

**CLARKE COUNTY PLANNING COMMISSION
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October 30, 2018 Work Session**

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Clarke County Planning Commission

AGENDA – Work Session

Tuesday, October 30, 2018 – 3:00PM

Berryville/Clarke County Government Center– A/B Meeting Room

1. Approval of Work Session Agenda
2. Review of Agenda Items for November 2, 2018 Business Meeting
3. Old Business Items
 - a. TA-18-01, Antenna Support Structures
 - b. Progress Report, Ordinance Update Project
4. New Business Items
5. Other Business
6. Adjourn



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TO: Planning Commission members

FROM: Brandon Stidham, Planning Director

RE: TA-18-01, Antenna Support Structures

DATE: October 23, 2018

Item 3a on the October 30 Work Session agenda is a review of the proposed text amendment regarding small-scale lattice towers for wireless internet service providers (WISPs), referenced in the text amendment as “antenna support structures.” This issue was last reviewed by the Commission in September and forwarded to the Policy & Transportation Committee for development. The Committee met on October 17 and agreed to recommend the attached text amendment for consideration by the full Commission.

As we have done with previous text amendments at their initial presentation to the Commission, this item has not been added to the November 2 Business Meeting agenda. The Commission should discuss the draft text amendment and, if comfortable, direct Staff to add it to the November 2 Business Meeting agenda to schedule public hearing for December. If you have any questions on this issue prior to the Work Session, please feel free to contact me.

ZONING ORDINANCE TEXT AMENDMENT (TA-18-01)

Antenna Support Structures

November 2, 2018 Planning Commission Meeting – SET PUBLIC HEARING

STAFF REPORT – Department of Planning

The purpose of this staff report is to provide information to the Planning Commission and Board of Supervisors to assist them in reviewing this proposed ordinance amendment. It may be useful to members of the general public interested in this proposed amendment.

Description:

Proposed text amendment to amend §3-C-2-u (Wireless Communication Facilities (WCFs)), §6-H-12 (Design Standards for Wireless Communication Facilities (WCFs)), and §9-B (Definitions) of the Zoning Ordinance. The purpose is to establish new regulations for structures designed for the express purpose of accommodating wireless internet service provider (WISP) equipment, television antennas, satellite dishes, or other communications equipment to a maximum height of 120 feet.

Requested Action:

Assign the proposed text amendment to the December 7, 2018 Planning Commission meeting agenda for Public Hearing.

Background:

This proposed text amendment was developed by Planning Staff and the Commission’s Policy & Transportation Committee in response to concerns expressed by wireless internet service providers (WISPs) that serve the County. The Broadband Implementation Committee held a roundtable discussion with WISP representatives and other broadband industry companies on June 20, 2018 to discuss ways to expand access to broadband internet in the County. An issue that was raised by WISP representatives is the County’s prohibition on the use of lattice towers which in their opinion is a barrier to providing service to rural customers.

The regulations for wireless telecommunication facilities (WCFs) were significantly revamped in 2017 with the allowance of taller towers up to 199 feet and implementation of the WCF class system. One regulation that remained unchanged is that all WCFs have to use a monopole or stealth design and cannot use a lattice design. Lattice towers for cellular communications are more visible due to their size and are not conducive to stealth design or camouflage.

WISP representatives indicated that for customers lacking direct line of sight to a broadcast tower, it is often necessary to install their equipment on a small-scale lattice tower in order to establish that line of sight. Small-scale lattice towers are more commonly used by ham radio enthusiasts, have a smaller footprint, and are constructed from smaller gauge steel than a lattice tower used to support cellular communications arrays. The representatives stated that the small-scale lattice towers they use in other counties are typically no more than 24 inches in diameter with a maximum 8 foot radius from the center of the tower to the support legs. As a comparison, a typical lattice cell tower can have a radius from the center of the tower to the support legs of 15-18 feet. The representatives noted that small-scale lattice towers are easier and less expensive to install than a comparable monopole tower. They can also be maintained more easily because

a technician can climb a lattice tower whereas a bucket truck is needed to service a monopole. Some of the WISP representatives indicated that a small-scale lattice tower can also be used to provide broadband service to neighboring properties and that they can enter into profit-sharing agreements with homeowners who invest in these towers based on the number of neighbors who also use the tower.

WISP representatives stated at the meeting that they would like to be able to install small-scale lattice towers up to 120 feet and would prefer to be able to construct up to 80 foot towers with only a zoning permit from the Zoning Administrator. The Broadband Implementation Committee has recommended that the Commission consider developing a text amendment with the following parameters:

- Small-scale lattice towers up to 80 feet with a zoning permit issued by the Zoning Administrator.
- Towers over 80 feet to a maximum of 120 feet with a site plan review and approval by the Planning Commission.
- Minimum 100 foot setback from all property lines.

The Commission forwarded this item to the Policy & Transportation Committee. The Committee met on October 17 and agreed by consensus to support this proposed text amendment.

In developing the text amendment, Staff considered several approaches to incorporating new language for these structures into the wireless communication facility (WCF) regulations. The clearest and most direct approach is to create a new Class 6 for “Antenna Support Structures” and add new regulations to the WCF supplementary regulations (3-C-2-u) and the WCF design standards (6-H-12-a) and application requirements (6-H-12-b). A new definition for “antenna support structures” would be added to Article 9 as follows:

A structure that is designed for the express purpose of accommodating wireless internet service provider (WISP) equipment, television antennas, satellite dishes, or other communications equipment at a desired height. Antenna support structures may be attached to or mounted on a structure or may be freestanding, and shall not include Class 1-4 wireless communication facilities (WCFs) or Class 5 amateur radio antennas.

The amendment also addresses support structures that may be used by residents and businesses for television antennas, satellite dishes, or other communications equipment that would not fall under the regulations for Class 5 amateur radio antennas. Current regulations do not address mounting heights for these types of equipment so either the WCF regulations or the maximum structure height requirements for each zoning district would apply. The new Class 6 would include structures for mounting all of these types of antennas and equipment and not only WISP equipment. The definition indicates that antenna support structures are not Class 1-4 WCFs to provide one means of distinction from typical cell towers.

Regulations for Class 6 Antenna Support Structures are included for review in the attached text amendment draft and are summarized below. Staff requested technical information from WISP representatives but none was provided to aid development of this text amendment.

- Antenna support structures can be either freestanding or can be mounted on or attached to a building or other structure (such as a silo).
- If mounted on or attached to a building or other structure, the maximum height is 80 feet above ground level (AGL) including the height of the building or structure. For example, an antenna support structure mounted on the roof of a house that is 30 feet tall can be no taller than 50 feet, for a total height of 80 feet AGL.
- Antenna support structures that are mounted on a building or structure would be allowed by-right with no zoning permit requirements. Those that are installed in the ground and attached to a building or structure for additional support would require zoning permit approval to verify setback compliance.
- If the antenna support structure is freestanding, it can be a maximum height of 120 feet AGL. A zoning permit issued by the Zoning Administrator would be required for an antenna support structure up to 80 feet and a site development plan approved by the Zoning Administrator would be required for greater than 80 feet and up to 120 feet. Site development plan submission requirements would be the same as required for Class 5 amateur radio antennas which is more lenient than the requirements for Class 1-4 WCFs.

Staff does not recommend third party engineering review for antenna support structures however it is currently required for all other classes of WCFs and for amateur radio antennas at the Zoning Administrator's discretion.

- Antenna support structures can be a monopole or lattice design and may be guyed if necessary. In order to reflect the smaller scale as compared to WCFs, there is a maximum width requirement for the antenna support structure and its foundation. Staff recommends a maximum width of 8 feet (maximum footprint of 64 square feet) but notes that technical information from the WISP companies would help determine whether this number is adequate for their usage.
- Antenna support structures that are freestanding or are attached to a building or structure would have a minimum setback of 100 feet or 100% of the antenna support structure height, whichever is greater. Setback is to property lines, public rights of way, and private access easements. If the structure is guyed, all wires and anchors must be located within the setback area. For example, if the antenna support structure is 80 feet tall and the guy wires extend out 150 feet, the resultant minimum setback is 150 feet.
- Staff currently recommends allowing Class 6 antenna support structures in all zoning districts as permitted uses with the exception of the Historic (H) Overlay District. Antenna support structures would be prohibited in the H District.

Staff notes that the term “antenna support structures” is currently used in a generic fashion in several places including reference to “co-location” as an allowable use and in the definitions for “co-location” and “wireless communication facility.” Amendments are recommended to these sections to avoid confusion with this new proposed use.

Staff Recommendation:

Staff recommends that the Planning Commission set Public Hearing on the text amendment for the December 7, 2018 Commission meeting. Staff has no outstanding concerns with the adoption of the text amendment.

History:

November 2, 2018. Placed on the Commission’s business meeting agenda to set Public Hearing.

Ordinance Amendment Text (changes shown in bold italics with strikethroughs where necessary):

ANTENNA SUPPORT STRUCTURES

9-B DEFINITIONS

Antenna support structure – A structure that is designed for the express purpose of accommodating wireless internet service provider (WISP) equipment, television antennas, satellite dishes, or other communications equipment at a desired height. Antenna support structures may be attached to or mounted on a structure or may be freestanding, and shall not include Class 1-4 wireless communication facilities (WCFs) or Class 5 amateur radio antennas.

Co-location -- The shared use of ~~an antenna support~~ **a** structure by two or more wireless service providers or other entities that operate antennas. Co-location may occur on structures other than wireless communication facilities (WCFs) including but not limited to water tanks, lattice towers, rooftops, utility poles, silos, and similar structures. The use of a non-WCF structure by one wireless service provider or other entity that operates antennas shall also be considered co-location.

Wireless Communication Facility (WCF) -- All infrastructures and equipment including, but not limited to, ~~antenna support~~ structures, antennas, transmission cables, equipment shelters, equipment cabinets, utility pedestals, ground equipment, fencing, signage, and other ancillary equipment associated with the transmission or reception of wireless communications.

3-A-1-a-2 Accessory Uses and Structures (AOC District)

h. ~~Co-location of antennas on existing approved antenna support structures~~

3-A-2-a-2 Accessory Uses and Structures (FOC District)

h. ~~Co-location of antennas on existing approved antenna support structures~~

3-A-3-a-2 Accessory Uses and Structures (RR District)

d. ~~Co-location of antennas on existing approved antenna support structures~~

3-A-12-a-2 Accessory Uses and Structures (CN District)

f. ~~Co-location of antennas on existing approved antenna support structures~~

3-A-13-a-2 Accessory Uses and Structures (CH District)

f. ~~Co-location of antennas on existing approved antenna support structures~~

3-C-2-u Wireless Communication Facilities (WCFs):

2. Classes of Wireless Communication Facilities. WCFs shall be divided into the following classes:

f. ***Class 6. Freestanding antenna support structures with a height not to exceed one hundred and twenty (120) feet above ground level, and building or structure mounted antenna support structures with a height not to exceed eighty (80) feet above ground level.***

4. By-right uses. The uses listed in this subsection are deemed to be by-right uses subject to review and approval of a site development plan demonstrating compliance with this section, §6-H-12, and other applicable sections of the Zoning Ordinance:

d. **Class 6 antenna support structures.**

(1) ***Freestanding.*** A zoning permit issued by the Zoning Administrator shall be required for freestanding antenna support structures up to a maximum height of eighty (80) feet. A site development plan subject to administrative review and approval by the Zoning Administrator shall be required for antenna support structures over eighty (80) feet to a maximum height of one-hundred twenty (120) feet.

- (2) ***Building or structure mounted.*** A zoning permit is required for an antenna support structure that is installed in the ground and attached to a building or structure for additional support. No zoning permit is required for an antenna support structure that is mounted on a building or structure.

ZONING DISTRICTS FOR WIRELESS COMMUNICATION FACILITIES

| Class | AOC | FOC | CH | CN | RR | Historic Overlay* | Historic Access Overlay* |
|--------------------------------------|------------|------------|-----------|-----------|-----------|--------------------------|---------------------------------|
| Co-Location | A | A | A | A | A | A | A |
| 1 (max 50') | P | P | P | P | P | X | P |
| 2 (max 80') | P | P | P | P | P | X | P |
| 3 (max 120') | S | S | S | X | X | X | S |
| 4 (max 199') | S | S | S | X | X | X | S |
| 5 (am. radio) | P | P | P | P | P | P | P |
| 6 (antenna support structure) | P | P | P | P | P | X | P |

P - Permitted/by-right

A - Accessory use

S - Special Use

X - Prohibited use

* - Subject to the underlying zoning district regulations and compliance with overlay district review criteria.

**SUMMARY OF WIRELESS COMMUNICATION
FACILITY CLASSES**

| Class | Max Height | Approval Authority | Special Use Permit Required? | Site Plan Required? | Engineering Review Required? | Design |
|--------------|-------------------|-----------------------------|-------------------------------------|----------------------------|-------------------------------------|--|
| 1 | 50 feet | Zoning Administrator | No - by right use | Yes* | Zoning Administrator's discretion | Monopole or stealth w/surface mounted antennas |
| 2 | 80 feet | Planning Commission | No - by right use | Yes | Yes | Monopole or stealth w/surface mounted antennas |
| 3 | 120 feet | BOS with PC review | Yes | Yes | Yes | Monopole |
| 4 | 199 feet | BOS with PC review | Yes | Yes | Yes | Monopole |
| 5 | Per State Law | Zoning Administrator | No - by right use | Yes* | Zoning Administrator's discretion | Amateur radio antenna per State law |
| 6 | 120 feet | Zoning Administrator | No | Yes if over 80 feet | No | Monopole or lattice |

* Depending on the nature and design of the Class 1 or Class 5 WCF, the Zoning Administrator has the discretion to waive certain site development plan requirements per §6-C.

NOTE – Co-location of new antennas and equipment on existing WCFs and other structures are approved administratively by the Zoning Administrator.

6-H-12-a Design Standards

3. Height requirements.

- e. The maximum height of a freestanding Class 6 antenna support structure shall be one hundred and twenty (120) feet above ground level (AGL). The maximum height of a building or structure mounted antenna support structure shall be eighty (80) feet above ground level (AGL) including the height of the building or structure.*

7. **Siting and design requirements for Class 6 antenna support structures.** *The following regulations shall apply to the siting of antenna support structures:*

- a. **Size.** *The maximum width of the antenna support structure and foundation shall not exceed eight (8) feet, excluding wires and anchors if the structure is guyed.*
- b. **Design.** *Freestanding antenna support structures may be a monopole or lattice design and may be guyed. There are no design requirements for building or structure mounted antenna support structures.*
- c. **Building or structure mounted.** *Antenna support structures may be mounted on or attached to a building or structure at a maximum height of 80 feet above ground level (AGL) including the height of the building or structure. No zoning permit is required for a building or structure mounted antenna support structure.*
- d. **Freestanding.** *Antenna support structures that are freestanding or that are attached to a building or structure shall be set back a minimum of 100 feet, or 100% of the antenna support structure height if greater than 100 feet, whichever setback distance is greater. Setbacks shall be from any property line, public right of way, and private access easement. All wires, anchors, and other structures associated with a guyed antenna support structure shall be located within the setback area.*

6-H-12-b Application Requirements

4. **Requirements for Class 6 antenna support structures.**

- (a) **Permit requirements.** *A zoning permit issued by the Zoning Administrator shall be required for antenna support structures up to a maximum height of eighty (80) feet. A site development plan subject to administrative review and approval by the Zoning Administrator shall be required for antenna support structures over eighty (80) feet to a maximum height of one-hundred twenty (120) feet.*
- (b) **Site development plan requirements.** *The site development plan shall depict the support structure design, height, width of structure and foundation, location of wires and anchors for guying (if applicable), and setbacks from property lines, public rights of way, and private access easements.*

ZONING AND SUBDIVISION ORDINANCE UPDATE PROJECT PROGRESS REPORT (NOVEMBER 2018)

Work Plan Items Completed to Date:

- Step 1 – Adopt Work Plan, Project Policies and Timeline
- Step 3 – Approve Framework for Draft Ordinances.

Work Plan Items in Process:

- Step 2 -- Discuss and Provide Formal Direction on Policy Issues. The Ordinances Committee met on October 10 and completed review of the sign ordinance regulations (4-I). Work primarily focused on updating specific provisions in response to a recent U.S. Supreme Court ruling that municipal sign regulations cannot be based on the content of the message displayed on the sign. Examples include directional signs, campaign signs, and event signs. The Committee also provided policy direction on the functionality of the sign regulations including application of freestanding and wall sign rules, as well as streamlining rules for temporary signs while simultaneously making the rules content-neutral.

Five policy and technical issues remain under review by the County Attorney:

- Private access easement regulations (P12) – This issue has been reviewed previously by the Committee with specific items forwarded to the County Attorney for comment.
- Special use permits on private access easements (P15) – This issue involves whether to create new requirements for special use permit applicants who rely on a private access easement as primary means of ingress/egress for the special use. More specifically, the Committee and Staff are reviewing ways to address the impact of a special use on a private access easement without requiring the County to be involved in overseeing maintenance of the easement over the life of the permit. The Committee has discussed this issue previously and the County Attorney is currently reviewing this issue.
- Attached Residential District (AR) references (T5) – The AR District was removed from the Zoning Ordinance several years ago however the Institutional District (ITL) relies specifically on regulations from the AR District. The County Attorney is reviewing questions from Staff on this issue before it is presented to the Committee.
- Subdivisions and boundary line adjustments on jurisdictional boundaries (T14) – The County Attorney is reviewing procedural questions from Staff regarding how to process transactions involving one or more lots that are bisected by County or State boundary lines. This technical issue has not been reviewed by the Committee.

- Family divisions (T15) – The County Attorney is currently reviewing Staff’s questions regarding inclusion of family division regulations to comply with State code requirements while remaining consistent with the County’s sliding-scale zoning and subdivision regulations. This technical issue has not been reviewed by the Committee.
- Step 4 -- Present Draft Ordinance Text by Chapter and by Subject. Staff continues to work on the initial drafts including:
 - Completion of the Combined Definitions article including moving all uses definitions to the new Uses Chapter of the Zoning Ordinance. The first cut of the definitions subsection is complete and work is underway on the remaining subsections.
 - Development of the new Uses Chapter including combining all existing definitions and supplementary regulations (to be referred to as “use regulations”) and making edits as recommended by the Committee. County Use definitions have been moved to the initial draft Uses Chapter and new definitions will need to be created for each undefined use. Berryville Annexation Area uses will be included in a separate chapter and will contain definitions and regulations as they currently appear in the Town’s Zoning Ordinance. If the Town’s Ordinance does not contain a definition or a use regulation for an Annexation Area use, we will not attempt to create them. Language will be added to make it clear that County uses apply only to County zoning districts and Annexation Area uses will apply only to Annexation Area zoning districts.
 - As Ordinance chapters are completed over the next few months, Staff will develop a work plan for presenting the revised Ordinances to the full Commission and Board of Supervisors. One approach could be to schedule a series of 90 minute workshop/information sessions where Staff presents Ordinance chapters in a topical format. This would enable Commissioners and Board members to digest the changes in manageable increments and to ask questions in an informal setting.

Upcoming Meetings Scheduled:

- #20 – To be scheduled pending completion of County Attorney Review

Other Staff Items in Process:

- County Attorney review of previous policy issues
- Initial development of the Guidance Manual outline
- Revise Work Plan upon completion of Step 2