



PROPOSED COMPREHENSIVE PLAN AMENDMENT

ITEM: S12-CW-2CP
March 13, 2013

GENERAL LOCATION: Countywide

SUPERVISOR DISTRICT: All

PLANNING AREA: All

PLANNING DISTRICT: All

SUB-DISTRICT DESIGNATION: All

PARCEL LOCATION: All

PLANNING COMMISSION PUBLIC HEARING:
Wednesday, March 27, 2013 @ 8:15 P.M.

BOARD OF SUPERVISORS PUBLIC HEARING:
Tuesday, April 30, 2013 @ 4:00 P.M.

**PLANNING STAFF DOES RECOMMEND
THIS ITEM FOR PLAN AMENDMENT**

For additional information about this amendment call (703) 324-1100.



Reasonable accommodation is available upon 7 days advance notice. For additional information about accommodation call (703) 324-1100.

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STAFF REPORT FOR PLAN AMENDMENT S12-CW-2CP

Introduction

On November 20, 2012 the Board of Supervisors authorized an amendment to the Comprehensive Plan to provide additional Policy Plan guidance for locating telecommunication facilities. The proposed Comprehensive Plan amendment is the result of the Planning Commission's Telecommunication Committee's work to review the current Policy Plan provisions concerning mobile and land based telecommunications facilities. The primary emphasis of this effort includes the following:

- Provide a definition of the term “telecommunication facility.”
- Provide an appropriate reference to the 1966 Telecommunications Act guidance that states and local governments may not regulate telecommunication facilities based on the potential health or environmental effects of radio frequency (sometimes referred to as RF) emissions.
- Facilitate the placement of distributed antenna systems (DAS), if feasible, as an alternative to new monopole or towers for telecommunication services.
- Clarify that public lands are a preferred location for siting facilities.
- Clarify that proposed telecommunication facilities should avoid areas of environmental sensitivity.
- Expand the mitigation measures to be taken for reducing or eliminating negative visual impacts of telecommunication facilities.
- Expand the location of telecommunication facilities to include PTC zoning districts.
- Clarify right-of-way easement setback requirements.
- Allow provisions for whip antennas approvals as a Feature Shown of the Comprehensive Plan if they do not pose adverse visual impacts.
- Provide Administrative Review requirements that reflect current zoning regulations.
- Expand Administrative Review conditions to approve the full-build out of the maximum allowable antennas on approved monopoles.

The staff report is organized to present background on mobile and land based telecommunication facilities and the current processes used in Fairfax County (County) to regulate them; the

recommendations proposed by the County's Telecommunications Task Force for modifying the current Policy Plan; and the proposed Comprehensive Plan and Zoning Ordinance amendments.

Definition of Use

Mobile and land based telecommunication facilities provide for the wireless transmission of voice and data and include cellular and personal communication services, paging and wireless internet services and mobile radio. These types of facilities are one of the primary methods of communication used by public safety services including police, fire and emergency medical services throughout the County. Not included in this use are television or radio broadcasting facilities and satellite earth stations, which are regulated by the Zoning Ordinance as a separate Category 1 special exception use, while some telecommunication facilities can be permitted by right as described later in this report.

Mobile and land based telecommunication facilities are characterized by low wattage transmissions, which appear to present no known environmental or health hazards and do not cause interference with other transmissions. The principal components of these facilities are panel, whip (omni-directional) antennas, and small dish antennas. Antennas are located on structures such as rooftops, water towers, utility or light poles, or on self-supporting towers or monopole structures. An unmanned equipment shelter or cabinet is usually included in the installation and can be located on a utility pole, the ground, on a rooftop or within an existing building.

Mobile and land based telecommunication facilities are based on a cellular system. Each cell contains a transmitter location (cell site). The coverage area of a cell site is determined by the frequency of the particular sender, the elevation of the antennas above the ground and surrounding topography and vegetation. In general, the higher the antenna above the surrounding area, the greater the area of service it provides. As the cellular network system expands and enhances service by means of additional cells within its licensed service area, the cell usually becomes smaller. In many instances, there can be co-location of providers at these facilities, without causing any interference between the different services due to differences in frequency. Such co-location can provide benefits to the community by reducing the number of cell sites needed for the provision of these services.

The use of cellular and personal communication services, paging and wireless internet services and mobile radio has greatly increased in the last several years, and the demand for full coverage with no gaps in service has also grown. In order for full coverage to be provided, additional cell sites must be provided. Typically, the existing gaps in coverage are found in residential areas. One means of filling these gaps is through the installation of new structures or the placement of antennas on existing structures of sufficient height. The installation of monopoles and towers present a greater locational challenge than antenna installations on existing buildings or structures because their potential visual impact on residential areas may be generally intrusive and out of character with the surrounding area. However, it should also be noted that there has been a growing concern regarding the proliferation of unscreened antennas and equipment cabinets on building rooftops and the belief that such installations may also have adverse visual impacts on adjacent properties.

Current Review Process and Regulations

Proposed mobile and land based telecommunication facilities must comply with regulations set forth in the Fairfax County Zoning Ordinance and provisions of the County's Comprehensive Plan. Although certain telecommunication facilities are permitted by right in some zoning districts provided that certain conditions are met, all proposed facilities, including enlargements to existing approved facilities, are subject to a "2232 Review" to determine conformance with the Comprehensive Plan.

The Fairfax County zoning regulations pertaining to mobile and land based telecommunication facilities as uses by right are set forth in Sect. 2-514 of the Zoning Ordinance. This section sets forth limitations on the location, size, dimensions, color, illumination and screening of telecommunication facilities. If any of the provisions of Sect. 2-514 are not met, a special exception must be granted by the Board of Supervisors prior to the installation of the facility. In general, rooftop and structure mounted facilities are permitted in all non-residential zoning districts, in any zoning district on publicly owned property or on existing transmission towers, in any zoning district on property developed with certain special permit and special exception uses, and on certain multiple family dwellings. Antennas may be mounted on existing or replacement utility poles and light standards in any zoning district, but are generally limited to the right-of-ways of arterial streets or utility easements that are directly abutting and parallel to such right-of-ways in residential zoning districts. Monopole structures up to 199 feet in height are permitted in commercial and industrial zoning districts, in any zoning district on publicly owned property, and in any zoning district within a major utility easement. Lattice towers are permitted only in industrial zoning districts.

The County's 2232 Review process is mandated by Sect. 15.2-2232 of the Code of Virginia, which provides for a review by the Planning Commission of all public facility, public utility and public service corporation proposals to determine if their general location, character and extent are substantially in accordance with the County's adopted Comprehensive (Plan). Under the County's review process, all proposed telecommunication facilities are submitted to the County as a 2232 Review application. A basic requirement of any such proposal is that it meets all Zoning Ordinance requirements. Thus, upon receipt of an application, staff determines its compliance with zoning regulations. Staff also determines if the proposal is directly supported and recommended by the Plan and may be processed as a "feature shown" without a public hearing, or whether a public hearing is required. In general, under current Plan guidance, any facility proposed on an existing, non-residential structure, such as an office building, communication or electrical transmission tower, or water tank or tower, is directly supported by Plan policies and may be processed as a "feature shown." New structures such as monopoles and towers erected to support telecommunications antennas and equipment require a 2232 Review Public Hearing before the Planning Commission.

A "feature shown" determination is recommended by the Director of the Department of Planning and Zoning to the Planning Commission. If the Planning Commission does not agree with the Director ' s recommendation, as presented in a staff report, a public hearing for the proposed facility is scheduled. The Code of Virginia provides that the Planning Commission must act on any telecommunication proposal within 90 days of receipt of the application; unless the time is

extended by the Board of Supervisors for a period not to exceed an additional 60 days or the review period is extended by the applicant.

Existing Comprehensive Plan Provisions

The current Policy Plan guidance related to telecommunication uses is presented in the “Mobile and Land-Based Telecommunication Services” section of the Public Facilities element of the County's Policy Plan. This section contains three objectives and related policies that provide the basis for determining the appropriate location, character and extent of telecommunication uses, under the County's 2232 Review process.

Before 1992, this Policy Plan section provided only general guidance and did not specifically address wireless telecommunication uses. In 1992, in conjunction with a Zoning Ordinance amendment, the Board of Supervisors adopted a Comprehensive Plan amendment which added new specific polices and guidelines for wireless telecommunication facilities including the “feature shown” option for rooftop installations. In general, this amendment established policies favoring the use of publicly-owned property and the co-location of telecommunication facilities on single sites and structures. The policies recommended that telecommunication uses be placed so as not to adversely affect the use or character of public property. The policies also supported telecommunication locations having a minimal impact on surrounding residential areas.

In 1996, the Board of Supervisors amended the “Energy and Communication Services” section of the Public Facilities element by adding a new objective and policies. This amendment provided additional options for “feature shown” determinations, including low impact installations on utility poles and towers, existing structures such as monopoles and towers, and light and camera standards. The amendment also provided and expanded policy guidance for the siting of telecommunication facilities and equipment and emphasized the need to mitigate the visual impact and prominence of telecommunication installations.

SUMMARY OF PROPOSED AMENDMENTS

On September 15, 2010, the Planning Commission convened its Telecommunication Committee for the purpose of addressing issues concerning the visual impact of telecommunication structures to residential areas, new telecommunications technologies and improving the 2232 telecommunication review process relating to the installation of telecommunication facilities in Fairfax County.

The Telecommunications Committee met between September 2010 and June 2012 on the matter, including a May 2011 Telecommunication Seminar on innovation in telecommunication structural, antenna and equipment design. The Committee focused its efforts on the development of amendments to the “Mobile and Land-based Services” element of the Policy Plan. These deliberations resulted in recommendations centered on providing new opportunities for serving the County’s residential communities through reducing the visual impact of the telecommunication structures, recognizing new telecommunication technologies, and revising the “Administrative Review” portion of the Plan guidance.

The Planning Commission Telecommunication Committee is recommending that the Policy Plan element of the Comprehensive Plan be amended to provide additional guidance for locating telecommunication facilities, to allow for expedited processing of installations where there is little or no visual presence, and for clarifying and expanding plan guidance concerning “Administrative Review” locations.

The proposed plan amendment includes the following major changes to the Policy Plan:

- Incorporates the definitions of “telecommunication facility” and “mitigation” into the telecommunication-related plan text.
- Clarifies state and local governments’ authority for placement, construction and modification used to provide cellular, broadband, and other personal wireless services with regard to the 1996 Telecommunications Act (as implemented by the Federal Communications Commission).
- Provides additional policy guidance for the placement of new facilities and encourages installations with little visual impact and the use of camouflaged and disguised facilities in residential areas.
- Recognizes the use of recently developed camouflage structure design and/or micro-cell technologies or similar miniaturization technologies, such as distributive antenna systems (DAS).
- Addresses mitigation of the height and mass of any proposed telecommunication structure or appropriate collocation on the telecommunication facility so that it is in character with the surrounding residential area.
- Includes the comparison of alternative sites in order to analyze the potential impacts from their 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.
- Notes that 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 these FCC regulations is available for review at: www.fcc.gov/oet/rfsafety.
- Improves “administrative review” guidance by providing greater specificity and detail in the following ways:
 - Increases “administrative review” opportunities for collocating on approved 2232 monopoles; and
 - Expands an “administrative review process” for installations having little visual impact and does not require formal Planning Commission review and approval

when certain specific guidelines are met, in order to encourage the installation of mobile and land-based telecommunication facilities with minimal visual impact on adjacent properties. This type of Planning Commission review and approval allows for more informal, expedited Planning Commission review procedure through Planning Commissioner concurrence and/or consent agenda.

RECOMMENDATION AND PROPOSED AMENDMENT TO THE COMPREHENSIVE PLAN

Staff recommends the Comprehensive Plan be modified as shown in **Attachment 1** to incorporate these recommendations that provide improved direction and incentive for locating telecommunication facilities with minimal visual impact. The proposed amendment also improves the clarity and organization of objectives and policies that are related to wireless telecommunication uses.

Proposed Comprehensive Plan Text

Text to be added is shown as underlined and text to be deleted is shown with a ~~strike through~~.

MODIFY: Fairfax County Comprehensive Plan, 2011 Edition, Policy Plan, Public Facilities, as amended through 1-10-2005, Mobile and Land-Based Telecommunication Services, page 37:

**“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 ~~are dependent~~ 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 distributive 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 ~~and are~~ 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.

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 ~~in order~~ to achieve opportunities for the collocation of related facilities and the reduction or elimination of their visual impact, locate the network’s necessary support facilities**

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which include any antennas, monopoles, lattice towers 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 ~~building~~ 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 e d. ~~Subject to the availability and feasibility of public sites w~~When multiple sites have provide similar or equal opportunity to minimize impacts, consider public lands shall be as the preferred location for new structures.
- Policy d 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 g 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 e 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 collocation structure for multiple service providers is not desirable or feasible due to technological differences, site limitations or visual impact concerns.
- Policy f h. Ensure that the height of ~~towers and monopoles has the least visual impact~~ the proposed telecommunication facility is no greater than necessary to allow

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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, or 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 compatible in character with the surrounding residential character area and mitigates the visual impact of the facility upon the surrounding residential area.

Policy h 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 i k. Demonstrate that the selected site for a new ~~monopole and tower~~ 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 ~~illustrate that~~ show how the selected site provides the best opportunity to minimize ~~the its~~ visual impact on the area and on properties near the of the proposed facility site.

Policy j 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 ~~antennas and ancillary~~ 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 to or within areas of mature vegetation and trees which 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. ~~or which,~~ ~~or~~ When viewed in context, considering perspective views, relative topography and other factors, to mitigate their visual presence and prominence of the structure;

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- Blending proposed telecommunication facilities with an existing pattern of tall structures;
- Obscuring or blocking the views of proposed telecommunication facilities with other existing structures, vegetation, tree cover, or topographic features to the maximum extent feasible; and
- Replacing 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, and including the surrounding area and are consistent with the type, style and pattern of the existing structure.

Policy ~~k~~ 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 ~~l~~ 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 ~~m~~ o. Site proposed telecommunication facilities to allow for future expansion and with corresponding and maintain levels of screening to accommodate expansion.

Policy ~~n~~ 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 ~~o~~ 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 ~~and~~ or camouflage the appearance of proposed telecommunication facilities ~~so as~~ 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 ~~appropriately~~ 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:**

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

- ~~publicly owned property~~ 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);
- ~~e~~Commercial and industrial zoned property and in the commercial areas of PDH, PDC, PRM, ~~and~~ PRC and PTC zoning districts;
- ~~r~~Residential properties zoned for and developed with multiple family dwellings 35 feet or greater in height; and
- ~~i~~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:

- ~~u~~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.);
- ~~u~~Utility distribution poles on property zoned for residential uses provided:
 - ~~t~~The pole is located either within 10 feet of the pavement of an

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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 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 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; 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

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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.

- ~~w~~Water tanks and water towers;
- ~~e~~Communication towers and monopoles;
- ~~H~~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 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
- ~~r~~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:

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

- ~~b~~ 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;
- ~~a~~ 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 a height of 3 feet or less and a diameter of 1.5 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:

- ~~t~~ The monopole or tower is placed at least 35 feet inside the transmission easement;
- ~~t~~ The monopole or tower is placed a minimum of 200 feet from any existing residence;
- ~~t~~ 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 further 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:

- ~~t~~ 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 ~~72~~ 102 inches in height, 24 inches in width, and 6 inches in depth, or, when a dish

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antenna, no more than 24 inches in diameter;

- ~~n~~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:
 - ~~H~~Located inside the building, building penthouse or inside the building parking structure on a level other than the roof;
 - ~~H~~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;
 - ~~H~~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 ~~842~~ feet in height; or,
 - ~~H~~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 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

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- The related equipment cabinet or shelter shall be located under, 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 shall be located 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 12 feet in height.~~ 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 replaced;
- The color of the replacement antenna and its mountings closely match the background on which placed; and

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- 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 an 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.”



FIGURE 8

Avoid building antennas silhouetted against the sky which create roof top clutter.

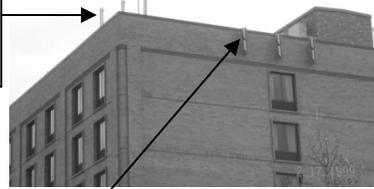


FIGURE 9

Place telecommunication facilities to blend inconspicuously with existing structures. Place antennas “flush” against the building wall to blend with the building material.

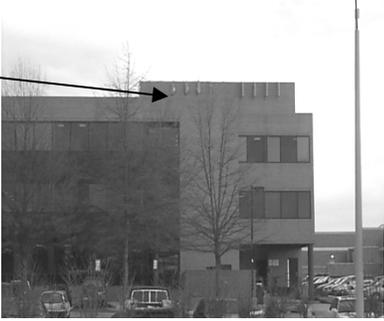


FIGURE 10



FIGURE 11

Disguise and camouflage telecommunication facilities to resemble other objects found within the area located.

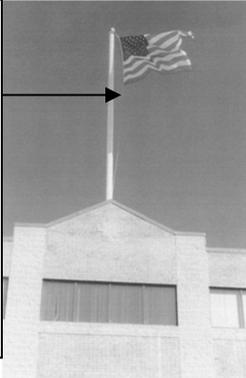
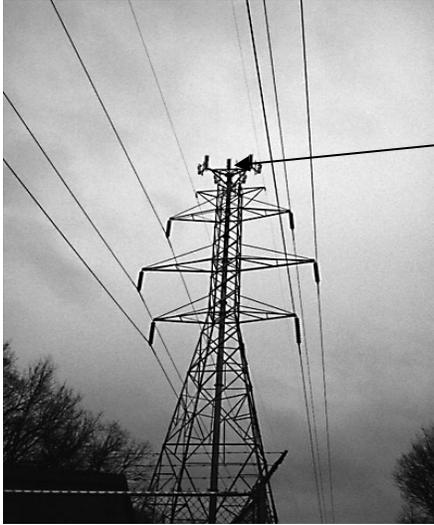


FIGURE 12



A “Fort Worth” structure integrates the telecommunication pole and antennas within an existing electrical transmission tower and helps to conceal the use.

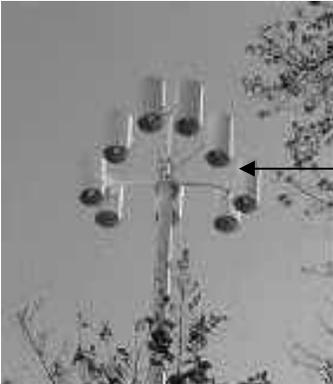
FIGURE 13

A 7 foot “radome cap” on the top of an electrical distribution pole conceals the telecommunication antennas.

The equipment box located on the distribution pole or on the ground should be placed and colored to match the pole or screened to blend



FIGURE 14



Antennas can be of a “candelabra” design and covered with a cylindrical shell to provide a unified, organized appearance.

FIGURE 15