



### CASING DETAIL NOTES:

1. CASING SPACERS FOR GRAVITY SEWER LINES MAY BE USED ONLY WHEN THE SLOPE OF THE FINISHED WELDED CASING PIPE HAS BEEN COMPLETED AND CHECKED AND IS EQUAL TO THE SLOPE OF THE CARRIER PIPE.
2. THREE CASING SPACERS SHALL BE ATTACHED TO EACH JOINT OF CARRIER PIPE WITH ONE AT THE CENTER AND ONE NOT MORE THAN 24" FROM EACH END.
3. ONE CASING SPACER SHALL BE LOCATED NOT MORE THAN 12" FROM EACH END OF THE CASING PIPE
4. CARRIER PIPE SHALL BE POSITIONED AND RESTRAINED WITHIN CASING TO COMPLY WITH GRADE REQUIREMENTS BY AN APPROVED CASING SPACER.
5. STEEL CASING SHALL HAVE A MINIMUM YIELD STRENGTH OF 35,000 PSI AND CORROSION PROTECTION IF SPECIFICALLY CALLED FOR ON THE PLANS. CASING PIPES UNDER RAILROADS MUST HAVE CORROSION PROTECTION.
6. LINES TO BE ENCASED UNDER STATE ROADS/RAILROADS WILL COMPLY WITH COUNTY AND ANY APPLICABLE VDOT/AMERICAN RAILROAD ENGINEERING SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.
7. WHEN INSTALLING CARRIER PIPE, CONTRACTOR SHALL PUSH SO THAT PIPE JOINTS ARE ALWAYS BEING COMPRESSED.
8. REINFORCED CONCRETE CASING PIPE SHALL BE ASTM C-76, CLASS III. STEEL CASING PIPE SHALL BE ASTM-139, GRADE B.
9. CARRIER PIPE WITHIN BORES FOR SANITARY SEWER INSTALLATION SHALL BE DUCTILE IRON (CLASS 52) AND IS TO BE USED FROM MANHOLE TO MANHOLE.
10. CASING PIPE SHALL BE SEALED BY USE OF WRAPAROUND END SEALS OR WRAP ENDS OF CARRIER PIPE WITH TAR PAPER AND INSTALL 4" THICK BRICK AND MORTAR PLUG IN THE ANNULAR SPACE WITH A 1" WEEP HOLE.

DATE  
MAY 2004  
HANOVER  
DPU

## CASING DETAIL METHOD FOR GRAVITY SEWER LINES

DRWG. NO.  
**CAS-3**