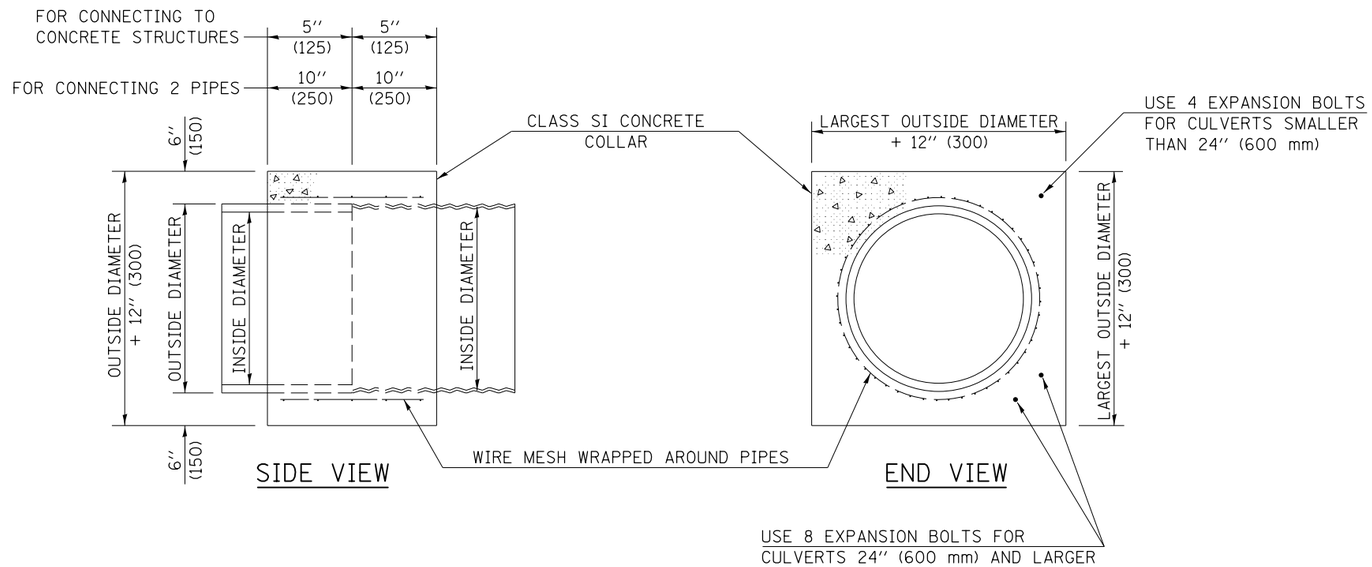


| QUANTITIES FOR CONCRETE PIPES | |
|---|---|
| INSIDE DIAMETER OF PIPE INCH (mm) | ESTIMATED CLASS SI CONCRETE REQUIRED 20″ (500 mm) WIDTH CU. YD. ($m^3$) |
| 4″ (100) | 0.14 (0.11) |
| 6″ (150) | 0.16 (0.12) |
| 8″ (200) | 0.19 (0.14) |
| 10″ (250) | 0.22 (0.17) |
| 12″ (300) | 0.25 (0.19) |
| 15″ (375) | 0.30 (0.23) |
| 18″ (450) | 0.35 (0.27) |
| 24″ (600) | 0.45 (0.35) |
| 30″ (750) | 0.57 (0.43) |
| 36″ (900) | 0.69 (0.53) |
| 42″ (1050) | 0.83 (0.63) |
| 48″ (1200) | 0.97 (0.74) |
| 54″ (1350) | 1.12 (0.86) |
| 60″ (1500) | 1.28 (0.98) |

| QUANTITIES FOR METAL PIPES | |
|---|---|
| INSIDE DIAMETER OF PIPE INCH (mm) | ESTIMATED CLASS SI CONCRETE REQUIRED 20″ (500 mm) WIDTH CU. YD. ($m^3$) |
| 4″ (100) | 0.12 (0.09) |
| 6″ (150) | 0.14 (0.11) |
| 8″ (200) | 0.16 (0.12) |
| 10″ (250) | 0.19 (0.14) |
| 12″ (300) | 0.21 (0.16) |
| 15″ (375) | 0.25 (0.19) |
| 18″ (450) | 0.29 (0.22) |
| 24″ (600) | 0.38 (0.29) |
| 30″ (750) | 0.47 (0.36) |
| 36″ (900) | 0.59 (0.45) |
| 42″ (1050) | 0.69 (0.53) |
| 48″ (1200) | 0.81 (0.62) |
| 54″ (1350) | 0.93 (0.71) |
| 60″ (1500) | 1.05 (0.81) |

## GENERAL NOTES

1. CLASS SI CONCRETE SHALL BE USED THROUGHOUT.
2. WHEN CONCRETE COLLARS ARE USED TO CONNECT PIPES OF DIFFERENT OUTSIDE DIAMETERS, THE CONCRETE COLLAR SHALL BE FORMED USING THE LARGEST OUTSIDE DIAMETER (SEE END VIEW).
3. THE WIRE MESH SHALL WEIGH NOT LESS THAN 54#/100 SQ. FT. (2.63 $kg/m^2$).
4. WHEN CONCRETE COLLARS ARE CONSTRUCTED ADJACENT TO AN EXISTING CONCRETE STRUCTURE (HEADWALLS, ETC.) EXPANSION BOLTS, SHALL BE USED AND WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, EACH, FOR EXPANSION BOLTS OF THE SIZE SPECIFIED IN THE PLANS.
5. CONCRETE COLLARS WILL BE PAID FOR AT THE CONTRACT UNIT PRICE, PER CUBIC YARD (CUBIC METER), FOR CONCRETE COLLARS INCLUDING ALL MATERIAL AND LABOR SPECIFIED TO COMPLETE THE WORK IN PLACE.

Note: All dimensions are in INCHES (millimeters) unless otherwise shown.

**DISTRICT 5 DETAIL NO. 54248510**

| | | | |
|---|---|---|---|
| FILE NAME = c:\pw_work\pwidot\oglebj\d0244982\D570783-sht-details.dgn | USER NAME = oglebj | DESIGNED - | REVISED - 12/06 |
| | | DRAWN - | REVISED - |
| | PLOT SCALE = 40.0000 ' / in. | CHECKED - | REVISED - |
| | PLOT DATE = 10/9/2012 | DATE - | REVISED - |

**STATE OF ILLINOIS**
**DEPARTMENT OF TRANSPORTATION**

**CONCRETE COLLAR**

SCALE: | SHEET NO. OF SHEETS | STA. TO STA.

| F.A.P. RTE. | SECTION | COUNTY | TOTAL SHEETS | SHEET NO. |
|---|---|---|---|---|
| 315 | 119RS-4, 18RS & (57-10)RS | MCLEAN | 225 | 57 |
| | | CONTRACT NO. 70783 | | |

FED. ROAD DIST. NO. | ILLINOIS | FED. AID PROJECT