

# Town of Wake Forest Unified Development Ordinance

## Erosion and Sediment Control Chapters

### Notes:

TOWF Approved 7/14/13

E&SC revisions per NCDEMLR Comments 11/10/13, first reading Feb 2014, second reading March 2014

Approved Unanimously by TOWF BOC 3/18/14

SCC Mtg Agenda item- May 15, 2014

### Table of Contents

Chapter	Section	Revision
Chapter 6	6.6.3	revised NCDWQ to NCDWR
Chapter 12	12.3.2.F.1	corrected GS number
	12.3.2.F.2	revised NCDWQ to NCDWR
	12.3.3	add all
	12.3.3.F.3	added HQW standards
	12.3.3.G	added (typically 3:1)
	12.3.5	revised NCDWQ to NCDWR
	12.3.6.A	added watercourse
	12.5.3.C	revised NCDWQ to NCDWR
	12.5.4.D	added sediment basin design for Fall Lake Watershed
	12.5.4.E	added open channel design for Fall Lake Watershed
	12.5.5	revised NCDWQ to NCDWR
	12.6.C	revised NCDWQ to NCDWR
	12.7.1.b.1.C, 4, 5	revised NCDWQ to NCDWR
Chapter 15	15.2.2.C	added No person shall willfully resist, delay, or obstruct an authorized representative, employee, or agent of the Town while that person is inspecting or attempting to inspect a land-disturbing activity.
	15.2.2.D	added The Town shall also have the power to require written statements, or filing reports under oath, with respect to pertinent questions relating the the land-disturbing activity.
	15.7.2.D	added Subsequent plan revisions shall be reviewed and acted upon by the staff and notice given the applicant within 15 days of receipt of the revision.
	15.7.2.E	added Other Disapprovals: The Town shall disapprove an erosion and sedimentation control plan if implementation of the plan would result in a violation of the rules adopted by the Environmental Management Commission (State) to protect riparian buffers along surface waters. The Town may disapprove the plan upon finding that an applicant or a parent, subsidiary, or other affiliate of the applicant:
	15.7.2.E.a	added Is conducting or has conducted land-disturbing activity without an approved plan, or has received a notice of violation of a plan previously approved by the Town pursuant to this Ordinance and has not complied with the notice within the time specified in the notice.
	15.7.2.E.b	added Has failed to pay a civil penalty assessed pursuant to this Ordinance adopted pursuant to this Ordinance by the time the payment is due.
	15.7.2.E.c	added Has been convicted of a misdemeanor pursuant to G.S. 113A-64(b) or any criminal provision outlined in this Ordinance pursuant to this article.

Chapter 16

16.3.3.H

added If any sections in this chapter is/are to be held invalid or unenforceable, all other sections shall nevertheless continue in full force and effect.

Chapter 17

Definitions

BEING CONDUCTED Means a land disturbing activity that has been initiated and permanent stabilization of the site has not been completed.

WATERCOURSE BUFFER ZONE The strip of land adjacent to a lake, river, creek, stream, wash, channel, or other body of water or natural watercourse.

Person Conducting Land-Disturbing Activity - added SPCA

Person Responsible for the Violation- Added SPCA

SEDIMENT Means the solids particulate matter both mineral and organic that has been or is being transported by water, air, gravity, or ice from its site of origin.

SEDIMENT POLLUTION CONTROL ACT (SPCA Act) Means the North Carolina Sediment Pollution Control Act of 1973 and all rules and orders adopted pursuant to it.

Stormwater Best Management Practice Manual - DWQ to DWR

STREAM- DWQ to DWR

MSSD

Chapter 2

P. 2-13, 2-37, 2-39  
2.8.5.A

DEHNR to DENR

added Stream banks and channels downstream from any land disturbing activity shall be protected from increased degradation by accelerated erosion caused by increased velocity of runoff from the land disturbing activity.

2.8.5.C

added Persons shall conduct land disturbing activity so that the post construction velocity of runoff of the ten year or twenty five year storm (depending on watershed or HQW zone) in the receiving watercourse to the discharge point does not exceed the greater of:

1. The velocity established by the Maximum permissible Velocities Table or
2. The velocity of the ten year storm runoff in the receiving watercourse prior to the development.
3. If condition 1 or 2 cannot be met, then the receiving watercourse to and including the discharge point shall be designed and constructed to withstand the expected velocity anywhere the velocity exceeds the pre development velocity by 10%.

Maximum Permissible Velocities Table

Material

- Fine sand (noncolloidal)
- Sandy Loam (noncolloidal)
- Silt Loam (noncolloidal)
- Ordinary firm loam
- Fine gravel
- Stiff clay (very colloidal)
- Graded, loam to cobbles (noncolloidal)

Graded, silt to cobbles (colloidal)

- Alluvial silts (noncolloidal)
- Alluvial silts (colloidal)
- Course gravel (noncolloidal)
- Cobbles and shingles
- Shales and hard pans

Source: [adopted from recommendations by Special Committee on

2.8.5.D

added Acceptable Management Measures- Measures applied along or in combination to satisfy the intent of the Ordinance area acceptable if there are no objectionable secondary consequences. The Town recognizes that the management of storm water runoff to minimize or control downstream channel and bank erosion is a developing technology. Innovative techniques and ideas will be considered and may be used when shown to the the potential to produce successful results. Some alternatives, while not exhaustive are to:

1. Avoid increases in surface runoff volume and velocity by including measures to promote infiltration to compensate for increased runoff from areas rendered impervious
  
2. Avoid increased in storm water discharge velocities by using vegetated or roughened swales and waterways in place of closed drains and high velocity paved sections
  
3. Provide energy dissipaters at outlets of storm drainage facilities to reduce flow velocities to the point of discharge
  
4. Protect watercourses subject to accelerated erosion by improving sections and/or providing erosion resistant lining
  
5. Upgrade or replace the receiving device structure, or watercourse such that it will receive and conduct the flow to a point where it is no longer subject to degradation from the increased rate of flow or increased velocity.  
Does this violate our Phase ii??

Chapter 4

- 4.3.1.O 7-14 days
- 4.3.1.S revised NCDWQ to NCDWR
- 4.3.2.J changed seven to ten

Chapter 6

- 6.4.1 revised NCDWQ to NCDWR
- p. 6-10 revised NCDWQ to NCDWR