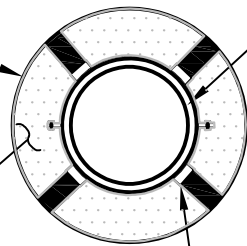


MIN. .375 INCH STEEL CASING CONTINUOUSLY WELDED AT JOINTS. DIAMETER ON DRAWINGS.

FILL ALL VOIDS WITH SAND. SEE NOTE 2.



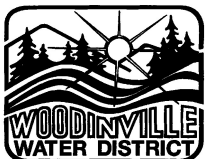
DUCTILE IRON SEWER MAIN

CENTERED AND RESTRAINT TYPE CASING SPACER

MIN. CASING DIAMETER	
PIPE DIA.	CASING DIA.
6"	12"
8"	15"
10"	18"
12"	20"
15"	24"
>15"	AS SPECIFIED

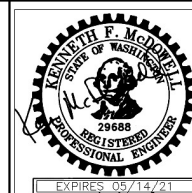
**NOTES:**

1. PVC PIPE NOT ALLOWED IN CASING. RESTRAINED JOINT DUCTILE IRON CL 52 REQUIRED.
2. THE INTERSTITIAL SPACE BETWEEN THE PIPE AND CASING SHALL BE COMPLETELY FILLED WITH DRY SAND AFTER AIR TESTING AND VIDEO RECORDING HAVE PASSED. METHOD OF FILLING SAND SHALL BE APPROVED BY THE DISTRICT.
3. NO PONDING ALLOWANCES ALLOWED IN SEWER MAINLINE THROUGH A CASING.
4. CASING LOCATIONS SHALL BE AS SHOWN ON THE PLANS OR IDENTIFIED IN THE FIELD. MAINLINE OR SIDE SEWERS UNDER RETAINING WALLS OR OTHER HEAVY STRUCTURES SHALL HAVE A CASING DESIGNED BY THE ENGINEER.
5. MAXIMUM SPACING BETWEEN CASING SPACERS IS 6' O.C. END CASING SPACER MAX. 1' FROM END OF CASING PIPE.
6. CASING SPACER SHALL BE CENTERED RESTRAINT TYPE.
7. CASING SPACERS SHALL BE MANUFACTURED BY ADVANCED PRODUCTS & SYSTEMS MODEL SSI, CASCADE WATERWORKS MFG. MODEL CCS, OR DISTRICT APPROVED EQUAL.
8. ONE CASING SPACER SHALL BE SET ON THE SPIGOT END OF EACH SEGMENT OF THE CARRIER PIPE. WHEN JOINT IS COMPLETE THE SPACER SHALL BE IN CONTACT WITH THE BELL OF THE JOINT.



**Woodinville  
Water District**

**CASING DETAILS  
AND REQUIREMENTS**



**SEWER STD.  
PLAN NO. 13**

REVISION DATE  
12-20