

1720

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.

Copyright, 1914, by Eugene Dietzgen Co.

1720

CITY ENGINEER'S OFFICE

osborne

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

- P. 2-6
 " 7-13
 " 14-17. Curb levels. Niagara St. Santa Barbara to Catalina
 " 31- Survey drain 49th to Estrella N of Orange
 " 35 " " Estrella to 48th " " "
 40 Cross Sec Hilcy B/4 236 Pacific Beach
 45 " " " " 8 Roseville
 54 " " 54th St. North of Collier Ave.

X-Sect. 62nd

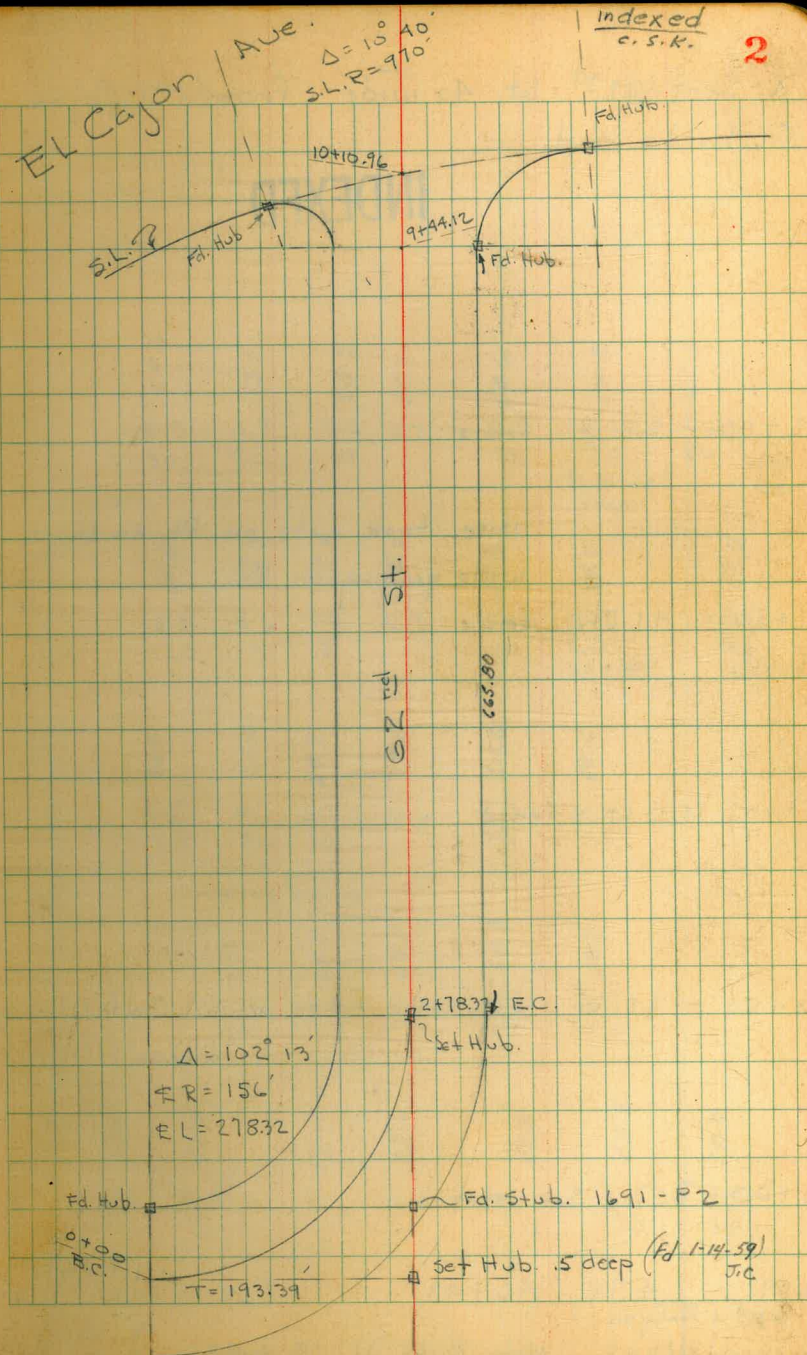
Ties T.P. 29 - P. 3

B. 1691 - P 2

7-1-46

Osborne
McCoy
Hardin
Waddel

INDEXED



X- Sect. 62nd St. 40' wide - from El Cajon
South to end.

INDEXED

2+00 - 2.2 Lt. = fence

Note: took outs on Rt. to show
wide grading on Rd.

1+50 - 4.1 Lt. = fence

1+00 - 18.5 Lt. = fence

0+50 - 28' Lt. = High wire fence around Golf Driving
Range

0+00 = B.C. See sketch

B.M. 4.78
639 + El Cajon

To check B.M. at

469.93

Note: Raise .11 = 465.26

465.15 =

17+08.63

B. 1691

P. 5

Lt.

Rt.

3

64.6

5.3
30

65.1

4.8
20

65.3

4.6
10

64.7

5.2
10

64.6

5.3
0

64.8

5.1
20

65.3

4.6
50

Graded
Road.

edge
Rd.

64.4

5.5
20

65.3

4.6
10

65.4

4.5
5

64.6

5.3
10

64.8

5.1
10

64.7

5.2
20

edge Rd.

65.0

4.9
65

edge rd.

64.4

5.5
30

65.6

4.3
20

64.7

5.2
10

64.3

5.6
10

64.6

5.3
0

64.6

5.3
20

Dirt piled
along fence

63.9

6.0
20

64.1

5.8
10

64.2

5.7
10

64.3

5.6
10

64.2

5.7
20

63.9

6.0
30

63.8

6.1
20

63.6

6.3
10

63.7

6.2
10

63.9

6.0
10

63.8

6.0
20

64.0

5.9
30

469.93

Sec. 34691 for check.

Raise starting B.M. 11

6

5.26 465.53 465.66
 T.P. 4.87 470.81 3.65 465.94
 along curve of cb. line
 10+12.8 - Int. Φ and S. cb. line El. Cajon - Sect.
 10+07.4 - 18.3 Rt = face of cb. end of Ret. 20' Rad.
 10+04 - 20.2 Rt = Φ Fire Hyd. to S.H. El. Cajon
 Sec. taken on Curve parallel
 9+99.2 = Int. Φ + S. edge of AC. pave on El. Cajon
 9+95 - 24.5 Lt. = P. pole 20' Rad. 9+99.2 for rods.
 9+91 - 17.9 Lt = face of cb. at end of Ret. See sect.
 9+80 - 19 Lt. = end slat fence
 9+73.84 = opp Prop. P.C. on Lt. 19.1 Lt. = fence
 9+44.12 = opp Prop. P.C. on Rt. 19.6 Lt. = fence
 9+43 - 15.5 Lt. = Φ Tel. pole
 9+00 - 19.5 Lt. = fence
 8+50 - 19.5 Lt. = fence
 8+04 - 25.4 Rt. = Φ 4" Acacia
 8+00

Lt				Rt			
64.92	65.79	65.22	65.33	65.33	65.33	65.31	65.76
4.62	3.80	4.37	4.26	4.26	4.26	4.29	3.83
100	45	45	30	15	25	35	100
9+1	Top cb.	9+1	9+1	9+1	9+1	9+1	9+1
9+1	P.C. Ret.	9+1	9+1	9+1	9+1	9+1	9+1
64.9	65.86	65.24	65.64	65.70	65.52	66.02	65.42
4.7	3.73	4.35	3.95	3.76	3.89	4.07	3.83
35	19.6	19.6	10	10	20	20	10
9+1	Top cb.	9+1	9+1	9+1	9+1	9+1	9+1
9+1	end Ret.	9+1	9+1	9+1	9+1	9+1	9+1
64.5	64.9	65.1	65.1	65.1	65.0	65.0	65.0
5.1	4.7	4.5	4.5	4.5	4.6	4.6	4.6
30	20	10	10	10	20	30	40
64.4	64.8	64.7	64.9	64.9	64.7	64.6	64.9
5.2	4.8	4.9	4.7	4.7	4.9	5.0	4.9
30	20	10	10	10	20	30	40
64.3	64.6	64.6	64.7	64.6	64.5	64.4	64.4
5.3	5.0	5.0	4.9	5.0	5.1	4.9	4.9
30	20	10	10	10	20	30	40
63.8	64.4	64.6	64.7	64.6	64.3	64.4	64.4
5.4	5.2	5.0	4.9	5.0	5.3	5.2	5.2
30	20	10	10	10	20	30	40
63.6	64.7	64.7	64.7	64.7	64.6	64.3	64.3
5.0	4.9	4.9	4.9	4.9	5.0	5.3	5.3
30	20	10	10	10	20	30	40

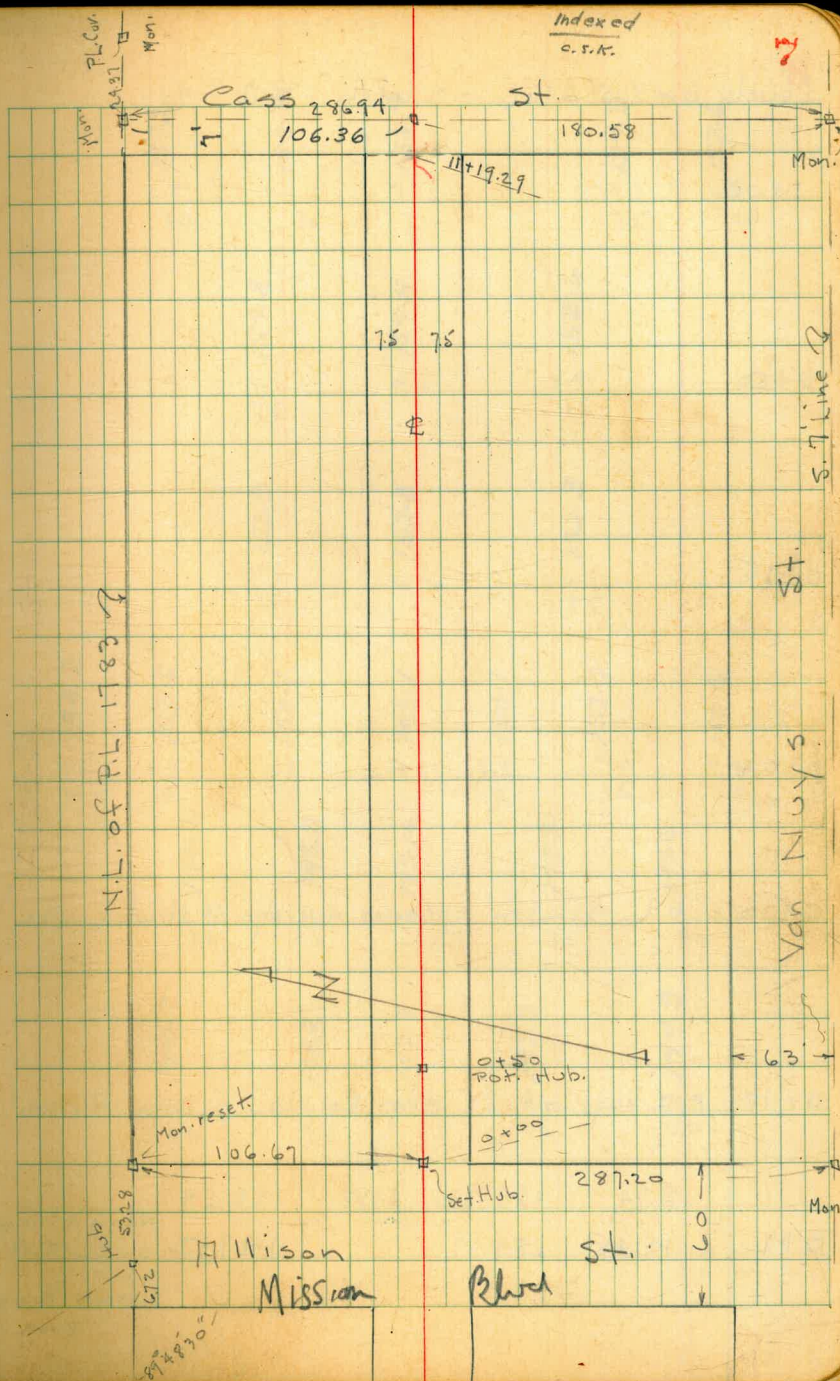
469.59

X-Sect. of 15' Alley in Blk. 3 Pac. Beach
 Vista - Maps 916 + 930 + Blk 4 - Buena Vista
 Map. 929 - T.P. Book 30-P. 13 + T.P. 20-P. 48

INDEXED

7-18-46

Osborne
 McCoy
 Hardin
 Waddell



Levels on 15 Alley - Sketch - P. 7

1 + 00

 $0 + 50$

D + 15

0 + 0 4

$0+00 = \text{E.L. Allison} - \text{shows average of Graded walks}$

0-18' = E. edge of 26' strip Cold lay pave on Allison

	5.74	159.33	6.38	153.59	NE. 5 th Cl. Glim
B.M.	1245	159.97		147.52	on E.L. Taft
					Sissons Bench
					Book

$$\begin{array}{r} 1572 \\ 30 \overline{) 1572} \\ \underline{90} \\ 672 \\ \underline{600} \\ 72 \end{array}$$

159.8	159.5
4.2	4.5
7.5	

$$\begin{array}{r} 153.9 \\ 152.8 \end{array}$$

154.2

4.8
30

153.5

5.5
14

150.5

8.	
3	

1.051

8.9
7.5

199.0

10.	7.5
-----	-----

149.1

9.

199.16

10
05

1.051

$$\begin{array}{r} 8.9 \\ 5 \end{array}$$

198.3

10
7

152.0

7.

9.05

8.
3

0.61

[illegible]

$Rt. = 8.$
 154.9
 4.1
 25
 153.6
 5.4
 30

8

T.P. 12.42 173.87 3.58 161.45

4+50

4+00

3+50

ahead - steep hill on Lt.

3+00

To here - both sides Cont. about same slope

2+50

2+00

1+70 - 1.5 Rt. = Sewer M.H.

T.P. 9.90 165.03 4.20 155.13

1+50

Lt.

Rt.

9

159.3
5.7
30

161.2
3.8
5

156.6
2.4
5

160.8
2

156.0
9
0

159.7
5.3
5

155.5
9
5

154.7
10
30

156.2
8.8
30

154.4
10
5

154.2
10
5

153.9
11
1

153.6
11
4

153.2
11
5

153.0
11
0

151.6
13.4
30

157.5
2
30

156.2
8.8
5

155.8
9
5

155.2
9
8

155.7
9
3

154.8
10
5

155.3
9
5

153.8
3
0

156.3
2
7

165.03
156.4
8.6

155.7
8.92
3.3

159.33

7+51 - 10.6 Rt = behind Board fence = ^{Conc. floor} $\frac{1}{2}$ Large Gar.
Back - Dr. to S.

7+50

7+35 - 7.9 Rt = end shed. ^{High} + 7.9 Rt = beg. board fence

7+27 - 58' Rt = $\frac{1}{2}$ Mecl frame house

7+13 - 79 Rt = Beg. low shed.

7+07 - 9' Rt = $\frac{1}{2}$ Shed - wood floor

7+00

T.P. 7.33 180.98 0.22 173.65

6+50

6+00

5+50

5+00

Lt.

Rt.

Rt.

173.73

10.6 = Conc. floor Gar.

175.5

175.7

175.1

173.98

1.50

173.48

1.50 = floor Elev.

174.03

6.95 = Floor elev.

176.8

179.6

179.7

173.7

171.8

4.2

6.4

6.3

1.3

9.2

172.9

171.9

180.98

171.5

174.1

170.3

169.3

168.8

167.1

3.0

3.6

4.6

1.5

6.8

167.2

164.6

164.0

163.3

161.6

3.0

9.3

9.9

10.6

12.3

173.87

T.P. 12.86 213.98 3.54 201.12 Pipe on SL
Alley + W.L. Gss.

10+85

10+50

T.P. 12.40 204.66 1.08 192.26

10+00

9+55

T.P. 12.94 193.34 0.58 180.40

9+30

9+27- 8.1 Rt. = E Sing. Gar. Conc. floor + 6" Conc. foundation
wall on N. side

9+19- 12' Rt. = E P. pole

9+17- 12.9 Lt. = E Med. frame House

9+05 - 15.6 Rt. = E of back of Sing. Gar. Dirt floor
Dr. to S.

Lt.

Rt.

Rt.

209.4

20.3
0.0

202.3

2.4
5.5

213.98

5199.7

153.3

1.4

197.7

7.0
5.5

191.1

13.6
5.5

190.4

14.3
30.0

193.0

0.3
30.0

187.1

5.2
7.5

204.66

186.3

1.0

183.5

9.8
7.5

178.0

1.5
30.3

181.6

7.7
5.5

180.2

13.1

178.8

14.5
7.5

176.8

16.5
15' - in yard

193.34

172.1

2.9

176.9

4.1
7.5

177.23

3.7
5.58.1 = Top.
Conc. Found.

172.38

8.60 = floor
8.1

180.96

0.02 = floor
12.9

178.2

2.8
7.5

177.7

3.3

180.98

176.3

4.7
7.5

174.8

6.2
11

173.4

7.6

15.6 = floor
Gar.

10+97 - edge of old Road bed. (not used.)

Lt.		Rt.	
210.7	222.0	210.7	222.0
208.2	221.5	208.2	221.5
205.0	206.4	205.0	206.4
203.9	207.1	203.9	207.1
202.4	209.7	202.4	209.7
199.9	201.1	199.9	201.1
199.9	200.1	199.9	200.1
199.9	198.0	199.9	198.0
198.0	190.0	198.0	190.0

Curb Levels. Niagara St.
from Santa Barbara to Venice

BM 7.08 224.80 ^{Elev} 217.72 ^{S.W.B.P.} Venice (Niagara)

T.P. 0.72 212.51 13.01 211.79

T.P. 10.95 210.44 13.02 199.49 ^{S.E. TOP} Curb on East

0+00 N. Side 12.79 197.65

INDEXED

" S. " WIL 10.95 199.49

FEB 1 1949

0+50 N. Side 11.32 199.12

" " S. 9.93 200.51

1+00 S. Side 8.88 201.56

" N. " 9.76 200.68

1+50 N. Side 7.90 202.54

" " S. " 7.66 202.78

1+60 P.V.C. S. Side 7.31 203.13

" " N. " 7.49 202.95

14

Bliss Notes

King -

Davis

Sept 26 - 46

Profile Niagara v. Santa Barbara Used as BM. for Grades P. 1 ^{Sec GBR 24}

210.44

1	"	S	"	6.42	204.02	✓
---	---	---	---	------	--------	---

11	5	5.36	205.08
----	---	------	--------

6	4	N.	"	1.55	208.89
---	---	----	---	------	--------

3400	S. Side	1116	211.69
------	---------	------	--------

"	N	"	10:30	212.55
---	---	---	-------	--------

3450	N. Side	6.68	216.17
------	---------	------	--------

"	5	"	7.79	215.06
---	---	---	------	--------

4+00	P.V.C. S.S. side	46.3	218.22
------	------------------	------	--------

11	11	N. Side	2.94	219.91	✓
----	----	---------	------	--------	---

222.85

4+20 S. Side 3.58 219.27

4+20 N. " 1.69 221.16

4+40 S. Side 2.93 219.92

4+40 N. " 0.90 221.95

4+60 S. Side 2.64 220.21

4+60 N. " 0.58 222.27

4+80 S. Side 2.76 220.09

" " N. " 0.73 222.12

5+00 S. Side EVC. 3.15 219.70

" N. Side " 1.13 221.72

5+50 N. " 2.16 220.69

" S. " 4.19 218.66

π

222.85

6+00² S Side W Line Venice 5.22 217.63

" " " " " 3.26 219.59

check BM

514

217.71

SW BP

Venice & Nagasaki

Bliss
King
Davis
3/27/46

Curb levels on Orchard St Venice to Catalina

BM 9.88 206.38 196.50 S.W. Orchard
Catalina

TP 11.58 217.58 0.38 206.00

TP 3.64 220.71 0.51 217.07

6+20 ⁸⁰ N. Side 2.18 218.53
S " 2.15 218.56

6+80 ⁶⁰ S. Side 4.71 216.00 ✓ used for
BM.

" " N. " 4.59 216.12

7+00 N. " 5.60

" S " 5.61

7+50 S " 8.20

" " N. " 8.24

8+00 " " 10.75

" " S " 10.84

TP 0.94 209.09 12.56 208.15

18

INDEXED

WK

FEB 1 1949

W. Prop. Line of Venice

E Prop. Line Venice

⌘ Note Stationing starts 20' W of the
E. Curb of Santa Barbara.

8450	S.S.de	1.78	
"	N "	1.79	
9400	" "	4.35	
"	S.	4.35	
9440	P.V.C. S.S.de	6.38	202.71
"	" " N. Side	6.35	202.74 ✓
9460	N. Side	7.20	201.89 ✓
9460	S "	7.22	201.87 ✓
9480	N. Side EYC.	7.82	201.27 ✓
9480	S "	7.77	201.32 ✓
10400	N. Side	8.37	200.72 ✓
10400	S "	8.17	200.92 ✓

202.09

10+50	N. Side	3.43	199.66 ✓
" "	S. "	3.02	200.07 ✓
11+00	S. "	2.81	199.28 ✓
" "	N. "	10.31	198.78 ✓
11+50	N. "	11.31	197.78 ✓
" "	S. "	10.60	198.49 ✓
12+00	S. "	11.37	197.72 ✓
" "	N. "	12.23	196.86 ✓
12+10	N. Side Corb. BC 30 North	12.40	196.69 ✓
12+33	S. Side Corb. BC. on South	11.87	197.22
check BN		12.58	196.51

Bliss
Kiny.
Davis
9/21/99
Curb Levels Orchard St
from E line Santa Barbara to 150'
East on South Side.

BM 2.39 252.21 N.W. B.P.

0+00 4.44 250.16

+30 P.V.C. 4.94 249.62

+50 5.40 249.20

+70 5.94 248.66

+90 6.72 247.88

1+10 7.70 246.90

+30 E.V.C. 8.82 245.78

INDEXED
WK
FEB 1 1949

= 0+20 on 8" pipe line

(Void)
Curb Levels - Niagara St. Venice to Catalina
SWBP
Venice to Niagara

BM	2.76	220.48		217.72
6+80 ⁷⁰			3.21	217.27
7+30			4.56	92
+80			5.83	
7+33 ⁴³			6.18	214.30
8+23 ⁴³			7.44	213.04
+43 ⁴³			9.50	210.98
T.P.	0.55	209.01	12.02	208.46
+63 ⁴³			2.38	206.63
+93 ⁴³			8.17	200.84
T.P.	0.31	196.85	12.47	196.54
9+43 ⁴³			5.61	191.24
T.P.	0.93	185.96	11.88	184.97
+83 ⁴³			2.40	183.50
10+03 ⁴³			6.12	179.78
+23 ⁴³			9.49	176.41

185.90

10+43⁴³

12.26

T.P.

0.58

173.58

12.90

173.00

+63.43

2.11

171.47

+83⁴³

4.02

169.56

11+03⁴³

5.99

167.59

+19⁴³

BC-Alley Return

7.45

166.13

+43⁴³

10.19

163.39

+63⁴³

12.76

160.82

T.P.

113

162.05

12.66

160.92

+83⁴³

3.92

158.13

12+00

6.20

155.85

+22⁵

Corb BC.

9.26

152.79

T.P.

2.84

153.55

11.34

150.71

+52⁹²

Edge Paving Catalina

5.58

147.97

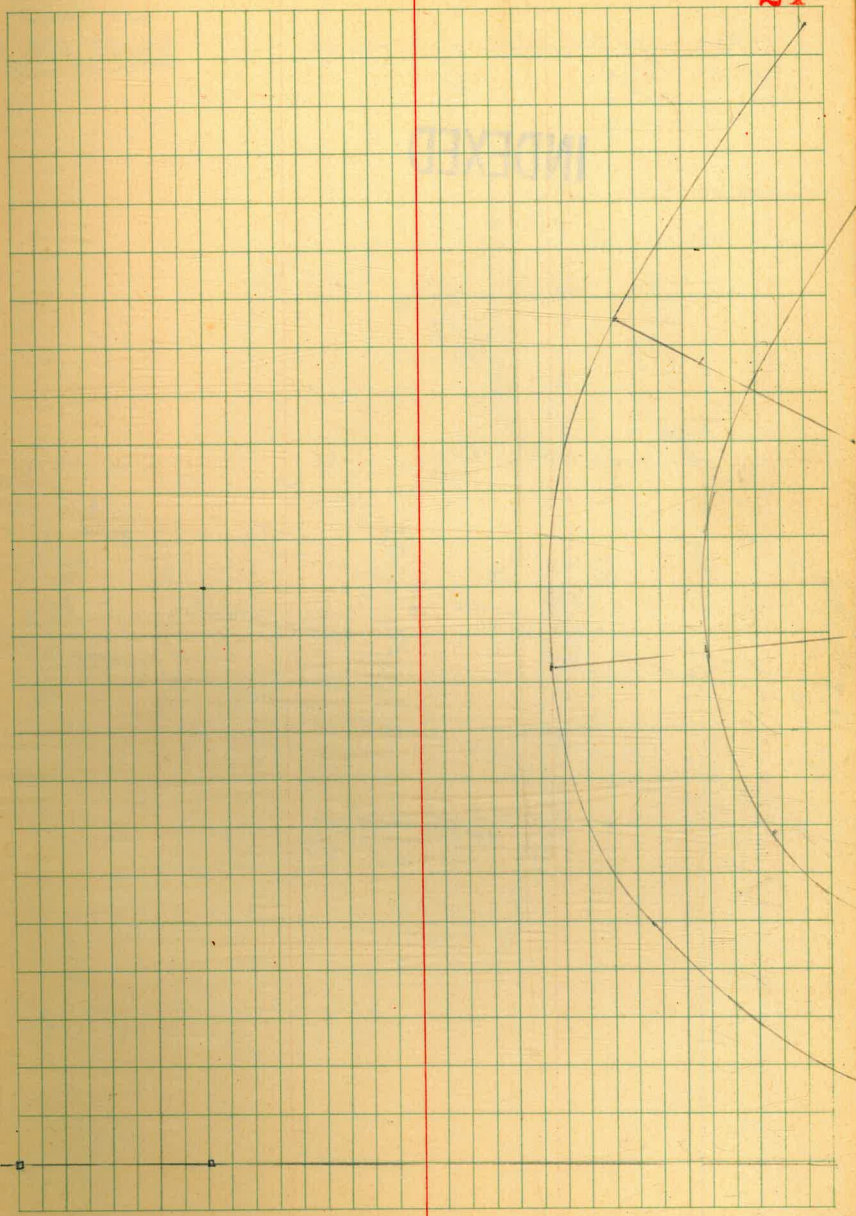
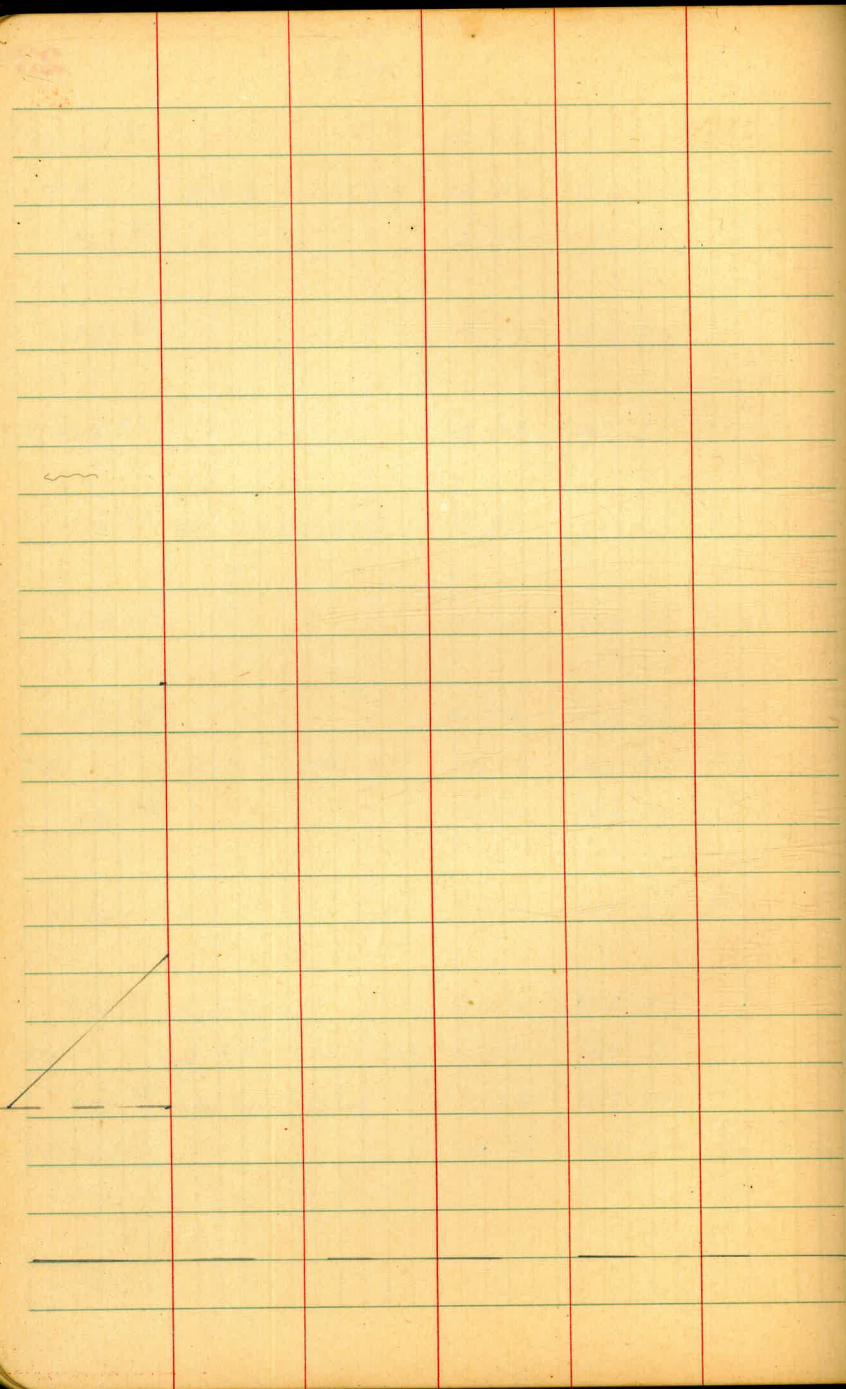
Check BM

10.11

143.44

NW BP
Catalina Niagara176.4
30
173.4

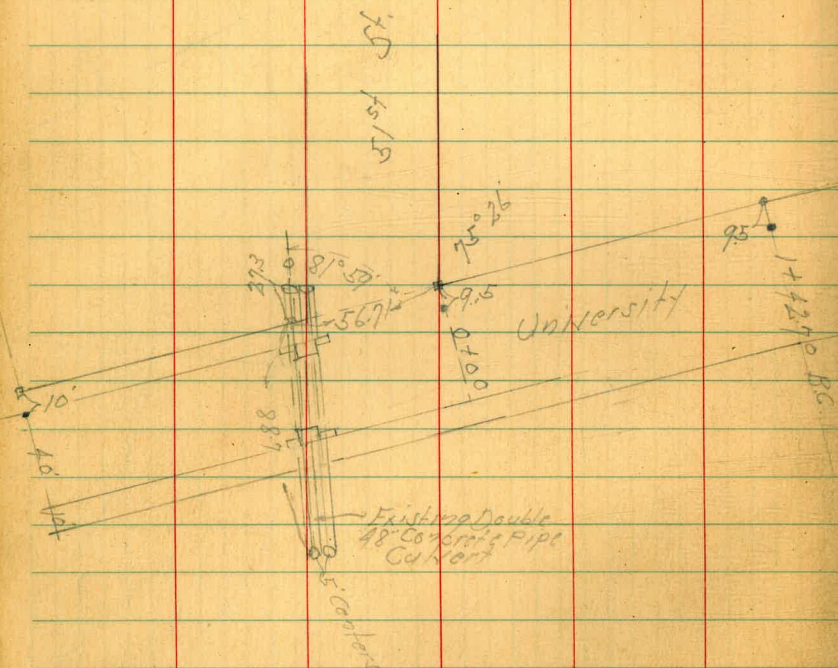
23



Topography University Ave.
51st St + 52nd St.

Topog Plotted in Field

INDEXED



Indexed
C.S.K.

Dec. 4-16
S. Iron

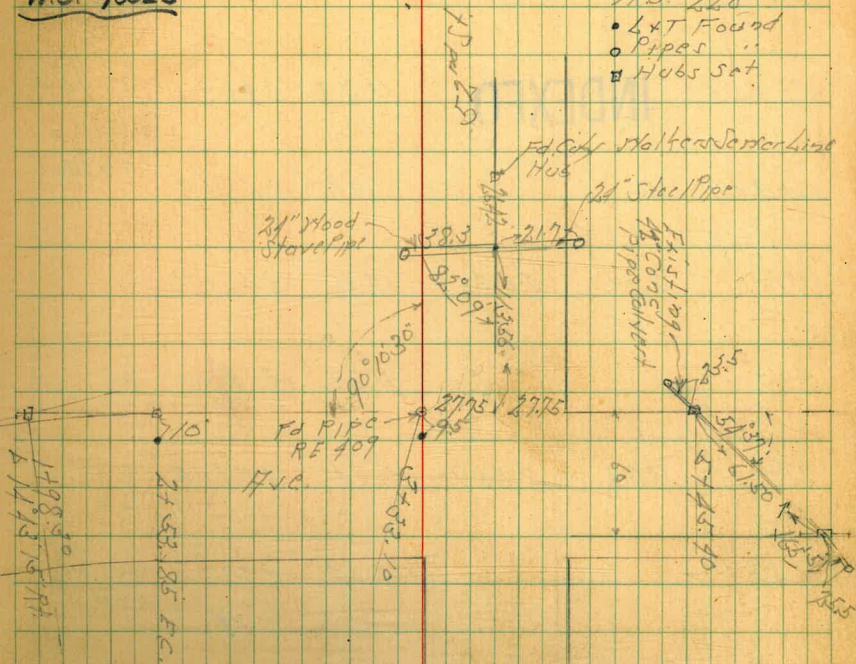
McCoy
Hobbs

25

W.O. 228

- 4xT Found
- Pipes
- Hubs Set

W.O. 90023



Love's University Ave. H+51st & 32nd St.

For Topog.

315.57

36' Error

8

26

BM 2.15 354.72

351.57

N.W. BP
University
452nd

5+4540 INDEXED

11.35

343.32

00 Hub
5+45.40

1+9830-A

6.02

348.69

07 Hub

TP 2.06 344.62 12.16 342.56

0+0

11.27

333.35

62 Hub

TP 9.72 353.90 0.44 344.18

BM

2.33

351.52

N.W. BP
University
452nd

✓

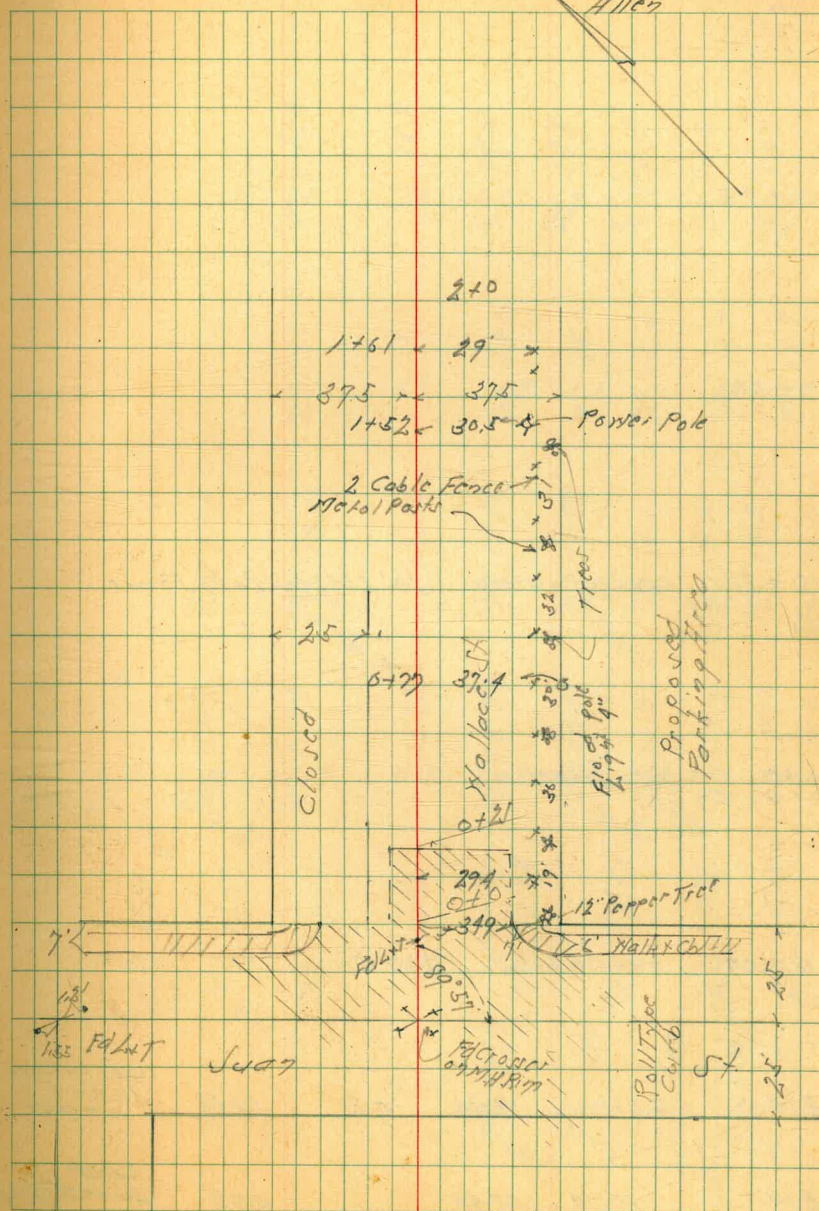
Cross Section Wallace St North of Suaz St
Also Proposed Parking Area Presidio Golf Course

Levels next page

INDEXED

Jan 29 47
Sisson
Hodges
Allen

27



2+0

1+75

1+50

1+32 104 L¹ of $\frac{1}{2}$ = N¹ y Lat¹ b Fence

1+25

1+0

11 L¹ of $\frac{1}{2}$ = Lat¹ b Fence

1934

4+

2

Rt

29

8.67 233	10.67	8.7 13	10.6	8.7 13	10.6	8.7 13	10.7	8.7 13	11.4	8.7 13	14.3	8.7 13	13.9
Fly Store Work													
8.69 18	10.65	8.7 13	10.9	8.7 13	11.0	8.7 13	11.3	8.7 13	12.3	8.7 13	13.5	8.7 13	13.5
Fly Store Work													
7.8 20	11.5	7.8 20	11.3	7.8 20	11.4	7.8 20	11.5	7.8 20	12.3	7.8 20	13.0	7.8 20	13.6
7.9 20	11.9	7.9 20	11.6	7.9 20	11.8	7.9 20	11.8	7.9 20	12.3	7.9 20	13.5	7.9 20	14.2
7.5 20	12.5	7.5 20	12.0	7.5 20	12.2	7.5 20	12.2	7.5 20	12.8	7.5 20	13.5	7.5 20	14.6
7.1 20	12.2	7.1 20	12.2	7.1 20	12.2	7.1 20	12.2	7.1 20	13.5	7.1 20	13.9	7.1 20	14.6
7.1 20	12.2	7.1 20	12.2	7.1 20	12.2	7.1 20	12.2	7.1 20	13.5	7.1 20	13.9	7.1 20	14.6
7.1 20	12.2	7.1 20	12.2	7.1 20	12.2	7.1 20	12.2	7.1 20	13.5	7.1 20	13.9	7.1 20	14.6

1934

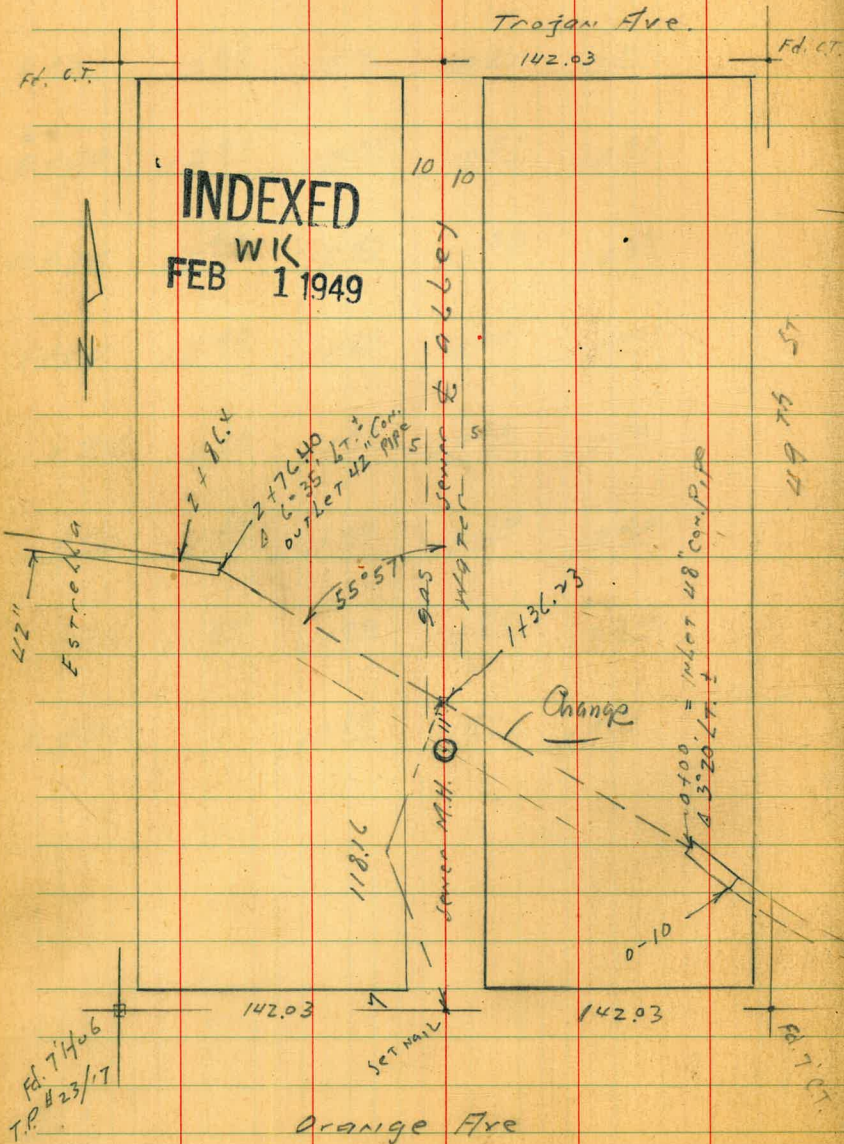
Grades for parking area

30

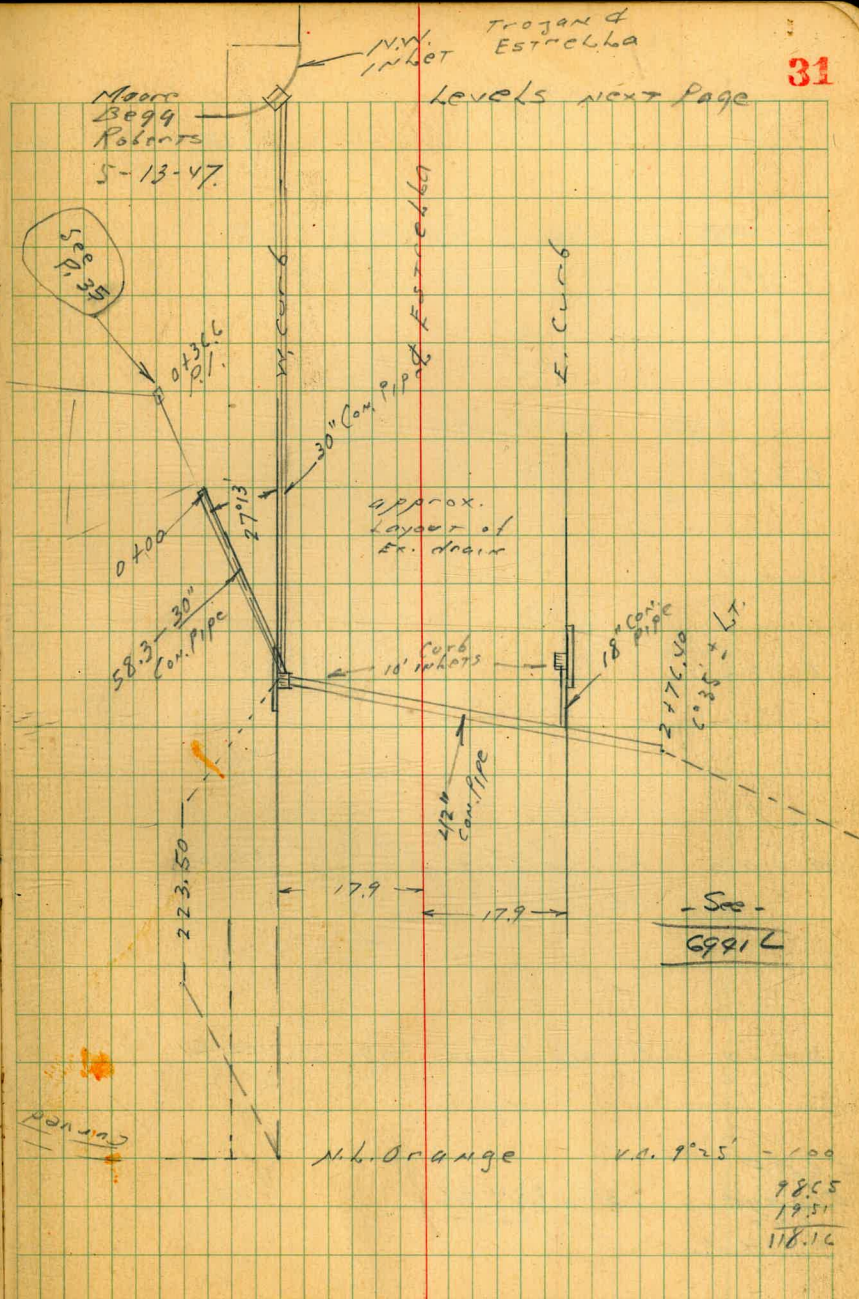
	12 ^E 14.	6	37 ^E 11	95 Rt.
0+00	13 ⁵⁵	13 ³⁵	14 ¹⁵	15 ⁶⁰
0+21	13 ³¹	13 ¹¹	13 ³¹	15 ³¹
0+50	12 ⁹⁷	12 ⁷⁷	13 ⁵⁷	14 ⁹⁷
0+75	12 ⁶⁹	12 ⁴⁹	13 ²⁹	14 ⁶⁹
1+00	12 ⁴⁰	12 ²⁰	13 ⁰⁰	14 ⁴⁰
+25	12 ⁰⁰	11 ⁸⁰	12 ⁶⁰	14 ⁰⁰
+50	11 ⁶⁰	11 ⁴⁰	12 ²⁰	13 ⁶⁰
+75	11 ²⁰	11 ⁰⁰	11 ⁸⁰	13 ²⁰
2+00		10 ⁶⁰	11 ⁴⁰	12 ⁸⁰

Survey drain betw. 49th & Estrella
N. of Orange Ave.

W.O. 90023



31



Levels for drain
Sketch P 31

1 + 00

0 + 50

0 + 75

0 + 100 F.L. inlet 12.23 322.03
48" Con. Pipe

0 - 10 R.L. 48" ^{Con.} Pipe 12.65 321.61

S.E.B.P.
Orange 1.31 334.26 332.95
and
49th St.

St. South

Pt.

32

328.5	329.3	329.5	323.7	323.7	329.5	329.1	329.1
$\frac{5.8}{30}$	$\frac{10.0}{15}$	$\frac{9.8}{7}$	$\frac{10.6}{5}$	$\frac{10.6}{2}$	9.8	$\frac{10.2}{15}$	$\frac{10.2}{30}$

326.6	329.2	322.9	322.9	329.0	323.8	322.9
$\frac{7.7}{15}$	$\frac{10.1}{4}$	$\frac{11.4}{3}$	$\frac{11.4}{1}$	10.3	$\frac{10.5}{15}$	$\frac{11.4}{30}$

329.3	323.8	322.9	322.8	323.8	323.1
$\frac{10.0}{15}$	$\frac{10.5}{4}$	$\frac{11.4}{2}$	11.5	$\frac{10.5}{1}$	$\frac{11.4}{15}$

323.3	322.03	329.5
$\frac{11.0}{6}$	12.73	$\frac{9.8}{5}$

334.26 ✓

2 + 48

2 + 43

T.P. 7.83 338.36 3.73 330.53

2 + 20

2 + 00

1 + 50

Section taken on 326.3 329.8 318.59
1 + 36.23 Valley and Sewer 80 9.5 156.7
30 24 11

334.26

328.5

9.9
31

F.L.
from
North

L7

4

R7

33

327.9 328.7 329.6 326.4 326.9 329.2 328.0 328.1 333.0
10.5 9.7 8.8 12.0 12.0 9.2 10.4 10.3 5.4
29 17 9 6 1 6 12 25

327.5 328.2 329.6 326.3 326.1 329.1 329.3 327.8 328.1 332.1
10.9 10.2 8.8 12.1 12.3 9.3 9.1 10.6 10.3 6.3
29 18 10 7 1 8 8 12 23

338.36

327.5 327.6 325.3 326.3 328.7 328.8 328.3 328.3 331.9
6.8 6.7 9.0 9.0 5.6 5.5 6.0 6.0 2.4
25 11 10 6 3 3 15 30

326.9 326.9 325.1 325.1 327.3 326.9 328.0 330.3
7.4 7.4 9.2 9.2 7.0 7.4 6.3 4.0
24 15 13 10 7 23 30

N. edge
chick yard

325.5 325.7 323.7 323.7 325.9 326.0 325.2
8.8 8.4 10.6 10.6 8.4 8.3 9.1
24 8 7 3 2 15

317.89 326.65 323.8 323.8 325.0 325.2 329.9 325.3
16.37 7.61 9.0 10.5 10.5 9.3 9.1 9.0
11 11 9 5 3 15 30
F.L. P.M.
M.H. M.H.
Main
line

334.26

T.P. & Top curb
of W. Cb. inlet
on Estrella
check to S.E. BP Church St
Orange & Estrella 0.35 348.44 348.45
Cb inlet on W. Cb of Estrella

Cb inlet on E. Cb. of Estrella

T.P. 10.77 348.79 0.34 338.02

2 + 86.4 F.L. 42" Pipe

2 + 76.4 out let 42" Pipe

2 + 76.4 on dirt

2 + 60.

338.36

LT

E

R

34

327.27 338.18 339.18
21.54 10.61 9.65
F.L. 91970 E Top Cb
Box

INDEXED

339.95 338.99 329.29
9.34 10.30 19.50
E Top Cb 91970 F.L. Box

348.79 ✓

326.52
11.74

326.52
11.84
F.L.

332.8 329.1 326.0 329.1 328.7
5.6 9.3 12.4 9.3 9.7
13 2 2 13

331.3 328.5 330.9 329.1 327.1 326.9 326.6 329.9 328.9 335.0
7.1 9.9 8.0 9.3 11.3 12.9 11.8 9.0 9.5 5.4
25 15 10 6 4 5 6 13 25

338.36 ✓

Survey drain from 48th + Estrella
South of Trojan Ave.

170000
Begg
Greene
Roberts
5-14-47

V.O. 90023

INDEXED
WK
FEB 1 1949



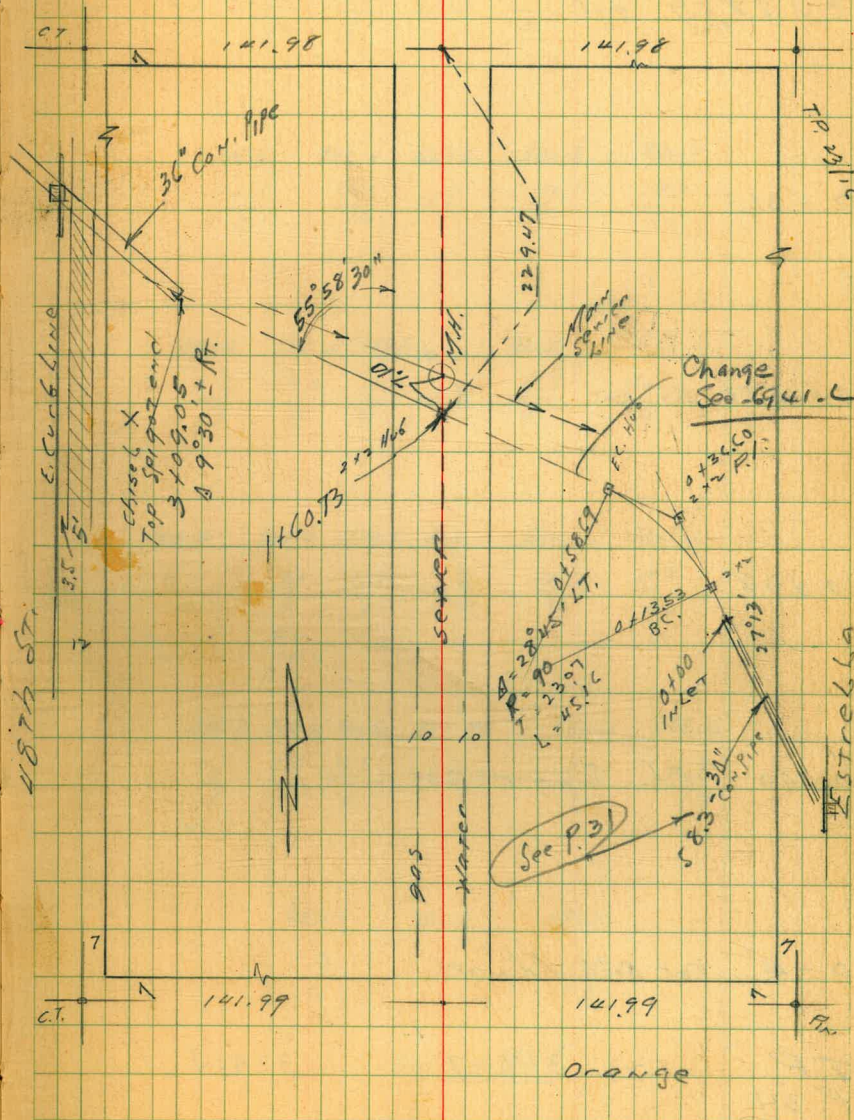
$$V.O. 7^{\circ}03' - 100 = 99.2V$$

$$\frac{130}{229.2V}$$

INDEXED
C.S.K.
Blk. 34 - Fairmount Addition

35

Trojan Ave



Levels for drain, Sketch P. 35

0 + 58.69 E.C.

0 + 36.1

0 + 13.53 B.C. LT

0 + 08

0 + 00 F.L. inlet 30" Con. Pipe

0 - 4' Top Rock Ad. wall

T.P.
P. 34

1.23

340.37

339.14

LT = South

±

P.T.

333.6	329.6	329.6	329.0	329.6	329.1	331.1
$\frac{2.8}{15}$	$\frac{10.8}{10}$	$\frac{10.8}{5}$	11.4	$\frac{10.8}{3}$	$\frac{11.3}{6}$	$\frac{9.3}{17}$

332.3	329.2	328.8	330.3	330.7
$\frac{3.1}{21}$	$\frac{11.2}{10}$	11.6	$\frac{10.1}{6}$	$\frac{9.7}{14}$

337.8	333.2	329.2	328.1	331.5	336.3
$\frac{2.6}{13}$	$\frac{7.2}{9}$	$\frac{11.1}{41}$	12.3	$\frac{8.9}{4}$	$\frac{4.1}{15}$

338.2	331.9	329.9	328.1	330.1	336.2
$\frac{2.0}{10}$	$\frac{9.0}{7}$	$\frac{11.0}{3}$	12.3	$\frac{10.3}{3}$	$\frac{4.2}{10}$
Top end Wall	Base Wall				

339.3	339.6	330.6	327.84	331.2	339.6
$\frac{1.1}{8}$	$\frac{5.8}{7}$	$\frac{9.8}{3}$	12.53	$\frac{9.2}{3}$	$\frac{0.8}{19}$
Wall					

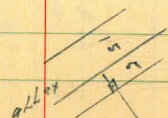
339.2	339.3	339.2
$\frac{1.2}{6}$	11	$\frac{1.0}{18}$

340.37 ✓

1+60.73 Line of alley

1+60.73 sec. taken on E alley
Has this alley been x sec.

1+35



1+34

3/4" x 1/2" x 1/2"

1+00

0+88

T.P. 8.28 337.24 11.41 328.96
340.37

Lt

£

Pt

31

331.2 332.0 327.72 326.54
6.0 5.2 9.50 10.70
22 38 71 71
ground

336.6 339.5 331.3 330.2 330.9 331.5 332.57 326.27 326.11
0.6 2.7 5.9 6.8 6.8 5.7 3.67 10.87 11.13
28 20 1 7 ground ground 71 71 71
Lot 100 ft North
F.L. Main Line
F.L. 89/3 ?

336.3 332.6 330.7 329.9 331.2 330.1 330.2
0.9 4.5 6.5 7.3 6.0 7.1 7.0
19 10 2 5 10 25

335.5 332.7 330.9 329.2 330.9 330.1 330.3 330.2
1.7 4.5 6.3 8.0 6.3 7.1 6.9 6.8
17 10 2 5 10 15 25

333.9 329.9 328.9 330.2 329.2 330.4
3.8 7.8 8.3 7.0 8.0 6.8
12 2 6 10 20

20 2000 ft Rock Wall

337.24 ✓

2 + 75

2 + 50

2 + 30

T.P. 9.50 342.62 4.12 333.12

2 + 60

1 + 97

1 + 70

337.24

Lr P. 38

335.2	339.3	331.9	331.9	331.9	333.8	334.6	333.3	333.9
$\frac{7.4}{30}$	$\frac{8.3}{4}$	$\frac{11.2}{1}$	$\frac{11.2}{1}$	$\frac{11.2}{1}$	$\frac{8.8}{4}$	$\frac{8.0}{7}$	$\frac{9.3}{13}$	$\frac{9.2}{25}$

332.3	333.9	332.6	331.0	331.1	333.2	332.6	332.9
$\frac{8.3}{20}$	$\frac{8.7}{4}$	$\frac{12.0}{1}$	$\frac{11.1}{1}$	$\frac{11.5}{2}$	$\frac{9.4}{3}$	$\frac{10.0}{16}$	$\frac{9.7}{30}$

336.7	333.7	332.5	331.1	331.1	332.8	332.1	332.2
$\frac{5.9}{21}$	$\frac{8.9}{16}$	$\frac{10.1}{2}$	$\frac{11.5}{1}$	$\frac{11.5}{3}$	$\frac{9.8}{5}$	$\frac{10.5}{17}$	$\frac{10.4}{30}$

342.62 ✓

337.29	333.2	332.6	331.0	331.0	332.3	331.3	332.2
$\frac{0.0}{11}$	$\frac{4.0}{4}$	$\frac{4.6}{1}$	$\frac{6.2}{1}$	$\frac{6.2}{3}$	$\frac{4.9}{5}$	$\frac{5.9}{20}$	$\frac{5.0}{30}$

337.2	333.9	332.5	330.9	330.9	332.0	331.9	332.2
$\frac{0.0}{10}$	$\frac{3.3}{5}$	$\frac{4.7}{1}$	$\frac{6.3}{1}$	$\frac{6.3}{2}$	$\frac{5.2}{3}$	$\frac{5.8}{20}$	$\frac{5.0}{30}$

337.2	333.2	330.6	331.9	330.9	331.7
$\frac{0.0}{10}$	$\frac{3.8}{3}$	$\frac{6.6}{1}$	$\frac{5.3}{3}$	$\frac{6.3}{10}$	$\frac{5.5}{24}$

337.24 ✓

Check to S.E. BP Church
Estrell + Orange

1.45 348.42 348.45

0.03

T.P.

10.57 349.87 3.32 339.30

6 INLET E. side 48th 125' S of Trojan

3 + 09.05 outlet 36" Con Pipe
9' 30" R ±

3 + 00

342.62

LT.

8

RT

39

Notes Reduced. 5.15.0

391.33 390.35 332.49

1.29 2.27 10.18
Top curb Top Box

336.6 338.0 331.90 333.9 339.0 339.9
6.0 8.6 10.72 8.7 8.0 8.2
7 3 5.6 1.5 8 1.5

338.2 339.9 333.9 332.1 332.1 332.1 333.7 335.2 332.6
4.1 8.2 8.7 10.5 10.5 10.5 8.9 7.4 8.0
27 12 4 2 2 2 4 9 23

342.62

indexed
c.S.R.

X-Sect. 20' Alley in Block 236
Pacific Beach - T.P. Book 20 - P. 2

1167

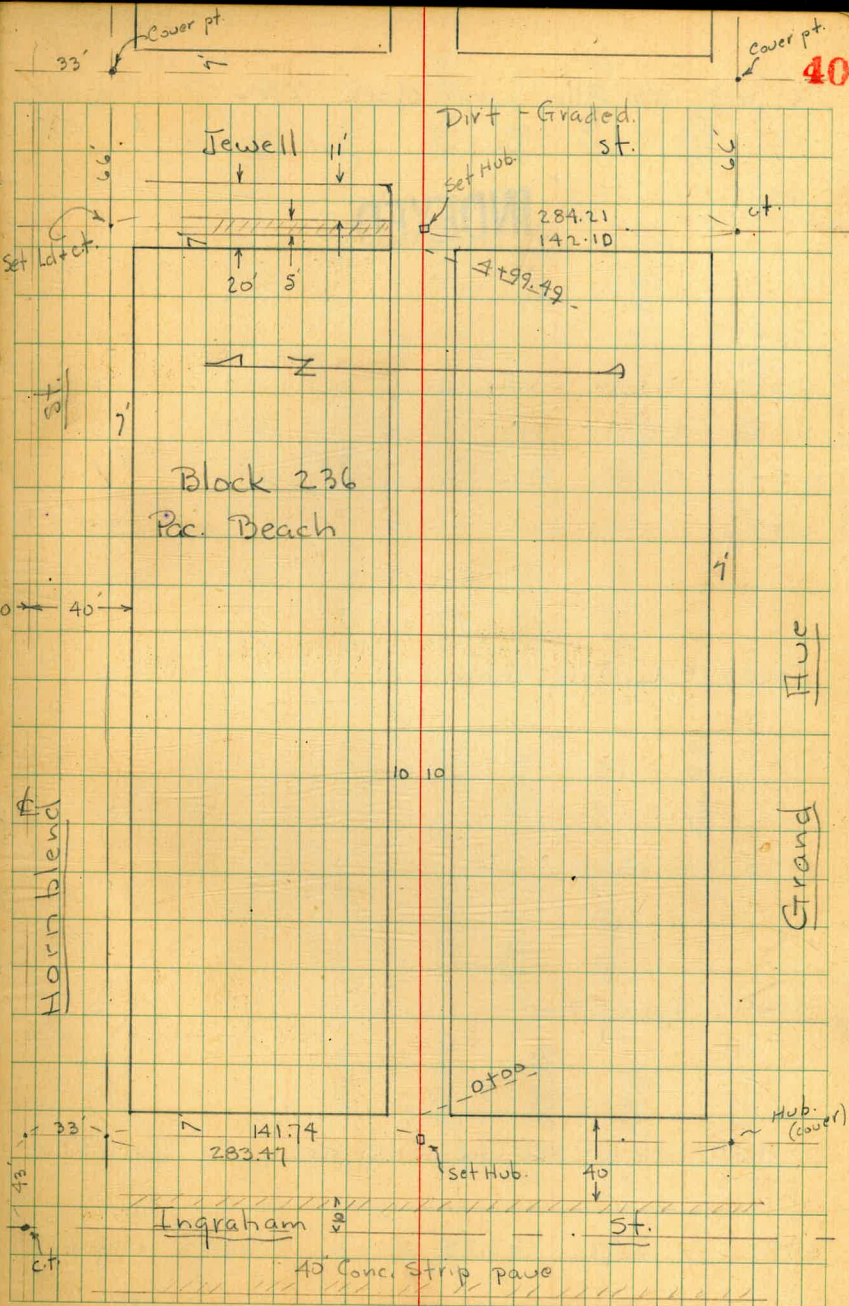
W.O. 25001

6-4-47

Osborne
Hardin
Smith
Worrell

INDEXED

50'
X
50'
↓



X-Sect. 20' Alley in Block 236 - Pac. Beach

0+75

INDEXED

0+50

0+40 - 10.1 Rt. = N.E. Cor. Ice House

0+39 - 8.8 Rt. = Sly. Pole # A 1606

0+28 - 9.8 Rt. = N.W. Cor. Ice House

0+20

0+00 = E.L. Ingraham

0-20 = E. cb.

0-30 = Ave. gutter.

0-40 = edge of 40' Conc. Strip paving on Ingraham

B.M.

7.98

63.83

55.85

N.E.P. Ground
+ Ingraham

59.38	4.9	58.93	3.6	60.23	3.3	60.53	Lt. =
58.70	5.3	58.53	5.4	59.13	2.0	60.53	
58.19	5.6	57.13	5.5	59.23	3.8	59.93	
58.04	5.7	57.53	5.3	59.33	4.3	59.53	
57.94	5.8	57.13	5.4	59.83	4.4	59.43	
57.41	5.9	56.53	5.6	59.83	4.0	58.83	Rt. =
57.15	6.0	56.93	5.7	60.13	4.0	57.53	41
							in excavation
							ground
							floor

T.P. 5.12 61.96 6.84 56.84

3+00

2+99- 9' Rt. = Sly. P. pole # A 1654

2+87- 12.1 Rt. = $\pm$ Shed - Wood floor

2+75- 8.9 Lt. = $\pm$ 28" Euc.

2+64- 8.4 Lt. = $\pm$ 36" Euc.

2+56- $\pm$ Sing Gar. on Rt. - Conc. floor + Apron

2+50

2+43- 11.4 Rt. = $\pm$ Small shed - Conc. floor

T.P. 3.65 63.68 3.80 60.03

2+00

1+64- 8.5 Rt. = Sly. P. pole # A 1630

1+50

1+00

0+99- 8.7 Lt. = NLy. Tel. pole # J.P.A. 1625

0+94- 10.1 Lt. = $\pm$ Sing Gar. - Conc. floor - opens N.

59.88
3.8
20

Lt.

59.58
4.1
10

58.98
4.7
10

58.78
4.9
10

58.58

5.1

2.1

ground

59.08

4.6
20

58.58
5.1
10

59.62

4.16
10.7
apron

59.58

4.1
11.4
ground

59.03

4.65

12.1

floor

59.49

4.19
16.7
floor

59.71

3.97
11.4
floor

60.13
2.7
20

60.83
3.0
20

63.68

59.93

3.0
20

60.13

3.1
20

60.03

3.8
20

59.63

4.2
10

59.63

4.2
20

59.23

4.6
20

59.23

4.6
20

59.53

4.6
20

59.23

4.6
20

60.15

3.08
10.1
floor

63.83

T.P.	4.72	60.87	5.81	56.15
------	------	-------	------	-------

4 + 99.49 = W.L. Jewell

$4+60-9.5$ Lt. = Nly. Tel. pole # 464044 H

 $4 + 50$
$$4 + 42 - 11.5 \text{ Rt.} = \pm 12' \text{ Conc. Slab. (for Gar.)}$$

4+34-10' Rt. = $\pm$ 2.5' Conc. walk

4+04-8.4 Rt. = Sly. P. pole # P.A. 1676

 $4 + 00$

3 + 69 - 11.1 Rt. = E. end = opening of Sing Gar - Dirt floor

3 + 50 - 9' Rt. = end wire fence

3 + 37 - 9.5 Rt. = end fence + Beg. wire fence

$3 + 18 - 12$ Rt. = Beg. picket fence

3+10-12.4 Rt. = $\pm$ Doub. Gar. - Conc. floor

3408- 9.1 Lt. = Nly. Tel. pole # 4640438

43

LT

१

Top 10 56.59

56.36
5.6
10
94

5.6, 2.6
5.7

6.1
10

20.3
55.55

4.51
20

57.06
A.9
10

5.1 56.86

5.2 56.76

56.73

5.5
20

56.93

71.85
3.8
20

59.66
A.

4. 57.36

57.46
4.5

57.06
4.9

4. 57.96
11.

2.5
2.5
59.46

58.76
3.2
10

58.5
3.4

58.36
3.6
10

3.5
58.16

58.99
2.9
12.4
100

61.96

check B.M. + Grand NW.BP Jewell 9.02 51.85 51.84

5 + 19.49 = W.co. Jewell = end.

5 + 16.49 = opp. P.C. of 3' Pb. rad. on Ret. on Lt.

Lt.

P

Rt.

44

57.49	56.87	56.41	55.77	55.57	55.17	53.77	54.77
3.38 50	4.0 50	4.6 10	5.1 10	5.3	5.7 0.7	6.7 0.7	6.1 0.1
Top cb.	Top cb.	Top cb.	Top cb.				
		3 Rad. Ret.					
		56.39	56.07	55.87	55.97	55.47	54.77
		4.8 10	4.8 10	5.0	5.9 0.9	6.4 0.4	6.1 0.1
		Top P.C.	Top P.C.				

60.87

Walker
Hendricks
Becker
Johnson
9-4-47
W.O. #31297

CROSS SECTION 16' ALLEY BLK 8
Roseville Hts.

INDEXED

WK
FEB 1 1949

Fd. ST Ld
PH

Fd. ST Ld / PH
Tie Post 26
10

Trumbull St.

Bangor

31285
Hub 10' chisel X
13193

419932
set nail

ST.

45

Fd. ST.
26

Block

8

Roseville

Hts.

8' x 8'

Hill St.

set nail
60.00

31274

131.87'

Fd. ST Ld PH
Tie Post 26
12

Concord

ST.

X Sect. 16' Alley Block 8 Roseville Hts.

Sta + H.L. - Elev B.M.

0+08 Beg. Conc. Ramp to Gar. Conc Fl.

0+06 Beg. Gar. on Lt 13.3416

INDEXED

0+00

0-07 Edge of paving & End Curb.

0-13 East Cb Concord.

0-30 E Concord St

TP. 9.42 237.73 0.11 228.31

B.M. 12.33 228.42 216.09

46

230.97	232.10	232.41	233.41
231.74	232.13	232.51	233.13
231.75	232.16	232.52	233.14
231.96	232.17	232.53	233.15
231.97	232.18	232.54	233.16
231.98	232.19	232.55	233.17
231.99	232.20	232.56	233.18
232.01	232.21	232.57	233.19
232.02	232.22	232.58	233.20
232.03	232.23	232.59	233.21
232.04	232.24	232.60	233.22
232.05	232.25	232.61	233.23
232.06	232.26	232.62	233.24
232.07	232.27	232.63	233.25
232.08	232.28	232.64	233.26
232.09	232.29	232.65	233.27
232.10	232.30	232.66	233.28
232.11	232.31	232.67	233.29
232.12	232.32	232.68	233.30
232.13	232.33	232.69	233.31
232.14	232.34	232.70	233.32
232.15	232.35	232.71	233.33
232.16	232.36	232.72	233.34
232.17	232.37	232.73	233.35
232.18	232.38	232.74	233.36
232.19	232.39	232.75	233.37
232.20	232.40	232.76	233.38
232.21	232.41	232.77	233.39
232.22	232.42	232.78	233.40
232.23	232.43	232.79	233.41
232.24	232.44	232.80	233.42
232.25	232.45	232.81	233.43
232.26	232.46	232.82	233.44
232.27	232.47	232.83	233.45
232.28	232.48	232.84	233.46
232.29	232.49	232.85	233.47
232.30	232.50	232.86	233.48
232.31	232.51	232.87	233.49
232.32	232.52	232.88	233.50
232.33	232.53	232.89	233.51
232.34	232.54	232.90	233.52
232.35	232.55	232.91	233.53
232.36	232.56	232.92	233.54
232.37	232.57	232.93	233.55
232.38	232.58	232.94	233.56
232.39	232.59	232.95	233.57
232.40	232.60	232.96	233.58
232.41	232.61	232.97	233.59
232.42	232.62	232.98	233.60
232.43	232.63	232.99	233.61
232.44	232.64	233.00	233.62
232.45	232.65	233.01	233.63
232.46	232.66	233.02	233.64
232.47	232.67	233.03	233.65
232.48	232.68	233.04	233.66
232.49	232.69	233.05	233.67
232.50	232.70	233.06	233.68
232.51	232.71	233.07	233.69
232.52	232.72	233.08	233.70
232.53	232.73	233.09	233.71
232.54	232.74	233.10	233.72
232.55	232.75	233.11	233.73
232.56	232.76	233.12	233.74
232.57	232.77	233.13	233.75
232.58	232.78	233.14	233.76
232.59	232.79	233.15	233.77
232.60	232.80	233.16	233.78
232.61	232.81	233.17	233.79
232.62	232.82	233.18	233.80
232.63	232.83	233.19	233.81
232.64	232.84	233.20	233.82
232.65	232.85	233.21	233.83
232.66	232.86	233.22	233.84
232.67	232.87	233.23	233.85
232.68	232.88	233.24	233.86
232.69	232.89	233.25	233.87
232.70	232.90	233.26	233.88
232.71	232.91	233.27	233.89
232.72	232.92	233.28	233.90
232.73	232.93	233.29	233.91
232.74	232.94	233.30	233.92
232.75	232.95	233.31	233.93
232.76	232.96	233.32	233.94
232.77	232.97	233.33	233.95
232.78	232.98	233.34	233.96
232.79	232.99	233.35	233.97
232.80	233.00	233.36	233.98
232.81	233.01	233.37	233.99
232.82	233.02	233.38	234.00
232.83	233.03	233.39	234.01
232.84	233.04	233.40	234.02
232.85	233.05	233.41	234.03
232.86	233.06	233.42	234.04
232.87	233.07	233.43	234.05
232.88	233.08	233.44	234.06
232.89	233.09	233.45	234.07
232.90	233.10	233.46	234.08
232.91	233.11	233.47	234.09
232.92	233.12	233.48	234.10
232.93	233.13	233.49	234.11
232.94	233.14	233.50	234.12
232.95	233.15	233.51	234.13
232.96	233.16	233.52	234.14
232.97	233.17	233.53	234.15
232.98	233.18	233.54	234.16
232.99	233.19	233.55	234.17
233.00	233.20	233.56	234.18
233.01	233.21	233.57	234.19
233.02	233.22	233.58	234.20
233.03	233.23	233.59	234.21
233.04	233.24	233.60	234.22
233.05	233.25	233.61	234.23
233.06	233.26	233.62	234.24
233.07	233.27	233.63	234.25
233.08	233.28	233.64	234.26
233.09	233.29	233.65	234.27
233.10	233.30	233.66	234.28
233.11	233.31	233.67	234.29
233.12	233.32	233.68	234.30
233.13	233.33	233.69	234.31
233.14	233.34	233.70	234.32
233.15	233.35	233.71	234.33
233.16	233.36	233.72	234.34
233.17	233.37	233.73	234.35
233.18	233.38	233.74	234.36
233.19	233.39	233.75	234.37
233.20	233.40	233.76	234.38
233.21	233.41	233.77	234.39
233.22	233.42	233.78	234.40
233.23	233.43	233.79	234.41
233.24	233.44	233.80	234.42
233.25	233.45	233.81	234.43
233.26	233.46	233.82	234.44
233.27	233.47	233.83	234.45
233.28	233.48	233.84	234.46
233.29	233.49	233.85	234.47
233.30	233.50	233.86	234.48
233.31	233.51	233.87	234.49
233.32	233.52	233.88	234.50
233.33	233.53	233.89	234.51
233.34	233.54	233.90	234.52
233.35	233.55	233.91	234.53
233.36	233.56	233.92	234.54
233.37	233.57	233.93	234.55
233.38	233.58	233.94	234.56
233.39	233.59	233.95	234.57
233.40	233.60	233.96	234.58
233.41	233.61	233.97	234.59
233.42	233.62	233.98	234.60
233.43	233.63	233.99	234.61
233.44	233.64	234.00	234.62
233.45	233.65	234.01	234.63
233.46	233.66	234.02	234.64
233.47	233.67	234.03	234.65
233.48	233.68	234.04	234.66
233.49	233.69	234.05	234.67
233.50	233.70	234.06	234.68
233.51	233.71	234.07	234.69
233.52	233.72	234.08	234.70
233.53	233.73	234.09	234.71
233.54	233.74	234.10	234.72
233.55	233.75	234.11	234.73
233.56	233.76	234.12	234.74
233.57	233.77	234.13	234.75
233.58	233.78	234.14	234.76
233.59	233.79	234.15	234.77
233.60	233.80	234.16	234.78
233.61	233.81	234.17	234.79
233.62	233.82	234.18	234.80
233.63	233.83	234.19	234.81
233.64	233.84	234.20	234.82
233.65	233.85	234.21	234.83
233.66	233.86	234.22	234.84
233.67	233.87	234.23	234.85
233.68	233.88	234.24	234.86
233.69	233.89	234.25	234.87
233.70	233.90	234.26	234.88
233.71	233.91	234.27	234.89
233.72	233.92	234.28	234.90
233.73	233.93	234.29	234.91
233.74	233.94	234.30	234.92
233.75	233.95	234.31	234.93
233.76	233.96	234.32	234.94
233.77	233.97	234.33	234.95
233.78	233.98	234.34	234.96
233.79	233.99	234.35	234.97
233.80	234.00	234.36	234.98
233.81	234.01	234.37	234.99
233.82	234.02	234.38	235.00
233.83	234.03	234.39	235.01
233.84	234.04	234.40	235.02
233.85	234.05	234.41	235.03
233.86	234.06	234.42	235.04
233.87	234.07	234.43	235.05
233.88	234.08	234.44	235.06
233.89	234.09	234.45	235.07
233.90	234.10	234.46	235.08
233.91	234.11	234.47	235.09
233.92	234.12	234.48	235.10
233.93	234.13	234.49	235.11
233.94	234.14	234.50	235.12
233.95	234.15	234.51	235.13
233.96	234.16	234.52	235.14
233.97	234.17	234.53	235.15
233.98	234.18	234.54	235.16
233.99	234.19	234.55	235.17
234.00	234.20	234.56	235.18
234.01	234.21	234.57	235.19
234.02	234.22	234.58	235.20
234.03	234.23	234.59	235.21
234.04	234.24	234.60	235.22
234.05	234.25	234.61	235.23
234.06	234.26	234.62	235.24
234.07	234.27	234.63	235.25
234.08	234.28	234.64	235.26
234.09	234.29	234.65	235.27
234.10	234.30	234.66	235.28
234.11	234.31	234.67	235.29
234.12	234.32	234.68	235.30
234.13	234.33	234.69	235.31
234.14	234.34	234.70	235.32
234.15	234.35	234.71	235.33
234.16	234.36	234.72	235.34
234.17	234.37	234.73	235.35
234.18	234.38	234.74	235.36
234.19	234.39	234.75	235.37
234.20	234.40	234.76	235.38
234.21	234.41	234.77	235.39
234.22	234.42	234.78	235.40
234.23	234.43	234.79	235.41
234.24	234.44	234.80	235.42
234.25	234.45	234.81	235.43
234.26	234.46	234.82	235.44
234.27	234.47	234.83	235.45
234.28	234.48	234.84	235.46
234.29	234.49	234.85	235.47
234.30	234.50	234.86	235.48
234.31	234.51	234.87	235.49
234.32	234.52	234.88	235.50
234.33	234.53	234.89	235.51
234.34	234.54	234.90	235.52
234.35	234.55	234.91	235.53
234.36	234.56	234.92	235.54
234.37	234.57	234.93	235.55
234.38	234.58	234.94	235.56
234.39	234.59	234.95	235.57
234.40	234.60	234.96	235.58
234.41	234.61	234.97	235.59
234.42	234.62	234.98	235.60
234.43	234.63	234.99	

X Sect. 16' Alley Block & Roseville Hts. Cont'd.

5/a	+	M.I.	-	E/ey
-----	---	------	---	------

0+70 End Conc. Dr 9.6 Rt. £

0+66 Beg. Gar & Asp. Ramp. 7.7 Lt. &

0+53 Beg. Conc. Drive 9.6 Rt. E

0150 End Board Fence & Conc wall 8.8 Lf &
Power Pole 7' Rt. of & SDG & E A 3490

TP	7.40	245.00	0.13	227.60
----	------	--------	------	--------

0125 Beg. Conc Wall & Board Fence 9.3 Lt. &
End Gar. 133 Lt. &

0+23.4 End. Conc. Ramp to Gar.

O+22 Dead Man for Pole 7' Rt. of E
237.73

2

47

[illegible]

£

48

240.36

10.5	4.52	240.30	60.41
10.5	4.5	240.1	60.41
8	4.5	240.1	
9	4.5	239.9	
4	4.5	239.9	
8	4.5	240.3	
5	4.5	240.5	

240.4	240.57	241.48
4.6	4.3	3.51
9.3	9.3	13.3
Gr.	Romp	Gr. F

4.5	4.5	3.5
240.5	240.76	241.44
9.1	9.1	13.1
Gr Ramp		Gr. Fl

15	4.6	240.4
8	5	240.4
15	5	240.2
8	7	240.3
18	10	241.0

$$\begin{array}{r} 239.98 \\ 502 \\ 13 \end{array}$$

$$\begin{array}{r} 239.73 \\ 527 \\ 77 \end{array}$$

245.00

X Sect 16' Alley Block 8 Roseville Hb. Cont'd.

5/0. H1 - Ekv.

2195 End. Wire Fence 8.9 Lt. E

2150 End Board Fence 8.8 Lt. E Beg. Wire Fence 8.8 Lt.

2121 End. Conc. Ramp to Gar.

2106 Beg. Conc. Ramp to Gar. 16' Rt. of E

TP. 0.05 239.57 5.48 239.52

2103 & 3' Conc. Drain 7' Rt. E

2101 End. Board Fence 9.5 Rt. of E

2100 Power Pole 7.5 Rt. of E A-3460
End Board Fence 8.4 Lt. E Beg. Board Fence 8.8 Lt. E

24500

49

237.3	237.4	235.9	236.2	236.6	237.1
12	8	4	4	8	17
			239.33		239.59
			0.24		10.02
			16		18
			Ramp		Gar. Fl.
			239.56		239.61
			0.01		10.0
			16		18
			Ramp		Gar. Fl.
			239.57		239.55
			12		15
			7		9
238.8	238.5	238.6	238.4		
5	5	5	5		
8		8	8		
		245.00			

X Sect. 16' Alley Block 8 Roseville Hts. Contd.

Sta + H.I. - Elev.

3+45 End Conc. Slob 9.8 Rt. &

3+35 Step in Conc. Slob

3+295 & Manhole

3+23 Beg Conc. Slob 9.3 Rt. &

3+24 Beg. Picket Fence 9.3 Lt. &

3+13 End Conc Ramp to Gar.

3+05 Beg Conc Ramp to Gar 18.8 Lt. &

3+00 Power Pole 76 Rt. of & A-3440
Beg Lath Fence 88 Rt. of &

239.57

50

232.47
7.0
West Rim
232.42
7.5
East Rim
232.39
9.4
232.52
9.4
70.5

233.00
6.9
9.5

233.72
233.44

5.8
22
Gar. Fl.
18.8
Camp

233.00
5.9
22
Gar. Fl.
18.8
Ramp

233.6
6.0
16

233.4
6.0
8

233.6
6.0

233.7
5.9
5

234.0
5.9
6

233.7
5.9
8

233.9
5.9
5

239.57

Sto	+	H.I.	-	Elev
-----	---	------	---	------

4+00

3+77 Dead Man to Pole 7' R.T. &

3+70 End Cor. B. & R. L. &

3+67 End Board Fence Beg. wire fence g.Lt. &

3+53 Beg Gar. Conc Fl. 134 Rt. &

TP.	2.09	233.89	7.77	231.80
-----	------	--------	------	--------

2+50 End Lath Fence 10.4 RL. 2
End Picket Fence 8.9 L+G Beg Board Fence 8.9 RL

239.57

£

51

[illegible]

229.00
4.89
8.4
Coke Foundation
for Fence

25231.31
154
71

23/3/1
758
134
11

1	8.1	23/1.3
2	10	23/1.3
3	10	23/1.3
4	8.1	23/1.3
5	7.8	23/1.3
6	10	23/1.3
7	8	23/1.3
8	7.9	23/1.3

23957

X Sect. 16' Alley Block & Roseville Hts. Cont'd

Sta.	+	H.I.	-	Elev.
------	---	------	---	-------

5+04 End Conc. Ret. Wall & Beg. Ch. 8.3 ft.

4+99.32 W Line Bangor St

TP	103	222.05	1286	221.03
----	-----	--------	------	--------

4 + 50

4+44.7 End Conc Sidewalk & Beg Conc Ret Wall

4438.5 End Conc. Ramp. & Beg. Tide v161K

4 + 22

23.3.89

£

224.3	221.0	216.69
9.5	1.0	5.36
16	16	28.2
		8.3
		Wall
223.5	220.8	219.23
10.5	1.0	5.36
8	11	14.8
		Wall
222.9	217.4	216.69
11.0	4.5	5.36
5	7	14.8
		Wall
223.05	217.2	216.69
10.9	4.8	5.36
8	10	14.8
		Wall
223.1	217.3	216.69
10.8	4.7	5.36
8	10	14.8
		Wall
223.4	219.66	216.69
10.5	2.9	5.36
8.5	11	14.8
		Wall
223.95	220.3	216.69
9.9	1.7	5.36
8.5	12	14.8
		Wall
224.12		216.69
9.7		5.36
12		14.8
		Wall
224.54		216.69
9.36		5.36
8.3		14.8
		Wall
224.90		216.69
9.9		5.36
13		14.8
		Wall
225.11		216.69
8.78		5.36
11		14.8
		Wall
225.19		216.69
8.70		5.36
12		14.8
		Wall
225.35		216.69
8.54		5.36
13.4		14.8
		Wall

233.89

52

Sta	+	M1	-	Elev
-----	---	----	---	------

53

TP	10.22	226.28	5.99	216.06
----	-------	--------	------	--------

541232 W. Cb. Line Bangor St.

5406.32 Beg Asp Paving & Cbs

222.05

[illegible]

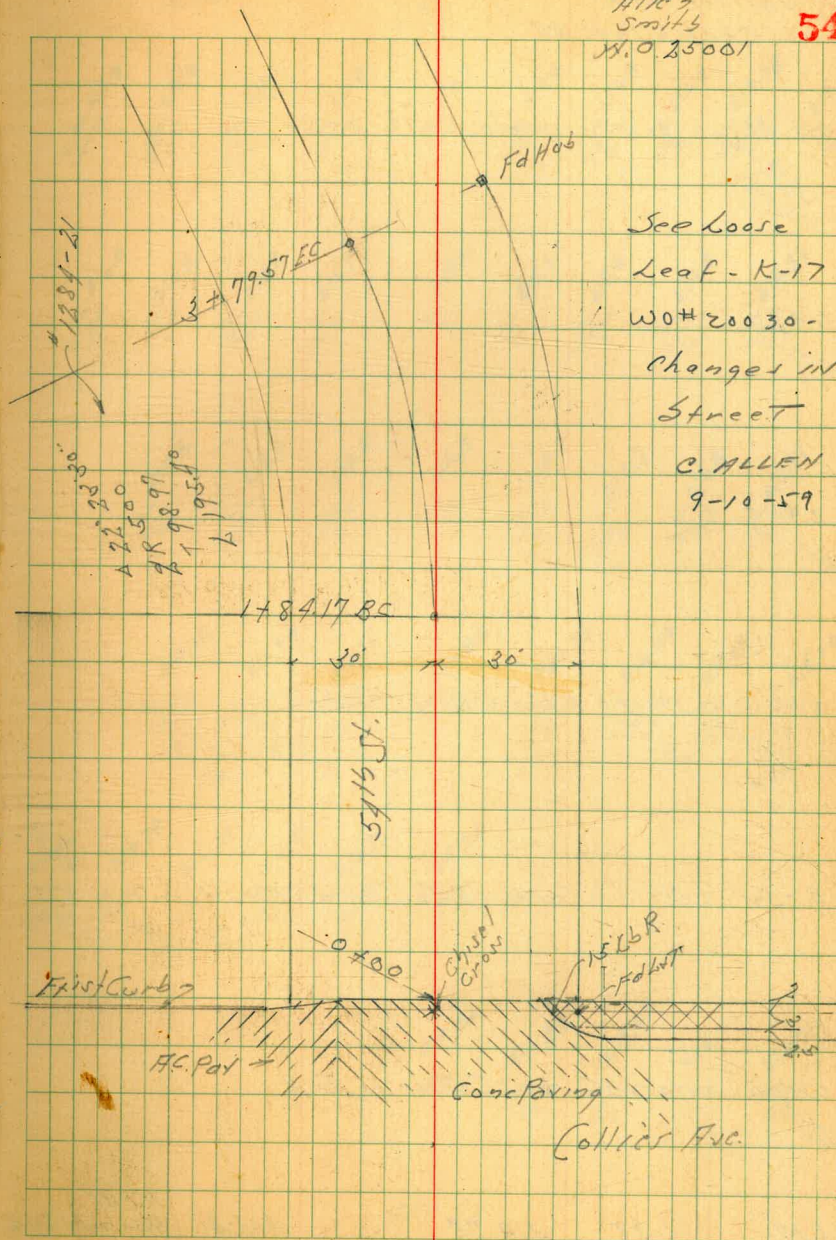
222.05-

INDEXED
JAN 16 1968

IND 16 1948

54

See Loose
Leaf - K-17
WO# 20030 -
changes in
Street
C. ALLEN
9-10-59



N.F.B.P.
Fda m5454/4

415.9 50 20	415.8 50 20	415.7 50 20	414.4 50 20	414.7 50 20	414.8 50 20	414.8 50 20	414.7 50 20	414.98 50 20	415.36 50 20
416.0 50 20	415.8 50 20	415.8 50 20	414.7 50 20	415.2 50 20	415.1 50 20	415.4 50 20	414.8 50 20	415.32 50 20	
	415.8 50 20	415.7 50 20	414.9 50 20	414.9 50 20	414.7 50 20	414.7 50 20	414.8 50 20	415.31 50 20	
	414.46 50 20	414.46 50 20	414.71 50 20	414.86 50 20	414.75 50 20	414.39 50 20	415.03 50 20	415.04 50 20	
414.98 50 20	414.47 50 20	414.51 50 20	414.73 50 20	414.89 50 20					
					414.95 50 20	414.88 50 20	414.65 50 20	414.50 50 20	414.96 50 20

TP 2.94 412.53 10.19 409.59

2150 5° 46.3'

210 0° 54.4'

1+8417 BC LT

1+50

1+07 21° 10' 30" N 101° 10' 30" W 402809H

1+02

0+84

41978

410.5 410.3 409.7 409.7 408.7 405.3 402.0 397.5
 9.5 9.5 10.1 10.2 11.1 14.5 17.8 22.3
 50 50 10 10 10 20 30 40

411.5 410.9 410.8 411.5 411.4 411.2 410.7 405.7
 8.8 8.9 9.0 8.0 8.1 8.1 8.1 11.1
 50 50 10 10 10 20 30 40

411.2 411.1 411.0 411.2 411.8 411.5 410.5 410.3
 8.8 8.8 8.8 8.1 8.1 8.1 8.1 8.1
 50 50 10 10 10 20 30 40

413.8 413.5 411.7 411.8 411.9 411.8 411.7 411.3
 5.0 5.0 8.1 8.0 7.9 8.0 8.1 8.1
 50 50 10 10 10 20 30 40

410.9 410.7 410.7 412.9 413.3 413.3 412.9 413.2 413.34 414.10
 5.0 5.0 5.0 8.1 8.1 8.1 8.1 8.1 8.1 8.1
 50 50 10 10 10 10 10 10 10 10

415.2 415.0 414.9 413.5 413.8 413.8 413.5 413.6 414.18 413.99 414.12
 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0
 50 50 50 50 50 50 50 50 50 50 50

41978

54+55

3779.57 E. 11° 11.75'

3750 9° 50.1'

370 6° 58.2'

412.53

Lt.

2

Pt

57

409.7

28
30

409.2

28
30

408.6

28
30

408.2

28
30

407.7

28
30

406.4

28
30

404.73

28
30

402.1

28
30

408.8

28
30

409.0

28
30

408.3

28
30

407.3

28
30

406.3

28
30

404.7

28
30

403.0

28
30

399.5

28
30

409.3

28
30

408.5

28
30

408.1

28
30

407.0

28
30

405.1

28
30

401.9

28
30

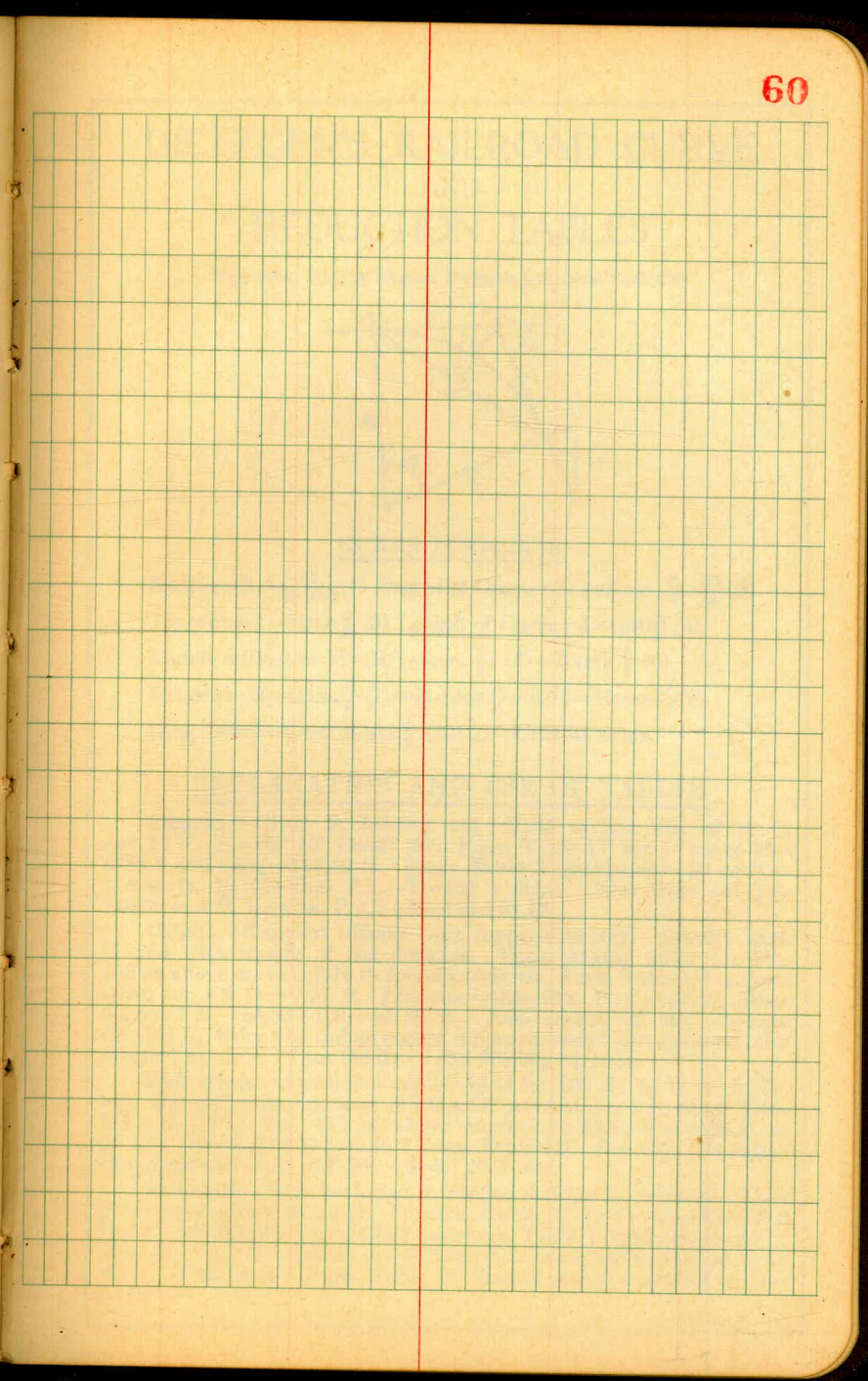
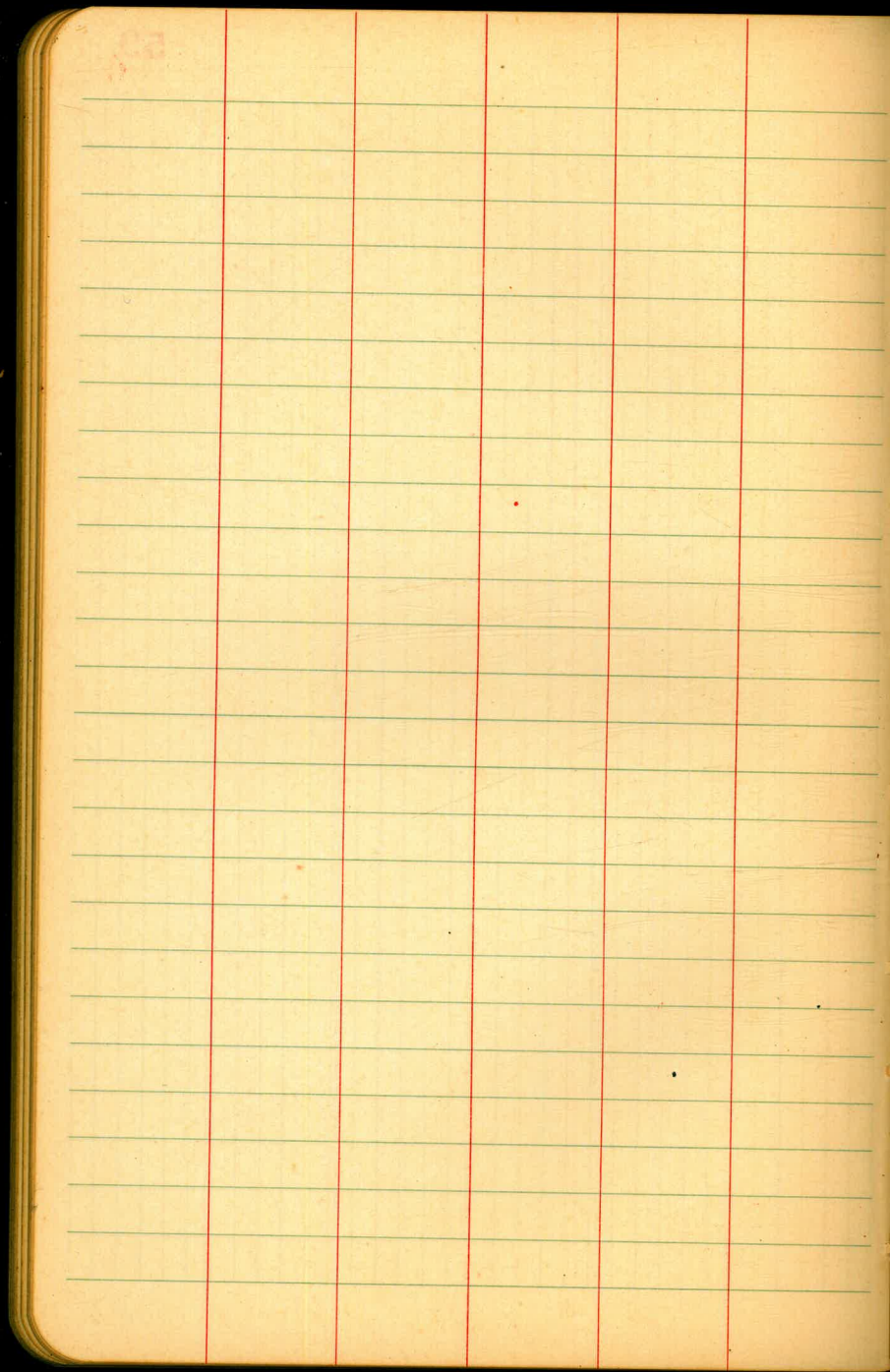
399.4

28
30

396.7

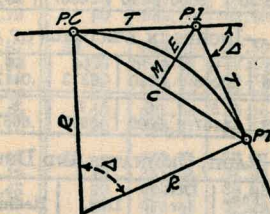
28
30

412.53



DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES

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



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

EXPLANATION AND USE OF TABLES

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

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

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

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

$$\begin{array}{r} 58923 \\ 8463 \\ \hline 67386 \end{array}$$

$$\begin{array}{r} 93470 \\ 67386 \\ \hline 26084 \end{array}$$

$$\begin{array}{r} 5+0632 \\ 7 \\ \hline 49932 \end{array}$$

$$\begin{array}{r} 36 \\ 0 \end{array}$$

$$\begin{array}{r} 20211 \\ 928 \\ \hline 23232 \end{array}$$

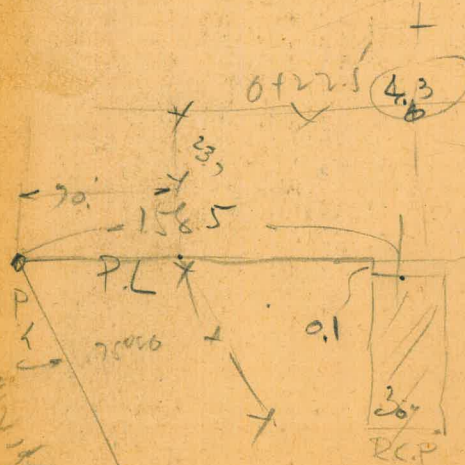
$$\begin{array}{r} 32 \\ 0 \end{array}$$

$$\begin{array}{r} 15703 \\ 56 \\ \hline 8603 \end{array}$$

HOB 247
 0+55

DITCH

7-8/15



0+100
 1.E 72.04
 TOP. 74.54

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

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

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

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

MADE IN U.S.A.