

# TOWER ORDINANCE

**Purpose and Intent:** It is the express purpose of these changes to the land use ordinance to minimize the visual and human environmental impacts of wireless telecommunication service facilities, herein to be called “facility”. This section enables the review and approval of personal wireless service facilities by the Town’s Planning Board in keeping with the Town’s existing ordinances and historic development patterns, including the size and spacing of structures and open spaces.

This ordinance is intended to be used in conjunction with other regulations adopted by the Town, including historic district regulations, site plan review and other local ordinances designed to encourage appropriate land use, human environmental protection, and provision of adequate infrastructure development in Newcastle.

The regulation of such facilities is consistent with the purpose of the Newcastle Land Use Ordinance and planning efforts of the town through its local comprehensive plan to further the conservation and preservation of developed, natural and undeveloped areas, wildlife, flora and habitats for endangered species; the preservation of scenic views; protection of the natural resources of Newcastle; balanced economic growth; the provision of adequate capital facilities; the coordination of the provision of adequate capital facilities with the achievement of other goals; and the preservation of historical, cultural archaeological, architectural and recreational values. The Town feels is necessary to reinforce, clarify and further regulate Towers, Steeples or Similar Structures because:

1. Their height of construction may present a safety hazard to the public.
2. Their emissions and structure may interfere with the normal reception of electromagnetic waves.
3. Their emissions may be harmful to the public.
4. Their structure will create a

## 02.0 Definitions

**02.1** Above Ground Level (AGL). A measurement of height from the natural grade of a site to the highest point of a structure.

**02.2** Antenna. The surface from which wireless radio signals are sent and received by a personal wireless service facility.

**02.3** Camouflaged. A personal wireless service facility that is disguised, hidden, part of an existing or proposed structure or placed within an existing or proposed structure is considered “camouflaged”.

**02.4** Carrier. A company that provides wireless services.

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

**02.6** Cross-polarized (or dual-polarized) antenna. A low mount that has three panels flush mounted or attached very close to the shaft.

**02.7** Elevation. The measurement of height above sea level.

**02.8 Environmental Assessment (EA).** An EA is the document required by the Federal Communications Commission (FCC) and the National Environmental Policy Act (NEPA) when a personal wireless service facility is placed in certain designated areas.

**02.9 Equipment Shelter.** An enclosed structure, cabinet, shed or box at the base of the mount within which is housed batteries and electrical equipment.

**02.10 Fall Zone.** The area on the ground within a prescribed radius from the base of a personal wireless service facility. The fall zone is the area within which there is a potential hazard from falling debris (such as ice) or collapsing material.

**02.11 Functionally Equivalent Services.** Cellular, Personal Communication Services (PCS), Enhanced Specialized Mobile Radio, Specialized Mobile Radio and Paging.

**02.12 Guyed Tower.** A monopole or lattice tower that is tied to the ground or other surface by diagonal cables.

**02.13 Lattice Tower.** A type of mount that is self-supporting with multiple legs and cross-bracing of structural steel.

**02.13 Licensed Carrier.** A company authorized by the FCC to construct and operate a commercial mobile radio services system.

**02.15 Monopole.** The type of mount that is self-supporting with a single shaft of wood, steel or concrete and a platform (or racks) for panel antennas arrayed at the top.

**02.16 Mount.** The structure or surface upon which antennas are mounted, including the following four types of mounts:

1. Roof-mounted. Mounted on the roof of a building.
2. Side-mounted: Mounted on the side of a building.
3. Ground-mounted: Mounted on the ground.
4. Structure-mounted: Mounted on a structure other than a building.

**02.17 Omni directional (whip) antenna.** A thin rod that beams and receives a signal in all directions.

**02.18 Panel Antenna.** A flat surface antenna usually developed in multiples.

**02.19 Personal Wireless Service Facility.** Facility for the provision of personal wireless services, as defined by the Telecommunications Act.

**02.20 Personal Wireless Services.** The three types of services regulated by this Model Ordinance.

**02.21 Radiofrequency (RF) Engineer.** An engineer specializing in electrical or microwave engineering, especially the study of radiofrequencies.

**02.22 Radiofrequency Radiation (RFR).** The emissions from personal wireless services facilities.

**02.23 Security Barrier.** A locked, impenetrable wall, fence or berm that completely seats an area from unauthorized entry or trespass.

**02.24 Separation.** The distance between one carrier's array of antennas and another carrier's array.

**02.25 Telecommunication or Radio Tower.** A structure greater than 75' used for the commercial broadcasting of wireless communication.

**02.26 Tower.** A structure, such as a lattice tower, guy tower or monopole tower constructed as a free-standing structure or in an association with a building, or other permanent structure or equipment, on which is located one or more antennae intended for transmitting or receiving analog, digital, microwave, cellular, telephone, personal

wireless service or similar forms of electronic communication. The term includes microwave towers, common carrier towers, and cellular telephone towers.

**02.27** Wireless Telecommunications Facility or “Facility” means any structure, antenna, tower, or other device which provides radio/television transmission, commercial mobile wireless services, unlicensed wireless service, cellular phone service, specialized mobile radio communications, common carrier wireless exchange access services, and personal communications service or pager service.

### **03.0 District Standards:**

**03.1** Use Regulations A personal wireless service facility shall require a building permit in all cases and may be permitted as follows:

- a. A personal wireless service facility may locate on any existing guyed tower, lattice tower, monopole, electric utility transmission tower, fire tower or water tower, provided that the installation of the new facility does not increase the height of the existing structure except as provided in Section 03.35 below. Such installations shall not require a Site Plan Permit from the Newcastle Planning Board but may require a special exception from the Planning Board for determination if its use is compatible with the proposed location.
- b. A personal wireless service facility involving construction of one or more ground or building (roof or side) mounts shall require a Site Plan Permit from the Newcastle Planning Board, a Special Exception Permit from the Newcastle Planning Board (if applicable). Design Review Board (if applicable) and a building permit from the Codes Enforcement Officer. Such facilities may locate by special exception permit from Newcastle Planning Board in all zoning districts within the Town, provided that the proposed use complies with the, use, height and setback requirements of the district and all Board of Appeals Regulations.
- c. A personal wireless service facility that exceeds the height restrictions of Sections 03.3-03.35 may have its use permitted by Special Exception Permit from the Newcastle Planning Board. They would be allowed throughout the town if they meet certain height restrictions and performance standards. Taller structures would only be permitted in the light industrial district.

The model Ordinance recommends that towns develop Overlay Districts which permit the location of taller personal wireless service facilities by identifying areas that are less sensitive to visual impacts. Wireless Service Overlay Districts would not need to be established for an entire zoning district but could be designated for a specific area depending upon the visual or environmental sensitivity of an area. Greater heights could be permitted in these areas if co-locations are proposed. Some municipalities determine height restrictions based upon the number of co-locations on one facility. Overlay Districts would still be subject to the other setback and Special Permit from the Newcastle Board of Appeals regulations.

As part of the planning process, towns may wish to identify and map certain areas where personal wireless service facilities are prohibited unless fully camouflaged. For example, a town may not want these facilities to be located within historic districts or Areas of Critical Environmental Concern unless the facilities can be completely hidden.

**03.2 Location Applicants seeking approval for personal wireless service facilities shall comply with the following:**

- a. If feasible, personal wireless service facilities shall be located on existing structures, including but not limited to buildings, water towers, existing telecommunications facilities, utility poles and towers, and related facilities, provided that such installation preserves the character and integrity of those structures. Applicants are urged to consider use of existing telephone and electric utility structures as sites for one or more personal wireless service facilities. The applicant shall have the burden of proving that there are no feasible existing structures upon which to locate.
- b. If the applicant demonstrates that it is not feasible to locate on an existing structure, personal wireless service facilities shall be designed to be camouflaged to the greatest extent possible, including but not limited to: use of compatible building materials and colors, screening, landscaping and placement within trees.
- c. The applicant shall submit documentation of the lease or legal right to install and use the proposed facility mount at the time of application for Site Plan Review from the Newcastle Planning Board, a building permit from the Codes Enforcement Officer, and Special Exception Permit from the Newcastle Planning Board.

**03.3 Dimensional Requirements.**

Personal Wireless Service Facilities shall comply with the following requirements:

- a. Height. General regardless of the type of mount, facilities shall be no higher than ten feet above the average height of buildings within 300 feet of the proposed facility. In addition, the height of a personal wireless service facility shall not exceed by more than ten feet the height limits of the zoning districts in which the facility is proposed to be located, unless the facility is completely camouflaged such as within a flagpole, steeple chimney, or similar structure. Personal wireless service facilities may locate on a building that is legally non-conforming with respect to height, provided that the facilities do not project above the existing building height.
- b. Height, Ground-Mounted Facilities. Ground Mounted Personal Wireless Service Facilities shall not project higher than ten feet above the average building height or, if there are no buildings within 300 feet, these facilities shall not project higher than ten feet above the average tree canopy height measured from ground level (AGL). If there are no buildings within 300 feet of the proposed site of the facility, all ground-mounted facilities shall not exceed seventy feet.
- c. Height. Side and Roof-Mounted Facilities. Side and Roof-Mounted Personal Wireless Service Facilities shall not project more than ten feet above the height of an existing building nor project more than ten feet above the height limit of the zoning district within which the facility is located. Personal Wireless Service Facilities may locate on a building that is legally non-conforming with respect to height, provided that the facilities do not project above the existing building height.

- d. Height. Existing Structures. (Utility) New antennas located on any of the following existing structures shall be exempt from the height restrictions of the Ordinance if there is no more than a ten-foot increase in the height of the existing structure as a result of the installation of a personal wireless service facility: electric transmission and distribution towers, telephone poles and similar existing utility structures. This exemption shall not apply in the design review districts, within 150 feet of the right-of-way of any scenic roadway, or in designated scenic views.
- e. Height. Wireless Facility Overlay Districts. The light industrial district is a Wireless Facility Overlay District (as designated on the Town zoning map); personal wireless service facilities of up to 150 feet in height may be permitted by Special Permit from the Newcastle Board of Appeals. Monopoles are the preferred type of mount for such taller structures. Such structures shall comply with all setback and regulations set forth in this Ordinance.

### **03.4 Setbacks.**

All Personal Wireless Service Facilities and their equipment shelters shall comply with the building setback provisions of the zoning district in which the facility is located. In addition, the following setbacks shall be observed:

- a. In order to ensure public safety, the minimum distance from the base of any ground-mounted personal wireless service facility to any property line, road, habitable dwelling, business or institutional use, or public recreational area shall be the height of the facility/mount, including any antennas or other appurtenances plus 10% of the total. This setback is considered a “fall zone”.
- b. If an existing structure is proposed as a mount for a personal wireless service facility, a fall zone shall not be required, but the setback provisions of the zoning district shall apply. In the case of pre-existing non-conforming structures, personal wireless service facilities and their equipment shelters shall not increase any non-conformities, except as provided in paragraph c. below.
- c. Flexibility. In reviewing a Site Plan Review Application for a personal wireless service facility, the Planning Board may reduce the required fall zone and/or setback distance of the zoning district by as much as 50% of the required distance, if it finds that a substantially better design will result from such reduction. In making such a finding, the Planning Board shall consider both the visual and safety impacts of the proposed use.

### **03.5 Design Standards**

Visibility/Camouflage by Existing Building or Structures:

- a. When a personal wireless service facility extends above the roof height of a building which it is mounted, every effort shall be made to conceal the facility within or behind existing architectural features to limit its visibility from public ways. Facilities mounted on the roof shall be stepped back from the front façade in order to limit their impact on the building's silhouette.

- b. Personal Wireless Service Facilities which are side mounted shall blend with the existing building's architecture and, if over 5 square feet, shall be painted or shielded with material which is consistent with the features and materials of the building.

**03.6 Camouflage by Vegetation:**

- a. If personal wireless service facilities are not camouflaged from public viewing areas by existing buildings or structures, they shall be surrounded by buffers of dense tree growth and under story vegetation in all directions to create an effective year-round visual buffer. Ground-mounted personal wireless service facilities shall provide a vegetated buffer of sufficient height and depth to effectively screen the facility. Trees and vegetation may be existing on the subject property or installed as part of the proposed facility or a combination of both. The Planning Board shall determine the types of trees and plant materials, height, and depth of the needed buffer based on site conditions.

**03.7 Color:**

- a. Personal Wireless Service Facilities which are side mounted on building shall be painted or constructed of materials to match the color of the building material directly behind them. The Planning Board shall determine the most appropriate color for the facility so that it is least visible against the skyline/horizon.
- b. To the extent that any personal wireless service facilities extend above the height of the vegetation immediately surrounding it, they shall be painted in a light grey or light blue hue which blends with sky and clouds.

**03.8 Equipment Shelters.** Equipment shelters for personal wireless service facilities shall be designed consistent with one of the following design standards:

- a. Equipment shelters shall be located in underground vaults; or
- b. Designed consistent with traditional Newcastle architectural styles and materials, with a roof pitch of at least 10/12 and wood clapboard or shingle siding; or
- c. Camouflaged behind an effective year-round landscape buffer, equal to the height of the proposed building, and/or wooden fence. The Planning Board shall determine the style of fencing and/or landscape buffer that is compatible with the neighborhood.

**03.9 Lighting and Signage.**

- a. The upper portion of the personal wireless service facilities shall be lighted only if required by the Federal Aviation Administration (FAA).
- b. Lighting of equipment structures and any other facilities on site shall be shielded from abutting properties. All such lighting may not be mounted more than 20 feet in height from the natural grade. There shall be total cutoff of all light at the property lines of the parcel to be developed, and foot-candle measurements at the property line shall be 0.0 (not yet decided) initial foot-candles when measured at grade.
- c. Signs shall be limited to those needed to identify the property and the

owner and warn of any danger. All signs shall comply with the requirements of the Town's sign regulations.

- d. All ground mounted personal wireless service facilities shall be surrounded by a security barrier within the buffer landscape.

#### **03.91 Historic Buildings and Districts:**

- a. Any personal wireless service facilities located on or within an historic structure shall not alter the character defining features, distinctive construction methods, or original historic materials of the building.
- b. Any alteration made to an historic structure to accommodate a personal wireless service facility shall be fully reversible.
- c. Personal Wireless Service Facilities within an historic district shall be concealed within or behind existing architectural features, or shall be located so that they are not visible from public roads and viewing areas within the district.
- d. However, the Design Review Board shall be involved in the review of any applications to locate such facilities within a design review district or within a structure of historic significance.

#### **03.92 Scenic Landscapes and Vistas.**

- a. Personal Wireless Service Facilities shall not be located within open areas that are visible from public roads, recreational areas or residential development. As required in the camouflage section above, all ground-mounted personal wireless service facilities which are not camouflaged by existing buildings or structures shall be surrounded by a buffer of dense tree growth.
- b. Any personal wireless service facility that is located within 300 feet of a designated scenic view as described in the town ordinance, scenic landscape or scenic road as designated by the town shall not exceed the height of vegetation at the proposed location. If the facility is located farther than 300 feet from the scenic view, the height regulations described elsewhere in this Ordinance will apply.

#### **03.93 Human Environmental Standards.**

- a. Personal wireless service facilities shall not be located in wetlands or riparian, and resource protection zones as defined by the shore land zoning overlay district. Locating of wireless facilities in wetland and or riparian buffer areas shall be avoided whenever possible and disturbance to wetland and or riparian buffer areas shall be minimized.
- b. No hazardous waste shall be discharged on the site of any personal wireless service facility. If any hazardous materials are to be used on site, there shall be provisions for full containment of such materials. An enclosed containment area shall be provided with a sealed floor, designed to contain at least 110% of the volume of the hazardous materials stored or used on the site.
- c. Storm water run-off shall be contained on-site and meet the standards of this ordinance found in Chapter XII.
- d. Ground-mounted equipment for personal wireless service facilities shall not generate noise in excess of 50db at ground level at the base of the building

- closest to the antenna.
- e. Roof-mounted or side-mounted equipment for personal wireless service facilities shall not generate noise in excess of 50db at ground level at the base of the building closest to the antenna.

### **03.94 Safety Standards**

#### **Radiofrequency Radiation**

- a. All equipment proposed for a personal wireless service facility shall be authorized per the FCC Guidelines for Evaluating the Environmental Effects of Radioactivity Radiation (FCC Guidelines).

### **04.0 Administration**

- a. The Newcastle Planning Board will conduct a site plan review for personal wireless service facilities.
- b. A special exception permit from the Newcastle Planning Board may be granted for personal wireless service facilities concerning the site use, and structure height in the light industrial district.

### **05.0 Site plan review**

#### **Location Filing Requirements**

- a. A town-wide map showing the other existing personal wireless service facilities in the Town and outside the Town within one mile of its corporate limits.
- b. The proposed locations of all existing and future personal wireless facilities in the Town on a Town-wide map for this carrier.

#### **Siting filing requirements:**

1. Tree cover on the subject property and adjacent properties within 300 feet, by dominant species and average height, as measured by or available from a verifiable source.
2. Proposed location of antenna, mount and equipment shelter(s).
3. Proposed security barrier, indicating type and extent as well as point of controlled entry.
4. Location of all roads, public and private, on the subject property and on all adjacent properties within 300 feet including driveways proposed to serve the personal wireless service facility.
5. Distances, at grade, from the proposed personal wireless service facility to each building on the vicinity plan.
6. Lines representing the sight line showing viewpoint (point from which view is taken) and visible point (point being viewed) from "Sight Lines" subsection below.
  - a. A sight line representation shall be drawn from any public road within 300 feet and the closest façade of each residential building (viewpoint) within 300 feet to the highest point (visible point) of the personal wireless service facility. Each sight line shall be depicted in profile, drawn at one-inch equals 50 feet. The profiles shall show all intervening trees and buildings. In the event there is only one (or more) residential building within 300 feet there shall be at least two sight lines from the closest habitable structures or public roads, if any.



- b. Existing (before condition) photographs. Each sight line shall be illustrated by one four-inch by six-inch color photograph of what can currently be seen from any public road within 300 feet.
- c. Proposed (after condition). Each of the existing condition photographs shall have the proposed personal wireless service facility superimposed on it to show what will be seen from public roads if the proposed personal wireless facility is built.
- d. Siting elevations, or views at-grade from the north, south, east and west for a 50-foot radius around the proposed personal wireless service facility plus from all existing public and private roads that serve the subject property. Elevations shall be at either one-quarter inch equals one foot or one-eighth inch equals one-foot scale and show the following:
  - 1. Antennas, mounts and equipment shelter(s), with total elevation dimensions and AGL of the highest point.
  - 2. Security barrier. If the security barrier will block views of the personal wireless service facility, the barrier drawing shall be cut away to show the view behind the barrier.
  - 3. Any and all structures on the subject property.
  - 4. Existing trees and shrubs at current height and proposed trees and shrubs at proposed height at time of installation, with approximate elevations dimensioned.
  - 5. Grade changes, or cuts and fills, to be shown as original grade and new grade line with two-foot contours above mean sea level.

### **Design Filing Requirements**

- a. Equipment brochures for the proposed personal wireless service facility such as manufacturer's specifications or trade journal reprints shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- b. Materials of the proposed personal wireless service facility specified by generic type and specific treatment (e.g., anodized aluminum, stained wood, painted fiberglass, etc....). These shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- c. Colors of the proposed personal wireless service facility represented by a color board showing actual colors proposed. Colors shall be provided for the antennas, mounts, equipment shelters, cables as well as cable runs, and security barrier, if any.
- d. Dimensions of the personal wireless service facility specified for all three directions: height, width and breadth. These shall be provided for the antennas, mounts, equipment shelters and security barrier, if any.
- e. Appearance shown by at least two photographic superimpositions of the personal wireless service facility within the subject property. The photographic superimpositions shall be provided for the antennas,

- mounts, equipment shelters, cables as well as cable runs, and security barrier, if any, for the total height, width and breadth.
- f. Landscape plan including existing trees and shrubs and those proposed to be added, identified by size of specimen at installation and species.
  - g. Within 30 days of the pre-application conference, or within 21 days of filing an application for a Site Plan Review Permit from the Newcastle Planning Board, the applicant shall arrange for a balloon or crane test at the proposed site to illustrate the height of the proposed facility. The date, time and location of such test shall be advertised in a newspaper of general circulation in the Town at least 14 days, but not more than 21 days prior to the test.
  - h. If lighting of the site is proposed, the applicant shall submit a manufacturer's computer-generated point-to-point printout, indicating the horizontal foot-candle levels at grade, within the property to be developed and twenty-five (25) beyond the property lines. The printout shall indicate the locations and types of luminaries proposed.

#### **05.10 Noise Filing Requirements**

The applicant shall provide a statement listing the existing and maximum future projected measurements of noise from the proposed personal wireless service facilities, measured in decibels Ldn (logarithmic scale, accounting for greater sensitivity at night), for the following:

1. Existing, or ambient: the measurements of existing noise.
2. Existing plus proposed personal wireless service facilities: maximum estimate of noise from the proposed personal wireless service facility plus the existing noise environment.

Such statement shall be certified and signed by an acoustical engineer, stating that noise measurements are accurate and meet the Noise Standards of this Ordinance.

#### **05.20 Radiofrequency Radiation (RFR) Filing Requirements**

The applicant shall provide a statement listing the existing and maximum future projected measurements of RFR from the proposed personal wireless service facility, for the following situations:

1. Existing, or ambient: the measurements of existing RFR.
2. Existing plus proposed personal wireless service facilities: maximum estimate of RFR from the proposed personal wireless service facility plus the existing RFR environment.
3. Certification, signed by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radiofrequency Radiation Standards sub-section of this Ordinance.

#### **05.30 Federal Environmental Filing Requirements.**

- a. The National Environmental Policy Act (NEPA) applies to all applications for personal wireless service facilities. NEPA is administered by the FCC via procedures adopted as Subpart 1, Section 1.1301 et seq. (47 CFR Ch. I). The FCC requires that an environmental assessment (EA) be filed with the FCC prior to beginning operations for any personal wireless service facility proposed in or involving any of the following:

1. Wilderness areas
  2. Wildlife preserves
  3. Endangered species habitat.
  4. Historical site.
  5. Indian religious site.
  6. Flood plain.
  7. Wetlands.
  8. High Intensity white lights in residential neighborhoods.
  9. Excessive radiofrequency radiation exposure.
- b. At the time of application filing, an EA that meets FCC requirements shall be submitted to the Town for each personal wireless service facility site that requires such an EA to be submitted to the FCC.
  - c. The applicant shall list location, type and amount (including trace elements) of any materials proposed for use within the personal wireless service facility that are considered hazardous by the federal, state or local government.

The Federal Communications Commission (FCC) Guidelines were published on August 1, 1996. The FCC has extended the implementation date of the FCC Guidelines from January 1, 1997 to September 1, 1997. The existing guidelines remain in effect.

**05.40 The Special Exception Permit** from the Newcastle Planning Board and the Site Plan Review from the Newcastle Planning Board may waive one or more of the application filing requirements of this section if it finds that such information is not needed for a thorough review of a proposed personal wireless service facility.

#### **06.00 Co-Location**

- a. Licensed carriers shall share personal wireless service facilities and sites where feasible and appropriate, thereby reducing the number of personal wireless service facilities that are stand-alone facilities. All applicants for Site Plan Review Permit from the Newcastle Planning Board for a personal wireless service facility shall demonstrate a good faith effort to co-locate with other carriers. Such good faith effort includes, but is not limited to:
  1. A survey of all existing structures that may be feasible sites for co-locating personal wireless service facilities;
  2. Contact with all the other licensed carriers for commercial mobile radio services operating in the County; and
  3. Sharing information necessary to determine if co-location is feasible under the design configuration most accommodating to co-location.
- b. If co-location is found to be not feasible, a written statement of the reasons for the infeasibility shall be submitted to the Town. The Town may retain a technical expert in the field of RF engineering to verify if co-location at the site is not feasible or is feasible given the design configuration most accommodating to co-location. The cost for such a technical expert will be at the expense of the applicant. The Town may deny a Site Plan Permit from the Newcastle Planning Board to an applicant that has not demonstrated a good faith effort to provide for co-

location.

- c. If the applicant does intend to co-locate or to permit co-location, the Town shall request drawings and studies which show the ultimate appearance and operation of the personal wireless service facility at full build-out.
- d. If the Planning Board approves co-location for a personal wireless service facility site, the Site Plan Permit from the Newcastle Planning Board shall indicate how many facilities of what type shall be permitted on that site. Facilities specified in the Site Plan Permit from the Newcastle Planning Board approval shall require building permits to be issued, by the Code Enforcement Officer, after Board approval. The Planning Board must also approve any special exceptions for height prior to site plan approval.

Estimates of RFR emissions will be required for all facilities, including proposed and future facilities.

#### **07.00 Modifications.**

A modification of a personal wireless service facility may be considered equivalent to an application for a new personal wireless service facility and will require a new Site Plan Permit from the Newcastle Planning Board when the following events apply:

- a. The applicant and or co-applicant wants to alter the terms of the Site Plan Permit from the Newcastle Planning Board or Special Exception from the Planning Board by changing the personal wireless service facility in one or more of the following ways:
  - 1. Change in the number of facilities permitted on the site;
  - 2. Change in the technology used for the personal wireless service facility.
  - 3. The applicant and/or co-applicant wants to add any equipment or additional height not specified in the original design filing.

#### **08.00 Site Plan Review**

##### **Monitoring and Maintenance**

- a. After the personal wireless service facility is operational, the applicant shall submit, within 90 days of beginning operations and at annual intervals from the date of issuance of the Site Plan Permit from the Newcastle Planning Board, existing measurements of RFR from the personal wireless service facility. Such measurements shall be signed and certified by a RF engineer, stating that RFR measurements are accurate and meet FCC Guidelines as specified in the Radiofrequency Standards sections of this Ordinance.
- b. After the personal wireless service facility is operational, the applicant shall submit, within 90 days of the issuance of the Site Plan Permit from the Newcastle Planning Board, and at annual intervals from the date of issuance of Site Plan Permit from the Newcastle Planning Board, existing measurements of noise from the personal wireless service facility. Such measurements shall be signed by an acoustical engineer, stating that noise measurements are accurate and meet the Noise Standards sub-section of this Ordinance.
- c. The applicant and co-applicant shall maintain the personal wireless service

facility in good condition. Such maintenance shall include, but shall not be limited to, painting structural integrity of the mount and security barrier, and maintenance of the buffer areas and landscaping.

#### **09.00 Abandonment or Discontinuation of Use**

- a. At such time that a licensed carrier plans to abandon or discontinue operation of a personal wireless service facility, such carrier will notify the Town by certified U.S. mail of the proposed date of abandonment or discontinuation of operations. Such notice shall be given no less than 30 days prior to abandonment or discontinuation of operations. Such notice shall be given no less than 30 days prior to abandonment or discontinuation of operations. If a licensed carrier fails to give such notice, the personal wireless service facility shall be considered abandoned upon such discontinuation of operations.
- b. Upon abandonment or discontinuation of use, the carrier shall physically remove the personal wireless facility within 90 days from the date of abandonment or discontinuation of use. "Physically remove" shall include, but not be limited to:
  1. Removal of antennas, mount, equipment shelters and security barriers from the subject property.
  2. Proper disposal of the waste materials from the site in accordance with local and state solid waste disposal regulations.
  3. Restoring the location of the personal wireless service facility to its natural condition, except that any landscaping and grading shall remain in the after-condition.
  4. If a carrier fails to remove a personal wireless service facility in accordance with this section of this Ordinance, the Town shall have the authority to enter the subject property and physically remove the facility. The Planning Board may require the applicant to post a bond at the time of construction to cover costs for the removal of the personal wireless service facility in the event the Town must remove the facility.

#### **10.00 Reconstruction or Replacement of Existing Towers and Monopoles.**

- a. Guyed towers, lattice towers, utility towers and monopoles in existence at the time of adoption of this Ordinance may be reconstructed, altered, extended or replaced on the same site by Site Plan Permit from the Newcastle Planning Board, provided that the Planning Board finds that such reconstruction, alteration, extension or replacement will not be substantially more detrimental to the neighborhood and/or the Town than the existing structure. In making such a determination, the Planning Board shall consider whether the proposed reconstruction, alteration, extension or replacement will create public benefits such as opportunities for co-location, improvements in public safety, and/or reduction in visual and environmental impacts. No reconstruction, alteration, extension or replacement shall exceed the height of the existing facility by more than twenty (20) feet.

#### **11.00 Term of Site Plan Permit from the Newcastle Planning Board**

- a. A site Plan Permit from the Newcastle Planning Board issued for any personal wireless service facility over fifty (50) feet in height shall be valid for fifteen (15) years. At the end of that time period, the personal wireless service facility shall be removed by the carrier or a new Site Plan Permit from the Newcastle Planning Board shall be required.

**12.00 The purpose of the changes is to reinforce, clarify, and further regulate Towers, Steeples, or Similar Structures, because:**

- a. Their height of construction may present a safety hazard to the public; and
- b. Their emissions and structure may interfere with the normal reception of electromagnetic waves; and
- c. Their emissions may be harmful to the public.

**13.00 Steeples, or Similar Structures**

1. The Board of Appeals may grant a waiver to the maximum height limitation in a zone for:
  - a. a structure exempted from such a limitation by federal or state law;
  - b. a structure traditionally accepted as an addition to certain types of buildings, such as a church steeple; or a use that reasonably requires such a structure to accomplish a lawful use or function, and no reasonable alternative is available.
2. In granting a waiver, the Board shall:
  - a. set the waiver height as low as possible to allow its reasonable use;
  - b. establishes standards and limitations on lighting;
  - c. ensure that the structure and its location will not substantially impair another's view;
  - d. ensure that any electromagnetic emission will not interfere with anyone else;
  - e. the structure's construction or location shall not pose a threat to public health or safety; and
  - f. establishes any other conditions or limitations it deems appropriate to reduce any adverse effect of the granting of a waiver.
3. Commercial telecommunication towers and radio towers over 75'. Herein after may also be referred to as "tower or structure" for this section.
4. The Planning Board may grant a permit for a use requiring a TOWER, OR SIMILAR STRUCTURES if the tower complies with Chapter III – Site Plan Review, of the Newcastle Land Use Ordinance and the following:
  - a. The structure is exempted from such a limitation by federal or state law;
  - b. The structure is traditionally accepted as an addition to certain types of buildings, such as a church steeple; or
  - c. The structure is required to accomplish a lawful use or function, and reasonable alternative is available.
5. Land Use Ordinance and the following:
  - a. The structure is exempted from such a limitation by federal or state law;
  - b. The structure is traditionally accepted as an addition to certain types of buildings, such as a church or steeple or;

- c. The structure is required to accomplish a lawful use or function, and no reasonable alternative is available.
- 6. In granting a permit, the Board shall:
  - a. Set the height to be no greater than 50' above the tree canopy and in no circumstances is it to exceed 199'. In all cases the height shall be as low as possible.
  - b. There will be no lights higher than 20' from the ground. All lights will be shielded and directed downward. The ground level is the level of the ground prior to construction at the base of the proposed tower.
  - c. The structure and its location will not substantially impair another's view.
  - d. The electromagnetic emission will not interfere with anyone else.
  - e. The structure's construction or location shall not pose a threat to public health or safety; and the lot is large enough to contain the structure if it fails. Adequate proof must be shown by the applicant to show conformance.
  - f. A bond must be posted prior to issuing a site plan permit, that will compensate the town for removal and or storage of any tower if the facility becomes delinquent in taxes or is found in violation of a town, state or federal ordinance, or if it has not been used in 360 days. Such costs for removal and or for storage shall be established by the applicant to the satisfaction of the Board prior to approval. The bond will be reviewed by the Planning Board annually and, fluctuate at the rate of inflation as described by the U.S. Federal Reserve Bank.
  - g. The structure will be free standing with no guide wires.
  - h. All such structures should be located in such a fashion so as to allow for adequate coverage of services provided.
  - i. Applicant must show that the use of alternate sites such, as water towers and existing towers are not available. All towers must be fully utilized before any additional permits can be granted unless evidence of unsuitability can be given by an impartial source. All utilization except for the municipal exceptions will be contracted at fair market rates.
  - j. No new towers may be located outside of the commercial or light industrial zones as described by the Newcastle Land Use Code.
  - k. The Town may request at no cost a space for an antenna or other appropriate communication device.
  - l. The color of the tower shall be the choice of the Planning Board.
  - m. Any site for which an application for a radio tower, and the required fees have been accepted by the Town of Newcastle.