



DIMENSIONS IN FEET FOR CONCRETE BLOCKING - HORIZONTAL THRUST.

BEND	SIZE	A	B	C	D	E
45	16"	7' - 0"	5' - 0"	3' - 0"	4' - 0"	1' - 5"
DEG	18"	7' - 6"	6' - 0"	3' - 6"	5' - 0"	1' - 7"
	24"	9' - 0"	8' - 0"	4' - 6"	5' - 6"	1' - 9"
90	16"	7' - 0"	6' - 6"	3' - 0"	5' - 6"	2' - 0"
	18"	7' - 0"	8' - 0"	3' - 6"	7' - 0"	2' - 9"
	24"	9' - 0"	9' - 0"	4' - 9"	9' - 0"	3' - 5"

SHAPE 1/2" STEEL PLATE TO FIT BEND. COPE STRUTS TO FIT SADDLE SHAPE. WELD SADDLE TO STRUTS.

DESIGN DATA:
 DIMENSION OF THRUST BLOCK IN FEET BASED ON 2000 POUNDS PER SQUARE FOOT SOIL BEARING PRESSURE AND 250 POUNDS PER SQUARE INCH TEST PRESSURE. ACTUAL INSIDE DIAMETER OF DUCTILE IRON PIPE, CLASS 50 USED AS STANDARD. ALL CONCRETE TO BE USED SHALL BE CLASS A, 3000 PSI, HIGH EARLY.

NOTES:

1. TYPE A THRUST BLOCK SHALL ONLY BE USED IN SITUATIONS WHERE NEW WATER MAIN CONSTRUCTION IS TO BE CONNECTED TO AN EXISTING WATER MAIN AND SHUT DOWN TIME ALLOWED WILL NOT PERMIT CONCRETE TO PROPERLY CURE FOR STANDARD THRUST BLOCK CONSTRUCTION.
2. CONTRACTOR WILL INSTALL NEW WATER MAIN TO A POINT APPROXIMATELY 10' FROM THE POINT OF CONNECTION TO THE EXISTING WATER MAIN AND INSTALL THE FIRST SECTION OF THRUST BLOCK. AFTER THE NEW WATER MAIN HAS BEEN SATISFACTORILY TESTED FOR HYDROSTATIC PRESSURE, BACTERIOLOGICALLY CHECKED AND ALL TEMPORARY THRUST BLOCKING HAS BEEN REMOVED, THE CONNECTION WILL BE COMPLETED.
3. ALL SECOND PHASE WORK IS TO BE COMPLETED BY THE CITY OF CUMMING EXCEPT EXCAVATING, BACKFILLING, REPAVING THE CONSTRUCTION AREA, AND CONSTRUCTION OF FIRST SECTION OF THRUST BLOCK.
4. INSTALLATION OF NEW BEND AND WIDE FLANGE STRUT SHALL BE PERFORMED AFTER THE FIRST SECTION OF THRUST BLOCK IS PROPERLY CURED.
5. CUT AND REMOVE PORTION OF EXISTING WATER MAIN AS REQUIRED TO ALLOW INSTALLATION OF STEEL STRUTS AND SECOND SECTION OF TYPE A THRUST BLOCK. REMAINING UNUSED SECTION OF EXISTING WATER MAIN TO BE ABANDONED.
6. WATER MAY BE TURNED ON AFTER WIDE FLANGE STRUTS HAVE BEEN SECURLY WELDED TO THE BEARING PLATE EMBEDDED IN THE FIRST SECTION OF THRUST BLOCK AND TO THE BEND SADDLE.
7. SECOND SECTION POUR OF CONCRETE TO PROTECT STEEL STRUTS TO BE COMPLETED BEFORE BACKFILL.
8. PIPE SADDLES AND STRUTS MAY BE FIELD FABRICATED.
9. SOIL CONDITIONS SHALL BE VERIFIED BY THE ENGINEER BEFORE THRUST BLOCK DESIGN IS IMPLEMENTED.
10. THE CITY ENGINEER WILL FURNISH DIMENSIONS FOR BENDS LESS THAN 45 DEGREES.

REVISIONS

City of Cumming
 Department of Utilities - Distribution and Collection Division

THRUST RESTRAINT: HORIZONTAL
16", 20", 24" MAINS (TYPE A)

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