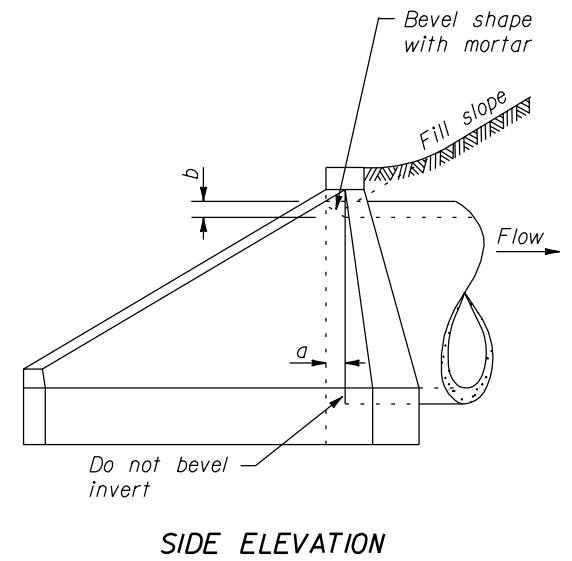


| DIMENSIONS AND QUANTITIES FOR WINGWALL | | | | | | | | |
|--|------|------|---|--|---|--|-----|-----|
| FOR CONCRETE PIPE | | | | | | | | |
| DIAMETER D OF PIPE | S | T | FILL SLOPE 1:1.5 | | FILL SLOPE 1:2 | | a | b |
| | | | m ³ CONC. ONE DOUBLE ENDWALL | INCREASE m ³ CONC. FOR EACH ADDITIONAL PIPE | m ³ CONC. ONE DOUBLE ENDWALL | INCREASE m ³ CONC. FOR EACH ADDITIONAL PIPE | | |
| 1050 | 1830 | 2895 | 3.692 | 0.972 | 4.200 | 0.960 | 140 | 90 |
| 1200 | 2085 | 3300 | 4.560 | 1.216 | 5.201 | 1.202 | 150 | 100 |
| 1350 | 2335 | 3710 | 5.881 | 1.573 | 6.725 | 1.556 | 175 | 115 |
| 1500 | 2590 | 4115 | 7.408 | 1.988 | 8.496 | 1.968 | 190 | 125 |
| 1650 | 2845 | 4520 | 9.187 | 2.477 | 10.559 | 2.453 | 215 | 140 |
| 1800 | 3100 | 4930 | 11.211 | 3.028 | 12.910 | 3.002 | 230 | 150 |
| 1950 | 3350 | 5335 | 13.465 | 3.632 | 15.540 | 3.603 | 255 | 165 |
| 2100 | 3605 | 5740 | 16.169 | 4.355 | 18.645 | 4.295 | 265 | 175 |
| FOR CORRUGATED METAL PIPE | | | | | | | | |
| 1050 | 1615 | 2680 | 3.876 | 0.978 | 4.382 | 0.966 | 140 | 90 |
| 1200 | 1840 | 3060 | 4.814 | 1.236 | 5.453 | 1.220 | 150 | 100 |
| 1350 | 2070 | 3440 | 6.291 | 1.609 | 7.078 | 1.591 | 175 | 115 |
| 1500 | 2300 | 3825 | 7.889 | 2.047 | 8.974 | 2.026 | 190 | 125 |
| 1650 | 2525 | 4205 | 9.749 | 2.493 | 11.119 | 2.470 | 215 | 140 |
| 1800 | 2755 | 4585 | 11.983 | 3.110 | 13.677 | 3.083 | 230 | 150 |
| 1950 | 2985 | 5120 | 14.464 | 3.772 | 16.532 | 3.741 | 255 | 165 |
| 2100 | 3215 | 5345 | 17.381 | 4.515 | 19.878 | 4.480 | 265 | 175 |

- NOTE:**
- Dimensions not labeled are in millimeters.
 - See Standard M601-5 for any dimensions not shown.
 - Use this Standard for normal crossing and skews up to 15°.
 - On shallow fill, where headwall is 600 mm or less below shoulder line, construct the headwall parallel to line and grade of the shoulder.
 - Do not allow top of wingwalls to project above fill slope, ditch slope, or shoulder.
 - Chamfer all exposed corners 20 mm.
 - Bevel required at inlet only.
 - Concrete quantities as shown will be used as the basis for final payment for wingwalls constructed according to this Standard.



NO SCALE

| | |
|--|----------|
| U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION FEDERAL LANDS HIGHWAY | |
| METRIC STANDARD | |
| CONCRETE WINGWALLS FOR MULTIPLE NORMAL 1050 TO 2100 mm CULVERTS | |
| STANDARD APPROVED FOR USE 3/1996 | STANDARD |
| REVISED: 5/1997 | M601-7 |