

WV DIVISION OF HIGHWAYS HORIZONTAL DIRECTIONAL DRILLING GUIDELINES

Horizontal Directional Drilling (HDD) is a trenchless method for installing facilities that involve an operator from a remote location using a control panel combined with locating techniques to guide the cutting head along an intended path.

Pits will not be permitted within a divided highway median. If pits must remain open overnight, the utility shall provide appropriate protective measures, as approved by the District Utility Supervisor.

Safety measures for bore pits and drilling shall meet current OSHA requirements.

Directionally drilled holes must not exceed 1.5 times the outside diameter of any pipe up to 12 inches in diameter and the outside diameter plus 6 inches for pipes exceeding 12 inches in diameter.

Depth from the top of the casing/carrier pipe to the roadway surface shall be a minimum of 5 LF.

If the drilling head becomes unretrievable under the road during installation, the District Utility Supervisor shall make the determination of feasibility of retrieval and applicable pavement restoration.

Use of air hammers will be permitted on a case-by-case basis, at the discretion of the District Utility Supervisor.

In addition to the Permit Submission requirements, the following must also be provided with the permit application if using HDD method:

- Plan sheet(s) will include locations of entry/exit bore pits, with dimensions and offsets from roadway features, when pits are within the right of way or in close proximity to the right of way
- Boring contractor contact information
- Bore hole diameter
- Method of tracking for pilot or back reamer
- Soil Analysis, available at <https://websoilsurvey.nrcs.usda.gov/app/homepage.htm>
- Proposed viscosity, density, and composition of drilling fluids
 - Based on the details of the soil analysis
 - drilling fluid to be made with clean water and additives that are environmentally safe and approved for use in drilling fluids
- Method of containment, collection, and disposal of drilling fluid

Upon completion of drilling operation, supply accurate as-built drawing to the District Utility Supervisor, in a pdf or GIS datafile. The as-built drawing must include:

- Actual path alignment
- Depth of cover for the casing
- Actual length
- Product diameter-
- Casing diameter
- Final elevations