



GUILFORD COUNTY PLANNING AND DEVELOPMENT

Cellular Tower Placement

OVERVIEW

The Guilford County Development Ordinance (and Town Ordinances administered by Guilford County under contract) defines a Cellular Communication Tower as a “Radio, Television or Communication Tower (principle).” Cellular Towers are treated as a principle use. A tower’s location, size, and height are regulated by the Development Ordinance in the same manner as a structure or building.

DEVELOPMENT STANDARDS

Location: The location or placement of a Cellular Tower is regulated in the following manner:

- 1) Cell Towers are permitted in the **AG** Agricultural, **GO-M** General Office-Medium Intensity, **GO-H** General Office-High Intensity, **GB** General Business, **HB** Highway Business, **CP** Corporate Park, **LI** Light Industrial, **HI** Heavy Industrial, and **PI** Public Institutional zoning districts:
 - a) In the GO-M, GO-H, HB, CP, LI, HI, and PI districts, the tower shall be a minimum of one hundred (100) feet from any residentially zoned property (including AG zoned property).
 - b) In the AG district, the distance of the nearest portion of the tower to any existing residence or RM or RS zoned property shall be one and one-half times the height of the tower for unguyed freestanding towers; or for guyed towers, the area necessary to contain all guy wires and appurtenances plus the district’s required setback for any portion of the tower, guy wires or equipment buildings.
- 2) The Town of Summerfield and the Town of Oak Ridge prohibit new cell towers within designated Scenic Corridors as indicated on their Official Zoning Maps:
 - a) Town of Summerfield: East and West NC 150 along those portions within the town limits of Summerfield, and US 220 along those portions within the town limits of Summerfield.
 - b) Town of Oak Ridge: East and West NC 150 along those portions within the town limits of Oak Ridge, NC 68 along those portions within the town limits of Oak Ridge, and Bunch/Brookbank Road beginning at the Bunch Road/NC 150 intersection extending east along Bunch Road to its intersection with Brookbank

Road then extending east to the town limits of Oak Ridge.

Landscaping: Where adjacent to RM or RS zoned property, the required planting yard shall be landscaped at a Type A planting rate.

General:

- 1) Guy wires, anchors, and supporting cables shall be contained on the same zone lot with the tower and shall not encroach more than one-half the width of the planting yard.
- 2) The zone lot shall be of sufficient size to accommodate the intended use and the planting yard, if required.
- 3) Towers must be located on a separate lot from a single-family residential use. The provisions of Article 4-9 of the Development Ordinance regarding Special Purpose Lots may be applied.
- 4) New towers shall be permitted only if there is no prudent and feasible method to share an existing tower. No triangular platforms greater than fifteen (15) feet on a side shall be permitted. Triangular or T-bar platforms shall not be permitted if mounting of required antennas can be accomplished without such platforms.
- 5) The towns of Summerfield and Oak Ridge have Lighting Ordinances that may affect the lighting standards of the compound and tower. Please refer to their respective ordinance for details.
- 6) Access to the site must be provided by direct frontage from a state-maintained public road or by a 25-foot access easement. The drive must be all-weather construction at least 12 feet wide with a cleared area 16 feet wide to accommodate construction vehicles and emergency vehicles.

CO-LOCATION ANALYSIS

The Development Ordinance requires that all prudent and reasonable efforts be made to co-locate a new cellular antenna on existing towers, or other structures. A co-location analysis is required whenever a tower is within 3 miles of the proposed tower site. The department will evaluate the report with consideration given both to the communication provider’s needs and to the community’s desires to limit new tower construction. If the department determines that co-location is **not** prudent and feasible, a new tower site will be authorized and the project can proceed with site plan and permit approvals. If the department determines that co-location is prudent and feasible, the new tower site will be denied,



requiring co-location on an existing tower or structure.

The co-location analysis report shall be submitted in duplicate and consist of the following items:

- 1) Detailed description of the purpose of proposed site, i.e., capacity or coverage, and area designed to cover;
- 2) Site Plan showing tower location, tower height, ground elevation, and type of tower;
- 3) Detailed description of all existing towers or other structures of significant height within a 3-mile radius of the proposed tower, including height of structure, ground elevation, number of existing users, height available for co-location, if any, and structural deficiencies, if any;
- 4) Propagation maps showing coverage without proposed tower, coverage with proposed tower, and coverage for each co-location possibility. Base maps should include roads and other physical features at a minimum, and;
- 5) Detailed analysis of co-location possibilities including coverage overlap percentages, signal interference problems, etc.

Additional information may be requested after initial review for further analysis. If the department determines that co-location is prudent and feasible after its review, it may submit the information to a radio frequency engineer for an independent analysis.

SPECIAL PURPOSE LOTS FOR CELLULAR TOWERS

A Special Purpose Lot (SPL) may be used to create a lot for cellular towers locating in areas where there is an existing principle use, and a second principle use is not permitted. Generally, this will occur whenever a site is located within the AG zoning district. Special Purpose Lot provisions are to be found in Article 4-9 of the Development Ordinance. Approval of an SPL requires review by the jurisdiction in which the tower is proposed. Special Purpose Lots must be platted before a Certificate of Occupancy can be obtained.

HOW TO OBTAIN A PERMIT TO ERECT A CELLULAR TOWER

Applications for a permit to erect, alter, replace, or co-locate a cellular tower shall be made to the Guilford

County Planning and Development Department. To apply for a permit, the applicant will need to provide the following:

- 1) All site plans must have a completed Guilford County site plan cover sheet, available via the internet at: http://www.co.guilford.nc.us/planning_cms/.
- 2) Nine copies of a site plan meeting the standards of Appendix 2 Map Standards (Site Plan) of the Development Ordinance, including: tower height, setback requirements, access to tower, landscaping, tax lot number, zoning, property owner/developer and address, etc.
- 3) Provide FCC location coordinates for tower in decimal degrees.
- 4) If Special Purpose Lot is required, then a plat meeting Appendix 2 Standards (Preliminary Plat) must be filed.
- 5) All applicable fees are required at time of submission, contact Commercial Permits Facilitator for fee schedule.
- 6) A septic check by the Guilford County Environmental Health Department is required for any site that has a structure on the tract that uses on-site waste disposal systems (septic fields). This requirement is to ensure that the septic system is functioning properly and to ensure that the proposed development does not interfere with the safe operation of the septic system. An additional application and fee is required and will be arranged upon receipt of the site plan submission by the Commercial Permit Facilitator.
- 7) After approval of the site plan, submit construction/engineering drawings to the commercial permits facilitator. Provide structural analysis report for 90 mph wind load and include seismic analysis based on the short and long spectral response acceleration as per the 2000 International Building Code/North Carolina 2002 Code. For questions regarding specific requirements, contact the plans engineer at 641-3334.

ADDRESSING

Staff will assign an E-911 address to the site when the site plan is approved and/or when the Special Purpose Lot is recorded. Guilford County Emergency Services requires that a cellular tower must have the address posted at the public road in which access is available. Also, the site must be posted with the owner's name and contact information and all carrier's names and contacts. These shall be updated when ownership change occurs.

This bulletin is intended for public information purposes only. It summarizes and omits some provisions. It is not to be construed or used as an official Development Ordinance interpretation in any legal proceeding.