

- a. Preserve the character and appearance of the Town while simultaneously allowing adequate Personal Wireless Services to be developed;
- b. Protect the rural, scenic, historic, environmental, and natural or man-made resources for the community and the Town of Washington including roads designated as scenic roads by the local, state or federal government;
- c. Provide standards and requirements for regulation, placement, construction, monitoring, design, modification and removal of Personal Wireless Service Facilities, including access roads, buildings and protective fencing;
- d. Provide a procedural basis for action within a reasonable period of time for requests for authorization to place, construct, operate or modify Personal Wireless Services Facilities;
- e. Preserve property values;
- f. Minimize the total number and height of Towers throughout the community;
- g. Locate Towers so that they do not have negative impacts (such as, but not limited to, attractive nuisance, noise and falling objects) on the general safety, welfare and quality of life of the community;
- h. Require the owners of Towers and Personal Wireless Service Facilities to configure them so as to minimize and mitigate the adverse visual impact of the Towers and Facilities;
- i. Require Tower sharing and the clustering of Personal Wireless Service Facilities where possible; maximize the use of existing communications towers, water towers, silos and other similar buildings, if available, to accommodate new wireless telecommunication antennae in order to reduce the number of towers within the community;
- j. Provide consistency with Federal Law: These regulations are intended to be consistent with the Telecommunications Act of 1996 in that: 1) they do not prohibit or have the effect of prohibiting the provision of Personal Wireless Services; 2) they are not intended to be used to unreasonably discriminate among providers of functionally equivalent Services; 3) they do not regulate Personal Wireless Services on the basis of environmental effects of radio frequency emissions to the extent that the regulated Services and Facilities comply with the FCC's regulations concerning such emissions;
- k. Provide consistency with Washington's Plan of Development with respect to preserving the rural, historic and agrarian character of the land use including protection of the landscape and scenic views consisting of hills, the Steep Rock Preservation areas, historic settings, streams, trees, meadows and other natural features;
- l. Avoid potential damage to adjacent properties from Tower failure through structural standards and setback requirements.

#### 13.19.1 Exempted Wireless Telecommunications Uses.

The following wireless telecommunications facilities uses are specifically exempted from this Section 13.19: police, fire, ambulance and other emergency dispatch; amateur (ham) radio; citizens band radio; any existing radio tower; radio dispatch services for local business. No Personal Wireless Service Facility shall initiate construction of such exempted facilities, towers or structures in order to subvert or avoid the regulations applying to Personal Wireless Services or Telecommunications Towers. No

Personal Wireless Service Facility, Telecommunications Tower or structure shall be considered exempt from this regulation for any reason whether or not said Facility is proposed to share a Tower or other structure with such exempt uses.

13.19.2 Provision of Independent Consultants.

- a. Upon submission of an Application for a Special Permit under this Section 13.19, the applicant shall pay the cost for the Commission for retaining an independent consultant or consultants to analyze and report on the application including determining areas appropriate for Towers and the cost of the town's monitoring of operations of the Towers. These consultants shall each be qualified professionals with a record of service to municipalities in one or more of the following fields: 1) telecommunications engineering, 2) structural engineering, 3) monitoring of electromagnetic fields, and 4) others as determined necessary by the Commission.
- b. The Commission shall select the independent consultant(s).

13.19.3 Prohibition of Teleports. There shall be no Teleport(s) within the Town of Washington.

13.19.4 General Application Requirements: In addition to the requirements of Section 2, applications pursuant to Section 13.19 shall comply with the following:

- a. Special Permit. No Tower or Personal Wireless Facility shall be erected, constructed, or installed without first obtaining a Special Permit from the Commission. One or both kinds of Special Permits are required: 1) for new Tower construction (or Major Modification of an Existing Tower); 2) for Personal Wireless Service Facilities (or Major Modification of an Existing Facility) to be mounted on an existing, or newly permitted, Tower or structure. If the Applicant is applying for both permits, they shall be submitted and examined concurrently. Applications shall be submitted using an application in accordance with the requirements of Section 13.19 of these Regulations. The following additional information must also be submitted:
- b. Adequate Coverage, Adequate Capacity, and Justification of Need. The Applicant shall provide written documentation of any Facility sites in Washington, and in abutting towns in which it has a legal or equitable interest, whether by ownership, leasehold or otherwise, or facility sites for which it has applied. From each facility site, it shall demonstrate with written documentation that these Facility Sites are not already providing, or do not have the potential to provide by adjusting the Site, Adequate Coverage and/or Adequate Capacity to the Town of Washington. The documentation shall include, for each Facility Site listed, the exact location (in longitude and latitude, to degrees, minutes and seconds), an A-2 Survey Map, ground elevation, height of Tower or structure, type of Antennae, Antenna gain, height of Antennae on Tower or structure, output frequency, number of channels, power input, and maximum power output per channel.

Potential adjustments to these existing Facility Sites, including changes in Antenna type, orientation, gain, height, or power output shall be specified. Radial plots from each of these Facility Sites, as they exist, and with adjustments as above, shall be provided as part of the Application. The applicant shall provide a map showing the extent of coverage through Washington.

- c. Applicant shall demonstrate with written documentation that he has examined all Facility Sites located in Washington, and in abutting towns in which Applicant has no legal or equitable interest, whether by ownership, leasehold or otherwise, or facility sites for which it has applied, to determine whether those existing or proposed Facility Sites can be used to provide Adequate Coverage and/or Adequate Capacity to the Town of Washington. The documentation shall include, for each Facility Site examined, the exact location (in longitude and latitude, to degrees, minutes and seconds), ground elevation, type of Antennae proposed, proposed Antenna gain, height of proposed Antennae on Tower or structure, proposed output frequency, proposed number of channels, proposed power input, and proposed maximum power output per channel. Radial plots from each of these Facility Sites, as they exist, and with adjustments as above, shall be provided as part of the Application. The applicant shall provide a map showing the extent of proposed coverage through Washington.
- d. The Applicant shall demonstrate with written documentation that he has analyzed the feasibility of Repeaters in conjunction with all Facility Sites listed in compliance with this Section 13.19 to provide Adequate Coverage and/or Adequate Capacity to the Town of Washington. Radial Plots of all Repeaters considered for use in conjunction with these Facility Sites shall be provided as part of the Application.
- e. The Tower and Facilities shall be designed to withstand sustained wind speeds for the location proposed. The fall zone shall be determined so that non-facility structures are not located within the fall zone.

#### 13.19.5 Required Documentation.

- a. Copies of all submittals and showings pertaining to: FCC licensing; Environmental Impact Statements; FAA Notice of Construction or Alteration; Aeronautical Studies; and, all data, assumptions and calculations relating to service coverage and power levels regardless of whether categorical exemption from Routine Environmental Evaluation under the FCC rules is claimed.
- b. Copies of all information submitted in compliance with requirements of Connecticut Department of Public Health including without limitation all laws, regulations and requirements relating to Facilities which generate electromagnetic fields in the frequency range of 300 KHZ to 100 GHZ and Microwave ovens or any revisions thereof as the Department of Public Health may, on written notice, create.

- c. The exact legal name, address of principal place of business and phone number of the Applicant. If any Applicant is not a natural person, it shall also give the state under which it was created or organized.
- d. The name, title, address, mailing address, and phone number of the person to whom correspondence and communications in regard to the application are to be sent. Notice, orders, and other papers may be served upon the person so named, and such service shall be deemed to be service upon the Applicant.
- e. Name, address, mailing address, phone number, and written consent to apply for this permit, of the owner of the property on which the proposed Tower or structure shall be located, or of the owner(s) of the Tower or structure on which the proposed Facility shall be located.
- f. Required Plans and engineering plans, prepared, stamped and signed by a Professional Engineer licensed to practice in Connecticut. Note: Survey plans should also be stamped and signed by a Professional Land Surveyor registered in Connecticut. Plans shall be on 24" x 36" sheets, on as many sheets as necessary, and at scales which are no smaller (i.e. no less precise) than listed below, and which show the following information: each plan sheet shall have a title block indicating the project title, sheet title, sheet number, date, revision dates, scale(s), and original seal and signature of the P.E. and other professionals who prepared the plan.

**13.19.6 Application Requirements for New Tower construction or Major Modification of an Existing Tower: A Tower Construction Special Permit Is Required.**

- a. The Applicant shall provide a written, irrevocable commitment valid for the duration of the existence of the Tower, to rent or lease available space for co-location on the Tower at fair-market prices and terms, without discrimination to other Personal Wireless Service Providers.
- b. If the Applicant is not simultaneously applying for a Personal Wireless Service Facilities Special Permit, he shall provide a copy of its existing lease/contract with a Personal Wireless Service Provider. A Tower Construction Special Permit shall not be granted for a Tower to be built on speculation.
- c. The following site plans and maps are required:
  - 1. Location Map: Copy of a portion of the most recent U.S.G.S. Quadrangle map, at a scale of 1: 25,000, and showing the area within at least two miles from the proposed tower site. Indicate the Tower location and the exact Latitude and Longitude (degrees, minutes and seconds).
  - 2. Vicinity Map at a scale of 1" = 200' with contour intervals no greater than 10 feet showing the entire vicinity within a 2000' radius of the Tower site, and including the topography, public and private roads and driveways, buildings and structures, bodies of water, wetlands, landscape features including ridge

- lines, preserved open space, historic sites, recreational areas, habitats for endangered species. Indicate the property lines of the proposed Tower site parcel and all abutters within 300' of the Tower site parcel (from the assessor's maps or available surveys). Include the names and addresses of all abutters within 300' of the Tower site parcel. Indicate any access easement or right of way needed for access from a public way to the Tower, and the names of all abutters or property owners along the access easement or who have deeded rights to the easement. Show all designated scenic roads in the vicinity of the site.
3. Existing Conditions Plan: A recent A-2 survey of the Tower Site at a scale no smaller than 1" = 40' with topography drawn with a minimum of 2' contour intervals, showing existing utilities, property lines, existing buildings or structures, stone walls or fence lines, wooded areas, individual trees with diameters greater than 12" within a 200' radius from the base of the proposed Tower. Show the boundary of any wetlands or floodplains or watercourses, and of any bodies of water within 200' from the Tower or any related facilities or access ways or appurtenances. Show slopes, scenic vistas, stone walls, and other important environmental features of the site. Show any historically designed properties on or adjacent to the site or historic districts to which the site is part or adjacent to the site. All permanently protected lands, such as State parks, forest lands, and land protected by a land trust on or adjacent to the site shall be shown. The survey plan must have been completed, on the ground, by a Professional Land Surveyor within two years prior to the application date.
  4. The applicant shall also provide the following:
    - a. An inventory of all Antennae and Towers not contained within a fully enclosed building.
    - b. A map showing the extent of planned coverage within the Town of Washington and the location and service area of the proposed facilities.
    - c. A topographic profile showing the proposed Tower and its associated equipment.
    - d. Effect on bird habitats prepared by a qualified wildlife biologist.
    - e. Historical, architectural and archaeological sites listed on the National Register or the State Register of Historic places, or eligible for listing on them.
  - d. Proposed Facility Site Plans: Proposed Facility Site layout, grading and utilities at the same scale or larger than the Existing Conditions Plan.
    1. Proposed Tower location and any appurtenances, including supports and guy wires, if any, and any accessory buildings. Indicate property boundaries and setback distances to the base

- of the Tower and to the nearest corners of each of the appurtenant structures to those boundaries, and dimensions of all proposed improvements.
2. Indicate proposed spot elevations at the base of the proposed Tower and at the base of any guy wires, and the corners of all appurtenant structures.
  3. Proposed utilities, including distance from the source of power, sizes of service available and required, locations of any proposed utility or communication lines, and whether underground or above ground.
  4. Limits of areas where vegetation is to be cleared or altered, and justification for any such clearing or alteration.
  5. Any direct or indirect wetlands alteration proposed. A copy of the Inland Wetlands Permit (when Inland Wetlands approval is necessary) granted for this work shall be submitted with the Special Permit application.
  6. Detailed plans for drainage of surface and/or sub-surface water, plans to control erosion and sedimentation both during construction and as a permanent measure.
  7. Plans, including length of proposed access driveway or roadway and parking area, at the Tower site. Include grading, drainage, and traveled width. Include a cross section of the access drive indicating the width, depth of gravel, paving or surface materials. Provide soil erosion and sedimentation control plans for all site improvements.
- e. Proposed Tower and Appurtenances:
1. Plans, elevations, sections and details at appropriate scales but no smaller than 1" = 10'.
  2. Detail of proposed Tower foundation, including cross sections and details. Show all ground attachments, specifications for anchor bolts and other anchoring hardware.
  3. Detail proposed exterior finish of the Tower. Provide an architectural rendering of the view of the Tower from adjoining properties.
  4. Indicate relative height of the Tower to the tops of surrounding trees as they presently exist, and the height to which they are expected to grow in ten years.
  5. Illustration of the modular structure of the proposed Tower indicating the heights of sections which could be removed or added in the future to adapt to changing communications conditions or demands.
  6. A Structural Professional Engineer's written description of the proposed Tower structure and its capacity to support additional Antennae or other communications facilities at different heights and the ability of the Tower to be shortened if future communications facilities no longer require the original height.
  7. A description of Available Space on the Tower, providing

- illustrations and examples of the type and number of Personal Wireless Services Facilities which could be mounted on the structure.
8. The power and frequency of all transmissions to be broadcast from the facility.
  9. The location of the fall zone so that structures are not located within the fall zone.
  10. An elevation drawing showing the ridge line on all sides of the proposed Tower and showing the Tower and facilities on the ridge line as seen from the Town Hall.
  11. If known, indicate whether other development is being proposed or considered near the proposed site
- f. Proposed Communications Equipment Shelter:
1. Floor Plans, elevation and cross sections at a scale of no smaller than  $\frac{1}{4}'' = 1'$  of any proposed appurtenant structure.
  2. Representative elevation views, indicating the roof, facades, doors, and other exterior appearance and materials.
- g. Sight Lines:
1. A minimum of eight view lines in a zero to two-mile radius from the site, shown beginning at True North and continuing clockwise at forty-five-degree intervals.
  2. A plan map of a circle of two-mile radius of the Facility Site on which any visibility of the proposed Tower from a public way shall be indicated.
  3. Applicant shall utilize the U.S.G.S. Quadrangle map, at a scale of 1: 25,000 and submit profile drawings on a horizontal scale of  $1'' = 500'$  with a vertical scale of  $1'' = 40'$ . Trees shall be shown at existing heights and at projected heights in ten years.
- h. Balloon Test. Prior to the public hearing on the application, the Applicant shall arrange to fly, or raise upon a temporary mast, a three-foot diameter brightly colored balloon at the maximum height of the proposed Tower. The dates (including a second date, in case of poor visibility on the initial date), times and location of this balloon test shall be advertised, by the Applicant, at 7 and 14 days in advance of the first test date in a newspaper with general circulation in the Town of Washington. The Applicant shall inform the Commission, in writing of the dates and times of the test, at least 14 days in advance. The balloon shall remain in place as long as practical but not less than four consecutive hours sometime between 8:00 a.m. and 6:00 p.m. of the dates chosen.
- i. The Commission may waive any of the application requirements for a Major Modification of an existing Tower if it finds that the modification or addition will not have significant impact.
- j. Site Justification Statement: The Applicant shall provide a statement containing the description of the siting criteria employed in the application, the process by which other possible sites were considered and eliminated, and a discussion of whether alternative sites were

- exhausted.
- k. Description of the technological alternatives and their costs for the proposed Tower and a statement containing the reasons for the choice of the proposed facility shall be submitted.
  - l. A statement of the impact on human health, if any, of signal frequency and power density to be transmitted and/or received at the proposed facility and site shall be submitted.
  - m. The Applicant shall provide such other additional information necessary or useful for evaluating the environmental impacts of the proposed site and alternative sites.
- 13.19.7 Applications for new Personal Wireless Service Facility or Major Modification of an Existing Facility: A Personal Wireless Facility Special Permit is required and the following maps and plans must be submitted:
- a. Location Map: Copy of a portion of the most recent U.S.G.S. Quadrangle map, at a scale of 1: 25,000, and showing the area within at least two miles from the proposed Facility Site. Indicate the location of the proposed Personal Wireless Service Facility, or the Facility under going Major Modification, and the exact Latitude and Longitude (degrees, minutes, and seconds).
  - b. Proposed Facility Plan: A recent survey of the Facility Site at a scale no smaller than 1"=40' showing:
    - 1. Horizontal and radial distances of antenna(e) to nearest point on property line.
    - 2. Horizontal and radial distances of Antenna(e) to nearest dwelling unit.
    - 3. Proposed utilities, including distance from source of power, sizes of service available and required, locations of any proposed utility or communication lines, and whether underground or above ground.
    - 4. Any changes to be made to the existing Facilities landscaping, screening, fencing, lighting, drainage, wetlands, grading, driveways or roadways, parking, or other infrastructures as a result of this proposed Modification of the Facility.
  - c. Proposed Communications Equipment Shelter:
    - 1. Floor Plans, elevations and cross sections at a scale of no smaller than 1/4"=1' of any proposed appurtenant structure.
    - 2. Representative elevation views, indicating the roof, facades, doors and other exterior appearance and materials. Screening shall be shown.
  - d. Proposed Equipment Plan:
    - 1. Plans, elevations, sections and details at appropriate scales but no smaller than 1"=10'.
    - 2. Number of Antennae and Repeaters, as well as the exact locations, of Antenna(e) and of all Repeater(s) located on a map as well as Degrees, minutes and seconds of Latitude and Longitude.
    - 3. Mounting locations on Tower or structure, including height



above ground.

4. Antenna type(s), manufacturer(s), model number(s).
5. For each Antenna, the Antenna gain and Antenna radiation pattern.
6. Number of channels per Antenna, projected and maximum.
7. Power input to the Antenna(e).
8. Power output, in normal use and at maximum output for each Antenna and all Antennae as an aggregate.
9. Output frequency of the transmitter(s)
- e. An architectural rendering of the view of the Antenna(e) from adjoining properties and roads abutting site.
- f. A description of the technological alternatives and their costs for the proposed antenna(e) and a statement providing the reason for the choice of the proposed location.
- g. A statement of the impact on human health, if any, of signal frequency and power density to be transmitted and/or received by the proposed antenna(e) sites.

#### 13.19.8 General Requirements.

- a. All New Towers shall be set back at least one time the height of the tower plus 50' from all boundaries of the Site on which the Tower is located. This setback supersedes all other setback requirements.
- b. If the Facility or Tower is located in a wooded area, a vegetated buffer strip of undisturbed trees shall be retained for at least 50 feet in width around the entire perimeter except where the access drive is located. Further, in addition to the preservation of a buffer, landscaping around the fence shall be required which shall consist of a row of evergreen trees planted 10 feet on center maximum. The evergreen shall be a minimum of six feet at planting and shall be reasonably projected to grow to a minimum height of fifteen feet at maturity. The landscaping shall screen the building and fence from a view of streets and neighboring properties. The screen shall be maintained by the owner of the property to ensure its effectiveness. The Commission may substitute any combination of existing vegetation, topography, walls, or other features in lieu of evergreen screening, providing the substitute plan equals or exceeds the protection provided by the evergreen screen. The Applicant shall provide financial surety (letter of credit, surety or cash bond) in a form and content acceptable to the Town Attorney and the Independent Consultant and/or the Town's consulting engineer to cover the cost of the remediation of any damage to the landscape which occurs during the clearing of the Site and to secure the installation of new landscaping required by the screening plan.
- c. Fencing and Signs: The area around the Tower and Communication Equipment Shelter(s) shall be completely fenced for security to a height of eight feet and gated. Use of razor wire is not permitted. A sign no greater than two square feet indicating the name of the facility owner(s) and a 24-hour emergency telephone number shall be posted

adjacent to the entry gate. In addition, No Trespassing or other warning signs may be posted on the fence. If in a residential zone, the fencing and gate shall be designed and made of materials so as to be in keeping with the neighborhood and to appear residential in character rather than commercial. No signs other than as required and approved by the FCC or other state or federal governmental agency having jurisdiction, shall be permitted on the Tower. No advertising shall be permitted from the Tower.

- d. Communication Equipment Shelters and Accessory Buildings shall be designed to be architecturally similar and compatible with each other, and shall be no more than 12 feet high. The buildings shall be used only for the housing of equipment related to this particular site. Manned equipment incidental to the business office, maintenance depot and vehicle storage is prohibited. Whenever possible, the buildings shall be joined or clustered so as to appear as one building. Any building shall be designed to be in harmony with the surrounding neighborhood properties on the site and to minimize the impact that the Tower will have on these resources. If located in a residential zone, the buildings shall be designed to appear residential. The buildings shall be no larger than necessary to accomplish the functions required.
- e. Height and Size. New Towers shall not exceed the minimum height necessary to provide Adequate Coverage for the Wireless Service Facilities proposed for use on the Tower. Applicant may submit a request for additional height to accommodate future sharing and shall provide design information to justify such additional height. Building or rooftop mounted antenna(e) shall be located or screened so as not to be visible from abutting public streets or adjoining residences. If the equipment is located on the roof of a building, the area of the equipment building and other structures shall not occupy more than twenty-five percent of the roof area. Roof located equipment must be set back at least ten feet or 10 percent of the roof depth, whichever is greater.
- f. No Tower or Antenna(e) will be permitted on a school roof.
- g. Tower Finish, Antenna Design: The Commission may require the Tower(s) to be painted or otherwise camouflaged to minimize the adverse visual impact. Antenna located on a building shall be compatible with underlying structure.
- h. Tower(s) must be of a type, which will maximize potential sharing. Lattice type structures are preferred, but where a Monopole is requested, the Applicant must demonstrate future utility of such structure for expansion of service for Applicant and other future Applicants. If possible, each Tower must have the capacity to accommodate at least three Service Providers. The proposed support structure shall be designed for additional facilities including other wireless communications companies, local police, fire and ambulance need, unless it is determined to be technically unfeasible. The

Antenna(e) shall be located on existing communications towers, silos, water towers and the like, where available; if no existing Towers are available, antennae may be located on new Towers, where topography, vegetation, buildings or other structures provide the greatest amount of screening.

- i. The use of Repeaters to assure Adequate Coverage, or to fill holes within areas of otherwise Adequate Coverage, while minimizing the number of required Towers is permitted and encouraged.
- j. If primary coverage (greater than 50%) from proposed Personal Wireless Service Facility is outside Washington, then the permit may be denied unless the Applicant can show that it is unable to locate within the Town which is primarily receiving service from the proposed Facility.
- k. Commercial advertising is prohibited on any Antenna, Tower, or Accessory Building or Communication Equipment Shelter.
- l. Unless required by the Federal Aviation Administration, the FCC or the Connecticut Siting Council, no lighting or illumination of Towers, or the Personal Wireless Service Facility, is permitted, except for manually operated emergency lights for use only when operating personnel are on site.
- m. No Tower or Personal Wireless Service Facility that would be classified as a hazard to air navigation as defined by the Federal Aviation regulations is permitted.
- n. No clear cutting of timber, except as approved in connection with construction, is allowed within the setback area.
- o. No Tower or Personal Wireless Service Facility, including any guy wires, with the exception of Repeaters shall be located:
  1. Closer than 1500' on a horizontal plane, to any structure, existing at the time of Application, which is, or is able to be occupied or habitable, on the property of any school (public or private).
  2. Closer than 750' on a horizontal plane, to an existing Dwelling Unit, or, day- care center, hospital, nursing home, church or other place of worship.
- p. No Repeater shall be located closer than 50' to an existing Dwelling Unit, nor less than 25' above ground.
- q. No Tower or Personal Wireless Service Facility, including any guy wire, with the exception of Repeaters shall be located within any of the following areas:
  1. Local or federally regulated wetland or vernal pool;
  2. The habitat of any Local or State listed Rare or Endangered Wildlife or Rare Plant Species;
  3. Within 500' horizontally from any Historic District or property listed or eligible to be listed on the Local, State or Federal Register of Historic Places;
  4. Within 200' horizontally from any river or watercourse;
  5. Within 500' horizontally from any known archaeological site;

6. Within 500' of a Local, State or Federally designated scenic road;
  7. On a lot which is less than the minimum lot size required for the zoning district in which it is located;
  8. On property designated as a scenic ridge line pursuant to the Planning Commission approved Plan of Conservation and Development.
- 13.19.9 Towers and Personal Wireless Service Facilities shall be located so as to minimize the following potential impacts:
- a. Visual/Aesthetic: Towers shall, when possible, be sited where their visual impact is least detrimental to areas that possess scenic quality of local, regional or statewide significance such as:
    1. Ridge lines
    2. Connecticut State Forests, Connecticut Natural Area Preserves, and Natural Area Inventory Sites
    3. Areas permanently preserved by land trusts and similar organizations
    4. Areas marked as "rural" on the State Plan of Conservation and Development set forth at Conn. Gen. Stat. Section 16a-24 et. seq.
    5. Roads designated as Scenic Roads pursuant to Conn. Gen. Stat. Section 7-149a and 13b-31b through 13b-31e.
  - b. Diminution of residential property values: Siting shall be in as low population density areas as possible.
  - c. Structural failure and attractive nuisances
  - d. Safety from excessive electromagnetic radiation: In case the Tower or Personal Wireless Service Facility is found to exceed the FCC guidelines.
- 13.19.10 The following locations are ranked in order of preference for tower sitings:
- a. The use of municipal lands, with the approval of the Town, which comply with other requirements of this Section 13.19 and where visual impact can be minimized and mitigated;
  - b. Shared use of existing Personal Wireless Service Facilities shall be encouraged;
  - c. The use of Repeaters to provide Adequate Coverage without requiring new Tower(s) shall be encouraged;
  - d. Clustering of Towers: Applications for Towers adjacent to Existing Towers shall be encouraged, providing the location is suitable (based on these regulations).
- 13.19.11 Towers and Personal Wireless Service Facilities shall be located so as to provide Adequate Coverage and Adequate Capacity with the least number of Towers and Antennae which is technically and economically feasible.
- 13.19.12 The Commission shall request input from the Fire, Police, Ambulance and other Emergency Services regarding the adequacy for emergency access of the planned drive or roadway to the site. The Commission shall require the accessway, driveway or right of way to the site be constructed and maintained to meet the Town's road standards ordinance unless where it is

shown that such standards are unnecessary for safety and traffic use.

13.19.13 The Commission may impose conditions that foster a compatible design of the Tower with the site and surrounding neighborhood and to carry out the requirements of these Regulations.

13.19.14 Evaluation by Independent Consultants.

- a. Upon submission of a complete Application for a Special Permit under this Section 13.19, the Commission shall provide its Independent Consultant(s) with the full Application for their analysis and review.
- b. Applicants for any Special Permit under this Section 13.19 shall obtain permission from the Owner(s) of the proposed property or Facilities Site for the Town's Independent Consultant(s), to conduct any necessary site visit(s).

13.19.15 Approval Criteria.

- a. In acting on the Special Permit Application, the Commission shall proceed in accordance with the procedures and timeliness established for Special Permits in Section 2 and Section 14 of the Zoning Regulations.
- b. In addition to the requirements of Section 2 and 14, the Commission shall make all of the applicable findings before granting the Special Permit, as follows:
  1. That Applicant is not already providing Adequate Coverage and/or Adequate Capacity to the Town of Washington; and
  2. That Applicant is not able to use Existing Tower/Facilities Sites either with or without the use of Repeaters to provide Adequate Coverage and/or Adequate Capacity to the Town of Washington; and
  3. That the Applicant has agreed to rent or lease Available Space on the Tower, under the terms of a fair-market lease, without discrimination to other Personal Wireless Service Providers; and
  4. That proposed Personal Wireless Service Facility or Tower will not have an undue adverse impact on historic resources, wetlands and watercourses, conservation areas and parks, scenic views including ridge lines, scenic roads, residential property values, natural or man-made resources; and
  5. That the Applicant has agreed to implement all reasonable measures to mitigate the potential adverse impacts of the Facilities; and
  6. That the proposal shall comply with FCC Reg. 96-326 regarding emissions of electromagnetic radiation and that the required Monitoring program is in place and shall be paid for by the Applicant; and
- c. Any decision by the Commission to deny an Application for a Special Permit under Section 13.19 shall be in conformance with SEC. 332 147 U.S.C. 3321(7)(B)(iii) of the ACT, in that it shall be in writing and supported by substantial evidence contained in a written record.

### 13.19.16 Monitoring and Evaluation of Compliance

- a. Pre-testing: After the granting of a Special Permit and before Applicant's Personal Wireless Service Facilities begin transmission, the applicant shall pay for an Independent Consultant, hired by the Town, to Monitor the background levels of EMF radiation, around the proposed Facility Site and/or Repeater locations to be utilized for Applicant's Personal Wireless Service Facilities. The Independent Consultant shall use the Monitoring Protocol. A report of the Monitoring results shall be prepared by the Independent Consultant and submitted to the Zoning Commission, the Director of Health, and the Town's consulting engineer.
- b. Post-testing: After transmission begins. The owner(s) of any Personal Wireless Service Facilities located on any Facility Site shall pay for an Independent Consultant, hired by the Town, to conduct testing and Monitoring of EMF radiation emitted from said Site, and to report results of said Monitoring as follows:
  1. There shall be routine annual Monitoring of emissions by the Independent Consultant using actual field measurements of radiation, utilizing the Monitoring Protocol. This Monitoring shall measure levels of EMF radiation from the Facility Site's primary Antennas as well as from Repeaters. A report of the Monitoring results shall be prepared by the Independent Consultant and submitted to the Commission, the Director of Health, and the Town's consulting engineer.
  2. Any Major Modification of Existing Facility, or the activation of any addition permitted channels, shall require new Monitoring.
- c. Excessive Emissions: Should the Monitoring of a Facility Site reveal that the Site exceeds the FCC 96-326 standard, then the owner(s) of all Facilities utilizing that Site shall be so notified. The owner(s) shall submit to the Commission a plan for the reduction of emissions to a level that complies with the FCC 96-326 standard within ten business days of notification of non-compliance. That plan shall reduce emissions to the standard within fifteen days of initial notification of non-compliance. Failure to accomplish this reduction of emission within fifteen business days shall be a violation of the Special Permit and the Commission shall issue a Cease and Desist Order. The owner(s) will also be subject to penalties and fines as specified in these Regulations. Such fines shall be payable by the Owner(s) of the Facilities with Antennas on the Facility Site, until compliance is achieved.
- d. Structural Inspection: Tower owner(s) shall pay for an Independent Consultant (a licensed professional structural engineer), hired by the Town, to conduct inspections of the Tower's structural integrity and safety. Guyed towers shall be inspected every three years. Monopoles and non-guyed lattice towers shall be inspected every five years. A report of the inspection results shall be prepared by the Independent

Consultant and submitted to the Commission, the Town's consulting engineer, and the Building Inspector. Any Major Modification of Existing Facility which includes changes to Tower dimensions or antenna numbers or type shall require new structural inspection.

- e. Unsafe Structure: Should the inspection of any Tower reveal any structural defect(s) which, in the opinion of the Independent Consultant render(s) that Tower unsafe, the following actions must be taken. Within ten business days of notification of unsafe structure, the owner(s) of the Tower shall submit a plan to remediate the structural defect(s). This plan shall be initiated within 10 days of the submission of the remediation plan. Failure to accomplish this remediation of structural defect(s) within ten days of the submission of the remediation plan or of approval of the remediation plan shall be a violation of the Special Permit and the Commission shall issue a Cease and Desist Order. The owner(s) shall be subject to penalties and fines as specified in Section 19 of these regulations.

**13.19.17 Removal and Reporting Requirements.** The following shall apply to removal of abandoned Towers and Personal Wireless Service Facilities:

Any Personal Wireless Service Facility, which ceases to operate for a period of six months shall be removed by the owner. "Cease to operate" is defined as not performing the normal functions associated with the Personal Wireless Service Facility and its equipment on a continuous and ongoing basis for a period of six months. At the time of removal, the Facility Site shall be remediated such that all Personal Wireless Service Facility improvements which have ceased to operate are removed. If all Facilities on a Tower have ceased to operate, the Tower shall also be removed and the site revegetated. Existing trees shall only be removed if necessary to complete the required removal. The Applicant, upon obtaining a Special Permit shall obtain a financial surety to cover the cost of removal of the Personal Wireless Service Facility and remediation of the landscape, should the Facility cease to operate. The removal required by Section 13.19.17 shall be completed within ninety days of the end of the six-month period. The owner(s) of a Tower shall submit a report every year indicating that the Tower and/or Facility remains in use. Failure to timely provide such a report shall be deemed conclusive evidence that the Tower and/or Facility is no longer used and shall prompt immediate removal. Further, the failure to operate a Tower and/or Facility for six months shall indicate an intent to abandon the use or uses.

**13.19.18 Fees and Insurance**

- a. Towers and Personal Wireless Facilities shall be insured by the owner(s) against damage to persons or property. The owner(s) shall provide a Certificate of Insurance to the Selectmen's Office on an annual basis in which the Town of Washington shall be an additional named insured.
- b. A schedule of fees for Towers and Personal Wireless Service Facilities permitting and removal, any Monitoring of emissions and

inspection of structures, and any other fees shall be established by the Commission. This schedule may be amended from time to time. The application fee for Special Permit applications made under this Section 13.19 is \$200 per vertical foot or \$3,000, whichever is greater.

13.19.19 Siting Council.

If any or all of the Towers and Facilities and related structures regulated by this Section 13.19 become subject to the jurisdiction of the Connecticut Siting Council, this regulation shall remain in effect to the extent not pre-empted by the statutory Siting Council jurisdiction and even to the extent pre-empted shall serve as a guide to the siting council as to the factors important to the Town in the location of towers and related facilities defined under this Section 13.19. Further, these regulations shall remain effective to the extent that they do not conflict with the laws and regulations of the Connecticut Siting Council.

13.19.20 Severability Clause.

The invalidity of any section or provision of this Section 13.19 shall not invalidate any other section or provision hereto.

13.19.21 Definitions and Word Usage: As used in this Section 13.19, the following terms shall have the meaning indicated. The word “shall” or “will” indicates mandatory requirements; “may” is advisory and indicates recommendations which are not mandatory.

- a. **Act.** The Telecommunications Act of 1996.
- b. **Adequate Coverage.** Coverage is considered to be “adequate” within that area surrounding a Base Station where the predicted or measured median field strength of the transmitted signal is greater than -95 dbm. It is acceptable for there to be holes within the area of Adequate Coverage where the signal is less than -95 dbm, as long as the signal regains its strength to greater than -95 dbm further away from the Base Station. For the limited purpose of determining whether the use of Repeater is necessary or desirable, there shall be deemed not to be Adequate Coverage within said holes. The outer boundary of the area of Adequate Coverage, however, is that location past which the signal does not regain a strength of greater than -95 dbm.
- c. **Adequate Capacity.** Capacity is considered to be “adequate” if the Grade of Service is p.05 or better for at least 50% of the days in a proceeding month, prior to the date of Application, as measured using direct traffic measurement of the Personal Wireless Service Facility in question, where the call blocking is due to frequency contention at the antenna(e).
- d. **Antenna.** A device which is attached to a Tower or other structure for transmitting and receiving electromagnetic waves and telecommunication and radio signals. Examples include panels, microwave dishes (other than Earth Stations as defined herein) and Monopoles.
- e. **Available Space.** The space on a Tower or other structure to which



- Antennae of a Personal Wireless Service Provider are both Structurally Able and Electromagnetically Able to be attached.
- f. **Base Station.** The primary sending and receiving site in a wireless communications network. More than one Base Station and/or more than one variety of Personal Wireless Service Provider can be located on a single Tower or structure.
  - g. **Channel.** The segment of the radiation spectrum from an Antenna which carries one signal. An Antenna may radiate on many Channels simultaneously.
  - h. **Communication Equipment Shelter.** A structure located at a Base Station designed principally to enclose equipment used in connection with Personal Wireless Service transmissions.
  - i. **DEM.** Unit of measure of the power level of an electromagnetic signal expressed in decibels referenced to 1 milliwatt.
  - j. **Electromagnetically Able.** The determination that the new signal from and to the proposed new Antennae will not significantly interfere with the existing signals from and to other Facilities located on the same Tower or structure as determined by a qualified professional telecommunications engineer. The use of available technologies to alleviate such interference shall be considered when making this determination.
  - k. **EMF.** Electromagnetic Frequency Radiation.
  - l. **Facility Site.** A property, or any part thereof, which is owned or leased by one or more Personal Wireless Service Providers and upon which one or more Personal Wireless Service Facility(s) and required landscaping are located.
  - m. **FCC.** Federal Communications Commission. The government agency responsible for regulating telecommunications in the United States.
  - n. **FCC 96-326.** A report and order, which sets national standards for emissions of Radio-Frequency emissions from FCC regulated transmitters.
  - o. **GHZ.** Gigahertz: One billion hertz.
  - p. **Grade of Service.** A measure of the percentage of calls which are able to connect to the Base Station during the busiest hour of the day. Grade of Service is expressed as a number, such as p.05 which means that 95% of callers will connect on their first try. A lower number, (p.04), indicates a better Grade of Service.
  - q. **Hertz.** One hertz is the frequency of an electric or magnetic field which reverses polarity once each second or one cycle per second.
  - r. **Major Modification of an Existing Facility.** Any change or proposed change in power input or output, number of Antennae, change in Antenna type or model, repositioning of Antenna(e), change in number of Channels per Antenna above the maximum number approved under an existing Special Permit.
  - s. **Major Modification of an Existing Tower.** Any increase or proposed increase in dimensions of an existing and permitted Tower

- or other structure designed to support Personal Wireless Service transmission, receiving, and/or relaying Antennas and/or equipment.
- t. **HZ. Megahertz:** One million hertz.
  - u. **Monitoring.** The measurement, by the use of instruments in the field, of radiation from a Site as a whole, or from individual Personal Wireless Service Facilities, Towers, Antennas, or Repeaters.
  - v. **Monitoring Protocol.** The testing protocol, initially the Cobbs Protocol, which is to be used to monitor the emissions from existing and new Personal Wireless Service Facilities upon adoption of the Section 13.19. The Commission may, as the technology changes, require by written regulation the use of other testing protocols. A copy of the Monitoring Protocol shall be on file with the Commission.
  - w. **Monopole.** A single self-supporting vertical pole with no guy wire anchors, usually consisting of a galvanized or other unpainted metal, or a wooden pole with below grade foundations.
  - x. **Personal Wireless Services.** Commercial Mobile Services, unlicensed wireless services, and common carrier wireless exchange access services. These services include: cellular services, personal communications services (PCS), Specialized Mobil Radio Services, and Paging Services.
  - y. **Personal Wireless Service Facility.** All equipment (including any Repeaters) with which a Personal Wireless Service Provider broadcasts and receives the radio frequency waves which carry their services and all
  - z. **Personal Wireless Service Provider.** An entity licensed by the FCC to provide Personal Wireless Services to individuals or institutions.
  - aa. **Radiation Propagation Studies or Radial Plots.** Computer generated estimates of the radiation emanating from Antennae or Repeaters sited on a specific Tower or structure.
  - bb. **Repeater.** A small receiver/relay transmitter of not more than 20 watts output designed to provide service to areas which are not able to receive Adequate Coverage directly from a Base Station.
  - cc. **Structurally Able.** The determination that a Tower or structure is capable of carrying the load imposed by the proposed new Antennae under all reasonably predictable conditions as determined by professional structural engineering analysis.
  - dd. **Teleport.** A facility utilizing satellite dishes of greater than 2.0 meters in diameter designed to up-link to communications satellites for transmitting in the C-BAND (4-6 GHZ) spectrum.
  - ee. **Tower.** A lattice structure or framework or Monopole that is free standing or attached to a building or another structure, that is used and designed to support Personal Wireless Service Transmissions, receiving and/or relaying Antennae and/or equipment.

**13.20\* Outdoor Wood-burning Furnaces.** Outdoor wood-burning furnaces (see definition

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\* Addition of Section 13.20: outdoor wood-burning furnaces effective 4/14/07.

in Section 21.1) are allowed by Special Permit, subject to the following conditions:

- 13.20.1 All applicable Connecticut statutes regarding such furnaces shall be met. The applicant shall submit a signed statement affirming compliance with the state's requirements.
- 13.20.2 The application shall include a sketch plan. A site plan is not required.
- 13.20.3 The furnace shall not be operated between May 1 and September 30.
- 13.20.4 Permits for outdoor wood-burning furnaces shall be issued for periods not to exceed 3 years and may be renewed, without reapplication, if the Commission, upon inspection, finds that the furnace remains in compliance with applicable Connecticut statutes regarding such furnaces.