

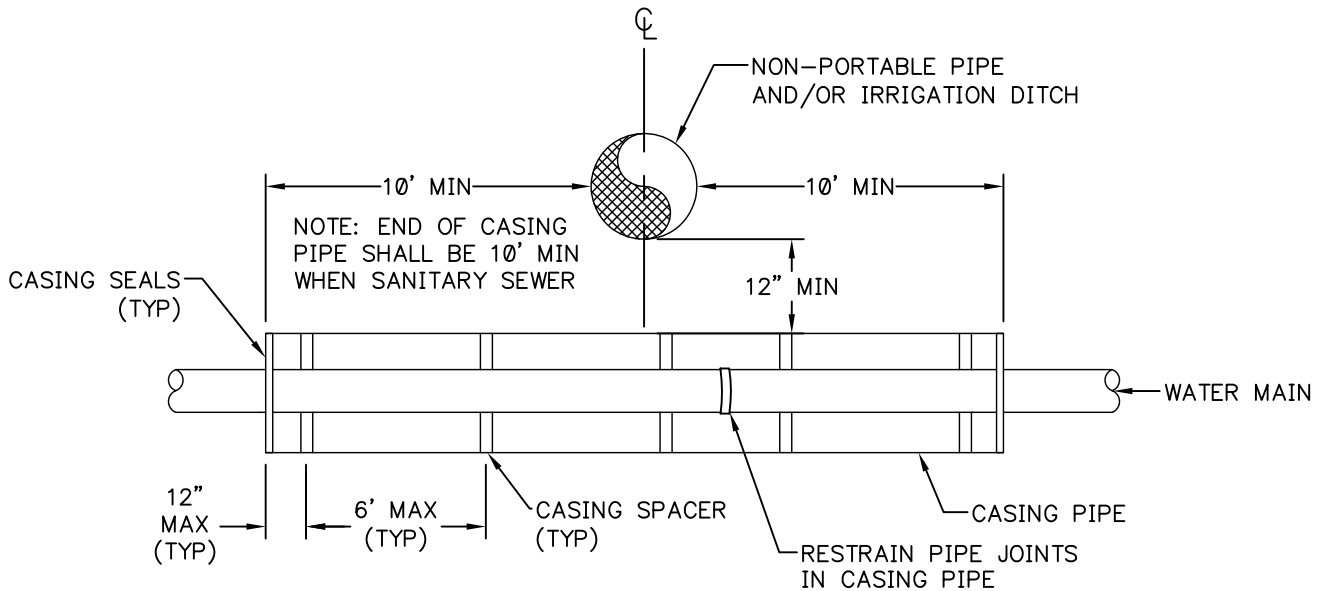


Originator: **RCS**

Standards Approval:  
**Ron Slabaugh**

Date: **3/12/2019**

Rev #: **1**  
Revision Description:  
**2019 UPDATES**



NOTES:

1. WHEN CROSSING IRRIGATION DITCHES, CONSTRUCTION MUST OCCUR WHEN DITCH IS DRY.
2. METHOD FOR INSTALLATION OF CASING PIPE MUST BE APPROVED BY DISTRICT ENGINEER.
3. CASING PIPE SHALL BE INSTALLED IN A MANNER AS TO PROTECT NON-POTABLE PIPE. ANY DAMAGE THAT OCCURS DURING CONSTRUCTION SHALL BE REPAIRED IMMEDIATELY BY THE CONTRACTOR.
4. INSTALLATION OF WATER MAIN AT GRADE IS REQUIRED TO ACHIEVE VERTICAL LIMITS. CENTER MAIN WITHIN CASING PIPE. FIELD ADJUSTMENTS TO PIPE INVERT AT CROSSING MUST BE APPROVED BY DISTRICT ENGINEER PRIOR TO INSTALLATION.
5. SPACERS SHALL BE INSTALLED TO ACCOMMODATE CENTERING OF WATER MAIN AND TO CLEAR THE DIMENSIONS OF THE BELL OF DUCTILE IRON PIPE.
6. IF CASING PIPE REQUIRES WELDING, FIELD WELD BY A CERTIFIED WELDER. USE BEVELED ENDS AND FULL PENETRATION WELDED CONNECTIONS.

MATERIALS LIST

CASING SPACERS

1. INJECTION MOLDED PLASTIC.
2. ALL HARDWARE SHALL BE 304 STAINLESS STEEL.

CASING SEALS

1. BOOT SHALL BE SEAMLESS SYNTHETIC RUBBER WITH A MINIMUM 1/8-INCH THICKNESS.
2. BANDS AND CLAMPS SHALL BE 304 STAINLESS STEEL.

CASING PIPE

1. CASING PIPE SHALL BE STEEL, ASTM-139 GRADE B WITH MINIMUM TENSILE STRENGTH OF 60,000 PSI.
2. WALL THICKNESS SHALL BE MINIMUM 1/4-INCH.
3. INSIDE DIAMETER MUST BE AT LEAST 4-INCHES GREATER THAN OUTSIDE DIAMETER OF WATER MAIN (FROM THE BELL OUTSIDE DIAMETER WHEN BELL IS LOCATED INSIDE CASING).

WATER MAIN

1. DUCTILE IRON IN ACCORDANCE WITH GENERAL NOTES.