

MISSION BAY

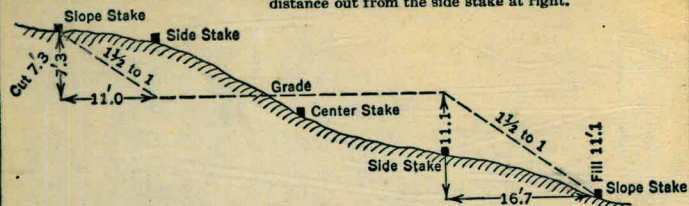
59



**DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING**

Roadway of any Width. Side Slopes 1 1/2 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.



Book No 59

6.18 2" x 2" 1/41 + 00

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

MICROFILMED

JAN 7 1965

The paper in this book No. 373A  
is made of 50% high grade rag stock  
with a WATER RESISTING surface sizing.



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X-SECTION OF AREA EAST OF MIDWAY

Sta 44+00

C. BARRAGAN 8-14-50  
A. SHERRY  
W. CARVER

(2)

DRIVE - PROJECT NO 16

Sta + HI - Elev

Sta - 44+00-N

11.00

DIST + H.I. - ELEV EB25 4.3 6.7

T.P. 4.82 11.00 6.18 E940 4.4 6.6

0+00 = {N-44+00} SECTION DUE EAST E1055 4.3 6.7

0+00 5.1 5.9

E-0+40 4.5 6.5 T.P. 11.00 4.30 6.70

E 1+00 4.6 6.4

E 150 4.7 6.3

E 205 4.6 6.4

E 260 4.6 6.4

E 320 4.9 6.1

E 390 4.6 6.4

E 400 3.2 7.8

E 464 2.1 8.9

E 408 4.1 6.9

E 425 4.7 6.3

E 480 4.5 6.5

E 600 4.5 6.5

E 710 4.3 6.7

2"x2"  
Sta 46+00 N  
427+00 VV



P+ STA. 45+00 N

DIST + H.I. - ELEV.

T.P 5.19 11.89 6.70

0+00 = { 45+00 N  
227+00 W } SECT E/E W

E 1065 5.1 6.7

E 980 4.8 7.0

E 925 5.2 6.6

E 865 5.2 6.6

E 755 4.9 6.9

E 640 5.1 6.7

E 575 5.6 6.2

E 490 5.2 6.6

"  
E 479 4.0 7.8

<sup>3</sup>  
E 476 2.1 9.7

<sup>2</sup>  
E 474 3.7 8.1

"  
E 463 5.0 6.8

E 410 5.6 6.2

E 350 5.1 6.7

E 290 4.9 6.9

E 240 4.9 6.9

E 180 5.1 6.7

P+ STA 45+00

Sta + 11.1 - Elev

11.84  
E 125 4.9 6.9

E 0168 4.8 7.0

0+00 4.9 6.9

W 0130 5.7 6.1

W 0154 5.2 6.6

W 110 5.3 6.5

W 170 5.4 6.4

W 210 5.5 6.3

W 280 5.7 6.1

W 330 5.4 6.4

W 385 5.6 6.2

W 440 5.7 6.1

W 495 5.7 6.1

W 545 6.0 5.8

W 605 6.3 5.5

W 660 6.0 5.8

<sup>12</sup>  
W 672 6.9 4.9

W 690 6.5 5.3

W 745 6.6 5.2



P.T.

Sta 45+00

(N-46+00  
Dist W-127+00) STA-46+00-N

P.T.

8-14-50

Sta	+	H <sub>1</sub>	-	Elev	Dist	+	H <sub>1</sub>	-	Elev
W810		11.84	6.6	5.2	7.12	7.69	11.39		6.70
W880			6.4	5.4	W964			9.4	1.0
W882			7.7	4.1	W859			7.0	4.7 <del>3.4</del>
W889			9.9	1.9	W946			7.0	4.4 <del>3.4</del>
W894			10.7	1.1	W943			5.3	6.1
					W912			6.1	5.3
					W907			6.1	5.3
					W900			5.6	5.8
					W895			6.8	4.6
					W888			6.5	4.9
					W820			6.0	5.4
					W775			5.9	5.5
					W720			5.6	5.8
					W660			5.6	5.8
					W610			5.6	5.8
					W560			5.5	5.9
					W500			5.2	6.2
					W442			5.2	6.2
					W385			5.0	6.9

10° E 2' 32"  
Sta SN-46+00  
W-127+00



Sta 46+00-N

IX

Sta

+

46+00-N

H1

8-14-53

IX

G

Sta	+	H1	-	Elev
W 330		11.39	5.1	6.3
W 260			5.1	6.3
W 200			5.1	6.3
W 148			5.1	6.3
W 0+90			5.1	6.3
W 0+46			5.3	6.1
0+00			5.0	6.4
E 0+50			5.1	6.3
E 0+82			5.2	6.2
E 130			4.7	6.7
E 185			4.7	6.7
E 245			4.4	7.0
E 300			4.6	6.8
E 350			4.3	7.1
E 413			4.1	7.3
E 455			4.3	7.1
E 490			5.3	6.7
E 545			4.6	6.8
<sup>5.55</sup> E 434			? 7.0	4.4
			(4.0)	

Sta

11.39

560<sup>5</sup>  
E 440

1.9 9.5

566  
E 446

3.9 7.5

5710  
E 456

5.1 6.3

5622

5.1 6.3

E 735

5.1 6.3

E 850

4.9 6.5

E 950

4.7 6.7

E 1065

4.7 6.7

E 1175

4.8 6.6



8-1450

(N-47+00)  
ELEVATION 1222.00

STA - 47+00 N

DIST	+	H.I.	-	ELEV
T.P	5.21	12.01		6.70
E 1185			5.5	6.5
E 1060			5.2	6.8
E 955			5.5	6.5
E 860			5.9	6.1
E 810			5.9	6.1
E 755			6.0	6.0
E 710			6.0	6.0
E 640			5.9	6.1
E 624 <sup>10</sup>			4.6	6.4
E 622 <sup>2</sup>			3.1	8.9
E 618 <sup>4</sup>			4.3	7.7
E 612 <sup>6</sup>			5.4	6.8
E 570			6.3	5.7
E 530			5.5	6.5
E 475			5.3	6.7
E 410			5.7	6.3
E 355			5.9	6.1
E 300			5.9	6.1

C. ALDRICH  
A. SHERRY  
W. CARVER

8-14-50

②

N-47+00

PY  
8-15-50

Sta	+	H.I.	-	ELEV
E 245		12.01	5.5	6.5
E 190			5.4	6.6
E 135			5.1	6.9
E 0+80			5.5	6.5
E 0+58			5.5	6.5
E 0+00			5.1	6.9



PX

STA- 79+00 -N 8-16-15

0+00 = PT 390' E of West Causeway 3/4.

SOUND EAST  
9:15 (26)

	DIST	SOUND	DIST	SOUND
0+00	+P		1+70	14.0 11.4
+14	0.0	+2.6		13.8 11.2
+20	1.2	+1.4	(2.6)	13.9 11.3
	3.3	0.7	2+00	
	6.1	3.5		12.8 10.2
30	8.2	5.6		12.0 9.4
	9.8	7.2		11.4 8.8
	9.8	7.2		11.2 8.6
	11.2	8.6	+50	11.1 8.5
	12.3	9.7		10.4 7.8
1+00	13.4	10.8		9.0 6.4
	13.9	11.3		9.0 6.4
	13.9	11.3		8.1 5.5
	13.9	11.3	3+00	7.7 5.1
	14.6	12.0		7.4 4.8
50	14.6	12.0		7.3 4.7
60	14.2	11.6	+30	7.4 4.8

8-16-50

PX

79+00 -N SOUND EAST

	DIST	SOUND	DIST	SOUND
	3+40	7.1 4.4	+50 1.8	+1.0
	5-50	7.1 4.4	<del>5+60</del> 1.8	+1.0
		6.8 4.1	9:20 1.8	+1.0
		6.8 4.1	(2.8) 1.6	+1.2
	4+00	6.6 3.9	6+00 1.5	+1.3
	(2.7)	6.7 4.0		1.4 +1.4
		6.2 3.5		1.6 +1.2
		5.6 2.9		1.6 +1.2
		5.1 2.4		1.5 +1.3
	+50	5.1 2.4	+50 1.6	+1.2
		4.8 2.1		1.6 +1.2
		4.9 2.2		1.7 +1.1
		4.7 2.0		1.8 +1.0
		3.9 1.2		1.9 +0.9
	5+00	3.5 0.8	7+00 2.0	+0.8
		3.4 0.7		2.1 +0.7
		2.9 0.2		2.2 +0.6
		2.3 +0.4		2.1 +0.7
	+40	2.2 +0.5	1+0 2.0	+0.8



8-16-50

⑧

PX 79400N Sound East 8-16-50

80+00-N

100

Dist.	Sound		Dist.	Sound
7+50	2.1	+0.9 +30	7.0	4.0

PT 430' E/CORNERWAY B/L (WEST)

SOUND EAST

PX

Dist.	Sound	Dist.	Sound
14	7.0	13.9	10.6

+10	0.0	+3.3	13.3	10.0
-----	-----	------	------	------

20	3.0	+0.3	13.1	9.8
----	-----	------	------	-----

30	7.1	3.8	2+00	12.7	9.4
----	-----	-----	------	------	-----

96	6.3		12.6	9.3
----	-----	--	------	-----

50	11.3	8.0	11.1	7.8
----	------	-----	------	-----

12.8	9.5	11.1	7.8
------	-----	------	-----

13.1	9.8	11.3	8.0
------	-----	------	-----

13.2	9.9	50	11.4	8.1
------	-----	----	------	-----

13.4	10.1	10.0	6.7
------	------	------	-----

100	13.4	10.1	10.7	7.4
-----	------	------	------	-----

14.0	10.7	9.5	6.2
------	------	-----	-----

14.0	10.7	9.5	6.2
------	------	-----	-----

14.9	11.6	3+00	9.2	5.9
------	------	------	-----	-----

15.0	11.7	8.1	4.8
------	------	-----	-----

50	15.0	11.7	8.3	5.0
----	------	------	-----	-----

1+60	14.5	11.2	3+30	8.6	5.3
------	------	------	------	-----	-----

79400N

Sound East

8-16-50

Dist.

Sound

Dist.

Sound

7+50

2.1

+0.9

+30

7.0

4.0

9'

(3.0)

2.2

+0.8

7.9

4.9

2.2

+0.8

+50

8.1

5.1

2.3

+0.7

8.1

5.1

3.7

0.7

8.1

5.1

8+00

3.8

0.8

6.1

3.1

5.0

2.0

4.9

1.9

5.4

2.4

10+00

3.0

0.0

6.0

3.0

2.0

+1.0

6.0

3.0

1.6

+1.4

9'25"

+50

6.0

3.0

1.0

+2.0

6.3

3.3

0.4

+2.6

6.5

3.5

10+50

0.2

+2.8

6.8

3.8

0.0

+3.0

6.9

3.9

9+00

6.9

3.9

6.9

3.9

+20

7.0

4.0



~~PX~~ 80+00N Sound East 8-16-50

80+00N Sound East 8-16-50

~~PX~~ <sup>3</sup>

Dist.	Sound		Dist.	Sound		Dist.	Sound		Dist.	Sound	
3+40	8.8	5.5	5+30	5.1	1.8	7+20	3.0	+0.4	9+10	4.1	0.7
+50	8.0	4.7		4.9	1.6	(3.4)	2.9	+0.5	(3.4)	6.5	3.1
(3.3)	8.0	4.7	+50	4.8	1.5		3.0	+0.4		6.8	3.4
	8.0	4.7		4.6	1.3	+50	2.9	+0.5		6.0	2.6
	7.6	4.3		3.8	0.5		3.0	+0.4	+50	6.2	2.8
	7.4	4.1		3.5	0.2		3.0	+0.4		6.5	3.1
4+00	7.3	4.0		3.6	0.3		3.0	+0.4		6.6	3.2
	7.1	3.8	6+00	3.3	0.0		2.9	+0.5		6.6	3.2
	7.2	3.9	(3.3)	3.1	+0.2	8+00	2.9	+0.5		6.6	3.2
	7.7	4.4	(3.4)	3.0	+0.4		3.0	+0.4	10+00	6.5	3.1
	6.3	3.0		3.0	+0.4		2.9	+0.5		5.7	2.3
4+50	6.2	2.9		3.0	+0.4		2.9	+0.5		5.0	1.6
	6.9	3.6	+50	2.8	+0.6		2.9	+0.5		3.8	0.4
	6.1	2.8		3.1	+0.3	+50	3.1	+0.4		3.3	+0.1
	7.1	3.8		3.1	+0.3		3.2	+0.2	+50	2.1	+1.3
	6.2	2.9		3.1	+0.3		3.1	+0.3		2.5	+0.9
5+00	7.0	3.7 <sup>9.5</sup>		3.1	+0.3		3.3	+0.1		1.8	+1.6
	5.3	2.0	7+00	3.1	+0.3		3.4	0.0		1.5	+1.9
+20	4.9	1.6	7+10	3.0	+0.4	9+00	4.8	0.4	10+90	1.1	+2.3



Sound East

PX 80+00 N

8-16-50

Dist Sound

9:55  
11+00 1.0 +2.4

(3.4) 0.4 +3.0

0.4 +3.0

9:58 0.2 +3.2

9:48  
+140 0.1 +3.3

81+00 N - 8-16-50

0+00 = PT. 520' E/causeway 1/2 west

PX

Sound East

Dist Sound Dist Sound  
10:15  
0100 0.0 +3.8 1470 13.9 10.1

2.1 +1.7 13.6 9.8

(3.8) 7.2 3.4 (3.8) 13.3 9.5

10.0 6.2 2100 13.4 9.6

11.9 8.1 12.8 9.0

750 12.8 9.0 12.2 8.4

13.3 9.5 12.3 8.5

14.8 11.0 12.1 8.3

14.2 10.4 +50 11.4 7.6

14.0 10.2 11.3 7.5

1400 14.6 10.8 11.0 7.2

14.0 10.2 10.2 6.4

14.0 10.2 10.1 6.3

13.6 9.8 3+00 9.0 5.2

13.1 9.3 9.6 5.8

+50 13.3 9.5 9.6 5.8

+60 14.0 10.2 3+30 9.4 5.6



81100 N Sound East 8-16-50

Dist.	Sound	Dist	Sound
140	8.9	5.1	5+30 7.0
150	8.6	4.8	7.7
	8.9	5.1	+50 6.9
(3.8)	9.0	5.2	(3.8) 7.1
	8.7	4.9	7.0
	8.8	5.0	6.6
4400	8.9	5.1	6.2
	8.8	5.0	6100 6.0
	8.0	4.2	6.1
	8.1	4.3	5.8
	8.1	4.3	
+150	8.7	4.9	
	8.2	4.4	+150 5.0
	8.1	4.3	4.9
	7.9	4.1	4.9
	7.8	4.0	4.6
5+00	7.6	3.8	4.8
	7.9	4.1	7700 5.0
+20	7.4	3.4	710 4.0

81100 N Sound East 8-16-50

PX<sup>(11)</sup>

Dist.	Sound	Dist.	Sound
7170 3.8	0.0	9.100 3.3	+0.6
4.0	0.2	(3.9) 3.2	+0.7
4.0	0.2	3.2	+0.7
		3.1	+0.8
+50 4.0	0.2	4.0	0.1
4.0	0.2	+150 3.1	1.2
(3.8) 3.9	0.1	6.2	2.3
(3.9) 3.8	+0.01	5.7	1.8
3.9	0.0	6.1	2.2
8100 3.8	+0.1	6.5	2.6
3.6	+0.3	10+00 6.6	2.7
3.8	+0.1	6.9	3.0
1070 3.8	+0.1	6.7	2.8
3.9	0.0	(3.9) 6.8	2.9
+50 3.6	+0.3	(4.0) 7.0	3.0
3.4	+0.5	+50 6.6	2.6
3.5	+0.4	5.0	1.0
3.5	+0.4	3.0	+1.0
+90 3.4	+0.5	+80 2.2	+1.8



81+00N

Sound East 8-16-50

Dist.	Sound	
10+90	1.6	+2.4
11+00	1.3	+2.7
10:25	1.7	+2.3
(9.0)	2.0	+2.0
	2.4	+1.6
	1.6	+2.4
+50	2.0	+2.0
	2.1	+1.9
	2.1	+1.9
	2.5	+1.5
10:30	2.6	+1.4
12+00	0.2	+3.8

82+00N

PX

0+00 = Pt 530' E/crossway of west.

Sound East

Dist.	Sound		Dist.	Sound	
10:50	?		1+70	13.3	8.9
+10	0.0	+4.3		14.1	9.8
(4.3)	1.8	+2.5	(4.3)	15.0	10.7
	2.7	+1.6	2+00	15.1	10.8
	3.0	+1.3		15.7	11.4
+50	3.2	+1.1		16.4	11.1
	4.0	+0.3		14.9	10.6
	4.9	0.5.		15.0	10.7
	4.9	1.6	+50	15.0	10.7
	6.2	1.9		15.3	11.0
1+00	7.3	3.0		15.0	10.7
	8.0	3.7		14.7	10.4
	10.7	6.4		13.5	9.12
	11.1	6.8	3+00	13.8	9.5
	11.2	6.9		13.3	9.0
+50	12.0	7.7		12.8	8.5
+60	12.7	8.4	+30	11.9	7.6



82+00N Sound East 8-16-50				82+00N Sound East 8-16-50				8-16-50			
Dist.	Sound	Dist.	Sound	Dist.	Sound	Dist.	Sound	Dist.	Sound	Dist.	Sound
+40	12.0	7.7	5+30 9.0	4.7	7+20 7.7	3.4	9+10 4.9				0.5
3+50	11.6	7.3		5.4	7.1	2.8	(4.4) 5.3				0.9
	11.6	7.3	+50 9.3	5.0	7.2	2.9		4.9			0.5
(4.3)	11.3	7.0	(4.3) 9.0	4.7	+50 7.1	2.8		4.4			0.0
	10.9	6.6		4.8	7.0	2.7	+50 4.0				+0.4
	10.8	6.5		4.7	(4.3) 8.1	3.8		3.5			+0.9
4+00	10.6	6.3	8.8	4.4	(4.4) 7.0	2.6		3.5			+0.9
	10.3	6.0	6+00 8.9	4.5	7.1	2.7		3.7			+0.7
	9.7	5.4		4.4	<sup>10-55</sup> 8+00 7.0	2.6		3.7			+0.7
	9.8	5.5		4.9	6.1	1.7	10+00	3.5			+0.9
	10.1	5.8		5.0	6.3	1.9		3.3			+1.1
+50	9.8	5.5		9.0	4.7	6.8	2.4		3.4		+1.0
	9.0	4.7	+50 8.9	4.6	5.5	1.1		3.4			+1.0
	9.1	4.8		9.0	4.7	+50 5.8	1.3		3.3		+1.1
	9.6	5.3		8.7	4.4	8.7	4.3	+50	3.7		+0.7
	9.3	5.0		8.5	4.2	8.8	4.4		4.5		0.1
3+00	8.8	4.5		8.7	4.4	7.0	2.6		4.6		0.2
	8.8	4.5	7+00 8.9	4.6	5.7	1.3		4.8			0.4
+20	8.8	4.5	+10 8.9	4.6	9+00 5.2	0.8	10+90 6.0				1.6



PX 82+00 N Sound East 8-16-50

Dist.	Sound	<u>Sound</u>
11+00	6.8	2.4
	7.5	3.1
(4.4)	7.2	2.8
	7.0	2.6
	5.9	1.5
+50	4.0	+0.4
	3.0	+1.4
	2.6	+1.8
	2.0	+2.4
	1.5	+2.9
12+00	1.0	+3.4
	1.0	+3.4
	2.1	+2.3
	2.0	+2.4
	2.5	+1.9
11:00 +50	2.7	+1.7
	1.8	+2.6
	1.3	+3.1
+80	1.4	+3.0

83+00N - 8-16-50 PX (4)

0+00 = Pt. 400 1/2 course way 3/4 west

Sound East

Dist.	Sound	Dist.	Sound
11:15 0+00	0.0	+4.7	1+70 2.9 +1.8
	1.7	+3.0	2.9 +1.8
(4.7)	2.2	+2.5	(4.7)
	2.8	+1.9	2+00 2.7 +2.0
	3.3	+1.4	2.0 +2.7
+50	3.6	+1.1	2.0 +2.7
	3.9	+0.8	2.0 +2.7
	4.1	+0.6	2.0 +2.7
	4.2	+0.5	3.0 +1.7
	4.1	+0.6	3.9 +0.8
1+00	3.9	+0.8	5.5 0.4
	3.9	+0.8	7.7 3.0
	4.0	+0.7	7.8 3.1
	3.7	+1.0	3+00 8.0 3.3
	3.4	+1.3	10.0 5.3
+50	3.2	+1.5	12.2 7.5
+60	5.0	+1.7	+30 12.9 8.2



83100N Sound East 8-16-50

<del>Dist</del>	Sound	Dist.	Sound
3+40	13.4	8.7	5+30 12.0
+50	14.2	9.5	11.8
(4.7)	14.8	10.1	<sup>11:20</sup> +50 11.7
	15.0	10.3	(4.7) 11.2
	15.3	10.6	11.2
	15.5	10.8	11.1
4+00	16.6	10.9	10.8
	15.3	10.6	6+00 10.9
	15.3	10.6	10.7
	15.2	10.5	10.6
	15.1	10.4	10.4
+50	15.0	10.3	9.5
	14.1	9.4	+50 9.6
	14.1	9.4	9.7
	14.4	9.7	10.2
	14.3	9.6	11.0
5+00	13.8	9.1	10.1
	13.0	8.3	7+00 9.9
+20	12.3	7.6	+10 10.1

83100N Sound East 8-16-50

Dist.	Sound	Dist.	Sound
7+20	10.0	5.3	9+10 10.1
	9.8	5.1	10.2
(4.7)	10.0	5.3	(4.7) 10.2
+50	10.0	5.3	(4.8) 10.3
	9.8	5.1	+50 10.2
	9.6	4.9	10.0
	9.5	4.8	9.8
	10.1	5.4	9.8
8+00	10.1	5.4	9.6
	10.4	5.7	10+00 9.7
	10.4	5.7	11.8
	10.3	5.6	11.25 13.0
	10.2	5.5	12.8
+50	10.3	5.6	11.1
	11.0	6.3	+50 8.0
	10.7	6.0	7.7
	9.9	5.2	7.3
	10.2	5.5	7.4
9+00	10.1	5.4	+9.8 8.3

21<sup>(15)</sup>



PX 83+00N Sound East 8-16-50

83+00N Sound East 8-16-50

Dist.	Sound	Dist.	Sound
11+00	7.1	12+90	6.1
(4.8)	6.9	13+00	6.0
	6.8	(4.8)	5.1
	6.3		4.8
	6.0		4.0
+50	5.1		3.7
	4.0	+50	3.0
	3.6		2.8
	3.4		2.7
	3.4		2.3
12+00	3.5		2.1
	3.7	14+00	2.5
	3.8		2.2
	4.0		2.0
	4.2		2.1
+50	4.5		2.3
	5.0	+50	2.0
	4.9		1.8
+80	4.6	+70	1.7

Dist.	Sound	Dist.	Sound
13+00	1.7	14+80	1.7
1.2	(4.8)	1.5	+3.3
0.3	1.5	1.5	+3.3
0.0	1.4		+3.4
+0.8	1.2		+3.6
+1.1	1.1	11+30	1.3
+1.9	0.6		+4.2

PX



PX

84100N-8-16-50

0+00 = Pt. 400'  $\frac{1}{4}$  causeway  $\frac{3}{4}$  west.Sound East

Dist.	Sound	Dist.	Sound
0+00	0.0	+5.0	1+10 3.1
	1.7	+3.3	3.3
(5.0)	2.8	+2.2	(5.0) 3.2
	3.0	+2.0	2+00 3.2
	3.0	+2.0	3.1
+50	3.2	+1.8	3.0
	3.3	+1.7	3.0
	3.6	+1.4	2.8
	4.0	+1.0	+50 2.5
	4.0	+1.0	2.4
1+00	4.0	+1.0	2.1
	4.0	+1.0	1.8
	4.0	+1.0	1.9
	3.6	+1.4	3+00 1.8
	3.1	+1.9	1.7
+50	3.0	+2.0	1.4
+60	3.0	+2.0	+30 1.4

84100N-Sound East 8-16-50

PX

Dist.	Sound	Dist.	Sound
3+40	1.5	+3.5	5+20 14.6
+50	1.6	+3.4	15.0
	1.4	+3.6	(5.0) 14.9
(5.0)	1.4	+3.6	+50 14.9
	1.3	+3.7	15.0
	1.0	+4.0	15.0
4+00	1.0	+4.0	15.0
	0.6	+4.4	15.0
	<del>1.2</del>		6+00 14.8
	1.2	+3.8	14.6
	1.9	+3.1	14.5
+50	2.8	+2.2	13.8
+50	4.1	+0.9	13.7
	6.0	1.0	+50 14.0
	7.7	2.7	14.1
	9.4	4.4	13.5
	10.8	5.8	12.9
5+00	11.5	6.5	12.1
+10	13.7	8.7	7+00 12.2



PX 84+00 Sound East 8-16-50

84+00N. Sound East 8-16-50 PX

	Dist. Sound		Dist. Sound		Dist. Sound		Dist. Sound		Dist. Sound			
	7+10	12.2	7.2	9+100	10.2	5.2	10+90	11.1	6.1	12+80	11.0	6.0
		11.9	6.9		10.1	5.1	11+00	11.2	6.2		10.8	5.8
	(5.0)	11.4	6.4	(5.0)	10.2	5.2		11.4	6.4	13+00	10.0	5.0
		11.2	6.2		10.1	5.1	(5.0)	11.2	6.2	(5.0)	9.6	4.6
	+50	11.1	6.1		10.3	5.3		11.1	6.1		8.7	3.7
		10.9	5.9	+50	10.2	5.2		11.2	6.2		7.9	2.9
		10.6	5.6		10.1	5.1	+50	11.3	6.3		7.1	2.1
		10.8	5.8		10.1	5.1		11.2	6.2	+50	5.9	0.9
		10.3	5.3		10.3	5.3		11.2	6.2		4.0	+1.0
	8+00	9.8	4.8		10.0	5.0		11.2	6.2		3.8	+1.2
		10.2	5.2	10+100	10.3	5.3		11.3	6.3		4.0	+1.0
	12:05	10.1	5.1		10.5	5.5	12+00	11.3	6.3		3.9	+1.1
		10.0	5.0		10.6	5.6		11.4	6.4	14+00	4.0	+1.0
		10.1	5.1		10.7	5.7		11.0	6.0		4.1	+0.9
	+50	10.0	5.0		10.8	5.8		11.0	6.0		4.2	+0.8
		10.1	5.1	+50	10.9	5.9		11.0	6.0		4.3	+0.7
		9.9	4.9		10.9	5.9	+50	11.0	6.0		4.2	+0.8
		10.0	5.0		11.0	6.0		11.1	6.1	+50	4.5	+0.5
	+90	10.3	5.3	+80	11.1	6.1	+70	11.1	6.1	+60	5.3	0.3



~~PA~~ 84+00N Sound East 8-16-50

84+00N Sound East 8-16-50

Dist.	Sound		Dist.	Sound		Dist.	Sound	Dist.	Sound
14770	6.0	1.0	16160	4.8	+0.2	18150	5.8	0.7	
	5.1	0.1		5.1	0.1		6.0	0.9	
(5.0)	5.0	0.0	(5.0)	4.8	+0.2	(5.1)	5.9	0.3	
15100	4.8	+0.2		4.8	+0.2		5.0	+0.1	
	4.5	+0.5	17100	6.2	1.2		4.8	+0.3	
	4.2	+0.8		6.8	1.9	19100	4.7	+0.4	
	4.1	+0.9	(3.0)	6.8	1.8		4.4	+0.7	
1210	4.4	+0.6	(5.1)	5.9	0.9		4.7	+0.4	
+50	4.2	+0.8		5.2	0.1		4.7	+0.4	
	4.5	+0.5	+50	5.1	0.0		4.5	+0.6	
	5.1	0.1		5.0	+0.1	+50	4.4	+0.7	
	6.8	1.8		5.0	+0.1		4.3	+0.8	
	6.3	1.3		5.0	+0.1	1215	4.4	+0.7	
16100	6.2	1.2		5.0	+0.1		4.2	+0.9	
	6.2	1.2	18100	5.0	+0.1		4.0	+1.1	
	4.8	+0.2		5.0	+0.1	20100	3.7	+1.4	
	4.7	+0.3		5.0	+0.1				
	4.6	+0.4		5.0	+0.1				
+50	4.8	+0.2	+40	5.5	+0.1				

~~PA~~



8-22-50

PX

8

8-22-50

(30)

X-SECTIONS OF PROJ. 16

Sta N 35+00 Cont

(AREA SOUTH OF DETOUR)

Sta H1 Elev

PX

STA-N-35+00

E103 12.66 1.9 10.7

STAT + H.I. - ELEV E115 5.9 6.7

.0+00 = (N-35+00  
W-127+50) SEC. E/E/W E150 6.6 6.1

B.M 2.31 12.66 10.35 Top Hgt Sta+127+50 E2100 5.6 7.1

W-285 8.2 4.6 E250 6.5 6.2

W 272 6.6 6.1 E300 6.6 6.1

W 250 6.3 6.4 E350 6.4 6.3

W 200 6.1 6.6 E400 6.2 6.5

W 150 6.1 6.6 E450 6.3 6.4

W 100 6.0 6.7 E500 6.2 6.5

W 0+50 6.0 6.7 E550 6.1 6.6

W 0+45 6.1 6.6 E600 6.0 6.7

W 0+38 6.9 5.8 E650 6.2 6.5

W 0+29 5.9 6.8 E700 6.1 6.6

W 0+21 7.0 5.7 E750 6.2 6.5

W 0+08 5.8 6.9 E800 6.4 6.3

0+00 4.2 8.5 E825 5.8 6.9

E 0+30 3.2 9.5 E845 6.8 3.9

E 0+75 2.3 10.4 E850 6.3 6.4



PX

Sta N 35+00

Sta	+	H1	-	Elev
E 900		12.66	5.2	7.5
E 914	14		2.9	9.8
E 925	"		4.8	7.9
E 950			5.5	7.2
E 1000			5.6	7.1
E 1050			5.0	7.7
T.P.			4.71	7.95
T.P.			6.21	6.45
T.P.	1.16	11.51		10.35
0+00 =	N-35+00 W-127+00		SEC EAST	
0+25 E	14.23	7.7	7.7	6.6
0+42 E		8.2	8.2	6.1
0+43 E		9.8	9.8	4.5
0+49 E		11.9	11.9	2.9
W 1+25				0.7
W 1+55				7.2
W 2+50				4.4
W 2+54				5.1
W 2+75				11.51
T.P.	11.51	4.67		6.84

Top 12"  
Tap  
opp  
Sta 1200

Drill 11.50  
on SFC  
To show 5.0+93

Top 12"  
Tap  
Sta 35+00

B. 22+00 (21)

Sta W 118+00 - N 35+00

Sta	+	H1	-	Elev
0+00 =	Sta W 118+00 Sta N 35+00			
0+00	5.18	11.63	5.0	6.6
0+25			5.2	6.4
0+70			5.1	6.5
0+100			4.8	6.8
0+120			2.4	9.2

TP opp  
120+00  
6.45

Sta W 119+00 - N 36+00

Sta	+	H1	-	Elev
0+00	4.98	11.43		6.45
0+25			5.1	6.3
0+42			5.0	6.9
0+43			4.9	6.5
0+49			4.9	6.5
W 1+25			1.0	10.4



PX Sta<sup>W</sup> 120+00 - N 35+00

Sta	+ HI	- Elev	TP 120+00
0+00	4.77	11.22	6.45
0+00		5.1	6.1
S 0+45		5.0	6.2
S 0+92		4.8	7.4
S 155		4.8	7.4
S 163		3.1	8.1

Sta<sup>W</sup> 121+00 N 35+00

Sta	+ HI	- Elev	TP 120+00
	4.86	11.31	6.45
0+00		5.2	6.1
S 0+41		5.2	6.1
S 0+95		4.6	6.7
S 104		2.0	9.3
S 117		1.7	9.6

PY Sta<sup>W</sup> 122+00 N 35+00

Sta	+ HI	- Elev	TP Sta 120+00
	4.59	11.04	6.45
0+00		5.0	6.0
S 0+07		4.4	6.6
S 0+18		4.3	6.7
S 0+33		0.7	10.3
S 0+49		1.1	9.9
S 0+86		1.4	9.6
S 102		1.8	9.2
S 112		4.5	6.5
S 143		5.0	6.0

Sta<sup>W</sup> 124+00 N 35+00

Sta	+ HI	- Elev	Water Pipe
	3.88	11.83	7.95
0+00		5.1	6.7
S 0+50		5.3	6.5
S 1+00		5.7	6.1
S 1+50		5.9	5.9
S 1+75		5.7	6.1



PX

8-22-50

Sta W 123+00 - N 34+00

Sta	+ HI -	Elev	T.P. 12" Water Line
	3.59 11.54	7.95	
N. 1+00	1.8	9.7	
N. 0+88	2.1	9.4	
N. 0+77	2.2	9.3	
N. 0+70	5.3	6.2	
0+00	5.1	6.4	
S 0+45	5.3	6.2	
S 0+82	5.3	6.2	

S

PX

8-22-50

(23)

Sta W 125+00 - N. 35+00

Sta	+ HI -	Elev	T.P. 12" Water Line
	3.72 11.67	7.95	
0+00	5.1	6.7	
0+50	5.3	6.5	
0+92	5.5	6.3	
1+40	5.8	6.0	
1+89	5.8	6.0	
2+20	5.6	6.2	



8-22-50

PX Sta<sup>w</sup> 126+00 N 35+00

Sta	+	H <sub>1</sub>	-	Elev
1	2.60	10.55		7.95
0+00			5.2	5.3
S 5.0+40			5.1	5.4
S 5.0+95			6.4	4.1
S 5.110			6.9	3.6
S 5.125			6.9	3.6
S 5.146			6.0	4.5
S 5.172			6.8	3.7
S 5.190			0.0	10.5

Sta<sup>w</sup> 127+00 N 35+00 Sec South

Sta	+	H <sub>1</sub>	-	Elev
	1.35	11.70		10.35
0+00			5.2	6.5
S 0+36			5.1	6.6
S 0+50			5.2	6.5
S 0+62			6.2	5.5
S 0+68			7.5	4.2
S 118.			6.8	4.9

Water

Top of

Sta 127+00

PX 8-23-50 (29)

Sta 127+00 W 35+00 N

Sta	+	H <sub>1</sub>	-	Elev
0+00		11.51		6.5
0+20			6.7	4.8
0+35			6.6	4.9
0+53			5.3	6.2
0+61			0.7	10.8
0+64			2.7	8.8
0+75			2.3	9.2

Sta W 128+00 N 35+00 see South

Sta	+	H <sub>1</sub>	-	Elev
T.P.	4.85	11.69		6.84

{ 128+00
{ 35+00 }

0+14			0.0	11.7
0+00			3.5	8.2
0+28			5.0	6.7
0+30			6.0	5.7
0+30			8.3	3.4
0+83			8.6	3.1
0+83			6.3	5.4
0+75			5.2	6.5
0+92			5.4	6.3
0+00			5.1	6.6

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8-23-50

PX

N-35+00

0+00 = { N-35+00  
W-128+00 }

STA	+ H.I.	-	ELEV
	11.69		
E1+00		5.2	6.5
E0+50		5.2	6.5
S 0+00		5.1	6.6
SW0+29		5.2	6.5
W0+46		4.8	6.9
W0+51		5.4	6.3
W0+53 <sup>2</sup>		6.8	4.9
W0+55 <sup>2</sup>		7.5	4.2
W0+64		7.4	4.3
W0+66 <sup>2</sup>		6.8	4.9
W0+74		5.9	5.8
W0+87		5.8	5.9
W0+98		6.8	4.9
W1+01 <sup>3</sup>		7.6	4.1
W1+50		7.3	4.4
W1+54		6.6	5.1
W1+75		0.2	11.5

8-23-50

25

STA-129+00-W

0+00 = { N-36+00  
W-129+00 } SEC. SOUTH

STA	+ H.I.	-	ELEV
T.P	4.77	11.61	6.89
S-1+45		0.0	11.6
S-1+39		5.9	5.7
S-1+33		6.7	4.9
S-1+28		7.3	4.3
S-1+23		7.6	4.0
S-1+02		7.3	4.3
S-0+98		6.7	4.9
S-0+96		6.2	5.9
S-0+68		5.0	6.6

H<sub>2</sub>O LEVEL



PX

STA-36+00-N

0+00 = (N-36+00)  
(W-127+00) SEC. WEST

STA + H.I. - ELEV

T.P. 4.43 11.27 6.84

W-4+07 0.0 11.3

W-3+96 4.5 6.8

W-3+70 5.1 6.2

W-3+68 7.1 7.2

W-3+64 8.3 3.0

~ Show G.H. ~

W-3+50 11.3/ 8.5 2.8

W-3+49 7.3 7.0

W-3+48 5.3 6.0

W-3+04 4.9 6.9

W-2+55 4.8 6.5

W-1+73 4.8 6.5

W-1+58 5.2 5.1

W-1+55 6.6 4.7

W-1+51 7.3 9.0

W-1+47 7.1 4.2

W-1+45 6.4 7.9

N-36+00

STA + H.I. - ELEV

N-1+43 11.3 5.5 5.8

N-1+32 4.8 6.5

N-1+00 5.1 6.2

N-0+52 5.0 6.3

N-0+00 5.0 6.3

N-2+50 5.1 6.2

N-1+04 4.5 6.7

N-1+52 4.7 6.6

N-1+82 3.3 8.0

T.P. 2.53 8.74

0+00 = (125+00 W)  
(36+00 N) SEC. EAST.

T.P. 5.52 14.26 8.74

0+00 4.7 9.6

N-0+05 5.6 8.7

N-0+31 3.1 11.2

N-1+14 2.6 11.7

N-1+19 2.9 11.9

N-1+30 6.9 7.4

N-1+73 6.8 7.5

C. BAIRD  
A. SHEPARD  
H. BIRLOW  
W. CARVER

8-23-50

PX (26)  
5-7S/E COR CONCLD  
ON 12" LINE  
TO S/E COR 125+00 W  
36+00 N



PX

N-36+00

STA	+ H.I.	-	ELEV
E-2+06	14.26 <sup>3/</sup>	7.7	6.6
E-2+23		8.6	5.7
E-2+28		9.2	4.7
E-2+55		10.3	4.0
E-2+61		9.4	4.9
E-2+62		7.5	6.8
E-3+05		7.4	6.9
E-3+60		7.5	6.8
E-4+14		7.6	6.7
E-4+68		7.7	6.6
E-5+22		7.6	6.7
E-5+73		7.6	6.7
E-6+27		7.6	6.7
E-6+85		7.7	6.6

8-23-50

STA-N-37+00

PX (27)

STA	+ H.I.	-	ELEV
T.B.M	9.80	15.15	10.35
4+31		4.5	10.6
4+75		5.0	10.1
4+82		4.9	10.2
4+03		4.9	10.2
4+80		4.6	10.5
4+00		5.0	10.1
4+10		5.4	9.7
4+52		8.8	6.3
4+42		8.9	6.2
4+00		8.9	6.2
4+50		8.9	6.2
4+10		8.8	6.3
4+60		8.7	6.4
4+05		9.0	6.1
4+07		10.2	4.9
4+13		10.8	4.3
4+28		10.3	4.8
4+31		9.7	5.4

3"x3" 37+00 N  
(127+00 W)

Top mantle



PX

N 37400

N 17+00 W 127+00

PX

Sta	+	Hr	-	Elev
E4+35		15.15	9.0	6.1
E4+90			8.8	6.3
E5+40			8.6	6.5
E6+00			8.6	6.5
E6+65			8.5	6.6
E7+90			8.5	6.6
F8+05			8.6	6.5
F8+85			8.9	6.2

Sta	+	Hr	-	Elev
TP		5.07	11.77	6.70
W1+00				4.9
W1+50				5.3
W1+05				5.3
W1+55				5.3
W2+15				5.5
W2+70				5.6
W3+25				5.6
W3+75				5.5
W4+35				5.8
W4+90				6.1
W5+45				5.9
W6+05				5.9
W6+65				5.9
W7+25				6.2
W7+75				6.3
W8+40				6.3
W9+00				6.3
W9+65				6.5

 10 ft East  
 { 46+00 N  
 127+00 W }



N 47+00 W 127+00  
 Sta 2 + H- - Eleu  
 11.77 9.4 2.4

8-23-50 (29)  
 N 48+00 W 127+00  
 Sta + H<sub>i</sub> - Eleu  
 TP 4.54 11.24 6.70

PX

10 ft East  
 46+00 N  
 127+00 W

Sta	H <sub>i</sub>	-	Eleu
			8
10+68	8.4		2.8
10+66	6.4		4.8
10+34	6.1		5.1
9+86	5.7		5.3
9+20	6.0		5.2
8+75	5.7		5.5
8+20	5.7		5.5
7+63	5.7		5.5
7+10	5.6		5.6
6+65	5.4		5.8
6+10	5.4		5.8
5+55	5.3		5.9
5+00	5.0		6.2
4+45	4.9		6.3
3+85	4.8		6.4
3+30	4.7		6.5
2+75	4.8		6.4



PX

N 48+00 W 127+00

Sta	+	H <sub>i</sub>	-	Elev
W 2+22		11.24	4.7	6.5
W 1+65			5.0	6.2
W 1+10			5.0	6.2
W 0+45			4.8	6.4
0+00			5.0	6.2
E 0+44			5.5	5.7
E 0+85			5.9	5.3
E 1+20			5.2	6.0
E 1+60			5.3	5.9
E 2+05			6.5	4.7
E 2+58			6.3	4.9
E 2+65			4.9	6.3
E 3+20			5.1	6.1
E 4+00			5.8	5.4
E 4+56			5.7	5.5
E 5+00			6.0	5.2
E 5+60			5.8	5.9
E 6+25			5.3	5.9
E 6+75			5.1	6.1

N 48+00-W 127+00

PX

Sta	+	H <sub>i</sub>	-	Elev
E 6+90		11.24	4.2	7.0
E 7+00			5.1	6.1
E 7+77			5.1	6.1
E 8+34			4.9	6.3
E 8+68			4.7	6.5
E 8+64			5.0	6.2
E 10+22			4.9	6.3
E 10+87			4.8	6.4



8-23-50

PX

N 49+00

W 127+00

Sta	+	Hi	-	Elev
T.P	4.75	11.45		6.70
E 12+40			5.0	6.4
E 11+54			5.1	6.3
E 11+00			4.9	6.5
E 10+27			4.9	6.5
E E 9+60			5.0	6.4
E E 8+90			5.3	6.1
E E 8+52			5.3	6.1
E E 8+37			5.4	6.0
E E 7+80			4.4	7.0
E E 7+72			1.7	9.7
E E 7+61			4.3	7.1
E E 7+10			5.7	5.7
E E 6+50			4.6	6.8
E E 5+85			4.4	7.0
E E 5+20			4.6	6.8
E E 4+50			4.7	6.7
E E 3+80			5.1	6.3
E E 3+10			4.7	6.7

8-23-50

(31)

N-49+00

W 127+00

Sta	+	Hi	-	Elev
E 2+70		11.45	5.2	6.2
E 2+55			6.8	4.6
E 2+40			5.6	5.8
E 1+80			5.4	6.0
E 1+05			5.5	5.9
E 0+79			7.9	3.5
E 0+65			5.5	5.9
E 0+37			5.3	6.1
0+00			4.9	6.5



8-24-50 PX 89+00N			8-24-50 PX (32) 89+00N								
0+00 = { 89+00N 130+00W			Sound East		Dist Sound		Dist Sound				
Dist	Sound		Dist	Sound	Dist	Sound	Dist	Sound	Dist	Sound	
					3+60	17.9	15.1		20	8.3	5.6
0+00	8.8	6.0	(2.8)	9.9	7.1	(2.8)	16.8	14.0	(2.7)	8.2	5.5
(1:50)	8.5	5.7		10.2	7.4		15.8	13.0		8.3	5.6
(2.8)	8.2	5.4	2+00	10.3	7.5		15.0	12.2	0+50	8.0	5.3
	8.0	5.2		10.2	7.4	1+00	14.6	11.8		8.0	5.3
	8.0	5.2		11.3	8.5		13.7	10.9		8.1	5.4
+50	8.0	5.2		11.7	8.3		12.6	9.8		7.2	4.5
	8.2	5.4		12.2	9.4		12.0	9.2		7.1	4.4
	8.7	5.9	+50	12.5	9.7		11.0	8.2	1+00	7.0	4.3
	8.8	6.0		13.2	10.4	+50	9.5	6.7		6.8	4.1
	8.5	5.7		13.5	10.5		7.0	4.2		6.3	3.6
1+00	8.0	5.2		14.3	11.5		3.0	0.2		6.8	4.1
	8.5	5.7		15.6	12.8	(5.3)	1.9	+0.9		7.0	4.3
	8.0	5.2	3+00	16.8	14.0		1.5	+1.3	+50	7.0	4.3
	8.3	5.5		17.0	14.2	5+00	1.0	+1.8		6.5	3.8
	8.4	5.6		17.2	14.4		1.0	+1.8		6.5	3.8
+50	8.7	5.9		17.8	15.0	Sound west				6.3	3.6
	8.9	6.1		18.1	15.3	(2.7) 0+00				6.1	3.4
	9.4	6.6	+50	18.4	15.6	(2.7) 1+00	8.9	6.2	2+00	6.0	3.3



PX

8-24-50

89+00 N Soundwest

Dist	Sound		Dist	Sound	
2+10	6.0	3.3	4+00	7.3	4.6
(2.7)	6.1	3.4	(2.7)	7.2	4.5
	6.0	3.3		7.2	4.5
	6.2	3.5		7.7	5.0
+50	6.2	3.5		7.6	4.3
	5.9	3.2	+50	7.9	5.2
	6.0	3.3		8.0	5.3
	6.3	3.6	(2.05)	8.2	5.5
	6.5	3.8		8.4	5.7
3+00	6.0	3.3		8.5	5.8
	6.8	4.1	5+00	8.7	6.0
	6.7	4.0		9.1	6.4
	6.9	4.2		9.0	6.3
	6.8	4.1		9.3	6.6
+50	6.6	3.9		9.4	6.7
	7.0	4.3	+50	9.3	6.6
	6.7	4.0		9.5	6.8
	6.8	4.1		9.6	6.9
+90	7.2	4.5	+80	9.7	7.0

89+00 N

PX

(33)

Dist	Sound	
5+30	9.7	7.0
6+00	9.9	7.2
(2.7)	10.0	7.3
	10.0	7.3
	9.5	6.8
	9.2	6.5
+50	9.0	6.3
	8.1	5.4
	6.9	4.2
	6.0	3.3
	5.0	2.3
+00	4.3	1.6
	3.9	1.2
	2.5	+0.2
(2.10)	2.0	+0.7
+40	0.2	+2.5



8-24-50

PX

88+00 N

0+00 = { 88+00N }  
          { 130+00W } Sound East

Dist Sound      Dist Sound

0+00 10.9 8.1 (2.8) 18.1 15.3

(2.25) 10.7 8.1      18.0 15.2

(2.8) 10.9 8.1 2+00 18.0 15.2

12.0 9.2      18.1 15.3

12.1 9.3      17.9 15.1

+50 12.5 9.7      17.9 15.1

12.9 10.1 9.6      17.3 14.5

12.9 10.1 +50 15.4 12.6

13.0 10.2      14.5 11.7

13.2 10.4      13.8 11.0

1+00 14.0 11.2      13.2 10.4

14.7 11.9      12.9 10.1

15.1 12.3 3+00 11.3 8.5

15.9 13.1      10.1 7.3

16.5 13.7      9.0 6.2

+50 17.1 14.3      8.9 6.1

18.0 15.2      7.3 4.5

18.3 15.5 +50

8-24-50

88+00 N

PX

(34)

Dist Sound      Dist Sound

(2.8) 5.6 2.8 (2.8) 10.6 7.8

2.9 0.1 1+00 10.3 7.5

2.3 +0.5      10.2 7.4

1.8 +1.0      10.1 7.3

4+00 1.1 +1.7      10.7 7.3

1.0 +1.8      10.0 7.2

1.1 +1.7 +50 10.0 7.2

0.7 +2.1      9.8 7.0

0.5 +2.3      9.9 7.1

Sound West      9.9 7.1

10.0 7.2

10.4 7.6 2+00 9.8 7.0

10.1 7.3      9.8 7.0

9.9 7.1      9.7 6.9

10.3 7.5      9.5 6.7

+50 10.4 7.6      9.0 6.2

10.9 8.1 +5.0 8.8 6.0

10.9 8.1      8.8 6.0

10.8 8.0 +7.0 8.7 5.9



8-24-50

PX

88 + 00 N

Dist	Sound	Dist	Sound
2+80	8.5	5.7	4+70 7.6
(2.8)	8.2	5.4	(2.9) 7.5
3+00	8.1	5.3	7.7
	8.0	5.2	5+00 8.0
	7.7	4.9	8.0
	7.2	4.4	7.8
	7.2	4.4	8.3
+50	7.5	4.7	8.3
	7.5	4.7	+50 8.5
	7.0	4.2	8.8
	7.2	4.4	8.9
	7.4	4.6	9.2
4+00	7.5	4.7	9.8
(2.9)	7.2	4.3	6+00 9.5
(2.40)	7.0	4.1	9.6
	7.0	4.1	9.7
	7.0	4.1	9.9
+50	7.1	4.2	9.8
	7.3	4.4	+50 10.3

8-24-50

88 + 00 N

PX

(35)

Dist	Sound	Dist	Sound
6+60	10.4	7.5	(2.9) 8+50 0.3
(2.9)	10.8	7.9	(2.45)
	11.0	8.1	
	11.3	8.4	
7+00	11.4	8.5	
	11.5	8.6	
	11.9	9.0	
	11.5	8.6	
	11.2	8.3	
+50	11.0	8.1	
	10.2	7.3	
	9.8	6.9	
	8.8	5.9	
	7.7	4.8	
8+00	7.0	4.1	
	6.0	3.1	
	5.2	2.3	
	2.5	+0.4	
+90	1.5	+1.4	



121  
PX 8-25-50  
85+00 N

0+00 = { 85+00N }  
          { 141+00W }

Dist Sound      Dist Sound

0+00                      1+00    11.5    9.1

0+16    0.0    12.4                      11.3    8.9

2.4+20    0.9    11.5    2+00    11.0    8.6

2.4    2.5    0.1    2.4    10.8    8.4

5.3    2.9                      10.8    8.4

+50    6.5    4.1                      10.8    8.4

7.6    5.2                      10.8    8.4

8.0    5.6    +50    10.7    8.3

10.2    7.8                      9.9    7.5

11.1    8.7                      9.0    6.6

1+00    11.4    9.0                      9.1    6.7

11.8    9.4                      9.1    6.7

12.0    9.6    3+00    9.0    6.6

11.9    9.5                      8.6    6.2

11.5    9.1                      7.9    5.5

+50    11.6    9.2                      8.0    5.6

11.7    9.3                      8.0    5.6

+70    11.7    9.3    +50    8.0    5.6

8-25-50  
85+00 N

PX <sup>(36)</sup>

Dist Sound      Dist Sound

3+60    7.5    5.1    5+50    7.7    5.3

7.5    5.1                      7.7    5.3

7.3    4.9                      7.7    5.3

7.5    5.1                      7.8    5.4

4+00    7.4    5.0                      7.9    5.5

7.3    4.9    6+00    7.6    5.2

2.4    7.2    4.8                      8.1    5.7

7.4    5.0                      8.2    5.8

7.7    5.3    2.4    8.2    5.8

+50    7.4    5.0    2.20    8.3    5.9

7.3    4.9    +50    8.2    5.8

7.4    5.0                      8.2    5.8

7.4    5.0                      8.2    5.8

7.5    5.1                      8.3    5.9

5+00    7.4    5.0                      8.4    6.0

7.3    4.9    7+00    8.6    6.2

7.7    5.3                      8.7    6.3

7.4    5.0                      8.8    6.4

+40    8.0    5.6    7+30    8.8    6.4



8-25-50  
PX 85+00 N

Dist	Sound	Dist	Sound
7+40	9.0 6.6	9+30	9.2 6.8
+50	9.1 6.7		9.0 6.6
	9.1 6.7	+50	8.7 6.3
	9.1 6.7		8.1 5.7
	9.1 6.7		7.7 5.3
	9.0 6.6		6.9 4.5
8+00	9.4 7.0		6.2 3.8
	9.1 6.7	10+00	5.1 2.7
(2A)	9.3 6.9	(2.4)	4.5 2.1
	9.3 6.9		3.8 1.4
	9.3 6.9		3.1 0.7
+50	9.4 7.0		2.9 0.5
	9.3 6.9	+50	3.1 0.7
	9.4 7.0		2.5 0.1
	9.6 7.2		1.7 +0.7
	9.7 7.3		1.5 +0.9
9+00	9.3 6.9		1.1 +1.3
	9.3 6.9	11+00	1.0 +1.4
+20	9.2 6.8	+10	1.0 +1.4

8-25-50  
85+00 N

(37)  
PX

Dist	Sound	Dist	Sound
11+20	0.9 +1.5	13+10	1.3 +1.1
	1.0 +1.4		1.2 +1.2
	0.9 +1.5		1.4 +1.0
+50	0.9 +1.5		1.3 +1.1
	1.0 +1.4	+50	1.2 +1.2
	1.0 +1.4		1.1 +1.3
	1.1 +1.3		1.2 +1.2
	1.1 +1.3		1.0 +1.4
12+00	1.2 +1.2		0.7 +1.7
	1.2	14+00	0.5 +1.9
(2A)	1.2	(2A)	0.5 +1.9
	1.2	(2A)	0.4 +2.0
	1.2 +1.2		0.0 +2.4
+50	1.3 +1.1	(2.30)	+0.2 +2.6
(2.25)	1.2 +1.2	+50	+0.6 +3.0
	1.3 +1.1		
	1.3 +1.1		
	1.2 +1.2		
	1.3 +1.1		
		15+00	



8-25-50

PX

86+0.0 N

0+00 = { 86+00 N }  
{ 140+00 W } Sound East

Dist	Sound	Dist	Sound
0+00		1+80	10.8 8.4
+13-	0:0 +2.4		10.6 8.2
(2.45) +20	0.9 +1.5	2+00	10.3 7.9
(2.4)	1.9 +0.5		10.2 7.8
	2.9 0.5	(2.4)	10.1 7.7
+50	4.7 2.3		10.5 8.1
	6.1 3.7		10.0 7.6
	6.9 4.5	+50	10.2 7.8
	8.2 5.8		10.1 7.7
	9.1 6.7		9.9 7.5
1+00	10.2 7.8		9.3 6.9
	10.5 8.1		9.3 6.9
	10.9 8.5	3+00	9.4 7.0
	11.0 8.6		9.1 6.7
	11.0 8.6		8.3 5.9
+50	11.0 8.6		8.4 6.0
	10.8 8.4		8.3 5.9
+70	10.9 8.5	+50	7.7 5.3

8-25-50

86+0.0 IX

(38)

PX

Dist	Sound	Dist	Sound
3+60	7.0 4.6	5+50	8.1 5.7
	7.3 4.9		8.1 5.7
	7.7 5.3		8.2 5.8
	7.4 5.0		8.3 5.9
4+00	7.2 4.8		8.4 6.0
	7.2 4.8	6+00	8.5 6.1
	7.3 4.9		8.7 6.3
(2.4)	7.3 4.9	(2.9)	9.0 6.6
	7.1 4.7	(2.50)	8.8 6.4
+50	7.0 4.6		8.8 6.4
	7.3 4.9	+50	8.9 6.5
	7.4 5.0		8.6 6.2
	7.4 5.0		8.7 6.3
	7.5 5.1		8.9 6.5
5+00	7.2 4.8		9.2 6.8
	7.6 5.2	7+00	9.0 6.6
	7.7 5.3		9.0 6.6
	7.7 5.3		9.0 6.6
+40	7.8 5.4	+50	8.9 6.5



8-25-50

PX

86+00N

Dist	Sound		Dist	Sound	
7+40	9.0	6.6	9+30	10.2	7.8
+50	9.3	6.9		10.3	7.9
	9.4	7.0	+50	10.5	8.1
(2)	9.5	7.1		10.5	8.1
(2.4)	9.5	7.1	(2.55)	10.3	7.9
	9.4	7.0	(2.4)	10.0	7.6
8+00	9.3	6.9		9.5	7.1
	9.4	7.0	10+00	9.5	7.1
	9.3	6.9		9.2	6.8
	9.4	7.0		9.1	6.7
	9.4	7.0		8.8	6.4
+50	9.5	7.1		8.5	6.1
	9.5	7.1	+50	8.2	5.8
	9.6	7.2		7.8	5.4
	9.7	7.3		7.3	4.9
	9.8	7.4		7.0	4.6
9+00	9.8	7.4		7.0	4.6
	9.9	7.5	11+00	6.9	4.5
+20	10.1	7.7	+10	6.3	3.9

8-25-50

86+00N

(39)

PX

Dist	Sound		Dist	Sound	
11+20	6.0	3.6			
(2.4)	5.8	3.4			
	5.7	3.3			
+50	5.2	2.8			
	4.0	1.6			
	3.9	1.5			
	2.9	0.5			
	2.4	0.0			
12+00	2.0	+0.4			
	1.8	+0.6			
	1.8	+0.6			
	1.5	+0.9			
	1.3	+1.1			
+50	0.2	+2.2			
	0.6	+1.8			
	0.2	+2.2			
	0.1	+2.3			
	+0.1	+2.5			
13+20	+0.1	+2.5			



8-25-50

PX N-87+00

0+00 = (N-87+00)  
(W-140+00) SOUND EAST

DIST SOUND DIST SOUND

0+00 2+80 11.2 8.7

1+15 0.0 +2.5 11.2 8.7

20 0.4 +2.1 3+00 10.9 8.4

3.15 1.0 +1.5 10.5 8.0

1.7 +0.8 10.0 7.5

1+50 3.1 0.6 2.5 10.0 7.5

2.5 6.1 3.6 10.1 7.6

6.4 3.9 50 10.0 7.5

7.2 4.7 10.0 7.5

8.2 5.7 9.8 7.3

2+00 8.9 -6.4 9.8 7.3

9.2 6.7 9.4 6.9

10.2 7.7 4+00 8.7 6.2

10.8 8.3 8.2 5.7

11.1 8.6 8.0 5.5

50 11.1 8.6 8.1 5.6

11.2 8.7 8.3 5.8

2+70 11.3 8.8 4+50 8.2 5.7

8-25-50

N-87+00

DIST SOUND DIST SOUND

4+00 8.2 5.7 6+50 7.7 5.2

7.8 5.3 7.9 5.4

2.5 7.1 4.6 3.20 8.0 5.5

7.2 7.7 2.5 8.0 5.5

5+00 7.0 4.5 8.1 5.6

7.0 4.5 7+00 8.1 5.6

6.9 4.4 8.3 5.8

7.0 4.5 8.5 6.0

7.0 4.5 8.7 6.2

50 8.0 4.5 8.9 6.4

6.9 4.4 +50 9.0 6.5

7.0 4.5 9.1 6.6

7.2 4.7 9.2 6.7

7.0 4.5 9.3 6.8

6+00 7.2 4.7 9.4 6.9

7.4 4.9 8+00 9.7 7.2

7.2 4.7 9.8 7.3

7.2 4.7 9.8 7.3

6+40 7.1 4.6 8+30 9.7 7.2



PX 8-25-50  
87 +00N

Dist sound

8+00	10.0	7.5	10+30	11.7	9.2
+50	10.0	7.5		12.0	9.5
	10.1	7.6	+50	12.4	9.9
(2.5)	10.0	7.5		12.8	10.3
	10.0	7.5	(2.5)	12.9	10.4
	9.8	7.3		13.2	10.7
9+00	10.0	7.5		13.8	11.3
	10.0	7.5	11+00	14.2	11.7
	10.1	7.6		14.8	12.3
	10.1	7.6		15.0	12.5
	9.9	7.4		15.2	12.7
+50	9.7	7.2		15.1	12.6
	9.7	7.2	+50	15.3	12.8
	9.8	7.3		15.8	13.3
	10.2	7.7		16.5	14.0
	10.7	8.2		17.0	14.5
10+00	10.9	8.4		16.9	14.4
	11.0	8.5	12+00	16.8	14.3
+20	11.2	8.7	+10	16.0	13.5

8-25-50  
87+00N

Dist sound

12+20	14.9	12.4	14+10	0.5	+2.0
	13.8	11.3		0.4	+2.1
(3:25)	13.3	10.8		0.2	+2.3
+50	13.3	10.8	(2.5)	0.2	+2.3
(2.5)	13.0	10.5	+50	0.1	+2.4
	11.8	9.3	+60	0.0	+2.5
	9.9	7.4	(3:30)+70	+0.1	+2.6
	9.3	6.8			
13+00	7.7	5.2			
	5.5	3.0			
	4.4	1.9			
	3.0	0.5			
	2.8	0.3			
+50	2.2	+0.3			
	2.0	+0.5			
	1.5	+1.0			
	1.0	+1.5			
	0.6	+1.9			
14+00	0.4	+2.1			

PX (41)



The image shows an open notebook with two facing pages. The pages are cream-colored and feature light blue horizontal ruling. Each page has two vertical red margin lines, one on each side of the central gutter. The notebook has rounded corners and a visible binding on the left side. The pages are blank, with no writing or markings. A small circular stamp with the number '92' is located in the top right corner of the right page.



STA- 73+00-N

0+00 = { N-73+00 } PICKUP ON STA-73+00 SEC WEST  
          { W-140+00 }

DIST    +    H.L.    -    ELEV



PX

N-70+00

N-70+00

PX

WATER 5.05

9.53

0+00 (N-70+00)  
(N-140+00) SEC EAST & WEST

Sta

+

HI

-

Elev

DIST + H.I. - ELEV

SURFACE R.  
E 03.95

E 116

9.55

5.0

4.5

WATERKEY 5.15 9.55 4.4

E 118

5.8

3.7

W-390 5.4 4.1

E 140

8.9

0.6

W 383 5.1 4.4

E 163

6.5

3.0

W 340 4.6 4.9

E 168

5.1

4.4

W 290 4.7 4.8

E 215

4.2

5.3

W 240 4.4 5.1

E 272

4.3

5.2

W 185 4.3 5.2

E 330

4.3

5.2

W 130 4.0 5.5

E 390

4.1

5.4

W 0+75 5.2 4.3

W 0+70 5.7 3.8

W 0+52 5.7 3.8

W 0+25 5.3 4.2

0+00 5.0 4.5

E 0+26 5.2 4.3

E 0+23<sup>3</sup> 5.5 4.0

E 0+46 5.2 4.3

E 0+98 4.7 4.8



PX

N-69+00

N. 69+00

Water. 4.70 PX<sup>(45)</sup>0+00 = {N-69+00  
{W-190+00} Sec E, & W.

Sta + HI - Elev

W0160 9.5 4.7 4.8

D. ST + H.I. - ELEV

W115 4.0 5.5

WATERLEY 5.87 9.57 4.7

SURFACE  
@ 10:00

W175 4.2 5.3

E-445 4.0 5.5

W230 4.1 5.4

E-380 4.2 5.3

W285 4.2 5.3

E-325 4.6 4.9

W340 4.3 5.2

E-270 5.0 4.5

W390 4.3 5.2

E-240 5.3 4.2

W430 4.4 5.1

E-225 5.8 3.7

W434 4.9 4.6

E-210 6.9 2.6

W450 5.9 3.6

E-195 6.5 3.0

W475 6.1 3.4

E-175 6.1 3.4

E-155 5.0 4.5

E-102 4.8 4.7

E-0+53 4.6 4.9

E-0+20 4.5 5.0

0+00 5.0 4.5

W-0+28 5.4 4.1



0+00 = W 140+00 N. 68+00 Water 4.0

Sta	T	H1	-	Elev
W	4.08	8.88 <sup>9</sup>		4.8
W 4+30			4.9	4.0
W 4+27			3.9	5.0
W 3+75			3.8	5.1
W 3+22			3.5	5.4
W 2+70			3.5	5.4
W 2+15			3.4	5.5
W 1+60			3.2	5.7
W 1+00			3.4	5.5
W 0+65			3.4	5.5
W 0+61			2.9	6.0
W 0+30			4.1	4.8
W 0+22			4.1	4.8
W 0+15			5.1	3.8
0+00			4.7	4.2
E 0+15			4.7	4.2
E 0+30			4.0	4.9
E 0+36			3.4	5.5

N. 68+00

Sta	T	H1	-	Elev
E 100		8.88	3.8	5.1
E 150			3.7	5.2
E 205			4.2	4.6
E 222			4.4	4.5
E 231			4.1	4.8
E 270			4.0	4.9
E 295			3.6	5.3
E 365			3.9	5.0
E 415			4.3	4.6
E 435			4.2	4.7
E 438 <sup>3</sup>			4.7	4.2
E 455			4.6	4.3
E 478			4.4	4.5
E 495			4.7	4.2
E 515			4.0	4.9
E 555			3.6	5.3
E 610			3.7	5.2
E				

PX (70)



Sta	T	H1	-	Elev
E630		10.05	5.1	4.9
E590			5.1	4.9
E570			4.4	5.6
E562 <sup>8</sup>			5.2	4.8
E551 <sup>11</sup>			4.4	5.6
E531			5.1	4.9
E480			5.0	5.0
E430			4.8	5.2
E370			4.4	5.6
E315			4.5	5.5
E255			5.0	5.0
E190			4.3	5.7
E130			4.3	5.7
E0+70			4.2	5.8
E0+48 <sup>6</sup>			5.1	4.9
E0+42			6.3	3.7
E0+30			7.4	2.6
E0+12 <sup>6</sup>			6.4	3.6
0+06			5.1	4.9

0+00 = W140+00

Sta<sup>N</sup> 67+00

Sta	T	H1	-	Elev
0+00		4.7	10.05	5.0 5.35 5.0
W0116				4.7 5.3
W0170				4.5 5.5
W125				4.2 5.3
W185				4.6 5.4
W240				4.9 5.1
W288				4.9 5.1
W294 <sup>6</sup>				5.6 4.4
W				
W				
W				
W				

PX (99)



PX

N. 66+00

Sta + HI - Elev

PT. 270E/40+00 D/L

0+00 N. 66+00 W 137+30

WATERLEV 4.27 9.77 5.5

0+00 4.9 4.9

E 0+40 4.6 5.2

E 100 4.3 5.5

E 165 4.2 5.6

E 220 4.1 5.7

E 283 4.4 5.4

E 298 3.5 6.3

E 318 4.0 5.8

E 370 3.9 5.9

E 430 3.5 6.3

0+00 = W/140+00

Sta N. 63+00

Sta + HI - Elev

4.63 10.18 5.5

E 570 5.1 5.1

E 535 5.2 5.0

E 500 5.3 4.9

E 494 5.7 4.5

E 487 7.6 2.6

E 465 9.5 0.7

E 440 7.7 2.5

E 430 5.3 4.9

E 426 4.7 5.5

E 380 4.6 5.6

E 320 4.7 5.5

E 270 4.6 5.6

E 215 4.8 5.4

E 163 5.0 5.2

E 110 5.2 5.0

E 0+70 5.1 5.1

E 0+33 5.0 5.2

0+00 5.0 5.2

8-29-50

(98)

PX

Tide



PX

0+00 = W140+00

Sta 63+00

Sta	SI	H1	-	Elev
W0+55		10.18	5.1	5.1
W0+75			5.5	4.7
W0+79 <sup>4</sup>			6.2	4.0
W0+84 <sup>5</sup>			6.7	3.5
W0+95			8.8	1.4
W108			8.7	1.5
W130			7.7	2.5
W140			5.6	4.6
W147			6.2	4.0
W153 <sup>6</sup>			7.5	2.7
W160			6.3	3.9
W177			5.5	4.7
W210			5.1	5.1
W280			5.3	4.9
W322			5.6	4.6
W324 <sup>7</sup>			6.8	3.4
W326 <sup>12</sup>			8.9	1.3
W345			8.9	1.3

8-27-80 (49)

Sta 63+00

PX

Sta	H1	-	Elev
	10.18		
W355			8.9 1.3
W365			6.3 3.9
W371 <sup>6</sup>			5.4 4.8
W410			5.3 4.9
W465			5.3 4.9
W510			5.3 4.9
W530			5.4 4.8
W542			5.7 4.5
W580			5.1 4.1
W585 <sup>15</sup>			4.4 5.6



8-30-50

PX

Sta 76+00 N

0+00 = { 76+00N  
west curb B/L

Sta	+	Hi	-	Elev
BM	6.67	17.50		10.83
East Gutter			5.25	12.25
" Curb			4.68	12.82
E 0+55			4.7	12.8
E 0+58			6.1	11.4
E 0+66			12.2	5.3
E 0+71			13.8	3.7

8-30-50

PX

(50)

Sta 77+00 N

0+00 = { 77+00N  
west curb B/L

Sta	+	Hi	-	Elev
BM	4.93	15.76		10.83
East Gutter			5.68	10.08
" Curb			5.03	10.73
E 0+68			5.1	10.7
E 0+7			4.7	11.1
E 1+36			5.7	10.1
E 1+38			8.2	7.6
E 1+45			10.2	5.6
E 1+54			12.0	3.8



8-30-50

PX

78+00 N

0+00 = { 78+00 N  
west curb B/L

Sta + Hi - Elev

B.M. 5.01 15.84 10.83

East gutter 5.05 10.79

" curb 4.56 11.28

E 0+75 5.2 10.6

E 1+10 4.8 11.0

E 1+50 5.1 10.7

E 2+11 4.2 11.6

E 2+30 4.5 11.3

E 2+40 9.6 6.2

E 2+53 12.0 3.8

250

"Causway"

79+00 N

8-30-50

PX (51)

0+00 = { 79+00 N  
west curb B/L

Sta + Hi - Elev

B.M. 4.94 15.77 10.83

F.P. 4.45 11.32

E 3+40 10.3 5.5

E 3+77 4.1 11.7

E 2+65 4.2 11.6

E 1+58 5.6 10.2

E 1+29 4.6 11.2

E 0+75 4.7 11.1

East curb 4.56 11.21

East gutter 5.13  
~~5.40~~ 10.69

"Causway"

Lamp Post  
4619



8-30-50

80+00 N

PX

0+00 = { 80+00 N  
west curb B/c

Sta + Hi - Elev

T.P. 4.67 15.99 11.32

Lamp Post  
4619

East gutter

5.50 10.49

" curb

4.84 11.15

E0+85

4.6 11.4

E1+30

4.6 11.4

E2+00

5.8 10.2

E2+75

6.1 9.9

E3+75

4.6 11.4

E4+10

5.6 10.4

E4+28

10.2 5.8

E4+37

12.0 4.0

(52)

81+00 N

8-30-50

PX

0+00 = { 81+00 N  
west curb B/c

Sta + Hi - Elev

T.P. 4.77 16.09 11.32

Lamp Post  
4619

E5+20

12.0 4.1

E5+05

8.8 7.3

E4+90

6.3 9.8

E4+30

6.2 9.9

E3+30

6.0 10.1

E2+35

6.4 9.7

E1+60

6.6 9.5

E1+10

6.0 10.1

E1+01

5.2 10.9

E0+68

4.5 11.6

East curb

4.79 11.30

East gutter

5.43 10.66



PX

82+00 N

0+00 = { 82+00 N  
west curb B/C

sta	+	H <sub>1</sub>	-	Elev	
T.P.	4.90	16.22		11.32	Lamp Post 4619
East gnt			5.45	10.77	
Curb			4.85	11.37	
E 0+83			5.2	11.0	
E 0+94			6.5	9.7	
E 1+65			6.7	9.5	
E 2+35			6.8	9.4	
E 3+33			6.8	9.4	
E 4+50			5.7	10.5	
E 5+02			6.1	10.1	
E 5+20			9.6	6.6	
E 5+40			11.7	4.5	

83+00 N 8-30-50

PX (53)

0+00 = { 83+00 N  
west curb B/C

sta	+	H <sub>1</sub>	-	Elev	
T.P.	4.95	16.27		11.32	Lamp Post 4619
4+65			11.5	4.8	
4+53			8.5	7.8	
4+33			5.0	11.3	
3+75			5.2	11.1	
3+48			6.4	9.9	
2+75			6.3	10.0	
1+95			7.0	9.3	
1+20			6.7	9.6	
0+70			4.8	11.5	
East curb			4.82	11.45	
gutter			5.42	10.85	15' south Lamp Post 4625
T.P.	4.92	11.35			



PX

84+00 N

8-30-50

0+00 = { 84+00 N  
west curb } B/L

Sta	+	H <sub>1</sub>	-	Elev	15' south Lamp Post 4625
T.P.	4.89	16.24		11.35	
East gutter			5.40	10.84	
East curb			4.79	11.45	
0+82			5.3	10.9	
1+05			6.5	9.7	
1+70			7.0	9.2	
2+30			6.4	9.8	
2+85			6.1	10.1	
3+35			6.0	10.2	
3+65			5.2	11.0	
3+76			4.1	12.1	
3+90			8.9	7.3	
4+00			11.3	4.9	

85+00 N 8-30-50

59

0+00 = { 85+00 N  
west curb } B/L

PX

Sta	+	H <sub>1</sub>	-	Elev	15' south Lamp Post 4625
T.P	4.86	16.21		11.35	
4+30			11.6	4.6	
4+25			11.2	5.0	
4+10			8.6	7.6	
3+80			3.9	12.3	
3+73			5.6	10.6	
3+30			7.5	8.7	
2+80			7.4	8.8	
2+30			6.7	9.5	
1+80			7.0	9.2	
1+28			6.6	9.6	
0+80			5.2	11.0	
East curb			4.82	11.39	
" gutter			5.44 <del>4.44</del>	11.72	
				10.71	



PX

86+00 N

8-30-50

0+00 =

{ 86+00 N  
West curb B/L }

Sta	+	H.I.	-	Elev
T.P.	4.66	16.01		11.35
907			5.34	10.67
ck.			4.74	11.27
0+70			4.6	11.4
1+20			6.0	10.0
1+83			6.5	9.5
2+67			7.1	8.9
3+40			8.6	7.4
4+00			7.8	8.2
4+55			6.8	9.2
5+05			6.6	9.4
5+15			5.7	10.3
5+46			9.0	7.0
5+57			11.1	4.9

15' South  
Lamp Post  
#4625

Sta. 87+00 N

8-30-50

PX (55)

0+00 = { 87+00 N  
West curb B/L }

Sta.	+	H.I.	-	Elev.
T.P.	4.28	15.63		11.35
6+34			10.5	5.1
6+10			8.2	7.4
6+02			6.2	9.4
5+83			8.2	7.4
5+00			9.1	6.5
4+10			8.8	6.8
3+55			8.8	6.8
3+00			8.2	7.4
2+55			7.4	8.2
2+18			6.1	9.5
1+82			5.9	9.7
1+31			9.7	10.9
0+90			4.6	11.0
0+69			4.3	11.3
East Curb			4.55	11.08
East 60'			5.08	10.55
T.P.			4.51	11.12

15' South  
Lamp Post  
#4625opposite  
Bus. Stop  
East curb.



PX Sta 88+00 N 8-30-50

0+00 = { 88+00 N West curb 3/4 }

Sta	+ H.I.	-	Elev
TP	4.40	15.52	11.12
East gutter		5.35	10.17
East curb		4.53	10.99
1+00		4.8	10.7
1+30		5.9	9.6
1+70		5.8	9.7
2+50		7.2	8.3
3+20		7.1	8.4
3+75		8.1	7.4
4+33		8.6	6.9
5+25		9.0	6.5
6+03		8.8	6.7
6+85		8.8	6.7
7+08		7.7	7.8
7+22		5.6	9.9
7+50		9.4	6.1
7+60		10.4	5.1

Stake set at 760' from West curb 3/4 for a sounding station.

PX Sta 89+00 N 8-30-50

0+00 = { 89+00 N West curb 3/4 }

Sta	+ H.I.	-	Elev
TP	4.50	15.62	11.12
8+70		9.7	5.9
8+40		8.0	7.6
8+10		8.7	6.9
7+60		8.5	7.1
7+15		8.8	6.8
6+80		10.0	5.6
5+90		9.4	6.2
5+10		8.8	6.8
4+65		8.6	7.0
4+20		8.8	6.8
3+70		8.1	7.5
2+75		7.5	8.1
2+23		6.4	9.2
1+72		6.1	9.5
1+22		5.8	9.8
0+80		4.8	10.8

Stake set at 870' from West curb 3/4 for a sounding station to finish line by sounding



Sta 89+00 N 8-30-50 CONTD.

Sta.	+	H.I.	-	Elev.
East curb		15.62	4.50	11.12
East gutter			5.15	10.47

Sta. 68+00 N

8-30-50

(57)

PX

0+00 = Sta <sup>69+00 N</sup> ON East curb 3/4 }

Sta	+	H.I.	-	Elev.
B.M.	6.21	17.41		11.20
East gutter			5.37	12.04
East (0+00) curb			4.75	12.66
0+04			4.6	12.8
0+08			5.5	11.9
0+08			8.9	8.5
0+10			10.0	7.4
0+11			11.0	6.4
0+13			12.2	5.2
0+19			13.2	4.2

Sta. 67+00 N West curb



PX

Sta 67+00 N 8-30-50

0+00 = Sta 67+00 N on Causeway 3/4 East curb

Sta.	+	H.I.	-	Elev.
B.M.	4.76	15.96		11.20
East Gutter			5.40	10.56
East (0+00) curb			4.85	11.11
0+05			4.7	11.2
0+10			5.4	10.5
0+15			10.0	5.9
0+22			12.0	3.9

Sta 67+00 N  
West curb

PX

Sta. 66+00 N 8-30-50

0+00 = Sta. 66+00 N on Causeway 3/4 East curb

Sta.	+	H.I.	-	Elev.
B.M.	4.88	16.08		11.20
East Gutter			5.40	10.68
East (0+00) curb			4.80	11.28
0+05			3.2	12.9
0+10			3.9	12.2
0+23			10.6	5.5
0+30			11.9	4.2

Sta 67+00 N  
West curb

58



STA-N-61+00				N-61+00					
DIST	+	H.I.	-	ELEV	DIST	+	H.I.	-	ELEV
WATERKEY	6.02	9.52		3.5	E-0+92		9.52	5.2	4.3
T.P.			3.15	6.37	E-1+00			5.8	3.7
0+00 =	{N-61+00 W-140+00}				E-1+20			7.2	2.3
0+00		9.52	4.8	4.7	E-1+60			6.3	3.2
W-0+22			5.0	4.5	E-2+00			4.7	4.8
W-0+25			6.9	2.6	E-2+60			4.7	4.8
W-0+39			7.8	1.7	E-3+20			4.7	4.8
W-0+55			7.3	2.2	E-4+03			4.6	4.9
W0+58			4.3	6.2	E-4+82			4.4	5.1
W110			4.5	6.0	E-5+50			4.4	5.1
W143			4.4	5.1	E-5+90			4.7	4.8
W211			4.3	5.2	E-5+95			7.7	1.8
W260			4.5	5.0					
W296			4.9	4.6					
W300			6.9	2.6					
E0+20			5.2	4.3					
E-0+30			5.9	3.6					
E0+58			5.0	4.5					

140 SURFACE  
@ 09:15 A.M.  
248 # 15  
1/2" 140  
6/15



PX		N-60+00		N-60+00		PX	
0+00 =	{N-60+00 W-140+10}			Dist	+ H.I.	-	Elev
DIST	+ H.I.	-	ELEV	<sup>0</sup> <sup>00</sup> E-0+08	9.57	5.3	4.3
T.P	3.20	9.57	6.37	T.P. LAST PAGE 0+00		4.8	4.8
E-6+80		6.9	2.7	W-0+55		4.4	5.2
E-6+77		4.5	5.1	W-1+10		4.5	5.1
E-6+00		4.4	5.2	W-1+60		4.7	4.9
E-5+20		4.6	5.0	W-2+15		4.9	4.7
E-4+55		5.2	4.4	W-2+59		5.3	4.3
E-4+00		5.1	4.5	W-2+62		2.8	1.8
E-3+55		5.5	4.1	T.P.	9.57	3.19	6.38
E-3+15		5.4	4.2				
E-2+65		5.2	4.4				
E-2+20		5.4	4.2				
E-1+55		5.0	4.6				
E-0+95		5.1	4.5				
E-0+53		5.0	4.6				
E-0+50		6.7	2.9				
E-0+33		13.1	-4.1				
E-0+15		11.1	-1.5				
E-0+10		7.2	2.4				

- LATH  
17' W OF  
{N-59+00  
W-140+00}



H<sub>2</sub>O 5.18  
Tide 4.9  
10.19

42

(61)

PX

STA-59+00.N

N-59+00

PX

0+00 =	N-59+00 W-14+00				DIST +	H.I.	-	ELEV
DIST +	H.I.	-	ELEV					
			6.38	FORM PAGE	E2+30	10.08	5.7	4.4
T.P	3.70	10.08 -89	3.19	(60)	E3+03		6.1	4.0
W-2+95			2.7		E3+40		6.4	3.7
W-2+89			5.1		E3+95		5.7	4.4
W-2+47			5.2		E4+73		4.8	5.3
W-2+00			5.2		E5+50		4.6	5.5
W-1+55			5.1		E6+30		5.3	4.8
W-1+07			5.0		E6+40		5.8	4.3
W-0+79			5.0		E6+90		5.5	4.6
W-0+76 <sup>3</sup>			7.8		E7+30		5.3	4.8
W-0+67			9.2					
W-0+54			6.7					
W-0+50 <sup>9</sup>			5.3					
W-0+00			4.9					
E-0+53			4.8					
E-1+10			5.1					
E-1+13 <sup>3</sup>			7.4					
E-1+20			8.5					
E-2+20			7.2					



Dist	+ H <sub>i</sub>	-	FLY
T.P.	2.20	8.58	6.38
0+00 =	{ N-58+00 W-140+00 }		
E	2.0	1.6	
	2.7	4.9	
E 7+40	3.4	5.2	
E 6+65	3.8	4.8	
E 6+15	4.1	4.5	
E 5+85	4.1	4.5	
E 5+40	3.5	5.1	
E 5+00	3.9	4.7	
E 4+36	3.7	4.9	
E 3+70	3.6	5.0	
E 3+05	3.3	5.3	
E 2+75	4.0	4.6	
E 2+60	4.7	3.9	
E 2+55	5.6	3.0	
E 2+50	4.7	3.9	
E 2+40	3.7	4.9	
E 1+85	3.9	5.2	

8-31-50

Dist	+ H <sub>i</sub>	-	Elev
E 1+20	8.58	3.2	5.4
E 0+58		3.1	5.5
E 0+12		3.5	5.1
E 0+08		5.1	3.5
E 0+05		6.3	2.3
	5.52	10.52	5.0
0+00 =	{ N-58+00 W-140+10 }		NOTE
E 0+10	10.5	6.6	3.9
0+00		5.1	5.4
W 0+30		5.2	5.3
W 0+65		5.3	5.2
W 0+70		6.6	3.9
W 0+82		9.5	1.0
W 0+92		7.8	2.7
W 0+94		5.2	5.3
W 1+53		5.3	5.2
W 2+10		5.4	5.1
W 2+60		5.7	4.8
W 3+10		5.9	4.6
W 3+13		6.3	4.2
W 3+30		7.5	3.0



PX

N-57+00

(N-57+00  
W-140+00)

N-57+00

PX

	DIST	+	H.I.	-	ELEV
Waterlev	5.50		10.60		5.10
E W-3+75				7.9	2.7
W-3+73				6.4	4.2
W-3+30				5.7	4.9
E W-2+85				5.4	5.2
E W-2+40				5.3	5.3
E W-1+90				5.1	5.5
E W-1+45				5.2	5.4
E W-1+20				5.4	5.2
E W-1+18				7.7	2.9
E W-1+07				9.4	1.2
E W-1+00				7.7	2.9
E W-0+96				5.3	5.3
E W-0+50				5.1	5.5
E 0+00				5.0	5.6
E F-0+45				5.0	5.6
E E-0+90				5.3	5.3

	DIST	+	H.I.	-	ELEV
E-0+99			10.6	7.9	3.2
E-1+00				5.5	5.1
E-1+95				5.0	5.6
E-2+80				5.3	5.3
E-2+87				7.6	3.0
E-3+00				6.6	4.0
E-3+35				6.6	4.0
E-3+65				5.7	4.9
E-4+55				5.2	5.4
E-5+45				5.3	5.3
E-6+40				5.2	5.4
E-7+30				5.2	5.4



PX

Sta N 56+00

0+00 = { N 56+00  
W 146+00

Sta	+	HI	-	Elev
T.P.	3.95	10.33		6.38
E 775			4.6	5.7
E 675			5.0	5.3
E 590			5.0	5.3
E 500			5.1	5.2
E 460			5.3	5.0
E 433			6.4	3.9
E 408			6.0	4.3
E 385			5.1	5.2
E 340			4.9	5.4
E 237			4.9	5.4
E 200			5.0	5.3
E 194			6.3	4.0
E 189 <sup>-5</sup>			4.9	5.4
E 185 <sup>-4</sup>			4.9	5.4
E 183 <sup>2</sup>			5.7	4.6
E 180			4.6	5.7

Lath 17'  
11" C  
W. 6910

Sta 56+00

8-31-50 (59)

PX

Sta	+	HI	-	Elev
E 123		10.33	4.9	5.4
E 0+70			5.0	5.3
E 0+28			4.9	5.4
0+00			5.0	5.3
W 0+54			5.0	5.3
W 0+83			5.0	5.3
W 0+86 <sup>+3</sup>			7.9	2.4
W 0+95			10.9	-0.6
W 110			6.5	3.8
W 115 <sup>+5</sup>			4.9	5.4
W 207			5.2	5.1
W 300 <sup>?</sup>			5.5	4.8
W 245 <sup>?</sup>			5.6	4.7
W 384			6.3	4.0
W 387			8.0	2.3
W				



PX

Sta 55+00

0+00 = { W 140+00

T.P. 3.78 10.16<sup>2</sup> 6.38

Sta + HI - Elev

W 302 7.6 2.6

W 377<sup>-5</sup> 5.5 4.7

W 335 5.4 4.8

W 278 5.3 4.9

W 185 5.0 5.2

W 125 4.9 5.3

W 0+68 5.0 5.2

W 0+65<sup>-3</sup> 7.5 2.7

W 0+53 8.9 1.3

W 0+44 6.7 3.5

W 0+41<sup>-3</sup> 4.7 5.5

0+00 4.9 5.3

E 0+60 4.8 5.4

E 130 4.7 5.5

E 225 4.7 5.5

E 280 4.8 5.4

Sta 55+00

PX (65)

Sta + HI - Elev

E 294 10.16<sup>2</sup> 6.1 4.1

E 295 4.8 5.4

E 386 5.0 5.2

E 475 5.0 5.2

E 500 5.2 5.0

E 525 6.3 3.9

E 531<sup>16</sup> 5.2 5.0

E 600 4.8 5.4

E 700 4.9 5.3

T.P. 4.34 5.82

2x2 P14A  
15' 265+00



PX

STA-62+00 N

62+00-N

PX

DIST	+	H.L.	-	ELEV
T.T.P.	3.25	9.62		6.37
0+00 =	N-62+00 W-140+00		SEC E. & W.	
0+00		9.62	4.9	4.7
E-0+52			4.5	5.1
E-1+03			4.6	5.0
E-1+56			4.8	4.8
E-2+10			4.9	4.7
E-3+15			4.3	5.3
E 4+15			4.2	5.4
E 4+95			4.5	5.1
E 5+15			4.6	5.0
E 5+12 <sup>3</sup>			6.4	3.2
E 5+22			8.4	1.2
E 5+33			8.6	1.0
E 5+50			7.7	1.9
E 5+55 <sup>5</sup>			5.9	3.7
E 5+80			5.6	4.0
E 6+40			4.7	4.9
F 6+92			4.8	4.8

Sta	+	H'	-	Elev
		9.62		
W 0+08			5.8	3.8
W 0+13			7.4	2.2
W 0+20			8.0	1.6
W 0+27			7.8	1.8
W 0+46			6.9	2.7
W 0+55			8.7	0.9
W 0+76			8.7	0.9
W 0+79			6.2	3.4
W 0+80			5.2	4.4
W 1+30			4.7	4.9
W 1+88			4.4	5.0
W 2+47			4.6	5.0
W 3+00			5.0	4.6
W 3+24			5.5	4.1
W 3+26			7.1	2.5
W 3+70			8.0	1.6



PX

Sta N 54+00

0+00 = {  
 Sta N 54+00  
 W 140.00

N-54+00

9-1-50

(27)

PX

DIST + H.I. - ELEV

10.27

Sta + H.I. - Elev

T.T.P. 4.45 10.27 5.82

FROM PAGE

(63)

1" x 25" W.S.S.

1" x 25" W.S.S.

OF N-54+00

E 617

10.3/ 4.9 5.4

SET T.P. 4.15 6.12

E 715

4.8 5.5

0+00 10.3/ 5.1 5.2

E 768

4.7 5.6

E 0+60 5.0 5.3

E 825

5.0 5.3

E 130 4.9 5.4

E 840

5.9 4.4

E 183 4.7 5.6

E 842

8.4 1.9

E 238 4.7 5.6

E 847

6.9 3.4

E 270 4.6 5.7

E 855

5.8 4.5

E 342 4.9 5.4

E 859

4.7 5.6

E 377 4.8 4.5

E 878

5.5 4.8

E 381 5.7 4.6

E 933

4.5 5.8

E 386 4.7 4.6

E 1043

4.7 5.6

E 435 5.2 5.1

E 1140

4.4 5.9

E 440 5.5 4.8

E 446 5.1 5.2

W-0+30

5.0 5.3

E 503 5.0 5.3

W-0+37

5.5 4.8

E 560 5.2 5.1

W-0+44

9.7 0.6

W-0+53

10.9 -0.6



PX

54+00

DIST	+	H.I.	-	ELEV
W.0+60		10.27 <sup>3</sup>	6.8	3.5
W.0+60			5.2	5.1
W.1+13			5.2	5.1
W.1+65			5.3	5.0
W.2+13			5.5	4.8
W.2+60			5.6	4.7
W.3+05			6.1	4.2
W.3+43			6.1	4.2
W.3+65			6.5	3.8
W.3+68			8.8	1.5

53+00N

PX

(68)

0+00 = { 53+00N  
19,000 W

Dist	+	H <sub>i</sub>	-	Elev
BM		3.32	9.94	6.12
E12+86			3.8	5.6
E11+84			4.0	5.4
E11+48			4.4	5.0
E11+43			5.2	4.2
E11+37			4.3	5.1
E10+90			4.0	5.4
E9+89			3.7	5.7
E9+72			3.7	5.7
E9+71			5.0	4.4
E9+66			7.1	2.3
E9+52			6.3	3.1
E9+46			5.1	4.3
E9+45			4.2	5.2
E9+13			4.7	4.7
E9+09			5.5	3.9
E8+85			4.7	4.7



PX

53+00 N

Dist	+	Hi	-	Elev
E 8+33		9.44	3.8	5.6
E 7+75			3.4	6.0
E 6+60			3.7	5.7
E 5+90			4.1	5.3
E 5+33			4.0	5.4
E 4+80			3.9	5.5
E 4+74 <sup>(6)</sup>			4.7	4.7
E 4+70 <sup>(4)</sup>			3.9	5.8
E 4+15			4.0	5.4
E 3+60			3.8	5.6
E 3+00			4.0	5.4
E 2+46			4.0	5.4
E 1+93			4.1	5.3
E 1+40 <sup>(3)</sup>			4.3	5.1
E 1+38 <sup>(1)</sup>			5.5	3.9
E 1+31 <sup>(2)</sup>			5.5	3.9
E 1+29			4.3	5.1
E 0+43			4.7	4.7
E 0+39 <sup>(1)</sup>			6.7	2.7

2.3

53+00 N

PX (69)

Dist	+	Hi	-	Elev
E 0+19		9.44	8.6	0.8
E 0+05			6.2	3.2
E 0+00			4.5	4.9
W 2+82			7.3	2.1
W 2+81 <sup>(4)</sup>			5.0	4.4
W 2+74 <sup>(1)</sup>			4.7	4.7
W 2+67 <sup>(1)</sup>			4.5	4.9
W 2+64			6.6	2.8
W 2+60			6.8	2.6
W 2+57			5.5	3.9
W 2+30			5.0	4.4
W 1+93			4.9	4.5
W 1+55			4.7	4.7
W 1+10			4.5	4.9
W 0+50			4.3	5.1



9-5-50

## EXTENSIONS ON SECTIONS NEAR

## Q1 MIDWAY BRIDGE DETOUR

STA - 37+00 N

0+00 = (N-37+00  
W-127+00) SEC. EAST & WEST.

DIST + H.I. - ELEV

T.P. 4.82 15.17 10.35

W 640 5.1 10.1

W 605 4.8 10.4

W-5+86 4.9 10.3

W-5+67 4.8 10.4

W-5+60 5.0 10.2

W-5+56 3.6 11.6

W-5+52 5.2 10.0

W-5+45 4.3 10.9

W-5+32 4.6 10.6

W-5+17 5.0 10.2

W-4+63 5.0 10.2

9-5-50

70

Q1 STA-38+00 N

0+00 = (N-38+00  
W-127+00) SEC. EAST & WEST.

DIST + H.I. - ELEV

T.P. 1.16 11.51 10.35

W 773 0.9 10.6

W 738 0.8 10.7

W 690 1.5 10.0

E 460 4.9 6.6

E 510 5.3 6.2

E 563 5.3 6.2

E 595 4.7 6.8

E 665 5.0 6.5

E 727 5.1 6.4

E 767 5.1 6.4

E 825 4.9 6.6

E 850 4.1 7.4

E 855 1.8 9.7

E 861 4.0 7.5

E 885 5.0 6.5

E 935 4.7 6.8

2' x 2' @ N-37+00  
W-127+0010.35  
1.16  
11.512' x 2' @ N-37+00  
W-127+0010.35  
4.82  
15.17



9-5-50

C. BARRAGAN  
A. SHERRY  
W. CARVER 9-5-50

41 (71)

Q+

STA- 39+00-N

0+00 = (N-39+00  
W-127+00) SEC EAST & WEST

DI ST	+	H.I.	-	ELEV
T.P.	0.90	11.25		10.35
E 9+30			4.3	7.0
E 860			4.4	6.9
E 795			4.3	7.0
E 751			4.2	7.1
W E 723			3.4	7.9
E 717 <sub>6</sub>			2.1	9.2
E 710			4.0	7.3
E 690			5.0	6.3
E 636			4.8	6.5
E 580			4.9	6.4
E 528			4.7	6.6
E 523 <sub>5</sub>			5.2	6.1
E 520 <sub>3</sub>			4.9	6.4
E 487 <sub>c</sub>			5.1	6.2
E 481			5.6	5.7
E 467 <sub>o</sub>			6.3	5.0
E 461			5.0	6.3
E 430			4.7	6.6

2' x 2" E  
 (N-39+00-  
 W-127+00)  
 10.35  
 90  
 11.25



PX

3-12-51

SOUND WEST

STA 7R+00 - 0+00 = 14160 W

DIST	SOUND		DIST	SOUND	
0+00	0.0	+2.6	1+80	12.0	9.4
(2.40)	4.0	-1.4	(2.6)	12.1	9.5
(2.6)	7.5	-4.9	2+00	12.2	9.6
	12.0	-9.4		12.5	9.9
	12.0	9.4		12.9	10.3
+50	12.1	9.5		12.7	10.1
	11.5	8.9		12.5	9.9
	12.4	9.8	+50	12.5	9.9
	12.1	9.5		14.0	11.4
	12.1	9.5		14.1	11.3
1+00	12.2	9.6		14.0	11.4
	12.0	9.4		13.7	11.1
	12.1	9.5	3+00	13.0	10.4
	12.1	9.5		12.9	10.3
	12.1	9.5		12.7	10.1
+50	12.1	9.5		12.5	9.9
	12.0	9.4	(2.45)	12.2	9.6
	12.0	9.4	+50	12.2	9.6

STA 7Z+00

3-12-51 (72)

SOUND WEST

DIST	SOUND		DIST	SOUND	
3+60	12.2	9.6	5+50	13.2	10.6
	12.2	9.6		13.0	10.4
(2.6)	12.3	9.7	(2.6)	12.7	10.1
	12.0	9.4		12.5	9.9
4+00	11.8	9.2		12.0	9.4
	11.7	9.1	6+00	12.2	9.6
	11.5	8.9	BR.	11.4	9.8
	11.2	8.6		13.2	10.6
	11.1	8.5		13.8	11.2
+50	11.4	8.8		13.8	11.2
	12.0	9.4	+50	13.6	11.0
	12.0	9.4		13.5	10.9
	12.5	9.9		12.0	9.4
	14.4	11.8		12.3	9.7
5+00	14.4	11.8		11.0	8.4
	14.0	11.4	7+00	10.2	7.6
	14.0	11.4		11.0	8.4
	14.0	11.4		10.0	7.4
	13.6	11.0		8.2	5.6



PX STA 72+00

3-12-31

SOUND WEST

DIST	SOUND		DIST	SOUND	
7+40	9.2	6.6	9+30	10.8	8.2
+50	9.5	6.9		11.4	8.8
(2:50)	10.0	7.4	+50	11.6	9.0
	10.0	7.4			
(2.6)	10.0	7.4			
	10.3	7.7			
8+00	10.3	7.7			
	10.4	7.8	10+00		
	10.3	7.7			
	10.3	7.7			
	10.4	7.8			
+50	10.4	7.8			
	10.1	7.5			
	10.1	7.5			
	10.1	7.5			
	10.1	7.5			
9+00	10.3	7.7			
	10.3	7.7			
	10.0	7.4			

3-12-51

(73)

SOUND WEST

STA	73+00	0+00 = 14140	W		
DIST	SOUND		DIST	SOUND	
0+10	0.0	+2.5	1+90	12.3	9.8
+20	1.0	+1.5	2+00	12.3	9.8
(3.00)	3.1	-0.6		12.3	9.8
(2.5)	6.8	4.3	(2.5)	12.8	10.3
+50	12.0	9.5		12.4	9.9
	12.5	10.0		12.5	10.0
	12.4	9.9	+50	12.6	10.1
	12.9	10.4		12.9	10.4
	12.9	10.4		12.5	10.0
1+00	12.0	9.5		12.1	9.6
	12.0	9.5		11.7	9.2
	11.8	9.3	3+00	11.5	9.0
	12.0	9.5		11.7	9.2
	12.0	9.5		12.0	9.5
+50	12.0	9.5		12.4	9.9
	11.9	9.4		12.1	9.6
	11.5	9.0	+50	12.0	9.5
	12.3	9.8		12.0	9.5



PX

3-12-51

3-12-51

(74)

STA 73+00 SOUND WEST

STA 73+00 SOUND WEST

DIST SOUND DIST SOUND

DIST SOUND DIST SOUND

3+70 12.0 9.5 5+60 14.6 12.1

7+50 12.2 9.7

12.0 9.5 14.5 12.0

11.8 9.3

12.0 9.5 (2.5) 14.5 12.0

(2.5) 11.0 8.5

4+00 12.1 9.6 14.4 11.9

11.5 9.0

12.1 9.6 6+00 14.2 11.7

12.3 9.8

(2.5) 12.0 9.6 14.4 11.9

8+00 12.1 9.6

11.8 9.3 14.8 12.3

11.6 9.1

11.8 9.3 15.5 13.0

11.0 8.5

+50 13.0 10.5 B.R. 16.0 13.5

12.0 9.5

14.4 11.9 +50 15.0 12.5

12.2 9.7

13.7 11.2 13.5 11.0

+50 11.5 9.0

13.5 11.0 14.5 12.0

14.1 11.6

(3:08)

5+00 14.7 12.2 13.3 10.8

14.7 12.2 7+00 12.0 9.5

(3:05) 14.5 12.0 11.5 9.0

9+00

14.6 12.1 12.5 10.0

14.6 12.1 12.8 10.3

+50 14.7 12.2 12.4 9.9



3-14-51

(75)

## SOUND WEST

STA 72+00 N 0+00 = 14160 W

DIST	SOUND		DIST	SOUND	
6+00	10.2	8.4	7+80	12.4	10.6
	9.8	8.0	(1.8)	9.0	7.2
(1.8)	11.5	9.7	8+00	9.4	7.6
(10:27)	12.4	10.6		9.7	7.9
	12.5	10.7		9.5	7.7
+50	12.3	10.5		9.8	8.0
	12.0	10.2		9.5	7.7
	10.4	8.6	+50	9.4	7.6
	10.8	9.0		9.4	7.6
	10.3	8.5		9.4	7.6
7+00	11.0	9.2		9.5	7.7
	11.8	10.0		9.7	7.9
	<del>10.8</del>	<del>9.0</del>			
	11.5	9.7	9+00	10.0	8.2
	10.5	8.7			
	12.0	10.2			
+50	11.4	9.6			
(10:40)	12.5	10.7			
	12.7	10.9			







77





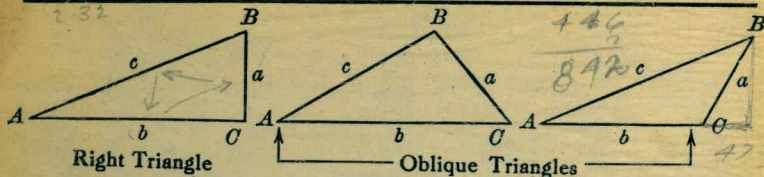


140400

31.13  
5

5.82  
4.9  
6.1  
10.93  
10.5

TRIGONOMETRIC FORMULÆ



Solution of Right Triangles

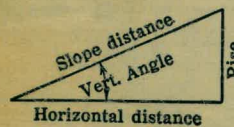
For Angle A.  $\sin = \frac{a}{c}$ ,  $\cos = \frac{b}{c}$ ,  $\tan = \frac{a}{b}$ ,  $\cot = \frac{b}{a}$ ,  $\sec = \frac{c}{b}$ ,  $\operatorname{cosec} = \frac{c}{a}$

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

$A, B, a$	Required $b, c, C$	$b = \frac{a \sin B}{\sin A}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$
$A, a, b$	$B, c, C$	$\sin B = \frac{b \sin A}{a}, C = 180^\circ - (A + B), c = \frac{a \sin C}{\sin A}$
$a, b, C$	$A, B, c$	$A + B = 180^\circ - C, \tan \frac{1}{2}(A - B) = \frac{(a - b) \tan \frac{1}{2}(A + B)}{a + b}$ $c = \frac{a \sin C}{\sin A}$
$a, b, c$	$A, B, C$	$s = \frac{a + b + c}{2}, \sin \frac{1}{2}A = \sqrt{\frac{(s - b)(s - c)}{bc}}$ $\sin \frac{1}{2}B = \sqrt{\frac{(s - a)(s - c)}{ac}}, C = 180^\circ - (A + B)$
$a, b, c$	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 IX.  $\cos 5^\circ 10' = .9959$ . 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.