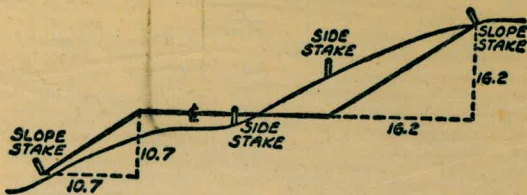


W 793



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

59 + 44.31
38.91
59 + 83.22
14.85
59 + 98.07

MICROFILMED

JAN 14 1965

Please Return to

City of San Diego Water Dept.

Room 268 Civic Center

Telephone Main 5161

Schetch

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 | .88 | 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 |

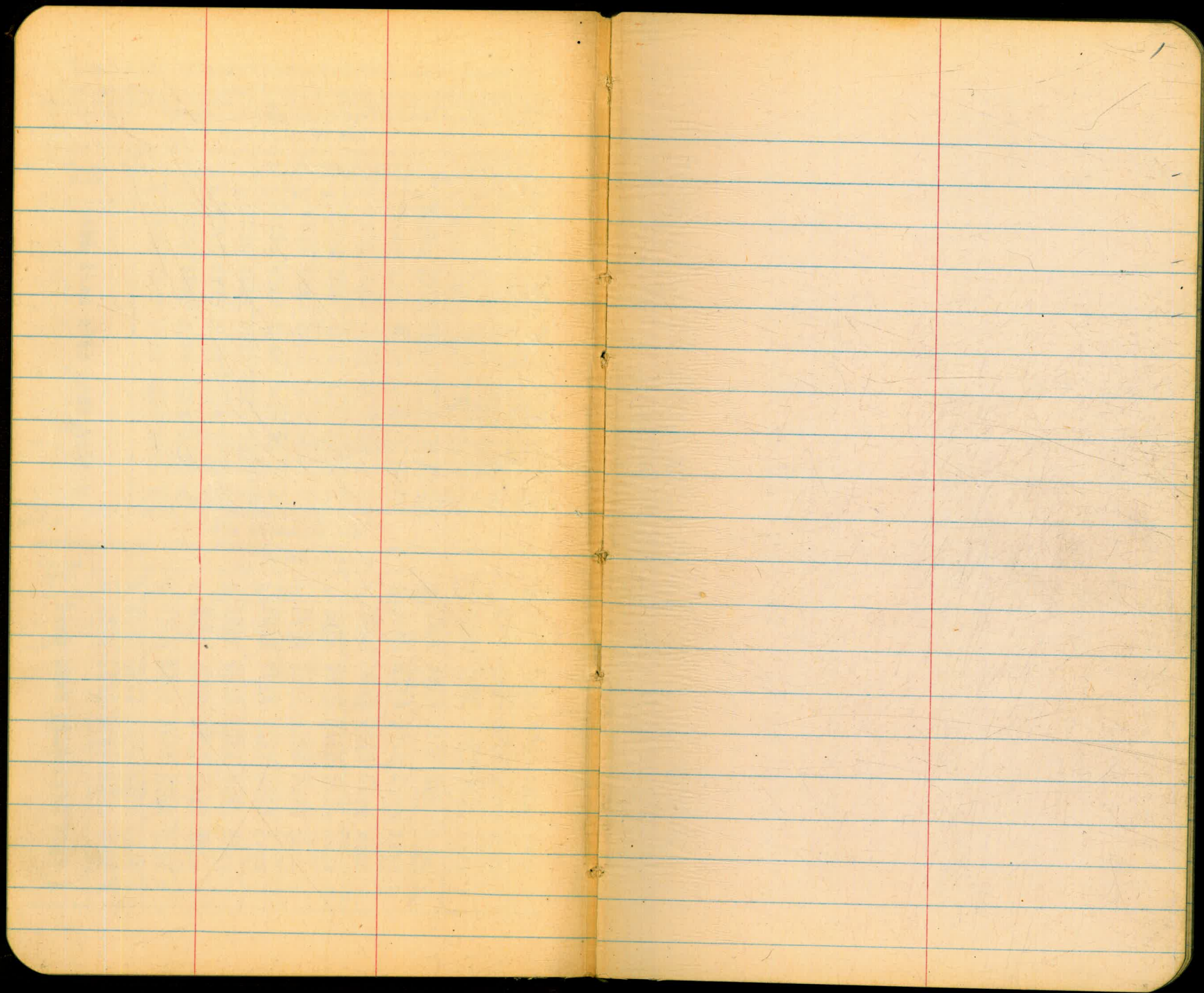
FOR EXTERNALS ADD

| 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 | .032 | .035 | .039 | .043 | .047 | .051 | .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 | .188 | .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 | .711 | .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 | .877 | 1.07 | 1.18 | 1.29 | 1.39 |
| 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 | 2.15 | 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 |

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Alvarado Pipeline Proposed Relocation
Retracement & Tics to State Hwy Survey
also



FEB 28, 1950

BEATTY
ROGERS
PAYNE

6" MAIN - CASS ST.
ARCHER TO VAN NUYS
PROFILE # W.O # 2-750-5

| | | | | |
|------|--------------------------|--|------------|-------------------------------------|
| IP | 12.99 | 175.81 | 162.82 | |
| 0+00 | = 6" Cross | { 10' S. & 10' E. Intersection Cass & Archer | 11.3 164.5 | 1630 C ₁₀ 158.5 6- |
| +50. | | | 9.1 166.7 | 165.2 C ₁₀ 160.7 6- |
| 1+00 | | | 6.8 169.0 | 166.2 C _{7.5} 161.7 7.5 |
| +50 | | | 5.4 170.4 | 167.2 C _{7.5} 162.7 7.5 |
| 2+00 | | | 5.3 170.5 | 168.3 C _{7.0} 162.5 7.0 |
| +50 | | | 6.9 169.0 | 169.8 C _{5.5} 163.5 5.5 |
| 3+00 | | | 6.5 169.3 | 170.3 C _{5.5} 160.6 5.5 |
| +04. | Inv. 30" R.C.P. Cross DR | | 10.5 165.3 | |
| 3+35 | = 6" Cross | { 10' S & 10' E Intersection Van Nuys & Cass | 6.0 169.8 | 169.6 C _{4.5} 165.1 4.5 |

April 28, 1950

Beatty
Rogers
Payne

GRADES FOR METERS - CASS ST
ARCHER TO VAN NUYS.

| | | | | |
|--------|------------------------------|--------|--------|--|
| BN | 6.14 | 174.73 | 168.59 | |
| 0+00 = | | | | { Case No. SW Cor Cass & Van Nuys |
| 1+87 | NET EAST (29' from E ST.) | 3.5 | 171.2 | 168.0 C ₂₂ |
| 1+166 | NET EAST | 3.8 | 170.9 | 166.5 C ₄₉ |
| 0+458 | NET WEST (29' from E ST.) | 8.5 | 166.2 | 165.0 C ₁₂ |
| ck IP | | 12.13 | 162.60 | = 162.60 |

FEB 28 1950

6" MAIN - VAN NUYS ST
LA JOLLA MESA DRIVE TO CASS

Profile

175.81

| | | | | | | | | | | | | |
|--------|--|-------|--------|---------|----|------|------|--------|-------|--------|----------|-----|
| 13+09± | ④ FH - 27' 50" EST (FH - 23' 50" EST) | 6.5 | 1693 | 171.4 | F2 | P | 0.39 | 156.70 | 12.33 | 156.31 | | |
| 13+09± | = 10' E - E line Cass | 6.2 | 1696 | 166.9 | C2 | 6+00 | | | 1.5 | 155.2 | 149.9 | C53 |
| 12+59± | | 6.0 | 1698 | 165.0 | C4 | +50 | | | 4.3 | 152.4 | 148.0 | C44 |
| 12+19± | W Prop Line Cass | 6.3 | 1695 | 164.5 | C5 | 5+00 | | | 7.1 | 149.6 | 145.9 | C37 |
| CK BM. | Comp Mon SW. (BK 166) Cass. (19.60) | 7.23 | 168.58 | -168.59 | | | | | | | | |
| 11+69± | | 7.9 | 167.9 | 163.3 | C4 | +50 | | | 8.8 | 147.9 | 144.1 | C38 |
| 11+19± | | 9.6 | 166.2 | 162.1 | C4 | 4+00 | | | 10.0 | 146.7 | 143.0 | C37 |
| 10+94± | | 10.3 | 165.5 | 161.4 | C4 | +50 | | | 10.7 | 146.0 | 142.1 | C32 |
| P rock | 333 | 10.49 | 165.32 | | | 3+00 | | | 10.5 | 146.2 | 141.1 | C51 |
| 10+44± | | 4.3 | 164.3 | 160.6 | C3 | +50 | | | 10.5 | 146.2 | 140.2 | C60 |
| 9+94± | | 4.4 | 164.2 | 160.9 | C3 | 2+00 | | | 11.2 | 145.5 | 139.2 | C63 |
| 9+44± | | 4.1 | 164.5 | 159.6 | C4 | P | 0.00 | 144.11 | 12.59 | 144.11 | | |
| (9+03 | Bottom of Ditch E | 7.9 | 160.7 | | | +50 | | | 0.3 | 143.8 | 142.7 | C56 |
| 8+90 | | 3.8 | 164.8 | 159.2 | C5 | 1+00 | | | 3.8 | 140.3 | 137.1 | C32 |
| +50 | | 5.0 | 163.6 | 158.9 | C4 | 0+86 | | | 4.57 | 139.54 | = 139.54 | |
| 8+00 | | 5.6 | 163.0 | 158.0 | C5 | P | 1.52 | 132.90 | 12.73 | 131.38 | | |
| +50 | | 7.1 | 161.5 | 156.4 | C5 | CR P | | | 9.5 | 123.4 | = 123.4 | |
| 7+00 | | 9.9 | 158.7 | 154.3 | C4 | | | | | | | |
| +00 | E FH - 23' 50" E ST | | | | | | | | | | | |
| +00 | ③ " = 28' 50" E ST | 10.4 | 158.2 | 158.8 | F0 | | | | | | | |
| +50 | | 11.1 | 157.5 | 152.2 | C5 | | | | | | | |

CK BM (Comp Mon SE Cor
VAN NUYS # L.J. MESA Dr.)

165.92 P
9.89

175.21 H
6.69

168.58 BM
5.6

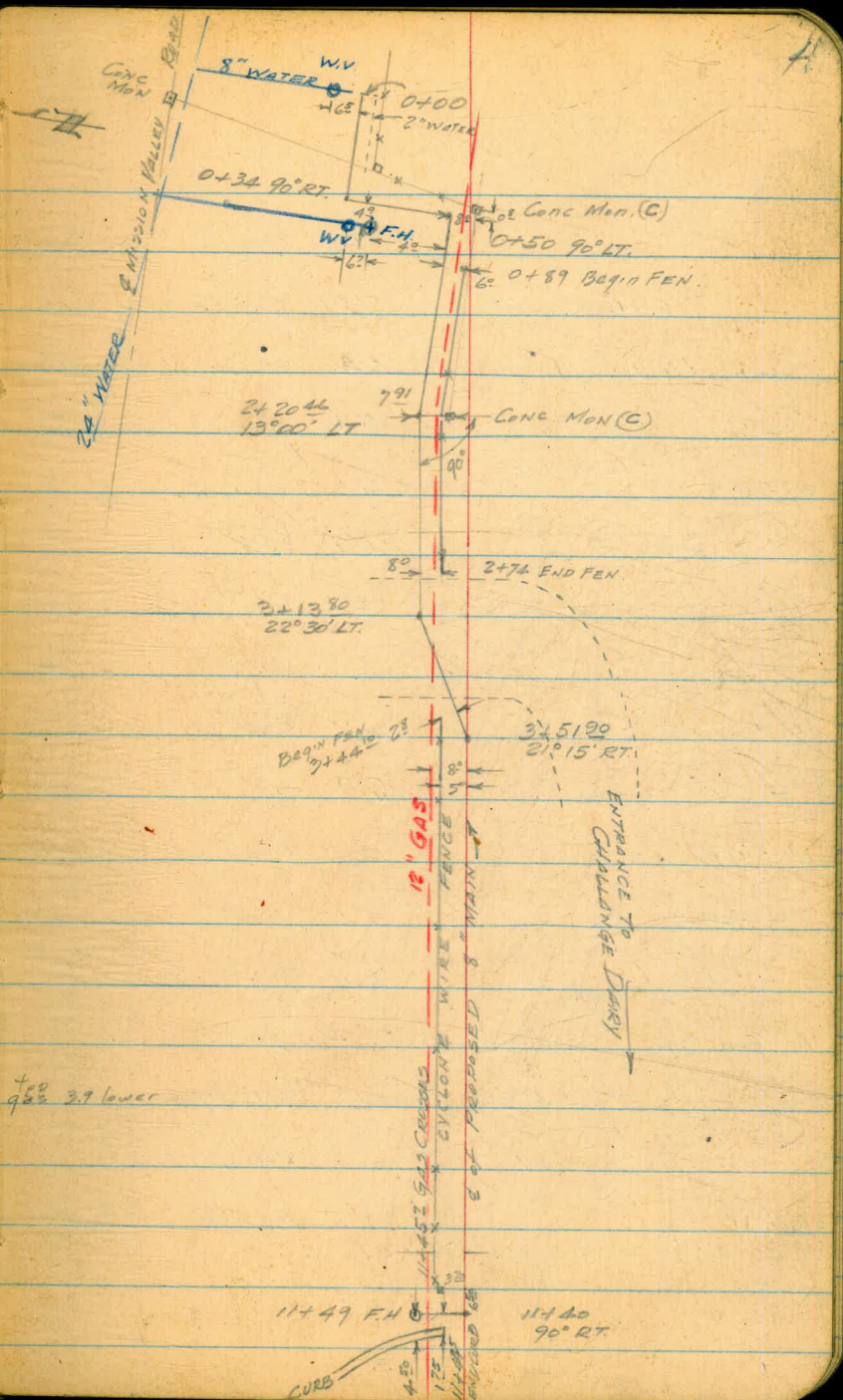
164.6

139.54 SE
139.68 Disc

m.

Mar 21, 1950
 Beatty Rogers Dairy
 8" MAIN - DISTRIBUTION LINE
 MISSION VALLEY ROAD at 6TH ST. EXT
 CHALLENGE DAIRY SUPPLY LINE

| P | | | | | | | |
|-------------------|------|-----------------|-------|-------|------|--|-----------------|
| | 1.66 | 36.76 | 35.10 | | | | (E. PNT 199+96) |
| 0+00 | | | 5.5 | 31.3 | 27.5 | | C38 |
| +31 | SE @ | | 5.9 | 30.9 | 27.5 | | C34 |
| +34 | NW @ | 90° LT. | 5.3 | 31.5 | 27.5 | | C40 |
| +50 | SE @ | | 6.4 | 30.9 | 27.5 | | C29 |
| +50 | NW @ | 90° RT. | 6.4 | 30.4 | 27.5 | | C29 |
| Top F.H. (x chis) | | | 3.59 | 33.17 | - | | |
| 1+00 | | | 7.10 | 29.7 | 27.5 | | C22 |
| +50 | | | 7.3 | 29.5 | 27.5 | | C20 |
| 2+00 | | | 7.1 | 29.7 | 27.5 | | C22 |
| +20+46 | | 11 1/2° LT | 5.3 | 31.5 | 27.5 | | C40 |
| +50 | | | 5.4 | 31.4 | 27.5 | | C39 |
| 3+00 | | | 4.3 | 32.5 | 27.5 | | C50 |
| +1380 | | ¥ PT. 22°30' LT | 4.2 | 32.6 | 27.5 | | C53 |
| +5190 | | ¥ PT. 21°15' RT | 7.3 | 29.5 | 26.5 | | C30 |
| 4+00 | | | 7.8 | 29.0 | 26.5 | | C25 |
| +50 | | | 7.7 | 29.1 | 26.5 | | C26 |
| 5+00 | | | 7.7 | 29.1 | 26.5 | | C26 |
| +50 | | | 6.7 | 30.1 | 26.5 | | C26 |



450 3.9 lower

3/21/50

8" MAIN - (CONT'D)
Challenge Dairy Supply LINE

5

36.76

| | | | | | |
|---|-------|-------|-------|---------|----------|
| 6+00 | | 7.2 | 29.6 | 26.5 | C31 |
| IP | | | | | |
| +50 | 6.94 | 36.69 | 7.01 | 29.75 | 26.5 C33 |
| 7+00 | | 6.4 | 30.3 | 26.5 | C38 |
| +50 | | 6.5 | 30.2 | " | C37 |
| 8+00 | | 6.6 | 30.1 | " | C36 |
| +50 | | 6.2 | 30.5 | " | C40 |
| 9+00 | | 5.7 | 31.0 | " | C45 |
| +50 | | 6.0 | 30.7 | " | C42 |
| 10+00 | | 6.3 | 30.4 | " | C39 |
| +50 | | 5.9 | 30.8 | " | C43 |
| 11+00 | | 5.4 | 31.3 | " | C48 |
| +40 | | 5.2 | 31.5 | " | C50 |
| ⑤ FH | | | | | |
| +51 | | 3.1 | 33.6 | 33.2 | C04 |
| +51 Top Curb | | 3.5 | 33.2 | 26.5 | C67 |
| Top Conc Mark | 2.13 | 34.48 | 5.84 | 30.35 | ✓ |
| IP | 12.45 | 44.30 | 2.63 | 31.85 | |
| IP | 12.78 | 56.95 | 0.13 | 44.17 | |
| CK BM | | 4.71 | 52.74 | = 52.74 | |
| 1. Pin 30' E, on So side, West Traffic Lane | | | | | |
| CABRILLO FREEWAY | | | | | |

(USE THIS ONE)

Mar 27 1950

Dealy
Rogers
Poytic

GRADES FOR METERS - AGATE ST.
LA JOLLA MESA DRIVE TO DAWES.

| | | | | | | | | | | | |
|--|--------|--------|------|--------|-------|-----|-------------------------------------|--------|--------|--------|------------------------|
| P.M. | 11.51 | 126.36 | | 114.85 | | | 8+15 METER 23' Nor & ST. | 6.7 | 143.2 | 142.4 | C08 |
| 0+00 = E. Prop. line La Jolla Mesa DR. | | | | | | | | | | | |
| 0+57 MET 23' Nor & ST. | | | 8.5 | 119.9 | 116.1 | C18 | 8+96 " " So. " | 4.1 | 145.8 | 144.7 | C12 |
| 1+01 MET " " " " | | | 7.4 | 119.0 | 117.7 | C13 | 9+51 " " Nor | 1.1 | 148.8 | 147.1 | C17 |
| 1+25 MET 23' So & ST | | | 7.9 | 118.5 | 118.0 | C05 | ROCK 10+85 | 159.98 | 0.75 | 149.13 | |
| 2+19 " " Nor | | | 2.8 | 123.6 | 121.7 | C19 | 10+23 " " Nor | 8.5 | 151.5 | 149.7 | C18 |
| 2+66 " " So | | | 2.2 | 124.2 | 122.7 | C15 | 10+33 " " So | 10.1 | 149.9 | 149.5 | C04 |
| 2+75 " " Nor | | | 0.9 | 125.5 | 123.7 | C18 | 12+73 " " Nor | 3.0 | 157.0 | 155.2 | C18 |
| 3+16 " " So. | | | 0.6 | 125.8 | 124.6 | C12 | 13+20 " " So | 5.2 | 154.8 | 155.1 | F03 |
| DP 11.27 | 137.02 | | 0.61 | 125.75 | | | 13+86 " " So | 5.3 | 154.7 | 155.2 | F05 |
| 3+33 " " Nor | | | 9.1 | 127.9 | 125.8 | C21 | 14+06 " " So | 5.4 | 154.6 | 155.2 | F06 |
| 3+96 " " Nor | | | 6.8 | 130.2 | 128.2 | C20 | 14+27 " " Nor | 3.3 | 156.7 | 155.5 | C12 |
| 4+89 " " Nor | | | 4.6 | 132.4 | 131.1 | C13 | 14+74 " " So | 5.7 | 154.3 | 154.8 | F05 |
| 5+72 " " Nor | | | 10.2 | 126.8 | 134.0 | F72 | 15+59 " " So | 6.5 | 153.5 | 153.6 | F04 |
| 6+28 " " Nor | | | 7.2 | 129.8 | 135.9 | F61 | 16+55 " " So | 8.0 | 152.0 | 151.3 | C07 |
| 6+83 " " Nor | | | 1.3 | 135.7 | 137.8 | F82 | | 7.53 | 152.45 | 152.46 | |
| 7+00 " " So | | | 0.8 | 136.2 | 137.9 | F17 | OK B.M. CONC Mon NW Cor Dawes | | | 152.28 | |
| DP 1304 | 149.88 | | 0.18 | 136.84 | | | | | | | (See BK 72d Pg. 71) |
| 7+27 Nor | | | 9.4 | 140.5 | 140.0 | C05 | | | | | |
| 7+94 Nor | | | 7.6 | 142.3 | 141.7 | C04 | | | | | |

149.88

6

April 12 1950
 Peaty
 Rogers
 Payne

6" MAIN - Avenida de Commercial & Electric Ave

| | | | | | |
|------------|--------|------------------|-------|---------------|--|
| BM. | 2.30 | 94.19 | 91.89 | | |
| | | Bot. Cross 13.2 | 81.0 | | |
| 0+00 | | Curb 8.6 | 85.6 | | |
| +50 | | ⊕ 9.1 | 85.1 | 81.4 C37 | |
| | | Curb 8.4 | 85.8 | | |
| 1+00 | | ⊕ 9.0 | 85.2 | 81.8 C38 | |
| | | Curb 8.2 | 86.0 | | |
| +50 | | ⊕ 8.9 | 85.3 | 82.2 C39 | |
| | | Curb 7.9 | 86.3 | | |
| 2+00 | | ⊕ 7.5 | 86.7 | 82.5 C42 | |
| | 2+00 | Tap 6" gas | 10.6 | 83.6 | } Pipe to go over 20" water and UNDER 6" gas |
| | 2+11.4 | Tap 20" water | 11.2 | 83.0 | |
| 2+11.44 B | | ✕ PT 103° RT ⊕ | 8.2 | 86.0 | 82.2 C40 |
| 2+21.50 A | | | | | |
| +50 | | | 6.5 | 87.7 | 84.5 C39 |
| 3+00 | | HOS Curb | 2.5 | 91.7 | 86.7 C50 |
| | | | 2.24 | | |
| 3+18.95 | | ✕ PT 101° LT (S) | 2.5 | 91.7 | 87.5 C42 |
| 3+18.95 | | (E) | 2.1 | 92.1 | 87.5 C46 |
| 71 | | 96.68 | 2.16 | 92.03 = 92.00 | END of Curb |
| 3+50 | | | 4.4 | 92.3 | 87.3 C50 |
| 4+00 | | | 5.3 | 91.4 | 86.9 C45 |
| +46.71 B.C | | | 5.6 | 91.1 | 86.5 C46 |
| +50 | | | | | |
| 5+00 | | | 5.9 | 90.8 | 86.1 C47 |
| +50 | | | 6.4 | 90.3 | 85.7 C46 |
| CK BM | | | 4.79 | 91.89 | |

OP E. Curb
 Dowling & Electric Ave

4/13/50

8.

| | | | | | | |
|-----------|-----------------|-------------|-----|-------|------|-----|
| 13M | 2.89 | 94.76 | | 91.89 | | |
| 5+79.50 | X PT. | 22 1/2° RT. | 4.6 | 90.2 | 85.5 | C47 |
| 6+18.70 | X PT. | 22 1/2° LT. | 3.8 | 91.0 | 85.3 | C57 |
| 6+20.70 | TEE | @ EAST | 3.8 | 91.0 | 85.3 | C57 |
| | TEE | @ WEST | 4.0 | 90.8 | 85.3 | C58 |
| (0+04) | FIRE HYD. | | 3.8 | 91.0 | 85.3 | C57 |
| | (Bottom 6" Gas) | | 6.9 | 87.9 | | |
| (0+50.9) | FIRE HYD. CONN. | | 3.1 | 91.7 | 86.4 | C53 |
| (6+28.40) | (6" Sewer Bot.) | | 8.9 | 85.9 | | |

| | | | | | | |
|----------|----------|--|------|------|------|-----|
| 6+43.70 | | | 4.0 | 90.8 | 85.3 | C55 |
| 6+93.70 | Curb. | | 4.2 | 90.6 | | |
| | (+) | | 4.9 | 89.9 | 85.3 | C46 |
| 7+43.70 | Curb. | | 4.6 | 90.2 | | |
| | (+) | | 5.3 | 89.5 | 85.2 | C43 |
| +93.70 | Curb. | | 5.1 | 89.7 | | |
| | (+) | | 5.6 | 89.2 | 84.7 | C45 |
| 8+43.70 | Curb. | | 5.5 | 89.3 | | |
| | (+) | | 5.9 | 88.9 | 84.3 | C46 |
| +93.70 | Curb. | | 6.0 | 88.8 | | |
| | (+) | | 6.2 | 88.6 | 83.8 | C48 |
| 9+43.70 | Curb. | | 6.4 | 88.4 | | |
| | (+) | | 6.6 | 88.2 | 83.4 | C48 |
| +93.70 | Curb. | | 6.7 | 88.1 | | |
| | (+) | | 6.6 | 88.2 | 84.4 | C38 |
| 10+01.70 | Bot. TEE | | 10.1 | 84.7 | | |

APRIL 17, 1950

DEATY
ROGERS
PAYNE

GRADES FOR METERS - ARCHER ST.
LA JOLLA MESA DR TO DAWES

| PM. | 12.47 | 127.28 | 114.85 | CONC MON NEGR | 162.76 | 11265.0 | 9 |
|--|--------------|--------|-------------|------------------|----------------------------|-------------|------------|
| 0+00 = (E. Prop line La Jolla Mesa Dr) | | | | | 10.87 173.47 | 0.16 162.60 | |
| 0+46 So. (23' from E ST) | | | 2.6 124.7 | 125.4 F07 | 13+16 Nor. | 4.1 169.4 | 166.5 C2.9 |
| 0+80 So. | | | 1.4 125.9 | 126.4 F05 | 13+30 So | 3.7 169.8 | 167.0 C2.8 |
| 0+93 Nor. (23' from E St.) | 12.84 138.67 | | 1.45 125.83 | | 13+75 Nor | 4.7 168.8 | 166.2 C2.6 |
| 1+02 Nor | | | 11.0 127.7 | 127.2 C05 | 14+03 So | 3.9 169.6 | 167.6 C2.0 |
| 1+57 Nor | | | 10.5 128.2 | 127.6 C06 | 14+11 Nor | 5.8 167.7 | 166.6 C1.1 |
| 2+02 Nor | | | 8.6 130.1 | 129.2 C09 | 14+64 So | 4.0 169.5 | 167.6 C1.9 |
| 2+65 Nor | | | 7.2 131.5 | 130.7 C08 | 14+84 Nor | 6.1 167.4 | 166.4 C1.0 |
| 2+99 So. | | | 5.1 133.6 | 132.6 C10 | 15+32 So | 4.1 169.4 | 167.2 C2.2 |
| 3+48 So | | | 5.9 132.8 | 133.4 F06 | 15+93 So 8.39 176.30 | 6.3 167.2 | 163.5 C1.7 |
| 3+48 Nor | | | 4.1 134.6 | 134.8 F02 | 16+29 So | 5.56 167.91 | 164.5 C3.4 |
| 4+78 So | 12.45 150.89 | | 2.8 135.9 | 135.3 C04 | 16+75 So | 8.9 167.4 | 164.0 C3.4 |
| 5+46 So. | | | 0.29 138.38 | | 17+05 56 w Prop line Dawes | 10.6 165.7 | 163.9 C2.4 |
| 6+13 So. | | | 11.6 139.2 | 138.8 C04 | 18+02 Nor | 9.1 167.2 | 164.5 C2.7 |
| 6+06 Nor | | | 9.6 141.2 | 141.1 C03 | 18+10 So | 12.4 163.9 | 164.1 F03 |
| 6+66 So | | | 7.8 143.0 | 143.1 F01 | 18+26 So | 12.0 164.3 | 165.0 F07 |
| 8+28 Nor | | | 7.4 143.4 | 143.4 C00 | 18+45 Nor | 7.6 168.7 | 166.4 C1.3 |
| 8+97 So | 12.68 162.76 | | 4.3 146.5 | 150.5 F42 | 18+88 So | 9.8 166.5 | 167.7 F13 |
| 9+52 So | | | 0.75 150.08 | | | | |
| 9+91 So | | | 9.0 153.8 | 152.8 C10 | | | |
| | | | 7.9 155.5 | 155.3 C02 | | | |
| | | | 5.9 157.5 | 157.3 C02 | | | |

176.30

19+13 NoR 5.6 170.7 169.6 C¹

19+50 So 6.5 169.8 170.4 F⁰

19+80 Se. 4.5 171.8 171.7 C⁰

20+54 NoR +4.3 180.6 175.9 C¹

OK 12.75 163.55 = 163.56
BK 72+
PA 74

April 28, 1950

Beath
Rogers
Payne

GRADES FOR METERS - VAN NUYS ST
LA JOLLA MESA DRIVE to GASS.

| | | | | | |
|----------------------------------|-------|--------|-------|--------|--------|
| B.M. | 11.99 | 151.53 | | 139.54 | |
| 0+00 = (E. Drop Line L.J.M. De.) | | | | | |
| 0+41 MET. SOUTH (23' from E St) | 8.1 | 143.4 | 142.5 | 09 | |
| 0+85 SOUTH | 6.4 | 145.1 | 143.4 | 97 | |
| 1+52 SOUTH | 5.4 | 146.1 | 144.7 | 94 | |
| 1+79 NOR (23' from E St) | 2.9 | 148.6 | 145.7 | 29 | |
| 2+28 SOUTH | 5.4 | 146.1 | 146.1 | 00 | |
| 3+74 SOUTH 12.99 | 2.85 | 148.68 | 149.5 | 08 | 161.60 |
| 4+35 SOUTH | 10.3 | 151.3 | 151.8 | 05 | |
| 4+64 NOR | 6.7 | 152.9 | 151.4 | 05 | |
| 4+70 SOUTH | 7.8 | 153.8 | 153.3 | 05 | |
| 5+05 NORTH | 4.3 | 157.3 | 156.1 | 12 | |
| 5+42 SOUTH | 5.0 | 156.6 | 156.4 | 02 | |
| 5+81 So | 3.6 | 158.0 | 157.9 | 01 | |
| 6+38 So | 10.20 | 171.28 | 0.52 | 161.08 | |
| 6+87 So | 11.0 | 160.3 | 160.3 | 00 | |
| 6+87 So | 9.3 | 162.0 | 162.2 | 02 | |
| 7+44 NOR | 4.5 | 166.8 | 163.0 | 38 | |
| 8+63 So. | 7.0 | 164.3 | 164.3 | 00 | |
| 9+14 So | 7.0 | 164.3 | 164.7 | 04 | |
| 9+62 NOR | 4.9 | 166.4 | 165.8 | 06 | |

171.28

| | | | | | |
|-------------|------|--------|----------|----|--|
| 7+88 SOUTH | 16.2 | 165.1 | 165.8 | 07 | |
| 10+68 SOUTH | 3.5 | 167.8 | 167.8 | 00 | |
| 13+09 NOR | 0.0 | 171.3 | 171.9 | 06 | |
| ck B.M. | 2.69 | 168.59 | = 168.59 | | |

11.

MAY 2 1952
 BEATTY
 ROGERS
 PAYNE

12

GRADES FOR 6" MAIN IN ALLEY

MONROE TO MADISON BETWEEN 34TH & FELTON

167.75
 2955

| BM | 9.51 | 393.63 | | 384.12 | BM BP NW COR 34 & MEAD |
|-------|---|--------|------|-----------------|------------------------------|
| CK BM | 4.68 | 393.04 | 4.68 | 388.95 = 384.71 | TOP SE COR 34 & MONROE |
| HP | 5.87 | 389.33 | 7.58 | 382.4 | |
| 0+00 | (NOT PROP LINE MONROE) (4' offset - 65 E & ALLEY) | | 5.93 | 383.40 | 383.62 |
| +50 | | | 4.5 | 384.8 | 384.1 379.6 C52 |
| 1+00 | | | 5.0 | 384.3 | 384.4 379.9 C42 |
| +50 | | | 4.4 | 384.9 | 384.8 380.3 C46 |
| 2+00 | | | 4.1 | 385.2 | 385.1 380.6 C46 |
| +50 | | | 3.8 | 385.5 | 385.4 380.9 C46 |
| 3+00 | | | 2.1 | 386.2 | 385.8 381.3 C49 |
| +50 | | | 2.8 | 386.5 | 386.1 381.6 C49 |
| HP | 5.73 | 392.04 | 3.02 | 386.31 | |
| 4+00 | | | 4.6 | 387.4 | 386.2 381.9 C55 |
| +50 | | | 4.5 | 387.5 | 386.8 382.3 C52 |
| 5+00 | | | 4.7 | 387.3 | 387.1 382.6 C47 |
| +50 | | | 4.1 | 387.9 | 387.4 382.9 C50 |
| 6+00 | | | 3.3 | 388.7 | 387.6 383.1 C50 |
| +40 | | | 4.4 | 387.6 | 387.3 382.8 C48 |
| CK | | | 4.95 | 387.09 | |

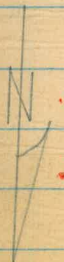
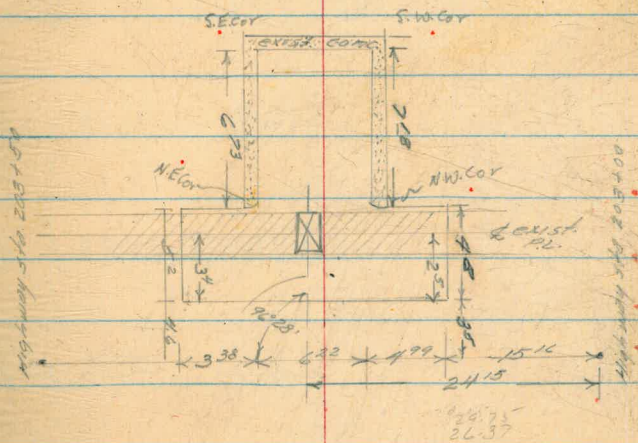
Ties to Gate Valve Chamber
Mission Valley & 6th St.

Rainey - Notes
King &
West
Shipman

5-3-50

Cold - Windy

13.



Note: El. U.S.G.S

Levels - Gate Valve Box
Mission Valley at 6th St.
Near Challenge Entrance

King
Shiphant
West

5-452

Clear-cold

14

| | | | | U.S.G.S. Datum | 52.74 U.S.G.S. 6.1 City Datum |
|--------|------|---------|-------|-------------------|-------------------------------------|
| B.M. | 1.71 | 54.45 ✓ | | | |
| T.P. | 1.77 | 43.15 ✓ | 13.07 | 41.38 ✓ | |
| T.B.M. | 3.42 | 36.62 ✓ | 9.95 | 33.20 ✓ | |
| | | 2.9 | | 33.7 | 27.6 |
| | | 11.4 | | 25.2 | 19.1 ✓ |
| | | 3.0 | | 33.6 | 27.5 |
| | | 11.5 | | 25.1 | 19.0 ✓ |
| | | 7.5 | | 29.1 | 23.0 ✓ |
| | | 7.5 | | 29.1 | 23.0 ✓ |
| | | 3.7 | | 32.9 | 26.8 ✓ |

U.S.G.S. Datum - see page 5

Extreme Top Fire Hydrant - Adjacent to G.V. Box

N.W. Cor. G.V. Box ON Oil Pav

N.W. Cor. G.V. Box - Top Floor

N.E. Cor. G.V. Box ON Oil Pav

N.E. Cor. G.V. Box - Top CONC Floor

Top G.V. IN Existing PL

Top CONC. CASING Near G.V.

S.W. Cor. G.V. Box - ON Oil Pav

Note: El. U.S.G.S

Levels - G.V. Box
Mission Valley RR + 6th
Near Challenge Co. Entrance

~~21565-6.1~~

King
Shannon St
West

5-4-50

Clear

15

36.62

U.S.G.S.

City

11.4

25.2

19.1 ✓

Top conc Floor S.W. Cor. G.V. Box

3.8

32.8

26.7

S.E. Cor. G.V. Box ON oil Pan

11.6

25.0

18.9 ✓

S.E. Cor. G.V. Box - Top conc Floor

0+60

Ø G.V. + Existing Pipe

Profile So. 50' From Ø Existing Pipe

0+95

3.9

32.7

26.6

0+29

5.7

30.9

24.8

0+40

5.8

30.8

24.7

0+41

6.9

29.7

23.6

0+42

5.9

30.7

24.6

0+56

6.0

30.6

24.5

T.B.M.

3.43

33.19

33.17

Set by Beetly - Top F. 11.

SEPT. 5 1950

16

Alvarado Pipeline

S.O. EXTENSION - FROM FIRE HYDRANT

To NEW F.H. 282 RT STA 3+2450 - K2

| TP | | | | CHIS. X Top. FH | CITY DATUM |
|---------|---|-------|----------------|--------------------|---------------|
| | 250 | 35.67 | | 33.17 | |
| 0-0620 | Top of stem GN | 8.15 | 27.52 | | |
| 0+00 | (AT Present F.H.) | 5.4 | 30.3 | 26.0 | 43 |
| +25 | | 5.15 | 30.5 | 25.9 | 46 |
| +75 | | | | | |
| +79.5 | (= 5' inside Row.) (= 282 RT. STA. 3+2450) | 4.85 | 30.8 | 25.9 | 49 |
| +84.5 | (= 5' offset for F.H.) | 4.80 | 30.9 | FOE | (Flange) |
| (0+108) | Top 16" GAS) | 7.77 | 27.90 | | |
| 0+79.5 | (= 282 RT STA. 3+2450) OF K2 OUTER HWY. | | 26.57 25.97 | | |

SEPT. 5, 1950

Alvarado Pipeline

8" S.O. EXTENSION FROM F.H. 115+52
TO NEW F.H. 2920 OUT FROM STA 19+34

| BM # | | | | SPIKE IN PALM TREE | USGS DATUM |
|-------------------|---|--------------------------|---------------|-----------------------|--------------------------------------|
| | 5.44 | 40.07 | 34.63 | | |
| 0+23 | (35' RT) | TOP SEWER MH INV. " " | 3.40 13.95 | | 26.12 |
| 0+45 ³ | | TOP 16" GAS | 10.17 | | 29.90 |
| 0+00 | | TOP 8" WATER | 7.95 | | 32.12 31.3 |
| 0+00 | AT Present F.H. | | | | |
| 0+23 | Subgrade Road | | 5.0 | | 35.1 |
| 0+50 ² | (- 5' inside ROW = 2920 OUT 19+34) OUTER HWY. | | 6.9 | | 32.2 30.0 33 ² |
| 0+55 ³ | = 5' offset for F.H. | | 6.8 | | 32.3 33 ² 30 ² |

SEPT. 5, 1950

Alvarado Pipeline

6" S.O. EXTENSION FROM G.V. 105+48
TO END OF 6" S.O. RT 29+208

| BM | | | | 3/8" I.P.W. # 3-A | USGS DATUM |
|-------------------|---|---------------|-------|----------------------|------------------|
| 0+00 | Top Stem G.V. | 6.95 | 34.50 | | |
| 0+00 | | 4.2 | 37.3 | 33.0 | C 4 ³ |
| 0+25 | | 7.8 | 33.7 | 30.5 | C 3 ³ |
| 0+50 | | 8.6 | 32.9 | 30.5 | C 2 ⁴ |
| 0+78 ⁶ | 60' LT SEWER Rim XI.H TIV. | 3.58 13.11 | 28.34 | | Top 30.4 |
| 0+87 | (Side of road) | 5.0 | 36.5 | 30.5 | C 6 ² |
| 1+24 ³ | Top 16" Gas. | 11.07 | 30.4 | | |
| 1+28 ² | = END S.O. = 5' inside Row. of outer highway Sta. 44+025 | 7.69 | 33.76 | 30.5 | C 3 ³ |

SEPT 5 1950

14625 FH

19

Alvarado Pipeline

8" S.O. EXTENSION FROM FH STA 90+58
TO NEW FH 30' RT 44+02.5

| BM # | Description | Stationing | Reading | Height | Notes |
|--------|-----------------------------------|------------|---------|--------|--------------------------|
| BM #4 | | 5.02 | 44.40 | 39.38 | Spike in pole 1995 Datum |
| 0+00 | Top 8" pipe | 8.2 | 36.2 | | |
| 0+00 | at Present FH | 5.2 | 39.2 | 36.2 | C ₃₀ |
| +25 | | 7.2 | 37.2 | 35.5 | C ₁₇ |
| 0+68.5 | SEWER - Top pipe | 11.02 | 33.38 | | |
| 0+75 | | 7.3 | 37.1 | 34.0 | C ₃₁ |
| 0+88 | Top 16" Gas | 10.52 | 33.82 | 34.0 | |
| 1+05 | | 4.4 | 40.0 | | C ₆ |
| 1+50 | | 4.3 | 40.1 | | C ₆ |
| 1+62.5 | | 7.4 | 37.0 | 34.0 | C ₃₀ |
| 1+67.5 | 5' offset for FH 5' inside ROW | 7.4 | 37.0 | 37.5 | F ₀₅ |

3.1
7.92
11.02

2.58
7.92
10.50

2.4
5.8
8.2

SEPT 6, 1950

Alvarado Pipeline

6" S.O. EXTENSION FROM F.H. 77+52°
TO NEW F.H. STA 56+74.5

| | | | | | | |
|--------|---|-------|-------|-------|------------------|------|
| BN 6-A | 0.96 | 59.62 | 58.66 | | SPIKE IN TREE | USGS |
| 1+577 | = (5) off set F.H. = 3' inside ROW Sta. 56+74.5 | | 57.9 | 53.8 | 49.1 | C47 |
| 1+527 | | | 57.6 | 53.8 | 45.6 | C48 |
| 1+47 | Top 16" GAS | | 9.69 | 49.9 | | |
| TP | 2.53 | 51.82 | 10.33 | 49.29 | | |
| 1+45 | | | 2.7 | 49.1 | 45.6 | C35 |
| 1+265 | 24 SEW Inv. | | 17.5 | 34.3 | | |
| 1+00 | (Shoulder of road) | | 2.5 | 49.3 | 45.6 | C37 |
| 0+75 | | | 5.7 | 46.1 | 43.7 | C24 |
| 0+50 | | | 6.8 | 45.0 | 42.5 | C25 |
| 0+00 | | | 6.8 | 45.0 | 40.0 | C50 |
| 0-10 | (G.V. Top/stem) | | 10.7 | 41.1 | 39.6 | |

$\Delta = 8^{\circ} 06' 34''$ RT.
 $R = 506'$
 $T = 35.87$
 $L = 71.62$

$274.96 \pm$ B.C.

E.C. 22761 $\frac{25}{45}$ AH.
E.C. 22739 $\frac{25}{45}$ BK. =

$\Delta = 32^{\circ} 33' 30''$
 $R = 177.04$
 $T = 51.70$
 $L = 100.60$

B.C. 21758 $\frac{45}{45}$

$207.99 \pm$
 Δ PT. 20454.127

EXIST. ALVARADO
B.O. 17466.89

E.C. 20725
B.C. 20760 $\frac{58}{45}$ AH.
F.O. 20757 $\frac{49}{45}$ BK.

CONT'D \rightarrow

E.C. 28732 $\frac{45}{45}$

P.R.C. 28762 $\frac{43}{43}$

ALVARADO PIPELINE
PROPOSED RELOCATION PRELIM.
FOR
ALVARADO FREEWAY IMPROVEMENT

27+46.71 POT

22+61.25 AH. POT.
22+66.94 BK

22+04.22 P.I.

25°42'20" RT

$\Delta = 23^{\circ}32'40"$ LT.

20+95 EC & RT.

5°26' LT

20+60.58 AH. BC.
20+57.00 BK.

17+66.89 B.O.

Sept. 20 1956

Shorey
Kemp
Smith
Obrien

22

R.R. Spike
POT
23+33.49
"A" Line
(Hwy Dept)

CALIF
Hwy
R/W
COPC.
Mon.

72'
242"
406
"A" Line
B.C. 28+82.09
Hwy Dept

18°32'40" 20+99 ΔPT.

NOTE: RED LINE REPRESENTS
LINE OF STATE HWY PLANS -
PIPE AS LAYED IS 1/2" SELY. OF
RED LINE
SHOREY - 12/23/57

RT

Proposed Relocation

STATE HWY PLANS
22+54.76 AHD. =
22+58.73 BK. E.C.
 $\Delta = 26^{\circ}23'46"$

P.I. 22+04.22

25°42'20" RT

21+48.16 B.C.
STATE HWY PLANS

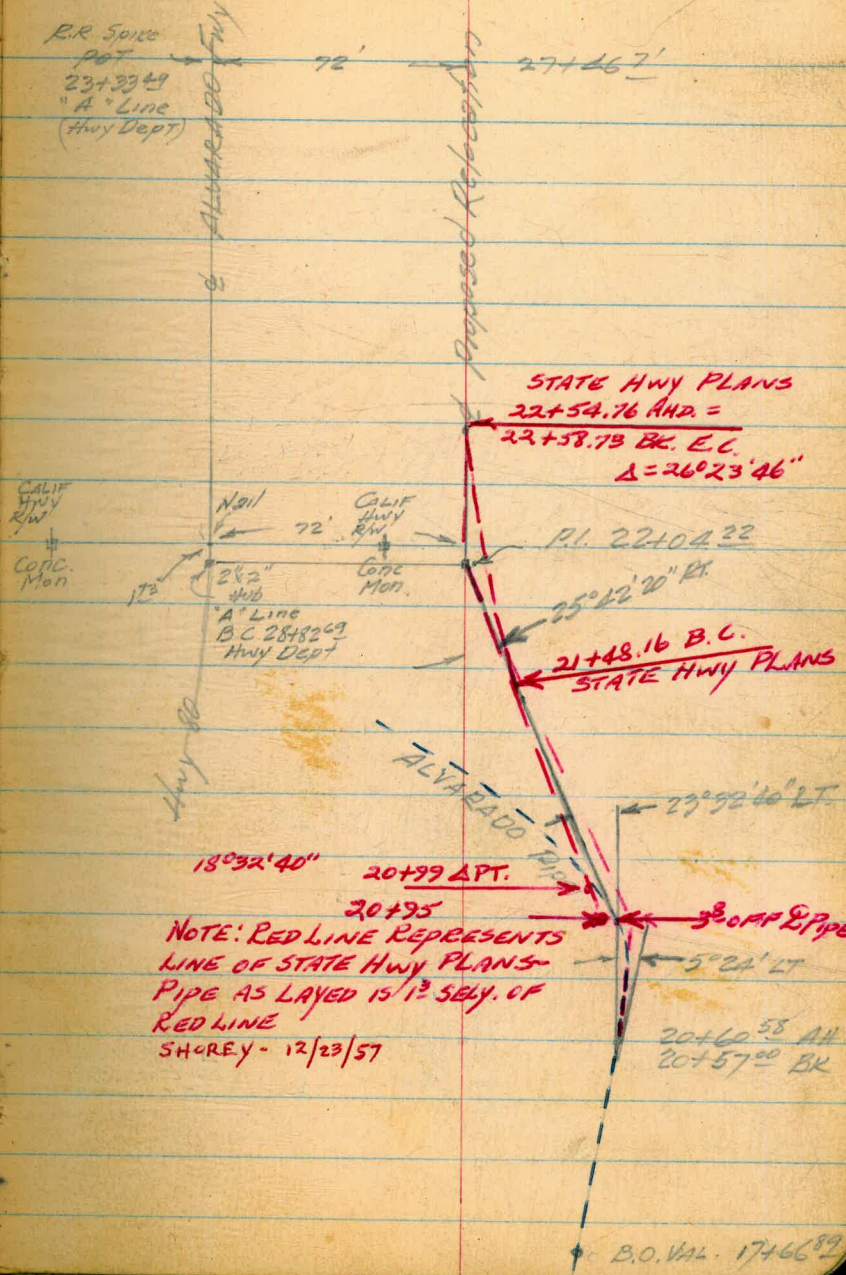
23°52'46" LT

38" O.P.F. PIPE

5°24' LT

20+60.58 AH
20+57.00 BK

B.O. VAL. 17+66.89



ALVARDO PIPELINE
Proposed RELOC. PRELIM.

Sept 21 1956
Shorby
Kemp
Smith.

23

44+84.29

EC.

Δ 22°52'54" RT.

R. 406.

T. 82.17

L. 162.14

43+22.35

B.C.

36+58.48

EC

Δ 7°11'04" RT

R. 1006.

T. 63.15

L. 126.14

35+32.34

B.C.

29+32.35

EC

Δ 8°06'34" LT

R. 494.

T. 35.02

L. -69.92

28+62.43

P.R.C

Δ 8°06'34" RT

T. 35.87

R. 506.

L. 71.62

NOTE:-

per plan
 Δ 's turned
to closest
15"

27+90.81

BC.

ALVARADO PIPELINE
Proposed Reloc. Prelim.

9/24/56
Kemp
Smith
O'Brien

JTD

24

55+60⁰⁴ P.R.C.

Δ 19°36'00" RT
R 860
T 148.55
L 294.19

19°38'35" RL

25.19
60
13.19

52+6585 B.C.

51+4155 F.C.

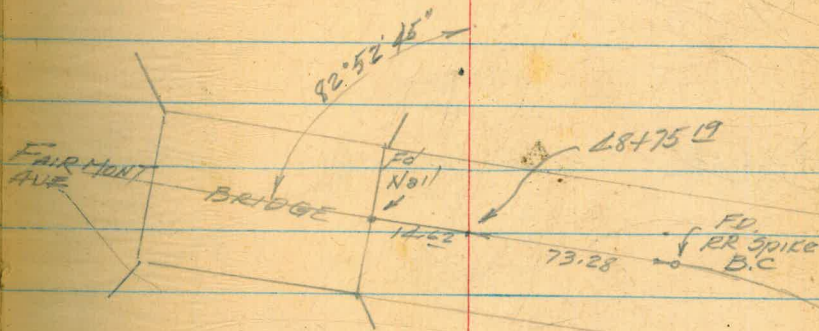
Δ 29°26'00" LT 28°58'09" LT
R 200 R 197.53
T 53.15 T 51.03
L 103.91 L 99.88

29°45'35"

50+3764 B.C.

50+4162 AH.
50+4281 BK.

48+7519 P.O.T.



47+4932 E.C.

Δ 25°06'11" LT
R 200
T 44.53
L 87.64

46+6168 B.C.

ALVARADO PIPELINE
Proposed Reloc. Prelim.

9/26/56
West
WILLIAMS
R8015011

A 69°50'30" RT to AVA
58+21.45 AH. Orig. Alignment
59+98.07 BK Proposed Reloc

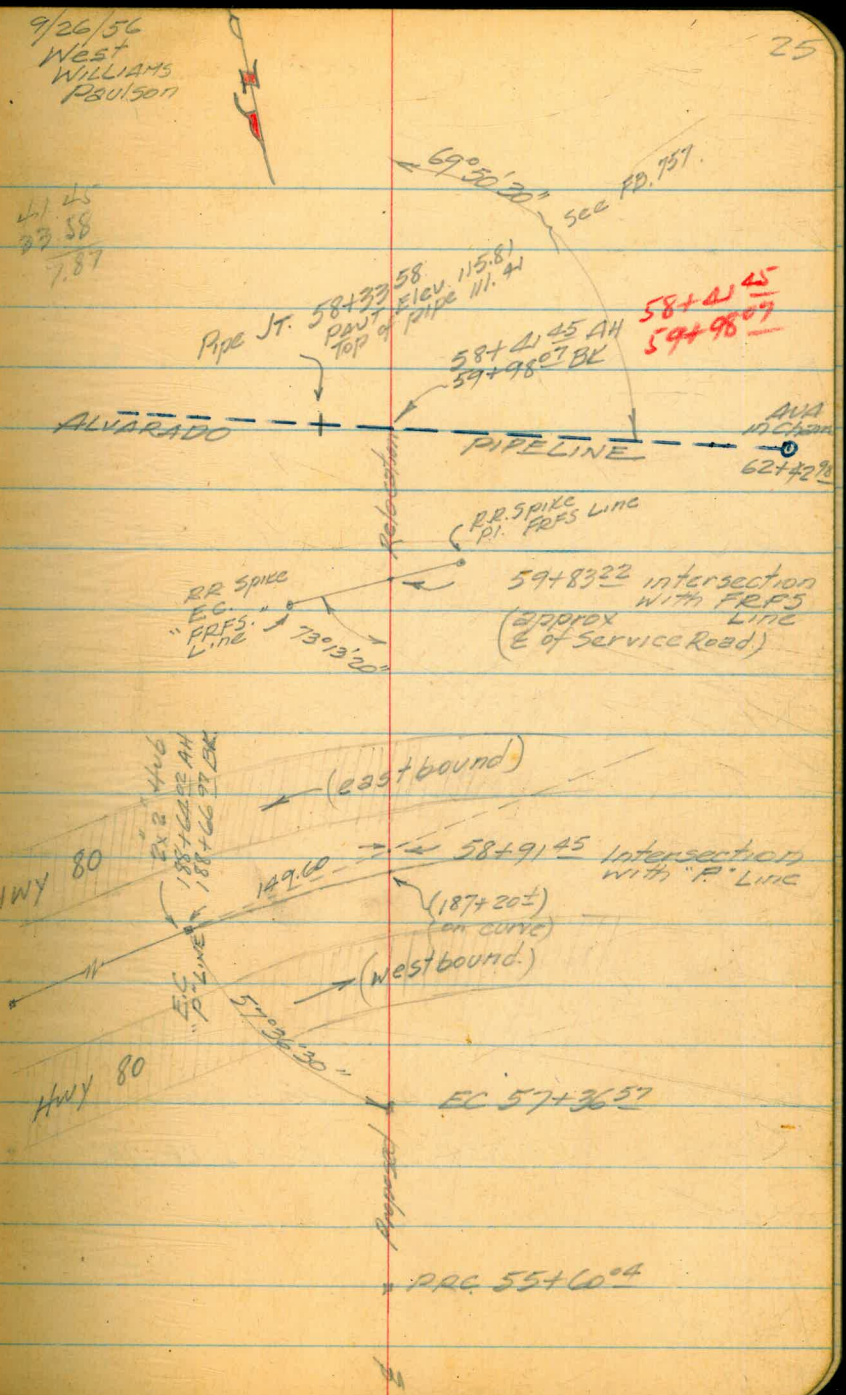
59+83.22 P.O.T. intersection with "FRFS" Line

58+91.45 P.O.T. intersection with "P" Line

57+36.57 E.C.

Δ 52°28'40" LT 53°32'55" LT
R 192.74 ✓
T 95.00
L 176.53 ✓

55+60.04 P.R.C.



41.45
23.58
7.87

ALVARADO PIPELINE
Proposed Relocation Prelim.
& Profile

Sept. 26 1956
West
Williams
Paulson

26

BM. 6.19 118.35 112.16

1/2 P_{rock} 0.01 105.38 1298 105.37

Set TBM. 4.44 100.94

19+00 9.6 95.8

+24 9.2 96.2

+31 10.6 94.8

+35 9.6 95.8

+50 8.3 97.1

20+00 4.6 100.8

1/2 P_{rock} 12.39 117.33 0.44 104.94

+25 13.9 103.4

+50 10.3 107.0

20+57 BK. BC 9.3 108.0

20+60⁵⁸ AH.

20+95 POC X PT 4.4 112.9

21+00 3.7 113.6

1/2 P_{rock} 11.53 128.23 0.63 116.70

21+50 8.0 120.2

22+00 4.5 123.7

22+04²² P.1 4.2 124.0

Bolt Ely end Culv. Adwell, So Side Alvarado Fwy.

1/2" I.P. on fence line 30' S. Sta. 19+00

ALVARADO PIPELINE
Proposed Reloc. Prelim.
& Profile

9/26/56

27

| | | | |
|------------------------|-----------|--------|---|
| | 128.23 | | |
| 22+50 | | 3.4 | 124.8 |
| 22+66 ⁹⁴ BK | | 3.6 | 124.6 |
| 21+61 ²⁵ AH | | | |
| TI _{rock} | 2.50 | 120.54 | 10.19 118.04 |
| CK BM | | 8.36 | 112.18 = 112.16 |
| | (+ 32.62) | | (- 32.60) |
| | 3.79 | 74.65 | 71.18 (FB 757) 70.86 (Harden Bridge) |
| 47+49 ³² EC | | 10.7 | 64.0 |
| 48+00 | | 10.4 | 64.3 |
| +37 | | 13.8 | 60.9 |
| +40 | | 10.9 | 63.8 |
| +45 | | 10.4 | 64.3 |
| +50 | | 7.5 | 67.2 |
| +58 ² | | 3.23 | 71.42 |
| +60 ³ | | 2.62 | 72.03 |
| +61 ² | | 3.14 | 71.51 |
| +75 ¹⁹ | | 2.94 | 71.71 |
| +88 | | 2.93 | 71.72 |

BM on wingwall of Bridge See FB 757

Bottom of Road embankment

Begin AC Berm

Top AC Berm

Begin AC pave

Q Mission Gorge Rd

End AC pave Mission Gorge Rd

9/26/56

28

74.65

| | | | |
|------------------------|------|-------|-------|
| 48+41 | | 3.20 | 71.45 |
| 49+00 | | 7.1 | 67.6 |
| +11 | | 13.9 | 60.8 |
| JP | 0.29 | 69.00 | 11.94 |
| | | | 62.71 |
| 49+36 | | 13.3 | 55.7 |
| +42 | | 15.7 | 53.3 |
| +47 | | 12.1 | 56.9 |
| +63 | | 8.5 | 60.5 |
| +73 | | 3.4 | 65.6 |
| 50+00 | | 3.3 | 65.7 |
| +37 ⁶² BC | | 3.0 | 66.0 |
| +50 | | 3.2 | 65.8 |
| 51+00 | | 3.0 | 66.0 |
| +41 ⁵⁵ EC | | 3.0 | 66.0 |
| +50 | | 3.0 | 66.0 |
| 52+00 | | 4.1 | 64.9 |
| +50 | | 4.4 | 64.6 |
| 52+65 ⁸⁵ BC | 317 | 68.15 | 4.02 |
| | | | 64.98 |
| 53+00 | | 3.7 | 64.5 |

Top Road embankment

Bott " "

49+70

32

36

70

47

20

42

Top of Creek Bank

Bott of Creek

Turn on Binney

9/25/56

29

68.15

| | | | |
|----------------------|-------|-------|-------|
| 53+50 | | 4.7 | 63.5 |
| 54+00 | | 3.9 | 64.3 |
| +50 | | 5.0 | 63.2 |
| 55+00 | | 5.1 | 63.1 |
| +50 | | 5.4 | 62.8 |
| +60 ⁰⁴ FC | | 5.3 | 62.9 |
| +75 | | 5.5 | 62.7 |
| 56+00 | | 5.6 | 62.6 |
| +25 | | 5.6 | 62.6 |
| +50 | | 5.5 | 62.7 |
| +75 | | 4.8 | 63.4 |
| +93 | | 0.1 | 68.1 |
| | 3.99 | 70.79 | 1.35 |
| 57+08 ⁶ | | 16.4 | 54.4 |
| +23 ⁶ | | 15.3 | 55.5 |
| +36 ⁵⁷ FC | | 8.6 | 62.2 |
| +50 | | 6.0 | 64.8 |
| +71 | | 1.9 | 68.9 |
| TP | 12.81 | 82.53 | 1.07 |
| | | | 69.72 |

Top of Drainage bank for Freeway
 Turn on wingwall of Drainage Culvert
 Bottom of Drainage Ditch
 " " " "

West
Williams
Paulson

943
772
675
772
765
194
4.5
82
19
40.3
19

30

9/26/56

82.53

| | | | |
|--------------------|-------|-------|------------|
| 57+94 ⁵ | | 4.3 | 78.2 |
| 58+28 ⁵ | | 0.1 | 82.4 |
| TR | 7.02 | 88.77 | 0.78 81.75 |
| 58+30 | | 5.48 | 83.29 |
| +38 | | 6.26 | 82.51 |
| +72 ³ | | 4.89 | 83.88 |
| +73 | | 4.06 | 84.71 |
| +89 ² | | 5.9 | 82.9 |
| 59+08 | | 4.18 | 84.59 |
| +46 ³ | | 3.39 | 85.38 |
| +49 | | 3.85 | 84.92 |
| +57 ³ | | 3.34 | 85.43 |
| +67 ² | | 1.72 | 87.05 |
| +82 ³ | | 1.65 | 87.12 |
| +98 ⁰² | | 1.88 | 86.89 |
| 60+05 | | 2.50 | 86.27 |
| 0.65 | 88.37 | 1.05 | 87.72 |
| 0.91 | 80.66 | 8.62 | 79.75 |
| 5.91 | 80.40 | 6.17 | 74.49 |
| | | 9.60 | 70.80 = |

Begin AC Berm N side Freeway

Top AC Berm

Begin AC pave of Freeway

end AC pave on Center Island

Top of Berm on Center "

Begin AC pave South Lane of Freeway

end " " " " " "

Q of AC Cutler

end of AC Cutler

Begin AC pave of Access Road

Q Access Road

Q existing Alvarado Pl.

Cutter Line Sky edge AC pave
18' E of 59+82

Turn on Pl RR spike of F.R.F.S line

70.86 BM

Alvarado Pipeline
Proposed Pl. Relocation Retracement
and ties

57+36⁵⁷ EC 52° 29' 40" Lt (Turned)
R = 192.74
T = 95.00'
L = 176.53'

53+60⁰⁴ PRC
19° 38' 35" Rb (Turned)
R = 86.0
T = 148.53
L = 294.19

52+65⁸⁵ BC

51+41⁵⁵ EC

Δ = 29° 45' 35" Turned
R = 200'
T = 53.15
L = 103.91

50+37⁶⁴ BC

48+75¹⁹

POJ EV Nail @ Mission

Qorse Rd.



West
Williams
Kellhofer
Bull

31

5/20/57

Alvarado Pt Cont
Ties To State Hwy R.P.'s

48+60⁹² Our Survey = 48+60²² State Hwy Survey Fairmount

5/20/57

56+29⁸³

5.06 RL Fd State Hwy 2"x2" H+T
(10) RP to 2 36" RCSP 56+25

56+29⁸³

5.06 Fd State Hwy 2"x2"
H+T (10) RP to 2 36"
RCSP 56+25

Calc
53+49⁷²

Calc
18.52 RL Fd State Hwy 2x2 H+T
(10) RP 53+50 & Pipe

53+51⁰⁶

18.57 Fd State Hwy
2"x2" H+T (10) RP
53+50 & Pipe

Calc
52+66.75

(Calc)
13.32 RL Fd State Hwy 2"x2" H+T
"50" 291.26 TO 2 191+92²⁰

52+67⁰²

13.32 Fd State Hwy
2"x2" H+T
"50" 291.26
TO 2 191+92²⁰

(Calc)
52+05³⁹

(Calc)
10.21 RL Fd State Hwy 2"x2"
H+T (75) RP to 2 193+15⁵⁶ EC

52+01²⁸

10.97 Fd State Hwy 2"x2"
H+T (75) RP TO
2 193+15⁵⁶ EC

(Calc)
52+00⁸²

(Calc)
12.43 RL Fd State Hwy 2"x2"
H+T (10) RP TO Sta 52+00

12.44 Fd State Hwy 2"x2"
(10) RP TO Sta
52+00 & Pipe

(Calc)
51+42⁵⁹

(Calc)
1.65 RL Fd State Hwy 2"x2" H+T
51+41⁰³ EC &

51+42.26

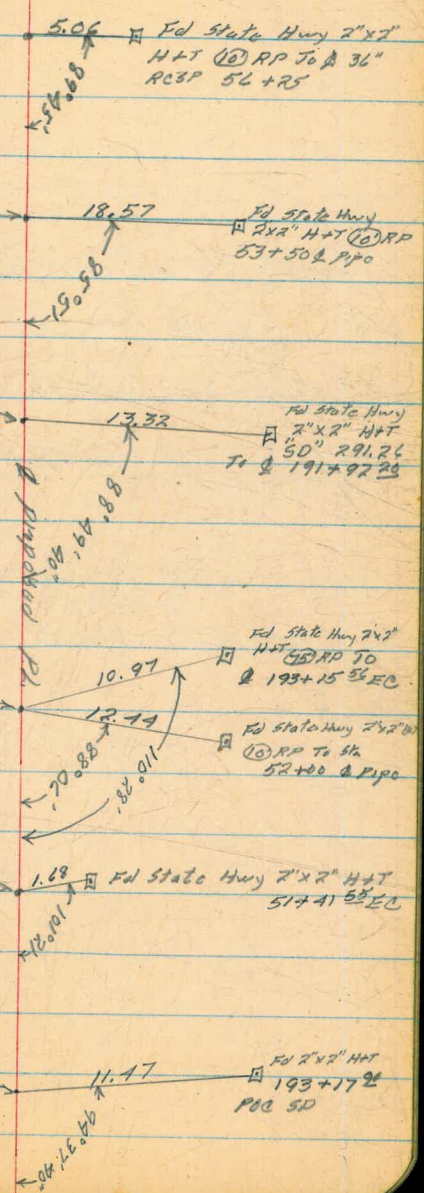
1.68 Fd State Hwy 2"x2" H+T
51+41⁰³ EC

(Calc)
52+28²⁴

(Calc)
11.13 RL FD RD POB 193+17⁹⁰ POB
S.D. 2"x2" H+T State Hwy

51+27³¹

11.17 Fd 2"x2" H+T
193+17⁹⁰
POB SD



ELEV. ON TOP OF ALVARADO
P/L RELOCATION

AS PER STATE HWY PLANS
WEST END CONNECTION

TP 7.44 92.03 84.59
8.33 83.70
9.57 82.46

EAST END CONNECTION

BM 10.47 122.63 112.16
SET TBM 0.25 117.16 5.72 116.91
9.72 107.44
10.02 107.14
TP 5.28 122.19 0.25 116.91
CK. BM 10.02 112.17 = 112.16

12/24/57
SHOREY
SMITH
O'BRIEN
HALBERT

59408 Pg. 30

TOP OF RELOCATED PIPE AT STA. 59+81²

TOP OF ORIG. ALVARADO PIPE AT STA. 59+98²⁷

NAIL IN P.P.

20+79⁶ TOP OF PIPE ON ORIG. ALVARADO
PIPELINE AT

21+23⁴ AS PER ALVARADO P/L RELOCATION
PLANS

34.

Howard
~~Alvarado~~ Elmer
1:20 P.M.
talked to
him

(ET) ~~Paint elev, SE
corner each step -
west stairs - Ft & Tent~~

(ET) ~~Flag 24" outlet
and Access MH on
72"~~

FD 793 Field measure E,
end Alvarado conn.
at Fairmount interchange

(ET) ~~Paint elev. at
even foot mark on
each of 1/2 level rods~~

FD 757

22+04²²

22+58.73
56.28

22.04.22
2095

22+02.45

109.22

62.72

2790.81
2261.25

529.56
62.72

592.28 =

2790.81
592.28
2198.53

P.I. 22+04²²

2790.81
2254.76
536.05
56.28
592.33

2148.16
2099.00
49.16

N

UNIV. AVE

W.V. 9

Top Stem 18
THAN BM on CURB

4.7' To bot pipe

EI 305.3

BM. 310.02

W.V.

Top STEM
33 lower
THAN BM on
CURB

6.2 to bot
pipe

EI 303.8

54

Euclid

EI 244.0

W.V. 15' lower than
Elev. L&T at E Inter.

EI 242.4

W.V. 3' lower than
L&T Elev

L&T. EI. 245.54

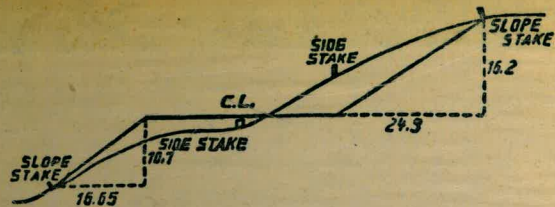
W.V.
2.6 lower
than L&T

EI 242.9

3.5
8
2.7

902

Please Return to
City of San Diego Water Dept.
Room 268 Civic Center
Telephone Main 5161



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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