

BZA APPLICATION FORM

GENERAL INFORMATION

The undersigned hereby petitions the Board of Zoning Appeal for the following:

Special Permit: X Variance: Appeal:

PETITIONER: Cellco Partnership, d/b/a Verizon Wireless

PETITIONER'S ADDRESS: 118 Flanders Road, Westborough, MA 01581

LOCATION OF PROPERTY: 799 Concord Avenue

TYPE OF OCCUPANCY: Hospital ZONING DISTRICT: Office 1; AOD3

REASON FOR PETITION:

- | | |
|---|------------------------|
| <u> </u> Additions | <u> </u> New Structure |
| <u> </u> Change in Use/Occupancy | <u> </u> Parking |
| <u> </u> Conversion to Addi'l Dwelling Unit's | <u> </u> Sign |
| <u> </u> Dormer | <u> </u> Subdivision |
| <u> X </u> Other: <u> Mobile Communications Facility </u> | |

DESCRIPTION OF PETITIONER'S PROPOSAL:

Special Permit for the continued operation of the existing mobile communications facility located at 799 Concord Avenue. See attached Special Permit (BZA Case No.10518), photographs, and As-Built drawings.

SECTIONS OF ZONING ORDINANCE CITED:

- Article 4 Section 4.32(g)(1) and Footnote 49 (Section 4.40.49)
- Article 10 Section 10.40 (Special Permit)
- Article Section

Applicants for a **Variance** must complete Pages 1-5
Applicants for a **Special Permit** must complete Pages 1-4 and 6
Applicants for an **Appeal** to the BZA of a Zoning determination by the Inspectional Services Department must attach a statement concerning the reasons for the appeal

Original Signature(s):

Timothy C. Twardowski
(Petitioner(s)/Owner)
Timothy C. Twardowski, attorney for Cellco Partnership
d/b/a Verizon Wireless
(Print Name)

Address: Verizon Wireless, Attn: Ellen Dalmus

118 Flanders Road, Westborough, MA 01581

Tel. No.: (508) 330-3300

E-Mail Address: ttwardowski@rc.com

Date: 3/2/17

* Robinson + Cole LLP
One Boston Place, 25th Floor, Boston, MA 02108
(617) 557-5965

2017 MAR -6 PM 2:39
REGISTRAR OF DEEDS
CLERK
MIDDLESEX COUNTY
PROBATE DEPARTMENT

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.

I/We SANCTA MARIA HOSPITAL, INC.
(OWNER)

Address: 799 CONCORD AVENUE, CAMBRIDGE, MA 02138

State that I/We own the property located at 799 CONCORD AVENUE,
which is the subject of this zoning application.

The record title of this property is in the name of SANCTA MARIA HOSPITAL, INC.

*Pursuant to a deed of duly recorded in the date 4-16-64, Middlesex South
County Registry of Deeds at Book 10521, Page 187; or
Middlesex Registry District of Land Court, Certificate No. _____
Book _____ Page _____.

Maryanne Daddones
**SIGNATURE BY LAND OWNER OR
AUTHORIZED TRUSTEE, OFFICER OR AGENT***

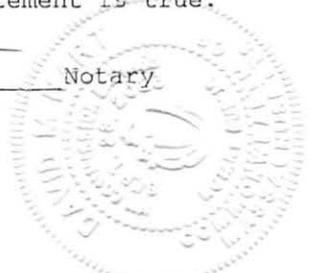
***Written evidence of Agent's standing to represent petitioner may be requested.**

Commonwealth of Massachusetts, County of Middlesex

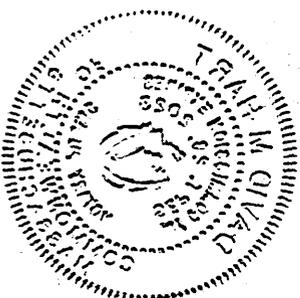
The above-name Mary Jane McHaffigan personally appeared before me,
this 24 of February, 2017, and made oath that the above statement is true.

David M. [Signature]
Notary

My commission expires September 28, 2023 (Notary Seal).



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



BZA APPLICATION FORM

SUPPORTING STATEMENT FOR A SPECIAL PERMIT

Please describe in complete detail how you meet each of the following criteria referring to the property and proposed changes or uses which are requested in your application. Attach sheets with additional information for special permits which have additional criteria, e.g.; fast food permits, comprehensive permits, etc., which must be met.

Granting the Special Permit requested for 799 Concord Avenue (location) would not be a detriment to the public interest because:

A) Requirements of the Ordinance can or will be met for the following reasons:

As demonstrated by the documents and information provided with this application and as will be further demonstrated at the hearing on this matter, the existing facility meets the requirements of the Zoning Ordinance and the special permit granted in BZA Case No. 10518.

B) Traffic generated or patterns of access or egress would not cause congestion hazard, or substantial change in established neighborhood character for the following reasons:

The existing facility has created virtually no traffic demand, with approximately one or two vehicle trips per month by a standard passenger vehicle during normal business hours for routine maintenance.

C) The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:

The existing facility has had no adverse effects on the operation or development of adjacent uses. The existing facility emits no light, odor, dust, or glare and generates no unusual noise or other adverse impacts.

D) Nuisance or hazard would not 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 for the following reasons:

The existing facility does not generate traffic or other negative impacts on the surrounding properties or within the City of Cambridge. The existing facility requires no water or sewer service and emits no light, odor, dust, or glare, and generates no unusual noise or other adverse impacts. The existing facility is unoccupied, with no employees or customers. The availability of wireless communications enhances the health, safety, and welfare of the community. The existing facility was installed in 2015 and has operated continuously since then. ISD confirmed by telephone call on 3/2/2017 that the City has not received any complaints about the facility.

E) For other reasons, the proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this ordinance for the following reasons:

The existing facility was designed and constructed to minimize its visual impact and is in harmony with the general purpose of the Zoning Ordinance and complies with the requirements of the Zoning Ordinance.

DIMENSIONAL INFORMATION

Cellco Partnership
d/b/a Verizon Wireless

APPLICANT: _____ PRESENT USE/OCCUPANCY: Hospital

LOCATION: 799 Concord Avenue ZONE: Office 1; AOD3

PHONE: (508) 330-3300 REQUESTED USE/OCCUPANCY: Mobile Communications Facility

	<u>EXISTING CONDITIONS</u>	<u>REQUESTED CONDITIONS</u>	<u>ORDINANCE REQUIREMENTS¹</u>
TOTAL GROSS FLOOR AREA:	_____	No Change	NA (max.)
LOT AREA:	<u>223,093</u>	No Change	<u>5,000</u> (min.)
RATIO OF GROSS FLOOR AREA TO LOT AREA: ²	_____	No Change	<u>0.75</u> (max.)
LOT AREA FOR EACH DWELLING UNIT:	<u>NA</u>	No Change	<u>1,200</u> (min.)
SIZE OF LOT:		No Change	NA (min.)
WIDTH	_____		NA
DEPTH	_____		NA
Setbacks in Feet:		No Change	<u>25'</u> (min.)
FRONT	<u>243'</u>	No Change	<u>25'</u> (min.)
REAR	<u>186'</u>	No Change	<u>63.26'</u> (min.)
LEFT SIDE	<u>104'</u>	No Change	<u>31.64'</u> (min.)
RIGHT SIDE	<u>48'</u>	No Change	<u>31.64'</u> (min.)
SIZE OF BLDG.:		No Change	<u>55'/65'</u> (max.)
HEIGHT	<u>71' 4" (high roof)</u> <u>86' 6" (penthouse)</u>	No Change	<u>55'/65'</u> (max.)
LENGTH	_____		
WIDTH	_____		
RATIO OF USABLE OPEN SPACE TO LOT AREA: ³	<u>NA</u>	<u>NA</u>	<u>NA</u> (min.)
NO. OF DWELLING UNITS:	<u>NA</u>	<u>NA</u>	<u>NA</u> (max.)
NO. OF PARKING SPACES:	<u>NA</u>	<u>NA</u>	<u>NA</u> (min./max)
NO. OF LOADING AREAS:	<u>NA</u>	<u>NA</u>	<u>NA</u> (min.)
DISTANCE TO NEAREST BLDG. ON SAME LOT:	<u>41'</u>	No Change	<u>NA</u> (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.

Not applicable

- 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'.

DONALD L. HAES, JR., PH.D., CHP

Radiation Safety Specialist

MA Radiation Control Program Health Physics Services Provider Registration #65-0017
PO Box 198, Hampstead, NH 03841 603-303-9959 Email: donald_haes_chp@comcast.net

February 25, 2017

RE: Post installation measurements of radio frequency fields for the Verizon Wireless Personal Wireless Services facility located at the building at 799 Concord Avenue in Cambridge, MA.

PURPOSE

I have repeated the radio frequency (RF) field measurements obtained on November 1, 2013 for the Verizon Wireless installation of panel antennas on the building for their personal wireless services (PWS). The measured values of power density are presented as a percent of current Maximum Permissible Exposures (%MPE) as adopted by the Federal Communications Commission (FCC), ^{i,ii} and those established by the Massachusetts Department of Public Health (MDPH) ⁱⁱⁱ (100% signifies an acceptable amount). This report provides written proof that the RF fields from the existing facility complies with the FCC RF exposure guidelines, including residential areas and in the surrounding neighborhood.

SUMMARY

Previous theoretical RF field calculations performed by this consultant (11/7/2013) indicate the summation of the existing Verizon Wireless personal wireless services RF contributions, in addition to the existing ambient levels, would be well-within the established RF exposure guidelines. The measured existing ambient RF field levels indicated the maximum to be around one percent of the current State and Federal maximum permissible exposure guidelines. There is very little change in ambient RF field readings since the last measurements were obtained in 2013. These RF measurements are accurate, and meet both FCC and the MDPH guidelines.

Based on the RF fields I have measured; it is my expert opinion that this facility complies with all regulatory guidelines for RF exposure to members of the public with the existing Verizon Wireless personal wireless services antennas.

Note: The analyses, conclusions and professional opinions are based upon the precise parameters and conditions of these particular sites; **Utility pole near 799 Concord Avenue, Cambridge, MA.** Utilization of these analyses, conclusions and professional opinions for any personal wireless services installation, existing or proposed, other than the aforementioned has not been sanctioned by the author, and therefore should not be accepted as evidence of regulatory compliance.

EXPOSURE LIMITS AND GUIDELINES

The RF exposure guidelines adopted by the FCC are a combination of the standards published by the American National Standards Institute (ANSI) ^{iv} and the National Council on Radiation Protection and Measurement (NCRP). ^v Also applicable are those published by the MDPH. The RF exposure guidelines are divided into two categories: "Controlled/Occupational areas" (those areas restricted to access by RF workers only) and "Uncontrolled/Public Areas" (those areas unrestricted for public access). Listed in Table 1 below and shown in Figure 1 are the applicable RF exposure guidelines for uncontrolled areas as they pertain to the operating frequency band of the PWS facility.

Table 1: Maximum Permissible Exposure Values for Uncontrolled/Public Areas	
<u>Frequency Band:</u> 300 - 1500 MHz 1500 - 100,000 MHz	<u>Maximum Permissible Exposure:</u> $f / 1.5$ in $\mu\text{W}/\text{cm}^2$ $1000 \mu\text{W}/\text{cm}^2$ *
Note: $1 \mu\text{W} = 0.000001$ Watt * For equivalent plane-wave power density, where f is the frequency in MHz (10^6 Hz).	

NOTE: FCC 5% Rule – At multiple transmitter sites, actions necessary to bring the area into compliance with the RF exposure guidelines are the shared responsibility of all licensees whose transmitters produce RF field levels in excess of 5% of the applicable FCC MPEs.

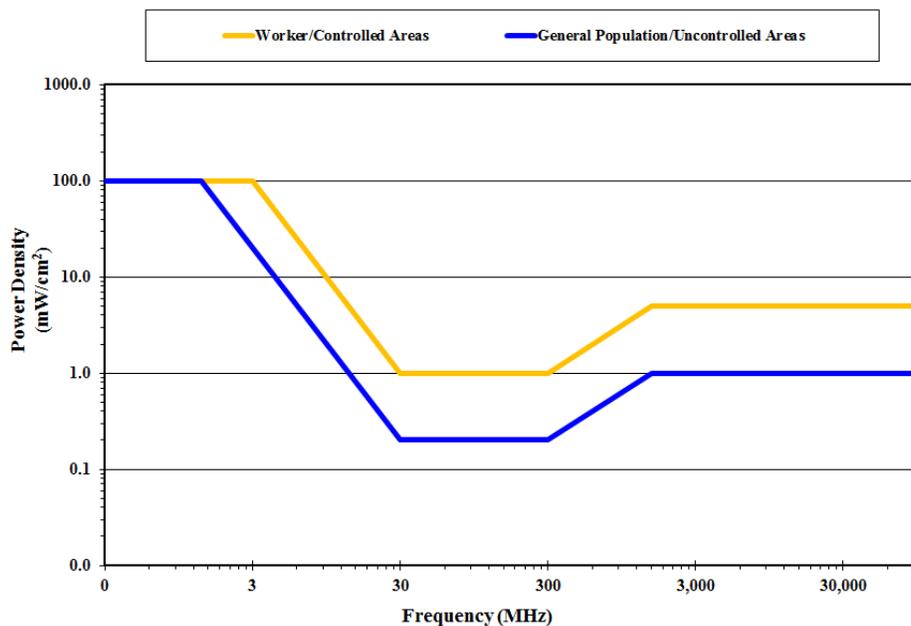


Figure 1: FCC Limits for Maximum Permissible Exposure (MPE)

MEASUREMENT PROTOCOL

RF ambient field measurements were obtained on February 25, 2017, using accepted scientific procedures.^{vi, vii} The following environmental conditions were noted: Partly sunny skies; Temperature 63°F - 65°F; Humidity 67%; Wind gusts up to 10 mph); Barometric pressure 1000.1 mBar.

The measuring equipment included the following:

Narda model SRM-3000 Electromagnetic Radiation Meter/Spectrum Analyzer with model 3AX 75M-3G Broadband Isotropic (50 – 3000 MHz) probe. The equipment was within the calibration specifications set by the manufacturer. The SRM-3000 was used for an RF field evaluation and exposure assessment. The unit was set to provide a read-out in %MPE **for members of the general public** within the frequency band of 50 MHz to 3,000 MHz.

The RF field measurements were obtained during normal use of the existing transmitters. The measurements were obtained at several locations in the general vicinity (See map, Figure 2). At each location, measurements were obtained by continuously scanning an area from the ground plane up to a height of six feet above ground level, referred to as the “Spatial Average”. The highest reading during the spatial average was recorded as the “peak” reading. The results are listed in Table 2.



**Figure 2: Locations of RF Field Measurements
Vicinity of 799 Concord Avenue, Cambridge, MA
(Picture courtesy Bing Maps© and may not represent current conditions)**

RESULTS - RF FIELD EVALUATION

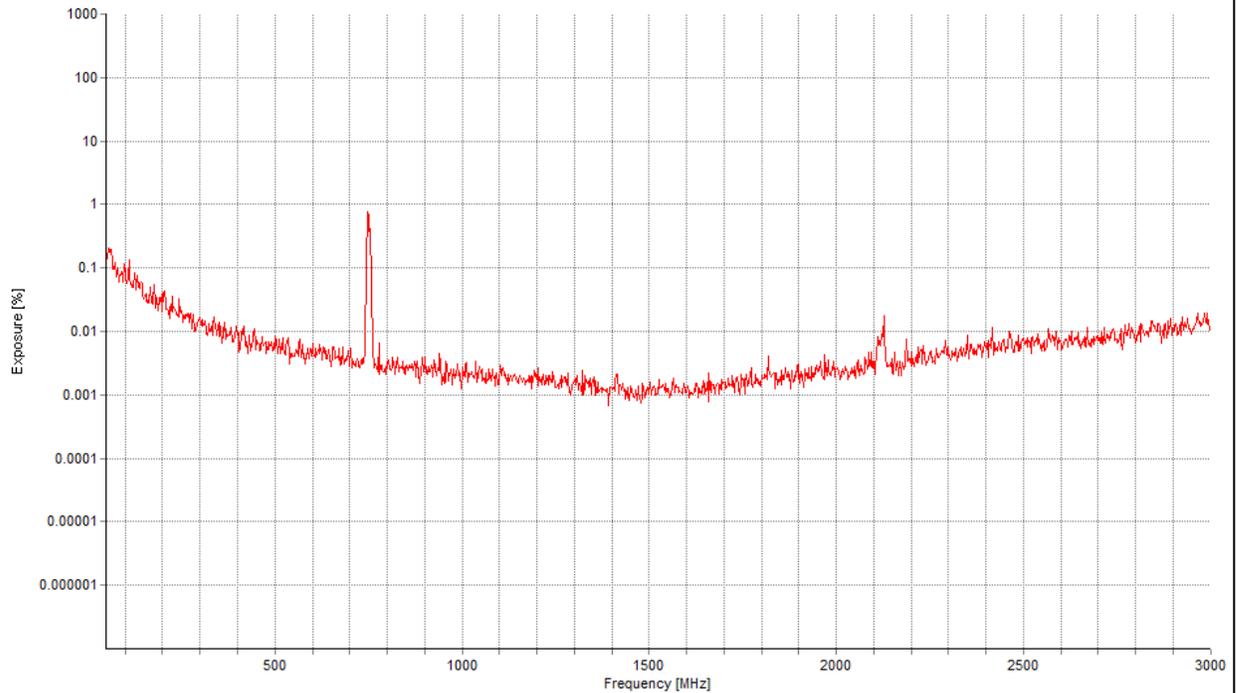
The SRM-3000 was used for an RF field evaluation and RF exposure assessment. The SRM-3000 was set to provide a read-out in %MPE for members of the general public within the frequency band of 50 to 3,000 MHz. The “Spectrum Analysis” mode was used to examine the total RF field with a visual representation of the spectrum. Each “peak” was evaluated by frequency and amplitude (intensity).

The RF field evaluation was performed during normal use of the existing transmitters to ensure they were in operation during the RF exposure assessment measurements. The locations for the measurements (See map, Figure 2) were based upon making a comparison with previously obtained measurement data. For this particular site, measurements were obtained using two methods:

(1) **Potential RF Exposure based on Spatial Average:** The built-in “averaging” feature was used to record while the probe was continuously scanning an area from the ground plane up to a height of six feet above the ground, referred to as the “Spatial Average”. The **highest observed** spatial average readings at each location were recorded in units of %MPE for members of the public 50 to 3000 MHz. The highest observed spatially-averaged RF field levels are contained in Table 2.

(2) **Potential RF Exposure based on Peak Fields:** The built-in “peak hold” feature was used during the continuous scan. The **highest observed** readings at each location were recorded in units of %MPE for members of the public 50 to 3000 MHz, and are contained in Table 2.

The “Spectrum Analysis” mode was used to examine the total RF field with a visual representation of the spectrum. Each “peak” was evaluated by frequency and amplitude (intensity). Figure 3 shows the full spectrum (50 – 3000 MHz) captured at the location of the host building parking lot (#2, Figure 2).



Isotropic Result

**Figure 3: Spectral Analysis; 50 - 3000 MHz
Location #2, Figure 2**

NOTES:

- (1) Y-Axis “%MPE(FCC General Public Guidelines)” in LOGARITHMIC scale, maximum 1000% MPE; X-Axis Frequency in LINEAR Scale; linear-linear plots would be off the page.**
- (2) Dominant peak at ~750 MHz; Verizon Wireless “LTE”**
- (2) Secondary peaks at ~2150 MHz; Verizon Wireless “AWS”**

RESULTS

Table 2: Results of Broadband RF Field Measurements; 50 to 3000 MHz. Vicinity of 799 Concord Avenue, Cambridge, MA		
Location, See Map, Figure 2	Spatial Average Reading Corrected (% MPE) *	Peak Meter Reading Corrected (% MPE) *
1	1.18%	1.24%
2	1.57%	1.58%
3	0.82%	1.23%
4	0.75%	1.04%
5	0.55%	0.78%
6	0.89%	1.33%
7	0.88%	1.14%
8	0.50%	0.76%
9	1.16%	1.26%
10	0.61%	0.73%

Table Notes:

* The highest observed readings at each location were recorded in units of %MPE for members of the public 50 to 3000 MHz.

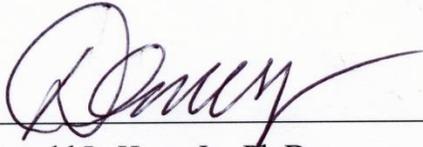
CONCLUSION

Previous theoretical RF field calculations performed by this consultant (11/7/2013) indicate the summation of the existing Verizon Wireless personal wireless services RF contributions, in addition to the existing ambient levels, would be well-within the established RF exposure guidelines. The measured existing ambient RF field levels indicated the maximum to be around one percent of the current State and Federal maximum permissible exposure guidelines. There is very little change in ambient RF field readings since the last measurements were obtained in 2013. These RF measurements are accurate, and meet both FCC and the MDPH guidelines.

Based on the RF fields I have measured; it is my expert opinion that this facility complies with all regulatory guidelines for RF exposure to members of the public with the existing Verizon Wireless personal wireless services antennas.

Feel free to contact me if you have any questions.

Sincerely



Donald L. Haes, Jr., Ph.D
Certified Health Physicist

Note: The analyses, conclusions and professional opinions are based upon the precise parameters and conditions of these particular sites; **Utility pole near 799 Concord Avenue, Cambridge, MA.** Utilization of these analyses, conclusions and professional opinions for any personal wireless services installation, existing or proposed, other than the aforementioned has not been sanctioned by the author, and therefore should not be accepted as evidence of regulatory compliance.

DONALD L. HAES, JR., PH.D., CHP

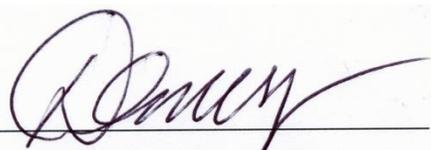
Radiation Safety Specialist

MA Radiation Control Program Health Physics Services Provider Registration #65-0017
PO Box 198, Hampstead, NH 03841 603-303-9959 Email: donald_haes_chp@comcast.net

STATEMENT OF CERTIFICATION

1. I certify to the best of my knowledge and belief, the statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions, and are personal, unbiased professional analyses, opinions and conclusions.
3. I have no present or prospective interest in the property that is the subject of this report and I have no personal interest or bias with respect to the parties involved.
4. My compensation is not contingent upon the reporting of a predetermined energy level or direction in energy level that favors the cause of the client, the amount of energy level estimate, the attainment of a stipulated result, or the occurrence of a subsequent event.
5. This assignment was not based on a requested minimum environmental energy level or specific power density.
6. My compensation is not contingent on an action or event resulting from the analyses, opinions, or conclusions in, or the use of, this report.
7. The consultant has accepted this assessment assignment having the knowledge and experience necessary to complete the assignment competently.
8. My analyses, opinions, and conclusions were developed and this report has been prepared, in conformity with the *American Board of Health Physics* (ABHP) statements of standards of professional responsibility for Certified Health Physicists.

Date: February 25, 2017



Donald L. Haes, Jr., Ph.D

Certified Health Physicist

ENDNOTES

- i. Federal Register, Federal Communications Commission Rules; *Radiofrequency radiation; environmental effects evaluation guidelines* Volume 1, No. 153, 41006-41199, August 7, 1996. (47 CFR Part 1; Federal Communications Commission).
- ii. Telecommunications Act of 1996, 47 USC; Second Session of the 104th Congress of the United States of America, January 3, 1996.
- iii. 105 CMR 122.000: Massachusetts Department of Public Health, *Non-Ionizing Radiation Limits for: The General Public from Non-Occupational Exposure to Electromagnetic Fields, Employees from Occupational Exposure to Electromagnetic Fields, and Exposure from Microwave Ovens*.
- iv. ANSI/IEEE C95.1-1999: American National Standard, *Safety levels with respect to human exposure to radio frequency electromagnetic fields, from 3 KHz to 300 GHz (Updated in 2010)*.
- v. National Council on Radiation Protection and Measurements (NCRP); *Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields*, NCRP Report 86, 1986.
- vi. ANSI/IEEE C95.3-2002: American National Standard, *IEEE Recommended Practice for Measurements and Computations of Radio Frequency Electromagnetic Fields With Respect to Human Exposure to Such Fields, 100 kHz–300 GHz*.
- vii. NCRP Report No. 119: National Council on Radiation Protection and Measurements, 1993; *A Practical Guide to the Determination of Human Exposure to Radiofrequency Fields*.



AFFIDAVIT OF RADIO FREQUENCY ENGINEER

The undersigned, in support of the application to renew the special permit for the existing wireless communications facility consisting of rooftop mounted equipment and an indoor equipment room at the building located at 799 Concord Avenue (Sancta Maria Hospital) in Cambridge, Massachusetts, states the following:

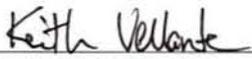
1. My name is Keith Vellante. I have a Bachelor of Science degree in Electrical Engineering from the University of New Hampshire and I am employed as a Radio Frequency (RF) Engineer for C Squared Systems, LLC. C Squared Systems has entered into a contract with Verizon Wireless to provide RF consulting services on behalf of Verizon Wireless. I have reviewed this site with the Radio Frequency Engineer responsible for the Verizon Wireless network design in the area of Massachusetts that includes the City of Cambridge, MA.
2. Verizon Wireless is a federally licensed provider of wireless communications services with a national footprint.
3. The subject facility provides wireless voice and data services to busy areas of western Cambridge and eastern Belmont generally encompassed by Route 60, Route 2, Alewife Brook Parkway, and Concord Avenue. This facility is an integral piece of Verizon Wireless' network and its continued operation is critical in order to maintain reliable service in this area.
4. I have reviewed the existing installation at 799 Concord Street as well as the other existing and planned antenna site locations used in Verizon Wireless' system in and around the surrounding areas. I have analyzed the benefits that the subject site represents to Verizon Wireless' network and its users. I employ computer simulations, which incorporate the results of field tests of existing facilities, to determine existing radio frequency (RF) coverage for Verizon Wireless' system. These simulations model characteristics such as antenna types, antenna height, output power, terrain, ground elevations and RF propagation effects of the frequency utilized.
5. The following table provides details of the surrounding Verizon Wireless telecommunications facilities used to generate the RF maps attached hereto as exhibits to Verizon Wireless' application.

Site Name:	Latitude:	Longitude:	Street Address:	City, State:	Structure Type:	Antenna Height (AGL):	Status:
Arlington 3	42.4213	-71.1723	1098 Massachusetts Avenue	Arlington, MA	Rooftop	45/49.5	On-Air
Arlington 4	42.4091	-71.1470	300 Massachusetts Avenue	Arlington, MA	Steeple	64.25	On-Air
Arlington Ctr	42.4168	-71.1507	47 Mystic Street	Arlington, MA	Rooftop	83	On-Air
Belmont	42.3813	-71.1757	125 Trapelo Road	Belmont, MA	Rooftop	60	On-Air
Belmont 3	42.3990	-71.1752	582 Pleasant Street	Belmont, MA	Steeple	46.1	Approved
Belmont N	42.3994	-71.1884	780 Concord Avenue	Belmont, MA	Monopole	97	On-Air
Waverley	42.3873	-71.1900	20 Church Street	Belmont, MA	Rooftop	37/43	On-Air
Arlington 2	42.3986	-71.1398	40 Whittemore Avenue	Cambridge, MA	Rooftop	52	On-Air
Belmont 2	42.3916	-71.1554	799 Concord Avenue	Cambridge, MA	Rooftop	79.3	On-Air
Cambridge West	42.3808	-71.1546	700 Huron Avenue	Cambridge, MA	Rooftop	125	On-Air
Fresh Pond	42.3882	-71.1426	545 Concord Avenue	Cambridge, MA	Rooftop	53	On-Air
Harvard Sq 2	42.3816	-71.1201	1654 Massachusetts Avenue	Cambridge, MA	Rooftop	67	On-Air
Mt Auburn	42.3737	-71.1338	330 Mt Auburn Street	Cambridge, MA	Rooftop	48/60	On-Air
Porter Sq	42.3915	-71.1230	2067 Massachusetts Avenue	Cambridge, MA	Rooftop	77	On-Air
Somerville 7	42.3965	-71.1232	49 Davis Square	Somerville, MA	Rooftop	64	On-Air
Tufts 2	42.4036	-71.1293	15 Weston Avenue	Somerville, MA	Rooftop	79.25	On-Air
Watertown 8	42.3746	-71.1507	818 Mt Auburn Street	Watertown, MA	Rooftop	45.8	On-Air
Watertown E	42.3679	-71.1520	76 Coolidge Hill Road	Watertown, MA	Smokestack	50	On-Air

6. The signal propagation plots included as attachments were produced using deciBel Planner™, a Windows-based RF propagation computer modeling program and network planning tool. The software takes into account the topographical features of an area, land cover, antenna models, antenna heights, RF transmitting power and receiver thresholds to predict coverage and other related RF parameters used in site design and network expansion.
7. The coverage map titled “Existing/Approved LTE Coverage with 799 Concord Avenue” attached hereto depicts the coverage provided from the “On-Air” and “Approved” Verizon Wireless sites in the western Cambridge area, including the subject facility located at 799 Concord Avenue. “On-Air” sites are existing Verizon Wireless facilities, and “Approved” sites are defined as those that are in the final stages of permitting or construction and are expected to be turned on-air in the near future. The green shaded areas represent the level of coverage necessary to cover into the denser building makeups of the business and commercial areas, whereas the orange represents the minimum level of coverage for reliable service in the more residential areas. The deficient areas of coverage are defined by the unshaded/white areas.
8. The coverage map titled “LTE Coverage without 799 Concord Avenue” attached hereto depicts what Verizon Wireless’ coverage in the western Cambridge area would be, without the subject facility at 799 Concord Avenue. As can be seen from the coverage map, the surrounding network of Verizon Wireless sites is unable to provide adequate coverage to areas of western Cambridge, creating a significant gap in reliable service along key roadways such as Concord Avenue, Blanchard Road, and the surrounding roads, neighborhoods, and business/commercial/community areas.
9. The map titled “Existing/Approved LTE Sector Footprints with 799 Concord Avenue” depicts the areas primarily served by the sectors (a.k.a. signal “footprints”) of the “On-Air” and “Approved” Verizon Wireless sites in the area, which are shown by the unique color for each particular site or sector of interest. For clarity, all other sectors of less interest with respect to the subject facility are shown in grey. As demand for wireless voice and data services continues to grow, Verizon Wireless manages the footprint of each sector so that it can support the demand within the area it is primarily serving. In addition to maintaining coverage in the area, the subject site is also needed to serve existing and anticipated demand in the vicinity. As shown in this map by the green shaded area, the facility at 799 Concord Avenue predominantly serves much of the area encompassed by Route 60, Route 2, Alewife Brook Parkway, and Concord Avenue.
10. The map titled “LTE Sector Footprints without 799 Concord Avenue” depicts the sector footprints without the facility at 799 Concord Avenue. As shown in this map, the footprints of the surrounding sectors would expand to fill the void left behind without the 799 Concord Avenue facility and impose a significant additional burden on those sectors from a capacity standpoint. Please note that the outer parts of each sector footprint may include areas that presently have signal strength below the targeted value required for reliable service to Verizon Wireless’ customers. The fact that low-level signal is capable of reaching these areas does not mean that these areas experience adequate coverage. These unreliable areas of low signal level impose a significant capacity burden on the sites primarily serving the area.
11. I have concluded that the continued operation of the subject facility is necessary to maintain the service currently provided by Verizon Wireless and that without this site, a significant gap in service would be created. Any reduction in the antenna configuration and/or equipment would also limit optimal performance and effectiveness of this site.
12. Verizon Wireless certifies that the subject facility will not cause interference to any lawfully operating emergency communication system, television, telephone, or radio in the surrounding area. The FCC has licensed Verizon Wireless to transmit and receive in the Upper C Block of the 700 MHz band, B Block of the Cellular (850 MHz) band, the F, C3, and C4 Blocks of the PCS (1900 MHz) band, and the A and B Blocks of the AWS (2100 MHz) band of the RF spectrum. As a condition of the FCC licenses, Verizon Wireless is prohibited from interfering with other licensed devices that are being operated in a lawful manner. Furthermore, no emergency communication system, television, telephone, or radio is licensed to operate on these frequencies, and therefore interference is highly unlikely.

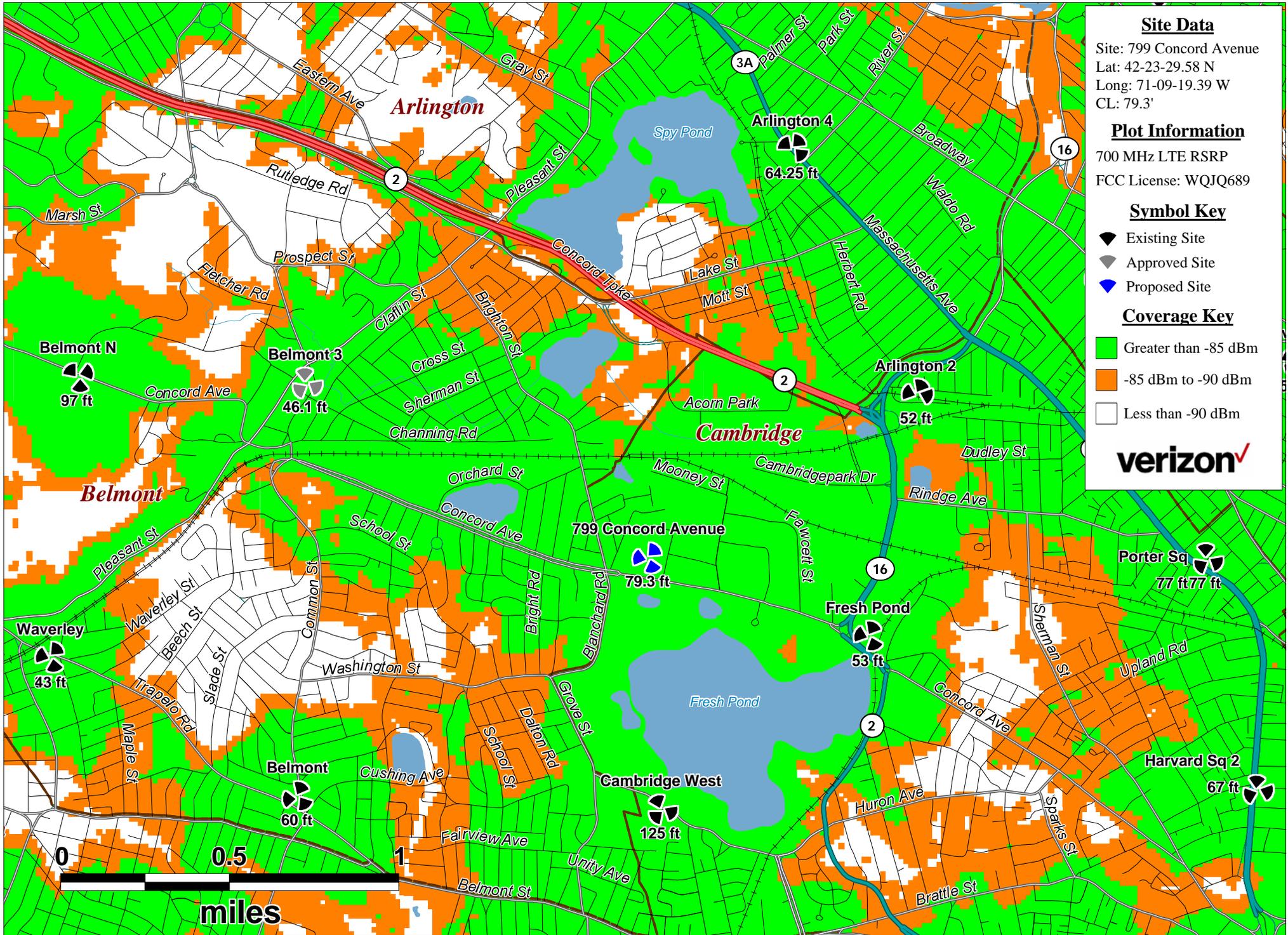
13. Pursuant to its Federal Communications Commission (FCC) licenses, Verizon Wireless is required to ensure that all radio equipment operating at the subject communications facility and the resulting radio frequency exposure levels are compliant with FCC requirements as well as federal and state health and safety standards.
14. Providing wireless communication services is a benefit to the residents of the City of Cambridge, as well as to mobile customers traveling throughout the area. The subject facility is well suited to meet Verizon Wireless' network requirements for the intended area. The absence of a wireless telecommunications facility at the subject location will result in the creation of coverage gaps and inadequate network capacity in this area. Without the subject facility, Verizon Wireless would be unable to continue providing reliable wireless communication services in the area of western Cambridge; therefore, Verizon Wireless respectfully requests that the City of Cambridge act favorably upon the subject facility.

Signed and sworn under the pains and penalties of perjury February 27th, 2017.



Keith Vellante
Radio Frequency (RF) Engineer
C Squared Systems, LLC
65 Dartmouth Drive
Auburn, NH 03032

Existing/Approved LTE Coverage with 799 Concord Avenue



Site Data
 Site: 799 Concord Avenue
 Lat: 42-23-29.58 N
 Long: 71-09-19.39 W
 CL: 79.3'

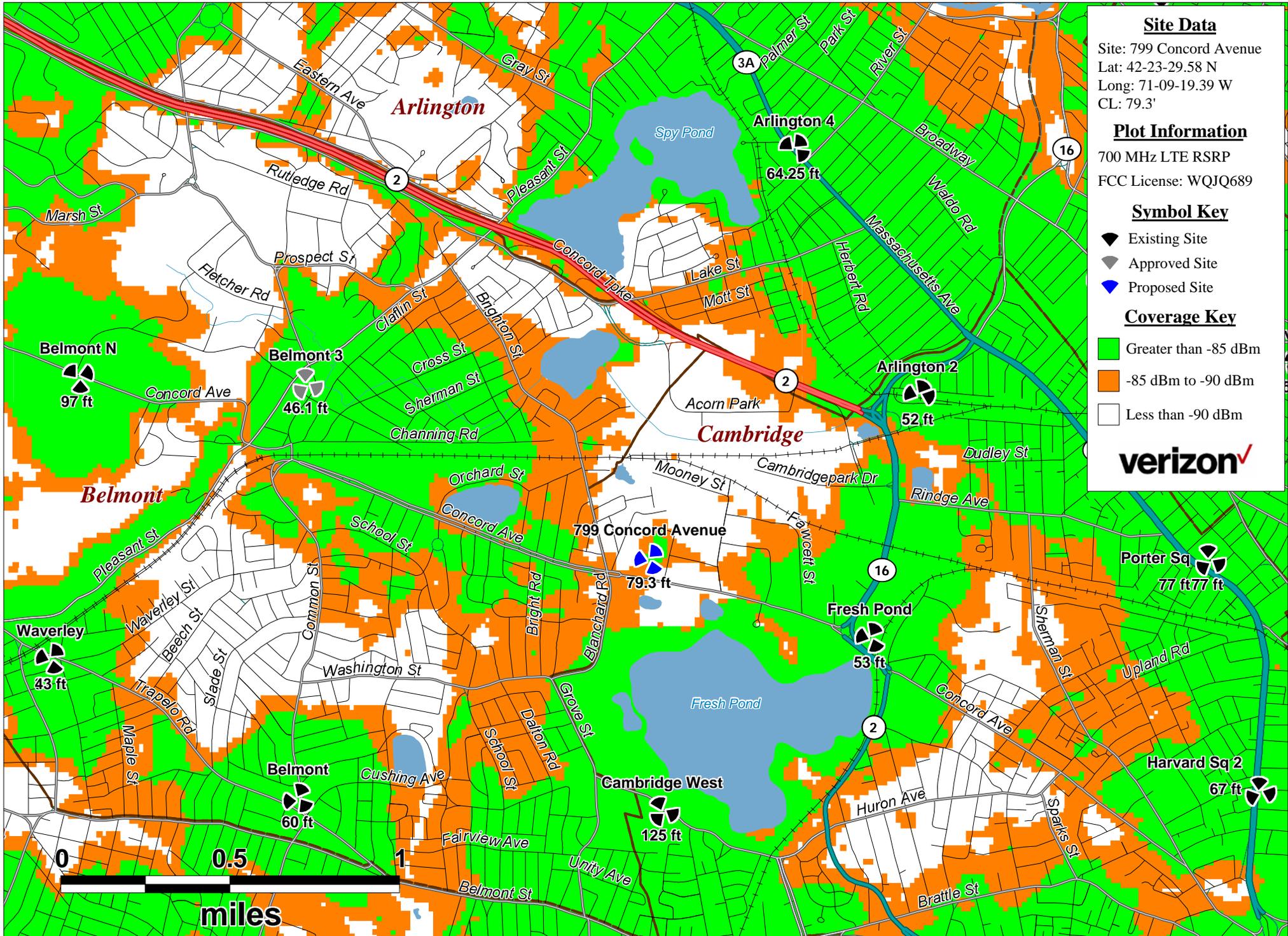
Plot Information
 700 MHz LTE RSRP
 FCC License: WQJQ689

Symbol Key
 Existing Site
 Approved Site
 Proposed Site

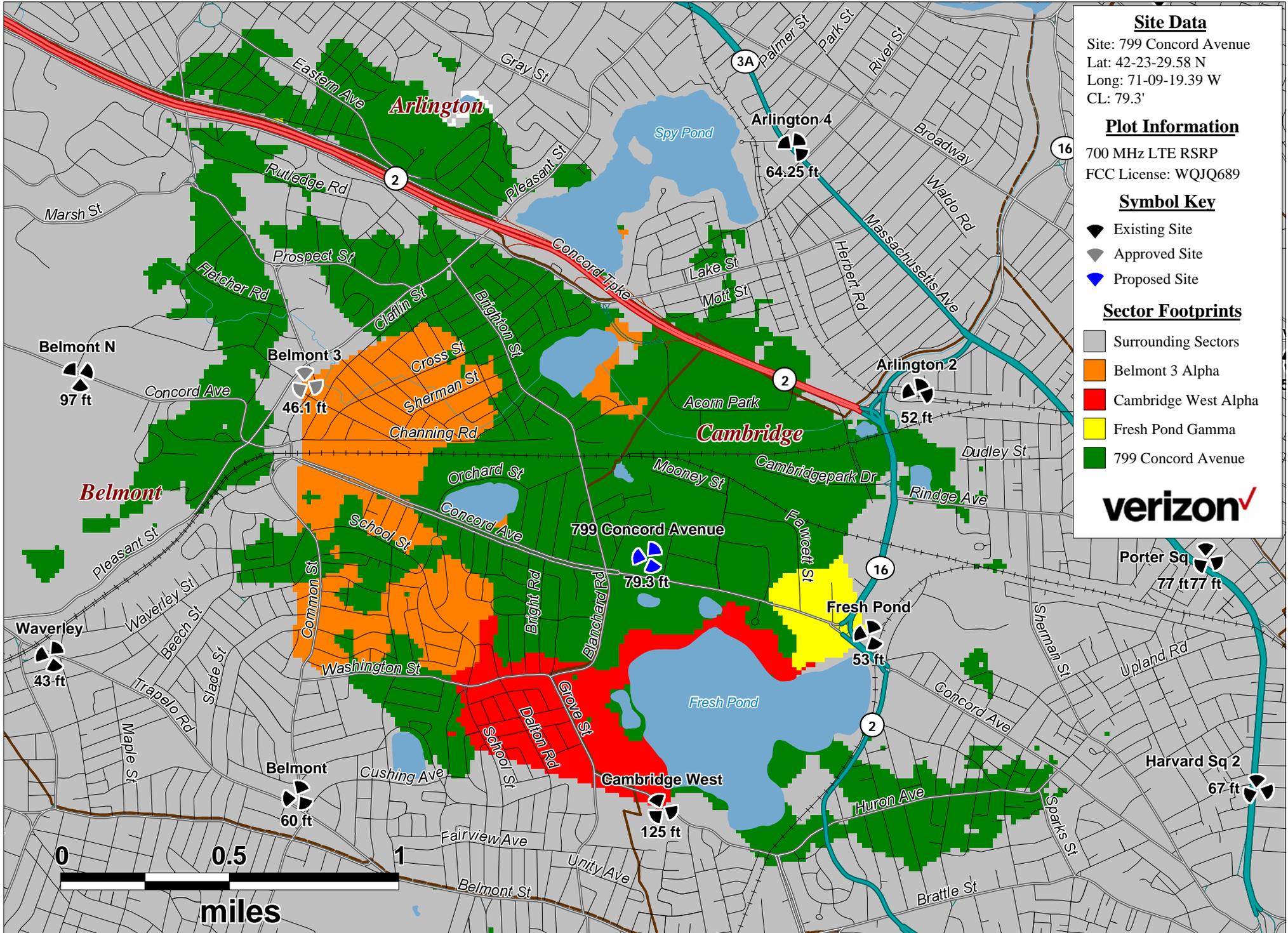
Coverage Key
 Greater than -85 dBm
 -85 dBm to -90 dBm
 Less than -90 dBm

verizon

LTE Coverage without 799 Concord Avenue



Existing/Approved LTE Sector Footprints with 799 Concord Avenue



Site Data

Site: 799 Concord Avenue
 Lat: 42-23-29.58 N
 Long: 71-09-19.39 W
 CL: 79.3'

Plot Information

700 MHz LTE RSRP
 FCC License: WQJQ689

Symbol Key

- Existing Site
- Approved Site
- Proposed Site

Sector Footprints

- Surrounding Sectors
- Belmont 3 Alpha
- Cambridge West Alpha
- Fresh Pond Gamma
- 799 Concord Avenue



Porter Sq 77 ft 77 ft

Fresh Pond 53 ft

Cambridge West 125 ft

Harvard Sq 2 67 ft

Belmont 60 ft

799 Concord Avenue 79.3 ft

Arlington-2 52 ft

Arlington 4 64.25 ft

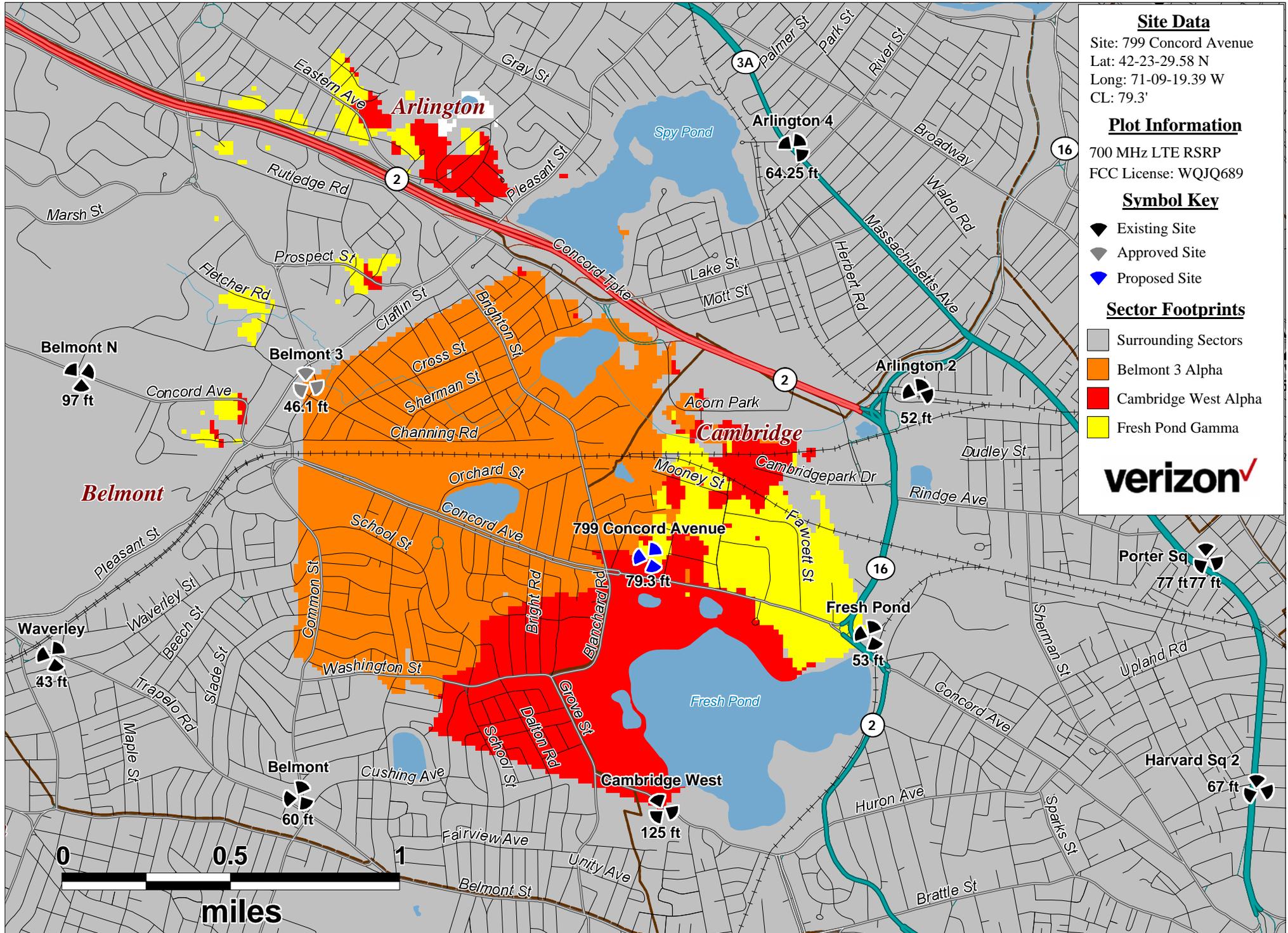
Belmont 3 46.1 ft

Belmont N 97 ft

Waverley 43 ft



LTE Sector Footprints without 799 Concord Avenue





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 799 Concord Avenue

The above-referenced property is subject to the jurisdiction of the Cambridge Historical Commission (CHC) by reason of the status referenced below:

- Old Cambridge Historic District
 - Fort Washington Historic District
(M.G.L. Ch. 40C, City Code §2.78.050)
 - Avon Hill Neighborhood Conservation District
 - Half Crown – Marsh Neighborhood Conservation District
 - Harvard Square Conservation District
 - Mid Cambridge Neighborhood Conservation District
 - Designated Landmark
 - Property is being studied for designation: _____
(City Code, Ch. 2.78., Article III, and various City Council Orders)
 - Preservation Restriction or Easement (as recorded)
 - Structure is fifty years or more old and therefore subject to CHC review of any application for a demolition permit, if one is required by ISD. (City Code, Ch. 2.78, Article II). **See the back of this page for definition of demolition. No demolition permit anticipated.**
 - No jurisdiction: not a designated historic property and the structure is less than fifty years old.
 - No local jurisdiction, but the property is listed on the National Register of Historic Places; CHC staff is available for consultation, upon request.
- Staff comments: _____

The Board of Zoning Appeal advises applicants to complete Historical Commission or Neighborhood Conservation District Commission reviews before appearing before the Board.

If a line indicating possible jurisdiction is checked, the owner needs to consult with the staff of the Historical Commission to determine whether a hearing will be required.

CHC staff initials SLB

Date March 13, 2017

Received by Uploaded to Energov

Date March 13, 2017

Relationship to project BZA 12697-2017

cc: Applicant
Inspectional Services Commissioner

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>

799 Concord Ave

143

Rektioner

267D-289
LEO, NICHOLAS A.,
TR. THE CONCORD AVE REALTY TRUST
517 CONCORD AVE.
CAMBRIDGE, MA 02138

267D-289
SZARMACH, PAUL E. &
KATHERINE O'BRIEN O'KEEFE
773 CONCORD AVE. UNIT#406
CAMBRIDGE, MA 02138

ROBINSON + COLE, LLP
C/O TIMOTHY C. TWARDOWSKI, ESQ.
ONE BOSTON PLACE - 25TH FL.
BOSTON, MA 02108

267D-289
BETHUNE, CRISTINA M.
773 CONCORD AVE., #405
CAMBRIDGE, MA 02138

267D-289
THAKORE, KOMAL & ROMIT THAKORE
773 CONCORD AVE. UNIT#403
CAMBRIDGE, MA 02138

CELLCO PARTNERSHIP
D/B/A VERIZON WIRELESS
C/O ELLEN DALMUS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581

267D-289
ROLLI, SIMONA
458 EXCHANGE AVENUE
GAITHERSBURG, MD 20878

267D-289
O'CONNOR, CORNELIA,
TRUSTEE O'CONNOR REALTY TRUST
773 CONCORD AVE., #306
CAMBRIDGE, MA 02138

267D-289
COLUCCI, ROBERT D. & KATHRYN M. COLUCCI
P.O. BOX 808
NEWTOWN, CT 06470

267D-289
FRESH POND GREENWAY, LLC.
517 CONCORD AVE
CAMBRIDGE, MA 02138

267D-289
ALLY, SAID A. & SADA SALUM
773 CONCORD AVE. UNIT#303
CAMBRIDGE, MA 02138

267D-289
DOLS, BRIAN M.
2901 BARTON SKWY #2204
AUSTIN, TX 78746

267D-289
FRESH POND GREENWAY, LLC.
517 CONCORD AVE
CAMBRIDGE, MA 02139

267D-289
HARTLEY, DOUGLAS
773 CONCORD AVE., #206
CAMBRIDGE, MA 02138

267D-289
FOK, ELISE HOI WAN
773 CONCORD AVE., #205
CAMBRIDGE, MA 02138

267D-289
IZU, ALLEN E. & TONIA IZU
773 CONCORD AVE. UNIT#204
CAMBRIDGE, MA 02138

267D-289
LE SAGE, DAVID & ANDREA TSAI
773 CONCORD AVE., #203
CAMBRIDGE, MA 02138

267D-289
SANCHEZ, JOSEFA LOPEZ &
JAQUIN LOPEZ VERAZA
773 CONCORD AVE. UNIT#202
CAMBRIDGE, MA 02138

267D-289
ROY, BIDYUT KUMAR & SANTONA RANI ROY
773 CONCORD AVE. UNIT#201
CAMBRIDGE, MA 02138

267D-289
KANG, JANE M.
773 CONCORD AVE. UNIT# 107
CAMBRIDGE, MA 02138

267D-289
SCOTT, MICHELE N.
773 CONCORD AVE., #106
CAMBRIDGE, MA 02138

267D-289
LOBOSCO, JOHN J. & MARGARET O'BRIEN
773 CONCORD AVE. UNIT 105
CAMBRIDGE, MA 02138

267D-289
WANG, XIAOEN & BIANLING LIU
773 CONCORD AVE., #104
CAMBRIDGE, MA 02138

267D-289
KATZ, WILLIAM H.
773 CONCORD AVE. UNIT#103
CAMBRIDGE, MA 02138

267D-322/266-32
CITY OF CAMBRIDGE
C/O LOUIS DEPASQUALE
CITY MANAGER

266-32
CAMBRIDGE CITY OF RECREATION DEPT
51 INMAN ST
CAMBRIDGE, MA 02139

267D-322/266-32
CITY OF CAMBRIDGE
C/O NANCY GLOWA
CITY SOLICITOR

267B-132
MADDEN, SHERLY A.
70 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-143
EVANS, MARTIN G. & NANCY R. EVANS
48 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-145
MCDONOUGH, MARY T. & JANET E. GRIFFIN
44 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-147
RANAGAN, SCOTT
P.O. BOX 445
CHELMSFORD, MA 01824

267B-147
HOM, VINCENT M. & WING YEE HOM
36 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-147
YUEN, MAN K. & KAREN H. CHAN
34 GRISWOLD ST., #3
CAMBRIDGE, MA 02138

267B-158
KOSKO, JOHN J. & KAREN N. KOSKO
16 GRISWOLD STREET
CAMBRIDGE, MA 02138

267B-161
ABBASI, SALMAN
1-3 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-164
IGNAZIO, JOSEPH L. & MARY J. IGNAZIO,
A LIFE ESTATE
76 WILSON ROAD
BEDFORD, MA 01730

267B-177
SULLIVAN, ROBERT
22 GRISWOLD STREET
CAMBRIDGE, MA 02138

267B-191
GRIFFIN, CLAIRE E. A LIFE ESTATE
92 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-192
ROSA, LOUIS C.
88 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-193
CORTIZAS, ANTHONY P., JR.
84 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-194
IANNOTTI, MICHAEL
80 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-199
SQUIRES, ANNE C.
56 GRISWOLD ST.
CAMBRIDGE, MA 02138

267B-200
MULLEN, FRANCIS T. &
BARBARA CLARK MULLEN
52 GRISWOLD
CAMBRIDGE, MA 02138

267B-211
DANILIUK, MICHAEL & RENEE DANILIUK
30 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-212
GINSBERG, VICTORIA M.
24-26 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-219
SACK, HOM KWONG
64 GRISWOLD ST
CAMBRIDGE, MA 02138

267B-220
XIONG, DAVID & LING LI
66 GRISWOLD
CAMBRIDGE, MA 02138

267C-44
MOSCARDINI, LORRAINE & LEANDERS H. SMITH
14 LOOMIS ST.
CAMBRIDGE, MA 02138

267C-70
WEST CAMBRIDGE SCIENCE PARK, LLC
38 PEQUOSSETTE RD
BELMONT, MA 02478

267C-86
AMOROSO, JOSEPH A. &
FLORA G. AMOROSO LIFE ESTATE
40 LOOMIS ST
CAMBRIDGE, MA 02138

267C-87
AMOROSO, PATRICIA L.
40 LOOMIS STREET
CAMBRIDGE, MA 02138

267D-259
TRUELOVE, JOHN M.,
TR. OF THE 769 CONCORD AVE REALTY TR.,
769 CONCORD AVE
CAMBRIDGE, MA 02138

267D-282
DELEO, JOSEPH F.
777 CONCORD AVE., UNIT #101
CAMBRIDGE, MA 02138

267D-282
CIRAFICE, RICHARD P.,
TRUSTEE OF SYDKAL REALTY TRUST.
777 CONCORD AVE., UNIT #102
CAMBRIDGE, MA 02138

267D-282
HARTUNIAN, BYRON V. &
MARGARET C. NICHOLS
777 CONCORD AVE
CAMBRIDGE, MA 02138

267D-282
YOUNGWIRTH, STEPHEN A
400 STUART ST. #22D
BOSTON, MA 02116

267D-282
DAUGHTERS OF MARY OF THE IMMACULATE
CONCEPTION, INC. THE
799 CONCORD AVE.
CAMBRIDGE, MA 02138

267D-282
TCHERKEZIAN, SARKIS & TANYA TCHERKEZIAN
777 CONCORD AVE., UNIT #106
CAMBRIDGE, MA 02138

267D-282
MUGNIER, RENE & JESSICA L. FEWKES
777 CONCORD AVE., UNIT #201
CAMBRIDGE, MA 02138

267D-282
FORSTER, JOHN T.A. P. O. BOX 48
M.I.T. BRANCH P.O.
CAMBRIDGE, MA 02139

267D-282
FORSTER, T.A. JOHN P.O.BOX 48
M.I.T. BRANCH P.O.
CAMBRIDGE, MA 02138

267D-282
STORROW COMPANY, INC.
777 CONCORD AVE., UNIT #205
CAMBRIDGE, MA 02138

267B-129
RAFFERTY, JAMES V.
74 GRISWOLD ST
CAMBRIDGE, MA 02138

267D-282
777 CONCORD AVE UNIT 206, LLC.
777 CONCORD AVE., UNIT#206
CAMBRIDGE, MA 02138

267D-282
ELECTROMAGNETICS ACADEMY, INC
C/O J.A. KONG
P.O. BOX 425517, KENDALL SQ.
CAMBRIDGE, MA 02142

267D-282
LYDIAN CENTER, LLC
777 CONCORD AVE. SUITE 301
CAMBRIDGE, MA 02138

267D-282
SMITH, JUDITH E. & DIRAN S. ZAHIGIAN
777 CONCORD AVE., #302
CAMBRIDGE, MA 02138

267D-282
FULLER, MICHAEL J.,
TRUSTEE THE MICHAEL J. FULLER TRUST
68 BRIDGE ST
LEXINGTON, MA 02421

267D-303
SHIRLEY SLOANE
125 COOLIDGE AVE #506
WATERTOWN, MA 02472

267D-340
THE FAYERWEATHER STREET SCHOOL
765 CONCORD AVE
CAMBRIDGE, MA 02138

267C-46
YANG, ROBERT Y. & KATHERINE S. YANG
20 LOOMIS ST., #2
CAMBRIDGE, MA 02138

267D-339
SANCTA MARIA HOSPITAL
799 CONCORD AVE
CAMBRIDGE, MA 02138

267D-329-332
WEST CAMBRIDGE SCIENCE PARK, LLC
38 PEQUOSSETTE RD
BELMONT, MA 02478

267D-289
MCAULIFFE, WILLIAM J.
773 CONCORD AVE., #102
CAMBRIDGE, MA 02138

267C-46
COSTELLO, MICHAEL C.
20 LOOMIS ST. UNIT#1
CAMBRIDGE, MA 02138

267C-46
RENN, ROBERT D., NANCY D. RENN &
MELISSA LEIGH RENN
20 LOOMIS ST. UNIT#4
CAMBRIDGE, MA 02138

267C-46
SEEHLE, DANA & ANDREW J. CROTEAU
20 LOOMIS ST., #3
CAMBRIDGE, MA 02138

267D-289
NAMGYAL, JIGMEY & KELSANG LHAMO
773 CONCORD AVE., #402
CAMBRIDGE, MA 02138



City of Cambridge

MASSACHUSETTS



2015 00046877

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Page: 1 of 4 04/02/2015 03:36 PM

BOARD OF ZONING APPEAL

831 Mass Avenue, Cambridge, MA.
(617) 349-6100

RE-HEARING

2015 MAR 11 PM 2 05
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

CASE NO: 10518

LOCATION: 799 Concord Avenue / Office -1 Zone/ AOD
Cambridge, MA

PETITIONER: Bell Atlantic Mobile of Massachusetts Corporation, LTD. /
D/B/A Verizon Wireless – C/o Timothy C. Twardowski, Esq.

PETITION: Special Permit: To reconsider the petitioner's application for a special permit in light of a revised design and/or plan to locate mobile communications antennas on the roof of the existing building and place equipment inside an existing ground level garage space.

VIOLATION: Art. 4.000, Sec. 4.32.G.1 (Footnote 49) (Telecommunication Facility).
Art. 10.000, Sec. 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: February 12 & 19, 2015

DATE OF PUBLIC HEARING: February 26, 2015

MARGINAL REFERENCE REQUESTED
6257 409
BOOK 10521 PAGE 187

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER – CHAIR
TIMOTHY HUGHES – VICE-CHAIR
BRENDAN SULLIVAN
THOMAS SCOTT
JANET O. GREEN

✓
✓
✓
✓
✓

ASSOCIATE MEMBERS:

DOUGLAS MYERS
SLATER W. ANDERSON
ANDREA A. HICKEY
ALISON HAMMER
JIM MONTEVERDE
GEORGE S. BEST
LAURA WERNICK

Members of the Board of Zoning Appeal heard testimony and viewed materials submitted regarding the above request for relief from the requirements of the Cambridge Zoning Ordinance. The Board is familiar with the location of the petitioner's property, the layout and other characteristics as well as the surrounding district.

Case No. 10518
Location: 799 Concord Avenue
Petitioner: Bell Atlantic Mobile of MA Corp. Ltd. – D/B/A Verizon Wireless

On February 26, 2015, Petitioner's attorney Timothy Twardowski appeared before the Board of Zoning Appeal requesting a special permit in order to locate mobile communications antennas on the roof of the existing building and place equipment inside an existing ground level garage space. The Petitioner requested relief from Article 4, Section 4.32.G.1 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Twardowski stated that the case had been heard and denied in 2013. He stated that it had been appealed and was now being reheard upon a remand from the Federal District Court. He stated that the site had been redesigned so as to place all antennas behind a screen wall on the roof, making them not visible to the public.

Several neighbors spoke or wrote in opposition to the proposal based on negative effects to their businesses, which included schools and medical facilities, and to their property values due to actual or perceived health and/or environmental risks from radio frequency radiation. Some neighbors expressed concern about adverse health effects on students attending schools in the immediate neighborhood. The Chair explained that there was a federal law which had limited the Board's ability to deny an application based upon the health and environmental effects of the Petitioner's installation.

After discussion, the Chair moved that the Board grant the special permit for relief in order to locate mobile communications antennas on the roof of the existing building and place equipment inside an existing ground level garage space based upon the finding that traffic generated or patterns of access or egress resulting from the installation would not cause congestion, hazard, or substantial change in established neighborhood character. The Chair moved that the Board find that the continued operation of, and development of adjacent uses, would not be adversely affected by the nature of the proposed use. The Chair moved that the Board find that no 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. The Chair moved that the Board find that the proposed use would not impair the integrity of the district or adjoining districts or otherwise derogate from the intent and purpose of the Ordinance. The Chair moved that the Board grant the special permit on the following conditions:

1. that the work proceed in accordance with and be entirely consistent with photo simulations, architectural drawings, and engineering plans submitted by the petitioner, as initialed by the Chair,
2. that should the petitioner discontinue telecom services at this facility, the equipment be promptly removed and the building be restored to its prior condition to the extent reasonable and practical,
3. that, inasmuch as the health effects of the transmission of electromagnetic energy waves is a matter of ongoing societal concern and scientific study, the special permit is also subject to the following conditions:
 - A. that the petitioner shall file with the Inspectional Services Department each report it files with the federal authorities regarding the electromagnetic energy waves emissions emanating from all the petitioner's equipment on the site. Each such report shall be filed with the Inspectional Services Department no later than ten business days after the report has been filed with the federal authorities. Failure to timely file any such report with the Inspectional Services Department shall ipso facto terminate the special permit granted here,
 - B. that in the event that at any time federal authorities notify the petitioner that its equipment on the site, including, but not limited to the special permit granted here, fails to comply with the requirements of law or governmental regulation, whether with regard to the emissions of electromagnetic energy waves or otherwise, the petitioner, within ten business days of receipt of such notification of such failure shall file with the Inspectional Services Department a report disclosing in reasonable detail that such failure has occurred and the basis for such claimed failure. The special permit granted here shall ipso facto terminate if any of the petitioner's federal licenses is or are suspended, revoked, or terminated.
 - C. that to the extent that a special permit has terminated pursuant to the foregoing paragraphs A and B, the petitioner may apply to this Board for a new special permit provided that the public notice concerning such application discloses in reasonable detail that the application has been filed because of a termination of the special permit pursuant to paragraphs A or B above. Any such new application shall not be deemed a repetitive petition and therefore shall not be subjected to the two-year period during which repetitive petitions may not be filed.
 - D. that prior to the installation of the equipment, the petitioner shall file with the Inspectional Services Department a sworn Affidavit of the person in charge of the installation of equipment by the petitioner with a geographical area that includes Cambridge, stating that A, he or she has such responsibility; and B, that the equipment is being installed pursuant to the special permit granted here, will comply with all federal safety rules and will be situated and maintained in locations with

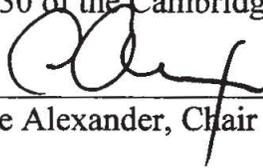
appropriate barricades and other protections, such that individuals, including nearby residents and occupants of nearby structures, will be sufficiently protected from excessive radio frequency radiation under federal law.

- 4. that the special permit granted here shall continue for two years and that after two years should the petitioner want to continue to use this facility, it must reapply for the special permit. At that point the Board and the public will have the ability to take into account any new developments, either scientifically or legislatively, with regard to telecommunications facilities.

The five member Board voted unanimously in favor of granting the special permit (Alexander, Hughes, Sullivan, Scott, and Green) as conditioned. Therefore, the special permit is granted.

The Board based its decision upon all the information presented, and upon the following findings:

- 1) The meeting of the requirements of the Ordinance;
- 2) Traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in the established neighborhood character;
- 3) The continued operation of or the development of adjacent uses as permitted in the Ordinance would not be adversely affected by the nature of the proposed uses;
- 4) Nuisance or hazard would not be created to the detriment of the health, safety and /or welfare of the occupants of the proposed use;
- 5) The proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the Ordinance, and in fact would be a significant improvement to the structure and benefit the neighborhood, and;
- 6) The new use or building construction is not inconsistent with the Urban Design Objectives set forth in Section 19.30 of the Cambridge Zoning Ordinance.



Constantine Alexander, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 3/11/15 by Marie DeLuca, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed

Appeal has been filed and dismissed or denied.

Date: April 1, 2015 Deanna P. Kopy City Clerk.

**CITY OF CAMBRIDGE, MASSACHUSETTS
BOARD OF ZONING APPEAL**

**STATEMENT IN SUPPORT OF
APPLICATION FOR SPECIAL PERMIT**

Applicant: Cellco Partnership d/b/a Verizon Wireless
Property: 799 Concord Avenue (Map and Parcel 267D-339)
Zoning: Office 1 (O-1), Alewife Overlay District (AOD3), Parkway Overlay District,
and Concord Avenue Parkway Subdistrict
Proposed Use: Mobile Communications Facility

BACKGROUND

The Applicant, Cellco Partnership d/b/a Verizon Wireless (“Applicant” or “Verizon Wireless”), is licensed by the Federal Communications Commission (“FCC”) to provide cellular mobile radiotelephone service within the market area that includes the City of Cambridge. On March 11, 2015, the Board of Zoning Appeal (the “BZA”) granted a special permit to Verizon Wireless for the installation, use, and operation of a mobile communications facility at 799 Concord Avenue (*see* BZA Case No. 10518). A copy of BZA’s decision in Case No. 10518—hereinafter referred to as the “2015 Special Permit”—is attached as **Exhibit A**.

Condition #4 of the 2015 Special Permit states that “the special permit granted here shall continue for two years and that after two years should the petitioner want to continue to use the facility, it must reapply for the special permit.” In light of this condition, and because Verizon Wireless desires to continue to operate this facility, Verizon Wireless—with full reservation of its rights under applicable federal, state and local law, including particularly and without limitation, Section 6409(a) of the federal Middle Class Tax Relief and Jobs Creation Act of 2012 (the “Spectrum Act”)—seeks a special permit under Section 4.32.g.1 and associated Footnote 49 of the Zoning Ordinance of the City of Cambridge (the “Ordinance”) authorizing the continued use and operation of the existing mobile communications facility (the “Existing Facility”) at 799 Concord Avenue (the “Property”). Verizon Wireless further requests that the special permit be granted without limitation as to the effective period of the special permit, consistent with the usual practice of the BZA on building mounted mobile communications facilities.

As shown on the as-built drawings titled “Belmont 2 (Sancta Maria), 799 Concord Ave. Cambridge, MA 02138,” dated January 13, 2017, by Dewberry Engineers Inc. (the “As-Built Drawings”) (*see* **Exhibit B**) and the photograph package titled “As-Built Photo Package – Site Name: Belmont 2 (Sancta Maria),” dated December 8, 2016, by Dewberry Engineers Inc. (the “Photographs”) (*see* **Exhibit C**), the Property is improved with a six-story brick and masonry structure that steps down to two stories toward the rear of the Property and is currently used as a hospital facility. The Existing Facility is a personal wireless services facility within the meaning of the Federal Telecommunications Act (“TCA”), 47 U.S.C. § 332(c)(7)(C)(ii) and a mobile communications facility within the meaning of Section 4.32.g.1 and accompanying Footnote 49 of the Ordinance.

DESCRIPTION OF EXISTING MOBILE COMMUNICATIONS FACILITY

As depicted in the As-Built Drawings submitted with this application, the Existing Facility contains three arrays of four panel antennas each, for a total of twelve panel antennas, on the roof of the six-story building situated on the Property. One antenna array is mounted on the south façade of the existing rooftop penthouse located at the southwest corner of the building, and a second array of antennas is mounted on the west façade of the same penthouse. The third antenna array is mounted on the north façade of the existing rooftop penthouse located on the northeast corner of the building. As shown on the As-Built Drawings and the Photographs, each antenna array is enclosed by a brick-faced fiberglass enclosure that matches the façade of host penthouse, completely concealing the antennas from view. An emergency power generator and communications equipment cabinet are located inside the ground level garage on the west side of the building, and two HVAC condensers are situated on the roof of the garage. Cables connecting the communications equipment in the garage to the antennas on the roof were routed along the west and north exterior walls and are enclosed within cable trays that were painted to match the existing building façade. A GPS antenna is mounted on the roof of the garage.

This application does not request any changes to the Existing Facility.

SATISFACTION OF SPECIAL PERMIT STANDARDS FOR MOBILE COMMUNICATIONS FACILITIES UNDER ORDINANCE SECTION 4.32.g.1

Pursuant to Section 4.32.g.1 of the Ordinance, mobile communications facilities in the Office-1 District require a special permit issued by the BZA. In reviewing a special permit application for a mobile communications facility, the BZA applies the standards set forth at Footnote 49 to the Table of Use Regulations.¹ The following analysis demonstrates that continued operation of the Existing Facility meets each of these standards.²

1. *The scope of or limitations imposed by any license secured from any state or federal agency having jurisdiction over such matters.*

As documented at **Exhibit D**, Verizon Wireless is licensed by the Federal Communications Commission (“FCC”) to provide cellular mobile radiotelephone service within the market area that includes the City of Cambridge. There are no limitations imposed on Verizon Wireless’ licenses that would prevent it from continuing to provide service via the Existing Facility.

2. *The 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 a building’s roof or other features of the building as support and background; (2) through the use of materials that in texture and color*

¹ Footnote 49 is codified as Section 4.40.49 of the Ordinance.

² In providing information addressing the standards set forth in the Ordinance that concern the wireless communications use, Verizon Wireless does not concede, and expressly reserves all of its rights with respect to, any attempt by the City to exercise jurisdiction over matters concerning Verizon Wireless’ license or the technical performance of the proposed site or its network.

blend with the materials to which the facilities are attached; or (3) other effective means to reduce the visual impact of the facility from off the site.

As shown in the As-Built Drawings and Photographs submitted with this application, the antenna arrays are mounted on an existing building and are enclosed by a brick-faced fiberglass enclosure that completely conceals the antennas from view.

Associated communications and power equipment, as well as the emergency generator for use as a backup power supply, are located inside the existing ground level garage space. Condensers for the air conditioning in the equipment room are located on the roof of the garage.

3. *Where 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 a finding that nonresidential uses predominate in the vicinity of the proposed facility's location and that the telecommunication facility is not inconsistent with the character that does prevail in the surrounding neighborhood.*

Not applicable. The Existing Facility is not located in a residential zoning district.

SATISFACTION OF SPECIAL PERMIT STANDARDS UNDER SECTION 10.43 OF THE ORDINANCE

Section 10.43 of the Ordinance states that 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.” The following analysis of Section 10.43 special permit standards demonstrates that the Existing Facility is not detrimental to the public interest.

1. *The requirements of this Ordinance can or will be met for the following reasons:*

The Existing Facility is authorized by the 2015 Special Permit, which the BZA approved by a unanimous (5-0) vote on February 26, 2015. The Existing Facility was installed in 2015 and has operated continuously since then. Lesli Johnson, Records Coordinator for the Inspectional Services Department (“ISD”), confirmed via telephone call on March 2, 2017 that the City has not received any complaints about the Existing Facility. As demonstrated by the documents and information provided with this application, and as will be further demonstrated at the hearing on this matter, the Existing Facility meets the requirements of the Ordinance for mobile communications facilities.

- 2. Traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in established neighborhood character for the following reasons:*

The Existing Facility creates virtually no traffic demand. The Existing Facility only requires approximately one or two vehicle trips per month by a standard passenger vehicle during normal business hours for routine facility maintenance.

- 3. The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would not be adversely affected by the nature of the proposed use for the following reasons:*

The Existing Facility has no adverse effect on the operation or development of adjacent uses. ISD records indicate that the existing facility was installed in 2015 and has operated continuously since then. The City has received no complaints about the Existing Facility since it was and installed. The Existing Facility emits no light, odor, dust, or glare and generates no unusual noise or other adverse impacts.

- 4. A nuisance or hazard would not 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 for the following reasons:*

As noted above, ISD records indicate that there have been no complaints about the existing facility since it was installed in 2015, and Verizon Wireless is likewise not aware of any complaints during that time. The Existing Facility generates no traffic other than an occasional single vehicle trip for periodic maintenance visits. It has no negative impacts on surrounding properties or the City of Cambridge. The Existing Facility requires no water or sewer service, emits no light, odor, dust, or glare, and generates no unusual noise or other adverse impacts. The Existing Facility is unoccupied, with no employees or customers. The availability of reliable wireless communications enhances the health, safety and welfare of the community.

- 5. The proposed use would not impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance for the following reasons:*

The Existing Facility is a passive use involving no on-site employees, and has been designed, constructed, and operated to avoid any impacts on nearby properties, both inside and outside the zoning district in which it is located. The improved wireless service it provides enhances public safety and is a benefit to business and institutional uses located in the area and to residents, employees, visitors and others travelling to Sancta Maria hospital or who are in the area for other reasons. Wireless communications is increasingly relied on by civil defense and other safety officers as well as the public in times of crisis, natural disaster, inclement weather, and similar circumstances. It also provides a convenience to residents, and is an attractive feature to businesses. It is increasingly used not just for voice service but to transfer data using mobile devices. By providing these services, the Existing Facility promotes the health, safety, and

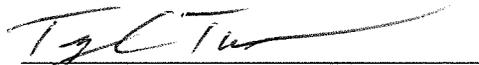
general welfare of the City's residents and visitors consistent with the intent and purpose of the Zoning Ordinance.

For all the above reasons, the Existing Facility is in harmony with the general purpose of the Zoning Ordinance as required by G.L. c. 40A, §9, and complies with its provisions, including the specific requirements of Section 4.32.g.1 and Footnote 49 concerning mobile communications facilities.

CONCLUSION

For all of the foregoing reasons, and with full reservation of its rights under applicable federal, state and local law, including particularly and without limitation the Spectrum Act, Verizon Wireless respectfully requests that the Board of Zoning Appeal, acting as the special permit granting authority, renew the special permit pursuant to Section 4.32.g.1 of the Ordinance, as well as such other relief as may be necessary or appropriate, to allow the continued use and operation of the Existing Facility described in this application and documented in the provided As-Built plan and photographs. Verizon Wireless further requests that the renewed approval be granted without limitation as to the effective period of the special permit.

Respectfully submitted,
Verizon Wireless
By its attorney,



Timothy C. Twardowski, Esq.
Robinson & Cole LLP
One Boston Place, 25th Floor
Boston, MA 02108
(617) 557-5959

Dated: March 2, 2017

**Application Of Cellco Partnership d/b/a
Verizon Wireless for a Special Permit for a
Mobile Communications Facility
799 Concord Avenue**

Exhibit A: 2015 Special Permit

Exhibit B: As-Build Drawings

Exhibit C: Photographs

Exhibit D: FCC License

Exhibit A



City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

831 Mass Avenue, Cambridge, MA.
(617) 349-6100



2015 00046877
Bk: 65163 Pg: 213 Doc: DECIS
Page: 1 of 4 04/02/2015 03:38 PM

2015 MAR 11 PM 2 05
OFFICE OF THE CITY CLERK
CAMBRIDGE, MASSACHUSETTS

RE-HEARING

CASE NO: 10518

LOCATION: 799 Concord Avenue / Office -1 Zone/ AOD
Cambridge, MA

PETITIONER: Bell Atlantic Mobile of Massachusetts Corporation, LTD. /
D/B/A Verizon Wireless - C/o Timothy C. Twardowski, Esq.

PETITION: Special Permit: To reconsider the petitioner's application for a special permit in light of a revised design and/or plan to locate mobile communications antennas on the roof of the existing building and place equipment inside an existing ground level garage space.

VIOLATION: Art. 4.000, Sec. 4.32.G.1 (Footnote 49) (Telecommunication Facility).
Art. 10.000, Sec. 10.40 (Special Permit).

DATE OF PUBLIC NOTICE: February 12 & 19, 2015

DATE OF PUBLIC HEARING: February 26, 2015

MARGINAL REFERENCE REQUESTED
6252 409
BOOK 10521 PAGE 187

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER - CHAIR ✓
TIMOTHY HUGHES - VICE-CHAIR ✓
BRENDAN SULLIVAN ✓
THOMAS SCOTT ✓
JANET O. GREEN ✓

ASSOCIATE MEMBERS:

DOUGLAS MYERS _____
SLATER W. ANDERSON _____
ANDREA A. HICKEY _____
ALISON HAMMER _____
JIM MONTEVERDE _____
GEORGE S. BEST _____
LAURA WERNICK _____

Members of the Board of Zoning Appeal heard testimony and viewed materials submitted regarding the above request for relief from the requirements of the Cambridge Zoning Ordinance. The Board is familiar with the location of the petitioner's property, the layout and other characteristics as well as the surrounding district.

Case No. 10518
Location: 799 Concord Avenue
Petitioner: Bell Atlantic Mobile of MA Corp. Ltd. – D/B/A Verizon Wireless

On February 26, 2015, Petitioner's attorney Timothy Twardowski appeared before the Board of Zoning Appeal requesting a special permit in order to locate mobile communications antennas on the roof of the existing building and place equipment inside an existing ground level garage space. The Petitioner requested relief from Article 4, Section 4.32.G.1 of the Cambridge Zoning Ordinance ("Ordinance"). The Petitioner submitted application materials including information about the project, plans, and photographs.

Mr. Twardowski stated that the case had been heard and denied in 2013. He stated that it had been appealed and was now being reheard upon a remand from the Federal District Court. He stated that the site had been redesigned so as to place all antennas behind a screen wall on the roof, making them not visible to the public.

Several neighbors spoke or wrote in opposition to the proposal based on negative effects to their businesses, which included schools and medical facilities, and to their property values due to actual or perceived health and/or environmental risks from radio frequency radiation. Some neighbors expressed concern about adverse health effects on students attending schools in the immediate neighborhood. The Chair explained that there was a federal law which had limited the Board's ability to deny an application based upon the health and environmental effects of the Petitioner's installation.

After discussion, the Chair moved that the Board grant the special permit for relief in order to locate mobile communications antennas on the roof of the existing building and place equipment inside an existing ground level garage space based upon the finding that traffic generated or patterns of access or egress resulting from the installation would not cause congestion, hazard, or substantial change in established neighborhood character. The Chair moved that the Board find that the continued operation of, and development of adjacent uses, would not be adversely affected by the nature of the proposed use. The Chair moved that the Board find that no 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. The Chair moved that the Board find that the proposed use would not impair the integrity of the district or adjoining districts or otherwise derogate from the intent and purpose of the Ordinance. The Chair moved that the Board grant the special permit on the following conditions:

1. that the work proceed in accordance with and be entirely consistent with photo simulations, architectural drawings, and engineering plans submitted by the petitioner, as initialed by the Chair,
2. that should the petitioner discontinue telecom services at this facility, the equipment be promptly removed and the building be restored to its prior condition to the extent reasonable and practical,
3. that, inasmuch as the health effects of the transmission of electromagnetic energy waves is a matter of ongoing societal concern and scientific study, the special permit is also subject to the following conditions:
 - A. that the petitioner shall file with the Inspectional Services Department each report it files with the federal authorities regarding the electromagnetic energy waves emissions emanating from all the petitioner's equipment on the site. Each such report shall be filed with the Inspectional Services Department no later than ten business days after the report has been filed with the federal authorities. Failure to timely file any such report with the Inspectional Services Department shall ipso facto terminate the special permit granted here,
 - B. that in the event that at any time federal authorities notify the petitioner that its equipment on the site, including, but not limited to the special permit granted here, fails to comply with the requirements of law or governmental regulation, whether with regard to the emissions of electromagnetic energy waves or otherwise, the petitioner, within ten business days of receipt of such notification of such failure shall file with the Inspectional Services Department a report disclosing in reasonable detail that such failure has occurred and the basis for such claimed failure. The special permit granted here shall ipso facto terminate if any of the petitioner's federal licenses is or are suspended, revoked, or terminated.
 - C. that to the extent that a special permit has terminated pursuant to the foregoing paragraphs A and B, the petitioner may apply to this Board for a new special permit provided that the public notice concerning such application discloses in reasonable detail that the application has been filed because of a termination of the special permit pursuant to paragraphs A or B above. Any such new application shall not be deemed a repetitive petition and therefore shall not be subjected to the two-year period during which repetitive petitions may not be filed.
 - D. that prior to the installation of the equipment, the petitioner shall file with the Inspectional Services Department a sworn Affidavit of the person in charge of the installation of equipment by the petitioner with a geographical area that includes Cambridge, stating that A, he or she has such responsibility; and B, that the equipment is being installed pursuant to the special permit granted here, will comply with all federal safety rules and will be situated and maintained in locations with

appropriate barricades and other protections, such that individuals, including nearby residents and occupants of nearby structures, will be sufficiently protected from excessive radio frequency radiation under federal law.

- 4. that the special permit granted here shall continue for two years and that after two years should the petitioner want to continue to use this facility, it must reapply for the special permit. At that point the Board and the public will have the ability to take into account any new developments, either scientifically or legislatively, with regard to telecommunications facilities.

The five member Board voted unanimously in favor of granting the special permit (Alexander, Hughes, Sullivan, Scott, and Green) as conditioned. Therefore, the special permit is granted.

The Board based its decision upon all the information presented, and upon the following findings:

- 1) The meeting of the requirements of the Ordinance;
- 2) Traffic generated or patterns of access or egress would not cause congestion, hazard, or substantial change in the established neighborhood character;
- 3) The continued operation of or the development of adjacent uses as permitted in the Ordinance would not be adversely affected by the nature of the proposed uses;
- 4) Nuisance or hazard would not be created to the detriment of the health, safety and /or welfare of the occupants of the proposed use;
- 5) The proposed use would not impair the integrity of the district or adjoining district or otherwise derogate from the Ordinance, and in fact would be a significant improvement to the structure and benefit the neighborhood, and;
- 6) The new use or building construction is not inconsistent with the Urban Design Objectives set forth in Section 19.30 of the Cambridge Zoning Ordinance.

Constantine Alexander, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 3/11/15 by Marie DeLuca, Clerk.

Twenty days have elapsed since the filing of this decision.

No appeal has been filed

Appeal has been filed and dismissed or denied.

Date: April 1, 2015 Donna P. Lopez City Clerk.

Exhibit B

verizon

WIRELESS

BELMONT 2 MA (SANCTA MARIA)

799 CONCORD AVE.
CAMBRIDGE, MA 02138

verizon
WIRELESS

VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

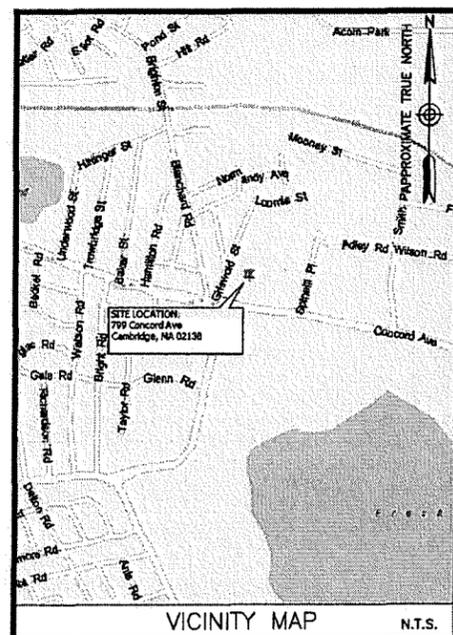
**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL

Dewberry

Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



ENGINEER
DEWBERRY ENGINEERS INC.
280 SUMMER ST.
10TH FLOOR
BOSTON, MA 02210
PHONE # (617) 531-0800
FAX # (617) 695-3310
CONTACT: BENJAMIN REVETTE, P.E.

CONSTRUCTION
VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956
PHONE # (617) 921-9716
CONTACT: ERIC WAINWRIGHT

CONSULTANT TEAM

SITE NAME:
BELMONT 2 MA (SANCTA MARIA)

PROPERTY OWNER:
N/F
SANCTA MARIA HOSPITAL
795 CONCORD AVE.
CAMBRIDGE, MA 02138

APPLICANT:
CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

ELECTRIC UTILITY:
NSTAR (800) 592-2000

TELEPHONE UTILITY:
VERIZON (800) 837-4966

PARCEL ID:
267D-339

CENTER OF ROOF*:
LATITUDE: 42° 23' 29.58" N
LONGITUDE: 71° 09' 19.39" W
*PER FAA-2C

PROJECT SUMMARY

SITE ADDRESS:
799 CONCORD AVE.
CAMBRIDGE, MA 02138

ZONING DISTRICT:
01 - OFFICE ONE
ADD3 - ALEWIFE OVERLAY DISTRICT
PARKWAY OVERLAY DISTRICT
CONCORD AVENUE PARKWAY SUBDISTRICT

PROJECT DIRECTORY

THE SITE CONSISTS OF (12) ANTENNAS AND ASSOCIATED EQUIPMENT MOUNTED TO THE PENTHOUSE FACADES OF AN EXISTING BUILDING. THE ANTENNAS ARE SCREENED BEHIND FIBERGLASS PENTHOUSE EXTENSIONS. IN ADDITION, THE EXISTING VACANT GARAGE AT GRADE IS UTILIZED AS AN EQUIPMENT ROOM. A NATURAL GAS GENERATOR ARE INSIDE THE EQUIPMENT ROOM.

PROJECT DESCRIPTION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	ROOF PLAN
C-2	NORTH ELEVATION
C-3	WEST ELEVATION
C-4	SOUTH ELEVATION
C-5	EAST ELEVATION
C-6	ANTENNA MOUNTING DETAILS
S-1	SCREENWALL ISOMETRICS

SHEET INDEX

DIRECTIONS FROM WESTBOROUGH, MA:

TAKE MA-9 E TO BOSTON. TAKE EXIT 14 FOR I-95 N TOWARD N.H. AND MERGE ONTO I-95 N. TAKE EXIT 29A TO MERGE ONTO MA-2 E TOWARDS ARLINGTON. TAKE THE 1ST EXIT ONTO CONCORD AVE. THE SITE WILL BE ON THE RIGHT.

AS-BUILT DRAWINGS

AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.

DRAWN BY: MR

REVIEWED BY: KB

CHECKED BY: BBR

PROJECT NUMBER: 50002925

JOB NUMBER: 50070896

SITE ADDRESS:

799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.895.3400
FAX: 617.895.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

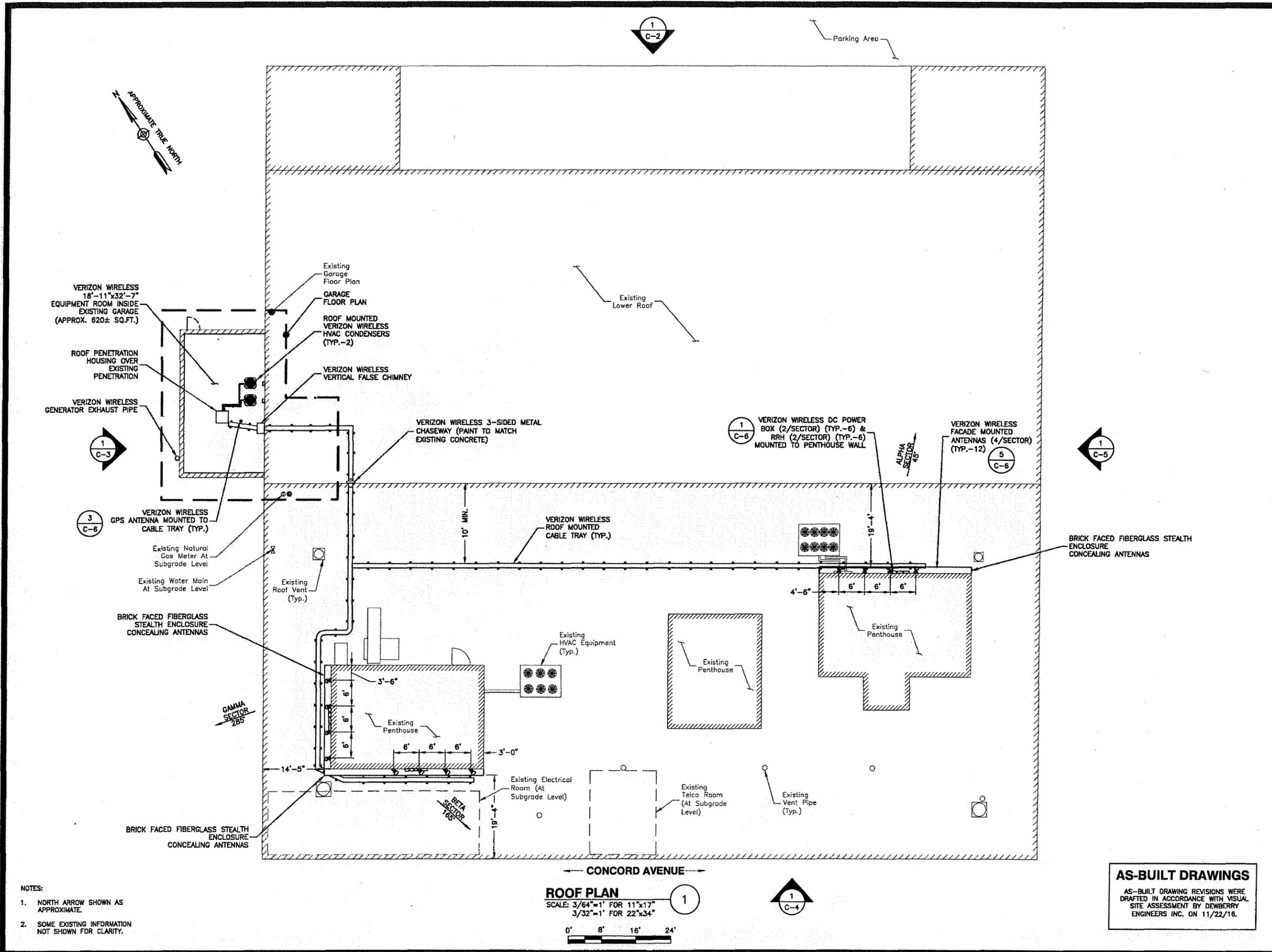
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

ROOF PLAN

SHEET NUMBER

C-1



- NOTES:
- NORTH ARROW SHOWN AS APPROXIMATE.
 - SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.

ROOF PLAN
SCALE: 3/64"=1' FOR 11'x17"
3/32"=1' FOR 22'x34"
0' 8' 16' 24'

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.696.3400
FAX: 617.696.3310



DRAWN BY: MR

REVIEWED BY: KB

CHECKED BY: BBR

PROJECT NUMBER: 50002925

JOB NUMBER: 50070896

SITE ADDRESS:

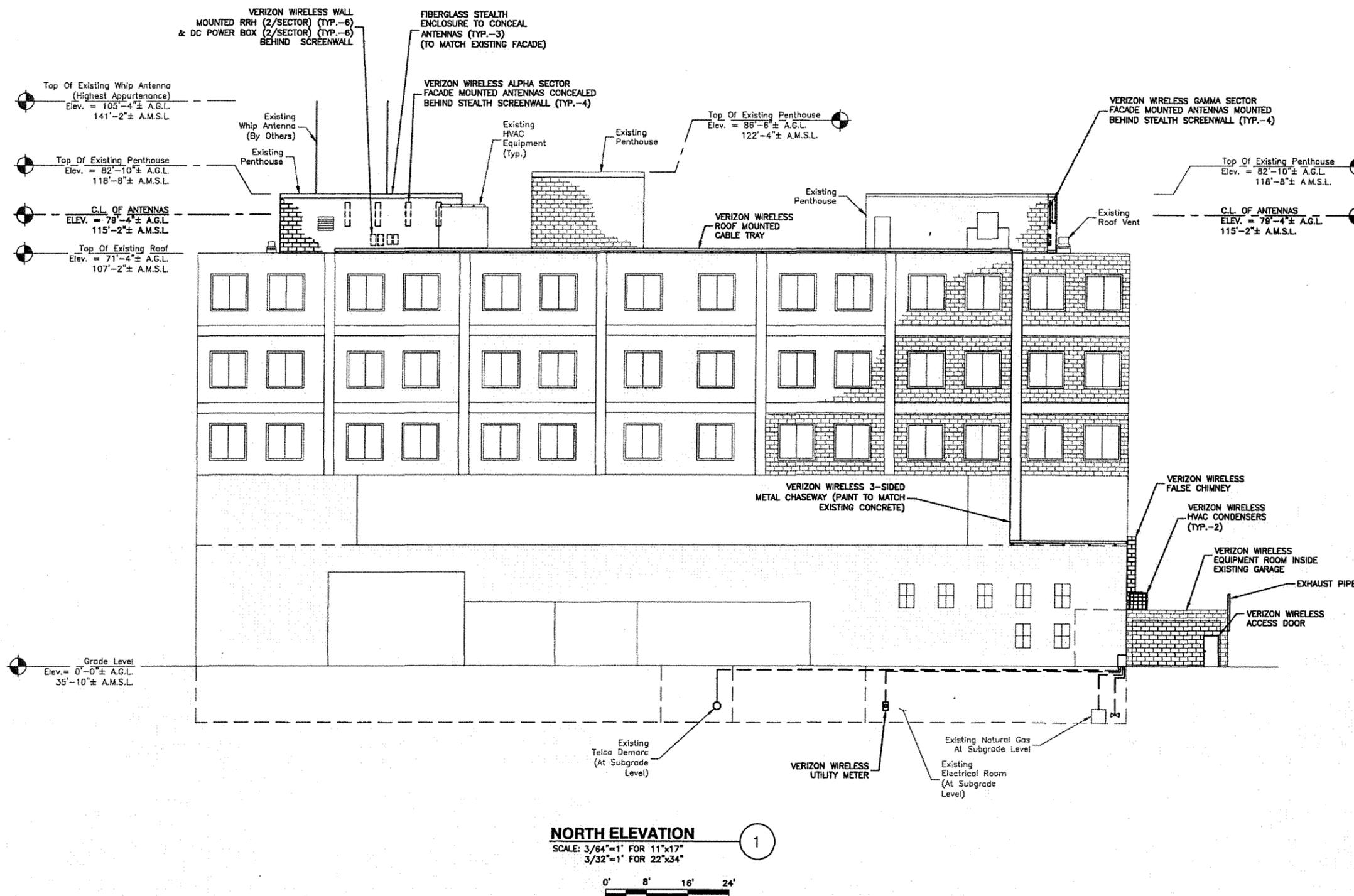
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

NORTH ELEVATION

SHEET NUMBER

C-2



- NOTES:
- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - A.G.L. = ABOVE GRADE LEVEL
A.R.L. = ABOVE ROOF LEVEL
A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.895.3400
FAX: 617.895.3310



DRAWN BY: MR

REVIEWED BY: KB

CHECKED BY: BBR

PROJECT NUMBER: 50002925

JOB NUMBER: 50070896

SITE ADDRESS:

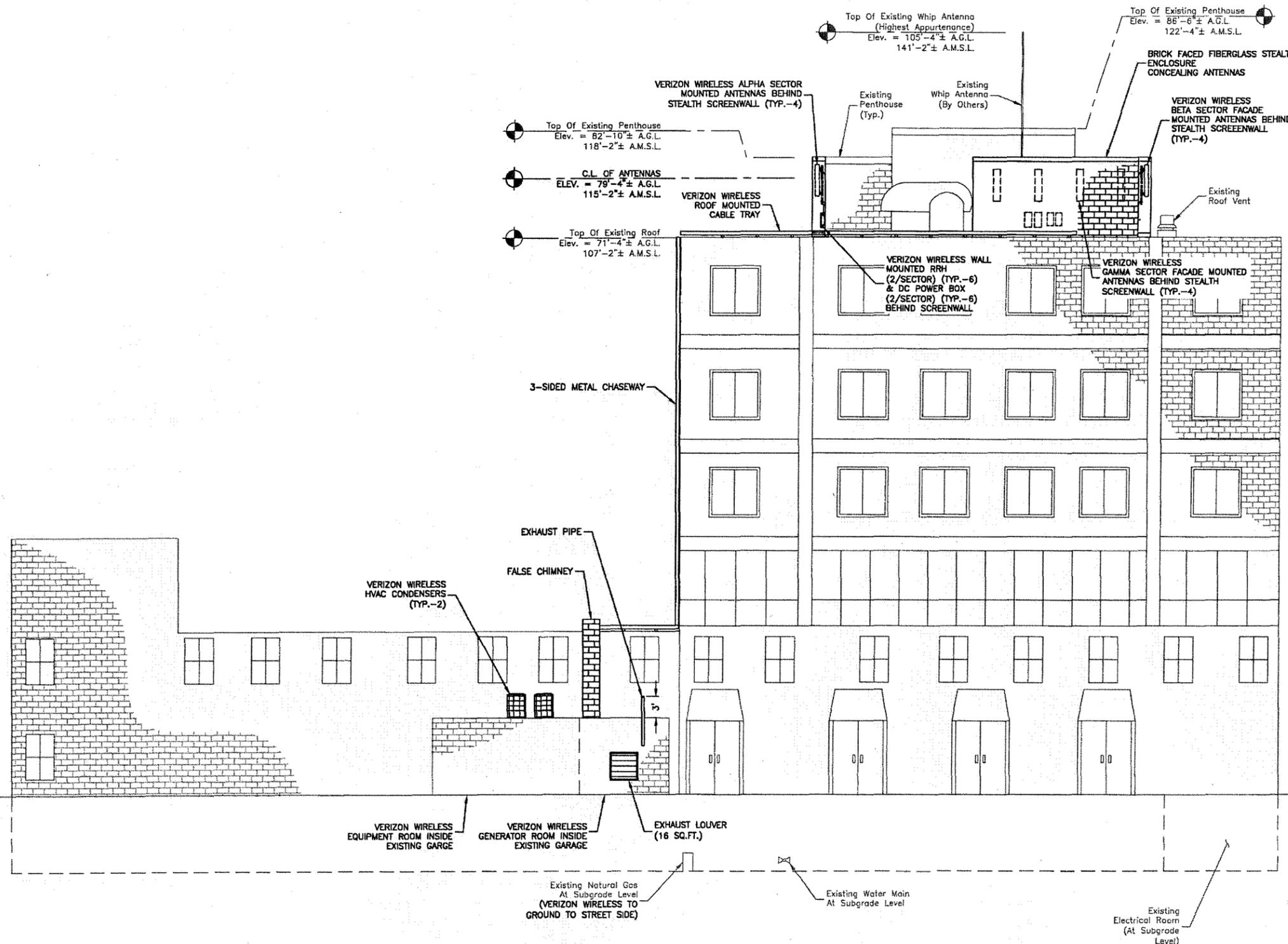
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

WEST ELEVATION

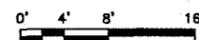
SHEET NUMBER

C-3



WEST ELEVATION

SCALE: 1/16"=1' FOR 11'x17"
1/8"=1' FOR 22'x34"

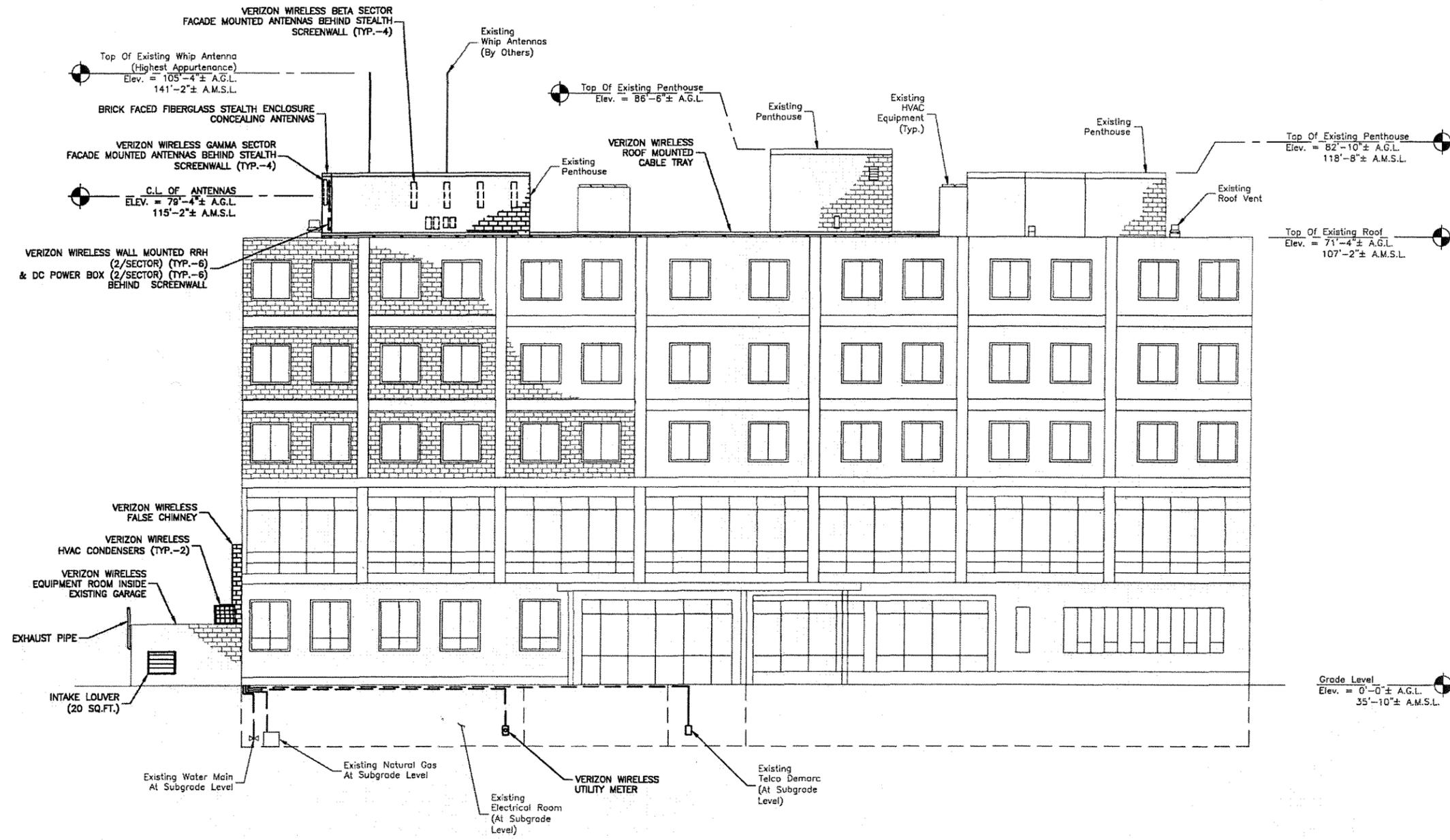


NOTES:

- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
- A.G.L. = ABOVE GRADE LEVEL
A.R.L. = ABOVE ROOF LEVEL
A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS

AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



SOUTH ELEVATION
 SCALE: 3/8"=1' FOR 11'x17"
 3/32"=1' FOR 22'x34"
 0' 8' 16' 24'

- NOTES:
- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - A.G.L. = ABOVE GRADE LEVEL
 A.R.L. = ABOVE ROOF LEVEL
 A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS
 AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/18.

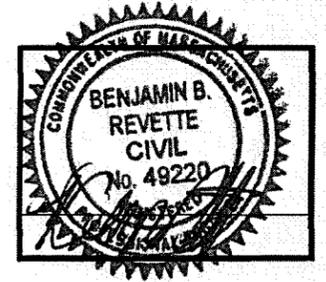
verizon
 WIRELESS
 VERIZON WIRELESS
 118 FLANDERS ROAD
 WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
 (SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL

Dewberry
 Dewberry Engineers Inc.
 280 SUMMER STREET
 10TH FLOOR
 BOSTON, MA 02210
 PHONE: 617.895.3400
 FAX: 617.895.3310

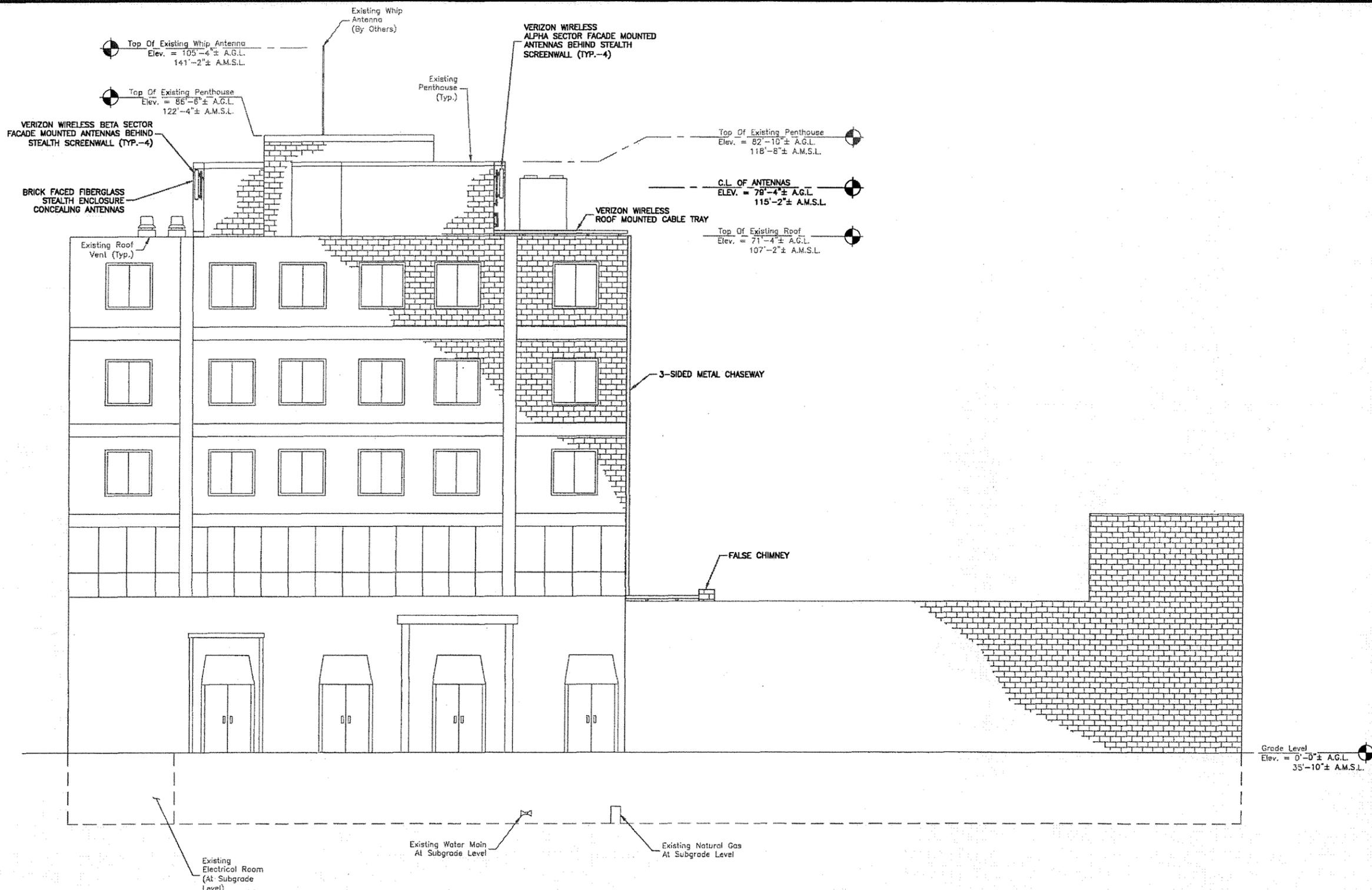


DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

799 CONCORD AVE.
 CAMBRIDGE, MA 02138

SHEET TITLE	SOUTH ELEVATION
SHEET NUMBER	

C-4



EAST ELEVATION
 SCALE: 1/16"=1' FOR 11"x17"
 1/8"=1' FOR 22"x34"
 1

- NOTES:
- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - A.G.L. = ABOVE GRADE LEVEL
 A.R.L. = ABOVE ROOF LEVEL
 A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS
 AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.

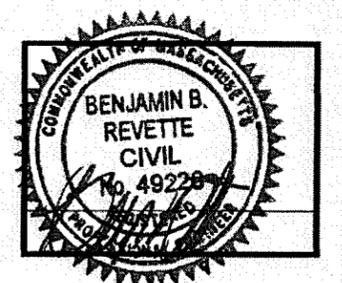
verizon
 WIRELESS
 VERIZON WIRELESS
 118 FLANDERS ROAD
 WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
 (SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL

Dewberry
 Dewberry Engineers Inc.
 280 SUMMER STREET
 10TH FLOOR
 BOSTON, MA 02210
 PHONE: 617.695.3400
 FAX: 617.695.3310

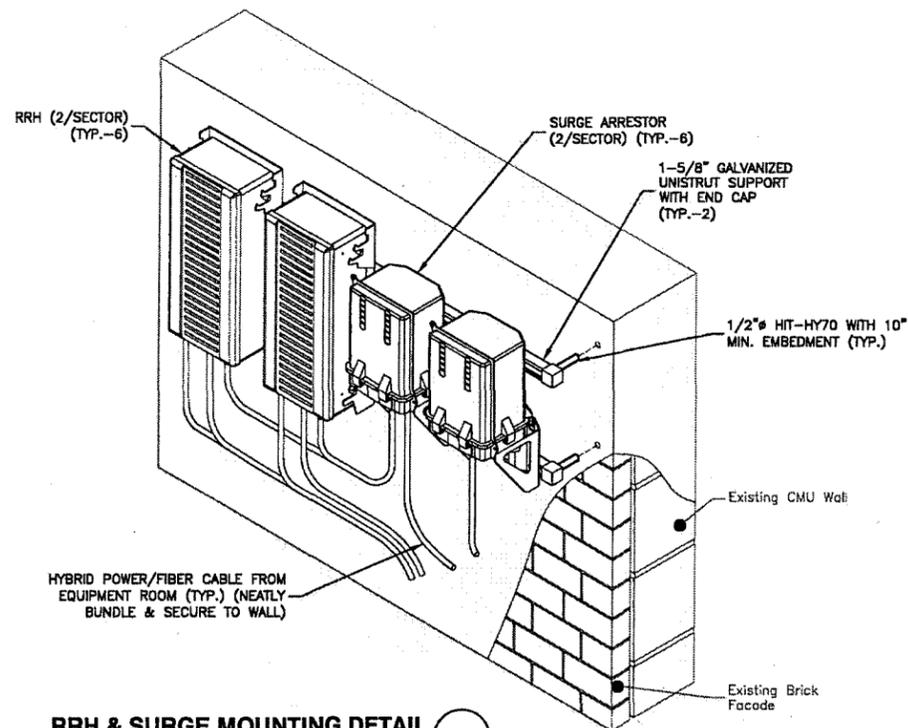


DRAWN BY: MR
 REVIEWED BY: KB
 CHECKED BY: BBR
 PROJECT NUMBER: 50002925
 JOB NUMBER: 50070896
 SITE ADDRESS:

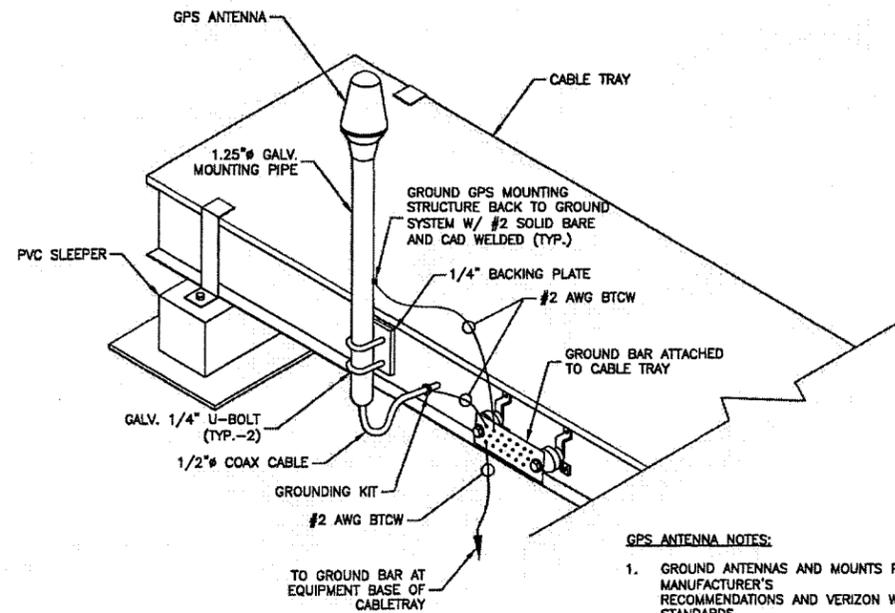
799 CONCORD AVE.
 CAMBRIDGE, MA 02138

SHEET TITLE
 EAST ELEVATION
 SHEET NUMBER

C-5



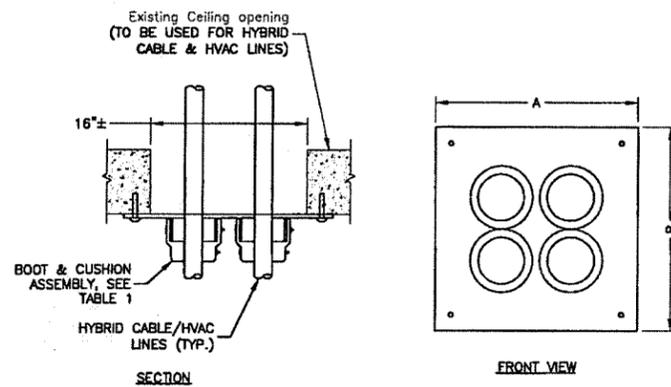
RRH & SURGE MOUNTING DETAIL
SCALE: N.T.S.



GPS ANTENNA NOTES:

- GROUND ANTENNAS AND MOUNTS PER MANUFACTURER'S RECOMMENDATIONS AND VERIZON WIRELESS STANDARDS.
- FIELD LOCATE GPS ANTENNAS A MINIMUM OF 10' HORIZONTALLY FROM OTHER GPS ANTENNAS, WITH VERIZON WIRELESS CM APPROVAL.

GPS ANTENNA MOUNT
SCALE: N.T.S.



NOTE:
NON-RATED PENETRATION IN THIS INSTALLATION

TABLE 1		TABLE 2			
CABLE SIZE	MICROFLECT BOOT & CUSHION ASSEMBLY	No. CABLES	MICROFLECT CABLE ENTRY PANEL	A	B
1/2"	B1346A	4	B1199	17.5"	17.5"
1 5/8"	B535A				

NOTES:

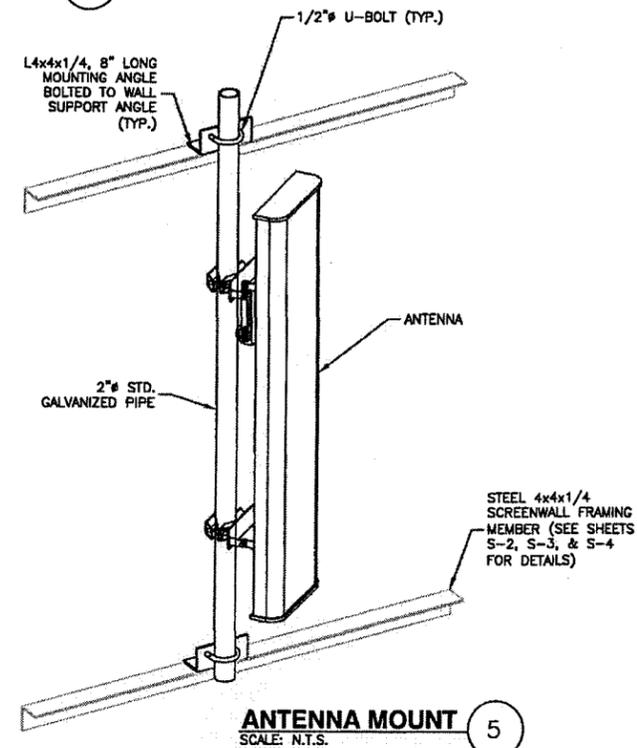
- FASTEN CABLE ENTRY TO WALL W/ STAINLESS STEEL SCREWS W/ LEAD SHIELD INSERTS INTO BRICK, MASONRY, CONC. USE TOGGLE BOLTS INTO STUD WALLS.
- DRILL HOLES 1/2" LARGER IN DIAMETER THAN CABLES THROUGH WALL/CEILING TO MATCH HOLES IN THE CABLE ENTRY.
- DETAIL BASED ON THE USE OF MICROFLECT AND HILTI. CONTRACTOR MAY SUBSTITUTE APPROVED EQUAL MATERIAL.

COAX CABLE WAVEPORT
SCALE: N.T.S.

RF SCHEDULE
SCALE: N.T.S.

RF SCHEDULE & B.O.M.									
SECTOR	ANTENNA	AZIMUTH (TRUE NORTH)	RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	RRH	RET CABLES (LENGTH)	HYBRID CABLE (LENGTH)	LARGE JUNCTION BOX WITH SURGE
IA	COMMSCOPE LNX-6513DS-A1M	45°	79'-4"±	0°	-6°	(1) RRH2x40-07U	(2) LINE (325'±)	(1) 6x12 (325'±)	(1) RAYCAP DB-C1-6C-12AB-0Z
IIA	COMMSCOPE SBNHH-1D65A	45°	79'-4"±	0°	-3°	(1) RRH2x60-AWS			
IIIA	COMMSCOPE SBNHH-1D65A	45°	79'-4"±	0°	-3°	-			
IVA	COMMSCOPE LNX-6513DS-A1M	45°	79'-4"±	0°	-6°	-	(2) LINE (275'±)	(1) 6x12 (275'±)	(1) RAYCAP DB-C1-6C-12AB-0Z
IB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-6°	(1) RRH2x40-07U			
IIB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-3°	(1) RRH2x60-AWS			
IIIB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-3°	-	(2) LINE (225'±)	(1) 6x12 (225'±)	(1) RAYCAP DB-C1-6C-12AB-0Z
IVB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-6°	-			
IG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-6°	(1) RRH2x40-07U			
IIG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-3°	(1) RRH2x60-AWS	(2) LINE (225'±)	(1) 6x12 (225'±)	(1) RAYCAP DB-C1-6C-12AB-0Z
IIIG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-3°	-			
IVG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-6°	-			

RF SCHEDULE BASED ON ANTENNA DESIGN REC DATED 3/3/2015. CONTRACTOR TO VERIFY FINAL ANTENNA DESIGN AND CABLE LENGTHS PRIOR TO CONSTRUCTION.



ANTENNA MOUNT
SCALE: N.T.S.

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

BELMONT 2 MA (SANCTA MARIA)

AS-BUILT DRAWINGS

NO.	DATE	DESCRIPTION
2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3910



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

799 CONCORD AVE.
CAMBRIDGE, MA 02138

ANTENNA MOUNTING DETAILS

SHEET NUMBER

C-6

FIBERGLASS BOX PANEL (TYP.) (TO MATCH EXISTING PENTHOUSE IN COLOR & TEXTURE) (SEE NOTE 1)

OPENING IN FIBERGLASS BOX PANEL FOR EXISTING VENT LOCATED ON EXISTING PENTHOUSE

ALPHA

OPENING IN FIBERGLASS BOX PANEL FOR EXISTING PVC PIPING

BETA

GAMMA

LEGEND

-  STEEL MEMBER
-  FIBERGLASS MEMBER

FIBERGLASS NOTES:

1. FIBERGLASS PANELS FABRICATED BY DUROFIBER COMPANY INC. CONTACT ROB JOHNSON (603) 881-4200.
2. FRP (FIBERGLASS REINFORCED POLYMER) STRUCTURAL SHAPES SHALL BE MANUFACTURED USING THE PULTRUSION PROCESS.

B.O.M.	ITEM	QUANTITY
01	FIBERGLASS L4X4X1/2	3 (LENGTH VARIES)
02	FIBERGLASS L6X6X1/2	20
03	FIBERGLASS L4X4X1/2	38
04	STEEL L4X4X1/4	6 (LENGTH VARIES)
05	STEEL L6X6X3/8	3 (LENGTH VARIES)
06	STEEL L6X6X3/8	8
07	STEEL L4X4X1/4 (8" LONG)	12
08	STEEL PL6X10X3/8	8
09	STEEL HSS4X4X3/8	13
10	STEEL PL6X8X3/8	13
11	FIBERGLASS L4X4X1/2	1
12	STEEL PL6X8X3/8	5

Existing Penthouse Wall

Existing Upper Roof Level

Existing Penthouse Wall

Existing Upper Roof Level

SCREENWALL ISOMETRICS
SCALE: N.T.S.

1

AS-BUILT DRAWINGS

AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.

verizon
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VERIZON WIRELESS
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WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

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1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL

Dewberry

Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.896.3400
FAX: 617.896.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

SCREENWALL ISOMETRICS

SHEET NUMBER

S-1

Exhibit C

AS-BUILT PHOTO PACKAGE

Site Name: Belmont 2 MA (Sancta Maria)

799 Concord Ave
Cambridge, MA 02138

December 8, 2016



Prepared For:

Verizon Wireless
118 Flanders Road
Westborough, MA 01581-3956

Prepared by:

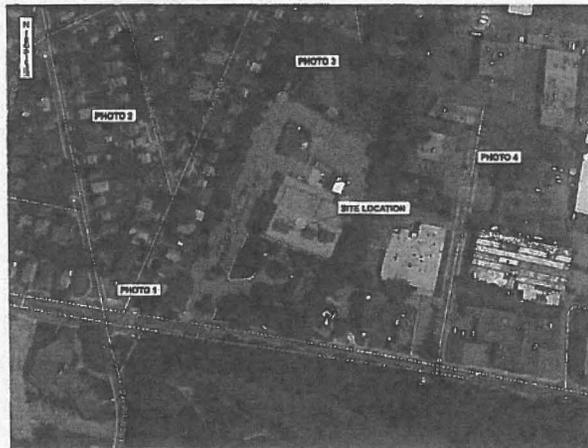
Dewberry Engineers Inc.
280 Summer Street 10th Floor
Boston, Massachusetts 02210-1131

Belmont 2 MA (Sancta Maria)

Table of Figures

Figure 1: View of Sancta Maria Nursing Facility from Concord Ave.....	2
Figure 2: View of Sancta Maria Nursing Facility from Sunet Road.....	3
Figure 3: View of Sancta Maria Nursing Facility from rear parking lot.....	4
Figure 4: View of Sancta Maria Nursing Facility from Spinelli Place.....	5
Figure 5: View of Verizon Wireless equipment room and fiberglass chimney.....	6
Figure 6: View of alpha sector fiberglass enclosure.....	7
Figure 7: View of beta sector fiberglass enclosure.....	8
Figure 8: View of gamma sector fiberglass enclosure.....	9

Key Map



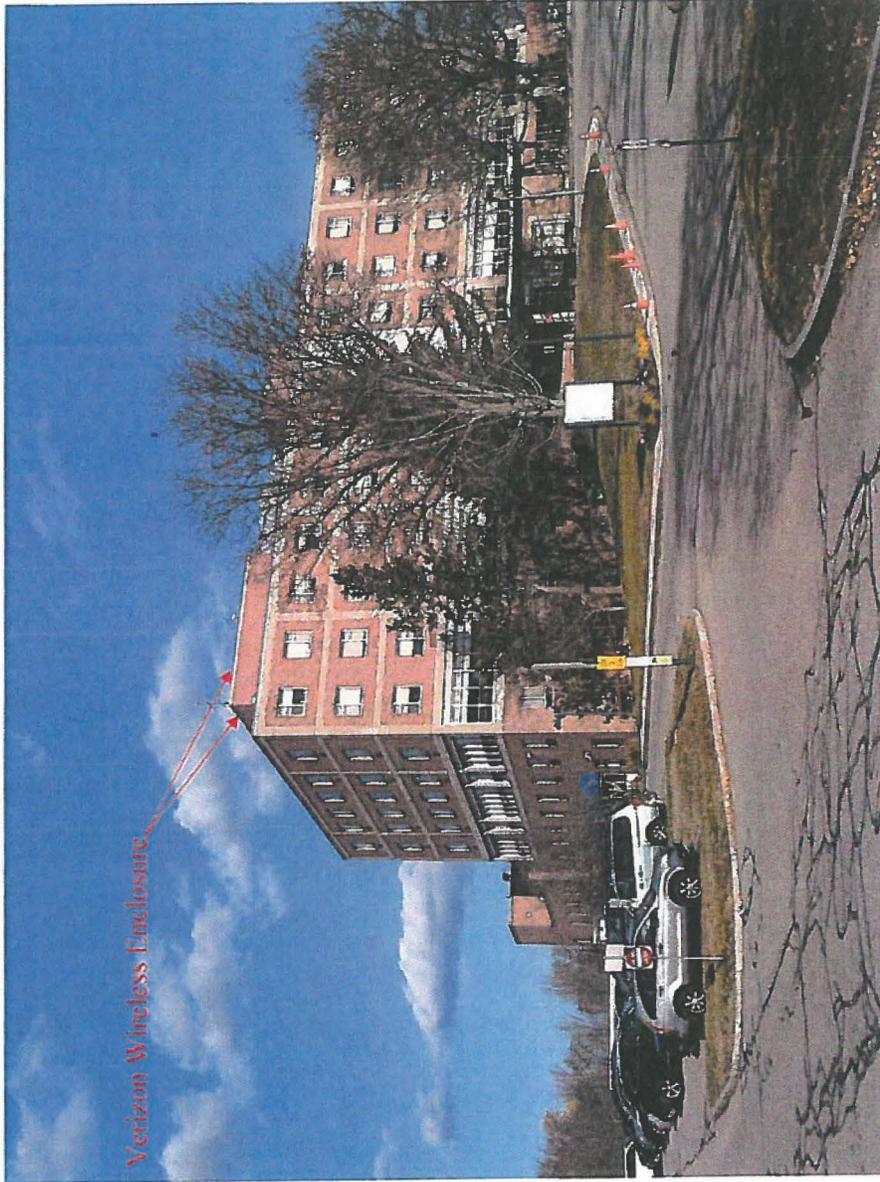


Figure 1: View of Sancta Maria Nursing Facility from Concord Ave

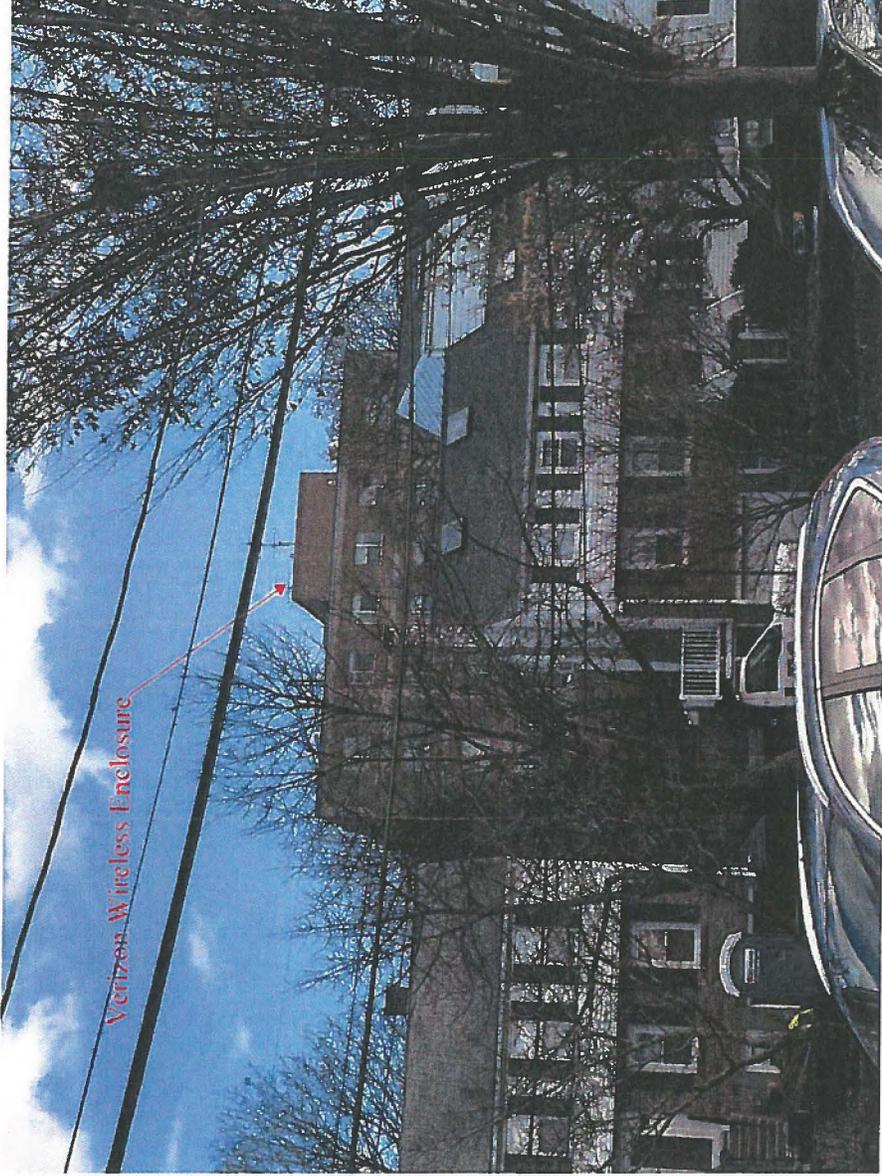


Figure 2: View of Sancta Maria Nursing Facility from Sunset Road

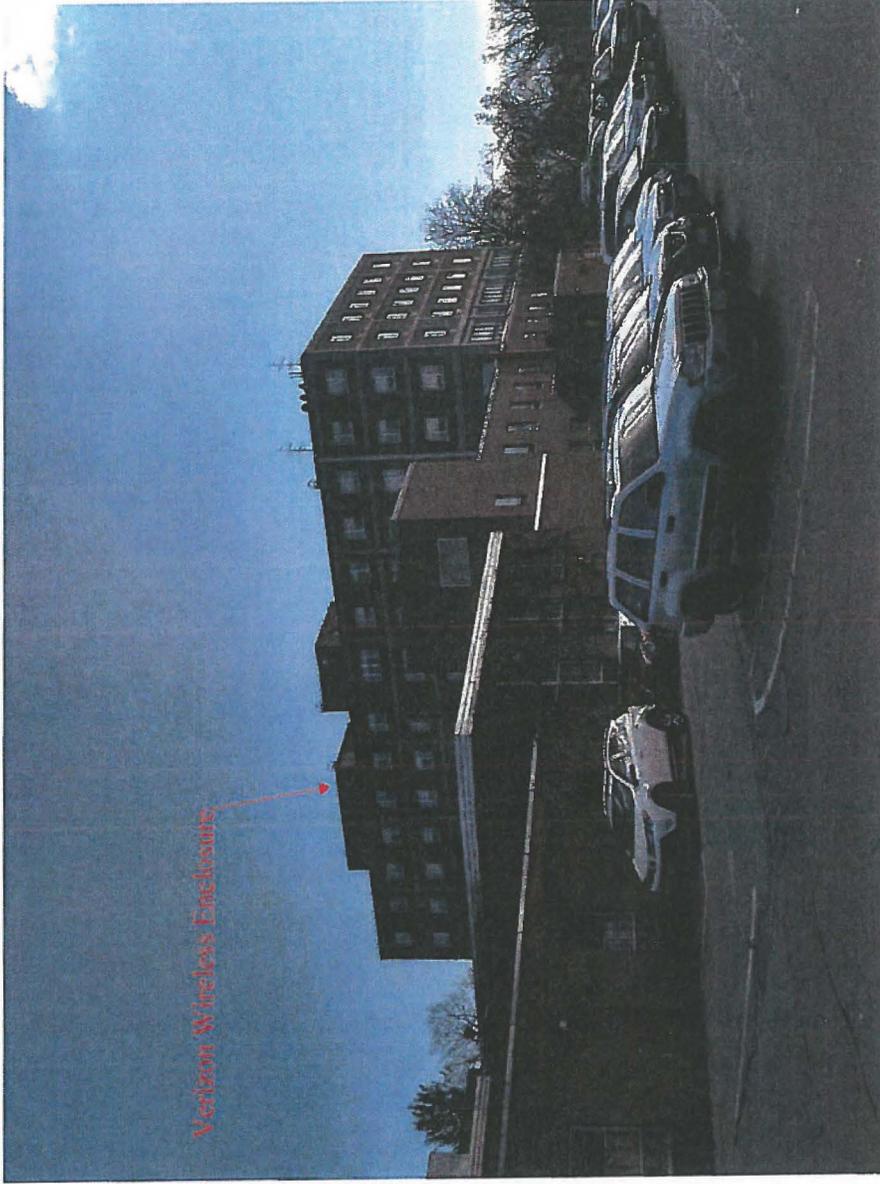


Figure 3: View of Sancta Maria Nursing Facility from rear parking lot

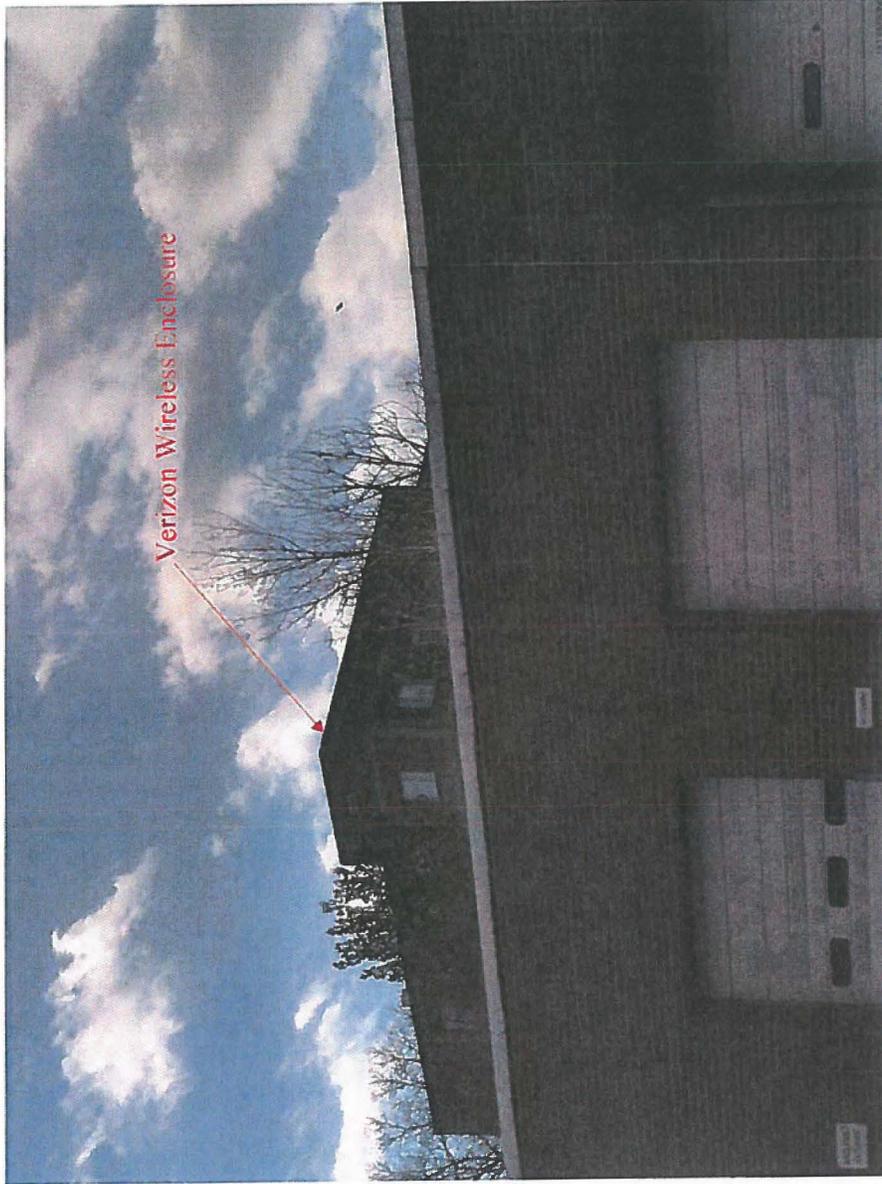


Figure 4: View of Sancta Maria Nursing Facility from Spinelli Place



Figure 5: View of Verizon Wireless equipment room and fiberglass chimney

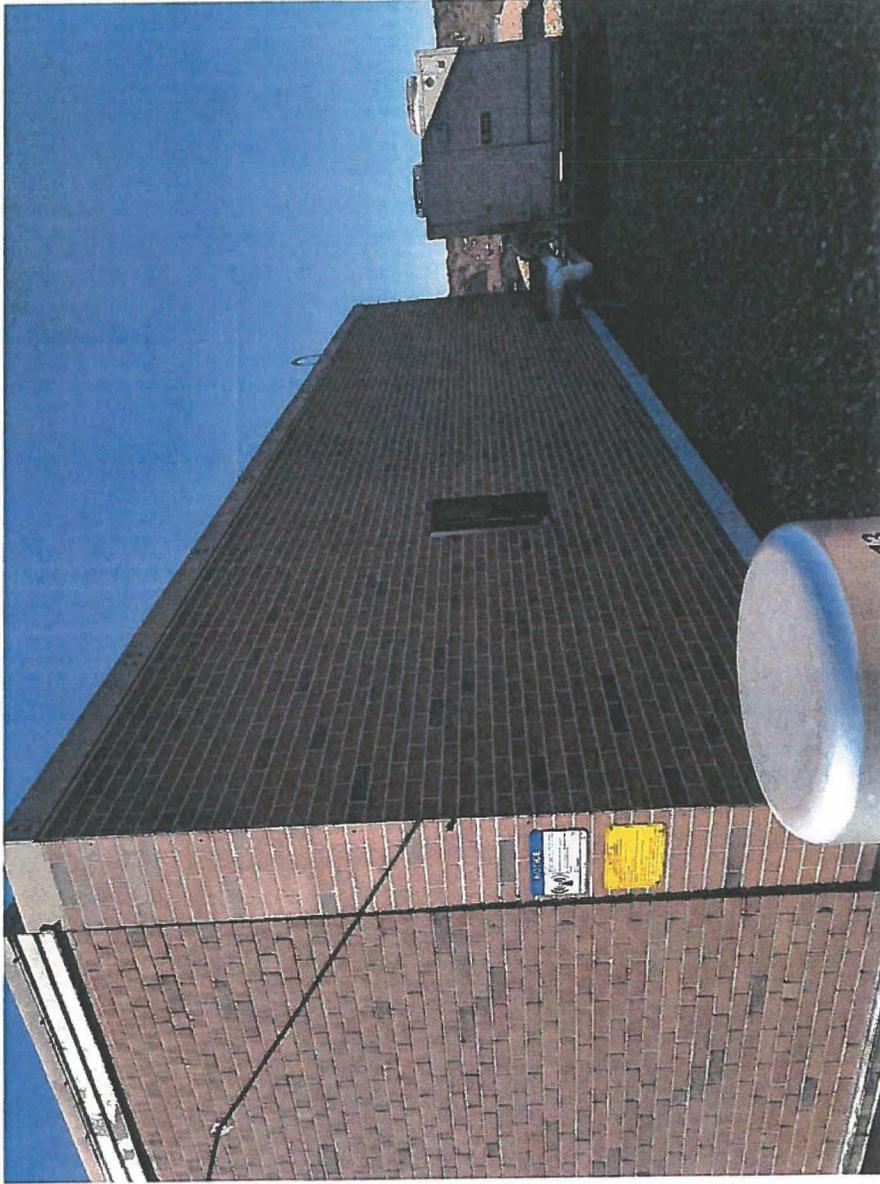


Figure 6: View of alpha sector fiberglass enclosure

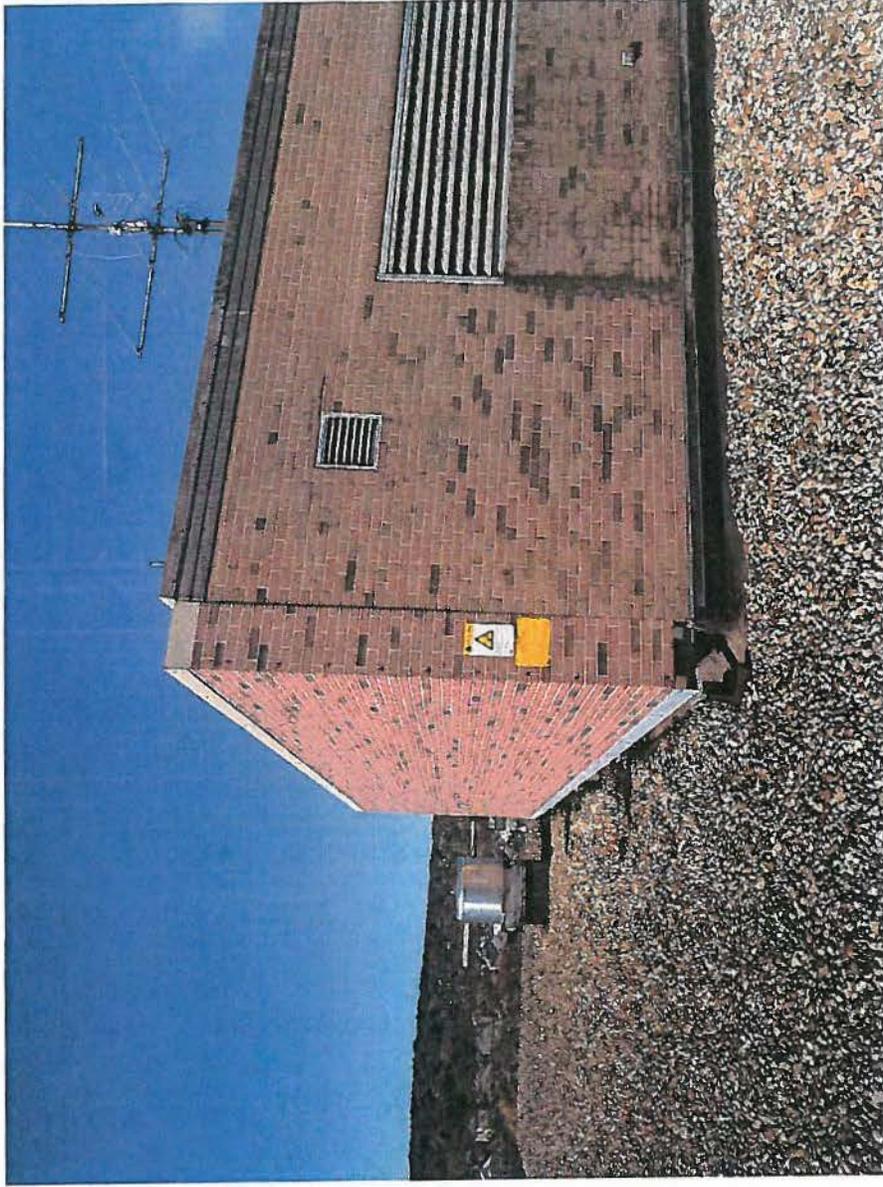


Figure 7: View of beta sector fiberglass enclosure



Figure8: View of gamma sector fiberglass enclosure

Exhibit D

ULS License

Cellular License - KNKA201 - Cellco Partnership

Call Sign	KNKA201	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular
Market			
Market	CMA006 - Boston-Lowell-Brockton-Lawrence-Haverhill, MA-NH	Channel Block	B
Submarket	0	Phase	2
Dates			
Grant	08/26/2014	Expiration	10/01/2024
Effective	11/01/2016	Cancellation	

Five Year Buildout Date

08/27/1989

Control Points

3 500 W. Dove Rd., TARRANT, Southlake, TX
P: (800)264-6620

Licensee

FRN 0003290673 Type General Partnership

Licensee

Cellco Partnership P:(770)797-1070
5055 North Point Pkwy, NP2NE Network Engineering F:(770)797-1036
Alpharetta, GA 30022 E:LicensingCompliance@VerizonWireless.com
ATTN Regulatory

Contact

Cellco Partnership P:(770)797-1070
Licensing Manager F:(770)797-1036
5055 North Point Pkwy, NP2NE Network Engineering E:LicensingCompliance@VerizonWireless.com
Alpharetta, GA 30022
ATTN Regulatory

Ownership and Qualifications

Radio Service Type Mobile
Regulatory Status Common Carrier Interconnected Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Demographics

Race
Ethnicity Gender

ULS License

PCS Broadband License - KNLH242 - Cellco Partnership

Call Sign	KNLH242	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular
Market			
Market	BTA051 - Boston, MA	Channel Block	F
Submarket	0	Associated Frequencies (MHz)	001890.00000000- 001895.00000000 001970.00000000- 001975.00000000

Dates

Grant	07/23/2007	Expiration	06/27/2017
Effective	11/01/2016	Cancellation	

Buildout Deadlines

1st	06/27/2002	2nd	
-----	------------	-----	--

Notification Dates

1st	05/17/2002	2nd	
-----	------------	-----	--

Licensee

FRN	0003290673	Type	Joint Venture
-----	------------	------	---------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Verizon Wireless Licensing - Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile		
Regulatory Status	Common Carrier	Interconnected	Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any foreign government?	No
Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	No

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGA900 - Cellco Partnership

Call Sign	WQGA900	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
Market			
Market	BEA003 - Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH-RI-VT	Channel Block	B
Submarket	1	Associated Frequencies (MHz)	001720.00000000-001730.00000000-002120.00000000-002130.00000000

Dates

Grant	11/29/2006	Expiration	11/29/2021
Effective	11/01/2016	Cancellation	

Buildout Deadlines

1st	2nd
-----	-----

Notification Dates

1st	2nd
-----	-----

Licensee

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Cellco Partnership Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGB266 - Cellco Partnership

Call Sign	WQGB266	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
Market			
Market	CMA006 - Boston-Lowell-Brockton-Lawrence-Haverhill, MA-NH	Channel Block	A
Submarket	0	Associated Frequencies (MHz)	001710.00000000-001720.00000000-002110.00000000-002120.00000000

Dates

Grant	11/29/2006	Expiration	11/29/2021
Effective	11/01/2016	Cancellation	

Buildout Deadlines

1st	2nd
-----	-----

Notification Dates

1st	2nd
-----	-----

Licensee

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Cellco Partnership Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any foreign government?	No
Is the applicant a corporation of which more than one-fifth of the	

ULS License

700 MHz Upper Band (Block C) License - WQJQ689 - Cellco Partnership**PA** This license has pending applications: 0007581227

Call Sign	WQJQ689	Radio Service	WU - 700 MHz Upper Band (Block C)
Status	Active	Auth Type	Regular
Market			
Market	REA001 - Northeast	Channel Block	C
Submarket	0	Associated Frequencies (MHz)	000746.00000000- 000757.00000000- 000776.00000000- 000787.00000000

Dates

Grant	11/26/2008	Expiration	06/13/2019
Effective	01/31/2017	Cancellation	

Buildout Deadlines

1st	06/13/2013	2nd	06/13/2019
-----	------------	-----	------------

Notification Dates

1st	06/20/2013	2nd	
-----	------------	-----	--

Licensee

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Verizon Wireless Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

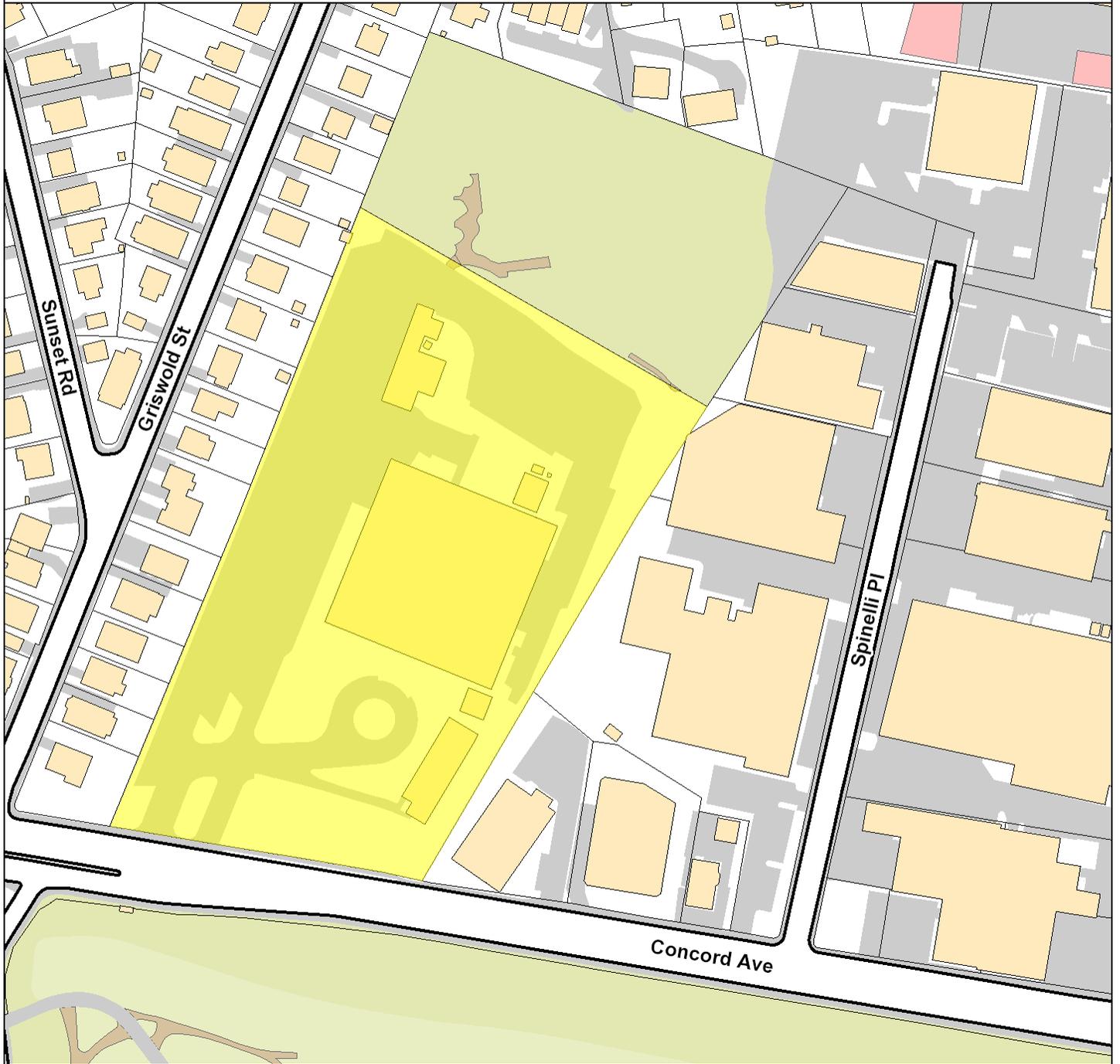
The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.



City of Cambridge
Massachusetts

1" = 151 ft

All data is provided for graphic representation only. The City of Cambridge expressly disclaims all warranties of any type, expressed or implied, including, but not limited to, any warranty as to the accuracy of the data, merchantability, or fitness for a particular purpose.

www.cambridgema.gov/gis

- Rail
- Building Footprints
- Parcels
- Paved Surfaces
 - Paved Roads
 - Bridges
 - Unpaved Roads
 - Unpaved Parking
 - Sidewalks
 - Driveways
 - Alleys
 - Other Paved Surface
 - Public Footpath



AS-BUILT PHOTO PACKAGE

Site Name: Belmont 2 MA (Sancta Maria)

799 Concord Ave
Cambridge, MA 02138

December 8, 2016



Prepared For:

Verizon Wireless
118 Flanders Road
Westborough, MA 01581-3956

Prepared by:

Dewberry Engineers Inc.
280 Summer Street 10th Floor
Boston, Massachusetts 02210-1131

Belmont 2 MA (Sancta Maria)

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Figure 8: View of gamma sector fiberglass enclosure 9

Key Map





Figure 1: View of Sancta Maria Nursing Facility from Concord Ave

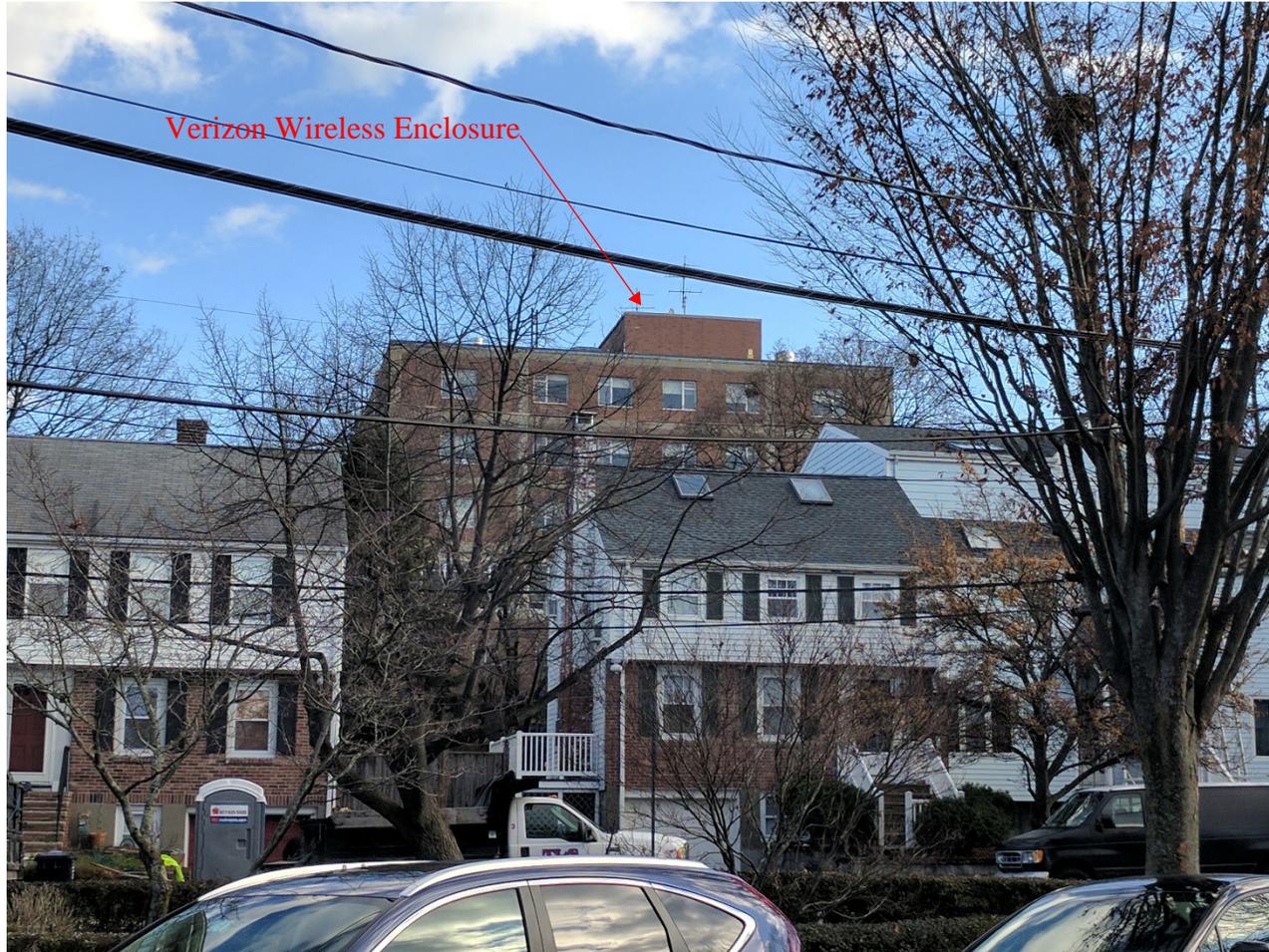


Figure 2: View of Sancta Maria Nursing Facility from Sunset Road



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Figure 5: View of Verizon Wireless equipment room and fiberglass chimney



Figure 6: View of alpha sector fiberglass enclosure



Figure 7: View of beta sector fiberglass enclosure



Figure8: View of gamma sector fiberglass enclosure

verizon

WIRELESS

BELMONT 2 MA (SANCTA MARIA)

799 CONCORD AVE.
CAMBRIDGE, MA 02138



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

NO.	DATE	DESCRIPTION
2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.685.3400
FAX: 617.685.3310



DRAWN BY: MR

REVIEWED BY: KB

CHECKED BY: BBR

PROJECT NUMBER: 50002925

JOB NUMBER: 50070896

SITE ADDRESS:

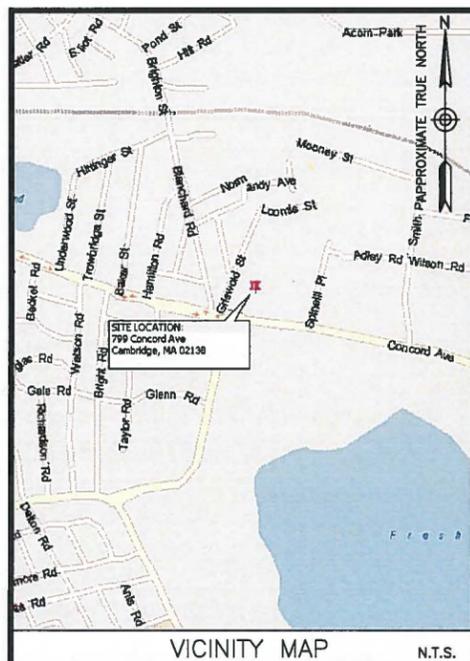
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



ENGINEER
DEWBERRY ENGINEERS INC.
280 SUMMER ST.
10TH FLOOR
BOSTON, MA 02210
PHONE # (617) 531-0800
FAX # (617) 695-3310
CONTACT: BENJAMIN REVETTE, P.E.

CONSTRUCTION
VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956
PHONE # (617) 921-9716
CONTACT: ERIC WAINWRIGHT

CONSULTANT TEAM

SITE NAME:
BELMONT 2 MA (SANCTA MARIA)

PROPERTY OWNER:
N/F
SANCTA MARIA HOSPITAL
795 CONCORD AVE.
CAMBRIDGE, MA 02138

APPLICANT:
CELLCO PARTNERSHIP D/B/A
VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

ELECTRIC UTILITY:
NSTAR (800) 592-2000

TELEPHONE UTILITY:
VERIZON (800) 837-4966

PARCEL ID:
267D-339

CENTER OF ROOF*:
LATITUDE: 42° 23' 29.58" N
LONGITUDE: 71° 09' 19.39" W
*PER FAA-2C

PROJECT SUMMARY

SITE ADDRESS:
799 CONCORD AVE.
CAMBRIDGE, MA 02138

ZONING DISTRICT:
01 - OFFICE ONE
ADD3- ALEWIFE OVERLAY DISTRICT
PARKWAY OVERLAY DISTRICT
CONCORD AVENUE PARKWAY SUBDISTRICT

PROJECT DIRECTORY

THE SITE CONSISTS OF (12) ANTENNAS AND ASSOCIATED EQUIPMENT MOUNTED TO THE PENTHOUSE FACADES OF AN EXISTING BUILDING. THE ANTENNAS ARE SCREENED BEHIND FIBERGLASS PENTHOUSE EXTENSIONS. IN ADDITION, THE EXISTING VACANT GARAGE AT GRADE IS UTILIZED AS AN EQUIPMENT ROOM. A NATURAL GAS GENERATOR ARE INSIDE THE EQUIPMENT ROOM.

PROJECT DESCRIPTION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE AND ITS SITE CONDITIONS AND IS NOT TO BE USED FOR ANOTHER SITE OR WHEN OTHER CONDITIONS PERTAIN. REUSE OF THIS DOCUMENT IS AT THE SOLE RISK OF THE USER.

A.D.A. COMPLIANCE:
FACILITY IS UNMANNED AND NOT FOR HUMAN HABITATION.

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
C-1	ROOF PLAN
C-2	NORTH ELEVATION
C-3	WEST ELEVATION
C-4	SOUTH ELEVATION
C-5	EAST ELEVATION
C-6	ANTENNA MOUNTING DETAILS
S-1	SCREENWALL ISOMETRICS

SHEET INDEX

DIRECTIONS FROM WESTBOROUGH, MA:

TAKE MA-9 E TO BOSTON. TAKE EXIT 14 FOR I-95 N TOWARD N.H. AND MERGE ONTO I-95 N. TAKE EXIT 28A TO MERGE ONTO MA-2 E TOWARDS ARLINGTON. TAKE THE 1ST EXIT ONTO CONCORD AVE. THE SITE WILL BE ON THE RIGHT.

AS-BUILT DRAWINGS

AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

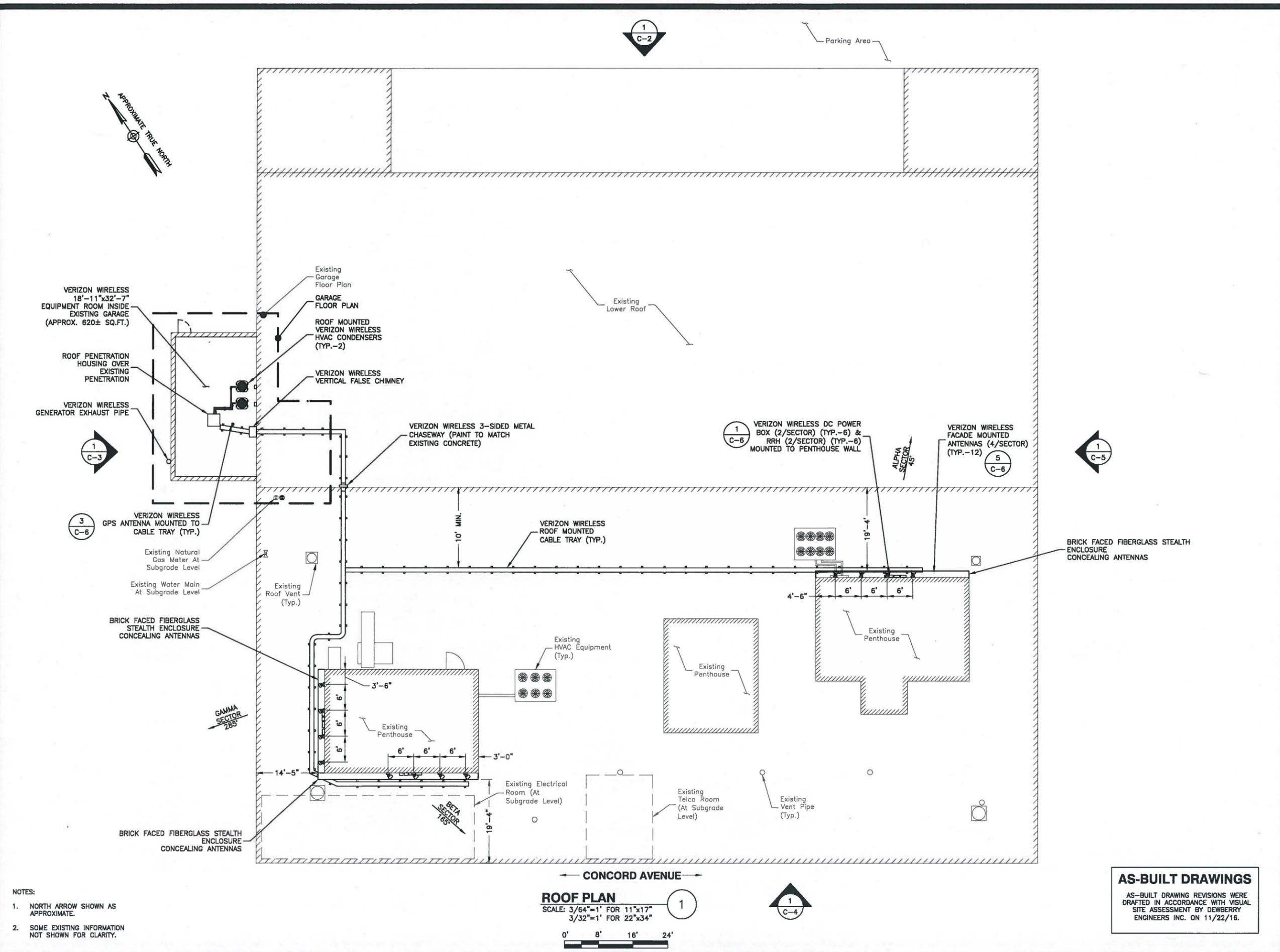
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

ROOF PLAN

SHEET NUMBER

C-1



- NOTES:
- NORTH ARROW SHOWN AS APPROXIMATE.
 - SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.

ROOF PLAN
SCALE: 3/64"=1' FOR 11"x17"
3/32"=1' FOR 22"x34"
0' 8' 16' 24'

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

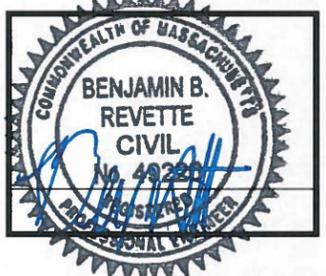
**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
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10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.9400
FAX: 617.695.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

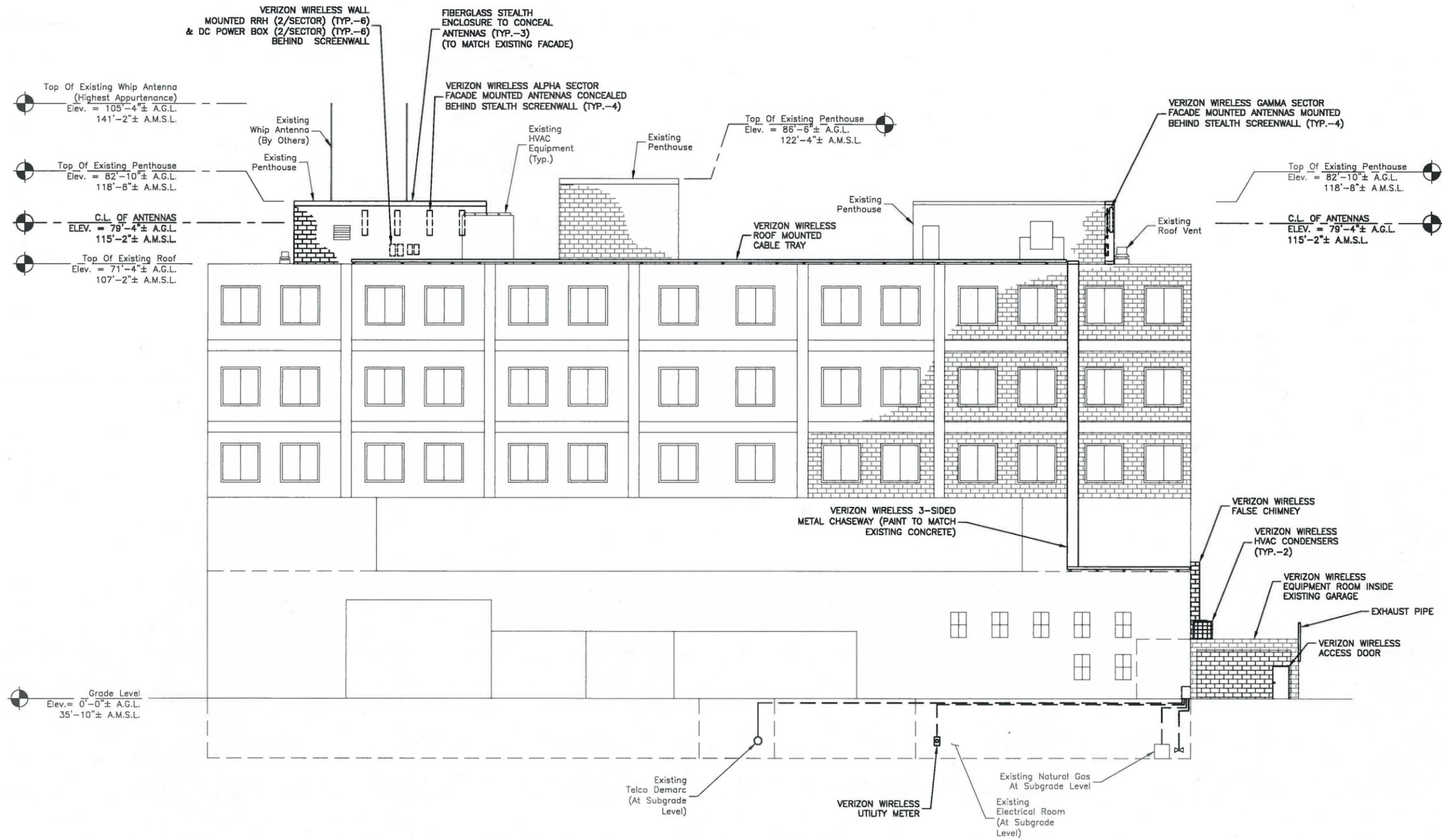
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

NORTH ELEVATION

SHEET NUMBER

C-2



NORTH ELEVATION
SCALE: 3/64"=1' FOR 11"x17"
3/32"=1' FOR 22"x34"
0' 8' 16' 24'

- NOTES:
- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - A.G.L. = ABOVE GRADE LEVEL
A.R.L. = ABOVE ROOF LEVEL
A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
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10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.9400
FAX: 617.695.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

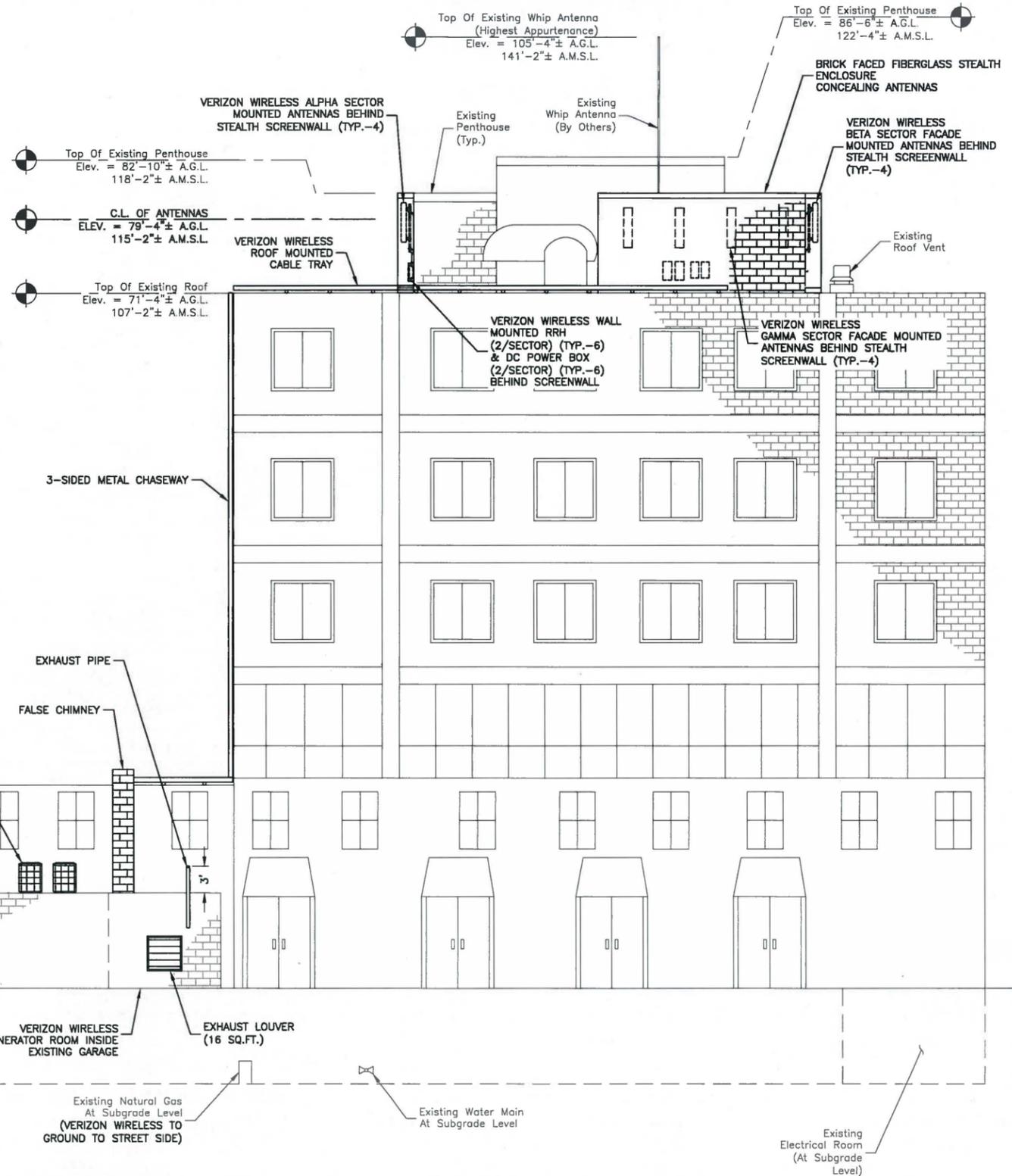
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

WEST ELEVATION

SHEET NUMBER

C-3



WEST ELEVATION
SCALE: 1/16"=1' FOR 11"x17"
1/8"=1' FOR 22"x34"
0' 4' 8' 16'

- NOTES:
- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - A.G.L. = ABOVE GRADE LEVEL
A.R.L. = ABOVE ROOF LEVEL
A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.685.3400
FAX: 617.685.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

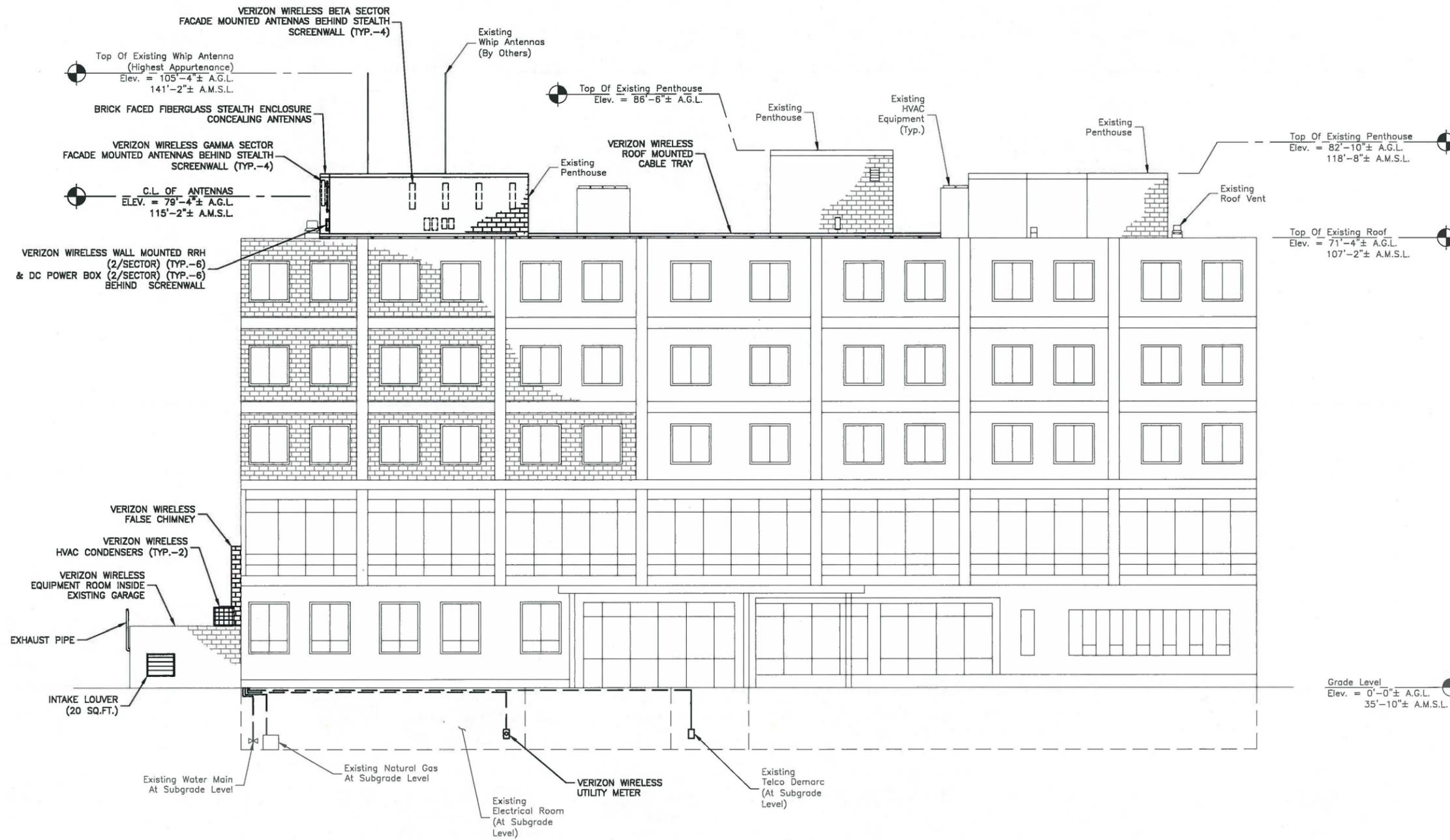
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

SOUTH ELEVATION

SHEET NUMBER

C-4



SOUTH ELEVATION

SCALE: 3/64"=1' FOR 11"x17"
3/32"=1' FOR 22"x34"



1

NOTES:

- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
- A.G.L. = ABOVE GRADE LEVEL
A.R.L. = ABOVE ROOF LEVEL
A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS

AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
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10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY: MR

REVIEWED BY: KB

CHECKED BY: BBR

PROJECT NUMBER: 50002925

JOB NUMBER: 50070896

SITE ADDRESS:

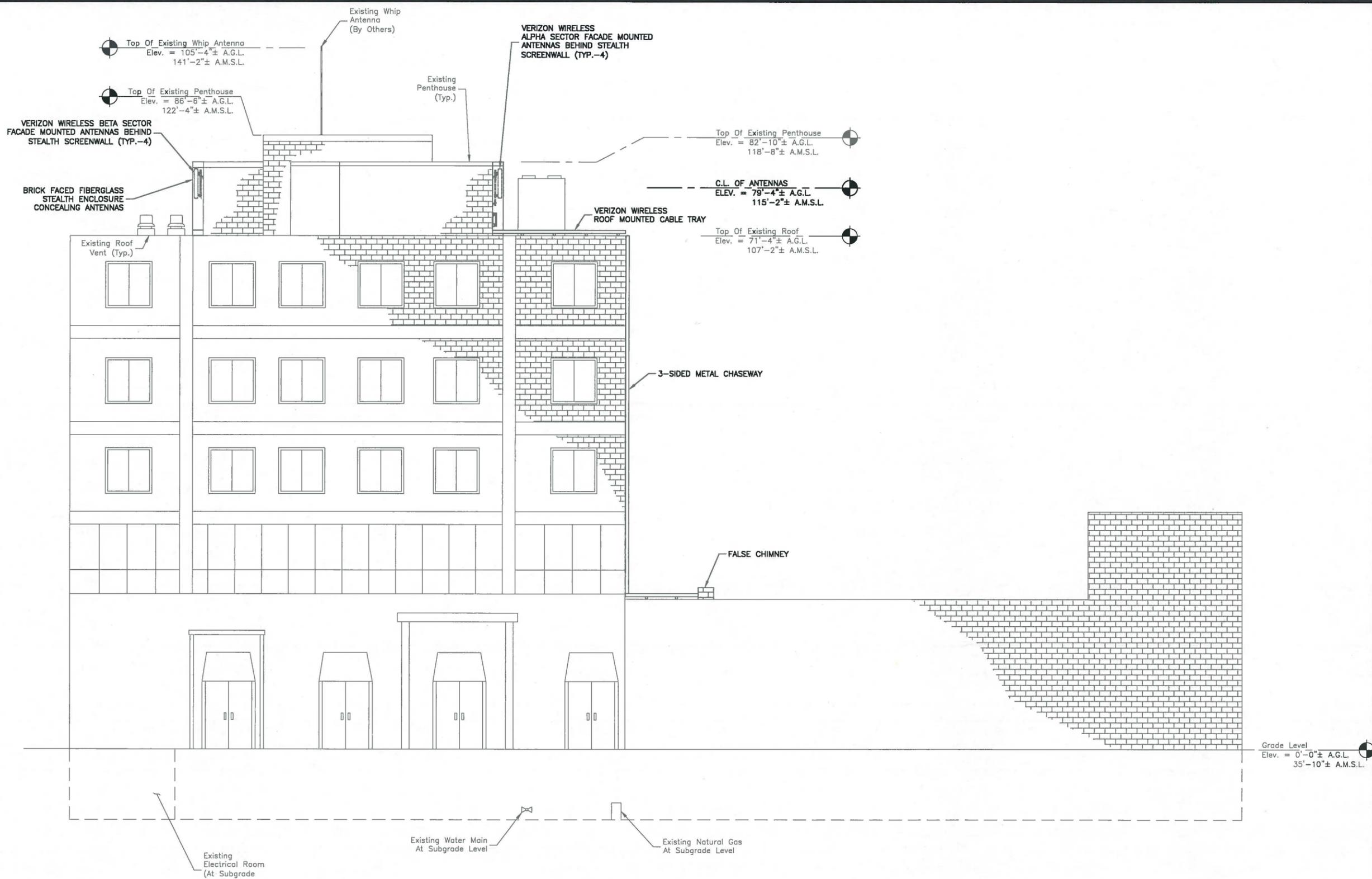
799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

EAST ELEVATION

SHEET NUMBER

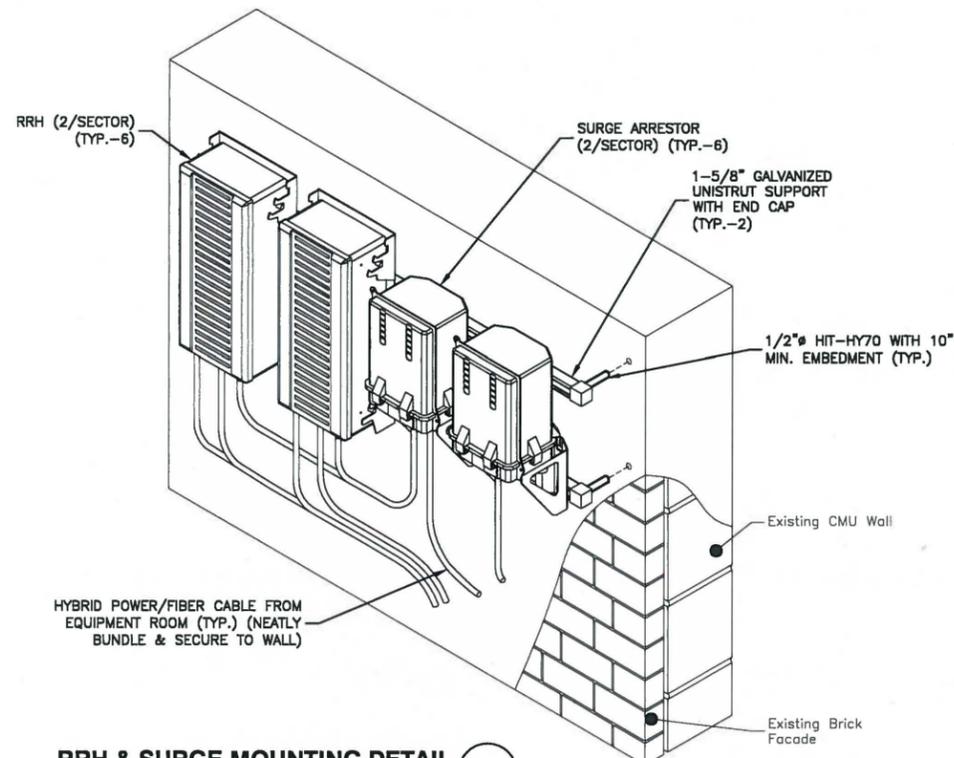
C-5



EAST ELEVATION 1
SCALE: 1/16"=1' FOR 11"x17"
1/8"=1' FOR 22"x34"
0' 4' 8' 16'

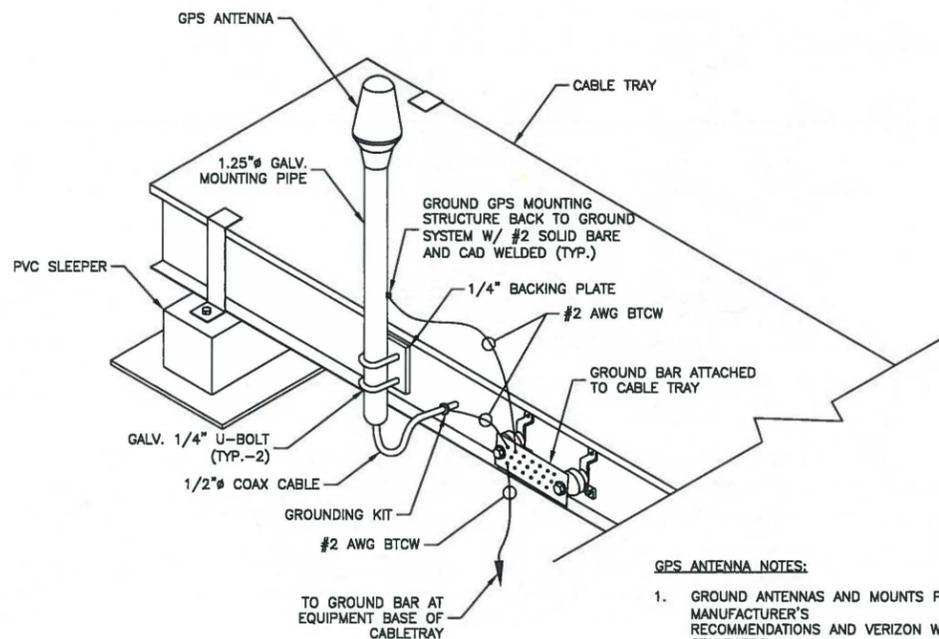
- NOTES:
- SOME EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - A.G.L. = ABOVE GRADE LEVEL
A.R.L. = ABOVE ROOF LEVEL
A.M.S.L. = ABOVE MEAN SEA LEVEL

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



RRH & SURGE MOUNTING DETAIL
SCALE: N.T.S.

1



GPS ANTENNA NOTES:

- GROUND ANTENNAS AND MOUNTS PER MANUFACTURER'S RECOMMENDATIONS AND VERIZON WIRELESS STANDARDS.
- FIELD LOCATE GPS ANTENNAS A MINIMUM OF 10' HORIZONTALLY FROM OTHER GPS ANTENNAS, WITH VERIZON WIRELESS CM APPROVAL.

GPS ANTENNA MOUNT
SCALE: N.T.S.

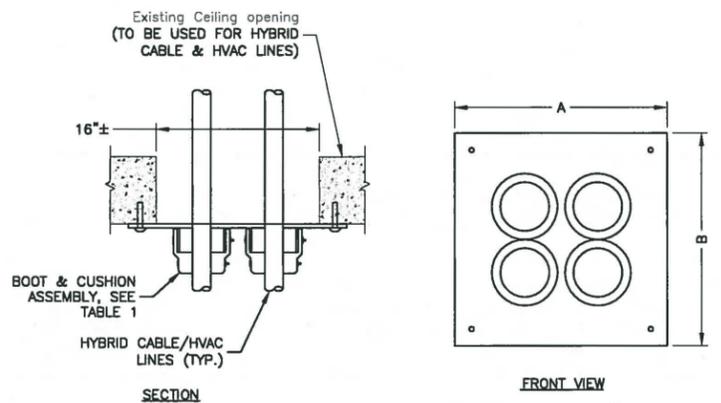
3

RF SCHEDULE & B.O.M.									
SECTOR	ANTENNA	AZIMUTH (TRUE NORTH)	RAD CENTER	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	RRH	RET CABLES (LENGTH)	HYBRID CABLE (LENGTH)	LARGE JUNCTION BOX WITH SURGE
IA	COMMSCOPE LNX-6513DS-A1M	45°	79'-4"±	0°	-6'	(1) RRH2x40-07U	(2) LINE (325'±)	(1) 6x12 (325'±)	(1) RAYCAP DB-C1-6C-12AB-OZ
IIA	COMMSCOPE SBNHH-1D65A	45°	79'-4"±	0°	-3'	(1) RRH2x60-AWS			
IIIA	COMMSCOPE SBNHH-1D65A	45°	79'-4"±	0°	-3'	-			
IVA	COMMSCOPE LNX-6513DS-A1M	45°	79'-4"±	0°	-6'	-	(2) LINE (275'±)	(1) 6x12 (275'±)	(1) RAYCAP DB-C1-6C-12AB-OZ
IB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-6'	(1) RRH2x40-07U			
IIB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-3'	(1) RRH2x60-AWS			
IIIB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-3'	-	(2) LINE (225'±)	(1) 6x12 (225'±)	(1) RAYCAP DB-C1-6C-12AB-OZ
IVB	COMMSCOPE LNX-6513DS-A1M	165°	79'-4"±	0°	-6'	-			
IG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-6'	(1) RRH2x40-07U			
IIG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-3'	(1) RRH2x60-AWS	(2) LINE (225'±)	(1) 6x12 (225'±)	(1) RAYCAP DB-C1-6C-12AB-OZ
IIIG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-3'	-			
IVG	COMMSCOPE LNX-6513DS-A1M	285°	79'-4"±	0°	-6'	-			

RF SCHEDULE BASED ON ANTENNA DESIGN REC DATED 3/3/2015. CONTRACTOR TO VERIFY FINAL ANTENNA DESING AND CABLE LENGTHS PRIOR TO CONSTRUCTION.

RF SCHEDULE
SCALE: N.T.S.

2



NOTE:
NON-RATED PENETRATION IN THIS INSTALLATION

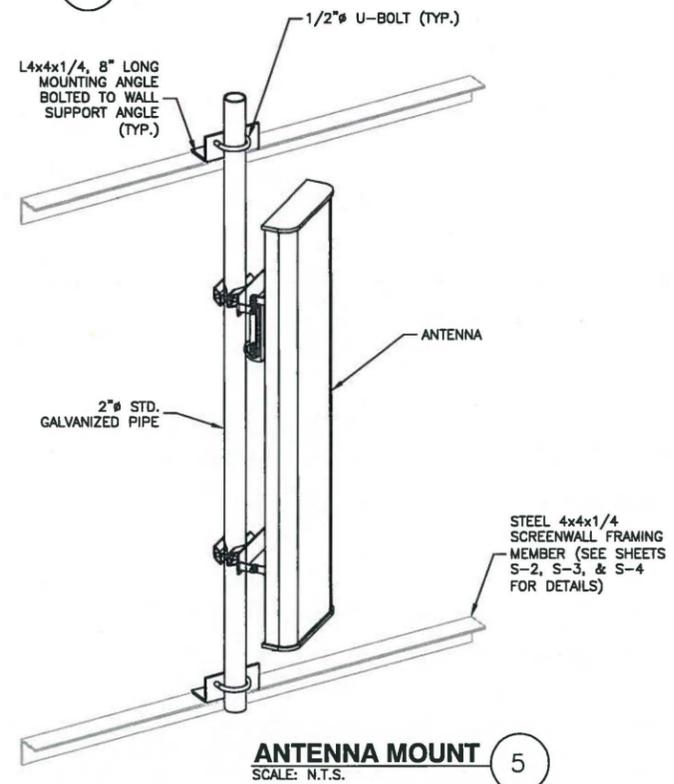
TABLE 1		TABLE 2			
CABLE SIZE	MICROFLECT BOOT & CUSHION ASSEMBLY	No. CABLES	MICROFLECT CABLE ENTRY PANEL	A	B
1/2"	B1346A	4	B1199	17.5"	17.5"
1 5/8"	B535A				

NOTES:

- FASTEN CABLE ENTRY TO WALL W/ STAINLESS STEEL SCREWS W/ LEAD SHIELD INSERTS INTO BRICK, MASONRY, CONC. USE TOGGLE BOLTS INTO STUD WALLS.
- DRILL HOLES 1/2" LARGER IN DIAMETER THAN CABLES THROUGH WALL/CEILING TO MATCH HOLES IN THE CABLE ENTRY.
- DETAIL BASED ON THE USE OF MICROFLECT AND HILT. CONTRACTOR MAY SUBSTITUTE APPROVED EQUAL MATERIAL.

COAX CABLE WAVEPORT
SCALE: N.T.S.

4



ANTENNA MOUNT
SCALE: N.T.S.

5

AS-BUILT DRAWINGS

AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

BELMONT 2 MA (SANCTA MARIA)

AS-BUILT DRAWINGS

NO.	DATE	DESCRIPTION
2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY:	MR
REVIEWED BY:	KB
CHECKED BY:	BBR
PROJECT NUMBER:	50002925
JOB NUMBER:	50070896
SITE ADDRESS:	

799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

ANTENNA MOUNTING DETAILS

SHEET NUMBER



VERIZON WIRELESS
118 FLANDERS ROAD
WESTBOROUGH, MA 01581-3956

**BELMONT 2 MA
(SANCTA MARIA)**

AS-BUILT DRAWINGS

2	01/13/17	FOR SUBMITTAL
1	12/09/16	FOR SUBMITTAL
0	12/01/16	FOR SUBMITTAL

Dewberry
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY:	MR
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SITE ADDRESS:	

799 CONCORD AVE.
CAMBRIDGE, MA 02138

SHEET TITLE

SCREENWALL ISOMETRICS

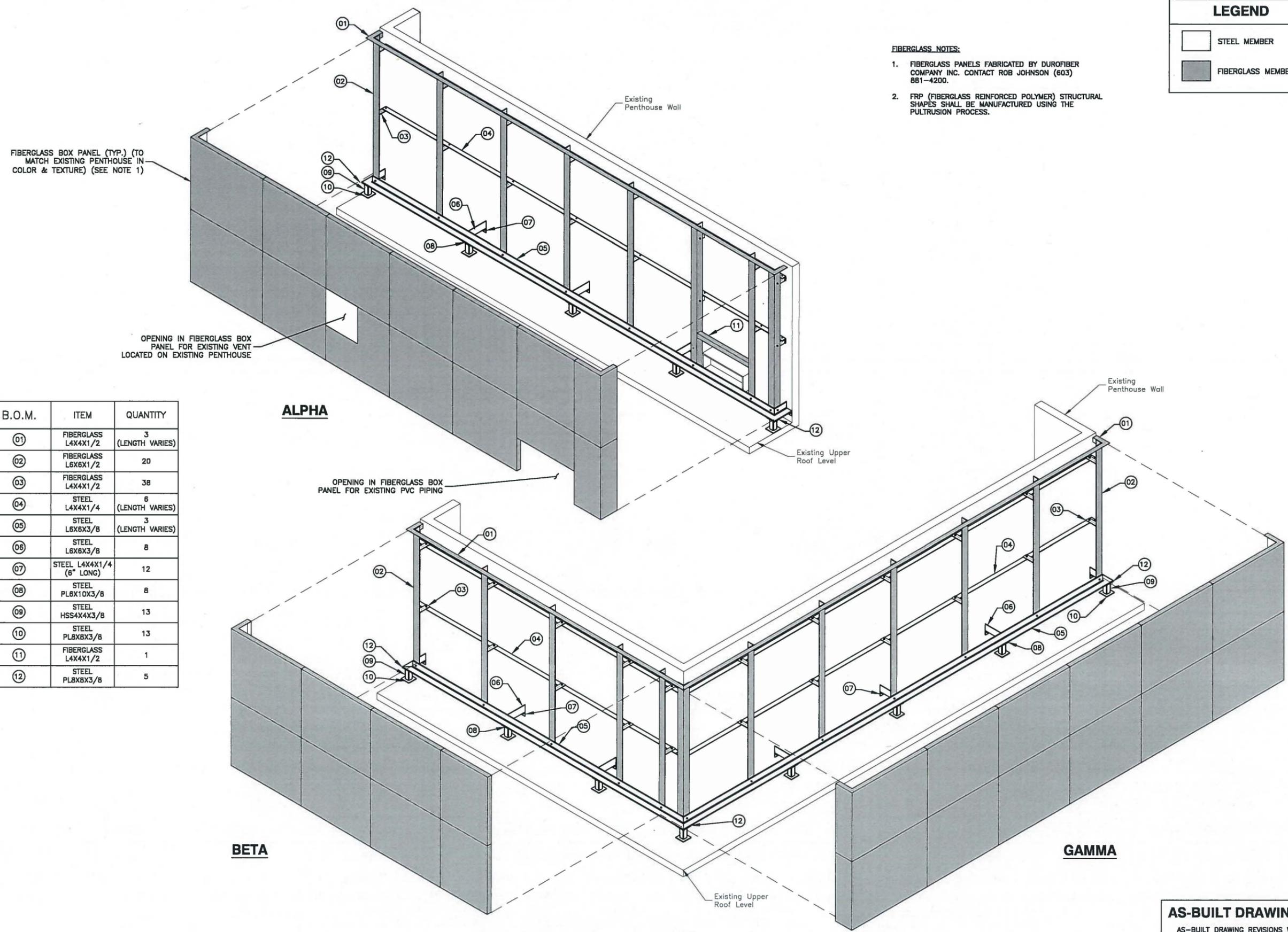
SHEET NUMBER

S-1

LEGEND

	STEEL MEMBER
	FIBERGLASS MEMBER

- FIBERGLASS NOTES:**
- FIBERGLASS PANELS FABRICATED BY DUROFIBER COMPANY INC. CONTACT ROB JOHNSON (603) 881-4200.
 - FRP (FIBERGLASS REINFORCED POLYMER) STRUCTURAL SHAPES SHALL BE MANUFACTURED USING THE PULTRUSION PROCESS.



B.O.M.	ITEM	QUANTITY
01	FIBERGLASS L4X4X1/2 (LENGTH VARIES)	3
02	FIBERGLASS L6X6X1/2	20
03	FIBERGLASS L4X4X1/2	38
04	STEEL L4X4X1/4 (LENGTH VARIES)	6
05	STEEL L6X6X3/8 (LENGTH VARIES)	3
06	STEEL L6X6X3/8	8
07	STEEL L4X4X1/4 (6" LONG)	12
08	STEEL PL6X10X3/8	8
09	STEEL HSS4X4X3/8	13
10	STEEL PL8X8X3/8	13
11	FIBERGLASS L4X4X1/2	1
12	STEEL PL8X8X3/8	5

SCREENWALL ISOMETRICS
SCALE: N.T.S.

AS-BUILT DRAWINGS
AS-BUILT DRAWING REVISIONS WERE DRAFTED IN ACCORDANCE WITH VISUAL SITE ASSESSMENT BY DEWBERRY ENGINEERS INC. ON 11/22/16.

ULS License

Cellular License - KNKA201 - Cellco Partnership

Call Sign	KNKA201	Radio Service	CL - Cellular
Status	Active	Auth Type	Regular

Market

Market	CMA006 - Boston-Lowell-Brockton-Lawrence-Haverhill, MA-NH	Channel Block	B
Submarket	0	Phase	2

Dates

Grant	08/26/2014	Expiration	10/01/2024
Effective	11/01/2016	Cancellation	

Five Year Buildout Date

08/27/1989

Control Points

3 500 W. Dove Rd., TARRANT, Southlake, TX
P: (800)264-6620

Licensee

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Cellco Partnership Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Demographics

Race

Ethnicity

Gender

ULS License

PCS Broadband License - KNLH242 - Cellco Partnership

Call Sign	KNLH242	Radio Service	CW - PCS Broadband
Status	Active	Auth Type	Regular

Market

Market	BTA051 - Boston, MA	Channel Block	F
Submarket	0	Associated Frequencies (MHz)	001890.00000000- 001895.00000000 001970.00000000- 001975.00000000

Dates

Grant	07/23/2007	Expiration	06/27/2017
Effective	11/01/2016	Cancellation	

Buildout Deadlines

1st	06/27/2002	2nd	
-----	------------	-----	--

Notification Dates

1st	05/17/2002	2nd	
-----	------------	-----	--

Licensee

FRN	0003290673	Type	Joint Venture
-----	------------	------	---------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Verizon Wireless Licensing - Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any foreign government?	No
Is the applicant a corporation of which more than one-fifth of the capital stock is owned of record or voted by aliens or their representatives or by a foreign government or representative thereof or by any corporation organized under the laws of a foreign country?	No

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGA900 - Cellco Partnership

Call Sign	WQGA900	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
Market			
Market	BEA003 - Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH-RI-VT	Channel Block	B
Submarket	1	Associated Frequencies (MHz)	001720.00000000-001730.00000000-002120.00000000-002130.00000000

Dates

Grant	11/29/2006	Expiration	11/29/2021
Effective	11/01/2016	Cancellation	

Buildout Deadlines

1st 2nd

Notification Dates

1st 2nd

Licensee

FRN	0003290673	Type	General Partnership
-----	------------	------	---------------------

Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
---	---

Contact

Cellco Partnership Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
--	---

Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.

ULS License

AWS (1710-1755 MHz and 2110-2155 MHz) License - WQGB266 - Cellco Partnership

Call Sign	WQGB266	Radio Service	AW - AWS (1710-1755 MHz and 2110-2155 MHz)
Status	Active	Auth Type	Regular
Market			
Market	CMA006 - Boston-Lowell-Brockton-Lawrence-Haverhill, MA-NH	Channel Block	A
Submarket	0	Associated Frequencies (MHz)	001710.00000000-001720.00000000-002110.00000000-002120.00000000

Dates

Grant	11/29/2006	Expiration	11/29/2021
Effective	11/01/2016	Cancellation	

Buildout Deadlines

1st	2nd
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Notification Dates

1st	2nd
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Licensee

FRN	0003290673	Type	General Partnership
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Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
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Contact

Cellco Partnership Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
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Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

Is the applicant a foreign government or the representative of any foreign government?	No
Is the applicant an alien or the representative of an alien?	No
Is the applicant a corporation organized under the laws of any foreign government?	No
Is the applicant a corporation of which more than one-fifth of the	

ULS License

700 MHz Upper Band (Block C) License - WQJQ689 - Cellco Partnership**PA** This license has pending applications: 0007581227

Call Sign	WQJQ689	Radio Service	WU - 700 MHz Upper Band (Block C)
Status	Active	Auth Type	Regular
Market			
Market	REA001 - Northeast	Channel Block	C
Submarket	0	Associated Frequencies (MHz)	000746.00000000- 000757.00000000 000776.00000000- 000787.00000000

Dates

Grant	11/26/2008	Expiration	06/13/2019
Effective	01/31/2017	Cancellation	

Buildout Deadlines

1st	06/13/2013	2nd	06/13/2019
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Notification Dates

1st	06/20/2013	2nd	
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Licensee

FRN	0003290673	Type	General Partnership
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Licensee

Cellco Partnership 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
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Contact

Verizon Wireless Licensing Manager 5055 North Point Pkwy, NP2NE Network Engineering Alpharetta, GA 30022 ATTN Regulatory	P:(770)797-1070 F:(770)797-1036 E:LicensingCompliance@VerizonWireless.com
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Ownership and Qualifications

Radio Service Type	Mobile
Regulatory Status	Common Carrier Interconnected Yes

Alien Ownership

The Applicant answered "No" to each of the Alien Ownership questions.

Basic Qualifications

The Applicant answered "No" to each of the Basic Qualification questions.

Tribal Land Bidding Credits

This license did not have tribal land bidding credits.