

SECTION 31: PERFORMANCE STANDARDS PERTAINING TO ANTENNAS AND ANTENNA SUPPORT STRUCTURES

Subd. 1. Purpose. In order to accommodate the communication needs of residents and businesses while protecting the public health, safety and general welfare of the community, the City of Long Lake finds that these regulations are necessary in order to maximize the use of existing and approved for telecommunication, transmitting and receiving antennas to reduce the number of antenna support structures needed to serve the community, and to establish predictable and balanced regulations for the siting and screening of wireless communications equipment while protecting the public against any adverse impacts on the City's aesthetic resources and the public welfare.

Subd. 2. General Standards. The following standards shall apply to all antennas, accessory and secondary use antennas, and antenna support structures in every zoning district:

- A. All obsolete and unused antennas, antenna support structures, or related facilities as defined herein, shall be removed within twelve (12) months of cessation of operation at the site by the owner of the antenna or the property, unless an exemption is granted by the City Council, in the same manner and pursuant to the procedures for dangerous and unsafe structures established by Minnesota Statutes, Sections 463.15 through 463.26.
- B. The owner or property owner shall maintain the antenna and antenna support structure in a manner that continually complies with all City building and electrical code requirements, and manufacturer requirements. If repair and/or maintenance of the antenna and/or antenna support structure is required, the owner or property owner, as applicable, shall obtain all required permits for repair and maintenance.
- C. The structural design, mounting and installation of the antenna shall be in continuous compliance with manufacturer's specifications, as determined by the Zoning Administrator and/or the Building Official. The Zoning Administrator or Building Official may obtain the services of a licensed professional engineer to verify that the antenna and antenna support structure complies with all manufacturer, City, State and federal requirements, as may be necessary from time to time.
- D. The property owner shall provide written authorization if the petitioner or applicant is different than the property owner for antenna and antenna support structure construction.
- E. No advertising message or lighting shall be affixed to the antenna or antenna support structure, unless required by law or by the Federal Aviation Agency, the Federal Communications Commissions, the City, or

other governmental agency to protect public health and safety.

- F. When applicable, proposals to erect new antenna shall be accompanied by any required federal, state, or local agency permits or licenses.
- G. Antenna support structures shall be constructed of, or treated with, corrosive resistant material, and shall be painted in a manner that is consistent with the colors present in the immediate vicinity of the tower site to reduce visual impact.
- H. No more than one freestanding antenna support structure may be erected per parcel.
- I. Guy wires or guy wire anchors shall not be permitted.

Subd. 3. Accessory and Secondary Use Antennas. The following standards shall apply to all accessory and secondary use antennas :

A. Permitted Accessory Uses

- 1. Accessory or secondary use antennas and antenna support structures shall not be erected in any required front or side yard setback or within public or private utility and drainage easements, and shall be set back a minimum of five (5) feet from all lot lines.
- 2. Accessory or secondary use antennas and necessary antenna support structures may extend a maximum of fifteen (15) feet above the permitted maximum height restriction for that zoning district.
- 3. No more than one satellite dish up to three (3) feet in diameter or smaller shall be allowed per parcel shall be a permitted within any zoning districts.

B. Conditional Uses

- 1. The City Council may allow one satellite dish between three (3) and six (6) feet in diameter per parcel by conditional use within all zoning districts if the City Council finds that each of the following have been met:
 - a. All accessory and secondary use provisions of applicable subdivisions of the underlying zoning district in which the parcel is located have been satisfactorily met,
 - b. The lot on which the satellite dish antenna is located is of sufficient size to assure that an obstruction free receive

window can be maintained within the boundary of the property.

- c. Significant landscape buffering and screening is provided on all sides of the satellite dish antenna in a manner in which growth of the landscape elements will not interfere with the receive window except where the antenna is screened by a structure exceeding the antenna height.

Subd. 4. Antennas, Personal Wireless Service, as defined in Section 2 of this Ordinance.

A. Industrial (I-1 and I-2), Infrastructure and Institutional (INST) District Standards

1. Permitted accessory uses:
 - a. Personal wireless service antennas and antenna support structures located on a public structure, not exceeding fifty (50) feet in height as regulated in Section 31.
 - b. Accessory and secondary use antennas.
2. Conditional Uses
 - a. Personal wireless service antennas and antenna support structures located on a building that exceed fifty (50) feet in height.
 - b. Freestanding Personal Wireless Service Antennas and antenna support structures.
3. Conditional Use Permit Standards
 - a. A permit may be granted by the City Council for a personal wireless service antenna and antenna support structure on a property up to a maximum of one hundred fifty (150) feet if the structure and the structure base area are designed and built for the co-location of at least two other personal wireless service providers.
 - b. A new conditional use permit or modification to an existing conditional use permit shall not be required for minor repair or adjustment to an antenna array affixed to a structure of an existing facility, if the repair or replacement does not negatively impact the safety of the structure and antenna or enlarge the physical space occupied by the facility.
4. Setbacks.

- a. The tower, equipment, and accessory structures are subject to the following minimum setbacks:
 - 1. Public right of way: 50 feet
 - 2. Side yard: 5 feet
 - 3. Rear yard: 5 feet
 - b. If a antenna structure is located adjacent to a parcel zoned for any residential district, the minimum setback from the antenna structure to the nearest residential structure is equal to the maximum height of the structure and antenna plus 25 feet.
5. Height. Freestanding antenna structures and antennas shall not exceed a maximum height of 150 feet as measured at the unaltered ground elevation of the antenna structure base.
6. Antenna and Antenna Support Structure Design
- a. New antenna support structure shall be designed to accommodate other users including but not limited to other cellular or PCS companies, local police, fire, ambulance, and public notification services.
 - b. All coaxial cables and related wires and infrastructure connecting the antenna, the antenna support structure and exterior equipment shall be buried underground. Ice fences and similar site improvements that support wires and related equipment are not permitted.
 - c. No antenna support structure shall be equipped with any platform, catwalk, crows nest, or like structure, except during periods of construction or repair on a temporary basis.
 - d. The City may require the applicant of the Conditional Use Permit to hire or pay for a study or other research by a qualified radio frequency engineer to determine the need for the proposed antenna and antenna support structure.
 - e. The installation of the antenna and antenna support structure shall be in substantial compliance with the site plan approved by the City Council.
7. Antenna Support Structure Screening
- a. Antenna support structure locations shall provide the maximum amount of screening possible for off-site views of the facility and to lessen the visibility of the support structure and antenna.
 - b. The base of the antenna support structure and any exterior equipment or accessory structures shall be screened with an effective vegetative screen as determined by the City Council.

If an effective vegetative screen is not possible or does not complement the character of the surrounding neighborhood, non-vegetative methods may be used in a method that is compatible with the characteristics of the surrounding vicinity.

8. Antenna and Support Structure Accessory Equipment
 - a. Transmitting, receiving, and switching equipment shall be housed within an existing structure whenever possible.
 - b. All new equipment shelters or accessory structures shall be designed to be architecturally compatible with any principle structures on the site and the surrounding vicinity.
 - c. All new equipment buildings or facilities shall be designed and constructed to blend in with the surrounding environment.
 - d. At least seventy (70) percent of the exterior vertical walls shall be constructed of decorative masonry building materials, such as face brick or rock face block, and shall reflect the design elements found in current or planned public buildings.

B. Conditional Use Permit Application Requirements. In addition to the submittal requirements contained in Section 28, the following shall be submitted for review of the proposed antenna and antenna support structure:

1. Cellular, PCS, ESMR and paging coverage and signal interference maps, as appropriate, transcending municipal borders demonstrating antenna need, existing coverage gap and capacity of the existing network.
2. Coverage and signal interference maps transcending municipal borders demonstrating how the proposed antenna and antenna support structure will impact the signals in the geographic area proposed to be served, interference with other antennas and antenna structures, and capacity of the existing network.
3. Narrative demonstrating that the location of the proposed antenna and antenna support structure is necessary to meet the frequency and spacing needs of the cellular, PCS, ESMR and paging systems and to provide adequate coverage and capacity, as appropriate to areas that cannot be adequately served by locating the antenna at an alternate site or sites.
4. Documentation that the antenna equipment planned for the proposed support structure cannot be accommodated on an existing or approved support structure or existing building within one-half (1/2) mile radius of the proposed site, transcending municipal borders.
5. An inventory of parcels within one-half (1/2) mile of the proposed site and narrative indicating under what conditions these sites would viably meet the applicant's technical needs to enhance

- coverage and/or capacity in the network.
6. Documentation demonstrating that the applicant has made a good faith effort to co-locate on existing antenna structure but no agreement was reached or co-location does not meet the technical needs of the service provider.
 7. Design information indicating how the applicant, owner, or operator of the antenna and support structure has designed the facility structurally, electrically, and in all respects to accommodate the applicant's antennas and the antenna for at least two (2) additional users.
 8. Photo illustrations, simulations or similar-styled artist's renderings of the proposed antenna and support structure and base site that show the appearance of the proposed structure and the proposed ground equipment or building(s) after they are constructed.
 9. A narrative and plans from a qualified and registered engineer and others that include:
 - a. The antenna and support structure height and design indicating a cross section and elevation of the site and proposed improvements.
 - b. The facility's structural capacity including the number and type of antennas that it can hold.
 - c. The height above grade for all potential mounting positions for co-located antennas and the minimum separation distances that are necessary between antennas.
 - d. A letter of intent committing the antenna and antenna structure owner and their successors or assigns to allow the shared use of the facility if a/an additional user(s) agree(s) to meet reasonable terms and conditions for shared use.
 - e. A narrative indicating that the proposal is the least intrusive method of achieving the necessary coverage or additional system capacity in the area and that alternatives do not meet the technical needs of the service provider.
 - f. A narrative indicating that the equipment planned for the proposed facility cannot be accommodated at any existing antenna or antenna support structure or facility.

Subd. 5. Radio and Television Broadcast Transmitting and Receiving Antenna, Short-Wave Radio Transmitting and Receiving Antenna; Public Utility Microwave Antennas, and Satellite Dish Antennas as defined in Section 2 of this ordinance:

A. Conditional Use Permits.

1. A conditional use permit shall be required for the following within the I-1, I-2 and INST zoning districts:

- a. Public utility microwave antennas and satellite dish antennas greater than six (6) feet in diameter and/or fifty (50) feet in height.
 - b. Radio and television broadcast and short-wave radio transmitting and receiving antennas greater than fifty (50) feet in height.
2. Conditional Use Permit Standards.
- a. The antennas and antenna support structures shall be located on a continuous parcel having a dimension of length or width, whichever is less, at least equal to the height of the antenna and antenna support structures.
 - b. The applicant shall comply with the screening requirements found in this Section.

Subd. 6. Inspections and Violations

A building permit, as required, shall be obtained to construct, modify and/or reconstruct all antennas and antenna supporting structures. These facilities are subject to inspection by the City building official to determine compliance with City construction standards, including the UBC. Deviations from the original construction plans approved by a building permit are a misdemeanor. The construction plans for antennas and antenna support structures must be in substantial compliance with the development plans approved by the City Council.