



# PLAN REVIEW CHECKLIST

Town of Garner  
Engineering Department

900 Seventh Avenue, Garner, NC 27529  
Telephone: (919) 773-4425

## Section A. DATA TO BE SHOWN ON PLANS

### (a) Overall Submission requirements

- 1. The site plan drawings shall be drawn on a standard sheet size of either twenty-four (24) by thirty-six (36) inches or thirty (30) by forty-two (42) inches when included in an architectural submittal;
- 2. A vicinity sketch or key map at a scale of not more than one thousand (1000) feet to the inch (1"=200' is preferred on cover sheet), showing the position of the proposed project with its relation to surrounding streets and properties, and oriented in the same direction as the site plan;
- 4. True north arrow, with north being at the top of the map;
- 5. Scale of the map using engineer's scale (1"=10', 1"=50', etc.) both graphic and numeric and date of preparation, including all revision dates;
- 6. Each plan sheet shall be signed AND sealed by a NC registered Professional Engineer;
- 7. A legend and notes sheet shall be included with all line types and symbols clearly shown for interpretation;

### (b) Title Block/Site Data Tabulation

- 1. The name of the development, name of the owner and agent, name, address and telephone number of the designer who prepared the plan;
- 2. Project address, PIN number, and project name;
- 3. Site information including total acreage, disturbed area, existing impervious area, proposed impervious area with percentage, future impervious (where applicable);
- 4. For residential developments – Planned number of units, along with their size (in terms of bedrooms);
- 5. For commercial developments – Proposed number of employees per shift;
- 6. Proposed area in square feet to be irrigated;

### (c) General Information

- 1. An accurate and complete legend is required on each plan sheet (detail sheets do not require a legend);
- 2. Names of property owners of adjacent properties or subdivisions of record;
- 3. Proposed streets, existing and platted streets on adjoining properties and in the proposed development with right-of-way widths (and NCDOT SR numbers if applicable);
- 4. Existing and proposed topographical information, along with proposed finished floor elevations for structures, and spot elevations for all roadways and parking areas;
- 5. Existing or proposed sidewalks, both on public rights-of-way and on-site;
- 6. All proposed and existing easements, widths, purposes noted, public or private and book and page numbers;
- 7. Location, material, and size of any existing utilities (water, sanitary sewer, septic, storm water, etc.) along with their owners' names, and inverts on all sanitary sewer and storm water facilities;
- 8. Street centerline stations are shown for reference on all plan views and correspond to plan and profile sheets;

### (d) Environmental Requirements (where applicable)

- 1. Floodplain information, including base flood elevation, 100-year flood boundary, floodway and floodway fringe areas, indicating source of information;
- 2. Riparian buffer information including Zone 1 (30') and Zone 2 (50');
- 3. State and federal wetlands are shown on the site;

- 4. Blue-line streams and other existing water features on the site, or are adjacent to the site and impact the site through previously mentioned buffers;
- 5. Drainage basin maps showing existing drainage basins with area and impervious broken down, and proposed drainage basin maps showing areas broken down by their destination (i.e. Pond #1, Bio-retention #4, Bypass area, etc.);

**(e) General Storm Water Information Requirements (where applicable)**

- 1. The overall storm water plan demonstrates the ability to treat for the site and location;
- 2. All existing and proposed storm water piping shown as well as their sizes and material type, and details on how they are to be constructed;
- 3. All existing and proposed storm water structures (curb inlets, drop inlets, manholes, and outlets) with their size, rim elevation, invert elevations, and labeling to correspond to calculations and details to show how they are to be constructed;
- 4. All existing and proposed swales for conveyance or treatment shown as well as spot elevations at the top and bottom of the swale and the linear footage of the swale (i.e. "335LF grassed swale No. 1"), and details;
- 5. All proposed storm water BMP's or SCM's comply with the NCDEQ Minimum Design Criteria;
- 5. All BMP details are included for construction including a cross-sectional detail of each proposed BMP, and all elevations on plan and details match those in routing calculations of storm water narrative;
- 6. All outlet protection, rip-rap energy dissipaters, and their associated sizing calculations and details;

**(f) General Transportation & Roadway Information Requirements (where applicable)**

- 1. Site plan demonstrates conformance with Garner Transportation Plan (rights-of-way are dedicated, street sections match, sidewalk is in correct locations, etc.);
- 2. Connectivity to surrounding vacant parcels or existing streets is provided;
- 3. Street cross-sections match Town of Garner standards for the type of street;
- 4. Proposed gutter types match the Town of Garner standards and are applicable for the area of the project;
- 5. Street details meet minimum design standards for Town of Garner;

**(g) General Water & Sewer Information Requirements (where applicable)**

- 1. Tie-ins and extension locations for connectivity to neighboring parcels is provided (either through construction or easements);

**(h) Special Notes for the plan.**

- 1. Add note on plans – "Contact the North Carolina One Call Center prior to doing any digging. 1-800-632-4949";
- 2. Add note on plans – "All roof drains shall be directed to storm drain system";
- 3. Add note on plans – "Please contact the Town of Garner Engineering Department at 919-773-4425 to schedule a pre-construction meeting prior to obtaining building permits for this plan.";

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## **Section B. DATA TO BE SHOWN IN NARRATIVE AND CALCULATIONS**

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- 1. Storm water narrative demonstrates how site will be developed and how storm water runoff will be captured and treated to meet Town of Garner storm water ordinance and NCDEQ MDC;
  - 2. Storm water narrative also includes all details about the storm water on the site, how it drains prior to the proposed development, how it will drain after the proposed development, and if any off-site drainage is being captured or if any on-site drainage is being bypassed and how the treatment over-detains to compensate;
  - 3. Pipe/swale calculations included either on plans or in narrative package to justify sizing;
  - 4. Basin maps show pre-developed condition and post-developed condition with clear delineation on treatment areas;
  - 5. Storm water routing calculations provide clear justification for sizing of SCM's and outlet elevations;
  - 6. Routing calculations provide 1-year, 10-year, and 25-year pre vs. post compliance (Post < Pre) and 100-year emergency sizing;
  - 7. Nitrogen calculations on Town of Garner form;
  - 8. Operations & Maintenance agreement for each proposed BMP is included in the submittal;
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