



**GUILFORD COUNTY
PLANNING AND DEVELOPMENT**

Watershed
Development Plan Review
Checklist

Project: _____
Date submitted: _____ **County Case #:** _____

To assist applicants in the preparation of site development plans in compliance with Stormwater Management & Watershed Protection regulations, this Checklist is provided as general guidance for submitting a comprehensive set of plans and reports. Please complete this checklist and include it in the submission package for review by the Watershed Section of the Technical Review Committee (TRC). Providing the checklist information will help to assure a more complete submittal and a timelier review. This list is not all inclusive and additional information may be required to address project specific circumstances.

Watershed Section approval of the following plan submissions are required prior to the issuance of a Grading Permit by the Erosion Control Section:

- Watershed Development Plan (low- and high-density projects)
 - Submit with Site Plan for commercial projects
 - Submit with Prelim Plat for subdivisions
- Buffer Authorization (when required)
- Floodplain Development Permit (when required)

See Unified Development Ordinance (UDO) [Article 9 Environmental Regulations](#) and [Appendix 2 – Map Standards](#) for additional information required.

See [Stormwater Control Measure \(SCM\) Checklists and Forms](#) for additional information required for high-density projects. SCM design must meet Minimum Design Criteria (MDC) requirements outlined in NCDEQ Stormwater Manual.

Provide PDF of plans, reports and associated documentation to the Watershed Section for review.

Provide Completed Checklist with Plan Submission. Indicate for each item as appropriate:

√ Provided

N/A Not Applicable or not required

UNK Unknown at this time (must be verified prior to approval)

RESPONSES TO PLAN REVIEW COMMENTS MUST BE PROVIDED WITH REVISED PLAN SUBMISSION FOR REVIEW. INDICATE SHEET #, NOTE #, OR PAGE # IN RESPONSE.

Watershed Development Plan / Stormwater Management Plan:

- _____ Project name
- _____ Owner and Engineer contact information
- _____ Professional Engineer’s signature, seal, date signed
- _____ Vicinity map
- _____ North Arrow
- _____ Scale Bar (engineering scale)
- _____ Legend
- _____ Survey background reference info
- _____ Parcel info (Parcel ID, Owner, DB & PG)
- _____ Property boundaries and rights-of-way
- _____ Adjoining property owners labeled (Parcel ID, Owner, DB & PG)
- _____ Easements (drainage, utility, other)
- _____ Water Supply Watershed (WSW) name and classification. Indicate if site in WSW General Watershed Area (GWA) or Watershed Critical Area (WCA) with WCA Tier #.
- _____ Indicate Riparian Buffer Rules that apply (Jordan Lake, Randleman Lake, Polecat Creek WS-III, Sandy Creek WS-III, NPDES non-WSW Area)



- ___ Project Density Calculations (allowable & proposed density in dwelling units per acre or % BUA as appropriate)
- ___ Total Site Area
- ___ Existing, Proposed (net change), Total BUA (acreage & % total)
- ___ Deed Restriction – Restrictive Covenant note (UDO 9.1.F.4) on subdivision plats
- ___ Existing and Proposed Topography at minimum 2-foot contour intervals with elevation labels
- ___ Water Courses (Streams, Ponds, Wetlands)
- ___ Riparian Buffers and Buffer Detail
- ___ Riparian Buffer impacts (obtain Buffer Authorization for non-exempt uses)
- ___ Floodplain information (1% Chance Annual Flood Limits - SFHA, Floodway or Non-encroachment Area Limits, FIRM Map # & Effective Date)
- ___ Stormwater Conveyance System (pipe sizes, slopes, materials, classification; storm structures, types, invert & grade elevations; culverts; swales with surface type; riprap aprons; details; bedding)
- ___ SCM design plans, cross-sections, details, specifications, and provide profile of core trench for wet detention ponds.
- ___ SCM Maintenance & Access Easement with connection to public ROW
- ___ SCM Maintenance Responsibility Note (UDO 9.1.F.5.d.iv)
- ___ Guilford County SCM Standards Notes (these can be requested from the Watershed Section) for:
 - SCM General Notes
 - SCM Maintenance Responsibility Notes
 - SCM Close-out Requirements Prior to Issuance of Temporary or Final Certificate of Occupancy (site plans)
 - SCM Close-out Requirements Prior to Recording of Subdivision Plats (subdivisions)
 - SCM Material Submittals (for engineer of record review and approval prior to installation)
 - SCM Inspections (for engineer of record inspections required during construction prior to SCM certification and close-out)
- ___ SCM Conversion Notes (when permanent SCM to be utilized as temporary Erosion Control Measure during construction)
- ___ Engineer's Statement of Runoff Control (for SCMs per UDO 9.1.F.5.d.iii), signed, sealed, dated
- ___ Pre- and Post-Development Drainage Area Plans (include in plan set and report)
- ___ Include typical Site Construction Document plans with the Watershed Development Plan submission including, but not limited to Site Plan, Utility Plan, Erosion Control Plan (with full limits of disturbance), Grading & Drainage Plan, Landscape Plan (including SCM plantings), Details.
- ___ Guilford County Site Plan Standard Notes for Watersheds, Buffers, Floodplains, WQCE (these can be requested from the Watershed Section)
- ___ Impacts to Riparian Buffers, if any (Buffer Authorization maybe required)
- ___ Development in the Special Flood Hazard Area a.k.a. 100-year Floodplain, if any (Floodplain Development Permit required for and development activity in the SFHA include, but not limited to land disturbance, clearing, erosion control measures, structures, grading, paving, excavation, utilities, mining, dredging, and any other development in the SFHA). No-fill is allowed in the SFHA.
- ___ Low-density Development projects must be demonstrated to meet requirements of UDO Section 9.1.F.5.c, NCDEQ Stormwater Design Manual Section E-1, 15A NCAC 2H .1003(2) for non-WSW areas, and 15A NCAC 02B .0624(5) for WSW areas.

Stormwater Management Report & Calculations (for projects with SCM)

- ___ Narrative (project summary; existing & proposed site conditions; calculation methodology description; summary table of calculation results demonstrating MDC and UDO compliance)
- ___ Water Quality Design Calculations (per NCDEQ Design Manual & MDCs)
- ___ Hydrographs with input and output data (pre- and post-development, including bypass areas)
- ___ SCM Stage-Storage calculations & Outlet Control Structure routing model inputs
- ___ Curve Number (CN) calculations
- ___ Time of Concentration (Tc) calculations
- ___ Precipitation Data (NOAA)
- ___ Soils Map with HSG info
- ___ Exhibits (Pre- and Post-Development Drainage Area Maps with acreages and Tc path. Bypass areas, and off-site drainage areas discharging onto property to be indicated)



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- _____ Seasonal High-Water Table Study (if applicable)
- _____ Documentation of request for NCDEQ Dam Safety Law of 1967 Jurisdictional Determination / Hazard Classification (for wet detention ponds and sites with work near or downstream of existing dams)

Stormwater Conveyance Report

- _____ Storm pipe calculations (capacity, peak flow and HGL for 10-year storm event)***
- _____ Swale Calculations (capacity and liner design)***
- _____ Precipitation / IDF Data (NOAA)
- _____ Drainage Area Exhibit for storm structures, culverts and swales
- *** Public ROW drainage must be designed per NCDOT standards and submitted to NCDOT for their review and approval. The more stringent standards must be followed.

Buffer Use Request application (if applicable)

- _____ Buffer Use Request application (Stream Buffer Use Request Form for proposed buffer impacts)
 - _____ Buffer Impact Exhibits showing temporary and permanent impacts
 - _____ Narrative of impacts with Letter of No Practical Alternative
- Contact Guilford County Watershed Section and see Stream Buffer Use Request Form for additional information required.

Floodplain Development Permit Application (if applicable)

- _____ Floodplain Development Permit Application (no-fill allowed in SFHA)
- _____ Plans showing all proposed development / encroachments in the SFHA
- _____ No-rise Certification, documentation and narrative report, if required (encroachments in Floodway or Non-Encroachment Area)
- _____ FEMA CLOMR or LOMR, documentation and narrative report, if required (encroachments in Floodway or Non-Encroachment Area)

Other Requirements (if applicable)

- _____ NCDEQ 401 Permit approval (if applicable)
- _____ USACE 404 Permit approval (if applicable)



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Signature and Contact Information:

Complete the information below and submit this page with development plans to signify that every attempt was made to provide the applicable information as outlined in the forgoing Watershed Development Plan Review Checklist. Providing the checklist information will help to assure a more complete submittal and a timelier review.

County project number: _____

Project name: _____

Project address: _____

Name of submitting Engineer: _____

E-mail address: _____

Phone number: _____

Signature and submittal date:
