

EUGENE DIETZGEN CO.

DRAWING MATERIALS, MATHEMATICAL and
SURVEYING INSTRUMENTS

Chicago New York San Francisco New Orleans Pittsburg Toronto

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

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

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

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MICROFILMED

APR 12 1965

The paper stock of this book is made of a high grade 50% rag paper having a water resisting surface. This book is sewed with Bing Special Enamel Waterproof Thread.

Made in U. S. A.

K St Grader

South Line Stal II

INDEXED

Note - Tie Field Book 984

Indexed

1+09 = FL 36th 9425 98 out 93.73 92.75 10.0
From N 8.3
6.8

TP 11.72 104.10 0.91 92.38

0+79 = ϕ 94.00 out 93.48 92.50 -0.2
3.2
F40

0+462 = N.L. 36th 93.75 out 93.23 92.75 0.0
12.5
F12.5
From N

0+23.1 93.50 91.98 out 91.42 92.00 0.3
16.3
F16.0

0+0 = FL 36th 93.25 91.03 out 92.23 92.75 0.5
10.3
-9.8
From South

12.07 104.92 92.85

BM 0.44 93.29 92.85

L+T on
S.L. K St
12.1 34.5
From S

36th St Grader 60' wide

Stationing

Dec 24-41

S. 5500

North part I

E. 4' Moor

3+75.65 = ϕ 55+ 108.05 13.3
18.1
F26.4
108.59 17.0
6.9

TP 12.26 116.50 4.27 1.2
6.3
104.24 0.2
5.5

3+35.65 = S.L. 55+ 101.32 7.2
10.8
F3.6 101.36 6.5
3.6
2.7
6.9
4.7

2+88.15 99.41 9.1
97.42 1.52
3.5
F6.1
99.97 8.5
2.5
0.40

2+40.65 = B-k 97.75 10.7
16.0
F5.3 97.73 10.2
1.2
6.9
6.8

2+0 96.74 11.7
15.2
F4.5 97.24 11.7
2.3
6.5

1+50 95.82 12.7
16.6
F3.3 95.80 12.2
3.2
2.8

TP 5.54 108.48 1.16 8.5
2.9
102.94

1+0 94.90 9.2
15.2
F5.2 94.8 8.7
1.2
6.8
0.75

0+50.9 = B-k 94.00 -0.7
11.4
F13.1 93.98 9.6
10.9
2.8
6.8

0+40.9 = N.L. K St

0+0 = S.L. K St 104.78 92.85
BM 12.07

104.10

36+607 Graders
KSI to Market

INDEXED

TP	12.25	138.75	0.44	126.50	
0+0					
7+9504-NL Island	121.90	21.63	121.90		
BM		6.01	120.90	120.90	Mon
7+5304-7	120.70	6.2 2.8 0.14	120.95	120.95	8.0 2.5 0.15
7+1504-SL Island	119.50	7.1 0.2 7.8	119.48	120.00	6.0 8.0 F11
6+5757	115.94	11.8 11.2 F0.9	116.44	116.44	10.5 10.7 F0.2
TP	11.96	1.52	114.98	114.98	
6+0 = Brk	112.70	3.8 3.9 F11	112.20	112.20	3.3 4.7 0.6
5+5392	110.46	6.0 11.4 F0.7	110.98	110.98	5.5 3.1 0.2
5+0783	108.54	8.0 8.6 F0.6	108.53	109.07	7.1 4.1 0.3
4+6179	106.63	10.6 9.9 F0.7	107.16	107.16	9.3 8.1 0.6
4+1565-NL Island	104.72	11.8 10.8 F2.0	104.71	105.25	11.2 8.9 0.3
TP	11.48	0.80	104.12	104.12	
		116.507			
		104.92			

~~Indexed~~
98

BM	4.40	126.667	122.36	122.36	NW 8P Market 38.51
					15 F of 2.0 = C6 Grade
2+0 = SL Market		122.50	122.50	122.50	2.6 2.6 0.0
2+65		123.02	123.02	123.02	36.2 18.2 0.80
2+50 = F.V.C.		123.55	123.55	123.55	3.6 6.8 0.28
1+90		123.95	123.95	123.95	35.3 2.1 0.27
1+50		123.95	123.95	123.95	35.3 2.1 0.27
TP	9.04	159.20	150.16	150.16	
1+10 = P.V.C.		123.55	123.55	123.55	35.7 8.2 0.27
0+55		122.72	122.72	122.72	27.6 1.2 0.3
TP	11.93	150.31	138.38	138.38	
0+0 = NL Island		121.90	121.90	121.90	16.9 10.7 0.62
		128.751			4.76 4.92 0.2

Crown Point Series Graden
Blocks 7-8-20-21

BM	7.82	29.09	21.27	NE 87 Sporland & Frazier
0-25.09	2 Moorland		9.28	8.66
0+0	5 1/2 Moorland	8.89	9.31	19.78 5.12 c/4.65
0+25		19.69 4.87 c/4.506	9.40	
0+56			9.48	19.61 4.86 c/4.7
0+62.5	Chimney		9.52	19.57 4.95 c/4.83
0+81.25		19.51 4.55 c/4.96	9.58	
1+0			9.65	19.44 4.90 c/4.54
1+25		19.35 4.99 c/4.36	9.74	
1+50			9.83	19.26 5.25 c/4.01
1+73.5	Chimney		9.91	19.18 5.10 c/4.08
2+0			10.00	19.09 5.06 c/4.03
2+21.25		19.02 4.82 c/4.20	10.07	
2+42.5	Chimney		10.15	18.94 4.88 c/4.26
2+68.7		18.85 4.28 c/4.57	10.24	
2+94.91	MH # 48		10.25	18.76 4.06 c/4.70

Indexed
92

					Dec. 27. 41 S. W. A. Northam W. Moore
			29.09		
3+53.41	Chimney				18.56 4.14 c/4.42
3+76.7					18.48 3.20 c/4.58
4+0					18.40 3.53 c/4.77
4+63.11	Chimney				18.28 3.59 c/4.69
4+52.54					18.22 3.56 c/4.66
4+71.97					18.15 3.35 c/4.80
TP	5.13	30.87	3.35	25.74	0.0846 4.97197
5+10.84	MH # 49				19.20 5.98 c/4.61
9.59					
5+20.43	Chimney				19.76 4.84 c/4.94
4-26.15					
5+46.58					19.67 4.86 c/4.81
5+72.73					19.57 4.76 c/4.78
5+98.88					19.48 5.01 c/4.47
6+25.03	Chimney				19.39 5.63 c/4.38
2-20.70					

S: 0.03467

Block 5-7-8-20-21

30.87

6+55.78

11.58

19.29
6.93
12.36

9+85.70

12.73

15.19
2.46
12.73

Corrected Chainage

6+86.42

La Mancha

11.69

19.18
8.49
10.69

10+18.64

12.85

13.07
0.22
12.85

2-36.3

7+22.72

11.82

19.05
7.24
11.81

10+51.58

12.96

13.91
0.95
12.96

7+59.09 Chimney

11.94

18.93
7.04
11.89

10+84.53

13.08

13.84
0.76
13.08

3-26.22 7+82.63 BC

7+85.34

12.03

18.84
7.81
11.03

11+17.47

13.19

13.73
0.54
13.19

8+11.69

5 0.32467

12.12

18.75
8.12
10.63

11+50.42 = MH #52 Δ 0°16'

13.30

12.62
0.68
13.30

6-27.17

8+38.03 Chimney

12.21

18.66
8.86
9.80

11+87.57

13.43

12.19
1.24
13.43

2-27.22

8+65.26

12.30

18.57
9.27
9.30

12+24.74

13.56

12.36
1.20
13.56

8+98.5

8+86.87 = MH #51 Δ 11.32°

TP 4.15 25.92 9.40 21.47

12.41

18.46
9.41
9.05

12+61.91

13.68

12.24
1.44
13.68

1-27.34

9+19.81

12.50

13.42
0.92
12.50

12+99.08

13.81

12.11
1.70
13.81

7-32.94

9+52.75

12.62

13.50
0.88
12.62

13+36.25

13.94

11.98
1.96
13.94

Blocks 7-8-20-21

TP 4.80 ^{25.92} 26.08 4.64 21.28

13+73.42 = 2' H of N.L. LaCima 14.07

BM 8.37 17.71

0+0 = 3.4 Sep. S. LaCima 14.31

4.45.84

0+45.84 14.46

0+91.68 14.62

1+37.52 14.77

1+83.35 MH 51 A 9⁰⁰ 14.92

2-42.62

2+25.97 15.06

2+68.59 15.21

3+11.20 MH 53 A 13³⁷ 15.35

5-51.78

3+52.5 = FC

12.01
5.13
6.88
SERP.
LaCima
Frontier
17.71

11.77
5.26
6.57

11.63
4.34
7.28

11.46
4.56
6.90

11.31
4.76
6.55

11.16
4.62
6.54

11.02
4.25
6.27

10.89
4.88
6.97

10.73
5.17
6.56

26.08

3+62.98 15.52

4+14.76 15.69

4+66.53 15.87

5+18.31 16.04

5+70.09 - N.L. Edge Cliff Existing Survey 16.21

580 3.23

10.56
4.84
5.68

10.30
2.80
5.89

10.21
4.25
5.66

10.04
4.36
5.69

9.87
4.97
4.90

BM	3.93	3442	30.49	025706 2+75 #1599
0+0 =	19.50	MH 57 = EXH 129 Pipe	20.01	1441 3.27 05.74
3-3821				
0+3820			20.70	13.77 7.69 06.63
0+7642			21.38	13.04 5.62 09.42
1+14.62 =	MH 58	^{10.46} Δ + 14	22.07	13.35 2.26 08.09
4.40				
1+54.62			22.79	11.63 3.92 07.70
1+94.62			23.51	10.91 3.60 07.41
2+34.62			24.23	10.19 3.25 06.54
2+74.62 =	DE		24.95	9.47 3.28 05.69

Block 19

BM 419	32.83	28.64	17.80 Yosemite 41904007
0+0 = 27.5 NW of MH 45		23.71	9.12 4.58 c 4.62
4-41.2			
0+41.2		23.41	9.42 4.23 c 5.19
0+82.4		23.10	9.72 4.26 c 5.47
1+23.6		22.80	10.02 4.29 c 5.54
1+64.8 = MH 44 Δ 41° 28' 30"		22.49	10.34 7.88 c 5.46
8-44.225			
2+09.02		22.18	10.65 4.93 c 5.72
2+53.25		21.87	10.96 8.00 c 4.96
2+97.48		21.56	11.27 6.25 c 5.02
3+41.70		21.25	11.58 5.00 c 5.8
3+85.93		20.94	11.89 5.28 c 6.17

Jan 2-92

			32.83					12.20 4.58 c 6.62
4+30.15								
4+74.38								12.51 5.24 c 7.17
5+18.60 = MH 43								12.80 5.28 c 7.54
5+47.43								
5+66.03								13.15 4.90 c 8.25
6+13.46								13.48 4.82 c 8.86
TP 4.86	33.07	4.62						
6+60.89								14.06 6.13 c 8.93
7+08.32								14.39 5.82 c 9.07
7+55.75 = 21 So/SW La Cima								14.78 6.28 c 8.44

Blocks 9+6

	32.07		
0+0 = 19H of MH La Cruz	18.46	14.63 5.64 c8.99	
5+44.62			
0+44.62	18.91	14.16 4.62 c9.54	
0+89.24	19.35	13.72 4.62 c9.03	
1+33.86	19.80	13.27 4.87 c8.10	
1+78.48	20.24	13.83 5.23 c7.60	
2+22.10 - MH #41 Δ 0°28'	20.69	12.88 8.01 c6.37	
5+47.18			
2+70.20	21.16	11.91 6.24 c5.49	
2+174.6	21.63	11.41 7.68 c4.36	
3+64.64	22.11	10.96 7.20 c3.76	
4+11.82	22.58	10.48 7.25 c3.23	

32.07

8

4+59.0 = MH 40 Δ 11°32'	22.05	10.02 7.34 c2.68
7-51-05		
5+10.05	23.56	9.51 8.06 c1.45
TP 11.21 5832 6.06	27.01	
5+61.10	24.07	11.25 10.57 c0.68
6+12.15	24.58	10.74 8.20 c2.54
6+63.20	25.09	13.23 9.15 c4.10
7+14.25	25.60	12.72 8.51 c4.21
7+65.30	26.11	12.21 8.39 c3.82
8+16.24 - MH #38 Δ 1°37'	26.62	11.70 8.20 c3.50
1+46.53		
8+62.89	27.23	11.09 1.32 c9.77
9+09.44	27.83	10.70 8.84 c1.86
9+56	28.44	9.88 8.56 c1.32

Block 6

3832

10+02.54-MH ³⁷ A321	29.04	0.87	29.91	9.28 6.87
TP 5.51 42.96	37.45			13.00 6.53 6.77
10+50.18 BM	29.66 37.22	5.74		07.23 M.H. 87 87.23
10+97.31	30.28			12.88 6.63 6.75
11+45.41	30.90			13.06 6.53 6.53
11+92.08	31.51			11.45 5.09 6.36
12+40.71	32.13			10.83 4.80 6.23
12+88.25	32.75			10.21 4.64 6.17
13+35.99-DF	33.37			9.50 4.02 6.57

Block 18

Jan. 8. 1952

9

BM 3.08	26.09	32.01	H.M.B.P. Lacina 107.06
0+0 = DF		26.75	9.84 4.14 5.70
4-47			
0+47		26.42	9.67 6.38 6.28
0+94		26.09	10.00 5.22 5.78
1+41		25.76	10.00 5.78 6.75
1+88 = 2.50/5.1 Lacina Existing Survey		25.43	10.66 8.76 6.91

	36.09		
0+0 = 3.5 H.O. / H.L. / Lo. C. = 50 Existing Semic	25.45	10.64 2.88 c 7.81	
1-41625			
0+41.62	25.74	10.35 2.27 c 8.08	
0+83.25	26.04	10.05 1.82 c 8.23	
1+24.87	26.33	9.76 1.99 c 8.27	
1+66.50 = MH #35 A 1° 45'	26.62	9.47 0.84 c 8.63	
TP 4.19 39.99 0.29	35.80		
6-4577			
2+12.23	26.94	13.05 3.22 c 9.23	
2+57.96	27.26	12.73 3.45 c 9.27	
3+03.69	27.58	12.41 3.60 c 8.72	
3+49.42	27.90	12.09 3.69 c 8.40	
3+95.15	28.22	11.77 4.39 c 7.48	

		39.99	
4+40.88 = MH #34	28.54	11.45 4.62 c 8.43	
5.5146			
4+92.34	28.90	11.09 4.95 c 5.14	
5+42.80	29.26	10.78 5.68 c 4.64	
5+95.26	29.62	10.37 6.39 c 4.88	
6+46.72	29.98	10.01 7.10 c 4.81	
6+98.17 = MH #33 - La Mancha	30.34	9.65 7.81 c 4.21	
5-4792			
7+46.02	30.68	9.21 8.71 c 5.86	
7+94.01	31.01	8.93 9.80 c 6.18	
TP 5.73 42.92 2.80	31.19		
8+41.93	31.35	11.57 9.27 c 5.70	
8+89.85	31.68	11.24 9.99 c 6.31	
9+37.77 = MH #32	32.02	10.90 10.52 c 6.28	
4.5069			

Block 5

4292

9+8846		32.37	10.55 2.27 6.38 0.78 3.19 3.65 38.67
BM	427	38.65	10.20 4.37 65.83
10+3915		32.72	9.85 4.57 65.28
10+8984		33.07	9.49 4.27 65.82
11+40.52 - M.H. 31		33.43	9.14 4.33 64.81
1-50			
11+90.52		33.78	8.79 2.16 64.63
12+40.52		34.13	8.44 3.76 64.74
12+90.52		34.48	8.09 3.25 64.84
13+40.52 D.E.		34.83	

Block 11

Jan 5-43
P.M. 11

BM	9.61	38.31	28.70	N.M. R.P. La Mancha + Ingraton 13.81 2.38 65.43
0-05 - M.H.				
0+0 = M.H. 29-2		La Mancha	24.50	
	5-41.47			
0+41.47			25.02	13.39 4.92 68.56
0+82.93			25.54	13.77 2.36 68.47
1+24.40			26.05	12.26 4.23 68.03
1+65.86			26.57	11.74 4.21 67.53
2+07.33 = M.H. 30			27.09	11.28 3.89 67.50
	5-41.47			
2+48.80			27.61	10.79 3.72 67.53
2+90.26			28.13	10.18 4.40 67.53
TP	5.59	41.50	24.0	35.91
3+31.73			28.64	12.86 3.33 67.53
3+73.19			29.16	12.34 4.70 67.64

3945			
4+91.99	29.42	10.03 4.37 c 5.66	
5+41.54	29.92	9.53 4.63 c 4.90	
5+91.03	30.41	9.04 4.89 c 4.15	
6+40.63 = DI	30.91	8.54 5.26 c 3.28	
BM	577	32.68	NWBP Moorland + 12950400 3368

Block 5

Jan. 8-42 PM

13

BM	2.95	31.65	2870	NWBP La Mancha 9790400
0+0	Existing MH#222	La Mancha	19.21	12.94 8.06 c 8.28 opp.
	7-46.905			
0+46.70			19.49	12.76 8.11 c 7.65
0+93.41			19.77	11.83 4.27 c 7.56
1+40.11			20.05	11.60 5.23 c 6.37
1+86.20			20.33	11.32 5.58 c 5.74
2+33.52			20.61	11.04 5.76 c 5.28
2+80.23			20.89	10.76 5.92 c 4.84
3+26.94	MH#21	19°58'	21.17	10.48 5.88 c 4.60
	5-41.81			
3+68.75			21.59	10.06 5.12 c 4.93
4+10.56			22.01	9.24 4.55 c 5.69

Block 2

28.73

4+43.91

19.35

938
8.18
972

4+88.72

19.79

894
1.60
c744

TP 5.71

32.94

1.50

27.22

5+33.48

20.24

1270
6.20
c740

5+78.22

20.69

12.25
5.36
c689

changed MH.

6+01.33 = MH # 22

20.92

1202
5.25
c683

8-49.82

6+51.15

21.42

11.55
4.25
c663

7+00.97

21.92

11.02
4.03
c669

7+50.80 DF

22.42

10.53
5.08
c550

check

460

28.34

0.25 stub
078263
28.31

La Mancha Drive Sewer Grader

15

0+0 = MH # 22

19.21

10.46
4.68
c638

2-44.25

0+44.25

20.03

9.64
3.79
c617

0+88.49 - Existing Pipe End of log rakers

20.86

8.81
4.12

1+44.09 = " " N of "

22.04

7.63
12.5
c638

TP

0.74

2+37.24

29.67

7.77

28.93

1+81.23

22.86

13.84
2.77
c607

2+18.57

23.68

13.02
7.42
c658

1-66.93

2+55.5 = MH # 29

24.50

12.70
8.76
c544

BM

8.00

36.70

28.76

N.W. BP
La Mancha
+ log rakers

	28.73			
4+43.98			19.35	938 2.18 972
4+88.79			19.79	8.94 1.50 c744
TP 5.71	32.94	1.50	27.23	
5+33.48			20.24	12.70 5.28 c740
5+78.21			20.69	12.25 5.36 c689
changed MH				
6+01.33 = MH # 22			20.92	12.02 5.20 c682
8-49.82				
6+51.15			21.42	11.57 4.20 c663
7+00.97			21.92	11.02 4.03 c669
7+50.80 DF			22.42	10.57 5.02 c650
check	4.60		28.34	0.25 tab 0.8263 28.31

0+0 = MH # 22			19.21	10.26 4.08 c638
2-44.25				
0+44.25			20.03	9.64 3.79 c617
0+88.49	Existing Pipe End of Ingraves		20.86	8.81 5.10 c662
1+44.09	" " of "		22.04	7.63 1.25 c638
TP	0.74	29.67	7.77	28.93
1+81.33			22.86	13.84 2.77 c607
2+18.57			23.68	13.03 7.44 c658
1-36.93				
2+55.5 = MH # 29			24.50	12.70 6.76 c544
BM	8.00	36.70		38.70
				N.W. 8P La Mancha + Ingraves

Block 16

B.M.	3.99	35.46	31.47	0.28 0.28 0.28 15.99 14.90 6.95 6.84
0+0 = 26.8 S of MH 17			20.97	14.16 3.82 c 10.34
3-41.29			21.30	13.85 4.50 c 9.35
0+41.29			21.30	13.50 4.65 c 9.15
0+82.58			21.63	13.11 4.43 c 8.68
1+23.88 MH 18 Δ 4.21			21.96	12.73 4.42 c 8.51
7-48.27			22.35	12.34 3.85 c 8.49
1+72.15			22.35	11.93 3.20 c 8.25
2+20.41			22.73	12.65 4.19 c 8.46
2+68.70			23.12	12.27 4.64 c 7.63
3+16.97			23.51	
TP	4.79	36.55	3.70	31.76
3+65.24			23.90	
4+12.52			24.28	

Block 16

50715-43

16

36.55				11.88 4.74 c 7.14
4+61.80 = MH #19 Δ 17° 18'			24.87	11.54 4.85 c 6.69
4-42.43			25.01	11.29 4.83 c 6.46
5+04.23			25.35	10.86 5.57 c 5.29
5+46.66			25.69	10.53 6.27 c 4.26
5+89.09			26.02	24.05 5+07.19 51.98
6+31.53 - D.F.			26.36	N.F.B.P. Yosemite + Ingridson 2864
check	4.87		31.68	
B.M.	7.93		28.62	

Block 17

BM	429	5730	33.01	N.W. B.P. 200' into 100' from
0+0	= 26.66 S of MH 26		25.08	13.22 4.88 c 7.35
	1-414			
0+41.4			25.50	11.80 4.38 c 7.42
0+82.8			25.91	11.41 5.06 c 7.45
1+24.2			26.33	12.97 5.06 c 7.91
1+65.6 = D.F.			26.74	10.56 5.25 c 5.31

Block 22

Jan 30-22

17

BM	1162	3569	24.07	N.W. B.P. E.B.P. V. C.F. & N.P.L. Dr.
0+0	= 30' S of MH # 92 Eden Dr.		20.99	14.70 14.15 c 8.35
	5-44.53			
0+44.53			21.44	14.25 4.35 c 9.90
TP	3.52	35.09	4.12	31.57
0+89.06			21.88	13.21 3.83 c 9.63
1+32.59			22.33	12.76 3.57 c 9.19
1+78.12			22.77	12.33 3.94 c 8.58
2+22.65 = MH # 10 Δ 19° 28' 30" From			23.22	11.87 4.59 c 7.37
	2 of corner			
	2-52.81			
2+75.46			23.75	11.34 5.01 c 6.33
3+28.27 = Δ 71° 58'			24.28	10.81 5.05 c 5.78
	1-50.07			
3+78.29 = D.F.			24.77	10.37 5.20 c 5.18
BM				S.F.B.P.

Reo from Ch. Ex. 110
pipe to MH # 10

Crown Point
Culvert No 1

1-30-43

Stakes offset 6' South of 2' Culvert

BM	0.57	33.37	32.80	S.F.B.P. La Mancha Boyce Dr.
0+0 = 1/4 Existing Culvert E of W. Boyce Dr.			22.59	10.78 4.78 c 6.00
0+48.17			21.17	12.70 5.32 c 6.88
0+96.25			19.75	13.62 7.97 c 5.65
1+44.52			18.33	15.04 10.04 c 5.00
TP	4.87	26.59	11.65	21.72
1+92.70 = Inlet E Side Buena Vista			16.90	9.69 6.18 c 3.51
1-26				
2+18.70 = Inlet W Side Buena Vista			16.40	10.18 6.66 c 3.52
4-48.075				
2+66.77			15.94	10.64 4.30 c 6.34
3+14.80			15.49	11.10 5.20 c 5.90
3+62.92			15.03	11.56 5.99 c 5.57
4+11 = 1/4 Existing Culvert E of Frostera			14.58	12.01 6.37 c 5.64
BM		613	20.46	S.F.B.P. La Mancha Frostera 2049

INDEXED

Culvert No 2

1-30-43

18

BM	2.05	30.69	28.64	S.F.B.P. Josemitex Incorated
0+0 = 1/4 Existing 18" Pipe E of El Buena Vista			18.95	11.74 5.25 c 6.49
2-42.8				
0+42.8			19.35	11.34 4.51 c 6.83
0+85.6 = A			19.75	10.94 3.67 c 7.27
2-45.95				
1+31.55			20.18	10.51 3.20 c 7.31
1+77.50 = 1/4 Existing 18" Pipe W of Boyce Dr.			20.61	10.08 4.53 c 5.55

Indexed
92

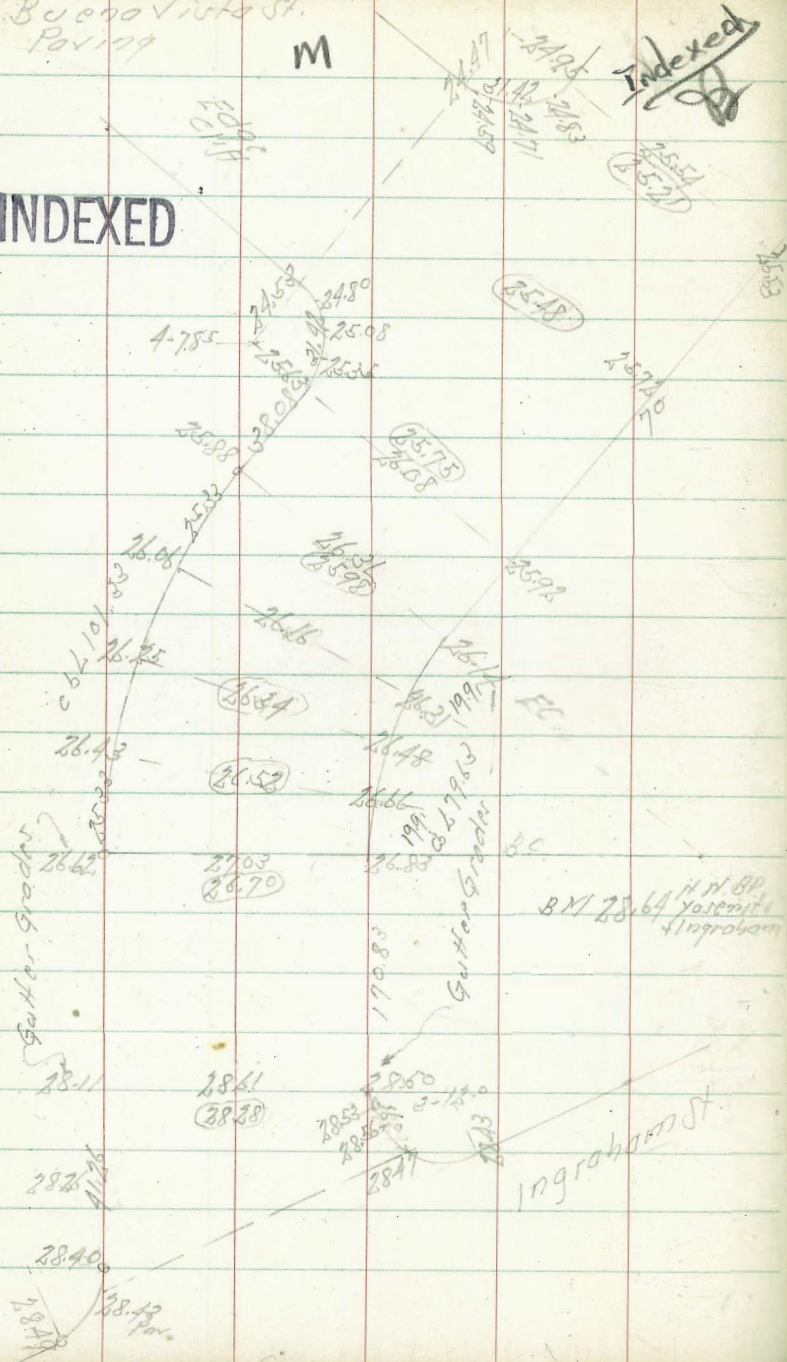
BM	865	21.07	12.42	Fly End 18" Flon line
0+0	= 29 E of Elk Scrd 11		12.42	865 2.86 5.79
	4.43.775			
0+4377			11.74	933 2.78 6.55
0+8755			11.06	10.01 4.24 5.67
1+3132			10.38	10.69 4.52 6.17
1+75.1	= 24 E of Elk Scrd 18' Cul.		9.71	11.36 5.80 5.56

Buono Vista St.
Paving

M

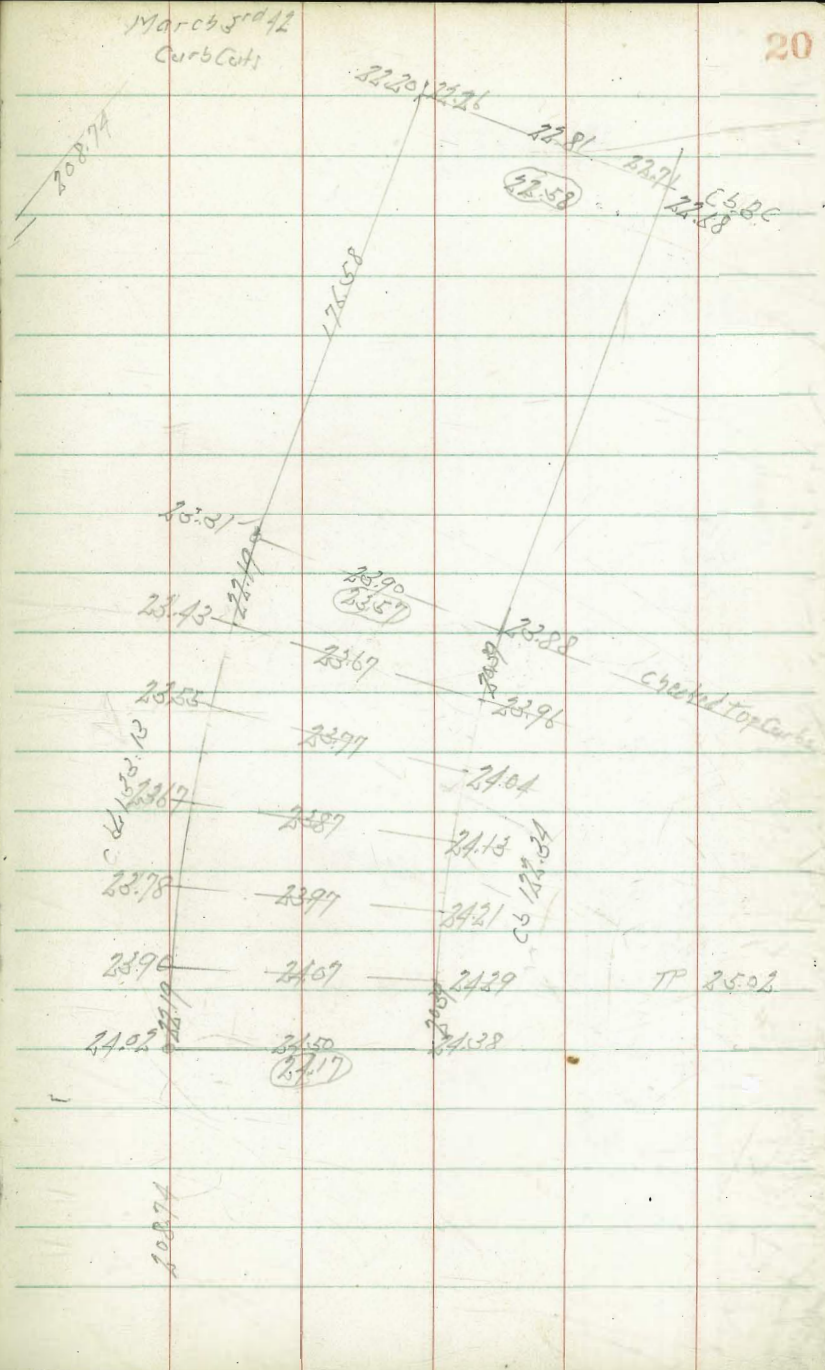
INDEXED

Indexed



March 3rd 42
Curb Cuts

20



INDEXED

364.25 Rec
344.65

21.81

22.03
22.36

22.32

21.87

22.49

22.45

Paved

22.20

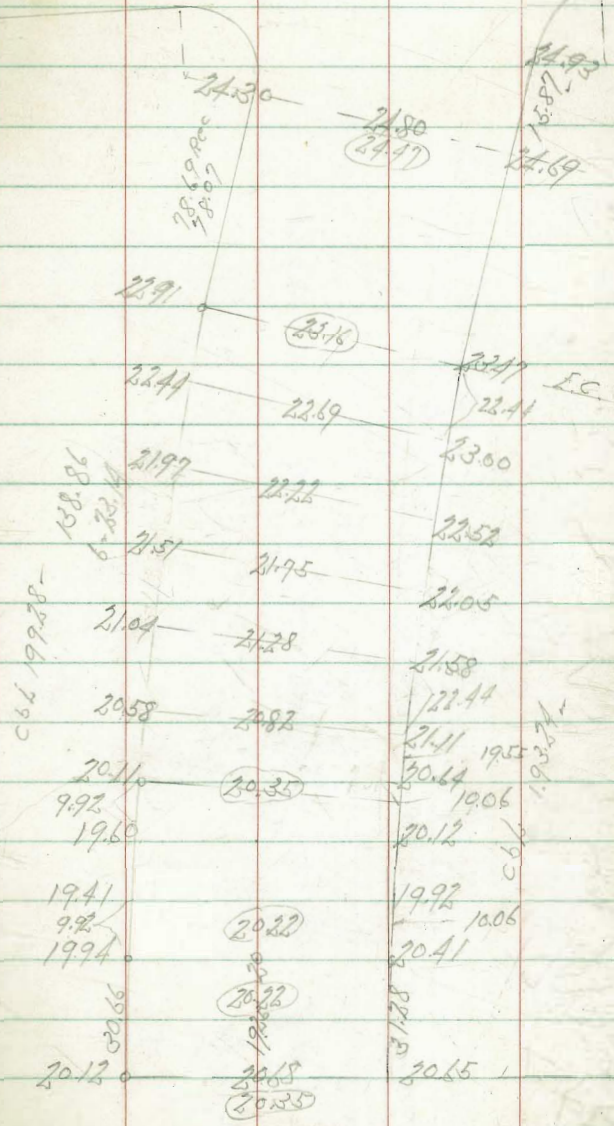
22.81

22.88

BY JFBP
La Cima y Frontera
17.91

La Cima Drive

La Mancha

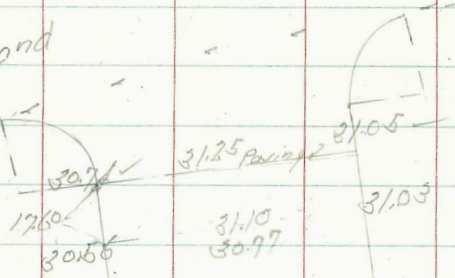


C6 197.38

13.20/64

344.65

Moorland



50825

27.48	28.02 27.60	27.97
27.31	27.52	27.80
27.14	27.35	27.63
26.96	27.18	27.46
26.79	27.01	27.29
26.62	26.84	27.13
26.45	26.67	26.96
26.28	26.50	26.79
26.11	26.33 26.33	26.62

565187.90
8-20-98

Curb 1 178.10
8-21-51

INDEXED

La Mancha

3

Promontory

INDEXED

~~Indexed~~

32.01

31.98

1482

3336

Paving

32.81

BM 2580
J.F.B.P.

Bayonne

31.79

32.09 Pav

31.74

PO 9082 30.97

215

3097
3130

3103

March 5-12
Curb Cuts

24

BM 2020
2020

7.57 27.012

2739

2723
2758

2758

Lograham

Paving

BM 2870
2870

2830 Pav

2862

Pav 2885

2840

2822

2870 Pav

2873

C 280 (28.43)

2883

2871 FC

2905

2913

2898

2938

2942

2925

2971

2972

2951

3004

10 ON

3002

2978

3036

3032

3005

3069

3061

3031

3102

3091

3058

3126 Pav

Paving

3085

1930

3113 Pav

P. 2220

C 62 20219

C 62 19662

Paving Grader East of West Alley Block 37
 Horizontal Hts From 320 to Bancroft
 Between Adams & Madison # 1590-72

2+65.2 - W.L. Bancroft 384.32 ^{6.30} 5 ^{6.29} 384.13

INDEXED

2+55.1 384.41 ^{6.00} 6.09 ^{5.36} 384.33 ^{6.73}

2+55.1 384.74 ^{5.18} 5.77 ^{4.23} 384.65 ^{4.66} ^{6.95} 6.71

2+15.1 - P.V.C. 384.89 ^{3.33} 5.18 ^{4.88} 4.27 ^{6.65} 384.80 ^{7.35}

1+77.6 385.01 ^{5.41} 5.51 ^{5.03} 384.91 ^{4.68} ^{6.33} 6.16

1+40.1 - E.L. NW 385.12 ^{5.20} 5.39 ^{4.74} 4.87 ^{6.56} 385.03 ^{6.32}

1+25.1 - W.L. NW 385.17 ^{5.25} 5.20 ^{4.81} 4.86 ^{6.44} 385.03 ^{6.86}

0+75.1 385.22 ^{5.18} 5.21 ^{4.85} 4.91 ^{6.25} 385.21 ^{6.30}

0+25.1 - Bk 385.47 ^{4.95} 5.04 ^{5.01} 4.92 ^{6.09} 385.38 ^{6.11}

0+0 = E.L. 32nd 385.39 ^{5.05} 5.01 ^{5.06} 5.00 ^{6.71} 385.41 ^{6.71}

BM 4.84 390.42 385.58 Top of 32nd E.L. 32nd

March 8-42
 Sisson
 Northport
 St. Maurel

Indexed
 JB

INDEXED

Carleton St. South Curb Grades
Evergreen to Willow

M

7532

INDEXED

2+0		65.21	10.11 10.76 FO.65	
TP	0.42	68.56	12.18	63.14
1+75		60.25	8.26 8.55 FO.29 CO.02	
1+50 = Brk		55.30	8.26 8.55 FO.29	
TP	0.31	52.08	11.79	51.77
1+25		50.41	1.67 1.84 CO.03	
1+0		45.52	6.56 6.80 FO.24	
0+75		40.64	11.44 11.42 CO.02	
TP	0.36	41.02	11.42	40.66
0+50		35.75	5.27 5.34 FO.07	
0+25 = C6EC		30.86	10.16 9.96 CO.02	10.18 0.2 Existing Curb
0+0 = W.L. Evergreen				

Aug 29 42
Supt
Hazard
FO

Indexed
92

Brk	0.83	87.23		86.40	50.80 Willow + Carleton
2+89.5 Existing				82.78	
2+75 = C6EC				80.08	7.15 6.92 CO.17
2+50 = Brk				75.12	12.11 11.26 CO.05
TP	0.12	75.32	12.03	75.20	
2+25				70.16	5.16 5.25 FO.09

Grader Road to Con Bin Collier Park

M
Indexed

	LT	S	RT	
5+0	-F102 -1.4 8.8 24.3	1538		9.1 F50 16.5
TP	9.93	19.51X	4.95	9.58
4+48.91	-2.2 3.2 F10.4 24.6	16.25	16.00	15.75 -1.7 4.2 F5.9 17.9
4+20	-3.0 7.0 F100 24.0	17.08	16.58	16.08 -2.0 3.8 F5.8 17.7
TP	2.04	14.03X	10.96	11.99
3+80	1.8 10.6 F5.8 17.7	18.20	17.70	17.20 5.8 9.7 F3.9 14.9
3+40	3.3 5.7 F2.6 12.6	19.68	19.18	18.68 4.3 5.3 F1.0 10.5
2+0	1.4 1.4 F1.0 9	21.50	21.00	20.50 2.4 2.5 F0.1 9.2
2+82.10	BC RT			
BM	1.24	22.95	21.71	on stub 2+82.10 S

F.8 1561 P76	Roadway 18'W ide			
Cuts 1.1	Fills 1.1			
	25.6 11.9 C18.7 22.7	8+01.79	E.C.	13.49 25.6 0.9 C25.2 21.6
	25.4 12.8 C12.6 21.6	7+62.3		13.73 25.4 4.3 C21.1 19.6
	25.1 15.0 C10.1 19.1	7+24.82	BC Lt	13.97 25.1 15.4 C19.7 28.7
	15.8 7.8 C8.0 17.0	TP	10.90	39.08X 1.73 28.18 7+24.82 on stub 28.15
	15.5 12.0 C3.5 12.5	7+0		14.13 13.8 +0.9 C16.7 25.7
	15.5 7.2 C8.3 17.8	6+5.0		14.44 15.5 7.2 C8.3 17.8
	4.8 5.9 F1.1 10.7	TP	11.80	29.91X 1.40 18.11
	4.8 1.8 C3.0 12.0	6+0		14.75 4.8 1.8 C3.0 12.0
		5+50	out	15.07 4.4 5.8 F1.4 11.1
				19.511

Dec 10 42
Sibson
Hazard
H. S. S. R.
29

	Lt	Z	Rt
10+07.51	$\begin{matrix} 3.3 \\ 7.1 \\ \hline F.C. F3.8 \\ 14.7 \end{matrix}$	12.07	$\begin{matrix} 2.8 \\ 13.8 \\ \hline F11.0 \\ 25.5 \end{matrix}$
10+0	RCH	12.25	
9+81.33	$\begin{matrix} 3.5 \\ 5.6 \\ \hline F3.1 \\ 13.7 \end{matrix}$	11.87	$\begin{matrix} 2.5 \\ 13.3 \\ \hline F10.8 \\ 25.2 \end{matrix}$
9+55.15	$\begin{matrix} 3.4 \\ 3.2 \\ \hline C 0.7 \\ 9.7 \end{matrix}$	12.03	$\begin{matrix} 2.4 \\ 6.5 \\ \hline F4.1 \\ 15.2 \end{matrix}$
TP	0.20	15.39T	11.98
9+28.97	$\begin{matrix} 15.0 \\ 9.1 \\ \hline C 5.9 \\ 14.9 \end{matrix}$	12.20	$\begin{matrix} 14.0 \\ 9.3 \\ \hline C 4.7 \\ 13.7 \end{matrix}$
9+02.79	$\begin{matrix} 14.8 \\ 10.3 \\ \hline C 0.3 \\ 19.2 \end{matrix}$	12.36	$\begin{matrix} 13.8 \\ 11.0 \\ \hline C 14.8 \\ 23.8 \end{matrix}$
TP	0.12	27.17T	12.03
8+76.67	$\begin{matrix} 26.5 \\ 13.6 \\ \hline C 13.9 \\ 22.0 \end{matrix}$	12.52	$\begin{matrix} 26.6 \\ 14.8 \\ \hline C 20.8 \\ 19.4 \end{matrix}$
8+50.43	$\begin{matrix} 25.9 \\ 12.8 \\ \hline C 13.1 \\ 22.1 \end{matrix}$	13.19	$\begin{matrix} 25.9 \\ 11.3 \\ \hline C 27.2 \\ 22.6 \end{matrix}$

3908T

	Lt	Z	Rt
13+44.96		15.34	
4790.96		6.54	9.61
For chock			10.9
13+06.47		15.00	$\begin{matrix} 10.9 \\ F9.6 \\ 23.4 \end{matrix}$
12+67.99	1.5	14.66	$\begin{matrix} 16.3 \\ F8.8 \\ 23.2 \end{matrix}$
8CPT	out		
12+50	$\begin{matrix} 1.6 \\ 2.0 \\ \hline F2.1 \\ 13.6 \end{matrix}$	14.50	$\begin{matrix} 1.6 \\ 10.8 \\ \hline F9.2 \\ 22.8 \end{matrix}$
12+0	$\begin{matrix} 2.1 \\ 2.6 \\ \hline F1.5 \\ 11.3 \end{matrix}$	14.05	$\begin{matrix} 2.1 \\ 10.6 \\ \hline F8.5 \\ 21.8 \end{matrix}$
11+50	$\begin{matrix} 2.5 \\ 2.0 \\ \hline F1.5 \\ 11.3 \end{matrix}$	13.60	$\begin{matrix} 2.5 \\ 10.5 \\ \hline F8.0 \\ 21.0 \end{matrix}$
TP	5.56	16.14	4.43
11+0	$\begin{matrix} 1.9 \\ 1.7 \\ \hline F0.8 \\ 10.2 \end{matrix}$	13.15	$\begin{matrix} 1.9 \\ 1.7 \\ \hline F5.8 \\ 17.7 \end{matrix}$
TP	6.39	15.01	6.77
10+50	$\begin{matrix} 2.7 \\ 2.0 \\ \hline F2.3 \\ 12.3 \end{matrix}$	12.70	$\begin{matrix} 2.7 \\ 12.2 \\ \hline F9.5 \\ 23.2 \end{matrix}$

1539T

Midway Drive At West Point Loma Blvd
 Grads For Rctop. See F.B. # 1636 P4 For Sketch M

	6.13 6.18 0.0	Lt	2	5.55 5.59 5.45	Rt	548	5.55 6.03 5.40	5.09 5.30
+75		4.82		F0.09			F0.48	F0.21 2 1/2

INDEXED

+50	6.77 6.80 F0.03	4.18	6.15 6.40 4.80	F0.25	488	492	6.23 6.75 F0.48	5.77 5.94
							F0.33 4"	

+25	7.40 7.55 F0.15	3.55	6.77 6.95 4.18	F0.18	428	417	6.78 7.18 F0.40	6.32 6.68
							F0.45 4 1/2 5 1/2	

+0	8.02 8.22 F0.20	2.93	7.40 7.56 3.55	F0.16	367	358	7.27 7.58 F0.21	F0.20 5 1/2
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0+75	8.66 8.78 F0.18	2.35	7.25 8.02 3.00	F0.07	306		7.89 8.02 F0.13	
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0+50	9.20	1.75	8.48 8.25 2.47	F0.03	248		8.47	
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0+0	9.95	1.00	9.25 9.21 1.70	F0.06	144		9.51	
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R.C. on Midway Lox Ploma
 BIV #2 7.59 10.49X 2.90
 BIV 8.05 10.95 2.90
 BPSMHW
 Midway Dr.
 W.P. Loma

Dec 21-12
 S15507
 Sommermyer
 Hill
 Road

Indexed
 93

31

+75	4.24 5.14 F0.47 5 1/2	4.51 5.25 F0.74	6.14	4.22 4.52 F0.21 3 1/2	6.27	6.56	5.23	5.12 5.23 F0.11
-----	--------------------------------	-----------------------	------	--------------------------------	------	------	------	-----------------------

+50	4.31 4.52 F0.23 2 1/2	4.18 4.61 F0.43	6.77	3.83 4.22 F0.41 4 1/2	6.66	6.90	6.27	4.18 4.22 5.07 4.58 F0.39 F0.36 4 1/2
-----	--------------------------------	-----------------------	------	--------------------------------	------	------	------	---------------------------------------------------------

+25	4.14 4.28 F0.14 1 1/2	3.98 4.23 F0.25	6.97	3.64 3.89 F0.25 3"	6.85	6.53	6.64	4.31 3.86 4.99 4.27 F0.66 F0.43 5"
-----	--------------------------------	-----------------------	------	-----------------------------	------	------	------	------------------------------------------------------

+91.2	4.10 3.97 3.87 0.10	6.98	3.44	3.90 4.20 F0.30 3 1/2	7.05	6.90	7.05	4.05 3.89 4.60 3.92 F0.55 F0.33 4"
-------	------------------------------	------	------	--------------------------------	------	------	------	------------------------------------------------------

+50	4.45 4.27 0.08	6.50	3.99 3.90 6.96	6.6	6.92		2.03 3.57 4.28 3.68 F0.25 F0.11 1 1/2
-----	----------------------	------	----------------------	-----	------	--	---------------------------------------------------------

+25	4.93 4.86 F0.07	6.02	4.35 4.20 F0.00	6.60	6.65		4.20 3.94 4.02 F0.18 F0.14 2 1/2
-----	-----------------------	------	-----------------------	------	------	--	-------------------------------------------------

+10	5.50 5.48 F0.02	5.45	4.87 4.96 F0.09	6.08	6.13		4.82 4.36 5.29 4.63 F0.47 F0.27 3 1/2
-----	-----------------------	------	-----------------------	------	------	--	---------------------------------------------------------

10.49A
10.95

Lt L Rt

INDEXED

			5.88 5.95		
475		5.07			
4150	5.61 5.66 FO.05	5.34	5.60 5.68 FO.08	4.77	6.18 6.18 6.0
4125	5.21 5.45 FO.23	5.93	5.39 5.40 FO.11	5.07	5.88 6.00 FO.12
3794	4.80 5.74 FO.94	6.15	4.91 5.35 FO.44 5.4	5.56	5.39 5.64 FO.17
		10.95			

0.7 Semitape Rt/Lt

4+25	4.52 4.27 CO.28	6.65 6.40	
470	4.17 4.04 CO.13	6.75	6.17 4.75 5.04 FO.25
3+95	4.05 4.02 CO.02	6.87	
3+50	3.99 4.10 FO.4	6.83	
3+25	3.91 4.12 FO.21	7.01	
2+91/2		7 1/2	
4+0	4.50 4.50 6.0	6.42	2 on Curve
3+50	4.57 4.55 CO.02	6.25	
3+0	4.62 4.66 CO.02	6.30	
RM	802	10.92	2.90

S.E. Curb Return
Midway & Frontier
Curb Grades

See FB 1638 P4
For Sketch Gutter
1.81
5.95
Fo. 54
Curb Grade

20' End PRC 6.07

INDEXED

10' End PRC 6.19
6.16

BM 7.98 10.88

0+62.0 140°57'30"
P.R.C. Frontier 6.15
6.02

3.78
4.32
Fo. 54
0.67
Grade

0+46.5 105°48'07.5"
3 6.05
5.82

3.98
4.33
Fo. 35
Fo. 58
Grade

0+31 70°28'45"
2 5.79
5.62

4.18
4.86
Fo. 68
Fo. 85
Fo. 18
2 1/4

0+15.5 35°14'22.5"
1 5.53
5.34

4.46
5.43
Fo. 99
Fo. 06
Fo. 039

0+0 C.B.R.C. Midway 5.20
5.04

4.76
5.86
Fo. 10
1.26

BM 6.90 9.80

2.90

Indexed
28

N.W. Curb Return
Midway & West Point Loma Blvd.
Curb Grades R 17.5

34

Curb Gutter

1+38 End of Curb 1.52
1+22.23 = 5+0 5.16

1+05 Ex. Mt. 99 Cb 5.54
5.25 on Cb 5.11
5.05 6.00

0+72.23 = 4+50 6.26
31.58 4.62
5.06
Fo. 44 5.70 5.41
5.58

4 4+133°06' 4.18 5.04
0+40.65 E.C. on Midway 6.70 6.06 6.07
Fo. 88

3 0+30.48 99°49'30" 6.77 4.11 4.96
5.23
Fo. 12 6.15

2 0+20.32 66°33' 6.83 4.05 4.89
4.92
Fo. 88 6.22

1 0+10.17 33°16'30" 6.89 3.99 4.84
4.66
Fo. 67 6.25

0+0 = B.C. on West Loma 6.90 3.98 4.83
4.81
Fo. 83 6.28

-19 6.90 6.25

BM Curb 7.98 10.88 2.90

BM Gutter 8.21 11.11 2.90

Franklin 2 of Semitang
to Midway

35

2+40.89 BC

2+25 0° 23.85 6.87 ^{4.68}
~~4.82~~
50.15 1 3/4

2+0 1° 00.60 6.73 ^{4.82}
~~5.14~~
50.32 3/4

1+75 1° 37.25 6.57 ^{4.98}
~~5.24~~
50.21 5/8

1+50 2° 14.10 6.37

1+26 2° 34.68 6.25

BM 5.42 11.55 6.13 2 Nail
1+26 DR

Kurtz St Setter Grades
 State Highway to Greenwood.
 Stakes Set 12' 14' of Kurtz By others

7+50					-13.87	$\frac{19.94}{4.56}$ c15.38.
7+25					-13.92	$\frac{19.99}{4.53}$ c15.46.
7+0					-13.97	$\frac{20.04}{4.29}$ c15.65.
6+75					-14.02	$\frac{20.09}{4.24}$ c15.85.
6+50					-14.07	$\frac{20.14}{4.21}$ c15.73.
TP	4.07	6.07	6.98	2.00		
6+25					-14.12	$\frac{23.10}{7.13}$ c15.97.
6+12.87					-14.14	$\frac{23.12}{7.25}$ c15.87.
5+84	Man Hole Existing Sewer West of State Hwy				-14.20	$\frac{23.18}{23.27}$ -0.09
TP	5.29	8.98	3.35	3.69		
BM	2.54	7.04		4.50		SFTOP Rail Hancock Greenwood

INDEXED

July 9-43
 S. 5507
 B. 1155
 8.077

36

Indexed
 93

9+75					-13.42	$\frac{19.49}{3.82}$ c15.57.
9+50					-13.47	$\frac{19.54}{4.32}$ c15.27.
9+25					-13.52	$\frac{19.59}{3.81}$ c15.98.
9+0					-13.57	$\frac{19.64}{4.36}$ c15.38.
8+75					-13.62	$\frac{19.69}{4.46}$ c15.4.
8+50					-13.67	$\frac{19.71}{4.69}$ c15.35.
8+25					-13.72	$\frac{19.79}{4.22}$ c15.97.
8+0					-13.77	$\frac{19.81}{4.38}$ c15.46.
7+75					-13.82	$\frac{19.89}{4.34}$ c15.35.

6.07

B.M		2.65	7.50	S. E. Top of Rail Hancock + Greenwood 4.50
11+70.42	= 2 Greenwood According to Plan		-13.03	20.18 out
11+50			13.07	20.22 3.82 c/15.70
11+25			-13.12	20.27 3.29 c/15.98
11+0			-13.17	20.32 3.87 c/15.45
10+75			-13.22	20.37 4.57 c/15.70
TP	5.52	7.15	4.44	1.63
10+50			-13.27	19.34 4.34 c/14.90
10+25			-13.32	19.39 4.31 c/15.08
10+0			-13.37	19.44 4.29 c/15.15

6.07

Greenwood 50
 1250 # 200
 Fd Mon
 25 x 25
 RR Hub
 RR Rail

Sewer Grades Alley Blk 872 H Wehrmann
Hancock - Gainer - Safferson

Prelm Levels + Ties
F.B. 1651-45

July 14, 43 38
515107
81/55
8057

3+50			-6.95	14.05 4.92 c913
	INDEXED			
2+25	J Hancock - M.H.		7.02	14.12 4.90 c922 on S stub
B.M.	5.26	7.10	1.84	3+25 J Hancock 1651-46
2+0			-7.10	
2+50			-7.25	
2+0			-7.40	
1+50			-7.55	
		5.003		
1+0			-7.70	
0+50			-7.85	
0+0	H. Kurtz		-8.00	
0-23	EX 11/17/43		-8.07	

8+50	J Moore - M.H.		-5.45	13.07 4.28 c837
8+0			-5.60	13.27 5.25 c797
TP	4.80	7.62	4.28	2.82
7+50			-5.75	13.85 4.28 c857
7+0			-5.90	13.06 4.08 c873
6+50			-6.05	13.15 4.02 c913
6+0			-6.20	13.30 4.64 c876
5+50	J RPB 852 Hancock B.M. Gainer	4.95	2.15	13.45 4.39 c906
5+0	J Gaidoo - M.H.		-6.50	13.60 5.11 c849
4+50			-6.65	13.75 5.16 c857
4+0			-6.80	13.90 4.86 c904

~~Indexed~~

7.10

13+50 -3.35 $\begin{matrix} 11.75 \\ 4.57 \\ \hline 7.18 \end{matrix}$

12+0 -3.70 $\begin{matrix} 12.10 \\ 4.60 \\ \hline 7.50 \end{matrix}$

12+50 -4.05 $\begin{matrix} 12.45 \\ 4.82 \\ \hline 7.57 \end{matrix}$

TP 4.96 8.40 4.18 3.44
 12+0 = 55 left on van = M.H. -4.40 $\begin{matrix} 12.02 \\ 4.18 \\ \hline 7.84 \end{matrix}$

11+50 -4.55 $\begin{matrix} 12.17 \\ 2.84 \\ \hline 7.33 \end{matrix}$

11+0 -4.70 $\begin{matrix} 12.32 \\ 4.27 \\ \hline 7.45 \end{matrix}$

10+50 -4.85 $\begin{matrix} 12.47 \\ 4.29 \\ \hline 7.68 \end{matrix}$

10+0 -5.00 $\begin{matrix} 12.62 \\ 4.88 \\ \hline 7.84 \end{matrix}$

9+50 -5.15 $\begin{matrix} 12.77 \\ 4.74 \\ \hline 8.03 \end{matrix}$

9+0 -5.30 $\begin{matrix} 12.92 \\ 4.84 \\ \hline 8.08 \end{matrix}$

7.62

Ground 4.5 2.9 3.9

14+80 = DF -2.44 $\begin{matrix} 10.84 \\ 4.50 \\ \hline 6.34 \end{matrix}$

14+50 -2.65 $\begin{matrix} 11.05 \\ 4.15 \\ \hline 6.65 \end{matrix}$

14+0 -3.00 $\begin{matrix} 11.48 \\ 4.18 \\ \hline 6.94 \end{matrix}$

8.40

Sexton Grader Pearl St.
Alley west of Cabrillo to E Miramar Ave

INDEXED

3+52	D.F. Miramar	173.93		8.40 2.25 65.75
	6.50	182.33	0.65	175.83
3+11.75		168.40		8.08 0.63 67.43
3+71.50		162.89		13.59 7.41 67.18
TP	12.46	176.48	0.35	164.02
3+81.25		157.38		6.99 3.44 67.35
1+91.0	Broad	151.87		12.50 2.72 24.72
B.M.		9.36		155.01 11.7 Pearl St Cabrillo
1+42.25		148.52		15.85 7.20 66.65
TP	13.05	164.37	0.09	151.32
0+95.5		145.18		6.23 0.09 66.14
0+47.75		141.84		9.57 5.06 64.51
0+0	Franklin Ave Alley west of Cabrillo	138.50		0.41

151.4 / Back opp.
Page

Aug. 25-43
Sisson Walker &
Bliss Hazard

Indexed
B

B.M.	4.05	119.22		115.17	J.F.B.P. Pearl St Sifard
TP	10.99	128.30	1.91	117.31	
B.M.	11.88	139.01	1.17	127.13	S.W.B.P. Pearl St High Ave
TP	12.82	151.41	0.42	138.59	

Gainer St. Grader
Azusa St to 100' W

25' wide

974-72 Prop. Survey
1630-78 x Sec

Sept 14, 43

41

INDEXED

Indexed
92

1+0

0+50

0+05

0+0 = W Azusa

BM

587

35.31

29.44

No. 1 Post
N.E.
Azusa
R. 14
1630-78

Curb Grades East Side College Ave.
North of El Cajon Blvd.

M

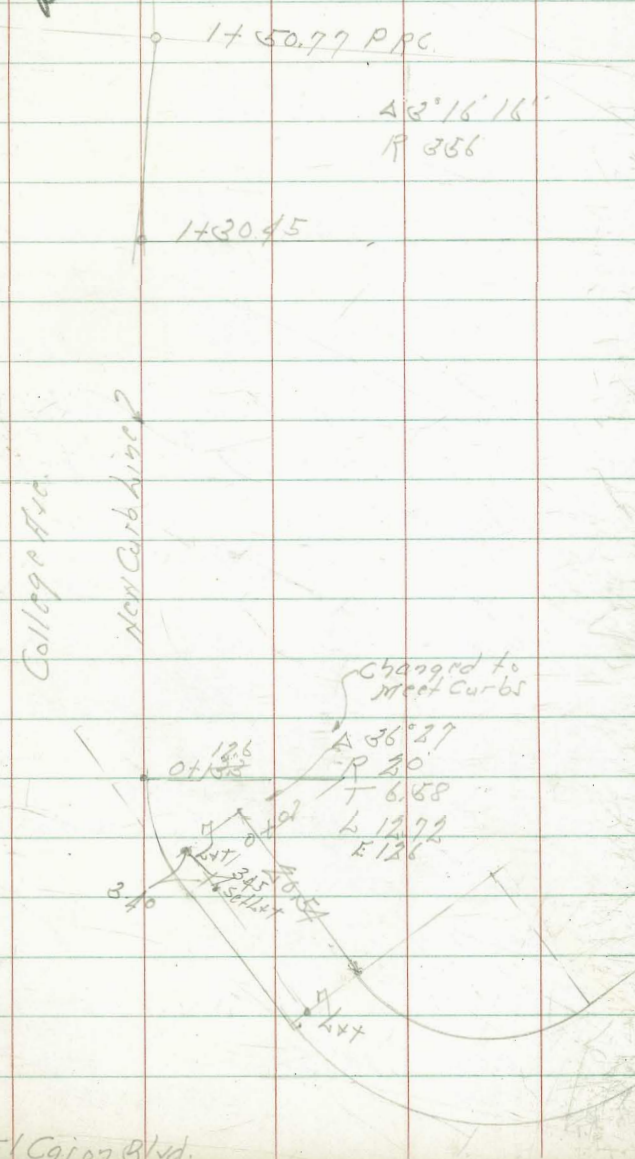
INDEXED

		Cb Grade	
1+50.77 PRC	1'379	463.97	5.29
1+40.61	0'4895	464.03	5.23 on Cb
1+30.45 B.C. R356 D1838		464.07	5.19
1+10.22		464.16	5.10
0+90 = Gut. Bck		464.25	5.01
0+76		464.38	4.88
0+30 = Gut. Bck		464.51	4.75
0+13.6 = P.C.		464.58	4.68
0+6.2 = Curve		464.64	4.64
0+0 = B.C. 20'R		464.64	4.63 on Exst. Cb
BM	3.99	469.26	465.27 N.W. BP El Cajon College Ave.

Sept 25 1913
S.W. 02
8/155
8499

42

~~Indexed~~



Juan St Curb Grader
Taylor to Rosacran
State on 9 lines

M

Oct 26. 43
5.500
81.02
8099

INDEXED

3+50	W.L. Rosacran	4.10	5.08 5.32 Co.8	4.88	4.20	5.98 5.32 Co.7
2+0	EL. Rosacran	4.30	5.88 4.64 Co.12	4.40	4.40	5.78 5.48 Co.3
2+50		4.43	5.75 4.63 Co.1	4.53	4.53	5.65 5.28 Co.4
2+0		4.55	5.63 4.64 Co.10	4.65	4.65	5.53 5.45 Co.4
1+50		4.68	5.50 4.7 Co.8	4.78	4.78	5.40 5.80 Co.4
1+0		4.80	5.38 4.78 Co.6	4.90	4.90	5.25 5.28 Co.7
0+70		4.88	5.30 4.86 Co.4	4.98	4.98	5.70 5.83 Co.6
0+40	Br. k.	4.95	5.23 5.8 Co.2	5.05	5.05	5.13 5.25 Co.8
0+0	W.L. Taylor	4.75	5.13 5.46 Co.6	4.75	4.75	5.43

BM 546 10.18 4.72 SERP Taylor x Juan

Nov. 2. 43

43

Indexed
98

2+80	W.L. Gairner					
3+0	EL. Gairner	4.85	4.5 4.3 Co.2	4.95	4.95	4.4 4.3 Co.8
2+50		4.72	4.6 4.2 Co.4	4.82	4.82	4.5 4.3 Co.3
2+0		4.60	4.8 4.1 Co.7	4.70	4.70	4.7 4.6 Co.5
1+50		4.47	4.7 4.4 Co.5	4.57	4.57	4.8 4.8 Co.0
1+0		4.35	5.0 4.6 Co.4	4.45	4.45	4.9 4.8 Co.1
0+50	SA. Ho/nh Rosacran	4.22	5.1 4.8 Co.3	4.32	4.32	5.0 4.7 Co.5
BM		4.50		9.36	4.86	S.M. Cat Stake Juan Rosacran

Water Grader Alley Blk 13 Sub Lots 20 to 51
 Blk N Teralta. From Polk to Orange
 Betwean 39th + 40th St

INDEXED

3+70	Blk			359.00	⁹⁶ 47 252
3+25				358.87	⁹⁷ 36 47
3+80				358.75	⁹⁹ 39 48
2+35				358.62	¹⁰⁰ 39 46
1+90	Blk			358.50	¹⁰¹ 39 47
1+50				357.50	¹⁰⁸ 37 47
TP	642	368.60	269	362.18	⁷⁹ 37 47
1+0				356.95	⁷⁹ 37 47
0+50	Blk			356.10	⁸⁸ 37 47
0+0	N. Polk			356.00	
BM	610	364.87		358.77	N.H. B.P. Polk + 40th

~~Indexed~~

5+73	St. Orange			367.75	635
5+20				361.40	⁷³ 47
4+70				360.60	⁸⁰ 38 42
4+15				359.72	⁸⁹ 39 40
				368.60	

Water Grader #116y Block 35 City Ht
 From University to Park between 35th & Charlot

INDEXED

410				359.02	10.2 5.0 c 5.2
+50				358.47	10.8 5.2 c 4.9
310				357.93	11.3 6.7 c 4.6
+44 - Brk				357.32	11.9 5.6 c 4.8
TP	7.91	369.23	1.97	361.32	
210				357.09	6.2 2.0 c 4.2
+50				356.82	6.5 2.6 c 3.9
140				356.56	5.7 2.0 c 3.7
0+46 - Brk				356.27	7.0 3.1 c 3.9
0+0 = N. University				355.20	
BM	15.75	363.29		359.54	11.4 5.8 c 5.6

Nov. 2. 43
 5.550
 81.55
 3299

Indexed
 JB

610 = St. Park				362.00	7.2
+50				361.18	8.1 3.4 c 4.7
5+0				360.87	8.9 4.2 c 4.9
4+52 - Brk				359.59	9.8 2.8 c 5.1
				369.23	

Sewer Grader Gainer St. Congress to S.D. Ave.
 San Diego Ave Gainer to Ely line of Riley
 Stakes offset 10' Lt of $\frac{1}{2}$ Sewer

BM	3.40	6.24	2.84	on Rim MH 2 Gainer + Congress 1897-67
0+0	= 2 Congress from MH #6		-3.35	
+25	INDEXED		-2.27	$\frac{9.51}{8.81}$ c 4.20
+50			-2.20	$\frac{9.41}{8.53}$ c 4.53
+75			-2.12	$\frac{9.21}{8.83}$ c 4.83
+100			-2.05	$\frac{9.29}{8.83}$ c 4.96
+125			-2.97	$\frac{9.21}{8.71}$ c 4.64
+150			-2.90	$\frac{9.41}{8.94}$ c 4.94
+175			-2.82	$\frac{9.61}{8.79}$ c 4.39
+200			-2.75	$\frac{9.79}{8.72}$ c 3.87
+225			-2.67	$\frac{8.91}{8.82}$ c 3.27

Nov. 5-13
 5.8807
 81.55
 8099

2+50				2.24				$\frac{8.81}{8.83}$ c 3.81
+75								$\frac{8.76}{8.54}$ c 4.22
3+07.56	A 50° 01' L.M.H. #7							$\frac{8.69}{8.19}$ c 4.50
TP	4.46	6.70	4.00	2.24				$\frac{9.55}{8.93}$ c 4.62
3+32.61								-2.35
3+57.66	A 40° 04' L.M.H. #8							$\frac{8.98}{8.72}$ c 4.56
4+0								$\frac{8.85}{8.27}$ c 4.58
+25								$\frac{8.78}{8.18}$ c 4.62
+50								$\frac{8.70}{8.95}$ c 4.95
+75								$\frac{8.63}{8.22}$ c 4.41
+100								$\frac{8.55}{8.30}$ c 4.25

Indexed
 JB

6.70

5+25 -1.78 $\begin{matrix} 8.48 \\ 4.72 \\ \hline c 3.76 \end{matrix}$

750 -1.70 $\begin{matrix} 8.40 \\ 4.70 \\ \hline c 3.98 \end{matrix}$

775 -1.63 $\begin{matrix} 8.33 \\ 4.70 \\ \hline c 4.18 \end{matrix}$

6+0 -1.55 $\begin{matrix} 8.25 \\ 4.70 \\ \hline c 4.08 \end{matrix}$

725 -1.48 $\begin{matrix} 8.18 \\ 4.22 \\ \hline c 3.96 \end{matrix}$

6+43.66 = F.L. Riley -1.42 $\begin{matrix} 8.13 \\ 4.57 \\ \hline c 3.58 \end{matrix}$

For Check: 4.75 1.95 $\begin{matrix} on stub \\ 3107.56 \\ \hline 1.97 \end{matrix}$

H56 St. Sewer Grader

Feb-10-14
Sisson 47
8/115
0.5602
F.L. EXNT
M.H.

BM 1194 12.16 0.22

EXNT 109
M.H. 247' W of W.L. Pacific 0.22

23 W of M.H. 0.38 $\begin{matrix} 11.78 \\ 5.35 \\ \hline c 6.43 \end{matrix}$

46 W = Next M.H. $\Delta 90^\circ$ 0.54 $\begin{matrix} 11.69 \\ 5.47 \\ \hline c 6.15 \end{matrix}$

72 = S.L. Ash 0.72 $\begin{matrix} 11.44 \\ 4.72 \\ \hline c 6.67 \end{matrix}$

Water Grades Alley Block 34 City Hts
From University to Polk Bct. Wilson + 3614

2+20 = Brk	INDEXED			360.15	$\frac{11.3}{.68}$ c4.3
3+0				359.78	$\frac{11.6}{.75}$ c4.1
2+50				358.86	$\frac{12.5}{.73}$ c3.9
2+0				357.94	$\frac{13.5}{.77}$ c4.9
1+50				357.02	$\frac{14.4}{.78}$ c4.6
1+39 = Brk				356.65	$\frac{14.9}{1.02}$ c4.5
1+0					$\frac{14.7}{1.06}$ c4.4
TP 994	371.39	2.51		361.45	$\frac{8.3}{.43}$ c4.0
0450					
0+0 = N.L. Univ				356.67	
B.M. 4.35	364.96			360.61	N.L. B.P. University + Wilson

Nov. 10. 43
515507
8155
8099

~~Indexed~~
99

6+0 = S.L. Polk				365.37	
5+66 = Brk				365.75	$\frac{5.6}{1.2}$ c4.1
5+50				365.45	$\frac{5.9}{1.7}$ c4.2
5+0				364.49	$\frac{6.9}{2.4}$ c4.5
4+50				362.52	$\frac{7.9}{2.6}$ c4.3
4+25 = Brk				363.05	$\frac{8.3}{2.5}$ c4.2
4+0				362.36	$\frac{9.0}{2.7}$ c4.9
3+50				360.98	$\frac{10.4}{3.3}$ c4.1

371.39

Gutter Grader West Side Canterbury Drive
Ridgeway to Palisades

+25 4.54 ✓

2+0 = B-4 INDEXED 4.63 ✓

+75 4.69
4.09
CO. 60 Topch

+50 4.76
4.63
CO. 70 Topch

+25 4.83 ✓

1+0 4.90
4.82
CO. 68 Topch

+75 4.97 ✓

+50 = B-4 5.04 ✓

+25 5.19 ✓

0+0 SM 5.34 ✓

Nov. 12-43

51.5509

81.11

81.99

+50

+75

+50

+25

+40

+75

+50

+25

2+0

+75

2+50

3.68

3.70 ^{good}

3.78

3.86

3.95

4.03

4.12

4.20

4.28

4.37

4.46

3.98

CO. 67 Topch

~~Indexed~~
98

49

Grades Culvert

Fl. Coron Blvd And Harrison Ave

Stakes off Set 5' E of Pipe Except 019 5' N. of Nch

BM 3.15 483.61 480.46 722nd St
5.78 ft

040: 2' South 4 of Nch Fl. Coron 472.75 10.86
= South 4 Edge of 217 lot 12.40

TP 3.67 480.88 6.40 477.21

0134 INDEXED 472.41 8.47
4.47
4.00

0174 = 2' 9" 12/14 472.00 8.88
4.27
4.61

1413 471.62 9.21
5.20
3.97

1452 = End Pipe 471.23 9.65
8.19
1.48

1467 = End Spill Way 471.03 9.85
9.27
0.58

Dec 21 43
515507
811W
8099

Indexed
JG

Gutter Grade

475.80 2.81
6.40
07.41

Top Ch So. End

475.25 5.63
4.27
07.36

7593
495

Grader Alley Block 19 Sherman's Add.
Between Island & S St. 200' W of 15th St

Jan 29-44
\$10.00
81.55
0.60

52

INDEXED

Indexed
98

2+0	$\begin{array}{r} 3.85 \\ 2.88 \\ \hline 67.00 \end{array}$	24.12	23.87	24.12	$\begin{array}{r} 3.85 \\ 5.12 \\ \hline 51.28 \end{array}$ 51.28 slab
+50	$\begin{array}{r} 3.97 \\ 0.97 \\ \hline 0.00 \end{array}$	24.00			$\begin{array}{r} 3.97 \\ 3.27 \\ \hline 0.00 \end{array}$
1+0	$\begin{array}{r} 4.10 \\ 2.66 \\ \hline 61.44 \end{array}$	23.87			$\begin{array}{r} 4.10 \\ 3.10 \\ \hline 61.00 \end{array}$
+50	$\begin{array}{r} 4.27 \\ 3.22 \\ \hline 61.00 \end{array}$	23.75			$\begin{array}{r} 4.22 \\ 3.22 \\ \hline 61.00 \end{array}$
+20 = Brk	$\begin{array}{r} 4.30 \\ 3.30 \\ \hline 61.00 \end{array}$ Nail Floor	23.67	23.42	23.67	$\begin{array}{r} 4.30 \\ 3.30 \\ \hline 61.00 \end{array}$ Nail Comp Floor
0+0 = 1/2 15th St		23.73	23.37	23.71	
BM	249	27.97		25.48	$\begin{array}{r} 4.30 \\ 3.30 \\ \hline 61.00 \end{array}$ 1/2 15th St Island Ave 15th St

Sewer Grades Hilley Block H Alta Vista Suburb
 Retrievon 45th & West St - T St & Occan View
 off set 0+0 to 1+0 6' East 1+0 to 5+90 6' West

Feb 10. 44
 S. Sisson
 81115
 0560-11

53

INDEXED

3+90

100's

84.08 c 4.18

9.08
 2.60
 4.18

+40 = MH #11

80.38

9.78
 5.00
 4.78

3+0

83.10

12.26
 2.23
 4.83

TP

5.34 93.16 4.15

87.82

07 0.40
 2+50

+50

82.75

9.22
 4.15
 5.07

2+0

82.40

9.57
 4.56
 5.07

BM

9.68

85.46

2 2+7
 4576+
 Occan View
 to West
 85.44

+50

100's

82.05

9.02
 4.67
 5.31

5+90 = D End

86.88

8.26
 2.13
 6.13

1+0

M
 10.27
 7.86
 5.71

100's

81.70

10.27
 4.84
 5.73

5+40

86.18

8.96
 4.92
 6.04

+50

81.25

10.64
 4.61
 5.96

TP

3.77 95.14 1.79

91.37

7.68
 1.79
 5.89

0+0 = 2 T St. MH #12

81.00

10.97
 4.67
 5.76

4+90

85.48

5.89

BM

4.93 91.97

87.04

075+06
 M.H. #12
 Page 51

4+40

100's

84.78

8.58
 2.57
 4.87

93.16

Survey of Grader Flley Block C 41 to Vista Suburb
Between 46th & Pyncheon - Ocean View & T.R.

Feb 14-41

54

INDEXED

Indexed
B

INDEXED
OCT 1941

370 = M.H. #7

90.22

750

240

750

91.87

12.13
5.09
07.04

140

91.46

12.58
5.35
07.23

0446 = A-10011 Pt. S.E. Ocean View

90.94

12.08
6.06
07.02

040 = M.H. Ocean View #14

90.52

TP 9.59 104.00 3.23

94.41

14.72
15.65
08.07
Ocean View to West

BM 12.30 97.74

85.44

Sewer Grader Alley Block H Alto Vista Suburb
 Between 4th St + West St T St + Logan

Feb 15 44
 Sisson
 Blair
 Barber

55

3+90		82.95	^{9.79} ^{4.26} 5.54
+40	MH #13	82.70	^{10.04} ^{4.15} 5.89
3+0		82.50	^{10.24} ^{3.91} 6.33
+50		82.25	^{10.49} ^{3.73} 6.76
2+0		82.00	^{10.74} ^{5.43} 5.31
+50		81.75	^{10.99} ^{5.16} 5.87
1+0		81.50	^{11.24} ^{6.10} 5.14
+50		81.25	^{11.49} ^{4.99} 6.50
0+0	MH #12 1/2 T St	81.00	^{11.74} ^{11.74 on F.L MH}
BM	558	92.74	87.16

~~Indexed~~

5+90	= DF - 40' N H L Logan	83.95	^{8.79} ^{5.19} 3.69
5+40		83.70	^{9.04} ^{4.02} 3.02
+90		83.45	^{9.29} ^{5.82} 3.47
4+40		83.20	^{9.54} ^{6.74} 5.80

5005

92.74

Proposed Building New Town Park
For Buddy Beds

BM	5.67	15.02	9.35	SIX BP G + Columbus
H	SFCOT	3.61	11.91	on stub
B		4.17	10.85	" "
C	INDEXED	4.39	10.63	" "
D		5.02	10.00	" "
E		4.92	10.10	" "
F		5.36	9.66	" "
G		5.34	9.68	" "
H		3.33	11.69	" "

BM	6.54	15.89	9.35	SIX BP G + Columbus
----	------	-------	------	------------------------

Sec #1

N Curb G St	6.65	9.24
37' N of Cb = Sky Walk	6.43	9.46
90' N of Cb = NY Walk	6.46	9.43
12' N of Cb = N.L.G St	5.5	10.4

Sec #2

N Curb G St	7.36	8.53
37' N of Cb = Sky Walk	7.22	8.67
90' N of Cb = NY Walk	7.16	8.73
12' N of Cb = N.L.G St	6.1	9.8

Indexed
c.s.K.

March 12, 44
Sisson
81155
8197

56

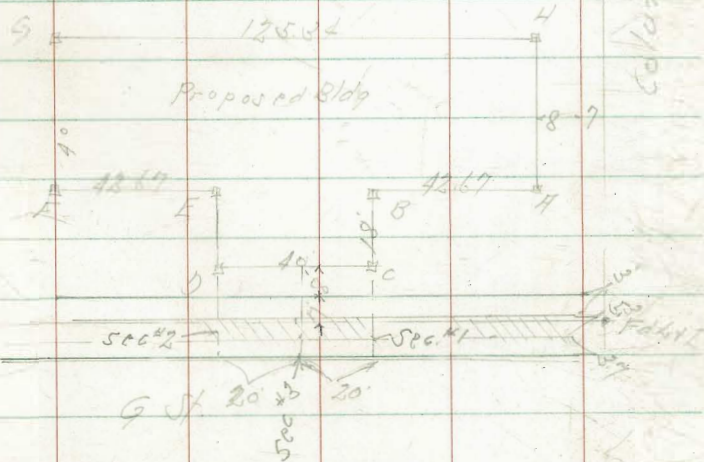
Curb + Walk Levels
March 28, 44

H = Hub level

15.89 X

Sec #2 = 2 Bldg.

N Curb of G St	7.09	8.80
37' N of Cb = Sky Walk	7.01	8.88
9' N of Cb = NY Walk	6.88	9.01
12' N of Cb = N.L.G St	5.8	10.1



Sewer Grader 89th St + Brooklyn Ave
 From 89th + Atkins to Brooklyn + 67th St.

INDEXED

3788.8				267.93	12.35 6.84 7.76
5738.8				263.62	18.61 9.51 9.10
TP	12.65	282.23	0.61	269.58	10.88 1.34
788.8				259.21	9.04
738.8 = MH of Brooklyn				255.00	15.19 7.41 10.92 6.72
TP	11.83	270.19	0.80	258.36	5.44 5.30
740				252.72	62.51 4.64 1.85
750				252.06	51.60 7.10 3.04 4.06 1.52
750				250.41	49.68 8.75 4.40 4.25 4.50 5.08
750				248.75	47.76 10.41 5.30 5.11 6.10
0+0 = Ex. of MH of Atkins + 19th St				247.10	245.88 12.06 8.50 6.51 6.77 6.81
BM	5.72	259.16		253.44	7.02" Pipe 5' X 8" Box Culv. Imperial 169/1551

Brooklyn Ave

89th St

Indexed

March 20-44
 Sunson
 81st
 8199

57

8789.52 = MH of 68th St				274.10	10.34 4.48 6.50
8739.52				273.90	10.64 4.83 6.01
7789.52				273.70	10.84 4.25 6.59
7739.52				273.50	11.04 4.15 6.89
6789.52				273.30	11.24 3.31 6.73
6739.52				273.10	11.24 3.34 8.10
5789.52 = MH				272.90	11.64 2.96 8.68
TP	2.97	284.54	0.66	281.57	9.53 0.81
5739.52				272.70	8.72
4789.52				272.50	9.22 7.31 6.92
4739.52 = 8th				272.30	8.73 2.63 5.93

Brooklyn Ave

282.22

13+89.52				282.55	
13+89.52				282.20	
12+89.52			0.00	281.85	
12+89.52				281.50	
11+89.52 = M.H.				281.15 ✓	
11+89.52				279.97	
10+89.52	st.p			278.80	8.06 8.74 09.32
10+89.52	Brooklyn Ave			277.62	9.21 2.84 06.40
9+89.52	Brooklyn Ave		0.20	276.45	10.41 4.23 06.18
9+89.52				275.27	11.59 5.64 05.95
TP	7.40	286.86	5.08	279.46	0.02 2.00 Brooklyn 287.54 279.42
		284.54			

17+39.52	DF & 67th St			285.00 ✓	
16+89.52				284.65	
16+39.52				284.30	
15+89.52	Brooklyn Ave		0.00	283.95	
15+39.52	Brooklyn Ave			283.60	
14+89.52 = M.H.				283.25	
14+39.52				282.90	

Macaulay St. Grader South Side
Capistrano to Clove
Sketch & Ties # 1557-68

S.L. Cb Grader 13.6
5.6
C 8.0

8+59.85 146.50

TP 8.75 160.14 0.20 151.39

TP 10.18 151.59 0.88 141.41

8+19.85 144.50

INDEXED

7+79.85 - RVC 141.50

7+49.85 139.00

7+19.85 - Brk 136.50

6+64.85 133.50

6+09.85 - F.C. + Wd. Capistrano 130.50

BM 12.42 142.29 129.87

N.W. 1/4 +
Capistrano +
Macaulay
#1557-76

April 18-45
S. 1/4 00
81.55
Osborne
3499

Sec 9 #199-1 Ties & Grader West of Capistrano

59

10+88.04 135.23

~~Indexed~~
QB

10+47.72 = A 139.40

BM 10+47.72 11.25 139.31 139.35

10+39.85 - FVK 140.50

TP 2.39 130.56 11.97 148.17

10+19.85 142.20

9+79.85 145.10

9+39.85 146.80

8+99.85 147.20

160.14

Macaulay

S

12733.60

120.00

18.8
17.8
0.40

11784.42

125.08

18.7
9.6
0.41

11736.23

130.15

8.7
4.6
0.47

TP

129

138.84

13.01

137.55

150.56

Twelfth St Grader Macaulay North

60

East Line
Curb Grade

0+90 = F.V.C.

143.10

7.5
7.0
0.05

0+90

145.00

5.6
5.2
0.2

0+30

147.00

3.6
3.4
0.16

0+0 = H.L. Macaulay

146.90

3.9
4.9
F1.0

150.56 R/Ford 959

Iona Drive Sewer Grader

M Tiers & Cross Sec.
See 1659-2

Stakes off set L/R or East of 2

INDEXED

+50				209.63	18.47 11.45 c7.02
TP	12.91	228.10	0.54	215.19	9.70 2.85 c6.85
3+0				206.03	15.80 6.71 c6.59
+50				202.43	18.90 18.67 c6.23
2+0				198.83	8.57 3.18 c5.33
TP	12.75	215.73	0.76	202.98	12.11 7.11 c5.00
+50				195.23	12.21 7.84 c5.70
1+0				191.63	14.52 9.02 c5.50
0+91.3 = M.H. #4 H. Kenwood				191.00	16.29 10.81 c5.68
0+45.65				189.22	11.10 Pale 0+45.07 1659-3
0+0 = M.H. #5 Iona				187.45	
35' S of S.L. Kenwood				202.54	
BM	1.20	202.74		202.54	

April 5-45
J. J. 507
Bliss
Asbornt
8499

~~INDEXED~~

8+0				249.05	15.20 9.83 c5.37
0+54.6				252.64	7+6.9
+69.3 = M.H. #2 = Brooklyntaxest				247.15	17.10 11.51 c5.49
TP	12.13	276.60	0.85	251.12	8.65 8.63 c8.02
+50				245.32	11.40 3.79 c7.61
7+0				240.57	16.16 7.94 c8.22
+50				235.81	9.13 6.30 c8.23
TP	12.74	25	0.96	239.23	13.89 5.49 c8.40
6+0				231.66	18.65 10.93 c7.72
+50				226.30	11.18 4.08 c7.10
5+0				221.56	14.87 8.13 c6.74
TP	13.04	240.19	0.95	227.15	
+51.3 = M.H. #3				216.92	
4+0				213.23	
				228.10	

BM		4.02	283.91	5" Pipe Marlton 1070 283.90 +1809.2
+793 = D.E.			271.13	16.80 2.83 c8.97
TP	12.41	1.08	275.52	
+50			269.66	6.94 0.12 c6.5
1140			267.16	9.54 3.19 c6.36
+593 = MH #1			265.13	11.47 5.05 c6.42
1040			261.45	15.15 7.60 c7.55
+50			258.35	18.25 10.25 c8.00
TP	13.15	276.60	0.80	268.45
940			255.25	9.00 1.26 c7.30
8450			252.15	12.10 5.78 c6.33
			264.25	

Brooklyn Ave Sewer Grades
 Iowa Drive to 59th St.

INDEXED

~~Indexed~~
 JB

3+0. = D.F.	250.15	13.55 6.28 c7.22
+50	249.65	14.05 4.22 c9.33
2+0	249.15	14.53 3.39 c11.36
+50	248.65	15.05 3.21 c11.84
1+0	248.15	15.53 4.23 c10.80
+50	247.65	16.05 7.59 c8.46
0+0 = M.H. #27 + Brooklyn to west	247.15	
11.06 26370	252.64	07 54.6 7+69.3 1070

Brooklyn Ave Sewer Grades
 60th St to 210th West

63

~~Indexed~~
 JB

BM 1.04	253.68	252.64	07 54.6 7+69.3 1070
2+10 = D.F.		237.55	16.13 10.09 c6.04
1+68		235.87	17.81 12.21 c5.60
TP 192	12.21	241.47	9.20 4.00 c5.20
1+26		234.19	
0+84		232.51	10.88 5.13 c5.75
0+42		230.83	12.56 7.44 c5.12
0+0 = Existing M.H. #60th St		229.15	14.24
BM 897	234.42	234.42	14.7 26 Brooklyn 11.06 60th 234.47

Imperial Ave Sewer Grader
 63rd & High to Imperial & Woodman

+50				200.54	18.05 2.57 c8.94
3+0				200.14	13.73 4.24 c9.09
+50				199.74	13.83 4.60 c9.23
2+0				199.34	14.23 5.31 c8.92
BM	0.95	213.57		212.62	SETOP F Hd Imperial & 63rd St. 14.69 6.08 c8.61
1+58.05	Equation	213.69		199.00	14.07 5.26 c8.81
1+430	M.H. #1			199.00	16.69 7.00 c9.69
1+01.5				197.00	16.69 7.00 c9.69
+60	B-t			195.00	18.69 12.32 6.37
TP	1.87	202.83	12.73	200.96	14.12 6.47 c7.65
+30				188.71	14.12 6.47 c7.65
0+0				182.42	20.41
BM	1.07	213.69		212.62	SETOP F Hd Imperial & 63rd St.

INDEXED

April 7-45
 S. J. S. 001
 811.11
 053.001
 8079

8+0					14.58 Lat 8.65 5.97 c5.54
+50				206.53	9.68 4.22 c5.44
7+0				205.50	10.71 5.46 c5.25
+50				204.47	11.74 6.89 c5.15
6+0				203.44	12.77 7.20 c5.48
+50				202.41	13.80 7.98 c5.87
TP	8.26	216.21	5.62	207.95	11.61 5.46 c5.99
+28	M.H. #2			201.96	11.61 5.46 c5.99
5+0				201.74	11.83 5.88 c5.95
+50				201.34	12.33 5.55 c6.68
4+0				200.94	12.63 5.02 c7.61
				213.57	

~~Indexed~~

INDEXED

April 25-45

S. J. S. 001
 811.11
 053.001

14.58 Lat
8.65
5.97
c5.54
9.68
4.22
c5.44
10.71
5.46
c5.25
11.74
6.89
c5.15
12.77
7.20
c5.48
13.80
7.98
c5.87
11.61
5.46
c5.99
11.83
5.88
c5.95
12.33
5.55
c6.68
12.63
5.02
c7.61

+75 = MH #4				211.88	12.48 2.92 2.76 c9.56
+50				211.73	12.63 3.26 c9.37
12+0				211.43	12.93 2.80 c9.13
+50				211.13	13.23 4.33 c8.90
11+0				210.83	13.53 4.78 c8.75
+50			500.5	210.53	13.83 5.21 c8.52
10+0				210.23	14.13 6.46 c8.28
+50				209.93	14.43 7.62 c8.81
TP	8.78	224.36	0.63	215.58	
9+0 = MH #3				209.63	6.58 0.64 c5.94
8+50				208.59	7.63 1.85 c5.77
		216.21			

+50				214.73	10.03 4.20 c5.72
17+0				214.43	10.33 4.22 c6.10
+50				214.13	10.62 4.12 c6.47
BM			1.07	223.68	52 Top of Hill Imperial 55+501
16+0 = MH #5 = 65+501				212.83	10.92 4.02 c6.84
+50				213.53	11.22 3.99 c7.23
15+0				213.23	11.52 3.82 c7.66
+50				212.93	11.82 3.29 c8.53
TP	2.88	224.75	2.49	221.87	
14+0				212.63	11.73 2.49 c9.24
+50				212.33	12.03 2.35 c9.78
13+0				212.03	12.33 2.67 c9.66
		224.36			

+50 219.56 9.83
4.55
c5.28

22+0 218.41 10.98
5.53
c6.45

+42.0 = MH #7 217.08 12.31
6.78
c5.53

21+0 216.83 12.54
7.55
c5.01

+50 216.53 12.86
8.21
c4.65

20+0 216.23 13.16
8.99
c4.67

+50 215.93 13.46
8.88
c4.78

TP 8.87 229.39 4.23 220.52

19+0 = MH #6 215.63 9.12
4.23
c4.89

+50 215.33 9.44
4.39
c5.03

18+0 215.03 9.72
4.42
c5.30

224.75

5.033

5.006

5.006

+40 = DF 223.93 5.96
0.87
c4.59

24+0 223.01 6.38
1.48
c4.98

+50 221.86 7.53
2.07
c5.16

23+0 220.71 8.68
3.44
c5.24

229.39

5.023

39th St. Gutter Grades
Adams to Edna Place

BM	5.56	376.43	370.87
TP	4.74	375.50	370.76

S.F. 8 P.
Adams +
39th St.

INDEXED

April 17 45
S. 807
Bliss
Osborn

Adams Arc

372.00	7144.10v	70.22	370.98
--------	----------	-------	--------

~~Indexed~~

3700

39th St

36940
C6. Cut

36944
State

Edna Place

39th St Gutter Grader
Madison Ave Works

~~Indexed~~

INDEXED

Case Gutter
36428 Profile 36955

39th St

Profile
to Case Gutter

36586
36555
Pay

Madison Ave

Orange Ave Gutter Grades
40th St. to Central

INDEXED

April 17-48
Simon
Bliss
Osborne

69

~~INDEXED~~
98

Central



Orange Ave

Rated Between Paving

40th St

Alley Bk 14 Teratta Lots 20-50 Bk N
 Paving Grader Between 40th & Central
 100 South of Orange St

F

H

INDEXED

1405 = Bk 363.80 364.00

140 363.81 364.01
 5.49
 4.65
 10.16
 5.30
 4.29
 01.00

0465 = Bk 363.90 364.10
 5.40
 3.40
 02.00
 5.30
 4.85
 00.35

0425 = Bk 363.80 363.90
 5.50
 2.19 on Corn
 1.37 Wall
 5.40
 3.40
 2.00 07 Garage

040 = S. Orange 363.60 363.60
 5.70
 363.99 363.99 CB

BM 4.68 369.30 364.62
 N.W. B.P.
 Orange
 40th St

April 17-45

Sisson
 Bliss
 Osborn

70

Indexed
 99

Dawson St. North of El Cajon
 West Line Prop. Grader

BM 0.87 394.75 393.88

INDEXED

~~INDEXED~~

S.W.B.P.
 El Cajon
 5.53.9

Prop. Grade

384.03	384.70	384.88	385.05
10.0	9.0	9.7	8.2
8.2	7.7	8.2	7.5
6.8	6.2	6.2	6.5

384.95

384.78

384.6

384.10

El Cajon

Dawson

July 7-15
 5.53.07
 8.11.11
 05.00.25
 8.09.9

El Cajon + 3776 St. S.W. Carb Retort
 Gutter Grader

71

BM 540 378.90 373.50

S.W.B.P.
 El Cajon
 + 374.08

373.08	373.13	373.18	373.23	373.55	373.47	373.59
5.72 = 10.11	5.77	5.72	5.67	5.55	5.43	5.31 = 10.11

El Cajon Blvd

~~INDEXED~~

377.59

373.47

373.05

373.23

373.18

18.3

18.3

18.3

7.5

373.13

373.08

7.5

372.89

372.50

Cross Sec # 1250 Page 1

INDEXED

1+79.60 = Brk on N		319.00		
1+69.6 = Brk on S	319.00		318.40	
1+49.6 = Brk on N	318.00		317.80	3.40 3.06 00.34 on Cass Pav
- Ely N + S Hill				
1+14.8	316.25		316.10	5.10 4.18 0.92
+ 84 = Fly 6' Conc on N	314.70			6.50 6.00 0.50
0+80 = FVC	314.50		314.40	6.80 6.75 0.05
0+60	313.00		312.90	8.20 7.50 0.70
0+40 = FVC	310.50		310.40	10.70 7.6 3.10
TP 1045	321.20		310.75	8.72
0+0 = W Florida	304.20		304.20	9.28 9.40 on Pav
B.M. 12.83	313.48		300.65	S.M.P. Florida

June 12-45
5.5500
31.45
Osborn

72

~~Indexed~~

BM			1.70	343.62	S.F. Plug on Meade + Georgia 3/30
TP	12.23	345.22	0.23	332.09	
TP	12.59	333.32	0.47	320.73	
				321.20	

Moore
R 99

Pav. Grades

Sherman SANTA RITA PLACE

D. Sisson

4-20-49

W.O. 31143

Ref. 1546-55-1780-27

0+30 = F.V.C.

INDEXED
WK
APR 22 1949

0+20 W.L. MISSION Blvd. to N

0+10 W c b to N

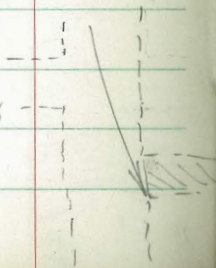
0+00 W.L. MISSION Blvd. to S

T.P 3.05 (4.02) 8.70 0.97

SW BP 2.59 9.67

YORK CT
SEAWALL

BM. Cor. Old Pav.
W. Cor. Strandway to N
at Santa Rita Pl



Lt. 50.

¢

Rt. 73

-1.44
5.46
4.85
C 0.61

-1.65

-1.44
5.46
5.16
C 0.30

-1.40
5.42
4.90
C 0.52

-1.48

-1.47
5.49
5.28
C 0.21

-1.25
5.27
4.89
C 0.38

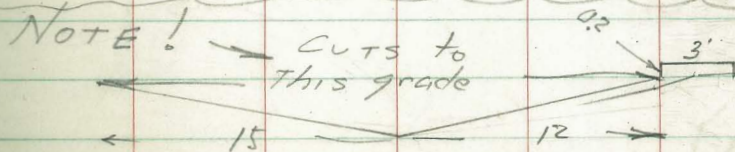
-1.31

-1.74
5.76

-0.95
4.97
4.75
C 0.22

-1.14

-1.30
5.32
5.44
F 0.12
Meet



Santa Rita PL.

Lt

£

Rx 74

3333

17497 E.V.C.

-0.79
4.81
4.55
C 0.26

-1.04

-0.79
4.81
4.42
C 0.39

17297

-1.07
5.09
4.72
C 0.37

-1.32

-1.07
5.09
4.92
C 0.17

170470 B.V.C.

-1.20
5.22
5.08
C 0.14

-1.40

-1.20
5.22
4.92
C 0.30

078313

-1.28
5.30
4.97
C 0.33

-1.48

-1.28
5.30
5.30
0.00

075656

-1.36
5.38
4.95
C 0.43

-1.56

-1.36
5.38
4.91
C 0.47

(4.02)

3 + 08.97 = E.L. Strandway to S

3927

$$\begin{array}{r} 3.40 \\ 5.16 \\ 5.15 \\ \hline C 0.01 \end{array}$$

3.05

$$\begin{array}{r} 3.20 \\ 5.36 \\ 5.21 \\ \hline C 0.15 \end{array}$$

2 + 6.97 = W.L. Strandway to N.

$$\begin{array}{r} +1.60 \\ 7.96 \\ 5.48 \\ \hline C 1.53 \end{array}$$

+1.28

$$\begin{array}{r} +1.46 \\ 7.10 \\ 7.07 \\ \hline C 0.03 \end{array}$$

$$\begin{array}{l} \text{B.M.} \\ \downarrow \\ \text{on Pav.} \\ 0.97 \end{array}$$

2 + 4.97 = E.L. Strandway to N.

3033

$$\begin{array}{r} +1.00 \\ 7.50 \\ 7.41 \\ \hline C 0.15 \end{array}$$

+0.74

$$\begin{array}{r} +0.98 \\ 7.58 \\ 7.59 \\ \hline F 0.01 \\ \text{MCC} \end{array}$$

2 + 16.36

$$\begin{array}{r} +0.40 \\ 8.16 \\ 7.91 \\ \hline C 0.25 \end{array}$$

+0.15

$$\begin{array}{r} +0.39 \\ 8.17 \\ 7.44 \\ \hline C 0.73 \end{array}$$

T.P. 7.59 (8.56) 3.05 0.97

1 + 80.03

(4.02)

$$\begin{array}{r} -0.20 \\ 4.22 \\ 3.84 \\ \hline C 0.38 \end{array}$$

-0.45

$$\begin{array}{r} -0.20 \\ 4.22 \\ 4.85 \\ \hline F 0.63 \end{array}$$

SANTA RITA PL.

LT

\$

RT 76

3798.97

4.93
3.63
3.48
C 0.15

4.75

4.93
3.63
3.63
C 0.2

3788.97

4.98
3.58
3.10
C 0.48

4.73

4.98
3.58
3.57
C 0.01

3778.97

4.90
3.66
2.61
C 1.05

4.65

4.90
3.66
3.69
F 0.03

3768.97 B.V.C.

4.73
3.83
3.32
C 0.51

4.48

4.73
3.83
3.81
C 0.02

3728.97 = W.L. Strandway to S.

(8.55)

3.80
4.76
4.76
O 0.00

3.55

3.80
4.76
4.56
C 0.20

Santa Rita Pl.

L

\$

R 77

4 + 20.97 = E. edge Con. Walk of Sea Wall

$$\begin{array}{r} 4.64 \\ 3.92 \\ \hline 3.89 \\ C 0.03 \\ \text{Meet} \end{array}$$
$$\begin{array}{r} 4.61 \\ 3.95 \\ \hline 3.93 \\ C 0.02 \\ \text{Meet} \end{array}$$
$$\begin{array}{r} 4.64 \\ 3.92 \\ \hline 3.91 \\ C 0.01 \\ \text{Meet} \end{array}$$

¹²
4 + 0.897 = E.V.C. = E.L. Ocean Front Walk

$$\begin{array}{r} 4.76 \\ 3.80 \\ \hline 2.94 \\ C 0.82 \end{array}$$

4.76

$$\begin{array}{r} 4.76 \\ 3.80 \\ \hline 3.79 \\ C 0.01 \end{array}$$

(8.56)

429.49 State of Santa Rita Pl
 Hendricks
 Green Mission Blvd to Ocean Front Walk
 Rorer

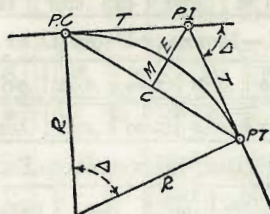
NO#	DWG.	7044 L	Finish Grade
410897		7.89	4.76
3198.97		1.91	4.74
318897		1.92	4.73
347897		2.00	4.65
346897	BVC.	2.17	4.48
3428.97		3.10	3.55
3408.97		3.60	3.05
24697	} Strandway	5.37	1.28
24497		5.91	0.74
2416.36		6.50	0.15
1480.03		7.15	-0.50
14497	Exc	7.69	-1.04
14297		7.97	-1.32
1409.70	BVC.	8.05	-1.40
0183.13		8.13	-1.48
0152.56		8.21	-1.56
0130	Exc	8.30	-1.65
0120		8.13	-1.48
0110		7.96	-1.31
0100	W.L. Mission Blvd.		-1.14
BM	526	$\frac{6.23}{1}$	0.97

Stakes set 5" Below finish
Grade.

Cor. Pav. NE Cor Strandway & Santa Rita Pl
 P-73 this Book

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

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

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. $\Delta=62^\circ 10'$ $D=8^\circ 20'$. From Table IV for 1° curve $T=3454.1$ and $\div 8\frac{1}{2}=414.49$ 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) $.3 \times C \times D^2$ or=defl. for 1 ft. from Table III $\times C$. For Sta. 158 of above curve= $.3 \times 54.5 \times 8\frac{1}{2}=136.2'$ 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 91.37. For from Table IV for 1° curve $E=960.6$ for $8^\circ 20'=960.6 \div 8\frac{1}{2}=91.27$ and from Table V correction=.10 or $E=91.37$ ft. Or suppose $\Delta=32^\circ$ and E is measured and found to be 42 ft. What is D ? From Table IV $E=230.9$ and $\div 42=5.5$ or $D=5^\circ 30'$.

DISTANCES FROM CENTER OF ROADWAY FOR
CROSS-SECTIONING.

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

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

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

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