CHAPTER 28: TOWERS

28.01	Findings and Purpose
28.02	Definitions
28.03	General Regulations
28.04	Performance Standards
28.05	Application Process
28.06	Non-Tower Facilities
28.07	Removal of Towers or Commercial Telecommunication Service Facilities
28.08	Additional Requirements
28.09	Variances
28.10	Violation
28.11	Severability
28.12	Penalties

28.01 Findings and Purpose

A. Findings.

- (1) The Federal Communications Act of 1934 as amended by the Telecommunications Act of 1996 ("the Act") governs the construction, placement, and modification of personal wireless service facilities.
- (2) Consistent with the Act, the general purpose of this section is to manage the placement, construction, and modification of telecommunication towers, antennas and related facilities in order to protect the health, safety and welfare of the public, while not unreasonably interfering with the development of the competitive wireless telecommunications marketplace in the city.

B. Purpose.

- (1) In furtherance of the goals of the city and within the framework of the Act and state law, the city will give due consideration to the city's comprehensive plan, zoning districts, existing land uses, and environmentally sensitive areas in approving sites for the location of towers and antennas. Specifically, the purposes of this section are:
 - (a) To provide for wireless telecommunication services for the residents and businesses of the City;

- (b) To minimize adverse visual impacts of telecommunication towers and facilities through design, siting, landscaping, and innovative camouflaging techniques;
- (c) To promote and encourage shared use and collocation of telecommunication towers and antenna support structures so as to reduce the number of towers needed to serve the area;
- (d) To avoid damage to adjacent properties caused by telecommunication towers and facilities by ensuring that those structures are soundly and carefully designed, constructed, modified, maintained and promptly removed when no longer used or when determined to be structurally unsound.

28.02 Definitions

- A. For purposes of this section the following terms have the meanings given them, except where the context clearly indicates a different meaning:
 - (1) "Antenna" means any device which is designed to transmit or receive any electromagnetic, microwave, radio, television, or other frequency energy waves including but not limited to directional and omni-directional antennae such as microwave dishes, satellite dishes and whip antennae.
 - (2) "Antenna support structure" means a building, water tower, or other structure, other than a telecommunications tower, which can be used for location of telecommunications facilities.
 - (3) "Applicant" means a person who applies for a permit to develop, construct, build modify or erect a tower or antenna under this section.
 - (4) "Application" means the process by which the owner of a plot of land within the city or other person submits a request to develop, construct, build, modify or erect a tower or antenna upon that land.
 - (5) "Commercial wireless telecommunication services" mean licensed commercial wireless telecommunication services including cellular, personal communication services (PCS), specialized mobilized radio (SMR), enhanced specialized mobilized radio (ESMR), paging and television similar services that are marketed to the general public.
 - (6) "Engineer" means an engineer licensed by the state of Minnesota.
 - (7) "Person" means any natural person, firm, partnership, association, corporation, company, or other legal entity, private or public, whether for profit or not for profit.
 - (8) "Stealth" means design features that blend a structure into the surrounding environment; examples of stealth facilities include, without limitation, architecturally screened roof-mounted antennas, antennas integrated into architectural elements, and telecommunications towers designed to appear other than as a tower, such as light poles, power poles, and trees or other vertical structures as they normally appear in their existing environments.
 - (9) "Telecommunications facilities" means cables, wires, lines, wave guides, antennas or any other equipment or facilities associated with the transmission or reception of telecommunications located or installed on or adjacent to a tower or antenna support structure. The term does not include:

- (a) A satellite earth station antenna two meters in diameter or less located in an industrial or commercial district;
- (b) A satellite earth station antenna one meter or less in diameter, wherever located; or
- (c) A tower.
- (10) "Telecommunications tower" or "tower" means any ground or roof mounted pole, spire, structure or combination thereof taller than 15 feet including supporting lines, cables, wires, braces and masts intended primarily for the purpose of mounting an antenna or similar apparatus above grade.

28.03 General Regulations

- A. Development of towers; approval required.
- (1) Towers supporting amateur radio antennas and conforming to all applicable provisions of this Ordinance shall be allowed in rear yards of residentially zoned parcels under a conditional use permit is issued and no more than one tower exists at any one time on one residential parcel.
- (2) Commercial telecommunications towers shall be allowed in industrial zoning districts provided a conditional use permit is issued.
- (3) Building Permit Required. Towers may not be constructed in any zoning district unless a building permit has been issued by the building official.
- (4) City Property. The city may authorize the use of city property for towers in accordance with the procedures of this code. The city has no obligation to allow the use of city property for this purpose.
- (5) Right-of-Way. Except as approved by the city, no part of any telecommunications tower or telecommunications facilities, nor any lines, cable, equipment, wires or braces shall at any time extend across or over any part of the right-of-way, public street, highway, sidewalk or property line.
- (6) Proof of Insurance Coverage Required. The applicant shall provide evidence satisfactory to the city that its tower and telecommunication facilities thereon are adequately insured for personal injury and property damage liability. Upon request, the holder of a conditional use permit issued under this chapter shall submit to the city clerk a photocopy of a certificate of insurance showing that the tower or antenna facility is insured for that calendar year.
- B. Exemptions. No permits are required for the following:
- (1) Household television antennas extending less than 15 feet above the highest point of a residential structure.
- (2) Satellite dish receiving antennas two meters or less in diameter.
- (3) Adjustment, repair or replacement of the elements of an antenna, provided that such work does not constitute a clear safety hazard.
- (4) Antennas and antenna support structures used by the city for city purposes.

- (5) Emergency or routine repairs, reconstruction, or routine maintenance of previously approved facilities, or replacement of transmitters, antennas, or other components or previously approved facilities which do not create a significant change in visual impact or an increase in radio frequency emission levels, and provided that such work does not constitute a clear safety hazard.
- (6) Two-way communication transmitters used on a temporary basis by a "911" emergency services, including fire, police and emergency aid or ambulance service.
- (7) Radio transceivers normally hand-held or installed in moving vehicles, such as automobiles, watercraft, or aircraft. This includes cellular phones.

28.04 Performance Standards

- A. Co-location capability.
- (1) A proposal for a new commercial wireless telecommunication service tower shall not be approved unless the Council finds that the telecommunications equipment planned for the proposed tower cannot be accommodated on an existing or approved tower or building within one mile of the proposed tower because:
 - (a) The planned equipment would exceed the structural capacity of the existing or approved tower or building, or
 - (b) The planned equipment would cause interference materially impacting the usability of other existing or planned equipment as documented by a qualified and licensed professional engineer.
 - (c) Existing or approved towers and buildings within one mile of the proposed tower cannot accommodate the planned equipment at a height necessary to function reasonable as documented by a qualified and licensed engineer.
 - (d) Other unforeseen reasons that make it not feasible to locate the planned equipment upon an existing or approved tower or building.
- (2) A new tower may not be built, constructed or erected in the city unless the tower is capable of supporting additional telecommunications facilities other than what the applicant proposes.
- B. Setback Requirements. A tower must comply with the following setback requirements:
- (1) A tower shall not interfere with arrival/departure corridors for the Sibley Medical Center heliport as mapped by the Minnesota Department of Transportation Aeronautics Division.
- (2) Setback requirements for towers are measured from the base of the tower to the property line of the parcel on which it is located.
- (3) Amateur radio towers when not rigidly attached to a building shall be setback a distance equal to the height of the antenna and tower. Amateur radio towers when rigidly attached to a building may exceed the required setback by an amount that is equal to the distance from the point of attachment to the ground.

- (4) Commercial wireless telecommunication service towers shall have a minimum setback from any property line equal to the height of the tower plus 10 feet, unless otherwise provided in this section.
- (5) Commercial wireless telecommunication service towers located next to a residential zone shall have a setback equaling the height of the tower plus 100 feet.
- (6) The minimum spacing between commercial wireless telecommunication service tower locations is one mile.
- (7) A tower setback may be reduced by variance to allow for the integration of a tower into an existing or proposed structure such as a church steeple, light standard, power line support device or similar structure.
- C. Towers must be designed and certified by a licensed and qualified professional engineer to conform to the latest structural standards and wind loading requirements of the Building Code and the Electronics Industry Association and the provisions of the National Electric Code.

D. Construction Standards.

- (1) Tower Design. A tower shall be designed to ensure that visual intrusiveness and impacts on nearby properties is mitigated to the greatest extent feasible.
- (2) Every tower affixed to the ground shall be protected to discourage climbing of the tower by unauthorized persons.

(3) Height Restrictions.

- (a) Commercial wireless telecommunication service towers may not exceed the lesser of 195 feet in height or the minimum height necessary to provide adequate coverage in the city by the provider of wireless service. Measurement of tower height must include the tower structure itself, the base pad, and any telecommunications facilities attached thereto. Tower height is measured from grade.
- (b) Amateur radio towers in residential areas shall not exceed a height equal to the minimum height necessary to provide adequate service but shall in no case exceed seventy (70) feet in height.
- (4) Lighting. Towers may not be artificially lit except as required by the Federal Aviation Administration or as required by the City for heliport safety. If so required, lighting shall be of a type, color and intensity so as to minimize visual intrusiveness, particularly at night.
- (5) Exterior Finish. Towers not requiring Federal Aviation Administration painting or marking must have an exterior finish as approved in the site plan.
- (6) Fencing. Fences constructed around or upon parcels containing towers, antenna support structures, or telecommunications facilities must be constructed as approved in the site plan.
- (7) Landscaping. Landscaping on parcels containing towers, antenna support structures or telecommunications facilities must be in accordance with landscaping requirements as approved in the site plan. Utility buildings and structures accessory to a tower must be architecturally designed to blend in with the surrounding environment and to meet such setback requirements as are

compatible with the actual placement of the tower. Ground mounted equipment must be screened from view by suitable vegetation, except where a design of non-vegetative screening better reflects and complements the character of the surrounding neighborhood.

- (8) Associated Equipment and Accessory Buildings.
 - (a) Ground equipment associated with a tower or commercial wireless telecommunication service facility shall be screened by vegetative or other screening compatible with the surrounding environment.
 - (b) No more than one accessory building is permitted per commercial wireless telecommunication service tower unless collocation requirements require a second structure. Said accessory structure may be no more than 200 square feet in size, shall meet the setback requirements of the underlying zoning district and be architecturally designed to blend in with the surrounding environment.
 - (c) All support structures shall be reasonably protected against climbing.
- (9) Commercial wireless telecommunication service towers must be reasonably posted and secured to protect against trespass. All signs must comply with applicable sign regulations.
- (10) Commercial wireless telecommunication service towers must be of stealth design as approved in the site plan unless the city determines that such design is infeasible due to the lack of vertical structures in the vicinity of the proposed site.
- (11) Signs and Advertising. The use of any portion of a tower for signs other than warning or equipment information is prohibited.
- (12) Types of Towers. Towers must be self-supporting without the use of guys, wires, cables, beams or other means.
- (13) Tower Materials. All metal towers shall be constructed of, or treated with, corrosion-resistant material. Wooden structures shall be impregnated with rot resistant substances.
- (14) Equipment housing. Transmitting, receiving and switching equipment shall be housed within an existing structure whenever possible. If a new equipment building is necessary for transmitting, receiving and switching equipment, it shall meet the requirements of Section 4, Subd. 4(H) of this Ordinance.

28.05 Application Process

- A. Building Permit Required. A person desiring to construct a tower must submit an application for a building permit and a conditional use permit, to the zoning administrator.
 - B. Application Requirements. An application to develop a tower must include:
 - (1) Name, address, and telephone number of the applicant;
 - (2) Name, address, and telephone numbers of the owners of the property on which the tower is proposed to be located;

- (3) Legal description of the parcel on which the tower is proposed to be located;
- (4) Written consent of the property owner(s) to the application;
- (5) A scaled site plan indicating the location, type and height of the proposed tower, the existing land uses and zoning of the subject parcel, adjacent land uses and zoning, adjacent roadways, proposed means of access, setbacks from property lines, drawings of the proposed tower showing elevation and other structures, topography, parking, and depicting the proposed tower design;
- (6) A landscape plan showing specific landscape materials, method of fencing, and finished color and, if applicable, the method of camouflage and lighting;
- (7) Documentation such as coverage maps showing the need for a tower at the proposed site in order to close a gap in the applicant's wireless telecommunications service, or a gap in the service provided by a person intending to place telecommunications facilities on the tower;
- (8) An inventory of existing towers, antennas, or sites approved for towers or antennas, that are either within the city or are sited in a location from which the applicant could provide service within the city, including specific information about the location, height and design of each tower and documentation showing that such existing facilities are unavailable or unsuitable to meet the applicant's need for a tower;
- (9) Separation distance of the proposed tower from the other towers described in the inventory of existing sites;
- (10) A structural engineering report certifying the ability of the tower to accommodate co-location of additional wireless service provider facilities and a statement by the applicant regarding accommodation for co-location of additional antennas for future users;
- (11) The setback distance between the proposed tower and the nearest platted residential property, and unplatted residentially zoned properties;
- (12) Proof that all necessary consents or approvals have been applied for from appropriate federal, state or other local agencies;
- (13) An application fee established from time to time by resolution of the city council. In the event the city elects to consult with its attorney or a radio frequency (RF) engineer in review of the application, the applicant shall be required to fully reimburse the city for all such expenses;
- (14) Other information deemed by the zoning administrator to be necessary.

28.06 Non-Tower Facilities

- A. Commercial wireless telecommunication service antennae on roofs, walls and existing towers are a conditional accessory use in the industrial districts and city property, provided that the owner of such telecommunications facilities, by written certification to the building official, establishes the following facts at the time plans are submitted for a building permit:
 - (1) That the height from grade of the telecommunications facilities and antennae support structure does not exceed the maximum height from grade of the roof, walls, or other antenna support structure by more than 20 feet;

- (2) That a qualified and licensed professional engineer submits a written report indicating the existing roof, wall or other antenna support structure is suitable to accept and support the commercial telecommunications accessory antenna and the proposed method of affixing the antenna to the roof, walls, or other antenna support structure; and that the proposed telecommunications facilities and support structure comply with the Uniform Building Code; and
- (3) That telecommunications facilities located above the primary roof of an antenna support structure are set back one foot from the edge of the primary roof for each one foot in height above the primary roof of the telecommunications facilities. This setback requirement does not apply to antennas that are mounted to the exterior of antenna support structures below the primary roof; such antennas may not protrude more than six inches from the side of the antenna support structure.

28.07 Removal of Towers or Commercial Telecommunication Service Facilities

Abandoned or unused towers and associated above-ground facilities must be removed within 90 days of the cessation of operations of the telecommunications facility at the site unless an extension is approved by the City Council. Any tower and associated telecommunications facilities that are not removed within 90 days of the cessation of operations at a site are declared to be public nuisances and may be removed by the City and the costs of removal assessed against the property pursuant to state law and the code. The conditional use permit shall establish an amount to be posted by bond, letter of credit, cash or equivalent by the applicant that will cover the projected cost of removal of towers or telecommunications facilities in the event of abandonment.

28.08 Additional Requirements

- A. Structural Inspections.
- (1) The City may conduct inspections at any time, upon reasonable notice to the property owner and the tower owner to inspect the tower for the purpose of determining if it complies with the Uniform Building Code and other construction standards provided by the City Code, federal and state law. The City's expense related to such inspections will be borne by the tower owner or property owner. Based upon the results of an inspection, the building official may require repair, modification or removal of a tower.
- (2) Deviation from original construction for which a permit is obtained constitutes a violation of this Section.
- (3) Notice of violations will be sent by postal mail to the owner and the owner will have thirty days from the date the notification is issued to make repairs.
- B. Radiation Emission Inspections. The owner of a telecommunications facility shall provide the City with current, technical evidence of compliance with FCC radiation emission requirements at the City's reasonable request.
- C. Maintenance. Towers and telecommunication facilities must be maintained in accordance with the following provisions:
 - (1) Tower owners must employ ordinary and reasonable care in construction and use commonly accepted methods and devices for preventing failures and accidents that are likely to cause damage, injuries, or nuisances to the public.

- (2) Tower owners must install and maintain towers, telecommunications facilities, wires, cables, fixtures and other equipment in compliance with the requirements of the National Electric Safety Code and all Federal Communications Commission, state, and local regulations, and in such a manner that they will not interfere with the use of other property.
- (3) Towers, telecommunications facilities, and antenna support structures must be kept and maintained in good condition, order, and repair.
- (4) Maintenance or construction on a tower, telecommunications facilities or antenna support structure must be performed by qualified maintenance and construction personnel.
- (5) All tenants on towers must comply with radio frequency emissions standards of the Federal Communications Commission.
- (6) If the use of a tower is discontinued by the tower owner, the tower owner must provide written notice to the city of its intent to discontinue use and the date when the use will be discontinued.

28.09 Variances.

- A. The applicant may apply for a variance from the provisions of this section to the extent expressly indicated herein.
- B. A variance may be granted if the applicant shows by clear and convincing evidence that it or its tenants cannot meet reasonable service quality needs of end users in the city without a variance from the requirements of this section.
- C. If the applicant makes the showing required by Subdivision 2 the City Council must consider the following additional factors in determining whether to grant a variance:
 - (1) Whether there are exceptional or extraordinary circumstances that apply to the property because of lot size or shape, or topography, or other circumstances over which the owners of the property have no control;
 - (2) Whether special conditions or circumstances exist that were not created by the applicant or the owner of the property or their predecessors;
 - (3) Whether the variance would be detrimental to the public or to the owners of other property in the vicinity; and
 - (4) Whether the variance requested is the minimum variance that would alleviate the hardship.
 - (5) Whether the variance is in keeping with the spirit and intent of this ordinance.
 - (6) Whether the variance, if granted, will not alter the essential character of the locality.
- D. A variance will be granted only in instances where the strict enforcement of the requirements of this section would cause undue hardship. Economic consideration alone will not constitute an undue hardship if reasonable use of the property exists under the terms of this section.

28.10 Violation

- A. Violation. If the permitee fails to comply with any provision of the city code, federal or state law or the conditional use permit requirements, the city may impose penalties for noncompliance, and it may revoke the permit in accordance with the following provisions:
 - (1) Except as provided in subdivision 1(B) below, a permit revocation shall be preceded by written notice to the permittee of the alleged violation(s), the opportunity to cure the violation(s) during a period not to exceed 30 days following receipt of the written notice and a hearing before the city council within 15 days after receiving written notice of the hearing. The hearing shall provide the permittee with an opportunity to show cause as to why the permit should not be revoked.
 - (2) If the city finds that exigent circumstances exists requiring immediate permit revocation, the city may revoke the permit and shall provide a post-revocation hearing at least 15 days after permittee's receipt of written notice of the hearing.
 - (3) Any decision to revoke shall be in writing and supported by substantial evidence contained in a written record.

28.11 Severability

Should any section, subdivision, clause or other provision of this Ordinance be held to be invalid by any court of competent jurisdiction, such decision shall not affect the validity of the Ordinance as a whole, or of any part thereof, other than the part held to be invalid.

28.12 Penalties

A violation of the provisions of this Ordinance or failure to comply with any of its requirements (including violations of conditions and safeguards established in connection with grants of variance) shall constitute a misdemeanor, punishable by the fines and other penalties established under state law for misdemeanors in effect on the date the violation occurs. Each day that a violation is allowed to exist shall be considered a separate misdemeanor violation, to be punishable by a separate fine and other penalties for each such day.