

176.40 WIRELESS COMMUNICATIONS TOWERS AND ANTENNAS.

1. For use in this section the following terms are defined:
 - A. “Antenna” means any exterior transmitting or receiving device mounted on a tower, building or structure and used in communications that radiate or capture electromagnetic waves, digital signals, analog signals, radio frequencies (excluding radar signals), wireless telecommunications signals or other communication signals.
 - B. “FAA” means the Federal Aviation Administration.
 - C. “FCC” means the Federal Communications Commission.
 - D. “Height” means, when referring to a tower or other structure, the distance measured from the finished grade to the highest point on the tower or other structure, including the base pad and any antenna.
 - E. “Preexisting towers and preexisting antennas” means any tower or antenna existing prior to the effective date of Ordinance No. 00-6.[†]
 - F. “Public” means the State of Iowa or any of its governmental subdivisions.
 - G. “Tower” means any structure that is designed and constructed for the purpose of supporting one or more antennas for telephone, radio and similar communication purposes, including self-supporting lattice towers, guyed towers, or monopole towers. The term includes radio and television transmission towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures, and the like. The term includes the structure and any support thereto.
2. Applicability.
 - A. New Towers and Antennas. All new towers or antennas in the City shall be subject to these regulations, except as provided in the following paragraphs B through E, inclusive.
 - B. Public Towers or Antennas. Any tower or antenna owned and operated by the State of Iowa or any of its governmental subdivisions or used by the State of Iowa or any of its governmental subdivisions, shall be exempt from this section provided the tower or antenna is for governmental purposes.

(Ord. 01-25 – Nov. 01 Supp.)
 - C. Amateur Radio Station Operators/Individual Residential Antennas. This section shall not govern any tower, or the installation of any antenna, that is seventy (70) feet or less in height and is owned and operated by a

[†] EDITOR’S NOTE: Ordinance No. 00-6 was passed and approved by the Council on March 2, 2000.

federally licensed amateur radio station operator or is used exclusively for an individual residence (dish antenna, etc.). Any tower, or the installation of any antenna, that is greater than seventy (70) feet in height and is owned and operated by a federally licensed amateur radio station operator or is used exclusively for an individual residence (dish antenna, etc.) shall be subject to a conditional use review pursuant to Section 176.36(6) of this chapter.

D. Preexisting Towers or Antennas. Preexisting towers and preexisting antennas shall not be required to meet the requirements of this section, other than the requirements of paragraphs 3(F) and (G) of this section.

E. AM Array. For purposes of implementing this section, an AM array, consisting of one or more tower units and supporting ground system which functions as one AM broadcasting antenna, shall be considered one tower. Measurements for setbacks and separation distances shall be measured from the outer perimeter of the towers included in the AM array. Additional tower units may be added within the perimeter of the AM array by right.

3. General Requirements.

A. Principal or Accessory Use. Antennas and towers may be considered either principal or accessory uses.

B. Lot Size. For purposes of determining whether the installation of a tower or antenna complies with district development regulations, including but not limited to setback requirements, lot coverage requirements, and other such requirements, the dimensions of the entire lot shall control, even though the antennas or towers may be located on leased parcels within such lot.

C. Inventory of Existing Sites. Each applicant for an antenna and/or tower shall provide to the Zoning Official an inventory of

its existing towers that are either within the jurisdiction of the City or within one mile of the border thereof, including specific information about the location, height, and design of each tower. The Zoning Official may share such information with other applicants applying for administrative approvals or conditional use permits under this section or other organizations seeking to locate antennas within the jurisdiction of the City, provided, however that the Zoning Official is not, by sharing such information, in any way representing or warranting that such sites are available or suitable.

D. Aesthetics. Towers and antennas shall meet the following general aesthetic requirements.

(1) Towers shall either maintain a galvanized steel finish or, subject to any applicable standards of the FAA, be painted a neutral color so as to reduce visual obtrusiveness.

(2) At a tower site, the design of the buildings and related structures shall, to the extent possible, use materials, colors, textures, screening and landscaping that will blend them into the natural setting and surrounding buildings.

(3) If an antenna is installed on a structure other than a tower, the antenna and supporting electrical and mechanical equipment must be of a neutral color that is identical to or closely compatible with the color of the supporting structure so as to make the antenna and related equipment as visually unobtrusive as possible.

E. Lighting. Towers and antennas shall not be artificially lighted, unless required by the FAA or other applicable authority. If lighting is required, the lighting alternatives and design chosen must cause the least disturbance to the surrounding views.

F. State or Federal Requirements. All towers and antennas must meet or exceed current standards and regulations of the FAA, the FCC and any other agency of the State or Federal government with the authority to regulate towers and antennas. If such standards and regulations are changed, then the owners of the towers and antennas governed by this section shall bring such towers and antennas into compliance with such revised standards and regulations within six (6) months of the effective date of such standards and regulations, unless a different compliance schedule is mandated by the controlling State or Federal agency. Failure to bring towers and antennas into compliance with such revised standards and regulations shall constitute grounds for the removal of the tower or antenna at the owner's expense.

G. Building Codes; Safety Standards. Notwithstanding any provisions of this section, the construction of towers, antennas and supplemental buildings and equipment shall comply with applicable State and local building, electrical and mechanical codes, as amended from time to time. If, upon inspection, the City concludes that such facility fails to comply with such codes and standards and constitutes a danger to persons or property, then upon notice being provided to the owner of the facility, the owner shall bring such facility into compliance as set forth in said notice.

H. Measurement. For purposes of measurement, tower setbacks and separation distances shall be calculated and applied to facilities located in the City irrespective of municipal and County jurisdictional boundaries.

I. Not Essential Services. Towers and antennas shall be regulated and permitted pursuant to this section and shall not be regulated or permitted as essential services, public utilities, or private utilities.

J. Signs. No signs shall be allowed on an antenna or tower, other than safety or warning signs.

K. Buildings and Support Equipment. Buildings and support equipment associated with antennas or towers shall comply with the requirements of subsection 15 of this section.

L. Multiple Antenna/Tower Plan. The City encourages the users of towers and antennas to submit a single application for approval of multiple towers and/or antenna sites.

M. Co-location. No wireless communications owner, operator, lessee and/or employee thereof shall act to exclude or attempt to exclude any other wireless communications provider from using the same building, structure or location. Wireless communications owners, operators, lessees and/or employees thereof shall cooperate in good faith to achieve co-location of wireless telecommunication towers, antennas and equipment with other wireless communications providers.

N. Certification of Information. Any information of an engineering nature that the applicant submits, whether civil, mechanical, or electrical, shall be certified by a licensed professional engineer.

4. Administratively Permitted Uses Generally. The following provisions shall govern the issuance of administrative approvals for towers and antennas.

A. The Zoning Official may administratively approve the uses listed in subsection 5 of this section.

B. Each applicant for administrative approval shall apply to the Zoning Official providing the information set forth in subsection 8 of this section.

C. The Zoning Official shall review the application for administrative approval and determine if the proposed use complies with subsections 5 and 8 through 15 of this section, as applicable.

D. If an administrative approval is denied, the applicant may file an appeal to the Zoning Board of Adjustment pursuant to Section 176.36 of this chapter.

5. List of Administratively Permitted Uses. The following uses may be permitted by the Zoning Official after conducting an administrative review:

A. Locating a tower, including the placement of additional buildings or other supporting equipment used in connection with said tower, in the following Zoning Districts:

I-1, Restricted Industrial

I-1P, Industrial Park

I-2, General Industrial

B. Locating a tower, including the placement of additional buildings or other supporting equipment in Planned Development Zoning Districts, provided said facilities are in compliance with an approved Final Development Plan. If not specifically included on an approved Final Development Plan, a revised Final Development Plan shall be required pursuant to subsection 176.34 of this chapter.

C. Locating antennas on existing structures or towers consistent with the terms of paragraphs (1) and (2) below.

(1) Any antenna which is not attached to a tower, that is an accessory use to a public structure in any district, or an accessory use to a commercial or industrial structure located in any district except those listed in paragraph 7(B) of this section, provided:

a. The antenna is located as far from the edge of the roof or top of the structure as possible and does not extend more than fifteen (15) feet above the highest point of the structure when attached to the roof or top of the structure;

b. The antenna is mounted in a configuration as flush to the wall as technically possible and does not project above the wall on which it is attached when mounted to the wall of a structure;

c. The antenna complies with all applicable FCC and FAA regulations;

d. The antenna complies with all applicable building codes; and

e. A license or lease authorizing such antenna or tower has been approved by the property owner.

(2) Any antenna which is attached to an existing tower provided a licensed engineer certifies the existing tower can structurally accommodate the additional antenna.

6. Conditional Uses Generally. Applications for conditional use permits from the Zoning Board of Adjustment under this subsection shall be subject to the procedures and requirements of Section 176.36 of this chapter and subsections 3 and 6 through 15 of this section as applicable.

7. List of Conditional Uses. The following conditional uses may be permitted by the Zoning Board of Adjustment:

A. Locating a tower, including the placement of additional buildings or other supporting equipment used in connection with said tower, in the following Zoning Districts:

O-2, Office Park
RT-1, Residential/Transitional Use
C-3P, Commercial Park
C-3, General Commercial
C-4, Warehouse Commercial

B. Locating antennas on existing structures consistent with the terms of subsections (1) through (6) in the following districts:

A-1, Rural Restricted
R-1, Low Density Single-Family Residential
R-2, Medium Density Single-Family Residential
R-3, Two-Family Residential
R-4, Four-Family Residential
R-5, Moderate Density Multiple-Family Residential
R-6, High Density Multiple-Family Residential
R-6A, Medium Density Multiple-Family Residential
R-M, Mobile Home Park
PD-R, Planned Development Residential
O-1, Office-Transitional District
C-1, Neighborhood Commercial
C-2, Central Business District Commercial

(1) The antenna is an accessory use to any commercial, industrial, or multi-family structure of eight or more dwelling units.

(2) The antenna is located as far from the edge of the roof or top of the structure as possible and does not extend more than fifteen

(15) feet above the highest point of the structure when attached to the roof or top of the structure.

(3) The antenna is mounted in a configuration as flush to the wall as technically possible and does not project above the wall on which it is attached when mounted to the wall of a structure.

(4) The antenna complies with all applicable FCC and FAA regulations.

(5) The antenna complies with all applicable building codes.

(6) A license or lease authorizing such antenna or tower has been approved by the property owner.

8. Submittal Requirements. Applicants for a permit to construct a tower and/or antenna shall submit the following information (as applicable):

A. A scaled site plan clearly indicating the location, type and height of the proposed tower and/or antenna, on-site land uses and zoning, adjacent land uses and zoning, Comprehensive Plan land use designation and zoning of the site and all properties within the applicable separation distances set forth in subsection 12 (including when adjacent to other municipalities), adjacent roadways, proposed means of access, setbacks from property lines, elevation drawings of the proposed tower and/or antenna and any other structures, topography, parking, and other information deemed by the decision maker to be necessary to assess compliance with this section.

B. Legal description of the parent tract and leased parcel (if applicable).

C. The separation distance between the proposed tower and the nearest residentially zoned property.

D. The separation distance from other towers described in the inventory of existing sites submitted pursuant to subsection 3(C) shall be shown on an updated site plan or map. The applicant shall also identify the type of construction of the existing tower(s) and the owner/operator of the existing tower(s), if known.

E. A landscape plan showing specific landscape materials.

F. Method of fencing, and finished color and, if applicable, the method of camouflage and illumination.

G. A description of compliance with subsections 3 and 8 through 14 of this section and all applicable Federal, State or local laws.

H. A statement by the applicant as to whether construction of the tower will accommodate co-location of additional antennas for future users.

I. Identification of other cellular sites owned or operated by the applicant within the City.

J. A description of the suitability of the use of existing towers, other structures or alternative technology not requiring the use of towers or structures to provide the services to be provided through the use of the proposed new tower.

K. A description of the feasible location(s) of future towers or antennas within the geographic area based upon existing physical, engineering, technological or geographical limitations in the event the proposed tower is erected.

9. Factors Considered in Granting Conditional Use Permits for Towers. In addition to any standards for consideration of conditional use permit applications pursuant to Section 176.36(6) of this chapter, the Zoning Board of Adjustment shall consider the following factors in determining whether to issue a conditional use permit, although the Zoning Board of Adjustment may waive or reduce the burden on the applicant of one or more of these criteria if the Board concludes that the goals of this section are better served thereby.

A. Height of proposed tower;

B. Proximity of the tower to residential structures and residential district boundaries;

C. Nature of uses on adjacent and nearby properties;

D. Surrounding topography;

E. Surrounding tree coverage and foliage;

F. Design of the tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness;

G. Proposed ingress and egress; and

H. Availability of suitable existing towers, other structures or alternative technologies not requiring the use of towers or structures, as discussed in subsection 10 of this section.

10. Availability of Suitable Existing Towers, Other Structures or Alternative Technology. No new tower shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the decision maker that no existing tower, structure or alternative technology can accommodate the applicant's needs. Evidence submitted shall address the following:

A. No existing towers or structures are located within the geographic area that meet the applicant's engineering requirements.

B. Existing towers or structures are not of sufficient height to meet applicant's engineering requirements.

C. Existing towers or structures do not have sufficient structural strength to support applicant's proposed antenna and related equipment.

D. The applicant's proposed antenna would cause electromagnetic interference with the antenna on the existing towers or structures, or the antenna on the existing towers or structures would cause interference with the applicant's proposed antenna.

E. The fees, costs, or contractual provisions required by the owner in order to share an existing tower or structure or to adapt an existing tower or structure for sharing are unreasonable. Costs exceeding new tower development are presumed to be unreasonable.

F. Other limiting factors that render existing towers and structures unsuitable are demonstrated.

G. Alternative technology that does not require the use of towers or structures, such as a cable micro cell network using multiple low-powered transmitters/receivers attached to a wire line system, is unsuitable.

11. Setbacks. The following setback requirements shall apply to all wireless communications towers:

A. Towers must be set back a distance equal to at least seventy-five percent (75%) of the height of the tower from any adjoining lot line.

B. Guys and accessory buildings must satisfy the minimum zoning district setback requirements.

12. Separation. The following separation requirements shall apply to all wireless communications towers.

A. Separation From Residentially Zoned Property.

(1) Wireless communications towers shall be separated from any residentially zoned property (regardless of development status) by a distance of 300 feet or 300% of the height of the tower, whichever is greater.

(2) Separation distances between towers and residentially zoned property shall be measured by drawing or following a straight line from the base of the proposed tower to the nearest point of the residential district boundary.

B. Separation Distances Between Towers.

(1) Separation distances between towers shall be measured between the proposed tower and preexisting towers. The separation distances shall be measured by drawing or following a straight line between the base of the existing tower and the proposed base, pursuant to a site plan, of the proposed tower.

(2) The separation distances (listed in linear feet) shall be as shown in Table 1.

Existing Towers – Types				
	Lattice	Guyed	Monopole 75 Feet in Height or Greater	Monopole Less than 75 Feet in Height
Lattice	5,000	5,000	1,500	750
Guyed	5,000	5,000	1,500	750
Monopole 75 Feet in Height or Greater	1,500	1,500	1,500	750
Monopole Less than 75 Feet in Height	750	750	750	750

13. Security Fencing. Towers shall be enclosed by fencing not less than six feet in height and shall also be equipped with an appropriate anti-climbing device.

14. Landscaping. The following requirements shall govern the landscaping surrounding ground-based towers unless the tower is located in an Industrial zoned district.

A. Ground-based towers shall be landscaped with a buffer of plant materials that effectively screens the view of the tower compound from adjoining properties. The standard buffer shall consist of an evergreen hedge with an ultimate height of at least 5 feet and a planted height of at least 36 inches outside the perimeter of the compound.

B. In locations where the visual impact of the ground-based tower would be minimal, the landscaping requirement may be reduced or waived by the decision maker.

C. Existing mature tree growth and natural landforms on the site shall be preserved to the maximum extent possible. In some cases, such as towers sited on large, wooded lots, natural growth around the property perimeter may be sufficient buffer.

15. Buildings or Other Equipment Storage. Any buildings and support equipment associated with antennas or towers are subject to the following:

A. When located on a roof or top of an existing structure, the buildings and support equipment shall be located as far from the edge of the roof or top as possible.

B. When located on the ground, the buildings and support equipment shall meet or exceed the minimum setbacks of the applicable zoning district.

C. Roof-mounted buildings and support equipment shall be screened by parapet walls or screen walls in a manner compatible with the building's design, color and material.

D. Ground-mounted buildings and support equipment shall be enclosed by a 6-foot high wood fence. An evergreen hedge with an ultimate height of at least 5 feet and a planted height of at least 36 inches shall be planted along the perimeter of the fence.

16. Removal of Abandoned Antennas and Towers. Any antenna or tower that is not operated for a continuous period of twenty-four (24) months shall be considered abandoned, and the owner of such antenna or tower shall remove the same within ninety (90) days of receipt of notice from the City notifying the owner of such abandonment. Failure to remove an abandoned antenna or tower within said ninety days shall be grounds to remove the tower or antenna at the owner's expense. If there are two or more users of a single tower, then this provision shall not become effective until all users cease using the tower.

17. Nonconforming Uses.

A. Not Expansion of Nonconforming Use. Towers that are constructed and antennas that are installed in accordance with the provisions of this section shall not be deemed to constitute the expansion of a nonconforming use or structure.

B. Preexisting Towers. Preexisting towers shall be allowed to continue their usage as they presently exist. Routine maintenance (including replacement with a new tower of like construction and height) shall be permitted on such preexisting towers. New construction other than routine maintenance on a preexisting tower shall comply with the requirements of this section.

C. Rebuilding Damaged or Destroyed Nonconforming Towers or Antennas. Notwithstanding subsection 16, bona fide non-conforming towers or antennas that are damaged or destroyed may be rebuilt without having to first obtain administrative approval or a conditional use permit and without having to meet the setback and separation requirements specified in subsections 11 and 12. The type, height, and location of the tower on site shall be of the same type and intensity as the original facility approval. Building permits to rebuild the facility shall comply with the then applicable building codes and shall be obtained within 180 days from the date the facility is damaged or destroyed. If no permit is obtained or if said permit expires, the tower or antenna shall be deemed abandoned as specified in subsection 16.