

ARTICLE VI. REQUIREMENTS FOR SPECIALLY REGULATED USES

Sec. 30-98. Communication Tower and Antenna Regulations.

(a) Purpose. These regulations were developed to protect the health, safety and welfare of residents of the City, and to protect property values and minimize visual impact while furthering the development of enhanced telecommunications services in the City. These standards are designed to comply with the Telecommunications Act of 1996. The provisions of this section are not intended to and shall not be interpreted to prohibit or have the effect of prohibiting the provision of personal wireless services. This section shall not be applied in such a manner as to unreasonably discriminate between providers of functionally equivalent services, consistent with federal regulations. These regulations are intended to:

- (1) Provide uniform standards for the provision of both radio and television broadcast signals and telecommunication services, including two-way radio, paging, PCS, cellular and related wireless services;
- (2) Protect the natural features and aesthetic character of the city by regulating the location, design and operation of wireless communication facilities, with special attention to residential neighborhoods, public parks, transportation view corridors, historic districts, historic landmarks, and environmentally sensitive lands;
- (3) Minimize the adverse visual and aesthetic impacts of wireless communication facilities through innovative design, siting and landscaping standards, including incentives to promote the use of camouflaged towers, stealth facilities, co-location of new antennas on existing communication towers and the placement of antennas on roofs, walls, existing towers and other existing structures;
- (4) Accommodate the growing demand for wireless communication services, consistent with the Federal Telecommunications Act of 1996, and ensuring an efficient and high-quality wireless communications network; and
- (5) Expedite the review process for those applications choosing the least intrusive alternative of deploying wireless telecommunication services.

(b) Definitions. When used in this section, the following terms shall have the following meaning:

Amateur radio towers. Structural facilities used to support amateur radio antennas as licensed and operated by federally licensed amateur radio station operators.

Antenna. Any exterior apparatus designed for sending and/or receiving intelligence without physical connection.

Broadcast. To transmit information without physical connections to two or more receiving devices simultaneously. Information can be transmitted over local television or radio stations, satellite systems or wireless data communications networks.

Camouflaged facility. Any wireless communication facility that is designed to blend into the surrounding environment or that camouflages or conceals the presence of the wireless communication facility. Examples of camouflaged towers include, but are not limited to, man-made trees, clock towers, bell steeples, flag poles, light poles, and similar alternative-design mounting structures. Examples of camouflaged antennas include, but are not limited to, architecturally screened roof-mounted antennas, building-mounted antennas painted to match the existing structure, and antennas integrated into architectural elements.

Camouflaged towers. Man-made trees, clock towers, bell steeples, flag poles, light poles, and similar alternative-design mounting structures that camouflage or conceal the presence of antennas or towers.

Co-location. Locating wireless communications equipment from more than one provider on a single site.

Communication tower. A guyed, ~~monopole~~, or self-supporting tower, constructed as a free standing structure or in association with a building, other permanent structure or equipment, containing one or more antennas intended for transmitting and/or receiving television, AM/FM radio, digital, microwave, cellular, telephone, or similar forms of electronic communication.

FAA. The Federal Aviation Administration.

FCC. The Federal Communications Commission.

Guyed tower. A communication tower that is supported, in whole or in part, by guy wires and ground anchors.

Height. The vertical distance measured from the base of the tower or antenna support structure at grade to the highest point of the structure. ~~Alternatively, if at applicant's option, if the tower or support structure is on a sloped grade, then the average between the highest and lowest grades within six times the tower height shall~~ may be used in calculating the antenna height.

Lattice tower. A guyed or self-supporting three or four-sided, open, steel frame structure used to support communications equipment.

Microwave transmission tower. A structure operated for the specific purpose of transmitting microwave frequency bands communications not open to public correspondence, operated by and for the sole use of those licensees operating their own point-to-point radio communication facilities in the public safety, business, industrial, land transportation, marine or aviation service.

Monopole wireless tower. A communication tower consisting of a single pole, constructed without guy wires and ground anchors, used for the transmission of wireless communication.

Personal wireless services (PWS). Commercial mobile services, unlicensed wireless services and common carrier wireless exchange access services as defined by Federal Regulations.

Personal wireless service (PWS) antenna. A device used for sending or receiving radio signals used by a personal wireless service provider (a company authorized by the FCC to operate a PWS system), including This may include, but is not limited to, hardware to affix an antenna to its supporting object. the support structure used to hold the antenna at a particular height. This does not include antennas as defined in subsections 30-98(n) a)(4) and 30-98(f) and (g), or other accessory personal use antennas as allowed by the City Code of Ordinances.

Personal wireless service facility (PWSF). A collection of objects, commonly termed 'system', used in the transmission and reception of signals by a company authorized by the FCC to provide Personal Wireless Services. This definition may include all commonly used ancillary apparatus such as equipment buildings, towers, generators, mounting hardware and electronic devices specifically intended for PWS transmission and reception. This definition excludes buildings or other structures that were not constructed specifically for antenna support.

Retransmission tower. A structure operated for the specific purpose of retransmitting the signals of a radio broadcast station or another retransmission facility without significantly altering the characteristics of the incoming signal other than its frequency or amplitude.

Service provider(s). Any individual, company, firm or other entity that provides telecommunications service over telecommunications facilities.

Stealth facility. Any communications facility that is designed to blend into the surrounding environment. Examples of stealth facilities may include architecturally screened roof mounted antennas, building mounted antennas painted to match the existing structure, antennas integrated into architectural elements, and antenna structures designed to look like light poles.

System. The communications transmission system operated by a service provider in the municipality.

Telecommunications. ~~The transmission of information by electronic transmissions of the user's choosing between or among points specified by the user.~~

Tower. Any structure that is designed and constructed primarily for the purpose of supporting one or more antennas, including self-supporting lattice towers, guy towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures, and the like.

Wireless communication facility. An all-encompassing definition including any towers, poles, antennas or other structures intended for use in connection with transmission or receipt of radio or television signals, or any other transmissions/receptions.

(c) Applicability. The requirements of this section apply to all new, existing (to the extent stated herein), replacement, relocated, expanded and/or modified wireless communication facilities and broadcast towers. All property within the City shall be subject to the requirements of this section. It is the intent of the City to impose all regulations of this section to all land within the City, whether publicly or privately held, except as specifically provided. These regulations shall supersede all other code provisions concerning these facilities. Setback and separation distances shall be applied regardless of municipal and county jurisdictional boundaries.

(d) Camouflaged towers. Camouflaged towers shall be permitted in all zoning districts except for those zones in the single-family and residential-low land use categories (see Attachment A).

(1) Height. The maximum height of camouflaged towers in multiple-family districts as listed in Attachment A, and office or mixed-use districts as listed in Attachment A, is 80 feet. The maximum height of camouflaged towers in all other districts is 110 feet, except that in industrial districts a camouflaged tower of 130 feet can be approved if the tower is not within 300 feet of residential, office or mixed-use land, as designated on the Future Land Use Map. The height requirement shall not apply if the camouflaged tower is incorporated into a steeple, clock tower or similar architectural feature; however, the incorporated antenna must not exceed the height limitations prescribed in the airport zoning ordinance. Camouflaged towers may be constructed in excess of the maximum heights listed above, provided a special use permit is issued in accordance with Article VII, Division 5 of this chapter.

(2) Setbacks. Regardless of the zoning district in which a camouflaged tower is located, the tower shall be set back a distance of at least 150 percent of the height of the tower from any adjoining lot line, 250 feet from the nearest property lines of any single-family, multiple-family, office or mixed-use district. Camouflaged towers may be constructed within 250

~~feet of the nearest property lines of any single family, multiple family, office or mixed use district, provided a special use permit is issued in accordance with Article VII, Division 5 of this chapter.~~

- (3) Co-location. Any camouflaged tower in excess of 110 feet in height shall be designed to support the facilities of at least 3 providers, including the facilities of the applicant. Any camouflaged tower in excess of 70 feet in height but less than 110 feet in height shall be designed to support the facilities of at least 2 providers, including the facilities of the applicant.
- (4) Development plan approval. Development plan approval will be in accordance with the review procedures in Article VII, Division 1 of this chapter, the provisions for neighborhood workshops in section 30-350, Citizen participation and with the requirements as listed below in subsection 30-98(m), Submittal requirements. All proposed camouflaged towers must be architecturally and/or aesthetically compatible with the surrounding community. A public hearing shall be held to consider all camouflaged tower development plan applications. The base application fee for review of an application to construct a camouflaged tower shall be the same as the fee for intermediate plan review, plus the fee for the technical consultant, if necessary.
- (5) Aircraft hazard. All towers shall comply with the airport hazard zoning regulations in Appendix F.
- (6) Utility building. ~~The camouflaged tower site shall be limited to one accessory utility building or structure to shelter the associated equipment needed to operate the facility. The building or structure shall be constructed to accommodate multiple providers and designed to be compatible with the surrounding environment, while meeting the minimum building setback requirements of the underlying zoning district.~~ The equipment used to operate the facility shall be stored in:
 - a. An existing building on the site; or
 - b. An equipment cabinet, shelter or an underground vault; or
 - c. A building constructed or installed to accommodate multiple providers and designed to be compatible with the surrounding environment, while meeting the minimum building setback requirements of the underlying zoning district.

The equipment cabinet or shelter shall be screened by a fence or wall of not less than 8 feet in height from finished grade, or by landscaping that conceals the cabinet or building.

(7) Equipment storage. No equipment, mobile or immobile, not used in direct support of the transmission or relay facility, shall be stored or parked on the site unless repairs to the facility are being made.

(e) Monopole wireless towers. Except as set forth in section 30-98(i), monopole wireless towers that are not accessory to Communications uses (MG-48), shall be permitted by right in I-1, I-2, AGR and PS zones.

(1) Height. The maximum height of a monopole wireless tower is 130 feet. Monopole wireless towers may be constructed in excess of the maximum height, up to 200 feet, provided a special use permit is issued in accordance with Article VII, Division 5 of this chapter.

(2) Setbacks. Regardless of the zoning district in which a monopole wireless tower is located, the tower shall be set back a distance of at least 300 feet from the nearest property lines of any single-family, multiple-family, office or mixed-use district. The tower shall be set back at least 100 percent of the height of the tower from any adjoining lot line. Monopole towers may be constructed within 300 feet of the nearest property lines of any single-family, multiple-family, office or mixed-use district, provided a special use permit is issued in accordance with Article VII, Division 5 of this chapter.

(3) Co-location. Monopole wireless towers shall be designed to accommodate co-location for multiple wireless communication service providers in accordance with the following:

Table 1: Co-location Requirements

Monopole Wireless Tower Height	Total Number of Providers
Less than 110 feet	3 (70-110 feet)
111 feet to 130 feet	4
131 feet to 170 feet	5
171 feet to 200 feet	6

(4) Fencing and buffering (all nonresidential districts). A metal or solid fence or wall of not less than 8 feet in height from finished grade, with locked gates, shall be provided around the base of each tower or around the yard area where the tower is located. Climb-proof shields can be substituted for a fence or wall around any tower. A monopole wireless tower shall provide a buffer equal to that of an industrial commercial use in accordance with Article VIII, except that in cases where the adjacent use is also industrial commercial and a buffer is not required, adjacent use

Buffer D C will be provided in any event. Exceptions to the buffer strip requirement shall be in accordance with Section 30-253(5)b.

- (5) Utility building. The monopole wireless tower site shall be limited to one accessory utility building or structure to shelter the associated equipment needed to operate the facility. The building or structure shall be constructed to accommodate multiple providers and designed to be compatible with the surrounding environment, while meeting the minimum building setback requirements of the underlying zoning district. The equipment used to operate the facility shall be stored in:
- a. An existing building on the site; or
 - b. An equipment cabinet, shelter or an underground vault; or
 - c. A building constructed or installed to accommodate multiple providers and designed to be compatible with the surrounding environment, while meeting the minimum building setback requirements of the underlying zoning district.

The equipment cabinet or shelter shall be screened by a fence or wall of not less than 8 feet in height from finished grade, or by landscaping that conceals the cabinet or building.

- (6) Equipment storage. No equipment, mobile or immobile, not used in direct support of the transmission or relay facility, shall be stored or parked on the site unless repairs to the facility are being made.
- (7) Aircraft hazard. All towers shall comply with the airport hazard zoning regulations in Appendix F.
- (8) Development plan approval. Development plan approval will be in accordance with the review procedures in Article VII, Division 1 of this chapter, the provisions for neighborhood workshops in section 30-350, Citizen participation and with the requirements as listed below in subsection 30-98(m), Submittal requirements. A public hearing shall be held to consider all monopole wireless tower development plan applications. The base application fee for review of an application to construct a monopole wireless tower shall be the same as the fee for intermediate plan review, plus the fee for the technical consultant, if necessary.
- (f i) *Personal wireless service (PWS) facilities.*
- (1) *General.*
- a. PWS antennas attached to existing structures shall be permitted as accessory uses in all zoning districts.

- b. PWS antennas may be located on existing commercial, industrial, office, institutional or multiple-family structures ~~of 5 or more stories, or at least 65 feet.~~ PWS antennas shall not be mounted on single-family structures, and two-family structures, ~~or on commercial, industrial, office, institutional or multiple-family structures less than 5 stories in height, or less than 65 feet.~~
- c. PWS antennas may extend a maximum of 20 feet above the roofline or the highest point of the existing structure on which they are mounted. A special use permit may be approved for a PWS antenna to extend higher than 20 feet above the roofline or the highest point of the existing structure if it can be shown that this will prevent the construction of a communications tower elsewhere.
- d. The height of a rooftop installation shall be measured from the finish level of the portion of the roof on which the antenna is mounted.
- e. The height requirement shall not apply if the PWS antenna is incorporated into an existing steeple, bell tower or similar architectural feature of a church, school or institution; however, the incorporated antenna must not exceed the height limitations prescribed in the airport zoning ordinance.
- f. PWSF's antennas may not display any commercial advertising, nor may they display any signals, lights or illumination unless it is required by an applicable federal, state or local statute, ordinance, rule or regulation.
- g. The design, construction and installation of PWSF's antennas shall comply with all applicable building codes.
- h. PWS antennas placed on a legally non-conforming structure shall not be considered an expansion of the structure. Existing PWS antennas that were legally installed at the time of initial installation may be repaired, replaced and/or relocated at an equal or lower height on the existing structure.

(2) *Visual compatibility.*

- a. PWS antennas must be placed on the structure out of public view to the greatest extent possible. If this is not practical, screens or enclosures are required to conceal the facility from public view in a manner that is compatible with the scale, color and architectural character of the structure.
- b. If it is necessary to place the PWS antenna in public view, it shall be integrated into the structure in such a manner that it is compatible with the scale, color and architectural character of the structure to the greatest extent practical.

- c. Equipment shelters used in conjunction with PWS antennas shall be located inside the existing structure or hidden from public view, or made compatible with the scale, color and architectural character of the structure.
- d. A PWS antenna shall comply with the required setbacks for the zoning district in which it is located.

(3) *Development plan approval.* Development plan approval in accordance with Article VII and the application requirements of subsection 30-98(m)(1), and (6) and through (9), are is required prior to the issuance of a building permit for all PWS antennas.

(g) *Personal wireless service (PWS) facilities (PWSF) on existing wireless communication towers.*

(1) *General.*

- a. PWS antennas attached to existing tower structures shall be permitted as accessory uses in all zoning districts.
- b. PWSF's antennas may not display any commercial advertising, nor may they display any signals, lights or illumination unless it is required by an applicable federal, state or local statute, ordinance, rule or regulation.
- c. The design, construction and installation of PWSF's antennas shall comply with all applicable building codes.
- d. PWS antennas placed on a legally non-conforming structure shall not be considered an expansion of the structure. Existing PWS antennas that were legally installed at the time of initial installation may be repaired, replaced and/or relocated at an equal or lower height on the existing structure.

(2) *Development plan approval.* The level of review for PWSF's facilities on at existing wireless communication towers shall be rapid review in accordance with Article VII and the application requirements of subsection 30-98(m)(1), and (6) and through (9), prior to the issuance of a building permit for all PWS antennas.

(h 4) *Amateur radio towers Residential districts.* All ~~transmitter~~ amateur radio towers in residential districts as listed in Article IV of this chapter must meet the following requirements:

- (1 a-) *Height.* No tower shall rise more than 80 feet from the ground level at the exact site on which it is erected except as otherwise provided for in paragraph (g 7) below.
- (2 b-) *Location.* Towers are only allowed in rear yards. Only one tower is

allowed per lot.

- (3 e-) *Guy anchors.* Guy anchors shall meet the setback requirements of the respective residential district and are allowed in side and rear yards only.
- (4 d-) *Construction standards.* Towers must meet manufacturer's specifications and plans must be certified by an engineer licensed in the State of Florida. Towers must meet the requirements of the Standard Building Code, as may be amended from time to time, relating to wind loads, and must be engineered or guyed so that in the event a tower falls it will collapse only within the property lines on which it is located. All towers must meet the standards contained in American National Standards Institute "Steel Antenna Towers and Steel Supporting Structures" (ANSI EIA/TIA 222, ~~E-1991~~ latest version).
- (5 e-) *Fencing and buffering.* A metal chainlink ~~chainlink~~ fence or solid wood or masonry wall at least 8 feet in height shall be constructed and maintained around the perimeter of the rear yard or the base of the tower. Climb-proof shields can be substituted for a fence or wall around the tower. A combination of hedges and/or evergreen trees, at least 4 feet in height when planted, shall be planted and maintained around the perimeter of the rear yard or in a continuous line around the tower and spaced close together to provide a continuous visual screen. Shrubs shall also be planted and maintained around the guy anchors for visual screening purposes.
- (6 f-) *Design/landscape plan.* A design/landscape plan is required for all proposed tower sites, showing the proposed location of the tower, guy anchors and any existing or proposed landscaping as required by this section.
- (7 g-) *Special use permit for excess height.* Towers may be constructed in excess of the 80-foot height limitation provided a special use permit is issued. In addition to the requirements of Article VII, Division 5 ~~4~~, special use permit considerations shall also include the following:
 - 1 a. The effects of topography, terrain and height of surrounding tree canopy on broadcasting ability.
 - 2 b. The construction and design of towers with regard to safety regulations including a consideration of the distance from the airport and whether the proposed tower would interfere with any flight paths.
 - 3 c. The visual impact on surrounding properties and existing or proposed screening and buffering.
- (8) *Development plan approval.* The level of review for amateur radio towers shall be rapid review in accordance with Article VII.

(i) Historic preservation/conservation districts. A wireless communications tower may only be located in a historic preservation/conservation district if it is a camouflaged tower and is 80 feet or less in height. A certificate of appropriateness from the historic preservation board will be required for approval, in addition to the requirements of subsection 30-98(d). Personal wireless service (PWS) antennas located in a historic preservation/conservation district will be required to obtain a certificate of appropriateness from the historic preservation board for approval, in addition to the requirements of subsection 30-98(f) and (g). Any alteration made to a historical structure to accommodate the placement of a PWS antenna shall be fully reversible.

(j) Broadcast Transmitter towers, retransmission and microwave transmission towers. Broadcast towers can be guyed towers, lattice towers or monopole towers.

(1 a) Dimensional requirements.

(1) a. Tower location. Broadcast transmitter towers and retransmission and microwave transmission towers shall be located on the site so as to provide a minimum distance equal to one-third the height of the tower from all property lines shall be set back at least 300 feet from the nearest property lines of any single-family or multiple-family district. The tower shall be set back at least 100 percent of the height of the tower from any adjoining lot line. No accessory broadcast tower may be located between the street and the front of any principal building, except in the W, I-1, I-2, CON and AGR districts. Broadcast accessory towers adjacent to any residential district shall be screened along any common property line by trees and shrubs as required in subsection (a)(4)e. of this section. A combination of hedges (firs or other fast growing plants) and/or evergreen trees, at least four feet in height when planted, shall be planted and maintained around the perimeter of the rear yard or in a continuous line around the tower and spaced close together to provide a continuous visual screen. Shrubs shall also be planted and maintained around the guy anchors for visual screening purposes.

(2) b. Anchor location. All tower supports and peripheral anchors shall be located entirely within the boundaries of the property.

(3) c. Height and angle of light. The height and angle of light obstruction of particular zoning districts shall not apply to transmitter broadcast towers.

(2 b) Fencing and buffering (all nonresidential districts). A chainlink metal or solid fence or wall of not less than 8 feet in height from finished grade, with locked gates, shall be provided around the base of each tower or

around the yard area where the tower is located. Climb-proof shields can be substituted for a fence or wall around any ~~accessory~~ tower. A broadcast tower shall provide a buffer equal to that of an industrial use in accordance with Article VIII, except that in cases where the adjacent use is also industrial and a buffer is not required, adjacent use Buffer D will be provided.

- (3 e) *Equipment storage.* No equipment, mobile or immobile, not used in direct support of the transmission or relay facility, shall be stored or parked on the site unless repairs to the facility are being made.
- (4 d) *Aircraft hazard.* ~~No tower shall be permitted to encroach into or through an established airport approach plane as established by the airport zoning ordinance.~~ All towers shall comply with the airport hazard zoning regulations in Appendix F.
- (5) *Development plan approval.* Development plan approval will be in accordance with the review procedures in Article VII, Division 1 of this chapter, as well as the provisions for neighborhood workshops in section 30-350, Citizen participation and with the requirements as listed below in subsection 30-98(m)(6)-(10) and (13)-(15), Submittal requirements.
- (k 5) *Existing communication ~~transmitter~~ towers.*
 - (1 a-) An existing communication ~~transmitter~~ tower that does not conform to the minimum distance requirements in subsections ~~(a)(1)~~ (d)(2), (e)(2) or (j)(1) a., may be replaced by a tower of the same type and height without coming into compliance with those minimum distance requirements. All other applicable requirements of this section shall apply to the replacement tower.
 - (2 b-) Modification or reconstruction of any existing communication ~~transmitter~~ tower to accommodate the co-location of one or more additional users shall be permitted. The modification or reconstruction shall not increase the height or change the type of tower, except that any type of tower may be reconstructed as a monopole or camouflaged tower. An existing wireless communication facility and broadcast tower that is being modified or replaced to accommodate the co-location of two or more additional users may be moved within the development site. However, the modified or replacement tower shall be located as close as possible to the existing tower and in no instance shall either the modified or replacement tower be constructed at a distance greater than 50 feet from the existing tower. The base of the communication tower cannot be closer than 25 feet to property designated for residential use on the future land use map of the comprehensive plan. Distance shall be measured from the base of the tower.
 - (3 e-) No existing communication ~~transmitter~~ tower location shall be made nonconforming with the minimum distance requirements of subsections

~~(a)(1)~~ ~~(d)(2)~~, ~~(e)(2)~~ or ~~(j)(1) a.~~, due to the modification or replacement of the existing tower. An existing tower that does not conform to the minimum distance requirements of subsections ~~(a)(1)~~ ~~(d)(2)~~, ~~(e)(2)~~ or ~~(j)(1) a.~~, shall not be moved within the development site to a position closer to existing adjacent residential land as designated on the future land use map of the comprehensive plan.

- ~~(4 d-)~~ In all cases the existing tower shall be removed within 30 days of completion of the replacement tower.
- ~~(5 e-)~~ The replacement tower must comply with the airport hazard zoning regulations of the city.

~~(1 h) *Unused or abandoned towers.* A wireless communications tower shall be considered to be abandoned when it is not used for transmission or retransmission for nine continuous months. Upon determination that a tower has been abandoned, the City Manager or designee shall provide written notice of the determination, by certified mail, to the owner of the tower. Upon receipt of the written notice of abandonment, the owner shall have 90 days to: Any transmitter tower that does not comply with any regulation or ordinance of the City of Gainesville and that is not used for transmission or retransmission for nine continuous months shall be considered to have lost its legal nonconforming status and must comply with section 30-346(d)(5) of this chapter concerning nonconforming uses.~~

- (1) Reactivate the use of the tower;
- (2) Transfer the tower to another owner who makes actual use of the facility;
or
- (3) Remove the tower and all associated equipment. If the tower is not removed within 90 days of the receipt of notice of abandonment, the city may dismantle and remove the tower and recover the costs from the owner or by accessing the bond set forth in subsection 30-98(m)(13), Submittal requirements.

(m) *Submittal requirements.* In addition to the requirements of Article VII, Division 1, an application for a wireless communication tower facility shall contain the following information:

- (1) The identity of the owner(s) of the proposed facility, as well as the identity of the wireless communication service provider(s) who have committed to locating on the proposed facility.
- (2) The distance between the proposed tower and the nearest residentially zoned lands.

- (3) A map showing all of the existing wireless communication towers within a minimum 2 mile radius of the proposed facility, including those that are currently in the permitting process, and all of the structures greater than 80 feet in height that could reasonably support a wireless communication antenna and are located within the search area of the proposed facility. Additionally, this map shall show all locations of the nearest adjacent existing, and pending and planned sites of the service provider, possibly requiring the map to display distances greater than 2 miles from the proposed site.
- (4) Written documentation that the applicant made diligent, but unsuccessful efforts to install or co-locate the applicant's telecommunications facilities on towers or other support structures owned by the applicant or other persons located within the applicant's search area.
- (5) Written documentation that the applicant made diligent, but unsuccessful efforts to install or co-locate the applicant's telecommunications facilities on towers or other support structures on city-owned towers or support structures located within the applicant's search area.
- (6) Details of all proposed antennas and mounting equipment, including the location on the structure, size and color.
- (7) A design drawing including a cross-section and elevation of the proposed tower.
- (8) A description of the capacity of the facility tower including the number and type of antennas that can be accommodated as well as the proposed location of all mounting positions for co-located antennas and the minimum separation distances between antennas.
- (9) A certified statement from a licensed professional engineer attesting to the structural integrity of the proposed facility and its ability to accommodate additional antennas.
- (10) Color photo simulations showing the proposed site of the tower with a photo-realistic representation of the proposed facility, as it would appear viewed from the closest residential property or properties and adjacent roadways.
- (11) An application for a wireless communication tower facility that requires a special use permit shall contain a propagation map depicting both the extent of the communication service provider's existing coverage within the subject area and the service area of the proposed tower.

~~(12) An application for a wireless communication tower facility that requires a special use permit shall contain a wireless communication plan that includes:~~

- ~~a. All of the provider's existing wireless communication facilities within the urbanized area by size, type, and their coverage areas.~~
- ~~b. All presently anticipated future service areas within the urbanized area, anticipated deployment date, and types of wireless communication facilities and heights desired for each of the service areas.~~
- ~~c. The various types of wireless communication facilities used by the provider to furnish service and when they are used. This includes drawings providing the sizes and shapes of the antenna and equipment as well as written materials describing their application.~~

(12) A bond or irrevocable letter of credit in an amount determined by the city manager or designee to ensure that should the tower be abandoned pursuant to subsection 30-98(1), removal of the tower will be guaranteed.

(13) FCC license and registration numbers.

~~(14) In addition to the requirements listed above, review of a special use permit will require a technical showing that includes an uplink and downlink power budget for the applicant's proposed facilities shall be required. In addition, supply the following data (a computer printout is sufficient) concerning the proposed facilities and each existing or planned adjacent site, if any. The data shall include the site name or other reference, NAD83 Latitude and Longitude, frequency band, site elevation above mean sea level (amsl), radiation center height above ground level (agl), of each sector antenna along with its manufacturer, model number, maximum effective radiated output power and main lobe azimuth and beam tilt factors. Note that all microwave and other radio facilities, if any, must be included.~~

(14) Any additional information that is necessary for the city to complete the review of the application.

(n f) *Antennas.* For the purposes of this subsection and subsection (g), antenna shall mean any exterior apparatus designed for television communications through the reception of electromagnetic waves. The following antennas used to receive video programming signals are allowed in all zoning districts and are exempt from the provisions of this section except as noted herein:

- (1) Residential antenna satellite dishes that are one meter (39 inches) or less in diameter and are designed to receive direct broadcast satellite (DBS) service, including direct-to-home satellite service.
- (2) Antennas that are one meter (39 inches) or less in diameter or diagonal measurement and are designed to receive video programming services via multichannel multipoint distribution service (MMDS or wireless cable). These antennas may be mounted on masts to reach the height needed to establish line-of-sight contact with the transmitter. Antennas mounted on masts higher than 20 feet are considered communication towers and are subject to the provisions of subsection 30-98(h) ~~(a)-(e)~~.
- (3) Antennas that are designed to receive over-the-air television broadcast signals and that are mounted on masts higher than 20 feet are considered communication towers and are subject to the provisions of subsection 30-98(h) ~~(a)-(e)~~.

(4 g) *General conditions for antennas.*

- a. There are no minimum setback requirements for antennas described in subsections 30-98(f n)(1)-(3). In order to protect pedestrians and vehicle operators from possible conflict with structures in the right-of-way, no part of an antenna or its support structure may extend over public sidewalk or right-of-way at a height of less than nine feet.
- b. Antennas described in subsections 30-98(f n)(1)-(3), must be placed in a location not visible from the street unless an acceptable signal cannot be obtained from that location. If an antenna must be placed where it is visible from the street, it must be placed wholly on the subject property and must comply with the provisions of section 30-341, (vision triangle). This is a safety-based restriction necessary to provide unobstructed sight distance in both directions on all approaches to an intersection, so that the vehicle operator is afforded an opportunity to avoid collisions.
- c. A certificate of appropriateness is required for the placement of antennas described in subsections 30-98(f n)(1)-(3), in those districts or on individual properties that are listed on both the local and national register of historic places and for those districts or individual properties listed on the local register of historic places for which the federal communications commission has granted permission for the city to regulate antenna placement.

(o) *Environmental regulations.* All wireless communications facilities shall comply with all applicable environmental regulations.

(p) *Separation.* No monopole wireless tower shall be permitted to be constructed within 1,320 feet of another tower. The distances shall be measured by

drawing or following a straight line between the base of an existing tower and the base of the proposed tower.

(q e) *RF radiation.* Wireless communication facilities shall comply with the current Federal Communications Commission (FCC) standard with respect to human exposure to radio frequency electromagnetic fields. The tower owner shall be prepared to demonstrate the percentage of compliance with the appropriate standard upon written request by the city manager or his/her designee. Radio facilities shall not exceed "Radio Frequency Protection Guides" in American National Standards Institute "Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300k to 100GHz" (ANSI C95.1 1992). The tower owner shall be prepared to demonstrate the percentage of compliance with ANSI standard C95.1 1992 upon written request by the city manager or his/her designee.

(r) *Signs and illumination.* No signage or advertising shall be permitted on any wireless communications facility, except that each tower facility shall have an identification sign of no more than 6 square feet, identifying the service providers, the dates of permit approval, and the FCC registration and site identification numbers. The maximum height of the sign shall be no more than 6 feet, as measured from the base of the tower. No signals, lights or illumination shall be permitted on any wireless communication facility unless required by the Federal Aviation Administration or as an integral part of the design of a camouflaged facility.

(s) *Technical consultants.* The city shall have the right to hire independent technical consultants and experts that it deems necessary to properly evaluate applications for individual commercial wireless telecommunication facilities. The applicant shall be responsible for paying the costs of such consultation, the costs of which shall be based upon a reasonable hourly rate. Payment is due upon receipt of the billing invoice and proof of payment shall be required prior to the consideration of the application by the appropriate reviewing body of the city. The applicant shall also be responsible for paying the costs of such consultation that may occur at the time of consideration of the application by the appropriate reviewing body. No final development order for the project under review shall be issued by the city until payment in full has been received by the city for technical consultation costs incurred during review of the application by the appropriate reviewing body.

(t) *New technology.* If at any time after the adoption date of this ordinance the city finds that the technologies pertaining to communication towers and stealth facilities have changed such that wireless communications can be readily provided with structures that are significantly less intrusive to surrounding land uses than previous technologies, the city manager or designee has the option to make the new technologies permitted uses with the appropriate level of development review.

Attachment A

For the purposes of this section, single-family and residential-low zoning districts shall include the following:

- RSF-1: 3.5 units/acre single-family residential district.
- RSF-2: 4.6 units/acre single-family residential district.
- RSF-3: 5.8 units/acre single-family residential district.
- RSF-4: 8 units/acre single-family residential district.
- RC: 12 units/acre residential conservation district.
- MH: 12 units/acre mobile home residential district.
- RMF-5: 12 units/acre single-family/multiple-family residential district.

Multiple-family districts shall include the following:

- RMF-6: 8--15 units/acre multiple-family residential district.
- RMF-7: 8--21 units/acre multiple-family residential district.
- RMF-8: 8--30 units/acre multiple-family residential district.
- RMU: Up to 75 units/acre residential mixed use district.
- RH-1: 8--43 units/acre residential high density district.
- RH-2: 8--100 units/acre residential high density district.

Office districts shall include the following:

- OR: 20 units/acre office residential district.
- OF: General office district.
- MD: Medical services district.

Mixed-use districts shall include the following:

- MU-1: 10--30 units/acre mixed use low intensity.
- MU-2: 14--30 units/acre mixed use medium intensity.
- CCD: Up to 150 units/acre central city district.
- CP: Corporate park district.