

SECTION 338110 - WORK IN N.C. DEPARTMENT OF TRANSPORTATION RIGHTS-OF-WAY

PART 1 - GENERAL

- 1.1 All work within the rights-of-way of the North Carolina Department of Transportation rights-of-way shall be done in accordance with the Contract Documents and the Department's requirements, as applicable. Work in NCDOT Rights-of-Way shall comply with the NCDOT Division of Highways Manual Titled Policies and Procedures for Accommodating Utilities on Highway Rights-of-Way. Upon completion of such work, the Contractor shall present to the A-E certificates in duplicate from the Department of Transportation, as applicable, stating that the work has been done in accordance with their requirements and is acceptable to them. All work in rights-of-way shall be guaranteed for one year after completion of the Contract by the Contractor.

PART 2 - DETAIL REQUIREMENTS

2.1 PIPE COVER

- A. The top of the pipeline or casing shall be installed at a minimum depth of 4' below the surface of the pavement and 3' below the flow line of side ditches. See plans for any allowable exceptions.

2.2 BACKFILLING

- A. All trenches in rights-of-way shall be backfilled in layers not exceeding 4" and each layer shall be thoroughly tamped by a mechanical tamp before the next layer is placed. All excess excavated material shall be removed and disposed of outside of the limits of the right-of-way in such a manner as not to interfere with drainage of highways unless otherwise directed by a representative of the Department, as applicable.

2.3 PIPELINE CROSSINGS

- A. All pipeline crossings of paved roads shall be made by means of jacking, boring, drilling or open cutting as shown on the plans. Casing pipe and carrier pipe shall be the size and type as shown on the plans. Where open cutting is allowed, the trench width shall be as narrow as possible and in no case exceed the width shown on the plans. Whenever the traveled portion of the roadway is cut only one-half of the road width shall be opened at one time. Before the other half is cut, the first opening shall be made usable, safe and maintained for traffic.

2.4 PAVEMENT REPLACEMENT

- A. Where it is necessary to cut existing pavement in roads, the road shall be repaired with a surface of the same type as shown on plans. All replaced surfacing shall meet the requirements of the department both as to material and performance of work. If mutually satisfactory arrangement can be made with the District Engineer through whose division the pipeline passes, pavement may be restored by the Department's maintenance forces with the Contractor assuming the cost of replacement.

2.5 INSPECTION

- A. Before any crossing of a highway is made, written notice shall be given to the Department's District Engineer 5 working days in advance so that a Department inspector may be assigned to the work at the District Engineer's option. A copy of this notice is also to be sent to the Owner's Utility Department Project Coordinator. Any inspector assigned to the pipe laying operations shall have full authority to act in behalf of the Department and to stop any work affecting highways, provided the work is not being performed in accordance with the Department's requirements. The cost of any such inspection shall be borne by the Contractor.

2.6 MAINTENANCE

- A. All work done in the Department's right-of-way shall be maintained by the Contractor for a period of one year after completion of the Contract. The Department shall request the Contractor to make any repairs to work not satisfactorily maintained, and if not brought up to the Department's standard, may be repaired by the Department's forces and all costs of repairs shall be charged to and paid by the Contractor.

2.7 ACCIDENT PREVENTION

- A. Barricades, signs, lights, flagmen, watchmen, and pilot cars shall be used where required by the District Engineer or his Representative. All operations in the Department's rights-of-way shall be conducted at all times in such a manner so as not to create a hazard or to impede the flow of traffic. All costs for these items shall be included in the base bid.

2.8 EXISTING CULVERTS

- A. Wherever a pipeline must be installed beyond the ditch line because of the location of a box culvert, bridge pipe culvert or any other highway structure a minimum horizontal distance of 6' shall be maintained between the pipeline and any portion of the highway structure and the pipelines shall be installed at a minimum depth of 1' below the existing stream bed. When a main is buried in the fill over a culvert, it must be located at least 18" from the inside face of the headwall. Contractor installing water line under existing drain pipes shall maintain a minimum clearance of 1' between the existing pipe culvert and the water line.

2.9 SERVICE LINE INSTALLATION

- A. No pipeline, including service connections shall be installed in open trench unless actually shown on plans as open cut. All service connections shall be bored, driven or punched under roadways maintained by the Department.

2.10 BORING OR JACKING

- A. The length, diameter and thickness of the steel pipe encasements shall be as shown on the plans. The encasement pipe shall be installed by dry boring or jacking, including all necessary handwork, the dry boring operation progresses, each new section of the encasement pipe shall be butt welded to the section previously jacked into place. The boring auger shall not be of a greater diameter than the outside diameter of encasement and voids are to be filled with grout at 50 psi pressure to insure that there will be no settlement of the roadway. In the event that an obstruction is encountered during the dry boring operation, which makes boring impossible in the opinion of the Engineer and Inspector, the boring operation shall be suspended and the section that was to be bored shall be tunneled or open cut by whichever method the NC Department of Transportation will permit. The cost of boring and jacking, (including all necessary handwork) will be paid for at the prices quoted in the proposal. The cost of open cutting that section will be paid for at the prices quoted in the proposal for open cut pipe installation plus asphalt pavement cut.

END OF SECTION 338110