

ARTICLE 11 TELECOMMUNICATION FACILITIES

The following standards shall apply to all Telecommunication Facilities:

1101 HEIGHT

Height limit shall be 195 feet.

The height of a telecommunication tower shall be measured from the natural undisturbed ground surface below the center of the base of said tower to the top of the tower itself or, if higher, to the tip of the highest antenna or piece of equipment attached thereto. In the case of building-mounted towers the height of the tower includes the height of the portion of the building on which it is mounted. In the case of crank-up or other similar towers whose height can be adjusted, the height of the tower shall be the maximum height to which it is capable of being raised.

1102 ACCESS

1102.1 All telecommunications facilities shall be located and equipped with step bolts and ladders to be readily accessible for inspection purposes. Guy wires and other accessories shall not cross or encroach upon any street or other public space, be located over electric power lines or encroach upon any other privately owned property without written consent of the owner.

1102.2 Sufficient anti-climbing measures shall be incorporated into the facility, as needed, to reduce potential for trespass and injury.

1103 CONSTRUCTION

All telecommunication facilities shall be constructed of corrosion-resistive, non-combustible material.

1104 DESIGN STRENGTH

All telecommunication facilities shall be designed for the dead load plus ice load and wind load. Said design shall be certified by a structural engineer licensed by the State of Maine.

1105 ANCHORING

Adequate foundation and anchorage shall be provided to resist two times the calculated wind uplift, as certified by a Maine registered professional engineer.

1106 GROUNDING

All telecommunication antenna/towers shall be permanently and effectively grounded, as certified by a Maine registered professional engineer.

1107 SETBACKS (#36)

- 1107.1** All setbacks shall be measured from the base of the tower or structure closest to the applicable property line or structure.
- 1107.2** The center line of the tower base shall be set back not less than one hundred ten (110) percent of the total height, including any attached transmitting or receiving devices. Guy wire anchors and facility equipment rooms or vaults shall meet the minimum setback of the zoning districts.
- 1107.3** Notwithstanding the above, for cantilevered towers not dependent on guy wires for structural support, the center line of the tower base shall be set back not less than fifty (50) percent of the total height, including any attached transmitting or receiving devices if the site is located within the Industrial (IND) zoning district and the applicant submits evidence, prepared by a Maine Licensed Professional Engineer, certifying that the design characteristics of the tower provide a likelihood of catastrophic lateral collapse of essentially nil.
- 1107.4** Setbacks are not applicable for new facilities proposed to be co-located onto an existing, legally-established telecommunication tower.

1108 EXEMPT FACILITIES - BASIC REQUIREMENTS

Exempt Facilities may be installed, erected, maintained and/or operated in any zoning district, without benefit of a building permit or other entitlement process, so long as all the following conditions are met:

- 1108.1** The antenna use involved is accessory to the primary use of the property which is not a telecommunications facility;
- 1108.2** a residential zone, no more than one (1) support structure for licensed amateur radio operator, satellite dish three feet (3') or less in diameter, is allowed on the parcel; and
- 1108.3** Sufficient anti-climbing measures have been incorporated into the facility, as needed, to reduce potential for trespass and injury.

1109 MINI FACILITIES - BASIC REQUIREMENTS

Mini facilities defined in this Section may be installed, erected, maintained and/or operate in any zoning district where such facilities are permitted under this title, upon the issuance of a necessary permit and receipt of a Certificate of Occupancy by the Code Enforcement Officer, if the following conditions are met:

- 1109.1** In a commercial zone, no more than three (3) antenna, satellite dish eight feet (8') or less in diameter; where adequate screening, at the discretion of the Code Enforcement Officer, is provided; and the telecommunication facilities are solely for the use of the project site tenants - location subject to the discretionary review and approval of the Code Enforcement Officer.

- 1109.2** Replacement of pre-existing telecommunication facilities, installed under a prior approval under this Section which is being proposed for replacement by equipment of identical or a smaller size, at the discretion of the Code Enforcement Officer.
- 1109.3** Sufficient anti-climbing measures have been incorporated into the facility, as needed, to reduce potential for trespass and injury.

11010 MINOR FACILITIES - BASIC REQUIREMENTS

Minor facilities as defined in this Section may be installed, erected, maintained and/or operated in any commercial zoning district where such facilities are permitted under this title, upon the issuance of all necessary permits and receipt of a Certificate of Occupancy by the Code Enforcement Officer.

- 1110.1** The minor antenna use involved is an accessory to the primary use of the property that is not a telecommunications facility.
- 1110.2** The combined effective radiated power radiated by all the antenna present on the parcel is less than 1500 watts.
- 1110.3** The antenna is not situated between the primary building on the parcel and any public or private street adjoining the parcel, so as to create a negative visual impact.
- 1110.4** The antenna is located outside all yard and street setbacks specified in the zoning district in which the antenna is to be located.
- 1110.5** None of the guy wires employed are anchored within the area in front of the primary structure on the parcel.
- 1110.6** No portion of the antenna array extends beyond the property lines or into the area in front of the primary building on the parcel, so as to create a negative visual impact.
- 1110.7** At least ten feet (10') of horizontal clearance exists between the antenna and any power lines, unless more clearance is required to meet Bangor Hydro Electric Company standards.
- 1110.8** No more than two (2) satellite dishes are allowed on the parcel, one of which may be over three feet (3') in diameter, but no larger than eight feet (8') in diameter, with adequate screening, at the discretion of the Code Enforcement Officer.
- 1110.9** Any ground mounted satellite dish with a diameter greater than four feet (4') that is situated less than five (5) times its actual diameter from adjoining property lines has screening treatments located along the antenna's non-reception window axes and low-level landscape treatments along its reception window axes.

- 1110.10** Any roof mounted panel antenna with a face area greater than three and one-half (3 ½) square feet shall be located so as to be effectively unnoticeable.
- 1110.11** The facility is located more than seventy-five feet (75') from any residential dwelling unit, unless recognized as an exempt facility as set forth in this Article.
- 1110.12** No trees larger than twenty inches (20") in diameter measured at four and one-half feet (4½') high on the tree would have to be removed.
- 1110.13** Any new building(s), structure(s), control panel(s), etc. shall be effectively screened from view from off-site.
- 1110.14** The site has an average cross slope of 10% or less; and
- 1110.15** All utility lines to the facility from public or private streets shall be placed under ground.
- 1110.16** The general criteria set forth in this Section are met.

11011 LIFE OF PERMITS

- 1111.1** A use permit issued pursuant to this chapter or a site plan approval issued pursuant to this chapter authorizing establishment of a telecommunication facility, except exempt facilities as defined in this Article shall be reviewed every ten (10) years. Costs associated with the review process shall be borne by the telecommunication facility owner/ provider.

Grounds for revocation of the use permit shall be limited to a finding that (1) the use involved is no longer allowed in the applicable zoning district, (2) the facility fails to comply with the relevant requirements of this Article as they exist at the time of renewal and the permittee has failed to supply assurances acceptable to the Code Enforcement Officer that the facility will be brought into compliance within one hundred twenty (120) days, (3) the permittee has failed to comply with the conditions-of-approval imposed, (4) the facility has not been properly maintained, or (5) the facility has not been upgraded to minimize its impact, including community aesthetics, to the greatest extent permitted by the technology that exists at the time of renewal and is consistent with the provisions of universal service at affordable rates. The grounds for appeal of issuance of a renewal shall be limited to a showing that one or more of the situations listed above do in fact exist or that the notice by the Code Enforcement Officer was not provided.

- 1111.2** If a use permit or other entitlement for use is not renewed, it shall automatically become null and void without notice or hearing ten (10) years after it is issued or upon cessation of use for more than a year and a day, whichever comes first. Unless a new use permit or entitlement of use is issued, within one hundred twenty (120) days thereafter all improvements installed including their foundations down to three

feet (3' below ground surface) shall be removed from the property and the site restored to its natural pre-construction state within one hundred eighty (180) days of non-renewal or abandonment. Any access road installed shall also be removed and the ground returned to its natural condition unless the property owner establishes to the satisfaction of the Code Enforcement Officer that these sections of road are necessary to serve some other allowed use of the property that is permitted or is currently present or to provide access to adjoining parcels.

11012 BASIC DESIGN

All telecommunication facilities, except exempt facilities as defined in Article 14 of this Land Use Code, shall be designed to blend into the surrounding environment to the greatest extent feasible. To this end all the following measures shall be implemented:

- 1112.1** Telecommunication towers shall be designed and constructed as set forth by the this Land Use Code and other ordinances and codes of the City of Brewer.
- 1112.2** Telecommunication towers taller than thirty-five (35') shall be monopoles or guyed/lattice towers except where satisfactory evidence is submitted to the Code Enforcement Officer or Planning Board, as appropriate, that a self-supporting tower is required to provide the height and/or capacity necessary for the proposed telecommunication use to minimize the need for screening from adjacent properties, or to reduce the potential for bird strikes.
- 1112.3** Satellite dishes other than microwave dishes shall be of mesh construction, except where technical evidence is acceptable to the Code Enforcement Officer or Planning Board, as appropriate, is submitted showing that this is infeasible.
- 1112.4** Telecommunication support facilities (i.e. vaults, equipment rooms, utilities, and equipment enclosures) shall be constructed out of non-reflective materials (visible exterior surfaces only) and shall be placed in underground vaults to all extent possible.
- 1112.5** Telecommunication support facilities shall be no taller than one story (fifteen feet) in height and shall be treated to look like a building or facility typically found in the area.
- 1112.6** Telecommunication support facilities in areas of high visibility shall, where possible, be sited below the Ridge line or designed (i.e. placed underground, depressed, or located behind earth berms) to minimize their profile.
- 1112.7** All buildings, poles, towers, antenna supports, antennas, and other components of each telecommunications site shall be initially painted and thereafter repainted as necessary with a flat paint. The color selected shall be one that in the opinion of the Code Enforcement Officer or Planning Board, as appropriate, will minimize their visibility to the greatest extent feasible. To this end, improvements which will be

primarily viewed against soils, trees or grasslands shall be painted colors matching these landscapes while elements which rise above the horizon shall be painted a blue gray that matches the typical sky color at that location.

- 1112.8** The project description and permit shall include a specific maximum allowable gross cross-sectional area, or silhouette, of the facility. The silhouette shall be measured from the worst case elevation perspective.
- 1112.9** The City shall have the authority to require special design of the telecommunication facilities where findings of particular sensitivity are made (e.g. proximity to historic or aesthetically significant structures, views and/or community features).

11013 LOCATION

All telecommunication facilities shall be located so as to minimize their visibility and the number of distinct facilities present. To this end all of the following measures shall be implemented for all telecommunication facilities, except exempt facilities as defined in this Land Use Code.

- 1113.1** No telecommunication facility shall be installed within the safety zone of the Bangor International Airport and/or the Brewer Airport unless the airport owner/operator indicates that it will not adversely affect the operation of the airport.
- 1113.2** No telecommunication facility shall be installed at a location where special painting or lighting will be required by the FAA regulations unless technical evidence acceptable to the Code Enforcement Officer or Planning Board, as appropriate, is submitted showing that this is the only technically feasible location for this facility.
- 1113.3** No telecommunication facility shall be installed on an exposed ridge line, in or at a location readily visible from highways or roadways, a public trail, public park or other outdoor recreation area, or in property designated as a park or open space on any Site or Subdivision Plan as approved by the Planning Board, unless it blends with the surrounding existing natural and man-made environment in such a manner as to be effectively unnoticeable and a finding is made that no other location is technically feasible.
- 1113.4** No telecommunication facility that is readily visible from off-site shall be installed closer than one-half mile from another readily visible uncamouflaged or unscreened telecommunication facility unless it is a co-located facility, situated on a multiple-user site, or blends with the surrounding existing natural and man-made environment in such a manner as to be effectively unnoticeable; or technical evidence acceptable to the Code Enforcement Officer or Planning Board, as appropriate, is submitted showing a clear need for this facility and the infeasibility of co-locating it on one of these former sites.

1113.5 No telecommunication facility that is readily visible from off-site shall be installed on a site that is not already developed with telecommunication facilities or other public or quasi-public uses unless it blends with the surrounding existing natural and man-made environment in such a manner so as to be effectively unnoticeable or technical evidence acceptable to the Code Enforcement Officer or Planning Board, as appropriate, is submitted showing a clear need for this facility and the unfeasibility of co-locating it on one of these former sites.

11014 CO-LOCATED AND MULTIPLE-USER FACILITIES

1114.1 An analysis shall be prepared by or on behalf of the applicant, subject to the approval of the decision making body, which identifies all reasonable, technically feasible, alternative locations and/or facilities which would provide the proposed telecommunication service. The intention of the alternatives analysis is to present alternative strategies which would minimize the number, size, and adverse environmental impacts of facilities necessary to provide the needed services to the City and surrounding rural and urban areas. The analysis shall address the potential for co-location at an existing or a new site and the potential to locate facilities as close as possible to the intended service area. It shall also explain the rationale for selection of the proposed site in view of the relative merits of any of the feasible alternatives. Approval of the project is subject to the decision making body making a finding that the proposed site results in fewer or less severe environmental impacts than any feasible alternative site. The City may require independent verification of this analysis at the applicant's expense. Facilities which are not proposed to be co-located with another telecommunication facility shall provide a written explanation why the subject facility is not a candidate for co-location.

1114.2 All co-located and multiple-user telecommunication facilities shall be designed to promote facility and site sharing. To this end telecommunication towers and necessary appurtenances, including but not limited to, parking areas, access roads, utilities and equipment buildings shall be shared by site users when in the determination of the Code Enforcement Officer or Planning Board, as appropriate, this will minimize overall visual impact to the community.

1114.3 The facility shall make available unutilized space for co-location of other telecommunication facilities, including space for these entities providing similar, competing services. A good faith effort in achieving co-location shall be required of the host entity. Requests for utilization of facility space and responses to such requests shall be made in a timely manner and in writing and copies shall be provided to the City's permit files. Unresolved disputes may be mediated by the Code Enforcement Officer or Planning Board. Co-location is not required in cases where the addition of the new service or facilities would cause quality of service impairment to the existing facility or if it became necessary for the host to go off-line for a significant period of time.

- 1114.4** Approval for the establishment of facilities improved with an existing microwave band or other public service use or facility, which creates interference or interference is anticipated as a result of said establishment of additional facilities, shall include provisions for the relocation of said existing public use facilities. All costs associated with said relocation shall be borne by the applicant for the additional facilities.

11015 LIGHTING

All telecommunication facilities shall be unlit except for the following:

- 1115.1** A manually-operated or motion-detector controlled light above the equipment shed door which shall be kept off except when personnel are actually present at night; and
- 1115.2** The minimum tower lighting required under FAA regulation; and
- 1115.3** Where tower lighting is required, it shall be shielded or directed to the greatest extent possible in such a manner as to minimize the amount of light that falls onto nearby properties, particularly residences.

11016 ROADS AND PARKING

All telecommunication facilities, except exempt facilities as defined in this Article, shall be served by the minimum roads and parking areas necessary. To this end all the following measures shall be implemented:

- 1116.1** Existing roads shall be used for access, whenever possible, and be upgraded the minimum amount necessary to meet City of Brewer standards. Any new roads or parking areas built shall, whenever feasible, be shared with subsequent telecommunication facilities and/or other permitted uses. In addition, they shall meet the width and structural requirements of the City of Brewer.
- 1116.2** Existing parking areas shall, whenever possible, be used; and
- 1116.3** Any new parking areas constructed shall be no larger than three hundred fifty (350) square feet.

11017 VEGETATION PROTECTION AND FACILITY SCREENING

All telecommunication facilities shall be installed in such a manner so as to maintain and enhance existing native vegetation and to install suitable landscaping to screen the facility, where necessary. To this end all of the following measures shall be implemented for all telecommunication facilities, except exempt facilities as defined in this Land Use Code:

- 1117.1** A landscape plan shall be submitted with project application submittal indicating all existing vegetation, identifying landscaping that is to be retained on the site and any additional vegetation that is needed to satisfactorily screen the facility from adjacent

land uses and public view areas. The landscape plan shall be subject to review and approval of the Site Plan Review process. All trees, larger than four inches (4") in diameter shall be identified in the landscape plan with indication of species type, diameter at four and one-half feet (4½') high, and whether it is to be retained or removed with project development.

1117.2 Existing trees and other screening vegetation in the vicinity of the facility and along the access roads and power/telecommunication line routes involved shall be protected from damage, both during the construction period and thereafter. To this end, the following measures shall be implemented:

1. A Tree Protection Plan shall be submitted with building permit or improvement plan. This Plan shall be prepared by a certified arborist and give specific measures to protect trees during project construction.
2. Grading, cutting/filling, and the storage/parking of equipment/vehicles shall be prohibited in landscaped areas to be protected and the drip line of any trees required to be preserved. Such areas shall be fenced to the satisfaction of the Code Enforcement Officer or Planning Board, as appropriate. Trash, debris, or spoils shall not be placed within these fences nor shall the fences henceforth be opened or moved until the project is complete and written approval to take the fences down has been received from the Code Enforcement Officer.
3. All underground lines shall be routed such that a minimum amount of damage is done to tree root systems.

1117.3 All areas disturbed during project construction other than the access road and parking areas shall be replanted with vegetation compatible with the vegetation in the surrounding area (e.g., ornamental shrubs or natural brush, depending upon the circumstances) to the satisfaction of the City Planner.

1117.4 Any existing trees or significant vegetation, on the facilities site or along the affected access area that die shall be replaced with native trees and vegetation of a size and species acceptable to the City Planner.

1117.5 No actions shall be taken subsequent to project completion with respect to the vegetation present that would increase the visibility of the facility itself or the access road and power/telecommunication lines serving it.

11018 FIRE PREVENTION

All telecommunication facilities shall be designed and operated in such a manner so as to minimize the risk of igniting a fire or intensifying one that otherwise occurs.

11019 ENVIRONMENTAL RESOURCE PROTECTION

All telecommunication facilities shall be sited so as to minimize the effect on environmental resources. To that end the following measures shall be implemented for all telecommunication facilities, except exempt facilities:

- 1119.1** No telecommunications facility or related improvements including but not limited to access roads and power lines shall be sited so as to create a significant threat to the health or survival of rare, threatened or endangered plant or animal species.
- 1119.2** No telecommunications facility or related improvements shall be sited such that their construction will damage an archaeological site or have an adverse effect on the historic character of a historic feature or site;
- 1119.3** No telecommunications facility shall be sited such that its presence threatens the health or safety of migratory birds;
- 1119.4** The facility shall comply with all applicable Floodplain, Floodway and Storm Drainage and Erosion Control regulations; and
- 1119.5** Potential adverse visual impacts which might result from project related grading or road construction shall be minimized; and
- 1119.6** Potential adverse impacts upon nearby public use areas such as parks or trails shall be minimized; and
- 1119.7** Drainage, erosion, and sediment controls shall be required as necessary to avoid soil erosion and sedimentation of waterways. Structures and roads on slopes of 10% or greater shall be avoided. Erosion control measures shall be incorporated for any proposed facility that involves grading or construction near a waterway or on lands with slopes over 10%. Natural vegetation and topography shall be retained to the extent feasible.

11020 VISUAL COMPATIBILITY

- 1120.1** Facility structures and equipment shall be located, designed and screened to blend with the existing natural or built surroundings so as to reduce visual impacts to the extent feasible considering the technological requirements of the proposed telecommunication service and the need to be compatible with neighboring residences and the character of the community.
- 1120.2** The facility is designed to blend with any existing supporting structure and does not substantially alter the character of the structure or local area.

1120.3 Following assembly and installation of the facility, all waste and debris shall be removed and disposed of in a lawful manner; and

1120.4 A visual analysis, which may include photo montage, field mock up or other techniques, shall be prepared by or on behalf of the applicant which identifies the potential visual impacts, at design capacity, of the proposed facility to the satisfaction of the Code Enforcement Officer. Consideration shall be given to views from public areas as well as from private residences. The analysis shall assess the cumulative impacts of the proposed facility and other existing and foreseeable telecommunication facilities in the area, and shall identify and include all feasible mitigation measures consistent with the technological requirements of the proposed telecommunication service. All costs for the visual analysis, and applicable administrative costs, shall be borne by the applicant.

11021 EXCEPTIONS (#36)

1121.1 Exceptions to the requirements specified within this Article may be granted through issuance of a Waiver by the Planning Board. Such a permit may only be approved if the Planning Board finds, after receipt of sufficient evidence, that failure to adhere to the standard under consideration in the specific instance will not increase the visibility of the facility or decrease public safety.

1121.2 An exception to the requirements for Fire Safety may only be granted upon written concurrence by the Fire Chief.

11022 PUBLIC NOTICE

In addition to the public notice required within this Article, the following special noticing shall be provided:

1122.1 Notice of consideration or a public hearing, as appropriate, on a minor or major use permit authorizing the establishment or modification of a telecommunication facility shall be provided to all property owners within five hundred feet (500').