



D	18"	21"	24"	27"	30"	33"	36"	39"	42"	45"	48"	51"	54"	57"	60"	66"
L	12"	12"	12"	12"	12"	18"	18"	18"	18"	18"	18"	18"	18"	18"	21"	21"
T	5"	5"	6"	7"	7"	8"	9"	9"	9"	10"	10"	10"	10"	10"	11"	11"
J	1/16"	1/4"	1/4"	1/4"	5/16"	5/16"	5/16"	5/16"	5/16"	5/16"	3/8"	3/8"	3/8"	3/8"	3/8"	3/8"
NO. OF TIES	3	3	3	3	3	4	4	4	4	4	4	4	4	4	5	5

NOTES:

1. A CONCRETE COLLAR IS REQUIRED WHERE PERMITTED PULL AT PIPE JOINT IS EXCEEDED. PULLING OF JOINTS SHALL BE LIMITED TO 3/4" FROM NORMAL CLOSURE FOR PIPE 36" OR SMALLER AND TO 1" FOR PIPE 39" OR LARGER.
2. VALUE OF ANGLE "A" SHALL BE SHOWN ON PLANS.
3. BEVELED PIPE MAY BE USED IN LIEU OF A CONCRETE COLLAR.
4. CONCRETE COLLARS SHALL NOT BE USED FOR A SIZE CHANGE ON THE MAINLINE.
5. FOR PIPE 21" OR SMALLER AN INTERIOR FORM OF UNSEALED SONO-TUBE OR EQUAL SHALL BE USED. FOR PIPE 24" OR LARGER A REMOVABLE INTERIOR FORM SHALL BE USED.
6. REINFORCING SHALL BE USED FOR PIPES LARGER THAN 21" AND ON ALL PIPES WHERE THE SPACE BETWEEN PIPE EXTREMITIES IS 2 1/2" OR LARGER.
7. INCREASE NUMBER OF CIRCULAR TIES TO MAINTAIN A SPACING OF 6" O.C. WHEN THE SPACE BETWEEN PIPE EXTREMITIES IS OVER 2 1/2".
8. CONCRETE SHALL BE CLASS 560-C*-3250.
9. FOR PIPE LARGER THAN 66" A SPECIAL COLLAR DETAIL IS REQUIRED.

* USE "B" AGGREGATE GRADATION WHEN PLACING CONDITIONS PERMIT.

DATE OF REVISIONS	NATURE OF	CITY OF SANTA ANA IMPROVEMENT STANDARD		STD NO 320
		CONCRETE COLLAR FOR STORM DRAIN PIPE		
		APPROVED: <i>[Signature]</i>	CITY ENGINEER DATE 6/21/82	