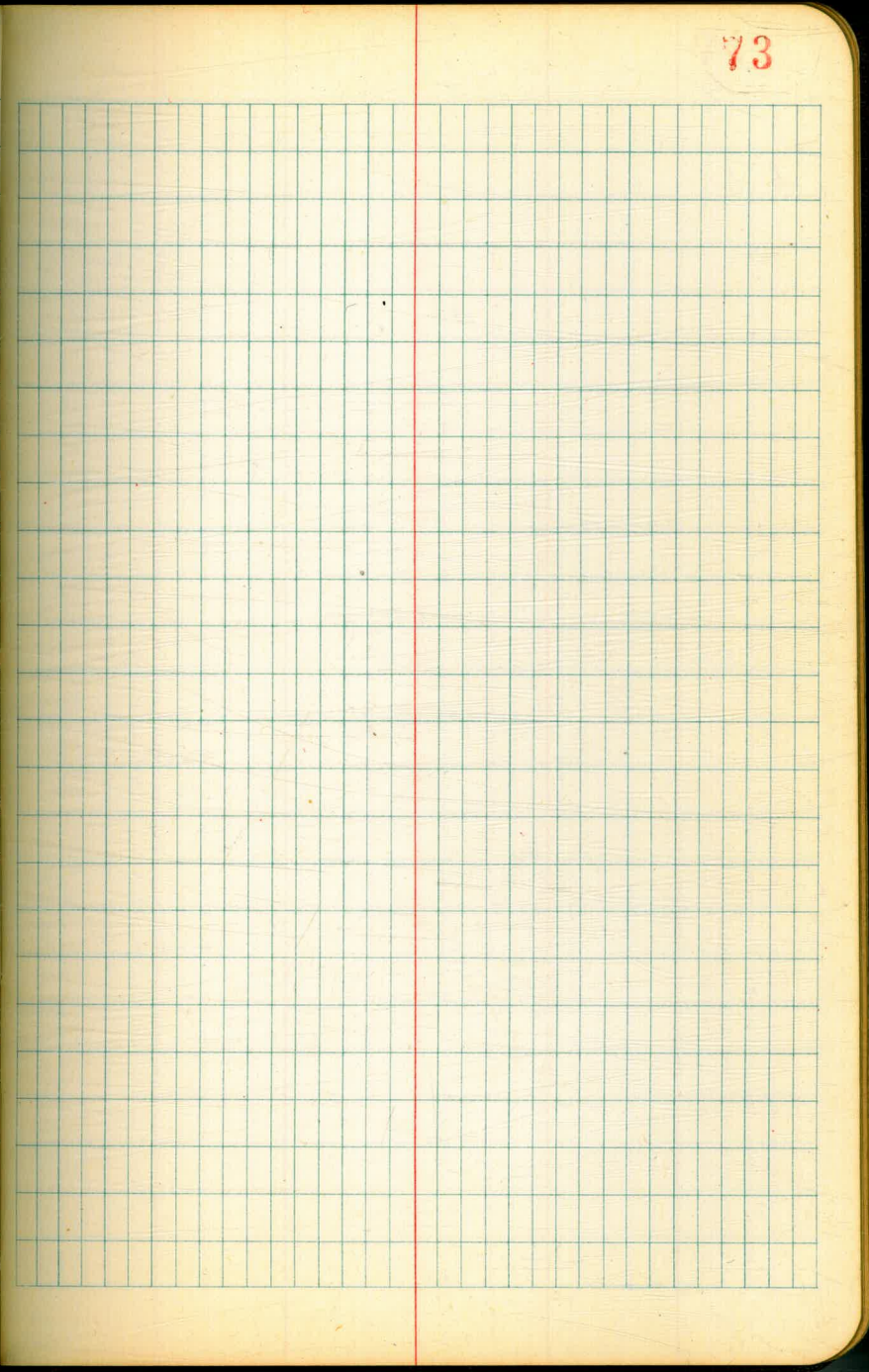
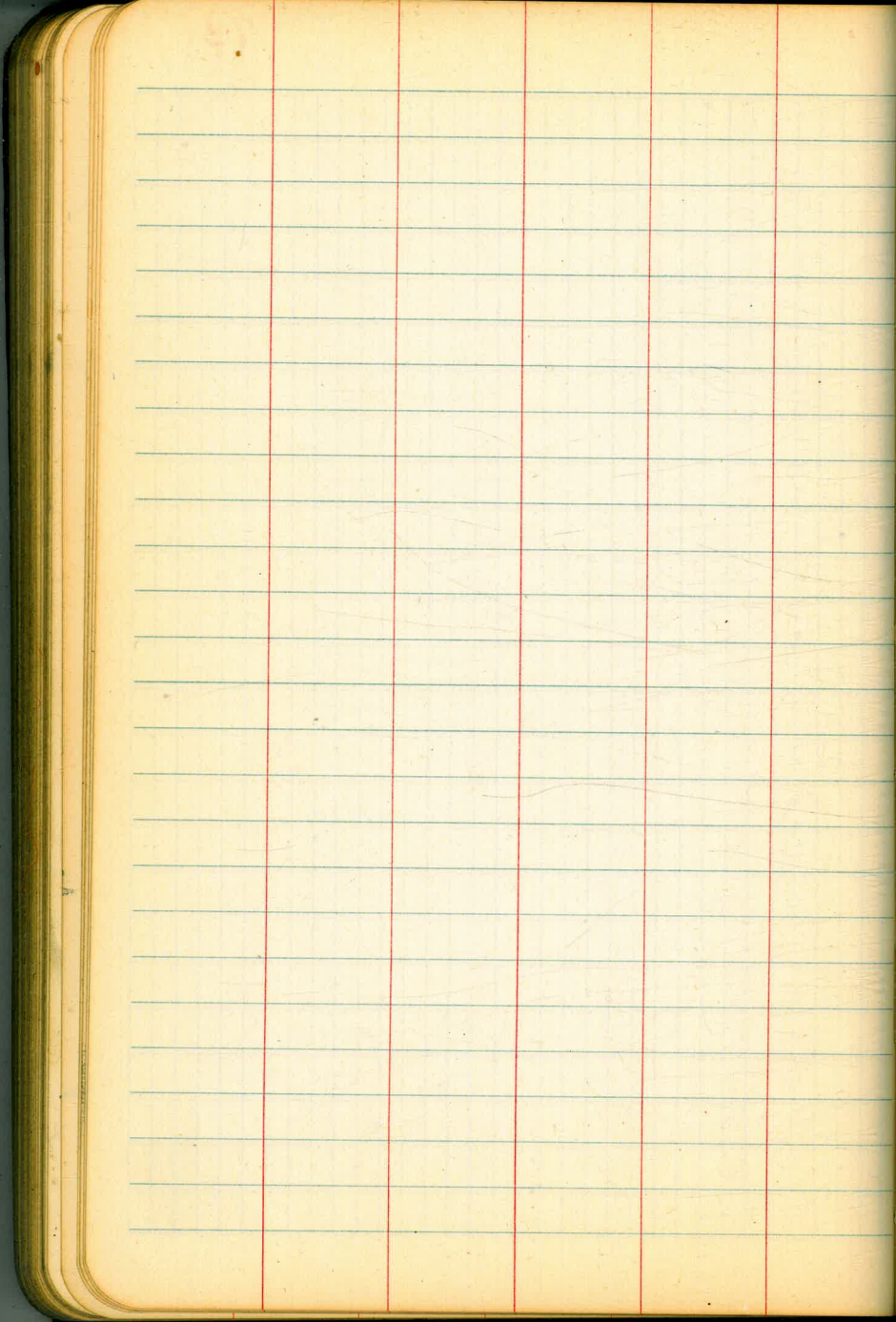
A table with 1 column and 20 rows. The column is defined by a single vertical red line. The rows are defined by horizontal blue lines. The table area is filled with a fine grid of green lines.

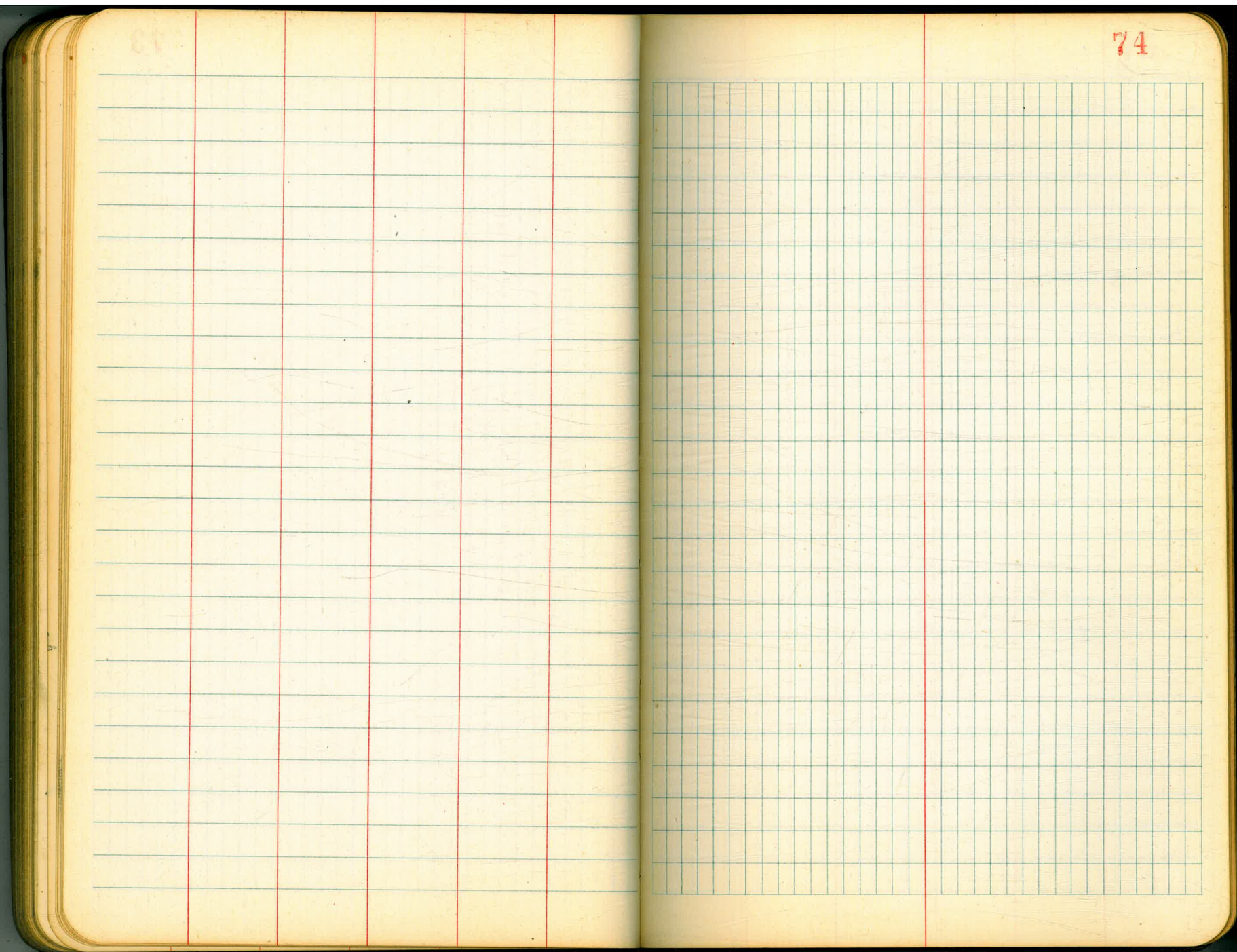


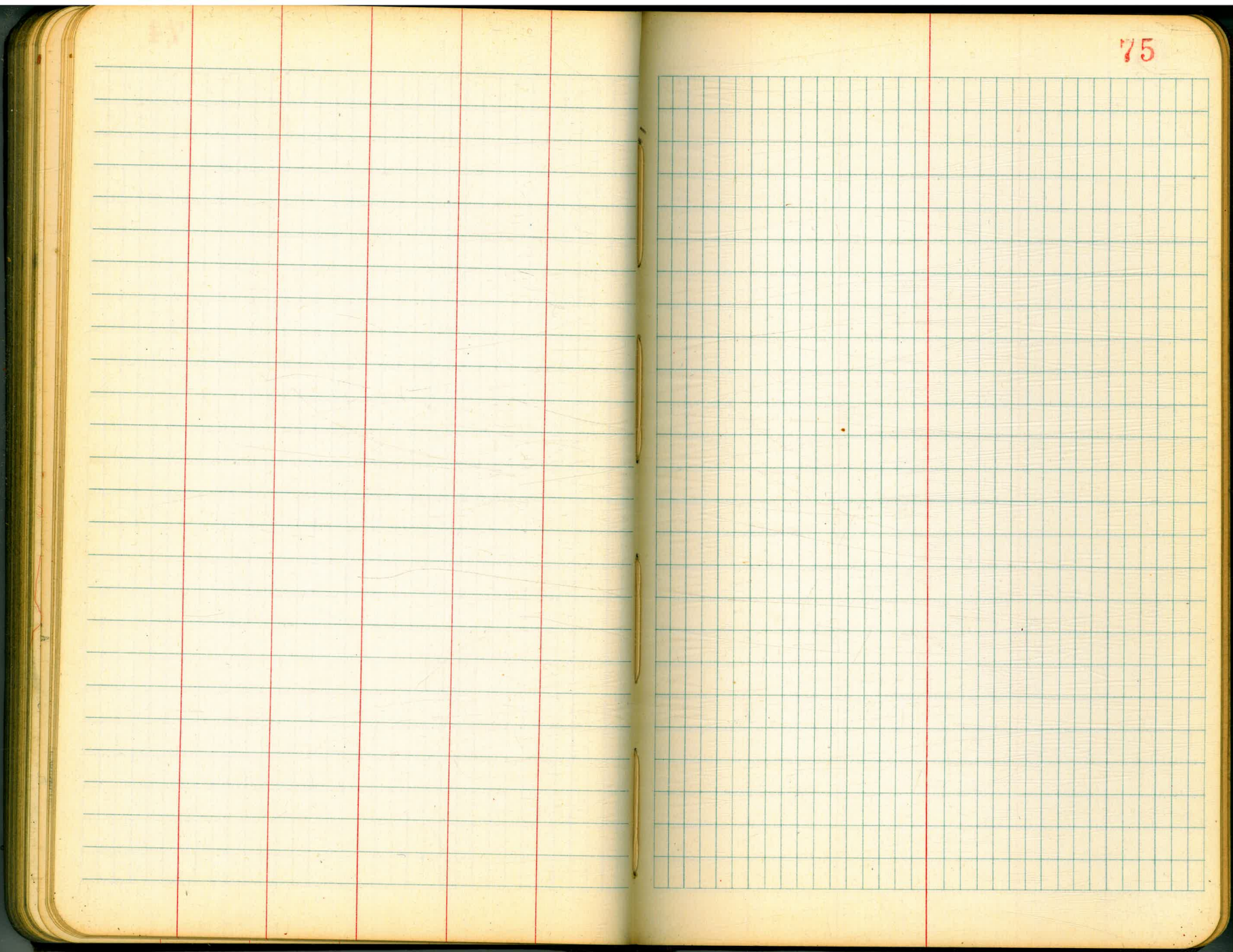


This page is a ledger-style page with horizontal blue lines and four vertical red margin lines. The margins are located at approximately 10%, 20%, 30%, and 40% from the left edge of the page. The page is otherwise blank.

This page is a grid-style page with a vertical red margin line on the left side, approximately 10% from the edge. The rest of the page is filled with a grid of blue lines, forming a grid of approximately 20 columns and 30 rows. The page is otherwise blank.

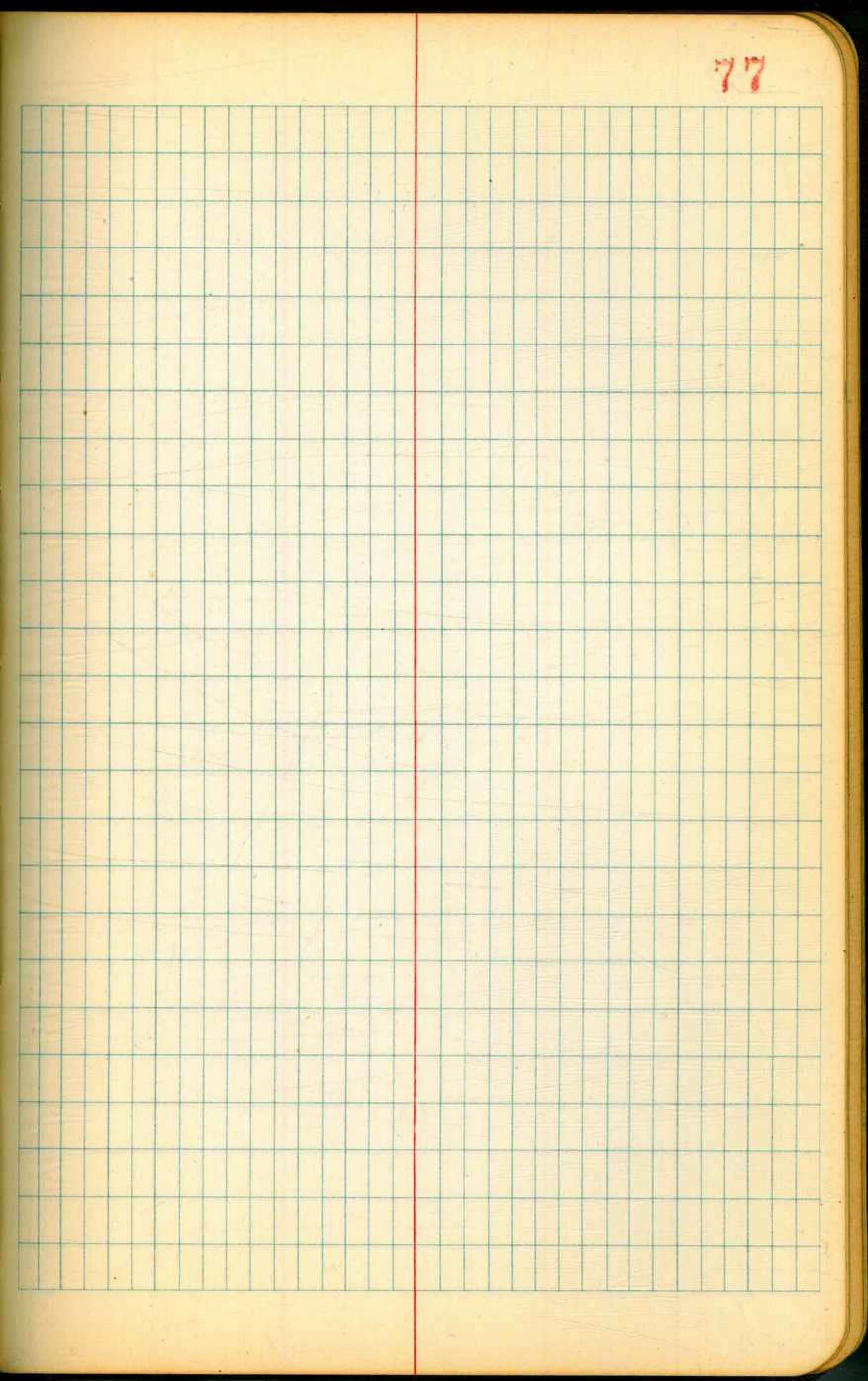
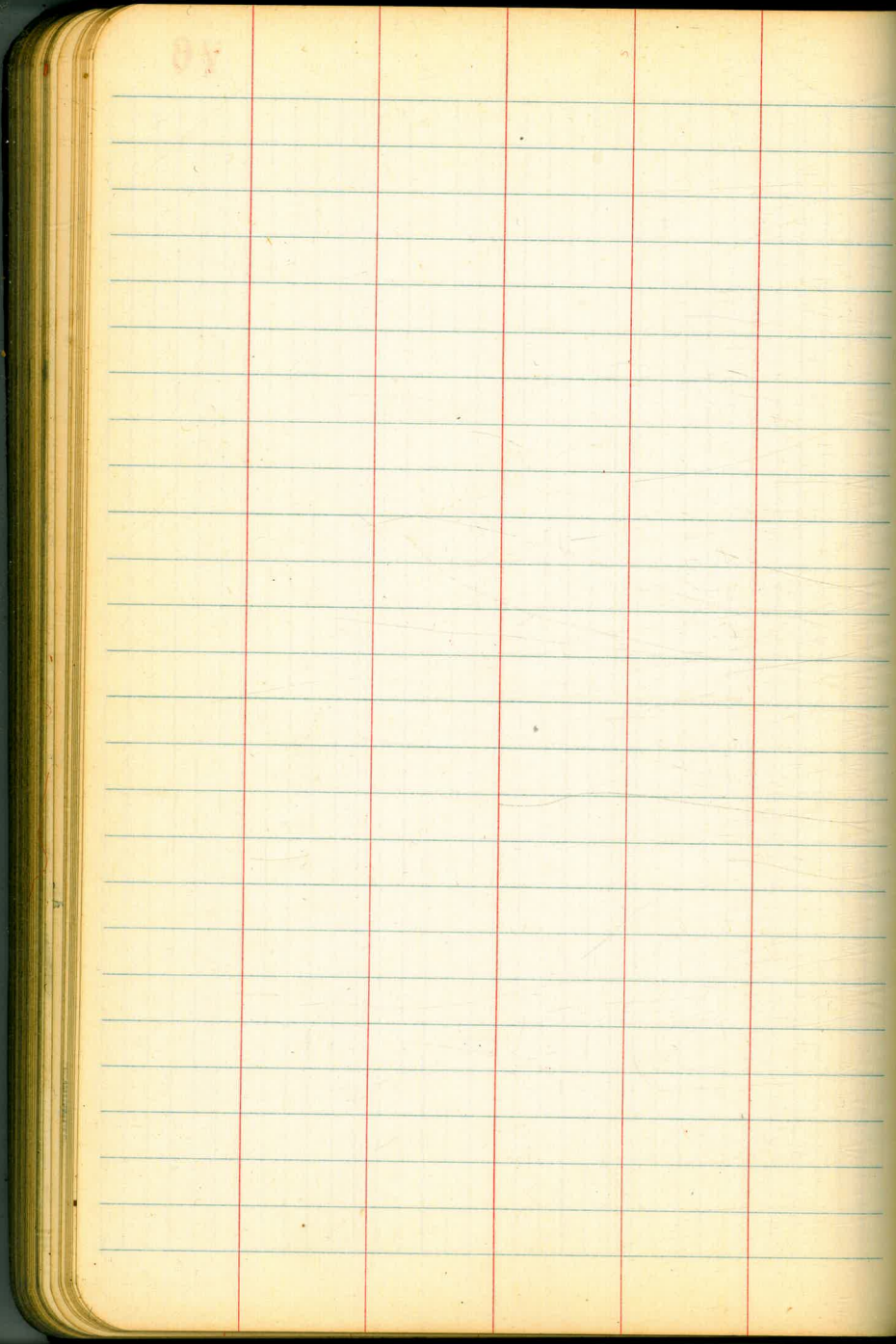


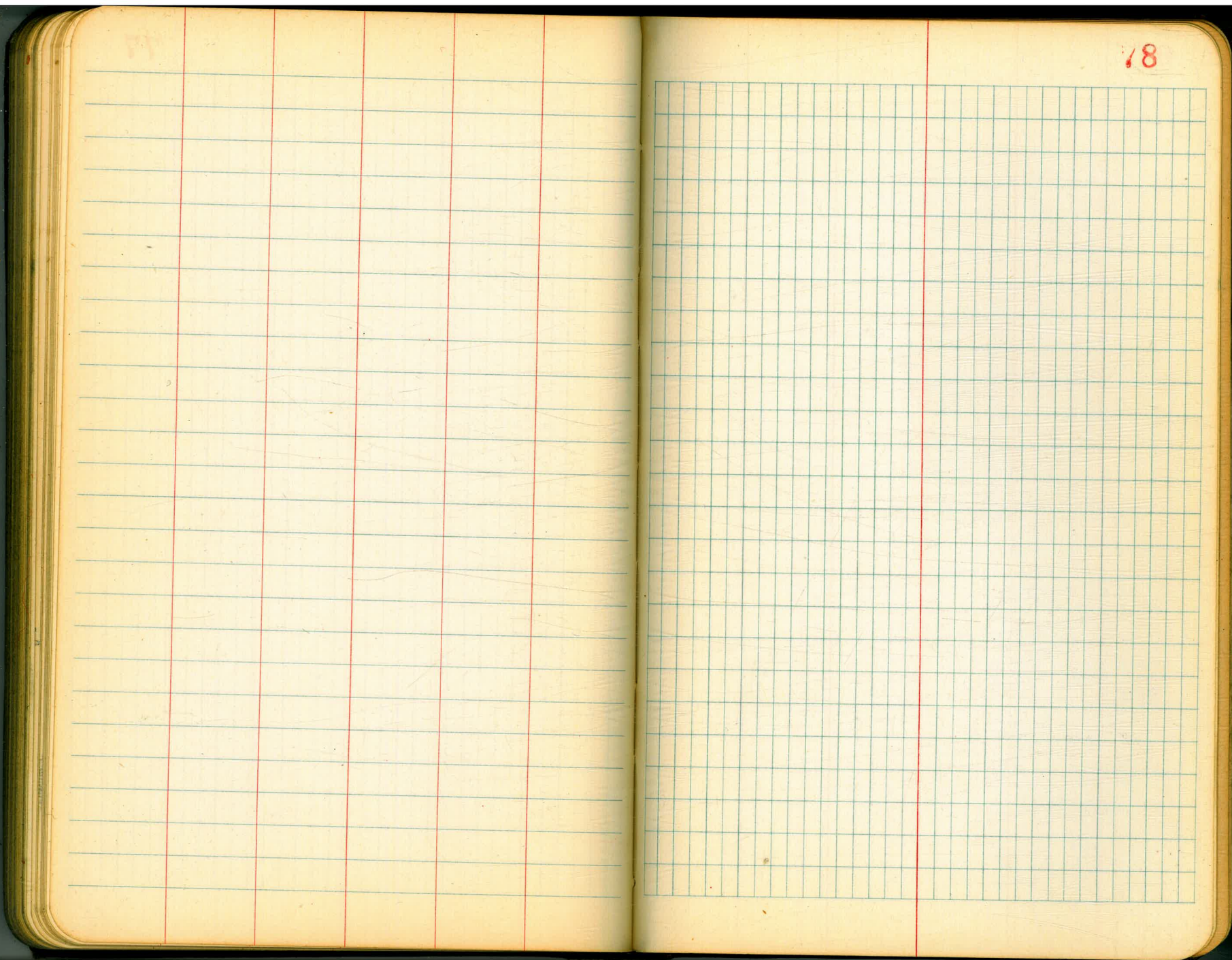


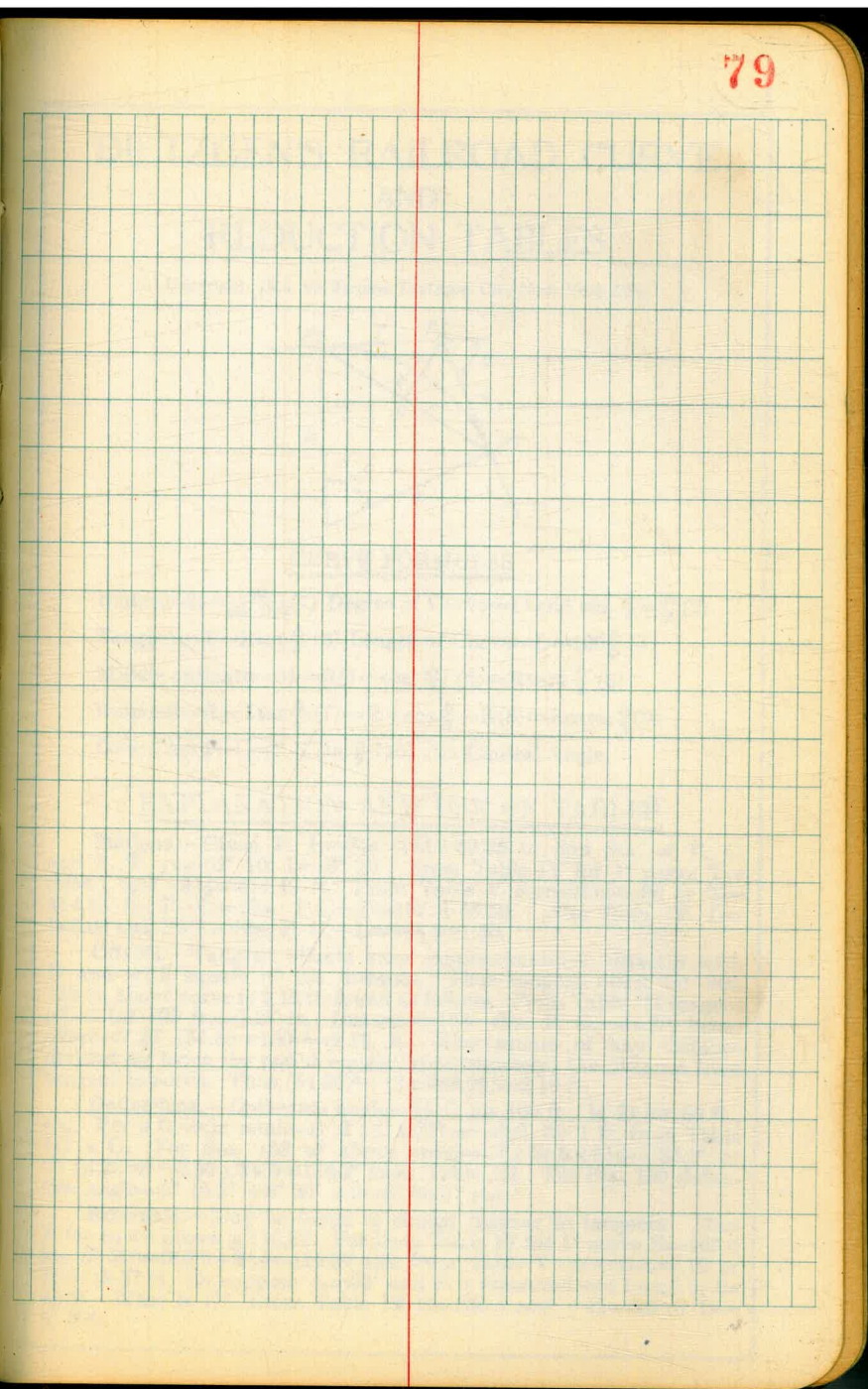
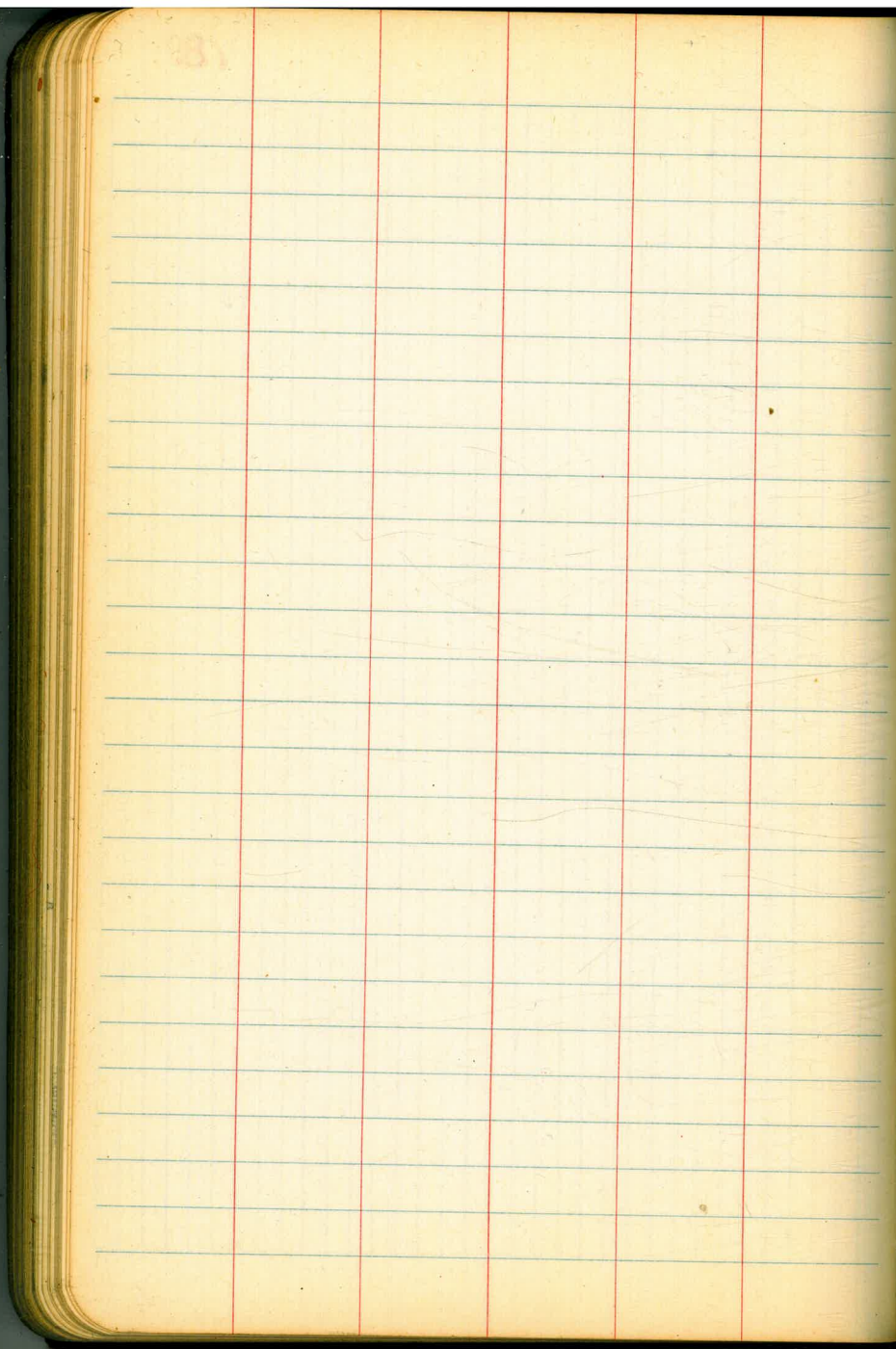


A page of lined paper with three vertical red margin lines and horizontal blue lines. The page is blank.

A page of graph paper with a grid of blue lines and a vertical red margin line. The page is blank.

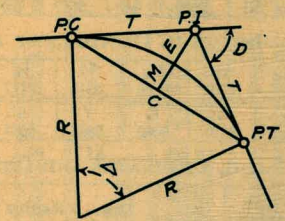






DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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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= $M = R(1 - \cos \frac{\Delta}{2})$ (5) $= R \text{vers} \frac{\Delta}{2}$ (6)
- External= $E = T \tan \frac{\Delta}{4}$ (7) $= R \div \cos \frac{\Delta}{2} - R$ (8) $= R \text{exsec} \frac{\Delta}{2}$ (9)
- Long Chord= $C = 2 R \sin \frac{\Delta}{2}$ (10) $\Delta =$ 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 $+8\frac{1}{8} = 414.49$ 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= $.3 \times 54.5 \times 8\frac{1}{8} = 136.2'$ 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 $8^\circ 20' = 960.6 \div 8\frac{1}{8} = 115.27$ 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 $+42 = 5.5$ or $D = 5^\circ 30'$.

w. - $\frac{8.50}{11.86} = \text{Pin to FL}$, 164.29
 $\frac{20.36}{14.76}$
 E - $\frac{6.15}{20.91}$

81
 86 120.23
 92 126.66
 97 246.89

$\frac{52.57}{522}$
 47.35

295
 $\frac{615}{910}$

41.63
 63.92
 180.91
286.46

m. 16

0.27

59
 $\frac{17.7}{41.3}$

**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.