



GILLS CREEK WATERSHED ASSOCIATION

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21 August 2020

Sent via email to: nip@richlandcountysc.gov, powella@rcgov.us

Ashley M. Powell, Associate AIA
Planning Services Manager
Richland County Planning & Development Services
2020 Hampton Street, 1st Floor
Columbia, SC 29204

Re: Request for Public Comment on March 2020 Consolidated Draft of the Land Development Code (LDC) for Richland County, South Carolina

Dear Ms. Powell:

Thank you for the opportunity to comment on Clarion Associates' March 2020 Consolidated Draft of the Land Development Code (LDC) for Richland County, South Carolina. Gills Creek Watershed Association (GCWA) is a local nonprofit, working to restore Gills Creek, educate the communities within its watershed, and advocate for the protection and preservation of the Creek's resources, beauty, and environmental sustainability.

GCWA greatly appreciates the time and effort that has gone into this LDC Rewrite, making for a more integrated approach to development, as well as its more holistic efforts in preserving the County's natural landscape and water quality. We are especially encouraged by the focus on reduction in pavement, connectivity for bikes and walkers, and the stated intent to increase connection for large contiguous natural areas. However, we would like to provide comments and to particularly emphasize a few over-arching issues that undermine the future of the Gills Creek Watershed and Richland County as a whole.

We are strongly supportive of many concepts established throughout the LDC, including walkable urbanism, pedestrian and bicycle-friendly aspects, overall connectivity, and concepts that will reduce stormwater runoff. GCWA is also pleased to see the inclusion of innovative practices such as pervious surfaces and green development practices, but we would like to note that standards for these practices—along with low impact development practices, which were severely lacking in the LDC—need to be strengthened and should always require maintenance plans. They should not just be included as permissible, but be encouraged, or even mandated in some cases. Open space standards also need to be strengthened, and preservation of existing natural areas, including forests, needs to be prioritized.



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GCWA would like to see Richland County commit to no net loss of the County's large, connected natural areas due to land development.

GCWA noted the omission of the Gills Creek Environmental Protection Overlay District (Ord. 006-10HR; 1-19-10) in this draft LDC. The EP Overlay District, and Gills Creek EP Overlay District sub-area need to be included in this LDC rewrite. The ordinance was developed to address environmental concerns, specifically "the most critical water resource problems that exist within Richland County," of which the Gills Creek Environmental Protection Overlay District was the only sub-area identified. Specifically, Ord. 006-10HR; 1-19-10 states, "Richland County seeks to preserve the Gills Creek Floodway in order to protect and improve the water quality, scenic beauty, and wildlife habitat of the creek. The creation of the EP-GC District for Richland County is done in order to establish a mechanism for the accomplishment of these objectives. There is hereby established one (1) EP overlay district in the Gills Creek area of Richland County. The boundaries of the EP-GC District shall be the Gills Creek Floodway as shown on the FEMA Flood Insurance Rate Maps." Due to overdevelopment of the Gills Creek Watershed, the Watershed continues to be one of the largest urban impaired watersheds in South Carolina, and Richland County would be severely amiss to not include this previously-established ordinance within the new LDC.

Additional comments relate to specific sections of the proposed Code.

Sec. 26-2.3 Review and Decision-Making Bodies

GCWA recommends that the Conservation Manager receive notice of, and have the opportunity to review, land development projects with significant conservation, water quality, or flooding impacts.

GCWA also recommends that the Blue Ribbon Committee receive notice of, and have the opportunity to review, proposed projects requesting a floodplain development permit and proposed land development projects with significant flooding impacts. As described on Richland County's website, "The Blue Ribbon Committee, established by County Council to serve as a stakeholder group representing the whole community, makes recommendations to Council about flood recovery efforts and how best to use flood relief funds." We ask that the Blue Ribbon Committee be notified during review of large land development projects with potential flooding impacts.

Sec. 26-2.4(b) Pre-Application Neighborhood Meeting

GCWA requests that the County mandate pre-application neighborhood meetings, rather than have them "encouraged" for certain projects, such as Major Subdivisions and Major Land Development, for the purpose of enhanced public transparency and input.



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Sec. 26-2.5(j)(4) Decision Standards for Floodplain Development Permit

GCWA requests that the following factor be added in order to maintain a swath of preserved floodplain: “The connectivity of the property to FEMA buyout properties.” Also, along these same lines, we request the addition of a statement that any development within a floodplain not increase adjacent or downstream property owners’ risk of flood.

Sec. 26-2.5(p)(4) Decision Standards for Water Quality Buffer Waiver

In order to protect highly impaired waterbodies from further degradation, GCWA requests that the applicant must also demonstrate the following: “The project will not add to an already-established TMDL.”

Sec. 26-3.2(c) OS: Open Space District

Under “Purpose,” GCWA requests that floodplains be added as an example of “lands that have significant environmental features or functions” in the text. We would also like to see stronger language regarding the importance of preservation of land, including water quality benefits, etc.

Reference to Other Standards

In **Sec. 26-3.4(d) MU1: Neighborhood Mixed-Use District** and **Table 26-3.5(c)(7): Reference to Other Standards**, information is missing in the row after “Sec. 26-5.11 Water Quality.” It appears that the next line should read “Sec. 26-5.13 Green Development Incentives,” but this line instead reads “Sec. 26-5.1.”

Sec. 26-3.5 Neighborhood Master Plan Base Districts

GCWA advocates for the CC: Crane Creek Neighborhood District master plan. GCWA particularly likes that the purposes for this master plan include “preserv[ing] existing wetlands and creat[ing] a community open space network” and that CC-1 Residential Sub-District supports conservation of “the natural and environmentally-sensitive features within the Crane Creek Master Plan area.” GCWA would like to see this concept applied to other neighborhood areas through the creation of neighborhood master plans.

Sec. 26-3.7(d) FP-O: Floodplain Overlay District

The language in this section is consistent with existing ordinance language. GCWA would like to see stricter standards. Specifically, Gills Creek Watershed Association would like to stress to the County the importance of protecting floodway and floodplain areas as much as possible. Floods inundate floodplains, a natural process. Properly functioning floodplains provide protection for the entire County by providing floodwater storage and safe passage, reducing flood velocities, and restricting erosion and



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sedimentation, which in turn helps to maintain water quality. Thus, when floodplains are kept in or restored to their natural state, they can actually reduce the number and severity of floods, improve water quality, and save lives. This natural process is much more cost-effective than rebuilding or enhancing a structure. An increase in permanent flood mitigation in the form of floodplain preservation is needed. As we have seen with properties in the Crowson Road area, significant floods will destroy property located in the floodplain, not just within the floodway.

As related to **Sec. 26-3.7(d)(5)12 Watercourse Alterations and Maintenance**, Gills Creek Watershed Association objects to the filling of streambeds and watercourse alterations for development, even if mitigation for increased flooding is provided. Filling natural streambeds, particularly in flood-prone areas, does not abate flooding, but rather exacerbates flooding, as was demonstrated during the devastating floods of 2015. GCWA opposes allowing a watercourse to be altered or relocated, particularly within a Special Flood Hazard Area in Richland County.

Under Sec. 26-3.7(d)(6)a Activity Within 100 Feet of the Stream Bank

GCWA applauds the exclusion zone, and we also request that there be no exception for encroachment within 100 feet of the stream bank.

Sec. 26-3.7(e) WR-O: Water Resources Overlay District

This section needs to be strengthened. **Sec. 26-3.7(e)(3) Use Standards** needs to be more inclusive in order to adequately protect water resources within the County, GCWA would like to see car washes, fuel sales (vehicular), and concentrated animal feeding operations prohibited within the WR-O District, which can all “contribute to the degradation of water quality” through stormwater runoff, as the purpose of WR-O describes its intent is to ensure that this does *not* happen.

GCWA also requests that the Gills Creek Watershed be considered for inclusion in this district.

Sec. 26-5.12(a) Water Quality Buffers

GCWA’s experience with the 2015 floods suggests that water quality buffers need to be increased, but recommends that the issue be addressed collaboratively, as was the case with the original Water Quality Buffer code. If the purpose of water quality buffer requirements for new development is indeed as the General Development Standards explain in **Sec. 26-5.12(a)(1)a.1.(a)-(d)**, to “protect the streams, wetlands, and flood plains of the County; protect the water quality of watercourses, reservoirs, lakes, and other significant water resources, protect riparian and aquatic ecosystems; and provide for the environmentally sound use of the County’s land resources,” and the environmental protection and resource management benefits are as numerous as to describe them as “including” ten items such as



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those in **Sec. 26-5.12(a)(1)b.1-10**, the County's own reasoning supports increasing the base buffer width as well as increasing the buffer adjustment widths.

GCWA further requests that **Sec. 26-5.12(a)(7)i** be removed from buffer adjustments—no buffer width should be less than 50 feet perpendicular from the jurisdictional line on each side of the waterway. In **Sec. 26-5.12(a)(3)b Delineation**, GCWA stresses that statements regarding the buffer width being “never less than 50 feet” need to be clarified to refer to each side of the stream, not the entire buffer.

While the draft LDC allows unpaved paths in water quality buffers, GCWA suggests that to support and encourage the development of greenways, which are usually composed of impervious pavement in part because it is more flood-resistant, perhaps greenway paths composed of impervious pavement could be included in the buffer, but only if the water quality buffer is increased by the width of the paved path. Intentionally designing greenways in flood zones is a great way for this greenspace to be used and improve the quality of life for residents, where other development would be problematic. GCWA would also like to note that any path or structure that will encourage dog walking or dog recreation within or near a water quality buffer should correspond with the requirement of installation of dog waste stations to prevent bacteria from entering the waterbody.

It should be noted that in **Table 26-5.12(e): Green Building Features**, the category **Water Conservation and Water Quality** should have maintenance plans required. BMPs like these must be properly maintained in order to work. Specifically, GCWA also requests that the item in this section for rain water capture and re-use devices include language about required netting to prevent mosquito breeding, as this would prevent the excessive use of pesticides.

GCWA requests the addition of LID features in **Table 26-5.12(e): Green Building Features**, as this is a very important category that adds to the purpose and intent outlined in **Sec. 26-5.13(a) Green Development Incentives Purpose and Intent** and is completely missing from the table

Sec. 26-5.12(c)(3)g. Water Quality Controls for Impaired Water Bodies and Consistency with TMDLs

GCWA would like to see this section strengthened. GCWA would like to note that this standard does not anticipate cumulative effects, particularly for 303(d)-listed waterbodies. That is, the fact that multiple permits, each meeting the “not cause or contribute” standard as written could, over time, indeed cause or contribute to violations of water quality standards. Gills Creek, among other waterbodies in the County, is already listed as a South Carolina 303(d) impaired waterbody, so any new construction will automatically contribute to further violations, inevitably further impairing the Creek. Thus, the standard as is, effectually becomes null. GCWA requests that, to improve its standard, the County instead look to



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Brevard, North Carolina's stormwater ordinance for more appropriate language, which places absolute limits on certain factors, such as discharge rates and total suspended solids (TSS), addressing cumulative impacts. Specifically, from the [Brevard, NC Stormwater Ordinance](#):

- Sec. 6.6,C.1.b. – “The stormwater runoff generated by a two-year and ten-year, 24-hour rain event, shall be limited to the pre-development discharge rates.”
- Sec. 6.6,C.1.c. – “At a minimum, stormwater measure shall be designed to remove 85 percent of the Total Suspended Solids (TSS) from the first inch of any rain event.”
- Sec. 6.6,C.3. – “Small scale Stormwater management practices, non-structural techniques, low-impact designs (LID), and site planning designed to mimic natural hydrologic runoff characteristics and minimize the impact of land development on water resources must be implemented. Only when it is absolutely necessary is the use of a structural BMP warranted.”

Sec. 26-5.13(f) Failure to Install or Maintain Green Building Features

GCWA proposes the language here be changed to include the italicized text: “Failure to *properly* install or *properly* maintain approved green building features [...]” to further emphasize the necessity of proper maintenance and its relation to a successful BMP.

Sec. 26-5.2 Off-Street Parking and Loading

Under **(c)(2)b Pervious or Semi-pervious Surfacing**, point 1., GCWA proposes the draft LDC be changed to include the italicized text: “The use of pervious or semi-pervious parking lot surfacing material, including... *is encouraged, and* may be [...]” GCWA supports the use of pervious pavement due to its many benefits, so long as a maintenance plan is provided and followed, and encourages the County to give preference to this in future development.

Under **(d)(2) Excess Parking**, GCWA is highly supportive of bioretention or other LID practices being required in this section; however, we request a maintenance plan be required to be submitted, as it is for pervious/semi-pervious surfacing. Best management practices like these are only as good as their appropriate maintenance.

Sec. 26-5.3 Landscaping

GCWA requests that a minimum depth/height of organic matter for **Sec. 26-5.3(c)(8) Mulch** be specified to reduce water usage, stormwater runoff, and erosion. Typically, 2-4 inches is suggested. The LDC should also specify that double-ground hardwood mulch be used, as it is much more likely to stay in place during rain events compared to other types.

Sec. 26-5.3(i) Tree Protection



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GCWA would like to see a broader class of protected trees, particularly as they assist in reducing the heat island effect and combatting rising temperatures in urban areas.

Sec. 26-5.4. Open Space Set-Asides

GCWA would like to request that a minimum standard be set for Natural Areas, as is done for other areas.

GCWA requests that **Table 26-5.4(d): Open Space Set-Aside Features – Squares, Forecourts, and Plazas** include LID practices in their design, such as pervious pavement, particularly as the definition for open space in **Sec. 26-9.3 Definitions** is “land areas that are not occupied by buildings, structures, *impermeable areas*, streets, alleys, or required buffer transition and street protective yards” (italics added for emphasis).

In **Table 26-5.4(d): Open Space Set-Aside Features**, for each category under **Design and Maintenance Requirements**, the design is described, but most do not describe maintenance requirements, including Passive Recreation Areas, Stormwater Management Areas Treated as Site Amenities, Public Access Easements with Paths or Trails, Active Recreational Areas, and Squares, Forecourts, and Plazas. Squares, Forecourts, and Plazas does not even include “Maintenance Requirements” in its description. We request that maintenance requirements be described in these sections, particularly as BMPs, such as the category of “stormwater management areas treated as site amenities” will require maintenance to continue effectively serving as a stormwater management area.

Sec. 26-8.5(d) Enforcement of Open Space Management

GCWA suggests a language change, whereby if the County takes over improperly maintained open space, the maintenance costs “shall” be charged to the owner, rather than “may.” This would keep the County from incurring extra expenses, while holding the property owner responsible.

Sec. 26-9.3 Definitions

GRAND TREE – GCWA requests that longleaf pines included in “large softwoods” under this definition be expanded to “24 inches DBH.”

LID (LOW IMPACT DEVELOPMENT) – GCWA requests the addition of the definition for low impact development, LID. LID describes an approach to manage stormwater runoff through land planning and engineering design.

OPEN SPACE – This word and definition is included twice.



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PARK OR GREENWAY – Greenway is defined separately and differently above this definition.

PRESERVE – GCWA requests that this definition simply state “Land set aside for protection.”

VEGETATION – GCWA would like to see this definition expanded to include vines and forbs as examples.

WATERSHED – GCWA requests that this definition be expanded. A watershed does not apply just to “contributing stormwater runoff.” The EPA defines a watershed as, “the land area that drains to one stream, lake or river – affects the water quality in the waterbody that it surrounds”

GCWA is pleased to see a more integrated approach to development in this Land Development Code Rewrite, as well as its more holistic efforts in preserving the County’s natural landscape and water quality. Efforts such as encouraging permeable pavement, connectivity of large open spaces, and dedicated spaces for pedestrians and bicyclers are positive steps the draft LDC makes to improve quality of life in Richland County. Gills Creek Watershed Association encourages Richland County to strengthen both its standards for innovative development practices, such as LIDs, and its floodplain and floodway development standards, to help prevent flooding and subsequent damage. GCWA also encourages Richland County to make no net loss of large contiguous natural areas in the County a commitment of the code.

GCWA appreciates the opportunity to comment on this Land Development Code Rewrite and looks forward to joining with Richland County as we continue to preserve the County’s natural landscape and water quality, while allowing for responsible development.

Sincerely,

Carmony Adler
Executive Director