DRAFT

Small Cell Wireless Ordinance and Aesthetic Guidelines

Board of Commissioners Meeting Presentation December 11, 2018



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House Bill 310

"An Act to Reform Collocation of Small Wireless Communications infrastructure to Aid in Deployment of New Technologies"

- Effective July 2017
- Limits municipal authority regarding the sitting of small cell wireless facilities and opens up public right of way (ROW) for installation of these facilities.
- Davidson has very limited authority, and likely no authority, to regulate small cell placement in NCDOT ROW. Arguably, some authority to regulate aesthetics in a local historic district.
- New poles may be installed in NCDOT ROW and new antenna placed on existing poles



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House Bill 310 (continued)

- Only permits Davidson to regulate, in a very limited way, small cell installations that occur on private property or town right of way.
- Only NCDOT may regulate small cell placement in the NCDOT ROW
- Some constraints on NCDOT- new poles and new antennas. Height is limited to 50' or greater, depending on the height of existing poles nearby. NCDOT is not required to notify the Town before these installations occur.



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Background

- Mobile data traffic is expected to increase six-fold between now and 2020.
- To cope with demand, wireless providers in NC and across the country looked to supplement the traditional cell tower antenna sites with "small cell facilities"
- Intended to supply additional capacity (data speeds) and additional coverage (better signals) for cell phone users.



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Background (continued)

- "Small" in "small cell" refers to the area of coverage, not the actual size of the installation. Small cell facilities generally base a communication network on closely spaced antenna mounted to shorter poles as compared to traditional networks based on taller and more widely spaced towers.
- Small cell antenna can be attached to existing (or new) streetlight poles, utility poles, traffic signal poles and buildings or placed inside buildings or venues.
 Equipment housed in boxes power the site and provide the connection back to the wireless network.



Cindy Reid, Town Attorney December 11, 2018

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Traditional cell tower

Small cell facilities on a light pole







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What can the Town regulate?

- Public safety regulations
- Objective design standards
- Reasonable/nondiscriminatory stealth/concealment requirements
- Screening/landscaping for ground equipment
- Historic Preservation requirements
- Undergrounding requirements



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Town, NCDOT, and Private Roads

- Private Maintained Roads: 31 miles
 Summers Walk, Davidson East, Bailey Springs, etc.
- State Maintained Roads: 21.53 miles
 Main Street, Concord Rd., Grey Rd.,
 Davidson-Concord Rd., and East Rocky River Rd.
- Town Maintained Roads: 46.26 miles



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Small Cell Installations in Town Right of Way (ROW) or Private Property

The proposed ordinance requires all small cell antenna and equipment to be "stealth" or "concealed" to lessen the visual impact.

The ordinance imposes the most restrictive height limits allowed by the legislation.

Installation of new poles is prohibited by the Town's undergrounding requirements.

Replacement poles in areas used for SF residential may not exceed 40 feet in height



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Location	Collocation Permitted	New pole permitted	Replacement pole permitted
Property zoned or used for single family residential	Stealth only	no	Yes but may not exceed 40 feet
Town ROW (clear zone)	Yes; antenna limited to 10 feet above height of structure	no	Only if pole is breakaway rated and may not exceed 50 feet
Town ROW (outside clear zone); property not zoned or used for SF residential	Yes; antenna limited to 10 feet above height of structure	no	Yes, may not exceed 50 feet
NCDOT ROW	Town cannot regulate	Town cannot regulate	Town cannot regulate



Cindy Reid, Town Attorney December 11, 2018

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Historic Preservation

Municipalities may still regulate wireless facilities in historic districts and on landmarks. Can the municipality regulate new poles on NCDOT Row in the local historic district?

Arguably, yes, but NCDOT cooperation is necessary.



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Collocation and Replacement of existing poles

The placement, installation, maintenance, modification, operation or replacement of wireless facilities on, under, within or on the surface of the earth adjacent to existing structures, including utility poles, city utility poles, water towers, buildings or other structures capable of structurally supporting the attachment of wireless facilities in compliance with applicable codes.

The term "collocation" does not include the installation of new utility poles, city utility poles or wireless support structures."



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Duke Power and Energy United

- Duke Power and Energy United own utility poles and street lights. Town owns 42 light poles in the Knox Court area.
- The Town pays the operating costs of the street lights.
- Dual use streetlights- the street light contains a concealed small cell wireless antenna at the top and associated equipment in a shrouded box on the streetlight pole. As per Ron Stephenson, with Duke Power, Duke requires consent from Town for dual streetlights in Town or NCDOT ROW (DB conversation)



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Duke Energy Joint Use Pole in Charlotte





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Traffic signals or other poles

- HB 310 forces cities to allow collocation on municipally owned traffic signals or other poles that provide lighting, traffic control or a similar function
- In addition the Town must pay for make ready work meaning any work that is required to shore up the existing pole to handle the small cell equipment.



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Small cell wireless equipment on a shared light pole in Huntersville





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Small cell wireless equipment on a shared light pole in Huntersville



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The Town cannot require any of the following in regard to small wireless facilities:

- Services unrelated to the collocation such as reservation of conduit or pole space for town;
- Application may not require info not required of other "communications services providers"; "
- Undergrounding UNLESS town has a non-discriminatory policy; but 40-foot tall poles are permitted through a waiver process
- Moratoria



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Small wireless facilities shot clocks FCC & NC

- Ten days to notify applicant that an application is not complete
- Forty-five days to approve completed applications
- One year to begin service "Mandatory attestation required"
- 180 days to remove after "abandonment"
- Optional: 6 months to begin "collocation", 12 months to "activate for use" but only if included in permit (and ordinance)

Traps for the unwary – notice of incomplete application must explain the "deficiencies" in writing. Re-submissions are deemed complete unless further written notice is made.



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Brief Summary of Small Cell Wireless Ordinance and Aesthetic Guidelines

Lists general application requirements

Permit application including description of the work and a statement as to potential visual and aesthetic impacts of the proposed facility, site plan, compliance with all applicable codes, compliance with FCC regulations, certification of height limit, structural engineering report, etc.

Lists general siting preferences

- Locations
- Spacing
- Alternative Location
- Collocation Required

Lists requirements for Collocation and Objective Design Standards

Only permitted in Town ROW or outside Town ROW on land that is used for non single family residential



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Objective Design Standards

- May not obstruct pedestrian or vehicular traffic
- No advertising or logos
- Small cell facilities shall be stealth
- Ground equipment shall be minimal, least intrusive and blended with natural surroundings
- Service lines underground
- Installed as flush to a pole as possible
- No tree trimming without permission
- Remove or correct al graffiti and vandalism
- Comply with codes



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Next Steps

- April 15 deadline to adopt aesthetic guidelines
- Work with utility companies to iron out process or collocation
- Discussions with NCDOT regarding aesthetic control of installations
- Consult with a telecommunications expert
- Bring back to BOC in February or March



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