

Engineering Department Comments for Development Code Draft 2023

Article 13.3.1

2. No portion of any structure may be located closer than 25 feet from stream banks, wetlands or any body of water.

3. is deleted and replaced with text from 13.4.2.1 where wetlands was added and 25 changed to 50 feet.

Article 13.3.2

For consistency the development code in Article 13.3.2 Protection in Section

Section 1 should read "An undeveloped open space riparian buffer shall be maintained for a distance of 50 feet on both sides of the stream as measured from the streambanks, wetlands and around all bodies of water as measured from the high-water mark. "

Section 2 should read "No impervious surface shall be constructed within a 50 foot setback area on both sides of the stream as measured from stream banks, wetlands and around all bodies of water as measured from the high-water mark."

Article 13.3.3

In Article 13.3.3 there needs to be a fourth bullet: 4) waterbodies designated by the state as impaired may have more restrictive setbacks and requirements.

Article 13.4.2

"Natural Water Courses should be eliminated from this article. The Section 1a should be moved to 13.3.2.3 and add wetlands, 50 instead of 25.

Article 13.4.2

Article 13.4.3. in number 3, the word "side" is misspelled.

Article 13.6.1

There is a random "w" at the end of the paragraph.

Note in reference to question about recreation in buffers: The caveat for recreational use in these areas, including impervious surfaces such as "walking trails, nature trails, boardwalks..." etc. exists in Article 13.3.6 in Section 4.

ARTICLE 13 - ENVIRONMENTAL STANDARDS

3. Property that contains natural water courses, creeks, or drainage basins shall not be subdivided or platted as individual lots for resale and further development within a distance of 50 feet on the side of each bank of the creek, wetlands, water course, or drainage way. Such property should be platted as open space.

located closer than ~~50~~ 25 feet from the stream banks, wetlands or any body of water.

~~No portion of any structure may be located closer than 50 feet from a wetland.~~

13.1 PURPOSE AND APPLICABILITY

The purpose of this article is to minimize adverse environmental impacts. The standards contained in this article shall apply to applications for all new development and expansions to existing uses and structures.

13.2 ENVIRONMENTALLY SENSITIVE AREAS

13.2.1 Generally. The following specific areas shall be preserved as undeveloped open space to the extent practicable and consistent with the site analysis and recommendations. Any such areas not preserved as undeveloped open space shall be developed in accordance with applicable federal, state, or local regulations pursuant to all required permits.

1. Wetlands as delineated and approved by the U.S. Army Corps of Engineers or the South Carolina Department of Health and Environmental Control, and non-jurisdictional wetlands that meet the definition of a wetland as defined by this Article.
2. Slopes in excess of 20 percent.
3. Lands in the floodplain and floodway as delineated by the Federal Emergency Management Agency and U.S. Army Corps of Engineers.

13.3 RIPARIAN BUFFERS

13.3.1 Applicability. This section applies to any application for development approval that proposes any impervious surface or land-disturbing activity not otherwise expressly exempt. Furthermore, nothing in this section shall prohibit or be construed to prohibit the building of a single-family dwelling on an existing lot of record, including the usual appurtenances thereto, within the buffer areas established herein, subject to the following conditions:

1. Such dwelling must be in compliance with all applicable zoning regulations, and
2. No portion of any structure may be

13.3.2 Protection. The corridors of all perennial streams and the areas around ponds, Carolina bays, and other permanent or seasonal bodies of water are protected by the following criteria:

1. An undeveloped open space riparian buffer shall be maintained for a distance of ~~25~~ 50 feet on both sides of the stream as measured from the stream banks, wetlands and around all bodies of water as measured from the high-water mark and
2. No impervious surface shall be constructed within a ~~25~~ 50 foot setback area on both sides of the stream as measured from the stream banks, wetlands and around all bodies of water as measured from the high-water mark.

13.3.3 Encroachments. Encroachments into the buffer area are permitted as needed for the construction of public roads, stormwater management facilities and public utility crossings. Such encroachments shall conform to all state and local erosion and sedimentation control requirements. Public utility crossings and stormwater management facilities may be permitted if:

1. The utility crossings and stormwater facilities are located as far from the stream or pond bank as reasonably possible,
2. The installation and maintenance of the utilities and facilities shall be such as to protect the integrity of the buffer and setback areas as well as is reasonably possible, and
3. Neither the utilities nor the stormwater management facilities shall ~~impair the quality of the water, and~~ ^{4. Waterbodies designated by the state as impaired may have more restrictive setbacks and requirements.}

13.3.4 Construction Prohibited. Except for the encroachments noted above and uses and activities expressly permitted by this section, all construction within the buffer area is prohibited.

13.3.5 Restoration Required. The natural vegetative buffer shall be restored as quickly as possible following any land-disturbing



activity within the riparian buffer.

13.3.6 Uses and Activities Permitted. The following acceptable uses are permitted within riparian buffers provided that such uses do not impair the long-term functions of the protected body of water, stream, or stream corridor.

1. Timber production and harvesting, subject to the following additional conditions:
 - a. The activity shall be consistent with the best management practices as defined in this Article,
 - b. The activity shall not impair the quality of the stream water as defined by the federal Clean Water Act of 1977 (P.L. 95-217), and
 - c. The harvesting or clearing of forest lands shall not be initiated for the purpose of preparing land for future development and thereby avoiding the requirements of this Article.
2. Wildlife and fisheries management activities.
3. Wastewater treatment, excluding septic tanks or septic drainfields.
4. Low impact passive recreational use consistent either with the maintenance of a natural vegetative buffer or with water-dependent recreation. Low impact passive recreational amenities may be constructed in the riparian buffer. Such amenities may include walking trails, nature trails, boardwalks, Greenways, benches, picnic areas, viewing areas, boat ramps, fishing docks and similar amenities. Playgrounds, ball fields, hard-surface tennis courts and other active recreational amenities may not be constructed.
5. Natural water quality treatment or purification.
6. Agricultural production and management, subject to the following conditions:
 - a. Agricultural activity shall be consistent with best management practices as defined in this Article;
 - b. Agricultural activity shall not impair the quality of the water as defined by the federal Clean Water Act, as

amended; and

c. Agricultural activity shall be consistent with all state and federal laws and all regulations promulgated by the South Carolina Department of Agriculture.

7. Other uses permitted by the Department of Natural Resources or under §404 of the Clean Water Act.

13.3.7 Uses and Activities Prohibited. Any use, construction, or activity not expressly permitted by this article is prohibited within a riparian buffer including, but not limited to, any of the following:

1. Receiving areas for toxic or hazardous waste or other contaminants,
2. Hazardous waste landfills,
3. Sanitary landfills, and
4. Parking, whether surface or structured.

13.3.8 Ownership and Management.

1. Riparian buffers shall be platted as open space or riparian buffers and deed restricted in accordance with this section.
2. Riparian buffers shall be owned and maintained by the city, another public agency, a conservation land trust, a property association or other similar entity for the benefit of the public generally. If ownership is retained by a private person or entity, the deed restriction shall specify the public purpose of the riparian buffer.
3. All management and maintenance of a riparian buffer shall be consistent with this section.
4. The city will consider accepting a dedication of title to the property within riparian buffers for the purpose of ownership, maintenance, and management.

13.4 STORM DRAINAGE REQUIREMENTS

13.4.1 Applicability. Storm drainage systems shall be installed within every subdivision or project site in accordance with this Article. The applicant shall install, at his own expense, all improvements necessary to provide proper drainage for the property



that is the subject of the application and shall connect the drainage system of the subdivision or project site into the existing city or state drainage system. All drainage improvements must be complete and approved prior to approval of any final plat or occupancy of the subdivision or project site.

13.4.2 General Design Criteria. Storm drainage systems shall be provided as necessary to permit the unimpeded flow of natural water courses, to ensure the drainage of all low points on streets and roads, to intercept stormwater runoff on roads, and to provide positive drainage away from on-site sewage collection and disposal facilities. Storm drainage facilities shall be designed for the anticipated peak discharge from the property being developed and for the stormwater runoff that will occur when and if all other property in the area controlled by the property owner or developer is fully developed.

1. ~~Natural Water Courses.~~ Except as expressly permitted in a riparian buffer:

Move to 13.3.1.3

a. ~~Property that contains natural water courses, creeks, or drainage basins shall not be subdivided or platted as individual lots for resale and urban development within a distance of 25 feet on the side of each bank of the creek, water course, or drainage way. Such property should be platted as open space.~~

Already stated above

b. ~~An area 25 feet in width adjacent to each bank of the creek, water course or drainage way shall be maintained as open space and free of development.~~

2. **Stormwater Systems.** Underground storm drainage systems, including all related collection, diversion, storage, and water quality facilities, shall be installed in all subdivisions and development project sites in the city.

3. **Stormwater Drainage Ditches.** Stormwater drainage ditches and related drainage facilities may be installed in any subdivision or project site where underground storm sewers are not required by this Article. Where permitted, storm drainage ditches shall

be installed according to the following specifications.

- a. All stormwater ditches, canals or other drainage ways installed by the applicant or developer shall be stabilized against erosion in accordance with a design approved by the City Engineer.
- b. The maximum depth of stormwater ditches adjacent to or within the right of way of a road or street shall be three feet. All ditches shall be designed to enable maintenance and mowing of ditch banks.
- c. Where required, easement widths on all stormwater drainage ditches shall be a minimum of 20 feet or as specified by the City Engineer.
- d. All stormwater drainage ditches and related facilities shall be installed in accordance with designs approved by the City Engineer.
- e. Culverts. All culverts and related facilities shall be installed in accordance with designs approved by the City Engineer.

4. **Impact on Abutting Properties.** Stormwater drainage facilities shall be designed to prevent excess runoff onto adjacent property, both developed and undeveloped.

5. **Road Drainage.** All roads and streets shall be designed in accordance with Appendix D, Construction Standards, and shall provide for the discharge of surface water from paved road surfaces. Adequate facilities shall be installed on all roads and streets to properly intercept and carry away stormwater drainage.

13.4.3 Easements Required.

1. **Utility Easements.** Utility or reserve easements or both are required along and parallel to all interior lot lines in subdivisions of land. Easements of between five feet and 10 feet, depending on the need, shall be provided on all side and rear lot lines. Where the side or rear setback is less than five feet the utility or reserve easement shall equal the setback. All



such easements shall be specifically conveyed to the City of North Augusta at the time of final plat approval.

2. **Natural Watercourse Easements.** When the property that is the subject of an application is traversed by a watercourse, drainageway, channel, or stream, a stormwater or drainage easement of adequate width may be required in addition to the riparian buffer described in this article. The land associated with natural watercourse easements and riparian buffers may be deeded to the city in fee simple.
3. **Streets Adjacent to Natural Watercourse.** Parallel streets on either side of natural watercourse easements may be required where necessary to facilitate drainage and circulation and avoid unnecessary crossings or obstruction of the natural watercourse.

13.4.4 Stormwater Drainage System Plans.

The plans for the installation of a stormwater drainage system must be prepared by a South Carolina registered professional engineer or landscape architect. Such plans shall be subject to the approval of the City Engineer and, to the extent required, by the South Carolina Department of Health and Environmental Control. Upon completion of construction, copies of the plans as built and approved shall be filed with the city. It shall be the responsibility of the applicant or developer to inform and coordinate the construction of the stormwater drainage infrastructure system with the various utility providers serving North Augusta.

- 13.4.5 **Improvement Expenses.** The applicant or developer shall be fully responsible for the cost of the installation of all stormwater drainage system improvements required pursuant to this Article.

13.5 LAND DISTURBING ACTIVITIES

- 13.5.1 No land disturbing activity shall be performed until a grading permit has been obtained from the City of North Augusta. No land disturbing activity shall be performed by the contractor until a stormwater management plan and sediment reduction plan has been submitted to the City of North Augusta Stormwater Management

Department and the required Stormwater Permit has been obtained.

13.6 ADDITIONAL STANDARDS FOR STORMWATER DETENTION AND RETENTION PONDS

- 13.6.1 **Screening Required.** Detention and retention ponds shall be screened from view at the street right-of-way by evergreen shrubs and trees that will, at maturity, block at least 50 percent of the view of the detention pond and fencing from the property line. ~~w~~
- 13.6.2 **Location.** Detention and retention ponds shall be located to the side or rear of the principal buildings unless otherwise approved. The Director and City Engineer may approve a detention or retention pond in the front setback area if the applicant demonstrates, as part of a site plan application, that the location is required by unique topographical considerations. Ponds located in the front setback or in front of the principal building shall be completely screened by a landscape strip planted in accordance with section (a.), above
- 13.6.3 **Pedestrian and Bicycle Accommodation.** Detention and retention ponds shall not disrupt sidewalks, bikeways, or pedestrian paths, or be located so as to require a circuitous route for pedestrian travel.
- 13.6.4 **Minimum Slope and Size.** The minimum slope and size of detention and retention ponds shall conform to these regulations and the regulations of the SCDHEC (SC ADC §72- 307).



Jason Whinghter comments for NADC rewrite

4.12.1 – keep the minimum lot width 70ft but consider allowing a smaller minimum lot size (sf). Keep the max density at 3.5 units per acre. By allowing a smaller minimum lot size, developers could increase greenspace/common area.

4.12.2 – same comment as above but still keeping the max density as written.

4.12.3 – same comment as above. Also consider allowing a 20ft lot width for townhomes and single family attached

Article 4 general comment – consider adding a Planned Residential Development (PRD) or similar classification to allow a development with a mix of residential lot sizes. The PD classification historically has been used for this type of development but state law now requires a percentage of commercial or other non-residential uses to be included

5.4.2.1.c.i- consider allowing food trucks in residential neighborhoods as well. We have food trucks come into several of our neighborhoods on a regular basis in other jurisdictions and the residents love them.

5.5.20.3 Consider allowing parking in the fronts of buildings. Residents like to park in front of their front door.

5.5.20.6.a-the drives and parking lots are typically the same. Separating these two increases impervious cover.

5.5.38.b- access through a single shared main entrance is not always attainable. For example, three or four units in a row would typically have three or four front doors.

6.3.4.6 – consider allowing poured concrete walls with no decorative finish in areas where they will not be seen, in industrial zones, in the back side of commercial developments, etc

6.3.5.2 – once this updated zoning ordinance passes, galvanized chain link will no longer be allowed to be installed?

6.4 – Do the design standards in this section apply to a specific district or the city as a whole?

6.4.4.2 – consider including multifamily, duplex, triplex, quadplex in this allowance as well

7.6 – Consider the street/subdivision tree requirement per lot to be tied to the final CO of the house and not bonded out by the developer.

7.6.5 – should also include a reference to Table 7.6

7.8.2 – need a definition of “net lot area”

7.11.1.2.b.ii – need definitions of traffic circles, roundabouts, rotaries and closes

12.6.4.5 – does this include individual septic tanks?

13.4.2.1.a&b – in larger lot neighborhoods (acreage lots), lots should be allowed to include waterways

16.8.2.1 – consider not having a staff recommendation, but rather a staff description of how the project fits or doesn't fit within current regulations. Recommendations in general tend to include some level of personal opinion which should not be a part of the review.