

**Section 16**  
**Wireless Telecommunications Facilities**

**Sec. 16-1 Purpose and Intent.**

The intent of this Section is to provide standards for the development of Wireless Telecommunications Facilities (WTFs) for personal wireless services and to:

- a. Promote the health, safety and general welfare of the public by regulating the siting of and establishing development standards for WTFs and related equipment and infrastructure.
- b. Minimize the impacts of WTFs on surrounding areas by recognizing the variety of facilities and establishing standards for location, aesthetics, structural integrity and compatibility.
- c. Encourage the location and collocation of wireless communication equipment on existing structures thereby minimizing new visual, aesthetic and public safety impacts, effects upon the natural environment, and to reduce the need for additional WTFs.
- d. Encourage coordination between suppliers and providers of personal wireless services in the city of Savannah (City) and unincorporated Chatham County (County).
- e. Follow and promote the policies embodied in Section 704 of the Federal Telecommunications Act of 1996 in such a manner as to not unreasonably discriminate between providers of functionally equivalent personal wireless services or to prohibit or have the effect of prohibiting personal wireless services in the County.
- f. Promote the orderly development of telecommunications infrastructure through coordination of master plans among the County, City and participating personal wireless service providers.
- g. Protect the beauty and character of the County, particularly residential districts, recognized historic areas, and scenic vistas and landscapes, while meeting the needs of its citizens to enjoy the benefits of personal wireless services;
- h. Encourage the use of public lands, buildings, and structures as locations for WTFs as a method to establish a precedence of quality concealment products that will minimize the aesthetic impact of related infrastructure; and,
- i. Ensure that applicable goals and objectives of the Chatham County-City of Savannah Comprehensive Plan are addressed.

**Sec. 16-2 Definitions.**

The following definitions are in addition to definitions in Section 2. Where the same or similar definitions exist, the definitions of this Section shall apply in reference to WTFs.

**Abandonment.** The intent to abandon or discontinue operations as evidenced by voluntary conduct or failure to use a wireless telecommunications facility for a period of six months or more.

**Above Ground Level (AGL).** A measurement of height from the natural grade of a site to the highest point of a structure.

**AGL.** See Above Ground Level.

**Ancillary Structures.** Any development associated with a wireless telecommunications facility, including but not limited to foundations, concrete slabs on grade, guy wire anchors, generators and transmission cable supports. This definition does not include equipment compound.

**Antenna.** Any apparatus designed for transmitting and/or receiving electromagnetic waves that includes but is not limited to: telephonic, radio or television communications. Types of antennas include, but are not limited to: omni-directional (whip) antennas, sectorized (panel) antennas, or parabolic (dish) antennas.

**Antenna Array.** A single set or group of antennas and their associated mounting hardware, transmission lines or other appurtenances which share a common attachment device such as a mounting frame or mounting support.

**Antenna Support Structure.** A vertical projection, typically composed of metal, with or without a foundation that is for the express purpose of accommodating antennas at a desired height above grade.

**Antenna types. (as referred to in the Modifications section). "Antenna types" for the purposes of this ordinance are defined as cellular, panel, whip and dish. Any change to the type of antenna installed on a tower shall be considered a modification.**

**Applicant.** A person or entity with an application for the permit of a wireless telecommunications facility. A co-applicant is any person or entity that joins with an applicant in an application for the same permit, including the property owner, antenna support structure owner, and any proposed tenants for the facility.

**Attached Wireless Telecommunications Facility.** An antenna or antenna array that is secured to an existing building or structure (except an antenna support structure) with any accompanying pole or device which attaches it to the building or structure, together with transmission cables, and an equipment cabinet, which may be located either on the roof or inside/outside of the building or structure. An attached wireless telecommunications facility is considered to be an accessory use to the existing principal use on a site.

**Base Station.** The primary sending and receiving site in a telecommunications facility network. More than one base station and/or more than provider can be located on a single antenna support structure.

**Breakpoint Technology.** The engineering design of a monopole wherein a specified point on the monopole is designed to have stresses concentrated so that the point is at least five percent more susceptible to failure than any other point along the monopole. 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.

**Cellular Telecommunications.** A commercial Low Power Mobile Radio Service bandwidth licensed by the FCC to providers in a specific geographical area in which the radio frequency spectrum is divided into discrete channels which are assigned in group to geographic cells within a service area and which are capable of being reused in different cells within the service area.

**Collocation.** A situation in which two or more wireless personal service providers place a wireless telecommunications antenna or antennas and feed lines on a common antenna support structure or other structure on which there is an existing antenna array. The term "collocation" shall not be applied to a situation where two or more wireless personal service providers independently place equipment on an existing building.

**Combined Antenna.** An antenna or antenna array designed and utilized to provide services for more than one wireless provider for the same or similar type of services.

**Concealed.** A wireless telecommunications facility that is disguised, hidden, part of an existing or proposed structure or placed within an existing or proposed structure, to include antennas, ancillary structures, and utilities. Concealment is further explained in 16.6-4.

**Contributing Structure.** A structure listed on the Georgia Register of Historic Places; the National Register of Historic Places; or that is at least 50 years old, has not had any major exterior alterations that has changed its original architectural character, and that has had an historic survey which documents the structure as contributing to the historic district in which it is located.

**Coverage.** The geographic area reached by an individual wireless telecommunications facility installation.

**Decision.** The conclusion of a wireless telecommunications facility application review that results in an approval or denial with or without conditions. Decisions may be appealed as identified within this Section

**Dual Lighting Systems.** Strobe lights during daytime and flashing red lights during non-daytime.

**Equipment Compound.** The area or structure surrounding a ground-based wireless telecommunications facility including, but not limited to, the areas inside or under the following: an antenna support structure's framework and ancillary structures such as equipment necessary to operate the antenna on the facility that is above the base flood elevation including: cabinets, shelters, pedestals, generators and other similar structures.

**Equipment Cabinet.** A structure located at a base station that is above the base flood elevation and designed exclusively to contain radio or other equipment necessary for the transmission or reception of wireless telecommunication signals. A cabinet cannot be used for storage and/or habitable space.

**Executive Director.** The Executive Director of the Metropolitan Planning Commission or his or her designee.

**Existing Structures and Facilities.** Any wireless telecommunications facility for which a permit has been properly issued prior to the effective date of the ordinance from which this Section is derived.

**FAA.** Federal Aviation Administration.

**FCC.** Federal Communications Commission. The government agency responsible for regulating telecommunications.

**Feed Lines.** The interconnecting media between the transmission / receiving base station and the antenna.

**Functionally Equivalent Services.** Cellular, personal communications services (PCS), Enhanced Specialized Mobile Radio, Specialized Mobile Radio and paging services.

**Geographic Search Area (GSA).** An area designated by a wireless provider or operator for a new base station, produced in accordance with generally accepted principles of wireless engineering.

**GSA.** See Geographic Search Area.

**Guyed Structure.** A style of antenna support structure 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.

**Lattice Structure.** Typically a tapered style of antenna support structure that consists of vertical and horizontal supports with multiple legs and cross-bracing and metal crossed strips or bars to support antennas.

**Least Visually Obtrusive Profile.** The design of a wireless telecommunications facility intended to present a visual profile that is the minimum profile necessary for the facility to properly function.

**Location.** The area where a wireless telecommunications facility is located or proposed to be located. Reference to location shall be exact longitude and latitude, to the nearest tenth of a second. Bearing or orientation is referenced to true north.

**Metropolitan Planning Commission (MPC).** The planning and zoning agency for Chatham County and the City of Savannah.

**Modification.** The change, or proposed change, of any portion of a wireless telecommunication facility from its description in a previously approved WTF permit. Modification includes structural reinforcement, change in antenna type, and changes that alter the appearance, size or height of a WTF.

**Monopole.** A style of freestanding antenna support structure that consists of a single shaft usually composed of two or more hollow sections that are in turn attached to a foundation. This type of antenna support structure 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 the roof of a building.

**Mount.** The surface upon which antennas are mounted. Mounts described in this Article include: roof-mounts (mounted on the roof of a building) and side-mounts (mounted on the side of a building).

**MPC.** See Metropolitan Planning Commission.

**Personal Wireless Telecommunications Services.** Commercial mobile radio services, unlicensed wireless services and common carrier wireless exchange access service as identified in the Telecommunications Act of 1996.

**Planning Commission.** The planning commission for the Chatham County-Savannah Metropolitan Planning Commission.

**Provider.** Any entity licensed by the FCC to provide subscriber-based personal wireless telecommunications services.

**Radiofrequency Engineer.** An engineer specializing in electrical or microwave engineering, especially the study of radiofrequencies.

**Recognized Historic Area.** Districts or locations identified as having historic and/or architectural significance through an ordinance, guideline, map, listing or designation by a local, state or federal government.

**Review.** A review of a wireless telecommunication facility application by applicable administrators, staff, or commissions that results in a decision.

**Screening.** The use of design, existing buildings and structures, existing and proposed vegetation and color to obscure a wireless telecommunications facility.

**Separation.** The vertical distance between one carrier's antenna array and the antenna array of another carrier.

**Siting.** The method and form of placement of a wireless telecommunications facility on a specific area of a property.

**Unlicensed Wireless Services.** Commercial mobile services that can operate on public domain.

**Wireless Telecommunications Facility (WTF).** A staffed or unstaffed commercial facility for the transmission and/or reception of radio frequency signals, or other wireless communications, and usually consisting of an antenna or groups of antennas, transmission cables and equipment enclosures, and may include an antenna support structure. The following non-exclusive list shall be considered a wireless telecommunications facility: new and existing antenna support structures, replacement antenna support structures, collocations on existing antenna support structures, attached wireless telecommunications facilities and concealed wireless telecommunications facilities.

**WTF.** See Wireless Telecommunications Facility.

### **Sec. 16-3 Applicability and Exemptions.**

#### **Sec. 16-3.1 Applicability.**

This Section shall apply to the installation, construction or modification of the following WTFs:

- a. Existing antenna support structures.
- b. Proposed antenna support structures.
- c. Replacement and modification of existing antenna support structures.
- d. Collocation or combining on existing antenna support structures.
- e. Attached WTFs.
- f. Concealed WTFs.
- g. Temporary WTFs.

#### **Sec. 16-3.2 Exemptions.**

The following uses are exempt from the requirements of this Section notwithstanding any other land development provision, but are subject to all applicable building code compliance and building permit reviews:

- a. Non-commercial, amateur radio antennas.
- b. Single-use local radio dispatch.
- c. Television antennas for home reception use.
- d. Satellite earth stations that are one meter (39.37 inches) or less in diameter in all residential districts and two meters or less in all other zoning districts.
- e. Antenna support structures, antennas and/or antenna arrays for AM/FM/TV/HDTV broadcasting transmission facilities that are licensed by the FCC.
- f. A temporary, commercial WTF, upon the declaration of emergency by Federal, State or local government, or determination of public necessity by the County, and approval by the County Manager; except that such WTF must comply with all Federal and State requirements. The exemption may continue up to 120 days after the duration of the state of emergency with the approval of the County Manager.
- g. A temporary, commercial WTF for the purposes of providing coverage of a special event such as news coverage or sporting event, subject to approval of the County Manager, except that

such WTF must comply with all Federal and State requirements. The exemption may continue up to seven days after the duration of the special event.

- h. Any modification not described in described in Sec. 16-7.

**Sec. 16-4 Wireless Telecommunications Facilities Master Plan.**

[Reserved.]

**Sec. 16-5 Submittal Requirements.**

An application for a WTF shall include the applicable items listed in this section, in addition to other requirements within this Section.

- a. **Authorization from Co-applicants.** For all facilities, all parties with an ownership interest, including the land owner, support structure owner, and facility owner shall be co-applicants and be bound by and comply with all terms, limitations, requirements and conditions that are part of this Section and of any permit issued. The WTF applicant shall provide signed authorization from co-applicants allowing the application.
- b. **Evidence of Need Report.** For all WTFs, a report certified by a radio frequency engineer shall be provided that demonstrates that no existing WTF can accommodate the applicant's proposed facility due to technical or physical circumstances, or that existing facilities would prohibit personal wireless services in the area to be served by the proposed WTF. The following information shall be provided with the report:
  - (1) Identification of efforts to comply with the facility and location hierarchy in Sec. 16.6-1. If the highest ranking facility type (concealed attached) is not proposed, the applicant must demonstrate that existing facilities or the mitigation of existing facilities within the applicant's Geographic Search Area (GSA) cannot be reasonably made to accommodate the applicant's need because:
    - (a) There are no existing WTFs in the GSA that meet the applicant's engineering requirements, and why.
    - (b) The existing WTFs, buildings and structures in the GSA are not of sufficient height and cannot be increased in height to meet the applicant's engineering requirements.
    - (c) The existing WTFs, buildings and structures in the GSA do not have sufficient structural strength and cannot be structurally improved to support the applicant's proposed WTF and related equipment. Such information shall be certified by a Georgia-licensed professional engineer.
    - (d) There are other limiting factors that render existing WTFs in the GSA unsuitable.
  - (2) Graphics to be provided shall include:
    - (a) A map of the GSA to include the location of the proposed WTF and all existing WTFs (including those not owned by the applicant). The exact location of the facility (in longitude and latitude, to degrees, minutes and seconds to the nearest tenth) including the height of the antenna support structure and height, type and number of antennas shall be provided.
    - (b) A color plot demonstrating the existing coverage of all WTFs owned by the applicant within the GSA.
    - (c) A color plot demonstrating the existing coverage of all WTFs owned and proposed by the applicant within the GSA.

- (d) Additional maps and calculations as may be deemed necessary by the Executive Director.
- (3) Any additional information that may be requested of the applicant or provided by the applicant to prove need for the proposed WTF.
- c. **Site Plan.** For freestanding WTFs and when a proposed WTF will create a site modification, a site plan (no larger than 24 inches by 36 inches with an 8½ inch by 11 inch reduced copy) prepared and certified by a Georgia-licensed professional engineer shall include all information listed on the WTF application checklist. Other site plan related information shall include:
  - (1) **Existing and Proposed Access.**  
Existing or proposed public rights-of-ways, private roads and/or access easements through, on, or adjacent to the subject property. The proposed access driveway or roadway and parking area at the WTF site shall be shown, to include grading, drainage and traveled width and type of surface materials proposed. Parking shall also be shown.
  - (2) **Landscape Plan.**  
Landscaping is to be provided in accordance with Section 16-6.4. The method of irrigation and any proposed removal of vegetation shall be identified.
  - (3) **Drainage.**  
Plans for drainage of surface and sub-surface water to control erosion and sedimentation both during construction and as a permanent measure.
  - (4) **Utilities.**  
Proposed utilities, including distance from power source, sizes of service available and required, locations of any proposed utility or telecommunications lines, and whether utilities will be above ground or underground.
- d. **WTF Plan.** For all WTFs, a plan (no larger than 24 inches by 36 inches with an 8½ inch by 11 inch reduced copy) shall include a diagram of the proposed facility and antenna(s), including:
  - (1) Elevation of the antenna and/or antenna support structure to include the following proposed dimensions: height, width and breadth. Height shall include the base, the antenna support structure, and lightning rod.
  - (2) Elevation views of the security barrier or equipment compound, indicating architectural design, exterior appearance and materials, including color. Equipment enclosures shall be consistent with one of the alternatives identified in Section 16-6.5.
  - (3) Mounting location on antenna support structure or building, including height (AGL).
  - (4) If a concealed or nonconcealed attached WTF is proposed, identification of all mounting frames, arms, brackets or other devices or equipment used to hold antennas and other equipment in place.
  - (5) Equipment brochures or drawings for the proposed facility, shall be provided for antennas, support structures/mounts, equipment shelters, feed lines and security barrier, if any.
  - (6) If a freestanding WTF is proposed, it shall be demonstrated that the structure will be able to accommodate additional facilities as identified in Section 16-6.9.
- e. **Visual Impact Analysis.** For all freestanding nonconcealed WTFs, a visual impact analysis shall be performed. All or a portion of the analysis shall be performed for other WTFs when, in the opinion of the Executive Director, the proposed type of WTF and its location requires additional assessment (i.e., within a residential district, recognized historic area, or scenic

vista/landscape). The analysis shall include the following:

- (1) **Line-of-Sight Analysis.** The applicant shall provide a line-of-sight analysis, including elevation views of the proposed facility. The analysis shall include a description of natural and man-made features that affect the buffering of the potential visual impact of the structure.
- (2) **Photo Simulations.** The applicant shall provide photo-simulated post-construction renderings of the completed proposed antenna support structure, equipment compound and/or equipment cabinets, ancillary structures, and landscaping, if any, from locations determined at the pre-application conference. The views shall incorporate before and after scenarios, a scaled color image of the proposed type of facility, an aerial map with the location of the selected views, and a description of the technical approach used to create the photo simulations. The simulations shall include a minimum of four vantage points (north, south, east, and west).
- (3) **Balloon Test.** A balloon test may be required subsequent to the receipt of the photo simulations in order to demonstrate the proposed height of the WTF. The applicant shall arrange to raise a colored balloon (no less than three feet in diameter) at the maximum height of the proposed WTF and within fifty (50) horizontal feet of the center of the proposed antenna support structure.

The date, time and location of the balloon test shall be advertised by the applicant at least seven but no more than fourteen (14) days in advance of the test date in the official legal organ for Chatham County. The applicant shall inform the Executive Director and abutting property owners in writing of the date and times of the test at least 14 days in advance. The balloon shall be flown for at least two consecutive hours during daylight hours on the date chosen. The applicant shall record the weather during the balloon test.

- f. **Documentation from Applicable Regulatory Agencies.** For all WTFs, copies of all applicable licenses or approvals, if available, as required by the FCC and any other agency of the government with authority to regulate WTFs to include the following at the time of submission:
  - (1) A letter from the FAA establishing the maximum antenna support structure height or a written statement prepared a professional airspace safety consultant predicting the maximum height likely to be approved by the FAA.
  - (2) A copy of Form 600 on file with the FCC; or FCC license (Radio Authorization Form).
  - (3) Evidence of compliance with applicable FAA requirements under 14 C.F.R. s. 77, as amended, which may be a copy of the FAA Notice of Proposed Construction.
  - (4) A compliance letter from the Historic Preservation Division of the Georgia Department of Natural Resources.
- g. **Radio Frequency Engineer Qualifications.** For all WTFs, a curriculum vitae shall be provided for the radio frequency engineer who certifies any documentation provided as part of the application for a WTF. Information shall include education obtained in the area of radio frequency engineering, and experience in the field, including length of time.
- h. **Fees.** In addition to any other fees required by the County, applicants shall pay a fee to cover the actual cost and the administrative fee for consulting services that may be required by the County and/or MPC to evaluate any technical aspect of the WTF application.









- i. **Address.** All applicants and co-applicants shall keep the MPC notified of their current mailing address and shall advise the MPC of any change in mailing address within 30 days of such change.

**Sec. 16-6 Additional Standards.**

To ensure compatibility with surrounding land uses, protect public safety and natural, cultural and scenic resources and preserve and enhance the character of neighborhoods, all WTFs subject to this Section shall be located, developed and operated in compliance with the following:

**Sec. 16-6.1 Siting and Location.**

WTFs are allowed in all zoning districts, subject to the limitation set forth herein. Siting of WTFs shall be in accordance with a hierarchy of facility alternatives. If a WTF is proposed that is a lower-ranking facility than the most preferred facility type (concealed attached), an Evidence of Need Report as specified in Sec. 16-5 shall be provided. Whenever feasible, a new facility, not to include collocation or combined antennas, should be located on County property to ensure that regular maintenance of the facility, as required by Sec. 16-8, is occurring.

Hierarchy by Facility Type		
Priority	Facility Type	Example
<p>Most Preferred</p>  <p>Least Preferred</p>	Concealed Attached [1]	
	Collocated or Combined on Existing Antenna Support Structure or on Athletic Field Light Poles or Water Tanks (at least 50 feet in height )	
	Concealed Freestanding	
	Nonconcealed Attached [2]	
	Nonconcealed Freestanding (Monopole Only) [3]	

[1] An applicant does not have to provide a concealed attached facility if collocation on an existing antenna support structure or other structure (i.e., athletic field light pole or water tank) is available within the applicant's geographic search area provided that the structure is not located within a residential district, recognized historic area or within the scenic vistas/landscapes identified in Section 16-6.8 unless approved by the Planning Commission.

[2] May be allowed within a recognized historic area with Planning Commission approval, but not on a contributing structure.

[3] Not allowed within a residential district, a recognized historic area or within 100 feet of either. A setback waiver may be requested if the criteria in Sec. 16-6.8.c can be met.

**Sec. 16-6.2 Height.**

- a. **General.** Height shall be measured in Above Ground Level (AGL).
- b. **Height, Maximum.**

Maximum Height by Type of Facility	
Type of Facility	Maximum Height
Concealed Attached	Shall not exceed the height of the structure on which the facility is attached by more than 20 feet.
Nonconcealed Attached	Shall not exceed the height of the structure on which the facility is attached by more than 20 feet.
Collocation or Combined on Existing Structure (General)	A new WTF located on any of the following structures existing on the effective date of this Section shall be exempt from height restrictions provided that there is no increase in height of the existing structure as a result of the installation: water towers, guyed structures, lattice structures; police, fire, ambulance and other emergency dispatch and public works structures and monopoles.
Collocation on Existing Structure at least 50 feet in height (Utilities)	A new WTF located on any utility structure shall be exempt from height restrictions of this Section provided that there is no more than a 20 foot increase in the height of an existing structure as a result of the installation.
Collocation on Existing Buildings and Structures (Legal Nonconforming)	A WTF may locate on a building or structure that is legally non-conforming with respect to height, provided that the facility does not project above the existing height by more than 20 feet.
Concealed Freestanding	Shall not exceed 45 feet above the maximum allowable zoning district building height or a total of 100 feet, whichever is less.
Nonconcealed Freestanding (Monopole)	Up to 199 feet provided that the applicant has provided evidence of need.

- c. **Height, Flexibility.** The Planning Commission may approve additional height beyond the maximum allowed if findings can be made that siting of the proposed WTF is appropriate to the context of the proposed location using the criteria listed in Section 16.6-4.

**Sec. 16-6.3 Setbacks.**

All WTFs and their equipment enclosures and ancillary structures shall comply with the setback provisions of the zoning district in which the WTF is located. In addition, the following setbacks shall be observed:

a. **Setbacks Required.**

- (1) In order to ensure public safety, the minimum distance from the base of any nonconcealed freestanding WTF to any property line, road, dwelling, commercial or institutional use or public recreational area shall be the height of the antenna support structure, including any antennas or other appurtenances, if the WTF has not been constructed with breakpoint design technology.

The setback may be reduced by the Planning Commission if documentation filed by a Georgia-licensed professional structural engineer certifies that the WTF utilizes breakpoint design technology. The minimum setback shall be equal to 110% of the distance from the top of the structure to the breakpoint level of the structure, plus the minimum setback distance of the zoning district. For example, a nonconcealed WTF of 100 feet in height with a breakpoint at 80 feet, the minimum setback would be 22 feet (110% of 20 feet-the distance from the top of the WTF) plus the minimum setback for the zoning district.

- (2) The Planning Commission may waive all or part of a required setback if the applicant can demonstrate that the proposed facility will be the least visually obtrusive profile, will not detract from the beauty and/or character of the area in which the WTF is proposed, and will not cause a public safety issue.
- (3) Setbacks from residential districts, recognized historic areas, and certain scenic vistas and landscapes for nonconcealed freestanding WTFs, as described in Section 16.6-8, are also required. If more than one standard applies, the more restrictive standard shall govern.

- b. **Setback Not Required.** A setback is not required by this Section for concealed freestanding and attached WTFs. However, the setback provisions of the zoning district shall apply. In the case of pre-existing non-conforming structures, a WTF (including its equipment compound and/or cabinetry and ancillary structures) shall not increase any non-conformities, except as provided in Section 16-10.

**Sec. 16-6.4 Aesthetics / Visibility.**

To protect the beauty and character of the County, particularly residential districts, recognized historic areas and certain scenic vistas and landscapes as identified herein, all facilities shall be screened to the greatest extent possible. Screening shall occur through the use of design, existing buildings and structures, existing and proposed vegetation, appropriate materials and color. Unlike nonconcealed facilities, concealed facilities shall not be identifiable as a WTF.

Visibility of Facility		
Screening and/or Concealment Techniques	Applicable WCF	Explanation
Design	Concealed Attached	Concealed Attached: Feed lines and antennas shall be designed to architecturally match the façade, roof, wall or structure on which they are affixed in order to blend in with the existing structural design, color and texture and in order to provide the least visually obtrusive profile.
	Concealed Freestanding	Concealed Freestanding: Such facility shall blend into its surroundings through design and siting that is appropriate and typical to the context of the proposed location. Such facility shall also be designed to appear as a structure that would be allowed in the zoning district in which it is proposed

		to be located and that is customary to the location (e.g., a smokestack would not be allowed in a residential district). Examples of concealed facilities include chimneys, steeples, clock towers, light poles, and flag poles. Guyed structure and lattice structure construction is not allowed.
Existing Buildings and Structures	<p>Nonconcealed Attached and Combined</p> <p>Nonconcealed Freestanding</p>	<p>Roof Mount: When a WTF extends above the roof height of a building on which it is mounted, the WTF shall be camouflaged within or behind existing architectural features to limit the visibility from public rights-of-way. The WTF should be stepped back from the façade in order to limit its impact on the building's silhouette.</p> <p>Side Mount: The WTF shall blend with the building's existing architecture and shall be painted or shielded with material which is consistent with the design features and materials of the building.</p> <p>Freestanding Nonconcealed: To the extent possible, existing buildings and structures should be used to screen a WTF from rights-of-way.</p>
Existing and Proposed Vegetation	<p>Nonconcealed Freestanding</p> <p>Nonconcealed Attached</p> <p>Collocation and Combined</p>	<p>Nonconcealed Freestanding: The perimeter of the WTF shall be at least 15 feet in width for landscaping and include: 1) a row of evergreen trees a minimum of 10 feet in height at the time of planting with a minimum two-inch caliper, spaced a maximum of 12 feet apart; and, 2) a row of evergreen shrubs a minimum of two feet tall at the time of planting, planted four feet on center. Within a year of planting, the trees and shrubs shall achieve 80 percent opacity of the security barrier and/or equipment enclosure. Existing trees and vegetation may be used as an alternative or in combination with new plantings to achieve the opacity requirement subject to approval of the Planning Commission upon a recommendation of the County Engineer or his or her designee. An easement may be required to ensure that vegetation remains intact.</p> <p>Nonconcealed Attached: To the extent possible, vegetation should be used to screen a WTF from full view.</p> <p>Collocation and Combined: If the equipment compound and/or landscaping is not in compliance with this Section, compliance shall occur at the time of antenna installation. Landscaping compliance may be waived, wholly or partially, if the site lacks sufficient area.</p>

Color	<p>Nonconcealed Freestanding</p> <p>Attached Nonconcealed</p> <p>Collocation and Combined</p>	<p>Nonconcealed Freestanding: The WTF shall maintain a galvanized gray finish or the Planning Commission may accept other contextual or compatible color, except as required by federal rules or regulations.</p> <p>Nonconcealed Attached: The WTF shall be painted and/or constructed of materials to match the color of the building or structure on which it is attached, except as required by federal rules or regulations.</p>
Antenna	Nonconcealed Freestanding	The first antenna placement, and all subsequent collocated antennas, on new antenna support structures shall be flush-mounted, unless it is demonstrated through RF propagation analysis that such antennas will not meet the network objectives of the desired coverage area.

**Sec. 16-6.5 Equipment Compound and/or Equipment Cabinetry.**

Equipment related to the operation of a WTF shall be hidden and/or screened from public view by one or more of the following techniques, which shall also be consistent with the aesthetic / visibility standards identified in Sec. 16-6.4:

- a. Ground equipment, including platforms. One or more of the following techniques can be used to hide and /or screen equipment:
  - (1) Locate equipment underground. If a nonconcealed freestanding WTF is proposed, an opaque security barrier consisting of brick, masonry, or other material approved by Planning Commission shall be installed around the antenna support structure that will prevent unauthorized access to the structure. Landscaping as identified in Sec. 16-6.4 shall be provided.
  - (2) Locate equipment within a building. The building shall be designed to be consistent with the prevailing architectural style of the neighborhood in which it is located, including exterior materials and roof pitch. The enclosure shall not exceed one story, unless location in a flood plain or other drainage concerns requires it to be elevated.
  - (3) Locate equipment behind a secured, landscaped perimeter. An evergreen landscape buffer shall surround the perimeter of the WTF. If this method is selected, the buffer requirements identified in Section 16-6.4 apply. Additionally, an opaque fence or wall shall be constructed to minimize opportunities for unauthorized access, climbing, vandalism, graffiti and other conditions that would result in hazardous conditions, visual blight and attractive nuisances. The fence or wall shall be no less than the above grade height of any equipment within the enclosure, which shall not be taller than one story, unless located in a flood zone.
- b. Roof-top equipment. Equipment shall be screened from public view in a manner that is consistent with the architectural style of the building upon which the WTF is located.

**Sec. 16-6.6 Lighting and Signage.**

- a. Wireless Telecommunications Facilities taller than 199 feet AGL shall be lit according to FAA standards including light intensity and flashes per minute. When applicable, dual lighting systems shall be employed. This dual lighting system includes red lights (L-864) for nighttime

and medium intensity flashing white lights (L-865) for daytime and twilight use. This lighting system may be used in lieu of operating a medium intensity flashing white light system at night.

- b. Lighting of equipment enclosures and other ancillary structures on site shall be shielded from adjacent properties. The footcandle measurement at property lines shall be no more than 1.0 footcandle when measured at grade. FAA required lighting is exempt from this requirement.
- c. Signs shall be limited to those needed to identify the WTF, the owner, the party responsible for the operation and maintenance (including address and telephone number), to warn of danger and to comply with applicable federal regulations. Such signage shall be visible and legible at ground level.

**Sec. 16-6.7 Recognized Historic Areas.**

- a. Freestanding WTFs within a recognized historic area shall be concealed. Attached WTFs proposed for existing structures shall also be concealed unless it can be demonstrated that the facility will not be visible from ground level.
- b. Any WTF located on or within an historic building or structure shall not alter the character-defining features, distinctive construction methods or original historic materials of the building or structure.

**Sec. 16-6.8 Scenic Vistas and Landscapes.**

To preserve scenic vistas and landscapes, any nonconcealed freestanding WTF shall:

- a. Not be developed on a hammock or back-barrier island (i.e., an island that cannot be accessed by a wheeled vehicle).
- b. Be separated from the following areas by the following distances:
  - (1) Residential districts, recognized historic areas: 100 feet
  - (2) Public rights-of-way: 100 feet.
  - (3) Protected and restricted roadways as identified in the Zoning Ordinance: 300 feet.
  - (4) Amenity corridors as identified in the 2030 Long Range Transportation Plan: 300 feet.
  - (5) Marshes, to include estuarine waterways and/or spartina marshes: 500 feet. The distance shall be measured from the jurisdiction line established by the Georgia Department of Natural Resources.
  - (6) Protected river corridors as identified in the River Corridor Protection Act (O.C.G.A. 12-2-8): 500 feet. The distance shall be measured from the jurisdiction line established by the Georgia Department of Natural Resources.
- c. The Planning Commission may waive all or part of separation distance if the applicant can demonstrate that the proposed facility will be the least visually obtrusive profile and not detract from the beauty and/or character of the scenic vistas and landscapes identified within this Subsection.

**Sec. 16-6.9 Antenna Support Structure Multiple User Standards.**

If a freestanding WTF is proposed, it shall be engineered and constructed to accommodate multiple users, as indicated below:

- a. Ninety (90) feet or less in height: at least three antenna arrays.

- b. More than 90 feet and up to 120 feet in height: at least four antenna arrays.
- c. More than 120 feet and up to 150 feet in height: at least five antenna arrays.
- d. More than 151 feet and up to 199 feet in height: at least six antenna arrays.
- e. If the Planning Commission approves a height of more than 199 feet, additional antenna arrays may be required.

**Sec. 16-6.10 Structural Integrity.**

All WTFs and antenna support structures shall be designed to meet or exceed all federal, state and local building code requirements, including windloading and American National Standards Institute standards (EIA/TIA) Document 222-F, Structural Standards for Steel Antenna Towers and Supporting Structures, for the Wind Code Zone for Chatham County, Georgia and any state/county building codes (as they may be amended and/or updated from time to time). Structural integrity shall be certified by a Georgia-licensed professional engineer.

**Sec. 16-6.11 Environmental Standards.**

The following standards shall apply:

- a. Freestanding WTFs shall not be located in wetlands or wetlands buffers, whether federal or state designated.
- b. Freestanding WTFs shall not generate noise in excess of 60 db at the property line. Attached WTFs shall not generate noise in excess of 60 db at ground level at the base of a habitable building closest to the facility.

**Sec. 16-6.12 Safety Standards.**

**16-6.121 Radiofrequency Radiation (RFR) Standards.** All equipment for a WTF shall be authorized per the FCC Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation. Documentation shall be provided that these guidelines will be met.

**16-6.122 Interference with Public Safety Communications.**

- a. In order to facilitate the regulation, placement, and construction of a WTF and its interaction with public safety communications equipment, an applicant requesting such a facility shall agree in a written statement, to the following:
  - (1) Compliance with FCC regulations regarding susceptibility to radio frequency interference (RFI), frequency coordination requirements, general technician standards for power, antenna, bandwidth limitations, frequency stability, transmitter measurements, operating requirements and any and all other federal statutory and regulatory requirements relating to RFI; and
  - (2) In the case of collocation of facilities, the applicant, together with the owner of the site, shall provide a composite analysis of all users of the site to determine that the proposed facility will not cause RFI.
- b. When a base station is identified as causing RFI, the following shall occur:
  - (1) The County shall provide notification to all WTF service providers operating in the jurisdiction of possible interference with the public safety communications equipment. Upon such notification, the owners shall use their best efforts to cooperate and coordinate with the County and among themselves to investigate and mitigate the interference, if any, utilizing the procedures set forth in the joint wireless industry-public



safety Best Practices Guide, released by the FCC in February 2001, including the Good Engineering Practices, as may be amended by the FCC from time to time.

- (2) If any WTF provider fails to cooperate with the County in complying with the owner's obligations under this Section or if the FCC makes a determination of RFI with the County's public safety communications equipment, the owner who fails to cooperate and/or the owner of the WTF which caused the interference shall be responsible, upon FCC determination of radio frequency interference, for reimbursing the County for all costs associated with ascertaining and resolving the interference including, but not limited to, any engineering studies obtained by the jurisdiction to determine the source of the interference. For the purposes of this subsection, failure to cooperate shall include failure to initiate any response or action as described in the Best Practices Guide within twenty-four (24) hours of the County's notification.

#### **Sec. 16-7 Modifications.**

- a. A modification is a proposed change to any portion of a WTF from its description in a previously approved permit that:
  - (1) When viewed from ground level from surrounding properties, appears to be of a different height, size, antenna type or appearance than what presently exists on or is associated with the WTF;
  - (2) , Changes in antenna type(s), changes the size, type and number of feed lines, or changes the size, type and number of antenna mounting devices or
  - (3) Any changes in structural windloading capacity.
- b. All modifications shall comply with any conditions or provisions of the existing permit, for the property or WTF and with all applicable standards of this Article including the lighting and safety markings (taping) as described in Section 6.6.
- c. The Executive Director shall have the discretion to determine if a proposed change is a modification.
- d. For the purposes of this subsection, collocation consistent with approved plans and equipment upgrade shall not be considered a modification unless the structural integrity is compromised by the addition of a collocation not originally approved for the structure.

#### **Sec. 16-8 Maintenance.**

- a. A WTF shall be maintained in good condition. Maintenance of a WTF shall include, but not be limited to the structural integrity of the antenna support structure and antennas, equipment compound and cabinets, painting, and irrigation and upkeep of buffer areas and landscaping.
- b. If maintenance will impede access used by others, create noise in excess of 60 dB (at the property line) between the hours of 7:00 p.m. to 7:00 a.m., or have other potential nuisance effects during the period of maintenance, the owner of the facility undergoing maintenance shall notify the Executive Director and adjacent property owners in writing at least five days before maintenance is scheduled.
- c. If maintenance of a WTF will result in a modification as described in Sec. 16-7, the requirements of that section shall apply.

#### **Sec. 16-9 Abandonment or Discontinuation of Use.**

- a. At such time that an antenna support structure owner or wireless provider plans to abandon or discontinue operation of a WTF, said owner shall notify the Executive Director by certified U.S. mail of the proposed date of abandonment or discontinuation of operations.
- b. In the event all legally approved use of any WTF has been discontinued for a period of six months and the antenna support structure owner or wireless provider has not notified the Executive Director, the facility shall be deemed to be abandoned. Determination of the date of abandonment shall be made by the Executive Director who shall have the right to request documentation and/or affidavits from the facility owner regarding the issue of usage, including evidence that use of the facility is imminent.
- c. At such time as the Executive Director determines that a WTF is abandoned, the Executive Director shall provide the facility owner and property owner with written notice of an abandonment determination by certified mail addressed to all applicants at the addresses on file with the MPC and to the owner of the property at the address on file with the MPC, the property address and at the address to which tax notices are sent; additionally, notice shall be made by publication in the Savannah Morning News, or such other newspaper that is the official newspaper for the publication of legal notices. Failure or refusal by the facility owner or any other co-applicant to respond to such notice within 60 days of the receipt of the certified letter, or within 30 days of the last published notice, whichever is later, shall constitute prima facie evidence that the WTF has been abandoned.
- d. If the owner of the WTF fails to respond or fails to demonstrate that the WTF is not abandoned, the facility shall be considered abandoned and the owner of the facility shall have an additional 120 days to:
  - (1) Reactivate the use of the WTF or transfer the WTF to another owner who makes actual use of the facility, subject to permit approval, within a 120 day period; or
  - (2) Dismantle and physically remove the WTF. "Physically remove" shall include, but not be limited to removal of antennas, antenna support structures, equipment shelters and an associated materials from the subject property, where applicable. Physically remove shall also include restoration of the location of the WTF to its natural condition, where applicable, except that any landscaping and grading shall remain in post-development condition.
- e. Upon a determination of abandonment by the Executive Director pursuant to this section, and the failure of the WTF owner or other co-applicant to remove the facility in accordance with this Section, the facility and related structures shall be deemed unfit for use and in violation of the permit requirements so as to be deemed a danger to public health and a public and private nuisance. Failure of the WTF owner or other co-applicant to dismantle and physically remove the facility and related structures in accordance with the terms of this Section shall authorize the County to do so in order to abate the nuisance and/or ensure compliance with this Section. The dismantling and the physical removal of such abandoned WTFs is the responsibility of the WTF owner and other co-applicants and shall become a lien upon the property. If the cost of such dismantling and physical removal is borne by the County, the cost therefore shall be charged to the WTF owner and all co-applicants. The County shall have the authority to enforce the collection of the charges associated with the dismantling and physical removal of abandoned WTFs by any and all means provided by law when such charges are due and remain unpaid for a period of thirty (30) days.

**Sec. 16-10 Reconstruction or Replacement of Existing Antenna Support Structures.**

- a. Guyed structures, lattice structures, utility structures and nonconcealed freestanding structures in existence at the time of adoption of this Section may be reconstructed, altered, extended or replaced on the same site, provided that the Planning Commission finds that the proposed antenna support structure will be a lesser visually obtrusive profile than the existing structure. In

making such a determination, the Planning Commission shall consider whether the proposed action will create public benefits such as opportunities for collocation, improvements in public safety, reduction in the overall number of WTFs, improvement in network functionality resulting in compliance with this Section and/or reduction in visual and environmental impacts.

- b. No reconstruction, alteration, extension or replacement shall exceed the height of the existing WTF by more than 20 feet.
- c. Reconstruction and replacement of guyed and lattice structures and nonconcealed freestanding structures shall not be allowed in residential districts, recognized historic areas or within the scenic vistas and landscapes listed in Sec. 16-6.8.
- d. Setbacks shall comply with Sec. 16-6.3. Reconstructed facilities shall comply with all other current ordinance requirements. The Planning Commission may waive compliance, wholly or partially, if requirements cannot be met because of physical limitations relating to the location of the proposed reconstruction.

**Sec. 16-11 Review Procedures.**

**Sec. 16-11.1 Pre-Application Conference.**

Prior to the submission of an application, the applicant shall have a pre-application conference with the Executive Director to discuss a new WTF and the filing requirements. It shall be the discretion of the Executive Director to waive this requirement.

**Sec. 16-11.2 Application Submission**

- a. An application shall be reviewed for completeness. If any required item fails to be submitted, the application shall be deemed incomplete. The Executive Director shall advise an applicant, in writing, within 15 business days after submittal of an application regarding completeness. If the application is incomplete, such notice shall set forth the missing items or deficiencies in the application which the applicant must correct and/or submit in order for the application to be deemed complete. If the application is complete, the notification will identify completeness and the type of review to be conducted.
- b. Upon resubmittal of an application, the Executive Director shall have an additional 15 business days to give notice as to the completeness of the amended application.

**Sec. 16-11.3 Review Responsibility.**

Review procedures vary by the type of WTF facility proposed. Where due to the complexity of the methodology or analysis required to review an application for a WTF requiring radio frequency analysis, the Executive Director may require a technical expert review as described in Section 16-11.5. Review procedures are as follows:

<b>Review Process</b>		
<b>Facility Type</b>	<b>Review Responsibility</b>	<b>Other Considerations</b>
Concealed Attached	Executive Director	
Collocation or Combined on Existing Antenna Support Structure	Executive Director	

Nonconcealed Attached	Executive Director	Planning Commission review required if proposed in a recognized historic area.
Concealed Freestanding	Planning Commission	
Nonconcealed Freestanding	Planning Commission	Not allowed within a residential district, a recognized historic area, within 100 feet of either, or within a scenic vista or landscape as identified in Subsection 16-6.8.
Modification	Executive Director	
<b>Exceptions to the Above Facilities</b>		
A request for any waiver identified in this Article	Planning Commission	
Replacement or reconstruction of existing antennas and monopoles.	Planning Commission	Section 16-10

**Sec. 16-11.4 Notification.**

An application that requires review by the Planning Commission (not to include reviews by the Executive Director) shall have public notice to include:

- a. **Mailed Notification.** A notification of the date and time of the Planning Commission meeting shall be mailed to all property owners within a 300 foot radius of the proposed WTF subject property at least 15 days but no more than 45 days prior to the meeting.
- b. **Posting of Property.** A sign provided by the MPC or County shall be posted on the property to announce the date and time of the Planning Commission meeting at least 15 days but no more than 45 days before the meeting. The sign shall be posted to face the most traveled right-of-way.

**Sec. 16-11.5 Supplemental Review.**

A supplemental review will be required for a freestanding WTF and may be required for all other types of WTFs, when determined necessary, subject to the following:

- a. Where due to the complexity of the methodology or analysis required to review an application for a WTF, the Executive Director or Planning Commission may require a supplemental review by a third party expert, the costs of which shall be borne by the applicant and be in addition to other applicable fees.
- b. The applicant shall submit a deposit towards the costs of such supplemental review upon written notification from the Executive Director that such review is required.
- c. Based on the results of the expert review, changes to the application or items submitted as part of the application may be required.

- d. The technical expert review shall address all of the following:
  - 1. The accuracy and completeness of the items submitted with the application.
  - 2. The applicability of analysis and techniques and methodologies.
  - 3. The validity of conclusions reached.
  - 4. Whether the proposed WTF complies with applicable approval criteria set forth in this Section.
  - 5. Other matters deemed to be relevant to determining whether a proposed WTF complies with the provisions of this Section.

**Sec. 16-11.6 Appeals.**

- a. An applicant or citizen with legal standing aggrieved by a decision may file an appeal within five days of the decision. The appeal shall be specific to the portion of the decision is being appealed.
- b. An appeal of a decision of the Executive Director shall be to the Planning Commission. The Planning Commission shall have the authority to review the application in its entirety.
- c. An appeal of a decision of the Planning Commission shall be to the Board of County Commissioners. The Board of County Commissioners shall limit their review to only that information that was presented to the Planning Commission. However, the Board of County Commissioners may request other evidence as they deem relevant to make a decision.
- d. Notification of an appeals meeting shall be consistent with the mailed notification requirement in Section 16-11.4.