


§500-132 Wireless Communication Facilities (WCF) Replaces old §500-50. Attorney James Nanovic, when he reviewed the draft Lehighon Borough zoning update, preferred this section.

In addition to all other applicable standards of this ordinance, the following regulations shall apply to wireless communications facilities (WCF) including, but not limited to,, cellular phone antennas, antennas for communication service regulated by the PA Public Utility Commission, and other commercial antennas and associated facilities.

A. Purposes.

- (1) To accommodate the need for communication facilities while regulating their location and number in the Borough in recognition of the need to protect the public health, safety and welfare.
- (2) To minimize the adverse visual effects of communication facilities and support structures through proper design, siting and vegetative screening.
- (3) To avoid potential damage to adjacent properties from communication facility support structure failure and falling ice, through engineering and proper siting of support structures.
- (4) To encourage the joint use of any wireless communication facility support structures and to reduce the number of such structures needed in the future.

B. Permits; Use Regulations. A permit shall be required for every WCF and support structure installed at any location, whether in or out of a right-of-way, and the following use regulations shall apply:

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- (1) Existing Tall Structures. A WCF site with a WCF that is attached to an existing communications tower, smoke stack, water tower, other tall structure, or a building not less than 35) feet in height and where the height of the WCF does not exceed the height of the existing structure by more than twenty (20) feet shall be permitted in all Districts as an accessory use and special exception approval shall not be required. A WCF on a single-family or two-family dwelling shall not be permitted. Any subsequent installations above the initial twenty-foot height increase shall be prohibited. The applicant shall provide the following information:
 - (a) Evidence from a Pennsylvania registered professional engineer certifying that the proposed installation will not exceed the structural capacity of the building or other structure, considering wind and other loads associated with the antenna location.
 - (b) Detailed construction and elevation drawings indicating how the antennas will be mounted on the

structure for review by the Borough for compliance with the applicable requirements.

- (c) Evidence of recorded agreements and/or easements necessary to provide access to the building or structure on which the antennas are to be mounted so that installation and maintenance of the WCF and associated equipment can be accomplished.
- (2) New Structures and WCF Exceeding 20 Feet on Existing Structures. A WCF site with a WCF that is either not mounted on an existing eligible structure, or is more than twenty (20) feet higher than the structure on which it is mounted shall be permitted only in those Districts specified on the Schedule of Uses and shall require special exception approval in accord with this §218-132.
- (3) New Tower-Based WCF in a Right-of-Way. A new tower-based WCF shall not be permitted in any street or alley right-of-way. See §218-132B(4) for a WCF on an existing utility pole.

This §(4) is intended to address the PA Small Cell Act.

- (4) Small Wireless Facilities. Small wireless facilities (SWF), as defined by the Federal Communications Commission (FCC), shall be considered principal permitted uses in all zoning districts and shall comply with FCC requirements and Pennsylvania Act 50: The Small Wireless Facilities Deployment Act. The Borough shall regulate SWF in accord with FCC requirements and Pennsylvania Act 50. In addition, the following requirements shall apply:
 - (a) A small wireless facility shall utilize the smallest, least visually intrusive antennas, components, and other necessary equipment available at the time of installation.
 - (b) Structures should be architecturally integrated into the environment and harmonize with the property on which it is proposed.
 - (c) Structures shall be the minimum height necessary.
 - (d) Each small wireless facility antenna shall be located entirely within a shroud or canister type enclosure
 - (e) The diameter of the antenna or antenna enclosure should not exceed the diameter of the top of the wireless support structure pole, and to the maximum extent practical, should appear as a seamless vertical extension of the pole. In no case shall the maximum diameter of the shroud be wider than one and one half times the diameter of the top of the pole. Where maximum shroud diameter exceeds diameter of the top of the pole, the shroud shall be tapered to meet the top of the pole. The enclosure shall not exceed six cubic feet in volume.
 - (f) All antennas shall be mounted to the top of the wireless support structure pole, aligned with the centerline of the wireless support structure.
 - (g) Tree "topping" or the improper pruning of trees is prohibited. Any proposed pruning or removal of trees, shrubs or other landscaping already existing (especially within the right-of-way) must be noted in the application.
 - (h) All cables, wires and connectors related to the small wireless facility must be fully concealed on the wireless support structure and shall match the color of the wireless support structure. There shall be no external cables and wires related to the small wireless facility hanging off or otherwise exposed on the wireless support structure.

- (i) All colors shall match the background of any wireless support structure that the facilities are located upon. In the case of existing wood poles, finishes of conduit shall be zinc, aluminum or stainless steel, or colored to match those metal finishes and equipment cabinets shall be the color of brushed aluminum. Ground mounted equipment cabinets shall be the color of brushed aluminum.
 - (j) Ground mounted equipment in the street right-of-way is prohibited, unless the applicant can demonstrate that pole mounted or underground equipment is technically infeasible. If ground mounted equipment is necessary, the equipment must be as far away from the roadway as possible (other than if impacting active use residential property) and should be fully concealed where practicable. Generators located in the rights-of-way are prohibited.
 - (k) Replacement poles shall be located as near as possible to the existing pole with the requirement to remove the abandoned pole.
 - (l) Equipment enclosures, including electric meters, shall be as small as possible. Ground-mounted equipment shall incorporate concealment elements into the proposed design matching color and materials of the wireless support structure unless other materials or colors are identified by the Borough. Concealment may include, but shall not be limited to, landscaping, strategic placement in less obtrusive locations and placement within existing or replacement street furniture.
 - (m) Radio equipment shall be fully enclosed within an equipment cabinet or concealed within the antenna shroud enclosure matching color and materials of the wireless support structure unless other materials or colors are approved by the Borough.
 - (n) The small wireless facility operator/permittee shall post its name, location identifying information, and emergency telephone number in an area on the cabinet of the small wireless facility that is visible to the public. Signs required under this section shall not exceed 4 inches x 6 inches, unless otherwise required by law (e.g., RF ground notification signs) or the Borough. If no cabinet exists, the signs shall be placed at the base of the pole.
 - (o) Small wireless facilities and wireless support structures shall not be illuminated, except in accord with state or federal regulations, or unless illumination is integral to the camouflaging strategy such as design intended to look like a street light pole.
 - (p) The small wireless facility operator/permittee shall remove or paint over unnecessary equipment manufacturer decals. The color shall match or shall be as approved by the Zoning Officer. Small wireless facilities and wireless support structures shall not include advertisements and may only display information required by a federal, state or local agency. The small wireless facility operator/permittee shall use the smallest and lowest visibility radio frequency (RF) warning sticker required by government or electric utility regulations. Placement of the RF sticker shall be as close to the antenna as possible.
 - (q) In residential areas, the small wireless facility operator shall use a passive cooling system. In the event that a fan is needed, the small wireless facility operator shall use a cooling fan with a low noise profile.
- (5) Associated Use. All other uses ancillary to the WCF (including a business office, maintenance depot, vehicle storage, etc.) are prohibited from the WCF site, unless otherwise permitted in the Zoning District in which the WCF site is located. This shall not prohibit the installation, as accessory structures, of equipment containers not intended for human occupancy to house only equipment necessary for the operation of the

WCF.

(6) WCF as a Second Principal Use. A WCF shall be permitted on a property with an existing use subject to the following land development standards:

- (a) The WCF facility shall be fully automated and unattended on a daily basis, and shall be visited only for periodic maintenance.
- (b) The minimum lot area, minimum setbacks and maximum height required by this Ordinance for the WCF and support structure shall apply; and, the land remaining for accommodation of the existing principal use(s) on the lot shall also continue to comply with the minimum lot area, density and other requirements.
- (c) The vehicular access to the equipment building shall, whenever feasible, be provided along the circulation driveways of the existing use.
- (d) The applicant shall present documentation that the owner of the property has granted an easement filed of record or other legal interest for the land for the proposed facility and that vehicular access is provided to the facility.

C. Standards. The following standards shall apply to all WCF:

- (1) Location Requirement and Number . The applicant shall demonstrate to the satisfaction of the Borough, using technological evidence, that the WCF and support structure must go where it is proposed, in order to satisfy its function in the company's grid system. The number of WCF to be installed at a site by an applicant may not exceed the current minimum necessary to ensure the adequacy of current service required by the Federal Communications Commission (FCC) license held by that applicant. The applicant shall provide information on the general location of other towers/sites planned for the region.
- (2) Collocation; New Tower. If the applicant proposes to build a tower (as opposed to mounting the WCF on an existing structure), the Borough may require the applicant to demonstrate that it contacted, in writing, the owners of tall structures within a one- mile radius of the site proposed, asked for permission to install the WCF on those structures, and was denied. This would include smoke stacks, water towers, tall buildings, WCF support structures of other cellular phone companies, other communications towers (fire, police, etc.) and other tall structures. The Borough may deny the application to construct a new tower if the applicant has not made a good faith effort to mount the WCF on an existing structure, thereby documenting that there exists no other support structure which can reasonably serve the needs of the owner of the proposed WCF. A good faith effort shall demonstrate that one or more of the following reasons apply to a particular structure:
 - (a) The proposed equipment would exceed the structural capacity of the existing structure; and, its reinforcement cannot be accomplished at a reasonable cost.
 - (b) The proposed equipment would cause radio frequency interference with other existing equipment for that existing structure; and, the interference cannot be prevented at a reasonable cost.
 - (c) Such existing structures do not have adequate location, space, access or height to accommodate the proposed equipment or to allow it to perform its intended function.

- (d) Addition of the proposed equipment would result in electromagnetic radiation from such structure exceeding applicable standards established by the Federal Communications Commission governing human exposure to electromagnetic radiation.
 - (e) A commercially reasonable agreement could not be reached with the owners of such structures.
- (3) WCF Height; Airport Zoning; Design.
- (a) The applicant shall demonstrate that the WCF is at the minimum height required to function satisfactorily and provide adequate height for eight service providers. The maximum height of any WCF shall be two hundred (200) feet.
 - (b) The Borough may require the tower to be designed and constructed to be stackable (structurally capable of being increased in height) so that additional antenna arrays can be accommodated in addition to the arrays on the original tower to facilitate future collocation.
 - (c) WCF equipment buildings shall comply with the accessory structure height limitations of the applicable Zoning District.
 - (d) The Borough shall require stealth design or specific colors to ensure that the WCF is compatible with the surrounding landscape; and, such determination shall be based on a balloon test for height conducted by the applicant.
- (4) Setbacks. If a new WCF support structure is constructed (as opposed to mounting the WCF on an existing structure) or if the WCF height exceeds the height of the existing structure on which it is mounted by more than twenty (20) feet, the following minimum setbacks shall apply.
- (a) Separate Parcel. If the parcel on which the WCF and support structure are located is a separate and distinct parcel, the distance between the base of the support structure and any adjoining property line shall not be less than the height of the WCF structure plus the normal setback for the District. The setback for equipment containers, other accessory structures, and guy wire anchors shall be a minimum of 30 feet.
 - (b) Lease, License or Easement. If the land on which the WCF and support structure is leased, or is used by license or easement, the setback for any part of the WCF, the support structure, equipment containers, other accessory structures, and guy wire anchors shall be a minimum of thirty (30) feet from the line of lease, license or easement. In any case, the distance between the base of the support structure and any adjoining property line (not lease, license or easement line) shall not be less than the height of the WCF structure.
- (5) WCF Support Structure Safety. The applicant shall demonstrate that the proposed WCF and support structure are safe and the surrounding areas will not be negatively affected by support structure failure, falling ice or other debris, electromagnetic fields, or radio frequency interference. All support structures shall be fitted with anti-climbing devices, as approved by manufacturers. The applicant shall submit certification from a Pennsylvania registered professional engineer that a proposed WCF and support structure will be designed and constructed in accordance with the current Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, published by the Electrical Industrial Association/Telecommunications Industry Association and applicable requirements of any applicable building code. Within 45 days of initial operation, the owner and/or operator of the WCF and support structure shall provide a certification from

a Pennsylvania registered professional engineer that the WCF and support structure comply with all applicable regulations.

- (6) Stealth Design. Wireless communication facilities shall be of stealth design, as required by the Borough, and shall comply with the following standards relating to neighborhood character, placement, material and colors:
- (a) Wireless communication facilities attached to an existing structure shall be designed and maintained to blend in with the existing structure to the extent feasible, including placement in a location which is consistent with proper functioning of the wireless communication facility and use of compatible or neutral colors.
 - (b) Wireless communication facilities attached to an existing structure shall be screened in a reasonable and achievable manner.
 - (c) Wireless communication facilities proposed on a new tower, including support structure(s), shall be designed to blend in with the existing surroundings, including the use of compatible colors and disguised structures.
 - (d) Equipment facilities shall, to the extent practicable, use materials, colors and textures that blend in with the natural setting and built environment.
- (7) Fencing. A fence shall be required around the WCF support structure and other equipment, unless the WCF is mounted on an existing structure. The fence shall be a minimum of eight feet in height.
- (8) Landscaping. Landscaping may be required to screen as much of the support structure as possible, the fence surrounding the support structure, any other ground level features (such as a building), and, in general, buffer the WCF and support structure site from neighboring properties. The Borough may permit any combination of existing vegetation, topography, walls, decorative fences or other features instead of landscaping, if they achieve the same degree of screening as the required landscaping. If the WCF is mounted on an existing structure and other equipment is housed inside an existing structure, landscaping shall not be required. In addition, existing vegetation on and around the site shall be preserved to the greatest extent possible.
- (9) Collocation; Other Uses. In order to reduce the number of WCF support structures needed in the community in the future, the proposed support structure for a new tower facility shall be required to accommodate other users, including, but not limited to, other cellular phone companies, and local fire, police, and ambulance companies. The applicant shall provide evidence of written contact with all wireless service providers who supply service within the Borough for the purpose of assessing the feasibility of colocated facilities. The proposed structure, as determined by the Borough, shall be constructed to provide available capacity for other providers if there is a future additional need for such facilities.
- (10) Licenses; Other Regulations; Insurance. The applicant must demonstrate that it has obtained the required licenses from the Federal Communications Commission, the PA Public Utility Commission, and other agencies. The applicant shall also document compliance with all applicable state and federal regulations. The applicant shall submit the name, address and emergency telephone number for the operator of the WCF and a Certificate of Insurance evidencing general liability coverage in the minimum amount of \$2,000,000 per occurrence and property damage coverage in the minimum amount of \$2,000,000 per occurrence covering the WCF and support structure. The applicant shall provide the Borough with annual

proof of renewal prior to expiration.

- (11) Access. Access to the WCF and support structure shall be provided by means of a public street or easement to a public street. The easement shall be a minimum of twenty (20) feet in width and shall be improved to a width of at least 10 feet with a dust-free, all weather surface for its entire length.
- (12) Signs; Lighting; FAA and PA DOT Notice.
 - (a) No signs or lights shall be mounted on a WCF except as may be required by this §218-132, Federal Communication Commission, Federal Aviation Administration or other governmental agency which has jurisdiction.
 - (b) No WCF support structure may be artificially lighted, except as required by the Federal Aviation Administration.
 - (c) The applicant shall provide a copy of the response to Notice of Proposed Construction or Alteration forms submitted to the FAA and PA DOT Bureau of Aviation; and, the WCF and support structure shall comply with all FAA and PA DOT requirements.
- (13) Communications Interference. The applicant shall document that the radio, television, telephone or reception of similar signals for nearby properties will not be disturbed or diminished.
- (14) Historic Structures. A WCF shall not be located on a building or structure that is listed on a historic register or within five hundred (500) feet of such a structure.
- (15) Identification. All antenna support structures, including, but not limited to, equipment buildings and cabinets, shall clearly display the operator's name, license number and emergency telephone number.
- (16) Fire Suppression System. The applicant shall provide details about any fire suppression system installed in any accessory structure or equipment container associated with the WCF.
- (17) Discontinued Use. If any WCF or support structure ceases to be used as a communications facility, the owner or operator or then owner of the land on which the WCF and support structure is located shall be required to remove the same within ninety (90) days from the abandonment of use. Failure to do so shall authorize the Borough to remove the facility and assess the cost of removal to the foregoing parties. In addition, at the time of zoning permit issuance for any WCF the Borough shall require a financial guarantee, in a term, form and amount determined by the Borough Council with the advice of the Borough Solicitor, to guarantee the removal of the WCF.
- (18) Site Plan. A full site plan shall be required for all WCF and support structure sites, showing the WCF, WCF support structure, building, fencing, buffering, access, and all other items required in the Subdivision and Land Development Ordinance. The site plan shall not be required if the WCF is to be mounted on an existing structure and the WCF does not exceed the height of the existing structure by more than twenty (20) feet.