

3.11.4.3. Stormwater Management

- A. Authority.** This section is adopted pursuant to the authority vested in the Town of Chapel Hill by the Session Laws and the General Statutes of North Carolina and the authority referenced in Section 1.2 of the Land Use Management Ordinance.
- B. Purpose.** The purpose of this Section is to establish minimum stormwater performance criteria, management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This section seeks to meet that purpose through the following objectives:
1. Minimize increases in stormwater runoff from any development in order to reduce flooding, siltation and streambank erosion and maintain the integrity of stream channels;
 2. Minimize increases in non-point source pollution caused by stormwater runoff from development that would otherwise degrade local water quality;
 3. Minimize the total volume of surface water runoff that flows from any specific site during and following development in order to replicate the pre-development hydrology to the maximum extent practicable;
 4. Reduce stormwater runoff rates and volumes, soil erosion and non-point source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety; and
 5. Meet the requirements of the National Pollutant Discharge Elimination System (NPDES Phase 2) regulations as established by the Clean Water Act and administered by the North Carolina Department of Natural Resources, or its successor agency.
 6. Control nonpoint and point source pollution associated with new development and redevelopment and help protect the water supply uses of Jordan Lake.

C. Applicability.

1. This section applies to all new development and redevelopment projects for which a form district permit is required. No development or redevelopment for which a form district permit is required pursuant to this section shall occur except in compliance with the provisions, conditions, and limitations of the permit.
2. Projects that disturb less than ½-acre of land, including cumulative disturbance are exempt from subsection 3.11.4.3.F.4.

D. Design Manual and Standard Details

1. The Town shall use the policy, criteria, and information, including technical specifications and standards in the Town's "Design Manual and Standard Details" and the July 2007 publication of the "Stormwater Best Management Practices Manual," as amended, published by the North Carolina Department of Environment and Natural Resources' Division of Water Quality, as the basis for stormwater review decisions and for determining the proper design, implementation and performance of engineered stormwater controls and other practices for compliance with this section.
2. If the specifications or guidelines of either design manual are more restrictive or apply a higher standard than the other, or other laws or regulations, the more restrictive specifications or guidelines apply.
3. Whenever an applicant proposes to utilize a practice or practices not designed and constructed in accordance with the criteria and specifications in the design manuals, the applicant shall have the burden of demonstrating that the practices will satisfy the minimum water quality performance standards of this section. The town manager shall require the applicant to provide the documentation, calculations, and examples necessary for the town manager to determine whether such an affirmative showing is made.

E. Application Requirements

1. Unless otherwise exempted by this Section, every permit application for development must be accompanied by a stormwater impact statement in order for the permit application to be considered.

2. The Town Manager shall prescribe the forms and information that shall be submitted to determine compliance with this chapter, with sufficient copies for necessary referrals and records.

F. Design and Performance Standards. The following are required stormwater management performance criteria:

1. Stormwater treatment shall be designed to achieve average annual 85% total suspended solids (TSS) removal and must apply to the volume of post-development runoff resulting from the first one-inch of precipitation. Alternative treatment methods to achieve 85% average annual TSS removal may be acceptable. The 85% requirement applies to 85% of the additional suspended solids that are the result of the new development.
2. The stormwater runoff volume leaving the site post-development shall not exceed the stormwater runoff volume leaving the site pre-development (existing conditions) for the local 2-year frequency, 24-hour duration storm event for all development. This may be achieved by hydrologic abstraction, recycling and/or reuse, or any other accepted scientific method.
3. The stormwater runoff rate leaving the site post-development shall not exceed the stormwater runoff rate leaving the site pre-development (existing conditions) for the local 1-year, 2-year, and 25-year 24-hour storm events.
4. Notwithstanding subsection 3.11.4.3.F.1., the minimum impervious area treated for eighty-five (85) percent average annual TSS removal shall be fifty (50) percent of the post construction total impervious area.

G. Post-Construction Requirements

1. Inspection, Operation and Maintenance Plan

- a. The owner or owners of a development must sign and record an inspection, operation, and maintenance plan that shall be binding on all subsequent owners of the site, portions of the site, and lots or parcels served by the stormwater management facility. Until the transference of all property, sites, or lots served by the engineered stormwater controls and practices, the original owner or owners, shall have primary responsibility for

carrying out the provisions of the maintenance agreement.

- b. The inspection, operation, and maintenance plan shall require the owner or owners, to maintain, repair and, if necessary, reconstruct the stormwater management facility and shall state the terms, conditions, and schedule of maintenance for the stormwater management facility. In addition, it shall grant to the Town of Chapel Hill the right of entry in the event that the town manager has reason to believe it has become necessary to inspect, monitor, maintain, repair, or reconstruct the stormwater management facility; however, in no case shall the right of entry, of itself, confer an obligation on the town to assume responsibility for the stormwater management facility.
- c. The inspection, operation, and maintenance plan must be approved by the town manager prior to permit approval and shall be recorded with the county register of deeds prior to issuance of a certificate of occupancy.

2. Upon completion of a project and before a certificate of occupancy shall be granted, all of the documents enumerated below must be submitted to the Town Manager and a final stormwater management inspection must be scheduled. After performing the final inspection and reviewing and approving the documents, the Town Manager will issue an approval notification to the Town's Inspections Division.

- a. A copy of the recorded stormwater facility and maintenance easement, signed and sealed by a registered North Carolina professional land surveyor and recorded by the county register of deeds, showing the "Stormwater Management Facility and Maintenance Easements", the stormwater management facilities, and the maintenance access locations. For purposes of maintenance, the maintenance access must be shown on the exhibit and extend from the "Stormwater Facility Easement" to the nearest public right-of-way. The following notes must be included on the recorded final plat or easement exhibit.
 - i. All engineered stormwater management control, treatment, and conveyance

- structures located on or below the ground shall be wholly contained within an easement entitled: "Reserved Stormwater Facility Easement Hereby Dedicated" and shall be reserved from any development which would obstruct or constrict the effective management, control, and conveyance of stormwater from or across the property, other than the approved design and operation functions.
- ii. The reserved stormwater facility and maintenance easements and the facilities they protect are considered to be private, with the sole responsibility of the owner to provide for all required maintenance and operations as approved by the Town Manager except as noted in Sec. I. below.
 - iii. The reserved stormwater facility and maintenance easements and the inspections, operations, and maintenance plan are binding on the owner, heirs, successors, and assigns.
- b. A copy of the recorded inspection, operation, and maintenance plan signed by the owner and recorded by the county register of deeds, for the stormwater management facilities. The inspection, operations, and maintenance plan must include a description and details of the device or structure, an inspections checklist, and operating and maintenance procedures. The plan should identify contact information, who will perform the inspections, frequency of inspections, inspections and maintenance logs, any specific equipment needs or certifications (e.g., confined space certification), action levels or thresholds (e.g., remove sediment after depth exceeds 1 foot), and disposal methods. The person responsible for the maintenance of stormwater management facilities shall submit an annual inspection report to the Town.
 - c. Certified as-built plans signed and sealed by qualified registered North Carolina professional engineer, showing final design specifications for all stormwater management facilities and practices and the field location, size, depth, and planted vegetation of all measures, controls, and devices, as installed.
 - d. Certified final survey signed and sealed by a registered North Carolina professional land surveyor, showing building footprints, driveways, all other impervious surfaces, stormwater drainage/conveyance piping, and stormwater management structures. The survey should be in DXF binary format using state plane coordinates and NAVD 88.
 - e. Certification, signed and sealed by a qualified registered North Carolina professional engineer, that the stormwater management facilities were constructed in accordance with the approved plans and specifications.
3. **Annual inspection.** An original inspection report shall be provided to the town beginning 1 year from the date of the recorded inspection, operation, and maintenance plan and each year thereafter on or before that date of recordation.
- H. The Ephesus/Church Fordham Municipal Service District (MSD) through the Town's departments, agencies, officers, employees, consultants, contractors or agents may assist with meeting the inspection and maintenance requirements as provided in the service district plan and provided for in right of entry agreements with the property owners and responsible parties. The MSD may also provide the financial assurance required for issuance of certificate of occupancy upon approval of the Town Manager.
 - I. **Failure to maintain practices.** If a responsible party fails or refuses to meet the requirements of the maintenance covenant, the Town, after reasonable notice, may correct a violation of the design standards or maintenance needs by performing all necessary work to place the facility in proper working condition. In the event that the stormwater management facility becomes a danger to public safety or public health, or is otherwise not functioning as designed, the Town shall notify the party responsible for maintenance of the stormwater management facility in writing. Upon receipt of that notice, the responsible person shall have 30 days to effect maintenance and repair of the facility in an approved manner. After proper notice, the town may assess the owners of the facility for the cost of repair work and any penalties; and the cost of the work shall be a lien on the property, or prorated against the

beneficial users of the property, and may be placed on the tax bill and collected as ordinary taxes by the County.

- J. **Variations.** Persons who wish to undertake uses and activities prohibited by this section may pursue a variance. The procedures for requesting a variance from the requirements of this section shall be as follows:
 - 1. The procedures for requesting a variance from the requirements in this subsection are contained in Section 4.12 of the Land Use Management Ordinance.