

Article VIII. Supplemental Regulations

Section 8.01 Wireless Communication Towers

8.01.01

Intent:

Based upon the Communications Act of 1934, as amended by the Telecommunications Act of 1996 (the Act) grants the Federal Communications Commission (FCC) exclusive jurisdiction over certain aspects of telecommunication services. This section is intended to regulate towers, telecommunications facilities and antennas in the County in conformance with the Act without prohibiting or intending to prohibit any person from providing wireless telecommunication service. Telecommunication facilities, towers and antennas in the County shall be sited, to protect residential areas and land uses from potential adverse impact of installation of towers and antennas through careful design, siting, and camouflaging, to promote and encourage shared use / co-location of towers and other antenna support structures rather than the construction of additional single use towers, to avoid potential damage to property caused by towers, telecommunications facilities and antennas by ensuring such structures are soundly and carefully designed, constructed, modified, maintained, repaired and removed when no longer used or are determined to be structurally unsound and to ensure that towers and antennas are compatible with surrounding land uses.

8.01.02

Definitions

All terms in this Section which are not specifically defined herein shall be construed in accordance with the Communications Act of 1934, the Telecommunications Act of 1996 and the Rules and Regulations of the Federal Communications Commission (FCC). As used in this Section, the following terms shall have the following meanings:

1. **ANTENNA** shall mean a device, designed and intended for transmitting or receiving television, radio, or microwave signals, direct satellite service (including direct-to-home satellite service), and/or video programming services via multi-point distribution services.
2. **ANTENNA SUPPORT STRUCTURE** shall mean any building or structure other than a tower which can be used for location of telecommunications facilities.
3. **APPLICANT** shall mean any person that applies for a Tower Development Permit.
4. **APPLICATION** shall mean a process by which the owner of a tract of land within the zoning jurisdiction of the County submits a request to develop, construct, modify, or operate a tower upon such tract of land. The term application includes all written documentation, verbal statements, and representations, in whatever formal forum made by an applicant to the County concerning such request.
5. **CONFORMING COMMERCIAL EARTH STATION** shall mean a satellite dish that is two meters or less in diameter and is located in an area where commercial or industrial uses are generally permitted under this Ordinance.

6. **ENGINEER** shall mean any engineer qualified and licensed by any state or territory of the United States of America.
7. **OWNER** shall mean any person with a fee simple title or a leasehold exceeding 10 years in duration to any tract of land within the zoning jurisdiction of the County who desires to develop, construct, modify, or operate a tower upon such tract of land.
8. **PERSON** shall mean any person, firm, partnership, association, corporation, company, or other legal entity, private or public, whether for profit or not for profit.
9. **SATELLITE DISH ANTENNA** shall mean an antenna consisting of a radiation element intended for transmitting or receiving television, radio, microwave, or radiation signals and supported by a structure with or without a reflective component to the radiating dish, usually circular in shape.
10. **STEALTH** shall mean any telecommunications facility, tower, or antenna which is designed to enhance compatibility with adjacent land uses, including, but not limited to, architecturally screened roof-mounted antennas, antennas integrated into architectural elements, and towers designed to look other than a tower, such as light poles, power poles and trees.



11. **TELECOMMUNICATIONS FACILITIES** shall mean any cables, wires, lines, wave guides, antennas, or any other equipment or facilities associated with the transmission or reception of communications that a person seeks to locate or has installed upon or near a tower or antenna support structure. However, telecommunications facilities shall not include:
 - A. Any conforming commercial earth station antenna two meters or less in diameter which is located on real estate zoned A-1, TA-1, R-1, R-2, R-3, C-1, I-1 or I-2.
 - B. Any earth station antenna or satellite dish antenna of one meter or less in diameter, regardless of zoning applicable to the location of the antenna.
12. **TOWER** shall mean a self-supporting lattice, guyed, or monopole structure that supports telecommunications facilities. The term tower shall not include non-commercial amateur radio operator's equipment as licensed by the FCC or structure supporting an earth station antenna serving residential premises or dwelling units exclusively.
13. **TOWER DEVELOPMENT PERMIT** shall mean a permit issued by the County upon approval, by the County Board of Adjustment, of an application to develop a tower within the zoning jurisdiction of the County. Said permit

shall continue in full force and effect for so long as the tower to which it applies conforms to this section. Upon issuance, a Tower Development Permit shall be deemed to run with the land during the permits duration and may be transferred, conveyed, and assigned by the applicant to assigns and successors-in-interest.

14. **TOWER OWNER** shall mean any person with an ownership interest of any nature in a proposed or existing tower following the issuance of a Tower Development Permit.

8.01.03

Location of Towers and Construction Standards

1. Towers shall be permitted as a conditional use of the land in only those zoning districts where specifically listed and authorized in this Ordinance.
2. No person shall develop, construct, modify or operate a tower upon any tract of land within the zoning jurisdiction of the County prior to approval of its application for a Tower Development Permit by the County Board of Adjustment and issuance of the permit by the County. Applicants shall submit their application for a Tower Development Permit to the Zoning Office and shall pay a filing fee in accordance the Fee Schedule established by the County Board of Supervisors.
3. All towers, telecommunications facilities and antennas where construction has commenced within the zoning jurisdiction of the County, after the effective date of this Ordinance, shall conform to the Zoning Ordinance and all other construction standards set forth by the County, federal, and state law and applicable American National Standards Institute (ANSI). Upon completion of construction of a tower and prior to the commencement of use, an engineer's certification that the tower is structurally sound and in conformance with all of the aforementioned applicable regulatory standards shall be filed in the Zoning Office.
4. All tower locations shall meet all FAA regulations when near an airport.

8.01.04

Application to Develop a Tower

Prior to commencement of development or construction of a tower, an application shall be submitted to the Zoning Office for a Tower Development Permit and shall include the following:

1. Name, address, and telephone number of the owner and if applicable, the lessee of the tract of land upon which the tower is to be located. Applicants shall include the owner of the tract of land and all persons having an ownership interest in the proposed tower. The application shall be executed by all applicants.
2. The legal description and address of the tract of land on which the tower is to be located.
3. The names, addresses and telephone numbers of all owners of other towers or useable antenna support structures within a one mile radius of the proposed tower, including publicly and privately owned towers and structures.
4. An affidavit attesting to the fact that the applicant has made diligent but unsuccessful efforts to obtain permission to install or co-locate the applicant's telecommunications facilities on a tower or useable antenna support; or

written technical evidence from an engineer that the applicant's telecommunications facilities cannot be installed or co-located on another tower or useable antenna support structure.

5. Written technical evidence from an engineer that the proposed tower will meet the established Zoning Ordinance, and all other applicable construction standards set forth by the County Board of Supervisors and federal and state and ANSI standards.
6. Color photo simulations showing the proposed location of the tower with a photo-realistic representation of the proposed tower as it would appear viewed from the nearest residentially used and / or zoned property and nearest roadway, street or highway.
7. Descriptions and diagrams of the proposed tower, telecommunications facilities and/or antenna, manufacturers literature, appurtenances such as buildings, driveways, parking areas, and fences or other security enclosures with significant detail to allow persons reviewing the application to understand the kind and nature of the proposed facility.

8.01.05 ***Tower Development Permit Procedure***

After receipt of an application for a Tower Development Permit, the following shall occur:

1. The Zoning Administrator shall schedule a public hearing before the Zoning Commission, following all requirements for publication and notice, to consider such application.
2. The Zoning Commission shall review the application and make a recommendation to the Board of Adjustment.
3. The Zoning Administrator shall schedule a public hearing before the Board of Adjustment, following all requirements for publication and notice, to consider such application.
4. Notice, for said Public Hearing, shall be made at least one time and at least four days prior to such hearing. In addition, the Zoning Administrator shall cause a notice to be issued pursuant to the code of Iowa and the Ordinances of Boone County.
5. Notification will follow **Section 3.07**.
6. The Board of Adjustment shall receive testimony on the Tower Development Permit.
7. The Board of Adjustment may approve the Tower Development Permit as requested in the pending application with any conditions or safeguards it deems reasonable and appropriate based upon the application and / or input received at the public hearings or deny the application. In all zoning districts in which towers are a permitted conditional use of land, the Tower Development Permit shall be deemed a conditional use permit for said tract of land.

8.01.06 ***Setbacks and Separation or Buffer Requirements***

1. *All towers up to 50 feet in height* shall be setback on all sides a distance equal to the tower height.
2. *Towers in excess of 50 feet in height* shall be set back one additional foot for each foot of tower height in excess of 50 feet. The height of the tower shall be measured from the grade at the foot of the base pad to the top of any telecommunications facilities or antennas attached thereto. Setback

requirements shall be measured from the base of the tower to the property line of the tract of land on which it is located.

3. *Towers exceeding 100 feet in height* may not be located in any residentially zoned district and must be separated from all residentially zoned districts and occupied structures, other than those utilized by the tower owner, by a minimum of 200 feet or 100 percent of the height of the proposed tower, whichever is greater.
4. *Towers of 100 feet or less in height* may be located in residentially zoned districts provided said tower is separated from any residential structure, school, church, and/or occupied structures other than those utilized by the tower owner, by a minimum of 100 percent of the height of the tower.
5. Towers must meet the following minimum separation requirements from other towers:
 - a. Monopole tower structures shall be separated from all other towers, whether monopole, self-supporting lattice, or guyed by a minimum of 750 feet.
 - b. Self-supported lattice or guyed towers shall be separated from all other self-supporting lattice or guyed towers by a minimum of 1,500 feet.

8.01.07 ***Structural Standards for Towers Adopted***

The *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures*, 1991 Edition or later (ANSI/EIA/TIA 222-E-1991) is hereby adopted, together with any amendments thereto as may be made from time to time, except such portions as are hereinafter deleted, modified, or amended by Ordinance and set forth in this Article of the Zoning Ordinance.

8.01.08 ***Illumination and Security Fences***

1. Towers shall not be artificially lit except as required by the Federal Aviation Administration (FAA). All towers shall be equipped with dual mode lighting, unless red blinkers are the only light source used, with strobes used only during daylight hours.
2. All self-supporting lattice or guyed towers shall be enclosed within a security fence or other structure designed to preclude unauthorized access. Monopole towers shall be designed and constructed in a manner which will preclude to the extent practical, unauthorized climbing of said structure.

8.01.09 ***Exterior Finish***

Towers not requiring FAA painting or marking shall have an exterior finish which enhances compatibility with adjacent land uses, subject to review and approval by the Board of Adjustment as part of the application approval process. All towers must be approved as a conditional use shall be stealth design unless stealth features are impractical or the cost of such features represents an undue burden on the applicant.

8.01.10 ***Landscaping***

All tracts of land on which towers, antenna support structures, telecommunications facilities and/or antennas are located shall be subject to the landscaping requirements of the County.

8.01.11 ***Maintenance, Repair or Modification of Existing Towers***

Previously constructed permitted towers shall not be required to conform to this ordinance, unless altered. Nonconforming structures or uses may not be enlarged or the degree of nonconformance increased without complying with this Section, including applying for and obtaining a Tower Development Permit. Any modification or reconstruction of a tower constructed after the approval of this Ordinance shall be required to comply with the requirements of this Section including applying for and obtaining a Tower Development Permit. Said application shall describe and specify all items which do not comply with this Section and may request, subject to final review and approval of the County Board of Adjustment, an exemption from compliance as a condition of the Tower Development Permit.

8.01.12 ***Inspections***

The County reserves the right to conduct inspection of towers, antenna support structures, telecommunications facilities and antenna upon reasonable notice to the tower owner or operator to determine compliance with this Section and to prevent structural and equipment failures and accidents which may cause damage, injuries or nuisances to the public. Inspections may be made to determine compliance with the County's Zoning Ordinances and any other construction standards set forth by the County, federal, and state law or applicable ANSI standards. Inspections shall be made by either an employee of the County's Zoning Office, Building Inspector, or a duly appointed independent representative of the County.

8.01.13 ***Maintenance***

The towers, antenna support structures, telecommunications facilities and antennas shall at all times be kept and maintained in good condition, order and repair so that the same does not constitute a nuisance to or a danger to the life or property of any person or the public.

8.01.14 ***Abandonment***

If any tower shall cease to be used for a period of one year, the Zoning Office shall notify the tower owner and property owner that the site will be subject to determination by the Zoning Administrator that the site has been abandoned. Upon issuance of written notice to show cause by the Zoning Administrator, the tower owner shall have 30 days to show preponderance of evidence that the tower has been in use or under repair during the period of apparent abandonment. In the event the tower owner fails to show that the tower has been in use or under repair during the relevant period, the Zoning Administrator shall issue a final determination of abandonment of the site and the property owner shall have 75 days thereafter to coordinate with the tower owner for the dismantling and relocation of the tower. In the event the tower is not dismantled and removed, the tower shall be declared a public nuisance by the Zoning Administrator, or his/her designee and a written request shall be directed to the County Attorney to proceed to abate said public nuisance pursuant to authority of the Iowa Code and Boone

County codes, and charge the costs thereof against the real estate on which the tower is located or the owner of record of the said real estate.

8.01.15

Satellite Dish, Antennas, Regulations

Upon adoption of this Ordinance, installation of satellite dish antennas shall be permitted within the zoning jurisdiction of Boone County only upon compliance with the following criteria:

1. In residentially zoned districts, satellite dish antennas *may not exceed a diameter of ten (10) feet.*
2. Single family residences may not have more than one (1) satellite dish antenna over three (3) feet in diameter.
3. Multiple family residences with ten (10) or less dwelling units may have no more than one (1) satellite dish antenna over three (3) feet in diameter. Multiple family residences with more than ten (10) dwelling units may have no more than two (2) satellite dish antennas over three (3) feet in diameter.
4. All satellite dish antennas installed within the zoning jurisdiction of Boone County, upon adoption of this ordinance, shall be of a neutral color such as black, gray, brown, or such color as will blend with the surrounding dominant color in order to camouflage the antenna.