G-230

G-230

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.

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)÷2 or 2 ft. added to 30.6 =32.6. For slopes of 1 on 1½ see inside of back cover.

Tie outs S.E. Cor. 5th + Broadway 58

58th + Vale Way. Culvert Gr. 80

Drain Vale Way + 58th Back. Page

Merlin Dr. Kenwood to Brooklyn Iona	1-10
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Ocean Beach Play Grounds (Blk 31 O.B)	18 12
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" Concession Bldg. Marley Field	75

0+96.66 1° 40.42'

7+53.77 0°-55.40'

Reset { 0+96 @ Lt
219.10 On
2.27 Cor
221.37 E ↗
8.01
229.38 ↖

0+17.22 0°-17.89' E.C. N.E. Cb. Ret. East only

0+10 = 0°-10.39' E.C. N.W. Cb. Ret. West only

0+00. = N.L. Kentwood

0-45 Δ Rate per. foot = 1.0389 Min = S.L. Kentwood

11.69 229.24 — 217.55

B.C. Hub. Kentwood + Merlin FB. 165 9-14

219.10 / 10.14 / 7.87 / C 2.27

215.90 / 13.44 / 8.41 / C 4.63

Reset ↖ 229.38 / 215.80 / 13.58 / 10.98 / C 2.60

219.61 / 9.63 / 7.55 / C 2.08

216.31 / 12.93 / 10.33 / C 2.60

213.56 / 15.68 / 12.34 / C 3.34

212.50 / 16.74 / 12.18 / C 4.56

212.56

213.00 / 16.24 / 11.54 / C 4.70

211.85 / 17.39 / 12.86 / C 4.53

211.00

212.35 / 16.89 / 11.37 / C 5.52

209.85 / 19.39

209.90 / 19.34

2+40		4°-09.34'		
2+20		3°-48.56'		
	12.74	241.80	0.18	229.06
2+00		3°-27.8'		
1+80		3°-07'		
1+60		2°-46.23'		
1+40	P.V.C.	2°-25.45'		
		229.21		

228.86
12.94
11.56
C 1.38

228.91

229.36
12.44
9.80
C 2.64

227.77
14.03
12.85
C 1.18

227.82

228.27
13.53
11.89
C 2.34

226.57
2.67
2.00
C 0.67

226.62

227.07
2.17
18
C 1.99
T.P.

A = 229.38 Resat
225.28
4.10
3.18
C 0.92

225.33

225.78
3.46
1.96
C 1.50

223.90
5.34
4.59
C 0.75

223.95

221.40
4.84
3.32
C 1.52

222.42
6.82
6.03
C 0.79

222.47

222.92
6.32
4.73
C 1.59

T.P.=	13.17	253.41	2.65	240.24	
T.P. = 2X2 = 5' East of E. Line station 4+54					
5+00		8°-39.45'			
4+50		7°-47.51'			
4+00		6°-55.56'			
3+50		6°-03.62'			
3+00		5°-11.67'			
T.P.	9.57	242.89		233.32	
El. Stake at 2+60 on Rt. = 233.32					
2+60	E.V.C	4°-30.12'			

Lt. West

241.45
1.44
1.80
F 3.36

239.04
3.85
1.74
F 3.89

236.63
6.26
9.07
F 2.81

234.22
8.67
9.77
F 1.10

231.81
11.08
9.33
C 1.75

229.86
14.74
10.04
C 1.90

229.91

Rt. East

241.93
0.96
0.64
C 0.32

239.52
3.37
3.00
C 0.37

237.11
5.78
4.29
C 1.49

234.70
8.19
5.94
C 2.25

232.29
10.60
7.56
C 3.04

230.36
11.44
8.48
C 2.96

T.P.

7+04 = ℄ Brooklyn Dep. 12°-11.38' =

6+83.55 on East. 11°-50.13'

℄ Hub. Merlin & Brooklyn
F.B. 1636-72 S.S. 7.29 253.61 253.59

T.P. 9.33 260.90 1.84 251.57

11°-43.33'
6+77 = S.L. Brooklyn on ℄ Merlin

6+62.37 on East. 11°-28.13'

11°-27.87'
6+62.12 on west S.L. Brooklyn on west

6+47.11 11°-12.29'

6+00 10°-23.34'

5+50 9°-31.40'

253.41

Lt. Rt. 4

253.41 π
230.80
2.61
0.79
C 1.91

250.00 out. 250.45

249.73
3.68
2.02
C 1.26

248.58
4.83
1.84
C 2.99

248.52 248.57 249.02
4.89 4.29
2.49 3.26
C 2.40 C 1.13

246.27 246.73
7.14 6.66
6.37 6.04
C 0.77 C 0.62

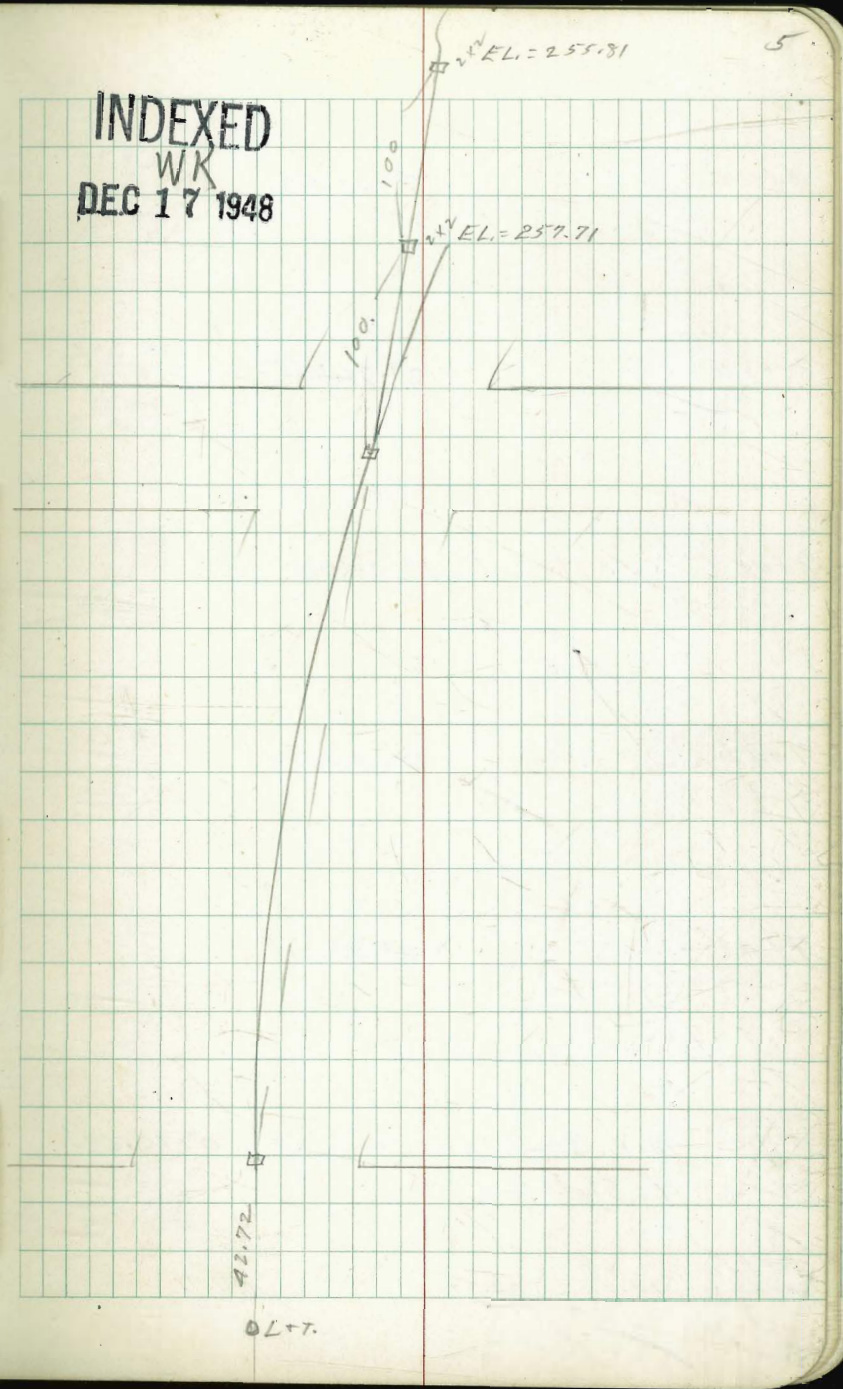
243.86 244.34
9.55 9.07
11.55 8.42
F 2.00 C 0.65

Ties - Merlin Dr.
Kenwood & Brooklyn

℄ Brooklyn + Merlin tied out on production of long chord. ⅌ Hubs 100.00 + 100.00 Nly.

℄ Merlin + old North line Kenwood tied into tack (as shown. FB 1636-61) 42.72 Sly from Hub.

200' RP.		5.09	255.81
100' RP.		3.19	257.71
	260.90		



9+00 3°-23.63

8+50 2°-31.70'

8+00 1°-39.75

7+50 0°-47.79'

7+43.55 0°-40.51'

.0383 per ft.

7+19.88
0+00 = N.L. Brooklyn to west 0°-16.62'
7+04 = ℄ Brooklyn.

100' R.P.
page 5 10.00 267.71 — 257.71

258.67
9.04
9.15
F 0.41

256.76
10.75
10.24
C 0.71

254.84
12.87
10.77
C 2.10

252.93
14.78
13.70
C 1.08

256.78
15.93
14.43
C 1.50

259.23
8.48
3.90
C 4.58

257.33
10.38
5.37
C 5.01

255.43
12.28
8.35
C 3.93

253.53
14.18
10.88
C 3.30

253.28
14.43
11.21
C 3.22

T.P.	11.81	286.11	2.65	274.30
12+25		4°-04.16'		
11+80	E.C.	2°-52.35		
11+60		2°-20.43'		
11+40		1°-48.51'		
11+20		1°-16.60		
11+00		0°-44.68		
		276.95		

272.65
4.30
8.15
F 3.85

273.15
3.80
1.80
C 2.00

270.45
6.50
11.69
F 5.19

270.95
6.00
4.40
C 1.60

269.48
7.47
12.63
F 5.16

269.98
6.97
5.65
C 1.32

268.52
8.43
13.08
F 4.65

269.02
7.93
6.36
C 1.57

267.60
10.35
13.45
F 3.10

268.10
8.85
6.95
C 1.90

266.68
10.27
14.21
F 3.94

267.18
9.77
7.26
C 2.51

2x2 R.P. 30'Rt - Nail + shiner 40 more or 70'Rt. ±

13+93.99 E.C. 8°-33.86

13+85 8°-19.50'

13+65 7°-47.58'

13+45 7°-15.67'

13+25 6°-43.75

12+75 5°-23.94

286.11

280.70
5.91
7.92
F 2.51

280.44
5.87
8.43
F 2.56

279.40
6.71
9.10
F 2.41

278.51
7.60
9.45
F 1.85

277.55
8.56
8.58
F 0.02

275.10
11.01
11.81
F 0.80

281.20
4.91
2.45
C 2.46

280.74
5.37
2.75
C 2.62

279.90
6.21
3.80
C 2.41

279.01
7.10
5.00
C 2.10

278.05
8.06
5.89
C 2.18

275.60
10.51
8.32
C 2.19

Field Books 1659 - 1636

(For Dail - 5936 Brooklyn)

13+9

13+

13+9322 BC. Hub. A.10

FB1659- 18= 281.97

13+

14+59.53 N.Ely Iona

13+

14+30.38 ℄ Iona

13+

12+

14+01.23 Swly Iona Dr.

282.98
3.13
4.77
F 1.64

283.50
2.61

281.92
4.19
5.61
F 1.42

282.50
3.61

280.86
5.25
7.51
F 2.26

281.50
4.61
1.37
C 3.24

7-3-41 Stake Water Line Woden St.
Cottonwood to Dalbergia

Ely top Ch. 3+30		10.50	12.04	12.00
Wly. top Ch. 3+30		8.95	13.59	13.50

60' Sly. from Wly line Dalbergia

3+90 = Intersect. Dalbergia water line.
+60
3+30 = Nly. line Dalbergia
+80
2+30
+80
1+30
+80
0+30 = Sly. line cotton wood.
Intsection of water line on
0+00 = Cotton wood. 30' Nly. from Sly line.

Top. Ely. Ch. at Sly line Cottonwood		2.55	19.99	20.00
Top. Wly Ch. at Sly. line Cottonwood		1.99	20.55	20.50
B.R. Wly. Rot. Cottonwood + Woden	189	22.54	—	20.65

Indexed
C.S.K.

11

4' offset from ℄ water line
Nails set in oil pav. 14' Ely. from
℄ Woden St. cuts painted on pav.

Pav. Gr. = 11.10

3+90: 8.00 / 14.54 / 10.53 — C 4.01 V

+60: 8.45 / 14.09 / 10.50 — C 3.59 V

Pav. Gr. = 12.00

3+30: 8.90 / 13.64 / 10.54 — C 3.10 V

2+80: 10.19 / 12.35 / 9.62 — C 2.73 V

2+30: 11.48 / 11.06 / 8.39 — C 2.67 V

1+80: 12.77 / 9.77 / 7.03 — C 2.74 V

1+30: 14.06 / 8.48 / 5.80 — C 2.68 V

0+80: 15.35 / 7.19 / 4.46 — C 2.73 V

Pav. Gr. = 19.75

0+30: 16.65 / 5.89 / 3.10 — C 2.79 V

" Gr. = 20.31

0+00: 17.21 / 5.33 / 2.04 — C 3.29 V

22.54

Ocean Beach Play Grounds

Page 13 For Grades

Blk. 31 - Ocean Beach

10-16-47

SWBP Newport + EBers

EBers + Santa Monica W.W. Exp L+T.

Prop. line

EBERS

Santa Monica

Ocean

E+W sta	0+62 East	0+67 West stake
A (Page 12		43.65
		5.67
		3.91
		C 1.76
B	45.82	43.60
	3.50	5.72
	3.53	4.10
	F 0.03	C 2.04
C	45.69	43.48
	3.63	5.84
	3.30	3.60
	C 0.33	C 2.24
D	45.58	43.35
	3.74	5.97
	3.29	3.50
	C 0.45	C 2.47
E	45.50	43.28
	3.82	6.04
	3.53	3.79
	C 0.29	C 2.25
P	45.98	
	3.34	
	3.28	
	C 0.06	
Q	46.11	
	3.21	
	2.25	
	C 0.96	
R	46.20	
	3.12	
	2.12	
	C 1.00	

E+W sta: 0+58 East stake	0+66 West stake
G 44.21	43.47
5.11	3.85
3.73	4.17
C 1.38	C 1.68
H 44.29	43.55
5.03	5.77
4.10	4.35
C 0.93	C 1.42
I 44.41	43.67
4.91	5.65
4.91	5.01
X	C 0.64
J 44.54	43.80
4.78	5.50
5.50	5.66
F 0.72	F 0.16
K 44.66	43.92
4.66	5.40
5.75	6.03
F 1.09	F 0.63
L 44.78	44.04
4.54	5.28
6.12	6.48
F 1.58	F 1.16
M 44.85	44.11
4.47	5.21
6.30	6.50
F 1.83	F 1.29

℄ Alley Blk. 31

	37.75	2+50
	6.01	
	5.82	
	C 0.19	
X		
43.76	38.92	2+25
0.54	5.04	
43.22 T.P.	5.10	
3.21	F 0.06	
51.43	39.70	2+00
4.32	4.06	
47.11 T.P.	4.29	
4.35	F 0.23	
51.46		
8.45		
43.01 on B.M.		
O.K.		
	42.79	1+72
	6.53	
	6.86	1+17
	F 0.33	
	43.61	1+00
	5.71	
	6.10	
	F 0.39	
	44.20	0+75
	5.12	
	4.21	
	C 0.91	
	44.90	0+67 (0+66)
	4.72	
	3.79	
	C 0.63	
	45.50	0+50
	3.82	
	4.46	
	C 0.86	
	45.80	0+25
	3.52	
	2.30	
	C 1.22	
	45.59	0+07
	3.73	
	2.97	
	C 0.76	

42.99	
6.33	
6.67	
F 0.34	
43.61	
5.71	
5.93	
F 0.22	
44.20	
5.12	
4.60	
C 0.52	
44.98	
4.34	
4.17	
C 0.17	
45.50	
3.82	
3.30	
C 0.52	
45.80	
3.52	
3.15	
C 0.37	
45.60	
3.72	
3.44	
C 0.28	

EBERS

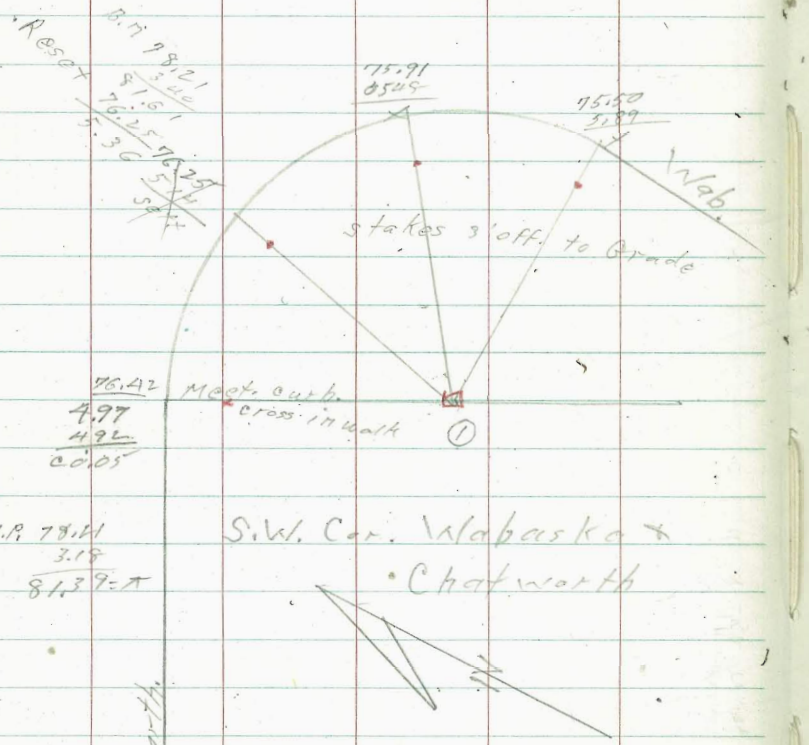
Stake out Cb. Inlets & Drain Across Wabasha Ave So. Side Chatsworth

Sta	+	H I	-	Elev. Nails	Elev. Grade
1+23.15	End 12" RCP		5.87	76.21	72.16
0+92.52			6.03	76.05	71.88
0+61.90	& Cleanout		6.28	75.80	70.60
0+30.95			6.07	76.01	72.08
0+00	Beg 12" RCP		4.95	77.13	73.57
BM	547	82.08			76.61

Cuts 4% Ed.

4.05	
4.17	
5.20	
5.93	
3.56	

Wabaska Curb Grades



10-30-47 15

Chats.

77.81 - Meet Exist Cb. #2
3.58
3.58
C.0.08
cross walk
S.E. Cor.
Chatsworth + Wabaska
Δ 58.54
Cb. R. 75'
" T 14.11
" L = 25.70
" 3 parts.
77.41
3.98 L
T 81.39
77.10
4.29 L
76.90
4.49 L
E. Cb. Wabaska
78.41
1.43
Reset T = 77.64
W. Cb. Wabaska
71.70
7.76 L
grade
7.94
Δ 148°-21
Cb. R. = 15'
" T = 52.92
" L = 38.84
3 parts.
71.46
8.00 L
71.46
79.46=T
stakes 3' back
of Cb. face
#1
S.E.B.R.
poc + Chats.
78.24
1.25
79.46
71.36
8.10 L
71.36
8.95
Flg. Cb.
poc.
71.50
7.76 L
71.42
8.04 L
71.42

Meet ch. 11-6-47

Δ 121°-39'
R 18.39
T 37.79
L 39.05
3 parts.

5 stakes 3' back

#3

69.02
7.50 L meet ch.

68.63
7.89
7.61
C 0.28 x-on walk

6.85 5
7.97
4.97
C 3.00

68.48
8.04
6.00
C 2.00

Restake 4-19-48
P. 18

N'ly ch. Capistrano

S.E.B.R. Poa + Chatsworth = 78.21
1.55
79.77
9.88
69.89
4.95
74.84
4.72
70.12

w'ly 7' Lt. Poa + Capistrano

F.L. 64.64
11.88

Grate 67.52
9.00
7.00
C 2.00

Wabaska

See page 20

Restake 3/24/48

0+45.3
F.L. 63.20
13.32

F.L. 63.92
12.60

Alley Line

69.05
7.47
3.40
C 4.00

Δ 90° C 4.00
R 19.58
T 19.58
L 30.76
3 parts.
stakes 3' back

#1

67.12
7.40
5.40
C 2.00

69.46
7.06
7.04
C 0.02 on walk

70.08
6.44
Meet curb

N'ly Capistrano

0+63.9
F.L. 65.09
11.43

Grade 68.28
8.28
6.78
C 1.50

70.12
6.40
76.52 = X

A 68.65
7.87
8.87
F 1.00

B 68.58
7.94
7.94
X

C 68.53
7.99
7.99
X

D 68.55
7.97
7.97
X

E 68.60
7.92
7.92
X

X Reset 5' offset
Grades changed
Grades to meet Exist. curb

Δ = 60° 21'
C.R. = 25.00
C.T. = 14.53
L = 26.33
Rate 68.755'

#6

Changed
See page 18
P. 20
Right

6033
11.63
F 0.19
C 0.21

5961
12.46
12.39
C 0.39

5889
13.12
13.13
C 0.39

61.05 = F.L.

9 stakes 6' Rt.
Wabaska Dr.

70.12
4.29
74.41 = X

0+31
74.09
10.32 = Rad
9.87
C 4.05

70.10
6.42
4.92
C 1.50

11.38

70.58
5.66
4.66
C 1.00

70.64
5.88
4.38
C 1.50

Grade
Reset:
67.11 = F.L.

Δ 119° 39'
C.R. = 18.73
C.T. = 32.20
L = 39.11
Rate = 91.771'

#4

72.46
9.06
9.74
C 0.32
x-on walk

73.86
2.66
2.66
Meet ch.

Tie to Rock X in west curb
Nearest point tree
Line only
Class 1.10 > walk
Oak 15" dia.

Grades Alley Blk 31. O.B

	S		N.
1+39	42.09 6.57 6.77 F 0.2		42.09 6.57 6.77 F 0.2
0+99	43.65 5.01 5.2 F 0.4		43.65 5.01 5.2 F 0.2
Blk 0+59	45.22 3.44 3.0 C 0.4		45.22 3.44 4.4 F 1.0
Blk 0+39	45.73 2.93 2.89 C .04		45.73 2.93 4.13 F 1.20
Blk 0+19	45.74 2.92 2.89 .02		45.75 2.91 4.09 F 1.18
Blk W.L. EBERS. 0+00	45.50 3.16		45.22 3.44
N.W. Cor. T. Ebers & Santa Monica	1.55	48.66	47.11

Blk 3+79	32.70 4.55 4.3 C 0.2		32.70 4.33 4.4 C 0.1 Blk
3+39	34.26 2.99 2.6 C 0.4		34.26 2.99 3.5 C 0.5
TP 1.18	37.25	12.59	36.07
2+99	35.83 12.83 12.1 C 0.7		35.83 12.83 11.83 C 1.00 Nail
2+59	37.39 11.27 11.1 C 0.2		37.39 11.27 10.9 C 0.4
2+19	38.96 9.70 working Hub 58		38.96 9.70 9.6
1+79	40.52 8.14 8.2 X		40.52 8.14 8.9 F 0.2

Alley Blk. 31. Ocean Beach.

E.L. Sunset Cliffs

5+99	25.06			25.28
	12.19			11.97
	12.21	check		11.99
	−0.02	ok		−0.02
Brk.				
5+59	27.00			27.00
	10.25			10.25
	9.9			10.0
	C 0.3			C 0.2
5+14	28.42			28.42
	8.83			8.93
	8.6			8.7
	C 0.2			C 0.1
4+69	29.85			29.85
	7.40			7.40
	7.5			7.2
	F 0.1			C 0.2
4+24	31.27			31.27
	5.98			5.98
	5.7			5.8
	C 0.3			C 0.2

Wabash

From page 16

Restake 1-17-48

W'ly 7'L+T Capistrano + POC - page 16

70.12
1.89
72.01 T

72.01
69.36
2.65
3.65
F 1.00

72.01
69.30
2.71
3.71
F 1.00

69.25
2.76
3.76
F 1.00

69.20
2.81
3.81
F 1.00

72.01
2.48
67.53 3-plate

69.20
67.53
1.67 to C/L pave (1)

Sta. Capistrano

R = 25
Δ 60° 21'
L = 26.33
4 equal pts

69.15
2.86
E.L. Wabash

7'L+T (Above)
70.12
2.47
72.59 T

1-19-48
From P. 14

Δ 121° 39'
R 18.39
Δ 0° 33'
68° 06'

69.97
3.57

68.63
3.96
365
Cut 82

68.55
4.04 C

68.48
4.14 C

Bangor - Harbor View - South 17

11-24-47

W.O. # 60220
sheet 3397-B

Sommermeyer
W Moore
E Sherman

Sewer Grades

(10' Tie back)
BM = S.E. 17 Ct. & Bangor & Harbor View

	11.20	265.91	—	254.71
	8.86	274.67	0.10	265.81
N.E. Tie back Lucinda & Bangor			5.21	269.46
				269.48
				-0.02

M.H. #1

0+00	0+40	0+80	1+20	1+60	
248.10	250.52	252.93	255.35	257.77	
17.81	15.39	12.98	10.56	8.14	
9.71	6.77	4.15	2.07	0.10	= T.R.
C 8.10	C 8.62	C 8.83	C 8.49	C 8.04	

* 274.67

2+00	2+40 = D.E.
260.19	262.60
14.48	12.07
7.21	5.99
C 7.27	C 6.08

2+40 = Dead End

Harbor View

12"

Existing O.E.

Restake returns 3/24/48
Wabaska & Capistrano

S.W L+7.
Poe Capistrano

70.12
6.61
76.73

#3 (page 16)

69.02	68.63	68.48	68.55
7.71	8.10	8.25	8.18
7.71	7.82	6.25	5.18
Meet curb.	C0.28 cross	C2.00	C3.00

#5 (page 16)

69.05	69.12	69.46	70.08	70.12
7.68	7.61	7.27	6.65	298
4.68	6.61	7.29	Meet ch.	
C3.00	C1.00	C0.03		73.10

69.75
3.35
85
C 2.50
E.C. + 19

#7 Page 16

73.86	72.46	70.88	70.10
2.87	4.27	5.85	6.63
2.77	4.27	4.85	5.13
C0.10	<	C1.00	C1.50

76.73
4.40 Rod
72.26 =
Elev. Stake
72.69
C 0.75
C 2.51

#6 - Page 16
" 18

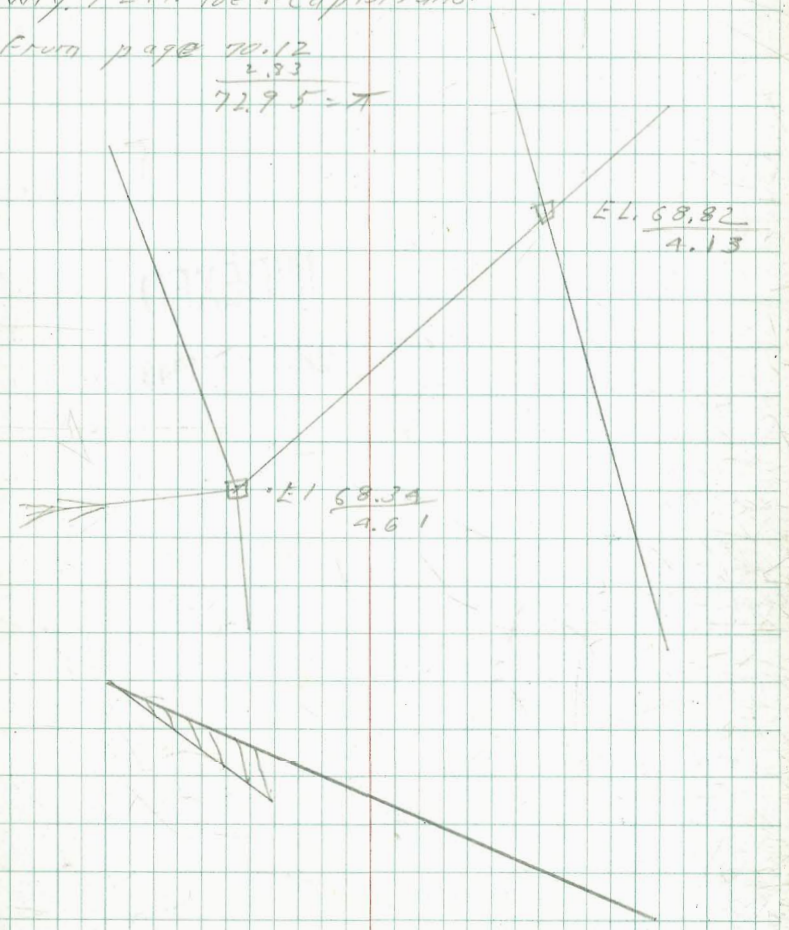
69.36	69.30	69.25	69.20	69.15
7.37	7.43	7.48	7.53	7.58
8.37	8.43	8.48	8.53	8.58
F 1.00	F1.00	F1.00	F1.00	F1.00

-8.1'
76.77
69
69.8 Elev.

Clean outs Wabaska & Capistrano 12-15-47

Grades to top of clean out.
1 sheet # 7005

Wly. 7'L+7. Poe & Capistrano.
From page 70.12
2.83
72.95 = T



Evergreen St. Grades.
Water & Sewer Lats.

B.M.: Spike in S.E. Pole Evergreen + Emerson - Lsheet 6694 = 19.94

Sewer

#1	#2	#3	#5	#6
43.48	43.48	43.48	43.48	31.76
36.00	31.60	31.70	26.87	20.87
7.48	11.88	11.78	16.61	10.89
3.54	8.79	7.73	12.30	6.89
C 3.94	C 3.09	C 4.05	C 4.31	C 4.00

#7	#8	#9
22.08	22.08	12.51
13.97	8.57	2.20
8.11	13.51	10.31
2.38	8.78	5.27
C 5.73	C 4.73	C 5.04

+ or - are from Breaks in Grade. Not prop. line

0.05 Allowed for rise in walk

Water laterals

#1	#2	#3	#5
51.07	38.13 - 38.89	39.22 - 39.00	30.92 - 31.32
48.62 47.84	5.35 4.59	5.26 4.48	12.56 12.16
2.45 3.23	.05 .05	.05 .05	.05 .05
.05 .05	5.30 4.54	5.21 4.43	12.51 12.11
2.40 3.18	6.80 5.54	3.21 3.43	11.51 11.11
1.40	F 1.50 F 1.00	C 2.00 C 1.00	C 1.00 C 1.00
C 1.00			

22.08

#6	#7	#8	#9
31.76	-.09 -.03	43' 47'	74' 78'
24.57 - 24.51	18.32 - 18.42	13.04 13.14	7.46 7.51
7.19 6.75	3.76 3.66	9.04 8.94	5.05 5.00
.05 .05	.05 .05	.05 -.05	5.00 4.95
7.14 6.70	3.71 3.61	8.99V 8.89V	19.94
6.14 5.70			2.14
C 1.00 C 1.00			22.08

Evergreen + Emerson. S.E. Prop + 7' Disk	5.68	25.62	7.12	18.50	Set B.M.
				19.94	S.E. Spike Lsheet 6693

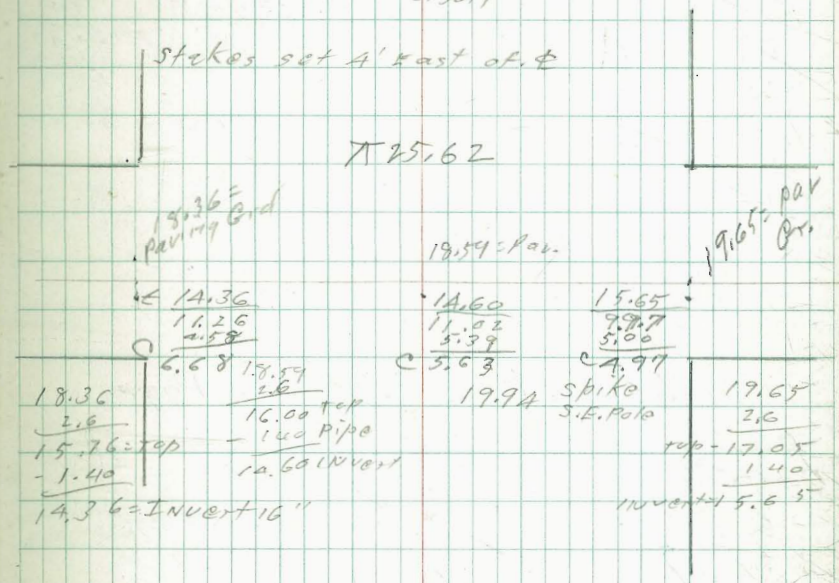
INDEXED
WK
DEC 17 1948

Grades 16" Water Main
Evergreen + Emerson

℄ Emerson

Stakes set 4' East of ℄

25.62



Emerson Grades.

Evergreen

2+75

Rake

2+55 ℄ only

Rake

0+25

.022 So. Gutt.
.0264 North Gutt

Disk. P. 23 18.50
5.93
24.43
1.52
22.91
12.57
X to P. 23 → 35.48

Locust St. Int. Page

2+75

Rake

6.15 B.M. Rosecrans Emerson
5.67
11.82 X
1.83
9.99
5.89
15.88 X

9.42
6.83
16.25 X

9.42
4.89
14.31

0+34

.015 South Gutt.
.0162 North Gutt

0+27

W'ly 91 Emerson
& Rosecrans
Page 27

8.98 — 15.13 — 6.15

W. line Rosecrans

S Cb.	S Gutter	S 1/4	℄	N 1/4	N Gutter	N22 Cl.
18.00	17.50	17.78	17.95	18.03	18.00	18.50
6.43	6.93	17.45	17.62	17.70	6.43	5.93
6.41						
0.07						
	17.06	17.42	17.60	17.63	17.47	
		17.09	17.27	17.30		
		Set Brk from raked gutter grade.				
		X 16.25	16.25	16.25		
12.50	12.00	12.14	12.04	11.87	11.40	11.90
2.63 V	3.88	11.78	11.71	11.48	4.48	3.25 V
		4.47 V	4.54 V	4.77 V		
10.52	10.02	10.13	10.06	9.83	9.42	9.92
4.61	5.86	9.80	9.73	9.50	6.48	5.21 V
	X 15.88	4.51 V	4.58 V	4.87 V	X 15.88	
7.12	6.44	6.47	6.32	6.01	5.52	6.15
8.01 V		6.14	5.99	5.68		8.98 V
6.95	6.34		6.15		5.41	5.96
8.18	5.48		5.67		6.41	9.17
8.13	5.49		5.65		6.42	
Cmos	F 0.01		Co. 02		F 0.01	
	X 11.82		X 11.82		X 11.82	

Emerson St.

2+75								
2+47.5	43.20 / 11.52 / 11.06 / 0.46			4.79	43.85 / 10.87 / 12.40			
T.P.	12.40	54.72	1.00	42.32	F 1.53			
2+20								
	1/4 + ℄							
2+10	18.50 = Disk							
	12.46 / 30.96 ↗ / 0.14 / 30.82				curb, cuts 24.43 / 1.52 / 22.91 / 12.57 / 35.48 / 0.09 / 35.39 / 12.74 / 48.13 ↗ / 0.70 / 47.43 / 11.59 / 59.02 ↗			
2+00	T.P. & 1+70							
	11.88 / 42.70 ↗ / 0.15 / 42.55 / 12.49 / 55.04 ↗							
1+90	T.P. Between 2+20 + 1+47.5							
1+80								
1+70								
T.P. 1160 Rt.	12.49	43.32	0.60	30.83				
1+60								
1+50				Should be				
1/16	26.48 / 4.95 / 4.27 / C 0.68			26.75 = C 0.28	26.25 / 5.18 / 4.00 / C 0.78			
0+50	23.49 / 7.94 / 7.80 / C 0.14			23.92 = C 0.50	28.42 / 8.01 / 7.61 / C 1.00			
0+25								
Evergreen								
Disk P.21 Emerson & Evergreen	12.93	31.43 Evergreen.	—	18.50				

Sta.	S Gutter		℄		N Gutter	
49.60 / 5.12 / 5.16 / F 0.04	49.10 / 9.92 / 5.94 / 42.20 / 17.42 / 59.62 ↗	49.30 / 48.97 / 6.07 / 42.90 / 43.45 / 11.59	49.30 / 48.97 / 6.07 / 42.90 / 43.49 / 11.57	49.10 / 48.77 / 6.27 / 42.50 / 43.28 / 11.76	48.70 / 12.32 / 6.34 / 43.32 / 11.52 / 54.84 ↗	49.20 / 5.52 / 5.79 / F 0.27
38.60 / 4.72 / 4.72 ↙	38.10 / 10.03 ↙ / 4.60	38.25 / 37.92 / 4.78 ↙	38.30 / 37.97 / 4.73 ↙	38.00 / 37.87 / 4.83 ↙	38.00 / 10.13 ↙ / 4.70	38.50 / 4.82 / 6.00 / F 1.18
36.70 / C 6.62 / 6.04 / C 0.18	36.20 / 11.73 ↙ / 6.53 / ↗ 48.13	36.18 / 36.15 / 6.55 ↙	36.55 / 36.22 / 6.48 ↙	36.16 / 35.13 / 6.57 ↙	36.16 / 11.71 ↙ / 6.54 / ↗ 48.13	36.66 / 6.66 / 7.11 / F 0.45
35.00 / 8.32 / 8.15 / C 0.17	34.50 / 0.98 / Set 1.00 ↙ / 8.20	34.85 / 34.52 / 8.18 ↙	34.96 / 34.63 / 8.07 ↙	34.83 / 34.50 / 8.20 ↙	34.48 / 1.00 ↙ / 8.22	34.98 / 8.34 ↙ / 8.34
33.50 / 9.82 / 9.47 / C 0.35	33.00 / 2.48 ↗ / 7.00	33.42 / 33.09 / 9.61 ↙	33.54 / 33.21 / 9.49 ↙	33.13 / 33.10 / 9.60 ↙	33.02 / 2.46 ↙ / 9.68	33.52 / 9.80 / 9.56 / C 0.24
32.20 / 11.12 / 10.82 / C 0.30	31.70 / 3.78 ↙ / 11.20	32.14 / 31.81 / 10.89 ↙	32.27 / 31.94 / 10.76 ↙	32.15 / 31.82 / 10.88 ↙	31.75 / 3.73 / Set 0.33 / 10.93 C	32.25 / 11.07 / 10.42 / C 0.65
31.10 / 12.22 / 12.82 / C 0.20	30.60 / 4.88 ↙ / 0.36	31.01 / 30.68 / 0.32 ↙	31.15 / 30.82 / 0.14 ↙	31.03 / 30.70 / 0.26 ↙	30.66 / 4.82 ↙ / 0.30	31.16 / 12.16 / 11.36 / C 0.80
30.18 / 1.25 / .99 / C 0.26	29.68 / 5.80 ↙ / 1.17	30.06 / 29.73 / 1.23 ↙	30.20 / 29.87 / 1.09 ↙	30.10 / 29.77 / 1.19 ↙	29.77 / 5.71 ↙ / 1.17	30.27 / 1.16 / 0.60 / C 0.56
29.47 / 1.96 / 1.52 / C 0.44	28.97 / 6.51 ↙	29.29 / 28.96 / 2.00 ↙	29.40 / 29.07 / 1.89 ↙	29.34 / 29.01 / 1.95 ↙	29.08 / 6.40 ↙	29.58 / 1.85 / 1.55 / C 0.30
22.00 / 7.43	21.50 / 2.93 ↙ / ↗ 24.43	21.88 / 21.55	22.04 / 21.76	22.14 / 21.81	22.00 / 2.43 ↙ / ↗ 24.43	22.50 / 8.33 / 8.43 / C 0.54

Disk E. of Willow & Emerson

60.64

6.61

54.03

57.82

56.59

58.29

57.37

55.41

56.13

Willow St.

3+00

2+87.5

2+75

54.49
6.15
6.27
F0.13

53.82
5.20

52.10
2.62
2.62
F

51.45
7.57

54.72

49.60
5.12
5.16
F0.04

49.10
8.92

49.30

Sly. Ret.

Willow St. (Meet paving & Cl)

3+00

2+87.5

From Evergreen (Cont.

EMERSON Street.

EMERSON. ST.

Low St.

53.89

53.46

53.74

54.56

54.22

This Cl. 0.10 low

54.35
6.29
6.17
E 0.17

60.64

52.60
6.42

53.17
7.47
7.93
F 0.46

3+00

T.P.
54.72
3.49
51.28
7.36
60.64

50.75
8.27

51.40
3.32
3.44
F0.12

54.72

2+87.5

48.70

49.20
5.52
5.39
F0.27

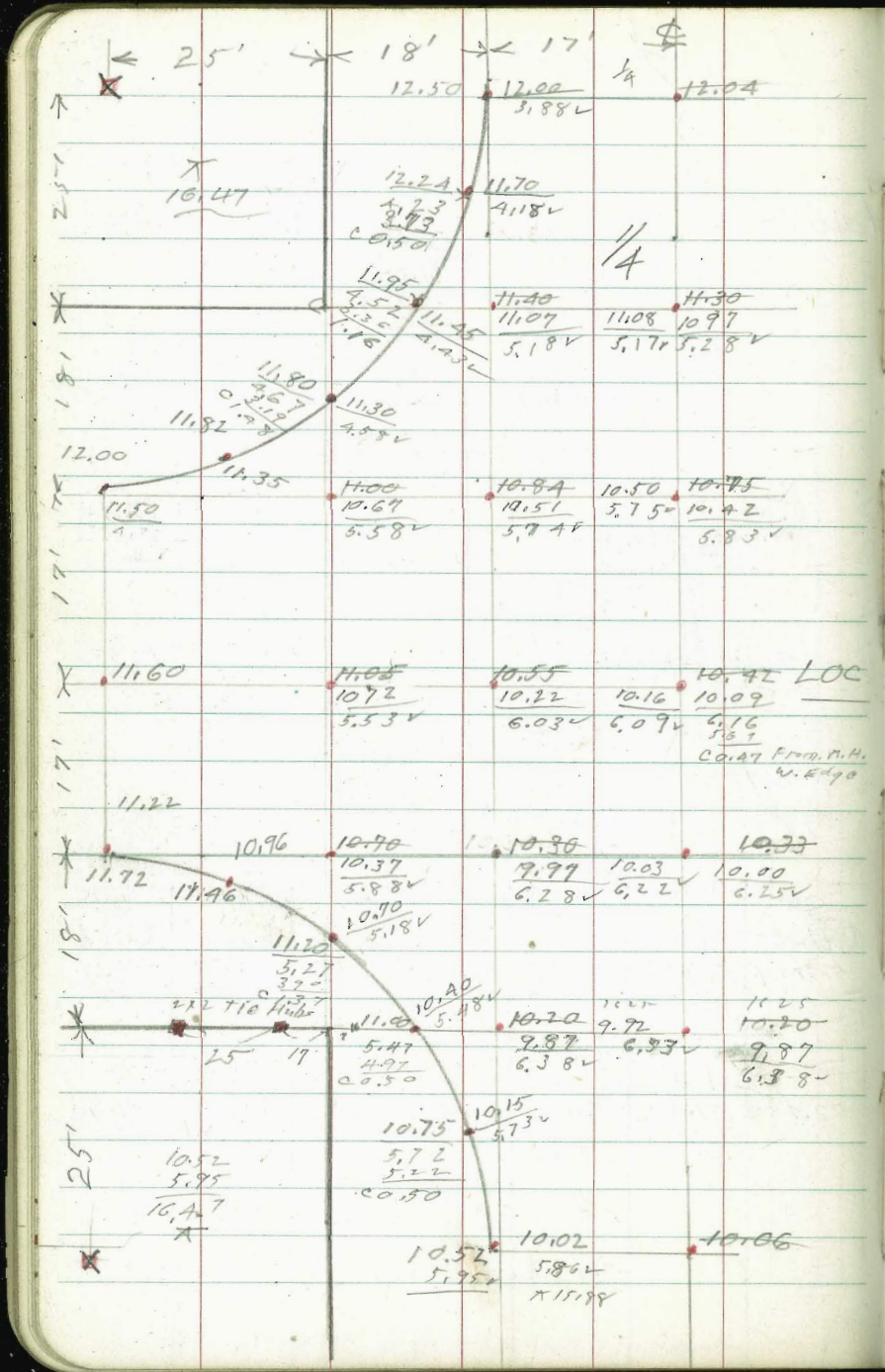
2+75

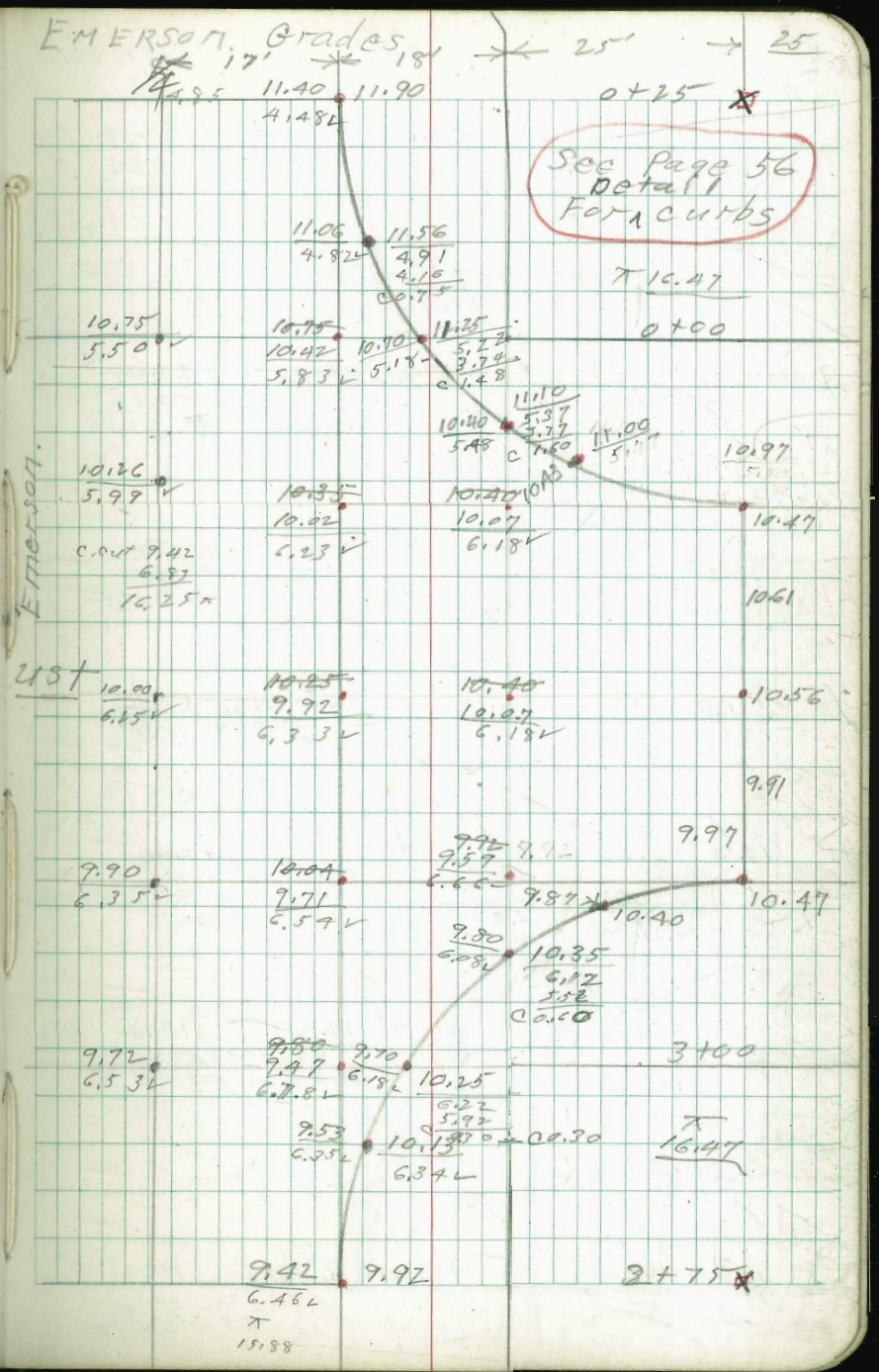
Ely. Ret.

See Page 56 For Curbs Detail

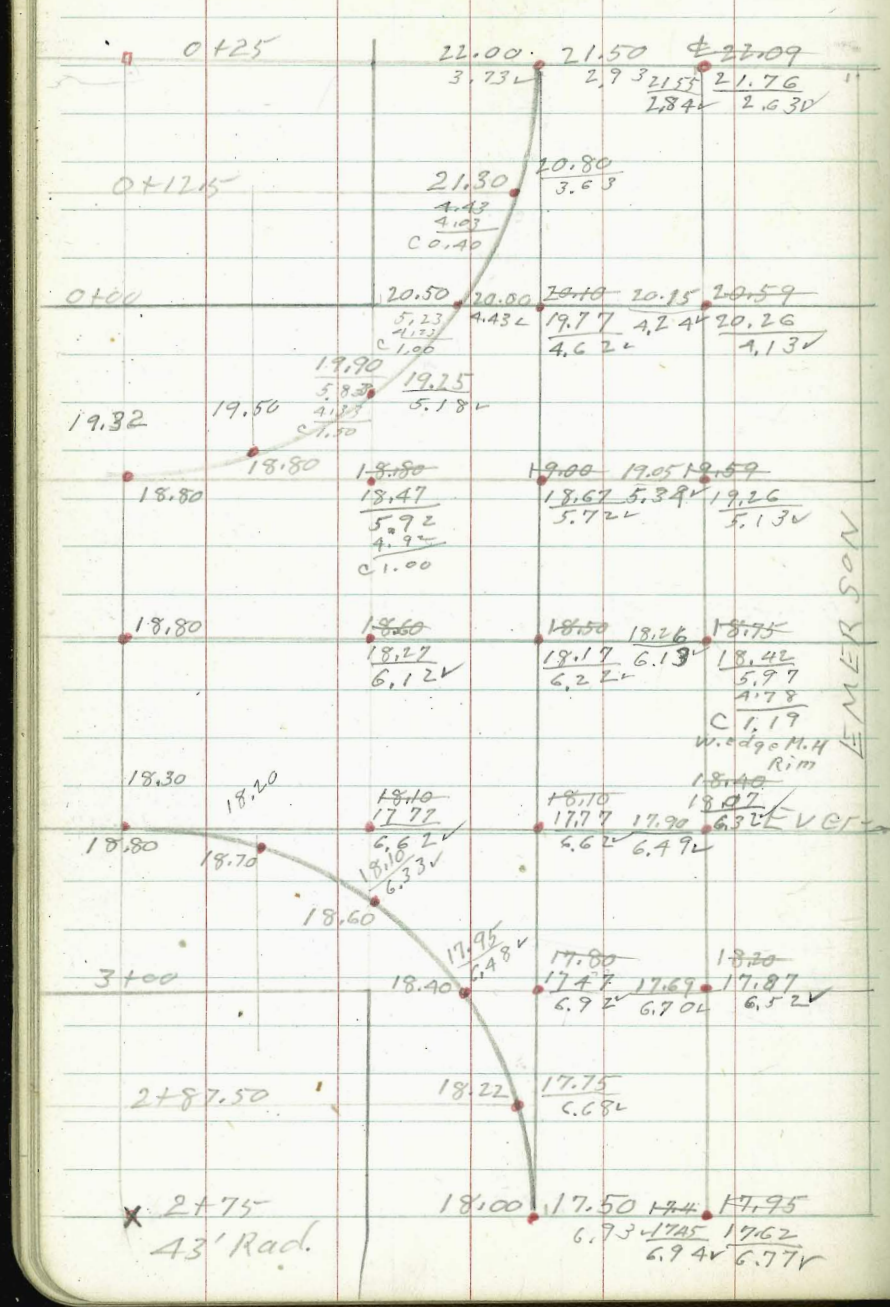
S Curb	S Gutter		℄		N Gutter	N Curb
54.49	53.72 5.50 5.35 -0.05	53.58	53.39 5.63	53.15	52.86 6.16	53.17 5.85 E
52.08	51.00	51.42	51.45	51.32	50.80	51.40 7.62

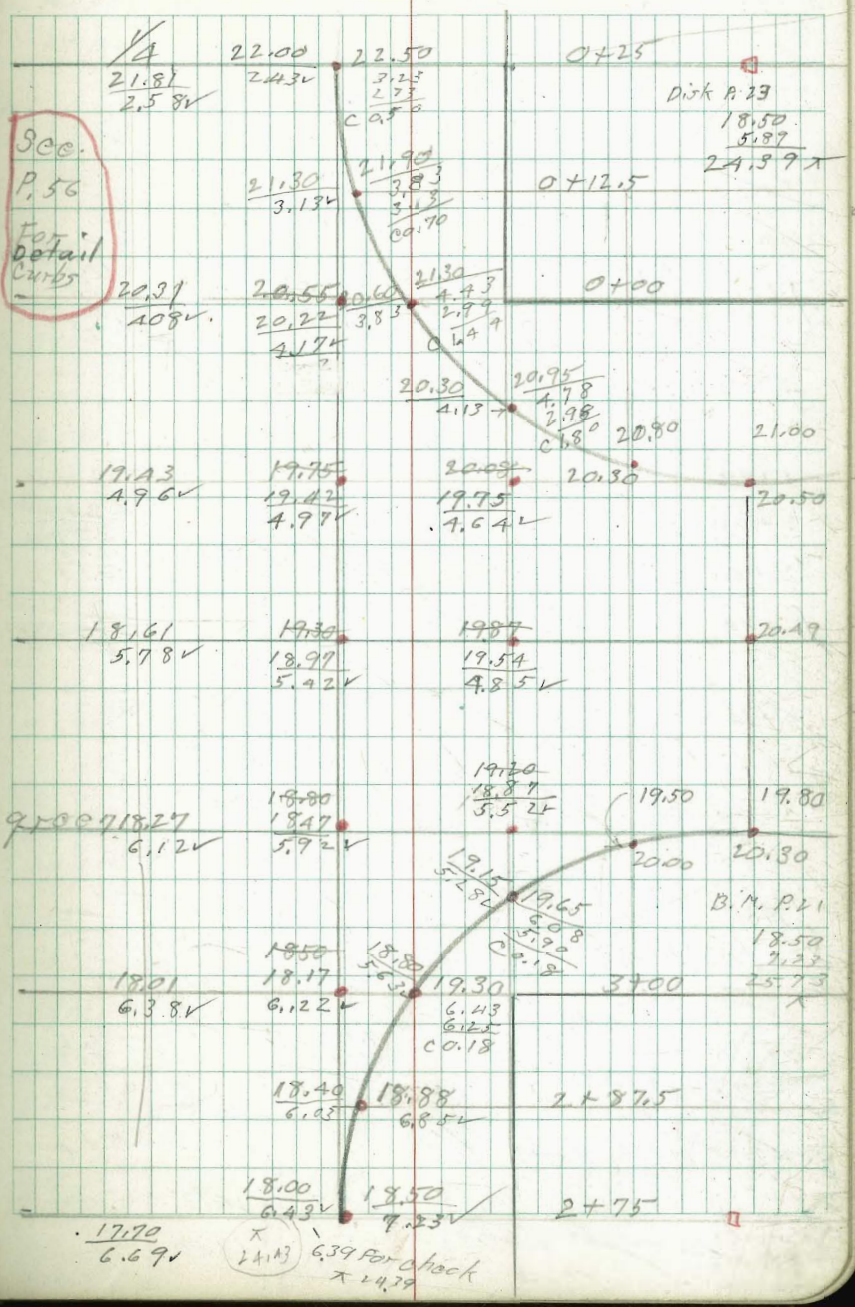
59.02


25'
18'
17'
℄
1/4
1/4
12.50
12.00
3.88
12.04
16.47
12.24
11.70
4.18
C 0.50
11.95
11.40
11.30
11.08
10.97
5.17
5.28
11.80
11.82
11.30
4.58
12.00
11.35
11.50
11.00
10.69
5.58
10.84
10.51
5.74
10.50
5.75
10.42
5.83
11.60
11.05
10.72
5.53
10.55
10.22
6.03
10.16
6.09
10.42 LOC
10.09
6.16
5.67
C 0.47 From M.H.
W. Edge
11.22
11.72
11.96
10.96
10.70
10.37
5.88
10.70
5.18
10.30
9.97
6.28
10.03
6.22
10.00
6.25
11.20
5.27
3.70
C
2.32 Tile Holes
25
17
11.00
5.47
4.97
C 0.50
10.40
5.18
10.20
9.87
6.38
9.92
6.33
10.25
9.87
6.38
10.15
5.73
10.75
5.72
5.22
C 0.50
10.52
5.95
16.47
10.52
5.95
10.02
5.86
15.98
10.06
25'
18'
17'


EMERSON, Grades
17'
18'
25'
25
0+25
See page 56 Detail For Curbs
11.40
11.90
4.48
11.06
4.82
11.56
4.91
4.16
C 0.75
16.47
0+00
10.75
5.50
10.75
10.42
5.83
10.90
5.18
11.25
5.24
3.74
C 1.48
11.10
5.37
3.77
C 1.60
11.00
5.11
10.97
10.47
10.26
5.99
10.35
10.02
6.23
10.40
10.07
6.18
C.C. at 9.42
6.83
16.25
10.61
10.56
EMERSON
UST
10.00
6.15
10.25
9.92
6.33
10.40
10.07
6.18
9.91
9.97
9.90
6.35
10.04
9.71
6.54
9.92
9.59
6.66
9.87
10.40
10.47
9.80
6.08
10.35
6.12
5.52
C 0.60
3+00
9.72
6.53
9.80
9.47
6.78
9.70
6.18
10.25
6.22
5.92
C 0.30
9.53
6.35
10.13
6.34
16.47
9.42
6.46
15.88
9.97
2+75

Evergreen and Emerson.





3-2-48 Emerson St. Rough Grade

		Lt.	Lt. Cb. Or.	Rt.	Rt. Cb.
T.P.	9.57	21.85	0.95	12.28	
3+05		11.25		10.40	
3+00	Ely. Lima Locust.	11.45	11.00 2.23 0.76 C 1.47	10.45	10.25 2.98 2.39 C 0.59
2+90		11.60			
2+80		11.60		10.30	
2+75			10.52 2.71 1.03 C 1.68		9.92 3.31 2.94 C 0.37
2+60				10.10	
2+20		10.50			
2+10		10.15			
2+00		9.75			
1+90		9.50			
1+60				8.30	
0+34			9.12 6.11 3.15 C 0.26		6.15 7.08 6.44 C 0.64
Stream Disk Emerson & Rosecrans			7.08	6.15	
0+27 Meet. Exist cb.					B.M.#1
	2.11	13.23	8.97	11.12	
Emerson & Evergreen Disk-S-7'+ E. prop.	1.59	20.09	—	18.50	

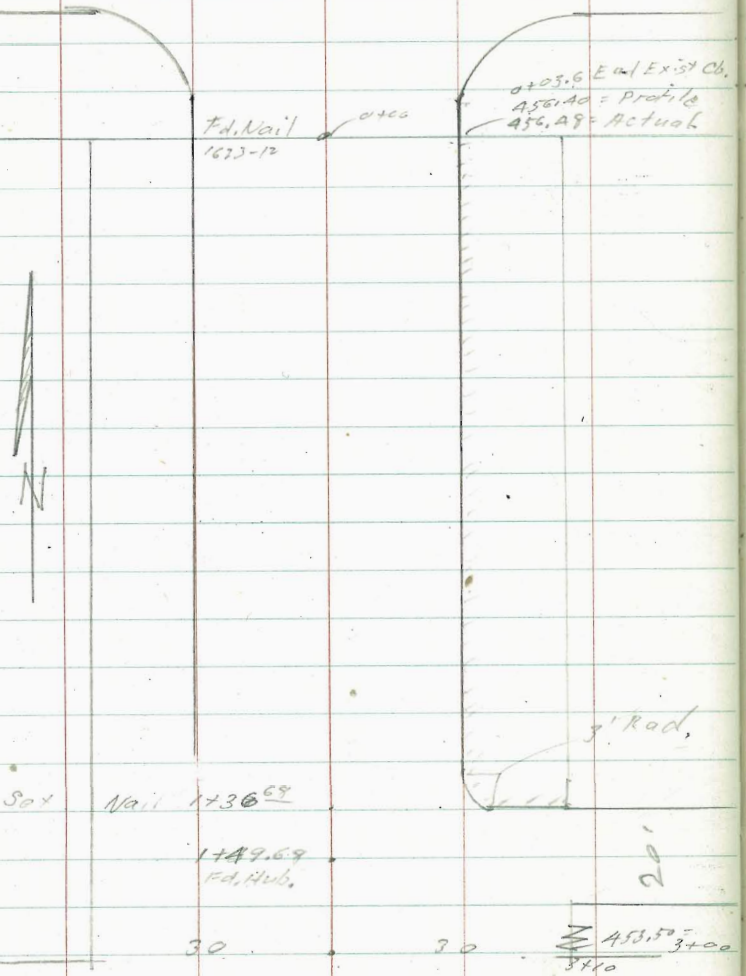
		Lt.	Lt. Cb.	Rt.	Rt. Cb.
T.P.	11.30	32.35	0.80	21.05	
3+05		18.65		19.70	
3+00	Ely Lima Evergreen	18.60	18.40 3.45 2.97 C 0.58	19.75	19.30 2.55 1.31 C 1.24
2+90				19.50	
2+75			18.00 3.85 3.00 C 0.85		18.50 3.35 2.28 C 1.07
1+10		15.00			
1+00		14.75			
0+90		14.65			
0+30		13.60			
0+25			12.50 3.35 8.04 C 1.31		11.90 3.95 8.23 C 1.72
0+20		13.30			
0+10		12.85		12.10	
0+00 = W/y Locust		12.30	11.95 9.90 8.51 C 1.39	11.60	11.25 10.60 9.85 C 1.75
0-05		11.85		11.15	
		21.85 ✓			

	Emerson St.	Lt.	Rough Grades Lt. Cl.	Rt.	Rt. Ck.
2+10		36.90	36.70 2.70 3.72 F 1.02	36.86	36.68 2.72 4.67 C 1.95
2+00		35.20	35.00 4.40 4.40 ✓	35.18	34.98 4.42 6.36 F 1.94
1+90		33.85	33.50 5.90 5.48 C 0.42	33.72	33.52 5.88 6.40 F 0.52
1+80		32.70	32.20 7.26 6.09 C 1.11	32.45	32.25 7.15 6.48 C 0.67
1+70		31.75	31.10 8.30 7.09 C 1.21	31.36	31.16 8.24 6.96 C 1.28
1+60		31.00	30.18 9.22 8.22 C 1.00	30.60	30.27 9.13 7.43 C 1.70
1+50		30.35	29.47 9.93 8.18 C 1.75	30.00	29.58 9.82 5.88 C 3.94
T.P.	8.18	39.40	1.13	31.22	
0+25			22.00 10.35		22.50 9.85 7.70 C 2.15
0+20		22.85	9.45 C 2.90		
0+10		21.70			
0+00		20.60	20.50 11.85 10.11 C 1.74		21.30 11.05 9.27 C 1.78
0-05		19.95		21.00	
		32.05 ✓			

	Lt.	Lt. Cl.	Rt.	Rt. Ck.
3+00	54.67	54.49 4.68 3.78 F 0.05 ✓	53.35	53.17 6.00 4.05 F 0.05 ✓
2+87.5	52.30	52.19 7.07 4.07 C 3.00	51.60	51.40 7.67 12.67 F 5.00
T.P. 10.03	59.17	1.05	49.14	
2+75	49.80	49.60 0.50 1.12 F 0.46 50.19 ✓	49.40	49.20 0.99 7.50 F 6.51
T.P. Pole #32.71 19.11	50.19	2.32	37.08	
2+20	38.80	38.60 1.80 2.78 F 1.98	38.70	38.50 0.90 3.35 F 2.45

Curb. "A" - 69th + El Cajon

Stakes set 3' Back of curb face.
El Cajon



S.W.B.P. El Cajon + 69th 456.75
3.52
460.27

INDEXED
WK
DEC 17 1948

0+03.6	0+44.36	0+88.72	3' ch. Rad. B.C. 1+36.68
End Exist. Ch.			
456.48	456.04	455.59	455.15
3.79 ✓	4.23 ✓	4.68 ✓	5.12 ✓

Ch. 1+13.3 E.C. on Sta. 1+
0.3 Higher than 1+39.68
455.15
5.12 ✓

Ch. 1+10 = End Hi Leg Ch.
0.10 Higher than 1+39.68
455.22
5.05 ✓

Imp. Logan 43rd - West. 12-18-47

South ℄ North

30

W.O. 80074

		BM. 471. 1718-39			
1+08 43		65.05 1.01 66.06 6.53 59.53 3.20 62.73 A	62.73 55.51 7.22 5.50 C 1.72		56.70 55.81 −0.89 8.44 F 7.55
0+88 43	2' Back	11.21 51.52 5.18 A 56.70 12.00 44.66 2.48 A 47.14 .77 46.37 12.28	62.77 57.00 5.73 4.95 C 0.78		56.70 57.30 F 0.60 7.90 F 8.50
0+68 43	2° Back	58.65 2.8 58.73 7.61 66.04 0.99 65.05 orig: Rm OK 2.51	62.79 58.24 4.49 4.55 F 0.06		56.70 58.54 F 1.84 7.62 F 9.46
0+20	Nail in 6x6 5' Back		2.73 60.94 1.79 2.55 F 0.76		56.70 61.24 F 4.54 6.49 F 11.03
0+10	5' Back		2.17 61.30 1.43 3.07 F 1.64		56.70 61.60 F 4.90 5.97 F 10.87
0+00			62.77 60.97 60.0 1.82 3.20 F 1.38		56.70 61.36 F 4.66 5.44 F 10.10

2+23 43 = Curb. E.C. on Rt.

2+18 43 W.L. San Pasqual.

2+08 43

1+68 43 = E. Line San Pasqual

1+63 43 = Curb B.C. on Rt.

1+48 43

1+28 43

62.77
45.50
17.27
12.58
C 4.69

62.77
49.70
13.07
10.50
C 2.57

62.77
51.81
10.96
8.50
C 2.46

62.77
53.78
8.99
5.95
C 3.04

47.14
44.33
2.81
5.65
F 2.84

~~44.82~~ So
47.14
45.80 East
1.34
5.61
F 4.27

47.14
45.80
1.34

49.95

56.70
48.80 West
7.90
9.60
F 1.70

56.70
50.48
6.22
9.60
F 3.38

56.70
52.11
4.59
9.66
F 5.07

56.70
54.08
2.62
8.94
F 6.32

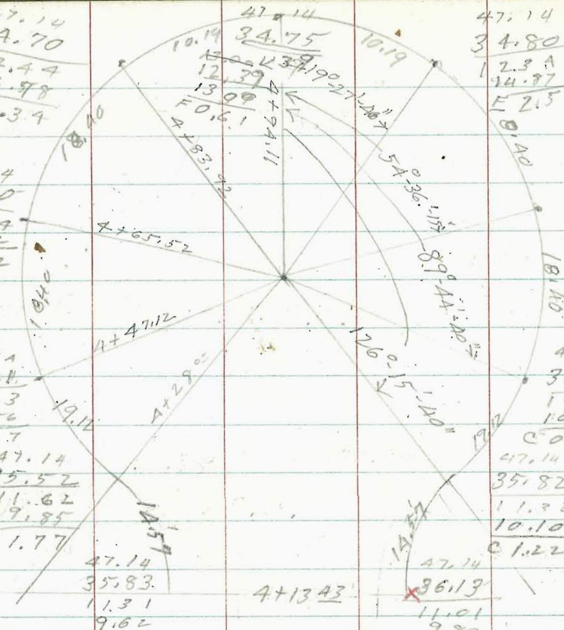
	South	North
3+28 43	47.14 37.80 9.34 7.59 C 1.75	47.14 38.10 9.04 8.73 C 0.31
3+08 43	47.14 38.41 8.73 6.38 C 2.35	47.14 38.71 8.43 out.
2+88 43	47.14 39.28 7.86 5.08 C 2.78	47.14 39.58 7.56 5.16 F 2.40
2+68 43	47.14 40.43 6.71 3.62 C 3.09	47.14 40.73 6.41 out.
2+48 43	47.14 41.85 5.29 1.90 C 3.39	47.14 42.15 4.99 7.04 F 3.05
2+28 43	47.14 43.54 3.60 0.29 C 3.31	47.14 43.84 3.30 6.14 F 2.84

47.14
34.70
12.44
12.78
F 0.34

47.14
34.90
12.24
12.12
C 0.12

47.14
35.11
12.03
11.56
C 0.47

47.14
35.52
11.62
9.85
C 1.77



47.14
34.80
12.34
14.87
F 2.53

47.14
35.10
12.04
14.25
F 2.21

47.14
35.41
11.73
10.92
C 0.81

47.14
35.82
11.32
10.10
C 1.22

Rate for 30' Rad 57.296'

47.14
35.83
11.31
9.62
C 1.69

4+13 43

47.14
36.13
11.01
9.88
C 1.13

see page. 34

4+03 74 = Curb B.C. for turn around

4+03 74   36.04   ← 25.00 → ← 11° → cross in walk R.P.

SS Cross in walk   47.14 9.69   37.45 Set B.M.

3+78 53

3+53 53

47.14 36.04 11.10 9.58 C 1.52	47.14 36.34 10.80 9.82 C 0.98
47.14 36.63 10.51 8.82 C 1.69	47.14 36.93 10.21 9.32 C 0.89
47.14 37.22 9.92 8.42 C 1.50	47.14 37.52 9.62 9.06 C 0.56

Turnaround
Curb Grades

B.C. S. Line 0+00 = 4+03.74	P.R.C. 9.69 = L	12 = L	2.57	19.12 = L	+18.40
36.04	35.83	35.58	35.52	35.11	
	℄ Lagan.				
36.80 = L	10+19 = L	+18.60	36.80 = L	19.12 = L	2.57 = L
P.R.C. 12.00 = L	E.C. N. Line 9.69 = L				

			Stations put on Lath		BM. 19.21
2+00	S. L. Emerson		0+00	18.34	19.94
				8.16	6.56
				C 1.14	26.50 ±
				C 2.02	
1+87.5	B.M.		0+12.5	18.34	
				8.16	
				5.31	
				C 2.85	
1+75	B.M.		0+25	18.37	
				8.13	
				6.18	
				C 1.95	
1+25			0+75	18.60	
				7.90	
				6.55	
				C 1.35	
0+75			1+25	18.83	
				7.67	
				6.62	
				C 1.05	
0+25	B.M.		1+75	19.07	
				7.43	
				6.56	
				C 0.87	
0+12.5	B.M.		1+87.5	19.13	
				7.37	
				6.74	
				C 0.73	
0+00 =	N.L. Dickens		2+00	19.18	
				7.32	
				6.52	
				C 0.80	

Water grades - Evergreen.

S.L. Emerson

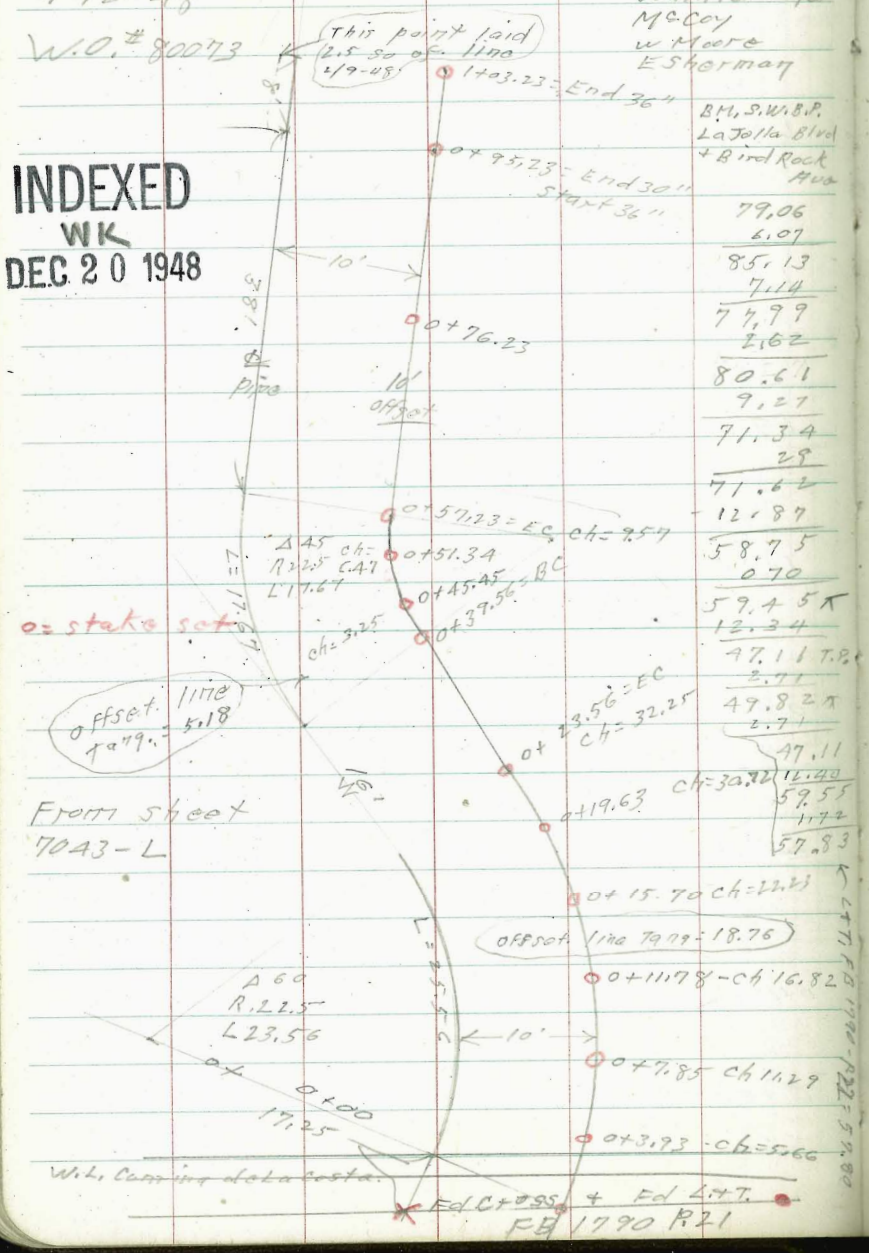
2+00	B.M.	0+00	23.70
			2.80 ±
1+87.5	B.M.	0+12.5	23.61
			2.89
			2.66
			C 0.23
1+75	B.M.	0+25	23.42
			3.08
			2.66
			C 0.42
1+25		0+75	23.26
			4.24
			2.77
			C 1.47
0+75		1+25	21.09
			5.41
			3.90
			C 1.51
0+25	B.M.	1+75	19.92
			6.58
			5.58
			C 1.00
0+12.5	B.M.	1+87.5	19.61
			6.89
			5.74
			C 1.15
0+00 =	N.L. Emerson	2+00	19.37
			7.13
			5.92
			C 1.21

Extend Culvert, Camino de la Costa

1-12-48

W.O. # 80073

Sommermeyer
McCoy
w Moore
E Sherman



59.45

0+00	+03.93	0+07.85	0+11.78	0+15.70
45.81	45.48	45.07	44.58	44.10
13.64	13.77	14.38	14.87	15.35
4.20	6.19	6.65	6.09	7.43
C 9.44	C 7.78	C 7.73	C 8.78	C 7.72

59.45

0+19.63 E.C.	0+23.56	0+39.56 B.C.	0+45.45	0+51.34
43.33	42.57	39.32	38.17	37.13
16.17	16.88	20.13	21.28	22.32
7.01	7.17	11.34	10.89	10.92
C 9.11	C 9.75	C 8.77	C 10.37	C 11.40

59.45

49.82

E.C. 0+57.23	0+76.23	30" 0+95.23	36" 0+95.23	End 1+03.23
36.20	33.35	30.50	30.25	29.05
23.25	26.12	19.32	19.57	20.77
11.94	12.34 = T.R	6.16	6.16	7.16
C 11.31	C 13.78	C 13.16	C 13.41	C 13.61

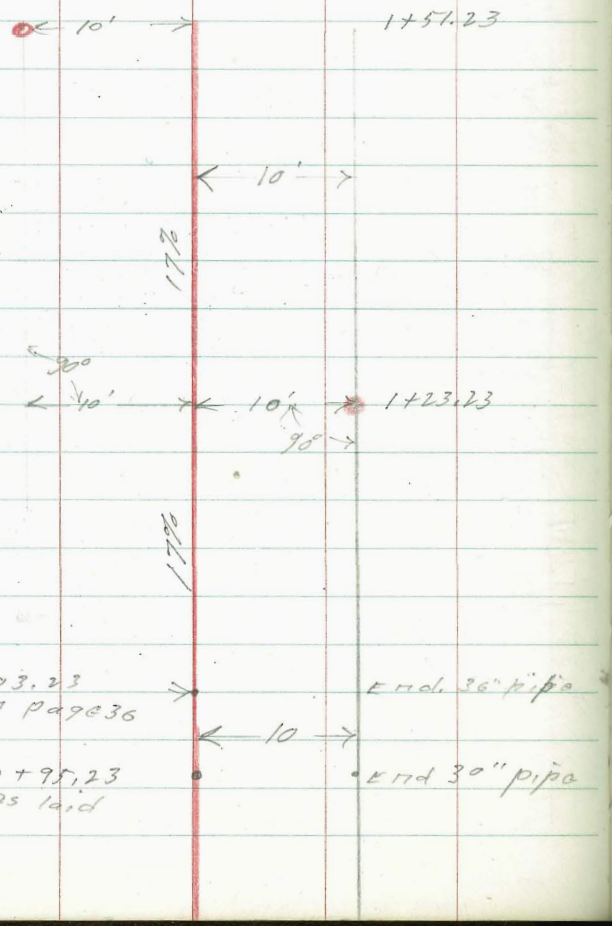
1+03.23
29.05
13.61
42.66 El.
stake

7 7 87
7.0
30 87

T 46.87
42.60
4.27
4.20
+ 0.07

check, ok

77.37
29.05
8 92



Aprox. grade as laid
= 30.8
30.5
0.3. High

End Exist. 30"
0+95.23
30.50

1+23.23
16.87 A
25.75
21.12
4.20
C 16.92

End pipe
1+51.23
37.37 A
21.00
16.87
13.15
C 3.72

L+T. P.36
57.83
0.52
58.35
12.28
46.07
.80
46.87
10.49
36.38
1.49
37.87

Water line Grades
& Rough Grade

Knoxville (Morena North)

See 7117-L for revised water line.

1+50

1+00

0+50

0+00 = ℄ line Morena.

0-13 Connect to exist 16" water line

T.P.	5.35	14.11	5.24	8.76
B.M. = B.P. Top Inlet Hd. wall Tecolote Culv. & Morena Blvd.	3.96	14.00	—	10.04

Stakes 6' Lt of ℄ Set to trench grade

Water Line

Rate .004/16

6.03
8.08
5.02
C3.04.

6.24
7.87
5.29
C2.58.

6.44
7.67
5.50
C2.17.

6.65
7.46
5.02
C2.44.

6.70
7.41
5.?
C2.1

14.11

= 4+50 Ahead = Δ 5°-40' Rt. in water line
4+50 Back

T.P.	6.28	16.88	3.51	10.60
4+00	Brk. in water line Grade. Δ 5°-40' Lt. in water line			
3+50				
3+00				
2+50				
2+00				

water line

5.00
11.88
2.78
C 9.10

16.88

5.00
9.11
3.51
C 5.60

5.21
8.90
4.15
C 4.75

5.42
8.69
4.46
C 4.23

5.62
8.49
4.68
C 3.81

5.83
8.28
4.91
3.37

14.11

Gutter
A. Lewis
B.M. 1. P. 42
120.4
5.10
17.14 A

~~17.04~~

6+50

6+18[13] Nly. Tonopah Brk. in (W) grade

6+00

5+68[12] Sly. line Tonopah

5+50

5+00 Brk. in water line Gr.

W
Gutter

11.72
5.42
5.70
F 0.28

11.55
5.59
6.12
F 0.53

17.14

water line

.057 Gr.

8.16
3.72
4.68
C 4.04

8.00
3.88
4.87
C 4.01

7.54
3.34
4.92
C 4.42

Rateroad

6.27
10.61
5.85
C 4.76

5.00
11.88
2.50
C 9.38

16.88

E
Gutter

11.77
5.42
4.65
C 0.77

11.55
5.59
4.63
C 0.96

17.14

9+50					17.14 ✕ 5.42 11.72 8.42 20.14 ✕
9+00					
T.P.	7.11	17.93	6.06	10.82	
8+50					
8+00					
7+50					
7+00					

W — Water Line — E

13.28 3.86 5.42 F 1.56	9.72 8.21 6.30 C 1.91	13.28 3.86 5.16 F 1.30
13.02 4.12 6.00 F 1.88	9.46 8.47 6.77 C 1.50	13.02 4.12 5.10 F 0.98
	17.93	
12.76 4.38 4.96 F 0.58	9.20 7.68 6.06 C 1.62	12.76 4.38 5.00 F 1.02
12.50 4.64 5.09 F 0.45	8.94 7.94 5.54 C 2.40	12.50 4.64 5.25 F 0.61
12.24 4.90 5.16 F 0.26	8.68 8.20 5.38 C 2.82	12.24 4.90 4.88 C 0.02
11.98 5.16 5.40 F 0.24	8.42 8.46 5.18 C 3.28	11.98 5.16 5.11 C 0.05
✕ 17.14	16.88	✕ 17.14

T.P. → .0052

			20+14	
12+50				
12+00				
11+50				
11+00				
10+50				
Mon. on L+T. 20' Rt. of Water Line at 10+34±		5.89	12.04	B.M. #1
10+00				
	17.93			

Water Line

14.84	11.28	14.84
5.30	5.65	5.30
4.48	5.70	4.72
C 0.82	C 5.95	C 0.58
14.58	11.02	14.58
5.56	6.91	5.56
5.44	3.56	5.54
C 0.12	C 3.35	C 0.02
14.32	10.76	14.32
5.82	7.17	5.82
5.20	4.20	6.50
C 0.62	C 2.97	F 0.68
14.06	10.50	14.06
6.08	7.43	6.08
6.29	4.57	6.46
F 0.21	C 2.90	F 0.38
13.80	10.24	13.80
6.34	7.69	6.34
7.96	5.42	6.73
F 1.62	C 2.27	C 0.11
13.54	9.98	13.54
6.60	7.95	6.60
8.17	5.46	7.60
F 1.57	C 2.49	F 1.00
20.14	17.99	20.14

.0052

15+50					
14+95 99	Nly. line Empire St.				20.14 8.09 12.05 0.01
			Mon. Page 40	(12.04)	
14+45 99	Sly line Empire St = Brk (11)				
14+00					
13+50					
13+00					
T.P.	6.74	21.87 17.93	2.80	15.13	

(11) Gutter

12.93
8.94
4.00
C 4.94

Meet existing road

.00611

12.60
9.27
4.81
C 4.46

15.85
4.29
3.80
C 0.47

12.30
9.57
5.03
C 4.54

(E) Gutter

15.85
4.29
3.25
C 1.04

15.62
4.52
4.05
C 0.47

12.06
9.81
5.11
C 4.70

15.62
4.52
3.18
C 1.34

.0052

15.36
4.78
4.47
C 0.35

11.80
10.07
5.66
C 4.41

15.36
4.78
3.78
C 1.00

15.10
5.04
4.48
C 0.56

11.54
10.33
6.74
C 3.59

15.10
5.04
4.51
C 0.53

20.14

21.87

20.14

18+50					
18+00					
T.P.	6.04	24.74	3.17	18.70	
17+50					
17+00					
16+50					
16+00					
		21.87			

Lido Rd
Line

14.76
9.98
5.81
C 4.17

14.45
10.29
5.84
C 4.45

24.74

14.15
7.72
3.17
C 4.55

.006/15

13.84
8.03
3.48
C 4.55

13.54
8.33
3.59
C 4.74

13.23
8.64
4.01
C 4.43

21.87

T.P. Mon S.E. Gardena & Knoxville	8.30	28.00	5.04	19.70	Set B.M.
20+98.50	= Sly line Gardena on East				
/	Sly line Gardena on west				
20+50					
20+00					
19+50					
19+00					
		24.74			

1 1/4 of 2 pts

16.30
8.44
3.54
C 4.90

15.99
8.75
5.08
C 3.67

100 6 1/2

15.67
9.07
5.67
C 3.44

15.37
9.37
6.00
C 3.37

15.06
9.68
5.76
C 3.92

24.74

check to & conc. drive (Sta. (El.=18.52) 17+92 F.B 1450 page 58)

21+50

21+00

28.00

Water Line

check .01'

19.53

9.47

34.2 LF of
Public line

14.2 LF of
water line

16.61
11.27
2.30
9.09

.01 19.00

28.00

2300 to 2400 Block - Kettner

Stake curb.

2-27-48

W.O. #21018

INDEXED

WK

DEC 20 1948

Dimmermeyer
McCoy
Meefe
Sherman

W. line Kettner

A.C. Pav.

0+80 - 29.69 = Grade set

0+56.5 - 29.90

Brk 0+33 - 30.10 = Gr. set

0+16.5 - 30.06

Gr. (meet. exist.)

Kalmia St.

Brk 0+00 - 30.02

0+00 = 37' so. of N. line Kalmia = so. end curb. inlet.

F 0.44

F 0.30

Rake replaced

1.019

0-96 Meet. Exist Ch.

SE. B.P. Laurel to Kettner

Restake 5/26/48

47

32.97
2.16

	0+00	0+16.5 Brk	0+33	0+56.5	0+80
	30.02	30.06	30.10	29.90	29.69
	5.11	5.07	5.03	5.23	5.44
	5.50	5.40	5.48	5.59	5.66
	F 0.39	F 0.33	F 0.45	F 0.36	F 0.22

0-96 Meet. Ch.
35.03
5.10 ✓

Off Rake - Going No.

#1	#2	#3
5.11	5.11	5.11
5.47	5.34	5.27
F 0.36	F 0.23	F 0.16

0+80 29.69
5.37
5.02
F 0.25

0+33 30.10
4.96
5.50
F 0.54

0+56.5 - 29.90
5.16
5.58
F 0.42

0+00 30.02
5.04
5.57
F 0.53

0+16.5 30.06
5.00
5.02
F 0.42

0-96 Meet. Ch. El. = 30.03 ✓

3/9/48

Everts & Garnet.

Set walk grade 43' so of N. line Garnet. west side Everts.

Nail set on west line Everts 45' so. Garnet. Grade for 43' so.

S.W. Ref. Southend = 38.53 ok.

At. N. line Alley (Profile #1139) = 36.32

Rate (Fig) = .0178 per foot.

Ch. grade 43' so. = 37.76

Prop. " " " = 37.96

B.M. = N.W. B.P. Garnet & Everts =

3.67 43.20 — 39.53

@ 37.96

5.24

5.24

set Nail in form for foundation.

3/10/48 Water Main + Services W.O. 31018
Benton Place – Drawing #6785-L
stakes 5' Left.

3+00			390.25	8.87 5.46 3.41 +.2 c-3.6	
+50					
2+00					
+50					
1+00					
+50					
TP	4.55	399.12	6.00	394.57	
0+00			390.9 ~~394.28~~	9.67 ~~9.25~~	9.67 4.85 c 4.82
SW.B.P. My View 4 3 5 Ft.	5.15	400.57			395.42

INDEXED
W K.
DEC 20 1948

Raised

90° ∠ Left.

Connection to Exist 6" Water Main
East Mountain View & Benton Pl.

SW BP. Mt. View + 35 ft.			2.87		395.43
TP	5.67	398.25	0.94	392.58	
10+77.10					
10+21.42			383.26	10.26 6.81 3.45 +3 C-3.7	
4+40					
TP.	2.29	393.52	7.89	391.23	
4+00.1			389.50	9.62 5.84 3.78 +.2 C-4.0	
3+50		397.1±	389.87	9.25 5.42 3.83 .2 C 4.0	

Rolled

Connects to Exist 4" water Main
38°47' ∠ Lt.

Marked location on Curb of Fire Hydrant

90° ∠ Rt.

Alley Blk 131 Mannasse & Shiller Add

(Sheet L6933)

3-12-48
W.O. 31212

Sommermeyer-McCoy, T
W. Moore
E. Sherman

□ = Stake
N = Nail
X = Cross

Outs are from Edge of Pav.

	Left			Right	
□ 3' out. 1+68.	27.04 / 3.87 / 3.80 / C 0.07			27.04 / 3.87 / 4.11 / F 0.24	2' out. □
+ 1^c out. 1+24	25.72 / 5.19 / 4.19 / C 1.00			25.72 / 5.19 / 6.09 / F 0.90	2' out. □
□ out. 1^c 0+80	24.40 / 6.51 / 6.59 / F 0.08			24.40 / 6.51 / 6.70 / F 0.19	3^c out □
□ out. 1^c 0+60	23.68 / 7.23 / 7.13 / <			23.66 / 7.25 / 6.90 / C 0.35	3^c out. □
□ out 1^c 0+40	22.72 / 8.19 / 7.30 / C 0.89			22.64 / 8.27 / 9.23 / C 1.04	3^c out □
T. P.	7.23	30.91	0.85	23.68	
N. out 1^c 68 0+20	21.52 / 3.01 / 1.01 / C 2.00			21.35 / 3.18 / 1.48 / C 1.70	3' out. □
S.E. ly. Sigsbee C+00	20.08 / 4.45			19.77 / 4.76	
B.P. N.E. National & Sigsbee	0.59	24.53		23.94	

INDEXED
WK
DEC 20 1948

	Left			Right	
□ 2' out 4+15	32.67 / 4.85 / 4.49 / C 0.36			32.67 / 4.85 / 4.88 / F 0.03	□ 2' out
□ 2' back 3+80	32.45 / 5.07 / 5.01 / C 0.06			32.45 / 5.07 / 5.91 / F 0.84	□ 2' out
□ 0.25 out 3+60	32.27 / 5.25 / 4.86 / C 0.39			32.27 / 5.25 / 4.25 / C 1.00	N, 0.20 out
□ 2' out 3+40	31.96 / 5.56 / 5.44 / C 0.12			31.96 / 5.56 / 4.56 / C 1.00	N, 0.35 out
□ 3' out 3+20	31.54 / 5.98 / 5.62 / C 0.36			31.54 / 5.98 / 5.75 / C 0.23	X-1' out
□ 2' out. 3+00	31.00 / 6.52 / 5.78 / C 0.74			31.00 / 6.52 / 5.37 / C 1.15	X-1' out
2+73 ± = P.O.T.					
□ 4' out. 2+56	29.68 / 7.84 / 6.71 / C 1.13			29.68 / 7.84 / 6.84 / C 1.00	0.65 out = N
T.P.	7.47	37.52	0.86	30.05	
N. Line 2+12	28.36 / 2.55 / 1.55 / C 1.00			28.36 / 2.55 / 3.12 / F 0.57	3' out □
		30.91			

Blk. 131 - M. & S. Add

	Left.			Right	
C + 01.80	32.41			31.73	
N. wly. line	5.76			5.44	
Beardsley	5.77			2.43	
	0.01			0.01	
	on Exist Pave.			on Exist Pav	
D 1° out	32.91			32.54	N. 1° out
5 + 80	5.26			5.63	
	4.71			4.67	
	C 0.55			C 1.00	
N 0.40 out	33.24			33.07	N. 0.90 out
5 + 60	4.93			5.10	
	3.93			4.10	
	C 1.00			C 1.00	
D 0.50 out	33.38			33.36	N. 0.45 out
5 + 40	4.79			4.81	
	4.83			3.81	
	F 0.04			C 1.00	
T. P.					
N. 0.05 out	33.35			33.35	D 2' out
5 + 20	4.82			4.82	
	4.17			3.26	
	C 0.65			F 0.44	
T. P.	4.87	38.17	4.22	33.30	
D 0.50 out	33.12			33.12	N. 0.75 out
4 + 85	4.40			4.40	
	4.18			3.40	
	C 0.22			C 1.00	
N. 0.52 out	32.90			32.90	N. 0.50 out
4 + 50	4.62			4.62	
	3.62			3.62	
	C 1.00			C 1.00	
		39.52			

Alley Blk. 139 Mannasse + Shiller Add.

	Lt.			Rt.	
	6.99	40.63	2.14	33.64	
N. 0.55 Lt. 1+40	33.15 2.63 1.63 C 1.00			33.15 2.63 2.13 C 0.50	□ - 1' Rt
N. 0.53 Lt 1+20	32.78 3.00 2.00 C 1.00			32.78 3.00 2.00 C 1.00	N 0.98 Rt.
N 0.60 Lt. 1+00	32.22 3.56 2.23 C 1.33			32.22 3.56 2.56 C 1.00	N - 1.33 Rt
□ 2' Lt. 0+80	31.48 4.30 3.31 C 0.97			31.48 4.30 3.40 C 0.90	N. 1.10 Rt.
□ 2' Lt. 0+60	30.57 5.21 3.70 C 1.51			30.57 5.21 4.41 C 0.80	N. 0.40 Rt
□ 2' Lt. 0+40	29.46 6.32 4.18 C 2.14			29.46 6.32 5.74 C 0.58	□ - 2' Rt
□ 2' Lt. 0+20	28.18 7.60 4.27 C 3.33			28.18 7.60 7.02 C 0.58	□ - 2' Rt.
0+00 = Sty. Sigsbee	26.72			26.81 8.77 V	
T.P. NE. B.P. Sigsbee & National	6.37 7.31	35.78 31.25	1.84 —	29.41 23.94	

□ = stub
N = Nail
X = Cross

INDEXED
WK
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	Lt.			Rt.	
N. 0.10 in Alley 4+60	37.66 4.09 3.73 C 0.36			37.66 4.09 4.50 F 0.41	□ 2' Rt.
X - 1' Lt. 4+20	37.09 4.66 4.65 C 0.01			37.09 4.66 4.91 F 0.25	N. 2' Rt.
X - 1' Lt. 3+80	36.53 5.22 5.20 C 0.02			36.53 5.22 3.47 C 1.75	N. Line
T.P. X - 0.25 in Alley 3+40	5.47 35.96 4.67 4.57 C 0.10	41.75	4.35	36.28 35.96 4.67 3.25 C 1.42	N. 0.35 Rt
□ on line 3+00	35.40 5.23 5.30 F 0.07			35.40 5.23 4.56 C 0.67	Corner Tank 0.80 Rt.
N. 0.04 in Alley 2+60	34.87 5.80 5.80			34.83 5.80 5.50 C 0.30	N. 0.43 Rt
□ - 0.50 Lt 2+20	34.27 6.36 6.19 C 0.17			34.27 6.36 6.34 C 0.02	□ 2' Rt
N. 0.65 Lt. 1+80	33.71 6.92 6.24 C 0.68			33.71 6.92 5.92 C 1.00	N. 0.80 Rt.
		40.63			

	Blk 139	M.+S.	Add.	
	Lt.		Rt.	
6+01 S.W.ly. Beardsley	38.39 5.13		38.40 5.12 5.17 -0.01	
□ 2' Lt. 5+80	38.53 4.99 3.88 C 1.11		38.53 4.77 3.37 C 1.40	N 0.35 Rt
□ 2' Lt. 5+60	38.61 4.91 4.18 C 0.73		38.61 4.91 4.05 C 0.86	N. 0.32 Rt
N. 0.50 Lt. 5+40	38.59 4.93 3.50 C 1.43		38.59 4.93 5.03 F 0.10	□ 2' Rt.
N. 0.24 Lt. 5+20	38.47 5.05 4.32 C 0.73		38.47 5.05 4.46 C 0.59	N. 0.45 Rt.
□ 2' Lt. 5+00	38.23 5.29 5.17 C 0.12		38.23 5.29 4.76 C 0.53	X. 2' Rt
T.P.	5.05	43.52	3.28	38.47
		41.75		

℄ Grades Wabaska Dr. 4/18/48
Capistrano to Chatsworth.
℄

Sly. Pos. 1+98.05	70.32
1+63.09	70.04
1+28.13	69.77
1+08.13	69.58
+78.91	69.29
+49.69	69.00
+29.69	68.82
Wly. Capistrano 0+60	68.67

1+97.06	74.85
1+59.80	73.93
1+22.54	73.01
1+02.54	72.54
+82.54	72.11
+62.54	71.74
+42.54	71.55
Nly. Pos. 0+00	71.17

Ely. chats.
2+82.43 76.43

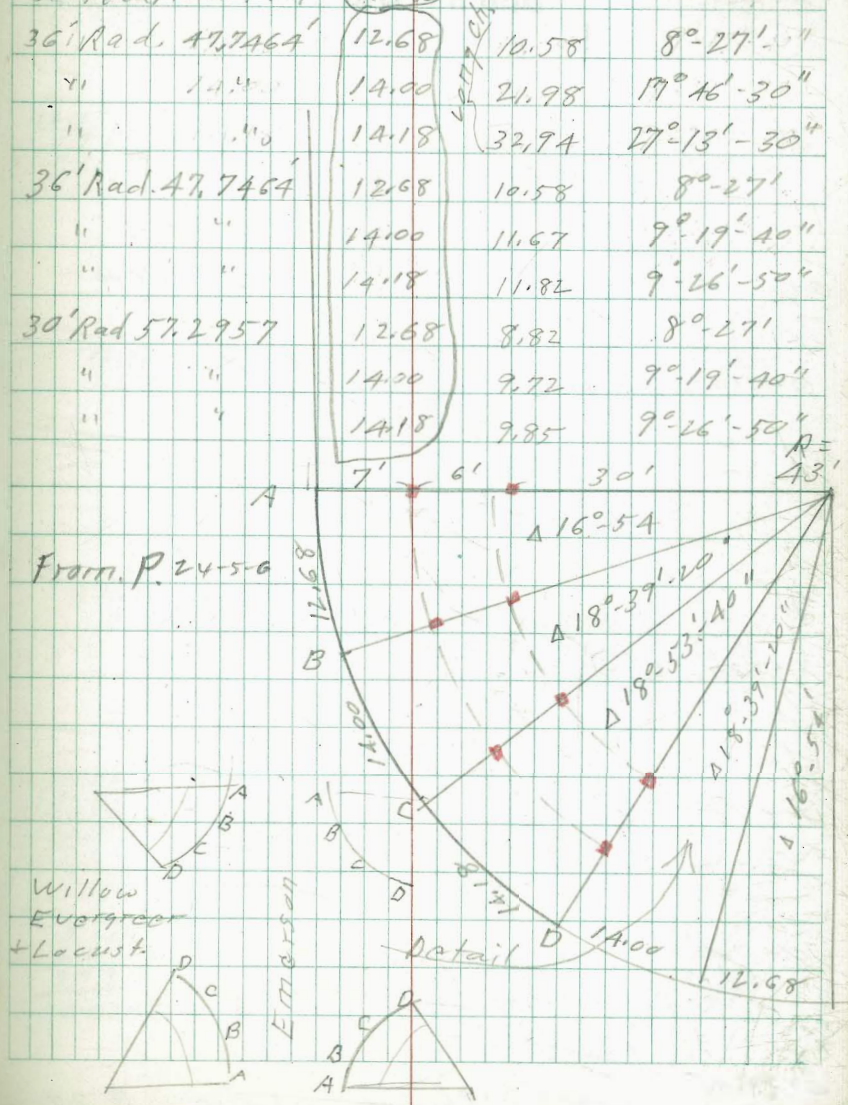
2+37.06 75.75

2+17.06 75.31

Detail Curb Return stakes

Set. Emerson St.

	Rate	L	ch.	Def.
43' Rad. = 39.974'		(43' Rad 40.86)		
36' Rad. 47.7464'		12.68	10.58	8°-27'-"
" " "		14.00	21.98	17°-46'-30"
" " "		14.18	32.94	27°-13'-30"
36' Rad. 47.7464'		12.68	10.58	8°-27'
" "		14.00	11.67	9°-19'-40"
" "		14.18	11.82	9°-26'-50"
30' Rad 57.2957		12.68	8.82	8°-27'
" "		14.00	9.72	9°-19'-40"
" "		14.18	9.85	9°-26'-50"



Emerson.
Meter Box grades

1

2+75 8.12 20.55 0.78 12.43

0+25

(0+25 - 21) 21' Back of E.C. on Rt. M.C. 14.40

0+17 (10' - B.C. on left.)

~~← Locust St. →~~

27' on curve to left.

2+80.3 (5.3' on curve on Rt.)

2+75 Rake point.

0+34 Rake point

Stakes 0.06 above curb grade

W. line Roseerans = 0+00

w'ly 7' Oct Emerson + Roseerans 7.26 13.41 6.15 P. 27

57

Exist Ck.
18.00
2.55
2.55
×

20.55

18.50
2.05
2.09
F 0.05

12.50
0.91
0.91
×

11.90
1.51
1.51
×

#1
12.32
1.09
1.09
×

#2
12.40
1.01
1.01
×

#1
11.43
1.98
0.98
C 1.00

#2
11.49
1.92
0.92
C 1.00

#1
11.06
2.35

#2
11.14
2.27

#1
10.05
3.36
3.36
L

#2
10.14
3.27
3.27
L

10.58
2.83
2.83
L

9.92
3.49
3.49
L

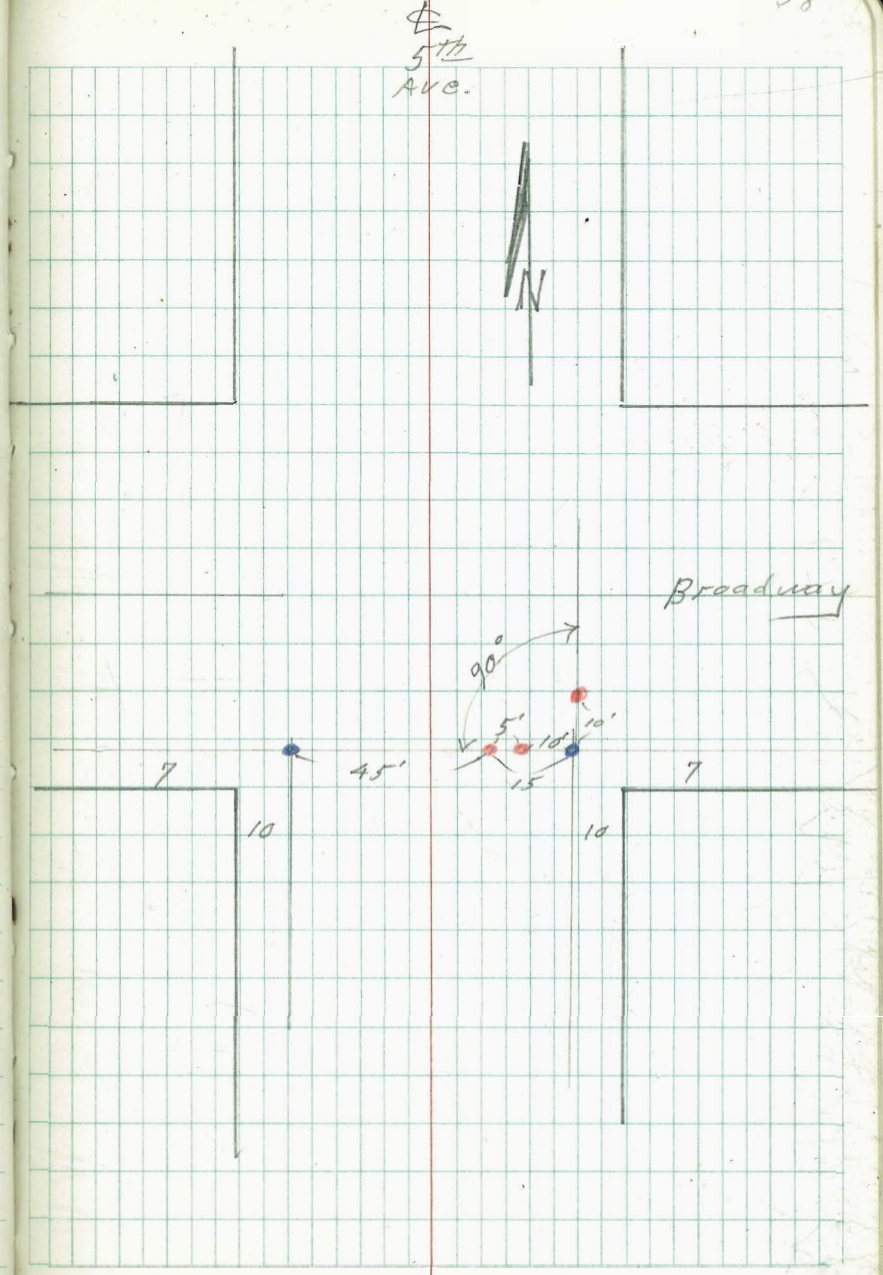
7.18
6.23
6.29
F 0.05

6.21
7.20
6.85
C 0.35

13.41

Tie outs for R.P. tack
S.E. Cor. Broadway & 5th

● = Fd. Lead & Tack
● = Set disk with iron nail.



Euclid + Cleveland
Sewers

3+24.85			98.73
2+72.68			97.99
2+20.51			97.24
1+68.34			96.49
1+16.17			95.75
1-52.15 5-52.17			
0+64	M.H.#1		95.00
0+32			93.14
0+00			91.29

Mud change by Al Soter. (See page 64)

1-48.34
2-48.33
7+12.00 M.H.#3 125.94
6+64.16 122.19
6+16.30 118.39
5+68.44 114.61
5+20.58 110.83
4+72.72 107.05
4+24.86 103.26
1-47.84
6-47.86
3+77.00 M.H.#2 99.48

10+62.00	
10+21.00	
9+80.00	
9+39.00	
8+98.00	
10-A1 PC	
8+57.00	M.H.#4
8+08.66	
7+60.33	

13+79 PT	
13+42.00	
13+04.50	
10-37 PC	
12+67.00	M.H.#5
12+26.00	
11+85.00	
11+44.00	
11+03.00	

16+88

5-46.00

Δ 14° 10' 27".
16+42 M.H.#6

16+01.50

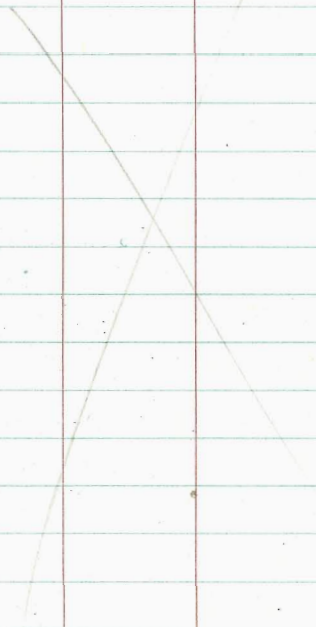
15+67.00

15+29.00

14+92.00

14+54.50

14+17.00

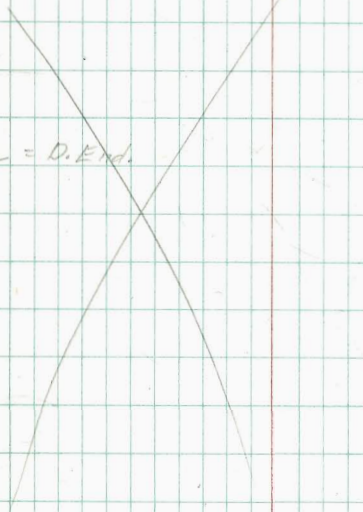


18+72 = D.E.#4

18+26

17+80

17+34



San Jacinto Drive

1+75		136.43	12.39 4.56 C 7.83	
1+50		136.18	12.64 4.82 C 7.82	
1+25		135.93	12.89 5.18 C 7.71	
1+00		135.68	13.14 5.69 C 7.45	
0+75		135.43	13.39 6.41 C 6.98	
0+50		135.18	13.64 7.08 C 6.56	
0+25		134.93	13.89 7.89 C 6.00	
=0+00 M.H.#5 R.C.P.		134.68 12.14 8.22 C 5.92		
From page 68	8.22	148.82	—	140.60

L+T. P. 65	137.76		10.15	132.76 ← (CK)
T.P.	4.13	142.91	10.04	138.78
3+00 = D.E.nd.				137.68 — 11.14 4.45 C 6.69
2+75				137.43 — 11.39 4.18 C 7.21
2+50				137.18 — 11.64 4.07 C 7.57
2+25				136.93 — 11.89 4.26 C 7.63
2+00				136.68 — 12.14 4.36 C 7.78

148.82

1+94.42				96.86	11.07 4.74 C 6.33
1+68.34				96.49	11.44 4.62 C 6.82
1+42.25				96.12	11.81 4.62 C 7.19
1+16.17				95.75	12.18 4.14 C 8.04
0+90.08				95.37 12.56	12.56 4.08 C 8.48
0+69.0	M.H.#1	107.93		95.07 12.86	12.86 8.09 C 4.77
0+59	104.22 4.43 108.65	B.M.		94.53	14.12 4.38 C 9.74
0+41				93.54	15.71 4.45 C 10.66
0+00				91.29	
200' Sa. of Mouth of Euclid	3.71	107.93		104.22	R.R. N.W. Cor. Bridge

4+00				101.29	17.93 11.40 C 6.53
T.P.		119.22			
	12.98	119.22	169	106.24	
3+77-M.H.#2				99.48	8.45 1.69 C 6.76
3+50.93				99.10	8.83 2.96 C 5.87
3+24.85				98.73	9.20 3.77 C 5.43
2+98.76				98.36	9.57 4.36 C 5.21
2+72.68				97.99	9.94 4.55 C 5.39
2+46.59				97.61	10.32 4.37 C 5.95
2+20.51				97.24	10.69 4.60 C 6.09

107.93

6+00				117.09	13.54 3.85 C 9.69
5+75				115.11	15.52 6.42 C 9.10
5+50				113.14	17.49 8.99 C 8.50
5+25				111.17	19.46 11.44 C 8.02
T.P. (Rock)	11.68	130.63	0.27	118.95	
5+00				109.19	10.03 2.50 C 7.49
4+75				107.21	12.01 4.98 C 7.03
4+50				105.24	13.98 7.45 C 6.53
4+25				103.26	15.96 9.76 C 6.20

7+75				127.20	15.77 7.85 C 7.92
7+50				126.70	16.27 8.72 C 7.55
7+25				126.20	16.77 9.86 C 6.91
T.P. Left of Euclid & Braveland	10.21	142.97	6.58	132.76	
7+12 = Mkl. #3 89°-22'-30" Rt.				125.94	17.03 10.37 C 6.70
	10.21 - 142.97		—	132.76	
7+00				124.98	14.36 7.05 C 7.31
6+75				123.01	16.33 7.70 C 8.63
6+50				121.03	18.31 8.68 C 9.63
T.P.	10.32	139.34	1.41 -	129.02	
6+25				119.06	11.57 1.61 C 9.96

130.63

9+75				130.49	12.48 4.78 C 7.70
9+50				130.14	12.83 4.86 C 7.97
9+25				129.79	13.18 5.01 C 8.17
9+00				129.44	13.53 5.07 C 8.46
.035					
8+75				129.09	13.88 5.44 C 8.44
8+57 = 11.44				128.84	14.13 5.77 C 8.36
		+50	13.27 5.35 C 8.42		
8+25				128.20	14.77 6.31 C 8.46
8+00				127.70 13	15.27 6.91 C 8.36
		142.97			

1.44 − .014 = 1.426

.02

11+75				133.29	9.68 3.90 C 5.78
11+50				132.99	10.03 4.18 C 5.85
11+25				132.59	10.38 4.26 C 6.12
11+00				132.24	10.93 4.35 C 6.38
10+75				131.89	11.08 4.39 C 6.69
10+50				131.54	11.43 4.51 C 6.92
10+25				131.19	10.78 4.64 C 7.14
10+00				130.84	12.13 4.71 C 7.42
				142.97	

.014

13+50				135.24	12.56 5.82 C 6.74
13+25				135.04	12.76 6.23 C 6.53
13+00				134.84	12.96 6.57 C 6.39
12+75				134.64	13.16 6.98 C 6.18
			To South	East-West	
12+67=	M.H.#5		134.68 13.12 6 20 C 5.92	134.58	13.22 7.20 C 6.02
	7.30	147.80	2.47	140.50 134.34	8.63 2.47 C 6.16
12+25				133.99	8.98 2.92 C 6.06
12+00				133.64	9.33 3.51 C 5.82
		147.97			

800

810

15+50	136.84	10.96 4.40 C 6.56
15+25	136.64	11.16 4.59 C 6.57
15+00	136.44	11.36 4.80 C 6.56
14+75	136.24	11.56 4.75 C 6.81
14+50	136.04	11.76 4.90 C 6.86
14+25	135.84	11.96 5.24 C 6.72
14+00	135.64	12.16 5.59 C 6.63
13+75	135.44	12.36 5.63 C 6.73

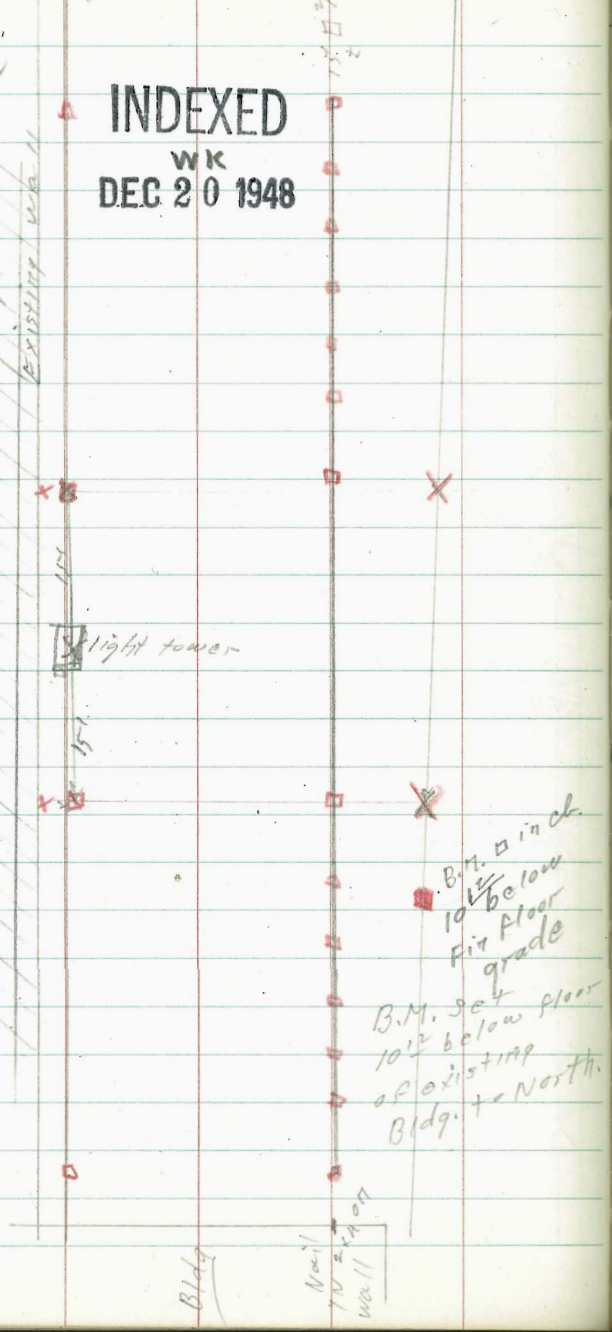
147.80

17+50				138.44	11.66 5.32 C 6.34
17+25				138.24	11.86 5.42 C 6.44
17+00				138.04	12.06 5.83 C 6.23
16+75				137.84	12.26 6.03 C 6.23
16+42 = M.M. # 6	Δ 00-14'-10"24.			137.58	12.52 6.28 C 6.24
T.P.	6.40	150.10	4.10	143.70 137.44	10.36 4.10 C 6.26
16+25					
16+00				137.24	10.56 4.22 C 6.34
15+75				137.04	10.76 4.27 C 6.49
		147.80			

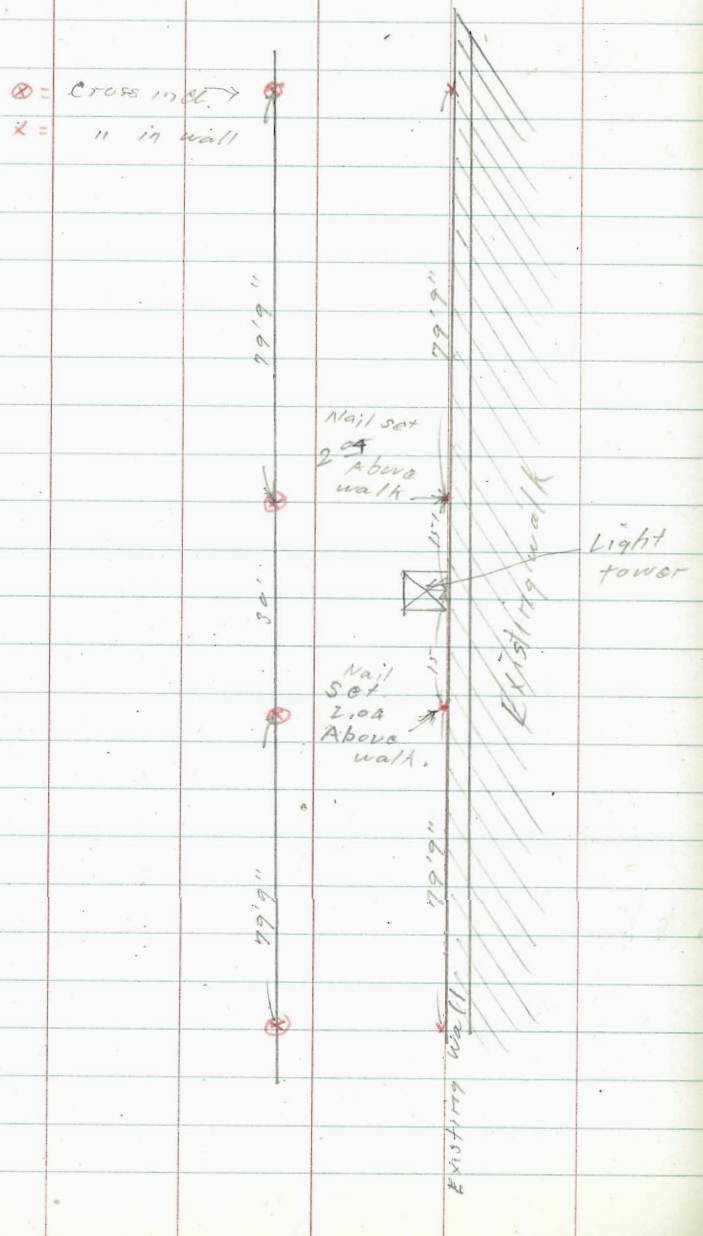
Continued on Page 63

T.P.	9.50	140.60	
18+72 D.E.		139.42	10.68 4.02 C 6.24
18+50		139.24	10.86 4.67 C 6.19
18+25		139.04	11.06 4.85 C 6.18
18+00		138.84	11.26 4.82 C 6.44
17+75		138.64	11.46 5.15 C 6.31

Balboa Stadium - 1



4/29/18


⊗ = Cross in st.
x = " in wall
99'9"
99'9"
99'9"
99'9"
30'
15'
15'
Nail set 2.04 Above walk
Nail Set. 2.04 Above walk.
Light tower
Existing wall
Existing wall

Benton Place 4-15-48

	Lt.			RT.	
0+25	393.05 / 5.97 ✓			392.75 / 6.27 ✓	
=0+00 / 1+00 W.L. Benton to South.	393.30 / 5.72 ✓			393.00 / 6.02 ✓	
+70				393.20 / 5.82 ✓	= Ch. EC.
0+30				393.30 / 5.72 ✓	= ch. B.C.
=0+00 / 2+78 E.L. Benton (East + West)	393.40 / 5.62 ✓			393.50 / 5.52 ✓	
Rak T.P.	4.60	397.02	6.06	394.42	
0+08 Edge pave. 0+00 M.V. Dr.	394.52 / 5.96			394.42 / 6.06 ✓	
0-10 B				394.62 / 5.86	394.49 / 5.99 ✓ Set
B.M. S.W.B.P. 35 Mountain View	5.06	400.48	—	395.42	

A

Ch. B.C. on Lt. 5+73	386.50 / 7.24 ✓	4+75		386.50 / 7.24 ✓	4+75 / 387.51 / 6.23
	387.47 / 6.27			4+50 387.77 / 5.97	
4+00	388.27 / 5.47			388.27 / 5.47	4+25 / 388.02 / 5.72
3+75 Rak T.P.	2.75	388.53 / 5.19	393.74	8.03	390.99
=0+00 1+30 N.L. Benton to East	392.35 / 6.67 ✓			392.35	ch. E.C.
				6.67 ✓	
1+00 ch. E.C.	392.53 / 6.49 ✓				
0+80 ch. B.C.	392.62 / 6.40 ✓				
0+50 E.L. Benton to North	392.80 / 6.22 ✓			392.50 / 6.52 ✓	ch. B.C.

Benton Place

4+50	387.77 / 5.97 ✓	
4+25	388.02 / 5.72 ✓	
4+00	388.27 / 5.47 ✓	388.27 / 5.47 ✓
3+75	388.53 / 5.21 ✓	
End.	386.41 / 7.33 OK	386.18 / 7.56 OK
~~5+98.24~~ CL. E.C. 1' Post EC.	386.47 / 7.27 / 7.28 ✓	386.37 / 7.37 ✓
5+84.16 BC. Obj.		386.42 / 7.32 ✓

+50	386.75 / 6.79 ✓
+25	387.00 / 6.74 ✓
5+00	387.25 / 6.49 ✓
4+75	387.51 / 6.23 ✓

0+25		392.96 / 4.77	392.95 / 4.78	392.81 / 4.92	
W.L. Benton 0+00 To South	393.30	393.46 (25) / 393.21 / 4.52	393.45 (27) / 393.20 / 4.53	393.3[illegible] (25) / 393.0[illegible] / 4.6[illegible]	393.00
Intersection Page 74					T 397.73
S.L. Benton E+W. Street 1+78.2	93.40	93.66 (25) / 93.41 / 4.3	393.75 (25) / 393.50 / 4.23	393.70 (25) / 393.45 / 4.28	393.50
0+08 C M.V. Drive Pav. on west	394.52	394.72 (25) / 394.47	394.77 (25) / 394.52 / 4.48	394.68 (25) / 394.43	394.42
	4.58	99.00		394.42	30
0+00 M.V. Drive Pav. on ℄			394.77		
Pav. M.V. Dr. on East 0 – 10 L					349.49

		1/4	℄	1/4	
Δ on Lt. Ahead ℄ to ℄ C.	386.47 / 5.45	386.64 (25) / 386.39 / 5.55	386.67 (25) / 386.42 / 5.50	386.59 (25) / 386.34 / 5.59	386.37 / 5.55
Split Δ 5+84 16	386.49 / 0	386.69 (25) / 386.44	386.72 (25) / 386.47	386.64 (25) / 386.39	386.40
5+73 C Δ on Lt. Back	386.50	386.73 (25) / 386.48 / 5.29	386.80 (25) / 386.55 / 5.22	386.73 (25) / 386.48 / 5.29	386.50
3+00 .0102	389.29	389.52 (27) / 389.27 / 4.55	389.59 (25) / 389.34 / 4.48	389.52 (25) / 389.27 / 4.55	389.29
0+00 = N.L. Benton to East	392.35	392.58 (25) / 392.33 / 4.19	392.65 (25) / 392.40 / 4.12	392.58 (25) / 392.33 / 4.19	392.35
0+50 = E.L. Benton to No.	392.80	392.96 (25) / 392.71 / 5.02	392.95 (25) / 392.70 / 5.03	392.81 (25) / 392.56 / 5.17	392.50

T 391.92

393.50
4.23
397.73

N. Line Benton (Runs E. + W.

393.00
393.20
393.30
393.06
393.20
393.21
393.30
393.40
393.41
393.50
393.45
393.50
393.71
4.52V
393.30
4.43V
3.35
4.38V
393.31
4.42V
393.26
4.47V
393.40
4.33V
393.36
4.37V

W. L. Benton

392.35
392.53
392.47
5.26V
392.62
392.53
5.20V
392.50
5.23V
392.56
5.17V
392.38
5.35V
392.60
5.13V
392.50
5.23V
392.35
392.80
392.50
W. L. Benton

Sewer. Morley Field Recreation Building.

5-6-48
W.O. 90064

Sommermeyer
McCoy
VV Moore
Sherman

orig. B.M. 4.38 272.81

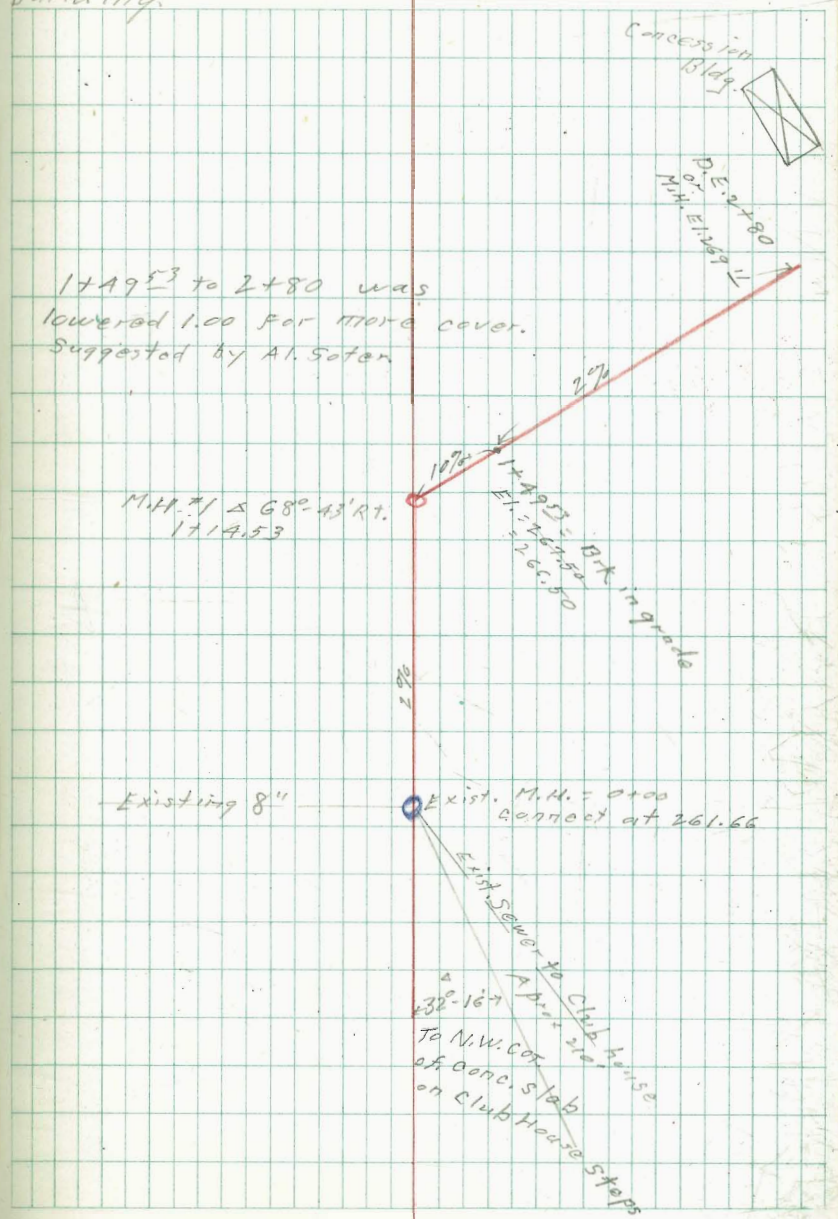
2+80 = D.E. of M.H.

269.11
8.08
3.12
C 4.96

Brk. 1+49.53	1+75	2+00	2+25	2+50	2+75
266.50	267.01	267.51	268.01	268.51	269.01
10.69	10.18	9.68	9.18	8.68	8.18
5.39	5.14	4.95	4.75	4.55	4.34
C 5.30	C 5.04	C 4.73	C 4.43	C 4.13	C 3.84

T.P.	7.15	277.19	4.99	270.04	
					M.H. #1
0+00	0+25	0+50	0+75	1+00	1+14.53
261.66	262.16	262.66	263.16	263.66	263.95
13.37	12.87	12.37	11.87	11.37	11.08
5.58	5.62	5.32	5.12	4.96	4.99
C 7.79	C 7.25	C 7.05	C 6.75	C 6.41	C 6.09

T.P. on N.E. Cor. Tennis Court 1775-74 — 272 — 275.07 — 272.81



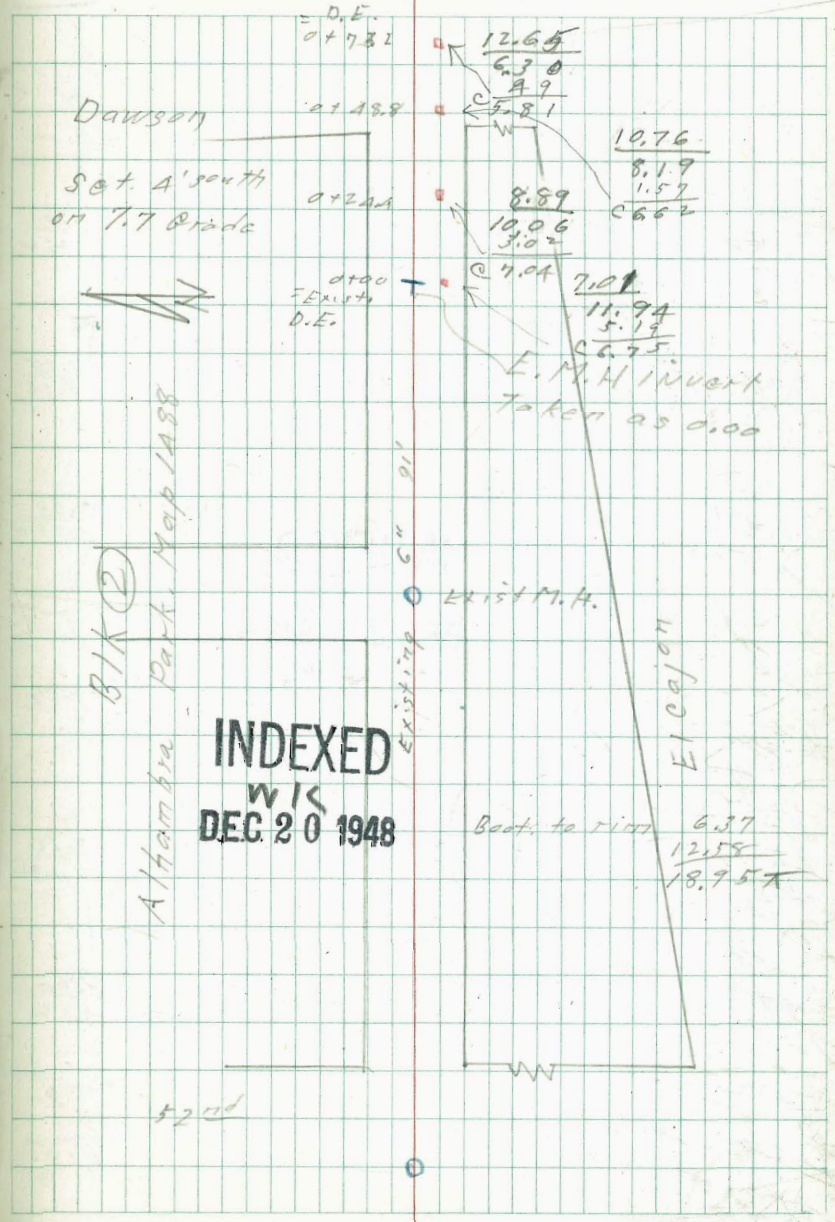
Venice - Alley Blk 66 to
Sewer Alley " 67

4-19-48
W.O. 60256

INDEXED
WK
DEC 20 1948

Sammermeyer
W. McCoy
W Moore
E Sherman

					Turn back 209.40 / 11.07 / 197.37 / 1.33 / 198.66 / 12.00 / 186.06 / 2.90 / 183.96 / 87.0 / 180.24 / .002
3+25	Bead Etd			202.38	7.02 / 0.91 / C 6.11
2+87.5		199.19	12.21 / 3.98 / C 6.73		
T.P.	3.98	209.40	0.27	205.42 / 4' off	8' off
2+50				196.00 / 9.69 / 2.93 / 3.00 / C 6.69	9.69 / 2.93 / C 6.76
2+00				194.00	11.69 / 4.79 / C 6.90
1+50				192.00	13.69 / 6.49 / C 7.20
1+00				190.00	15.69 / 9.25 / C 6.44
+50				188.00	17.69 / 12.28 / C 5.41
T.P.	12.96	205.68	0.22	192.73	8' off
M.H.#1				186.00 / 6.95 / 2.63 / C 4.32	186.00 / 6.95 / 2.53 / C 4.42
0+00 & Alley Blk 66 Produced					
sheet 2978-B					
5' W.B.P. Venice & Saratoga	12.71	192.95	—	180.24	



North Wightman ℄ W.O. 31023 A-16-48 South

	5.23	352.91		347.68	
0+00 = W.L. 36	347.11 5.80 L		3 L		346.60 6.31 L
			351.99 T		
0+40	347.20 5.71 L	347.14 4.85 L	347.47 33 347.14 4.85 L	346.89 5.10 L	346.70 6.21 L
		352.74 T	352.74 T	352.70 T	
2+80	348.25 4.66 L	348.18 4.56 L	348.52 33 348.19 4.55 L	347.93 4.81 L	347.75 5.16 L
E.L. Wilson	348.37 4.54 L				347.93 4.98 L
	352.91 3.50				
	349.37 6.52				
	355.89				
0+00 = W.L. Wilson	349.05 6.84				348.67 7.22
		55.61	55.61	55.61	55.61
0+20	349.26 6.63 L	349.52 6.09 33 6.42	349.53 6.08 33 6.41	349.27 6.34 L 6.07	348.76 7.13 L
2+80	352.30 3.57 L	352.23 3.38	352.57 33 352.24 3.37	351.98 3.63 L	351.80 4.09
E.L. 35	352.49 3.40 L		352.82 pav.		352.11 3.78 L
Set New curb to raked grade.					

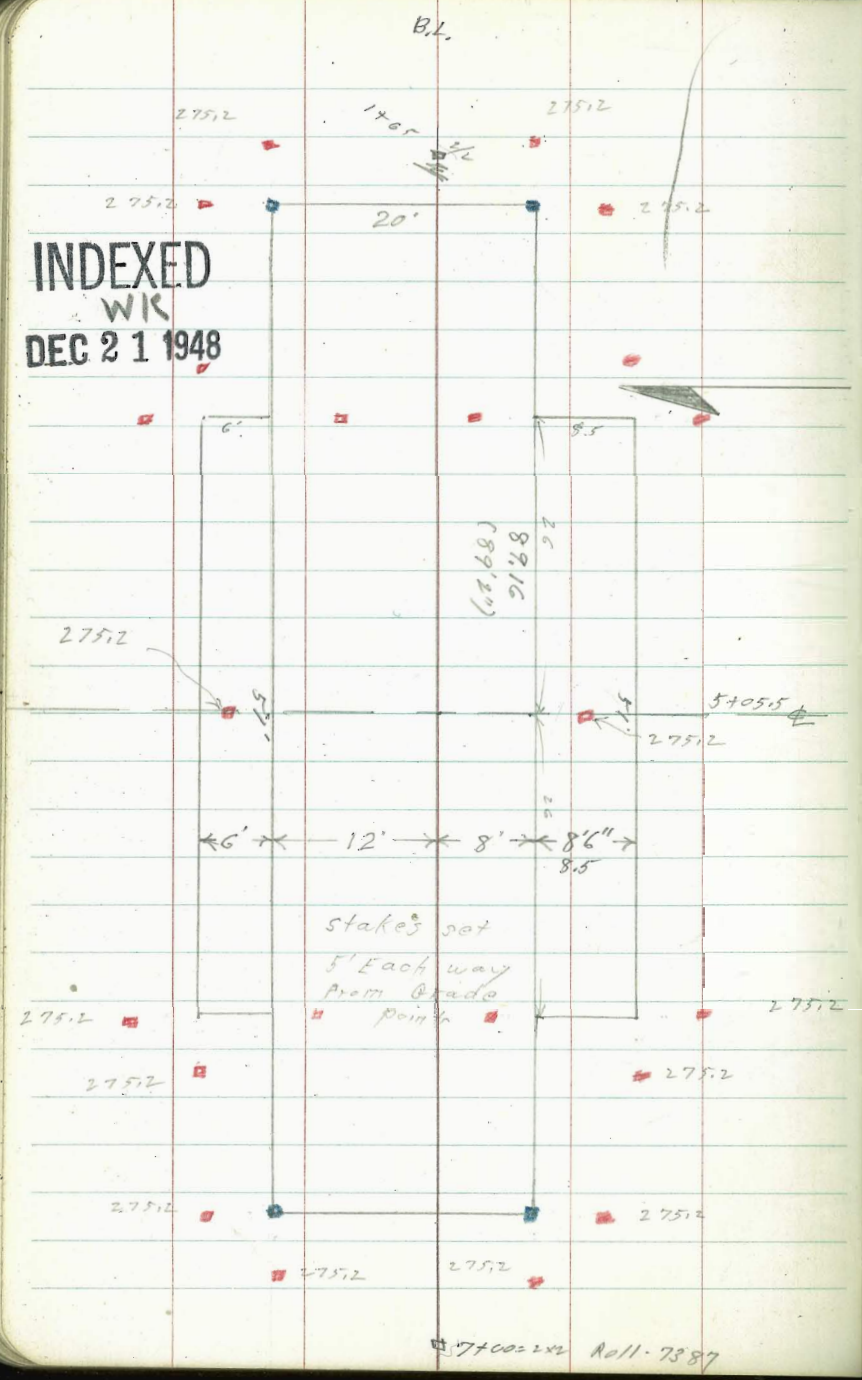
INDEXED
WR
DEC 2 1 1948

348.25 4.09 352.74 T

347.20 4.79 351.99 T

Note. Changed grades to set sub grade. 4/27/48 C.H.S.

349.26 = 0+2 North 6.35 355.61 T 6.55



Murray Field

W.O. 90064

3/29/48

Instructions changed by
Mr. Wilson Supt. for Nielsen Const. Co.

Set 4 Bldg. corners (in blue)
" Elev on tennis courts
Painted ■ El. = 272.95

N.E. Cor. Tennis court 272.81
4.68
277.49
4.64
272.85 = El. Req.

(80)

36" Culvert 59th & Vale Way

out let
33+16.7 385.06
.17

32+85.00 + Gas line 385.44

Stubs set on line of
Gas main (under Const.)

B.M.= Spike in pole 178268 FB 18.25
31

0.13 395.88 395.75 B.M.

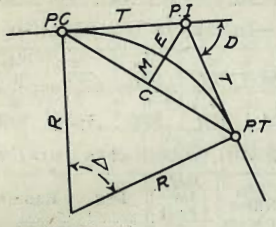
32+95 33+05

395.32 385.20
3.25 Pipe + 3.25 Pipe

388.57 = El top pipe = 388.45
7.31 7.43
6.43 6.56
C 0.88 C 0.87

(80)

DIETZGEN'S RAILROAD CURVE AND REDUCTION TABLES



CURVE FORMULAS

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

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

Middle ordinate=M=R(1—cos. $\frac{\Delta}{2}$) (5)=Rvers $\frac{\Delta}{2}$ (6)

External=E=Ttan$\frac{\Delta}{4}$-(7)=R ÷ cos.$\frac{\Delta}{2}$—R(8)=Rexsec$\frac{\Delta}{2}$(9)

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

EXPLANATION AND USE OF TABLES

Stations.—Given P. I.=Sta. 161+60.35 to find Sta. of P. C. and P. T. Δ=62° 10′ D=8° 20′. From Table IV for 1° curve T=3454.1 and ÷8⅓=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=½ D for 100 ft., ¼ D for 50 ft., etc. For c ft.=(in minutes) .3 x C x D° or=defl. for 1 ft. from Table III x C. For Sta. 158 of above curve=.3 x 54.5 x 8⅓=136.2′ or 2° 16.2′, or=2.50 x 54.5=136.2′ from Table III. For Sta. 159 deflection angle=2° 16.2′ +8° 20′ ÷2=6° 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° 20′=960.6 ÷8⅓=115.27 and from Table V correction=.10 or E=115.37 ft. Or suppose Δ=32° and E is measured and found to be 42 ft. What is D? From Table IV E=230.9 and ÷42=5.5 or D=5° 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)÷2 or 2 ft. added to 41.9 =43.9. For slopes of 1 on 1 see inside of front cover.