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Crossville, TN Code of Ordinances

CHAPTER 9: TELECOMMUNICATIONS FACILITIES

Section

§ 14-901 DEFINITIONS.

ALTERNATIVE STRUCTURE. A structure that is not primarily constructed for the purpose of holding antennas but on which one or more antennas may be mounted, including but not limited to buildings, water tanks, pole signs billboards, church steeples, electric power transmission poles/towers, and streetlights.

ANTENNA. Any apparatus designed for the transmitting and/or receiving of electromagnetic waves, including telephonic, radio or television communications. Types of elements include omni-directional (whip) antennas sectionalized or sectorized (panel) antennas, multi or single bay (FM & TV) yagi, or parabolic (dish) antennas, or any other antenna elements approved by the Director of Information Technology Services or his delegate.

BASE STATION. Equipment and non-tower supporting structure at a fixed location that enable wireless telecommunications between user equipment and a communications network. Examples include transmission equipment mounted on a rooftop, water tank, silo or other above ground structure other than a tower. The term does not encompass a tower as defined herein or any equipment associated with a tower. ***BASE STATION*** includes, but is not limited to: equipment associated with wireless telecommunications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul; radio transceivers, antennas, coaxial or fiber optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including Distributed Antenna Systems and small-cell networks); any structure other than a tower that, at the time the application is filed under this section, supports or houses equipment described in this definition that has been reviewed and approved, or under another city regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support. ***BASE STATION*** does not include any structure that, at the time the application is filed under this section, does not support or house wireless communication equipment.

BREAKPOINT TECHNOLOGY. The engineering design of a monopole, or any applicable support structure, wherein a specified point on the monopole is designed to have stresses concentrated so that the point is at least 5% more susceptible to failure than any other point along the monopole so that in the event of a structural failure of the monopole, the failure will occur at the breakpoint rather than at the base plate, anchor bolts, or any other point on the monopole.

CO-LOCATION. The mounting or installation of transmission equipment on an eligible support structure for the purposes of transmitting and/or receiving radio frequency signals for communications purposes so that installation of a new support structure will not be required, including an eligible facilities request or a qualified co-location request.

CELLULAR ON WHEELS (COW). A temporary PWSF placed on property to provide short term, high volume telecommunications services to a specific location and which can be easily removed from the property.

DISTRIBUTED ANTENNA SYSTEM (DAS). A system consisting of:

(1) A number of remote communications nodes deployed throughout the desired coverage area, each including at least one antenna for transmission and reception;

(2) A high capacity signal transport medium (typically fiber optic cable) connecting each node to a central communications hub site; and

(3) Radio transceivers located at the hub site (rather than at each individual node as is the case for small cells) to process or

control the communications signals transmitted and received through the antennas.

DOWNTOWN BUSINESS DISTRICT. The Downtown Business District shall be designated as Main Street and all right-of-way abutting Main Street from the intersection of Lantana Road to the intersection of Neecham Street.

ELIGIBLE FACILITIES REQUEST. Any request for modification of an existing tower or base station involving co-location of new transmission equipment; removal of transmission equipment; or replacement of transmission equipment that does not substantially change the physical dimensions of such tower or base station.

ELIGIBLE SUPPORT STRUCTURE. Any tower or base station existing at the time the application is filed. For purposes of this chapter, the definition of ***ELIGIBLE SUPPORT STRUCTURE*** shall include utility structures currently hosting fiber, cable and wire.

PEDESTRIAN TRAVELWAY. The portion of a sidewalk or multi-use path intended to facilitate the unobstructed through movement of pedestrians and/or bicyclists.

PERSONAL COMMUNICATION SYSTEM CARRIER (PCSC). Telecommunications carriers that bundle voice communications, numeric and text messaging, voice-mail and various other features into one device, service contract and bill. PCSC are carried over cellular links, most often digital.

PERSONAL WIRELESS SERVICE FACILITY (PWSF). Any staffed or unstaffed location for the transmission and/or reception of radio frequency signals or other personal wireless communications, including commercial mobile services, unlicensed wireless services, wireless broadband services, and common carrier wireless exchange access services as defined in the Telecommunications Act of 1996, and usually consisting of an antenna or group of antennas, transmission cables, feed lines, equipment cabinets or shelters, and may include a tower. Facilities may include new, replacement, or existing towers, replacement towers, co-location on existing towers, base station attached concealed and non-concealed antenna, dual purpose facilities, concealed towers, and non-concealed towers (monopoles, lattice and guyed), so long as those facilities are used in the provision of personal wireless services as that term is defined in the Telecommunications Act.

QUALIFIED CO-LOCATION REQUEST. Co-location of PWSF on a tower or base station that creates a substantial change in the facility but is entitled to processing within 90 days under 47 U.S.C. § 332(c)(7).

SMALL CELL FACILITY. A wireless service facility that either meets both of the following qualifications or is within a stealth design that is consistent with the design guidelines:

(1) Each antenna is located inside an enclosure of no more than five cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an enclosure of no more than five cubic feet, however, the maximum dimensions of the antenna shall not exceed 36" in height and 16" in diameter; and

(2) Primary equipment enclosures are no larger than 17 cubic feet in volume. The following associated equipment may be located outside of the primary equipment enclosure and, if so located, is not included in the calculation of equipment volume: Electric meter, concealment, telecommunications demarcation box, underground enclosures, back-up power systems, grounding equipment, power transfer switch, and cut-off switch.

SMALL CELL NETWORK. A collection of interrelated small cell facilities designed to deliver wireless service.

SUBSTANTIAL CHANGE. A modification or co-location constitutes a "substantial change" of an eligible support structure if it meets any of the following criteria:

(1) A telecommunications facility co-location on an existing structure within a public right of way increases the overall height of the structure, antenna and/or antenna array more than 10% or ten feet, whichever is greater.

(2) A telecommunications facilities co-location for towers not in a public right of way protrudes from the structure more than 10% or 20 feet whichever is greater or the width of the structure at the elevation of the co-location, and for towers within a public right of way, protrudes from the structure more than six feet.

(3) A telecommunications facility co-location on an existing structure fails to meet current building code requirements (including windloading).

(4) A telecommunications facility co-location adds more than four additional equipment cabinets or one additional equipment shelter.

(5) A telecommunications facility co-location requires excavation outside of existing leased or owned parcel or existing easements.

(6) A telecommunications facility co-location defeats any existing concealment elements of the structure.

(7) A telecommunications facility co-location fails to comply with all conditions associated with the prior approval of the structure except for modification of parameters as permitted in this section.

SUPPORT STRUCTURE. Anything constructed or erected, the use of which requires permanent location on the ground, or attachment to something having a permanent location on the ground, including alternative structures, but excluding antennas.

TELECOMMUNICATIONS FACILITY. One or more antenna, tower, base station, mechanical and/or electronic equipment, conduit, cable, fiber, wire, and associated structures, enclosures, assemblages, devices and supporting elements that generate, transmit or produce a signal used for communication that is proposed by an entity other than the Metropolitan Government, including but not limited to radio/tv/satellite and broadcast towers, telephone service, including new microwave or cellular towers, PWSF, DAS, small cell facilities and COW's.

TOWER. Any support structure built for the primary purpose of supporting any antennas and associated facilities for commercial, private, broadcast, microwave, public, public safety, licensed or unlicensed, and/or fixed or wireless services. A tower may be concealed or non-concealed. Non-concealed towers include:

(1) ***GUYED.*** A style of tower consisting of a single truss assembly composed of sections with bracing incorporated. The sections are attached to each other, and the assembly is attached to a foundation and supported by a series of wires that are connected to anchors placed in the ground or on a building.

(2) ***LATTICE.*** A self-supporting tapered style of tower that consists of vertical and horizontal supports with multiple legs and cross bracing, and metal crossed strips or bars to support antennas.

(3) ***MONOPOLE.*** A style of freestanding tower consisting of a single shaft usually composed of two or more hollow sections that are in turn attached to a foundation. This type of tower is designed to support itself without the use of guy wires or other stabilization devices. These facilities are mounted to a foundation that rests on or in the ground or on a building's roof. All feed lines shall be installed within the shaft of the structure.

TRANSMISSION EQUIPMENT. Equipment that facilitates transmission oi communication service (whether commercial, private, broadcast, microwave, public, public safety, licensed or unlicensed, fixed or wireless), including but not limited to radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply.

(Ord. 1555, passed 11-7-2017)

§ 14-902 TELECOMMUNICATIONS FACILITY.

(A) *Application requirements.* An applicant for a telecommunications facility, including co-locating on an eligible support structure or adding transmission equipment to an alternative structure shall provide the codes department with the following information at the time of application for the final site plan or building permit (for eligible facilities requests, it is not necessary to meet the requirements of divisions (4) through (7), below):

(1) A schematic site plan, including schematic landscape plan for any application where landscaping is required, and an elevation view of the type of facility to be placed on the site. The site plan shall depict where the facility is to be located on the site and where additional co-located communication equipment, shelters or vaults will be or can be placed.

(2) If the application is not for co-location, a statement justifying why co-location is not possible. Such statement shall include:

(a) Such structure and technical information and other justifications as are necessary to document the reasons why co-location is not possible; and

(b) The applicant shall provide a list of all eligible support structures and alternative structures considered as alternatives to the proposed location The applicant shall provide a written explanation why the alternatives considered were impossible due to technical or physical alternatives.

(3) Identification of any radio frequencies that would be utilized on the telecommunications facility. If any frequency is later changed, notice of the new frequency shall be provided to the Information Technology Services (ITS) Department. The city reserves the right to immediately require the discontinuance of any radio frequency that causes interference with the City of Crossville and Cumberland County Communications System.

(4) The applicant shall demonstrate that through location, construction, or stealthing, the proposed facility or network of facilities will have minimum visual impact upon the appearance of adjacent properties and the views and vistas from adjacent residential neighborhoods and pedestrian environment while retaining viable opportunities for future co-location, provided applications for designs consistent with the design guidelines provided for in division (7) of this section shall be deemed to have met the requirement of this subsection.

(5) Documentation of the number of other users that can be accommodated within the design parameters of the telecommunications facility as proposed.

(6) A statement indicating the owner's commitment to allow feasible shared use of the facility within its design capacity for co-location.

(7) The proposed site plan and stamped engineering design plans meet or exceed all applicable standards, including without limitation those of the Federal Communications Commission (FCC), American National Standards Institute (ANSI), and Institute of Electrical and Electronics Engineers (IEEE) standards for power density levels and structural integrity, American Concrete Institute (ACI), American Standards Testing and Materials Institute (ASTM), the National Electrical Code, and the American Steel Institute. The telecommunications facility must comply with building codes and other federal, state, and local regulations, Applicant must also comply with Section 106 of the National Historic Preservation Act of 1966.

(8) Copy of signed lease and/or agreement for the use of the property, if not owned by applicant.

(B) *Downtown Business District.* For the purposes of this chapter the downtown business district shall be designated as Main Street and all right-of-way abutting Main Street from the intersection of Lantana Road to the intersection of Neecham Street. The City of Crossville and its residents have a vested interest in the aesthetics and the preservation of the downtown business district.

(1) Any and all standalone telecommunication equipment shall be prohibited in the downtown area and must be placed behind the main thoroughfare of the downtown business district in the right-of-way or private property located off of side or back streets.

(2) Standalone equipment may be located on the tops of buildings in the downtown business district provided such consent is given by the individual property owners.

(3) Nothing in this section shall waive the permit requirements set out in other provisions of this chapter.

(C) *Co-location requirements.* Co-location or location on existing alternative structures is required where possible. New telephone service towers of a height of more than 100 feet and less than 200 feet must be designed and built to accommodate three or more personal communication system carrier applications and must be made available upon reasonable terms for co-location to at least three additional single antenna applications such as 911 and emergency management communications. Additionally, the site must be sufficiently large enough to accommodate at least three telecommunication equipment shelters, cabinets, or additions to existing structures. New telephone service towers of a height of 200 feet or more must be designed and built to accommodate at least three personal communication system applications and at least three additional single antenna applications plus at least one additional personal communication system application and at least one additional single antenna application for each additional 50 feet of height, to a maximum of six personal service communication system carriers and six single antenna applications, to be made available upon reasonable terms for co-location.

(D) *Removal of abandoned telecommunication facilities.*

(1) Any telecommunication facility that is replaced with a new or updated telecommunication facility, including conduit, wire or cable, or any telecommunication facility permitted under this chapter that is not operated as a personal communication system carrier application for a continuous period of 12 months shall be considered abandoned and the owner of such telecommunication facility shall notify the Codes Department of the abandonment and remove same within 90 days. Failure to do so shall be deemed to be a violation of these regulations and be filed with the Administrative Hearing Officer according to § 12-1101 et. seq. of the Crossville Municipal Code. The owner of the antenna or tower will be notified to appear before the Administrative Hearing Officer to show just cause why the antenna or tower should not be considered abandoned and subject to removal. Judicial review of the final order of the Administrative Hearing Officer is available under T.C.A. 6-54-1017.

(2) If a provider fails to fully comply with a demand by the city pursuant to this section promptly or by the date specified by the city, the city shall have the right to: (i) declare that all rights and title to and interest in the affected equipment or facilities are the property of the city; and/or (ii) move, alter, relocate, or remove any such equipment or facilities and restore the affected public right-of-way as it deems necessary. The provider shall reimburse the city for any costs incurred ir moving, altering, relocating, or removing any equipment or facilities and restoring the affected public right-of-way in an amount equal to the sum of the actual cost of moving, altering, relocating, or removing any equipment or facilities and restoring the affected public right-of-way and 25% of such costs as compensation to the city for general overhead and administrative expenses associated with such work and shall make any payment due as directed by the city and not later than 20 calendar days after receipt of a bill.

(E) *Telecommunication facilities outside of the public right-of-way.*

(1) New support structures or substantial changes to eligible support structures 150' and greater, shall be designed to accommodate a minimum of three PWSF providers. This number shall be inclusive of any emergency management communication systems.

(2) A permit for a COW is limited to 30 days, but when circumstances reasonably warrant, the permit may be renewed.

(3) Additional provisions for substantial changes to eligible support structures or placement of new telecommunications equipment on alternative structures.

(a) New telecommunications equipment placements on alternative structures, shall be designed with screening and other stealth elements so as to minimize the visual impact from a pedestrian viewpoint within any abutting public right of way, excluding alleys, even after any eligible facilities request. Once said alternative structure is approved and becomes an eligible support structure, any subsequent modifications must meet established design guidelines.

(b) Communication equipment or any new structure that is integrated as an architectural feature of a structure so that the purpose of the facility for providing wireless services is not readily apparent to a casual observer or which is concealed within a building or structure so that it is architecturally indiscernible may be permitted subject to building permit procedures and standards. Architecturally indiscernible shall mean that the addition or feature containing the antenna is architecturally harmonious in such aspects including but not limited to material, height, bulk, scale and design with the building or structure to which it is to be a part.

(4) *Additional provisions for towers.*

(a) *Setbacks.* A tower shall be set back from all property lines on which the tower is located by the distance equal to the height of the lowest engineered break point on the proposed structure or the height of the tower (fall zone).

(b) *Lights.* No lights shall be permitted on a tower except such lighting that is required by state or federal law.

(c) *Height.* The maximum height of a tower shall be in compliance with airport zoning regulations (Crossville Municipal Code § 14-202). Guy wire anchors, if used, shall be set back a minimum of five feet from all property lines.

(d) *Final site plans.* Final site plans for a tower shall be accompanied by a certification from a qualified structural engineer that the tower has sufficient structural integrity and equipment space to accommodate multiple users shall be required at the time of applying for a building permit.

(e) *As-builts.* Stamped engineered drawings showing final construction details and location of the tower and associated buildings.

(5) Generators shall be placed in a building with sufficient barriers to eliminate any noise being heard from outside of the building.

(F) *Telecommunication facilities inside the public rights-of-way.*

(1) All facilities to be located inside public rights-of-way shall be required to obtain a permit as outlined in § 14-903. Permit applications will be reviewed and may be rejected should they be found to be in conflict with the City of Crossville's 10-Year Capital Plan, the City of Crossville and Planning Commission's Major Thoroughfare Plan, the Tennessee Department of Transportation's 10-Year Plan, existing setback requirements, utility easements, or create a safety hazard.

(2) New support structures or substantial changes to eligible support structures 150' and greater, shall be designed to accommodate a minimum of three PWSF providers. This number shall be inclusive of any emergency management communication systems.

(3) A permit for a COW is limited to 30 days, but when circumstances reasonably warrant, the permit may be renewed.

(4) Additional provisions for substantial changes to eligible support structures or placement of new telecommunications equipment on alternative structures.

(a) New telecommunications equipment placements on alternative structures, shall be designed with screening and other stealth elements so as to minimize the visual impact from a pedestrian viewpoint within any abutting public right-of-way, excluding alleys, even after any eligible facilities request. Once said alternative structure is approved and becomes an eligible support structure, any subsequent modifications must meet established design guidelines.

(b) Communication equipment or any new structure that is integrated as an architectural feature of a structure so that the purpose of the facility for providing wireless services is not readily apparent to a casual observer or which is concealed within a building or structure so that it is architecturally indiscernible may be permitted subject to building permit procedures and standards. Architecturally indiscernible shall mean that the addition or feature containing the antenna is architecturally harmonious in such aspects including but not limited to material, height, bulk, scale and design with the building or structure to which it is to be a part.

(5) *Additional provisions for towers.*

(a) *Setbacks.* A tower shall be set back from all property lines on which the tower is located by the distance equal to the height of the lowest engineered break point on the proposed structure or the height of the tower (fall zone).

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(d) *Final site plans.* Final site plans for a tower shall be accompanied by a certification from a qualified structural engineer that the tower has sufficient structural integrity and equipment space to accommodate multiple users shall be required at the time of applying for a building permit.

(e) *As-builts.* Stamped engineered drawings showing final construction details and location of the tower and associated buildings.

(6) Generators shall be placed in a building with sufficient barriers to eliminate any noise being heard from outside of the building.

(G) Recommendations and other actions from departments of the city government. Prior to the consideration of a variance for or issuance of a permit for a telecommunication facility, the following departments shall submit recommendations or approvals to the Codes Administrator that describe compliance with all applicable design guidelines or other regulations:

(1) Planning Commission.

(2) Department of Information Technology Services shall provide a recommendation on all permits, with regard to the issue of interference with city and county facilities.

(3) Street Department.

(4) Water/Sewer Utilities.

(5) City Clerk.

(H) The review shall be completed within 45 business days of the filing of the application, all required documentation, and applicable fees.

(Ord. 1555, passed 11-7-2017)

§ 14-903 NON-CONFORMING STRUCTURES.

(A) All non-conforming structures which, prior to enactment of this chapter, were legally erected, and which are existing and properly maintained, shall be allowed to remain and shall be considered as "grandfathered" in place. These structures may not be enlarged in any manner.

(B) As of the effective date of this chapter, the structure may not be totally replaced. Maintenance and repairs to the structure will only be allowed if over 50% of the structure is in good condition. If the structure is over 50% in disrepair, it must be removed completely.

(C) Any upgrade to the equipment will be required to obtain a permit and subject to current rates and fees.

(Ord. 1555, passed 11-7-2017)

§ 14-904 FEES.

(A) *Plan review fee.* Each application shall be accompanied by a $200 plan review fee. This fee will be charged per site.

(B) *Building permit.* Upon approval of the plans, a building permit fee will be assessed per site based on the construction cost, with a minimum fee of $200.

(C) *Annual permits and fee.*

(1) An annual fee of $25 per location will be required.

(2) Annual fees will be immediately due upon adoption of this chapter, including pre-existing and non-conforming structures (described in § 14-903).

(3) No annual fee will be charged for the calendar year in which a building permit is obtained.

(4) The annual fee is due and payable between January 1 and February 1 of each calendar year, beginning in 2018. If the annual fee is not paid by February 1, the structure may be declared illegal and removed at owner's expense.

(Ord. 1555, passed 11-7-2017)

§ 14-905 GENERAL REQUIREMENTS.

(A) *Electricity for alternate structures.* The City of Crossville will not be responsible for supplying electricity to any alternate structures, as described in § 14-901.

(B) *Spacing.* All telecommunication facilities constructed and installed under this chapter of the Crossville Municipal Code must be spaced at least 500' apart from any other facility or structure.

(C) Alternative structures must be capable of serving multiple carriers.

(Ord. 1555, passed 11-7-2017)