

NCDOT Required Information for Encroachments Using  
Horizontal Directional Drilling (HDD)

In addition to submittal requirements outlined in the NCDOT Utilities Accommodations Manual, this information must be submitted either explained on this form or in other documentation submitted for the encroachment requests using HDD.

- 1. Project schedule and Boring Contractor contact information and experience record.**
- 2. Soil Analysis Report for project area.** Obtain report from USDA at <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm> and submit with encroachment package.
- 3. Proposed viscosity, density, and composition of drilling fluids**, including whether they are bentonite or polymer based (based on soil analysis). \_\_\_\_\_  
(Manufacturer Data sheet included)
- 4. Type of Boring Machine:**
  - a. Make/Model: \_\_\_\_\_
    - i. Thrust: \_\_\_\_\_
    - ii. Pull Back: \_\_\_\_\_
    - iii. Max. Torque: \_\_\_\_\_
  - b. A copy of the Equipment spec. sheet should be attached.
- 5. Pilot Drill Manufacturer Name/Spec:** \_\_\_\_\_
- 6. Back Reamer Manufacturer Name/Spec:** \_\_\_\_\_
- 7. Method of Tracking for (pilot and back reamer):** \_\_\_\_\_
- 8. Mud Motor bit (If used):** \_\_\_\_\_
- 9. Method of Compaction (if open trench is used):** \_\_\_\_\_
- 10. Method of containment, collection and disposal of drilling fluid:** \_\_\_\_\_
- 11. Tracer wire used on all bores:** \_\_\_\_\_
  
- 12. Drilling Pump Efficiency:**
  - a. Mechanical pump rated capacity in gallons: \_\_\_\_\_
  - b. Stem Length, diameter and radius of curvature. \_\_\_\_\_
  - c. Angle penetration of rod to ground: \_\_\_\_\_
  - d. Product being pulled back: \_\_\_\_\_
- 13. Contingency plan for frac-out or drilling hole failure.**
- 14. Traffic control plan when applicable** (Needed when personnel and/or equipment is within 5 ft. of the

edge of pavement or 10 ft. on a divided roadway). Show all pavement and lane widths within closure.

15. Upon completion of the drilling operation, supply accurate **as built drawing** within 30 days to the District Engineer's Office. The As-Built drawings must include the following information: Actual path alignment, depth of cover for the casing, actual length, product diameter, casing diameter, and all final elevations. The format as a deliverable must include a PDF drawing with this information and GIS georeferenced datafile (in kmz or ESRI shapefile/geodatabase format) and according to NCDOT standards for GIS data.

Acknowledgment to submit As Built drawings as required: