



Zoning Text Amendment (ZTA) No. 16-05, Telecommunications Towers – Limited Use



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Description

ZTA No. 16-05 would allow a telecommunications tower 30 feet or shorter in height (including the antenna) as a limited use in the public right-of-way of all zones and under certain other circumstances; and revise the use standards for small cell antennas (defined as a maximum height of 3 feet and a maximum width of 2 feet). Currently, a telecommunications tower in the RNC and residential detached zones are allowed only through conditional use approval. ZTA 16-05 would allow towers of 30 feet or shorter in height as a limited use as stated above.

Currently, where an antenna on an existing structure is allowed as a limited use, a small cell antenna is permitted on any structure, at a minimum height of 15 feet, when located at least 60 feet from a detached house or a duplex building type. ZTA 16-05 would allow the existing structures to be located a minimum of 30 feet from a detached house or duplex building type, coinciding with the proposed limited use setback standard for a 30-foot or shorter height tower.

Summary

Staff recommends approval, with modifications, of ZTA No. 16-05 to allow a telecommunications tower 30 feet or shorter in height (including the antenna) as a limited use in the public right-of-way of all zones and under certain other circumstances; and revise the use standards for small cell antennas. The proposed changes include a recommendation that only small cell antenna (maximum height of 3 feet and a maximum width of 2 feet) be permitted on a tower 30 feet in height or shorter. Staff is also concerned that not requiring a minimum distance between towers along a block face could allow visual clutter and therefore recommends that a requirement for a minimum separation between telecommunication towers be addressed during the PHED Committee worksession(s) where input from the telecommunications industry and MCDOT can occur.

Background/Analysis

Zoning Text Amendment (ZTA) 16-05 would allow poles (within the Zoning Ordinance's definition of Telecommunications Towers) no higher than 30 feet in various zones as a limited use.

As people use their cell phones for far more than voice communication, there is a greater demand for wireless services in residential areas. The telecommunications industry proposes to meet this need with

small antennas on shorter poles. This new equipment cannot be supported on existing street lights. Also, some neighborhoods have underground utilities without utility poles. In all residential detached zones, the RNC zone and the NR zone, the current Zoning Ordinance requires conditional use approval for every new pole, no matter the height of the structure. The sponsor of this legislation believes that the Council should set specific standards for these structures instead of subjecting each pole to the conditional use process.

Cellular Technology-In General

The most familiar component of a cellular network is the cell tower and antenna installations on other tall structures such as multi-story buildings and municipal water towers. These large cell sites, often referred to as “macro” cell sites, form the core of the macrocellular network, enabling wireless service providers to deliver voice, text, and broadband communications to wireless subscribers. Macrocell sites are effective for covering large geographic areas with relatively high capacity, because the antennas are typically mounted on tall towers or the rooftops of tall buildings and transmit radiofrequency (RF) signals at high power levels. They are also typically capable of hosting multiple wireless service providers (co-locations). However, although a tower or building-mounted macrocell can be upgraded over time, coverage areas cannot typically be expanded.

Various *small cell* technologies are being deployed to provide coverage in targeted locations, moving radios closer to the subscriber, and/or providing additional call and data-handling capacity in areas with concentrated demands for wireless services. This small cell Technology is typically deployed to enhance existing macrocell coverage. Depending on the particular network architecture and the environment in which it is deployed, the small cell may include equipment in addition to the antennas (e.g., amplifiers, remote radio heads, signal converters and power supplies). Small cells are typically mounted or installed in low elevations when deployed outdoors (for example, on a utility pole or the side of a building).

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.

ZTA 16-05 Provisions and Staff Comments

As introduced in ZTA 16-05, the existing limited use standards would remain in effect for towers greater than 30 feet in height (see lines 24-60 in Attachment 1). For telecommunications towers 30 feet or shorter in height, an additional set of limited use parameters would be established that include: a requirement that the tower be located in the public right-of-way; a height restriction to ensure compatibility with nearby pre-existing street lights or utility poles; a setback of one foot for every foot of height from any off-site dwelling unit (comparable to the existing limited use and conditional use setback requirement from property zoned Agricultural, Rural Residential, or Residential); a tower size limited to 8 inches in diameter (comparable to the size of street light poles); any equipment cabinet located at the base of the tower be limited in size; and signage or illumination on the structure and antenna be prohibited, with the exception of a street light. These limited use standards would also be allowed in the RNC, TS, and residential detached zones, where they were previously not permitted.

Staff believes that the proposed limited use standards provide a number of mitigating measures that help to maintain the character of existing neighborhoods, especially for those communities where above ground utilities already exist. Staff is concerned that not requiring a minimum distance between towers along a block face could allow visual clutter. However, staff also recognizes that these towers would be located in the public rights-of-way, reviewed by the County Transmission Facility Coordinating Group where co-location by various carriers would be required where possible, and practicably, an applicant will want as few poles as possible to reduce cost while adequately providing signal coverage. One possibility would be to establish a requirement that there be a minimum distance between poles based on general spacing standards used by MCDOT for streetlight poles or based on a minimum distance agreed upon by the telecommunications industry and MCDOT. For situations where the telecommunications tower carrier cannot meet this requirement, then a conditional use application could be filed with the Hearing Examiner. In any case, staff believes that the specifics of a requirement for a minimum separation between telecommunication towers should be addressed during the PHED Committee worksession(s).

In addition, although the poles are limited in height and diameter (thereby practicably limiting the size of the antenna), nowhere in the legislation does it specifically limit the type of antenna that could locate on the pole. *Staff recommends that the antenna type be limited to small cell antenna, as defined in Section 3.5.14.C.2.a.iv (maximum height of 3 feet and a maximum width of 2 feet).*

Conclusion

With the proposed changes to the ZTA language as depicted in Attachment 1 (limiting the type of antenna on 30 foot or shorter poles to small cell antennas), and the recommendation that a minimum separation between telecommunication towers be addressed during the PHED Committee worksession(s), staff recommends approval of ZTA 16-05.

Attachments

1. ZTA No. 16-05 as modified by staff

ATTACHMENT 1

Zoning Text Amendment No.: 16-05

Concerning: Telecommunications
Towers – Limited Use

Draft No. & Date: 3 – 6/8/16

Introduced:

Public Hearing:

Adopted:

Effective:

Ordinance No.:

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN
MONTGOMERY COUNTY, MARYLAND**

Lead Sponsor: Councilmember Floreen

AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- allow short telecommunications towers as a limited use under certain circumstance;
- revise the use standards for small cell antennas;
- allow short telecommunications towers in public rights-of-way in the RNC, TS, and residential detached zones as a limited use; and
- generally amend telecommunications tower and small cell antenna provisions.

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

DIVISION 59-3.1. “Use Table”

Section 3.1.6. “Use Table”

DIVISION 59-3.5. “Commercial Uses”

Section 3.5.2. “Communication Facility”

Section 3.5.14 “Accessory Commercial Uses”

DIVISION 59-8.3 “Planned Unit Development Zones”

Section 59-8.3.3. “T-S Zone”

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:

1 **Sec. 1. DIVISION 59-3.1 is amended as follows:**

2 **DIVISION 59-3.1. Use Table**

3 * * *

4 **Section 3.1.6. Use Table**

5 The following Use Table identifies uses allowed in each zone. Uses may be modified in Overlay zones under
 6 Division [4.9](#).

USE OR USE GROUP	Definitions and Standards	Residential																
		Ag	Rural Residential				Residential Detached						Residential Townhouse			Residential Multi-Unit		
		AR	R	RC	RNC	RE-2	RE-2C	RE-1	R-200	R-90	R-60	R-40	TLD	TMD	THD	R-30	R-20	R-10
* * *																		
COMMERCIAL																		
Animal Services	3.5.1																	
Animal Boarding and Care	3.5.1.B	C	C	C	C	C	C	C	C									
Veterinary Office/Hospital	3.5.1.C	C	C	C	C	C	C	C	C	C	C							
Communication Facility	3.5.2																	
Cable Communications System	3.5.2.A	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C
Media Broadcast Tower	3.5.2.B	C	C	C		C	C	C	C	C	C				C	C	C	
Telecommunications Tower	3.5.2.C	L/C	L/C	L/C	L/C	L/C	L/C	L/C	L/C	L/C	L/C	L	L	L	L	L	L	L
* * *																		

7 **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

Telecommunications Tower means any structure other than a building, providing wireless voice, data or image transmission within a designated service area. 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).

2. Use Standards

a. Where a Telecommunications Tower is allowed as a limited use and the tower is taller than 30 feet in height as measured from the base to the highest point on the tower, including the antenna, it must satisfy the following standards:

i. It must not be staffed.

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

(a) omni-directional (whip) antennas with a maximum height of 15 feet and a maximum diameter of 3 inches;

- 35 (b) directional or panel antennas with a maximum
36 height of 8 feet and a maximum width of 2 feet;
37 and
38 (c) satellite or microwave dish antennas with a
39 maximum diameter of 8 feet.
- 40 iii. Signs or illumination on the antennas or support structure
41 are prohibited unless required by the Federal
42 Communications Commission, the Federal Aviation
43 Administration, or the County.
- 44 iv. In the AR, R, and RC zones, the tower must be located
45 within an overhead transmission line right-of-way and is
46 a maximum height of 199 feet. The tower must be a
47 minimum of 300 feet from any residence. A
48 Telecommunications Tower conditional use application
49 may be filed with the Hearing Examiner to deviate from
50 this standard.
- 51 v. In the LSC, IL, IM, and IH zones, the tower is a
52 maximum height of 199 feet with a setback of one foot
53 for every foot of height from all properties zoned
54 Agricultural, Rural Residential, or Residential.
- 55 vi. In the GR and EOF zones, the tower is a maximum
56 height of 150 feet with a setback of one foot for every
57 foot of height from all properties zoned Agricultural,
58 Rural Residential, or Residential. A Telecommunications
59 Tower conditional use application may be filed with the
60 Hearing Examiner to deviate from this standard.

- 61 vii. In the RNC and all residential zones, all towers taller
62 than 30 feet as measured from the base of the structure to
63 the highest point are only allowed as a conditional use
64 under subsection c.
- 65 b. Where a Telecommunications Tower is allowed as a limited use
66 and the tower is 30 feet in height or shorter as measured from
67 the base to the highest point on the tower, including the
68 antenna, it must satisfy the following standards:
- 69 i. The tower must be located in a public right-of-way.
- 70 ii The height of the structure, including the antenna, must
71 not exceed the height of the nearest pre-existing street
72 light or utility pole, plus the greater of:
73 (A) 20 percent of the height of the existing pole; or
74 (B) 10 feet.
- 75 iii. The tower must be set back a distance of one foot for
76 every foot in height, including the antenna, from any off-
77 site dwelling unit.
- 78 iv. The tower must not be more than 8 inches in diameter.
79 Each antenna mounted to the tower must not exceed the
80 dimensions of a small cell antenna, as defined in Section
81 3.5.14.C.2.a.iv.
- 82 v. Any equipment cabinet at the base of the tower must not
83 exceed 25 cubic feet of volume.
- 84 vi. The tower must not be staffed.
- 85 vii. Signs or illumination on the antennas or support
86 structure, with the exception of a street light, are
87 prohibited unless required the County.

- 88 viii. Each owner of the tower must accept responsibility for
- 89 maintaining the tower in a safe condition.
- 90 ix. The tower must be removed at the cost of the owner of
- 91 the tower when the tower is no longer in use by any
- 92 wireless communication carrier for more than 12 months.

93 [b]c. Where a Telecommunications Tower is allowed as a conditional

94 use, it may be permitted by the Hearing Examiner under all

95 applicable limited use standards, Section 7.3.1, Conditional

96 Use, and the following standards:

97 * * *

98 **Section 3.5.14. Accessory Commercial Uses**

99 * * *

100 C. Antenna on Existing Structure

101 1. Defined

102 Antenna on Existing Structure means one or more antennas attached to an

103 existing support structure, such as a building, a transmission tower, a

104 monopole, a light pole, a water tank, a silo, a barn, or an overhead

105 transmission line support structure. Antenna on Existing Structure includes

106 related equipment.

107 2. Use Standards

108 Where an Antenna on Existing Structure is allowed as a limited use, it must

109 satisfy the following standards:

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

- 111 i. omni-directional (whip) antennas with a maximum height of 15
- 112 feet and a maximum diameter of 3 inches ;
- 113 ii. directional or panel antennas with a maximum height of 8 feet
- 114 and a maximum width of 2 feet;

- 115 iii. satellite or microwave dish antennas with a maximum diameter
- 116 of 8 feet; and
- 117 iv. small cell antennas with a maximum height of 3 feet and a
- 118 maximum width of 2 feet.

119 * * *

120 e. When located on a structure at least [60] 30 feet from a detached house or a

121 duplex building type, a small cell antenna that satisfies Section

122 3.5.14.C.2.a.iv may be installed on any existing structure, at a minimum

123 height of 15 feet, in any zone where an antenna on an existing structure is

124 allowed.

125 * * *

126 **Sec. 3. DIVISION 59-8.3 is amended as follows:**

127 **DIVISION 8.3. Planned Unit Development Zones**

128 * * *

129 **Section 8.3.3. T-S Zone**

130 * * *

131 **B. Land Uses**

- 132 1. A use described on the approved development plan is allowed by right
- 133 in the T-S zone.
- 134 2. All uses authorized in any zone, by right or as conditional uses, may
- 135 also be authorized in the T-S zone if the use is shown on the approved
- 136 site plan or the site plan is first amended under Section 7.3.4.J.
- 137 3. An amendment to the site plan is not required for construction of
- 138 accessory buildings and additions or modifications to existing
- 139 detached houses, townhouses, and accessory buildings if:

- 140 a. the Planning Board has approved homeowners association
141 documents establishing a procedure to review such
142 development prior to construction; and
143 b. the development is approved under this procedure.
144 4. No use may occupy a location other than indicated on the approved
145 site plan.

146 * * *

- 147 6. An Antenna on an Existing Structure that satisfies the limited use
148 standards in Section. 3.5.14.C is allowed.
149 7. If the provisions of Section 3.5.2.C.2.b are satisfied, a
150 telecommunications tower that is 30 foot tall or shorter, including the
151 antenna, is allowed and a site plan amendment is not required.
152 8. Privately owned roads and community open spaces may be held in
153 perpetuity by the developer or by an approved home owners
154 association with substantial membership and duration if the Planning
155 Board approves easements for such uses granted to the County and
156 recorded in the land records of the County.
157 [8]9. All utility lines in the T-S zone must be placed underground. The
158 developer or subdivider must ensure final and proper completion and
159 installation of utility lines under Section 50-40(c). The developer must
160 provide street lighting satisfying the standards contained in the
161 approved site plan. A use-and-occupancy permit must not be issued
162 for any building [which is] not served by an approved sewer and water
163 supply.

164
165 **Sec. 4. Effective date.** This ordinance becomes effective 20 days after
166 approval.

167

168 This is a correct copy of Council action.

169

170 _____

171 Linda M. Lauer, Clerk of the Council