

**ORDINANCE NO. \_\_\_\_\_**

**AN ORDINANCE OF THE TOWNSHIP OF HAYCOCK, BUCKS COUNTY, PENNSYLVANIA, MERGING AND RESTATING IN FULL ORDINANCE NO 95 AND ITS AMENDMENT, ORDINANCE NO. 96, WHICH AMENDED ARTICLE IV SECTION 404 OF THE ZONING ORDINANCE OF THE TOWNSHIP OF HAYCOCK, BUCKS COUNTY, ESTABLISHING STANDARDS AND REGULATIONS FOR TELECOMMUNICATIONS FACILITIES WITHIN HAYCOCK TOWNSHIP**

**WHEREAS**, Section 1516 (53 P.S. §66516) of the Pennsylvania Second Class Township Code provides that the corporate powers of the Board of Supervisors of Haycock Township (the “Board of Supervisors”) include the ability to plan for the development of the township through zoning, subdivision and land development regulations under the act of July 13, 1968 (P.L. 805, No. 247), known as the “Pennsylvania Municipalities Planning Code.”

**WHEREAS**, the Board of Supervisors on or about September, 26, 1994, duly adopted Ordinance No. 71, revising and restating the Haycock Zoning Ordinance as adopted in 1975;

**WHEREAS**, Section 1601 of the Second Class Township Code provides that the Board of Supervisors may adopt ordinances in which general or specific powers of the township may be exercised, and, by the enactment of subsequent ordinances, the Board of Supervisors may amend, repeal or revise existing ordinances (53 P.S. Section 66601);

**WHEREAS**, the since its adoption, the Zoning Ordinance has from time to time been amended;

**WHEREAS**, the Board of Supervisors on or about December 1, 2003, duly adopted Ordinance No. 95, amending the Zoning Ordinance to make provisions for the establishment of standards and regulations for telecommunications facilities within the Township and on or about May 3, 2004, duly adopted Ordinance No. 96, amending Ordinance No. 95 regarding exemptions to the Ordinance and regarding the location on which a telecommunications facility may be located in Haycock Township;

**WHEREAS**, the Board of Supervisors finds and determines that Ordinance No. 95 and its Amendment, Ordinance No. 96 should be merged and restated in full for ease and better efficiency of use.

**NOW THEREFORE**, in consideration of the foregoing, be it **ENACTED** and **ORDAINED** by the Board of Supervisors of Haycock Township, Bucks County, Pennsylvania, as follows:

**Section 01:** Article IV section 404 of the Zoning Ordinance is amended by merging Ordinance 95 and its Amendment, Ordinance No. 96 and the same is restated in full as follow:

## **I. TELECOMMUNICATIONS FACILITIES**

### **I1 PURPOSE**

The purpose of this section is to protect the public health, safety, and general welfare of the citizens of Haycock Township and of those who visit this community, while accommodating the telecommunication needs of residents, visitors, community services and businesses. This section shall:

- A.** Preserve the character and appearance of Haycock Township, while allowing adequate telecommunications services to be developed;
- B.** Protect the scenic, historic, environmental, and natural resources of Haycock Township, and property values therein;
- C.** Provide standards and requirements for the operation, siting, design, appearance, construction, monitoring, modification, and removal of telecommunications facilities;
- D.** Minimize tower and antenna proliferation by encouraging the sharing of existing telecommunications facility sites where possible and appropriate;
- E.** Facilitate the provision of telecommunications services to the residences and businesses of Haycock Township;
- F.** Require, through performance standards, the location of telecommunication facilities in nonresidential areas and away from other sensitive areas such as schools, hospitals, senior centers, and child care facilities.

### **I2 AUTHORITY TO HIRE INDEPENDENT CONSULTANTS**

**A.** Upon review of an application for use by special exception and/or Site Plan Review for a telecommunications facility, the Haycock Township Zoning Hearing Board (hereinafter "Zoning Board") and/or the Haycock Township Planning Commission (hereinafter "Planning Commission") may determine that it needs the assistance of an independent consultant or consultants to evaluate the application. Upon making such a determination, it may hire independent consultants, the reasonable costs of whose services shall be paid for by the applicant from escrow funds held with the Township pursuant to the fee schedule set by the Board of Supervisors via Resolution. These consultants shall be qualified professionals with an appropriate combination of training, record of service, and/or certification in one or more of the following areas of expertise: 1) telecommunications/radio frequency engineering; 2) structural engineering; 3) assessment of electromagnetic fields; 4) legal issues; 5) other

areas, if determined necessary by the Zoning Board or the Planning Commission.

**B.** The Zoning Board and Planning Commission may provide the full application to any independent consultant(s) hired pursuant to this section for their analysis and review. Consultants shall report directly to the Zoning Board and/or the Planning Commission.

### **I3 CONSISTENCY WITH FEDERAL LAW**

The Zoning Board's decision regarding an application is intended to be in agreement with federal law, particularly the Telecommunications Act of 1996 as it may be amended. This section is not intended to:

**A.** Prohibit or have the effect of prohibiting the provision of personal wireless services;

**B.** Unreasonably discriminate among providers of functionally equivalent services; or

**C.** Regulate personal wireless services on the basis of the environmental effects of radio frequency emissions, to the extent that the regulated services and facilities comply with the Federal Communications Commission (FCC) regulations concerning such emissions.

### **I4 EXEMPTIONS**

The following telecommunications facilities and uses are exempt from the requirements of this section: police, fire, ambulance, and other emergency dispatch; amateur (ham) radio, citizens-band radio, single-use local business radio dispatch, television antennas for home use, or temporary mobile facilities for television or radio broadcasts ("Exempt Facilities").

No FCC-licensed telecommunications facility or use, except applicants for telecommunications facilities permits that received Zoning Hearing Board approval prior to the date of the enactment of Ordinance 95, shall be considered exempt from this section for any reason, whether or not said facility or use is proposed to share a tower or other structure with Exempt Facilities

### **I5 DEFINITIONS**

Definitions contained in this section shall be applicable to this section only, and do not pertain to the remainder of the Haycock Township Zoning Ordinance. Definitions in the Haycock Township Zoning Ordinance will pertain to this section unless the term is specifically defined herein.

**ANTENNA:** A device for transmitting and/or receiving electromagnetic signals.

**APPLICANT:** A person who applies for a telecommunications facility siting. An applicant can be the landowner of record, or the telecommunications service provider or agent of record, with the landowner's (or other legally designated representative) written permission.

**BASE STATION:** The primary sending and receiving site in a telecommunications facility. More than one base station and/or more than one variety of telecommunications provider can be located on a single tower or structure.

**CELLULAR TELECOMMUNICATIONS:** A commercial Low Power Mobile Radio Service bandwidth licensed by the FCC to providers in a specific geographical area in which the radio frequency spectrum is divided into discrete channels which are assigned in groups to geographic cells within a service area and which are capable of being reused in different cells within the service area.

**CHANNEL:** The segment of the radiation spectrum to or from an antenna which carries one signal. An antenna may radiate on many channels simultaneously.

**CO-LOCATION:** Locating wireless telecommunications equipment from more than one provider at a single site or structure.

**FCC:** Federal Communications Commission. The government agency responsible for regulating telecommunications in the United States.

**LOCATION:** References to site location shall be the exact longitude and latitude, to the nearest tenth of a second. Bearing or orientation should be referenced to true north.

**MODIFICATION OF AN EXISTING TELECOMMUNICATIONS FACILITY:** Any change, or proposed change, in power input or output, number of antennas, change in antenna type(s) or model(s), repositioning of antenna(s), or change in number of channels per antenna above the maximum number approved under an existing permit.

**MODIFICATION OF AN EXISTING TOWER OR STRUCTURE:** Any change, or proposed change, in dimensions of an existing and permitted tower or other structure designed to support telecommunications transmission, receiving and/or relaying antennas and/or equipment.

**MONITORING:** The measurement, by the use of instruments in the field, of non-ionizing radiation exposure at a telecommunications facility site as a whole, or from the towers, antennas or repeaters.

**MONITORING PROTOCOL:** The testing protocol, such as the Cobbs Protocol or the FCC Regulations (Title 47, Part 1, Section 1.1307 referenced as IEEE C95.3 1991), or one substantially similar, including compliance determined in

accordance with the National Council on Radiation Protection and Measurements, which is to be used to monitor the emissions and determine exposure risk from existing and new telecommunications facilities.

**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.

**PERMIT:** An official action which sets forth the rights and obligations extended by Haycock Township to an operator to own, construct, maintain, and operate its telecommunications facility within the boundaries of the township.

**PERMITTEE:** An applicant who is granted a permit for a telecommunications facility by Haycock Township.

**RADIAL PLOTS:** Radial plots are the result of drawing equally spaced lines (radials) from the point of the antenna, calculating the expected signal and indicating this graphically on a map. The relative signal strength may be indicated by varying the size or color at each point being studied along the radial. A threshold plot uses a mark to indicate whether that point would be strong enough to provide adequate coverage i.e., the points meeting the threshold of adequate coverage. The draw back is the concentration of points close to the antenna and the divergence of points far from the site near the ends of the radials.

**REPEATER:** A small receiver/relay transmitter and antenna of relatively low power output designed to provide service to areas which are not able to receive adequate coverage directly from a base or primary station.

**ROOF AND/OR BUILDING MOUNT TELECOMMUNICATIONS FACILITY:** A telecommunications facility where antennas are mounted to an existing structure on the roof (including rooftop appurtenances) or a building face.

**STRUCTURALLY ABLE:** The determination that a tower or structure is capable of safely carrying the load imposed by the proposed new antenna(s) under all reasonably predictable conditions as determined by professional structural engineering analysis including the wind load or any other structural requirements.

**STRUCTURE:** Any pole, telescoping mast, tripod or the like which supports a device used in the transmitting and/or receiving of electromagnetic signals.

**TELECOMMUNICATIONS EQUIPMENT BUILDING:** A structure located at a base station designed principally to enclose equipment used in connection with telecommunications transmissions including any foundation that may be required.

**TELECOMMUNICATIONS FACILITY:** All equipment, including any tower, structure, building, antenna, repeater and other related device which a telecommunications provider needs to broadcasts and receives radio frequency signals which carry their services.

**TELECOMMUNICATIONS FACILITY SITE:** A property, or any part thereof, which is owned or leased by one or more telecommunications providers and upon which one or more telecommunications facility(ies) and any required landscaping are located.

**TELECOMMUNICATIONS PROVIDER:** An entity licensed by the FCC to provide telecommunications services to individuals or institutions.

**TEMPORARY WIRELESS TELECOMMUNICATIONS FACILITIES:** Any telecommunications facility designed for use while a permanent wireless telecommunications facility is under construction, rehabilitation or restoration.

**TILED COVERAGE PLOTS:** Tiled plots result from calculating the signal at uniformly spaced locations on a rectangular grid, or tile, of the area of concern. Tiled plots (in comparison to radial plots) 1) provide a uniform distribution of points over the area of interest, 2) usually allow the same grid to be used as different sites are examined, and 3) do not necessitate the transmitter site be within the grid or area of interest. As with radial plots, the graphic display or plot can be either signal strength or adequate threshold. Tile plotting require more topographic data and longer (computer) execution time than radial plotting, but is preferable for comparative analysis.

**TOWER:** A permanent guyed, monopole, or self-supporting free standing mount, or in association with a building, other permanent designed to accommodate one or more antennas intended for transmitting and/or receiving television, AM/FM radio, digital, microwave, cellular, telephone, or similar forms of electronic telecommunication.

## **I6 PERMITS**

No permit shall issue to an applicant for the construction, alteration, modification, installation or operation of any telecommunication facility prior to a completed application being received by the Township; site plan approval from the Planning Commission; the granting of a special exception from the Zoning Board when applicable; a letter of intent to allow co-location of telecommunications facilities being received by the Township, the removal bond (or other financial security) being received by the Township; proof of telecommunications facility insurance; the deposit of escrow funds and payment of all fees due to the Township.

An applicant for a telecommunications facility shall be a telecommunications provider, or must have a letter of intent or an executed contract to provide land or facilities to such an entity. A permit shall not be granted for a facility built on

speculation of a future letter of intent or contract with a telecommunications provider. A permit shall be granted only for a telecommunications facility with a user that has a current FCC license.

## **I6.1 TELECOMMUNICATIONS USE**

Telecommunications use shall be considered a principal use of the property and, notwithstanding the provision of Section 400 of the Zoning Ordinance, is also permitted as an additional use on the property so long as the existing principal use on the property is a permitted use or in the district or a lawful nonconforming use. The existing principal use need not be affiliated with the telecommunications provider.

## **I6.2 USE PERMITTED BY RIGHT**

A new telecommunications facility attached to an existing telecommunication facility is a permitted use by right and may be located in any zoning district.

## **I6.3 USE PERMITTED BY SPECIAL EXCEPTION**

Telecommunications facilities are a use permitted by special exception upon compliance with the provisions of this section on parcels of land located on land owned by a government agency and located within 500 feet of the centerline of Old Bethlehem Road and Route 563. If it is demonstrated by an applicant that the telecommunication service needs of Haycock Township cannot be met by locating on land as referred to above, then a telecommunications facility may be located on land owned by a nonprofit entity located within 500 feet of the centerline of Old Bethlehem Road and Route 563. If it is demonstrated by an applicant that the telecommunication service needs of Haycock Township cannot be met by locating on land as referred to above, then a telecommunications facility may be located on land having a total acreage of five or more acres located within 500 feet of the centerline of Old Bethlehem Road and Route 563. Regardless of the parcel of land, the telecommunication facility must be located and constructed so that the greatest possible distance exists from the facility to the centerline of the referenced roadways.

## **I6.4 APPLICATION**

All applicants for telecommunications facilities permits shall include the following information, as it applies to the specific type of telecommunications facility applied for, in addition to requirements of the Zoning Ordinance for uses by special exception:

- A.** The legal name, address, and telephone number of the applicant, tower or structure owner (if other than applicant), and landowner(s) of record. If the applicant, tower or structure owner or landowner is not a natural person, the

name and address of the company, the type of business entity, the state in which the company is incorporated and has its principal office. Written permission of the tower or structure owner and landowner(s) to apply for the special exception use permit shall be submitted along with written permission from the tower or structure owner and landowner(s) allowing the Township's independent consultant(s) to conduct any necessary site visit(s).

- B.** The name, address and telephone number of the person to be contacted with regard to the application. 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's registered agent.
  
- C.** The name, address, and telephone number of someone who is available on a 24-hour basis that is authorized to act in the event of an emergency regarding the structure or safety of the telecommunications facility.
  
- D.** A copy of the applicant's letter of intent or executed contract with the telecommunication service provider if the applicant is not the provider.
  
- E.** The names and addresses of the landowners of record of all abutting property.
  
- F.** A report from qualified and Pennsylvania-licensed professional engineer(s) that:
  - 1. Describes the telecommunications facility height, design, elevation, width, support system and reasons and design implications for use or non-use of guy wires.
  
  - 2. Documents the height above grade for all proposed mounting positions for antennas to be co-located on a tower or structure and the minimum separation distances between antennas.
  
  - 3. Describes the tower or structure's proposed capacity, including the number, height, and type(s) of antennas that the applicant expects the tower or structure to accommodate.
  
  - 4. Provides evidence of need, as described in Section 17. herein.
  
  - 5. Describes the output frequency, number of channels and power output per channel for each proposed antenna.
  
  - 6. For each antenna, describes the antenna gain (projected and maximum), polarization and radiation pattern (composite pattern for an antenna array), the power input to antenna(s), including power input in normal use and at maximum output for each antenna and all antennas as an aggregate if tower is fully utilized.
  
  - 7. Describes the output frequency of the transmitter(s).



8. For a telecommunications facility with multiple emitters, describes the results of an intermodulation study to predict the interaction of the additional equipment with existing equipment.

9. Demonstrates the tower or structure's compliance with accepted structural engineering standards and if an existing tower or structure, that it is structurally able to receive the proposed addition. Any tower or structure shall be designed and constructed in accordance with the most current Telecommunications Industries Association (TIA) – Electronic Industries Association (EIA) Standard 222-F “Structural Standards for Steel Antenna Towers and Antenna Supporting Structures” and all applicable requirements of the Haycock Township Building Code. The proposed tower or structure must be designed and constructed so as to be able to withstand wind gusts of at least one hundred (100) miles per hour with no ice and 78 mile per hour basic wind speed with .5-inch radial ice.

10. Provides proof that at the proposed site the applicant will be in at least minimum compliance with all federal, state, and local regulations, standards and requirements, the basis for such representation and a statement that the applicant commits to continue to maintain such compliance with both radio frequency interference (RFI) and radio frequency radiation (RFR) standards (including all Environmental Assessments and Historic Preservation requirements) and that such compliance is within the limitations of the latest standards set by the following oversight organizations:

The American National Standards Institute (ANSI-C95-1, as amended);

The Institute of Electrical and Electronic Engineers (IEEE-C95.1, as amended);

The National Council on Radiation Protection and Measurements (CRP);

The International Radiation Protection Association (IRPA) and the FCC.

11. Describes any foundations to be built upon which telecommunications facilities are located. Identifies any blasting and earth movement that may be required, and provides plans and elevations of the area to be blasted or affected and describes the steps to be taken to reduce or eliminate potential effects of the blasting including vibrations and impacts to foundations, wells and other structures in the area. Provides a plan to identify abutters prior to blasting. The Zoning Board may, in its discretion, require the Applicant to notify additional property owners prior to blasting

that may be sufficiently close to the proposed location and may reasonably require additional information related to such site preparation.

12. Provides a soil report for the site, which provides verification that the areas of land, where the foundation of the tower, any buildings and any anchors for guy wires will be located, are appropriate for constructing those structures thereon.

13. Includes other information required by the Zoning Board that is necessary to evaluate the request and its impact upon the health and safety of the residents of Haycock Township.

- G.** For a tower or structure, a letter of intent committing the tower or structure owner and future tenant(s) to permit shared use of the tower or structure by other telecommunications providers, without discrimination, if the additional users agree to meet reasonable terms and conditions for shared use, including compliance with all applicable FCC regulations, standards, and requirements and provisions provided herein.
- H.** For a telecommunications facility to be installed on an existing tower or structure, a copy of the applicant's letter of intent or executed contract with the owner of the existing tower or structure.
- I.** To the extent required by the National Environmental Policy Act (NEPA) and as administered by the FCC, a complete Environmental Assessment (EA) draft or final report describing the expected impacts of the proposed telecommunications facility. To the extent the applicant claims that an EA is not required, it should provide an explanation as to why an EA is not required in the form of an opinion, ruling, or other certification from the FCC.
- J.** Proof of compliance with Section 106 of the National Historic Preservation Act, as amended, and with the Advisory Council on Historic Preservation's regulations under the Act.
- K.** Detailed plans for emergency power generation, including:
  - 1. Demonstration of percent of electrical demand being proposed in event of loss of commercial power.
  - 2. Type of fuel, storage method, and expected means and frequency of fuel delivery to the site for power generation.
  - 3. Amount of generator time, based on historical power reliability for the area of the telecommunications facility, proposed frequency and duration of tests, and description of muffler system and methods for noise abatement.
  - 4. Feasibility of wind and/or solar power in conjunction with storage batteries.

- L. Two cross-sections of proposed telecommunications facility, drawn at right angles to each other, showing any guy wires or supports. This shall show the proposed height of the tower or structure above the average grade at the base. This shall also show all proposed antennas, including their location on the tower or structure as well as all electrical wires, cables, and support equipment.
- M. A professional structural engineer's written description of the proposed tower or structure and its capacity to support additional antennas or equipment at different heights and the ability of the tower or structure to be shortened if future telecommunications facilities no longer require the original height.
- N. An Existing Conditions Plan and Proposed Site Plan as defined in Section I 6.5.C. and D. herein.
- O. All pertinent submittals and showings pertaining to: FCC permitting/licensing; Environmental Assessments and Environmental Impact Statements; FAA Notice of Construction or Alteration; aeronautical studies; all pertinent data, assumptions, and calculations relating to service coverage; and all pertinent calculations and/or measurement data related to non-ionizing radiation emissions and exposure, regardless of whether categorical exemption from routine environmental evaluation under the FCC rules is claimed.
- P. An emergency plan to be implemented in the event that the tower or structure is deemed unsafe after inspection as described in section I 9.E. and F. herein. The plan shall include measures to warn abutting landowners of an unsafe situation, to evacuate a zone where injury or property damage may occur, and to notify local authorities.
- Q. Details of proposed method of financial surety as required in section I 12. (Abandoned, Unused, Obsolete, Damaged, or Dangerous Telecommunications Facility or Portions of Telecommunications Facility) herein.

#### **I6.5. SITE PLAN REVIEW**

Site plan applications for telecommunications facilities shall include the following information:

- A. Location Map: a copy of a portion of the most recent USGS Quadrangle map showing the area within at least a two-mile radius of the proposed telecommunications facility site, including the exact latitude and longitude (degrees, minutes, seconds to the nearest tenth).

- B.** Vicinity Map at a scale of no smaller than 1 inch = 416 feet (or metric equivalent 1:5,000) with contour intervals no greater than 10 feet (or 3 meters) showing the entire vicinity within a 2,500-foot radius of the telecommunications facility site, topography, public and private roads and driveways, buildings and structures, water bodies, wetlands, landscape features, historic sites, and habitats for endangered species. It shall indicate the property lines of the proposed telecommunications facility site parcel and all access easements or rights of way needed for access from a public way to the site, and the names of all abutters or property owners along the access easement or who have deeded rights to the easement.
- C.** Existing Conditions Plan: A recent survey of the area within 500 feet of the telecommunications facility site at a scale no smaller than 1 inch = 40 feet (1:480 or metric equivalent 1:500) with topography drawn with a minimum of 5 feet (1.5 meters) contour intervals, showing existing utilities, property lines, existing buildings or structures, wooded areas, existing water wells and springs. It shall show the boundary of any wetlands or flood plains or watercourses, and of any bodies of water included in the Official Flood Hazard Area within 500 feet from the tower or any related facilities or access ways or appurtenances. The survey plan shall have been completed, on the ground, by a Pennsylvania-registered land surveyor no more than two years prior to the application date.
- D.** Proposed Site Plans of the entire telecommunications facility site, indicating all improvements at the same scale as or larger than the Existing Conditions Plan showing the following:
1. Proposed tower or structure location and any appurtenances, including supports and guy wires, if any, and any accessory building(s). It shall indicate property boundaries and setback distances to the base(s) of the tower or structure and the nearest corners of each of the appurtenant structures to those boundaries, and dimensions of all proposed improvements. Where protective fencing is proposed, it shall indicate setback distances from the edge of the fencing.
  2. Proposed spot elevations at the base of the proposed tower or structure and at the base of any guy wires, and the corners of all appurtenant structures.
  3. Proposed utilities, including distance from source of power, sizes of service available and required, locations of any proposed utility or telecommunications lines.
  4. Any direct or indirect wetlands alteration proposed.
  5. Detailed plans for drainage of surface and sub-surface water, to control erosion and sedimentation both during construction and as a permanent measure.

6. Plans indicating locations and specifics of proposed screening, landscaping, grading, ground cover, fencing, and additional information that may be required; any exterior light(s) or sign(s).

7. Plans of proposed access driveway or roadway and parking area at the telecommunication facility site. This shall include grading, drainage, and traveled width. This shall also include a cross-section of the access drive indicating the width, depth of gravel, paving or surface materials.

8. Plans showing any changes to be made to an existing telecommunications facility's landscaping, screening, fencing, lighting, drainage, wetlands, grading, driveways or roadways, parking or other infrastructure as a result of a proposed modification of said facility.

9. Horizontal and radial distances of proposed antenna(s) to nearest point on property line, and to the nearest primary or secondary residence, school, hospital, senior center, child care facility, religious structure, or any other public building.

**E.** Proposed details of the telecommunications facility including the following:

1. Ground attachments, specifications for anchor bolts and other anchoring hardware for tower or structure.

2. Proposed exterior finish and color of the tower or structure, building(s) and other portions of the telecommunications facility.

3. The relative height of the tower or structure to the tops of surrounding trees, as they presently exist and the height to which they are expected to grow in 10 years.

**F.** Proposed plans of telecommunications facility building(s) showing the following:

1. Floor plans and cross sections at a scale of no smaller than 3 inch = 1 foot (1:48) of any proposed appurtenant structure.

2. Elevation views, indicating exterior appearance and materials.

**G.** Proposed equipment plan elevations, sections and details at a scale no smaller than 1 inch = 10 feet showing the following:

1. Number of antennas and repeaters, as well as the exact locations of antenna(s) and of all repeaters (if any) located on a map, as well as by degrees, minutes, and seconds to the nearest tenth of latitude and longitude.

2. Mounting locations on tower or structure, including height above ground.
  3. Identification of all mounting frames, arms, brackets or other devices or equipment used to hold antennas and other equipment in place.
  4. Identification of all equipment or devices either attached to the structure or on the ground.
- H. Visibility Maps and Visual Analysis:** The applicant shall provide photographs with a simulation of the proposed telecommunication facility. Photographs shall show views towards the proposed site, from a two-mile radius around the site, at forty-five-degree intervals. A minimum of eight views should be presented.

The applicant shall also develop and submit to the Planning Commission a written analysis of the visual impact of the proposed tower by a registered landscape architect. This analysis shall include photographs of the balloon test, as described in section I6.I., taken from at least 10 different perspectives within Haycock Township and any other visual analysis it may have developed or processed.

- I. Balloon Test:** Within thirty-five days of submitting an application, 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 and within fifty horizontal feet of the center of the proposed tower. The date, time, and location of this balloon test shall be advertised by the applicant at 7 and 14 days in advance of the test date in the local newspaper. The applicant shall inform the Zoning Board, the Planning Commission, and abutting property owners in writing of the dates and times of the test, at least 14 days in advance. The balloon shall be flown for at least six consecutive hours, between 7 a.m. and 5 p.m. (and/or at least two hours before sunset as posted for the test dates by the National Weather Service) on the dates chosen. In the event of application for co-location at an existing telecommunications facility, the applicant shall be exempt from this balloon test. The applicant shall record the weather during the balloon test including the wind velocity and direction.
- J. Construction sequence and time schedule for completion of each phase of the entire project.**

## **17. EVIDENCE OF NEED**

- A. Existing Coverage:** Applicant shall provide written documentation to the Zoning Board demonstrating that existing telecommunications facility sites within a 30-mile radius of the proposed site cannot reasonably be made to provide adequate coverage and/or adequate capacity to areas within the

Haycock Township which lack such coverage and/or capacity. The documentation shall include, for each telecommunications facility site listed which is owned or operated by the applicant, the exact location (in longitude and latitude, to degrees, minutes and seconds to the nearest tenth), ground elevation, height of tower or structure, type of antennas, antenna gain, height of antennas on tower or structure, output frequency, number of channels, power input and maximum power output per channel. Potential adjustments to these existing telecommunications facility sites, including changes in antenna type, orientation, gain, height or power output shall be specified. Tiled coverage plots showing each of these telecommunications facility sites, as they exist, and with adjustments as above, shall be provided as part of the application.

- B. Repeaters:** The applicant shall demonstrate that it is not reasonably able to create adequate coverage in Haycock Township from wireless base stations located in other townships or to fill holes within the area of otherwise adequate coverage by use of repeaters. Applicants shall detail the number, location, power output, and coverage of any proposed repeaters in their systems and provide engineering data to justify their use.
  
- C. Towers:** The applicant for new telecommunications facility utilizing a tower shall demonstrate that it has made a good faith effort to obtain permission to mount communications antenna(s) on an existing building, structure or tower. A good faith effort shall require that the applicant contact all owners of potentially suitable structures (such as, but not limited to, smoke stacks, water towers/tanks, tall buildings, other towers or poles, church steeples, or other natural or manufactured tall structures or features) within a minimum one-half (1/2) mile radius of the proposed tower site and that one or more of the following reasons, supported by engineering and other related support data, for not selecting such structure apply:
  - 1. The proposed antenna(s) and related equipment would exceed the structural capacity of the existing structure and its reinforcement cannot be accomplished at a reasonable cost.
  - 2. The proposed antenna(s) and related equipment would cause radio frequency interference with other existing equipment for that existing structure and the interference cannot be prevented at a reasonable cost.
  - 3. Such existing structures do not have adequate location, space, access or height to accommodate the proposed equipment or to allow it to perform its intended function.
  - 4. Addition of the proposed antenna(s) and related equipment would result in electromagnetic radiation from such structure exceeding applicable standards established by the FCC and/or other industry standards governing human exposure to electromagnetic radiation.

5. A commercially reasonable agreement could not be reached with the owner(s) of such existing structure(s).

D. Five-Year Plan: All applications shall be accompanied by a written five-year plan for the utilization of the proposed facilities. This plan should include justification for capacity in excess of immediate needs, as well as plans for any further development within the Township.

## **I8 GENERAL PROJECT REQUIREMENTS AND STANDARDS**

A. Access Roads and Utilities: Where new telecommunications facilities require construction of, or improvement to, access roads, roads shall follow the contour of the land, be constructed or improved at the edge of fields and/or forests, and where feasible, access shall be over existing driveways and easements. Applicant shall maintain the access and shall ensure that no mud or dirt is conveyed onto public roads. Utility or service lines shall be underground, and designed and located so as to minimize disruption to wildlife habitat, agricultural lands, and scenic areas.

B. Landscaping/Screening: Natural or planted evergreen screening shall be located at the perimeter of the site to ensure that ground equipment and structures associated with the telecommunications facility are hidden from adjacent public roadways. The evergreen screening shall consist of either a hedge, planted 3 feet on center maximum, or a row of evergreen trees planted 10 feet on center maximum. Existing on-site vegetation outside the immediate site for the telecommunications facility shall be preserved. Disturbance to existing topography shall be minimized, unless the disturbance is demonstrated to result in less visual impact on the telecommunications facility from surrounding properties and other vantage points.

C. Fencing: The area around the telecommunications facility site shall be completely fenced and gated for security to a height of eight feet by means of chain link fencing. Use of razor wire is not permitted. In addition, all towers and support structures shall be fitted with anti-climbing devices, as approved by industry standards.

D. Signs: A sign no greater than two (2) square feet indicating the name of the telecommunications facility owner(s) and a 24-hour emergency telephone number, either local or toll-free, shall be posted adjacent to the entry gate. In addition, radio frequency radiation (RFR) warning signs, and the federal tower registration plate, where applicable, shall be posted on the fence or as required to meet federal requirements. "No Trespassing" signs may be posted at the discretion of the telecommunications facility owner(s). No commercial signs shall be placed on any telecommunications facility.



**E. Building Design:**

1. Telecommunications facilities buildings shall not exceed 250 square feet, 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. Whenever possible, the buildings shall be joined or clustered so as to appear as one building.

2. Except as provided herein, the only lighting on the exterior of the telecommunications facility may be a fixture on the communications equipment building not greater than 100 watts and activated by a monitor sensor. Manually operated emergency lights are permitted for use only when telecommunications facility operating personnel are on site.

Towers shall not be illuminated by artificial means and shall not display lights unless such lighting is specifically required by the FAA, FCC or other federal or state authority. In the event that any lighting is required solely as a result of tower height, the tower owner(s) shall submit for review by the Planning Commission (under Site Plan Review or Site Plan Amendment, as applicable). The Planning Commission may 1) require that the tower height be reduced to eliminate the need for lighting, 2) require another suitable location be utilized, or 3) make selection among lighting alternatives.

3. The owner(s) of the facilities shall take reasonable measures to minimize noise from the operation of any machinery or equipment, as detected at the site perimeter. The noise level of the machinery shall be no louder than 40 decibels.

**F. Height of Towers and Telecommunications Facilities Combined with Existing Structure:** New towers shall not exceed the minimum height necessary to provide adequate coverage for the telecommunications use proposed for the tower and shall not exceed 200 feet in height measured from the ground. Roof and/or building mount telecommunications facility shall be permitted to exceed the height limitations of the applicable zoning district by no more than forty-five (45) feet.

Antennas: Omni directional or whip communications antennas shall not exceed twenty (20) feet in height and seven (7) inches in diameter. Directional or panel communications antennas shall not exceed five (5) feet in height and three (3) feet in width. No microwave dish antennas shall be attached to a telecommunications tower.

**G. Guy Wires:** All guy wires associated with guyed towers shall be clearly marked so as to be visible at all times and shall be located within the fenced enclosure.

- H. Co-location:** Co-location of telecommunications facilities is encouraged. Owners of new towers shall agree to and allow for co-location consistent with the provisions of section I6.4.G., and at usual and customary rates for co-locators.
- I. Visual Impact:** Towers, antennas, and any necessary support structures shall be designed to blend into the surrounding environment. New towers shall have a galvanized finish unless otherwise required. The Zoning Board may require the tower(s) to be painted or otherwise camouflaged to minimize the adverse visual impact except in cases in which the Federal Aviation Administration (FAA) or other state or federal authorities have dictated color.

Proposed facilities shall not unreasonably interfere with the view from any public park, conservation area, natural scenic vista, historic building or district, or major view corridor. Narrow structures with guyed supports may be preferred for aesthetic purposes.

- J. Staff:** The telecommunications facility shall be fully automated, unstaffed and visited only for periodic maintenance, and there shall be no water or sewage facilities connected to the compound.
- K. Building Permit:** Applicant shall make application for and have evidence of a Haycock Township building permit prior to construction or installation of any portion of the telecommunications facility.
- L. Zoning Compliance:** All telecommunications facilities shall be located on lots which meet the minimum size requirement and other regulations for the zoning district in which they are to be located, in addition to the setback requirements as provided in herein.
- M. Setback and Height Requirements:** No telecommunications facility or tower, including guy-wire anchors and protective fencing, if any, shall be located:
  - 1. Closer than 200 feet horizontally to any property boundary of the site on which the tower is located, or the height of the tower, whichever is greater.
  - 2. Closer than 200 feet horizontally to any structure existing at the time of application which is used as a primary or secondary residence, school property (both public and private), a hospital, senior center, child care facility, building used for religious worship, or to any other building used regularly by the public. Primary or secondary residences are those dwelling units that include toilet facilities and facilities for food preparation and sleeping.
  - 3. Within the habitat of any state-listed rare or endangered wildlife or plant species.

4. Within 200 feet horizontally of any Pennsylvania or federally regulated wetland.
  5. Within the 200 feet horizontally of the outer riparian zone, measured horizontally from any river or perennial stream.
  6. Within the Township, state or federal setback requirements of an archeological site or historic structure. No telecommunications facility shall be located on a building or structure that is listed on an historic register or is in an historic district.
- N.** Parking: One (1) off-street parking space shall be provided within or outside the fenced telecommunications facility site.
- O.** At the completion of building, and/or installation, the owner shall provide the Township with a certification issued by a Pennsylvania-registered professional structural engineer that the telecommunications facility has been built in accordance with the plans submitted to the Township.

## **19. MONITORING PROTOCOL**

- A.** Monitoring Protocol: The Zoning Board may, as the technology changes, amend this section to require the use of testing protocols other than the approved monitoring protocol. A copy of the currently approved monitoring protocol shall be on file with the Township Secretary.
- B.** Pre-transmission Testing: After the granting of a permit and before applicant's telecommunications facilities begin transmission, the applicant shall submit a report, prepared by a qualified telecommunications or radio frequency engineer, on the cumulative background levels of non-ionizing radio frequency radiation around the proposed telecommunications facility site and/or any repeater locations to be utilized for applicant's telecommunications facilities. The engineer shall use the monitoring protocol, or one substantially similar. This report shall be submitted to the Zoning Officer, who may verify the results using an independent consultant.
- C.** Post-transmission Testing: After transmission begins, the owner of the telecommunications facility shall provide testing of the site as follows:

There shall be routine annual monitoring of emissions/exposure by a qualified engineer using actual field measurement of radiation, utilizing the Monitoring Protocol. This monitoring shall measure levels of non-ionizing radio frequency radiation (RFR) exposure at the telecommunications facility site and any repeaters. Each permittee shall provide a list of the most recent RFR readings at or near the site, their distances from the facility, dates of the readings, and the name of the person and company who took the readings and verify the operational levels of each telecommunications

transmitter at the time of testing. In addition, each permittee shall provide additional RFR readings taken at sensitive areas within 3 miles of the facility. A report should indicate whether other permittees at the facility were notified prior to testing that RFR monitoring would occur. The notification should be attached to the report.

A report of the monitoring results shall be prepared by the engineer and submitted to the Zoning Officer, who may verify the results using an independent consultant. In the case of co-located telecommunications facility, permittee may bill all telecommunications providers and the telecommunications facilities owner(s) equally or according to a predetermined proportionality.

In the event of any major modification of existing telecommunications facility, or the activation of any additional channels, the telecommunications facility owner(s) shall immediately perform new monitoring, as described in this section. Minor changes, such as slight changes in frequency, shall not require additional monitoring.

Permittees shall have the opportunity to demonstrate reasons for inability to comply with these provisions.

- D. Excessive Exposure:** Should the monitoring of a telecommunications facility site reveal that the site exceeds the current FCC standard and guidelines in existence at the time of the violation, the owner(s) of all telecommunications facilities utilizing that site shall be so notified. In accordance with FCC requirements, the telecommunications facility owner(s) shall immediately reduce power or cease operation as necessary to protect persons having access to the site, tower, and/or antennas. Additionally, the telecommunications facility owner(s) shall submit to the Township a plan for the correction of the situation that resulted in excessive exposure. Failure to act as described above shall be a violation of this Zoning Ordinance and subject to fines and other sanctions consistent with this Ordinance.
- E. Structural Inspection:** Tower owner(s) shall arrange for an qualified consultant (a licensed professional structural engineer) to conduct inspections of the tower's structural integrity and safety. Guyed towers shall be inspected every three years unless there is cause to conduct an inspection more frequently. Monopoles and non-guyed lattice towers shall be inspected every five years unless there is cause to conduct an inspection more frequently. A report of the inspection results shall be prepared by the consultant, and a copy shall be sent to the Zoning Officer within 10 business days. In the event of any major modification of the existing tower, which includes changes to tower dimensions, increase in number or types of antennas or other devices or structural modifications, the tower owner(s) shall immediately perform a new structural inspection. The Township has the right to enter onto the property and conduct inspections during the construction phase and at all times thereafter.

**F. Unsafe Towers:** Should the inspection required in section I9.E. reveal any structural defect(s) which, in the opinion of the qualified consultant (a licensed professional structural engineer), render(s) that tower unsafe, the tower owner(s) shall undertake the following actions:

1. Immediately upon notification of any structural defect(s) which render(s) a tower unsafe, post warnings of same at access points to the tower; notify appropriate emergency authorities; notify the Zoning Officer, and notify the landowner and owners of record of the abutting properties within the unsafe area (minimally a 360-degree area the radius of the height of the tower); when appropriate, in consultation with emergency authorities, restrict access to the unsafe area and/or encourage evacuation of residents.

2. Within 10 business days of notification of any structural defect(s) which render(s) a tower unsafe, submit to the Zoning Officer a plan to correct the structural defect(s) as soon as reasonably possible. The Township shall review and make any changes if needed to the remediation plan within 10 days. The tower owner(s) shall implement the remediation plan upon Township approval.

#### **I10. AMENDMENTS TO EXISTING TELECOMMUNICATIONS FACILITY PERMIT**

In the event of an alteration or addition to a previously approved telecommunications facility, the facility owner(s) shall submit to the Zoning Board an application for a permit amendment when any of the following are proposed:

- A.** Change in the number of buildings or other telecommunications facilities permitted on the site;
- B.** Material change in technology used by the telecommunications facility; or
- C.** Addition or change of any equipment resulting in greater visibility or structural wind-loading, or additional height of the tower, including profile of additional antennas, not specified in the original application.

#### **I11. TEMPORARY WIRELESS TELECOMMUNICATIONS FACILITIES**

Temporary wireless telecommunications facilities are subject to the following:

- A.** Use of a temporary wireless telecommunications facility requires a special exception use permit from the Zoning Board.
- B.** Temporary wireless telecommunications facilities are allowed for no longer than five days use during a special event.

- C. The maximum height of a temporary telecommunications facility is 50 feet from grade.
  - D. Temporary wireless telecommunications facilities shall comply with all applicable sections herein.
- I12. ABANDONED, UNUSED, OBSOLETE, DAMAGED, OR DANGEROUS TELECOMMUNICATIONS FACILITY OR PORTIONS OF TELECOMMUNICATIONS FACILITY**

Abandoned or unused telecommunications facilities or portions of telecommunications facilities shall be removed as follows:

- A. The owner of a telecommunications facility shall annually, on January 15, file a declaration with the Zoning Officer certifying the continuing safe operation of every telecommunications facility installed subject to this Zoning Ordinance. Failure to file a declaration shall mean that the telecommunications facility is no longer in use and considered abandoned.
- B. Abandoned or unused facilities shall be removed within 180 days of cessation of operations at the site, unless a time extension is approved by the Zoning Board within the 180-day period. In the event the facility is not removed within 180 days of the cessation of operations at a site, the Zoning Officer shall send the owner(s) of the facility a Notice of Zoning Violation and, following the expiration of the period for remediation of the violation, shall request Haycock Township to remove the facilities. Costs of removal shall be assessed against the facility owner, including any regulatory costs, disposal costs, clean up, and final landscaping costs.
- C. Unused portions of facility shall be removed by facility owner(s) within 180 days of the time that such portion is no longer used for antennas. The replacement of portions of a facility previously removed shall require the issuance of a new telecommunications facility permit by the Zoning Board.
- D. An owner who has failed to file an annual declaration with the Zoning Officer by January 15 may, by February 15, file a declaration of use or intended use and may request the ability to continue use of the telecommunications facility.
- E. At the time of filing an application for a building permit for the construction of the telecommunications facility, a bond or other financial security, in the amount of \$20,000.00 wherein a tower is proposed as part of the facility and \$5,000 otherwise, in the form approved by the Township Solicitor shall be deposited with the Township to assure the removal of the facility when it ceases to be used as a telecommunications facility or is found in violation of the Township's code or ordinance as provided herein. At the time of filing an application for a building permit, applicant shall also enter into a written

agreement with the Township, in a form approved by the Township Solicitor, to ensure that the Removal Bond remains continuously in effect.

### **I13. TELECOMMUNICATIONS FACILITY INSURANCE**

The owner of a telecommunications facility shall provide evidence to the Township of liability, property damage and personal injury insurance in the minimum amount of One Million Dollars (\$1,000,000.00) per occurrence and Three Million Dollars (\$3,000,000.00) in the aggregate covering all portions of the telecommunications facility, naming Haycock Township as an Additional Insured thereon. The owner(s) shall arrange with the insurance carrier(s) for original certificates of insurance for all renewals or cancellations of said insurance coverage to be delivered to the Zoning Officer. At a minimum the following insurance requirements shall be satisfied:

- A.** The required insurance must be obtained and maintained for the entire period the telecommunications facility is in existence from pre-construction through final decommissioning and rehabilitation. If the operator, its contractors or subcontractors do not have the required insurance, the Township will order such entities to cease operation of the facility until such insurance is obtained.
- B.** Certificate(s) of insurance verifying such insurance shall be filed with the Zoning Officer at the time of application. For entities that are entering the market, the certificate(s) shall be filed prior to the commencement of construction and once a year thereafter, and as provided below in the event of a lapse of coverage. Such certificate(s) should provide the name, address and phone number of the insurance carrier and identify an agent in case of inquiries.
- C.** The certificate(s) of insurance shall contain a provision that coverages afforded under such policies shall not be canceled until at least thirty (30) days prior written notice had been given to the Township. All insurance policies shall be issued by companies authorized to do business under the laws of the Commonwealth of Pennsylvania.

### **I14. INDEMNIFICATION AND HOLD HARMLESS**

The telecommunications facility shall, at its sole cost and expense, fully indemnify, defend and hold harmless the Township, its officers, public officials, boards and commissions, agents and employees from and against any and all lawsuits, claims, causes of action, actions, liability and judgments for injury or damage (including but not limited to expenses for reasonable attorney fees and disbursements of the Township in connection therewith) arising out of the construction or operation of the cell tower or arising in any way out of any failure by any locator to comply with the provisions of any federal, state or local laws, rules or regulations.

**Section 02: Partial Repealer**

All other provisions of the Zoning Ordinance, as amended, shall remain in full force and effect. All other ordinances or provisions of the Zoning Ordinance inconsistent herewith or in conflict with any of the terms hereof are, to the extent of said inconsistencies or conflicts, hereby specifically repealed.

**Section 03: Savings Clause**

In the event any portion of this Ordinance is determined by a court of jurisdiction to be unconstitutional or unenforceable, it shall not affect any of the other provision of this Ordinance or of the Zoning Ordinance. All other provisions of the Zoning Ordinance and this Ordinance shall remain in full force and effect.

**Section 04: Effective Date**

All provisions of this Ordinance shall be in force and effect five days after approval and adoption.

**ORDAINED AND ENACTED** this \_\_\_\_\_ day of \_\_\_\_\_, 2004.

**ATTEST:**

\_\_\_\_\_  
Nancy M. Yodis, Secretary

**HAYCOCK TOWNSHIP  
BOARD OF SUPERVISORS**

\_\_\_\_\_  
Kathleen M. Babb, Chair

\_\_\_\_\_  
Michael Lennard, Vice Chair

\_\_\_\_\_  
Henry Depue