



BOARD OF APPEALS  
Jesse Geller, Chairman  
Christopher Hussey  
Jonathan Book

# *Town of Brookline*

## *Massachusetts*

Town Hall, 1<sup>st</sup> Floor  
333 Washington Street  
Brookline, MA 02445-6899  
(617) 730-2010 Fax (617) 730-2043  
Patrick J. Ward, Clerk

TOWN OF BROOKLINE  
BOARD OF APPEALS  
CASE NO. 2014-0046  
**Owner: Majestic Limited Partnership**

Petitioner, **Bell Atlantic Mobile of Massachusetts Corp., Ltd. d/b/a Verizon Wireless**, applied to the Building Commissioner for permission to install a wireless telecommunications facility on the roof of a multi-family residential building at **1569 Beacon Street**. The application was denied and an appeal was taken to this Board.

The Board administratively determined that the properties affected were those shown on a schedule in accordance with the certification prepared by the Assessors of the Town of Brookline and approved by the Board of Appeals, and fixed August 28, 2014 at 7:30 p.m. in the Selectmen's hearing room as the time and place of a hearing on the appeal. Notice of the hearing was mailed to the Petitioner, to their attorney of record, to the owners of the properties deemed by the Board to be affected as they appeared on the most recent local tax list, to the Planning Board and to all others required by law. Notice of the hearing was published on August 7, 2014 and August 14, 2014 in the Brookline TAB, a newspaper published in Brookline. A copy of said notice is as follows.

### **Notice of Hearing**

Pursuant to M.G.L., C. 40A, the Board of Appeals will conduct a public hearing at Town Hall, 333 Washington Street, Brookline, on a proposal at:

**1569 BEACON ST – INSTALL WIRELESS FACILITY ON ROOF in an M-2.5, APARTMENT HOUSE residential district on August 28, 2014, at 7:30 PM in the 6<sup>th</sup> Floor Selectmen’s Hearing Room (Petitioner: ROBINSON & COLE; Owner: MAJESTIC LIMITED PARTNERSHIP)**

The Board of Appeals will consider variances and/or special permits from the following sections of the Zoning By-Law:

1. **Section 4.09.4.b ; Wireless Telecommunications Services**
2. **Section 4.09.6; Wireless Telecommunication Services**
3. **Section 4.09.7; Wirless Telecommunication Services**
4. **Section 5.09.a; Design Review**
5. **Section 5.30; Maximum Height of Buildings**
6. **Section 5.31.1; Exceptions to Maximum Height Regulations**
7. **Section 5.43; Exceptions to Yard and Setback Regulations**
8. **Section 5.60; Side Yard Requirements**
9. **Section 5.70; Rear Yard Requirements**
10. **Section 8.02.2; Alteration or Extension**

*Hearings may be continued by the Chair to a date/time certain, with no further notice to abutters or in the TAB. Questions about hearing schedules may be directed to the Planning and Community Development Department at 617-730-2130, or by checking the Town meeting calendar at: [www.brooklinema.gov](http://www.brooklinema.gov).*

*The Town of Brookline does not discriminate on the basis of disability in admission to, access to, or operations of its programs, services or activities. Individuals who need auxiliary aids for effective communication in Town programs and services may make their needs known to **Robert Sneurson, Town of Brookline, 11 Pierce Street, Brookline, MA 02445. Telephone: (617) 730-2328; TDD (617)-730-2327; or email at [rsneurson@brooklinema.gov](mailto:rsneurson@brooklinema.gov).***

*Jesse Geller, Chair  
Christopher Hussey  
Jonathan Book*

**Publish: August 7, 2014 & August 14, 2014**

At the time and place specified in the notice, this Board held a public hearing. Present at the hearing was Chairman Jesse Geller, and Board Members Mark Zuroff and Christopher Hussey. Attorney, Michael Giaimo, presented the case on the applicant's behalf.

Mr. Giaimo described 1569 Beacon Street as a six story brick apartment building located to the east of Washington Square. The area consists of several multi-family residential and commercial structures. The property is also located within the Beacon Street National Register Historic District.

Mr. Giaimo stated that the applicant is proposing to install a wireless telecommunications facility, and associated equipment on the roof of the apartment building at 1569 Beacon Street. The facility would consist of 12 panel antennas (three arrays of four panel antennas) and an equipment shelter. Eight antennas would be mounted on the proposed equipment shelter, four on the east side and four on the west side. Four additional antennas would be mounted on the back of the rear stair penthouse, on a wall that is flush with the building's rear exterior wall. The applicant is proposing to paint the shelter and antennas to match the existing façade/roof of the building. The proposal was slightly modified in accordance with Planning Board recommendations. Modifications included moving shelter equipment back from Beacon Street and reducing shelter height by one foot.

A similar proposal was brought before the Board in 2007, but was withdrawn by the applicant without prejudice prior to a final Board decision. Mr. Giaimo stated that this iteration of the 1569 Beacon Street wireless telecommunications facility plan represents a less intense design. A use variance is sought by the applicant to install wireless telecommunications equipment on a residential structure in order to fill a service area coverage gap that extends along Beacon Street for .5 miles. Mr. Giaimo noted that the applicant does not claim to meet the

requirements of a use variance under the standards established by the Zoning By-Law but rather meets the requirements of a use variance after application of the Federal Telecommunications Act.

Martin Lavin, a radio frequency coverage expert, stated that the applicant's site evaluation process revealed that after reviewing all possible alternatives no non-residential structures in the area provided adequate conditions to locate wireless telecommunications equipment intended to alleviate this coverage gap noting that the coverage gap partially results from the hilly nature of the surrounding terrain and that the commercial structures at 1550 Beacon Street and 1648 Beacon Street in particular were considered but are respectively too tall and too short for use.

Wireless telecommunications noise and public health reports were submitted to the Board as supplemental information to support the applicant's claim that proposed equipment will have no adverse impact on 1569 Beacon Street residents and the surrounding neighborhood.

Board members requested further description of the applicant's site evaluation process and equipment concealment practices. Mr. Lavin explained that it is standard practice to evaluate structure height, line of site, roof space, and zoning regulations prior to engaging in any lease negotiations with property owners. Mr. Giaimo stated that the applicant is proposing to paint and texture all necessary equipment to match existing structural elements and reduce overall visual impact.

Mr. Giaimo concluded his comments by stating that the federal Wireless Telecommunications Act of 1996 allows the Board to grant a use variance and prohibits local regulatory restrictions which prevent adequate wireless service.

The Chairman called for public comment in favor of or in opposition to the applicant's proposal.

Janice Kahn, 63 Craftsland Road – Precinct 12 Town Meeting Member suggested that the Washington Square Fire House may serve as a feasible location for the proposed wireless telecommunications facility that would also generate revenue for the town. Ms. Kahn also provided historic context for the language of Section 4.09. and urged the Board to seek consultant review of information provided by the applicant prior to rendering a final decision.

Mr. Lavin responded by stating that the Washington Square Fire House is a designated historic structure and does not provide enough usable roof space to support necessary wireless telecommunications equipment.

The Chairman called upon Polly Selkoe, Assistant Director for Regulatory Planning, to deliver the comments of the Planning Board:

### **FINDINGS**

Section 4.09.4.b. and 6.a.1: Wireless Telecommunications Services – Wireless communications antennas and facilities shall not be located on residences. **Use variance** required. Under Section 9.09, the Board of Appeals may grant a use variance, provided the statutory variance requirements are met, only on a lot that conforms to one or more of the following conditions:

- a. Expiration of the time limit specified for a previously granted use variance.
- b. Existence prior to January 1, 1977, of uses of the same general classification as the use variance applied for, on lots adjoining the lot in question on both sides, or, if the lot in question is a corner lot, on both the side and the rear.
- c. Existence on an adjoining lot of a use of such nuisance characteristics as to render unreasonable any conforming use of the lot in question.
- d. Existence on the lot in question of a structure(s) of appearance compatible with its vicinity which is either of historical or architectural significance which shall be preserved or restored in a manner sufficient to justify the relief granted herein, and/or contains gross floor area excessive for the use permitted in the district wherein the structure is located, and which can reasonably be maintained as a visual and taxable asset only if a nonconformity of use is permitted.

Section 4.09.6.c: Wireless Telecommunications Services

A **special permit** is required for any wireless telecommunications antenna and mount on a building or any related equipment, fixtures, or enclosures exceeding 10 feet above roof height, subject to the following design review standards. The antennas on the 16' penthouse will be 12' above the roof and equipment shelter will be 13' above the roof

Section 5.09.a & d: Design Review

New structures and outdoor uses and exterior alterations to existing structures on a lot which fronts on or is within 100 feet of Beacon Street or has 10 or more dwelling units shall require a special permit subject to the design review standards listed under *Section 5.09.4(a-l)*. The most relevant sections are described below:

- a. *Preservation of Trees and Landscape*: Minimal landscaping exists on the property now, except for the shrubbery located directly in front of the building, and this installation will only be located on the roof, having no affect on existing landscaping.
- b. *Relation of Buildings to Environment*: The applicant has designed the proposed wireless facility, including the equipment shelter, to camouflage the antennas and blend in with the existing building. To further disguise the installation, the applicant should consider locating the equipment shelter in the basement of the existing building, thereby limiting the total amount of visible rooftop structures.
- f. *Utility Service*: The facility will require electric power to operate, but the wiring will not be visible to the general public or to building residents. The applicant has not stated whether there is a backup generator to be installed to provide energy for the facility in emergencies or loss of power situations.
- h. *Special Features*: The panel antennas and the equipment shelter will be screened from view or otherwise disguised to appear as though part of the building's rooftop elements.
- i. *Safety and Security*: The applicant has indicated that the site would be continuously monitored for functionality, and the site would be tested annually to ensure compliance with FCC RF emissions standards. Due to its rooftop location, access to the facility would be restricted to those who have access to the building's roof.
- j. *Heritage*: The applicant has attempted to minimize the facility's impact on the building's historic character by blending it in with the building's architectural features.
- k. *Microclimate*: The applicant has stated that the wireless facility will not emit heat, vapor or fumes, and it will comply with the provisions of the Noise Control By-law.
- l. *Energy Efficiency*: The applicant has stated that the most energy efficient technology available will be used for this installation.

Section 5.30, 5.31 Exceptions to Maximun Height Regulations

Section 5.60 - Side Yard Requirements

Section 5.70 - Rear Yard Requirements

<b>Dimensional Requirements</b>	<b>Required</b>	<b>Proposed</b>	<b>Relief</b>
<b>Height of antennas/shelter</b>	No more than 10' above roof	12'/13'	variance

<b>Side Yard Setback</b>	24.5''	13.75'	Special Permit*
<b>Rear Yard Setback</b>	Approx. 35'	0'	Special Permit*

\*Under *Section 5.43*, the Board of Appeals may, by special permit, waive dimensional requirements if the applicant provides counterbalancing amenities.

Section 8.02.2: Alteration or Extension – Special permit required to alter or extend a nonconforming use or structure.

Ms. Selkoe stated that the Planning Board was not opposed to the general design of the wireless telecommunications facility and agreed that it was a more appropriate design than the 2007 proposal that was submitted but subsequently withdrawn. The Planning Board also felt that the applicant’s proposal to paint and shelter equipment to match the existing façade should effectively minimize visual impact. However, the residential building in question is prohibited for wireless facilities by the town Zoning By-Law and the Planning Board felt that the conditions for granting a use variance had not been met by the applicant.

Therefore, the Planning Board recommended denial of the proposal and plans, prepared by Hudson Design Graphic and last dated 4/25/14. If, however, the Board of Appeals finds that the statutory requirements for a use variance are met, the Planning Board recommended the following conditions be attached to the decision:

1. Prior to issuance of a building permit, final plans and elevations of the wireless facility and the screening methods for the antennas shall be submitted to the Assistant Director for Regulatory Planning for review and approval.
2. All antennas and related equipment shall be removed if abandoned or not in operation for a time period of twelve months or longer.
3. Prior to the issuance of a building permit, the applicant shall submit a removal bond of \$5,000 to the Town.
4. Prior to the issuance of a building permit, the applicant shall submit a \$1,500 monitoring/inventorying fee to the Town.

5. Prior to the issuance of a building permit, the applicant shall submit to the Building Commissioner for review and approval for conformance to the Board of Appeals decision: 1) a final roof plan, stamped and signed by a registered engineer, indicating utilities, wiring, and antenna placement and screening; 2) final elevations of the wireless facility, stamped and signed by a registered engineer, indicating dimensions; and 3) evidence that the Board of Appeals decision has been recorded at the Registry of Deeds.

The Board deliberated on the merits of use variance and special permit relief as requested.

The Board expressed concern that the threshold for applying federal regulations intended to override the prohibition of adequate local wireless service had not been reached by the applicant.

The Board elected to continue the hearing to September 11, 2014 at 7:00 pm, and requested that the applicant provide detailed information that confirms the significant coverage gap claim made by the applicant.

At the time and place specified by the Board, the public hearing was re-opened. Present at the hearing was Chairman Jesse Geller, and Board Members Mark Zuroff and Christopher Hussey. The case was again presented by the applicant's attorney Michael Giaimo. Prior to the hearing, Mr. Giaimo provided a memorandum to the Zoning Board of Appeals and the Department of Planning and Community Development. The memorandum included details of similar legal cases intended to establish a clear range of signal strength industry standards. Coverage gaps were established in these cases as being areas containing below -85 dBm signal strength. Coverage plots provided by Verizon Wireless displayed gaps around 1569 Beacon Street that contain -90 and -95 dBm signal strength, indicating a service gap. For context, Mr. Giaimo stated that any signal below -84 dBm would result in weak area wireless connectivity, particularly within vehicles and structures.

Board Members requested further definition of the term “unreliable service” questioned if an industry standard exists for adequate dBm signal strength and raised concern over application of a standard subjective to the service provider.

Mr. Giaimo described unreliable service as intermittent and slow user service as opposed to the outright inability to connect to phone and internet service. Mr. Giaimo confirmed that no industry standard for signal strength currently exists, but the applicant’s established standard of -85 dBm is below the coverage strength outlined in memorandum cases that were granted local zoning relief following federal appeal.

Polly Selkoe, Assistant Director for Regulatory Planning, read a letter for the record from the Director of Planning and Community Development recommending peer review of the applicant’s evaluation of area coverage strength.

Board members Mark Zuroff and Christopher Hussey concurred with this suggestion and requested additional peer review to evaluate the claims, data, and findings presented by the applicant. It was agreed by the applicant that this peer review would be procured at the expense of the applicant.

The Board elected to continue the hearing to November 13, 2014 at 7:00 pm. At that time, peer review findings will be presented and the applicant will be provided with the opportunity to respond to any peer review findings. It was also agreed that the applicant will be provided with all peer review report materials prior to the November 13, 2014 hearing date.

At the time and place specified by the Board, the public hearing was re-opened. Present at the hearing was Chairman Jesse Geller, and Board Members Mark Zuroff and Christopher Hussey. Hired consultant David Maxson, of Isotrope Wireless, presented his evaluation of applicant provided coverage information to the Board.

Mr. Maxson explained that wireless coverage and capacity require different evaluation when determining if a significant coverage gap is present in the area of 1569 Beacon Street. Mr. Maxson felt that the applicant did not accurately explain that distinction at prior hearings. New wireless telecommunication facilities are traditionally utilized to provide new service to geographic areas that are not “covered”. Capacity improvement is increasingly common, especially in dense urban areas similar to Brookline, as a strategy to meet high user demand and alleviate strain on area signal strength that is provided by existing facilities. Mr. Maxson believed that the applicant’s proposal is more accurately described as being the latter.

Mr. Maxson described coverage maps that were produced by the applicant in order to provide more context regarding capacity evaluation. Relevant Verizon Wireless facilities currently exist at Cleveland Circle, Brighton, Aspinwall Hill, Coolidge Corner, and Brookline Devotion School areas. Each of these facilities provides three sectors of cell service radiating out from the site. The maps illustrate the approximate coverage area for all of these sectors. The anticipated coverage area provided by the proposed new facility will overlap with some of these sectors, thus providing additional capacity by taking back some of the user load placed on existing sectors – referred to as off-loading.

Mr. Maxson agreed with the applicant that very few non-residential sites exist in the area that meet the needs of the applicant in installing wireless telecommunications equipment. Mr. Maxson stated that Board denial of this application may be considered to be a prohibition of adequate wireless service if no alternative sites are available to the applicant.

Mr. Maxson's evaluation of 1569 Beacon Street area building stock and current town zoning regulations concluded that a monopole located behind Washington Square commercial structures is the only viable alternative for the applicant to improve area signal coverage and capacity. Mr. Maxson acknowledged that the town Zoning By-Law describes this monopole alternative as the least ideal strategy to provide wireless telecommunications service in northern portions of the Town.

Mr. Maxson concluded his comments by stating that permanent and transient user demand is high in the area, and the proposed 1569 Beacon Street site is well suited to improve the applicant's distribution of service within the immediate area as well as wider community areas. In Mr. Maxson's opinion, the coverage issue in this situation is minimal in comparison to the capacity issue.

The Chairman called for any public comment in favor of or in opposition to the applicant's proposal.

Janice Kahn, 63 Craftsland Road – Precinct 12 Town Meeting Member described Brookline as a supremely residential community that maintains an aesthetic standard and questioned whether the applicant had adequately evidenced its assertions concerning coverage limitations. Ms. Kahn suggested that the Board consider use variance conditions to maintain design input if the applicant intends to alter wireless telecommunications equipment in the future. Ms. Kahn also stated that Town wireless telecommunications regulations should be amended to reflect changing technology and capacity needs (§4.09).

The Board deliberated on the merits of use variance and special permit relief as requested. The Board concluded that federal wireless telecommunications regulations do not supplant local zoning regulations for this application, affirming the need for a use variance and established

conditions to receive a building permit. The Board agreed the Zoning By-Law language pertaining to this issue should be updated consistent with the provisions of the Federal Telecommunications Act and the state of the industry.

The Board was satisfied with signal coverage data provided by the applicant as it was largely supported through peer review and evaluation. Board concern regarding design review for potential alteration or co-location was alleviated by existing Zoning By-Law language provided in **Section 4.09.8**: “Any modification before or after installation that is found to be significant by the Planning Director and/or Building Commissioner shall be reviewed by the Planning Board and/or Board of Appeals, as appropriate, before issuance of a building permit.”

The Board voted unanimously that the requirements had been met for the issuance of a special permit under **Sections: 4.09.6.c, 5.09.a, 5.09.d, 5.30, 5.31, 5.60, 5.70, 8.02.2, and 9.05** of the Zoning By-Law. The Board made the following specific findings pursuant to said **Section 9.05**:

- a. The specific site is an appropriate location for such a use, structure, or condition.
- b. The use as developed will not adversely affect the neighborhood.
- c. There will be no nuisance or serious hazard to vehicles or pedestrians.
- d. Adequate and appropriate facilities will be provided for the proper operation of the proposed use.

The Board also voted unanimously that although the state and local requirements for a use variance had not been met under **Sections: 4.09.4.b, 4.09.6.a.1, and 9.09**, the grant of a use variance is authorized under federal law on the basis that the approval of this application is necessary in order to avoid an effective prohibition of wireless service within the meaning of the Federal Telecommunications Act.

**Accordingly, the Board voted unanimously to grant the requested relief subject to the**

**following conditions:**

1. Prior to issuance of a building permit, final plans and elevations of the wireless facility and the screening methods for the antennas shall be submitted to the Assistant Director for Regulatory Planning for review and approval.
2. All antennas and related equipment shall be removed if abandoned or not in operation for a time period of twelve months or longer.
3. Prior to issuance of a building permit, the applicant shall submit a removal bond of \$5,000 to the Town.
4. Prior to issuance of a building permit, the applicant shall submit a \$1,500 monitoring/inventorying fee to the Town.
5. Prior to issuance of a building permit, the applicant shall submit to the Building Commissioner for review and approval for conformance to the Board of Appeals decision: 1) a final roof plan, stamped and signed by a registered engineer, indicating utilities, wiring, and antenna placement and screening; 2) final elevations of the wireless facility, stamped and signed by a registered engineer, indicating dimensions; and 3) evidence that the Board of Appeals decision has been recorded at the Registry of Deeds.

**Unanimous decision of the**

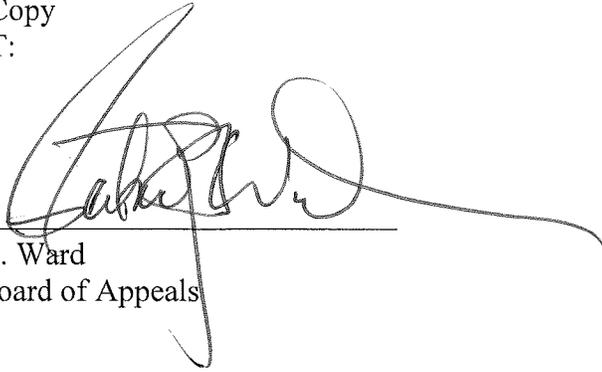
**Board of Appeals**

Filing Date: \_\_\_\_\_

1/12/15

  
\_\_\_\_\_  
Jesse Geller, Chairman

A True Copy  
ATTEST:

A handwritten signature in black ink, appearing to read 'Patrick J. Ward', written over a horizontal line. The signature is stylized and extends to the right of the line.

Patrick J. Ward  
Clerk, Board of Appeals

RECEIVED  
TOWN OF BROOKLINE  
TOWN CLERK

2015 JAN 12 P 1:22