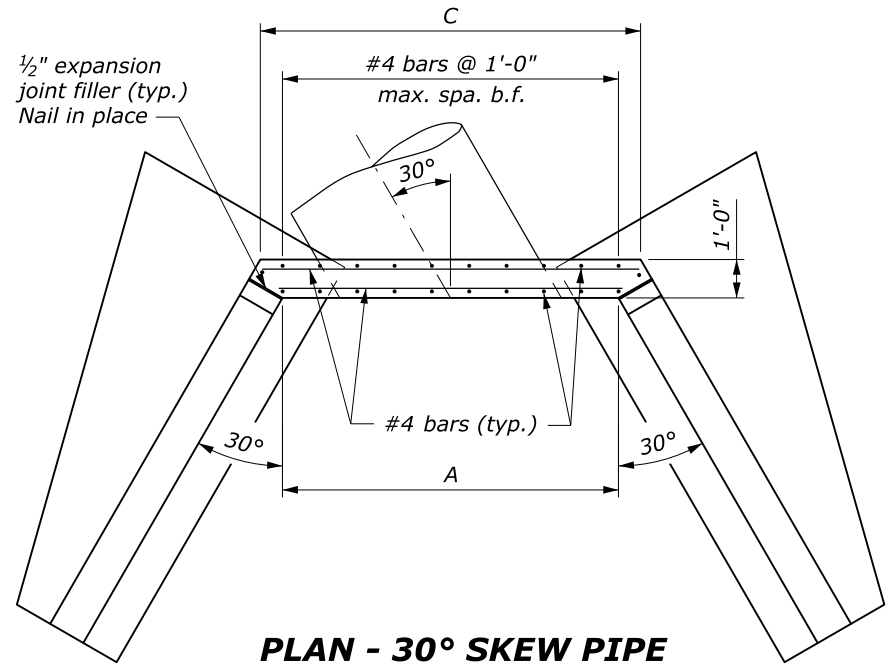
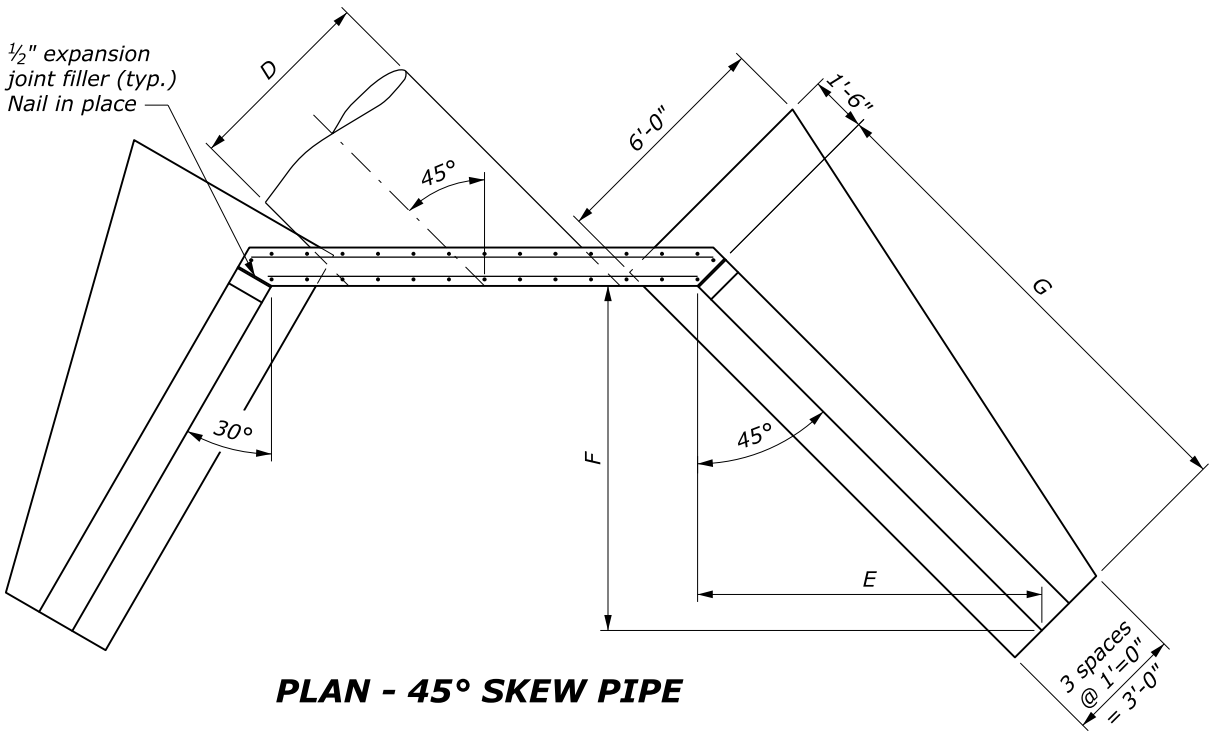
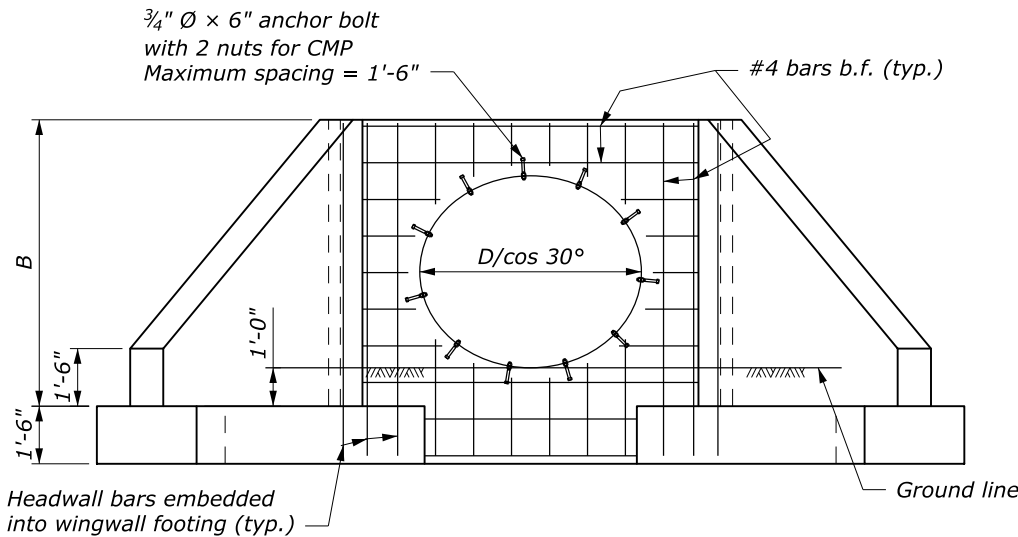




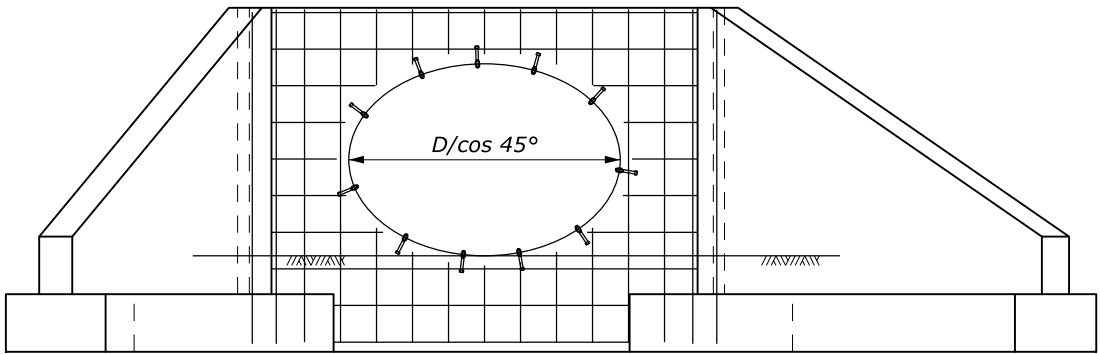
PLAN - 30° SKEW PIPE



PLAN - 45° SKEW PIPE



FRONT ELEVATION - 30° SKEW PIPE  
(Showing headwall reinforcement)



FRONT ELEVATION - 45° SKEW PIPE  
(Showing headwall reinforcement)

DIMENSIONS AND QUANTITIES FOR 30° SKEW PIPE

|                       |              | D (Diameter of pipe culvert) |      |      |      |      |      |      |      |
|-----------------------|--------------|------------------------------|------|------|------|------|------|------|------|
|                       |              | 42"                          | 48"  | 54"  | 60"  | 66"  | 72"  | 78"  | 84"  |
| 1V:1.5H<br>fill slope | Conc. (CUYD) | 8.4                          | 9.4  | 10.5 | 11.6 | 12.7 | 13.9 | 15.1 | 16.4 |
|                       | Steel (LB)   | 682                          | 764  | 853  | 908  | 1016 | 1080 | 1196 | 1294 |
| 1V:2H<br>fill slope   | Conc. (CUYD) | 10.4                         | 11.7 | 13.0 | 14.5 | 15.9 | 17.4 | 18.9 | 20.5 |
|                       | Steel (LB)   | 829                          | 938  | 1036 | 1135 | 1245 | 1355 | 1461 | 1598 |

DIMENSIONS AND QUANTITIES FOR 45° SKEW PIPE

|                       |              | D (Diameter of pipe culvert) |            |             |             |             |             |             |             |
|-----------------------|--------------|------------------------------|------------|-------------|-------------|-------------|-------------|-------------|-------------|
|                       |              | 42"                          | 48"        | 54"         | 60"         | 66"         | 72"         | 78"         | 84"         |
| 1V:1.5H<br>fill slope | A            | 8'-11 1/4"                   | 9'-8"      | 10'-4 1/4"  | 11'-0 3/4"  | 11'-9 1/4"  | 12'-6"      | 13'-2 1/4"  | 13'-11"     |
|                       | C            | 9'-11 1/4"                   | 10'-8"     | 11'-4 1/4"  | 12'-1"      | 12'-9 1/4"  | 13'-6"      | 14'-2 1/4"  | 14'-11"     |
|                       | E            | 6'-8 3/4"                    | 7'-5 3/4"  | 8'-2 1/2"   | 8'-11 3/4"  | 9'-8 1/2"   | 10'-5 3/4"  | 11'-2 3/4"  | 12'-0"      |
|                       | F            | 6'-8 3/4"                    | 7'-5 3/4"  | 8'-2 1/2"   | 8'-11 3/4"  | 9'-8 1/2"   | 10'-5 3/4"  | 11'-2 3/4"  | 12'-0"      |
|                       | G            | 9'-6"                        | 10'-7"     | 11'-7 1/2"  | 12'-8 1/4"  | 13'-9"      | 14'-10"     | 15'-10 1/4" | 16'-11 1/4" |
|                       | Conc. (CUYD) | 9.5                          | 10.6       | 11.8        | 13.1        | 14.4        | 15.7        | 17.1        | 18.5        |
| 1V:2H<br>fill slope   | Steel (LB)   | 787                          | 868        | 977         | 1051        | 1177        | 1249        | 1370        | 1490        |
|                       | E            | 8'-11 1/2"                   | 9'-11 3/4" | 10'-11 1/2" | 11'-11 3/4" | 12'-11 1/2" | 13'-11 3/4" | 14'-11 1/2" | 15'-11 3/4" |
|                       | F            | 8'-11 1/2"                   | 9'-11 3/4" | 10'-11 1/2" | 11'-11 3/4" | 12'-11 1/2" | 13'-11 3/4" | 14'-11 1/2" | 15'-11 3/4" |
|                       | G            | 12'-8"                       | 14'-1 1/4" | 15'-6"      | 16'-11 1/4" | 18'-4"      | 19'-9 1/4"  | 21'-2"      | 22'-7"      |
|                       | Conc. (CUYD) | 11.7                         | 13.2       | 14.7        | 16.3        | 17.9        | 19.6        | 21.3        | 23.1        |
|                       | Steel (LB)   | 951                          | 1070       | 1190        | 1303        | 1440        | 1559        | 1695        | 1846        |

NOTE:

1. Use the 30° Skew Detail for skews greater than 15° to 37°30'. Use the 45° Skew Detail for skews greater than 37°30' to 45°.
2. Quantities shown in table are for one headwall and two wingwalls and are based on CMP. Concrete and steel quantities shown will be used as basis for final payment for headwall/wingwalls constructed according to this standard.
3. For dimensions and reinforcing details not shown, and additional notes see Standard 601-5.

NO SCALE