

ARTICLE 4

DESIGN STANDARDS

SECTION 1: GENERAL

This article contains the minimum design standards for the construction of roadways, recreational spaces, utilities, and other improvements in new land development throughout Georgetown County. Use of higher standards is encouraged in all development designs. All new public and private streets shall be designed to the identical standards unless otherwise stated.

SECTION 2: STREETS

2-1. Public and/or Private Road Rights-of-Way.

All streets shall be within a platted public right-of-way deeded fee simple to Georgetown County, the South Carolina Department of Transportation (SCDOT) or a platted private right-of-way deeded fee simple to a specific HOA, POA, or HPR or other entity. Prescriptive or other easements for the purpose of conveying maintenance of streets to Georgetown County, SCDOT, a homeowner's association, property management firm, etc. shall not be allowed.

The right-of-way shall be measured from lot line to lot line and shall contain the pavement, curbs, shoulders, sidewalks, graded areas, and utilities, when applicable. Right-of-way requirements are shown in Appendix A, Table 1.

The minimum width of right-of-way, measured from lot line to lot line, for new highways, streets or extensions of existing roadways shall conform to the minimum values found in Appendix A, Table 1. The right-of-way shall reflect future development as indicated by the sketch plan.

2-2. Relation to Adjoining Street System.

The proposed street system shall extend existing streets when feasible or where the Planning Commission determines that extension of the proposed streets provides a public benefit. Such streets shall be extended at a width no less than the required minimum width as set forth in this article or the width of the existing street, whichever is greater.

Sufficient access streets to adjoining properties shall be provided in subdivisions to permit harmonious development of the area.

Where a subdivision abuts or contains an existing or proposed major street, the Planning Commission may require marginal access streets, reverse frontage with screen planting contained in a non-access reservation along the rear property line, or such other treatment as may be necessary for adequate protection of residential properties to afford separation of through and local traffic.

2-3. Retrofitting Existing Public or Private Road Rights-of-Way.

Subdivisions that adjoin existing streets shall dedicate additional rights-of-ways to meet the minimum street width requirements.

The entire right-of-way shall be provided where any part of the subdivision is on both sides of the existing street; and,

When the subdivision is located on only one side of an existing street, one-half of the required right-of-way, measured from the centerline of the existing roadway shall be provided. In no case shall the resulting right-of-way be less than fifty (50') feet.

2-4. Street Hierarchy.

Streets within Georgetown County shall be classified into the street hierarchy system shown in Appendix A, Table 3. Table 3 indicates the purpose of the street and the maximum average daily trips (ADT) that such street is to support. Improvement, right-of-way, and paving standards for such street are shown in Appendix A, Table 4.

2-5. Trip Generation.

A land development may include a mixture of roadway types indicated in Appendix A, Table 4. The types of roadway required will depend on the type of development proposed (commercial, office, residential, etc.) and the average daily trips shown in Table 4, the regression formula for the specific land use, as published by the Institute of Transportation Engineers in the most recent version of the ITE Trip Generation Manual, may be substituted for the rates given. A licensed engineer shall certify the accuracy of the trip generation rate derived from the use of the regression.

2-6. Roadway Design Criteria.

A. Development Intensity, Paving Width, and Improvements

All proposed streets built for access to structure(s) shall be designed to be accessible to fire department apparatus by way of an approved right-of-way with an asphalt, concrete, or other approved driving surface capable of supporting the imposed load of a minimum 80,600 pounds (34,050 kg). The required paving width and improvement standards for rights-of-way in land development shall be based on the development's intensity as determined from the lot width at the building setback line of the lots within the land development. Table 1 indicates the paving widths and improvement standards for the type of right-of-way at the various intensity levels. Roadway centerlines and right-of-way centerlines are to be coincident unless the road has received prior approval to be offset to factor in additional lanes of traffic turn lanes, etc.

B. Roadway Design Speed and Posted Speed.

Design speed and posted speed limits for new public or private roadways shall be consistent with those shown in Appendix A, Table 1. Variation from such speeds may be approved if roadway designs justify such variation and the variation has been approved by the Georgetown County Public Works Department.

C. Roadway Geometric Design Criteria

New public or private roadways shall be designed to ensure that the roadway will function as intended in Appendix A, Table 1 and will provide safe and efficient traffic movement to the public. Geometric features such as sight distances for stopping on horizontal and vertical curves, corner sight distances, and horizontal and vertical curves shall be sized and design in accordance with the standards published by the South Carolina Department of Transportation Highway Standards Manual or the AASHATO Manual for the roadway type that will be constructed.

D. Grades

In the design of a roadway's vertical alignment the maximum grade(s) to be used are shown in Appendix A, Table 2.

E. Dead-end Streets

Minor terminal streets or courts designed to have one end permanently closed shall be no greater than eight hundred (800') feet long unless necessitated by topography or land configuration and approved by the Planning Commission. They shall be provided at the closed end with a turnaround having an outside roadway diameter of at least eighty (80') feet and a street right-of-way diameter of at least one hundred (100') feet or the Planning Commission may approve an alternate design as shown in Appendix A, Table 5. Where, in the opinion of the Planning Commission, it is desirable to provide for street access to adjoining property, proposed streets shall be extended to the boundary of such property. Such dead-end streets shall be provided with a temporary turnaround having a roadway diameter of at least eighty (80') feet or other design approved by the Planning Commission.

F. Private Street, Reserve Strips and Gated Communities

Private streets shall be allowed in both major and minor subdivisions. Private streets in major subdivisions shall be built to County or State standards and shall meet the design criteria found in Table 1 of Appendix A. Gated communities will only be allowed with County Council approval after receiving a recommendation from the Planning Commission. Related to this section of the Zoning Ordinance, communities are deemed to be residential subdivisions that contain or will contain E911 addresses and are served by a road that has not been gated and has generally been open for public use. Private roads associated with timber companies, farming and hunting clubs are exempt from acquiring Planning Commission and County Council approval.
(Amended Ord. 2010-38)

There shall be no reserve strips controlling access to streets, except where the control of such strips is definitely placed with the community under conditions approved by the Planning Commission.

G. Medians and Traffic Control Islands

Natural or planted islands may be used in the center of cul-de-sacs on streets. Landscaping of such islands shall not interfere with the sight distance requirements.

Natural or planted (with grass/shrubs) medians separating opposing traffic lanes shall be required on all roads classified as arterials on Table 3. If a center median is to be utilized, 12 feet shall be added to the total right-of-way required and the minimum width of such median shall be 12 feet to the back edge of curb and gutter. All medians and traffic control islands shall utilize vertical type curb and gutter or shall comply with the current SCDOT standards.

The minimum width of pavement on either side of the median is to be in accordance with the minimum lane widths contained in Appendix A, Table 1. The number of median openings required to serve abutting property shall be allowed in accordance SCDOT.

Maintenance of landscaped medians and traffic control islands within new public and private road rights-of-ways shall be the responsibility of the developer or deeded to a property owner’s association or other entity. Georgetown County is not responsible for upkeep and maintenance of landscaped medians.

H. Intersections

Street intersections shall be as nearly at right angles as is possible. Whenever a proposed street intersects an existing or proposed street of higher order in the street hierarchy, the street of lower order shall be made a stop or yield street. No planted, constructed and/or erected obstruction to vision between 3.75 feet and ten (10’) feet above the finished street grade, measured at the edge of pavement, shall be located within the sight triangle.

I. Intersection Spacing

To prevent dangerous street jogs the following minimum street spacing shall be used:

<u>Street Type Intersected</u>	<u>Spacing (Feet)</u>
Higher order streets	500
Residential collector (Major)	300
Residential collector (Minor),	300
Minor or Loop streets	125

J. Tangents.

The tangent section between reverse curves, in horizontal roadway alignment, at a minimum shall be one hundred (100’) feet in length and shall be a function of the degree of the reverse curves, super elevation rate and the design speed of the roadway.

K. Drainage

All streets and roads must be designed to provide for the discharge of surface water from the right-of-way by grading and drainage.

L. Street Names

Design and placement of traffic control signs shall follow the requirements in the Manual on Uniform Traffic Control Device for Streets and Highways, published by the SCDOT.

At least two street name signs, at opposing intersections, shall be placed at each four-way street intersection, and one at each “T” intersection. Signs shall be installed free of visual obstruction.

Private roads shall be required to provide signage in accordance with the requirement of the subsection. In addition, a sign shall be posted at the entrance of such development that states: “Private Road. Not maintained by Georgetown County”

It is the responsibility of the Planning Commission to approve and certify all street names within the territory of jurisdiction of the Commission.

The division of GIS will determine the street designation based of the following criteria:

NOTE: Where more than one possibility may be used, the applicant will be given the option.

- A. Avenue – Roadways running east west and longer in length then one thousand (1000’) feet.
- B. Boulevard – A street with a median or landscaped center island and generally designated by a name.
- C. Circle – Short streets that return to themselves.
- D. Court – Dead end right-of-ways less than one thousand (1000’) in length and run east west.
- E. Drive – Diagonal, curvilinear or other types of roads greater than one thousand (1000’) feet in length.
- F. Highway – US Routes, state or federal highways.
- G. Interstate – Roads of the highest order, characterized by limited access, wide rights-of-ways, prohibited adjacent to development and with through-traffic preference.
- H. Parkway – A special scenic route or park drive, generally designated by a name.
- I. Paths – A minor local street running in a diagonal direction, usually between a north-south avenue and an east-west street.
- J. Pike – State primary-numbered roads.
- K. Place – Dead end rights-of-ways under one thousand (1000’) feet running north south.

- L. Roads – Diagonal roadways longer than one thousand (1000') feet and generally designated by a name.
- M Street – Roadways running north south and longer in length than one thousand (1000') feet.
- N. Trail – A diagonal or curvilinear street.
- O. Way – A dead end diagonal street under one thousand (1000') feet in length.

2.7 Sidewalks and/or Bike Lanes

The Planning Commission may require the applicant to construct sidewalks in major subdivisions, within the right-of-way of public streets to connect with existing or proposed sidewalks and along major thoroughfares and collector streets where sidewalks are needed for pedestrian traffic. The Planning Commission may also require the applicant to connect with existing bike paths or bikeways.

SECTION 3: LOT LAYOUT

3-1. Blocks.

Blocks shall not be less than four hundred (400') feet nor more than twelve hundred (1,200') feet in length, except as the Planning Commission considers necessary to secure efficient use of land or desired features of street pattern. In blocks over eight hundred (800') feet in length, the Planning Commission may require one or more public crosswalks of not less than ten (10') feet in width to extend entirely across the block and at locations deemed necessary. Blocks shall be wide enough to allow two tiers of lots of minimum depth, except where fronting on major streets or prevented by topographical conditions or size of the property, in which case the Planning Commission will approve a single tier of lots of minimum depth.

3-2. Lots.

A. General

All lots created for sale, rent, mortgage, or lease shall be buildable through the provision of public water and sewer or septic tanks and wells unless otherwise exempted by this Ordinance (i.e. identified open, recreation, or common areas). No plat shall be authorized for recording unless the applicable certifications, as indicated in Article 2, are shown upon such plat and they have been signed by the agency or entity attesting to the contents of certification. All lots shall conform to the minimum design standards of this Ordinance, the Georgetown County Zoning Ordinance, and any other applicable county, state or federal regulations.

B. Frontage

Each lot must front for a minimum of fifty (50') feet upon a street or shared driveway/access easement as allowed in Article 2, Section 3-10, except on cul-de-sacs radii in which case thirty (30') feet of frontage is required. *(Amended Ord 2017-15)*

C. Minimum Size.

The size, shape and orientation of lots shall be such, as the Planning Commission deems appropriate for the type of development and use contemplated. Where a public sanitary sewer is reasonably accessible, the subdivider shall connect with such sewer and provide a connection to each lot. Where a public sewer is not accessible, an alternative method of sewage disposal may be used, when meeting all applicable public health regulations.

The size and width of lots shall in no case be less than the minimum requirements of the Zoning Ordinance, except that the Planning Commission shall determine the size, width and building setbacks for lots for utility installations. *(Amended Ord. 2009-40)*

D. Shape of Lots.

Insofar as practical, side lot lines shall be at right angles to straight street lines or radial to curved street lines.

Lots designed for buildings or for development purposes shall not have its depth greater than four and one-half (4.5) times its width. [Example: If a lot is one hundred (100') feet wide – its length or depth should not be longer than four hundred and fifty (450') feet.] Staff may exempt marsh areas and wetlands from this provision. Staff may also waive this requirement for proposed lots that do not meet the lot width to depth ratio because of wetlands, rivers, marsh, unusual topographic features, farms, configuration of neighboring lots, issues with existing streets or inheritance requirements. *(Amended Ord. 2013-59)*

E. Setbacks

Building setbacks shall adhere to the standards established by the Georgetown County Zoning Ordinance. *(Amended Ord. 2009-40)*

SECTION 4: PUBLIC USE AND SERVICE AREAS

Due consideration shall be given to the allocation of areas suitably located and of adequate size for playgrounds and parks for local or neighborhood use as well as public service area.

4-1. Public Open Spaces.

Where a school, neighborhood park or recreation area or public access to water frontage, shown on an official map or in a plan made and adopted by the Planning Commission, is located in part in the applicant's subdivision, the Planning Commission may require the dedication or reservation of such open space within the subdivision up to a total of ten (10%) percent of the gross area or water frontage of the subdivision, for park, school or recreation purposes.

4-2. Easements for Utilities.

Drainage and utility easements shall be provided on each side and rear lot line where deemed necessary by the County Department of Public Works. The easements shall be designed to adequately provide utilities and drainage for all lots in the proposed subdivision. Where

drainage is proposed to cross any lot at any point other than the side or the rear of the lot, the plat shall indicate the size of the pipe necessary to carry the proposed runoff. Each cul-de-sac shall have provisions for a fifteen (15') foot utility easement extending there from to prevent dead-end water mains. Easements of the same or a greater width may be required along the lines of or across lots where necessary for the extension of existing or planned utilities.

4-3. Water Supply and Sewerage Connections.

Where a public water supply or public sewerage system is reasonably accessible, the subdivider shall indicate a connection with such water supply or sewerage connection for each lot with such material size and length as shall be approved by the Georgetown County Water and Sewer District. Where a public water supply or public sewerage system is not reasonably accessible or not planned for in the future, an alternative method of water supply or sewage disposal may be indicated by the Department of Health and Environmental Control (DHEC).

4-4. Community Assets.

In all subdivisions due regard shall be shown for all natural features such as large trees, watercourses, historical sites, and similar community assets.

4-5. Fire Protection.

Approved fire hydrants shall be provided for in developments to meet the necessary fire flow requirements as determined by the fire official. Where public water supply is inadequate or not available, an alternative water source meeting the fire flow requirements shall be provided. Fire flow performance tests shall be witnessed and approved by the fire marshal, or representative, prior to final plat approval.

- A. Hydrant locations. The fire official shall designate the location and number, but in no case shall the distance between fire hydrants exceed 1,000 ft.
- B. Physical Protection and Clear Space. A 3-foot clear space shall be maintained around the circumference of the fire hydrant. Fire hydrants shall be immediately discernable and access shall not be deterred or hindered in any way. Where fire hydrants are subject to vehicle impact, guardrails or other approved means shall be required.

SECTION 5: FLOOD PRONE AREAS

Subdivisions within “flood-prone” areas, as defined by the Federal Emergency Management Agency shall meet the requirements of the Georgetown County Flood Damage Prevention Ordinance.

SECTION 6: LARGE TRACTS OR PARCELS

When land is subdivided into larger parcels than ordinary building lots, such parcels shall be arranged so as to allow for the opening of future streets and logical further resubdivision.

SECTION 7: GROUP HOUSING DEVELOPMENTS

A comprehensive group housing development, including large-scale construction of housing units and mobile home sites together with necessary drives and ways of access, may be approved by the Planning Commission, although the design of the project does not include standard street, lot and subdivision arrangements, if departure from the foregoing standards can be made without destroying their intent.

7-1. Mobile Home Parks.

Proposed mobile home park developments shall be submitted to the Planning Commission for their approval:

- A. Within Georgetown County, mobile home parks shall meet all requirements of the Zoning Ordinance.
- B. Mobile home parks shall meet all requirements and specifications of the Department of Health and Environmental Control (DHEC).

7-2. Planned Development Districts

The staff of the Planning Commission may approve subdivisions within approved planned developments provided they are connected to an approved sewerage system and comply with the overall intent of these regulations and the Georgetown County Zoning Ordinance.