

974 CMR 10.00: WIRELESS COMMUNICATIONS FACILITIES

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10.01: Objectives

The following are the objectives of regulating wireless communications facilities at Devens:

- (1) To comply with the Federal Telecommunications Act of 1996.
- (2) To provide a uniform and comprehensive set of standards for the development and installation of wireless communications facilities.
- (3) To minimize adverse visual impacts.
- (4) To encourage maximum use of camouflaging, concealment, screening or other visual attenuation techniques when erecting telecommunications facilities.
- (5) To maximize the use of existing towers, buildings, and structures to accommodate new wireless communication antennas.
- (6) To channel facilities to the locations within the DEZ that provide minimum public visibility.
- (7) To facilitate provision of wireless communications services to those in and around the DEZ.
- (8) To minimize the likelihood of potential damage to adjacent properties from tower failure.

10.02: Applicability

974 CMR 10.00 applies to all wireless communications facilities (“facilities”), except those exempted by federal or state laws that preempt local regulation of certain uses (such as fire, police, ambulance and other safety communications antennas and amateur [ham] radio or citizens band radio antennas. No facility shall be exempt from these requirements by means of sharing a tower or other structure with such exempt uses.

10.03: Definitions

For purposes of 974 CMR 10.00, the following definitions shall take precedence over words defined otherwise in 974 CMR and By-laws of the DEC.

Act: The Communications Act of 1934, as it has been amended from time to time, including the Telecommunications Act of 1996, and future amendments.

Antenna: Any exterior apparatus designed for telephonic, radio, or television communications through sending and/or receiving of electromagnetic waves.

10.03: continued

Camouflaged: Made to resemble a man-made architectural/structural feature of the host building or structure; situated within an existing architectural feature or appurtenance in order to conceal the proposed facility; or painted or decorated in order to hide or conceal the facility from public view.

Co-location: The use of a single mount on the ground by more than one carrier (vertical co-location) and/or several mounts on an existing building or structure by more than one carrier.

Grade: The lowest point of elevation of the finished surface of the ground (after grading), paving, or sidewalk within the area between the structure and the property line or, when the property line is more than five feet from the structure, between the structure and a line five feet from the structure as measured by the Director.

Height: The vertical distance measured from the base of the antenna support structure at grade to the highest point of the facility.

Internal Industrial Street: A local street whose sole function is to provide access to abutting industrial properties and to other roads from other industrial properties

Licensed Carrier: A company that is in the telecommunications business by means of Federal Communications Commission (FCC) authorization or license, in order to provide licensed mobile radio and telecommunications services to individual, businesses or institutions.

Monopole: A single shafted, self-supporting vertical pole without guy wires, for the purpose of supporting wireless communications equipment.

Planned Public Rights of Way: The proposed location of a public way as shown on the most recently adopted Master Plan of the DEZ.

Screening: Refers to any method – other than direct architectural treatment or encasement (*see* 974 CMR 10.03: Camouflage) – used to attain significant visual attenuation or concealment of a facility. May include any of the following or combinations thereof: natural vegetation; landscaping; topographic features; visually impermeable fencing; or buildings and other structures which clearly limit view of the facility from a public way or publicly accessible open space.

Setback: The distance between the outer most edge of the facility, including any structure thereof, and the lot line, the district zoning boundary line, the boundaries of the DEZ, the line of the street right-of-way, or other specified feature as more particularly set forth in 974 CMR 10.06(3).

Tower: A support structure for wireless communications equipment involved in the transmission, receiving or relaying of electromagnetic signals. The term includes radio and television towers, microwave towers, common-carrier towers, cellular telephone towers, alternative tower structures, and the like.

Wireless Communications Facility (“Facility”): Any or all equipment, buildings and other structures with which a licensed carrier transmits, receives or relays the electromagnetic (or radio frequency or television signals, or any other spectrum based transmissions or receptions) waves which carry their services.

10.04: Permits

- (1) Building permits are required for all new, enlarged or altered facilities.
- (2) Permits may be issued for a term not to exceed five years and may be renewed by the Director for five year terms upon written request of the permit holder. Upon receiving a request for renewal, the Director shall determine whether adequate performance guarantees are in place and may require that additional surety be posted as a condition of permit renewal (*See* 974 CMR 1.12).

10.04: continued

(3) Levels of Permits.

(a) Level One permits with the exception noted 974 CMR 10.04(3)(b)2. The following shall be deemed to require a Level One permit administered by the Director, in accordance with the procedures set forth in Article III Section E.2 of the Devens By-laws:

1. Co-location of an antenna on an existing structure. Co-location of an antenna on an existing structure which structure is nonconforming does not constitute an expansion of a nonconforming structure or use (*see* Article VIII Section C of the Devens By-laws).
2. A camouflaged facility.
3. Any facility located on top of or adjacent to an existing building or situated such that the facility, is screened and cannot be seen from the adjacent public way(s) and from publicly accessible open space.
4. Modifications to an existing or previously permitted wireless communications facility, such as change in ownership or lessee, minor physical changes to the facility (such as adding a utility box or repeater), or restoration of unused portions of towers.
5. Extension of time for the removal of an abandoned or unused tower or associated facility (*see* 974 CMR 10.13)
6. Temporary use permits (*see* 974 CMR 10.08)

(b) The following shall be deemed to require a Level Two permit and a Public Hearing by the DEC. Level Two permits shall be administered in accordance with Article III Section E.3 of the Devens Bylaws.

1. Construction of any new facility not deemed Level One.
2. Construction, installation, expansion (other than co-location on an existing tower or structure) or enlargement of any facility on a lot abutting or within 500 feet of the boundary of the DEZ.

(c) For any activity not listed in 974 CMR 10.04(1) or (2), the applicant shall request in writing a determination from the Director of whether the proposed work requires a Level One or Level Two permit. The Director shall respond within ten days of the receipt of the request.

10.05: Design Requirements

- (1) When feasible and practical, the facilities shall be camouflaged.
- (2) The use of guyed towers is prohibited. Towers shall be monopoles, meaning self-supporting; with no wires, cables, or beams.
- (3) For towers with a height of at least 100 feet the applicant shall demonstrate that there is no structure within a ½ mile radius of the proposed facility location on which the tower can be reasonably accommodated; for towers under 100 feet, the radius is ¼ mile.
- (4) Towers with a height of at least 100 feet shall be designed, structurally, electrically, and in all respects, to accommodate three antennas, the applicant's and two others; towers over 60 feet shall accommodate at least one additional antenna. All towers must be designed to allow for future rearrangement of antennas and antennas mounted at varying height.
- (5) The owner of the facility shall agree to permit other persons/cellular providers to attach cellular antenna or other communications apparatus, which do not interfere with the primary purpose of the facility.
- (6) There shall be a minimum of one parking space for each facility, to be used in connection with the maintenance of the facility, not for the permanent storage of vehicles or other equipment.
- (7) Stormwater runoff from the facility shall be managed and recharged on-site.
- (8) There shall be no signs placed on the facility except for a required sign giving the telephone number where the owner may be reached on a 24-hour basis and "No Trespassing" signs if needed. All signs shall conform to 974 CMR 6.00: *Signs*. No advertising or identification, visible off-site, may be placed on the towers or antennas.

10.05: continued

- (9) Towers shall be provided with security fencing to prevent unauthorized entry. Gates in the security fence shall be fitted with a lock box and key, enabling access by police and fire personnel.
- (10) The lowest six feet of the facility shall be screened.

10.06: District and Area Requirements

- (1) Within viewshed districts (Article IX, Section C.3. of the Devens By-laws and Figure H in 974 CMR 3.06(8), and historic districts (Article X Section D of the Devens By-laws), facilities shall be either incorporated within the architecture of the structure or camouflaged.
- (2) Area Requirements:
 - (a) The facility shall be located on a parcel of land is at least 2,500 square feet in area.
 - (b) The lot on which the facility is located need not have frontage and may be accessed by a drive or way across a recorded easement or right-of-way. Land within this circle may be used for other uses or structures after site plan approval for those other uses or structures has been obtained, provided the lot meets the area requirements under the Devens Bylaws.
- (3) Setbacks:
 - (a) A tower shall be set back from the edge of the rights of way of streets or planned public rights of way as though it were a building.
 - (b) A towers shall be set back from electric transmission lines the height of the tower plus ten feet. This does not preclude the co-location of antennas on electric transmission line towers.
 - (c) A towers shall be located to the side and rear of the buildings with the following exceptions:
 - 1. A tower located in the Rail, Industrial and Trade Related Zone, the Environmental Business Zone, and the Special Use II Zone may be placed to the side of the building abutting an internal industrial street; and
 - 2. On a site surrounded by public ways, towers may be placed within a side yard abutting a street.
 - (d) A tower's setback may be reduced or its location in relation to a public way varied, at the discretion of the DEC or the Director, to allow its integration into an existing structure and to encourage the siting of facilities in the most appropriate and advantageous locations.

10.07: Dimensions of Wireless Communications Facilities

- (1) The base of the facility may occupy no more than 500 square feet.
- (2) Unless the DEC or the Director determines there are exceptional circumstances (set forth in 974 CMR 10.07(3)), the maximum height limits for various types of facilities are as follows:
 - (a) Towers From grade to highest point of structure 100 feet
 - (b) All Other Facilities and support buildings Height as per By-laws, Exhibit B and Article IX, Section C
 - (c) Water tank-mounted antennas 12 feet above top of tank
- (3) Exceptional circumstances include, but are not limited to the following:
 - (a) A taller facility results in a broader service area and eliminates the need for another tower.
 - (b) The tower cannot be seen from any abutting or nearby street or way.
 - (c) Topography and vegetation minimize the "apparent height" of the tower so that it would seem to be of conforming height.

10.08: Special Types of Wireless Communications Facilities

The following cases involve allowable uses of facilities where there is a user other than a duly licensed carrier:

10.08: continued

- (1) Antennas for business and institutional use may be allowed provided all height limitations, setbacks, and other dimensional requirements provided in 974 CMR 10.00 are met and permit application is made.
- (2) Amateur ("ham") radio towers which conform to all provisions of 974 CMR 10.00 shall be allowed provided they are located to the rear of the building on residentially zoned parcels and are no taller than the minimum height that is technically necessary to engage successfully in amateur radio communications.
- (3) Use of a temporary facility is allowed only if the owner has received a temporary use permit from the DEC or the Director and the applicant has complied with the following requirements:
 - (a) Time Limits: no longer than 30 days if the facility is used while a permanent facility is being built, no longer than five days if the facility is used during a special event, and
 - (b) Height: the maximum height is 50 feet.

10.09: Construction Requirements

All facilities erected, constructed or within the DEZ and associated wiring shall comply with the following:

- (1) Be certified by a qualified and licensed professional engineer as to:
 - (a) Tower Design.
 - (b) Compliance with Federal Communications Commission, Federal Aviation Administration, Massachusetts Aeronautics Commission, Massachusetts Department of Public Health and American National Standards Institute Standards.
 - (c) Conformance with accepted electrical engineering methods and practices and the *National Electrical Code*.
 - (d) Non-interference with present users and facilities.
- (2) All signal and remote control conductors of low energy extending substantially horizontally above the ground between a tower or antenna and a structure, or between towers, shall be at least eight feet above the ground at all points, unless buried underground.
- (3) Metal towers shall be constructed of, or treated with, corrosive resistant material. Wood structures shall be impregnated with rot resistant substances. All facilities and structures associated with them shall comply with 780 CMR: *The Massachusetts State Building Code*.
- (4) Towers and antennas shall be designed, using the best available technology, to blend into the surrounding environment through the use of color and camouflaging architectural treatment, except in instances where the color is dictated by federal or state authorities such as the Federal Aviation Administration.
- (5) Facilities mounted on buildings or water tanks shall be painted or constructed of materials to match the color of the building material directly behind them.
- (6) No facility may have affixed or attached to it in any way, except during time of repair or installation, any lights, reflectors, flashers, or other illuminating device, except as required by the Federal Aviation Agency or the Federal Communications Commission. Lighting of equipment structures and any other facilities on site shall be shielded from abutting properties. There shall be total cutoff of all light at the property lines of the property to be developed, and foot-candle measurements at the property line shall be 0.0 initial foot-candles when measured at grade.
- (7) Compliance with the industrial performance standards (974 CMR 4.00) with the exception of 974 CMR 4.03.

10.10: General Requirements

- (1) Antennas placed upon the tower shall be subject to state and federal regulations pertaining to non-ionizing radiation and other health and safety issues related to such facilities. If new, more restrictive standards are subsequently adopted by the DEC, the antennas shall comply. The cost of verification of compliance shall be borne by the owner and operator of the tower.
- (2) All facilities shall conform to the requirements of the Occupational Safety and Health Association.
- (3) All facilities shall be subject to an annual inspection by the DEC or its designee.
- (4) All facilities shall be designed to blend in with the surrounding environment. Ground mounted equipment shall be screened from view by suitable vegetation, except where a design of non-vegetative screening better reflects and complements the architectural character of the surrounding area.
- (5) No hazardous waste shall be discharged on the site of any facility. If any hazardous materials are to be used on site, the materials shall be contained. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site and located within a building or covered to minimize rain or snow filling the containment area.
- (6) The owner shall be responsible for ongoing proper maintenance of the facility. Verification of maintenance and structural integrity by a certified structural engineer shall be required, at the request of the Director, on a biannual basis. The Director shall require a maintenance and removal guarantee bond for all facilities.
- (7) The DEC may impose conditions on permits for facilities to further the objectives set forth in 974 CMR 10.01.

10.11: Approval Criteria

- (1) In making a decision on an application for approval for a Level I or a Level II permit, the DEC or the Director shall determine whether the proposed facility complies with all applicable provisions of 974 CMR, and the Devens By-laws.
- (2) In making a decision on an application for approval for a Level II Wireless Communications Facility permit, the DEC shall determine whether:
 - (a) The applicant has made a good faith effort to either co-locate or camouflage the facility, and
 - (b) The siting of the proposed facility minimizes adverse visual impacts by means of adequate screening, color, or other visual attenuation techniques.

10.12: Performance Guarantees

The DEC shall require the applicant to provide a performance guarantee (in accordance with 974 CMR 1.12) for the following:

- (1) The construction of the proposed facility and any associated site work;
- (2) The catastrophic failure, collapse, or other destruction of the tower or other portions of the facility. (This bond may be waived by the Director upon annual filing of proof of insurance in amounts acceptable to the DEC);
- (3) The demolition of the tower and any other portion of the facility and site improvements associated with the facility in the event the facility is abandoned. This non-cancelable bond or guarantee shall be in an amount required to remove the facility and restore the land to an undeveloped or other condition as specified by the Director.

10.12: continued

Performance guarantee amounts shall be reviewed and updated upon the application of the facility operator for a permit term renewal or any extension of the permit or facility. The Director may also review the guarantees periodically and require additional surety to be posted.

10.13: Obsolete or Unused Wireless Communication Facilities

Abandoned or unused facilities or portions thereof shall be removed as follows:

- (1) All abandoned or unused facilities shall be removed within 12 months of the cessation of operations at the site unless the DEC approves a time extension. A copy of the relevant portions of a signed lease which requires the applicant to remove the facilities upon cessation of operations at the site shall be submitted at the time of application. In the event that a facility is not removed within the specified time period, the facilities may be removed by the DEC and the cost of removal shall be borne by the owner of the facility.
- (2) For facilities with more than one antenna, if the upper-most antenna is removed or be relocated to another position on the tower, the portion of the tower supporting that antenna shall be removed within six months of the time of antenna relocation or removal.

10.14: Severability

If any provision of 974 CMR 10.00 or the administration thereof shall be held unconstitutional, invalid or void, it shall not affect any other provision of 974 CMR 10.00 or the administration thereof.

REGULATORY AUTHORITY

974 CMR 10.00: St. 1993, c. 498.

NON-TEXT PAGE