

NAME ^{Ave.} PACIFIC CONSTRUCTION

Class _____ Course _____ Party _____

522

1938

WATSON, VALLE & GOUGH

FIELD NOTES

No. 403P

ESPECIALLY ADAPTED

TO THE USE OF

ENGINEERING STUDENTS

EUGENE DIETZGEN Co.

MANUFACTURERS

DRAWING MATERIALS

MATHEMATICAL AND SURVEYING INSTRUMENTS

MEASURING TAPES

CHICAGO SAN FRANCISCO NEW YORK
NEW ORLEANS PITTSBURGH

MICROFILMED

DEC 30 1964

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Frontier Rough Grades

Lt. + or Rt. + or
C. Grade - C Gr. -

Sta.					
0+00		17.76	Grade	18.76	Grade
0+20	(6.6)	16.51		17.51	
0+40	(7.07)	16.05		17.05	(6.07)
0+60	(7.3)	15.80		16.80	(6.3)
0+80	(7.34)	15.78		16.78	(6.34)
1+00	(7.25)	15.87	+0.2	16.87	+1.3
1+50	(7.02)	16.10	Grade	17.10	+0.7
2+00	(6.79)	16.33	+0.1	17.33	+0.6
2+50	(6.55)	16.57	+0.1	17.57	+0.5
3+00	(6.3)	16.80	Grade	17.80	+0.6
3+50	(5.58)	17.03	+0.1	18.03	+0.7
4+00	(5.35)	17.26	+0.3	18.26	+1.2
4+50	(5.11)	17.50	Grade	18.50	+0.9
5+00	(4.88)	17.73	+0.1	18.73	+1.2
5+60.26	Rt.	18.00	-0.1	19.00	
5+63.26	Rt.			19.00	+0.2

- ① All cuts and fills are to cut grade
② Property grade is 1 1/4" or 0.10' above cut grade.

For 1/2 = 7.126 (End 7.064)

Sta.	Lt C.Gr		Rt C.Gr	
6+38.26 Rt.	—		19.40	+1.2
6+41.26 Lt. (5.56)	18.40	+0.2	19.40	
7+00 (4.92)	19.04	Grade	20.04	+1.1
7+50 (4.38)	19.58	+0.2	20.58	+1.3
8+00 (3.83)	20.13	+0.1	21.13	+1.3
8+50 (3.29)	20.67	Grade	21.67	+1.2
9+00 (2.74)	21.22	+0.2	22.22	+1.4
9+64 - B.V.C. (2.04)	21.92	-0.1	22.92	+1.2
9+84	22.07		23.07	
10+04	22.07	-0.1	23.07	+2.2
10+24	21.93		22.93	
10+44	21.64	Grade	22.64	+2.2
10+64	21.22		22.22	
10+84	20.65	-0.5	21.65	+3.2
11+04	19.95		20.95	
11+24	19.10	-0.8	20.10	+4.2
11+44	18.11		19.11	
11+64 B.V.C.	16.97	-2.1	17.97	+5.5

7009 (1/2 = 7.09) (C = End = 0.08)

(3.92) ✓
 (3.38) ✓
 (2.93) ✓
 (2.29) ✓
 (1.74) ✓
 (1.04) ✓
 (2.90)
 (4.13) ✓
 (4.27) ✓
 (4.56)
 (4.98)
 (5.55) ✓
 (6.25)
 (7.10)
 (8.29)
 (9.23)

Sta.	C Gr. Lt.	+ or -	G Gr. Rt.	+ or -
12+00	14.81		15.81	
12+30.26 Lt.	13.00	-2.5	14.00	
12+38.26 Rt.			13.50	+4.2
12+75.76 (390)	11.50			
13+13.26 Rt.			11.25	+2.2
13+21.26 Lt. ✓	10.0	-2.6	11.00	
13+54 = Br.e	9.08	-2.1	10.08	+2.1
13+74	8.64		9.64	
13+94	8.38	-0.2	9.38	+1.2
14+14	8.33		9.33	
14+34 E.V.C (674)	8.46	-0.1	9.46	+1.2
14+66.45 (627)	8.83	0.11	9.83	
14+98.90 Rt.			10.20	+1.2
15+03.90 Lt.	9.25	+0.1		
Estrella.				
15+43.90 Lt.	9.90	+0.5		
15+48.90 Rt.			11.0	+2.0
16+00	11.57	-0.1	12.57	+1.8
16+50	13.11	Grade	14.11	+1.6
17+00	14.65	-0.2	15.65	+1.6

W. Cut E. Cut

(1139)
(120)

($\frac{1}{2} = 7.43$) (End C-4.00)

fil 1.0

(4.0)

($\frac{1}{2} = 7.07$) (End C-1.40)

(5.12)
(5.56)
(5.82)
(5.87)
(5.74)

(End C-0.50) ($\frac{1}{2} = C-0.50$) (C-0.50)

(End C-0.50) ($\frac{1}{2} = C-0.50$) (C-0.50)

(9.22)
(7.68)
(6.14)

13+21.26
5+84
19+0.26
15+48.90
3 5 6.36

Sta.	C Gr. Left	+ _W -	G Gr. Rt.		
17+50	16.20	+0 ²	17.20	+1 ⁸	(111)
18+00	17.74	+0 ^L	18.74	+2 ⁰	(10.5)
18+50	19.29	+0 ²	20.29	+2 ^L	(903) (967)
19+05.26 Lt.	21.00	-0 ^L	(22.00)		(73.1)
19+13.26 Rt.			22.28	+1 ³	(614)
"Summit"					
19+88.26 Rt.			23.64	+2 ²	(55.1)
19+96.26 Lt.	22.80	+0 ²	(23.80)		
20+50	23.91	+0 ^L	24.91	+2 ⁰	(9.1) (5.04)
21+13.26 B.V.C.	25.22	Grade	26.22	+1 ⁸	(28.1) (6.89) ✓
21+33.26	25.61		26.61		(7.4) (6.49) ✓
21+53.26	26.01	Grade	27.01	+2 ⁰	(7.23) (6.10) ✓
21+73.26	26.37		27.37		(6.67) (5.24) ✓
21+93.26	26.71	-0 ²	27.71	+2 ²	(6.33) (5.40) ✓
22+13.26	27.03		28.03		(6.01) (5.08) ✓
22+33.26	27.37	-0 ³	28.37	+2 ⁶	(5.22) (4.79) ✓
22+53.26	27.60		28.60		(5.44) (4.51) ✓
22+73.26	27.85	Grade	28.85	+3 ^L	(5.19) (4.26)
22+93.26	28.09		29.09		(4.98) (4.02)

Sta.	C Gr. Left	+ -	C Gr. Rt.	+ -
23+13.26	28.30	-0.3	29.30	+3.3
23+33.26	28.49		29.49	
23+53.26 E.V.C.	28.66	-0.4	29.66	+3.5
23+93.26	28.98	-0.3	29.98	+3.2
24+33.26 B.V.C.	29.30	-0.3	30.30	+3.4
24+53.26	29.39		30.39	
24+73.26	29.35	-0.4	30.35	+3.6
24+93.26	29.18		30.18	
End on Rt.	28.87			
25+13.26 = E.V.C.	28.87	Grade.	29.87	+3.8
25+53.58	28.13	+1.4	Pav. Gr. 28.46	+4.2
25+43.26				
25+93.90	27.38	+1.4		
25+99.58			Pav. Gr. 27.62	+5.7
26+03.90 = End Rt.	27.20	+1.9		

(474)
(455)
(438) (3.45)

(406) (3.13)

(374) (2.81)
(365) (2.71)
(369) (2.76)
(386) (2.93)

(417) Prop. of Pac. Ave. on Rt.

(Grades on Rt. are for Pav.
Gr. + are .33 higher than Cont
Grade on left.)

Prop. of Pac. Ave. on Rt.
Pac. Ave. Prop.

27.51 = 4.00 ✓
27.30 = 4.20 ✓
27.09 = 4.41 ✓
26.88 = 4.62 ✓
26.68 = 4.82 ✓

Pacific Arc

- Water Main -

Sta.	5 Curb Elev.	Bottom trench	Prod	Cuts-
0+00	-1.03	-4.0	9.1	+3.0
0+03 = Gate Main.				
0+05 = F. Hydrant.		-0.95		F. 0.25 = Elev. Walk
0+70	-0.78	-3.8	8.9	+3.5
1+30	-0.40	-3.4	8.5	+3.1
1+90	+0.34	-2.7	7.8	+3.0
2+30	+1.04	-2.0	7.1	+3.5
3+00	+2.35	-0.7	14.9	+3.8
3+50	3.30	+0.3	13.7	+3.7
4+00	4.25	+1.1	13.0	+3.8
4+50	5.20	+2.2	12.0	+3.9
5+10	6.34	3.3	10.9	+4.3
5+50	7.03	4.0	10.2	+4.4
5+80 = 6" x 4" Tee				
5+90	7.41			
5+95	7.55	4.4	9.8	+4.7 = Cut 0.84 = Back of Walk for F.H.

Set F.H. ϵ
0.8' back of Walk.
Set Stake 3.8' back
for 3' offset

- Note -

all stations have
a peg - 6' South
of actual line
and marker put
out North of peg
& distance marked
from Peg

3.07
+ 2.04
5.11
5.15
Ch on S.W. 0+09
See BK 482 p. 10 - 0.04 = -0.07

17.18
- 11.11
3.07
T.P. 0.7 3+00

Pacific Ave.
Water Main

7

Sta.	South Curb Elev.	Bottom Main	Rel.	Cuts
6+50	8.2	5.2	9.0	+4.5
7+00	8.83	5.8	8.4	+4.3
7+50	9.47	6.5	7.7	+3.9
8+00	10.10	7.1	7.1	+4.0
8+50	10.74	7.7	6.5	+4.0
9+00	11.37	8.4	12.8	+3.3
9+50	12.01	9.0	12.2	+3.1
10+00	12.64	9.6	11.6	+3.2
10+50	13.28	10.3	10.9	+3.6
10+90	13.80	10.5	10.7	+4.1
11+70	15.00	12.0	9.2	+4.0

11+70 = Gate

11.76
2.42
14.18

2123
- 947
1176
T.P. on 8+00

Pacific Ave

Water Main -

South
Curb
Elev.

Bathroom
Drain

Rel Cuts.

Sta	Water Main - South Curb Elev.	Bathroom Drain	Rel	Cuts.
12+10	15.67	12.7	8.5	+4.1
12+70	16.57	13.6	7.6	+4.1
13+30	17.27	14.3	6.9	+4.3
13+70	17.63	14.6	6.6	+4.4
14+00	17.87	14.9	6.3	+4.5
14+50	18.27	15.3	5.9	+4.5
15+00	18.63	15.6	14.6	+4.5
15+50	19.03	16.0	14.2	+4.1
16+00	19.42	16.4	13.8	+4.1
<u>16+70 - Existing Gate</u>				
16+70	20.00	17.0	13.5	+4.0
<u>Bureau</u>				
<u>17+50 - Existing Gate</u>				
17+50	29.31 21.5	10.8 18.5	11.7	+9.3
18+00	22.74	9.6 19.7	10.5	+2.9

8

$$\begin{array}{r} 20.12 \\ + 1.11 \\ \hline 21.23 \end{array}$$

$$\begin{array}{r} 30.24 \\ - 10.12 \\ \hline 20.12 \end{array}$$

Ann. Jan. 15+00

Pacific Arc
Water Main

9

Sta.	29.31 S. curb Grade	Bottom cure	Rod.	Cuts.
18+50	23.98 24	8.3 21.0	9.5	+2.5
19+00	25.22	7.1 22.1	8.0	+3.0
19+50	26.46	5.8 23.5	6.7	+2.7
19+70	26.95	5.3 24.0	6.4	+2.7
19+80				

"
"Bingham"
"Pacific"
23 61 - 1314
663
30.24

Frontier St.
West = West Side

Lat. No	Sta.	Elev.	Rod	Cuts
Lat. No				
1	0+43.9	11.0	12.5	+4.9
3	0+93.9	10.5	13.0	+5.6
5	1+13.9	11.0	12.5	+5.0
7	1+63.9	11.0	12.5	+5.4
9	2+13.9	11.0	12.5	+5.7
11	2+63.9	11.5	12.0	+5.2
13	3+13.9	12.0	11.5	+5.0
15	3+63.9	12.0	11.5	+5.6
17	4+13.9	12.0	11.5	+6.0
19	4+63.9	12.5	11.0	+5.5
21	5+13.9	12.5	11.0	+5.5
23	5+63.9	13.0	10.5	+4.9
24	6+13.9	12.93	10.6	+5.6
26	6+63.9	13.53	14.4	+5.4
29	7+13.9	13.92	14.0	+5.4
31	7+58.9	14.38	13.55	+5.6
33	8+46.4	15.50	12.4	+5.2
36	9+16.4	16.00	11.9	+5.4
38	9+58.9	17.15	10.8	+4.6
39	10+43.9	12.00	15.9	+8.9
42	10+93.9	10.00	17.9	+9.8
44	11+43.9	8.00	19.9	+9.2
46	11+93.9	5.00	13.5	+9.4
48	12+43.9	4.91	13.6	+6.3

Frontier S.W. Side (10)
East Side

Lat. No	Sta.	Elev.	Rod	Cuts
Lat. No				
2	0+53.26	11.5	12.0	+7.7
4	1+03.26	12.0	11.5	+6.2
6	1+23.26	12.0	11.5	+5.9
8	1+73.26	12.0	11.5	+5.6
10	2+23.26	12.5	11.0	+5.6
12	2+73.26	12.5	11.0	+5.8
14	3+23.26	13.0	10.5	+5.5
16	3+73.26	13.0	10.5	+6.0
18	4+23.26	13.0	10.5	+6.2
20	4+73.26	13.5	10.0	+5.8
22	5+23.26	14.0	9.5	+5.7
25	6+48.26	14.5	13.4	+6.0
27	6+75.86	14.5	13.4	+6.2
28	6+98.26	15.0	12.9	+6.0
30	7+48.26	15.5	12.4	+6.1
32	7+98.26	16.0	11.9	+6.4
34	8+48.26	16.13	11.8	+6.8
35	8+98.26	16.63	11.3	+7.0
37	9+48.26	18.00	9.9	+6.3
40	10+28.26	18.00	9.9	+7.3
41	10+78.26	16.68	11.2	+8.7
43	11+28.26	15.00	12.9	+9.6
45	11+78.26	12.00	15.9	+10.8
47	12+28.26	9.00	18.9	+10.1

Frontier - Sewer Lat.
West Side

Lat. No	Sta.	Elev.	Rad.	Cuts
49	12+93.9	48.4	13.66	18.48 +5.4
50	13+43.9	47.4	13.76	+4.2
52	13+93.9	46.4	13.86	+3.4
54	14+13.9	45.6	13.92	+3.6
56	14+63.9	47.0	13.8	+4.0
59	16+13.9	7.23	11.25	+4.6
61	16+63.9	8.83	9.65	18.48 +4.7
63	17+13.9	10.43	15.2	4.91 13.57 +4.5
65	17+63.9	12.03	13.6	12.00 25.57 +4.6
67	18+13.9	13.63	12.0	+4.7
69	18+63.9	15.23	10.4	+4.8
71	19+13.9	16.83	8.8	25.6 +4.2
72	19+63.9	18.26	7.3	+4.0
74	20+13.9	19.26	6.3	+3.9
76	20+63.9	20.26	5.3	25.57 +3.9
77	21+13.9	21.23	14.5	1.45 +4.0
79	21+63.9	22.26	13.4	24.12 11.56 +3.9
81	22+13.9	23.26	12.4	35.68 +3.6
83	22+63.9	24.09	11.6	+3.5
85	23+13.9	24.44	11.2	35.7 +3.7
87	23+63.9	24.99	10.9	+3.7
89	24+13.9	25.14	10.5	+3.9
91	24+63.9	25.49	10.2	+3.5

Frontier - Sewer Lat.
East Side

Lat.	Sta.	Elev.	Rad.	Cuts
51	13+50.26	47.0	13.8	18.48 +7.5
53	13+98.26	46.0	13.9	+6.7
55	14+48.26	45.0	14.0	+7.0
57	15+25.76	5.20	13.3	+7.4
58	15+73.26	5.91	12.57	+7.8
60	16+25.76	8.50	11.0	25.6 +6.5
62	16+73.26	9.11	11.65	+7.3
64	17+23.26	11.71	13.9	+6.3
66	17+73.26	12.31	13.3	+7.5
68	18+23.26	13.91	12.7	+7.7
70	18+73.26	15.51	10.1	35.68 +7.6
73	19+98.26	18.94	16.7	+6.9
75	20+75.76	21.00	14.7	+6.3
78	21+23.26	21.44	14.2	+6.8
80	21+73.26	22.44	13.2	+6.9
82	22+23.26	23.44	12.2	+7.1
84	22+73.26	24.15	11.5	+7.7
86	23+23.26	24.50	11.2	+8.3
88	23+73.26	24.85	10.8	+8.6
90	24+23.26	25.20	10.5	+8.5
92	24+73.26	25.55	10.1	+8.3

Flood Water Line

South from Pacific

12

Sta. Ar. Cmt Bottom
 2 in Road

0+00 = 4 Pacific (Bolt Way)

0+35 = F.H.

14.40

Cut: 0.94 (for F.H.) (23.60' to 3'-off emb)

1+00 12.5 9.5 +3.8

1+80 = 4"x6" Tee 10.5 11.5 7.3 +4.5

(7.0) = (Cut 4.5 on Plug) Run West to Prop. Line

2+50 08.8 05.8 +4.3

3+00 07.6 04.6 +4.2

3+80 = 4"x6" Tee 5.40 10.2 2.40 +4.2

(2.7) Cut 3.7 (on Plug) (Run east to Prop. Line)

4+15 = F.H. 4.89 1.4 +4.3

(Cut 0.76 on F.H.) (23.0' to 3'-off emb)

4+50 4.1 0.6 +3.9

5+25 6"x2" Plug^{2.5} -1.0 +3.8

Fanuel Water Line

North from Pacific

13

Sfa.	Ar. Ant	Bottom Gues.	Pal
0+00 =	Pacific (Bolt Waps)		
0+30 =	Gate Valve		
2+80 = Existing	8" Gate		
1+00	16.7	14.8	13.7 +3.1
1+50	17.6	11.9	14.6 +3.2
2+00	18.5	11.0	15.5 +3.1
2+80 = Existing	^{20.0} 3.5	17.0	+3.9
3+60 = Existing	^{21.4} 3.2	18.2	+2.7
4+00	21.8	7.7	18.8 +2.8
4+50	22.6	6.9	19.6 +2.6
5+00	23.4	6.1	20.4 +2.5
5+50	24.2	5.3	21.2 +2.8
6+00	25.0	4.5	22.0 +2.8

25.86
0.64
26.50

(Par. Grade = 19.8) - Linked Apr. 9.29
off

Tunnel Water Line

14

Sta.	Av. Curb	Bottom Recess	Reel
6+25 = F.H.	25.5	11.5	22.5 +2.5
6+60 = 6" Curb	25.9	11.1	22.9 +2.5
7+10 =	26.5	10.5	23.5 +2.5
7+50	26.9	10.1	23.9 +2.3
8+00	27.5	9.5	24.5 +2.0
8+50	28.0	9.0	25.0 +2.4
9+00	28.6	8.4	25.6 +2.4
9+50	29.2	7.8	26.2 +2.3
9+95 = F.H.	29.5	10.9	26.5 +2.5
10+10 = 6" Curb	29.8	10.6	26.8 +2.2
10+60 =	30.3	11.1	27.3 +2.4
11+00	30.7	11.7	27.7 +2.4

811 (Curb 25.94) - 0.06 (23'-to 3' off curb)
 (23.0 West) +2.5
 (23.5 East) +3.0 = 6"x2" Plugs to Property (Both ways)

N. Line of Reel

Checked Elev. of Curb
 Apr. 9 - 29
 6026

39.38
 10.66
 28.72
 5.31
 34.03
 38.17
 25.86

Curb
 29.94 +0.16 (23'-to 3'-off)

(26.3 West. 27.3 East) +3.3 Set 6"x2" Plugs to Property (Both)

N. Line of Shimmer

Tunnel Water Line.

15

<u>Sta</u>	<u>Ar. Cmt</u>	<u>Water</u>	<u>Bottom</u>	<u>Gravel</u>	<u>Red</u>
11+50	31.1	11.3	28.1		+2.6
12+00	31.9	10.5	28.9		+2.7
12+50	33.4	9.4	30.4		+2.5
13+00	34.5	7.9	31.5		+2.5
13+25 = F.N.	35.4		32.4		+2.4
13+30 = Entry Gate	35.3		32.3		
13+82.5 72.5	35.7		32.7		Tunnel Main
14+55.0	36.4	12.5	32.7		+2.9
15+00	36.8	12.9	33.3		+2.7
15+50	37.6	14.1	34.1		+3.1
16+00	38.5	14.2	35.0		+3.5
16+50	39.3	10.4	35.8		+3.4

3938

(^{Ar. Cmt} 35.66) (-0.02) (23'-to 3'-off end)

~~8" x 10" Rods~~ 8" x 10" Cross

Entry Gate

Samuel Water Level

16

Sta.	Av. Curb	Bottom Dinner	Ref
17+20 = 7.4	40.5	9.1	37.0 +3.4
17+55	40.7	9.0	37.7 +3.7
18+25 =	41.7	8.0	38.7 +3.7
18+50	42.4	7.3	38.9 +3.5
19+00	43.1	6.5	39.7 +3.4
19+50	43.9	5.8	40.4 +3.5
20+00	44.6	5.1	41.1 +3.5
20+50	45.3		42.3
20+75	45.7 Cresty Gate		42.7

(Curb)
40.77 = +0.11 (23' to 3' off curb)
(37.0 West +4.7)
(37.9 East +4.4) (6" x 8" Cross - Run out to pump.
(Ball) with 6" x 2" Plug.)
N. Line. Hornshead.

South Line "Samuel"

Tunnel Rough Grades

- North from Pacific

17

Sta.	West Curb	+ or -	East Curb	+ or -
0+00				
0+30	10.0	15.10	+0.4	15.90 (9.2) +1.2
(0+40)	9.9	(15.10)	+0.4	(16.00) (9.1) +1.2
1+00	8.8	16.27	Grade	17.15 (8.0) +0.7
(1+43) = Alley Rst				
1+50	7.9	17.17	+0.3	18.06 (7.0) +0.7
(1+67) = Alley Rst				
2+00	7.0	18.07	+0.2	19.00 (6.1) +0.5
(2+80)	5.3	(19.60)	+0.3	(21.00) (4.1) +0.3
	5.6	19.50	+0.6	20.50 (4.6) +0.2
(3+60)	4.4	(20.70)	+1.0	(21.70) (3.4) +1.2
4+00	3.8	21.34	+1.2	22.34 (2.8) +1.4
4+50	3.0	22.14	+1.1	23.14 (2.0) +1.3
(4+83) = Alley Rst				
5+00	8.6	22.94	+0.8	23.94 (1.0) +1.0
(5+07) = Alley Rst				
5+50	7.8	23.74	+0.9	24.74 (6.8) +0.9
6+00	7.0	24.53	+0.6	25.53 (6.0) +0.7

& Pacific Bell Ways.

(Red Cashed
Elevations are
for returns)

S. Line of Oliver

N. Line of Oliver

3148

Channel Ridge Grade

North from Pacific

18

Sta.	W. Arch Gr.	+ or -	East Curb	+ or -
6+25				
6+30	6.5	25.00	26.00	+0.6
7+10		26.00	27.00	+0.5
7+50	5.1	26.44	27.44	+0.3
8+00	4.5	27.00	28.00	+0.1
8+50		27.55	28.55	+0.3
9+00		28.11	29.11	+0.3
9+50		28.66	29.66	+0.3
9+75		29.00	30.00	+0.1
9+80	7.8	29.00	30.00	+0.3
10+60	7.0	29.80	30.80	+0.2
11+35	6.3	30.47	31.47	-0.1
11+75	5.8	30.95	31.95	-0.3
12+15	5.1	31.70	32.70	-0.7

S. Line of Road
N. Line of Road

3354
3080
-1.74

Red Encl.
Elevations indicated
Pitman elevations

2400
9.54
33.54

S. Line of Road
N. Line of Road

Channel Range Beale

North from Pacific

19

Sta.		West Curb	tor-	East Curb	tor-
12+55	7.1	32.70	-1.5	33.20 ^(3.1)	-1.4
13+00	2.8	33.96	-2.5	34.96 ^(1.8)	-2.2
<u>13+25</u>	1.4	<u>35.40</u>	Grade	<u>36.40</u> <u>0.4</u>	+0.2
13+30	2.0	34.80	+0.6	35.80 ^(1.0)	+0.8
	8.1	<u>35.40</u>	Grade	<u>36.40</u> <u>0.4</u>	+0.2
14+55	7.6	35.90	-0.5	36.40 ^(7.1)	-0.6
					-0.6
15+00	6.9	36.63	+0.2	37.13 ^(6.4)	-0.6
15+50	6.1	37.44	+0.9	37.94 ^(5.6)	-0.2
16+00	5.2	38.26	+1.2	38.78 ^(4.7)	-0.1
16+50	4.4	39.07	+1.1	39.57 ^(3.9)	+0.9
<u>17+20</u>		<u>40.30</u>	+1.2	<u>41.20</u> <u>2.3</u>	+0.7
17+25	3.2	40.30	+1.2	40.81 <u>2.7</u>	+1.1
	2.5	<u>41.00</u>	+1.2	<u>42.00</u> <u>1.5</u>	+1.2
18+05	2.0	41.50	+0.7	42.00 <u>1.5</u>	+1.2
		<u>42.09</u>			
18+50	6.8	42.15	+0.3	42.67 ^(6.3)	+1.1
		<u>42.74</u>	+0.2		
19+00	<u>(6.1)</u>	42.87	+0.1	43.41 ^(5.6)	+0.8

S. Line of Grand

N. Line of Grand

N. Line of Hontland

General Runge Scale

North from Pacific

20

Sta.	West Cmtr	+ or -	East Cmtr	+ or -
19400	5.7	<u>43.39</u> + 0.2	Grade 44.15 ⁹⁸	+ 0.6
20400	4.7	<u>44.04</u> ^{0.2} 44.31 - 0.5	44.89 ⁹⁹	- 0.2
20400	4.0	<u>44.69</u> ^{0.8} 45.03 - 1.1	45.63 ³⁴	- 0.2
20475		45.00 45.40	46.00	

S. Line "Sanct"

Fairbank Rough Grades

South from Pacific

21

Sta.	West Curb	+w-	East Curb	+w-
0+00	15.43 2.74 18.17 (4.7)		13.50	+0.5
0+40	18.17 (4.7)		14.20 (3.7)	+1.1
1+00	(6.1)	14.07	+0.8	12.79 (5.4) +1.2
1+45	(7.7) 10.50 (7.2) 11.00	+1.6 +1.1	11.66 (6.3)	+1.1
2+05	8.2 10.00 8.5 9.70	+0.7 +1.0	10.15 (8.0)	+1.1
2+50	9.5	8.66	+0.9	9.07 (7.2) +0.9
3+00	10.7	7.50	+1.0	7.76 (10.4) +0.8
3+30	3.1	6.80	+1.0	6.60 (3.3) +1.2
3+70			7.00 (2.9)	+0.7
4+10	4.9	5.00	+0.7	5.00 (4.3) +0.1
4+50	5.8	4.17	+0.7	4.17 +0.7
5+00		3.07		3.07
5+25	7.4	2.47	-5.1	2.47 Grade
5+55			1.81 (8.1)	+0.4

2 Pacific South

(Red indicates
Return Elevation)

Side return
on 15' offset
from street
(on West side)

on East side

Side return
fall on Prop. line
of side street
offset = 0.0
at side street

Pacific Ave

— Rough Grades —

22

Sta. H.C. +w- S.C. +or-

Pacific Air
Rough Grades

Curt + or -

23

Sta.		N.C.	+ or -	S.C.	+ or -		N.C.	S.C.
2+30		7.1	+1.60	+0 ³	^{7.7} +1.02	-0 ²	1.04	
2+10	8.72	7.5	+1.22	+0 ³	^{8.0} +0.66	-0 ⁶	+0.67	
1+90		7.8	+0.88	0.0	^{8.4} +0.34	-0 ⁸	+0.34	
1+70		8.1	+0.57	-0 ³	^{8.6} +0.05	-0 ⁷	+0.04	
1+50		8.4	+0.31	-0 ¹	^{8.9} -0.19	-0 ⁵	-0.21	
1+30		8.6	+0.10	-0 ¹	^{9.1} -0.40	-0 ⁴	-0.41	
1+10		8.8	-0.07	-0 ⁴	^{9.3} -0.56	-0 ⁷	-0.59	
0+90		8.9	-0.20	-0 ⁴	^{9.4} -0.69	-0 ⁵	-0.71	
0+70		9.0	-0.29	-0 ⁶	^{9.5} -0.78	-0 ⁵	-0.81	
0+25							-0.78	
0+10		9.2	-0.50	-0 ³				
0+05					-1.00			
0+00					-1.03	+0 ¹		

Pacific Slope
Range scale

Cont. Grades + or -

24

Stn.		N.C. + or -	5.0	+ or -
7+00	6.8	9.89	+1 ⁵ (78)	8.85 +0 ³
6+50	7.4	9.26	+1 ² (83)	8.24 +0 ¹
5+95	—	—	(92)	7.50 +1 ²
5+90	16.70	8.2	8.50 +1 ¹	—
5+45	—	—	(97)	7.00 +0 ¹
5+10 (Ret. N)	9.5	7.20	+1 ²	—
5+00	9.7	7.00	+0 ⁸ 10.5	6.15 +0 ⁶
4+50	10.7	6.00	+0 ¹ 11.5	5.20 +0 ³
4+00	3.7	5.00	+0 ⁵ (45)	4.25 -0 ¹
3+50	4.7	4.00	+0 ¹ (54)	3.30 -0 ¹
3+00	5.7	3.00	+0 ⁶ (64)	2.35 -0 ⁴
2+50	6.7	2.00	+0 ⁵ (73)	+1.40 -0 ³

N.C.	S.C.
F-0.06	F-0.01
— 0.10	C-0.14
—	C-0.40
C-0.25	—
—	C-0.73 (C ^{end.} -1.23)
6.50	—

6.30	—
5.33	—
4.35	C-0.07
3.38	—
2.40	—
1.43	—

Pacific Ave. Rough-

Cent. Grades + or -

25

Sta. N.C. + or - S.C. + or -

N.C. S.C.

12+10 7.3 16.67 +1² 8.3 15.67 +0[±]
 11+85 7.95 16.00 +0⁸ 8.95 15.00 +0[±]
 11+70

15.90

36.3

15.49

40.4

15.00

C-0.03 (C-0.04)

10+90 9.15 14.80 +0⁶ 10.1 13.80 +0³

(1/4 - C-0.10) C-0.06

F-0.15 (1/3 = 2.29) (1/3 = 7.40)

10+50 9.65 14.30 +0³ 10.65 13.30 +0²

F-0.24

C-0.03

10+00 10.3 13.67 +0³ 11.3 12.67 +0²

F-0.43

F-0.16

9+50 3.2 13.04 +0⁸ 4.7 12.04 -0³

F-0.13

- F-0.24

9+00 4.3 11.41 +0⁹ 5.3 11.41 -0.0

F-0.36

F-0.20

8+50 4.9 11.78 +1² 5.9 10.77 +0²

F-0.13

C-0.08

8+00 5.6 11.15 +1³ 6.6 10.13 +0²

C-0.04

C-0.08

7+50 6.2 10.52 +1⁰ 7.2 9.49 -0.1

F-0.02

C-0.06

Pacific Range Brads.

Curt Grades + or -

26

Sta.	N.C.	+ or -	S.C.	+ or -
15750	3.9	20.03 +1 ⁵ 4.9	19.03	+0 ²
15700	4.3	19.63 +1 ⁸ 5.3	18.63	+0 ¹
14450	4.7	19.27 +2 ⁰ 5.7	18.27	0.0
14400	5.1	18.87 +2 ¹ 6.1	17.87	+0 ⁴
13470	5.3	18.63 +1 ⁹ 6.3	17.63	—
13450	5.5	18.46 +1 ⁸ 6.5	17.46	+0 ²
13450	5.7	18.27 +1 ⁷ 6.7	17.27	+0 ³
13410	5.9	18.06 +1 ⁵ 6.9	17.06	+0 ³
12490	6.1	17.87 +1 ⁵ 7.1	16.87	+0.4
12470	6.4	17.57 +1 ⁴ 7.4	16.57	+0 ³
12450	6.6	17.29 +1 ⁴ 7.6	16.29	+0 ³
12430	6.7	16.99 +1 ³ 7.9	15.99	+0 ⁴

23.95

N. Curt	S. Curt
	19.33
	18.6
	18.11
	17.14
17.86	16.7
17.69	18.4
17.50	2.03
17.29	2.24
17.05	2.48
16.80	2.73
16.57	2.95
16.22	

Pacific Rung grade

Curb grade for

27

Sta. Rod No. + or -

11-Curb 5-Curb

19+70.55 6.1 26.94 +2² 26.95 +2⁶

C-0.60

19+60.55 — 26.70

19+50.55 6.9 26.55 +1³ 26.46 +1²

Grade

Grade

19+00 2.6 25.41 +0⁶ 25.22 +0⁷

Grade

Grade

18+50 8.7 24.27 +0³ 23.98 +0⁷

Grade

Grade

18+00 33.01 9.9 23.13 +0⁵ 22.74

Grade

Grade

17+50 11.0 22.00 +1³ 21.50 +1²

(C-134) (C-033) Grade

Grade (1/2 709) (C-122)

16+70 12.0 21.00 +1³ 20.00 +0⁵

Grade

16+50 9.1 20.83 +1² 19.83

Grade

16+00 3.5 20.42 +1⁴ 19.42 +0²

Grade

26.08
21.48
4.60

26.08
21.48
4.60

23.61
2.47

26.08 = H.T.

- Pacific Rongha Seals -

28

Sta. Δ N.C. + or -

Futura & Pacific.

South West - Corner -

(on Pacif.) West Return = 2670 =

$\frac{1}{2}$ arc = 27.04 =

(on 4m) South Return = 27.38 =

20+48.39 P.C. Δ 4-29-20 = $\frac{1}{2}$ Δ

28.48 Cut 4.28

20+41.2 ($\frac{1}{2}$ Δ) Δ 2-14-40 = $\frac{1}{2}$ arc

28.15 (Cut 3.0) + 2 $\frac{10}{10}$

$\Delta = 8-58-40$
(3'-4' Δ) L.C. = 120.5
 $\frac{1}{2}$ arc = ch = 60.3
End = ch = 60.3 more

20+35.85 P.P.C. 62-21-30 31-40-45

27.83 Cut (3.0) Cms Line Sta.

20+25.85

5V-49 -26-24.5

27.59 (Cut 1.5V)

(Δ - R = 60'
P.P.C. - R = 70')

12.46

43.50

24.89

19+90.55

19-06

9.33

27.21

(Cut 1.0)

20

19+79.55 = P.C.

0-00

26.94

11' Cut Line Sta.

20 tangent

19+50.55

26.55

$\Delta = 62-21-30$
L.C. = 63.34
R = 63.0
(3'-4' Δ) R = 20.90
1st ch = 36.54
2nd " = 10.48
End ch = 10.48

Frontera Water Line

29

Sta	H.I. East	Av. Carb	Roll	Bottom Trench	+ or -
0+00 = F.H. & G.V.	17.70			14.5	
0+53.90	$\frac{18.19}{3.22}$ 21.91	16.40	8.7	13.2	+3 ⁸
1+00		16.37	8.7	13.2	+3 ³
1+50		16.60	8.5	13.4	+3 ⁰
2+00		16.83	8.3	13.6	+2 ⁶
2+50		17.07	8.0	13.9	+2 ⁸
3+00		17.30	7.8	14.1	+2 ³
3+50		17.53	7.6	14.3	+2 ⁸
4+00		17.76	7.4	14.5	+2 ⁷
4+50		18.00	7.1	14.8	+2 ⁴
5+00		18.23	6.9	15.0	+2 ⁷
5+58.26 = East F.H.	18.48	6.6	15.3	+2 ⁸	
S.P.L. of La Playa 5+63.26 = G.V.	18.50	6.6	15.3	+3 ⁰	

Curb Grade
at F.H. = (18.20)

Fire Hydrant + Gate

B.M. = 18.19

3.22

H.I. = 21.91

Curb Grade = -0.10
(18.98)
19.04 = S.W.

Fire Hydrant

Gate Valve

Fronton Water Line

30

Sta	La Playa	McLurb	Bottom Trench	+ or -
6+38.26	21.91 3.56 18.35 7.82 26.17	18.90	6.2 15.7	+2 ⁶
7+00		19.54	9.9 16.3	+2 ⁹
7+50		20.08	9.3 16.9	+2 ⁷
8+00		20.63	8.8 17.4	+3 ⁰
8+50		21.17	8.2 18.0	+2 ⁹
9+00		21.72	7.7 18.5	+2 ⁹
9+64 B.K.C.		22.42	7.0 19.2	+2 ⁹
10+04		22.57	6.8 19.4	+2 ⁷
10+44		22.14	7.3 18.9	+3 ¹
10+84		21.15	8.3 17.9	+4 ²
11+24	26.17 10.95 15.72 2.10	19.60	9.8 16.4	+3 ²
11+64 E.V.C.	17.82	17.47	11.9 14.3	+3 ⁰
12+3326 East F.H.		386		

Curb Grade

(13.90)

13.96 S.W.G. = +0

(22.3 - 3' off walk)
Fire Hydrant

Frontera Water Line

31

Sta S.P.L. Roosevelt
12+38.26 E.V. 17.82

Av. Curb

Bottom Trench

13.12

7.9

9.9

+3¹

12+65.76 =

± Grade

12.32

8.7

9.1

+2³

6" C.I. Tee

N.P.L. Roosevelt

13+13.26

10.75

10.2

7.6

+2¹

13+54 B.V.C.

9.58

11.4

6.4

+2⁶

13+94

8.88

12.1

5.7

+3⁰

14+34 = E.V.V

8.96

12.0

5.8

+3²

15+132.6 =

± Grade

9.60

11.4

6.4

+3³

6" 14" C.I. Tee

Run to West Prop for 4' x 2" C.I. Plug

15+48.26

10.50

10.5

7.3

+3⁰

16+00

12.07

8.9

8.9

+2⁵

16+50

13.61

7.4

10.4

+2²

17+00

17.82

15.15

5.8

12.0

+2³

17+50

26.36

16.70

12.9

13.5

+2⁵

18+00

18.24

11.4

15.0

+2⁶

Gate Valve

78

+52

10.0

Run out To East Prop for 6" x 2" C.I. Plug

11.3

± 6.5

+3⁰

Front Water Line

Sta	Av. Curb	Bottom Trench	
18+50	26.36	19.79	9.8 16.6 +2 ⁸
19+08.26	East F.H.		
S.P.L. Sunset			
19+13.26	21.70	7.9	18.5 +2 ⁸
N.P.L. Sunset			
19+88.26	23.1	6.5	19.9 +3 ⁰
20+50	24.42	5.2	21.2 +2 ⁵
21+13.26	B.V.C.	25.72	3.9 22.5 +2 ⁴
21+53.26	26.36 24.89 9.03 33.92	26.51	10.6 23.3 +2 ⁴
21+93.26	27.21	9.9	24.0 +2 ¹
22+33.26	27.82	9.3	24.6 +2 ⁸
22+73.26	28.35	8.7	25.2 +2 ⁵
23+13.26	28.80	8.3	25.6 +2 ⁹
23+53.26	EV.C	29.16	7.9 26.0 +2 ¹
23+93.26	29.48	7.6	26.3 +2 ⁸

4.20
S.W. = 22¹⁶ - 0¹⁰
Curb Grade
22.10

22.3 - 3' off wall
Fire Hydrant

Frontera Water Line

33

Sta	Av. Curb	Bottom Trench	
24+3326 33.92	29.80	7.3 26.6	+2 ⁵

24+7326	29.85	7.2 26.7	+2 ³
---------	-------	----------	-----------------

25+0826 F.H.

S.P.L Pacific

25+1326

29.37

7.7

26.2

+2¹

25+46.42

Av. Grade

28.40

8.7

25.2

+3⁶

Curb Grade

(29.95)

S.W. = 30.00

(3.92)

+0⁶⁰

Fire Hydrant

Gate Valve

6" C.I. Tee

(25.40)

+7¹

Run to East Prop for 6" 12" C.I. Plug

25+89.94

Av. Grade

27.7

9.4

24.5

+4³

6" C.I. Bend 45°

25+89.94

Av. Grade

27.7

9.4

24.5

+4³

6" C.I. Bend 22½°

26+32.22

Frontera

26.8

10.3

23.6

+3²

6" C.I. Bend 45°

19+80.55 Pacific

33.92

6.58

27.34

11.91

29.31

Funnel Sewer Lat East

Lat No.	Sta	Elev	Red	H.I.	Cuts
93	0+70	9.20	8.44	$\frac{15.43}{2.21}$	+5.5
94	1+20	8.20	9.44	17.64	+5.3
95	1+70	7.20	10.44		+4.9
96	2+20	4.80	12.84		+6.0
97	2+70	3.80	13.84		+5.7
98	3+20	2.80	14.84		+5.1

Pacific Sewer Lat South

109	0+10	-3.87	8.71		+2.9
108	0+60	-3.67	8.57		+2.6
107	1+10	-3.47	8.31		+2.2
106	1+60	-3.27	8.11		+2.6
105	2+10	-3.27	8.11		+3.4
104	2+60	-2.87	7.71		+4.3
103	3+10	-2.67	7.51		+4.8
102	3+60	-2.47	7.31		+5.8
101	4+10	-2.27	11.43		+6.7
100	4+60	-2.07	11.23		+7.8

Note

Old flow at Gutter = $2.9 \sqrt{= (\#109)}$
Main = $-(2.85)$ Apx to flow = $(\text{Old flow} - 2.83)$

- ① Laterals were evidently constructed without grades (Stakes evidently lost)
- ② Laterals 109-108-107-106 might be too high - "Banker" authorized C.I.P. -
- ③ Notes on opposite page show that Stakes were set for each lateral -

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Covert #3 on Faneuil

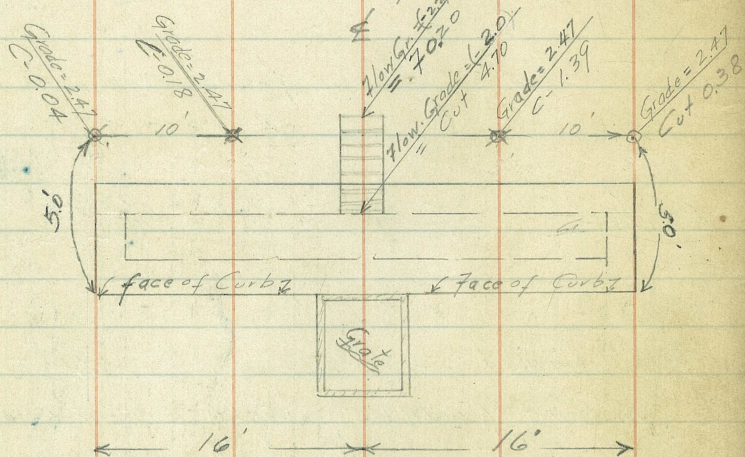
Assuming 0100 to be $\frac{1}{2}$ of Pacific

Sta. $5 + 25 =$ Face of Curb. at S. end of "A"

$$5 + 26.5 = \text{End of } 36'' = \text{Inlet at C.B.}$$

" $5 + 27.0 =$ Back Wall of Curb Inlet $=$ Back side of Back Wall

" $5 + 48.5 = \text{End of } 36" = \text{Outlet at H.W.}$



Four stakes set 5' offset to face
of curb (and southerly therefrom)

$$\begin{array}{r} + 3.67 \\ - 2.20 \\ \hline 1.47 \end{array}$$
 (See sh. #13)

Top of Hd-Wall = +1.97 Elevation /
= 711 3.85

Covert #2

Flow Line Upper End = Elev. = 2.50 C-5.6

"	100		=	0.76	C-40
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Cuts. [Top of HdW. Elev. = + 1.17] = F 3.23

Details of Curb -
at (May-22-29)

Catch Basin -

N. end of Curb = 10^{-5} from \angle Pipe Elev. = 8.33 (7.82)

N. end of Carb - 10.5' from Pipe Elev. = 7.05' = 8.38'

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Culvert #1

Sta. Grade for -

N. End ² 15.79 + 0 ¹⁰ = Curb Grade at N. End C.B.

S. End C.B. 16.01 + 0 ⁰² = Curb Grade at S. End of C.B.

0+00 10.80 + 5 ¹ = Flow of Pipe at C.B.

0+60 10.50 + 7 ⁰ = Cut below Top Curb

1+00 10.30 + 8 ² = " " " "

1+30 10.15 + 10 ¹⁴ = " " " "

1+49 10.05 + 10 ²⁰ = " " " "

1+68 9.95 + 9 ⁸³ = " " " "

1+90 9.84 + 9 ⁶² = " " " "

2+20 9.70 + 6 ⁴⁵ = " " " "

2+30 (-1.0) - 0.67 = " " " "

How Gr. 1.25 - 2.92 = Top of Hd. Wall