1599

CROWN POINT

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.

1599

CITY ENGINEER

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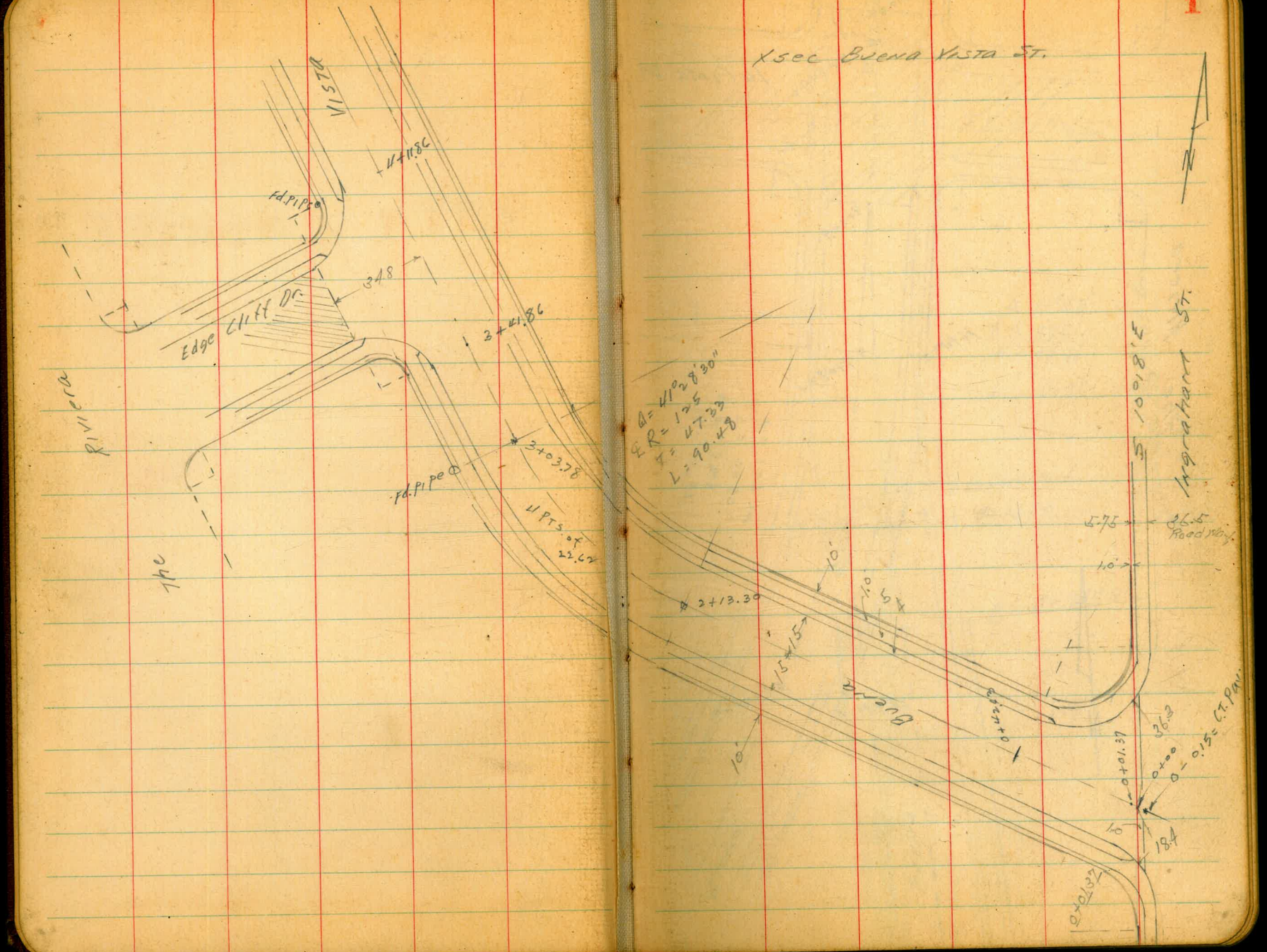
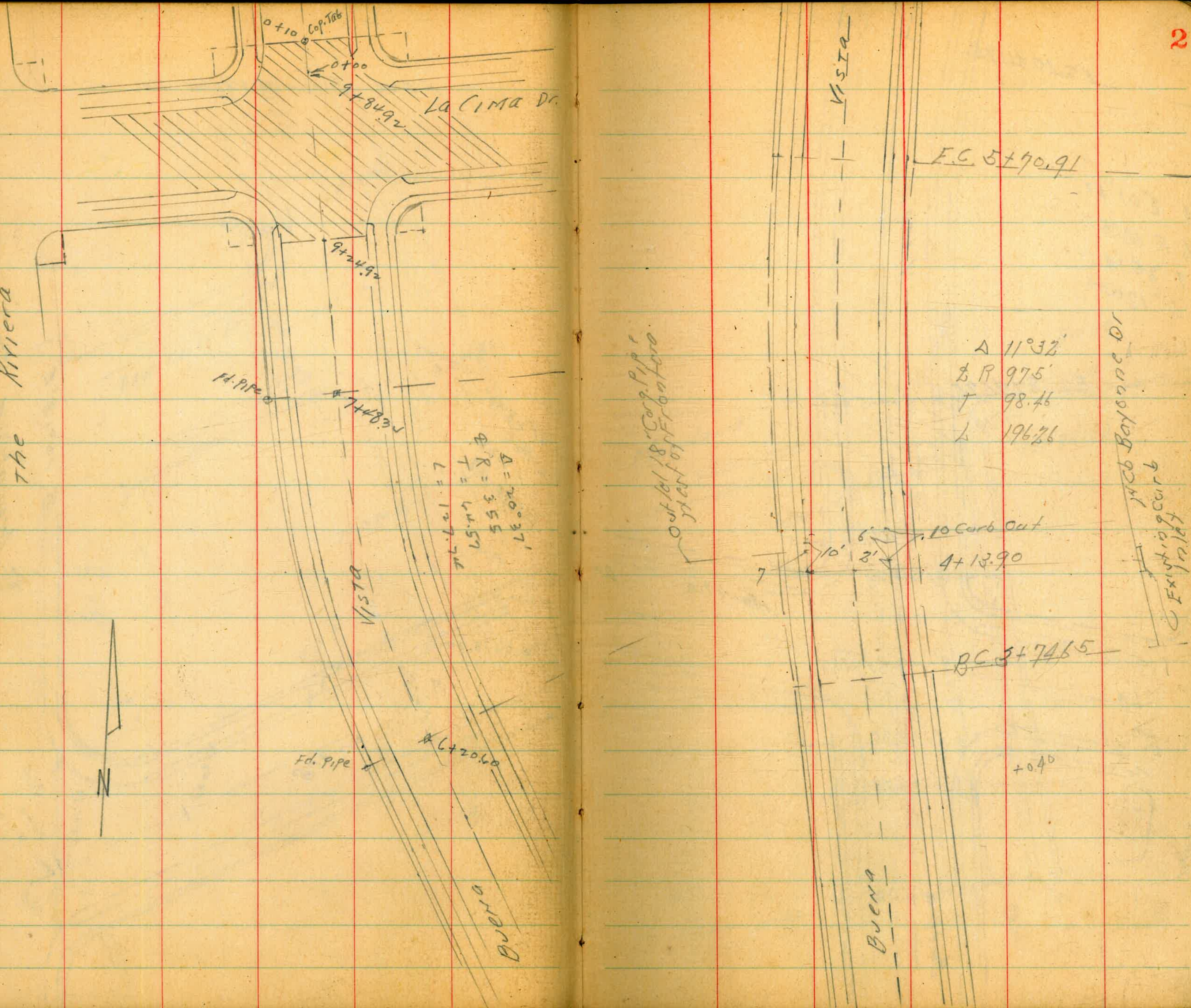
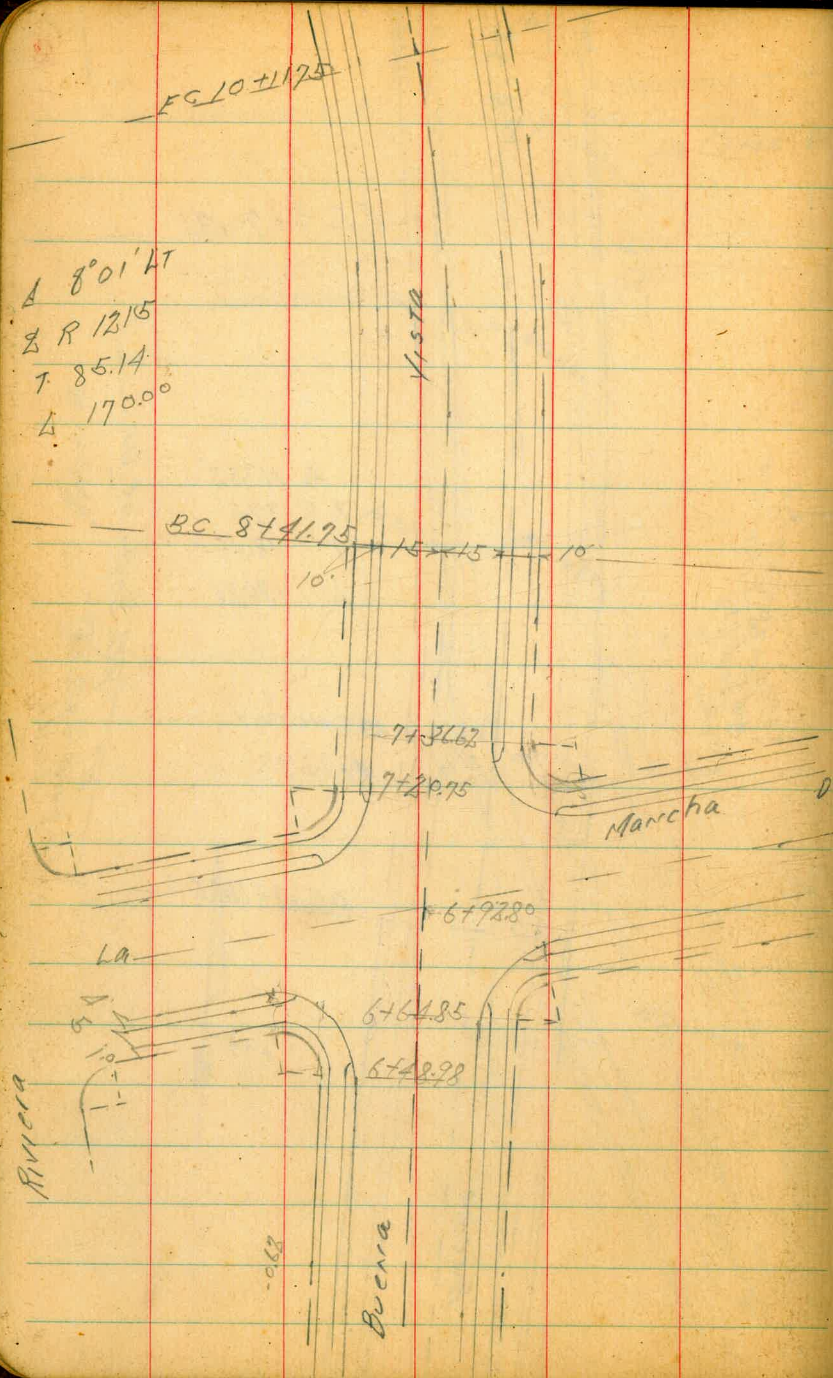
Made in U. S. A.

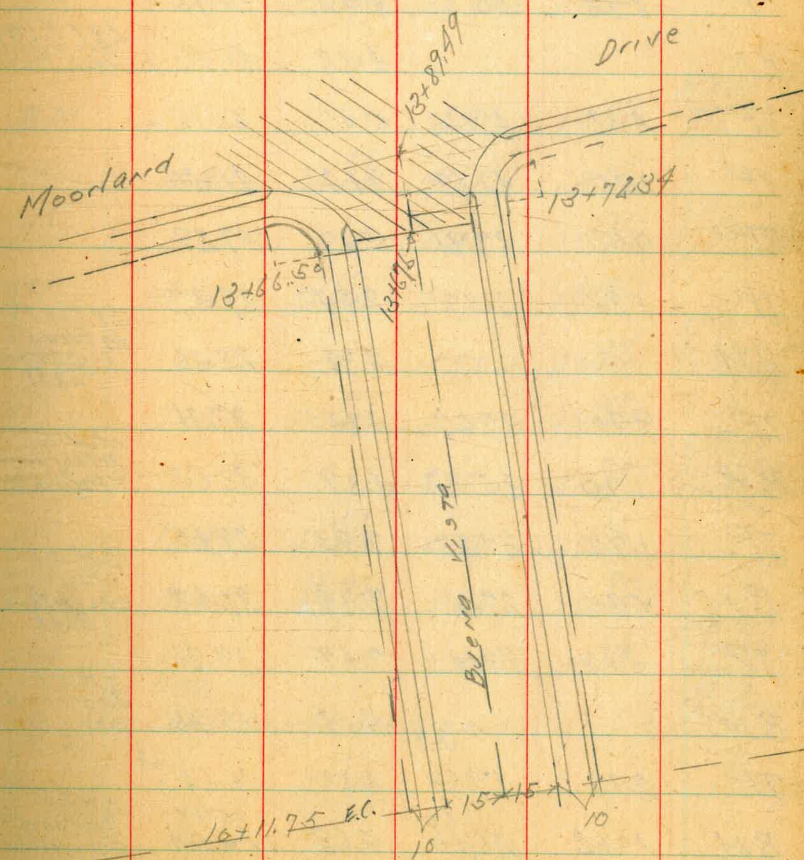
Xsec Buena Vista St.




0+10
Cop. Tak
0+00
9+84.92
La Cima Dr.
9+24.92
The Riviera
Fd. Pipe
7+48.3
Δ = 20°37'
R = 355
T = 64.57
L = 127.74
Vista
6+20.60
Fd. Pipe
Buena
N
Vista
E.C. 5+70.91
Δ 11°32'
R 975'
T 98.46
L 196.26
Bayonne Dr
10 Curb Out
4+13.90
10'
6'
3'
7
B.C. 3+74.65
+0.40
Existing Curb Inlet
Buena

Δ 8°01' Lt
℄ R 1215
T 85.14
L 170.00





Crown Point Bench Levels

BM	0.85	56.70		55.85	N.E.B.P. Grand Ave + Ingraham
TP	1.23	51.36	6.57	50.13	
			7.21	44.15	L+T Z Reed + Ingraham 44.15
TP	4.80	51.75	4.41	46.95	
TP	2.78	50.53	4.00	47.75	
B.M.			4.32	46.11 .21 ×	L+T Z Ingraham From South W.L. Pacific
TP	4.32	49.48	5.37	45.16	
TP	1.35	42.69	8.14	41.34	
TP	0.62	37.91	5.40	37.29	
TP	1.82	31.19	8.54	29.37	
BM			2.83	28.36	S.E. Top Hyd La Playa + Ingraham 28.43
TP	9.71	37.07	3.83	27.36	
BM	1.70	35.38	3.39	33.68	N.W. B.P. ✓ Moorland + Ingraham
TP	1.77	29.22	7.93	27.45	
BM	5.95	27.43	7.74	21.48	S.W. B.P. ✓ Moorland + Crown Point Dr. 21.68
TP	3.18	23.14	7.47	19.96	
BM			5.19	17.95	S.W. B.P. ✓ La Mancha + Crown Pt. Dr. 18.19
TP	2.97	19.61 × (~~19.67~~)	6.50	16.64 ok	
BM	10.62	26.60 (~~26.66~~)	3.63	15.98 (~~16.04~~)	S.W. B.P. ✓ La Cima + Crown Pt. Dr. 16.18
				16.98 ×	

Indexed C.S.K.

Feb-27-41 Sissoy Northern N. Moore

		26.60 (~~26.66~~)			
BM	9.93	34.09 (~~34.66~~)	2.53	24.07 (~~24.13~~)	N.W. B.P. ✓ Eden + Crown Pt. Dr.
BM	4.24	32.31 (~~32.37~~)	5.93	28.07 (~~28.13~~)	S.E. B.P. Crown Pt. Dr. + Ingraham N.E. Cor. Bridge Causeway 28.34 Walker
TP	1.30	22.33 (~~22.39~~)	11.28	21.03 (~~21.09~~)	
BM			6.86	15.47 (~~15.53~~)	N.E. B.P. ✓ Edge Cliff + Frontera
TP	4.39	23.08 (~~23.14~~)	3.64	18.69 (~~18.75~~)	
BM			5.37	17.71 (~~17.77~~)	S.E. B.P. ✓ La Cima + Frontera
TP	6.76	26.17 (~~26.23~~)	3.67	19.41 (~~19.47~~)	
BM			5.70	20.47 (~~20.53~~)	S.E. B.P. ✓ La Mancha + Frontera
TP	10.63	30.11 (~~30.17~~)	6.69	19.48 (~~19.54~~)	
BM			8.86	21.25 (~~21.31~~)	N.E. B.P. ✓ Moorland + Frontera 21.44
TP	12.39	41.52 (~~41.58~~)	0.98	29.13 (~~29.19~~)	
TP	2.09	38.99 (~~39.05~~)	4.62	36.90 (~~36.96~~)	
BM			5.35	33.64 (~~33.70~~)	N.W. B.P. ✓ Moorland + Ingraham 33.68 This Circuit

For check Levels See Page 51

Crown Point Bench Levels

BM	2.11	35.79		33.68	N.W.B.P. Woodland & Ingraham
TP	6.40	35.38	6.81	28.98	
BM			6.68	28.70	N.W.B.P. Lomonch & Ingraham
TP	6.21	38.54	2.05	32.33	
BM			5.53	33.01	N.W.B.P. Locinda & Ingraham
TP	2.47	32.19	8.82	29.72	
BM			3.55	28.64	N.E.B.P. Z, Rel. Yosemite & Ingraham
BM			4.06	28.13	S.E.B.P. Crown Point & Ingraham N.E. Cor Bridge 28.43 OK

For check Levels See Page 51

BM	1.59	35.27		33.68	N.W.B.P. Woodland & Ingraham
TP	4.50	31.57	8.20	27.07	
TP	8.86	39.09	0.84	30.73	
TP	9.77	48.33	0.53	38.56	
TP	5.20	50.30	3.23	45.10	
TP	2.80	49.20	3.10	47.20	
TP	8.64	56.00	1.84	47.36	N.E.B.P. Grand Ave & Ingraham 55.85
BM Starting			0.17	55.83	

Cross Section Buena Vista St.
Ingraham St to Moorland Drive

Indexed
C.S.K.

Feb 28-41
Sisson
Northboro
Moore

	Lt = W			℄			Rt = E
1+50	27.66 5.23 14.9	26.7 6.2 14.9	27.0 5.9 7.5	27.3 5.6	27.2 5.7 7.5	27.0 5.9 14.9	27.93 4.96 14.9
1+0	28.11 4.78 15=Cb	27.1 5.8 15	27.5 5.4 7.5	27.8 5.1	27.7 5.2 7.5	27.5 5.4 14.9	28.41 4.48 14.9=Cb
0+42.63 = Cb EC on Rt	28.66 4.25 14.9=Cb	27.6 5.3 14.9	28.1 4.8 7.5	28.4 4.5	28.4 4.5 7.5	28.2 4.7 14.9	28.99 3.90 14.9=Cb
0+01.37 = Cb E.C. on Lt	28.97 3.92 15=Cb	28.1 4.8 15		28.7 4.2			
0+0 = W.L. Ingraham on Paving	28.97 3.92 18.4=Cb	28.44 4.45 18.4	28.61 4.28 10	28.71 4.18	28.69 4.20 20	28.47 4.42 36.3	29.06 2.83 36.3=Cb
0-7.4 = W Cb Ingraham on Paving	29.06 2.83 34.7=Cb	28.49 4.40 34.7		28.75 4.14	28.65 4.24 30	28.43 4.46 61=Gut	29.06 3.83 61.0 Cb

BM 4.25 32.89 28.64 NW BP Yosemite & Ingraham

H.I

32.89 ✓

3+03.78 : EC				
TP	4.10	30.15	6.84	26.05
2+81.16				
2+58.54				
2+35.92				
2+13.30 = BC RT				
2+0				
		32.89		

	LT			RT	
26.38	25.6	25.8	26.0	26.0	25.9	26.64
3.77	4.6	4.4	4.2	4.2	4.3	3.51
15	15	7.5		7.5	15	15
		30.15				
26.57	25.8	25.9	26.1	26.1	26.0	26.79
6.32	7.1	7.0	6.8	6.8	6.9	6.10
15	15	7.5		7.5	14.9	14.9
26.72	26.2	26.2	26.2	26.0	26.1	26.97
6.17	6.7	6.7	6.7	6.9	6.8	5.93
15.1	15	7.5		7.5	14.8	14.8
26.94	26.4	26.3	26.4	26.2	26.2	27.14
5.95	6.5	6.6	6.5	6.7	6.7	5.73
15	15	7.5		7.5	14.9	14.9
27.12	26.4	26.5	26.6	26.4	26.3	27.33
5.77	6.5	6.4	6.3	6.5	6.6	5.56
15	15	7.5		7.5	14.9	14.9
27.25	26.4	26.6	26.7	26.6	26.5	27.45
5.64	6.5	6.3	6.2	6.3	6.4	5.44
15	15	7.5		7.5	14.8	14.8 = CT
		32.89				

Bucno Vista

4+01.86 = NL Edgecliff Dr.

3+91.86 = NCL

3+26.86 = ℄ Edgecliff

3+61.86 = S CL

3+51.86 = SL Edgecliff Dr.

3+41.86 = CL BC on Lt.

30.15

Lt = ℄ Rt = E

8

25.29	24.5	24.7	25.2	25.6			
4.86	5.7	5.5	5.0	4.6			
17.5=CL	17.5	15	7.5				
24.99	24.47	24.9	25.3	25.7			
5.16	5.68	5.3	4.9	4.5			
34.8=CL	34.8=Par	15	7.5				
24.59	25.2	25.5	25.8	25.7	25.5	26.23	
5.56	5.0	4.7	4.4	4.5	4.7	3.92	
34.8=Par	15	7.5		7.5	14.8	14.8	
25.06	24.53	25.2	25.6	25.9			
5.09	5.62	5.0	4.6	4.3			
34.8=CL	34.8=Par	15	7.5				
25.71	24.8	248	25.5	26.0	25.9	256	26.35
4.44	5.4	5.4	4.7	4.2	4.3	4.6	3.80
17.6	17.6	15	7.5		7.5	14.8	14.8
26.13	25.0	25.5	25.9	26.0	25.7	26.42	
4.02	5.2	4.7	4.3	4.2	4.5	3.73	
15	15	7.5		7.5	14.8	14.8	

80.15

	Lt		℄		Rt	
6+20.6 = BC Rt						
6+0	24.52 5.63 14.9	23.8 6.4 14.9	24.1 6.1 7.5	24.4 5.8	24.2 6.0 7.5	23.9 6.3 15	24.88 5.77 15
5+50	24.64 5.51 14.9	23.8 6.4 14.9	24.1 6.1 7.5	24.5 5.7	24.4 5.8 7.5	24.1 6.1 15	25.02 5.13 15
5+0	24.84 5.31 14.9	24.2 6.0 14.9	24.4 5.8 7.5	24.7 5.5	24.7 5.5 7.5	24.4 5.8 15	25.30 4.85 15
4+50	25.05 5.10 15	24.2 6.0 15	24.6 5.6 7.5	25.0 5.2	24.9 5.3 7.5	24.6 5.6 14.9	25.53 4.62 14.9
4+11.86 = CB EC on Lt	25.30 4.85 15	24.5 5.7 15	24.9 5.3 7.5	25.3 4.9	25.1 5.1 7.5	24.9 5.3 14.9	25.82 4.33 14.9
30.15	25.45 4.70 15=CB	24.8 5.4 15	25.1 5.1 7.5	25.5 4.7	25.4 4.8 7.5	25.2 5.0 14.8	26.03 4.12 14.8=CB
			30.15 ✓				

Buena Vista

8+0				
7+48.31 E.C.				
7+22.79				
TP	3.70	26.97	6.88	23.27
6+97.24				
6+71.69				
6+46.15				
		30.15		

	Lt		C		Rt	
	23.52	22.8	23.1	23.5	23.4	23.1	23.99
	3.45	4.2	3.9	3.5	3.6	3.9	3.98
	15	15	7.5		7.5	15	15
	23.81	23.0	23.3	23.7	23.6	23.4	24.35
	3.16	4.0	3.7	3.3	3.4	3.6	2.62
	15.1	15.1	7.5		7.5	15	15
	23.90	23.1	23.5	23.9	23.7	23.5	24.47
	3.07	3.9	3.5	3.1	3.3	3.5	2.58
	15.1	15	7.5		7.5	15	15
			26.97 ✓				
?	25.05	23.7	23.6	24.1	23.9	23.6	25.57
	5.10	6.5	6.6	6.1	6.3	6.6	4.58
	15	15	7.5		7.5	15	15
	24.25	23.4	23.8	24.2	24.0	23.8	24.70
	5.90	6.8	6.4	6.0	6.2	6.4	5.45
	15	15	7.5		7.5	15	15
	24.38	23.6	23.9	24.3	24.1	23.8	24.79
	5.77	6.6	6.3	5.9	6.1	6.4	5.36
	14.9-Cb	14.9	7.5		7.5	15	15-Cb
			30.15 ✓				

9+599 2 = 2 Lo Cima

9+1192 = 5 Cb

9+3492 = 5 Lo Cima

9+3492 = 5 Paving + Cb B.C.

9+0

8+50

26.97

Lt 2 Rt

21.45	22.16	22.46	22.65	22.88	23.01	23.47
5.57	4.81	4.51	4.32	4.09	3.96	3.50
3.5	15	7.5		7.5	15	3.5
21.76	21.28	21.86	22.09	22.30	22.52	22.74	23.33	23.76
5.21	5.69	5.11	4.88	4.67	4.45	4.23	3.64	3.21
3.5 Cb	3.5	15	7.5		7.5	15	3.5	3.5 Cb
22.38	21.94	22.07	22.47	22.67	22.79	22.82	22.85	23.37
4.59	5.03	4.90	4.50	4.30	4.18	4.15	4.12	3.60
17.6 Cb	17.6	15	7.5		7.5	15	17.6	17.6 Cb
22.70	22.21	22.56	22.81	22.80	22.69	23.18
4.27	4.76	4.41	4.16	4.17	4.28	3.79
15	15 Pav	7.5		7.5	15	15
22.89	22.0	22.4	22.7	22.6	22.5	23.35
4.08	5.0	4.6	4.3	4.4	4.5	3.62
15	15	7.5		7.5	15	15
23.17	22.1	22.7	23.1	23.0	22.9	23.69
6.83	4.9	4.3	3.9	4.0	4.1	3.28
15	15	7.5		7.5	14.9	14.9 Cb

26.97

Bacon Vista

	Lt			Rt	
1+50	21.72 5.75 15.1	21.1 5.9 15.1	21.2 5.8 7.5	21.7 5.3	21.5 5.5 7.5	21.4 5.6 15	22.22 4.75 15
1+0	21.96 5.01 15.1	21.3 5.7 15.1	21.5 5.5 7.5	22.0 5.0	22.0 5.0 7.5	21.7 5.3 15	22.46 4.51 15
0+50	22.22 4.75 15	21.5 5.5 15	21.8 5.2 7.5	22.1 4.9	22.0 5.0 7.5	21.7 5.3 15	22.73 4.24 15
0+10.40 = N.L. Paving	22.41 4.56 15	21.87 5.10 15	22.27 4.70 7.5	22.49 4.48	22.53 4.44 7.5	22.45 4.52 15	22.92 4.05 15
9+84.92 = N.L. Lo Cima = 0+0 Ahead	22.09 4.88 17.6 Cb	21.67 5.30 17.6	21.78 5.19 15	22.05 4.92 7.5	22.25 4.72	22.41 4.56 7.5	22.50 4.47 15	22.52 4.45 17.6	23.02 3.95 17.6
9+74.92	21.40 5.57 35=Cb	20.95 6.02 35	21.62 5.35 15	21.87 5.10 7.5	22.04 4.93	22.21 4.76 7.5	22.38 4.59 15	22.94 4.03 35	23.43 3.54 35=Cb

26.97

26.97

4+1390 = 1/4 Cb on Lt				
3+74.65 BC				
TP	6.59	29.39	4.17	22.80
3+50				
3+0				
2+50				
2+0				
		26.97		

	Lt		℄		Rt	
20.39 9.00 15.1	20.0 9.4 15.1	20.1 9.3 7.5	20.4 9.0	20.4 9.0 7.5	20.2 9.2 15	20.86 8.53 15
20.62 8.77 15	19.9 9.5 15	20.1 9.3 7.5	20.4 9.0	20.5 8.9 7.5	20.3 9.1 15	21.15 8.24 15
			29.39			
20.82 6.15 15.1	19.8 7.2 15.1	20.3 6.7 7.5	20.6 6.4	20.5 6.5 7.5	20.4 6.6 15	21.27 5.70 15
20.98 5.99 15.2	20.1 6.9 15.2	20.5 6.5 7.5	20.9 6.1	20.7 6.3 7.5	20.6 6.4 14.9	21.53 5.44 14.9
21.26 5.71 15.2	20.5 6.5 15.2	20.7 6.3 7.5	21.2 5.8	21.1 5.9 7.5	20.8 6.2 14.9	21.73 5.24 14.9
21.48 5.49 15.2	20.6 6.4 15.2	21.0 6.0 7.5	21.4 5.6	21.4 5.6 7.5	21.1 5.9 15	22.01 4.96 15 Cb
			26.97			

		Lt		℄		Rt	
6+0	23.96 5.42 15.2	23.3 6.1 15.2	23.4 6.0 7.5	23.8 5.6	23.7 5.7 7.5	23.6 5.8 14.9	24.39 5.00 14.9
5+70.91 = EC	23.41 5.98 15.1	22.6 6.8 15.1	22.9 6.5 7.5	23.3 6.1	23.2 6.2 7.5	23.0 6.4 14.9	23.97 5.42 14.9
5+31.65	22.65 6.74 15.2	21.8 7.6 15.2	22.2 7.2 7.5	22.5 6.9	22.5 6.9 7.5	22.1 7.3 15	23.10 6.29 15
4+92.40	21.80 7.59 15.2	21.1 8.3 15.2	21.4 8.0 7.5	21.8 7.6	21.6 7.8 7.5	21.3 8.1 14.9	22.26 7.13 14.9
4+53.15	21.04 8.35 15.2	20.3 9.1 15.2	20.6 8.8 7.5	21.0 8.4	20.8 8.6 7.5	20.7 8.7 14.8	21.59 7.80 14.8
= Sly End Curb Rt+Lt.		20.49 8.90 15 = Cb				21.01 8.38 15 Cb	

29.89

29.39

Buenavista

7+18.43 = NL La Mancha

7+08.18 = NCb

6+92.80 = L

6+77.42 = SCb

6+67.17 = SL La Mancha

6+48.98 = BC a LT

29.39

	LT	L	PT
25.50	24.7 247	25.3 25.5 25.5	25.5 25.6 26.33
3.89	4.7 4.7	4.1 3.9 3.9	3.9 3.8 3.06
16.5	16.5 15.4	7.5 7.5	15.4 20.7 20.7
24.84	24.2 24.8	25.0 25.3 25.4	25.6 26.3 26.63
4.55	5.2 4.6	4.4 4.1 4.0	3.8 3.1 2.76
31.0	31 15.4	7.5 7.5	15.4 40 40
	24.5 24.7	24.9 25.1 25.3	25.5 25.8
	4.9 4.7	4.5 4.3 4.1	3.9 3.6
	25.6 15.4	7.5 7.5	15.4 25.6
24.68	23.8 24.4	24.8 25.0 25.1	25.0 25.5 26.37
4.71	5.6 5.0	4.6 4.4 4.3	4.4 3.9 3.02
40.0	40.0 15.4	7.5 7.5	15.4 31.0 31
24.70	23.8 24.3	24.6 24.8 24.8	24.8 25.59
4.69	5.6 5.1	4.8 4.6 4.6	4.6 3.80
20.8	20.8 15.4	7.5 7.5	15.4 16.1
24.80	24.1	24.2 24.6 24.5	24.3 25.12
4.59	5.3	5.2 4.8 4.9	5.1 4.27
15=Cb	15	7.5 7.5	14.9 14.9=Cb

29.39

	Lt				Rt	
9+26.75	27.34 2.05 15.1	26.6 2.8 15.1	26.9 2.5 7.5	27.2 2.2	27.1 2.3 7.5	26.8 2.6 14.9	27.82 1.57 14.9
8+84.25	26.97 2.42 15.1	26.1 3.3 15.1	26.5 2.9 7.5	26.8 2.6	26.8 2.6 7.5	26.5 2.9 14.9	27.59 1.80 14.9
8+41.75 BC Lt	26.61 2.78 15.1	25.9 3.5 15.1	26.2 3.2 7.5	26.5 2.9	26.4 3.0 7.5	26.1 3.3 14.9	26.12 3.27 14.9
8+0	26.32 3.07 15.1	25.7 3.7 15.1	25.8 3.6 7.5	26.1 3.3	26.1 3.3 7.5	25.8 3.6 14.9	26.83 2.56 14.9
7+50	25.96 3.43 15.2	25.3 4.1 15.2	25.6 3.8 7.5	25.8 3.6	25.8 3.6 7.5	25.4 4.0 14.9	26.47 2.97 14.9
7+36.67 = EC on Rt	25.88 3.51 15.2 = CC	25.1 4.3 15.2	25.4 4.0 7.5	25.6 3.8	25.7 3.7 7.5	25.5 3.9 14.9	26.34 3.05 14.9 = CC
	29.39			29.39			

Buena Vista

							Lt		℄		Rt	
12+0						29.64 5.41 15	29.1 6.0 15	29.3 5.8 7.5	29.7 5.4	29.5 5.6 7.5	29.3 5.8 15	30.14 4.91 15
11+50						29.24 5.81 15	28.6 6.5 15	28.8 6.3 7.5	29.1 6.0	29.0 6.1 7.5	28.8 6.3 15	29.73 5.32 15
11+0						28.78 6.27 15	28.0 7.1 15	28.4 6.7 7.5	28.7 6.4	28.5 6.6 7.5	28.3 6.8 15	29.26 5.79 15
10+50						28.33 6.72 15	27.6 7.5 15	27.9 7.2 7.5	28.2 6.9	281 7.0 7.5	28.1 7.0 15	28.83 6.22 15
10+11.75 E.C.						27.98 7.07 15	27.2 7.9 15	27.6 7.5 7.5	27.9 7.2	27.9 7.2 7.5	27.7 7.4 15	28.47 6.58 15
TP	7.79	35.05	2.13	27.26					35.05			
9+69.25						27.65 1.74 15.1=CG	26.9 2.5 151	27.2 2.2 7.5	27.5 1.9	27.4 2.0 7.5	27.2 2.2 15	28.20 1.19 15=CG
		29.39							29.39			

BM			6.30	21.27	N.E.B.P. Moorland + Frontage 21.37 .37 Page 51
TP	341.	27.57	10.89	24.16	

13+89.49 = SCb

13+79.46 = SL Moorland

13+67.6 = Sly Paving

13+50

13+0

12+50

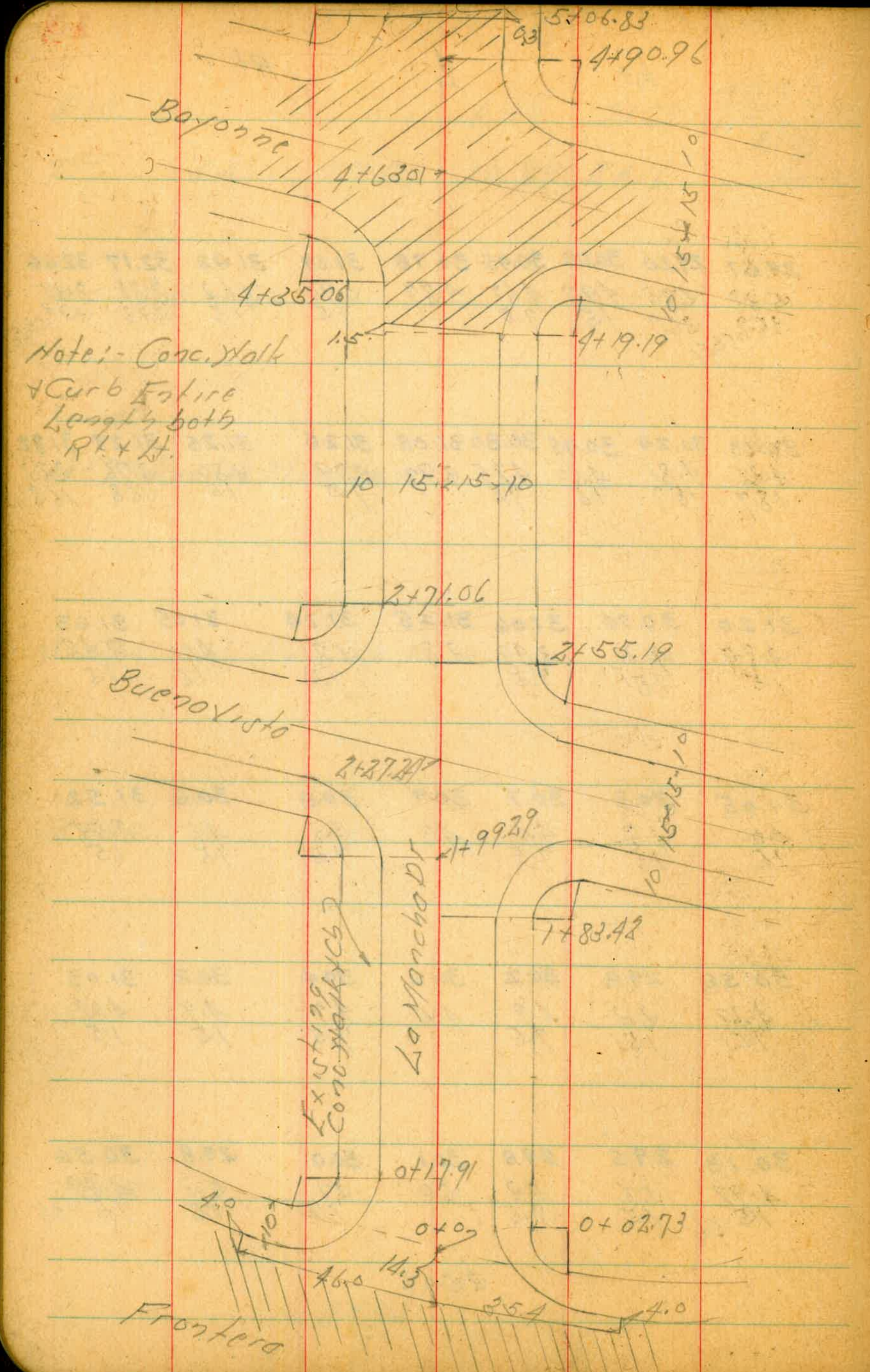
35.05

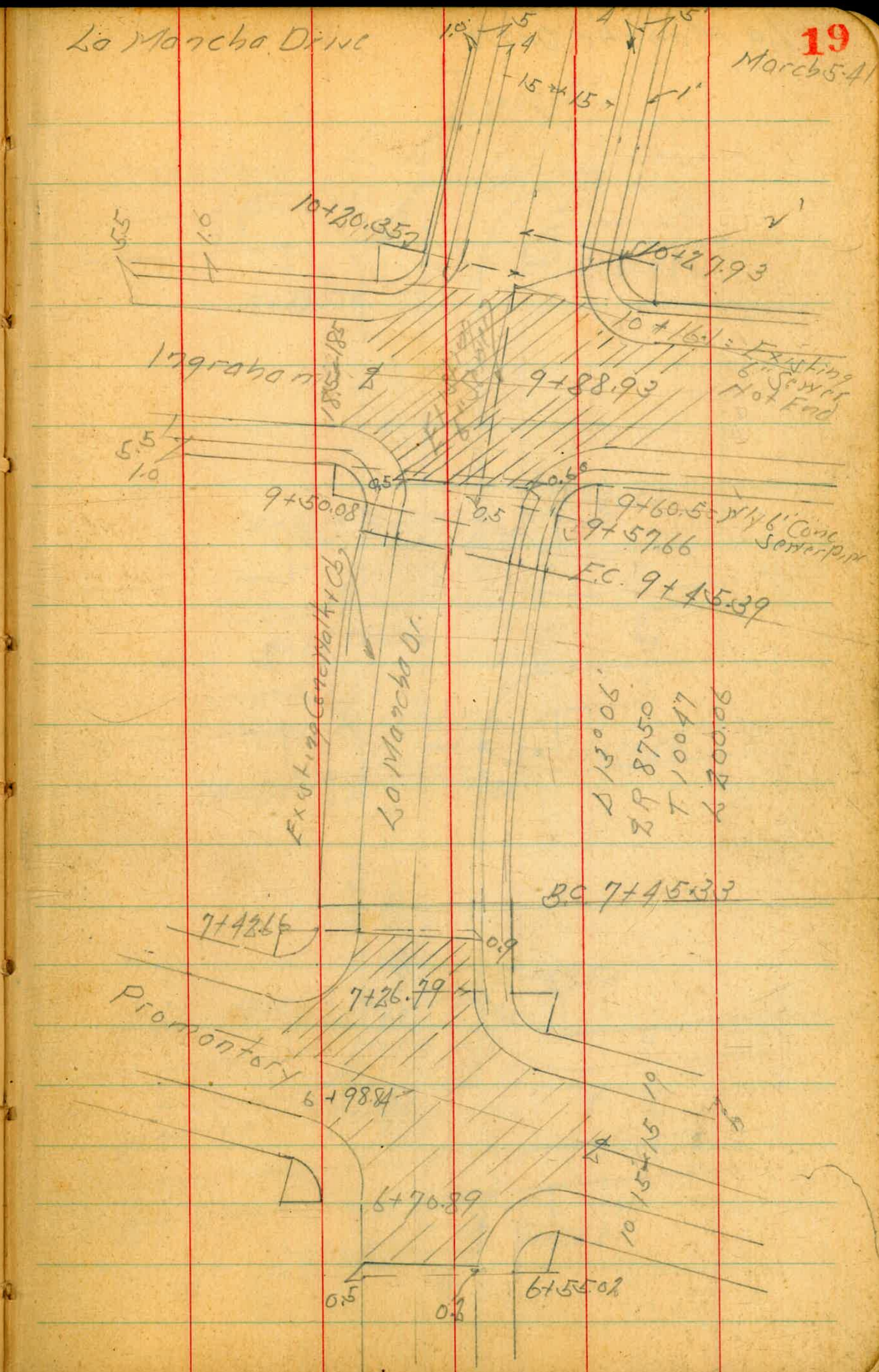
	Lt		L		Rt		
29.67	29.20	30.08	30.45	30.78	31.09	31.42	32.17	32.66
5.38	5.85	4.99	4.60	4.27	3.96	3.63	2.88	2.39
36.7 CbEc	36.7	15	7.5		7.5	15	33.3	33.3 CbEc
30.73	30.24	30.45	30.80	31.08	31.26	31.25	31.29	31.82
4.33	4.81	4.60	4.25	3.97	3.79	3.80	3.76	3.23
18.7	18.7	15	7.5		7.5	15	16.8	16.8
31.20	30.74	31.06	31.25	31.24		31.05	31.63	
3.85	4.31	3.99	3.80	3.81		4.00	3.42	
15	15	7.5		7.5		15	15	
31.05	30.3	30.7	30.9	30.8		30.6	31.52	
4.00	4.8	4.4	4.2	4.3		4.5	3.53	
15	15	7.5		7.5		15	15	
30.56	29.8	30.2	30.6	30.4		30.2	31.03	
4.49	5.3	4.9	4.5	4.7		4.9	4.02	
15.1	15.1	7.5		7.5		15	15	
30.13	29.5	29.8	30.1	30.0		29.8	30.56	
4.92	5.6	5.3	5.0	5.1		5.3	4.49	
15 Cb	15	7.5		7.5		15	15 Cb	

35.05

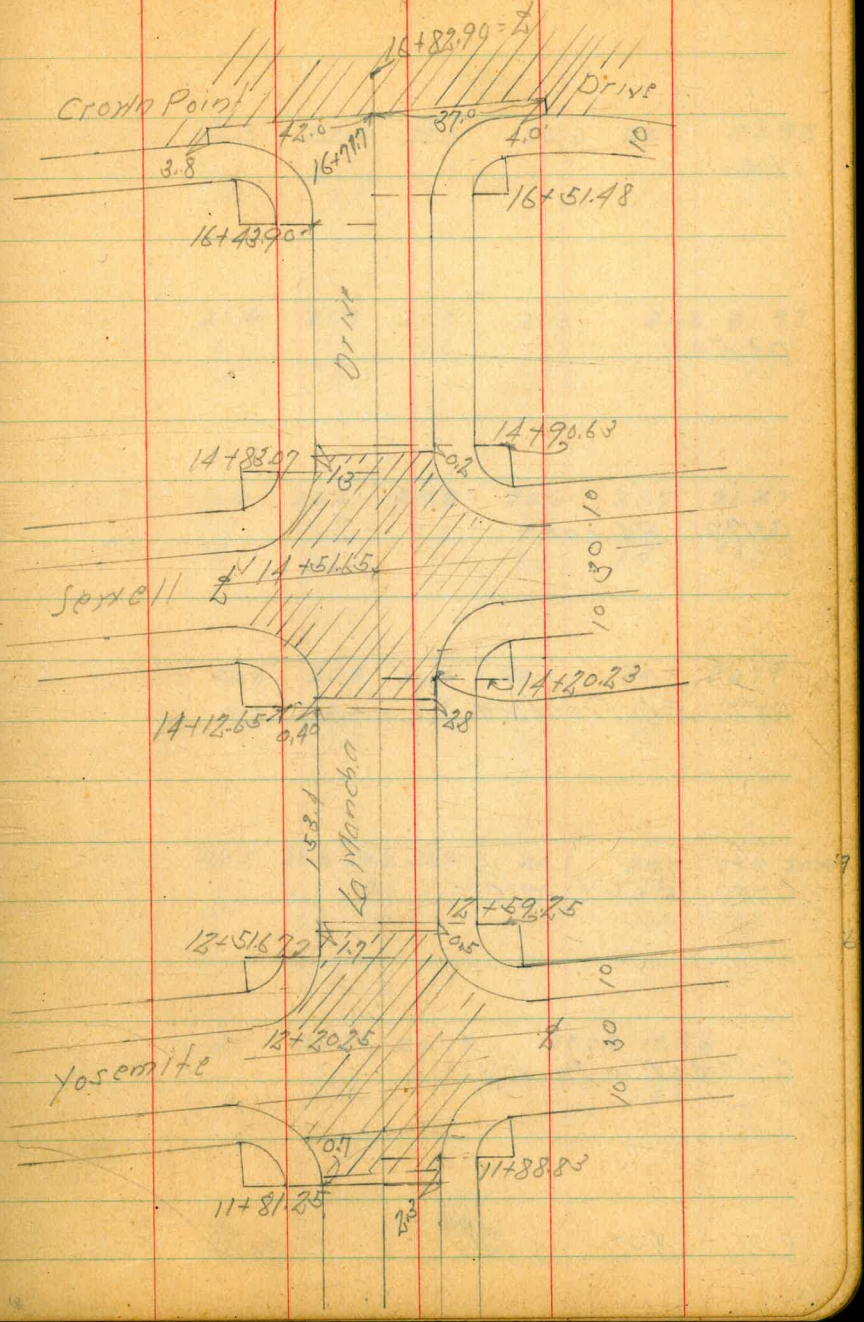
March 5 41

Note:- Conc. Walk + Curb Entire Length both Rt + Lt.





La Mancha Drive



Cross Section Lamancho Drive
Frontera St to Crown Point Drive

Indexed
C.S.K.

Station	Lt = N			℄			Rt = S		
1+0	22.93 5.56 15	22.2 6.3 15	22.4 6.1 7.5	22.5 6.0	22.3 6.2 7.5	22.1 6.4 15	22.93 5.56 15		
0+50	21.99 6.50 15	21.4 7.1 15	21.5 7.0 7.5	21.5 7.0	21.3 7.2 7.5	21.2 7.3 15	21.97 6.52 15		
0+17.91 = BC on Lt.	21.37 7.12 15	20.6 7.9 15	20.6 7.9 7.5	20.8 7.7	20.6 7.9 7.5	20.5 8.0 15	21.27 7.22 15		
0+0 = E.L. Frontera	21.03 7.46 21.1	20.3 8.2 21.1	20.3 8.2	20.3 8.2 7.5	20.3 8.2	20.1 8.4 7.5	20.1 8.4 15	20.79 7.70 16.4	
0-10 = E Cb Frontera	20.90 7.59 41-Cb	20.5 8.0 41	20.3 8.2 15.4	20.3 8.2 7.5	20.2 8.3	20.1 8.4 7.5	20.0 8.5 15.4	19.9 8.6 32	20.49 8.00 32-cb
0-14.3 = E ly Paving		20.45 8.04 46	20.49 8.20 15.4	20.19 8.30		20.08 8.41 15.4	19.96 8.53 35.4 on Pav.		

BM	8.02	28.~~55~~ 49	20.~~53~~ 47	S F BP Lamancha + Frontera

28.~~55~~ 49

	Lt.		℄		Rt.	
4+00	31.52 6.58 14.9	30.5 7.6 14.9	30.7 7.4 7.5	31.1 7.0	30.9 7.2 7.5	30.7 7.4 15	31.60 6.50 15
3+50	29.61 8.49 15	28.8 9.3 15	29.1 9.0 7.5	29.2 8.9 38.10/6	29.0 9.1 7.5	28.8 9.3 15	29.77 8.33 15
TP 9.77 38.10/6 0.16 28.33/39							
3+00	27.70 0.79 15	27.1 1.4 15	27.2 1.3 7.5	27.4 1.1	27.3 1.2 7.5	27.2 1.3 15	28.04 0.45 15
2+71.06 : CbEC on Lt	26.61 1.88 14.9	26.3 2.2 14.9	26.3 2.2 7.5	26.3 2.2	26.2 2.3 7.5	26.0 2.5 15	26.95 1.54 15
1+83.42 = Cb BC on Rt	24.50 3.99 15	23.9 4.6 15	24.0 4.5 7.5	24.1 4.4	23.9 4.6 7.5	23.7 4.8 15	24.66 3.83 15
1+50	23.89 4.60 15-Cb	23.2 5.3 15	23.4 5.1 7.5	23.5 5.0 28.49/55	23.3 5.2 7.5	23.1 5.4 15	23.98 4.51 15=Cb
28.49/55							

Lamancha Drive

Lt. ℄ Rt.

Station									
5+06.83 = BC. on Lt. on Ely Paving	33.86 / 4.24 / 14.9	33.37 / 4.73 / 14.9	33.45 / 4.65 / 7.5	33.40 / 4.70	33.12 / 4.98 / 7.5	32.81 / 5.29 / 15	33.27 / 4.83 / 15		
4+88.64: EL Bayonne	34.02 / 4.08 / 21.0	33.48 / 4.62 / 21.0	33.44 / 4.66 / 7.5	33.35 / 4.75 / 7.5	33.16 / 4.94	33.01 / 5.09 / 7.5	32.77 / 5.33 / 15	32.73 / 5.37 / 16.6	33.22 / 4.88 / 16.2
4+78.41: ECb	34.36 / 3.74 / 40	33.86 / 4.24 / 40	33.36 / 4.74 / 15	33.19 / 4.91 / 7.5	33.04 / 5.06	32.85 / 5.25 / 7.5	32.61 / 5.49 / 15	32.33 / 5.77 / 31	32.83 / 5.27 / 31
4+47.68: WCb	33.84 / 4.26 / 32'	33.39 / 4.71 / 32'	32.92 / 5.18 / 15	32.84 / 5.26 / 7.5	32.73 / 5.37	32.58 / 5.52 / 7.5	32.40 / 5.70 / 15	31.84 / 6.26 / 40	32.32 / 5.78 / 40
4+37.38 = WL Bayonne	32.97 / 5.13 / 16.2	32.51 / 5.59 / 16.2	32.53 / 5.57 / 15	32.58 / 5.52 / 7.5	32.55 / 5.55	32.40 / 5.70 / 7.5	32.07 / 6.03 / 15	31.84 / 6.26 / 21.0	32.26 / 5.84 / 21.0
4+19.19 = BC. on Rt. = Wly Conc Paving on 25	32.27 / 5.83 / 14.9 = Cb	31.76 / 6.34 / 14.9	32.02 / 6.08 / 7.5	32.09 / 6.01	32.01 / 6.09 / 7.5	31.73 / 6.37 / 15	32.24 / 5.86 / 15 = Cb		

38.10
38.76

38.76 (10)

Lt ℄ Rt March 6.4

Station													
7+13.21 = E Cb					32.39 3.10 40:cb	31.94 3.55 40	31.88 3.61 15	31.89 3.60 7.5	31.87 3.62	31.84 3.65 7.5	31.79 3.70 15	31.79 3.70 31	32.36 3.13 31:cb
6+83.5 W Cb					32.36 3.13 31:cb	31.99 3.50 31	31.98 3.51 15	32.02 3.47 7.5	32.07 3.42 35.49 (~~35.55~~)	32.10 3.39 7.5	32.01 3.48 15	32.00 3.49 40	32.36 3.13 40:cb
TP	3.18	35.49 (~~35.55~~)	5.79	32.31 (~~32.37~~)									
6+73.21 · W.L. Promontory					32.29 5.81 16.1	31.97 6.13 16.1	31.97 6.13 15	32.08 6.02 7.5	32.17 5.93	32.16 5.94 7.5	31.97 6.13 15	31.98 6.12 21	32.36 5.74 31
6+55.02 · B.C. on Rt. on W'ly Paving					32.49 5.61 14.9	32.03 6.07 14.9	32.24 5.86 7.5	32.30 5.80	32.22 5.88 7.5	31.98 6.12 15	32.48 5.62 15		
6+0					33.03 5.07 14.9	32.4 5.7 14.9	32.4 5.7 7.5	32.5 5.6	32.3 5.8 7.5	32.1 6.0 15	32.75 5.35 15		
BM			5.30	32.80 (~~32.86~~)	S.E. B.P. Lamarche & Bayonne								
5+50					33.55 4.55 14.9:cb	32.5 5.6 14.9	32.7 5.4 7.5	32.7 5.4 38.10 (~~38.16~~)	32.5 5.6 7.5	32.4 5.7 15	33.02 5.08 15:cb		
		38.10 (~~38.16~~)											

Lamancha Drive

9+05.37

8+65.36

8+25.35

7+85.31

7+45.33 BC Rt

7+42.66 = EC on Lt on Ely Paving

7+24.47 = E.L. Promontory

35.~~55~~ 49

	Lt		℄		Rt			
29 / ~~3~~9.49 6.00 15	28.9 6.6 15	29.1 6.4 7.5	29.2 6.3	29.0 6.5 7.5	28.9 6.6 15	29.69 5.80 15		
30.01 5.48 15	29.3 6.2 15	29.5 6.0 7.5	29.6 5.9	29.3 6.2 7.5	29.2 6.3 15	30.18 5.31 15		
30.63 4.86 15	29.9 5.6 15	30.1 5.4 7.5	30.1 5.4	29.8 5.7 7.5	29.6 5.9 15.1	30.62 4.87 15.1		
31.21 4.28 14.9	30.4 5.1 14.9	30.5 5.0 7.5	30.6 4.9	30.3 5.2 7.5	30.1 5.4 15.1	31.11 4.38 15.1		
31.82 3.67 14.9	31.26 4.23 14.9	31.53 3.96 7.5	31.57 3.92	31.41 4.08 7.5	31.13 4.36 15.2	31.62 3.87 15.2		
31.98 3.51 20.9 = cb	31.51 3.98 20.9	31.68 3.81 15	31.85 3.64 7.5	31.84 3.65	31.70 3.79 7.5	31.52 3.97 15	31.50 3.99 16.5	32.00 3.49 16.5 = cb

35.49
~~35.55~~

Station					Lt			℄		Rt		
10+14.08 = E L Ingraham on Ely Paving				28.01 7.48 17	27.32 8.17 17	27.32 8.17 15.1	27.73 7.76 7.5	27.87 7.62	27.86 7.63 7.5	27.77 7.72 15.1	27.70 7.79 19.8	28.33 7.16 19.8
10+07.5 = E Cb				28.20 7.29 35	27.69 7.80 35	27.75 7.74 15.1	27.92 7.57 7.5	28.04 7.45	28.08 7.41 7.5	28.05 7.44 15.1	28.24 7.25 38	28.77 6.72 38
BM	6.80	28.69 28.75	N.W. B.P. Lamanche + Ingraham 28.70									
9+70.5 = W Cb				28.68 6.81 38	28.22 7.27 38	28.40 7.09 15.1	28.53 6.96 7.5	28.60 6.89	28.69 6.80 7.5	28.79 6.70 15.1	29.07 6.42 34	29.61 5.88 34
9+63.93 = W L Ingraham on Wly Paving				28.79 6.70 20'	28.29 7.20 20'	28.34 7.15 15.1	28.50 6.99 7.5	28.62 6.87	28.72 6.77 7.5	28.84 6.65 15.1	28.85 6.64 17.2	29.27 6.22 17.2
9+57.66 = B.C. on Rt				28.79 6.70 16.3	28.3 7.2 16.3	28.5 7.0 7.5		28.5 7.0	28.6 6.9 7.5	28.7 6.8 15		29.05 6.44 15
9+45.39 E.C.				28.90 6.59 15	28.5 7.0 15.0	28.4 7.1 7.5		28.6 6.9	28.6 6.9 7.5	28.5 7.0 14.9		29.21 6.28 14.9 = Cb

35.55 49

35.55 49 ✓

La Mancha Drive

						Lt		℄			Rt	
11+95.10 = H.L. Yosemite					23.45 3.27 19	23.09 3.63 19	23.16 3.56 15.1	23.34 3.38 7.5	23.52 3.20	23.61 3.11 7.5	23.54 3.18 15.1	24.08 2.64 17.0=cb
11+81.25 = BC on Lt on 24' Paving					23.62 3.10 15	23.10 3.62 15	23.51 3.21 7.5	23.78 2.94		23.88 2.84 7.5	23.81 2.91 15	24.31 2.41 15
11+50					24.40 3.32 15	23.6 3.1 15	24.0 2.7 7.5	24.2 2.5		24.4 2.3 7.5	24.5 2.2 15	25.11 1.61 15
								~~26.78~~ 26.72				
TP	1.13	~~26.78~~ 26.72	9.90	~~25.65~~ 25.59								
11+0					25.69 9.80 15	24.5 11.0 15	25.1 10.4 7.5	25.5 10.0		25.5 10.0 7.5	25.2 10.3 15	26.33 9.16 15
10+50					26.86 8.63 15	26.0 9.5 15	26.2 9.3 7.5	26.5 9.0		26.3 9.2 7.5	26.0 9.5 15	27.57 7.92 15
10+27.93 = B.C. on Rt					27.54 7.95 15=cb	26.4 9.1 15	26.9 8.6 7.5	27.1 8.4		26.8 8.7 7.5	26.4 9.1 15	28.06 7.43 15=cb
								35.49 ~~35.55~~				
		~~35.55~~ 35.49										

	Lt		℄		Rt	
13+0	21.92 4.80 15	21.0 5.7 15	21.1 5.6 7.5	21.5 5.2	21.5 5.2 7.5	21.5 5.4 15	22.39 4.33 15
12+60		21.2 5.5 15	21.7 5.0 7.5	22.2 4.5	21.9 4.8 7.5		21.8 4.9 15
12+59.25 = BC on Rt of Ely Paving	22.44 4.28 15	22.00 4.72 15	22.35 4.37 7.5	22.61 4.11	22.66 4.06 7.5	22.59 4.13 15	23.11 3.61 15
12+45.40 - EL. Yosemite	22.56 4.16 17	22.19 4.53 17	22.20 4.52 15.1	22.50 4.22 7.5	22.68 4.04	22.75 3.97 7.5	22.69 4.03 15.1	22.68 4.04 19	23.17 3.55 19
12+35.35: EC6	22.84 3.88 33	22.38 4.34 33	22.52 4.20 15.1	22.65 4.07 7.5	22.78 3.94	22.87 3.85 7.5	22.95 3.77 15.1	23.06 3.66 37	23.53 3.19 37
12+05.20 - WC6 Yosemite	23.34 3.38 37-C6	23.00 3.72 37	23.08 3.64 15.1	23.14 3.58 7.5	23.25 3.47	23.35 3.37 7.5	23.39 3.33 15.1	23.48 3.24 33	23.91 2.81 33-C6
26.72				26.72					

La Mancha Drive

Lt. ℄ Rt.

14+66.73 = ECb	19.95 6.77 35	19.55 7.17 35	19.40 7.32 15.1	19.42 7.30 7.5	19.34 7.38	19.29 7.43 7.5	19.22 7.50 15.1	19.02 7.70 37	19.44 7.28 37
14+36.6 = YCb	20.40 6.32 37	20.00 6.72 37	19.85 6.87 15.1	19.84 6.88 7.5	19.79 6.93	19.73 6.99 7.5	19.63 7.09 15.1	19.51 7.21 33	19.94 6.78 33
14+26.50 = W.L. Sewell	20.42 6.30 19.5	20.00 6.72 19.5	19.94 6.78 15.1	20.01 6.71 7.5	19.96 6.76	19.95 6.77 7.5	19.77 6.95 16.9	20.10 6.62 16.9	
14+12.65 = B.C. on Lt. on W'lly Paving	20.39 6.33 15	19.90 6.82 15	20.07 6.65 7.5	20.08 6.64	20.03 6.69 7.5	19.79 6.93 14.9	20.28 6.44 14.9		
14+0	20.61 6.11 15	20.0 6.7 15	20.3 6.4 7.5	20.3 6.4	20.2 6.5 7.5	20.1 6.6 15	20.56 6.16 15		
13+50	21.30 5.42 15 = cb	20.8 5.9 15	20.5 6.2 7.5	21.0 5.7	20.9 5.8 7.5	20.9 5.8 15	21.46 5.26 15 = cb		

26.78 (72 written over 78)

26.78 (72 written over 78)

16+43.90 = BC. on Lt.

16+0

15+50

TP 3.96 ~~33.05~~ 33.11 7.63 19.09 19.15

15+0

14+90.63 = BC. on Rt. on Ely. Paving.

14+76.80 = E.L. Sewell

~~26.78~~ 26.78

	Lt				Rt	
18.39	18.0	18.0	18.0	17.9	17.9	18.44
4.66	5.1	5.1	5.1	5.2	5.2	4.61
15	15	7.5		7.5	15	15 = C6
18.75	18.2	18.4	18.5	18.4	18.2	18.72
4.30	4.9	4.7	4.6	4.7	4.9	4.33
15	15	7.5		7.5	15	15
19.15	18.5	18.8	18.9	18.8	18.6	19.09
3.90	4.6	4.3	4.2	4.3	4.5	3.96
15	15	7.5		7.5	15	15
			23.05 11			
19.54	19.0	19.1	19.2	19.2	19.0	19.40
7.18	7.7	7.6	7.5	7.5	7.7	7.32
15	15	7.5		7.6	15	15
19.62	19.13	19.32	19.33	19.24	18.97	19.46
7.10	7.59	7.40	7.39	7.48	7.75	7.26
15	15	7.5		7.5	15	15
19.62 19.23	19.26	19.35	19.33	19.24	19.03 19.00	19.42
7.10 7.49	7.46	7.37	7.39	7.48	7.19 7.72	7.30
16.8 16.8	15.1	7.5		7.5	15 19	19
			26.77 78			

La Mancha

			Lt		℄		Rt		
BM 5.12 17.93 17.99	S.N. BP La Mancha & Crown Point Dr 17.95								
16+71.7 = Wly Paving	18.04 5.01 42.0	17.86 5.19 15.1	17.80 5.25 7.5	17.74 5.31	17.70 5.35 7.5	17.67 5.38 15.1	17.44 5.61 37.0		
16+67.8 = W Cb	17.95 5.10 41.5 Gutter	18.40 4.65 37.5 = Cb	18.0 5.1 37.5	17.9 5.2 15.1	17.8 5.3 7.5	17.9 5.2	17.8 5.3 7.5	17.7 5.4 15.1	17.6 5.5 33.5	17.93 5.12 33.5 · 17.36 5.69 37.5
16+57.75 = W ℄ Crown Point Drive	18.32 4.73 18.8 = Cb	17.9 5.2 18.8	17.8 5.3 7.5	17.9 5.2	17.8 5.3 7.5	17.8 5.3 16.8	18.15 4.90 16.8 = Cb		

23.05
23.11

23.05
23.11

Levels Proposed Sewer Blocks 7-8-20
Crown Point

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March 8-41

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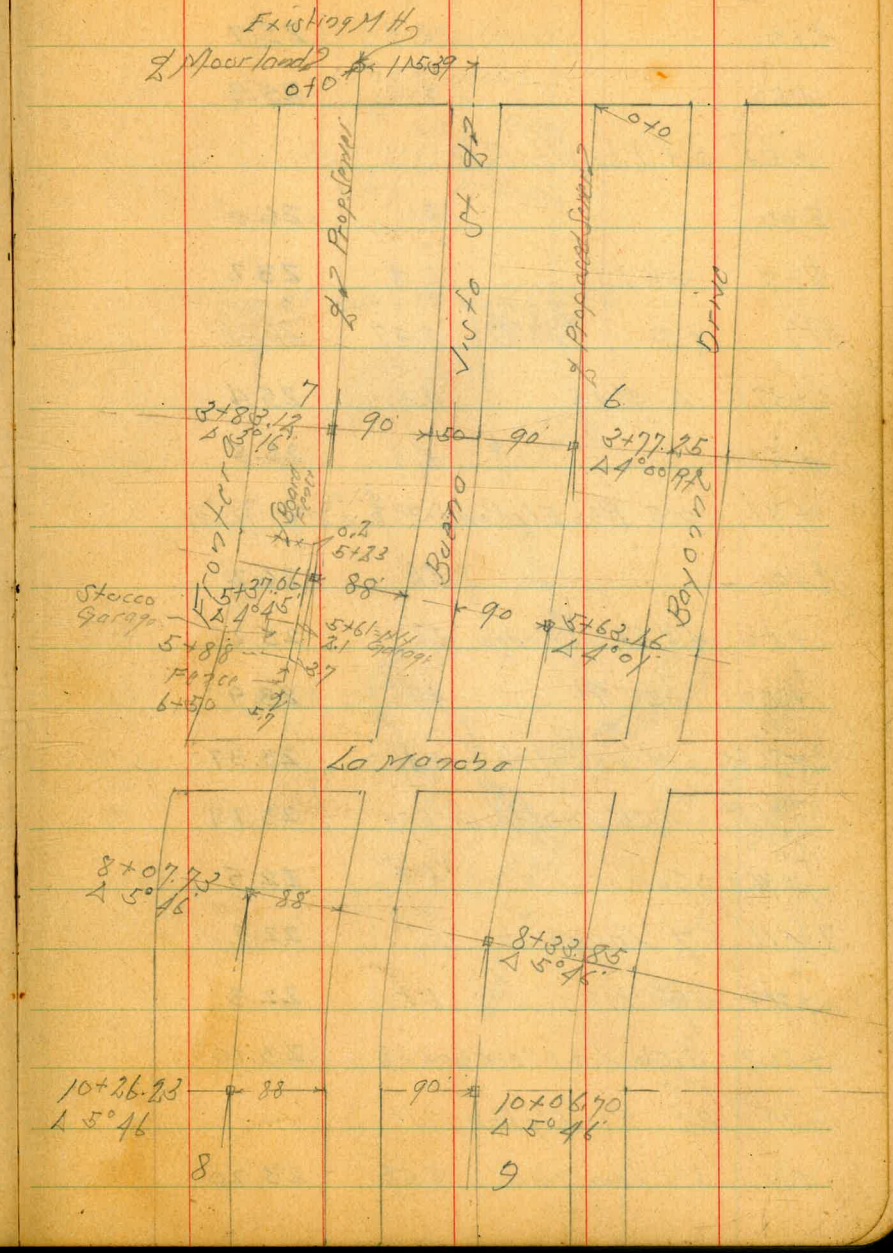
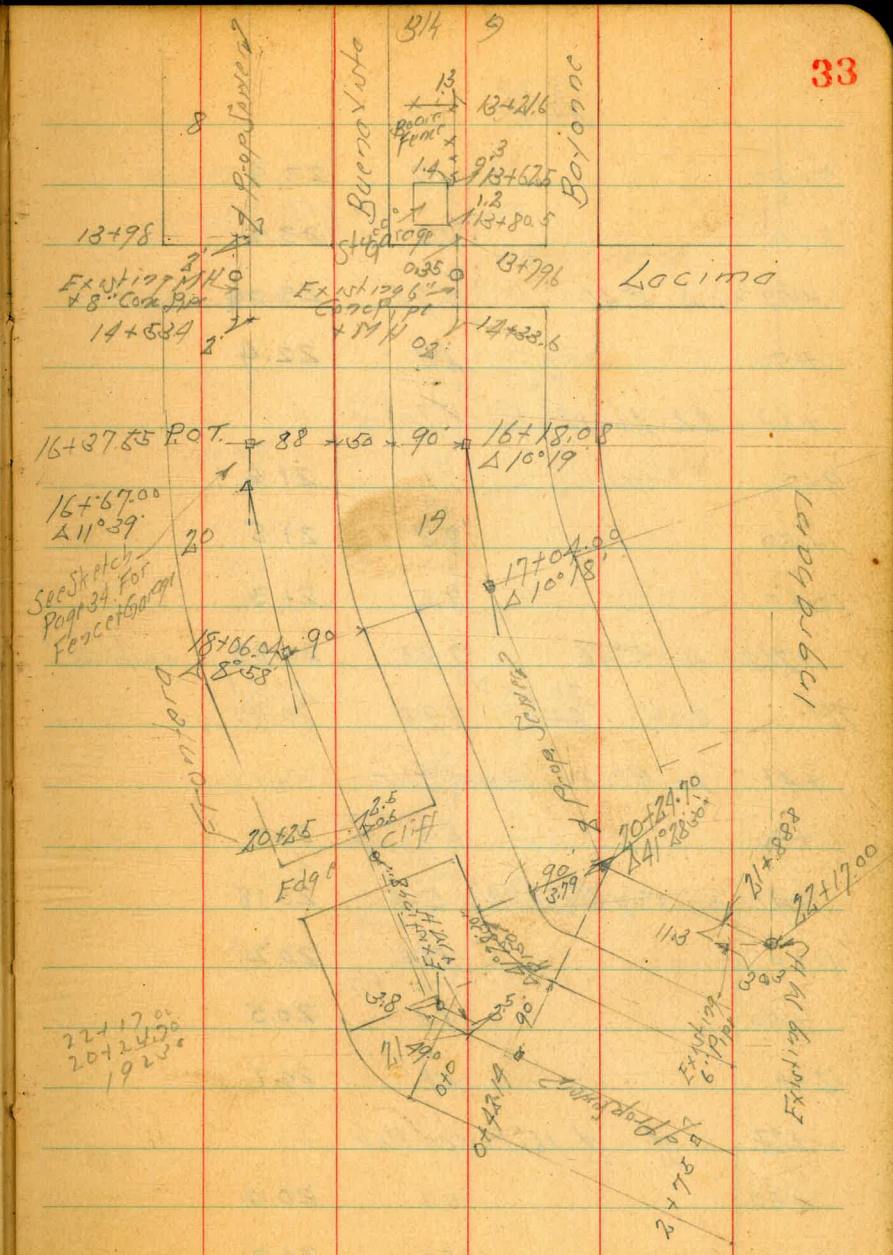
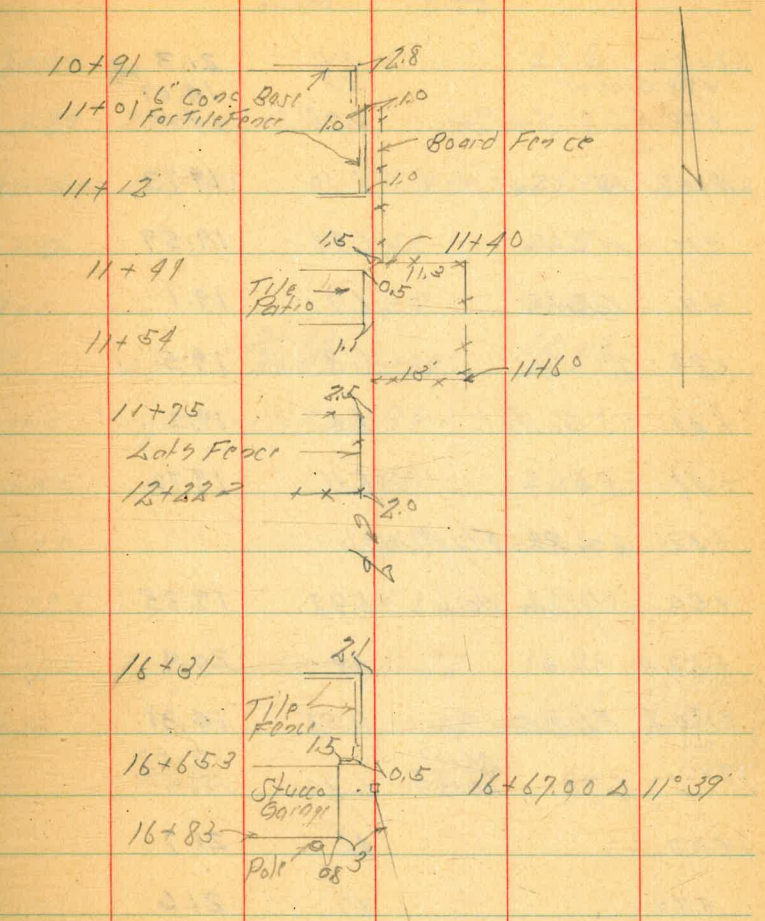
BM	7.68	28.95 28.99		21.31	NE B.P. Moorland & Frontage
0+0 = Existing MH & Moorland 0.7 Rise			4.77	24.18	
Flow Line			19.73	9.22	
0+15.2 = Gu Hol			5.18	23.77	
0+15.2 = Curb			4.70	24.25	
0+24.25 = Sly Walk			4.69	24.26	
0+50			4.2	25.8	
0+50	50' Rt of ℄		7.2	21.8	
0+79	0.6 Lt = Wly Pow Pole				
1+0			4.1	24.9	
+50			4.6	24.4	
+50	50' Rt of ℄		7.6	21.4	
2+0			4.6	24.4	
2+08.3	0.4' Lt = Wly Pow Pole				
+50			4.4	24.6	
+50	50' Rt		7.4	21.6	
3+0			3.6	25.4	
+38	0.4' Lt = Wly Power Pole				
+50			3.7	25.3	
+83.12	Δ 3°16		3.61	25.34	Co Stake
+83.12	50' Rt		5.9	23.1	



		~~28.95~~ 28.99		
4+0			2.3	25.7
+50			3.1	25.9
+53	0.3 Lt = W'ly Pole			
5+0			3.0	26.0
5+0	50' Rt		5.3	23.7
TP	2.8°	~~28.78~~ ~~28.82~~	2.97	~~25.98~~ ~~26.02~~
+37.06	Δ 4°45		3.4	25.4
+50			3.3	25.5
+91	0.5' Rt = E'ly Power Pole = N'ly Hedge			
6+0			2.6	26.2
+50	4.5 Rt S'ly Hedge		3.6	25.2
+50	50' Rt		4.9	23.9
+86.85	= N'ly Conc Walk		5.41	23.37
+96.1	= NCb La Mancha		5.59	23.19
+96.1	= Gutter		6.3	22.5
7+11	= ℄ La Mancha		6.1	22.7
+26.9	= Gutter		6.5	22.3
+36.9	= SCb La Mancha		5.18	23.10
+30	3.2 Rt = E'ly Pow Pole			
+36.1	= S'ly Conc Walk		5.58	23.20



		28.78 28.82			
7+50			4.9	23.9	
8+0			5.6	23.2	
+07.73	Δ 5°46		5.72	23.06	00 Stub
+50			6.4	22.4	
+63	2.2 Lt.	Wly Pow Pole			
9+0			7.1	21.6	
+50			7.3	21.5	
10+0			7.5	21.3	
+26.23	Δ 5°46		7.95	20.83	00 Stub
TP	5.06	25.83 25.87	7.95	20.83 20.87	
+41	1.1 Rt.	Ely Power Pole			
+50			5.5	20.3	
+91	0.7 Top	6" Conc Wall	5.65	20.18	
11+0			5.6	20.2	
+50			5.3	20.5	
12+0			5.1	20.7	
+22	℄ = ℄	16" Power Pole			
+50			5.4	20.4	
13+0			5.0	20.8	
+42	℄ = Ely	16" Pole			



		~~25.83~~ 25.87			
13+50			4.5	21.3	29
+98	Ground		4.9	14.07	
+98	F.L. 8" Conc Pipe		11.76	+4.44	
14+02	= N Sly Conc Walk		6.10	19.73	
+11	= N C&G		6.24	19.59	
+11	= Gutter		6.7	19.1	
+25	= ℄		6.3	19.5	
+41	= S Gutter		6.6	19.2	
+41	= S C&G		6.11	19.72	
+43	3.0 Rt = Ely Pow Pole				
+50	= S Sly Conc Walk		5.98	19.85	
+58.4			4.9	20.9	
+58.4	F.L. 8" Conc Pipe		11.52	14.31	
TP	6.78	~~26.31~~ ~~26.35~~	6.30	~~19.53~~ 19.57	
15+0			4.6	21.7	
+50			4.7	21.6	
+70	2' Rt: Ely Pow Pole				
16+0			4.9	21.4	
+37.65			5.0	21.3	
16+67	Δ 11°39'		5.16	21.15	on Stub
17+0			5.23	21.0	

		~~26.31~~ ~~26.35~~			
17+50			5.1	21.2	
+87	3.7 Rt = Ely Pole				
18+06.04	Δ 8°58'		5.19	21.12	on Stub
+50			4.8	21.5	
19+0			4.5	21.8	
TP	4.00	~~26.43~~ ~~26.49~~	3.88	~~22.43~~ ~~22.47~~	
+04	0.9' Rt = Ely Power Pole				
+50			4.8	21.6	
20+0			4.8	21.6	
+25			5.3	21.1	
+25	Flow Line Existing 8" P.I.P.		10.22	16.21	N.E. BP Edge Cliff + Frontage
BM			10.95	15.48 ~~15.52~~	~~15.53~~ 15.47

Levels Proposed Sewer Block 21 Crown Point

Indexed C.S.K.

				28.10	S.E. BP Crown Point Dr & Ingraham St Cor Bridge
BM	6.56	34.66		28.13	
TP	8.73	29.93	8.67	26.02	
	Existing M.H. 49" of 6+0		6.29	23.43	on Rim
	Flow Line		10.50	19.22	
0+0			4.0	25.7	
0+0	3.5 Lt = Flow Existing 8" Conc Pipe F.L.		9.71	20.01	
+42			2.2	27.5	
TP	6.51	34.73	1.51	28.24	
+82	0.8 Rt = Flow 18" Power Pole				
1+0			5.2	29.5	
+50			4.0	30.7	
+50	50' Rt		4.3	30.4	
2+0			4.1	30.6	
+50			4.1	30.6	
+75			4.23	30.49	on Stake

Existing 6" Sewer La Manche Dr. Across Ingraham St.

See Sketch Page 19

					N.W. BP La Manche & Ingraham
B.M	2.85	31.55		28.70	
9+60.5	0.5 Lt = Flow 6" Conc Sewer Pipe Flow Line		9.51	23.04	
10+16.1	Flow Existing 6" Conc Sewer Pipe Flow Line		10.69	20.86	

Levels Proposed Sewer Blocks 6-9-15
Crown Point See Sketch Page 62

BM	11.76	33.03		21.27	N.E.B.P. Moorland & Frontera
TP	10.23	42.78	0.48	32.55	
0+0 = S.L Moorland			7.2	35.6	
+20			4.3	38.5	
+50			4.0	38.8	
1+0			4.6	38.2	
1+0	50' Rt of ℄		6.8	36.0	
+50			4.9	37.9	
2+0			5.7	37.1	
2+0	50' Rt of ℄		7.7	35.1	
+50			5.7	37.1	
3+0			5.8	37.0	
3+0	50' Rt of ℄		7.6	35.2	
+50			5.6	37.2	
+77.25 Δ 4°00' Rt			5.55	37.23	on Stub
TP	2.17	39.40	5.55	37.23	
4+0			2.0	37.4	
4+0	50' Rt of ℄		3.8	35.6	
+50			2.0	37.4	
5+0			2.5	36.9	

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39.40

5+0	50' Rt ℄	4.6	34.8	
+50		2.3	36.1	
+63.16 Δ 4°01		3.69	35.71	on Stub
6+0		4.7	34.7	
6+0	50' Rt of ℄	6.4	33.0	
+40		6.0	33.4	
+58		8.5	30.9	
+61.3 = Mh Conc Walk		9.61	29.79	
+70.5 = NCB Lo Manhole		9.83	29.58	
+70.5 Gutter		10.7	28.7	
+85.9 = ℄		10.3	29.1	
7+01.3 = Gutter		10.8	28.6	
7+01.3 = S CB		9.92	29.48	
+04	1.5 Rt = Ely Power Pole			
+10.5 = Mh Conc Walk		9.82	29.58	
+30		8.6	30.8	
+50		9.1	30.3	
8+0		10.7	28.7	
8+0	50' Rt of ℄	12.2	27.2	
+33.85 Δ 5°46		12.09	27.31	on Stub

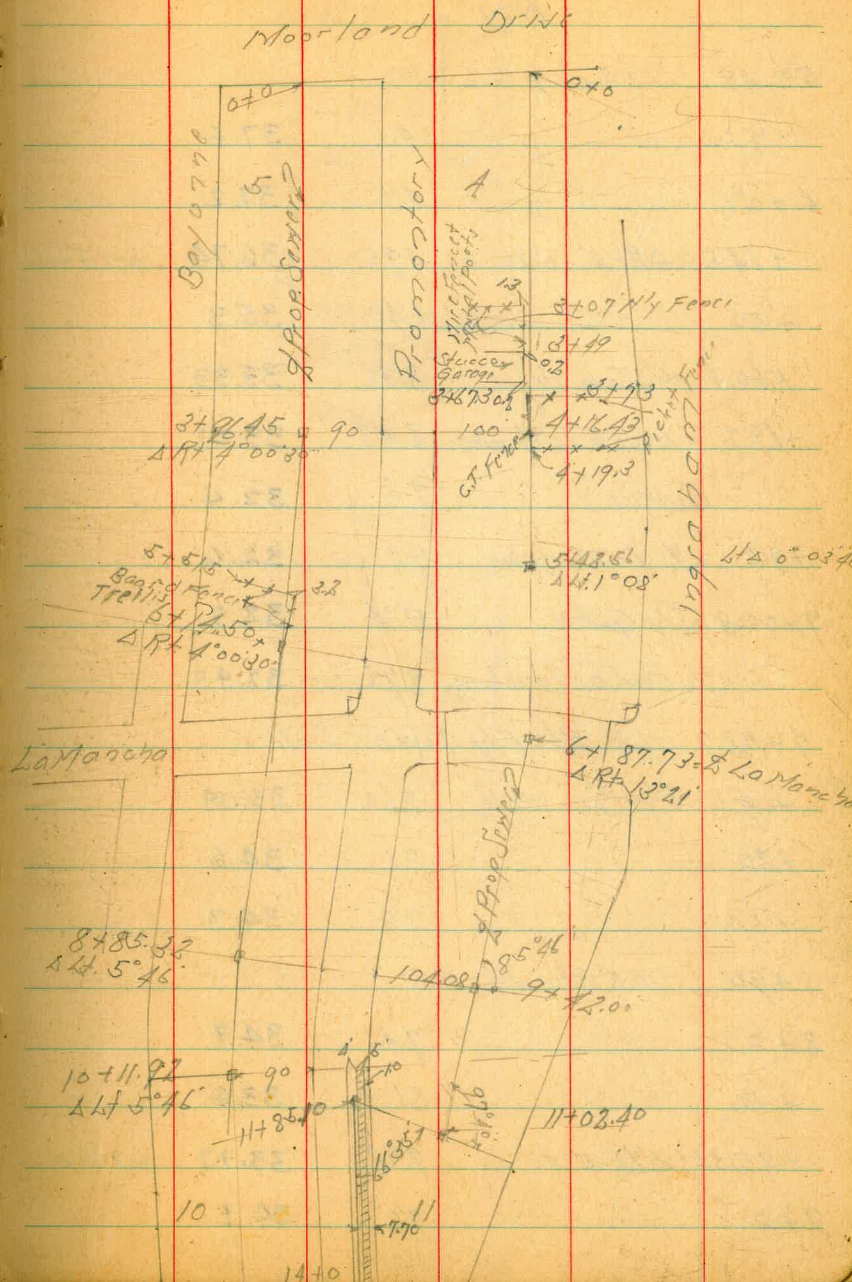
		39.40/44			
TP	3.86	30.67/74	12.09	27.23/25	
8+50			3.5	27.2	
9+0			4.6	26.1	
9+0	50' Rt of ℄		5.9	24.8	
+50			4.5	26.2	
10+0			4.6	26.1	
10+0	50' Rt of ℄		7.1	23.6	
+06.7	Δ 5°46'		4.66	26.01	on Stob
+50			4.5	26.2	
11+0			4.0	26.7	
11+0	50' Rt of ℄		6.6	24.1	
+50			3.6	27.1	
12+0			3.3	27.4	
12+0	50' Rt of ℄		5.8	24.9	
+50			2.9	27.9	
13+0			2.7	27.7	
13+0	50' Rt of ℄		5.6	25.1	
TP	4.45	32.85/89	2.27	28.40/47	
+21.6	0.2 Lt = Ely Pole				

	32.85/89			
13+50		4.5	28.4	
13+79.6		5.8	27.1	
13+79.6	= Hy 6" Conc Pipe Flow Line	14.89	18.46	
+82.5	= Hy Conc Walk	6.10	26.75	
+91.5	= HC 6 Lacing	6.20	26.65	
14+06.5	= ℄ Lacing Existing Flow Line	6.24	26.61	on Rim
		14.76	18.09	
+21.5	= SC 6	6.00	26.85	
+28.5	2.2 Rt = Ely Power Pole			
+30.5	= Sly Conc Walk	5.90	26.95	
+33.6	= Sly 6" Conc Pipe Flow Line	14.50	18.35	
+50		5.20	27.65	
15+0		4.8	28.1	
15+0	50' Rt of ℄	6.9	26.0	
+50		4.7	28.2	
16+0		4.5	28.4	
16+0	50' Rt of ℄	6.4	26.5	
+18.08	Δ 10°19' Lt.	4.82	28.03	on Stob
+50		4.8	28.1	
+60	4.3 Rt = Ely Pole on Diam			
17+0	4.0° Δ 10°18	5.07	27.78	on Stob

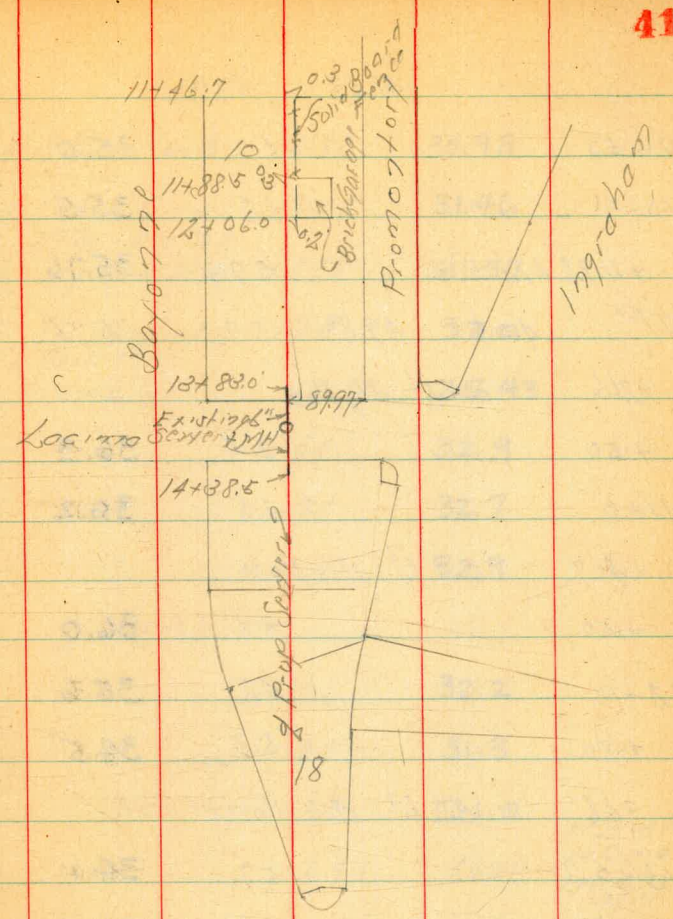
		32.85			
TP	4.71	32.49	5.07	27.78	
17+50			5.3	27.2	
+77	0.3 Lt = Wly Pole 0.8 Diam				
18+0			5.0	27.5	
18+0	50' Rt of ℄		6.3	26.2	
+50			5.7	26.8	
+97	0.5 Lt = Wly Pole 0.6 Diam				
19+0			5.7	26.8	
19+0	50' Rt of ℄		5.8	26.7	
+50			5.6	26.9	
+62			3.9	28.6	
+71 = Bottom Open Ditch			9.2	23.3	
+77			4.6	27.9	
20+0			5.2	27.3	
+24.70 Δ 41°28'30" Lt			4.5	28.0	
+50			4.4	28.1	
21+0			3.9	28.6	
+50			4.1	28.4	
+88.8 =			4.1	28.4	
+88.8	11.8 Rt of ℄ = Wly 6" Conc. Pipe Flow Line		8.78	23.71	
		33.19			
21+90.3 = Wly Conc Walk			4.24	28.25	
+96.6 = W Cb Ingraham			4.30	28.19	
22+17.00 = Existing M.H.			4.33	28.16	on Rim
Flow Line			8.53	23.96	
TP	5.96	33.58	4.87	27.62	
BM			5.46	28.12 ~~28.16~~	S.E. B.P. Crown Pt Dr + Ingraham ~~28.13~~ 28.10

Levels Proposed Sewer
Blocks 5-10-18 Crown Point

BM	10.06	43.74		33.68	N.W. B.P. Moorland & Ingraham
0+0 = S.L. Moorland			6.0	37.7	
+15			4.2	39.5	
+50			4.0	39.7	
1+0			4.4	39.3	
1+0	50' Lt of ℄		5.7	38.0	
+50			4.7	39.0	
2+0			5.1	38.6	
2+0	50' Lt of ℄		6.3	37.4	
+50			5.0	38.7	
3+0			5.3	38.4	
3+0	50' Lt of ℄		5.7	38.0	
+50			5.2	38.5	
+96.45	Δ Rt 1°00'30"		5.07	38.67	on Stub
TP	3.02	41.69	5.07	38.67	
4+0			2.9	38.8	
4+0	50' Lt of ℄		3.6	38.1	
+50			3.4	38.3	
5+0			3.6	38.1	
5+0	50' Lt of ℄		4.2	37.5	



	42.69			
5+49	1.5' Lt. - Hly 16" Pole			
+50		4.1	37.6	
6+0		4.5	37.2	
+14.50	ΔRt 4° 00' 30"	4.95	36.74	on Stob
+50		6.4	35.3	
+60.4	= Hly Conc Walk	8.36	33.33	
+69.7	= Hly Cb La Mancha	8.48	33.21	
	Gutter	9.3	32.4	
+85	= Δ La Mancha	9.1	32.6	
7+00.3	= Sly Gutter	9.4	32.3	
	Sly Cb La Mancha	8.76	32.93	
7+02.7	1.3 Rt = Ely Power Pole			
+09.5	= Sly Conc Walk	8.60	33.09	
+20		7.1	34.6	
+50		7.0	34.7	
+90	0.5' Rt = Ely Pole			
8+0		7.4	34.3	
+50		8.1	33.6	
+85.32	Δ Lt 5° 46'	7.92	33.77	on Stob
9+0		7.6	34.1	



		41.69			
9+50			6.7	35.0	
10+0			6.2	35.5	
+11.92	Lt 5.96		5.93	35.76	on Stub
TP	4.04	39.80	5.93	35.76	
+26.6	0.3 Lt = Wly Pole				
+50			3.5	36.3	
11+0			3.6	36.2	
+16.7	0.4 Lt = Wly Pole				
+50			3.8	36.0	
12+0			4.2	35.6	
+50			5.3	34.5	
+66	0.2 Lt = Wly Power Pole				
13+0			5.7	34.1	
+50			6.2	33.6	
+82.0	= Wly Existing 6" Conc Pipe Flow Line		7.3	32.8	
			14.35	25.45	
+87.5	= Wly Conc Walk		8.11	31.69	
+96.5	= NCb LaCima Gutter on Par		8.21	31.59	
			8.70	31.10	
14+11.5	= Existing MH. Flow Line		8.45	31.35	on Rim
			14.59	25.21	

		39.80			
14+26.4	S Gutter on Par		8.82	30.98	
14+26.4	S Cb LaCima		8.34	31.46	
+28.5	4.7 Rt = Ely Pole				
+35.4	= Sly Conc Walk		8.23	31.57	
+38.5	= Sly Existing 6" Conc Pipe Flow Line		7.8	32.0	
			14.37	25.43	
+50			6.9	32.9	
15+0			7.1	32.7	
+50			6.9	32.9	
+76	Lt = Ely Pole				
16+0			7.6	32.2	
+50			8.5	31.3	
+85			8.8	31.0	
BM			6.73	33.07	NW BP LaCima + Ingraham 33.01

Levels Proposed Sewer Blocks 4-11 Crown Point

Indexed 4.5.K.

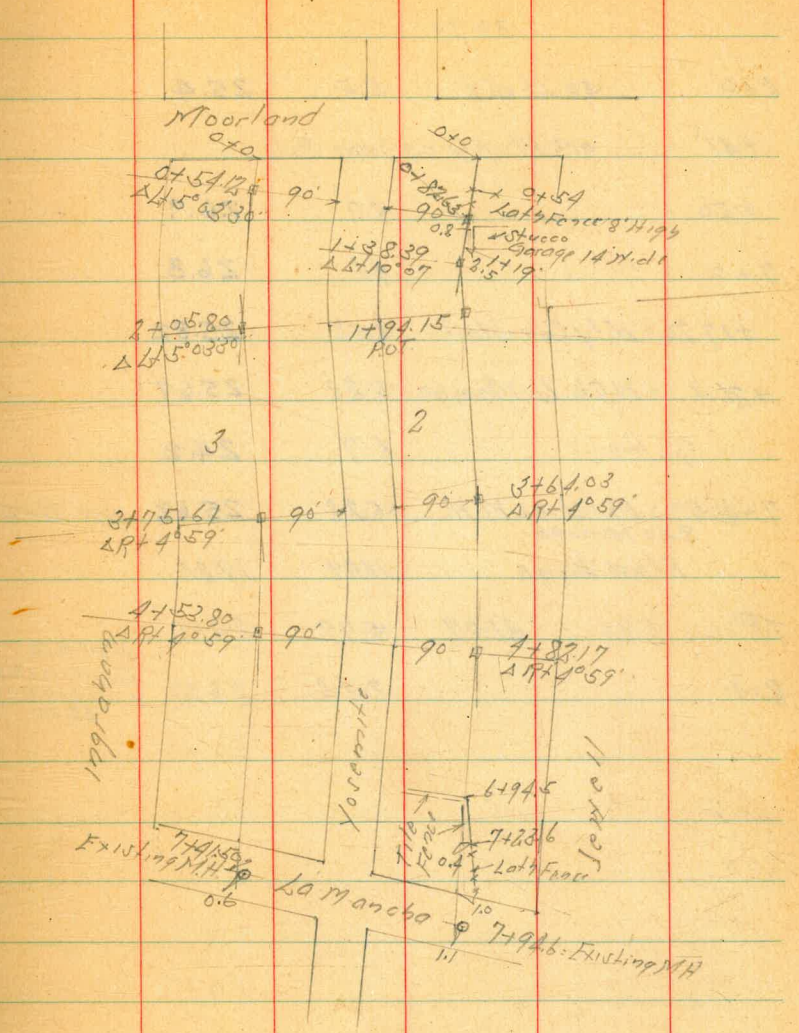
BM	6.17	39.85		33.68	NW BP Moorland & Ingraham
0+0 = SL Moorland			5.2	34.7	
+50			5.8	34.1	
1+0			5.4	34.5	
1+0	50' Lt		5.4	34.5	
+50			5.0	34.9	
2+0			4.6	35.3	
2+0	50' Lt		5.1	34.8	
+50			4.4	35.5	
3+0			4.2	35.7	
+06	0.1 Rt = Ely Power Pole				
3+0	50' Lt		5.8	34.1	
+50			4.4	35.5	
4+0			4.5	35.4	
4+0	75 Lt = Wly House		6.5	33.4	
+16.43			4.8	35.1	
TP	0.11	38.92	1.04	38.81	
+50			4.0	34.9	
5+0			4.1	34.8	
5+0	60' Lt		5.1	33.8	
		38.92			
5+42.56 & Lt 1°08'			3.9	35.0	
+50			3.9	35.0	
+52.6 & = Wly Power Pole					
6+0			4.5	34.4	
+40			4.8	34.1	
+50			6.1	32.8	
+62.7 = Wly Conc Walk			8.51	30.41	
+72.7 = W Cb La Moncho			8.61	30.31	
Gutter			9.4	29.5	
+87.73 ΔRt 73°21'			9.11	29.81	on Stub
7+03 Gutter			9.4	29.5	
+03 = SCb			8.52	30.40	
+06.6 5.4 Rt = Ely Pole					
+12.1 = Sly Conc Walk			8.35	30.57	
+25'			5.7	33.2	
+35' 50' Rt = Ely Anchor Pole					
+50			5.2	33.7	
8+0			5.0	33.9	
+50			4.9	34.0	
9+0			4.6	34.3	

		38.92			
9+42.00	POT		2.84	35.08	on Stub
+50			3.7	35.2	
10+0			2.9	36.0	
+50			3.4	36.5	
11+02.10	△ 97°40		1.64	37.28	
BM			10.24	28.68	NW BP La Manche Ingraham 28.70
BM	8.68	41.64		38.01	NW BP La Grange Ingraham
11+50			3.9	37.7	
+70			4.2	37.4	
+77.8	Ely Conc Walk		5.45	36.19	
+85.10	△ 66°35'		5.58	36.06	on Stub
12+0			5.5	36.1	
+50			4.9	36.7	
13+0			4.8	36.8	
13+0	80' Lt of ℄		5.4	36.2	
+50			5.5	36.1	
14+0			6.7	34.9	
14+0	60' Lt of ℄		7.0	34.6	

Levels Proposed Sewer Block 3 Crown Point

Indexed C.S.K.

BM	2.74	36.42		38.68	N.W. BP Moorland & Ingraham
0+0 = St. Moorland			5.3	31.1	
+54.12	Δ Lt 5°03'30"		4.96	31.46	on Stub
1+0			5.4	31.0	
1+0	50' Lt of ℄		6.7	29.7	
+23	2.5 Rt = ℄	0.7 Diam Power Pole			
+50			6.4	30.0	
2+05.80	Δ Lt 5°03'30		7.29	29.13	on Stub
2+05.80	50' Lt		8.4	28.0	
+50			7.9	28.5	
+56	℄ = ℄	0.7 Diam Pole			
3+0			8.6	27.8	
+50			9.3	27.1	
+75.61	Δ Rt 4°59'		9.77	26.65	on Stub
TP	4.25	30.90	9.77	26.65	
4+0			4.6	26.3	
+53.80	Δ Rt 4°59'		4.81	26.09	on Stub
5+0			4.8	26.1	
+50			4.7	26.2	
6+0			4.4	26.5	



		30.90			
6+0	50' Lt of ℄		5.5	25.4	
+41	0.5 Rt = Ely 0.7 Down Pole				
+50			4.0	26.9	
7+0			4.1	26.8	
+17.20	= N'ly Conc Walk		5.08	25.82	
+26.3	= N Cb La Mancha		5.23	25.67	
	Gu Hol:		6.7	24.2	
7+41.50	= Existing M.H		5.28	25.62	on Rim
	La Mancha				
	Flow Line		11.69	19.21	
TP	5.96	31.07	5.79	25.11	
BM			2.35	28.72	HW & P La Mancha & Logan Ave 28.70

Levels Proposed Sewer
Block 2 Crown Point

Indexed
C.S.K.

BM	10.70	32.18		21.48	S.W. B.P. Moorland & Crown Pt. Dr.
0+0 = S.L. Moorland			5.4	26.8	
+50			4.4	27.8	
+82.63			3.87	28.31	on Stub
1+0			4.1	28.1	
+38.39	Δ Lt 10°07'		4.12	28.06	on Stub
+50			4.2	28.0	
+94.15			4.47	27.71	on Stub
2+0			4.5	27.7	
+50			4.5	27.7	
3+0			5.0	27.2	
+50			5.8	26.4	
+64.03	Δ Rt 4°59		5.92	26.26	on Stub
4+0			6.6	25.6	
+50			7.3	24.9	
+88.17	Δ Rt 4°59		7.79	24.39	on Stub
TP	3.02	27.41	7.79	24.39	
5+0			3.4	24.0	
+50			4.1	23.3	
6+0			4.6	22.8	

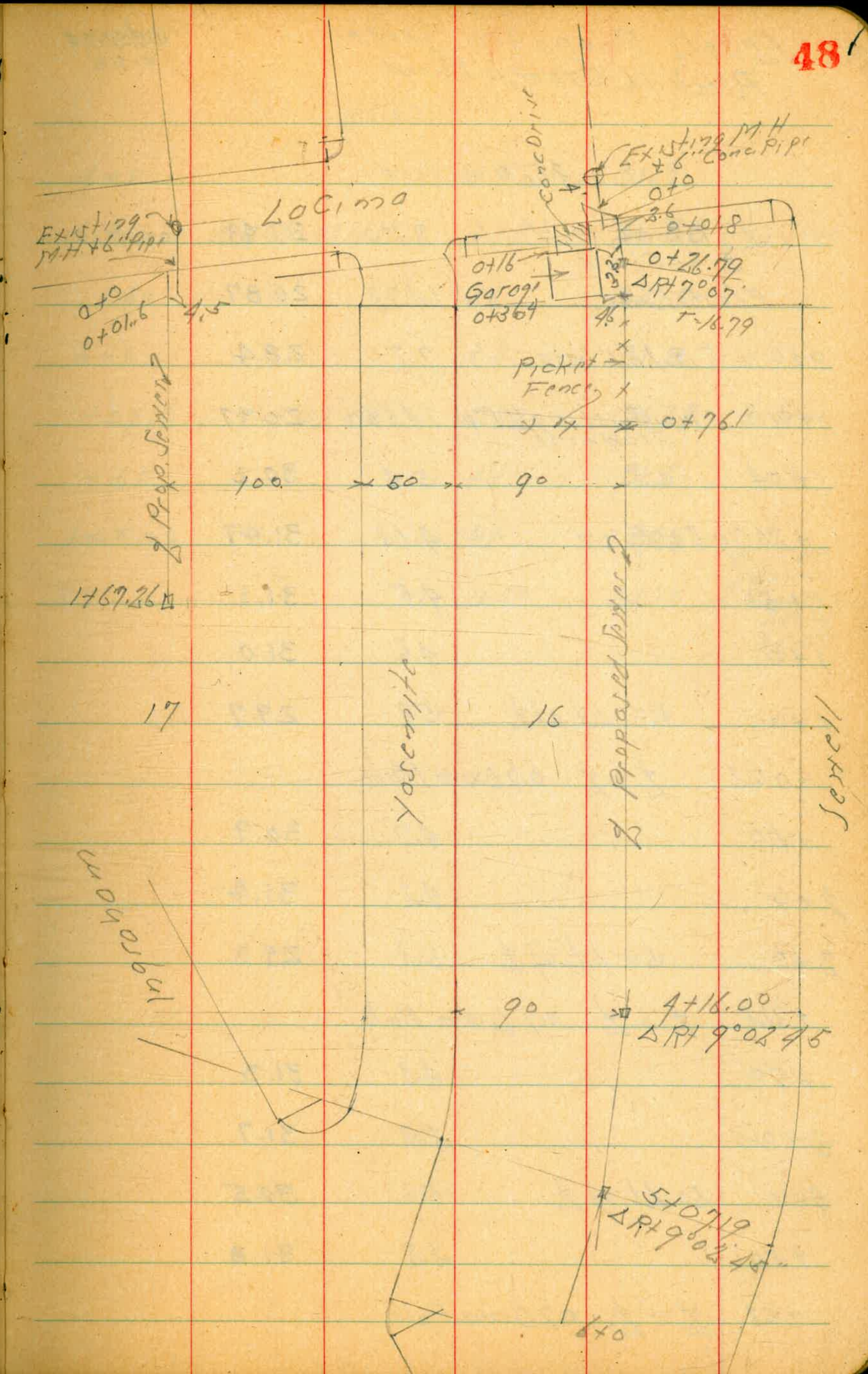
March 20-41

		27.41			
6+50			4.8	22.6	
+94.5 = N'ly & E'ly Base 5 High Tile Wall			5.1	22.3	
7+0			4.9	22.5	
+50			5.0	22.4	
+70.5 = N'ly Conc. W			5.77	21.64	
+79.5 = N.Cb. La Mancha			5.93	21.48	
Gutter			6.4	21.0	
7+94.6 = Existing M.H. ℄ La Mancha			6.26	21.15	on Rim
Flow Line			12.50	14.91	
BM			9.45	17.96	S.W. B.P. La Mancha + Crown Pt. Dr. 17.95

Levels Proposed Sewer
Block 17 Crown Point

Indexed
C.S.K.

BM	3.87	36.88		33.01	M.H. B.P. LoCimo & Ingraham
Existing M.H. ℄ LoCimo & ℄ Blk 17			5.36	31.52	on Rim
Flow Line			11.86	25.02	
0+0 = S.L. LoCimo			4.7	32.2	
+1.6 - opp Existing 6" Pipe 4.5 Lt Flow Line			11.80	25.08	
+50			4.3	32.6	
1+0			4.7	32.2	
+50			4.9	32.0	
+67.26			4.94	31.94	on Stub
T.P.	4.60	35.60 Ford	5.88	31.00	



Levels Proposed Sewer Block 16 Crown Point

Indexed C.S.K.

	35.60 Bt. Ford			
Existing M.H & La Cima Flow Line		8.11	27.49	on Rim
		14.73	20.87	
0+0 = St. La Cima		7.2	28.4	
+01.8	opp. Existing 6" Pipe Flow Lt.	14.63	20.97	
+04		5.4	30.2	
+26.79	Δ Rt 7°07'	4.13	31.47	on Stake
+50		4.5	31.1	
1+0		4.6	31.0	
1+0	50' Lt of ℄	5.9	29.7	
+05.3	℄ = ℄	0.7 Diam Pole		
+50		4.7	30.9	
2+0		4.2	31.4	
2+0	50' Lt. of ℄	6.3	29.3	
+31.5	℄ = ℄	0.7 Diam Pole		
+50		4.3	31.3	
3+0		3.9	31.7	
3+0	50' Lt of ℄	5.1	30.5	
+50		3.8	31.8	
+52	℄ = ℄	0.7 Diam Pole		

35.60

4+0		3.7	31.9	
+16.00	Δ Rt 9°02'45"	3.72	31.88	on Stake
+50		3.6	32.0	
5+0		3.8	31.8	
+07.19	Δ Rt 9°02'45"	3.82	31.78	on Stake
+50		4.1	31.5	
6+0		5.1	30.5	
BM		11.50	24.10	N.W. BP Eden & Crown Pt. Dr. 24.13 24.07

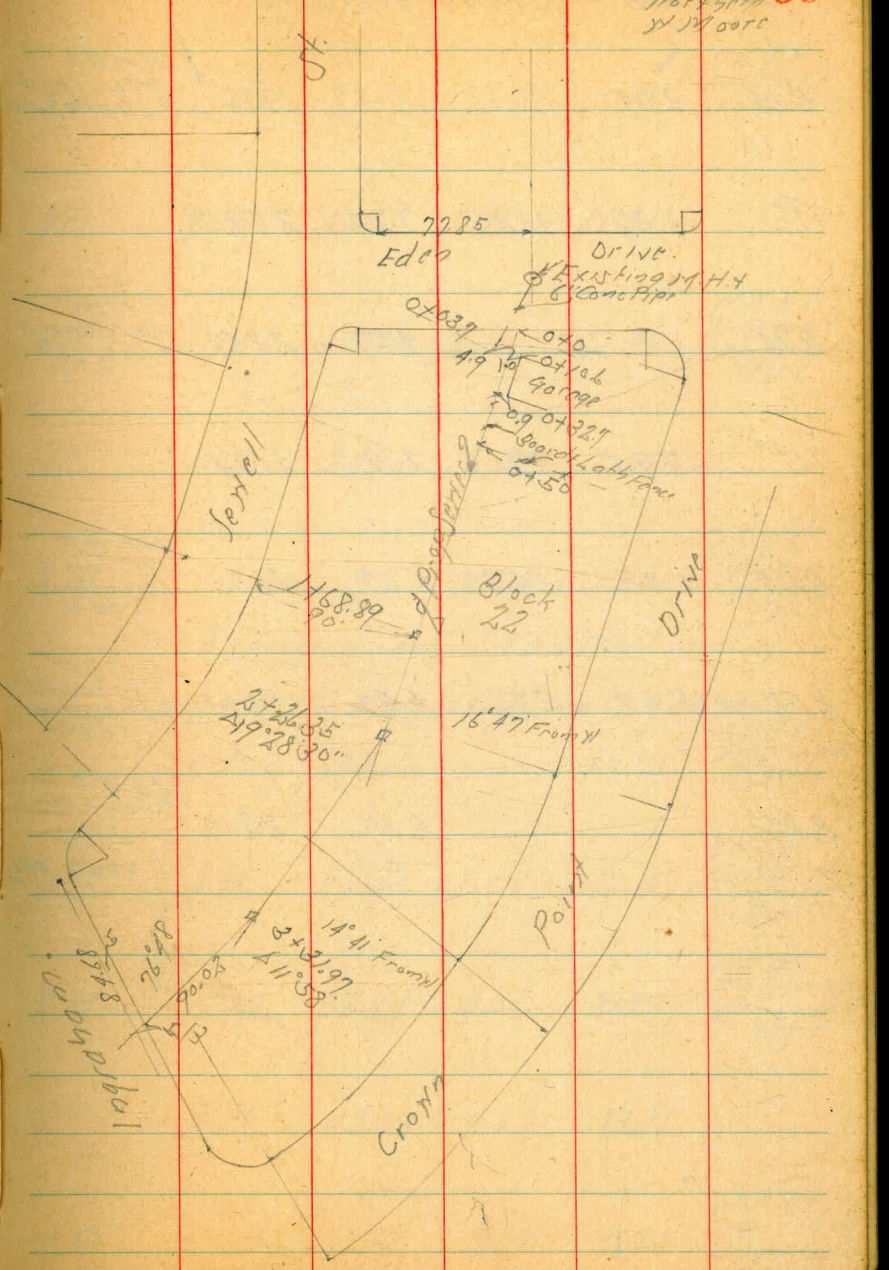
Levels Proposed Sewer
Block 22 Crown Point

Indexed
C.S.K.

B.M.	11.50	~~25.57~~ ~~25.63~~		24.07 24.13	N.W.B.P. Eden + Crown Pl. Cor.
Existing MH ℄ Eden ℄ Block 22			8.23	27.34	on Rim
Flow Line			14.72	20.85	
0+0 = ℄ Eden			7.5	28.1	
+03.7	Opp. Existing 6" P.p. 4.9 Rt. of ℄		14.58	20.99	
+10.6	Opp. N.W. Cor Garage		5.1	30.5	
+50			4.7	30.9	
1+0			4.3	31.3	
1+0	50' Lt. of ℄		5.6	30.0	
+50			4.3	31.3	
2+0			4.7	30.9	
+22	0.5 Lt. = Wty Pole 16" Dia.				
+26.35	∠ Rt 19°28'30"		5.18	30.39	on Stat
+50			5.1	30.5	
3+0			5.4	30.2	
+31.97	∠ Rt 11°58'		5.48	30.09	on Stat
+50	22 Lt. = Wty Pole		5.6	30.0	
4+0			5.9	29.7	

March 31-41
Sunset Northern
W.W. Moore

50



Check Levels on Ingraham Moorland to Crown Point Drive

BM	3.01	36.69		33.68	✓ N.W.B.P. Moorland + Ingraham
TP	4.30	33.25	7.74	28.95	
BM			4.56	28.69	N.W.B.P. La Mancha + Ingraham 28.70
TP	7.95	39.09	2.11	31.14	
BM	1.88	34.90	6.07	33.02	N.W.B.P. La Cima + Ingraham 33.01
BM	5.57	34.20	6.27	28.63	N.E.B.P. Yosemite + Ingraham 28.64
BM			6.10	28.10	S.E.B.P. Crown Pt Dr. 28.13 28.07 [illegible]

La Cima Crown Point Dr. to Frontera

March 25-41 Sisson Workgang H. Moore

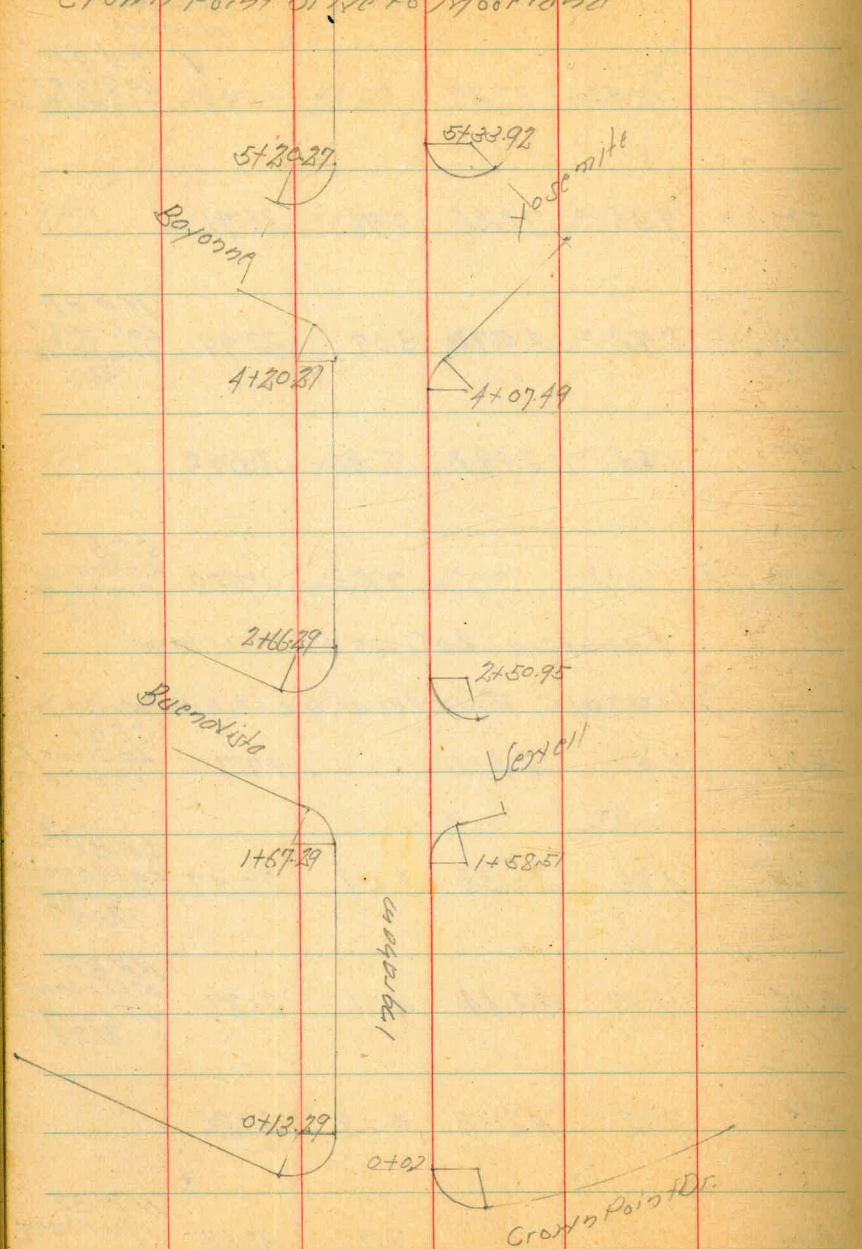
BM	11.49	27.47		15.98 ✓	S.W.B.P. La Cima + Crown Pt Dr.
TP	9.35	36.06	0.76	26.71	
BM	2.72	35.71	3.07	32.99	N.W.B.P. La Cima + Ingraham 33.01
TP	1.53	24.93	12.31	23.40	
BM			7.23	17.70	S.E.B.P. La Cima + Frontera 17.71

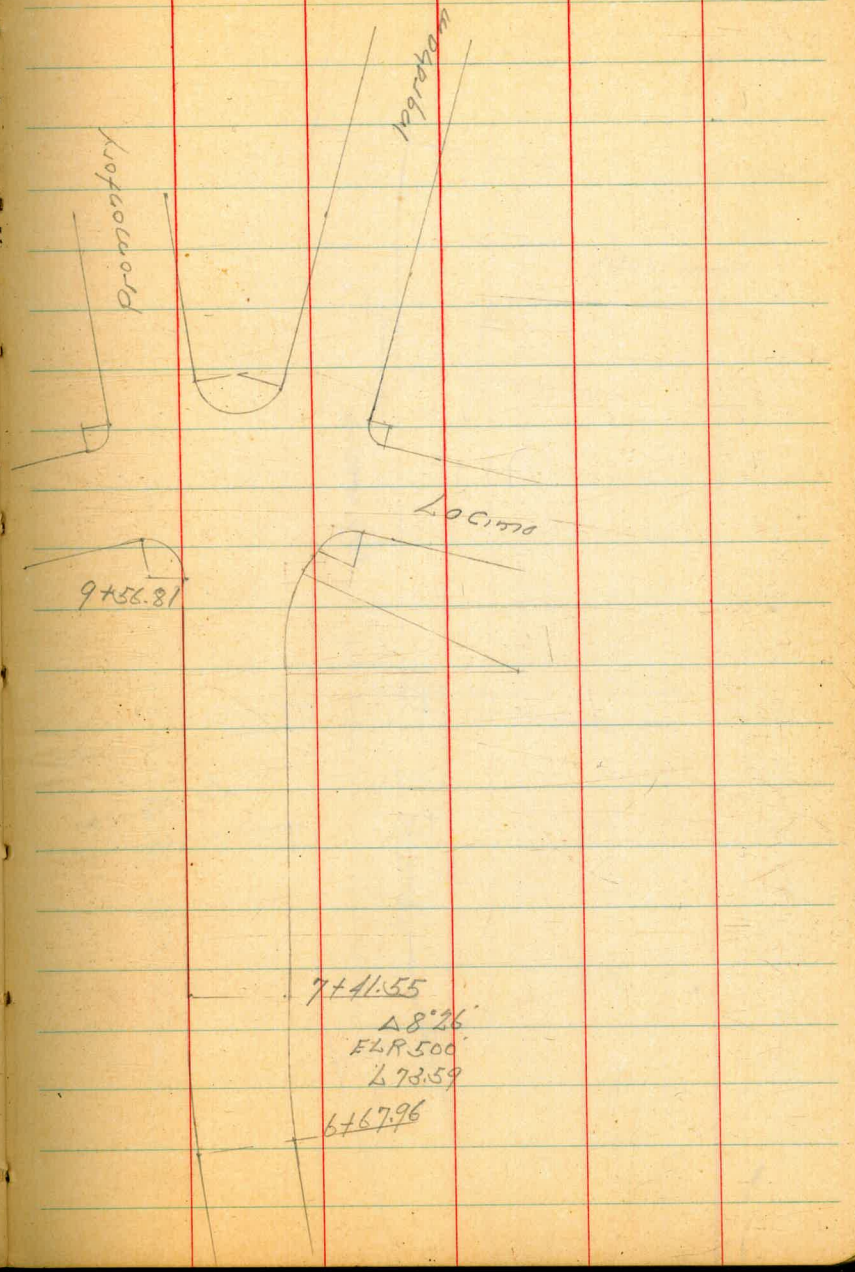
Frontera La Cima to Moorland

Moorland Frontera to Ingraham

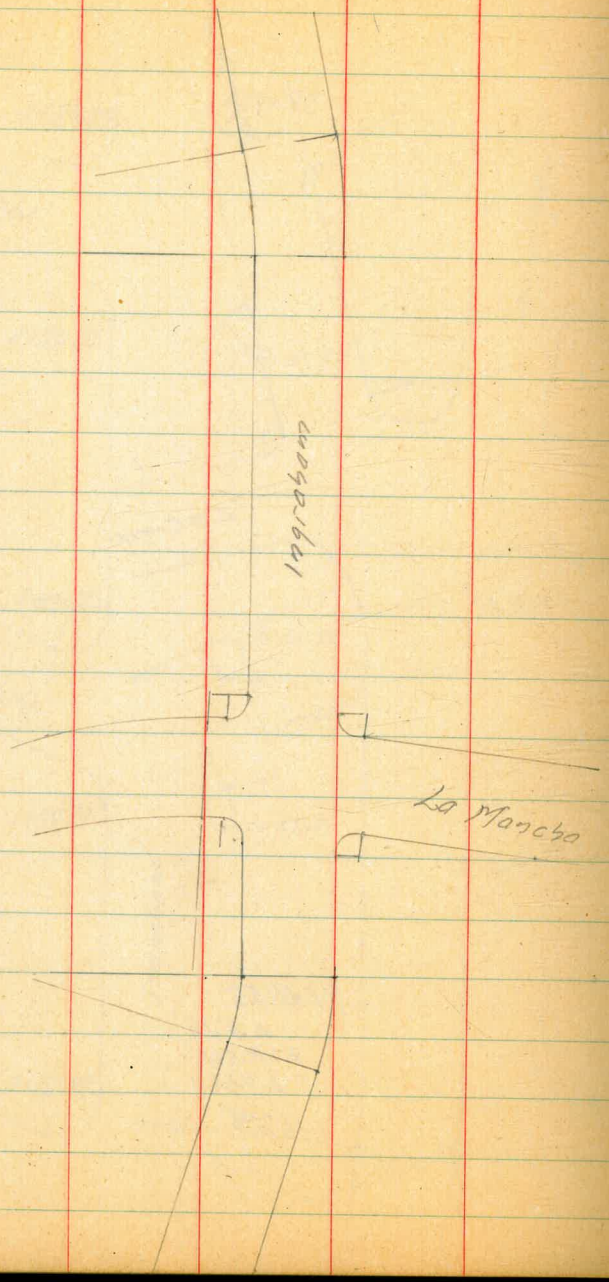
BM	6.40	24.11		17.71	S.E.B.P. La Cima + Frontera
BM	4.86	25.33	3.64	20.47	S.E.B.P. La Mancha + Frontera 20.47
BM	12.17	33.44	4.06	21.27	N.E.B.P. Moorland + Frontera 21.25
TP	9.12	42.38	0.18	33.26	
BM			8.70	33.68 ✓	N.W.B.P. Moorland + Ingraham 33.68

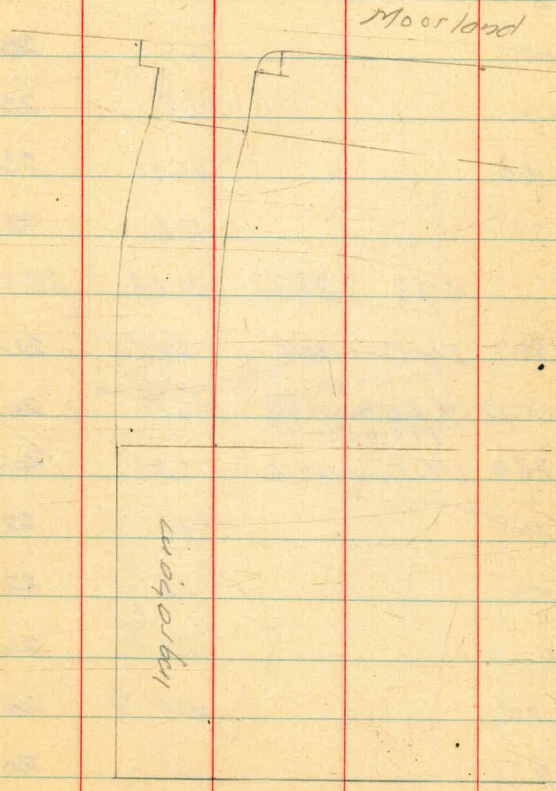
Cross Section Ingraham St
Crown Point Drive to Moorland





Ingraham St.



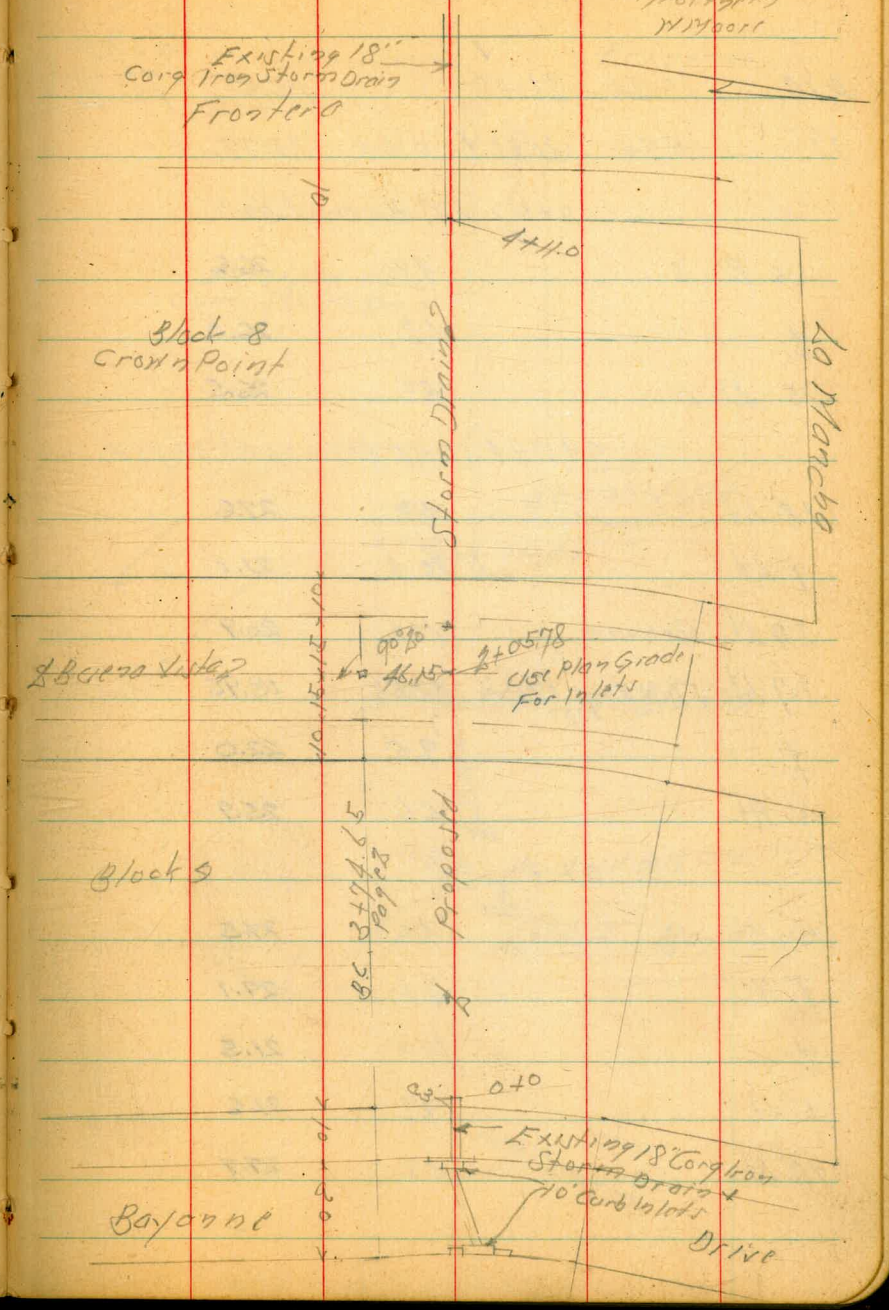


Proposed Storm Drain Across Blocks 8-9 Crown Point Bayonne to Frontera

2 Levels

BM	1.17	3397 ✓		22.80	S.E.B.P. La Mancha at Bayonne
0+0	Ground		5.2	28.8	
0+0	Flow Line Existing		11.38	22.59	22.59
+25			4.8	29.2	21.85
+50			6.0	28.0	21.11
1+0			8.8	25.2	19.63
+50			10.8	23.2	18.15
+70			11.8	22.2	17.55
TP	8.78	26.61	11.14	22.83 ✓	
1+80.7	= Fly Conc Walk		5.56	21.05	17.35
2+05.78	= ℄ Buena Vista From South		6.1	20.5	16.45
2+28.9	= Wly Conc Walk		6.03	20.58	16.31
+40			4.6	22.0	16.20
+50			4.1	22.2	16.11
3+0			5.0	21.6	15.64
+50			5.9	20.7	15.17
4+0			6.1	20.5	14.70
4+07			6.1	20.5	14.63
4+11			6.9	19.7	
4+11	= Flow Line Existing 18" Corg Iron Pipe		12.03	14.58 ✓	14.55
BM			6.15	20.46	S.E.B.P. La Mancha at Frontera 2.0.47

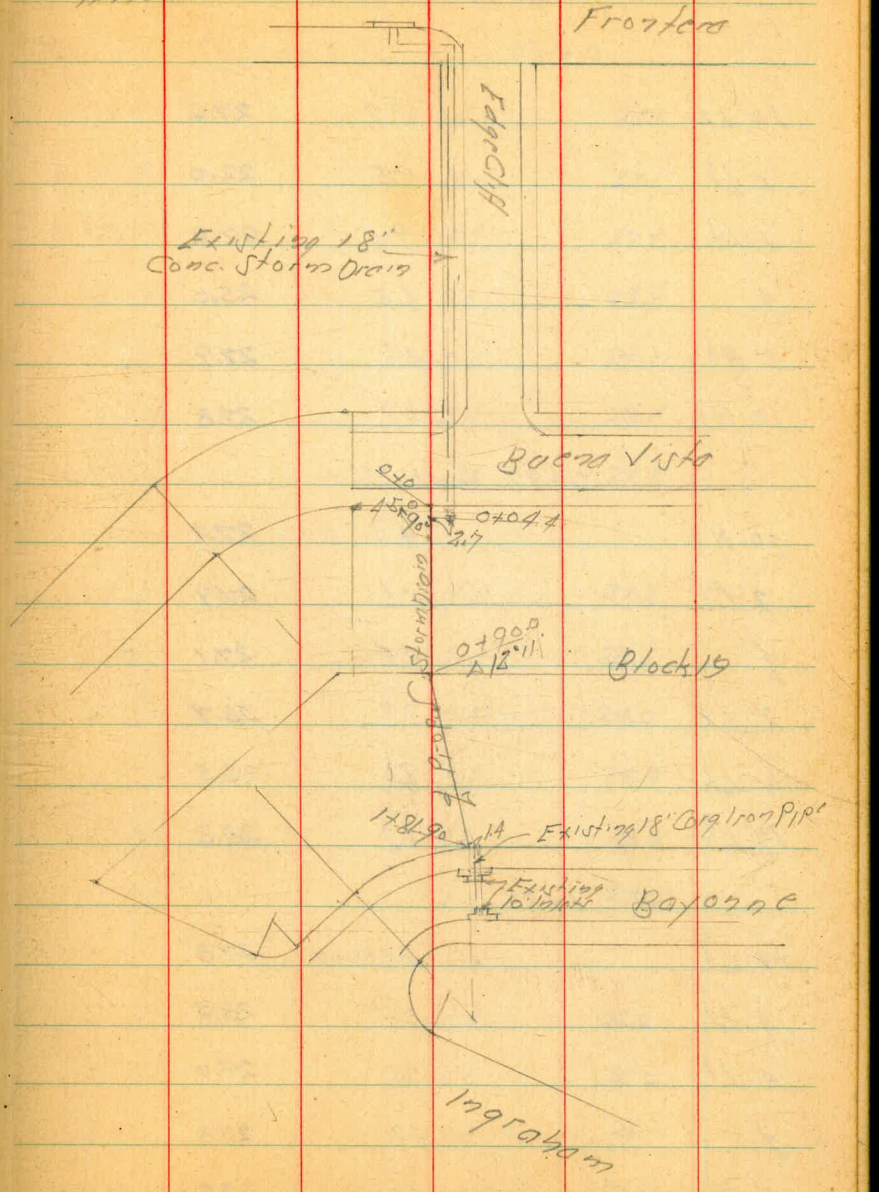
Notes Revised 5-8-41.



Proposed Storm Drain Across Block 19
From Buena Vista to Bayonne

BM	10.84	26.31 ✓		15.47	H.E.B.P. Edge of Alley Frontera
TP	5.74	31.51 ✓	0.54	25.77	
		0+0 = E.L. Buena Vista			
15' Rt.	S		4.9	26.6	
"			5.2	26.3	
15' Lt.	N		5.0	26.5	
		0+04.4 - opp Existing 18" Conc. Pipe			
12' Lt.			8.9	27.6	
7' Lt.			10.4	21.1	
2.7 Lt.	Ground		10.6	20.9	
2.7 Lt.	Flow Line 18" Conc Pipe		12.56	18.95	
"			9.5	22.0	
5' Rt.			5.6	25.9	
		0+30			
10' Rt.			4.0	27.5	
1' Rt.			7.4	24.1	
"			10.0	21.5	
5' Lt.			9.9	21.6	
12' Lt.			3.8	27.7	

May 7-41
Sissin
Northern
Moore



3/31/51

0+80

10' Lt	3.9	27.6
5' Lt	9.5	22.0
1 Lt	9.3	22.2
℄	6.5	25.0
5' Rt	3.6	27.9
10' Rt	3.7	27.8

0+90 - Δ Lt 12°11'

10' Rt	4.3	27.2
2' Rt	3.6	27.9
℄	4.4	27.1
2 Lt	7.8	23.7
6 Lt	8.0	23.5
12' Lt	3.2	28.3

1+20

15 Lt	3.7	27.8
9 Lt	3.1	28.4
4' Lt	7.5	29.0
℄	3.7	27.8
5' Rt	4.0	27.5
10' Rt	3.9	27.6

3/31/51

1+50

10' Rt	4.4	27.1
5' Rt	4.4	27.1
℄	3.8	27.7
2 Lt	7.6	23.9
5 Lt	7.5	24.0
9 Lt	2.8	28.7
15' Lt	4.2	27.3

1+70

15' Lt	4.3	27.2
10' Lt	3.3	28.2
4 Lt	7.5	29.0
℄	7.1	29.4
2' Rt	3.2	28.3
10' Rt	4.5	27.0

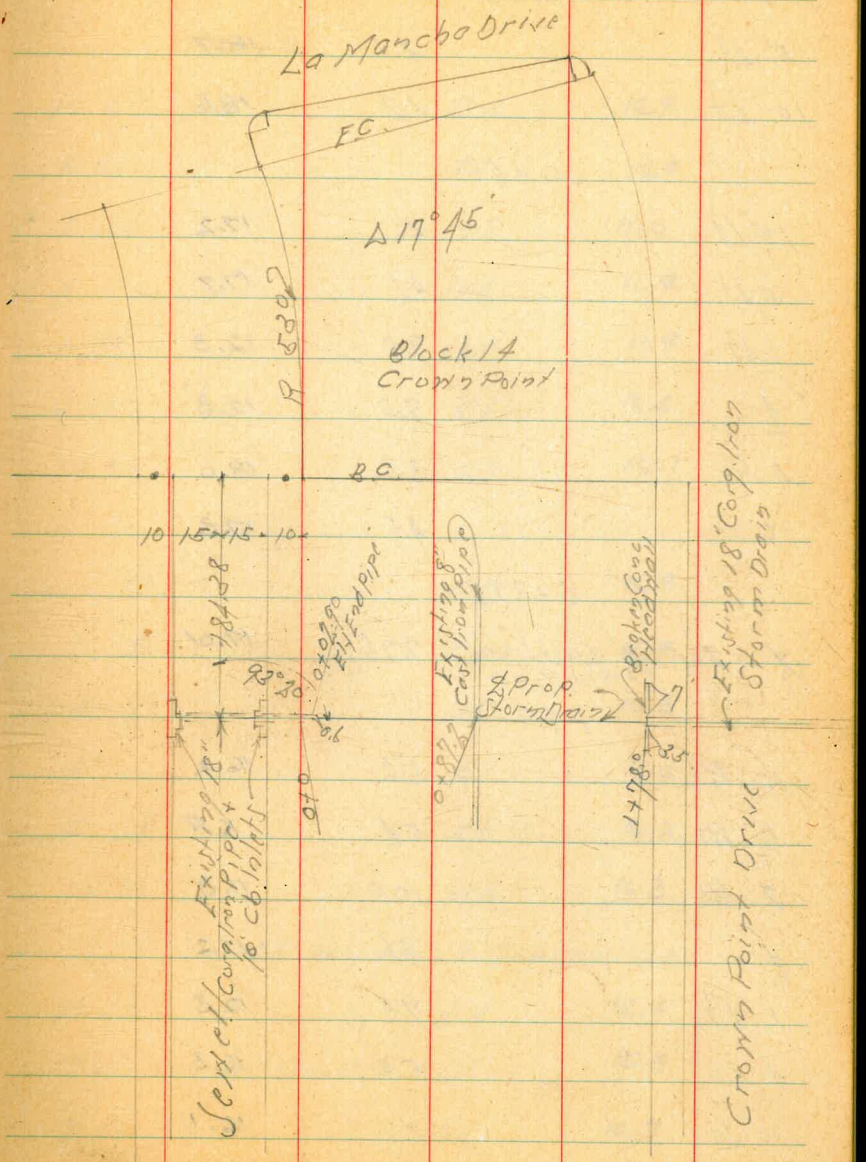
1+81.90 =

10' Rt	5.3	26.2
2' Rt	5.5	26.0
℄	8.4	23.1
1.4' Lt Flow Line 18" Corrug. P.	10.90	20.6
1.4' Lt Ground	10.5	21.0

		21.51				
0' Ht			7.8	23.7		
5' Ht			5.4	26.1		
10' Ht			5.4	26.1		
BM			2.91	28.60	N.E.BP Yosemite Ingraham 28.64	

Proposed Storm Drain Across Block 14 From Sewell to Crown Point Drive

B.M.	4.71	22.66 ✓		17.95	SW BP La Mancha & Crown Pt. Dr.
TP	3.76	21.79 ✓	4.63	18.03	
		0+00 = FL. Sewell			
15 Rt. S			4.1	17.7	
℄			4.2	17.6	
15 Lt. N			4.1	17.7	
		0+02.9 = opp Existing 18" C.I. Pipe			
10' Lt			3.8	18.0	
4' Lt			4.0	17.8	
0.6 Lt	℄ 18" Corg. Iron Pipe Flow Line		9.37	12.92	
0.6 Lt	Ground		10.2	11.6	
℄			9.0	12.8	
3' Rt			3.7	18.1	
10 Rt			3.8	18.0	
		0+30			
10' Rt			3.5	18.3	
4' Rt			2.6	19.2	
1' Rt			9.1	12.9	
℄			9.1	12.9	
1' Lt			9.0	12.8	



	21.79		
5' Lt		3.1	18.7
10' Lt		3.2	18.6
	0+60		
10' Lt		4.6	17.2
5' Lt		4.1	17.7
1 Lt		9.5	12.3
℄		9.5	12.3
4 Rt		3.8	18.0
10' Rt		4.5	17.3
	0+87.2		
℄ = Top 8" Cast Iron Sewer Pipe		7.78	14.01
	1+0		
10' Rt		5.6	16.2
6' Rt		5.4	16.4
2 Rt		10.0	11.8
℄		9.6	12.2
1 Lt		9.5	12.3
4' Lt		5.5	16.3
10' Lt		5.7	16.1

	21.79		
	1+30		
10' Lt		5.4	16.4
5' Lt		5.4	16.4
2 Lt		10.8	11.0
℄		10.4	11.4
1 Rt		10.4	11.4
4' Rt		5.3	16.5
10' Rt		5.7	16.1
	1+60		
10' Rt		5.4	16.4
6' Rt		5.4	16.4
2' Rt		11.5	10.3
℄		10.8	11.0
5' Lt		5.6	16.2
10' Lt		5.5	16.3
	1+78 = Wly End 18" Corg Iron Pipe		
10' Lt		6.4	15.4
7' Lt = Wly Brok Conc Hdwl		6.5	15.3
2' Lt		11.1	10.7
℄ = Flow Line 18" Corg Iron Pipe		12.08	9.71

21.79

2' Rt Ground	11.3	10.5	
3.5 Rt Top Broken Conc Mt	6.5	15.3	
7' Rt	9.8	12.0	
9' Rt	6.1	15.7	

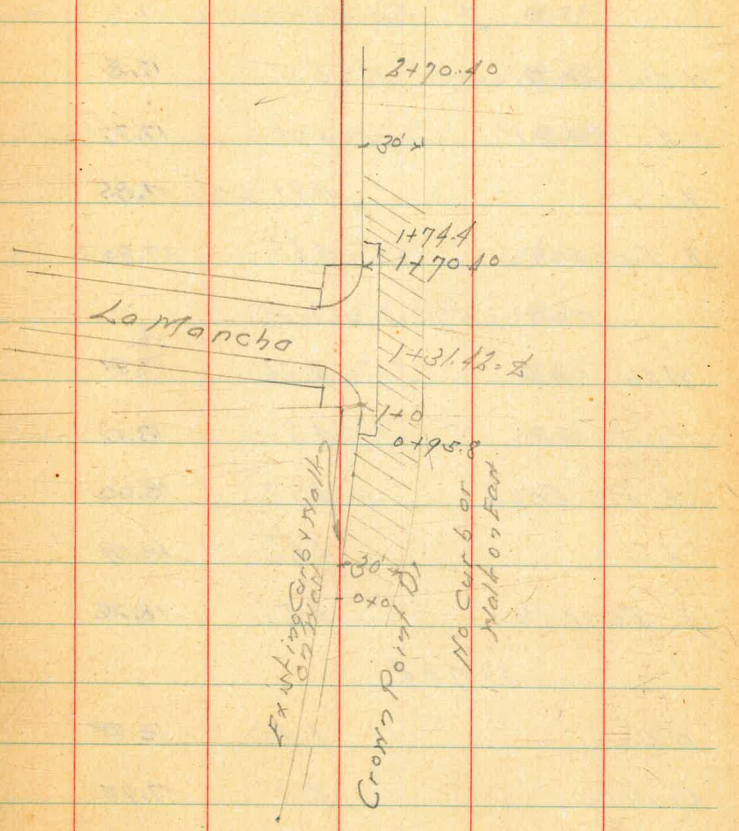
Crown Point Check Levels — May 14-41
Old Sewer Levels Bench Marks

				✓	
BM	4.33	37.34		33.01	NW BP Loc Cima + Ingraham
BM			4.38	32.96	Crossing CS Mid. Curve Promontory + Ingraham # 1463 P 10 32.75
BM	6.42	24.13		17.71	SE BP Loc Cima + Fronton
BM			2.39	21.74	Cross CS SW Cor Loc Cima + Bucnavista 21.53 # 1463 P 10
BM	11.52	27.50		15.98	SW BP Loc Cima + Cronin PLD
BM			0.43	27.07	SE Top F Hyd Loc Cima + Jennett 26.91 # 1463 P 13
BM	4.23	60.08		55.85	NE BP Grand + Ingraham
TP	3.81	56.00	7.89	52.19	
TP	4.78	55.77	5.01	50.99	
BM			4.28	51.49	NW BP Grand + Kendall 51.57

Cross Section Crown Point Drive
100' S of E.C. & 100' N of E.C. At
La Mancha

	✓		✓	S/W B.P. La Mancha & Crown Pt Dr.
BM	4.82	22.77	17.95	
		0+0 = 100' S of BC La Mancha		
W Cb Top		5.61	17.16	
Gutter		6.08	16.69	
℄		6.01	16.76	
E Edge Paving		5.78	16.99	
	0+50			
W Cb Top		5.23	17.54	
Gutter		5.72	17.05	
℄		5.64	17.13	
E Edge Pav		5.47	17.30	
	0+95.8			
W Cb Top		4.87	17.90	
Gutter		5.40	17.37	
+4 : Edge Pav		5.32	17.45	
℄		5.20	17.57	
E Edge Paving		5.04	17.73	
	1+0 = PCC			
W Cb Top		4.83	17.94	
Gutter Ground		5.3	17.5	
+4 : Edge Pav.		5.31	17.46	

Notes Reduced 5.16.41



22.77

℄	5.14	17.63
E Edge Paving	4.98	17.79
℄ Lo Yoncha		
W Cb Low Ground	5.0	17.8
1+4 = Edge P	5.00	17.77
℄	4.92	17.85
E Edge Pav	4.85	17.92
1+70.4 = Cb FC		
W Cb	4.36	18.41
Gut	4.8	18.0
1+4 = Edge	4.77	18.00
℄	4.68	18.09
E Edge Pav	4.51	18.26
1+74.4		
W Cb	4.33	18.44
Gutter	4.80	17.97
1+4 = Edge Pav	4.71	18.06
℄	4.67	18.10
E Edge Pav	4.47	18.30

22.77

2+20.4

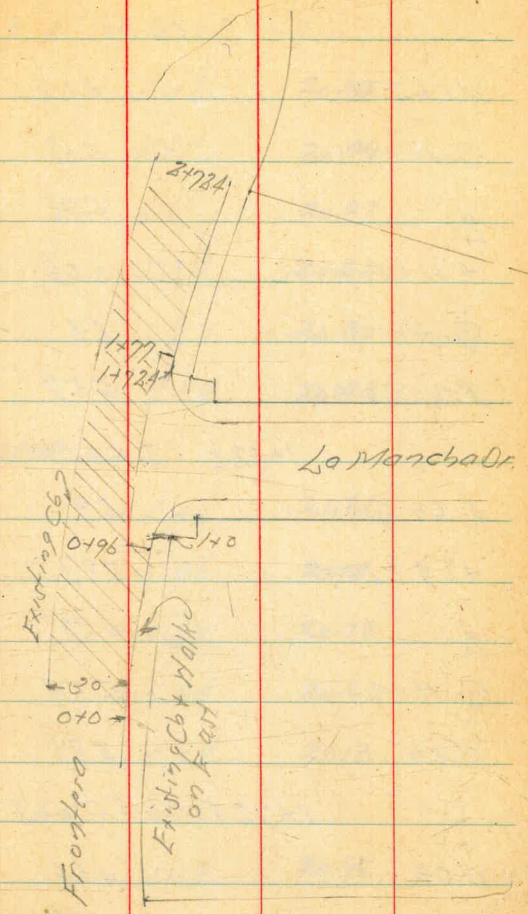
W Cb Top	4.02	18.75
Gutter	4.56	18.21
℄	4.42	18.35
E Edge Pav	4.33	18.59
2+70.4		
W Cb Top	3.75	19.02
Gutter	4.27	18.50
℄	4.17	18.60
E Edge Pav	3.97	18.80

Cross Section Frontera
100'S of EC + 100'N of EC At
La Mancha

30' Roadway

S.E.B.P.
La Mancha at
Frontera

BM	5.60	26.07		20.47
		0+00 = 100'S of Cb EC		
E Cb Top			6.03	20.04
Gutter			6.52	19.55
℄			6.48	19.59
Gutter			6.23	19.84
W Cb Top			5.55	20.52
		0+50		
W Cb Top			5.27	20.80
Gutter			5.93	20.14
℄			6.16	19.91
Gutter			6.24	19.83
E Cb			5.76	20.31
		0+96		
E Cb			5.59	20.48
Gutter			6.18	19.95
+4 = Edge Pav			6.10	19.97
℄			5.96	20.11
Gutter			5.71	20.36
W Cb			5.08	20.99



26.07 ✓

1+00 = Cb BC

W Cb Top	5.07	21.00
Gutter	5.68	20.39
℄	5.96	20.11
+11 = Edge Pav.	6.06	20.01
Gutter Ground	6.1	20.0
E Cb = Cb BC	5.57	20.50

1+32.4 = ℄ La Mancha

E Cb Ground	5.9	20.2
+04 = Edge	5.87	20.20
℄	5.82	20.25
Gutter	5.54	20.53
W Cb	4.86	21.21

1+72.4 = Cb E.C. on E

W Cb	4.63	21.44
Gutter	5.29	20.78
℄	5.54	20.53
+11 = Edge Pav	5.62	20.45
Gutter Ground	5.6	20.47
E Cb	5.15	20.92

26.07

1+77

E Cb	5.12	20.95
Gutter	5.61	20.46
+4	5.60	20.47
℄	5.54	20.53
Gutter	5.27	20.80
W Cb	4.59	20.48

2+32.4

W Cb	4.46	21.61
Gutter	5.06	21.01
℄	5.29	20.78
Gutter	5.44	20.63
E Cb	4.94	21.13

2+72.4

E Cb	5.12	20.95
Gutter	5.60	20.47
℄	5.49	20.58
Gutter	5.20	20.87
W Cb	4.59	21.48

X-Section of Estrella - Trojan to Polk

60' st. 12' cbs. 36' Rdw. 9' 1/4"

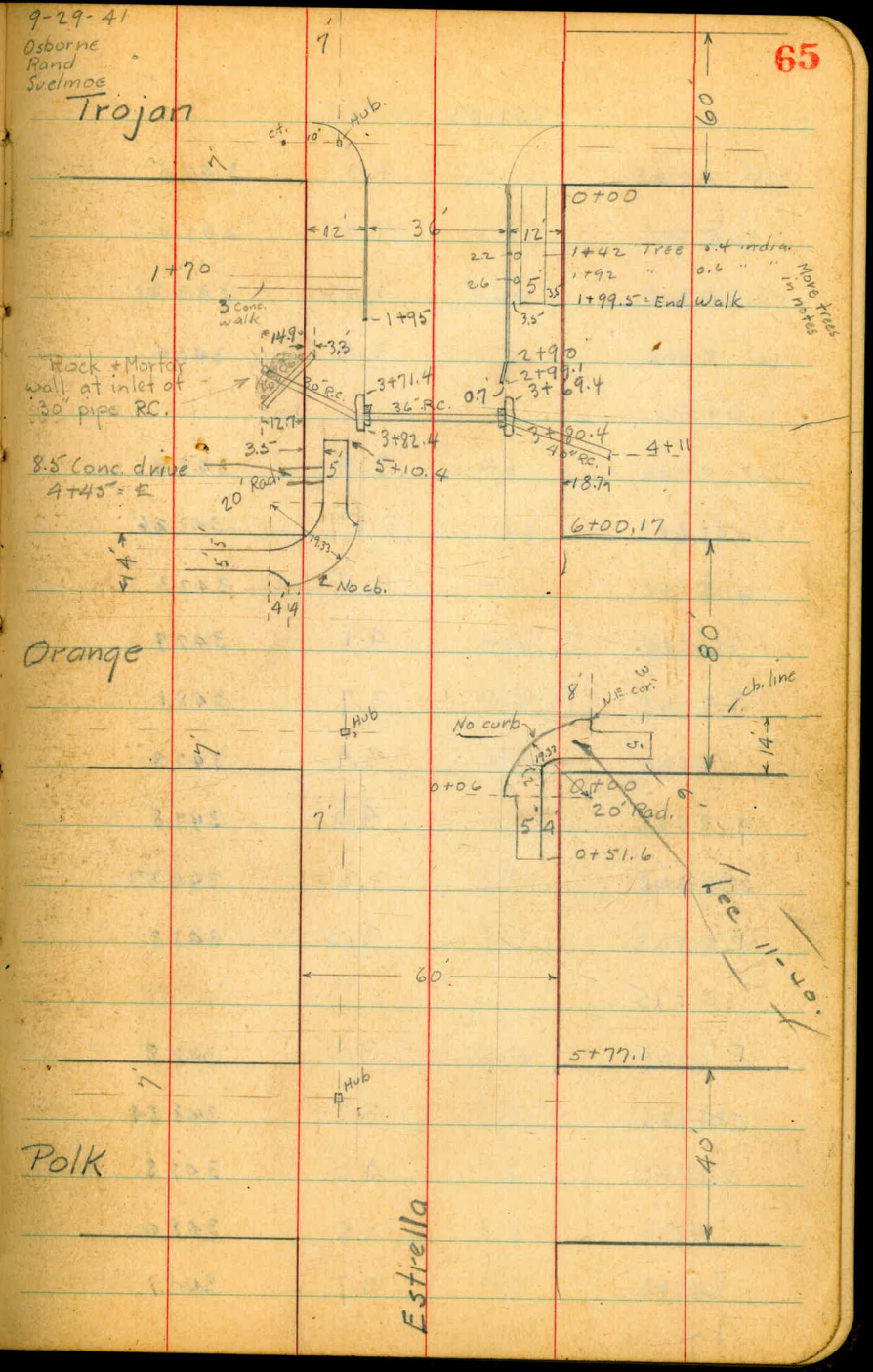
Indexed LM

	+	HI	−	Elev.
Orange + Estrella S.E.B.P. on church steps				348.45
	3.04	351.49		
	8.35	351.83	8.01	343.48
				348.32
S.E.B.P. Trojan + Estrella			3.61	349.22 (No record in my book)
0+00 = S.L. Trojan				
W			3.5	348 3
cb Top			3.56	348.27
gut			4.6	347 2
1/4			4.6	347 2
℄			4.4	347.4
1/4			4.4	347.4
gut			4.4	347.4
cb Top			3.62	348.21
E			3.5	348 3
0+25				
F			3.3	348 5
cb Top			3.47	348 36
gut			4.2	347 6
1/4			4.0	347 8
E			3.9	347.9

(Reduced & Plotted on Profile #289 11-7-41 CBH)

9-29-41
Osborne
Rand
Suelmoe

65



	351.83	
1/4	4.3	347.5
gut	4.4	347.4
cb top	3.62	348.21
W	3.4	348.4
0+50		
W	3.4	348.4
cb top	3.57	348.26
gut	4.5	347.3
1/4	4.1	347.7
E	3.7	348.1
1/4	3.9	347.9
gut	4.0	347.8
cb top	3.26	348.57
E	3.0	348.8
0+75		
E	3.0	348.8
cb Top	3.29	348.54
gut	4.0	347.8
1/4	3.8	348.0
E	3.7	348.1

	351.83	
1/4	4.1	347.7
gut	4.5	347.3
cb. top	3.60	348.23
W	3.5	348.3
1+00		
W	4.1	347.7
cb. Top - (break)	3.65	348.18
gut	4.6	347.2
1/4	4.2	347.6
E	4.0	347.8
1/4	4.1	347.7
gut	4.1	347.7
cb top	3.34	348.49
E	3.1	348.7
1+25		
E	3.2	348.6
cb. top	3.73	348.10
gut	4.6	347.2
1/4	4.5	347.3
E	4.4	347.4

351.83

1/4	4.6	347.2
gut	5.2	346.6
cb. top	4.48	347.35
W	4.6	347.2
1+40		
E curb-top	3.86	347.97
gut	4.7	347.1
1+50		
W	5.6	346.2
cb top	5.24	346.59
gut	5.9	345.9
1/4	5.3	346.5
℄	5.0	346.8
1/4	4.8	347.0
gut	4.9	346.9
cb top	4.13	347.70
E	4.1	347.7
1+75		
E	4.5	347.3
cb top	4.84	346.99

351.83

gut	5.6	346.2
1/4	5.8	346.0
℄	5.8	346.0
1/4	6.2	345.6
gut	6.7	345.1
cb top	6.12	345.71
W	5.8	346.0
1+95 = End cb. on W.		
W.	6.5	345.3
cb. Top of end	6.60	345.23
gut	7.4	344.4
1/4	7.1	344.7
℄	6.6	345.2
1/4	6.8	345.0
gut	6.6	345.2
cb Top	5.73	346.10
E	5.3	346.5
2+07 = ℄ drive on W.		
W. on Conc. drive	7.56	344.27
+9 " " "	7.58	344.25
+12.1 = edge of drive	7.78	344.05

351.83

2+14 = Acacia tree on E 0.5 india 3.2 back from cb.

2+25		
E	6.5	345.3
cb Top	7.04	344.79
gut	8.2	343.6
1/4	8.1	343.7
℄	8.0	343.8
1/4	8.3	343.5
+6	8.8	343.0
cb	8.5	343.3
W.	8.2	343.6
2+50		
W	9.1	342.7
cb	9.4	342.4
+2	10.0	341.8
1/4	9.5	342.3
℄	9.2	342.6
1/4	9.2	342.6
gut	9.3	342.5
cb top	8.04	343.79
E	7.5	344.3

351.83

2+66 = Acacia tree on E. 0.8 india 3' back from cb.

T.P.	9.96	341.87
	2.18	344.05
2+75		
E	1.0	343.1
cb top	1.26	342.79
gut	2.5	341.6
1/4	2.4	341.7
℄	2.5	341.6
1/4	2.8	341.3
+8	3.4	340.7
cb	2.5	241.6
W	2.1	242.0
W+2	2.0	242.1
W+25	12.4	231.7
2+90 Curb broken on E. (should be rebuilt from here)		
Top cb (.15 in st)	1.90	242.15
gut	3.1	241.0
2+99.1 = End of cb. on E.		
Top cb. (0.7 in st.)	2.10	341.95
gut	3.5	340.6

	344.05		
3+00			
W-25		14.0	330.1
W-1		3.6	340.5
W		3.5	340.6
cb		3.7	340.4
+2		4.6	339.5
1/4		3.9	340.2
℄		3.6	340.5
1/4		3.6	340.5
+8		3.7	340.4
cb		3.0	341.1
+3		2.2	341.9
E		1.6	342.5
3+19			
E		2.3	341.8
+9		3.1	341.0
cb		4.2	339.9
1/4		4.4	339.7
℄		4.3	339.8
1/4		4.6	339.5

	344.05		
+7		5.1	339.0
cb		4.8	339.3
+8.7 = E. end Top culvert head wall	Rouble Conc.	4.65	339.40
W		6.1	338.0
W+19		16.0	328.1
3+24			
W-14.9 = Inlet of Culvert F.L.	℄ 30" Pipe	16.30	327.75
3+29 = W. end Top culvert head wall			
W-12.7 = Top wall		4.76	339.29
W		5.0	339.1
cb		4.9	339.2
+2		5.2	338.9
1/4		4.7	339.4
℄		4.5	339.6
3+50			
W		5.1	339.0
cb		5.1	339.0
+2		5.6	338.5
1/4		5.3	338.8
℄		4.9	339.2

344.05

1/4	5.0	339.1
cb	4.8	339.3
E.	4.4	339.7

3+69.4 = N. end cb. inlet on E. - 10' opening on cb. line

E cb. Top	4.48	339.57
bottom of opening or inlet (F.L. gut)	5.51	338.54

3+71.4 = N. end cb. inlet on W. 10' opening on cb. line

W cb. Top	4.93	339.12
Bottom of opening	5.94	338.11

3+75 = approx. ℄ of boxes

E -10	6.0	338.1
E	4.2	339.9
cb Top.	4.54	339.51
gut on grating	5.51	338.54 ✓
Flow line of box	14.57	329.48
1/4	5.0	339.1
E	5.1	339.0
1/4	5.4	338.7
gut on grating	5.88	338.17 ✓
Flowline of box	16.53	327.52
Feb top	4.88	339.17
W.	4.9	339.2

344.05

3+80.4 = S. end Inlet on E.

cb. top	4.66	339.39
bottom of opening	5.64	338.41

3+82.4 = S end inlet on W.

cb. top	4.86	339.19
bottom of opening	5.84	338.21
T.P.	4.86	339.19
	10.58	349.77 ✓

4+11

W	10.5	339.3
cb	10.0	339.8
+2	11.0	338.8
1/4	10.5	339.3
E	10.2	339.6
1/4	10.4	339.4
+6	10.7	339.1
cb	10.0	339.8
E	10.0	339.8

+18.7 ℄ End of 40' R.C. pipe at toe of Slope

F.L. of pipe	23.16	326.61

349.77

4+50		
E - 27 = Toe of slope	22.8	327.0
E	9.1	340.7
cb	9.6	340.2
1/4	9.3	340.5
E	9.2	340.6
1/4	9.5	340.3
+7	10.1	339.7
cb	9.1	340.7
W	8.3	341.5

4+62 N. edge of house - shows end of slope on E.

4+76 N. end Conc. wall on W. 4' high 8" 0.1 back

4+82 = ℄ Conc. walk on E. 5.8 wide (porch of house

E + 0.8 = on Conc.	7.66	342.11
4+94		
W	6.7	343.1
cb	7.1	342.7
+2	8.0	341.8
1/4	7.6	342.2
℄	7.4	342.4

349.77

1/4	7.3	342.5
cb	7.8	342.0
+ 9.2 = ℄ Edge of apron 8.1 wide on conc.	7.06	342.71
E - on conc. apron	6.94	342.83
E + 0.4 = Conc floor. & Sin. gar.	6.91	342.86

5+04 = ℄ Con. drive on W. 7.6 wide

W = edge of conc.	6.34	343.43

5+10.4 = N. end of 5' side walk on W.

W + 8.5 = E edge on conc.	6.33	343.44
W + 3.5 = W edge " "	6.26	343.51

5+45

E	5.0	344.8
cb	5.0	344.8
+2	5.8	344.0
1/4	5.4	344.4
℄	5.3	344.5
1/4	5.6	344.2
cb	6.2	343.6
+ 3.5 = E edge of s. walk	5.10	344.67
+ 8.5 = W " " " "	5.04	344.73

	349.77	
W. on ℄ 8.4 drive	4.93	344.84
5+75		
W	4.1	345.7
W+3.5 = W. edge walk-Conc	3.98	345.79
W+8.5 = E " " "	4.01	345.76
cb	4.5	345.3
+2	5.1	344.7
1/4	4.8	345.0
℄	4.5	345.3
1/4	4.6	345.2
cb	5.1	344.7
+3	4.6	345.2
E	4.3	345.5
5+78 = S. end of Wall on W. 1.5' high 0.6 back		
6+94.17 = P.C. of 20' Ret. on W.		
W	3.4	346.4
W+3.5 = W. edge walk	3.26	346.51
W+8.5 E " "	3.33	346.44
6+00.17 = N.L. Orange		
E	3.7	346.1

	349.77	
cb	4.7	345.1
1/4	4.4	345.4
℄	4.1	345.7
1/4	4.3	345.5
+8	4.5	345.3
cb to back edge of cb. - No Curbin.	3.8	346.0
+1.1 = Outside of walk on Ret.	3.19	346.58
+9.9 = Inside " " " "	3.05	346.72
W	3.3	346.5
6+13 = Tel. pole on W 1.2 dia. 5' back of W.L. ✓		
6+14.1 = S.W. Cor. Ret. (out to back edge of cb.		
W-3.8 - on Conc.	3.21	346.56
6+14.17 = N. cb Orange		
W	4.4	345.4
cb	4.3	345.5
1/4	4.1	345.7
℄	4.0	345.8
1/4	4.2	345.6
cb	4.3	345.5
E	4.5	345.3

349.77

6+27.17 = N. ¼ Orange		
E	4.1	345.7
cb	3.9	345.9
¼	3.9	345.9
℄	3.8	346.0
¼	3.7	346.1
cb	3.8	346.0
W	3.9	345.9
6+40.17 = ℄		
W	3.5	346.3
cb	3.5	346.3
¼	3.5	346.3
℄	3.5	346.3
¼	3.5	346.3
cb	3.6	346.2
E	3.7	346.1
6+53.17 = S ¼		
E	4.0	345.8
cb	3.8	346.0
¼	3.7	346.1

349.77

℄	3.7	346.1
¼	3.6	346.2
cb	3.5	346.3
W	3.7	346.1
6+66.17 = S cb.		
W	4.3	345.5
cb	4.2	345.6
¼	4.0	345.8
℄	3.9	345.9
¼	4.0	345.8
cb	4.1	345.7
E	4.0	345.8
6+68		
W-2 = P. pole 1' dia. ✓		
W - To show high dirt ret. on W.	3.3	346.5
cb	4.3	345.5
N.E. Cor Ret. on S.E. Cor. (see sketch)		
7.9 E. of E.L. Estrella. out to back edge of cb. on Orange		
Top conc.	4.93	344.84
check on B.M.	1.32	348.45 ✓

349.77

0+00 = S.L. Orange

E	3.6	3462
E+4 = E. edge of Walk edge of cb. No Curb.	3.76	34601
+10.4 = Outside ret. = back	3.78	34599
cb	4.6	3452
1/4	4.4	3454
℄	4.2	3456
1/4	4.4	3454
cb	4.6	3452
+3	3.4	3464
W	3.3	3465

0+06 = P.C. of 20' Ret. on E.

E.	3.5	3463
+4 = E. edge walk	3.91	34586
+9 = W. " " back edge of cb.	3.93	34584
+11.33 = Outside of Ret.	3.92	34585
cb	4.9	3449
1/4	4.5	3453
℄	4.3	3455

349.77

0+57.6 = End 5' walk on E.

W	5.3	3445
+11	5.5	3443
cb	6.5	3433
1/4	5.8	3440
℄	5.5	3443
1/4	5.6	3442
cb	6.2	3436
+3 = W. edge of walk	5.34	34443
+8 = E " " "	5.30	34447
E.	4.6	3452

0+73 = ℄ 2.3 Flagstone walk on W.

W - 0.1 = edge of walk on Conc.	5.88	34389
T.P.	6.52	343.25

1.99 345.24

1+00 = N. end 6" Con. wall 2.5' high at back on E.

E	2.1	343.1
+11	2.5	3427
cb	3.0	3422
+1	3.3	341.9

345.24

1/4	2.5	342.7
℄	2.5	342.7
1/4	2.9	342.3
+8	3.6	341.6
cb	3.5	341.7
+2	2.7	342.5
W	2.6	342.6
1+18 = ℄ 4' Steps in Wall		
E - 0.1 = Top of bottom step	2.68	342.56
1+37 = ℄ 10.7 Dirt drive		
E	3.0	342.2
cb	4.2	341.0
1+50		
W	4.3	340.9
+10	4.4	340.8
cb	4.7	340.5
+2	5.0	340.2
1/4	4.4	340.8
℄	4.0	341.2
1/4	4.1	341.1

345.24

+8	4.8	340.4
cb	4.5	340.7
+2	4.0	341.2
E	3.4	341.8
1+53 = S. end wall on E.		0.1 back
1+57 = ℄ 10' Dirt drive on W		
W	4.4	340.8
+9	4.5	340.7
cb	5.1	340.1
2+00		
E	5.0	340.2
cb	6.6	338.6
1/4	6.0	339.2
℄	5.9	339.3
1/4	6.2	339.0
+7	6.9	338.3
cb	6.1	339.1
+1	5.9	339.3
W	5.6	339.6
2+04 = N. end 6" Wall conc. on E. 2.0 high		

345.24

2+17 = ℄ 3.8 Conc. steps in Wall on E.		
E-0.3 = Top of bot. step.	5.38	339.86
2+41 = ℄ 8.3 dirt drive on E		
E	5.9	339.3
cb	7.9	337.3
2+50		
W	7.6	337.6
+11	7.7	337.5
cb	8.0	337.2
+1	8.7	336.5
1/4	8.1	337.1
E	7.6	337.6
1/4	7.7	337.5
cb	8.3	336.9
+2	7.4	337.8
E	6.9	338.3
2+53 S End of Conc. wall on E. 0.7	0.3 back	
N end Rock wall on E.	0.3 back	
2+83 = ℄ 9.2 Conc. steps on E.		
E+1.0 = Top of bot. step.	7.54	337.70

345.24

3+00		
E.	8.4	336.8
+11	8.8	336.4
cb	9.6	335.6
+1	10.0	335.2
1/4	9.2	336.0
℄	9.0	336.2
1/4	9.4	335.8
+7	10.2	335.0
cb	9.7	335.5
+1	9.0	336.2
W	9.1	336.1
3+03 = S. end Rock wall 0.1 back on E		
3+20 = ℄ 3.7 Walk at bottom of Conc. steps in wall		
E+1.6 = edge of walk on Conc.	8.72	336.52
3+37 = ℄ 8' dirt drive on W.		
W	10.1	335.1
+7	9.9	335.3
cb	10.5	334.7
+3	11.0	334.2

345.24

3+50		
W	10.4	334.8
cb	10.2	335.0
+1	10.2	335.0
+3	11.5	333.7
1/4	10.9	334.3
E	10.6	334.6
1/4	10.7	334.5
cb	11.3	333.9
+2	10.4	334.8
E	10.2	335.0

3+53 = N. end 6" Conc. wall on E. 4' high 0.6 in st.

3+68 = ℄ 3.2' Conc. steps on E.

E +0.2 = Top of bot. step.	10.21	335.03
T.P.	10.86	334.38
0.67	335.05	

3+99 = ℄ 4' Conc. walk on W.

W-0.2 on edge of walk	1.51	333.54
4+00		
E	1.4	333.7

335.05

+10	2.2	332.9
cb	2.6	332.5
+1	2.9	332.2
1/4	2.6	332.5
E	2.4	332.7
1/4	2.5	332.6
+5	3.1	332.0
cb	2.4	332.7
+1	2.0	333.1
W	1.9	333.2

4+02 = S. end Conc. wall on E online 4' high

N. " 6" " " " " " " " 3' "

4+27 = ℄ 3.2 Conc. steps on E.

E. - 0.2 = top of bottom step	2.69	332.36

4+28 = ℄ 7' drive - 2-2' strips conc. on W.

on N. strip - W - 0.4 on conc.	2.86	332.19
on S " " " " "	2.92	332.13
W	2.8	332.3
+7	2.9	332.2
cb	3.5	331.6
+3	4.2	330.9

335.05

1/4	3.9	331.2
℄	3.8	331.3

4+50 = S. end Conc. wall on E. 0.3 back 3.5 high

N. " 0.6 " " " " " 2' high

W	4.4	330.7
cb	4.7	330.4
+3	5.7	329.4
1/4	5.2	329.9
℄	5.0	330.1
1/4	5.0	330.1
+8	5.5	329.6
cb	5.2	329.9
+2	4.7	330.4
E	4.2	330.9

4+76 = ℄ 4' Conc. steps on E.

E - 0.5 Top of bot. step	5.02	330.03
E	5.5	329.6
+10	5.9	329.2
cb	6.6	328.5
1/4	6.3	328.8

335.05

℄	6.0	329.1
1/4	6.1	329.0
+7	6.7	328.4
cb	6.2	328.9
+1	5.9	329.2
W	6.0	329.1

5+00 = S. end Conc. wall on E. 2' high 0.9 back

W-15	10.6	324.5
W-10	9.3	325.8
W	7.6	327.5
+11	7.4	327.7
cb	8.0	327.1
+7	8.5	326.6
1/4	7.6	327.5
℄	7.4	327.7
1/4	7.8	327.3
+8	8.3	326.8
cb	7.6	327.5
+1	7.2	327.9
E	6.6	328.5

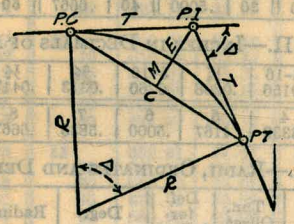
5+40		
E.	9.0	326.1
+10	9.6	325.5
cb	10.1	325.0
+3	10.6	324.5
1/4	10.1	325.0
℄	9.8	325.3
1/4	9.8	325.3
+8	10.6	324.5
cb	10.2	324.9
+2	9.6	325.5
w	9.7	325.4
+8	9.3	325.8
+20	13.4	321.7
5+77.1 = N.L. Polk		
w	11.3	323.8
+8	11.5	323.6
cb	12.0	323.1
1/4	11.8	323.3
℄	11.7	323.4
1/4	12.0	323.1

cb	11.9	323.2
+9	11.3	323.8
E	10.4	324.7
5+87.1		
E	11.8	323.3
cb	12.2	322.9
1/4	12.2	322.9
℄	12.1	323.0
1/4	12.1	323.0
cb	12.2	322.9
w	12.0	323.1
5+97.1 = ℄ Polk		
w	12.3	322.8
cb	12.4	322.7
1/4	12.4	322.7
℄	12.5	322.6
1/4	12.6	322.5
cb	12.2	322.9
E	11.6	323.5
6+09.1		
E	12.5	322.6
cb	12.9	322.2
1/4	13.3	321.8
℄	12.9	322.2
1/4	12.8	322.3
cb	12.9	322.2
w	12.7	322.4
6+17.1 = S.L. Polk		
w	12.3	322.8
cb	12.4	322.7
+3	13.7	321.4
1/4	13.4	321.7
℄	13.2	321.9
1/4	13.7	321.4
+4	14.1	321.0
cb	13.3	321.8
+3	12.6	322.5
E	12.5	322.6

Sorry, runing short of Room (over)

		335.05		
T.P.			0.68	334.37
	11.95	346.32	2.44	343.88
B.M. on steps	5.50	349.38	0.92	348.46
				348.45 ✓
				.01

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÷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÷(2 x 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 91.37. For from Table IV for 1° curve E=960.6 for 8° 20′=960.6÷8⅓=91.27 and from Table V correction=.10 or E=91.37 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′.

ENGINEERING DEPARTMENT
CITY OF SAN DIEGO,
CALIFORNIA.

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.