

17. Tunnels or Casing Pipes.

a. Requirements.

- 1) When crossing MSHA roadways, railroads and county roadways in which the jurisdictional agency requires the pipeline to be in a tunnel or casing pipe, the following is required:
 - a) Do not grout around water pipelines enclosed in tunnels or casing pipes.
 - b) Design the water pipeline DIP class for the depth without consideration of the tunnel or casing pipe, see requirements for the design of DIP, Part One, Section 4 (Selection of Pipe Material). Do not use PVC pipe AWWA C900 or C905 in tunnels or casing pipes.
 - c) Provide minimum ten (10) feet between end of tunnel and fitting on pipeline.
 - d) Provide minimum fifteen (15) feet between end of tunnel and outside wall of concrete thrust block, Standard Details B/3.1, B/3.1a, B/3.1b and B/3.3.
 - e) Pipelines with restrained joints shall not be designed for use within tunnels or casing pipes unless approved by WSSC.
 - d) For requirements on allowable depths of tunnels or casing pipes and detailed design requirements, see Part Three, Section 25 (Tunnels) and Section 26 (Tunnel Design Criteria).
 - e) For details on allowable diameters of the tunnels or casing pipes, see Standard Details M/17.1 and M/17.6.
 - f) When required, provide access manholes to the tunnels or casing pipes, see Standard Detail M/17.5.

