

9. SUBDIVISION REGULATIONS

9.1 INTRODUCTORY AND LEGAL PROVISIONS

9.1.1 AUTHORITY AND APPLICABILITY

- A. **Authority.** This section is adopted under the authority of N.C. Gen. Stat. § 160 D, Article 8, Subdivision Regulation.
- B. **Applicability.** Consistent with N.C. Gen. Stat. § 160D-802, subdivision regulations shall be applicable to all divisions of a tract or parcel of land into two (2) or more lots, building sites, or other divisions, in any zoning district, when any one or more of those divisions is created for the purpose of sale or building development (whether immediate or future) and shall include all divisions of land involving the dedication of a new street or a change in existing streets. The following shall not be included within this definition nor be subject to the regulations authorized by this section:
1. The combination or recombination of portions of previously subdivided and recorded lots where the total number of lots is not increased and the resultant lots are equal to or exceed the standards of the Town of Rolesville LDO.
 2. The division of land into parcels greater than ten (10) acres where no street right-of-way dedication is involved.
 3. The public acquisition by purchase of strips of land for the widening or opening of streets or for public transportation system corridors.
 4. The division of a tract in single ownership whose entire area is no greater than two (2) acres into not more than three (3) lots, where no street right-of-way dedication is involved and where the resultant lots are equal to or exceed the standards of the Town of Rolesville LDO.
 5. The division of a tract into parcels in accordance with the terms of a probated will or in accordance with interstate succession under Chapter 29 of the General Statutes.

9.1.2. SUBDIVISION TYPES

- A. **Major Subdivision.** All subdivisions shall be considered major subdivisions except those defined as minor subdivisions in this section.
- B. **Minor Subdivision.** A minor subdivision is defined as one involving no new public or private streets or roads, or right-of-way dedication, no easements, no utility extension, where the entire tract to be subdivided is five (5) acres or less in size, and where four (4) or fewer lots result after the subdivision is completed.

9.1.3. PLAT RECORDATION

- A. After the effective date of this LDO, no subdivision plat of land with the Town of Rolesville's jurisdiction shall be filed or recorded until it has been submitted to and approved by the Town of Rolesville and until this approval is entered in writing on the face of the plat.
- B. The Register of Deeds shall not file or record a plat of a subdivision of land located within the territorial jurisdiction of the town that has not been approved in accordance with these provisions. The Clerk of Superior Court shall not order or direct the recording of a plat if the recording would be in conflict with this section.
- C. Pursuant to N.C. Gen. Stat. § 160D-806, the approval of a plat shall not be deemed to constitute or effect the acceptance by the Town of Rolesville of the dedication of any street or other ground, public utility line, or other public facility shown on the plat.
 - 1. The Board of Commissioners of the Town of Rolesville may, by resolution, accept any dedication made to the public of lands or facilities for streets, parks, public utility lines, or other public purposes, when the lands or facilities are located within its subdivision regulation jurisdiction.
 - 2. Acceptance of dedication of lands or facilities located within the subdivision regulation jurisdiction but outside the corporate limits of the Town of Rolesville shall not place on the town any duty to open, operate, repair, or maintain any street, utility line, or other land or facility, and the Town of Rolesville shall in no event be held to answer in any civil action or proceeding for failure to open, repair or maintain any street located outside its corporate limits.

9.1.4. STREETS AND SERVICES

- A. **Streets.** No street shall be maintained by the town nor street dedication accepted for ownership and maintenance in any subdivision for which a plat is required to be approved unless and until such final plat has been approved by the Town of Rolesville.
- B. **Services.** Water, sewer, electric or other public services shall not be extended to or connected with, any subdivision for which a plat is required to be approved unless and until the requirements set forth in this section have been met.

9.1.5. SCHOOL SITES

- A. **Reservation of School Site.** Consistent with N.C. Gen. Stat. § 160D-804(f), if the adopted comprehensive plan specifies a specific location and size of a school site to be reserved, the Board of Commissioners of the Town of Rolesville shall immediately notify the Board of Education whenever a subdivision is submitted which includes all or part of a school site to be reserved.
- B. **Determination.** The Board of Education shall promptly decide whether the site shall be reserved. If the Board of Education does not wish to reserve the site, it shall so notify the Board of Commissioners of the Town of Rolesville. If the Board does wish to reserve the site, the subdivision shall not be approved without such reservation.
- C. **Timing.** The Board of Education shall then have eighteen (18) months beginning on the date of final approval of the subdivision within which to acquire the site by purchase or by initiating condemnation proceedings. If the Board of Education has not purchased or begun proceedings to condemn the site within eighteen (18) months, the subdivider may treat the land as freed of the reservation.

9.1.6. CONFORMANCE WITH TOWN PLANS

All subdivisions shall comply with the principles, goals and/or objectives of the Rolesville comprehensive plan and all other officially adopted plans and policies of the town.

9.1.7. PENALTIES FOR VIOLATION

- A. After the effective date of this LDO, any person who, being the owner or agent of the owner of any land located within the territorial jurisdiction of this LDO, thereafter subdivides their land in violation of this LDO or transfers or sells land by reference to,

exhibition of, or any other use of a plat showing a subdivision of the land before the plat has been properly approved under the terms of this LDO and recorded in the Office of the Wake County Register of Deeds, shall be guilty of a misdemeanor.

- B. The description by metes and bounds in the instrument of transfer or other document used in the process of selling or transferring land shall not exempt the transaction from this penalty.
- C. The town, through its attorney or other official designated by the Board of Commissioners of the Town of Rolesville, may enjoin illegal subdivision, transfer, or sale of land by action for injunction. Further, violators of this LDO shall be subject, upon conviction, to fine and/or imprisonment as provided by G.S. 14-4.
- D. Each day's continuing violation of this LDO shall be a separate and distinct offense.
- E. This section may be enforced by appropriate equitable remedies issuing from a court of competent jurisdiction.
- F. Nothing in this section shall be construed to limit the use of remedies available to the town. The town may seek to enforce this LDO by using any one, all, or a combination of remedies.

9.1.8. FEES AS PRESCRIBED

- A. Fees for the inspection of required improvements shall be charged according to a schedule adopted by the Board of Commissioners of the Town of Rolesville.

9.1.9. ABROGATION

- A. It is not intended that this LDO repeal, abrogate, annul, impair, or interfere with existing easements, covenants, deed restrictions, agreements, rules, regulations, or permits previously adopted or issued pursuant to law. However, where this LDO imposes greater restrictions, the provisions of this LDO shall govern.
- B. When the requirements of this LDO are in conflict with other requirements of lawfully adopted rules, regulations, ordinances, deed restrictions, or covenants, the most restrictive, or that imposing the highest standards, shall govern.

9.1.10. PROCEDURE FOR REVIEW AND APPROVAL OF SUBDIVISION PLATS

- A. Pursuant to N.C. Gen. Stat. § 160D-804, a final plat shall be prepared, approved, and recorded pursuant to the provisions of this LDO whenever any subdivision of land takes place.
- B. Pursuant to N.C. Gen. Stat. § 160D-803, no final plat of a subdivision within the jurisdiction of the Town of Rolesville shall be recorded by the Register of Deeds of Wake County until it has been approved by the town.
- C. The review and approval procedures for subdivision plats are identified in Appendix A – LDO Handbook.

9.1.11. RECOMBINATION OF LAND

- A. Any plat, or any part of any plat, may be vacated by the owner at any time before the sale of any lot in the subdivision by a written instrument (to which a copy of such plat shall be attached) declaring the same to be vacated.
- B. Such an instrument shall be approved by the same agencies as approved the final plat. The governing body may reject any such instrument which abridges or destroys any public rights in any of its public uses, improvements, street, or alleys.
- C. Such an instrument shall be executed, acknowledged or approved and recorded and filed in the same manner as a final plat; and being duly recorded or filed shall operate to destroy the force and effect of the recording of the plat so vacated, and to divest all public rights in the streets, alleys, and public grounds, and all dedications laid out or described in such plat.
- D. When lots have been sold, the plat may be vacated by all owners of the lots in such plat joining in the execution of such writing.

9.1.12. PERFORMANCE/IMPROVEMENT GUARANTEES

- A. **Agreement and Security Required.** All performance guarantees shall be consistent with N.C. Gen. Stat. § 160D-804.1. In lieu of requiring the completion, installation, and dedication of all improvements prior to final plat approval, the Town of Rolesville may enter into an agreement with the subdivider whereby the subdivider shall agree to complete all required improvements. Once the agreement is signed by both parties and

the security required herein is provided, the final plat may be approved, if all other requirements of this LDO are met.

9.2 DESIGN STANDARDS

9.2.1 STREETS AND SIDEWALKS

- A. **Generally.** All streets and related infrastructure in the town’s jurisdiction shall be built and maintained in accordance with the principles, goals and/or objectives of the adopted comprehensive plan, community transportation plan, other officially adopted plans and policies of the town, and any applicable North Carolina Department of Transportation (NCDOT) requirements. All streets and rights-of-way shall be constructed in accordance to the standards below, unless a more restrictive standard is required by NCDOT, in which the street shall meet the more restrictive standard.
1. All subdivision lots shall abut, at least twenty (20) feet in width, on a public street, except that Lots for ‘Dwelling, Single Family, Attached’ uses may provide the required minimum twenty (20) feet of frontage width on a Private Access Easement per Section 5.1.2.B. Use Standards. Minimum lot frontage width is dictated by the Zoning District of the property; see LDO Section 3.
 2. All public streets shall be dedicated to the Town of Rolesville, the State of North Carolina or the public as determined appropriate by the Board of Commissioners of the Town of Rolesville.
 3. Public streets not dedicated to the town which are eligible for acceptance into the State Highway System shall be constructed to the standards necessary to be put on the State Highway System or the standards in this LDO, whichever is stricter, in regard to each particular item and shall be put on such system.
 4. Streets not dedicated to the town which are not eligible to be put on the State Highway System because there are too few lots or residences shall, nevertheless, be dedicated to the public and shall be in accordance with the standards in this LDO or the standards necessary to be put on the State Highway System, whichever is stricter in regard to each particular item, so as to be eligible to be put on the system at a later date.

5. A written maintenance agreement with provisions for maintenance of the street until it is put on the State System shall be included with the final plat.

B. Street Design Standards. The design of all streets and roads within the jurisdiction of this LDO shall be in accordance with the accepted policies of NCDOT, Division of Highways, as taken or modified from the American Association of State Highway Officials (AASHO) manuals. Development should be supportive of transportation and mobility solutions. Additionally, this requires consideration of right-of-way expectations to ensure the site can accommodate future widening or inclusion of bicycle and pedestrian facilities. The standards of the NCDOT, Subdivision Roads Minimum Construction Standards, as amended, shall apply for any items not included in this LDO, or where stricter than this LDO. The provision of street rights-of-way shall conform to and meet the requirements of the thoroughfare plan of the Town of Rolesville as approved by the Planning Board and adopted by the Board of Commissioners of the Town of Rolesville and the North Carolina Board of Transportation. The urban planning area shall consist of that area within the urban planning boundary as depicted on the mutually adopted Rolesville thoroughfare plan.

The rural planning area shall be that area outside the urban planning boundary.

1. **Street Types Classifications.** Street types shall be consistent with provided definitions in the town thoroughfare plan, community transportation plan, and the below summaries:

Street Type	Definition
Freeway	Highest classification of arterial streets, designed for mobility and long-distance travel. Access is controlled and roadways are designed for high-speed travel.
Arterial	A federal and/or state highway designed primarily for the movement of large volumes of vehicular traffic through an urban area and neighboring rural areas.

Minor Arterial	Minor arterials connected arterials streets to one another and help distribute vehicle trips throughout the town.
Major Collector	A public way designed primarily to connect residential streets with arterial streets
Minor Collector	A public street used primarily for providing direct access to abutting properties, further defined below
Local Street	The largest percentage of lane miles across street types, local streets provide access to individual lots.

2. **Required Right-of-Way Widths.** Right-of-way widths shall not be less than the standards of this section, except in those cases where right-of-way requirements have been specifically set out in the Thoroughfare Plan.
 - a. Subdivisions along existing streets which contain inadequate right-of-way width shall provide additional right-of-way to meet the minimum widths defined in this section. The entire required right-of-way shall be provided where any part of a new subdivision is on both sides of an existing street, and one-half the required right-of-way measured from the centerline of the existing street shall be provided where a new subdivision is located only on one side of an existing street.

Planning Area	Street Type	Minimum ROW Width (Feet)
Rural	Freeway	350
Rural	Arterial	200
Rural	Minor Arterial	100
Rural	Major Collector	100
Rural	Minor Collector	100

Rural	Local Road	60*
Urban	Major Throughfare	90
Urban	Minor Throughfare	70
Urban	Local Street	60*
Urban	Cul-de-sac	Variable**

Additional Standards:

*The desirable minimum right-of-way is established as 60 feet. If curb and gutter is provided, 50 feet of right-of-way is adequate on local residential streets.

**The subdivider will only be required to dedicate a maximum of 100 feet of right-of-way. In case where over 100 feet of right-of-way is desired, the subdivider will be required only to reserve the amount in excess of 100 feet. In all cases in which right-of-way is sought for an access controlled facility, the subdivider will only be required to make a reservation.

3. **Street Widths.** Minimum street right-of-way widths shall be determined on the basis of the street classification shown on the town thoroughfare plan and/or community transportation plan, where such plans do not apply, according to the type of the street as illustrated on the plat. Minimum pavement width shall be measured from back of curb to back of curb. Width of local roads and streets shall be as follows:

a. **Local Residential.**

- i. **Curb and Gutter Section:** Twenty-six (26) feet to face of curb.
- ii. **Shoulder Section:** Twenty (20) feet to edge of pavement, four (4) foot shoulders.

b. **Residential Collector.**

- i. **Curb and Gutter Section:** Thirty-four (34) feet to face of curb.

ii. **Shoulder Section:** Twenty (20) feet to edge of pavement, six (6) foot shoulders.

4. **Geometric Characteristics.** The standards outlined below shall apply to all subdivision streets proposed for addition to the State Highway System (or Municipal Street System). In cases where a subdivision is sought adjacent to a proposed thoroughfare corridor, the requirements of dedication and reservation discussed under Right-of-Way shall apply.

a. **Design Speeds.** The design speeds for subdivision-type streets shall be as below:

	Desirable	Minimum	
		Level	Rolling
Rural			
Minor Collector Roads	60	50	40
Local Road (Including Residential Collectors and Local Residential)	50	50*	40*
Urban			
Major Thoroughfares other than Freeway or Expressway	60	50	50
Minor Thoroughfares	60	50	50
Minor Thoroughfares	60	50	40
Local Streets	40	40**	30**
<p><u>Additional Standards:</u></p> <p>*The desirable minimum right-of-way is established as 60 feet. If curb and gutter is provided, 50 feet of right-of-way is adequate on local residential streets.</p> <p>**The right-of-way dimension will depend on radius for vehicular turnaround. Distance from edge of pavement of turnaround to right-of-way should not be less than distance from edge of pavement to right-of-way on street approaching turnaround.</p>			

- b. **Maximum and Minimum Grades.** The maximum grades in percent shall be as below:

Design Speed	Level	Rolling
60	3	4
50	4	5
40	5	6
30		9
20		

Additional Standards:

Based on projected annual average daily traffic of 400—750. In cases where road will serve a very limited area and small number of dwelling units, minimum design speeds can be reduced further, but in no case, below 25.

A minimum grade for curbed streets normally should not be less than 0.5 percent, a grade of 0.35 percent may be allowed where there is a high type pavement accurately crowned and in areas where special drainage conditions may control.

Grades for 100 feet each way from intersections should not exceed five percent.

For streets and road with projected annual average daily traffic less than 250, short grades less than 500 feet long, may be 150 percent greater.

- c. **Minimum Site Distance.** In the interest of public safety, no less than the minimum sight distance applicable shall be provided in every instance. Vertical curves than connect each change in grade shall be provided and calculated using the following parameters. (General practice calls for vertical curves to be multiples of fifty (50) feet. Calculated lengths shall be rounded up in each case):

ROLESVILLE LAND DEVELOPMENT ORDINANCE

Design Speed, MPH	20	30	40	50	60
Min. Stopping Distance, Ft.	150	200	275	350	475
Des. Stopping Distance, Ft.	150	200	300	450	650
Minimum K* Value For:					
a. Min. Crest Vert. Curve	16	28	55	85	160
Des. Crest Vert. Curve	16	28	65	145	300
b. Min. SAG Vert. Curve	24	35	55	75	105
Des. SAG Vert Curve	24	35	60	100	155
Passing Sight Distance					
Min. Passing Distance, Ft. (2 lane)		1100	1500	1800	2100
Min. K* Value for Crest		365	686	985	1340
Vertical Curve					

Additional Notes:

K* is a coefficient by which the algebraic difference in grade may be multiplied to determine the length in feet of the vertical curve which will provide minimum sight distance.

Sight distance provided for stopped vehicles at intersections should be in accordance with, "A Policy on Geometric Design of Rural Highways", and the UDO for the Town of Rolesville.

- d. **Maximum Degree of Curve.** The following table shows the maximum degree of curve and related maximum superelevation for design speeds. The maximum rate of roadway superelevation (e) for rural roads with no curb and gutter is .08. The maximum rate of superelevation for urban streets with curb and gutter is .06 with .04 being desirable.

ROLESVILLE LAND DEVELOPMENT ORDINANCE

Design Speed MPH	Maximum e*	Rounded (Feet)	Rounded (Degrees)
20	.04	125	45.0
30	.04	300	19.0
40	.04	5600	10.0
50	.04	925	6.0
60	.04	1410	4.0
20	.06	115	50.0
30	.06	275	21.0
40	.06	510	11.5
50	.06	830	7.0
60	.06	1260	4.5
20	.08	110	53.5
30	.08	250	23.0
40	.08	460	12.5
50	.08	760	7.5
60	.08	1140	5.0
<p><u>Note:</u> * = rate of roadway superelevation, foot per foot.</p>			

5. **Intersection Design.** Intersections shall be designed with the following standards:
- a. Streets shall intersect as nearly as possible at right angles. No street shall intersect any other street at an angle of less than sixty (60) degrees.
 - b. Property lines at intersections should be set so that the distance from the edge of pavement, of the street turnout, to the property line will be at least as great as the distance from the edge of pavement to the property line along the intersecting streets. This property line can be established

- as a radius or as a sight triangle. Greater offsets from the edge of pavement to the property lines will be required, if necessary, to provide sight distance for the vehicle on the side street.
- c. Offset intersections are to be avoided unless exception is granted by the DOT. Intersections which cannot be aligned should be separated by a minimum length of two-hundred (200) feet between survey center lines.
 - d. Intersections with arterial, collectors and thoroughfares shall be at least one-thousand (1,000) feet from center line to center line, or more if required by the North Carolina Department of Transportation.
 - e. Where two public rights-of-way (street or road) cross or where a Private Access Easement meets a public right-of-way and signalization is not warranted, a stop bar and stop sign shall be used on the minor right-of-way/Private Access Easement approaches.
 - f. The requirements for installation of a stop bar shall be subject to the Manual on Uniform Traffic Control Devices. Stop bars shall be a twelve (12) to twenty-four (24) inches wide and must be located four (4) feet behind a crosswalk if present.
 - g. A pavement marking and signage plan showing description and placement of traffic signs, pavement markings, and specialty sights shall be submitted with all roadway and subdivision plans as a requirement of the Developer and shall be done prior to final acceptance of the roadway by the town.
6. **Cul-De-Sacs.** Cul-de-sacs shall be avoided unless the design of the subdivision and street system in the surrounding area is so that a street is not essential in the location of the proposed cul-de-sac, or where environmental factors including streams, floodplains, and wetlands would be substantially disturbed by making road connections. Cul-de-sacs shall be designed with the following standards:

- a. Permanent deadened streets should not exceed five-hundred (500) feet in length unless necessitated by topography or property accessibility and in no case shall be permitted to be over nine-hundred (900) feet.
 - b. Measurement shall be from the point where the center line of the deadened street intersects with the center of a through street to the center of the turnaround of the cul-de-sac. where one cul-de-sac intersects with another cul-de-sac, the end of each cul-de-sac shall be no more than five-hundred (500) to nine-hundred (900) feet from a through street, measured as stated above.
 - c. The distance from the edge of pavement on the vehicular turnaround to the right-of-way line shall not be less than the distance from the edge of pavement to right-of-way line on the street approaching the turnaround.
 - d. Cul-de-sacs should not be used to avoid connection with an existing street or to avoid the extension of an important street unless exception is granted by the Board of Commissioners of the Town of Rolesville.
7. **Alleys.** Alleys may be utilized for both nonresidential and residential developments. Alleys shall be designed with the following standards:
- a. **Nonresidential Alley Design.**
 - i. Alleys shall be required to serve lots used for commercial and industrial (i.e. nonresidential) purposes except that this requirement may be waived where other definite and assured provision is made for service access.
 - ii. The width of an alley shall be at least twenty (20) feet.
 - iii. Deadened alleys shall be avoided where possible, but unavoidable, shall be provided with adequate turnaround facilities at the deadened as may be approved by the Board of Commissioners of the Town of Rolesville.
 - iv. Sharp changes in alignment and grade shall be avoided.

- v. All alleys shall be designed in accordance with N.C. Department of Transportation Standards.
 - b. Residential.** Alleys may be appropriate in residential developments to provide rear access to houses.
 - i. Where lots front arterials, collectors, thoroughfares, or freeways without driveway access, then a public alley is required.
 - ii. Parking for visitors shall be served by an alternate adjacent street or parking area.
8. **Street Names and Signs.** Street names shall comply with the following standards:
- a. Street names shall be coordinated with the town Planning Department and Wake County.
 - b. Proposed streets which are obviously in alignment with existing streets shall be given the same name.
 - c. In assigning new names, duplication of existing names shall be avoided and in no case shall the proposed name be phonetically similar to existing names in the county irrespective of the use of a suffix such as street, road, drive, place, court, etc.
 - d. Street names shall be subject to the approval of the Board of Commissioners of the Town of Rolesville.
 - e. Street name signs shall be required. The subdivider shall provide and erect street name signs to town standards at all intersections with the subdivision.
9. **Permits for Connection to State Roads.** An approved permit is required for connection to any existing state system road. This permit is required prior to any construction on the street or road. The application is available at the office of the nearest district engineer of the NCDOT.
10. **Wheelchair Ramps.** In accordance with Chapter 136, Article 2A, Section 135-44-14, all street curbs in North Carolina being constructed or reconstructed for

maintenance procedures, traffic operations, repairs, correction of utilities, or altered for any reason after September 1, 1973, shall provide wheelchair ramps for the physically handicapped at all intersections where both curb and gutter and sidewalks are provided and at other major points of pedestrian flow.

11. **Bridges.** The clear roadway widths for new and reconstructed bridges serving two-lane, two-way traffic shall be as follows:

a. **Shoulder Section Approach**

- i. Under 800 ADT Design Year Minimum twenty-eight (28) feet width face-to-face of parapets or rails or pavement width plus ten (10) feet, whichever is greater.
- ii. 800—2,000 ADT Design Year Minimum thirty-four (34) feet width face-to-face of parapets or rails or pavement width plus twelve (12) feet, whichever is greater.
- iii. Over two-thousand (2,000) ADT Design Year Minimum forty (40) feet. Desirable forty-four (44) feet width face-to-face of parapets or rails.

b. **Curbs and Gutters Approach.**

- i. Under eight-hundred (800) ADT Design Year. Minimum twenty-four (24) feet face-to-face of curbs.
- ii. Over eight-hundred (800) ADT Design Year. Width of approach pavement measured face-to-face of curbs. Where curb and gutter sections are used on roadway approaches, curbs on bridges shall match the curbs on approaches in height, in width of face-to-face of curbs, and in crown drop. The distance from face of curb to face of parapet or rail shall be one (1) foot and six (6) inches minimum, or greater if sidewalks are required.
- iii. The clear roadway widths for new and reconstructed bridges having four (4) or more lanes serving undivided two-way traffic shall ensure that any shoulder section approach has a width of approach pavement plus width of usable shoulders on the

approach left and right, a minimum eight (8) feet; des. ten (10) feet. Any curb and gutter approach shall have a width of approach pavement measured face-to-face of curbs.

12. **Curb and Gutter.** Curb and gutter shall be provided in all subdivisions except in watershed districts.
 - a. Curb and gutter shall meet the specifications in Section I.C. of the NCDOT Subdivision Roads Minimum Construction Standards, as amended.
 - b. Unless otherwise specified by the Rolesville Board of Commissioners, curb and gutter shall be provided along the entire length of each street in the subdivision.
 - c. The Board of Commissioners of the Town of Rolesville may make an exception this policy in areas having very low traffic volume.
13. **Street Drainage, No Curb and Gutter.** Where the installation of curb and gutter is not required, the Town of Rolesville shall review all drainage prior to acceptance of any facility on the town system.
 - a. The storm drainage system shall be designed to meet NCDOT standards.
 - b. All driveway drainage pipes shall be constructed to meet a ten-year storm and shall be at least fifteen (15) inches in diameter constructed of reinforced concrete.
14. **Subdivision Street Disclosure Statement.** All streets shown on the final plat shall be designated in accordance with G.S. § 136-102.6 and designation as public shall be conclusively presumed an offer of dedication to the public. Where streets are dedicated to the public but not accepted into a municipal or the State system, before lots are sold, a statement explaining the status of the street shall be included with the final plat.
15. **Half-Streets.** The dedication of half streets of less than sixty (60) feet at the perimeter of a new subdivision shall be prohibited. If circumstances render this impracticable, adequate provision for the concurrent dedication of the remaining half of the street shall be furnished by the subdivider. Where there

exists a half-street in an adjoining subdivision, the remaining half shall be provided by the proposed subdivision.

- a. In circumstances where more than sixty (60) feet of right-of-way is required, a partial width right-of-way, not less than sixty (60) feet in width, may be dedicated when adjoining undeveloped property is owned or controlled by the subdivider.
- b. The width of the partial dedication shall be as such as to permit the installation of such facilities as may be necessary to serve abutting lots.
- c. When the adjoining property is subdivided, the remainder of the full required right-of-way shall be dedicated.
- d. The Board of Commissioners may accept a dedication of half-street right-of-way instead of fee-in-lieu.

16. **Marginal Access Streets.** Where a tract of land to be subdivided adjoins a principal arterial street, the subdivider may be required to provide a marginal access street parallel to the arterial street or reverse frontage on a minor street for the lots to be developed adjacent to the arterial. Where reverse frontage is established, private driveways shall be prevented from having direct access to the principal arterial.

17. **Nonresidential Streets.** The subdivider of a nonresidential subdivision shall provide streets in accordance with the North Carolina Department of Transportation Subdivision Roads Minimum Construction Standards (as amended) and the standards in this LDO, whichever are stricter in regard to each particular standard.

18. **Utility Poles.** Poles for overhead utilities should be located clear of roadway shoulders, a minimum of a least thirty (30) feet from the edge of pavement on major thoroughfares. On streets with curb and gutter, utility poles should be set back a minimum distance of six (6) feet from the face of curb.

C. **Sidewalks.** Sidewalks shall be required for all major subdivisions. Sidewalks shall comply with the following standards:

1. Sidewalks shall meet the applicable requirements of the ADA. All sidewalks must be ADA accessible from street intersections.
2. Sidewalks shall be provided along all lots fronting streets.
3. Sidewalks shall be provided along both sides of streets. Streets that are three-hundred (300) feet or less are only required to have a sidewalk on one (1) side if it ends in a cul-de-sac.
4. Sidewalks shall be constructed to a minimum width of five (5) feet and shall consist of a minimum thickness of four (4) inches of concrete. Sidewalks shall consist of a minimum thickness of six (6) inches of concrete at driveway crossings.
5. All sidewalks shall be placed in the right-of-way.
6. Sidewalks shall be in a parallel manner alongside the street. Where topography prohibits sidewalks being constructed in a straight manner, sidewalks may be designed to meander along the street.
7. Internal sidewalks shall be provided in all developments regardless of zoning district.
8. Sidewalks shall be required to connect to existing or planned sidewalks at property boundaries.
9. In low-lying areas or where natural topography requires it, the Land Development Administrator can require that the developer construct a boardwalk.
10. Greenways shall not be constructed in place of required sidewalks.
11. Where a subdivision is traversed by a stream or drainage way, an easement shall be provided conforming with the lines of such stream and of sufficient width as will be adequate for the purpose.

D. Interconnectivity of Streets.

1. The subdivision's street system shall conform to the Rolesville community transportation plan and thoroughfare plan.

2. In areas where there are no thoroughfares or collector streets, streets shall be designed and located in proper relation to existing and proposed streets.
3. Streets shall be designed or walkways dedicated to assure convenient access to parks, playgrounds, schools, or other places of public assembly.

9.2.2 BLOCKS

- A. **Generally.** Blocks shall be designed with consideration given to the type of land use proposed within the block. The following additional factors shall be given consideration for block design:
 1. LDO requirements;
 2. Vehicular demands;
 3. Pedestrian circulation;
 4. Control and safety of street traffic;
 5. Topographical limitations; and
 6. Convenient access to water areas
- B. **Length.** Blocks shall not be less than four-hundred (400) feet or more than one-thousand-two-hundred (1,200) feet.
- C. **Width.** Residential blocks shall have sufficient width to allow for two (2) tiers of lots of appropriate depth, except where single tier lots are required to separate residential development from vehicular traffic or another type of use.
- D. **Crosswalks.** A pedestrian crosswalk not less than fifteen (15) feet in width may be required near the center and entirely across any for the following instances and comply with the below standards:
 1. Residential block nine-hundred (900) feet or more in length within residential zoning districts;
 2. Where deemed essential to provide adequate access to schools, shopping centers, churches, transportation facilities or recreational facilities.

3. Crosswalks shall be constructed of permanent materials such as those generally used for sidewalks, including concrete, brick, asphalt and similar wear-resistant and weather resistant surfacing.
4. Crosswalks shall be marked in accordance with the standard “Manual on Uniform Traffic Control Devices” as provided by the Federal Highway Administration.

9.2.3. LOTS

- A. **Standards.** Lots shall conform to the zoning district standards set forth in Section 3: Zoning Districts, of this LDO. Conformance to zoning requirements means, among other things, that the smallest lot in the subdivision must meet all dimensional requirements of the LDO. It is not sufficient merely for the average lot to meet zoning requirements. Lots shall meet the following standards:
1. Lots shall meet any applicable Wake County Health Department Regulations.
 2. Through lot designs should be avoided wherever possible.
 3. Side lot lines shall be substantially at right angles to or radial to street lines.
 4. Where public water and/or sewer is not offered, lots shall comply with the standards of the Wake County Environmental Services Department and the Town of Rolesville LDO.
- B. **Setbacks.** Minimum building setback lines shall conform to the requirements of Section 3: Zoning Districts. Lots shall be designed to provide yards as required in connection with building sites by the terms of the LDO.
- C. **Compliance with Development Standards.** The subdivider shall refer to the various development standards of the LDO and shall apply them in the layout of subdivisions to avoid creating irregular lots that make compliance with development standards difficult or impracticable.
- D. **Access.** Every lot shall provide access to and abut a public right-of-way. For the Dwelling, Single Family, Attached use, Lots may access to and abut Private Access Easements rather than public rights-of-way.

E. Flag Lots.

1. The LDO prohibits the creation of flag lots in subdivisions except in the following circumstances:
 - a. To reasonably utilize irregularly shaped land;
 - b. To reasonably utilize land with unusual topography rendering a majority of the lot unbuildable;
 - c. To reasonably utilize land with limited sites suitable for septic tank requirements; and/or
 - d. To provide for the protection of significant natural resources.
2. Flag lots shall not be permitted if it increases the number of access points onto a major thoroughfare.
3. In no instance may a subdivision approved after the effective date of this LDO be resubdivided to create flag lots.
4. Use of a single driveway easement, to serve adjoining flag lots is permitted and encouraged to reduce access points on public streets.

9.2.4 EASEMENTS

- A. **Utility Easements.** Easements for underground or above ground utilities shall be provided, where necessary, across lots or centered on rear or side lot lines and shall be at least twenty (20) feet wide for water and sanitary sewer lines and as required by the companies involved, for telephone, gas, and power lines.
 1. The Board of Commissioners will determine whether one (1) easement is sufficient or whether several easements are necessary to accommodate the various facilities and the subdivider shall provide the required easements.
 2. Easements may also be upsized by the Board of Commissioners based upon the size of lines, projected demand of facility, or need to remain clear of other utilities and easements.

- B. **Drainage Easements.** Where a subdivision is traversed by a stream or drainage way, an easement shall be provided conforming with the lines of such stream and of sufficient width as will be adequate for the purpose.
- C. **Drainageway Buffer Easements.** In watershed overlays, drainage way buffers shall be provided as required by the LDO and shall be recorded as easements.

9.2.5. SUBDIVISION ACCESS STANDARDS

- A. **Open Access.** Subdivisions shall provide roadways that are permanently open to the public and provide community-wide access as part of a connected street network.
- B. **Connectivity.** Streets shall be interconnected and connect with adjacent streets external to the subdivision to provide multiple routes for pedestrian and vehicle trips. Implementation of any access points or associated improvements recommended by a traffic impact analysis (TIA) are required. In addition, connections must be made to existing and planned street stubs.
- C. **Number of Access Points.** Subdivisions shall provide access consistent with the North Carolina State Building Code: Fire Prevention Code.

9.2.6. UTILITIES

- A. **Residential.** Residentially zoned lots shall comply with the following standards:
 - 1. **New Construction.** Within the Town of Rolesville's jurisdiction, every residentially zoned lot being improved with a new dwelling that is within the distance defined in Table 9.2.6 shall be required to connect, at the expense of the owner or developer, to that public water or sewer system.
 - a. The distance shall be measured from the closest property line of the development to the nearest existing water or sewer line.
 - b. All water and sewer lines throughout each subdivision shall be placed within rights-of-way and/or existing easements except for each line serving the interior of individual lots.
 - c. Residential properties developed for one single family dwelling need not connect to public utilities if they are replacing an existing single family

home with another single family dwelling or if the owner is adding onto an existing single family dwelling.

Table 9.2.6.

Number of Lots	Distance From System
1 Lot	300 Feet
2 to 4 Lots	1,000 Feet
<5 Lots (Major Subdivision)	5,280 Feet

2. Lots with Existing Well and/or Septic System.

- a. All individual lots which have failing ground absorption wastewater treatment and dispersal systems shall, upon notice from the Wake County Authorized Agent, connect to the Town of Rolesville wastewater collection system when it is determined that three-hundred (300) feet or less of sewer line is required for the connection.
- b. The property owner shall be required to connect to the wastewater collection system within ninety (90) days of the notice unless a variance is granted by Wake County.
- c. When a facility is required to be connected to the Town of Rolesville's wastewater collection system, and the septic and/or pump tank is not being utilized as part of that connection, the septic and/or pump tank shall be properly abandoned.
- d. All individual lots which have failing well systems shall connect to the Town of Rolesville water utility system when it is determined that three-hundred (300) feet or less of water line is required for the connection.
- e. When a facility is required to be connected to the Town of Rolesville's water utility, the failing well shall be properly abandoned.

B. Community and Individual Water and Sewer. For all community and individual water and/or sewer systems, including individual wells or septic systems in subdivisions or developments outside of the 5,280 foot distance of existing water and/or sewer systems, the materials, design, and installation shall be subject to approval by the

Division of Water Quality at the N.C. Department of Environmental Quality or the Wake County Health Department.

- C. **Water and Sewer Utility Extensions.** Extensions of any water or sanitary sewer mains are to be made to the furthest property line of the tract where necessary to serve adjoining property owners with utilities along natural drainage patterns. In all instances, plans shall show the total area in acres draining to the uppermost bounds of the tract on any established watercourse. Additional extensions may be required if the Town of Rolesville or the City of Raleigh Public Utilities Department determines adjacent property can be served from extensions to the proposed site.
- D. **Nonresidential Properties.** To provide for sufficient water and wastewater service for businesses of Rolesville, and to provide for the town's long term capacity for future utility customers, all applicants for nonresidential zoning permits shall be required to provide anticipated peak water and wastewater usage to the Land Development Administrator. Nonresidential zoned lots shall comply with the following standards:
1. **Specifications.** All construction of water and/or sewer lines shall be done in conformity with the City of Raleigh specifications for utility construction.
 2. **Minimum Standards.** All nonresidential developments shall have capacity, at minimum, for 25,000 gallons of water and wastewater per day.
 3. **Conveyance.** Upon completion and approval of all water and/or sewer improvements to, into, and within the subdivision or development, the water and sewer improvements shall be conveyed, together with access easements for maintenance, to the City of Raleigh. The City of Raleigh shall maintain said lines as same shall be part of its water and/or sewer system.

9.2.7. REFUSE COLLECTION

- A. For multiple family and attached housing developments, only dumpsters may be used for refuse collection. Alley loaded and/or individual refuse collection cans are prohibited.