Zoning Text Amendment (ZTA) No. 18-02, Telecommunications Towers – Limited Use

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Completed: 03/18

Description

ZTA No. 18-02 amends the Montgomery County Zoning Ordinance to revise the use standards for antennas, revise the standards for antennas on existing structures and allow telecommunications towers as a limited use in certain zones.

Summary

Staff recommends approval of ZTA No. 18-02 to revise the use standards for antennas, revise the standards for antennas on existing structures and allow telecommunications towers as a limited use in certain zones.

Background/Analysis

As people use their cell phones for far more than voice communication, there is a greater demand for wireless services throughout Montgomery County. ZTA 18-02 would amend zoning regulations related to the placement of telecommunications antennas in non-residential zones and the provision for antennas on existing structures. The ZTA proposed by the Executive has less impacts to Residential zones in comparison to ZTA 16-05, which was the subject of a previous Council public hearing (Zoning Text Amendment (ZTA) 16-05 would allow poles (within the Zoning Ordinance’s definition of Telecommunications Towers) no higher than 30 feet in most zones as a limited use.). At this time, no further Council action is scheduled on ZTA 16-05.

As proposed, ZTA 18-02 adds to or modifies the telecommunication provisions as discussed below:

- Antenna size limits are modified to allow slightly taller or wider antennas, including cubic foot volume limits and more antenna size categories, to allow only small antennas on poles and lower height buildings. Current law references antenna size, but most antennas are enclosed – either to protect them from the elements or for aesthetics – in a panel, canister, or box shaped enclosure. ZTA 18-02 proposes size limitations to the combined volume of the antenna and its enclosure. Current law limits antennas to sizes that prohibit providers from using more powerful or efficient antennas. The
technical trade-off is more, smaller antennas, are needed if taller, more powerful, antennas cannot be used. The ZTA provides fixed height limits but provides height limits that are slightly taller than now permitted and adds volume limits to give some flexibility to dimensional width and depth. By making these changes, the term “small cell” antenna is no longer necessary and is therefore eliminated. (Lines 25-27)

- **Retains the current Conditional use requirements for allowing new towers in residentially zoned areas** (There are no proposed changes to setbacks, notice, hearings, and findings for approval).

- **Allows towers as a limited use in the CRN, CRT, CR and NR zones (new provision).** Streetlights, utility poles, and parking lot lights in these zones and all other Employment and Industrial zones, would be allowed to be replaced under the limited use provisions as discussed below under the bullet discussing “new regulations concerning utility poles, streetlights, and parking lot lights”. Currently, there are no limited use provisions in the CRN, CRT CR or NR zones to allow antennas below current rooftop heights. More antennas are needed in commercial areas, such as downtown Silver Spring and Bethesda, where concentrated use of mobile devices is straining network capacity. More antennas deployed below current rooftop heights are needed to supplement coverage. (Line 6-Use Table)

- **Lowers maximum tower height** from 199 feet to 179 feet (In the AR, R, RC, LSC, IL, IM, and IH zones), from 150 to 130 feet (In the GR and EOF zones) and in the case of a conditional use application, from 155 to 135 feet, unless it can be demonstrated that additional height up to 179 feet (currently 199 feet) is needed for service, collocation, or public safety communication purposes. (Lines 52-70, and Lines 192-196)

- **Establishes new regulations concerning utility poles (poles that support electric wires), streetlight poles and parking lot lights.** In order to support antennas and equipment, typically the pre-existing pole must be removed and a stronger and taller replacement pole is needed. Under ZTA 18-02, streetlights, utility poles, and parking lot lights in Commercial/Residential, Industrial, and Employment zones, can be replaced as a limited use under certain conditions as highlighted below. (Lines 71-)
  - Antennas must comply with the Antenna Classification Standard A under Section 59.3.5.2.C.1.b and must be installed parallel with the Tower. Standard A defines the smallest antenna size (4 feet, 2 inches in maximum length or width, 6 cubic feet in maximum volume) under the newly proposed antenna standards.
  - Height increases for antennas on replacement utility poles and parking lot lights are limited to 10 feet higher than the pre-existing pole.
  - Height increases for antennas on replacement streetlights are limited to the height of the pole being replaced plus 6 feet, when abutting a right-of-way with a paved section width of 65 feet or less; or plus 15 feet when abutting a right-of-way with a paved section width greater than 65 feet (more height is needed to serve both sides of congested roadways).
  - Replacement streetlights, utility poles, and parking lot light poles must be located within 2 feet of the pre-existing pole and at the same distance from the curb line, or edge of travel lane in an open section, as the pre-existing pole in a public right-of-way; must be
located at least 10 feet from an existing building, the wiring must be located inside the pole (or in a conduit on wooden pole), the equipment must be painted the same color or design as the pre-existing pole or may be a stealth design. Pre-existing streetlight and parking lot light poles are to be removed within 10 business days of installation of the new pole and a pre-existing utility pole is to be removed within 180 days after a replacement utility pole is installed.

- Any equipment cabinet must not exceed a maximum volume of 12 cubic feet, must be installed in the Telecommunications Tower base or at ground level, unless this requirement is waived, and must be the same color or pattern as the pre-existing Tower unless approved as a stealth design.

- The current code allows large antennas on existing structures near detached dwellings, but requires a 60-foot setback from detached dwellings for smaller antennas. The proposed ZTA would reduce the setbacks for smaller antennas on existing structures located in the right-of-way from 60 feet to 20 feet. Antennas are currently and would continue to be prohibited on detached dwellings and duplexes. The ZTA proposes to also prohibit attaching antennas on townhouses. These provisions further refine the original intent of the 2014 legislation establishing the small cell antenna standards.

- The minimum height of other existing structures located outside of a right-of-way that may have antennas would be reduced from 50 feet to 35 feet in a Residential detached, Rural Residential or Planned Unit Development zone and from 30 feet to 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone. Many commercial one-story and one-and-one-half-story buildings, such as large supermarkets and neighborhood banks, could be good locations to place antennas if the minimum height is lowered. Some anomalous tall buildings in residential neighborhoods (schools, institutional uses, etc.) can be used if the minimum building height for placement of antennas in residential neighborhoods is lowered thereby providing suitable alternatives to installing more equipment on poles. The intent of limiting the size (and requiring antennas to be painted or screened to match building color or design) is to make antennas on lower height buildings less noticeable.

**Limited Use Requirements for Telecommunications Towers–Montgomery County**

As defined under Section 59.3.5.2(C)(1), Telecommunications Tower means any structure other than a building, providing wireless voice, data or image transmission within a designated service area. A Telecommunications Tower consists of one or more antennas attached to a support structure and related equipment, but does not include amateur radio antenna (see Section 3.5.14.A and Section 3.5.14.B, Amateur Radio Facility), radio or TV tower (see Section 3.5.2.B, Media Broadcast Tower), or an antenna on an existing structure (See Section 3.5.14.C, Antenna on Existing Structure).

A Telecommunications Tower is allowed as a limited use in the AR, R, RC, GR, LSC, EOF and all Industrial zones, and must satisfy a number of standards including: locational requirements in the AR, R and RC zones (must be located within an overhead transmission line right-of-way); height limitations (a
maximum height of 199 feet in the AR, R, RC, LSC, IL, IM, and IH zones and a maximum height of 150 feet in the GR and EOF zones); and setback requirements (In the AR, R, and RC zones, the tower must be a minimum of 300 feet from any residence. In the GR, EOF, LSC, IL, IM, and IH zones, the tower must have a setback of one foot for every foot of height from all properties zoned Agricultural, Rural Residential, or Residential). In the AR, R, RC, GR, and EOF zones, a Telecommunications Tower conditional use application may be filed with the Hearing Examiner to deviate from these standards. Under ZTA 18-02, in the Agricultural zone, Rural zone, Rural Cluster zone, Employment zones, and Industrial zones, and where a tower is not a replacement tower (Section 59.3.5.2.C.2.b) the existing limited use standards continue to apply, except that the maximum tower heights are reduced from 199 feet to 179 feet (In the AR, R, RC, LSC, IL, IM, and IH zones), and from 150 to 130 feet (In the GR and EOF zones).

Conclusion

Staff believes that ZTA 18-02 strikes a balance in addressing the community’s interest in having increased access to mobile broadband services and the evolving technical needs of the wireless industry while also working to protect the community’s interest in managing commercial use of public property and maintaining attractive and safe roads and neighborhoods. Staff recommends approval of ZTA 18-02 as introduced.

Attachments

1. ZTA No. 18-02 as introduced
AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- revise the use standards for antennas;
- revise the standards for antennas on existing structures;
- allow telecommunications towers as a limited use in certain zones; and
- generally amend telecommunications tower and cellular antenna provisions.

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

DIVISION 3.1. “Use Table”
Section 3.1.6. “Use Table”
DIVISION 3.5. “Commercial Uses”
Section 3.5.2. “Communication Facility”
Section 3.5.14. “Accessory Commercial Uses”

EXPLANATION: **Boldface** indicates a Heading or a defined term.
*Underlining* indicates text that is added to existing law by the original text amendment or by ZTA 14-09.
[Single boldface brackets] indicate text that is deleted from existing law by original text amendment.
*Double underlining* indicates text that is added to the text amendment by amendment or text added by this amendment in addition to ZTA 14-09.
[Double boldface brackets] indicate text that is deleted from the text amendment by amendment or indicates a change from ZTA 14-09.
* * * indicates existing law unaffected by the text amendment.
ORDINANCE

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:
Sec. 1. DIVISION 59-3.1 is amended as follows:

DIVISION 59-3.1. Use Table

Section 3.1.6. Use Table

The following Use Table identifies uses allowed in each zone. Uses may be modified in Overlay zones under Division 4.9.

<table>
<thead>
<tr>
<th>USE OR USE GROUP</th>
<th>Definitions and Standards</th>
<th>Ag</th>
<th>Rural Residential</th>
<th>Residential Detached</th>
<th>Residential Townhouse</th>
<th>Residential Multi-Unit</th>
<th>Commercial/Residential</th>
<th>Employment</th>
<th>Industrial</th>
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<td>Communication Facility</td>
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<tr>
<td>Cable Communications System</td>
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<td>Media Broadcast Tower</td>
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<td>Telecommunications Tower</td>
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Key: P = Permitted Use  L = Limited Use  C = Conditional Use  Blank Cell = Use Not Allowed
Sec. 2. DIVISION 59-3.5 is amended as follows:

DIVISION 3.5. Commercial Uses

Section 3.5.2. Communication Facility

C. Telecommunications Tower

1. Defined

a. Telecommunications Tower means any structure other than a building, [providing] used to provide wireless voice, data, or image transmission within a designated service area. Telecommunications Tower [consists of] includes one or more antennas attached to a support structure and related equipment, but does not include amateur radio antenna (see Section 3.5.14.A and Section 3.5.14.B, Amateur Radio Facility), radio or TV tower (see Section 3.5.2.B, Media Broadcast Tower), or an antenna on an existing structure (See Section 3.5.14.C, Antenna on Existing Structure).

b. Antenna Dimension means an antenna, and any enclosure containing the antenna, in which the total combined size of the antenna within any enclosure meets the following dimensions:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Maximum Length on Any Side (in feet)</th>
<th>Maximum Volume (in cubic feet, excluding any equipment cabinet)</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>4 feet 2 inches</td>
<td>6 cubic feet</td>
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<tr>
<td>B</td>
<td>4 feet 2 inches</td>
<td>46 cubic feet</td>
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<tr>
<td>C</td>
<td>6 feet</td>
<td>30 cubic feet</td>
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<td>D</td>
<td>9 feet</td>
<td>13 cubic feet</td>
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<tr>
<td>E</td>
<td>15 feet</td>
<td>1 cubic foot</td>
</tr>
</tbody>
</table>
2. Use Standards
   a. Where a Telecommunications Tower is allowed as a limited use in the Agricultural zone, Rural zone, Rural Cluster zone, Employment zones, and Industrial zones, and the Tower is not a replacement tower that complies with 59.3.5.2.C.2.b, it must satisfy the following standards:
      [i. It must not be staffed.]
      [ii] Antennas are limited to the following [types and dimensions]:
       (a) an antenna that satisfies one of the Antenna Dimensions standards in Section 59.3.5.2.C.1.b [omni-directional (whip) antennas with a maximum height of 15 feet and a maximum diameter of 3 inches];
       (b) [directional or panel antennas with a maximum height of 8 feet and a maximum width of 2 feet; and]
       (c) satellite or microwave dish antennas with a maximum diameter of 8 feet.
      [iii] Signs or illumination on the antennas or support structure are prohibited unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.
      [iv] In the AR, R, and RC zones, the tower must be located within an overhead transmission line right-of-way and is a maximum height of [199] 179 feet. The tower must be a
minimum of 300 feet from any [residence] dwelling. A Telecommunications Tower conditional use application may be filed with the Hearing Examiner to deviate from this standard.

[v]i. In the LSC, IL, IM, and IH zones, the tower is a maximum height of [199]179 feet with a setback of one foot for every foot of height from the property lines of all properties zoned Agricultural, Rural Residential, or Residential.

[vi]i. In the GR and EOF zones, the tower is a maximum height of [150]130 feet with a setback of one foot for every foot of height from the property lines of all properties zoned Agricultural, Rural Residential, or Residential. A Telecommunications Tower conditional use application may be filed with the Hearing Examiner to deviate from this standard.

b. In the Commercial/Residential, Industrial, and Employment zones, where a Telecommunications Tower is allowed as a limited use and the tower would replace a pre-existing utility pole, streetlight pole, or site plan approved parking lot light pole, the Tower is allowed if it satisfies the following standards:

i. Antennas must comply with the Antenna Classification Standard A under Section 59.3.5.2.C.1.b and must be installed parallel with the Tower.

ii. The tower must be located:

(a) within 2 feet of the base of a pre-existing pole and at the same distance from the curb line, or edge of
travel lane in an open section, as the pre-existing pole in a public right-of-way;

(b) at least 10 feet from an existing building;

c) outside of the roadway clear zone as determined by the Department of Transportation;

d) in a manner that allows for adequate sight distances as determined by the Department of Transportation; and

e) in a manner that complies with streetlight maintenance requirements as determined by the Department of Transportation.

iii. A pre-existing streetlight or parking lot light pole must be removed within 10 business days after power is activated to the replacement tower, and a pre-existing utility pole must be removed within 180 days after a replacement utility pole is installed.

iv. The height of the tower, including any attached antennas and equipment, must not exceed:

(a) for streetlights, the height of the pole that is being replaced:

(1) plus 6 feet when abutting a right-of-way with a paved section width of 65 feet or less;

or

(2) plus 15 feet when abutting a right-of-way with a paved section width greater than 65 feet.
(b) for utility poles and parking lot lights, the height of the pre-existing utility or parking lot light pole plus 10 feet.

v. The tower must be the same color as the pre-existing pole.

vi. The tower must have no exterior wiring, except that exterior wiring may be enclosed in shielded conduit on wooden or utility poles.

vii. Any equipment cabinet:

(a) must not exceed a maximum volume of 12 cubic feet;

(b) used to support antennas on a replacement streetlight pole must be installed in the Telecommunications Tower base or at ground level, unless this requirement is waived by the Department of Transportation;

(c) must be the same color or pattern as the pre-existing Tower, except as provided in Section 59.3.5.2.C.2.b.vii(d);

(d) may be a stealth design approved by the Department of Transportation.

viii. The tower must include a replacement streetlight, if a streetlight existed on the pre-existing pole.

ix. The design of a replacement tower located in a public right-of-way, including the footer and the replacement streetlight, must be approved by the Department of Transportation.
x. The noise level of any fans must comply with Chapter 31B.

xi. Signs or illumination on the antennas or support structure, except a streetlight, are prohibited unless required by the Federal Communications Commission or the County.

xii. Each owner of antennas attached to the tower must maintain antennas and equipment in a safe condition, remove graffiti, and repair damage.

xiii. If a tower does not have a streetlight, the tower must be removed at the cost of the owner of the tower when the tower is no longer in use for more than 12 months. Antennas and equipment must be removed at the cost of the owner of the antenna and equipment when the antennas and equipment are no longer in use for more than 12 months. The Transmission Facilities Coordinating Group must be notified within 30 days of the removal.

[b]c. Where a Telecommunications Tower is allowed as a conditional use, it may be permitted by the Hearing Examiner under [all applicable] Section 3.5.2.C.2.a, limited use standards, Section 7.3.1, Conditional Use, and the following standards:

* * *

ii. A Telecommunications Tower must be set back [from the property line], as measured from the base of the support structure, as follows:
(a) A Telecommunications Tower is prohibited in any scenic setback indicated in a master plan.

(b) In the Agricultural, Rural Residential, and Residential Detached zones, a distance of one foot for every foot of height or 300 feet from an existing dwelling, whichever provides the greater setback from any property line.

(c) In the Employment zones, a distance of one-half foot for every foot of height [when] from the property lines of abutting [Commercial/Residential] Commercial/Residential, Employment, or Industrial zoned properties, and one foot for every foot of height [when] from the property lines of abutting Agricultural, Rural Residential, or Residential zoned properties.

(d) The Hearing Examiner may reduce the setback requirement to not less than the building setback for a detached house building type in the applicable zone or to a distance of one foot from an off-site dwelling for every foot of height of the support structure, whichever is greater, if evidence indicates that a reduced setback will allow the support structure to be located on the property in a less visually obtrusive location than locations on-site where all setback requirements can be met after considering the height of the structure, topography, existing vegetation, nearby residential
properties, and visibility from the street. A reduced setback may be approved only if there is a location on the property where the setback requirements can be met.

iii. The maximum height of a support structure and antenna is 135 feet, unless it can be demonstrated that additional height up to 179 feet is needed for service, collocation, or public safety communication purposes. At the completion of construction, before the support structure may be used to transmit any signal, and before the final inspection required by the building permit, the applicant must certify to DPS that the height and location of the support structure conforms with the height and location of the support structure on the building permit.

*   *   *

Section 3.5.14. Accessory Commercial Uses

*   *   *

C. Antenna on Existing Structure

1. Defined

Antenna on Existing Structure means one or more antennas attached to an existing support structure, including such as a building, a transmission tower, a monopole, a light pole, a utility pole, a water
tank, a silo, a barn, or an overhead transmission line support structure. Antenna on Existing Structure includes related equipment.

2. Use Standards

Where an Antenna on Existing Structure is allowed as a limited use, it must satisfy the following standards:

a. Antennas are limited to the following types and dimensions:

   i. an antenna that satisfies one of the Antenna Dimensions standards in Section 59.3.5.2.C.1.b; and
   ii. directional (whip) antennas with a maximum height of 15 feet and a maximum diameter of 3 inches;
   iii. satellite, radar, or microwave dish antennas with a maximum diameter of 8 feet. If the building includes a media broadcast studio, a dish may have a maximum diameter of 22 feet; and
   iv. small cell antennas with a maximum height of 3 feet and a maximum width of 2 feet.

   *   *   *

   c. Associated equipment must be located in an unmanned building, equipment cabinet, or equipment room in an existing building.

      i. An equipment building must satisfy the following standards:

      [i.] (a) It is a maximum of 560 square feet in area; however, a single equipment building in excess of
560 square feet, located at ground level, may be used if:

([a]1) the overall maximum square footage is 1,500 square feet and the maximum height is 12 feet;

([b]2) the building is used for more than one telecommunications provider operating from the same monopole or tower; and

([c]3) the building is reviewed by the Telecommunications Transmission Facility Coordinating Group under Chapter 2 (Section 2-58E).

[ii.] (b) It is a maximum of 14 feet in height, including the support structure for the equipment building.

[iii.] (c) If the equipment building is greater than 4 feet in height and is [or cabinet is at ground level] in a Residential zone, or the nearest abutting property is in a Residential zone, [and the equipment building or cabinet is more than 4 feet in height, including the support structure,] the building [or cabinet] must be faced with brick or other material compatible with the surrounding neighborhood on all sides [and the equipment must be surrounded by landscaping of at least 3 feet in height].
ii. If an equipment cabinet and any supporting platform are greater than 4 feet in height, and service an Antenna on an Existing Structure that is not a utility pole, streetlight pole, or site plan approved parking lot light pole, and if the Existing Structure is in a Residential zone, or the nearest abutting property to the Existing Structure is in a Residential zone, then the equipment must be surrounded by landscaping of at least 3 feet in height.

iii. If an equipment cabinet services an Antenna on Existing Structure and the Existing Structure is a utility pole, streetlight pole, or site plan approved parking lot light pole, the equipment cabinet:
   (a) must not exceed a maximum volume of 12 cubic feet; and
   (b) must be the same color or pattern as the existing structure, unless it is a stealth design approved by the Department of Transportation.

*d* * * *  
d. Except under Section 3.5.14.C.2.e [for a small cell antenna that satisfies Section 3.5.14.C.2.a.iv], when mounted on a rooftop or structure located outside of a right-of-way [on privately owned land], the antenna must meet the following standards:

i. An antenna is prohibited:
   (a) on any detached house, duplex, or townhouse building type or an accessory structure associated with either building type; and
   (b) in any scenic setback indicated in a master plan.
ii. An antenna and a related unmanned equipment building or cabinet may be installed on a rooftop if a building is a minimum height of:

(a) [50] 35 feet in any Residential Detached, Rural Residential, or Planned Unit Development zone; or

(b) [30] 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone.

* * *

e. [When located at least 60 feet from a detached house or a duplex building type, a small cell antenna that satisfies Section 3.5.14.C.2.a.iv may be installed on any existing structure, at a minimum height of 15 feet, in any zone where an antenna on an existing structure is allowed.]

An antenna classified as Standard A under Section 3.5.2.C.1.b may be installed on any existing structure located in the right-of-way in any zone where an antenna on an existing structure is allowed, if:

i. the antenna is the same color or pattern as the existing structure;

ii. the antenna is installed at a minimum height of 15 feet; and

iii. the structure is at least 20 feet from a dwelling in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.
Sec. 4. Effective date. This ordinance becomes effective 20 days after the date of Council adoption.

This is a correct copy of Council action.

Megan Davey Limarzi, Esq.
Clerk of the Council