

7

INFRASTRUCTURE & PUBLIC IMPROVEMENTS

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CHAPTER 7 INFRASTRUCTURE & PUBLIC IMPROVEMENTS¹

7.1 APPLICABILITY AND GENERAL REQUIREMENTS

7.1.1 REQUIRED IMPROVEMENTS BY DEVELOPMENT TYPE²

Developers shall install improvements as specified in this Section. Table 7.1.1-1 summarizes the types of improvements required by development type.

Table 7.1.1-1: Required Improvements by Development Type						
Required Improvement	Development Type					
	Minor Subdivision (<5 lots)	Minor Subdivision (6-15 lots)	Major Subdivision	Apartment Complex	Mixed Use Dev.	Non-Residential Dev.
Monuments & Lot Markers	✓	✓	✓	X	X	X
Pedestrian & Multimodal Systems	X	X	✓	✓	✓	✓
Stormwater Drainage Systems	Refer to Chapter 9: Stormwater Management for applicable regulations					
Public Streets	X	X	✓	X	X	X
Private Streets	✓	✓	X	✓	✓	✓
Private Easements	✓	X	X	X	X	X

¹ This Chapter updates and revises the requirements for developers to install infrastructure in new developments. Important changes include 1) requirement for infrastructure improvements to non-residential development; 2) adoption of new street framework with public streets, private streets, and private easements that requires dedication of public streets in major subdivisions, requires private streets to comply with NCDOT design standards, and allows gravel access by private easement for subdivisions of less than five lots; 3) addition of new street connectivity standards; 4) clarifies and requires pedestrian and multimodal transportation infrastructure; and 5) adds location standards for wastewater treatment facilities on development sites.

² This Section significantly updates SR 8.1: *Required Improvements* and converts it to a tabular format. The Section clarifies the types of improvements required for minor vs. major subdivisions and for non-subdivision development and adds infrastructure requirements for non-residential developments.

Table 7.1.1-1: Required Improvements by Development Type						
Required Improvement	Development Type					
	Minor Subdivision (<5 lots)	Minor Subdivision (6-15 lots)	Major Subdivision	Apartment Complex	Mixed Use Dev.	Non-Residential Dev.
Street Name & Traffic Signs	✓	✓	✓	✓	✓	✓
Utilities	✓	✓	✓	✓	✓	✓
Wastewater Systems	✓	✓	✓	✓	✓	✓
Water Supply Systems	✓	✓	✓	✓	✓	✓

Key: ✓ = the improvement is required | X = the improvement is not required

7.1.2 COMPLETION OF IMPROVEMENTS³

- A. Before the County issues a Zoning Compliance Permit for developments to which this Chapter applies or approves the Final Plat for a subdivision, all applicants shall:
 - 1. Complete, in accordance with the County's requirements, all the street, sanitary, and other infrastructure improvements required by this Chapter including, without limitation, improvements on the individual lots of the subdivision as required in these regulations, specified in the Final Plat, and as approved by the County; and
 - 2. If required, dedicate the same to the appropriate government body, free and clear of all liens and encumbrances on the property and public improvements thus dedicated.
- B. Alternatively, the applicant may request to post a performance guarantee in accordance with 7.4: Performance Guarantees for Completion of Improvements, prior to completion of the required improvements. This Section ensures improvements will be made and utilities installed without cost to public bodies in the event of default of the developer or subdivider. This also assures prospective purchasers that improvements will be installed as shown on the Final Plat.

³ Carries forward and consolidates SR 3.1.A: Completion of Improvements and SR 8.1 I: Guarantee in Lieu of Completed Improvements. Replaces the term *security* with *performance guarantee* for consistency with [N.C.G.S. 160D-804.1](#).

7.1.3 COSTS OF IMPROVEMENTS⁴

All required improvements shall be made by the applicant, at their expense, without reimbursement by the County.

7.1.4 ACCEPTANCE OF DEDICATION OFFERS

The approval by the County of a subdivision plat or site plan shall not be deemed to constitute or imply the acceptance by the County of any offer of dedication shown on the plat. Offers of dedication may be accepted only by resolution of the Board of Commissioners.

7.2 STREET IMPROVEMENTS⁵

7.2.1 ACCESS REQUIRED⁶

- A. Every subdivision developer is required to grade and improve new streets for access as provided in this Section. These improvements for streets and easements shall be in accordance with the minimum standards for design as specified in this Section.
- B. No building, structure, or use of land shall be established on a lot, nor shall any lot be created, that does not abut a public or private street right-of-way or an easement to which it has legal access.
- C. The access requirement does not apply:
 - 1. To land exempt from these regulations;
 - 2. To lots that might be created within a conditional zoning district⁷ where access may be through common area or otherwise provided; or

⁴ Carries forward SR 3.1.D: Costs of Improvements [Improvement and Adequate Security].

⁵ This Section significantly revises the current street development standards in SR 7.2: Rural Roads, and several other locations noted in the subdivision and zoning regulations. Important changes include: 1) requiring all major subdivisions to dedicate the streets; 2) requiring minor subdivisions' private streets to comply with NCDOT design standards; and 3) providing new connectivity standards.

⁶ This Section carries forward and clarifies SR 8.1 B.: *Street Development* and ZO 8.4. *Access to Property*

⁷ Changed from "planned residential development," which is no longer a distinct use/development type.

3. To situations otherwise exempt from street access by this UDO.

7.2.2 STREET CLASSIFICATIONS⁸

- A. Streets and roads are classified according to the function that they are to serve, the type, speed, and volume they will carry.
- B. The street classifications are:
 1. Arterials;
 2. Collectors; and
 3. Local roads.
- C. The designation in a transportation plan of arterials and collectors does not prevent other streets proposed in adjoining subdivisions from being similarly classified.

7.2.3 CONNECTIVITY REQUIRED⁹

- A. **Purpose.** A proposed subdivision with public streets or any non-subdivision development to which this Chapter applies shall provide multiple direct connections in its local street system to and between local destinations, such as parks, schools, and shopping, without requiring the use of arterial streets. This reduces trips on the arterial network which has the potential to reduce traffic congestion. It also encourages the use of alternative modes of transportation, such as walking and bicycling.
- B. **Connection to Existing Stub Streets Required.** Each development shall incorporate and continue all collector or local streets stubbed to the boundary of the development by previously approved but unbuilt development or existing development.
- C. **Future Connections.**
 1. To ensure future street connections to adjacent developable parcels, a proposed development shall provide a local street connection along each boundary that abuts undeveloped land suitable for development.

⁸ This Section carries forward current SR 7.2.A: *Classification*.

⁹ This new Section provides objective standards for connectivity that will provide for a grid-like street network.

At least one connection is required for every 660 linear feet of lot line along the development boundary.

2. This provision does not apply to proposed development of secure sites that will allow limited or no access by the general public, such as manufacturing facilities, distribution facilities, and electricity generation stations.

D. Intersections.

1. A proposed subdivision or development to which this Chapter applies shall provide a full-movement intersection of a collector or a local street with an arterial street at an interval of at least every 1,320 feet along arterial streets. This intersection shall be designed with current or potential signalization.
2. A proposed development shall provide an additional unsignalized, potentially limited-movement intersection of a collector or local street with an arterial street at an interval not to exceed 660 feet between the full-movement collector and the local street intersection.
3. Any limited-movement collector or local street intersections must include an access-control median or other acceptable access-control device as provided in the NCDOT's [Roadway Design Manual](#).

- E. Waiver.** The Subdivision Administrator may waive the requirements of Paragraphs B., C., and D. if the Administrator determines they are impracticable or infeasible due to unusual topographic features, existing development, or the presence of a natural feature or an historical or cultural resource.¹⁰

7.2.4 DEDICATIONS AND DESIGN FOR EXISTING AND FUTURE STREETS¹¹

A. Streets Identified in Applicable Transportation Plans.

1. The location and width of all streets and roads shall not conflict with any adopted NCDOT and/or Chatham County transportation or corridor plan.

¹⁰ Alternatively, the County could consider eliminating this waiver provision. In this case, any applicant unable to comply with the standards would have to seek a variance from the Board of Adjustment.

¹¹ This Section carries forward the street dedication standards from SR 7.2B: *Relation to Present, Proposed and Future Road System*.

2. When a subdivision is proposed in an area designated for a future right-of-way on any adopted NCDOT and/or Chatham County transportation or corridor plan and the construction of a road along this right-of-way is not necessary for the purpose of providing access to platted lots or carrying the traffic that will be generated by the subdivision development, the subdivider is not required to construct this road.
3. However, the subdivider must reserve such right-of-way for dedication to the NCDOT for the purpose of implementing the transportation plan. The subdivider also must reserve sufficient area adjacent to the right-of-way for a slope easement, if required by the NCDOT.

B. Consistency with Existing Streets.

1. For the purpose of these design standards, existing streets that terminate at or adjoin a subdivision boundary shall be deemed a part of the subdivision.
2. The proposed street system shall extend the right-of-way of existing streets at no less than the required minimum width.
3. Subdivisions that adjoin only one side of existing streets shall dedicate one-half of the additional right-of-way needed to meet minimum width requirements.
4. If any part of the subdivision includes both sides of an existing street, all the required additional right-of-way shall be dedicated.

C. Access for Landlocked Adjacent Parcels.

1. Where necessary to provide public street access to adjoining landlocked property or connectivity to large tracts with future development potential, proposed public streets shall be extended by dedication of right-of-way to the boundary of such property. Legal documents shall be recorded assuring future public accessibility.
2. Two of the issues to be reviewed when considering the extension of public roads are the improvement of traffic distribution to prevent unnecessary congestion and the improvement of public safety by providing increased access for law enforcement and emergency vehicles.

- D. Temporary Turnarounds for Stub Streets.** If the proposed public street to be extended is to be used as access for any lots, such stub street must have a temporary turn around located within the public right-of-way and/or a dedicated easement. A notation of this reservation will be noted on the plat.

- E. **Access Management.** When an arterial adjoins or is included in a subdivision, lots that abut the arterial shall have the number of access points limited or reduced with such conditions specified on the plat or shall be provided with another means of access, such as:
1. Platting a single tier of lots that back to the arterial and front on a minor street; or
 2. Other method approved by the Planning Board such as a frontage road.
- F. **Alignment for Future Subdivision.** When land is subdivided into larger parcels than necessary for ordinary building lots, such parcels may be required to be arranged to allow for the opening of streets in the future and for logical further re-subdivision.
- G. **Reserve Strips.** Reserve strips that control or prevent access to public streets are prohibited except where approved by the Board of Commissioners in a conditional zoning district.¹²

7.2.5 STREET ALIGNMENT AND NAMING¹³

- A. Proposed streets that align with others already existing and named shall bear the names of existing streets.
- B. In no case shall the name for a proposed street duplicate any existing street names in Chatham County or the towns therein, irrespective of the use of the suffix street, avenue, boulevard, road, pike, drive, way, place, court, or other derivatives.
- C. Streets must be named in accordance with the [Chatham County Road Name Ordinance](#).

7.2.6 PUBLIC STREETS¹⁴

- A. **Generally.** All streets in major subdivisions must be public streets unless otherwise allowed in a conditional zoning district.

¹² Carries forward prohibition on reserve strips in SR 7.2.C(3) but revises to limit BOC discretion to conditional zoning districts.

¹³ This Section carries forward SR 7.2.C.(4): *Street Names*.

¹⁴ This Section updates and clarifies SR 7.2.C: *Design Standards for Roads [Rural Roads]*. All streets in major subdivisions will have to be dedicated to the NCDOT.

- B. **Design Standards.** The design and construction of all public streets and roads, including the grading, roadbed, shoulders, slopes, medians, ditches, drainage, driveway entrances to lots, right-of-way and pavement widths, grades, curves, intersections, and other proposed features shall conform to the respective current standards of the North Carolina Department of Transportation, except as provided.
- C. **Offer of Dedication.** A developer of roads in subdivisions that are to be public roads shall provide an irrevocable offer of dedication to the NCDOT prior to Final Plat approval.

7.2.7 PRIVATE STREETS¹⁵

- A. **Generally.** All streets in minor subdivisions and other developments subject to this Chapter, except major subdivisions, may be private streets.
- B. **Design Standards.**
1. Except as provided in 7.2.7B.2, below, the design and construction of all private streets, roads, and drives, including the grading, roadbed, shoulders, slopes, medians, ditches, drainage, driveway entrances to lots, right-of-way and pavement widths, grades, curves, intersections and other proposed features shall conform to the NCDOT's [Roadway Design Manual](#), unless the subdivision qualifies for access from a private easement as provided in 7.2.8: *Private Driveways*.
 2. The County must accept engineered pavement design standards that do not meet minimum standards required by the NCDOT if the proposed design standard is signed and sealed by a duly licensed professional engineer, under N.C.G.S. [Chapter 89C: Engineering and Land Surveying](#), and meets vehicular traffic and fire apparatus access requirements. This applies to construction of new privately owned driveways, parking lots, and driving areas associated with parking lots within a new development or subdivision that the developer designates as private and that are intended to remain privately owned after construction.¹⁶

¹⁵ This Section significantly updates SR 7.2.D: *Private Road*. Under the proposed draft, all private streets will be required to comply with the NCDOT road design standards. However, they will not require dedication to the NCDOT.

¹⁶ This Paragraph is from N.C.G.S. [§ 160D-804\(j\)](#), which was added by [SL 2023-108](#).

- C. **Certification of Private Streets.** The design and construction of private streets shall be certified to comply with the NCDOT's [Roadway Design Manual](#) by a licensed engineer.

7.2.8 PRIVATE DRIVEWAYS¹⁷

A. **Private Driveway Standards.**

1. Up to 15 lots in a minor subdivision may be accessed from a private driveway if:
 - (a) Every lot has frontage on the driveway;
 - (b) The driveway is established by a perpetual easement;
 - (c) The driveway is at least 30 feet in width and intersects a public road.
 - (d) The driveway is at least 100 feet from another easement of this type and driveway does not connect with other driveways or access easements.
2. Proof of the permanence of the easement shall be provided to the Subdivision Administrator and shall be certified by the applicant's attorney.
3. The applicant must note on the plat that the driveway is subject to a shared maintenance agreement and record the driveway maintenance agreement at the same time as the Final Plat.
4. The applicant shall contact the NCDOT to determine whether a driveway permit is needed and shall provide proof of such to the Subdivision Administrator.

B. **Private Driveway Design Standards.**

1. Private driveways must comply with these standards for the entire length of the driveway.

¹⁷ This Section carries forward and clarified the private easement standards are from 7.4.B.: *Arrangement*. The draft removes the 60' standard for easements for additional lots. These should not apply because access by connecting easements is not allowed. Increases the number of lots allowed on a private driveway to 15 to match the new threshold for minor subdivisions.

2. The design and construction of private driveways must be certified to be in compliance with these regulations by a licensed engineer.
3. These driveway improvements must be made prior to the issuance of a building permit for any building on the subdivided lots. This restriction must be noted on the subdivision plat.
4. Driveways serving one lot shall be improved such that the driveway has a minimum clearance of 12 feet wide and 14 feet high and an all-weather travel surface.
5. Driveways serving more than one lot shall be improved such that the driveway has:
 - (a) A minimum unobstructed clearance of 12 feet wide and 14 feet high;
 - (b) An all-weather travel surface; and
 - (c) At a minimum, is designed to the specifications in Figure 7.2.8-1: *Minimum Gravel Driveway Standard*.
6. If the length of the driveway is more than 250 feet, then a turnaround must be provided at the end of the driveway.
 - (a) Options for acceptable turnarounds are shown in Figure 7.2.8-2: *Options for Turnarounds for Private Driveways*.
 - (b) If applicable, one or more legs of the turnaround may be the entrance to a private, un-shared driveway, if the minimum dimensions of the turnaround are accommodated entirely within the shared driveway easement.
7. Additionally, for driveways that are more than 500 feet in length, the easement shall be widened to 22 feet wide for a distance of 40 linear feet to provide a pull-out for safe passing, at a maximum interval of 500 feet as measured from the center of the pull-out.
8. The maximum distance between the turnaround and a pull-out is 500 feet. See Figure 7.2.8-3: *Illustration of Pull-outs for Private Driveways*.

Figure 7.2.8-1: Minimum Gravel Driveway Standard (not to scale)

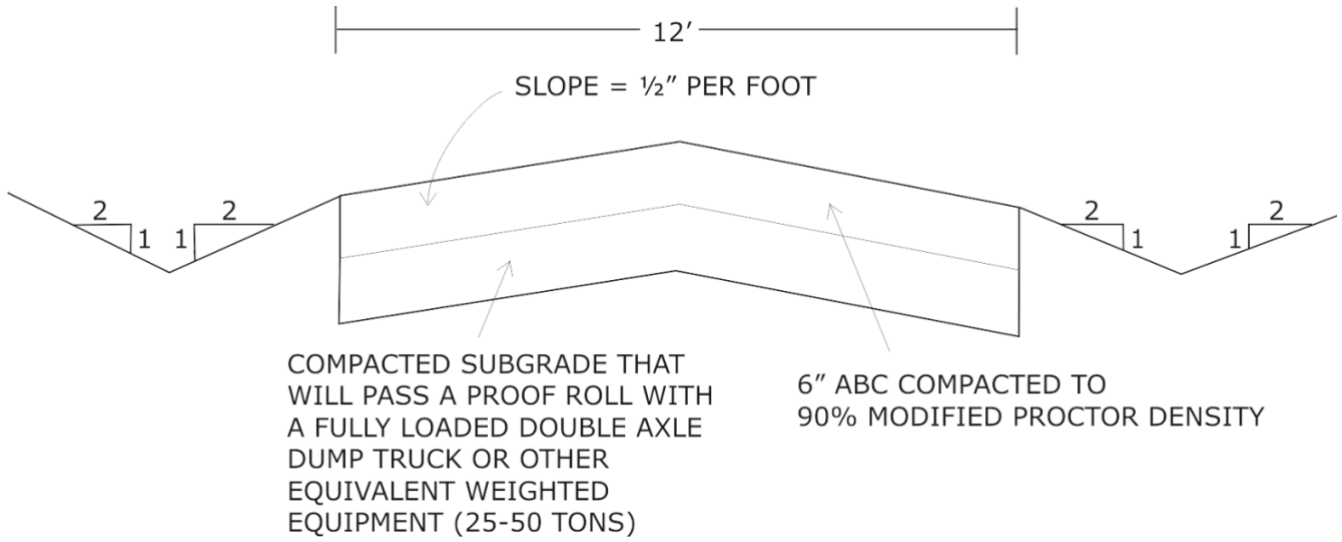
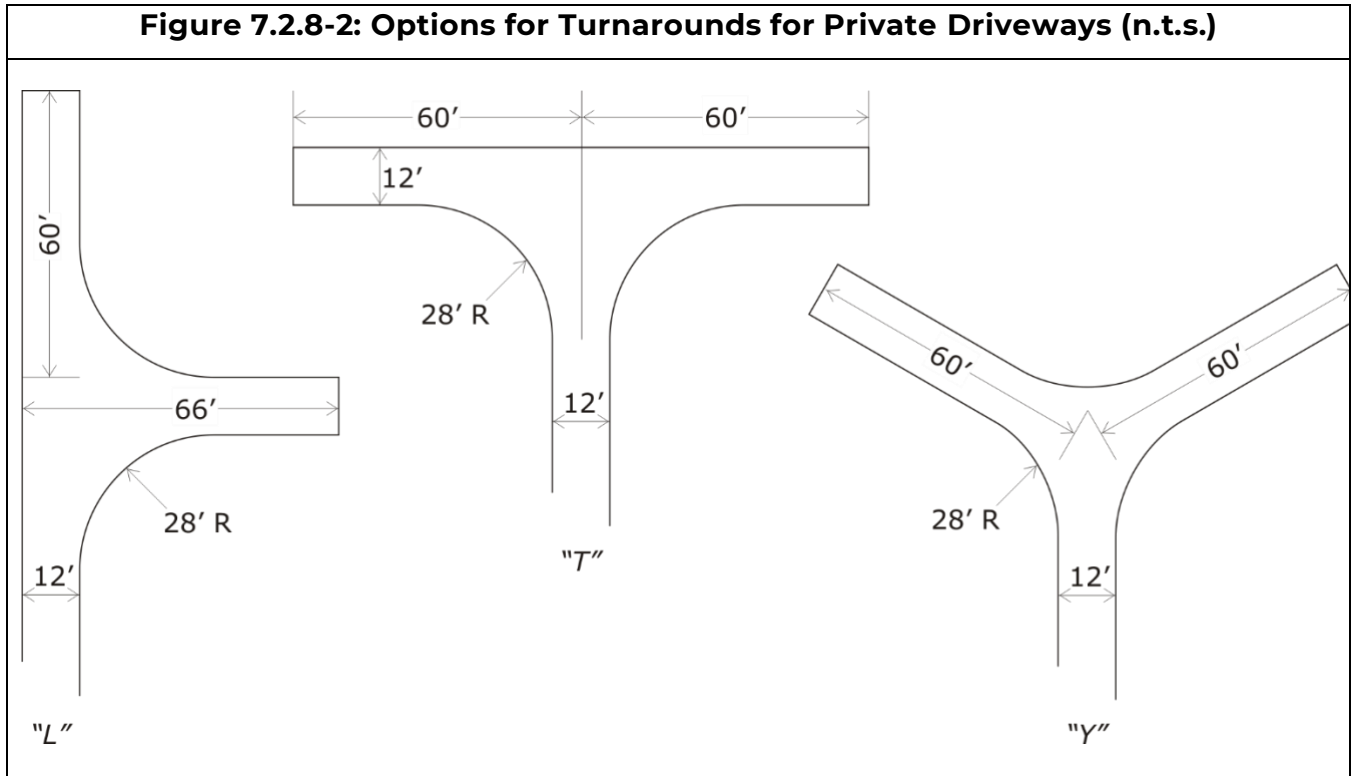
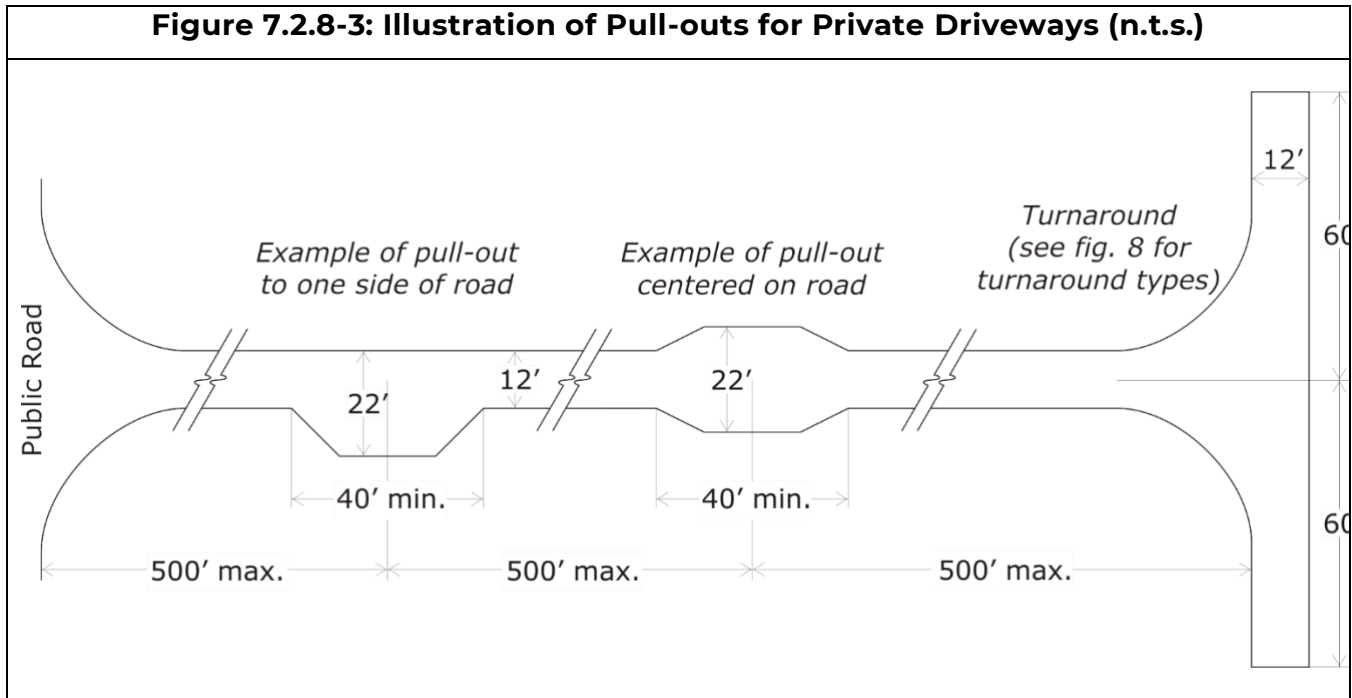


Figure 7.2.8-2: Options for Turnarounds for Private Driveways (n.t.s.)





- C. **Pre-1975 Easement.** One additional subdivision lot may be allowed if the lot has frontage on a private driveway with a perpetual easement or private road that extends to meet a public road and the driveway or private road existed prior to October 1, 1975.
 - 1. Proof of the existence of the easement before October 1, 1975, and proof of its permanence, shall be provided to the Subdivision Administrator and certified by the applicant's attorney.
 - 2. If these conditions are met, the existing private driveway does not require improvements pursuant to this Chapter.
- D. **Limitation on Multiple Subdivisions.** A subdivider shall not create any subdivision from the same parent parcel or adjacent commonly owned parcel for a period of 12 months after receiving approval of a subdivision with access by a private driveway as provided in this Section.

7.2.9 REVIEW BY THE DEPARTMENT OF TRANSPORTATION

The NCDOT’s District Highway Engineer will have the opportunity to review and provide recommendations for all state streets, highways, and related drainage systems before the Preliminary Plat approval.

7.3 OTHER REQUIRED IMPROVEMENTS

7.3.1 MONUMENTS & LOT MARKERS¹⁸

- A. Monuments and lot markers shall be set in accordance with [21 NCAC 56 .1602: Surveying Procedures](#) and any other applicable rules established by the N.C. State Board of Examiners for Engineers and Surveyors.
- B. Monuments and lot markers must be set prior to submittal of the Final Plat so that all necessary inspections may be made by the various agencies involved in the review of the subdivision.

7.3.2 PEDESTRIAN AND MULTIMODAL SYSTEMS¹⁹

- A. **Applicability.** All subdivisions and other developments to which this Chapter applies must provide pedestrian and multimodal transportation networks as required by Table 7.3.2-1: *Multimodal Transportation Standards*.

Table 7.3.2-1: Multimodal Transportation Standards					
Multimodal Transportation Type	Major Subdivision < 50 lots	Major Subdivision > 50 lots	Apartment Complex	Mixed Use Development	Non-Residential Development
Sidewalks	X	✓ ¹	✓	✓	✓
Bicycle Lanes	X	✓ ²	✓ ²	✓ ²	X
Side Paths	X	X	X	X	X

Key: ✓ = the improvement is required | X = the improvement is not required

¹ Sidewalks are only required in major subdivisions where the average lot size is 1.0 acre or less.

² Bicycle lanes are only required on collector and arterial streets.

- B. **Sidewalks.**

1. *Major Subdivision Standards.*

¹⁸ Carries forward SR 8.1.A: Monuments and Lot Markers.

¹⁹ This Section significantly modifies current SR 8.1.G.: *Sidewalks*. Major changes include 1) requiring sidewalks in all major subdivisions of more than 50 lots with average lot sizes of 1 acre or less; 2) requiring greenways or trails for all major subdivisions; 3) requiring all multimodal infrastructure to be constructed to the NCDOT’s specifications; and 4) requiring the developer or homeowners’ association to own and maintain multimodal infrastructure.

- (a) For all major subdivisions resulting in more than 50 parcels, the developer must provide sidewalks only if the average lot size is 1.0 acre or less in area.
 - (b) If they are required, sidewalks must be provided on all arterial, collector, and local street segments.
2. *All Other Developments.* Where sidewalks are required, the developer must provide both internal sidewalks and external sidewalks. Internal sidewalks are located on the interior of the development and connect buildings, parking areas, open space, and amenity areas. External sidewalks are located along the development's boundary and connect to other existing or planned sidewalks.²⁰
3. *Design Standards.* Where they are required or provided voluntarily, all sidewalks must conform to the standards of the NCDOT's Roadway Design Manual, [Section 4.14 Pedestrian Facilities](#) and documents referenced in the Manual.

C. **Bicycle Lanes and Side Paths.**

1. Bicycle lanes are required on all collector and arterial streets in developments indicated in Table 7.3.2-1: *Multimodal Transportation Standards*.
2. Bicycle lanes or side paths are recommended but not required in all development types.
3. Where they are required or provided voluntarily, all bicycle lanes and side paths must conform to the standards of the NCDOT's Roadway Design Manual, [Section 4.15 Bicycle Facilities](#) and documents referenced in the Manual.

D. **Ownership and Maintenance.**

1. All pedestrian and multimodal transportation infrastructure may be dedicated to the NCDOT, if allowed, or owned by the developer or homeowners' association, if one exists.

²⁰ The County should consider whether there are certain zoning districts, use types, or geographic areas where the UDO should not require external sidewalks.

2. All pedestrian and multimodal transportation infrastructure must be maintained by the developer or homeowners' association unless another organization or agency agrees to undertake maintenance.

7.3.3 STREET NAME SIGNS & TRAFFIC SIGNS²¹

- A. Appropriate street signs enable visitors, delivery drivers, and emergency services providers to find their way around.
- B. Street name signs shall be installed at all intersections. Traffic control signs shall also be installed where required by the [FHWA Manual on Uniform Traffic Control Devices \(MUCTD\)](#) and the [North Carolina Supplement to the MUCTD](#).
- C. The signs shall be of standard design, size, and material as specified by the MUCTD or North Carolina Supplement to the MUCTD, as applicable.
- D. State and local permits for signs may be required prior to installation.
- E. The owner of the street must maintain the street name signs and traffic control signs in good repair and replace the signs as needed to ensure legibility.

7.3.4 UTILITIES²²

- A. All utility services shall be designed and installed to conform with all appropriate state, local, and utility agency requirements.
- B. Underground utility lines are encouraged.

²¹ Carries forward SR 8.1 H: Street Name Signs and Traffic Signs and clarifies when traffic signs are required by adding a cross-reference to the [FHWA Manual on Uniform Traffic Control Devices \(MUCTD\)](#) and the [North Carolina Supplement to the MUCTD](#). Revises Paragraph A by replacing *strangers* with *visitors* and *potential lot buyers* with *emergency services providers*.

²² Carries forward SR 8.1 F: *Installation of Utilities* with a significant edit to remove the ability of the BOC to require underground utilities in subdivisions where lot densities and soil conditions exist to make the installation of such facilities economically feasible in the opinion of the Board of Commissioners. The BOC could include this as a condition of approval for a Conditional District Rezoning, even if not expressly stated here. Further, Chapter 12: *Procedures* proposes to change the major subdivision approval process such that the BOC would review and act on a Sketch Plan (formerly Concept Plan), but not a Preliminary Plat (formerly First Plat). A soils survey is not required for a Sketch Plan application.

7.3.5 WASTEWATER SYSTEMS ²³

- A. **Sewer Connections Required if Available.** Where public service is available, public sewer shall be provided and installed in such a manner as to serve adequately all lots within the subdivision or other development to which this Chapter applies.
- B. **Private Sewage Treatment Facilities.**
1. Where public service is not available and the subdivision or development will use private sewer, the wastewater treatment facility must be integrated into the developed area.
 2. For subdivisions, private sewage treatment facilities shall not be sited on lots bordering the external boundary of the subdivision area.
 3. For other developments and for subdivisions that only have lots with external boundaries, private sewage treatment facilities must be set back from any external property line at least;
 - (a) 300 feet for developments that contain 100 acres or less;
 - (b) 400 feet for developments that contain more than 100 acres but less than 500 acres; and
 - (c) 500 feet for developments that contain more than 500 acres.
- C. **Septic Systems.**
1. Where public service is not available and the subdivision or development will use septic systems for wastewater treatment, a soil scientist, licensed in North Carolina, shall certify that suitable soils are available for each lot in accordance with applicable state and local rules.
 2. The Chatham County Environmental Health Department will review soil scientist reports and maps and indicate its adequacy prior to proceeding with Final Plat approval.

²³ This Section significantly updates SR 8.1 D: Sanitary Sewers by adding 1) location standards for private sewage treatment systems and 2) Health Department input for preliminary plats.

- D. **Regulatory Compliance Required.** Installation of all sewage disposal systems shall conform to appropriate regulations of any governmental agency having jurisdiction.
- E. **Review by the Director of Environmental Health.** The Director of the County's Environmental Health Department will have the opportunity to review and provide recommendations for wastewater handling before the Preliminary Plat approval.

7.3.6 WATER SUPPLY SYSTEMS²⁴

- A. **Public Water Connections Required if Available.** Where public water service is available and feasible, as defined by the [Chatham County Water System Operating Policies](#), public water shall be provided and installed in such a manner as to serve adequately all lots within the subdivision or other development to which this Chapter applies.
- B. **Private Water Supply.** Where public service is not available, each lot must have a suitable water supply system approved by the Chatham County Environmental Health Department or other appropriate agency.
- C. **Regulatory Compliance Required.** Installation of all water supply systems shall conform to appropriate regulations of any governmental agency having jurisdiction.
- D. **Review by the Director of Environmental Health.** The Director of the County's Environmental Health Department will have the opportunity to review and provide recommendations for water supply systems before the Preliminary Plat approval.

7.3.7 DEFERRAL OR WAIVER OF REQUIRED IMPROVEMENTS²⁵

- A. **Conditions.** At the time of approval of a Major Subdivision Sketch Plan,²⁶ the Board of Commissioners may defer or waive, subject to appropriate

²⁴ This Section carries forward SR 8.1 E: Water Supply Systems with the addition of Environmental Health Department input for Preliminary Plats.

²⁵ Carries forward SR 3.3: Deferral or Waiver of Required Improvements with minor edits. Replaces the term *financial security* with *performance guarantee*.

²⁶ The County should consider whether to establish a procedure for deferral or waiver of required improvements for developments other than major subdivisions that are subject to this Chapter. For example, an apartment complex with private streets would require approval through a Zoning Compliance Permit, which is a staff-level approval. Deferring or waiving required improvements requires significant discretion that should likely be vested with the Planning Board or Board of

conditions, the provision of any or all required improvements as, in its judgment, are not requisite in the interests of the public health, safety, and general welfare, or that are inappropriate because of inadequacy or lack of connecting facilities. This includes the standards in 7.2.3: Connectivity Required, which may be waived if they are impracticable or infeasible due to unusual topographic features, existing development, or the presence of a natural feature or an historical or cultural resource.

- B. **Payment in Lieu of Improvements.** Whenever the County deems it necessary to defer the construction of any improvement required in this Chapter because of incompatible grades, future planning, inadequate or lack of connecting facilities, or for other reasons, the applicant may be required to:
1. Pay their share of the costs of the future improvements to the County prior to approval of the Final Plat or issuance of the Zoning Compliance Permit for other developments to which this Chapter applies; or
 2. Post a performance guarantee ensuring the completion of required improvements upon demand of the County.

7.4 PERFORMANCE GUARANTEES FOR COMPLETION OF IMPROVEMENTS²⁷

7.4.1 APPLICABILITY

- A. This Section applies to major subdivisions and all other developments to which this Chapter applies.
- B. This Section does not apply to performance guarantees associated with erosion control and stormwater control measures.²⁸

Commissioners. As currently drafted, this deferral or waiver of required improvements is only available for major subdivisions. Other types of developments would have to seek a variance to waive or defer required improvements.

²⁷ This Section carries forward and reorganizes SR Section 3: Security for Completion of Improvements. Replaces the terms *security*, *financial security*, and *financial guarantee* with *performance guarantee* for consistency with [N.C.G.S. 160D-804.1](#). Simplifies the language and limits the use of passive voice.

²⁸ This exclusion is from [N.C.G.S. 160D-804.1\(7\)](#).

7.4.2 GENERALLY

- A. **Requests to Provide a Performance Guarantee.** Upon request by the applicant, the County may enter into a contract with the applicant under which the applicant agrees to complete all required improvements by providing a performance guarantee. This contract may be executed when:
1. Seventy-five percent of the improvements (based on the total estimated cost of the improvements to be installed) have been completed;
 2. All weather access for emergency vehicles has been provided; and
 3. Waterlines are completed and ready for acceptance by the County if public water is available.
- B. **Timing of Request.** The applicant must submit the request, including a detailed construction cost estimate, at the time of submittal of the Final Plat or Certificate of Occupancy for other development types to which this Chapter applies.
- C. **Approval & Recording of Final Plat.** The Final Plat may be signed and recorded if:
1. The County and the applicant have executed the contract;
 2. The applicant has provided the required performance guarantee; and
 3. All requirements of this UDO, except the completion of the required improvements, have been met.

7.4.3 FORM OF PERFORMANCE GUARANTEE²⁹

- A. To secure the obligation under the contract, the applicant shall provide any one or a combination of the performance guarantees set forth below to cover the costs of the uncompleted improvements.
1. Surety bond issued by a company authorized to issue such bonds in North Carolina;

²⁹ These provisions are carried forward with minor revisions for consistency with [N.C.G.S. 160D-804.1\(3\)](#) and to reduce redundancies.

2. Letter of credit issued by any financial institution licensed to do business in North Carolina; or
 3. Other form of guarantee that provides equivalent security to a surety bond or letter of credit.
- B. The performance guarantee shall be made payable to Chatham County.
- C. The performance guarantee shall comply with all statutory requirements and shall be satisfactory to the County Attorney as to form and manner of execution as set forth in this Chapter and to the Subdivision Administrator as to sufficiency (i.e., inflation or rising construction costs shall be taken into account of security amount). A copy of the power of attorney for any countersigning agent shall be attached.
- D. A contract, satisfactory to the County as to form, shall accompany any performance guarantee accepted by the County for improvements, and shall be signed and approved prior to recordation of the Final Plat.
- E. The applicant may post one type of a performance guarantee as provided for in 7.4.3A, above, in lieu of multiple bonds, letters of credit, or other equivalent security, for all development matters related to the same project requiring performance guarantees.³⁰
- F. The County Attorney may at any time during the period of the performance guarantee accept a substitution of principal or sureties on the guarantee.

7.4.4 AMOUNT OF PERFORMANCE GUARANTEE³¹

- A. The amount of the performance guarantee shall not exceed 125% of the reasonably estimated cost to complete the required improvements at the time the performance guarantee is issued. The Subdivision Administrator may determine the amount of the performance guarantee or use a cost estimate determined by a registered landscape architect, registered engineer, surveyor, or licensed contractor.
- B. The reasonably estimated cost of completion shall be sufficient to secure the satisfactory construction, installation, and dedication of the incomplete portion of required improvements.

³⁰ This Paragraph is added for consistency with [N.C.G.S. 160D-804.1\(6\)](#).

³¹ The provisions related to the performance guarantee amount are revised for consistency with [N.C.G.S. 160D-804.1\(3\)](#).

- C. The reasonably estimated cost of completion shall include 100% of the costs for labor and materials necessary for completion of the required improvements. Where applicable, the costs shall be based on unit pricing. The additional 25% allowed includes inflation and all costs of administration, regardless of how such fees or charges are denominated.
- D. The amount of any extension of any performance guarantee shall be determined according to the procedures for determining the initial guarantee and shall not exceed 125% of the reasonably estimated cost of completion of the remaining incomplete improvements still outstanding at the time the extension is obtained.
- E. The performance guarantee shall also ensure the installation of all lot improvements on the individual lots of the subdivision as required in these regulations.

7.4.5 COVERAGE OF PERFORMANCE GUARANTEE³²

The performance guarantee shall only be used for completion of the required improvements and not for repairs or maintenance after completion.

7.4.6 DURATION OF PERFORMANCE GUARANTEE

- A. The duration of the performance guarantee shall initially be one year, unless the developer determines that the scope of work for the required improvements necessitates a longer duration.
- B. In the case of a bonded obligation, the completion date shall be set one year from the date the bond is issued unless the developer determines that the scope of work necessitates a longer duration.

7.4.7 EXTENSION OF PERFORMANCE GUARANTEE

- A. The applicant shall demonstrate reasonable, good faith progress toward completion of the required improvements that are the subject of the performance guarantee or any extension.
- B. If the improvements are not completed to the specifications of Chatham County and the current performance guarantee is expiring, the performance

³² Carries forward the last sentence of 3.1.B(1).

guarantee shall be extended, or a new performance guarantee issued, for an additional period until such required improvements are complete.

- C. The form of any extension shall remain at the election of the developer.
- D. If a new performance guarantee is issued, the amount shall be determined by the procedure in 7.4.4: *Amount of Performance Guarantee* and shall include the total cost of all incomplete improvements.³³

7.4.8 RETURN OR RELEASE OF PERFORMANCE GUARANTEE

- A. When the requirements of 7.5.2A: *Certificate of Satisfactory Completion* have been met, the performance guarantee shall be returned or released, as appropriate, in a timely manner upon acknowledgement by the County that the improvements for which the performance guarantee is being required are complete.
- B. The County shall return letters of credit or escrowed funds upon completion of required improvements to the specifications of the County or upon acceptance of the required improvements, if subject to County acceptance.
- C. When required improvements that are secured by a bond are completed to the specifications of the County, upon request by the applicant, the County shall timely provide written acknowledgement that the required improvements have been completed.

7.4.9 FAILURE TO COMPLETE IMPROVEMENTS³⁴

- A. In cases where the required improvements have not been installed in accordance with the contract, the Subdivision Administrator may declare the applicant to be in default and require installation of all the improvements regardless of the extent of the building development at the time of default.
- B. The Subdivision Administrator may take such actions necessary to collect on the security and provide for the completion of the required improvements.

³³ This sentence is added for consistency with [N.C.G.S. 160D-804.1\(1b\)](#).

³⁴ Carries forward SR 3.1.E: Failure to Complete Improvements.

7.4.10 LEGAL RESPONSIBILITIES

No person shall have or may claim any rights under or to any performance guarantee provided pursuant to this Section or in proceeds of any such performance guarantee other than the following:

- A. The County to whom such performance guarantee is provided;
- B. The developer at whose request or for whose benefit such performance guarantee is given; or
- C. The person or entity issuing or providing such performance guarantee at the request of or for the benefit of the developer.

7.5 INSPECTION OF IMPROVEMENTS³⁵

7.5.1 GENERAL PROCEDURE

- A. The County and other reviewing agencies responsible for approval or permitting of the improvements may provide for inspection of required improvements during construction to ensure their satisfactory completion.
- B. If the reviewing agencies find, upon inspection, that any of the required improvements have not been constructed in accordance with the construction standards and specifications of the County or agencies involved, the applicant must correct³⁶ the improvements.
- C. Wherever the cost of improvements is covered by a performance guarantee, the applicant and the bonding company, if applicable, shall be jointly and severally liable for completing the improvements according to specifications.

7.5.2 RELEASE OR REDUCTION OF PERFORMANCE GUARANTEE

A. **Certificate of Satisfactory Completion.**

- 1. The County will not accept the required improvements, nor will the Subdivision Administrator release or reduce the security, until the District Engineer of the NCDOT or other appropriate authority has

³⁵ Carries forward SR 3.2 *Inspection of Improvements*. Relocates from the section pertaining to performance guarantees since [7.5.1: General Procedure](#) applies in all situations, not just those involving a performance guarantee.

³⁶ Replaced the term *complete* with *correct*.

submitted a certificate stating that all required public street improvements have been satisfactorily completed, or until an engineer, surveyor, registered landscape architect, or contractor acceptable to the County has certified that all other required improvements have been completed in conformity with the requirements of this Ordinance.

2. Upon such certification, the County may accept the improvements in accordance with the established procedure and release the performance guarantee.

- B. **Reduction of Security.** A performance guarantee may be reduced upon actual completion of required improvements and then only to the ratio that the required improvements completed bears to the total required improvements for the subdivision.