

GOVERNMENT OF THE DISTRICT OF COLUMBIA
OFFICE OF PLANNING



Office of the Director

MEMORANDUM

TO: D.C. Zoning Commission

FROM: *JLS AV*
Andrew Altman, Director

DATE: February 7, 2003

SUBJECT: Supplemental Information regarding proposed zoning text amendments for antennas, antennas towers and monopoles in all zone districts (11 DCMR).

CASE NO: ZC-01-02

This report is in response to the Zoning Commission's request for additional information or clarification from the Office of Planning at the November 11, 2002 public meeting regarding the proposed antenna regulations.

The Commission asked that OP prepare a list of the industries concerns. OP has attempted to paraphrase the industry's stated issues in a quick chart with an accompanying OP response. By far the overwhelming concern raised by the industry was the proposed prohibition of monopoles in the residential zone districts. Many issues sprang from this primary concern including the issue of preemption of the Telecommunications Act, the denial of service, the inability to respond to demand and overly burdensome time delays.

Following the chart is additional information requested by the Commissioners including a map showing the areas *originally* proposed for monopoles and towers as a matter of right and special exception in the initially advertised text and a copy of the FCC complaint verification response. Also attached is an updated version of the advertised text with all the most current amendments incorporated.

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District of Columbia
Case 01-02
Exhibit 130

ZONING COMMISSION
District of Columbia
CASE NO.01-02
EXHIBIT NO.130

INDUSTRY General ISSUES	Proposed Section	OP Response
Permit Monopoles in R and C-1 Zones at least by Special Exception for wireless providers- Allows for: • Response to level of service demand • updating of service, and • timeliness of providing service	2611	OP has proposed additional text that allows for monopoles as a Special Exception within these zones and towers or monopoles as part of an approved campus plan; This is a similar process as currently exists.
Certification Section overly burdensome	2601	OP proposes a distilled section that requires wireless providers to submit as part of their DCRA application whatever certification or proof of compliance was required by and submitted to the FCC.
Regulations are based on RF fears	Not specified	OP did not draft regulations based on RF; limitation in the R and C-1 zone are based on the published statements of purpose for the zone districts in 11DCMR- existing §§ 200.1 and 700.1
Inability to use existing monopoles and structures in R and C-1 zones as a matter of right	2607 2612	§2607 allow for the continued use on existing towers and monopoles; §2612 repeats the existing non-conforming language of §2001 and addresses the ability to apply to the BZA for the continued use of non-conforming antennas.
More M-o-R flexibility for stealth structures	New § 2606	At the direction of the Commission OP has proposed alternate stealth language
Ability to use other public structures such as light stanchions		The Zoning regulations do not allow for the regulation of public space.
Proposed regulations inhibit ability of building owners to lease/site antennas on their property	2604 and 2605	The proposed regulations actually relax the current restrictions and allow for more flexibility to place antennas on existing buildings. The proposed regulations have been drafted to encourage antennas to be placed on existing buildings as an incentive not to build new towers or monopoles.
Antennas that have been legally permitted should be “grandfathered” and not deemed non-conforming; Explanatory language should be added to §2612 to clarify that it does not apply to towers, poles and supports.	2612	OP agrees and did not intend to make legally permitted antennas non-conforming. After input from the industry representatives propose new § 2612.3 and 2612.4 to clarify the issues.
Roof mounted equipment shelters and cabinets should be eligible for special exception relief under section 411.	411	OP agrees and after discussion with the industry representatives proposes to amend §411.1 to include the shelters and cabinets.

Zoning Commission Comments and Requests

1) *OCTO – additional information regarding their request for exemption from the regulations.*

OP has met twice with OCTO's consultants who presented the proposed antennas. Based on that information all but two of the proposed antennas can be processed through administrative review as a matter-of-right application. The two other applications involve new replacement monopoles which require special exception review. Both monopole applications have been filed with the Office of Zoning and are scheduled for public hearing on March 11, 2003; the consultant has indicated the other antennas will be submitted for administrative review and permit pursuant to existing §701. Based on this information, and the absence of any showing that the regulations inhibit their objectives to improve emergency service, the Office of Planning cannot recommend a blanket exemption from the existing or proposed regulations.

2) *Certification issue: what is it intended to be accomplish and does the language create an expectation of enforcement? §2601*

OP has revised the certification requirements to require the information submitted to the FCC.

2601 CERTIFICATION OF FCC COMPLIANCE FOR TRANSMITTING ANTENNAS.

2601.1 No application for a building permit for a transmitting antenna may be considered completed unless it is accompanied by a certification evidencing that the proposed transmitting antenna will comply with the radiofrequency (RF) radiation guidelines adopted by the Federal Communications Commission and the health and safety regulations adopted by the Occupational Safety and Health Administration.

2601.2 The certification shall include the following information:

- a) **The maximum radiofrequency (RF) radiation to be generated by the proposed antenna or antennas;**
- b) **The means used to determine the RF levels;**
- c) **The exact legal name, address of principal place of business and telephone number of the applicant, certifying engineer and property owner;**
- d) **A site plan, and roof plan if appropriate, drawn to scale showing the location of the proposed antennas and all existing antennas on the site, roof, tower or monopole.**

3a) §2603.1 - Why limit the visibility of a ground-mounted antenna only in the Central Employment Area?

This section reflects the existing regulation language (§ 701.7). OP was unable to find written documentation as to why the visibility from parks was limited to the CEA but suggests that it was intended to respect the more densely public areas that define the more public city core, the downtown and the National Mall.

OP has revised the proposed language to consolidate the visibility and screening issues of subsection 2603.1 (f) and (i), and expand the references to include national monuments and navigable waterways. This language allows for some flexibility to address the varying building opportunities and technical requirements of the antennas.

The revised §2603.1(e) is now proposed to read:

- (e) **Each antenna installation shall be located or screened such that its visibility from public spaces, navigable waterway and national monuments is minimized to the greatest practicable extent;**

OP has mirrored this language in §2604 Antennas Placed on a Roof, §2605 Building-mounted Antennas for consistency.

3a) Disregard advertised 2603.1 (f)

In this same section OP no longer recommends the originally advertised §2603.1 (f) that proposed a 25-foot setback around a ground-mounted antenna. While the initial intent of subsection (f) was to secure the antenna site, OP agrees that the provision, as it is applied to ground-mounted antennas, in conjunction with the proposed lot line setbacks of §2603.1 (e) and screening of §2603.1 (i) could be overly burdensome and have adverse aesthetic impacts contrary to the stated intent of the regulations. Such adverse impacts could be:

1. The need for property owners to purchase more property than otherwise needed for the sole purpose of providing the setback,
2. A potential alteration to the established streetscape, and
3. The creation of a larger visual field of antennas that could be avoided if the antennas are permitted to be “tucked” closer to the buildings.

OP, however, distinguishes between a ground-mounted antenna and the roof-mounted antennas on buildings with accessible recreation space, which will be discussed later in this report.

4) Stealth Structure: More information on the types of stealth structures and what could be deemed pre-approved by means of number, set back, height, physical appearance, etc.

Stealth Structures can be almost anything that fits the design of an antenna. Stealth structures that have been approved during the past three years in the District include two modified church steeples, three flag poles between 80 and 130 in height, and a stealth penthouse structure that mimicked the roof form and shielded 18 antennas.

Other potential stealth structures could include church crosses, fake trees, building cupolas and other architectural features, as well as ball field lights, and fence supports. OP has revised the stealth antenna language and proposes the following:

2606 STEALTH Antenna STRUCTURE

2606.1 Antennas located in stealth structures may be permitted provided the following conditions are met:

- (a) The proposed stealth design provides adequate screening of the antennas;**
- (b) The proposed stealth structure is not out of scale with the subject property taking into account the size, set-backs, topography and underlying use of the property;**
- (c) The primary use of the subject property is not single-family residential;**
- (d) The ground equipment of the proposed facility be landscaped, fenced or otherwise screened;**
- (e) The diameter of a stealth flagpole shall not exceed thirty (30) inches at its base;**
- (f) The height of a stealth structure shall be permitted, by right, to a height of 80 feet in all residential zoning districts and 120 feet in all other zoning districts.**

2606.2 Stealth antenna structures may include, but are not limited to, flag poles, light poles, fence supports, steeples, cupolas and other architectural elements, and trees.

2606.3 The Office of Planning shall provide a report and recommendation to the Zoning Administrator on a proposed stealth antenna structure.

2606.2 Any proposed stealth structure which is determined by the Zoning Administrator not to comply with the standards of § 2606.1 shall be referred to the Board of Zoning Adjustment for review as a special exception subject to §§ 2610 and 3104.

5) §§ 2603.1 (b) and (c)- How is "ground" determined for the purposes of measuring height of ground mounted antennas?

OP intends that the common usage be applied but recognizes that the common usage can easily be manipulated as construction and development activities typically result in the re-grading of the natural ground. OP proposes a new section 2603.3 to further clarify how ground mounted antennas should be measured for height:

§2603.3 The term ground as used in this section, shall not include artificially elevated terrain such as berms or planter boxes but may included

graded lawns, terraced landscapes that are formed from the natural grade and at-grade patios.

6) §2604 - Can towers or monopoles, by definition, be mounted on building roofs?

Yes, a monopole and tower could be mounted on a roof, and there are several rooftop towers currently in the city- the CNN building near the corner of H and North Capitol Streets, NE has a tower on its roof, as does the CBS building at 20th and M Street, NW.

The proposed regulations distinguish between towers and antennas to avoid confusion of the two uses. Section 2604 specifically speaks to antennas and §2611 specifically speaks to towers.

The intent of §2604 is to:

1. Allow antennas to be placed on roofs by administrative review as a matter-of-right
2. Allow these antennas to have a mounted height of 12 feet as measured from the top of the antenna to the roof (which includes the antenna's mounting structure or base), and
3. Allow other rooftop antennas to be permitted by Special Exception.

If a broadcaster proposes a tower to be placed on the roof of a structure, the tower would be subject to special exception review pursuant to §2611.3 and/or 2604.2.

This is the same procedure that has been applied under the current regulations.

7) §2604.1 (e) - Is the proposed regulation limiting the proximity of antennas to outdoor recreation space an RF-related restriction or a use- based restriction?

This section was not crafted as an RF-related restriction. OP proposed the regulations as a standard exercise of zoning powers as anticipated by FCC and as published in FCC publication "Local Official's Guide to RF" Appendix C (7) (B) (i).

The use of roofs as recreation space creates a type of semi-public active space for the tenants of the building and their guests. The setback is proposed as a means of separating the semi-public use of the recreation space from the private use of the antenna lease space. The two uses are distinct with very different use characteristics. The provision only creates a setback similar to those proposed for roof antennas from the edge of the building in §2604.1 (a), ground mounted antennas from lot lines in § 2603.1 (e) and tower from adjacent property in § 2608.1 (a). These setbacks recognize a use and safety issue, well within the legal exercise of zoning.

OP believes the setback provides a reasonable separation of uses. It provides for safety in from falling debris and ice. The setback also reduces the "attractive nuisance" of an antenna and its mounting frame in a recreation space in the same manner as a fence secures the attractive nuisance of a swimming pool.

As stated earlier, OP distinguishes between the ground mounted and the roof mounted antennas in regard to this setback, because of the specific recreational use lure of the roof. The setback here is provided as separation of uses.

To help clarify the setback issue, OP proposes an alternative for the Commission's considerations that would require a ten foot setback that would be consistent with the setback required from lot lines for ground antennas (§2603.1 (d)) and building-mounted antennas (§2605.1 (e)).

(e) Antennas placed on a roof that has outdoor recreation space shall be subject to the following:

- 1) The antenna location shall be secured from unauthorized access for a minimum distance of ~~twenty-five (25)~~ **ten (10)** feet in height; and

8) §2606.3- *Super-high frequency antennas: Are they defined and is this an outdoor antenna?*

These antennas are currently defined in §199 of 11DCMR.

Antenna, super high frequency - an antenna which serves a super high frequency channel and requires a line of sight to the transmitting antenna, and which generally consists of a metal grid or a sheet of bent metal, and is mounted on the pole of a UHF or VHF antenna or on a roof structure. (36 DCR 1509-1510)

Super-high frequency (SHF) is a microwave frequency in the frequency range of 3-30 GHz. SHF accommodates such uses as microwave links, satellite communications and broadcasting, land mobile communications, and "wireless cable" TV, including direct broadcast television.

OP is not proposing any change to the definition.

9a) §2606.3 *Are dishes also permitted as ground mounted and roof mounted antennas?*

Yes. A site could have more than one dish antenna:

- §2606.3 allows one dish with a 4-foot or less diameter as an **exempt** antenna only on the roof of a building,
- §2603.1 (a) allows one ground mounted antenna subject to administrative review as a matter-of-right, and
- §2604.1 allows for antennas to be placed on the roof subject to administrative review as a matter-of-right.

The proposed sections are intended to provide for various classes of antenna and related reviews. The exempt dish is only that small dish proposed to be placed on the roof and it is presumed that the placement on the roof will have minimal visual impact. Other locations and dish sizes may be permitted subject to administrative review, and if there is

additional flexibility required a special exception review is proposed (§§ 2603.2, 2604.2 and 2605.2).

OP supports this range of flexibility. Many businesses, such as banks, and telecommunication companies require the use of more than one antenna. These provisions in combination allow a site to accommodate multiple antennas, subject to location criteria, by administrative review. The flexibility maximizes the location options on a site thereby minimizing the presence of antennas in front yards and along streets and public ways.

9b) §2606- Front yards antenna restrictions should include both streets corners when a corner lot.

OP proposes the following language for the Zoning Commission's consideration regarding this issue:

Amend 2603.1 (Ground Mounted Antennas) to read as follows:

- (d) **(c)** The antenna shall be located in either the rear yard or the side yard of the principal building on the lot **except in the case of a corner lot no antenna may be located in the any yard between the principal structure and a street;**

10) §2608- Should ground mounted antennas be permitted on sites with towers and monopoles, or in the M zones?

The M zone district is cited in Section 2603.1 (c) regarding height of ground mounted antenna. The M Zone allows towers and monopoles as a matter-of-right and yet § 2603.1 (a) and § 2608.1 (f) prohibits ground mounted antennas from being on the same lot as towers or monopoles. Originally the text was trying to encourage the collation onto antenna towers and monopoles rather than have a proliferation of structure and antenna types, however, OP agrees with the Zoning Commission's discussion that there are many circumstances where it would be more desirable, aesthetically as well as technologically, to ground mount a dish or antenna rather than place it on a tower or monopole.

After hearing additional testimony, OP recommends that §2603 Ground-Mounted Antennas be expanded to allow for more than one ground mounted antenna in the C, CM and M zone district and to allow for ground-mounted antennas to be on the same lot as a tower or monopole. This allows for multiple antennas that may be required for businesses that are permitted within these zones as a matter-of-right and which also require more than one antenna as an element of the business. Such uses could include offices for television companies such as CNN, the cable company itself, banks, phone company offices, and any other information and telecommunications intensive business.

OP proposes the following text:

2603.1 Except for those antennas exempted by §2606, ground-mounted antennas, shall comply with the following conditions:

- (a) **In any Residence (R), Special Purpose (SP), Mixed Use (CR) or Waterfront (W) zone district only one antenna may be located per lot and may not exceed a mounted height of twelve feet (12 ft.) at its highest point above the ground** ~~No more than one ground-mounted antenna may be installed on any lot, nor may any ground-mounted antenna be installed on any lot on which there is an antenna tower or monopole;~~
- (b) ~~The antenna may not exceed a mounted height of twelve feet (12 ft.) at its highest point above the ground in any Residence (R), Special Purpose (SP), Mixed Use (CR) or Waterfront (W) zone district;~~
- (c) **In any Commercial (C) or Industrial (CM or M) zone district** an antenna may not exceed a mounted height of twenty feet (20 ft.) at its highest point above the ground;

OP no longer recommends adoption of §2608.1 (f):

- ~~(f) No antenna tower or monopole may be located on any lot on which there is a ground-mounted antenna.~~

11) §§2611.11 (i) - *Establish a figure for the relative distance of the tower and antenna height to trees:*

OP recognizes that this measurement can be highly relative especially when considering Washington's topography and low building height. Based on discussion with industry representatives OP recommends that the distance be identified as one quarter mile.

The industry representatives stressed that "[T]here must be a balance between the view shed requirement and the technology of wireless communications. Buildings, trees and other structures deflect and/or block wireless signals. To avoid this signal interference it is critical that the antennas be placed above any such obstruction including tree foliage. The distance of ¼ mile could accurately reflect the impact on property in the immediate area of the proposed site. OP also notes that the BZA has a degree of latitude under § 2611.12 to request additional information or impose conditions as may be deemed necessary to mitigate an adverse impact.

OP recommends amending the proposed advertised §2611.11 (i) to read as follows:

- (i) The total mounted height of the antenna relative to the tops of surrounding trees **within a quarter-mile radius of the proposed site**, as they presently exist;

12) §2612 - *Is there be a disincentive to repair or replace existing non-conforming towers and monopoles?*

No. Section 2612 applies only to antennas, not towers or monopoles. Towers and monopoles would continue to be subject to the non-conforming provisions of Chapter 20, 11DCMR and it is not intended that the non-conforming provisions be applied any differently to towers and monopoles than would be applied to any other non-conforming structure or use.

Section 2612 repeats the existing language of §§2001.11 and 2001.12 regarding non-conforming antennas. Section 2607 allows for the continued use of existing towers.

OP believes it is very important to distinguish between the regulation of antennas and the regulations of towers and monopoles.

13) §2611.12 Removal Provision- how would the city know that an antenna has not been used for a year?

The regulations presume that the owner of the property desires to replace the antenna, will apply for a building permit and will comply with the regulations. If an antenna permit is issued for the stated temporary period of one year, and within 3 months an application for BZA approval has not been submitted, the property would be in non-compliance with the 11DCMR and a zoning violation could be issued.

14) What is a "long wire antenna" as mentioned regarding amateur radio?

A "long wire antenna" as mentioned relative to amateur radio would be within the definition of a whip antenna. Whip antennas are defined in §199 and are permitted as exempt and as a matter-of-right subject to administrative review both in the existing and in the proposed regulations.

***Antenna, whip** – an antennas generally consisting of a single pole or mast, also called a broomstick antenna, sometimes including irregularly shaped prongs or attachments at its extremity, including an antenna used for citizens band or two-way communications.
(§199 11DCMR)*

15) Do the regulations need to include a definition for a "microcell" and if so should there be special treatment of the microcell proposed?

Microcell antennas supplement coverage from distant cell sites that lack sufficient channel capacity and/or the power to reach into buildings. They provide more channels and lower power output, handling peak demand that is limited to small areas where large numbers of people gather, such as large office buildings, transportation terminals, malls, highways and sporting arenas. These antennas are often very small in size and can be used both indoors and out. However, there is no industry standard that can be reasonably used to create a predictable zoning standard regarding the size or shape of these antennas.

As proposed §2606.1 (c) would also exempt small antennas needed for expanded emergency systems:

(c) No taller than eighteen inches (18 in.) In height and necessary for the implementation of expanded 911 or emergency communications.

OP does not recommend that microcell antennas be called out specifically but rather be reviewed as a matter-of-right antennas subject to the location-based criteria of §2603 Ground-Mounted Antennas, §2604 Antennas Placed on a Roof, or §2605 Building-Mounted Antennas or as an exempt antenna as contemplated by § 2606.

16) §2611- Should the regulations differentiate between Broadcast Towers and Wireless Towers?

After hearing testimony on the issue OP is still concerned that no technological or engineering evidence has been provided to substantiate that the proposed restriction of towers and monopoles in residential zones will result in the prohibition of service. However, in discussion about the variance options with the Office of Corporation Counsel, it is clear that a variance case would be almost impossible to make should it become necessary for a monopole to be placed in a residential zone, because the landowner, not a tenant, must make the hardship case.

Therefore OP has drafted special exception standards for monopoles in the R, residential and C-1, local commercial districts. The special exception should address the industry's concern about their ability to provide adequate cellular service to the residential neighborhoods.

Section 2611 currently distinguishes between monopoles in §2611.1 and towers in §2611.2. OP recommends that §2611.3 be revised to permit monopoles to be a special exception use in all zones and a new §2611.4 be added that allows towers by special exception in all but residential zones, with the exception of tower included in an approved campus plan.

OP has concluded that the use of monopoles can effectuate the extension of a public utility in a manner more in keeping with the stated intent and purposes of the residential zones than a tower. A tower is a more commercial or industrial structure and use and one that is not anticipated in a residential zone district. While many city residents live in other zoning districts, these non-residential zones anticipate a mixed use, more urban environment.

- 2611.2 ~~An antenna tower or~~ monopole may be permitted as a special exception use in the following zone districts:
- (a) **R, Residential district,**
 - (b) **C-1** through C-4 commercial districts;
 - (c) SP, special purpose districts;
 - (d) CM, commercial-light manufacturing districts;
 - (e) CR, mixed use district, if the Board considers appropriate it in furthering the objectives of the mixed use districts; and

- (f) W, waterfront districts, if the Board considers it appropriate in furthering the objectives of the waterfront districts.

2611.4 An antenna tower may be permitted as a special exception use in the following zone districts:

- (a) C-2 through C-4 commercial districts;**
- (b) SP, special purpose districts;**
- (c) CM, commercial-light manufacturing districts;**
- (d) CR, mixed use district, if the Board considers it appropriate in furthering the objectives of the mixed use districts; and**
- (e) W, waterfront districts, if the Board considers it appropriate in furthering the objectives of the waterfront districts.**

OP recognizes that towers, however, exist on certain college campuses in both residential and non-residential districts and has proposed inclusion of these unique uses subject to an approved campus plan.

2609 ANTENNA TOWERS AND MONOPOLES AS PART OF A CAMPUS PLAN

2609.1 An antenna tower or monopole may be permitted, subject to and as part of an approved campus plan in any zone district subject to the special exception standards on §2611.10 12;

OP believes that the proposed special exception review criteria is sufficiently stringent to ensure that the monopole or tower is not a speculative venture and provides a reasonable burden of proof for the applicant to provide and standards of review for the BZA.

OP also recommends that § 210.4 be amended to include a new subsection (e) that reflect the tower and monopole review standards:

210 COLLEGES AND UNIVERSITIES (R-1)

- (e) A description of any antenna towers or monopoles and their compliance with §2611 of 11DCMR.**

17) §2699 - Should additional definitions be proposed for ground-mounted, roof-mounted, and building-mounted antennas? Should the regulations distinguish between transmitting and receiving antennas?

Building-mounted Antennas and Antennas Placed on a Roof have been defined in the proposed regulations. The phrase roof- mounted in not a term used in the regulations, but is more a casual phrase. The regulations identify these as “Antennas Placed on a Roof.” Therefore OP does not recommend a definition. Ground mounted antennas could be easily defined as follows:

Antennas, Ground-Mounted – any antenna and its necessary support structures or mounts, but not including towers or monopoles, that are placed on the ground or at building grade.

OP does not feel it is necessary to further distinguish between transmitting and receiving antennas based on how they are considered in the proposed regulations. Transmitting antennas are called out only in § 2601.1 subject to the certification evidence.

17 a) Disregard §2604.1 (e) 2, §2605.1(d) 2) and § 2605.1 (f)

§ 2604.1 (e) 2) and § 2605.1 (e) 2):

~~2) Transmitting antennas shall be oriented such that transmission is not directed at the recreation space.~~

§ 2605.1 (f)

~~(f) To avoid off-site reception interference, a transmission antenna shall not be directed into any adjacent building window;~~

After discussion with OCC, OP recommends that this section *not be included in the final text* due to the FCC regulation that prohibits the regulation of antennas based on interference and to avoid the appearance of regulations based on RF related health issues.

18) §2611.11 (k) - Is there enforcement authority regarding the proposed maintenance plan requirement?

There is no active city enforcement mechanism for this provision. It is a self-regulating provision that could be reviewed if an applicant comes before the BZA for special exception review.

19) What is the FCC process for checking or responding to complaints of excessive RF emissions?

A copy of the FCC response process is attached.

20) Should towers that are permitted and constructed as architectural embellishments be used for antennas?

OP has no objection to antennas being incorporated into architectural elements subject to review. Often, as in the case of churches, the steeples can easily hide antennas while providing the needed elevation.

21) §§2603, 2604 and 2605 - *Expand the language regarding the ¼ mile view impacts to address prominent views such as national monuments and the National Cathedral;*

In order to provide a general rule that is neither too narrow to be useful nor so broad it's disproportionate to the antenna application, OP proposes the following language. OP also aimed to make the language consistent between the sections that referenced visibility and distance.

§2603.1 (e), §2604.1 (c) and §2605.1 (b):

Each antenna installation shall be located or screened such that its visibility from public spaces, navigable waterway, historic landmarks and national monuments is minimized to the greatest practicable extent.

Additional Issue raised by Industry representatives:

22) *Section 411.1 - The Industry requests that Section 411.1 be modified by adding the following language: "and equipment cabinet shelter or enclosure incidental and necessary to rooftop or roof mounted antennas."*

The purpose of this additional language is to ensure that these cabinets or shelters will be included as a part of the building's penthouse complex. Currently, any rooftop cabinet structure is not part of the penthouse and will be reviewed independent of the other roof structures. This is of major concern because if the building is at maximum permitted height, then only a penthouse containing equipment necessary for the operation of the building (and a few other architectural items) is permitted to exceed height restrictions. Penthouse structures are also subject to a building's FAR, but Zoning allows a 25% variable FAR.

Unfortunately, equipment cabinets for wireless facilities are not viewed as "penthouse" structures, but as accessory rooftop structures. Therefore, they are not permitted on building rooftops that are at the maximum permitted height nor do they qualify for the variable FAR. The result is that many buildings that would be available for the collocation of antennas are not due to the restrictions placed on roof top structures. In order to maximize the number of existing buildings available for collocation, the above-mentioned language should be added to Section 411.1.

OP agrees with the industry's request to include equipment cabinets and shelters within the special exception provisions to avoid unnecessary and burdensome variance standards and recommends §411.1 be amended to read as follows:

411.1 To exercise a reasonable degree of architectural control upon roof structures in all districts, housing for mechanical equipment, stairway, elevator penthouses, and, when not in conflict with An Act To Regulate the Height of Buildings in the District of Columbia, approved June 10, 1910 (36 Stat. 452, as amended; D.C. Code, 2001 Ed. §§ 6-601.01 to 6-601.09 (formerly codified at D.C. Code §§ 5-401 to 5-409 (1994 Repl. & 1999 Supp.))), penthouses for storage and toilets incidental and accessory to roof swimming pools shall be subject to conditions and variable floor area ratio credit specified in this section, **and equipment cabinet, shelter or enclosure incidental and necessary to antennas placed on a roof.**

Compiled Revisions as of February 7, 2003

**CHAPTER 26 REGULATIONS OF ANTENNAS, ANTENNA TOWERS
AND MONOPOLES**

2600 PURPOSE

2600.1 The purposes OF the regulation of antennas, antenna towers and monopoles as a particular type of structure shall be as follows:

- (a) The Zoning Commission has determined that certain antennas, antenna towers and monopoles because of their size, shape, design, construction or location, may affect the health, welfare or safety of the population and may detract from the streetscape, landscape, skyline, scenic beauty or aesthetic interests of Washington, D.C., and its role as the Nation's Capital;
- (b) The zoning regulations therefore regulate the size, height, construction, design and location of antennas, antenna towers and monopoles which have the greatest potential for adverse impact on the impact on the health, safety and welfare of the population, and on neighborhood quality, and those which have the greatest potential for adverse impact on the scenic beauty of the Nation's Capital **and the national monuments**; and
- (c) The principal types of antennas, antenna towers and monopoles regulated are those that, because of their shape, **size or quantity** ~~and relatively large mass~~, potentially have the greatest visual impact and include, by example, large satellite earth station antennas ~~and~~ certain microwave terrestrial antennas, monopoles, and antenna towers.

2600.2 Consistent with these purposes, the ~~matter of right~~ construction of new towers or monopoles shall only be permitted ~~as a matter of right in the General Industry Districts (M) and only as a special exception in the C-2, C-3, C-4, CR, SP, W and CM Districts and may be approved only when no other mounting option is available~~ **subject to certain placement and construction standards.**

**2601 CERTIFICATION OF FCC COMPLIANCE FOR TRANSMITTING
ANTENNAS.**

2601.1 No application for a building permit for a transmitting antenna may be considered completed unless it is accompanied by a certification evidencing that the proposed transmitting antenna will comply with the radiofrequency

(RF) radiation guidelines adopted by the federal communications commission and the health and safety regulations adopted by the occupational safety and health administration.

- 2601.2 The certification shall be signed by a licensed engineer qualified in RF engineering and shall include the following required information:
- a) The **maximum** radiofrequency (RF) radiation to be generated by the proposed antenna or antennas;
 - b) The means used to determine the RF levels;
 - c) **The exact legal name, address of principal place of business and telephone number of the applicant, certifying engineer and property owner;**
 - d) **A site plan, and roof plan if appropriate, drawn to scale showing the location of the proposed antennas and all existing antennas on the site, roof, tower or monopole;**
 - e) ~~The cumulative RF radiation generated by all other antennas at the proposed site and within two hundred (200) feet.~~
 - f) ~~The maximum potential cumulative RF radiation that could be generated by all antennas at the proposed site;~~
 - g) ~~The applicable legal citations relevant to the RF levels and antenna type;~~
 - h) ~~The date, time and location that any field measurements were taken;~~
 - i) ~~The exact legal name, address of principal place of business and telephone number of the certifying engineer;~~
 - j) ~~The exact legal name, address of principal place of business and telephone number of the applicant and property owner;~~
 - k) ~~The exact legal name, address or principal place of business and telephone number of the person to whom correspondence is to be sent;~~

2602 MATTER OF RIGHT ANTENNAS

- 2602.1 All antennas that comply with the applicable provisions of this chapter shall be permitted as a matter of right in all zone districts, except broadcast antennas, which shall not be permitted in residence districts (R).

2603 GROUND-MOUNTED ANTENNAS

2603.1 Except for those antennas exempted by §2606, ground-mounted antennas shall comply with the following conditions:

- (a) **In any Residence (R), Special Purpose (SP), Mixed Use (CR) or Waterfront (W) zone district only one antenna may be located per lot and may not exceed a mounted height of twelve feet (12 ft.) at its highest point above the ground** ~~No more than one ground mounted antenna may be installed on any lot, nor may any ground mounted antenna be installed on any lot on which there is an antenna tower or monopole;~~
- ~~(b) The antenna may not exceed a mounted height of twelve feet (12 ft.) at its highest point above the ground in any Residence (R), Special Purpose (SP), Mixed Use (CR) or Waterfront (W) zone district;~~
- (e) **(b) In any Commercial (C) or Industrial (CM or M) zone district** an antenna may not exceed a mounted height of twenty feet (20 ft.) at its highest point above the ground;
- (d) **(c) The antenna shall be located in either the rear yard or the side yard of the principal building on the lot except in the case of a corner lot no antenna may be located in the any yard between the principal structure and a street;;**
- (e) **(d) Each part of the antenna shall be removed from all lot lines by a minimum distance of ten feet (10 ft.);**
- ~~(f) The antenna location shall be secured from unauthorized access for a minimum distance of twenty five (25) feet, by a fence or screen at least five (5) feet in height;~~
- (e) Each antenna installation shall be located or screened such that its visibility from public spaces, navigable waterway, historic landmarks and national monuments is minimized to the greatest practicable extent;**
- (g) **(f) The antenna shall not be visible from any public park that is within the Central Employment Area or from any street that the lot abuts**
- ~~(h)~~**(g) The antenna, to the maximum practical extent, shall be constructed of materials and colors that blend with the surroundings; and**

- (i) ~~The installation shall include screening treatments necessary to ensure compliance with paragraph (g) of this subsection, and, to the maximum practical extent, to reduce the adverse impact of the antenna as viewed from adjacent property; and~~

- (j)(h) The antenna installation shall be as small as is practical for its intended use.

2603.2 A ground-mounted antenna which does not comply with the above requirements may be permitted through the special exception process set forth in ~~§2610~~ **§2612**.

2603.3 The term ground as used in this section, shall not include artificially elevated terrain such as berms or planter boxes but may include graded lawns, terraced landscapes that are formed from the natural grade and at-grade patios.

2604 ANTENNAS PLACED ON A ROOF

2604.1 Except for those antennas exempted by ~~§2606~~ **§2607**, antennas placed on a roof of a building shall comply with the following conditions:

- (a) Each part of an antenna shall be removed from each edge of the roof a minimum distance equal to its total mounted height above the ~~ground~~ **roof**;
- (b) An antenna may not exceed a total mounted height of twelve (12) feet above the roof;
- (c) Each antenna installation shall be located or screened ~~to minimize such that its visibility from public spaces, navigable waterway, historic landmarks and national monuments is minimized to the greatest practicable extent~~, **to the greatest practicable extent the view of the antenna from the following:**
 - 1) ~~Adjacent streets;~~
 - 2) ~~Any public park or public open space, within one-quarter mile, and~~
 - 3) ~~Any landmarked structure or site within one-quarter mile.~~
- (d) An antenna shall be constructed of materials and colors that blend with the surroundings to the maximum practical extent;
- (e) Antennas placed on a roof that has outdoor recreation space shall be subject to the following:

- 1) The antenna location shall be secured from unauthorized access for a minimum distance of ~~twenty-five (25)~~ **ten (10)** feet, by a fence or screen at least five (5) feet in height; and

- 2) ~~Transmitting antennas shall be oriented such that transmission is not directed at the recreation space.~~

~~(f) An antenna on any lot adjacent to a navigable waterway shall be placed such that its visibility from the navigable waterways is minimized to the greatest practicable extent;~~

(g) Any related equipment cabinet or shelter shall be:

- 1) Constructed of materials and colors that blend with the building or penthouses; and
- 2) Located to reduce its visibility from public space to the greatest practicable extent.

2604.2 An antenna proposed to be placed on a roof which does not comply with the above requirements may be permitted through the special exception process set forth in ~~§2610~~ **§2612**.

2605 BUILDING-MOUNTED ANTENNAS

2605.1 Except for those antennas exempted by ~~§2606~~ **§2607**, building-mounted antennas shall comply with the following conditions:

- (a) The top of the antenna shall not extend above the roof of the wall, building or structure to which it is mounted;
- (b) Each antenna installation shall be located or screened ~~to minimize~~ **such that its visibility from public spaces, navigable waterway, historic landmarks and national monuments is minimized to the greatest practicable extent**, ~~to the greatest practicable extent the view of the antenna from the following:~~
 - 1) ~~Adjacent streets;~~
 - 2) ~~Any public park or public open space, within one quarter mile;~~ and
 - 3) ~~Any landmarked structure or site within one quarter mile.~~

(c) An antenna shall be;

- (d) Building mounted antennas shall be constructed of materials and colors that blend with the surroundings to the maximum practical extent or shall be screened and/or painted to blend with the surface face to which they are attached.
- (e) Building-mounted antennas placed on a roof structure of a building with rooftop outdoor recreation space shall be subject to the following:
 - 1) The antenna location shall be secured from unauthorized access for a minimum vertical distance of ten (10) feet, and
 - 2) ~~Transmitting antennas shall be oriented such that transmission is not directed at the recreation space.~~
- ~~(e) Antenna on any lot adjacent to a navigable waterway shall be placed such that its visibility from the navigable waterways is minimized to the greatest practicable extent;~~
- ~~(f) To avoid off-site reception interference, a transmission antenna shall not be directed into any adjacent building window;~~
- (g) Any related equipment cabinet or shelter shall be:
 - 1) Constructed of materials and colors that blend with the building or penthouses; and
 - 2) Located to reduce its visibility from public space to the greatest practicable extent.

2605.2 A building mounted antenna which does not comply with the above requirements may be permitted through the special exception process set forth in ~~§2610~~ **§2612**.

2606 STEALTH Antenna STRUCTURE

2606.1 Antennas located in stealth structures may be permitted provided the following conditions are met:

- (a) **The proposed stealth design provides adequate screening of the antennas;**
- (b) **The proposed stealth structure is not out of scale with the subject property taking into account the size, set-backs, topography and underlying use of the property;**

- (c) The primary use of the subject property is not single-family residential;
- (d) The ground equipment of the proposed facility be landscaped, fenced or otherwise screened;
- (e) The diameter of a stealth flagpole shall not exceed thirty (30) inches at its base;
- (f) The height of a stealth structure shall be permitted, by right, to a height of 80 feet in all residential zoning districts and 120 feet in all other zoning districts.

2606.2 Stealth antenna structures may include, but are not limited to, flag poles, light poles, fence supports, steeples, cupolas and other architectural elements, and trees.

2606.3 The Office of Planning shall provide a report and recommendation to the Zoning Administrator on a proposed stealth antenna structure.

2606.2 Any proposed stealth structure which is determined by the Zoning Administrator not to comply with the standards of § 2606.1 shall be referred to the Board of Zoning Adjustment for review as a special exception subject to §§ 2612 and 3104.

2606 EXEMPTED ANTENNAS

2607

2606.1 The requirements of §§ 2603 through ~~2606~~ shall not apply to any antenna that **2607.1** is:

- (a) Entirely enclosed on all sides within a building or by the penthouse walls or extensions of the penthouse walls and which is not the primary use within the building;
- (b) Located entirely behind and no taller than the parapet walls; or
- (c) No taller than eighteen inches (18 in.) in height and necessary for the implementation of expanded 911 or emergency communications.

2606.2 For the purposes of § 2602.1, **2607** penthouse and parapet walls may include an opaque membrane covering a port in front of the antenna.

2606.3 The requirements of §§2603 through ~~2605~~ **2606** shall not apply to the following **2607.3** classes of antennas. The number to the right indicates the

maximum number of antennas within a class which may be placed on a building or located on a lot, as is applicable:

Residential type uhf/vhf television and frequency modulation (fm) radio receiving Yagi antenna not to exceed eight feet (8 ft.) Horizontally	2
Whip antennas not exceeding two and one-half inches (2 1/2 in.) seven inches In diameter, with a mounted dimension no longer than twelve feet (12 ft.) In any direction, and located on a principal building	2
Residential type super high frequency antenna, not to exceed three feet (3 ft.) In any dimension, excluding the support element	1
Dish antenna with a diameter of no more than four feet (4 ft.), not taller than eight feet (8 ft.), located on the roof of a principal building, and set back from the edge of the roof a distance at least equal to its height above the roof. The principal building shall have a height of no less than twenty-five (25) feet	1
Whip antenna mounted on a vehicle on private property	1

~~2606.4~~ An antenna which does not comply with the above requirements or numeric
2607.4 limitation set forth in § ~~2606.2~~ **§2607.3**, may be permitted subject to the
requirements of §§ 2603 through ~~2605~~, **2606**.

2607 ANTENNA ADDITIONS TO EXISTING ANTENNA TOWERS AND
2608 MONOPOLES

~~2607.1~~ An addition of an antenna to an existing antenna tower or monopole shall
2608.1 be permitted as a matter of right; provided, the following conditions are
met:

- (a) The size of the antenna tower or monopole is not increased;
- (b) The appearance of the antenna tower or monopole is not changed in a manner which causes an adverse impact on the surrounding area; and
- (c) A transmitting antenna may not be placed lower than fifty (50) feet above the base of the antenna tower or monopole.

2608 2609 **ANTENNA TOWERS AND MONOPOLE IN GENERAL INDUSTRY DISTRICTS (M) (MATTER OF RIGHT)**

2608.1 An antenna tower or monopole in conjunction with a studio or in conjunction with the erection, alteration, or use of buildings for transmission or reception equipment, shall be permitted in General Industry zone districts (M) as a matter-of-right; provided, the antenna tower or monopole complies with the following conditions:

2609.1

- (a) An antenna tower or monopole shall be set back a minimum horizontal distance equal to its total height as measured from the ground, from any residentially developed or zoned property;
- (b) Except as provided above, each part of an antenna tower or monopole shall be removed from each lot line a minimum distance equal to the greater of the following:
 - 1) Twenty (20) feet; or
 - 2) A distance of at least one-third (1/3) of the total mounted height;
- (c) The height of an antenna tower or monopole shall not exceed the maximum height permitted for structures plus thirty (30) feet as a matter of right;
- (d) Any antenna tower or monopole with a height in excess of (c) above, may be permitted if approved by the Board of Zoning Adjustment subject to the conditions of the ~~§2610~~ **§2612**;
- (e) Any antenna tower or monopole with a height in excess of that permitted by the act of June 1, 1910 (36 stat. 452), as amended, shall not be permitted, unless the height is approved by the Mayor or his or her designee;

- ~~(f) No antenna tower or monopole may be located on any lot on which there is a ground mounted antenna.~~
- ~~(g) A written statement shall be provided agreeing to design and make the antenna tower available on a commercial basis to the extent technically feasible for co-location by any telecommunications service provider;~~
- (h) A written statement shall be provided agreeing to design the monopole for at least three (3) antenna arrays and to make the array space available on a commercial basis for collocation by any telecommunications service provider if unused by the initial telecommunications service provider(s) or the owner;

2610 ANTENNA TOWERS AND MONOPOLES AS PART OF A CAMPUS PLAN

2610.1 An antenna tower or monopole may be permitted, subject to and as part of an approved campus plan as may be required in any zone district subject to the special exception standards on §§2612.1 and 2612.2;

2609 OFFICE OF PLANNING REPORT

2611

2609.1 The Zoning Administrator shall not take final action on an application to permit an antenna tower a monopole, or an antenna not exempted by §2606 until a report is received from the Office of Planning or thirty days (30) have passed since the application was submitted to the director of the Office of Planning, whichever occurs first.

2611.1

2609.2 The Director of the Office of Planning and the Zoning Administrator may agree to shorten or lengthen the time period indicated in ~~2609.1~~ **§2611.1**, but in no event shall the review period exceed sixty (60) days;

2611.2

2609.3 The report of the Office of Planning shall provide information sufficient to enable the Zoning Administer to determine whether the antenna complies with the applicable requirements of this chapter.

2611.3

2610 ANTENNAS SUBJECT TO BZA APPROVAL: GENERAL
2612

2610.1 An application for special exception approval pursuant to §§ ~~2603.2, 2604.2, 2605.2, 2606.3, and 2613.2~~ for a non-complying antenna shall include the following written and graphic documentation:

2612.1

- (a) A map of area to be served by the new antenna;
- (b) A map and explanation of the area being inadequately served;
- (c) A map indicating the location of any other antennas and facility sites providing service by the applicant within a two mile radius of the proposed antenna site, with identified heights above grade;
- (d) A site and roof plan showing all structures and antennas on site;
- (e) Elevation drawings of the structure and proposed antennas from all four directions;
- (f) A picture of the proposed antenna;
- (g) The total mounted height of the antenna relative to the tops of surrounding trees as they presently exist; and
- (h) Other information as may be necessary for impact assessment of the antenna.

~~2610.2~~
2612.2 In addition to any other conditions deemed necessary to mitigate potential adverse impacts, the Board may impose conditions pertaining to screening, buffering, lighting or other matter necessary to protect adjacent and nearby property and may require the removal of any on-site non-conforming, inoperable or unauthorized antenna.

2612.3 No advertising may be placed on the monopole or tower.

~~2611~~
2613 ANTENNA TOWERS AND MONOPOLES SUBJECT TO BZA APPROVAL

~~2611.1~~
2613.1 A monopole, shall be permitted if approved by the Board of Zoning Adjustment in accordance with §§ 2611.3104 of this title, subject to the provisions of this section, in the zone districts specified in ~~§2611.3~~ **§2613.2.**

2613.2 A monopole may be permitted as a special exception use in the following zone districts:

- (a) R, residence districts;**
- (b) C-1 through C-4 commercial districts;**
- (b) SP, special purpose districts;**

(c) CM, commercial-light manufacturing districts;

(d) CR, mixed use district, if the Board considers it appropriate in furthering the objectives of the mixed use districts; and

(e) W, waterfront districts, if the Board considers it appropriate in furthering the objectives of the waterfront districts.

~~2611.2~~
2613.3 An antenna tower, in conjunction with a studio, or the erection, alteration, or use of buildings for transmission or reception equipment on the same lot, shall be permitted if approved by the Board of Zoning Adjustment in accordance with §3104 of this title and subject to the provisions of this section, in the zone districts specified in § ~~2611.3~~ **2613.4**.

~~2611.3~~
2613.4 An antenna tower ~~or monopole~~ may be permitted as a special exception use in the following zone districts:

- (a) C-2 through C-4 commercial districts;
- (b) SP, special purpose districts;
- (c) CM, commercial-light manufacturing districts;
- (d) CR, mixed use district, if the Board considers it appropriate in furthering the objectives of the mixed use districts; and
- (e) W, waterfront districts, if the Board considers it appropriate in furthering the objectives of the waterfront districts.

~~2611.4~~
2513.5 The location, height and other characteristics of an antenna tower or monopole shall be:

- (a) Consistent with the purpose of this chapter;
- (b) Designed and available for co-location by other service providers;
- (c) Located so the visual impacts are minimized to the greatest practical extent, from neighboring property and adjacent public space, or appropriately screened by landscaping or other techniques to minimize the visibility of the antenna tower or monopole; and
- (d) Designed and constructed to preserve existing trees to the greatest practicable extent.

~~2611.5~~ The location, height and other characteristics of an antenna tower or monopole shall not:
2513.6

- (a) Adversely affect the use of neighboring property;
- (b) Adversely affect the present character and future development of neighboring property; or
- (c) Exceed that which is necessary to render satisfactory service to its service area.

~~2611.6~~ Any antenna tower or monopole with a proposed height in excess of that permitted by the act of June 1, 1910 (36 stat. 452), as amended, shall not be permitted, unless the height is approved by the Mayor or his or her designee.
2613.7

~~2611.7~~ An antenna tower or monopole shall be set back a minimum horizontal distance equal to its total height as measured from the ground, from any residentially developed or zoned property.
2613.8

~~2611.8~~ Each part of an antenna tower or monopole shall be removed from each lot line the greater of the following:
2613.9

- (a) Twenty (20) feet;, or
- (b) A distance of at least one-third of the total constructed height.

~~2611.9~~ The Board shall submit the application to the D.C. Office of Planning for review and report.
2613.10

~~2611.10~~ In addition to meeting the requirements of § 3104, the applicant shall have the burden of demonstrating the following:
2613.11

- (a) The need for the proposed location;
- (b) The necessity of the proposed height;
- (c) That no other mounting option is available; and
- (d) Full compliance with both cumulative site and individual antenna RF emission levels as established by the FCC.

~~2611.11~~ The applicant shall provide written and/or graphic documentation of the following:
2613.12

- (a) The area to be served by new antenna tower or monopole;

- (b) ;The area being inadequately served;
- (c) A map indicating the location of any other antennas and facility sites providing service by the applicant;
- (d) Other towers or monopoles within a two-mile radius of the proposed site;
- (e) An explanation of why the applicant cannot co-locate on an existing tower or monopole;
- (f) A commitment to permit the collocation by other service providers on an antenna tower;
- (g) A commitment to permit the collocation of at least three antenna arrays on a monopole;
- (h) The topographic conditions of the area to be served;
- (i) The relative height of the antenna tower or monopole to the tops of surrounding trees **within one-quarter (1/4) mile radius of the proposed site** as they presently exist;
- (j) The proposed appearance of the tower or monopole, including exterior finish; and
- (k) **A maintenance plan explaining how the property manager will control ice build-up, falling ice and potential falling debris; the plan should also address how inoperable antennas will be removed.**
- (l) Other information as may be necessary for impact assessment of the antenna tower or monopole.

~~2611.12~~
2613.13 In addition to any other conditions deemed necessary to mitigate potential adverse impacts, the Board may impose conditions relating to operation, location, screening, co-location or other requirements as it shall deem necessary to protect adjacent and nearby property, neighborhood character, and the image of the city as the nation's capital, consistent with the general purpose and intent of this chapter and may require the removal of any on-site inoperable or unauthorized antenna as a condition to the approval.

2612 NON-CONFORMING ANTENNAS

2614

2612.1

2614.1

A nonconforming antenna shall not be altered, modernized, or otherwise replaced, except in conformity with all provisions of this title.

~~2612.2~~ If a nonconforming antenna stops functioning, a temporary replacement
2614.2 antenna may be installed, subject to the following conditions:

- (a) A permanent replacement antenna cannot be installed as a matter-of-right;
- (b) The temporary installation shall be removed no later than one (1) year after the nonconforming antenna stops functioning;
- (c) Within three (3) months after the nonconforming antenna stops functioning, the owner or occupant of the land or structure on which the antenna is installed shall apply for a special exception to install a longer term replacement: and
- (d) If the owner or occupant elects to install an immediate replacement antenna, the cost of the temporary replacement shall not be considered by the Board of Zoning Adjustment as a basis for approval of a special exception to install a longer term replacement.

2614.3 An antenna that was legally permitted prior to the date of adoption of this Chapter shall be considered conforming antennas.

2614.4 This section does not apply to towers, monopoles or antenna support structures.

~~2613~~ **EQUIPMENT CABINET OR SHELTER**

2615

~~2613.1~~ **If an antenna equipment cabinet or shelter is provided on the ground, it shall be subject to the following:**
2615.1

(a) It shall be regulated as an accessory building subject to any applicable criteria within each zone, and

(b) It shall harmonize with the main structure in architectural character, material, and color.

~~2613.2~~ If an antenna equipment cabinet or shelter is provided on the roof of a
2615.3 building or structure, it shall be erected or enlarged as follows:

- (a) It shall be set back from all exterior walls a distance at least equal to its height above the roof upon which it is located;
- (b) It shall harmonize with the main structure in architectural character, material, and color;
- (c) It shall not exceed eighteen feet six inches (18 ft. 6 in.) in height above the roof upon which it is located

~~2613.3~~ An antenna equipment cabinet or shelter which does not comply with the
2615.3 above requirements may be permitted through the special exception process
set forth in ~~§2610~~ **§2612**.

~~2614~~ **REMOVAL OF ANTENNAS, ANTENNA TOWERS, MONOPOLES,**
2616 AND RELATED EQUIPMENT

~~2614.1~~ **Antennas, antenna towers, monopoles or equipment cabinets shall be**
2616.1 removed at the expense of the owner if they have not been used for a
period of one year. A one year exceptions may be granted by the Board
of Zoning Adjustment to this requirement for good cause shown.

CHAPTER 1 THE ZONING REGULATIONS

Amend §199.1 to modify and add the following definitions as indicated:

199 DEFINITIONS

Antenna – A device used to transmit or receive communications signals. This term encompasses transmitting and receiving elements, ~~and any tower and immediately related support and stabilizing elements~~, and rotating or other directional mechanism.

Antenna, commercial broadcast - an antenna used for television and ~~commercial~~ radio broadcasting ~~by a profit or non-profit entity~~. The transmitting **BROADCAST** antenna may be affixed to a tower or to the top of a building. ~~In amplitude modulation (AM) radio service, the tower also acts as the antenna.~~

Antenna, dish - a bowl-shaped device for the reception and/or transmission OF communication signals in a specific directional pattern.

Antenna, Ground-Mounted - **any antenna and its necessary support structure, not including an antenna tower or monopole, that is located on the ground or at building grade. This may include graded lawns, terraced landscapes formed from the natural grade and at-grade patios.**

Antenna Placed on a Roof - any antenna and its necessary support structure, not including an antenna tower or monopole, that is attached to the roof of a building and which does not fall within the definition of a building-mounted antenna.

Antenna tower - a lattice-type structure, guyed or self-supporting, used to support antennas for broadcasting, transmission, reception, or other utility equipment. Such

structures shall not be deemed ground mounted antennas as that term is used in this chapter.

Building-mounted antenna - any antenna and its necessary support structure, not including a tower or monopole, that is attached to the walls of, or integrated into a building, church steeple, cooling tower, elevator bulkhead, parapet, penthouse, fire tower, tank, water tower, or other similar structure.

Collocation - the use of a single mount, tower, monopole, or site by more than one antenna or telecommunications service provider.

Equipment cabinet or shelter - an enclosure housing only equipment related to the operation of an antenna located at the site and connected to the antenna by cable.

FCC – Federal Communications Commission

Monopole - a single, self-supporting pole-type structure, supporting a fixture designed to hold one or more antennas. Such structures shall not be deemed ground mounted antennas as that term is used in this chapter.

Mount- the necessary support structure to which an antenna is attached, not including antenna towers or monopoles.

Radiofrequency electromagnetic field – the presence of electromagnetic energy at a given location that can be described in terms of the electric and/or magnetic field strength at that location.

Radiofrequency radiation (RF radiation) - the propagation of energy through space in the form of waves or particles.

Stealth structure - a structure used or designed to enclose and screen from view antennas. Such structures may include, but are not limited to flag poles, tree poles and bell towers but not light standards.

Telecommunication service provider – any entity providing telecommunications services.

Telecommunications facility – all equipment, including repeaters, with which a telecommunications service provider broadcasts and receives the radiofrequency waves that carry their services, and all locations of said equipment or any part thereof.

CHAPTER 2 RESIDENCE DISTRICT USE REGULATIONS

Delete existing §201.2 through §201.7 in their entirety.

Add the following new §201.2 to read:

201 USES AS A MATTER OF RIGHT (R)

201.2 **Antenna, subject to the standards and procedures which apply to the particular class of antenna or its location pursuant to chapter 26 of this title.**

Delete existing § 211, Antenna, Commercial Broadcast (R-1) in its entirety.

Delete existing § 212, Antenna, Other Than Commercial Broadcast Antenna (R-1) in its entirety.

CHAPTER 4 RESIDENCE DISTRICT: HEIGHT, AREA, AND DENSITY REGULATIONS

Amend §400.3 to read as follows:

400 HEIGHT OF BUILDINGS OR STRUCTURES (R)

400.3 A spire, tower, dome, pinnacle, minaret serving as an architectural embellishment, or antenna may be erected to a height in excess of that which this section otherwise authorizes in the district in which it is located. **This section shall not be interpreted to bypass otherwise required special exception reviews or mayoral approvals.**

Amend §411.1 to read as follows:

411.1 To exercise a reasonable degree of architectural control upon roof structures in all districts, housing for mechanical equipment, stairway, elevator penthouses, and, when not in conflict with An Act To Regulate the Height of Buildings in the District of Columbia, approved June 10, 1910 (36 Stat. 452, as amended; D.C. Code, 2001 Ed. §§ 6-601.01 to 6-601.09 (formerly codified at D.C. Code §§ 5-401 to 5-409 (1994 Repl. & 1999 Supp.))), penthouses for storage and toilets incidental and accessory to roof swimming pools shall be subject to conditions and variable floor area ratio credit specified in this section, **and equipment cabinet, shelter or enclosure incidental and necessary to antennas placed on a roof.**

Amend §411.15 to read as follows:

411.15 For the administration of this section, mechanical equipment shall not include telephone equipment, radio, television, or electronic equipment of a type not necessary to the operation of the building or structure. **Antenna equipment cabinets and antenna equipment shelters shall be regulated by Chapter 26 of this title.**

CHAPTER 5 SPECIAL PURPOSE DISTRICTS

Add the following new § 501.1 (i):

- 501 USES AS A MATTER OF RIGHT (SP)
501.1 (i) **Antenna, subject to the standards and procedure which apply pursuant chapter 26 of this title.**

Delete existing § 514, Antenna, Commercial Broadcast (SP) in its entirety.

Delete existing § 515, Antenna, Other Than Commercial Broadcast Antenna (SP) in its entirety.

Amend §530 to read as follows:

- 530 HEIGHT
530.3 Spires, towers, domes, pinnacles or minarets serving as architectural embellishments, penthouse over elevator shaft, ventilator shaft, antenna, chimneys, smokestacks or fire sprinkler tanks may be erected to a height in excess of that which this sections otherwise authorizes. **This section shall not be interpreted to bypass otherwise required special exception reviews or mayoral approvals.**

Add the following new §534.12

- 534 REAR YARDS (SP)
534.12 **Antennas, antenna towers and monopoles shall comply with the rear yard requirements as specified in chapter 26.**

Add the following new §535.4:

- 535 SIDE YARDS (SP)
535.4 **Antennas, antenna towers and monopoles shall comply with the side yard requirements as specified in chapter 26.**

Renumber the existing 535.4 to 535.5

CHAPTER 6 MIXED USE DISTRICT (CR):

Amend §601.1 to read as follows:

- 601 USES AS A MATTER OF RIGHT (CR)

- 601.1 (s) Antenna, subject to the standards and procedures which apply to the particular class of antenna pursuant to ~~§§201.1 through 201.7~~ **chapter 26 of this title.**

Amend §617.1 to read as follows:

- 617 ANTENNA TOWER AND MONOPOLE (CR)
617.1 **If the Board considers that it is appropriate in furthering the objectives of the mixed use districts** an antenna **tower or monopole** shall be permitted as a special exception in the CR district, if approved by the Board of Zoning Adjustment subject to the standards and procedures ~~which apply to the particular class of antenna under §§211 or 212~~ **as specified in chapter 26 of this title.**

Amend §630.3 to read as follows:

- 630 HEIGHT
630.3 Spires, towers, domes, pinnacles or minarets serving as architectural embellishments, penthouse over elevator shaft, ventilator shaft, antennas, chimneys, smokestacks or fire sprinkler tanks may be erected to a height in excess of that which this sections otherwise authorizes. **This section shall not be interpreted to bypass otherwise required special exception reviews or mayoral approvals.**

Amend §637.1 to read as follows:

- 637 SIDE YARDS (CR)
637.1 No side yard shall be required for any structure located in a CR district, **except as may be otherwise established for ground mounted antennas.**

CHAPTER 7 COMMERCIAL DISTRICT (C):

- 701 USES AS A MATTER OF RIGHT (C-I)

Delete § 701.6 (g):

~~(g) Antenna tower for television and radio broadcasting, and in conjunction with the erection, alteration, or use of buildings for transmission or reception equipment; and~~

Delete § 701.7 through 701.9 in their entirety.

Amend §721.2 (t) to read as follows:

- 721 USES AS A MATTER OF RIGHT (C-2)
721.2 (t) Radio or television broadcasting studio ~~and antenna tower in
conjunction with the studio~~ **not including antenna tower
or monopole;**

Delete § 741.6 and 741.7 in their entirety.

Amend §770.3 to read as follows:

- 770 HEIGHT
770.3 Spires, towers, domes, pinnacles or minarets serving as architectural
embellishments, penthouse over elevator shaft, ventilator shaft, antennas,
chimneys, smokestacks or fire sprinkler tanks may be erected to a height in
excess of that which this sections otherwise authorizes. **This section shall
not be interpreted to bypass otherwise required special exception reviews
or mayoral approvals.**

CHAPTER 8 INDUSTRIAL DISTRICT (C):

Amend §840.2 to read as follows:

- 840 HEIGHT
840.2 Spires, towers, domes, pinnacles or minarets serving as architectural
embellishments, penthouse over elevator shaft, ventilator shaft, antennas,
chimneys, smokestacks or fire sprinkler tanks may be erected to a height in
excess of that which this sections otherwise authorizes. **This section shall not
be interpreted to bypass otherwise required special exception reviews or
mayoral approvals.**

CHAPTER 9 WATERFRONT DISTRICTS

Amend §901.1 (u) to read as follows:

- 901 USES AS A MATTER OF RIGHT (W)
901.1 (u) Antenna, subject to the standards and procedure which apply to the particular
class of antenna pursuant ~~to §201.2 through 201.7~~ **chapter 26 of this title.**

Amend §914.1 to read as follows:

- 914 ANTENNA TOWER AND MONOPOLE (W)

- 914.1 If the Board considers that it is appropriate in furthering the objectives of the waterfront districts, an **antenna tower or monopole** shall be permitted as a special exception in the W districts, if approved by the Board of Zoning Adjustment subject to the standards and procedures ~~which apply to the particular class of antenna under §§211 or 212~~ **as specified in chapter 26 of this title.**

Amend §930.3 to read as follows:

- 930 HEIGHT
930.3 Spires, towers, domes, pinnacles or minarets serving as architectural embellishments, penthouse over elevator shaft, ventilator shaft, antennas, chimneys, smokestacks or fire sprinkler tanks may be erected to a height in excess of that which this sections otherwise authorizes. **This section shall not be interpreted to bypass otherwise required special exception reviews or mayoral approvals or mayoral approvals.**

Amend §1201.3 to read as follows:

- 1201.3** The following uses shall be permitted if approved by the Board of Zoning Adjustment subject in accordance with the conditions specified in §3108 and in this section in each case:
- (b) In the CAP/SP District, any use permitted as a special exception in the SP District, except that the following uses shall not be permitted:
 - (1) Parking lot or parking garage;
 - (2) Telephone exchange; ~~and~~
 - (3) Public utility pumping station; ~~and~~
 - (4) Antenna Towers or Monopoles**
 - (c) In the CAP/C-2-A District, any use permitted as a special exception in the C-2-A District, except that the following uses shall not be permitted:
 - (1) Gasoline service station; Provided, that a gasoline service station existing on the effective date of this section may be remodeled, repaired or replaced subject to the special exception provisions of the underlying zone;
 - (2) Motorcycle sales and repairs; ~~and~~
 - (3) Public utility pumping station; ~~and~~
 - (4) Antenna Towers or Monopoles**

- 1203 HEIGHT, AREA, AND BULK REGULATIONS

1203.2 The height of buildings or structures as specified in 1203.1 may be exceeded in the following instances:

(c) This section shall not be interpreted to bypass otherwise required special exception reviews.

DELETE §2001.11:

~~2001.11—A nonconforming antenna shall not be altered, modernized, or otherwise replaced, except in conformity with all provisions of this title.~~

~~2001.12—If a nonconforming antenna stops functioning, a temporary replacement antenna may be installed, subject to the following conditions:~~

- ~~(a)—A permanent replacement antenna cannot be installed as a matter of right;~~**
- ~~(b)—The temporary installation shall be removed no later than one (1) year after the nonconforming antenna stops functioning;~~**
- ~~(c)—Within three (3) months after the nonconforming antenna stops functioning, the owner or occupant of the land or structure on which the antenna is installed shall apply for a special exception to install a longer term replacement; and~~**
- ~~(d)—If the owner or occupant elects to install an immediate replacement antenna, the cost of the temporary replacement shall not be considered by the Board of Zoning Adjustment as a basis for approval of a special exception to install a longer term replacement.~~**

DELETE §2503.5:

~~2503.5 An antenna which complies with all other requirements of this title may occupy any side or rear yard which is required by any provision of this title.~~

determine whether an EA is required. In the case of broadcast licensees, who are required to obtain a construction permit from the FCC, this evaluation is required before the application for a construction permit is filed, or the facility is constructed. In addition, if a facility requires the filing of an EA for any reason other than RF emissions, the RF evaluation must be performed before the EA is filed. Factors other than RF emissions that may require the filing of an EA are set out in 47 C.F.R. § 1.1307(a). Otherwise, new facilities that do not require FCC-issued construction permits should be evaluated before they are placed in operation. The FCC also requires its licensees to evaluate existing facilities and operations that are not categorically excluded if the licensee seeks to modify its facilities or renew its license. These requirements are intended to enhance public safety by requiring periodic site compliance reviews.

All facilities that were placed in service before October 15, 1997 (when the current RF exposure guidelines became effective) are expected to comply with the current guidelines no later than September 1, 2000, or the date of a license renewal, whichever is earlier.¹² If a facility cannot meet the September 1, 2000, date, the licensee of that facility must file an EA by that date. Section 1.1307(b) of the FCC's rules requires the licensee to provide the FCC with technical information showing the basis for its determination of compliance upon request.

II. How the FCC Verifies Compliance with and Enforces Its Rules.

A. Procedures Upon Initial Construction, Modification, and Renewal.

The FCC's procedures for verifying that a new facility, or a facility that is the subject of a facility modification or license renewal application, will comply with the RF exposure rules vary depending upon the service involved. Applications for broadcast services (for example, AM and FM stations, and television stations) are reviewed by the FCC's Mass Media Bureau (MMB). As part of every relevant application, the MMB requires an applicant to submit an explanation of what steps will be taken to limit RF exposure and comply with FCC guidelines. The applicant must certify that RF exposure procedures will be coordinated with all collocated entities (usually other stations at a common transmitter site or hill or mountain peak). If the submitted explanation does not adequately demonstrate a facility's compliance with the guidelines, the MMB will require additional supporting data before granting the application.

The Wireless Telecommunications Bureau (WTB) reviews personal wireless service applications (for cellular, PCS, SMR, etc.). For those services that operate under blanket area licenses, including cellular and PCS, the license application and renewal form require the applicant to certify whether grant of the application would have a significant environmental impact so as to require submission of an EA. The applicant's answer to this question covers all of the facilities sites included within the area of the license.

For those services that continue to be licensed by site (e.g., certain paging renewals), the WTB requires a similar certification on the application form for each site. To comply with the FCC's rules, an applicant must determine its own compliance before completing this certification for

¹² Prior to October 15, 1997, the Commission applied a different set of substantive guidelines.

every site that is not categorically excluded. The WTB does not, however, routinely require the submission of any information supporting the determination of compliance.

B. Procedures For Responding To Complaints About Existing Facilities.

The FCC frequently receives inquiries from members of the public as to whether a particular site complies with the RF exposure guidelines. Upon receiving these inquiries, FCC staff may ask the inquiring party to describe the site at issue. In many instances, the information provided by the inquiring party does not raise any concern that the site could exceed the limits in the guidelines. FCC staff will then inform the inquiring party of this determination.

In some cases, the information provided by the inquiring party does not preclude the possibility that the limits could be exceeded. Under these circumstances, FCC staff may ask the licensee who operates the facility to supply information demonstrating its compliance. FCC staff may also inspect the site to determine whether it is accessible to the public, and examine other relevant physical attributes. Usually, the information obtained in this manner is sufficient to establish compliance. If compliance is established in this way, FCC staff will inform the inquiring party of this determination.

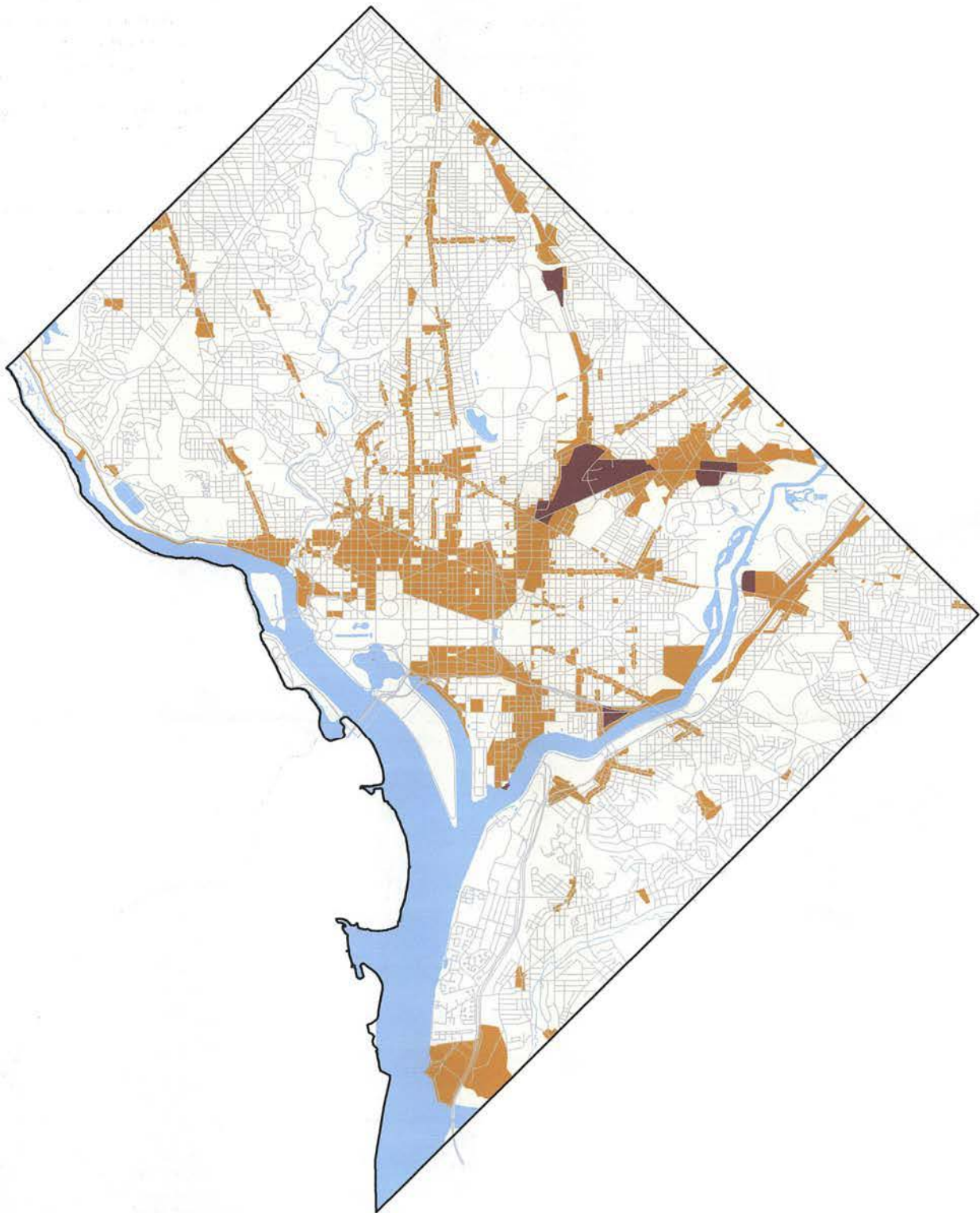
In some instances, a licensee may be unable to provide information sufficient to establish compliance with the guideline limits. In these cases, FCC staff may test the output levels of individual facilities and evaluate the physical installation. Keep in mind, however, that instances in which physical testing is necessary to verify compliance are relatively rare.

If a site is found to be out of compliance with the RF guidelines, the FCC will require the licensees at the site to remedy the situation. Depending on the service and the nature and extent of the violation, these remedies can include, for example, an immediate reduction in power, a modification of safety barriers, or a modification of the equipment or its installation. Actions necessary to bring a site into compliance are the shared responsibility of all licensees whose facilities cause exposures in that area that exceed 5% of the applicable MPE limit. In addition, licensees may be subject to sanctions for violating the FCC's rules and/or for misrepresentation.

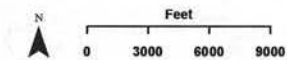
The FCC is committed to responding fully, promptly, and accurately to all inquiries regarding compliance with the RF exposure guidelines, and to taking swift and appropriate action whenever the evidence suggests potential noncompliance. To perform this function effectively, however, the FCC needs accurate information about potentially problematic situations. By applying the principles discussed in this guide about RF emissions, exposure and the FCC's guidelines, state and local officials can fulfill a vital role in identifying and winnowing out situations that merit further attention.

III. Practical Guidance Regarding Compliance.

This section is intended to provide some general guidelines that can be used to identify sites that should not raise serious questions about compliance with FCC RF exposure guidelines. Sites that don't fall into the categories described here may still meet the guidelines, but the determination



ORIGINALLY
Proposed Monopole and Tower Zoning



 **Government of the
District of Columbia
Anthony A. Williams, Mayor**

Office of Planning ~ January 22, 2003

This map was created for planning purposes from a variety of sources. It is neither a survey nor a legal document. Information provided by other agencies should be verified with them where appropriate.

