

CITY OF CAMBRIDGE **MASSACHUSETTS BOARD OF ZONING APPEAL** 831 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139 617 349-6100

BZA APPLICATION FORM

Plan No: BZA-012853-2017

GENERAL INFORMATION

The under	signed hereby	petitions the Boar	rd of Zoning Appeal for t	he following:
Special Pe	ermit:v		Variance :	Appeal :
PETITION	ER: New	Cingular Wire	less PCS, LLC d/b/	a AT&T Mobility C/O Timothy Greene
PETITION	ER'S ADDRESS	157 Ri	verside Drive Norwe	ell, MA 02061
LOCATION	OF PROPERT	Y: 675 Mas	sachusetts Ave Cam	bridge, MA
TYPE OF (OCCUPANCY:	-		ZONING DISTRICT: Business B Zone
REASON F	OR PETITION	:		
	0	ther: Telecom	munications	
DESCRIPT	ION OF PETITI	ONER'S PROPOS	AL:	
Class Ta a specia	ax Relief ar al permit ur	nd Job Creation	on Act of 2012, 47	pursuant to Section 6409 of the Middle U.S.C 1455; or in the alternative, for ted above, and and to the extent
				art of nationwide network upgrades
SECTIONS	OF ZONING O	RDINANCE CITE	D:	
Article	4.000	Section	4.32.G.1 (Telecomm	nunications Facility).
Article	4.000	Section	4.40 (Footnote 49)	(Telecommunications Facility).
Article	10.000	Section	10.40 (Special Per	mit).
Article	6409	Section	Middle Class and 7	Tax Relief and Job Creation Act
			Original Signature(s) :	(Petitioner(s) / Owner)
				Timothy W. Evere (Print Name)
			Address :	Norvell, MA 02061
			Tel. No. :	617-877-7950
_	3/2	1/17	E-Mail Add	21

BZA APPLICATION FORM - OWNERSHIP INFORMATION

To be completed by OWNER, signed before a notary and returned to

The Secretary of the Board of Zoning Appeals. REIF Central Plaza Massachuse Hs LLC Address: C/o Intercontinental Deal Estate Corp. 1270 Soldies Field Road 1800 for, 149 02135 State that I/We own the property located at 675 Hassnhuets Ave. which is the subject of this zoning application. The record title of this property is in the name of U. S. REIF Contral Plaza Hassachuets LLC *Pursuant to a deed of duly recorded in the date $\frac{10}{31}$ Middlesex South County Registry of Deeds at Book 51851 , Page 264 Middlesex Registry District of Land Court, Certificate No. Book _____ Page SIGNATURE BY LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT* *Written evidence of Agent's standing to represent petitioner may be requested. Commonwealth of Massachusetts, County of Saffer The above-name Peter Caland lian personally appeared before me, this _____of ____, 20___, and made oath that Statement is true.

• If ownership is not shown in recorded deed, e.g. if by court order, recent deed, or inheritance, please include documentation.

My commission expires ()

BZA APPLICATION FORM

DIMENSIONAL INFORMATION

APPLICANT:	TerraSearch	PRESENT USE/OCCUPANCY:	Office/Telecom	

LOCATION: 675 Massachusetts Ave Cambridge, MA ZONE: Business B Zone

PHONE: 617-077- C950 REQUESTED USE/OCCUPANCY: Same

			Composition and a second control of the control of		
		EXISTING CONDITIONS	REQUESTED CONDITIONS	ORDINANCE REQUIREMENTS	ı
TOTAL GROSS FLOOR AF	REA:	0	0	0	(max.)
LOT AREA:		0	0	0	(min.)
RATIO OF GROSS FLOOP TO LOT AREA: 2	R AREA	0	0	0	(max.)
LOT AREA FOR EACH DW	WELLING UNIT:	0	0	0	(min.)
SIZE OF LOT:	WIDTH	0	0	0	(min.)
	DEPTH	0	0	0	
SETBACKS IN FEET:	FRONT	0	0	0	(min.)
	REAR	0	0	0	(min.)
	LEFT SIDE	0	0	0	(min.)
	RIGHT SIDE	0	0	0	(min.)
SIZE OF BLDG.:	HEIGHT	0		(max.)	
	LENGTH	0	0	0	
	WIDTH	0	0	0	
RATIO OF USABLE OPEN TO LOT AREA:	N SPACE	0	0	0,	(min.)
NO. OF DWELLING UNIT	rs:	0	0	0	(max.)
NO. OF PARKING SPACE	IS:	0	0	0	(min./max)
NO. OF LOADING AREAS	<u>:</u>	0	0	0	(min.)
DISTANCE TO NEAREST ON SAME LOT:	BLDG.	0	0	0	(min.)

Describe where applicable, other occupancies on same lot, the size of adjacent buildings on same lot, and type of construction proposed, e.g.; wood frame, concrete, brick, steel, etc.

SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).

TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5')
DIVIDED BY LOT AREA.

OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.



CITY OF CAMBRID **MASSACHUSETTS BOARD OF ZONING APPEAL** 831 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139 617 349-6100

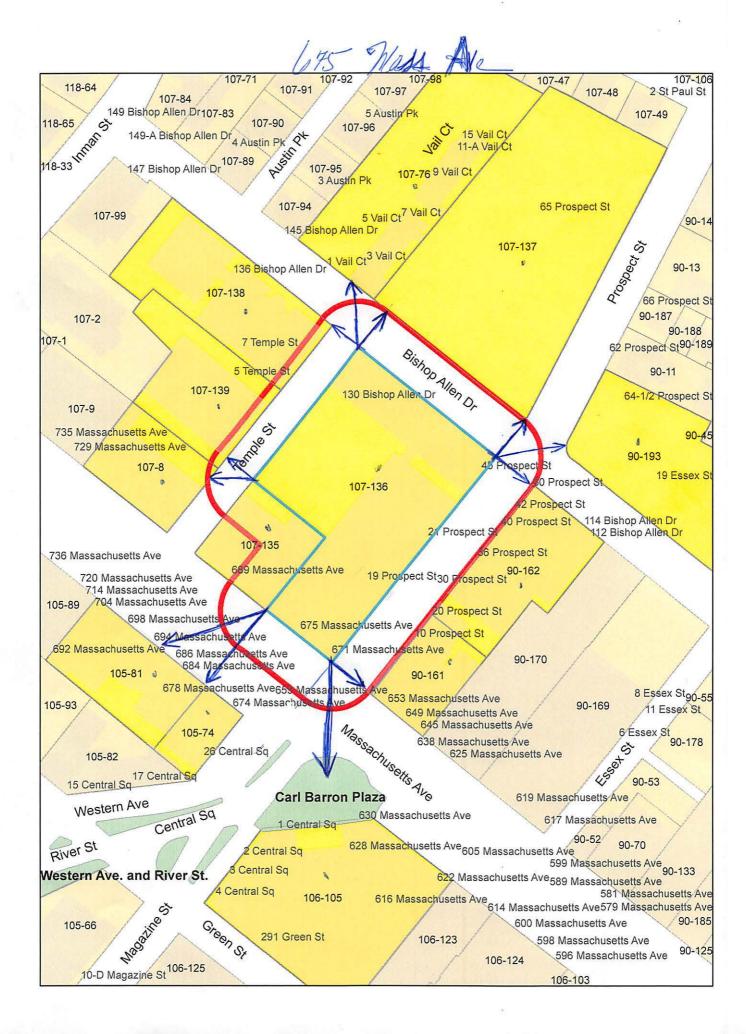
2017 HAR 28 AM 10: 12

BZA APPLICATION FORM

Plan No: BZA-012853-2017

GENERAL INFORMATION

he under	signed i	nereby petition	ons the Boa	rd of Zoning Appeal for ti	ne following:
Special Pe	rmit :			Variance :	Appeal :
PETITIONE	R:	New Cing	ular Wire	eless PCS, LLC d/b/a	a AT&T Mobility C/O Timothy Greene
PETITIONE	R'S AD	DRESS:	157 Ri	verside Drive Norwe	⊋11, MA 02061
OCATION	OF PR	OPERTY:	675 Mas	sachusetts Ave Camb	bridge, MA
YPE OF O	CCUPA	ANCY:			ZONING DISTRICT: Business B Zone
REASON F	OR PET	TITION :			
		Other	: Telecom	nmunications	
ESCRIPT	ION OF	PETITIONER	₹'S PROPOS	SAL:	
Class Ta specia	x Rel:	ief and Jo	b Creation the zoni	on Act of 2012, 47 ng ordinance as cit	pursuant to Section 6409 of the Middle U.S.C 1455; or in the alternative, for sed above, and and to the extent
					art of nationwide network upgrades
ECTIONS	OF ZO	NING ORDIN	ANCE CITE	D:	
rticle	4.000		Section	4.32.G.1 (Telecomm	nunications Facility).
rticle	4.000		Section	4.40 (Footnote 49)	(Telecommunications Facility).
rticle	10.00	0	Section	10.40 (Special Per	mit).
rticle	6409		Section	Middle Class and T	ax Relief and Job Creation Act
				Original Signature(s)	(Petitioner(s) / Owner)
					(Print Name)
				Address:	157 Riverside Drive Donuell. 14A 02061
				Tel. No. :	617-877-2950
		2/24	1	E-Mail Add	01 100 111
	-	474	111/		



675 Mass Ave

107-135 UNITARIAN UNIVERSALIST SERVICE COMMITEE INC. 689 MASS AVE ATT:CFO CAMBRIDGE, MA 02139

90-161-162 CHOICE REALTY LLC 825 BEACON ST., #1 NEWTON CENTRE, MA 02459

105-81
CENTRAL PROPERTY LIMITED PARTNERSHIP
C/O RIVERSIDE MANAGEMENT
P.O. BOX #440317
WEST SOMERVILLE, MA 02144

107-76
ABUZAHRA, SAID S.,
TRUSTEE THE EQUITY REALTY TRUST
29 MACKENZIE DRIVE.
WAKEFIELD, MA 01880

107-139-138
CAMBRIDGE YOUNG WOMENS CHRISTIAN
ASSOCIATION
7 TEMPLE ST
CAMBRIDGE, MA 02139

90-193 /107-136-137 U.S. REIF CENTRAL PLAZA MASS. LLC. C/O INTERCONTINENTAL REAL. 1270 SOLDIERS FIELD RD BOSTON, MA 02135

106-105 CENTRAL SQUARE LLC, C/O HUNNEMAN REAL ESTATE CORP. 303 CONGRESS ST. BOSTON, MA 02210 TIMOTHY W. GREENE
157 RIVERSIDE DRIVE
NORWELL, MA 02061

105-74 678 MASS AVE. LLC 825 BEACON ST.,SUITE 1 NEWTON CENTER, MA 02159

107-8
GINSBERG, ARNOLD, ELAINE COHEN &
ELIOT K. COHEN, TRS THE RINK REALTY TRS
727 MASSACHUSETTS AVE
CAMBRIDGE, MA 02139



CAMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2nd Floor, Cambridge, Massachusetts 02139

Telephone: 617 349 4683 TTY: 617 349 6112

E-mail: histcomm@cambridgema.gov URL: http://www.cambridgema.gov/Historic

William B. King, *Chair*, Bruce A. Irving, *Vice Chair*, Charles M. Sullivan, *Executive Director* William G. Barry, Jr., Robert G. Crocker, Chandra Harrington, Jo M. Solet, *Members* Joseph V. Ferrara, Kyle Sheffield, Susannah Barton Tobin, *Alternates*

Jurisdiction Advice

	-	
To the Owner of Property at	675 Massachuse	tts Ave.
The above-referenced property is su reason of the status referenced below		ne Cambridge Historical Commission (CHC) by
Old Cambridge	Historic District	
Fort Washingtor		
	a. 40C, City Code §2.78.050	
	borhood Conservation Distr	
	arsh Neighborhood Conserv	ation District
	Conservation District Neighborhood Conservation	District
Nid Cambridge Designated Land		District
	g studied for designation:	
		arious City Council Orders)
	striction or Easement (as rec	
		refore subject to CHC review of any application
		ed by ISD. (City Code, Ch. 2.78, Article II). See
	- 0	demolition. No demolition proposed.
•	not a designated historic pro	perty and the structure is less than fifty years
old.	listian but the manager is 1:	ated on the National Desigter of Historic Places
	s available for consultation,	sted on the National Register of Historic Places;
	ff comments:	
Sta	ii comments.	
The Board of Zoning Appeal advise Conservation District Commission		storical Commission or Neighborhood fore the Board.
If a line indicating possible jurisdi Historical Commission to determi		r needs to consult with the staff of the be required.
CHC staff initialsSLB		Date March 27, 2017
Received by Uploaded to E Relationship to project BZA 128		Date March 27, 2017
cc: Applicant Inspectional Services Comm	nissioner	

Demolition Delay Ordinance and Application Information

The Demolition Delay Ordinance (Chapter 2.78, Article II of the Cambridge Municipal Code) was adopted by the City Council in 1979 to afford public review of demolition permit applications for potentially significant buildings. When the Historical Commission determines that a building is significant and should be preserved, demolition will be delayed for up to six months so that solutions can be sought to preserve the building indefinitely. The Ordinance covers all buildings over 50 years old, city-wide. The Historical Commission archives provide dates of construction for all properties in the City.

Demolition is defined in the ordinance as "the act of pulling down, destroying, removing or razing a building or commencing the work of total or substantial destruction with the intent of completing the same." The Inspectional Services Commissioner has provided further guidelines to outline what actions require a demolition permit. In addition to complete demolition of a building, the following actions may require a demolition permit,

- removal of a roof,
- removal of one side of a building,
- gutting of a building's interior to the point where exterior features (windows, etc.) are impacted, and
- removal of more than 25% of a structure.

Please contact the building inspector or a staff member of the Historical Commission if you have questions about whether a demolition permit is required for a particular project.

Demolition permit applications can be obtained from the Inspectional Services Department. The completed application should be submitted to the Historical Commission, where the staff will review the application. If the Executive Director of the Historical Commission makes an initial determination that the building is significant, a public hearing will be scheduled with Historical Commission. If the staff makes an initial determination that the building is not significant, the application is released for further review by the Building Commissioner.

More information about the demolition permit application procedures is available on the Historical Commission's web site or by calling or dropping by the Historical Commission office.

July 2003

Cambridge Historical Commission 831 Massachusetts Ave., 2nd Fl. Cambridge, MA 02139 Ph: 617/349-4683 or TTY: 617/349-6112 http://www.cambridgema.gov/Historic



March 23, 2017

Donna P. Lopez, City Clerk
City of Cambridge
City Hall
795 Massachusetts Avenue
Cambridge, MA 02139

Constantine Alexander, Chair
Board of Zoning Appeal
City Hall
795 Massachusetts Avenue
Cambridge, MA 02139

Applicant: New Cingular Wireless PCS, LLC ("AT&T")

Property Address: 675 Massachusetts Ave

Assessor's Map 107, Lot 136 (the "Property")

Re: Application for:

(i) Eligible Facilities Request pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, 47 U.S.C. § 1455; or, in

the alternative,

(ii) Special Permit under Cambridge Zoning Ordinance Section

4.32(g)(1) and M.G.L. c. 40A, Section 9; and

(iii) Any other zoning relief required.

(All relief if and to the extent necessary, all rights reserved)

Dear Ms. Lopez, Mr. Alexander and Members of the Board of Zoning Appeal:

Pursuant to Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 (a/k/a the "Spectrum Act" or "Section 6409"), 47 U.S.C. § 1455, as further implemented by the Federal Communications Commission's Report and Order *In re Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies*, FCC Docket No. 13-238, Report and Order No. 14-153 (October 17, 2014) (the "FCC Order"), New Cingular Wireless PCS, LLC ("AT&T") hereby submits this Eligible Facilities Request ("Request"); and, in the alternative, applies for a special permit from the City of Cambridge Board of Zoning Appeal (the "Board") under Section 432(g)(1) of the Cambridge Zoning Ordinance (the "Ordinance") to modify its existing "Telephone Exchange including Transmission Facilities to serve a Mobile Communication System" (the "Facility") on and within the existing building located at 675 Massachusetts Ave. (the "Special Permit Application").²

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² AT&T submits this Request, Special Permit application and supporting materials subject to a full and complete reservation of AT&T's rights under the Spectrum Act and the FCC Order including without limitation its rights with respect to (i) any submittal requirements or approval criteria that are inconsistent with the prohibitions established by the FCC Order, (ii) any delay beyond the deadlines established in the FCC Order, (iii) the imposition of conditions on any approval that are inconsistent with the FCC Order, and (iv) referral or requirement to a discretionary review process such as a special permit.

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Under Section 6409, AT&T's proposed modification of its existing transmission equipment on and within the existing building, previously approved by the Board for use as a wireless communication base station, does "not substantially change the physical dimensions" of the existing building. Therefore, AT&T's Request must be approved administratively, including the issuance of a building permit, to enable AT&T to make the proposed modifications to its transmission equipment.

In the alternative, as demonstrated in this application letter, the AT&T's proposed modifications to its existing Facility on the Property located in the Business B zoning district satisfy the requirements for the grant of a special permit pursuant to Section 10.43 of the Ordinance.

I. <u>APPLICATION PACKAGE</u>

Enclosed with this application is a check payable to the City of Cambridge in the amount of \$500.00. In addition to the signed original of this letter are copies of the letter and the following materials:

- 1. The following completed and signed application forms:
 - a. BZA Application Form General Information;
 - b. BZA Application Form Ownership Information;
 - c. BZA Application Form Dimensional Requirements;
 - d. BZA Application Form Supporting Statement for a Special Permit; and
 - e. BZA Application Form Check List;
- 2. AT&T's relevant FCC License information;
- 3. Drawings by Hudson Design Group consisting of 7 pages dated 2/10/17;
- 4. Manufacturer's specification sheets for AT&T's proposed antennas and other featured equipment;
- 5. Photographs of the existing building by Hudson Design Group., dated 7/24/15;
- 6. Radio Frequency Coverage Report, demonstrating the public need for the proposed modifications to the Facility, radio frequency coverage maps showing (a) existing or predicted coverage from neighboring facilities; and (b) coverage with the proposed Facility;
- 7. Structural Analysis by Hudson Design Group LLC dated February 7, 2017;
- 8. Maximum Permissible Exposure Study, Theoretical Report, by SAI Communications, dated December 2, 2015;
- 9. Letter of Authorization from Owner of Subject Property; and
- 10. Deed to subject property.

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In addition to the supporting materials identified above, submitted simultaneously herewith is a completed building permit application package including:

- 1. Completed Building Permit Application;
- 2. Certificate of Liability Insurance;
- 3. Worker's Compensation Insurance Affidavit;
- 4. Construction Supervisor License for Keith F Barnard; and
- 5. 1 copy of the Plans.

II. PROPOSED FACILITY DESIGN

AT&T seeks to modify the existing Facility on and within the building located at the Property. The existing Facility consists of nine (9) panel antennas (Alpha Sector: 3 antennas, Beta Sector: 3 antennas, and Gamma Sector: 3 antennas) that mounted in three (3) locations. The proposed modifications include the replacement of one (1) antenna on the Alpha Sector. The replacement antenna will be mounted to the existing antenna mount consistent with the current Facility's design. Two (2) remote radio-head units (RRUs) will be added in close proximity to the antennas and out of public view.

The Facility's design is shown in detail in the Zoning Drawings attached as Exhibit 3 to this application letter and featured equipment is described in the manufacturers' specification sheets attached as Exhibit 4. The photographs (Exhibit 5) show the building rooftop as currently existing from various locations in the neighborhood around the Property. The Alpha Sector is nor readily available to public view due to its location on the roof.. A structural analysis for the Facility demonstrates that the building is capable of supporting AT&T's proposed equipment at or near the locations shown on the Zoning Drawings (*see* Exhibit 7).

The Facility will continue to bring advanced wireless voice, text and data communications services to the surrounding areas. It will allow residents, professionals, government, businesses and students to communicate locally, nationally and internationally from virtually any location within the coverage area. In the event of an emergency, the improved Facility will allow immediate contact with fire, rescue and other emergency personnel. The improved Facility will thus enhance public health, safety and welfare both in ordinary daily living and in the event of fire, accident, medical emergency, natural disaster or other dangers.

III. BACKGROUND

AT&T is licensed by the Federal Communications Commission to construct and operate a wireless telecommunications network in various markets throughout the country, including the Commonwealth of Massachusetts and the City of Cambridge. A copy of the AT&T's FCC license that covers the area of the proposed Facility is included with this application (*see* Exhibit 2). AT&T is in the process of designing and constructing additional wireless facilities to its existing

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telecommunications system to serve Massachusetts. One of the key design objectives of its systems is to provide adequate and reliable coverage. Such a system requires a grid of radio transmitting and receiving links located approximately .5 to 2 miles apart, depending on the location of existing and proposed installations in the surrounding area, the extent of use of AT&T's wireless services within the network, and the existing topography and obstructions. The radio transmitting and receiving facilities operate on a line-of-sight basis, requiring a clear path from the facility to the user on the ground. In urban settings, this dynamic requires the antennas to be located on buildings at heights and in locations where the signal is not obstructed or degraded by other buildings or by topographical features such as hills.

IV. RF COVERAGE DETERMINATION

AT&T has performed a study of radio frequency coverage for the City of Cambridge and from the Property, the results of which are described in the Radio Frequency Report submitted with this application (*see* Exhibit 6). Without the proposed modifications to its existing Facility, AT&T has a substantial coverage gap in this area of Cambridge stretching from both sides of Cambridge Street. AT&T has determined that the proposed modifications to the existing Facility located on the building at the Property will provide needed coverage to the targeted sections of the City and the immediately surrounding area if AT&T's antennas are located on the building's roof at the height and in the configuration requested. The importance of a facility at this location is underscored by AT&T's interest in enhancing its ability to provide its most up-to-date wireless technology, known as long-term evolution technology ("LTE"), in this area to satisfy its customers' ever-increasing needs for high-speed data services. Radio frequency coverage maps included in the report are provided to pictorially and vividly show the differences in existing and proposed wireless coverage at the various bands authorized for AT&T's service. The maps show dramatic improvements to wireless coverage at all three (3) bands with the inclusion of the proposed Facility, namely, at 700, 1900, and 2100 MHz.

V. THE FEDERAL SPECTRUM ACT AND THE FCC ORDER

As set forth below, the proposed modifications constitute an Eligible Facilities Request pursuant to the federal Spectrum Act,³ as further implemented by the FCC Order.⁴

Under the Spectrum Act, as further clarified by the FCC Order, the streamlined process for this Eligible Facilities Request is limited to non-discretionary review. Specifically, the FCC Order

47 U.S.C. § 1455(a)(2).

4 / U.S.C. § 1455(a)(2).

³ Pursuant to Section 6409(a)(2) an "eligible facilities request" means any request for modification of an existing wireless tower or base station that involves—

⁽A) collocation of new transmission equipment;

⁽B) removal of transmission equipment; or

⁽C) replacement of transmission equipment.

⁴ The Order was effective on February 9, 2015, except for § 1.40001, which became effective on April 8, 2015, except for §§ 1.40001(c)(3)(i), 1.40001(c)(3)(iii), 1.140001(c)(4), and 17.4(c)(1)(vii), which became effective on May 18, 2015, after approval by the Office of Management and Budget. The FCC Order makes clear that under the Spectrum Act discretionary review is not required or permitted for an Eligible Facilities Request.

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"adopt[s] an objective standard for determining when a proposed modification will 'substantially change the physical dimensions' of an existing tower or base station." $FCC\ Order$, ¶ 87. As stated in the FCC Order, Section 6409 "states without equivocation that the reviewing authority 'may not deny, and shall approve' any qualifying application. This directive leaves no room for a lengthy and discretionary approach to reviewing an application that meets the statutory criteria." $FCC\ Order$, ¶ 116.

In issuing the FCC Order and eliminating discretionary review for eligible facilities requests, the FCC's goal was to "adopt a test that is defined by specific, objective factors rather than the contextual and entirely subjective standard advocated by the IAC and municipalities." The FCC intentionally sought to reduce "flexibility" and "open ended context-specific approach" engendered by the discretionary review process:

While we acknowledge that the IAC approach would provide municipalities with maximum flexibility to consider potential effects, we are concerned that it would invite lengthy review processes that conflict with Congress's intent. Indeed, some municipal commenters anticipate their review of covered requests under a subjective, case-by-case approach could take even longer than their review of collocations absent Section 6409(a). We also anticipate that disputes arising from a subjective approach would tend to require longer and more costly litigation to resolve given the more fact-intensive nature of the IAC's open-ended and context-specific approach. We find that an objective definition, by contrast, will provide an appropriate balance between municipal flexibility and the rapid deployment of covered facilities. We find further support for this approach in State statutes that have implemented Section 6409(a), all of which establish objective standards.

FCC Order, \P 88.

As a result, the FCC Order implementing Section 6409 establishes clear and objective criteria for determining eligibility, limits the types of information that a municipality may require when processing an application for an eligible facilities request, and imposes a "deemed granted" remedy for failure to timely process and eligible facilities request.⁵ The FCC Order also establishes significant limits on the information that can be required to be provided with an eligible facilities request and limits it to only that information "reasonably related to determining whether the request meets the requirements of this section. A State or local government may not require an applicant to submit any other documentation". 47 CFR 1.40001(c)(1).

Both before and after the FCC Order was issued, the Massachusetts Attorney General's Office provided clear guidance that an eligible request cannot be subjected to a discretionary special permit process. *See* Attorney General's letters to (i) Town of Mount Washington, dated June 12, 2014, p. 3 (ii) Town of Lynnfield, dated February 10, 2015, p. 3 (the "AG Lynnfield Letter") and (iii) Town of Montague, dated February 23, 2015, p. 2 (all attached hereto). As set forth in each letter [t]he Act's requirement that a local government 'may not deny, and shall approve, any eligible facilities request' means that a request for modification to an existing facility that does

⁵ See 47 CFR §§1.40001(c)(1) - (c)(4).

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such qualifying requests also cannot be subject to a discretionary special permit.")(Emphasis added). In providing these opinions, the Attorney General's Office specifically opined that provisions in zoning ordinances that specifically required a special permit for modifications to existing facilities could not be applied to eligible facilities requests. While approving the Town of Lynnfield's Zoning Bylaw, the Attorney General stated that "Section 8.7.5.1 requires that PWSF may only be erected upon the grant of a special permit. The Town cannot apply this requirement to eligible facilities requests for modification to existing facilities that qualify for required approval under Section 6409 of the Act." AG Lynnfield Letter, p. 3.

Therefore, as set forth in the FCC Order and Attorney General's opinion letters, the City cannot impose a requirement that AT&T obtain a special permit, or an amendment to an existing special permit utilizing the same discretionary review process, in connection with its eligible facilities request. To the extent that the City of Cambridge's Zoning Ordinance and any prior decisions by the Board include provisions seeking to further regulate the modification of wireless communication facilities, federal law overrules those requirements. *See* Sprint Spectrum L.P. v. Town of Swansea, 574 F.Supp.2d 227, 236 (2008) (Board is obligated to consider whether its actions would violate federal law even if a different outcome would be permitted under state law). The standard of review for an application to modify an existing wireless communication facility on an existing tower or base station is governed by the Spectrum Act and the FCC Order which require eligible facilities requests to be permitted "by right."

In addition, the FCC Order establishes a 60-day period for approval from the time of AT&T's submission. 47 CFR \$1.40001(c)(2). Within the context of the Spectrum Act and FCC Order, approval means all necessary approvals to permit the proposed modifications, including the issuance of a building permit, if required. The FCC found that this 60-day period is appropriate due to "the more restricted scope of review applicable to applications under section 6409(a)." *FCC Order*, ¶ 108. If the Request is not acted upon within the 60-day period, it is deemed granted. 47 CFR \$1.40001(c)(4).

As set forth below, the proposed modifications constitute an eligible facilities request. Therefore, AT&T respectfully requests the Board to find that Section 4.32(g)(1) of the Ordinance does not apply to its Request.

VI. THE PROPOSED MODIFICATIONS ARE AN ELIGIBLE FACILITIES REQUEST

Under Section 6409 and the FCC Order, a "base station" means "[a] structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network." 47 C.F.R §1.40001(b)(1). A Base Station includes "any structure other than a tower" that supports or houses "authorized wireless communications between user equipment and a communications network." 47 C.F.R §1.40001(b)(1). Therefore, the existing building that is currently used for FCC-licensed transmissions for personal wireless services is a "base station" for purposes of Section 6409.

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AT&T proposes to modify its existing Facility as described above and depicted on the Plans submitted herewith.

The proposed modifications will not require the installation of any part of the facility on the ground outside of the building.

As a result, AT&T's proposed modifications involving the removal and replacement of the existing transmission equipment constitute an "eligible facilities request" under Section 6409. The proposed eligible facilities request is not a "substantial modification" under Section 6409 and the FCC Order because it does not:

- (i) Result in an increase in "the height of the structure by more than 10% or more than ten feet, whichever is greater" because the proposed replacement antennas will be façade mounted and located below the roofline and therefore will not exceed 10 feet above the existing building;
- (ii) Protrude from the edge of the building by more than six feet because AT&T's proposed antennas will not protrude more than six feet from building façade;
- (iii) Involve the installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets no new radio communications equipment cabinets will be installed;
- (iv) Require any excavation or deployment outside the current site of the tower or base station because all antennas, equipment cabinets and related equipment will be installed entirely on and within the existing building; or
- (v) Otherwise defeat the existing concealment elements of the tower or base station because the proposed replacement antennas will be painted and textured to match the façade of the existing building on which the existing and proposed antennas will be located and will continue to integrate the Facility into the existing architecture of the building. Further, the proposed RRUs and surge arrestor will be mounted behind an existing parapet or otherwise mounted out of view. Therefore, AT&T's proposed Facility will remain aesthetically consistent with the exterior finish of the building as well as maintain the concealment elements of the original design.

See FCC Order, §1.40001(b)(7)(i)-(v).

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VII. COMPLIANCE WITH THE CAMBRIDGE ZONING ORDINANCE

In the alternative, AT&T respectfully requests the Board to grant a special permit for the proposed modifications to the existing Facility.⁶

A. <u>AT&T complies with the Wireless Communications provisions set forth in Section</u> 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance.

AT&T's proposed modifications comply with Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance as follows:⁷

<u>Section 4.32(g)(1)</u>: Section 4.32(g)(1) of the Ordinance allows for the use of a "[t]elephone exchange (including switching, relay, and transmission facilities serving mobile communications systems) and any towers or antennas accessory thereto." Under the Table of Use Regulations beginning at Section 4.30, AT&T's proposed use of the Facility as a transmission facility serving a mobile communications system is permitted by special permit in the Business C zoning district (see the table at Section 4.32(g)(1)).

Section 4.40, Footnote 49: Section 4.32(g)(1) includes a reference to Section 4.40, Footnote 49 which sets out the standards for granting the special permit. AT&T's proposed Facility complies with Footnote 49's standards as noted below:

1. The Board of Zoning Appeal shall consider "[t]he scope of or limitations imposed by any license secured from any state or federal agency having jurisdiction over such matters."

<u>AT&T's Response</u>: AT&T's FCC license is included with this application and the license information included shows that AT&T is authorized to provide wireless service in the area served by the Facility (*see* Exhibit 2).

2. The Board of Zoning Appeal shall consider "[t]he extent to which the visual impact of the various elements of the proposed facility is minimized: (1) through the use of existing mechanical elements on the building's roof or other features of the building as support and background, (2) through the use in materials that in texture and color blend with the materials to which the facilities are attached, or (3) other effective means to reduce the visual impact of the facility on the site."

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⁶ AT&T's request is made, if and to the extent necessary, all rights reserved. As discussed above, the FCC Order establishes a 60-day period for receipt of all necessary approvals from the time of AT&T's submission, including a building permit, if required. 47 CFR §1.40001(c)(2). If the Request is not acted upon within the 60-day period, it is deemed granted. 47 CFR §1.40001(c)(4). Therefore, AT&T expressly reserves its rights under 47 CFR §1.40001(c)(2) and (4).

⁷ To the extent that Section 4.32(g)(1), and Section 4.40, Footnote 49 of the Ordinance purport to require the submission of information that is beyond the scope permitted by the FCC Order or Spectrum Act, AT&T expressly reserves, and does not waive, its right to assert that such information is not required under the Spectrum Act and the submission of such information shall not constitute a waiver of AT&T's rights pursuant thereto.

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AT&T's Response: The design of the overall Facility, including the choice and placement of replacement antenna and associated equipment, on the penthouse, minimizes the visual impact of the proposed Facility. This is because the antennas and equipment on the exterior façade surfaces will be painted to match the color and texture of the building so as to be minimally visible and consistent with the concealment elements of the existing Facility. The minimal visual impact of the Facility is shown in the photographs of the existing Facility (see, Exhibit 5).

3. The Board of Zoning Appeal shall consider "[w]here it is proposed to erect such a facility in any residential zoning district, the extent to which there is a demonstrated public need for the facility at the proposed locations, the existence of alternative, functionally suitable sites in nonresidential locations, the character of the prevailing uses in the area, and the prevalence of other existing mechanical systems and equipment carried on or above the roof of nearby structures. The Board of Zoning Appeal shall grant a special permit to erect such a facility in a residential zoning district only upon finding that nonresidential uses predominate in the vicinity of the proposed facility's location and that the telecommunications facility is not inconsistent with the character that does prevail in the surrounding neighborhood.

In granting a special permit the Board of Zoning Appeal shall set forth in its decision under which circumstances or procedures, if any, the permittee shall be allowed to replace and upgrade its equipment without the necessity of seeking a new special permit."

AT&T's Response: As demonstrated by the Radio Frequency Report and the associated coverage maps, AT&T has demonstrated an immediate and compelling need for the proposed modifications to its existing Facility located at the Property in order to provide substantially improved indoor coverage to residents, businesses, students and faculty, and the general public in that area. AT&T also seeks to substantially improve its ability to satisfy the ever-increasing need of its customers for data accessibility, navigation and use. This is especially critical in and around the area of Massachusetts Ave. which also serves as home for numerous businesses. AT&T proposes to satisfy its RF coverage needs in the area by adding to the existing Facility the antennas and equipment necessary to provide the latest LTE wireless communications service technology. By modifying its existing Facility, AT&T obviates the need to construct an entirely new facility within this area of Cambridge in order to meet its wireless network coverage needs.

As provided in Footnote 49, AT&T requests that once permission is received from the City to site the Facility at the Property, the Board permit AT&T to replace and upgrade the equipment at this Facility in the future without further zoning proceedings or a new special permit, provided that such equipment shall meet the eligible facilities request criteria set forth in 47 CFR § 1.40001.

B. <u>AT&T complies with the Special Permit Criteria set forth in Section 10.43 of the Ordinance.</u>

{A0338983.1}

⁸ AT&T must generate a signal strength of at least -74 dBm to provide serviceable voice and data coverage on its mobile wireless devices in indoor environments. AT&T also seeks to substantially improve its data navigation service coverage in the area by including antennas and equipment that will provide LTE service.

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Section 10.43 of the Ordinance specifies the following criteria for issuance of a special permit: "Special permits will normally be granted where specific provisions of this Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:

(a) The requirements of this Ordinance cannot or will not be met, or

<u>AT&T's Response</u>: As provided above, AT&T's proposed modifications comply with the requirements set forth in Section 4.32(g), Footnote 49 of the Ordinance, the Spectrum Act and the eligible facilities request criteria set forth in 47 CFR § 1.40001. Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

(b) Traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character for the following reasons, or

AT&T's Response: The proposed modifications to AT&T's existing Facility will not result in any change to the existing traffic on or near the Property. The Facility will continue to be unmanned and only require infrequent visits by a technician (typically two times per month for routine diagnostics and/or maintenance, except in cases of emergency), there will be no material increase in traffic or disruption to patterns of access or egress that will cause congestion, hazards or a substantial change in the established neighborhood character. AT&T's maintenance personnel will make use of the existing access roads and parking at the building. Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

(c) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or

AT&T's Response: As described above and illustrated on the attached photographs (*see* Exhibit 5) the proposed modifications to the existing Facility will result in a *de minimis* change in the appearance of the building because the equipment will be located on building exterior surfaces. As a result, the Facility as a whole either will be hidden from view or will visually blend with existing characteristics of the building and the surrounding neighborhood. Because the proposed installation will not generate any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater, it will not adversely affect residential uses on neighboring streets. Conversely, the surrounding properties and general public will benefit from the potential to enjoy improved wireless communications services. Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

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(d) Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or

AT&T's Response: Because the proposed modifications to the existing Facility will not cause the Facility to generate any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater, no nuisance or hazard will be created to the detriment of the health, safety, or welfare of the occupants of the building or the residents of the City of Cambridge. To the contrary, the proposed Facility will benefit the City and promote the safety and welfare of its residents, businesses and drivers by providing reliable state-of-the-art digital wireless voice and data services that will improve the reliability of emergency communications with the police and fire departments by eliminating dropped or blocked calls due to inadequate signal strength or insufficient network capacity to handle call volume, particularly important during emergency situations. The Facility, as modified, will continue to comply with all federal, state and local safety requirements including the standards established by the FCC and Federal Aviation Administration (FAA). (See Exhibit 8 Maximum Permissible Exposure Study, Theoretical Report). Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

(e) For other reasons, the proposed installation would impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this Ordinance, or

AT&T's Response: The purpose of the Ordinance is multifaceted, the relevant aspects of which relating to wireless telecommunications facilities include the lessening of congestion in the streets, conserving health, securing safety from fire, flood, panic and other danger, conserving the value of land and buildings and natural resources, preventing blight and pollution, encouraging the most rational use of land throughout the city, including encouraging appropriate economic development, and protecting residential neighborhoods from incompatible activities.

As noted above, the proposed modifications to the existing Facility directly accord with the purposes of the Ordinance because the modifications will not result in any traffic, smoke, dust, heat or glare, discharge noxious substances, nor pollute waterways or groundwater. As the Facility will improve the ability of residents, businesses, travelers and drivers in the area to access state-of-the-art wireless technology, the City's ability to provide emergency services will be improved, as will the economic development of the City as more people will be able to conduct commerce by virtue of a mobile platform. Because the proposed modifications to the existing Facility will be installed on an existing building that includes the Facility, and the proposed modifications are consistent with the existing concealment elements, the proposed modifications to the existing Facility are in consistent with the building's character and will not affect the value of the building or the natural resources of the City. Because the proposed modifications to the existing Facility are designed to be consistent with the existing concealment elements of the Facility and characteristics of the Property, the visual impact on the underlying and adjacent zoning districts will be *de minimis*. As a result, the proposed modifications to the existing Facility are consistent with the Ordinance's purpose to allow for less intrusive wireless telecommunications facilities in all districts (other than

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Open Space) including the applicable overlay districts, and the underlying Business B district. Granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

(f) The new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30

AT&T's Response: As stated in the Section 19.30, the Citywide Urban Design Objectives ("Objectives") "are intended to provide guidance to property owners and the general public as to the city's policies with regard to the form and character desirable for new development in the city. It is understood that application of these principles can vary with the context of specific building proposals in ways that, nevertheless, fully respect the policies' intent. It is intended that proponents of projects, and city staff, the Planning Board and the general public, where public review or approval is required, should be open to creative variations from the detailed provisions presented in this Section as long as the core values expressed are being served. A project need not meet all the objectives of this Section 19.30 where this Section serves as the basis for issuance of a special permit. Rather the permit granting authority shall find that on balance the objectives of the city are being served. Nor shall a project subject to special permit review be required to conform to the Required Building and Site Plan Requirements set forth in Section 11.50." [emphasis added]. For the reasons stated in AT&T's response to this Section 10.43(f) of the Zoning Ordinance and in its application generally, "on balance, the objectives of the city are being served" by the installation of the Facility at the Property so that granting the special permit would not be a detriment to the public interest and is consistent with the Board's obligations pursuant to the Spectrum Act and FCC Order.

The following are the Objectives' headings as appearing in the Ordinance:

<u>19.31</u>: New projects should be responsive to the existing or anticipated pattern of development.

AT&T's Response: The existing Facility is located on and within the existing building, some of the equipment of which is hidden from view behind the parapet and within the building, or otherwise obstructed from view, and the remaining equipment blends with the structures and colors of the building. The proposed modifications to the existing Facility are consistent with the design and concealment elements of the existing Facility. Therefore, the proposed modifications are responsive to the existing pattern of development in the Property's applicable zoning and overlay districts.

<u>19.32</u>: Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings.

AT&T's Response: The existing Facility is located on and within the existing building. The Facility is only accessed by authorized AT&T personnel for routine maintenance one to two times per month and is not accessed by the general public. The proposed modifications to the existing Facility will not result in any increase in routine visits nor otherwise result in a change in traffic patterns in the vicinity of the Property that would affect pedestrian flow or cyclists' access to the building or surrounding areas within the Property's applicable zoning districts.

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19.33 The building and site design should mitigate adverse environmental impacts of a development upon its neighbors. Indicators include[9]

- (1) Mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors. Consideration is given to the size, complexity and appearance of the equipment, its proximity to residential areas, and its impact on the existing streetscape and skyline. The extent to which screening can bring order, lessen negative visual impacts, and enhance the overall appearance of the equipment should be taken into account. More specifically:
 - (a) Reasonable attempts have been made to avoid exposing rooftop mechanical equipment to public view from city streets. Among the techniques that might be considered are the inclusion of screens or a parapet around the roof of the building to shield low ducts and other equipment on the roof from view.
 - (b) Treatment of the mechanical equipment (including design and massing of screening devices as well as exposed mechanical elements) that relates well to the overall design, massing, scale and character of the building.
 - (c) Placement of mechanical equipment at locations on the site other than on the rooftop (such as in the basement), which reduces the bulk of elements located on the roof; however, at-grade locations external to the building should not be viewed as desirable alternatives.
 - (d) Tall elements, such as chimneys and air exhaust stacks, which are typically carried above screening devices for functioning reasons, are carefully designed as features of the building, thus creating interest on the skyline.
 - (e) All aspects of the mechanical equipment have been designed with attention to their visual impact on adjacent areas, particularly with regard to residential neighborhoods and views and vistas.

AT&T's Response: As shown in the photographs (*see* Exhibit 5), the existing Facility, as proposed to be modified herein, will continue to be visually consistent with the color and texture of the building, the concealment elements of the design of the Facility, and with other existing wireless communications facilities from competing carriers located on the building. As a result, AT&T's Facility is in keeping with the building's existing features without adversely affecting the building's overall design, massing, scale or character.

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⁹ Inasmuch as Section 19.33 is most relevant to the Facility, it is stated here in full.

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- (2) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors, e.g. the use of trash compactors or containment of all trash storage and handling within a building is encouraged.
- **AT&T's Response:** The Facility does not generate trash, therefore this design objective is inapplicable.
 - (3) Loading docks that are located and designed to minimize impacts (visual and operational) on neighbors.
- <u>AT&T's Response</u>: The Facility does not utilize any loading dock, therefore this design objective is inapplicable.
 - (4) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.
- **AT&T's Response:** The existing Facility, and the proposed modifications, are located entirely on and within the existing Building on the Property and have no effect on stormwater runoff, therefore this design objective is inapplicable.
 - (5) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of stormwater runoff compared to pre-development conditions.
- **AT&T's Response:** The existing Facility and proposed modifications have no effect any landscaped or Green Area Open Space, therefore this design objective is inapplicable.
 - (6) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that would have a significant impact on the use and enjoyment of adjacent open space and shadows that might impact the operation of a Registered Solar Energy System as defined in Section 22.60 of this Zoning Ordinance.
- **AT&T's Response:** The existing Facility and proposed modifications are designed so as not to cause shadows on neighboring lots.
 - (7) Changes in grade across the lot are designed in ways that minimize the need for structural retaining walls close to property lines.
- **AT&T's Response:** The existing Facility and proposed modifications are located entirely on and within the existing building and have no impact on the grade of the Property, therefore this design objective is inapplicable.
 - (8) Building scale and wall treatment, including the provision of windows, are sensitive to existing residential uses on adjacent lots.
- **AT&T's Response:** The proposed modifications to the existing Facility will not change the building's scale because antennas and equipment will blend with the color and

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textures of the building (*see* Exhibit 3). The existing Facility and proposed modifications are consistent with characteristics of the existing building design, maintain the existing concealment elements of the Facility and therefore minimize any visual impact from the Facility.

- (9) Outdoor lighting is designed to provide minimum lighting and necessary to ensure adequate safety, night vision, and comfort, while minimizing light pollution.
- <u>AT&T's Response</u>: The existing Facility does not use any outdoor lighting. The proposed modifications to the Facility do not include any additional lighting of the Facility or building. As a result, this design objective is inapplicable.
 - (10) The creation of a Tree Protection Plan that identifies important trees on the site, encourages their protection, or provides for adequate replacement of trees lost to development on the site.
- **AT&T's Response:** The existing Facility and proposed modifications are located entirely on and within the existing building and have no effect on any trees on the Property, therefore this design objective is inapplicable.
 - <u>19.34</u>: Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply system, and sewer system.
- **AT&T's Response:** The existing Facility, including the proposed modifications, is a passive use and will not generate trash, odor, excess noise, or utilize water or wastewater services. As such, it will not burden the City's infrastructure services.
 - <u>19.35:</u> New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically.
- <u>AT&T's Response</u>: The proposed modification of the existing Facility located on and within the existing building, will obviate the need for AT&T to construct an additional Facility to address its wireless network coverage need in this area of Cambridge. The existing Facility and the proposed modifications blend the equipment with the building texture and color, and are consistent with the concealment elements of the Facility's design. As a result, the Facility will reinforce the existing Cambridge landscape as it currently is manifested at the Property.
 - 19.36: Expansion of the inventory of housing in the city is encouraged.
- **AT&T's Response:** The Facility and proposed modifications provide wireless services and will not adversely impact the City's housing inventory.
 - <u>19.37</u>. Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city.

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<u>AT&T's Response</u>: The Facility and proposed modifications are located on and within the existing building. The Facility and proposed modifications will not adversely impact or otherwise reduce open space amenities within the City.

VIII. SUMMARY

For the foregoing reasons AT&T respectfully requests that the Board to determine that pursuant to the Spectrum Act and the FCC Order, the Request constitutes and eligible facilities request and therefore AT&T's Request must be approved administratively, including the issuance of a building permit, without the need for further relief from the Board. In the alternative, without waiving its rights, AT&T requests the Board grant the foregoing zoning relief in the form of a Special Permit and such other relief as the Board deems necessary to allow the modification and operation of AT&T's proposed Facility.

Best Regards,

Timothy W. Greene Authorized Agent to New Cingular Wireless PCS, LLC ("AT&T")

cc: Brian S. Grossman, Esq.

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: REGINALD YOUNGBLOOD AT&T MOBILITY SPECTRUM LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign WQJU427	File Number
Radio	Service
WY - 700 MHz Low	ver Band (Blocks A,
В &	z E)

FCC Registration Number (FRN): 0014980726

Grant Date 01-06-2009	Effective Date 02-12-2014	Expiration Date 06-13-2019	Print Date
Market Number CMA006	Chann	nel Block B	Sub-Market Designator
	Market Boston-Lowell-B		
1st Build-out Date 12-13-2016	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

This license is subject to compliance with the conditions set forth in the Commission's Order of Modification, WT Docket No. 12-69, DA 14-43, released January 16, 2014.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This license may not authorize operation throughout the entire geographic area or spectrum identified on the hardcopy version. To view the specific geographic area and spectrum authorized by this license, refer to the Spectrum and Market Area information under the Market Tab of the license record in the Universal Licensing System (ULS). To view the license record, go to the ULS homepage at http://wireless.fcc.gov/uls/index.htm?job=home and select "License Search". Follow the instructions on how to search for license information.

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: REGINALD YOUNGBLOOD NEW CINGULAR WIRELESS PCS, LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign KNKA226	File Number
	Service Cellular
Market Numer	Channel Block
CMA006	A
Sub-Market	t Designator
()

FCC Registration Number (FRN): 0003291192

Market Name

Boston-Lowell-Brockton-Lawrenc

Grant Date 10-05-2004	Effective Date 02-13-2014	Expiration Date 10-01-2014	Five Yr Build-Out Date	Print Date
		· ·		

Site Information:

Location	Latitude	Longitude	Ground Elevation	Structure Hgt to Tip	Antenna Structure
			(meters)	(meters)	Registration No.
15	42-37-42.3 N	070-39-16.8 W	45.7	58.8	

Address: 40 DORY ROAD

City: GLOUCESTER County: ESSEX State: MA Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	93.100	97.500	101.800	101.800	100.800	88.700	85.700	101.800
	158.853	205.617	68.628	9.427	0.642	0.431	2.268	29.488
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	93.100	97.500	101.800	101.800	100.800	88.700	85.700	101.800
	0.459	5.462	56.429	198.529	168.403	38.276	3.953	0.786
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	93.100	97.500	101.800	101.800	100.800	88.700	85.700	101.800
	12.078	0.668	0.599	1.024	10.050	68.014	123.413	62.132

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Location Latitude Longit 20 43-03-11.8 N 071-16 Address: 80 Diamond Hill Road City: Candia County: ROCKINGHA	5-02.1 W	(m 17	round Elev leters) 9.2 Constructi	(r 59	tructure Hgt meters) 9.4 ine:	to Tip	Antenna St Registratio	
Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 73.200 52.325	45 111.000 70.778	90 159.400 16.988	135 159.000 1.425	180 98.400 0.187	225 148.300 0.144	270 88.600 0.491	315 75.600 7.084
Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 3 Azimuth (from true north)	0 73.200 0.343	45 111.000 3.851 45	90 159.400 33.085 90	135 159.000 100.313 135		225 148.300 19.494 225	270 88.600 2.061 270	315 75.600 0.299 315
Antenna Height AAT (meters) Transmitting ERP (watts)	73.200 6.845	111.000 0.890	159.400 0.107	159.000 1.038		148.300 7.633		75.600 6.905
Location Latitude Longit 24 42-54-55.1 N 071-21		(m	round Elev eters)	(r	tructure Hgt meters)	to Tip	Antenna St Registratio	
Address: 15 INDEPENDENCE DRIV City: LONDONDERRY County: R	Е		0.9 cate: NH		6.3 ction Deadlin	ne:	1011624	
Address: 15 INDEPENDENCE DRIV	E OCKING					225 72.000 0.437	270 68.000 1.233	315 66.500 19.454
Address: 15 INDEPENDENCE DRIV City: LONDONDERRY County: R Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	E OCKING 0 35.900 161.221	HAM St 45 30.000	90 44.800	135 52.100	180 54.500 0.510 180 54.500	225 72.000	270 68.000	66.500

Location Latitude Long 25 42-00-32.6 N 071-3 Address: 75 WASHINGTON SST City: PLAINVILLE County: NOR	9-15.2 W			(m 51	tructure Hgt neters) 1.8 dline: 03-29	•	Antenna St Registration	
City. I LAINVILLE County. NOR	TOLK 5	tate. MA	Constitut	ction Deac	uiiie. 03-23	-2013		
Antenna: 1 Azimuth (from true north	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	64.500	61.200	95.600	96.100	94.300	64.100	46.000	48.800
Transmitting ERP (watts)	84.752	97.052	31.772	5.158	0.550	0.224	2.803	20.645
Antenna: 2 Azimuth (from true north	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	64.500	61.200	95.600	96.100	94.300	64.100	46.000	48.800
Transmitting ERP (watts)	0.380	5.181	37.013	100.829	79.042	20.699	2.118	0.824
Antenna : 3 Azimuth (from true north	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	64.500	61.200	95.600	96.100	94.300	64.100	46.000	48.800
Transmitting ERP (watts)	24.577	1.736	0.715	2.292	18.444	139.378		142.336
Location Latitude Long 26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM	4-06.5 W			(m 58	tructure Hgt neters) 3.8 adline: 03-29	•	Antenna St Registration	
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM	14-06.5 W	(m 12 State: MA	c.5 Constru	(m 58 action Dea	neters) 3.8 adline: 03-29	9-2013	Registration	n No.
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north	14-06.5 W 10UTH 5	(m 12 State: MA 45	Constru	(m 58 action Dea	neters) 3.8 adline: 03-29	9-2013 225	Registration 270	315
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north Antenna Height AAT (meters)	14-06.5 W 10UTH 5 0 0 30.000	(m 12 State: MA 45 30.000	(construction) Construction 90 46.500	(nr 58	neters) 3.8 adline: 03-29 180 59.800	0-2013 225 50.600	270 39.100	315 32.800
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts)	14-06.5 W 10UTH 5 0 0 30.000 186.898	(m 12 State: MA 45 30.000 242.551	Constru 90 46.500 75.777	(n 58 action Dea 135 56.700 10.617	neters) 3.8 adline: 03-29 180 59.800 0.738	0-2013 225 50.600 0.508	270 39.100 2.730	315 32.800 35.860
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north	14-06.5 W 10UTH S 30.000 186.898 0	(m 12 State: MA 45 30.000 242.551 45	90 46.500 75.777 90	(m 58 135 56.700 10.617	neters) 3.8 adline: 03-29 180 59.800 0.738 180	9-2013 225 50.600 0.508 225	270 39.100 2.730 270	315 32.800 35.860 315
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north Antenna Height AAT (meters)	14-06.5 W 10UTH 5 0 0 30.000 186.898) 0 30.000	(m 12 State: MA 45 30.000 242.551 45 30.000	90 46.500 75.777 90 46.500	(m 58 135 56.700 10.617 135 56.700	neters) 3.8 adline: 03-29 180 59.800 0.738 180 59.800	225 50.600 0.508 225 50.600	270 39.100 2.730 270 39.100	315 32.800 35.860 315 32.800
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts)	14-06.5 W 10UTH S 30.000 186.898 0 30.000 0.361	(m 12 State: MA 45 30.000 242.551 45 30.000 5.818	90 46.500 75.777 90 46.500 47.861	(m 58 135 56.700 10.617 135 56.700 150.309	neters) 3.8 ndline: 03-29 180 59.800 0.738 180 59.800 121.062	225 50.600 0.508 225 50.600 28.493	270 39.100 2.730 270 39.100 2.933	315 32.800 35.860 315 32.800 0.991
26 41-46-57.1 N 070-4 Address: KENDRICK ROAD City: WAREHAM County: PLYM Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north Antenna Height AAT (meters)	14-06.5 W 10UTH S 30.000 186.898 0 30.000 0.361	(m 12 State: MA 45 30.000 242.551 45 30.000	90 46.500 75.777 90 46.500	(m 58 135 56.700 10.617 135 56.700	neters) 3.8 adline: 03-29 180 59.800 0.738 180 59.800	225 50.600 0.508 225 50.600	270 39.100 2.730 270 39.100	315 32.800 35.860 315 32.800

Location Latitude Longic 27 41-53-35.2 N 070-56 Address: 326 W GROVE ST	tude 5-35.0 W	_	cound Eleve eters) .7	(Structure Hgt (meters) 106.1	to Tip	Antenna St Registration 1210211	
City: Middleboro County: PLYMO	UTH St	ate: MA	Construc	tion Dea	ndline: 03-29-	2013		
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	47.500	46.300	30.000	37.000	40.900	39.500	51.600	42.300
Transmitting ERP (watts)	125.283	153.432	54.208	6.550	0.674	0.363	2.675	27.340
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	47.500	46.300	30.000	37.000	40.900	39.500	51.600	42.300
Transmitting ERP (watts)	0.351	5.901	52.455	151.828	8 120.612	27.887	2.679	0.991
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	47.500	46.300	30.000	37.000	40.900	39.500	51.600	42.300
Transmitting ERP (watts)	14.428	1.006	0.875	1.215	13.317	87.541	159.641	85.795
Location Latitude Longi 28 42-14-21.9 N 070-5		(m	ound Elev	(Structure Hgt (meters)	to Tip	Antenna St Registration	
42 14 21.714 070 3	1-09.3 W	54	.9	5	55.8			
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK					55.8 e: 03-29-2013			
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK	State:	MA Con	nstruction	Deadline	e: 03-29-2013		270	315
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK Antenna: 1 Azimuth (from true north)	State:	MA Con 45	nstruction 90	Deadline	e: 03-29-2013	225	270 86 700	315
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK	State:	MA Con	nstruction	Deadline	e: 03-29-2013 180 64.800		270 86.700 2.589	315 99.100 34.953
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 99.800 185.522	MA Con 45 98.300 243.217	90 97.600 80.727	135 71.700 11.598	180 64.800 0.756	225 62.900 0.499	86.700 2.589	99.100 34.953
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	0 99.800 185.522 0	MA Cor 45 98.300 243.217 45	90 97.600 80.727 90	135 71.700 11.598	180 64.800 0.756 180	225 62.900 0.499 225	86.700 2.589 270	99.100 34.953 315
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 99.800 185.522	MA Con 45 98.300 243.217	90 97.600 80.727	135 71.700 11.598	180 64.800 0.756 180 64.800	225 62.900 0.499	86.700 2.589	99.100 34.953
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 99.800 185.522 0 99.800 0.521	MA Cor 45 98.300 243.217 45 98.300 6.371	90 97.600 80.727 90 97.600 65.693	135 71.700 11.598 135 71.700 238.024	180 64.800 0.756 180 64.800 4 196.107	225 62.900 0.499 225 62.900 43.191	86.700 2.589 270 86.700 4.256	99.100 34.953 315 99.100 0.906
Address: 168 Turkey Hill Lane City: Cohasset County: NORFOLK Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	0 99.800 185.522 0 99.800 0.521	MA Cor 45 98.300 243.217 45 98.300	90 97.600 80.727 90 97.600	135 71.700 11.598 135 71.700	180 64.800 0.756 180 64.800 4 196.107 180	225 62.900 0.499 225 62.900	86.700 2.589 270 86.700	99.100 34.953 315 99.100

Location Latitude Longitu 29 41-56-02.0 N 070-35- Address: 265 STATE ROAD City: PLYMOUTH County: PLYMO	-08.0 W			(m / 128	ructure Hgt eters) 3.0 dline: 03-2	·	Antenna St Registratio 1007828	
Antenna: 1 Azimuth (from true north)		45	90	135	180	225	270	315
	128.000	128.000	128.000	123.500	92.200	86.600	84.900	120.500
	23.222	24.154	10.475	1.931	0.466	0.109	1.398	6.965
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
g , ,	128.000	128.000	128.000	123.500	92.200	86.600	84.900	120.500
Transmitting ERP (watts)	0.346	4.427	33.055	88.168	72.485	17.790	1.831	0.701
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.000	128.000	128.000	123.500	92.200	86.600	84.900	120.500
Transmitting ERP (watts)	9.680	0.561	0.550	1.216	9.292	54.685	90.439	45.409
Address: 26 LUMBER STREET	-33.4 W	(m) 128	ound Eleva eters) 8.0 A Constr	(m /58.			Antenna St Registratio	
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI	-33.4 W LESEX	(months)	eters) 8.0 A Constr	(m. 58. ruction De	eters) 5 adline: 03-	29-2013	Registratio	n No.
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDD! Antenna: 1 Azimuth (from true north)	-33.4 W LESEX 0	(ma 123 State: MA	eters) 8.0 A Constr	(m. 58. ruction De	eters) 5 adline: 03-	29-2013 225	Registratio	315
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	-33.4 W LESEX 0 68.900	(m) 123 State: MA 45 93.200	eters) 8.0 A Constr 90 99.800	(m. 58. ruction De 135 91.500	eters) 5 adline: 03- 180 55.300	29-2013 225 59.600	270 35.700	315 76.400
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	-33.4 W LESEX 0 68.900 158.662	(me 123 State: Ma 45 93.200 188.312	90 99.800 64.228	(m. 58. ruction De 135 91.500 8.830	eters) 5 adline: 03- 180 55.300 0.704	29-2013 225 59.600 0.395	270 35.700 4.080	315 76.400 30.535
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	-33.4 W LESEX 0 68.900 158.662 0	(m) 123 State: MA 45 93.200	eters) 8.0 A Constr 90 99.800	(m. 58. ruction De 135 91.500 8.830 135	eters) 5 adline: 03- 180 55.300	29-2013 225 59.600	270 35.700	315 76.400
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	-33.4 W LESEX 0 68.900 158.662 0 68.900	(m. 122) State: M. 45 93.200 188.312 45 93.200	90 99.800 64.228 90 99.800	(m. 58. ruction De 135 91.500 8.830 135 91.500	eters) 5 adline: 03- 180 55.300 0.704 180 55.300	29-2013 225 59.600 0.395 225 59.600	270 35.700 4.080 270 35.700	315 76.400 30.535 315 76.400
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	-33.4 W LESEX 0 68.900 158.662 0	(m) 128 State: MA 45 93.200 188.312 45	90 99.800 64.228	(m. 58. ruction De 135 91.500 8.830 135	eters) 5 adline: 03- 180 55.300 0.704 180	29-2013 225 59.600 0.395 225	270 35.700 4.080 270	315 76.400 30.535 315
30 42-12-47.6 N 071-32- Address: 26 LUMBER STREET City: HOPKINTON County: MIDDI Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	-33.4 W LESEX 0 68.900 158.662 0 68.900	(m. 122) State: M. 45 93.200 188.312 45 93.200	90 99.800 64.228 90 99.800	(m. 58. ruction De 135 91.500 8.830 135 91.500	eters) 5 adline: 03- 180 55.300 0.704 180 55.300	29-2013 225 59.600 0.395 225 59.600	270 35.700 4.080 270 35.700	315 76.400 30.535 315 76.400

Sun Signi III (III 1320	I He I (dill)	oci.					
Location Latitude Longit	tude	Ground Elev (meters)		ructure Hg neters)	t to Tip	Antenna St Registratio	
31 42-38-27.0 N 070-30	5-24.8 W	36.6	38	3.7			
Address: 38 Thatcher Rd							
City: ROCKLAND County: ESSEX	X State: MA	Construction	Deadline	: 03-29-2013	3		
Antenna: 1 Azimuth (from true north)	0 45	90	135	180	225	270	315
Antenna Height AAT (meters)	69.500 69.50	00 69.500	69.500	69.500	66.700	58.400	60.100
Transmitting ERP (watts)	170.519 227.	554 76.127	10.393	0.706	0.470	2.520	32.796
Antenna: 2 Azimuth (from true north)	0 45	90	135	180	225	270	315
Antenna Height AAT (meters)	69.500 69.50	00 69.500	69.500	69.500	66.700	58.400	60.100
Transmitting ERP (watts)	0.462 5.689	9 58.840	206.264	174.760	39.385	4.197	0.837
Antenna: 3 Azimuth (from true north)	0 45	90	135	180	225	270	315
Antenna Height AAT (meters)	69.500 69.50	00 69.500	69.500	69.500	66.700	58.400	60.100
Transmitting ERP (watts)	20.761 1.51	0.812	1.238	15.269	110.467	237.338	124.965
Location Latitude Longi	tude	Ground Elev	ration St	ructure Hg	t to Tip	Antenna St	ructure
Location Latitude Longic	tude	Ground Elev (meters)		ructure Hg neters)	t to Tip	Antenna St Registratio	
	tude 3-28.9 W			neters)	t to Tip		
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD	3-28.9 W	(meters) 148.4	(m 46	neters)	-		
32 42-36-37.9 N 071-33	3-28.9 W	(meters) 148.4	(m 46	neters)	-		
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD	3-28.9 W SEX State: M	(meters) 148.4	(m 46	neters)	-		
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE	3-28.9 W SEX State: M	(meters) 148.4 IA Construct 90	(m 46 ion Deadli	neters) 5.3 ine: 03-29-2	2013	Registratio	n No.
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE: Antenna: 1 Azimuth (from true north)	3-28.9 W SEX State: M 0 45	(meters) 148.4 IA Construct 90 000 121.700	(m 46 iion Deadli	neters) 5.3 ine: 03-29-2	2013	Registratio 270	315
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	3-28.9 W SEX State: M 0 45 129.600 133. 209.658 291.	(meters) 148.4 IA Construct 90 000 121.700	(m 46 ion Deadli 135 118.300	neters) 5.3 ine: 03-29-2 180 83.000	2013 225 99.300	270 81.700	315 86.000
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	3-28.9 W SEX State: M 0 45 129.600 133. 209.658 291.	(meters) 148.4 IA Construct 90 000 121.700 175 91.511 90	(m 46 2000 Deadli 135 118.300 11.206	neters) 5.3 ine: 03-29-2 180 83.000 1.156	2013 225 99.300 0.596	270 81.700 4.998	315 86.000 40.617
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	3-28.9 W SEX State: M 0 45 129.600 133.0 209.658 291. 0 45	(meters) 148.4 IA Construct 90 000 121.700 175 91.511 90 000 121.700	(m 46 35 118.300 11.206	neters) 5.3 ine: 03-29-2 180 83.000 1.156 180	2013 225 99.300 0.596 225	270 81.700 4.998 270	315 86.000 40.617 315
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	3-28.9 W SEX State: M 0 45 129.600 133.0 209.658 291. 0 45 129.600 133.0 0.597 10.0	(meters) 148.4 IA Construct 90 000 121.700 175 91.511 90 000 121.700	(m 46 35 118.300 11.206 135 118.300	neters) 5.3 ine: 03-29-2 180 83.000 1.156 180 83.000	2013 225 99.300 0.596 225 99.300	270 81.700 4.998 270 81.700	315 86.000 40.617 315 86.000
32 42-36-37.9 N 071-33 Address: 142 LOWELL RD City: GROTON County: MIDDLE Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	3-28.9 W SEX State: M 0 45 129.600 133.0 209.658 291. 0 45 129.600 133.0 0.597 10.0	(meters) 148.4 IA Construct 90 000 121.700 175 91.511 90 000 121.700 42 80.421 90	(m 46 35 118.300 11.206 135 118.300 284.569	neters) 5.3 ine: 03-29-2 180 83.000 1.156 180 83.000 246.599	2013 225 99.300 0.596 225 99.300 46.898	270 81.700 4.998 270 81.700 5.186	315 86.000 40.617 315 86.000 0.906

Location Latitude Longit	tude		ound Eleva eters)		ructure Hgt neters)	to Tip	Antenna St Registration	
	3-57.5 W	68	.3	80).5		1017973	
Address: 178 EAMES WAY								
City: Marshfield County: PLYMOU	JTH St a	ite: MA	Constructi	ion Deadl	ine: 03-29-2	013		
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	125.300	128.600	128.200	125.800	107.800	113.100	97.600	105.400
Transmitting ERP (watts)	156.993	202.510	73.503	10.210	0.666	0.415	2.429	32.615
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	125.300	128.600	128.200	125.800	107.800	113.100	97.600	105.400
Transmitting ERP (watts)	0.482	5.988	62.083	217.536	187.313	40.576	4.382	0.869
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	125.300	128.600	128.200	125.800	107.800	113.100	97.600	105.400
Transmitting ERP (watts)	21.007	1.466	0.829	1.219	15.907	109.305	228.002	122.541
-		_						
	5-47.1 W		round Eleva eters)		ructure Hgt neters) 0.4	to Tip	Antenna St Registration	
	5-47.1 W	(m 14	eters) 3	(m 59	neters)	•		
34 41-42-11.1 N 070-46 Address: 55 BENSONBROOK ROAL	5-47.1 W) TH Sta t	(m 14	eters) 3	(m 59 on Deadli	neters))13		n No.
34 41-42-11.1 N 070-40 Address: 55 BENSONBROOK ROAL City: MARION County: PLYMOU Antenna: 1 Azimuth (from true north)	5-47.1 W O TH Sta t	(m 14 te: MA	ceters)3 Construction	(m 59 on Deadlin	neters) 0.4 ne: 03-29-20	013	Registration 270	315
34 41-42-11.1 N 070-40 Address: 55 BENSONBROOK ROAL City: MARION County: PLYMOU	5-47.1 W) TH Sta t	(m 14 te: MA	Construction 90 66.200	(m 59 on Deadlin 135 68.700	neters) 0.4 ne: 03-29-20)13	Registration	n No.
34 41-42-11.1 N 070-46 Address: 55 BENSONBROOK ROAL City: MARION County: PLYMOU Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	5-47.1 W TH Stat 0 51.300 161.079	(m 14 te: MA 45 62.700	ceters)3 Construction	(m 59 on Deadlin	neters) 0.4 ne: 03-29-20 180 66.600	225 60.600	270 47.100	315 51.900
34 41-42-11.1 N 070-40 Address: 55 BENSONBROOK ROAL City: MARION County: PLYMOU Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	5-47.1 W TH Stat 0 51.300 161.079	(m 14 te: MA 45 62.700 196.082	construction 90 66.200 67.519	(m 59 on Deadlin 135 68.700 9.213	neters) 0.4 ne: 03-29-20 180 66.600 0.702	225 60.600 0.419	270 47.100 4.077	315 51.900 32.479
34 41-42-11.1 N 070-40 Address: 55 BENSONBROOK ROAD City: MARION County: PLYMOU Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	5-47.1 W TH Stat 0 51.300 161.079	(m 14 45 62.700 196.082 45	90 66.200 67.519	(m 59 on Deadlin 135 68.700 9.213	neters) 0.4 ne: 03-29-20 180 66.600 0.702 180	225 60.600 0.419 225	270 47.100 4.077 270	315 51.900 32.479 315
34 41-42-11.1 N 070-40 Address: 55 BENSONBROOK ROAD City: MARION County: PLYMOU Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	5-47.1 W TH Stat 0 51.300 161.079 0 51.300 0.446	(m 14 45 62.700 196.082 45 62.700	200 (66.200 (6	(m 59 20n Deadli 135 68.700 9.213 135 68.700	neters) 0.4 ne: 03-29-20 180 66.600 0.702 180 66.600	225 60.600 0.419 225 60.600	270 47.100 4.077 270 47.100	315 51.900 32.479 315 51.900
34 41-42-11.1 N 070-40 Address: 55 BENSONBROOK ROAD City: MARION County: PLYMOU Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	5-47.1 W TH Stat 0 51.300 161.079 0 51.300 0.446	(m 14 45 62.700 196.082 45 62.700 6.712	90 66.200 67.519 90 66.200 62.074	(m 59 on Deadlin 135 68.700 9.213 135 68.700 197.767	neters) 0.4 ne: 03-29-20 180 66.600 0.702 180 66.600 163.770	225 60.600 0.419 225 60.600 38.273	270 47.100 4.077 270 47.100 3.886	315 51.900 32.479 315 51.900 0.801

	itude 33-16.6 W	(m	round Elev eters) 6.1	(n	tructure Hg neters) 5.5	t to Tip	Antenna St Registratio	
City: MARLBOROUGH County:	MIDDLES	EX Stat	e: MA	Constructi	on Deadline	: 03-29-2	013	
Antenna: 1 Azimuth (from true north) 0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	119.900	113.500	108.400	76.200	73.000	51.900	77.300
Transmitting ERP (watts)	280.304	377.489	119.970	14.810	1.525	0.802	6.660	52.209
Antenna: 2 Azimuth (from true north) 0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	119.900	113.500	108.400	76.200	73.000	51.900	77.300
Transmitting ERP (watts)	0.801	13.105	105.660	375.949	325.389	63.339	6.978	1.142
Antenna: 3 Azimuth (from true north) 0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	119.900	113.500	108.400	76.200	73.000	51.900	77.300
Transmitting ERP (watts)	30.606	2.831	1.046	2.632	27.909	187.774	419.392	197.441
Location Latitude Long	itude	Gı	ound Elev	vation St	tructure Hg	t to Tin	A 4 C4	
Address: 68 JOHNSON ROAD	38-19.9 W		eters)	(n	neters) 4.5	. to 11р	Antenna St Registratio	
42 37 34.011	38-19.9 W	(m 59	eters)	(n 44	neters)	-		
Address: 68 JOHNSON ROAD	38-19.9 W X State:	(m 59	eters)	(n 44	neters) 4.5	-		
Address: 68 JOHNSON ROAD City: ROCKPORT County: ESSE	38-19.9 W X State:	(m 59 MA Co	eters) .4 nstruction	(n 44 Deadline:	neters) 4.5 : 03-29-2013	1	Registratio	n No.
Address: 68 JOHNSON ROAD City: ROCKPORT County: ESSE Antenna: 1 Azimuth (from true north	38-19.9 W X State:	(m 59 MA Coi	neters) .4 nstruction	(n 44 Deadline:	neters) 4.5 : 03-29-2013	225	Registratio	315
Address: 68 JOHNSON ROAD City: ROCKPORT County: ESSE Antenna: 1 Azimuth (from true north Antenna Height AAT (meters)	38-19.9 W X State:) 0 103.000 126.741	MA Co. 45 103.000	90 103.000	135 100.400	neters) 4.5 : 03-29-2013 180 95.400	225 85.100	270 98.100	315 103.000
Address: 68 JOHNSON ROAD City: ROCKPORT County: ESSE Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts)	38-19.9 W X State:) 0 103.000 126.741	MA Co. 45 103.000 159.124	90 103.000 54.189	135 100.400 7.443	neters) 4.5 : 03-29-2013 180 95.400 0.564 180	225 85.100 0.334	270 98.100 3.098	315 103.000 25.685
Address: 68 JOHNSON ROAD City: ROCKPORT County: ESSE Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north	X State: 0 0 103.000 126.741 0 0	MA Con 45 103.000 159.124 45	90 103.000 54.189 90	135 100.400 7.443	neters) 4.5 : 03-29-2013 180 95.400 0.564 180	225 85.100 0.334 225	270 98.100 3.098 270	315 103.000 25.685 315
Address: 68 JOHNSON ROAD City: ROCKPORT County: ESSE Antenna: 1 Azimuth (from true north Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north Antenna Height AAT (meters)	X State: 0 0 103.000 126.741 0 0 103.000 0.353	MA Co. 45 103.000 159.124 45 103.000	90 103.000 54.189 90 103.000	135 100.400 7.443 135 100.400	neters) 4.5 180 95.400 0.564 180 95.400	225 85.100 0.334 225 85.100	270 98.100 3.098 270 98.100	315 103.000 25.685 315 103.000

Sum Signi III viii 1220	THC.	i (uiiibei)					-	
Location Latitude Longi	tude		round Elev neters)		Structure Hg meters)	t to Tip	Antenna St Registratio	
37 42-41-29.8 N 071-4	7-30.8 W	23	33.8	4	7.9			
Address: 1140 Greenville Rd								
City: ASHBY County: MIDDLESI	EX State	e: MA C	Constructio	n Deadli	ne: 03-29-20	13		
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	138.200	163.500	145.000	68.800	30.000	30.000	30.000
Transmitting ERP (watts)	301.383	343.844	123.915	17.212	1.267	0.862	4.339	57.968
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	138.200	163.500	145.000	68.800	30.000	30.000	30.000
Transmitting ERP (watts)	0.559	6.546	72.077	254.800	226.824	50.359	4.678	0.979
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	138.200	163.500	145.000	68.800	30.000	30.000	30.000
Transmitting ERP (watts)	35.557	2.084	1.375	2.194	29.159	209.483	410.600	215.057
Location Latitude Longi	tude	Gı	round Elev	ation S	Structure Hg	to Tip	Antenna St	ructure
Location Latitude Longi	tude		round Elev neters)		Structure Hg meters)	to Tip	Antenna St Registratio	
38 42-38-54.9 N 071-4	7-40.6 W	(m 24		(1	_	to Tip		
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA	7-40.6 W TE ROAD	(m 24	neters) 10.8	(1 4	meters)			
38 42-38-54.9 N 071-4	7-40.6 W TE ROAD	(m 24	neters) 10.8	(1 4	meters)			
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA	7-40.6 W TE ROAD EX State	(m 24	neters) 10.8	(1 4	meters)			
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESS Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	7-40.6 W TE ROAD EX State	(m 24 e: MA C	neters) 40.8 Constructio	(1 4 on Deadlin	meters) 47.2 ne: 03-29-20 180	13	Registratio	n No.
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESI Antenna: 1 Azimuth (from true north)	7-40.6 W TE ROAD EX State	(m 24 e: MA C	neters) 40.8 Constructio	on Deadlin	meters) 47.2 ne: 03-29-20 180	13 225	Registratio	315
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESS Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	7-40.6 W TE ROAD EX State 0 31.100 204.865	(m 24 e: MA C 45 159.800	eters) 40.8 Constructio 90 170.800	(1 4 on Deadlin 135 147.700	meters) 17.2 ne: 03-29-20 180 0 56.300	225 30.000	270 30.000	315 30.000
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESS Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	7-40.6 W TE ROAD EX State 0 31.100 204.865	(m 24 2: MA C 45 159.800 233.420	90 170.800 85.530	(n 4 on Deadlin 135 147.700 11.768	meters) 17.2 ne: 03-29-20 180 0 56.300 0.897 180	225 30.000 0.575	270 30.000 2.961	315 30.000 39.554
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESS Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	7-40.6 W TE ROAD EX State 0 31.100 204.865 0	(m 24 24 25 159.800 233.420 45	90 170.800 85.530 90	(n 4 on Deadlin 135 147.700 11.768 135	meters) 17.2 ne: 03-29-20 180 0 56.300 0.897 180 0 56.300	225 30.000 0.575 225	270 30.000 2.961 270	315 30.000 39.554 315
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESS Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	7-40.6 W TE ROAD EX State 0 31.100 204.865 0 31.100 0.570	(m 24 25: MA C 45 159.800 233.420 45 159.800	90 170.800 85,530 90 170.800	(n 4 4 5 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1 2 1	meters) 17.2 ne: 03-29-20 180 0 56.300 0.897 180 0 56.300	225 30.000 0.575 225 30.000	270 30.000 2.961 270 30.000	315 30.000 39.554 315 30.000
38 42-38-54.9 N 071-4 Address: 601-603 FITCHBURG STA City: ASHBY County: MIDDLESS Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	7-40.6 W TE ROAD EX State 0 31.100 204.865 0 31.100 0.570	(m 24 24 45 159.800 233.420 45 159.800 6.676	90 170.800 85.530 90 170.800 74.271	(n 4 20n Deadlin 135 147.700 11.768 135 147.700 261.076	meters) 17.2 ne: 03-29-20 180 0 56.300 0.897 180 0 56.300 238.587 180	225 30.000 0.575 225 30.000 50.169	270 30.000 2.961 270 30.000 4.787	315 30.000 39.554 315 30.000 1.001

Location Latitude Longit 40 43-05-58.2 N 070-4 Address: 165 GOSLING RD City: NEWINGTON County: ROC	7-28.6 W	(m 7.6		(r 6'	tructure Hgt meters) 7.4 n Deadline: (Antenna St Registration	
Antenna: 1 Azimuth (from true north)		45	90	135	180	225	270	315
Antenna Height AAT (meters) Transmitting ERP (watts)	34.000 205.727	45.500 278.300	68.500 62.928	72.400 5.059	58.800 0.711	51.900 0.597	57.200 1.577	52.000 25.136
Antenna: 2 Azimuth (from true north)		45	90	135	180	225	270	315
Antenna Height AAT (meters)	34.000	45.500	68.500	72.400	58.800	51.900	57.200	52.000
Transmitting ERP (watts)	0.559	3.335	47.419	236.351		26.867	1.510	0.563
Antenna: 3 Azimuth (from true north)		45	90	135	180	225	270	315
Antenna Height AAT (meters)	34.000	45.500	68.500	72.400	58.800	51.900	57.200	52.000
Transmitting ERP (watts)	10.525	0.618	0.497	0.555	7.391	82.592	243.998	90.540
Location Latitude Longi	tude		ound Elev		tructure Hgt meters)	to Tip	Antenna St Registration	
Address: 150 Raymond Road	7-30.3 W	10	7.0		0.7	2013	1231475	
Address: 150 Raymond Road City: Nottingham County: ROCKIN	NGHAM	State: NI	H Consti	ruction D	Deadline: 03-2		1231475	
Address: 150 Raymond Road City: Nottingham County: ROCKIN Antenna: 1 Azimuth (from true north)	NGHAM 0	10 State: NI 45	H Constr	ruction D	Deadline: 03-2	225	1231475 270	315
Address: 150 Raymond Road City: Nottingham County: ROCKIN Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters)	0 54.900	10 State: NI 45 95.800	90 122.100	135 119.300	180 102.200	225 66.300	270 44.100	315 30.000
Address: 150 Raymond Road City: Nottingham County: ROCKIN Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts)	0 54.900 160.334	10 State: NI 45 95.800 230.049	90 122.100 54.265	135 119.300 4.271	180 102.200 0.586	225 66.300 0.522	270 44.100 1.415	315 30.000 21.993
Address: 150 Raymond Road City: Nottingham County: ROCKIN Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	0 54.900 160.334 0	10 State: NI 45 95.800 230.049 45	90 122.100 54.265 90	135 119.300 4.271 135	180 102.200 0.586 180	225 66.300 0.522 225	270 44.100 1.415 270	315 30.000 21.993 315
Address: 150 Raymond Road City: Nottingham County: ROCKIN Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north) Antenna Height AAT (meters)	0 54.900 160.334 0 54.900	10 State: NI 45 95.800 230.049 45 95.800	90 122.100 54.265 90 122.100	135 119.300 4.271 135 119.300	180 102.200 0.586 180 102.200	225 66.300 0.522 225 66.300	270 44.100 1.415 270 44.100	315 30.000 21.993 315 30.000
Address: 150 Raymond Road City: Nottingham County: ROCKIN Antenna: 1 Azimuth (from true north) Antenna Height AAT (meters) Transmitting ERP (watts) Antenna: 2 Azimuth (from true north)	0 54.900 160.334 0 54.900 0.493	10 State: NI 45 95.800 230.049 45	90 122.100 54.265 90	135 119.300 4.271 135	180 102.200 0.586 180 102.200	225 66.300 0.522 225	270 44.100 1.415 270	315 30.000 21.993 315

Call Sign: KNKA226 File Number: Print Date:

Location Latitude Longit 42 43-13-24.3 N 071-14 Address: 50 OLD CANTERBURY RI	4-23.2 W		ound Ele eters) 9.0		Structure Hg (meters) 38.7	t to Tip	Antenna St Registration	
City: NORTHWOOD County: RO		M State	: NH (Construct	tion Deadline	: 03-29-20	013	
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	43.800	80.800	68.900	30.000	53.500	30.000
Transmitting ERP (watts)	114.248	162.456	37.049	2.808	0.392	0.366	0.961	16.015
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	43.800	80.800	68.900	30.000	53.500	30.000
Transmitting ERP (watts)	0.544	3.573	49.915	233.63	38 184.420	30.453	1.413	0.618
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	43.800	80.800	68.900	30.000	53.500	30.000
Transmitting ERP (watts)	8.132	0.494	0.387	0.467	6.390	72.302	182.164	77.916
Location Latitude Longic	tude 6-58.5 W	(m	ound Ele		Structure Hg (meters)	t to Tip	Antenna St Registration	
Address: 96 GROVE RD	0-36.3 W	12.	.5		59.4			
City: RYE County: ROCKINGHA	M State: 1	NH Co	nstructio	on Deadli	ine: 03-29-201	3		
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)		62.100	64.000	64.300		45.100	38.900	54.200
Transmitting ERP (watts)		206.846	49.164	3.766	0.505	0.452	1.193	17.877
Antenna: 2 Azimuth (from true north)		45	90	135	180	225	270	315
Antenna Height AAT (meters)		62.100	64.000	64.300		45.100	38.900	54.200
Transmitting ERP (watts)		2.913	42.460	206.46		24.148	1.373	0.460

90

64.000

0.536

135

64.300

0.576

180

63.700

7.457

225

45.100

86.483

270

38.900

257.603

315

54.200

87.494

Control Points:

Control Pt. No. 2

Address: 100 LOWDER BROOK DR

Antenna: 3 Azimuth (from true north) **0**

Antenna Height AAT (meters)

Transmitting ERP (watts)

City: WESTWOOD County: NORFOLK State: MA Telephone Number: (617)462-7094

45

62.100

0.644

49.700

10.168

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNKA226 File Number: Print Date:

Waivers/Conditions:

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: REGINALD YOUNGBLOOD AT&T MOBILITY SPECTRUM LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign KNLB200	File Number
Radio	Service
WS - Wireless Com	munications Service

FCC Registration Number (FRN): 0014980726

Grant Date 09-27-2010	Effective Date 02-12-2014	Expiration Date 07-21-2017		Print Date	
Market Number MEA001	Chann	Channel Block B Sub-Ma			
	Market Name Boston				
1st Build-out Date 03-13-2017	2nd Build-out Date 09-13-2019	3rd Build-out Dat	te	4th Build-out Date	

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/Mexico), future coordination of any base station transmitters shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNLB200 File Number: Print Date:

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

Spectrum Lease associated with this license. See Spectrum Leasing Arrangement Letter dated 04/01/2005 and File No. 0001999501.

License renewal is granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Pursuant to WCS Order on Reconsideration, FCC 12-130, in order to obtain a renewal expectancy at the 7/21/17 renewal deadline, a licensee must, for each license area, certify that it has maintained, or exceeded, the level of coverage demonstrated for that license area at the 3/13/2017 construction deadline.

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: REGINALD YOUNGBLOOD AT&T MOBILITY SPECTRUM LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign KNLB210	File Number
Radio	Service
WS - Wireless Com	munications Service

FCC Registration Number (FRN): 0014980726

Grant Date 09-27-2010	Effective Date 02-12-2014	Expiration Date 07-21-2017		Print Date	
Market Number MEA001	Chann	Channel Block Sub-Market Desi			
Market Name Boston					
1st Build-out Date 03-13-2017	2nd Build-out Date 09-13-2019	3rd Build-out Dat	te	4th Build-out Date	

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/Mexico), future coordination of any base station transmitters shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNLB210 File Number: Print Date:

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

License renewal is granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Pursuant to WCS Order on Reconsideration, FCC 12-130, in order to obtain a renewal expectancy at the 7/21/17 renewal deadline, a licensee must, for each license area, certify that it has maintained, or exceeded, the level of coverage demonstrated for that license area at the 3/13/2017 construction deadline.

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: REGINALD YOUNGBLOOD AT&T MOBILITY SPECTRUM LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign KNLB297	File Number
Radio	Service
WS - Wireless Com	munications Service

FCC Registration Number (FRN): 0014980726

Grant Date 09-27-2010	Effective Date 02-12-2014	Expiration Date 07-21-2017		Print Date	
Market Number REA001	Chann	Channel Block Sub-Market D 0			
	Market Name Northeast				
1st Build-out Date 03-13-2017	2nd Build-out Date 09-13-2019	3rd Build-out Dat	te	4th Build-out Date	

Waivers/Conditions:

License renewal granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

License renewal is granted on a conditional basis, subject to the outcome of FCC proceeding WT Docket No. 10-112 (see FCC 10-86, paras. 113 and 126).

Pursuant to WCS Order on Reconsideration, FCC 12-130, in order to obtain a renewal expectancy at the 7/21/17 renewal deadline, a licensee must, for each license area, certify that it has maintained, or exceeded, the level of coverage demonstrated for that license area at the 3/13/2017 construction deadline.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: REGINALD YOUNGBLOOD NEW CINGULAR WIRELESS PCS, LLC 2200 N. GREENVILLE AVE, 1W RICHARDSON, TX 75082

Call Sign KNLF216	File Number
Radio	Service
CW - PCS	Broadband

FCC Registration Number (FRN): 0003291192

2 110 8 15 01 10 11 10 11 15 01 (1 1	7			
Grant Date 07-07-2005	Effective Date 11-24-2012	Expiration Date 06-23-2015	Print Date	
Market Number MTA008 Channel Block A Sub-Market Designator 17				
		t Name rovidence		
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out Date	4th Build-out Date	

Waivers/Conditions:

This license is conditioned upon compliance with the provisions of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, FCC 04-255 (rel. Oct. 26, 2004).

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: REGINALD YOUNGBLOOD NEW CINGULAR WIRELESS PCS, LLC 2200 N. GREENVILLE AVE, 1W RICHARDSON, TX 75082

Call Sign WPOI214	File Number		
Radio Service CW - PCS Broadband			

FCC Registration Number (FRN): 0003291192

Grant Date 07-07-2005	Effective Date 11-24-2012	Expiration Date 06-23-2015	Print Date
Market Number MTA008	Chan	nel Block A	Sub-Market Designator 7
		et Name Providence	
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is subject to the condition that the remaining balance of the winning bid amount will be paid in accordance with Part 1 of the Commission's rules, 47 C.F.R. Part 1.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPOI214 File Number: Print Date:

This license is conditioned upon compliance with the provisions of Applications of AT&T Wireless Services, Inc. and Cingular Wireless Corporation For Consent to Transfer Control of Licenses and Authorizations, Memorandum Opinion and Order, FCC 04-255 (rel. Oct. 26, 2004).

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY II LLC

ATTN: REGINALD YOUNGBLOOD AT&T MOBILITY II LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign WPWU950	File Number			
Radio Service				
WZ - 700 MHz Lower Band (Blocks C,				
D))			

FCC Registration Number (FRN): 0016982233

registration ramber (11			
Grant Date 01-24-2003	Effective Date 02-11-2014	Expiration Date 06-13-2019	Print Date
Market Number CMA006	Chan	nel Block C	Sub-Market Designator
		et Name Brockton-Lawrenc	
1st Build-out Date 06-13-2019	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

If the facilities authorized herein are used to provide broadcast operations, whether exclusively or in combination with other services, the licensee must seek renewal of the license either within eight years from the commencement of the broadcast service or within the term of the license had the broadcast service not been provided, whichever period is shorter in length. See 47 CFR §27.13(b).

Operation of the facilities authorized herein, are subject to the condition that harmful interference may not be caused to, but must be accepted from UHF TV transmitters in Canada and Mexico as identified in existing and any future agreements with those countries.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: AT&T MOBILITY II LLC

Call Sign: WPWU950 File Number: Print Date:

This license is subject to compliance with the conditions set forth in the Commission's Order of Modification, WT Docket No. 12-69, DA 14-43, released January 16, 2014.

This is not an official FCC license. It is a record of public information contained in the FCC's licensing database on the date that this reference copy was generated. In cases where FCC rules require the presentation, posting, or display of an FCC license, this document may not be used in place of an official FCC license.



Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: REGINALD YOUNGBLOOD NEW CINGULAR WIRELESS PCS, LLC 3300 E. RENNER ROAD, B3132 RICHARDSON, TX 75082

Call Sign WPZY689	File Number				
Radio Service					
CW - PCS Broadband					

FCC Registration Number (FRN): 0003291192

Grant Date 02-28-2007	Effective Date 02-13-2014	Expiration Date 01-03-2017	Print Date		
Market Number BTA051	Chann	el Block	Sub-Market Designator		
	Market Boston				
1st Build-out Date 12-07-2003	2nd Build-out Date 01-03-2007	3rd Build-out Date	4th Build-out Date		

Waivers/Conditions:

This authorization is subject to the condition that, in the event that systems using the same frequencies as granted herein are authorized in an adjacent foreign territory (Canada/United States), future coordination of any base station transmitters within 72 km (45 miles) of the United States/Canada border shall be required to eliminate any harmful interference to operations in the adjacent foreign territory and to ensure continuance of equal access to the frequencies by both countries.

This authorization is conditioned upon the full and timely payment of all monies due pursuant to Sections 1.2110 and 24.711 of the Commission's Rules and the terms of the Commission's installment plan as set forth in the Note and Security Agreement executed by the licensee. Failure to comply with this condition will result in the automatic cancellation of this authorization.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPZY689 File Number: Print Date:

Pursuant to Order DA 03-617 (rel. March 3, 2003), the designated entity holding period for this license is extended by 703 days, or until the licensee meets its five-year construction requirement, whichever is sooner.

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).

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Federal Communications Commission

Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: REGINALD YOUNGBLOOD AT&T MOBILITY SPECTRUM LLC 2200 N. GREENVILLE AVE, 1W RICHARDSON, TX 75082

Call Sign	File Number				
WQGA763					
Radio Service					
AW - AWS, 1710-1755/2110-2155 MHz					
bar	nds				

FCC Registration Number (FRN): 0014980726

Grant Date 11-29-2006	Effective Date 11-29-2012	Expiration Date 11-29-2021		Print Date				
Market Number BEA003	Char	nnel Block C	1 Block Sub-Market Designator 3					
	Market Name Boston-Worcester-Lawrence-Lowe							
1st Build-out Date	2nd Build-out Date	3rd Build-out Da	ite	4th Build-out Date				

Waivers/Conditions:

This authorization is conditioned upon the licensee, prior to initiating operations from any base or fixed station, making reasonable efforts to coordinate frequency usage with known co-channel and adjacent channel incumbent federal users operating in the 1710-1755 MHz band whose facilities could be affected by the proposed operations. See, e.g., FCC and NTIA Coordination Procedures in the 1710-1755 MHz Band, Public Notice, FCC 06-50, WTB Docket No. 02-353, rel. April 20, 2006.

Grant of the request to update licensee name is conditioned on it not reflecting an assignment or transfer of control (see Rule 1.948); if an assignment or transfer occurred without proper notification or FCC approval, the grant is void and the station is licensed under the prior name.

Conditions:

Pursuant to §309(h) of the Communications Act of 1934, as amended, 47 U.S.C. §309(h), this license is subject to the following conditions: This license shall not vest in the licensee any right to operate the station nor any right in the use of the frequencies designated in the license beyond the term thereof nor in any other manner than authorized herein. Neither the license nor the right granted thereunder shall be assigned or otherwise transferred in violation of the Communications Act of 1934, as amended. See 47 U.S.C. § 310(d). This license is subject in terms to the right of use or control conferred by §706 of the Communications Act of 1934, as amended. See 47 U.S.C. §606.

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: WQGA763 File Number: Print Date:

AWS operations must not cause harmful interference across the Canadian or Mexican Border. The authority granted herein is subject to future international agreements with Canada or Mexico, as applicable.

Commission approval of this application and the licenses contained therein are subject to the conditions set forth in the Memorandum Opinion and Order, adopted on December 29, 2006 and released on March 26, 2007, and revised in the Order on Reconsideration, adopted and released on March 26, 2007. See AT&T Inc. and BellSouth Corporation Application for Transfer of Control, WC Docket No. 06-74, Memorandum Opinion and Order, FCC 06-189 (rel. Mar. 26, 2007); AT&T Inc. and BellSouth Corporation, WC Docket No. 06-74, Order on Reconsideration, FCC 07-44 (rel. Mar. 26, 2007).

PROJECT INFORMATION

SCOPE OF WORK: TELECOMMUNICATIONS FACILITY UPGRADE (LTE BWE 2016 UPGRADE):

SITE ADDRESS:

675 MASSACHUSETTS AVENUE

CAMBRIDGE, MA 02139

LATITUDE:

42.365823" N, 42" 21' 56.96" N

LONGITUDE:

71.103888' W, 71° 06' 14.00" W

TYPE OF SITE:

ROOFTOP / INDOOR EQUIPMENT

TOP OF PENTHOUSE:

OUSF: 185'-0"±

RAD CENTER:

189"-0"±

PROPOSED USE:

CURRENT USE:

TELECOMMUNICATIONS FACILITY

TELECOMMUNICATIONS FACILITY



SITE NUMBER: MA2035

SITE NAME: CAMBRIDGE

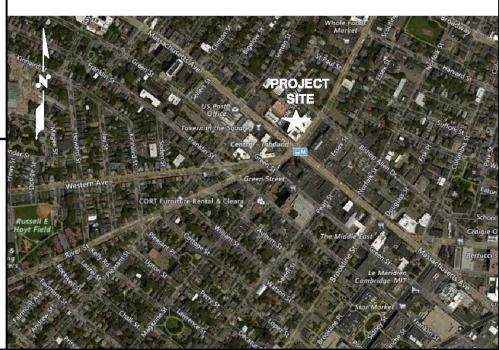
PROJECT: LTE BWE 2016 UPGRADE

DRAWING INDEX			
SHEET NO.	DESCRIPTION	REV.	
T-1	TITLE SHEET	Ĭ	
GN-1	GENERAL NOTES	i	
A-1	ROOF PLAN & ELEVATION	1	
A-2	ANTENNA LAYOUTS	1	
A-3	DETAILS	1	
RF-1	RF PLUMBING DIAGRAM	1	
G-1	GROUNDING DETAILS	Ĭ	

DIRECTIONS TO SITE:

FROM FRAMINGHAM, MA. HEAD NORTHEAST TOWARD LEGGAT McCALL CONN. 0.2 MILES. TURN LEFT AT LEGGAT McCALL CONN. 0.2 MILES. SLIGHT LEFT AT BURR ST. 489 FT. TURN LEFT AT COCHICUATE RD. 295 FT. TAKE THE RAMP TO I—90 E/MASSPIKE W/SPRINGFIELD/BOSTON. TOLL ROAD. 0.6 MILES. KEEP RIGHT AT THE FORK TO CONTINUE TOWARD I—90 E AND MERGE ONTO I—90 E. PARTIAL TOLL ROAD. 14.0 MILES. TAKE EXIT 18 ON THE LEFT TOWARD BRIGHTON/CAMBRIDGE. TOLL ROAD. 0.4 MILES. KEEP RIGHT AT THE FORK TO CONTINUE TOWARD CAMBRIDGE ST AND MERGE ONTO CAMBRIDGE ST. PARTIAL TOLL ROAD. 0.3 MILES. CONTINUE ONTO RIVER ST. 0.1 MILES. TURN LEFT AT PUTNAM AVE. 0.5 MILES. TURN RIGHT AT MASSACHUSETTS AVE/MASSACHUSETTS 2A E. DESTINATION WILL BE ON THE LEFT.

VICINITY MAP



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GENERAL NOTES

- THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY
 ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES
 NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY
 REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
- 3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

UNDERGROUND SERVICE ALERT



CALL TOLL FREE 1-888-DIG-SAFE

OR CALL 811

72 HOURS

Hudson Design Groupus GD

BUILDING 20 NORTH, SUITE 3090 N. ANDOVER, MA 01845



SITE NUMBER: MA2035 SITE NAME: CAMBRIDGE

675 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139 MIDDLESEX COUNTY



FRAMINGHAM, MA 01701

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QROUNDING NOTES

- 1. THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE—SPECIFIC (UL, LPI, OR NFPA) LIGHTING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- 3. THE SUBCONTRACTOR SHALL PERFORM IEEE FALL—OF—POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- 4. METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS FOUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- 6. EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- 7. APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- 8. ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- 10. MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- 11. METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- 12. ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250,50

GENERAL NOTES

1. FOR THE PURPOSE OF CONSTRUCTION DRAWING, THE FOLLOWING DEFINITIONS SHALL APPLY:

CONTRACTOR — SAI
SUBCONTRACTOR — GENERAL CONTRACTOR (CONSTRUCTION)
OWNER — AT&T MOBILITY

- 2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE ATTENTION OF CONTRACTOR.
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC ALITHORITY REGARDING THE PERFORMANCE OF THE WORK. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- DRAWINGS PROVIDED HERE ARE NOT TO BE SCALED AND ARE INTENDED TO SHOW OUTLINE ONLY.
- UNLESS NOTED OTHERWISE, THE WORK SHALL INCLUDE FURNISHING MATERIALS, EQUIPMENT, APPURTENANCES, AND LABOR NECESSARY TO COMPLETE ALL INSTALLATIONS AS INDICATED ON THE DRAWINGS.
- "KITTING LIST" SUPPLIED WITH THE BID PACKAGE IDENTIFIES ITEMS THAT WILL BE SUPPLIED BY CONTRACTOR, ITEMS NOT INCLUDED IN THE BILL OF MATERIALS AND KITTING LIST SHALL BE SUPPLIED BY THE SUBCONTRACTOR.
- THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION SPACE FOR APPROVAL BY THE CONTRACTOR.
- SUBCONTRACTOR SHALL DETERMINE ACTUAL ROUTING OF CONDUIT, POWER AND T1 CABLES, GROUNDING CABLES AS SHOWN ON THE POWER, GROUNDING AND TELCO PLAN DRAWING. SUBCONTRACTOR SHALL UTILIZE EXISTING TRAYS AND/OR SHALL ADD NEW TRAYS AS NECESSARY, SUBCONTRACTOR SHALL CONFIRM THE ACTUAL ROUTING WITH THE CONTRACTOR.
- 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF OWNER.
- 11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER ITEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- ALL CONCRETE REPAIR WORK SHALL BE DONE IN ACCORDANCE WITH AMERICAN CONCRETE INSTITUTE (ACI) 301.

- 14. ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR—ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
- 15. ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
- 16. CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF ATACT SITES."
- 17. SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- 18. THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- 19. SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
- 20. APPLICABLE BUILDING CODES:

SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.

BUILDING CODE: MA STATE BUILDING CODE 780 CMR 8TH EDITION AND IBC 2009
ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS
LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS:

AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE:

AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)

MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;

TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL

EQUIPMENT AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

FOR ANY CONFLICTS BETWEEN SECTIONS OF LISTED CODES AND STANDARDS REGARDING MATERIAL, METHODS OF CONSTRUCTION, OR OTHER REQUIREMENTS, THE MOST RESTRICTIVE REQUIREMENT SHALL GOVERN. WHERE THERE IS CONFLICT BETWEEN A GENERAL REQUIREMENT AND A SPECIFIC REQUIREMENT, THE SPECIFIC REQUIREMENT SHALL GOVERN.

			ABBREVIATIONS		
AGL	ABOVE GRADE LEVEL	EQ	EQUAL	REQ	REQUIRED
AWG	AMERICAN WIRE GAUGE	GC	GENERAL CONTRACTOR	RF	RADIO FREQUENCY
BBU	BATTERY BACKUP UNIT	GRC	GALVANIZED RIGID CONDUIT	TBD	TO BE DETERMINED
BTCW	BARE TINNED SOLID COPPER WIRE	MGB	MASTER GROUND BAR	TBR	TO BE REMOVED
BGR	BURIED GROUND RING	MIN	MINIMUM	TBRR	TO BE REMOVED AND REPLACED
BTS	BASE TRANSCEIVER STATION	P	PROPOSED	TYP	TYPICAL
E	EXISTING	NTS	NOT TO SCALE	UG	UNDER GROUND
EGB	EQUIPMENT GROUND BAR	RAD	RADIATION CENTER LINE (ANTENNA)	ИF	VERIFY IN FIELD TH OF MA
EGR	EQUIPMENT GROUND RING	REF	REFERENCE		DEREK J

Hudson Design Groupus 1600 O\$6000 STREET BULDING 20 NORTH, SUITE 3090 NANDOVER, MA DIB45 FAX: (978) 335-539



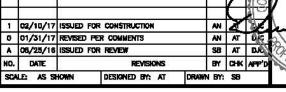
SITE NUMBER: MA2035 SITE NAME: CAMBRIDGE

675 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139 MIDDLESEX COUNTY



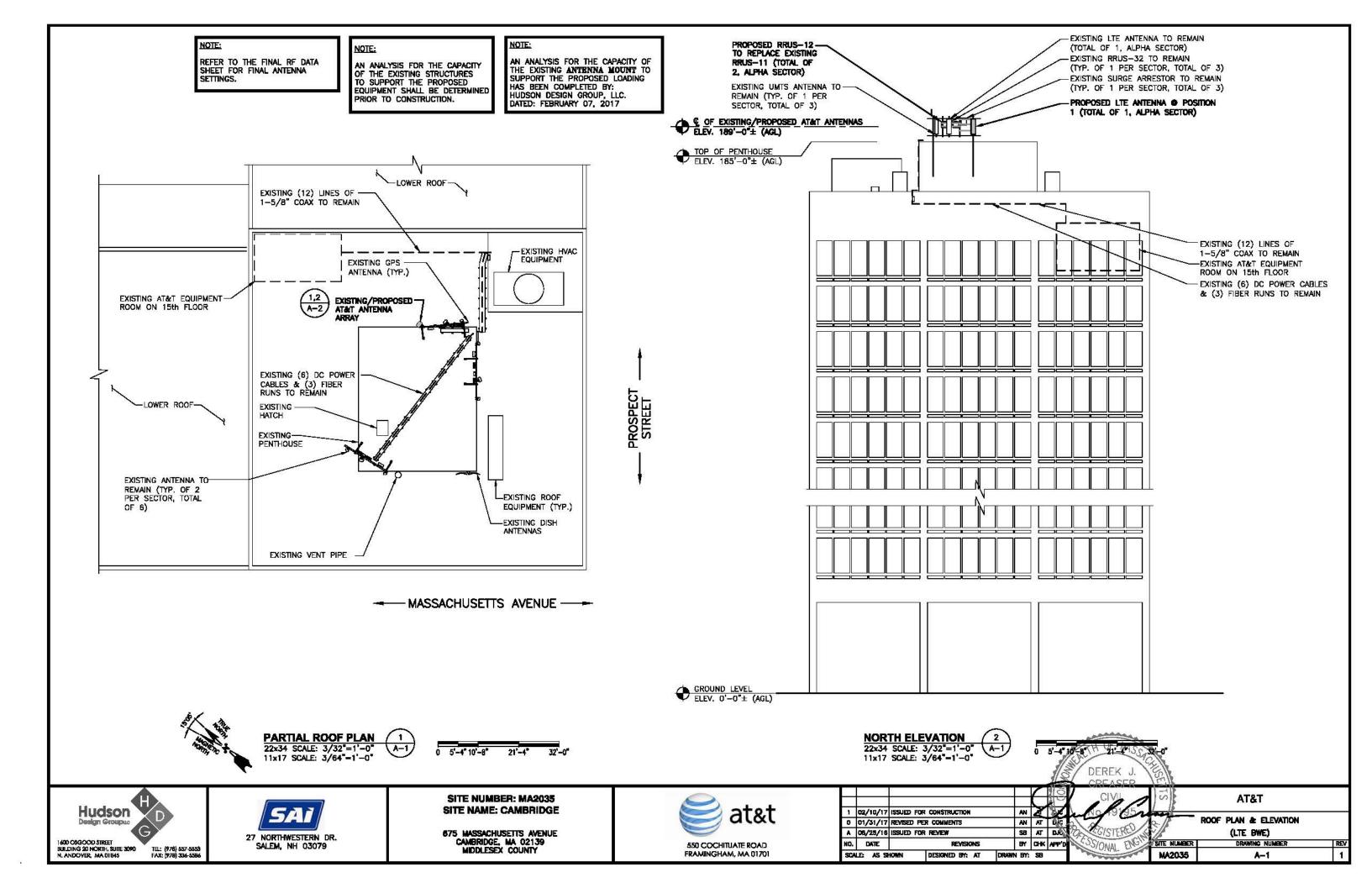
550 COCHITIATE ROAD

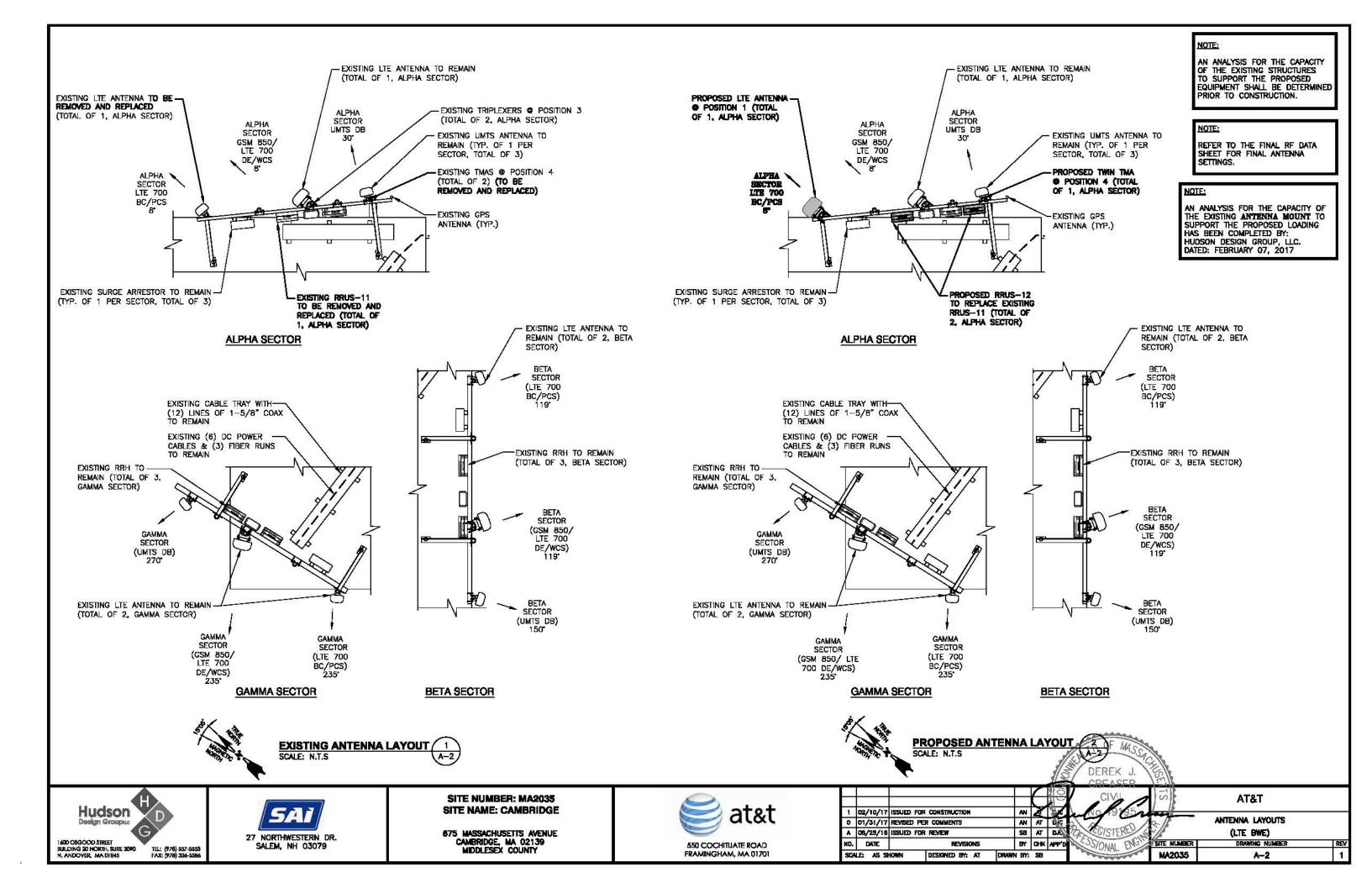
FRAMINGHAM, MA 01701



GENERAL NOTES
(LTE BWE)

SITE NUMBER DRAWING NUMBER
MA2035 GN-1





NOTE:

REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

NOTE:

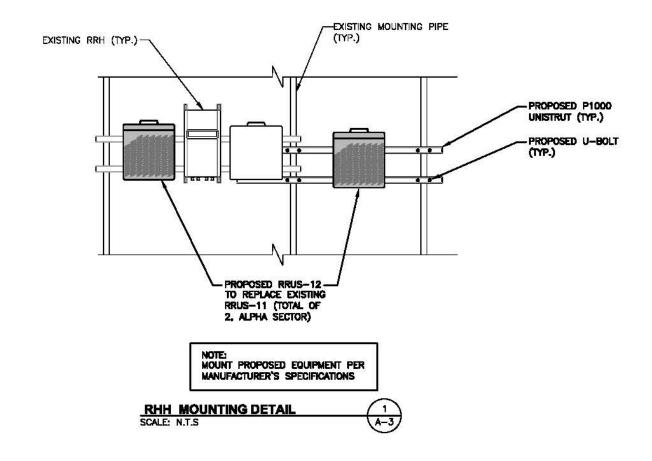
AN ANALYSIS FOR THE CAPACITY
OF THE EXISTING STRUCTURES
TO SUPPORT THE PROPOSED
EQUIPMENT SHALL BE DETERMINED
PRIOR TO CONSTRUCTION.

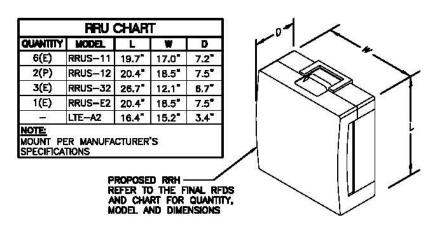
NOTE:

AN ANALYSIS FOR THE CAPACITY OF THE EXISTING ANTENNA MOUNT TO SUPPORT THE PROPOSED LOADING HAS BEEN COMPLETED BY: HUDSON DESIGN GROUP, LLC. DATED: FEBRUARY 07, 2017

EXISTING ANTENNA SCHEDULE					
SECTOR	MAKE	MODEL#	SIZE (INCHES)		
ALPHA	KMW	AM-X-14-65-00T-RET	48.0x11.8x5.9		
	_	7-1	-		
	CCI	OPA-65R-LCUU-H4	48.0x14.4x7.3		
	KATHREIN	800-10121	54.5x10.3x5.9		

PROPOSED ANTENNA SCHEDULE					
SECTOR	MAKE	MODEL#	SIZE (INCHES)		
CACODITA	CCI	OPA-65R-LCUU-H4	48.0x14.4x7.3		
	-	=	(-		
ALPHA	CCI	OPA-65R-LCUU-H4	48.0x14.4x7.3		
	KATHREIN	800-10121	54.5x10.3x5.9		





PROPOSED RRH DETAIL
SCALE: N.T.S



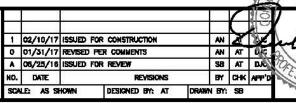


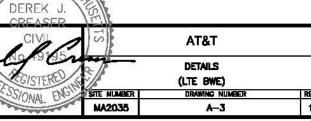


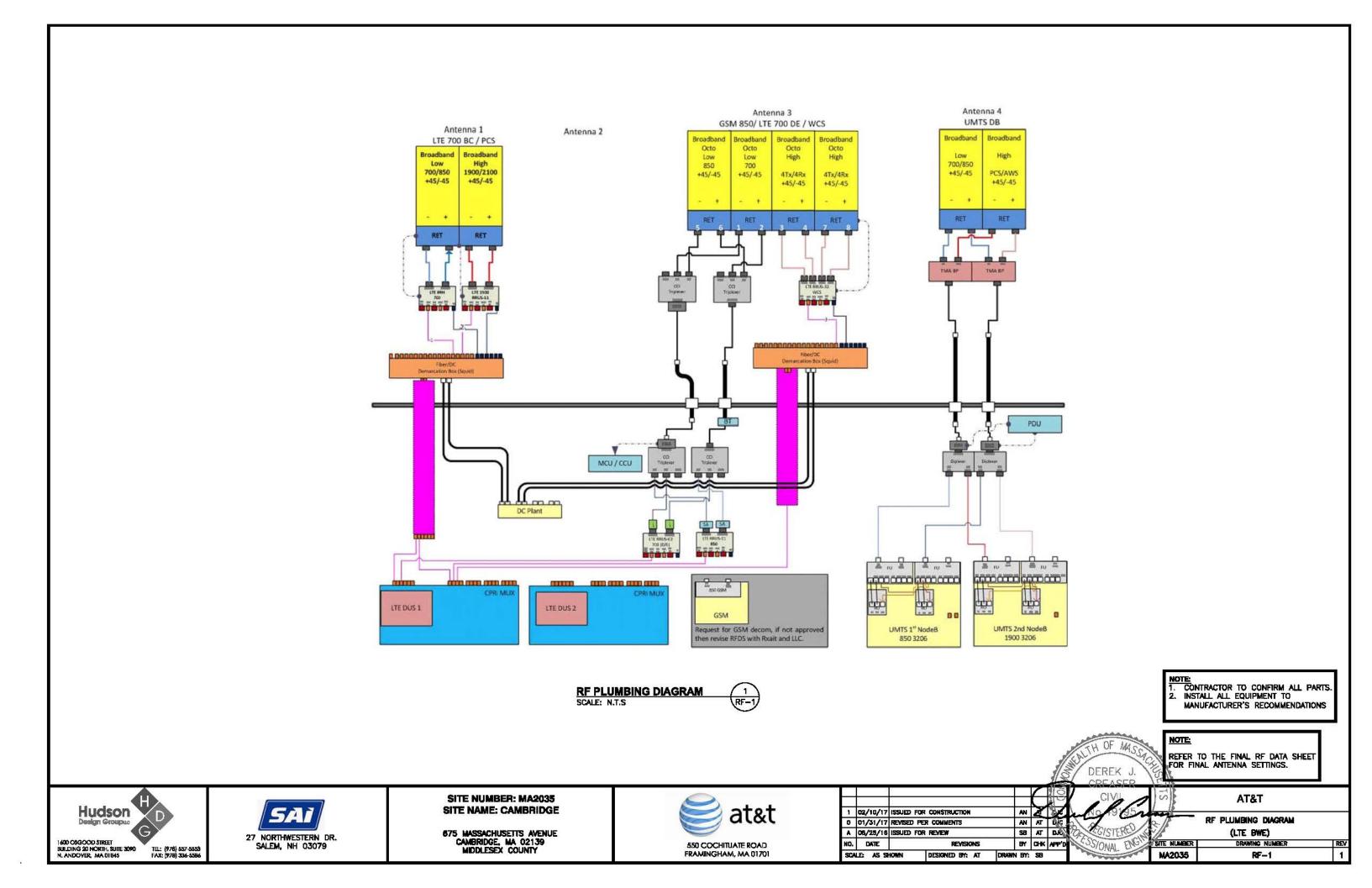
SITE NUMBER: MA2035 SITE NAME: CAMBRIDGE

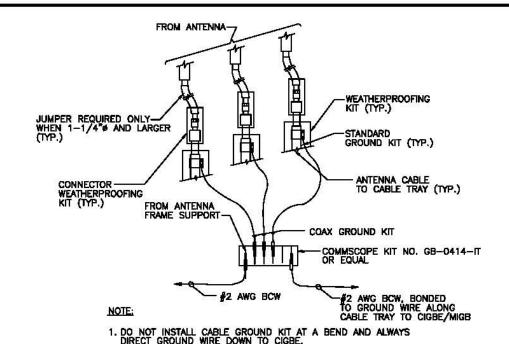
675 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139 MIDDLESEX COUNTY

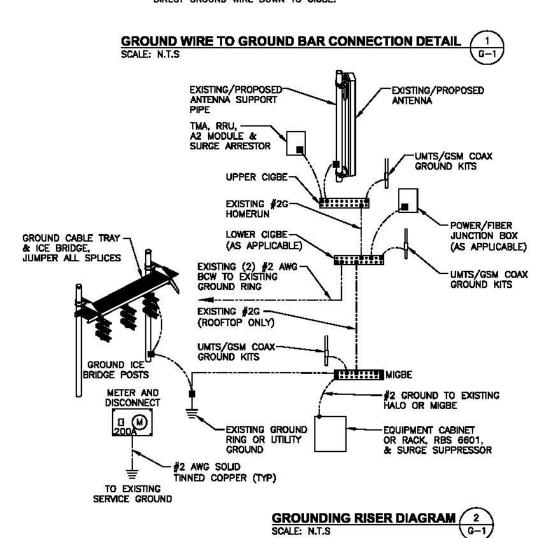


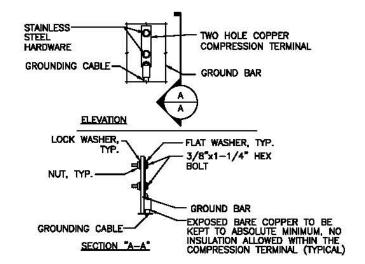












- 1. "DOUBLING UP" OR "STACKING" OF CONNECTION IS NOT PERMITTED.
- OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATION. 3. CADWELD DOWNLEADS FROM UPPER EGB, LOWER EGB, AND MGB

TYPICAL GROUND BAR CONNECTION DETAIL SCALE: N.T.S

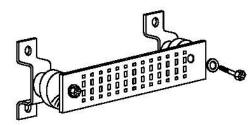
EACH GROUND CONDUCTOR TERMINATING ON ANY GROUND BAR SHALL HAVE AN IDENTIFICATION TAG ATTACHED AT EACH END THAT WILL IDENTIFY ITS

SECTION "P" - SURGE PRODUCERS

CABLE ENTRY PORTS (HATCH PLATES) (#2)
GENERATOR FRAMEWORK (IF AVAILABLE) (#2) TELCO GROUND BAR COMMERCIAL POWER COMMON NEUTRAL/GROUND BOND (#2)
+24V POWER SUPPLY RETURN BAR (#2)
-48V POWER SUPPLY RETURN BAR (#2)
RECTIFIER FRAMES.

SECTION "A" - SURGE ABSORBERS

INTERIOR GROUND RING (#2) EXTERNAL EARTH GROUND FIELD (BURIED GROUND RING) (#2) METALLIC COLD WATER PIPE (IF AVAILABLE) (#2) BUILDING STEEL (IF AVAILABLE) (#2)







at&t 550 COCHITUATE ROAD FRAMINGHAM, MA 01701

Hudson 1600 OSGOOD STREET BUILDING 20 NORTH, SUITE 3090 N. ANDOVER, MA DI 845



SITE NUMBER: MA2035 SITE NAME: CAMBRIDGE

675 MASSACHUSETTS AVENUE CAMBRIDGE, MA 02139 MIDDLESEX COUNTY





65° OctoPort Multi-Band Antenna

Model OPA-65R-LCUU-H4



Octoport Multi-Band Antenna Array

Benefits

- RET System allows Independent Tilt of each band specific paired port
- Reduces tower loading
- Frees up space for tower mounted Remote Radio Heads
- Single radome with eight ports
- All Band design simplifies radio assignments
- Sharp elevation beam eases network planning

The CCI Octoport Multi-Band Antenna Array is an industry first 8-port antenna with full WCS Band Coverage. With four high band ports covering PCS, AWS and WCS bands, two 700 MHZ ports, and two 850 MHz ports our octoport antenna is ready for 4X4 high band MIMO.

Modern networks demand high performance, consequently CCI has incorporated several new and innovative design techniques to provide an antenna with excellent side-lobe performance, sharp elevation beams, and high front to back ratio.

Multiple networks can now be connected to a single antenna, reducing tower loading and leasing expense, while decreasing deployment time and installation cost.

Full band capability for 700 MHz, Cellular 850 MHz, PCS 1900 MHz, AWS 1710/2155 MHz and WCS 2300 MHz coverage in a single enclosure.

Features

- ♦ High Band Ports include WCS Band
- Four High Band ports with four Low Band ports in one antenna
- ♦ Sharp elevation beam
- ♦ Excellent elevation side-lobe performance
- ♦ Excellent MIMO performance due to array spacing
- ♦ Excellent PIM Performance
- ♦ A multi-network solution in one radome

Applications

- ♦ 4x4 MIMO on High Band and Dual 2x2 MIMO on 700 & 850 Low Bands
- ♦ Adding additional capacity without adding additional antennas
- Adding WCS Band without increasing antenna count









65° OCTOPORT MULTI-BAND ANTENNA

Model OPA-65R-LCUU-H4

OPA-65R Multi-Band Antenna Electrical Specifications

-	2 X Low Band 2 X Low Band Ports (L) which Ports (C) which		4 X High Band Ports (H1 & H2) which cover the full range from 1710-2360 MHz			
Frequency Range	cover the range from 698-787	cover the range from 824-894	1850-1990 MHz	1710-1755 Mi	/2110-2170 Hz	2305-2360 MHz
Gain	12.7 dBi	13.3 dBi	15.7 dBi	14.9 dBi	16.4 dBi	16.8 dBi
Azimuth Beamwidth (-3dB)	65°	63°	63°	68°	62°	58°
Elevation Beamwidth (-3dB)	18.9°	16.5°	8.9°	9.8°	7.7°	6.9°
Electrical Downtilt	0° to 10°	0° to 10°	0° to 8°	0° to 8°	0° to 8°	0° to 8°
Elevation Sidelobes (1st Upper)	< -20 dB	< -18 dB	< -20 dB	< -20 dB	< -18 dB	< -18 dB
Front-to-Back Ratio @180°	> 28 dB	> 28 dB	> 30 dB	> 30 dB	> 30 dB	> 30 dB
Front-to-Back Ratio over ± 20°	> 28 dB	> 27 dB	> 28 dB	> 28 dB	> 26 dB	> 26 dB
Cross-Polar Discrimination (at Peak)	> 20 dB	> 20 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
Cross-Polar Discrimination (at ± 60°)	> 15 dB	> 13 dB	> 17 dB	> 17 dB	> 17 dB	> 17 dB
Cross-Polar Port-to-Port Isolation	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB	> 25 dB
VSWR	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1	< 1.5:1
Passive Intermodulation (2x20W)	≤ -150dBc	≤ -150dBc	≤ -150dBc	≤ -150dBc	≤ -150dBc	≤ -150dBc
Input Power	500 Watts CW	500 Watts CW	300 Watts CW	300 Watts CW	300 Watts CW	300 Watts CW
Polarization	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°	Dual Pol 45°
Input Impedance	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms	50 Ohms
Lightning Protection	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground	DC Ground

Mechanical Specifications

Dimensions (LxWxD) 48.0 x 14.4 x 7.3 inches (1218 x 366 x 185 mm)

Survival Wind Speed > 150 mph

Front Wind Load 152 lbs (676 N) @ 100 mph (161 kph) Side Wind Load 86 lbs (381 N) @ 100 mph (161 kph)

Equivalent Flat Plate Area 5.9 ft² (0.60 m²)
Weight (w/o RET/Mounting) 57 lbs (26 kg)
RET System Weight 7.0 lbs (3.0 kg)

Connector 8; 7-16 DIN female long neck

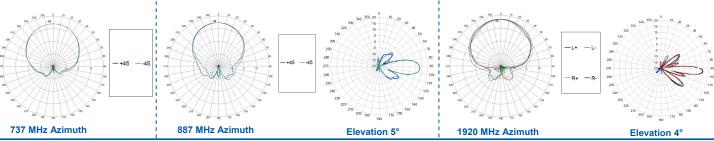
Mounting Pole 2-5 inches (5-12 cm)





Bottom View Rear View

Antenna Patterns*



*Typical antenna patterns. For detail information on antenna pattern, please contact us at info@cciproducts.com. All specifications are subject to change without notice.



65° OCTOPORT MULTI-BAND ANTENNA

Model OPA-65R-LCUU-H4

Ordering Information:

OPA-65R-LCUU-H4 4 Foot Octoport Antenna with 65° Azimuth Beamwidth and factory

installed RET Actuators (4)

OPA-65R-LCUU-H4-K Complete Kit with Antenna, Factory Installed Actuators (4) and

MBK-02 Mounting Bracket

BSA-RET200 **RET Actuator**

MBK-02 Mounting Bracket (Top & Bottom) with 0° through 10° Mechanical

tilt Adjustment: See Installation Guide 50-000038-01 for Details:

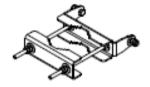
Weight 10.3 Lbs. (4.7 kg)

MRK-02 **Bottom** Mounting **Bracket**

MBK-02 Top

Mounting

Bracket



RET [Remote Electrical Tilt] System

General Specification

Electrical Specification

Part Number BSA-RET200 Interface Signal Data I dc **Protocols** AISG 2.0 Input Voltage Range 10-30 Vdc RET Type (Reference AISG 1.1) Type 1 Current consumption during tilting 120mA at Vin = 24V

Adjustment Cycles >10,000 cycles Current consumption idle 55mA at Vin=24V

Tilt Accuracy ±0.1° Hardware Interface AISG - RS 485 A/B

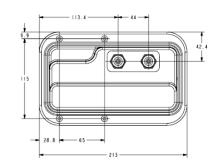
-40°C to +70°C Temperature Range Input Connector 1x8-pin Daisy Chain In Male **Output Connector** 1x8-pin Daisy Chain Out Female

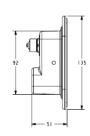
Mechanical Specification and Dimensions

Housing Material ASA / ABS / Aluminum

Dimensions (H x W x D) 8 x 5 x 2 inches (213 x 135 x 51 mm)

Weight 1.5 lbs (0.68 kg)





Standards Compliance

EN 60950-1, UL 60950-1 Safety

Emission EN 55022 EN 55024 **Immunity**

IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5, IEC 60068-2-6, IEC 60068-2-11, IEC 60068-2-14, Environmental

IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-2-30, IEC 60068-2-52, IEC 60068-2

-64, GR-63-CORE 4.3.1, EN60529 IP24

Regulatory Certification

AISG, FCC Part 15 Class B, CE, CSA US

RRUS 32 B30



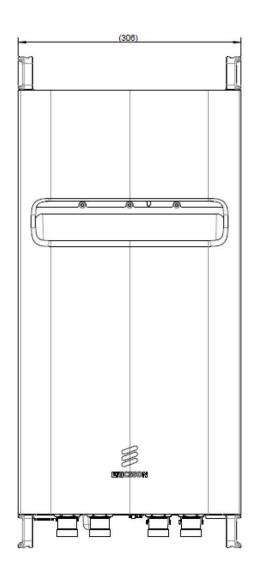


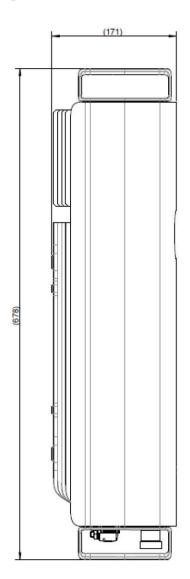
- > WCS A+B blocks
 - -TX = 2350 2360 MHz
 - -RX = 2305 2315 MHz
- > CPRI 2 ports x 10 Gbps
- Dimensions (incl. feet and sunshield)
 - Height: 26.7" (678 mm)
 - Width: 12.1" (306 mm)
 - Depth: 6.7" (171 mm)
- > Weight, excl. mounting hardware
 - 60 lbs (23 kg)



MECHANICAL OUTLINE







(millimeters)

PRELIMINARY

RRUS 12



- 2x60 Watts
- > GSM, WCDMA & LTE
- > Frequencies:
 - Band 2 (PCS, KRC 161 299/2)
 - Band 4 (AWS, KRC 161 349/2)
 - Band 5 (850MHz, KRC 161 321/2)
- > IBW: 40 MHz (B2, B4), 25 MHz (B5)
- > Up to 4 carriers WCDMA or LTE
- > 2.5 Gbps CPRI
- > 6 external alarms
- DC supply (AC as an option)
- Dimensions (HxWxD): 20.4"x18.5"x7.5"
 (including sun shield and handle)
- Weight: 50 lbs, excluding mounting hardware
 - 58 lbs in Extranet description, applicable to heaviest (non-AT&T) frequency model



RRUS 11 – RRUS 12 COMPARISON





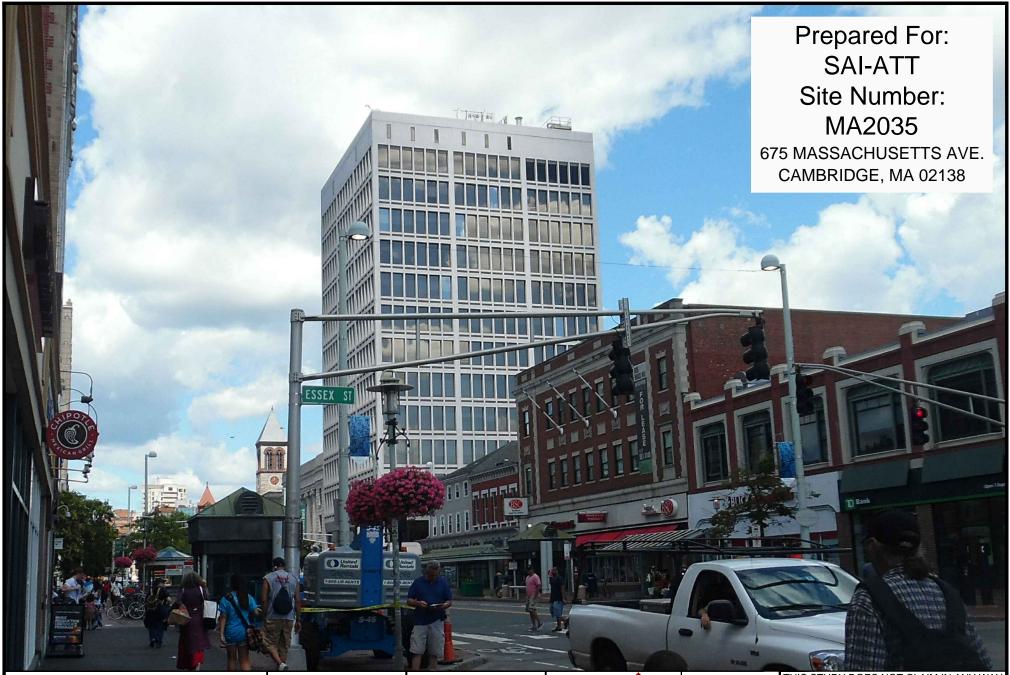
RRUS 11

- > GSM, WCDMA, LTE
- > 4 carriers over 20 MHz IBW
 - 4 carriers WCDMA, LTE
- > Up to 20 MHz LTE
- > Up to 2 x 40 W
- \rightarrow IBW = up to 20 MHz
- > 19.7"x17.0"x7.2"
- > 50 lbs



RRUS 12

- > GSM, WCDMA, LTE
- > 8 carriers over 40 MHz IBW
 - 4 carriers WCDMA, LTE
- Up to 20 MHz LTE
- Up to 2 x 60 W
- \rightarrow IBW = up to 40 MHz
- > 20.4"x18.5"x7.5"
- > 50 lbs
 - > 58 lbs in Extranet description



SITE NO: MA2035 SITE NAME: CAMBRIDGE

ADDRESS:

675 MASSACHUSETTS AVE. CAMBRIDGE, MA 02138



550 COCHITUATE ROAD FRAMINGHAM, MA 01701





1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 3090
N. ANDOVER, MA 01845
FAX: (978) 336-5586

REV: 0

SITE TYPE: ROOFTOP DATE: 07/24/15

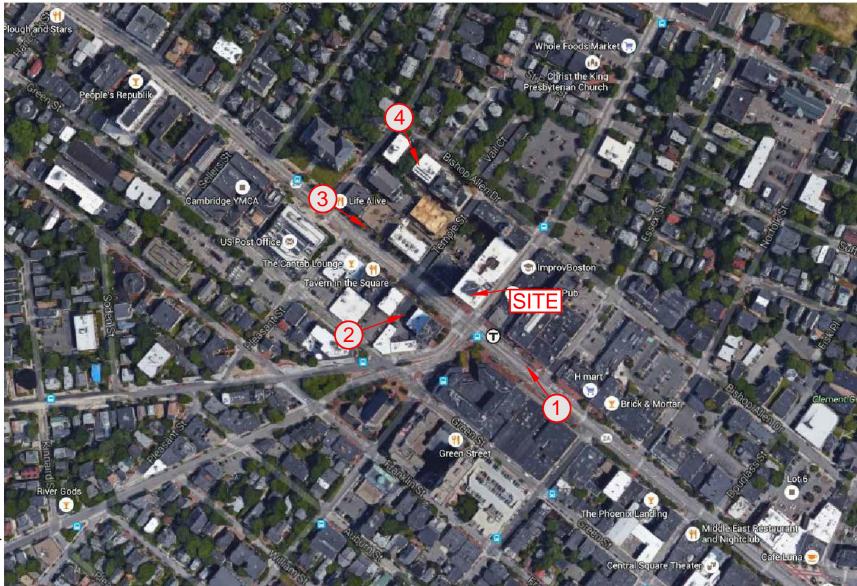
DRAWN BY: KMS SCALE: N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY TO SHOW THE ONLY AREAS OF VISIBILITY. IT IS MEANT TO SHOW A BROAD REPRESENTATION OF AREAS WHERE THE PROPOSED INSTALLATION MAY BE VISIBLE BASED UPON THE BEST INFORMATION FOR TOPOGRAPHY AND VEGETATION LOCATIONS AVAILABLE TO DATE.

PAGE 1 OF 11

LOCUS MAP

TAKEN FROM GOOGLE.COM ON 07-24-15





SITE NO: MA2035 SITE NAME: CAMBRIDGE

ADDRESS:

675 MASSACHUSETTS AVE. CAMBRIDGE, MA 02138



550 COCHITUATE ROAD FRAMINGHAM, MA 01701





SITE TYPE: ROOFTOP DATE: 07/24/15 DRAWN BY: KMS

SCALE: N.T.S.

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PAGE 2 OF 11

PHOTO LOCATION

EXISTING CONDITIONS

LOCATION #1

DATE OF PHOTO: 07-23-15



DETAIL OF EQUIPMENT

VIEW NORTHWEST FROM MASSACHUSETTS AVENUE

SITE NO: MA2035 SITE NAME: CAMBRIDGE

ADDRESS: 6

675 MASSACHUSETTS AVE. CAMBRIDGE, MA 02138



550 COCHITUATE ROAD FRAMINGHAM, MA 01701





DRAWN BY: KMS SCALE: N.T.S.

DATE: 07/24/15

SITE TYPE: ROOFTOP

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PAGE 3 OF 11

EXISTING CONDITIONS

LOCATION # 2

DATE OF PHOTO: 07-23-15

DETAIL OF EQUIPMENT



VIEW NORTHEAST FROM GREEN STREET

SITE NO: MA2035 SITE NAME: CAMBRIDGE

ADDRESS: 675 MASSACHUSETTS AVE. CAMBRIDGE, MA 02138



550 COCHITUATE ROAD FRAMINGHAM, MA 01701





DRAWN BY: KMS SCALE: N.T.S.

SITE TYPE: ROOFTOP

DATE: 07/24/15

THIS STUDY DOES NOT CLAIM IN ANY WAY
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FOR TOPOGRAPHY AND VEGETATION
LOCATIONS AVAILABLE TO DATE.

PAGE 6 OF 11

EXISTING CONDITIONS

LOCATION # 3

DATE OF PHOTO: 07-23-15



DETAIL OF EQUIPMENT

VIEW SOUTHEAST FROM MASSACHUSETTS AVE

SITE NO: MA2035 SITE NAME: CAMBRIDGE

ADDRESS:

675 MASSACHUSETTS AVE. CAMBRIDGE, MA 02138



550 COCHITUATE ROAD FRAMINGHAM, MA 01701





SITE TYPE: ROOFTOP DATE: 07/24/15 DRAWN BY: KMS

SCALE: N.T.S.

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FOR TOPOGRAPHY AND VEGETATION
LOCATIONS AVAILABLE TO DATE.

PAGE 9 OF 11

EXISTING/PROPOSED CONDITIONS

LOCATION # 4

DATE OF PHOTO: 07-23-15



VIEW SOUTHEAST FROM INTERSECTION OF INMAN STREET AND BISHOP ALLEN DRIVE (EQUIPMENT NOT VISIBLE)

SITE NO: MA2035 SITE NAME: CAMBRIDGE

ADDRESS: 675 MASSACHUSETTS AVE. CAMBRIDGE, MA 02138



550 COCHITUATE ROAD FRAMINGHAM, MA 01701 27 NORTHWESTERN DR SALEM, NH 03079



SITE TYPE: ROOFTOP DATE: 07/24/15 DRAWN BY: KMS

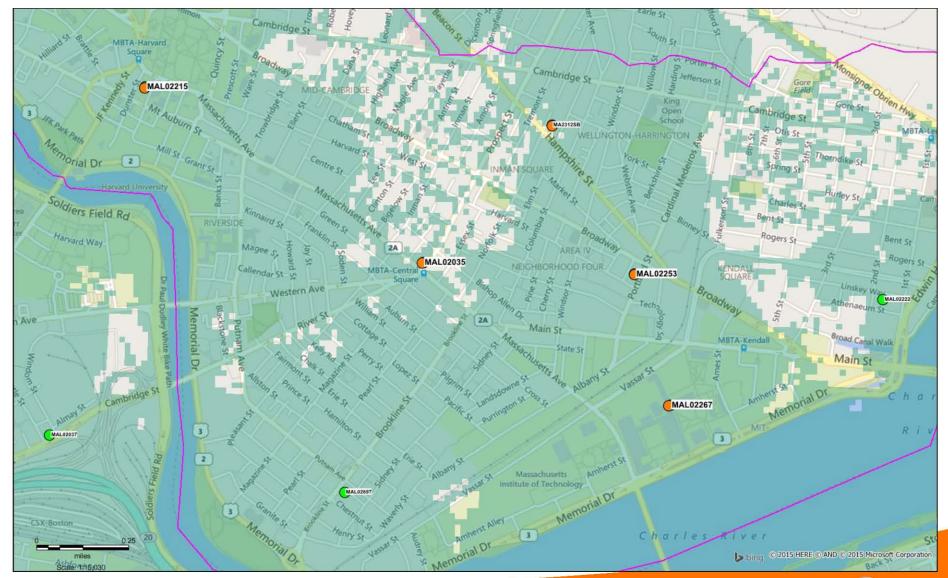
DRAWN BY: KMS SCALE: N.T.S.

THIS STUDY DOES NOT CLAIM IN ANY WAY
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LOCATIONS AVAILABLE TO DATE.

PAGE 9 OF 11

Cambridge Coverage Plot Without MAL02035







Cambridge Coverage Plot With MAL02035

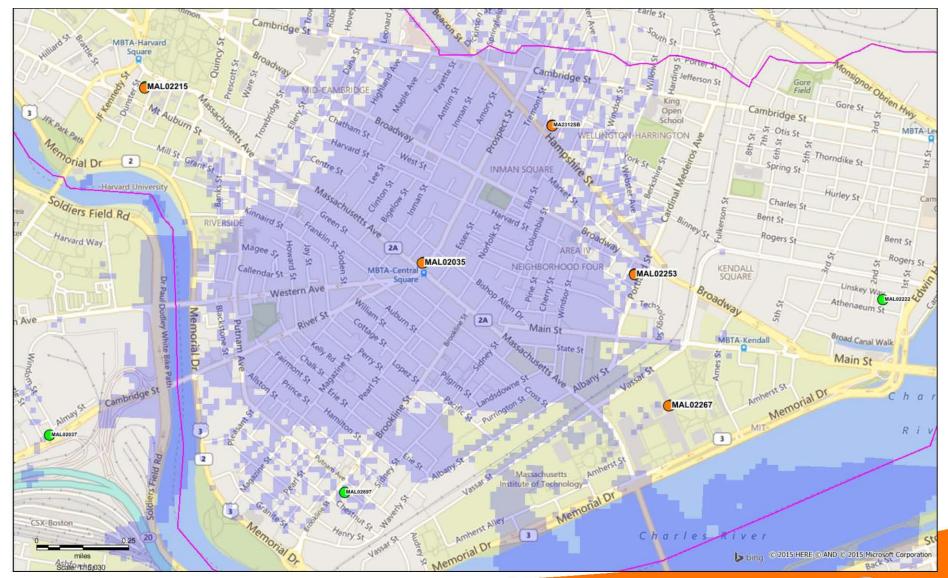






Cambridge Coverage Plot Individual MAL02035









February 7, 2017



SAI Communications 27 Northwestern Drive Salem NH, 03079

RE:

Site Number:

MA2035 (BWE)

Site Name:

Cambridae

Site Address:

675 Massachusetts Avenue

Cambridge, MA 02138

To Whom It May Concern:

Hudson Design Group LLC (HDG) has been authorized by AT&T to perform a structural assessment on the existing structure to determine its capability of supporting the following additional equipment loading:

- (1) OPA-65R-LCUU-H4 Antenna (in place of one existing AM-X-CD-14-65-00T-RET antenna) (Alpha)
- (2) RRUS-12 RRH's (in place of two existing RRUS-11 RRH's) (Alpha)
- (1) Twin TMA (Alpha)

Based on our evaluation, we have determined that the existing structure **IS CAPABLE** of supporting the proposed loading.

HDG reviewed field photographs and the previous HDG Structural Analysis dated June 10, 2015 to determine this assessment.

This analysis was conducted in accordance with EIA/TIA-222-G, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, the International Building Code 2009, and the Massachusetts State Building Code, 8th edition.

This determination was based on the following limitations and assumptions:

- 1. Equipment and locations should not deviate from the construction drawings without written approval of the engineer.
- 2. HDG is not responsible for any modifications completed prior to and hereafter which HDG was not directly involved.
- All structural members and their connections are assumed to be in good condition and are free from defects with no deterioration to its member capacities. Contractor is to perform a preinspection to confirm.
- 4. All antennas, coax cables and waveguide cables are assumed to be properly installed and supported as per the manufacturer's requirements.
- 5. All components supporting the AT&T equipment are assumed to be designed to all applicable codes and designed for identical to or larger than the current loads.

Please feel free to contact our office should you have any questions.

Respectfully Submitted, Hudson Design Group LLC

Michael Cabral Structural Dept. Head Danie P. Hamm, PE Principal DANIEL

HAMM CIVIL

p: 978.557.5553 f: 978.336.5586 a: 1600 Osgood Street, Building 20 North, Sulte 3090, N. Andover, MA 01845 p: 413.588.8139 f: 413.517.0590 a: 116 Pleasant Street, Ste 302, Easthampton, MA 01027



THEORETICAL REPORT



Site Number: MA2035
Site Name: Cambridge
Latitude: 42.3658239
Longitude: -71.1038889

Address: 675 Massachusetts

Avenue, Cambridge, MA

<u>Conclusion:</u> AT&T's existing + proposed antenna installation is calculated to be within the FCC Standard for Uncontrolled/General Public and Controlled/Occupational Maximum Permissible Exposure (MPE).

Prepared by: SAI Communications

260 Cedar Hill Street Marlborough, MA 01752

(603) 421-0470

Date of Report: November 30, 2015

Table of Contents

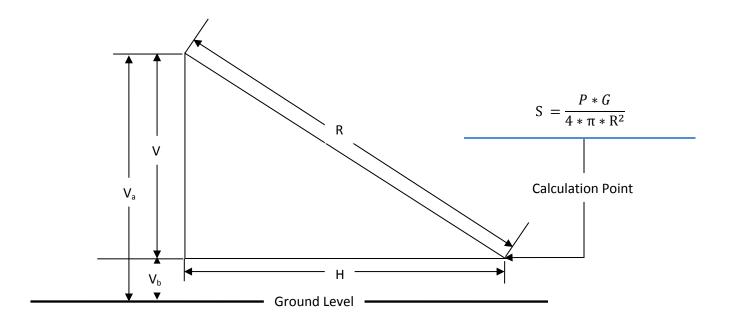
ntroduction	3
RF Exposure Prediction Method	3
Case Summary	
RF Design Specifications	
FCC Guidelines	
FCC RF Exposure Limits	
Calculation Results (6ft AGL)	
Statement of Certification	

Introduction

SAI Communications has conducted this theoretical analysis for AT&T, to ensure that the existing radio facility complies with Federal Communications Commission (FCC) regulations after carrier additions. This report will show that, through the use of FCC suggested prediction methods, the radio facility in question will be in compliance with all appropriate Federal regulations in regards to Radio Frequency (RF) Exposure.

RF Exposure Prediction Method

Power Density is calculated in accordance with FCC OET Bulletin 65 formula (3):



Where:

S = Power Density

P = Power input to the antenna

G = Gain of an antenna

R = Radial distance = $\sqrt{H^2 + V^2}$

H = Horizontal distance from antenna

V = Vertical distance from antenna = Va - Vb

V_a = Antenna height above ground

V_b = Calculation height above ground = 6ft

Case Summary

The existing radio facility has a radiation center of 189ft located at the following geographic coordinates:

Latitude: 42.3658239 **Longitude:** -71.1038889

See sketch below for specific property location.



RF Design Specifications

AT&T Mobility is planning to install 3 panel antennas, 1 per sector for LTE Technologies (3C+4C) with azimuths of 8-119-235 for alpha-beta-gamma sectors. Table below shows the technical data used for the calculation.

	UMTS850	UMTS1900	LTE700BC
Antenna Type:	Kathro 800-10		KMW AM-X-CD-14-65-00T-RET
Antenna Gain (dBd)	11.25	14.05	9.75
Rad Center, AGL (ft)	189	189	189
ERP (dBm)	56.25	59.05	54.75
No of Radios	2	2	1

	LTE850	LTE1900	LTEWCS
Antenna Type:	CCI OPA-65R-LCUU-H4	KMW AM-X-CD-14-65-00T-RET	CCI OPA-65R-LCUU-H4
Antenna Gain (dBd)	11.25	11.95	14.95
Rad Center, AGL (ft)	189	189	189
ERP (dBm)	56.25	56.95	59.95
No of Radios	1	1	1

FCC Guidelines

Table 1. MPE Limits for General Population/ Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time for $ E ^2$, $ H ^2$, or S (Minutes)
0.3 – 1.34	614	1.63	(100)*	30
1.34 -30	824/f	2.19/f	(180/f ²)*	30
30 – 300	27.5	0.073	0.2	30
300 – 1500			f/1500	30
1500– 100,000			1.0	30
f = frequency in MHz		t power density		

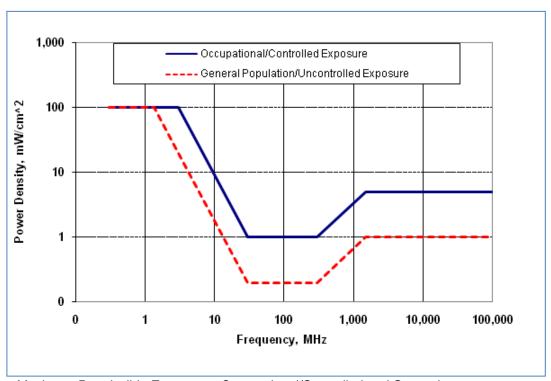
General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can't exercise control over their exposure.

Table 2. MPE Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm²)	Averaging Time for $ E ^2$, $ H ^2$, or S (Minutes)
0.3 - 3.0	614	1.63	(100)*	6
3.0 – 30	1842/f	4.89/f	(900/f ²)*	6
30 – 300	61.4	0.163	1.0	6
300 – 1500			f/300	6
1500- 100,000			5.0	6
f = frequency in MHz		* = Plane w	ave equivalent p	ower density

Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where such occupational/controlled limits apply provided he or she is made aware of the potential for exposure.

FCC RF Exposure Limits

FCC MPE LIMITS (mW/cm²)		
AT&T FREQUENCY BANDS		
EXPOSURE ENVIRONMENT	Cellular	PCS
General Public (Uncontrolled)	0.59	1.0
Occupational (Controlled)	2.93	5.0

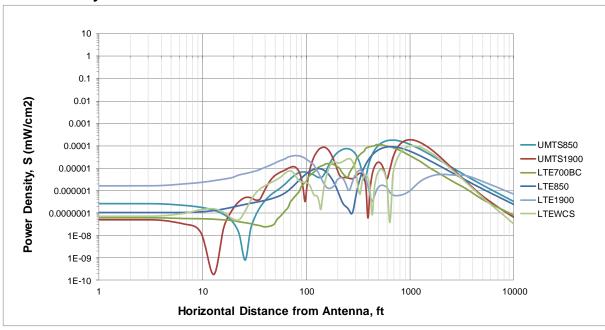


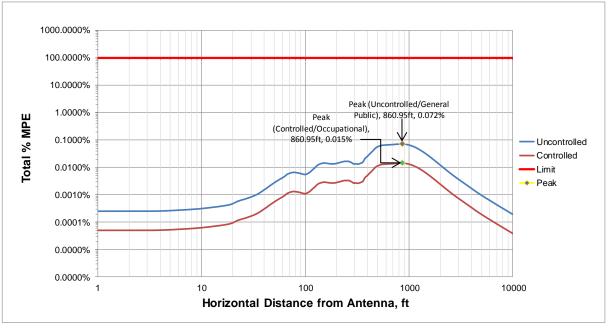
Maximum Permissible Exposures. Occupational/Controlled and General Population/Uncontrolled MPE's are functions of frequency.

Calculation Results (6ft AGL)

The following charts show the graphical representation of the calculated AT&T contribution on power density levels and % MPE at 6ft above ground, as horizontal distance from antenna increases. The calculations take into account the vertical pattern of the antennas and represent the immediate direction of each sector azimuth within the antenna horizontal beamwidth. The calculations also assume line of site to the antennas and the result will be lower if measured indoor due to in-building penetration loss.

Power Density and %MPE





Statement of Certification

I certify to the best of my knowledge that the statements contained in this report are true and accurate. The theoretical computations contained are based on FCC recommended methods, with industry standard assumptions & formulas, and complies with FCC mandated Maximum Permissible RF Exposure requirements.

A comprehensive field survey was not performed prior to the generation of this report. If questions arise regarding the calculations herein, SAI Communications recommends that a comprehensive field survey be performed to resolve any disputes.

Mike Lawton

RF Engineering Manager SAI Communications

November 30, 2015 Date

BZA APPLICATION FORM - OWNERSHIP INFORMATION

To be completed by OWNER, signed before a notary and returned to The Secretary of the Board of Zoning Appeals. S. REIF Central Plaza Massachusetts LLC Address: C/o Intercontinental Deal Estate Corp. 1270 Soldies Field Road 1800 for, 149 02135 State that I/We own the property located at 675 Hassachuets Ave. which is the subject of this zoning application. The record title of this property is in the name of U.S. REIF Pentral Plaza Massachivetts LCC *Pursuant to a deed of duly recorded in the date $\frac{10/31}{2006}$ Middlesex South County Registry of Deeds at Book 51851, Page 264Middlesex Registry District of Land Court, Certificate No. Book _____ Page _ SIGNATURE BY LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT? *Written evidence of Agent's standing to represent petitioner may be requested. Commonwealth of Massachusetts, County of Siffer The above-name Peter Caland jian y appeared before me,

• If ownership is not shown in recorded deed, e.g. if by court order, recent deed, or inheritance, please include documentation.

this _____of ____, 20___, and made oath that



QUITCLAIM DEED



Bk: 51851 Pg: 264 Doc: DEED Page: 1 of 7 10/31/2008 12:22 PM

Central Plaza/Wells Avenue, LLC, a Massachusetts limited liability company with an address of 110 Munroe Street, Lynn, Massachusetts 01901 ("Grantor"), for consideration paid of Thirty-One Million Six Hundred Thirty-Five Thousand Dollars (\$31,635,000), grants to U.S. REIF Central Plaza Massachusetts, LLC, a Delaware limited liability company with an address in c/o Intercontinental Real Estate Corp., 1270 Soldiers Field Road, Boston, MA 02135-1003 ("Grantee"), with Quitclaim Covenants, the land, together with the improvements thereon, in Cambridge, Middlesex County, Massachusetts, described on Exhibit A attached hereto and incorporated herein by reference.

Included as part of the consideration is Grantee's assumption of the Mortgage and Absolute Assignment of Rents and Leases and Security Agreement (and Fixture Filing) from Grantor to Wells Fargo Bank, National Association dated February 2, 2004 recorded with the Middlesex South Registry of Deeds in Book 41934 at Page 87 and filed with the Middlesex South Registry District of the Land Court as Document No. 1307910, as assigned to LaSalle Bank National Association, as Trustee for Bears Stearns Commercial Mortgage Securities Inc., Commercial Mortgage Pass-Through Certificates, Series 2004-PWR4, by Assignment dated effective as of June 30, 2004 and recorded with said Registry in Book 51839 at Page 512 and filed with the Middlesex South Registry District of the Land Court as Document No. 1485435, having a current principal balance of \$19,366,677.15. (the "Mortgage").

The deed stamps are to be calculated on the purchase price balance of \$12,268,322.85.

Subject to and with the benefit of all easements, agreements, restrictions, covenants and other matters of record, in so far as the same are in force and applicable, including, without limitation, the Mortgage.

Subject to all real estate taxes for the current fiscal year and for all future fiscal years which are not yet due and payable, all of which the Grantee, by its acceptance hereof, agrees to pay.

For Grantor's title, see Quitclaim Deed dated October 29, 1998 and recorded with the Middlesex South Registry of Deeds in Book 29330 at Page 362 and filed with the Middlesex South Registry District of the Land Court as Document No. 1085111 (Certificate of Title No. 213214), and Quitclaim Deed dated January 26, 2004 and recorded with the Middlesex South Registry of Deeds in Book 41934 at Page 82 and filed with the Middlesex South Registry District of the Land Court as Document No. 1307908 (Certificate of Title No. 230028).

Property address: 675 Massachusetts Avenue, 130 Bishop Richard Allen Drive, 19 Essex Street, 61 Prospect Street, 54-60 Prospect Street and 59-85 Prospect Street, Cambridge, Massachusetts 02139.

[Signature page follows.]

PLEASE RETURN TO: JOANN ALLAN FIRST AMERICAN TITLE INSURANCE COMPANY 101 HUNTINGTON AVENUE, 13TH FLOOR BOSTON, MA 02199

* DUP LD CT

In witness whereof, the undersigned has caused this Deed to be executed under seal as of the 304 day of October, 2008.

CENTRAL PLAZA/WELLS AVENUE, LLC,

a Massachusetts limited liability company

Name: Jodie S. Smith

Title: Authorized Signatory

COMMONWEALTH OF MASSACHUSETTS

COUNTY OF hotaluin

Notary Public

My Commission Expires:

Theodore J. Conroy, Jr. NOTARY PUBLIC My commission expires Oct. 15, 2010

EXHIBIT A

Legal Description of the Property

All these certain parcels of registered and unregistered land with the buildings and improvements thereon situated at 675 Massachusetts Avenue, 130 Bishop Richard Allen Drive, 19 Essex Street, 61 Prospect Street, 54-60 Prospect Street and 59-85 Prospect Street, Cambridge, Middlesex County, Massachusetts, more particularly described below:

TRACT I

A certain parcel of land with the buildings and other improvements thereon situated on Massachusetts Avenue, Temple Street, Bishop Richard Allen Drive and Prospect Street in Cambridge, Middlesex County, Massachusetts, shown as a parcel of 44,436 square feet on a plan entitled "Plan of Land in Cambridge, Mass., Middlesex County" dated October 25, 1983 by Survey Engineers of Boston, which plan is recorded with Middlesex South District Deeds in Book 15782, Page 1, and which parcel is described according to the plan as follows:

Beginning at a point at the intersection of the northeast sideline of Massachusetts Avenue with the northwest sideline of Prospect Street; thence running

NORTH 45° 04' 59" WEST	by Massachusetts Avenue, 90.42 feet to the most southerly corner of a parcel belonging to Cambridgeport Savings Bank; thence
NORTH 45° 04' 33" EAST	by the Cambridgeport Savings Bank property, 101.04 feet; thence
NORTH 45° 04' 59" WEST	by the Cambridgeport Savings Bank property, 100.04 feet to Temple Street; thence
NORTH 45° 03' 11" EAST	by Temple Street, 184.98 feet to Bishop Richard Allen Drive; thence
SOUTH 44° 56' 49" EAST	by Bishop Richard Allen Drive, 191.26 feet to Prospect Street; and thence
SOUTH 45° 13' 16" WEST	by Prospect Street, 285.58 feet to Massachusetts Avenue and the point of beginning.

Included within this First Parcel are two parcels of REGISTERED LAND, described as follows:

First Registered Parcel

That certain parcel of land situate in Cambridge, bounded and described as follows:

NORTHWESTERLY

by Temple Street, 38.02 feet;

NORTHEASTERLY

by Lot 2 as shown on plan hereinafter mentioned, 191.11

feet:

SOUTHEASTERLY

by Prospect Street, 37.83 feet; and

SOUTHWESTERLY

by lands now or formerly of Annie E. Southwick and of

William J. Sinnott, 190.93 feet.

Said parcel is shown as Lot 1 on said plan.

All of said boundaries are determined by the Court to be located as shown on a subdivision plan, as approved by the Court, filed in the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 636, Page 17, with Certificate 101167.

Second Registered Parcel

That certain parcel of land situate in Cambridge, bounded and described as follows:

NORTHWESTERLY

by Temple Street, 63 feet;

NORTHEASTERLY

by Austin Street (said Austin Street being now named

Bishop Richard Allen Drive) 191.41 feet;

SOUTHEASTERLY

by Prospect Street, 63 feet; and

SOUTHWESTERLY

by Lot 1 as shown on plan hereinafter mentioned, 191.11

feet.

Said parcel is shown as Lot 2 on said plan (Plan Nos. 8489B and 8809B).

All of said boundaries are determined by the Court to be located as shown on a subdivision plan, as approved by the Court, filed in the Land Registration Office, a copy of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 636, Page 17, with Certificate 101167.

TRACT II (Parcel A)

A certain parcel of land with the buildings and other improvements thereon situated on the northwesterly side of Prospect Street and the northeasterly side of Bishop Richard Allen Drive in Cambridge, Middlesex County, Massachusetts, shown as a parcel of 52,987 square feet on a plan entitled "Plan of Land in Cambridge, Mass., Middlesex County" dated October 25, 1983 by Survey Engineers of Boston, which plan is recorded with Middlesex South District Deeds in Book 15782, page 1, and which parcel is described according to the plan as follows:

Beginning at a point at the intersection of the northwest sideline of Prospect Street and the northeast sideline of Bishop Richard Allen Drive; thence running

NORTH 44° 56' 49" WEST	by Bishop Richard Allen Drive 211.58 feet to the most southerly corner of property of The Six S Realty Trust; thence
NORTH 45° 44' 02" EAST	by the Six S land, 137 feet to a point; thence
NORTH 45° 11' 43" EAST	by the Six S land, 163.23 feet to land of Sun Hong Lee and Lettie K. L. Lee; thence

SOUTH 55° 48' 10" EAST	by said Lee land and by lands of Shih Hing Lee and Julie Tuey Lin Lee and of John J. and Anne M. Considine,
	147.90 feet to Prospect Street; thence

SOUTH 33° 57' 57" WEST	by Prospect Street, 220.28 feet to the most easterly corner
	of the third parcel hereinafter described; thence

SOUTH 47° 45' 48" EAST	38.19 feet to Prospect Street, these last four bounds being
	by the third parcel; thence

SOUTH 33° 57' 57" WEST by Prospect Street, 70.15 feet to Bishop Richard Allen

Drive and the point of beginning.

TRACT II (Parcel B)

That certain parcel of land with the buildings thereon situate in Cambridge, bounded and described as follows:

SOUTHEASTERLY by the northwesterly line of Prospect Street, 43.88 feet;

SOUTHWESTERLY by lands now or formerly of Samuel L. Klashman and of

Cecilia Gregg, 98.04 feet;

NORTHWESTERLY by land now or formerly of John A. Blevins, 27.16 feet; and

NORTHEASTERLY by land now or formerly of Alzira R. Ebann, 91.35 feet.

All of said boundaries are determined by the Court to be located as shown on a plan, as modified and approved by the Court, filed in the Land Registration Office, a copy of a portion of which is filed in the Registry of Deeds for the South Registry District of Middlesex County in Registration Book 262, Page 137, with Certificate 39787.

TRACT III

A certain parcel of land with the buildings and other improvements thereon situated on the northwest side of Essex Street, the northeast side of Bishop Richard Allen Drive and the southeast side of Prospect Street in Cambridge, Middlesex County, Massachusetts, shown as a parcel of 27,154 square feet on a plan entitled "Plan of Land in Cambridge, Mass., Middlesex County" dated November 10, 1983 by Survey Engineers of Boston, which plan is recorded with Middlesex South District Deeds in Book 15782, Page 1, and which parcel is described according to the plan as follows:

Beginning at a point at the intersection of the northwest sideline of Essex Street and the northeast sideline of Bishop Richard Allen Drive; thence running

NORTH 45° 05' 46" WEST by Bishop Richard Allen Drive, 228.04 feet to the southerly

corner of a triangular parcel of land taken by the City by order dated May 3, 1976 and recorded with said Deeds in

Book 12992, Page 315; thence

NORTH 05° 33' 55" WEST by the taken parcel, 23.14 feet to Prospect Street; thence

NORTH 33° 57' 57" EAST by Prospect Street, 86.80 feet to the most westerly corner of

land of Adolph F. and Alica M. Ponte; thence

SOUTH 56° 02' 03" EAST by the Ponte land, 128.29 feet to land of George and Chris

Phillos; thence

SOUTH 33° 57' 57" WEST by the Phillos land, 22.33 feet to a point at the most westerly corner of the Phillos land; thence

SOUTH 55° 07' 33" EAST by the Phillos land, 110.83 feet to Essex Street; and thence

SOUTH 34° 11' 20" WEST by Essex Street, 123.83 feet to Bishop Richard Allen Drive and the point of beginning.

4532.22/448070.1



THE COMMONWEALTH OF MASSACHUSETTS OFFICE OF THE ATTORNEY GENERAL

CENTRAL MASSACHUSETTS DIVISION 10 MECHANIC STREET, SUITE 301 WORCESTER, MA 01608

> (508) 792-7600 (508) 795-1991 fax www.mass.gov/ago

February 10, 2015

Trudy L. Reid, Town Clerk Town of Lynnfield 55 Summer Street Lynnfield, MA 01940

RE: Lynnfield Fall Annual Town Meeting of October 20, 2014 - Case # 7408

Warrant Articles # 12, 13 and 14 (Zoning) Warrant Articles # 16 and 17 (General)

Dear Ms. Reid:

Articles 12, 13, 14, 16 and 17 - We approve Articles 12, 13, 14, 16 and 17 from the October 20, 2014 Lynnfield Fall Annual Town Meeting. Our comments regarding Article 14 are provided below.

Article 14 — Article 14 makes a number of changes to the Town's zoning by-laws pertaining to Radio Telecommunication Facilities (RTF) and Personal Wireless Service Facilities (PWSF) including adding new definitions to Section 2, amending Section 7.4, "Site Plan" to add a new sub-section 7.4A "Additional Requirements for Personal Wireless Service Facilities"; and amending Section 8, "Special Permits" to add a new sub-section 8.7, "Siting of Radio Telecommunications Facilities."

I. Applicable Law

The federal Telecommunications Act of 1996, 47 U.S.C. § 332 (7) preserves state and municipal zoning authority to regulate personal wireless service facilities, subject to the following limitations:

- 1. Zoning regulations "shall not unreasonably discriminate among providers of functionally equivalent services." 47 U.S.C. §332(7) (B) (i) (I)
- 2. Zoning regulations "shall not prohibit or have the effect of prohibiting the provisions of personal wireless services." 47 U.S.C. § 332 (7) (B) (i) (II).
- 3. The Zoning Authority "shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time." 47 U.S.C. § 332 (7) (B) (ii).

- 4. Any decision "to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record." 47 U.S.C. § 332 (7) (B) (iii).
- 5. "No state or local government or instrumentality thereof may regulate the placement, construction and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [Federal Communications] Commission's regulations concerning emissions." 47 U.S.C. § 332(7) (B) (iv).

Federal courts have construed the limitations listed under 47 U.S.C. § 332(7) as follows. First, even a facially neutral by-law may have the effect of prohibiting the provision of wireless coverage if its application suggests that no service provider is likely to obtain approval. "If the criteria or their administration effectively preclude towers no matter what the carrier does, they may amount to a ban 'in effect'...." <u>Town of Amherst, N.H. v. Omnipoint Communications</u> Enters, Inc., 173 F.3d 9, 14 (1st Cir. 1999).

Second, local zoning decisions and by-laws that prevent the closing of significant gaps in wireless coverage have been found to effectively prohibit the provision of personal wireless services in violation of 47 U.S.C. § 332(7). See, e.g., Nat'l Tower, LLC v. Plainville Zoning Bd. of Appeals, 297 F.3d 14, 20 (1st Cir. 2002) ("local zoning decisions and ordinances that prevent the closing of significant gaps in the availability of wireless services violate the statute"); Omnipoint Communications MB Operations, LLC v. Town of Lincoln, 107 F. Supp. 2d 108, 117 (D. Mass. 2000) (by-law resulting in significant gaps in coverage within town had effect of prohibiting wireless services).

Third, whether the denial of a permit has the effect of prohibiting the provision of personal wireless services depends in part upon the availability of reasonable alternatives. See 360 Degrees Communications Co. v. Bd. of Supervisors, 211 F.3d 79, 85 (4th Cir. 2000). Zoning regulations must allow cellular towers to exist somewhere. Towns may not effectively ban towers throughout the municipality, even under the application of objective criteria. See Virginia Metronet, Inc. v. Bd. of Supervisors, 984 F. Supp. 966, 971 (E.D. Va. 1998).

State law also establishes certain limitations on a municipality's authority to regulate wireless communications facilities and service providers. Under General Laws Chapter 40A, Section 3, wireless service providers may apply to the Department of Telecommunications and Cable for an exemption from local zoning requirements. If a telecommunication provider does not apply for or is not granted an exemption under c. 40A, § 3, it remains subject to local zoning requirements pertaining to cellular towers. See Building Comm'r of Franklin v. Dispatch Communications of New England, Inc., 48 Mass. App. Ct. 709, 722 (2000). Also, G.L. c. 40J, § 6B, charges the Massachusetts Broadband Institute with the task of promoting broadband access throughout the state. Municipal regulation of broadband service providers must not frustrate the achievement of this statewide policy.

In addition, Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012 requires that "[A] state or local government may not deny, and shall approve, any eligible

facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." (emphasis added). The Act defines "eligible facilities request" as any request for modification of an existing wireless tower or base station that involves: 1) collocation of new transmission equipment; 2) removal of transmission equipment; or 3) replacement of transmission equipment. The Act applies "[n]otwithstanding section 704 of the Telecommunications Act of 1996." The Act's requirement that a local government "may not deny, and shall approve, any eligible facilities request" means that a request for modification to an existing facility that does not substantially change the physical dimensions of the tower or base station must be approved. Such qualifying requests also cannot be subject to a discretionary special permit.

The Town must apply Article 14 in a manner consistent with the applicable law outlined above. In particular, Section 8.7.5.1 requires that PWSF may only be erected upon the grant of a special permit. The Town cannot apply this requirement to eligible facilities requests for modification to existing facilities that qualify for required approval under Section 6409 of the Act. We also urge the Town to consult closely with Town Counsel regarding the appropriate response to applications for collocation in light of these recent amendments.

II. Section 8.7, Siting of Radio Telecommunications Facilities

A. Section 8.7.2, Purpose

Section 8.7.2 provides that the purpose of the by-law is to establish general guidelines for the siting of RTFs. Section 8.7.2 (4) establishes one of the by-law's goals as "[t]o make all RTF locations available for municipal agencies use where feasible."

It is unclear whether Section 8.7.2 (4) would require the Town's use of the RTF, and whether such use would be compensated or uncompensated. When applying the by-law, the Town cannot require an applicant to transfer property to the public without fair compensation. "The Fifth Amendment to the United States Constitution, made applicable to the States through the Fourteenth Amendment, provides that private property shall not 'be taken for public use, without just compensation." This protection is "designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." Giovanella v. Conservation Commission of Ashland, 447 Mass. 720, 724 (2006) (quoting Armstrong v. United States, 364 U.S. 40, 49 (1960). More recently, the court in Collins v. Stow, 79 Mass. App. Ct. 447 (2011) ruled that a town cannot condition subdivision approval on the dedication of open space for public use and actual conveyance of the land to the Town in exchange for waivers. "Although a planning board's authority under the subdivision control law certainly encompasses, in appropriate circumstances, requiring open space, it does not extend to requiring the transfer of that open space to the public for reasons unrelated to adequate access and safety of the subdivision without providing just compensation." Id. at 453. We suggest that the Town consult with Town Counsel regarding the proper application of Section 8.7.2 (4).

B. Section 8.7.5.4, General

Section 8.7.5.4.1 provides in relevant part that:

An undertaking shall be required, secured by a BOND appropriate in form and amount for removal of the PWSF within 6 months of cessation of operation of said facility or such other activity which may be appropriate to prevent the structures from becoming a nuisance or aesthetic blights.

The Town must apply any bond proceeds in a manner consistent with state law. Bond proceeds do not become Town funds unless and until the applicant defaults on the obligation under the by-law. Moreover, if the Town must use the bond to pay for removal of a PWSF or for other activity to prevent nuisance or blight, an appropriation is required before expenditure is made to do the work. General Laws Chapter 44, Section 53, provides that "[a]ll moneys received by a city, town or district officer or department, except as otherwise provided by special acts and except fees provided for by statute, shall be paid by such officers or department upon their receipt into the city, town or district treasury." Under Section 53 all moneys received by the Town become a part of the general fund, unless the Legislature has expressly made other provisions that are applicable to such receipt. In the absence of any general or special law to the contrary, performance security funds of the sort contemplated here must be deposited with the Town Treasurer and made part of the Town's general fund, pursuant to G.L. c. 44, § 53. The Town must then appropriate the money for the specific purpose of completing the work required for removal and/or other activities. The Town should consult with Town Counsel regarding the proper application of Section 8.7.5.4.

C. Section 8.7.5.5, Application Procedures

Section 8.7.5.5 pertaining to the Special Permit application provides in relevant part, that:

The Application Phase of the process begins with the receipt by the SPGA of a complete application including all materials required by the Zoning Bylaw and any applicable regulations.

Within 30 days of receipt, the SPGA or its designee shall review the application for consistency and completeness with respect to the Application Requirements in the bylaw and any applicable regulations and shall notify the Applicant in writing of any deficiency in the completeness of the application.

The SPGA shall take regulatory notice of the Federal Communications Commission (FCC) presumption that the final action of the SPGA on a new Antenna Tower should take no more than 150 days from the date of receipt of the completed application, and that final action on a Collocation or Site Sharing application should take no more than 90 days from the date of receipt of the completed application except upon written

extension of these timelines by mutual agreement between the SPGA and the Applicant.

Section 8.7.5.5 must be applied in a manner consistent with the time limits established in G.L. c. 40A, § 9. General Laws Chapter 40A, Section 9, requires that the special permit granting authority "shall hold a public hearing for which notice has been given as provided in section eleven, on <u>any application</u> for a special permit within sixty-five days from the date of filing of such application. . . . The decision of the special permit granting authority shall be made within ninety days following the date of such public hearing. . . Failure by the special permit granting authority to take final action within . . . ninety days . . . shall be deemed to be a grant of the special permit." (emphasis added).

Pursuant to G.L. c. 40A, § 9, the filing of a special permit application "starts the clock" on the time period within which the special permitting authority must act. Section 8.7.5.5 cannot be applied in a manner that "starts the clock" only when a *completed* application is filed. The Town must apply Section 8.7.5.5 consistent with G.L. c. 40A, § 9. *See* Massachusetts Broken Stone Co. v. Town of Weston, 430 Mass. 637, 642 (2000). The Town should consult with Town Counsel regarding the proper application of Section 8.7.5.5.

Note: Pursuant to G.L. c. 40, § 32, neither general nor zoning by-laws take effect unless the Town has first satisfied the posting/publishing requirements of that statute. Once this statutory duty is fulfilled, (1) general by-laws and amendments take effect on the date these posting and publishing requirements are satisfied unless a later effective date is prescribed in the by-law, and (2) zoning by-laws and amendments are deemed to have taken effect from the date they were approved by the Town Meeting, unless a later effective date is prescribed in the by-law.

Very truly yours,

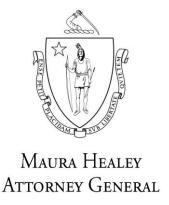
MAURA HEALEY ATTORNEY GENERAL

Nicole B. Caprioli

By: Nicole B. Caprioli Assistant Attorney General Municipal Law Unit 10 Mechanic Street, Suite 301 Worcester, MA 01608 (508) 792-7600 ext. 4418

nicole.caprioli@state.ma.us

cc: Town Counsel Thomas Mullen



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February 23, 2015

Debra A. Bourbeau, Town Clerk Town of Montague 1 Avenue A Montague, MA 01376

> RE: Montague Special Town Meeting of October 29, 2014 - Case # 7451 Warrant Article # 17 (Zoning)

Dear Ms. Bourbeau:

<u>Article 17</u> - We approve Article 17 from the October 29, 2014 Montague Special Town Meeting. Article 17 amends several portions of the Town's zoning by-laws pertaining to site plan review.

1. Section 5.2 (d), Permitted Uses and Special Permits - Procedures

Section 5.2 (d) was deleted in its entirety and replaced with new text that provides as follows (with emphasis added):

All applications for Special Permits and Site Plan Review from the Board of Appeals or the Planning Board shall be subject to the procedural requirements established by the respective Board. The Board of Appeals or Planning Board may determine that the assistance of outside professional expertise is required due to the size, scale, or complexity of a given project or its potential impact on the health, safety, and welfare of the Town. When outside review is determined to be necessary, the Board may require the applicant pay all reasonable expenses for this purpose, in accordance with the Board's regulations and M.G.L. Chapter 44 Section 53G.

General Laws Chapter 44, Section 53G, authorizes zoning boards, planning boards, boards of health, and conservation commissions, acting under authority conferred by G.L. c. 40A, § 9 and 12, c. 41, § 81Q, c. 40B, § 21, c. 111; and c. 40, § 8C, to impose consultant review fees, to disburse the funds collected, and to return unused portions to the applicant. However, the Legislature did not include Boards acting under the authority conferred solely by a local law within the small class of local boards that enjoy the benefits of G.L. c. 44, § 53G. When the Board is reviewing a site plan application based solely on the authority granted under local law, it cannot avail itself of the provisions of G.L. c. 44, § 53G. We suggest that the Town discuss this issue in more detail with Town Counsel.

2. Section 7.5.2, Telecommunication Facilities - General Provisions

Section 7.5.2, was deleted in its entirety and replaced with new text that provides as follows:

Telecommunication Facilities may be allowed by Special Permit from the Board of Appeals pursuant to Sections 5.2 and Section 7.5. Conditions shall maximize the shared use of any new or existing structures to minimize the required number of such facilities; and shall minimize[e] adverse visual impacts through careful design, siting, and screening. No facility shall be located in a (RS) Residential District. (see: Section 2, Definitions).

Section 7.5.2 must be applied in a manner consistent with Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012, which requires that "[A] state or local government *may not deny, and shall approve*, any eligible facilities request for a modification of an existing wireless tower or base station." (emphasis added). The Act defines "eligible facilities request" as any request for modification of an existing wireless tower or base station that involves: 1) collocation of new transmission equipment; 2) removal of transmission equipment; or 3) replacement of transmission equipment. The Act applies "[n]otwithstanding section 704 of the Telecommunications Act of 1996." The Act's requirement that a local government "may not deny, and shall approve, any eligible facilities request" means that a request for modification to an existing facility that does not substantially change the physical dimensions of the tower or base station must be approved. Such qualifying requests also cannot be subject to a discretionary special permit.

The Town must apply Section 7.5.2 in a manner consistent with the applicable law outlined above. We also urge the Town to consult closely with Town Counsel regarding the appropriate response to applications for collocation in light of these recent amendments.

Note: Pursuant to G.L. c. 40, § 32, neither general nor zoning by-laws take effect unless the Town has first satisfied the posting/publishing requirements of that statute. Once this statutory duty is fulfilled, (1) general by-laws and amendments take effect on the date these posting and publishing requirements are satisfied unless a later effective date is prescribed in the by-law, and (2) zoning by-laws and amendments are deemed to have taken effect from the

date they were approved by the Town Meeting, unless a later effective date is prescribed in the by-law.

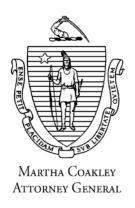
Very truly yours,

MAURA HEALEY ATTORNEY GENERAL

Nicole B. Caprioli

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cc: Town Counsel Gregg J. Corbo



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June 12, 2013

Gail Garrett, Town Clerk Town of Mount Washington 118 East Street Mount Washington, MA 01258

> RE: Mount Washington Special Town Meeting of April 1, 2013 - Case # 6642 Warrant Articles # 1, 2, and 3 (Zoning)

Dear Ms. Garrett:

Articles 1, 2, and 3 - We approve the amendments to the Town by-laws adopted under Articles 1, 2, and 3 on the warrant for the Mount Washington Special Town Meeting that convened on April 1, 2013, and the map pertaining to Article 3. Our comments on Articles 1 and 2 are provided below.

<u>Article 1</u> - The amendments adopted under Article 1 add a new Section 215-27 to the zoning by-laws entitled "Wireless Telecommunication Facility Zoning Bylaw." We approve the new Section 215-27, but offer the following comments.

I. <u>Applicable Law</u>

The federal Telecommunications Act of 1996, 47 U.S.C. § 332 (7) preserves state and municipal zoning authority to regulate personal wireless service facilities, subject to the following limitations:

- 1. Zoning regulations "shall not unreasonably discriminate among providers of functionally equivalent services." 47 U.S.C. §332(7) (B) (i) (I)
- 2. Zoning regulations "shall not prohibit or have the effect of prohibiting the provisions of personal wireless services." 47 U.S.C. § 332 (7) (B) (i) (II).
- 3. The Zoning Authority "shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time." 47 U.S.C.

§ 332 (7) (B) (ii).

- 4. Any decision "to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record." 47 U.S.C. § 332 (7) (B) (iii).
- 5. "No state or local government or instrumentality thereof may regulate the placement, construction and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the [Federal Communications] Commission's regulations concerning emissions." 47 U.S.C. § 332(7) (B) (iv).

Federal courts have construed the limitations listed under 47 U.S.C. § 332(7) as follows. First, even a facially neutral by-law may have the effect of prohibiting the provision of wireless coverage if its application suggests that no service provider is likely to obtain approval. "If the criteria or their administration effectively preclude towers no matter what the carrier does, they may amount to a ban 'in effect'...." Town of Amherst, N.H. v. Omnipoint Communications Enters, Inc., 173 F.3d 9, 14 (1st Cir. 1999).

Second, local zoning decisions and by-laws that prevent the closing of significant gaps in wireless coverage have been found to effectively prohibit the provision of personal wireless services in violation of 47 U.S.C. § 332(7). See, e.g., Nat'l Tower, LLC v. Plainville Zoning Bd. of Appeals, 297 F.3d 14, 20 (1st Cir. 2002) ("local zoning decisions and ordinances that prevent the closing of significant gaps in the availability of wireless services violate the statute"); Omnipoint Communications MB Operations, LLC v. Town of Lincoln, 107 F. Supp. 2d 108, 117 (D. Mass. 2000) (by-law resulting in significant gaps in coverage within town had effect of prohibiting wireless services).

Third, whether the denial of a permit has the effect of prohibiting the provision of personal wireless services depends in part upon the availability of reasonable alternatives. See 360 Degrees Communications Co. v. Bd. of Supervisors, 211 F.3d 79, 85 (4th Cir. 2000). Zoning regulations must allow cellular towers to exist somewhere. Towns may not effectively ban towers throughout the municipality, even under the application of objective criteria. See Virginia Metronet, Inc. v. Bd. of Supervisors, 984 F. Supp. 966, 971 (E.D. Va. 1998).

State law also establishes certain limitations on a municipality's authority to regulate wireless communications facilities and service providers. Under General Laws Chapter 40A, Section 3, wireless service providers may apply to the Department of Telecommunications and Cable for an exemption from local zoning requirements. If a telecommunication provider does not apply for or is not granted an exemption under c. 40A, § 3, it remains subject to local zoning requirements pertaining to cellular towers. See Building Comm'r of Franklin v. Dispatch Communications of New England, Inc., 48 Mass. App. Ct. 709, 722 (2000). Also, G.L. c. 40J, § 6B, charges the Massachusetts Broadband Institute with the task of promoting broadband access throughout the state. Municipal regulation of broadband service providers must not frustrate the achievement of this statewide policy.

In addition, Section 6409 of the Middle Class Tax Relief and Job Creation Act of 2012

requires that "[A] state or local government *may not deny, and shall approve*, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station." (emphasis added). The Act defines "eligible facilities request" as any request for modification of an existing wireless tower or base station that involves: 1) collocation of new transmission equipment; 2) removal of transmission equipment; or 3) replacement of transmission equipment. The Act applies "[n]otwithstanding section 704 of the Telecommunications Act of 1996." The Act's requirement that a local government "may not deny, and shall approve, any eligible facilities request" means that a request for modification to an existing facility that does not substantially change the physical dimensions of the tower or base station must be approved. Such qualifying requests also cannot be subject to a discretionary special permit.

We approve the new Section 215-27. However, the Town must apply the by-law in a manner consistent with the applicable law outlined above. In particular, Section IV of the new by-law requires that Wireless Telecommunication Facilities are only allowed by special permit in the Wireless Telecommunication Overlay District. This requirement cannot be applied to eligible facilities requests for modification to existing facilities which qualify for required approval under Section 6409 of the Act, as described above. We urge the Town to consult closely with Town Counsel regarding the appropriate response to applications for collocation in light of these recent amendments.

II. Analysis of Mount Washington's Wireless Telecommunication Facility By-Law

A. Section VIII "Criteria For Approval and Conditions".

This section provides as follows:

5. The applicant will remove the Facility, should the Facility be abandoned or cease to operate. The Planning Board may require the applicant to provide a bond, or other form of financial guarantee acceptable to the Planning Board to cover the cost of removal of the Facility, should the Facility be abandoned or cease to operate, and ensure other compliance hereunder.

The Town must apply any bond or other financial guarantee proceeds in a manner consistent with state law. Bond proceeds do not become Town funds unless and until the applicant defaults on the obligation under the proposed by-law. Moreover, if the Town must use the bond to pay for removal of a wireless communication facility or the repair and/or restoration of the premises, an appropriation is required before expenditure is made to do the work. General Laws Chapter 44, Section 53, provides that "[a]ll moneys received by a city, town or district officer or department, except as otherwise provided by special acts and except fees provided for by statute, shall be paid by such officers or department upon their receipt into the city, town or district treasury." Under Section 53 all moneys received by the Town become a part of the general fund, unless the Legislature has expressly made other provisions that are applicable to such receipt. In the absence of any general or special law to the contrary, performance security funds of the sort contemplated here must be deposited with the Town Treasurer and made part of the Town's general fund, pursuant to G.L. c. 44, § 53. The Town must then appropriate the money for the specific purpose of completing the work required for removal and/or restoration.

B. Section X "Permit Revocation For Non-Performance".

Section X authorizes the Planning Board to revoke a special permit for failure to comply with certain conditions. We approve Section X. However, before the Planning Board revokes a permit for failure to comply with certain conditions provided in Section X, the Planning Board should discuss with Town Counsel what due process, including notice and hearing requirements, are required. We suggest that the Town discuss this issue in more detail with Town Counsel.

Finally, the word "ordinance" is used in the by-law. Towns enact "by-laws" and cities enact "ordinances." The Town may wish delete the word "ordinance" from the new Section 215-27 and insert the word "by-law" at a future Town Meeting.

Article 2 - The amendments adopted under Article 2 add a new Section 215-28, "Solar Photovoltaic Installation Moratorium Bylaw," to the Town's zoning by-laws. The temporary moratorium (through one year from the date of enactment of Section 215-28) on solar photovoltaic installation other than those mounted on an existing structure provides as follows:

Whereas, the Town of Mount Washington is undertaking a comprehensive study with respect to regulating the use of land for Solar Photovoltaic Installations, and

Whereas, there have been significant changes in law regarding Solar Photovoltaic Installations; and,

Whereas, the Town wishes to act carefully in a field with evolving law and technology, to investigate ways to preserve the character of the community while serving the needs of its people, and to devise an orderly process for granting permits by drafting an amendment to the Bylaw which is comprehensive, practical, equitable, and addresses the concerns of the Town on number, size, appearance, site standards, and location of Solar Photovoltaic Installations; and.

Whereas, it is desired to protect the Town from ill-advised and inappropriate development of Solar Photovoltaic Installations pending a thorough review and the formulation of such a zoning amendment; and,

Whereas, the Planning Board has determined that one year is necessary for such a comprehensive review and development of a Bylaw Subsection on Solar Photovoltaic Installations.

Now, therefore, no Solar Photovoltaic Installations other than those mounted on an existing structure, in the usual manner, shall be permitted for one year from the date of enactment of this Bylaw.

We approve the temporary moratorium adopted under Article 2 because the Town has the authority to "impose reasonable time limitations on development, at least where those restrictions are temporary and adopted to provide controlled development while the municipality engages in comprehensive planning studies." <u>Sturges v. Chilmark</u>, 380 Mass. 246, 252-253 (1980). Such a temporary moratorium is within the Town's zoning power where there is a stated need for "study, reflection and decision on a subject matter of [some] complexity..." <u>W.R.</u>

Grace v. Cambridge City Council, 56 Mass. App. Ct. 559, 569 (2002) (City's temporary moratorium on building permits in two districts was within city's authority to zone for public purposes.) The time limit Mount Washington has selected for its temporary moratorium (one year from the date of enactment of the by-law) appears to be reasonable in the circumstances. The moratorium is limited in time period and scope (to the use of land and structures for solar photovoltaic installations), and thus does not present the problem of a rate-of-development bylaw of unlimited duration which the <u>Zuckerman</u> court determined was unconstitutional. <u>Zuckerman v. Hadley</u>, 442 Mass. 511, 512 (2004) ("[A]bsent exceptional circumstances not present here, restrictions of unlimited duration on a municipality's rate of development are in derogation of the general welfare and thus are unconstitutional.")

While we approve the temporary one year moratorium on solar photovoltaic installations, we note that G.L. c. 40A, § 3, protects solar energy systems and the building of structures that facilitate the collection of solar energy from certain local zoning requirements. General Laws Chapter 40A, Section 3, provides in pertinent part as follows:

No zoning ordinance or by-law shall prohibit or unreasonably regulate the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare.

General Laws Chapter 40A, Section 3, prohibits towns from adopting zoning by-laws that prohibit or *unreasonably regulate* the installation of solar energy systems or the building of structures that facilitate the collection of solar energy, except where necessary to protect the public health, safety or welfare. A temporary moratorium longer than one year may be vulnerable to a challenge in court that it is an unreasonable regulation of solar energy systems under G.L. c. 40A, § 3. We suggest the Town consult closely with Town Counsel on this issue.

Note: Pursuant to G.L. c. 40, § 32, neither general nor zoning by-laws take effect unless the Town has first satisfied the posting/publishing requirements of that statute. Once this statutory duty is fulfilled, (1) general by-laws and amendments take effect on the date these posting and publishing requirements are satisfied unless a later effective date is prescribed in the by-law, and (2) zoning by-laws and amendments are deemed to have taken effect from the date they were approved by the Town Meeting, unless a later effective date is prescribed in the by-law.

Very truly yours, MARTHA COAKLEY ATTORNEY GENERAL

Kelli E. Gunagan

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cc: Town Counsel Joel Bard (via electronic mail)