

A RESOLUTION ADOPTING A STATEMENT EXPLAINING THE BOARD OF ALDERMEN'S
REASONS FOR ADOPTING AN AMENDMENT TO THE TEXT OF THE CARRBORO LAND
USE ORDINANCE

Draft Resolution No. 110/2012-13

WHEREAS, an amendment to the text of the Carrboro Land Use Ordinance has been proposed, which amendment is described or identified as follows: AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO CLARIFY METHODS TO CALCULATE THE PERMISSIBLE VOLUME OF STORMWATER THAT RUNS OFF A DEVELOPED SITE.

NOW, THEREFORE, the Board of Aldermen of the Town of Carrboro Resolves:

Section 1. The Board concludes that the above described amendment is consistent with *Carrboro Vision 2020* regarding efforts to protect water resources, particularly the following section:

5.23 Carrboro should be proactive in managing its stormwater, promoting active maintenance of facilities, reducing impacts of increased impervious surface, and minimizing impacts on waterways.

Section 2. The Board concludes that its adoption of the above described amendment is reasonable and in the public interest because the Town seeks to remain consistent with its adopted plans or policies.

Section 3. This resolution becomes effective upon adoption.

A RESOLUTION ADOPTING A STATEMENT EXPLAINING THE BOARD OF
ALDERMEN'S REASONS FOR REJECTING AN AMENDMENT TO THE TEXT OF THE
CARRBORO LAND USE ORDINANCE

Draft Resolution No.

WHEREAS, an amendment to the text of the Carrboro Land Use Ordinance has been proposed, which amendment is described or identified as follows: AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO CLARIFY METHODS TO CALCULATE THE PERMISSIBLE VOLUME OF STORMWATER THAT RUNS OFF A DEVELOPED SITE.

NOW, THEREFORE, the Board of Aldermen of the Town of Carrboro Resolves:

Section 1. The Board concludes that the above described amendment is not consistent with Town plans and policies.

Section 2. The Board concludes that its rejection of the above described amendment is reasonable and in the public interest because existing regulations are appropriate.

Section 3. This resolution becomes effective upon adoption.

This the ____ day of _____, 20__ /

Ayes:

Noes:

Abstentions:

AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO CLARIFY
METHODS TO CALCULATE THE PERMISSIBLE VOLUME OF STORMWATER THAT
RUNS OFF A DEVELOPED SITE

DRAFT

THE BOARD OF ALDERMEN OF THE TOWN OF CARRBORO ORDAINS:

Section 1. Subsection 15-263(g)(3) of the Carrboro Land Use Ordinance is amended to read as follows:

(g)(3) The Board finds that increases in the total annual volume of runoff associated with new development results in decreased groundwater recharge, increased stream channel instability/erosion and significant water quality degradation. Therefore, developments shall install and maintain stormwater management systems such that the post-development total annual stormwater runoff volume shall not exceed the predevelopment volume by more than the limits set forth in the following table below. The predevelopment and post-development annual stormwater runoff volume shall be calculated using the Jordan Lake Accounting Tool (“JLAT”), except that the following inputs for the use of permeable pavement shall apply. If the NCDENR Division of Water Quality (DWQ) revises the following table of inputs for the use of permeable pavement, this subsection shall be deemed amended to incorporate the most recent inputs established by DWQ. .

Infiltrating Permeable Pavement			
Soil Type	Infiltrating PP	Detention w/o Liner	Detention w/ Liner
A	90%	-	0
B	85%	-	0
C	80%	20%	0
D	75%	5%	0

A composite curve number shall be assigned to the development site in the pre-development stage using the runoff curve number method described in USDA Technical NRCS Technical Release 55, Urban Hydrology for Small Watersheds (June, 1986). See also Chapters 4 through 10 of NEH-4, SCS (1985).

Preexisting Composite Curve Number*	Maximum allowable increase in annual stormwater runoff volume
>= 78	50%
70-78	100%
64-70	200%
<=64	400%

Section 2. All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

VIA ELECTRONIC MAIL

October 30, 2012

Ms. Patricia McGuire
Planning Director
Mr. Marty Roupe
Development Review Administrator
Town of Carrboro
301 West Main Street
Carrboro, NC 27510

Re: Proposed Amendment to Land Use Ordinance – Flexibility in Administering Stormwater Runoff Volume Requirements

Dear Ms. McGuire and Mr. Roupe:

Based on our review of the minutes and discussion from the Board of Alderman meeting on June 26, 2012, it was clear that the Board anticipated modifications to the Land Use Ordinance (LUO) of the Town of Carrboro with regards to the implementation of these new stormwater runoff volume requirements and that modifications would be made to the LUO as additional projects were reviewed.

The attached document is an amendment to the Section 15-263 of the LUO that was recently adopted on June 26, 2012. The attached amendment was developed based on our recent discussions with Town of Carrboro staff and legal counsel regarding the complications of implementing the existing ordinance in an urban setting, a thorough review of the impacts on the approved rezoning of the Shelton Station, and a review of the proposed amendment with other stakeholders. This amendment will allow for flexibility in administering the stormwater runoff requirements to address some unintended impacts to projects currently under development, including Shelton Station.

Please accept this letter and the attached document as a formal request for amending the LUO. Please do not hesitate to contact me at 919.885.4508 if you should have questions regarding this proposal.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ken Reiter'.

Kenneth M. Reiter

cc: William Anderson – Kennon Craver
Dan Jewell – Coulter Jewell Thames

attachment – Proposed Amendment to LUO – Section 15-263

**AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO MODIFY REQUIREMENTS
LIMITING THE PERMISSIBLE VOLUME OF STORMWATER THAT RUNS OFF A DEVELOPED SITE**

THE BOARD OF ALDERMAN OF THE TOWN OF CARRBORO ORDAINS:

Section 1. Section 15-263 of the Carrboro Land Use Ordinance, entitled "Management of Stormwater," is amended by adding thereto a new Subsection (g)(4) to read as follows:

(g)(4) The Board recognizes that the requirements set forth in subsection 15-263(g)(3) may place undue burden on particular developments because of the unique nature of those developments, rendering certain development sites incapable of being used for their highest and best use. Therefore when the proposed development otherwise fulfills important policy goals established by the Town, the Board shall have the authority to approve deviations from the requirements of subsection 15-263(g)(3). Whenever the Board allows a deviation from the stormwater requirements set forth in Subsection 15-263(g)(3), it shall enter on the face of the permit the stormwater requirement that it imposes and the reasons for allowing or requiring the deviation.

Section 2. All provisions of any Town ordinance in conflict with this ordinance are repealed.

ARTICLE XVI

FLOOD DAMAGE PREVENTION, STORMWATER MANAGEMENT, AND WATERSHED PROTECTION

**Section 15-263 Management of Stormwater (REWRITTEN 6/26/07; AMENDED 6/24/08;
AMENDED 10/28/08; 6/22/10; 11/23/10; REWRITTEN 6/26/12)**

(a) The requirements of this section shall apply to developments to the extent provided in this subsection.

- (1) For purposes of this subsection, “impervious surface” means that portion of the development of a lot or tract that is covered by a surface or material that substantially or completely prevents rainwater from reaching and being absorbed into the underlying soil. Impervious surfaces include but are not limited to streets, driveways, sidewalks, parking lots, buildings, and other roofed, paved, or graveled areas. Wooden slatted decks and the water area of swimming pools are considered pervious, as are detention ponds.
- (2) For purposes of this subsection, “net addition of impervious surface” shall be determined by subtracting the total square footage of impervious surface prior to commencement of construction authorized by a development permit from the total square footage of impervious that is proposed to be located on the development site when all construction authorized by the development permit (including all phases thereof) is completed. If the permit issuing authority reasonably concludes that a permit applicant is seeking or has sought separate permits (simultaneously or sequentially) for different components of what is demonstrably intended to be a single development in an attempt to stay below the impervious surface threshold that triggers the requirements set forth in this section, then the permit issuing authority shall treat such multiple applications as a single application for purposes of determining whether the requirements of this section are applicable.
- (3) All unsubdivided developments that involve a net addition of more than 5,000 square feet of impervious surface shall be subject to the requirements of this section, except that these requirements shall not apply if the total of the net addition of impervious surface area plus the previously existing impervious surface area on the lot does not exceed (i) six percent (6%) of the lot area within a B-5 or WM-3 zoning district, or (ii) for lots in all other zoning districts, the amount of impervious surface area permissible on lots within the C or WR zoning districts under subsection 15-266(b) of this part.
- (4) When land is subdivided, and the permit authorizing the subdivision does not itself authorize the net addition of more than 5,000 square feet of impervious surface to the tract to be subdivided, then the requirements of this section shall

Art. XVI. FLOOD DAMAGE PREVENTION, STORMWATER MANAGEMENT, AND WATERSHED PROTECTION

not be applicable to the subdivision. The applicability of the requirements of this section to each of the individual lots so created shall then be determined as development permits are issued for each such lot.

- (5) When land is subdivided, and the permit authorizing the subdivision itself authorizes the net addition of more than 5,000 square feet of impervious surface to the tract to be subdivided (regardless of whether such impervious surface consists of a road or other facilities external to the lots so created, or buildings, parking lots, and other facilities constructed within the lots so created, or a combination of the two), then the subdivision shall comply with the requirements of this section. Furthermore, the stormwater management system that is installed to comply with the provisions of this section shall be required to take into account all the stormwater reasonably expected to be generated by the development (according to generally accepted engineering standards) when all subdivided lots five acres or less in size are fully developed. When such lots are subsequently developed, they shall be exempt from further review under the provisions of this section. However, any lot within such subdivision that is greater than five acres in size and that was not included in the stormwater calculations for purposes of designing a stormwater management system that satisfies the requirements of this section shall be required to comply with the requirements of this section at the time such lot is developed, if and to the extent required to do so under subsection (a)(3) of this section.
- (6) Notwithstanding the other provisions of this subsection, if (i) a lot is within a commercial district described in Section 15-136 or a manufacturing district described in 15-137, (ii) on the date that a development permit application is submitted and the fees paid the lot is already developed to the extent that the lot contains at least 10,000 square feet of impervious surface area, and (iii) the reasonably estimated cost of the redevelopment of the lot as proposed in the development permit application exceeds the greater of \$100,000, or fifty percent (50%) of the appraised value of the existing improvements on the lot, then the requirements of this section shall be applicable to such redevelopment. For purposes of this subdivision (a)(6), the terms “cost” and “appraised value” shall have the same meaning as provided in Subsection 15-125(c) of this chapter.
- (7) Notwithstanding the other provisions of this subsection, the requirements of this section shall apply to any development involving the reconstruction of a previously paved area comprising at least 10,000 square feet (repaving or resurfacing shall not be considered reconstruction).
- (8) Notwithstanding the other provisions of this subsection (but subject to the provisions of subsection (a)(8)f below), the requirements of this section shall apply to all proposed new development that cumulatively disturbs one acre or more for single family and duplex residential property and recreational facilities, and one-half acre for commercial, industrial, institutional, multifamily residential, or local government property. For purposes of this subsection (a)(8) only:

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- a. Development means any land disturbing activity which adds to or changes the amount of impervious or partially impervious cover on a land area or which otherwise decreases the infiltration of precipitation into the soil.
- b. New development means any development project that does not meet the definition of existing development set forth immediately below.
- c. Existing development means development not otherwise exempted from the provisions of this section that meets one of the following criteria: (i) it either is built or has established a vested right based on statutory or common law grounds as of the effective date of this section, or (ii) it occurs after the effective date of this section but does not result in a net increase in impervious surface area and does not increase the infiltration of precipitation into the soil..
- d. Land disturbing activity means any use of the land that results in a change in the natural cover or topography that may cause or contribute to sedimentation.
- e. Larger common plan of development or sale means any area where multiple separate and distinct construction or land-disturbing activities will occur under one plan. A plan is any announcement or piece of documentation (including but not limited to a sign, public notice or hearing, sales pitch, advertisement, loan application, drawing, permit application, zoning request, or computer design) or physical demarcation (including but not limited to boundary signs, lot stakes, or surveyor markings) indicating that construction activities may occur on a specific plot.
- f. Redevelopment means any development on previously developed land.

(b) Developments must install and maintain stormwater management systems that will control and treat runoff from the first one inch of rain as follows:

- (1) Draw down the treatment volume in accordance with the requirements of the North Carolina Division of Water Quality Best Management Practices (NC DWQ BMP) Manual.
- (2) Achieve an eighty-five percent (85%) average annual removal rate for Total Suspended Solids.

(c) Subject to subsections (d) and (f), developments must install and maintain stormwater management systems that ensure that the nutrient load contributed by the development is limited to not more than 2.2 pounds per acre per year of nitrogen and 0.82 pounds per acre per year of phosphorus.

(d) Subject to subsection (f), developments that (i) would otherwise be required under subsection (a) to comply with the stormwater treatment standards set forth in subsection (c), and

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(ii) involve the replacement or expansion of existing structures or improvements, shall have the option of either satisfying the requirements of subsection (c) of this section or achieving a thirty-five percent (35%) nitrogen and five percent (5%) phosphorous reduction in the loading rates for these nutrients when comparing the situation that exists on the date a completed application is submitted to the post redevelopment situation for the entire project site.

(e) The need for engineered stormwater controls to meet the nutrient loading rate standards set forth in subsections (c) and (d) shall be determined by using the loading calculation methods and other standards established by the Division of Water Quality as set forth in Sub-Item (4)(a) of 15A NCAC 2B.0265, including the current version of the Stormwater Best Management Practices Manual published by the Division.

(f) Developers shall have the option of offsetting part of their nitrogen and phosphorus loads by implementing or funding offsite management measures as follows:

- (1) Before using offsite offset options, a development shall attain a maximum nitrogen loading rate on-site of six pounds per acre per year for single-family detached and duplex residential development and ten pounds per acre per year for other development, including multi-family residential, commercial and industrial, and shall meet any requirement for engineered stormwater controls required by this Article..
- (2) Offsite offsetting measures shall achieve at least equivalent reductions in nitrogen and phosphorus loading to the remaining reduction needed onsite to comply with the loading rate standards set forth in subsection (c) of this section.
- (3) A developer may make offset payments to the N.C. Ecosystem Enhancement Program contingent upon acceptance of payments by that Program. A developer may use an offset option provided by the Town of Carrboro, or may propose other offset measures including providing the developer's own offsite offset or utilizing a private seller. All offset measures shall meet the requirements of 15A NCAC 02B.0273(2) through (4) and 15A NCAC 02B.0240.

(g) Developments shall be constructed and maintained so that their stormwater management systems meet the following minimum standards:

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- (1) The post-development discharge rates shall be less than or equal to the pre-development discharge rates for the 1-, 2-, 5-, 10-, and 25-year 24-hour design storms.
- (2) For upstream properties, the 1% chance flood elevation may not be increased.
- (3) Developments shall install and maintain stormwater management systems such that the post-development total annual stormwater runoff volume shall not exceed the pre-development volume by more than the limits set forth in the following table. The pre-development and post-development annual stormwater runoff volume shall be calculated using the Jordan Lake Accounting Tool. A composite curve number shall be assigned to the development site in the pre-development stage using the runoff curve number method described in USDA NRCS Technical Release 55, Urban Hydrology for Small Watersheds (June, 1986). See also Chapters 4 through 10 of NEH-4, SCS (1985). **(AMENDED 6/26/12)**

Preexisting Composite Curve Number *	Maximum allowable increase in annual stormwater runoff volume
>78	50%
>70-78	100%
>64-70	200%
<=64	400%

(h) The presumption established by this section is that, to satisfy the standards set forth herein, the applicant shall design and construct all stormwater management systems required by this section in accordance with the guidelines set forth in the Town of Carrboro Storm Drainage Design Manual (Appendix I to this chapter). However, the permit issuing authority may establish different requirements when it concludes, based upon (i) the information it receives in the consideration of the specific development proposal, and (ii) the recommendations of the public works director or the town engineer, that such deviations from the presumptive guidelines are necessary to satisfy the standards set forth in this section, or that the standards can still be met with such deviations and the deviations are otherwise warranted.

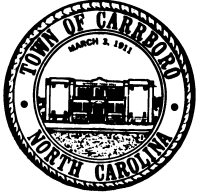
(i) Approval by the town of an applicant's stormwater management plans, and construction by the applicant of the stormwater management systems as shown in such plans, shall not relieve the applicant of the responsibility of complying with the standards set forth in this section. If at any time prior to two years following the issuance of a certificate of occupancy, for an unsubdivided development, or the approval of a final plat, for a subdivision, the town determines that the stormwater management systems planned to be installed or actually installed to meet the requirements of this section do not achieve that objective, the town may require the submission of revised plans and the installation of new, altered, or additional facilities to bring the development into compliance. Prior to issuance of a certificate of occupancy or approval of a final plat, the town may require the applicant to post a performance bond or other sufficient surety to guarantee compliance with this section.

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(j) Upon completion of construction of the stormwater management facilities, the permit recipient shall submit to the town “as built” plans for all such facilities in the form required by the town. Compliance with this requirement must occur prior to issuance of a certificate of occupancy, or prior to final plat approval (if applicable), unless adequate security is otherwise provided in accordance with the provisions of Sections 15-53 or 15-60.

(k) Proposed new development undertaken by the Town solely as a public road project shall be deemed compliant with the provisions of this section if it meets the buffer protection requirements of Part III of this Article. All other developments shall comply with both the requirements of this section and the provisions of Part III of this Article.

(l) Variances from the provisions of this section may only be granted in accordance with the requirements of Section 15-92, including subsection (l) of that section.



TOWN OF CARRBORO

Planning Board

301 West Main Street, Carrboro, North Carolina 27510

R E C O M M E N D A T I O N

THURSDAY, FEBRUARY 7, 2013

LAND USE ORDINANCE TEXT AMENDMENT RELATING TO STORMWATER MANAGEMENT

Motion was made by Seils and seconded by Adamson that the **Planning Board** recommends that the Board of Aldermen **approve** the draft ordinance.

VOTE:

AYES: (10) Chaney, Seils, Jahre, Barton, Adamson, Schaefer, Poulton, Foushee, Hunt and Clinton.

ABSENT/EXCUSED: (1) Jaimeyfield

NOES:

ABSTENTIONS:

Associated Findings

By a unanimous show of hands, the **Planning Board** membership also indicated that no members have any financial interests that would pose a conflict of interest to the adoption of this amendment.

Furthermore, the **Planning Board** of the Town of Carrboro finds that the proposed text amendment is consistent with Carrboro Vision 2020 regarding efforts to protect water resources, particularly the following section:

5.23 Carrboro should be proactive in managing its stormwater, promoting active maintenance of facilities, reducing impacts of increased impervious surface, and minimizing impacts on waterways.

Motion by Seils, seconded by Jahre.

VOTE:

AYES: (10) Chaney, Seils, Jahre, Barton, Adamson, Schaefer, Poulton, Foushee, Hunt and Clinton.

ABSENT/EXCUSED: (1) Jaimeyfield

NOES:

ABSTENTIONS:

February 7, 2013

(Chair)

(Date)

