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City Hall, San Diego, Cal.

LEVEL BOOK

400

F.B. 404

H. S. CROCKER COMPANY

DRAWING MATERIALS AND SURVEYING INSTRUMENTS

SAN FRANCISCO

404

TABLES FOR EXCAVATIONS AND EMBANKMENTS

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING

Roadway 18 Feet Wide. Side Slopes 1 to 1.
For Single Track Excavation.

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

MICROFILMED SEP 1 1964

	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.

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FROM
Loring's Book Store
SAN DIEGO, CAL.

75.08 SW Logan + 31st

54.34 SW Woolman + 31

145.76 H NW Albatross + Red Wood

200.45 Center of Cirlen

126.27 SW Quince + Brant

232.25 NW Spruce + Front

204.02 SW Spruce + Cirlen Top 3x3

Clough Tozler Orange July 10 08

Crossection of 31st St (60')

N Line Logan to S L Woolman

	1.92	77.00		75.08	BM SW 31st + Logan
	N L of Logan ave				
WL			2.8	74.2	
bh			3.2		
y			3.6		
b			3.4	73.6	
y			3.9		
bh			4.1		
EL			4.2	72.8	
	10' N of Logan				
EL			8.4	68.6	
bh			7.3		
y			5.2		
b			4.0	73.0	

POSTED

	25'	n of	Logan av	
EL			9,7	67.3
bl			8,2	
y			7,0	
b			5?	71.7
y			5,5	
bl			4,8	
WL			4,6	72.4
	50'	n y	Logan	
WL			6,7	70.3
bl			6,9	
y			7,7	
b			7,1	69.3
y			8,8	
bl			10,4	
EL			11,2	65.8

	75'	n of	Logan av	
EL			12,3	64.7
bl			11,8	
y			11,2	
b			10,5	66.2
y			10,5	
bl			9,5	
WL			8,7	68.3
TP	0,60	67,98	9,6	67.38
	100'	n of	Logan	
WL			0.9	67.1
bl			1,6	
y			2,4	65.6
bl			3,1	
y			4,0	
bl			4,4	
EL			5,5	62.2

67.98

	120'	n of Logan		
EL			7.8	60.2
bk			7.2	
t			6.7	
b			6.6	61.4
t			5.0	
bk			4.0	
WL			2.4	65.6
	130	n of	Logan	
WL			5.0	63.0
bk			5.8	
t			6.2	
bk			7.0	61.0
t			8.2	
bk			9.7	
EL			10.8	57.2

67.98

	164'	n of Logan = Public Serv		
EL			12.1	55.9
bk			10.8	
t			9.1	
b			7.7	60.3
t			7.1	
bk			6.9	
WL			6.0	62.0
	240	n of	Logan	
WL			8.6	59.4
bk			9.6	
t			10.3	
b			11.3	56.7
t			12.0	
bk			12.2	
EL			13.0	55.0
TP	1.08	5.914	9.92	5.806

		59.14		
	225'	n of	Logan ave	
EL			7,4	51.7
bl			6,6	
"			5,3	
b			3,5	55.6
"			2,7	
bl			2,0	
WL			1.2	57.9
	250	n of	Logan	
WL			3,8	55.3
bl			4,8	
"			5,9	
b			7,8	51.3
"			9,5	
bl			9,8	
EL			9,8	49.3

		59.14		31st St
	275'	n of	Logan	
EL			13,2	45.9
bl			12,6	
"			11,5	
b			10,5	48.6
"			9,7	
bl			9,8	
WL			7,6	51.5
	300'	n = S	L of	Greeley ave (80')
TP	1,65	49.67	11.12	48.02
WL			0,2	49.5
bl			1,2	
"			2,2	
b			3,8	45.9
"			4,3	
bl			6,0	
EL			7,0	42.7

		49.67					49.67		31 2t	2t
	S bb	of	Greeley				Center of	Greeley		
Et			7,8	41.9		Et		9,8	39.9	
bb			7,0			bb		9,0		
"			5,8			"		8,0		
b			4,4	45.3		b		6,9	42.8	
"			3,4			"		5,7		
bb			2,7			bb		4,8		
Wt			1,6	48.1		Wt		4,0	45.7	
	S 1/4	of	Greeley				N 1/4 of	Greeley		
Wt			2,6	47.1		Wt		4,8	44.9	
bb			3,7			bb		5,6		
"			4,7			"		6,6		
b			6,3	43.4		b		7,5	42.2	
"			7,8			"		8,3		
bb			8,2			bb		9,0		
Et			9,1	40.6		Et		9,7	40.0	

4967

N bk of Greeley

E2	11.4	38.3
bk	10.7	
7	9.5	
6	8.5	41.2
7	7.5	
bk	6.6	
WL	5.5	44.2

NL of Greeley

WL	3.8	45.9
bk	5.6	
7	6.1	
6	6.8	42.9
7	8.0	
bk	9.7	
E2	9.6	40.1

4967

25 N of Greeley

E2	8.6	41.1
bk	8.6	
7	8.2	
6	7.6	42.1
7	7.0	
bk	6.0	
WL	4.4	45.3

516 N of Greeley

WL	5.2	44.5
bk	6.3	
7	6.3	
6	6.5	43.2
7	6.4	
bk	6.8	
E2	7.9	41.8

	75'	n of	Greeley	
El			7,5	42.2
			7,2	
y			7,1	
l			7,0	42.7
y			6,5	
bl			5,9	
Wl			5,5	44.2
	100	n of	Greeley	
Wl			6,2	43.5
bl			6,6	
y			7,7	
l			7,8	41.9
y			7,8	
bl			7,7	
El			7,7	42.0

	125'	n of	Greeley	
El			7,8	41.9
bl			8,8	
y			9,4	
l			9,0	40.7
y			8,4	
bl			8,1	
Wl			6,8	42.9
	150'	n of	Greeley	
Wl			6,0	43.7
bl			7,6	
y			9,1	
l			7,8	39.9
y			10,0	
bl			11,0	
El			11,3	38.4
TP	5350	45,34	9,83	39,84

45-34

	175'	n y	Greeley	
E2			8,6	36.7
bk			8,2	
y			7,8	
b			6,7	38.6
y			4,8	
bk			3,2	
W2			1,7	43.6
	200	n y	Greeley	
W2			3,8	41.2
bk			5,1	
y			6,6	
b			7,3	38.0
y			8,1	
bk			8,7	
E2			9,2	36.1

45-34 31 st st

	225'	n of	Greeley	
E2			10,6	34.7
bk			9,7	
y			9,0	
b			8,0	37.3
y			7,4	
bk			6,5	
W2			5,8	39.5
	250	n y	Greeley	
W2			5,0	40.3
bk			5,6	
y			6,1	
b			6,5	38.8
y			7,1	
bk			7,7	
E2			8,5	36.8

POSTED

		45-34		
	275'	n of	Greeley	
EL			6,8	38.5
			6,2	
y			5,7	
b			5,1	40.2
y			4,5	
bb			3 8	
WL			3,0	42.3
	300'	n =	S Line of	Martin st (80')
WL			0,7	44.6
bb			1.1	
y			1,5	
b			2,4	42.9
y			3,2	
bb			3,7	
EL			3,7	41.6
TP	5,00	46,73	3.61	41.73

		46,73		31st st
	S bb	of	Martin st	
EL			4,7	42.0
bb			4,5	
y			4,2	
b			3,6	43.1
y			1,8	
bb			1,1	
WL			0,5	46.2
	S 1/4	of	Martin st	
WL			+0,2	46,9
bb			0,5	
y			1,0	
b			1,9	44.8
y			2,9	
bb			3,7	
EL			4,0	42.7

4673

Center of Martin St

El	2,9	43.8	
bk	2,9		
y	2,9		
b	2,1	44.6	
y	1,0		
bk	0,7		
Wh	0,2	46.1	

N 1/4 of Martin St

Wh	1,3	45.2	
bk	2,1		
y	3,4		
b	3,5	43.2	
y	3,5		
bk	3,8		
El	3,8	42.9	

4673

31 St W

N bk of Martin St

El	4,9	41.8	
bk	5,2		
y	5,2		
b	4,9	41.8	
y	5,1		
bk	4,2		
Wh	3,8	42.9	

N Line of Martin St

Wh	3,8	42.9	
bk	4,4		
y	4,2		
b	3,8	42.9	
y	3,4		
bk	2,6		
El	4,1	42.6	

POSTED

4673

	25'	n of	Martin	
C2			9.5	37.2
bl			9.2	
4			8.8	
6			8.5	38.2
4			8.3	
bl			7.8	
W2			8.4	38.3
TD	1.08	35.21	12.60	34.3
	50'	n of	Martin	
W2			11	34.1
bl			1.0	
4			1.0	
6			1.2	34.0
4			1.4	
bl			2.3	
E2			2.7	32.5

35.21

31st st

	75'	n of	Martin	
E2			7.1	28.1
bl			6.9	
4			6.6	
6			6.2	29.0
4			5.9	
bl			5.2	
W2			4.5	30.7
	100'	n of	Martin	(Culvert)
W2			6.0	29.2
bl			7.0	
4			8.0	
6			8.4	26.8
4			8.4	
bl			9.8	
E2			10.0	27.2

		35.21		
	125' n of	Martin St		
EL			8,5	26.7
bl			8,6	
"			7,5	
b			7,0	28.2
"			8,0	
bl			7,1	
WL			6,5	28.7
	150' n of	Martin St		
WL			4,9	30.3
bl			5,4	
"			4,4	
b			5,0	30.2
"			6,0	
bl			6,7	
EL			5,0	30.2
173' n =	2' w of	Rail on E side		
			0,2	

		35.21		31.25
	175 n of	Martin		
EL = Rail El 35.6			0,2	35.0
bl			4,0	
"			2,4	
b			1,6	33.6
"			0,7	
bl			0,2	
WL			0,2	35.0
TP	11.07	45.22	1.06	34.15
	200' n of	Martin St		
WL			7,8	37.4
bl			8,6	
"			8,7	
b			9,3	35.9
"			10,4	
bl = 2' w of Rail			9,8	
EL = 2' E of Rail			10,6	34.6

4/5 22

225' n of Martin St

EL	10.8	34.4	
+7' = 2' S Rock	9.8	35.4	
bk	9.0		
+5 = 2' W Rail	9.4	35.8	
1/4	9.4		
+2'	7.3		
b	7.0	38.2	
y	6.0		
bk	3.5-		
WL	3.3	39.9	

250' n of Martin St

WL	2.2	43.0	
bk	3.0		
y	4.2		
b	3.2	40.0	
+3'	8.8		
+9' = 2' W Rail	8.8	36.4	
y	8.8		
+8 = 2' E Rail	9.2	36.0	
bk	9.6		
EL	9.2	36.0	

4/5 22

275' n of Martin St

EL	10.2	35.0	
bk	8.5-		
+6 = 2' E Rail	8.8	36.4	
1/4	7.7		
+5' = 2' W Rail	8.0	37.2	
b	6.7	37.5	
y	2.9		
bk	1.5-		
WL	7.3	46.5-	
TP 4.14	4.89	1.47	43.75

300' n = S of Valley St (80')

WL	2.1	47.8	
bk	4.7		
y	5.8		
b = 2' W Rail	10.1	37.8	
y = 2' C Rail	10.8	37.1	
bk	12.0		
E.L.	13.6	34.3	

4789

	S bb of	Valley st	
El		15.2	32.7
bb		13.2	
4 = 2' E Rail		10.6	
6 = 2' W Rail		9.7	38.2
4		6.7	
bb		4.4	
WL		3.3	44.6
	S 1/4 of Valley st		
WL		2.6	47.8
bb		3.7	
7		5.9	
+8' = 2' W Rail		9.4	
6		9.2	38.7
+6' = 2' E Rail		10.1	
4		10.5	
bb		11.8	
El		13.4	34.8

4789

	Center of	Valley st	
El		12.8	37.1
bb		10.8	
4		9.7	
+4' = 2' E Rail		9.8	
6 = 2' W Rail		9.2	38.7
70% of Rail		8.5	39.4
4		6.7	
bb		3.3	
WL		1.8	46.1
	N 1/4 of Valley		
WL		1.3	46.6
bb		2.4	
7		6.1	
+7' 2' W Rail		8.9	
6		8.6	39.3
+5' 2' E Rail		9.5	
4		8.0	
bb		10.0	
El		11.7	36.2

4789

N bk of Valley

E2		11,0	36.9
bk.		9,0	
4		8,0	
+5 = 2' E Rail		9,1	
6		8,2	39.7
+3'		8,5	
4		5,9	
bk		2,5	
W2		1,2	46.7

N2 of Valley at

W2		0,8	47.1
bk		1,1	
+7'		2,2	
4		7,0	
+,8 = 2' W Rail		8,5	
6		8,0	39.9
+5' = 2' E Rail		8,9	
4		6,5	
bk		8,0	
E2		10,2	37.7

4789

25' N of Valley at

E2		9,4	38.2
bk		6,3	
4		5,7	
+5' = 2' E Rail		8,3	
6		7,7	40.2
+4		8,0	
4		5,4	
bk		2,2	
W2		2,1	47.8

50' N of Valley

W2		4,3	43.6
bk		4,7	
4		7,3	
+6		7,4	
6		7,0	40.9
+5'		7,5	
4		8,0	
bk		9,5	
E2		11,4	36.2

42.88

	75'	n of	Valley	
El			13.4	34.5
bl			11,8	
y			10,2	
+5'	2'c Rail		7,2	
b			6,5	41.4
+4'	=2'w Rail		7,0	
y			8,4	
bl			7,5	
Wl			6,4	41.5
	100	n of	Valley	
Wl			8,3	39.6
bl			9,8	
y			9,4	
+6'	=2'w Rail		6,4	
b			6,0	41.9
TP	282	44.75	5.96	41.93
+5'	=2'c Rail		3,6	
y			7,2	
bl			10,7	
El			1,00	32.8

44.75

31 24 24

	125'	n of	Valley	
El			12,3	32.5
bl			10,8	
y			6,3	
+5	=2'c Rail		2,9	
b			2,2	42.6
+4'	=2'w Rail		2,7	
y			5,8	
bl			8,6	
Wl			7,1	37.7
	150	n of	Valley	(Culvert)
Wl			8,5	36,3
bl			8,6	
y			5,5	
	2'wR		2,4	
b			1,7	43.1
	2'cR		2,3	
y			5,0	
bl			10,5	
El			11,2	33.6

	175'	n of	Valley	
EL			8.3	36.5
bk			7.2	
y			3.3	
	2' E of Rail		1.5	
b			0.8	44.0
	2' W Rail		1.7	
y			4.5	
bk			7.0	
WL			6.4	38.4
	200	n of	Valley	
WL			4.1	40.7
bk			4.3	
y			2.6	
	2' W R		1.0	
b			0.5	44.3
	2' E Rail		1.0	
y			3.0	
bk			4.0	
EL			4.8	40.0
TP	9.65	54.40	0.0	44.75

	225'	n of	Valley	
EL			11.1	43.3
bk			10.8	
y			10.3	
	2' E Rail		10.0	
b			9.5	44.9
	2' W Rail		9.9	
y			9.7	
bk			10.4	
WL			10.3	44.1
	250	n of	Valley	
WL			5.5	48.9
bk			6.8	
y			5.9	
	2' W Rail		9.2	
b			9.0	45.4
	2' E Rail		9.3	
y			9.4	
bk			9.0	
EL			9.4	45.0

54.40

275' n of Valley

EL		9,6	44.8
bl		8,3	
y		8,6	
	2' E Rail	8,6	
b		8,4	46.0
	2' W Rail	8,2	
y		4,2	
bl		3,5	
WL		2,9	51.5

300' n = S line of Woolman

WL		0,0	54.4
bl		2,6	
y		5,0	
	2' W Rail	7,9	
b		7,9	46.5
	2' E Rail	8,0	
y		8,0	
bl		9,3	
EL		11,3	43.1
Bm TP		.06	54.34 ✓

POSTED

Crossection of Brant St (80')

N line of Spruce to S L Quince

	1.30 / 1.16	233.5 / 227.12	75.9	232.25 / 225.96	BM SWH Front & Spruce Stn Pole
	N L	of	Spruce St (80')		
WL			0,0	227.1	
bb			+0.6	227.7	
"			+1.0	228.1	
b			1.1	226.0	
"			2,8		
bb			3,8		
EL			6.3	220.8	
	N bb of Spruce				
EL			12,5		
bb			10,4		
"			8,0		
b			6,2	220.9	
"			2,3		
bb			+0.4	227.5	
WL			1.4	225.7	

POSTED

		227.12		Brant St
	N 1/4	of	Spruce St	
WL			2,0	225.1
bb			0,4	
"			0,6	
b			8,7	218.4
	Center	of	Spruce St	
WL			2,1	225.0
bb			1,2	
"			1,2	
b			13,0	214.1
	S 1/4	of	Spruce St	
WL			2,3	224.8
bb			1,4	
"			1,5	
b			13.4	213.9
	S bb	of	Spruce St	
WL			1,8	225.3
bb			1,5	
"			1,8	
b			13,0	214.1

POSTED

		227.12		
	S Lin of Spruce st			
WL			1,0	226.1
bb			1.6	
y			1,6	
b			10.0	217.1
TP	0.96	216.46	11.62	215.50
	N 1/4 of Spruce st			
EL			8,1	
bb			7,0	
y			4,5	
	Center of Spruce st			
EL			17,0	
bb			11.6	
y			11,0	
	S 1/4 of Spruce			
EL			24,0	
bb			20,0	
y			12,0	

		216.46		Brant st	
	S bb of Spruce st				
EL			27,0		
bb			24,0		
y			11,0		
	S Lin of Spruce st				
EL			17,0		
bb			14,5		
y			5,5		
	15' S of Spruce				
EL			5,0		
bb			2,6		
y			0,6		
b			+2,0	218,5	
	5.37	231.33		225.96	Bm

POSTED

		231.33		
	25'	S of	Spruce st	
Wt			3,2	228.1
bh			4,4	
y			4,6	
b			5,8	225.5
y			6,6	
bh			7,8	
Et			12.6	
	50'	S of	Spruce	
Et			7,6	
bh			5,0	
y			3,4	
b			2,20	229.1
y			2,2	
bh			2,5	
Wt			1,5	229.8

		231.33		Brant st
	75'	S of	Spruce	
Wt			1,1	230.2
bh			2,1	
y			1,8	
b			1,8	229.5
y			3,0	
bh			4,4	
Et			7,0	
	100'	S of	Spruce st	
Et			7,4	
bh			6,0	
y			3,6	
b			2,3	229.0
y			1,3	
bh			1,7	
Wt			0,7	230.6

POSTED

		231.33		
	125'	S of	Spruce St	
Wh			0.4	230.9
bl			2,0	
y			3,0	
b			4.1	227.2
y			6,0	
bl			8,2	
Gr			11.8	
	150'	S of	Spruce St	
Gr			15,0	
bl			8,3	
y			6,6	
b			4,6	226.7
y			3,0	
bl			2,5	
Wh			1,0	230.3

		231.33		Brant St
	175'	S of	Spruce St	
Wh			2,5	228.8
bl			2,8	
y			5,2	
b			8,0	223.3
y			9,7	
bl			12,0	
Gr			16,0	
	200'	S of	Spruce St	
Wh			3,2	228.1
bl			3,0	
y			7,5	
b			10,0	221.3
y			12,5	
	225'	S of	Spruce St	
Wh			3,5	227.8
bl			4,4	
y			9,7	
b			12,2	219.1

POSTED

		231.33		
	250'	S of	Spruce	
WL			5,3	226.0
bh			8,4	
4			11,8	
TP	0,60	220.77	11.16	220.17
	200'	S of	Spruce	
EL			12,5	
bh			6.00	
	225'	S of	Spruce	
E bh			14,0	
E 1/4			9,0	
	250'	S of	Spruce	
center			2,6	217.2
E 1/4			11,0	
	275'	S of	Spruce	
WL			8,0	212.8
bh			9,5	
4			12,0	
TP	0.19	208.42	12,54	208.23

		208.42		Brant st
	225'	S of	Spruce	
EL			11,0	
	250'	S of	Spruce st	
EL			16,5	
bh			8,6	
	275'	S of	Spruce st	
EL				
bh			12,0	
4			6.8	
b			3,0	205,4
TP	0,37	199.35	9.44	199.98
	300'	S =	N S of	Redwood st (50)
WL			0,4	199.0
bh			2,0	
4			5,0	
b			7,0	192,3
4			10,0	
bh			10,8	

POSTED

		19935		
	273	S of	Spruce	
E2			9,7	
	N bk of		Red Wood ↵	
W2			7,4	
bk			8,0	
y			10,0	
b			12,2	
TP	0,02	187.37	12,20	187.35
y			2,5	
bk			4,4	
E2			7,0	
	N Line of		Red Wood	
E2			3,5	183.9
	N 1/4 of		Red Wood	
E2			10.9	
bk			9,2	
y			6,8	
b			5,8	
y			3.4	
bk			2,8	
W2			2,9	

		187.37		Brant ↵
	Center of		Red Wood	
W2			9,5	177.9
bk			11,5	
TP	0,37	17,644	11,3	176,07
y			1,8	
b			2,6	173,8
y			2,6	
bk			2,5	
E2			3,4	173.0
	S 1/4 of		Red Wood ↵	
E2			7,6	
bk			6,8	
y			6,6	
b			5-9	
y			6,3	
bk			6,0	
W2			4,7	

POSTED

		176.44		
	S Cb of Red wood st			
WL			6,5	
bh			11,5	
"	S Sin of Red wood st			
WL			8,2	168.2
bh			13,0	
TP	1,10	165.54	12,00	164.44
	S Cb of Red wood st			
W 1/4			1,5	
b			1,5	
"			1,0	
bh			0,0	
EL			0,2	
	S Sin of Red wood st			
EL			4,0	161.1
bh			3,6	
"			4,4	
b			5,3	160.2
4			5,0	

		165.54		Brant st
	25'	S of	Red wood st	
WL			3,4	
bh			8,0	
"			10,2	
b			11,5	
"			11,5	
bh			10,5	
EL			9,8	
	50	S of	Red Wood st	
WL			8,2	
bh			12,0	
TP	0,52	154.56	11,50	154.04
4			4,0	
b			6,4	
"			6,4	
bh			5,6	
EL			6,5	

POSTED

		15456			
	75'	S of	Red wood		
EL			13,0		
bl			11,4		
y			9,8		
b			7,1		
y			5,0		
bl			3,0		
WL			0,0		
	100'	S of	Red wood		
WL			5,0		
bl			7,4		
y			8,8		
b			10,4		
y			12,5		
	125'	S of	Red wood		
WL			9,0		
bl			11,0		
TP	1,32	14479	11,09	14347	

		14479		Brant et	
1/4			34		
b			4,8		
y			6,8		
bl			8,4		
EL			11,1		
	100'	S of	Red wood		
EL			5,8		
bl			4,8		
	150'	S of	Red wood et		
EL			12,4		
bl			9,7		
y			8,0		
b			7,4		
y			6,6		
bl			4,8		
WL			2,8		

POSTED

14479

	175'	S of	Red wood [illegible]	
WR			5,7	
bk			8,0	
y			10,0	
b			10,6	
y			12,0	
bk	200'	S of	Red wood	
WR			7,3	
bk			10,2	
y			12,6	
	225'	S of	Red wood	
WR			8,4	
bk			11,7	
	250'	S of	R w	
WR			9,4	
bk			12,0	
TP	11,0	13436	11,53	133,24

13436 — Brant

	175'	S of	Red wood	
RL			4,4	
bk			3,2	
	200'	S of	Red wood	
RL			6,8	
bk			4,6	
y			3,7	
b			2,6	
	225'	S of	Red wood	POE.
RL			10,0	
bk			7,4	
y			6,2	
b			3,5	
y			3,3	
	250	S of	Red wood	
RL			14,2	
bk			10,8	
y			8,6	
b			6,7	
y			4,5	

		134.36			
	275'	S of	Red	wood	
WL			0,4		
bb			3,5		
y			5,8		
b			9,3		
y			11,8		
	300'	S =	N S Quince	(80')	
WL			3,5		
bb			5,6		
y			7,6		
b			9,4		
y			12,6		
	N bb	of	Quince st		
WL			4,0		
bb			6,2		
y			7,8		
b			9,7		
y			12,4		

		134.36		Brant st	
	N 1/4	of	Quince st		
WL			4,5		
bb			6,8		
y			8,4		
b			9,9		
y			12,3		
	Center	of	Quince st		
WL			5,9		
bb			7,5		
y			9,3		
b			10,5		
y			12,6		
	S 1/4	of	Quince st		
WL			7,3		
bb			8,7		
y			9,8		
b			11,2		
y			12,8		

POSTED

		134.36		
	S bb of Quince st			
Wh			8,0	
bb			9,2	
y			10,7	
b			12,0	
7P	11,5	126.41	9,10	125.26
	S Line of Quince st			
Wh			1,1	
bb			2,5	
y			4,1	
b			5,3	
4			6,6	
bb			7,5	
Eh			9,5	
	S bb of Quince			
Eh			8,5	
bb			6,5	
y			5,0	

		126.41		Burnt st
	S 1/4 of Quince			
Eh			9,4	
bb			6,0	
	Center of Quince			
Eh			10,5	
bb			6,5	
	N 1/4 of Quince			
Eh			10,6	
bb			6,5	
	N bb of Quince			
Eh			10,7	
bb			8,3	
	N Line of Quince			
Eh			10,1	
bb			9,2	
	25' N of Quince — 275 S of Rw			
Eh			8,5	
bb			6,3	

POC

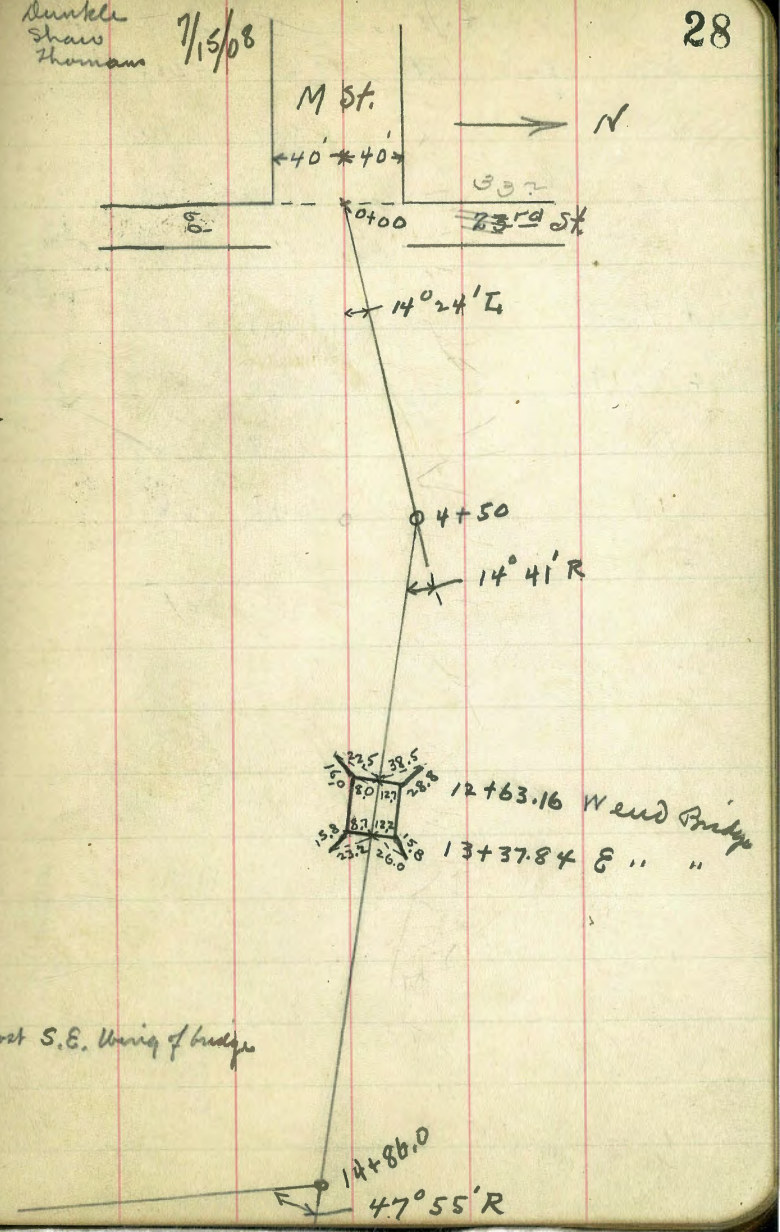
Location of Bridges on Cemetary Road

Sta	BS	HI	FS	Elev.	
	+5.71	80.96			Spike in pole
BM.				75.255	S W Cor 30 & M
T.P.	+2.71	79.15	-4.52	76.44	
T.P	+2.22	69.16	-12.21	66.94	
0+00			2.2	66.9	
1			6.0	63.2	
2			12.0	57.2	
T.P.	+ 0.17	56.74	12.59	56.57	
3			5.7	51.0	
+ approx 65 R.R.			9.5	47.2	← 60.6 Top Rail
4 Spike			11.3	45.4	
+50.0					
T.P.	+0.28	44.57	-12.45	44.29	
5			4.8	39.8	
6			9.3	35.3	
T.P.	+2.18	34.08	-12.67	31.90	
7			2.6	31.5	
8			4.3	29.8	
9			7.3	26.8	
10			7.4	26.7	
11			7.4	26.7	
T.P	+5.09	31.91	7.26	26.82	
12			5.2	26.7	
BM			-5.43	26.48	Spike in top post S.E. Wing of bridge
~~P.S.~~					
14			5.3	26.6	
+86.0 Spike					

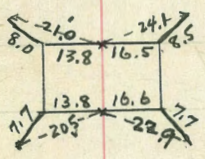
POSTED

Dunkle
Shaw
Thomas

7/15/08



Sta.	B.S.	HI	FS	Elev
BM	+7.06	33.54		26.48 via 8-28
15			6.4	27.1
16			6.0	27.5
17			5.2	28.3
N end Bridge +	77.13		4.7	28.8
S end Bridge +	89.19		4.8	28.7
18			4.8	28.7
19			4.6	28.9



Cemetary Road See P. 28
X sections at Chollas Creek

Sta	Rod	HI
12		31.91
+40		
End West Bridge +63.16		
+ 94.8		
13+ 12.8		
13+24.8		
East End Bridge 13+37.84		
13+50		
14		

POSTED

S side				℄ Road	North side				
22.8 +100	22.8 +50	24.4 +16	26.5 +11	26.7 0	26.7 +15	22.9 +22	23.9 +50	23.9 +100	
23.1 +100	23.1 +75	23.1 +42	24.3 +18	26.4 +12	27.1 0	26.4 +18	24.6 +24	24.1 +28	21.9 +32	23.6 +45	23.6 +75	23.7 +100
20.3 +61	22.5 +55	23.5 +11	27.7 +8	27.7 0	27.7 +12.7	16.8 +12.7	18.1 +50	19.6 +100				
23.6 +100	24.3 810	16.9 +76 wall	16.8 +8	27.4 0	18.1 +12.7	19.9 +50	24.4 +75	25.0 +100				
				27.3 0	19.4 +12.7	20.7 +16	23.1 +32	24.5 +50	25.0 +100			
17.5 +115 end wall	17.1 +62	18.1 +8	27.4 0	21.9 +2	21.9 +12.7	24.2 +19	24.5 +50	25.0 +100				
17.6 +100	19.9 +29	22.9 +8.7	27.7 0	24.6 +12.7	24.6 +15	25.0 +50	25.0 +100					
17.5 +100	18.7 +50	21.2 +25	24.8 +17	26.9 +6.0	27.3 0	27.1 +14	24.5 +23	24.6 +50	25.6 +100			
22.9 +70	22.5 +50	22.8 +37	24.2 +20	26.4 +12	26.6 0	26.6 +15	24.8 +20	25.3 +50	27.1 +100			

18.3 +100 19.4 +75

Sta.	Rod	HI
15		33.54
16		
17		
17+40		
17+45		
17+77.3	W end bridge	
17+83.16	Center bridge	
17+89.19	E end bridge	
18		
18+50		
19		

South			Road ℄			North		
			27.14 / 0					
			27.54 / 0					
25.84 / 50	28.94 / 17	28.24 / 14	28.34 / 0	28.54 / 17	31.24 / 25	32.94		
24.34 / 100	24.54 / 55	27.94 / 15	28.34 / 0	28.84 / 25	25.74 / 35	27.84 / 40	29.54 / 51	24.54 / 80
24.54 / 100	24.84 / 75	23.64 / 58	24.64 / 16	28.54 / 0	28.64 / 19	22.04 / 41	22.94 / 100	
24.44 / 90	21.04 / 50	20.04 / 16	27.14 / 15 ft. on wing	28.84 / 12	28.84 / 0	29.14 / 13	27.24 / 17 ft. on wing	21.34 / 18	21.14 / 50	21.64 / 100
24.34 / 100	24.34 / 85	18.44 / 53 creek	19.24 / 15 creek	28.84 / 15 bridge	28.84 / 0	28.84 / 18 Bridge	19.64 / 18 creek bed	19.84 / 50 creek	19.44 / 100 creek bed	
24.14 / 90	17.44 / 76	20.54 / 15	26.24 / 14 wing	28.94 / 12	28.74 / 0	28.84 / 16	27.24 / 18 wing	20.74 / 18	22.44 / 50	24.64 / 100
22.64 / 100		17.74 / 89	27.34 / 25	28.94 / 12	28.74 / 0	29.54 / 15	24.57 / 26	23.94 / 50		
23.34 / 50		24.44 / 22	28.44 / 13	28.84 / 0	28.84 / 14	25.54 / 21	25.54 / 50			
			28.94 / 0					

POSTED

Clough
Taylor
Wardie

Grades for Pt Loma Blvd
Wireless Station North

Sta	0.64	381.91		381.27	BM at Wireless
00			1.6	380.3	
1			4.3	377.6	
2			6.6	375.3	
3			8.8	373.1	
4			10.9	371.0	
TP	1.14	372.65	10.40	371.51	
5			3.4	369.2	
6			4.6	368.0	
7			6.5	366.1	
8			9.9	362.7	
TP	0.25	363.76	9.14	363.51	
9			5.5	358.3	
10			10.2	353.6	
TP	0.15	353.23	10.68	353.08	Hyd Post
11			5.2	348.0	
12			10.8	342.4	

	Grade				
		381.27		18.72	
		72			
		381.99	379	377	375
		8.86	2.99	4.99	6.99
		373.13	375	375	375
		3.86	371.3	369.5	367.7
		374.99	3.7	5.5	7.3
		9.05	375	368.4	368.4
		365.94	365.9	362.1	358.5
		2.50	9.1	5.7	9.9
		368.44	360	360	351.2
		9.93	353.5	347.5	341.5
	379.2	358.51	6.5	12.5	9.7
		1.48			
	377.2	359.99			
		12.48			
		347.51			
	375.2	3.61			
		351.12			
	373.1				
	371.3				
	369.5				
	367.7				
	365.9				
2	362.7				
3					
4	358.5				
5	353.5				
6	348.5				
6	342.5				

POSTED

POSTED

		353.21					341.5 0.74 342.24 12.68 329.56 .78 330.34 12.86 317.48 1.40 318.88	335.5 6.7 317.5 12.8	329.5 12.7 312.5 6.4	323.5 6.8 308.5 10.21
TP	2.85	343.73	12.35	240.88						
13			8.5	335.2		335.5				
TP	1.45	332.73	12.45	331.28						
14			4.7	328.0		329.5	305.21 6.03 311.24 10.15 301.1 1.40 302.50	308.5 2.7 301.00 10.25	305.3 6.0 299 3.5	303.0 8.25 298 4.5
15			10.6	322.1		323.5				
TP	1.89	322.27	12.35	320.38						
16			5.2	317.1		317.5				
17			9.8	312.4		312.5				
TP	0.23	311.99	10.51	311.76						
18			3.5	308.5		308.5				
19			7.0	305.		305.3				
20			9.5	302.5		303.0				
TP	1.91	307.12	6.78	305.21	B.M. Opt Wind Mill					
21			6.8	301.3		301.0				
22			8.8	298.3		299.0				
23			9.5	297.6		298				
TP	3.73	301.75	9.10	298.02						

		301,75				269,42			
						302,50			
						570			
						296.80			
						449			
						301.29			
24			4,7	297.0	297.0	6.17	297.0	296.7	296.4
						295.12	5.5	5.8	4.9
						3.04			
25			5,0	296.7	296.7 ✓	298.16	296.10	295.8	295.4
							5.2	5.5	6.3
26			5,0	296.7	296.4 ✓		295..		
						267.13 B2	5.2		
						5.80			
27			5,3	296.4	296.1 ✓	272.93	290.0	285.8	281.00
						2.17	2.39	6.9	11.4
						270.76			
TP	3,39	299,33	5,81	295.94		1290	277.0	273.00	270.0
						283.66	6.52	10.52	6.22
						63			
28			3,4	296.0	295.8 ✓	283.03	267.00	2.15	
						936	9.22	11.22	
						292.39			
29			3,9	295.4	295.0 ✓	1136			
						281.03			
						253			
30			6,2	293.1	293. ✓	283.56			
						1056			
						273.00			
31			9,6	289.7	290. ✓	322			
						276.22			
TP	0,74	287,77	12,30	287.03					
32			2,9	284.9	285.5 ✓				
33			7,1	280.7	281.0 ✓				
34			10,8	277.0	277.0 ✓				
TP	0,83	276,65	11.95	275.82	—				
35			3,3	273.3	273.0 ✓				
36			6,7	270,0	270.0 ✓				
37			9,6	267.0	267.0 ✓				
TP	2,77	269,42	10,00	266.65					

		269.42			
38			4,5-	264.9	
39			6.4	263.0	
4.0			7,1	262.3	
41			8,8	260.6	
BM				263.59 ✓	New Bench
			5,90	263.69	Cobas St monument
	5.90	269.42		263.592	New Bench
	2.43	269.56	2,366	267.126	Cobas St Shi Tsu
	2.30	269.42	844	266.12	
42			4,30	257.41	
43			6,5	256.9	
44			9,6	253.8	
TP	1,50	268.81	12,1	251.31	
45			3.7	249.6	
46			6.7	246.1	
47			9,4	243.4	
48			10,3	242,5-	
TP	7.18	249.74	10,25-	242.52	

	267.13	Bm at Cobas St		
	2.43			
	269.56			
265.0		265.20	263.2	262
		4.56	6,12	2,12
263.0 ✓	267.13	BM		
	14			
	267.31			
262. ✓	54	262.15	261.25-	261.25-
	267.77	5.16	6.21	3.47
	265			
	264.42			
261 ✓	258	257.25-	257.25	257.44
	256.84	5.17	2.31	5.3
	272			
	259.56	250.25-	247.25-	243.75-
	993	2.93	6.98	9.73
	249.63			
	3.55	247.32-		
	253.18	4.30		
	9.75			
	243.43			
	3.30			
	246.73			
	4.58			
259 ✓	242.15	TP on bridge		
257. ✓				
254. ✓				
		COSTED		
250.0 ✓				
246.0 ✓				
243.5 ✓				
241.5 ✓				

		24974			
49			7.4	242.3	
50			4,8	244.9	
51			2,2	247.5	
7P	9.08	25726	1.56	248.18	
52			8,3	249.0	
53			5,7	251.6	
54			1,7	255.6	
7P	8.09	26366	1.69	255.57	
55			4,7	259,0	
BM			3,75	259.91	Bmo Tent Vdaje
56			5,1	258.6	
57			6,7	257.0	
58			7,3	256.3	
59			7,6	256.1	

	242.15 TP 4.70 246.85 2.31 244.54			
242.5	242.75 4.1	244.75 2.1	246.50 5.74	249.25 3.00
249.75	244.54 TP 7.70 252.24 3.20 249.04 9.01 258.05 4.60 257.45 6.62 264.07	252.25 5.80	255.85 2.50	259.25 4.82
246.5				
249.0		257.45 6.59 264.04 3.72 258.32		
252.0				
255.5				
259.0				
258.6				
257.0				
256.3				
256.00				

Clough Location of Pt Loma Ave for
Taylor Pt Loma & Blvd
Wardie

Sheet 191

Bulb Put in 59+28

Pl 190

Row Trees

60

30

Land Scape St

30 Gate

Pl 182

Put on Line Sept 08 Fence

Pl 183

30

39 Charles St

30 Bulb Found

Warner Vista Tract

Pl 143

30 Bulb Found

Pl 104

POSTED

30 A Found

Moved Pl 102

30 Bulb Found

Reservoir

30

X. section 31st Logan to Colton

79.44

Nov. 13/08 { Childs, Barber, Rogers

T.P.	79.6	H.I. 79.44		71.48
		So. line Logan		
West line			4.7	74.7
			5.4	
			5.8	
C	POSTED		5.4	74.0
			5.5	
			5.6	
E line			5.9	73.5
		2' So.		
E. line			5.0	74.4
			5.2	
			5.1	
C			5.2	74.2
			5.7	
			5.1	
Cb + 5			2.8	
W line			2.2	77.2

60' street 10' sidewalks

		25' So.		
W. line			1.8	77.6
			2.4	
Cb + 4			2.3	
4 + 6			3.2	
1/4			3.3	
C			2.9	76.5
			2.7	
			3.3	
E line			3.0	76.4
		50' So.		
E line			2.5	76.9
			2.5	
			1.8	
C			1.9	77.5
			2.2	
1/4 + 4'			1.2	
			1.1	
W. line			1.1	78.3

POSTED

1944

	75' So.		
White	1.0	78.4	
	1.1		
	1.8		
C	1.7	77.7	
	1.8		
	2.4		
Elite	2.5	76.9	
	100' So.		
Elite	2.3	77.1	
	2.3		
	1.8		
C	2.0	77.4	
	1.4		
	1.2		
White	1.1	78.3	

	125' So.		
White	1.5	77.9	
	1.5		
	2.0		
C	2.5	76.9	
	2.3		
	2.5		
Elite	2.6	76.8	
	150' So.		
Elite	2.3	77.1	
	2.1		
	2.3		
C	2.5	76.9	
	2.0		
	2.0		
White	2.3	77.1	

175' Ro.

W line	2.5	76.9	
	2.9		
	3.0		
C	3.2	76.2	
	3.2		
	3.0		
E line	2.7	76.7	

200' Ro.

E line +3'	2.6	76.6	
	3.5		
	4.3		
	3.9		
C	3.6	75.8	
	3.5		
	3.4		
W line	3.0	76.4	

79.44

225' Ro.

W line	3.6	75.8	
	3.8		
	4.4		
C	4.3	75.1	
	4.4		
	4.7		
66+81	4.2		
E line	3.6	75.8	

250' Ro.

E line +2'	4.2	75.2	
	4.9		
	5.4		
	5.5		
C	5.6	73.8	
	5.3		
	4.4		
W line	4.2	75.2	

	275' So			
W line		4.8	74.6	
		5.4		
		6.1		
C		6.5	72.9	
		6.4		
		6.5		
E line	C6+8'	5.3		
		4.3	75.1	
	298' So W line Natural			
E line		5.3	74.1	
		7.2		
		7.2		
C		7.7	71.7	
		7.2		
		6.3		
W line		6.0	73.4	

	79,44			
	300' So (W line Natural)			
W line		7.7	71.7	
		7.5		
		7.6		
C		7.8	71.6	
		7.7		
		7.7		
E line		7.7	71.7	
	So. line Natural			
E line		8.7	70.7	
		9.0		
		9.0		
C		9.2	70.2	
		9.0		
		9.0		
W line		8.7	70.7	

	79.44		
	50' So.		
White	10.1	69.3	
	10.0		
	10.6		
C	10.3	69.1	
	10.1		
	9.4		
C6+2'	8.4		
E line	8.6	70.8	
	75' So.		
E line	9.0	70.4	
+8'	9.5		
	10.4		
	10.6		
C	11.2	68.2	
	11.2		
	11.1		
White	11.2	68.2	

	2' So.		
White	8.4	71.0	
	7.7		
C6+3'	8.6		
	9.1		
C	9.2	70.2	
	9.1		
	8.9		
C6+8'	8.3		
E line	7.0	72.4	
	25' So.		
E line	7.9	71.5	
+8'	7.9		
	8.6		
	9.2		
C	9.4	70.0	
	9.5		
	8.6		
White	9.1	70.3	

POSTED

		H.I.		
J.P.	1.02	69.76	10.70	68.74
		100' Rod.		
W. line			2.6	67.2
			2.5	
			2.6	
C			2.5	67.3
			2.3	
½ + 8'			2.2	
			1.7	
C6 + 2'			1.1	
E line			0.7	69.1
		125' Rod.		
E line			1.8	68.0
			2.2	
C6 + 2'			3.2	
			3.1	
C			3.4	
			3.4	
			3.5	
W line			3.6	66.2

69.76

150' Rod.

W line	4.9	64.9
	4.2	
	4.3	
C	4.1	65.7
	3.8	
	3.3	
E line	2.6	67.2

175' Rod.

E line	4.0	65.8
	4.6	
	4.9	
C	5.2	64.6
	5.2	
	5.7	
W line	6.0	63.8

6976

200' Ro.

White	7.0	62.8	
	7.0		
	6.3		
C	6.2	63.6	
	5.9		
1/4 +7	6.2		
	5.3		
E.hite	5.1	64.7	

225' Ro.

E.hite	6.1	63.7	
	6.4		
C6 +3'	7.2		
	6.9		
C	7.1	62.7	
	7.3		
	8.1		
W.hite	8.2	61.6	

6976

250' Ro.

White	8.4	61.4	
	9.0		
	8.2		
C	8.1	61.7	
	8.0		
1/4 +7'	8.2		
	7.4		
E.hite	7.2	62.6	

275' Ro.

E.hite +1'	8.0	61.8	
	8.6		
	8.6		
C6 + 3'	9.1		
	8.8		
C	8.9	60.9	
	9.0		
	9.5		POSTED
W.hite	9.5	60.3	

69,76

300' So. (No. line Grand).

W line			9.7	62.1
			9.8	
cb + 1'			10.3	
			9.6	
C			9.3	60.5
			9.4	
			9.7	
E line			9.5	60.3

So. line Grand

E line			10.6	59.2
			10.8	
cb + 1'			11.4	
			10.8	
C			10.8	59.0
			11.0	
1/4 + 9'			11.6	
			11.0	
W line			10.8	59.0

H.I.

0.67 61.72

T.P.	Noz. of Hyd		8.71	61.05 BM.

S.E. cor. Grand & 31st.

2' So.

W. line			3.8	57.9
			3.8	
			3.1	
C			2.7	59.0
			2.9	
1/4 + 9'			3.4	
			2.8	
E line			3.1	58.6

25' So.

E line			3.5	58.2
			3.6	
cb + 1'			4.0	
			3.2	
C			3.0	58.7
			3.5	
			4.2	
W line			4.3	57.4

61.72

50' to.

White		4.7	√7.0
		4.9	
		3.9	
C		3.7	√8.0
		3.7	
1/4+7'		4.5	
		4.0	
E line		4.2	√7.√7

75' to.

E line		5.1	√6.6
		5.0	
		4.5	
C		4.5	√7.2
		4.8	
		5.5	
W line		5.4	√6.3

100' to.

White		6.1	√√.6
		5.7	
		5.3	
C		5.2	√6.√
		5.3	
		5.4	
E line		5.1	√6.6

125' to.

E line		5.6	√6.1
		5.4	
C6+2'		6.1	
		5.7	
C		5.8	√√.9
		6.0	
		6.8	
C6+1'		6.1	
W line		6.5	√√.2

6172

150' So.

W line		6.8	√4.9
		6.8	
		6.3	
C		6.1	√√.6
		6.1	
		6.2	
E line		6.1	√√.6

175' So.

E line		6.6	√√.1
		6.4	
		6.7	
C		6.6	√√.1
		6.4	
		7.5	
W line		7.3	√4.4

6172

200' So.

W line		7.8	√3.9
		8.1	
		7.2	
C		7.0	√4.7
		7.0	
		7.0	
E line		7.0	√4.7

225' So.

E line		7.3	√4.4
		7.4	
		7.5	
C		7.4	√4.3
		7.8	
		8.6	
C6+21		7.9	
W line		8.3	√3.4

POSTED

61.72

250' So.

W line		8.4	√3.3
+7'		7.3	
		8.9	
		8.2	
C		7.8	√3.9
		8.0	
1/4 +8'		8.1	
		7.3	
E line		7.3	√4.4

275' So.

E line		8.0	√3.7
		8.0	
Cb + 2'		8.6	
		8.3	
C		8.2	√3.5
		8.6	
		9.4	
Cb + 2'		9.0	
W line		9.2	√2.5

300' So. (N. line Boston)

W line		9.6	√2.1
+7'		9.2	
		10.0	
		9.1	
C		8.9	√2.8
		8.8	
		9.2	
Cb + 2'		8.5	
E line		8.7	√3.0

No. Cb

E line		8.6	√3.1
		8.8	
Cb + 1'		9.5	
		9.2	
C		9.0	√2.7
		9.4	
		10.2	
Cb + 3'		9.3	
W line		9.7	√2.0

POSTED

No. ¼

W line +8'	10.3	V 1.4	
	9.9		
	10.6		
	9.6		
C	9.5	V 2.2	
	9.4		
¼ +8'	9.7		
	9.1		
E line	8.9	V 2.8	
Center			
E line	9.4	V 2.3	
	9.8		
	9.7		
C	9.8	V 1.9	
	10.1		
	10.7		
W line	10.9	V 0.8	

61.7.2

So ¼

W line	11.3	V 0.4	
	11.2		
	10.3		
C	10.1	V 1.6	
	10.0		
	9.9		
E line	9.6	V 2.1	
So. Cb.			
E line	9.9	V 2.8	
	10.3		
	10.3		
C	10.4	V 1.8	
	10.6		
	11.4		
W line	11.3	V 0.4	

	So. line Boston			
W line			11.3	50.4
			11.3	
			10.9	
C			10.6	51.1
			10.5	
			10.9	
E line			10.6	51.1
		25' So.		
E line			10.5	51.2
			11.0	
			10.8	
C			10.9	50.8
			11.0	
			12.2	
Cb + 2'			11.5	
W line			11.6	50.1

		61.72		
		50' So		
W line			12.1	49.6
+7'			11.6	
			12.6	
			11.6	
C			11.4	50.3
			11.3	
			11.3	
E line			11.0	50.7
		75' So		
E line			11.9	49.8
			12.1	
			11.7	
C			11.8	49.9
			12.4	
			12.8	
Cb + 2'			12.4	
W line			12.3	49.4
		H.I.		
T.P.	0.90	49.97	12.65	49.07

49.97

100' Sta.

W line		0.9	49.1
		1.2	
		0.6	
C		0.3	49.7
		0.2	
		0.2	49.8
E line		+0.2	50.2
	125' Sta		
E line		0.6	49.4
		0.8	
		0.7	
C		0.8	49.2
		1.4	
		1.6	
C6 + 2'		0.7	
W line		0.9	49.1

49.97

150' Sta

W line		1.2	48.8
		1.8	
		1.5	
C		1.4	48.6
		1.3	
		0.7	
E line		0.5	49.1
	175' Sta		
E line		1.2	48.8
		1.8	
		1.9	
C		1.9	48.1
		2.2	
		2.8	
W line		2.2	47.8

49.97

200' 20.

W line	3.1	46.9	
	3.2		
	2.7		
C	2.2	47.8	
	2.2		
1/4 + 8'	2.3		
	1.2		
E line	1.3	48.1	

225' 20.

E line	1.3	48.7	
	1.5		
C6 + 3'	3.0		
	3.2		
C	3.3	46.7	
	3.5		
	4.5		
W line	3.6	46.4	

250' 20.

W line	4.4	47.6	
	4.6		
	4.2		
C	4.0	46.0	
	4.0		
	2.9		
C6 + 6'	2.1		
E line	2.0	48.0	

275' 20.

E line	3.7	46.3	
	4.2		
	4.5		
C	4.6	47.4	
	4.7		
	5.3		
W line	4.9	47.1	

POSTED

300' So. (No. line Main)

W line		5.2	44.8
		5.2	
CB+1'		5.6	
		4.9	
C		4.7	47.3
		5.2	
		5.0	
E line		4.4	47.6

So. line Main

E line		5.8	44.2
		6.3	
		6.6	
C		6.5	43.5
		6.6	
1/4+9'		6.5	
" +9'		6.1	
W line		5.9	44.1

47.97

15' So.

W line		10.7	39.3
		7.2	
		6.8	
C		7.0	43.0
		7.2	
		7.0	
CB+8'		6.3	
E line		5.7	44.3

25' So.

E line		4.7	47.3
		5.6	
CB+2'		7.2	
		7.5	
C		7.3	42.7
		6.7	
		7.6	
W line		12.2	37.8

47.97

39' Sp.

W line	7.7	42.3	
	7.1		
	7.4		
C	7.5	42.5	
	7.7		
1/4 + 7'	7.2		
CB + 4'	6.2		
E line	5.2		
	4.8	45.2	

50' Sp.

E. line +6'	5.2	44.8	
	5.5		
	6.6		
	7.7		
C	7.8	42.2	
	7.4		
	7.8		
W. line	8.2	41.8	

75' Sp.

W line	8.0	42.0	
	7.5		
	7.8		
C	8.1	41.9	
	8.2		
	7.6		
CB + 4'	6.3		
E line	6.3	43.7	

100' Sp.

E. line +5'	7.4	42.6	
	7.6		
	8.3		
	8.3		
C	8.3	41.7	
	8.6		
	8.1		
W. line	8.3	41.7	

	125' Do.		
W. line		9.3	40.7
		9.4	
		9.2	
C		8.9	41.1
		9.1	
		8.7	
E. line		8.5	41.5
	150' Do.		
E. line		10.0	40.0
		9.9	
		10.0	
C		10.2	39.8
		10.2	
		10.2	
W. line		10.3	39.7

49.97

	175' Do.		
W line		11.2	38.8
		10.9	
		10.7	
C		10.8	39.2
		10.8	
		10.5	
E line		10.6	39.4
	200' Do.		
E line		11.2	38.8
		11.1	
		11.4	
C		11.3	38.7
		11.6	
		11.5	
W. line		11.5	38.7

	49.97			
	225' Ro.			
W line		12.4	37.6	
		12.3		
		12.0		
C		11.8	38.2	
		11.7		
		11.6		
E line		11.7	38.3	
	250' Ro.			
E line		12.2	37.8	
		12.0		
		12.2		
C		12.1	37.9	
		12.2		
		12.6		
W. line		12.9	37.1	
J.B.	4.87	42.62	12.22	37.75

	42.62			
	275' Ro.			
W line		6.1	36.5	
		5.8		
		5.6		
C		5.4	37.2	
		5.2		
		5.5		
E line		5.4	37.2	
	300' Ro. (No. line Colton)			
E line		6.4	36.2	
		6.0		
		5.9		
C		6.1	36.5	
		6.1		
		6.2		
W. line		6.83	35.79	B.M.
B.M.		6.83	35.79	

Iron pin N.W. cor. Colton + 3 ft

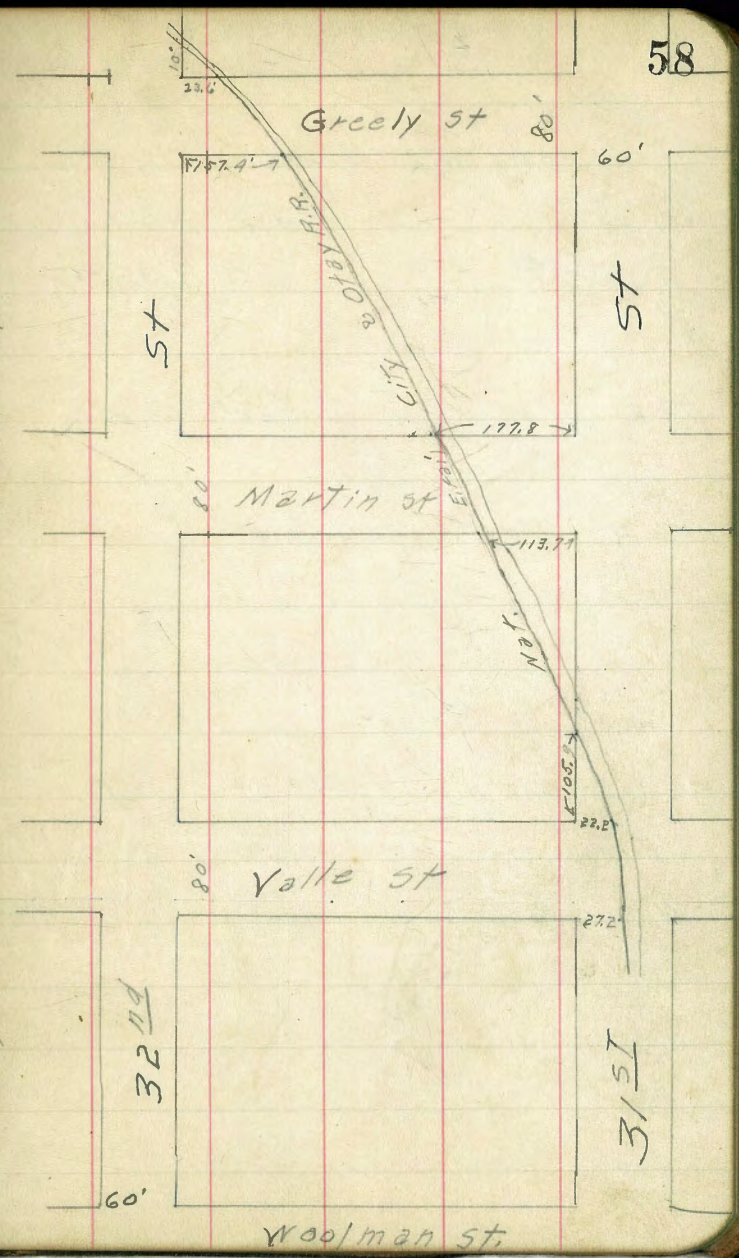
POSTED

Levels Taken on rails of National City & Otay R.R. at intersections of Valle to 32nd st 5/6/09

Dunkle
Shaw
Dyzel

B.M. Brass. Plg. Con. Mon. 31st & Woolman				52.56	
B.M.	3.82	56.38			
T.P.	1.23	45.13	12.48	43.90	
Int. N.L. Valle					
E. rail			5.25		39.88
W. rail			5.02		40.11
Int S.L. Valle					
E. rail			7.36		37.77
W. rail			6.90		38.23
T.P.	0.14	32.60	12.67	32.46	
Int N.L. Martin					
E. rail			2.07		30.53
W. rail			1.58		31.02
Int. S.L. Martin					
E. rail			4.02		28.58
W "			3.84		28.76

Note – All distances Taken To E. rail.



		32.60			
Int. N.L. Greeley					
E. rail			11.05		21.55
W "			10.52		22.08
T.P.	3.02	24.62	11.00	21.60	
Int. S.L. Greeley					
E rail			6.47		18.15
W "			5.88		18.74
Int. W.L. 32nd St					
E rail			6.99		17.63
W "			6.66		17.96

Clough Strain Bridges

Levels on RR Rails from S L of Valle to E L of 31st St

Mon BM Woolman + 31st

0.26	52.82		52.51	
1.80	45.79	10.83	41.99	
S Line of Valle St				
W Rail		5.52	38.27	~~5.52~~
E Rail		5.93	37.86	
25' S of Valle St				
W Rail		6.1	37.67	
E Rail		6.65	37.14	
50' S of Valle				
W Rail		6.6	37.19	
E Rail		7.0	36.79	
75' S of Valle				
W Rail		7.20	36.59	
E Rail		7.60	36.19	
100' S of Valle				
W Rail		7.74	36.05	
E Rail		8.20	35.59	

POSTED

on E Rail		4379			
106's =	E Lin	31 N	25		
N Rail			8.74	35.51	
E Rail			8.35	35.114	

POSTED

DISTANCES FROM CENTER OF ROADWAY FOR CROSS-SECTIONING.

For Single Track Embankment.

Roadway 14 feet wide. Side Slopes 1½ to 1.

	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	27
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.