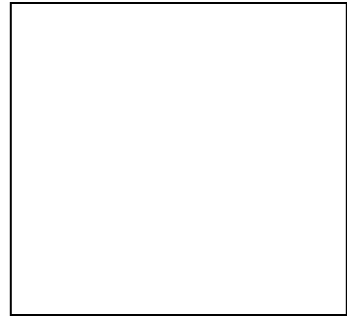


County of Durham

Engineering Department
Stormwater and Erosion Control Division
120 E. Parrish Street, Law Bldg., 1st Floor
Durham, North Carolina 27701
(919)560-0735 Fax: (919)560-0740



Design Professional's Signature, Seal, & Date

Stormwater and Erosion Control Division Rezoning Plan Submittal Checklist

For each review submittal the entire study must be submitted. This includes re-submittals. Partial study packages will not be reviewed. Incomplete Stormwater Site Plan Submittals will be returned with NO REVIEW PERFORMED. Contact Stormwater and Erosion Control Division concerning redevelopment, expansion or projects which result in a decrease in impervious area for modified submittal requirements. This submittal checklist is to be submitted with each plan submittal.

I. PROJECT INFORMATION

Project Name: _____ Phase: _____

Previous Project Name, if applicable: _____

PIN: _____ Tax Map Number _____ Planning Case Number: _____

Owner _____ Phone Number _____

Owner Address _____

Project Comment Contact Person: _____ Phone number () _____

Fax number: () _____ Company Name: _____

II. REQUIRED ITEMS CHECKLIST

The following checklist outlines submittal requirements. Initial in the space provided to indicate the following submittal requirements have been met and supporting documentation is attached.

A. General Requirements

Applicant's initials

- _____ a. Stormwater Impact Analysis (SIA) including narrative report and drainage calculations sealed and signed by North Carolina Professional Engineer.
- _____ b. Cape Fear / Neuse Basin (circle one).
(If Neuse Basin circled completion of **Section D.** below is required)
- _____ c. INSIDE / OUTSIDE (circle one) Water Supply Watershed.
(If INSIDE Water Supply Watershed completion of **Section E.** below is required)
- _____ d. Show all Durham County and Neuse Basin Stream Buffers on the plan. Diffuse flow into stream buffers is required.
- _____ e. Floodplain located on site: Yes / No (circle one). A copy of floodplain map with site boundary shown is required and the 100-year floodplain with base flood elevations (if applicable) must be shown on the site plan.

B. 10% Stormwater Rule Requirements

- _____ a. Durham County Soils map with site boundary shown.
- _____ b. USGS 7.5 Minute Quadrangle with site boundary shown.
- _____ c. Introduction narrative describing the site conditions in pre- and post-development conditions including a description of site improvement changes.
- _____ d. Drainage area map including:
 - ___ Site area delineated, scale and north arrow.
 - ___ Sub-basins delineated for pre- and post-development conditions with area in acres indicated.
 - ___ Analysis points clearly identified and labeled.
 - ___ Segmented TR-55 time of concentration flow paths showing each segment.
- _____ e. Methodologies and procedures described.
- _____ f. Site plan or grading plan identifying pre- and post-development drainage patterns.
- _____ g. Pre- and post-development times of concentration calculated using the TR-55 segmented approach.
- _____ h. Calculations for the pre- and post-development discharges for the 1-, 2- and 10-year 24-hour storm using TR-55, TR-20, HEC-HMS, HEC-1 or Rational Method. The discharge point for these calculations is the property boundary.
- _____ i. Summary of Results provided in the following format (see Example below).

<i>BASIN NAME</i>	<i>Pre- Developed 1-year discharge</i>	<i>Post-- Developed 1-year discharge</i>	<i>% Increase</i>	<i>Pre- Developed 2-year discharge</i>	<i>Post- Developed 2-year discharge</i>	<i>% Increase</i>	<i>Pre- Developed 10-year discharge</i>	<i>Post- Developed 10-year discharge</i>	<i>% Increase</i>	<i>Detention Required (Yes/No)</i>

- _____ j. Conclusion providing detailed findings.
- _____ k. BMP provided (indicate quantity): ___ Wet Pond ___ Sand Filter ___ Bioretention
 ___ Dry Detention ___ Other _____
 ___ Not required
- _____ l. BMP benefits: ___ control 1-, 2- and 10-year discharge
 ___ Other _____
 ___ Not required

C. Durham County Stream Buffers

- _____ a. A copy of the Durham County Soils map and the USGS 7.5 Minute Quadrangle with the site indicated has been provided. Diffuse flow into buffers is required.
- _____ b. All Durham County stream buffers are shown on the plan for intermittent and perennial streams shown on the Durham County Soils map or the USGS 7.5 Minute Quad. Diffuse flow into buffers is required
- _____ c. NCDENR documentation for approval of buffer impacts provided.
- _____ d. Stream delineations (Cape Fear / Neuse Basin). If in Neuse Basin, provide NCDENR Division of Water Quality documentation. If in Cape Fear Basin, provide report as required by Section 14-153(b)(3) (i) of the County Stormwater Ordinance.

D. Neuse Basin Requirements

Note: If a single family, duplex, or recreational development disturbs ≤ 1 acre or a multi-family, office, institutional, commercial or industrial development disturbs ≤ 0.5 acres then all items below are N/A.

- _____ a. Pre- and post-development nitrogen calculations using Durham County Nitrogen Calculation Tables.
- _____ b. Nitrogen buy-down calculations (if necessary). Site plan will not be approved until Ecosystem Enhancement Program (EEP) payment is verified.

E. Water Supply Watershed Requirements

- _____ a. Indicate the water supply watershed overlay district(s) the project is located. (Circle all that apply) (F/J-A, F/J-B, E-A, E-B, M/LR-A, M/LR-B)
- _____ b. Provided BMP for 85% TSS removal or **narrative** explaining why it is not provided

- _____ c. BMP provided: ___ Wet Pond ___ Sand Filter ___ Bioretention ___ Dry Detention
___ Other _____
___ Not required
- _____ d. BMP benefits: ___ 85% TSS Removal ___ Other _____
___ Not required

Note: Executed Stormwater Facility Operation and Maintenance Permit Agreement, payment of permit fee and payment of surety are required prior to construction drawing approval.