

Wireless Facilities Guidelines

The following guidelines are in addition to the requirements in Lenexa City Code Section 4-1-B-23-AE – Wireless Communication Facility. These guidelines are based upon local, state and federal regulations of wireless facilities and the City reserves their right to modify these guidelines should anything change regarding such regulations. If an applicant feels the guidelines create insurmountable obstacles in providing service, the applicant must document and submit evidence that supports waiving any of these guidelines. Cost savings will not be allowed as the sole reason to waive any guidelines. The Community Development Director or designee will make the determination regarding the waiver of any of these guidelines. The City reserves the right to restrict locations or use as a regulatory function for public safety. The primary use of City owned infrastructure is to provide for transportation purposes, including but not limited to, roadway/street pavement, traffic control, and street lighting. City operations, maintenance and repair take priority over wireless facility operations.

Pre-Application Meeting: The City recommends scheduling a pre-application meeting to discuss the proposed siting locations prior to starting the application process. The purpose of this meeting would be to discuss and develop a basic understanding of the proposed permit application and give both parties an opportunity to share their goals and objectives on the proposed project.

Application: Application information can be found in the Wireless Facilities Application. All information must be provided or the application will be denied. Reasons for denial will be given.

Permits and Fees:

- Permit and Fees required in accordance the City’s fee schedule.
- Franchise or right-of-way agreement will be entered into by all parties
- Installation on City owned pole or structure
 - Annual fee of \$270
 - Right of Occupancy Permit may be required
 - Master Attachment Agreement will be entered into by all parties
 - All applicable Franchise or right-of-way agreement fees
- Installation on non-City owned pole or structure
 - Right of Occupancy Permit may be required
 - All applicable Franchise or right-of-way agreement fees
- A complete as-built using city coordinates must be submitted to the City within 90 days of project completion. Failure to do so may result in the forfeiture of any applicable permit.

Timelines:

1. Final decisions for applications related to Wireless Communication Facilities, excluding Small Cell Facility or Distributed Antenna Systems, shall be subject to the following timeframes:
 - a. A final decision on a new Wireless Communication Facility, other than a Small Cell Facility or Distributed Antenna System, shall be issued within 150 days.
 - b. A final decision on substantial changes of Wireless Communications Facilities, as defined by 47 CFR § 1.6100, or any other collocation, removal or replacement of equipment not associated with an existing Wireless Communication Facility shall be issued within 90 days.
2. Final decisions for applications related to Small Cell Facilities or Distributed Antenna Systems shall be subject to the following timeframes:
 - a. A final decision on a new Small Cell Facility or Distributed Antenna System not on an existing structure shall be issued within 90 days.

- b. A final decision on substantial changes of a Small Cell Facility or Distributed Antenna System or any other installation, construction or modification of equipment on an existing structure shall be issued within 60 days.
3. A final decision on all other applications for the installation, construction, modification or operation of Wireless Communication Facilities shall be issued within 60 days.
4. The timeframes for final decision shall commence the day after the date when the application was submitted. If an application is materially incomplete, the City may toll the timeframe by providing written notice to the applicant within 30 days of receipt of the application stating all the missing documents and information, provided, however, the City has 10 days to provide written notice to the applicant if an initial application is materially incomplete. The timeframe is tolled as of the day after the City notified the applicant. The timeframe begins running when the applicant makes a supplemental submission responding to the written notice and provide all documents and information identified in the notice to render the application complete. After a notice of deficiency, the City then has 10 days to notify the applicant that the supplemental submission did not provide the information and documents stated in the original notice. The timeframe is tolled in the case of second or subsequent notices pursuant to this subsection that the supplemental submission was not sufficient to render the application complete and does not start again until the date the applicant submits all the documents and information identified by the City to render the application complete.

General Design Standards for Small Cell Facilities:

All equipment, material, and finishes shall be designed and constructed in accordance with all applicable City specifications including those set forth in Design Standards and Material Finish Requirements For Small Cell Facilities.

A pole attachment or excavation permit for a wireless telecommunication facility that has ground mounted equipment will be issued only if the Community Development Director or designee finds the following:

- Ground mounted equipment will not disrupt traffic or pedestrian circulations
- Ground mounted equipment will not create a safety hazard
- Ground mounted equipment complies with ADA requirements
- The location of the ground equipment minimizes impacts on adjacent property
- Ground mounted equipment will not interfere with the maintenance of the public right-of-way or operations of the City.
- Ground mounted equipment will not adversely impact the health, safety, or welfare of the community.
- Ground mounted equipment will not be allowed within the Planned City Center District.

The wireless telecommunication facility shall not block light emanating from the City owned structure and shall not otherwise interfere with the original use of the City owned structure.

Tree preservation – Every effort to protect the root zone of trees shall be taken. At a minimum, no disturbance shall be allowed within 20’ of a tree.

RF Cutoff - All facilities shall be designed, constructed, operated and maintained in compliance with all generally applicable health and safety standards, regulations, and laws, including without limitation all applicable federal regulations for human exposure to RF emissions. The small cell provider shall provide an RF cutoff switch a maximum of 10 feet from the finished ground surface at the pole location that is

easily reached by maintenance personnel. An RF warning sign shall also be placed on the pole below the cutoff switch.

The City reserves the right to deny any permit to protect the health, safety, welfare of the community.

Traffic Signal – No facilities shall be allowed on existing or proposed traffic signal poles.

Lenexa City Council authorizes the Community Development Director or designee to determine application requirements, design standards, and material finish requirements.

Design Standards and Material Finish Requirements For Small Cell Facilities

1. Pole Attachments and Replacements:

- a. The antenna shall be as small as possible and it shall not be larger than 3 cubic feet and shall have no individual surface larger than four square feet.
- b. The wireless telecommunication facility shall not extend outward from the existing pole by more than 2 feet, except that an antenna one half inch in diameter or less may extend an additional six inches.
- c. The replacement City owned structure, including lightning rods and all other attachments, shall not exceed the height requirements of the existing City owned structure by more than 10%. Once the height of the City owned structure has been increased under the provisions of this section, the height shall not be further increased.
- d. The replacement City owned structure diameter shall not exceed the existing City owned structure by more than 50 percent.
- e. The replacement City owned structure shall match the original or surrounding City owned structures in materials and color.
- f. The applicant shall provide stock poles to be used when damage occurs to existing structures. One stock pole of each type shall be provided with an additional pole for every five installed poles until four poles of each type have been provided. The required inventory must be maintained by the applicant.
- g. Antennas shall not exceed 30 inches in vertical length nor exceed 15 inches in width or depth.
- h. Antennas and Antenna Accessories - City owned structure attached equipment shall not exceed 75 pounds (combined weight). These include but are not limited to filters, combiners, splitters, remote radio heads, tower-mounted amplifiers, line-mounted amplifiers, and low-noise amplifiers. All equipment shall be arranged evenly, proportionate, equidistant, and aligned as practical to function and operations. Cabling and wiring between accessories to antennas shall be minimized and consolidated. Cabling and wiring schematics are required as part of the construction documents.
- i. Structure mounted equipment shall be mounted at least eight feet above grade.
- j. Ground Mounted Equipment associated with the wireless telecommunication facility shall meet the following performance standards:
 - Be separated from the sidewalk by minimum of 2 feet;
 - Be set back a minimum of 20 feet from the nearest intersecting right-of-way line;
 - Be separated from the nearest wireless telecommunication equipment installation on the same block face by a minimum of 150 feet;
 - Ground mounted equipment shall be as small as possible and 28 cubic feet in cumulative size

- k. Area of installation shall be restored to a condition equal to or better than prior to construction.
- l. Stand-alone poles should not be placed in front of the main windows of a house in residential areas. Preferably stand-alone poles should be placed on a lot line between two residential lots when possible. Minimum spacing of stand-alone poles should be 150’.
- m. Conduits are not permitted on the outside of any City-owned structure.
- n. All cabling and wiring shall be internal to the pole as much as practical.
- o. The Service Provider shall provide a network internet connection at each small cell site for the City to use. The network connection can be any one of the following:
 - i. An RJ45 copper Ethernet port with a weatherproof connection with internet access.
 - ii. A wireless compatible internet access service.
 - iii. A dark fiber strand that connects to the City’s fiber optic network.For items i or ii the service shall have a minimum 100 Mbps upload and download speed, and unlimited data. All services shall be at no additional cost to the City and be maintained for as long as the antenna is attached to the pole.

2. **Material and Finish Requirements:**

- a. Finishes: All replacement poles and equipment, including mounts, attached to the City owned structure shall match the finish of the existing or new City owned structure. Finishes shall be permanent or long-lasting. No temporary finishes will be approved. The City reserves the right to direct any permit holder to renew or maintain any finish to attached equipment.
- b. Fasteners: All fasteners for equipment use shall be denoted in construction documents for the strength, composition, coating, and exposure rating. No plastic fasteners shall be allowed, to include tie wraps and jacketed cable ties. Fasteners must be compatible to adjacent material to inhibit corrosion. All fasteners shall be the same color as the pole.
- c. Mounts: Any accessory mounting hardware shall be included in structural analysis performed for the Wireless Telecommunication Facility by a professional engineer as part of the construction documents. Mechanical connections by compressive force (e.g., collar or banded mounts) are permitted. Chain and magnetic mounts, along with chemical bonding or adhesive attachment methods are prohibited. Mount dimensions and weight should be included in the measurement of antennas and equipment to determine whether the antennas or equipment are within the size limitations established in the guidelines. A mount shall be as compact a possible, trimmed where practical, and not reserving space for future equipment attachments.
- d. Cables and Wires
 - Cables, including wires, must be neatly dressed and not containing any exposed slack other than drip loops. Drip loops shall be used with minimum excess cable to promote water egress. All cables and wires shall be jacketed and insulated; and concealed or enclosed where applicable and practical. Cables and wires must transition to conduit or City owned structure via weather tight and pest-resistant ports. Ports shall be mechanically sealed with weather heads or boots. Sealer to close voids (e.g., spray foam, silicone, and fire stop) are not permitted. Xcluder gaskets must be installed at the base of the pole.

- All cables and wires shall be placed inside the pole unless equipment is less than 2 inches apart then cabling should be consolidated and dressed neatly.

e. Grounding and Bonding

- All metallic and energized components of equipment must be bonded and have a separate ground from the pole. There shall be a common ground wire from the highest above-grade attached equipment to below grade. The central ground wire will not be smaller than 6AWG stranded. All ground wire shall be insulated in a green-colored nonconductive manufacturer-applied covering. The below-grade ground will consist of one half-inch ground rod, ten feet in length, driven to below grade. A connection to ground rods shall be made by exothermic weld. All equipment with manufacturer-installed ground posts shall be bonded to ground using a hydraulically crimped lug. All ground connections shall be tool-tight and not able to be loosened by hand. A non-corrosive bonding agent shall be used between all dissimilar ground metals. Ground plans are to be depicted on construction documents. Permit holders are to provide resistance to ground testing after a completed installation to be made part of the construction documents.