

Town of Shutesbury

Number: 990501

Telecommunications Tower Bylaw

Bylaw Name

Adopted at the **Annual/Special** Town Meeting held: May 1, 1999

and approved by the Attorney General's Office on August 3, 1999

Amendments:

Town Meeting date	Attorney General approval date
May 5, 2001	August 21, 2001

As voted at the May 1, 1999 Annual Town Meeting and Amended May 5, 2001

Approved by the Attorney General August 27, 2001

I. Purpose and Goals

The purpose of this bylaw is to establish general guidelines and outline the special permitting process to site any tower, such as, but not limited to wireless telecommunication towers and facilities anywhere in Shutesbury. The goals of this bylaw are to:

1. Encourage the location of towers on municipal land or on pre-existing structures so as to minimize the total number of towers and visual impact upon the community;
2. Require the co-location of new and existing tower sites thereby reducing the need for new facilities;
3. Locate towers and facilities, to the extent possible, in areas where adverse environmental, historic, and visual impact to the community and adjacent property is minimal;
4. Enhance the ability of providers of telecommunications services to provide such services to the community effectively and efficiently; and
5. Make available all wireless telecommunications tower locations to local municipal agencies.

II. Definitions

DISTANCE shall be measured on a horizontal plane.

FAA shall mean the Federal Aviation Administration.

FCC shall mean the Federal Communications Commission.

HEIGHT shall be the distance measured from the pre-existing ground level to the highest point on the structure.

NON-RESIDENTIAL STRUCTURE shall mean such structures as but not limited to, buildings, grain silos, water towers, and church steeples, but does not include houses or apartments.

WIRELESS COMMUNICATION BUILDING shall mean any building or shelter used to house equipment primarily for the installation and operation of equipment for generating and detecting electromagnetic radiation, and is an accessory to a wireless communication structure.

WIRELESS COMMUNICATION DEVICE shall mean any antenna, appurtenance, wiring or equipment used in connection with the reception or transmission of electromagnetic radiation which is attached to a structure.

WIRELESS COMMUNICATION FACILITY shall be used as a general term to include wireless communication building, wireless communication device, and wireless communication structure.

WIRELESS COMMUNICATION STRUCTURE shall mean any structure or tower intended to support equipment used for the transmission and reception of electromagnetic radiation, including antennae, wiring, or other devices attached to or mounted on a structure.

APPLICANT Any person applying for a special permit to construct, erect, install, operate or substantially modify a Wireless Communications Facility, Wireless

Communication Device or Wireless Communication Structure, or such person's agent, representative or successor in interest. An Applicant or at least one of the co-applicants if there is more than one Applicant in an Application must be a Telecommunications Service Provider.

APPLICATION shall mean the process of submission, consideration, and action on an Applicant's request for a special permit to construct, erect, install, operate or substantially modify a Wireless Communications Facility, Device, Structure or Building; and the forms, documents, and information presented to the town in the course of said request. The Application includes verbal representations made by and on behalf of the Applicant to the Planning Board.

TELECOMMUNICATIONS SERVICE PROVIDER shall mean a corporation or organization that provides wireless communications service to the public through explicit license by the FCC as contemplated by "The Telecommunications Act of 1996" in the term "carrier".

TOWER shall refer to any structure whose height greatly exceeds its width.

III. Exemptions

There shall be no exemptions from this bylaw, and it shall apply to all towers in the town of Shutesbury, except the following shall be exempted from this bylaw:

- A. Wireless Communication Facilities used for town or state emergency services.
- B. Amateur radio towers used in compliance with the terms of any amateur radio service licensed by the FCC and used solely for that purpose.
- C. Wireless communication structures and devices used expressly for home television reception and personal wireless communications.

IV. General Guidelines

A. A wireless telecommunications tower and facilities may be located in the Town of Shutesbury upon the granting of a Special Permit from the Planning Board in accordance with the requirements set forth herein. The submission of a site plan will be required prior to granting of a Special Permit.

B. Wherever feasible, wireless communication devices shall be located on existing towers or other non-residential structures, minimizing proliferation of new towers.

C. Wireless communication structures shall be built so that the structural integrity of the facility is able to accommodate devices operated by another carrier with little or no modification.

D. Wireless communication buildings shall be no larger than 500 square feet and 12 feet high, shall be designed to match other accessory buildings on site, and shall be used only for the housing of equipment related to this particular Wireless Communication Facility.

E. Communication relay structures, TV broadcast systems, radio broadcast systems and other similar systems are not permitted under this telecommunications tower bylaw.

V. Siting and Height requirements

A. Setbacks.

1. The minimum distance from the base of the wireless communication structure to any property line or road right-of-way shall be at least 1.25 times the height of the structure and any attached wireless communication devices, to ensure an adequate fall zone.
2. The minimum distance from any guy wire, anchor, or brace to any property line or road right-of-way shall be equal to the length of the guy wire.
3. Setbacks for the wireless communication building shall comply with other zoning setback requirements.
4. The wireless communication structure and any attached wireless communication devices shall be a minimum distance of three times its height from school buildings, playgrounds, athletic fields, and abutting residences to prevent the structure from appearing to "tower" over and adversely affecting property values.

B. The height of the wireless communication structure and any attached wireless communication devices shall be no greater than 100 feet. Any application for a structure in excess of 100 feet height shall be a request to waive this requirement. In the event that the Applicant seeks a permit for a tower of a height more than one hundred feet, documentation must be provided clearly showing that the additional height is necessary (1) to avoid construction of another tower, or (2) to allow the carrier to provide adequate coverage. Such documentation shall include alternative siting possibilities along with associated maps of service areas of different signal strengths. Tower height shall be measured from grade, and shall include the tower itself, its base pad, and any attached facilities .

C. The wireless communication structure shall, when possible, be sited off ridge lines and where visual impact is the least detrimental to valuable historic and scenic areas. Valuable areas shall be determined by the Planning Board, and can be views that Shutesbury has identified as scenic in the Shutesbury Open Space and Recreation Plan or Shutesbury Comprehensive Plan, or are listed in the Massachusetts Landscape Inventory, MGL C.131s.39A, conducted by the Massachusetts Department of Environmental Management, 1982.

D. No new wireless communication structure shall be permitted unless the applicant demonstrates to the reasonable satisfaction of the Planning Board that no existing wireless communication structure or other non-residential structure can

accommodate the Applicant's proposed wireless communication device. Evidence submitted to demonstrate that no existing structure can accommodate the Applicant's proposed device may consist of any of the following where each such structure is specifically identified:

1. No existing wireless communication structures or non-residential structures are located within the geographic area required to meet the applicant's engineering requirements.
2. Existing wireless communication structures or non-residential structures are not of sufficient height to meet the Applicant's requirements
3. Existing wireless communication structures or non-residential structures do not have sufficient structural strength or cannot be strengthened to support the proposed wireless communication device.
4. The proposed wireless communication device would cause electromagnetic interference with the existing devices on the site, or the existing devices would cause interference with the proposed wireless communication device.
5. The fee, costs, or contractual provisions required by the owner in order to share an existing wireless communication structure or to adapt an existing structure for use are unreasonable. Unreasonable cost would be equal to twice the cost of building a new structure.
6. The applicant demonstrates that there are other limiting factors that render existing structures unreasonable.

VI. Design Requirements

- A. Wireless communication structures shall be designed to accommodate the maximum number of users as technologically possible, but within the requirements and limitations of this bylaw (e.g., limitations to tower height).
- B. There shall be no signs or advertisements, except for no trespassing signs and a required sign giving the phone number where the responsible party can be reached on a 24-hour basis.
- C. All wireless communication structures and devices shall be colored, molded, and/or installed to blend into the structure and/or landscape.
- D. The wireless communication facility shall be fenced to control access (not necessarily the entire property)

E. Night lighting of the wireless communication facility shall be prohibited unless required by the FAA. If required by the FAA, a copy of the FAA permit requiring night lighting should be submitted with the application.

F. There shall be a maximum of one parking space for each facility to be used for parking in connection with maintenance of the site and not to be used for storage of vehicles or other equipment.

G. Existing on-site vegetation shall be preserved to the maximum extent possible.

H. Vegetative screening shall be used to screen abutting residential properties and roadways. Plants that fit in with the surrounding natural vegetation shall be used.

VII. Application Process

A. Approval. The Shutesbury Planning Board is hereby designated the Special Permit Granting Authority to grant Special Permits for wireless telecommunications towers and facilities. A Special Permit shall be granted by the Planning Board in accordance with Massachusetts General Laws (Ch. 40A, Section 9), provisions of this bylaw, and any rules and regulations that the Planning Board may adopt relative hereto.

B. Expiration. The Special Permit granted under this bylaw shall expire within two (2) years of the date of issuance of the permit, if no Wireless Communication Facility is constructed.

C. Submittal. Failure to provide all of the required materials and information shall be grounds for denial of the application. The Planning Board may require additional or supplemental information at its discretion, and the applicant's failure to timely provide such information shall also be grounds for denial of the application. The applicant or co-applicant must be a telecommunications service provider. As part of any application for a special permit, Applicants shall submit:

For a new Wireless Communications Facility:

1. no changes i.e.,

1. site plans and engineering plans, prepared by a professional engineer licensed to practice in Massachusetts, on 24" by 36" sheets at a scale of 1"=40' or 1"=200', where appropriate, on as many sheets as necessary which show the following:
 - a. north arrow, date, scale, seal(s) of licensed professional(s) who prepared the plans and space for reviewing engineer's seal
 - b. name and address of landowner and names and addresses of abutters
 - c. property lines and location of permanent structures and buildings, within a 500-foot radius of the proposed wireless communication structure.
 - d. existing (from a topographical survey completed within 2 years of application submittal date by a professional surveyor licensed to practice in Massachusetts) and proposed contour lines at a maximum of two-foot contour intervals and spot elevations at base of all proposed and existing structures
 - e. vegetation to be removed or altered

- f. plans for drainage of surface water and plans to control erosion and sedimentation both during construction and as a permanent measure.
- g. delineation of wetlands, if any
- h. location of wireless communication structure, including supports and guy wires, if any
- i. plans for anchoring and supporting the structure, including specifications of hardware and all other building material, and wind/ice survivability estimates.
- j. plans for accessory buildings
- k. layout and details of surfacing for access road and parking
- l. amenities such as lighting, fencing, and landscaping.
- m. four view lines in a one-to-three mile radius of the site, beginning at True North and continuing clockwise at ninety-degree intervals, plus additional view lines from any historic, scenic, or other prominent areas of Shutesbury, as determined by the Planning Board, based on scenic views and areas identified in the Shutesbury Open Space and/or Master Plan.

- 2. a. map showing all areas covered/served by the proposed wireless communications structure and device of different signal strengths, and the interference with adjacent service areas.
- b. a narrative description of the type of the service being provided, including the number of channels or number of supported communication links, maximum RF power level, effective radiated power, ranges of frequencies of operation both transmit and receive, and type(s) of modulation.
- c. a report setting forth the proposed power density of the Facility that demonstrates how FCC standards for RF emissions are met.
- d. if the service requires point-to-point links or other relay or RF communications not specifically between the subscriber and the facility, details of such additional communications requirements shall also be described.

3,4. no changes

i.e.,

- 3. locus map at a scale of 1"=1000', which shall show streets and landscape features
- 4. description of the soil and surficial geology of the proposed site

- 5. h. Provide simulated graphical depictions of the appearance of the facility from all public ways where it may be seen.
- 6. a. Proof of approval of all other necessary permits needed for construction and operation, and
- b. evidence that a valid license has been granted to the applicant (or co-applicant) for this specific service in this area by the FCC. A photocopy of such license is sufficient for the application, although other evidence may be required prior to approval.

For a new Wireless Communication Facility,

1. site plans and engineering plans, prepared by a professional engineer licensed to practice in Massachusetts, on 24" by 36" sheets at a scale of 1"=40' or 1"=200', where appropriate, on as many sheets as necessary which show the following:

- a. north arrow, date, scale, seal(s) of licensed professional(s) who prepared the plans and space for reviewing engineer's seal
- b. name and address of landowner and names and addresses of abutters
- c. property lines and location of permanent structures and buildings, within a 500-foot radius of the proposed wireless communication structure.
- d. existing (from a topographical survey completed within 2 years of application submittal date by a professional surveyor licensed to practice in Massachusetts) and proposed contour lines at a maximum of two-foot contour intervals and spot elevations at base of all proposed and existing structures
- e. vegetation to be removed or altered
- f. plans for drainage of surface water and plans to control erosion and sedimentation both during construction and as a permanent measure.
- g. delineation of wetlands, if any
- h. location of wireless communication structure, including supports and guy wires, if any
- i. plans for anchoring and supporting the structure, including specifications of hardware and all other building material, and wind/ice survivability estimates.
- j. plans for accessory buildings
- k. layout and details of surfacing for access road and parking
- l. amenities such as lighting, fencing, and landscaping.
- m. four view lines in a one-to-three mile radius of the site, beginning at True North and continuing clockwise at ninety-degree intervals, plus additional view lines from any historic, scenic, or other prominent areas of Shutesbury, as determined by the Planning Board, based on scenic views and areas identified in the Shutesbury Open Space and/or Master Plan.

2. map showing all areas covered/served by the proposed wireless communication structure and device of different signal strengths, and the interference with adjacent service areas.

3. locus map at a scale of 1"=1000', which shall show streets and landscape features

4. description of the soil and surficial geology of the proposed site

5. narrative report written by the operator of the Wireless Communication Facility and licensed professional engineer which shall:

- a. describe the justification of the proposed site
- b. describe the structure and the technical, economic, and other reasons for the facility design
- c. describe the capacity of the structure, including the number and type of additional facilities that it can accommodate
- d. describe the actions to be taken if the electromagnetic radiation from the facility should exceed levels designated by the FCC
- e. describe the projected future needs of the operator of the Wireless Communication Facility, and how the proposed wireless communications facility fits with future projections to serve Shutesbury and adjacent communities.

- f. describe leasing agreement should another carrier desire to co-locate
- g. Describe special design features to minimize visual impact of the proposed wireless communication facility.

6. Proof of approval of all other necessary permits needed for construction and operation.

7. Demonstration. The Planning Board may require the Applicant to perform an on-site demonstration of the visibility of the proposed tower by means of a crane with a mock antenna array raised to the maximum height of the proposed tower. A colored 4' minimum diameter weather balloon held in place at the proposed site and maximum height of the proposed tower may be substituted for the crane if approved by the Planning Board. The date and location of the demonstration shall be advertised at least 14 days, and not more than 21 days before the demonstration, and again in the public hearing advertisement in a newspaper with a general circulation in Shutesbury. Failure in the opinion of the Planning Board to adequately advertise the demonstration may be cause for the Planning Board to require another, properly advertised, demonstration.

8. In the event that the Special Permit Granting Authority determines that circumstances necessitate expert technical review, the Special Permit Granting Authority reserves the right to select expertise for the review, and the expense of the review shall be paid by the applicant.

TO SITE a wireless communication device on an existing wireless communication structure or non-residential structure such as buildings, silos, steeples, water towers or other non-residential structures, including co-location with another carrier, provided that the new use does not add to the height of the structure, the Applicant shall submit:

1. All information described in VII. C. 1 - 4, and 6, above.
2. A narrative report written by the Wireless Communication Facility operator and licensed professional engineer which shall:
 - a. include a draft contract between the non-residential structure owner and the Applicant
 - b. demonstrate that the wireless communication structure or non-residential structure to which the device will be mounted has the structural integrity to support such a device,
 - c. describe the actions to be taken if electromagnetic radiation from the facility should exceed levels designated by the FCC.
 - d. describe the projected future needs of the carrier, and how the proposed facility fits with future projections.
3. If the proposed facility adds more than 5 feet to the height of the non-residential structure at the effective date of this bylaw, the Planning Board may require a demonstration of height with balloons, as described in VII.A.7.

In both cases, the above information shall be submitted along with the regular application form to the following: 1 copy to the building inspector, 1 copy to the Fire Chief, 1 copy to the Chief of Emergency Services or Department of Public Works, and 3 copies to the Planning Board.

4. In the event that the Special Permit Granting Authority determines that circumstances necessitate expert technical review, the Special Permit Granting Authority reserves the right to select expertise for the review, and the expense of the review shall be paid by the applicant.

VIII. Approval

A. In granting a Special Permit for Wireless Communications Facilities, the Planning Board shall find:

1. That the Applicant has demonstrated to the satisfaction of the Planning Board that the requirements of this bylaw have been met.
2. That the size and height of the structure are the minimum necessary.
3. That the proposed wireless communication facility will not adversely impact historic structures or scenic views.
4. That there are no feasible alternatives to the location of the proposed Wireless Communication Facility, including co-location, that would minimize their impact, and the applicant has exercised good faith in permitting future co-location of Wireless Communication Facilities at the site.

B. When considering an application for a Wireless Communication Facility, the Planning Board shall place great emphasis on the proximity of the facility to residential dwellings, its impact on these residences, and will encourage the use of existing structures.

C. Any extension or construction of new or replacement towers or transmitters shall be subject to an amendment of the Special Permit, following the same procedure as siting a new wireless communication device on an existing structure.

IX. Conditions of Use

A. The Applicant shall post an initial bond to cover construction costs and an annual maintenance bond to cover maintenance for the access road, site and structures, and to cover the removal of the facility in the event of non-operation in an amount approved by the Planning Board.

B. Regulatory compliance.

1. annual certification demonstrating structural integrity and continuing compliance with current standards of the FCC, FAA, and the American National Standards Institute shall be filed with the Building Inspector by the Special Permit Holder, and shall be reviewed by a licensed professional engineer hired by the town of Shutesbury and paid for by the Special Permit holder.
2. If the FCC or the FAA regulations are changed, the owner or operator shall bring the facilities into compliance within 6 months or earlier if a more stringent compliance schedule is included in the regulation.
3. Failure to comply with any regulations shall be grounds for the Planning Board to revoke this Special Permit and require removal of non-complying structures, buildings, and devices at the owner's expense.

4. If the device is moved lower on the structure and the top of the structure is no longer needed, then the non-operational part of the structure shall be removed in 120 days.

C. Removal and Repair.

1. An Applicant must execute a covenant with the Planning Board agreeing to remove, within 180 days of notice from the town, the wireless communication facility not in operation for a period of 12 months, unless the reason for non-operation is the result of major damage.

2. If the facility is not removed within 180 days, the Town shall remove said facility at the owner's expense.

3. In the event of major damage, repair must begin within 6 months of damage. Major damage shall mean damage to the facility caused by no fault of the owner or operator.

A TRUE COPY

ATTEST Lisette Bracebridge
Shutesbury Town Clerk