Guidelines for Utility Permit Plan Submittals and Construction

Construction plans must be submitted for review as part of the permit process. The objectives are to make optimum utilization of the space available in the public rights-of-way and public utility easements; to ensure compliance with all City policies; to coordinate with the construction work of other utility companies, agencies, and City projects; and to reduce risk and inconvenience to the public.

Plan Requirements

• Drawings shall be to scale submitted in PDF format
• A cover page shall be provided that includes the following minimum requirements:
  1. Utility company name & contact information
  2. Utility project name, number and date.
  3. Vicinity map with north arrow
• Directly following the cover page, in no specific order, shall be sheets that include:
  1. Plan legend showing symbols and line types used on the drawings. Line types shall provide a clear distinction between proposed conduit installation method(s) being used.
  2. Construction notes.
  3. Construction details for proposed in-ground and above-ground structures (hand holes, vaults, manholes, cabinets, etc.)
  4. City of Winton-Salem “General Construction Notes” (see below)
• Following the above listed sheets shall be plan view sheets showing the proposed work that include the following:

  Existing
  1. North arrow
  2. ROW Lines label “RW” or “ROW”
  3. Street Names
  4. Property Lines & Addresses
  5. Edge of pavement lines (label as “EOP”)* and curb & gutter lines (label back of curb “BOC”)
  6. Planting Strips (label width)
  7. Sidewalks with label indicating exiting material and width (Concrete, Brick Pavers, and Decorative Pavers)
  8. Driveways
  9. Creeks
  10. Bridges
  11. Railroad tracks
  12. Water mains *
  13. Sewer mains *
  14. Storm water structures and pipes *
  15. Fences
  16. Walls

* This info can be obtained as shape files or in pdf format by contacting Tiffany Ladd in the Engineering Records Center at (336)747-6854.
Proposed
1. Proposed conduit/cable placement, above ground structures (utility poles, cabinets, etc.), handholes, vaults, manholes, and bore pits/receiving pits shall be shown per the plan legend. The plan shall include measurements from the EOP for all proposed cable, structures and/or pits.
2. Typical sections shall be provided for each type of underground installation. Road bores shall show the type of roadway, such as curb and gutter or ditch line. The minimum depth of underground lines is from lowest point of the roadway. For a ditch line road, this is generally the bottom of the ditch. Creek crossings shall show the minimum depth of proposed conduit below creek bed.

**Construction Requirements**

Required depth of proposed utility:

1. Proposed utilities shall be installed at a minimum depth of 5 feet when crossing a City street.

Horizontal and vertical offsets from existing utilities:

Three (3) feet is to be interpreted as the minimum vertical separation requirement when crossing water, sewer, and/or storm drain lines and associated structures. New utilities shall cross below any existing utility unless approval given otherwise.

The horizontal separation path between a new utility and existing utility should be both designed and targeted at a minimum distance of 10 feet or more. Reductions in this guideline may be considered on a case by case basis. If approved, at no time will the minimum separation shown on the plans or targeted in the field, be inside the absolute minimum of 5 feet horizontal separation between any existing utility main (and/or associated structures) and the new utility. This separation is to be measured from the outside diameter of the known utility to the outside edge of the conduit bundle.

The horizontal separation requirement may be waived if the proposed conduit is installed at a depth, below and relative to the adjacent existing utility, which meets the minimum vertical separation requirements above.

Structures (handholes, vaults, manholes etc.) shall not be placed on top of any water main, sewer main or storm drain pipe. The absolute minimum offset between any proposed structure from any City utility shall be 5 feet. Structures shall not be placed within a sidewalk unless prevented by lack
of right-of-way. In no case shall any appurtenance be placed in a curb ramp or potential future location of a curb ramp at an intersection.

**Other Provisions**

Any steel plates and/or construction signs utilized shall have a mark or tag identifying the owner.

Handholes placed within the public right-of-way shall be traffic bearing/rated.

If necessary, and at the discretion of the City, advanced subsurface investigations may be required.

**General Construction Notes**

The following construction notes are to be placed on a plan sheet for all construction plans submitted.

1. Contractor is responsible for locating all existing utilities prior to start of construction.
2. All erosion control devices shall be constructed and maintained in accordance with the most current standards of the Land Quality Section of the NCDENR.
3. As a minimum requirement, all graded areas not under pavement and within the right-of-way and/or easements shall be prepared, fertilized and limed, seeded, and mulched immediately upon completion of construction.
4. All work must carry a one-year warranty to cover all defects in materials and workmanship.
5. The most current editions of The North Carolina Department of Transportation Standard Specifications for Roads and Structures and The North Carolina Department of Transportation Roadway Standard Drawings will govern all roadway repair unless otherwise specified herein.
6. All subgrade under paved areas, curb and gutter, sidewalk, and roadway shoulders shall be compacted to at least 95% of the maximum dry density as determined by AASHTO T99 and the NCDOT. The final 12” of subgrade under paved areas and under curb and gutter shall be compacted to 100%.
7. All expansion joints for concrete to be sealed with silicone or polyurethane per NCDOT specifications. Hot applied joint sealer shall not be used. Color must be gray or a color that matches the concrete (not black).
8. Sidewalks shall be installed in the thicknesses as follows:
   a. Residential: 4” thick
      6” thick from PC to PT at intersections including HCR.
      6” thick across all driveways
   b. Commercial: 6” thick
   c. Industrial: 6” thick
      8” thick across all driveways
9. All concrete shall be a minimum of Class A (3000 psi). Class B (2500 psi) shall not be used.