

MEMBERS'  
FIELD BOOK  
1904-1905

# 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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# 1690

## CITY ENGINEER'S OFFICE

INDEXED

to page # 71

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.

Blank lined page with four vertical red margin lines.

Blank grid page with a vertical red margin line on the left side.

Mean High Tide Line Ocean Beach  
B Line Narragansett Ave to South End of  
Mission Bay Bridge

INDEXED

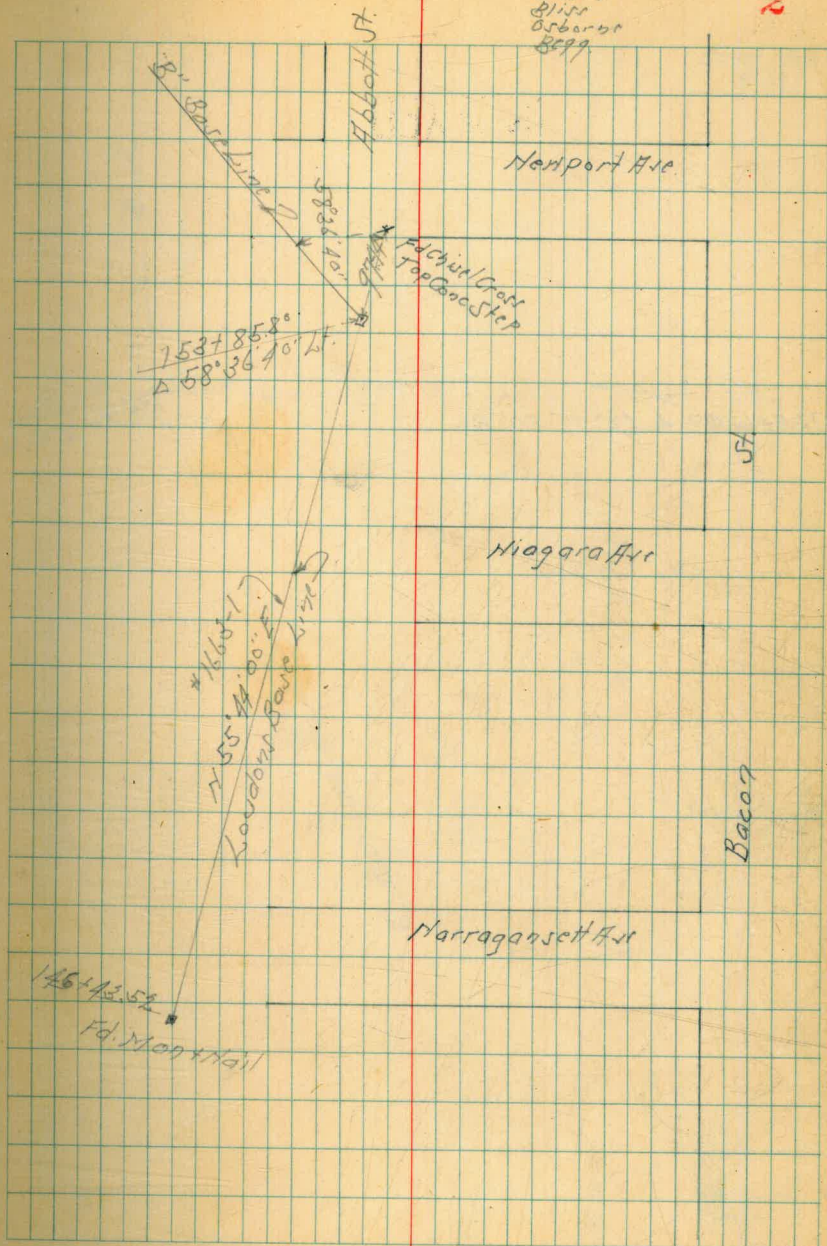
153+85.8° Δ 58°36'40" St.

146+43.52 Δ

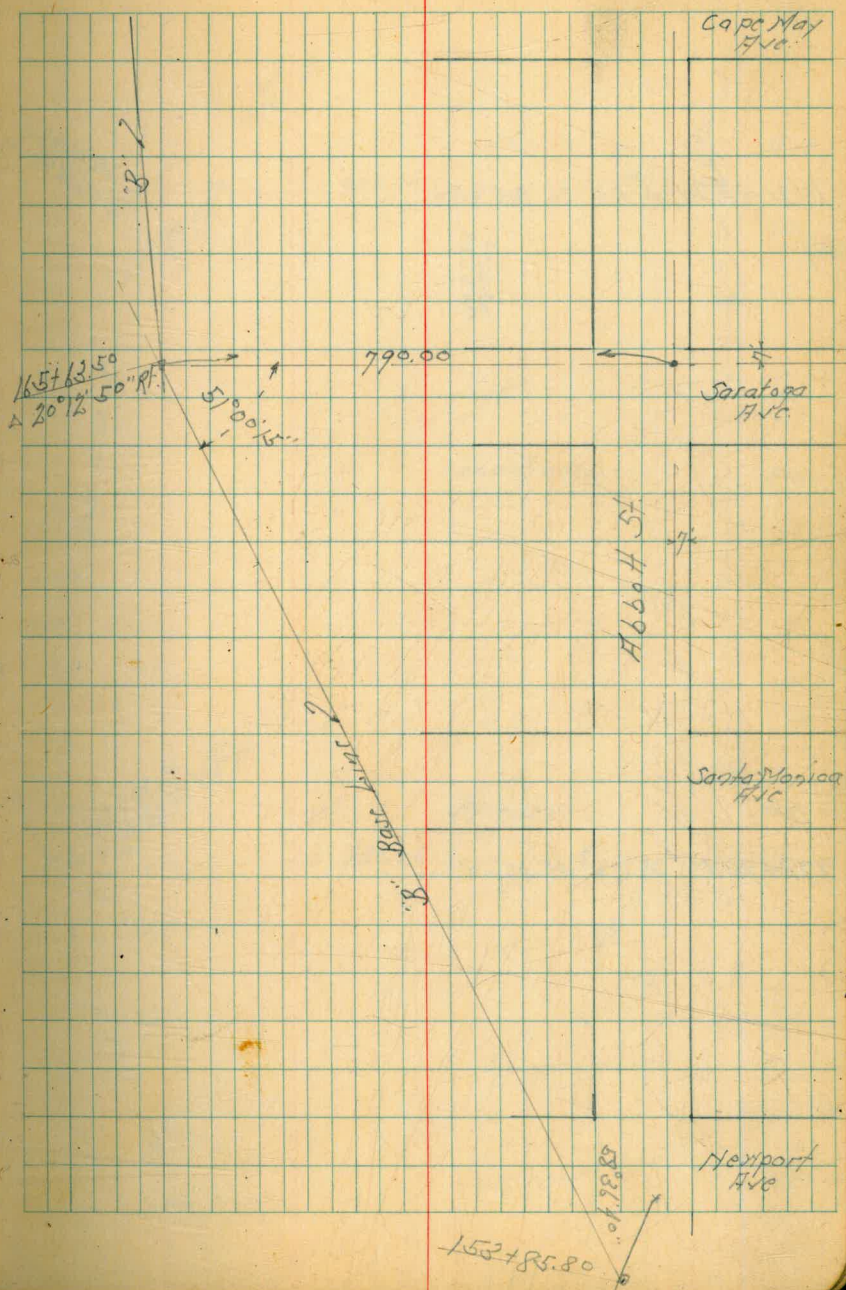
Indexed  
C.S.K.

Aug. 22-45  
S. 1007  
81.00  
050000  
899

2



165+62.50  $\Delta$  20° 12' 50" Rt.



152+85.80

Cape May Ave

Saratoga Ave

Abbeville St

Santa Monica Ave

Newport Ave

1.8

165+62.50  
 $\Delta$  20° 12' 50" Rt.

57° 00' 15"

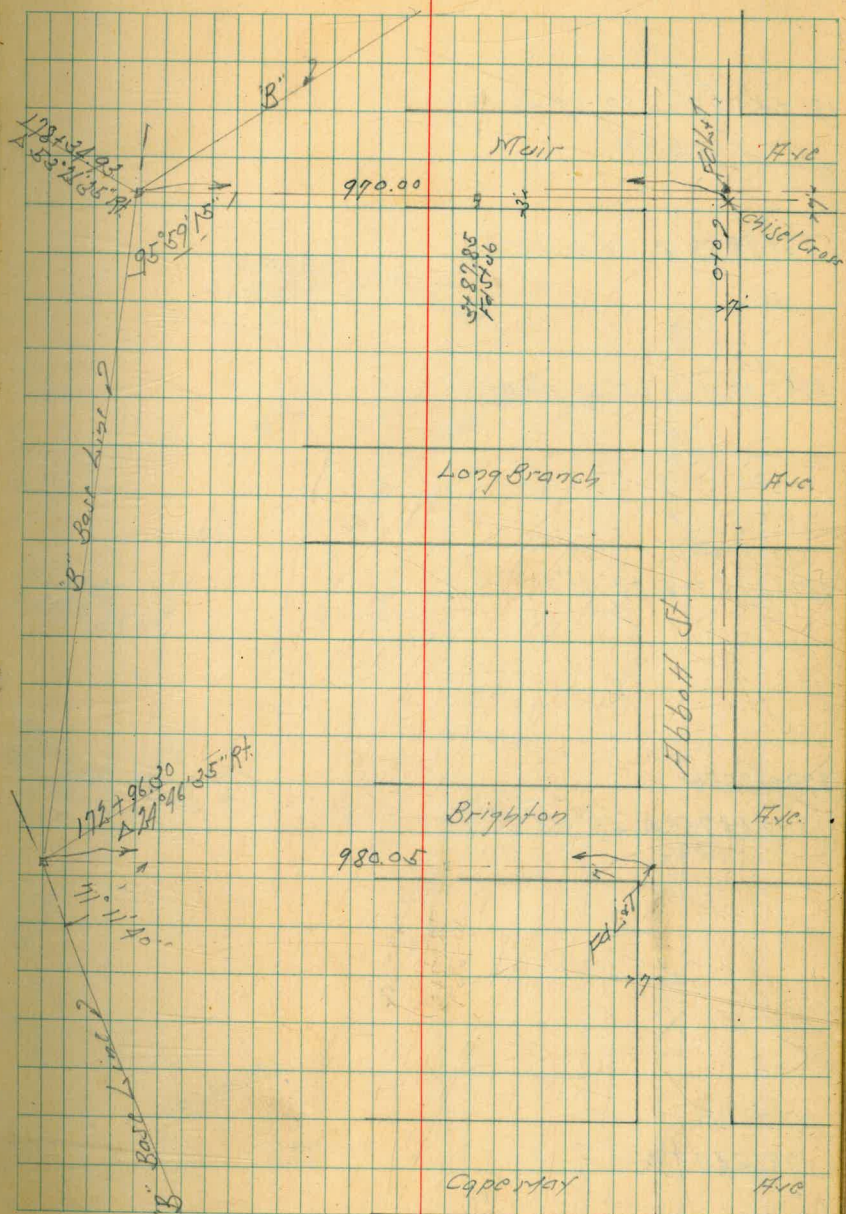
790.00

R. Bear River  
J. Bear River

152+85.80

178+34.95  $\Delta$  53° 26' 35" Rt.

172+96.50  $\Delta$  24° 46' 35" Rt.



191+55.88  $\Delta 89^{\circ}52'40''$  Lt

187+98.89  $\Delta 56^{\circ}33'50''$  Lt

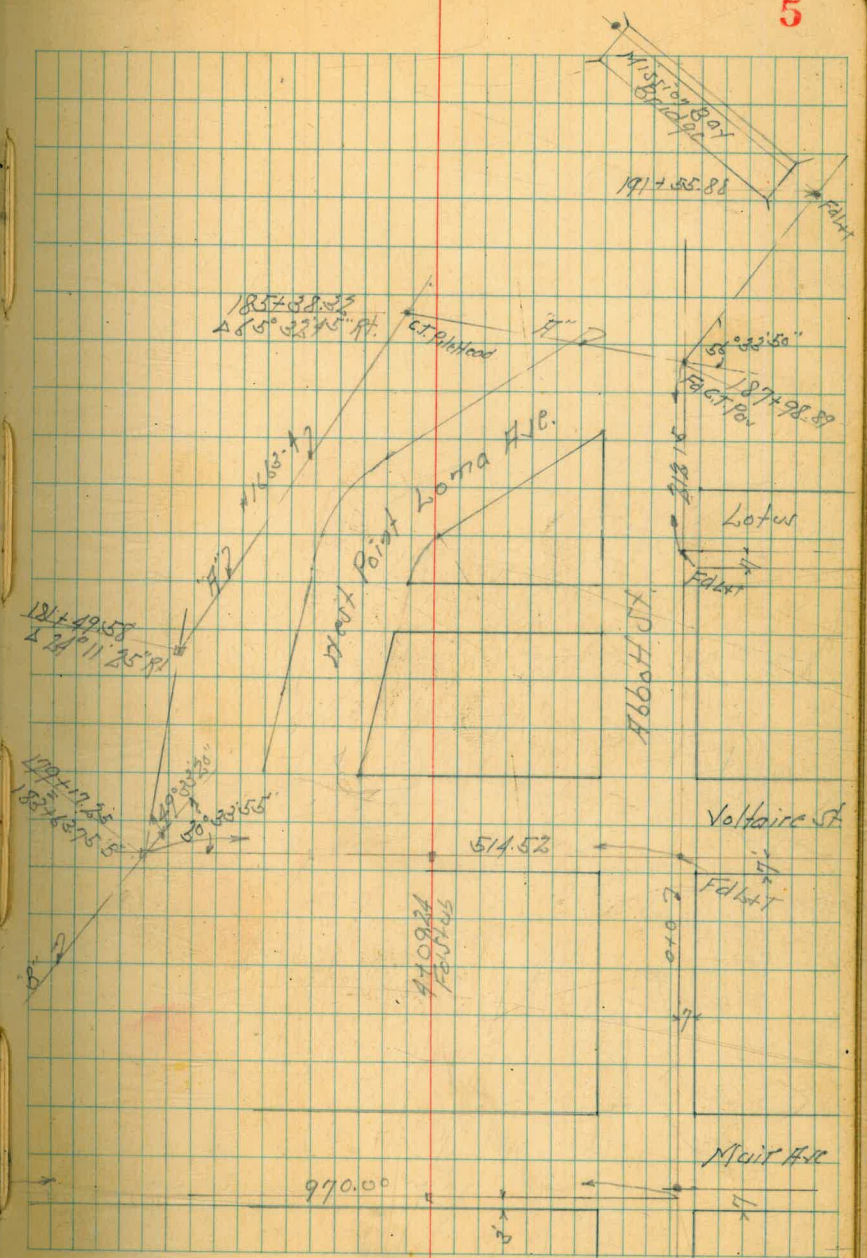
195+38.22  $\Delta 65^{\circ}32'45''$  Rt

181+19.58  $\Delta 21^{\circ}11'25''$  Rt

179+17.25

183+63.75  $\Delta 49^{\circ}33'20''$  Lt

178+34.93  $\Delta$



A grid of 20 columns and 20 rows on a notebook page. The grid is formed by light blue lines. A vertical red margin line is positioned on the left side of the grid, approximately one-fifth of the way across the page. The grid is mostly empty, with some faint, illegible blue ink markings in the upper-middle section.



Levels Mean High Tide Line  
Ocean Beach Sta. 149+0 to 191+0

Notes: cuts taken Right Angles to  
Base Line except where noted

Mean High Tide as 4.91 USCG Datum

153+0

INDEXED

152+0

151+0

150+0

149+0

TP 4.00 14.14 6.64 10.14 <sup>00 Hub</sup> 153+85.80

B.M. 1.34 16.78 15.44 USCG Datum

Aug. 23-45  
Stinson Lt.  
Bliss  
Abbott  
1899

B ✓ Rt. ! 7

4.91 10.1 9.9

$\frac{9.23}{298}$   $\frac{10}{175}$  4.2

4.91 10.2 8.6

$\frac{9.23}{162}$   $\frac{37}{78}$  5.5

4.91 8.8 7.6 8.5

$\frac{9.23}{62}$  5.3  $\frac{15}{7}$   $\frac{5.6}{100}$

4.0 4.91 9.2

9.5  $\frac{9.23}{7}$   $\frac{19}{86}$

3.9 4.91

10.2 9.23

14.14

5 on Cape Hill  
Bath House

N.E.B.P. Food Corp. Ratway, Merryport, Me. + Abbott St.  
#1663 Page 7

159+0

4.91	9.5	10.8	9.4
10.25	5.7	11	5.8
195	115	75	

158+0

4.91	9.4	10.7	9.5
10.25	5.8	11.5	5.7
209	125	70	

157+0

4.91	9.6	10.5	9.2
10.25	5.6	11.7	6.0
281	140	75	

156+0

4.91	9.6	9.2
10.25	5.6	6.0
228	150	

155+0

4.91	10.3	9.6
10.25	4.9	5.6
284	160	

TP 5.02 15.16 4.00 10.14

15.16

153+85.80 = A 58'56"40" Lt

Taken as split

4.91	10.3	10.1
9.25	5.8	4.0
272	183	

1414

1414

165+0

164+0

163+0

162+0

TP 5.04 14.97 <sup>15.16</sup> 5.23 9.93

161+0

160+0

15.16

Lt.

B

1

9

4.91 10.7<sup>5</sup> 10.2  
10.06 / 86 4.5 / 20 4.8

4.91 10.3 9.8  
10.06 / 113 4.7 / 65 5.2

4.91 10.5 9.3  
10.06 / 135 4.5 / 76 5.7

4.91 10.7 9.5  
10.06 / 152 4.8 / 93 5.5

14.97

4.91 10.6 9.4  
10.25 / 157 4.6 / 95 5.8

4.91 10.2 10.7 9.4  
10.25 / 185 5.0 / 105 4.5 / 80 5.8

15.16

14.97

TP 4.40 14.79 4.58 10.39

170+0

169+0

168+0

167+0

166+0

165+62.5° 120° 12' 50" pt taken on Spid

14.97

Lt

B

✓

4.91 10.6 10.1

10.06 44 49  
120 72

4.91 10.8 10.4

10.06 42 46  
105 37

4.91 10.9 10.4

10.06 41 46  
82 75

4.91 10.3 10.2

10.06 47 48  
85 72

4.91 10.4

10.06 46  
51

4.91 10.4

10.06 46  
55

14.97

Mean High Tide Ocean Beach

176+0

175+0

174+0

TP

178

12.15

14.79

4.42

10.37

opstus  
172+96.30

172+96.30  $\Delta 21^{\circ} 46' 35''$  RA

Taken on 5/1/66

172+0

171+0

14.79

Aug. 21.45 Lt.

Start 88

B

✓

11

4.91 7.7 8.9 7.5

~~7.24~~  
184 4.5 5.3 4.7  
90 70

4.91 8.3 8.8 7.8

~~7.24~~  
180 3.9 5.1 4.4  
100 55

4.91 8.2 9.7 8.8

~~7.24~~  
208 4.8 5.5 5.4  
120 25

12.15

172 13.07 Elev  
07 RA. 06

8.2 10.37

4.91

~~9.88~~  
187

8.6  
100

4.12  
205/06

4.91 9.4 9.9

~~9.88~~  
167 5.4 4.9  
95

4.91 10.1 9.9

~~9.88~~  
140 4.7 4.9  
80

14.79

181+0

180+0

179+0

TP	5.54	13.61	12.15 4.08	8.07	instab 178+34.93
----	------	-------	---------------	------	---------------------

178+34.93 A 53° 26' 25" Rt. Taken 07 Sept

178+0

177+0

12.15

Lt.

8

12

4.91 8.4 8.2

$\frac{8.70}{98}$   $\frac{5.1}{58}$  5.4

4.91 7.2

$\frac{8.70}{100}$  6.4

4.91 8.0 7.8

$\frac{8.70}{115}$   $\frac{5.1}{22}$  5.8

4.91 8.07

$\frac{7.24}{90}$  4.08  
0.25/45

4.91 8.4 8.0

$\frac{7.24}{112}$   $\frac{5.1}{20}$  4.2

4.91 9.0 7.5

$\frac{7.24}{182}$   $\frac{5.1}{15}$  4.7

12.15

181+49.58 Δ 21° 11' 25" RF

Taken on split

181+0

180+0

IP 2.18 10.82 13.61 4.97 8.64 13.61 on stub  
182+63.75 Δ

179+17.25

182+63.75 Δ 47° 33' 20" LT

Taken on split

182+0

B.M.

0.64

12.97

Top Piped  
2" Pipe West End  
Main St  
12.95  
1663-10

182+0

13.61

LT

RT

13

4.91

8.02

5.91  
8.7

2.80  
on stub

4.91

7.3

5.91  
11.0

3.5

4.91

8.8

5.91  
18.9

2.0

10.82

4.91

9.1

8.64

8.70  
17.8

4.5  
8.0

1.97  
on stub

4.91

9.1

8.2

8.70  
16.0

4.5  
4.5

5.4

4.91

8.9

8.4

8.70  
11.6

4.7  
4.5

5.2

13.61 -

18670

TP 8.42 14.50 10.63 4.55 6.08

18570 38.32 1 65° 32' 45" Rt Taken Split

18570

18470

TP 2.41 10.63 10.82 2.60 8.22

18370

18270

10.82

Lt.

8

1

11

2.9 4.91

11.6 9.59  
20

14.50

-1.9 3.4 4.91

12.5 7.2 5.72  
10.5 9 24

4.91 5.5

5.72 5.1

4.91 7.6

5.72 3.0  
5.5

10.63

4.91 8.2 6.8

5.91 3.6 4.0  
8.0

4.91 8.0 7.4

5.91 3.8 3.4  
8.5

10.82



BM 14.74 ✓  
2.56 12.18 12.18

191+0

190+0

TP 4.05 14.74 ✓  
3.81 10.69

189+0

187+98.89 A 56° 33' 50" Lt

Taken on Sept 1

187+0

14.50

Lt

R

15

B.P. Fort Curtis 9' South of South End Mission Bay Bridge

4.91 11.6 11.1

9.83 3.1 3.6  
87 30

4.91 10.0

9.83 4.7  
31

14.74 ✓

4.91 10.9 10.8

9.59 3.6 3.7  
75 70

4.91 11.0 11.1

9.59 3.4 3.4  
128 81 0718v

4.91 8.2 8.8

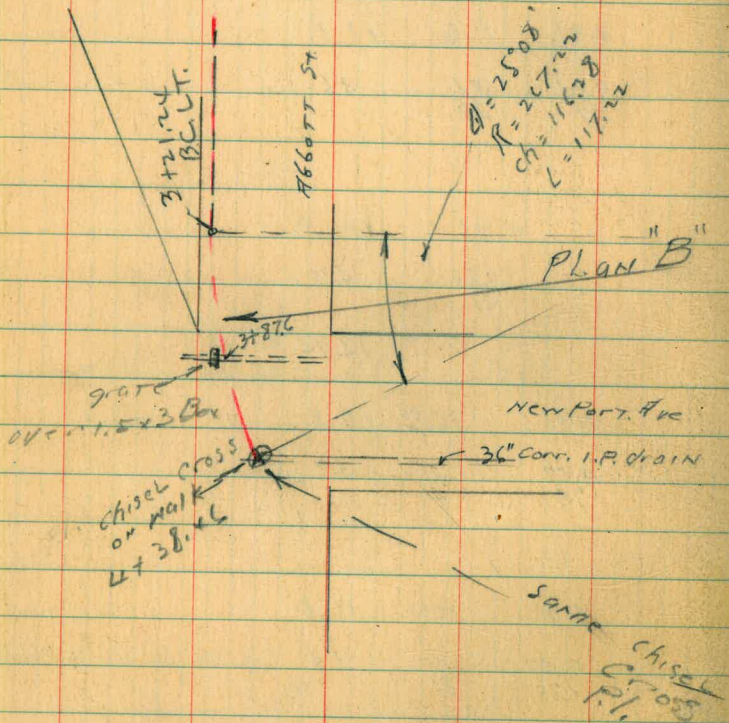
9.59 6.3 5.7  
61 77

14.50 ✓

Proposed Drain Levels  
at Ocean Beach

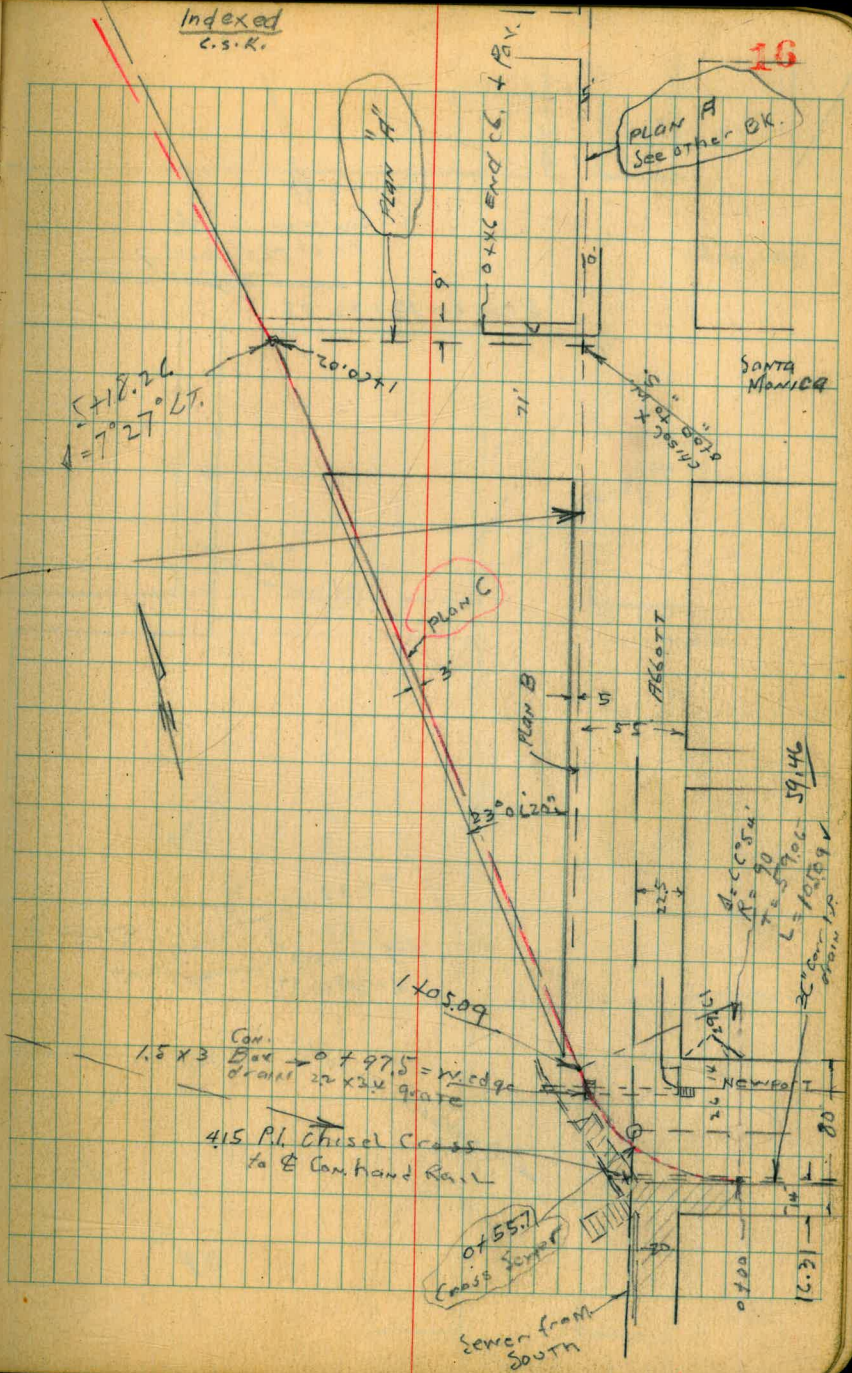
**INDEXED**

See 1579-63-75  
" 1475-59



Indexed  
C.S.R.

16



766077

Cape May

See other BK.

Saratoga.

See other BK  
EXISTING drain 7

S. curb = 12 + 82.03

PLAN "C"

9 + 38.03

9 + 22.03  
 $\Delta = 30^{\circ} 20' RT.$

57 + 8  
24'

15'

Proposed outfall

PLAN "C"

PLAN D

90' DND  
13' X 20'

0010

24'

20'

10'

10'

drain levels on Plan "B"

N.E.B.P.	3.71	<u>10.21</u>	6.50	Newport Alcort
0 + 00 Pav.			6.70	3.51
0 + 31 E Santa Monica			5.70	4.51
0 + 41.6 gut			6.38	3.83
" " cb			5.52	4.69
0 + 58.7 on walk			5.25	4.96
0 + 70 2.6 Lt. to LITE Post				
0 + 77 2.7 to P.P.				
1 + 02 end Can Walk +			5.45	4.76
1 + 50 Beg. Cold Lay Walk			5.40	4.81
2			5.05	5.16
+ 50			4.95	5.26
3			4.93	5.28
+ 21.24 BC Lt			4.83	5.38
+ 50			4.74	5.47
+ 68			4.57	5.62
+ 74			5.10	5.11
+ 97.6 E 15x3 drain			5.00	5.21
" " 1" RT edge grate			5.11	5.10
" " F.L. Box			7.20	3.01
4 Pav			4.69	5.52
4 + 18.5 gut			4.81	5.20

10.21 ✓

18

4 + 18.5 Top curb	4.33	5.88
and 3x3x11 Walk		
4 + 35 2.6 Lt to wedge of LAMP post		
4 + 38.46 chisel Cross	4.12	6.09
ON Walk		
FL. approx. of 31" LP	8.16	2.05 at outlet
drain		

Level on Plan "C" = JUST IN-  
side of Rock Break-  
water

10.21 ✓

0 + 00 B.C.	Pav.	4.22	5.99
+ 24	"	4.22	5.99
+ 50	Crosses LITE Cable	4.22	5.99
+ 55.7	" Sewer	4.31	5.90
+ 60.3	Pav.	4.36	5.85
"	5.4 Rt M.H. Rim	4.15	6.06
"	" " " F.L.	11.95	-1.72
+ 88	Pav.	4.80	5.91
0 + 92.5	Top grate	5.21	5.00
"	F.L.	7.22	2.99
1 + 01		4.59	5.62
1 + 05.09	F.C.	4.57	5.62
+ 20	end Cold Lay	4.75	5.46
+ 40		4.5	5.7
+ 55		5.5	4.7

13.5 Lt. to  
LITE Post

Cold Lay  
in walk

1071 ✓

PLAN "C"

1 +70	9.8	0.9	
2	10.8	-0.6	
+50	11.0	-0.8	
3	11.3	-1.1	
+20	11.5	-1.3	
+50	11.2	-1.0	
4	9.8	0.9	
+30	9.4	0.8	
+40	7.8	2.9	
+50	7.2	3.0	
+65	7.1	3.1	
+85	6.3	3.9	
5	6.7	3.5	
5+1876 & 7-27' LT.	6.51	3.70	STUB

T.P. <sup>on A</sup> STUB 3.25    6.95 ✓    6.51    3.70    5+1876

5 +45	6.5	0.5	
+80	7.0	0.0	
6	7.1	-0.1	
+50	8.2	-1.2	
7	8.7	-1.7	
+50	7.5	-0.5	
8	7.2	-0.2	

PLAN "C" P.20

19

Levels on PLAN "F" Sketch P.16

Foot of Santa Monica

6.95 = A

0 +00	3.45	3.50	Pav.
+46	3.95	3.00	" "
+55	4.4	2.6	
1	4.4	2.6	
+25	4.6	2.9	
1 +60.02 = JUNCTION	3.25	3.70	STUB

695 ✓

Plan "C"

8 + 50		8.2	-1.2	
9		8.0	-1.0	
9 + 2203	Δ 30°30' RT	7.68	-0.73	of Saratoga
T.P. 9 + 2203	7.79	<u>7.06</u>	7.68	-0.73
9 + 3803	Junc. with "D"	8.6	-1.5	
+ 62	Flow present Water	9.2	-2.1	
10		9.5	-2.4	
+ 50		11.0	-3.9	
11		11.2	-4.1	
+ 50		11.8	-4.7	
11 + 90		9.0	-1.9	
12 + 22		0.9	6.2	
12 + 62		1.0	6.1	
12 + 8203	Sub. Line CAPE MAY	2.2	4.7	Curb OUT

20

Levels on Plan "D"

on Saratoga Sketch p. 17

7.06 = T

0 + 00	on Pav	2.44	4.62	
+ 05	" " edge	2.54	4.52	W.L. 9660 ft
+ 50		3.3	3.8	
1		3.8	3.3	
+ 50		4.4	2.7	
2		5.2	1.9	
+ 50		6.5	0.6	
3		8.3	-1.2	
+ 75		8.9	-1.8	
3 + 65	Junc with "C"	8.6	-1.5	

Inland Sea  
High Water Line  
of JAN. 46,      6.4      0.7

# INDEXED

Levels on Saratoga outfall

2-13-46

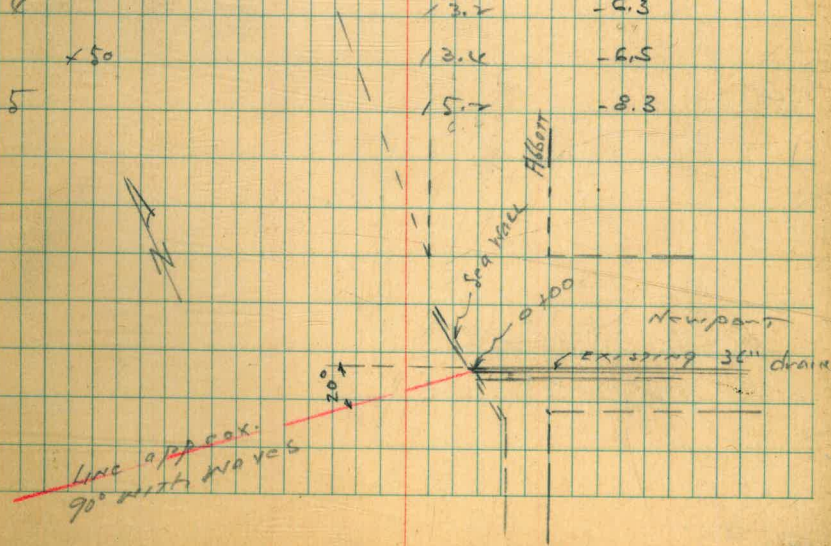
7.06 = T

0 + 00 = 4912203	7.7	-0.6
0 + 12	7.4	-0.3
0 + 17 Rock Breasted	1.9	5.2
0 + 20 " "	0.2	6.9
0 + 23 " "	1.1	6.0
0 + 25 " "	3.4	3.7
0 + 50 Sand	4.7	2.4
1	5.6	1.5
2 + 50	6.2	0.9
2	8.5	-1.4
3 + 50	11.0	-3.9
3	12.8	-5.7
4 + 50	14.0	-6.9
4	13.6	-6.5
5 + 50	14.2	-7.1
5	14.7	-7.6
6 + 50	15.4	-8.3

Levels Proposed outfall 21  
at foot of Newpark

2-13-46

NEBP 0.35	4.85	6.50	Abbott Newpark
0 + 00 = Present outfall 20' corr. 1.5' depth	8.2	-1.3	on sand
120	9.0	-1.1	" "
130	5.5	1.8	" "
150	5.0	1.9	" "
1	4.5	2.4	" "
2 + 50	6.4	0.5	" "
2	8.0	-1.7	" "
3 + 50	10.4	-3.5	" "
3	11.3	-4.4	" "
4 + 50	12.2	-5.3	" "
4	13.2	-6.3	" "
5 + 50	13.4	-6.5	" "
5	15.2	-8.3	" "



Save to part



Save

Save

to

P 24

Also copied into G. B. 212 P 73

Proposed siphon service on

Mission Beach TRUNK SEWER

at Mast wly Bridge of old RR.

BM. RR. spike 4.67    9.67    3.00    ←

**INDEXED**

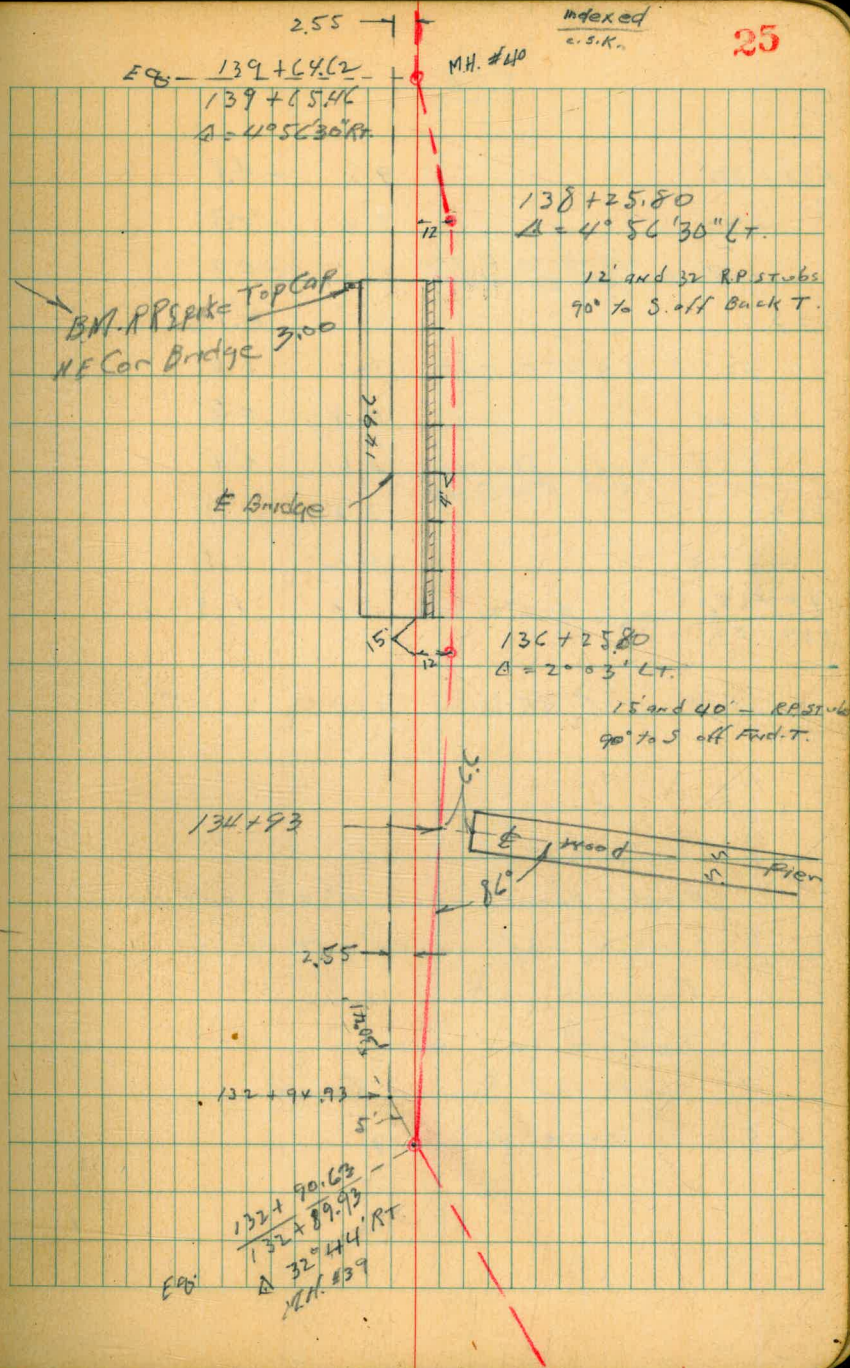
132	+ 90.63	Eq. 132 + 89.93	5.6	4.1	1611.439
		$\Delta = 32^\circ 44' RT$			
133			5.3	4.4	
	+ 50		5.2	4.5	
134			5.0	4.7	
	+ 50		5.3	4.4	
135			5.0	4.7	
	+ 50		5.2	4.5	
	+ 70	S. edge shoulder	5.3	4.4	
136			5.6	4.1	
	+ 25.8	$\Delta 2^\circ 03' LT$	8.2	1.5	
	+ 140.8	opposite <sup>end</sup> of Bridge	10.8	-1.1	
	+ 41		12.4	-2.7	
T.P.	8.38	<u>5.68</u>	12.37	-2.70	
	+ 55		10.3	-4.6	
	+ 73		10.8	-5.1	
137			12.8	-7.1	
	+ 21		12.1	-6.4	
	+ 28		13.8	-8.1	
	+ 45		12.1	-6.4	
	+ 55		12.5	-6.8	
	+ 68		11.3	-5.6	

C.S. Moore  
Surveyor  
W.F.M.  
12-27-45.

2.55

Indexed  
e.s.k.

25



S.C. 8

137 + 80 9.8 -4.1

+ 90 8.4 -2.7

+ 90.4 opposite E. end  
RR Bridge 6.6 -0.9

138 3.6 2.1

+ 25.8  $\Delta = 4^{\circ} 56' 30''$  LT 4.1 1.6

+ 30 4.9 0.8

+ 55 S. edge Shoulder  
P.R. Embank. 3.1 2.6

139 3.8 1.9

+ 50 4.2 1.5

139 + 65.4 E 8 -  $\Delta = 4^{\circ} 56' 30''$  RT 3.8 1.9

139 + 64.6

check to B.M. RR SPIKE 2.7 3.01 ✓

ACT, please call U.S.E.D. and have

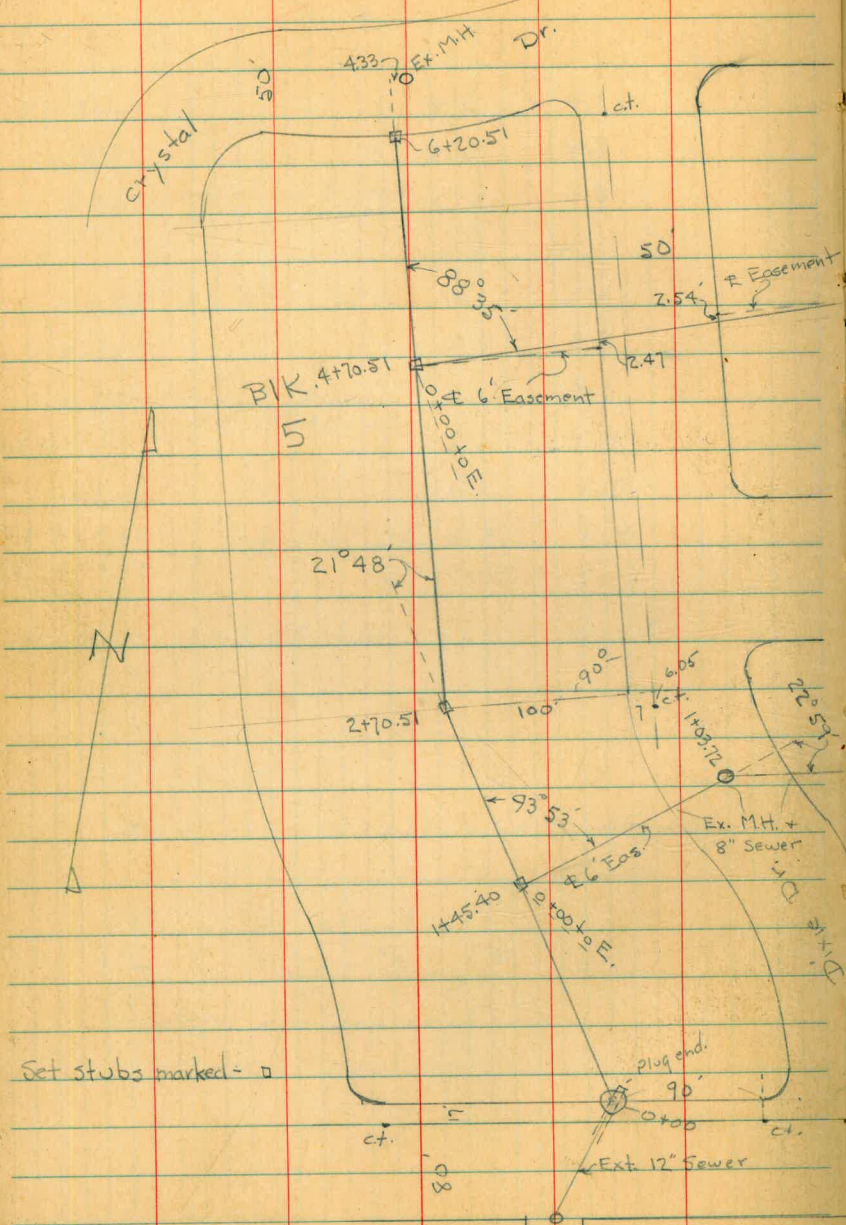
them reference out these

Control Mon?

"Jeeper" and "Diego"

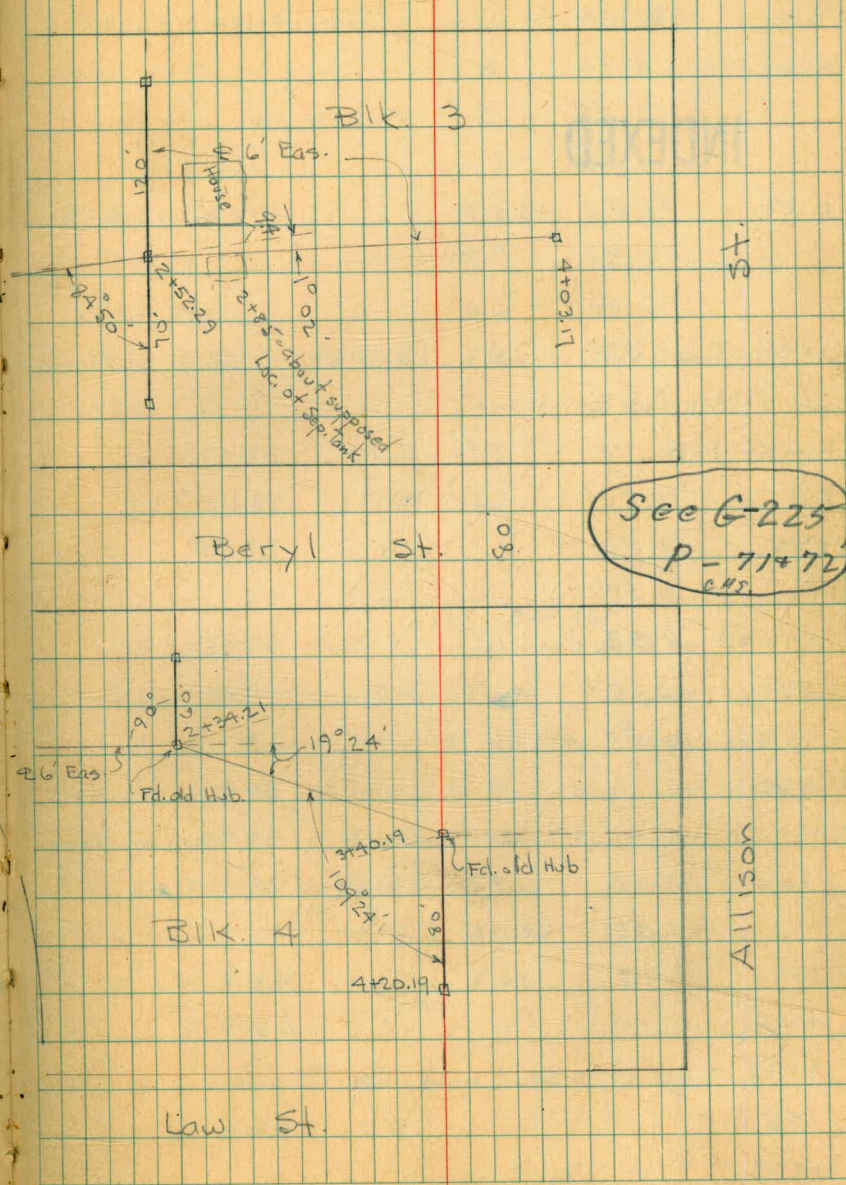
acct. of Sewer Const.

in this vicinity



Set stubs marked = □

Wilbur Ave. 88



See G-225  
P-71+72  
C.H.S.

Preliminary Sewer Location - Nettleship Tye

#1 Sketch - P. 27 Ties G124 - P10

Plans - 416 D

Osborne  
McCoy  
Hardin  
Keeft

5-28+29-46

**INDEXED**

B.M. 9.75 43.57 33.82 N.E. B.P. Law + Ocean Blvd.

0+00 = Ext M.H. on N.L. Law St 12" Line stub-plugged

See sketch for Direction

Rim of M.H.	5.50	38.07
F.L. " "	14.97	28.60
+50	6.5	37.10
1+00	4.9	38.7
1+45.40 on Stub = 0+00 for Lat. to E.	5.72	37.85
+50	5.6	38.0
2+00	4.9	38.7
+50	4.1	39.5
2+70.51 Ang. 21° 48' Rt.	3.63	39.94 on stub.
3+00	2.5	41.1
T.P. 11.83 54.20	1.20	42.37
3+50	10.4	43.8
4+00	8.3	45.9
4+45 - .60 Lt = Dead man for P. pole		
+50	6.0	48.2
4+69 - 9 Lt. = E P. pole		

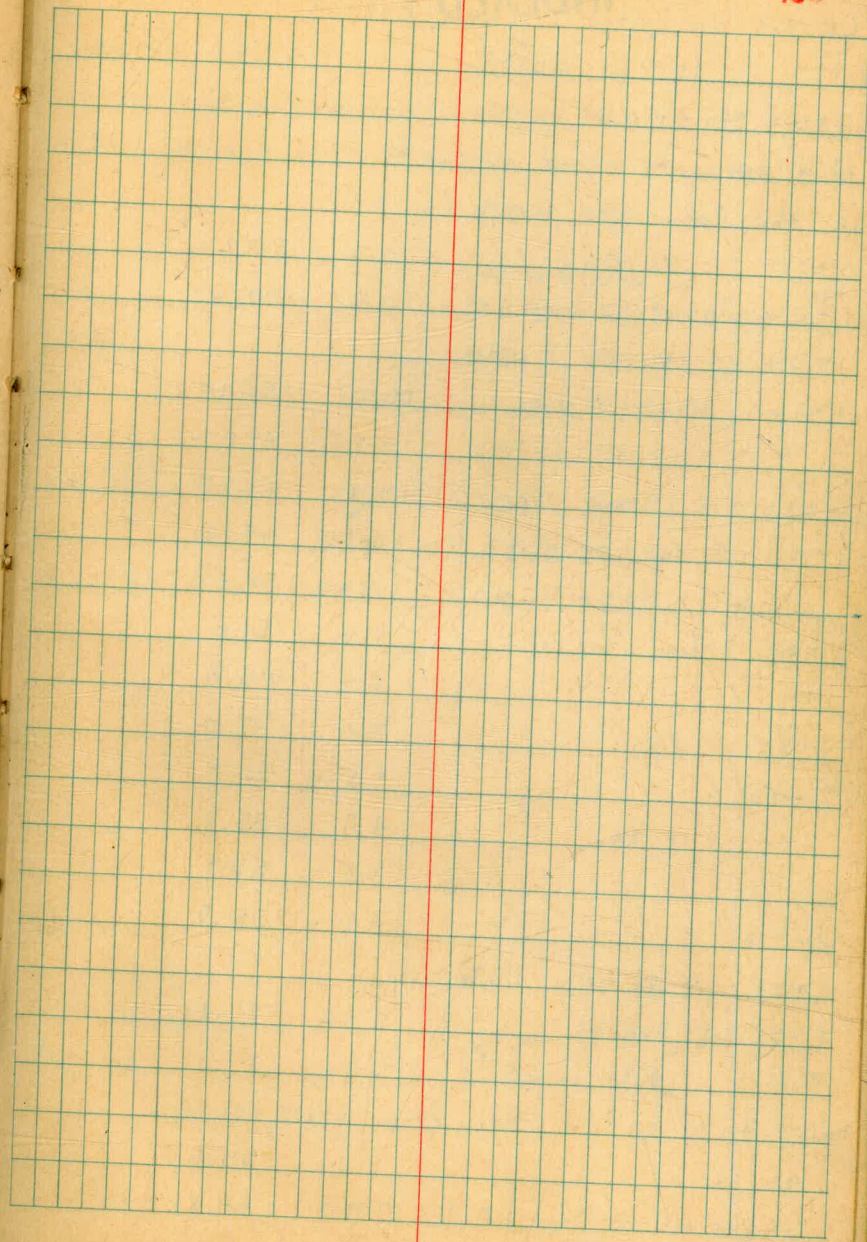
indexed  
C.S.R.I.

28

	East.	54.20	
4+70.51 = 0+00 for lat. to	6.30	47.90	on stub
5+00 - E	5.9	48.3	
10 Lt.	7.4	46.2	
10 Rt.	3.7	50.5	
5+50 - E	4.1	50.1	
10 Lt.	4.7	49.5	
10 Rt.	0.5	53.7	
T.P. 7.53 60.28	1.45	52.75	
5+70 - E	6.1	54.2	
10 Lt.	9.3	51.0	
10 Rt.	5.3	55.0	
6+00 - E	5.5	54.8	
10 Rt.	4.1	56.2	
10 Lt.	7.1	53.2	
6+20.51 = end. = Pan. with	5.62	54.66	on stub.
existing lat. from M.H. in E of St. Conditions indicate lat. maybe about 4' E. our line does not prod. ahead to M.H. - See sketch.			
Rim of M.H. & Crystal Dr.	5.52	54.72	
F.L. " " " "	18.24	42.04	
F.L. 10" line from E	8.53	51.75	

# INDEXED

Levels on lateral Thru Blk 4 on E 6' Easement.					
B.M.	12.62	50.47	37.85	1+45.40	on stub
0+00 = 1+45.40 on N+S. line in Blk. 5					
0+40		Prop. line 11.2	39.3		
0+78.72	= Join Ex. 8" lat. at		11.7	38.8	
+88.8	= W. Cb. Dixie Dr.		11.85	38.62	
1+03.72	= Ex. M.H. in E of St.				Shows open line E+W.
on Rim of M.H.			11.57	38.90	
F.L.	"	"	16.84	33.63	
1+22.90	= E. cb. Top		10.72	39.75	
		cut	11.34	39.13	
1+36.08	= Join Ex. 8" lat. at Pl.		10.0	40.5	
1+40			8.5	42.0	
1+70			7.3	43.2	
2+00			6.3	44.2	
2+34.21	= Hub on E 6' Eas.		4.91	45.56	on Hub.
30' Lt. on E 6' Eas.	= lat. to N.		3.8	46.7	
60 Lt. = End of lat. to N.			2.4	48.1	on stub.
2+85			3.3	47.2	
T.P.	6.84	52.40	4.91	45.56	
3+40.19	= Hub on E 6' Eas.		2.28	50.12	Ang to S.
3+41	-.5 Lt. - beg. wire fence				
3+42	1' Rt. E P. pole				
3+80			1.4	51.0	
4+14	-4 Lt. = End wire fence + Begin board fence				
4+20.19	= End		2.87	49.53	on Stub.
T.P.	2.11	43.81	10.70	41.70	
check B.M. B.P.			9.98	33.83	33.82



# INDEXED

Levels on lateral thru Blk 3

B.M.	12.47	60.37	47.90	stub. 4+70.51
0+00 = Sta. 4+70.51 on N+S. line in Blk 5 Note: this tangent is not on the $\Phi$ of 6' Eas. but it is in the Eas. - See sketch for loc.				
0+50		10.2	50.2	
at W.L. Dixie Dr.				
1+00 = Join ex. 6" Sewer Lat.		10.2	50.2	
1+04 -.5 Rt = Nly. P. pole				
1+10.1 = W. cb. = Top		10.27	50.10	
	gut	10.85	49.52	
+25 = $\Phi$ Dixie Dr.		10.42	49.95	conc. Pave
1+40 = E. cb.	gut.	10.65	49.72	
	Top	10.00	50.37	
1+50.18 = Join 6' lat. at E.L.		9.4	51.0	
1+70		5.4	55.0	
1+85		3.4	57.0	
2+00		3.5	56.9	
	10 Rt.	4.7	55.7	
	10 Lt.	3.5	56.9	
2+20		4.9	55.5	
2+51 - 9 Pt. = Nly. P. + Tel. pole				
2+52.29 - Ang. Pt.		2.46	57.91	on stub.
T.P.	4.30	62.21	2.46	57.91 on stub.
20' lat. to N. on $\Phi$ 6' Eas. from Sta. 2+52.29				
40' N.		2.7	59.5	
13' Rt. = Conc. floor of Garage in Center of Duplex = wly. line		2.40	59.81	

30

62.21  
-62.61

80' N.		1.7	60.51	
120' N. = End. on Stub		1.17	61.04	
Begin 70' lat. to S. from Sta. 2+52.29 on $\Phi$ 6' Eas.				
35' S.		7.8	54.4	
70' S. = End on Stub.		9.53	52.68	
2+65 on E+W. $\Phi$ 6' Eas.	- 4.5 Lt. = Sly. 4x6' Clothesline			Post.
3+00		2.8	59.4	
3+01 -.7 Lt. = Sly. 6x8' clothes line				Post.
3+50		2.4	59.8	
4+03.17 = End		1.23	60.98	on stub.
T.P.	1.09	53.77	9.53	52.68
Check B.M. stub 2+34.21		8.20	45.57	45.56



X-Section of Alley Blk 33  
Fairmount Addition

(Work Order: 230)

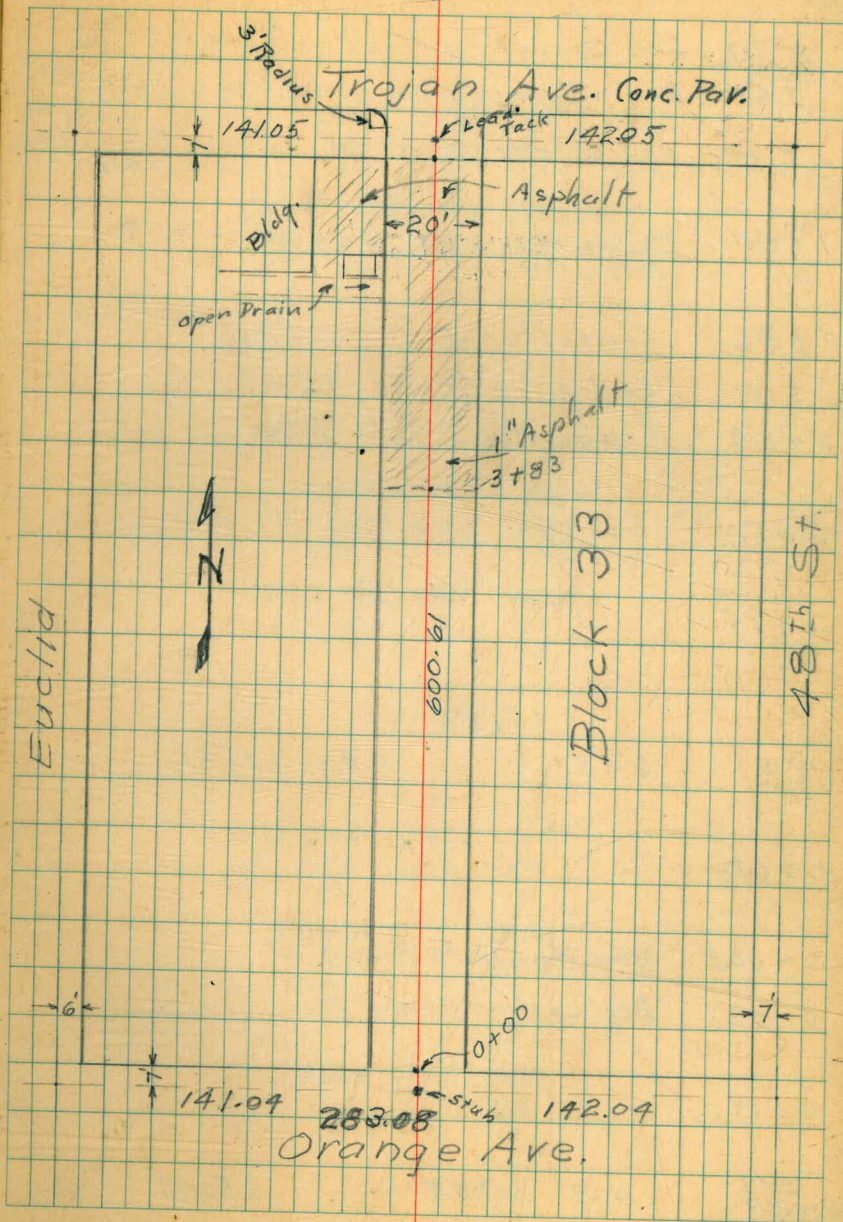
INDEXED

Rain All day 10/1/46

McCoy T  
Waddel  
Allen

Indexed  
C.S.N.

31



+97 End Garage (under const.) 14.0 Lt.  
 +53 Begin Garage (under const.) 14.0 Lt.  
 +50 End wire fence Rt 9.5 Begin Bd. Fence 10.2  
 1+00 End wire fence Rt. <sup>9.8</sup> Beg. Wire 9.5 Rt.

0+86 Conc. House Steps 12.3 Lt

0+70 End wire fence 9.8 Lt

0+69 Combination Pole 9.5 Lt.

0+50 End lath - Beg. Woven Wire Fence Rt. 10.1 9.1

0+15

351.85

T.P. 6.43 5.46 345.42

0+00

0-00.5 Beg. Wov. Wire Fence Lt.

0-03 Beg. Lattice Fence Rt.

0-17

BM.  
 NW.B.P.  
 Orang & +  
 Euclid

0.19 350.88

350.69

32  
10/2/46  
McCoy & Waddel Allen

347.10 Lt. 348.17

347.5	347.5	347.3	347.6	
4.3	4.3	4.5		
10		10	10.2	Begin Fence
347.4	347.2	346.8	346.9	346.9
4.4	4.6	5.0	4.9	4.9
2.5	10		10	2.5
			9.5	9.8
Top first Step 3.68				
12.3				
End Fence 9.8				
Pole 9.5				
346.7	346.4	346.4		
5.1	5.4	5.4		
10		10	9.1	10.1
346.7	346.3	345.8	345.8	
5.1	5.5	6.0	6.0	
10	8		10	
(351.85)				
347.0	345.6	345.3	345.5	
3.9	5.3	5.6	5.4	
10	8		10	
347.4		347.1		
9.5		10.8		Fence
Fence				
347.4	347.2	347.1		
6.5	6.7	6.8		
10		10		
(350.88)				

+34 End Hedge 11.3 RT.  
 +03 Begin Apron 10 car Garage 10.3 Lt.  
 +02 Begin 2' walk 10.3 Lt.  
 4+00 Begin 3' Hedge 11.0 RT.  
  
 +90 10.6 RT & Apron 1 car garage  
  
 +83 End fence 12.2 RT Begin Asphalt pav.  
 +52 Comb. Pole 8.9 Lt.  
  
 +50  
  
 3+00  
  
 +95 Sewer Manhole  
  
 +70 End Latl fence 9.4 Lt  
 351.57  
 T.P. 4.20 351.85 4.48 347.37  
  
 +50 Begin Fence 8.5 Lt.  
  
 +35 End Bd. fence 8.5 Lt.  
 +01 Begin fence 8.9 Lt  
  
 2+00

33

LT. E 346.36 RT.

351.57  
5.1

345.98	346.33	340.3	
5.57	5.34	11.3	End Hedge
19.3	10.3		
	346.34		
	5.2		
	10.3	346.33	346.43
	346.32	5.24	5.14
	5.25		11.0
	10		10 Edge Asphalt
	Edge Asphalt		346.6
			5.0
			10.16
			12.2 Floor
	346.42	346.53	346.53
End fence 12.2	5.15	5.04	5.02
	10		10
	Pole 8.9		
	346.8	346.6	347.0
	5.4	5.0	4.6
	10		10
346.5	346.9	347.1	347.3
5.1	7.7	4.5	4.3
50.0	10		10
			347.8
			3.8
			50.0
		347.05	Rim MH
		4.52	
	End fence 9.4		
		(351.57)	
	347.5	347.5	347.6
	4.3	4.3	4.2
	10		10
	End fence 8.5		
	Begin Bd. fence 8.9		
	347.6	347.3	347.4
	4.2	4.5	4.4
	10	8.9	10
			10.3
			End + Begin fence
		(351.85)	

+50

+43 Begin 8" conc. wall 9.6 RT

+35 \$ Double garage - dirt fl. 9.6 RT

+20 End double garage

+02 Begin double garage

5+00 Pole 9.4 Lt.

+99 \$2.5' walk 102 Lt.

+97

+78 Change in Garage Fl. Elev.

+50 Change in Garage Fl. Elev.

+43 \$ Single Garage Apron + Conc. Fl.

4+36 center 3' walk 9.6

Lt.                      C                      Rt.

343.8	343.3	342.54	342.47	342.49	342.6	341.1
7.8	8.3	9.03	9.10	9.08	9.0	10.5
25.0	10	8.2		6.1 Edg of Pav.	9.6	10

342.75  
8.82  
9.6

342.6  
9.0  
9.6 Floor.

344.72	343.92
6.85	7.65
15.8	11.8

344.72	344.52
6.85	7.45
16.0 Floor	12.0 Apron

345.1		344.11	343.86	343.83	344.2
6.5	Pole	7.46	7.71	7.74	7.4
25.0	9.4	10		10	25.0

344.60  
6.97  
102

344.92	344.63
6.65	6.94
14.3	102

345.00	345.44	344.90	344.69	344.85
6.57	6.13	6.67	6.88	6.72
14.4	14.4	10.3 Apron		10

345.44	346.10	345.39	345.39	345.57
6.13	5.97	6.18	6.18	6.00
14.7	14.7	10.2 Apron		10

345.73	345.94
5.89	5.63
9.8 Apron	12.1 Floor
345.88	
5.69	
9.6	\$ walk

(351.57)

(check on next page) →

BM  
NE BR 48<sup>th</sup>  
Trojan

347.19

3:00 344.19 (Record)  
(344.28)

T.P. 467 351.57 9.05 342.52

+12.61

6+0.0.61 Prop. Line 8" wall feathers into Curb Rt.  
(P.C. Pavement)

+83

+82

+63 Paving Widens

+59 Adobe Bldg 8'x8' 134 Lt.

+52 End Conc. Open Drain

Lt.

±

Rt.

35

~~351.57~~  
~~342.52~~  
~~344.19~~

342.53	342.02	341.92	341.92	342.40
9.04	9.55	9.65	9.65	9.17
12.5	12.5		12.5	12.5
Top Cb.		Gutter		Top Cb.

342.51	342.28	342.01	342.24	342.50
Ch. 9.06	9.29	9.56	9.33	9.07
10.4	10.4		9.7	9.7
Top		Gutter		Cb. + End Wall

342.82	342.34	342.31	342.42	342.61	342.5	342.5
8.75	9.23	9.26	9.15	8.96	9.1	9.1
10	5.0		8.0	9.5	10	2.5

342.82	342.34	342.32	342.44	342.64	342.9
8.75	9.23	9.25	9.13	8.93	10.7
10	5.0		8.5	9.8	10
				Top Wall	

343.62	342.73	342.37	342.34	342.52	342.9
7.95	8.84	9.20	9.23	9.05	10.7
26.5	10.0	4.7		9.0	10
End Pk.					

343.54
8.03
13.1
Floor

343.21
8.36
9.5
#

(351.57)

X-Sect. Alley Block 34  
Fairmount Addition

INDEXED

BM. 4.49 348.68 344.19 (see Pg. 35)

NEBP 48th  
& Trojan

T.P. 1.27 347.41

1.36 348.77

BM

5.95

342.82

342.81  
see Book  
1700 Pg 49

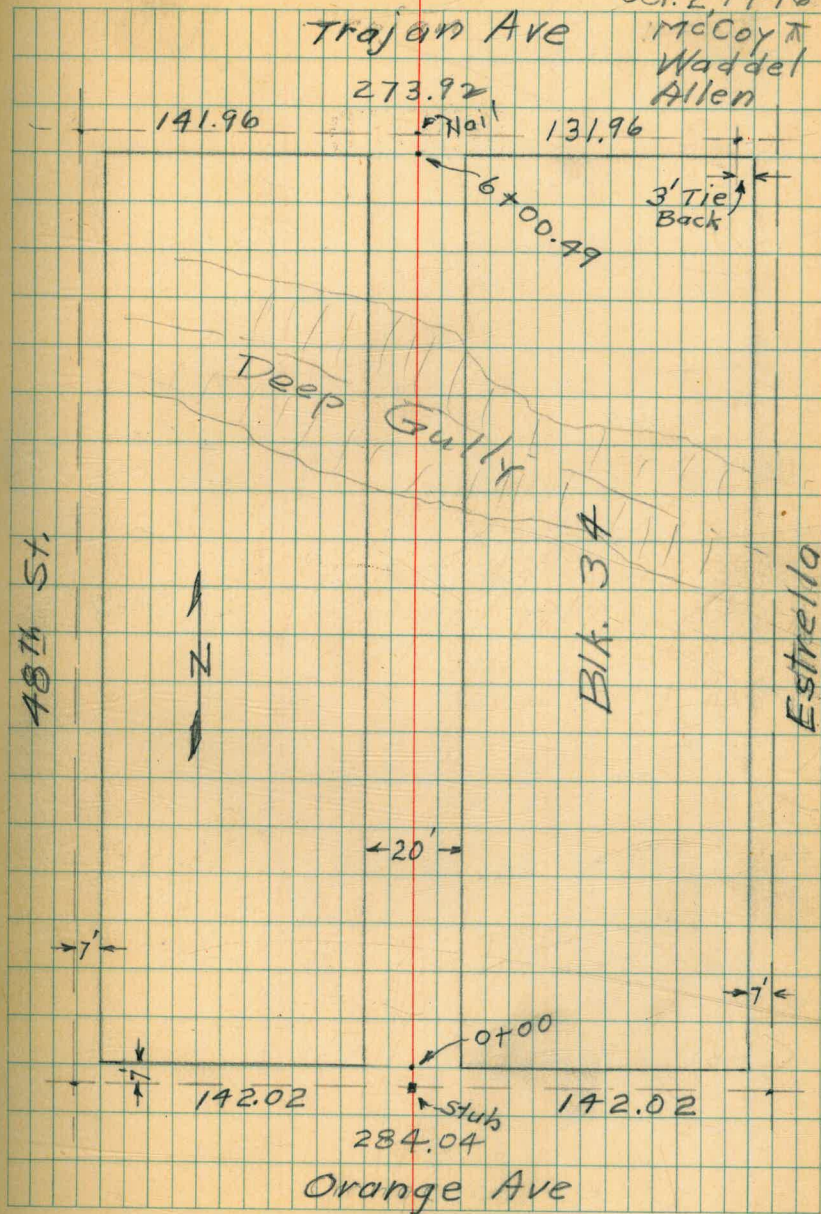
CK.

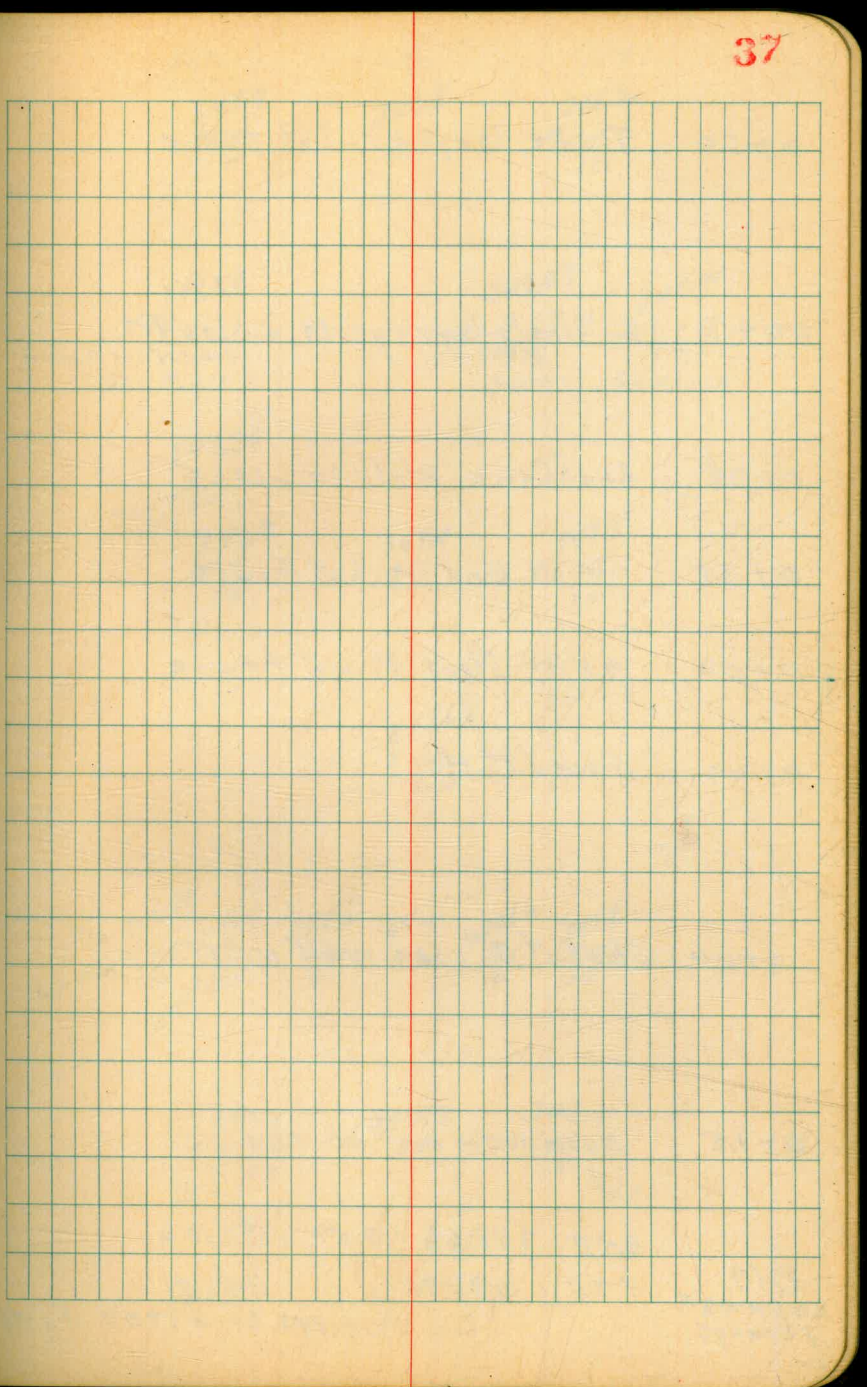
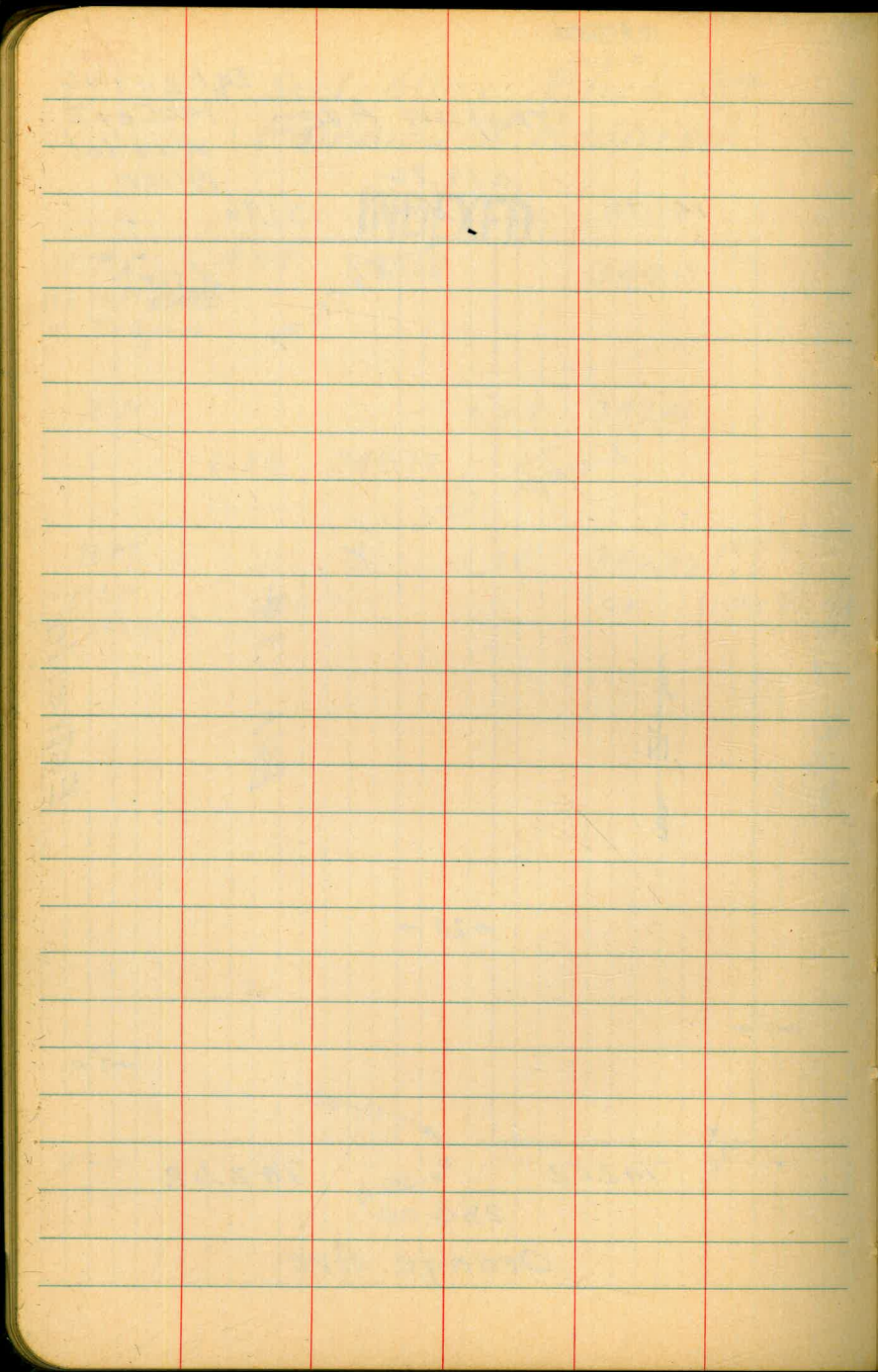
SEBP.  
48th + Orange

indexed  
C.S.K.

36

Oct. 2, 1946





0+50 9.3 RT Begin Picket fence

0+43 ± Single Garage Lt + Also RT.  
conc. Fl. conc. Fl. + Apron

0+38 End 5" Conc. Wall 10.2 Lt

0+35 9.4 RT. End Picket fence

0+08 9.8 RT Start Picket fence

0+02 Sewer M.H.

0+00 Start of 5" conc. wall 10' Lt.

0-15 No pavement or curbs

6.40 351.66 3.50 345.26

B.M.  
SE BR 48th  
+ Orange

5.95 348.76

342.81

see Book 1700 Pg. 49

Lt.

±

RT.

38

347.7  
7.0  
10

347.8  
3.9

348.2  
3.5  
10

347.55  
7.11  
11.2

Gar. Floor

348.07  
3.59  
9.3

Apron

348.41  
3.25  
17.1

Gar. Floor

347.34  
4.32  
10.2  
347.3  
4.4  
10

Top Wall

347.4  
7.3

347.9  
3.8  
10

345.66  
6.00  
Rim M.H.

346.31 346.1 345.5 345.6 345.6 345.9  
5.35 5.6 6.2 6.2 6.1 5.8  
10 10 6 6 6 10  
TOP WALL  
GROUND

344.1  
7.6  
10  
Gut.

344.3  
7.9

344.3  
7.4  
10  
Gut.

(351.66)



+55 Start 4 car garage Conc. Floor

+99 End Conc. Apron 10.8 Lt.

+26 9.2 Rt. End Picket Fence

+10 9.4 Rt. Begin Picket Fence

1+04 Begin Double Garage & Dwelling

1+00

+97 1/2 Single Garage Conc. Floor 14.3 Ft.

5.08 353.81

(10/3/46  
Sisson &  
McCoy  
Waddel  
Allen)

(353.81)

TP 351.66 2.93 348.73

+91 9.1 Rt End of Picket fence

+70 9.7 Lt Pole.

B.  
SEBP  
+ Oran

	Lt. 349.56				
	7.25				
	19.1				
349.09	349.1	349.1	349.1	349.1	349.1
4.72	4.71	4.7	4.7	4.7	4.9
15	10.8	10		10	25

348.72	348.73
5.09	5.08
21.6	10.7

348.6	348.6	348.9
5.2	5.2	4.9
10		10

348.7  
5.10  
14.3 Floor

348.1	348.3	348.3	348.6	348.5
3.6	3.4	3.4	3.1	3.2
35	10		10	35

(351.66)

Lt.

±

Rt.

+99 8.4 Rt. Wire F. ends - Picket begins

+37 10.6 Lt. Begin Lath Fence

+30 9.3 Rt Begin Woven Wire Fence

+20 10.9 Lt. Conc. Slab

+15 Single Garage Rt (Wood Fl<sup>3</sup>)  
Asphalt Apron

+10 Single Garage 10 Lt. Conc. Floor

2+00

+95 8.9 Lt Pole

1+83 End 4 Car Garage Conc. Floor

$$\begin{array}{r} 349.74 \\ 4.07 \\ \hline \text{slab } 10.9 \end{array}$$

$$\begin{array}{r} 349.24 \\ 4.57 \\ \hline \text{apron } 5 \end{array} \quad \begin{array}{r} 349.55 \\ 7.26 \\ \hline 14.3 \text{ Floor} \end{array}$$

$$\begin{array}{r} 349.73 \\ 4.08 \\ \hline \text{Floor } 10 \end{array}$$

$\begin{array}{r} 349.7 \\ 4.1 \\ \hline 20 \end{array}$	$\begin{array}{r} 349.7 \\ 4.1 \\ \hline 10 \end{array}$	$\begin{array}{r} 349.3 \\ 4.5 \\ \hline \end{array}$	$\begin{array}{r} 349.1 \\ 4.7 \\ \hline 10 \end{array}$	$\begin{array}{r} 348.8 \\ 5.0 \\ \hline 20 \end{array}$
--	--	---	--	--

$$\begin{array}{r} 349.42 \\ 4.39 \\ \hline \text{Floor } 14.1 \end{array}$$

(353.81)

+85

Sewer MH  $\frac{1}{2}$

+75

3+50

341.66

TP.

0.57 353.81 12.22 341.09

+17

3+00

9.3 Lt. Pole

10.6 Lt. End Pict. F.

+91

10.2 RT  $\frac{1}{2}$  Apron + Conc. Fl. Sing. Garage

+79

End RT 6.2 Picket Fence

+50

10.4 Lt. Lath F. ends-Picket Begins

331.7	Lt. 331.9	$\frac{1}{2}$ 331.9	RT 330.7	330.3	41
$\frac{10.0}{30}$	$\frac{9.8}{10}$	$\frac{9.8}{10}$	$\frac{11.0}{10}$	$\frac{11.4}{30}$	
		Ground Pim. MH $\frac{8.19}{10}$			

339.2	336.4	332.1	331.5	330.	330.7
$\frac{2.5}{20}$	$\frac{5.3}{10}$	$\frac{9.6}{3}$	$\frac{10.2}{10}$	$\frac{11.7}{10}$	$\frac{11.0}{30}$

340.5	338.0	338.6	336.6	337.5	336.2	333.5
$\frac{1.2}{20}$	$\frac{3.7}{10}$	$\frac{3.7}{7}$	$\frac{5.1}{10}$	$\frac{4.2}{5}$	$\frac{5.5}{10}$	$\frac{8.2}{20}$

(341.66)

345.9	345.6	345.2	345.0	341.2
$\frac{7.9}{25}$	$\frac{8.2}{10}$	$\frac{8.6}{10}$	$\frac{8.8}{10}$	$\frac{12.6}{20}$

346.0	346.14
Apron $\frac{7.81}{10.2}$	Floor $\frac{7.67}{11.2}$

348.0	347.0	346.5
$\frac{5.8}{10}$	$\frac{6.8}{10}$	$\frac{7.3}{10}$

349.6	349.1	348.3	347.9	
$\frac{4.2}{25}$	$\frac{4.7}{10}$	$\frac{5.5}{10}$	$\frac{5.9}{10}$	$\frac{6.3}{25}$

(353.81)

Lt. E Rt.

+50  
+28 9.6 Lt. Pole

5+00

+77

349.92  
T.P. 9.02 341.66 0.76 340.90

+50

+18

4+00

344.2	344.6	344.8	345.3	345.6
5.7	5.3	5.1	4.6	4.3
25	10		10	25

342.5	342.2	342.0	343.7	344.1
7.4	6.7	6.9	6.2	5.5
25	10		10	20

340.8	341.8	342.0	342.8	343.2
9.1	8.1	7.9	7.1	6.7
25	10		10	30

(349.92)

334.3	334.3	335.3	337.1	338.6	341.7
7.4	7.4	6.9	4.6	3.1	0.0
30	24	10		10	20

331.4	331.4	332.1	332.0	332.2	341.1
10.3	10.3	9.6	9.7	4.5	0.6
30	10		3	10	20

331.8	331.7	331.1	331.0	331.4
9.9	10.0	10.6	10.7	10.3
30	10		10	30

(341.66)

BM NEBP 3.13 349.16 (344.19)  
 48<sup>th</sup> + Trojan 347.29 see Pgs. 35 + 36

T.P. 2.90 349.92 5.53 344.39

+12.49 So. Gutter + Curb (No Curb on Lt.)

+04 So. Edge Walk

6+00.49 So. Line Street - Asphalt Pav.

+9.4

+69 11.7 Rt Begin W. Edge Conc. Ribbon Drive

+67 9.9 Rt End Single Garage

+51 9.9 Rt Begin Single Garage

Lt.      ♀      Rt.

43

343.57	343.68	343.82	344.1	344.63
<u>6.35</u>	<u>6.24</u>	<u>6.10</u>	<u>5.82</u>	<u>5.29</u>
10 Gut.		10 Gut.	20 Gut	20 T.C.

344.24	344.25	344.44
<u>5.68</u>	<u>5.67</u>	<u>5.48</u>
10 S. Edge Walk		11.3 S. Edge Walk

344.17	344.51	344.70
<u>5.75</u>	<u>5.41</u>	<u>5.23</u>
10 Pav.		10 Pav.

345.5	345.4	345.7	346.3	346.48
<u>4.4</u>	<u>4.5</u>	<u>4.2</u>	<u>3.6</u>	<u>3.44</u>
10		5	10	17

346.21
<u>3.71</u>
11.7 Wedge Ribbon Drive way

(349.92)

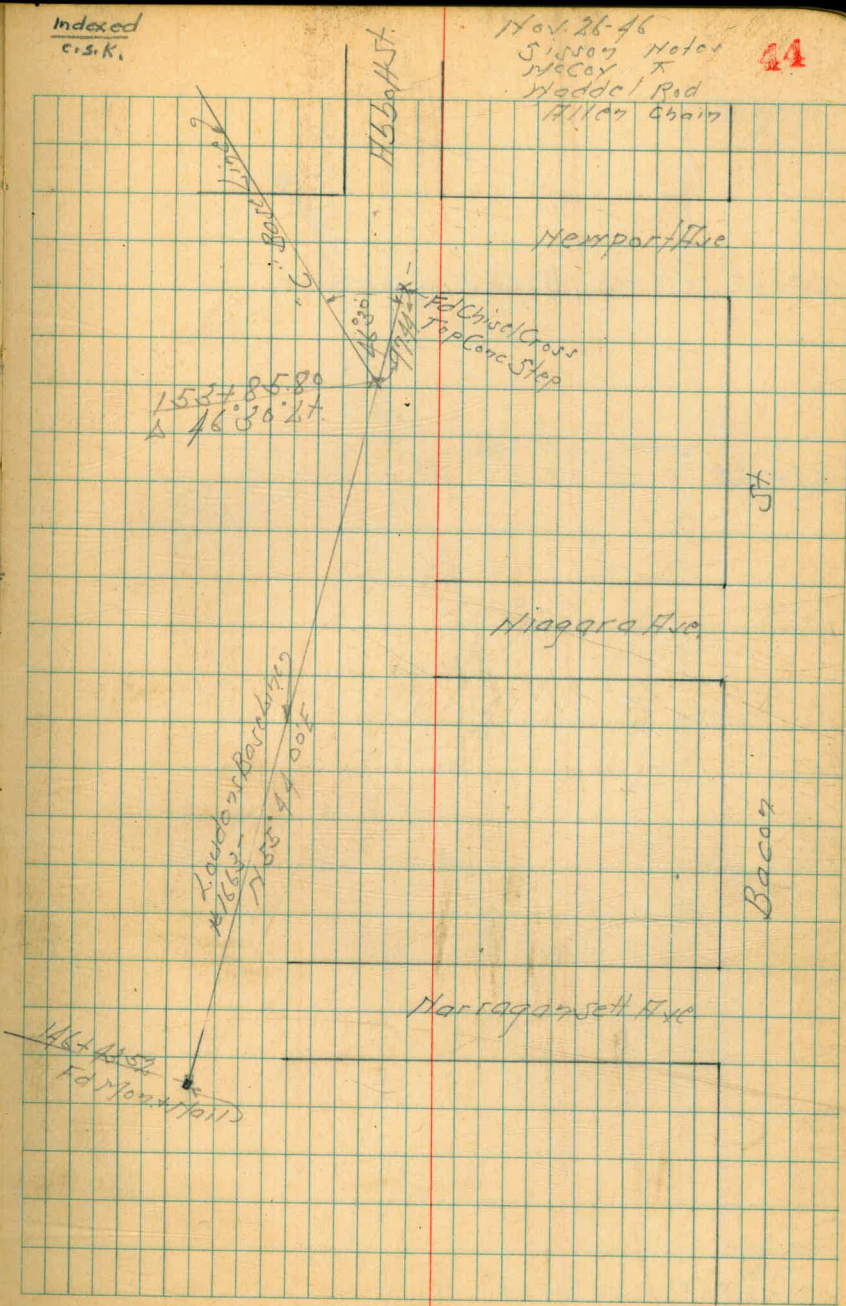
Mean High Tide Line Ocean Beach  
 C Line Narragansett Ave to South End of  
 Mission Bay Bridge

INDEXED

153+85.80 Δ 46°30' Lt.

146+43.52 Δ

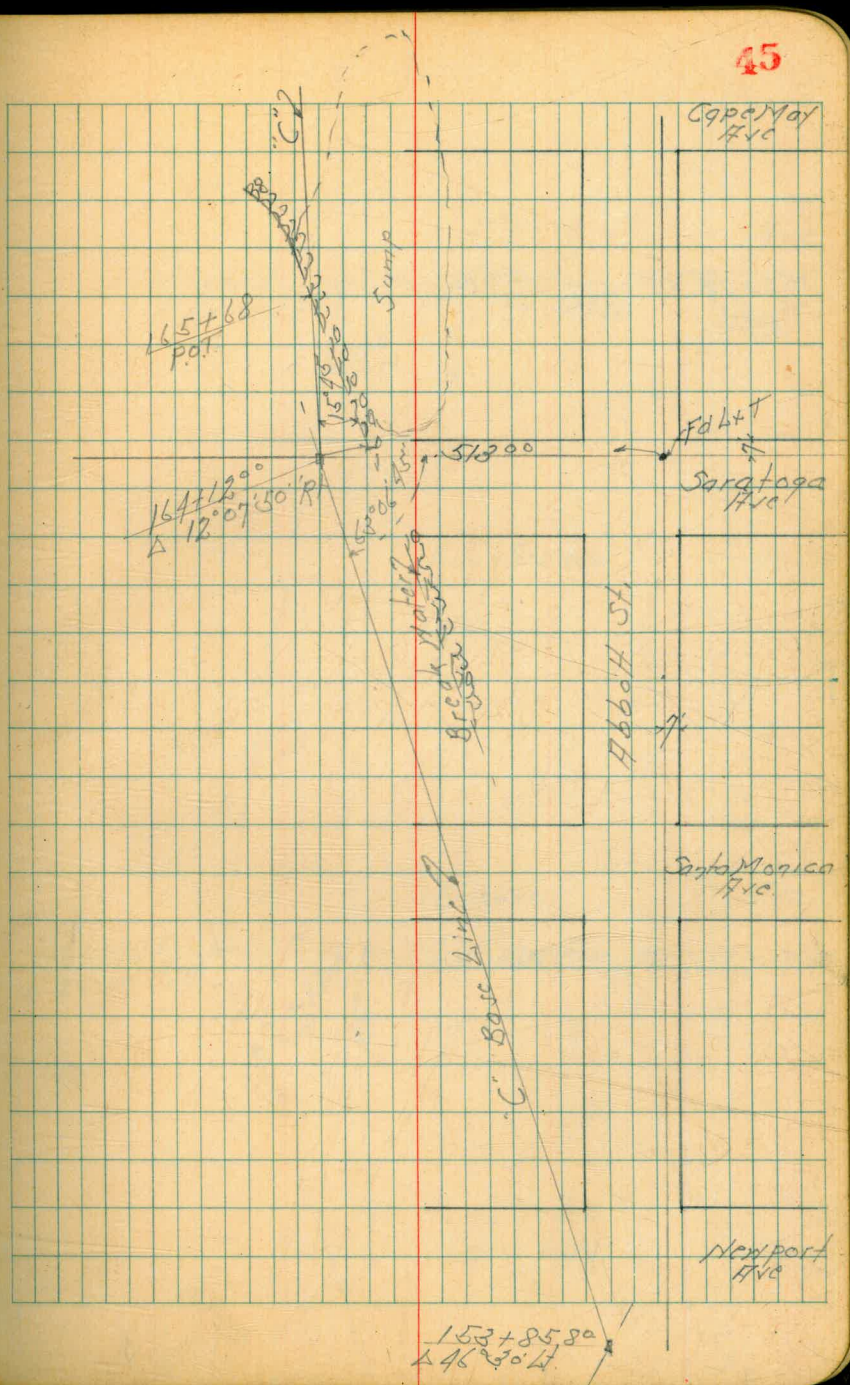
Indexed  
 C.S.K.



165+68 = S.W. 1/4 Rock Breakwater

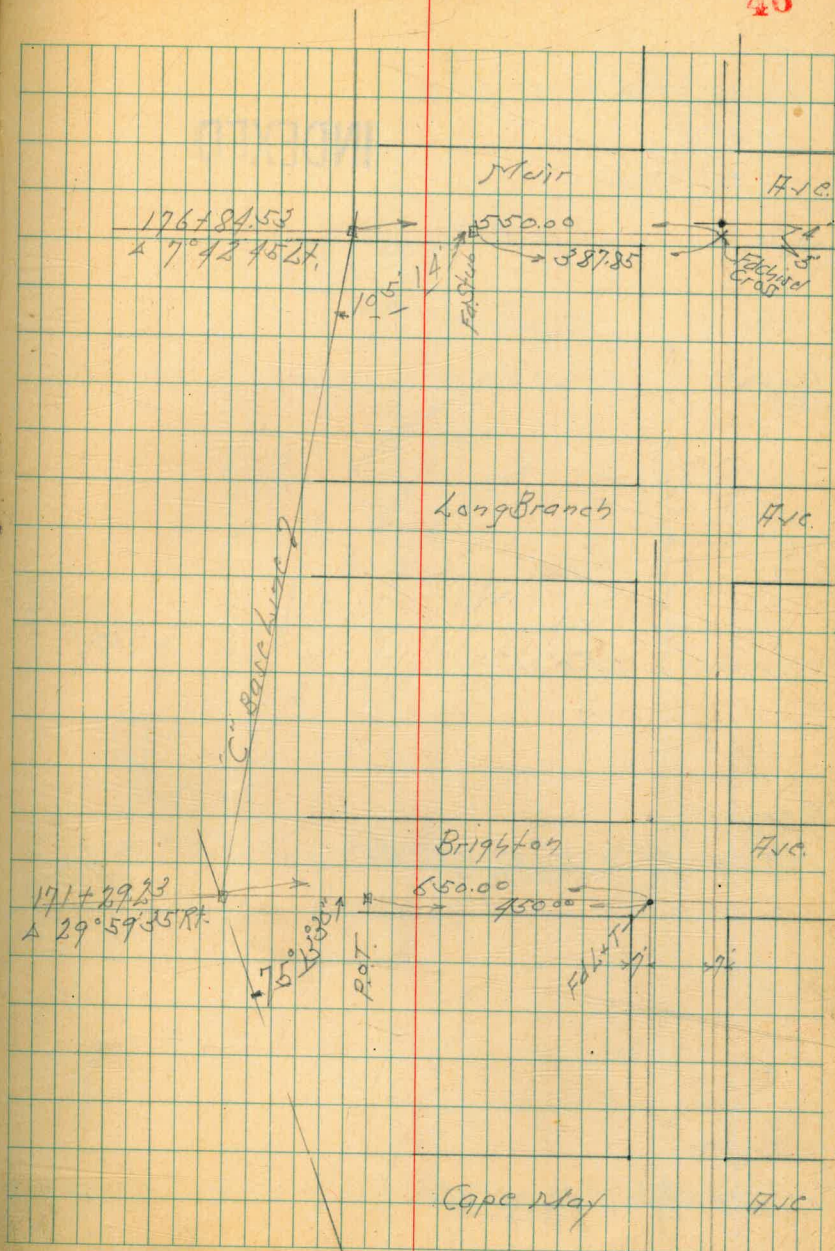
164+12.0° A 12° 07' 50" Rt

153+85.8° A 46° 30' Lt



176+84.53  $\Delta 7^{\circ} 42' 45''$  Lt.

171+29.23  $\Delta 29^{\circ} 59' 35''$  Rt.





Mean High Tide Line Ocean Beach

191+5588  $\Delta$  89°52'40" Lt

INDEXED

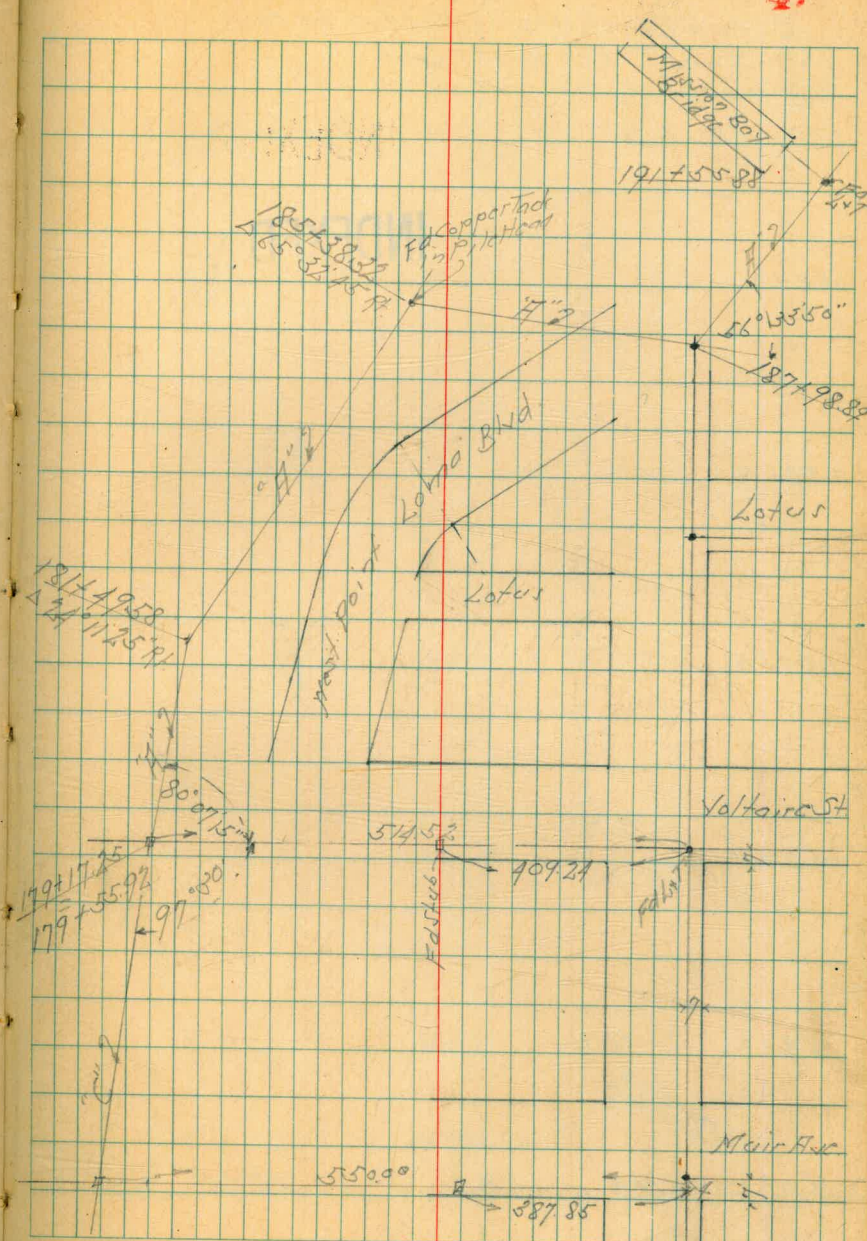
187+9889  $\Delta$  56°33'50" Lt

185+5832  $\Delta$  65°32'45" Rt

181+4958  $\Delta$  24°11'25" Rt

179+1725  
179+5592  $\Delta$  2°22'45" Rt

176+8453  $\Delta$  7°42'45" Lt



16070

15970

TP 4.53 16.23 4.04 11.70

15870

15770

15670

15570

1574

Lt.

B

40

4.91			
<u>11.33</u>	6.7	4.6	49
178	78	80	

4.91			
<u>11.32</u>	4.7	5.1	
158	35		

16.23

4.91			
<u>10.83</u>	4.6	4.5	
177	80		

4.91			
<u>10.83</u>	5.1	4.6	
183	85		

4.91			
<u>10.83</u>	5.9	5.3	
194	73		

4.91			
<u>10.83</u>	4.8	4.7	
193	98		

15.74

Levels Mean High Tide Line  
Ocean Beach

# INDEXED

16670

4.91  
11.55  
145    65    51  
41    32

4.3 Toprock  
water

16570

4.91  
11.55  
113    66    53    50  
33    25

16470 Δ 12° 07' 50" Rt. Taken on Split of 4

4.91  
11.55  
87    71    53    51  
23    17

TP    5.12    16.46    4.89    11.34    <sup>on 85° top</sup> 16470

16.46

16370

4.91  
11.32  
95    69    54    50  
25    22

16270

4.91  
11.32  
109    70    53    54  
42    34

16170

4.91  
11.32  
124    68    48    50  
34    37

16.23

16.23

Lt.

B

Nov 27-46 59

172+0

171+29.23 A 29° 59' 35" Rt. Taken on split of A

TP 3.59 12.76 7.29 9.17

170+0

169+0

168+0

167+0

16.46

Lt

B

Rt.

51

$\frac{4.91}{7.85}$  46' 1.5  
 $\frac{4.91}{7.85}$

$\frac{4.91}{7.85}$  14' 4.32  
 $\frac{4.91}{7.85}$  on stub  
12.76

$\frac{4.91}{11.55}$  74' 7.3  
 $\frac{4.91}{11.55}$

$\frac{4.91}{11.55}$  74' 7.4  
 $\frac{4.91}{11.55}$

$\frac{4.91}{11.55}$  90' 9.4  
 $\frac{4.91}{11.55}$  124' = H.E. Break  
Water

$\frac{4.91}{11.55}$  67' 3.3  
 $\frac{4.91}{11.55}$  77' = H.E. Break  
Water  
81' = H.E. Break  
Water  
100' 17.50 mp

16.46

Levels Mean High Tide Line  
Ocean Beach

# INDEXED

176+8453 Δ 7°42'45" Lt Taken on split of Δ

3.30 10.11 6.81 07 1/2 Stub 176+8453

BM 4.46 12.92 Tap Picked 2 1/2 pipe W End 176+8453 12.92

TP 10.57 17.38 5.95 6.81 07 1/2 Stub 176+8453

176+0

175+0

174+0

173+0

12.76

Lt

B

52

4.91  
5.20  
12.8'

53

10.11

4.91  
7.85  
13.0'

57

4.91  
7.85  
16.6'

54

53

4.91  
7.85  
18.3'

50

51

4.91  
7.85  
16.0'

49

47

12.76

Dec. 5-46  
 S. McCoy  
 McCoy  
 H. Allen  
 Start Sta. 180+0

181+0

180+0

179+50

TP 2.96 8.25 10.69 5.29

B.M. 3.06 15.98 12.92

Top Plugged  
 2" Pipe at End  
 Measured  
 109852

179+17.25 "A"

179+55.97 "G"

Taken as split of A

179+0

178+0

10-11

Lt

R

Rt.

53

47  
 100

73

7.3  
 6.3

4.91  
 5.34  
 6.3 on Bull  
 Head

52  
 100

48

4.91  
 5.34  
 3.3 on Bull  
 Head

4.91

5.34

8.25

4.91

5.20  
 38

7.07  
 0.55  
 6.52

4.91

5.20  
 17

61

4.91

5.20  
 80

42

10-11

185+0

184+0

183+0

182+83

182+0

JP 5.46 7.29 6.42 1.83

181+49.58  $\Delta$  24° 11' 25" R1 Taken on split of A

8.25

Lt

B

Rt

54

5.5

4.0  
31

4.91  
2.38  
31.07 Bulk  
Head

46

3.8  
23

4.91  
2.38  
23.07 Bulk  
Head

5.1  
100

49

5.1  
16

4.91  
2.38  
16 = Foghorn  
Bulk Head

47

5.2  
43

4.91  
2.38  
43 = Foghorn  
Bulk Head

62

6.1  
27

4.91  
2.38  
27.07 Bulk  
Head

7.29

6.6  
60

6.41 on stub

7.9  
10.8

4.91  
3.34  
10.8 on Bulk  
Head

8.25

TP 6.10 16.12 4.09 10.02

18940

187+9889  $\Delta 56^{\circ}32'50''$  Lt Taken on split of  $\Delta$

18740

18640

185+77 on Base Line - Nly of Bulk Head

TP 11.62 14.11 4.80 2.49

185+28.32  $\Delta 65^{\circ}32'45''$  Rt taken on split of  $\Delta$

7.29

Lt

Rt

Rt

55

4.91			
9.20	61	33	5.3
14.20	38	30	

4.91			
9.20	56	33	3.03 on line
12.9	77	87	

4.91		
9.20		4.8
13		

4.91		
9.20	9.9	
11.7		

4.91		
9.20	10.9	
12		

14.11

4.91		
9.20	6.3	4.6
13.4		1.38
		1.34 on Bulk Head

7.29



BM		4.43	15.35	NFBP 17' support 17' 10" 17' 6" 17' 10" 15.44	
TP	5.95	19.78	5.92	15.85	
TP	2.02	19.75	6.18	17.73	
TP	9.85	23.91	1.92	14.06	
TP	3.10	15.98	5.95	12.88	Top plugged 2nd pipe at end NFBP
TP	4.01	18.83	1.13	14.82	
TP	5.20	15.95	4.62	10.75	
BM	3.29	15.37		12.08	
BM		4.04	12.08	12.18	

191+0

190+0

16.12

Lt

B

pt.

56

Same as below

BP East Curb 9' South of South End Mission Bay Bridge

4.91		
11.31	41	52
58	22	

4.91		
11.31	90	62
58	25	

16.12

as subdiv. Carter Hole - Motcalf  
X-Sect. 10 Alley in Block 212 - Hortons add.

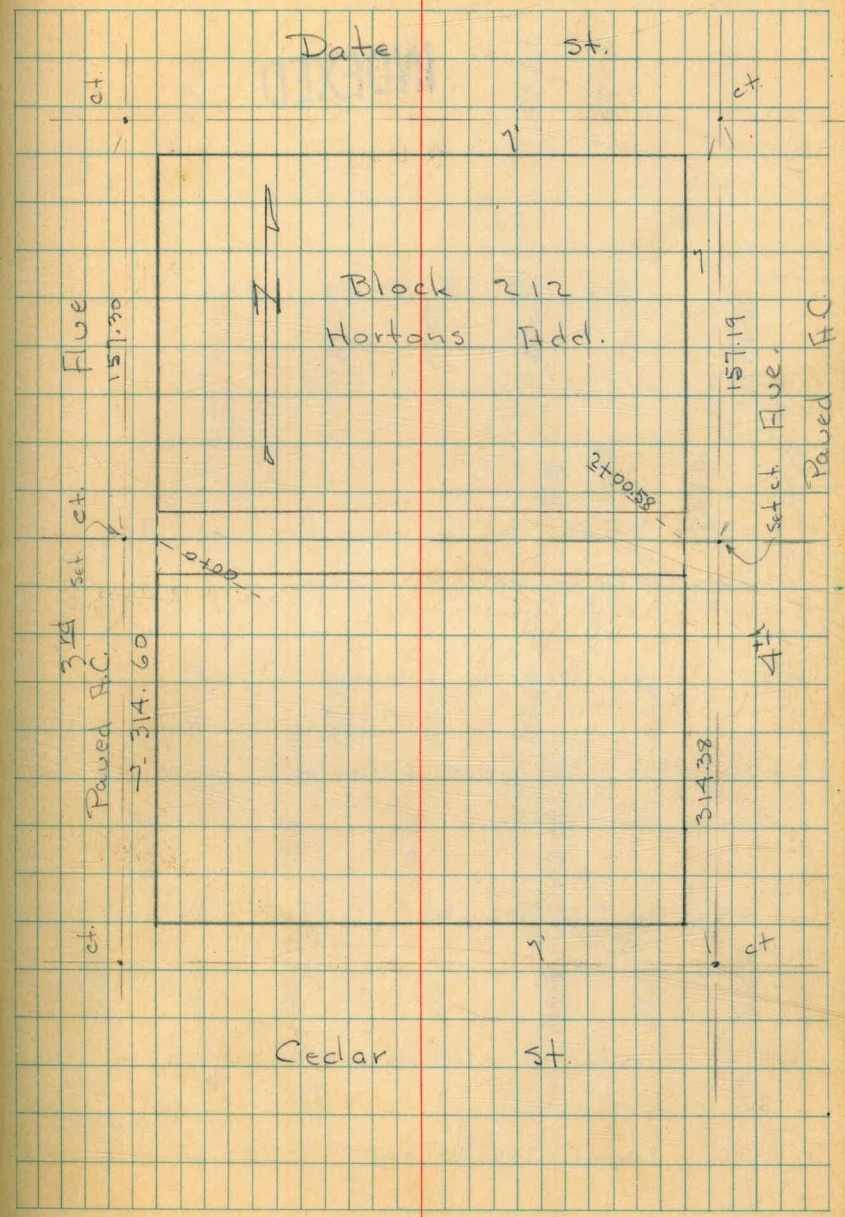
Map - 161

**INDEXED**

**MAR 8 1949**  
WK

# 680  
W.O. 210

Osborne - 12-18-46  
Hardin  
Worrell  
Smith



X-Sect. 10' Alley - Block 212.

# INDEXED

0+30

T.P. 11.48 130.15 0.03 118.67

0+15

0+034 = 3.5 Rt. = Beg 16" Conc gutter along Bldg.  
about 0.2' Dip in center of gutter

0+00 - 5' Lt. = Beg Conc. Ret wall 12" wide

Cold lay for Alley.

0+00 = E.L. 3<sup>rd</sup> Ave. = edge of A.C. pave and beg.

0-04 = Beg Conc Ramp and shoulder on Rt. - cb broken out

0-14 = E. cb. - curb returns Broken out and leaning

B.M. 10.61 118.70

108.09 NW.BP  
Cedar + 3' d

Lt. = N.

Rt. S.

58

Station	121.20	119.05	118.73	118.67	118.57	118.48	118.40
Top wall	4.95 4.9	11.1 4.9	11.42 3.5	11.48	11.58 3.5	11.67	11.67
		along wall	edge pave		edge pave + gut.		= gut along Bldg.
		116.70	115.87	130.15 116.07	116.35	116.47	116.51
		2.3 4.9	2.83 3	2.63	2.35 3.5	2.23 3.5	2.19 5.1 = conc.
		ground at wall	edge		edge gut Pave	Top edge at Bldg	
					4.80 113.90	114.80 114.20	114.88
					3.5 gut +	3.80 3.5 Top edge gutter	4.50 4.7 end of Conc Ramp
					Low end of Conc. shoulder		3.81 4.8 Top edge of gut along Bldg.
	119.56	113.87	113.72	113.56	113.60	113.88	
	to 0.86 5' Lt. Top wall						
		4.83 5.5	4.98 5	5.14	5.10	4.82	
		Top back edge of b.	5' face of pave + gut		4.7 = gut + Bottom of Shoulder	4.9 = Top edge of Ramp	
		113.68	113.5	113.26	113.48		
		5.02 5.5	5.20	5.44	5.22		
		Top edge of + walk	4.7 = gut + edge of pave		5' edge		
		112.66	112.55	112.5	112.41	113.14	113.35
		6.04 5.0	6.15 5	6.20	6.29 5	5.56 5	7.35 5.0
		5' edge of gut	Top cb 1' Rad.		5' edge of gut	Top cb	5' edge of gut
				118.70			

one floor below + 2 above  
Elev. at floor at Bldg. at Rt. 8.05

Head wall at end gut.

0+94 - end wall and Conc. gut. on Rt + end Bldg. - conc.

0+90

0+88.5 = 6.4 Lt. = \$ 1.5 Conc. walk

0+87 - 8.9 Lt. = end add.

0+76 - 8.6 Lt. = end Bldg. + 8.8 Lt. = Beg. add. to Bldg.

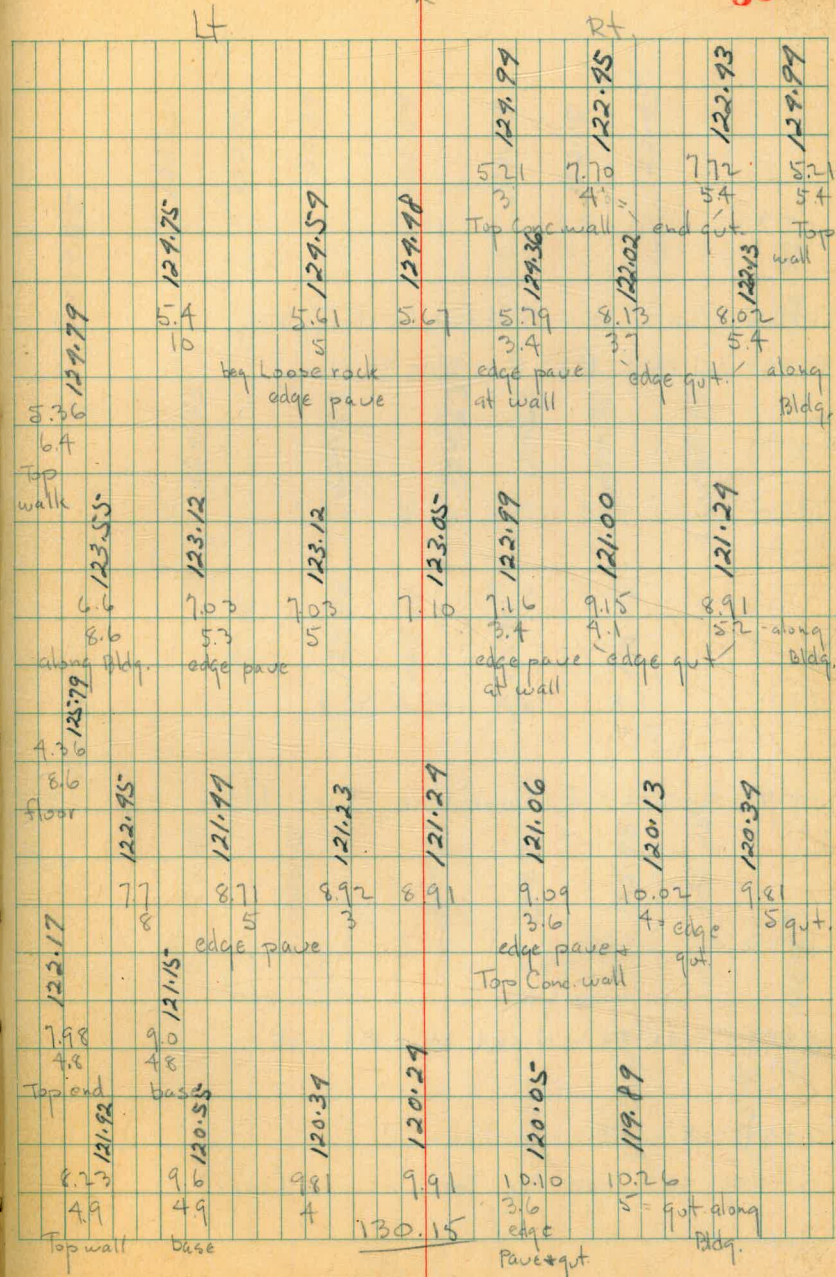
0+70

0+60 = S.W. Cor Bldg. 8.6 Lt.

0+54 - end Conc. wall on Rt. + Beg. 2" wood ret. wall along Conc. gut

0+51 - 4.8 Lt. end wall

0+45 - Beg. Conc. wall on outside of gut. on Rt.



1+45

1+35 = 20.2 Lt. = S.W. Cor. (2 story) Bldg

1+34 = 6.1 Rt. = N.W. Cor. Bldg. (3 story)

1+30

1+15

1+12 = 30.2 Lt. = Double Gar. Dirt. floor

1+00

0+995 = 4.5 Rt. = N. end of 1' Ret. wall

0+99 = 5.2 Rt. = end Porch

0+94 = 5.2 Rt. = Beg. Porch - wood floor

	Lt.		Rt.	
Top floor	129.55	122.99	122.09	122.95
Bot. floor	129.95	124.63	129.66	124.95
edge pave	125.05	125.05	125.35	125.95
on pave	125.05	125.25	125.35	125.95
floor.	125.05	124.93	124.95	125.25
pave + Rock	125.15	124.93	124.95	125.05
edge pave	125.15	124.93	124.95	125.05
Top porch	125.15	124.93	124.95	125.05
Top Porch	125.15	124.93	124.95	125.05
along Bldg.	126.92			
3.23				
6.1				
floor at ground.				

130.15

check starting B.M. 7.08 108.11 108.09  
 4.55 115.19 8.04 110.64  
 T.P. 4.52 118.68 9.56 114.16  
 2+14.58 = W. cb. line

2+03.6 = end Cold Lay + Beg. A.C. pave  
 2+01.4 = 5.8 Rt. - end porch.  
 ↓ end at Conc. gut on Rt.  
 2+00.58 = W.L. 4<sup>th</sup> Ave + 5.3 Lt. = end wall

1+97

or Dip in gut. Porch = add.

1+90.5 = 5.6 Rt = end Bldg. + beg. 12 Conc gutter along  
 1+86 = Brk. in Top of wall  
 1+81.4 = 5.3 Lt. = Beg 8" Conc. wall

T.P. 6.11 123.72 12.54 117.61

1+80

1+70 = 4.5 Rt. = 1 1/2" pipes for Guard for Gas Meter.

1+60

115.84 9.00 gut	115.97 8.25 Top edge Ret.	114.82 8.90 gut	114.68 9.04 Ret.	114.50 9.22 gut	115.05 8.67 Top cb. Ret.	113.32 10.40 40 gut.
117.92 5.08 53 Top wall	116.62 5.33 53 base	116.62 5.16 4.9 = gut. end curb.	115.68 8.05 7.60 edge pave.	115.71 8.01 7.32 edge pave + gut.	115.56 8.6 7.7 edge pave + gut.	115.32 8.44 5.1 = gut. + Top cb. 116.02 7.70 5.8 gut along Bldg.
119.18 4.54 53 Top wall	117.74 5.98 53 Top end wall	117.60 12.55 edge pave	123.72 117.55 12.60 edge pave	117.50 12.65 edge pave	116.74 6.98 4.5 = edge Pave + gutter	116.72 7.00 5.8 edge gutter along Bldg.
120.05 10.1 121.75 8.4 10	120.95 5.2 120.23 9.9 10.08 edge pave	123.72 117.55 12.60 edge pave	120.07 10.08 119.86 10.29 edge Pave	117.50 12.65 edge pave	117.75 12.4 5.1 119.95 10.2 5	117.85 12.3 5.1 120.35 5.8 5.7 along Bldg.
		130.15				

Levels on Ingraham for 2 Profiles  
See Plan for Sketch

7.0. - 1-8-47  
w.o. 23

INDEXED  
WK  
MAR 8 1949

Notes Reduced  
1-9-47 - Mhevy -

Profile - Ingraham

INDEXED

B.M.	4.70	37.31	32.61
0+00 - on $\Phi$	8.50	28.81	✓
0+50 - " "	8.10	29.21	✓
1+00 = P.C. $\Phi$ Curve			
$\Phi$	7.60	29.71	✓
18.3 Lt = gut	8.11	29.20	✓
" " Top	7.56	29.75	✓
18.3 Rt = gut	7.61	29.70	✓
" " Top	7.08	30.23	✓
1+25 on curve			
$\Phi$	7.43	29.88	✓
14.5 Lt = gut	7.82	29.49	✓
" " Top	7.29	30.02	✓
17.9 Rt = gut	7.40	29.91	✓
" " Top	6.81	30.50	✓
1+50			
$\Phi$	7.11	30.20	✓
19.6 Lt = gut	7.56	29.75	✓
" " = Top	7.01	30.30	✓
16.8 - Rt = edge of pave	7.19	30.11	✓
1+75			
$\Phi$	6.86	30.45	✓
21.5 Lt = gut	7.25	30.06	✓
" " Top	6.73	30.58	✓

1+75	37.31	
14.8 Rt = edge pave	6.98	30.73 ✓
2+00		
$\Phi$	6.66	30.65 ✓
6.3 Lt = Center stripe	6.72	30.59 ✓
24.1 gut	6.99	30.32 ✓
" " Top	6.51	30.80 ✓
12.1 Rt = edge	6.78	30.53 ✓
2+25		
$\Phi$	6.47	30.84 ✓
9.6 Lt = stripe	6.40	30.91 ✓
27.7 Lt = gut	6.69	30.62 ✓
" " Top	6.14	31.17 ✓
8.7 Rt = edge	6.57	30.74 ✓
2+65.50 = E.C.		
$\Phi$	6.22	31.09 ✓
16.6 Lt = Stripe (old $\Phi$ )	6.00	31.21 ✓
34.9 Lt = gut	6.26	31.05 ✓
" " = Top	5.66	31.65 ✓
1.6 Rt = edge	6.22	31.09 ✓
3+00 = on $\Phi$ Tan. to N.		
0.6 Lt = edge pave	5.95	31.26 ✓
1.9 Lt = stripe	5.77	31.54 ✓
42.3 Lt = gut	5.86	31.45 ✓
" " Top	5.28	32.03 ✓



37.31

3+25			
⊕	5.70	31.61	✓
15.7 Lt. = Stripe	5.67	31.64	✓
49.3 Lt = gut.	5.66	31.65	✓
" " = Top-on Ret.	5.10	32.21	✓
2.6 Rt = edge	5.75	31.56	✓
3+48 = Opp New P.C. of Ret on Rt			
⊕	5.48	31.83	✓
12' Lt. = Stripe	5.46	31.85	✓
34.7 Lt = ⊕ Prod from S.	5.40	31.91	✓
10.8 Rt. = edge	5.49	31.82	✓
3+58 = opp. E.C. Ret. on Rt			
⊕	5.40	31.91	✓
10.5 Lt. = Stripe	5.32	31.99	✓
37' " = ⊕ prod.	5.14	32.17	✓
20 Rt.	5.48	31.83	✓
38.8 Rt. = gut.	5.52	31.79	✓
" " Top P.C. Ret.	5.09	32.23	✓
3+73			
⊕	5.22	32.09	✓
7.6 Lt. = Stripe	5.13	32.18	✓
40.4 " = ⊕ Prod.	4.82	32.49	✓
12' Rt. = in cross gutter	5.28	32.03	✓
35 Rt. = ⊕ to Line to E.	5.27	32.04	✓

37.31

64

3+88 = opp E.C. Ret. on Rt.

⊕	4.96	32.35	✓
54 Lt. = Stripe	4.90	32.41	✓
27' Lt = gut on Ret.	4.68	32.63	✓
18' Rt = Cross gut.	5.20	32.11	✓
34.8 Rt. = E.C. Ret. gut	5.40	31.91	✓
" " Top	4.96	32.35	✓
4+08			
⊕	4.69	32.62	✓
2' Lt. = Stripe	4.63	32.68	✓
18.3 " = gut. on Ret.	4.65	32.66	✓
18.2 Rt = gut. P.C. Ret	5.28	32.03	✓
" " Top	4.64	32.67	✓
4+12 = opp P.C. Ret. on Lt.			
⊕	4.61	32.70	✓
1.5 Lt. = Stripe	4.59	32.72	✓
18 Lt = gut. P.C. Ret.	4.62	32.69	✓
" " Top	4.13	33.18	✓
18.4 Rt = gut.	5.23	32.08	✓
" " Top	4.65	32.66	✓
4+50			
⊕ = Stripe & St.	4.41	32.90	✓
18.2 Lt. gut.	4.38	32.93	✓
" " Top	3.84	33.47	✓
18.0 Rt = gut	4.89	32.42	✓
" " Top	4.28	33.03	✓

37.31

5+00		
Φ	3.97	33.34 ✓
18.4 Lt. = gut	3.98	33.33 ✓
" " Top	3.42	33.89 ✓
18.2 Rt. = gut.	4.44	32.87 ✓
" " = Top	3.90	33.41 ✓
end.		

Φ Ingraham to Lt.

	Rt.	
0+00 = B.C. = +00 on Φ to	7.60	29.71 ✓
0+50	7.11	30.20 ✓
1+00	6.72	30.59 ✓
1+57.38 = P.C. Φ	6.09	31.22 ✓
18.3 Lt. = gut.	6.32	30.99 ✓
" " Top	5.80	31.51 ✓
1+82.38 on curve		
Φ	5.82	31.49 ✓
16.9 Lt. = gut.	6.08	31.23 ✓
" " Top	5.48	31.83 ✓
2+07.38		
Φ	5.60	31.71 ✓
13 Lt. = gut	5.90	31.41 ✓
" " Top	5.25	32.06 ✓
11.8 Rt. = stripe	5.71	31.60 ✓

65

2+32.38

37.31

Φ	5.56	31.75 ✓
2.6 Lt. = gut on Ret.	5.68	31.63 ✓
" " Top "	5.08	32.23 ✓
12.3 Rt. = Φ Prod.	5.50	31.81 ✓
2+57.38		
Φ	5.39	31.92 ✓
21.9 Lt. = gut on Ret.	5.65	31.66 ✓
" " Top. " "	5.09	32.22 ✓
22.4 Rt. = Φ Prod.	5.05	32.26 ✓
2+72.78 = E.C.		
Φ	5.10	32.21 ✓
12.8 Lt.	5.29	32.02 ✓
32 "	5.45	31.86 ✓
12 Rt.	4.92	32.39 ✓
25.2 " = gut on Ret.	4.72	32.59 ✓
2+76.24 = P.C.		
Φ	5.06	32.25 ✓
3+01.24		
Φ	4.61	32.70 ✓
4.5 Lt. = Φ Prod. from N.	4.67	32.64 ✓
21.8 Lt. = gut. on Ret.	5.10	32.21 ✓
" " Top	4.72	32.59 ✓
12.5 = Rt. = gut. on Ret.	4.64	32.67 ✓
" " Top " "	4.17	33.14 ✓

37.31

3+26.24

Φ	4.20	33.11 ✓
17 Lt.	4.22	33.09 ✓
16.6 Lt. - gut	4.65	32.66 ✓
" " Top	4.23	33.08 ✓
13.3 Rt. - gut	4.39	32.92 ✓
" " Top	3.92	33.39 ✓
3+55.74 = E.C		
Φ	3.59	33.72 ✓
15 Lt. - gut.	4.00	33.31 ✓
" " Top	3.62	33.69 ✓
15 Rt. = gut.	3.76	33.55 ✓
" " Top	3.33	33.98 ✓
4+00		
Φ	2.70	34.61 ✓
15 Lt. = gut.	3.05	34.26 ✓
" " Top	2.63	34.68 ✓
15 Rt. = gut	2.78	34.53 ✓
" " - Top	2.33	34.98 ✓

Euclid - Ties to Lot #1  
Hortons Purchase.

Work Order

Sommermejer  
W Moore  
shorman

X = set chisel cross in paving

7-7 47

□ = set 2x2 Hub

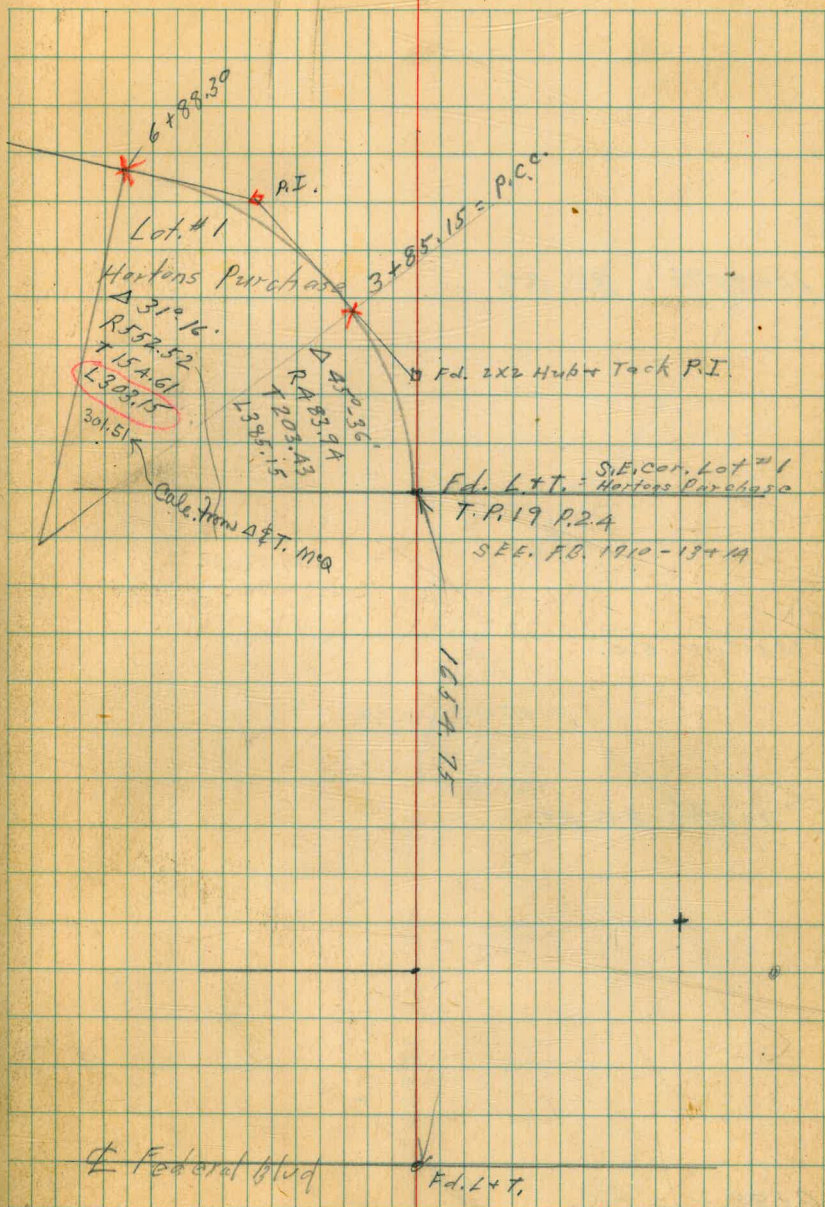
INDEXED

0+00 = B.C. = S.E. Cor. lot #1 Hortons Purchase

0+00 - 1654.75 T.P. 19-2A.

Indexed  
C.S.K.

67

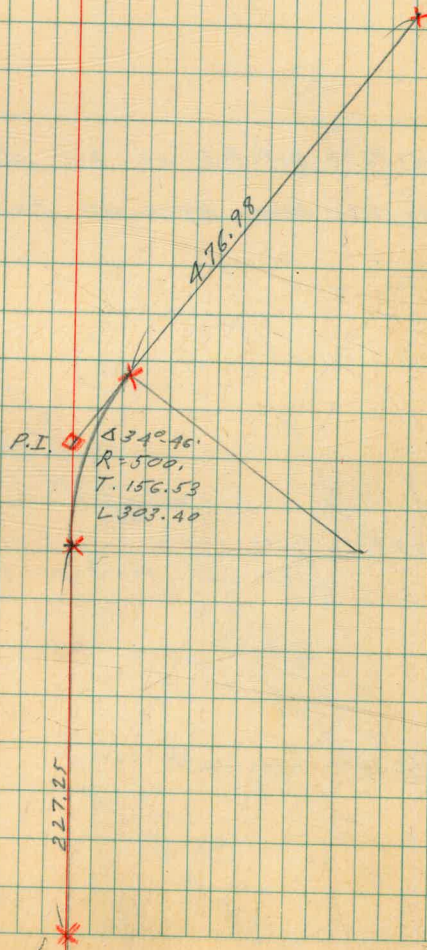


16+95.73 = B.C. RT.

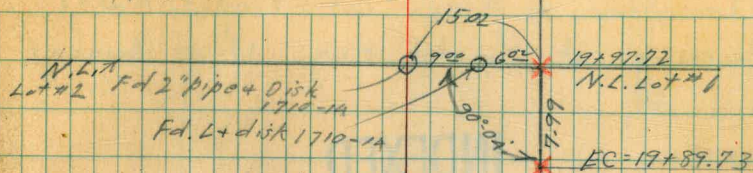
12+18.95 = E.C.

9+15.55 = B.C. RT.

6+88.30 = E.C.



## Wads worths olive Grove

Detail.

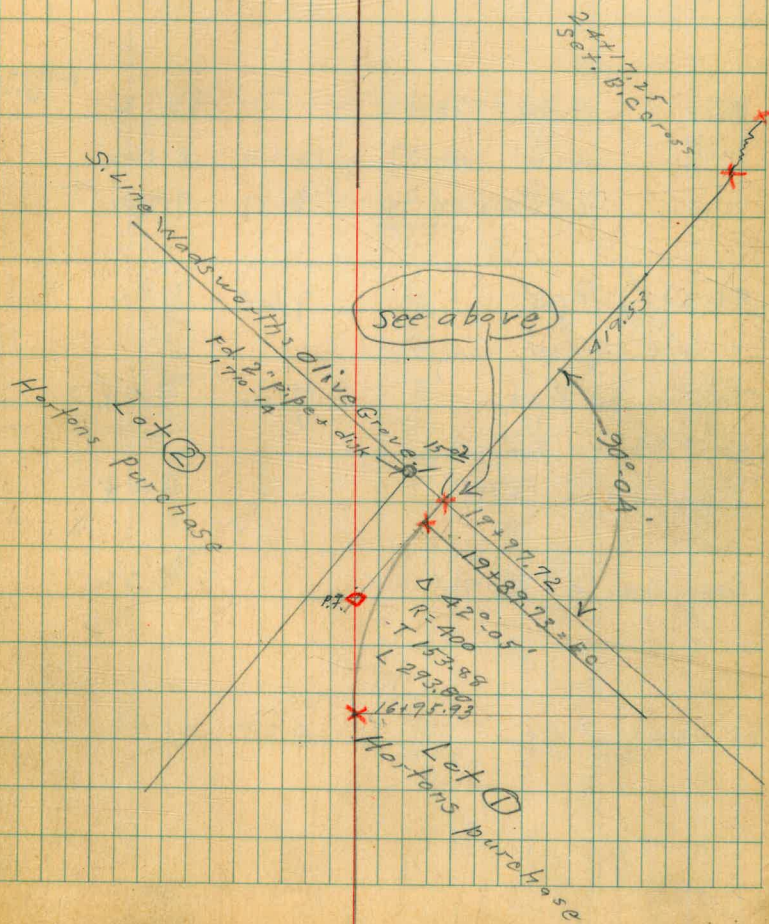
26+17.79 set. P.I. as per deed.

24+17.25 From here on paving is way off deed.

20254

19+97.72 = Intersection of Euclid with North  
Line Lot #1 Hortons Purchase.

16+95.23 = B.C. Rt.



Location + Elevs of Prop. Sewer  
Crossing at Pacific Hwy. N. of Bunker  
Hill St.

W.O. 80146

INDEXED  
WK  
MAR 8 1949

2-9-48

Osborne  
Hardin  
Hatch

BM.	4.70	18.42		13.72	Baboon Bridge
	6.21	14.37	10.26	8.16	
	6.55	<u>15.70</u>	5.17	9.20	

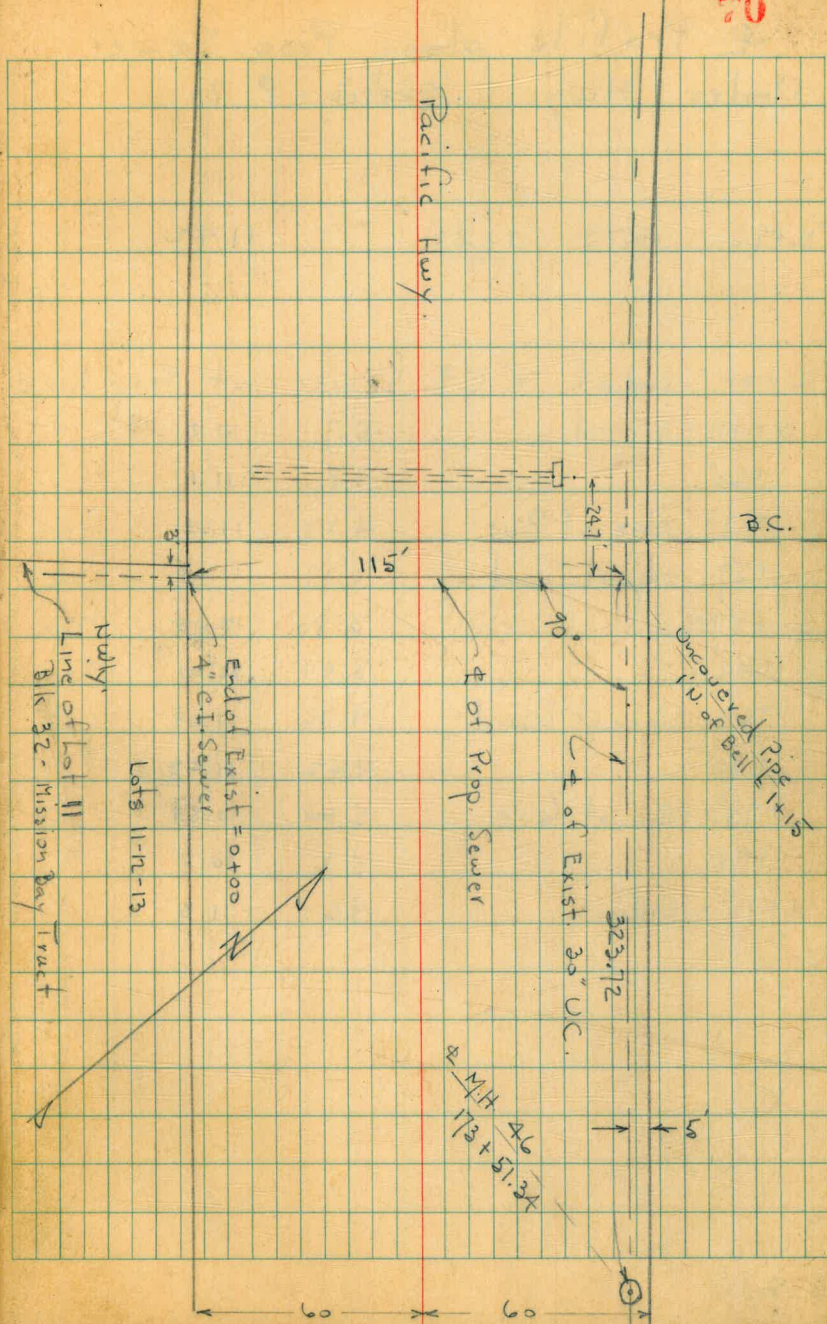
F.L. of 4" Pipe	7.64	8.06
-----------------	------	------

Top of 30" Pipe	7.76	7.94
- 2.70 to F.L.		2.70

Plan Elev =	5.41	5.24
-------------	------	------

Drop from 4" to 30"		2.82
---------------------	--	------

B.M. = Nail in Pole	4.28	11.42
---------------------	------	-------



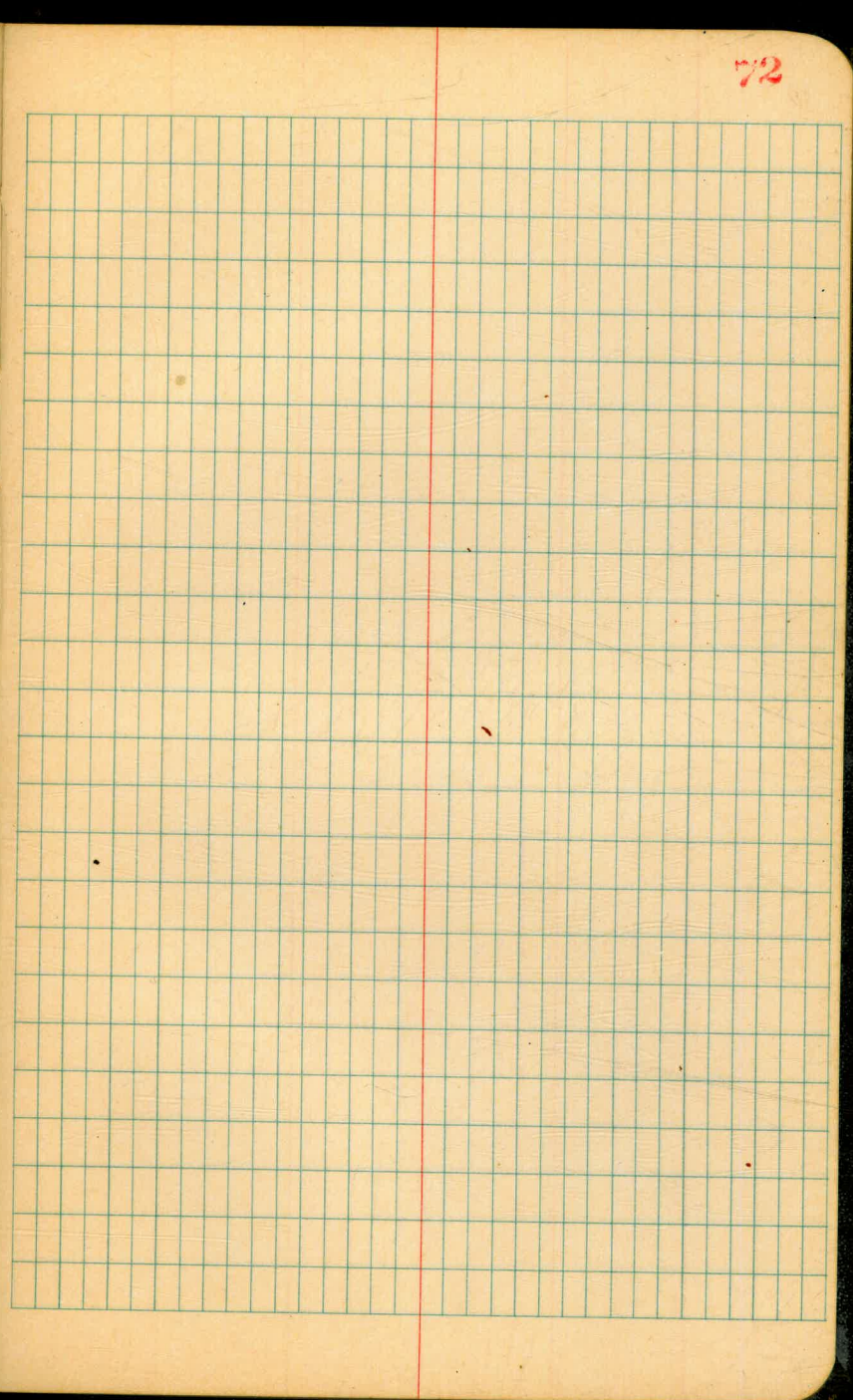
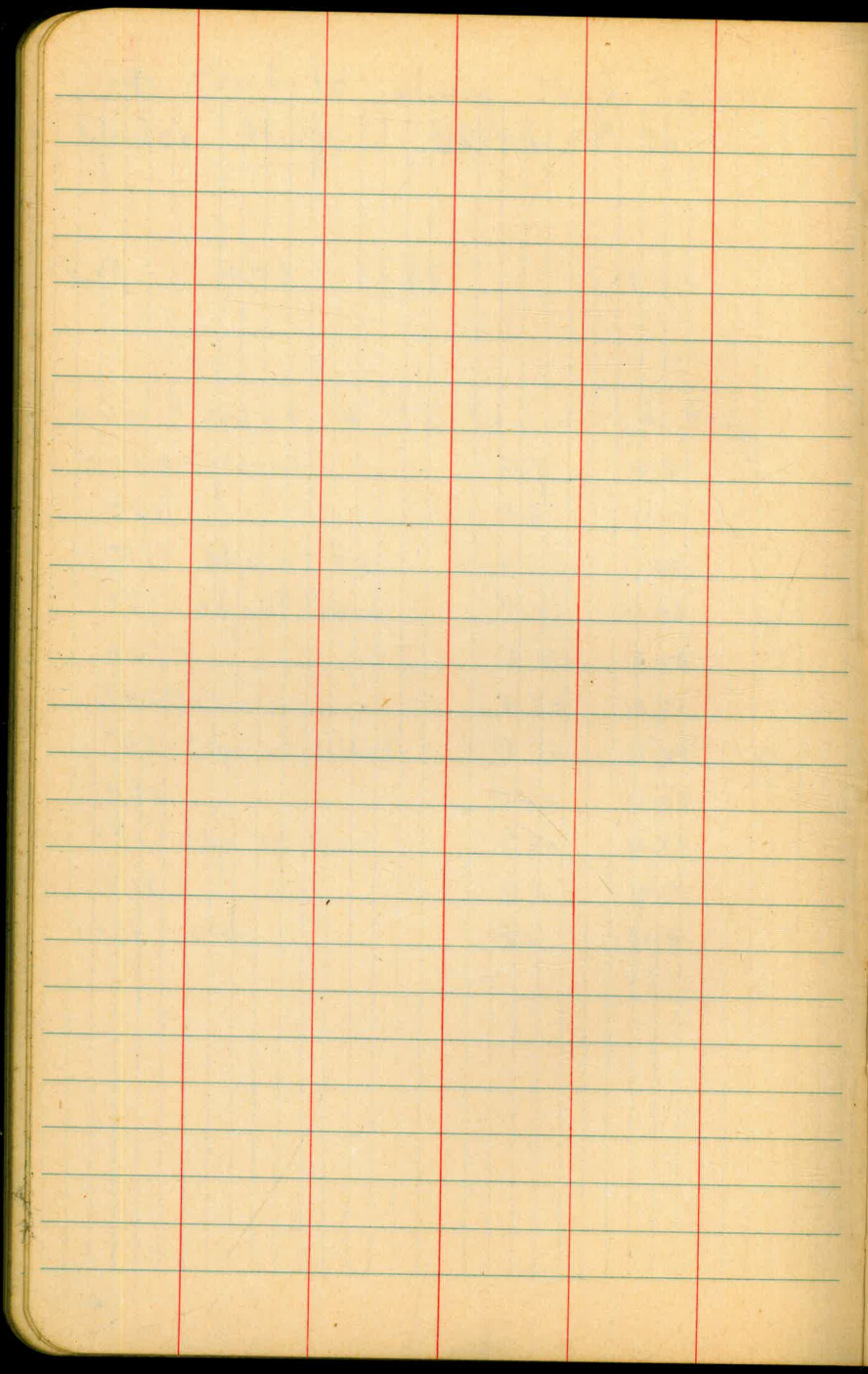
± Profile along Prop. Sewer  
Under Hwy. - Sketch - P. 70

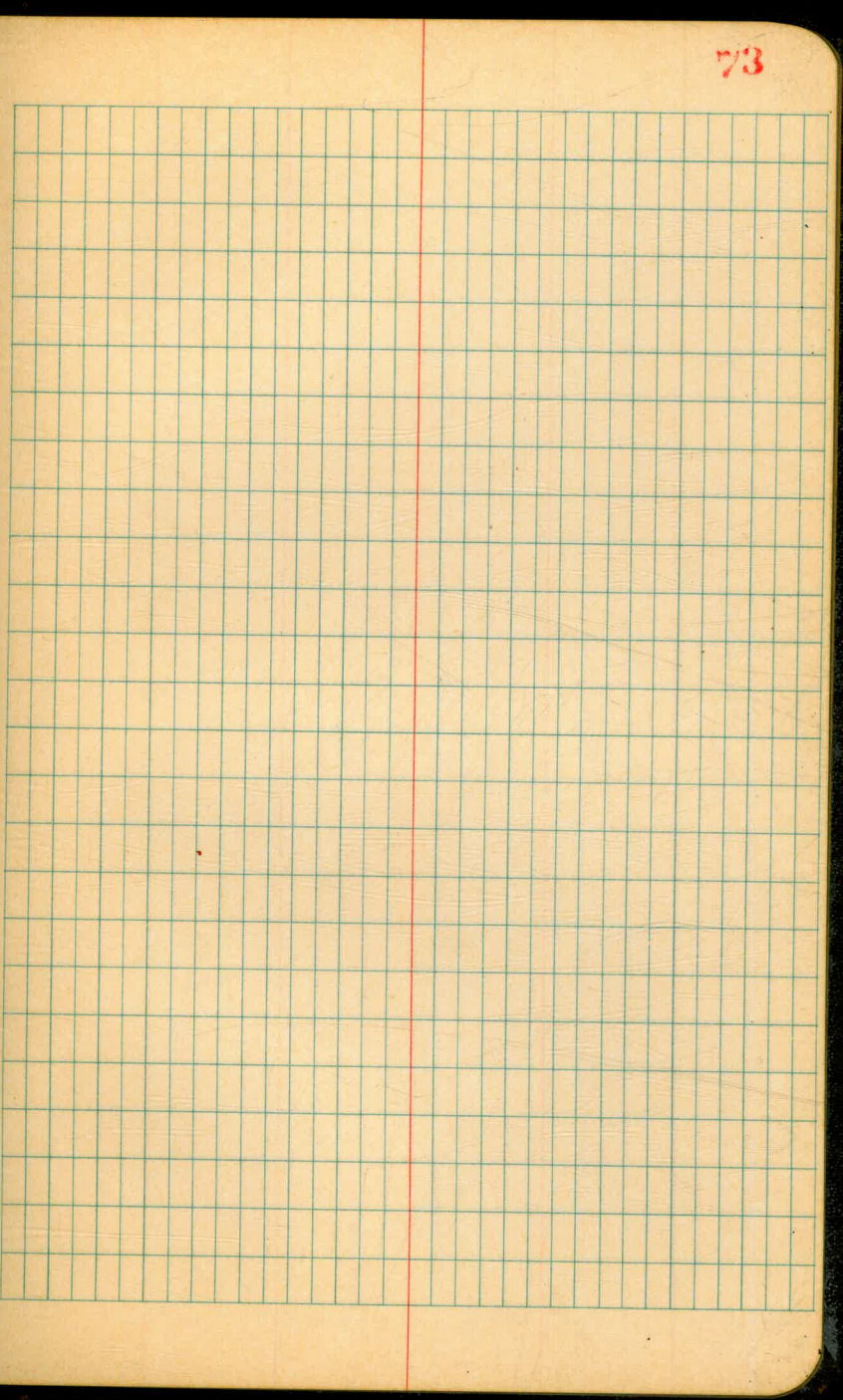
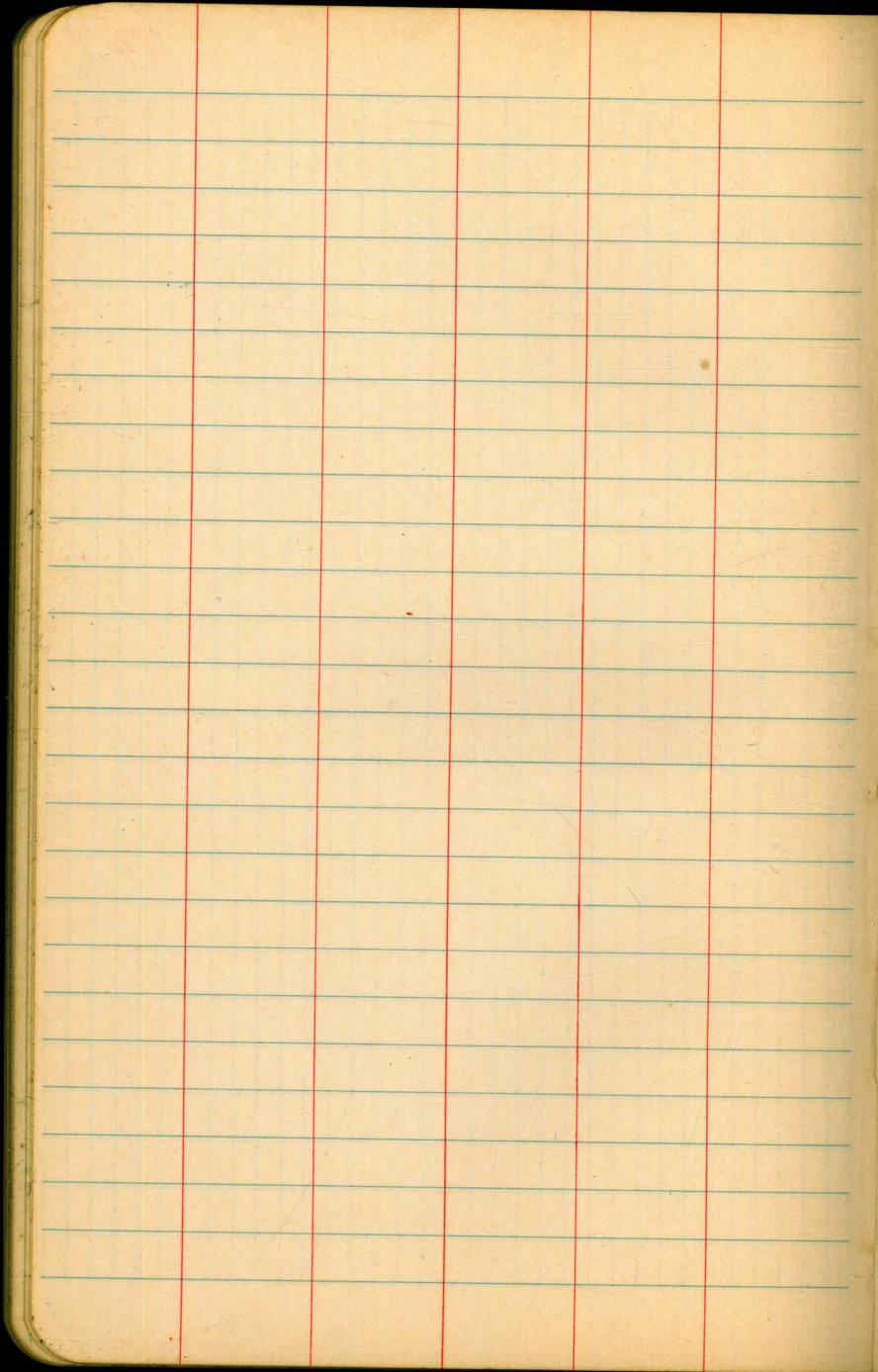
B.M. 4.43 15.85 11.42

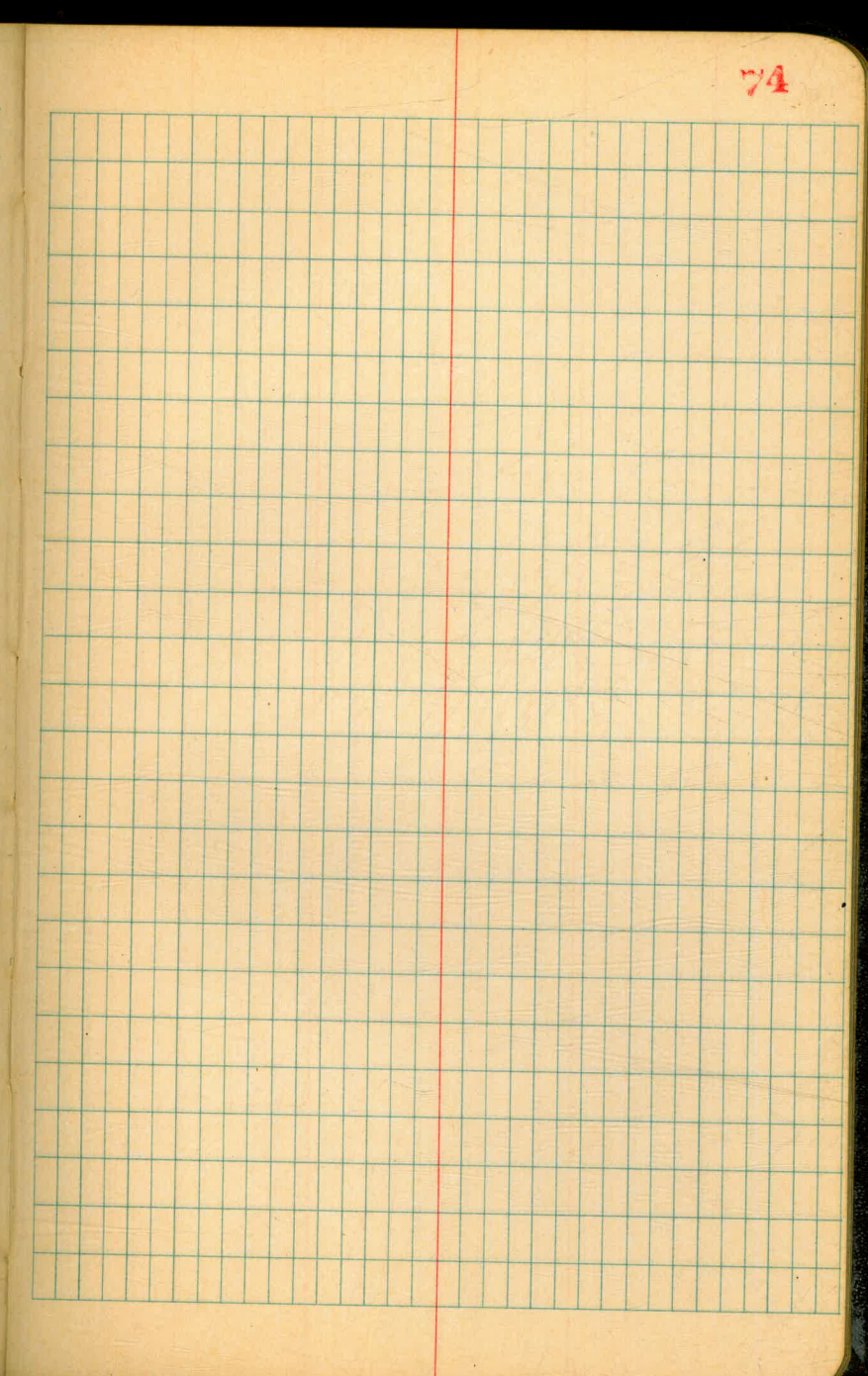
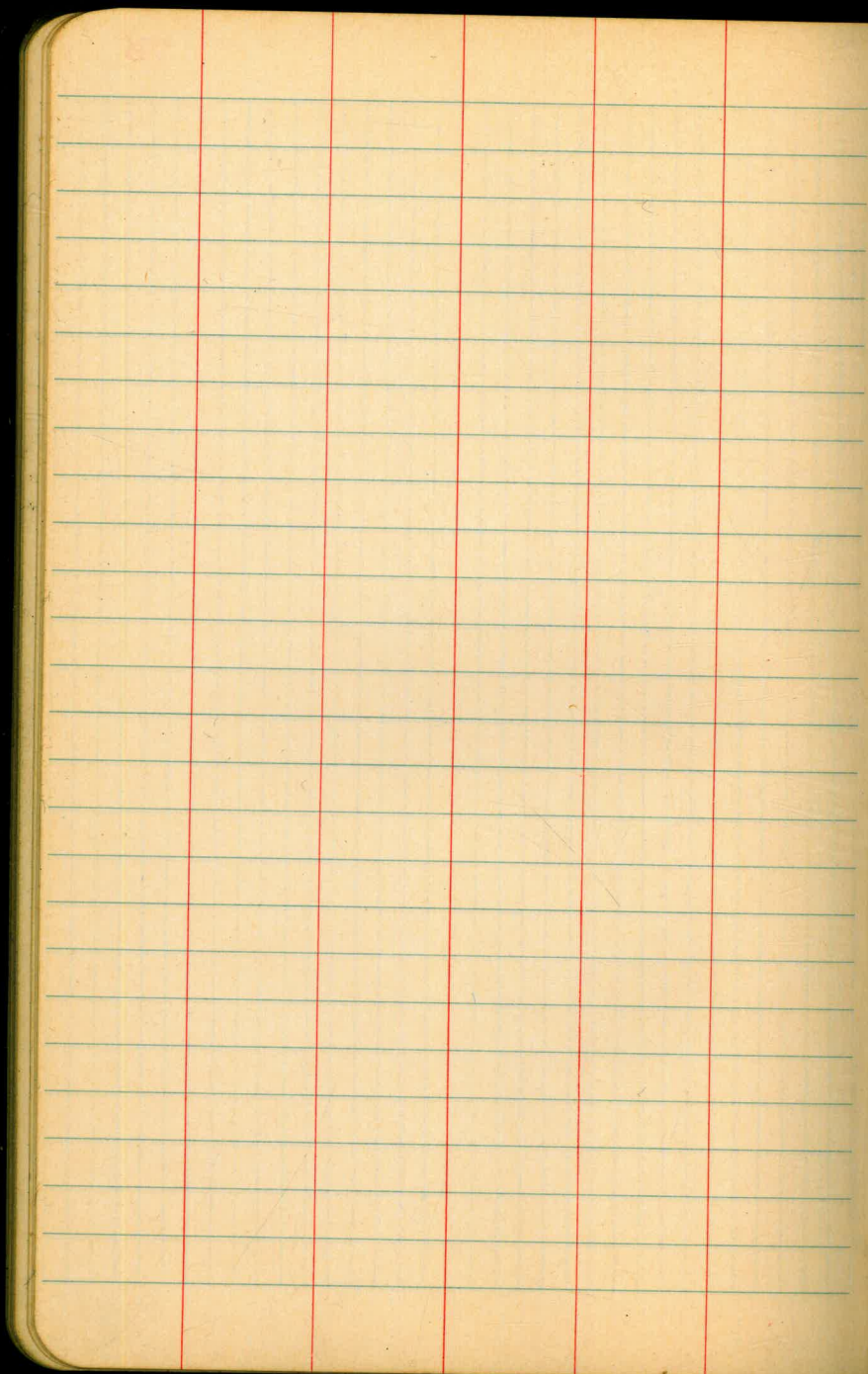
0+00 = end of 4" C.I. Sewer - at Prop line.

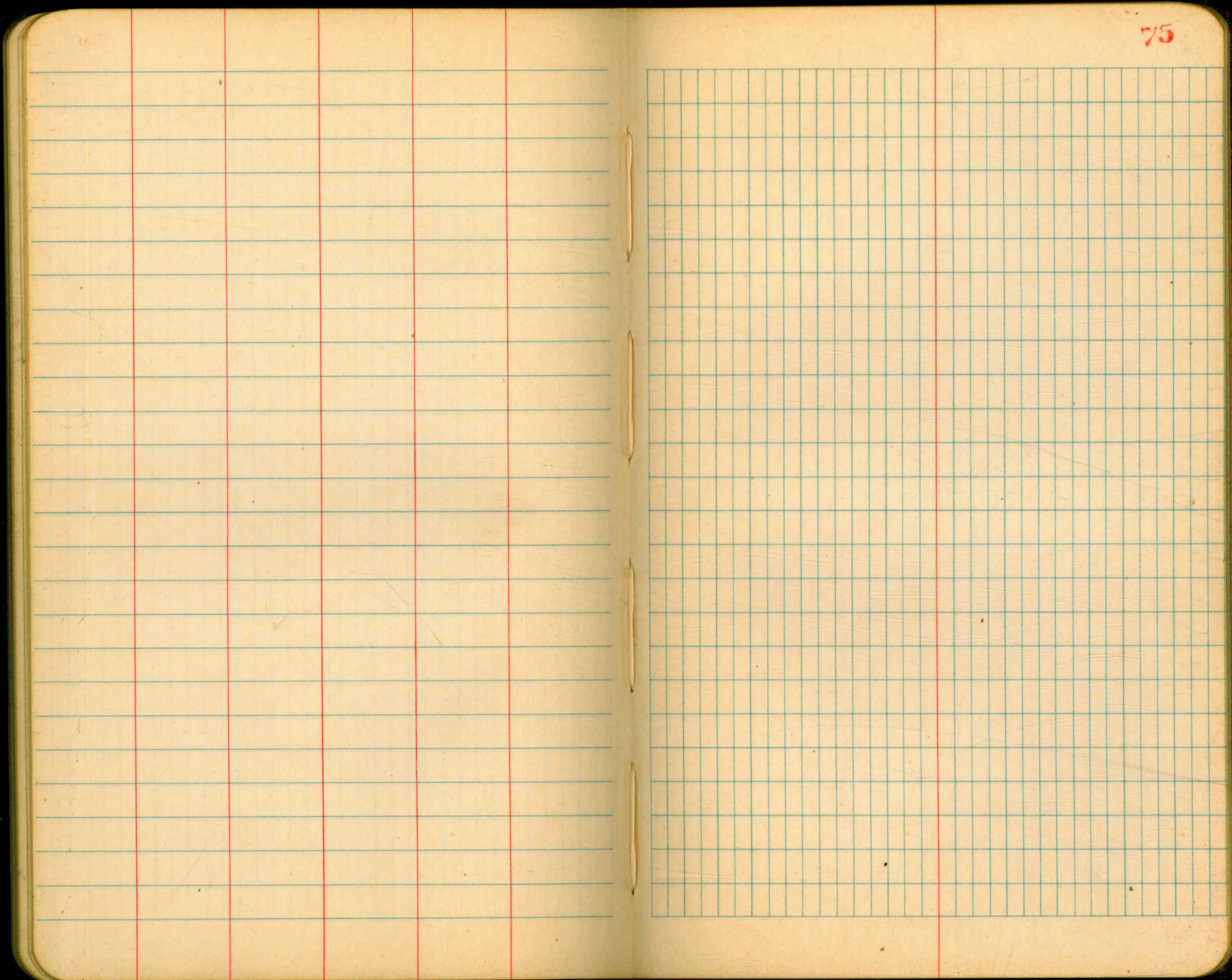
0+00 = ground.	5.7	10.2	
+25	4.8	11.1	
+27 = edge of Pavc	4.23	11.62	
+57 = edge of Island	4.17	11.68	gut.
+57.3	3.80	12.05	Top
+62.7	3.84	12.01	Top
+63 = edge of Island	4.16	11.69	gut.
+75	4.42	11.43	
+95 = edge of Pavc	5.00	10.85	
+98	5.2	10.7	
1+15 = end.	4.6	11.3	

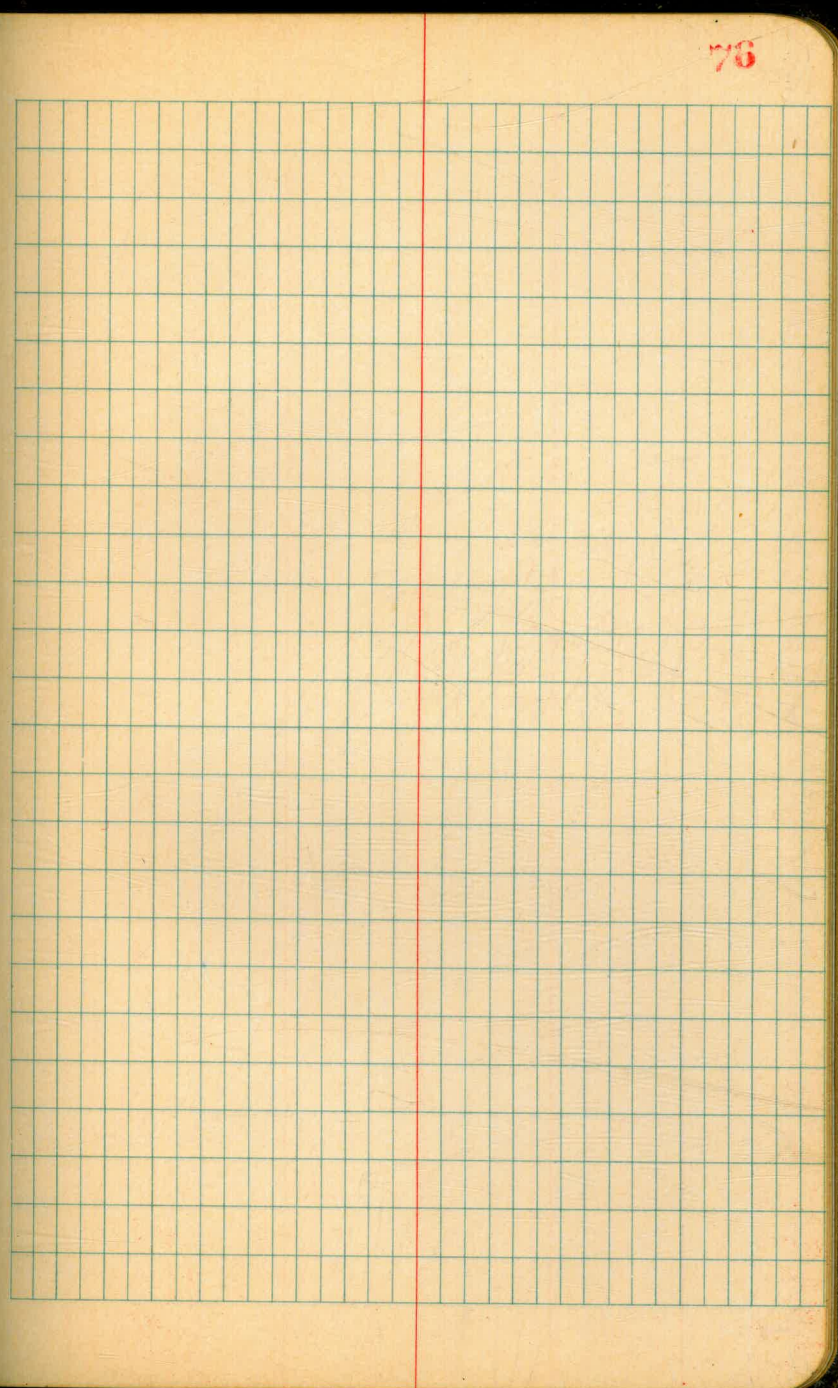
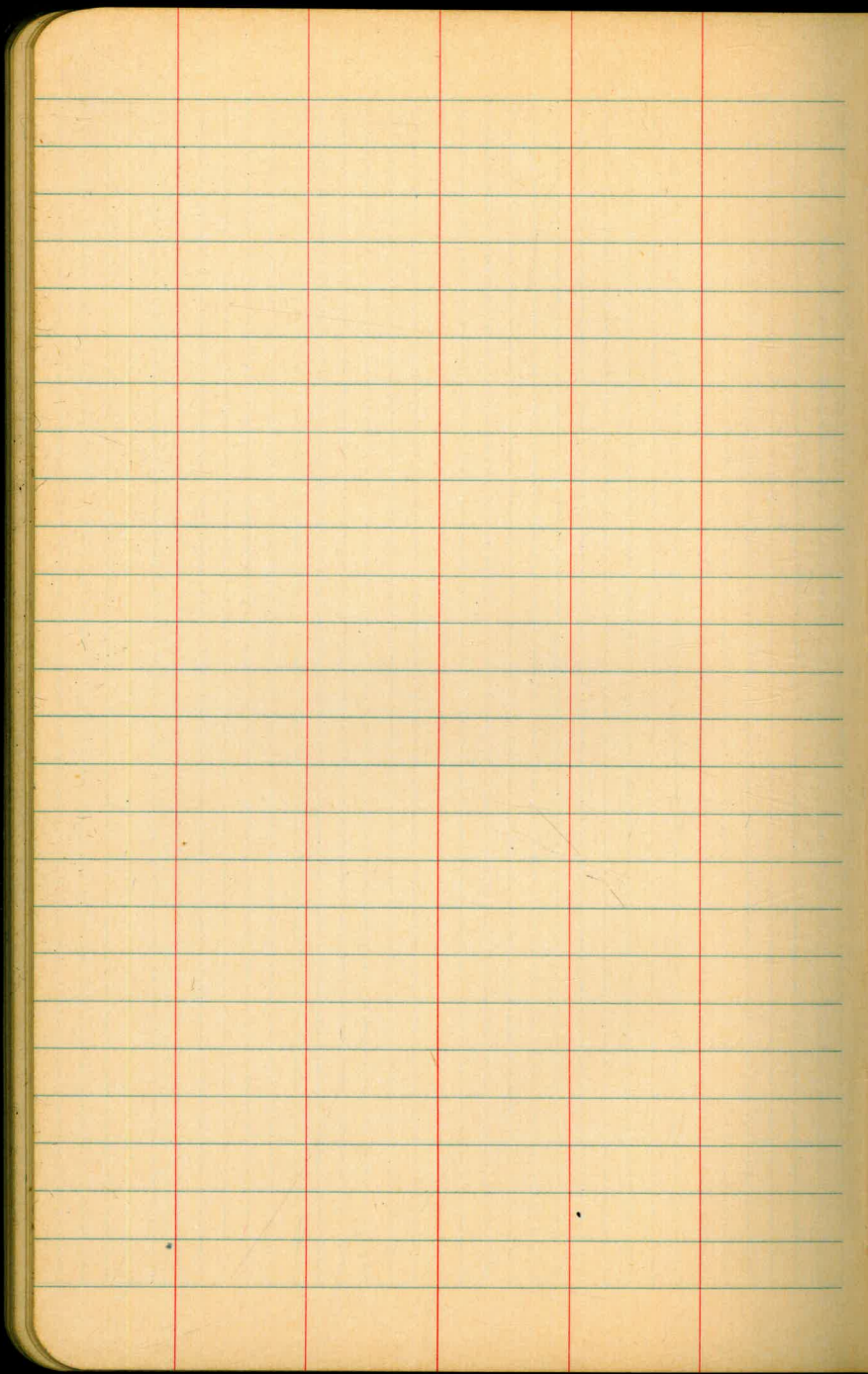






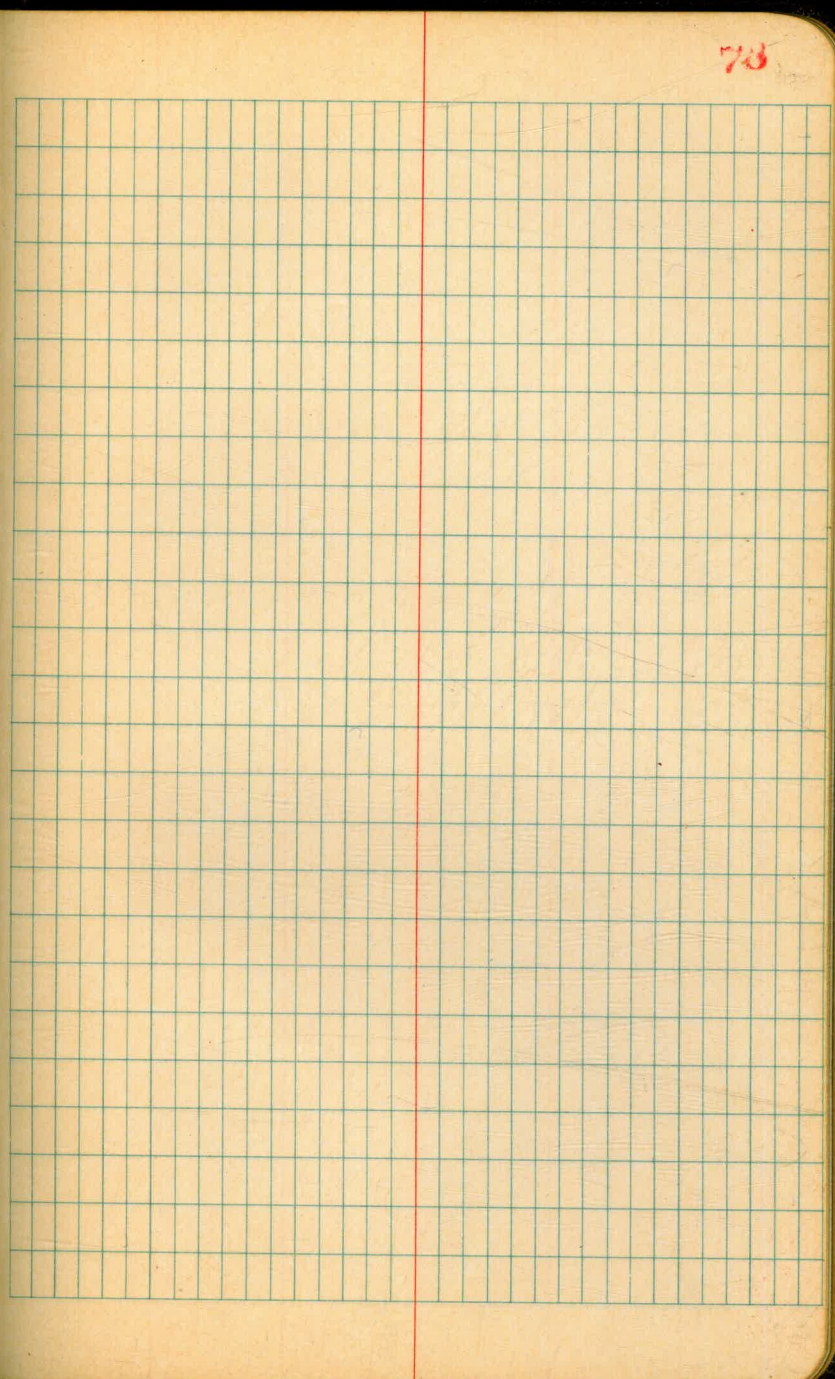
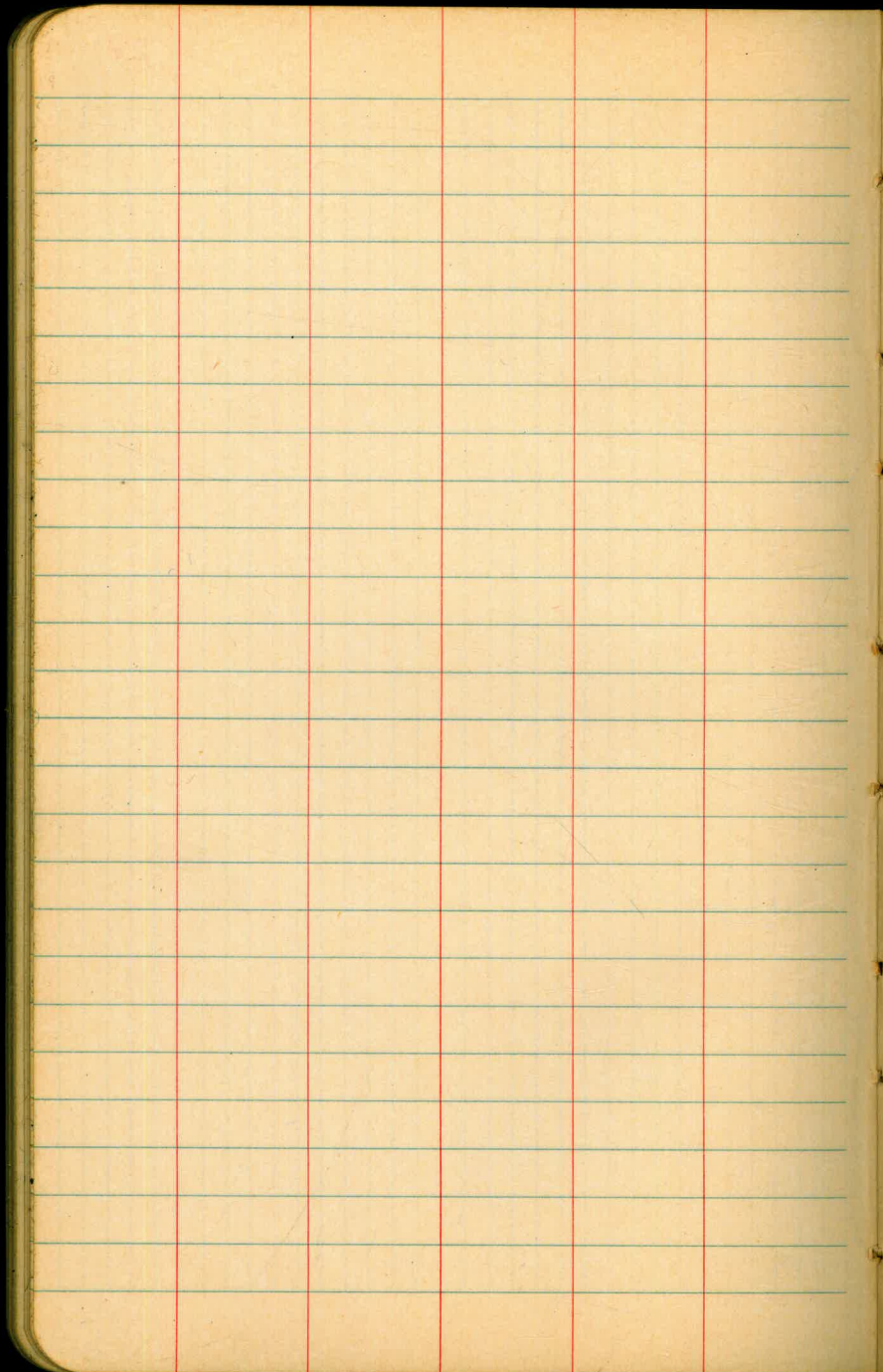


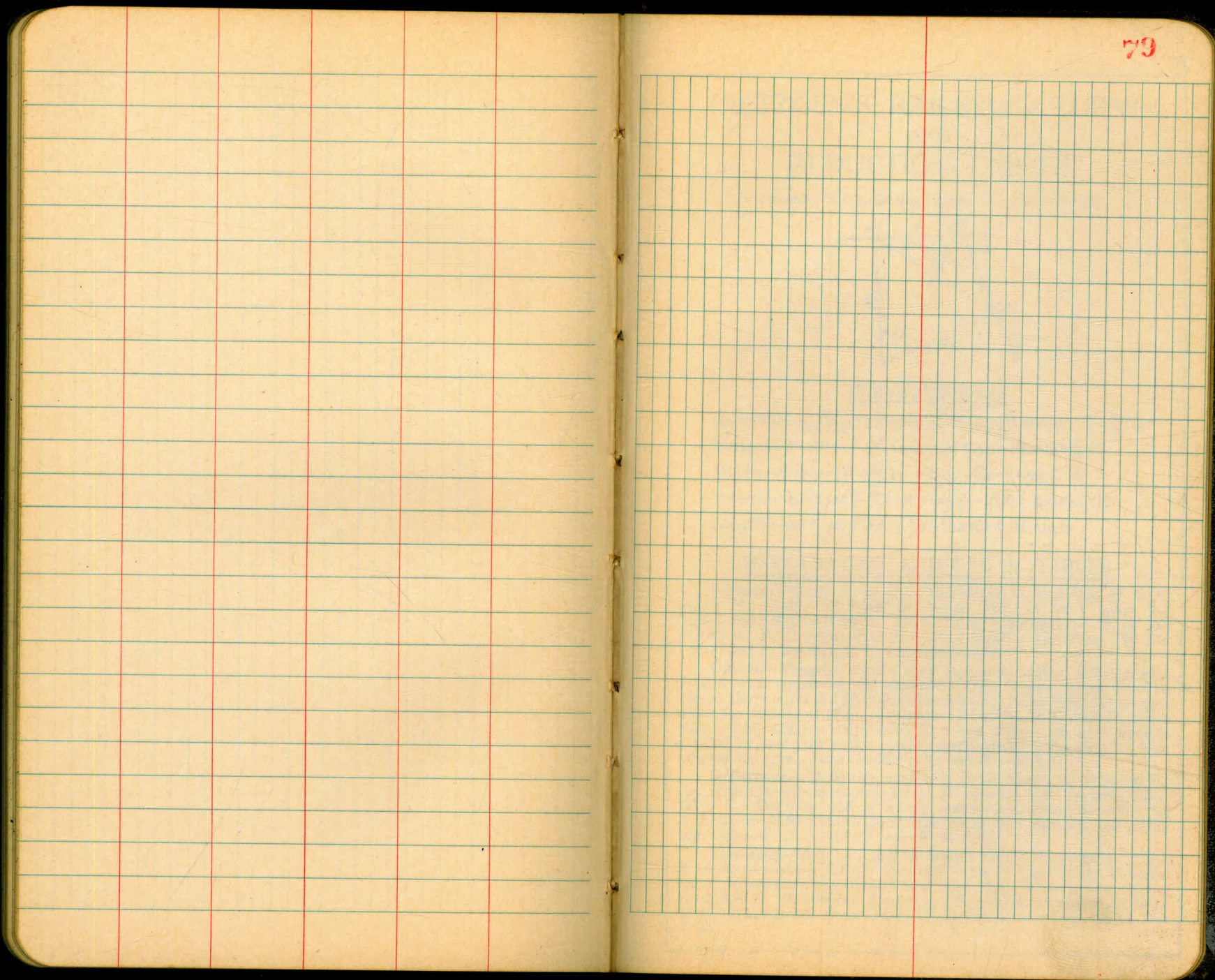




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Blank grid page with horizontal blue lines and vertical green grid lines.

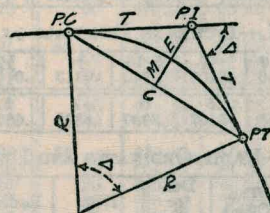






# DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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## CURVE FORMULAS

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

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

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

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

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

## EXPLANATION AND USE OF TABLES

**Stations.**—Given P. I.—Sta. 161+60.35 to find Sta. of P. C. and P. T.  $\Delta = 62^\circ 10'$   $D = 8^\circ 20'$ . From Table IV for  $1^\circ$  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 — Sta. P. C. = 54.50, hence offset =  $7.27 (54.50 \div 100)^2 = 2.16$  ft. Also square of any distance divided by twice the radius equals (approximately) the distance from tangent to curve. Thus  $(54.50)^2 \div (2 \times 688.26) = 2.16$  ft.

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

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

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