



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

2019 SEP -4 PM 12: 27

OFFICE OF THE CITY CLERK  
 CAMBRIDGE, MASSACHUSETTS  
 Plan No: BZA-017172-2019

BZA APPLICATION FORM

GENERAL INFORMATION

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

Special Permit :   v   Variance :            Appeal :           

PETITIONER : Sprint Spectrum Realty, LLC C/O Simon J. Brighenti/Centerline Communications

PETITIONER'S ADDRESS : 750 W Center Street W. Bridgewater, MA 02379

LOCATION OF PROPERTY : 270 Third St Cambridge, MA 02141

TYPE OF OCCUPANCY : Telecommunications ZONING DISTRICT : PUD-4C-IA1

REASON FOR PETITION :  
Additions

**DESCRIPTION OF PETITIONER'S PROPOSAL :**

Applicant is seeking to place telecommunication equipment on the rooftop of the property at 270 Third Street. Applicant currently operates a facility on the rooftop of 238 Main Street nearby and is being requested by the owner MIT to remove the equipment due to planned renovation of the building. The new facility will replace and enhance the current facility and add no net additional facilities in the city.

**SECTIONS OF ZONING ORDINANCE CITED :**

Article 4.000 Section 4.32.G.1 (Telecommunication Facility)  
 Article 4.000 Section 4.40 (Footnote 49) (Telecommunication Facility)

Original Signature(s) :   
 (Petitioner(s) / Owner)  
Simon J. BRIGHENTI JR  
 (Print Name)

Address : CENTERLINE COMMUNICATIONS LLC  
750 W CENTER ST. W. BRIDGEWATER, MA  
 Tel. No. : (413) 237-1550 02379  
 E-Mail Address : sbrighenti@cliselle.com

Date : 9/29/2019

**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.

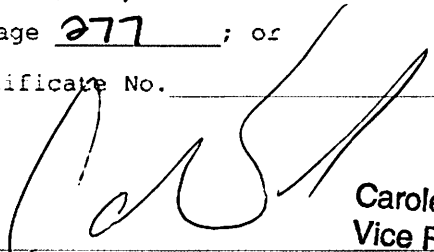
I/We Aimco 270 Third Street, LLC  
(OWNER)

Address: 4582 South Ulster St, Suite 1100, Denver, CO 80231

State that I/We own the property located at 270 Third St., Cambridge, MA 02142 which is the subject of this zoning application.

The record title of this property is in the name of Aimco 270 Third Street, LLC

\*Pursuant to a deed of duly recorded in the date 6/25/2005, Middlesex South County Registry of Deeds at Book 65611, Page 277; or Middlesex Registry District of Land Court, Certificate No. \_\_\_\_\_ Book \_\_\_\_\_ Page \_\_\_\_\_.



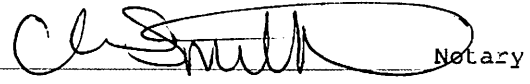
Carole Olite  
Vice President, Operations

SIGNATURE BY LAND OWNER OR AUTHORIZED TRUSTEE, OFFICER OR AGENT\*

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

Commonwealth of Colorado, County of Denver

The above-name Carole Olite personally appeared before me, this 3<sup>rd</sup> of July, 2019, and made oath that the above statement is true.

  
Notary

My commission expires 3/16/22 (Notary Seal).

**MICHELLE SMITH**  
Notary Public  
State of Colorado  
Notary ID # 20184012280  
My Commission Expires 03-16-2022

- 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 270 Third St Cambridge, MA 02141 (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:
- Increasing communication ability enhances both residential and non-residential uses within the city. While the applicable ECHO overlay and the ECD Guidelines both generally address larger scale-development and focus on existing and proposed residential development, such development and uses will be enhanced by this facility. Specifically the PUD-4B and -4C districts both encourage development that "enhances the pedestrian experience" in the area and the continued mix of retail, office and residential uses. Specifically both the applicable PUD and the underlying IA-1 district(s) allow Transportation, Communications and Utility Uses.
- 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:
- Once the proposed equipment has been installed, there will be no additional traffic or disruption attendant to the operation of the facility. The new facility will be replacing an existing facility approximately 1500 feet away so there will be little change to the overall traffic pattern or established neighborhood character.
- 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:
- There will be no impact to the listed resources or uses.
- 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:
- There will be no described nuisance or hazard created by the proposed installation as the existing facility will be replaced by a more sophisticated facility very close to the existing location.
- 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:
- To the contrary, the neighborhood will obtain a benefit from the installation of upgraded telecommunication equipment within the area.

**BZA APPLICATION FORM**

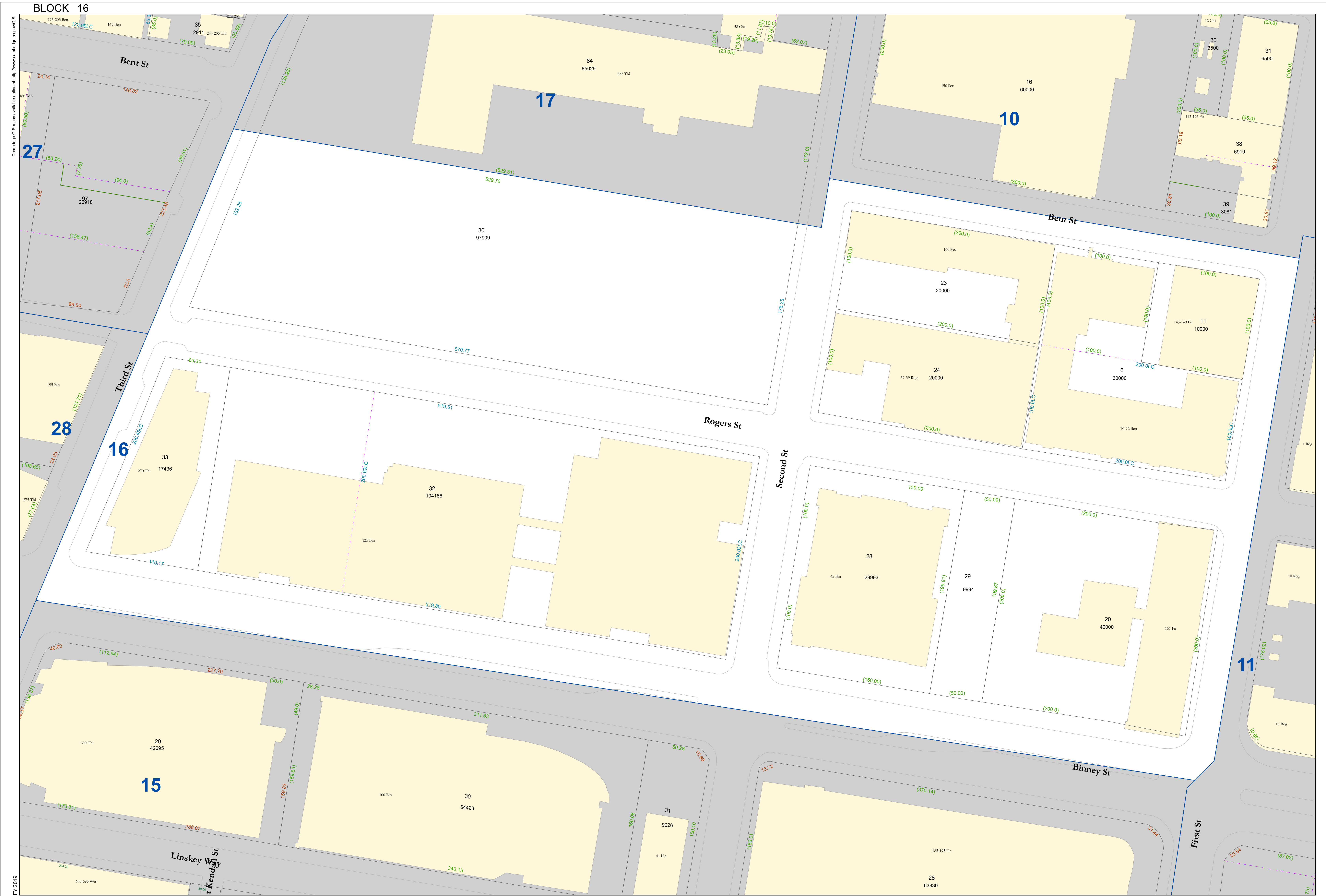
**DIMENSIONAL INFORMATION**

**APPLICANT:** Centerline Communications, LLC      **PRESENT USE/OCCUPANCY:** Muti-Res  
**LOCATION:** 270 Third St Cambridge, MA 02141      **ZONE:** PUD-4C-IA1  
**PHONE:** \_\_\_\_\_      **REQUESTED USE/OCCUPANCY:** Telecommunication

	<b><u>EXISTING</u></b> <b><u>CONDITIONS</u></b>	<b><u>REQUESTED</u></b> <b><u>CONDITIONS</u></b>	<b><u>ORDINANCE</u></b> <b><u>REQUIREMENTS</u></b> <sup>1</sup>	
<b><u>TOTAL GROSS FLOOR AREA:</u></b>	N/A	N/A	N/A	(max.)
<b><u>LOT AREA:</u></b>	N/A	N/A	N/A	(min.)
<b><u>RATIO OF GROSS FLOOR AREA</u></b> <b><u>TO LOT AREA:</u> <sup>2</sup></b>	N/A	N/A	N/A	(max.)
<b><u>LOT AREA FOR EACH DWELLING UNIT:</u></b>	N/A	N/A	N/A	(min.)
<b><u>SIZE OF LOT:</u></b>				
<b>WIDTH</b>	N/A	N/A	N/A	(min.)
<b>DEPTH</b>	N/A	N/A	N/A	
<b><u>SETBACKS IN FEET:</u></b>				
<b>FRONT</b>	N/A	N/A	N/A	(min.)
<b>REAR</b>	N/A	N/A	N/A	(min.)
<b>LEFT SIDE</b>	N/A	N/A	N/A	(min.)
<b>RIGHT SIDE</b>	N/A	N/A	N/A	(min.)
<b><u>SIZE OF BLDG.:</u></b>				
<b>HEIGHT</b>	85	95	N/A	(max.)
<b>LENGTH</b>	N/A	N/A	N/A	
<b>WIDTH</b>	N/A	N/A	N/A	
<b><u>RATIO OF USABLE OPEN SPACE</u></b> <b><u>TO LOT AREA:</u></b>	N/A	N/A	N/A	(min.)
<b><u>NO. OF DWELLING UNITS:</u></b>	N/A	N/A	N/A	(max.)
<b><u>NO. OF PARKING SPACES:</u></b>	N/A	N/A	N/A	(min./max)
<b><u>NO. OF LOADING AREAS:</u></b>	N/A	N/A	N/A	(min.)
<b><u>DISTANCE TO NEAREST BLDG.</u></b> <b><u>ON SAME LOT:</u></b>	N/A	N/A	N/A	(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.

1. SEE CAMBRIDGE ZONING ORDINANCE ARTICLE 5.000, SECTION 5.30 (DISTRICT OF DIMENSIONAL REGULATIONS).
2. TOTAL GROSS FLOOR AREA (INCLUDING BASEMENT 7'-0" IN HEIGHT AND ATTIC AREAS GREATER THAN 5') DIVIDED BY LOT AREA.
3. OPEN SPACE SHALL NOT INCLUDE PARKING AREAS, WALKWAYS OR DRIVEWAYS AND SHALL HAVE A MINIMUM DIMENSION OF 15'.



Cambridge GIS maps available online at <http://www.cambridgegis.gov/GIS>

FY 2019

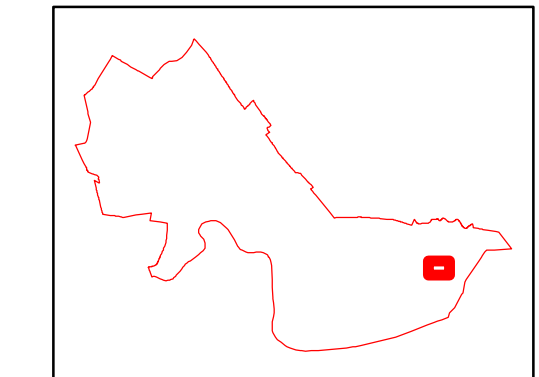
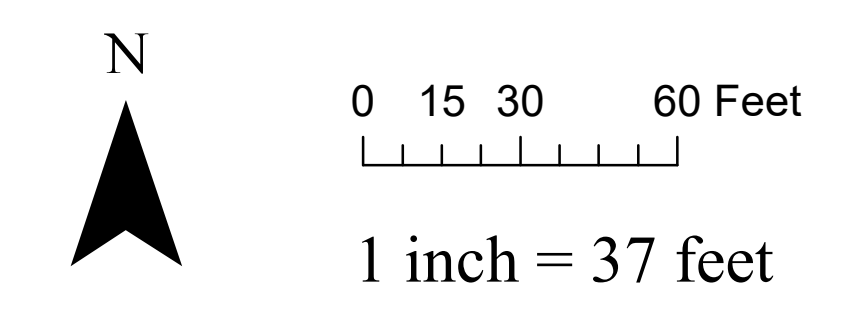


**City of Cambridge  
Assessing Department**  
  
795 Massachusetts Ave.  
Cambridge, MA 02139

- Buildings
- Lot Line
- Block Line
- City Boundary
- Water
- Sub-Parcel Line
- Easement
- Railway

10 Lot Number      100 Parcel size in Sq. Ft.  
 16 Block Number    44.0LC Land Court Dimension  
 10 Cam Street Number    65.0 Survey Dimensions  
 (125.0) Deed Dimension

DISCLAIMER:  
All Real Property shown on this map was compiled from existing Assessor's Tax Maps dated 1920 to 2018 and maintained by the City Assessor's Office and the Department of Public Works. Subsequent maintenance has been completed using the City of Cambridge Geographic Information System (GIS). Parcels have not been created from survey, and map is suitable for assessing purposes only.  
The City of Cambridge assumes no legal responsibility for information shown on this map.



Parcel Block Map  
**16**



**PHOTO SIMULATIONS**

**SITE NAME: BS25XC905-A  
AIMCO**

**PROJECT TYPE: NEW SITE BUILD/EQUIPMENT DEPLOYMENT**

Address:

**270 THIRD STREET  
CAMBRIDGE, MA 02142**

Date:

**JULY 9, 2019**

Prepared by:



R.K. Executive Centre ■ 201 Boston Post Road West ■ Suite 101 ■ Marlborough, MA 01752

t. 508.481.7400 ■ [www.chappellengineering.com](http://www.chappellengineering.com) ■ f. 508.481.7406

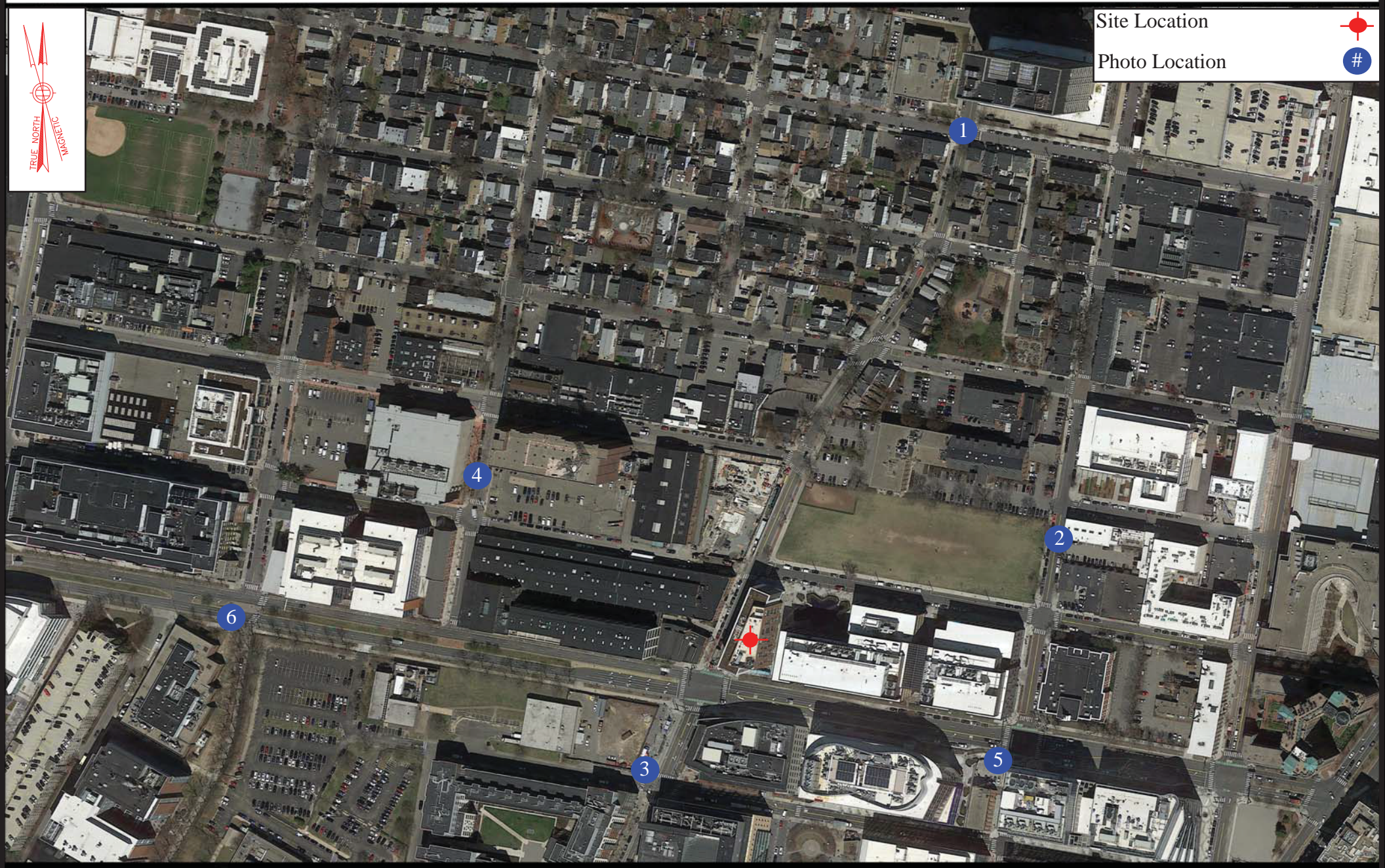
# PHOTO LOCATION MAP



Site Location



Photo Location



**BS25XC905-A**  
**AIMCO**  
270 Third Street  
Cambridge, MA 02142



# EXISTING CONDITIONS - PHOTO LOCATION 1



**BS25XC905-A**  
**AIMCO**

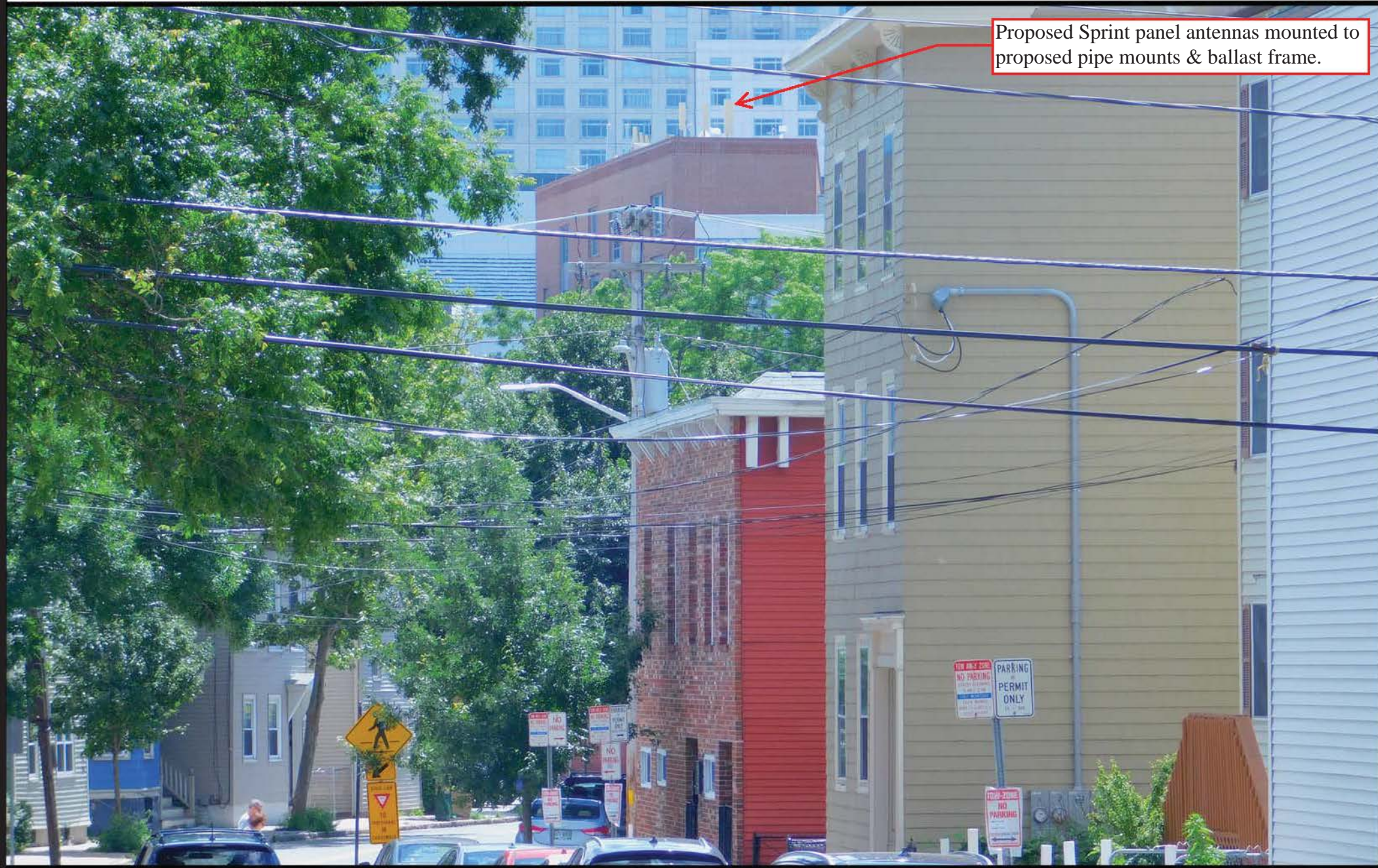
270 Third Street, Cambridge, MA 02142  
Photo Taken 1,180' +/- North-Northeast of Site





# PROPOSED CONDITIONS - PHOTO LOCATION 1

Proposed Sprint panel antennas mounted to proposed pipe mounts & ballast frame.



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Simulation from 1,180' +/- North-Northeast of Site



WWW.CHAPPELLENGINEERING.COM

## EXISTING CONDITIONS - PHOTO LOCATION 2

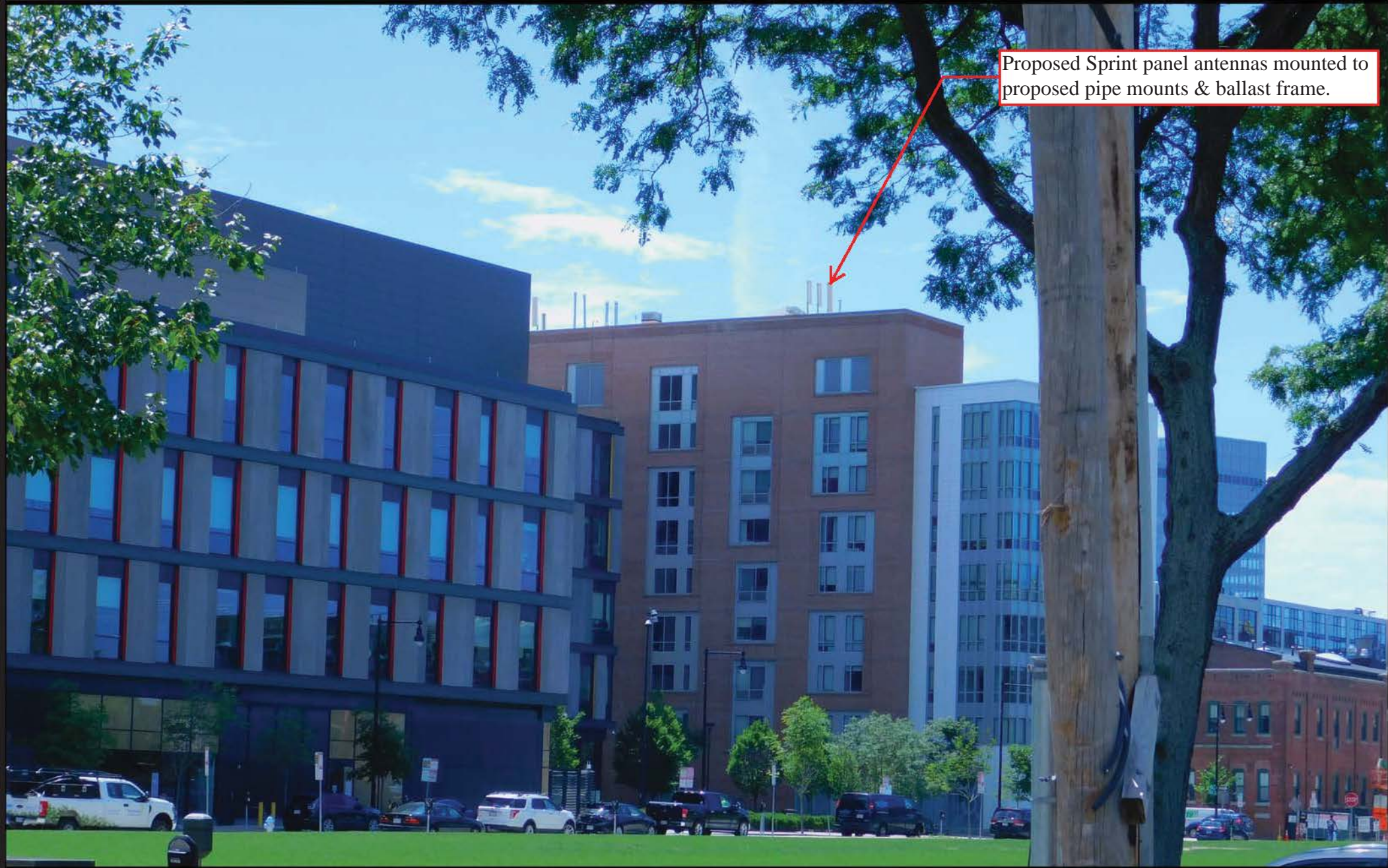


**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 690' +/- East-Northeast of Site



## PROPOSED CONDITIONS - PHOTO LOCATION 2



Proposed Sprint panel antennas mounted to proposed pipe mounts & ballast frame.



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Simulation from 690' +/- East-Northeast of Site



# EXISTING CONDITIONS - PHOTO LOCATION 3



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 370' +/- Southwest of Site



# PROPOSED CONDITIONS - PHOTO LOCATION 3

Proposed Sprint panel antenna mounted to proposed pipe mounts.



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Simulation from 370' +/- Southwest of Site



# EXISTING CONDITIONS - PHOTO LOCATION 4



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 670' +/- Northwest of Site



# PROPOSED CONDITIONS - PHOTO LOCATION 4

Proposed Sprint panel antennas mounted to proposed pipe mounts & ballast frame.



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Simulation from 670' +/- Northwest of Site



# EXISTING CONDITIONS - PHOTO LOCATION 5



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 590' +/- East-Southeast of Site





**PROPOSED CONDITIONS - PHOTO LOCATION 5**  
(No Proposed Installation Features Visible From This Location)



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 590' +/- East-Southeast of Site



# EXISTING CONDITIONS - PHOTO LOCATION 6



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 1,170' +/- West of Site



**PROPOSED CONDITIONS - PHOTO LOCATION 6**  
(No Proposed Installation Features Visible From This Location)



**BS25XC905-A**  
**AIMCO**

270 Third Street, Cambridge, MA 02142  
Photo Taken 1,170' +/- West of Site





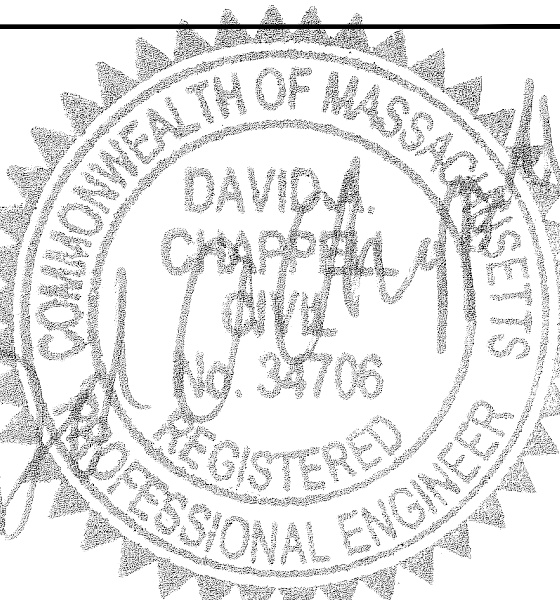
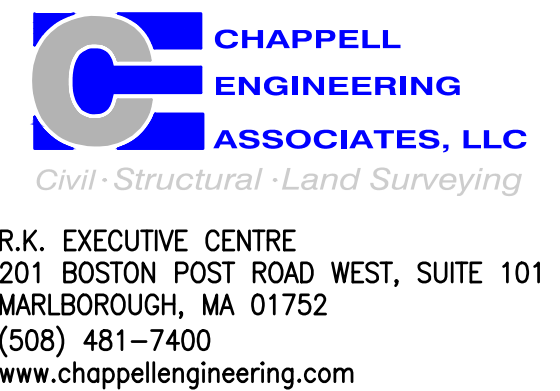
**PROJECT:** NEW SITE BUILD  
EQUIPMENT DEPLOYMENT

**SITE NAME:** AIMCO

**SITE CASCADE:** BS25XC905-A

**SITE ADDRESS:** 270 THIRD STREET  
CAMBRIDGE, MA 02142

**SITE TYPE:** ROOFTOP



THESE DOCUMENTS ARE CONFIDENTIAL AND ARE THE SOLE PROPERTY OF SPRINT AND MAY NOT BE REPRODUCED, DISSEMINATED OR REDISTRIBUTED WITHOUT THE EXPRESS WRITTEN CONSENT OF SPRINT.

CHECKED BY: JMT

APPROVED BY: JMT

**SUBMITTALS**

REV.	DATE	DESCRIPTION	BY
1	04/30/19	ISSUED FOR ZONING	CMC
0	11/29/18	ISSUED FOR REVIEW	CMC

SITE NUMBER:  
**BS25XC905-A**

SITE NAME:  
**AIMCO**

SITE ADDRESS:  
270 THIRD STREET  
CAMBRIDGE, MA 02142

SHEET TITLE  
**TITLE SHEET**

SHEET NUMBER  
**T-1**

**SITE INFORMATION**

**PROPERTY OWNER:**  
AIMCO 270 THIRD ST., LLC  
C/O PARADIGM TAX GROUP  
ATTN: FRANK ARMY  
1 TARA BLVD., SUITE 200  
NASHUA, NH 03062

**LATITUDE (NAD83):**  
**GOOGLE EARTH 2-C CONFIRMATION**  
N 42° 21' 57.60"  
42.366001°

**LONGITUDE (NAD83):**  
**GOOGLE EARTH 2-C CONFIRMATION**  
W 71° 04' 54.85"  
71.081902°

**COUNTY:**  
MIDDLESEX

**ZONING JURISDICTION:**  
CITY OF CAMBRIDGE

**ZONING DISTRICT:**  
IA-1 (INDUSTRY A-1)

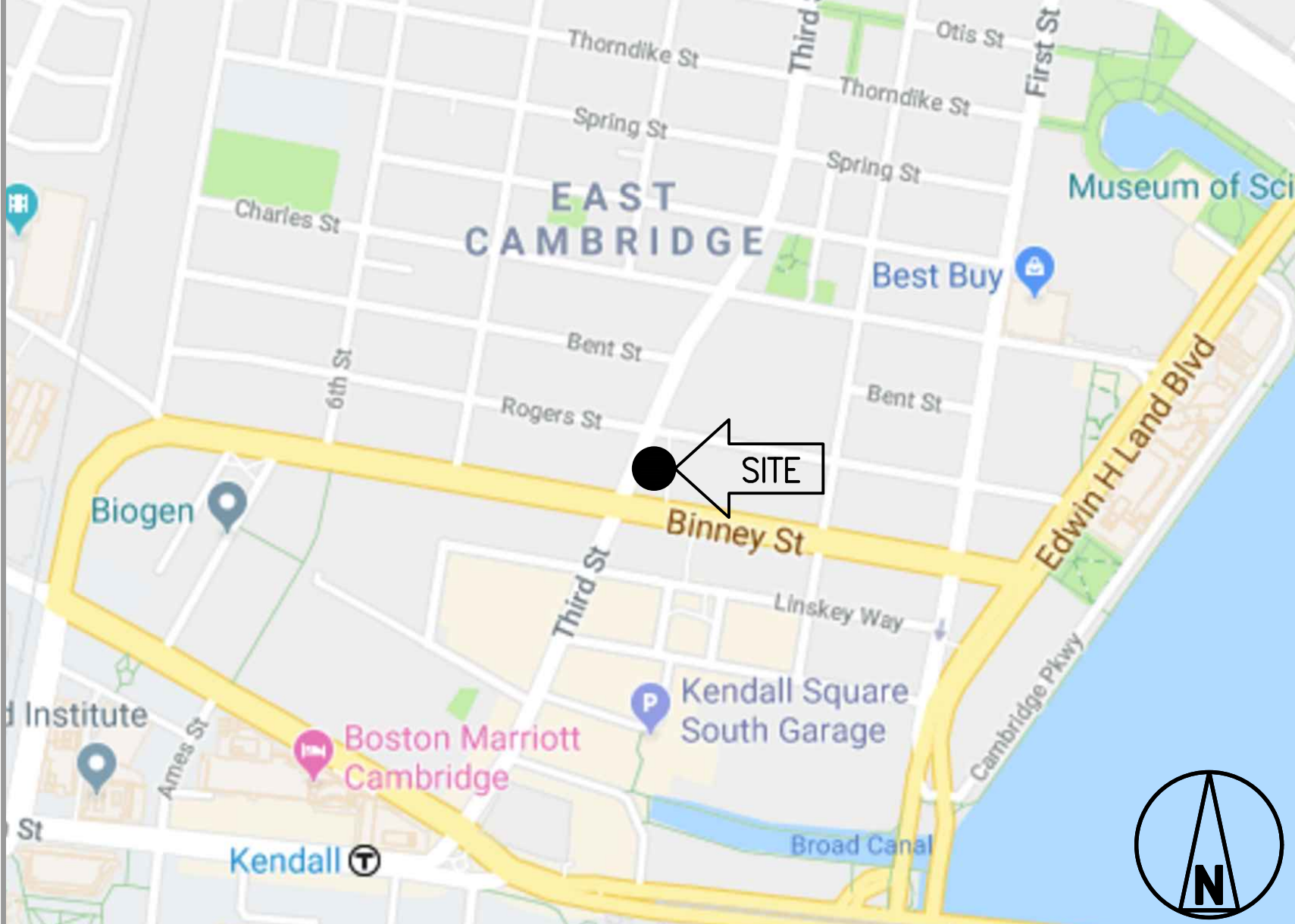
**POWER COMPANY:**  
EVERSOURCE  
PHONE: 1-888-633-3797

**AAV PROVIDER:**  
COMCAST  
PHONE: 1-800-COMCAST

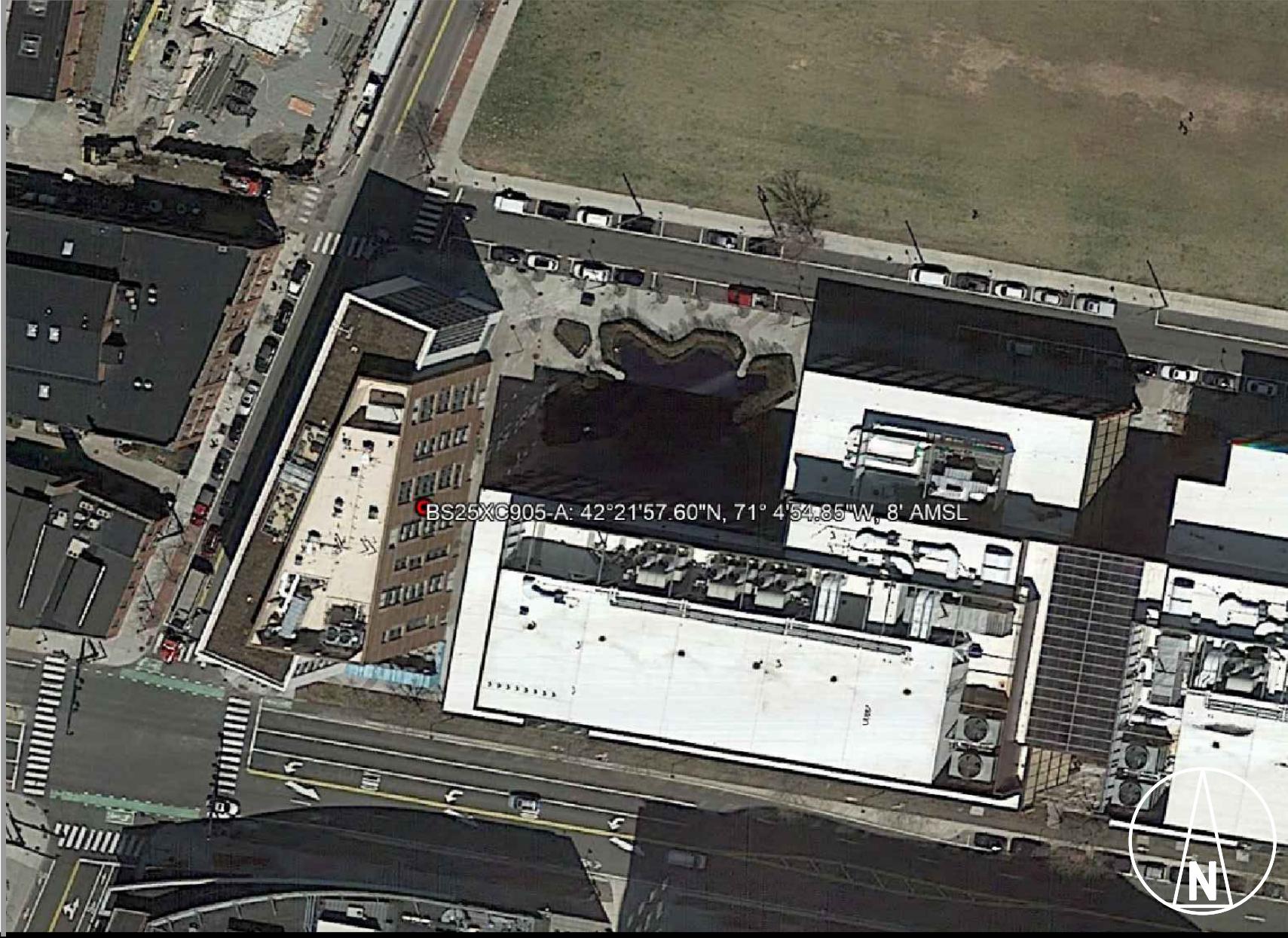
**SPRINT CM:**  
CHAD WAGNER  
PHONE: 617-529-0973  
chad.wagner@sprint.com

**EQUIPMENT SUPPLIER:**  
ELTEK  
2925 E. PLANO PARKWAY  
PLANO, TX 75074  
(469) 330-9100

**AREA MAP**



LOCATION MAP - GOOGLE EARTH 2-C CONFIRMATION



**PROJECT DESCRIPTION**

**SCOPE OF WORK:**

**ROOF-LEVEL RAN EQUIPMENT, CONSISTING OF**

- 8'x14' LEASE AREA
- INSTALL (1) ECAB, ICAB & BCAB
- INSTALL (1) PPC CABINET
- INSTALL (1) GPS

**ROOF-TOP EQUIPMENT, CONSISTING OF:**

- INSTALL (9) PANEL ANTENNAS
- INSTALL (6) 800 MHz RRH
- INSTALL (3) 1900 MHz RRH
- INSTALL (3) 2500 MHz RRH
- INSTALL (3) HYBRID FIBER CABLES

**SPECIAL ZONING NOTE:**  
BASED ON INFORMATION PROVIDED BY SPRINT REGULATORY COMPLIANCE PROFESSIONALS AND LEGAL COUNSEL, THIS TELECOMMUNICATIONS EQUIPMENT DEPLOYMENT IS CONSIDERED AN ELIGIBLE FACILITY UNDER THE MIDDLE CLASS TAX RELIEF AND JOB CREATION ACT OF 2012, 47 USC 1455(A), SECTION 6409(A), AND IS SUBJECT TO AN ELIGIBLE FACILITY REQUEST, EXPEDITED REVIEW, AND LIMITED/PARTIAL ZONING PRE-EMPTION FOR LOCAL DISCRETIONARY PERMITS (VARIANCE, SPECIAL PERMIT, SITE PLAN REVIEW, OR ADMINISTRATIVE REVIEW).

**GENERAL NOTES**

- THIS IS AN UNMANNED AND RESTRICTED ACCESS TELECOMMUNICATION FACILITY, AND IS NOT FOR HUMAN HABITATION. IT WILL BE USED FOR THE TRANSMISSION OF RADIO SIGNAL FOR THE PURPOSE OF PROVIDING PUBLIC CELLULAR SERVICE.
  - ADA COMPLIANCE NOT REQUIRED.
  - POTABLE WATER OR SANITARY SERVICE IS NOT REQUIRED.
  - NO OUTDOOR STORAGE OR ANY SOLID WASTE RECEPTACLES REQUIRED.
- CONTRACTOR SHALL VERIFY ALL PLANS, EXISTING DIMENSIONS, AND CONDITIONS ON JOB SITE. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ARCHITECT/ENGINEER IN WRITING OF ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK. FAILURE TO NOTIFY THE ARCHITECT/ENGINEER PLACE THE RESPONSIBILITY ON THE CONTRACTOR TO CORRECT THE DISCREPANCIES AT THE CONTRACTOR'S EXPENSE.
- NEW CONSTRUCTION WILL CONFORM TO ALL APPLICABLE CODES AND ORDINANCES.
  - BUILDING CODE: MASSACHUSETTS STATE BUILDING CODE 780 CMR (9TH EDITION)
  - ELECTRICAL CODE: 2017 NATIONAL ELECTRICAL CODE
  - STRUCTURAL CODE: TIA/EIA-222-H STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS.

AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 811



**DRAWING INDEX**

SHEET NO.	SHEET TITLE	REV.	CHK.	BY.
T-1	TITLE SHEET	1	JMT	CMC
C-1	PROPERTY PLAN	1	JMT	CMC
A-1	ROOF & EQUIPMENT PLANS	1	JMT	CMC
A-2	ELEVATION	1	JMT	CMC
A-3	ANTENNA PLANS	1	JMT	CMC
A-4	ANTENNA, RRH & CABLE DETAILS	1	JMT	CMC
A-5	EQUIPMENT DETAILS	1	JMT	CMC

**APPROVALS**

THE FOLLOWING PARTIES HEREBY APPROVE AND ACCEPT THESE DOCUMENTS AND AUTHORIZE THE CONTRACTOR TO PROCEED WITH THE CONSTRUCTION DESCRIBED HEREIN. ALL DOCUMENTS ARE SUBJECT TO REVIEW BY THE LOCAL BUILDING DEPARTMENT AND MAY IMPOSE CHANGES OR MODIFICATIONS.

SPRINT: \_\_\_\_\_ DATE: \_\_\_\_\_

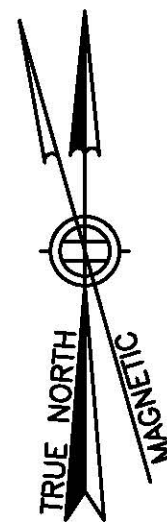
CONSTRUCTION MANAGER: \_\_\_\_\_ DATE: \_\_\_\_\_

LEASING/SITE ACQUISITION: \_\_\_\_\_ DATE: \_\_\_\_\_

RF ENGINEER: \_\_\_\_\_ DATE: \_\_\_\_\_

LANDLORD/TOWER OWNER: \_\_\_\_\_ DATE: \_\_\_\_\_

**ZONING DRAWINGS**  
(NOT FOR CONSTRUCTION)



MAP 27 LOT 97  
n/f  
ASN WORHTINGTON PLACE, LLC  
C/O EQR - R.E. TAX DEPT.  
TWO NORTH RIVERSIDE PLAZA  
SUITE 400  
CHICAGO, IL 60680

MAP 16 LOT 30  
n/f  
CITY OF CAMBRIDGE  
795 MASSACHUSETTS AVE.  
CAMBRIDGE, MA 02139

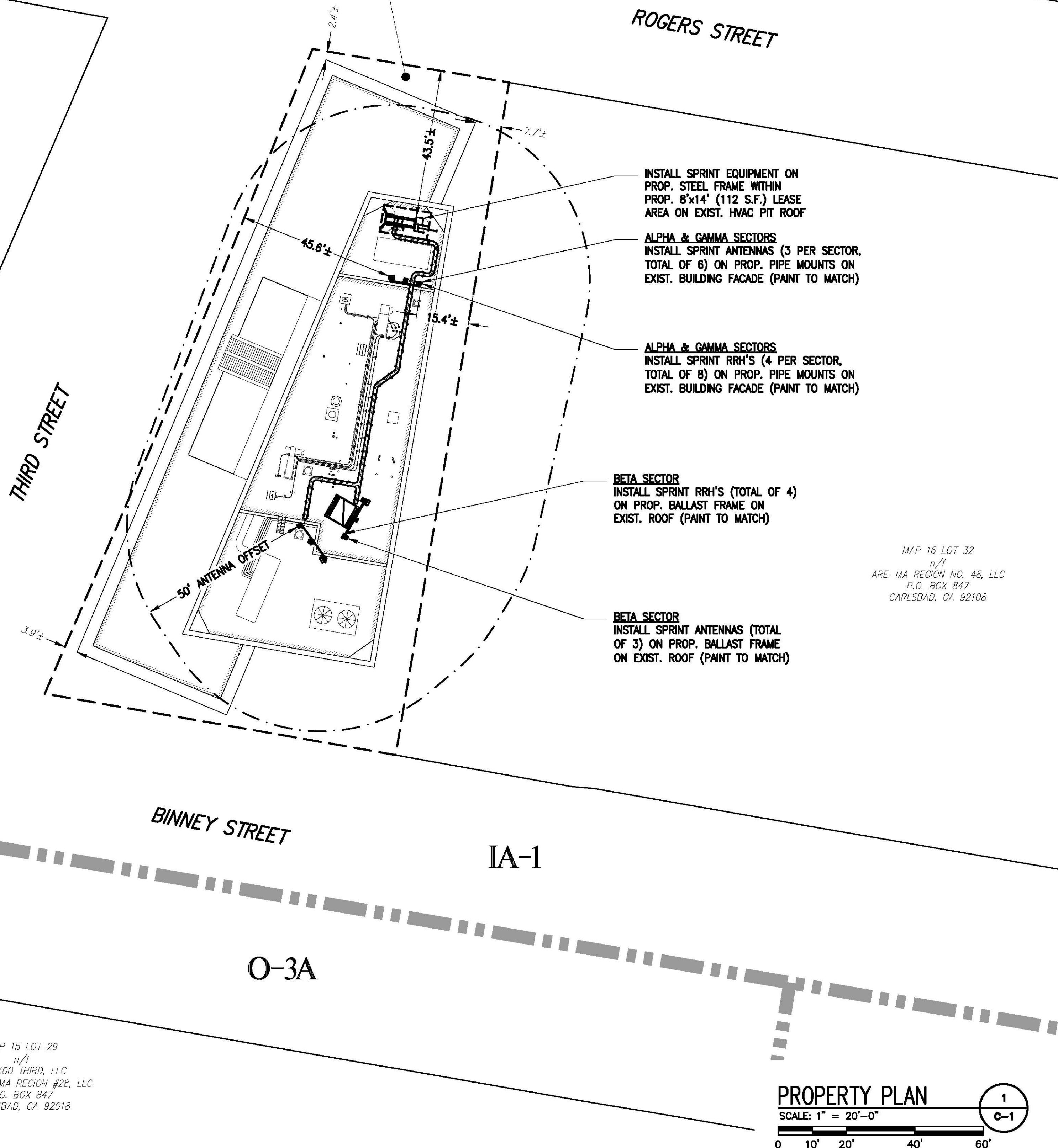
MAP 16 LOT 33  
n/f  
AIMCO 270 THIRD ST., LLC  
C/O PARADIGM TAX GROUP  
ATTN: FRANK ARMY  
1 TARA BLVD., SUITE 200  
NASHUA, NH 03062  
LAND AREA = 17,435 S.F.)

MAP 28 LOT 33  
n/f  
ASN WORHTINGTON PLACE, LLC  
C/O EQR - R.E. TAX DEPT.  
P.O. BOX 87407  
CHICAGO, IL 60680-0407

MAP 28 LOT 31  
n/f  
DIGITAL SPACE LAB, LLC  
CITY OF CAMBRIDGE TAX TITLE  
7 CAPTAIN PARKER ARMS #15  
LEXINGTON, MA 02421

MAP 16 LOT 32  
n/f  
ARE-MA REGION NO. 48, LLC  
P.O. BOX 847  
CARLSBAD, CA 92108

MAP 15 LOT 29  
n/f  
MIT 300 THIRD, LLC  
C/O ARE-MA REGION #28, LLC  
P.O. BOX 847  
CARLSBAD, CA 92018



INSTALL SPRINT EQUIPMENT ON PROP. STEEL FRAME WITHIN PROP. 8'x14' (112 S.F.) LEASE AREA ON EXIST. HVAC PIT ROOF

ALPHA & GAMMA SECTORS  
INSTALL SPRINT ANTENNAS (3 PER SECTOR, TOTAL OF 6) ON PROP. PIPE MOUNTS ON EXIST. BUILDING FACADE (PAINT TO MATCH)

ALPHA & GAMMA SECTORS  
INSTALL SPRINT RRH'S (4 PER SECTOR, TOTAL OF 8) ON PROP. PIPE MOUNTS ON EXIST. BUILDING FACADE (PAINT TO MATCH)

BETA SECTOR  
INSTALL SPRINT RRH'S (TOTAL OF 4) ON PROP. BALLAST FRAME ON EXIST. ROOF (PAINT TO MATCH)

BETA SECTOR  
INSTALL SPRINT ANTENNAS (TOTAL OF 3) ON PROP. BALLAST FRAME ON EXIST. ROOF (PAINT TO MATCH)

**GENERAL NOTES:**

- FIELD SURVEY DATE: 10/5/2018
- VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- HORIZONTAL DATUM: NORTH AMERICAN DATUM OF 1983 (NAD83)
- SITE CONTROL POINT: LATITUDE: N.42° 21' 57.60"  
LONGITUDE: W.71° 04' 54.85"
- OWNER: AIMCO 270 THIRD ST., LLC  
C/O PARADIGM TAX GROUP  
ATTN: FRANK ARMY  
1 TARA BLVD., SUITE 200  
NASHUA, NH 03062
- SITE NAME: AIMCO
- SITE ADDRESS: 270 THIRD STREET  
CAMBRIDGE, MA 02142
- APPLICANT: SPRINT  
1 INTERNATIONAL BLVD, SUITE 800  
MAHWAH, NJ 07495
- JURISDICTION: CITY OF CAMBRIDGE
- TAX ID: MAP 16 LOT 33
- DEED REFERENCE: BK. 65611 PG. 277
- PLAN REFERENCES: CITY OF CAMBRIDGE ASSESSOR MAPS/GIS
- ZONING DISTRICT: IA-1 (INDUSTRY A-1)
- ALL UNDERGROUND UTILITY INFORMATION PRESENTED HEREON WAS DETERMINED FROM SURFACE EVIDENCE AND PLANS OF RECORD. ALL UNDERGROUND UTILITIES SHOULD BE LOCATED IN THE FIELD PRIOR TO THE COMMENCEMENT OF ANY SITE WORK. CALL DIGSAFE 1-888-344-7233 A MINIMUM OF 72 HOURS PRIOR TO PLANNED ACTIVITY.
- THE PROPERTY LINES SHOWN WERE COMPILED UTILIZING TOWN/CITY ASSESSOR'S PLANS, GIS, RECORDED DEEDS AND PLANS OF REFERENCE AS INDICATED.
- BEARING SYSTEM OF THIS PLAN IS BASED ON TRUE NORTH. TRUE NORTH WAS ESTABLISHED FROM EXIST. PLAN REFERENCE. IT IS NOT INTENDED TO BE AN EXACT REPRESENTATION OF TRUE NORTH.

**LEGEND**

---	PROPERTY LINE
- - - - -	ABUTTING PROPERTY LINE
- - - - -	EXIST. EASEMENT
- x - x - x - x -	EXIST. CHAIN LINK FENCE
- - - - -	EXIST. STOCKADE FENCE
- - - - -	EXIST. EDGE OF PAVEMENT
- OHW - OHW -	EXIST. OVERHEAD UTILITIES
- OHW - OHW -	PROP. OVERHEAD UTILITIES
- T/E - T/E -	PROP. UTILITIES
- T/E - T/E -	EXIST. UTILITY POLE
- - - - -	ZONING BOUNDARY

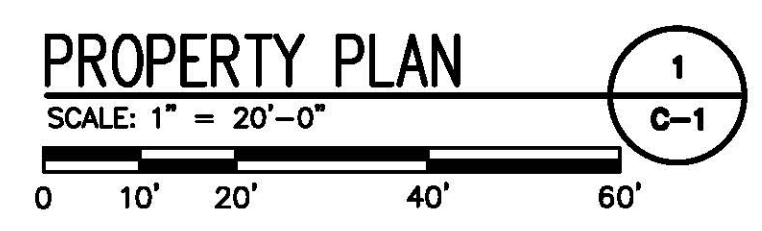
**ZONING DISTRICT LEGEND**

<b>BA</b>	BUSINESS A
<b>IA-1</b>	INDUSTRY A-1
<b>O-3A</b>	OFFICE-3A

**ZONING INFORMATION**

ZONING DISTRICT: IA-1 (INDUSTRY A-1)			
DESCRIPTION	REQUIRED	EXISTING	PROPOSED
MIN. LOT AREA:	5,000 S.F.	17,435 SF±	N/A
MIN. LOT FRONTAGE:	N/A	204.4'±	N/A
PROPERTY SETBACKS			
FRONT	N/A	3.9'±	45.6'±
SIDE	N/A	2.4'±	43.5'±
REAR	20'	7.7'±	15.4'±
MAX. HEIGHT	45'	85.0'±	95.0'±

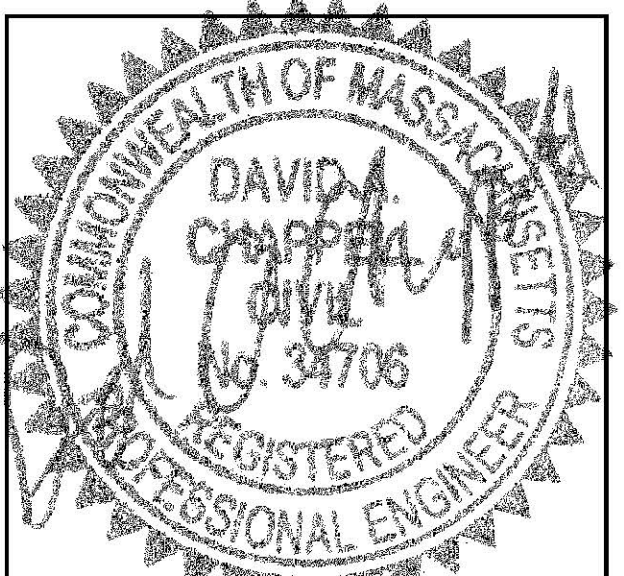
- NOTE:
- PLOT PLAN BASED ON CITY OF CAMBRIDGE ASSESSORS MAPS/GIS.
  - SETBACKS ARE TAKEN FROM THE CLOSEST POINT OF ANTENNAS/EQUIPMENT TO PROPERTY LINES.



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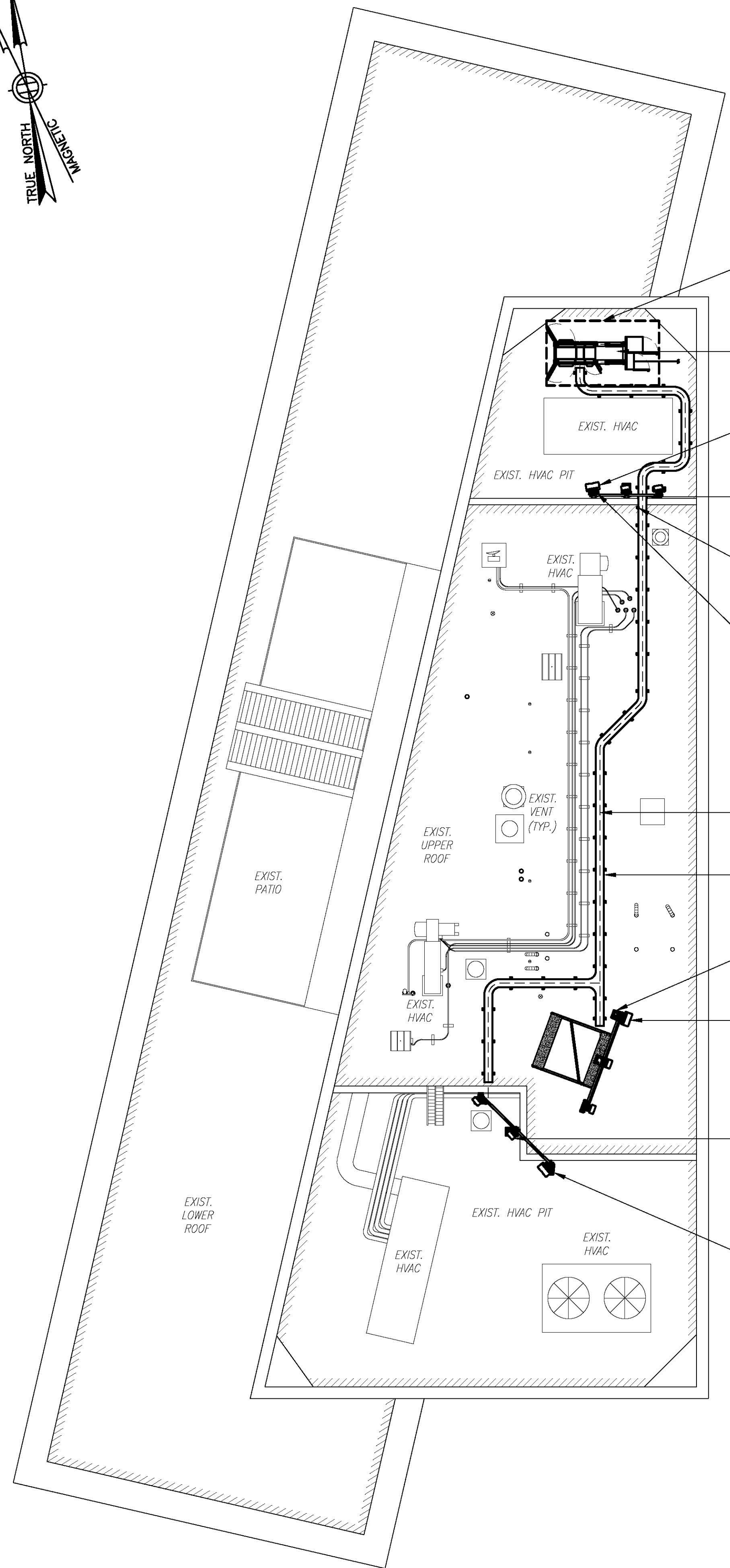
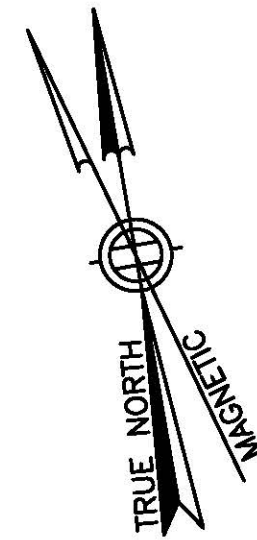
**SUBMITTALS**

REV.	DATE	DESCRIPTION	BY
1	04/30/19	ISSUED FOR ZONING	CMC
0	11/29/18	ISSUED FOR REVIEW	CMC

SITE NUMBER:  
BS25XC905-A  
SITE NAME:  
AIMCO  
SITE ADDRESS:  
270 THIRD STREET  
CAMBRIDGE, MA 02142

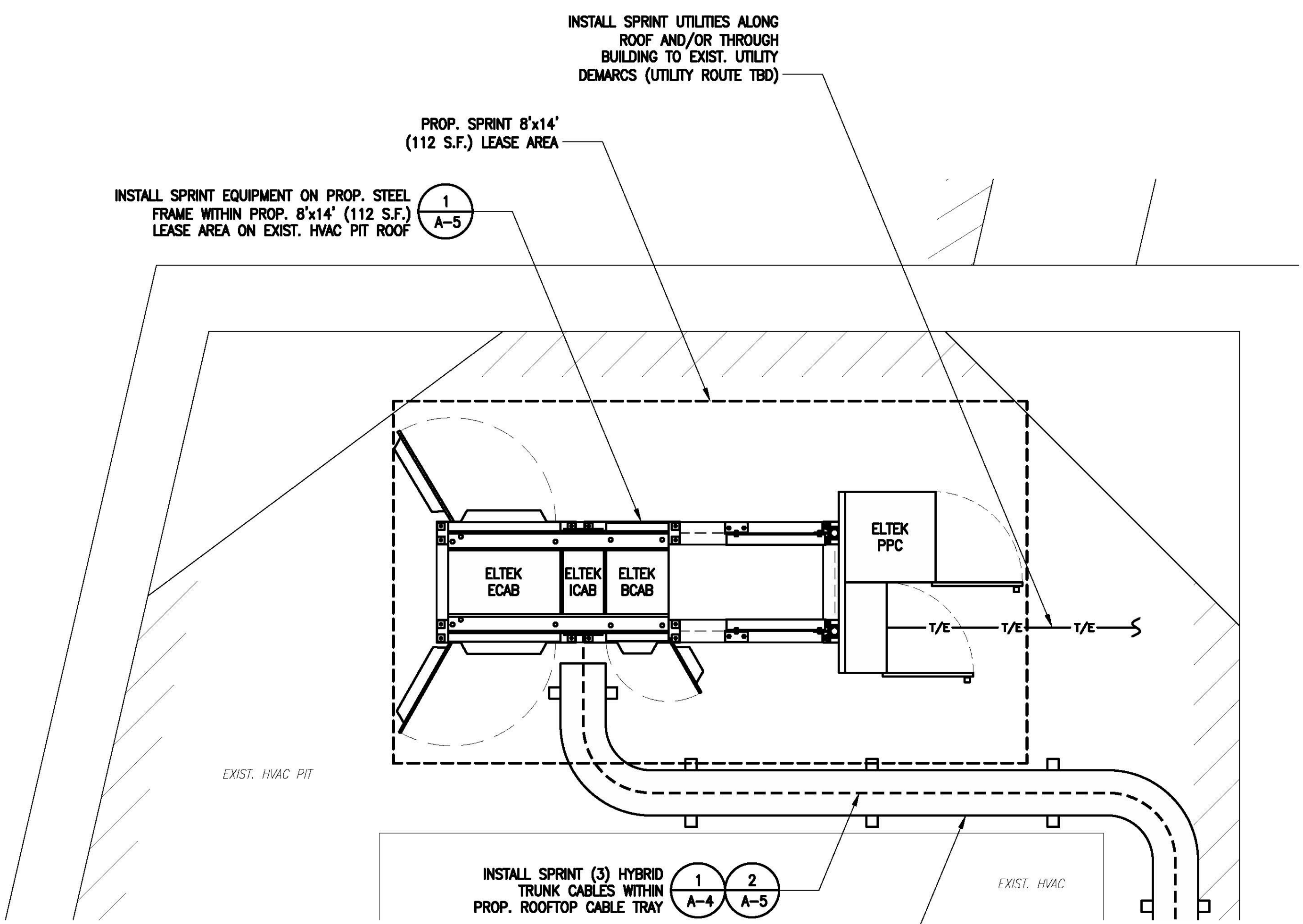
SHEET TITLE  
**PROPERTY PLAN**

SHEET NUMBER  
**C-1**



- PROP. SPRINT 8'x14' (112 S.F.) LEASE AREA
- 2 INSTALL SPRINT EQUIPMENT ON PROP. STEEL FRAME WITHIN PROP. 8'x14' (112 S.F.) LEASE AREA ON EXIST. HVAC PIT ROOF
- ALPHA SECTOR
- 1 3 INSTALL SPRINT PANEL ANTENNAS (TOTAL OF 3) ON PROP. PIPE MOUNTS ON EXIST. BUILDING FACADE (PAINT TO MATCH)
- 3 INSTALL SPRINT VERTICAL CABLE TRAY (PAINT TO MATCH)
- 4 5 INSTALL SPRINT GPS ANTENNA MOUNTED TO PROP. ROOFTOP CABLE TRAY
- ALPHA SECTOR
- 1 2 INSTALL SPRINT RRH'S (TOTAL OF 4) ON PROP. PIPE MOUNTS ON EXIST. BUILDING FACADE BELOW PROP. ANTENNAS (PAINT TO MATCH)
- 1 2 INSTALL SPRINT (3) HYBRID TRUNK CABLES WITHIN PROP. ROOFTOP CABLE TRAY
- 2 INSTALL SPRINT ROOFTOP CABLE TRAY
- BETA SECTOR
- 1 2 INSTALL SPRINT RRH'S (TOTAL OF 4) ON PROP. BALLAST FRAME ON EXIST. ROOF (PAINT TO MATCH)
- BETA SECTOR
- 1 3 INSTALL SPRINT PANEL ANTENNAS (TOTAL OF 3) ON PROP. BALLAST FRAME ON EXIST. ROOF (PAINT TO MATCH)
- GAMMA SECTOR
- 1 3 INSTALL SPRINT PANEL ANTENNAS (TOTAL OF 3) ON PROP. PIPE MOUNTS ON EXIST. BUILDING FACADE (PAINT TO MATCH)
- GAMMA SECTOR
- 1 2 INSTALL SPRINT RRH'S (TOTAL OF 4) ON PROP. PIPE MOUNTS ON EXIST. BUILDING FACADE BELOW PROP. ANTENNAS (PAINT TO MATCH)

**ROOF PLAN**  
SCALE: 1" = 10'-0"  
1 A-1

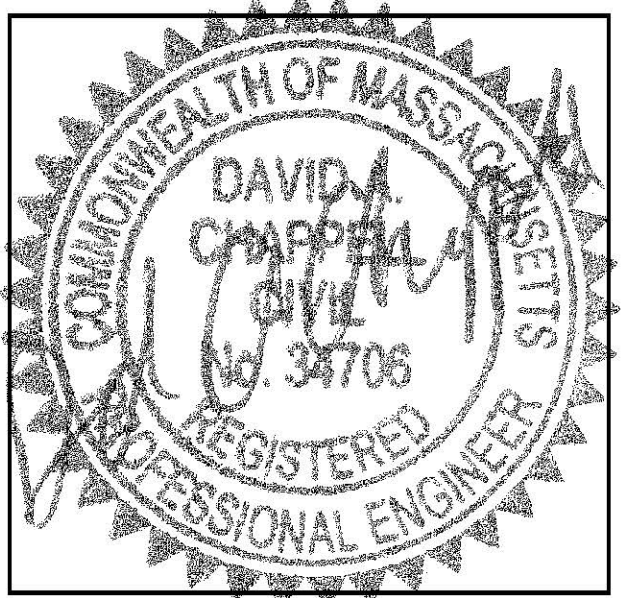


**PROPOSED EQUIPMENT PLAN**  
SCALE: 1/2" = 1'-0"  
2 A-1

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SITE ADDRESS:  
270 THIRD STREET  
CAMBRIDGE, MA 02142

SHEET TITLE  
ROOF & EQUIPMENT PLAN

SHEET NUMBER  
A-1

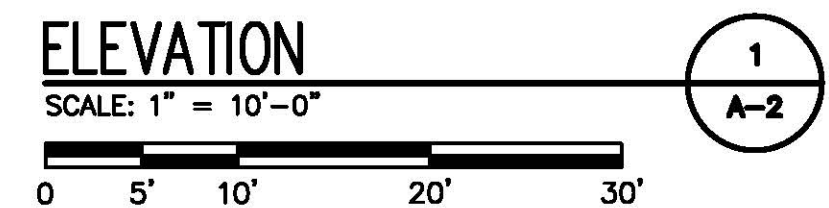
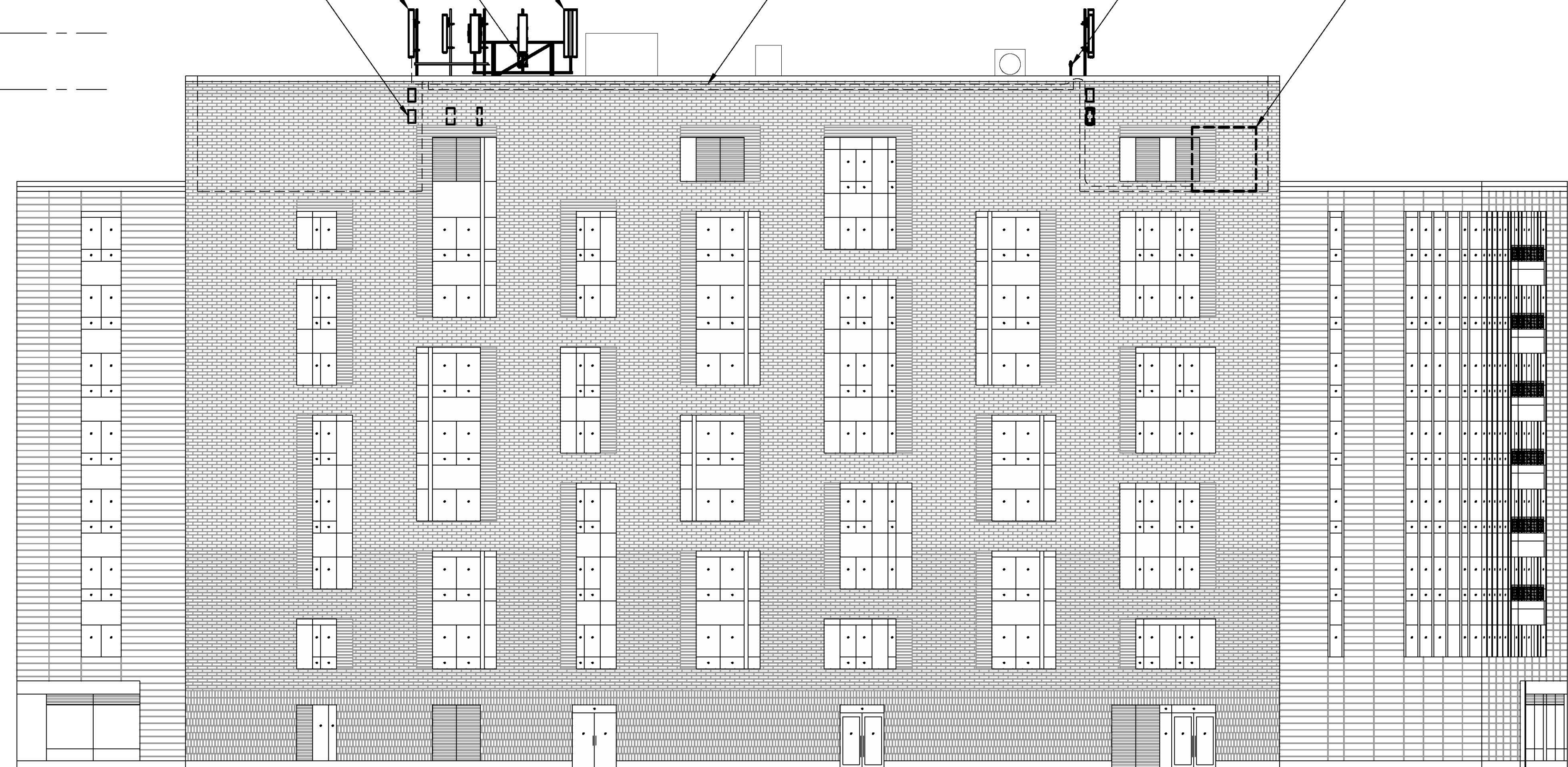
**SPECIAL CONSTRUCTION NOTE:**  
 SPRINT TOWER TOP WORK IS CONTINGENT ON THE FOLLOWING:  
 \* COMPLETION OF A GLOBAL STRUCTURAL STABILITY ANALYSIS (PROVIDED BY TOWER OWNER OR A&E VENDOR).  
 \* COMPLETION OF AN ANTENNA/RRH MOUNT STRUCTURAL ASSESSMENT (PROVIDED BY A&E VENDOR).  
 \* GC SHALL FURNISH, INSTALL AND COMPLETE ALL REQUIRED STRUCTURAL MODIFICATIONS AS INDICATED IN BEFORE-MENTIONED ANALYSIS AND ASSESSMENT.

- BETA SECTOR**  
 INSTALL SPRINT RRH'S (TOTAL OF 4)  
 ON PROP. BALLAST FRAME ON  
 EXIST. ROOF (PAINT TO MATCH) 1 2  
A-3 A-4
  
- BETA SECTOR**  
 INSTALL SPRINT PANEL ANTENNAS (TOTAL  
 OF 3) ON PROP. BALLAST FRAME ON  
 EXIST. ROOF (PAINT TO MATCH) 1 3  
A-3 A-4
  
- ALPHA & GAMMA SECTORS**  
 INSTALL SPRINT PANEL ANTENNAS  
 (3 PER SECTOR, TOTAL OF 6) ON  
 PROP. PIPE MOUNTS ON EXIST.  
 BUILDING FACADE (PAINT TO MATCH) 1 3  
A-3 A-4
  
- ALPHA & GAMMA SECTORS**  
 INSTALL SPRINT RRH'S (4 PER SECTOR,  
 TOTAL OF 8) ON PROP. PIPE MOUNTS  
 ON EXIST. BUILDING FACADE BELOW  
 PROP. ANTENNAS (PAINT TO MATCH) 1 2  
A-3 A-4
  
- INSTALL SPRINT (3) HYBRID  
 TRUNK CABLES WITHIN  
 PROP. ROOFTOP CABLE TRAY** 1 2  
A-4 A-5
  
- INSTALL SPRINT GPS  
 ANTENNA MOUNTED TO  
 PROP. ROOFTOP CABLE TRAY** 4 5  
A-5 A-5
  
- INSTALL SPRINT EQUIPMENT ON PROP. STEEL  
 FRAME WITHIN PROP. 8'x14' (112 S.F.)  
 LEASE AREA ON EXIST. HVAC PIT ROOF** 2  
A-1

PROP. (9) SPRINT ANTENNAS  
 EL. = 92'-0" ± AGL

TOP OF ROOF  
 EL. = 85'-0" ± AGL

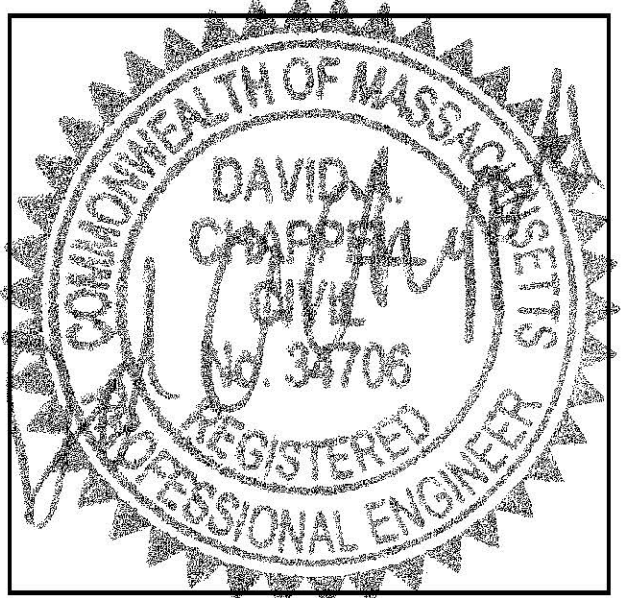
GROUND LEVEL  
 EL. = 0'-0" ± AGL



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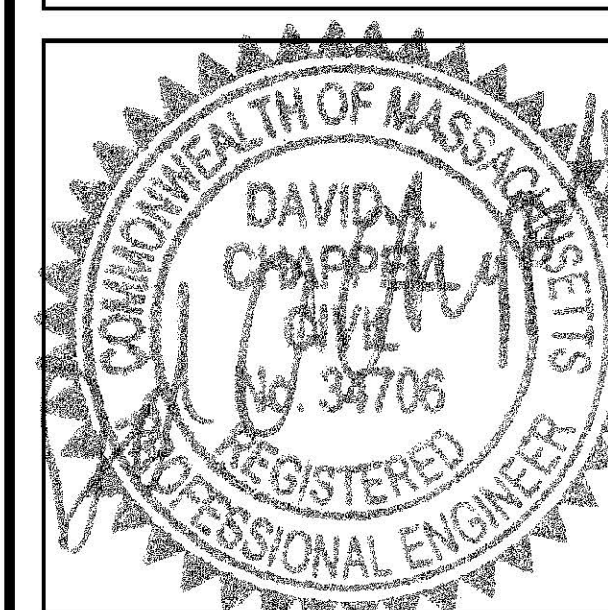
**SUBMITTALS**

REV.	DATE	DESCRIPTION	BY
1	04/30/19	ISSUED FOR ZONING	CMC
0	11/29/18	ISSUED FOR REVIEW	CMC

SITE NUMBER:  
 BS25XC905-A  
 SITE NAME:  
 AIMCO  
 SITE ADDRESS:  
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 CAMBRIDGE, MA 02142

SHEET TITLE  
 BUILDING  
 ELEVATION

SHEET NUMBER  
 A-2



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BS25XC905-A  
SITE NAME:  
AIMCO

SITE ADDRESS:  
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CAMBRIDGE, MA 02142

SHEET TITLE

ANTENNA PLAN

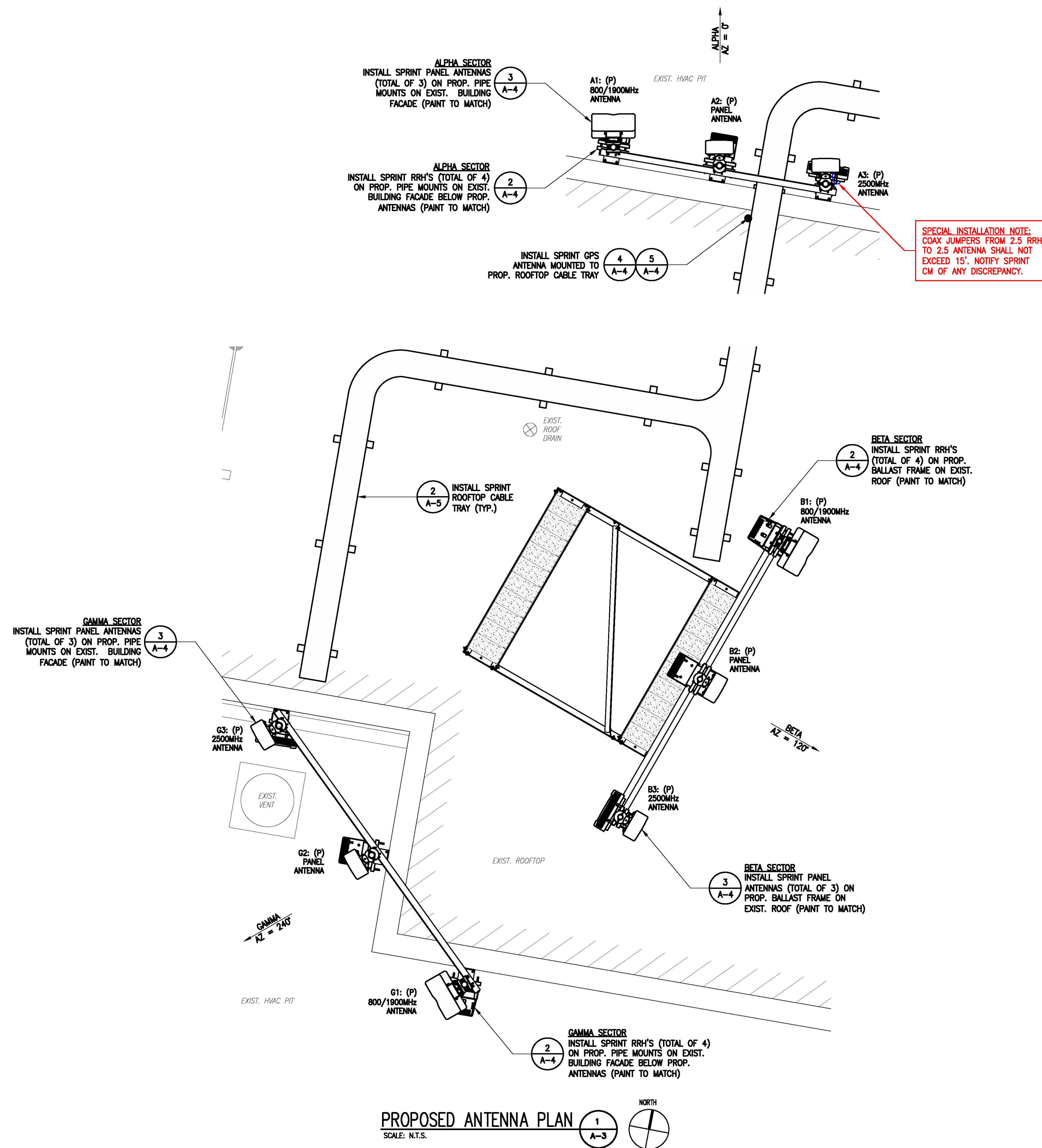
SHEET NUMBER

A-3

**ANTENNA STATUS LEGEND:**

- EMPTY - EMPTY PIPE
- (E) - EXISTING
- (P) - INSTALL
- NV - SPRINT ANTENNA
- 2.5 - SPRINT ANTENNA

NOTE:  
VERIFY PROPOSED AZIMUTHS  
WITH RF ENGINEER PRIOR  
TO INSTALLATION.





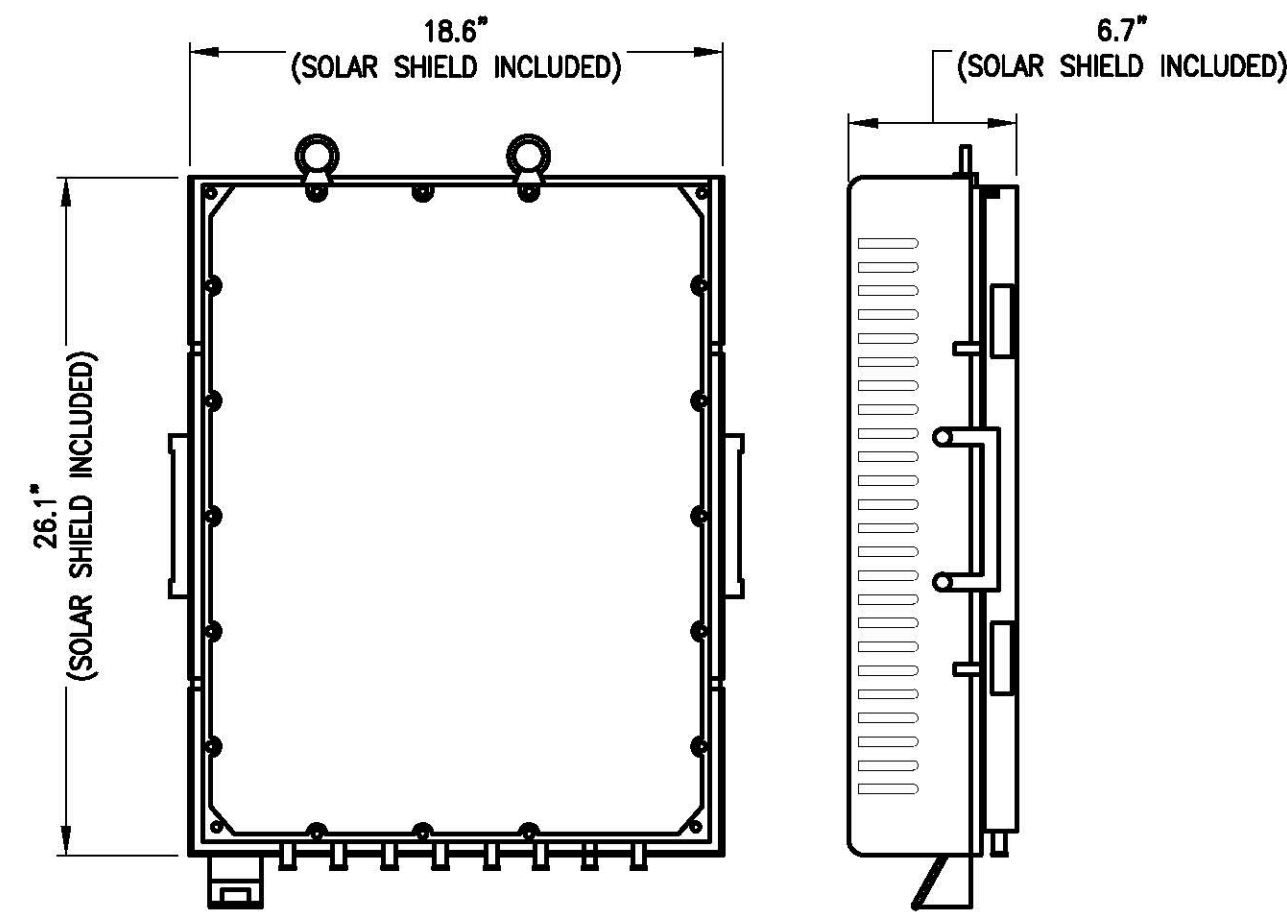
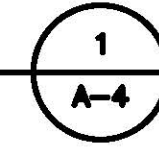
NOKIA-A SCENARIOS	CABLE DESCRIPTION	CABLE LENGTH (FT)	DIAMETER (IN)	WEIGHT (LBS/FT)
1 CABLE PER SECTOR (1) 1900 (2) 800 (1)MIMO OR 8T8R	4 PAIRS OF 6AWG DC CONDUCTORS WITH 24 MULTI-MODE FIBER PAIRS	0-120	1.376	1.354
1 CABLE PER SECTOR (1) 1900 (2) 800 (1)MIMO OR 8T8R	4 PAIRS OF 4AWG DC CONDUCTORS WITH 24 MULTI-MODE FIBER PAIRS	121-200	1.545	1.875
1 CABLE PER SECTOR (1) 1900 (2) 800 (1)MIMO (WITH BI-WIRE) OR 8T8R	5 PAIRS OF 4AWG DC CONDUCTORS WITH 24 MULTI-MODE FIBER PAIRS	201-375	1.619	2.161

\* ALL FIBER PAIRS TERMINATE IN SENKO IP-LC AT TOWER TOP.

\* NOTE: SPRINT CM TO CONFIRM HYBRID RISER CABLE AND HYBRID JUMPER CABLE MODEL NUMBERS BEFORE PREPARING BOM.

### HYBRID CABLE CHART

SCALE: NTS

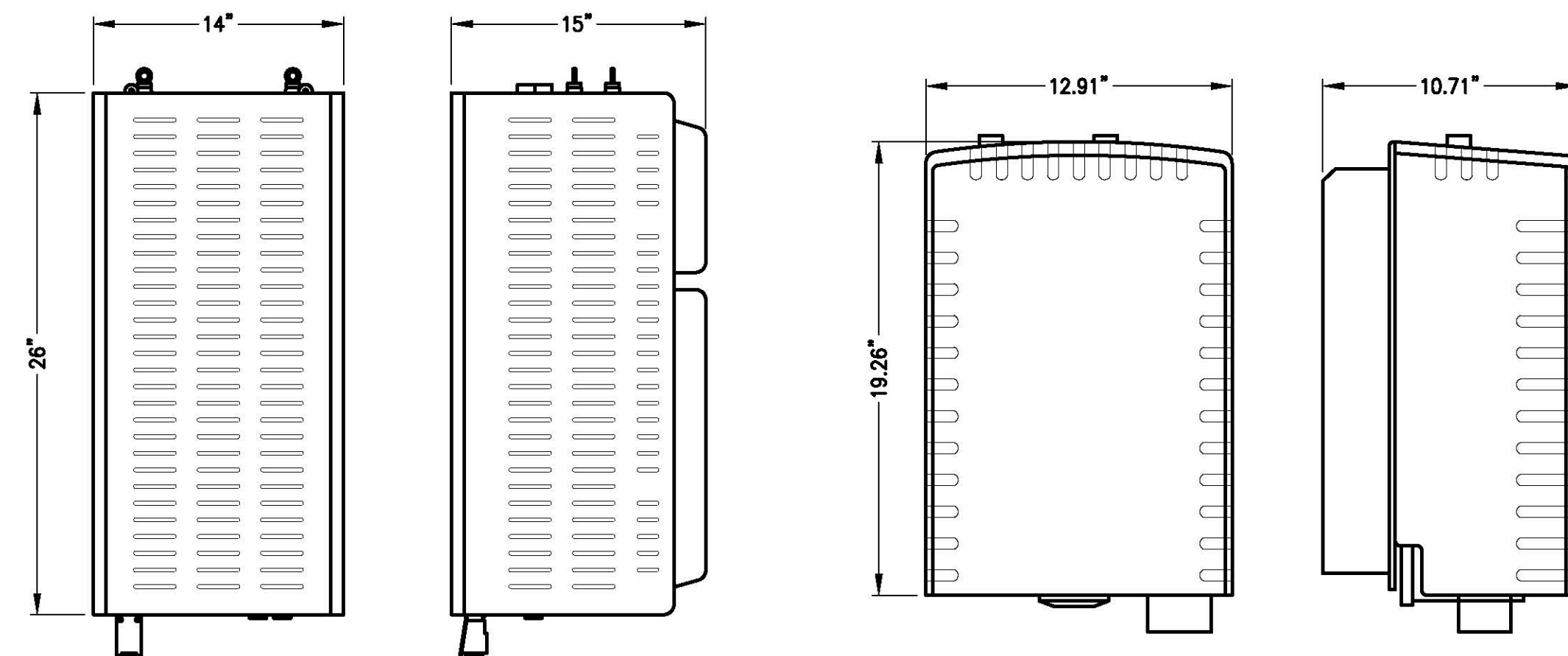


FRONT VIEW

SIDE VIEW

DIMENSIONS: 26.1"x18.6"x6.7"  
WEIGHT: 70.0 LBS

#### 2500MHz RRH



FRONT VIEW

SIDE VIEW

DIMENSIONS: 26"x14"x15"  
WEIGHT: 60.0 LBS

#### 1900MHz RRH

FRONT VIEW

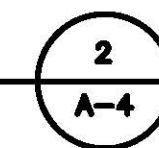
SIDE VIEW

DIMENSIONS: 12.91"x10.71"x19.26"  
WEIGHT: 53 LBS

#### 800MHz RRH

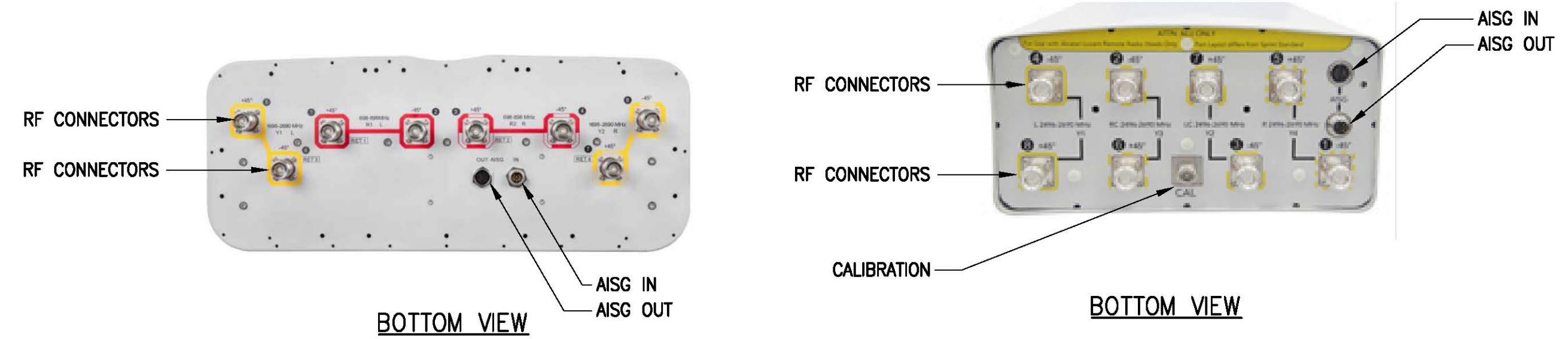
### RRH DETAILS

N.T.S.



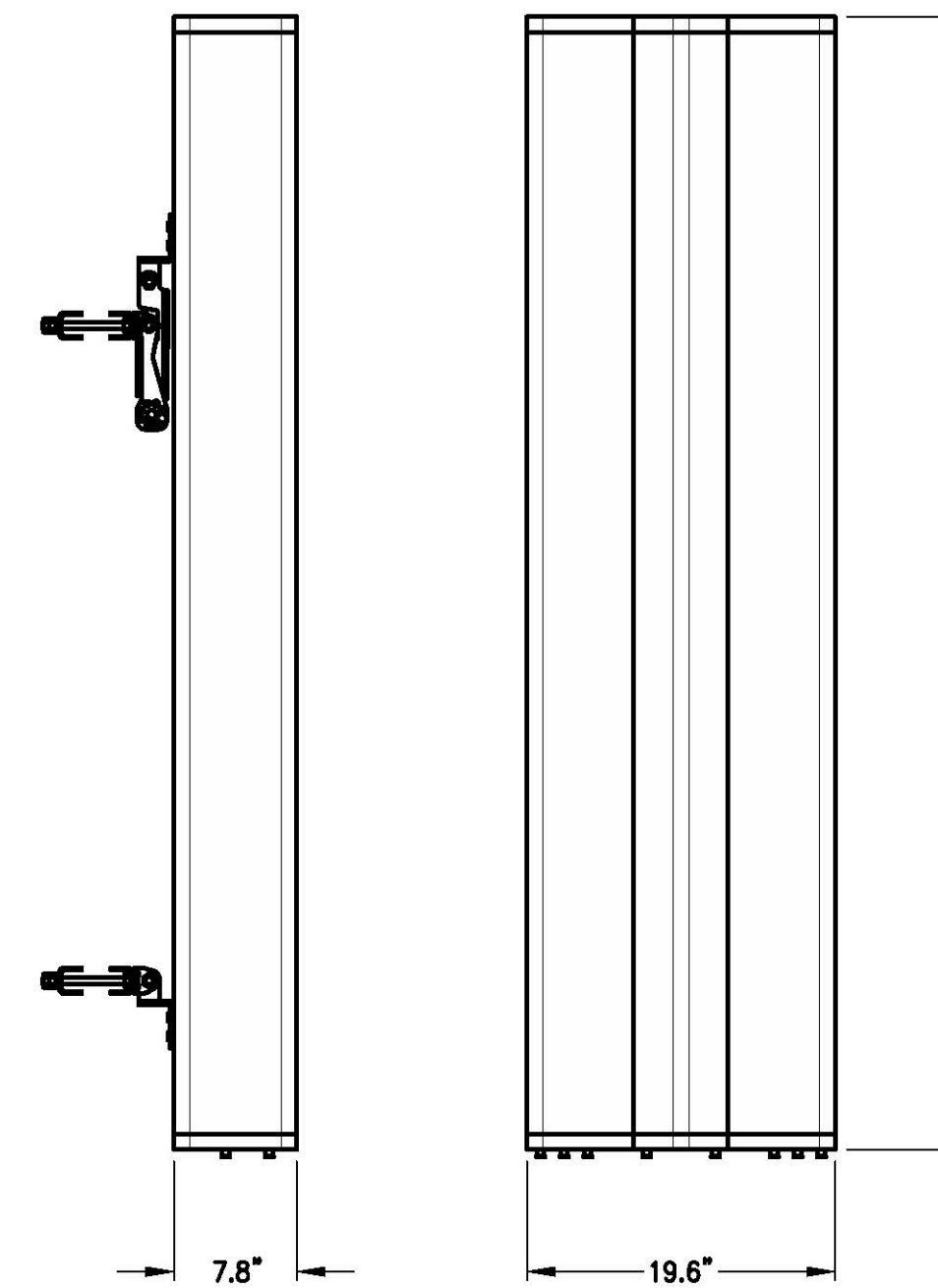
### FINAL ANTENNA CONFIGURATION

SECTOR	POS	STATUS	ANTENNA MFR	ANTENNA MODEL	RAD CENTER	AZIMUTH (TRUE NORTH)	DOWNTILT		RRH QTY & MODEL	JUMPER QTY & LENGTH	CABLE LENGTH & SIZE	CABLE QTY & MODEL
							MECH	ELEC				
ALPHA	1	PROPOSED	COMMSCOPE	NNV-65B-R4	92'± AGL	0°	0°	0°	(2) RRH-800MHz-2x50W (1) RRH-1900-4x45-65MHz	(4) 10'-0" (4) 10'-0"	60'± (1 3/8"φ)	(1) HB114-08U3M12-XXXF
	2	FUTURE	RFS	APXVTM14-ALU-I20	92'± AGL	0°	0°	0°	-	-	60'± (1 3/8"φ)	
	3	PROPOSED	RFS	APXVTM14-ALU-I20	92'± AGL	0°	0°	0°	(1) TD-RRH-8x20-25	(8) 10'-0"	60'± (1 3/8"φ)	
BETA	1	PROPOSED	COMMSCOPE	NNV-65B-R4	92'± AGL	120°	0°	0°	(2) RRH-800MHz-2x50W (1) RRH-1900-4x45-65MHz	(4) 10'-0" (4) 10'-0"	145'± (1 3/8"φ)	(1) HB114-08U3M12-XXXF
	2	FUTURE	RFS	APXVTM14-ALU-I20	92'± AGL	120°	0°	0°	-	-	145'± (1 3/8"φ)	
	3	PROPOSED	RFS	APXVTM14-ALU-I20	92'± AGL	120°	0°	0°	(1) TD-RRH-8x20-25	(8) 10'-0"	145'± (1 3/8"φ)	
GAMMA	1	PROPOSED	COMMSCOPE	NNV-65B-R4	92'± AGL	240°	0°	0°	(2) RRH-800MHz-2x50W (1) RRH-1900-4x45-65MHz	(4) 10'-0" (4) 10'-0"	170'± (1 1/2"φ)	(1) HB114-08U3M12-XXXF
	2	FUTURE	RFS	APXVTM14-ALU-I20	92'± AGL	240°	0°	0°	-	-	170'± (1 1/2"φ)	
	3	PROPOSED	RFS	APXVTM14-ALU-I20	92'± AGL	240°	0°	0°	(1) TD-RRH-8x20-25	(8) 10'-0"	170'± (1 1/2"φ)	



BOTTOM VIEW

BOTTOM VIEW



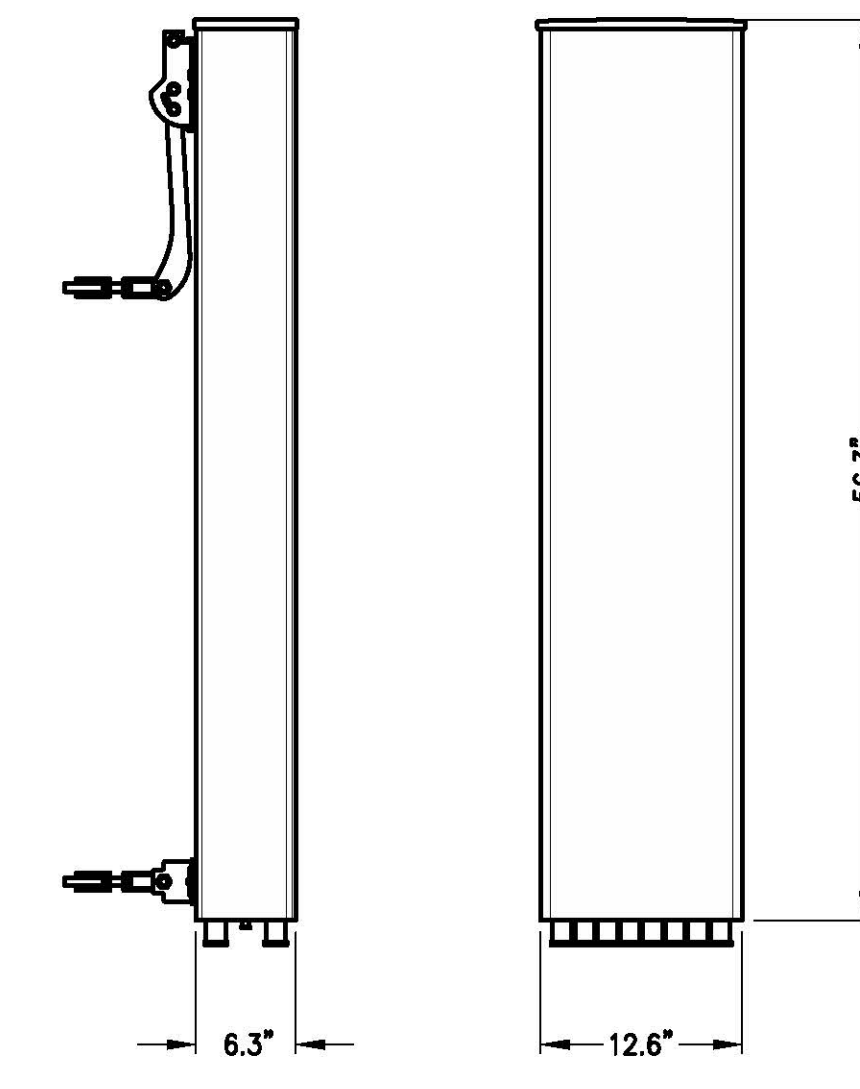
SIDE VIEW

FRONT VIEW

#### 800/1900MHz ANTENNA

COMMSCOPE>NNV-65B-R4 PANEL ANTENNA

DIMENSIONS: 72.0"x19.6"x7.8"  
WEIGHT: 77.4 LBS W/ HARDWARE  
FREQUENCY RANGE: 694-896 MHz  
1695-2690 MHz



SIDE VIEW

FRONT VIEW

#### 800/2500MHz ANTENNA

RFS APXVTM14-ALU-I20 PANEL ANTENNA

DIMENSIONS: 56.3"x12.6"x6.3"  
WEIGHT: 67.7 LBS W/ HARDWARE  
FREQUENCY RANGE: 2490-2600 MHz  
2600-2690 MHz

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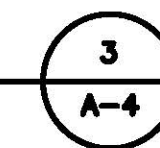
SITE NUMBER: BS25XC905-A  
SITE NAME: AIMCO  
SITE ADDRESS: 270 THIRD STREET  
CAMBRIDGE, MA 02142

SHEET TITLE: ANTENNA, RRH, & CABLE DETAILS

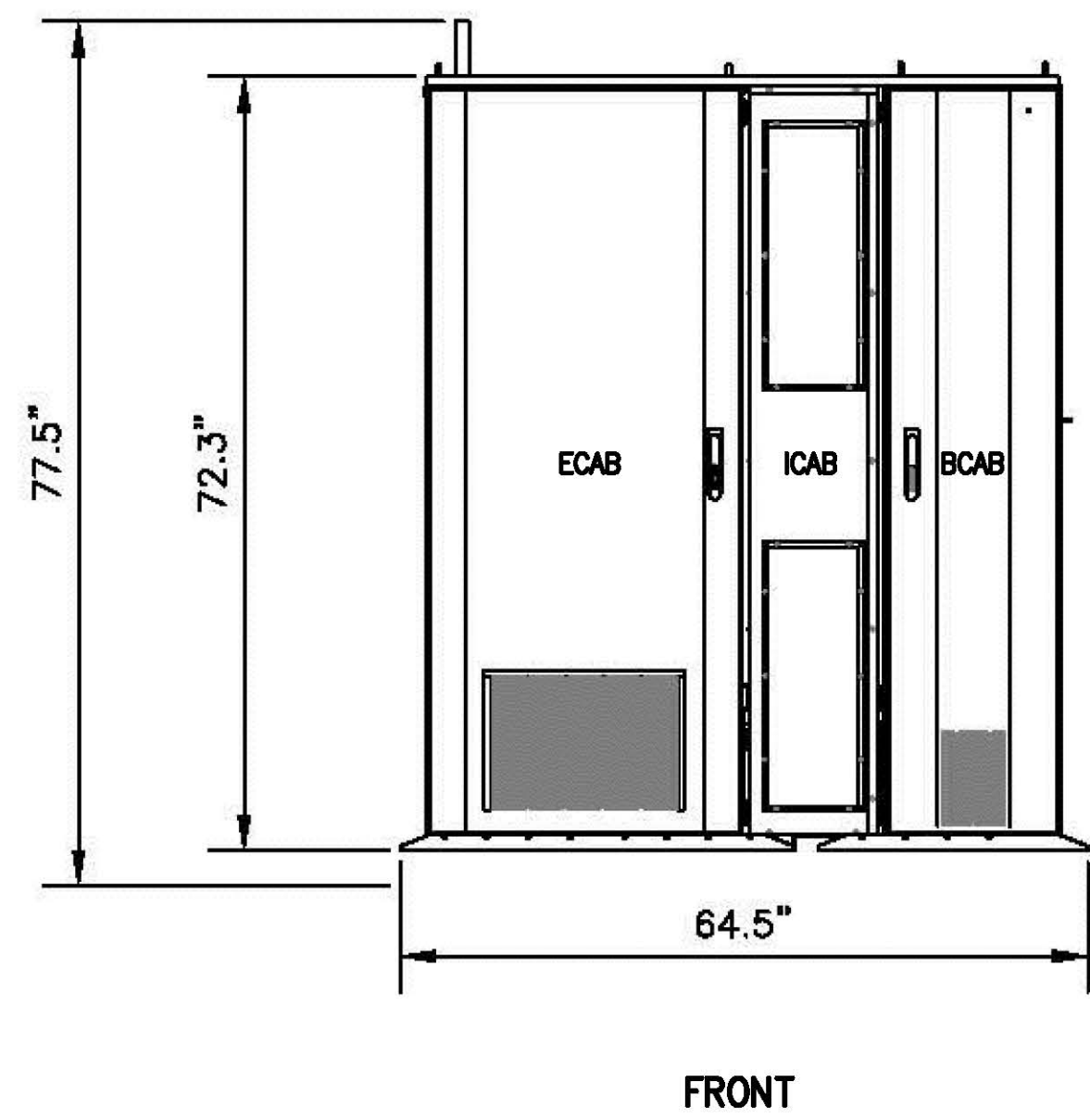
SHEET NUMBER: A-4

### ANTENNA DETAILS

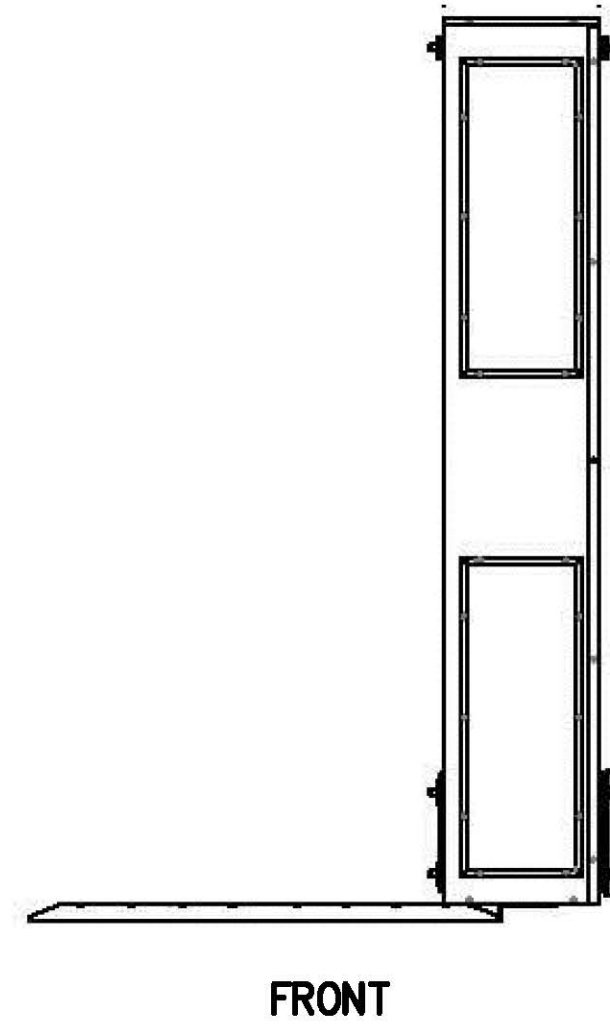
N.T.S.



EQUIPMENT CABINET INSTALLATION NOTE:  
GENERAL CONTRACTOR SHALL INSTALL EQUIPMENT CABINET FLOOR-MOUNT KIT AND SHALL FURNISH AND INSTALL ALL FASTENERS/ANCHORS PER MANUFACTURER'S INSTALLATION GUIDELINES.



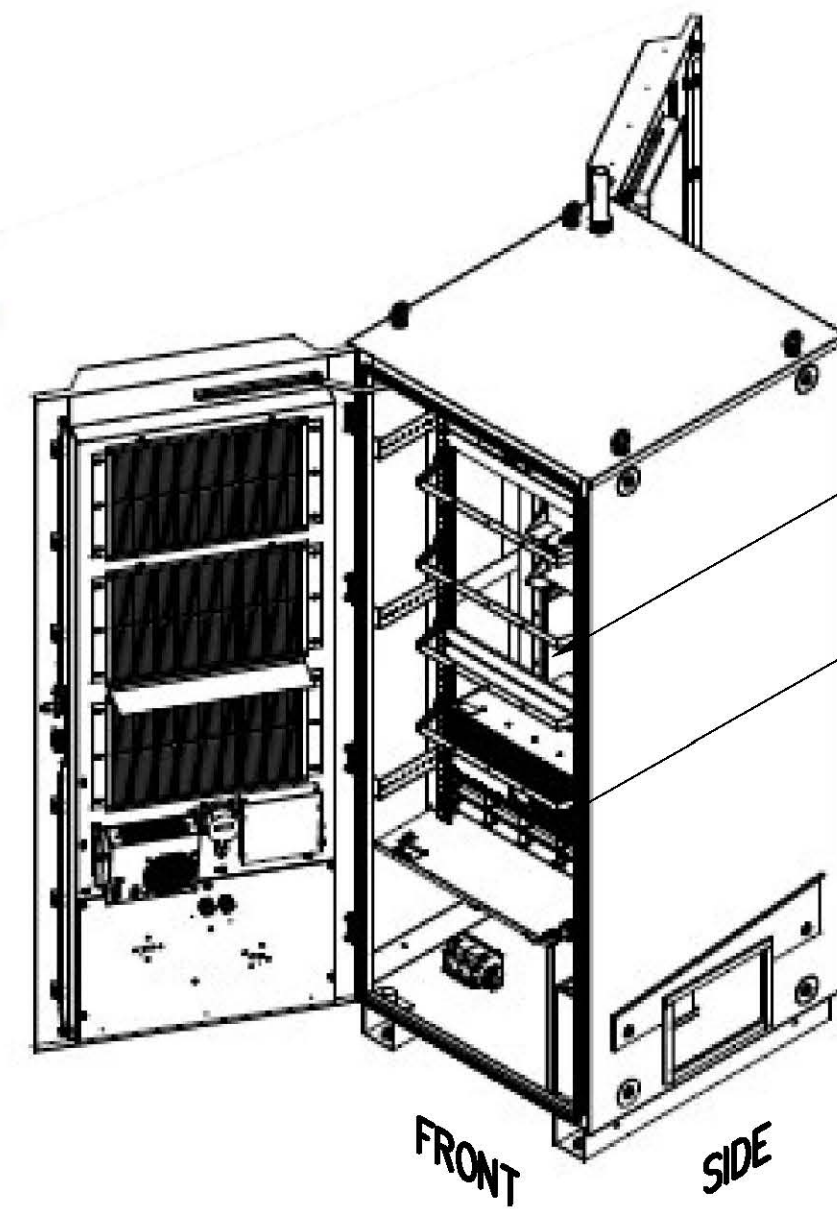
EQUIPMENT ASSEMBLY



ELTEK ICAB

MANUF: ELTEK ICAB  
MODEL: N/A  
HEIGHT: 71.4  
WIDTH: 12.1  
DEPTH: 28.1  
WEIGHT: N/A

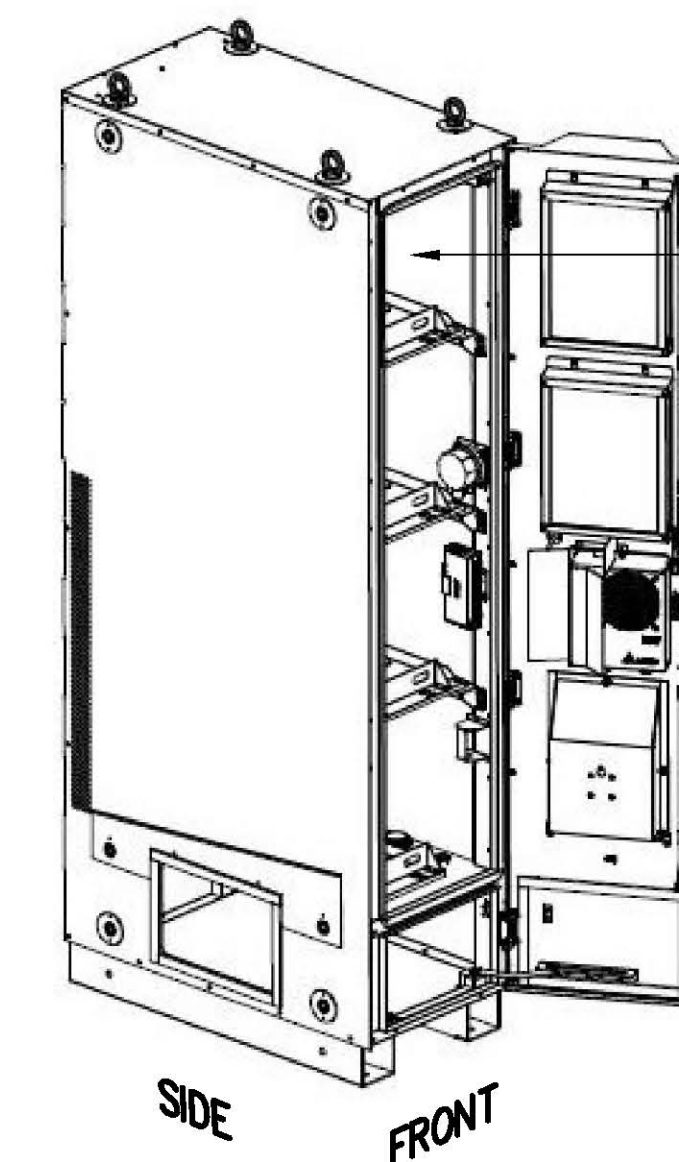
NOTE:  
ANCHOR INTERCONNECT CABINET TO PROPOSED CONCRETE PAD PER MANUFACTURER'S REQUIREMENTS.



ELTEK ECAB ES0A220-SCA02

INSTALL NEW LTE BBU 2.5 GHz  
(1) RECTIFIER SHELF & (3) RECTIFIERS 2.5GHz  
MANUF: ELTEK ECAB  
MODEL: ES0A220-SCA02  
HEIGHT: 73.5  
WIDTH: 30.0  
DEPTH: 38.0  
WEIGHT: 505 LBS

NOTE:  
ANCHOR EQUIPMENT CABINET TO PROPOSED CONCRETE PAD PER MANUFACTURER'S REQUIREMENTS.



ELTEK BCAB ES0F020-ECV02

INSTALL (1) NEW BATTERY STRING  
MANUF: ELTEK BCAB  
MODEL: ES0F020-ECV02  
HEIGHT: 73.5  
WIDTH: 16.5  
DEPTH: 34.7  
WEIGHT: 330 LBS

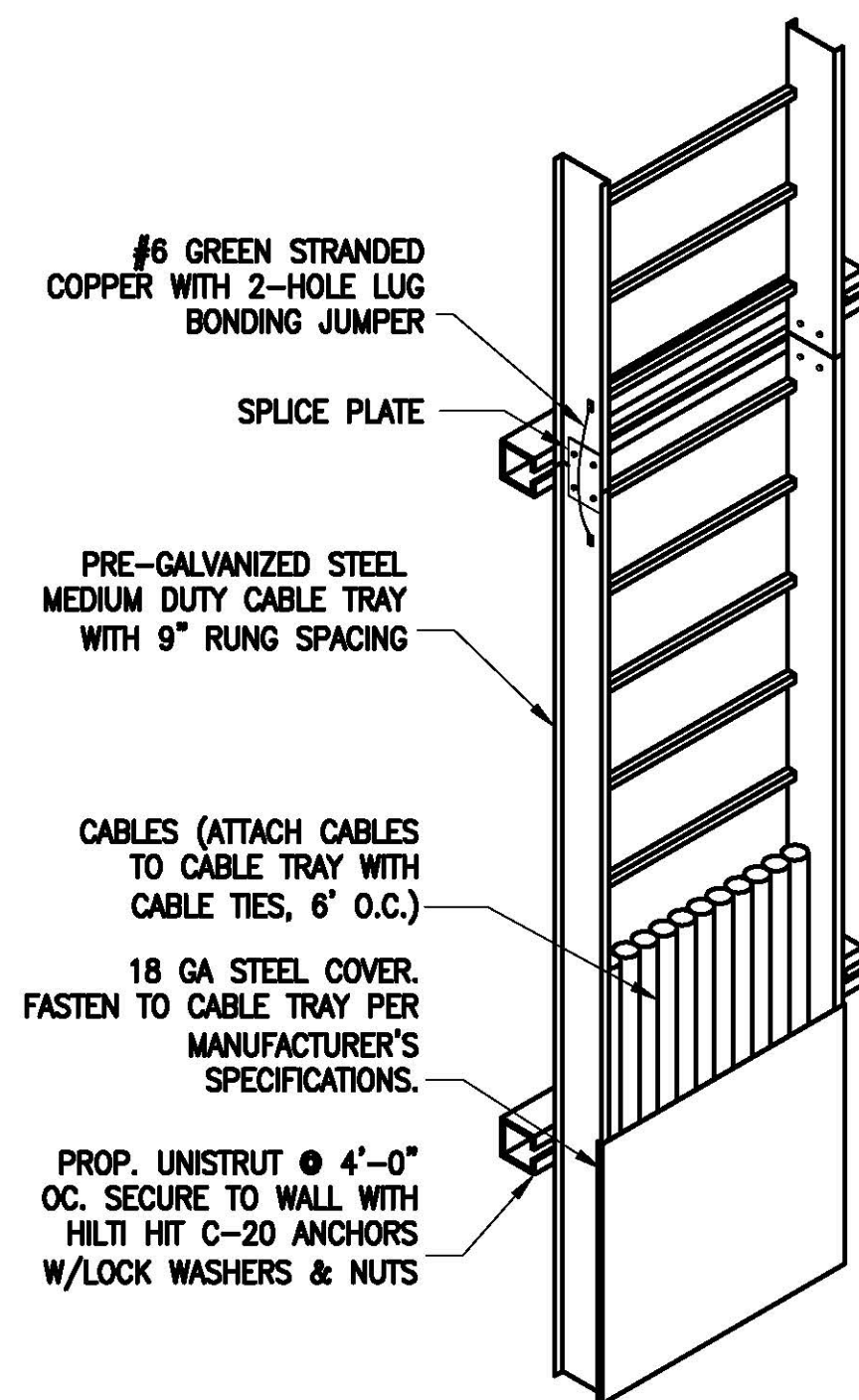
NOTE:  
ANCHOR BATTERY CABINET TO PROPOSED CONCRETE PAD PER MANUFACTURER'S REQUIREMENTS.

EQUIPMENT DETAILS

SCALE: NTS

1

A-5



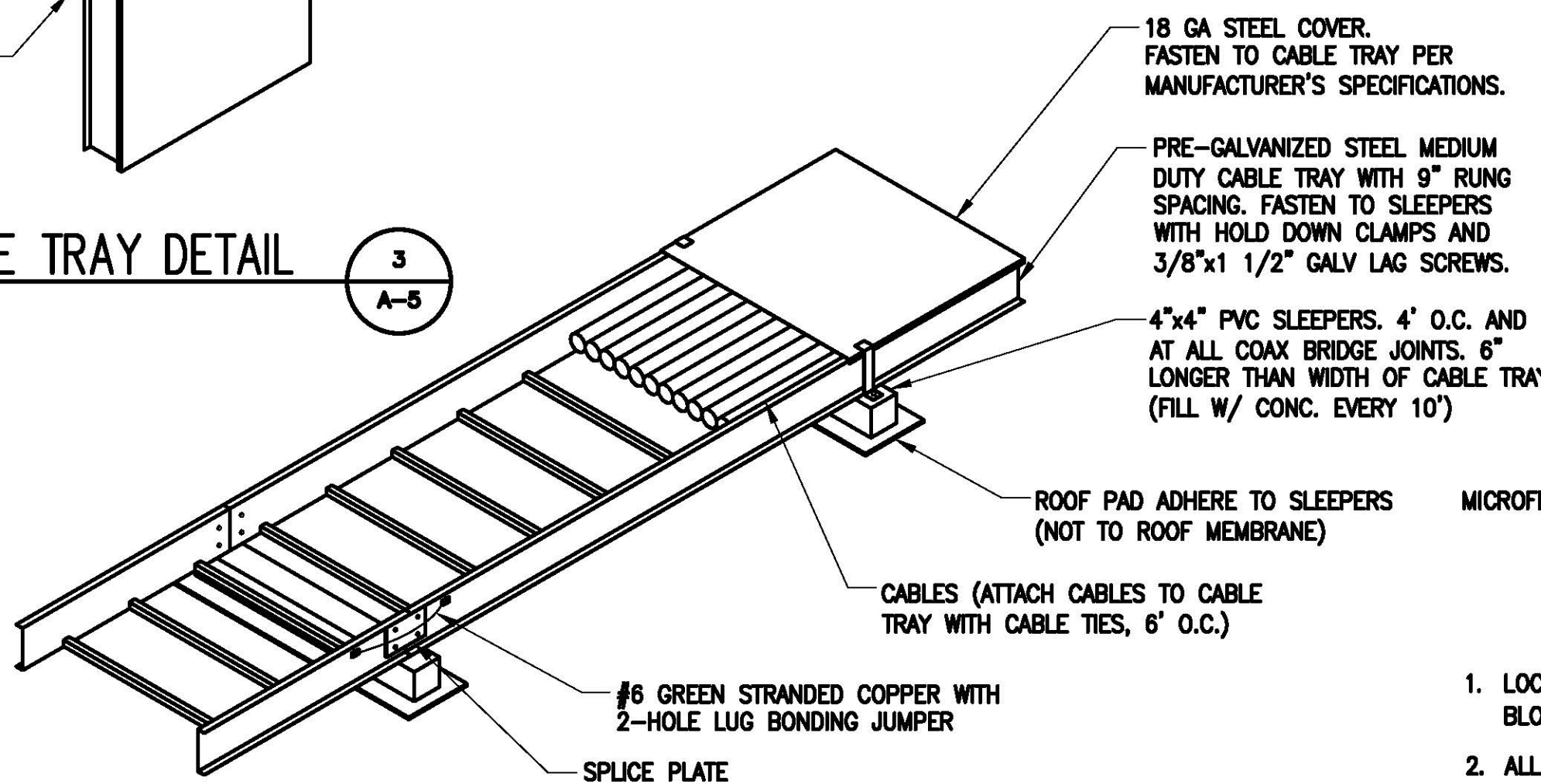
VERTICAL CABLE TRAY DETAIL

SCALE: NOT TO SCALE

3

A-5

NUMBER OF COAXIAL CABLES	WIDTH OF CABLE TRAY	LOADING DEPTH OF CABLE TRAY
12	24"	4"
8	18"	4"
4	12"	4"

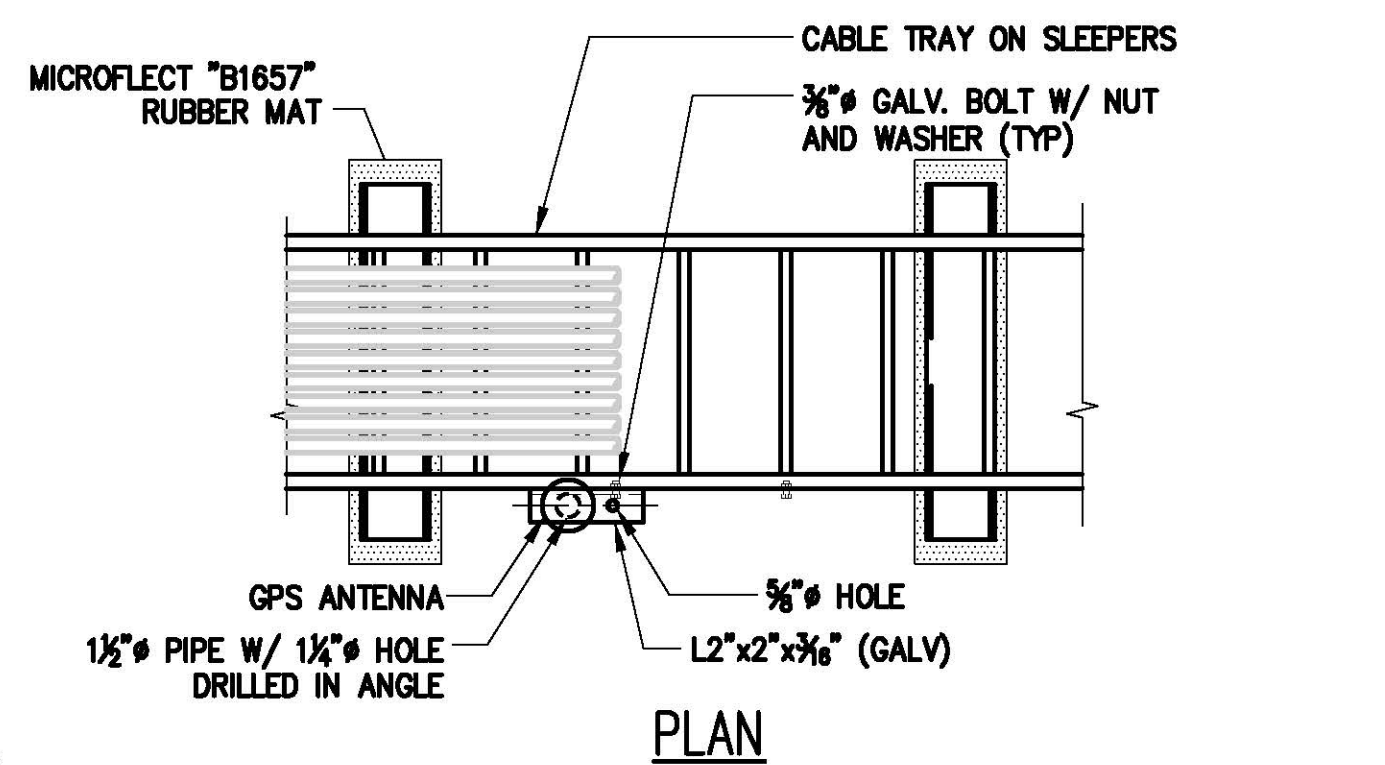


CABLE TRAY DETAIL

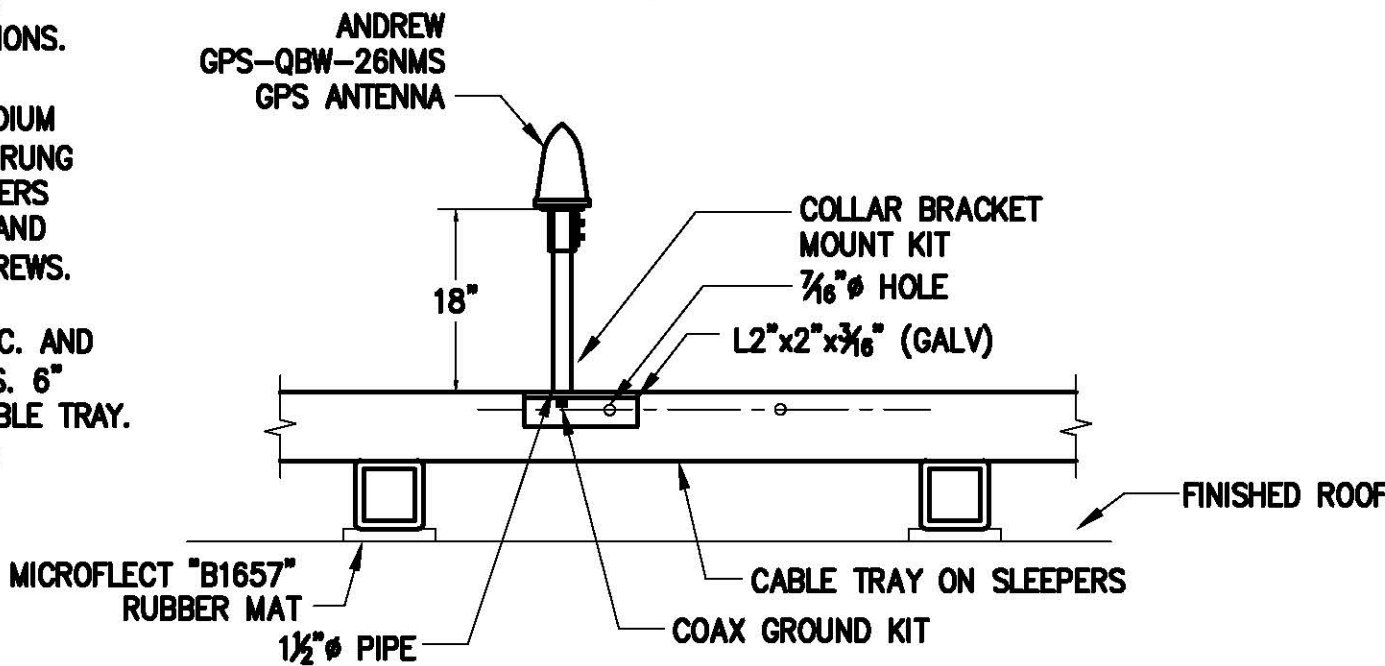
SCALE: NOT TO SCALE

2

A-5



PLAN



ELEVATION

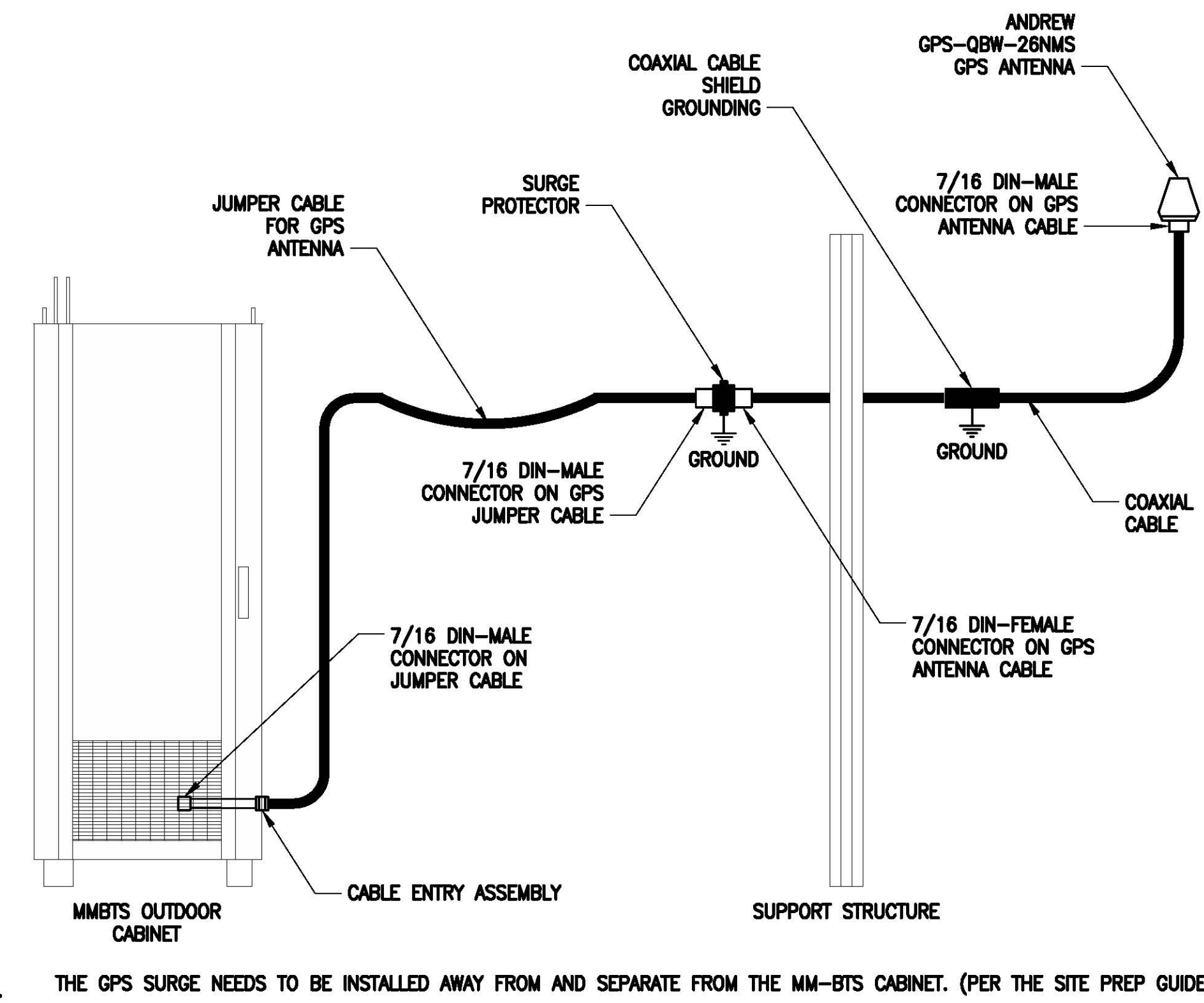
1. LOCATION OF ANTENNA MUST HAVE CLEAR VIEW OF SOUTHERN SKY AND CANNOT HAVE ANY BLOCKAGES EXCEEDING 25% OF THE SURFACE AREA OF A HEMISPHERE AROUND THE ANTENNA.
2. ALL GPS ANTENNA LOCATIONS MUST BE ABLE TO RECEIVE CLEAR SIGNALS FROM A MINIMUM OF FOUR (4) SATELLITES. VERIFY WITH HANDHELD GPS BEFORE FINAL LOCATION OF GPS ANTENNA.

GPS MOUNTING DETAIL

SCALE: 1" = 1'-0"

4

A-5



TYPICAL GPS DETAIL

SCALE: N.T.S.

5

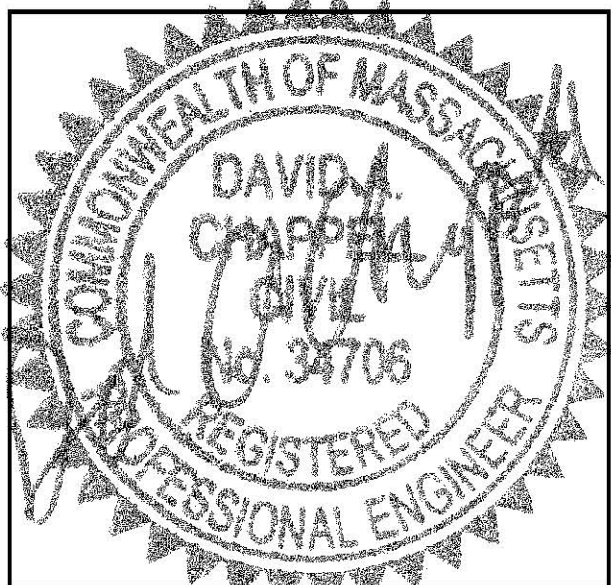
A-5

- THE JUMPERS ARE DESIGNED TO BE INSTALLED BEFORE/AFTER THE GPS SURGE.
- THE GPS SURGE NEEDS TO BE CONNECTED TO THE GROUND SYSTEM VIA A GROUND LEAD.

**Sprint VISION**  
1 INTERNATIONAL BLVD, SUITE 800  
MAHWAH, NJ 07495  
(800) 357-7641

**CENTERLINE COMMUNICATIONS**  
95 RYAN DRIVE, SUITE 1  
RAYNHAM, MA 02767  
(844) 748-8878  
www.centerlinecommunications.com

**CHAPPELL ENGINEERING ASSOCIATES, LLC**  
Civil - Structural - Land Surveying  
R.K. EXECUTIVE CENTRE  
201 BOSTON POST ROAD WEST, SUITE 101  
MARLBOROUGH, MA 01752  
(508) 481-7400  
www.chappellengineering.com



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CHECKED BY: JMT

APPROVED BY: JMT

SUBMITTALS			
REV.	DATE	DESCRIPTION	BY
1	04/30/19	ISSUED FOR ZONING	CMC
0	11/29/18	ISSUED FOR REVIEW	CMC

SITE NUMBER:  
BS25XC905-A  
SITE NAME:  
AIMCO  
SITE ADDRESS:  
270 THIRD STREET  
CAMBRIDGE, MA 02142

SHEET TITLE  
EQUIPMENT  
DETAILS

SHEET NUMBER  
A-5



## Radio Frequency Emissions Analysis Report

### Sprint Wireless Rooftop Facility

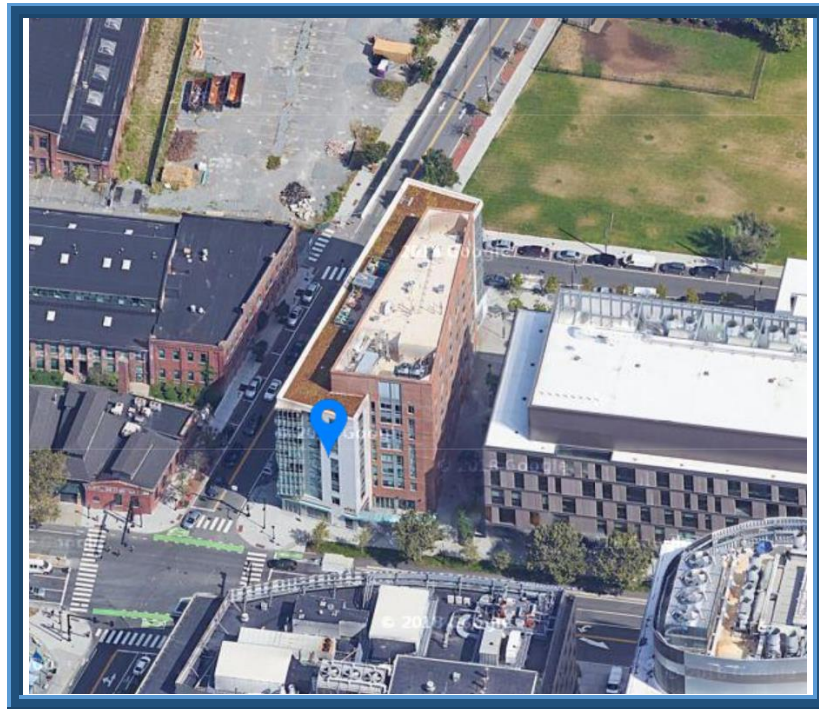
**Site ID:** BS25XC905

**Site Name:** AIMCO

**Address:** 270 Third Street,  
Cambridge, MA 02142

**Latitude:** 42.365940

**Longitude:** -71.082090



**Prepared for:**

Sprint

1 International Boulevard, Suite 800  
Mahwah, NJ 07495

**Centerline PN:** 950026-006

## TABLE OF CONTENTS

<b>GENERAL SUMMARY .....</b>	<b>2</b>
<b>SITE SUMMARY .....</b>	<b>2</b>
<b>FCC GUIDELINES .....</b>	<b>3</b>
<b>CALCULATION METHODOLOGY &amp; DATA .....</b>	<b>5</b>
<b>ANTENNA INVENTORY .....</b>	<b>6</b>
<b>RESULTS .....</b>	<b>7</b>
<b>APPENDIX A: CERTIFICATIONS.....</b>	<b>10</b>

**GENERAL SUMMARY**

Centerline Communications, LLC (“Centerline”) has been contracted to provide a Radio Frequency (RF) Analysis for the following Sprint wireless rooftop facility to determine whether the facility is in compliance with federal standards and regulations regarding RF emissions. This analysis includes theoretical emissions calculations, for all proposed equipment for Sprint.

**SITE SUMMARY**

Analysis Site Data	
<b>Site ID:</b>	BS25XC905
<b>Site Name:</b>	AIMCO
<b>Site Address:</b>	270 Third Street, Cambridge MA 02142
<b>Site Latitude:</b>	42.365940 N
<b>Site Longitude:</b>	-71.082090 W
<b>Facility Type:</b>	Rooftop
Compliance Summary	
<b>Compliance Status:</b>	Compliant Upon Mitigation Installation
Maximum Modeled MPE% on Walking Surface Sprint (General Public Limit):	1,376.40 %
Maximum Modeled MPE% at Ground Level Sprint (General Public Limit):	0.6 %
<b>Is Access Locked or Controlled? :</b>	Uncontrolled*
<b>Lock or Control Measures if Present:</b>	N/A

There were no other carriers on site.

\*To be conservative, all rooftop sites are considered uncontrolled for modeling purposes.

## FCC GUIDELINES

All power density values used in this report were analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The number of  $\mu\text{W}/\text{cm}^2$  calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General Population/Uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ( $\mu\text{W}/\text{cm}^2$ ). The general population exposure limit for the 700 and 800 MHz Bands is approximately 467  $\mu\text{W}/\text{cm}^2$  and 567  $\mu\text{W}/\text{cm}^2$  respectively, and the general population exposure limit for the 1900 MHz PCS and 2100 MHz AWS bands is 1000  $\mu\text{W}/\text{cm}^2$ . Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

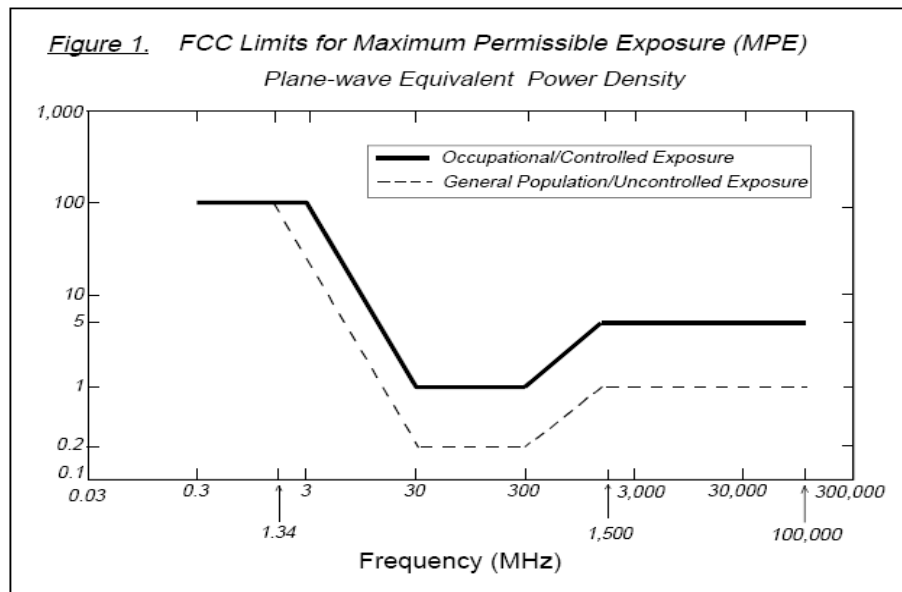
Occupational/Controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure, have been properly trained in RF safety and can exercise control over their exposure. Occupational/Controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure, have been trained in RF safety and can exercise control over his or her exposure by leaving the area or by some other appropriate means. The Occupational/Controlled exposure limits all utilized frequency bands is five (5) times the FCC's General Public / Uncontrolled exposure limit.

Additional details can be found in FCC OET 65.

Table 1: Limits for Maximum Permissible Exposure (MPE)				
(A) Limits for Occupational/Controlled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	(900/f <sup>2</sup> )*	6
30-300	61.4	0.163	1.0	6
300-1,500	--	--	f/300	6
1,500-100,000	--	--	5	6
(B) Limits for General Public/Uncontrolled Exposure				
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (H) (A/m)	Power Density (S) (mW/cm <sup>2</sup> )	Averaging Time [E] <sup>2</sup> , [H] <sup>2</sup> , or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	(180/f <sup>2</sup> )*	30
30-300	27.5	0.073	0.2	30
300-1,500	--	--	f/1,500	30
1,500-100,000	--	--	1.0	30

f = Frequency in (MHz)

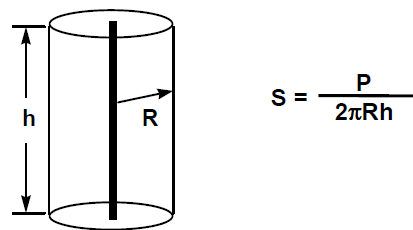
\* Plane-wave equivalent power density



**CALCULATION METHODOLOGY & DATA**

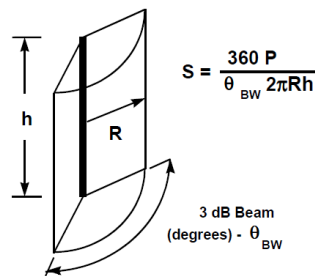
Centerline has performed theoretical calculations on all transmission equipment located on this facility. All calculations have been performed using the RoofView® software from Richard Tell Associates. This software performs calculations using a cylindrical model for very conservative power density predictions within the near-field of the antenna where the antenna pattern has not truly formed yet. Within this area power density values tend to decrease based upon an inverse distance function. At the point where it is appropriate for modeling to change from near-field calculations to far-field calculations the power decreases inversely with the square of the distance. This modeling technique is very accurate with very low antenna centerlines, such as rooftops, where persons can get very close to the antennas and pass through fields in close proximity.

The below calculation in Figure 1 shows the theoretical distribution of power over an imaginary cylinder with equal power distribution in all directions.



*Figure 1: Distribution of power over an imaginary cylinder in all directions*

This model can be modified for directional antennas to show directionality of power distribution. This formula will tend to be conservative as it assumes that all power is focused between the 3 dB power roll off points as shown in Figure 2.



*Figure 2: Distribution of power over an imaginary cylinder between the half power (3dB) power roll off points (HBW) for directional antennas*



**ANTENNA INVENTORY**

Sector	Operator	Frequency Band	TX Power Per Channel	# of Channels	ERP	Antenna Make	Antenna Model	Gain (dBd)	Azimuth (°)	Antenna Centerline Height (ft)	Z Value (ft)**
A	Sprint	CDMA 850	20	1	5569	Commscope	NNVV-65B-R4	12.8	0	92	16.455
		LTE 850	20	2				12.8			
		CDMA 1900	16	5				15.1			
		LTE 1900	40	2				15.1			
A	Sprint	LTE 2500	20	8	5484	RFS	APXVTM14-ALU-I20	15.85	0	92	16.455
B	Sprint	CDMA 850	20	1	5569	Commscope	NNVV-65B-R4	12.8	120	92	16.455
		LTE 850	20	2				12.8			
		CDMA 1900	16	5				15.1			
		LTE 1900	40	2				15.1			
B	Sprint	LTE 2500	20	8	4562	Nokia	AAHC	15.1	120	92	16.455
C	Sprint	CDMA 850	20	1	5569	Commscope	NNVV-65B-R4	12.8	240	92	17.21
		LTE 850	20	2				12.8			
		CDMA 1900	16	5				15.1			
		LTE 1900	40	2				15.1			
C	Sprint	LTE 2500	20	8	4562	Nokia	AAHC	15.1	240	92	3.705

*Table 1: Total Site data table    \*\* (Z Value is distance from bottom of antenna to walking surface)*

## RESULTS

All calculations performed based upon the data listed for this facility have produced results that are above allowable limits for General Population and Occupational limits for exposure to RF emissions as specified by federal standards. Sprint can ensure compliance on this facility by following the signage and barrier recommendations presented in this report.

The anticipated maximum power density value (% MPE) calculated in front of any of the Sprint sectors is **1,376.40 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**275.28 %** of the FCC's allowable Occupational limit). This was determined based upon worst-case theoretical modeling as described in this report for all walking surfaces in close proximity to the antenna arrays. The following is a summary for each Sprint Sector.

**Sector A:** There are no areas that exceeds the FCC's **General Population or Occupational limits** for exposure to radio frequency emissions. The maximum power density value (% MPE) calculated for Sprint's Sector A antennas is **48.20 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**9.64 %** of the FCC's allowable Occupational limit). The Sector A antennas are transmitting over the main roof level.

**Sector B:** There is an area that extends out **12 feet** from the antennas along the walking surface that exceeds the FCC's **General Population limit** for exposure to radio frequency emissions. There is an area that extends out **3 feet** from the antennas along the walking surface that exceeds the FCC's **Occupational limit** for exposure to radio frequency emissions. The maximum power density value (% MPE) calculated for Sprint's Sector B antennas is **1,376.40 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**275.28 %** of the FCC's allowable Occupational limit). The Sector B antennas are transmitting over the upper roof level.

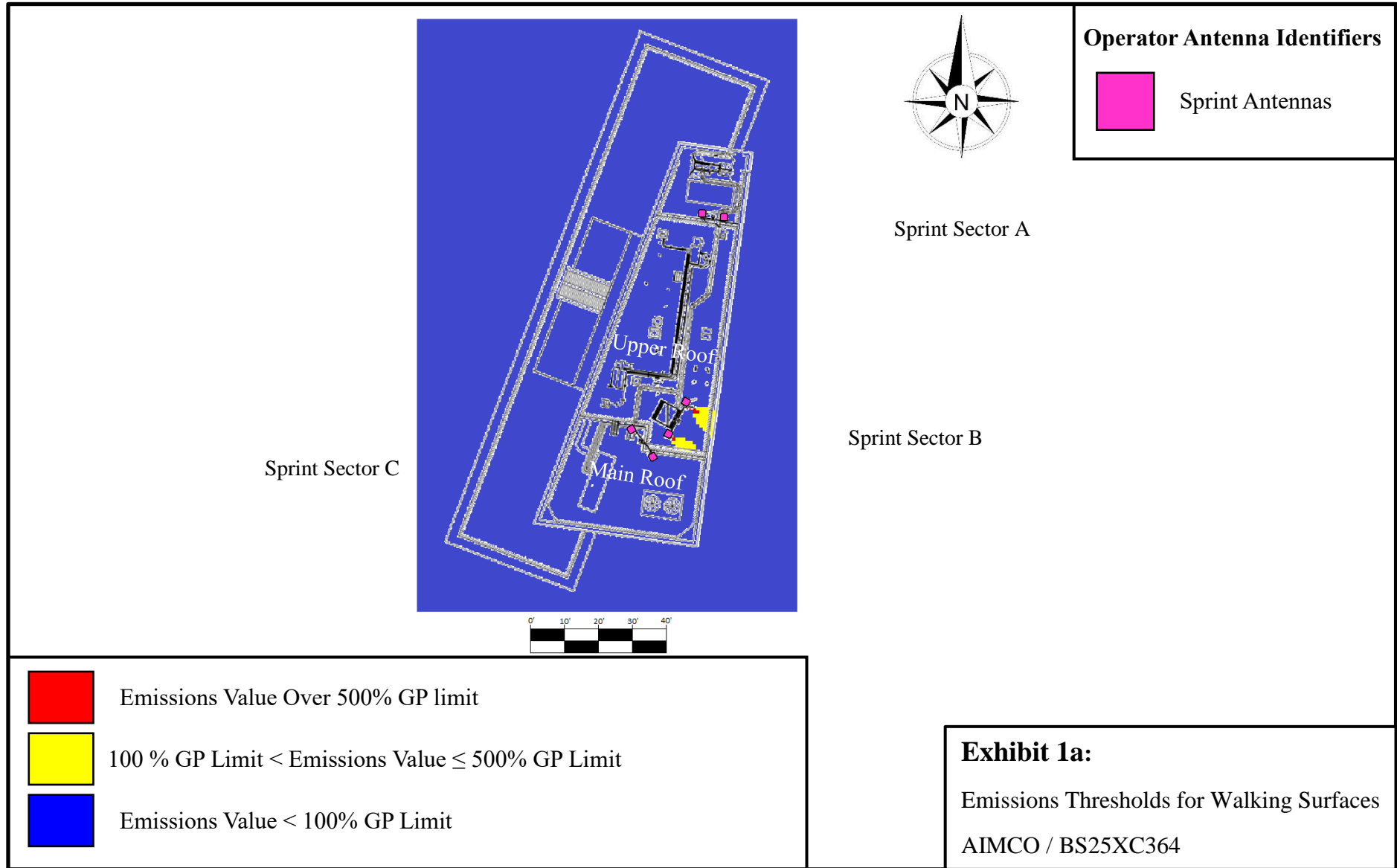
**Sector C:** There are no areas that exceeds the FCC's **General Population or Occupational limits** for exposure to radio frequency emissions. The maximum power density value (% MPE) calculated for Sprint's Sector C antennas is **47.80 %** of the FCC's allowable limit for General Population exposure to radio frequency emissions (**9.56%** of the FCC's allowable Occupational limit). The Sector C antennas are transmitting over the main roof level.

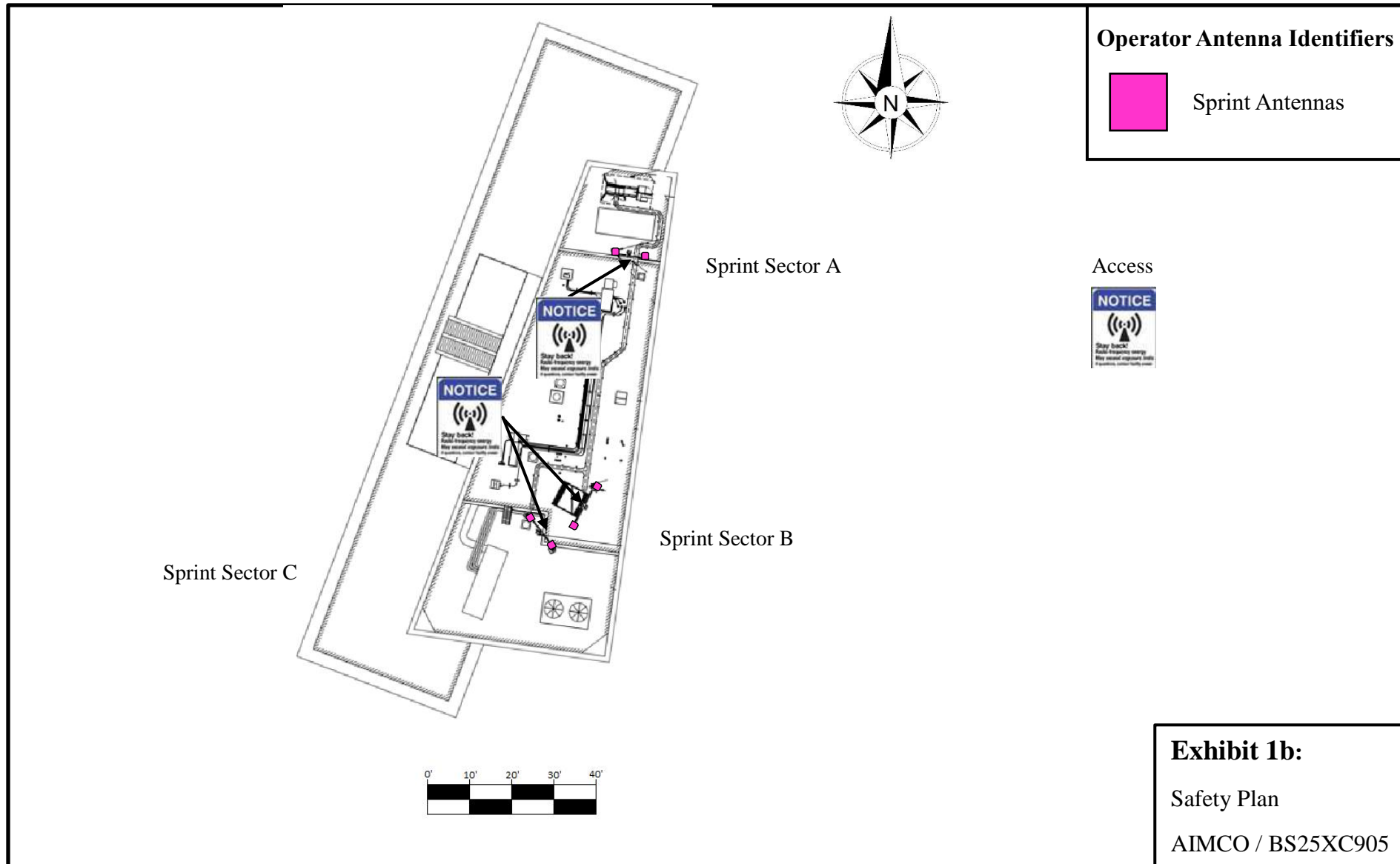
At the ground level the maximum power density value calculated from the Sprint radio equipment is **0.6 %** of the FCC's **General Population limit** for exposure to radio frequency emissions. At ground level the maximum composite power density for all system operators on this facility is **0.12 %** of the FCC's **Occupational limit** for exposure to radio frequency emissions.

The FCC mandates that if a site is found to be out of compliance with regard to emissions that any system operator contributing 5% or more to areas exceeding the FCC's allowable limits, as outlined in this report, will be responsible for bringing the site into compliance.

Signage and barriers are the primary means of mitigating access to accessible areas of exposure. It is recommended that blue Notice signs are installed at the base of the utility pole as shown in **Exhibit 1b-Safety Plan**.

A Composite emissions threshold plot which graphically shows power density values is shown following in **Exhibit 1a – Emissions Thresholds for Walking Surfaces**.

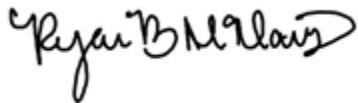




**Exhibit 1b:**  
Safety Plan  
AIMCO / BS25XC905

**APPENDIX A: CERTIFICATIONS**

I, Ryan McManus, preparer of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined by Sprint.

A handwritten signature in black ink that reads 'Ryan B. McManus'.

---

8/21/2019

I, Michelle Stone, reviewer and approver of this report certify that I am fully trained and aware of the Rules and Regulations of both the Federal Communications Commissions (FCC) and the Occupational Safety and Health Administration (OSHA) with regard to Human Exposure to Radio Frequency Radiation. I have been trained in the procedures and requirements outlined by Sprint.

A handwritten signature in black ink that reads 'Michelle A. Stone'.

---

8/21/2019



1 International Blvd  
Suite 800  
Mahwah, NJ 07495

**STRUCTURAL ANALYSIS**  
**BS25XC905 – AIMCO (VIVO BUILDING)**



Address:  
270 THIRD STREET  
**CAMBRIDGE, MA 02142**

Date:  
**AUGUST 13, 2019**



August 13, 2019

Sprint  
1 International Blvd  
Suite 800  
Mahwah, NJ 07495

**RE:**

---

Site Number	BS25XC905
Site Name	AIMCO (Vivo Building)
Site Address	270 Third Street, Cambridge, MA 02142

---

To whom it may concern:

Chappell Engineering Associates, LLC has performed a structural analysis of the proposed installation of the Sprint telecommunications facility at the above-referenced location. Sprint proposes to install equipment cabinets on the roof of the existing building with a single Equipment cabinet (ECAB), one Battery Cabinet (BCAB) and one Interconnect Cabinet (ICAB) located on a single centrally-located steel frame on roof curb.

The existing building is a multi-story residential structure. A steel frame and pre-cast concrete deck panel construction form the main load-bearing elements of the structure. The roof construction consists of an 10in pre-cast concrete panel (PCP). The *alpha*, and *gamma* sector antennas are to be located proposed façade mounted pipe arrays secured to the existing penthouse walls. The *beta* sector antennas are to be located on a proposed ballast-mounted structure on the main roof. A stability calculation has been completed for the proposed ballast mount and is included in our analysis.

Sprint's antenna arrays will consist of three (3) sectors, each supporting 2 panel antennas (2 per sector, total of 6) and ancillary hardware (remote radio units, cabling routed along the roof, and a GPS antenna). Details of the antenna mounts are included in our construction drawings.

The proposed Sprint equipment cabinets will be located on a steel skid frame on a roof curb mounted to the existing pre-cast concrete deck panels. Details for the construction of the equipment area also included in our construction drawings.

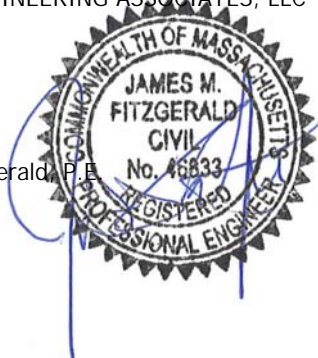
Based upon our site walks, field measurements, our review of the loads and of the existing available building plans, and our evaluation of the existing structural members under the proposed loading, Chappell Engineering Associates, LLC has determined that the existing structure **has adequate capacity** to support the proposed antenna configuration as shown on the construction drawings. Our analysis and results are enclosed in this report.

Enclosed are the construction drawings which detail the installation of the proposed antenna masts. Our structural calculations are also enclosed.

If you have any questions regarding this matter, please do not hesitate to call.

Very truly yours,  
CHAPPELL ENGINEERING ASSOCIATES, LLC

James M. Fitzgerald, P.E.  
JMF/jmf



Site Name/Number:	AIMCO (Vivo Building) - BS25XC905	 <b>CHAPPELL ENGINEERING ASSOCIATES, LLC</b> Civil • Structural • Land Surveying
Site Address:	270 Third Street, Cambridge, MA 02142	
CEA Job Number:	1725.116	
Date:	August 13, 2019	

**Appurtenances Attached to Cantilever Mast:**

	Commscope NNVV-65B-R4 (800/1900MHz)	RFS APXVTM14-ALU-I20	RFS APXVTM14-ALU-I20	800 RRH	1900 RRH	800 RRH	2500 RRH			
Depth, d =	7.8 in	6.3 in	6.3 in	11.0 in	15.0 in	11.0 in	6.8 in	in	in	
Width, w =	19.6 in	12.6 in	12.6 in	13.0 in	14.0 in	13.0 in	18.6 in	in	in	
Height, h =	72.0 in	56.3 in	56.3 in	20.0 in	26.0 in	20.0 in	26.1 in	in	in	
Height ARL =	9.0 ft	9.0 ft	9.0 ft	6.0 ft	4.0 ft	8.0 ft	4.0 ft	ft	ft	
Weight =	77 lbs	46 lbs	46 lbs	53 lbs	60 lbs	53 lbs	70 lbs	lbs	lbs	

Design Code: ASCE 7

	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	
Z (Above Ground Level) =	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	
Height of Projection Area =	6.0 ft	4.7 ft	4.7 ft	1.7 ft	2.2 ft	1.7 ft	2.2 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft	
Width of Projection Area =	1.6 ft	1.1 ft	1.1 ft	1.1 ft	1.2 ft	1.1 ft	1.6 ft	0.0 ft	0.0 ft	0.0 ft	0.0 ft	
Af (Projected Area of Gross) =	9.8 s.f.	4.9 s.f.	4.9 s.f.	1.8 s.f.	2.5 s.f.	1.8 s.f.	3.4 s.f.	0.0 s.f.	0.0 s.f.	0.0 s.f.	0.0 s.f.	
Reference Wind Velocity, V =	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	
Exposure =	B	B	B	B	B	B	B	B	B	B	B	Section 6.5.6.3
G (Gust effect factor) =	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	Section 6.5.8
Cr (Force Coefficient) =	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	Fig 6-20 to 6-23
Kz (Exposure Coefficients) =	1	1	1	1	1	1	1	1	1	1	1	6.5.6.6, Table 6-3
K1 (Multiplier) =	0	0	0	0	0	0	0	0	0	0	0	Figure 6-2
K2 (Multiplier) =	0	0	0	0	0	0	0	0	0	0	0	Figure 6-2
K3 (Multiplier) =	0	0	0	0	0	0	0	0	0	0	0	Figure 6-2
Kzt (Topographic Factor) : (1+K1*K2*K3)^2 =	1	1	1	1	1	1	1	1	1	1	1	Section 6.5.7.2
Kd =	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	Table 6-4
I (Importance Factor) =	1	1	1	1	1	1	1	1	1	1	1	Table 6-2
Qz = .00256*Kz*Kzt*Ka*V^2*I (psf) =	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	psf, Section 6.5.10
Reference Wind Pressure, p =	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	

Wind Load = F, lbs = 280 141 141 52 72 52 96 0 0 0

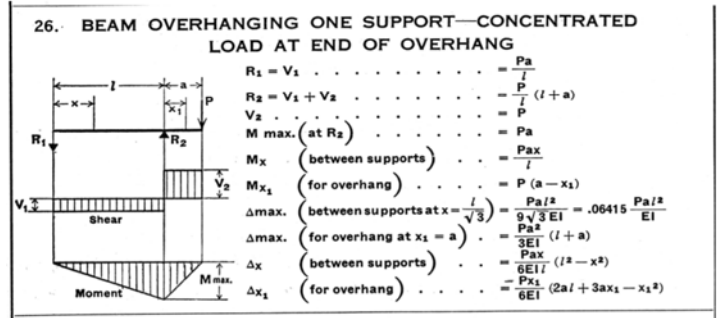
**Minimum Mast Section Required:**

Wind Force Total (F,lbs.) = 376.0 lbs  
 Equipment Weight (lbs.) = 147.0 lbs  
 Cantilever Length = 9.0 ft  
 Mount Spacing = 6.0 ft

Reaction R1 = 483.8 lbs  
 Reaction R2 = 940.1 lbs  
 Shear V = 376.0 lbs  
 Moment (Max) = 2903.0 #-ft

Sx(req.'d) = 1.464 in^3  
 <  
 Use 3" SCH40 Pipe (Sx) = 1.72 in^3

OK



**Distributed Equipment Loading:**

Sprint Elitek (Ecab) = 505 lbs  
 Sprint Elitek (Bcab) = 330 lbs  
 Inter Connection Cab. = 130 lbs  
 Dead Load (Curb) = 600 lbs  
 Total = 1565 lbs

Area (7.5' x 8.0') = 60 sq.ft.  
 Area Loading = 26.1 << (LL = 100#/ft^2)



Site Name/Number:	<b>AIMCO (Vivo Building) - BS25XC905</b>	 <b>CHAPPELL ENGINEERING ASSOCIATES, LLC</b> <i>Civil • Structural • Land Surveying</i>
Site Address:	<b>270 Third Street, Cambridge, MA 02142</b>	
CEA Job Number:	<b>1725.116</b>	
Date:	<b>August 13, 2019</b>	

### Appurtenances Attached to Ballast Frame:

	Commscope NNVV-65B-R4 (800/1900MHz)	RFS APXVTM14- ALU-I20	RFS APXVTM14- ALU-I20	800 RRH	1900 RRH	800 RRH	2500 RRH			
Depth, d =	7.8 in	6.3 in	6.3 in	11.0 in	15.0 in	11.0 in	6.8 in	in	in	
Width, w =	19.6 in	12.6 in	12.6 in	13.0 in	14.0 in	13.0 in	18.6 in	in	in	
Height, h =	72.0 in	56.3 in	56.3 in	20.0 in	26.0 in	20.0 in	26.1 in	in	in	
Height ARL =	9.0 ft	9.0 ft	9.0 ft	6.0 ft	4.0 ft	8.0 ft	4.0 ft	ft	ft	
Weight =	77 lbs	46 lbs	46 lbs	53 lbs	60 lbs	53 lbs	70 lbs	lbs	lbs	

Design Code: ASCE 7

Z (Above Ground Level) =	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	101 ft	
Height of Projection Area =	6.0 ft	4.7 ft	4.7 ft	1.7 ft	2.2 ft	1.7 ft	2.2 ft	0.0 ft	0.0 ft	0.0 ft	
Width of Projection Area =	1.6 ft	1.1 ft	1.1 ft	1.1 ft	1.2 ft	1.1 ft	1.6 ft	0.0 ft	0.0 ft	0.0 ft	
Af (Projected Area of Gross) =	9.8 s.f.	4.9 s.f.	4.9 s.f.	1.8 s.f.	2.5 s.f.	1.8 s.f.	3.4 s.f.	0.0 s.f.	0.0 s.f.	0.0 s.f.	
Reference Wind Velocity, V =	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	105 mph	
Exposure =	B	B	B	B	B	B	B	B	B	B	Section 6.5.6.3
G (Gust effect factor) =	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	Section 6.5.8
Cf (Force Coefficient) =	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	Fig 6-20 to 6-23
Kz (Exposure Coefficients) =	1	1	1	1	1	1	1	1	1	1	6.5.6.6, Table 6-3
K1 (Multiplier) =	0	0	0	0	0	0	0	0	0	0	Figure 6-2
K2 (Multiplier) =	0	0	0	0	0	0	0	0	0	0	Figure 6-2
K3 (Multiplier) =	0	0	0	0	0	0	0	0	0	0	Figure 6-2
Kzt (Topographic Factor) : (1+K1*K2*K3)^2 =	1	1	1	1	1	1	1	1	1	1	Section 6.5.7.2
Kd =	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	Table 6-4
I (Importance Factor) =	1	1	1	1	1	1	1	1	1	1	Table 6-2
Qz = .00256*Kz*Kzt*Kd*V^2*I (psf) =	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	24.0 psf	psf, Section 6.5.10
Reference Wind Pressure, p =	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	28.5 psf	

F, lbs = 280      141      141      52      72      52      96      0      0      0

### Required Minimum Ballast:

**Ballast Frame Geometry**

Frame width = 7.1 ft	Common 8x8x16 Block Wgt = 37 lbs
Frame depth = 8.42 ft	Solid 8x8x16 Block Wgt = 68 lbs
Centroid of front ballast to toe, dr = 0.67 ft	
Centroid of rear ballast to toe, dr = 7.75 ft	
Frame Footprint Area = 59.76 ft <sup>2</sup>	
Weight of steel frame = 425 lbs	

Safety Factor for Overturning = 1.8      Total Appurtenance Wgt = 405 lbs

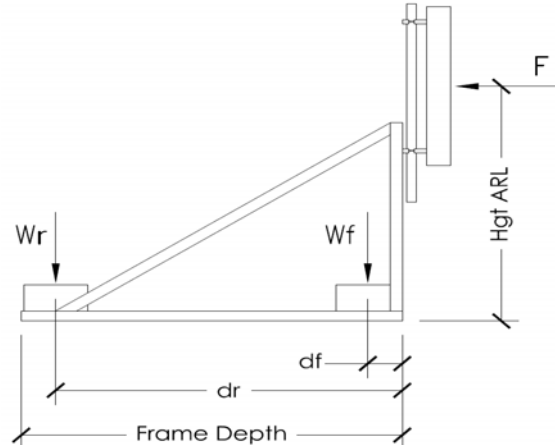
Let Wt = total ballast required, lbs  
Let Wr = 0.4 Wt  
Let Wf = 0.6 Wt

*For Stability;*

Mcausing <= Mresisting	
Mcausing <= Mframe wgt + Mrear ballast + Mfront ballast	
Mcausing <= Mframe wgt + 0.6 (Wt)(dr) + 0.4 (Wt)(df)	

*Solving for Wt;*

$\frac{Mcausing - Mframe wgt}{0.60 dr + 0.40 df} <= Wt$	(min total ballast req'd)
$\frac{10,995.0}{4.92} <= Wt$	
<b>Min. Total Ballast Req'd (Wt) = 2236 lbs &lt;= Wt</b>	
<b>Min. Front Ballast Req'd (Wf) = 895 lbs = 14 Solid 8x8x16 blocks</b>	
<b>Min. Rear Ballast Req'd (Wr) = 1342 lbs = 20 Solid 8x8x16 blocks</b>	
<b>Total Loaded Frame Weight = 3066 lbs</b>	



**Frame Geometry**

# City of Cambridge

MASSACHUSETTS

BOARD OF ZONING APPEAL

2010 JUN 25 A 10:36

831 Mass Avenue, Cambridge, MA OFFICE OF THE CITY CLERK  
(617) 349-6100 CAMBRIDGE, MASSACHUSETTS



CASE NO: 9935

LOCATION: 238 Main Street Residence C-3B/MXR  
Cambridge, MA

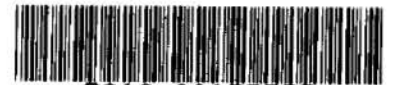
PETITIONER: Clear Wireless LLC - C/o Adam F. Brailard, Esq.

PETITION: Special Permit: To add three (3) WiMax panel antennas, two (2) wireless backhaul dish antennas, and one (1) radio equipment cabinet to the Applicant's existing and previously approved wireless communication facility currently operating on the rooftop of the Building.

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: May 7 & 14, 2010

DATE OF PUBLIC HEARING: May 27, 2010



2010 00139226

Bk: 55188 Pg: 262 Doc: DECIS  
Page: 1 of 3 08/17/2010 03:35 PM

MEMBERS OF THE BOARD:

CONSTANTINE ALEXANDER - CHAIR  
TIMOTHY HUGHES - VICE CHAIR  
BRENDAN SULLIVAN  
THOMAS SCOTT

\_\_\_\_\_  
✓  
\_\_\_\_\_  
✓  
\_\_\_\_\_  
✓

ASSOCIATE MEMBERS:

CHRISTOPHER CHAN  
MAHMOOD R. FIROUZBAKHT  
DOUGLAS MYERS  
SLATER W. ANDERSON  
TAD HEUER

\_\_\_\_\_  
✓  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
✓

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.

Bk 5047 Pg 151

Owner of record Massachusetts Institute of Technology

Case No. 9935  
Location: 238 Main Street  
Petitioner: Clear Wireless LLC c/o Adam Brillard, Esq.

On May 27, 2010, Petitioner's attorney Anne Malone appeared before the Board of Zoning Appeal requesting a special permit in order to add three WiMax panel antennas, two wireless backhaul dish antennas, and one radio equipment cabinet to the applicant's existing and previously approved wireless communications facility currently operating on the rooftop of the building. 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.

Ms. Malone stated that the proposal was to upgrade this existing site for 4G capability. She stated that the petitioner was properly licensed, that the new antennas would be painted to match the building, and that the site is surrounded largely by office buildings and other non-residential uses.

The Chair asked if anyone wished to be heard on the matter, no one indicated such.

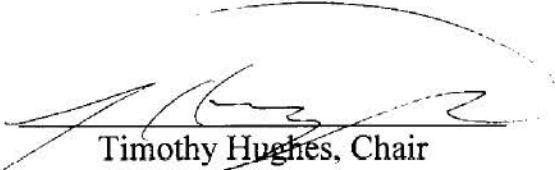
After discussion, the Chair moved that the Board grant the special permit for relief in order to add three WiMax panel antennas, two wireless backhaul dish antennas, and one radio equipment cabinet based on the finding that the petitioner holds the proper FCC licensing and has satisfied the requirements of Article 4, Section 4.32, Footnote 49, so that special permit may be granted. The Chair moved that the Board find that traffic generated and patterns of access and egress would not cause congestion, hazard or substantial change in established neighborhood character and that the continued operation or the development of adjacent uses as permitted in the Ordinance would not be adversely affected by the nature of the proposed use because telecommunications already exist at this site and this special permit only allows for an upgrading of that system. The Chair moved that the Board find that nuisance or hazard would not be created to the detriment of the health, safety and welfare of the occupants and that the proposed installation will not impair the integrity of the district or adjoining district or otherwise derogate from the intent or purpose of this Ordinance. The Chair moved that the Board grant the special permit on the condition that should the equipment become obsolete, it will be removed and the state of the building returned, as closely as possible, to its original state.

The five member Board voted unanimously in favor of granting the special permit (Hughes, Sullivan, Scott, Heuer, and Firouzbakht) with the above conditions. Therefore, the special permit is granted.

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

- 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.

The Board of Zoning Appeal is empowered to waive local zoning regulations only. This decision therefore does not relieve the petitioner in any way from the duty to comply with local ordinances and regulations of the other local agencies, including, but not limited to the Historical Commission, License Commission and/or compliance with requirements pursuant to the Building Code and other applicable codes.

  
Timothy Hughes, Chair

Attest: A true and correct copy of decision filed with the offices of the City Clerk and Planning Board on 6/25/10 by Maia Gabello, Clerk.

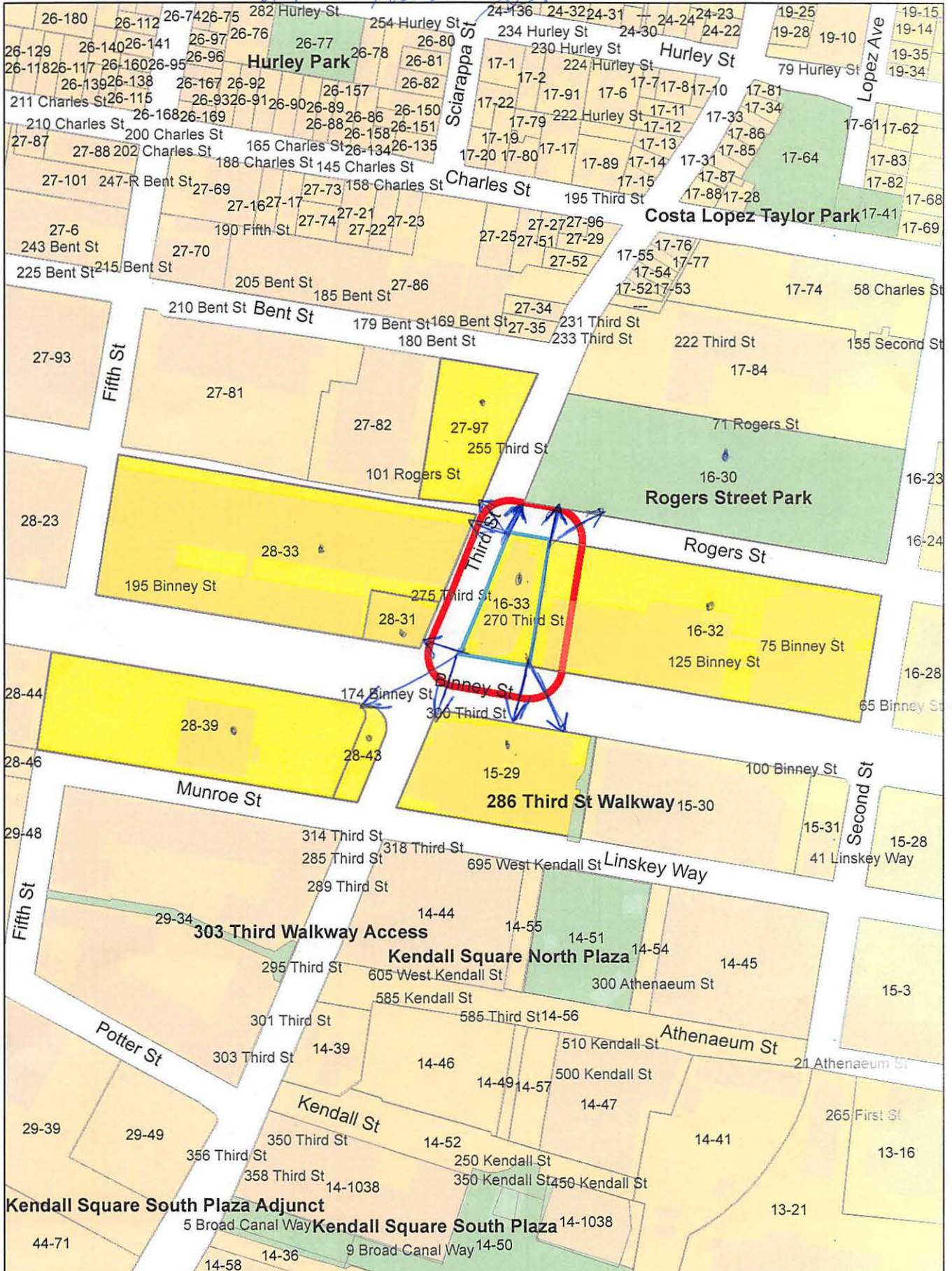
Twenty days have elapsed since the filing of this decision.

No appeal has been filed ✓.

Appeal has been filed and dismissed or denied.

Date: August 16/10 D. Margaret Drury City Clerk.

270 Third St.



270 Third St.

Petitioner

15-29  
MIT 300 THIRD LLC  
C/O ARE MA REGION #28,LLC  
P.O. BOX 847  
CARLSBAD, CA 92018

16-32  
ARE-MA REGION NO. 48, LLC  
P.O. BOX847  
CARLSBAD, CA 92108

CENTERLINE COMMUNICATIONS  
C/O SIMON J. BRIGHENTI  
750 W CENTER STREET  
W. BRIDGEWATER, MA 02379

27-97  
EQR-249 THIRD ST LLC  
TWO NORTH RIVERSIDE PLAZE, SUITE 400  
CHICAGO, IL 60606

28-31  
DIGITAL SPACE LAB, LLC. &  
CITY OF CAMBRIDGE TAX TITLE  
7 CAPTAIN PARKER ARMS#15  
LEXINGTON, MA 02421

28-33  
ASN WORTHINGTON PLACE LLC,  
C/O EQR- R.E. TAX DEPARTMENT  
P.O. BOX 87407 (29808)  
CHICAGO, IL 60680

28-39  
UNITED STATES OF AMERICA  
575 TECHNOLOGY SQUARE  
CAMBRIDGE, MA 02139

28-43  
CAMBRIDGE REDEVELOPMENT AUTHORITY  
255 MAIN ST, 4TH FLOOR  
CAMBRIDGE, MA 02142

16-33  
AIMCO 270 THIRD STEET, LLC  
C/O RYAN, LLC  
13155 NOEL RD, STE 100, LB73  
DALLAS, TX 75240

16-30  
CITY OF CAMBRIDGE  
C/O LOUIS DEPASQUALE  
CITY MANAGER

16-30  
CITY OF CAMBRIDGE  
C/O NANCY GLOWA  
CITY SOLICITOR

August 21, 2019

City of Cambridge  
Board of Zoning Appeals  
831 Massachusetts Avenue  
Cambridge, MA 02139

RE: Sprint Spectrum Realty Company, LLC Special Permit Application -  
270 3<sup>rd</sup> Street, Cambridge, MA

Dear Chair and Members:

Please accept the accompanying material on behalf of Sprint Spectrum Realty Company, LLC ("Sprint") in application for a Special Permit to install telecommunications equipment on the rooftop of the property known locally as 270 3<sup>rd</sup> Street ("the 3<sup>rd</sup> Street Property"). This telecommunications equipment is intended to replace and upgrade the equipment presently in place atop the structure located at 238 Main Street, Cambridge ("the Main Street Property"). That equipment was installed several years ago pursuant to a Special Permit ("the 2010 Permit") issued by this Board subsequent to a public hearing dated May 27, 2010, evidence of which was filed with the Office of the City Clerk of Cambridge on June 25, 2010<sup>1</sup>. The owner of the Main Street Property, the Massachusetts Institute of Technology ("MIT") has notified Sprint of its intention to renovate and upgrade the entire building of which 238 Main Street is a part. This will entail the removal of the permitted equipment from the roof of the building. Accordingly, Sprint has located and secured permission to employ the 3<sup>rd</sup> Street property, which is approximately 1,500 feet away. A facility upon this property will serve those citizens of and visitors to Cambridge currently obtaining the benefit of the facility atop the Main Street Property as well as additional Sprint customers.

The proposed relocation of the current telecommunication facility will not increase the overall number of such facilities within the City of Cambridge. The new facility, if approved, will be less visible than the current equipment due to both the increased height of the 3<sup>rd</sup> Street Property relative to the Main Street Property and the appearance of the upgraded equipment in comparison to the equipment installed in 2010. As illustrated in the accompanying plans and the photographic simulations, this proposed removal and replacement will have a very minimal aesthetic or visual impact as there will be very minor noticeable change to the current conditions should this requested zoning relief be granted and the new equipment installed.

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<sup>1</sup> Note that the 2010 Permit was issued to Clear Wireless, LLC, a predecessor to the instant applicant Sprint Spectrum Realty Company, LLC.

There will be, however, due to the new location and more sophisticated nature of the proposed facility, enhanced service available to individuals both inside and outside of the surrounding buildings as well as the vehicles passing through the general area, in both emergency and non-emergency situations. Radio Frequency studies submitted as a component of this application provide additional detail.

The Applicant submits that the accompanying application materials meet the requirements of the City of Cambridge Zoning Ordinance and respectfully requests that the requested relief be granted by the Board of Zoning Appeal.

Simon J. Brighenti, Jr.

Simon J. Brighenti, Jr., JD  
Senior Site Acquisition Consultant  
750 W. Center Street - Floor 3 |  
W. Bridgewater, MA 02379  
Phone : (413) 237-1550  
[sbrighenti@clinellc.com](mailto:sbrighenti@clinellc.com) |  
[www.centerlinecommunications.com](http://www.centerlinecommunications.com)