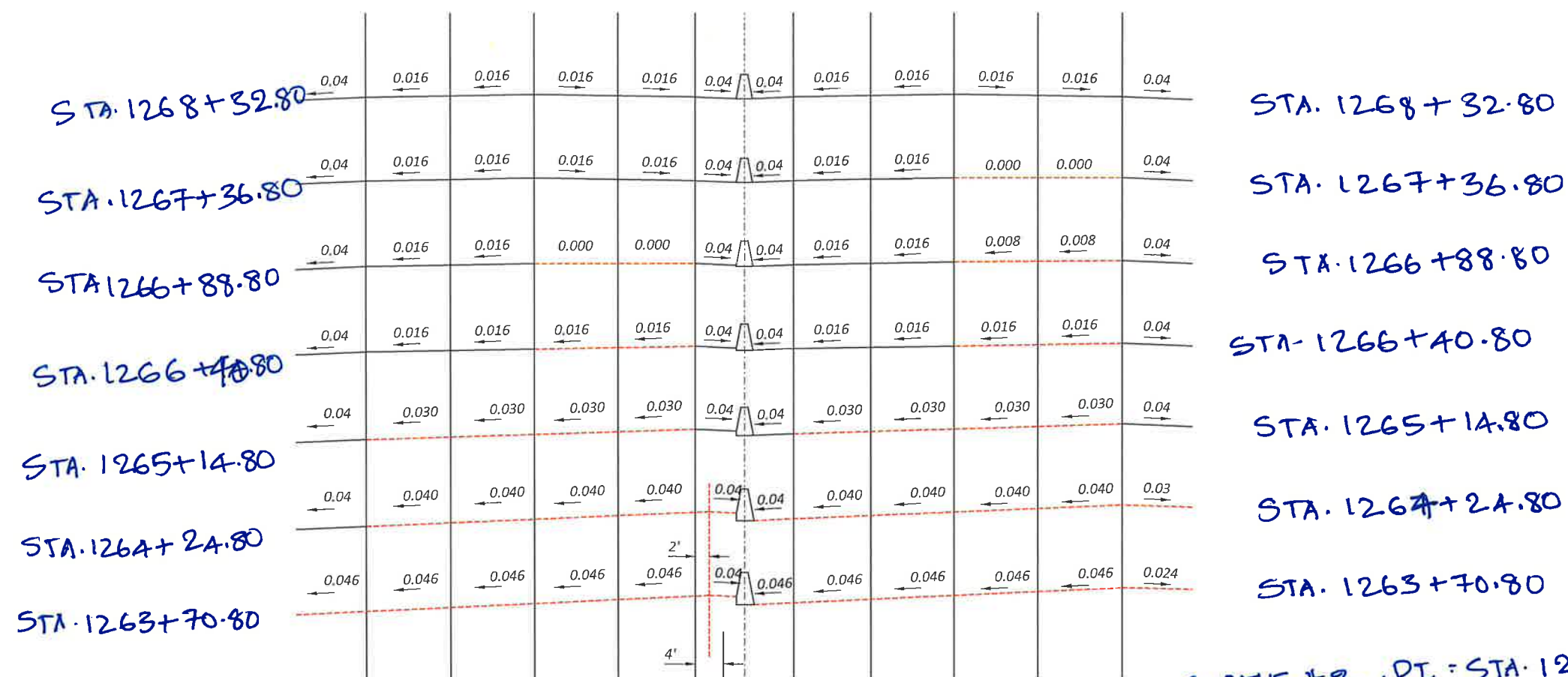




CURVE #2

CURVE #2, PI: STA 1243+94.77
 PC-STA 1214+64.11
 PT- STA 1264+80

STA 1215+86.11

STA 1215+32.11

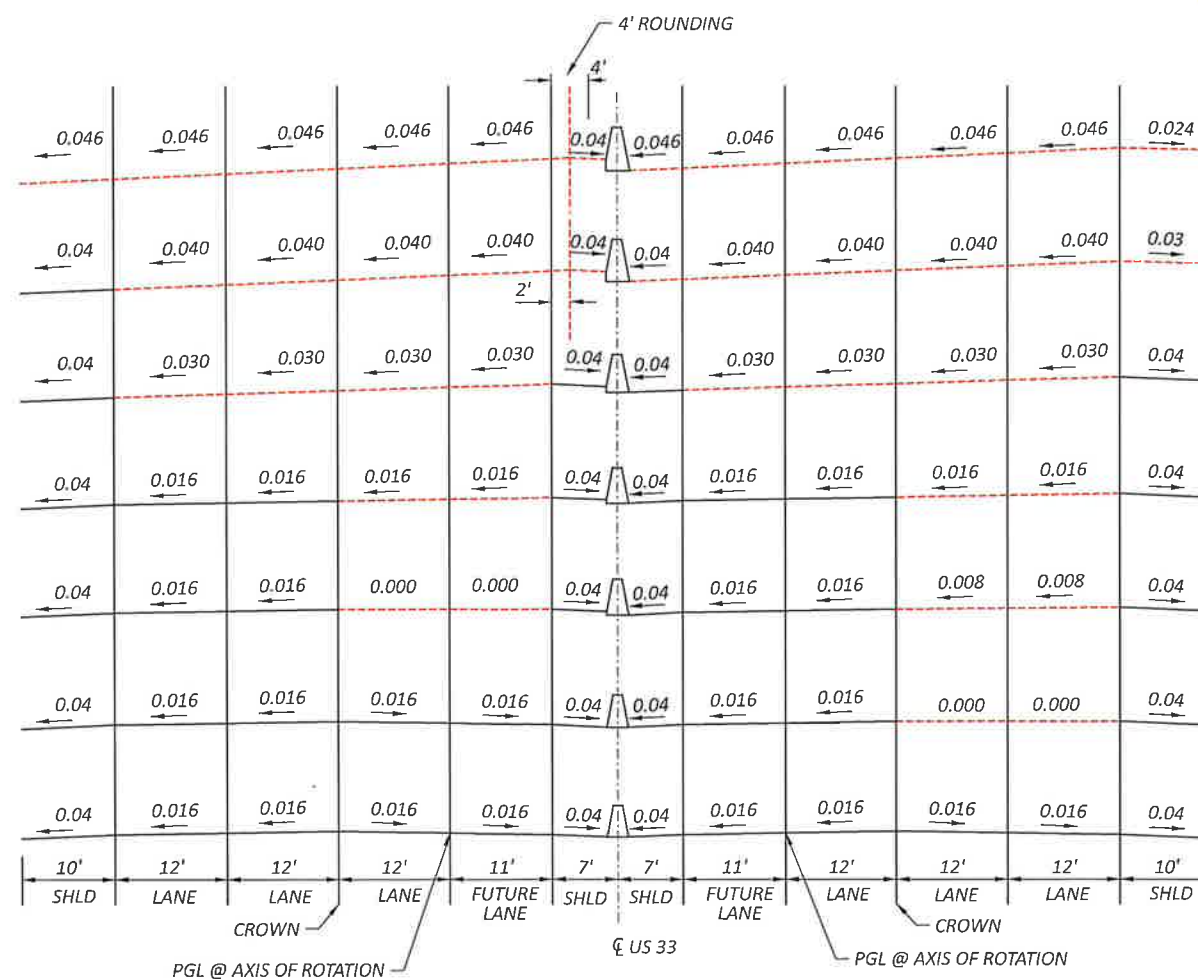
STA 1214+42.11

STA 1213+16.11

STA 1212+68.11

STA 1212+20.11

STA 1211+24.11



STA 1215+86.11

STA 1215+32.11

STA 1214+42.11

STA 1213+16.11

STA 1212+68.11

STA 1212+20.11

STA 1211+24.11

$$T_R = (2A)(0.016)(250) = 96'$$

$$L = L_m + L_{r2}$$

$$L_{r1} = T_R = 96'$$

$$L_{r2} = \frac{(36)(0.03)(250)}{2} = 270'$$

$$L_v = 366'$$

$$\frac{2}{3} \text{ on Tangent} = \frac{2}{3} \times 366 = 244'$$

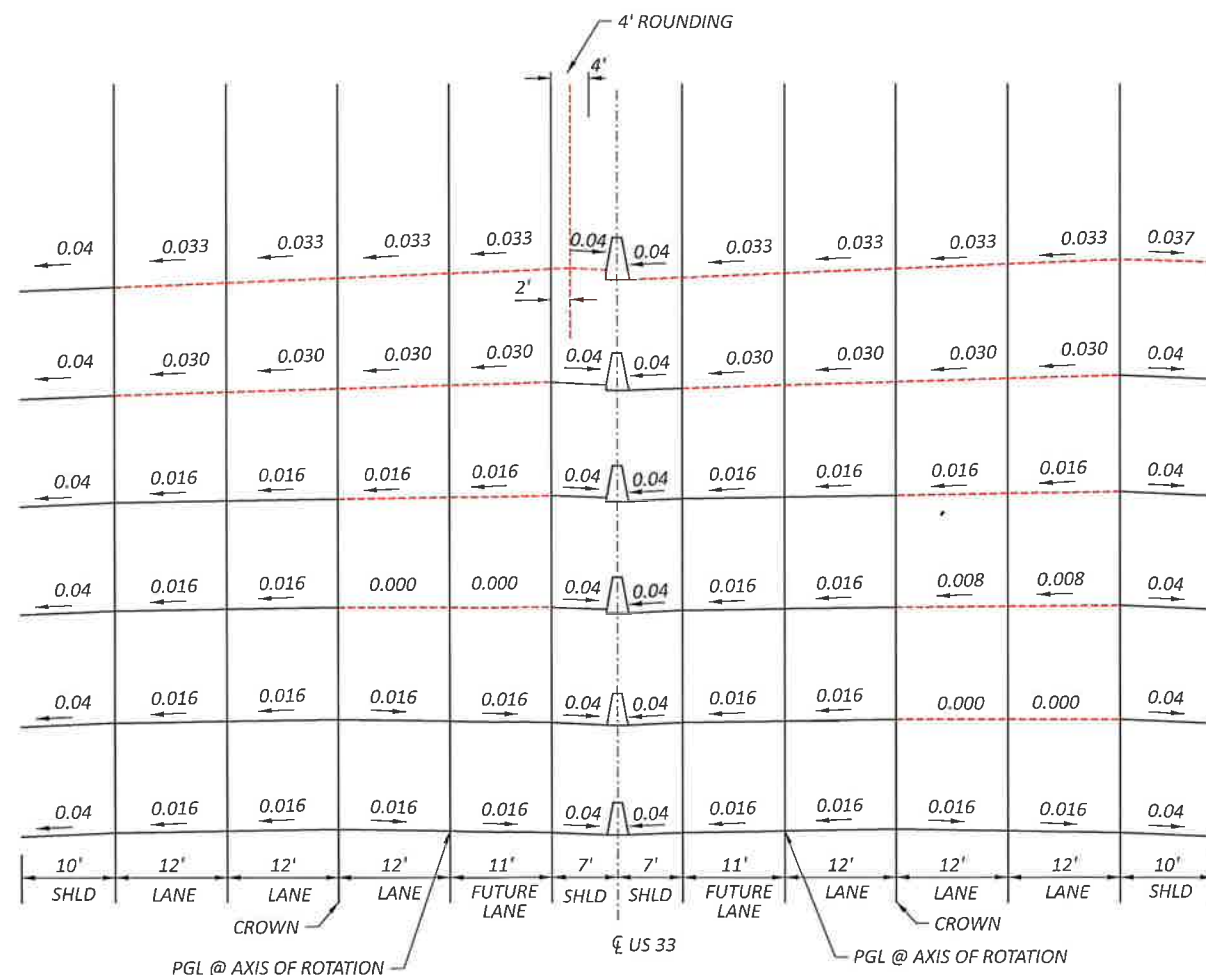
$$\frac{1}{3} \text{ on Curve} = \frac{1}{3} \times 366 = 122'$$

STA. 1349+91.20
 STA. 1349+43.20
 STA. 1348+95.20
 STA. 1347+69.20
 STA. 1347+42.20



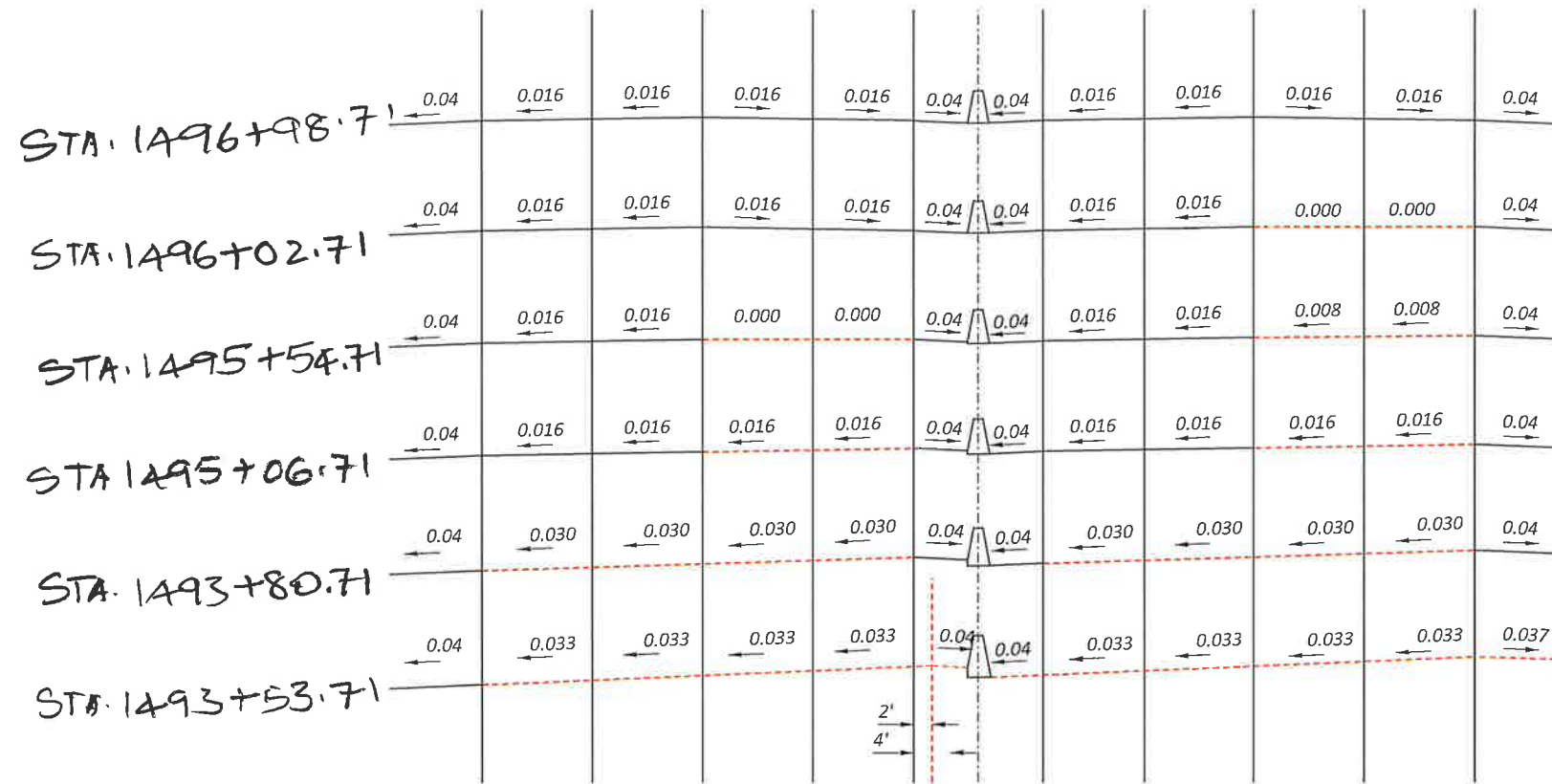
CURVE # 4
 STA. 1350+87.20
 STA. 1349+91.20
 STA. 1349+43.20
 STA. 1348+95.20
 STA. 1347+69.20
 STA. 1347+42.20

STA. 1333+99.45
 STA. 1333+72.45
 STA. 1332+46.45
 STA. 1331+98.45
 STA. 1331+50.45



STA. 1333+99.45
 STA. 1333+72.45
 STA. 1332+46.45
 STA. 1331+98.45
 STA. 1331+50.45
 STA. 1330+54.45

CURVE # 4
 PI - STA. 1340+75.22
 PC - STA. 1333+16.45
 PT - STA. 1348+25.20
 $T_R = (24)(0.016)(250)$
 $= 96$
 $L_R = L_{v1} + L_{v2}$
 $L_{v1} = T_R = 96$
 $L_{v2} = (36)(0.033 - 0.016)$
 (250)
 $= 153'$
 $L_R = 96 + 153$
 $= 249$
 $\frac{1}{3} L_R = 83$
 $\frac{2}{3} L_R = 166'$



CURVE #6

STA 1496+98.71

STA 1496+02.71

STA 1495+54.71

STA 1495+06.71

STA 1493+80.71

STA 1493+53.71

CURVE # 6

PI- STA 1485+56.44

PG- STA 1476+61.85

PT- STA 1494+36.71

$e = 0.033$

$T_R = (24)(0.016)(250)$

$= 96$

$L_R = L_{R1} + L_{R2}$

$L_{R1} = 96 = T_R$

$L_{R2} = \frac{(0.033 - 0.016)}{(36)(250)}$

$= 153$

$L_R = 153 + 96$

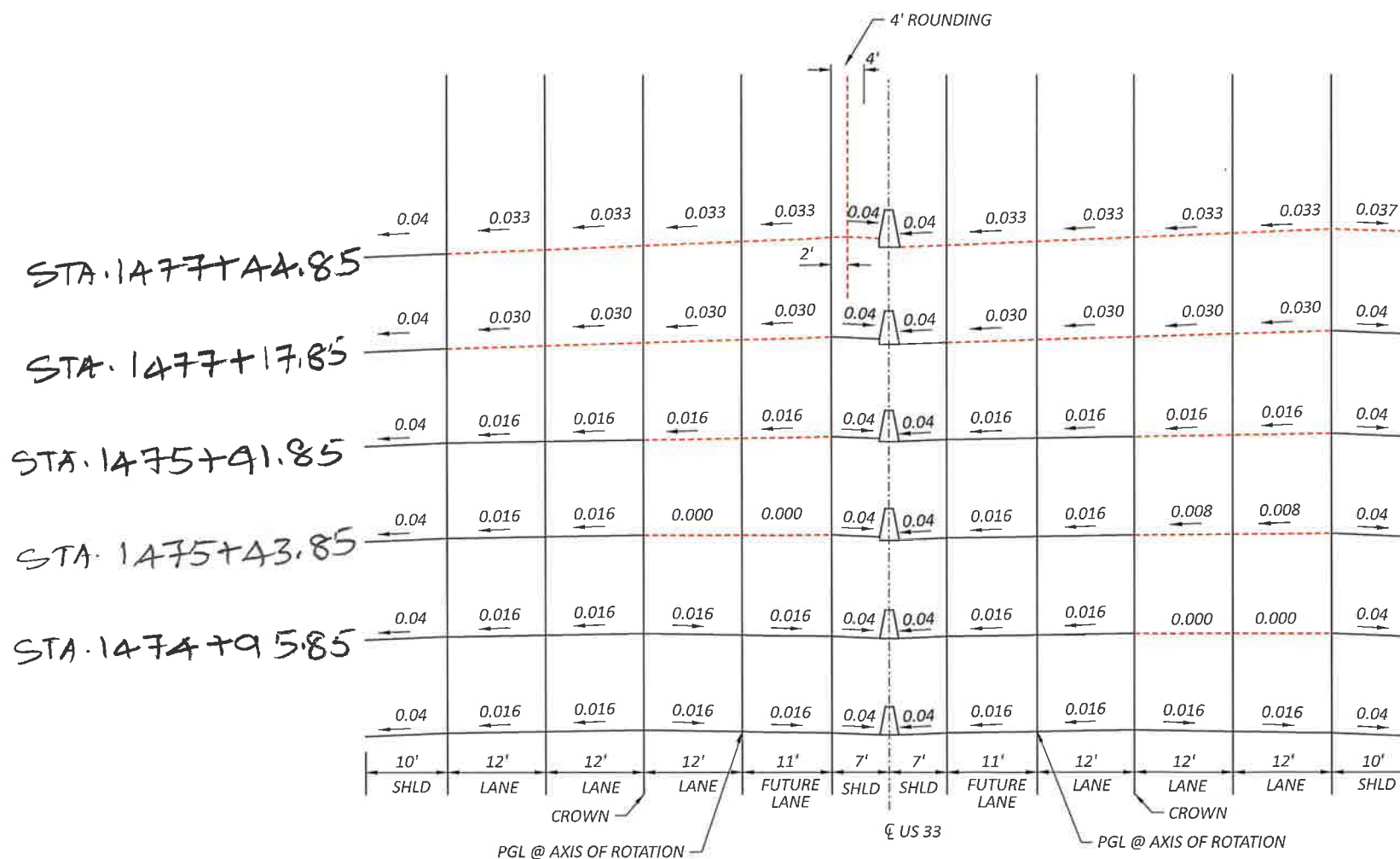
$= 249$

$\frac{2}{3} L_R = \frac{2}{3}(249)$

$= 166'$

$\frac{1}{3} L_R = \frac{1}{3}(249)$

$= 83'$



STA 1477+44.85

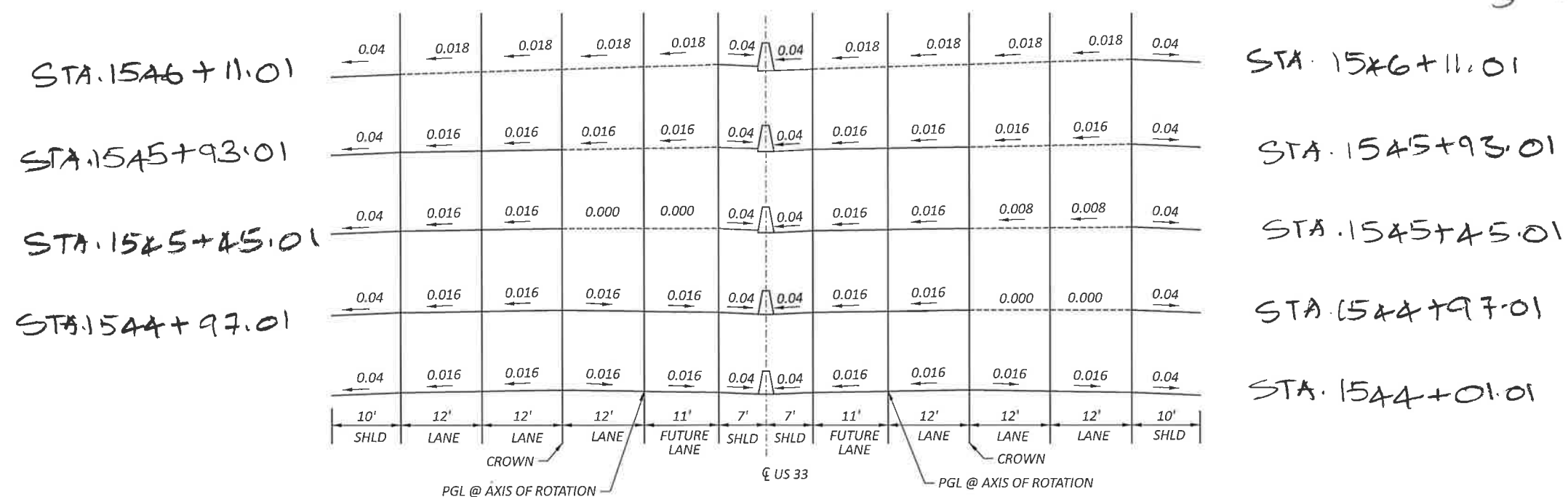
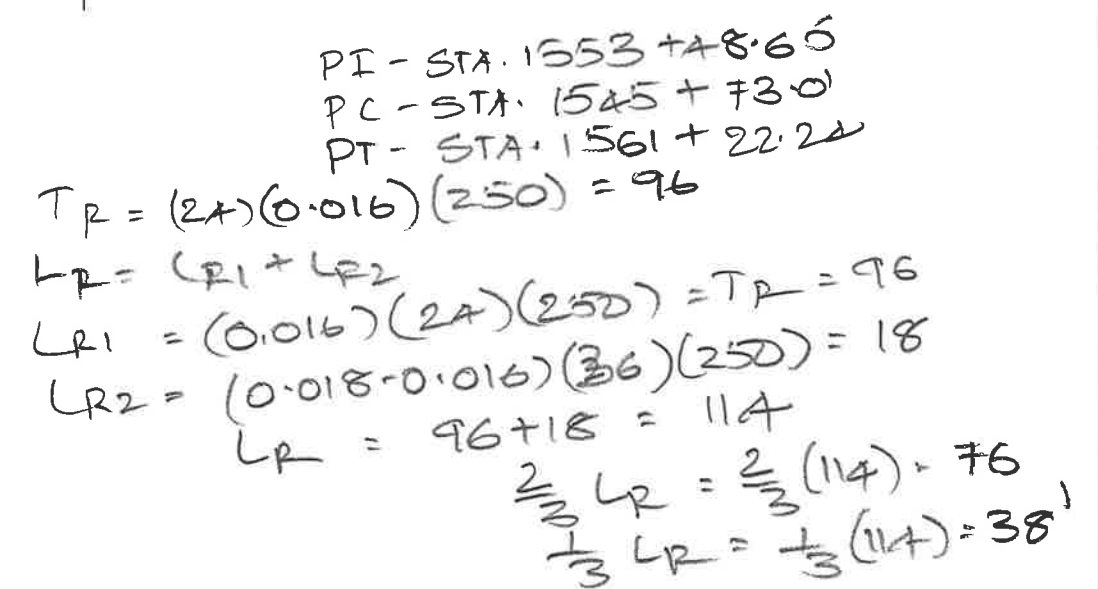
STA 1477+17.85

STA 1475+91.85

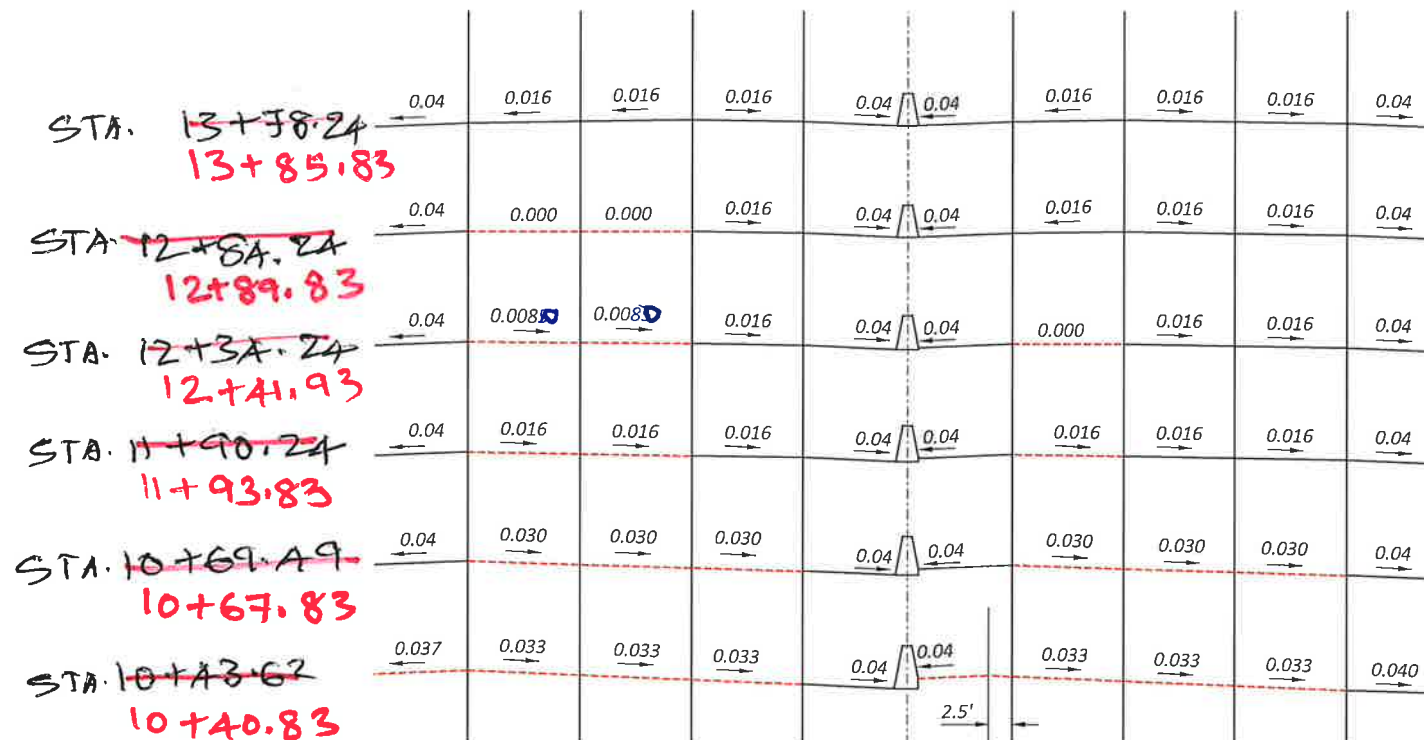
STA 1475+43.85

STA 1474+95.85

STA 1473+99.85

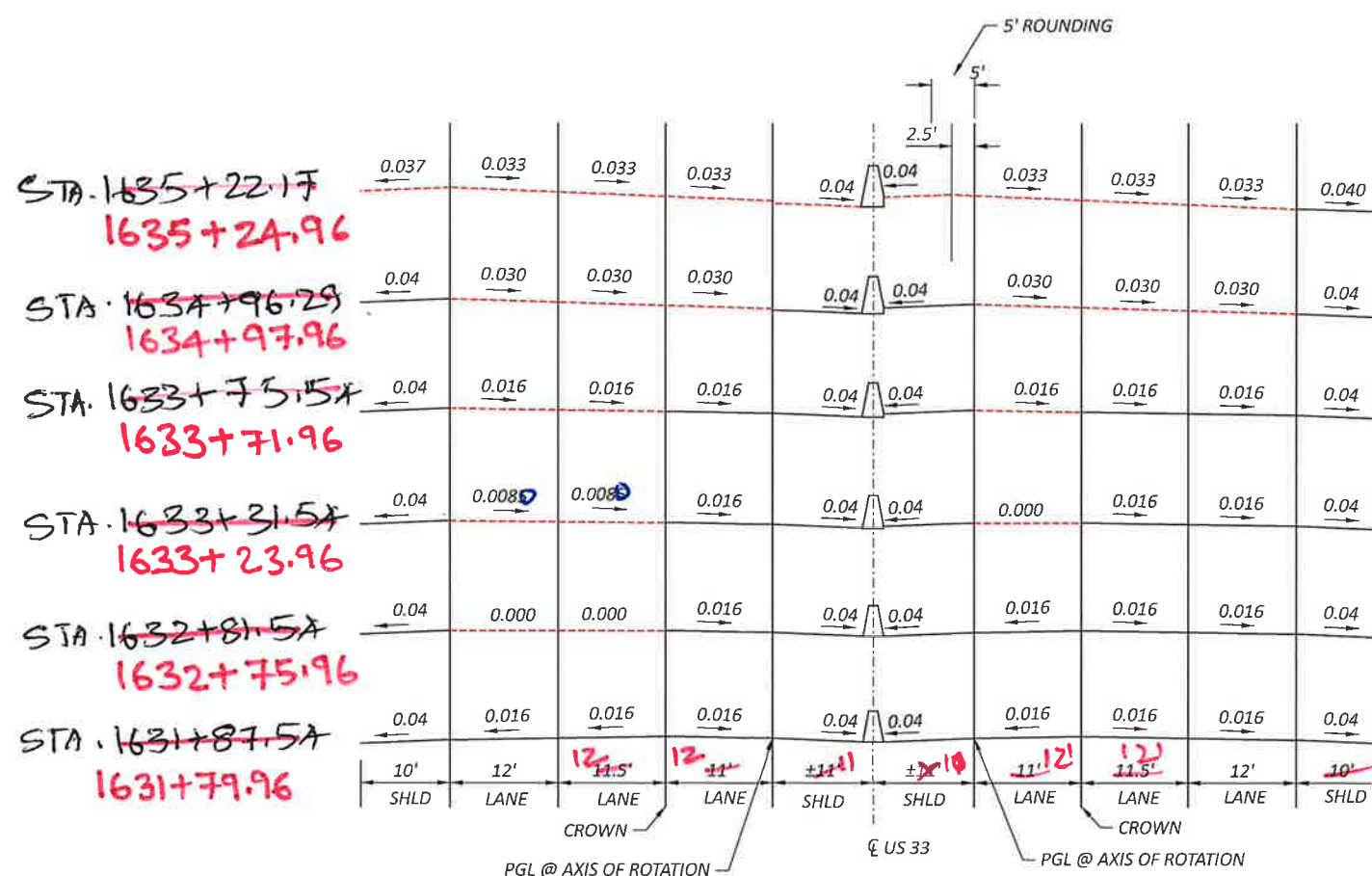


CURVE # 8



STA. 12+84.24
12+89.83
 STA. 12+34.24
12+41.93
 STA. 11+90.24
11+93.83
 STA. 10+69.49
10+67.83
 STA. 10+43.62
10+40.83

$PC = 1634+40.96$
 $PT = 11+23.83$
 $TR = (2A)(0.016)(250) = 96$
 $LR = LR_1 + LR_2$
 $LR_1 = (2A)(0.016)(250) = 96$
 $LR_2 = (36)(0.033-0.016)(250) = 153$
 $LR = 96 + 153 = 249$
 $4/3 \text{ on Tangent} = \frac{2}{3}(249) = 166$
 $1/3 \text{ on Curve} = \frac{1}{3}(249) = 83$



STA. 1635+22.17
1635+24.96
 STA. 1634+96.29
1634+97.96
 STA. 1633+75.54
1633+71.96
 STA. 1633+31.54
1633+23.96
 STA. 1632+81.54
1632+75.96

STA ~~38+45.33~~
 38+61.95
 STA ~~37+95.33~~
 38+13.95
 STA ~~37+51.33~~
 37+65.95
 STA ~~36+30.58~~
 36+39.95
 STA ~~35+44.33~~
 35+49.95
 STA 34+14.95 (CS)



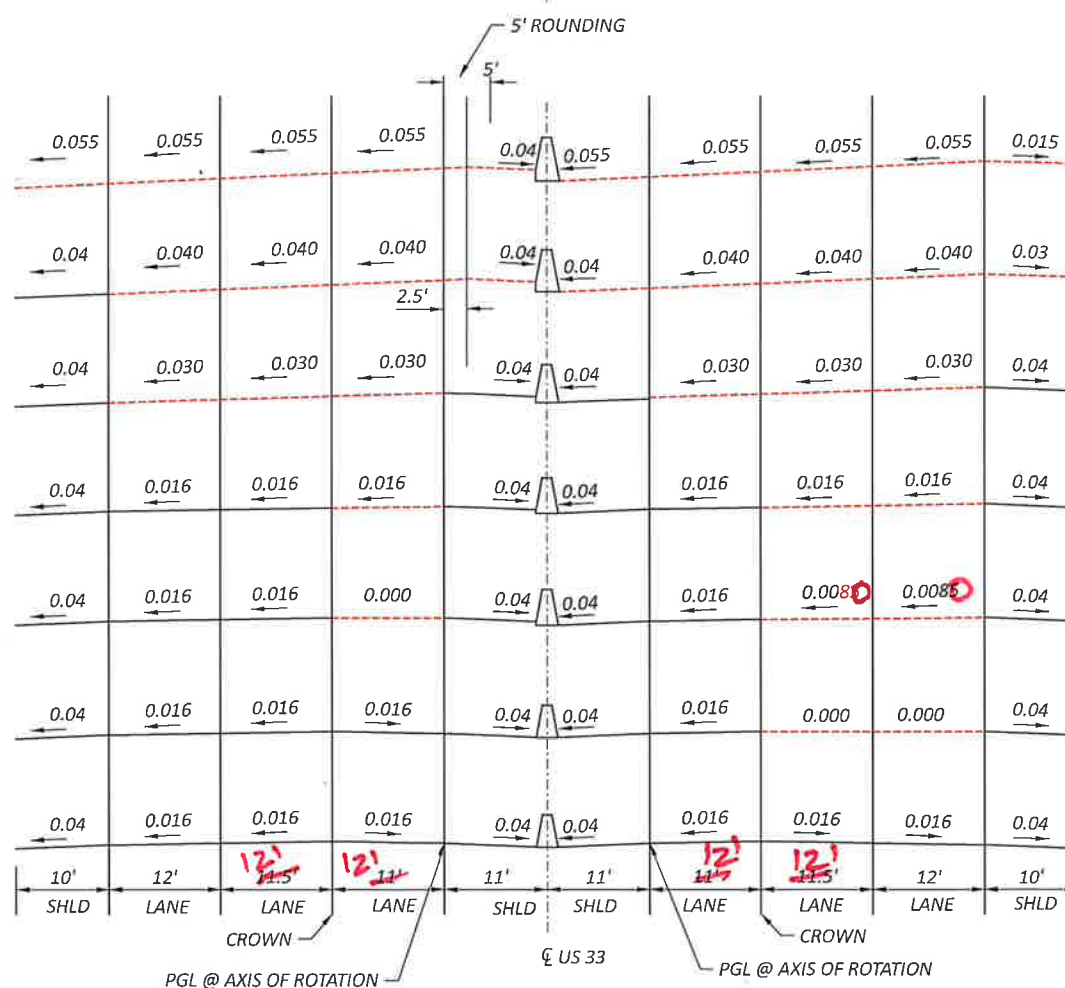
CURVE #9

STA ~~39+39.33~~
 39+57.95
 STA ~~38+45.33~~
 38+61.95
 STA ~~37+95.33~~
 38+13.95
 STA ~~37+51.33~~
 37+65.95
 STA ~~36+30.58~~
 36+39.95
 STA ~~35+44.33~~
 35+49.95
 STA 34+14.95 (CS)

USING EXISTING
 SPIRAL, $L_s = 300'$

Fix SC and CS station's
 AND WORK BACKWARD AND
 FORWARD

STA 18+66.61 (SC)
 STA ~~17+37.21~~
 17+31.61
 STA ~~16+50.99~~
 16+41.61
 STA ~~15+30.24~~
 15+15.61
 STA ~~14+86.21~~
 14+67.61
 STA ~~14+36.21~~
 14+19.61



STA 18+66.61 (SC) ✓
 STA ~~17+37.21~~
 17+31.61
 STA ~~16+50.99~~
 16+41.61
 STA ~~15+30.24~~
 15+15.61
 STA ~~14+86.21~~
 14+67.61
 STA ~~14+36.21~~
 14+19.61
 STA ~~13+12.21~~
 13+23.61

$$T_2 = (24)(6.016)(250) = 96$$

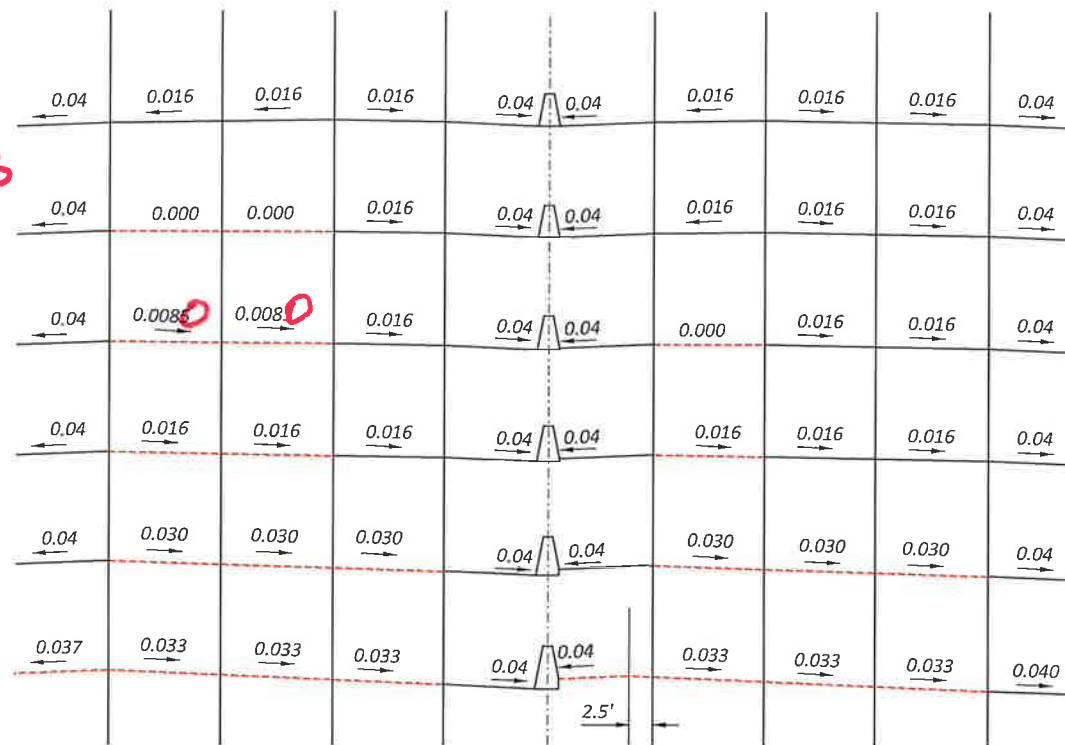
$$L_2 = L_1 + L_2$$

$$= L_1 = (0.016)(24)(250) = 96'$$

$$= L_2 = (24)(6.053 - 0.016)(250) = 351$$

$$L_s = 351 + 96 = 447'$$

STA ~~59+17.85~~
~~59+25.53~~
 STA ~~58+23.95~~
~~58+29.53~~
 STA ~~57+73.95~~
~~57+81.53~~
 STA ~~57+29.95~~
~~57+33.53~~
 STA ~~56+09.20~~
~~56+07.53~~
 STA ~~55+83.32~~
~~55+80.53~~



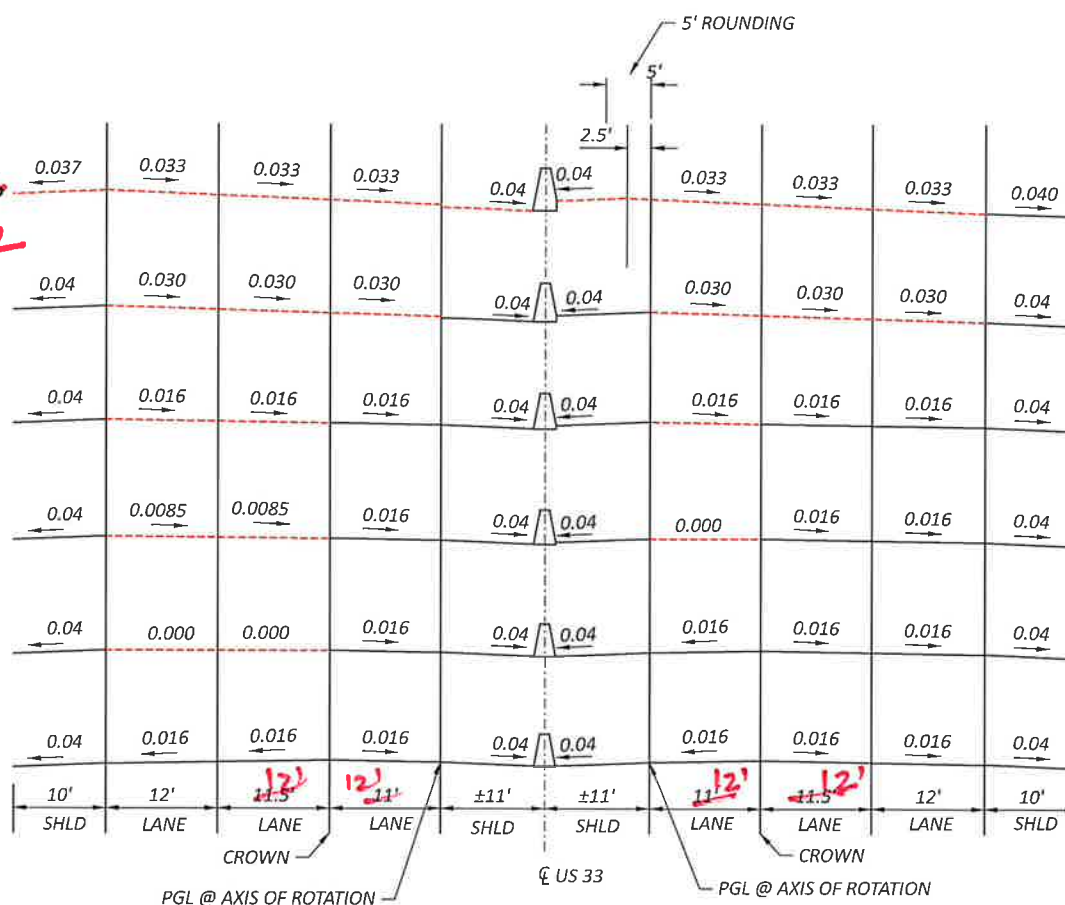
CURVE #10

STA ~~58+23.95~~
~~58+29.53~~
 STA ~~57+73.95~~
~~57+81.53~~
 STA ~~57+29.95~~
~~57+33.53~~
 STA ~~56+09.20~~
~~56+07.53~~
 STA ~~55+83.32~~
~~55+80.53~~

PC - STA. 43+59.22
 PT - STA. 56+63.53
 $TR = (2 \times) (0.016) (250) = 96$
 $L_R = L_{R1} + L_{R2}$
 $L_{R1} = (2 \times) (0.016) (250) = 96$
 $L_{R2} = (36) (0.033 - 0.016) (250) = 153$
 $L_R = 96 + 153 = 249$

$= \frac{2}{3} (249) = 166$
 $= \frac{1}{3} (249) = 83$

STA ~~44+39.43~~
~~44+42.22~~
 STA ~~44+13.55~~
~~44+15.22~~
 STA ~~42+92.80~~
~~42+89.22~~
 STA ~~42+48.80~~
~~42+41.22~~
 STA ~~41+98.80~~
~~41+93.22~~
 STA ~~40+98.80~~
~~40+97.22~~



STA ~~44+39.43~~
~~44+42.22~~
 STA ~~44+13.55~~
~~44+15.22~~
 STA ~~42+92.80~~
~~42+89.22~~
 STA ~~42+48.80~~
~~42+41.22~~
 STA ~~41+98.80~~
~~41+93.22~~