

Section 621 WIRELESS TRANSMISSION FACILITIES

Section 621.1 Intent

These regulations shall apply to wireless transmission facilities located within the unincorporated territory of Washington County, Tennessee. The purpose of these requirements are to provide for wireless transmission services while minimizing the potential negative impact of these facilities on neighboring properties. Reasonable technical standards and site plan review procedures will be used to carefully and fairly evaluate the placement and impact of wireless transmission facilities.

Section 621.2. Definitions

621.2.1 Alternative Tower Structure – shall mean a type of monopole tower structure camouflaged to appear as a tree, clock tower, light pole, flag pole, farm silo, or similar man-made structure to conceal the presence of antennas and/or towers.

621.2.2 County means Washington County, Tennessee

621.2.3 Planning Commission means Washington County, Tennessee Regional Planning Commission

621.2.4 BOZA means Washington County Board of Zoning Appeals

621.2.5 Mature System – shall mean an existing wireless transmission facility at the time of the original adoption of Washington County’s Wireless Transmission Facilities resolution.

621.2.6 Tower – shall mean the base of any wireless transmission facility; including, but not limited to, a self-supporting tower and/or monopole, together with any antennae or other appurtenances.

621.2.7 Tower Structure – shall mean a wireless transmission facility constructed as a lattice tower with or without guy wires, as an alternative tower structure, or as a monopole tower; primarily for the purpose of supporting an antenna array; and support buildings and equipment; excluding equipment under thirty (30) feet in height used for amateur radio communication.

621.2.8 Urban Growth Area (UGA) – shall mean that land that falls within the urban growth boundaries of the City of Johnson City or the Town of Jonesborough that were established in conformance with the provisions of Public Chapter 1101 of 1998, and as reflected in the Washington County 1101 Map. Urban Growth Areas are territory where high density residential, commercial, and industrial growth is expected.

621.2.9 User – shall mean any wireless telecommunications carrier utilizing wireless transmission facilities for the purpose of production or transmission.

621.2.10 Wireless Transmission Facilities – shall include buildings, cabinets, structures and facilities, including generating and switching stations, repeaters, antennas, transmitters, receivers, towers and all other buildings and structures relating to low-power mobile voice transmission, data transmission, video transmission, and radio transmission, or wireless transmission, accomplished by linking a wireless network of radio wave transmitting devices (including, but not limited to wire, cable, fiber optics, laser, microwave, radio, satellite, portable phones, pagers, mobile phones, or similar facilities) to the conventional ground-wired communications system (including, but not limited to telephone lines, video, and/or microwave transmission) through a series of short range, contiguous cells that are part of an evolving cell grid

Section 621.3 Procedures

621.3.1 The construction and maintenance of wireless transmission facilities is provided for in this resolution through a procedure which requires approval by the Washington County, Board of Zoning Appeals or the Washington County Regional Planning Commission, or both. Wireless transmission facilities are permitted as a “special exception” within the R-1, R-1A, R-1B, R-2, R-2A, R-3, R-3A, and Planned Residential Districts. Wireless transmission facilities are permitted, subject to site plan review by the Planning Commission within all zoning districts. These uses shall be subject to such additional conditions the Planning Commission may require to preserve and protect the character of the district in which the use is proposed.

621.3.3 Providers shall show and submit the following:

621.3.3.1 Show there is an existing, significant gap in service within the community.

621.3.3.2 Show the manner in which is proposes to fill the significant gap in service is the LEAST intrusive based on aesthetic and visual effects and effect on neighboring homes or buildings.

621.3.2 Within a designated Urban Growth Area (UGA), wireless transmission facilities shall be of the alternative tower type subject to Washington County Planning Commission approval. The following regulations shall apply:

621.3.2.1. Alternative tower structures shall be permitted only as a special exception in the county’s A-1, A-2, A-3, R-1, R-1A, R-1B, R-2, R-2A, R-3, R-3A, and Planned Residential Districts.

621.3.2.2. The county will afford the municipality the opportunity to review proposed tower projects within their designated UGA and any municipality recommendation will be reported to the Planning Commission.

621.3.2.3 All other regulations shall be as per Washington County Zoning Resolution, Article VI, Section 621 shall apply.

Section 621.4. Site Plan Required

The owner or authorized agent of any property proposed for the location of a wireless transmission facility within the unincorporated areas of Washington County, Tennessee shall prepare and submit a site plan meeting the requirements of this resolution.

In addition, the owner or authorized agent shall submit:

621.4.1. Information showing the relationship of the proposed development to:

- a. The existing street system.
- b. Existing zoning districts within a 500’ radius.
- c. The names and addresses of all property owners within a 500’ radius.

621.4.2. The distance to and the location of the nearest adjacent wireless transmission facility.

621.4.3. A location map indicating the proposed facility and all surrounding wireless transmission facilities within a radial distance of 2500 feet.

Section 621.5 Preliminary Plan

The site plan approved by the Planning Commission shall be valid for a period not to exceed one year. If construction of the wireless transmission facility is not 80% complete within one year and completed within 18 months of Washington County approval, the applicant shall be required to resubmit plans for appropriate review under the technical standards and review procedures applicable at the time of resubmission.

Section 621.6. General Provisions Co-location; Design Requirements

In addition to all applicable building and safety codes, all towers, except amateur radio towers, shall be designed to accommodate the co-location of cellular telecommunication antennas according to the following:

621.6.1. For towers up to 150 feet in height, the structure and fenced compound shall be designed to accommodate at least two providers, and

621.6.2. For towers greater than 150 feet in height but less than 195 feet, the structure and fenced compound shall be designed to accommodate at least three providers.

Section 621.7. Co-location; Availability of Suitable Existing Structures:

No new tower, except amateur radio towers, shall be permitted unless the applicant demonstrates to the satisfaction of the Planning Commission that no existing tower or existing alternative tower structure can accommodate the applicant's proposed antenna. All evidence submitted shall be signed and sealed by appropriate licensed professionals or qualified industry experts. Evidence submitted to demonstrate that no existing tower or structure can accommodate the proposed antenna shall consist of one or more of the following:

621.7.1. That no existing towers or suitable alternative tower structures are located within the geographic antenna placement area required to meet the applicant's engineering requirements.

621.7.2. That existing towers or structures are not of sufficient height to meet the applicant's engineering requirements.

621.7.3. That existing towers or structures do not have sufficient structural strength to support the applicant's antenna and related equipment.

621.7.4. That the applicant's proposed antenna (s) would cause electromagnetic interference with the antenna (s) on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna.

621.7.5. That the cost or contractual provisions required by the tower owner to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable. Costs exceeding new tower development are presumed to be unreasonable.

621.7.6. That the applicant adequately demonstrates that there are other limiting factors that render existing towers and structure unsuitable.

Section 621.8. Administrative Approvals for Co-Location on Existing Wireless Telecommunication Support Structures:

General

The County Planning director may administratively approve the co-location of additional antenna(s) upon existing wireless telecommunication support structures based on the applicant providing the following information:

621.8.1 That the co-location does not require the height of the existing structure to be lighted;

621.8.2 That the co-location does not require the height of the existing structure to exceed the height limitation of the authority;

621.8.3 That the applicant provides additional information, including:

- a. Tax map and parcel number of subject property;
- b. A scaled site plan with supporting drawings, signed by a licensed professional, showing the location and dimensions of all improvements, including the tower height.

621.8.4 Administrative approval is subject to the applicant providing the above information. If the applicant requests a variance to the above standards, the applicant shall make application to the Planning Commission or Board of Zoning Appeals as determined by the Planning director.

Section 621.9. Technical Standards

621.9.1. No Wireless Transmission Facility shall be located closer than 2500 feet of any existing wireless transmission facility except in the instance of co-location or if proposed adjacent to a mature wireless facility (within 100 feet).

621.9.2. Towers located in any A-1, A-2, A-3, R-1, R-1A, R-1B, R-2, R-2A, R-3, R-3A or PRD shall be located on a single lot with a minimum frontage on a public street of 40 feet. The minimum distance from the base of a tower to any adjacent property or street right-of-way shall be equivalent to or greater than the height of the tower plus 25 feet. Except for wireless transmission facilities necessary for the proposed tower, no buildings or structures shall be located within this required "clear fall zone." All other applicable provision of the Washington County Zoning Resolution shall apply.

621.9.3. Towers located in any B-1, B-2, B-3, B-3A, B-4, M-1, M-2 and PBD and PMD zoning districts which shall be located on a lot which adjoins a residential district shall be located from any such residential district a distance equivalent to or greater than the height of the tower plus 25 feet.

621.9.4. Towers located in any B-1, B-2, B-3, B-3A, B-4, M-1, M-2, PBD and PMD district which shall be located on a lot which does not adjoin a residential district shall be located in such a manner as set forth above unless the proposed tower is certified by a licensed structural engineer to be designed to collapse inward into its self in the event of structural failure. In such an instance the setbacks from property lines will become the outer boundary of the identified clear fall zone. In all cases, the standard setbacks established for each zone by the Washington County, Tennessee Regional Planning and Zoning Resolution must be met.

621.9.5. National Standards – The applicants engineer shall provide documentation that the proposed wireless transmission facility meets or exceeds the standards of the American National Standards Institute (ANSI) for professionally acceptable radio frequency emissions standards.

621.9.6. Tower Height and Altitude Restrictions – Maximum tower height shall be 195 feet unless specifically allowed due to topographic conditions located within one (1) mile of the proposed wireless transmission facility. No wireless transmission facility shall extend more than 150 feet above the ridgeline or tree line of the surrounding knob areas.

621.9.7. Structural Requirements – Prior to the approval of any tower in excess of thirty-five (35) feet in height, the applicant shall provide the Board of Zoning Appeals and/or Planning Commission with written certification from a registered structural engineer that the tower is able to minimally withstand winds of 70 miles per hour with 1/2 inch radial ice, as per the ANSI Standards and/or 100 miles per hour and/or 130 MPH wind gusts, whichever is greater. For towers placed on

buildings, the applicant shall also provide the Board of Zoning Appeals and/or Planning Commission such written certification plus evidence that the building itself is structurally capable of supporting the tower and its' accompanying equipment. The tower must not affect the structural integrity of the building.

621.9.8. Shared Use – Co-Location Sites - The shared use of existing towers or the placement of towers less than thirty-five (35) feet in height at locations adjacent to a mature wireless facility, or wireless transmission facilities incorporated within existing power transmission line towers, shall be encouraged whenever possible.

621.9.8.1. The applicant shall also address the extent to which shared use of the proposed tower will be allowed in the future. A letter of intent committing the tower owner and his or her successors to allow shared use of the tower, if an applicant agrees in writing to pay any reasonable charge for shared use, shall be filed in the office of the Washington County, TN Planning director prior to any building permit being issued.

621.9.8.2. The applicant's plans must demonstrate how shared facilities would potentially be situated on proposed sites. Towers and/or structures shall be required to be designed for multi-tenants on the initial installation, i.e. designed for two (2) sets of a fully sectored antenna arrays.

Section 621.10 Development Standards

The following landscaping and buffering standards shall apply.

621.10.1 A minimum 50 foot buffer strip shall be required on the outer perimeter of the property, abutting property currently zoned for residential, office, or commercial use or development. No Internal roads or driveways, parking areas, structures or storage of material shall be allowed within the buffer strip. This standard shall not provide for a greater buffer strip than outlined above.

621.10.2 The buffer strip shall consist of plantings and physical features sufficient to screen the view beginning at a specified level, reduce glare and noise, and provide greater privacy for nearby residential uses. The buffer shall be initially installed for the permanent year-round protection of adjacent property by visually shielding internal activities from adjoining property from ground level substance, design, width, height, opacity, growing period to maturity, time schedule for installation and responsibility for perpetual maintenance of the buffer strip shall be submitted to and approved by the Planning Commission.

621.10.3. Existing mature tree growth and natural land forms on the site shall be preserved to the maximum extent possible. Where natural vegetation around the perimeter of the site would provide an adequate visual screen, an undisturbed buffer may be utilized.

621.10.4. The landscaping provisions of this section may be varied or reduced if the proposed plan provides for unique and innovative landscaping treatment or physical features that, in the opinion of the Planning Commission, meet the intent and purpose of this section. In instances where significant physical features exist (i.e. railroads, major roads, hillsides, preserved wooded areas, and utility easements, etc.) which in the opinion of the Planning Commission provide adequate buffering between land uses, the existing buffers may be used to meet landscaping provisions of this section.

621.10.5. Off Street Parking – Off-street parking space shall be provided for each wireless transmission facility.

621.10.6. Lighting – Outside lighting, if required for safety and security purposes shall be arranged so as to minimize glare and reflection on adjacent residential properties and public streets. The Planning Commission may require the submission of a lighting plan by a qualified professional engineer to ensure that the illumination of outside lighting as designed and installed does not exceed 0.4 foot candles measured at the property line of abutting property zoned for residential use or

development. Wireless transmission facilities shall not be artificially lighted unless required by the Federal Aviation Administration or other governmental authority.

621.10.7. Signs – Signs identifying the wireless transmission facility may be allowed providing such signs:

- a. Do not exceed 10 square feet.
- b. Are not illuminated.
- c. Comply with all other requirements of the Washington County Tennessee sign regulations.

621.10.8. Vehicle Access Control – the location and design of driveways and/or accesses to reach the facility from a public street shall be approved by the Washington County, Tennessee Regional Planning Commission.

621.10.9. Erosion Control and Stormwater Management – The control of erosion during development and the design of drainage systems suitable to handle stormwater runoff after the site is developed shall be approved by the Washington County, Tennessee Regional Planning Commission upon recommendation of the County Engineer.

621.10.10. Noise – the intensity level of sound from the wireless transmission facility including temporary generators used during extended power outages, measured at the property line of abutting property zoned for residential use of development, shall not at any time exceed 70 decibels.

621.10.11. The Washington County, Tennessee Regional Planning Commission shall have the authority to require additional landscaping, buffering, screening, parking or other physical features when it is determined as necessary to insure the compatibility of the proposed use with existing and future surrounding land uses, or in order to protect the health, safety, and welfare of the residents of Washington County, Tennessee.

621.10.12. Guy-wires and accessory buildings and facilities shall meet the minimum accessory use location and setback requirements.

621.10.13. Security Fencing/Anti-Climbing Devices: All towers and supporting equipment shall be enclosed by fencing not less than ten (10) feet in height and shall also be equipped with appropriate anti-climbing devices. Fencing shall be of chain link, wood or other approved alternative. Amateur radio towers and antennas shall not be subject to the provisions of this section unless required by the Washington County Regional Planning commission.

Section 621.11. Aesthetics:

The guidelines set forth in this section shall govern the design and construction of all towers, and the installation of all antennas, governed by this resolution.

621.11.1. At all tower sites, the design of all buildings and related structures shall use materials, colors, textures, screening, and landscaping that will blend the tower facilities to the natural setting and building environment.

621.11.2 Towers shall not be artificially lighted, unless required by the FAA or other applicable authority. If lighting is required, the governing authority may review the available lighting alternatives and approve the design that would cause the least disturbance to the surrounding views.

621.11.3. No signage or other identifying markings of a commercial nature shall be permitted upon any tower or alternative tower structure within Washington County.

621.11.4 Change of Ownership Notification: Upon the transfer of ownership of any tower, alternative tower

structure, or lot upon which such a structure has been erected, the tower permit holder shall notify the County Planning director of the transaction in writing within 30 days.

Section 621.12. Inspections

621.12.1. The user shall provide the Washington County Tennessee Regional Planning Commission with a letter of certification from the design engineers (electrical, structural and civil) indicating that the wireless transmission facility was constructed according to the plans approved by Washington County, TN. The letter shall be submitted within 30 days of completion of the facility.

621.12.2. The user shall provide the Washington County Tennessee Regional Planning Commission with a copy of Washington County, Tennessee Electrical Inspector Report which ensures that the user met code requirements during construction of the facility.

621.12.3. The user shall provide the Washington County Tennessee Regional Planning Commission with a certified copy of the engineer's annual inspection report, which includes but is not limited to the condition of the grounding system, the structural integrity of the facility any damage incurred over the past year, the condition of the bolts, and a plan to correct any deficiencies.

Section 621.13. Required Demolition

Any approved wireless transmission facility not utilized as an active wireless transmission for a period exceeding twelve months shall be considered abandoned, and the owner of such antenna or tower shall remove the structure within ninety (90) days of receipt of notice from the Department notifying the owner of such abandonment. If said tower or antenna is not removed within said ninety (90) days, the governing authority may require removal of said structure.

Section 621.14 Surety Bond

The applicant shall post a surety bond for the amount of the wireless transmission facility demolition, after all approvals from the required governing boards and prior to the required building permit.

Section 621.15 Public Facilities

Wireless transmission facilities used exclusively for use by Washington County,

Tennessee, the State of Tennessee, or the United States of America may exceed the height limitations of this Resolution with documented need.