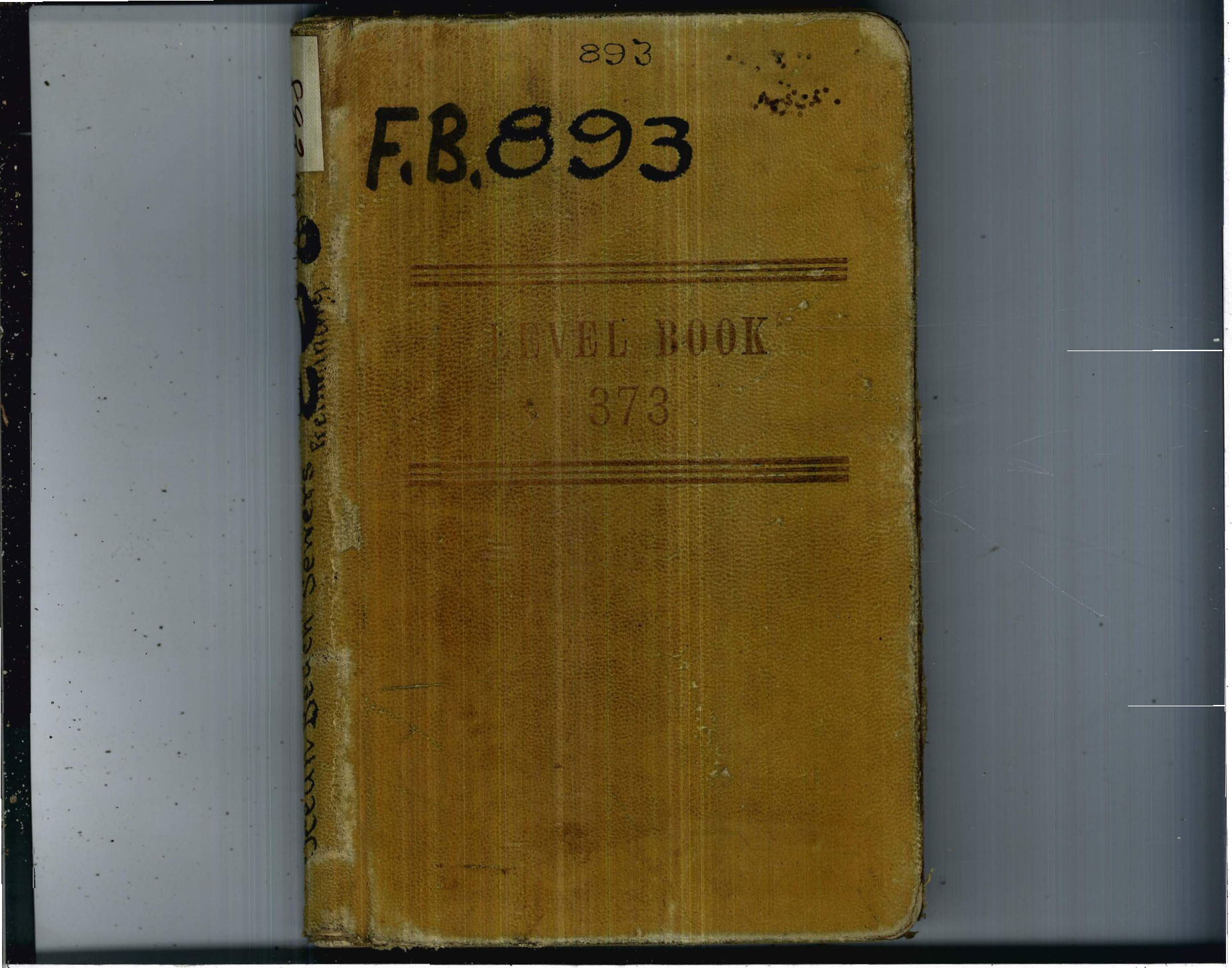

893
F.B.893
LEVEL BOOK
373

KEUFFEL & ESSER CO.

DRAWING MATERIALS
AND
SURVEYING INSTRUMENTS.

NEW YORK.
CHICAGO. SAN FRANCISCO. ST. LOUIS.

MICROFILMED
DEC 16 1964

TABLES FOR EXCAVATIONS AND EMBANKMENTS.

DISTANCES FROM CENTRE OF ROADWAY FOR CROSS-SECTIONING.
ROADWAY 30 FEET WIDE. SIDE SLOPES 1 TO 1.
FOR SINGLE TRACK EXCAVATION.

"Copyright, 1895, by Keuffel & Esser Co."

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

Calculated by Julien A. Hall, M. Am. Soc. C. E.

17.64

590' W of Bacon	2.2	15.5	
600' W = E & Abbott St (60)	5.5	12.2	
Center Abbott St (Graded)	8.3	9.4	
W Line of Abbott St	8.0	9.7	
50 W of "	7.4	10.3	
100 W of "	8.5	9.2	
TP 318 12.57	8.25	9.39	
150 W of Abbott	3.8	8.8	
200 W "	3.9	8.7	
250 W "	4.3	8.3	
290 " "	5.4	7.2	
300 W "	8.0	4.6	
350 " "	8.9	3.7	
400	8.7	3.6	
415 W	6.5	6.1	
435 W "	10.5	2.1	
450	11.1	1.5	
500 "	10.5	2.1	
515	8.5	4.1	
535	10.7	1.9	

12.57

550' W of Abbott	11.4	1.2	17.64 − 8.25 = 9.39
600' " Abbott	11.2	1.3	9.39 − 3.18 = 12.57

2

Alley Bet Brighton & Cobb Mary

	7.60	12.60		5.00	Curb S E Brigth
Center	Bacon (Graded)		6.7	5.9	
E L. of	"		6.5	6.1	
50' E	"		6.2	6.4	
100' E	"		5.2	7.4	
150' E	"		4.2	8.4	
200' E	"		3.1	9.5	
250 E	"		2.9	9.7	
300' E	"		2.4	10.2	
350 E	"		1.7	10.9	
TP	7.92	18.88	1.64	10.96	
400' E	Bacon		7.6	11.3	
450 E	"		6.6	12.3	
500' E	"		5.9	13.0	
550 E			4.4	14.5	
600' E =	W S Cable St (Graded)		5.2	13.7	
+12' Gutter			5.9	13.0	
Center	Cable St (60')		5.0	13.9	
E Gutter			5.2	13.7	
E Line	of Cable		4.5	14.4	

Sheet 14

1888

50' E	of Cable		2.8	16.1	
100 E	" "		2.7	16.2	
150 E	" "		2.0	16.9	
TP	7.14	24.22	1.80	17.08	
200' E	of Cable		6.7	17.5	
250 E	"		5.8	18.4	
300' E	"		5.0	19.2	
350' E	"		3.9	20.3	
400 E	"		2.6	21.6	
450 E	"		1.4	22.8	
TP	7.70	31.92	0.0	24.22	
500' E	of Cable		8.3	23.6	
550 E	" "		6.6	25.3	
600' E =	W S De Foe St		7.0	24.9	
W Gutter			8.0	23.9	
Center	De Foe (60') (Graded)		7.1	24.8	
E Gutter			7.5	24.4	
E Line	De Foe		6.4	25.5	
5' E of	" "		4.9	27.0	

1260
1.64
10.96
7.92
18.88
1.80
17.08
7.14
24.22
7.70
31.92

		31.92			
50' E of	De Zon		4.7	27.2	
100' E	" "		4.6	27.3	
150' E	" "		4.3	27.6	
200' E	" "		3.9	28.0	
250 E	" "		3.5	28.4	
TP	5.90	34.96	2.86	29.06	
		35.0			
300' E of	De Zon		6.3	28.7	
350 E	" "		6.0	29.0	
400 E	" "		5.7	29.3	
450 E	" "		5.1	29.9	
500' E	" "		4.0	31.0	
550 E			2.7	32.3	
600' E	W 2 of Eber St		1.8	34.0	
TP	11.48	45.74	0.70	34.26	
Center of	Eber St (60)		10.8	34.9	
E Line	Eber St		8.0	36.7	
50' E	"		6.5	39.2	
100 E	"		4.3	41.4	
150' E	"		2.5	43.6	
TP	10.50	54.08	2.16	43.38	

		54.08			4
200' E of	Eber St		8.6	45.5	31.92
250' E	"		6.2	47.9	2.86
300 E	"		3.5	50.6	29.06
350' E	"		1.5	52.6	5.90
TP	17.35	65.00	1.43	52.15	34.96
400' E	"		0.2	55.8	11.44
450 E	"		3.6	59.4	46.40
500' E	"		1.6	63.4	2.86
TP	11.74	75.34	1.38	63.96	43.54
550 E	of Eber		8.7	66.7	11.44
600' E	& W Line of	Forde St (60)	6.1	69.3	54.98
Center	Francis		4.8	70.6	8.04
E 2	Francis		3.3	71.1	1.92
TP	12.00	84.74	2.2	72.74	57.02
50' E of	Francis		10.6	74.1	Bm on 105 Bldg Francis Bldg 8.0
75' E	" "		6.0	78.7	
100' E	" "		1.5	80.2	
150' E			1.4	83	
TP	1.91	97.49	0.70	84.04	

		97.00			
200' E	of Froud St		12.6	84.4	
250' E	"		9.7	87.3	
300' E	"		7.6	89.4	
350' E	"		4.6	92.4	
400' E	"		1.8	95.2	
TP	13.08	109.19	0.89	96.11	
450' E	Froud		10.0	99.2	
500' E			5.1	104.1	
TP	12.90	121.67	0.42	108.77	
550' E	of Froud		11.6	110.1	
600' E =	W L Guizot (60)		5.2	116.5	
Center of	Guizot		2.4	119.3	
TP	12.85	134.52	0.0	121.67	Pa
E L of	Guizot		12.0	122.5	
50' E	of Guizot		6.9	127.6	
100' E	of Guizot		0.3	134.2	
TP	12.60	146.73	0.39	134.13	
150' E	of Guizot		5.8	140.9	
200' E	"		1.4	145.3	
	8.27	155.00	0.0	146.73	

		155.00			
250' E	of Guizot		7.8	147.2	
300' E	"		6.6	148.4	
350' E	"		6.5	148.5	
400' E	"		6.1	148.9	
450' E	"		5.7	149.3	
500' E	"		5.0	150.0	
550' E	" = End of Alley		4.8	150.2	
TP	8.27	158.65	4.62	150.38	
728' E =	W L Venice		3.8	154.8	
	7.40	157.78		150.38	
	Alley N + S				
00 = 560' E	of Guizot	157.8			
0.0	WL		7.6	150.2	
150 S			4.8	153.0	
100 S			2.5	155.3	
150 S =	N L Cop Mg		0.0	157.8	
00			7.6	150.2	
50 N			10.1	147.7	
100 N			11.6	146.2	
150 N =	S L Brighton		12.2	145.6	
			0.25	157.55	SW Sur NW Cn of SB

97.00
.89
96.11
1308
109.19
.42
108.77
12.90
121.67
12.85
134.52
.39
134.13
12.60
146.73
8.27
155.00
4.62
150.38
8.27
158.65
1.10
157.55

Sheet 54

2 Chapt. Prelim Sewers at Ocean Beach
2/13 Taylor
Feb Alley B+ Cor Ivy + Saratoga

	858	11.28		2.50					
00 = End of Alley at Beach			8.7	2.9	555				
25			4.8	6.6	1738				
50 E of Beach			7.8	3.6	1294				
75 E			4.5	6.9	1029				
100 "			6.2	5.2					
150 "			6.2	5.2					
155 "			5.5	5.9					
200 "			2.5	8.9					
+50 "			3.0	8.4					
3 "			3.4	8.4					
+50 = W of Abbott		7.1	4.0	7.4					
TP	7.26	14.84	4.50	6.88					
+62 Butte			8.5	6.4					
Center Abbott			8.1	6.7					
Butte			8.6	6.7					
4+10 E of Abbott			7.6	7.7					
+50			6.0	8.8					
57			5.3	9.5					

Sheet 1

1484

6

5+50 E of Beach			4.8	10.0	
6			4.6	10.2	
+50			4.6	10.2	
7			4.0	10.5	
+50			2.2	12.6	
8			2.0	12.8	
TP	6.32	1928	1.88	12.6	
+20			10.1	9.8	
+50			7.0	12.3	
9			3.8	15.5	
+50			2.5	16.8	
10			4.0	15.3	
+10 = E of Bacon St			9.5	9.8	
+20 Butte			12.8	6.5	
+40 Center of Bacon			12.1	7.2	
+50			12.3	6.9	
+58 Butte			12.2	7.1	
+70 = E of Bacon			11.4	7.9	
11			10.4	8.9	
+50			10.5	8.8	
12			11.2	8.2	Brine Saratoga Bacon

		1928			
#12 E			10.0	9.3	
TP	656	16.04	9.80	9.48	
+50			6.3	9.7	
13			6.2	9.8	
+50			5.6	10.4	
14			5.4	10.6	
+50			4.6	11.4	
15			3.5	12.5	
+50			2.9	13.1	
16			1.6	14.4	
+50			2.5	13.5	
+70	= W L Cobb St		2.2	13.8	
TP	875	22.62	2.17	13.87	
+82'	Gutter		9.2	13.4	
17	Cent		8.3	14.3	
+18	Gutter		8.9	13.7	
+30 =	E L Cobb		7.7	14.9	
+50			6.7	15.9	
18			6.2	16.4	
+50			5.8	16.8	

		22.62			
#19 E			5.3	17.3	
+50			4.3	18.3	
20			3.8	18.8	
+50			3.3	19.3	
21			2.7	19.9	
TP	898	29.30	2.30	20.32	
+50			8.5	20.8	
22			7.9	21.4	
+50			6.7	22.6	
23			5.6	23.7	
+30 =	Wd of De Zac St		5.0	24.3	
+42	Gutter		5.6	23.7	
+50			4.8	24.5	
+60 =	Center De Zac		4.4	24.9	
+78 =	Gutter		4.9	24.4	
+90 =	E L De Zac		4.0	25.3	
24			4.5	24.8	
+50			2.9	26.4	
25			2.3	27.0	
TP	10.46	37.61	2.15	27.15	

7

1928
980
9.48
656
16.04
2.17
13.87
875
22.62
2.30
20.32
898
29.30
2.15
27.15
10.46
37.61

		3761						7355			
25 +50 E			9,3	28,3		34 E			12,1	61,4	
26			8,3	29,3		+50			6,7	66,8	
+50			7,0	30,6		35			0,8	72,7	
27			5,1	32,5		TP	12,53	85,28	0,80	72,75	
+50			3,4	34,2		+50			7,2	78,1	
28			2,0	35,6		36			2,2	83,1	
+50			1,1	36,5		TP	12,96	97,79	0,45	84,83	
29			0,0	37,6		+50 = WL Froude			11,0	86,8	
TP	10,72	47,84	0,49	37,12		37			10,0	87,8	
+50			9,1	38,7		+10 = EL Froude			10,3	87,5	
+90 = WL		Eber st	8,2	39,6		+50			8,3	89,5	
30			7,8	40,0		38			0,0	97,8	
+50 = EL		Eber st	6,0	41,8		TP	12,44	110,22	0,01	97,78	
31			4,3	43,5		+50			7,5	102,7	
+50			2,5	45,3		39			7,2	103,0	
32			0,0	47,8		+50			7,6	102,6	
TP	13,11	60,95	0,0	47,84		40			5,0	105,2	
+50			10,9	50,0		+50			3,2	107,0	
33			8,0	52,4		TP	12,00	122,22	0,0	109,22	
+50			3,9	57,0		41			10,2	112,0	
TP	12,60	73,55	0,0	60,95							

3761
49
37,12
10,22
47,84
13,11
60,95
12,60
73,55
80
72,75
12,53
85,28
45
84,83
12,96
97,79
12,44
110,22
12,22
121,22

		122.22			
41+50			4.9	117.3	
42			0.0	122.2	
TP	12.65	134.87	0.0	122.22	
+50			7.0	127.8	
43			2.0	132.8	
+10	= W L of Guizot		0.7	134.4	
			0.40	134.47	[illegible]
			13.20	121.67	Check TP on Page
TP	12.37	146.84	0.40	134.47	
+50			7.8	139.0	
43 +70	= E L Guizot		5.4	146.4	
44			0.0	146.8	
TP	12.90	159.74	0.0	146.84	
+50			4.6	155.1	
	11.74	171.17	0.31	159.43	
45			10.9	160.3	
+50			6.5	164.7	
46			3.0	168.2	
+50			1.1	170.1	
47			0.6	170.6	
TP	5.80	176.45	0.52	170.65	

		176.45			
47+50 E			5.1	171.3	
48			5.2	171.2	
+50			5.2	171.2	
49			6.0	170.4	
+50			7.3	169.1	
+70	= W L of Santa Barbara		9.0	167.4	
+82	Gutter		10.9	165.5	
50	Center		9.9	166.5	
+18	Gutter		11.6	164.8	
+30	= E L Santa Barbara		9.7	166.5	
+50			8.0	168.4	
51		8	8.4	168.0	
+50			9.4	167.0	
52			8.4	168.0	
	Nearly to		Venice	St	
71	3.74	167.49	12.70	163.75	
			9.92	157.57	Sw State Sw Cm + SB Page 5

122.22
12.65
134.87
.40
134.47
12.37
146.84
12.90
159.74
.31
159.43
11.74
171.17
.52
170.65
5.80
176.45
12.70
163.75
3.74
167.49
9.92
157.57

7/3/13 Clouge — Prelim Sewers Ocean Beach

Alley Bet Saratoga + Santa Mon — Curb S W Abbott + Santa Mon

	5.65	10.15		4.50		#4 E			6.7	9.9	
	N + S Alley Block			79 Ocean Beach		+50			5.0	11.6	4.50
00 = Center E + W Alley			4.9	5.25	5				5.2	11.4	5.65
+50 N			4.8	5.35		+50			3.0	13.6	10.15
#1			4.9	5.25	6				4.3	12.3	9.33
+40 = S L Saratoga			5.4	4.7		+50			2.8	13.8	7.32
						+80			0.0	16.6	16.65
00			4.9	5.25		TP	4.62	21.27	0.0	16.65	4.62
+15 = Alley Sin above			4.9	5.25	7				1.2	20.1	21.27
+50			4.8	5.35		+30			3.2	18.1	12.95
#1 E			4.6	5.5		+50			8.0	13.2	8.32
+50 = W L Abbott ss			5.3	4.8		+70			12.8	8.4	6.90
+62 Gutter			5.8	4.3	8				13.0	8.2	15.22
+80 Center			5.0	5.2		+10 = W L of Bacon			13.0	8.2	
2			5.3	4.8		TP	6.90	15.22	12.95	8.32	
+10 = E L of Abbott			4.4	5.7		+22 = Gutter			7.6	7.6	
+50			2.2	7.9		+40 Center			6.8	8.4	
3			1.2	8.9		Gutter			7.0	8.2	
TP	7.32	16.65	0.82	9.33		+70 = E L of Bacon			6.5	8.7	
+50			7.3	9.3	9				6.4	8.8	

Sheet 12

		15.22		
9+50 E			5,6	9.6
10			5,2	10,0
+50			4,6	10.6
11			4,7	10.5
+50			3,9	11,3
12			2,9	12,3
+50			2,4	12,8
TP	747	2042	2,27	12,95
13			6,6	13,8
+50			6,0	14,4
14			5,4	15,0
+50			5,2	15,2
+70	= W L of Cable St		5,0	15,4
+82	Gutter		5,5	14,9
15	= Center		4,5	15,9
+18	Gutter		4,9	15,5
+30	= E Line of Cable.		4,4	16.0
+50			4,0	16.4
16			3,4	17,0
+50			3,0	17,4

		2042			
17 E			2,5	17,9	
TP	7,20	2532	2,30	18,2	
+50			6,8	18,5	
18			6,3	19,0	
+50			5,8	19,5	
19			5,1	20,2	
+50			3,8	21,5	
20			3,4	21,9	
+50			2,7	22,6	
21			1,5	23,8	
TP	10,08	3467	0,73	24,59	
+30	= W Line of	Cable St	10,2	24,4	
+42	Gutter		10,7	23,9	
+50			10,2	24,4	
+60	Center		9,7	24,9	
+78	Gutter		10,3	24,3	
+90			9,4	25,2	
22			8,2	26,4	
+50			6,9	27,6	
23			5,5	29,1	

(11)

1522
227
1295
747
2042
230
18,12
720
25,32
7,3
24,59
10,08
34,67

34.67

# 23+50 E			3,9	30,7
24			2,6	37,0
+50			0,0	34,6
TP	12,00	4639	078	3439
25			9,7	36,6
+50			8,0	38,0
26			6,3	40,1
+50			4,5	41,8
27			2,4	43,9
+50			0,0	46,4
TP	11,82	5801	020	46,19
+90 = W 2 ∫	Ebn St		1,0,3	47,7
28			10,0	46,0
+50 = E 21	Ebn		8,2	49,8
29			6,5	51,5
+50			1,4	53,6
30			1,8	56,7
TP	12,60	70,53	008	1-7,93
+50			11,7	58,8
31			8,9	61,6

20.53

# 31+50			6,4	64,1
32			3,7	66,8
TP	12,14	8244	023	7030
+50			10,9	71,5
33			6,8	75,6
+50			2,4	80,0
TP	12,75	9466	053	81,91
34			10,1	84,5
+50 = S 2 6	Franc St		6,6	88,0
35			2,8	91,8
+10 = E 2	Franc St		2,4	92,7
TP	12,50	10716	00	9466
+50			11,6	95,5
36			6,7	100,4
+50			1,7	105,4
TP	12,06	11967	060	10556
37			11,0	108,6
+50			7,8	110,8
38			3,2	115,4
TP	12,90	13088	064	11798

(12)

3467
28
3439
1200
4639
20
4619
1182
5801
5819
1260
7053
23
7030
1214
8244
5
8191
1275
9466
1259
10716
60
10656
1206
11862
64
11798
1290
13088

			130.88						190.78		
38+50			11.3	119.5				88	181.9		
39			7.4	123.5	44+50			46	186.7		
+50			3.7	127.7	45			2.5	188.3		
40			0.6	130.3	+50			0.5	190.3		
TP	12.22	14281	0.29	130.59	46			0.28	190.50		
+50			8.1	138.7	TP	8.70	139.20	7.0	192.7		
41			3.3	139.5	+50			5.4	193.8		
+10 = Wd of Guzzet			2.2	140.6	47			4.3	194.9		
TP	12.95	15-356	2.20	140.61	+50			4.0	195.2		
+50			8.1	145.7	+69			8.0	191.2		
+70			5.0	145.5	Grade 130.0 +70 = Wd of Santa Barbara			5.05	15415		
+80			2.1	151.4	TP	2.74	14459	6.62	190.27		
42			0.0	153.5	We should be to dock.				Bm Newport SB		
TP	12.73	16629	0.0	153.56	at start to back Prop not to be						
+50			7.4	158.9	10.6	201.8			19120		
43			1.6	160.7	45+30. E.L Santa Barbara			6.0	195.8		
TP	12.95	17908	0.16	166.13	47+50			6.2	195.6		
+50			7.2	171.9	48+30			7.2	194.6		
44			2.2	176.91	49+50			8.7	193.1		
TP	11.95	18078	0.25	177.73	50+30			9.5	192.0		
					50+30			9.6	192.2		
					51+30			9.9	191.9		
					51+50 = 46 mop wd, Street			9.6	192.2		

130.88
25
1305.9
1422
14281
12
14061
12.95
13356
12.73
166.29
16
156.13
12.95
179.08
25
178.83
11.95
190.78
48
190.30
870
191.20
5.05
5W NW SW
5.13
196.88
6.62
190.27
194.89
6.62
190.27

7/7/13

Prelim - Sewers Ocean Beach
Alley Bet Newport + Santa Monica

	4.88	10.38		5.50	SE Curb Abbott + Sade
00 = E L of Abbott St			4.5	5.9	
+50			3.5	6.9	
1			2.5	7.9	
+50			1.2	9.2	
TP	8.75	17.95	1.18	9.20	
2			5.5	12.4	
+50			2.2	15.7	
+70			1.8	16.2	
3			9.6	8.3	
+50			10.6	7.3	
4			9.6	8.3	
+50			9.5	8.4	
TP	6.32	15.05	9.22	8.73	
5			5.5	9.5	
+50			5.1	9.9	
#6.00 -	= W L Bacon St		4.8	10.2	
+12	Gutter		5.8	9.2	
+30	Center		4.9	10.2	
Gutter			5.1	9.9	

Sheet 11

1505

(14)

6+60 =	E L of Bacon St		3.8	11.2	
				12.27	mon Bacon
Bm			2.72	12.32	newport
7			3.3	11.7	
+50			2.6	12.4	
8			2.5	12.5	
	3.13	15.40		12.27 Bm	
+50			2.6	12.8	
9			1.2	14.2	
+50			0.8	14.6	
TP	6.92	21.38	0.94	14.46	
10			6.1	15.3	
+50			5.6	15.8	
11			5.1	16.3	
+50			4.8	16.6	
12			4.6	16.8	✓
+50			5.9	15.5	
+60	= W L Cable St		5.7	15.7	
+72	Gutter		6.2	15.2	
90	Center		5.0	16.3	
	Gutter		5.6	15.8	
13+20	= E L of Cable St		4.7	16.7	

550
488
1038
118
9.20
8.75
17.95
9.22
8.73
6.32
15.05
2.72
12.32
12.27
3.13
15.40
9.4
14.46
6.92
21.38

		21.38			
13+50			3.0	18.4	
14			1.8	19.6	
+50			1.5	19.9	
TP	6.30	26.70	0.98	20.40	
15			7.4	19.3	
+50			7.0	19.7	
16			6.4	20.3	
+50			5.7	21.0	
17			5.2	21.5	
+50			4.6	22.1	
18			4.1	22.6	
+50			3.2	23.5	
19			2.1	24.6	
+20 =	W.L. of DeFoe St		2.4	24.3	
+32	Gutter		2.8	23.9	
+50	Center		1.6	25.1	
	Gutter		2.1	24.6	
+80 =	E.L. DeFoe		1.3	25.4	
TP	11.48	36.78	1.40	25.30	
20			10.7	26.1	
+50			9.5	27.3	

		36.78			
21 E			7.5	29.3	
+50			6.1	30.7	
22			5.0	31.7	
+50			3.7	33.1	
23			2.0	34.8	
+50			0.3	36.5	
TP	12.37	48.97	0.18	36.60	
24			10.4	38.5	
+50			8.2	40.7	
25			6.2	42.7	
+50			3.2	45.7	
+80	= W.L. Eber St		2.0	46.9	
26			0.9	48.0	
TP	11.87	60.35	0.49	48.48	
+40	= E.L. of	Eber St	10.6	49.7	
+50			10.0	50.3	
27			6.5	53.8	
+50			4.0	56.3	
28			1.0	59.3	
TP	12.80	72.26	0.89	59.46	

(15)

21.38
0.98
20.40
6.30
26.70
1.40
25.30
11.48
36.78
18
36.60
12.37
48.97
49
48.48
11.87
60.35
89
59.46
12.80
72.26

		72.26			
28 + 50			9.7	62.3	
29			7.0	65.2	
+50			3.9	68.3	
30			0.2	72.1	
TP	12.32	84.42	0.16	72.10	
+50			8.8	75.6	
31			3.1	81.3	
TP	13.08	97.18	0.32	84.10	
+50			9.4	87.8	
32			3.6	93.6	
TP	12.15	108.71	0.62	96.56	
+40	= W L f	Froude st	11.4	97.3	
+50			11.2	97.5	
33	= E L f	Froude	7.0	101.7	
+50			1.4	107.3	
TP	12.70	121.20	0.21	108.50	
34			7.7	113.5	
+50			3.2	118.0	
TP	12.90	133.63	0.47	120.73	
35			9.8	123.8	
+50			4.8	128.8	

		133.63			
36			1.6	132.0	
TP	12.75	145.34	1.04	132.59	
+50			8.0	137.3	
37			2.5	142.8	
TP	12.24	157.58	0.0	145.34	
+50			11.1	146.5	
38			8.3	149.3	
+50			5.7	151.9	
39	= W L f	Guzot	5.9	151.6	
+30	Custe		3.7	153.8	
+60	= E L f	Guzot	1.5	156.1	
TP	12.05	168.57	1.06	156.52	
40			8.5	160.1	
+50			3.5	165.1	
TP	12.84	181.41	0.0	168.57	
41			12.2	169.2	
+50			8.0	173.4	
42			5.6	175.8	
+50			1.2	180.2	
TP	12.41	193.82	0.0	181.41	

72.26
16
72.10
12.32
84.42
32
84.10
13.08
97.18
62
96.56
12.15
108.71
21
108.50
12.70
121.20
47
120.73
12.90
133.63
1.04
132.59
12.75
145.34
12.24
157.58
1.06
156.52
12.05
168.57
12.84
181.41
12.48
193.87

		193.82			
43			11.7	182.1	
+50			8.8	185.0	
44			6.3	187.5	
+50			4.3	189.5	
45			2.7	191.1	
+50			1.3	192.5	
+60	= WL Santa Barbara		1.4	192.4	
+72			2.2	191.6	
+90	Center		0.8	193.0	
46			0.8	193.0	
	Gutter		1.8	192.0	
+20	= EL Santa Barbara		0.6	193.2	
Check			3.60	190.22	Bm at Santa Barbara & Newport
TP	1270	205.82	1.00	192.82	
+21	Top Bank		7.2	198.3	
+50			5.6	199.9	
47			3.2	202.3	
+50			0.7	204.8	
TP	1306	217.90	0.68	204.84	
48			10.6	207.3	
+50			8.0	209.9	

		217.90			
# 49			5.2	212.7	
+50			2.9	215.0	
50			0.9	217.0	
TP	1275	229.85	0.80	217.10	
+50			11.0	218.8	
51			9.6	220.2	
+50			8.8	221.1	
+60	on Grade = WL Venice St		13.9	215.9	
TP Check			0.12	229.73	on Bank at Newport

(17)

193.82
1.00
192.82
1270
205.82
68
204.84
1306
217.90
80
217.10
1275
229.85
1.2
229.73

7/8/13 Cloudy | Prelim Sewers at Ocean Beach

Alley Bet Newport + Niagara St

	4.72	16.99		12.27	Min Newport Bacon
	12.06	22.69	6.36	10.63	
	N + S Alley				
0.0 = 0+5 on E+W Line			6.5	16.2	
50 S			4.2	18.5	
100 S			1.6	21.1	
150 S =	N L Niagara St		+0.5	23.2	
0.0 = 0+5 on E+W Line			6.5	16.2	
50 N			8.6	14.1	
100 N			11.0	11.7	
150 N =	S L of Newport St		14.6	8.1	
	E + W Alley Line				
0.0 = 5' E of W L of Alley			6.5	16.2	
+50			8.8	13.9	
1			10.6	12.1	
+50			11.8	10.9	
TP	5.91	16.54	12.06	10.63	
2			6.2	10.3	
+50			5.8	10.7	

Sheet 10

16.54

18

#3			5.3	11.2	
+50			5.2	11.3	
4			4.8	11.7	
+40	= WL of Bacon St		4.6	11.9	
+52	= Gutter		4.8	11.7	
+70	Center		4.1	12.4	
+88	Gutter		4.7	11.8	
5 =	E L of Bacon St		3.8	12.7	
+50			2.3	14.2	
6			1.7	14.8	
TP	6.00	20.92	1.62	14.92	
+50			5.8	15.1	
7			5.7	15.2	
+50			5.3	15.6	
8			5.0	15.9	
+50			4.8	16.1	
9			4.6	16.3	
+50			4.2	16.7	
10			4.2	16.7	
+50			2.6	18.3	

12.27
4.72
16.99
6.36
10.63
12.06
22.69
10.63
5.91
16.54
1.62
14.92
6.00
20.92

			20.92						31.83		
11	=	W L of Cable St		3.3	17.6	17 + 72	= Gutter		7.0	24.8	
		8.23	25.90	3.25	17.67	+90	= Center		5.7	26.1	
	+12	= Gutter		8.7	17.2	18 +8	Gutter		6.0	25.8	
	+30	Center		7.9	18.0	+20	= E Line De Foe		5.1	26.7	
	+48			8.3	17.6	+50			4.7	27.1	
	+60	= E L of Cable St		7.1	18.8	19			3.7	28.1	
12				6.7	19.2	+50			3.2	28.6	
	+50			6.0	19.9	20			2.4	29.4	
13				4.9	21.0	+50			1.6	30.2	
	+50			5.2	20.7	TP	10.78	41.16	1.45	30.38	
14				4.4	21.5	21			9.8	31.3	
	+50			4.0	21.9	+50			8.8	32.3	
15				3.3	22.6	22			7.8	33.3	
	+50			2.5	23.4	+50			6.6	34.5	
16				2.1	23.8	23			5.2	35.9	
	TP	7.61	31.83	1.68	24.22	+50			3.5	37.6	
	+50			7.6	24.2	24			1.0	40.2	
17				6.7	25.1	+20	= W L Eber St		+0.2	40.4	
	+50			6.2	25.6	TP	12.05	53.21	0.0	41.16	
	+60	= W L of De Foe St		6.0	25.8	+50	= Center of Eber		8.0	45.2	
	Check			6.83	25.00						

20.92
3.25
17.67
8.23
25.90
1.68
24.22
7.61
31.83
1.45
30.38
10.78
41.16
12.05
53.21

		53.21						12.453			(70)
24+80	= Ed sw	Elev. =	3.8	49.4		30+80	= w. Sof	Foundn.	10.8	113.7	
25			0.8	52.1		31			7.6	116.8	53.21
TP	12.67	65.13	0.75	52.46		+10	= Bent		5.7	118.6	65.13
+50			4.9	60.7		+40	= Ed Found. =		1.4	123.1	63.18
TP	12.45	75.63	1.95	63.18		TP	12.90	137.15	0.28	124.25	75.63
26			7.6	68.0		+50			11.4	125.7	87.36
TP	12.08	87.36	0.35	75.28		32			4.4	132.7	87.27
+50			10.9	76.5		TP	12.53	148.53	1.15	136.20	100.15
27			6.7	80.7		+50			9.0	139.5	99.72
+50			3.2	84.2		33			2.9	145.6	112.57
28			0.1	87.3		TP	12.34	160.87	0.20	148.33	124.25
TP	12.88	100.15	0.09	87.27		+50			9.6	151.1	139.15
+50			9.3	90.8		34			6.6	154.1	136.20
29			3.5	96.6		+40			2.8	157.9	148.33
TP	12.85	112.57	0.43	99.2		+50			0.8	159.9	160.87
+50			10.4	102.2		TP	12.63	172.94	0.36	160.31	172.94
+85			7.6	104.9		+75			4.4	165.5	185.64
30			11.6	100.9		35			3.3	169.6	
+20			5.0	107.5		+50			1.8	171.1	
+50			2.3	110.2		TP	13.10	185.64	0.40	172.34	
TP	12.11	124.53	0.15	112.47							

		185.64			
36			12.4	173.2	
+50			9.5	176.1	
37			7.2	178.4	
+40	= W L of	Guizot	5.9	179.7	
+70	Center		4.8	180.8	
38	= E L	Guizot	3.8	181.8	
+50			1.4	184.2	
TP	5.10	190.53	0.21	185.43	
39			5.0	185.5	
+50			5.3	185.2	
40			6.3	184.2	
+50			5.5	185.0	
41			4.1	186.4	
+50			2.4	188.1	
42			1.2	189.3	
TP	12.10	202.63	0.0	190.53	
+50			12.0	190.6	
43			11.0	191.6	
+50			9.5	193.1	
44	= W L of	Santa Barbara	9.1	193.5	
Check			12.34	190.29	✓ R.W.

		202.63			
44 +10	Gutter		10.0	192.6	
+30	Center		8.9	193.7	
+50	Gutter		9.4	193.2	
+60	= E L of Santa Barbara		8.3	194.3	
+70			4.6	198.0	
45			2.4	200.2	
+50			0.2	202.4	
TP	13.02	215.50	0.15	202.48	
46			9.8	205.7	
+50			6.5	209.0	
47			1.7	213.8	
TP	12.14	227.64	0.00	215.50	
+50			11.0	216.6	
48			8.3	219.3	
+50			5.5	222.1	
49			3.0	224.6	
+50			1.1	226.5	
TP	7.80	234.42	1.02	226.62	
50			6.5	227.9	
+60	= W L Venice St		6.3	228.1	
Check			4.60		

185.64
.21
185.43
5.10
190.53
12.10
202.63
.15
202.48
13.02
215.50
12.14
227.64
1.02
226.62
7.80
234.42

7/9/13 / Clayt Prelim Sewers Ocean Beach
Alley Bet Niagara + Narragansett

	3.25	22.95		19.70	BM NE Bacon + Narragansett
	7.08	26.28	3.75	19.20	
	N + S Alley				
00 = 215 E on E & W Alley			6.0	20.3	
50' n			4.2	22.1	
100' n			2.7	23.6	
150' n = S L Niagara			2.5	23.8	
00 = Top of Bank at Beach			+1.0	27.3	
+50 E			1.0	25.3	
1			2.5	23.8	
+50			4.3	21.9	
2			5.6	20.7	
+15	= N + S Line		6.0	20.3	
+50			6.4	19.9	
3			6.8	19.5	
+50			7.2	19.1	
4			7.4	18.9	
+50			7.4	18.9	
TP	5.00	24.20	7.08	19.20	

Sheet 9

			24.20		
5 E			5.6	18.6	
+50			5.8	18.4	
6			6.5	17.7	
+50	= W L Bacon		7.4	16.8	
+62	Gutter		8.3	15.9	
+80	Center		8.0	16.2	
+98	Gutter		9.0	15.2	
7 + 10	= E L of Bacon		8.0	16.2	
50			6.4	17.8	
8			6.7	17.5	
+50			6.4	17.8	
TP	6.10	24.00	6.30	17.90	
9			6.0	18.0	
+50			5.8	18.2	
10			5.8	18.2	
+50			5.4	18.6	
11			5.0	19.0	
+50			4.6	19.4	
12			4.1	19.9	
+50			3.4	20.6	

19.70
3.25
22.95
3.75
19.20
7.08
26.28
19.20
5
24.20
6.30
17.90
6.10
24.00

		24.80					35.25			
13			3.0	21.0	19+70 E = Wd Lf	Dc 7.0E N	6.9	28.4		
+0 = Wd Cobble St			3.1	20.9	+52 Gutter		8.0	27.3		24.80
TP	8.30	29.10	3.20	20.80	20 Center		6.5	28.8		8.30
+22 = Gutter			8.9	20.2	+78 Gutter		7.1	28.2		29.10
+40 Center			8.0	21.1	+30 = E Lf	Dc 7.0E	5.6	29.7		2.35
54 Gutter			8.6	20.5	+50		4.2	31.1		26.75
+70 = E Lf Cobble St			7.7	21.4	21		3.9	31.4		8.47
14			5.7	23.1	+50		3.6	31.7		35.25
+50			6.0	23.1	W		2.9	32.4		1.80
15			5.3	23.8	+50		2.0	33.3		33.45
+50			4.9	24.2	TP	10.65	1.80	33.45		12.65
16			4.7	24.4	23		9.7	34.4		47.10
+50			4.5	24.6	+50		8.8	35.3		12.15
17			3.5	25.6	24		7.6	36.5		56.25
+50			3.1	26.0	+50		6.0	38.1		12.85
18			2.5	26.6	25		4.0	40.1		69.10
TP	8.47	35.25	2.32	26.78	+50		0.0	44.1		
+30			7.8	27.5	TP	12.15	5.625	44.10		
19			6.5	28.8	26		1.2	52.1		
+50			6.2	29.2	TP	12.85	6.90	0.0	56.25	

		69.0						157.49			
26+34 =	W Line of	Elbow	St	11.7	57.4		32+50			8.7	148.6
+60	Center			6.5	64.6		+90 =	W of	Trench	2.2	155.1
+90				1.2	67.9		TP	12.95	169.84	0.30	154.89
TP	13.10	81.44		0.76	68.34		33			14.0	155.9
27				11.6	69.8		+80	Center		12.0	157.9
+50				1.8	79.6		+50	= Center	Trench	9.0	160.9
TP	12.92	94.06		0.30	81.14		34			4.6	165.3
28				5.4	88.7		+50			1.3	168.6
TP	13.01	106.80		0.27	93.79		TP	12.44	169.96	0.42	169.54
+50				9.3	97.5		35			8.2	173.7
29				1.2	105.6		+50			3.7	178.3
TP	12.58	119.07		0.31	106.79		36			2.2	179.8
+58				6.6	112.5		TP	12.83	194.07	0.72	181.24
30				2.0	117.1	119.36	+50			11.5	182.6
TP	12.95	132.02		0.0	119.07		37			8.2	185.9
+50				10.4	121.6		+50			4.6	189.5
31				5.2	126.8		38			2.2	191.9
TP	13.00	144.85		0.17	131.85		TP	9.38	202.66	0.28	193.38
+50				12.2	137.7		+50			8.0	193.7
32				4.9	139.9		39			7.1	195.6
TP	12.55	152.24		0.11	144.74						

gjf

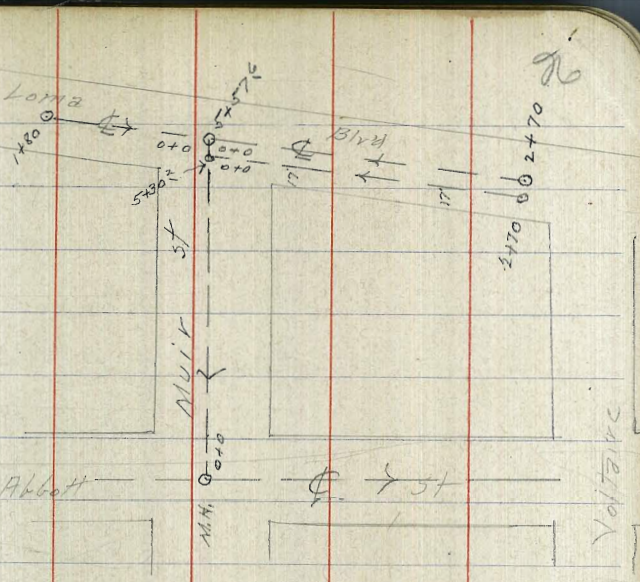
67.10
68.34
81.44
93.79
106.49
119.07
132.02
144.74
157.49
169.54
181.24
194.07
202.66

		202.66			
39+50	= W L f	Guizot	5.0	197.7	
+80	Center		4.0	198.7	
40			3.1	199.6	
+10	= E L f	Guizot	2.7	199.9	
+50			1.1	201.6	
TP	8.92	211.55	0.03	202.63	
41			7.8	203.8	
+50			6.6	204.9	
42			5.5	206.1	
+50			4.9	206.6	
43			4.6	206.9	
+50			3.9	207.7	
44			3.3	208.2	
+50			2.2	209.4	
TP	7.52	216.56	2.51	209.04	
45			7.5	209.1	
+50			6.4	210.2	
46			6.5	210.1	
+9			6.4	210.2	
+10	= W L Santa Barbara		9.2	207.4	

		216.56			25
46+20	Gatte		10.0	206.5	
+40	Center		9.1	207.5	202.66
+60	Gatte		9.7	206.9	202.63 8.92
+70	= E L Santa Barbara		8.3	208.3	211.55 2.51 209.04
+71			5.7	210.9	7.52 216.56 2.7 210.29
47			5.3	211.3	216.56 13.08 204.48 7.8
+50			5.0	211.6	205.26 9.91 195.35 2.97 198.32
48			4.5	212.1	
Bm			0.27	216.29	TP on bank at Naragansett + S.B.
TP			4.40	212.16	
Chute	0.78	204.26	13.08	203.48	
	2.97	197.32	8.91	194.35	
Bm Chute			7.10	190.22	Bm Newport Santa Barbara
	8.33	220.49		212.16	TP TP
+50			7.8	212.7	212.16 8.33 220.49
49			7.0	213.5	
+50			6.6	213.9	
50			5.4	215.1	
+50			4.6	215.9	
51			5.9	214.6	
+50			7.1	213.4	
52			9.5	210.9	
+50			11.2	209.3	
+70	= W S Venice		11.7	208.8	

Levels ℄ Muir st from ℄ Abbott st west to ℄ west Pt. Loma Ave

B.M. N.W. Abbott & Muir - brass plg.	3.40	5.34		1.94
0+00 = ℄ Abbott St.			3.0	2.3
+20			3.8	1.5
+50			3.5	1.8
1			3.5	1.8
+50			3.6	1.7
2			3.7	1.6
+50			3.8	1.5
3			3.7	1.6
+50			3.8	1.5
4			4.0	1.3
T.P. 1	4.66	5.92	4.08	1.26
+50			4.6	1.3
5			4.7	1.2
+30½ = 3' W. of E.C/L Line W. Pt. Loma Blvd			4.26	1.66
+36			4.1	1.8
+39			6.4	-0.5
+43			5.5	-0.6
+57½ = ℄ W. Pt. Loma Blvd			6.90	-1.0



Levels West Pt Loma Blvd 17' from E.L. from 5+57½ 5+30½ North for 270'

B.M.	4.32	5.98		1.66
0+0 = 5+30½			4.32	1.66
+50			5.6	0.4
1			5.4	0.6
+50			5.1	0.9
2			4.9	1.0
+50			4.9	1.0
+70			4.9	1.0

Levels ℄ Pt Loma Blvd from 5+57½ South for 180'

5.98

0+0	7.0	-1.0
+50	7.3	-1.3
1	6.9	-0.9
+50	6.8	-0.8
+80	6.8	-0.8

Levels ℄ West Pt. Loma Blvd from 5+57½ 5+57½ North for 270'

5.98

0+0	7.0	-1.0
+37	6.2	-0.2
+62	6.1	-0.1
+67	5.0	1.0
1	4.9	1.1
+50	4.7	1.3
2	4.7	1.3
+50	4.5	1.5
+70	4.6	1.4

7/10/13 Clough Prelim Sewers Ocean Beach

Alley Bet Narragansett + Del Monte

					Bm SE Bacon Del Monte
	2.80	28.67		25.87	
	12.50	37.67	3.50	25.17	
					alley
	5.99	43.46	.20	37.47	
	N + S Alley	N to Narragansett			
00			3.3	40.2	
+50 n			4.3	39.2	
100 n			5.2	38.3	
150 n	= S L Narragansett		8.0	35.0	
	N + S alley	S to Del Monte			
00 = 0+75 on	E + W Alley		6.0	37.5	
50 S			4.0	39.5	
100 S			1.0	42.5	
149 S			+1.0	44.5	
150 S			1.4	42.1	
	E + W alley				
00			3.3	40.2	
+50			5.1	38.4	
+75 =	Alley on South		6.0	37.5	
1			8.0	35.5	
+50			11.3	32.2	
TP	1.04	32.30	12.20	31.26	

Sheet 8

			32.30		
#2 E				3.6	28.7
+50				6.1	26.2
3				8.0	24.3
+50				9.3	23.0
4				9.6	22.7
+50				9.8	22.5
		4.15	26.75	9.70	22.60
5				4.0	22.7
+50				3.4	23.4
6				3.2	23.6
+10	= W L Bacon St			4.2	22.6
+22	Gutter			5.3	21.5
+40	Center			5.0	21.8
+58	Gutter			5.6	21.2
+70	= E Line			5.2	21.6
7				5.4	21.4
+50				5.5	21.3
8				6.2	20.6
+50				6.2	20.6
9				5.2	21.6
TP		8.10	29.70	5.15	21.60

87

57

25.87
2.80
28.67
3.50
25.17
12.50
37.67
.20
37.47
5.99
43.46
12.20
31.26
1.04
32.30
9.70
22.60
4.15
26.75
5.15
21.60
8.10
29.70

		29.70						34.97			
9 +50			7,8	21,8	17			4,8	30,2		
10			7,5	22,5	+30			4,6	30,4		
+50			5,2	24,5	18			3,7	31,3		
11			5,0	24,7	+50			3,0	31,9		
+50			4,6	25,1	19			2,2	32,8		
12			4,1	25,6	TP	7,65	29,49	3,03	31,94		
+50			4,6	25,1	+30	= W 2 Dr 7 mi N		5,9	33,7		
+70	= W 2 f	Gabbro	5,50	24,2	+42	Sutter		7,2	32,4		
+82	Sutter		6,6	23,1	+68	Lenter		5,7	33,9		
13	Lenter		5,8	23,9	+78	S.M.		6,3	33,3		
+16	Sutter		6,5	23,2	+90	= E 1 f	Gabbro	5,1	34,5		
+38	= E 2 f	Gabbro	5,2	24,5	20			4,9	34,7		
+50			1,9	27,8	+50			3,8	35,8		
14			1,3	28,4	21			2,0	37,6		
TP	6,50	34,97	1,23	28,47	TP	1,68	50,21	2,06	37,53		
+50			6,0	28,9	+50			10,7	39,5		
15			6,4	28,6	22			8,8	41,1		
+50			6,5	28,5	+50			5,8	44,4		
16			6,0	28,9	23			4,4	47,8		
+50			5,7	29,3	TP	13,05	67,01	0,45	47,96		

29.70
1.23
28.47
6.50
34.97
3.03
31.94
1.65
30.29
2.06
32.35
1.68
50.21
25
49.96
1.305
63.301

		63.01						112.86			
# 23 + 50			11.8	51.2		# 31			5.2	107.7	
24			10.3	52.7		TP	12.75	125.61	0.0	112.86	
+50			6.7	56.3		+50			11.8	113.8	
25			2.7	60.3		32			3.6	122.0	
TP	12.12	74.73	0.40	62.61		T.P	13.11	138.72	0.0	125.61	
+50			12.0	62.7		+50	= W L Fronde		8.3	130.4	
+90	= W L	Eber St	8.7	66.0		32 + 80	= Center		5.2	133.5	
26 + 20	center		7.7	67.0		33 +10	= E L Fronde		2.0	136.7	
+50	= E L	Eber	4.4	70.3		TP	12.73	151.45	0.0	138.72	
TP	12.35	86.78	0.30	74.43		+50			10.2	141.3	
27			11.5	75.3		34			5.3	146.2	
+50			8.2	78.6		TP	12.72	164.17	0.0	151.45	
28			3.7	83.1		+50			12.2	151.9	
+50			0.0	86.8		35			2.0	162.2	
TP	13.11	99.89	0.0	86.78		TP	12.80	176.97	0.0	164.17	
29			9.4	90.5		+50			7.1	169.9	
+50			5.0	94.9			12.45	189.42	0.0	176.97	
30			2.0	97.9		36			12.5	176.9	
TP	12.97	112.86	0.0	99.89		+50			3.3	186.1	
+50			10.5	102.4		TP	12.97	202.39	0.0	189.42	

63.01
.40
62.61
12.12
74.73
.30
74.43
12.35
86.78
13.11
99.89
12.97
112.86
12.75
125.61
13.11
138.72
12.73
151.45
12.72
164.17
12.80
176.97
12.45
189.42
12.97
202.39

			20239						23246			
37				8.0	194.4		45			5.2	227.3	
	+50			7.4	200.9		+50			4.3	228.2	
	TP	9.76	212.15	0.0	20239		+70	= W L Santa Barbara		4.8	227.7	
38				6.9	205.3		+80	Gutter		5.7	226.8	
	+50			5.2	206.9		46	Center		4.9	227.6	
39				3.7	208.5			Gutter		5.6	226.9	
	+10	= W L Guzot		3.4	208.8		+30			4.4	228.1	
	+40	Center		2.7	209.5		+50			2.8	229.7	
	+70	= E L Guzot		1.6	210.6		47			1.1	231.4	
	TP	11.00	222.56	0.59	211.56		TP	2.26	23472	0.0	23246	Checked
40				9.4	213.2		+50			3.0	231.7	
	+50			8.3	214.3		48			3.0	231.7	
41				6.5	216.1		+50			3.2	231.5	
	+50			5.2	217.4		49			4.2	230.5	
42				3.6	218.9		+50			5.8	228.9	
	+50			1.8	220.8		50			8.8	225.9	
43				0.5	222.1		+50			11.6	223.1	
	TP	9.90	23246	0.0	222.56		51			14.3	220.4	
	+50			9.0	223.5		+50			12.0	217.7	
44				7.5	224.9		52			20.5	214.7	
	+50			6.2	226.3							

202.39
9.76
212.15
59
211.56
222.56
9.90
232.46
2.26
234.72

7/17/13 | Change | Preliminary Sewers Ocean Beach

Alley Bet Del Monte & Santa Cruz

	887	34.74		25.87	BM Del Monte Bacon
	12.45	47.07	0.12	34.62	
	N & S Alley		Blk 69	410' W of Bacon	
00 = S L	Del Monte St		9.3	37.8	
+1's			3.6	43.5	
+50S			0.7	46.4	50' W S Alley
TP	11.40	57.21	1.26	45.81	
1			8.4	48.8	
+50 =	Center E & W Alley		8.0	49.2	
	N & S Alley Blk 69		360	W Bacon	
00 = +40	E & W Sm		6.4	50.8	
+50S			2.0	55.2	
+			10.0	47.2	
	Then down				
	E & W Alley Bet Del Monte & Santa Cruz				
00 = 10 E of	Center of N & S Alley N		8.0	49.2	
+40 =	Center N & S Alley S		6.4	50.8	
+50			4.0	53.2	
1			7.4	49.8	

(This Sewer should start 150-20' dist)

Sheet 7

			57.21		
1+50				12.2	45.0
	TP	1.14	46.45	11.90	45.31
2				4.8	41.7
	+50			10.0	36.5
	TP	0.35	34.35	12.45	34.00
	+75			4.4	29.9
3				6.5	27.9
	+50			8.4	25.9
	+97			9.0	25.0
4		= W S Bacon St		7.3	27.1
	+12	Butte		7.9	26.5
	+30	Center		7.4	26.9
		Butte		7.8	26.6
	+60	= E L Bacon		7.2	27.2
5				7.5	26.9
	+50			8.0	26.4
	TP	4.68	31.08	7.95	26.40
6				5.0	26.1
	+50			5.0	26.1
7				5.0	26.1

2587
887
34.74
12
34.62
12.45
47.07
1.26
45.81
11.40
57.21
11.90
31
45.14
46.45
12.45
34.00
34.35
7.95
26.40
4.68
31.08

		31.08			
7+50		31.08	5.0	26.1	
8			4.6	26.5	
+50			4.0	27.1	
9			3.4	27.7	
+50			2.8	28.3	
10			2.5	28.6	
+50			1.8	29.3	
+60	= W L Cobb St		5.8	25.3	
	Gutter		6.3	24.8	
	Center		5.3	25.8	
	Gutter		6.1	24.9	
TP	11.17	36.84	5.41	25.67	
11 +20	= E L Cobb		11.0	25.8	
+22			6.6	30.2	
+50			6.5	30.3	
12			5.9	30.9	
+50			5.3	31.5	
13			5.0	31.8	
+50			4.1	32.7	
14			3.6	33.2	

		36.84			
14+50			3.0	33.8	
15			2.4	34.4	
+50			2.5	34.3	
16			2.1	34.7	
TP	11.96	47.25	1.55	35.29	
+50			12.2	35.1	
17			9.0	38.3	
+20 = W L De Fox			4.3	42.9	
Gutter			4.3	42.9	
+50 Center			2.4	44.9	
Gutter			3.1	44.2	
+80 = E L De Fox			2.0	45.3	
BM			10.48	36.77	Check mon
+90			6.0	41.3	
18			5.9	41.4	
+50			3.0	44.3	
TP	12.90	59.40	0.75	46.50	
19			11.50	47.9	
+50			6.9	52.5	
20			2.9	56.5	
TP	12.98	72.38	0.0	59.40	

31.08
5.41
25.67
11.17
36.84
1.55
35.29
11.96
47.25
.75
46.50
12.90
59.40
12.98
72.38

		72.38		
20+50			11.3	61.1
21			6.0	66.4
TP	10.68	83.06	0.0	72.38
+50			9.3	73.8
22			6.0	77.1
+50			5.4	77.7
23			3.4	79.7
+50			1.5	81.6
TP	13.00	94.88	1.18	81.88
23+80 = WL Eber			10.5	84.9
24+10 Center			8.2	86.7
24+40 = EL Eber			6.6	88.3
+50			6.5	88.4
25			2.8	92.1
TP	12.16	106.14	0.90	93.98
+50			11.2	94.9
26			6.7	99.4
+50			3.2	102.9
TP	12.57	118.21	0.50	105.64
27			11.5	106.7

		118.21		
27+50			7.6	110.6
28			4.2	114.0
TP	13.05	130.05	1.21	117.00
+50			12.4	117.7
29			7.7	122.4
+50			1.8	128.3
TP	13.08	140.93	2.20	127.85
30			8.4	132.5
+40 = WL Fraude St			4.2	136.7
+70 Center			1.6	139.3
TP	11.36	152.19	0.10	140.83
31 = EL Fraude St			9.1	143.1
+20			15.0	137.2
+40			12.4	139.8
+50			8.0	144.2
32			0.6	151.6
TP	12.85	164.49	0.55	151.64
+50			5.9	158.6
33			0.0	164.5
TP	12.52	177.01	0.0	164.49

72.38
10.68
83.06
1.18
81.88
13
94.88
90
93.98
12.16
106.14
50
105.64
12.57
118.21
1.21
117.00
13.05
130.05
2.20
127.85
13.08
140.93
10
140.83
11.36
152.19
55
151.64
12.85
164.49
12.52
177.01

177.04

red
Note check 3-eler for new Line

33+50			5.7	171.3							
	12.70	189.70	0.01	177.00	00 = 34+00			12.0	190.8	177.00	
										12.70	
										189.70	
34			11.4	178.3	+50 S			15.0	187.8	13.00	
	11.70	201.90		190.7						202.70	
+50 & North thence 91' E to N. L alley			6.5	183.2	TP	12.63	x15.24	0.20	202.58	202.58	
thence along N. L alley for 51.1' to line Lot 11 & 12				11.7						12.63	
34+95			+1.0	190.7				9.6	205.6	215.21	
35				5.3						1.40	
35+20				196.0						213.81	
TP	13.08	202.78	0.0	189.70	+50 = N.L Santa Cruz Ave			7.6	207.6	8.60	
35+41				3.2						222.41	
+75			9.8	192.9						1.25	
										221.65	
+77			14.0	188.8						12.03	
35+73				0.4						233.68	
				201.5							
Big Washout S of this Line					N + S alley Bet						
35+92				9.5							
				192.4							
+50			15.0	187.8	00 = 36+00			12.0	190.8		
5' N of +50			4.0	198.8	+50			5.0	197.8		
10' S of +50			26.0	177.8	+80			3.0	199.8		
36			14.0	188.8	TP	12.63	x15.24	0.20	202.6		
20' N of 36			0.0	202.8	+70			1.2	214.0		
10' S of 36			20.0	182.8	TP	8.60	x22.41	1.40	213.81		
36+50 = N+S alley 00			12.0	190.8				7.2	215.2		
					+50 = S L of Bel Aire			6.0	216.4		
									56		alley Stake in Cement Post alley
					Ch. of Bn			10.88	211.53		
					TP	12.03	x33.66	0.76	221.65		

		233.68			
Continuation of Alley Bet Delmonte					
+ Santa Cruz st					
E. Line of Guizot St					
0 0			9.1	224.6	
+50			6.6	227.1	
1			4.4	229.3	
+50			2.0	231.7	
TP	13.10	246.78	0.0	233.68	
2			11.6	235.2	
+50			8.5	238.3	
3			5.0	241.8	
+50			1.7	245.1	
TP	12.55	257.59	1.74	245.04	
4			9.4	248.2	
+50			6.0	251.6	
5 = W.L. Santa Barbara			(4.9) (9.7)	252.7 247.9	
TP	11.73		2.70	254.89	Top curb Santa Cruz

Sewer Line Guizot St from 40' N of N.L. Santa Cruz north to Alley bet Delmonte & Narragansett

B.M.	1.52			225.00	
		226.52			
0+0 = 40' N. of N.L. Santa Cruz			2.8	223.7	233.68
					13.10
					246.78
+50			2.9	223.6	1.74
					245.04
1+0			3.3	223.2	12.55
					257.59
					2.70
+50			3.8	222.7	254.89
2+0			4.8	221.7	
+50			6.8	219.7	
+75			9.0	217.5	
3+00 M.H. ℄ Delmonte & Guizot			8.5	218.0	
+50			9.7	216.8	
4+0 = M.H. ℄ Delmonte & Guizot			10.5	216.0	
4+38			10.9	215.6	
4+45			9.2	217.3	
4+50			9.1	217.4	
+75			9.6	216.9	
5+0			8.6	217.9	
+10			10.5	216.0	
T.P.	2.89	216.65	12.76	213.76	
+50			4.9	211.8	
5+91 = M.H. ℄ Alley bet Delmonte & Narragansett			7.0	209.6	

	Prelim Alley	Sewrs Bet Santa	Ocean Beach Cruz + Pacific		
	1064	3968		29.04	BM Nw Bacon Santa Cruz
00 = E L	Bacon St		1.3	38.4	
+25			0.0	34.7	
+50			2.0	37.7	
TP	056	3837	1.87	37.81	
1			4.8	33.6	
+50			8.0	30.4	
2			9.5	28.9	
+50			10.3	28.1	
3			10.9	27.5	
+50			10.6	27.8	
TP	537	3311	10.63	27.74	
4			5.7	27.4	
+50			5.7	27.4	
5			5.7	27.4	
+50			5.5	27.6	
6 = W L	Cable St		6.4	26.7	
+12	Gutter		6.7	26.4	
+30	Center		6.0	27.1	
	Gutter		6.7	26.4	

Sheet 6

6+60 = E L	Cable St		6.0	27.1	
7			4.1	29.0	
+50			2.0	31.1	
8			1.0	32.1	
TP	1173	4434	0.50	32.61	
+50			10.6	33.7	
9			8.8	35.5	
+50			5.8	38.5	
10			2.8	41.5	
TP	1280	5702	0.12	44.22	
+50			12.1	44.9	
11			7.4	49.6	
+50			3.0	54.0	
TP	1113	6813	0.02	57.00	
12			10.4	57.7	
+50			6.1	62.0	
+60 = W L	De Fe St		(5.8) (8.0)	62.3 60.1	
	Gutter		8.8	59.3	
+80	Center		7.5	60.6	
	Gutter		7.8	60.3	

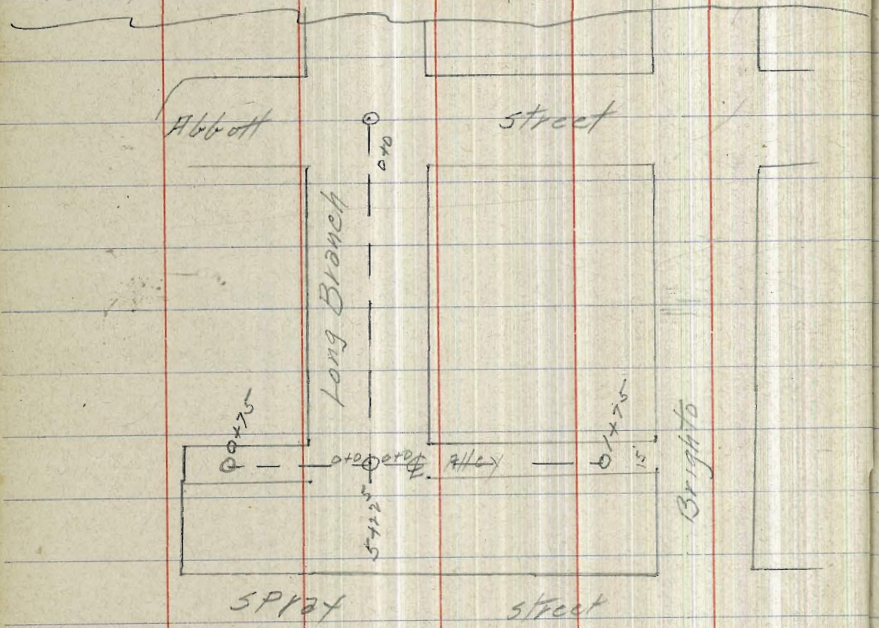
2904
1064
3968
187
37.81
56
38.37
1063
27.84
537
3311
50
32.61
1173
44.34
12
44.22
1280
57.02
2
57.00
1113
68.13

13 +20	= E2 of	Ebenezer	6.8	61.3		18+20 =	Center		5.5	104.3		
Check			7.3	61.0		+80 = E2	Eben		3.0	106.8		
TP	12.54	80.27	0.40	67.73		TP	12.82	119.90	2.71	107.08		
+22			10.6	69.7		20			11.5	108.4		
+80			7.5	72.8		+50			7.6	112.3		
14			2.2	78.1		21			4.4	115.5		
TP	12.67	92.67	0.27	81.04		TP	12.82	132.26	1.46	116.44		
+50			3.4	84.3		+20			1.20	119.9		
15			2.4	90.3		22			1.98	121.5		
TP	9.36	102.03	0.0	92.67		+80			2.3	128.9		
+50			7.1	94.9		TP	12.68	143.93	0.01	131.25		
16			4.6	97.4		23			7.3	136.6		
+50			4.7	97.3		TP	12.90	155.21	1.62	142.21		
17			6.3	95.7		+50			9.5	145.7		
+50			8.8	93.7		24			5.4	149.8		
18			8.6	93.4		+20			9.3	145.9		
+50			5.0	97.0		TP	13.06	168.17	0.10	155.11		
TP	12.60	109.79	11.90	97.13		+50			11.0	157.2		
19			10.0	99.8		25			3.5	164.7		
+20	= W2	Eben St	7.6	102.2		+20			2.8	165.4		
						TP	12.81	179.24	1.24	166.93		
						+80 = W 8 Jones				168.0		

6813
67.73
12.54
80.27
90.67
12.67
103.34
109.79
2.71
107.08
12.82
119.90
1.46
118.44
12.82
131.26
12.68
143.93
1.62
142.31
12.90
155.21
155.11
1.06
164.17
1.24
166.93
12.81
179.74

			17874						22567			
26				9.2	170.5	31+50				7.6	218,1	
+40	= E2 f	Front. of		+10	180.7	32				5.7	220,6	17874
+50				3.8	175.9	+40 = W2 Gurgot				2.8	222.9	17 822
+70 =				2,0	177,7	TP	5.35	22854		2.48	223.19	8 80
27 =				4.4	175,3	Blk	1			6.85	220.69	168 05
+25				1,0	178,7		1077	23396			224.19	1 22
+50				6.3	173,4	+60				10.8	223,2	186.27
28				2.6	177,1	+67				15.3	218,7	1 41
TP	880	1880		0.52	179.22	Two Sent. Rd Trail				13.5	220,5	198.99
	Big wash from S											1 41
+40				1.5	186.5	+80				14.6	219.4	197 98
TP	1270	1988		1.73	186.9	+85				8.7	225,3	12 04
TP	1204	2140		1.01	197.98	33 = E2 Gurgot				7.8	226.2	210 94
+50				5.8	204.2	+50				4.7	229,3	1 77
TP	800	2177		0.30	209.2	TP	1256	24457		2.25	231.71	2 25
29				7.8	209,9	34				12.0	237.6	231 71
+50				5.0	212,7	+30				9.0	235,6	12 86
30				4,0	213,7	35				5.7	238,9	244 57
+50				2,9	214,8	+50				2,3	242,3	8 22
TP	966	22567		1.71	21601		1214	25589		0.85	24375	240 35
31				9,3	216,4	36				10,3	245.6	1219
												255 89
												12 05
												263.84

		255.84			
36+50			8,3	247.6	
37			5,6	250.3	
+50			3,9	251.9	
38			3,5	252.4	
+50			4,3	251.6	
39	=	W.L. Santa Barbara	(6.5 / 9.3)	249.4 / 246.6	
Check TP			12.05	243.84	or Curb 100' W.S.B.



Levels ℄ Long Branch from ℄ Abbott West for 522.5' or ℄ N&S Alley

B.M. N.E. B.P. Long Branch				3.38
B.M.	3.08	6.46		
0+0 = ℄ Abbott			3.2	3.3
+20			4.0	2.5
+50			4.2	2.3
1			4.5	2.0
+50			4.6	1.9
2			5.2	1.3
+50			5.0	1.5
3			2.6	3.9
+18			4.0	2.5
+50			4.2	2.3
4			4.5	2.0
+50			4.7	1.8
5			5.6	0.9
+22.5 = N&S Alley			5.88	0.58
	5.12	5.70		

Levels ℄ N&S. Alley Blk 85 Ocean Beach Extension

North

0+0 = Sta 5+22.5 Long Branch	5.12	0.58
+50	5.1	0.6
+75	4.8	0.9

South

0+0 = Sta 5+22.5	5.12	0.58
+50	4.7	1.0
1	5.0	0.7
+50	5.2	0.5
+75	4.5	1.2

Prelim Sewers Ocean Beach

Alley Bt Pacific + Del Mar

	1.40	46.90		45.50	Cut Basin + Pacific
	N + S Alley B 66				
00 = S L Pacific St			5.4	41.5	
+50 S			3.5	43.4	
1 S			1.9	45.0	
TP	00 2.87	48.49	1.28	45.62	
+50 S = 00 of E + W Alley Sin			2.3	46.2	
	N + S Alley B 66				
00 = 0+50 of E + W Alley Sin			4.4	44.1	
+50 S			2.4	46.1	
1			1.8	46.7	
+49			0.5	47.9	
+50 S = N L Del Mar			1.5	46.9	
	E + W Alley				
0.0			2.3	46.2	
+50 E			4.4	44.1	
1			7.7	40.8	
+50			11.2	37.3	
TP	1.63	37.10	13.02	35.47	
	Sewer Should be 10' Deep at # 1				

Sheet 5

3710

+2				2.6	34.5
+50				5.0	32.1
3				6.2	30.9
+50				6.8	30.3
4				6.4	30.7
+35 = N L Cable St				6.2	30.9
TP	5.33	35.78		6.65	30.45
+47	Gutt			5.8	29.9
+65	Centre			5.0	30.8
	Gutt			5.6	30.2
+95 = E L Cable				4.8	30.9
5				4.7	31.1
+50				4.5	31.3
6				5.0	30.8
+50				4.5	31.3
7				4.2	31.6
+50				3.8	31.9
8				3.4	32.4
+50				2.7	33.1
TP	12.20	45.63		2.45	33.33

46.90
1.28
45.62
2.87
48.49
13.02
34.97
1.63
37.10
6.65
30.45
5.33
35.78
2.45
33.33
12.30
45.63

		4563							
9			11.3	34.2					
+50			10.2	35.4					
10			9.1	36.5					
+50			8.5	37.1					
+80			7.6	38.1					
+95	= W2 De Forest		3.6	42.0					
11+7 =	Gutter		3.6	42.0					
+25 (732)	Center		7.6	43.0					
	Gutter		3.2	42.0					
+55	= E2 De Forest		2.5	43.1					
TP	1072	5-1147	1.58	43.75					
+65			1.8	41.7					
12			10.8	43.7					
+50			7.2	47.3					
13			4.0	50.5					
+50			0.6	53.9					
TP	1248	1654	041	54.66					
14			2.1	57.4					
+50			5.7	60.8					
15			2.6	63.9					
TP	1304	79.25	033	66.71					

			79.25						
15 +50				11.5	67.8				
16				6.3	72.9				
+50				0.0	79.3				
TP	1262	91.92		0.0	79.25				
17				6.1	85.8				
TP	1274	104.20		0.0	91.92				
+50				11.3	92.9				
+55	= W2 Elm St			10.4	93.8				
18				2.4	101.8				
+55	= E2 Elm St			0.0	104.9				
TP	1258	11661		0.17	10402				
+50				8.0	108.6				
19				0.9	115.7				
TP	1304	129.61		0.0	11661				
+50				7.4	127.2				
20				1.4	128.2				
TP	1288	14239		0.10	12957				
+50				8.3	134.1				
21				2.8	139.6				
+0	1255	15444		0.50	14189				

4563
1.58
43.75
10.72
54.47
54.06
1.248
61.54
66.21
13.04
79.25
12.67
91.92
12.24
104.03
12.58
116.61
13.00
129.61
12.57
12.88
142.39
14.189
12.55
154.44

		154.44			
21 +50			9.0	145.4	
22			1.7	152.7	
TP	12.87	167.31	0.0	154.44	
+50			7.2	160.1	
TP	12.06	179.37	0.0	167.31	
23			11.9	167.4	
+50			5.0	174.4	
TP	12.31	191.25	0.43	178.94	
24			10.0	181.3	
+15 = WL Froude St			8.2	183.1	
+50			3.4	187.9	
+75 = EL of Froude St			1.6	189.7	N E Alley Line
TP	4.68	195.33	0.60	190.65	
25			4.2	191.1	
+50			3.3	192.0	
+90			4.5	190.8	
26			1.0	194.3	
+15			0.8	194.5	
TP	2.75	185.92	12.16	183.17	
+50			8.2	177.7	
27			14.7	171.0	

		185.92			
27 +50			13.0	172.9	
28			5.5	180.4	
TP	12.96	197.46	1.42	184.50	
+50			9.4	188.1	
29			2.5	194.9	
TP	12.98	210.08	0.36	197.10	
+50			6.9	203.9	
TP	12.65	222.73	0.0	210.08	
30			10.2	212.5	
+50			5.7	217.0	
+75 = WL Guizot St			2.9	219.8	
31			0.7	222.1	
TP	12.77	233.89	1.61	221.12	
+35 = EL Guizot			7.9	225.9	
+50			4.6	229.3	
TP	10.83	244.92	0.0	233.89	
32			9.1	235.8	
+50			9.7	235.2	
+70 = Center RR Track			7.3	237.6	
+80			7.2	237.7	
TP	12.60	256.94	0.58	244.34	

154.44
12.87
167.31
12.06
179.37
4.3
178.94
12.31
191.25
.60
190.65
4.68
195.33
12.16
183.17
2.75
185.92
1.42
184.50
12.96
197.46
.36
197.10
12.98
210.08
12.65
222.73
1.61
221.12
12.77
233.89
10.83
244.92
.58
244.34
12.60
256.94

		25694			
# 33			6.6	250.3	
+50			3.6	253.3	
34			0.9	256.1	
TP	6.00	26203	0.91	256.03	
+50			5.0	257.0	
35			3.4	258.6	
+50			3.7	258.3	
36			5.8	256.2	
+50			9.0	253.0	
37			13.0	249.0	
TP	3.57	25300	12.60	249.43	
+35 = WL Santa Barbara			(6.7) (9.0)	246.3 244.0	
TP			5.57	247.43	Bn a bank ne SB + DM
Check			9.16	243.84	

Levels ℄ Brighton from ℄ Abbott west f 610'

B.M. N.W.B.P. Brighton & Abbott	0.10	10.23		10.13
0+0 = ℄ Abbott St			0.2	10.0
+50			0.4	9.8
1			1.0	9.2
+50			1.8	8.4
2			2.5	7.7
+50			3.3	6.9
3			3.9	6.3
+50			4.7	5.5
4			5.4	4.8
+50			6.1	4.1
5			6.7	3.5
+50			7.4	2.8
6			8.1	2.1
+10			8.4	1.8

	Colonial Park Zone	Prelim Survey Alley bet Del Mar + Orchard		Ocean Beach							
		9.9 v	42.9 v		33 ov	15 m. Cente bet Mar & Del					
		12.40	42.6	1.06	41.86						
		M + S alley		+ Bell	67						
00 = Cente		E + W alley		4.2	50.1						
+50 N				4.1	50.2						
1				6.4	47.9						
+50 = S		L Del Mar		(10 v) (13.8)	44.1 40.5						
		E + W Alley									
00 = Cente		N-S alley		4.2	50.1						
+50				6.3	47.9						
1				9.6	44.7						
	TP	0.04	41.90	12.40	41.86						
	+50			0.6	41.3						
	+85	= W L Cobb		3.7	38.2						
	797	Cente		3.2	36.7						
2 + 15		Cente		4.4	32.5						
		Cente		3.5	36.4						
+45	= E L Cobb			4.7	37.8						
50				4.6	37.3						

4190

											12
#3								4.9	37.0		
+50								5.5	36.4		
4								6.9	35.0		
+40								7.7	34.2		
5								8.8	33.1		
TP			37.4	37.0				8.64	33.26		
+50								4.5	32.5		
6								4.7	37.8		
+50								4.8	37.2		
7								5.1	31.9		
+50								5.2	31.8		
8								5.1	31.9		
+45	= W L De Jon							4.3	37.7		
TP			4.53	37.50				4.08	32.92		
Mon								8.43	28.87		
+37	Cente							5.4	37.1		
+75	Cente							4.2	33.3		
	Cente							4.8	37.7		
9 +5	= E L	De Jon						4.0	33.5		
+10								5.3	37.2		

		3750			
9+50			5,2	32,3	
10			4,4	33,1	
+50			3,3	34,2	
11			1,9	35,6	
TP	1253	4922	0,81	36,69	
+50			10,3	38,9	
12			6,8	42,4	
+50			1,9	47,3	
TP	1260	6182	0,0	49,22	
13			9,8	52,0	
+50			4,8	57,0	
TP	1274	7394	0,62	61,20	
14			12,7	61,2	
+50			8,0	65,9	
15			4,0	69,9	
+5'	= W.L. Eber st		3,6	70,3	
+35	Center		0,5	73,4	
TP	1275	8619	0,50	73,44	
+65	= E.L. Eber		9,7	76,5	
16			6,7	79,5	

		8619			
16 +50			2,7	83,5	
TP	1277	9636	2,60	83,59	
17			8,8	87,6	
+50			2,4	93,9	
TP	1288	10744	1,80	94,56	
18			6,3	101,1	
+20			4,5	102,9	
+25			7,0	100,4	
+50			5,6	101,8	
TP	1305	11880	1,69	105,75	
19			13,5	105,3	
+50			8,5	110,3	
TP	1290	13074	0,96	117,84	
20			13,0	117,7	
TP	1266	14340	0,0	130,74	
+50			11,9	131,5	
TP	1286	15556	0,70	142,70	
21			12,5	143,1	
+50			5,0	150,6	
+65	= W.L. Froude st		4,1	151,5	

3750
81
36.69
1253
49.22
1260
61.82
62
61.20
1274
73.94
50
73.44
1275
86.19
2.60
83.59
1277
96.36
1.80
94.56
1288
107.44
1.69
105.75
1305
118.80
96
117.84
1290
130.74
1266
143.40
70
142.70
1286
155.56

			155.56		
21	+95	Center		1.7	153.9
	TP	12.60	167.24	0.92	154.64
22	+25 = E L Froude			11.2	156.0
	+50			10.2	157.0
23				7.8	159.4
	+50			2.3	164.9
	TP	6.85	173.23	0.86	166.38
24				2.7	170.5
	TP	7.64	169.44	11.43	161.80
	+50			10.1	159.3
25				13.0	156.4
	TP	10.57	179.85	0.16	169.28
	+50			9.2	170.7
26				8.0	171.9
	+50			4.2	175.7
27				6.2	173.7
	+50			4.1	175.8
	TP	12.66	189.14	3.37	176.48
28				9.9	179.3
	+25 = W L Guyot			7.0	182.1

			189.14			
	+55 = Center			2.3	186.8	
	TP	12.85	201.59	0.40	188.74	155.56
	+85 = E L Guyot			9.9	191.7	92
29				7.5	194.1	154.64
	TP	11.74	212.42	0.91	200.68	12.60
	+50			11.7	200.7	167.24
30				4.8	207.6	86
	TP	12.95	223.40	1.97	210.45	166.38
	+50			11.0	212.4	6.85
	TP	13.05	236.24	0.21	223.19	173.23
31				9.6	226.6	11.43
	+50			2.0	234.2	161.80
	TP	12.73	248.28	0.69	235.55	7.64
32				8.7	239.6	169.44
	+50			4.2	244.1	16
	TP	12.22	259.70	0.80	247.48	169.28
33				11.6	248.1	10.57
	+50 = RR Track			7.0	252.7	179.85
34				4.8	254.9	3.37
	TP	7.11	263.71	3.10	256.60	176.48

12.66
189.14
40
188.74
12.85
201.59
91
200.68
11.74
212.42
1.97
210.45
12.95
223.40
223.19
13.05
236.24
69
235.55
12.73
248.28
80
247.48
12.22
259.70
3.10
256.60
7.11
263.71
12.80
250.91
9.40
260.121

		26341		
34+50			4.0	259.7
+85 = W.L. Santa Barbara			(4.0 / 9.6)	259.7 / 254.1
TP	9.40	26021	12.90	25081
Check			12.88	24733 43

Preliminary Sewers Ocean Beach

N & S Alley Blk 45

See next Page

47

	768	3693		2925	from TP on next Page
0.0 = 1+40 on E & W Line			9.3	27.6	
+50 N			9.4	27.5	
/			8.6	28.3	
+40			7.2	29.7	
+50 = S.L. Orchard			+0.4	37.3	
0.0 = 1+40 E & W Line			9.3	27.6	
+50 S			8.8	28.1	
/			8.3	28.6	
+45			6.7	30.2	
+50			2.5	34.4	
TP			4.40	3253	

Sheet 3

7/29/13 | Chang Taylor Zig

Prelim. Sewers Ocean Beach

Alley E.of Orchard + Pedestrian

	1.20	42.20		41.00	Center N.E. Orchard Court	
00 = E? Cobb St			4.4	30.2		
TP	2.67	31.92	12.95	29.25		
+50			4.1	27.8		
1			4.6	27.3		
+40	= Center of N+S alley		4.3	27.6		
+30			4.3	27.6		
2			3.6	28.3		
+50			3.0	28.9		
3			1.9	30.0		
TP	5.96	36.06	1.82	30.10		
+50			5.3	30.8		
4			4.8	31.3		
+50			5.1	30.9		
5			6.0	30.1		
+50			7.5	28.6		
+95			8.4	27.7		
6 = W.L. De Forest St			7.6	28.5		
TP	5.07	33.59	7.34	28.52		
Mm			4.72	28.87	Orchard & Ocean	

3359

	Center		5.9	27.7		
+30	Center		4.8	28.8		
	Center		5.5	28.1		
+60 = E.L. of De Forest			5.0	28.6		
7			6.8	26.8		
+50			6.2	27.4		
8			5.7	27.9		
+50			2.8	30.8		
TP	12.77	45.23	1.13	32.46		
9			11.9	33.3		
+50			8.1	37.1		
10			5.4	39.8		
+50			2.2	43.0		
TP	17.81	57.46	0.58	44.65		
11			10.6	46.9		
+50			6.7	50.8		
12			3.6	53.9		
+50			0.7	56.8		
TP	17.75	69.57	0.7	56.76		
+60 = W.L. Eberhardt			12.0	57.5		

42.20
1.20
41.00
12.95
29.25
2.67
31.92
1.82
30.10
5.96
36.06
2.67
33.39
4.13
29.26
5.67
33.59
4.13
29.46
12.77
45.23
58
44.65
12.81
57.46
70
56.76
12.74
69.50

		69.54			
# 13			9.0	60.5	
+20	= E2 Cable #		7.1	62.4	
+50			5.7	63.8	
14			2.4	67.1	
+50			0.0	69.5	
TP	12.83	82.34	0.0	69.54	
15			9.3	73.0	
+50			5.1	77.7	
16			0.4	81.9	
TP	13.00	95.34	0.0	82.34	
+50			8.4	86.9	
17			3.3	91.8	
TP	12.97	108.31	0.0	95.34	
+50			11.2	97.1	
18			7.5	100.8	
+50			4.8	103.5	
19			1.6	106.7	
+20	= W2 Guy #		0.5	107.8	
TP	13.00	121.31	0.0	108.31	
+80	= E2 Guy #		10.0	111.3	

		121.31			69.54
# 20			7.9	113.4	12.83
+50			3.2	118.1	82.34
TP	12.12	133.43	0.0	121.21	13.00
21			11.0	122.4	95.34
+50			1.7	131.7	12.97
22			1.4	129.0	108.31
TP	13.02	145.08	1.37	132.06	13.00
+50			13.3	131.8	121.31
23			9.0	136.1	12.12
+50			1.6	143.5	133.43
24			3.2	141.9	1.37
TP	13.03	158.11	0.0	145.08	132.06
+50			9.7	148.4	13.00
TP	12.43	170.54	0.0	158.11	145.08
25			11.8	158.7	13.03
+50			3.3	167.2	158.11
TP	12.70	182.34	0.90	169.64	12.43
+80	= W2 Guy #		11.3	171.0	170.54
26			10.8	171.5	12.70
+40	= E2 Guy #		7.8	174.5	182.34

		18234			
26+50			6.8	175.5	
27			5.2	177.1	
+50			2.1	180.2	
TP	1312	19546	0.0	18234	
28			13.0	182.5	
+50			11.9	183.6	
29			7.4	188.1	
+50			2.0	193.5	
TP	1283	20816	0.13	195.33	
30			9.5	198.7	
+50			4.4	203.8	
TP	1282	22063	0.35	207.81	
31			9.3	211.3	
+50			1.6	219.0	
TP	1261	23300	0.24	220.39	
32			6.0	227.0	
TP	573	23873	0.0	233.00	
+40 = WL of Santa Barbara			1.1	237.6	
100 E of Santa Barbara can come in this alley					
Check	0.15	12824	1064	228.09	Pressure TPP 1/2
			1131	21693 Stat	

18234
1312
19546
13
19533
1283
20816
35
207.81
1282
22063
24
220.39
1261
233.00
573
23873
1064
228.09

7/30/15 Clough Tuttle Fay

Prelim Survey Alley in Block 44 Bet Pescadero & Bermuda

Accum Datum

Bearings

TP on Pipe

0.92 3345 3.45 N+S line in Blk 44

00 = 00 on	E+W line			4.4	29.1						
+50				3.0	30.5						
1	N			2.0	31.5						
+	50	= S of Pescadero		1.0	32.5						
		N & S line in Blk 44									
00 = 1+75		E+W line		7.7	25.8						
+50				9.9	23.6						
1	S			11.6	21.9						
+50		= N of Bermuda		11.0	22.5						
1+		E+W alley									
00				11.4	29.1						
+50				5.6	27.9						
1				7.4	26.1						
+25 =		beg N+S alley		7.7	25.8						
+50				7.5	25.9						
2				7.5	25.9						
+50				7.5	25.9						
TP		3.18	2.908	7.55	25.90						

2.908

		3							4.7	24.4	
		+50							5.8	23.3	
		+60	= W of Pesc						5.0	24.1	
		+78	Gutter						3.8	23.3	29.08
		+90	Curb						5.0	24.1	5.98
4		+8	Gutter						5.8	23.3	36.52
		+50	= E of Pesc						5.1	23.9	48.42
		+50							6.1	22.9	
5									6.7	22.4	
		+50							6.1	22.9	
6									5.3	23.8	
		7.2		12.30		3628			5.10	23.98	
		+50							10.6	25.7	
7									7.5	28.8	
		+50							4.0	32.3	
8									0.3	36.9	
		7.0		12.42		4842			0.8	36.4	
		+50							9.0	39.4	
9									7.0	41.4	
		+50							4.4	44.0	

51

		48.42			
10			2.10	46.3	
+20	= W.L. Eber St		0.7	47.7	
TP	12.36	60.15	0.63	47.79	
+50	= Center		10.6	49.6	
+80	= E.L. Eber St		8.8	51.4	
11			7.0	53.2	
+50			4.7	55.5	
12			2.6	57.6	
TP	12.94	72.79	0.30	59.85	
13 +50			12.3	60.5	
13			9.6	63.2	
+50			6.8	65.9	
14			4.7	68.1	
+50			1.2	71.6	
TP	12.68	84.97	0.50	72.29	
15			10.4	74.6	
+50			6.5	78.5	
16			3.7	81.3	
+50			0.5	84.5	
TP	12.76	97.34	0.39	84.58	

		97.34			
16+80 =	W.L. of Fraude St		11.3	86.1	
17			9.6	87.7	
17+10 =	Center		9.4	87.9	
+40	= E.L. Fraude		7.6	89.7	
+50			7.0	90.3	
18			3.6	93.7	
+50			1.7	95.6	
TP	12.75	109.51	0.58	96.76	
19			11.6	97.9	
+50			9.6	99.9	
20			4.7	104.8	
TP	13.03	121.85	0.69	108.82	
+50			11.0	110.9	
21			7.9	113.9	
+50			5.5	116.4	
22			3.0	118.9	
TP	13.06	133.31	1.60	120.25	
+50			9.3	124.0	
23			4.0	129.3	
TP	12.50	145.06	0.85	132.46	
+40	= W.L. of Guizot		10.9	134.2	

48.42
.63
47.79
12.36
60.15
.30
59.85
12.94
72.79
.50
72.29
12.68
84.97
.39
84.58
12.76
97.34
.58
96.76
12.75
109.51
.69
108.82
13.03
121.85
1.60
120.25
13.06
133.31
.85
132.46
12.50
145.06

		145.06		
23 + 70' = Center			5.8	139.3
24	= E L Guizot		0.0	145.1
TP	12.84	157.90	0.0	145.06
+50			2.6	155.3
TP	12.32	169.22	1.00	156.90
25			7.0	162.2
TP	12.93	181.82	0.33	168.89
+50			6.0	175.8
26			1.0	180.8
TP	12.68	193.57	0.93	180.89
+50			8.2	185.4
27			4.3	189.3
TP	12.75	205.84	0.48	193.09
+50			14.0	191.8
28			10.8	195.1
+50			8.3	197.5
29			3.8	202.1
TP	10.73	214.31	2.26	203.58
+50			7.8	206.5
+95			4.0	210.3
	W L of Sante Barbara		1.0	213.3
30 = Check TP	4.70	218.86	0.15 1.88	214.16 216.98 ✓

		218.86			
for Check			12.56	206.30	TP Reg Near Barnside

This line can run 300' E to the Summit with Alice Archer

145.06
12.84
157.90
1.00
156.90
12.32
169.22
.33
168.89
12.93
181.82
.93
180.89
12.68
193.57
.48
193.09
12.75
205.84
2.26
203.58
10.73
214.31
.15
214.16
4.70
218.86
1.88
216.98

218.86
12.56
206.30

Prelim Sewers Ocean Beach
Alley Bet Bermuda + Point Loma ave

	0.40	24.41		24.01	BM Top of Post Shoulder Tower
	N & S alley				
00 = Center of E & W alley			4.8	19.6	
+50 N			5.0	19.4	
1			5.0	19.4	
+50 = S L Bermuda			3.7	20.7	
	E & W alley				
00 = Center N & S alley			4.8	19.6	
+50			5.0	19.4	
1			5.0	19.4	
+18 = W L De Fox St			4.7	19.7	
+22 Gutter			5.4	19.0	
	Center		4.7	19.7	
	Gutter		5.5	18.9	
+70 = E L De Fox St			4.6	19.8	
2			5.3	19.1	
+50			5.1	19.3	
3			4.8	19.6	
+50			3.2	21.2	
TP	12.35	33.84	2.92	21.49	

Sheet 1

			33.84		
4				11.3	22.5
	+50			9.5	24.3
5				6.7	27.1
	+50			4.4	29.4
6				2.2	31.6
	TP	11.90	43.74	2.00	31.84
	+50			9.9	33.8
7				7.8	35.9
	+50			6.0	37.7
	+70 = W L of Eber St			5.0	38.7
8	= Center			3.2	40.5
	+30 = E L Eber St			1.2	42.5
	TP	13.00	56.62	0.12	43.62
	+50			12.5	44.1
9				9.4	47.2
	+50			6.2	50.4
10				5.0	51.6
	+50			3.1	53.5
11				1.6	55.0
	TP	11.60	67.16	1.06	55.56

24.41
2.92
21.49
12.35
33.84
2.00
31.84
11.90
43.74
12
43.62
13.00
56.62
1.06
55.56
11.60
67.16

		67.16			
# 11 +50			9.4	57.8	
12			7.8	59.4	
+50			5.0	62.2	
13			1.9	65.3	
TP	12.40	78.42	1.14	66.02	
+50			10.5	67.9	
14			7.8	70.6	
+30 = WL of Froude			5.9	72.5	
+50			4.1	74.3	
+90 = EL Froude			1.8	76.6	
TP	12.62	90.15	0.89	77.53	
15			13.0	77.2	
+50			10.1	80.1	
16			7.8	82.4	
+50			7.0	83.2	
17			4.4	85.8	
+50			3.2	86.9	
TP	12.80	101.05	1.90	88.25	
18			12.3	88.8	
+50			8.7	92.4	

		101.05			
# 19			2.6	98.5	
TP	12.63	113.34	0.34	100.71	
+50			10.1	103.2	
TP	12.93	126.05	0.22	113.12	
20			12.7	113.4	
+50			5.3	120.8	
TP	12.51	138.16	0.40	125.65	
+90 = WL Guyot 11			11.6	126.6	
21 +20	Center		7.8	130.4	
+50	EL of Guyot		5.3	132.9	
BM			7.00	131.18	
TP	12.37	150.23	0.30	137.86	
22			9.7	140.5	
+50			5.5	144.7	
23			2.8	147.4	
TP	12.80	160.65	2.38	147.85	
+50			9.5	151.2	
24			6.5	154.2	
+50			2.0	158.7	
TP	12.77	171.79	1.63	159.02	

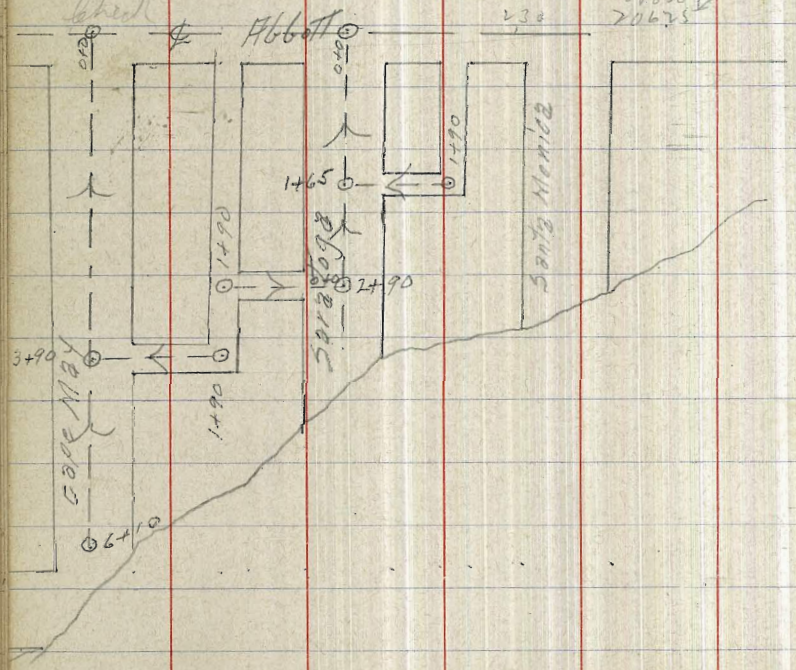
Pag Sin Rows

6716
114
66.02
1240
78.42
89
77.53
12.62
90.15
1.90
88.25
12.80
101.05
34
100.71
12.63
113.34
22
113.12
12.93
126.05
40
125.65
12.51
138.16

St Stanley Zone

138.16
30
137.86
12.37
150.23
2.38
147.85
12.80
160.65
1.63
159.02
12.77
171.79

			171.29		
25			8.3	163.5	
+50			2.5	169.3	
TP	12.90	16423	0.46	171.33	
26			9.3	174.9	
+50			3.6	180.6	
TP	13.02	19675	0.50	181.73	
27			12.0	186.8	
+50 = W'd Santa Barbara			7.7	194.6	
TP	11.80	20855	0.0	196.75	
				21630	
check			2.38	20675	



Levels ℄ Cape May from ℄ Abbott West for 610'

B.M. N.W. B.P. Abbott 1.73 | Cape May 10.62 | | 8.89

0+0 = ℄ Abbott	1.7	8.9
+50	2.1	8.5
1	2.4	8.2
+50	2.7	7.9
2	3.3	7.3
+50	3.7	6.9
3	4.1	6.5
+50	4.8	5.8
+90 = ℄ Alley	5.21	5.41
4	5.3	5.3
+50	5.8	4.8
5	6.3	4.3
+37	6.8	3.8
+37	8.5	2.1
+50	9.2	1.4
6	9.8	0.8
+10	10.1	0.5

Levels ℄ Alley from ℄ Cape May South for 190'

B.M. 4.52 | 9.93 | | 5.41

0+0 = ℄ Cape May	4.52	5.4
7+20	5.2	4.7
+50	4.2	5.7
+58	3.7	6.2
+37	4.2	5.7
1	5.7	4.2
+75	7.0	2.9
+50	6.8	3.1
+90 = ℄ Alley	6.6	3.3

Prelim Sewers Ocean Beach
Alley Bet Brighton & Long Branch

	8.50	10.00		1.50	End of Cent Brighton
00 = E L Spray St			10.0	0.0	
+50			9.4	0.6	
1			10.0	0.0	
+40			9.0	1.0	
+50			5.0	5.0	
+65			9.0	1.0	
2			7.6	2.4	
+15			6.0	4.0	
TP	0.20	9.75	0.45	9.55	
+30			+1.0	10.75	
+50			0.8	8.9	
3			4.5	5.3	
+50			3.6	4.2	
4			5.3	4.5	
+50			5.2	4.6	
5			6.1	3.7	
+50			7.5	2.3	
+85			7.0	2.8	
6	= W L Abbott St		3.3	6.5	
TP	1.40	8.08	3.07	6.68	

Sheet 15

8.08

6 +12	Gutter		1.5	6.6	
+30	Center		0.8	7.3	
	Gutter		1.5	6.6	
+60	= E L Abbott St		1.1	6.9	
+70			5.0	3.1	
7			5.4	2.7	
+50			5.3	2.8	
8			5.2	2.9	
+50			5.2	2.9	
9			5.0	3.1	
+50			5.0	3.1	
10			5.0	3.1	
+50			4.8	3.3	
TP	5.50	9.34	4.24	3.84	
11			5.6	3.7	
+50			5.2	4.1	
12			4.7	4.6	
+50			4.2	5.1	
+60	= W L Bacon St		4.2	5.1	
+90	= Center RR Track		3.8	5.5	

1000
45
9.55
20
9.75
3.07
6.68
1.40
8.08
4.24
3.84
5.50
9.34

		9.34		
13+20 = E L of		Baca St	3.2	6.1
TP	7.47	13.71	3.10	6.24
+50			6.7	7.0
no alley 13+20 to 14+20				
14			6.5	7.2
+50			5.5	8.2
15			4.7	9.0
+50			4.0	9.7
16			3.6	10.1
+50			3.0	10.7
17			2.3	11.4
+50			1.4	12.3
TP	6.85	19.32	1.24	12.47
18			6.4	12.9
+50			5.6	13.7
19			5.0	14.3
+20 = W L Cable St			4.8	14.5
+50 = Center			4.3	15.0
+80 = E L Cable			3.9	15.4
20			3.6	15.7
+50			2.6	16.7

		19.32		
*21			1.8	17.5
+50			1.1	18.2
TP	9.12	28.29	0.15	19.17
22			8.6	19.7
+50			7.6	20.7
23			6.3	21.9
+50			5.3	22.9
24			4.7	23.6
+50			4.1	24.2
25			3.1	25.2
+50			2.5	25.8
+80 = W L De Fore			2.1	26.2
Center			1.6	26.7
TP	7.05	33.32	2.02	26.27
26+40 = E L De Fore			6.1	27.2
+50			6.0	27.3
27			5.5	27.8
+50			5.0	28.3
28			4.7	28.6
+50			4.4	28.9

6.24
7.47
13.71
1.24
12.47
6.85
19.32
15
19.17
9.12
28.29
2.02
26.27
7.05
33.32

		33.32			
29			4.4	28.9	
+50			4.1	29.2	
30			4.1	29.2	
+50			4.1	29.2	
TP	8.82	38.19	3.95	29.37	
31			8.0	30.2	
+50			6.6	31.6	
32			5.6	32.6	
+40	= WL	Eber	4.3	33.9	
70	Center		3.7	34.5	
33 =	E Sin of	Eber	3.2	35.9	
+50			2.3	35.9	
34			0.9	37.3	
TP	9.94	47.32	0.81	37.38	
+50			8.9	38.4	
35			6.2	41.1	
+50			4.3	43.0	
36			1.6	45.7	
TP	9.30	56.41	0.21	47.11 13	
+50			8.2	48.2	

		56.41			
37			6.6	49.8	
+50			4.3	52.1	
38			2.8	53.6	
+50			2.0	54.4	
39	= WL Frank W		1.5	54.9	
TP	10.70	65.70	1.70	55.00	
+30	Center		9.9	55.8	
+60	EL Frank		9.3	56.4	
40			8.3	57.4	
+50			6.2	59.5	
41			4.2	61.5	
+50			2.2	63.5	
TP	12.70	77.90	0.50	65.20	
42			11.9	66.0	
+50			8.5	69.4	
43			3.6	74.3	
TP	13.10	90.18	0.82	77.08	
+50			1.00	80.2	
44			5.4	84.8	
+50			1.0	89.2	
TP	12.44	102.60	0.02	90.16	

33.32
3.95
29.37
8.82
38.19
.81
37.38
9.94
47.32
.21
47.11
9.30
56.41
1.40
55.00
10.70
65.70
.50
65.20
12.70
77.90
.82
77.08
13.10
90.18
.16
12.44
102.60

		102.60			
45			9.6	93.0	
+50			5.9	96.7	
+60	= W.S Gutter		5.0	99.6	
+90	bank		3.2	99.4	10.60 / 1.13 / 101.47 / 8.55 / 110.02
46+20	= E.S Gutter		1.3	101.3	
TP	8.55	110.02	1.13	101.47	
+50			6.7	103.3	
47			4.0	106.0	
+30	12.5	120.2	2.3	107.7	
	600 to top of Stake shown				
	unplotted bank	120.2			
47+70			8.5	111.7	
48+20			2.5	114.2	
48+35=25	W of P.L.		0.8	114.4	

Sta	Bkgd	Prelim Sewers alley Bet Long		Ocean Branch +	Birch Manor	Rod to TP on East line
		6.35	12.54		6.24	
60 =	Edg Board St			5.4	7.2	6.24 / 6.31 / 12.55 / 1.25 / 10.64 / 2.07 / 17.71 / 2.00 / 15.71 / 8.46 / 23.97 / 1.13
+50	No alley 1st 100 ft			4.3	8.2	
1				3.5	9.1	
+50				2.7	9.9	
2				2.0	10.6	
TP	7.07	17.71		1.85	10.64	
+50				6.4	11.3	
3				6.1	11.6	
+50				5.5	12.2	
4				4.8	12.9	
+50				3.9	13.8	
5				3.3	14.4	
+50				2.6	15.1	
6	= W.S ballast			2.0	15.7	
TP	8.46	23.97		2.00	15.71	
+70	Gutter			8.6	15.4	
+30	Curb			8.0	15.9	
	Gutter			8.0	15.9	

Sheet 16

		2397		
6+60	= E L Cabl st		7,2	16.8
7			6,3	17.7
+50			5,7	18.3
8			4,6	19.4
+50			3,5	20.5
9			2,6	21.4
+50			1,9	22.1
TP	6,70	28.80	1,87	22.10
10			6,1	22.7
+50			5,4	23.4
11			4,6	24.2
+50			4,3	24.5
12			3,7	25.1
+50			2,9	25.9
+60	= W L of De Foe		2,8	26.0
+90	Center		2,3	26.5
13+20	E L De Foe		2,3	26.5
TP	5.96	32.80	1,96	26.84
+50			6,0	26.8
14			5,5	27.3

		32.80		
14+50			5,4	27.4
15			5,0	27.8
+50			4,6	28.2
16			4,4	28.4
+50			3,9	28.9
17			3,5	29.3
+50			2,7	30.1
TP	6.41	36.51	2,70	30.10
18			6,2	30.3
+50			5,8	30.7
19			5,2	31.3
+20	= W L Ebert		5,0	31.5
+50	Center		4,2	32.3
+80			3,4	33.1
20			2,9	33.6
+50			1,6	34.9
TP	9,72	44.78	1,45	35.06
21			8,7	36.1
+50			8,2	36.6
22			7,2	37.6

2397
1.87
22.10
6.70
28.80
1.96
26.84
5.96
32.80
2.70
30.10
6.41
36.51
1.45
35.06
9.72
44.78

22+50			5.8	38.9	
23			1.3	40.5	
+50			2.8	41.7	
TP	10.64	5273	2.9	44.6	
24			9.8	47.9	
+50			8.5	44.2	
25			8.0	44.7	
+50			6.5	46.2	
+80	= W.L. Trunk Line		5.8	46.9	
26+10	Leeds		1.5	48.2	
+40	= E.L. Trunk		3.8	48.9	
+50			3.4	49.3	
27			1.5	51.2	
9 in			3.91	48.82	64 Main + P.L. 265
Int TP	6.25	5640	2.55	50.14	
			9.00	47.13	114
	1.75	6159		48.84	Main
27+50			8.7	53.9	
28			7.4	54.2	
+50			3.4	56.2	

		6159			67
29			3.4	58.2	
+50			0.4	61.2	4478
TP	13.05	7428	0.26	61.23	2.59 42,109 10.64 52.773
30			1.05	63.8	3.61 48.82
+50			8.2	66.1	6272 2.57 50.18 6.45 56.63 9.36 47.19
31			4.0	70.3	
TP	12.95	8677	0.46	73.82	4864 12.77 61.52 .36 61.23 1.305 74.28 .46 73.82 12.95 86.77 .36 86.41 12.57 98.62
+50			11.2	75.6	
32			6.8	79.9	
+40	= W.L. Trunk		3.2	83.6	
70			0.4	86.4	
TP	12.55	8869	0.70	86.47	
33	= E.L. Trunk		10.8	87.9	
+50			6.0	92.7	
34	13.2	11.1.9	0.0	98.7	
					~~3rd Platform Line~~
		111.9			
-150			5.4	106.5	
TP	7.00	118.90	0.00	111.90	
35+0			5.5	113.4	
35+15 = .25 N of P.L.			3.4	115.5	

Prelim Sewers Occ Beach
on Prop Line (No Alley) Bet Long Branch + Muir

	3.82	10.06		6.24	TP on P
00 = WL Bacon St			3.3	6.8	
+50 W			4.9	5.2	
1			5.6	4.5	
+50			6.0	4.1	
2			6.2	3.9	
+50			6.4	3.7	
3			6.5	3.6	
TP	4.19	7.69	6.56	3.50	
+50			4.2	3.5	
4			4.7	2.9	
+50			4.7	2.9	
5			4.8	2.9	
+50			5.3	2.4	
6	= E L Abbott St		4.5	3.2	
+30	= Center		5.1	2.6	
+60	= WL Abbott		5.0	2.7	
TP	6.20	8.89	5.00	2.7	
7			6.8	2.1	

Sheet 16

		8.89		
7+50			7.1	1.8
8			7.2	1.7
+50			6.6	2.3
9			5.0	3.9
+50			5.4	3.5
10			5.4	3.5
+50			5.4	3.5
11			6.3	2.6
+50			6.3	2.6
12			8.0	0.9
+60 = E L Sprague			9.0	-0.1
	4.80	6.26	7.43	1.46

6.24
3.82
10.06
6.56
3.50
4.19
7.69
5.00
2.69
6.20
8.89
7.43
1.46
4.80
6.26

	Prelim Alley Bet Sewers	Accum Brick Vaults			
		626			841 for Baldwin
00 = ℄ 2	Boulevard	5.2	1.1		
+50 ℄		4.6	1.7		
1		5.0	1.3		
+50		5.2	1.1		
2		4.6	1.7		
	Center of Street	4.3	1.9		
+50		4.8	1.5		
3		4.6	1.5		
+50		5.0	1.3		
+95	= ℄ 2 Abbott Pl	4.3	1.9		
	Center	4.3	1.9		
4+55	= ℄ 2 Abbott	4.1	2.2		
TP	541 841	3.27	3.00		
5		6.0	2.4		
+50		5.8	2.6		
6		5.2	3.2		
+50		5.1	3.3		
7		4.8	3.6		
+50		4.6	3.8		

			8.41			64
8.4				4.0	4.4	
+50				3.8	4.6	626 327 3.53 1.41 8.41 3.16 1.21 7.95 13.16 2.46 10.70
9				3.3	5.1	
TP	7.85	1316		3.10	5.31	
+50				7.2	5.9	
10				6.5	6.7	1321 1.95 11.26 7.35 18.61
+50				5.5	7.7	
+35 = ℄ of Bridge				5.0	8.2	✓
Center RR Track				5.0	8.2	
11+15 = 2 Bee				4.2	8.9	
Bm		1321		2.40	11.76 8.1	Bm Volley & Bee
+50				4.0	9.2	
12				3.2	10.0	
+50				2.4	10.8	
13				2.0	11.2	
TP	7.35	1861		1.95	11.26	
+50				6.3	12.3	
14				5.9	12.7	
+50				5.2	13.0	
15				4.8	13.8	

		1861		
15+50			3,9	14.7
16			2,4	16.2
+50			1,3	17.3
17			2,0	16.6
+15 = WL Cobb St			1,6	17.0
TP	6.64	23.81	1,44	17.17
Center			6,8	17.0
+75 = EL Cobb			6,0	17.8
18			5,6	18.2
+50			5,0	18.8
19			4,1	19.7
+50			3,4	20.4
20			2,5	21.3
+50			1,7	22.1
TP	7.26	29.36	1,71	22.10
21			6,9	22.5
+50			6,2	23.2
22			5,0	24.4
+50			4,7	24.7
23			4,1	25.3

		29.36		
23+50			3,7	25.7
+75 = WL DeFoe St			3,5	25.9
Center			3,1	26.3
24+35 = EL DeFoe			3,0	26.4
TP	5.47	31.93	2,90	26.46
+50			5,6	26.3
25			5,1	26.8
+50			5,2	26.7
26			4,8	27.1
+50			4,7	27.2
27			4,3	27.6
+50			3,9	28.0
28			3,3	28.6
+50			2,7	29.2
TP	6.06	35.54	2,45	29.48
29			5,7	29.8
+50			5,3	30.2
30			5,0	30.5
+35 = WL Eber St			4,8	30.7
Center			4,4	31.1

1861
1.44
17.17
6.64
23.81
1.71
22.10
7.26
29.36
2.90
26.46
5.47
31.93
2.45
29.48
6.06
35.54

35+54

30+95 =	W2 Elev		4.4	31.1	
31			4.4	31.1	
+50			4.0	31.5	
32			3.4	32.1	
+50			2.4	33.1	
TP	10.05	43.02	2.57	32.97	
33			9.1	33.9	
+50			8.0	35.0	
34			6.7	36.3	
+50			5.2	37.8	
35			3.2	39.8	
TP	10.15	51.07	2.10	40.92	
+50			9.1	41.9	
36			7.6	43.5	
+50			5.8	45.3	
36 +95 =	W2 Jamb		4.6	46.5	
Bk Bm			6.07	45.43	Bm Yellow Jamb
	Center		2.14	46.7	
37 +54 =	E2 Jamb		4.0	47.1	
38			3.9	47.2	

51.07

38+10			4.0	47.1	
TP	3.10	54.17	00.2	51.05	
39			8.1	48.1	
+50			7.5	48.7	
40			6.5	49.7	
+50			5.1	51.1	
41			3.1	53.1	
TP	11.88	67.65	0.38	55.77	
+50			11.3	56.4	
42			8.0	59.7	
+50			4.0	63.7	
TP	9.53	77.05	01.2	67.52	
43			8.6	68.5	
+55 = W2 Sweet H-			4.3	72.8	Bm Stone Base Sweet Gum
continued below					
TP			7.0	6.925	
0+9 = W2 Sweet H-	17.57	81.07	8.1	73.0	
+50	60.20		5.2	75.9	
+55			2.4	78.7	
1+0 T.P.	12.80	93.46	0.41	80.66	
1+50		cut 5'	10.2	82.3	
			6.2	87.3	
2+0		cut 6'	2.6	90.9	
T.P.	8.03	100.69	0.85	92.61	
2+50			6.2	94.5	
2+92 end of Bill 15		cut 7'	2.5	98.2	

35.54
2.57
32.97
10.05
43.02
1.0
40.92
10.15
51.07
3.10
38
55.77
11.88
67.65
9.53
77.18
69.25

Levels for sewer ℄ Abbott from S.L. Newport to N.L. Niagara

11/8/13 Dunkle Stam Kerr

B.M. curb S.E. Newport & Abbott.

B.M.	3.78	10.13		6.35	
℄ Newport			3.8	6.3	
0+0 = S.L. Newport			4.0	6.1	
+50			6.4	3.7	
1+0			7.0	3.1	
+50			7.7	2.4	
2+0			8.3	1.8	
+50			8.4	1.7	
3+0 = N.L. Niagara.			8.4	1.7	

Levels for sewer ℄ Muir from W.L. Abbott to ℄ W. Pt. Loma Blvd

B.M. S.W. curb Muir & Abbott

B.M.	3.85			2.0	
0+0 = W.L. Abbott.		5.85	4.0	1.8	
+50			3.8	2.0	
1+0			4.0	1.8	
+50			4.1	1.7	
2+0			4.1	1.7	
+50			4.2	1.6	
3+0			4.2	1.6	
+50			4.3	1.5	
4+0			4.5	1.3	
+50			4.6	1.2	
5+0			4.8	1.0	
5+27 = ℄ W. Pt. Loma Blvd			4.2	1.6	

Levels for sewer ℄ W. Pt. Loma Blvd from S.L. Voltaire to 187' S. of ℄ Muir

B.M. S.W. curb Muir & Abbott.

B.M.	3.85	5.8		2.0
0+0 = S.L. Voltaire			4.8	1.0
+50			4.6	1.2
1+0			4.6	1.2
+50			5.0	0.8
2+0			4.8	1.0
+50			4.1	1.7
2+39 = ℄ Muir			4.2	1.6
3+0			4.5	1.3
+50			5.3	0.5
4+0			5.7	0.1
+50			5.9	-0.1
4+76 = 187' S. of ℄ Muir			5.7	0.1

Preliminary Survey Base Line Beach Alley East Voltaire + Lotus st

		5.25	8.25		3.00	TP 2.00 Gate Valve		7.50			2.8	10.5
00 = E 2 Abbott st				5.7	2.6			8			2.4	10.9
+50 E				5.2	3.1			TP	7.34	18.61	2.04	11.27
1				5.0	3.2			+50			6.8	11.8
+50				4.7	3.6			9			6.0	12.6
2				4.4	3.9			+50			5.1	13.5
+50				3.7	4.6			10			4.7	13.9
3				3.2	5.1			+50			4.1	14.5
750				2.5	5.8			11			3.1	15.5
TP	7.50	13.31		2.44	5.81			+50			2.4	16.2
4				6.8	6.7			12			1.0	17.6
+50				6.2	7.1			+50			0.3	18.3
5				5.7	7.6			TP	7.54	24.95	1.20	17.41
+50				5.0	8.3			+60 = W 2 ball st			7.2	17.8
6 = W 2 1 Bacon				4.6	8.7			Center			6.9	18.1
+30 Center				4.9	8.4			13 +20 = E 2 ball st			6.3	18.7
+60 = E 2 Bacon				4.4	8.9			+50			6.0	18.9
7				3.4	9.9			14			5.2	19.8
check				2.50	10.81	BM Bolt on Post		+50			4.2	20.8
								15			3.6	21.4

Sheet 18

825 − 244 = 581 ; 581 + 720 = 1301 ; 1301 + 304 = 1605 ; 1605 + 1202 = 2807 ; 2807 + 244 = 3051 ; 3051 − 1810 = 1241 ; 1241 + 1200 = 2441 ; 2441 − 2304 = 137 ; 2441 − 2304 = 137

		24,95						33,12		
15 +50			2,9	22.1	23 +50			4.1	29,0	
16			1,9	23.1	24			3,6	29,5	
TP	6,75	29,79	1,91	23,04	+50			3,0	30.1	24,95
+50			6,0	23.8	25			2,8	30,3	1,91
17			5,4	24.4	+50			2,3	30.8	23,04
+50			5,2	24.6	+80 = WL Ebe			2,4	30.7	6,75
18			5,0	24.8	Cente			2,4	30,7	29,79
+50			4,4	25.4	26 +40 = EL Ebe			2,0	31,1	2,30
19			4,3	25,5	TP	6,45	37,75	1,82	31,30	27,49
+20 = WL			4,4	25.4	+50			6,1	31,7	5,63
	Cente De Fu		4,5	25.3	27			5,4	32.4	33,12
+80	EL De Fu		3,7	26.1	+50			5,0	32.8	1,82
20			3,0	26.8	28			4,8	32.9	31,30
+50			2,4	27.4	+50			4,2	33.6	6,45
TP	5,63	33,12	2,30	27,49	29			3,3	34.5	37,75
21			5,6	27.5	+50			2,1	35,7	2,05
+50			5,3	27.8	TP	8,95	44,65	2,05	35,70	35,70
22			5,5	27.6	30			7,8	36.9	8,95
+50			5,1	28.0	+50			6,5	38.2	44,65
23			4,9	28.2	31			5,0	39.7	

		44.65			
31+50			4.0	40.7	
32			2.5	42.2	
+40	= W.L.	Trouble	0.8	43.9	43.65
					5.70
TP	5.70	49.35	1.00	43.65	49.35
Check			4.35	45.00	BM Wallace + Trouble

Levels ℄ Saratoga st from ℄ Abbott st west for 290'

B.M. B.P.N.W. Saratoga & Abbott				5.05
	3.72	8.77		
0+0 = ℄ Abbott			3.4	5.4
+50			3.9	4.9
1			4.2	4.6
+50			4.4	4.4
+65 = ℄ Alley south			4.5	4.3
2			5.0	3.8
+50			5.3	3.5
+90 = ℄ Alley North			5.5	3.3

Levels ℄ Alley from sta 2+90 Saratoga st North for 190'

0+0	5.5	3.3
+50	4.9	3.9
1	4.7	4.1
+19	5.6	3.2
+50	5.4	3.4
+60	4.4	4.4
+90 = ℄ Alley	3.2	5.6

Levels ℄ Alley from sta 1+65 Saratoga st south for 190'

0+0	4.5	4.3
+20	5.3	3.5
+50	4.4	4.4
1	3.6	5.2
+50	3.7	5.1
+73	3.5	5.3
+75	6.2	2.6
+90	8.2	0.6

See sketch page 56

Prelim Sewers Eber Rec

Alley Bet Lotus + Green st

					Bm Spike Pole	
	4,87	31.01		26.14		
	7.10	32.36	5.75	25.26		
00 = E Lf	Do Jac St		6.8	25.4		
	+30 E			5.8	26.6	
1				5.6	26.6	
	7.30			5.2	27.2	
2				4.7	27.7	
	+50			4.2	28.2	
3				3.9	28.5	
	+50			3.3	29.1	
	TP	6.55	35.94	2.93	29.43	
4				6.2	29.8	
	+50			5.7	30.3	
5				5.1	30.9	
	+50			4.8	31.2	
6	= W2 Eber st			4.4	31.6	
	bank			4.4	31.6	
	+60 = E2 Eber st			4.2	31.8	
7				3.9	32.1	
	TP	7.33	39.76	3.55	32.43	Rock

3976

7+50				2.8	31.9	2.614
8				2.0	32.8	31.401
	+50			1.0	33.8	32.36
9				0.2	34.6	29.43
	+50			0.9	35.1	35.98
10				1.4	36.1	32.43
	+50			1.9	36.5	39.76
11				2.6	37.2	37.31
	TP	7.00	44.31	2.45	37.31	44.31
	+50			0.6	37.7	
12				0.2	39.1	
	+60 = W2 of Trouble			3.2	41.1	
	blank			4.28	40.03	Bm 7 Rock Green + Jac

Could run E100 + the S to valley

71

2.614
31.401
25.26
32.36
29.43
35.98
32.43
39.76
37.31
44.31

Preliminary sewer on West Point Loma Blvd.

↙see Last Page				
0+00 = hub 432.7 W of ℄ Bacon				
4+32.7 M.H.	41° 02" R	℄ Bacon St		
			480.3	
9+13 M.H.	53° 19' L			
			258	
11+71 M.H.	15° 42' L	6' N of ℄ Lotus & 35' W of cable		
			351	
15+22 M.H.	19° 10' R			
			404	
19+26 M.H.	20° 53' L	℄ DeFoe St.		
			674	
26+00 M.H.	19° 52' L			
				293
28+93 M.H.	1° 43' R	℄ Alley bet Larkspur & Castellar		
				196
30+89 M.H.	4° 53' L	℄ Castellar St		
				511
36+0 F.T. end of Line		13' S of S.L. Sea Side St.		

Levels for Line on opp page

B.M.				10.81
	0.56	11.37		
0+0			10.6	0.8
4+32.7			5.4	6.0
6+50			4.8	6.6
T.P.	11.14	21.41	1.10	10.27
9+13			9.4	12.0
11+71			4.0	17.4
15+22			0.92	20.49
	8.87	29.36		
19+26			5.5	23.9
T.P.	6.10	34.12	1.34	28.02
26+00			4.6	29.5
28+93			5.5	28.6
30+89			6.61	27.51
32+00			6.6	27.5
34+0			4.2	29.9
36+0			5.8	28.3

Prelim Sewers Ocean Beach
Alley Bet Green + Larkspur St

	4.90	37.33		32.43	Rect TP on P
00 = E L of Eber St			6.2	31.1	
+50 E			6.4	30.9	
1			6.8	30.5	
+50			6.5	30.8	
2			6.0	31.3	
+50			5.2	32.1	
3			4.3	33.0	
TP	8.56	41.86	4.03	33.30	
+50			7.8	34.1	
4			6.9	34.9	
+50			6.0	35.9	
5			5.3	36.6	
+50			4.3	37.6	
6			3.4	38.5	
TP	6.96	46.42	2.40	39.46	
+50			6.8	39.6	
7			5.4	41.0	
+35 = WL Sea Side			4.9	41.5	
Check			6.40	40.02	

Sheet 19

73

32.43
4.90
37.33
4.03
33.30
8.56
41.86
2.40
39.46
6.96
46.42
6.40
40.02

7.36
.90
8.26
.20
8.01

8/6/13 Prelim Sewers Ocn Beach
Alley Bet Larkspur + Castello

	6.40	46.43		40.03	Bm 7 Tack Green + Trans
	2.55	44.64	4.34	42.09	
00 = W Line of Sea Side St			2.4	42.3	
+50 W			3.4	41.3	
1			5.0	39.6	
+50			6.4	38.3	
2			7.8	36.8	
+50			9.2	35.4	
3			10.2	34.4	
7P	2.50	37.00	10.14	34.50	
+50			3.6	33.4	
4			5.2	31.8	
+50			6.3	30.7	
5			7.5	29.5	
+50 = SE L of Boulevard			7.6	29.4	
7P			7.90	29.10	a Curb

Sheet 19

550
25

550
25
58
633

46.43
4.34
42.09
2.55
44.64
10.14
34.50
2.50
37.00
7.90
29.10

Levels Sewer Line from M.H. ℄ Seaside Ave East on Lot Line between Lots 7-8 & 9-10 Blk 1 Dexter Add.

B.M. curb N.W. Seaside & Larkspur				41.00
B.M.	5.33	46.33		
0+0 = M.H. ℄ Seaside			4.76	41.6
+50			3.8	42.5
1+0			4.1	42.2
+50			4.5	41.8
2+0			5.1	41.2
+50			6.0	40.3
3+0			6.7	39.6
3+25 = M.H. ℄ Etiwanda St			7.11	39.22
+50			7.1	39.2
4+0			8.0	38.3
+50			8.6	37.7
5+0			8.8	37.5
+50			9.5	36.8
6+0			9.5	36.8
6+55 M.H. ℄ Soto St,			9.38	36.95

Sheet 20

Sewer Line Etiwanda St from 40' S of S.L. Castellar St to 35' N of N.L. Voltaire St.

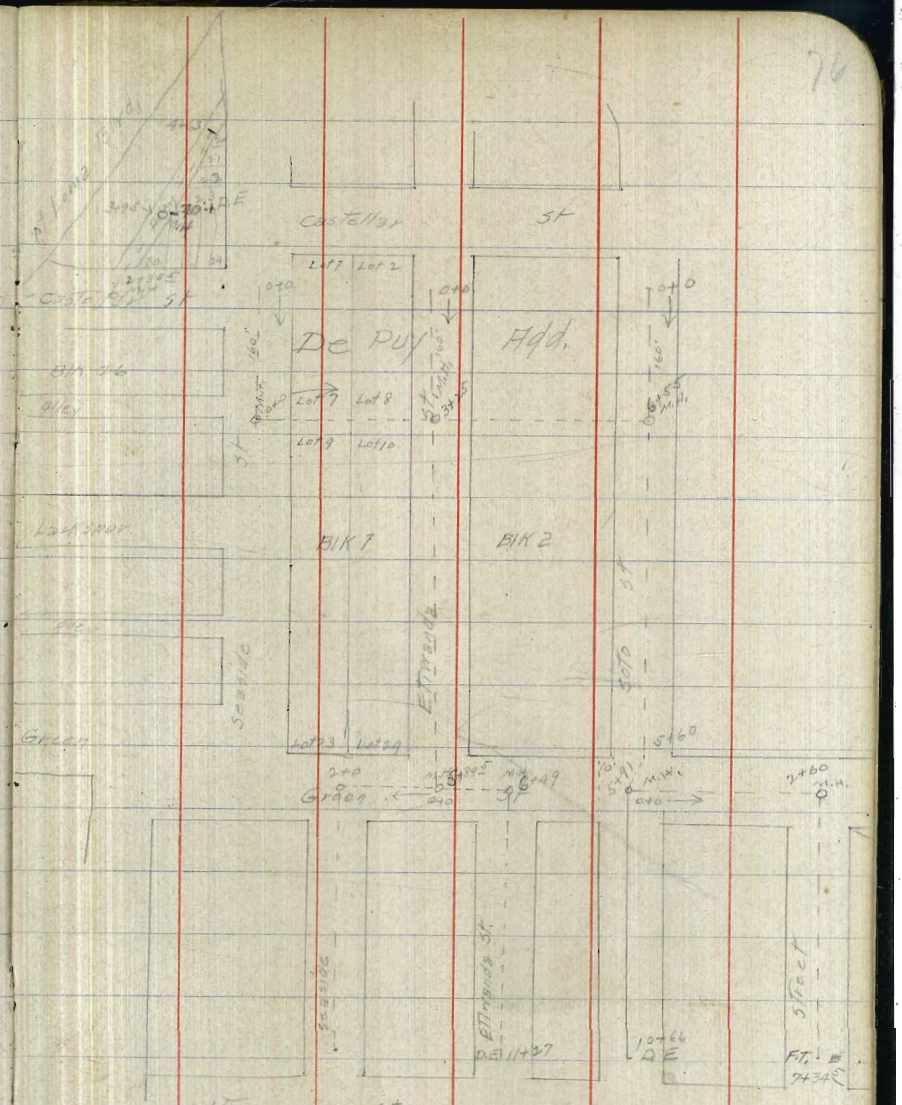
B.M. hub sta 3+25 Lot Line Sewer opp. page				39.22
B.M.	5.08	44.30		
0+0 = 40 S of Castellar			6.0	38.3
+50			4.8	39.5
1+0			4.8	39.5
1+60 M.H. Lot Line sta 3+25			5.1	39.2
2+0			4.7	39.6
+50			5.2	39.1
3+0			5.0	39.3
+50			4.5	39.8
4+0			4.7	39.6
+50			4.9	39.4
5+0			5.1	39.2
+50			5.0	39.3
5+29.5 M.H. ℄ Green St			4.57	39.73
T.P.	11.35	51.08	4.57	39.73
6+0			11.5	39.6
6+49 M.H. ℄ Green St			10.6	40.5
7+0			11.0	40.1
+50			9.3	41.8
8+0			7.7	43.4
+50			5.6	45.5
9+0			3.6	47.5
+50 T.P.	12.25	63.07	0.26	50.82
10+0	cut 6'		9.6	53.5
+50	" 7'		6.6	56.5
11+0			4.0	59.1
11+27 = 35 N of N.L. Voltaire St.	cut 8'		3.0	60.1

Sheet 20'

Sewer Line Soto St from 40' S of S.L. Castellar St to 35' N of Voltaire St

B.M.	11.85	48.76		36.95
0+00=40' S of Castellar St			15.5	33.3
1+50			14.0	34.8
1+0			13.5	35.3
1+60=M.H. to Line Sewer St			11.8	37.0
2+0			10.3	38.5
2+50			8.1	40.7
3+0			5.5	43.3
3+50			2.6	46.2
4+0 T.B.	11.99	59.17	1.56	47.20
			9.6	43.6
4+50 Note Cut 6' from 4+0 to 1+66			7.1	52.1
5+0			4.6	54.6
4+50			0.9	58.3
5+91 M.H. @ Green St		70.85	0.12	59.05
6+0			12.1	58.3
4+50			9.9	61.0
7+0			6.6	64.3
4+50			4.9	66.5
8+0			2.1	68.8
4+50 T.B.	10.02	80.63	0.24	70.6
9+0			9.7	70.9
9+8			2.7	73.8
4+50			6.9	73.7
10+0			5.8	74.8
4+50			4.2	76.4
10+66=35' N of Voltaire St			3.6	77.0

Sheet 76



Sewer Green St from M.H. Sta 5+91 on Soto St Line East on Green St to M.H. Sta 2+60 ℄ of St. (no name) Thence S on ℄ of St To Sta 7+34.5 or 35 N of Voltare St

B.M.				59.05
11.80		70.85		
0+0 = M.H. ℄ Green & Soto Sts.			11.8	59.1
+50			7.8	63.1
1+0			4.1	66.8
+50			1.1	69.8
T.P.	11.30	81.51	0.64	70.21
2+0			9.5	72.0
2+60 = M.H. ℄ St no name			8.2	73.3
3+0			7.6	73.9
+50			6.4	75.1
4+0			4.9	76.6
+50			3.7	77.8
5+0			2.4	79.1
+50			1.0	80.5
T.P.	7.87	88.35	1.03	80.48
6+0	cut 6'		6.7	81.7
+50			5.3	83.1
7+0			4.0	84.4
	cut 7'			
7+34.5 = 35 N of Voltare St			3.0	85.4

Sheet 20

Sewer Line Green St from M.H. ℄ Ettwanda West to Sta 2+0 M.H. ℄ Sea side St Thence South on Sea side to 35' N of Voltare St

B.M.				39.73
	7.16	46.89		
0+0 = M.H. ℄ Ettwanda & Green Sts.			7.2	39.7
+50			7.3	39.6
1+0			6.9	40.0
+50			6.0	40.9
2+0 M.H. ℄ Green & Sea side			5.4	41.5
+50			5.0	41.9
3+0			4.8	42.1
+50			4.8	42.1
4+0			4.4	42.5
+50			4.0	42.9
5+0			3.4	43.5
+50			2.7	44.2
6+0			2.2	44.7
+50			1.4	45.5
6+34.5 = 35 N of Voltare St			0.8	46.1

Sheet 19

77

Sewer Line beginning at M.H. Sta 30+89 on West Pt Loma Blvd Thence E on Castellar St for 235.5' to M.H. ℄ Alley Thence N on Alley To Sta 4+63

B.M.				27.51
	11.98	39.49		
0+0 = M.H. P/Loma Blvd & Castellar St			12.0	27.5
+50			11.8	27.7
1+0			9.6	29.9
50			7.9	31.6
2+0			6.2	33.3
2+35.5 = M.H. ℄ Alley Blk 27 & Castellar St			4.8	34.7
+50			5.2	34.3
3+0			2.9	36.6
+50			2.7	36.8
3+95 = M.H. Lot Line			2.2	37.3
4+0			2.1	37.4
4+63 end of Line			1.2	38.3

395.0
235.5
159.5

Lot Line Blk 27 between Lots 23 on N & 24 to 30 on South from Sta 3+95 on Alley Line for 60' East

B.M.				37.3
	6.4	43.7		
0+0 = M.H. Sta 3+95 Alley Line Blk 27			6.4	37.3
0+70 ~~[illegible]~~ D.E			2.8	40.9

9/5/16 Dunkle-Shaw-Bunker

Levels for Proposed Sewer ℄ Seaside Ave from M.H. (constructed) ℄ Alley bet Larkspur & Castellar South for 360'

B.M. S.W. brass Plg Voltaire & Ebers 30.06

B.M.	12.40	42.46		
T.P.	7.33	47.71	2.08	40.38
T.P.	4.53	46.63	5.61	42.10
		bottom	17.6	29.0
0+0 = M.H.		Top	4.9	41.7
+50			5.1	41.5
1			5.4	41.2
+50			5.5	41.1
2			5.5	41.1
+50			5.3	41.3
3			5.2	41.4
+50			4.8	41.8
+60			4.9	41.7

Levels for Proposed Sewer ℄ Seaside Ave from M.H. ℄ Alley bet Larkspur & Castellar North for 160'

	46.63		
	bottom	17.6	29.0
0+0 = M.H.	Top	4.9	41.7
+50		4.5	42.1
1		4.0	42.6
+50		3.6	43.0
+60		3.6	43.0

Levels & Soundings for outfall sewer Ocean Beach about 100' E of Wonderland = 0+0 = 0+0 on Pt Loma Boulevard Line or 432.7 N of intersection ℄ Bacon St - see sketch Last Page

B.M.				0.77				-1.28		
	2.22	2.99				4+25			20.6	21.9
0+0			2.2	0.8		4+42			21.5	22.8
0+50			3.8	-0.8		4+50			21.6	22.9
1+05 brk			3.1	-0.1		4+53			21.0	22.3
1+08 Hol			4.5	-1.5		4+71			21.6	22.9
1+25			7.7	-4.7		5+0			21.8	23.1
1+50			9.3	-6.3		5+11			21.7	23.0
2+0			10.3	-7.3		5+30			20.9	22.2
T.P.	4.30	-1.28	8.57	-5.58		5+75			17.6	18.9
Taken Oct 28th at 3:00 P.M.										
2+40 = water Level at -0.5 Tide			6.6	-7.9		6+20			17.6	18.9
2+60			7.5	8.8						
2+80			10.8	+2.1						
2+85			14.1	15.4						
2+90			14.6	15.9						
2+92			14.8	16.1						
3+0			16.6	17.9						
3+05			19.1	20.4						
3+20			20.6	21.9						
3+30			19.1	20.4						
3+43			21.6	22.9						
3+46			24.3	25.6						
3+60			21.7	23.0						
3+81			22.6	23.9						
3+90			22.5	-23.8						
4+20			20.6	21.9						

Levels for Sewer ℄ Lotus St from 25' n of ML Bacon St. to ℄ Abbot St

BM	1.26	12.07		10.81
0+0 = 25' n of Bacon St			4.5	7.6
0+50			4.8	7.3
1+0			5.0	7.1
1+50			5.4	6.7
2+0			6.0	6.1
2+25 ℄ Chamberlain Court			6.0	6.1
2+0			6.2	5.9
3+0			6.7	5.4
3+50			7.2	4.9
4+0			7.9	4.2
4+56			8.4	3.7
5+0			9.3	2.8
5+50			9.8	2.3
6+05 = ℄ Abbot St			10.0	2.1

Sewer graded.

Levels for Sewer Chamberlain Court from ℄ Lotus St North for 160'

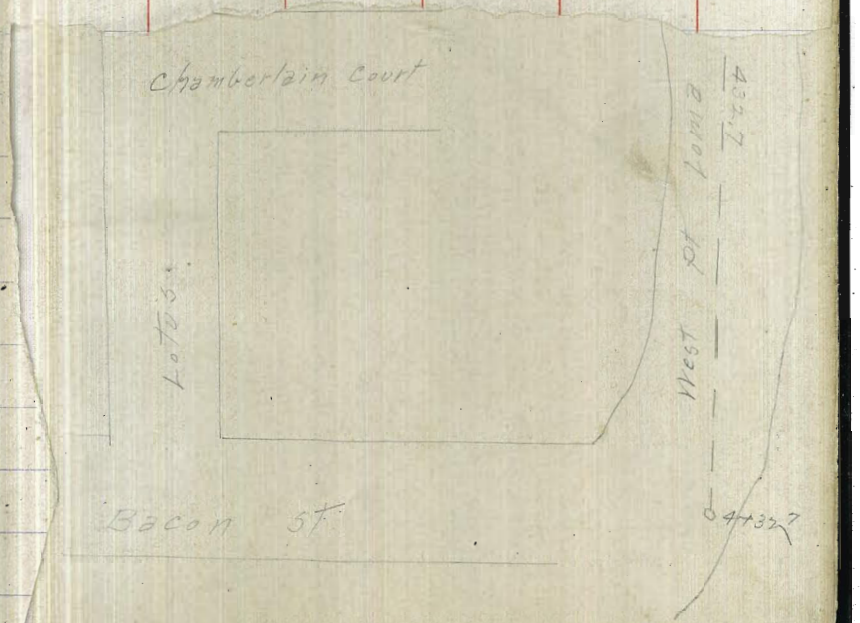
		12.07		
0+0 = ℄ Lotus St			6.0	6.1
0+50			6.1	6.0
1+0			5.9	6.2
1+60			5.8	6.3

St graded.

2+90
1+65

80

83 East
82 West



Levels for sewer app page

B.M.	5.68	6.45		0.77
0+0 = ℄ Lotus St			4.2	2.3
+50			4.1	2.4
1+0			4.1	2.4
1+38.4 Δ			4.2	2.3
+50			4.4	2.1
2+0			4.9	1.6
+50			4.7	1.8
3+0			4.7	1.8
3+30.3 new outfall			5.1	1.4
+50			5.0	1.5
4+0			5.2	1.3
+50			5.6	0.9
4+65.5 = 0+0 old outfall			5.7	0.8

Levels for outfall through Lot 31

6.45

0+0 = Sta 3+30.3 on Blvd.

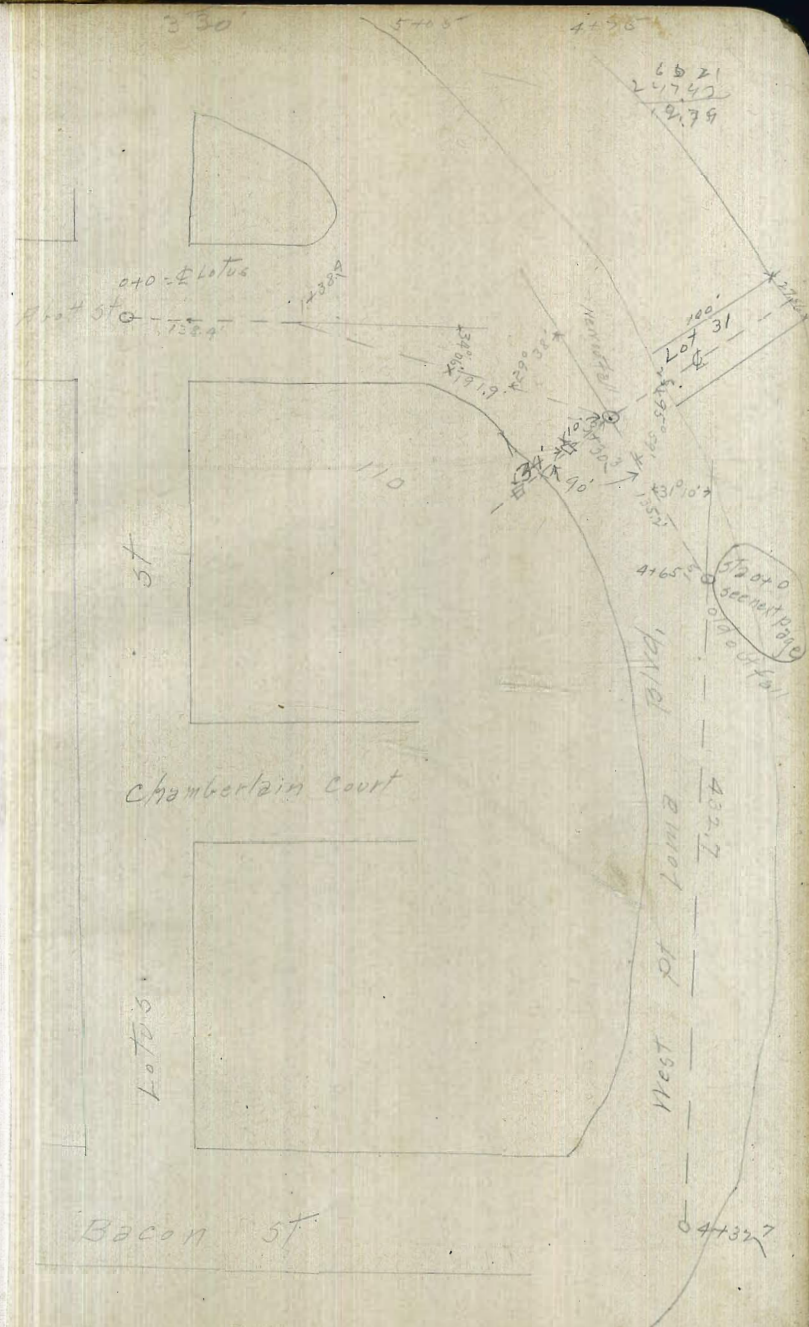
0+0			5.1	1.4
0+25			4.6	1.9
0+65 Top of bank			6.0	0.5
0+85			10.1	− 3.6
1+25			12.5	− 6.0
			7.9	4.2
+50			8.4	3.7
5+0			9.3	2.8
+50			9.8	2.3
6+05 = ℄ Abbot St			10.0	2.1

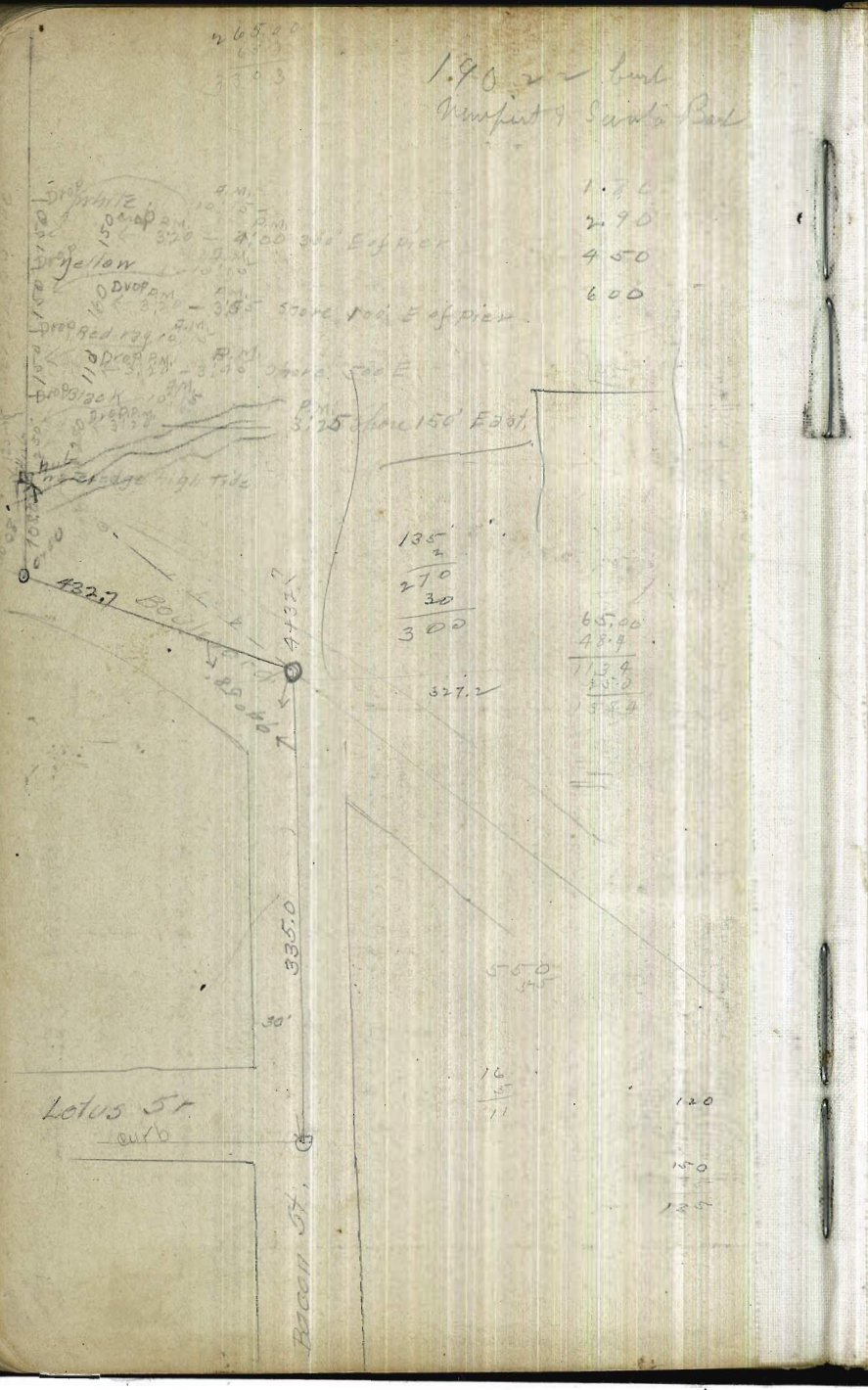
Levels for sewer Chamberlain Court from ℄ Lotus St North for 160'

12.07

0+0 = ℄ Lotus St			6.0	6.1
+50			6.1	6.0
1+0			5.9	6.2
4.1			5.8	6.3

St graded





DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

ROADWAY 14 FEET WIDE. SIDE SLOPES 1½ TO 1.

FOR SINGLE TRACK EMBANKMENT.

	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	7.0	7.2	7.3	7.5	7.6	7.8	7.9	8.1	8.2	8.4	0
1	8.5	8.7	8.8	9.0	9.1	9.3	9.4	9.6	9.7	9.9	1
2	10.0	10.2	10.3	10.5	10.6	10.8	10.9	11.1	11.2	11.4	2
3	11.5	11.7	11.8	12.0	12.1	12.3	12.4	12.6	12.7	12.9	3
4	13.0	13.2	13.3	13.5	13.6	13.8	13.9	14.1	14.2	14.4	4
5	14.5	14.7	14.8	15.0	15.1	15.3	15.4	15.6	15.7	15.9	5
6	16.0	16.2	16.3	16.5	16.6	16.8	16.9	17.1	17.2	17.4	6
7	17.5	17.7	17.8	18.0	18.1	18.3	18.4	18.6	18.7	18.9	7
8	19.0	19.2	19.3	19.5	19.6	19.8	19.9	20.1	20.2	20.4	8
9	20.5	20.7	20.8	21.0	21.1	21.3	21.4	21.6	21.7	21.9	9
10	22.0	22.2	22.3	22.5	22.6	22.8	22.9	23.1	23.2	23.4	10
11	23.5	23.7	23.8	24.0	24.1	24.3	24.4	24.6	24.7	24.9	11
12	25.0	25.2	25.3	25.5	25.6	25.8	25.9	26.1	26.2	26.4	12
13	26.5	26.7	26.8	27.0	27.1	27.3	27.4	27.6	27.7	27.9	13
14	28.0	28.2	28.3	28.5	28.6	28.8	28.9	29.1	29.2	29.4	14
15	29.5	29.7	29.8	30.0	30.1	30.3	30.4	30.6	30.7	30.9	15
16	31.0	31.2	31.3	31.5	31.6	31.8	31.9	32.1	32.2	32.4	16
17	32.5	32.7	32.8	33.0	33.1	33.3	33.4	33.6	33.7	33.9	17
18	34.0	34.2	34.3	34.5	34.6	34.8	34.9	35.1	35.2	35.4	18
19	35.5	35.7	35.8	36.0	36.1	36.3	36.4	36.6	36.7	36.9	19
20	37.0	37.2	37.3	37.5	37.6	37.8	37.9	38.1	38.2	38.4	20
21	38.5	38.7	38.8	39.0	39.1	39.3	39.4	39.6	39.7	39.9	21
22	40.0	40.2	40.3	40.5	40.6	40.8	40.9	41.1	41.2	41.4	22
23	41.5	41.7	41.8	42.0	42.1	42.3	42.4	42.6	42.7	42.9	23
24	43.0	43.2	43.3	43.5	43.6	43.8	43.9	44.1	44.2	44.4	24
25	44.5	44.7	44.8	45.0	45.1	45.3	45.4	45.6	45.7	45.9	25
26	46.0	46.2	46.3	46.5	46.6	46.8	46.9	47.1	47.2	47.4	26
27	47.5	47.7	47.8	48.0	48.1	48.3	48.4	48.6	48.7	48.9	27
28	49.0	49.2	49.3	49.5	49.6	49.8	49.9	50.1	50.2	50.4	28
29	50.5	50.7	50.8	51.0	51.1	51.3	51.4	51.6	51.7	51.9	29
30	52.0	52.2	52.3	52.5	52.6	52.8	52.9	53.1	53.2	53.4	30
31	53.5	53.7	53.8	54.0	54.1	54.3	54.4	54.6	54.7	54.9	31
32	55.0	55.2	55.3	55.5	55.6	55.8	55.9	56.1	56.2	56.4	32
33	56.5	56.7	56.8	57.0	57.1	57.3	57.4	57.6	57.7	57.9	33
34	58.0	58.2	58.3	58.5	58.6	58.8	58.9	59.1	59.2	59.4	34
35	59.5	59.7	59.8	60.0	60.1	60.3	60.4	60.6	60.7	60.9	35
36	61.0	61.2	61.3	61.5	61.6	61.8	61.9	62.1	62.2	62.4	36

Calculated by Julien A. Hall, M. Am. Soc. C. E.

MADE IN GERMANY.