



| CONC. SIZE | BEND | | | | | | | | | | | |
|---------------|------|------|-----|-----|---|---|---------|------|-----|-----|---|---|
| | 45° | | | 30° | | | 22° 30° | | | 15° | | |
| | K | L | M | K | L | M | K | L | M | K | L | M |
| 150 MM | 1400 | 800 | 600 | | | | 700 | 800 | 600 | | | |
| 200 MM | 2000 | 900 | 600 | | | | 1200 | 900 | 600 | | | |
| 250 MM | 3000 | 1100 | 600 | | | | 1500 | 1100 | 600 | | | |
| 300 MM | 3200 | 1400 | 600 | | | | 1600 | 1400 | 600 | | | |

| CONC. SIZE | BEND | | | | | | | | | | | |
|---------------|---------|---|---|---------|------|-----|-----|---|---|-------------|---|---|
| | 12° 30° | | | 11° 15° | | | 10° | | | 7° 30° & 5° | | |
| | K | L | M | K | L | M | K | L | M | K | L | M |
| 150 MM | | | | 500 | 600 | 600 | | | | | | |
| 200 MM | | | | 600 | 900 | 600 | | | | | | |
| 250 MM | | | | 900 | 900 | 600 | | | | | | |
| 300 MM | | | | 1000 | 1100 | 600 | | | | | | |

NOTE

1. BLOCKING IS NOT PERMITTED ON NEW INSTALLATIONS.
2. PIPE GREATER THAN 300mm REQUIRES MECHANICAL RESTRAINTS WITH SHOP DRAWING SUBMISSION.
3. ALL CONCRETE TO BE 15MPa.
4. ALL DIMENSIONS ARE IN MILLIMETRES.
5. SPECIAL BLOCKING MAY BE REQUIRED FOR POOR SOIL CONDITIONS.
6. BASED ON WATER TEST PRESSURE OF 1000kPa.



**PUBLIC WORKS
STANDARD DRAWING**

REV. DATE: NOVEMBER 2011

APPROVED BY

A.P.

STD. DWG. NUMBER

1-5-4

DRAWN BY

AINLEY GROUP

SCALE

N.T.S.

**VERTICAL BLOCKING
5 DEGREE TO 45 DEGREE BENDS
FOR CONNECTION TO EXISTING WATERMAIN ONLY**