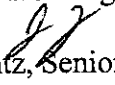


**MEMORANDUM**

September 27, 2018

TO: Planning, Housing, and Economic Development Committee

FROM: Jeff Zyontz,  Senior Legislative Analyst

SUBJECT: Zoning Text Amendment 18-11, Telecommunications Towers – Approval Standards

PURPOSE: Worksession to development recommendations for the Council

**Expected Participants:**

Joy Nurmi, Special Assistant to the County Executive  
Mitsuko Herrera, Project Manager, ultraMontgomery  
Diane Schwartz-Jones, Director, Department of Permitting Services (DPS)  
Ehsan Motazedi, Division Chief, DPS  
Atiq Panjshiri, Manager, Right-of-Way Permitting, DPS  
Pam Dunn, Chief, Functional Planning & Policy (FP & P), Maryland-National Park & Planning  
Commission (M-NCPPC)  
Greg Russ, Planner Coordinator, FP & P, M-NCPPC

**Background**

Zoning Text Amendment (ZTA) 18-11 was introduced on July 24, 2018 by Council President Riemer at the request of the County Executive. ZTA 18-11 would add definitions, allow certain telecommunications towers as a conditional use in certain residential zones, revise the standards for telecommunications towers allowed as a limited or conditional use, revise the conditional use findings required for the replacement of a pre-existing pole, and exempt certain antennas from height limits.

ZTA 18-11 would, in part, allow replacements taller than 22 feet to be approved as a limited use and short poles to be approved as a conditional use. The Executive's transmittal letter summarizes the reason for that idea as follows:

*Small cell antennas on existing streetlights, utility, and parking lot light poles taller than twenty-two feet would be able to proceed using the Limited Use process if they meet specific conditions. These taller poles are typically farther from residents, often located on wider streets, and usually require little to no height increase. Because the shorter poles will always require a height increase, and are typically in neighborhoods with underground utilities where there are no*

*existing tall utility poles, they are less likely to be compatible with neighborhoods and should require a Conditional Use. Retaining a process to allow greater residential input into placement and visual appearance, while allowing streamlined access to taller poles, strikes a reasonable balance between the concerns of residents and our interest in ensuring access to robust wireless broadband services.*

Federal Law (Section 332(c)(7)) preserves local zoning authority, with 5 limitations:

- 1) To “unreasonably discriminate” among providers of functionally equivalent services (332(c)(7)(B)(i)(I)) is prohibited;
- 2) Personal wireless service may not be prohibited or effectively prohibited (332(c)(7)(B)(i)(II));
- 3) Action on a request must be accomplished within a “reasonable period of time” (150 days for a new facility);
- 4) Final decisions to deny must be made “in writing” and supported by “substantial evidence” in written record;
- 5) A denial based on radio frequency (RF) emission is prohibited (if the facility satisfies FCC RF rules).

#### **Executive’s summary of changes in ZTA 18-11**

##### ***Telecommunications Towers Would be Allowed as Limited Use in Residential Areas***

- To replace poles taller than 22 feet and at least 30 feet from houses
  - The height of a replacement structure would be limited to 6 additional feet for streetlights and 10 additional feet for utility poles; additional minimal height increase would be allowed for utility poles to comply with safety code
- As colocations attached to existing structures, if 30 feet from houses
- On building roofs or facades, if the building is a minimum of 35 feet (three stories) and the building is a minimum of 10 feet from a single-family detached house, duplex or townhouse.

##### ***Telecommunications Towers would be Allowed as Conditional Use in Residential Areas***

- To replace poles shorter than 22 feet tall and at least 30 feet from houses
  - The Replacement pole is limited to 22 feet (8-foot increase)
- A hearing examiner could:
  - review to determine it is the least visually-obtrusive pole within 400 feet
  - reduce the setback to 10 feet if there is no other pole available within 800 feet that meets a 30-foot setback.

##### ***Office of Zoning and Administrative Hearings Conditional Use Changes***

- Narrows the criteria for what the Hearing Examiner reviews to determine compatibility
- Removes oral appeal of Hearing Examiner’s decision to Board of Appeals. This is needed to help the County meet the federal shot clock and prevent preemptory zoning approvals under federal law (“deemed granted”)
  - The decision can still be appealed to the Circuit Court.

##### ***Other Changes and Clarifications***

- Equipment size increased from 12 cubic feet to 20 cubic feet for equipment in pole base



- The setback is measured from the pole to the building/house, and excludes porches and similar permitted setback encroachments

An antenna does not count towards building height.

The Planning Department created a map of poles in the public right-of-way.

<http://mcplanning.maps.arcgis.com/home/webmap/viewer.html?webmap=3c6ea711792147bcbbe875658095d84f>

The green poles, which are either poles taller than 22 feet or wooden utility poles, would be allowed an antenna as a conditional use under ZTA 18-11.

## Public Hearing

The Planning Board recommended approval of ZTA 18-11. The Board believes that ZTA 18-11 strikes a balance between 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 (rights-of-way) and maintaining attractive and safe roads and neighborhoods. Because technology is constantly evolving, the Board believes that periodic review of these Code provisions should be established as part of the approval procedures of ZTA 18-11.

The Council conducted a public hearing on ZTA 18-11 on September 25, 2018. Forty-four people signed up to speak; seven did not participate at the hearing. Most (25 out of 34) questioned the wisdom of making any changes to the Zoning Ordinance that make approvals of small cell antennas easier or without notice to property owners. And most (16 of 25) who spoke in opposition expressed concern for the adverse health effects of RF transmissions.<sup>1</sup> Some questioned the need for more equipment in the right-of-way or near homes and its negative effect on property values. Some objected to the reduced setbacks, with poles as tall as 22 feet, as incompatible with residential neighborhoods. Some objected to allowing replacement poles as a limited use without notice or a public hearing (for poles taller than 22 feet). Some people object to the bulk of equipment allowed in the right-of-way. Some recommended a comprehensive redraft of ZTA 18-11. Those comprehensive changes also included changes to the functions of the People's Counsel and provisions in Chapter 8 (Building Permits).

Those who favored the approval of ZTA 18-11 positively anticipate faster and more comprehensive wireless service that may be offered by 5G. In their opinion, the availability of such service adds value to their homes and businesses; ZTA 18-11 would allow the industry to accommodate expected demand for wireless services.

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<sup>1</sup> Unlike most other topics of legislation, the Council is preempted by Federal law as to the basis for its decision. Federal law states:

No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

The federal act does not prohibit citizens from expressing their concerns about health effects; however, it prohibits the Council from acting on those concerns.

## Issues

### 1. *Why do anything now?*

The Council approved ZTA 18-02 on May 15, 2018. That ZTA principally focused on telecommunications in mixed-use and non-residential zones. ZTA 18-11 has residential zones as its primary focus. The Executive give the following reason for proceeding with another ZTA:

*The level of State and federal legislative and regulatory efforts to preempt the authority of local government to manage the placement and size of telecommunications towers in the public rights of way is unprecedented. The best defense we have against these intrusions into local governance is to demonstrate that no further state or federal preemption is necessary because we have already provided a balanced local solution. Preemption will lead to less local input and an inability to protect residents.*

In the last term of the General Assembly, Senator Middleton introduced Senate Bill 1188 in the Maryland Senate. The Bill, if adopted as introduced, would have preempted the County for almost all zoning regulations regarding small cell facilities. The Senate hearing on the Bill was canceled. No further action on the Bill was taken. It is expected that another preemption Bill will be introduced in the next General Assembly.

If the General Assembly approves a small cell bill that preempts the County, ZTA 18-11, even if approved, may be partially or completely preempted. If the Executive is correct, action by the Council on ZTA 18-11 may make state preemption less likely. **ZTA 18-11 is an opportunity for the Council to establish more comprehensive standards for telecommunications poles in the County's rights-of-way.** These lower poles were not anticipated when the current provisions for telecommunications facilities were approved.

Except for antennas on existing structures, cell antennas are prohibited in the right-of-way, except where the antenna can be located 300 feet from a building. There are very few places where the current provision would allow new or replacement poles. Required front setback in residential zones varies between 20 and 60 feet. Doing nothing may lead to litigation by wireless providers that claims a denial of service in violation of federal law.<sup>2</sup>

Cell antennas in the right-of-way are lower in cost to the industry than requiring all antennas to be on private property. This is an incentive to allow a service that residents find valuable. There is also a risk that keeping zoning restrictions as they exist in code will so limit wireless communications that residents will get less services than they are willing to pay for in the future.

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<sup>2</sup> Section 332(c)(7) of the Communications Act preserves state and local authority over zoning and land use decisions for personal wireless service facilities, but includes specific limitations on that authority. Specifically, a state or local government may not unreasonably discriminate among providers of functionally equivalent services, *may not regulate in a manner that prohibits or has the effect of prohibiting the provision of personal wireless services*, must act on applications within a reasonable period of time, and must make any denial of an application in writing supported by substantial evidence in a written record. The statute also preempts local decisions premised directly or indirectly on the environmental effects of RF emissions, assuming that the provider is in compliance with the Commission's RF rules.

The Council may wish to position the County to be accepting of the next generation of wireless technology. To some businesses and residents, this will make the County a better place to live and work. Council initiative in this area allows for reducing the number of potential poles in the right-of-way and establishing standards for height, bulk, and compatibility.

## 2. Why should the Council do nothing?

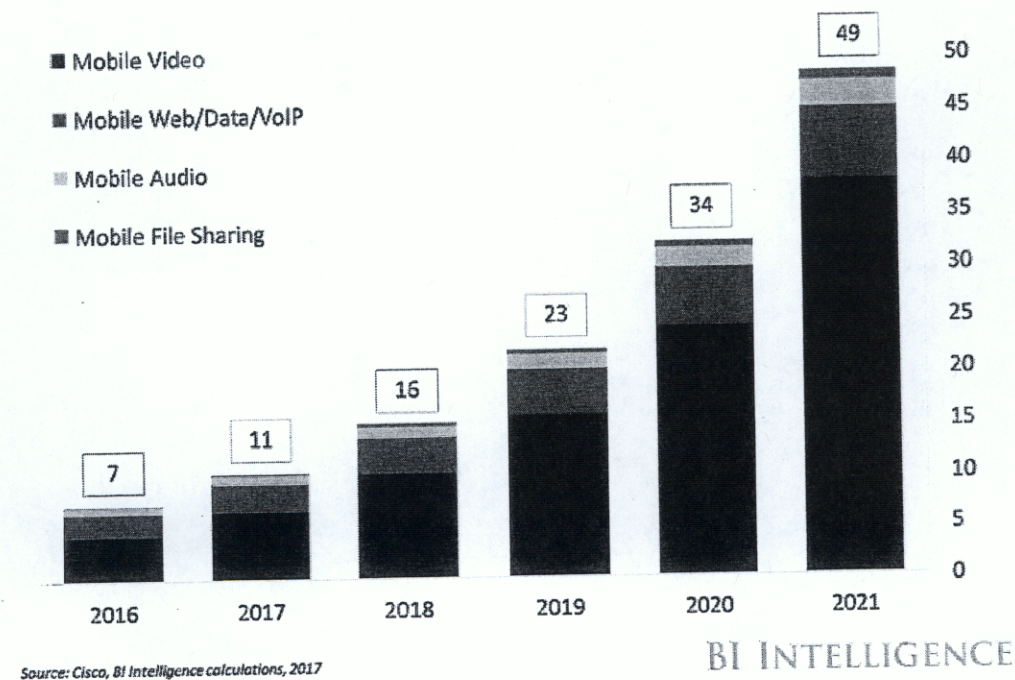
The public testimony that favored disapproval of ZTA 18-11 did so in part because of: 1) the lack of need for the antennas; 2) property value reduction; and 3) the lack of the County's capacity to assure that antennas meet the conditions of approval. The following are comments on each of these reasons.

### *The lack of need for the antennas*

There is information to confirm that wireless communication (voice, data, video) has increased and is anticipated to increase, mostly for mobile video use:

#### Global Monthly Mobile Data Traffic, By Type

*In exabytes*



The demand for more wireless capacity is coming from the bandwidth and speed required for mobile video. Expanding wireless speed and bandwidth will cost money. Telecommunications companies make money only by providing services for which customers are willing to pay. There is a risk these companies are wrong and there will be excess equipment in rights-of-way; however, these companies will not invest unless they see the possibility of financially beneficial uses.<sup>3</sup>

<sup>3</sup> With the County's insistence on the colocation of wireless facilities, Staff does not believe that there is a need for a minimum distance between wireless facilities.

5G is a developing technology. Different companies have different visions of how many antennas it will take to provide the speed and bandwidth required for 5G. The FCC assumes that 5G will take a massive intensification of antennas, given the new spectrum it has recently auctioned. The wireless industry agrees with the FCC and is willing to put funds at risk on that basis.

If the County were given choice between more lower poles and fewer higher poles, which would it want? Higher poles are visible to more people. Lower poles abut more properties. Within the standards of height, bulk, and setbacks, ZTA 18-11 allows for wireless flexibility.

### *Property value reduction*

As described in the staff memorandum on ZTA 18-02, Staff does not know the effect of wireless antennas in rights-of-way. The two studies most often cited in support of the contention that property values would be lower due to a dwelling's proximity to a cell tower are suspect.

The National Institute for Science, Law and Public Policy surveyed 1,000 **self-selected** respondents (including those who completed the survey by June 28, 2014) and published the result in a paper titled, "Neighborhood Cell Towers & Antennas—Do They Impact a Property's Desirability?"<sup>4</sup> The study concluded that 94% of those who responded said that their interest in buying a property and the price the respondents would pay would be impacted by the presence of a nearby cell tower.

The second frequently-cited study was published in The Appraisal Journal in the summer of 2005. Focusing on four case study neighborhoods in Christchurch, New Zealand, the article presented the results from both an opinion survey and market sales analysis undertaken in 2003 to determine residents' perceptions towards living near a cell tower and how this may have impacted property prices. Overall, respondents said they would pay (and price data found) from 10%-19% less to more than 20% less for a property if it were in close proximity to a cell tower. The study is limited in scope, out of country, and out of date.<sup>5</sup>

Anecdotal evidence exists in both directions. An author involved with the New Zealand study found similar results in Florida using 2004 data.<sup>6</sup> An appraiser in New Jersey found that a 130-foot cell tower reduced property values (2012).<sup>7</sup> An article in the National Real Estate Investor Quality concluded that quality cell phone coverage can have a significant impact on the desirability and value of a property.<sup>8</sup> A Real Estate appraiser concluded that visible utility structures adversely affect property values.<sup>9</sup> In a 2015 Delaware case, a court found that a cell tower did not impact surrounding property values.<sup>10</sup> Staff

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<sup>4</sup> The survey was circulated online through email and social networking sites, in both the U.S. and abroad. It sought to determine if nearby cell towers and antennas, or wireless antennas placed on top of or on the side of a building, would impact a homebuyer's or renter's interest in a real estate property.

<sup>5</sup> The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods, Sandy Bond, PhD, and Ko-Kang Wang. The Appraisal Journal, Summer 2005.

<sup>6</sup> Sandy Bond, PhD, The Effect of Distance to Cell Phone Towers on House Prices in Florida, The Appraisal Journal, Fall 2007.

<sup>7</sup> <https://patch.com/new-jersey/bridgewater/appraiser-t-mobile-cell-tower-will-affect-property-values>.

<sup>8</sup> The Growing Impact of Wireless Accessibility on Property Values, Vince Varga, December 8, 2016.

<sup>9</sup> Testimony of David Burgoyne, March 7, 2017.

<sup>10</sup> AT&T v. Sussex County Board of Adjustments, Delaware Superior Court, 2015; property value changes were measured after a temporary antenna was constructed.

could not determine how much focus in the literature was on the short poles proposed in recent applications submitted to the County.

ZTA 18-11 is somewhat focused on rights-of-way. The Council has never considered the effect of housing prices on anything it allows in a right-of-way. Does the proximity to street lights, utility poles, signs, speed cameras, or traffic signals affect the value of abutting property? Staff cannot answer those questions. There has always been an assumption that facilities in the right-of-way service the general community (and abutting property specifically).

### *The County's capacity to assure that antennas meet the conditions of approval*

Executive staff addressed this topic in a separate memorandum (attached on © 28-29). It describes the Tower Committee Review Process and DPS's current enforcement procedures.

In Staff's opinion, the reasons to do something that accommodates antennas that are lower than what the code previously anticipated outweighs the reasons to do nothing. If the Committee recommends disapproval, there is no need to read further.

### **3. Why not address public health concerns?**

Unlike most other topics of legislation, the Council is preempted by Federal law as to the basis for its decision. Federal law states:

*No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.<sup>11</sup>*

The County is bound by the 4<sup>th</sup> Circuit Court of Appeals holding in *T-Mobile Northeast, LLC v. Loudoun County Board of Supervisors*.<sup>12</sup> That decision, in part, overturned the Supervisors' denial of a

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<sup>11</sup> 47 U.S.C. § 332(c)(7)(B)(iv).

<sup>12</sup> 748 F.3d 185 (2014).

"Based on our review of the record, we conclude that the district court correctly held that the Board's basis for its decision violated the prohibition against regulating on the basis of radio frequency emissions.

"First, the record shows that Supervisor Miller's comments during the Board meeting were not isolated, either from the evidence before the Board or from the Board's own views. The record shows that discussions of health concerns were prevalent throughout the several hearings....When Supervisor Miller made a motion to include the health effects of radiation as a reason for denying T-Mobile's application, the Board added the reason to the motion to deny the application and voted 7 to 2 to carry the motion. The written denial given by the Board specifically included the health risk reason....Based on this record, it is thus indisputable that the Board as a whole regulated on the basis of radio frequency emissions, a prohibited basis under the Act. See 47 U.S.C. § 332(c)(7)(B)(iv). This explicit statutory prohibition against regulating the placement, construction, and modification of wireless facilities 'on the basis of the environmental effects of radio frequency emissions' is a limitation imposed by the Act on the Board's authority."

The County is in the 4<sup>th</sup> Circuit. The Court of Appeals is the highest federal court in our circuit. Its rulings apply to the County unless the Supreme Court overrules their decision. There were dicta in a case decided by the 2<sup>nd</sup> Circuit Court of Appeals that biological effects were included in the term "environmental effects", but the case was decided on the basis of preemption concerning radio frequency interference. *Freeman v. Burlington Broadcasters, Inc.*, 204 F.3d 311 (2000). There was a later District Court case in the 2<sup>nd</sup> Circuit that squarely ruled that environmental effects included health effects. "Environmental effects within the meaning of the [federal law] provision include health concerns about the biological effects of RF radiation." *T-Mobile Northeast LLC v. Town of Ramapo*, 701 F.Supp.2d 446 (2009). That phrase was repeated in the holding of *T-Mobile Northeast LLC v. Town of Islip*, 893 F.Supp.2d 338 (2012). Where a decision to deny a cell tower was



cell tower when part of the Supervisors' rationale for the denial was the human health effects of the radio frequency emission. The Court of Appeals holding in the case is still the law.

#### *4. Should the County require conditional use approval for all telecommunications facilities?*

ZTA 16-22, as introduced, would allow replacement poles in rights-of-way to be approved as a limited use if the pole is taller than 22 feet. The process for approving a limited use does not include notice or a public hearing. The Executive's transmittal letter reported that these taller poles are typically farther from residents, often located on wider streets, and the addition of an antenna usually requires little to no height increase.

The FCC declared that state and local authorities must review completed applications within 90 days for colocations and 150 days for all other applications. These timeframes are deemed presumptively "reasonable".<sup>13</sup> The larger the number of times that conditional use is approval is required, the larger the chances that the County cannot make decisions in a timely manner. Increasing the circumstances classified as a limited use would decrease the number of conditional use applications.

The Council could still require all of these poles to be approved as a conditional use. It would allow for more neighborhood involvement and would increase the volume of cases that require a hearing and Hearing Examiner findings.

More notice is possible short of requiring conditional use approval. The County's Tower Committee presents a map of pending applications.

<https://gis3.montgomerycountymd.gov/WirelessAntennasAndTowers/>

The County could require more, such as mailed notice of such applications, but such notice where there is no opportunity for a discretionary decision may only be frustrating to residents.

#### *5. Should antennas be kept out of the right-of-way along residential streets?*

Wireless service companies are not regulated in terms of the prices they can charge. Such companies are not required to serve all areas of the County. In these respects, wireless companies are not like any traditional public utility company.

The City of Gaithersburg prohibits new or replacement poles for antennas in residential areas with underground utilities, but **it allows as a permitted use** camouflaged antennas on residential buildings. The size limitation for the antenna and equipment match the standards in ZTA 18-11. The City requires a 30-foot setback from other detached or attached single-unit housing.

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solely based on the alleged adverse health effects of radio frequency emissions, the District Court overturned the denial. *SPRINTCOM, Inc. v. Puerto Rico Regulations and Permits*, 553 F.Supp.2d 87 (2008).

<sup>13</sup> US Code section 332(c)(7)(B)(ii).

6. *Is ZTA 18-11 appropriately addressing the compatibility of antennas and equipment boxes in residential communities?*

Aesthetics may not be the sole concern of a zoning decision in Maryland;<sup>14</sup> however, height, size, and bulk are squarely within zoning authority.<sup>15</sup> The FCC's ruling on September 26, 2018 has the following limitation:

*....We conclude that aesthetics requirements are not preempted if they are (1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments, and (3) published in advance.*

*Like fees, compliance with aesthetic requirements imposes costs on providers, and the impact on their ability to provide service is just the same as the impact of fees. We therefore draw on our analysis of fees to address aesthetic requirements....aesthetic requirements that are reasonable in that they are reasonably directed to avoiding or remedying the intangible public harm of unsightly or out-of-character deployments are also permissible. In assessing whether this standard has been met, aesthetic requirements that are more burdensome than those the state or locality applies to similar infrastructure deployments are not permissible, because such discriminatory application evidences that the requirements are not, in fact, reasonable and directed at remedying the impact of the wireless infrastructure deployment.<sup>16</sup>*

Standards in ZTA 18-11 would require an antenna approved as a conditional use to blend in with existing street attributes:

*...the Hearing Examiner may require the tower to be less visually obtrusive by use of screen, coloring, or other visual mitigation options, after considering within 400 feet the character of residential properties, proximity to nearby residential properties, existing tree coverage and vegetation, and design and presence of streetlight, utility, or parking lot poles.<sup>17</sup>*

There are residents who do not want any changes to street facilities near their homes. These residents would have the Council disapprove ZTA 18-11.

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<sup>14</sup> City of Baltimore v. Mano Swartz, 268 Md. 79, 299 A.2d 828 (1973).

<sup>15</sup> USCOC of Virginia RSA #3 v. Montgomery County Board of Supervisors, United States Court of Appeals, Fourth Circuit, 343 F.3d 262 (2003).

<sup>16</sup> Paragraphs 83 and 84.

<sup>17</sup> The Executive intent is that the only findings for approval of a Telecommunications Tower conditional use would be those identified in ZTA 18-11:

Notwithstanding any other requirements of Section 59 7.3.1.E, to approve a conditional use application for a Telecommunications Tower that replaces a pre-existing streetlight, utility, or parking lot light pole, the Hearing Examiner must find that the tower:

- a. meets the requirements of Section 3.5.2.C.2.d;
- b. is compatible with or can be made compatible with nearby residential property by the use of screening, coloring, stealth design, or other visual mitigation options after considering the height of the structure, topography, existing vegetation and environmental features; and
- c. does not abut or confront an individual resource in the Master Plan for Historic Preservation.

### *7. Why use the height of 22 feet to determine if conditional use approval is required?*

Small cell antennas on existing streetlights, utility, and parking lot light poles taller than 22 feet would be able to proceed using the Limited Use process if they meet specific conditions. These taller poles are typically farther from residents, often located on wider streets, and usually require little to no height increase. Because the shorter poles will always require a height increase and are typically in neighborhoods with underground utilities where there are no existing tall utility poles, they are less likely to be compatible with neighborhoods and should require a Conditional Use.

Lower poles, which are located on residential streets, would still be required to be approved as a conditional use. This is a process that allows a hearing concerning the placement and visual appearance of replacement poles. ZTA 18-11 would allow streamlined access to taller poles that, in the Executive's opinion, would "ensure access to robust wireless broadband services".

### *8. Why allow a 30-foot setback for most right-of-way poles?*

Currently, antennas on existing structures require a 60-foot setback from a dwelling in a residential zone. ZTA 18-11 would change that to a 30-foot setback, both for existing structures and replacement poles. Some would say that the change in the setback requirements to allow poles within 30 feet of a house (instead of 300 feet as currently required for new towers) would make any antenna incompatible.

A setback of 30 feet would be greater than the height of the pole. (The pole could fall without hitting the nearest building.) A 60-foot setback from dwellings would prohibit antennas on some 37,000 of the 75,000 streetlights in the County. There may be areas of the County off limits to antennas with a 60-foot setback. This condition may be viewed by the FCC as denial of service under its ruling issued on September 26, 2018.<sup>18</sup>

For conditional uses, the Hearing Examiner may allow a reduction in the setback to 10 feet if:

- (1) the Telecommunications Transmission Facilities Coordinating Group determines that improvements to service area or capacity cannot be achieved by using a pre-existing streetlight, utility, or parking lot pole within 800 feet of the proposed tower....; or
- (2) the Hearing Examiner determines that a reduced setback will allow the support structure to be located on the property in a less visually obtrusive location after considering the height of the structure, topography, existing tree coverage and vegetation, proximity to nearby residential properties, and visibility from the street.

**The basic concept of ZTA 18-11 is to require conditional use approval where changes to poles in the right-of-way would be most jarring (where the current poles are less than 22 feet tall). The Council could retain the 60-foot setback and allow the Hearing Examiner to reduce the setback to 30 feet (instead of 30 feet down to 10 feet).**

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<sup>18</sup> FCC ruling September 26, 2018, paragraph 76:

We clarify that an effective prohibition {of service} occurs where a state or local legal requirement materially inhibits a provider's ability to engage in any of a variety of activities related to its provision of a covered service.<sup>76</sup> This test is met not only when filling a coverage gap but also when densifying a wireless network, introducing new services or otherwise improving service capabilities. Under the California Payphone standard, a state or local legal requirement could materially inhibit service in numerous ways—not only by rendering a service provider unable to provide an existing service in a new geographic area or by restricting the entry of a new provider in providing service in a particular area, but also by materially inhibiting the introduction of new services or the improvement of existing services. Thus, an effective prohibition includes materially inhibiting additional services or improving existing services.



The 60-foot setback for antennas on existing structures is relatively new to the code. Prior to its insertion into the code, there were not required setbacks for such antennas. There have been antennas approved on wooden utility poles without zoning reviews at all. ZTA 18-11 would correct that situation, but would only prevent antennas on utility poles with less than 30-foot setbacks. The Executive viewed this as part of the reasonable balance his proposed ZTA struck between the concerns of residents and his interest in ensuring access to robust wireless broadband services.

***9. Why increase the bulk allowed for equipment at the base of a pole?***

ZT18-11 would allow for 20 cubic feet of equipment space. The current standard is 12 cubic feet. The increase accommodates the colocation of wireless providers. A smaller volume would not allow three carriers to use the same pole.

***10. Are amendments proposed by the Council Executive?***

Yes. See ©30.

<u>This packet contains</u>	<u>© number</u>
ZTA 18-11	1 – 16
Executive Transmittal	17 – 18
Planning Board Recommendation	19 – 20
Planning staff Recommendation	21 – 24
Equipment Shroud Specifications	25 – 27
Material submitted by Executive staff	28 – 40

Zoning Text Amendment No.: 18-11  
Concerning: Telecommunications  
Towers – Limited Use  
Draft No. & Date: 1 – 7/18/18  
Introduced: July 24, 2018  
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**

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Lead Sponsor: Council President Riemer at the request of the Executive

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**AN AMENDMENT** to the Montgomery County Zoning Ordinance to:

- add definitions;
- allow certain telecommunications towers as a conditional use in certain residential zones;
- revise the standards for telecommunications towers allowed as a limited or conditional use;
- exempt certain antennas from height limits;
- revise the conditional use findings required for the replacement of a pre-existing pole; and
- generally amend conditional use requirements to address certain telecommunications towers

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”
DIVISION 4.1.	“Rules for All Zones”
Section 4.1.7.	“Measurements and Exceptions”
DIVISION 7.3.	“Regulatory Approvals”
Section 7.3.1.	“Conditional Use”

**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 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.

USE OR USE GROUP	Definitions and Standards	Ag	Rural Residential				Residential												Commercial/ Residential			Employment				Industrial		
							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	CRN	CRT	CR	GR	NR	LSC	EOF	IL	IM	IH
* * *																												
COMMERCIAL																												
* * *																												
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	C	C	C	C	C	P	C	C	C	C
Media Broadcast Tower	3.5.2.B	C	C	C		C	C	C	C	C	C	C				C	C	C				C		L	C	C	C	P
Telecommunications Tower	3.5.2.C	L/C	L/C	L/C	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	L	L	L	L/C	L/C	L	L/C	L	L	L

**Key:** P = Permitted Use L = Limited Use C = Conditional Use Blank Cell = Use Not Allowed

8           **Sec. 2. DIVISION 59-3.5 is amended as follows:**

9   **DIVISION 3.5. Commercial Uses**

10   \*   \*   \*

11   **Section 3.5.2. Communication Facility**

12   \*   \*   \*

13   C.    Telecommunications Tower

14        1.    Defined

15   \*   \*   \*

16           c.   Enclosure or stealth design means material, or the use of  
17               materials, intended to conceal antennas and associated  
18               equipment.

19           d.   The height of a Telecommunications Tower is measured from  
20               the lowest point of the natural grade of the ground at the base of  
21               the pole to the highest point on the tower, including any  
22               attached antennas and equipment.

23        2.    Use Standards

24   \*   \*   \*

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

31           i.   In the Commercial/Residential, Industrial, and  
32               Employment zones, the pre-existing pole and the  
33               replacement tower must be at least 10 feet from an

existing building, excluding any building encroachments  
allowed under Section 4.1.7.B.5.

ii. In the Agricultural, Rural Residential, and Residential  
zones, the pre-existing pole must be at least 22 feet tall,  
and the pre-existing pole and replacement tower must be  
at least 30 feet from a dwelling, excluding any building  
encroachments allowed under Section 4.1.7.B.5.

[i]iii. Antennas must comply with the Antenna Classification  
Standard A under Section 59.3.5.2.C.1.b, be concealed  
within an enclosure the same color as the pole, be  
installed at a minimum height of 15 feet, and be installed  
parallel with the tower.

[ii]iv. 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)](b) outside of the roadway clear zone, as  
determined by the Department of Permitting  
Services;

[(d)](c) in a manner that allows for adequate sight  
distances, as determined by the Department of  
Permitting Services; and

[(e)](d) in a manner that complies with streetlight  
maintenance requirements, as determined by the  
Department of Transportation.

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

66 [iv]vi. The height of the tower, including any attached antennas  
67 and equipment, must not exceed:

68 (a) 22 feet when replacing a pre-existing streetlight  
69 less than 22 feet tall;

70 [(a)](b) for pre-existing streetlights 22 feet or taller,  
71 the height of the pole that is being replaced:

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

75 (2) plus 15 feet when abutting a right-of-way  
76 with a paved section width greater than 65  
77 feet[.];

78 [(b)](c) for utility poles [and parking lot lights], the  
79 height of the pre-existing utility [or parking lot  
80 light] pole plus 10 feet[.] and, if necessary, the  
81 minimum additional height required to comply  
82 with the National Electric Safety Code;

83 (d) for parking lot lights, the height of the pre-existing  
84 parking lot light pole plus 10 feet.

85 [v]vii. The tower must be the same color as the pre-existing  
86 pole.

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

[vii]ix. Any equipment cabinet:

(a) must not exceed a maximum volume of 12 cubic feet and be installed a minimum of 12 feet above ground if not installed in the Telecommunications Tower base or at ground level;

(b) must not exceed a maximum volume of 20 cubic feet when installed in the Telecommunications Tower base or at ground level;

[(b)](c) 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)](d) 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)] Section 59.3.5.2.C.2.b.ix(e);

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

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

[ix]xi. 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]xii. The noise level of any fans must comply with Chapter 31B.

[xi]xiii. 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]xiv. The owner of the tower or the antenna attached to the tower must maintain their tower, antennas, and equipment in a safe condition, remove graffiti, and repair damage.

[xiii]xv. 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. Any antenna 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 Telecommunications Transmission Facilities Coordinating Group must be notified within 30 days of the removal.

c. Where a Telecommunications Tower is allowed as a conditional use and does not replace a pre-existing pole, it may be permitted by the Hearing Examiner under Section 3.5.2.C.2.a[, limited use standards] = Limited Use, Section 7.3.1[,] = Conditional Use, and the following standards:

i. Before the Hearing Examiner approves any conditional use for a Telecommunications Tower, the proposed facility must be reviewed by the [County]

Telecommunications Transmission [Facility] Facilities  
Coordinating Group. The applicant for a conditional use  
must file a complete copy of a recommendation from the  
Telecommunications Transmission [Facility] Facilities  
Coordinating Group with the Hearing Examiner at least  
[5]30 days before the date set for the public hearing. The  
recommendation must be no more than 90 days old at the  
time the conditional use application is filed.

\* \* \*

d. Where a Telecommunications Tower is allowed as a conditional  
use and the tower would replace a pre-existing utility pole,  
streetlight pole, or site plan approved parking lot light pole, it  
may be permitted by the Hearing Examiner under Section  
3.5.2.C.2.b – Limited Use, Section 7.3.1 – Conditional Use, and  
the following standards:

i. Before the Hearing Examiner approves any conditional  
use for a Telecommunications Tower, the proposed  
facility must be reviewed by the Telecommunications  
Transmission Facilities Coordinating Group. The  
applicant for a conditional use must file a complete copy  
of a recommendation from the Telecommunications  
Transmission Facilities Coordinating Group with the  
Hearing Examiner at least 30 days before the date set for  
the public hearing. The recommendation must be no  
more than 90 days old at the time the conditional use  
application is filed.

- 167                   ii.    Notwithstanding Section 3.5.2.C.2.b.ii, a  
168                        Telecommunications Tower must be set back, as  
169                        measured from the base of the support structure, as  
170                        follows:
- 171                   (a)   not less than 30 feet from a dwelling, excluding  
172                        encroachments that are allowed under Section  
173                        4.1.7.B.5; or
- 174                   (b)   the Hearing Examiner may reduce the setback  
175                        requirement to not less than 10 feet, if:
- 176                        (1)   the Telecommunications Transmission  
177                            Facilities Coordinating Group determines  
178                            that improvements to service area or  
179                            capacity cannot be achieved by using a pre-  
180                            existing streetlight, utility, or parking lot  
181                            pole within 800 feet of the proposed tower  
182                            under Section 3.5.2.C.2.b or Section  
183                            3.5.2.C.14.c; or
- 184                        (2)   the Hearing Examiner determines that a  
185                            reduced setback will allow the support  
186                            structure to be located on the property in a  
187                            less visually obtrusive location after  
188                            considering the height of the structure,  
189                            topography, existing tree coverage and  
190                            vegetation, proximity to nearby residential  
191                            properties, and visibility from the street.
- 192                   iii.   Notwithstanding Section 3.5.2.C.2.b.iv.(a), the tower  
193                        must be located to minimize its visual impact. Screening

under Division 6.5 is not required; however, the Hearing Examiner may require the tower to be less visually obtrusive by use of screen, coloring, or other visual mitigation options, after considering within 400 feet the character of residential properties, proximity to nearby residential properties, existing tree coverage and vegetation, and design and presence of streetlight, utility, or parking lot poles.

\* \* \*

#### **Section 3.5.14. Accessory Commercial Uses**

\* \* \*

#### **C. Antenna on Existing Structure**

\* \* \*

##### **2. Use Standards**

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

\* \* \*

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

\* \* \*

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 be installed a minimum of 12 feet above

ground if not installed in the Telecommunications  
Tower base or at ground level; [and]

(b) must not exceed a maximum volume of 20 cubic  
feet when installed in the Telecommunications  
Tower base or at ground level; and

(c) must be the same color or pattern as the existing  
structure, unless it is a stealth design approved by  
the Department of Transportation.

\* \* \*

d. Except under Section 3.5.14.C.2.e, when mounted on a rooftop  
or structure located outside of a right-of-way, the antenna must  
meet the following standards:

i. An antenna is prohibited:

- (a) on or within 10 feet of 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,  
and must be mounted in an antenna enclosure the  
same color or design as the building; or
- (b) 20 feet in any Residential Multi-Unit,  
Commercial/Residential, Employment, or  
Industrial zone, and must be mounted in an

248 antenna enclosure the same color or design as the  
249 building.

250 ii. An antenna may be installed on the facade of a building  
251 at a minimum height of:

252 (a) [50] 35 feet in [a] any Residential Detached, Rural  
253 Residential, or Planned Unit Development zone  
254 and must be mounted in an antenna enclosure the  
255 same color or design as the building; or

256 (b) [30] 20 feet in any Residential Multi-Unit,  
257 Commercial/Residential, Employment, [and] or  
258 Industrial zone and must be mounted in an antenna  
259 enclosure the same color or design as the building.

260 \* \* \*

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

265 i. the antenna is in an enclosure and the enclosure is the  
266 same color or pattern as the existing structure;

267 ii. the antenna and the antenna enclosure [is] are installed at  
268 a minimum height of 15 feet above the ground; and

269 iii. the structure is at least [60] 30 feet from a dwelling in a  
270 Rural Residential, Residential, or Planned Unit  
271 Development zone, and at least 10 feet from any  
272 [structure] building in any Commercial/Residential,  
273 Employment, or Industrial zone.

**Sec. 3. DIVISION 59-4.1. is amended as follows:**

**DIVISION 4.1. Rules for All Zones**

\* \* \*

**Section 4.1.7. Measurement and Exceptions**

\* \* \*

**C. Height**

\* \* \*

**3. Height Encroachments**

Any height encroachment not specifically listed is prohibited.

\* \* \*

- b. The maximum height does not apply to solar panels and any roof structure listed in Section 4.1.7.C.3.a or Antenna on Existing Structures as defined in Section 3.5.14.C.2.d, except that in the TLD, TMD, THD, and R-30 zones, an air conditioning unit or similar structure or mechanical appurtenance may exceed the established height limit by a maximum of 8 feet.

\* \* \*

**Sec. 4. DIVISION 59-7.3 is amended as follows:**

**DIVISION 7.3. Regulatory Approvals**

**Section 7.3.1. Conditional Use**

\* \* \*

**B. Application Requirements**

\* \* \*

- 2. The applicant must submit the following for review:**

\* \* \*

m. for a [telecommunication tower] Telecommunications Tower  
application[,]:

i. photographic simulations of the tower and site seen from  
areas with a direct view of the tower, including a  
minimum of at least 3 directions; and

ii. photographs of streetlight, utility, or parking lot light  
poles within 400 feet of the proposed  
Telecommunications Tower.

\* \* \*

E. Necessary Findings

\* \* \*

7. Notwithstanding any other requirements of Section 59-7.3.1.E, to  
approve a conditional use application for a Telecommunications  
Tower that replaces a pre-existing streetlight, utility, or parking lot  
light pole, the Hearing Examiner must find that the tower:

a. meets the requirements of Section 3.5.2.C.2.d;

b. is compatible with or can be made compatible with nearby  
residential property by the use of screening, coloring, stealth  
design, or other visual mitigation options after considering the  
height of the structure, topography, existing vegetation and  
environmental features; and

c. does not abut or confront an individual resource in the Master  
Plan for Historic Preservation.

\* \* \*

F. Decision

1. Hearing Examiner

\* \* \*



c. [Any] Except for decisions relating to a Telecommunications Tower, any party of record may appeal the Hearing Examiner's decision by filing a written request to present oral argument before the Board of Appeals within 10 days after the Office of Zoning and Administrative Hearings issues the Hearing Examiner's report and decision. The filing of such a request transfers jurisdiction over the matter while on appeal from the Hearing Examiner to the Board of Appeals.

\* \* \*

d. Any party aggrieved by a decision of the Hearing Examiner relating to a Telecommunications Tower may, within 30 days after the Hearing Examiner's action, file a petition for judicial review of the decision under Section 22-403 of the Land Use Article.

\* \* \*

**Sec. 5. Effective date.** This ordinance becomes effective 20 days after the date of Council adoption.

This is a correct copy of Council action.

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Megan Davey Limarzi, Esq.  
Clerk of the Council



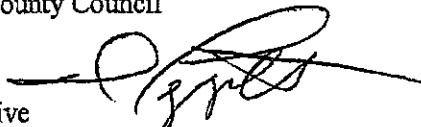
OFFICE OF THE COUNTY EXECUTIVE  
ROCKVILLE, MARYLAND 20850

Isiah Leggett  
County Executive

MEMORANDUM

July 19, 2018

TO: Hans Riemer, President  
Montgomery County Council

FROM: Isiah Leggett   
County Executive

SUBJECT: Telecommunications Towers – Approval Standards

Attached is a Zoning Text Amendment (ZTA) for the Council's consideration that would amend zoning regulations related to placement of small cell antennas in residential areas. As you are aware, technology in the wireless industry continues to evolve, and while we all welcome the coming transformation that allows us to be one of the most digitally connected Counties, there must be a balance between how small cell antennas are deployed and how to protect our residential communities and ensure compatibility.

Given the unprecedented state and federal legislative and regulatory efforts to preempt the authority of local governments to manage the placement and size of telecommunications towers in the public rights-of-way, it is important that we enact local solutions to address small cell deployments expeditiously. As you know, State preemption legislation was introduced in the last Maryland General Assembly session, and we anticipate that it will be reintroduced in the next session. Last week, the Federal Communications Commission (FCC) issued an Order for consideration at its August 2018 meeting to preempt "express and de facto moratoria" on deployment of small cells and announced an attempt to further preempt local government authority to regulate communications facilities in the public rights-of-way. The best defense we have against these intrusions into local governance is to demonstrate that no further state or federal preemption is necessary because we have already provided a balanced local solution. Preemption will certainly lead to less local input and an inability to protect residents.

Over the past year and a half, I sponsored four public forums and my staff has reached out to numerous residents, both individually and in small groups, to gather input on proposed changes to the zoning code regarding deployment of small cell antennas in residential neighborhoods. The proposed ZTA that was originally shared with the public has significantly

Hans Riemer, Council President  
July 19, 2018  
Page 2

evolved to reflect the many views and concerns of community members, and, as a result, will include opportunities for public notice and input, better enforcement mechanisms, and requirements to ensure that the small cell antennas will be compatible with the communities where they are located.

To this end, this ZTA incentivizes deployment on existing utility poles and on the tall light poles in the County's rights-of-way that are found along our wider thoroughfares. The ZTA also retains the Conditional Use process with a public hearing for poles smaller than twenty-two feet, which are typically located in residential communities with underground utilities.

Small cell antennas on existing streetlights, utility, and parking lot light poles taller than twenty-two feet would be able to proceed using the Limited Use process if they meet specific conditions. These taller poles are typically farther from residences, often located on wider streets, and usually require little to no height increase. Because the shorter poles will always require a height increase and are typically in neighborhoods with underground utilities where there are no existing tall utility poles, they are less likely to be compatible with neighborhoods and should require a Conditional Use. Retaining a process to allow greater residential input into placement and visual appearance, while allowing streamlined access to taller poles, strikes a reasonable balance between the concerns of residents and our interest in ensuring access to robust wireless broadband services.

Residents have also expressed concerns about the health effects of radio frequency (RF) emissions from antennas. As you are aware from our effort on ZTA 18-02, which regulates small cell deployment in our commercial and industrial zones, federal law prohibits the County from regulating on the basis of RF emissions. However, I and my staff will continue to work with your office and other Councilmembers and our state and Congressional delegations to address the FCC's failure of leadership on this important issue.

I look forward to working with the Council to ensure a successful solution to the deployment of small cell technology in our County.

HL:la

Attachment



**MONTGOMERY COUNTY PLANNING BOARD**  
THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

**OFFICE OF THE CHAIR**

September 24, 2018

**TO:** The County Council for Montgomery County, Maryland, sitting as the District Council  
for the Maryland-Washington Regional District in  
Montgomery County, Maryland

**FROM:** Montgomery County Planning Board

**SUBJECT:** Zoning Text Amendment No. 18-11

**BOARD RECOMMENDATION**

The Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission reviewed Zoning Text Amendment No. 18-11 (ZTA 18-11) at its regular meeting on September 20, 2018. By a vote of 3:0 (Chair Anderson and Commissioner Dreyfuss absent from the hearing), the Planning Board recommends approval of the amendment to add definitions; allow certain telecommunications towers as a conditional use in certain residential zones; revise the standards for telecommunications towers allowed as a limited or conditional use; exempt certain antennas from height limits; revise the conditional use findings required for the replacement of a pre-existing pole; and generally amend conditional use requirements to address certain telecommunications towers. The Board believes that ZTA 18-11 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 (rights-of-way) and maintaining attractive and safe roads and neighborhoods. The inclusion of a requirement for conditional use approval for replacement of shorter poles makes sense, given that retrofitting them with small cell technology can be more difficult when also trying to establish compatibility with neighborhoods, especially in areas with underground utilities. Further, because technology is constantly evolving, the Board believes that periodic review of these Code provisions should be established as part of the approval procedures of ZTA 18-11.

Zoning Text Amendment 18-02 (adopted May 15, 2018), amended the Zoning Ordinance to allow replacement of pre-existing streetlights, utility poles and site plan-approved parking lot lights in the Commercial/Residential, Employment and Industrial zones. ZTA 18-11 would allow replacement of these same types of pre-existing poles in the Agricultural, Rural Residential and Residential zones as a Limited Use if the pre-existing pole is at least 22 feet tall and 30 feet from a house, or as Conditional Use if the pre-existing pole is shorter than 22 feet and at least 30 feet from a house. The Hearing Examiner must find that the tower is compatible with nearby residential property and is located to minimize its visual impact. To meet federal shot clocks, the Hearing Examiner's decision would be made final action by the County, by removing the right to appeal the Hearing Examiner's decision to the Board of Appeals. Appeal to the Circuit Court would still be permitted.

As proposed, ZTA 18-11:

- Defines enclosure or stealth design;

- Defines the height of a telecommunications tower;
- Does not change the requirements for tall telecommunications towers. In residential areas, these macro towers continue to require a 300-foot setback, and conditional use approval;
- Allows Streetlight, Utility, and Parking Lot Light Poles to be replaced as a Limited Use if the poles are at least 22 feet tall and are at least 30 feet from homes in Residential, Rural Residential, and Agricultural zones;
- Limits the height of a replacement structure to 6 additional feet above the original streetlight pole, when abutting a right-of-way with a paved section width of 65 feet or less, or 15 additional feet for a streetlight pole when abutting a right-of-way with a paved section width greater than 65 feet. Additional height for utility poles and parking lot light poles would be limited to 10 feet. However, additional minimum height would be permitted to comply with the National Electric Safety Code;
- Reduces setbacks from dwellings in residential areas (in Rural Residential, Residential, or Planned Unit Development zones) from 60 feet to 30 feet (to use existing utility poles);
- Lowers the minimum building height for buildings that can be used to attach antennas to, from 50 feet to 35 feet in any Residential Detached, Rural Residential, or Planned Unit Development zone.
- Changes minimum building heights for attaching to building facades to the same as using building roofs – 35 feet in residential; 20 in commercial areas;
- Adds a requirement that the building used to attach antennas to, must be at least 10 feet from a house, duplex or townhouse;
- Allows replacement poles only as a Conditional Use if the pre-existing pole is less than 22 feet in height in Residential Detached, Rural Residential, and Agricultural zones;
- Narrows what the Office of Zoning and Administrative Hearings Hearing Examiner must look at to determine compatibility;
- Removes the right to appeal the Hearing Examiner's decision to the Board of Appeals; and
- Increases to 20 cubic feet the equipment size in the base of a pole.

#### CERTIFICATION

This is to certify that the attached report is a true and correct copy of the technical staff report and the foregoing is the recommendation adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, at its regular meeting held in Silver Spring, Maryland, on Thursday, September 20, 2018.

  
Casey Anderson  
Chair

CA:GR



MCPB  
Item No. 7  
Date: 9-20-18

**Zoning Text Amendment (ZTA) No. 18-11, Telecommunications Towers – Limited & Conditional Use**

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SDR

Gregory Russ, Planner Coordinator, FP&P, [gregory.russ@montgomeryplanning.org](mailto:gregory.russ@montgomeryplanning.org), 301-495-2174

PD

Pam Dunn, Chief, FP&P, [pamela.dunn@montgomeryplanning.org](mailto:pamela.dunn@montgomeryplanning.org), 301-650-5649

Completed: 09/13/18

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**Description**

ZTA No. 18-11 amends the Montgomery County Zoning Ordinance to add definitions; allow certain telecommunications towers as a conditional use in certain residential zones; revise the standards for telecommunications towers allowed as a limited or conditional use; exempt certain antennas from height limits; revise the conditional use findings required for the replacement of a pre-existing pole; and generally amend conditional use requirements to address certain telecommunications towers.

**Summary**

Staff recommends approval of ZTA No. 18-11 to add definitions; allow certain telecommunications towers as a conditional use in certain residential zones; revise the standards for telecommunications towers allowed as a limited or conditional use; exempt certain antennas from height limits; revise the conditional use findings required for the replacement of a pre-existing pole; and generally amend conditional use requirements to address certain telecommunications towers. Staff believes that ZTA 18-11 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 (rights-of-way) and maintaining attractive and safe roads and neighborhoods. The inclusion of a requirement for conditional use approval for replacement of shorter poles makes sense, given that retrofitting them with small cell technology can be more difficult when also trying to establish compatibility with neighborhoods, especially in areas with underground utilities.

**Background/Analysis**

ZTA 18-02 (Adopted May 15, 2018), amended the Zoning Ordinance to allow replacement of pre-existing streetlights, utility poles and site plan-approved parking lot lights in the Commercial/Residential, Employment and Industrial zones. ZTA 18-11 would allow replacement of these same types of pre-existing poles in the Agricultural, Rural Residential and Residential zones as a Limited Use if the pre-existing pole is at least 22 feet tall and 30 feet from a house, or as Conditional Use if the pre-existing pole is shorter than 22 feet and at least 30 feet from a house. The Hearing Examiner must find that the tower is compatible with nearby residential property and is located to minimize its visual impact. To meet federal shot clocks, the Hearing Examiner's decision would be made final action by the County, by

removing the right to appeal the Hearing Examiner's decision to the Board of Appeals. Appeal to the Circuit Court would still be permitted.

As proposed, ZTA 18-11 adds to or modifies the telecommunication provisions as discussed below:

- Defines **Enclosure or stealth design** to mean material, or the use of materials, intended to conceal antennas and associated equipment. *(lines 16-18)*
- Defines the **height of a Telecommunications Tower** as measured from the lowest point of the natural grade of the ground at the base of the pole to the highest point on the tower, including any attached antennas and equipment. *(lines 19-22)*
- **ZTA 18-11 does not change the requirements for tall telecommunications towers.** In residential areas, these macro towers continue to require a 300-foot setback, conditional use approval, and an Office of Zoning and Administrative Hearing (OZAH) Hearing Examiner's approval may be appealed to the Board of Appeals

**REPLACEMENT POLES AS LIMITED USE IN RESIDENTIAL AREAS** (Streetlight, Utility, and Parking Lot Light Poles)

- ZTA 18-11 allows these poles to be replaced as a **Limited Use** if the poles are at least 22 feet tall and are at least 30 feet from homes in Residential, Rural Residential, and Agricultural zones.
  - Sample research determined the 30-foot set back can be met in almost all cases.
  - ZTA 18-02 changed the Zoning Code to allow these poles to be replaced as a Limited Use if they are 10 feet from buildings in Commercial/Residential, Employment and Industrial Zones (no minimum height requirement).
  - Height of a replacement structure would be limited to 6 additional feet for streetlights, when abutting a right-of-way with a paved section width of 65 feet or less, or 15 additional feet for streetlights when abutting a right-of-way with a paved section width greater than 65 feet. Additional height for utility poles and parking lot light poles would be limited to 10 feet. However, additional minimum height would be permitted to comply with the National Electric Safety Code. *(lines 66-84)*
- **Setback for Attachments to Existing Poles.** ZTA 18-11 reduces setbacks from dwellings in residential areas (in Rural Residential, Residential, or Planned Unit Development zones) from 60 feet to 30 feet (to use existing utility poles). In 2018, the characteristics of emerging 5G and small cell technology require that antennas be located closer to mobile devices, and thus closer to residences and businesses. In ZTA 18-02, the County approved allowing the smallest class of antennas to be located on poles at least 10 feet from buildings in commercial areas. In proposed ZTA 18-11, the County Executive recommends that the smallest class of antennas be allowed if located at least 30 feet from a dwelling in residential neighborhoods. This makes the setback for replacement of preexisting poles the same as the setback to attach to an existing structure that does not require replacement. *(lines 269-273)*

- **Minimum Height for Buildings.** ZTA 18-11 lowers the minimum building height for buildings that can be used to attach antennas to, from 50 feet to 35 feet in any Residential Detached, Rural Residential, or Planned Unit Development zone. *(lines 230-273)*
  - **Facades.** ZTA 18-11 also changes minimum building heights for attaching to building facades to the same as using building roofs – 35 feet in residential; 20 in commercial areas.
  - **Setback.** ZTA 18-11 adds a requirement that the building used to attach antennas to, must be at least 10 feet from a house, duplex or townhouse. This minimum setback was added to address residents' concerns about increase of commercial structures like group/assisted living homes in residential areas.

#### REPLACEMENT POLES AS CONDITIONAL USE IN RESIDENTIAL AREAS (Streetlight Poles)

ZTA 18-11 will allow replacement poles as a Conditional Use if the pre-existing pole is less than 22 feet in height in Residential Detached, Rural Residential, and Agricultural zones (these shorter poles are typically in neighborhoods with underground utilities). The purpose of requiring conditional use for replacement of poles shorter than 22 feet is that these poles will always require a height increase, and are more difficult to make compatible with neighborhoods, especially in areas with underground utilities. However, under federal law, the County cannot prohibit all deployment of antennas in residential neighborhoods. By having a Hearing Examiner review the proposed location, the intent is to encourage the applicants to select locations that are farther from houses, such as across the street where there are no houses, adjacent to a park or greenway, surrounded by trees that make the antenna less visible, or near an intersection with other large street signs. Also, the purpose of allowing replacement of poles taller than 22 feet as a limited use is to incentivize applicants to select taller poles wherever possible. *(lines 150-191)*

- Maximum height for new replacement pole would be 22 feet (typically, existing pole is 14 feet tall – i.e., new 8-foot increase allowed; this is more than 6-foot increase allowed for taller poles as Limited Use, but taller poles do not need to get much taller to support small cells)
- 30-foot setback, but the Hearing Examiner can reduce the setback to 10 feet if there are no poles nearby that can meet the 30-foot setback requirement. This is a safety value to ensure the County does not prohibit provision of service, but there are very few instances where a pole that meets the 30-foot setback cannot be found.
- Setbacks can also be reduced by the Hearing Examiner to 10 feet if it will make the new telecommunications tower less visually obtrusive.

#### OZAH CONDITIONAL USE PROCESS CHANGES

- **Compatibility.** Narrows what OZAH Hearing Examiner must look at to determine compatibility. *(lines 311-322)*
  - The Hearing Examiner reviews height, topography, environmental features, and within 400 feet, character of residential properties, proximity to nearby residences, tree coverage, and design of other streetlight, utility and parking lot light poles. Small cell antennas for mobile phones have a limited service range of about a 350-foot radius, so there is a limited area in which an alternate location or pole could be selected. *(lines 192-201)*



- **Appeal to Board of Appeals Removed.** Board of Appeals does not oppose this change for a narrow class of decisions in the interest of complying with the federal shot clock rule. (lines
  - County action would be final after Hearing Examiner issues decision, but decisions can be appealed to the Circuit Court instead of oral argument by Board of Appeals.
  - Most decisions will involve adding 8 feet to an existing streetlight.
  - The Federal Communications Commission is proposing to reduce the period of time to review new replacement pole installations subject to conditional review from 150 days to 90 days. Making the Hearing Examiner's decision final action by the County, will enable retention of the conditional use process for replacement poles in residential areas.

#### OTHER CHANGES AND CLARIFICATIONS

- Equipment size was changed to 12 cubic feet in ZTA 18-02. ZTA 18-11 keeps 12 cubic feet for equipment size on a pole and increases to 20 cubic feet for equipment size in the base. DOT retains authority to approve having equipment on a pole instead of in the base. The additional size increase for the base is necessary to allow hardening of the base (e.g., to prevent damage from vandalism). (lines 90-97)
- Building height and setback calculations are amended so that antennas are treated similar to porches and do not count in setback limits. (lines 281-290)
- Antennas would not count toward building height, similar to solar panels.

#### Conclusion

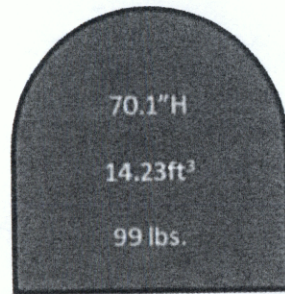
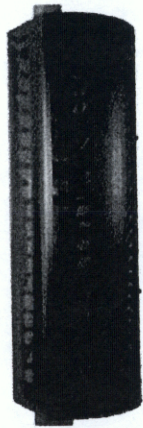
Staff believes that ZTA 18-11 strikes a balance in addressing the community's interest in having increased access to mobile broadband services and the evolving technical needs of the wireless industry while also working to protect the community's interest in managing commercial use of public property and maintaining attractive and safe roads and neighborhoods. Adding a requirement for conditional use approval for replacement of shorter poles makes sense, given that retrofitting them with small cell technology can be more difficult when also trying to establish compatibility with neighborhoods, especially in areas with underground utilities. Staff recommends approval of ZTA 18-11 as introduced.

#### Attachments

1. ZTA No. 18-11 as introduced
2. ZTA 18-11 Telecommunications Towers – Approval Standards- Frequently Asked Questions

# Equipment Shroud Specifications – Pole Mount

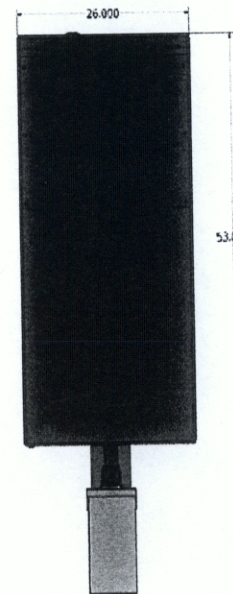
Curved Shroud



19.7"W x 17.8"D

4 Carrier

Rectangular Shroud



15" D  
11.96 cubic feet

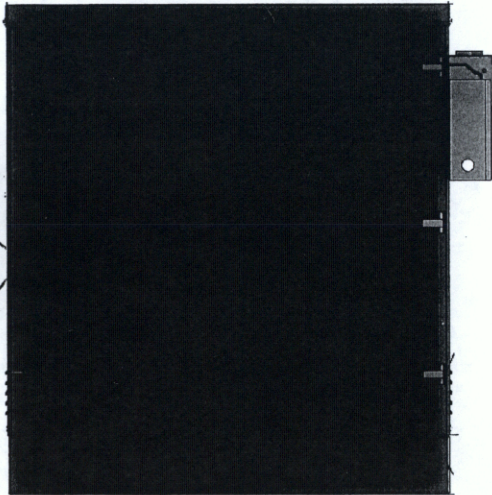
3 Carrier

25



# Equipment Shroud Specifications - Ground

## Ground Furniture

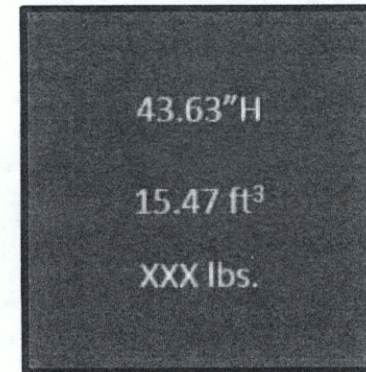
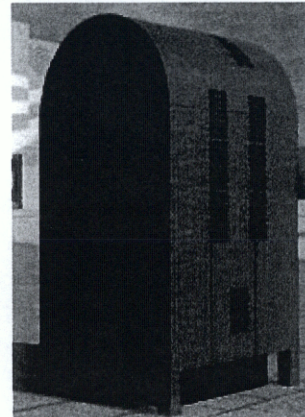


48" H  
15.56 cu. ft.  
XXX lbs.

42" W x 14" D

3 Carrier

## Mailbox



43.63"H

15.47 ft<sup>3</sup>

XXX lbs.

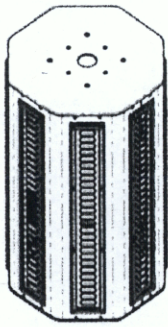
24.75"W x 24.75"D

2 Carrier



# Equipment Shroud Specifications – Pole Base

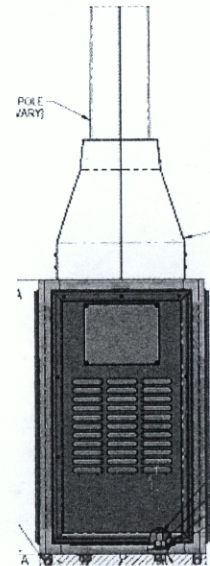
## Octagonal Base



35.75" Widest Point  
14.81" Side Length

4 Carrier

## Rectangular Base



26"W x 26"D

3 Carrier

## Tower Committee Review and Department of Permitting Services Enforcement

### Tower Committee Review Process

The County uses a three part process to review and approve requests to deploy telecommunications antennas.

1. All applications are submitted to the Transmission Facilities Coordinating Group (TFCG or Tower Committee). A site visit, engineering review, compliance with FCC radio frequency (RF) emission standards, review of self-certifications for compliance with applicable wind safety rating standards, and determination of need and capacity and coverage improvements, is conducted. Information is requested and evaluated to determine whether colocation is available. A recommendation is voted upon by members of the TFCG in an open meeting.
2. Applications requiring a Conditional Use must be submitted to the Office of Zoning and Administrative Hearings (OZAH), with a TFCG Recommendation not older than 90 days. OZAH and the Planning Department will review the Conditional Use application. After determining that the application is complete, and evaluating information, OZAH will schedule a public hearing and provide notice to surrounding properties. An OZAH Hearing Examiner will issue a report, approving or denying the Conditional Use application.
3. All telecommunications work for new towers, colocation on existing structures, or antenna modifications require a Department of Permitting Services (DPS) permit. DPS enforces compliance with zoning and safety codes.

The TFCG and DPS processes publish required standards. The processes are intended to enable applicants to submit applications that meet required standards, and to be processed in a timely manner. In contrast, Conditional Use is intended to be a process that allows for public hearing and discretionary application of standards.

### DPS Enforcement

Questions have been raised about enforcement under the pending ZTA 18-11 and recently adopted ZTA 18-02. It is important to note that the pending and recently adopted ZTAs provide much greater structure which, with implementation, involves more robust reviews and has provided the opportunity to create new reviews. They also provide the opportunity for improved coordination between the TFCG and DPS.

Plans review by all appropriate reviewers is the first line of enforcement of laws and regulations. DPS has modified its applications for antennas and small cell towers in the following areas:

1. Application: The application for wireless equipment installations in the public right of way has been modified to specifically require that the application is for wireless equipment and the applicant must include: 1) a description of the work; 2) the utility pole number (if on a pole, or a pole is being replaced); 3) the longitude and latitude of the pole location; 4) the TFCG application number; and 5) the height of the pole and equipment.

2. **Reviews:** DPS has added a zoning review for right-of-way permits involving wireless equipment and pole replacements for wireless equipment. In addition, DPS is creating electronic detail pages for the plans reviewer to facilitate ensuring that all of the criteria of the ZTAs are addressed during reviews.
3. **Inspections:** DPS's modified processes include preloading a scheduled final inspection at permit issuance and developing certain compliance certifications for permit closure.
4. **TFCG Coordination:** As mentioned, DPS is requiring TFCG application numbers to be included on wireless equipment permits. While DPS is a member of the TFCG, to improve tracking and coordination, DPS is developing automated reports to go to the Department of Technology Services (DTS) and TFCG. There will be two reports that will be scheduled to go out weekly. One report will include all applications received for wireless equipment permits (DPS permit application number; TFCG application number; pole number ; outside inspection date) and the other report will be for all permits finalized and closed for wireless equipment (antennas and towers).
5. **Zoning Enforcement:** Enforcement will occur 1) during work under the permit with compliance inspections and permit closeout; and 2) to address complaints. If a violation is found, DPS will, as it typically does for zoning enforcement, issue a notice of violation with direction as to the required corrective action. If the corrective action is not timely implemented, DPS will issue a civil citation which will include a fine and a request for a judicial abatement order to compel the corrective action.

**Executive Branch Amendments to ZTA 18-11**

The Executive Branch recommends consideration of the following amendments:

Lines 138 to 144. Amendments inserting "Telecommunications" and pluralizing "Facilities" should be removed. The TFCG is the "Transmission Facility Coordinating Group" in the County Code.

Line 328. After, "Except for decisions relating to a Telecommunications Tower" insert "decided under Section 59-3.5.2.C.2.d" to clarify that the parties may request the Board of Appeal to review Hearing Examiner decisions for macro towers (*e.g.*, 100 foot tall towers), but appeals of Hearing Examiner decisions to permit 22 foot towers as a conditional use replacement of a pre-existing pole would be appealed directly to Circuit Court, in order to comply with FCC shot clocks.

Line 132. Insert new subsection xvi. "Where a Telecommunications Tower is allowed as a limited use, an applicant who files a permit application with the Department of Permitting Services for such use must file a complete copy of a recommendation from the Transmission Facility Coordinating Group with the DPS permit application."



### Example 1 – Neighborhoods with Limited Use and Conditional Use Streetlights

In Neelsville, near the Montgomery College Germantown Campus, col de sacs have been built off primary roads.

- The green dots show streetlights taller than 22 feet and at least 30 feet from houses that under ZTA 18-11, could be replaced as a Limited Use, *i.e.*, with a compliance review and permit, but without an additional zoning hearing. The replacement pole could be up to 6 feet taller than the current streetlight, but it may also be possible to install new antennas on a new stronger replacement pole without increasing the pole height.
- The orange dots shows streetlights shorter than 22 feet but at least 30 feet from houses that under ZTA 18-11, would require zoning approval and a zoning hearing to replace and add new antennas to.
- The brown dots show poles that are less than 22 feet tall, but closer than 30 feet. The zoning Hearing Examiner would only allow use of these poles if there is no pole nearby that is at least 30 feet from homes. Since there are so many other pole nearby that meet the setback, the Hearing Examiner would be unlikely to approve use of pole closer than 30 feet to a house. (The blue dots are poles that cannot be used under any circumstances.)

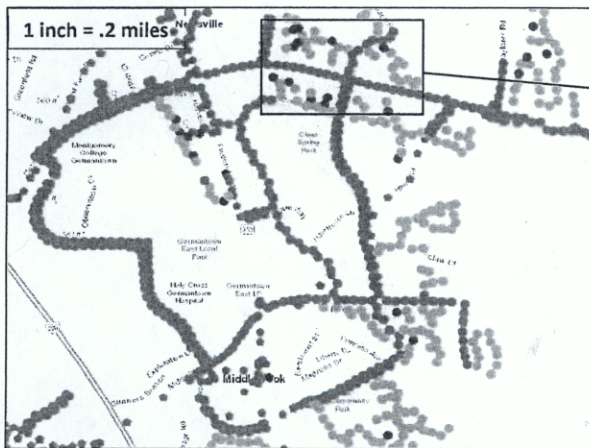


Figure 1 Germantown – Neelsville and Middletown

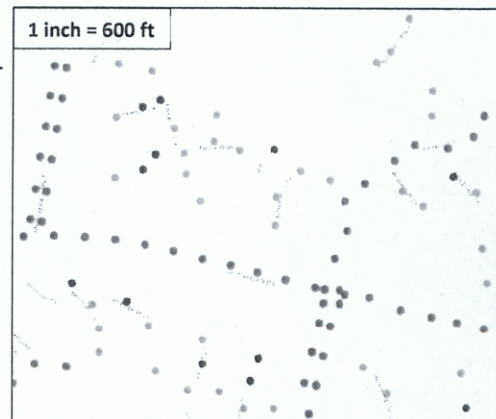


Figure 2 Close up of Neelsville Neighborhood



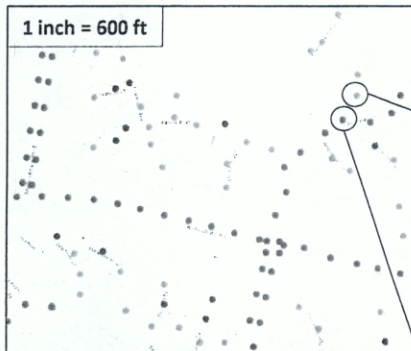
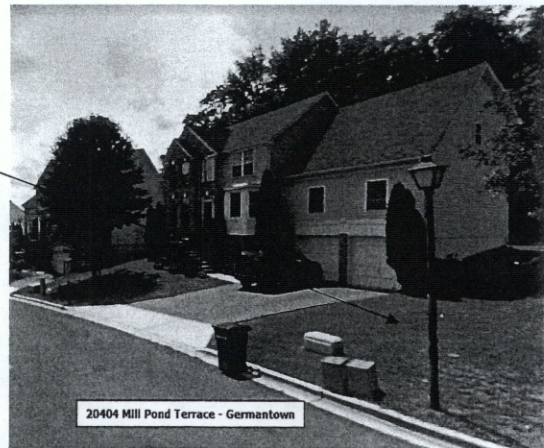


Figure 3 Close Up of Neelsville Neighborhood



20404 Mill Pond Terrace - Germantown



20322 Scenery Dr - Germantown

Streetlight above would require a Conditional Use to replace. Replacement light could be approximately 8 feet taller, up to a maximum of 22 feet in height as measured from the ground to the top of all equipment and antennas.

Streetlight at left could be replaced as Limited Use. Antennas could be attached at top of pole, adding up to 6 ft, or antennas could be added to pole without increasing height.



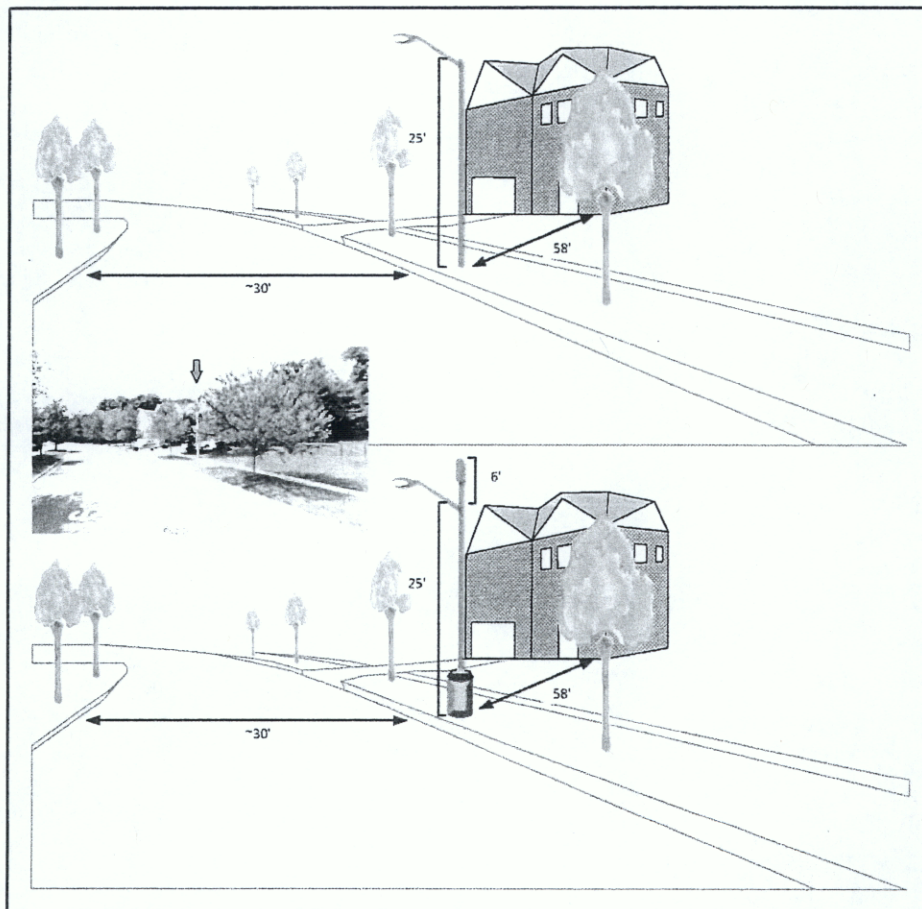
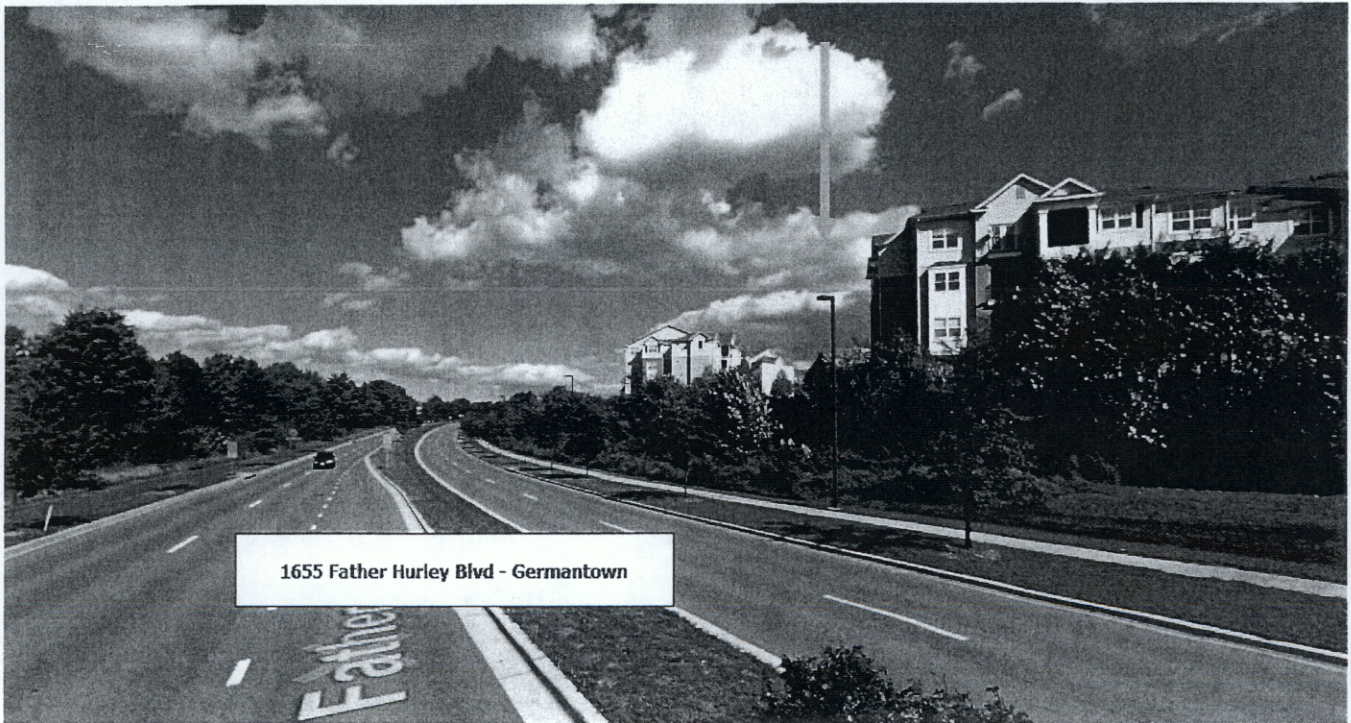


Figure 4 Illustration of Limited Use Replacement Pole with Maximum 6 Foot Height Increase and 6 Cubic Foot Antennas and 20 Cubic Foot Equipment Base



### Example 2 – Limited Use Streetlights on Streets Wider than 65 Feet

Replacement of pre-existing streetlights is limited to an additional 6 feet, except where the road is wider than 65 feet. The additional height is needed to ensure that wireless signals can reach both sides of the road.





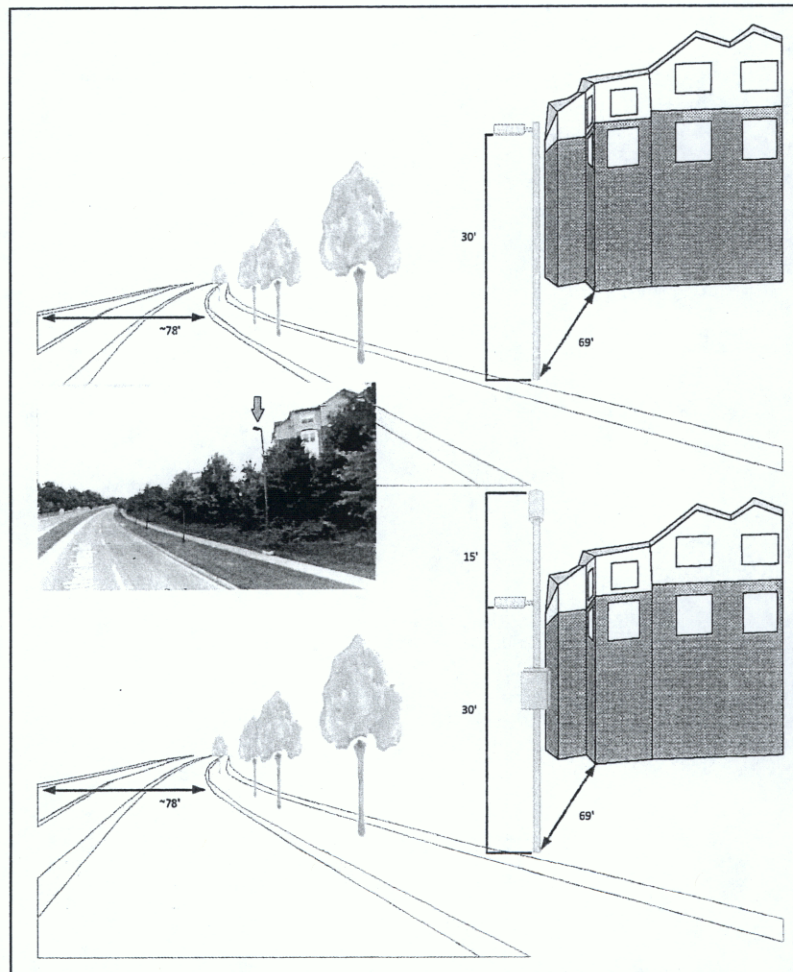


Figure 1 illustration of 15 Foot Increase in Height of Existing Streetlight

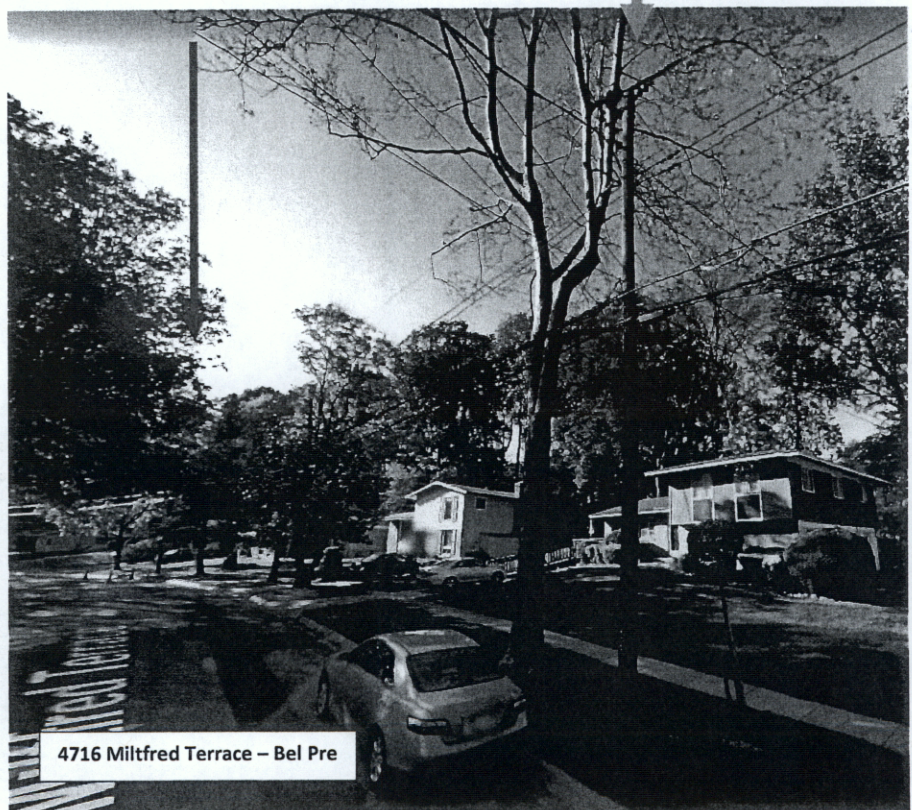
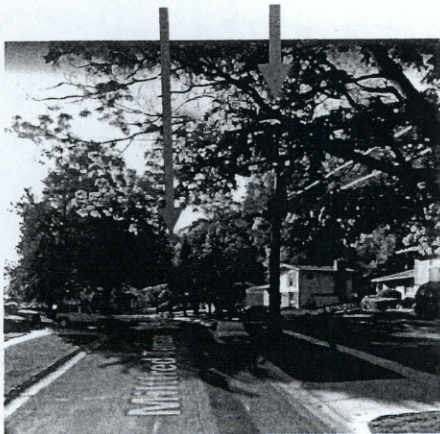


### Example 3 – Replacement Utility Poles as Limited Use – 10 Foot Increase

Utility poles at least 30 feet houses may be replaced as a limited use and the replacement pole may increase 10 feet in height.

The orange arrow shows the pole to be replaced.

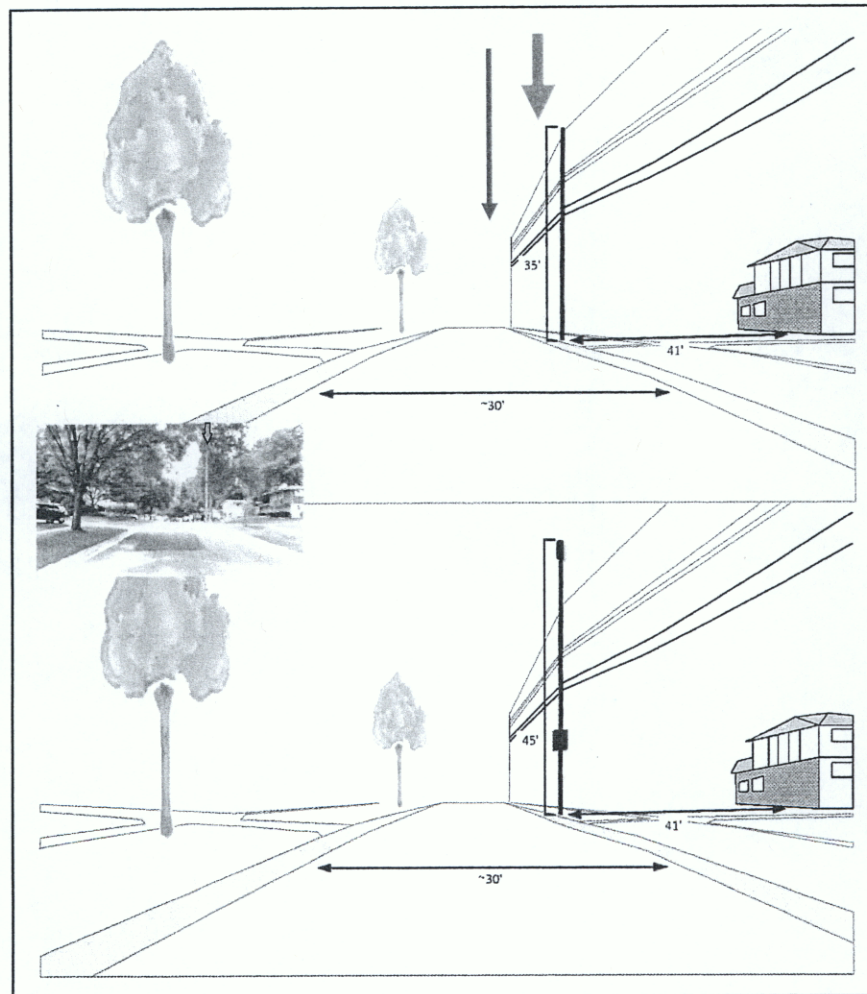
The red arrow shows a pole that would not be replaced, but that is already full of other electrical equipment.



4716 Miltfred Terrace – Bel Pre



Figure 1 10-Foot Increase in Utility Pole



Updated September 18, 2018

3.2





Updated September 18, 2018

3.3



#### Example 4 – Replacement Utility Poles as Limited Use – 15 Foot Increase

On roads wider than 65 feet, utility poles may be replaced as Limited Use, with a maximum increase in height of 15 feet to enable wireless signals to reach both sides of the road





