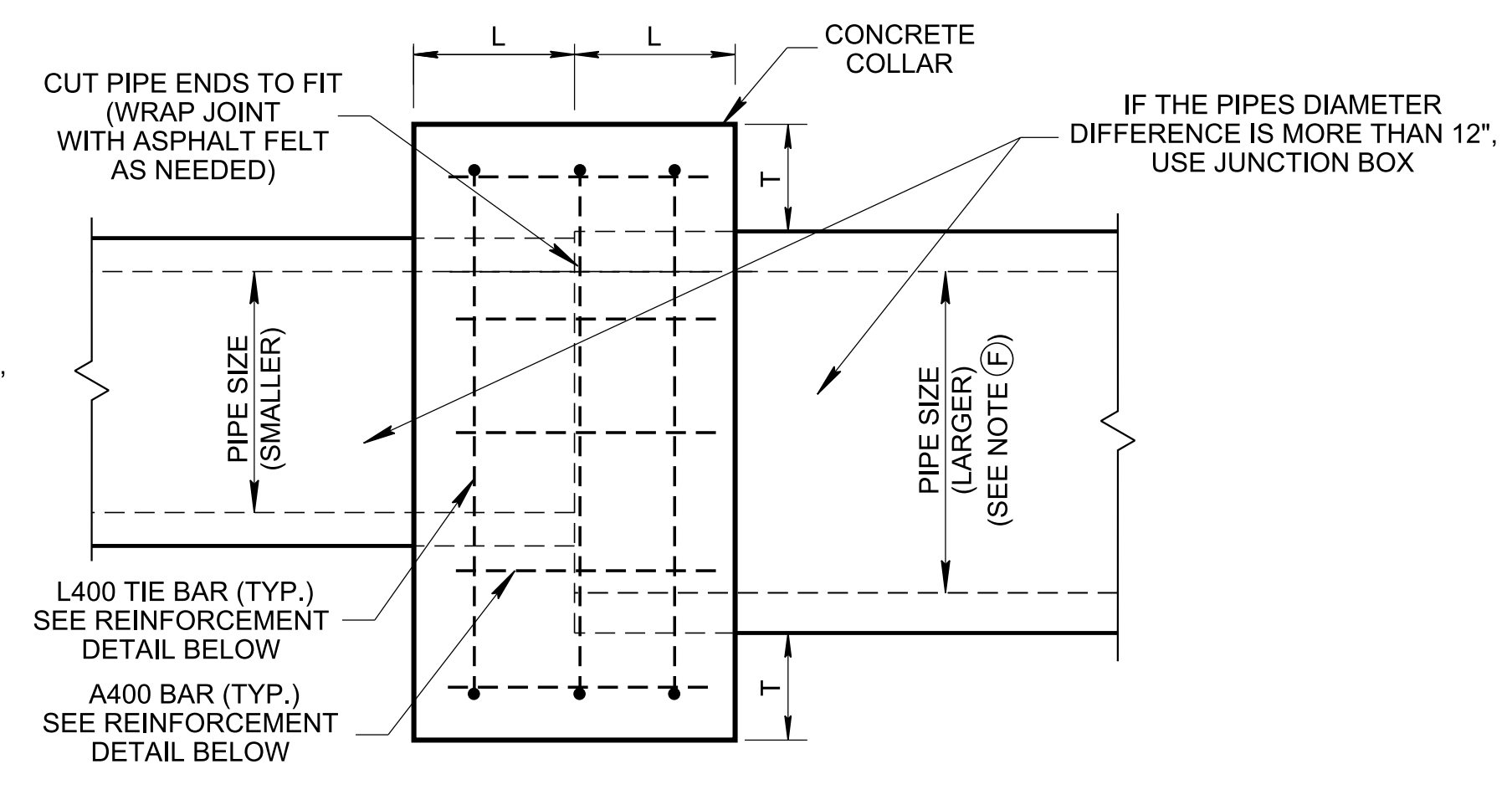
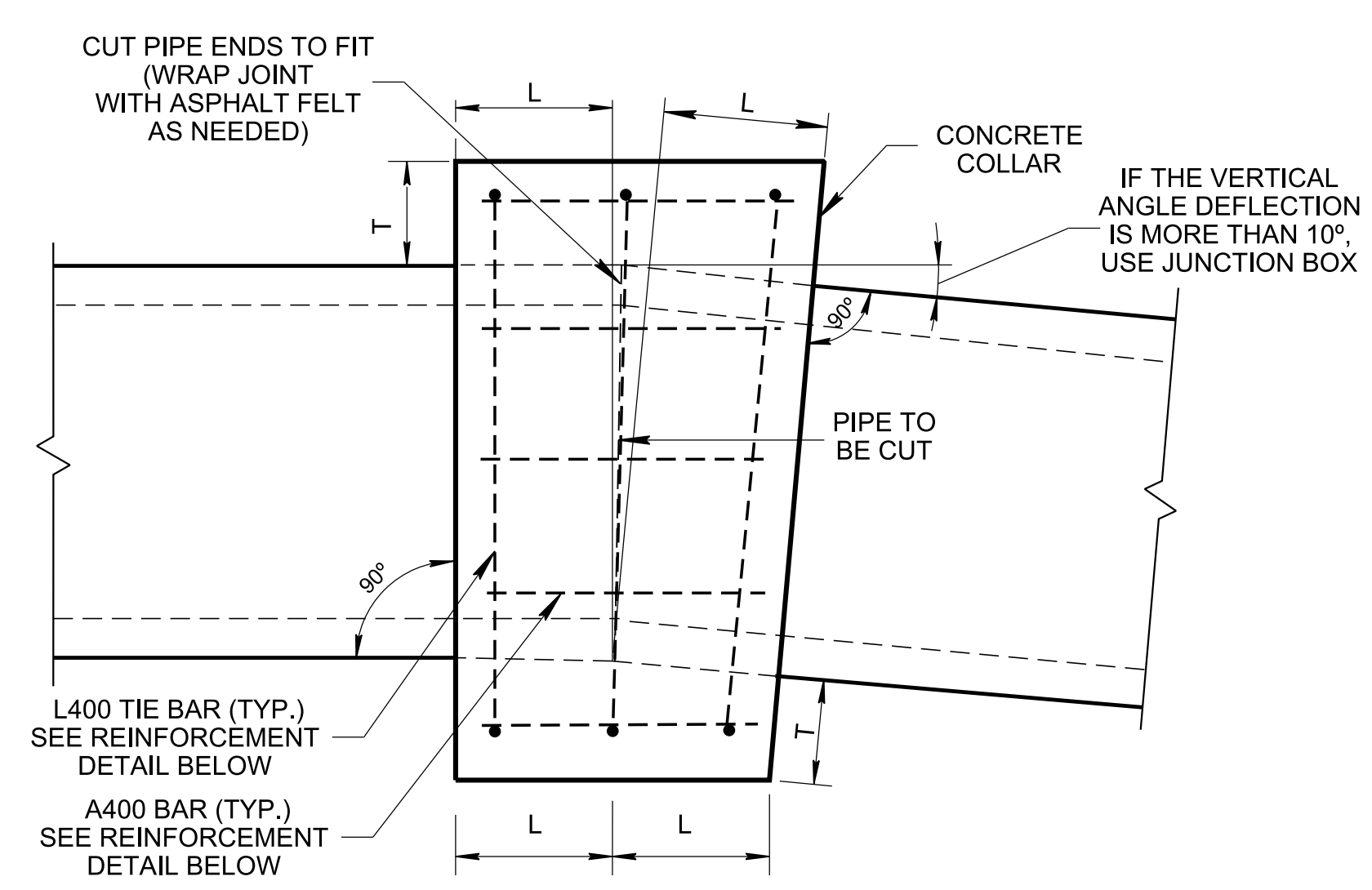


**PLAN VIEW
FOR HORIZONTAL ALIGNMENT
CONCRETE COLLAR DETAIL**

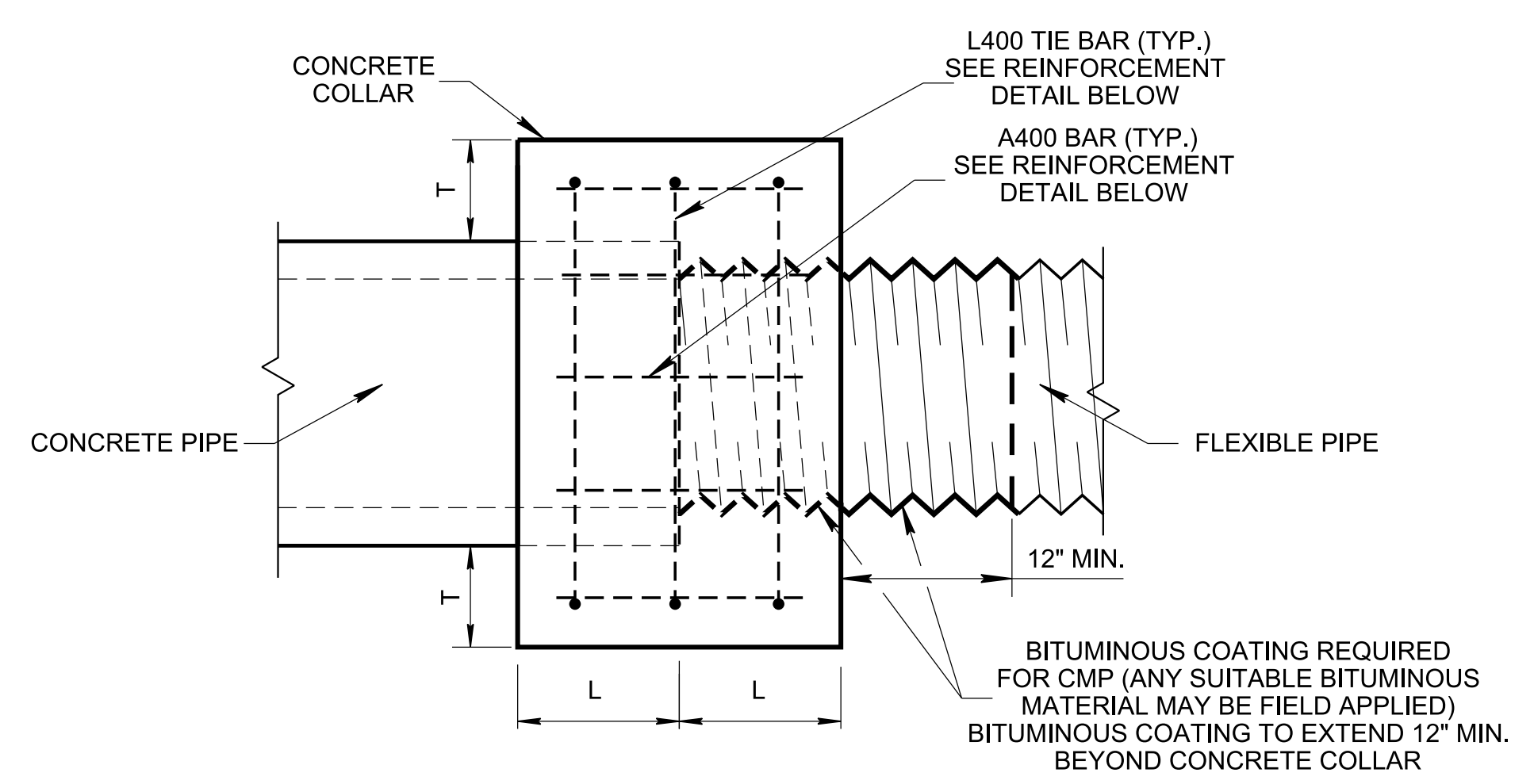


**ELEVATION VIEW
CONCRETE COLLAR DETAIL FOR
CONNECTING DIFFERENT PIPES DIAMETER**

PIPE COLLAR TABLE			
PIPE SIZE (IN)	LENGTH (L) MIN.	THICKNESS (T) MIN.	L400 TIE BARS (MIN.)
18"	1'-0"	8"	3
24"	1'-0"	8"	3
30"	1'-6"	8"	3
36"	1'-6"	8"	3
42"	2'-0"	10"	4
48"	2'-0"	10"	4
52"	2'-0"	10"	4
60"	2'-0"	12"	4
66"	2'-0"	12"	5
72"	2'-0"	14"	5
78"	2'-0"	14"	5

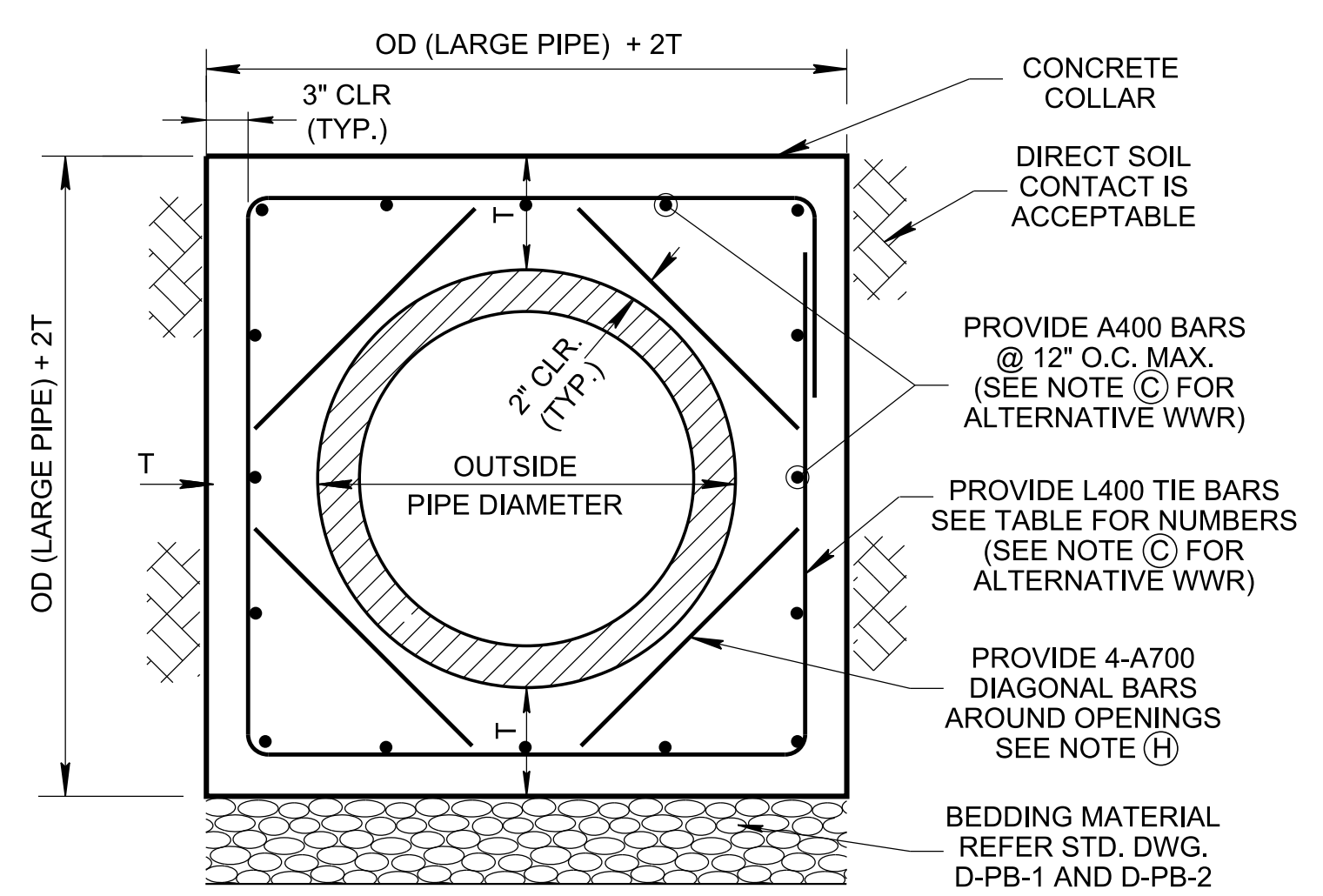


**ELEVATION VIEW
FOR VERTICAL ALIGNMENT
CONCRETE COLLAR DETAIL**



**ELEVATION VIEW
CONCRETE COLLAR DETAIL FOR
CONNECTING CONCRETE PIPE AND FLEXIBLE PIPE**

REINFORCING STEEL LEGEND	
VARIABLE A400	<p>12" MIN. LAP</p> <p>L400 (VARIABLE SIZE)</p>
VARIABLE A700	
APPLY STANDARD C.R.S.I. FOR HOOK AND TIE DETAILS.	



CONCRETE COLLAR REINFORCEMENT DETAIL

- GENERAL NOTES**
- (A) A CONCRETE COLLAR MAY BE USED WHERE PIPES OF DIFFERENT DIAMETERS OR MATERIALS ARE JOINED OR WHERE THE DESIGN CHANGE IN ALIGNMENT OR GRADE EXCEEDS THAT ALLOWED FOR A STANDARD JOINT.
 - (B) THE FOLLOWING MATERIAL PROPERTIES ARE REQUIRED FOR BOTH CAST-IN-PLACE AND PRECAST PIPE COLLAR:

CONCRETE: $f'_c = 4,000$ POUNDS PER SQUARE INCH AT 28 DAYS
REINFORCING STEEL: ASTM A615, $F_y = 60,000$ POUNDS PER SQUARE INCH
ALL REINFORCING STEEL TO BE INSTALLED AS DETAILED ON THIS DRAWING.
 - (C) AS ALTERNATIVE REINFORCEMENT, EQUIVALENT AREA OF WELDED WIRE REINFORCEMENT CAN BE USED. WELDED WIRE REINFORCEMENT SHALL MEET ASTM A1064, WITH A MINIMUM YIELD STRENGTH OF 70,000 POUNDS PER SQUARE INCH.
 - (D) REFER TO STANDARD DRAWINGS D-PB-1 OR D-PB-2 FOR PIPE INSTALLATION STANDARD DETAILS.
 - (E) REFER TO STANDARD DRAWINGS D-JBS SERIES FOR JUNCTION BOXES.
 - (F) WHEN PIPES OF DIFFERENT DIAMETERS ARE JOINED WITH A CONCRETE COLLAR, "L" AND "T" SHALL BE THOSE OF THE LARGER DIAMETER.
 - (G) PIPE ENDS TO BE TRIMMED SUCH THAT THE MAXIMUM DISTANCE BETWEEN PIPES AT ANY POINT IS 2".
 - (H) WHEN THE PIPE IS 30 INCH OR LARGER, PROVIDE DIAGONAL BARS AROUND THE PIPE OPENING.
 - (I) BENDING OF PROPOSED PIPE SEWER OR REINFORCED CONCRETE PIPE IN A VERTICAL AND/OR HORIZONTAL PLANE SHALL BE ACCOMPLISHED BY THE USE OF A PIPE COLLAR OR A PRECAST ELBOW AS APPROVED BY THE ENGINEER.
 - (J) PAYMENT FOR PIPE COLLAR SHALL BE INCLUDED IN THE PRICE BID FOR THE PIPE.