



NOTES

1. COLLAR MUST EXTEND TO TOP OF MANHOLE FRAME AND OVER BOTTOM FLANGE OF FRAME.
2. PLACE 4-#4 BARS X 4 FT. LONG AROUND MANHOLE IN CROSSING PATTERN.
3. MINIMUM COLLAR VOLUME SHALL BE ONE-HALF CUBIC YARD.
4. THE TABLE SHOWS MINIMUM REQUIREMENTS FOR CONCRETE COLLARS, THE ENGINEER SHALL SIZE FOR DESIGN PRESSURE AND SUBMIT DESIGN CALCULATIONS FOR THE CONCRETE COLOR AND REBAR FOR EACH SPECIFIC CONDITION, FOR APPROVAL BY THE PUBLIC WORKS DIRECTOR.

TABLE		
OUTSIDE COLLAR DIMENSIONS (FT)	CONCRETE COLLAR DEPTH (FT)	APPROX. VOLUME (CY)
4X4	1.5	0.5 MIN
4X5	2.0	1.00
4X5	3.0	1.25
4X5.5	3.5	1.33
4X6	3.0	1.50
4X6.5	3.0	2.00
5X6	3.0	2.25
5X6.5	3.0	2.50
5X6.5	3.5	2.75
5X7	3.5	3.00
5X7	4.0	3.25
5.5X6.5	4.0	3.50
5.5X7	4.0	4.00
6X7	3.5	3.75
6.5X7	3.75	4.50
6.5X7	4.0	5.00

CITY OF NAPA

PUBLIC WORKS DEPARTMENT

**STORM DRAIN PRESSURE
MANHOLES-CONCRETE COLLARS**

DRAWN BY: BRL
 DATE: 06/2018
 SCALE: NONE
 FIELD NOTES:

CHECKED BY: JGF
 APPROVED BY: JRL
 DRAWING NO. D-9