



CITY OF SOMERVILLE, MASSACHUSETTS
MAYOR'S OFFICE OF STRATEGIC PLANNING & COMMUNITY DEVELOPMENT
JOSEPH A. CURTATONE
MAYOR

MICHAEL F. GLAVIN
EXECUTIVE DIRECTOR

PLANNING DIVISION STAFF

GEORGE PROAKIS, *DIRECTOR OF PLANNING*
LORI MASSA, *SENIOR PLANNER*
DAN BARTMAN, *SENIOR PLANNER*
AMIE HAYES, *PLANNER*
DAWN PEREIRA, *ADMINISTRATIVE ASSISTANT*

Case #: ZBA 2012-109

Date: January 17, 2013

Recommendation: Conditional Approval

PLANNING STAFF REPORT

Site: 425 Broadway

Applicant Name: Bell Atlantic Mobile of Massachusetts Corporation, Ltd., d/b/a Verizon
Wireless

Applicant Address: 400 Friberg Parkway, Westboro, MA 01581

Property Owner Name: The Summit, LLC

Property Owner Address: 54 Highland Ave, Somerville, MA 02145

Agent Name: Daniel D. Klasnick

Agent Address: 10 Cedar Street, Woburn, MA 01801

Alderman: Sean O'Donovan

Legal Notice: Applicant, Bell Atlantic Mobile of Massachusetts Corporation, Ltd., d/b/a Verizon Wireless, and Owner, The Summit, LLC, seeks Special Permit Approval (§5.1) under SZO §7.11.15.3 and §14 for the installation of a wireless communications facility consisting of antennas and related equipment and cables, §4.4.1 for the alteration of an existing nonconforming structure to relocate antennas and related equipment, and a Variance (§5.5) from setback requirements §14.3.*

Zoning District/Ward: RC / 5

Zoning Approval Sought: Special Permit §5.1, §7.11.15.3 and §14 and Variance §5.5 and §14.3

Date of Application: December 2012

Dates of Public Hearing: Zoning Board of Appeals January 23, 2012

*The variance is not required. The existing antennas at the site were constructed prior to the setback requirements and therefore the site is an existing nonconforming structure that can be modified by Special Permit under §4.4.1 in order to locate other antennas within the setback.

I. PROJECT DESCRIPTION

1. Subject Property: The subject property is an approximately 11,850 square foot lot on which sits an eight story brick apartment building, which is approximately 77 ft in height to the rooftop. A number of telecommunications carriers have antennas and associated equipment on the roof, including some rather large equipment that has been in place on the roof since the late 1980's.

The Planning Staff understands that there have been significant concerns about the existing antenna installations at this property. Planning Staff undertook a significant review of the permit history and was able to conclude that permits were granted as follows:

- June 1989: Special Permit for NYNEX Mobile Communications for renovation of an equipment room in this building and for installation of a fifteen foot high antenna on the roof. This is one of the tallest structures on the roof today, and it is actually mounted above the penthouse, not above the taller roofline, as it appears to have been advertised. This results in a structure that is higher than advertised. While advertised as a single antenna, this installation is an antenna array. It should be noted that this application was completed prior to the current Telecommunications Ordinance, and therefore had much simpler submittal requirements. This equipment is now operated by Verizon wireless.
- December 1994: Special Permit to install twelve 10 foot by 4 foot rectangular panel antennas, not to exceed the height of the 1989 NYNEX antenna.
- March 1995: Revision to cable enclosures.
- October 1996: Installation of three 8 foot high antenna arrays on the roof. Noted that these would be seven feet lower than the existing NYNEX panel.
- January 1997: Revision to 1996 approval to relocate two panel systems.
- A late 1997 application was not accepted because of an ongoing moratorium on antennas, and a proposed 2004 amendment was denied because the project changes were not considered minor.
- October 2010: Installation of three dish antennae to the existing arrays by Clearwire.
- February 2011: Installation of three panel antennas to the existing arrays by AT&T

After this review, Planning Staff concluded that most of the equipment on the roof can be tied to specific Special Permits granted by the ZBA. Nonetheless, it appears that there is one large dish antenna on the roof that is not tied to one of these permits. It is possible that the owner of this antenna believes that the 1989 Special Permit granted permission to install the dish, but that remains unclear.

Verizon owns this dish antenna as well as the following antennas: six cellular antennas, six PCS antennas and equipment located in a room within the building. The panel antennas are mounted in three sectors with four antennas in each sector in a triangular array on a pole on top of the existing penthouse. The dish is attached by a frame to the side of the penthouse. AT&T, Sprint-Nextel and Clear Wireless LLC currently have equipment on the roof; however, the Nextel equipment has been decommissioned and will be removed.

2. Proposal: Verizon is proposing alterations to the existing equipment on the rooftop of the building at 425 Broadway in order to provide Forth Generation (4G) Long Term Evolution (LTE) services to the surrounding area. The application states that 4G LTE provides affordable, high-speed internet service. The triangular array on a pole on top of the existing penthouse will be removed as well as the 6 foot dish antenna that is mounted to the side of the penthouse. There will be no change to the total number of twelve panel antennas that are currently on the roof and penthouse. The antennas will be attached to frames on the roof. One of the frames will be reused from the decommissioned Sprint-Nextel

equipment and three other frames will be constructed to hold the remaining antennas. The existing cable tray will be used to accommodate the new cables and it will be painted to match the color of the building.



425 Broadway Rooftop:

Top left – existing arrays that will be removed and view of the small existing penthouse that is not sufficient for façade mounted antennas

Top right – location of proposed new array that will meet the setback requirements

Bottom left – view of how the northern corner is constrained by existing equipment on the roof

3. Nature of Application: A Special Permit is required to establish wireless communications under SZO §7.11.15.3. SZO §14 establishes guidelines and procedures for wireless installations.

The existing Verizon antennas were installed before the wireless setback regulations required the antennas to be setback 10 feet from the roof edge and at a 45 degree incline. The existing structure is nonconforming to these dimensions and two of the new frames will also be nonconforming to these guidelines. Section 4.4 of the Ordinance states that a nonconforming structure may be enlarged, extended, renovated or altered only by special permit if the Board finds, in accordance with the procedures of Article 5, that such extension, enlargement, renovation, or alteration will not be substantially more detrimental to the neighborhood than the existing nonconforming structure.

4. Surrounding Neighborhood: The surrounding neighborhood is a mix of residential and commercial uses, though primarily residential. The subject property is approximately 1,200 feet east of Magoun Square.

5. Impacts of Proposal: The proposal will greatly improve the appearance of the wireless installation at 425 Broadway. The array on top of the penthouse and the 6 foot dish antenna can be seen from many areas in and around the City because of the height and prominence of the building. The antennas are

currently an eyesore and although the relocated antennas will still be visible, it will be a huge improvement to the site. Staff visited the roof to determine if there was a way to move the proposed arrays back farther from the roof's edge. The space on the rooftop is limited due to the location of the existing equipment, penthouse, and hatch and therefore no alternatives were found. Also, the antennas need to be pointing in certain directions which prevented the use of an existing array that will be decommissioned and is attached to the side of the penthouse. Façade mounting on the top floor of the building is also not an option because there are large windows on this floor and a roof deck at this level.

6. Green Building Practices: None indicated.

7. Comments:

Fire Prevention: Has been contacted but has not yet provided comments.

Wiring Inspection: Has been contacted but has not yet provided comments.

Ward Alderman: Alderman O'Donovan has been contacted but has not yet provided comments.

II. FINDINGS FOR SPECIAL PERMIT (SZO §4.4.1, §5.1, §7.11.15.3 and §14):

In order to grant a special permit, the SPGA must make certain findings and determinations as outlined in §5.1.4 of the SZO. This section of the report goes through §5.1.4 in detail.

1. Information Supplied: The Staff finds that the information provided by the Applicant conforms to the requirements of §5.1.2 of the SZO and allows for a comprehensive analysis of the project with respect to the required Special Permits.

2. Compliance with Standards: The Applicant must comply "with such criteria or standards as may be set forth in this Ordinance which refer to the granting of the requested special permit."

The Applicant seeks a special permit under §7.11.15.3 of the SZO which requires the applicant to follow guidelines and procedures set forth in Article 14 for the, "regulation of wireless telecommunications facilities so as to allow and encourage such uses in the City with minimal harm to the public health, safety, and general welfare."

The Staff finds that minimal harm would be imposed upon the health, safety and welfare of the surrounding neighborhood. Bell Atlantic Mobile of Massachusetts Corporation, Ltd., d/b/a Verizon Wireless is a FCC licensed company that is required to comply with all state and federal regulations.

Review Criteria for Telecommunications Facilities:

a) *Height of proposed facility*: The base of the building to the top roof beam is 77 feet and the height to the top of the proposed antennas is 84 feet. This building is the tallest in the surrounding area and it sits on an area of high elevation as well making it an ideal site for coverage.

b) *Proximity of facility to residential structures and residential zoning districts*: The building at 425 Broadway is a residential structure in Residence C district. Other residential structures directly abut this property. The Staff finds that several companies currently have wireless communications equipment on this structure, as well as the nearby 391 Broadway. The

change to the existing equipment will be an improvement to the site and improve the views of the equipment from the surrounding residential structures. This project would have much greater impact if installed at a location without existing equipment.

- c) *Nature of uses on adjacent and nearby properties:* The site is located in a Residence C district. The surrounding neighborhood is a mix of residential and commercial uses, though primarily residential. The proposed installation will not generate any objectionable odor, fumes, glare, smoke, or dust nor require additional lighting or signage. Noise from the equipment will be minimal and should not be heard beyond the confines of the property where it will be placed. No increased traffic or hindrance to pedestrian movements will result from the proposed installation either. Furthermore, in connection with its FCC license, Verizon is prohibited from interfering with radio or television transmissions.
- d) *Surrounding topography and prominence of proposed facility:* The building is the tallest in the area and it sits on area of high elevation. This is why it is appealing to cellular companies. The proposed rooftop antennas are visible from several vantage points, but moving the antennas to the rooftop and removing the dish antenna will be a great improvement to the site. The antennas will match the visual appearance of the existing AT&T and Clear Wireless LLC antennas on the site.
- e) *Surrounding tree cover and foliage:* The building upon which the proposed antennas will sit is taller than all trees in the surrounding area and therefore no interference is anticipated with regard to the projection required for the antennas.
- f) *Design of tower, with particular reference to design characteristics that have the effect of reducing or eliminating visual obtrusiveness, as specified in Section 14.3:* The antennas will be mounted to frames on the rooftop of the building and will be situated at the same height as the existing antennas on similar mounting frames. The antennas can also be painted any color desired to help camouflage them. All cabling will run along the surface of the roof and will not be visible. The electronic equipment will be located inside the interior existing equipment room located on the first floor of the building. Façade mounting is not possible because there is not sufficient space to façade mount on the penthouse and there are large glass windows and a roof deck along the top story of the building leaving no space for mounting antennas. The Applicant stated that false chimneys at this location would not be possible due to the amount of existing equipment on the roof that limits roof area and the required size and number of antennas would necessitate a substantial enclosure that would likely be more intrusive than the appearance of the proposed antennas.

The antennas will be located so that they are not more than ten feet above the roofline and the existing antennas that are higher than this regulation will be removed. The large dish that is very visible from abutting streets will also be removed. One of the existing frames that will be reused is closer than ten feet from the roof edge and does not comply with the requirement for rooftop antennas to be setback below a 45 degree plane. Because this is an existing nonconforming situation, the antennas may be swapped out. The two new frames that do not comply with these setback requirements may be installed by Special Permit under 4.4.1. In considering a special permit under §4.4, Staff find that the alterations proposed would not be substantially more detrimental to the neighborhood than the existing structure. The existing equipment on the roof creates limited roof area and the need to have antennas pointing in specific locations around the building dictated the current configuration. The new antennas are visible as shown in the photosimulations; however they are less detrimental than the

current arrays on the penthouse and they are consistent in appearance to the other wireless carrier antennas making the rooftop appear more organized and less cluttered.

- g) *Location of tower, with particular reference to the existence of more suitable locations, as specified in Section 14.3:* The application is in compliance with this review criterion. The Applicant is proposing to locate the antennas on an existing wireless telecommunications facility at a co-location site. The other carriers at the site are AT&T and Clear Wireless LLC. Sprint-Nextel is no longer operating at this site and the company's antennas will be removed.
- h) *Proposed ingress and egress:* There is existing access to the roof and equipment on the roof via a ladder and hatch in the building. The building is accessible via Broadway.
- i) *Distance from existing facilities:* The accompanying map shows the locations of other existing Verizon antennas in Somerville and the current coverage gap that this proposal will fill.
- j) *Availability of suitable existing towers, poles, other structures, or alternative technologies, as discussed in Section 14.5.2: Section 14.5.2 states that no new sites for telecommunications facilities shall be permitted unless the Applicant demonstrates that existing sites cannot meet the Applicant's need:* The site where the Applicant is proposing to install and relocate antennas is currently operating as a wireless telecommunications facility.

3. Consistency with Purposes: The Applicant has to ensure that the project "is consistent with (1) the general purposes of this Ordinance as set forth in Article 1, and (2) the purposes, provisions, and specific objectives applicable to the requested special permit which may be set forth elsewhere in this Ordinance, such as, but not limited to, those purposes at the beginning of the various Articles."

The Staff finds that the proposal, as conditioned, is consistent with the general purposes of the Ordinance as set forth under §1.2, which includes, but is not limited to promoting "the health, safety, and welfare of the inhabitants of the City of Somerville; to secure safety from fire, panic and other dangers to encourage the most appropriate use of land throughout the City; and to preserve and increase the amenities of the municipality."

The Staff also finds that the proposal, as conditioned, is consistent with the purposes established for the Residence C (RC) district in which the property is located, namely, "[t]o establish and preserve a district for multi-family residential and other compatible uses which are of particular use and convenience to the residents of the district." The Staff finds the addition of the antennas and associated equipment, as conditioned, will not negatively impact the local neighborhood uses in the area.

Furthermore, the Staff finds that the proposal, as conditioned, is consistent with the purposes set forth in Article 14 of the Zoning Ordinance as conditioned in this report, to:

- a) *Protect residential areas and land uses from potential adverse impacts of towers and antennas;*
- b) *Encourage the location of telecommunications facilities in non-residential areas;*
- c) *Minimize the total number of towers and antennas throughout the community;*
- d) *Strongly encourage the joint use of new and existing tower sites as a primary option rather than construction of additional single-use towers;*

- e) *Encourage users of towers and antennas to locate them in areas where the adverse impact on the community is minimal;*
- f) *Encourage users of towers and antennas to configure them in ways that minimize the adverse visual impact of the towers and antennas through careful design, siting, landscape screening, and innovative camouflaging techniques;*
- g) *Enhance the ability of the providers of telecommunications services to provide such services to the community quickly, effectively, and efficiently;*
- h) *Consider the public health and safety of communications facilities; and*
- i) *Avoid potential damage to adjacent properties from tower and antenna failure through sound engineering and careful siting of structures.*

4. Site and Area Compatibility: The Applicant has to ensure that the project "(i)s designed in a manner that is compatible with the characteristics of the built and unbuilt surrounding area, including land uses."

The Staff finds the project and the way the equipment is designed to be compatible with the surrounding area and the appearance of other carriers' antennas on the roof. The antennas will be mounted to one of the existing frames on the rooftop of the building and three new frames will be added. The antennas can be painted any color desired. The number of antennas at the site will not change; however, the antennas will be lowered significantly so that they are less prominent. All cabling will run along the surface of the roof in existing cable trays that will be painted and will not be visible. The electronic equipment will be located inside the interior existing equipment room located on the first floor of the building. Photo simulations were taken from a variety of locations in the neighborhood and they indicate there will be limited impact of the installation on the surrounding neighborhood.

5. Adverse environmental impacts: The proposed use, structure or activity will not constitute an adverse impact on the surrounding area resulting from: 1) excessive noise, level of illumination, glare, dust, smoke, or vibration which are higher than levels now experienced from uses permitted in the surrounding area; 2) emission of noxious or hazardous materials or substances; 3) pollution of water ways or ground water; or 4) transmission of signals that interfere with radio or television reception.

The proposed installation will not generate any glare, light, smoke, dust, or vibrations nor will it emit any noxious or hazardous materials or substances. Noise from the equipment will be minimal and should not be heard beyond the confines of the property where it will be placed. The proposed installation will be located on an existing building and therefore no pollution of waterways or ground water will occur. Additionally, the proposed installation will not be tied into any public sewer or private wastewater disposal system. In connection with its FCC license, Verizon is prohibited from interfering with radio or television transmissions and furthermore, these transmissions function at different frequencies than those licensed to Verizon for the proposed telecommunications equipment.

III. RECOMMENDATION**Special Permit under SZO §4.4.1, §7.11.15.3 and §14**

Based on the materials submitted by the Applicant, the above findings and subject to the following conditions, the Planning Staff recommends **CONDITIONAL APPROVAL** of the requested **SPECIAL PERMIT**.

The recommendation is based upon a technical analysis by Planning Staff of the application material based upon the required findings of the Somerville Zoning Ordinance, and is based only upon information submitted prior to the public hearing. This report may be revised or updated with new recommendations, findings and/or conditions based upon additional information provided to the Planning Staff during the public hearing process.

#	Condition	Timeframe for Compliance	Verified (initial)	Notes								
1	Approval is for the installation of a wireless communications facility under SZO §7.11.15.3 and SZO §14 consisting of three panel antennas and related equipment and cables. This approval is based upon the following application materials and the plans submitted by the Applicant:	BP	Plng.									
	<table><tr><th>Date (Stamp Date)</th><th>Submission</th></tr><tr><td>December 2012</td><td>Initial application, submitted to the City Clerk’s Office</td></tr><tr><td>December 10, 2012</td><td>Photo simulations submitted with application</td></tr><tr><td>December 12, 2012</td><td>Plans (T-1 title sheet, Z-2 roof plan, Z-3 East Elevation, Z-4 North and South Elevations, Z-5 West Elevation, Z-1 Plot Plan</td></tr></table>				Date (Stamp Date)	Submission	December 2012	Initial application, submitted to the City Clerk’s Office	December 10, 2012	Photo simulations submitted with application	December 12, 2012	Plans (T-1 title sheet, Z-2 roof plan, Z-3 East Elevation, Z-4 North and South Elevations, Z-5 West Elevation, Z-1 Plot Plan
	Date (Stamp Date)				Submission							
	December 2012				Initial application, submitted to the City Clerk’s Office							
	December 10, 2012				Photo simulations submitted with application							
December 12, 2012	Plans (T-1 title sheet, Z-2 roof plan, Z-3 East Elevation, Z-4 North and South Elevations, Z-5 West Elevation, Z-1 Plot Plan											
	Any changes to the approved site plan, photograph simulations, and/or elevations that are not <i>de minimis</i> must receive SPGA approval.											
2	The antennas shall be painted to match the color of the antennae frame to which they are attached.	CO	Plng.									
3	<i>Compliance with Noise Control Ordinance.</i> Prior to the issuance of a Certificate of Use and Occupancy Permit for the installation of the wireless telecommunications facility, the Applicant shall submit to the Inspectional Services Department, with a copy to the Zoning Board of Appeals, a sound level measurement certified as accurate by a professional acoustician and shall perform such sound level measurements six months after issuance of the certificate of occupancy, with subsequent sound level measurements	Continued	ISD									

	annually on or before the anniversary date of the original six month measurement to document that all of the Applicant's installed equipment complies and continues to comply with the decibel level standards established by the City of Somerville, Noise Control Ordinance.			
4	<i>Compliance with Federal Communications Commission Guidelines for Human Exposure to Electromagnetic Fields.</i> To ensure compliance with the standards established by the Federal Communications Commission Office of Engineering and Technology ("FCC") in OET Bulletin 65 as adopted by Massachusetts Department of Public Health under 105 CMR 122.021, the Applicant shall perform measurements, within two (2) months of the date that the Applicant's wireless telecommunications facility commences operation and at intervals of twelve (12) months thereafter, to establish that the Applicant's wireless telecommunications facility complies and continues to comply with the FCC guidelines and applicable state regulations for human exposure to radio frequency electromagnetic fields for human exposure to radio frequency electromagnetic fields. The Applicant shall provide the results of such measurements with certification of compliance to the City of Somerville, Health Department, with a copy to the Zoning Board of Appeals.	Continued	BOH	
5	Any antenna that is not operated continuously for a period of twelve (12) months shall be considered abandoned, and the owner of such antenna shall remove the same within ninety (90) days of notice from the City of Somerville informing the owner of such abandonment.	Continued	ISD	
6	The applicant shall remove any of that carrier's unused or non-operating wireless equipment prior to installation.	BP	Plng.	
7	The Applicant shall at his expense replace any existing equipment (including, but not limited to street sign poles, signs, traffic signal poles, traffic signal equipment, wheel chair ramps, granite curbing, etc) and the entire sidewalk immediately abutting the subject property if damaged as a result of construction activity. All new sidewalks and driveways must be constructed to DPW standard.	Final inspection	DPW	
8	All construction materials and equipment must be stored onsite. If occupancy of the street layout is required, such occupancy must be in conformance with the requirements of the Manual on Uniform Traffic Control Devices and the prior approval of the Traffic and Parking Department must be obtained.	During Construction	T&P	
9	The Applicant shall contact Planning Staff at least five working days in advance of a request for a final inspection by Inspectional Services to ensure the proposal was constructed in accordance with the plans and information submitted and the conditions attached to this approval.	Final sign off	Plng.	

