

QUANTITIES F	OR METAL PIPES	1.
INSIDE DIAMETER OF PIPE	ESTIMATED CLASS SI CONCRETE REQUIRED 20" (500 mm) WIDTH	2.
INCH (mm)	CU.YD. (m 3)	_
4" (100) 6" (150) 8" (200)	0.12 (0.09) 0.14 (0.11) 0.16 (0.12)	3.
10" (250) 12" (300)	0.19 (0.14) 0.21 (0.16)	4.
15" (375) 18" (450) 24" (600)	0.25 (0.19) 0.29 (0.22) 0.38 (0.29)	
30" (750)	0.47 (0.36)	
36" (900) 42" (1050)	0.59 (0.45) 0.69 (0.53)	5.
48" (1200) 54" (1350)	0.81 (0.62) 0.93 (0.71)	
60" (1500)	1.05 (0.81)	

QUANTITIES FOR	CONCRETE PIPES
INSIDE DIAMETER	ESTIMATED
OF PIPE	CLASS SI CONCRETE
	REQUIRED
	20" (500 mm) WIDTH
INCH (mm)	CU.YD. (m3)
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)

						DISTRICT 5 DETAIL NO. 54248510		
FILE NAME =	USER NAME = bucklesjj	DESIGNED -	REVISED - 12/06				F.A.P. SECTION COUNTY SHEETS NO	
c:\pw_work\pwidot\bucklesjj\d0170848\D5	70507-sht-details.dgn	DRAWN -	REVISED -	STATE OF ILLINOIS	CONCRETE COLLAR FOR PIPE CULVERT		315 * McLean 115 70	
	PLOT SCALE = 40.0000 '/ IN.	CHECKED -	REVISED -	DEPARTMENT OF TRANSPORTATION			*(101,102X,RS-2 & 55RS-PRK LN CONTRACT NO. 70507	
	PLOT DATE = 12/9/2009	DATE -	REVISED -		SCALE:		FED. ROAD DIST. NO. ILLINOIS FED. AID PROJECT	

USE 4 EXPANSION BOLTS FOR CULVERTS SMALLER THAN 24" (600 mm)

## GENERAL NOTES

ASS SI CONCRETE SHALL BE USED THROUGHOUT.

IN CONCRETE COLLARS ARE USED TO CONNECT PES OF DIFFERENT OUTSIDE DIAMETERS, THE NCRETE COLLAR SHALL BE FORMED USING THE RGEST OUTSIDE DIAMETER (SEE END VIEW).

WIRE MESH SHALL WEIGH NOT LESS THAN /100 SQ, FT, (2.63 kg/m<sup>2</sup>).

EN CONCRETE COLLARS ARE CONSTRUCTED DACENT TO AN EXISTING CONCRETE STRUCTURE EADWALLS, ETC.) EXPANSION BOLTS, SHALL USED AND WILL BE PAID FOR AT THE CONTRACT ET PRICE, EACH, FOR EXPANSION BOLTS OF E SIZE SPECIFIED IN THE PLANS.

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.