

# Town of Hull SWF Wireless Facilities and Similar Structures Policy, Rules and Regulations

The Town of Hull, Massachusetts (the "Town"), by and through its Board of Selectmen (the "Board"), hereby adopts this policy (the "Policy") concerning Application Requirements and Aesthetic Standards for Small Wireless Facility ("SWF") use and/or installations to the extent applicable within the public or private rights of way of the Town or located on Town-owned or private property.<sup>1</sup>

## 1. Purpose and Intent-

The Board finds that it is necessary and beneficial for the health, safety and welfare of the Town and its residents to establish a policy to provide for the safe and orderly development of SWF within Town or Commonwealth rights of way and upon public or private property to ensure that such development does not interfere with its usual and primary purposes, such as to facilitate safe travel and appropriate uses as permitted by law of property. SWFs shall be designed and installed so as to minimize adverse visual effects through careful design and siting with an intent to preserve property values and the aesthetic character of the Town. This policy applies to the placement and operation of SWFs within the public rights of way and on public property and private rights of way, public and private property without regard to the type or owner of any vertical structure to which it is affixed or attached. The requirements of this policy are not inclusive and are in addition to all other applicable federal, state and local laws. This Policy augments any other applicable guidelines, laws, rules or regulations that may be applied to guide, regulate or address the design, appearance and location of a SWF.

This policy describes the permitting procedures and aesthetic and location criteria for SWFs in the Town. These Rules and Regulations are intended to cover the general standards for safety, compatibility, and aesthetics for the use, design and installation of SWFs in the Town.

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<sup>1</sup> The Board recognizes that the Hull Zoning Bylaw regulates development on parcels within the Town. The Board may delegate the review of any application under this Policy to the Planning Board in conjunction with the Planning Board's review under the Zoning Bylaw, provided such application is for the placement of a SWF on a parcel subject to the Zoning Bylaw.

## 2. **Background**

Public spaces and streetscapes enhance the quality of life for our residents and visitors, and this Policy ensures that the Town has the foundation to become a more walkable and sustainable community. This Policy supports the community's civic, cultural, and physical framework for maintaining the character of Hull.

To address the growing demand for wireless services across the United States, wireless service providers propose to increase the capacity of their networks by deploying Small Cell infrastructure (including but not limited to SWFSWFs), a more compact and often lower-powered wireless facilities, to reduce data traffic load on large roof-mounted arrays and larger cell towers (collectively, "macrocells") and to increase data speeds to subscribers. This new approach requires infrastructure to be installed closer to the users (and other people) on the ground and in buildings and vehicles. Like any wireless facility, SWF infrastructure consists of antennas and related power equipment that transmits and receives wireless signals. These facilities are more compact than macrocell facilities and will provide voice and data coverage to smaller geographic areas where the density of users is substantial. New SWFs will improve each provider's ability to meet the public's current 4G voice and data demands and the future 5th and later generation wireless technologies for interconnected devices to communicate with low connection latency and high bandwidth.

Small Cell infrastructure will affect the function and aesthetics of public spaces. Municipalities across the nation are addressing the issue of balancing the need to accommodate the increased wireless service demand with their communities' public space character and function. To provide the necessary coverage, each wireless service provider will install infrastructure to serve their individual needs; additionally, some companies ("neutral host providers") serve as infrastructure providers installing equipment that will house infrastructure that can support the facilities of multiple wireless service providers. Although SWFs are not public utilities, they are like public utilities, in that federal law allows SWF infrastructure equipment in the public right-of-way and gives SWF operators certain rights to access the public ways for this purpose. Balancing the need to accommodate increasing wireless service demand while preserving public space character and function is critically important, as is the need to design and place the proposed infrastructure in an appropriate way.

## 3. **Definitions:**

Unless the context or law warrants a different meaning, the definitions below shall be applicable in addressing SWFs in Hull and this Policy.

*abandoned* - cessation of all uses of a communications facility for a period of one hundred eighty (180) consecutive days or more. Where a wireless infrastructure provider has applied to place utility poles in the public right-of-way to support the collocation of small wireless facilities, and such collocation is not used by a wireless services provider to provide service

within nine (9) months after the date the application is approved, same shall be deemed abandoned;

*ADA* - the Americans with Disabilities Act, as amended, and the regulations promulgated thereunder, and by implication, any accessibility requirements of the Commonwealth of Massachusetts that may increase the restrictions under the ADA;

*antenna* - communications equipment that transmits and/or receives electromagnetic radio frequency signals used in the provision of wireless services;

*applicable codes* - Massachusetts building, plumbing and electrical code, uniform building, fire, electrical, plumbing, or mechanical codes adopted by a recognized national code organization or local amendments to those codes, and the National Electric Code, National Electric Safety Code, Massachusetts Department of Environmental Protection law, and the rules, regulations and provisions of the Federal Communications Commission, the Occupational Safety and Health Administration, and any other state or federal agency regulating any aspect of wireless communications or facilities;

*applicant* - any person who submits an application and is or is acting on behalf of a wireless services provider or wireless infrastructure provider;

*application* - a written application form submitted by an applicant to the Town to install or operate a small wireless facility within any right-of-way, public or private property including a request for a permit to collocate small wireless facilities on an existing utility pole or wireless support structure; or a written request for installation of a new utility pole or wireless support structure for a new small wireless facility, as well as all required exhibits and submittals as required by the application form and the applicable fee for the review of such application;

*collocate or collocation* - to install, mount, maintain, modify, operate, or replace wireless facilities on any existing structure or utility pole;

*concealed facility* - a wireless facility that is not readily identifiable as a wireless facility and that is designed to be aesthetically compatible with its surroundings. the geographic region such as a traditional or decorative light standard or traffic signal or utility pole consistent in size with the height and girth of existing structures in the area;

*FCC* - the Federal Communications Commission of the United States;

*historic district* - a district, building, property, or site, or group of buildings, properties, or sites that are either designated as an historic district by the Town as set forth G.L. c. 40C, or is the subject of a pending application;

*interference* - The effect of unwanted energy due to one or a combination of emissions, radiations, or inductions upon reception in a radio communication system, manifested by any performance degradation, misinterpretation, or loss of information which could be extracted in the absence of such unwanted energy;

*law* - a federal, Massachusetts or local statute, regulation, ordinance, order or rule;

*permit* - a written authorization that must be obtained by the applicant from the Town to perform an action or initiate, continue, or complete a project;

*person* - an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization;

*public safety agency* - the functional division of the federal government, the commonwealth of Massachusetts, the Town, any other unit of state or local government, or a special purpose district located in whole or in part within this commonwealth, that provides or has authority to provide firefighting, police, ambulance, medical, or other emergency services to respond to and manage emergency incidents;

*rate* - a recurring charge paid by the applicant to the Town;

*right-of-way* - the area on, below, or above a public or private roadway, highway, street, public sidewalk, or alley dedicated for compatible use;

*service provider (or personal wireless service provider)* – A person or company that provides wireless services to the public as defined by the Telecommunications Act of 1996, or any similar such provider as may be entitled to install SWFs in Hull under the federal SWFs policy.

*small wireless facility ("SWF")* - a wireless facility that meets both of the following qualifications: (i) each antenna is located inside an enclosure of no more than three (3) cubic feet in volume or, in the case of an antenna that has exposed elements, the antenna and all of its exposed elements could fit within an imaginary enclosure of no more than three (3) cubic feet; and (ii) all other wireless equipment attached directly to a utility pole associated with the facility is cumulatively no more than twenty eight (28) cubic feet in volume. The following types of associated ancillary equipment are not included in the calculation of equipment volume: electric meter, concealment elements, telecommunications demarcation box, ground-based enclosures, grounding equipment, power transfer switch, cut-off switch, and vertical cable runs for the connection of power and other services;

*SWF fee* - a charge paid to the Town by the applicant with an application, for recertification or other purpose outlined in this Policy;

*tower* – a structure built or used for the primary purpose of supporting antennas.

*utility pole* - a pole or similar structure that is used in whole or in part for electric distribution, lighting, traffic control, communications, or a similar function;

*wireless facility* – any fixed installation that provides wireless services to end-users, usually including at least radio transmission/reception equipment and antennas and support structures or apparatus for antennas and/or equipment. "Wireless facility" does not include: (i) the buildings or support structures primarily used for another purpose to which wireless equipment or antennas are attached. ; or (ii) wireline backhaul facilities, coaxial or fiber optic cable that connects wireless facilities to the wireless service provider's network or equipment that is otherwise not immediately adjacent to or directly associated with an antenna;

*wireless infrastructure provider* - any person authorized to conduct business in the commonwealth that builds, installs and maintains wireless facilities, wireless support structures, and/or backhaul equipment that enables wireless service providers to provide their services.;

*wireless services* - any services made available to the general public, or to a particular class of customers, on a nondiscriminatory basis using licensed or unlicensed spectrum, whether the subscriber is using fixed-location, portable or mobile equipment;

*wireless services provider* - a person who offers wireless services in Hull, including but not limited to personal wireless service providers;

*wireless support structure* - a freestanding structure, including a tower, or structures designed for other purposes to which a wireless facility is attached, such as utility pole, lamp-post, building, bridge infrastructure, wind turbine, or billboard. "Wireless support structure" does not include a utility pole or stub pole or similar devices;

#### **4. Siting Prohibitions**

SWF infrastructure is regulated as follows:

- a. No SWF wireless installation shall be installed on Double Poles
- b. No SWF wireless installation shall be installed on poles or along a way in a manner that is not ADA compliant.
  - a. No equipment shall be placed inconsistently with ADA regulations for passage around it.

- b. Cabinets or other SWF infrastructure may not be placed within the travel way of the street or sidewalk to impede street, sidewalk or other relevant accessibility. Sidewalk travel ways shall, unless waived by the Board, maintain a minimum of 4 feet in width to accommodate the snow clearing vehicles along the sidewalks or such other distance as the Town determines appropriate to accommodate snow or debris removal or repairs to the area.
- c. No SWF wireless installations shall remain within the Town right of way or on Town property which has not been certified as in use in the annual recertification affidavit.
- d. No SWF wireless installation equipment shall be replaced or altered without a re-application, hearing, and approval from the Board of Selectmen unless the equipment is no more than 10% larger in volume and in radial dimension from its mounting surface, or remains contained within existing approved concealment,
  - a. And continues to meet the standard as a SWF
- e. No small wireless facilities shall remain within a Town or private right of way or on Town or private property that has not been certified as being in use in the annual recertification affidavit.
- f. No small wireless facility installation equipment shall be replaced or altered without a re-application, hearing, and approval from the Town unless the equipment is no longer properly functioning, and it is being replaced with the same or substantially similar equipment.

**5. Application Process-**

- a. Applications shall be submitted in a packet containing all required information and any additional information the Applicant wish to submit. Nothing shall preclude the Town from requesting supplemental or additional information during the hearing. The packet shall as practicable be broken down by sections corresponding to the requirements set forth herein.
- b. Applications shall comply with the aesthetic standards set forth in this Policy and shall be submitted to the Board through the office of the Town Manager accompanied by the SWF application fee of \$500 per application for collocation, payable to the Town. The \$500 SWF application fee will cover up to 5 locations. Each application for more than 5 installations is subject to a separate SWF fee of \$100 per installation. For new structures (e.g., a new pole), the SWF new pole application fee is \$1000 per pole and/or wireless support structure.
- c. The Applicant must also pay for legal notices of the public hearing to local newspapers and abutters, as applicable. The Applicant is responsible for obtaining the abutters list for each pole location within the application and submitting same with its application. The Applicant is further advised that if the Town so determines during the application process and any appeals therefrom that additional specialized, legal or technical support is needed, the Applicant and the Town shall enter into an Agreement whereby the Applicant shall pay for same.

- d. 11 (eleven) hard copies of the application and 1 (one) electronic copy of the application must be submitted to the office of the Town Manager. Applications that fail to contain all the items required by this Policy might not be accepted for review until all items have been submitted, as well as all fees and the abutters list paid for. In addition, to the extent any other approvals from the Town or other public authorities are required for the installations set forth in the application, those approvals must be obtained and included within the application, before the application will be accepted or a satisfactory explanation is provided in the application as to why such approvals are not included.
  - e. Upon receipt, the Town Manager or his or her designee shall: (1) date and time stamp the Application as received; and (2) make within a reasonable period of time a determination as to completeness of the Application and notify the Applicant, in writing, within 10 days, if the Application is incomplete. If the Applicant is notified that the Application is incomplete, the time periods set forth in this Policy shall be tolled until such time as a complete Application has been submitted or the time period for action begins anew, whichever is the longest allowed by law.
  - f. The Town Manager or designee shall also circulate a copy of the Application to the following departments for comment and review: Inspectional Services, Public Works, Planning, Health, Building, Light, Police, Fire, Law and any other department that the Town Manager, in his or her sole discretion, determines is appropriate. If additional copies are requested, the Applicant shall supply them forthwith.
- f. Written comments from the departments shall be submitted to the Town Manager within 20 days of the date that the application is circulated or such other time as the Town Manager deems appropriate.
- g. Once the application is deemed complete, and all comments have been received, or when the Board deems it appropriate, the Board will schedule and hold a public hearing (which shall consist of one or more sessions as the Board determines) to consider the Application, such that a determination may be made on any Application for an installation on an existing structure within 60 days of receipt of the Application, and on a new structure, within 90 days of receipt of the Application, or such later times are permitted by law. The parties may enter into a tolling or other agreement to extend the time by which the Town must act on the Application.
- h. Any material changes to an Application, as determined by the Town in its sole discretion, shall constitute a new Application for the purposes of the time standards. Where a changed or new Application is submitted, the prior Application shall be deemed withdrawn by the Applicant.

- i. Upon completion of the hearing, the Board may grant, grant with conditions, or deny the Application, based on inadequate capacity of the pole or mounting structure, safety concerns, reliability concerns, incomplete or insufficient information or failure to meet applicable engineering standards and other requirements of this Policy and/or the law.
- j. Any approval granted to an applicant shall be only for the specific Applicant and Application. Any change in the name/carrier or registered service provided by another carrier or small wireless facility location will require a new Application and approval from the Town.

## **6. Content of Applications**

Applications shall, at a minimum, include the following information:

- a. Applicant's name, address, telephone number, website and email address.
- b. Names, addresses, telephone numbers, websites and email addresses of anyone acting on behalf of the Applicant with respect to the Application.
- c. Detailed drawings and descriptions, with photographs of the equipment to be installed, whether mounted on utility poles or on the ground, or otherwise, including:
  - i. Type of equipment
  - ii. Specifications of equipment (including but not limited to dimensions and weight)
  - iii. Equipment mount type and material
  - iv. Power source or sources for equipment, including necessary wires, cables, and conduit
  - v. Expected life of equipment
  - vi. Emissions capability of equipment, including:
    - 1. Inventory of proposed antennas including
      - a. Antenna models and specification sheets
      - b. Antenna dimensions and volumes,
      - c. Antenna drawings and photographs
      - d. Antenna electrical specifications (e.g. gain, power capacity, frequencies, numbers of inputs, etc.)



3. Inventory of radio transmission equipment

- a. Listing of all radio transmitters initially planned and the maximum number of transmitters the system is designed to be expandable to
- b. Transmitters' output power capability (maximum) and initially planned power levels
- c. Frequencies, channel bandwidths, air interface technologies for each, if known
- d. Combiners, splitters, filters and other equipment that may affect radiated power levels and their loss/gain characteristics
- e. Coaxial or waveguide types and lengths, transmission power losses,
- f. Any other factors pertinent to evaluating emissions compliance of the proposed system and the system at full expansion.
- g. In the case of beamforming antennas, the necessary information that will provide the necessary for a qualified individual to review the emissions

4.

5. Radio frequency energy (RFE) emissions report prepared by a competent individual demonstrating the facility as proposed, and with the designed expansion capability, will be compliant with applicable federal and state requirements with respect to human exposure to RFE. The report should include all inputs used to generate the outputs, the methods employed to calculate the outputs, graphical representations of the emissions in plan and elevation views.

viii. Peripherals, including:

1. If there is battery backup – and equipment specifications
2. If there is generator backup – and equipment specifications
3. All proposed and future expansion equipment, enclosures, mounting apparatus, utility connections and related items comprising the proposed facility.

ix. Photos and dimensional drawings, rendering the equipment and proposed configuration also showing distances to nearest habitable structures and elevations and radial distances of proposed antennas with respect to accessible spaces on and within such structures and outdoor areas.

d. Detailed map with locations of the utility poles, wireless support structure(s) or other structure on which equipment is to be located, including specific utility pole identification number, if applicable, and the areas it will service. The map shall also include any structures or public open space or recreational areas within 500 feet.

- e. Detailed map showing existing and proposed small wireless facility installations within 500 feet of the Application site.
- f. Certification by a registered professional engineer that the utility pole, wireless support structure or location will safely support the proposed equipment.
- g. Written consent of the utility pole, wireless support structure or facility owner to the installation, along with any agreements pertaining to same.
- h. Affidavit from a Radio Frequency Engineer outlining the network/network service requirements in the Town and how the installations address that need in the Town. Such affidavit should characterize the current level of coverage and how the desired installations will change the current level of coverage, through or with coverage maps, including current and proposed coverage, including a breakdown of "excellent" "good and "poor" reception areas.
- i. Noise assessment prepared by a qualified individual demonstrating that at maximum noise output level, the proposed installation will not constitute "air pollution" under state law and will satisfy the noise criteria within this Policy or any noise regulation adopted by the Town. Such noise assessment could require current ambient noise measurements, depending on the noise levels predicted to be produced by the equipment.
- j. Suitable insurance certificate with companies authorized to do business in Massachusetts in such commercially reasonable amount as are appropriate with the Town listed as an additional insured. Satisfactory surety bond in the form approved by and provided by the Town to ensure the faithful performance of the permit holder to the conditions of the permit, including ensuring the prompt removal of any equipment that is to be removed.
- k. Description as to why the desired location is superior to other similar locations, from a community perspective, including:
  - i. Visual aspects
  - ii. Proximity to single or multifamily residences, businesses, open space and recreational areas
- l. Description of efforts to co-locate the equipment on existing structures, utility poles, wireless support structures or towers which currently exist or are under construction. A good faith effort to collocate is required and evidence of such efforts must be included within the application. The Board will accept for review evidence that shows that any available collocation would result in impacts on the Town that are substantially more intrusive to the intent and purpose of this policy and/or Town development criteria.

- m. An Affidavit from the applicant which certifies that it will maintain the installations in good repair and according to FCC standards, and will remove any installation not in such good repair, or not in use, within 60 days of being no longer in good repair or no longer in use.
- n. A document containing the calculations and narrative necessary to demonstrate the proposed facility qualifies as a SWF under the FCC criteria, including but not limited to the criteria repeated herein.
- o. A rationale for each proposed location and for the overall combination of locations, demonstrating how the number of facilities has been minimized, the impacts of the facilities have been minimized, the sharing of existing locations is, should not or cannot be accomplished to minimize the deployment of SWFs on additional poles.
- p. All information necessary to support the applicant's claim of compliance with the criteria in this policy and requests for any waivers thereto.

7. **Annual Re-Certification and Affidavit**

- a. Each year on July 1 the equipment owner shall submit an affidavit which shall list, by location, all SWF installations it owns within the Town by location, and shall certify: (1) each such installation that remains in use; (2) that such in use installations remain covered by insurance; and (3) each such installation which is no longer in use.
- b. The equipment owner shall pay an annual re-certification fee of \$270 per installation which remains in use.
- c. Any SWF installation which is no longer in use shall be removed by the owner within 60 days of receipt of the annual re- certification affidavit, at the owner's expense.
- d. Any SWF installation which is not removed within 60 days after being listed as no longer in use in the annual re-certification affidavit shall be subject to a fine of \$100/day until such installation is removed.
- e. Where such annual re-certification has not been timely submitted, or equipment no longer in use has not been removed within the required 60- day period, no further Applications for SWF installations will be accepted by the Town until such time as the annual re-certification has been submitted and all fees and fines paid.

8. **Aesthetic and Development Requirements for SWF Wireless Facilities**

- a. Except when SWF infrastructure is attached to a wood pole, poles and all equipment must be the same color and finish as surrounding streetlight poles or third party poles, unless approved to have a specific color scheme or concealment design.
- b. Exposed wires and surface mounted conduits are not permitted, except where the Board specifically approves otherwise.
- c. Corporate or company names (except for location identification purposes noted
  - a. below), logos, identifying graphics or other advertisements shall not be painted, embossed, applied or displayed in any manner on the poles, equipment enclosures (boxes, cabinets, etc.), hand hole covers, or other component of the pole or mounting structure.
  - b. Individual location identification information, worker instructions and safety labeling will be permitted, provided no letter, number, or graphic symbol is taller than necessary to be legible for the use intended. Identification numbers shall be no more than one inch in height, and detailed information shall be of lesser letter size as appropriate for the situation..
- d. Standalone Poles: The height of any standalone pole not used for utility distribution (electricity and/or telecom) including its antenna(s) shall not exceed 32 feet above ground or no more than 10 percent taller than other adjacent poles, whichever is greater.
- e. Wood Poles: The height of any replacement wood pole including its antenna(s) shall not exceed 45 feet above ground.

**9. Antennas (subject to the approval of the Board)**

- a. Each small wireless antenna shall be located entirely within a shroud or canister type enclosure and shall meet the FCC volumetric criterion for a SWF antenna (currently 3 cubic feet).
- b. The diameter of the antenna enclosure at its widest point should not be wider than two times the diameter of the top of the wireless support structure. The Board may waive this and the preceding criterion at its sole discretion, if such a waiver results in a location-compatible design and is the result of accommodating multiple wireless carriers on the same pole.
- c. All antenna enclosures shall either be mounted symmetrically to the top of the wireless support structure or utility pole and aligned with the centerline of the wireless support structure or utility pole, or mounted to the side of the wireless support structure or utility pole such that the vertical centerline of the antenna enclosure shall be parallel with the wireless support structure or utility pole. The height of the side mounted antenna shall be at a location on the wireless support

structure noted in the application and approved by the Town, which height shall be at least 10 feet above pedestrian level or 15 feet above vehicular level, as applicable, at its lowest point.

- d. Tree “topping” or the improper pruning of trees is prohibited. Any proposed pruning or removal of trees, shrubs or other landscaping already existing in the ROW must be noted in the application and must be approved by the Tree Warden.

### **9.1 Cables and Wires**

All cables, wires and connectors related to the SWF must be fully concealed on the wireless support structure and shall match the color of the wireless support structure. There shall be no external cables and wires related to the SWF hanging off or otherwise exposed on the wireless support structure. On utility poles, exposed cabling shall be run in a neat, workmanlike manner, which shall be detailed in the application and executed as approved by the Selectmen.

### **9.2 Colors**

All colors shall be of low-contrast neutral hue and tone, consistent with the character of the structure to which it is attached (not necessarily a perfect match, subject to Selectmen’s discretion), including equipment cabinets, antenna covers, and cable covers. Notwithstanding the foregoing, in the case of existing wood utility poles, finishes of conduit may be their zinc, aluminum or stainless steel natural finishes, or colored to complement the cabinet finishes. The Board may recommend a standard color or color palette for such infrastructure in the right of way.

### **9.3 Equipment Enclosures/Concealment**

- a. The sum of the volumes of all SWF equipment enclosures and related equipment enclosures on a wireless support structure or utility pole, including electric meters, shall be as small as possible, but in no event greater than 28 cubic feet in volume. The equipment shall not extend more than three feet from the mounting surface, or such lesser dimension as may be necessary for safety, visual bulk or vehicular or pedestrian clearance.
- b. Structures installed primarily for the purpose of supporting antennas will not be approved without a demonstration included with the application of why nearby existing structures are not feasible or not reasonably capable

of complying with these design criteria with the applicant's equipment. Such structures shall be architecturally compatible with the surroundings.

- c. Ground-mounted equipment shall incorporate concealment elements into the proposed design matching color and materials of the wireless support structure, unless other materials, colors or decorations are approved by the Town. Concealment may include, but shall not be limited to, landscaping, strategic placement in less obtrusive locations and placement within existing or replacement street furniture.
- d. Landscaping concealing equipment enclosures shall be planted in such quantity and size such that 100% screening from normally traveled ways (streets, sidewalks, adjacent property uses) is achieved within two years of installation. The Board may waive the landscaping requirement if it finds the outcome without such landscaping is no more objectionable to the surroundings than with landscaping. Applicants shall submit a landscaping plan for any ground equipment proposed.

**10. Signage/Logos/Lights/Decals/Cooling Fans (subject to the approval of the Board)**

a. Signage:

- a. Identification: The SWF permittee shall post its name, location identifying information, and 24-hour contact telephone number in an area on the cabinet of the facility that is visible to the public. Signage required under this section shall not exceed 4 inches by 6 inches, unless otherwise required by law or the Town. If no cabinet exists, the signage shall be placed at ADA-compatible sign heights above the base of the pole.
- b. Safety signage: all necessary safety signage shall be of a size that is sufficient for being read at the distances, and no larger. See ANSI Z535.2 American-National-Standard-for-Environmental-and-Facility-Safety-Signs for guidance on safety sign design and minimum lettering sizes.
- b. Lights: New SWF and wireless support structures shall not be illuminated, except in accord with state or federal regulations, or unless illumination is integral to the camouflaging strategy such as design intended to look like a streetlight pole. Pilot and other status lights shall not be visible except from directly beneath the equipment, where "directly beneath" is defined by a 60 degree light cutoff below the horizontal plane of the light.
- c. Logos/Decals: No manufacturer logos or markings shall be on the exterior surfaces of the equipment cabinets except on equipment labels facing the ground. The SWF operator/permittee shall remove or paint over unnecessary equipment manufacturer markings using a color to match or a method as

approved by the Building Commissioner or designee. SWFs and wireless support structures shall not include advertisements and may only display information required to operate the facility safely and in compliance with applicable law. Placement of the RF sticker shall be as close to the antenna as possible.

- d. Cooling Fans: In all areas, the SWF operator/permittee shall use a passive cooling system. In the event that a fan is necessary, the SWF operator/permittee shall use one or more cooling fans that collectively produce noise less than 35 dBA at the nearest residential occupied space including residence windows, porches, patios, and the like. Operators/permittees shall provide and execute faithfully a maintenance plan for routinely inspecting and replacing fans in residential areas prior to their becoming noisy with age. The applicant shall provide manufacturer mean time between failure specifications for the fans, and shall implement a replacement schedule based on half such mean time or such other interval as necessary to prevent noisy fans from requiring service calls from the Town, and shall include verifying fan condition on each service inspection.

#### **11. Other Provisions (subject to the approval of the Board)**

- i. Only SWFs are permitted to be installed within a State or Town or private right-of-way on new or existing utility poles or wireless support structures. All SWFs eligible for administrative approval under this Policy shall not exceed the size dimensions of the SWF definitions and shall be designed as concealed facilities and shall be subject to applicable development standards and procedures as required by local, state and federal laws.
- ii. New utility poles or wireless support structures shall be designed to match the design parameters established by the Historical District Commission for a subject location under its jurisdiction, or in the absence of such design guidance, match the size, girth and design of any existing utility poles or other vertical structures located in the historic district right-of-way, e.g. decorative light poles.
- iii. Placement of small wireless service facilities within the rights-of-way on Town collector streets, cul-de-sacs, local streets and marginal access streets shall be prohibited unless the applicant cannot otherwise provide service to a particular customer or customers without doing so, and the inability to place facilities in such rights-of-way is necessary to accomplish requirements of nondiscriminatory treatment of the applicant in relation to the Town's treatment of other wireless service providers. In such circumstances, the applicant shall include with its application sufficient evidence, consistent with industry standards, to justify such placement.

- iv. Whenever SWFs must be placed in a right-of-way with residential or commercial uses on one (1) or both sides, neither utility poles, equipment, antennas or other structures shall be placed in front of said residential or commercial structure. If a right-of-way has residential or commercial structures on only one (1) side, the Board may permit the placement the small wireless facilities to be located on the opposite side of the right-of-way whenever possible, except where the opposite side is the beach, bay, waterway, river, open space or recreational area. The Board may permit said placement in such areas if it is satisfied that the placement does not materially interfere with the scenic vistas or use of the areas. All small wireless facilities shall be located in such a way that they do not interfere with views from residential structures.
- v. All SWFs shall be located so as to minimize adverse visual effects on the landscape.
- vi. All SWFs either independently sited or mounted on or to existing buildings and structures shall be camouflaged.
- vii. When a SWF extends above the roof height of a building on which it is mounted every effort shall be made to conceal every component within or behind existing architectural features to limit its visibility from public view.
- viii. All SWF components mounted on a roof shall be stepped back from the front facade in order to limit its impact on the building silhouette and the public view.
- ix. If the Board shall determine sufficient area exists immediate to the proposed SWF so that landscape improvements would be aesthetically beneficial, it shall request a landscape plan from the Applicant. Said plan will seek to screen or buffer the public view of the proposed SWF.
- x. Any small wireless facility shall be painted so as to visually blend into nearby vegetation or a light gray or light blue hue that blends with sky and clouds.

## **12. Location Requirements (subject to the approval of the Board)**

### **12.1 MOST PREFERABLE LOCATIONS**

The following are the most preferred areas for new SWFs in the order of preference (1 being most preferable):



1. Non-residential districts (or streets abutting non-residential districts) if not adjacent to a beach, bay, waterway, river, open space, recreational area park, residential district or historic district.
2. Any district, on parcels at locations satisfying the setbacks for wireless facilities under town bylaws.
3. On streets in or abutting residential districts using locations that minimize visual clutter, such as avoiding prominently appearing equipment on poles on street corners, selecting pole locations that are nearer to non-residential uses or more distant to residential uses than other poles in the vicinity, use of poles where other vegetation or infrastructure minimizes the visibility of the installation.

## 12.2 SITE SHARING PREFERENCE

It is the Town's strong preference that whenever an applicant proposes to place a new SWF that the applicant combine with an existing SWF, provided the additional equipment maintains the dimensional and volumetric requirements of this policy.

## 12.3 CONSIDERATION OF ALTERNATE LOCATIONS

The Town reserves the right to propose an alternate location for a SWF and/or wireless support structure to the location proposed in the application within one hundred feet of the proposed location or within a distance that is equivalent to the width of the ROW or structure in or on which the SWF and/or wireless support structure is proposed, whichever is greater, which the operator shall use if it has the right to use the alternate location on reasonable terms and conditions and the alternate location does not impose technical limits or substantial additional costs.

## 12.4 GENERAL LIMITS: ADHERENCE TO OTHER APPLICABLE STANDARDS

- a. If a streetscape is redesigned in the future, including, but not limited to the location and type of streetlights, SWF providers will be required to remove their infrastructure at their own cost and apply to reinstall SWF infrastructure in accordance with these guidelines and the new streetscape.
- b. Applicants shall demonstrate their proposed facilities will comply with applicable safety standards, including without limitation,
  - i. Demonstration the utility safety requirements for attachments will be met and maintained,
  - ii. Demonstration that the SWF as proposed, and as designed for future expansion, will satisfy applicable requirements relating to human exposure to radio frequency energy on the ground and at elevations nearby that humans normally may occupy (e.g. upper stories of buildings,

- exteriors and roofs of buildings where casual workers or homeowners may go to maintain their structures.
- iii. Demonstration that all necessary clearances, material fall hazards and other risks to passersby are properly controlled.

## 12.5 GUIDELINES ON PLACEMENT

The Town desires to promote cleanly organized and streamlined facilities using the smallest and least objectionable means available to provide wireless services to the community. Generally, a SWF and/or wireless support structure shall match or be consistent with the materials and finish of the wireless support structure, adjacent poles and structures, and of the surrounding area adjacent to their location, per the requirements above.

The following additional guidelines on placement shall apply:

- a. SWF and wireless support structures shall be located no closer than 150 feet away, radially, from another SWF and wireless support structure. If by necessity or because a better design will result, the Board may waive this requirement based on evidence submitted by the applicant and a finding in favor of the waiver.
- b. A combination wireless support structure and streetlight pole should only be located where an existing pole can be removed and replaced, or at a new location where it has been identified that a streetlight is necessary.
- c. SWF and wireless support structures shall be located in a manner that does not impede, obstruct, or hinder usual public pedestrian or vehicular travel or public safety on a ROW.
- b. SWF and wireless support structures shall be located in a manner that does not obstruct the legal use of a ROW by a utility provider.
- c. SWF and wireless support structures shall be located in a manner that does not violate or conflict with the zoning and general bylaws, applicable law and regulations, or this policy.
- d. SWF and wireless support structures shall be located in a manner that does not violate the federal Americans with Disabilities Act.
- e. SWF and wireless support structures shall be located in a manner that does not negatively impact the structural integrity of the associated wireless support structure.
- f. SWF and wireless support structures on ways shall be located in alignment with existing trees, utility poles, streetlights, and buildings.
- g. SWF and wireless support structures requiring new excavation shall be located such that no proposed disturbance shall occur within the critical root zone of any

- tree, such as by being equidistant between trees when possible, with a minimum of 15 feet separation.
- h. SWF and wireless support structures shall be located with appropriate clearance from existing utilities.
  - i. SWF and wireless support structures shall be located so as not to be located along the frontage of any building deemed to be of historic significance on a federal, state, or local level.
  - j. SWF and wireless support structures shall be located not within sight triangles at street intersections.
  - k. New wireless support structures shall not be located directly in front of or in main sightlines to or from any existing residential, commercial or industrial structure.
    - a. To the greatest extent possible, new wireless support structures shall be located in line with existing lot lines or an equidistance from any two existing structures, when such placement reduces the visual burden on the adjoining uses.
    - b. In areas of the Town where multiple structures abut each other and/or where small (<10 ft) or no side lot setback requirements exist, new wireless support structures shall not be located directly in front of an entrance or window of any existing structure.
  - l. SWF and wireless support structures shall be located in a manner that minimizes pedestrian and vehicular traffic obstruction during maintenance.

### **13. Pedestrian Path and Amenity Zone (subject to the approval of the Board)**

- a. The sidewalk area of public space is typically delineated into the pedestrian path and the amenity zone. The amenity zone is located between the pedestrian path and the roadway and provides access between the two as well as the area for street trees, streetlights and traffic signals, and other functional elements. It is critical that all pedestrian paths are clear to facilitate safe and optimal access and circulation along sidewalks.
- b. Standalone poles shall not be located in the clear pedestrian path.
- c. Standalone poles shall be aligned with existing streetlights, third party poles, and street trees as applicable in order to maintain a visual and physical organization of structures within the right-of-way, as measured from the center of the base of the pole. When streetlight and street tree alignment are offset within the amenity or curbside zones, prioritize alignment of the SWF facility with streetlights.
  - a. All measurements shall be taken from the outer edge of the standalone pole and the infrastructure listed in the following specific limits/prohibitions.

- b. Standalone poles must be placed a minimum of six feet (6') from existing fire hydrants or buildings' fire connections.
- c. Standalone poles shall be located a minimum of 10 feet (10') from light poles and traffic signal poles.
- d. Standalone poles shall be located a minimum of 3 feet (3') from bicycle racks and shall not impede the attachment of bicycles.
- e. Standalone poles shall be placed a minimum of ten feet (10') from any above grade building face, including bay windows, show windows, oriel windows, and building projections or overhangs.
- f. Poles should be located, to the maximum extent possible, to minimize impact on businesses and residential mixed-use development by avoiding placement directly in front of building entrances, alignment with windows, primary entry walks, or delivery zones or entrances.

**14. Access, Circulation, and Sight Distances** (subject to the approval of the Board)

- a. Safe and functional access, circulation, and clear sight lines are important for pedestrian ease of movement and to maintain unobstructed lines of sight among drivers, pedestrians, bicyclists.
- b. Standalone poles shall not obstruct ADA access, including maintaining a clear landing at the top of curb ramps at crosswalks.
- c. Pole placement shall not impede, obstruct, violate, conflict with, or hinder any mode of travel over or access to any public street, bridge, tunnel, highway, lane, path, alley, sidewalk, or driveway, including but not limited to the obstruction of sight lines.
- d. Poles shall be placed consistent with the most current Manual on Uniform Traffic Control Devices and adopted District standards for maintenance of an intersection's sight line triangles.
- e. A minimum of fifteen feet (15') shall be maintained between the pole and the outside edge of the alley or driveway.

**16. Miscellaneous**

- i. While the Town fully intends to apply the guidelines established in this policy uniformly to all SWF applications, there may be circumstances where not every specific guideline may be met. In these cases, the Board will use its reasonable discretion in approving SWF permit applications that deviate from the strict application of this policy. A failure of the Town to comply with any provision of this Policy shall not be deemed a violation of same by the Town. The Town may in its discretion waive or modify or grant a variance from any provision of this Policy if warranted by a particular situation and upon submission of satisfactory evidence.

ii. Applicants for SWF shall certify through a qualified radio frequency engineer in their application that operation of the SWF, including under maximum licensed operating parameters, will not cause interference with radio communications used by the Town, commonwealth or any other public safety agency used for public safety or operational communications and shall further provide a list of radio frequencies the applicant will use at that location, which list shall be updated as modified from time to time. The applicant shall provide evidence of the certifying engineer's qualifications to make such certification.

iii. wireless services provider shall install SWF of the type and frequency that will not cause unacceptable interference with the Town's and any other public safety agency's communications equipment; unacceptable interference will be determined by and measured by the Town in accordance with industry standards and the FCC's regulations addressing harmful interference to public safety communications or any other radio communications used by the Town or any other public safety agency. If a SWF causes such interference, and the wireless services provider has been given written notice of the interference by the Town or any other public safety agency, the wireless services provider, at its own expense, shall take all reasonable steps necessary to correct and eliminate the interference, including, but not limited to, powering down the SWF and later powering up the SWF for intermittent testing, if necessary. The Town may terminate a permit for a SWF based on such interference if the wireless services provider is not making a good faith effort to remedy the problem in a manner consistent with the abatement and resolution procedures for interference with public safety spectrum established by the FCC including 47 CFR 22.970 through 47 CFR 22.973 and 47 CFR 90.672 through 47 CFR 90.675 or other applicable law.

iv. Any permit issued by the Town for a SWF shall be subject to final testing for emissions to determine whether the SWF creates unacceptable interference to any public safety or town operational radio communications system. At the reasonable request of the Town, the SWF provider shall cooperate with the Town in conducting such a test. Such testing shall be at the expense of the Town but shall be reimbursed by applicant if the testing reveals harmful interference.

v. The owner of a SWF shall provide the Town's Fire Chief, Police Chief, the Town Manager and the Board a twenty- four hours / seven days a week (24/7) emergency contact number for the owner's network operations center, and a business-hours contact name, number and address for routine business communications. If the contact information is not current, not operational, or not responsive during an exigent circumstance, the Town reserves the right to take whatever reasonable immediate

action necessary to mitigate the situation until such time as a responsible person for the SWF is contacted. The Town shall have no responsibility, liability or financial responsibility to the owner of the SWF or any wireless service provider or any other party arising from such actions.

vi. Nothing contained herein or in any approval or permit issued constitute a specific assurance of safety or assistance by the Town.

viii. Violations of the permit and or applicable law by the permit holder may be subject to the Board holding a hearing, after due written notice and opportunity to be heard to consider whether the permit granted should be suspended, modified, amended or revoked or other sanctions imposed.

ix. Venue for any legal action arising out of this policy and/or any permit issued thereunder shall be and remain in Plymouth County, except to the extent that federal law requires venue in the United States District Court for the District of Massachusetts. In said event, venue shall be in and remain in said Court.

x. If there is a conflict between the provisions of this Policy and/or any applicable law, rule or regulation, the more restrictive provisions shall apply.

xx. If any provision of this Policy is determined by a final authority of competent jurisdiction to be invalid, said invalidity shall not affect the remainder of the Policy.

#### **17. Effective Date Of Policy**

This Policy will be effective as of September 9, 2019. Modifications, supplements, amendments or the like of Policy may be made from time to time by the Board of Selectman.

Adopted this 9<sup>th</sup> day of September, 2019 by a majority of the Board of Selectmen at a duly posted and noticed meeting.

  
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Greg Grey  
Clerk Member of the Board of Selectmen