

ATTACHMENT A

AN ORDINANCE AMENDING THE CARRBORO LAND USE ORDINANCE TO APPLY THE NORTHERN TRANSITION AREA BUFFER STANDARDS TO PROPERTIES WITHIN THAT AREA THAT ARE ANNEXED AFTER SEPTEMBER 1, 2002

THE BOARD OF ALDERMEN OF THE TOWN OF CARRBORO ORDAINS:

Section 1. Subsection (b) of Section 15-269 ("Buffers in Northern Transition Area") of the Carrboro Land Use Ordinance is amended to read as follows:

- (b) For purposes of this section, the term "Northern Transition Area" shall mean not only the Transition Area portion of the Carrboro Joint Development Review Area as identified in the Joint Planning Agreement, but also any properties that were within this Transition Area as of September 1, 2002 but that are effectively removed from the Transition Area classification by being annexed into the Town of Carrboro on or after September 1, 2002.
- (c) Notwithstanding the foregoing, these requirements shall not apply to projects with active land use permits issued prior to the effective date of this section.

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 All provisions of any town ordinance in conflict with this ordinance are repealed.

Section 3. This ordinance shall become effective upon adoption.

Section 15-269 Buffers in Northern Transition Area (AMENDED 05/25/99)

(a) The Board finds that:

1. Soil and pollutants carried overland, primarily from roads, trails and land disturbing activities, can be effectively trapped by leaving a relatively undisturbed strip of vegetation parallel and adjacent to the watercourse.
2. Properly managed overland water flow can be directed into this buffer in a manner that will reduce velocity and cause dispersion of the water.
3. Sediments and associated pollutants carried by the water will settle out as a result of this slowing and dispersion process.

(b) For purposes of this section, the term "Northern Transition Area" shall mean the Transition Area portion of the Carrboro Joint Development Area as identified in the Joint Planning Agreement.

(c) Development on lots within the Northern Transition Area shall, if any of the watercourses identified below are located in whole or in part within the lots so developed, contain a designated buffer area adjacent to such watercourses. The buffer area boundaries shall be demarcated by a line connecting the points on either side of the watercourse located as follows:

1. Bolin Creek and Tributaries (permanent streams flowing into Bolin Creek) as shown on the Northern Transition Area Stream Buffer Map on file in the Carrboro Planning Department, which map is incorporated herein by reference. Measure along a line running perpendicular to the edges of the floodplain (or if no floodplain has been demarcated, the center of the stream) one hundred (100) feet from the edge of the floodplain (or if no floodplain has been demarcated, from the edge of the water) plus an additional distance equal to

$$4 \times \text{slope} \times 100$$

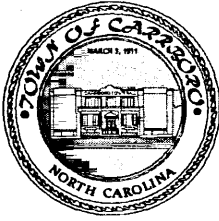
where slope is expressed as a percentage derived from dividing by 100 the rise of elevation between the floodplain boundary line (or if no floodplain has been demarcated, the edge of the water) and a point one hundred (100) feet from that point along the perpendicular line described above.

2. Intermittent streams flowing into Bolin Creek and its tributaries as shown on the Northern Transition Area Stream Buffer Map. Measure along a line running perpendicular to and sixty (60) feet from the center of the intermittent stream.
3. Minor intermittent streams as shown on the Northern Transition Area Stream Buffer Map. Measure along a line running perpendicular to and thirty (30) feet from the center of the minor intermittent stream.

(d) Subject to subsection (e), the existing natural vegetation in a buffer area designated in accordance with this section shall not be disturbed in any way that would reduce the buffer area's effectiveness in achieving the objectives set forth in subsection (a). In addition, buffer areas from which the vegetative cover does not exist, has been removed, or is inadequate shall be planted or otherwise provided with vegetative cover or devices, sufficient to allow the buffer area to accomplish the objectives set forth in subsection.

(e) Notwithstanding the foregoing provisions, the permit issuing authority may authorize the crossing of a designated buffer area by a street, bikeway, sidewalk, water or sewer line or pump station under the circumstances specified in Subsection 15-184(g). In addition, the permit issuing authority may authorize sewer lines to be constructed within buffer areas designated under this section under circumstances where such location is practicably unavoidable if

the subject property is to be served under the provisions of Section 15-238(c) and an alternate design would result in greater damage to the environment, so long as such sewer line is located to the extent practicable at least twenty-five feet from the edge of any stream bank.



TOWN OF CARRBORO

NORTH CAROLINA

Summary of NTA Stream Buffer Provisions

Northern Transition Area. Prior to 1999, stream buffer requirements were uniform for all portions of the Town's jurisdiction outside of the University Lake watershed. The Facilitated Small Area Plan for Carrboro's Northern Study Area affirmed these buffers as well, designating them among the area's Primary Conservation Areas. In the course of developing implementing regulations, the Ordinance Drafting Committee proposed more stringent buffers for the Northern Study Area. Modeled on the University Lake watershed buffers, the buffers are as follows.

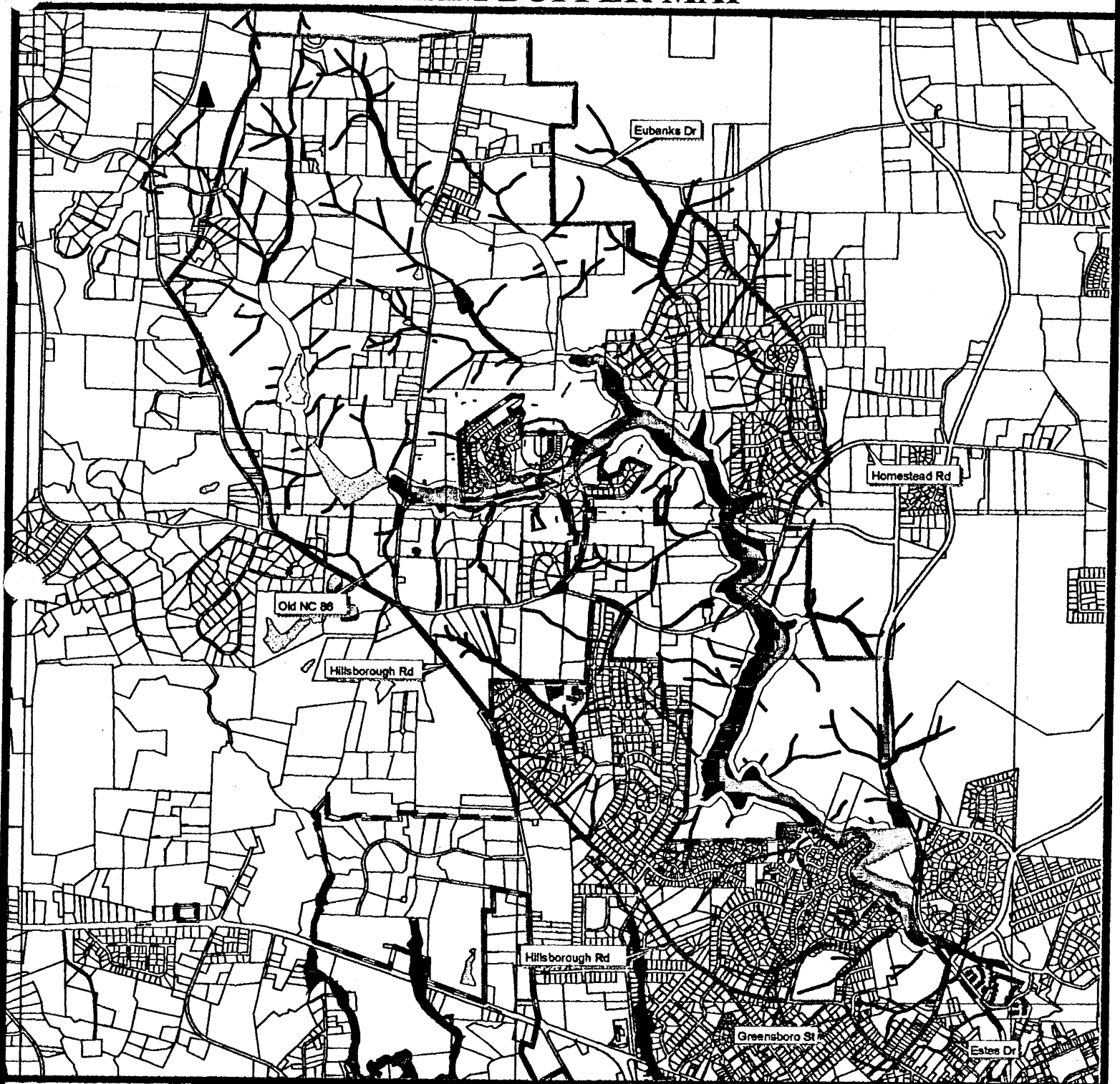
Type of waterway	Flowing Into	Buffer width (Feet) from Centerline or Edge of Floodplain on Both Sides
Bolin Creek and Tributaries	Bolin Creek (if applicable)	$100 + (4 \times \text{slope} \times 100)$
Intermittent Streams	Bolin Creek	60
Minor Intermittent Streams shown on the NTA Stream Buffer Map	(Waterways noted above)	30

Uses that may be permitted in these buffers include crossings for streets, bikeways, sidewalks, and water or sewer lines or pump stations. Sewer lines may be allowed within the buffers in some instances. The buffers were proposed to implement the provisions of the NSA Plan associated with protection of Bolin Creek and thus would be applicable to all of the NSA, including those already-developed portions located in the Town limits. In reviewing the initial maps prepared to illustrate these buffers, it was evident that these buffers would create a number of nonconforming situations for lots that were already developed or those in subdivisions that were still under construction. A table comparing Carrboro stream buffers to other jurisdictions is included below.

Comparison of Carrboro Buffers to Those in Other Places

Jurisdiction	Perennial	Intermittent	Other	Comment
Carrboro NTA	$100 + 4 \times \text{slope} \times 100$	60	30	Measured from centerline or edge of floodplain, as applicable
Chapel Hill	100	75		New LUO provisions propose 150 buffers and associated use limitations.
Neuse and Tar-Pamlico	50	50		Zoned Buffer. Zone 1 (30 feet) allows no activity. Zone 2 (20 feet) allows limited uses.
Durham	50	50		-
Cary	100	100	50	Applies to all other streams shown on Soil Survey.
Orange County	50	50		Watershed buffers are greater in width.
Greensboro	50			Two-Zone approach, but no dimension given for Zone Two.
Hendersonville	50	-		Two- Zone buffer, like Neuse and Tar-Pam.

NORTHERN TRANSITION AREA STREAM BUFFER MAP

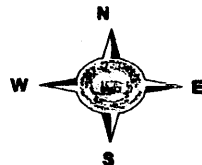


1983 State Plane Coordinate System (North)
North American Datum 1983

Scale: 1/2" = 1/4"

"THIS MAP IS NOT A CERTIFIED
SURVEY AND NO RELIANCE MAY
BE PLACED ON ITS ACCURACY"

Map of the Northern Transition Area
Stream Buffer Map
Scale: 1/2" = 1/4"



This map was prepared by the
South Carolina Department of
Transportation, Office of
Geographic Information Systems,
in cooperation with the
South Carolina Department of
Environmental and Natural
Resources, Office of Water
Resources. The map shows
the stream buffer areas for
the Northern Transition Area
study area. The map was
prepared by the South
Carolina Department of
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Legend

- BUFFER AREAS**
- Flood Plain
 - Floodway with 60' Buffer
 - Major Streams & Flood Plain
100' + 4% Slope Buffer
 - Intermittent Streams - 60' Buffer
 - Minor Intermittent Streams - 30' Buffer

- OTHER FEATURES**
- Transition Area
 - Property Lines
 - Cariboo City Limits
 - Cariboo's E.T.J.
 - Small Area Plan Study Area



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

NOVEMBER 7, 2002

LVO Text Amendment: Northern Transition
Area Stream Buffers

MOTION WAS MADE BY JAMES CARNAHAN AND SECONDED BY ANDE WEST THAT THE PLANNING BOARD RECOMMENDS THAT THE BOARD OF ALDERMEN APPROVE THE LAND USE ORDINANCE TEXT AMENDMENT REGARDING NORTHERN TRANSITION AREA STREAM BUFFERS.

VOTE: AYES (5) (BABISS, CARNAHAN, LUDWIG, SEARING, WEST); NOES (0); ABSENT/EXCUSED (5) (HAMMILL, HAVEN-O'DONNELL, HOGAN, MARSHALL, POULTON)

Adam Searing 11/14/02
Adam Searing, Chair (date)

TOWN OF CARRBORO
ENVIRONMENTAL ADVISORY BOARD



Meeting on November 7, 2002
at the Carrboro Town Hall
Carrboro, North Carolina

RECOMMENDATION

Text Amendment to Modify the Stream Buffer Requirements

Motion was made by Mike Mathews, and seconded by Merrilie Brown, that the Environmental Advisory Board recommends that the Board of Aldermen adopt the text amendment to modify the Town's stream buffer requirements as recommended by staff.

VOTE: AYES (5) (Brown, Burwell, Mathews, White, Gore); NOES (0); ABSENT/EXCUSED (1) Gallagher


for Glynis M. Gore, Chair (date)

TRANSPORTATION ADVISORY BOARD

RECOMMENDATION

November 7, 2002

SUBJECT: Land Use Ordinance Text Amendments – Northern Transition Area Stream Buffers

Motion: The Transportation Advisory Board (TAB) recommends that the Board of Aldermen approve the Land Use Ordinance text amendments regarding Northern Transition Area Stream Buffers as proposed by Town staff (Attachment D of the TAB's Agenda).

Moved: Ms. Ellen Perry

Second: Mr. Andreas Hay

VOTE: Ayes (Chris van Hasselt, Andreas Hay, Ellen Perry, Elizabeth Shay), Noes (None)

CHRIS VAN HASSELT (LOM)

TAB Chair

11 / 14 / 02

DATE