

# TOWN OF CARRBORO

## LAND USE ORDINANCE AMENDMENT REQUEST



*"Dear Potential Business Operator:*

*Please be advised that it may be necessary to meet with several members of Town staff as well as outside agencies to identify and fully understand all rules, regulations, and policies applicable to your business. Please refer to the 'Checklist for Opening a Business in Carrboro.'*

**To the Town Council, the Planning Board, Stormwater Advisory Commission, and the Appearance Commission, as appropriate, of the Town of Carrboro:**

**I (we), the undersigned do hereby respectfully make application and petition the Town Council to amend the Land Use Ordinance. In support of this application, the following facts are shown:**

- 1) The Land Use Ordinance, at present, would allow (description/quote, page and number of section in question):**

LUO Section 15-263(g)(3) currently reads as follows:

- (1) 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 to the maximum extent practicable 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 table below. The predevelopment and post-development annual stormwater runoff volume shall be calculated using the most up to date guidance and accounting methodology from North Carolina environmental regulatory agencies with stormwater management oversight. (AMENDED 6/26/12, AMENDED 2/26/13, AMENDED 5/28/19)**

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).

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

**(AMENDED 2/26/13)**

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- 2) The proposed amendment to the Land Use Ordinance would allow (describe briefly intended change):**

The LUO notes that annual stormwater runoff volume shall be calculated using the most up to date guidance and accounting methodology from North Carolina environmental regulatory agencies with stormwater management oversight. NCDEQ does not require annual volume mitigation, so there are no definitive methodologies specifically for this calculation. We would suggest that in circumstances where there is a clear community benefit (i.e., where a substantial portion of a property can remain in and/or be restored to a vegetated condition), and where regulatory requirements such as stream buffers, floodplains, steep slopes and utility easements substantially encumber a property, an alternate means of compliance through slow release of the additional runoff volumes above and beyond the amounts given in the table in LUO Section 15-263(g)(3), can be granted through the Approving Authority. NCDEQ requires that water quality devices drain down in 2-5 days. The intent of this section of the LUO is improved (or increased) groundwater recharge, improved (or decreased) channel instability, and reduced water quality degradation. Given this, we propose to use a combination of sand filter treatment as well as an underground detention system that releases the captured runoff volume slowly. This allows the device to have adequate time to provide the necessary nutrient reduction treatment. This slow, controlled release also allows for the runoff to have an opportunity to infiltrate due to a reduced velocity. The treatment provided by the sand filter improves water quality, and the slow release allows water to infiltrate and thus recharge groundwater more quickly. Additionally, the slow release is at a significantly reduced velocity that will positively affect the stream channel stability. Given this, we feel that the proposed stormwater controls meet the intent of this section of the LUO, and the Approving Authority can find as such.

Specifically, the applicant requests that a new subsection (4) be inserted below (3) under 15-263(g) to read as follows:

- (4) *In circumstances where (i) the post-development runoff volume exceeds the pre-development runoff volume; (ii) there is a clear community benefit inherent in the proposed development; and (iii) where a substantial portion of a property can remain in and/or be restored to a vegetated condition; and (iv) where regulatory requirements such as stream buffers, floodplains steep slopes and utility easements substantially encumber a property; an alternate means of compliance consisting of stormwater management systems installed to mitigate the increase in volume such that the increase in volume is captured and released over a 2-5 day period can be allowed by the Approving Authority.*

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### **3) State the reasons for the proposed amendment:**

This amendment is requested to provide further clarifying and conforming guidance with respect to interpretation of section 15-263(g)(3) of the LUO, and to deal with narrowly tailored and unique property circumstances and development proposals that provide community benefits and environmental protection, but where a strict adherence to the Staff's traditional policy interpretation of this section of the LUO, would be impractical. Staff has requested that the Stormwater Nitrogen and Phosphorus (SNAP) Tool be used to calculate the annual runoff volume. We believe that there are alternative tools that are equally effective in measuring, and more impactful in managing, storm water runoff and helping to meet the LUO's intentions, particularly: improved groundwater recharge, decreased channel instability, and reduced water quality degradation. Towards this end, we feel that the SNAP Tool that Staff currently relies on is not the only appropriate methodology to perform the required calculations or to show compliance with this section of the LUO; rather, we would propose sand filter treatment as well as an underground detention system that releases the captured runoff volume slowly to meet the intent of the LUO.. The limited buildable area on this site severely restricts

available stormwater control measure options. Above grade ponds and bioretention areas are not practical given the site's small size. Pervious pavement is not practical given the sewer easement that crosses the site and OWASA's requirement to avoid saturation of the sewer line. A green roof is not practical given the additional structural and building costs and the Arts Center's limited budget as a non-profit organization. In the specific example of this property, neither pervious pavement or a green roof, alone or in combination, would meet the volume reduction requirements. We have proposed a calculation methodology that we feel meets the intent of the requirements in the LUO and is acceptable to adjacent municipalities with similar requirements. In this specific case, the proposed user has long been located in and an economic and communal asset to the Town of Carrboro and approval of this would allow them to remain long term. In addition, when completed over 50% of the property will be in a naturalized vegetated condition, and the specific challenges of the physical characteristic of the site including the stream and associated buffer, as well as the sewer outfall crossing the property, make it otherwise impossible to meet the annualized runoff volume increase as has been historically interpreted by Staff. We would respectfully request the Council's consideration of this amendment.

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SIGNATURE:


  
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