

**AN ORDINANCE AMENDING THE TOWN OF CARRBORO LAND USE  
ORDINANCE TO UPDATE AND CLARIFY WATER QUALITY BUFFERS,  
ROAD BUFFERS, SETBACK EXCEPTIONS, AND FENCES**

\*\*DRAFT 5-21-2024\* \*

THE TOWN COUNCIL OF THE TOWN OF CARRBORO HEREBY ORDAINS:

Section 1. Section 15-92 (Variances), subsection (k) is amended to read as follows:

(k) With respect to a variance from any of the provisions of Part III (Water Quality Buffers) of Article XVI, the following procedure shall apply in addition to the standards set forth in Section 15-92(b):

(1) The Board may grant minor variances, which are activities that pertain to Zone Two as defined in 15a NCAC O2b.0267, as amended, and shall make a finding of fact as to whether there are practical difficulties or unnecessary hardships that prevent compliance with the riparian buffer protection requirements. A finding of practical difficulties or unnecessary hardships shall require that the following conditions are met:

(a) If the applicant complies with the provisions of this part, they can secure no reasonable return from, nor make reasonable use of, their property.

(a1) Merely proving that the variance would permit a greater profit from the property shall not be considered adequate justification for a variance. Moreover, the Board shall consider whether the variance is the minimum possible deviation from the terms of this part that shall make reasonable use of the property possible;

(b) The hardship results from application of this part to the property rather than from other factors such as deed restrictions or other hardship;

(c) The hardship is due to the physical nature of the applicant's property, such as its size, shape, or topography, such that compliance with provisions of this part would not allow reasonable use of the property;

(d) The applicant did not cause the hardship by knowingly or unknowingly violating this part;

(e) The applicant did not purchase the property after August 11, 2009, the effective date of this part, and then request a variance; and

(f) The hardship is rare or unique to the applicant's property.

(2) For any variance request, the local government shall make a finding of fact as to whether the variance is in harmony with the general purpose and intent of the State's riparian buffer protection requirements and preserves its spirit; and

(3) For any variance request, the Board shall make a finding of fact as to whether,

in granting the variance, the public safety and welfare have been assured, water quality has been protected, and substantial justice has been done.

(4) **MINOR VARIANCES.** A minor variance request pertains to activities that will impact only Zone Two of the riparian buffer. Minor variance requests shall be reviewed and approved based on the criteria in subsection (k)(1) through (k)(3) of this part by the Board pursuant to G.S. 160D-102(38). The Board may attach conditions to the variance approval that support the purpose, spirit and intent of the riparian buffer protection program.

(5) Request for appeals to decisions made by the Board shall be made on certiorari to the local Superior Court.

(6) **MAJOR VARIANCES.** A major variance request pertains to activities that will impact any portion of Zone One or any portion of both Zones One and Two of the riparian buffer. If the local government has determined that a major variance request meets the requirements in subsection (k)(1) through (k)(3) of this part, then it shall prepare a preliminary finding and submit it to the Board for approval. Within 90 days after receipt by the local government, the Board shall review preliminary findings on major variance requests and take one of the following actions: approve, approve with conditions and stipulations, or deny the request. Appeals from a Board decision on a major variance request are made on judicial review to the local Superior Court.

Section 2: Section 15-269.5 (d) (Table of Exempt and Allowable Activities in Water Quality Buffers) is amended to read as follows:

Use	Exempt *	Allowable *	Allowable with Mitigation*
Access trails: Pedestrian access trails leading to the surface water, docks, fishing piers, boat ramps and other water dependent activities: <ul style="list-style-type: none"> <li>• Pedestrian access trails that are restricted to the minimum width practicable and do not exceed 4 feet in width of buffer disturbance, and provided that installation and use does not result in removal of trees as defined in Section 15-316 and no impervious surface is added to the buffer.</li> <li>• Pedestrian access trails that exceed 4 feet in width of buffer disturbance, the installation or use results in removal of trees as defined in this Ordinance or impervious surface is added to the riparian buffer</li> </ul>	X	X	
Airport facilities: <ul style="list-style-type: none"> <li>• Airport facilities that impact equal to or less than 150 linear feet or one-third of an acre of riparian buffer</li> <li>• Airport facilities that impact greater than 150 linear feet or one-third of an acre of riparian buffer</li> <li>• Activities necessary to comply with FAA requirements (e.g. radar uses or landing strips)<sup>1</sup></li> </ul>		X  X	X
Archaeological activities	X		
Bridges		X	

Use	Exempt *	Allowable *	Allowable with Mitigation*
* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).			
Canoe Access provided that installation and use does not result in removal of trees as defined in Section 15-316 and no impervious surface is added to the buffer.	X		
Dam maintenance activities: <ul style="list-style-type: none"> <li>• Dam maintenance activities that do not cause additional buffer disturbance beyond the footprint of the existing dam or those covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3</li> <li>• Dam maintenance activities that do cause additional buffer disturbance beyond the footprint of the existing dam or those not covered under the U.S. Army Corps of Engineers Nationwide Permit No. 3</li> </ul>	X	X	
Drainage ditches, roadside ditches and stormwater conveyances through buffers: <ul style="list-style-type: none"> <li>• New stormwater flows to existing drainage ditches, roadside ditches, and stormwater conveyances provided that flows do not alter or result in the need to alter the conveyance and are managed to minimize the sediment, nutrients and other pollution that convey to surface waters.</li> <li>• Realignment of roadside drainage ditches retaining the design dimensions provided that no additional travel lanes are added and the minimum required roadway typical section is used based on traffic and safety considerations.</li> <li>• New or altered drainage ditches, roadside ditches and stormwater outfalls provided that a stormwater management facility is installed to control nutrients and attenuate flow before the conveyance discharges through the riparian buffer.</li> <li>• New drainage ditches, roadside ditches and stormwater conveyances applicable to linear projects that do not provide a stormwater management facility due to topographic constraints provided that other practicable BMPs have been employed.</li> </ul>	X	X	X  X
Drainage of a pond in a natural drainage way provided that a new riparian buffer that meets the requirements of this Section is established adjacent to the new channel [Ponds that are not in a natural drainage way are not subject to the buffer requirements of this part.] <b>(AMENDED 2/21/12)</b>	X		

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

Use	Exempt *	Allowable *	Allowable with Mitigation*
Driveway crossings of streams and other surface waters subject to this Section: <ul style="list-style-type: none"> <li>• Individual driveway crossings that disturb equal to or less than 25 linear feet or 2,500 square feet of buffer</li> <li>• Individual driveway crossings that disturb greater than 25 linear feet or 2,500 square feet of buffer</li> <li>• Multiple driveway crossings in any development that cumulatively disturbs equal to or less than 150 linear feet or one-third of an acre of buffer</li> <li>• Multiple driveway crossings in any development that cumulatively disturbs greater than 150 linear feet or one-third of an acre of buffer</li> <li>• Driveway impacts other than crossing of a stream or other surface waters subject to this Section</li> </ul>	X	X	X
Fences: <ul style="list-style-type: none"> <li>• Fences provided that disturbance is minimized and installation does not result in removal of trees as defined in Section 15-316</li> <li>• Fences provided that disturbance is minimized and installation results in removal of trees as defined in Section 15-316</li> </ul>	X	X	
Fertilizer application: One-time application to establish vegetation	X		
Forest harvesting – See Section 15-319.1			
Grading and revegetation in Zone 2 only provided that diffuse flow and the health of existing vegetation in Zone 1 is not compromised and disturbed areas are stabilized until they are revegetated		X	
Greenway / hiking trails <sup>1</sup> designed, constructed and maintained to maximize nutrient removal and erosion protection, minimize adverse effects on aquatic life and habitat, and protect water quality to the maximum extent practical.		X	
Maintenance access on modified natural streams: a grassed travel way on one side of the water body where less impacting alternatives are not practical. The width and specifications of the travel way shall be only that needed for equipment access and operation. The travel way shall be located to maximize stream shading.		X	

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

Use	Exempt *	Allowable *	Allowable with Mitigation*
Mining activities: <ul style="list-style-type: none"> <li>• Mining activities that are covered by the Mining Act provided that new buffers that meet the requirements of this section are established adjacent to the relocated channels</li> <li>• Mining activities that are not covered by the Mining Act OR where new buffers that meet the requirements of this section are not established adjacent to the relocated channels</li> <li>• Wastewater or mining dewatering wells with approved NPDES permit</li> </ul>	X	X	X
Playground equipment: <ul style="list-style-type: none"> <li>• Playground equipment on single family lots provided that installation and use does not result in removal of vegetation</li> <li>• Playground equipment installed on lands other than single-family lots or that requires removal of vegetation</li> </ul>	X	X	
Ponds created by impounding streams and not used as stormwater BMPs: <ul style="list-style-type: none"> <li>• New ponds in Zone 2 only provided that a riparian buffer meeting the requirements of Section 15-269.3 and 15-269.4 is established adjacent to the pond</li> <li>• All other ponds</li> </ul>		X	X
Preservation or maintenance of historic or cultural sites	X		
Protection of existing structures, facilities and stream banks when this requires additional disturbance of the riparian buffer or the stream channel		X	
Railroad crossings of streams and other surface waters subject to this Ordinance: <ul style="list-style-type: none"> <li>• Railroad crossings that impact equal to or less than 40 linear feet of riparian buffer</li> <li>• Railroad crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer</li> <li>• Railroad crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer</li> </ul>	X	X	X
Railroad impacts other than crossings of streams and other surface waters subject to this Part.			X

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

<p>Stormwater BMPs:</p> <ul style="list-style-type: none"> <li>• Wet detention, bioretention, and constructed wetlands in Zone 2 if diffuse flow of discharge is provided into Zone 1</li> <li>• Constructed wetlands in Zone 1, if not closer than 30' to surface waters and diffuse flow is provided into the remainder of Zone 1.</li> <li>• Wet detention, bioretention, and constructed wetlands 30' or less from surface waters</li> </ul>
<p>Temporary roads, provided that restoration activities, including re-establishment of pre-construction topographic and hydrologic conditions and replanting with comparable vegetation occur immediately after construction. Tree planting may occur during the dormant season; the restored buffer shall comply with Section 15-269.7(g) within five years:</p> <ul style="list-style-type: none"> <li>• Less than or equal to 2,500 square feet of buffer disturbance</li> <li>• Greater than 2,500 square feet of buffer disturbance</li> <li>• Associated with culvert installation or bridge construction or replacement.</li> </ul>

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

Use	Exempt *	Allowable *	Allowable with Mitigation*
<p>Temporary sediment and erosion control devices provided that the disturbed area is restored to preconstruction topographic and hydrologic conditions and comparable vegetation is replanted immediately after construction is complete. Tree planting may occur during the dormant season; the restored buffer shall comply with Section 15-269.7(g) within five years:</p> <ul style="list-style-type: none"> <li>• In Zone 2, provided that the vegetation in Zone 1 is not compromised, that discharge is released as diffuse flow in accordance with Section 15-269.5, and that ground cover is established within time frames required by the Sedimentation and Erosion Control Act</li> <li>• In Zones 1 and 2 to control impacts associated with uses approved by the Town or that have received a variance provided that sediment and erosion control for upland areas is addressed, to the maximum extent practical, outside the buffer.</li> <li>• In-stream temporary erosion and sediment control measures for work within a stream channel that is authorized under Sections 401 and 404 of the Federal Water Pollution Control Act.</li> <li>• In-stream temporary erosion and sediment control measures for work within a stream channel.</li> </ul>	X	X	
<p>Transportation (vehicular, bike) crossings of streams and other surface waters subject to this Section:</p> <ul style="list-style-type: none"> <li>• Transportation crossings that impact equal to or less than 40 linear feet of riparian buffer</li> <li>• Transportation crossings that impact greater than 40 linear feet but equal to or less than 150 linear feet or one-third of an acre of riparian buffer</li> </ul> <p>Transportation crossings that impact greater than 150 linear feet or one-third of an acre of riparian buffer</p>	X	X	X
Transportation impacts other than crossings of streams and other surface waters subject to this Section			X
<p>Utility, electric, aerial, perpendicular crossings<sup>2,3,4</sup>:</p> <ul style="list-style-type: none"> <li>• Disturb equal to or less than 100 linear feet of buffer</li> <li>• Disturb greater than 100 linear feet of buffer</li> </ul>	X	X	
<p>Utility, electric, aerial, other than perpendicular crossings<sup>3</sup>:</p> <ul style="list-style-type: none"> <li>• Impacts greater than 50 feet from surface waters</li> <li>• Impacts within 30-50 feet of surface waters</li> <li>• Impacts within 30 feet of surface waters<sup>2,4,5</sup></li> </ul>	X	X	X
<p>Utility, electric, underground, perpendicular crossings<sup>3,4,6</sup>:</p> <ul style="list-style-type: none"> <li>• Disturb less than or equal to 40 linear feet of buffer</li> <li>• Disturb greater than 40 linear feet of buffer</li> </ul>	X	X	

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

Use	Exempt *	Allowable *	Allowable with Mitigation*
Utility, electric, underground, other than perpendicular crossings <sup>3,6</sup> : <ul style="list-style-type: none"> <li>• Impacts greater than 50 feet from surface waters</li> <li>• Impacts within 30-50 feet of surface waters</li> <li>• Impacts within 30 feet of surface waters<sup>5</sup></li> </ul>	X	X	X
Utility, non-electric, perpendicular crossings <sup>3,4,6,7</sup> : <ul style="list-style-type: none"> <li>• Disturb equal to or less than 40 linear feet of buffer with a maintenance corridor equal to or less than 10 feet in width</li> <li>• Disturb equal to or less than 40 linear feet of buffer with a maintenance corridor greater than 10 feet in width</li> <li>• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of buffer with a maintenance corridor equal to or less than 10 feet in width</li> <li>• Disturb greater than 40 linear feet but equal to or less than 150 linear feet of buffer with a maintenance corridor greater than 10 feet in width</li> <li>• Disturb greater than 150 linear feet of buffer</li> </ul>	X	X  X	X  X
Utility, non-electric, other than perpendicular crossings <sup>3,6</sup> : <ul style="list-style-type: none"> <li>• Impacts greater than 50 feet from surface waters</li> <li>• Impacts within 30-50 feet of surface waters</li> <li>• Impacts within 30 feet of surface waters<sup>5,8</sup></li> </ul>		X	X
Vegetation management: <ul style="list-style-type: none"> <li>• Emergency fire control measures provided that topography is restored</li> <li>• Mowing or harvesting of plant products in Zone 2 only</li> <li>• Planting vegetation to enhance the riparian buffer</li> <li>• Pruning forest vegetation provided that the health and function of the forest vegetation is not compromised</li> <li>• Removal of individual trees which are dead, diseased, or damaged, are in danger of causing damage to dwellings, other structures or human life, or are imminently endangering the stability of the streambank.</li> <li>• Removal of poison ivy</li> <li>• Removal of invasive exotic vegetation as defined in Smith, Cherri L., 1998 Exotic Plant Guidelines. DENR, Division of Parks and Recreation. Raleigh, N.C. Guideline # 30, or a more recent version or alternative reference approved by the NC EMC.</li> </ul>	X  X X X  X  X  X		
Vehicle access roads and boat ramps leading to the surface water, docks, fishing piers, and other water dependent activities, but not crossing the surface water and having a minimum practicable width of not more than 10 feet.		X	
Water dependent structures where installation and use result in disturbance to riparian buffers.		X	

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

Use	Exempt *	Allowable *	Allowable with Mitigation*
Water supply reservoirs: <ul style="list-style-type: none"> <li>• New reservoirs where a riparian buffer that meets the requirements of Section 15-269.3 is established adjacent to the reservoir</li> <li>• New reservoirs where a riparian buffer that meets the requirements of Section 15-269.3 is not established adjacent to the reservoir</li> </ul>		X	X
Water wells <ul style="list-style-type: none"> <li>• Single family residential water wells</li> <li>• All other water wells</li> </ul>	X	X	
Wetland, stream and buffer restoration that results in impacts to the riparian buffers: <ul style="list-style-type: none"> <li>• Wetland, stream and buffer restoration that requires DWQ approval for the use of a 401 Water Quality Certification</li> <li>• Wetland, stream and buffer restoration that does not require DWQ approval for the use of a 401 Water Quality Certification</li> </ul>	X	X	
Wildlife passage structures		X	

\* To qualify for the designation indicated in the column header, an activity must adhere to the limitations defined for it in a given listing as well as the requirements established in Section 15-269.4 (Diffuse Flow Requirement).

<sup>1</sup> To the extent practicable the greenway easements shall be located a minimum of 10 feet from the top of bank; surfaces shall be a minimum of 15 feet from the top of bank.

<sup>2</sup> Provided that within 30 feet of surface waters, all of the following BMPs for overhead utility lines are used. If all of these BMPs are not used, then the overhead utility lines shall require a no practical alternative evaluation by the Administrator as defined in Section 15-269.6.

- A zone at least 10 feet wide immediately adjacent to the water body shall be managed such that only vegetation that poses a hazard or has the potential to grow tall enough to interfere with the line is removed.
- Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
- Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain where trees are cut.
- Riprap shall not be used unless it is necessary to stabilize a tower..
- No fertilizer shall be used other than a one-time application to re-establish vegetation.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Active measures shall be taken after construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
- In wetlands, mats shall be utilized to minimize soil disturbance.

<sup>3</sup> Perpendicular crossings are those that intersect the surface water at an angle between 75 degrees and 105 degrees.

<sup>4</sup> Provided that poles or aerial infrastructure shall not be installed within 10 feet of a water body unless the Administrator completes a no practical alternative evaluation as defined in Section 15-269.6.

<sup>5</sup> Provided that:

- No heavy equipment shall be used within 30 feet of surface waters.
- A tree protection plan shall be developed and approved by Administrator that will protect the buffer to the maximum extent practicable

- Vegetation in undisturbed portions of the buffer is not compromised.
- Felled trees are removed by chain.
- No permanent felling of trees occurs in protected buffers or streams.
- Stumps are removed only by grinding.
- At the completion of the project the disturbed area is stabilized with native vegetation.
- Zones one and two meet the requirements of Section 15-269.3.

<sup>6</sup> Provided that:

- A tree protection plan shall be developed and approved by Administrator that will protect the buffer to the maximum extent practicable.
- Trees shall be felled so as not to damage trees not intended for removal or stream banks.
- Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
- Stump grinding is allowable only for stumps more than 30 feet from surface waters.
- Within 30 feet of surface water, all of the following BMPs for underground utility lines shall be used. If all of these BMPs are not used, then the underground utility line shall require a no practical alternative evaluation by the Administrator, as defined in Section 15-269.6.
  - Woody vegetation shall be cleared by hand. No land grubbing or grading is allowed.
  - Vegetative root systems shall be left intact to maintain the integrity of the soil. Stumps shall remain, except in the trench where trees are cut.
  - Underground cables shall be installed by vibratory plow or trenching.
  - The trench shall be backfilled with the excavated soil material immediately following cable installation.
  - No fertilizer shall be used other than a one-time application to re-establish vegetation.
  - Construction activities shall minimize the removal of woody vegetation, the extent of the disturbed area, and the time in which areas remain in a disturbed state.
  - Measures shall be taken upon completion of construction and during routine maintenance to ensure diffuse flow of stormwater through the buffer.
  - In wetlands, mats shall be utilized to minimize soil disturbance.

<sup>7</sup> All sewer crossings shall be protected from damage and risk of future leakage to the maximum extent practicable using ductile iron and other appropriate construction materials and practices.

<sup>8</sup> The width of the corridor that is maintained to exclude woody vegetation will not exceed 20 feet in width except to accommodate vehicle turnaround, preparedness for emergency situations, and state and federal regulatory standards.

Section 3. Subdivision (b)(1)(b) of Section 15-198 (Open Space) is amended to read as follows:

- b. Is not devoted to use as a roadway, parking area, or sidewalk, unless a publicly accessible sidewalk or related shared-use facility is located within a protective roadway buffer as defined by Section 15-312.

Section 4. Subdivision (b)(4)(g) of Section 15-198 (Open Space) is amended to read as follows:

- g. Road buffers as required by Section 15-312 of the Chapter, except for those portions of the buffers that must be included in road or utility crossings, sight triangles and pedestrian and bicycle improvements.

Section 5. Section 15-312 (Protective Buffer Along Major Roads). Is amended to read as follows:

Notwithstanding the provisions of Section 15-308, but subject to the remaining provisions of this section, an undisturbed protective buffer shall be maintained along Old N.C. 86, Dairyland Road, Union Grove Church Road, Homestead Road, Eubanks Road and Smith Level Road south of Ray Road that will help preserve the scenic views and elements of this area. With respect to each property that fronts one of the named streets, any development other than use classification 13.200, Fire Station, that occurs after the effective date of this section shall provide an undisturbed buffer (except for necessary crossings and encroachments as described in Section 15-198(b)(4)(g)) that is a minimum of 50 feet in width and on average is 100 feet in width along such frontage. If the buffer area does not provide the equivalent of a Type 'A' screen, the developer shall provide a Type 'A' screen on the development's side of the buffer (one hundred (100) feet from the right-of-way)

Section 6. Section 15-92.1 (Special Exception Permits) is amended by replacing the term "special exception permit" in all instances with the term "setback exception."

Section 7. Section 15-92.1(c)(2) is amended to read as follows:

- (2) Issuance of the permit will not adversely affect the value of adjoining or neighboring properties.

Section 8. Section 15-184(3)(b) is amended with the addition of a definition of "substantially opaque" so that the subdivision now reads as follows:

- (b). Fences, walls or berms running along right-of-way or lot boundaries adjacent to public street rights of way if such fences, walls or berms exceed three feet in height and are substantially opaque except that fences, walls or berms shall not be regarded as "buildings" within the meaning of this subdivision if they are located along the rear lot line of lots that have street frontage along both the front and rear of such lots. For the purpose of this section, any portion of a fence higher than three feet located parallel along or perpendicular to a right-of-way that does not meet the applicable setback requirement must be at least 50 percent open/revealed to 50 percent closed/opaque. A zoning permit for use 35.00 (Fences) is only required when fences are located in the right-of-way setback.

Section 9. Section 15-147 (Use of the Designations A,B,Z in Table of Permissible Uses) is amended by the addition of a new subsection (w) that reads as follows:

- (w) Notwithstanding the foregoing, a zoning permit is only required for use 35.00 (Fences) as defined in Subdivision 15-184(3)(b), when fences are located in the right-of-way setback.

Section 10. Section 15-146 (Table of Permissible Uses) is amended by the addition of a new use classification, 35.00 (Fence), with a “Z” entered in each column indicating that a zoning permit is required for the installation of a fence in each zoning district.

Section 11. All provisions of any Town Ordinance in conflict with this Ordinance are repealed.

Section 12. This Ordinance shall become effective upon adoption.

DRAFT