



### Standard Record Drawing Check List Items

Please find below a list of standard items to be included with all record drawings submitted for review. This check list must be submitted with the record drawings (to ensure completeness) or the plans shall be returned without review.

1. Prior to preparing a record drawing, the Engineer of Record shall contact the Town of Morrisville to review the required items identified on the record drawing check list, noting any administrative or field change and incorporating the deviations from the approved Construction Drawings into the record drawing set.
2. Each previously approved construction sheet, except the plans which identify temporary construction conditions, shall be revised to reflect existing as-built conditions.
3. Sanitary sewer and water as-builts shall be provided in accordance with the Town of Cary standards and as described herein.
4. Record drawings shall include both horizontal and vertical as-built location information used on the NAD 1983 State Plane coordinate system.
5. Each sheet must include an as-built certification block which can be found at the following location: <http://www.ci.morrisville.nc.us/engineering/AsBuiltsBlock.pdf>.
6. Record drawings shall be sealed by both a NCPE and NCPLS.
7. Two (2) paper copy sets shall be submitted to the Town of Morrisville for review and approval. Record drawings are considered final when the Town has received, reviewed, and accepted the paper copy. At that time one (1) mylar set of approved record drawings must be provided to the Town for execution of signatures.
8. When the Town has returned the mylar copy of the plans (with signatures), the following items must be provided to the Town for recordkeeping (the Town of Morrisville will forward copies to the Town of Cary):
  - a) Two (2) mylar copies
  - b) Two (2) half-size paper copies
  - c) Two (2) PDF copies (electronic)
  - d) Two (2) copies of AutoCAD files on a CD-Rom. This CD-Rom shall include the name of the project, the Town Project Number, name of the engineering firm providing the CD, and a paper insert with an index listing the contents of the CD.

**Record Drawing Information**

Project Name: \_\_\_\_\_  
Town of Morrisville Project No: \_\_\_\_\_  
Submitted by: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Transmittal Date: \_\_\_\_\_

At a minimum, record drawings shall provide the following information:

**Data**

- \_\_\_\_ 1. Acreage in total tract
- \_\_\_\_ 2. Average lot size
- \_\_\_\_ 3. Total number of lots
- \_\_\_\_ 4. Impervious coverage (separately list buildings, parking areas, sidewalks, etc)
- \_\_\_\_ 5. Total number of stop signs
- \_\_\_\_ 6. Total linear footage on infrastructure chart
  - \_\_\_\_ a. Streets (list individually ROW width, length (ft), area (Ac), and sidewalk length (ft)) Public, Private and Fire Lanes
  - \_\_\_\_ b. Water mains (identify size and length)
  - \_\_\_\_ c. Sewer mains (identify size and length)
  - \_\_\_\_ d. Number of valves (for each size)
  - \_\_\_\_ e. Number of fire hydrants
  - \_\_\_\_ f. Number of manholes
  - \_\_\_\_ g. Other (any additional appurtenances)

**General Information**

- \_\_\_\_ 1. Copy of recorded plat or deed of easements, indicating easements and right-of-way
- \_\_\_\_ 2. Boundary of tract by courses and distance with references
- \_\_\_\_ 3. Tie to N.C. grid coordinate system
- \_\_\_\_ 4. 500 scale vicinity map
- \_\_\_\_ 5. Scale of drawings and bar scale
- \_\_\_\_ 6. North arrow
- \_\_\_\_ 7. Location of benchmark with M.S.L. elevations
- \_\_\_\_ 8. Seal and signature of North Carolina registered P.E. and/or P.L.S. on each sheet that prepared as-built information

- \_\_\_\_ 9. All easements identified and dimensioned. Include legal reference (deed, BOM, page #)

### **Streets**

- \_\_\_\_ 1. Horizontal alignment with radii, P.C.'s, and P.T.'s of all curves
- \_\_\_\_ 2. Vertical alignment with centerline grades, vertical curve lengths and station and elevation of all PVC's and PVT's and centerline profile
- \_\_\_\_ 3. Street name, dimensioned/labeled right-of-way, and street widths
- \_\_\_\_ 4. Pavement section
- \_\_\_\_ 5. Typical cross section
- \_\_\_\_ 6. Horizontal and vertical sight lines
- \_\_\_\_ 7. Pavement markings, signage and traffic signals

### **Storm Drainage**

- \_\_\_\_ 1. Outline of 100-year flood plain
- \_\_\_\_ 2. Pipe material
- \_\_\_\_ 3. Structure invert and top elevations
- \_\_\_\_ 4. Pipe size
- \_\_\_\_ 5. Pipe slope and distance
- \_\_\_\_ 6. Size of riprap dissipation pad
- \_\_\_\_ 7. Statement of stormwater velocity at all outlets
- \_\_\_\_ 8. Show permanent stormwater BMP in accordance with Section 7.203.3 of the Design and Construction Ordinance
- \_\_\_\_ 9. A separate, recorded easement dedication plat for stormwater and utility extensions outside right-of-way

### **Water System**

- \_\_\_\_ 1. Pipe material labeled
- \_\_\_\_ 2. Pipe size labeled
- \_\_\_\_ 3. Separation from sanitary, storm sewer, and gas line shown on plans
- \_\_\_\_ 4. Locations with distance references (permanent points/fixed structure) (2 each per appurtenance)
- \_\_\_\_ a. Valves
- \_\_\_\_ b. Fire hydrants
- \_\_\_\_ c. Blow-offs
- \_\_\_\_ d. Meters
- \_\_\_\_ e. Air release valves

- \_\_\_ 5. Certification by N.C.P.E. of construction in accordance with the water extension permits
- \_\_\_ a. Certification on the plans
- \_\_\_ b. A separate certification sheet must be provided
- \_\_\_ 6. A separate, recorded easement dedication plat for stormwater and utility extensions outside right-of-way
- \_\_\_ 7. Plan and profile

**Sanitary Sewer System**

- \_\_\_ 1. Pipe material labeled
- \_\_\_ 2. Pipe size labeled
- \_\_\_ 3. Manhole top elevations
- \_\_\_ 4. Invert in and out elevations
- \_\_\_ 5. Pipe slope
- \_\_\_ 6. Separation from storm sewer, water line, and gas line
- \_\_\_ 7. Locations with distance references (permanent points/fixed structure) (2 each per appurtenance)
  - \_\_\_ a. Clean outs
  - \_\_\_ b. Air release valves
  - \_\_\_ c. Manholes
  - \_\_\_ d. Force main valves
- \_\_\_ 8. Horizontal control (angles at manholes)
- \_\_\_ 9. 100-year flood plain elevation
- \_\_\_ 10. Certification by N.C.P.E. of Construction in accordance with sanitary sewer extension permits
  - \_\_\_ a. Certification on the plans
  - \_\_\_ b. A separate certification sheet must be provided
- \_\_\_ 11. A separate, recorded easement dedication form for stormwater and utility extensions outside right-of-way
- \_\_\_ 12. Plan and profile

TOWN OF MORRISVILLE USE ONLY

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Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

Approved: \_\_\_\_\_ Returned: \_\_\_\_\_