Í			building and site
			preparation shall utilize
			specialized site design techniques and
1			approaches as described
			in subsection (d).

5.4 Stormwater Management

5.4.1 Purpose

The purpose of this s<u>Section</u> is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This ordinance seeks to meet that purpose through the following objectives:

- (a) minimize increases in stormwater runoff from any development in order to reduce flooding, siltation and streambank erosion and maintain the integrity of stream channels;
- (b) minimize increases in nonpoint source pollution caused by stormwater runoff from development which would otherwise degrade local water quality;
- (c) minimize the total volume of surface water runoff which flows from any specific site during and following development in order to replicate the pre-development hydrology to the maximum extent practicable;
- (d) reduce stormwater runoff rates and volumes, soil erosion and nonpoint 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
- (e) meet the requirements of the National Pollution Pollutant Discharge Elimination System (NPDES Phase 2) Program-regulations as established by the Clean Water Act and administered by the North Carolina Department of Natural Resources, or its successor agency.

5.4.2 Applicability

- (a) This sSection shall apply to all new development and redevelopment projects for which a Zoning Compliance Permit is required.
 - (b) To prevent the adverse impacts of stormwater runoff, the Town has developed a set of performance standards that must be met at all new development and redevelopment sites. The following activities may be exempt from these stormwater performance criteria:



- (1) Any logging and agricultural activity which is consistent with all Federal, State and local regulations;
- (2) Single-family and two-family developments and redevelopments that do not disturb more than 5,000 square feet of land area, provided they are not part of a larger common development plan;
- (3) Repairs to any stormwater treatment facility deemed necessary by the Town.

5.4.3 Design Manual and Standard Details

The Town may furnish additional policy, criteria and information, for the proper implementation of the requirements of this sSection and may provide such information in the Design Manual and Standard Details, which manual may include a list of acceptable stormwater treatment practices, including the specific design criteria for each stormwater practice. The manual may be updated and expanded from time to time, at the discretion of the Town, based on improvements in engineering, science, monitoring, and local maintenance experience. Stormwater treatment practices that are designed and constructed in accordance with these design and sizing criteria will be presumed to meet the minimum water quality performance standards.

5.4.4 Application Submittal Requirements

Unless otherwise excepted exempted by this sSection, every permit application for development must be accompanied by a Stormwater Impact Statement in order for the permit application to be considered.

The Town Manager shall prescribe the form(s) and information that shall be submitted to determine compliance with this eChapter, with sufficient copies for necessary referrals and records.

Information requirements may be adjusted or waived by the Town Manager for a particular development application upon written request of the applicant, provided that at least one of the following circumstances can be demonstrated:

- (a) Alternative measures for on-site and/or off-site management of stormwater have been proposed, and theses measures are approved by the Town Manager and comply with local ordinance(s).
- (b) It is otherwise demonstrated that the proposed development will not produce any significant change to the existing pre-application hydrology.

5.4.5 Waivers for Stormwater Management Facilities Requirements



Unless otherwise exempted by this ssection, every development application shall provide for stormwater management. The requirements for stormwater management facilities may be waived in whole or in part by the approving body, provided that it is demonstrated by the applicant that at least one of the following conditions applies:

- (a) Alternative measures for on-site and/or off-site management of stormwater have been proposed, and theses measures are approved by the Town Manager and comply with local ordinance(s).
- (b) It is otherwise demonstrated that the proposed development will not produce any significant change to the existing pre-application hydrology.

5.4.6 General Performance Criteria for Stormwater Management

The following are required stormwater management performance criteria:

- Stormwater treatment shall be designed to achieve average annual 85% Total Suspended Solids (TSS) removal and must apply to the volume of post-eonstructiondevelopment runoff resulting from the first 1-inch of precipitation.

 Alternative treatment methods to achieve 85% average annual TSS removal may be acceptable.
- (b) The stormwater runoff volume leaving the site post-construction development shall not exceed the stormwater runoff volume leaving the site pre-construction development (existing conditions) for the local 2-year frequency, 24-hour duration storm event for all development except single-family and two-family dwellings on lots existing as of January 6, 2003, or on lots pursuant to a Preliminary Plat that was approved by the Town Council prior to January 6, 2003. This may be achieved by hydrologic abstraction, recycling and/or reuse, or any other accepted scientific method.
- (c) The stormwater runoff rate leaving the site post-construction development shall not exceed the stormwater runoff rate leaving the site pre-construction development (existing conditions) for the local 1-year, 2-year, and 25-year 24-hour storm events.
 - (d) Land disturbance within the stream channel of any ephemeral stream shall be minimized, and prohibited unless explicitly authorized by issuance of a Zoning Compliance Permit after demonstration of the necessity for the disturbance.

5.4.7 Integrated Management Practices

A combination of approaches and facilities can be used to meet the standards established in Section 5.4.6. Applicants are encouraged to propose low impact design stormwater management strategies, supplemented where necessary with conventional strategies.

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Descriptions of and specifications for integrated management and conventional practices are included in the Design Manual.

Applicants shall utilize Integrated Management Practices/Best Management Practices to meet the standards established in Section 5.4.6, using one or more approved design options. Low Impact Design options are en couraged. Descriptions and standard details of approved Integrated Management Practices/Best Management Practices are included in the Town Design Manual.

Consideration shall be given in all stormwater management strategies to the relationship between temporary facilities required and installed during construction as part of soil erosion and sedimentation control regulations; and permanent facilities designed to manage stormwater post-construction on an on-going basis.

5.4.8 Maintenance

Stormwater Management Facilities that are constructed on privately-owned land and that are not within a public easement shall be maintained by the owner of the subject property. Stormwater Management Facilities that are constructed on public land, within public rights-of-way, and/or within public easements shall be maintained by the public body with ownership/jurisdiction.

The following requirements shall be met for all stormwater management facilities that are constructed on privately-owned property and not within a public easement.

(a) Maintenance Easement.

Prior to the issuance of any permit that has a stormwater management facility as one of the requirements of the permit, the applicant or owner of the site must execute a maintenance easement agreement that shall be binding on all subsequent owners of land served by the stormwater management facility. The agreement shall provide for access to the facility at reasonable times for periodic inspection by the Town, or its contractor or agent, and for regular or special assessments of property owners to ensure that the facility is maintained in proper working condition to meet design standards and any other provisions established by this Section. The property owner shall record such easement, in a form and format approved by the Town Manager, with the office of the appropriate County Register of Deeds.

(b) Maintenance Covenants.

Maintenance of all stormwater management facilities shall be ensured through the creation of a formal maintenance covenant that must be approved by the Town Manager and recorded in the office of the appropriate County Register of Deeds. This covenant shall be entitled, "Stormwater Operations and Maintenance Plan." A schedule for maintenance and inspections shall be included as part of the covenant.



The owner, or the owner's assigns, are responsible for maintenance of stormwater management facilities; however, Tthe Town may, under certain circumstances, accept dedication of existing or future stormwater management facilities for public maintenance and inspection.

(c) Requirements for Maintenance Covenants.

All stormwater management facilities must be periodically inspected by the responsible party, in accordance with the approved schedule in the Stormwater Operations and Maintenance Plan, to identify maintenance and repair needs, and to ensure compliance with the requirements of this ordinance. Any identified maintenance and/or repair needs found must be promptly addressed in a timely manner by the responsible party. The inspection and maintenance requirement may be increased as deemed necessary by the Town to ensure proper functioning of the stormwater management facility.

(d) Records of Installation and Maintenance Activities.

Parties responsible for the inspection, operation, and maintenance of a stormwater management facility shall make records of the installation and of all maintenance and repairs and shall retain the records for at least 5 years. These records shall be made available to the Town upon request and/or as specifically outlined in the maintenance covenant.

(e) 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 owner(s) 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.

5.4.9 Inspection

(a) Inspection of Stormwater Facilities.

Inspections shall be conducted as prescribed by the maintenance Stormwater Operations Maintenance Plan covenant. Additional inspections may be conducted by the Town on any reasonable basis, including but not limited to: routine inspections; random inspections; inspections based upon complaints or other notice of possible violations;



inspection of drainage basins or areas identified as higher than typical sources of sediment or other contaminants or pollutants; inspections of businesses or industries of a type associated with higher than usual discharges of contaminants or pollutants or with discharges of a type which are more likely than the typical discharge to cause violations of State or Federal water or sediment quality standards or the National Pollutant Discharge Elimination System (NPDES) stormwater permit; and joint inspections with other agencies inspecting under environmental or safety laws. Inspections may include, but are not limited to: reviewing maintenance and repair records; sampling discharges, surface water, groundwater, and material or water in drainage control facilities; and evaluating the condition of drainage control facilities and other stormwater treatment practices.

(b) Right-of-Entry for Inspection

When any new drainage control facility is installed on private property, or when any new connection is made between private property and a public drainage control system the property owner shall grant to the Town the right to enter the property at reasonable times and in a reasonable manner for the purpose of inspection. This includes the right to enter a property when the Town has a reasonable basis to believe that a violation of this ordinance is occurring or has occurred, and to enter when necessary for abatement of a public nuisance or correction of a violation of this ordinance.

5.5 Parks and Open Space

5.5.1 Applicability

- (a) This s \underline{S} ection applies to:
 - (1) Any major subdivision that creates lots reasonably expected to be used for dwelling units; or
 - (2) Any multi-family development.
 - (b) In all cases the Chapel Hill Parks and Recreation Commission shall review and make recommendations to the Town Council on the provision or dedication of parks and open space.
 - (c) Provision or dedication of parks and open space is not required for a minor subdivision.
 - (d) Phases of development within a subdivided tract that occur after the initial subdivision must provide the required parks and open space appropriate for the subsequent development of those tracts. For instance example, if multifamily dwellings are built within an already subdivided tract, those dwellings must comply with recreation and outdoor space ratios required for multifamily dwellings by this Section.