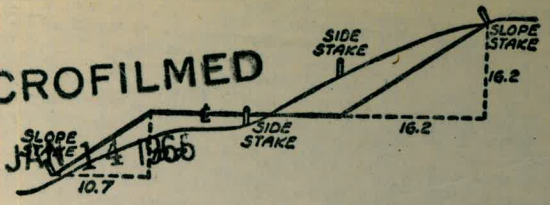


764

MICROFILMED



DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING  
SLOPE 1 TO 1. ROADWAY OF ANY WIDTH

|    | 0     | .1    | .2    | .3    | .4    | .5    | .6    | .7    | .8    | .9    |    |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 0  | 0.00  |       |       |       |       |       |       |       |       |       |    |
| 1  | 1.00  | 0.10  | 0.20  | 0.30  | 0.40  | 0.50  | 0.60  | 0.70  | 0.80  | 0.90  | 0  |
| 2  | 2.00  | 1.10  | 1.20  | 1.30  | 1.40  | 1.50  | 1.60  | 1.70  | 1.80  | 1.90  | 1  |
| 3  | 3.00  | 2.10  | 2.20  | 2.30  | 2.40  | 2.50  | 2.60  | 2.70  | 2.80  | 2.90  | 2  |
| 4  | 4.00  | 3.10  | 3.20  | 3.30  | 3.40  | 3.50  | 3.60  | 3.70  | 3.80  | 3.90  | 3  |
| 5  | 5.00  | 4.10  | 4.20  | 4.30  | 4.40  | 4.50  | 4.60  | 4.70  | 4.80  | 4.90  | 4  |
| 6  | 6.00  | 5.10  | 5.20  | 5.30  | 5.40  | 5.50  | 5.60  | 5.70  | 5.80  | 5.90  | 5  |
| 7  | 7.00  | 6.10  | 6.20  | 6.30  | 6.40  | 6.50  | 6.60  | 6.70  | 6.80  | 6.90  | 6  |
| 8  | 8.00  | 7.10  | 7.20  | 7.30  | 7.40  | 7.50  | 7.60  | 7.70  | 7.80  | 7.90  | 7  |
| 9  | 9.00  | 8.10  | 8.20  | 8.30  | 8.40  | 8.50  | 8.60  | 8.70  | 8.80  | 8.90  | 8  |
| 10 | 10.00 | 9.10  | 9.20  | 9.30  | 9.40  | 9.50  | 9.60  | 9.70  | 9.80  | 9.90  | 9  |
| 11 | 11.00 | 10.10 | 10.20 | 10.30 | 10.40 | 10.50 | 10.60 | 10.70 | 10.80 | 10.90 | 10 |
| 12 | 12.00 | 11.10 | 11.20 | 11.30 | 11.40 | 11.50 | 11.60 | 11.70 | 11.80 | 11.90 | 11 |
| 13 | 13.00 | 12.10 | 12.20 | 12.30 | 12.40 | 12.50 | 12.60 | 12.70 | 12.80 | 12.90 | 12 |
| 14 | 14.00 | 13.10 | 13.20 | 13.30 | 13.40 | 13.50 | 13.60 | 13.70 | 13.80 | 13.90 | 13 |
| 15 | 15.00 | 14.10 | 14.20 | 14.30 | 14.40 | 14.50 | 14.60 | 14.70 | 14.80 | 14.90 | 14 |
| 16 | 16.00 | 15.10 | 15.20 | 15.30 | 15.40 | 15.50 | 15.60 | 15.70 | 15.80 | 15.90 | 15 |
| 17 | 17.00 | 16.10 | 16.20 | 16.30 | 16.40 | 16.50 | 16.60 | 16.70 | 16.80 | 16.90 | 16 |
| 18 | 18.00 | 17.10 | 17.20 | 17.30 | 17.40 | 17.50 | 17.60 | 17.70 | 17.80 | 17.90 | 17 |
| 19 | 19.00 | 18.10 | 18.20 | 18.30 | 18.40 | 18.50 | 18.60 | 18.70 | 18.80 | 18.90 | 18 |
| 20 | 20.00 | 19.10 | 19.20 | 19.30 | 19.40 | 19.50 | 19.60 | 19.70 | 19.80 | 19.90 | 19 |
| 21 | 21.00 | 20.10 | 20.20 | 20.30 | 20.40 | 20.50 | 20.60 | 20.70 | 20.80 | 20.90 | 20 |
| 22 | 22.00 | 21.10 | 21.20 | 21.30 | 21.40 | 21.50 | 21.60 | 21.70 | 21.80 | 21.90 | 21 |
| 23 | 23.00 | 22.10 | 22.20 | 22.30 | 22.40 | 22.50 | 22.60 | 22.70 | 22.80 | 22.90 | 22 |
| 24 | 24.00 | 23.10 | 23.20 | 23.30 | 23.40 | 23.50 | 23.60 | 23.70 | 23.80 | 23.90 | 23 |
| 25 | 25.00 | 24.10 | 24.20 | 24.30 | 24.40 | 24.50 | 24.60 | 24.70 | 24.80 | 24.90 | 24 |
| 26 | 26.00 | 25.10 | 25.20 | 25.30 | 25.40 | 25.50 | 25.60 | 25.70 | 25.80 | 25.90 | 25 |
| 27 | 27.00 | 26.10 | 26.20 | 26.30 | 26.40 | 26.50 | 26.60 | 26.70 | 26.80 | 26.90 | 26 |
| 28 | 28.00 | 27.10 | 27.20 | 27.30 | 27.40 | 27.50 | 27.60 | 27.70 | 27.80 | 27.90 | 27 |
| 29 | 29.00 | 28.10 | 28.20 | 28.30 | 28.40 | 28.50 | 28.60 | 28.70 | 28.80 | 28.90 | 28 |
| 30 | 30.00 | 29.10 | 29.20 | 29.30 | 29.40 | 29.50 | 29.60 | 29.70 | 29.80 | 29.90 | 29 |
| 31 | 31.00 | 30.10 | 30.20 | 30.30 | 30.40 | 30.50 | 30.60 | 30.70 | 30.80 | 30.90 | 30 |
| 32 | 32.00 | 31.10 | 31.20 | 31.30 | 31.40 | 31.50 | 31.60 | 31.70 | 31.80 | 31.90 | 31 |
| 33 | 33.00 | 32.10 | 32.20 | 32.30 | 32.40 | 32.50 | 32.60 | 32.70 | 32.80 | 32.90 | 32 |
| 34 | 34.00 | 33.10 | 33.20 | 33.30 | 33.40 | 33.50 | 33.60 | 33.70 | 33.80 | 33.90 | 33 |
| 35 | 35.00 | 34.10 | 34.20 | 34.30 | 34.40 | 34.50 | 34.60 | 34.70 | 34.80 | 34.90 | 34 |
| 36 | 36.00 | 35.10 | 35.20 | 35.30 | 35.40 | 35.50 | 35.60 | 35.70 | 35.80 | 35.90 | 35 |
| 37 | 37.00 | 36.10 | 36.20 | 36.30 | 36.40 | 36.50 | 36.60 | 36.70 | 36.80 | 36.90 | 36 |
| 38 | 38.00 | 37.10 | 37.20 | 37.30 | 37.40 | 37.50 | 37.60 | 37.70 | 37.80 | 37.90 | 37 |
| 39 | 39.00 | 38.10 | 38.20 | 38.30 | 38.40 | 38.50 | 38.60 | 38.70 | 38.80 | 38.90 | 38 |
| 40 | 40.00 | 39.10 | 39.20 | 39.30 | 39.40 | 39.50 | 39.60 | 39.70 | 39.80 | 39.90 | 39 |
| 41 | 41.00 | 40.10 | 40.20 | 40.30 | 40.40 | 40.50 | 40.60 | 40.70 | 40.80 | 40.90 | 40 |
| 42 | 42.00 | 41.10 | 41.20 | 41.30 | 41.40 | 41.50 | 41.60 | 41.70 | 41.80 | 41.90 | 41 |
| 43 | 43.00 | 42.10 | 42.20 | 42.30 | 42.40 | 42.50 | 42.60 | 42.70 | 42.80 | 42.90 | 42 |
| 44 | 44.00 | 43.10 | 43.20 | 43.30 | 43.40 | 43.50 | 43.60 | 43.70 | 43.80 | 43.90 | 43 |
| 45 | 45.00 | 44.10 | 44.20 | 44.30 | 44.40 | 44.50 | 44.60 | 44.70 | 44.80 | 44.90 | 44 |
| 46 | 46.00 | 45.10 | 45.20 | 45.30 | 45.40 | 45.50 | 45.60 | 45.70 | 45.80 | 45.90 | 45 |
| 47 | 47.00 | 46.10 | 46.20 | 46.30 | 46.40 | 46.50 | 46.60 | 46.70 | 46.80 | 46.90 | 46 |
| 48 | 48.00 | 47.10 | 47.20 | 47.30 | 47.40 | 47.50 | 47.60 | 47.70 | 47.80 | 47.90 | 47 |
| 49 | 49.00 | 48.10 | 48.20 | 48.30 | 48.40 | 48.50 | 48.60 | 48.70 | 48.80 | 48.90 | 48 |
| 50 | 50.00 | 49.10 | 49.20 | 49.30 | 49.40 | 49.50 | 49.60 | 49.70 | 49.80 | 49.90 | 49 |
|    |       | 50.10 | 50.20 | 50.30 | 50.40 | 50.50 | 50.60 | 50.70 | 50.80 | 50.90 | 50 |

Distance of slope stake from side or shoulder stake for any width roadway, slope 1 to 1. If ground is nearly level, the cut or fill at side stake is located by the double entry method in left column and top row. The number in body of table in same row and column gives distance from side stake to slope stake. If ground is not level estimate the difference in elevation between the side stake and slope stake, lower target by this amount if cut, elevate if fill. Add this amount to cut or fill and find distance in table. Set up rod at this point, and line of sight should cut target. If it does not make the slight adjustment necessary.

TABLE XIII—CORRECTIONS FOR TANGENTS AND EXTERNALS

These corrections are to be added to the approximate values, found by dividing the tangent, or external, for a 1° curve (Table VIII) by the degree of curve, in order to obtain the true tangents, or externals. Intermediate values may be obtained by interpolation.

FOR TANGENTS ADD

| Central Angle | DEGREE OF CURVE |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|               | 5°              | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  | 55°  | 60°  | 65°  | 70°  |
| 10°           | .03             | .06  | .09  | .13  | .16  | .19  | .22  | .25  | .28  | .31  | .34  | .38  | .42  | .46  |
| 15°           | .04             | .10  | .14  | .19  | .24  | .29  | .34  | .39  | .45  | .51  | .53  | .58  | .63  | .68  |
| 20°           | .06             | .13  | .19  | .26  | .32  | .39  | .45  | .51  | .58  | .65  | .72  | .79  | .84  | .90  |
| 25°           | .08             | .16  | .24  | .33  | .40  | .49  | .58  | .67  | .75  | .83  | .90  | .99  | 1.06 | 1.14 |
| 30°           | .10             | .19  | .29  | .39  | .49  | .59  | .69  | .79  | .89  | .99  | 1.09 | 1.20 | 1.29 | 1.39 |
| 35°           | .11             | .22  | .34  | .47  | .58  | .69  | .79  | .81  | .92  | 1.04 | 1.29 | 1.42 | 1.54 | 1.66 |
| 40°           | .13             | .26  | .40  | .53  | .67  | .80  | .93  | 1.06 | 1.20 | 1.34 | 1.49 | 1.64 | 1.79 | 1.94 |
| 45°           | .15             | .30  | .44  | .60  | .76  | .91  | 1.06 | 1.21 | 1.37 | 1.52 | 1.70 | 1.87 | 2.04 | 2.21 |
| 50°           | .17             | .34  | .51  | .68  | .85  | 1.02 | 1.19 | 1.36 | 1.54 | 1.72 | 1.91 | 2.10 | 2.29 | 2.48 |
| 55°           | .19             | .38  | .57  | .76  | .95  | 1.14 | 1.32 | 1.52 | 1.72 | 1.92 | 2.14 | 2.35 | 2.56 | 2.77 |
| 60°           | .21             | .42  | .63  | .84  | 1.05 | 1.27 | 1.49 | 1.71 | 1.94 | 2.17 | 2.38 | 2.60 | 2.83 | 3.07 |
| 65°           | .23             | .46  | .69  | .93  | 1.16 | 1.40 | 1.64 | 1.88 | 2.13 | 2.38 | 2.63 | 2.88 | 3.13 | 3.39 |
| 70°           | .25             | .51  | .76  | 1.02 | 1.28 | 1.54 | 1.80 | 2.06 | 2.33 | 2.60 | 2.88 | 3.16 | 3.44 | 3.72 |
| 75°           | .27             | .56  | .83  | 1.12 | 1.40 | 1.69 | 1.98 | 2.27 | 2.57 | 2.87 | 3.16 | 3.47 | 3.78 | 4.09 |
| 80°           | .30             | .61  | .91  | 1.22 | 1.53 | 1.84 | 2.15 | 2.46 | 2.78 | 3.10 | 3.44 | 3.78 | 4.12 | 4.46 |
| 85°           | .33             | .66  | 1.00 | 1.33 | 1.68 | 2.02 | 2.36 | 2.70 | 3.05 | 3.40 | 3.77 | 4.14 | 4.55 | 4.89 |
| 90°           | .36             | .72  | 1.09 | 1.45 | 1.83 | 2.20 | 2.57 | 2.94 | 3.32 | 3.70 | 4.10 | 4.50 | 4.91 | 5.32 |
| 95°           | .39             | .79  | 1.19 | 1.55 | 2.00 | 2.40 | 2.80 | 3.20 | 3.61 | 4.02 | 4.40 | 4.98 | 5.38 | 5.83 |
| 100°          | .43             | .86  | 1.30 | 1.74 | 2.18 | 2.62 | 3.06 | 3.50 | 3.95 | 4.40 | 4.88 | 5.37 | 5.85 | 6.34 |
| 110°          | .51             | 1.03 | 1.56 | 2.08 | 2.61 | 3.14 | 3.67 | 4.21 | 4.76 | 5.31 | 5.86 | 6.43 | 7.01 | 7.60 |
| 120°          | .62             | 1.25 | 1.93 | 2.52 | 3.16 | 3.81 | 4.45 | 5.11 | 5.77 | 6.44 | 7.12 | 7.80 | 8.50 | 9.22 |

FOR EXTERNALS ADD

| Central Angle | DEGREE OF CURVE |      |      |      |      |      |      |      |      |      |      |      |      |      |
|---------------|-----------------|------|------|------|------|------|------|------|------|------|------|------|------|------|
|               | 5°              | 10°  | 15°  | 20°  | 25°  | 30°  | 35°  | 40°  | 45°  | 50°  | 55°  | 60°  | 65°  | 70°  |
| 10°           | .001            | .003 | .004 | .006 | .007 | .008 | .009 | .011 | .012 | .014 | .015 | .017 | .018 | .020 |
| 15°           | .003            | .007 | .010 | .014 | .018 | .023 | .027 | .029 | .032 | .035 | .039 | .043 | .047 | .051 |
| 20°           | .006            | .011 | .017 | .022 | .028 | .034 | .038 | .045 | .051 | .057 | .063 | .070 | .076 | .083 |
| 25°           | .009            | .018 | .027 | .036 | .046 | .056 | .065 | .074 | .083 | .093 | .106 | .120 | .127 | .135 |
| 30°           | .013            | .025 | .038 | .051 | .065 | .078 | .090 | .103 | .116 | .129 | .149 | .170 | .179 | .188 |
| 35°           | .018            | .035 | .054 | .072 | .086 | .109 | .131 | .153 | .175 | .197 | .213 | .230 | .247 | .264 |
| 40°           | .023            | .046 | .070 | .093 | .117 | .141 | .172 | .203 | .234 | .265 | .277 | .290 | .315 | .341 |
| 45°           | .030            | .060 | .093 | .119 | .153 | .184 | .216 | .254 | .289 | .325 | .351 | .378 | .411 | .445 |
| 50°           | .037            | .075 | .116 | .151 | .189 | .227 | .266 | .305 | .345 | .384 | .425 | .467 | .508 | .550 |
| 55°           | .046            | .093 | .142 | .189 | .236 | .283 | .332 | .381 | .420 | .479 | .530 | .582 | .641 | .700 |
| 60°           | .056            | .112 | .168 | .225 | .283 | .340 | .398 | .457 | .516 | .575 | .636 | .697 | .774 | .851 |
| 65°           | .067            | .135 | .204 | .273 | .343 | .412 | .483 | .554 | .625 | .697 | .771 | .845 | .922 | 1.01 |
| 70°           | .080            | .159 | .240 | .321 | .403 | .485 | .568 | .652 | .735 | .819 | .906 | .994 | 1.08 | 1.17 |
| 75°           | .095            | .182 | .266 | .353 | .440 | .528 | .617 | .707 | .797 | .887 | .977 | 1.07 | 1.18 | 1.29 |
| 80°           | .110            | .220 | .332 | .445 | .558 | .671 | .787 | .903 | 1.02 | 1.13 | 1.25 | 1.38 | 1.50 | 1.62 |
| 85°           | .128            | .259 | .391 | .524 | .657 | .790 | .926 | 1.06 | 1.20 | 1.34 | 1.47 | 1.62 | 1.76 | 1.91 |
| 90°           | .149            | .299 | .450 | .603 | .756 | .910 | 1.07 | 1.22 | 1.38 | 1.54 | 1.70 | 1.87 | 2.03 | 2.20 |
| 95°           | .174            | .350 | .522 | .706 | .885 | 1.06 | 1.25 | 1.43 | 1.62 | 1.80 | 1.99 | 2.18 | 2.38 | 2.58 |
| 100°          | .200            | .401 | .604 | .809 | 1.01 | 1.22 | 1.43 | 1.64 | 1.85 | 2.06 | 2.28 | 2.50 | 2.73 | 2.96 |
| 110°          | .268            | .536 | .806 | 1.08 | 1.35 | 1.63 | 1.91 | 2.20 | 2.48 | 2.76 | 3.05 | 3.35 | 3.66 | 3.96 |
| 120°          | .360            | .721 | 1.08 | 1.45 | 1.82 | 2.19 | 2.57 | 2.95 | 3.33 | 3.72 | 4.11 | 4.50 | 4.91 | 5.32 |

WOODCREST  
8-29-74  
FINNEY

MORENA RESERVOIR.

SILT SURVEY

JULY 12, 1948 - AUG. 6, 1948

PARTY

F. FINNEY

R. GRANSTEDT

D. ELLIOTT

P. SMITH

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## RANGE 08-07

| STA.              | B.S.  | H.I.    | F.S.  | ELEV.   |                  |
|-------------------|-------|---------|-------|---------|------------------|
| R-08              |       |         |       | 3060.37 | TOP<br>OF PIPE   |
| 0+00              | -.10  | 3060.27 | —     | 3059.5  | GROUND<br>@ PIPE |
| 0+15              |       |         | 6.9   | 3053.4  |                  |
| 0+20              |       |         | 13.0  | 3047.3  |                  |
| T.P. <sub>1</sub> | 0.41  | 3048.58 | 12.10 | 3048.17 |                  |
| 0+40              |       |         | 2.9   | 3045.7  |                  |
| 0+50              |       |         | 7.1   | 3041.5  |                  |
| T.P. <sub>2</sub> | 0.63  | 3036.86 | 12.35 | 3036.23 |                  |
| T.P. <sub>3</sub> | 0.53  | 3025.35 | 12.04 | 3024.82 |                  |
| 1+50              |       |         | 11.4  | 3014.0  |                  |
| T.P. <sub>4</sub> | 0.80  | 3016.03 | 10.12 | 3015.23 |                  |
| 1+65              |       |         | 5.0   | 3011.0  |                  |
| 1+75              |       |         | 7.0   | 3009.0  |                  |
| 1+85              |       |         | 8.8   | 3007.2  |                  |
| 1+95              |       |         | 9.6   | 3006.4  |                  |
| 2+05              |       |         | 11.7  | 3004.3  |                  |
| 2+39              |       |         | 11.7  | 3004.3  |                  |
| T.P. <sub>5</sub> | 10.14 | 3024.28 | 1.89  | 3014.14 |                  |
| 2+85              |       |         | 7.9   | 3016.4  |                  |

JULY 12, 1948

BRIGHT SUN

F.B. FINNEY T

R. GRANSTEDT

D. ELLIOTT

P. SMITH

| STA.   | B.S.  | H.I.    | F.S. | ELEV.   |                  |
|--------|-------|---------|------|---------|------------------|
| T.P. 6 | 11.45 | 3034.06 | 1.67 | 3022.61 |                  |
| T.P. 7 | 12.22 | 3054.54 | 0.74 | 3033.32 |                  |
| 3+30   |       |         | 6.3  | 3039.2  |                  |
| T.P. 7 | 7.05  | 3051.91 | 0.68 | 3044.86 |                  |
| 3+45   |       |         | 6.2  | 3045.7  |                  |
| 3+55.4 |       |         | 1.0  | 3050.9  | GROUND<br>@ PIPE |
| R-07   |       |         | 0.04 | 3051.87 | TOP<br>OF PIPE   |

| STA.              | B.S.  | H.I.    | F.S.  | ELEV.   |                  |
|-------------------|-------|---------|-------|---------|------------------|
| R-04              | 1.03  | 3048.02 |       | 3046.99 | TOP<br>OF PIPE*  |
| 0+00              |       |         | 2.6   | 3045.4  | GROUND<br>@ PIPE |
| 0+80              |       |         | 12.3  | 3035.7  |                  |
| T.P. <sub>1</sub> | 0.26  | 3036.42 | 11.86 | 3036.16 |                  |
| T.P. <sub>2</sub> | 1.53  | 3025.11 | 12.84 | 3023.58 |                  |
| 1+55              |       |         | 2.3   | 3022.8  |                  |
| T.P. <sub>3</sub> | 0.45  | 3014.29 | 11.27 | 3013.84 |                  |
| 3+00              |       |         | 2.6   | 3012.5  |                  |
| 3+50              |       |         | 5.5   | 3009.6  |                  |
| T.P. <sub>4</sub> | 1.82  | 3003.51 | 12.60 | 3001.69 |                  |
| 5+00              |       |         | 4.2   | 2999.3  |                  |
| 6+00              |       |         | 7.1   | 2996.4  |                  |
| T.P. <sub>5</sub> | 1.89  | 2994.71 | 10.69 | 2992.82 |                  |
| 7+00              |       |         | 3.0   | 2991.7  |                  |
| 7+45              |       |         | 5.1   | 2989.6  |                  |
| 8+35              |       |         | 5.9   | 2988.8  |                  |
| 8+50              |       |         | 4.7   | 2990.0  |                  |
| 9+00              |       |         | 2.3   | 2992.4  |                  |
| T.P. <sub>6</sub> | 11.33 | 3004.71 | 1.33  | 2993.38 |                  |

JULY 13, 1948

BRIGHT SUN

| STA                | B.S.  | H.I.    | F.S.     | ELEV.   |                  |
|--------------------|-------|---------|----------|---------|------------------|
| 10+50              |       |         | 0.6      | 3004.1  |                  |
| T.P. <sub>7</sub>  | 12.68 | 3017.24 | 0.15     | 3004.56 |                  |
| T.P. <sub>8</sub>  | 12.57 | 3029.68 | 0.13     | 3017.11 |                  |
| 12+00              |       |         | 10.6     | 3019.1  |                  |
| T.P. <sub>9</sub>  | 12.24 | 3040.14 | 1.78     | 3027.90 |                  |
| 12+50              |       |         | 10.2     | 3029.9  |                  |
| 12+80              |       |         | 7.1      | 3033.0  |                  |
| 13+45              |       |         | 12.2     | 3027.9  |                  |
| 14+00              |       |         | 5.3      | 3034.8  |                  |
| T.P. <sub>10</sub> | 12.82 | 3051.05 | 1.91     | 3038.23 |                  |
| 14+28              |       |         | 10.8     | 3040.3  |                  |
| 14+51 <sup>2</sup> |       |         | 0.17     | 3050.88 | GROUND<br>@ PIPE |
| R-06               |       |         | +<br>.92 | 3051.80 | TOP<br>OF PIPE   |



RANGE 010-09

JULY 13, 1948

BRIGHT SUN

| STA.              | B.S.  | H.I.    | F.S.  | ELEV.   |                  |
|-------------------|-------|---------|-------|---------|------------------|
| R-010             | 0.22  | 3059.26 |       | 3059.04 | TOP<br>OF PIPE   |
| 0+00              |       |         | 1.0   | 3058.26 | GROUND<br>@ PIPE |
| 0+53              |       |         | 4.3   | 3055.0  |                  |
| T.P. <sub>1</sub> | 1.77  | 3049.28 | 11.75 | 3047.51 |                  |
| T.P. <sub>2</sub> | 1.46  | 3038.23 | 12.51 | 3036.77 |                  |
| 1+03              |       |         | 6.0   | 3032.2  |                  |
| 1+49              |       |         | 11.5  | 3026.7  |                  |
| T.P. <sub>3</sub> | 0.22  | 3027.36 | 11.09 | 3027.14 |                  |
| 2+05              |       |         | 10.4  | 3017.0  |                  |
| 2+16              |       |         | 15.0  | 3012.4  |                  |
| 2+28              |       |         | 10.5  | 3016.9  | x                |
| 3+40              |       |         | 6.3   | 3021.1  |                  |
| 5+30              |       |         | 8.7   | 3018.7  |                  |
| T.P. <sub>4</sub> | 3.85  | 3022.51 | 8.70  | 3018.66 |                  |
| 6+00              |       |         | 10.4  | 3012.1  |                  |
| 6+75              |       |         | 7.8   | 3014.7  | x                |
| 7+50              |       |         | 14.1  | 3008.4  |                  |
| 8+00              |       |         | 9.7   | 3012.8  |                  |
| T.P. <sub>5</sub> | 12.03 | 3029.34 | 5.20  | 3017.31 |                  |

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |                  |
|--------------------|-------|---------|------|---------|------------------|
| 10+00              |       |         | 5.3  | 3024.0  |                  |
| 10+75              |       |         | 4.4  | 3024.9  |                  |
| T.P. 6             | 12.26 | 3041.11 | 0.49 | 3028.85 |                  |
| 11+65              |       |         | 1.7  | 3039.4  |                  |
| T.P. 7             | 11.89 | 3052.73 | 0.27 | 3040.84 |                  |
| 12+54 <sup>L</sup> |       |         | 2.0  | 3049.9  | GROUND<br>@ PIPE |
| R-09               | 1.50  | 3051.23 | 1.50 | 3051.23 | TOP<br>OF PIPE   |

## RANGE 03-05

| SHOT # | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.              | ELEV.   | REMARKS                     |                   |
|--------|---------|------|------------|-------------|-------|-------------------|---------|-----------------------------|-------------------|
| 1      | 9°21'   | 3.82 | 371.92     | 61.23       |       | R-03              | 3048.86 | TOP OF PIPE                 | JULY 14, 1948     |
| 2      |         |      |            |             |       | 0+00              | 3048.1  | PIPE IS .8 ABOVEGROUND      | BRIGHT SUN        |
| 3      | 8°48.5' | 3.50 | 331.81     | 52.92       |       | 0+40 <sup>1</sup> | 3040.5  |                             |                   |
| 4      | 7°30'   | 3.27 | 321.40     | 42.31       |       | 0+50 <sup>2</sup> | 3029.9  |                             |                   |
| 5      | 4°18'   | 2.56 | 254.56     | 19.15       |       | 1+17 <sup>2</sup> | 3006.8  |                             |                   |
| 6      | -1°15'  | 2.21 | 219.90     | -4.81       | 0     | 1+52              | 2982.8  | SHORE LINE                  | GUN IS @ 2987.63  |
| 7      | 0       | 2.05 | 205        |             | 9.8   | 1+67              | 2973.0  |                             | 3+71 <sup>2</sup> |
| 8      | 0       | 1.75 | 175        |             | 21.0  | 1+97              | 2961.8  |                             |                   |
| 9      | 0       | 1.37 | 137        |             | 23.9  | 2+35              | 2958.9  |                             |                   |
| 10     | 0       | 1.10 | 110        |             | 23.6  | 2+62              | 2959.2  |                             |                   |
| 11     | 0       | .93  | 93         |             | 19.2  | 2+79              | 2963.6  |                             |                   |
| 12     | 0       | .70  | 70         |             | 11.0  | 3+02              | 2971.8  |                             |                   |
| 13     | -8°11'  | 0.35 | 34.06      | -4.97       | 0     | 3+37 <sup>2</sup> | 2982.6  | SHORE LINE<br>← PLUNGED GUN |                   |
| 14     | 7°55'   | 0.58 | 56.90      | 7.89        |       | 4+28 <sup>2</sup> | 2995.5  |                             |                   |
| 15     | 5°22'   | 1.01 | 100.12     | 9.40        |       | 4+72 <sup>2</sup> | 2997.0  |                             |                   |
| 16     | 10°25'  | 1.48 | 143.16     | 26.31       |       | 5+15 <sup>2</sup> | 3013.9  |                             |                   |
| 17     | 11°37'  | 1.80 | 172.69     | 35.50       |       | 5+44 <sup>2</sup> | 3023.1  |                             |                   |
| 18     | 12°54'  | 2.03 | 192.89     | 44.17       |       | 5+64 <sup>2</sup> | 3031.8  |                             |                   |
| 19     | 12°41'  | 2.42 | 230.34     | 51.84       |       | 6+02 <sup>2</sup> | 3039.5  |                             |                   |

| SHOT # | VERT. $\angle$ | INT. | HOR.<br>DIST. | VERT.<br>DIST. | DEPTH | STA.              | ELEV.   | REMARKS                                  |
|--------|----------------|------|---------------|----------------|-------|-------------------|---------|--|
| 20     | 12°54'         | 2.72 | 258.45        | 59.19          |       | 6+30±             | 3046.8  | EDGE OF<br>ROAD                          |
| 21     |                | 3.22 |               |                |       | 6+55±             | 3046.8  | OTHER EDGE<br>OF ROAD<br>+25' SAME ELEV. |
| 22     | 13°01'         | 3.22 | 305.67        | 70.65          |       | 6+77 <sup>6</sup> | 3058.3  |  |
| 23     | 13°10'         | 3.52 | 333.73        | 78.07          |       | R-05              | 3065.70 | TOP OF<br>PIPE                           |
| 24     |                |      |               |                |       | 7+05 <sup>2</sup> | 3064.6  | TOP IS 1.1'<br>ABOVE GROUND              |

| SHOT # | VERT. $\angle$ | INT  | HOR. DIST. | VERT. DIST. | DEPTH | STA               | ELEV.   | REMARKS                    |
|--------|----------------|------|------------|-------------|-------|-------------------|---------|----------------------------|
| 1      | 14°52'         | 2.22 | 207.40     | 55.06       |       | R015              | 3056.66 | TOP OF PIPE                |
| 2      |                |      |            |             |       | 0+00              | 3055.8  | TOP OF PIPE TO GROUND=.9   |
| 3      | 14°58'         | 1.47 | 137.2      | 36.68       |       | 0+70 <sup>2</sup> | 3038.3  |                            |
| 4      | 14°34'         | 1.03 | 96.5       | 25.07       |       | 1+10 <sup>2</sup> | 3026.7  |                            |
| 5      | 13°36'         | 0.67 | 63.3       | 15.31       |       | 1+44 <sup>1</sup> | 3016.9  |                            |
| 6      | 7°55'          | 0.35 | 34.3       | 4.77        |       | 1+73 <sup>1</sup> | 3006.4  |                            |
| 7      | 0              | 0    | 0          | 0           |       | 2+07 <sup>1</sup> | 3001.6  | BREAK @ GUN<br>PLUNGED GUN |
| 8      | -13°09'        | 0.50 | 47.4       | -11.08      |       | 2+54 <sup>0</sup> | 2990.5  |                            |
| 9      | -15°01'        | 0.72 | 67.2       | -18.04      | 0     | 2+74 <sup>0</sup> | 2983.6  | SHORE LINE                 |
| 10     | 0              | 1.02 | 102.0      |             | 4.5'  | 3+04 <sup>0</sup> | 2979.0  | WATER SHOT                 |
| 11     | -8°37'         | 1.22 | 119.3      | -18.08      | 0     | 3+26 <sup>2</sup> | 2983.5  | SHORE LINE                 |
| 12     | -4°14'         | 1.55 | 154.2      | -11.41      |       | 3+61 <sup>0</sup> | 2990.2  |                            |
| 13     | 2°40'          | 2.30 | 229.5      | 10.70       |       | 4+36 <sup>2</sup> | 3012.3  |                            |
| 14     | 4°52'          | 2.77 | 275.0      | 23.41       |       | 4+82 <sup>1</sup> | 3025.0  |                            |
| 15     | 6°33'          | 3.20 | 315.8      | 36.26       |       | 5+23 <sup>2</sup> | 3037.9  |                            |
| 16     | 7°26'          | 3.79 | 372.7      | 48.63       |       | R016              | 3050.2  | TOP OF PIPE                |
| 17     |                |      |            |             |       | 5+80 <sup>1</sup> | 3049.4  | TOP OF PIPE TO GROUND=.8   |

7-15-98

| STA.            | B.S. | H.I.    | I.S.  | FLEV.   |                   |
|-----------------|------|---------|-------|---------|-------------------|
| R024            | 1.98 | 3066.36 |       | 3064.38 | TOP<br>OF<br>PIPE |
| 0+00            |      |         | 2.7   | 3063.7  | GR. @<br>PIPE     |
| 0+50            |      |         | 10.2  | 3056.2  |                   |
| TP <sub>1</sub> | 0.67 | 3055.92 | 11.11 | 3055.25 |                   |
| 1+00            |      |         | 11.9  | 3044.0  |                   |
| TP <sub>2</sub> | 1.74 | 3046.55 | 11.11 | 3044.81 |                   |
| 2+00            |      |         | 8.5   | 3038.1  |                   |
| TP <sub>3</sub> | 0.57 | 3038.38 | 8.74  | 3037.81 |                   |
| 3+00            |      |         | 1.4   | 3037.0  |                   |
| TP <sub>4</sub> | 0.81 | 3028.80 | 10.39 | 3027.99 |                   |
| 4+25            |      |         | 5.2   | 3023.6  |                   |
| 5+00            |      |         | 10.0  | 3018.8  |                   |
| 5+76            |      |         | 6.6   | 3022.2  |                   |
| TP <sub>5</sub> | 1.43 | 3018.04 | 12.19 | 3016.61 |                   |
| 7+00            |      |         | 10.8  | 3007.2  |                   |
| TP <sub>6</sub> | 1.36 | 3006.50 | 12.80 | 3005.24 |                   |
| 8+00            |      |         | 4.5   | 3002.1  |                   |
| 9+00            |      |         | 8.8   | 2997.8  |                   |
| 10+00           |      |         | 11.6  | 2995.0  |                   |

7-18-48

| STA.             | B.S.  | HI      | FS    | ELEV.   |
|------------------|-------|---------|-------|---------|
| TP <sub>7</sub>  | 1.83  | 2996.77 | 11.66 | 2994.94 |
| 11+00            |       |         | 2.7   | 2994.1  |
| 12+00            |       |         | 5.8   | 2991.0  |
| 13+00            |       |         | 5.9   | 2990.9  |
| 14+00            |       |         | 4.0   | 2992.8  |
| TP <sub>8</sub>  | 7.23  | 3001.57 | 2.43  | 2994.34 |
| 15+00            |       |         | 8.0   | 2993.6  |
| 16+00            |       |         | 7.2   | 2994.4  |
| 17+00            |       |         | 6.4   | 2995.2  |
| 18+00            |       |         | 5.3   | 2996.3  |
| 19+00            |       |         | 5.1   | 2996.5  |
| 20+00            |       |         | 2.4   | 2999.2  |
| TP <sub>9</sub>  | 12.96 | 3011.58 | 2.95  | 2998.62 |
| 21+00            |       |         | 7.3   | 3004.3  |
| 22+00            |       |         | 0.0   | 3011.6  |
| TP <sub>10</sub> | 12.40 | 3023.68 | 0.30  | 3011.28 |
| 23+00            |       |         | 5.3   | 3018.4  |
| TP <sub>11</sub> | 12.35 | 3035.59 | 0.44  | 3023.24 |
| 24+00            |       |         | 7.1   | 3028.5  |

| STA.            | B.S.  | H.I.    | F.S.  | ELEV.   |
|-----------------|-------|---------|-------|---------|
| 24+52           |       |         | 3.8   | 3031.8  |
| 24+77           |       |         | 5.7   | 3029.9  |
| 25+15           |       |         | 1.3   | 3034.3  |
| 25+40           |       |         | 1.9   | 3033.7  |
| 27+00           |       |         | 11.0  | 3024.6  |
| TP <sub>2</sub> | 6.97  | 3030.34 | 12.22 | 3023.37 |
| 28+00           |       |         | 8.1   | 3022.2  |
| 29+48           |       |         | 8.2   | 3022.1  |
| 31+00           |       |         | 17.9  | 3012.4  |
| 32+00           |       |         | 17.0  | 3013.3  |
| 33+50           |       |         | 14.0  | 3016.3  |
| 34+23           |       |         | 5.5   | 3024.8  |
| TP <sub>3</sub> | 13.06 | 3042.62 | 0.78  | 3029.56 |
| 35+75           |       |         | 5.8   | 3036.8  |
| 36+00           |       |         | 3.3   | 3039.3  |
| 37+00           |       |         | 2.5   | 3040.1  |
| TP <sub>4</sub> | 7.86  | 3048.01 | 1.67  | 3040.95 |
| 38+00           |       |         | 4.3   | 3044.5  |
| 39+00           |       |         | 7.2   | 3041.6  |



| STA.               | B.S.  | H.I.    | FS.   | ELEV.   |               |
|--------------------|-------|---------|-------|---------|---------------|
| 40+00              |       |         | 10.3  | 3038.5  |               |
| TP <sub>15</sub>   | 11.49 | 3049.11 | 11.19 | 3037.62 |               |
| 40+85              |       |         | 14.9  | 3034.2  |               |
| 41+00              |       |         | 15.9  | 3033.2  |               |
| 41+15              |       |         | 14.7  | 3034.4  |               |
| 42+00              |       |         | 12.2  | 3036.9  |               |
| 43+00              |       |         | 8.3   | 3040.8  |               |
| TP <sub>16</sub>   | 11.18 | 3059.31 | 0.98  | 3048.13 |               |
| 43+58              |       |         | 12.7  | 3046.6  |               |
| TP <sub>17</sub>   | 6.92  | 3065.05 | 1.18  | 3058.13 |               |
| 44+36 <sup>2</sup> |       |         | 1.5   | 3063.6  | GR. @<br>PIPE |
| R025               |       |         | 0.70  | 3064.35 | T.O.P.        |

## RANGE 038-025

| STA.            | B.S. | H.I.    | F.S.  | ELEV.             |            |
|-----------------|------|---------|-------|-------------------|------------|
| R 038           | 1.03 | 3050.56 |       | 3049.53           | T.O.P.     |
| 0+00            |      |         | 2.1   | 3048.5            | GR. @ PIPE |
| TP <sub>1</sub> | 4.27 | 3042.58 | 12.25 | 3038.31           |            |
| 0+42            |      |         | 5.7   | 3036.9            |            |
| 1+00            |      |         | 9.7   | 3032.9            |            |
| 1+20            |      |         | 5.4   | 3037.2            |            |
| 1+42            |      |         | 6.7   | 3035.9            |            |
| 2+00            |      |         | 13.2  | 3029.4            |            |
| TP <sub>2</sub> | 0.17 | 3030.24 | 12.51 | 3030.07           |            |
| 2+70            |      |         | 5.0   | <del>3025.2</del> |            |
| 3+00            |      |         | 3.3   | 3026.9            |            |
| 3+30            |      |         | 3.8   | 3026.4            |            |
| 3+60            |      |         | 7.5   | 3022.7            |            |
| 4+40            |      |         | 6.3   | 3023.9            |            |
| 5+00            |      |         | 9.3   | 3020.9            |            |
| TP <sub>3</sub> | 0.83 | 3019.37 | 11.70 | 3018.54           |            |
| 5+71            |      |         | 2.8   | 3016.6            |            |
| 6+20            |      |         | 4.4   | 3015.0            |            |
| 7+68            |      |         | 14.0  | 3005.4            |            |

7-20-48

| STA             | B.S. | H.I.    | F.S.  | ELEV.             |
|-----------------|------|---------|-------|-------------------|
| TP <sub>4</sub> | 4.01 | 3011.32 | 12.06 | 3007.31           |
| B+68            |      |         | 5.3   | 3006.0            |
| 9+00            |      |         | 3.8   | 3007.5            |
| 10+00           |      |         | 1.8   | 3009.5            |
| 11+00           |      |         | 3.3   | 3008.0            |
| 12+00           |      |         | 3.9   | 3007.4            |
| 13+00           |      |         | 3.7   | <del>3007.6</del> |
| 14+00           |      |         | 3.2   | 3008.1            |
| 15+00           |      |         | 3.4   | 3007.9            |
| TP <sub>5</sub> | 2.83 | 3010.79 | 3.36  | 3007.96           |
| 16+00           |      |         | 4.4   | 3006.4            |
| 16+70           |      |         | 5.0   | 3005.8            |
| 17+00           |      |         | 4.0   | 3006.8            |
| 17+40           |      |         | 3.2   | 3007.6            |
| 18+00           |      |         | 3.7   | 3007.1            |
| 18+40           |      |         | 6.4   | 3004.4            |
| 19+00           |      |         | 6.7   | 3004.1            |
| 20+00           |      |         | 7.0   | 3003.8            |
| 21+00           |      |         | 5.4   | 3005.4            |

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |
|--------------------|-------|---------|------|---------|
| TP <sub>6</sub>    | 12.59 | 3023.22 | 0.16 | 3010.63 |
| 22+00              |       |         | 15.2 | 3008.0  |
| 23+00              |       |         | 11.9 | 3011.3  |
| 24+00              |       |         | 8.3  | 3014.9  |
| 25+00              |       |         | 5.7  | 3017.5  |
| 25+85              |       |         | 0.2  | 3023.0  |
| 26+00              |       |         | 0.9  | 3022.3  |
| TP <sub>7</sub>    | 11.22 | 3034.21 | 0.23 | 3022.99 |
| 27+00              |       |         | 10.0 | 3024.2  |
| 28+00              |       |         | 5.7  | 3028.5  |
| TP <sub>8</sub>    | 12.80 | 3046.65 | 0.36 | 3033.85 |
| 29+00              |       |         | 11.3 | 3035.4  |
| TP <sub>9</sub>    | 10.45 | 3056.64 | 0.46 | 3046.19 |
| 30+00              |       |         | 8.5  | 3048.1  |
| TP <sub>10</sub>   | 11.11 | 3066.59 | 1.16 | 3055.48 |
| 31+05 <sup>2</sup> |       |         | 2.9  | 3063.6  |
| R025               |       |         | 2.15 | 3064.44 |

RANGE 021-023

| STA             | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-021           | 2.25 | 3056.36 |       | 3054.11 |
| 0+00            |      |         | 3.0   | 3053.3  |
| 0+42            |      |         | 7.3   | 3049.1  |
| 0+65            |      |         | 11.4  | 3045.0  |
| TP <sub>1</sub> | 1.76 | 3046.61 | 11.51 | 3044.85 |
| TP <sub>2</sub> | 1.25 | 3035.83 | 12.03 | 3034.58 |
| 2+00            |      |         | 5.9   | 3029.9  |
| 3+00            |      |         | 11.7  | 3024.1  |
| TP <sub>3</sub> | 1.99 | 3026.62 | 11.20 | 3024.63 |
| 3+45            |      |         | 3.6   | 3023.0  |
| 4+75            |      |         | 7.9   | 3018.6  |
| 5+20            |      |         | 3.5   | 3023.1  |
| 5+40            |      |         | 6.2   | 3020.4  |
| TP <sub>4</sub> | 0.37 | 3014.91 | 12.08 | 3014.54 |
| 5+75            |      |         | 5.0   | 3009.9  |
| TP <sub>5</sub> | 0.67 | 3002.72 | 12.86 | 3002.05 |
| 6+30            |      |         | 3.2   | 2999.5  |
| 7+00            |      |         | 9.6   | 2993.1  |
| TP <sub>6</sub> | 1.77 | 2992.75 | 11.74 | 2990.98 |

7-21-48

| STA.            | B.S.  | H.I.    | F.S.  | ELEV.   |                                      |
|-----------------|-------|---------|-------|---------|--------------------------------------|
| 8+00            |       |         | 6.9   | 2985.9  |                                      |
| 9+08            |       |         | 10.6  | 2982.1  | SHORE<br>LINE                        |
| TP <sub>7</sub> | 3.75  | 2990.47 | 6.03  | 2986.72 |                                      |
| STA.            | INT.  | DEPTH   | DIST. | ELEV.   | SHOT #                               |
| 11+04           | 1.95  | 3.2     | 195   | 2978.9  | 1                                    |
| 11+59           | 2.50  | 4.6     | 250   | 2977.5  | 2                                    |
| 12+19           | 3.10  | 5.0     | 310   | 2977.1  | 3                                    |
| 12+99           | 3.90  | 4.8     | 390   | 2977.3  | 4                                    |
| 13+69           | 4.60  | 4.8     | 460   | 2977.3  | 5                                    |
| 14+79           | 5.70  | 4.8     | 570   | 2977.3  | 6                                    |
| 15+09           | 6.00  | 4.9     | 600   | 2977.2  | 7                                    |
| 15+69           | 6.60  | 5.1     | 660   | 2977.0  | 8                                    |
| 16+59           | 7.50  | 5.7     | 750   | 2976.4  | 9                                    |
| 17+39           | 8.30  | 5.8     | 830   | 2976.3  | 10                                   |
| 18+29           | 9.20  | 6.0     | 920   | 2976.1  | 11                                   |
| 19+29           | 10.20 | 6.1     | 1020  | 2976.0  | 12                                   |
| 21+69           | 12.60 | 6.1     | 12.60 | 2976.0  | 13                                   |
| 21+95           | 1.00  | 1.0     | 100   | 2981.1  | SHOT BACK<br>FROM<br>TP <sub>8</sub> |
| TP <sub>8</sub> | 3.12  | 2988.86 | 4.73  | 2985.74 |                                      |
| 22+95           |       |         | 7.1   | 2981.7  | SHORELINE                            |

| STA              | B.S.  | H.I.    | F.S. | ELEV.   |
|------------------|-------|---------|------|---------|
| 24+00            |       |         | 2.5  | 2986.4  |
| TP <sub>9</sub>  | 12.04 | 2999.55 | 1.35 | 2987.51 |
| 24+75            |       |         | 10.7 | 2988.9  |
| 25+00            |       |         | 3.4  | 2996.1  |
| TP <sub>10</sub> | 5.84  | 3004.79 | 0.60 | 2998.75 |
| 26+00            |       |         | 2.0  | 3002.8  |
| 26+80            |       |         | 1.0  | 3003.8  |
| 27+00            |       |         | 2.5  | 3002.3  |
| 27+35            |       |         | 7.5  | 2997.3  |
| TP <sub>11</sub> | 9.31  | 3004.31 | 2.79 | 2995.00 |
| 27+60            |       |         | 10.5 | 2993.8  |
| 28+00            |       |         | 13.2 | 2991.1  |
| 28+35            |       |         | 15.2 | 2989.1  |
| 28+65            |       |         | 15.5 | 2988.8  |
| 29+00            |       |         | 16.6 | 2987.7  |
| 30+45            |       |         | 17.5 | 2986.8  |
| 30+55            |       |         | 15.7 | 2988.6  |
| 32+00            |       |         | 13.7 | 2990.6  |
| 32+85            |       |         | 9.9  | 2994.4  |

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |
|--------------------|-------|---------|------|---------|
| 33+00              |       |         | 7.1  | 2997.2  |
| 33+15              |       |         | 2.7  | 3001.6  |
| TP <sub>12</sub>   | 12.25 | 3016.55 | 0.01 | 3004.30 |
| 34+00              |       |         | 6.9  | 3009.7  |
| 34+66              |       |         | 0.3  | 3016.3  |
| TP <sub>13</sub>   | 12.93 | 3028.97 | 0.51 | 3016.04 |
| 35+60              |       |         | 1.8  | 3027.2  |
| TP <sub>14</sub>   | 12.99 | 3041.67 | 0.29 | 3028.68 |
| 36+67              |       |         | 7.2  | 3034.5  |
| TP <sub>15</sub>   | 11.85 | 3051.76 | 1.76 | 3039.91 |
| 37+02 <sup>4</sup> |       |         | 4.6  | 3047.2  |
| R-023              |       |         | 3.43 | 3048.33 |



| STA             | B.S. | M.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-040           | 2.13 | 3056.04 |       | 3053.91 |
| 0+00            |      |         | 3.9   | 3052.1  |
| 0+22            |      |         | 12.1  | 3043.9  |
| TP <sub>1</sub> | 0.42 | 3044.70 | 11.76 | 3044.28 |
| 0+90            |      |         | 10.1  | 3034.6  |
| TP <sub>2</sub> | 0.60 | 3033.16 | 12.14 | 3032.56 |
| 1+25            |      |         | 3.5   | 3029.7  |
| 2+00            |      |         | 8.8   | 3024.4  |
| TP <sub>3</sub> | 1.86 | 3022.30 | 12.72 | 3020.44 |
| 3+00            |      |         | 2.6   | 3019.7  |
| 4+00            |      |         | 4.7   | 3017.6  |
| 5+00            |      |         | 3.5   | 3018.8  |
| 5+40            |      |         | 3.2   | 3019.1  |
| 6+00            |      |         | 5.3   | 3017.0  |
| 7+00            |      |         | 6.9   | 3015.4  |
| 8+00            |      |         | 7.1   | 3015.2  |
| 9+00            |      |         | 6.5   | 3015.8  |
| TP <sub>4</sub> | 0.05 | 3016.15 | 6.20  | 3016.10 |
| 9+40            |      |         | 1.0   | 3015.2  |

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| STA.  | B.S. | H.I.    | F.S. | ELEV.   |
|-------|------|---------|------|---------|
| 10+00 |      |         | 2.1  | 3014.1  |
| 10+85 |      |         | 5.1  | 3011.1  |
| 10+90 |      |         | 6.6  | 3009.6  |
| 12+15 |      |         | 8.0  | 3008.2  |
| 12+25 |      |         | 6.7  | 3009.5  |
| 13+00 |      |         | 5.8  | 3010.4  |
| 14+00 |      |         | 5.6  | 3010.6  |
| 15+00 |      |         | 5.3  | 3010.9  |
| 16+00 |      |         | 4.4  | 3011.8  |
| TP5   | 3.26 | 3015.18 | 4.23 | 3011.92 |
| 17+00 |      |         | 3.4  | 3011.8  |
| 17+60 |      |         | 3.9  | 3011.3  |
| 18+15 |      |         | 5.3  | 3009.9  |
| 18+20 |      |         | 7.7  | 3007.5  |
| 19+00 |      |         | 7.5  | 3007.7  |
| 20+00 |      |         | 8.1  | 3007.1  |
| 21+00 |      |         | 7.9  | 3007.3  |
| 21+85 |      |         | 8.3  | 3006.9  |
| 22+20 |      |         | 9.1  | 3006.1  |

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |
|--------------------|-------|---------|------|---------|
| 23+00              |       |         | 8.7  | 3006.5  |
| 24+00              |       |         | 7.0  | 3008.2  |
| 25+00              |       |         | 2.8  | 3012.4  |
| TP <sub>6</sub>    | 11.28 | 3024.84 | 1.62 | 3013.56 |
| 26+12              |       |         | 6.8  | 3018.0  |
| TP <sub>7</sub>    | 11.85 | 3036.28 | 0.41 | 3024.43 |
| TP <sub>8</sub>    | 12.45 | 3048.04 | 0.69 | 3035.59 |
| TP <sub>9</sub>    | 8.87  | 3056.28 | 0.63 | 3047.41 |
| 26+89 <sup>L</sup> |       |         | 6.4  | 3049.9  |
| R-039              |       |         | 5.47 | 3050.81 |

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| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-042           | 0.13 | 3055.40 |       | 3055.27 |
| 0+00            |      |         | 1.5   | 3053.9  |
| 0+17            |      |         | 9.7   | 3045.7  |
| TP <sub>1</sub> | 0.59 | 3043.84 | 12.15 | 3043.25 |
| 0+60            |      |         | 10.7  | 3033.1  |
| TP <sub>2</sub> | 0.82 | 3032.31 | 12.35 | 3031.49 |
| 1+00            |      |         | 6.2   | 3026.1  |
| 2+00            |      |         | 6.1   | 3026.2  |
| 3+00            |      |         | 4.8   | 3027.5  |
| 3+47            |      |         | 5.8   | 3026.5  |
| 3+60            |      |         | 10.8  | 3021.5  |
| 4+00            |      |         | 11.8  | 3020.5  |
| 5+00            |      |         | 12.3  | 3020.0  |
| 6+00            |      |         | 12.6  | 3019.7  |
| TP <sub>3</sub> | 6.61 | 3026.53 | 12.39 | 3019.92 |
| 7+00            |      |         | 7.3   | 3019.2  |
| 8+00            |      |         | 7.9   | 3018.6  |
| 9+00            |      |         | 8.6   | 3017.9  |
| 10+00           |      |         | 9.2   | 3017.3  |

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |
|--------------------|-------|---------|------|---------|
| 10+85              |       |         | 10.3 | 3016.2  |
| 11+43              |       |         | 10.3 | 3016.2  |
| 11+59              |       |         | 7.0  | 3019.5  |
| 11+91              |       |         | 7.4  | 3019.1  |
| 12+00              |       |         | 8.9  | 3017.6  |
| 12+35              |       |         | 9.7  | 3016.8  |
| 12+46              |       |         | 5.1  | 3021.4  |
| 13+00              |       |         | 3.5  | 3023.0  |
| 14+00              |       |         | 0.4  | 3026.1  |
| TP <sub>4</sub>    | 12.82 | 3038.71 | 0.64 | 3025.89 |
| 15+00              |       |         | 9.4  | 3029.3  |
| 15+48              |       |         | 4.0  | 3034.7  |
| TP <sub>5</sub>    | 9.88  | 3048.01 | 0.58 | 3038.13 |
| 15+80              |       |         | 5.1  | 3042.9  |
| 16+00 <sup>±</sup> |       |         | 2.3  | 3045.7  |
| R-093              |       |         | 0.97 | 3047.04 |

| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-048           | 0.64 | 3050.01 |       | 3049.37 |
| 0+00            |      |         | 2.6   | 3047.4  |
| TP <sub>1</sub> | 0.32 | 3039.20 | 11.13 | 3038.88 |
| 0+35            |      |         | 4.5   | 3034.7  |
| 0+58            |      |         | 6.2   | 3033.0  |
| 0+66            |      |         | 8.5   | 3030.7  |
| 1+00            |      |         | 8.3   | 3030.9  |
| 2+00            |      |         | 8.7   | 3030.5  |
| 3+00            |      |         | 7.1   | 3032.1  |
| 4+00            |      |         | 5.9   | 3033.3  |
| TP <sub>2</sub> | 7.62 | 3041.16 | 5.66  | 3033.54 |
| 4+33            |      |         | 7.4   | 3033.8  |
| 4+45            |      |         | 8.5   | 3032.7  |
| 4+51            |      |         | 7.4   | 3033.8  |
| 5+00            |      |         | 6.8   | 3034.4  |
| 5+25            |      |         | 8.4   | 3032.8  |
| 5+85            |      |         | 8.5   | 3032.7  |
| 6+00            |      |         | 5.8   | 3035.4  |
| 7+00            |      |         | 5.4   | 3035.8  |

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| STH.               | B.S. | H.I.    | F.S. | ELEV.   |
|--------------------|------|---------|------|---------|
| 8+00               |      |         | 5.7  | 3035.5  |
| 9+00               |      |         | 5.9  | 3035.3  |
| 10+00              |      |         | 5.7  | 3035.5  |
| TP <sub>3</sub>    | 4.50 | 3040.27 | 5.39 | 3035.77 |
| 11+00              |      |         | 4.8  | 3035.5  |
| 12+00              |      |         | 4.6  | 3035.7  |
| 13+00              |      |         | 4.5  | 3035.8  |
| 14+00              |      |         | 4.5  | 3035.8  |
| 15+00              |      |         | 3.1  | 3037.2  |
| 16+00              |      |         | 1.0  | 3039.3  |
| TP <sub>4</sub>    | 9.75 | 3049.59 | 0.43 | 3039.84 |
| 17+00              |      |         | 8.5  | 3041.1  |
| 18+00              |      |         | 7.4  | 3042.2  |
| 18+60              |      |         | 6.4  | 3043.2  |
| 19+00              |      |         | 3.4  | 3046.2  |
| 19+26 <sup>2</sup> |      |         | 1.3  | 3048.3  |
| R-049              |      |         | 0.27 | 3049.32 |

## RANGE 053-052

| STA.              | B.S. | H.I.    | F.S. | ELEV.   |
|-------------------|------|---------|------|---------|
| R-053             | 4.30 | 3050.06 |      | 3045.76 |
| 0+00              |      |         | 4.9  | 3045.2  |
| 0+16              |      |         | 5.4  | 3044.7  |
| 0+20              |      |         | 4.7  | 3045.4  |
| 1+00              |      |         | 4.8  | 3045.3  |
| 1+05              |      |         | 5.4  | 3044.7  |
| 1+50              |      |         | 4.8  | 3045.3  |
| 1+95              |      |         | 4.5  | 3045.6  |
| 2+12              |      |         | 5.6  | 3044.5  |
| 2+25              |      |         | 4.7  | 3045.4  |
| 3+00              |      |         | 4.5  | 3045.6  |
| 3+85 <sup>2</sup> |      |         | 4.5  | 3045.6  |
| R-052             |      |         | 3.57 | 3046.49 |

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| STA.  | B.S. | H.I.    | F.S. | ELEV.   |
|-------|------|---------|------|---------|
| R-050 | 0.93 | 3044.82 |      | 3043.89 |
| 0+00  |      |         | 2.3  | 3042.5  |
| 0+23  |      |         | 5.9  | 3038.9  |
| 0+54  |      |         | 8.6  | 3036.2  |
| 0+65  |      |         | 9.9  | 3034.9  |
| 0+75  |      |         | 10.3 | 3034.5  |
| 0+85  |      |         | 10.3 | 3034.5  |
| 0+90  |      |         | 6.2  | 3038.6  |
| 2+00  |      |         | 4.6  | 3040.2  |
| 2+50  |      |         | 4.7  | 3040.1  |
| 3+00  |      |         | 5.0  | 3039.8  |
| 3+50  |      |         | 5.0  | 3039.8  |
| 4+00  |      |         | 4.7  | 3040.1  |
| 4+50  |      |         | 4.3  | 3040.5  |
| 5+00  |      |         | 3.7  | 3041.1  |
| 5+50  |      |         | 3.5  | 3041.3  |
| 6+00  |      |         | 3.3  | 3041.5  |
| TP,   | 4.23 | 3045.95 | 3.10 | 3041.72 |
| 6+24  |      |         | 5.1  | 3040.9  |

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| STA.              | B.S. | H.I. | F.S. | ELEV.   |
|-------------------|------|------|------|---------|
| 6+34              |      |      | 5.7  | 3090.3  |
| 6+45              |      |      | 5.0  | 3041.0  |
| 7+00              |      |      | 4.9  | 3041.1  |
| 7+50              |      |      | 5.3  | 3040.7  |
| 8+00              |      |      | 5.1  | 3040.9  |
| 8+50              |      |      | 4.3  | 3041.7  |
| 8+96 <sup>6</sup> |      |      | 1.5  | 3044.5  |
| R-051             |      |      | 0.70 | 3045.25 |

| STA.            | B.S.  | H. I.   | F.S.  | ELEV.   |
|-----------------|-------|---------|-------|---------|
| R-044           | 1.62  | 3047.61 |       | 3045.99 |
| 0+00            |       |         | 2.6   | 3045.0  |
| 0+50            |       |         | 9.3   | 3038.3  |
| TP <sub>1</sub> | 0.54  | 3036.32 | 11.83 | 3035.78 |
| 1+15            |       |         | 5.6   | 3030.7  |
| 2+00            |       |         | 10.5  | 3025.8  |
| TP <sub>2</sub> | 0.15  | 3024.10 | 12.37 | 3023.95 |
| 3+00            |       |         | 0.6   | 3023.5  |
| 4+00            |       |         | 3.2   | 3020.9  |
| 5+00            |       |         | 5.7   | 3018.4  |
| 6+00            |       |         | 8.1   | 3016.0  |
| 7+00            |       |         | 8.4   | 3015.7  |
| 8+00            |       |         | 6.9   | 3017.2  |
| TP <sub>3</sub> | 9.57  | 3028.54 | 5.13  | 3018.97 |
| 9+00            |       |         | 10.2  | 3018.3  |
| 10+00           |       |         | 7.8   | 3020.7  |
| 11+00           |       |         | 4.6   | 3023.9  |
| 12+00           |       |         | 2.1   | 3026.4  |
| TP <sub>4</sub> | 12.32 | 3040.39 | 0.47  | 3028.07 |

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| STA.               | B.S. | H.I.    | F.S. | ELEV.   |
|--------------------|------|---------|------|---------|
| 13+00              |      |         | 11.7 | 3028.7  |
| 13+65              |      |         | 9.0  | 3031.4  |
| 14+00              |      |         | 6.8  | 3033.6  |
| 14+75              |      |         | 1.3  | 3039.1  |
| TP <sub>5</sub>    | 8.43 | 3047.74 | 1.08 | 3039.31 |
| 15+30 <sup>+</sup> |      |         | 3.6  | 3044.1  |
| R-045              |      |         | 2.87 | 3044.87 |

| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R 042           | 1.32 | 3056.59 |       | 3055.27 |
| 0+00            |      |         | 2.6   | 3054.0  |
| TP <sub>1</sub> | 1.83 | 3045.70 | 12.72 | 3043.87 |
| 0+55            |      |         | 1.7   | 3044.0  |
| 1+00            |      |         | 9.7   | 3036.0  |
| 1+22            |      |         | 11.7  | 3034.0  |
| TP <sub>2</sub> | 0.86 | 3034.58 | 11.98 | 3033.72 |
| 1+40            |      |         | 3.1   | 3031.5  |
| 2+00            |      |         | 7.1   | 3027.5  |
| 2+60            |      |         | 8.5   | 3026.1  |
| 2+80            |      |         | 7.2   | 3027.4  |
| 3+00            |      |         | 8.9   | 3026.2  |
| 3+22            |      |         | 7.9   | 3026.7  |
| 3+50            |      |         | 10.6  | 3024.0  |
| 4+00            |      |         | 12.6  | 3022.0  |
| TP <sub>3</sub> | 0.50 | 3022.25 | 12.83 | 3021.75 |
| 5+00            |      |         | 4.4   | 3017.9  |
| 6+00            |      |         | 8.5   | 3013.8  |
| 6+50            |      |         | 10.1  | 3012.2  |

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| STA.            | B.S.  | H.I.    | F.S.  | ELEV.   |
|-----------------|-------|---------|-------|---------|
| 7+00            |       |         | 12.1  | 3010.2  |
| TP <sub>4</sub> | 1.94  | 3011.45 | 12.74 | 3009.51 |
| 8+00            |       |         | 3.4   | 3008.1  |
| 9+00            |       |         | 4.3   | 3007.2  |
| 10+00           |       |         | 4.3   | 3007.2  |
| 11+00           |       |         | 4.5   | 3007.0  |
| 12+00           |       |         | 4.7   | 3006.8  |
| 13+00           |       |         | 4.8   | 3006.7  |
| 14+00           |       |         | 4.6   | 3006.9  |
| TP <sub>5</sub> | 12.52 | 3023.24 | 0.73  | 3010.72 |
| 15+00           |       |         | 12.7  | 3010.5  |
| 16+00           |       |         | 9.7   | 3013.5  |
| 17+00           |       |         | 6.7   | 3016.5  |
| TP <sub>6</sub> | 13.01 | 3036.07 | 0.18  | 3023.06 |
| 18+00           |       |         | 13.2  | 3022.9  |
| 18+25           |       |         | 9.8   | 3026.3  |
| 18+38           |       |         | 7.0   | 3029.1  |
| 18+56           |       |         | 5.2   | 3030.9  |
| 18+90           |       |         | 0.7   | 3035.4  |

| STA.               | B. S. | H. I.   | F. S. | ELEV.   |
|--------------------|-------|---------|-------|---------|
| TP <sub>7</sub>    | 1.79  | 3037.33 | 0.53  | 3035.54 |
| 19+00              |       |         | 1.8   | 3035.5  |
| 19+30              |       |         | 2.1   | 3035.2  |
| 19+60              |       |         | 6.9   | 3030.4  |
| 20+00              |       |         | 9.8   | 3027.5  |
| 21+00              |       |         | 13.9  | 3023.4  |
| 22+00              |       |         | 10.9  | 3026.4  |
| 23+00              |       |         | 4.2   | 3033.1  |
| TP <sub>B</sub>    | 11.07 | 3047.35 | 1.05  | 3036.28 |
| 24+00              |       |         | 4.7   | 3042.7  |
| 24+17 <sup>4</sup> |       |         | 1.5   | 3045.9  |
| R-041              |       |         | 0.61  | 3046.74 |

| STA.              | B.S. | H.I.    | F.S. | ELEV.   |
|-------------------|------|---------|------|---------|
| R-046             | 1.30 | 3047.24 |      | 3045.94 |
| 0+00              |      |         | 2.3  | 3044.9  |
| 0+50              |      |         | 5.5  | 3041.7  |
| 1+00              |      |         | 6.5  | 3040.7  |
| 1+50              |      |         | 5.9  | 3041.3  |
| 2+00              |      |         | 4.9  | 3042.3  |
| 2+50              |      |         | 3.4  | 3043.8  |
| 3+01 <sup>L</sup> |      |         | 2.2  | 3045.0  |
| R-047             |      |         | 1.48 | 3045.76 |

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| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-033           | 1.71 | 3049.29 |       | 3047.58 |
| 0+00            |      |         | 2.3   | 3047.0  |
| 1+00            |      |         | 5.8   | 3043.5  |
| 2+00            |      |         | 6.6   | 3042.7  |
| 2+67            |      |         | 7.6   | 3041.7  |
| 3+25            |      |         | 8.8   | 3040.5  |
| TP <sub>1</sub> | 0.44 | 3041.15 | 8.58  | 3040.71 |
| 4+00            |      |         | 2.4   | 3038.8  |
| 5+00            |      |         | 5.3   | 3035.9  |
| 6+00            |      |         | 7.3   | 3033.9  |
| 7+00            |      |         | 9.7   | 3031.5  |
| TP <sub>2</sub> | 2.86 | 3033.66 | 10.35 | 3030.80 |
| 8+00            |      |         | 2.7   | 3031.0  |
| 9+00            |      |         | 4.6   | 3029.1  |
| 10+00           |      |         | 5.9   | 3027.8  |
| 11+00           |      |         | 7.3   | 3026.4  |
| 12+00           |      |         | 6.9   | 3026.8  |
| TP <sub>3</sub> | 3.54 | 3030.45 | 6.75  | 3026.91 |
| 13+00           |      |         | 3.8   | 3026.7  |

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| STA.            | B.S.  | H.I.    | F.S. | ELEV.   |
|-----------------|-------|---------|------|---------|
| 14+00           |       |         | 4.0  | 3026.5  |
| 15+00           |       |         | 3.1  | 3027.4  |
| 15+60           |       |         | 5.2  | 3025.3  |
| 15+65           |       |         | 7.4  | 3023.1  |
| 15+86           |       |         | 8.0  | 3022.5  |
| 15+94           |       |         | 5.7  | 3024.8  |
| 16+00           |       |         | 4.9  | 3025.6  |
| 17+00           |       |         | 4.8  | 3025.7  |
| 18+00           |       |         | 1.7  | 3028.8  |
| 19+00           |       |         | 0.0  | 3030.5  |
| TP <sub>4</sub> | 2.14  | 3032.08 | 0.51 | 3029.94 |
| 20+00           |       |         | 0.6  | 3031.5  |
| 21+00           |       |         | 0.3  | 3031.8  |
| 21+23           |       |         | 1.0  | 3031.1  |
| 22+00           |       |         | 8.1  | 3024.0  |
| 23+00           |       |         | 8.8  | 3023.3  |
| 24+00           |       |         | 6.5  | 3025.6  |
| 25+00           |       |         | 3.2  | 3028.9  |
| TP <sub>5</sub> | 11.21 | 3041.69 | 1.60 | 3030.48 |

3030.5

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |
|--------------------|-------|---------|------|---------|
| 26+00              |       |         | 9.7  | 3032.0  |
| 27+00              |       |         | 6.7  | 3035.0  |
| 28+00              |       |         | 2.1  | 3039.6  |
| TP <sub>6</sub>    | 11.05 | 3052.53 | 0.21 | 3041.48 |
| 29+00              |       |         | 9.1  | 3043.4  |
| 29+25 <sup>2</sup> |       |         | 3.9  | 3048.6  |
| R-032              |       |         | 3.21 | 3049.32 |

3041.7

| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-037           | 1.57 | 3052.23 |       | 3050.66 |
| 0+00            |      |         | 2.3   | 3049.9  |
| 1+00            |      |         | 5.9   | 3046.3  |
| 2+00            |      |         | 8.5   | 3043.7  |
| 2+50            |      |         | 12.4  | 3039.8  |
| TP <sub>1</sub> | 5.41 | 3045.50 | 12.14 | 3040.09 |
| 2+52            |      |         | 7.9   | 3037.6  |
| 2+70            |      |         | 7.6   | 3037.9  |
| 2+76            |      |         | 7.8   | 3037.7  |
| 2+84            |      |         | 6.2   | 3039.3  |
| 3+00            |      |         | 6.6   | 3038.9  |
| 3+12            |      |         | 6.2   | 3039.3  |
| 3+25            |      |         | 7.7   | 3037.8  |
| 3+45            |      |         | 7.3   | 3038.2  |
| 3+50            |      |         | 6.5   | 3039.0  |
| 4+00            |      |         | 6.6   | 3038.9  |
| 5+00            |      |         | 7.0   | 3038.5  |
| 5+60            |      |         | 7.3   | 3038.2  |
| 6+00            |      |         | 7.3   | 3038.2  |

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| STA.            | B.S. | H.I.    | F.S. | ELEV.   |
|-----------------|------|---------|------|---------|
| 6+42            |      |         | 7.6  | 3037.9  |
| 6+50            |      |         | 5.7  | 3039.8  |
| 7+00            |      |         | 4.5  | 3041.0  |
| 8+00            |      |         | 2.4  | 3043.1  |
| TP <sub>2</sub> | 6.06 | 3050.41 | 1.15 | 3044.35 |
| 9+00            |      |         | 3.8  | 3046.6  |
| 9+34.2          |      |         | 2.7  | 3047.7  |
| R-036           |      |         | 1.95 | 3048.46 |

3045.5

| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-035           | 1.02 | 3052.74 |       | 3051.72 |
| 0+00            |      |         | 1.6   | 3051.1  |
| 0+20            |      |         | 6.9   | 3045.8  |
| TP <sub>1</sub> | 0.39 | 3041.01 | 12.12 | 3040.62 |
| 0+55            |      |         | 8.4   | 3032.6  |
| 1+00            |      |         | 10.1  | 3030.9  |
| 1+20            |      |         | 9.9   | 3031.1  |
| 1+30            |      |         | 8.4   | 3032.6  |
| 1+70            |      |         | 7.9   | 3033.1  |
| 1+83            |      |         | 9.0   | 3032.0  |
| 2+00            |      |         | 9.4   | 3031.6  |
| 2+65            |      |         | 7.8   | 3033.2  |
| 3+00            |      |         | 7.7   | 3033.3  |
| TP <sub>2</sub> | 9.13 | 3042.35 | 7.79  | 3033.22 |
| 4+00            |      |         | 9.9   | 3032.5  |
| 4+12            |      |         | 9.8   | 3032.6  |
| 4+25            |      |         | 9.2   | 3033.2  |
| 4+65            |      |         | 9.9   | 3032.5  |
| 5+00            |      |         | 10.8  | 3031.6  |

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| STA.              | B.S. | H.I.    | F.S. | ELEV.   |
|-------------------|------|---------|------|---------|
| 6+00              |      |         | 6.9  | 3035.5  |
| 7+00              |      |         | 1.8  | 3040.6  |
| TP <sub>3</sub>   | 9.65 | 3051.19 | 0.81 | 3041.54 |
| 7+65              |      |         | 7.2  | 3044.0  |
| 7+84 <sup>9</sup> |      |         | 2.5  | 3048.7  |
| R-034             |      |         | 1.89 | 3049.30 |

| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-030           | 1.44 | 3050.72 |       | 3049.28 |
| 0+00            |      |         | 2.1   | 3048.6  |
| 1+00            |      |         | 8.3   | 3042.4  |
| 2+00            |      |         | 12.2  | 3038.5  |
| TP <sub>1</sub> | 1.21 | 3039.16 | 12.77 | 3037.95 |
| 3+00            |      |         | 5.2   | 3034.0  |
| 4+00            |      |         | 8.5   | 3030.7  |
| 5+00            |      |         | 10.5  | 3028.7  |
| TP <sub>2</sub> | 0.36 | 3028.44 | 11.08 | 3028.08 |
| 6+00            |      |         | 2.7   | 3025.7  |
| 7+00            |      |         | 5.2   | 3023.2  |
| 8+00            |      |         | 8.0   | 3020.4  |
| 9+00            |      |         | 10.7  | 3017.7  |
| 10+00           |      |         | 12.4  | 3016.0  |
| TP <sub>3</sub> | 0.82 | 3016.61 | 12.65 | 3015.79 |
| 11+00           |      |         | 1.5   | 3015.1  |
| 12+00           |      |         | 3.1   | 3013.5  |
| 13+00           |      |         | 3.6   | 3013.0  |
| 14+00           |      |         | 4.4   | 3012.2  |



| STA.            | B.S.  | H.I.    | F.S. | ELEV.   |
|-----------------|-------|---------|------|---------|
| 14+75           |       |         | 6.1  | 3010.5  |
| 14+85           |       |         | 11.9 | 3004.7  |
| 15+30           |       |         | 9.5  | 3007.1  |
| 15+60           |       |         | 7.7  | 3008.9  |
| 16+00           |       |         | 9.7  | 3006.9  |
| 16+25           |       |         | 9.7  | 3006.9  |
| 16+35           |       |         | 6.7  | 3009.9  |
| 17+00           |       |         | 6.4  | 3010.2  |
| 18+00           |       |         | 5.8  | 3010.8  |
| TP <sub>4</sub> | 8.17  | 3019.06 | 5.72 | 3010.89 |
| 19+00           |       |         | 8.1  | 3011.0  |
| 20+00           |       |         | 7.6  | 3011.5  |
| 21+00           |       |         | 8.0  | 3011.1  |
| 21+20           |       |         | 8.0  | 3011.1  |
| 22+00           |       |         | 5.4  | 3013.7  |
| TP <sub>5</sub> | 12.85 | 3031.00 | 0.91 | 3018.15 |
| 24+00           |       |         | 5.2  | 3025.8  |
| 25+00           |       |         | 0.9  | 3030.1  |
| TP <sub>6</sub> | 13.02 | 3043.42 | 0.60 | 3030.40 |

| SJA.             | B.S.  | H.I.    | F.S.  | ELEV.   |
|------------------|-------|---------|-------|---------|
| 26+00            |       | 47.4    | 7.6   | 3035.8  |
| TP <sub>7</sub>  | 6.04  | 3049.02 | 0.44  | 3042.98 |
| 27+00            |       |         | 5.3   | 3043.7  |
| 27+25            |       |         | 3.3   | 3045.7  |
| 28+00            |       |         | 5.1   | 3043.9  |
| 28+50            |       |         | 11.0  | 3038.0  |
| TP <sub>8</sub>  | 1.35  | 3038.20 | 12.17 | 3036.85 |
| 29+00            |       |         | 3.3   | 3034.9  |
| 30+00            |       |         | 9.4   | 3028.8  |
| TP <sub>9</sub>  | 0.45  | 3025.85 | 12.80 | 3025.40 |
| 31+00            |       |         | 3.5   | 3022.4  |
| 32+00            |       |         | 8.4   | 3017.5  |
| TP <sub>10</sub> | 9.00  | 3021.94 | 12.91 | 3012.94 |
| 33+00            |       |         | 10.0  | 3011.9  |
| 34+00            |       |         | 14.5  | 3007.4  |
| 35+00            |       |         | 11.4  | 3010.5  |
| 36+00            |       |         | 2.8   | 3019.1  |
| TP <sub>11</sub> | 12.88 | 3034.05 | 0.77  | 3021.17 |
| 36+25            |       |         | 10.4  | 3023.7  |

| STA.               | B.S.  | H.I.    | F.S. | ELEV.   |
|--------------------|-------|---------|------|---------|
| TP <sub>12</sub>   | 12.91 | 3046.86 | 0.10 | 3033.95 |
| 37+00              |       |         | 8.6  | 3038.3  |
| 37+36              |       |         | 3.5  | 3043.4  |
| TP <sub>13</sub>   | 9.13  | 3055.34 | 0.65 | 3046.21 |
| 38+11 <sup>e</sup> |       |         | 6.9  | 3048.4  |
| R-031              |       |         | 6.79 | 3048.55 |

| STA.            | B.S. | H.I.    | F.S.  | ELEV.   |
|-----------------|------|---------|-------|---------|
| R-028           | 0.33 | 3053.03 |       | 3052.70 |
| 0+00            |      |         | 1.1   | 3051.9  |
| 0+20            |      |         | 8.3   | 3044.7  |
| TP <sub>1</sub> | 2.84 | 3047.03 | 8.84  | 3044.19 |
| 1+00            |      |         | 11.9  | 3035.1  |
| TP <sub>2</sub> | 0.61 | 3034.78 | 12.86 | 3034.17 |
| 2+00            |      |         | 7.2   | 3027.6  |
| TP <sub>3</sub> | 0.12 | 3022.31 | 12.59 | 3022.19 |
| 3+00            |      |         | 4.1   | 3018.2  |
| 4+00            |      |         | 9.3   | 3013.0  |
| 5+00            |      |         | 7.5   | 3014.8  |
| 6+00            |      |         | 13.2  | 3009.1  |
| TP <sub>4</sub> | 0.61 | 3009.92 | 13.00 | 3009.31 |
| 6+95            |      |         | 5.8   | 3004.1  |
| 7+05            |      |         | 6.5   | 3003.4  |
| 7+15            |      |         | 7.6   | 3002.3  |
| 7+20            |      |         | 5.0   | 3004.9  |
| 8+00            |      |         | 5.4   | 3004.5  |
| 9+00            |      |         | 6.2   | 3003.7  |

| STA.            | B.S. | H.I.    | F.S. | ELEV.   |
|-----------------|------|---------|------|---------|
| 10+00           |      |         | 7.8  | 3002.1  |
| 11+00           |      |         | 9.0  | 3000.9  |
| TP <sub>5</sub> | 2.42 | 3003.28 | 9.06 | 3000.86 |
| 12+00           |      |         | 3.6  | 2999.7  |
| 13+00           |      |         | 4.5  | 2998.8  |
| 14+00           |      |         | 4.4  | 2998.9  |
| 15+00           |      |         | 5.0  | 2998.3  |
| 16+00           |      |         | 5.1  | 2998.2  |
| 17+00           |      |         | 5.6  | 2997.7  |
| 18+00           |      |         | 6.1  | 2997.1  |
| TP <sub>6</sub> | 2.74 | 2999.81 | 6.21 | 2997.07 |
| 19+00           |      |         | 3.5  | 2996.3  |
| 20+00           |      |         | 3.6  | 2996.2  |
| 21+00           |      |         | 4.3  | 2995.5  |
| 22+00           |      |         | 5.1  | 2994.7  |
| 23+00           |      |         | 4.2  | 2995.6  |
| 23+30           |      |         | 5.9  | 2993.9  |
| 24+00           |      |         | 5.9  | 2993.9  |
| TP <sub>7</sub> | 8.22 | 3002.05 | 5.98 | 2993.83 |

| STA.             | B.S.  | H.I.    | F.S. | ELEV.   |
|------------------|-------|---------|------|---------|
| 24+15            |       |         | 11.4 | 2990.7  |
| 24+40            |       |         | 13.2 | 2988.8  |
| 24+74            |       |         | 13.7 | 2988.3  |
| 24+75            |       |         | 14.4 | 2987.6  |
| 24+90            |       |         | 14.4 | 2987.6  |
| 24+93            |       |         | 9.6  | 2992.4  |
| 25+00            |       |         | 7.6  | 2994.4  |
| 25+50            |       |         | 0.5  | 3001.5  |
| TP <sub>8</sub>  | 12.41 | 3013.99 | 0.47 | 3001.58 |
| 26+00            |       |         | 9.4  | 3004.5  |
| 27+00            |       |         | 3.7  | 3010.2  |
| TP <sub>9</sub>  | 12.84 | 3026.81 | 0.02 | 3013.97 |
| 27+30            |       |         | 12.8 | 3014.0  |
| 28+00            |       |         | 8.8  | 3016.0  |
| 28+44            |       |         | 3.2  | 3023.6  |
| TP <sub>10</sub> | 12.32 | 3038.57 | 0.56 | 3026.25 |
| 28+86            |       |         | 2.6  | 3036.0  |
| TP <sub>11</sub> | 12.84 | 3050.92 | 0.49 | 3038.08 |
| 29+00            |       |         | 10.4 | 3040.5  |

| STA.               | B.S. | H.I. | F.S. | ELEV.   |
|--------------------|------|------|------|---------|
| 29+20              |      |      | 2.9  | 3048.0  |
| 29+26 <sup>B</sup> |      |      | 0.37 | 3050.5  |
| R-029              |      |      |      | 3052.05 |

| SHOT #  | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.   |                  |
|---------|---------|------|------------|-------------|-------|-------|---------|------------------|
| 1       | 5°37'   | 4.36 | 432        | 42.5        |       | R-021 | 3054.11 |                  |
| 2       |         |      |            |             |       | 0+00  | 3053.4  |                  |
| 3       | 5°40'   | 4.08 | 404        | 40.1        |       | 0+28  | 3051.7  |                  |
| 4       | 5°30'   | 3.63 | 360        | 34.6        |       | 0+72  | 3046.2  |                  |
| 5       | 5°18'   | 3.21 | 318        | 29.5        |       | 1+14  | 3041.1  |                  |
| 6       | 4°44'   | 2.79 | 277        | 22.9        |       | 1+55  | 3034.5  |                  |
| 7       | 4°18'   | 1.83 | 182        | 13.7        |       | 2+50  | 3025.3  | (GUN IS AT       |
| 8       | 3°44'   | 1.72 | 171        | 11.2        |       | 2+61  | 3022.8  | 4+32 AND 3011.6) |
| 9       | 3°04'   | 1.18 | 118        | 6.3         |       | 3+14  | 3017.9  |                  |
| 10      | 0°08'   | 0.10 | 10         | 0           |       | 4+22  | 3011.6  | PLUNGED GUN      |
| 11      | 0°00'   | —    | 5          | -2.5        |       | 4+37  | 3009.1  |                  |
| 12      | -2°12'  | 0.34 | 30         | -11.0       |       | 4+62  | 3000.6  |                  |
| 13      | -19°10' | 0.62 | 55         | -19.2       |       | 4+87  | 2992.4  |                  |
| 14      | -14°04' | 1.16 | 109        | -27.4       |       | 5+41  | 2984.2  |                  |
| 15      | -11°40' | 1.48 | 142        | -29.3       |       | 5+74  | 2982.3  |                  |
| 16      | -9°50'  | 1.65 | 160        | -27.8       |       | 5+92  | 2983.8  |                  |
| 17      | -8°14'  | 2.12 | 208        | -30.0       | 0     | 6+40  | 2981.6  | SHORE LINE       |
| TP F.S. | -7°52'  | 1.76 | —          | -23.87      |       | TP    | 2987.7  |                  |
| TP B.S. | -0°10'  | 6.64 | —          | -1.93       |       | TP    | —       |                  |



| SHOT # | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.  |                 |
|--------|---------|------|------------|-------------|-------|-------|--------|-----------------|
| 17 A   | -0.44   | 6.30 | 630        | -8.06       | 0     | 6+40  | 2981.5 | SHORE LINE      |
| 18     | 0       | 6.20 | 620        |             | 5.0   | 6+50  | 2976.5 |                 |
| 19     | 0       | 5.80 | 580        |             | 8.0   | 6+90  | 2973.5 |                 |
| 20     | 0       | 5.50 | 550        |             | 15.1  | 7+20  | 2966.4 |                 |
| 21     | 0       | 5.15 | 515        |             | 18.1  | 7+55  | 2963.4 | (GUN IS AT      |
| 22     | 0       | 4.80 | 480        |             | 22.0  | 7+90  | 2959.5 | 12+70 + 2989.6) |
| 23     | 0       | 4.55 | 455        |             | 24.9  | 8+15  | 2956.6 |                 |
| 24     | 0       | 3.30 | 330        |             | 28.0  | 9+40  | 2953.5 |                 |
| 25     | 0       | 2.50 | 250        |             | 31.1  | 10+20 | 2950.4 |                 |
| 26     | 0       | 1.70 | 170        |             | 23.9  | 11+00 | 2957.6 |                 |
| 27     | 0       | 1.60 | 160        |             | 20.0  | 11+10 | 2961.5 |                 |
| 28     | 0       | 1.50 | 150        |             | 17.1  | 11+20 | 2964.4 |                 |
| 29     | 0       | .80  | 80         |             | 12.0  | 11+90 | 2969.5 |                 |
| 30     | -15°40' | 0.29 | 27         | —           | 0     | 12+43 | 2981.5 | SHORE LINE      |
| 31     | 0       | 0    | 0          | 0.6         |       | 12+70 | 2990.2 | PLUNGED GUN     |
| 32     | 5°14'   | 0.51 | 51         | 4.6         |       | 13+21 | 2994.2 |                 |
| 33     | 10°26'  | 0.84 | 81         | 15.0        |       | 13+51 | 3004.6 |                 |
| 34     | 9°58'   | 1.00 | 97         | 17.1        |       | 13+67 | 3006.7 |                 |
| 35     | 10°30'  | 1.03 | 100        | 18.5        |       | 13+70 | 3008.1 |                 |

| SHOT # | VERT. L | INT. | HOR.<br>DIST. | VERT.<br>DIST. | DEPTH | STA.  | ELEV.  |
|--------|---------|------|---------------|----------------|-------|-------|--------|
| 36     | 10°36'  | 1.26 | 121           | 22.8           |       | 13+91 | 3012.4 |
| 37     | 14°12'  | 1.61 | 151           | 38.3           |       | 14+21 | 3027.9 |
| 38     | 14°24'  | 1.72 | 161           | 41.4           |       | 14+31 | 3031.0 |
| 39     | 13°38'  | 1.90 | 179           | 43.5           |       | 14+49 | 3033.1 |
| 40     | 14°00'  | 1.99 | 187           | 46.7           |       | 14+57 | 3036.3 |
| 41     |         |      |               |                |       | 14+85 | 3050.5 |
| 42     | 16°04'  | 2.33 | 215           | 61.9           |       | R-022 | 3051.5 |

| SHOT #  | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH |
|---------|---------|------|------------|-------------|-------|
| 1       | 0       | 0.34 | 34         | -1.21       |       |
| 2       |         |      |            |             |       |
| 3       | 0       | 0.11 | 11.        | -4.4        |       |
| 4       | -29°46' | 0.23 | 17         | -9.9        |       |
| 5       | -28°30' | 0.52 | 40         | -21.8       |       |
| 6       | -21°30' | 0.81 | 70         | -27.6       |       |
| TP F.S. | -13°36' | 1.06 | 100        | -24.2       |       |
| TP B.S. | 2°44'   | 6.87 | 685        | 32.7        |       |
| 7       | 1°52'   | 6.79 | 678        | 22.1        |       |
| 8       | -0°18'  | 6.33 | 633        | -3.3        | 0     |
| 9       | 0       | 5.99 | 599        |             | 32.3  |
| 10      | 0       | 5.60 | 560        |             | 38.1  |
| 11      | 0       | 5.50 | 550        |             | 38.8  |
| 12      | 0       | 5.02 | 502        |             | 38.9  |
| 13      | 0       | 4.95 | 495        |             | 38.5  |
| 14      | 0       | 4.00 | 400        |             | 35.0  |
| 15      | 0       | 3.60 | 360        |             | 30.2  |
| 16      | 0       | 3.00 | 300        |             | 26.3  |
| 17      | 0       | 2.40 | 240        |             | 20.4  |

| STA.  | ELEV.   |
|-------|---------|
| R-020 | 3045.31 |
| 0+00  | 3044.56 |
| 0+23  | 3042.1  |
| 0+51  | 3036.6  |
| 0+74  | 3024.7  |
| 1+04  | 3018.9  |
| TP    | 3022.3  |
| TP    | —       |
| 1+41  | 3011.7  |
| 1+86  | 2986.3  |
| 2+20  | 2954.0  |
| 2+59  | 2948.2  |
| 2+69  | 2947.5  |
| 3+17  | 2947.4  |
| 3+24  | 2947.8  |
| 4+19  | 2951.3  |
| 4+59  | 2956.1  |
| 5+19  | 2960.0  |
| 5+79  | 2965.9  |

8-3-46

D.L.

PLUNGED  
GUN (GUN IS AT  
0+34 + 3046.5)

SHORE LINE

(GUN IS AT 8+19  
+ 2989.6)

| SHOT # | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.  |             |
|--------|---------|------|------------|-------------|-------|-------|--------|-------------|
| 18     | 0       | 1.90 | 190        |             | 14.8  | 6+29  | 2971.5 |             |
| 19     | 0       | 1.55 | 155        |             | 3.0   | 6+64  | 2983.3 |             |
| 20     | 0       | 1.81 | 181        |             | 12.7  | 6+38  | 2973.6 |             |
| 21     | -1°33'  | 1.14 | 114        | -3.1        | 0     | 7+05  | 2986.5 | SHORE LINE  |
| 22     | -3°46'  | 0.51 | 51         | -3.3        |       | 7+68  | 2986.3 |             |
| 23     | -9°32'  | 0.18 | 18         | -2.9        |       | 8+01  | 2986.7 | PLUNGED GUN |
| 24     | 2°42'   | 0.54 | 54         | 2.5         |       | 8+73  | 2992.1 |             |
| 25     | 0°50'   | 1.43 | 143        | 2.1         |       | 9+62  | 2991.7 |             |
| 26     | 6°25'   | 3.40 | 336        | 37.8        |       | 11+55 | 3028.4 |             |
| 27     | 7°18'   | 3.66 | 360        | 46.1        |       | 11+79 | 3035.7 |             |
| 28     |         |      |            |             |       | 12+49 | 3051.3 |             |
| 29     | 8°21'   | 4.39 | 430        | 63.1        |       | R-019 | 3052.7 |             |

| SHOT #  | VERT. L | INT.  | HOR. DIST. | VERT. DIST. | DEPTH |
|---------|---------|-------|------------|-------------|-------|
| 1       | 8°51'   | 4.66  | 455        | 70.83       |       |
| 2       |         |       |            |             |       |
| 3       | 7°11'   | 4.16  | 409        | 51.6        |       |
| 4       | 7°12'   | 3.60  | 354        | 44.7        |       |
| 5       | 7°12'   | 3.33  | 328        | 41.4        |       |
| 6       | 7°02'   | 2.97  | 293        | 36.1        |       |
| 7       | 6°55'   | 2.80  | 276        | 33.4        |       |
| 8       | 5°43'   | 2.37  | 235        | 23.5        |       |
| 9       | 5°23'   | 2.34  | 232        | 21.9        |       |
| 10      | 5°14'   | 2.13  | 211        | 19.3        |       |
| 11      | 5°00'   | 1.70  | 169        | 14.8        |       |
| 12      | 6°45'   | 1.29  | 127        | 15.1        |       |
| 13      | 6°06'   | 0.71  | 70         | 7.5         |       |
| 14      | D.L.    | —     | 21         | 3.16        | 0     |
| TP F.S. | -6°18'  | 0.12  | 12         | -1.31       |       |
| TP B.S. | -0°06'  | 15.35 | 1535       | -2.61       |       |
| 15      | 0       | 15.00 | 1500       |             | 4.5   |
| 16      | 0       | 13.04 | 1304       |             | 0.8   |
| 17      | 0       | 10.66 | 1066       |             | 1.5   |

8-4-48

| STA.  | ELEV.   |                               |
|-------|---------|-------------------------------|
| R-026 | 3052.01 | (REESTABLISHED R-026)         |
| 0+00  | 3051.5  |                               |
| 0+46  | 3031.8  | -1'                           |
| 1+01  | 3018.9  | -7'                           |
| 1+27  | 3014.1  | -8.5'                         |
| 1+62  | 3016.3  | -1'                           |
| 1+79  | 3014.6  | (GUN IS AT 2981.18<br>+ 4755) |
| 2+20  | 3004.7  |                               |
| 2+23  | 3003.1  |                               |
| 2+44  | 2998.5  | -2'                           |
| 2+86  | 2996.0  |                               |
| 3+28  | 2996.3  |                               |
| 3+85  | 2988.7  |                               |
| 4+76  | 2977.7  | PLUNGED GUN<br>SHORELINE      |
| 4+67  | 2979.87 |                               |
| 20+02 | 2982.48 |                               |
| 5+02  | 2973.2  |                               |
| 6+98  | 2976.9  |                               |
| 9+36  | 2976.2  |                               |

| SHOT # | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.   |
|--------|---------|------|------------|-------------|-------|-------|---------|
| 18     | 0       | 8.66 | 866        |             | 10.7  | 11+36 | 2967.3  |
| 19     | 0       | 9.28 | 928        |             | 10.0  | 10+74 | 2967.7  |
| 20     | 0       | 9.80 | 980        |             | 10.0  | 10+22 | 2975.7  |
| 21     | 0       | 9.10 | 910        |             | 10.3  | 10+92 | 2967.4  |
| 22     | 0       | 8.00 | 800        |             | 10.2  | 12+02 | 2967.5  |
| 23     | 0       | 6.75 | 675        |             | 10.1  | 13+27 | 2967.6  |
| 24     | 0       | 5.94 | 594        |             | 10.2  | 14+08 | 2967.5  |
| 25     | 0       | 4.61 | 461        |             | 7.1   | 15+41 | 2970.6  |
| 26     | 0       | 3.81 | 381        |             | 6.4   | 16+21 | 2971.3  |
| 27     | 0       | 3.05 | 305        |             | 9.1   | 16+97 | 2968.6  |
| 28     | 0       | 2.57 | 257        |             | 5.4   | 17+45 | 2972.3  |
| 29     | 0       | 2.06 | 206        |             | 6.8   | 17+96 | 2970.9  |
| 30     | 0       | 1.83 | 183        |             | 3.2   | 18+19 | 2974.5  |
| 31     | 0       | 1.62 | 162        |             | 2.4   | 18+40 | 2975.3  |
| 32     | -1°52'  | 1.45 | 145        | 4.7         | 0     | 18+57 | 2977.74 |
| 33     | 1°56'   | 2.00 | 200        | 6.7         |       | 22+02 | 2989.1  |
| 34     | 1°35'   | 4.04 | 404        | 11.2        |       | 24+06 | 2993.6  |
| 35     | 1°54'   | 6.21 | 620        | 20.6        |       | 26+22 | 3003.0  |
| 36     | 2°05'   | 6.76 | 675        | 24.5        |       | 26+77 | 3006.9  |

SHORE LINE  
PLUNGED GUN

| S | SHOT # | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.   |
|---|--------|---------|------|------------|-------------|-------|-------|---------|
|   | 37     | 2°30'   | 7.28 | 727        | 31.7        |       | 27+29 | 3014.1  |
|   | 38     | 2°47'   | 7.54 | 752        | 36.6        |       | 27+54 | 3019.0  |
|   | 39     | 2°53'   | 7.98 | 796        | 40.1        |       | 27+98 | 3022.5  |
|   | 40     | 3°20'   | 8.42 | 839        | 48.8        |       | 28+41 | 3031.2  |
|   | 41     | 3°24'   | 8.48 | 845        | 50.2        |       | 28+47 | 3032.6  |
|   | 42     | 3°27'   | 8.61 | 858        | 51.7        |       | 28+60 | 3034.1  |
|   | 43     | 3°36'   | 8.74 | 871        | 54.8        |       | 28+73 | 3037.2  |
|   | 44     | 3°45'   | 8.85 | 881        | 57.8        |       | 28+83 | 3040.2  |
|   | 45     |         |      |            |             |       | 29+17 | 3048.4  |
|   | 46     | 4°12'   | 9.20 | 915        | 67.16       |       | R-027 | 3049.64 |

| SHOT # | VERT. L | INT. | HDR.<br>DIST. | VERT.<br>DIST. | DEPTH | STA. | ELEV.   |                      |
|--------|---------|------|---------------|----------------|-------|------|---------|----------------------|
| 1      | 23°09'  | 1.78 | 150.5         | 64.35          |       | R-01 | 3054.04 |                      |
| 2      |         |      |               |                |       | 0+00 | 3053.1  |                      |
| 3      | 23°13'  | 1.60 | 135           | 58.0           |       | 0+15 | 3047.7  | (GUN IS AT 2989.69   |
| 4      | 23°10'  | 1.33 | 112           | 48.1           |       | 0+38 | 3037.8  | + 1+50.5)            |
| 5      | 21°49'  | 0.80 | 69            | 27.6           |       | 0+81 | 3017.3  |                      |
| 6      | 9°30'   | 0.16 | 16            | 2.6            |       | 1+35 | 2992.3  |                      |
| 7      | D.L.    | -    | 6             | 1.5            |       | 1+45 | 2991.2  | PLUNGED GUN          |
| 8      | D.L.    | -    | 12            | 6.6            | 0     | 1+63 | 2983.1  | SHORE LINE           |
| 9      | -10°37' | 0.35 | 34            |                | 14.1  | 1+84 | 2969.0  |                      |
| 10     | -5°05'  | 0.70 | 69            |                | 21.9  | 2+20 | 2961.2  |                      |
| 11     | -4°35'  | 0.90 | 89            |                | 29.2  | 2+40 | 2953.9  |                      |
| 12     | -4°32'  | 0.95 | 94            |                | 30.3  | 2+45 | 2952.8  |                      |
| 13     | -3°12'  | 1.14 | 114           |                | 34.4  | 2+64 | 2948.7  |                      |
| 14     | -3°10'  | 1.30 | 130           |                | 33.0  | 2+80 | 2950.1  |                      |
| 15     | -2°48'  | 1.50 | 150           |                | 43.4  | 3+00 | 2939.7  |                      |
| 16     | -2°20'  | 1.75 | 175           |                | 45.4  | 3+25 | 2937.7  |                      |
| 17     | -1°53'  | 2.10 | 210           |                | 45.7  | 3+60 | 2937.4  |                      |
| 18     | -1°35'  | 2.40 | 240           |                | 52.8  | 3+90 | 2936.5  | (CHAIN BROKE K=-6.2) |
| 19     | -1°25'  | 2.95 | 295           |                | 52.8  | 4+45 | 2936.5  |                      |



| SHOT # | VERT. $\angle$ | INT. | HOR.<br>DIST. | VERT.<br>DIST. | DEPTH | STA. | ELEV.  |            |
|--------|----------------|------|---------------|----------------|-------|------|--------|------------|
| 20     | -1°13'         | 3.40 | 340           |                | 52.5  | 4+90 | 2936.8 |            |
| 21     | -1°08'         | 3.75 | 375           |                | 52.1  | 5+25 | 2937.2 |            |
| 22     | -1°03'         | 4.20 | 420           |                | 50.6  | 5+70 | 2938.7 |            |
| 23     | -0°46'         | 4.30 | 430           |                | 50.8  | 5+80 | 2938.5 |            |
| 24     | -0°40'         | 4.50 | 450           |                | 48.7  | 6+00 | 2940.6 |            |
| 25     | 0              | 4.75 | 475           |                | 41.5  | 6+25 | 2947.8 |            |
| 26     | 0              | 4.90 | 490           |                | 30.0  | 6+40 | 2959.3 |            |
| 27     | 0              | 5.00 | 500           |                | 23.0  | 6+50 | 2966.3 |            |
| 28     | 0              | 5.05 | 505           |                | 18.9  | 6+55 | 2970.4 |            |
| 29     | 0              | 5.15 | 515           |                | 17.6  | 6+65 | 2971.7 |            |
| 30     | -0°42'         | 5.32 | 532           | -6.5           | 0     | 6+82 | 2983.2 | SHORE LINE |
| 31     | 4°12'          | 6.65 | 661           | 48.6           |       | 8+12 | 3038.3 |            |
| 32     | 4°39'          | 7.05 | 700           | 57.0           |       | 8+51 | 3046.7 |            |
| 33     |                |      |               |                |       | 8+79 | 3061.0 |            |
| 34     | 5°38'          | 7.36 | 729           | 71.9           |       | R-02 | 3061.6 |            |

| SHOT # | VERT. L | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.   | 8-4-48                |
|--------|---------|------|------------|-------------|-------|-------|---------|-----------------------|
| 1      | 7°39'   | 4.60 | 452        | 60.70       |       | R-04  | 3046.99 |                       |
| 2      |         |      |            |             |       | 0+00  | 3045.3  |                       |
| 3      | 7°48'   | 3.97 | 390        | 53.4        |       | 0+62  | 3039.7  |                       |
| 4      | 6°42'   | 3.55 | 350        | 41.1        |       | 1+02  | 3027.4  | (GUN IS AT 2986.29    |
| 5      | 6°54'   | 2.85 | 281        | 34.0        |       | 1+71  | 3020.3  | + 4+51 <sup>2</sup> ) |
| 6      | 2°51'   | 2.05 | 205        | 10.2        |       | 2+48  | 2996.5  |                       |
| 7      | 3°01'   | 1.99 | 199        | 7.8         |       | 3+03  | 2994.1  |                       |
| 8      | 2°12'   | 1.12 | 112        | 4.3         |       | 3+40  | 2990.6  |                       |
| 9      | 9°46'   | 0.25 | 24         | 4.2         |       | 4+28  | 2990.5  | PLUNGED GUN           |
| 10     | -6°06'  | 0.41 | 41         | -4.3        | 0     | 4+93  | 2982.0  | SHORE LINE            |
| 11     | -3°06'  | 1.00 | 100        |             | 16.1  | 5+52  | 2972.1  |                       |
| 12     | -1°46'  | 1.80 | 180        |             | 36.4  | 6+32  | 2951.8  | (INDICATED DEPTH      |
| 13     | -2°48'  | 1.10 | 110        |             | 19.4  | 5+62  | 2968.8  | -6.2 = TRUE DEPTH)    |
| 14     | -1°46'  | 1.81 | 181        |             | 37.2  | 6+33  | 2951.0  |                       |
| 15     | -1°06'  | 2.80 | 280        |             | 48.1  | 7+32  | 2940.1  |                       |
| 16     | 0       | 3.72 | 372        |             | 50.4  | 8+24  | 2937.8  |                       |
| 17     | 0       | 4.12 | 412        |             | 51.1  | 8+64  | 2937.1  |                       |
| 18     | 0       | 5.10 | 510        |             | 51.2  | 9+62  | 2937.0  |                       |
| 19     | 0       | 6.10 | 610        |             | 51.5  | 10+62 | 2936.7  |                       |

| SHOT # | VERT. $\angle$ | INT.  | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.   |
|--------|----------------|-------|------------|-------------|-------|-------|---------|
| 20     | 0              | 7.12  | 712        |             | 48.0  | 11+69 | 2940.2  |
| 21     | 0              | 7.68  | 768        |             | 49.4  | 12+20 | 2938.8  |
| 22     | 0              | 8.10  | 810        |             | 45.0  | 12+62 | 2943.2  |
| 23     | 0              | 8.72  | 872        |             | 32.8  | 13+24 | 2955.4  |
| 24     | 0              | 9.22  | 922        |             | 26.2  | 13+74 | 2962.0  |
| 25     | 0              | 9.52  | 952        |             | 13.1  | 14+04 | 2975.1  |
| 26     | -0°18'         | 9.66  | 966        | -5.0        | 0     | 14+18 | 2982.0  |
| 27     | 1°14'          | 10.38 | 1038       | 22.3        |       | 14+90 | 3008.6  |
| 28     |                |       |            |             |       | 16+04 | 3047.8  |
| 29     | 3°06'          | 11.55 | 1152       | 62.37       |       | R-03  | 3048.66 |

SHORE LINE

| SHOT # | VERT L | INT.  | HOR.<br>DIST. | VERT.<br>DIST. | DEPTH | STA   | ELEV.   |                      |
|--------|--------|-------|---------------|----------------|-------|-------|---------|----------------------|
| 1      | 2°35'  | 14.90 | 1487          | 67.12          |       | R-011 | 3050.27 |                      |
| 2      |        |       |               |                |       | 0+00  | 3049.4  |                      |
| 3      | 2°06'  | 14.50 | 1448          | 53.1           |       | 0+39  | 3036.3  | GUN IS @ 2983.15     |
| 4      | 1°17'  | 13.80 | 1379          | 30.9           |       | 1+08  | 3014.1  | + 14+87              |
| 5      | 0°20'  | 13.45 | 1345          | 7.8            |       | 1+42  | 2991.0  |                      |
| 6      | -0°00' | 13.15 | 1315          | -3.0           | 0     | 1+72  | 2980.2  | SHORE-LINE           |
| 7      | 0      | 12.70 | 1270          |                | 18.3  | 2+17  | 2968.5  | (SHORT CHAIN K=-6.2) |
| 8      | 0      | 12.45 | 1245          |                | 30.1  | 2+42  | 2956.7  |                      |
| 9      | 0      | 11.90 | 1190          |                | 46.8  | 2+97  | 2940.0  |                      |
| 10     | 0      | 11.05 | 1105          |                | 48.9  | 3+82  | 2937.9  |                      |
| 11     | 0      | 10.55 | 1055          |                | 49.0  | 4+32  | 2937.8  |                      |
| 12     | 0      | 10.00 | 1000          |                | 48.7  | 4+87  | 2938.1  |                      |
| 13     | 0      | 9.14  | 914           |                | 48.2  | 5+73  | 2938.6  |                      |
| 14     | 0      | 8.14  | 814           |                | 25.6  | 6+73  | 2961.2  |                      |
| 15     | 0      | 7.55  | 755           |                | 17.2  | 7+32  | 2969.6  |                      |
| 16     | 0      | 5.95  | 595           |                | 44.2  | 8+92  | 2942.6  |                      |
| 17     | 0      | 6.90  | 690           |                | 25.3  | 7+97  | 2961.5  |                      |
| 18     | 0      | 5.56  | 556           |                | 45.2  | 9+31  | 2941.6  |                      |
| 19     | 0      | 4.45  | 445           |                | 35.2  | 10+42 | 2951.6  |                      |

8-5-48

| SHOT # | VERT. $\angle$ | INT. | HOR.<br>DIST. | VERT.<br>DIST. | DEPTH | STA.  | ELEV.   |                           |
|--------|----------------|------|---------------|----------------|-------|-------|---------|---------------------------|
| 20     | 0              | 3.64 | 3.64          |                | 28.0  | 11+23 | 2958.8  |                           |
| 21     | 0              | 3.00 | 300           |                | 22.0  | 11+87 | 2964.8  |                           |
| 22     | 0              | 2.30 | 230           |                | 17.2  | 12+57 | 2969.6  |                           |
| 23     | 0              | 1.34 | 134           |                | 14.1  | 13+53 | 2972.7  |                           |
| 24     | -3°41'         | 0.40 | 40            | -2.6           | 0     | 14+47 | 2980.6  | SHORE-LINE<br>PLUNGED GUN |
| 25     | 4°06'          | 0.98 | 97.5          | 7.0            |       | 15+85 | 2990.2  |                           |
| 26     | 5°35'          | 2.18 | 216           | 21.1           |       | 17+03 | 3002.3  | -2.0'                     |
| 27     | 6°20'          | 3.06 | 302           | 33.5           |       | 17+89 | 3016.7  |                           |
| 28     | 7°40'          | 3.66 | 360           | 48.4           |       | 18+47 | 3031.6  |                           |
| 29     |                |      |               |                |       | 18+80 | 3050.0  |                           |
| 30     | 9°45'          | 4.05 | 393           | 67.60          |       | R-012 | 3050.74 |                           |

| SHOT # | VERT. A. | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA   | ELEV.   |                      |
|--------|----------|------|------------|-------------|-------|-------|---------|----------------------|
| 1      | 15°35'   | 2.93 | 272        | 75.81       |       | R-013 | 3060.37 |                      |
| 2      |          |      |            |             |       | 0+00  | 3059.6  |                      |
| 3      | 13°37'   | 2.50 | 236        | 57.2        |       | 0+36  | 3041.8  | GUN IS @ 2984.56     |
| 4      | 13°37'   | 2.27 | 214        | 51.9        |       | 0+58  | 3036.5  | + 2+72               |
| 5      | 12°33'   | 1.86 | 177        | 39.5        |       | 0+95  | 3022.1  | -2.0'                |
| 6      | 7°37'    | 1.07 | 105        | 14.1        |       | 1+67  | 2997.7  | -1.0'                |
| 7      | 15°11'   | 0.54 | 50.3       | 13.6        |       | 2+22  | 2998.2  |                      |
| 8      | 0        | 0    | 0          | 0.5         |       | 2+72  | 2985.1  | PLUNGED GUN          |
| 9      | -10°14'  | 0.19 | 18         | -3.3        | 0     | 2+90  | 2981.3  | SHORE LINE           |
| 10     | -4°00'   | 0.85 | 85         |             | 17.4  | 3+57  | 2970.1  | (SHORT CHAIN K=-6.2) |
| 11     | -2°20'   | 1.25 | 125        |             | 18.1  | 3+97  | 2969.4  |                      |
| 12     | -1°19'   | 2.05 | 205        |             | 22.6  | 4+77  | 2964.9  |                      |
| 13     | 0        | 3.32 | 332        |             | 36.4  | 6+04  | 2951.1  |                      |
| 14     | 0        | 3.20 | 320        |             | 34.9  | 5+92  | 2952.6  |                      |
| 15     | 0        | 2.85 | 285        |             | 32.2  | 5+57  | 2955.3  |                      |
| 16     | 0        | 2.34 | 234        |             | 26.2  | 5+06  | 2961.3  |                      |
| 17     | 0        | 4.05 | 405        |             | 35.4  | 6+77  | 2952.1  |                      |
| 18     | 0        | 4.91 | 491        |             | 37.9  | 7+63  | 2949.6  |                      |
| 19     | 0        | 5.94 | 594        |             | 44.3  | 8+66  | 2943.2  |                      |

| SHOT # | VERT. $\angle$ | INT.  | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.             |               |
|--------|----------------|-------|------------|-------------|-------|-------|-------------------|---------------|
| 20     | 0              | 6.76  | 676        |             | 45.9  | 9+48  | 2941.6            |               |
| 21     | 0              | 7.56  | 756        |             | 41.4  | 10+28 | 2946.1            |               |
| 22     | 0              | 8.44  | 844        |             | 40.6  | 11+16 | 2946.9            |               |
| 23     | 0              | 9.36  | 936        |             | 40.7  | 12+08 | 2946.8            |               |
| 24     | 0              | 9.87  | 987        |             | 41.1  | 12+59 | 2946.4            |               |
| 25     | 0              | 11.05 | 1105       |             | 43.0  | 13+77 | 2944.5            |               |
| 26     | 0              | 12.10 | 1210       |             | 46.1  | 14+82 | 2941.4            |               |
| 27     | 0              | 12.57 | 1257       |             | 45.8  | 15+29 | 2941.7            |               |
| 28     | 0              | 13.13 | 1313       |             | 45.0  | 15+85 | 2942.5            |               |
| 29     | 0              | 13.85 | 1385       |             | 42.9  | 16+57 | 2944.6            |               |
| 30     | 0              | 14.60 | 1460       |             | 33.0  | 17+32 | 2954.3            |               |
| 31     | 0              | 15.10 | 1510       |             | 20.2  | 17+82 | 2967.3            |               |
| 32     | 0              | 15.30 | 1530       |             | 16.1  | 18+02 | 2971.4            |               |
| TP FS. | 0° 41'         | 17.10 | 1710       | 20.35       |       | 19+82 | 3004.91           |               |
| TP BS  | -21° 55'       | 0.48  | 41         | -16.62      |       | 20+23 | 3021.53           |               |
| 33     | -15° 04'       | 1.57  | 146        | -39.4       | 0     | 18+77 | <del>3081.5</del> | SHORE LINE    |
| 34     | -20° 39'       | 0.75  | 66         | -24.8       |       | 19+57 | 2996.7            | PLUNGED GUN   |
| 35     | -18° 12'       | 0.21  | 19         | -6.2        |       | 20+42 | 3015.3            | GUN @ 3021.53 |
| 36     | -6° 07'        | 0.42  | 42         | -4.5        |       | 20+65 | 3017.0            | + 20+23       |

2981.5

| SHOT # | VERT. & | INT. | HOR.<br>DIST. | VERT.<br>DIST. | DEPTH |
|--------|---------|------|---------------|----------------|-------|
| 37     | -5°38'  | 0.61 | 60            | -6.0           |       |
| 38     | 3°15'   | 1.76 | 175           | 10.0           |       |
| 39     | 2°30'   | 2.31 | 231           | 10.1           |       |
| 40     | 2°35'   | 2.95 | 294           | 13.3           |       |
| 41     | 1°08'   | 3.26 | 326           | 6.5            |       |
| 42     |         |      |               |                |       |
| 43     | 4°31'   | 3.44 | 342           | 27.0           |       |

| STA.  | ELEV.   |       |
|-------|---------|-------|
| 20+83 | 3015.5  |       |
| 21+98 | 3031.5  |       |
| 22+54 | 3028.6  | -3.0' |
| 23+17 | 3034.8  |       |
| 23+99 | 3028.0  |       |
| 23+65 | 3047.8  |       |
| R-014 | 3048.53 |       |



| SHOT # | VERT. A | INT. | HOR. DIST. | VERT. DIST. | DEPTH | STA.  | ELEV.   |                                    |
|--------|---------|------|------------|-------------|-------|-------|---------|------------------------------------|
| 1      | 0       | 0    | 0          | 2.75        |       | R-017 | 3055.49 | SCOPE IS 2.25'<br>OVER TOP OF PIPE |
| 2      |         |      |            |             |       | 0+00  | 3054.0  |                                    |
| 3      | -22°32' | 0.14 | 12         | -5.0        |       | 0+12  | 3047.7  |                                    |
| 4      | -9°29'  | 0.47 | 46         | -7.7        |       | 0+46  | 3045.0  |                                    |
| 5      | -13°15' | 0.83 | 79         | -18.5       |       | 0+79  | 3032.2  | -2.0'                              |
| 6      | -13°09' | 1.21 | 115        | -26.8       |       | 1+15  | 3022.9  | -3.0'                              |
| 7      | -12°11' | 1.75 | 167        | -36.1       |       | 1+67  | 3016.6  |                                    |
| 8      | -11°10' | 2.00 | 192        | -38.0       |       | 1+93  | 3014.7  |                                    |
| 9      | -11°16' | 2.10 | 202        | -40.2       |       | 2+02  | 3012.5  | GUN @ 3052.74                      |
| 10     | -10°15' | 2.20 | 213        | -38.5       |       | 2+13  | 3014.2  |                                    |
| 11     | -9°43'  | 2.38 | 231        | -39.6       |       | 2+31  | 3013.1  |                                    |
| 12     | -8°05'  | 3.16 | 310        | -44.0       |       | 3+10  | 3008.7  |                                    |
| 13     | -7°10'  | 3.36 | 331        | -41.6       |       | 3+31  | 3011.1  |                                    |
| 14     | -7°53'  | 3.49 | 342        | -47.4       |       | 3+42  | 3005.3  |                                    |
| 15     | -6°39'  | 3.75 | 370        | -43.1       |       | 3+70  | 3009.6  |                                    |
| 16     | -3°28'  | 4.35 | 433        | -26.3       |       | 4+33  | 3026.4  |                                    |
| 17     | -1°52'  | 4.71 | 471        | -15.4       |       | 4+71  | 3037.3  |                                    |
| 18     |         |      |            |             |       | 4+90  | 3047.8  |                                    |
| 19     | -5°22'  | 4.90 | 490        | -3.14       |       | R-018 | 3049.60 |                                    |

## Morena Lake Basin

Flags on 166 Contour - From Bridge  
Along East Shore.

Contour 166 = 3048.4 U.S.G.S.

|        |       |         |       |         |         |
|--------|-------|---------|-------|---------|---------|
| T.B.M. | 12.5  | 3079.01 |       | 3077.76 |         |
|        | 1.10  | 3067.09 | 13.02 | 3065.99 |         |
|        | 3.89  | 3058.28 | 12.70 | 3044.39 |         |
|        | 3.57  | 3054.09 | 7.74  | 3050.52 |         |
|        | 2.70  | 3050.21 | 6.58  | 3047.51 |         |
|        | 0.34  | 3049.58 | 0.97  | 3049.24 |         |
|        | 4.69  | 3046.74 | 7.53  | 3042.05 |         |
|        | 2.30  | 162.73  | 3.91  | 3042.83 | =160.43 |
|        | 4.42  | 153.72  | 3.43  | 159.30  |         |
|        | 10.31 | 143.94  | 10.09 | 153.63  |         |
|        | 3.92  | 160.11  | 7.75  | 156.19  |         |
|        | 2.60  | 158.89  | 3.82  | 156.29  |         |
|        | 1.55  | 159.84  | 0.60  | 158.29  |         |
|        | 2.29  | 159.01  | 2.92  | 157.52  |         |
|        | 7.87  | 165.79  | 1.89  | 157.92  |         |
|        | 4.42  | 161.92  | 5.29  | 160.56  |         |

King  
Baker  
West

11-15-50

♀ West End County, Bridge U.S.G.S.















BMG 575 TO WATER SURFACE

78

8-10-48  
or 8-6-48?

| STA         | +<br>B.S. | I.I.   | -<br>F.S. | ELEV.  |
|-------------|-----------|--------|-----------|--------|
| BMG 575     | 4.07      | 104.07 |           | 100.00 |
| TP #1       |           |        | 3.74      |        |
| TP #1       | 1.46      | 80.74  | 24.79     | 79.28  |
| TP #2       | 0.77      | 68.81  | 12.70     | 68.04  |
| TP #3       | 3.00      | 59.54  | 12.27     | 56.54  |
| TP #4       | 2.91      | 50.04  | 12.41     | 47.13  |
| TP #5       | 0.44      | 38.63  | 11.85     | 38.19  |
| B.M. #1     |           |        | 9.32      | 29.31  |
| B.M. #2     |           |        | 10.20     | 28.43  |
| Water Level |           |        | 10.87     | 27.76  |
| STEP TP     |           |        | 7.52      | 31.11  |
| "           | 7.58      | 38.69  |           |        |
| Water Level |           |        | 12.35     | 26.34  |

BMG 575 3053.4

Water Level  $100 - 26.34 = 73.66$  BELOW BMG 575

WATER SURFACE TO R 25

| STA         | B.S   | H.I.   | I.S. | ELEV  |
|-------------|-------|--------|------|-------|
| WATER       | 9.06  | 009.06 |      | 0.00  |
| BM          | 7.57  | 12.12  | 4.51 | 4.55  |
| TP #1       | 9.78  | 16.44  | 5.46 | 6.66  |
| #2          | 12.16 | 27.13  | 1.47 | 14.97 |
| #3          | 11.33 | 37.90  | 0.56 | 26.57 |
| #4          | 11.41 | 48.47  | 0.84 | 37.06 |
| #5          | 11.43 | 55.58  | 4.32 | 44.15 |
| #6          | 12.17 | 66.89  | 0.86 | 54.72 |
| #7          | 7.17  | 72.60  | 1.46 | 65.43 |
| BM #2       |       |        | 8.21 | 64.39 |
| TP #8       | 12.03 | 88.23  | 1.40 | 71.20 |
| #9          | 5.61  | 87.20  | 1.64 | 81.59 |
| TOP<br>R 25 |       |        | 2.58 | 84.62 |

= 3064.35

SEE PG. 16 FB 763

Wa

Sta

WATT

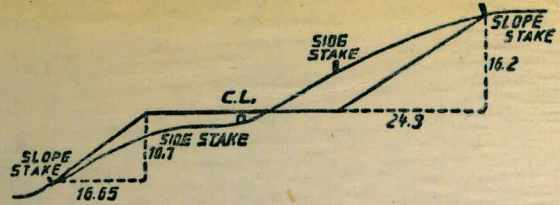
BM

TP

BM#

TP#

TOP  
R 25



**DISTANCES FROM SIDE STAKES FOR CROSS-SECTIONING.**  
**SLOPE 1 1/2 TO 1. ROADWAY OF ANY WIDTH.**

|    | 0     | .1    | .2    | .3    | .4    | .5    | .6    | .7    | .8    | .9    |    |
|----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----|
| 0  | 0.00  | 0.15  | 0.30  | 0.45  | 0.60  | 0.75  | 0.90  | 1.05  | 1.20  | 1.35  | 0  |
| 1  | 1.50  | 1.65  | 1.80  | 1.95  | 2.10  | 2.25  | 2.40  | 2.55  | 2.70  | 2.85  | 1  |
| 2  | 3.00  | 3.15  | 3.30  | 3.45  | 3.60  | 3.75  | 3.90  | 4.05  | 4.20  | 4.35  | 2  |
| 3  | 4.50  | 4.65  | 4.80  | 4.95  | 5.10  | 5.25  | 5.40  | 5.55  | 5.70  | 5.85  | 3  |
| 4  | 6.00  | 6.15  | 6.30  | 6.45  | 6.60  | 6.75  | 6.90  | 7.05  | 7.20  | 7.35  | 4  |
| 5  | 7.50  | 7.65  | 7.80  | 7.95  | 8.10  | 8.25  | 8.40  | 8.55  | 8.70  | 8.85  | 5  |
| 6  | 9.00  | 9.15  | 9.30  | 9.45  | 9.60  | 9.75  | 9.90  | 10.05 | 10.20 | 10.35 | 6  |
| 7  | 10.50 | 10.65 | 10.80 | 10.95 | 11.10 | 11.25 | 11.40 | 11.55 | 11.70 | 11.85 | 7  |
| 8  | 12.00 | 12.15 | 12.30 | 12.45 | 12.60 | 12.75 | 12.90 | 13.05 | 13.20 | 13.35 | 8  |
| 9  | 13.50 | 13.65 | 13.80 | 13.95 | 14.10 | 14.25 | 14.40 | 14.55 | 14.70 | 14.85 | 9  |
| 10 | 15.00 | 15.15 | 15.30 | 15.45 | 15.60 | 15.75 | 15.90 | 16.05 | 16.20 | 16.35 | 10 |
| 11 | 16.50 | 16.65 | 16.80 | 16.95 | 17.10 | 17.25 | 17.40 | 17.55 | 17.70 | 17.85 | 11 |
| 12 | 18.00 | 18.15 | 18.30 | 18.45 | 18.60 | 18.75 | 18.90 | 19.05 | 19.20 | 19.35 | 12 |
| 13 | 19.50 | 19.65 | 19.80 | 19.95 | 20.10 | 20.25 | 20.40 | 20.55 | 20.70 | 20.85 | 13 |
| 14 | 21.00 | 21.15 | 21.30 | 21.45 | 21.60 | 21.75 | 21.90 | 22.05 | 22.20 | 22.35 | 14 |
| 15 | 22.50 | 22.65 | 22.80 | 22.95 | 23.10 | 23.25 | 23.40 | 23.55 | 23.70 | 23.85 | 15 |
| 16 | 24.00 | 24.15 | 24.30 | 24.45 | 24.60 | 24.75 | 24.90 | 25.05 | 25.20 | 25.35 | 16 |
| 17 | 25.50 | 25.65 | 25.80 | 25.95 | 26.10 | 26.25 | 26.40 | 26.55 | 26.70 | 26.85 | 17 |
| 18 | 27.00 | 27.15 | 27.30 | 27.45 | 27.60 | 27.75 | 27.90 | 28.05 | 28.20 | 28.35 | 18 |
| 19 | 28.50 | 28.65 | 28.80 | 28.95 | 29.10 | 29.25 | 29.40 | 29.55 | 29.70 | 29.85 | 19 |
| 20 | 30.00 | 30.15 | 30.30 | 30.45 | 30.60 | 30.75 | 30.90 | 31.05 | 31.20 | 31.35 | 20 |
| 21 | 31.50 | 31.65 | 31.80 | 31.95 | 32.10 | 32.25 | 32.40 | 32.55 | 32.70 | 32.85 | 21 |
| 22 | 33.00 | 33.15 | 33.30 | 33.45 | 33.60 | 33.75 | 33.90 | 34.05 | 34.20 | 34.35 | 22 |
| 23 | 34.50 | 34.65 | 34.80 | 34.95 | 35.10 | 35.25 | 35.40 | 35.55 | 35.70 | 35.85 | 23 |
| 24 | 36.00 | 36.15 | 36.30 | 36.45 | 36.60 | 36.75 | 36.90 | 37.05 | 37.20 | 37.35 | 24 |
| 25 | 37.50 | 37.65 | 37.80 | 37.95 | 38.10 | 38.25 | 38.40 | 38.55 | 38.70 | 38.85 | 25 |
| 26 | 39.00 | 39.15 | 39.30 | 39.45 | 39.60 | 39.75 | 39.90 | 40.05 | 40.20 | 40.35 | 26 |
| 27 | 40.50 | 40.65 | 40.80 | 40.95 | 41.10 | 41.25 | 41.40 | 41.55 | 41.70 | 41.85 | 27 |
| 28 | 42.00 | 42.15 | 42.30 | 42.45 | 42.60 | 42.75 | 42.90 | 43.05 | 43.20 | 43.35 | 28 |
| 29 | 43.50 | 43.65 | 43.80 | 43.95 | 44.10 | 44.25 | 44.40 | 44.55 | 44.70 | 44.85 | 29 |
| 30 | 45.00 | 45.15 | 45.30 | 45.45 | 45.60 | 45.75 | 45.90 | 46.05 | 46.20 | 46.35 | 30 |
| 31 | 46.50 | 46.65 | 46.80 | 46.95 | 47.10 | 47.25 | 47.40 | 47.55 | 47.70 | 47.85 | 31 |
| 32 | 48.00 | 48.15 | 48.30 | 48.45 | 48.60 | 48.75 | 48.90 | 49.05 | 49.20 | 49.35 | 32 |
| 33 | 49.50 | 49.65 | 49.80 | 49.95 | 50.10 | 50.25 | 50.40 | 50.55 | 50.70 | 50.85 | 33 |
| 34 | 51.00 | 51.15 | 51.30 | 51.45 | 51.60 | 51.75 | 51.90 | 52.05 | 52.20 | 52.35 | 34 |
| 35 | 52.50 | 52.65 | 52.80 | 52.95 | 53.10 | 53.25 | 53.40 | 53.55 | 53.70 | 53.85 | 35 |
| 36 | 54.00 | 54.15 | 54.30 | 54.45 | 54.60 | 54.75 | 54.90 | 55.05 | 55.20 | 55.35 | 36 |
| 37 | 55.50 | 55.65 | 55.80 | 55.95 | 56.10 | 56.25 | 56.40 | 56.55 | 56.70 | 56.85 | 37 |
| 38 | 57.00 | 57.15 | 57.30 | 57.45 | 57.60 | 57.75 | 57.90 | 58.05 | 58.20 | 58.35 | 38 |
| 39 | 58.50 | 58.65 | 58.80 | 58.95 | 59.10 | 59.25 | 59.40 | 59.55 | 59.70 | 59.85 | 39 |
| 40 | 60.00 | 60.15 | 60.30 | 60.45 | 60.60 | 60.75 | 60.90 | 61.05 | 61.20 | 61.35 | 40 |
| 41 | 61.50 | 61.65 | 61.80 | 61.95 | 62.10 | 62.25 | 62.40 | 62.55 | 62.70 | 62.85 | 41 |
| 42 | 63.00 | 63.15 | 63.30 | 63.45 | 63.60 | 63.75 | 63.90 | 64.05 | 64.20 | 64.35 | 42 |
| 43 | 64.50 | 64.65 | 64.80 | 64.95 | 65.10 | 65.25 | 65.40 | 65.55 | 65.70 | 65.85 | 43 |
| 44 | 66.00 | 66.15 | 66.30 | 66.45 | 66.60 | 66.75 | 66.90 | 67.05 | 67.20 | 67.35 | 44 |
| 45 | 67.50 | 67.65 | 67.80 | 67.95 | 68.10 | 68.25 | 68.40 | 68.55 | 68.70 | 68.85 | 45 |
| 46 | 69.00 | 69.15 | 69.30 | 69.45 | 69.60 | 69.75 | 69.90 | 70.05 | 70.20 | 70.35 | 46 |
| 47 | 70.50 | 70.65 | 70.80 | 70.95 | 71.10 | 71.25 | 71.40 | 71.55 | 71.70 | 71.85 | 47 |
| 48 | 72.00 | 72.15 | 72.30 | 72.45 | 72.60 | 72.75 | 72.90 | 73.05 | 73.20 | 73.35 | 48 |
| 49 | 73.50 | 73.65 | 73.80 | 73.95 | 74.10 | 74.25 | 74.40 | 74.55 | 74.70 | 74.85 | 49 |
| 50 | 75.00 | 75.15 | 75.30 | 75.45 | 75.60 | 75.75 | 75.90 | 76.05 | 76.20 | 76.35 | 50 |

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