



As-Built Submittal Checklist

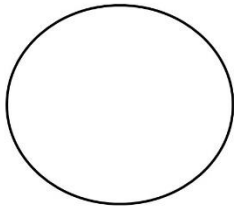
Please submit (1) hard copy of all documents to the Engineering Department and an electronic copy of all documents to asbuilts@garnernc.gov. Plans considered incomplete or not meeting Town standards will be returned with written comments to be addressed. Any minor comments shall be addressed in final submittal for engineering approval. **Do not resubmit unless all comments have been fully addressed.**

The following fees are due at the time of submittal:

- \$ 150.00 (fee includes 1st and 2nd Review)
- \$ 75.00 (collected at 3rd, 5th, 7th Review)

General Notes

1. Plans must be submitted on 24" X 36" sheets.
2. Provide a north arrow on each plan sheet.
3. Provide scale of drawings and bar scale on each plan sheet.
4. Horizontal tie to North American Datum (NAD83/Suffix year). Datum to be consistent with approved plans.
5. Vertical tie to North American Vertical Datum of 1988 (NAVD88).
6. Submittals must include an electronic copy of as-built drawings in PDF format.
7. On each page, include the text "As-Built" in large, bold font.
8. On each page, add the provided certification block in accordance with 21 NCAC 56.16.00, completed, signed, and sealed by a NC registered PLS responsible for the as-built survey.

AS-BUILT CERTIFICATION	
Firm Name: _____	
Address: _____	
Name/Date: _____	
Signature: _____	
SEAL	
<small>I hereby certify to the best of my knowledge and belief that this recorded As-Built is based on actual field survey information provided by _____ dated _____ and accurately represents the final conditions of this project. The constructed improvements have been field verified and conform to all the provisions of the Town of Garner.</small>	

9. As-Built drawings should conform to the approved construction plans and include any field modifications or other changes to the approved construction plans.

Cover Sheet

10. Ensure that the cover sheet includes:
 - project name
 - vicinity map
 - parcel identification number
 - project address
 - date of survey
11. On Cover Sheet provide an As-Built Quantity Table indicating, at a minimum, the following information:
 - Streets (List lengths individually: Public, Private and/or Fire Lane)
 - Water mains (Identify diameter, material (including wrapping and/or coating (if applicable), pressure class and length)
 - Sewer mains (Identify diameter, material (including wrapping and/or coating (if applicable), pressure class and length)
 - Storm pipe (Identify diameter, material and length)
 - Reclaimed water mains (Identify diameter, material, pressure class, and length)
 - Number of and manufacturer of valves (For each size)
 - Number of and manufacturer of fire hydrants (per each)
 - Number of and manufacturer of manholes (per each)
 - Other (Any additional appurtenances)
 - Number of stop signs
 - Sidewalks (Identify width and length, measured in feet)
 - Greenways & multi-use trails (Identify width and length, measured in feet)
 - Greenway structures (bridges & culverts) (Identify width and length, measured in feet)
 - Greenway signs, benches & trashcan (per each)

Stormwater Conveyance

12. Show/label outline of FEMA 100-year floodplain (with base flood elevations) and Town of Garner Conservation Buffer.
13. Show/label outline of any jurisdictional wetlands and/or applicable zones of Neuse River buffers.
14. Label structure invert and top elevations.
15. Label all pipes with length, size, and material.
16. Provide as-built pipe schedule. For any pipes with slope less than 0.5% or with greater than 10% variance from design slope, provide as-built capacity calculations.
17. Provide size of riprap dissipation pad.
18. Provide statement of stormwater velocity at all outlets.
19. Include maintenance agreement responsibility statement.
20. Show/label permanent stormwater SCMs with locations and associated drainage inlets where required on site plan/construction drawings.
21. Spatial data shall be submitted to the Town of Garner following approval of as-builts. Provide Survey Point File - SHP (preferred), DWG, or DGN file of all NCPLS certified post-construction survey information with the following columns (as applicable):

- a. Feature Type – Descriptions used shall be common industry standard abbreviated terms (MH, CB, DI, JB, FH, WV, WM, CO, SCM, etc.)
 - b. Northing
 - c. Easting
 - d. Elevation
 - e. Description
22. Spatial data shall be submitted to the Town of Garner following approval of as-builts. Provide Survey Lines file - SHP (preferred), DWG, or DGN file of all NCPLS certified post-construction survey information with following layer names.
- a. Storm Pipes (including attribute table or labels for pipe size, pipe type, pipe slope, invert upstream, invert downstream)
 - b. Roadway Centerline
 - c. Edge of Pavement
 - d. Back of Curb
 - e. Sidewalk
 - f. Right of Way

Stormwater Control Measures

23. Provide narrative summary of site SCMs and any deviations from approved plans.
24. Provide as-built surveyed elevation spot shots to confirm as-built elevations in comparison to design contours, including slopes, top of dam, exterior slopes, and emergency spillway. Provide SCM as-built storage capacity/volume.
25. Provide as-built impervious and pervious surface areas in tabular form.
26. Provide approved elevations versus built elevations for any differences on the SCM cross-section.
27. Recorded Memorandum of Agreement along with SCM Operations and Maintenance Agreement is required prior to approval of as-builts.
28. Media/materials certification (for filtration systems [ex: sand filter, bioretention areas, etc.])
29. For vegetation to be planted within an SCM, provide a landscape planting list to verify conformance with approved plan or any substitutions made.
30. Ensure slopes of the stormwater device and berm are stable and not steeper than 3:1.
31. Removal of any silt fence or tree protection fence material is required prior to as-built approval.
32. Licensed Professional Certification of Engineering Stormwater Control Measure (attached) is required prior to as-built approval.

**LICENSED PROFESSIONAL CERTIFICATION OF ENGINEERED
STORMWATER CONTROL MEASURE**

Specific type of Engineered Stormwater Measure(s):

I _____ as a duly licensed Professional, do hereby certify that the Engineered Stormwater Control Measure for the project entitled:

with the Town of Garner Site/Subdivision #: _____ has been constructed within substantial compliance and intent of approved construction plans, drawings, and specifications and that the associated infrastructure has been installed in compliance with the approved construction plans, drawings, and specifications. This statement is based upon reference and reviews of the record drawings prepared for this site and upon periodic field inspections and project reviews completed during the construction of the referenced Engineered Stormwater Control Measure, including a final inspection of the stormwater control measure made within 30-days prior to the signature date outlined below.

Signature

Date

(seal)