FAIRFAX COUNTY PLANNING COMMISSION
TELECOMMUNICATIONS COMMITTEE
WEDNESDAY, NOVEMBER 30, 2016

PRESENT: Peter F. Murphy, Springfield District, Chairman
Ellen J. Hurley, Braddock District
John Ulfelder, Dranesville District
James T. Migliaccio, Lee District
Earl L. Flanagan, Mount Vernon District
James R. Hart, Commissioner At-Large

ABSENT: Timothy J. Sargeant, Commissioner At-Large
Kenneth A. Lawrence, Providence District

OTHERS: Janyce N. Hedetniemi, Commissioner At-Large
Frank A. de la Fe, Hunter Mill District
Chris Caperton, Planning Division (PD), Department of Planning and Zoning (DPZ)
Natalie Knight, PD, DPZ
Inna Kangarloo, Senior Deputy Clerk, Planning Commission

ATTACHMENT:
A. Fairfax County Comprehensive Plan, 2013 Edition, Public Facilities, Amended through 3-4-2014

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Chairman Peter F. Murphy called the meeting to order at 7:02 p.m., in the Board Conference Room, 12000 Government Center Parkway, Fairfax, Virginia, 22035.

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Chris Caperton, Planning Division (PD), Department of Planning and Zoning (DPZ) and Natalie Knight, PD, DPZ, discussed with the Committee the Policy Plan Amendment language that was superseded by Section 6409 of the Spectrum Act. The Committee came to a consensus that a clarification was required from the County Attorney's Office on the suggested Plan Policy language. Once the clarification is obtained, staff would provide a draft of the Policy Plan for Committee members' review.

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The meeting was adjourned at 7:56 p.m.
Peter F. Murphy, Chairman

An audio recording of this meeting is available in the Planning Commission Office, 12000 Government Center Parkway, Suite 330, Fairfax, Virginia 22035.

Minutes by: Inna Kangarloo

Approved: December 6, 2017

John W. Cooper, Clerk to the
Fairfax County Planning Commission

MOBILE AND LAND-BASED TELECOMMUNICATION SERVICES

Mobile and land-based telecommunication services provide for the wireless transmission of voice and data and include cellular and personal communications services (PCS), paging and wireless Internet services and mobile radio communication. These services operate from wireless networks that depend on antenna devices and related equipment to transmit from a sender to one or more receivers. Such services are viewed as public utility service providers that benefit the community and its economic growth and vitality.

A **telecommunications facility** is defined as a facility, site, or location that contains one (1) or more antenna, telecommunications towers or monopoles, a distributed antenna system (DAS), micro-cell or other miniaturization technology, alternative support structures, satellite dish antennas, other similar communication devices, and related equipment and site improvements used for transmitting, receiving, or relaying telecommunications signals.

The objectives and policies set forth in this section provide guidance on siting and design issues used in evaluating land use applications. They should not be interpreted as superseding or amending any requirements of the Zoning Ordinance or other applicable local, state and federal laws pertaining to these issues.

The 1996 Telecommunications Act, implemented by the Federal Communications Commission (FCC), and the federal courts defers to state and local governments (subject to certain exceptions) with respect to the placement, construction, and modification of facilities used to provide cellular, broadband, and other personal wireless services. State and local governments may not regulate these facilities based on the potential health or environmental effects of radio frequency (RF) emissions, to the extent that the facilities comply with established FCC regulations. Information on the FCC regulations is available for review on their Website.

In February 2012, Section 6409(a) of the Spectrum Act (codified at 47 U.S.C. §1455) was enacted for state and local government review of requests to co-locate, replace, or remove transmission equipment on existing wireless towers or base stations. The FCC adopted a Report and Order in 2015, clarifying that modifications not substantially changing eligible facilities shall be approved under Section 6409(a) of the Spectrum Act. In the County, such modifications are administratively approved as a feature shown of the Comprehensive Plan.

GENERAL GUIDELINES

Objective 42: **In order to provide for the mobile and land-based telecommunication network for wireless telecommunication systems licensed by the Federal Communications Commission, and to achieve opportunities for the co-location of related facilities and the reduction or elimination of their visual impact, locate the network's necessary support facilities which include any antennas, support structures and equipment buildings or equipment boxes in accordance with the following policies.**

Policy a. Avoid the construction of new structures by locating proposed telecommunication facilities on available existing structures such as rooftops, telecommunication and broadcast support structures, electrical utility poles and towers, and water storage facilities when the telecommunication facilities can be placed inconspicuously to blend with such existing structures. (See Figures 8, 9, 10.)

Policy b. When existing structures are not available for co-location, or co-location is not appropriate because of adverse visual impacts or service needs, locate new structures that are required to support telecommunication antennas on properties that provide the greatest opportunity to conceal the telecommunication facilities and minimize their visual impact on surrounding areas.

Policy c. When new structures or co-locations are required to serve residential neighborhoods, consider minimizing visual impacts on the surrounding area by utilizing camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributed antenna systems (DAS), if feasible.

Policy d. When multiple sites provide similar or equal opportunity to minimize impacts, public lands shall be the preferred location.

Policy e. Locate mobile and land-based telecommunication facilities on public property only after a lease agreement between the county, or related board or authority, and the service provider has been established.

Policy f. Ensure that the use of public property by mobile and land-based telecommunication facilities does not interfere with the existing or planned operational requirements of the public use and complies with adopted policies and plans to protect natural resources.

Policy g. Co-locate mobile and land-based telecommunication facilities operated by different service providers on single sites and/or structures whenever appropriate. Locate single-use structures on a property only when a co-location structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.

Policy h. Ensure that the height of the proposed telecommunication facility is no greater than necessary to allow for co-location on the telecommunication facility based on its service area requirements while still mitigating the visual impact of the facility.

Policy i. When new structures, co-locations and/or technologies (such as distributed antenna systems, micro-cell technology or miniaturization technology) are necessary to meet the service area requirements for the residential neighborhood(s), ensure that the height and mass of any appropriate co-location on the telecommunication facility is in character with the surrounding residential area and mitigates the visual impact of the facility on the surrounding residential area.

Policy j. Design, site and/or landscape proposed telecommunication facilities to minimize impacts on the character of the property and surrounding areas. Demonstrate the appropriateness of the design through facility schematics and plans which detail the type, location, height, and material of the proposed structures and their relationship to other structures on the property and surrounding areas.

Policy k. Demonstrate that the selected site for a new telecommunication facility provides the least visual impact on residential areas and the public way, as compared with alternate sites. Analyze the potential impacts from other vantage points in the area, especially from residential properties, to show how the selected site

provides the best opportunity to minimize its visual impact on the area and on properties near the proposed site.

Policy l. A key concept in assessing telecommunication facilities is mitigation which is defined as actions taken to reduce or eliminate negative visual impacts. Mitigate the visual impact of proposed telecommunication facilities and their equipment, by using effective design options appropriate to the site such as:

- Design, site and/or landscape the proposed facility to minimize impacts on the character of the area;
- Locate proposed telecommunication facilities near or within areas of mature vegetation and trees that effectively screen or provide an appropriate setting for the proposed structure provided such location does not adversely impact sensitive resources or cause fragmentation of forested communities. When viewed in context, consider perspective views, relative topography and other factors, to mitigate the visual presence and prominence of the structure;
- Blend proposed telecommunication facilities with an existing pattern of tall structures;
- Obscure or block the views of proposed telecommunication facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible; and
- Replace existing telecommunication facilities with taller structures or extend their overall height to reduce the need for another structure when such height increases or structure replacements are visually appropriate to the site, including the surrounding area and are consistent with the type, style and pattern of the existing structure.

Policy m. Locate proposed telecommunication facilities to ensure the protection of historically significant landscapes and cultural resources. The views of and vistas from architecturally and/or historically significant structures should not be impaired or diminished by the placement of telecommunication facilities.

Policy n. Site proposed telecommunication facilities to avoid areas of environmental sensitivity, such as steep slopes, floodplains, wetlands, environmental quality corridors, and resource protection areas.

Policy o. Site proposed telecommunication facilities to allow for future expansion and with corresponding levels of screening to accommodate expansion.

Policy p. Design and site proposed telecommunication facilities to preserve areas necessary for future right-of-way dedication and ancillary easements for construction of road improvements.

Policy q. Locate and construct antennas used for purposes other than mobile and land-based telecommunication services in accordance with the same guidelines established in this "Mobile and Land-Based Telecommunications Services" section.

Objective 43: **Design proposed telecommunication facilities to mitigate their visual presence and prominence, particularly when located in residential areas, by concealing their intended purpose in a way that is consistent with the character of the surrounding area. (See Figures 11 and 12.)**

Policy a. Disguise or camouflage the appearance of proposed telecommunication facilities to resemble other man-made structures and natural features (such as flagpoles, bell towers, and trees) that are typically found in a similar context and belong to the setting where placed.

Policy b. Design proposed telecommunication facilities that are disguised and camouflaged to be of a bulk, mass and height typical of and similar to the feature selected.

Policy c. Use other new and existing structures and vegetation of comparable form and style to establish a grouping that complements a camouflaged telecommunication facility and supports its design, location and appearance.

FEATURE SHOWN GUIDELINES

~~**Objective 44:** **With Planning Commission approval, consider mobile and land-based telecommunication facilities to be located on existing or replacement structures a "feature shown" of the Comprehensive Plan to be processed without a public hearing when placed in conformance with the following policies:**~~

Objective 44: **With Planning Commission approval, first time mobile and land-based telecommunication facilities proposed on existing or replacement structures may be processed without a public hearing as a "feature shown" of the Comprehensive Plan when in conformance with the following policies:**

Policy a. Locate telecommunication facilities on existing buildings and structures at the following properties:

- In any zoning district on buildings and structures owned or controlled by a public use or Fairfax County governmental unit (as defined under Sect. 2-514 of the Zoning Ordinance);
- Commercial and industrial zoned property and in the commercial areas of PDH, PDC, PRM, PRC and PTC zoning districts;
- Residential properties zoned for and developed with multiple family dwellings 35 feet or greater in height; and
- Institutional and quasi-public property (as defined under Section 2-514 of the Zoning Ordinance).

Policy b. Utilize the following types of existing or replacement poles and towers for telecommunication facilities to avoid the construction of new monopoles and

towers:

- Utility poles and towers that are within an easement 90 feet and greater in width, including "Fort Worth" or similar mounts that are designed to integrate a pole or other supporting structure within a transmission tower (See Figure 13.);

- Utility distribution poles on property zoned for residential uses provided:

  - The pole is located either within 10 feet of the pavement of an existing Principal or Minor (Type A) Arterial roadway as defined in Appendix 1 (Functional Classification) of the Transportation element of the county's Policy Plan; or is located on land that is developed with a public or nonresidential use; or is located on land that is undeveloped and planned for public or nonresidential use;

  - The antennas on the pole are either concealed within a cap enclosure that resembles the pole, is no greater than ~~12~~ 20 inches in diameter, and is no higher than 7 feet above the top of the pole (See Figure 14.); or the antennas are flush-mounted panels no higher than the top of the pole and are limited to four in number; or the antennas are omni-directional (whips) that either extend no more than 4 feet above the top of the pole and are limited to 3 in number or extend no more than 8.5 feet above the top of the pole and are limited to 1 in number;

  - There is no more than one related equipment cabinet which is either (1) located on and painted to match the pole and is 20 cubic feet or less in volume, or (2) is located on the ground immediately adjacent to the pole, is 70 cubic feet or less in volume and no more than 5 feet in height, and is screened according to Zoning Ordinance provisions; and

  - The height of a replacement pole or standard, including antennas, shall not exceed sixty-four (64) feet in height. The diameter of a replacement pole shall not exceed eighteen (18) inches.

- Utility distribution poles on property zoned for commercial or industrial uses or that is within the right-of-way of an interstate highway or the Dulles Airport Access/Toll Road provided:

  - The antennas on the pole are either concealed within a cap enclosure that resembles the pole, is no greater than ~~12~~ 20 inches in diameter and is no higher than 7 feet above the top of the pole; or the antennas are flush-mounted panels and are placed no higher than the top of the pole and are limited to 12 in number; or the antennas are placed in a unified design, such as a candelabra with cylindrical shells covering each antenna (See Figure 15.), and are limited to 12 in number; or the antennas are omni-directional (whips) that either extend no more than 4 feet above the top of the pole and are limited to 3 in number or extend no more than 8.5 feet above the top of the pole and are limited to 1 in number; and

- There is no more than one related equipment cabinet which is (1) located on and painted to match the pole and is 20 cubic feet or less in volume; or (2) is located on the ground no larger than 250 square feet in size, setback a minimum distance of 10 feet from any property line or setback a minimum distance of 20 feet from any right-of-way easement line when located in road right-of-way, or utility easement or right-of-way and screened according to Zoning Ordinance provisions.

- Water tanks and water towers;

- Communication towers and monopoles;

- Light and camera standards in rights-of-way of an interstate highway or the Dulles Airport Access/Toll Road provided the antennas on the standard are either concealed within a cap enclosure that resembles the standard, is no greater than ~~12~~ 20 inches in diameter, and is no higher than 7 feet above the top of the pole; or the antennas are flush-mounted panels and are placed no higher than the top of the standard and are limited to 12 in number; or the antennas are placed in a unified design, such as a candelabra with cylindrical shells covering each antenna, and are limited to 12 in number; and

- Replacement utility poles or poles extended in height to accommodate telecommunication antennas provided the diameter and overall height of the new or extended pole are no more than 25% greater than that of the originally approved structure and provided such poles: (a) are located on a parcel of land developed with a public or nonresidential use or are on a vacant parcel that is planned for public or nonresidential use; and (b) are outfitted with antennas consistent with the sizes and numbers described above in this objective under the "utility distribution poles" bullets.

Policy c: In determining that proposed telecommunication facilities are a feature shown of the Comprehensive Plan, ensure that the following general factors are met:

- The proposed installation has no material adverse impact on the visual quality or character of the general area in which it is to be placed including any surrounding residential properties;

- The proposed installation is located and designed to blend with the structure on which it is placed such as flush-mounting antennas or screening the antennas and equipment as appropriate to the site;

- The proposed installation, when in a grouping of other similar structures, is consistent with the pattern of those surrounding structures;

- Related equipment cabinets or shelters located on the ground or on a rooftop should be appropriately screened or placed to obscure their visibility from surrounding properties;

- Building rooftop antennas should be either flush mounted to surface walls, screened or placed to not be visible from the surrounding area unless the antenna has a minimal visual impact if installed above the

roofline;

- Access to the proposed installation for purposes of maintenance has no material adverse impact on adjoining properties; and

- Whip antennas with minimal visual impact and an overall height of 5 feet or less and a diameter of 2.5 inches or less.

Policy d. Consider new monopoles or towers to be located in major utility transmission easements or rights-of-way, which are at least 100 feet in width and not used for underground gas transmission lines, to be a feature shown of the Comprehensive Plan if it is demonstrated that the telecommunication facilities cannot be accommodated on existing utility structures and the following guidelines are met:

- The monopole or tower is placed at least 35 feet inside the transmission easement;

- The monopole or tower is placed a minimum of 200 feet from any existing residence;

- The monopole or tower is placed a minimum of 200 feet from the right-of-way of any existing public roadway or street.

ADMINISTRATIVE REVIEW GUIDELINES

Objective 45: Consider the placement of antennas and their associated equipment to be an Administrative Review "feature shown" of the Comprehensive Plan requiring no formal Planning Commission review when the placement of the antennas and the related equipment structures is in full conformance with all Fairfax County Zoning Ordinance provisions and the following applicable policies:

Policy a. Locate telecommunication facilities on building surfaces (including water tanks or towers) in accordance with the following standards:

- The antenna shall be placed directly in front of the building's or tank's surface, including the surfaces of the penthouse and other structures on the building's roof, and be no greater than 102 inches in height, 24 inches in width, and 6 inches in depth, or, when a dish antenna, no more than 24 inches in diameter;

- No part of the antenna shall extend above the surface of the building or tank on which it is placed and no part of the antenna's mounting shall extend more than 6 inches above the surface of the building on which it is placed;

- The back of the antenna shall be no more than one foot horizontally from the surface on which it is placed;

- The antenna and its mounting shall be of a color or finish that closely matches and blends with the surface on which they are placed.

- The equipment cabinet or shelter shall be either:
  - Located inside the building, building penthouse or inside the building parking structure on a level other than the roof;
  - Located on the ground and enclosed within a structure no greater than 500 square feet in area and 12 feet in height that is attached to the building and constructed of the material that is the same as, or visually the same as, the color and pattern of the building;
  - Located on the ground behind a solid fence, wall, berm, or planted hedge, or combination thereof, as required by the Zoning Ordinance, and shall be no greater than 500 square feet in area and 8 feet in height; or,
  - Located on the roof of the building immediately adjacent to its penthouse or other structure on the roof, is no greater than 500 square feet in area and ~~12~~ 14 feet in height, and shall be screened by a material of the same, or visually the same, color or pattern and of an equal or lesser height as the adjacent rooftop structure.

Policy b. Locate telecommunication facilities on electrical transmission towers in accordance with the following standards:

- The electrical transmission tower shall be within an easement of 100 feet or greater;
- The top of the antenna shall be no higher than 15 feet above the top of the existing transmission tower;
- The color of the antenna and its mounting shall closely match the surface on which they are placed; and
- The related equipment cabinet or shelter shall be located under the tower, and match the color of the tower structure.

~~Policy c. Locate telecommunication facilities on existing monopoles and towers in accordance with the following standards:~~

- ~~The antenna shall be self-supporting and its top shall be located no more than 15 feet above the top of the existing structure.~~
- ~~The color of the antenna and its mountings shall closely match the surface on which they are placed.~~
- ~~The related equipment cabinet or shelter area shall be no greater than 500 square feet in area and 12 feet in height and shall be placed within an existing telecommunications compound. The compound must meet the screening requirements of the Zoning Ordinance; and~~
- ~~The structure shall be located on property that is zoned I-1 through I-6 industrial zoning district.~~

~~Policy d.~~ ~~Install telecommunication facilities within existing structures in accordance with the following standards:~~

- ~~The antenna shall be located totally within an existing structure; and~~
- ~~The equipment cabinet or shelter shall be located totally within an existing structure.~~

~~Policy e.~~ ~~Expand and/or modify telecommunications facilities at existing installations in accordance with the following standards:~~

- ~~The surface area (as measured for panel antennas as height times width and for whip antennas as height times diameter) of a replacement antenna shall be no more than 50% greater than the antenna originally approved by the Planning Commission;~~
- ~~The top of the replacement antenna shall be mounted at a level no higher than the level of the top of the antennas being replace;~~
- ~~The color of the replacement antenna and its mountings closely match the background on which placed; and~~
- ~~The square footage and the height of the replacement or expanded equipment cabinet or shelter shall be no more than 25% greater than the square footage and the height of the original equipment cabinet or shelter approved by the Planning Commission for the provider at the site.~~

~~Policy f.~~ ~~As an option for approved monopoles (camouflaged or non-camouflaged), add telecommunication facilities in accordance with the following standards:~~

- ~~Antennas allowed within the maximum number identified for the platform elevations in the original monopole approval;~~
- ~~Antennas allowed within the allowable size;~~
- ~~Pad sites and equipment cabinet/shelters allowed within the maximum number identified in the originally approved monopole equipment compound; and~~
- ~~Proposed telecommunication facilities must be in accordance with the Zoning Ordinance.~~