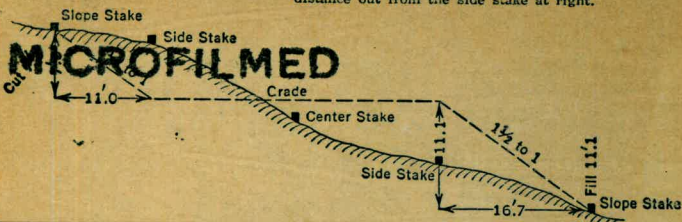


Mission Bay

No. 11

DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING
 Roadway of any Width. Side Slopes 1½ to 1.

In the figure below: opposite 7 under "Cut or Fill" and under .3 read 11.0, the distance out from the side stake at left. Also, opposite 11 under "Cut or Fill" and under .1 read 16.7, the distance out from the side stake at right.



Cut or Fill	Distance out from Side or Shoulder Stake										Cut or Fill
	0	.1	.2	.3	.4	.5	.6	.7	.8	.9	
0	0.0	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4	0
1	1.5	1.7	1.8	2.0	2.1	2.3	2.4	2.6	2.7	2.9	1
2	3.0	3.2	3.3	3.5	3.6	3.8	3.9	4.1	4.2	4.4	2
3	4.5	4.7	4.8	5.0	5.1	5.3	5.4	5.6	5.7	5.9	3
4	6.0	6.2	6.3	6.5	6.6	6.8	6.9	7.1	7.2	7.4	4
5	7.5	7.7	7.8	8.0	8.1	8.3	8.4	8.6	8.7	8.9	5
6	9.0	9.2	9.3	9.5	9.6	9.8	9.9	10.1	10.2	10.4	6
7	10.5	10.7	10.8	11.0	11.1	11.3	11.4	11.6	11.7	11.9	7
8	12.0	12.2	12.3	12.5	12.6	12.8	12.9	13.1	13.2	13.4	8
9	13.5	13.7	13.8	14.0	14.1	14.3	14.4	14.6	14.7	14.9	9
10	15.0	15.2	15.3	15.5	15.6	15.8	15.9	16.1	16.2	16.4	10
11	16.5	16.7	16.8	17.0	17.1	17.3	17.4	17.6	17.7	17.9	11
12	18.0	18.2	18.3	18.5	18.6	18.8	18.9	19.1	19.2	19.4	12
13	19.5	19.7	19.8	20.0	20.1	20.3	20.4	20.6	20.7	20.9	13
14	21.0	21.2	21.3	21.5	21.6	21.8	21.9	22.1	22.2	22.4	14
15	22.5	22.7	22.8	23.0	23.1	23.3	23.4	23.6	23.7	23.9	15
16	24.0	24.2	24.3	24.5	24.6	24.8	24.9	25.1	25.2	25.4	16
17	25.5	25.7	25.8	26.0	26.1	26.3	26.4	26.6	26.7	26.9	17
18	27.0	27.2	27.3	27.5	27.6	27.8	27.9	28.1	28.2	28.4	18
19	28.5	28.7	28.8	29.0	29.1	29.3	29.4	29.6	29.7	29.9	19
20	30.0	30.2	30.3	30.5	30.6	30.8	30.9	31.1	31.2	31.4	20
21	31.5	31.7	31.8	32.0	32.1	32.3	32.4	32.6	32.7	32.9	21
22	33.0	33.2	33.3	33.5	33.6	33.8	33.9	34.1	34.2	34.4	22
23	34.5	34.7	34.8	35.0	35.1	35.3	35.4	35.6	35.7	35.9	23
24	36.0	36.2	36.3	36.5	36.6	36.8	36.9	37.1	37.2	37.4	24
25	37.5	37.7	37.8	38.0	38.1	38.3	38.4	38.6	38.7	38.9	25
26	39.0	39.2	39.3	39.5	39.6	39.8	39.9	40.1	40.2	40.4	26
27	40.5	40.7	40.8	41.0	41.1	41.3	41.4	41.6	41.7	41.9	27
28	42.0	42.2	42.3	42.5	42.6	42.8	42.9	43.1	43.2	43.4	28
29	43.5	43.7	43.8	44.0	44.1	44.3	44.4	44.6	44.7	44.9	29
30	45.0	45.2	45.3	45.5	45.6	45.8	45.9	46.1	46.2	46.4	30
31	46.5	46.7	46.8	47.0	47.1	47.3	47.4	47.6	47.7	47.9	31
32	48.0	48.2	48.3	48.5	48.6	48.8	48.9	49.1	49.2	49.4	32
33	49.5	49.7	49.8	50.0	50.1	50.3	50.4	50.6	50.7	50.9	33
34	51.0	51.2	51.3	51.5	51.6	51.8	51.9	52.1	52.2	52.4	34
35	52.5	52.7	52.8	53.0	53.1	53.3	53.4	53.6	53.7	53.9	35
36	54.0	54.2	54.3	54.5	54.6	54.8	54.9	55.1	55.2	55.4	36
37	55.5	55.7	55.8	56.0	56.1	56.3	56.4	56.6	56.7	56.9	37
38	57.0	57.2	57.3	57.5	57.6	57.8	57.9	58.1	58.2	58.4	38
39	58.5	58.7	58.8	59.0	59.1	59.3	59.4	59.6	59.7	59.9	39
40	60.0	60.2	60.3	60.5	60.6	60.8	60.9	61.1	61.2	61.4	40

KEUFFEL & ESSER CO., N. Y.

SHOAL SPOT
 3-25-47
 WINDOW TO WATSON
 38° 01' 1.5"

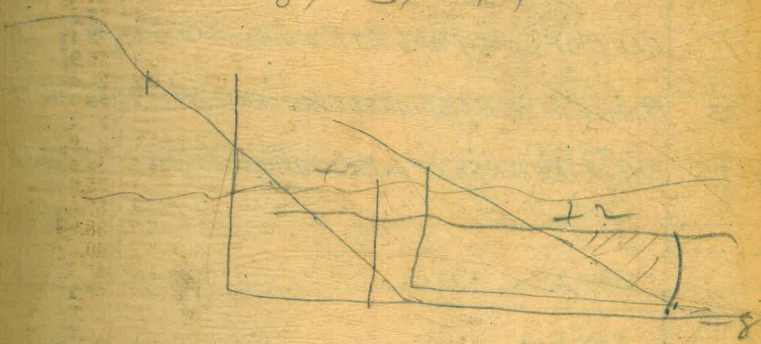
WATSON TO GLEASON
 65° 00' 00"

N 10-11 W
 36 09
 170 60
 98 20
 81° 40'
 134 0

174 39 60
 117° 26' 30
 62° 33' 30

78
 79
 80
 81
 82

81-39-44



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 with a WATER RESISTING surface sizing.

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MISSION BAY PROJECT #6-

1-20-47

STA 113+00

①

SOUNDINGS

DIST SOUND EL. DIST SOUND

Px 0+00 = W. SHORE B/L.

STA 113+00

EL.

90 10.0-4.8 70 13.0-7.8

11+00 11.3-6.1 80 13.0-7.8

10:21 10 11.6-6.4 90 13.0-7.8

10:10 1+41 0.0 +5.3 40 12.2-7.0" 20 12.0-6.8 13+00 13.1-7.9

10:14 8+00 14.1 -8.8 50 11.3-6.1 30 11.5-6.3 10 13.3-8.1

10 13.9-8.6 60 10.5-5.3 40 12.1-6.9 20 13.5-8.3

(5.3) 20 14.3-9.0 70 9.5-4.3 50 12.0-6.8 30 13.2-8.0

30 14.0-8.7 80 7.4-2.2 60 11.8-6.6 40 13.2-8.0

10:17 40 14.0-8.7 90 6.7-1.5 (5.2) 70 13.3-8.1 50 13.0-7.8

50 13.7-8.4 10+00 7.2-2.0 80 13.3-8.1 60 13.1-7.9

60 14.0-8.7 10 9.6-4.4 90 13.3-8.1 (5.2) 70 13.1-7.9

(5.2) 70 14.0-8.8 20 10.3-5.1 12+00 13.7-8.5 (5.2) 80 13.0-7.8

80 13.5-8.3 30 10.7-5.5 10 14.1-8.9 90 13.2-8.0

90 13.3-8.1 (5.2) 40 ~~11.1~~ 10:23 20 14.2-9.0 14+00 13.4-8.2

9+00 14.2-9.0 50 11.0-5.8 30 14.2-9.0 10 13.3-8.1

10 14.0-8.8 60 11.7-6.5 40 14.2-9.0 20 12.0-6.8

20 13.1-7.9 70 11.0-5.8 50 13.5-8.3 30 4.5 +0.7

30 12.5-7.3 80 10.2-5.0 60 13.5-8.3 40 2.7 +2.5

50 2.7 +2.5

1-20-47 0+00 = SHORE
STA 114+00 B/L.

PX			DIST SOUND			DIST SOUND			
10:46	1+61	0.0 +4.9	80	13.5	-8.6	80	13.5	-8.6	
10:50	8+00	16.0 -11.1	90	13.8	-8.9	90	13.8	-8.9	
	10	15.5 -10.6	10+00	13.4	-8.5	10+00	13.4	-8.5	
	20	15.5 -10.6	10:53	10	13.2	-8.3	10	13.2	-8.3
	30	15.5 -10.6	20	13.7	-8.1	20	13.7	-8.1	
	40	15.4 -10.5	30	13.3	-8.4	30	13.3	-8.4	
(A.9)	50	15.6 -10.7	40	13.5	-8.6	40	13.5	-8.6	
	60	15.5 -10.6	50	13.6	-8.7	50	13.6	-8.7	
	70	15.0 -10.1	(X.9) 60	13.7	-8.8	60	13.7	-8.8	
	80	14.3 -9.4	70	13.7	-8.8	70	13.7	-8.8	
	90	13.5 -8.6	80	14.2	-9.3	80	14.2	-9.3	
	9+00	13.3 -8.4	90	14.2	-9.3	90	14.2	-9.3	
	10	13.3 -8.4	11+00	14.5	-9.6	11+00	14.5	-9.6	
	20	13.8 -8.9	10	14.5	-9.6	10	14.5	-9.6	
	30	13.8 -8.9	20	14.7	-9.8	20	14.7	-9.8	
	40	13.8 -8.9	30	14.5	-9.6	30	14.5	-9.6	
	50	13.6 -8.7	40	14.5	-9.6	40	14.5	-9.6	
	60	13.8 -8.9	50	14.5	-9.6	50	14.5	-9.6	
	70	13.5 -8.6	60	15.0	-10.1	60	15.0	-10.1	

DIST SOUND			DIST SOUND		
70	15.0	-10.1	10:56	70	14.8 -9.2
80	14.5	-9.6	80	12.0	-7.2
90	14.0	-9.1	90	11.1	-6.3
12+00	13.2	-8.3	14+00	2.4	+2.4
10	13.2	-8.3	10	2.3	+2.5
20	13.2	-8.3	10:57	20	2.3 +2.5
(X.9) 30	13.2	-8.3			
40	13.4	-8.5			
50	13.6	-8.7			
60	13.8	-8.9			
70	13.5	-8.6			
80	13.3	-8.4			
10:55	90	13.5 -8.6			
13+00	13.5	-8.7			
10	13.5	-8.7			
(X.9) 20	13.5	-8.7			
(X) 30	13.8	-9.0			
40	13.8	-9.0			
50	13.8	-9.0			
60	14.0	-9.2			

Px

1-20-47 0+00=SHORE
STA 115+00 B/L1-20-47
115+00

3

DIST SOUND DIST SOUND

DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND
11:10 1+42	+45 0.0	20	14.0 -9.5	20	14.0 -9.5	20	19.0 -4.6
11:13 7+50	14.0 -9.5	30	12.8 -8.3	30	13.4 -8.9	30	2.7 +1.7
60	14.0 -9.5	40	13.0 -8.5	40	13.3 -8.8	11:19 40	2.3 +2.1
(45) 70	13.8 -9.3	11:15 50	13.0 -8.5	50	13.1 -8.6	50	
80	14.0 -9.5	60	13.0 -8.5	11:17 60	13.4 -8.9	60	
(X) 90	14.0 -9.5	70	12.8 -8.3	70	13.6 -9.1	(X) 70	
8+00	13.8 -9.3	80	13.1 -8.6	80	13.8 -9.3	(X) 80	
10	13.7 -9.2	90	13.0 -8.5	90	13.8 -9.3	90	
20	13.2 -8.7	10+00	13.0 -8.5	12+00	13.5 -9.1	14+00	
30	13.4 -8.9	10	13.3 -8.8	10	13.7 -9.3		
40	13.1 -8.6	20	13.5 -9.0	20	13.5 -9.1		
50	13.0 -8.5	30	13.8 -9.3	30	13.5 -9.1		
60	13.0 -8.5	40	13.5 -9.0	40	13.4 -9.0		
70	12.6 -8.1	(X) 50	13.5 -9.0	50	13.4 -9.0		
80	12.5 -8.0	60	13.7 -9.2	60	13.3 -8.9		
90	12.6 -8.1	70	14.0 -9.5	70	13.4 -9.0		
9+00	12.5 -8.0	80	14.1 -9.6	80	13.5 -9.1		
10	12.5 -8.0	90	14.4 -9.9	90	12.5 -9.1		
20	12.5 -8.0	11+00	14.7 -10.2	13+00	13.8 -9.4		
		10	14.7 -10.2	10	13.0 -8.6		

PK			1-20-47 STA 116+00			0+00 = SHORE		
DIST	SOUND		DIST	SOUND		DIST	SOUND	
11:27	14.3		90	13.4	-9.1			
1+60	0.0	→						
11:33			8+00	13.4	-9.1			
6+00	14.0	-9.7	10	13.0	-8.7			
10	13.5	-9.2	20	12.5	-8.2			
20	13.3	-9.0	30	12.4	-8.1			
30	13.2	-8.9	40	12.2	-7.9			
40	13.1	-8.8	50	12.1	-7.8			
50	13.3	-9.0	60	12.0	-7.7			
60	13.0	-8.7	70	12.0	-7.7			
(A ³) 70	13.1	-8.8	80	12.0	-7.7			
80	13.3	-9.0	90	12.0	-7.7			
90	13.2	-8.9	9+00	12.0	-7.7			
7+00	13.2	-8.9	10	12.0	-7.7			
10	13.0	-8.7	(3) 50	12.1	-7.8			
20	12.8	-8.5	30	12.3	-8.0			
30	12.8	-8.5	40	12.5	-8.2			
40	12.7	-8.4	50	12.5	-8.2			
50	12.6	-8.3	60	12.7	-8.4			
11:35	60	12.6	-8.3	70	12.6	-8.3		
70	12.8	-8.5	80	12.5	-8.2			
80	13.1	-8.8						

1-20-47 STA 116+00			(4)			
DIST	SOUND		DIST	SOUND		
90	12.3	-8.0	90	13.6	-9.4	
10+00	12.3	-8.1	12+00	13.5	-9.3	
11:35	10	13.3	-9.1	10	13.5	-9.3
20	13.3	-9.1	20	13.5	-9.3	
30	13.0	-8.8	30	13.3	-9.1	
40	12.8	-8.6	40	12.7	-8.5	
50	13.7	-9.5	50	12.4	-8.2	
(X) 60	13.8	-9.6	60	11.5	-7.3	
70	13.8	-9.6	70	7.0	-2.8	
80	14.0	-9.8	(2) 80	2.3	+1.9	
90	14.5	-10.3	90	2.1	+2.1	
11+00	14.5	-10.3	13+00			
10	14.3	-10.1	10			
11:40	20	14.0	-9.8	20		
30	14.0	-9.8	30			
40	13.8	-9.6	40			
50	13.8	-9.6	50			
60	14.0	-9.8	60			
70	14.0	-9.8	70			
80	13.8	-9.6	80			

1-21-47
 SOUNDEAST STA 103+00
 TX 0+00 = RADIUS LINE

DIST	SOUND	DIST	SOUND
9:22 0+00	1.3 +4.8	90	14.4 -8.3
10	1.5 +4.6	9:26 2+00	14.9 -8.8
(6.1) 20	1.8 +4.3	10	15.0 -8.9
30	2.0 +4.1	20	14.6 -8.5
40	2.0 +4.1	30	14.6 -8.5
50	2.2 +3.9	40	15.0 -8.9
60	2.5 +3.6	50	15.1 -9.0
70	2.6 +3.5	60	15.2 -9.1
80	3.7 +2.4	70	15.4 -9.3
90	5.0 +1.1	80	15.4 -9.3
9:24 1+00	7.1 -1.0	90	15.5 -9.4
10	7.2 -1.1	9:27 3+00	15.7 -9.6
20	7.6 -1.5	10	15.7 -9.6
(6.1) 30	8.5 -2.4	20	15.2 -9.1
40	9.2 -3.1	30	14.5 -8.4
50	11.9 -5.1	40	14.5 -8.4
60	12.7 -6.6	50	14.5 -8.4
70	13.5 -7.4	60	15.0 -8.9
80	14.0 -7.9	70	15.0 -8.9

1-21-47 STA 103+00
 DIST SOUND

80	14.7 -8.6
90	15.0 -8.9
4+00	14.8 -8.7
10	15.0 -8.9
20	15.1 -9.0
30	15.1 -9.0
40	15.0 -9.0
50	15.0 -9.0
60	14.7 -8.6
70	14.2 -8.1
(6.1) 80	14.2 -8.1
90	14.0 -7.9
5+00	14.0 -7.9
10	13.3 -7.2
20	10.0 -3.9
30	6.0 +0.1
(6.1) 40	5.4 +0.7
50	5.5 +0.6
60	5.5 +0.6
70	5.5 +0.6

(5)

PN-21-47 STA 104+00
 0+00=110'E. OF RADIALS
 DIST SOUND DIST SOUND

9:37							
0+10	0.0	+6.0	10	14.5	8.5		
20	1.0	+5.0	20	14.8	8.8		
30	1.3	+4.7	30	14.7	8.7		
(6.0)	40	1.5	+4.5	40	13.5	7.5	
50	1.7	+4.3	50	13.5	7.5		
60	2.1	+3.9	60	13.8	7.6		
70	3.0	+3.0	70	14.0	8.0		
80	5.1	+0.9	80	14.0	8.0		
90	7.3	-1.3	90	14.0	8.0		
1+00	9.8	-3.8	3+00	14.3	8.3		
10	10.2	-4.2	10	14.0	8.0		
20	11.1	-5.1	20	14.2	8.2		
30	12.4	-6.4	9:42 30	14.3	8.3		
40	13.0	-7.0	40	13.8	7.8		
50	13.2	-7.2	50	13.8	7.8		
60	13.6	-7.6	60	14.2	8.2		
9:40 70	13.8	-7.8	70	14.0	8.0		
(6.0)	80	14.0	-8.0	80	13.6	7.6	
90	14.4	-8.4	90	12.8	6.8		
2+00	14.5	-8.5	4+00	10.4	4.4		

104+00 1-21-47
 DIST SOUND

10	5.0	+1.0
(6.0) 20	5.3	+0.7
9:44 30	5.3	+0.7

40

50

1-21-47
STA 105+00
0+00 = 130' E. OF RAD. S. EAST.
DIST SOUND EL. DIST SOUND

0+27	0.0	+5.9	30	13.2	-7.4
9:50 40	1.1	+4.8	9:53 40	13.1	-7.3
50	1.5	+4.4	50	12.8	-7.0
60	1.8	+4.1	60	12.8	-7.0
5.9 70	2.3	+3.6	70	13.2	-7.4
80	2.7	+3.2	80	13.5	-7.7
90	3.5	+2.4	90	14.5	-8.7
1+00	7.2	-1.3	3+00	13.9	-8.0
10	10.8	-4.9	10	13.2	-7.4
20	12.0	-6.1	20	13.0	-7.2
30	12.2	-6.3	30	13.0	-7.2
40	12.5	-6.6	40	13.5	-7.7
50	12.6	-6.7	50	13.5	-7.7
60	12.8	-6.9	5.8 60	12.5	-6.7
70	12.7	-6.8	70	8.0	-2.2
80	12.7	-6.8	9:53 80	4.7	+1.1
90	13.0	-7.1	90	4.7	+1.1
2+00	13.4	-7.5	4+00		
10	13.4	-7.5	10		
20	13.2	-7.3	20		

1-21-47
STA 106+00
0+00 = 130' E. OF RAD. ⑦
DIST SOUND DIST SOUND DIST SOUND

0+32	0.0	+5.5	20	13.5	-7.8
10:24 40	0.5	+5.3	40	13.5	-7.8
50	1.0	+4.8	50	13.5	-7.8
60	1.3	+4.5	60	13.5	-7.8
70	1.5	+4.3	5.7 70	13.8	-8.1
80	2.0	+3.8	80	13.8	-8.1
90	2.4	+3.4	10:08 90	13.4	-7.7
1+00	4.9	+1.4	3+00	13.0	-7.3
10	6.3	-0.5	10	13.0	-7.3
20	8.6	-2.2	20	12.8	-7.1
30	9.5	-3.7	30	11.5	-5.8
40	11.0	-5.2	40	6.5	-0.8
50	12.0	-6.2	50	4.4	+1.3
60	12.5	-6.7	60	4.4	+1.3
70	12.8	-7.0	70		
80	13.0	-7.2	80		
90	13.0	-7.2	90		
2+00	13.2	-7.4	4+00		
10	13.4	-7.6			
20	13.4	-7.6			

PX 1-21-47
STA 107+00 - 0+00 = 130' E. OF RAD

DIST SOUND			DIST SOUND		
0+35	0.0	+5.6	30	13.5	-8.0
10 ¹⁵ 40	0.2	+5.4	40	13.4	-7.9
50	0.4	+5.2	50	13.4	-7.9
60	0.8	+4.8	60	13.7	-8.2
70	1.0	+4.6	70	13.5	-8.0
80	1.4	+4.2	55 80	13.3	-8.0
90	1.8	+3.8	90	13.5	-8.0
1+00	4.5	+1.1	3+00	13.5	-8.0
10	7.0	-1.4	10	13.5	-8.0
20	9.5	-3.9	10 ²⁰ 20	13.3	-7.8
30	10.0	-4.4	30	13.0	-7.5
40	11.5	-5.9	40	12.0	-6.5
10 ¹⁷ 50	12.7	-7.1	50	5.0	+0.5
60	12.6	-7.0	60	5.0	+0.5
70	12.5	-6.9			
80	12.8	-7.2			
90	12.7	-7.2			
2+00	12.7	-7.2			
10	12.7	-7.2			
20	13.0	-7.4			

PX 1-21-47
STA 108+00 - 0+00 = 130' E. OF RAD (8)

DIST SOUND			DIST SOUND		
0+40	0.0	+5.4	40	13.4	-8.0
10 ²⁶ 50	0.3	+5.1	50	13.6	-8.2
60	1.1	+4.3	10 ³⁰ 60	13.4	-8.0
70	1.5	+3.9	5.9 70	13.4	-8.0
80	1.5	+3.9	80	13.4	-8.0
90	1.8	+3.6	90	13.4	-8.0
1+00	5.0	+0.4	3+00	13.4	-8.0
10 ²⁷ 10	6.4	-1.0	10	13.3	-7.9
20	7.0	-1.6	20	13.3	-7.9
30	9.1	-3.7	30	12.6	-7.2
40	12.2	-6.8	40	9.8	-4.4
50	12.2	-6.8	50	4.0	+1.4
60	12.4	-7.0	60	3.2	+2.2
70	12.8	-7.4	70	3.0	+2.4
80	13.0	-7.6			
90	13.3	-7.9			
2+00	13.4	-8.0			
10	13.4	-8.0			
20	13.4	-8.0			
30	13.4	-8.0			

P.X. STA 109+00 - 0+00 = 130' E. OF RAD
 DIST SOUND DIST SOUND

0+39	0.0	+5.3	30	14.0	-8.7
10 ^{1.36} 40	0.4	+4.9	40	13.5	-8.2
50	0.5	+4.8	50	13.3	-8.0
60	1.0	+4.3	60	13.2	-7.9
70	1.1	+4.2	70	13.3	-8.0
80	1.4	+3.9	80	13.3	-8.0
90	3.0	+2.2	90	13.1	-7.8
1+00	4.5	+0.8	3+00	13.1	-7.8
10	6.5	-1.2	10	13.0	-7.7
20	8.4	-3.1	20	13.0	-7.7
30	9.6	-4.3	30	10.7	-5.4
40	10.5	-5.2	40	4.0	+1.3
50	11.4	-6.1	50	2.7	+2.6
5.3 60	12.0	-6.7	10 ^{1.43} 60	2.6	+2.7
70	12.4	-7.1			
80	12.5	-7.2			
10 ^{1.40} 90	12.9	-7.5			
2+00	13.0	-7.7			
10	13.4	-8.1			
20	14.0	-8.7			

STA 110+00 - 0+00 = 130' E OF RAD (9)
 DIST SOUND DIST SOUND DIST SOUND

0+30	0.0		40	13.3	-8.2
50	0.4	+4.8	10 ^{1.52} 50	13.2	-8.1
10 ^{1.49} 60	1.0	+4.2	60	13.0	-7.9
5.2 70	1.4	+3.8	5.1 70	13.0	-7.9
80	2.0	+3.2	80	13.0	-7.9
90	4.0	+1.2	90	12.8	-7.7
1+00	6.3	-1.1	3+00	12.6	-7.5
10	8.7	-3.6	10	12.7	-7.6
20	9.9	-4.9	20	12.8	-7.7
30	10.5	-5.3	30	12.8	-7.7
40	12.0	-6.8	40	11.4	-6.3
50	12.2	-7.0	50	5.0	+0.1
60	12.4	-7.2	60	2.4	+2.7
70	12.5	-7.3	10 ^{1.5} 70	2.3	+2.8
80	12.7	-7.5			
90	12.8	-7.6			
2+00	13.2	-8.0			
10	13.5	-8.3			
20	13.3	-8.1			
30	13.4	-8.2			

P.X.			1-21-47			SOUND EAST 1-27-47			107+00-04+00 = R88+6758			(70)
DIST	STA	SOUND	DIST	STA	SOUND	DIST	STA	SOUND	DIST	STA	SOUND	
0+53	0+00	(5.0)	50	13.0	-8.0	20+00	6.1	-1.6	22+00	4.4	+0.1	
11:02 60	0.2	+4.8	60	13.0	-8.0	2:05	6.0	-1.5	2:08	4.3	+0.2	
70	0.9	+4.1	70	13.0	-8.0	(4.5)	5.6	-1.1	(4.5)	4.3	+0.2	
80	1.4	+3.6	80	13.0	-8.0		5.4	-0.9		4.3	+0.2	
90	2.5	+2.5	90	13.0	-8.0		5.3	-0.8		4.3	+0.2	
1+00	4.0	+1.0	3+00	12.7	-7.7	50	5.4	-0.9	50	4.4	+0.1	
10	5.4	-0.4	10	12.7	-7.7		5.4	-0.9		4.5	0.0	
20	7.5	-2.5	20	13.0	-8.0		5.5	-1.0		4.5	0.0	
30	10.1	-5.1	30	12.5	-7.5		5.5	-1.0		4.5	0.0	
40	12.0	-7.0	11:07 40	9.3	-4.3		5.4	-0.9		4.5	0.0	
50	13.0	-8.0	(5.0) 50	3.0	+2.0	21+00	5.4	-0.9	23+00	4.8	-0.3	
60	14.0	-9.0	60	2.4	+2.6	(4.5)	5.2	-0.7		5.1	-0.6	
70	14.1	-9.1	70			2:07	5.1	-0.6		5.0	-0.5	
80	14.3	-9.3	80				4.8	-0.3		5.2	-0.7	
11:03 90	14.1	-9.1					4.5	0.0		5.1	-0.6	
2+00	14.0	-9.0				50	4.5	0.0	50	4.8	-0.3	
10	13.5	-8.5					4.5	0.0	2:10	5.1	-0.6	
20	13.3	-8.3					4.4	+0.1	(4.5)	5.5	-1.0	
30	13.3	-8.3					4.4	+0.1		6.1	-1.6	
40	13.0	-8.0					4.4	+0.1		6.4	-1.9	

1-27-47 107+00 SOUND EAST				V* 108+00-0+00 = 88+67.58 SOUND EAST (11) 1-27-47			
DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND
24+00	6.0	26+00	3.1	20+00	6.4	22+00	4.8
	4.7		3.0	2:21	6.4		4.7
2:11	4.6		3.0	(4.4)	6.4		5.0
(4.5)	4.2	(4.5)	3.0		6.3		5.2
	4.3	2:14	3.1		6.0		5.2
50	4.4	50	3.8	50	5.8	50	5.3
	4.2		5.1		5.5		4.7
	4.3		8.0		5.3		4.7
	4.0	(4.5)	8.5		5.3	(4.3)	4.7
	3.4	2:15	8.5		5.2		4.7
25+00	3.4	27+00	7.1	21+00	5.0	23+00	4.7
	3.1	↑ E. EDGE OF BRIDGE			5.0	2:25	4.7
	3.0				5.0		4.6
	3.0				4.8		4.5
2:13	3.0				4.8		4.5
50	3.0			50	4.5	50	4.5
(4.5)	3.0			(4.4)	4.4		4.5
	3.0			2:23	4.3		4.5
	3.0				4.3		4.6
	3.3				4.5		5.0

108+00 - 1-27-47

DIST	SOUND	DIST	SOUND
24+00	5.0 -0.7	26+00	5.3 -1.0
2:26	5.0		5.5 -1.2
(4.3)	5.0		5.5 -1.2
	5.0 -0.7		5.0 -0.7
	4.7 -0.4	(4.3)	5.7 -1.4
50	4.7 -0.4	50	5.7 -1.0
	4.5 -0.2	2:30	5.7 -1.4
	4.5 -0.2		6.2 -1.9
	4.4 -0.1		5.2 -0.9
	4.5 -0.2	26+40	6.0 -1.7
25+00	4.6 -0.3	27+00	E.F. BRIDGE
	4.8 -0.5		
(4.3)	4.8 -0.5		
2:28	5.0 -0.7		
	5.1 -0.8		
50	5.0 -0.8		
	4.8 -0.5		
	5.0 -0.7		
	5.1 -0.8		
	5.3 -1.0		

110+00 - 1-27-47
R 88+67.58 SOUND EAST (12)

DIST	SOUND	DIST	SOUND
20+00	3.0 +1.3	21+95	0.0 +4.2
2:40	3.0		
	3.0		
(4.3)	3.0		
	3.0		
50	3.0	50	
	3.0		
	3.0		
	3.0		
	3.0 +1.3		
	2.9 +1.4	23+00	
	2.7 +1.6		
	2.6 +1.7		
	2.3 +2.0		
	2.1 +2.2		
50		50	
(4.2)	1.7 +2.5		
2:45	1.5 +2.7		
	0.9 +3.3		
	0.3 +3.9		

1-27-47 109+00 - 0+00 = R88+67.5
 DIST SOUND DIST SOUND SOUND EAST

DIST	SOUND	DIST	SOUND
20+00	4.8 -0.6	22+00	3.5 +0.7
	4.8 -0.6		3.5 +0.7
2:49	4.4 -0.2		3.4 +0.7
(4.2)	- -	(4.1)	3.4 +0.7
	4.0 +0.2	2:52	3.2 +0.9
50	3.5 +0.7	50	3.1 +1.0
	3.4 +0.8		3.0 +1.1
	3.3 +0.9		2.7 +1.4
	3.1 +1.1		2.5 +1.6
	3.2 +1.0		2.3 +1.8
21+00	3.1 +1.1	23+00	2.3 +1.8
2:50	3.1 +1.1		2.2 +1.9
(4.2)	3.0 +1.2		2.0 +2.1
	3.0 +1.2	(4.1)	1.9 +2.2
	3.0 +1.2	2:53	1.8 +2.3
50	3.1 +1.1	50	1.8 +2.3
	3.2 +1.0		1.9 +2.2
	3.4 +0.8		2.0 +2.1
	3.4 +0.8		2.0 +2.1
	3.5 +0.7		1.9 +2.2

109+00 - 1-27-47 SOUND EAST (13)

DIST	SOUND	DIST	SOUND
24+00	1.9 +2.2	26+00	0.7 +3.4
	1.9 +2.2	2:57	0.6 +3.5
	2.0 +2.1	(4.1)	0.4 +3.7
	2.0		0.0 +4.1
	2.0		
50	2.0		
	2.0		
	2.0		
	2.0		
	2.0	(4.1)	2.0 +2.1
	1.9 +2.2	2:55	1.9 +2.2
	1.7 +2.4		1.5 +2.6
	1.5 +2.6		1.4 +2.7
	1.4 +2.7		1.3 +2.8
	1.3 +2.8	50	1.1 +3.0
	1.1 +3.0		1.0 +3.1
	1.0 +3.1		0.8 +3.3
	0.8 +3.3		0.7 +3.4
	0.7 +3.4		0.7 +3.4

2-3-47
109+00 - 0+00 = R88+67⁵⁸ SOUND EAST

PX.	DIST	SOUND	DIST	SOUND
	0+00	2.8	+2.8	2+00 3.9
	9:40	2.8		3.9
		2.8		3.9
(5.6)		2.8		3.9
50		2.8	50	3.5 2.0
50		2.8	50	2.8 2.7
9:43		2.8	9:46	2.6 2.9
		2.8	(5.5)	2.6 2.9
		2.8		2.5 3.0
(5.5)		2.8		2.5
	1+00	2.8	2.7	2.5
		2.8	3+00	2.5
		2.8	9:48	2.5
		2.8		2.5
		2.8	(5.5)	2.4 3.1
		2.6	2.9	2.4
50		2.7	2.8	50 2.4
		3.4	2.1	2.4
		3.8	1.7	2.4
		3.8	1.7	2.4
		4.0	1.5	2.4

109+00 - 2-3-47 (14)

DIST	SOUND	DIST	SOUND
4+00	+2.5	3.0	6+00 +3.0
	+2.6	2.9	9:52 +3.0
	+3.4	2.1	(5.4) +3.0
	+3.0	2.5	+3.0
	2.7	2.8	+3.0
50	2.6	2.9	50 +2.9
	2.5	3.0	+2.9
(5.5)	+2.5		(5.4) +3.0
9:50	+2.5		9:53 +3.0
	+2.5		+3.0
5+00	+2.6	2.9	7+00 +3.0
	+2.7	2.8	+3.0
	+2.8	2.7	+2.9
	+2.8	2.7	+2.9
	+3.0	2.5	+2.8
50	+3.0	2.5	50 +2.7
	+2.9	2.6	+2.8
	+2.9	2.6	+2.7
	+2.9	2.6	+2.9
	+3.0	2.5	+3.0

109+00 2-3-47			109+00 2-3-47		
DIST	SOUND		DIST	SOUND	
8+00	3.1	+2.3	10+00	3.0	+2.3
9:55	3.5	+1.9	9:58	3.0	
(5.4)	3.7	+1.7	(5.3)	3.0	
	3.6	+1.8		3.0	
	3.5	+1.9		3.0	
50	3.4	+2.0	50	3.0	
	3.1	+2.3		3.0	
	2.8	+2.6		3.0	
(5.4)	2.7	+2.7		3.0	
9:56	2.7	+2.7		3.0	
9+00	2.8	+2.6	11+00	3.1	+2.2
	2.7	+2.7		3.0	+2.3
(5.4)	2.7	+2.7		3.0	+2.4
9:57	2.8	+2.6		3.1	+2.2
	2.7	+2.7		3.0	+2.3
50	2.8	+2.6	50	3.1	+2.2
	2.9	+2.5	(5.3)	3.1	+2.2
	2.9	+2.5	10:01	3.2	+2.1
	3.0	+2.4		3.2	+2.1
	3.0	+2.4		3.0	+2.3

109+00 2-3-47			109+00 2-3-47		
DIST	SOUND		DIST	SOUND	
12+00	3.2	+2.1	14+00	3.5	+1.7
10:02	3.3	+2.0		3.6	+1.6
(5.3)	3.3			3.6	
	3.3			3.6	
	3.3			3.5	+1.7
50	3.3		50	3.5	+1.7
	3.3			3.6	+1.6
	3.4	+1.9		3.5	+1.7
10:03	3.4		(5.2)	3.5	+1.7
(5.2)	3.4			3.6	+1.6
13+00	3.5	+1.7	15+00	3.6	
	3.5	+1.7	10:07	3.6	
	3.4	+1.8		3.6	
	3.4			3.6	
	3.4			3.5	+1.7
50	3.4		50	3.6	+1.6
	3.5	+1.7	(5.2)	3.6	
10:05	3.5			3.6	
	3.5			3.6	
	3.5			3.5	+1.7

109+00 - 2-3-47			112+00 - 0+00 = RADIUS LINE SOUND EAST		
DIST	SOUND		DIST	SOUND	
16+00	3.5	+1.7	18+00	6.0	-0.9
	3.5		10:12	5.8	-0.7
10:09	3.5		(5.1)	6.2	-1.1
(5.2)	3.5			6.5	-1.4
	3.5			6.6	-1.5
50	3.6	+1.6	50	6.9	-1.8
	3.7	+1.5		7.1	-2.0
	4.0	+1.2		7.5	-2.4
	4.5	+0.7		7.7	-2.6
	5.0	+0.2	10:13	8.0	-2.7
17+00	6.4	-1.2	19+00	8.0	-2.7
	6.8	-1.6	(5.1)	8.2	-3.1
	7.3	-2.1		8.0	-2.7
	8.0	-2.8		8.0	
10:11	8.8	-3.6		8.0	
50	9.9	-4.7	50	8.0	
(5.1)	8.8	-3.7	10:14	8.0	
	8.0	-2.9	(5.1)	7.8	-2.7
	6.8	-1.7		7.5	-2.4
	6.4	-1.3		7.5	-2.4
			20+00	6.0	-1.8

2-3-47			RADIUS LINE SOUND EAST		
DIST	SOUND		DIST	SOUND	
0+00	0.3	+6.3	2+00	4.5	+8.2
	0.0	+6.4		7.0	-2.3
	+0.1	+6.7		8.3	-3.6
	+0.2	+6.8		9.6	-5.2
	+0.2	+6.8		10.3	-5.6
50	+0.2	+6.8	50	11.5	-6.8
(6.6)	0.0	+6.6	10:35	12.0	-7.3
	0.2	+6.4	(4.7)	12.4	-7.7
	0.3	+6.3		12.8	-8.1
	0.8	+5.8			
1+00	1.0	+5.6	3+00	13.1	-8.4
10:32	0.0	+4.7		13.2	-8.6
(4.7)	0.3	+4.4		13.5	-8.8
	0.4	+4.3		13.5	-8.8
	0.5	+4.2		13.0	-8.3
50	0.5	4.2	50	12.6	-7.9
	0.7	+4.0		12.4	-7.7
	0.8	+3.9		12.4	-7.7
	1.6	+3.1		12.3	-7.6
	2.8	+1.9		12.0	-7.3

112+00 - 2-3-47

DIST	SOUND	DIST	SOUND
4+00	12.2 -7.5		
10:36	12.2 -7.5		
(4.7)	12.2 -7.5		
	12.3 -7.6		
	12.4 -7.7		
50	12.5 -7.8		
	12.1 -7.4		
	11.0 -6.3		
	3.4 +0.9		
	3.1 +1.6		
5+00	2.0 +2.7		
	2.0 +2.7		
	2.0 +2.7		

PX. 2-3-47
128+00 0+00 = SHORE B/L. (10)

DIST	SOUND	DIST	SOUND	DIST	SOUND
0+91	0.0 +4.3			13.2	-8.9
1+00	0.3 +4.0	3+00	12.8	-8.5	
10:58	0.4 +3.9		12.5	-8.2	
(4.3)	1.0 +3.3		12.0	-7.7	
	1.4 +2.9		12.0	-7.7	
	2.0 +2.3		12.0	-7.7	
50	2.5 +1.8	50	12.4	-8.1	
	3.1 +1.2	11:02	12.6	-8.3	
	3.8 +0.5	(4.3)	12.8	-8.5	
	7.8 -3.5		13.0	-8.7	
	8.0 -3.7		13.0	-8.7	
2+00	8.0 -3.7	4+00	12.5	-8.2	
	8.8 -4.5		12.3	-8.0	
(4.3)	12.0 -7.7		12.5	-8.2	
11:00	12.5 -8.2		12.7	-8.4	
	13.2 -8.9		13.0	-8.7	
50	13.5 -9.2	50	13.0	-8.7	
	13.7 -9.4		13.0	-8.7	
	13.5 -9.2		12.5	-8.2	
	13.5 -9.2		12.0	-7.7	

128+00-2-3-47

DIST	SOUND	DIST	SOUND
	12.0 -7.8		12.5 -8.2
5+00	12.0	7+00	13.0 -8.8
11:09	12.0	11:07	12.5 -8.3
	12.0	(4.2)	12.2 -8.0
	12.0		12.4 -8.2
	12.0		12.4 -8.2
50	12.0	50	12.8 -8.2
	12.1 -7.9		13.0 -8.2
(4.2)	12.4 -8.2		13.0 -8.2
	12.4		12.7 -8.2
	12.4	11:08	12.5 -8.2
6+00	12.2 -8.0	8+00	12.5
	12.1 -7.9	(4.2)	12.5
	12.0 -7.8		12.5
	12.4 -8.2		12.5
	12.0 -7.8		13.0 -8.2
50	11.8 -7.6	50	13.0 -8.2
	12.5 -8.3		12.0 -7.8
	12.0 -7.8		12.1 -7.8
	12.0 -7.8		8.0

128+00 2-3-47 (18)

DIST	SOUND	DIST	SOUND
	7.0 -2.8		
9+00	4.3 -0.1		
11:10	3.5 +0.7		
	3.4 +0.8		
	(4.2) 3.4 +0.8		
	3.4 +0.8		

129+00 2-3-47
DIST SOUND

11:33 3.2 + 0.5

STAMPER

9+00 3.1 + 0.6

SHERRY

STANLEY

(3.7) 3.1 + 0.6

3.1 + 0.6

3.1 + 0.6

3.0 + 0.7

50 3.0 + 0.7

11:34 3.0 + 0.7

(3.7)

STA. 130+00 = 0+00 ON N. LIMIT

OF SHORELINE FILL

2-5-47

CHECK SOUNDINGS ON PROJ #7

0+00 = 80+00 SOUND SOUTH 4 1/2 WITH
BRIDGE

DIST	SOUND	DIST	SOUND
0+00	11.5	17.2	17.2
9:48	21.0	17.2	
	17.0	17.4	
	10.3	2+00	17.3
	9.0	17.1	
50	9.5	18.3	
	11.3	19.1	
	15.0	17.5	
	16.3	50	17.0
		17.0	
1+00	16.0		
	16.0		
	16.0		
	16.5		
	17.3		
50	17.0		
	17.2		

2-5-47

80+00

21

DIST	SOUND	DIST	SOUND
0+00	13.0	2+00	17.5
10:00	20.5	10:02	17.1
	16.0		17.0
	11.0		19.8
	8.9		20.5
50	10.0	50	20.0
	11.5		19.0
(70)	12.7	(90)	17.6
	14.5		18.0
	16.2		19.8
1+00	16.0	3+00	19.8
	15.8	10:04	16.8
	16.0		19.0
	16.7		17.5
	17.1		16.5
50	17.1	50	16.0
	17.0		16.0
	17.0		17.0
	17.0		18.5
	17.0		18.2

DIST	SOUND	DIST	SOUND
4+00	17.6	6+00	17.4
10:05	17.0		17.0
	17.0		16.5
	—		17.0
	—		17.0
(4.9) 50	17.0	50	16.8
	16.8		16.0
	17.5	(6.8)	14.7
	17.5		13.5
	17.0	10:09	12.0
5+00	18.0	7+00	11.2
	18.1		10.1
	17.0		8.0
(4.9)	16.3		6.5
10:07	16.0	10:10	5.0
50	16.2	50	5.0
	16.5		
	17.0		
	16.5		
	18.0		

N. END OF BRIDGE
 STA 80+00²⁻⁵⁻⁴⁷ SOUND WEST

0+00	—
10	10.0
10:18	18.1
	21.0
	19.5
(8) 50	14.3
10:20	10.2
	10.4
	10.3
1+00	

BENT #1 + 11 THERE WITH
SOUND WEST

DIST	SOUND	DIST	SOUND
0+00	14.5		12.9
10:27	14.2	2+00	12.0
	13.5		10.4
	12.7		9.8
(4.7)	12.1		9.0
50	10.0		8.0
	10.0	50	5.6
	10.2		4.5
	10.6		
10:29	12.0		
1+00	13.0		
	14.1		
	15.0		
(6.6)	15.9		
	16.2		
50	16.2		
	15.4		
	15.0		
	14.0		

BENT #2 + 11 SOUND WEST 22
2-5-47

DIST	SOUND	DIST	SOUND
0+00	11.5	2+00	15.5
10:35	11.5		14.0
	10.5		12.0
	9.6		10.3
	9.2		9.5
50	8.3	50	8.5
(4.5)	9.0		8.5
	10.0		7.0
	10.9		
	11.8		
1+00	12.7	3+00	
	13.2		
	14.2		
	14.0		
10:37	15.1		
50	17.0	50	
	17.5		
(4.5)	18.0		
	18.2		
	17.2		

BENT #3 2-5-47 SOUND WEST
 PROJ. LINE

DIST	SOUND	DIST	SOUND
0+00	20.2	2+00	19.2
10:44	18.5		19.2
	16.0		19.0
	15.7		18.0
	15.2		16.0
50	14.5	50	14.5
(6.5)	14.5		14.1
	14.4		14.0
	14.4		14.0
	14.8	(6.4)	—
1+00	15.5	3+00	14.3
	16.3		14.4
	15.7		13.8
	16.0		13.4
	16.0	10:49	13.2
50	16.0	50	13.2
(6.4)	16.5		13.2
	17.7		13.2
10:47	18.4		14.0
	19.0		14.5

DIST	SOUND	DIST	SOUND
4+00	14.8	6+00	16.2
	14.3		17.0
	14.2		17.0
	14.7		17.4
	15.6		
50	15.0		
	15.5		
	15.7		
(6.4)	14.8		
	15.0		
5+00	15.0		
10:52	15.1		
	15.4		
	15.0		
	15.1		
50	15.0		
	15.2		
	15.2		
	15.5		
	16.3		

BENT #5 SOUND WEST

24

DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	18.5	2+00	16.0	4+00	14.5	6+00	14.0
10:58	19.0		17.4	11:02	14.4		14.3
	17.0		18.4		14.5		14.3
	17.1		19.2		14.7		
	16.8		19.5	(6.1)	14.3		
50	16.5	50	19.5	50	14.0		
(6.2)	16.0		19.0		14.0		
	16.0		18.5		14.4		
	16.1	11:02	17.6		14.4		
	16.0	(6.2)	17.0		14.4		
1+00	15.7	3+00	15.7	5+00	14.4		
11:00	16.0		14.8	11:06	14.4		
	16.0		14.7		14.0		
	15.4		14.2		14.4		
(6.2)	15.4		15.5	(6.1)	14.4		
50	15.2	50	16.0	50	14.1		
	15.2		15.4		14.0		
	15.2		14.8		13.5		
	15.4		14.3		13.6		
	15.0		14.5		13.6		

BENT #7
2-5-47

SOUND WEST

2-5-47

BENT #7

25

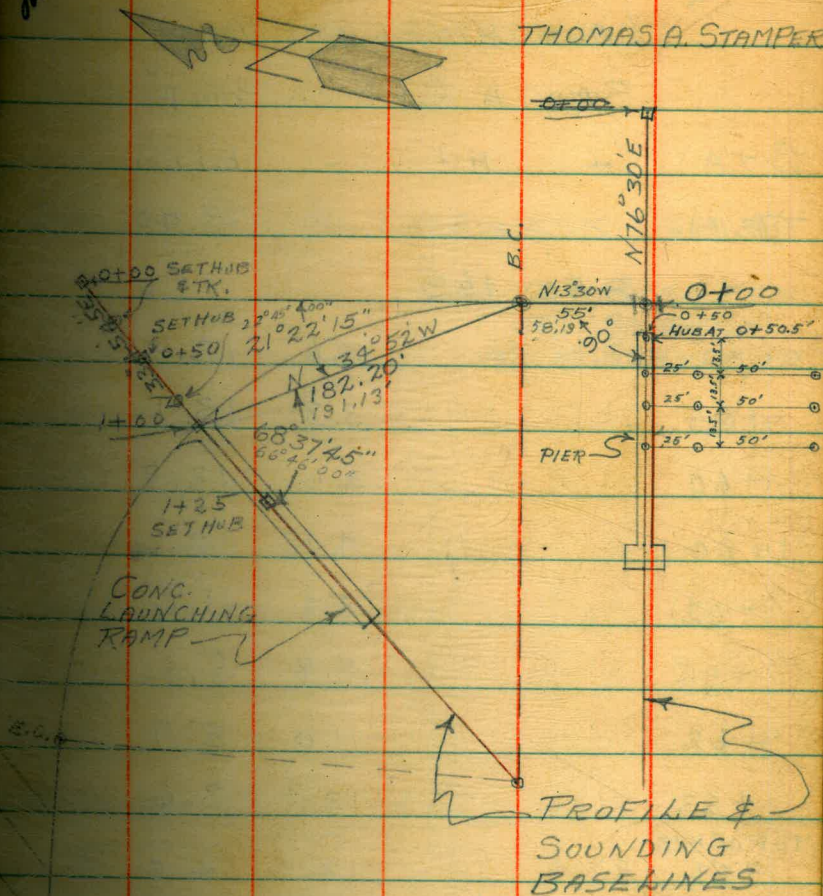
DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	18.0	2+00	15.5	4+00	16.0	6+00	13.0
11:12	17.5		15.8		15.5		13.8
	19.4		16.2		15.2		14.8
	18.0		16.2		15.0		
	17.0		16.2		15.0		
50	16.1	50	16.0	50	14.2		
(6.0)	16.4		16.5		13.5		
	16.1		17.3		13.3		
	15.8		18.0		13.2		
	15.3		18.8	11:18	13.2		
1+00	15.3	3+00	19.0	5+00	13.3		
	15.8	11:16	18.3	(5.0)	13.4		
	16.3	(6.0)	17.5		13.4		
	16.2		17.3		13.2		
11:14	16.0		17.0	(5.0)	13.3		
50	16.0	50	17.0	50	13.0		
	16.0		16.5		13.0		
(6.0)	16.0		16.5		13.0		
	16.0		16.8		13.0		
	15.2		16.5		13.0		

BASELINE LAYOUT FOR
 PROPOSED LAUNCHING
 RAMP & PIER AT SANTA
 CLARA DREDGED FILL

3-12-47

THOMAS A. STAMPER

Indexed



WEST

SHORELINE

PROFILE OF PROPOSED
LAUNCHING RAMP AT
SANTA CLARA POINT

STA	+	H.I.	-	ELEV.
T.B.M.				8.40
	8.50	16.9		
0+00			3.6	13.3
+25			3.8	13.1
+60			3.6	13.3
1+00			4.5	12.4
+02			5.3	11.6
+35			8.8	8.1
+62			11.0	5.9
+83			13.3	3.6
TOP OF HUB +86			12.1	4.8
T.B.M.			3.22	13.68

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Indexed

NOTE: SEE BASELINE SKETCH
(PG. 26)

STA 122+00 & SIDEWALK CHISEL

TOM STAMPER
AL SHERRY
NICK STANLEY

NOTE: SOUNDINGS ON (PG. 28)

T.P.

TOP OF 2"x2" 0+00 OF LAUNCHING RAMP

LAUNCHING RAMP

3-12-47

28

PROFILE SOUNDINGS

0+00 = 1+86 B/L. STA.

DIST	SOUND	DIST	SOUND
0+00	0.0	+3.3	1+60 13.1 -9.8
	1.3	+2.0	
(3.3)	2.1	+1.2	
	3.2	+0.1	
	4.5	-1.2	
50	5.9	-2.6	
	6.5	-3.2	
	9.2	-5.9	
	11.0	-7.7	
	11.4	-8.1	
1+00	12.0	-8.7	
	12.3	-9.0	
	12.0	-8.7	
	13.0	-9.7	
	13.3	-10.0	
50	13.2	-9.9	
	13.2	-9.9	

SANTA CLARA

(49)

PROFILE OF PROPOSED
PIER AT SANTA CHARA
DREDGED FILL

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NOTE: SEE BASELINE SKETCH

(Pg. 26)

STA + H.I. - ELEV.

T.B.M. 13.68

(SEE T.B.M. PG. 27)

2.90 16.58

0+00 4.4 12.2

+25 4.5 12.1

+30 4.0 12.6

+64 4.0 12.6

+96 4.6 12.0

H00 5.2 11.4

+21 6.7 9.9

+45 9.0 7.6

+68 11.2 5.4

+91 13.4 3.2

NOTE: SOUNDINGS ON PG. 30

+91
T.P. 11.3 5.3

TOP OF HUP

T.B.M. 3.66 12.92

TOP OF 2X2" HUB 0+00 OF PIER

T.B.M. 8.18 8.40 8.00

STA 122 CHISEL + IN W. SHORE S. WALK

3-12-47

PROPOSED PIER

PROFILE SOUNDINGS

Adjusted

0+00 = 1+91 B/L STA

DIST SOUND DIST SOUND

0+00	0.0	+3.4	13.1	-9.7
	1.0	+2.4	13.1	-9.7
(3.4)	2.1	+1.3	13.0	-9.6
	4.8	-1.4	2+00 13.0	-9.6
	8.2	-4.8		
50	9.8	-6.4		
	10.4	-7.0		
	11.0	-7.6		
	11.4	-8.0		
	11.5	-8.1		
1+00	11.4	-8.0		
	11.5	-8.1		
	12.0	-8.6		
	13.2	-9.8		
	13.3	-9.9		
50	13.2	-9.8		
	13.1	-9.7		

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STA 73+00.

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0+00 = CAUSEWAY BAK SOUND WEST

DIST	SOUND	DIST	SOUND
0+00	5.5 -2.0	13.3	-9.8
11:17	5.0 -1.5	13.3	-9.8
	6.1 -2.6	2+00 13.1	-9.6
	8.0 -4.5	13.0	-9.5
	7.0 -3.5	13.0	-9.5
50	6.8 -3.3	12.6	-9.1
	7.0 -3.5	12.6	-9.1
(3.5)	9.4 -5.9	50 12.5	-9.0
	10.0 -6.5	11:20 13.0	-9.5
	10.1 -6.6	13.0	-9.6
1+00	11.5 -8.0	(3.4) 13.0	-9.6
	12.5 -9.0	12.8	-9.4
	14.0 -10.5	3+00 12.8	-9.4
	14.0 -10.5	12.7	-9.3
	14.0 -10.5	12.5	-9.1
50	13.5 -10.0	12.8	-9.4
	13.5 -10.0	12.5	-9.1
	13.5 -10.0	50 12.2	-8.8

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73+00

DIST SOUND			DIST SOUND		
3+60	11.5	-8.1	50	13.6	-10.2
	11.3	-7.9		13.4	-10.0
11:21	11.4	-8.0		13.0	-9.6
	11.8	-8.4		12.5	-9.1
4+00	12.2	-8.8		12.7	-9.3
	12.8	-9.4	6+00	12.5	-9.1
	12.7	-9.3		12.8	-9.4
	13.2	-9.8		13.0	-9.6
(3.4)	14.0	-10.6		12.6	-9.2
50	14.0	-10.6		12.6	-9.2
	14.1	-10.7	50	13.1	-9.7
	13.5	-10.1		13.1	-9.7
	14.0	-10.6		13.2	-9.8
	13.7	-10.3		13.2	-9.8
5+00	13.2	-9.8		13.3	-9.9
	13.2	-9.8	7+00	13.2	-9.8
	13.0	-9.6	11:25	13.3	-10.0
	12.4	-9.0	(3.3)	14.0	-10.7
	12.8	-9.4		14.5	-11.2

73+00
DIST SOUND

DIST SOUND		
	13.8	-10.5
50	14.0	-10.7
	13.4	-10.1
	12.7	-9.4
	12.5	-9.2
	12.5	-9.2
8+00	12.5	-9.2
	12.4	-9.1
	12.7	-9.4
(3.3)	13.3	-10.0
	13.4	-10.1
50	14.1	-10.8
	13.4	-10.1
11:26	12.7	-9.4
	12.5	-9.2
	13.1	-9.8
9+00	13.0	-9.7
	13.0	-9.7
	13.0	-9.7
	13.0	-9.7

3-18-47
DIST SOUND

DIST SOUND		
	13.0	-9.7
50	13.0	-9.7
	12.7	-9.4
	12.8	-9.5
	12.5	-9.2
	12.0	-8.7
10+00	11.5	-8.2
	11.1	-7.8
	11.1	-7.8
(3.3)	11.0	-7.7
	11.4	-8.1
50	11.4	-8.1
	11.4	-8.1
	11.8	-8.5
(3.2)	12.0	-8.8
11:28	12.5	-9.3
11+00	12.4	-9.2
	12.4	-9.2
	12.8	-9.6
	13.1	-9.9

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73+00 3-18-47
 DIST SOUND DIST SOUND

11+40	13.5	-10.3	12.6	-9.4	
50	13.5	-10.3	50	13.0	-9.8
	13.2	-10.0	13.0	-9.8	
	13.3	-10.1	13.0	-9.8	
	13.1	-9.9	12.5	-9.3	
	13.0	-9.8	12.1	-8.9	
12+00	13.1	-9.9	14+00	11.7	-8.5
	13.0	-9.8	12.0	-8.8	
(3.2)	13.0	-9.8	12.1	-8.9	
	13.0	-9.8	(3.2)	12.0	-8.8
	13.5	-10.3	12.0	-8.8	
50	13.5	-10.3	50	11.0	-7.8
	13.0	-9.8	8.1	-4.9	
11:30	12.7	-9.5	8.3	-5.1	
	12.5	-9.3	8.4	-5.2	
	12.5	-9.3	11:30	8.0	-4.8
13+00	12.5	-9.3			
	12.4	-9.2	72-170 W		
	12.5	-9.3	71-320 W		
	12.5	-9.3			

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 STA 72+00 SOUND WEST

0+00 = 170' W. OF CAUSEWAY B/LK

DIST SOUND	DIST SOUND			
0+22	0.0 +2.3	2+00	11.5	-9.2
	0.5 +1.8		11.4	-9.1
1.00	5.0 -2.7		11.4	-9.1
50	6.0 -3.7		11.5	-9.2
	6.2 -3.9		12.2	-9.9
	6.4 -4.1	50	13.0	-10.7
(2.3)	7.5 -5.2		13.4	-11.1
	9.0 -6.7		13.0	-10.7
1+00	10.3 -8.0	(2.3)	13.0	-10.7
	10.4 -8.1		13.7	-11.4
	10.0 -7.7	3+00	13.1	-10.8
	11.4 -9.1		12.5	-10.2
	12.0 -9.7		13.2	-10.9
50	12.0 -9.7		13.2	-10.9
	11.8 -9.5	102	13.7	-11.4
	11.4 -9.1	50	13.5	-11.2
	11.6 -9.3		13.5	-11.2
	11.6 -9.3		13.0	-10.7

72+00 3-18-47

DIST	SOUND		DIST	SOUND	
3+80	12.3	10.0		11.7	9.4
	11.5	9.2	1:05	11.5	9.1
4+00	12.5	10.2		11.2	8.9
1:03	12.5	10.2	6+00	11.2	8.9
	12.2	9.9		11.3	9.0
	12.4	10.1		11.7	9.4
	12.3	10.0		11.7	9.4
50	12.1	9.8		12.0	9.7
	12.2	9.9	50	11.8	9.5
(2.3)	12.0	9.7		12.0	9.7
	12.0	9.7	(2.3)	12.0	9.7
	12.1	9.8		12.0	9.7
5+00	12.1	9.8		12.0	9.7
	12.2	9.9	7+00	12.0	9.7
	12.5	10.2		12.3	10.0
	12.3	10.0		12.0	9.7
	12.1	9.8		11.6	9.3
50	12.0	9.7		11.6	9.3
	11.8	9.5	50	11.6	9.3

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72+00 3-18-47

DIST	SOUND		DIST	SOUND	
1:07	11.5	9.3	50	11.0	8.8
	11.4	9.2	1:10	11.0	8.8
	11.2	9.0		11.0	8.8
	11.5	9.3		10.8	8.6
8+00	11.5	9.3		11.2	9.0
	11.3	9.1	10+00	11.5	9.3
(2.2)	11.0	8.8		11.1	8.9
	10.8	8.6		11.0	8.8
	10.8	8.6	(2.2)	11.0	8.8
50	11.5	9.3		11.0	8.8
	11.3	9.1	50	11.1	8.9
	11.3	9.1		11.0	8.8
	11.0	8.8		11.3	9.1
	11.0	8.8	1:12	11.7	9.5
9+00	11.7	9.5		11.7	9.5
	12.0	9.8	11+00	11.7	9.2
	12.4	10.2		11.4	9.2
	12.0	9.8		12.0	9.8
	11.5	9.3		12.3	10.1

3-18-47

72+00

DIST	SOUND	DIST	SOUND
11+40	12.3	10.1	11.6
50	12.0	9.8	11.4
	12.0	9.8	12.0
11:13	12.0	9.8	50
	12.2	10.0	12.0
	12.5	10.3	9.8
12+00	12.5	10.3	12.0
	12.6	10.4	9.8
	13.1	10.9	12.5
(2.2)	13.0	10.8	10.3
	12.3	10.1	12.5
50	12.0	9.8	10.3
	12.4	10.2	10.8
	12.0	9.8	8.6
	11.8	9.6	50
	11.5	9.3	10.0
13+00	11.5	9.3	8.0
	11.4	9.2	5.8
	11.2	9.0	

3-18-47

STA 71+00 SOUND WEST

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0+00 = 32.0' W. OF CAUSEWAY B/W

DIST	SOUND	DIST	SOUND
0+00	—	10.1	8.0
	—	11.5	9.4
	—	2+00	11.2
39	0.0	+2.1	11.30
40	—		11.2
50	6.0	-3.9	12.0
1:27	8.0	-6.9	12.1
	9.5	7.4	10.0
(2.1)	10.0	7.9	50
	10.1	8.0	13.5
1+00	10.6	8.5	14.5
	10.8	8.7	12.4
	10.5	8.4	15.0
	10.0	7.9	(2.1)
	12.5	10.4	14.5
50	12.0	9.9	15.4
	11.0	8.9	15.8
	10.1	8.0	3+00
			16.5
			16.1
			14.0
			16.0
			13.9
			15.2
			13.1
			50
			13.5
			11.4

7/400		3-18-47	
DIST	SOUND	DIST	SOUND
3+60	13.7 11.7	9.6 7.6	
	14.3 12.3	1:35 9.5 7.5	
1:33	13.8 11.8	9.5 7.5	
	13.5 11.5	10.5 8.5	
4+00	14.5 12.5	6+00 10.5 8.5	
	13.8 11.5	10.6 8.6	
	12.0 10.0	11.0 9.0	
(2.0)	11.5 9.5	10.1 8.1	
	11.3 9.3	10.0 8.0	
50	11.3 9.3	50 10.2 8.2	
	12.4 10.4	10.2 8.2	
	12.8 10.8	12.0 8.0	
	12.0 10.0	(2.0) 12.1 8.1	
	11.7 9.7	12.1 8.1	
5+00	11.1 9.1	7+00 12.0 8.0	
	11.0 9.0	1:38 12.0 8.0	
	10.5 8.5	11.6 9.6	
	10.3 8.3	11.5 9.5	
	10.0 8.0	11.4 9.4	
50	9.5 7.5	50 11.4 9.4	

7/400-3-18-47			
DIST	SOUND	DIST	SOUND
11.6 9.6	10.7 8.7		
11.6 9.6	1:42 11.0 9.0		
11.6 9.6	11.0 9.0		
12.0 10.0	11.1 9.1		
8+00 12.3 10.3	10+00 11.0 9.0		
12.5 10.5	11.0 9.0		
12.0 10.0	10.8 8.8		
12.2 9.2	10.8 8.8		
11.0 9.0	(2.0) 11.0 9.0		
50 11.0 9.0	50 11.2 9.2		
10.5 8.5	10.8 8.8		
(2.0) 10.6 8.6	12.0 10.0		
10.5 8.5	12.2 10.2		
10.2 8.2	12.3 10.3		
9+00 11.1 9.1	11+00 12.5 10.5		
10.5 8.5	14.0 12.0		
10.2 8.2	13.0 11.0		
10.2 8.2	145 12.1 10.1		
10.7 8.7	12.5 10.5		
50 10.7 8.7	50 12.0 10.0		

71+00 3-18-47				71+00 3-18-47				3-18-47			
DIST SOUND		DIST SOUND		DIST SOUND		DIST SOUND		DIST SOUND		DIST SOUND	
						10.5	8.4			10.1	8.2
11+60	12.0	10.0	50	12.5	10.6	50	11.0	9.1	50	10.1	8.2
	11.7	9.7		11.0	9.1		12.0	10.1		10.1	8.2
	12.0	10.0		10.1	8.2		13.1	11.2		10.3	8.4
	12.0	10.0		10.5	8.6		10.8	8.9	(1.9)	10.1	8.2
12+00	12.0	10.0		10.8	8.9		11.3	9.4		10.0	8.1
1:46	11.6	9.6	14+00	12.5	10.6	16+00	11.0	9.1	18+00	9.4	9.9
	12.0	10.0		12.3	10.4		11.0	9.1		9.5	8.6
	12.5	10.5		12.5	10.6		11.7	9.8		9.0	7.1
(2.0)	12.2	10.2		11.5	9.6	(1.9)	11.7	9.8	1:53	8.8	6.9
50	12.1	10.1		11.2	9.2		12.0	10.1			
	12.0	10.0	50	10.0	8.1	50	11.0	9.1			
	12.0	10.0		10.2	8.3		11.0	9.1			
	12.2	10.2		10.1	8.2		10.1	9.1			
	12.2	10.2		10.4	8.5	1:52	10.5	8.6			
13+00	12.0	10.0	1:50	10.7	8.8		10.7	8.8			
	12.0	10.0	15+00	10.4	8.5	17+00	10.2	8.3			
	12.0	10.0	(1.9)	10.4	8.5		10.1	8.2			
	12.5	10.5		10.8	8.9		10.1	8.2			
	12.8	10.8		10.8	8.9		10.1	8.2			

3-18-47

74+00 SOUND EAST

0+00 = RANGE 105+00

DIST SOUND DIST SOUND

0+00 — 10.6 8.9

— 10.4 8.7

— 2+00 10.0 8.3

(1.7) — 9.5 7.8

— 2:57 9.2 7.5

50 0.0 +1.7 9.5 7.8

2:54 6.5 -4.8 10.0 8.3

5.1 3.4 50 9.7 8.0

8.0 6.3 10.4 8.7

6.5 4.8 10.4 8.7

1+00 9.4 7.7 (1.7) 10.4 8.7

12.0 10.3 10.4 8.7

11.4 9.7 3+00 10.5 8.8

12.0 10.3 10.4 8.7

11.5 9.8 10.4 8.7

50 11.4 9.7 10.4 8.7

10.5 8.8 10.5 8.8

10.4 8.7 50 10.5 8.8

74+00

DIST SOUND DIST SOUND

10.5 8.8 10.8 9.1

10.5 8.8 10.3 8.6

10.5 8.8 10.3 8.6

10.5 8.8 10.4 8.7

4+00 10.7 9.0 6+00 10.5 8.8

10.7 9.0 10.0 8.3

3:00 10.7 9.0 10.4 8.7

10.8 9.1 10.8 9.1

11.0 9.3 10.8 9.1

50 11.5 9.8 50 12.2 10.5

12.0 10.3 3:03 12.0 10.3

(1.7) 12.1 10.4 11.4 9.7

12.0 10.3 (1.7) 11.2 9.5

11.8 10.1 10.5 8.8

5+00 11.7 10.0 7+00 10.4 8.7

12.0 10.3 10.5 8.8

11.5 9.8 10.7 9.0

11.3 9.4 10.8 9.1

11.5 9.8 10.6 8.9

50 11.2 9.5 50 10.4 8.7

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3-18-47 74+00 SOUND EAST
DIST SOUND

7460	10.7	9.0		12.2	10.5
	10.7	9.0		12.2	10.5
	10.4	8.7	3:08	12.5	10.8
3:05	10.6	8.9		12.0	10.3
8+00	11.0	9.3	10+00	11.4	9.7
	10.8	9.1		11.7	10.6
	10.7	9.0		12.0	10.3
(1.7)	10.5	8.8		11.7	10.0
	10.4	8.7		11.3	9.6
50	10.5	8.8	50	12.0	10.3
	11.0	9.3		12.3	10.6
	11.4	9.7	(1.7)	12.0	10.3
	11.7	10.0		12.0	10.3
	11.6	9.9		11.6	9.9
9+00	11.5	9.8	11+00	11.5	9.8
	11.8	10.1	3:10	11.5	9.8
	11.8	10.1		10.1	8.4
	11.4	9.7		10.0	8.3
	12.0	10.3		10.0	8.3
50	12.2	10.5	50	10.0	8.3

74+00 3-18-47
DIST SOUND DIST SOUND

10.4	8.7		11.5	9.8	
11.1	9.4		12.4	10.7	
11.1	9.4		12.5	10.8	
12.0	10.3		12.7	11.0	
12+00	10.6	8.9	14+00	12.0	10.3
	12.0	10.3		11.1	9.4
	11.5	9.8		11.0	9.3
(1.7)	11.8	10.1	(1.7)	11.0	9.3
	11.3	9.6		11.4	9.7
50	11.0	9.3	50	12.0	10.3
	11.7	10.0	3:15	11.7	10.0
3:12	12.0	10.3		12.0	10.3
	12.0	10.3		11.7	10.0
	11.0	9.3		12.1	10.4
13+00	10.1	8.4	15+00	12.5	10.8
	10.0	8.3		14.0	12.3
	10.5	8.8		14.8	13.1
	11.0	9.3			
	10.8	9.1			
50	11.0	9.3			

3-21-47
STA 75+00 - SOUND EAST

0+00 = R 105+00					
DIST	SOUND	DIST	SOUND	DIST	SOUND
0+00	8.1	-2.0	9:15	15.1	9.0
9:13	8.3	2.2		15.1	9.0
	8.0	1.9	2+00	15.1	9.0
	8.1	2.0		15.3	9.2
(6.1)	8.1	2.0	(6.1)	15.3	9.2
50	8.2	2.1		15.5	9.1
	8.3	2.2		15.5	9.4
	9.0	2.9	50	15.4	9.3
	13.3	7.2		15.7	9.2
	15.1	9.0		15.6	9.5
1+00	15.7	9.6		15.7	9.6
	15.2	9.1		15.4	9.3
	15.6	9.5	3+00	15.5	9.4
	15.4	9.3		15.5	9.4
	15.4	9.3		16.1	10.0
50	15.4	9.3		16.0	9.9
	15.0	8.9		15.8	9.7
	14.6	8.5	50	15.8	9.7

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75+00

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DIST SOUND		DIST SOUND	
15.5	9.9	15.5	9.4
16.0	9.9	15.4	9.3
16.0	9.9	9:20	15.4
16.0	9.9		16.0
16.7	10.6	6+00	16.0
16.5	10.4		15.8
16.5	10.4	9:18	15.6
17.4	11.3		15.6
17.5	11.4	(6.1)	15.8
17.0	10.9	50	16.2
17.0	10.9		16.2
16.3	10.2		16.0
16.0	9.9		16.0
16.0	9.9		15.5
16.0	9.9	5+00	16.0
15.8	9.7	7+00	15.1
15.3	9.2		14.5
15.1	9.0		14.5
15.4	9.3		15.4
15.8	9.7		16.4
15.8	9.7	50	16.4

75+00		3-21-47			
DIST	SOUND	DIST	SOUND	DIST	SOUND
7+60	17.0 10.9		16.4 10.3		
	16.8 10.7		16.4 10.3		
	16.5 10.4	9:25	16.6 10.5	9:28	
	16.2 10.1		16.4 10.3		
8+00	15.5 9.4	10+00	16.8 10.7	12+00	15.0 8.9
	14.6 8.5		16.8 10.7		
9:23	14.0 7.9		16.7 10.1	(6.1)	14.7 8.6
(6.1)	14.0 7.9	(6.1)	17.0 10.9		14.4 8.3
	14.1 8.0		17.3 11.2		14.5 8.4
50	14.5 8.4	50	17.3 11.2	50	15.0 8.9
	15.0 8.9		17.0 10.9		15.2 9.1
	16.4 10.3		17.0 10.9		15.0 8.9
	15.8 9.7		16.8 10.7	(6.1)	15.5 9.4
	15.7 9.6		16.2 10.1	9:30	15.0 8.9
9+00	15.5 9.4	11+00	15.8 9.7	13+00	14.8 8.7
	15.5 9.4	9:27	15.6 9.5		15.1 9.0
	15.6 9.5	(6.1)	16.0 9.9		15.1 9.0
	15.4 9.3		16.4 10.3		15.1 9.0
	15.5 9.4		15.8 9.7		15.1 9.0
50	15.8 9.7	50	15.5 9.4	50	15.2 9.1

75+00		3-21-47		SOUND EAST		40
DIST	SOUND	DIST	SOUND	DIST	SOUND	
	15.5 9.4		15.2 9.1			
	15.0 8.9		15.2 9.1			
	15.0 8.9		15.5 9.4			
	15.0 8.9		15.7 9.6			
	14.7 8.6		15.5 9.4	14+00	15.7 9.4	
	14.7 8.6	(6.1)	15.2 9.1			
	14.4 8.3	9:32	15.1 9.0			
	14.5 8.4		14.8 8.7			
	15.0 8.9	50	14.5 8.4			
	15.2 9.1		14.2 8.1			
	15.0 8.9		14.7 8.6			
	15.5 9.4		15.4 9.3			
	15.0 8.9		16.0 9.9			
	14.8 8.7	15+00	15.8 9.7			
	15.1 9.0					
	15.1 9.0					
	15.1 9.0					
	15.2 9.1	50		50		

3-21-47
STA 76+00 SOUND EAST

0+00 = RANGE 105+00			
DIST	SOUND	DIST	SOUND
0+00	4.9 +1.7	15.2	9.1
	4.4 +1.7	15.2	9.1
	4.4 +1.7	2+00 15.0	8.9
(6.1)	4.4 +1.7	9.49 15.1	9.0
9.42	4.4 +1.7	15.1	9.0
50	4.4 +1.7	(6.1) 15.0	8.9
	4.4 +1.7	15.2	9.1
	6.0 +0.1	50 15.2	9.1
	10.0 -3.9	15.3	9.2
	15.8 - 9.7	15.2	9.1
1+00	15.1 9.0	15.0	8.9
	15.4 9.3	15.0	8.9
	17.5 11.4	3+00 15.3	9.2
	17.6 11.5	15.7	9.6
	16.8 10.7	15.4	9.3
50	16.2 10.1	15.8	9.7
	15.5 9.4	15.8	9.7
	15.4 9.3	50 15.5	9.4

76+00 3-21-47
SOUND DIST SOUND

DIST	SOUND	DIST	SOUND
16.0	8.0	16.0	10.0
16.0	9.9	16.0	10.0
16.0		16.1	10.1
16.0		16.6	10.6
16.0		6+00 16.6	10.6
16.0		16.2	10.2
16.2	10.1	9.50 16.0	10.0
16.2	10.1	15.8	9.8
(6.1) 16.1	10.0	(6.0) 15.6	9.6
50 15.8	9.7	50 15.5	9.5
15.4	9.3	15.5	9.5
15.4	9.3	15.7	9.7
15.5	9.4	15.5	9.5
15.5	9.4	15.0	9.0
5+00 16.0	10.0	7+00 15.3	9.3
16.0	10.0	15.7	9.7
16.4	10.4	16.0	10.0
(6.0) 16.4	10.4	16.0	
9.49 16.1	10.0	16.0	
50 16.1	10.1	50 16.0	

76+00 3-21-47

DIST	SOUND	DIST	SOUND
7+60	16.0 10.0	16.5 10.3	9.58
	15.5 9.5	16.3 10.3	
9:52	15.3 9.3	15.5 10.5	
	15.5 9.5	15.1 10.1	
8+00	15.5	10+00 15.3 10.3	12+00
	15.5	15.4 10.4	
(6.0)	15.4 9.4	15.4 10.4	
	15.4 9.4	15.6 10.6	
	15.5 9.5	(6.0) 15.6 10.6	
50	15.1 9.1	50 16.4 10.7	
	15.0 9.0	16.4 10.4	
	15.3 9.3	16.4 10.4	
(6.0)	15.5 9.5	16.5 10.5	
9:54	15.4 9.4	9:57 16.3 10.3	
9+00	15.4 9.4	11+00 16.3	
	15.2 9.2	16.3	
	15.0 9.0	16.3	
	15.5 9.5	16.3	
	15.8 9.8	16.0 10.0	
50	16.3 10.3	50 15.8 9.8	

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76+00

DIST	SOUND	DIST	SOUND
9:58	16.2 10.2	17.0 11.0	
	16.0 10.0	16.2 10.2	
	16.5 10.5	15.7 9.7	
	15.7 9.7	15.1 9.1	
12+00	14.7 8.7	14+00 15.0 9.0	
	13.7 7.7	10:00 15.0 9.0	
	13.7 7.7	15.0 9.0	
(6.0)	14.5 8.5	15.3 9.3	
	15.1 9.1	(6.0) 16.7 10.7	
50	15.1 9.1	50 17.0 11.0	
	15.1 9.1	16.0 10.0	
	15.4 9.4	14.5 8.5	
	15.4 9.4	15.0 9.0	
	15.2 9.2	10:01 15.0 9.0	
13+00	15.3 9.3	15+00	
	16.4 10.4		
	17.0 11.0		
	17.0 11.0		
	17.0 11.0		
50	17.1 11.1		

3-21-47

STA 77+00 SOUND WEST

DIST

3-21-47
77+00

DIST SOUND

0+00 = CAUSEWAY BASELINE

DIST SOUND DIST SOUND

0+00 16.5 10.7 14.7 8.9

16.4 10.6 14.8 9.0

10:17 15.0 9.2 2+00 15.0 9.2

17.0 11.2 10:20 14.7 8.9

(5.8) 17.0 11.2 (5.8) 14.7 8.9

50 16.5 10.7 15.2 9.4

16.3 10.5 15.1 9.3

15.8 10.0 50 14.8 9.0

15.0 9.2 15.0 9.2

15.3 9.5 15.1 9.3

1+00 15.4 9.4 15.7 9.2

15.4 9.6 16.1 10.3

16.0 10.2 3+00 16.6 10.3

(5.8) 16.0 10.2 17.0 11.2

10:19 15.8 10.0 17.0 9.2

50 15.5 9.7 17.0 (5.7)

15.5 9.7 17.0

15.4 9.4 50 16.5 10.7

10:23

16.5 10.8

16.3 10.6

3+00 15.8 10.1

(5.7) 15.2 9.5

15.0 9.3

14.7 9.0 (5.7)

14.5 8.8

50 14.2 8.5 50

14.0 8.3

13.0 7.3

12.7 7.0

12.5 6.8 10:28

5+00 12.5 7+00

12.5 13.4

9:25 12.5 13.3

(5.7) 12.5 13.3

12.5 13.5

50 12.5 50 13.5

16.5 10.8 12.2 6.5

16.6 10.9 12.0 6.3

16.5 10.8 12.0 6.3

16.3 10.6 12.5 4.8

15.8 10.1 6+00 13.5 7.8

(5.7) 15.2 9.5 12.7 7.0

15.0 9.3 13.8 8.1

14.7 9.0 (5.7) 13.2 7.5

14.5 8.8 13.2

50 14.2 8.5 50 13.2

14.0 8.3 13.2

13.0 7.3 13.2

12.7 7.0 13.2

12.5 6.8 10:28 12.5 6.8

5+00 12.5 7+00 12.7 7.0

12.5 13.4 7.7

9:25 12.5 13.3 7.6

(5.7) 12.5 13.3 7.6

12.5 13.5 7.8

50 12.5 50 13.5 7.8

77+00 3-21-47

DIST	SOUND	DIST	SOUND
7+60	13.6 7.9	16.0	10.4
	13.2 7.5	15.8	10.3
	13.5 7.8	10:33 16.2	10.6
10:30	14.0 8.3	16.0	10.4
8+00	14.2 8.5	10+00 16.1	10.5
	14.4 8.7	16.4	10.8
(5.7)	14.4 8.7	(5.6) 16.4	10.8
	14.7 9.0	15.7	10.1
	14.8 9.1	15.0	9.4
50	15.0 9.3	50 14.8	9.2
	15.1 9.4	14.8	9.2
	15.5 9.8	15.0	9.4
	16.0 10.3	15.0	9.4
	15.0 9.3	15.3	9.7
9+00	14.0 8.3	11+00 15.3	9.7
	14.5 8.8	10:35 15.6	10.8
	15.3 9.6	(5.6) 16.0	10.4
	15.5 9.8	16.0	10.4
	16.0 10.3	15.7	10.1
50	16.4 10.7	50 15.0	9.4

77+00 - 3-27-47

DIST	SOUND	DIST	SOUND	44
15.5	10.0	12.5	7.0	
15.2	9.7	12.4	6.9	
15.0	9.5	9.6	4.1	
15.0	9.5	7.0	1.5	
12+00 15.1	9.6	14+00 4.0	+ 1.5	
10:37 14.8	9.3	2.5	+ 3.0	
(5.5) 15.5	10.0	2.5		
15.5	10.0	(5.5) 2.5		
16.0	10.5	10:41 2.5		
50 17.0	11.5	50 2.6	2.9	
17.0				
17.0				
15.5	10.0			
15.5	10.0			
13+00 14.5	9.0			
12.5	7.0			
10:39 11.5	6.0			
(5.5) 11.5	6.0			
12.5	7.0			
50 13.0	7.5			

3-21-47

SOUNDINGS OF ROCK SHOAL

PX AREA MISSION BAY W. SHORE

0+00 = W. SHORE BASELINE

STA 93+00

DIST SOUND DIST SOUND

1+39	0.0	+2.2	4.4	-2.2	
50	0.8	+1.4	4.4	-2.2	
	1.5	+0.7	4.4	-2.2	
(2.2)	2.1	+0.1	4.4	-2.2	
	2.8	-0.6	50	4.4	-2.2
	3.2	-1.0	4.3	-2.1	
2+00	3.2	-1.0	4.3	-2.1	
	3.4	-1.2	4.1	-1.9	
	3.5	-1.3	4.0	-1.8	
	3.4	-1.2	4+00	4.1	-1.9
	3.5	-1.3	4.3	-2.3	
50	3.5	-1.3	4.4	-2.2	
	3.6	-1.4	4.4	-2.2	
	4.0	-1.8	4.4	-2.2	
	4.1	-1.9	50	4.4	-2.2
	4.2	-2.0	4.6	-2.4	
3+00	4.3	-2.1	5.0	-2.8	

PX 93+00 3-21-47 45

DIST SOUND

DIST SOUND

5.1	-2.9	9.6	-7.5		
5.1	-2.9	9.1	-7.0		
5+00	5.7	-3.5	7+00	8.8	-6.7
	6.0	-3.8	8.7	-6.6	
	5.3	-3.1	8.7	-6.6	
	7.2	-5.0	8.6	-6.5	
	9.3	-7.1	9.0	-6.9	
50	10.1	-7.9	50	9.5	-7.4
	10.2	-8.0	9.5	-7.4	
	10.7	-8.5	9.4	-7.3	
(2.2)	10.9	-8.7	9.1	-7.0	
	10.9	-8.7	(2.1)	9.2	-7.1
6+00	11.0	-8.8	8+00	9.4	-7.3
	11.0	-8.8	9.5	-7.4	
	11.4	-9.2	9.4	-7.3	
	11.5	-9.3	9.5	-7.4	
	12.0	-9.8	9.5	-7.4	
50	12.3	-10.1	50	9.8	-7.7
	12.5	-10.3	9.9	-7.8	
	12.0	-9.8	9.9	-7.8	

93+00 3-21-47
DIST SOUND

880 9.8 -7.7

9.9 -7.8

9+00 10.0 -7.9

9.8 -7.7

(2.1) 9.2 -7.1

8.0 -5.9

5.5 -3.4

PX 3-21-47 46
STA 92+00 SOUND EAST

0+00 = W. SHORE BASELINE

DIST SOUND DIST SOUND

1+40 0.0 +2.1 5.0 -2.9

0.5 +1.6 5.0 -2.9

1.6 +0.5 4.8 -2.7

3.3 -1.4 5.0 4.6 -2.5

(2.1) 4.0 -2.9 4.5 -2.4

4.5 -2.4 4.4 -2.3

2+00 4.8 -2.7 4.4 -2.3

5.2 -3.1 4.4 -2.3

5.3 -3.2 4+00 4.5 -2.4

5.1 -3.0 4.8 -2.7

5.1 -3.0 5.0 -2.9

5.0 5.1 -3.0 5.1 -3.0

5.1 5.4 -3.3

5.1 5.0 -3.9

5.1 7.4 -5.3

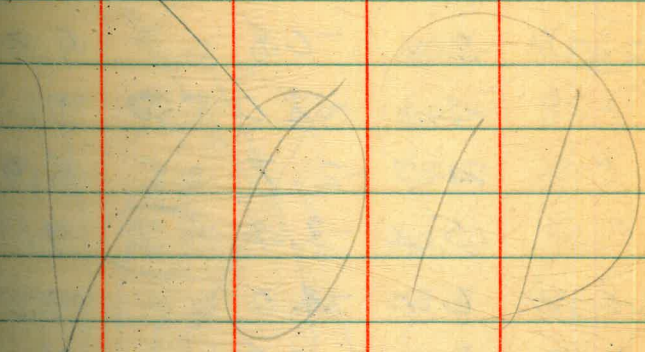
5.1 8.0 -5.9

3+00 5.1 -3.0 8.4 -6.3

5.0 -2.9 9.0 -6.9

PA 3-21-47 92+00 92+00 3-21-47

DIST SOUND		DIST SOUND		DIST SOUND	
5+00	9.3 -7.2	7+00	8.8 6.7	9+00	10.0 8.0
	9.6 -7.5		8.7 6.6	10.0	8.0
	9.1 -7.0		8.7 6.6	9.8	7.8
(2.1)	8.7 -6.6		8.5 6.4	(2.0)	9.0 7.0
	8.5 -6.4		8.4 6.3		
50	8.3 -6.2	50	10.5 8.4	50	
	8.1 -6.0		10.7 8.6		
	8.3 -6.2		10.7 8.6		
	8.3 -6.2	(2.1)	10.2 8.1		
	8.1 -6.0		10.0 7.9		
6+00	7.8 -5.7	8+00	9.9 7.8		
	7.8 5.7		9.9 7.8		
	8.2 6.1		9.9 7.8		
	9.7 7.6		9.6 7.5		
	10.0 7.9		10.0 8.0		
50	9.7 7.6	50	11.1 9.0		
	9.0 6.9		11.2 9.1		
	9.0 6.9		11.0 8.9		
	9.0 6.9		10.4 8.3		
	8.8 6.7		10.1 8.0		



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STA 91+00 SOUND EAST

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DIST SOUND DIST SOUND

0+00 = W SHORE B/L		DIST SOUND		5+00		7+00		10+00		8+00	
DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND	DIST	SOUND
1+42	0.0 +2.0		8.3 6.5		9.0 7.0		9.2 7.2		9.0 7.0		7.0
50	1.0 +1.0		9.2 7.2		9.5 7.5		10.5 8.5				
(2.0)	2.8 -0.8		9.3 7.3	(2.0)	10.0 8.0		10.6 8.6				
	4.0 -2.0	50	9.1 7.1	50	9.7 9.7	50	10.5 8.5				
	4.7 -2.7		8.9 6.9		9.4 7.4		10.3 8.3				
	5.4 -3.4	(2.0)	9.1 7.1		9.2 7.2		10.0 8.0				
2+00	6.0 -4.0		9.0 7.0		9.0 7.0		9.8 7.8				
	6.3 -4.3		8.9 6.9		9.0 7.0		9.8 7.8				
	6.4 -4.4	4+00	8.5 6.5	6+00	9.0 7.0	8+00	9.8 7.8				
	6.5 -4.5		9.0 7.0		9.2 7.2		9.8 7.8				
	6.6 -4.6		9.5 7.5		9.5 7.5	(2.0)	9.7 7.7				
50	6.8 -4.6		10.0 8.0		9.5 7.5		9.7 7.7				
	6.9 -4.9		9.8 7.8		9.4 7.4		9.1 7.1				
	7.1 -5.1	50	9.6 7.6	50	9.3 7.3	50	9.3 7.3				
	7.7 -5.7		9.5 7.5		9.0 7.0		9.0 7.0				
	7.7 -5.7		9.3 7.3		9.0 7.0		9.0 7.0				
3+00	7.4 -5.4		9.1 7.1		9.1 7.1		9.3 7.3				
	7.6 -5.6		9.0 7.0		9.0 7.0		9.5 7.5				

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91+00

DIST SOUND

9+00 9.5 7.5

8.5 7.5

2.0 7.2 7.2

9.0 7.0

7.5 5.5

50 6.1 4.1

2.0 1.0

80 = 470' WEST

79 = 370 "

3-24-47

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STA 81+00 SOUND WEST ^{PL}

0+00 = 440' W OF C.S.WAY B/L.

DIST SOUND DIST SOUND

0+00 12.0 9.1

13.0 10.1

2+00 12.5 9.6

2:35 12.5 9.6

12.4 9.5

50 0.4 +2.5 12.4 9.5

2:31 0.5 +2.4 2.9 12.3 9.42.9 4.1 - 1.2 50 13.0 10.1

9.4 - 6.5 12.8 9.9

11.6 8.7 12.4 9.5

1+00 12.5 9.6 12.5 9.6

12.0 9.1 12.4 9.5

12.4 9.5 3+00 12.0 9.1

2.9 12.1 9.2 12.0 9.1

2:34 12.1 9.2 12.4 9.5

50 12.1 9.2 12.2 9.3

12.5 9.6 12.0 9.1

12.3 9.4 50 13.2 10.3

81+00 3-24-47

DIST SOUND

3+60 14.2 11.3

13.0 10.1

13.5 10.6

13.5 10.6

4+00 13.5 10.6

13.0 10.1

13.0 10.1

2.9

13.2 10.3

13.6 10.7

50 13.1 10.2

12.7 9.8

5.3 2.4

+0.5 +3.4

3-24-47

50

FX

STA 80+00 SOUND WEST FX

0+00 = 470' W. OF CSWY B/L

DIST SOUND

DIST. SOUND

0+00 +0.7 +3.5 12.8 -10.1

0.0 12.8 12.1 9.4

2.46 2.0 +0.8 2+00 12.5 9.8

6.8 -4.0 12.6 9.9

10.2 -7.4 13.0 10.3

50 10.2 -7.4 12.5 9.8

9.7 -6.9 12.6 9.9

2.8

10.0 7.2 50 12.8 10.1

10.2 7.4 2.7 12.4 9.7

10.0 7.2 2.50 12.2 9.5

1+00

10.3 7.5 11.8 9.1

10.5 7.7 11.0 8.3

11.0 8.2 3+00 11.7 9.0

11.1 8.3 11.1 8.4

10.6 7.8 11.8 9.1

50 13.0 10.2 12.0 9.3

13.0 10.2 11.8 9.1

13.2 10.4 50 12.0 9.3

STA 80+00-3-24-47

DIST	SOUND	DIST	SOUND
3+60	12.0	9.3	
	11.8	9.1	
	11.7	9.0	
	11.3	8.6	
4+00	12.3	9.6	
2'55	12.5	9.8	
(2.7)	11.6	8.9	
	11.4	8.7	
	9.5	6.8	
50	2.0	+0.7	
55	0.0	+2.7	

3-24-47 STA 79+00 SOUND WEST ⁵¹ FX

0+00 = 370' W. OF CS-WAY B/L.

DIST	SOUND	DIST	SOUND
0+00	+0.5	+3.0	10.1 7.6
17	0.0	+2.5	10.1 7.6
20	0.2	+2.3	2+00 10.1 7.6
	1.0	+1.5	10.8 8.3
(2.0)	3.1	-0.6	11.3 8.8
50	7.4	-4.9	11.3 8.8
	9.0	-6.5	12.6 10.1
3'03	10.3	7.8	50 12.8 10.3
	11.1	8.6	(2.5) 12.0 9.5
	11.2	8.7	3'07 11.0 8.5
1+00	10.2	7.7	11.0 8.5
	10.2	7.7	10.5 8.0
	10.2	7.7	3+00 11.0 8.5
(2.0)	10.1	7.6	11.3 8.8
	10.0	7.5	12.0 9.5
50	10.0	7.5	12.1 9.6
	10.0	7.5	12.2 9.7
3'05	10.1	7.6	50 12.0 9.5

79+00-3-24-47

DIST	SOUND	DIST	SOUND	PK
3+60	11.8 9.3	4.0	1.5	
	11.4 8.9	4+70	1.0 +1.5	
	11.0 8.5			
	11.7 9.2			
4+00	12.5 10.0			
	12.0 9.5			
3:09	11.3 8.8			
	12.3 9.8			
(2.5)	12.8 10.3			
50	13.0 10.5			
	12.6 10.1			
	12.3 9.8			
	12.0 9.5			
	11.7 9.2			
5+00	11.5 9.0			
	11.5 9.0			
	13.0 10.5			
	13.5 11.0			
	11.0 8.5			
50	7.3 4.8			

3-24-47

STA 79+00 SOUND EAST 52 PK

0+00 = 370' W. OF CAUSEWAY BASELINE

DIST	SOUND	DIST	SOUND
0+68	0.0 +2.4	12.0	-9.6
70	0.3 +2.1	50 12.0	9.6
80	0.5 +1.9	11.8	9.4
90	1.1 +1.3	11.8	9.4
1+00	6.0 -3.6	11.3	8.9
319	6.3 -3.9	10.2	7.8
	6.1 -3.7	3+00 9.6	7.2
(2.4)	6.8 4.4	9.5	7.1
	7.4 5.0	(2.4) 9.4	7.0
50	8.0 5.6	3:21 19.5	7.1
	10.4 8.0	11.3	8.9
	13.0 10.6	50 12.3	9.9
	14.5 12.1	12.0	9.6
	14.8 12.4	12.0	9.6
2+00	14.0 11.6	13.5	11.1
	13.0 10.6		
	12.5 10.1		
	12.0 9.6		

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STA 78+00 SOUND WEST ~~TX~~

0+00 = CAUSEWAY BASELINE

	DIST	SOUND		DIST	SOUND	
	0+00	15.0	-12.7		11.0	-8.7
		14.1	11.8		11.5	9.2
		13.1	10.8	2+00	12.3	10.0
		13.0	10.7		14.0	11.7
		13.0	10.7		14.5	12.2
	50	13.0	10.7		14.1	11.8
		12.5	10.2		14.3	12.0
	3:30	12.1	9.8	50	14.3	12.0
		12.3	10.0		15.0	12.7
		12.0	9.7	(2.3)	14.7	12.4
	1+00	12.0	9.7		13.5	11.2
		12.0	9.7		12.0	9.7
		11.7	9.4	3+00	11.3	9.0
		11.5	9.2		11.0	8.7
		11.3	9.0	3:32	11.0	8.7
	50	11.0	8.7		10.8	8.5
		11.3	9.0		10.4	8.1
		11.0	8.7	50	10.6	-8.3

78+00		- 3-24-47			
DIST	SOUND	DIST	SOUND	FX	
3+60	11.2	- 9.0	11.1	- 8.9	
	11.2	9.0	11.2	9.0	
	10.2	8.0	11.4	9.2	
	9.5	7.3	12.1	9.9	
4+00	10.0	7.8	6+00	11.5 9.3	
	10.0	7.8		12.0 9.9	
	9.7	7.5	3:35	12.4 10.2	
	10.0	7.8		12.8 10.2	
3:33	9.5	7.3	(2.2)	13.0 10.9	
50	10.0	7.8	50	13.1 10.9	
(2.2)	11.5	9.3		13.2 11.0	
	10.0	7.8		12.5 10.3	
	11.0	8.8		11.0 8.9	
	11.0	8.8		10.5 8.9	
5+00	11.0	8.8	7+00	11.0 8.9	
	11.3	9.1		11.0 8.9	
	11.3	9.1		11.2 9.0	
	11.2	9.0		12.1 9.9	
	11.2	9.0		12.1 9.9	
50	11.0	- 8.8	50	12.0 - 9.8	

78+00		- 3-24-47			
DIST	SOUND	DIST	SOUND	54 FX	
	12.0	9.8		10.2 - 8.0	
	12.2	10.0		10.5 8.3	
	13.4	11.2		10.5 8.3	
	13.3	11.1		11.0 8.8	
8+00	13.0	10.8	10+00	11.1 8.9	
	13.0	10.8		11.0 8.8	
(2.2)	14.3	12.1		10.1 7.9	
	13.0	10.8	(2.2)	10.0 7.8	
	13.0	10.8	3:40	7.7 5.5	
50	12.0	9.8	50	5.0 - 2.8	
	11.1	8.9	60	0.0 + 2.2	
	12.1	9.9	62	+ 1.2 + 3.4	
	12.3	10.1			
	11.2	9.0			
9+00	11.4	9.2			
	10.5	8.3			
	10.0	7.8			
	9.8	7.6			
	9.5	7.3			
50	9.7	- 7.5			

3-25-47

SOUNDINGS OF ROCK SHOALS *Indexed*

AREA IN GLEASON COVE

0+00 = W. SHORE BASELINE

STA 93+00 SOUND EAST

DIST	SOUND	DIST	SOUND
1+23	0.0 +4.0	6.1	2.1
	0.5 +3.3	6.1	2.1
	1.2 +2.8	6.2	2.2
50	2.0 +2.0 3+00	6.3	2.3
	3.0 +1.0	6.4	2.4
(4.0)	3.5 +0.5	6.4	2.4
	4.2 -0.2 (4.0)	6.2	2.2
	4.8 0.8	6.2	2.2
2+00	5.0 1.0 50	6.1	2.1
	5.2 1.2	6.0	2.0
	5.3 1.3	6.1	2.1
	5.4 1.4	6.1	2.1
	5.5 1.5	6.0	2.0
50	6.0 2.0 4+00	6.0	2.0
	6.0 2.0	6.0	2.0

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STA 93+00 SOUND EAST

DIST	SOUND	DIST	SOUND
6.0	2.0	12.4	8.4
6.0	2.0	12.5	8.5
6.0	2.0	12.8	8.8
50	6.1 2.1	14.2	10.2
	6.3 2.3 50	14.0	10.0
	6.2 2.2	12.5	8.5
	6.2 2.2	11.0	7.0
	6.5 2.5 (4.0)	11.0	7.0
	6.5 2.5 5+00	10.5	6.5
	6.5 2.5 7+00	10.0	6.0 10.0
	6.5 2.5	10.0	6.0
(4.0)	7.0 3.0	10.0	6.0
	7.1 3.1	10.0	6.0
	7.0 3.0 50	10.0	6.0
	11.8 7.8 50	10.2	6.2
	11.8 7.8	10.0	6.0
	12.2 8.2	10.0	6.0
	12.3 8.3	11.2	7.2
	12.3 8.3 6+00	12.0	8.0

3-25-47
STA 93+00 SOUND EAST

DIST	SOUND	DIST	SOUND
8+00	12.0	8.0	2.6 +1.4
	11.4	7.4	
	11.1	7.1	
	11.1	7.1	
	11.2	7.2	
50	11.4	7.4	
	11.2	7.2	
(A.O)	11.0	7.0	
	10.8	6.8	
	11.0	7.0	
9+00	11.1	7.1	
	11.1	7.1	
	11.3	7.3	
	11.6	7.6	
	11.8	7.8	
50	11.7	7.7	
	9.5	-5.5	
	4.7	-0.7	
	3.4	+0.6	

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STA 92+00 SOUND EAST

0+00 = W. SHORE BASELINE

DIST	SOUND	DIST	SOUND
1+20	0.0	+40	3+00 7.0 3.0
	0.6	+3.4	7.0 3.0
	1.5	+2.6	6.8 2.8
(A.O)	2.4	+1.6	6.8 2.8
	3.0	+1.0	6.8 2.8
	4.5	-0.5	50 6.8 2.8
	5.5	-1.5	6.8 2.8
	6.0	2.0	6.8 2.8
2+00	6.3	2.3	7.0 3.0
	7.0	3.0	(A.O) 7.0 3.0
	7.1	3.1	4+00 7.1 3.1
	7.3	3.3	7.1 3.1
	7.2	3.2	7.2 3.2
50	7.2	3.2	7.4 3.4
	7.2	3.2	8.8 4.4
	7.2	3.2	50 12.0 4.0
	7.1	3.1	12.0 8.0
	7.1	3.1	11.0 7.0

3-25-47

STA 92+00 SOUND EAST

DIST	SOUND		DIST	SOUND
4+80	10.5	6.5	11.0	7.0
	10.2	6.2	10.7	6.7
5+00	11.0	7.0	10.7	6.7
	10.6	6.6	7+00	10.5
	10.5	6.5	10.5	6.5
	10.3	6.3	10.5	6.5
	11.2	7.2	10.6	6.6
50	11.4	7.4	10.6	6.6
	11.4	7.4	50	10.5
(4.0)	11.4	7.4	10.3	6.3
	11.2	7.2	(4.0)	12.0
	11.4	7.4	11.7	7.7
6+00	12.0	8.0	11.3	7.3
	12.1	8.1	8+00	11.3
	12.0	8.0	11.4	7.4
	11.5	7.5	11.5	7.5
	11.0	7.0	11.5	7.5
50	12.0	8.0	11.5	7.5
	11.5	7.5	50	11.7

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57

STA 92+00 SOUND EAST

DIST	SOUND		DIST	SOUND
	12.0	8.0		
	12.4	8.4		
	12.0	8.0		
	11.1	7.1		
	11.8	7.8	9+00	11.8
	12.0	8.0		
	12.0	8.0		
	11.3	7.3	(4.0)	11.3
	11.0	7.0		
	11.2	7.2	50	11.2
	10.4	6.4		
	10.2	6.2		
	8.0	4.0		
	4.7	-0.7		
	3.0	+1.0		

3-25-47

STA. 91+00 SOUND EAST

0+00 = WEST SHORE BASELINE

DIST.	SOUND	DIST.	SOUND
1+30	0.0 +3.8	10.6	6.8
	1.0 +2.8	11.4	7.6
50	2.2 +1.6	12.0	8.2
	4.1 -0.3	12.0	8.2
(3.8)	5.1 1.3	50	12.0 8.2
	6.2 3.4	12.0	8.2
	7.1 3.3	11.3	7.5
2+00	7.4 3.6	(3.8)	11.5 7.7
	8.0 4.2	11.8	8.0
	8.3 4.5	4+00	12.2 8.2
	8.3 4.5	12.0	8.2
	8.4 4.6	12.6	8.8
50	8.4 4.6	12.3	8.5
	8.5 4.7	12.0	8.2
	8.8 5.0	50	12.0 8.2
	9.4 5.6	11.8	8.0
	9.7 5.9	11.5	7.7
3+00	10.0 6.2	11.3	7.5

3-25-47

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STA 91+00 SOUND EAST

DIST SOUND DIST SOUND

DIST.	SOUND	DIST.	SOUND
11.3	7.5	11.1	7.3
5+00	11.2 7.4	11.1	7.3
	11.1 7.3	7+00	11.0 7.2
	11.1 7.3	11.0	7.2
	11.1 7.3	11.0	7.2
	11.5 7.7	10.7	6.9
50	11.7 7.9	11.4	7.6
	11.7 7.9	50	12.2 8.4
(3.8)	11.8 8.0	(3.8)	12.0 8.2
	11.7 7.9	12.0	8.2
	11.4 7.6	(3.8)	11.7 7.9
6+00	11.0 7.2	11.5	7.7
	10.8 7.0	8+00	11.5 7.9
	10.5 6.7	11.7	7.9
	11.0 7.2	11.4	7.6
	11.3 7.7	11.0	7.2
50	11.3 7.7	11.0	7.2
	11.6 7.8	50	10.5 6.7
	11.4 7.6	10.1	6.3

3-25-47

STA 91+00 SOUND EAST

DIST. SOUND

8+70 10.4 6.6

(3.8) 10.4 6.6

10.4 6.6

9+00 10.4 6.6

10.4 6.6

11.0 7.2

11.3 7.5

10.3 6.5

50 11.0 7.2

10.8 7.0

9.0 5.2

5.3 -1.5

3.5 +0.3

16+00

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59

STA 90+00 SOUND EAST

0+00 = W. SHORE BASELINE

DIST SOUND DIST SOUND

H33 0.0 +3.6 11.5 7.9

0.5 +3.1 11.0 7.4

50 1.5 +2.1 10.8 7.2

2.8 +0.8 11.2 7.6

(3.6) 4.4 -0.8 50 11.2 7.6

6.0 -2.4 11.0 7.4

6.3 -2.7 10.8 7.2

2+00 6.0 -2.4 (3.6) 10.5 6.9

6.1 -2.5 10.0 6.4

8.8 5.2 4+00 9.5 5.9

9.7 6.1 10.0 6.4

9.8 6.2 11.5 7.9

50 9.8 6.2 11.5 7.9

10.5 6.9 11.3 7.7

10.4 6.8 50 11.0 7.4

11.2 7.6 11.1 7.5

12.0 8.4 11.0 7.4

3+00 12.0 8.4 10.8 7.2

3-25-47

STA 90+00 SOUND EAST

DIST	SOUND		DIST	SOUND	
4+90	10.6	7.0		11.3	7.7
5+00	10.4	6.8		11.3	7.7
	10.4	6.8	7+00	11.3	7.7
(3.6)	10.4	6.8		11.3	7.7
	10.5	6.9	(3.6)	11.3	7.7
	10.8	7.2		11.3	7.7
50	11.2	7.6		11.5	7.9
	11.4	7.8	50	11.5	7.9
	12.0	8.4		11.6	8.0
	11.5	7.9		11.2	7.6
	10.8	7.2		11.0	7.4
6+00	11.0	7.4		11.1	7.5
	10.8	7.2	8+00	11.0	7.4
	10.3	6.9		10.6	7.0
	11.0	7.4		10.5	6.9
	11.5	7.9		10.5	6.9
50	12.0	8.4		10.5	6.9
	11.3	7.7	50	10.3	6.7
	11.3	7.7		10.3	6.7

3-25-47

60

STA 90+00 SOUND EAST

DIST	SOUND		DIST	SOUND	
	11.0	7.4			
	11.4	7.8			
	11.1	7.5			
9+00	11.0	7.4			
	11.0	7			
	11.0	7			
(3.6)	11.0	7.4			
	10.5	6.9			
50	9.8	6.2			
	9.1	5.5			
	7.4	3.8			
	4.3	-0.7			
	1.5	+2.4			

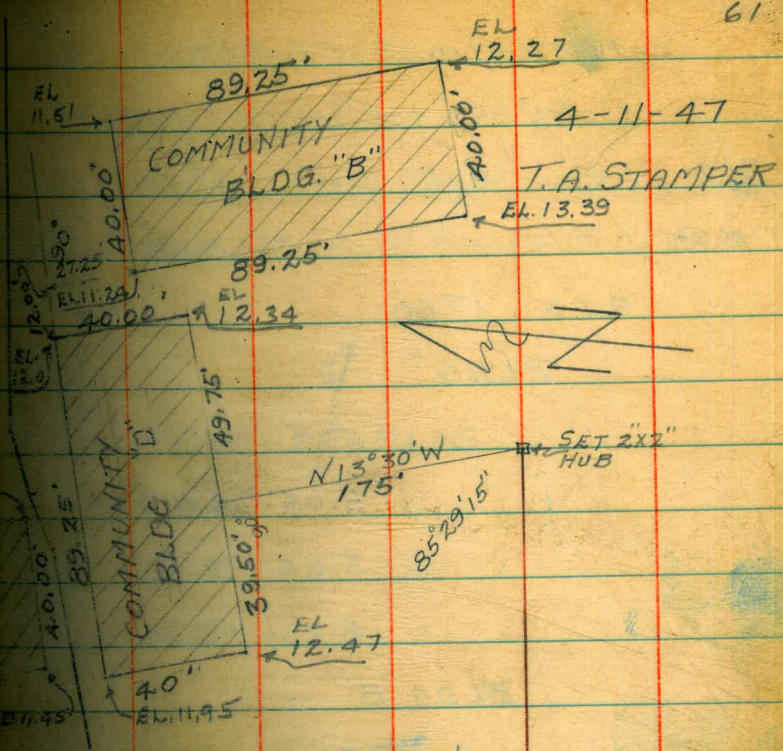
LAYOUT OF PROPOSED BLDGS
ON SANTA CLARA POINT

Indexed



N 81° 00' 45" E
641.15'

SANTA CLARA



NOTE: STAKES ARE SET ON
EDGE OF STUDS

N 81° 00' 45" E
641.15'

N 10° 13' 30" W
2 QUEENSTOWN

SANTA CLARA

ELEVATIONS OF BLDG
CORNERS ON SANTA CLARA PT.

STA + H.I. - ELEV.
T.B.M. 8.40

9.20 17.60

BLDG "D"

5.13 12.47

5.65 11.95

5.60 12.00

5.26 12.34

BLDG "B"

5.36 11.24

6.09 11.51

5.33 12.27

4.21 13.39

BLDG "C"

5.07 12.53

5.78 11.82

6.15 11.45

5.48 12.12

T.B.M.

3.88 13.72

4-15-47

62

COMMUNITY BLDGS TOP OF CONC.

EL. 13.0

BOAT HOUSE TOP OF CONC. EL 12.5

CHSLX STA 122 & W. SHORE SIDEWALK

TOP 2X2 S.W. COR BLDG

" " N.W. " "

" " N.E. " "

" " S.E. " "

TOP 2X2 N.W. COR BLDG

" " N.E. " "

" " S.E. " "

" " S.W. " " ON TOP SOIL

TOP 2X2 N.E. COR BLDG ON TOP SOIL FILL

" " N.W. " "

" " S.W. " "

" " S.E. " "

TOP OF 2X2 HUB O+OO OF LAUNCHING RAMP

4-16-47
BARRACAN
STANLEY

63

GRADES FOR COMM. BLDG & BOAT HOUSE

T.B.M. 2x2 HUB	+	H.I	-	13.72	GRADE AD	GRADE
	4.99	18.71			5.71	13.00
T.B.M. 2x2 HUB	4.04	17.76		13.72	5.26	13.50

X-SECTIONS EL CARMEL 4-19-47
 B/L STA-111+70 + 103+45

Indexed

	+	H.I.	-	ELEV.
STA-107				
B.M	6.63	15.07		8.44
T.P	3.98	15.52	3.53	11.54
2x2 HUB				
T.P	2.82	14.50	3.84	11.68

STA-111+70	WEST		ELEV	EAST		ELEV
	ROD	DIST		DIST	ROD	
			4.8 E. 9.7			
	9.3	5.2 37		200	13.2	1.3
	6.9	7.6 90		163	10.2	4.3
	4.3	10.2 122		123	7.4	7.1
	0.5	14.0 147		64	5.1	9.4
T.P	+2.80	14.48		31	4.8	9.7

STA	WEST		ELEV	EAST		ELEV
103+45			4.8 E. 9.7			
10.3	4.2	30		184	12.6	1.7
10.2	4.3	70		100	10.2	4.3
9.4	5.1	114		52	7.2	7.3
7.0	7.5	162		21	5.7	8.8
4.5	10.0	195				
2.0	12.5	226				

CROSS SECTIONS ^{FINAL} SANTA CLARA R/L
 STA-125+60 + 117+65 4-19-97

2x2 HUB + HI -
 T.B.M 1.95 15.67 13.72

STA-125+60

5.1 ^{EI} 107

ELEV	WEST		EAST		ELEV
	ROD	DIST	DIST	ROD	
5.0	10.7	101	28	5.3	10.2
7.3	8.4	71	57	5.9	9.8
9.6	6.1	33	91	7.1	8.6
			126	9.0	6.7
			152	10.5	5.2

2x2 HUB + HI -
 T.B.M 2.46 16.18 13.72

STA-117+65

5.1 ^{EI} 111

ELEV	WEST		EAST		ELEV
	ROD	DIST	DIST	ROD	
4.8	11.4	172	27	5.6	10.6
7.1	9.1	132	62	7.0	9.2
9.8	6.4	102	93	9.2	7.0
11.4	5.0	43	114	11.2	5.0

PROFILE OF PROPOSED
PIER SANTA CLARA POINT.

STA	+	H.I.	-	ELEV.
T.B.M.				13.68
	0.68	14.36		
0+00			2.9	11.5
+05			3.5	10.9
+10			3.7	10.7
15			4.2	10.2
20			4.6	9.8
25			4.9	9.5
30			5.5	8.9
35			5.9	8.5
40			6.3	8.1
45			6.8	7.6
50			7.3	7.1
55			7.8	6.6
60			8.2	6.2
65			8.6	5.8
70			9.2	5.2
75			9.7	4.7

Indexed

5-8-47

NOTE: 0+00 = W. SIDE OF F.B.H.

SEE PG. 27

TOP OF 2X2 0+00 LAUNCHING RAMP

T. STAMPER
C. BARRAGAN
A. SHERRY
N. STANLEY

PIER PROFILE CONTD

STA	+	H.I	-	ELEV.
		14.36		
0+80		10.2		4.2
85		10.7		3.7
90		11.2		3.2
95		11.7		2.7

SOUNDINGS OF PIER

0+00 = 0+90 SOUND WEST

DIST	SOUND	DIST	SOUND
^{10:15} 10	0.3 +2.4	65	11.2 -8.5
¹⁵ 65	0.5 +2.2	70	11.4 -8.7
20	1.2 +1.2	^{10:20} 75	11.4 -8.7
25	1.9 +0.8	80	11.6 -8.9
(2.7) 30	3.7 -1.0	85	11.6 -8.9
35	4.5 -1.8	(2.7) 90	11.5 -8.8
40	6.0 -3.3	95	11.5 -8.8
45	7.4 -4.7	100	11.5 -8.8
50	10.0 -7.3	105	11.7 -9.0
55	10.8 -8.1	110	11.8 -9.1
60	11.2 -8.5	115	11.7 -9.0

SOUNDING OF PIER # 5-8-47

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DIST	SOUND	DIST	SOUND
120	11.8 -9.1	220	12.4 -9.7
125	11.8 -9.1	5	12.4 -9.7
30	11.8 -9.1	30	12.3 -9.6
35	11.8 -9.1	5	12.0 -9.3
40	12.1 -9.4	40	12.0 -9.3
45	12.1 -9.4	5	12.0 -9.3
50	12.0 -9.3	50	11.9 -9.2
(2.7) 5	12.0 -9.3	5	11.8 -9.1
60	12.2 -9.5	(2.7) 60	11.7 -9.0
5	12.2 -9.5	5	11.5 -8.8
70	12.0 -9.3	^{10:25} 70	11.5 -8.8
^{10:22} 5	12.0 -9.3	5	11.4 -8.7
80	12.0 -9.3	80	11.3 -8.6
5	12.0 -9.3	5	11.3 -8.6
90	12.0 -9.3	90	11.3 -8.6
5	12.0 -9.3	5	11.0 -8.3
200	12.1 -9.4	300	8.6 -5.9
5	12.0 -9.3	5	7.0 -4.3
210	12.0 -9.3	10	6.0 -3.3
5	12.2 -9.5	^{10:22} 5	5.7 -3.0
		320	5.4 -2.7

7
320
PROFILE OF PROPOSED
LAUNCHING RAMP AT
SANTA CLARA PT.

Induced

STA	+	H.I.	-	ELEV
T.B.M.	1.67	15.35		13.68
T.B.M			2.12	13.23
0+50			2.1	13.2
+55			2.2	13.1
60			2.2	13.1
65			2.3	13.0
70			2.4	12.9
75			2.5	12.8
80			2.5	12.8
85			2.7	12.6
90			2.7	12.6
95			2.9	12.4
1+00			3.1	12.2
+02			3.2	12.1
+05			3.9	11.4
+10			4.5	10.8
+15			5.0	10.3

27
2x2" HUB 0+00 LAUNCHING RAMP SEERC.
2x2" " 0+50 " " "

LAUNCHING RAMP CONTD

STA + H.I. - ELEV.

15.35

1+20		5.5	9.8
25		6.0	9.3
30		6.5	8.8
35		7.0	8.3
40		7.4	7.9
45		7.9	7.4
50		8.3	7.0
55		8.8	6.5
60		9.3	6.0
65		9.8	5.5
70		10.5	4.8
75		10.9	4.4
80		11.4	3.9
85		11.8	3.5
90		12.4	2.9

5-8-47

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SOUNDING OF LAUNCHING RAMP

0+00 = 1+90 SOUND WEST

DIST SOUND

DIST SOUND

0+00			90	11.3	-8.3
5	0.7	+2.3	95	11.5 7.5	-8.5
10	1.1	+1.9	100	11.9	-8.9
<u>3.0</u> 15	1.5	+1.5	105	11.9	-8.9
20	2.1	+0.9	110	12.0	-9.0
25	2.5	+0.5	115	11.7	-8.7
30	3.4	-0.4	120	11.7	-8.7
35	4.0	-1.0	125	12.5	-9.5
40	4.6	-1.6	130	13.0	-10.0
45	5.2	-2.2	<u>3.0</u> 135	13.1	-10.1
50	5.6	-2.6	140	13.0	-10.0
55	5.9	-2.9	145	12.9	-9.9
60	7.2	-4.2	150	12.9	-9.9
65	8.1	-5.1	155	12.9	-9.9
70	9.5	-6.5	160	12.8	-9.8
75	10.2	-7.2	165	12.9	-9.9
80	10.8	-7.8	170	12.9	-9.9
85	10.9	-7.9	175	12.9	-9.9

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DIST	SOUND		DIST	SOUND	
180	12.9	-9.9	280	12.0	-9.0
85	12.8	-9.8	285	12.0	-9.0
90	12.8	-9.8	290	11.8	-8.8
95	12.7	-9.7	295	12.0	-9.0
200	12.5	-9.5	300	12.7	-9.3
205	12.4	-9.4	(3.0)		
(3.0)					
210	12.3	-9.3			
215	12.3	-9.3			
220	12.3	-9.3			
225	12.5	-9.5			
230	12.5	-9.5			
235	12.6	-9.6			
240	12.7	-9.7			
245	12.6	-9.6			
250	12.6	-9.6			
255	12.6	-9.6			
260	12.6	-9.6			
265	12.5	-9.5			
270	12.4	-9.4			
275	12.3	-9.3			

5-8-47

ELEVATION OF TOP OF CONG. AT
RIO-GRAND GAS STA
AT N.E. COR. OF INTERSECTION
OF MISSION BLVD & VENTURA

Indexed

STA	+	H.I.	-	ELEV
T.B.M.				-0.25
	4.17	3.82		
			5.06	-1.24
			5.32	-1.50
			4.71	-0.89

TOP OF 2"X4" HUB ON CONG. PUMP
HOUSE ABANDONED STA APPROX
100' S.W. OF BONITA BAY CLUB.
E. PAD &
TOP OF CONG. PAD AT RIO-GRANDE
GAS STA, W. PAD &
TOP OF CONG. FLOOR BONITA BAY CLUB

5-26-47

BARRAGAN
SHEAFF
5-26-47

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PROFILE ALONG NORTH SIDE OF PROPOSED					STA-	+	H.I.	-	
YENTORD AND MISSION BAY CAUSEWAY ROAD					8+08 ³		18.08	7.7	10.4
STA-	+	H.I.	-	ELEV	8+58 ³			7.9	10.2
B.M.				B.M.					
56+00	6.71	18.08		11.37	TOP HUB	9+08 ³		8.4	9.7
B.C. OF T.O.			7.53	10.55	GUTTER	9+58 ³		8.7	9.4
E.C. OF T.O.			6.9	11.2		10+08 ³		9.0	9.1
0 + 50			6.9	11.2		10+58 ³		9.2	8.9
B.C. 11+08 ³			7.0	11.1		11+08 ³		9.4	8.7
1+58 ³			6.5	11.6		11+58 ³		9.6	8.5
2+08 ³			6.1	12.0		12+08 ³		9.7	8.4
2+58 ³			5.8	12.3		12+58 ³		10.0	8.1
3+08 ³			4.9	13.2		13+08 ³		10.3	7.8
3+58 ³			5.7	12.4					
4+08 ³			6.0	12.1					
4+58 ³			6.2	11.9					
5+08 ³			6.3	11.8					
5+58 ³			6.4	11.7					
6+08 ³			6.4	11.7					
6+58 ³			6.5	11.6					
7+08 ³			6.7	11.4					
7+58 ³			7.2	10.9					

Indexed

5-26-47

BARRAGAN
SHERRY
5-26-47

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PROFILE ALONG SOUTH SOUTH SIDE OF
PROPOSED
VENTURA AND MISSION BAY CAUSEWAY

STA.	+	H.I.	-	ELEV.
B.M.				B.M.
56+00	6.71	18.08		11.37 TOP OF HILL
B.C. OF T.O.			7.61	10.47
E.C. OF T.O.			6.9	11.2
0+50			6.6	11.5
B.C. 1+08 ²			6.6	11.5
1+58 ²			6.1	12.0
2+08 ²			6.1	12.0
2+58 ²			6.1	12.0
3+08 ²			5.2	12.9
3+58 ²			5.4	12.7
4+08 ²			5.1	13.0
4+58 ²			5.6	12.5
5+08 ²			5.5	12.6
5+58 ²			5.7	12.4
6+08 ²			5.5	12.6
6+58 ²			5.6	12.5
7+08 ²			6.0	12.1
7+58 ²			6.5	11.6

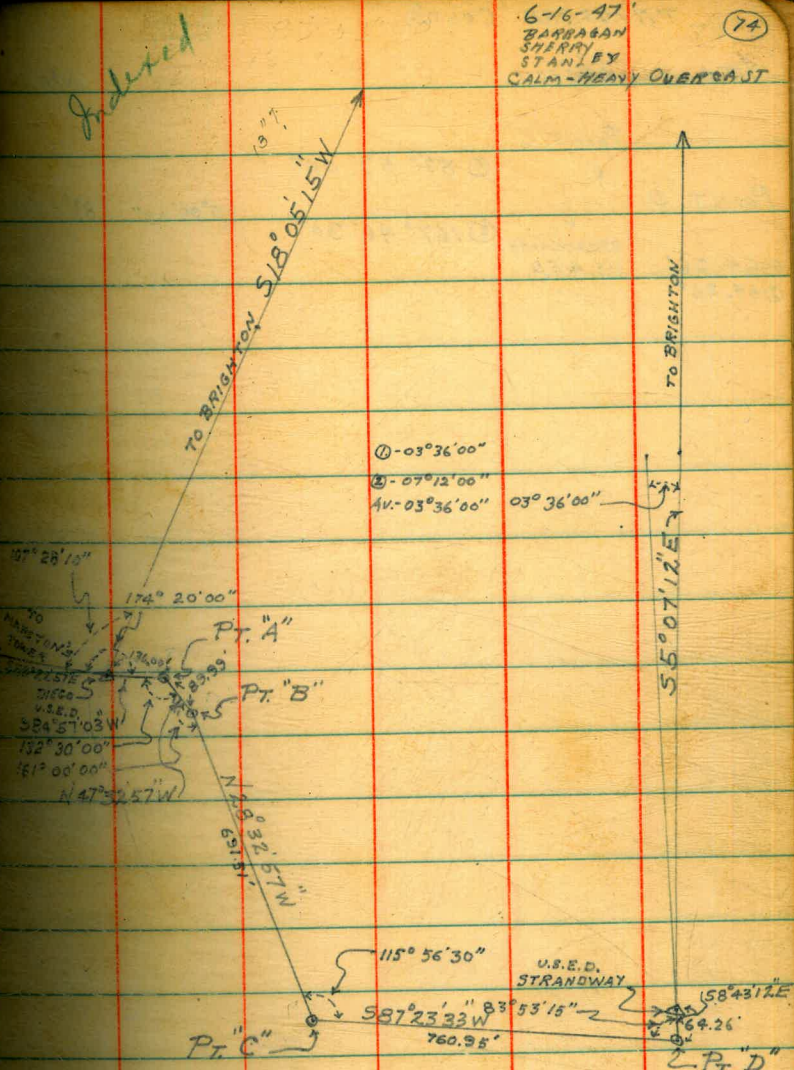
STA.	H.I.	-	ELEV.
8+08 ²	18.08	7.0	11.1
8+58 ²		7.5	10.6
9+08 ²		8.1	10.0
9+58 ²		8.4	9.7
10+08 ²		8.8	9.3
10+58 ²		9.0	9.1
11+08 ²		9.2	8.9
11+58 ²		9.5	8.6
12+08 ²		9.6	8.5
12+58 ²		9.8	8.3
13+08 ²		10.0	8.1

TRVERSE FOR LOCATION OF EXISTING
 Δ PT'S - BRIGHTON & STRANDWAY FROM DIEGO 6-16-47

6-16-47
 BARRAGAN
 SHERRY
 STANLEY
 CALM-HEAVY OVERCAST

(74)

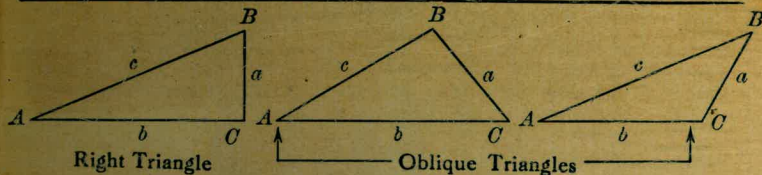
STA.	OBJECT	SIX	ANGLES	YERNIER	MEAN
	MARSTON'S TOWER	①	107° 28' 00"		
U.S. & E.D. DIEGO	R. ↓	②	214° 56' 00"	0° 00' 00"	107° 28' 00"
	BRIGHTON	③	644° 49' 00"		
	MARSTON'S TOWER	①	174° 20' 00"		
U.S. & E.D. DIEGO	R. ↓	②	348° 40' 00"	0° 00' 00"	174° 20' 00"
	PT. "A"				
		②	136.00'		
		③	136.00'		
	DIEGO	①	132° 30' 00"	0° 00' 00"	
	POINT "A"				
		②	265° 00' 00"		
		④	89.99'		
		⑤	90.00'		
	POINT "A"				
		①	161° 00' 00"	0° 00' 00"	
	POINT "B"				
		②	322° 00' 00"		
		④	691.51'		
		⑤	691.50'		
	POINT "C"				
		①	115° 56' 00"	0° 00' 00"	
	POINT "C"				
		②	331° 52' 00"		
		③	691° 39' 00"		
		④	760.96'		
		⑤	760.95'		



STA	OBJECT	MEAN	
	POINT "C"		
	R	① 83° 53' 00"	
	↓		
	POINT "D"	② 167° 46' 30"	83° 53' 15"
	STRANDWAY		
	U.S. A.E.D.		
① 67.26'			
② 67.26'			

207.85
 152
 55.85
 51.65
 7.40
 7.75
 15.15
 3.51
 11.64 EL. 0790 L/R
 3.51
 15.15
 4.33
 10.82 EL. FOUNDATION 3/4

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

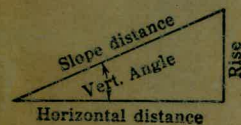
For Angle A. $\sin = \frac{a}{c}$, $\cos = \frac{b}{c}$, $\tan = \frac{a}{b}$, $\cot = \frac{b}{a}$, $\sec = \frac{c}{b}$, $\text{cosec} = \frac{c}{a}$

Given	Required	Formulas
a, b	A, B, c	$\tan A = \frac{a}{b} = \cot B$, $c = \sqrt{a^2 + b^2} = a\sqrt{1 + \frac{b^2}{a^2}}$
a, c	A, B, b	$\sin A = \frac{a}{c} = \cos B$, $b = \sqrt{(c+a)(c-a)} = c\sqrt{1 - \frac{a^2}{c^2}}$
A, a	B, b, c	$B = 90^\circ - A$, $b = a \cot A$, $c = \frac{a}{\sin A}$
A, b	B, a, c	$B = 90^\circ - A$, $a = b \tan A$, $c = \frac{b}{\cos A}$
A, c	B, a, b	$B = 90^\circ - A$, $a = c \sin A$, $b = c \cos A$

Solution of Oblique Triangles

Given	Required	Formulas
A, B, a	b, c, C	$b = \frac{a \sin B}{\sin A}$, $C = 180^\circ - (A + B)$, $c = \frac{a \sin C}{\sin A}$
A, a, b	B, c, C	$\sin B = \frac{b \sin A}{a}$, $C = 180^\circ - (A + B)$, $a = \frac{a \sin C}{\sin A}$
a, b, C	A, B, c	$A + B = 180^\circ - C$, $\tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$ $c = \frac{a \sin C}{\sin A}$
a, b, c	A, B, C	$s = \frac{a + b + c}{2}$, $\sin \frac{1}{2}A = \sqrt{\frac{(s - b)(s - c)}{bc}}$ $\sin \frac{1}{2}B = \sqrt{\frac{(s - a)(s - c)}{ac}}$, $C = 180^\circ - (A + B)$
a, b, c	Area	$s = \frac{a + b + c}{2}$, $\text{area} = \sqrt{s(s - a)(s - b)(s - c)}$
A, b, c	Area	$\text{area} = \frac{bc \sin A}{2}$
A, B, C, a	Area	$\text{area} = \frac{a^2 \sin B \sin C}{2 \sin A}$

REDUCTION TO HORIZONTAL



Horizontal distance = Slope distance multiplied by the cosine of the vertical angle. Thus: slope distance = 319.4 ft. Vert. angle = $5^\circ 10'$. From Table, Page 1X, $\cos 5^\circ 10' = .9959$. Horizontal distance = $319.4 \times .9959 = 318.09$ ft. Horizontal distance also = Slope distance minus slope distance times (1 - cosine of vertical angle). With the same figures as in the preceding example, the following result is obtained. $\cos 5^\circ 10' = .9959$, $1 - .9959 = .0041$. $319.4 \times .0041 = 1.31$. $319.4 - 1.31 = 318.09$ ft.

When the rise is known, the horizontal distance is approximately:—the slope distance less the square of the rise divided by twice the slope distance. Thus: rise = 14 ft., slope distance = 302.6 ft. Horizontal distance = $302.6 - \frac{14 \times 14}{2 \times 302.6} = 302.6 - 0.32 = 302.28$ ft.