

**AN ORDINANCE TO AMEND SEDIMENTATION AND EROSION CONTROL PROVISIONS  
OF THE *UNIFIED DEVELOPMENT ORDINANCE*  
(TC22000005)**

**WHEREAS**, the Durham County Board of Commissioners wishes to amend certain provisions in the *Unified Development Ordinance* by making various revisions to update sedimentation and erosion control regulations; and

**WHEREAS**, it is the objective of the Durham County Board of Commissioners to have the *Unified Development Ordinance* promote regulatory efficiency and consistency and the health, safety, and general welfare of the community;

**NOW, THEREFORE**, be it ordained that Article 12, Infrastructure and Public Improvements; and Article 15, Enforcement, of the *Unified Development Ordinance* are amended to make the following changes set forth in the deletions (strikethroughs) and additions (underlining) below:

**PART 1**

[Amendments to Article 12, Infrastructure and Public Improvements]

**Sec. 12.10 Sedimentation and Erosion Control**

[Paragraphs not shown remain unchanged]

**12.10.4 Mandatory Standards for Land-Disturbing Activity**

**A. Buffer Zones**

Except where more stringent buffer requirements are specified in Article 8, Environmental Protection, and/or Article 9, Landscaping and Buffering, the following requirements shall apply;

1. No land-disturbing activity during periods of construction or improvement to land shall be permitted in proximity to a lake or natural watercourse unless a buffer zone is provided along the margin of the watercourse of sufficient width to confine visible siltation within the 25% of the buffer zone nearest the land-disturbing activity. This subsection shall not apply to a land-disturbing activity in connection with the construction of facilities to be located on, over or under a lake or natural watercourse; and
2. Unless otherwise provided, the width of a buffer zone is measured from the top of the bank nearest edge of the disturbed area, with the 25% of the strip nearer the land-disturbing activity containing natural or artificial means of confining visible siltation.
3. Two rows of silt fence shall be placed along all buffer zones. Rows should be spaced a minimum of three (3) feet apart.

**M. Triassic Soil Specific Requirements**

Triassic soils do not respond as well to conventional erosion control measures as listed within this ordinance and projects with underlying Triassic soils are thus subject to the following additional requirements:

1. Flocculants shall be used onsite in accordance with the requirements of Section 12.10.4N.
2. Sediment basins and traps shall have a minimum volume of 5,400 cubic feet per acre of disturbed area and shall be designed so as to dewater in a minimum of 4 days.

3. Moderate and steep slopes shall be stabilized by either matting or hydroseeding in order to more rapidly provide groundcover.

#### **N. Flocculants**

Flocculants are chemicals that can cause fine particles to combine and settle in detained runoff. When used in conjunction with sediment basins or traps, they can reduce sediment in discharge leaving a site. The use of flocculants, where not required by Section 12.10.4M, is recommended in land disturbing activity. When used, the following requirements apply:

1. A flocculant application plan shall be included on the erosion control plan, including:
  - a. Type of Flocculant to be used including manufacturer and supplier;
  - b. Site-specific dosing systems;
  - c. Location(s) of flocculant application; and
  - d. Identification of the individual and/or position responsible for dosing and monitoring of flocculant usage.
2. Soil samples should be obtained from areas where flocculants will be used, and samples should be screened using jar tests with multiple flocculants to select the appropriate flocculant. Jar testing can be performed by the contractor or flocculant supplier.
3. Only flocculants listed on the NCDEQ website as an approved product for use in North Carolina shall be used.
4. Flocculant applied in solid form should be evaluated and re-applied if needed after every rainfall event that is equal to or exceeds 0.5 inches.
5. Flocculants shall not be applied directly to surface waters.
6. Flocculants shall be applied upstream of a sediment basin, trap, or other pooling device such as silt fence.
7. The use of flocculants does not alter the requirements for site stabilization. Sites should be stabilized as soon as possible using conventional methods to minimize the need to use flocculants.

**Commentary:** Additional information on the use of chemical treatment of construction site stormwater can be found at: <https://cals.ncsu.edu/crop-and-soil-sciences/extension/publications/> (scroll down from top to find Erosion, Sediment, and Turbidity Control section).

**PART 2**

[Amendments to Article 15, Enforcement]

**Sec. 15.5 Sedimentation and Erosion Control Enforcement and Penalties**

[Paragraphs not shown remain unchanged]

**15.5.1 Inspections and Investigations**

**D. Stop Work Order**

The County may issue a stop work order for the site on which the violation has occurred.

- a. Upon issuance of such an order and the posting of same on the site of the violation, all work on the site of the violation shall cease, except those activities necessary to bring the site into compliance with this article.
- b. Notice of the stop work order may be served by any means authorized under NCGS § 1A-1, Rule 4.

**DE. Investigation**

The Sedimentation and Erosion Control Officer or designee shall have the power to conduct such investigation as it may reasonably deem necessary to carry out its duties as prescribed in this Ordinance, and for this purpose to enter at reasonable times upon any property, public or private, for the purpose of investigating and inspecting the sites of any land-disturbing activity.

**EF. Statements and Reports**

The Sedimentation and Erosion Control Officer or designee shall also have the power to require written statements, or filing of reports under oath, with respect to pertinent questions relating to land-disturbing activity.

**PART 3**

That the Unified Development Ordinance shall be renumbered, including references, as necessary to accommodate these changes and clarifications.

**PART 4**

That this amendment of the Unified Development Ordinance shall become effective upon approval by the North Carolina Sedimentation Control Commission (SCC).



Monica W. Wallace  
Clerk to the Board  
Durham County