

BORINGS FOR UTILITIES (UNDER ROADS) - Unless specifically noted otherwise on the plans, all utility lines crossing paved public roadways shall be accomplished by jacking or boring and installing the carrier pipe within a steel encasement pipe. All road crossings shall be accomplished in accordance with the VDOT Permit and/or the VDOT inspector's requirements. The Contractor shall first conduct the minimum number of bore attempts (as specified in the VDOT Permit) before special permission to open cut is requested. During boring or open cut installation, the Contractor shall maintain traffic flow on the roadway.

All carrier pipes installed inside encasement shall be metal (ductile iron or copper as applicable). The Contractor shall exercise extreme care to ensure that the road crossings are installed to the design depth and slope. Carrier pipes shall be supported by wood blocks strapped to the pipe or adjustable mechanical spacers. The pipe supports shall prevent any part of the carrier pipe from coming in contact with the casing. The casing pipe shall be ASTM A53 Grade B & shall conform to Section 232.02(c)5 of the 2007 VDOT Road & Bridge Specifications. The minimum required wall thickness for the steel casing pipe shall be the lesser of ASTM A53 Standard Weight Class for the casing size or 0.5 inches. The casing pipe shall be fabricated to the required length prior to installing the casing in the bore hole. The minimum size diameter casing pipe used for road and railroad crossings shall generally be a minimum of six inches larger than the largest outside diameter of the carrier pipe. A table of the required casing pipe sizes is shown on the standard detail plan sheets.

When road crossings cannot be accomplished by jacking or boring or if special permission is granted by VDOT, road crossings may be made by open cut. At open cut road crossings, the existing pavement shall be saw cut on either edge of the pipeline trench to minimize damage to the adjacent pavement. Following pipe installation the crossing shall be backfilled full depth with compacted crushed stone. Pavement overlay of the crossing shall be conducted in accordance with the standard detail plan sheets and the VDOT Highway Permit.