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November 1, 2017

Jane Santosuosso
Chief Zoning Code Official
City of Newton
Planning and Development Department
1000 Commonwealth Avenue
Newton, MA 02459-1449

RE: New Cingular Wireless PCS, LLC - Administrative Site Plan Review for oDAS Installation on Boston College Campus: Carney Hall; Rubenstein Hall; Law Library; and, Kenny Cottle Library (Assessor's ID: 63009 0002; 63009 0002A; 13021 0003; and 13021 0000)

Dear Jane:

As we discussed, on behalf of New Cingular Wireless PCS LLC ("AT&T"), enclosed are completed General Permit and Administrative Site Plan Review applications with the required attachments for the proposed oDAS facilities located at Carney Hall, Rubenstein Hall, The Law Library and Kenny Cottle Library (the "Sites") on the Boston College Campus in Newton, Massachusetts. Pursuant to our discussions, this oDAS system is a neutral host system which is primarily designed to provide enhanced and more robust wireless data coverage to the Boston College Campus. AT&T will be designing and maintaining the network but Verizon Wireless and T-Mobile have agreed to use the network. Additionally, Boston College is not receiving any rental income from the installation of the oDAS equipment at the Sites.

As further illustrated on the submitted plans, the oDAS system (the "Facilities") consists of the following:

Carney Hall - AT&T proposes to install 4 panel antennas on the building. Two panel antennas will be mounted on the facades of the existing mechanical penthouse on the roof of the building. Additionally, two panel antennas will be concealed within one proposed fiberglass canister mounted on the roof of the building. The façade mounted antennas will be mounted at the 54' 11" above ground level ("AGL") antenna centerline mark and not exceed the height of the existing penthouse. The canister antennas will be located at the 55' 7" AGL antenna centerline mark with the top of the canister extending to 59' 4" AGL (which is 10' above the main roof). Proposed equipment will be installed within the existing mechanical penthouse.

Rubenstein Hall - AT&T proposes to install 4 panel antennas on the four façades of the existing mechanical penthouse on the roof of the building. The façade mounted antennas will be mounted at the 72' 1" AGL antenna centerline mark and will not exceed the height of the existing penthouse. Proposed equipment will be installed within the existing mechanical penthouse.



Law Library - AT&T proposes to install 3 panel antennas on the façades of the building. The façade mounted antennas will be mounted at the 41' 5" AGL antenna centerline mark, will be painted to match the building and will not exceed the height of the roof of the building, or the height of the wall to which it is mounted. Proposed equipment will be installed within the existing penthouse area.

Kenny Cottle Library - AT&T will install one antenna on the façade of the building and two panel antennas within two proposed fiberglass canisters mounted on the roof of the building. The façade mounted antenna will be mounted at the 35' 10" AGL antenna centerline mark, will be painted to match the building and will not exceed the height of the main roof of the building. The antennas concealed within the canisters will be mounted at the 46' 10" AGL antenna centerline mark and the canisters will extend to 50' 5" AGL (10' above the roof line). Proposed equipment will be installed within a room on the third floor of the building.

The following addresses each applicable section of the Ordinance.

SECTION 7.5.2(C) (3) OF THE ORDINANCE

- a. Convenience and safety of vehicular and pedestrian movement within the site and in relation to adjacent streets, properties or improvements, including regulation of the number, design and location of access driveways and the location and design of handicapped parking. The sharing of access driveways by adjoining sites is to be encouraged wherever feasible.**

The Facilities will be installed on and within the existing buildings on the Boston College Campus. The Facilities will be unmanned and will not generate large amounts of traffic with maintenance visits averaging one or two trips per month. There will be no additional access driveways installed at the Sites as a result of the proposed Facilities and no change to the existing access driveways or pedestrian ways at the Sites.

- b. Adequacy of the methods for disposal of sewage, refuse and other wastes and of the methods of regulating surface water drainage.**

The Facilities will be unmanned and will not produce any refuse, sewage, or other wastes. The Facilities will be installed on and within the existing buildings on campus and will not adversely impact existing surface water drainage.

- c. Provision for off-street loading and unloading of vehicles incidental to the servicing of the buildings and related uses on the site.**

The Facilities will be unmanned and will not require additional loading and unloading areas at the Sites. Maintenance visits will be infrequent and conducted by a technician.



- d. Screening of parking areas and structures on the site from adjoining premises or from the street by walls, fences, plantings or other means. Location of parking between any existing or proposed structures and the street shall be discouraged.**

No additional parking areas will be installed at the Sites as a part of the proposed Facilities. The proposed facilities will be installed on and within the existing buildings.

- e. Avoidance of major topographical changes; tree and soil removal shall be minimized and any topographic changes shall be in keeping with the appearance of neighboring developed areas.**

There will be no topographical changes to the Sites, tree removal, or soil removal as a result of the installation of the Facilities.

- f. Location of utility service lines underground wherever possible. Consideration of site design, including the location and configuration of structures in terms of major design elements including scale, materials, color, roof, and cornice lines; and**

Adequate utilities are already present at the Sites.

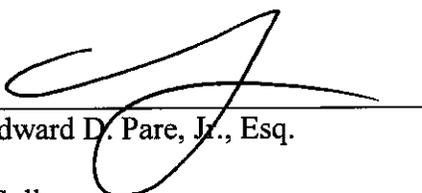
- g. Avoidance of the removal or disruption of historic resources on or off-site. Historical resources including designated historical structures or sites, historical architectural elements or archeological sites.**

No historical resources will be removed or disrupted, either on or off-site, as a result of the installation of the Facilities.

Please let us know if you need any additional information and we look forward to your approval of the Administrative Site Plan Review.

Sincerely,

BROWN RUDNICK LLP



Edward D. Pare, Jr., Esq.

cc: Joseph Herlihy, General Counsel, Boston College
Jeanne Levesque, Director of Government Relations, Boston College
Alex Giannaras, EBI



ATTACHMENTS

1. Application Forms
2. Letter of Authorization
3. FCC Licenses
4. Evidence of Owner Nonprofit Educational Status
5. Plans
6. Viewshed Analysis



Setti D. Warren
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone
(617) 796-1120
Telefax
(617) 796-1086
www.newtonma.gov

Barney Heath
Director

GENERAL PERMIT APPLICATION

PROJECT #: _____ ZONING DISTRICT: _____ DATE RECEIVED: _____

PROJECT DESCRIPTION:

PROPERTY LOCATION INFORMATION

STREET ADDRESS: _____ CITY/ZIP: _____

LEGAL DESCRIPTION (SECTION, BLOCK, LOT): _____

PROPERTY OWNER INFORMATION

NAME: _____ PHONE: _____ ALT. PHONE: _____

MAILING ADDRESS: _____ E-MAIL ADDRESS: _____

PROPERTY OWNER CONSENT

I am (we are) the owner(s) of the property subject to this application and I (we) consent as follows:

1. This application for a land use permit or administrative approval for development on my (our) property is made with my permission.
2. I (we) grant permission for officials and employees of the City of Newton to access my property for the purposes of this application.

X _____ (Property Owner Signature) _____ (Date)

X _____ (Property Owner Signature) _____ (Date)

NOTICE: The City of Newton staff may need access to the subject property during regular business hours and will attempt to contact the applicant/agent prior to any visit. Further, members of a regulatory authority of the city may visit the property as well.

APPLICANT / AGENT INFORMATION

NAME: _____ PHONE: _____ ALT. PHONE: _____

MAILING ADDRESS: _____ E-MAIL ADDRESS: _____

X _____ (Applicant/Agent Signature) _____ (Date)

NOTICE: The applicant/agent is the primary contact and may be any individual representing the establishment or property owner. The applicant/agent must also be legally authorized to make decisions on behalf of the Property Owner(s) in regards to the application.

----- OFFICE USE ONLY BELOW THIS LINE -----

CHECK APPROPRIATE PERMIT OR REVIEW PROCESS (CHECK ALL BEING SUBMITTED)

<input type="checkbox"/>	Zoning Review Application	<input type="checkbox"/>	Comprehensive Permit
<input type="checkbox"/>	Administrative Site Plan Review	<input type="checkbox"/>	Variance Application
<input type="checkbox"/>	Sign Permit	<input type="checkbox"/>	Historic Preservation Review
<input type="checkbox"/>	Special Permit/Site Plan Approval	<input type="checkbox"/>	Conservation Commission Review
<input type="checkbox"/>	Fence Appeal	<input type="checkbox"/>	Other, describe _____

Comments: _____

PERMIT INTAKE INITIALS AND DATE STAMP

NOTE: This form MUST accompany all other Department of Planning and Development applications.

To Be Completed By Applicant

GENERAL PERMIT APPLICATION INSTRUCTIONS

LAND USE PERMITTING CHECKLIST (City staff, check all that apply)

In most instances, any development or land disturbance activity within the City of Newton will require some type of review and approval from the Planning Department and one of the City's regulatory authorities. In all cases, this General Permit Application must accompany all land use permitting applications. A checklist of permit forms, by regulatory authority, is provided below:

Administrative

- Administrative Site Plan
- Review of Accessory Apartment
- Wireless Facility

Conservation Commission

- Request for Determination of Applicability
- Notice of Intent
- Abbreviated Notice of Resource Area Delineation

Historic Commission(s)

- Demolition Delay
- Historic District
- Landmark/Preservation Restriction

Land Use Committee

- Amendment to Special Permit/Site Plan
- Extension of Nonconforming Use or Building
- Site Plan Only
- Special Permit/Site Plan

Urban Design Commission

- Fence Appeal
- Sign Permit

Zoning Board of Appeals

- Appeals of the ISD Commissioner
- Comprehensive Permit
- Variance Application

NOTE: The Planning Department has many handouts that provide useful information regarding each of the permitting processes above. Petitioners should also be aware that approvals from other City or State agencies may be necessary as well.

APPLICATION COMPONENTS

For each permit application, the submission of inaccurate information or an incomplete application may delay the review and approval process for said permit. The items needed for a complete application will vary by permitting process, but generally include:

FORMS: A completed General Application and the project-specific permit application form. The signature of the Property Owner (or the Owner's legal representative) and the Applicant/Agent are **mandatory** on the General Permit Application.

FEES: To process any land use permit application, it must be submitted with the appropriate fee. The permit fee will vary by permitting process. All fees are subject to change, please contact the Department of Planning to verify the current fee.

SUBMITTALS: Each permit should also be accompanied by the necessary supporting documentation. The items needed to explain a project may vary, please refer to the permit application for the typical documents submitted for each permit application or contact a city planner. All applications should be submitted in hard and digital formats.

SUBMITTING THE APPLICATION

Bring the complete application to the Planning Department (at Inspectional Services customer service counter), on the second floor of City Hall at 1000 Commonwealth Avenue. A planner will review the application, answer any questions you may have and explain the next step of the permitting process.

If you have questions about an application or application process, please call the Department of Planning at (617) 796-1120 or visit the Planning Department, Monday-Friday: 8:30 a.m. to 5:00 p.m., and Tuesday 8:30 a.m. to 8:00 p.m.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.



Setti D. Warren
Mayor

City of Newton, Massachusetts
Department of Planning and Development
1000 Commonwealth Avenue Newton, Massachusetts 02459

Telephone
(617) 796-1120
Telefax
(617) 796-1086
www.newtonma.gov

Barney Heath
Director

ADMINISTRATIVE SITE PLAN REVIEW APPLICATION

DATE RECEIVED: _____ PROJECT #: _____ ZONING DISTRICT: _____

PROJECT ADDRESS: _____

PROJECT INFORMATION

IS THIS PROJECT A: WIRELESS FACILITY OTHER

CURRENT USE: _____ PROPOSED USE: _____

PROJECT DESCRIPTION (Briefly describe the project below):

REVIEWS BY OTHER REGULATORY AUTHORITIES? NO IF YES, DESCRIBE THE OF THOSE REVIEWS BELOW:

SITE INFORMATION

DESCRIBE THE CURRENT AND PAST USES, SITE, AND/OR STRUCTURE INFORMATION AS IT RELATES TO THIS APPLICATION:

ANY PRIOR SPECIAL PERMITS, VARIANCES, EASEMENTS, AND/OR SPECIAL RESTRICTIONS? NO IF YES, DESCRIBE BELOW:

THE PROJECT FILING MATERIALS SHOULD INCLUDE THE FOLLOWING INFORMATION IN CURRENT AND PROPOSED CONDITIONS:

REQUIRED SUBMITTAL CHECKLIST (CHECK ALL BEING SUBMITTED)					
<input type="checkbox"/>	Evidence of Religious or Nonprofit Educational Status	<input type="checkbox"/>	Plot Plan or As-built Survey Describing the Project Site	<input type="checkbox"/>	Site Topography (2-foot intervals)
<input type="checkbox"/>	Façade Elevations or Floor Plans	<input type="checkbox"/>	Delineation of Wetlands or Watercourses	<input type="checkbox"/>	Site Structures and Improvements
<input type="checkbox"/>	Utility Details	<input type="checkbox"/>	Landscaping	<input type="checkbox"/>	Site Encumbrances
<input type="checkbox"/>	Lot Area Per Unit	<input type="checkbox"/>	Number of Stories	<input type="checkbox"/>	Parking & Circulation

(All plans **MUST** be signed, stamped, dated, drawn to scale, and clearly labeled. An inaccurate or incomplete application will **NOT** be accepted. Please review the reverse of this form for additional information.)

NOTE: This Application MUST be accompanied by a General Permit Application.

ADMINISTRATIVE SITE PLAN REVIEW APPLICATION INSTRUCTIONS

DEVELOPMENT REVIEW TEAM MEETING: A Development Review Team (DRT) meeting is required prior to submitting any land use permitting or review application. During a DRT, City staff from several departments meet with prospective applicants to evaluate new proposals. These meetings are held weekly on Wednesday mornings. Most people find these meetings to be an efficient way to learn about issues they may want to address early on to ensure a successful project. After the DRT meeting, the next steps for pursuing this type of approval and handouts, further explaining the review and approval process, will be given to you.

APPLICATION SUBMISSION REQUIREMENTS: An application for site plan review will not be accepted by the Department of Planning and Development (Department) until it is determined to be complete. Whether a project qualifies for site plan review is determined by the Commissioner of Inspectional Services (Commissioner). **Inaccurate information or incomplete applications may delay the review of your project.** The items needed for a complete application include:

FORMS: A completed General Permit Application form and Administrative Site Plan Review Application. The signature of the Owner of the property (or the Owner's legal representative) and the Applicant/Agent is **mandatory** on the General Permit Application. Please provide current contact information on the General Application form to ensure City staff is able to contact the appropriate people regarding the project. On the Administrative Site Plan Review Application, be sure to fill in all possible fields with accurate information to describe the project.

FEES: The fee for an Administrative Site Plan Review is \$350.00. All fees are subject to change.

PROJECT DESCRIPTION: A detailed letter or narrative describing the project, which includes:

1. Parking and Circulation movements within and off the site. The Department will determine whether a parking and/or traffic study may also be required;
2. The ability to adequately dispose of sewage, refuse and other wastes and to control drainage on site;
3. The ability to screen parking areas and structure(s) from adjoining properties or streets through an acceptable means (i.e. walls, fences, plantings or other means);
4. The removal of trees or soil shall be minimized and any topographic changes shall be in keeping with the surrounding neighborhood;
5. Consideration of the configuration and location of structures on site and their relationship to nearby structures in terms of scale, materials, color, roof and cornice lines; and
6. Avoidance of the removal or disruption of historic resources on and off the site.

SUBMITTALS: Each application shall be accompanied by copies of the project filling materials identified on the front page of this form. Any plans that are submitted as part of an application should be signed, stamped, dated, drawn to scale, clearly labeled, and not exceeding 11" x 17", except as requested by the Department.

DOCUMENT FORMAT: All information submitted as part of an application shall be submitted in the following formats:

1. One (1) electronic copy submitted on a CD in .pdf or another format approved by the Department; and
2. Five (5) hard copies of the complete application packet, including completed forms.

APPLICATION REVIEW PROCESS: The Department, upon receipt of a complete application packet, shall transmit a copy to the Commissioner of Inspectional Services, the City Engineer, and the Commissioner of Public Works for review. A copy of the application must also be filed with the Fire Chief. Upon the receipt of any responses by the above-mentioned departments, the Department shall review said plans for compliance with the dimensional controls and parking regulations contained in the Newton Zoning Ordinance.

After said review, the Department may issue nonbinding recommendations to the petitioner for changes in the site plan, which shall be consistent with accepted and responsible planning principles. The Department shall also inform, in writing, the Commissioner that the petitioner has complied with the procedural requirements as stated above and whether the petition has complied with the regulations of the Newton Zoning Ordinance. This statement shall be made within sixty (60) days after receipt of the site plan application. In cases of wireless facilities, an advisory report will be issued to the Commissioner within three weeks after receipt of the site plan application.

INCOMPLETE APPLICATIONS WILL NOT BE ACCEPTED.

City of Newton, Massachusetts

General Permit Application & Administrative Site Plan Review Application

Boston College – AT&T oDAS

Property Location Information

Law Library

885 Centre St, Newton, MA 02459

SBL – 13021 0003

Land Use Current – 942

Land Use Description – Private College/University

Zoning – SR2

Kenny Cottle Library

885 Centre St, Newton, MA 02459

SBL – 13021 0003

Land Use Current – 942

Land Use Description – Private College/University

Zoning – SR2

Rubenstein Hall

90-100 Commonwealth Ave, Chestnut Hill, MA 02467

SBL – 63009 0002A

Land Use Current – 945

Land Use Description – Private Educational Affiliated Housing

Zoning – SR1

Carney Hall

140 Commonwealth Ave, Chestnut Hill, MA 02467

SBL – 63009 0002

Land Use Current – 942

Land Use Description – Private College/University

Zoning – SR1

City of Newton, Massachusetts

General Permit Application & Administrative Site Plan Review Application

Boston College – AT&T oDAS

Letter of Authorization



BOSTON COLLEGE

OFFICE OF GOVERNMENTAL AND COMMUNITY AFFAIRS

October 25, 2017

To: City of Newton
Department of Planning & Development
1000 Commonwealth Avenue
Newton, MA 02459

Re: Letter of Authorization – oDAS Installation, Boston College Campus
Law Library, 885 Centre St, Newton, MA 02459 – SBL 13021 0003
Kenny Cottle Library, 885 Centre St, Newton, MA 02459 – SBL 13021 0003
Carney Hall, 140 Commonwealth Ave, Chestnut Hill, MA 02467 – SBL 63009 0002
Rubenstein Hall, 90-100 Commonwealth Ave, Newton, MA 02467 – SBL 63009 0002A

To Whom It May Concern:

Permission is hereby granted to New Cingular Wireless PCS, LLC ("AT&T") or its employees, agents or consultants to submit any applications necessary to obtain the required approvals from the City of Newton, Massachusetts for installation of antennas and associated equipment as depicted on the plans for the referenced sites.

Very truly yours,

By: Jeanne Levesque
Date: 10/25/2017

Name: Jeanne Levesque
Director of Government Relations
Boston College

cc: Edward D. Pare, Jr., Esq., Brown Rudnick LLP
Alex Giannaras, EBI Consulting

62891916 v1

AT&T
61 Spit Brook Road
Floor 3
Nashua, NH 03060

October 25, 2017

To: City of Newton
Department of Planning & Development
1000 Commonwealth Avenue
Newton, MA 02459

Re: Letter of Authorization – oDAS Installation, Boston College Campus
Law Library, 885 Centre St, Newton, MA 02459 – SBL 13021 0003
Kenny Cottle Library, 885 Centre St, Newton, MA 02459 – SBL 13021 0003
Carney Hall, 140 Commonwealth Ave, Chestnut Hill, MA 02467 – SBL 63009 0002
Rubenstein Hall, 90-100 Commonwealth Ave, Newton, MA 02467 – SBL 63009 0002A

To Whom It May Concern:

Permission is hereby granted to EBI Consulting ("EBI") to submit any applications necessary to obtain the required approvals from the City of Newton, Massachusetts for installation of antennas and associated equipment as depicted on the plans for the referenced sites.

Very truly yours,

David Tower

By: David Tower

Date: 10/25/17

Name: David Tower
Real Estate and Construction Manager

City of Newton, Massachusetts

General Permit Application & Administrative Site Plan Review Application

Boston College – AT&T oDAS

FCC Licenses

REFERENCE COPY

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



**Federal Communications Commission
Wireless Telecommunications Bureau**

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: LESLIE WILSON
AT&T MOBILITY SPECTRUM LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign KNKA226	File Number
Radio Service CL - Cellular	
Market Numer CMA006	Channel Block A
Sub-Market Designator 0	

FCC Registration Number (FRN): 0014980726

Market Name Boston-Lowell-Brockton-Lawrenc
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Grant Date 09-09-2014	Effective Date 06-08-2017	Expiration Date 10-01-2024	Five Yr Build-Out Date	Print Date
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Site Information:

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

Address: 40 DORY ROAD

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

Antenna	1	2	3	4	5	6	7	8	9
Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	93.100	97.500	101.800	101.800	100.800	88.700	85.700	101.800	
Transmitting ERP (watts)	158.853	205.617	68.628	9.427	0.642	0.431	2.268	29.488	
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	93.100	97.500	101.800	101.800	100.800	88.700	85.700	101.800	
Transmitting ERP (watts)	0.459	5.462	56.429	198.529	168.403	38.276	3.953	0.786	
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315	
Antenna Height AAT (meters)	93.100	97.500	101.800	101.800	100.800	88.700	85.700	101.800	
Transmitting ERP (watts)	12.078	0.668	0.599	1.024	10.050	68.014	123.413	62.132	

Conditions:

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

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
20	43-03-11.8 N	071-16-02.1 W	179.2	59.4	

Address: 80 Diamond Hill Road

City: Candia County: ROCKINGHAM State: NH Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	73.200	111.000	159.400	159.000	98.400	148.300	88.600	75.600
Transmitting ERP (watts)	52.325	70.778	16.988	1.425	0.187	0.144	0.491	7.084
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	73.200	111.000	159.400	159.000	98.400	148.300	88.600	75.600
Transmitting ERP (watts)	0.343	3.851	33.085	100.313	84.855	19.494	2.061	0.299
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	73.200	111.000	159.400	159.000	98.400	148.300	88.600	75.600
Transmitting ERP (watts)	6.845	0.890	0.107	1.038	6.652	7.633	3.304	6.905

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
24	42-54-55.1 N	071-21-37.4 W	100.9	46.3	1011624

Address: 15 INDEPENDENCE DRIVE

City: LONDONDERRY County: ROCKINGHAM State: NH Construction Deadline:

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	35.900	30.000	44.800	52.100	54.500	72.000	68.000	66.500
Transmitting ERP (watts)	161.221	224.756	47.602	3.692	0.510	0.437	1.233	19.454
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	35.900	30.000	44.800	52.100	54.500	72.000	68.000	66.500
Transmitting ERP (watts)	0.510	3.172	43.604	213.248	156.639	22.374	1.350	0.496
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	35.900	30.000	44.800	52.100	54.500	72.000	68.000	66.500
Transmitting ERP (watts)	11.168	0.691	0.533	0.586	7.854	87.092	266.329	94.294

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
25	42-00-32.6 N	071-19-15.2 W	90.5	51.8	

Address: 75 WASHINGTON SST

City: PLAINVILLE County: NORFOLK State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	64.500	61.200	95.600	96.100	94.300	64.100	46.000	48.800
Transmitting ERP (watts)	84.752	97.052	31.772	5.158	0.550	0.224	2.803	20.645
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	64.500	61.200	95.600	96.100	94.300	64.100	46.000	48.800
Transmitting ERP (watts)	0.380	5.181	37.013	100.829	79.042	20.699	2.118	0.824
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	64.500	61.200	95.600	96.100	94.300	64.100	46.000	48.800
Transmitting ERP (watts)	24.577	1.736	0.715	2.292	18.444	139.378	281.180	142.336

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
26	41-46-57.1 N	070-44-06.5 W	12.5	58.8	

Address: KENDRICK ROAD

City: WAREHAM County: PLYMOUTH State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	46.500	56.700	59.800	50.600	39.100	32.800
Transmitting ERP (watts)	186.898	242.551	75.777	10.617	0.738	0.508	2.730	35.860
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	46.500	56.700	59.800	50.600	39.100	32.800
Transmitting ERP (watts)	0.361	5.818	47.861	150.309	121.062	28.493	2.933	0.991
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	46.500	56.700	59.800	50.600	39.100	32.800
Transmitting ERP (watts)	18.390	1.111	0.538	1.628	13.482	98.897	203.625	103.938

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

File Number:

Print Date:

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
27	41-53-35.2 N	070-56-35.0 W	17.7	106.1	1210211

Address: 326 W GROVE ST

City: Middleboro County: PLYMOUTH State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	47.500	46.300	30.000	37.000	40.900	39.500	51.600	42.300
Transmitting ERP (watts)	125.283	153.432	54.208	6.550	0.674	0.363	2.675	27.340
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	47.500	46.300	30.000	37.000	40.900	39.500	51.600	42.300
Transmitting ERP (watts)	0.351	5.901	52.455	151.828	120.612	27.887	2.679	0.991
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	47.500	46.300	30.000	37.000	40.900	39.500	51.600	42.300
Transmitting ERP (watts)	14.428	1.006	0.875	1.215	13.317	87.541	159.641	85.795

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
28	42-14-21.9 N	070-51-09.3 W	54.9	55.8	

Address: 168 Turkey Hill Lane

City: Cohasset County: NORFOLK State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	99.800	98.300	97.600	71.700	64.800	62.900	86.700	99.100
Transmitting ERP (watts)	185.522	243.217	80.727	11.598	0.756	0.499	2.589	34.953
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	99.800	98.300	97.600	71.700	64.800	62.900	86.700	99.100
Transmitting ERP (watts)	0.521	6.371	65.693	238.024	196.107	43.191	4.256	0.906
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	99.800	98.300	97.600	71.700	64.800	62.900	86.700	99.100
Transmitting ERP (watts)	9.488	0.543	0.538	1.234	8.977	53.553	85.290	45.661

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
29	41-56-02.0 N	070-35-08.0 W	82.9	128.0	1007828

Address: 265 STATE ROAD

City: PLYMOUTH County: PLYMOUTH State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.000	128.000	128.000	123.500	92.200	86.600	84.900	120.500
Transmitting ERP (watts)	23.222	24.154	10.475	1.931	0.466	0.109	1.398	6.965
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.000	128.000	128.000	123.500	92.200	86.600	84.900	120.500
Transmitting ERP (watts)	0.346	4.427	33.055	88.168	72.485	17.790	1.831	0.701
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	128.000	128.000	128.000	123.500	92.200	86.600	84.900	120.500
Transmitting ERP (watts)	9.680	0.561	0.550	1.216	9.292	54.685	90.439	45.409

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
30	42-12-47.6 N	071-32-33.4 W	128.0	58.5	

Address: 26 LUMBER STREET

City: HOPKINTON County: MIDDLESEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	68.900	93.200	99.800	91.500	55.300	59.600	35.700	76.400
Transmitting ERP (watts)	158.662	188.312	64.228	8.830	0.704	0.395	4.080	30.535
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	68.900	93.200	99.800	91.500	55.300	59.600	35.700	76.400
Transmitting ERP (watts)	0.432	6.612	61.028	195.296	166.263	35.500	3.748	0.703
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	68.900	93.200	99.800	91.500	55.300	59.600	35.700	76.400
Transmitting ERP (watts)	18.831	1.074	0.590	1.783	15.144	103.799	219.501	97.060

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
31	42-38-27.0 N	070-36-24.8 W	36.6	38.7	

Address: 38 Thatcher Rd

City: ROCKLAND County: ESSEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	69.500	69.500	69.500	69.500	69.500	66.700	58.400	60.100
Transmitting ERP (watts)	170.519	227.554	76.127	10.393	0.706	0.470	2.520	32.796
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	69.500	69.500	69.500	69.500	69.500	66.700	58.400	60.100
Transmitting ERP (watts)	0.462	5.689	58.840	206.264	174.760	39.385	4.197	0.837
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	69.500	69.500	69.500	69.500	69.500	66.700	58.400	60.100
Transmitting ERP (watts)	20.761	1.510	0.812	1.238	15.269	110.467	237.338	124.965

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
32	42-36-37.9 N	071-33-28.9 W	148.4	46.3	

Address: 142 LOWELL RD

City: GROTON County: MIDDLESEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	129.600	133.000	121.700	118.300	83.000	99.300	81.700	86.000
Transmitting ERP (watts)	209.658	291.175	91.511	11.206	1.156	0.596	4.998	40.617
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	129.600	133.000	121.700	118.300	83.000	99.300	81.700	86.000
Transmitting ERP (watts)	0.597	10.042	80.421	284.569	246.599	46.898	5.186	0.906
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	129.600	133.000	121.700	118.300	83.000	99.300	81.700	86.000
Transmitting ERP (watts)	18.748	1.375	0.781	1.196	15.487	106.791	230.014	118.184

Licensee Name: AT&T MOBILITY SPECTRUM LLC

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
33	42-08-01.1 N	070-43-57.5 W	68.3	80.5	1017973

Address: 178 EAMES WAY

City: Marshfield County: PLYMOUTH State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	125.300	128.600	128.200	125.800	107.800	113.100	97.600	105.400
Transmitting ERP (watts)	156.993	202.510	73.503	10.210	0.666	0.415	2.429	32.615
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	125.300	128.600	128.200	125.800	107.800	113.100	97.600	105.400
Transmitting ERP (watts)	0.482	5.988	62.083	217.536	187.313	40.576	4.382	0.869
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	125.300	128.600	128.200	125.800	107.800	113.100	97.600	105.400
Transmitting ERP (watts)	21.007	1.466	0.829	1.219	15.907	109.305	228.002	122.541

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
34	41-42-11.1 N	070-46-47.1 W	14.3	59.4	

Address: 55 BENSONBROOK ROAD

City: MARION County: PLYMOUTH State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	51.300	62.700	66.200	68.700	66.600	60.600	47.100	51.900
Transmitting ERP (watts)	161.079	196.082	67.519	9.213	0.702	0.419	4.077	32.479
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	51.300	62.700	66.200	68.700	66.600	60.600	47.100	51.900
Transmitting ERP (watts)	0.446	6.712	62.074	197.767	163.770	38.273	3.886	0.801
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	51.300	62.700	66.200	68.700	66.600	60.600	47.100	51.900
Transmitting ERP (watts)	3.819	0.784	0.433	6.729	64.256	202.261	164.916	37.606

Licensee Name: AT&T MOBILITY SPECTRUM LLC

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
35	42-21-20.1 N	071-33-16.6 W	156.1	26.5	

Address: 157 UNION STREET

City: MARLBOROUGH County: MIDDLESEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	119.900	113.500	108.400	76.200	73.000	51.900	77.300
Transmitting ERP (watts)	280.304	377.489	119.970	14.810	1.525	0.802	6.660	52.209
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	119.900	113.500	108.400	76.200	73.000	51.900	77.300
Transmitting ERP (watts)	0.801	13.105	105.660	375.949	325.389	63.339	6.978	1.142
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	97.800	119.900	113.500	108.400	76.200	73.000	51.900	77.300
Transmitting ERP (watts)	30.606	2.831	1.046	2.632	27.909	187.774	419.392	197.441

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
36	42-39-54.6 N	070-38-19.9 W	59.4	44.5	

Address: 68 JOHNSON ROAD

City: ROCKPORT County: ESSEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	103.000	103.000	103.000	100.400	95.400	85.100	98.100	103.000
Transmitting ERP (watts)	126.741	159.124	54.189	7.443	0.564	0.334	3.098	25.685
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	103.000	103.000	103.000	100.400	95.400	85.100	98.100	103.000
Transmitting ERP (watts)	0.353	5.360	49.103	157.255	130.117	30.639	2.895	0.641
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	103.000	103.000	103.000	100.400	95.400	85.100	98.100	103.000
Transmitting ERP (watts)	15.787	0.974	0.495	1.442	11.730	84.942	168.331	87.120

Licensee Name: AT&T MOBILITY SPECTRUM LLC

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
37	42-41-29.8 N	071-47-30.8 W	233.8	47.9	

Address: 1140 Greenville Rd

City: ASHBY County: MIDDLESEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	138.200	163.500	145.000	68.800	30.000	30.000	30.000
Transmitting ERP (watts)	301.383	343.844	123.915	17.212	1.267	0.862	4.339	57.968
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	138.200	163.500	145.000	68.800	30.000	30.000	30.000
Transmitting ERP (watts)	0.559	6.546	72.077	254.800	226.824	50.359	4.678	0.979
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	138.200	163.500	145.000	68.800	30.000	30.000	30.000
Transmitting ERP (watts)	35.557	2.084	1.375	2.194	29.159	209.483	410.600	215.057

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
38	42-38-54.9 N	071-47-40.6 W	240.8	47.2	

Address: 601-603 FITCHBURG STATE ROAD

City: ASHBY County: MIDDLESEX State: MA Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	31.100	159.800	170.800	147.700	56.300	30.000	30.000	30.000
Transmitting ERP (watts)	204.865	233.420	85.530	11.768	0.897	0.575	2.961	39.554
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	31.100	159.800	170.800	147.700	56.300	30.000	30.000	30.000
Transmitting ERP (watts)	0.570	6.676	74.271	261.076	238.587	50.169	4.787	1.001
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	31.100	159.800	170.800	147.700	56.300	30.000	30.000	30.000
Transmitting ERP (watts)	24.123	1.410	0.948	1.499	20.272	140.599	280.157	146.756

Licensee Name: AT&T MOBILITY SPECTRUM LLC

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
40	43-05-58.2 N	070-47-28.6 W	7.6	67.4	

Address: 165 GOSLING RD

City: NEWINGTON County: ROCKINGHAM State: NH Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	34.000	45.500	68.500	72.400	58.800	51.900	57.200	52.000
Transmitting ERP (watts)	205.727	278.300	62.928	5.059	0.711	0.597	1.577	25.136
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	34.000	45.500	68.500	72.400	58.800	51.900	57.200	52.000
Transmitting ERP (watts)	0.559	3.335	47.419	236.351	181.187	26.867	1.510	0.563
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	34.000	45.500	68.500	72.400	58.800	51.900	57.200	52.000
Transmitting ERP (watts)	10.525	0.618	0.497	0.555	7.391	82.592	243.998	90.540

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
41	43-04-39.1 N	071-07-30.3 W	107.0	60.7	1231475

Address: 150 Raymond Road

City: Nottingham County: ROCKINGHAM State: NH Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	54.900	95.800	122.100	119.300	102.200	66.300	44.100	30.000
Transmitting ERP (watts)	160.334	230.049	54.265	4.271	0.586	0.522	1.415	21.993
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	54.900	95.800	122.100	119.300	102.200	66.300	44.100	30.000
Transmitting ERP (watts)	0.493	3.289	48.427	238.724	177.920	27.618	1.619	0.581
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	54.900	95.800	122.100	119.300	102.200	66.300	44.100	30.000
Transmitting ERP (watts)	10.353	0.693	0.601	0.662	8.753	100.864	305.315	110.743

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

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Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
42	43-13-24.3 N	071-14-23.2 W	189.0	38.7	

Address: 50 OLD CANTERBURY RD

City: NORTHWOOD County: ROCKINGHAM State: NH Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	43.800	80.800	68.900	30.000	53.500	30.000
Transmitting ERP (watts)	114.248	162.456	37.049	2.808	0.392	0.366	0.961	16.015
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	43.800	80.800	68.900	30.000	53.500	30.000
Transmitting ERP (watts)	0.544	3.573	49.915	233.638	184.420	30.453	1.413	0.618
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	30.000	30.000	43.800	80.800	68.900	30.000	53.500	30.000
Transmitting ERP (watts)	8.132	0.494	0.387	0.467	6.390	72.302	182.164	77.916

Location	Latitude	Longitude	Ground Elevation (meters)	Structure Hgt to Tip (meters)	Antenna Structure Registration No.
43	42-59-40.7 N	070-46-58.5 W	12.5	59.4	

Address: 96 GROVE RD

City: RYE County: ROCKINGHAM State: NH Construction Deadline: 03-29-2013

Antenna: 1 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	49.700	62.100	64.000	64.300	63.700	45.100	38.900	54.200
Transmitting ERP (watts)	146.515	206.846	49.164	3.766	0.505	0.452	1.193	17.877
Antenna: 2 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	49.700	62.100	64.000	64.300	63.700	45.100	38.900	54.200
Transmitting ERP (watts)	0.464	2.913	42.460	206.462	152.606	24.148	1.373	0.460
Antenna: 3 Azimuth (from true north)	0	45	90	135	180	225	270	315
Antenna Height AAT (meters)	49.700	62.100	64.000	64.300	63.700	45.100	38.900	54.200
Transmitting ERP (watts)	10.168	0.644	0.536	0.576	7.457	86.483	257.603	87.494

Control Points:

Control Pt. No. 2

Address: 100 LOWDER BROOK DR

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

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNKA226

File Number:

Print Date:

Waivers/Conditions:

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

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

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: LESLIE WILSON
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign KNLF216	File Number
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0003291192

Grant Date 06-02-2015	Effective Date 06-13-2017	Expiration Date 06-23-2025	Print Date
Market Number MTA008	Channel Block A	Sub-Market Designator 17	
Market Name Boston-Providence			
1st Build-out Date 06-23-2000	2nd Build-out Date 06-23-2005	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: KNLF216

File Number:

Print Date:

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

Referenced Copy

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: LESLIE WILSON
AT&T MOBILITY SPECTRUM LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign KNLF954	File Number 0007753171
Radio Service CW - PCS Broadband	

FCC Registration Number (FRN): 0014980726

Grant Date 06-29-2017	Effective Date 06-29-2017	Expiration Date 06-27-2027	Print Date 06-30-2017
Market Number BTA051	Channel Block D		Sub-Market Designator 0
Market Name Boston, MA			
1st Build-out Date 06-27-2002	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: KNLF954

File Number: 0007753171

Print Date: 06-30-2017

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

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: LESLIE WILSON
AT&T MOBILITY SPECTRUM LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

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

FCC Registration Number (FRN): 0014980726

Table with columns: Grant Date, Effective Date, Expiration Date, Print Date, Market Number, Channel Block, Sub-Market Designator, Market Name, 1st Build-out Date, 2nd Build-out Date, 3rd Build-out Date, 4th Build-out Date.

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: AT&T MOBILITY SPECTRUM LLC

Call Sign: WPWU950

File Number:

Print Date:

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

Reference Copy

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: LESLIE WILSON
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign WPZA235	File Number
Radio Service WZ - 700 MHz Lower Band (Blocks C, D)	

FCC Registration Number (FRN): 0003291192

Grant Date 12-11-2003	Effective Date 06-14-2017	Expiration Date 06-13-2019	Print Date
Market Number EAG701	Channel Block D	Sub-Market Designator 0	
Market Name Northeast			
1st Build-out Date 06-13-2019	2nd Build-out Date	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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

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

Conditions:

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

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

Licensee Name: NEW CINGULAR WIRELESS PCS, LLC

Call Sign: WPZA235

File Number:

Print Date:

This application is granted pursuant to the Commission's Order In the Matter of Qualcomm Incorporated Petition for Declaratory Ruling, WT Docket No. 05-7, FCC 06-155, released October 13, 2006.

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: NEW CINGULAR WIRELESS PCS, LLC

ATTN: LESLIE WILSON
NEW CINGULAR WIRELESS PCS, LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign WQIZ616	File Number
Radio Service WY - 700 MHz Lower Band (Blocks A, B & E)	

FCC Registration Number (FRN): 0003291192

Grant Date 06-26-2008	Effective Date 06-14-2017	Expiration Date 03-07-2021	Print Date
Market Number BEA003	Channel Block E	Sub-Market Designator 0	
Market Name Boston-Worcester-Lawrence-Lowe			
1st Build-out Date 03-07-2017	2nd Build-out Date 03-07-2021	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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

Conditions:

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

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

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Federal Communications Commission
Wireless Telecommunications Bureau

RADIO STATION AUTHORIZATION

LICENSEE: AT&T MOBILITY SPECTRUM LLC

ATTN: LESLIE WILSON
AT&T MOBILITY SPECTRUM LLC
208 S AKARD ST., RM 1016
DALLAS, TX 75202

Call Sign WQJU427	File Number
Radio Service WY - 700 MHz Lower Band (Blocks A, B & E)	

FCC Registration Number (FRN): 0014980726

Grant Date 01-06-2009	Effective Date 06-08-2017	Expiration Date 06-13-2019	Print Date
Market Number CMA006	Channel Block B	Sub-Market Designator 0	
Market Name Boston-Lowell-Brockton-Lawrenc			
1st Build-out Date 12-13-2016	2nd Build-out Date 06-13-2019	3rd Build-out Date	4th Build-out Date

Waivers/Conditions:

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

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

Conditions:

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

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

City of Newton, Massachusetts

General Permit Application & Administrative Site Plan Review Application

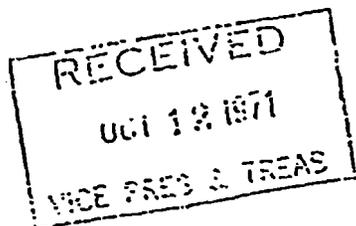
Boston College – AT&T oDAS

Evidence of Owner Nonprofit Educational Status

Bos.-EO-71-971

Address any reply to: P O Box 9122, JFK P. O., Boston, Mass 02203

Department of the Treasury



District Director.
Internal Revenue Service

Date: OCT 8 1971 | In reply refer to: AU:EO:RC

Trustees of Boston College
Chestnut Hill, Mass. 02167
TAX ID # 04-2103545

- d -

AMC

Gentlemen:

Purpose: Educational

Accounting Period Ending: June 30

On the basis of the information submitted and the understanding that your operations will continue as evidenced to date or will conform to those proposed in your application, we have concluded that you are exempt from Federal income tax as an organization described in section 501(c)(3) of the Internal Revenue Code. Any changes in operation from those described, or in your character or purposes, must be reported immediately to the District Director shown above for consideration of their effect upon your exempt status. You must also report any change in your name or address.

We have further determined that you are an organization described in section 170(b)(1)(A) of the Code (other than in clauses (vii) and (viii)) and not a private foundation within the meaning of section 509(a).

For years, beginning prior to January 1, 1970, you are not required to file the annual information return, Form 990-A. For subsequent years, please refer to the instructions accompanying the Form 990 for that particular year to determine whether you are required to file. If filing is required, you must file the Form 990 by the 15th day of the fifth month after the end of your annual accounting period.

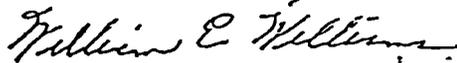
You are not required to file Federal income tax returns unless you are subject to the tax on unrelated business income under section 511 of the Code. If you are subject to this tax, you must file an income tax return on Form 990-T. In this letter we are not determining whether any of your present or proposed activities are unrelated trade or business as defined in section 513 of the Code.

Contributions made to you are deductible by donors as provided in section 170 of the Code. Bequests, legacies, devises, transfers or gifts to or for your use are deductible for Federal estate and gift tax purposes under the provisions of section 2055, 2106 and 2522 of the Code.

You are not liable for the taxes imposed under the Federal Insurance Contributions Act (social security taxes) unless you file a waiver of exemption certificate as provided in such act. You are not liable for the tax imposed under the Federal Unemployment Tax Act. Inquiries about the waiver of exemption certificate for social security taxes should be addressed to your local Internal Revenue Service office, as should any questions concerning excise, employment or other Federal taxes.

This is a determination letter.

Sincerely yours,



WILLIAM E. WILLIAMS

District Director

This letter supersedes our letter dated February 9, 1943. ✓

City of Newton, Massachusetts

General Permit Application & Administrative Site Plan Review Application

Boston College – AT&T oDAS

Site Plans

GENERAL CONSTRUCTION NOTES:

- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, & LOCAL CODES, & COMPLY WITH AT&T SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT "DIG SAFE 1888 DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, & ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, & SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- CONTRACTOR SHALL COORDINATE WITH BOSTON COLLEGE TO DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO BOSTON COLLEGE PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE BOSTON COLLEGE REPRESENTATIVE PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE BOSTON COLLEGE REPRESENTATIVE, & COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T CONSTRUCTION MANAGER & BOSTON COLLEGE REPRESENTATIVE.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, AT&T PROJECT CONSTRUCTION MANAGER, & BOSTON COLLEGE IMMEDIATELY.
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS & SPECIFICATIONS FOR THIS PROJECT.
- ALL ROOF WORK SHALL ABIDE BY THE REQUIREMENTS & SPECIFICATIONS SET FORTH IN THE ROOFING MANUFACTURER'S GUARANTEE.
- CONTRACTOR SHALL REMOVE ALL RUBBISH & DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH BOSTON COLLEGE & TAKE PRECAUTIONS TO MINIMIZE IMPACT & DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH AT&T WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK. AT&T SHALL PROVIDE ONE COPY OF THOSE AS-BUILT DRAWINGS TO BOSTON COLLEGE AS WELL AS AN ELECTRONIC COPY, IF AVAILABLE, OF THE CAD DRAWINGS.
- ANTENNAS & CABLES ARE TYPICALLY PROVIDED BY AT&T. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY AT&T. ALL ITEMS NOT PROVIDED BY AT&T SHALL BE PROVIDED & INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY AT&T.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY AT&T. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED, & PAID FOR, BY THE CONTRACTOR. AT&T OR ITS SUB-LICENSEES, SHALL IN ADVANCE INFORM BOSTON COLLEGE IN WRITING OF ALL APPLICATIONS TO BE FILED & SHALL PROVIDE ADVANCE NOTICE TO BOSTON COLLEGE OF ALL PUBLIC MEETINGS & HEARINGS SCHEDULED IN CONNECTION WITH SUCH APPLICATIONS.
- CONTRACTOR SHALL START UP HVAC UNITS & SYNCHRONIZE THE THERMOSTATS.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS & REQUIREMENTS AS WELL AS WITH THE INPUT & APPROVAL OF BOSTON COLLEGE.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW & APPROVAL PRIOR TO FABRICATION.
- UNLESS OTHERWISE NOTED AT&T SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS-T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY AT&T FOR INSTALLATION BY CONTRACTOR.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS & LOCATED ACCORDING TO AT&T SPECIFICATIONS, & AS SHOWN IN THESE PLANS.
- THE CONTRACTOR SHALL SUPERVISE & DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES & PROCEDURES & FOR COORDINATING ALL PORTIONS OF THE WORK UNDER & IN COMPLIANCE WITH THE CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE W/ALL APPLICABLE OSHA STANDARDS & RECOMMENDATIONS & SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE & PPM & CONSTRUCTION DEVICES SUCH AS WELDING & FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
- CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ALL INTERIOR FINISHES.
- CONTRACTOR SHALL ADHERE TO ALL BOSTON COLLEGE REQUIREMENTS FOR SAFETY & CONSTRUCTION ON CAMPUS. THESE INCLUDE BUT ARE NOT LIMITED TO CAMPUS SAFETY PROGRAM & THE BOSTON COLLEGE CONSTRUCTION SPECIFICATION REQUIREMENTS.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL ROLLED SHAPES, PLATES, & BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:

ASTM A-992, GRADE 50	ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE.
ASTM A-36	ALL OTHER ROLLED SHAPES, PLATES & BARS UNLESS NOTED OTHERWISE.
ASTM A-500, GRADE B	HSS SECTION (SQUARE, RECTANGULAR, ROUND)
ASTM A-325, TYPE SC OR N	ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS.
F1554, GRADE 36	ALL ANCHORS BOLTS, UNLESS NOTED OTHERWISE.
ASTM A-53, GRADE B	STEEL PIPE
- ALL WELDING SHALL BE DONE USING E70XX ELECTRODES & WELDING SHALL CONFORM TO AISC & AWS D1.1 WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 14TH EDITION, WHERE WELD LENGTH IS NOT INDICATED, USE FULL LENGTH WELD. AT THE COMPLETION OF ALL WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA.) SUPPLIED WITH A NUT & WASHER UNDER TURNED END & SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN & DETAILED ON STRUCTURAL DRAWINGS.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
- CONCRETE EXPANSION ANCHORS & EPOXY ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. MANUFACTURER'S MINIMUM CONCRETE EDGE DISTANCE SHALL BE MAINTAINED DURING INSTALLATION.
- USE PRECAUTIONS & PROCEDURES PER AWS D1.1 WHEN WELDING GALVANIZED METALS.
- TOUCHUP ALL DAMAGED GALVANIZED STEEL WITH VERIZON WIRELESS APPROVED COLD ZINC, "GALVANOX", "DRY GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. TOUCHUP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.
- ALL PROPOSED STEEL SHALL CONFORM TO HIGH STRENGTH STEEL MATERIALS, ASTM A36 WITH A MINIMUM STRENGTH OF 36 KSI.
- ALL EXISTING BEAM & COLUMN DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR PRIOR TO FABRICATION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS & THOSE SHOWN SHALL BE REPORTED TO DEWBERRY ENGINEER IMMEDIATELY.
- CONTRACTOR TO MAKE ALL NECESSARY PRECAUTIONS & SECURE ALL PERMITS REQUIRED FOR WELDING ON THE ROOF.
- CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW & APPROVAL BY ENGINEER.
- ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123/A123M-00 HOT-DIP GALVANIZED FINISH UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, & WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED. REPAIR DAMAGED GALVANIZED COATINGS ON GALVANIZED ITEMS WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A780 & MANUFACTURER'S WRITTEN INSTRUCTIONS, PRIOR TO COMPLETION OF WORK.

GENERAL ELECTRICAL NOTES:

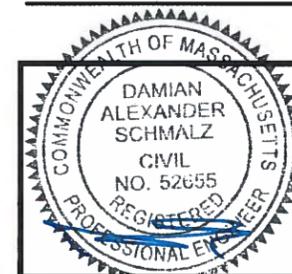
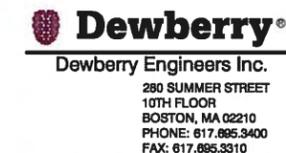
- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS & WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, & EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT & THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT & DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY & HEALTH ACT (O.S.H.A.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE & PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT & AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS & EQUIPMENT SHALL BE NEW & IN PERFECT CONDITION WHEN INSTALLED & SHALL BE OF THE BEST GRADE & OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED & APPROVED BY UNDERWRITER'S LABORATORY & SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY & ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA & NBFU.
- ALL CONDUIT INSTALLED MAY BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY & LOCAL CODES, O.S.H.A & NFPA 70E.
- CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS & PAY ALL REQUIRED FEES
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, & CIRCUITS.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- NO SHARED NEUTRAL IS ALLOWED FOR LIGHTING FIXTURES.
- ALL BUILDING WIRE #12 TO # 6 SHALL BE STRANDED COPPER TYPE THWN-THHN. CONDUCTORS #4 & LARGER SHALL BE COPPER TYPE XHHW.
- ALL CIRCUIT BREAKERS, FUSES & ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED. SEE SCHEDULES FOR RATINGS.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES
- PATCH, REPAIR & PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, W PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
- LOCATION OF TENDONS &/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN &, THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS & EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH FIRESTOP DETAILS.
- WIRE & CABLE CONDUCTORS SHALL BE STRANDED COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY STATED OTHERWISE ON DRAWINGS.
- VERIFY ALL CONDUIT ROUTING W/OWNER REP. & AT&T MOBILITY C.M. NO OTHER SURFACE MOUNTED CONDUITS WILL BE ALLOWED OTHER THAN IN CHASES & ABOVE CEILINGS.
- ALL MATERIALS SHALL BE U.L. LISTED.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR & SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL. FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL & MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
 - CONDUIT RUNS MAY BE SURFACE MOUNTED ON CEILINGS OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- COORDINATE THE ELECTRICAL SERVICE WITH BUILDING OWNER.
- GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS & FURNISH TO DISPATCH COMMUNICATIONS ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, & FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK & LEAVE WORK IN A COMPLETE & UNDAMAGED CONDITION.
- ALL WALL PENETRATIONS SHALL BE FIRE STOPPED WITH FS-ONE HIGH PERFORMANCE INTUMESCENT FIRE STOP BY HILTI OR APPROVED EQUAL. INSTALL PER MANUFACTURERS RECOMMENDATIONS.



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CONSTRUCTION DRAWINGS

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0	06/30/17	FOR CONSTRUCTION
A	02/02/17	FOR COMMENT



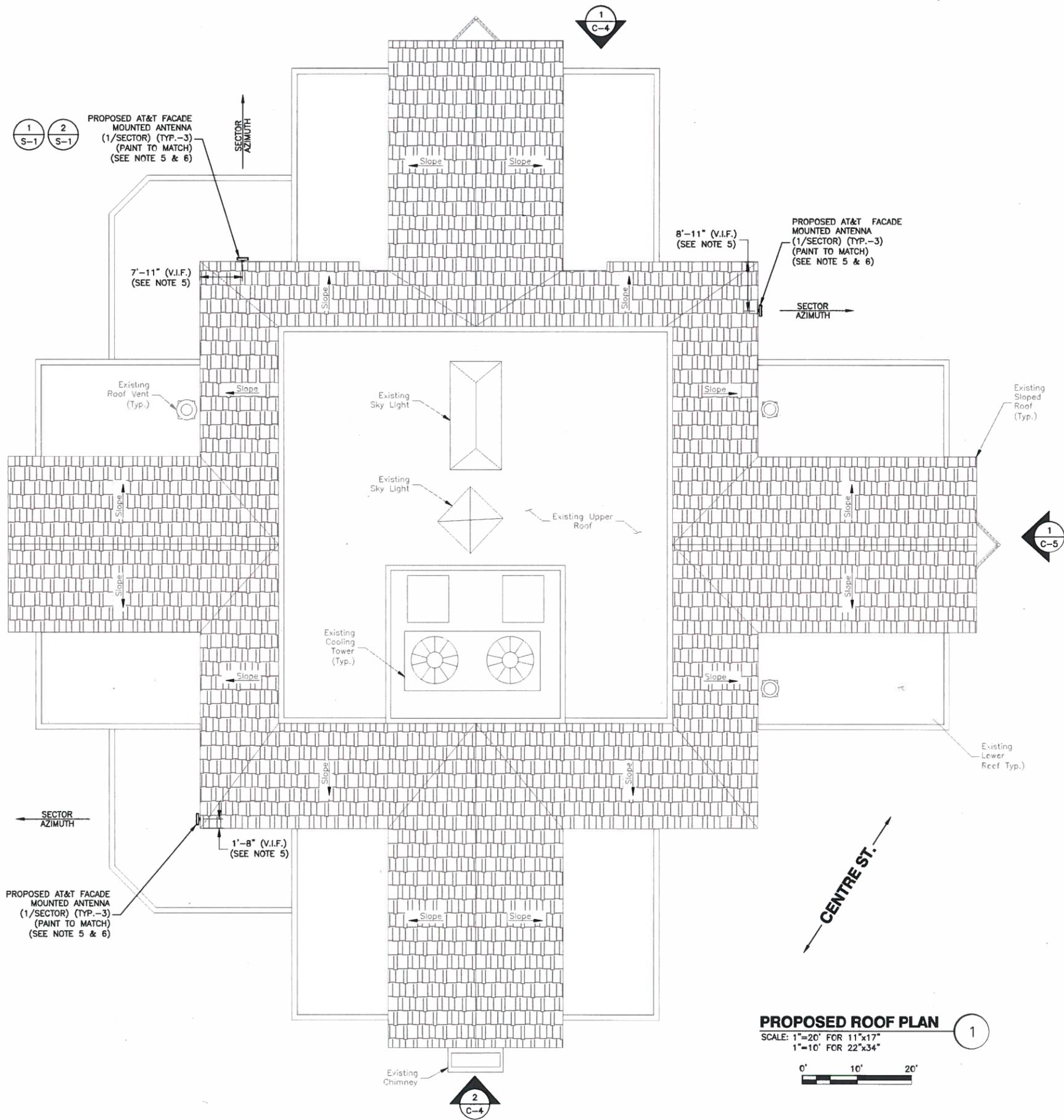
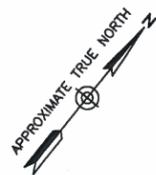
DRAWN BY:	MR
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE

GENERAL NOTES

SHEET NUMBER



- NOTES:**
1. NORTH SHOWN AS APPROXIMATE.
 2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 4. PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
 5. PROPOSED ANTENNAS TO BE ALIGNED WITH EXISTING FLASHING SEAMS. VERIFY FINAL LOCATION & ALIGNMENT WITH AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
 6. ANTENNAS & SUPPORT HARDWARE SHALL BE PAINTED TO MATCH EXISTING FLASHING IN COLOR & TEXTURE. FINAL COLOR MATCH TO BE APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE.

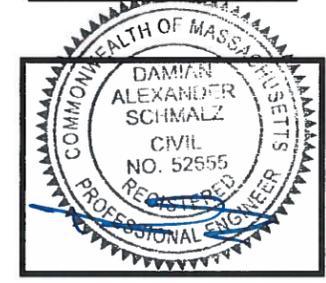
PROPOSED ROOF PLAN
 SCALE: 1"=20' FOR 11"x17"
 1"=10' FOR 22"x34"
 0' 10' 20'

550 COCHITUATE ROAD
 SUITES 13 & 14
 FRAMINGHAM, MA 01701

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A	02/02/17	FOR COMMENT

Dewberry Engineers Inc.
 280 SUMMER STREET
 10TH FLOOR
 BOSTON, MA 02210
 PHONE: 617.665.3400
 FAX: 617.665.3310

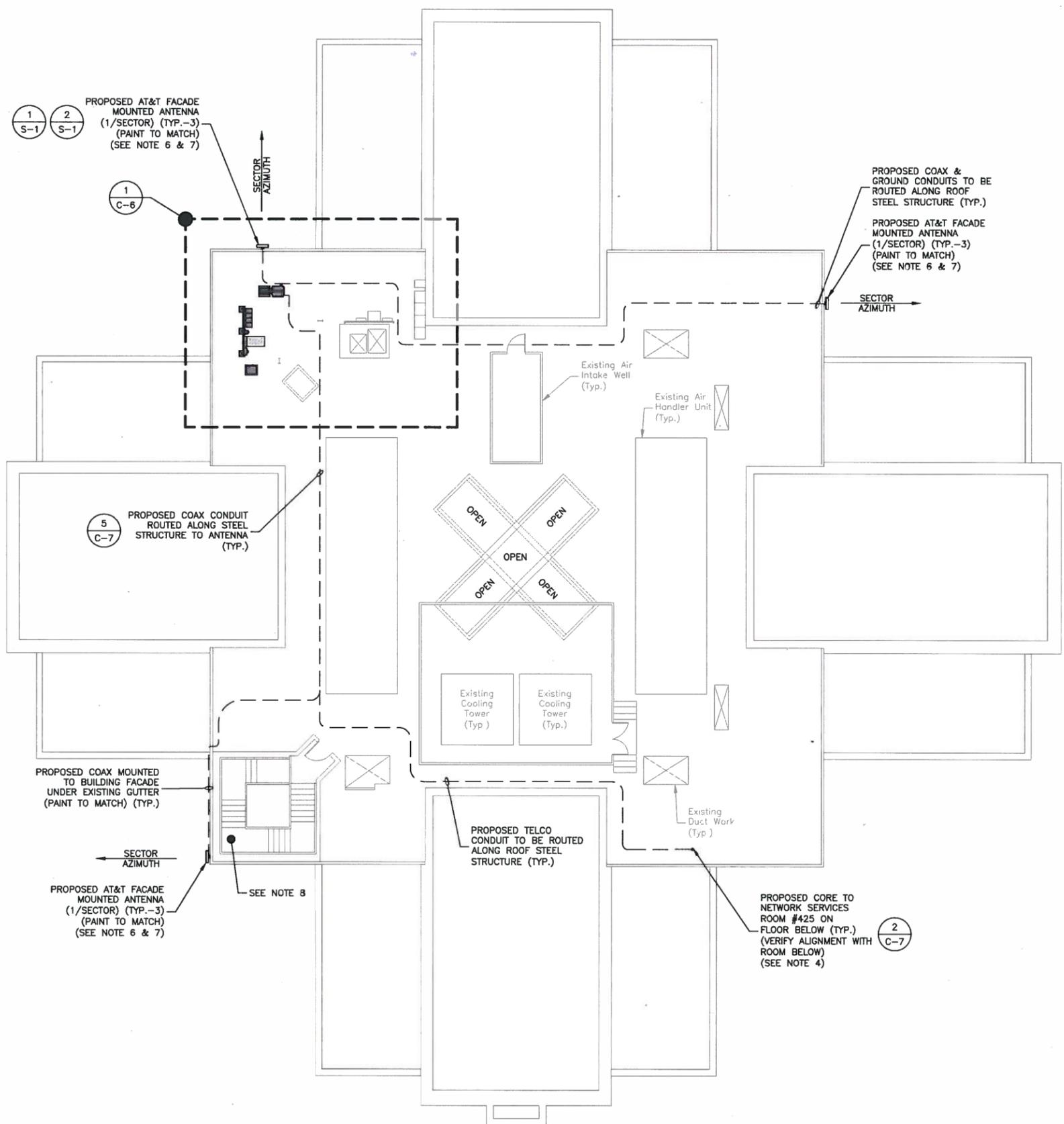
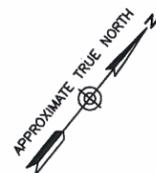


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JOB NUMBER:	50057154
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NEWTON CAMPUS
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 NEWTON, MA 02459

SHEET TITLE	
PROPOSED ROOF PLAN	
SHEET NUMBER	

C-1



NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
4. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
5. PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
6. ANTENNAS & SUPPORT HARDWARE SHALL BE PAINTED TO MATCH EXISTING FLASHING IN COLOR & TEXTURE. FINAL COLOR MATCH TO BE APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
7. PROPOSED ANTENNAS TO BE ALIGNED WITH EXISTING FLASHING SEAMS. VERIFY FINAL LOCATION, ALIGNMENT, & AZIMUTH WITH AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
8. DO NOT RESTRICT EGRESS PATH IN STAIRWELL.

PROPOSED PENTHOUSE PLAN

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

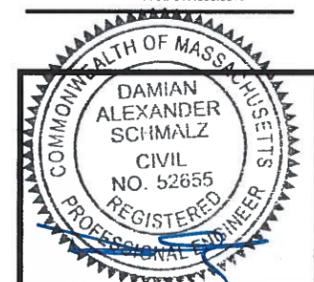


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280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.865.3400
FAX: 617.865.3310



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SITE ADDRESS	

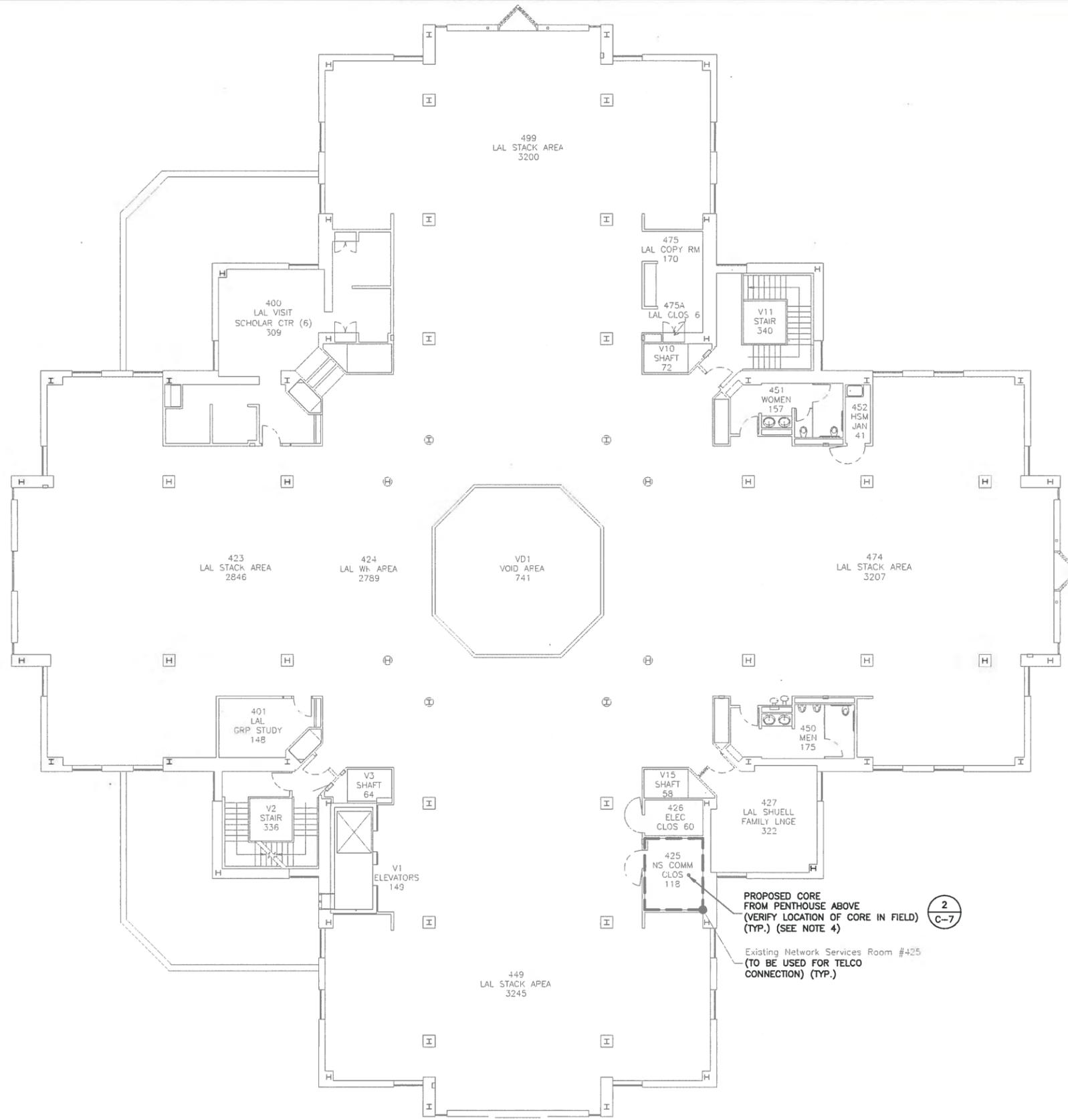
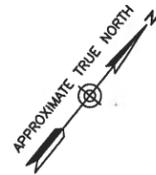
NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE

PROPOSED
PENTHOUSE PLAN

SHEET NUMBER

C-2



PROPOSED 4TH FLOOR PLAN ①
 SCALE: 1"=20' FOR 11"x17"
 1"=10' FOR 22"x34"



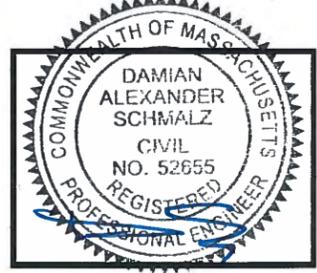
- NOTES:**
1. NORTH SHOWN AS APPROXIMATE.
 2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 4. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
 5. PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.

550 COCHITUATE ROAD
 SUITES 13 & 14
 FRAMINGHAM, MA 01701

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



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JOB NUMBER:	50057154
SITE ADDRESS	

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 NEWTON, MA 02459

SHEET TITLE

PROPOSED
 4TH FLOOR PLAN

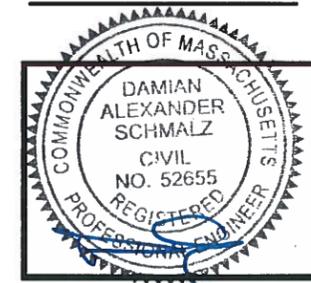
SHEET NUMBER

C-3

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BOSTON, MA 02210
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PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE
**PROPOSED NORTH &
SOUTH ELEVATIONS**

SHEET NUMBER
C-4



NORTH ELEVATION ①
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"
0' 10' 20'



SOUTH ELEVATION ②
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"
0' 10' 20'

- NOTES:**
- SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 - PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 - ELEVATIONS ARE APPROXIMATE & BASED ON EXISTING BUILDING PROVIDED BY BOSTON COLLEGE.
 - PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
 - ANTENNAS & SUPPORT HARDWARE SHALL BE PAINTED TO MATCH EXISTING FLASHING IN COLOR & TEXTURE. FINAL COLOR MATCH TO BE APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
 - PROPOSED ANTENNAS TO BE ALIGNED WITH EXISTING FLASHING SEAMS. VERIFY FINAL LOCATION & ALIGNMENT WITH AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
 - A.G.L. = ABOVE GROUND LEVEL
C.L. = CENTERLINE



EAST ELEVATION
 SCALE: 1"=20' FOR 11"x17"
 1"=10' FOR 22"x34"
 0' 10' 20'



WEST ELEVATION
 SCALE: 1"=20' FOR 11"x17"
 1"=10' FOR 22"x34"
 0' 10' 20'

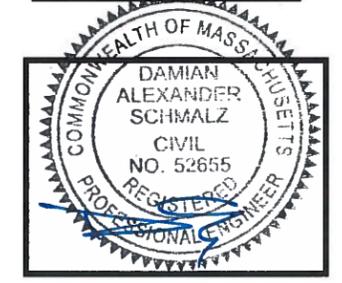
- NOTES:**
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 - PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
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 - A.G.L. = ABOVE GROUND LEVEL
 C.L. = CENTERLINE

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 280 SUMMER STREET
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 PHONE: 617.685.3400
 FAX: 617.685.3310



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PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

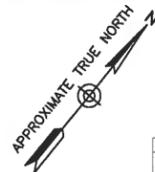
NEWTON CAMPUS
 885 CENTRE ST.
 NEWTON, MA 02459

SHEET TITLE

PROPOSED EAST & WEST ELEVATIONS

SHEET NUMBER

C-5

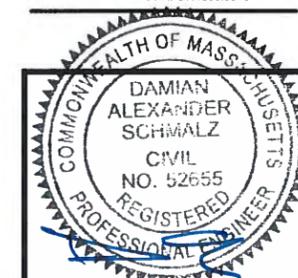


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A	02/02/17	FOR COMMENT

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280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.895.3400
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PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
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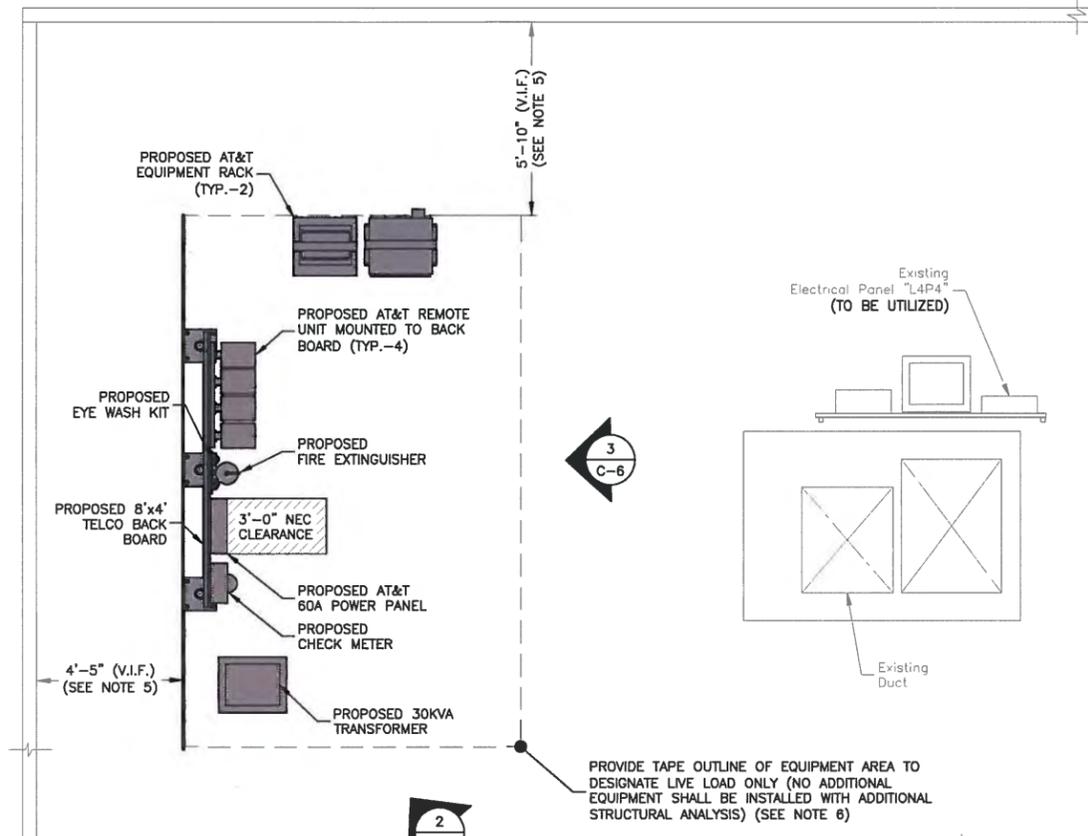
NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE

EQUIPMENT PLAN-
PENTHOUSE LEVEL

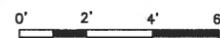
SHEET NUMBER

C-6



PROPOSED EQUIPMENT PLAN

SCALE: 3/16"=1' FOR 11"x17"
3/8"=1' FOR 22"x34"



NOTES:

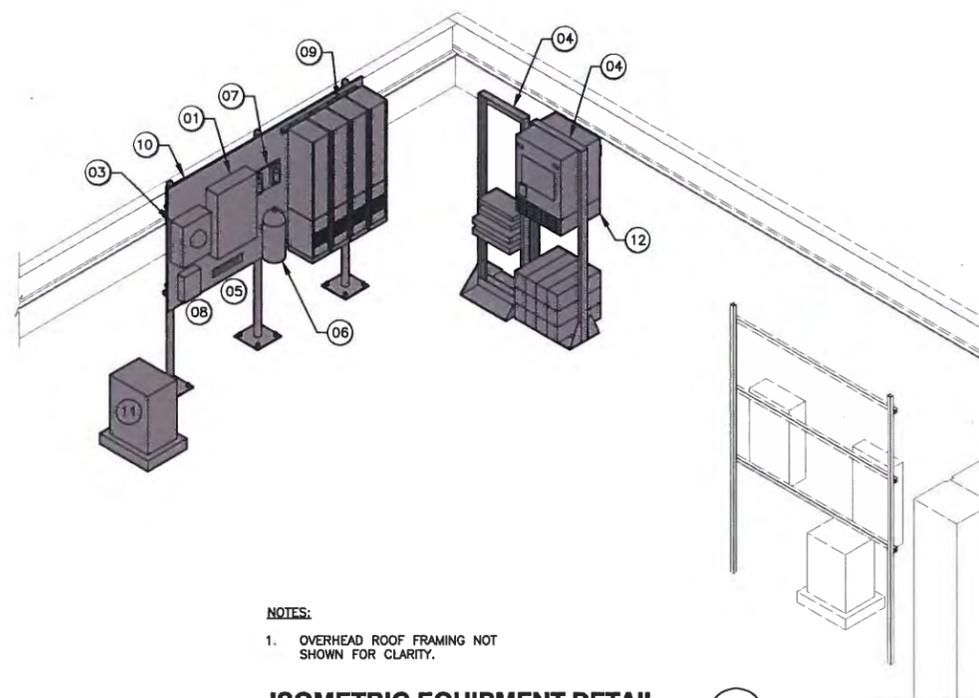
- NORTH SHOWN AS APPROXIMATE.
- SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
- PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11/11/16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
- UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
- VERIFY LOCATION OF EQUIPMENT & OVERHEAD CLEARANCE FROM ROOF FRAMING. ADJUST EQUIPMENT LOCATION AS NECESSARY WITH APPROVAL FROM AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
- EQUIPMENT TO BE INSTALLED ACCORDING TO STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC. EQUIPMENT AREA TO HAVE TAPE OUTLINE TO INDICATE LIVE LOAD ONLY & NO PERMANENT EQUIPMENT SHALL BE INSTALLED WITHOUT FURTHER ANALYSIS AS REQUIRED BY STRUCTURAL REPORT.

EQUIPMENT NOTES:

- FINAL AT&T EQUIPMENT LAYOUT DESIGN TO BE CONFIRMED WITH AT&T C.M. & BOSTON COLLEGE.
- PROVIDE STRUT & PAINTED FIRE RESISTANT PLYWOOD MOUNTING BACKBOARDS AS REQUIRED.
- PROVIDE JUNCTION BOX & PULL BOXES AS REQUIRED BY THE NEC & SITE CONDITIONS.

NOTE:

:-REFER TO THIS SHEET FOR BILL OF MATERIALS.
FOR RISER DIAGRAM SEE SHEET E-1.

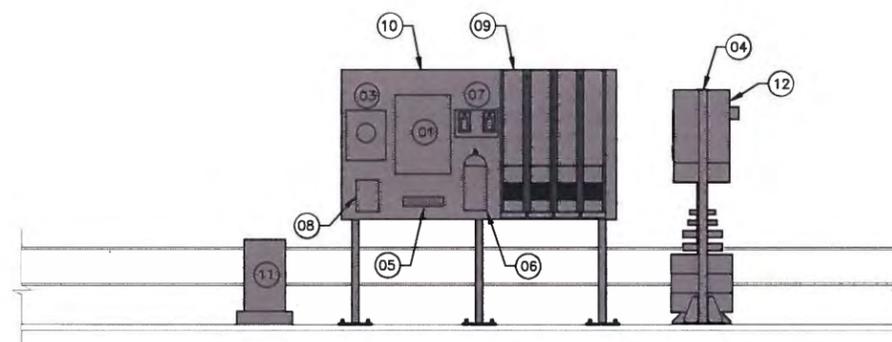


NOTES:

- OVERHEAD ROOF FRAMING NOT SHOWN FOR CLARITY.

ISOMETRIC EQUIPMENT DETAIL

SCALE: N.T.S.



PROPOSED EQUIPMENT ELEVATION

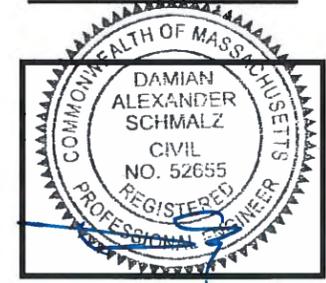
SCALE: N.T.S.

BILL OF MATERIALS	
01	POWER PANEL "AT&T" (60A, 120/208V, 3Ø) WITH 60A MCB IN LOCKABLE NEMA TYPE 1R ENCLOSURE
02	A/C DATA SURGE PROTECTOR IN NEMA TYPE 1R ENCLOSURE
03	CHECK METER (SEE ELECTRICAL NOTES 1 & 2, SHEET E-1 FOR SPECIFICATIONS)
04	PROPOSED 23" AT&T EQUIPMENT RACK
05	MASTER GROUND BAR, 4"x20"x1/4" TINNED
06	FIRE EXTINGUISHER. PROVIDE SIGNAGE & MOUNT PER CODE.
07	EYE WASH STATION
08	FIBER PANEL-TE 24 SC/APC RIBBON - NEQ.15566
09	CORNING 40W GX QUAD BAND REMOTE
10	4'x8' FIRE RATED BACKBOARD
11	30KVA TRANSFORMER; 480V PRIMARY, 120/208V SECONDARY
12	EMERSON 721 PLANT WITH BATTERY UNITS

**BOSTON COLLEGE
o.D.A.
LAW LIBRARY**

CONSTRUCTION DRAWINGS			
2	11/20/17	FOR CONSTRUCTION	
1	08/22/17	FOR CONSTRUCTION	
0	06/30/17	FOR CONSTRUCTION	
A	02/02/17	FOR COMMENT	

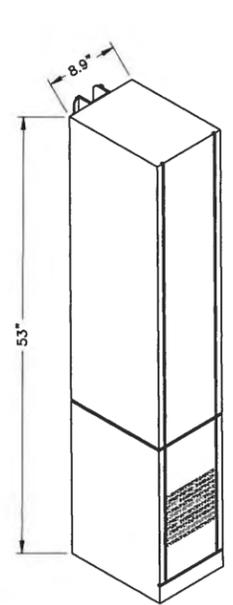
Dewberry®
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY:	MR
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

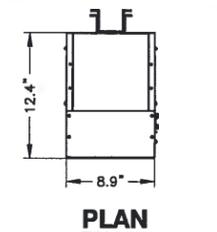
NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE	
CONSTRUCTION DETAILS	
SHEET NUMBER	

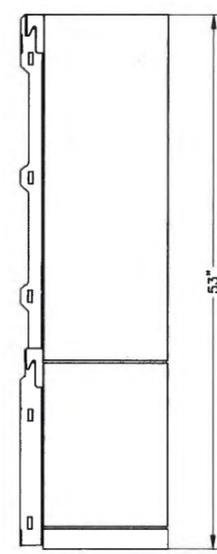


ISOMETRIC

REMOTE UNIT SPECIFICATION	
MANUFACTURER:	CORNING
MODEL:	40 W GX QUAD BAN REMOTE
DIMENSIONS (HxWxD):	53"x8.9"x12.4"

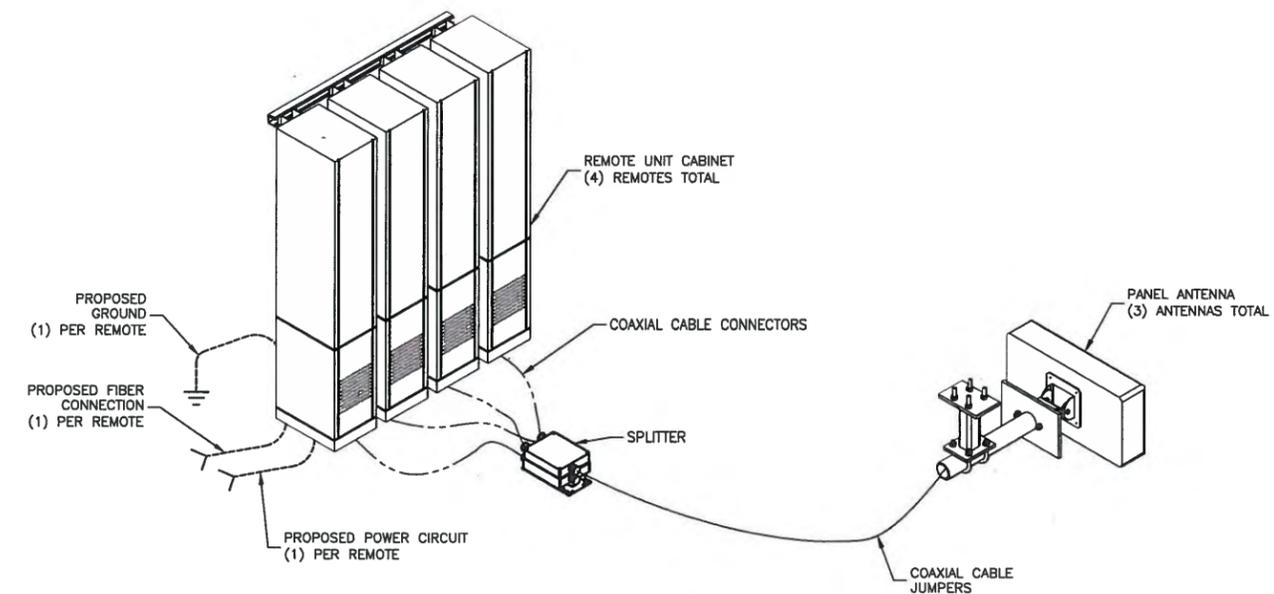


PLAN

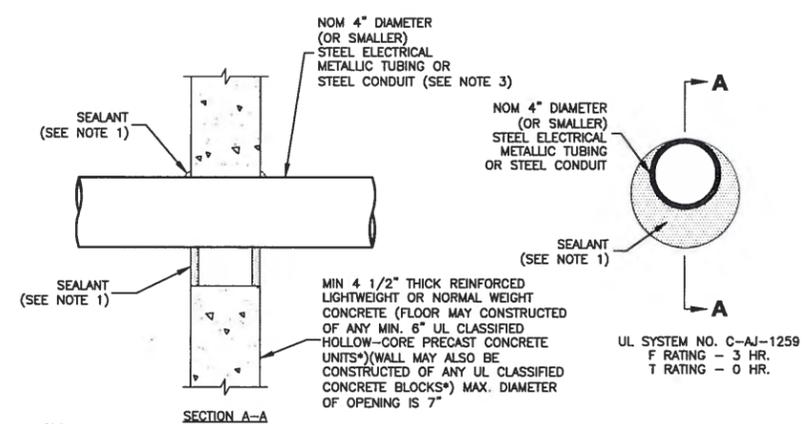


SIDE ELEVATION

REMOTE UNIT DETAIL
SCALE: N.T.S.

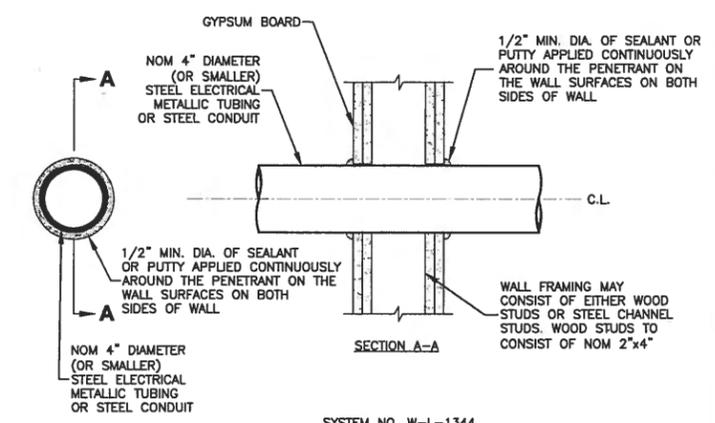


SECTOR ONE LINE DIAGRAM
SCALE: N.T.S.



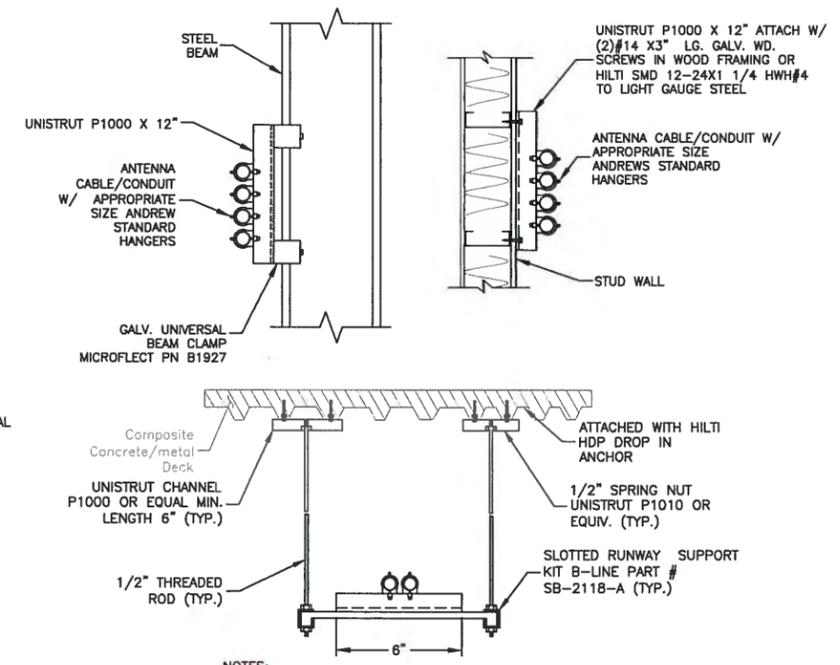
- NOTES:**
- FILL VOID OR CAVITY MATERIAL* - SEALANT - MIN. 1/2" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF FLOOR OR WALL. AT THE POINT CONTACT LOCATION BETWEEN PENETRATING ITEM & CONCRETE, A MIN. 1/4" THICK BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/ PENETRATING ITEM INTERFACE ON BOTH SIDES OF FLOOR OR WALL.
 - FORMING MATERIAL - (OPTIONAL, NOT SHOWN) - MINERAL WOOL BATT PACKING MATERIAL OR POLYURETHANE BACKER ROD FRICTION FITTED INTO OPENING & RECESSED FROM FLOOR OR WALL SURFACES AS REQUIRED TO ACCOMMODATE THICKNESS OF FILL MATERIAL.
 - ONE CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE CONDUIT & THE PERIPHERY OF THE OPENING SHALL BE A MIN. OF 0" (POINT OF CONTACT) TO A MAX. OF 3". CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
- * BEARING THE UL CLASSIFICATION MARK.

CORING DETAIL
SCALE: N.T.S.



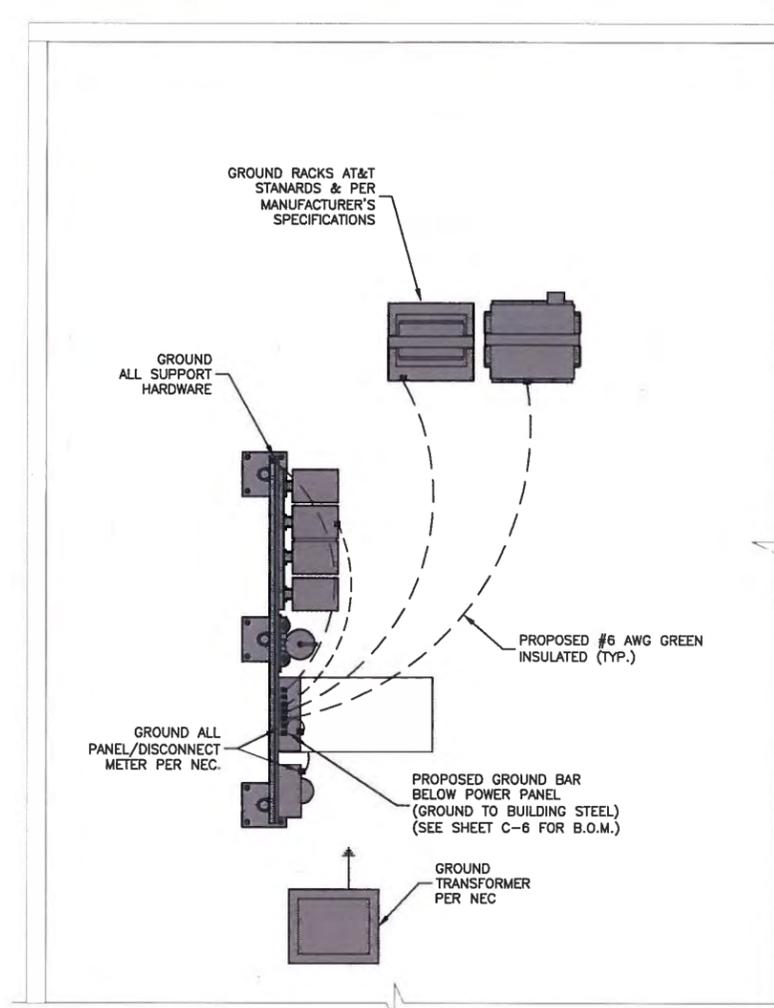
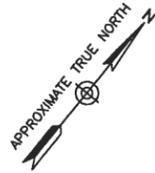
- SYSTEM NO. W-L-1344
F RATINGS - 1 & 2 HR
T RATING - 1/4 HR
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT
- NOTES:**
- THE 1 & 2 HOUR FIRE RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS & MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL & PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY.
 - 5" DIAMETER OPENING MAX.

**SECTION - THROUGH PENETRATION
FIRESTOP SYSTEM**
SCALE: N.T.S.



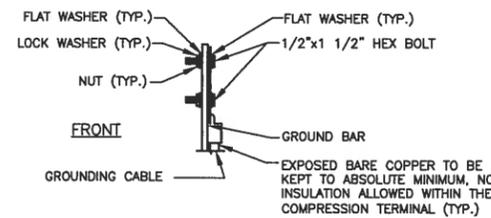
- NOTES:**
- ALL COAX SUPPORT SPACING: 4'-0" MAX.
 - ALL CONDUIT SUPPORT SPACING: 10'-0" MAX.
 - CONFIRM CONDUIT ROUTING WITH BUILDING OWNER & CONSTRUCTION MANAGER PRIOR TO INSTALLATION.

CABLE/CONDUIT SUPPORT
SCALE: N.T.S.

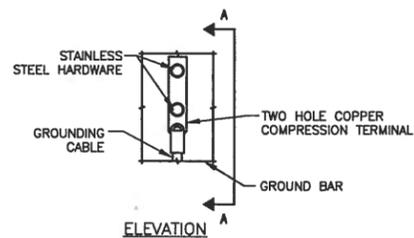


GROUNDING PLAN

SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"



SECTION 'A-A'

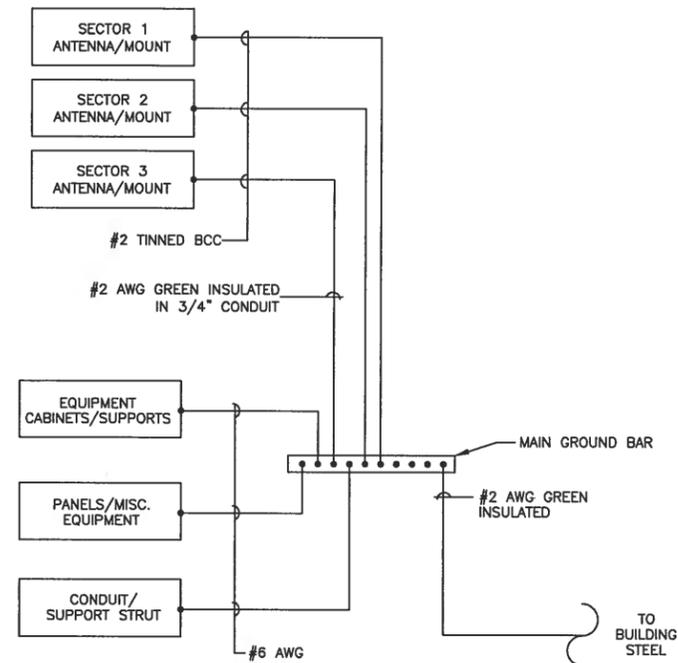


NOTES:

1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED
2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL

SCALE: N.T.S.

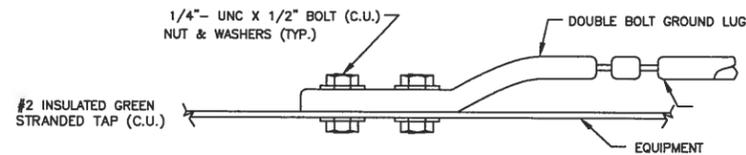


GROUNDING SCHEMATIC

SCALE: N.T.S.

NOTES:

1. BOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR (GNP BAR).
2. ALL CELL EQUIPMENT (BCE, BATTERY FRAME, POWER CABINETS, MISC. EQUIPMENT FRAMES, ETC.) SHALL BE GROUNDED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
3. ALL EXPOSED METAL OBJECTS IN EQUIPMENT AREA SHALL BE BONDED & JUMPED TO MGB.
4. GROUND ANTENNA SUPPORT PIPES WITH #2 AWG TINNED BCC DEDICATED LEAD BACK TO GROUND BAR.
5. VERIFY EQUIPMENT GROUNDING REQUIREMENTS WITH SPECIFIC MANUFACTURERS.
6. EXISTING GROUND BAR SHALL BE TESTED TO ENSURE SUFFICIENT GROUNDING RESISTANCE CAN BE ACHIEVED. VERIFY RESULTS WITH AT&T CM & BOSTON COLLEGE.



CONNECTION TO EQUIPMENT DETAIL

SCALE: N.T.S.

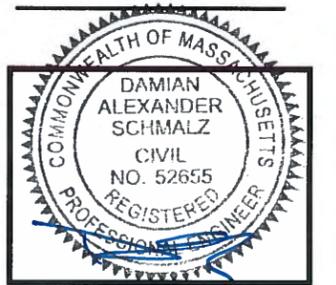
at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

BOSTON COLLEGE
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CONSTRUCTION DRAWINGS

2	11/20/17	FOR CONSTRUCTION
1	08/22/17	FOR CONSTRUCTION
0	06/30/17	FOR CONSTRUCTION
A	02/02/17	FOR COMMENT

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: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

SITE ADDRESS

NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE

GROUNDING PLAN & DETAILS

SHEET NUMBER



550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

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CONSTRUCTION DRAWINGS

NO.	DATE	DESCRIPTION
2	11/20/17	FOR CONSTRUCTION
1	08/22/17	FOR CONSTRUCTION
0	06/30/17	FOR CONSTRUCTION
A	02/02/17	FOR COMMENT



Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
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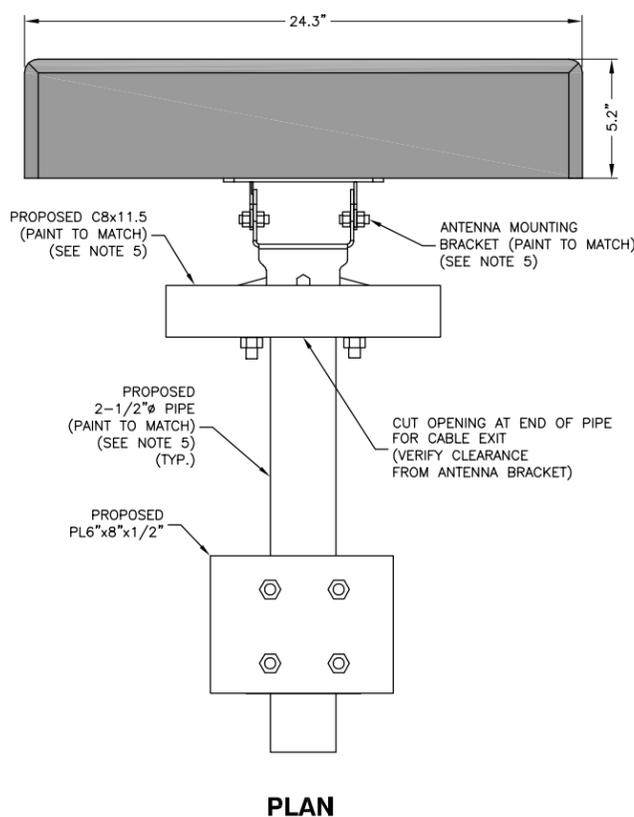
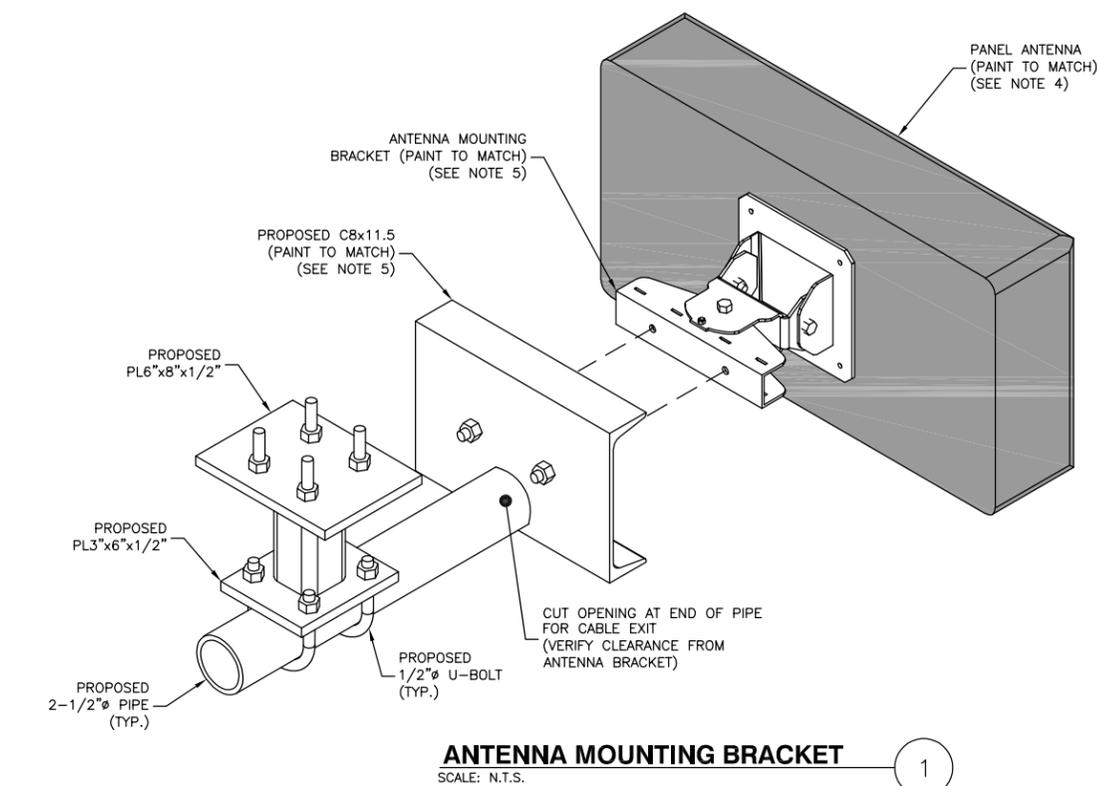
NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE

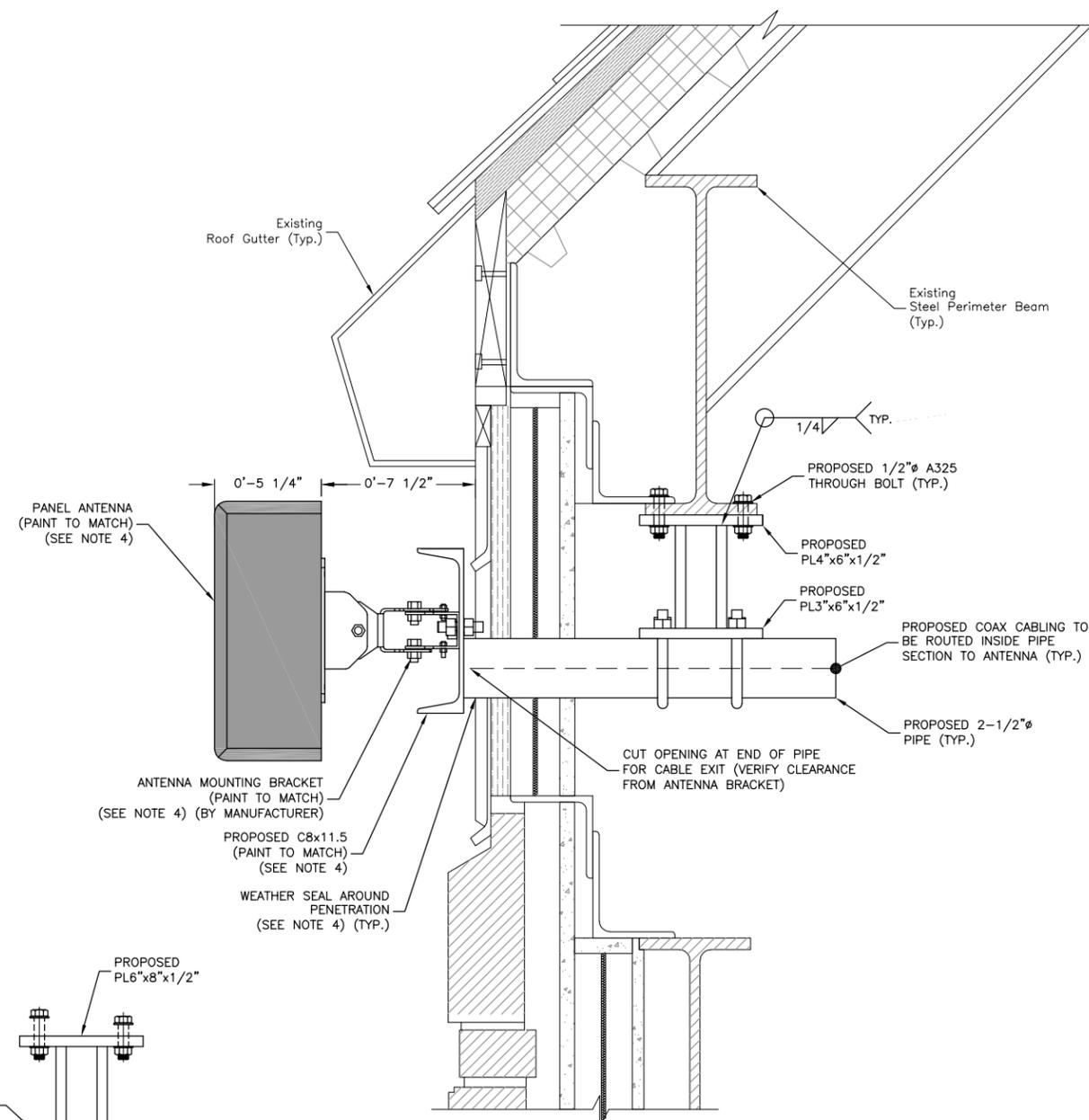
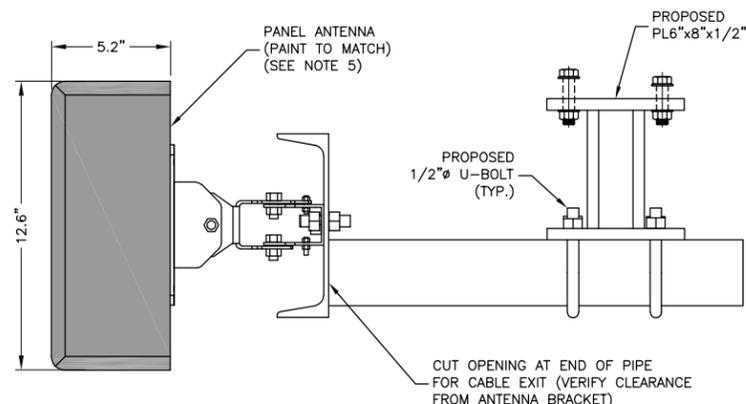
ANTENNA MOUNTING
DETAILS

SHEET NUMBER

S-1



PANEL ANTENNA DETAIL
SCALE: N.T.S.



ANTENNA MOUNTING DETAIL
SCALE: 3/4"=1' FOR 11"x17"
1 1/2"=1' FOR 22"x34"



- NOTES:**
- CONTRACTOR TO VERIFY ALL ANTENNA & DOWNTILT BRACKET DIMENSIONS PRIOR TO FABRICATION & COMMENCEMENT OF WORK.
 - ALL STEEL TO BE GALVANIZED.
 - FINAL FLASHING & WEATHERPROOFING DESIGN TO BE COMPLETED BY BC APPROVED ROOFER & SHALL MAINTAIN ANY EXISTING WARRANTIES.
 - ALL ANTENNAS, CABLING & SUPPORT HARDWARE TO BE PAINTED TO MATCH EXISTING FLASHING. VERIFY COLOR WITH BC & AT&T CM PRIOR TO APPLICATION.



550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

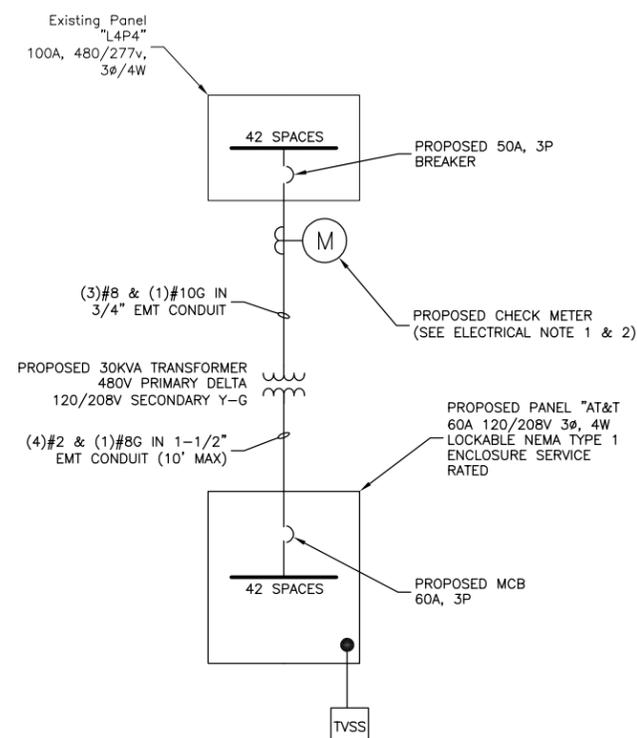
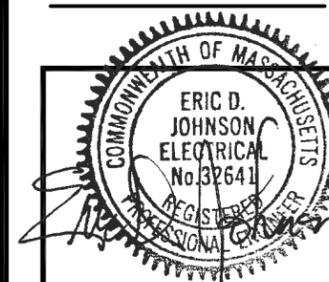
BOSTON COLLEGE
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LAW LIBRARY

CONSTRUCTION DRAWINGS

2	11/20/17	FOR CONSTRUCTION
1	08/22/17	FOR CONSTRUCTION
0	06/30/17	FOR CONSTRUCTION
A	02/02/17	FOR COMMENT



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



ELECTRIC ONE LINE DIAGRAM
SCALE: N.T.S.

1

ELECTRICAL NOTES:

- COORDINATE THE METER LOCATION & CONDUIT ROUTING WITH BOSTON COLLEGE PRIOR TO CONSTRUCTION.
- VERIFY METER TYPE & SPECIFICATIONS WITH BOSTON COLLEGE PRIOR TO ORDERING & INSTALLATION.
- SEE SHEET C-2 FOR EQUIPMENT LOCATIONS & APPROXIMATE CONDUIT ROUTING PATH.
- COORDINATE ANY REQUIRED POWER SHUT DOWNS WITH BOSTON COLLEGE & BUILDING PERSONNEL.
- CONTRACTOR IS TO PROVIDE DEWBERRY & BOSTON COLLEGE EQUIPMENT SPECS & SHOP DRAWING FOR APPROVAL PRIOR TO ORDERING MATERIALS.
- CONDUIT ROUTING SHOWN IS SCHEMATIC. FIELD VERIFY CONDUIT PATH & HEIGHT WITH BOSTON COLLEGE FACILITIES. DO NOT BLOCK EXISTING EQUIPMENT OR IMPEDE MAINTENANCE SPACE.
- PROVIDE PULL BOXES & EXPANSION JOINTS PER NEC REQUIREMENTS & FIELD CONDITIONS.
- ALL CORING LOCATIONS SHALL BE X-RAYED TO VERIFY NO STRUCTURAL MEMBERS ARE CUT. ALL CORES SHALL BE FIRE SEALED. TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EQUIPMENT DURING CORING/CONSTRUCTION. PROVIDE A PROTECTION PLAN TO BOSTON COLLEGE FOR REVIEW & APPROVAL PRIOR TO COMMENCEMENT OF CORING.

NEMA 1 PANEL SCHEDULE - AT&T 10,000 A.I.C.

CKT #	DESCRIPTION	W/60A MAIN C/B		DESCRIPTION	CKT #
		AMP	AMP		
1	RECTIFIER	30	30	RECTIFIER	2
3					4
5	RECTIFIER	30	30	RECTIFIER	6
7					8
9	RECTIFIER	30	30	RECTIFIER	10
11					12
13	OUTLET	20	-	SPACE	14
15	SPACE	-	-	SPACE	16
17	SPACE	-	-	SPACE	18
19	SPACE	-	-	SPACE	20
21	SPACE	-	-	SPACE	22
23	SPACE	-	-	SPACE	24
25	SPACE	-	-	SPACE	26
27	SPACE	-	-	SPACE	28
29	SPACE	-	-	SPACE	30
31	SPACE	-	-	SPACE	32
33	SPACE	-	-	SPACE	34
35	SPACE	-	-	SPACE	36
37	SPACE	-	-	SPACE	38
39	TVSS	60	-	SPACE	40
41				SPACE	42

PANEL SCHEDULE
SCALE: N.T.S.

2

DRAWN BY: MR

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

SITE ADDRESS

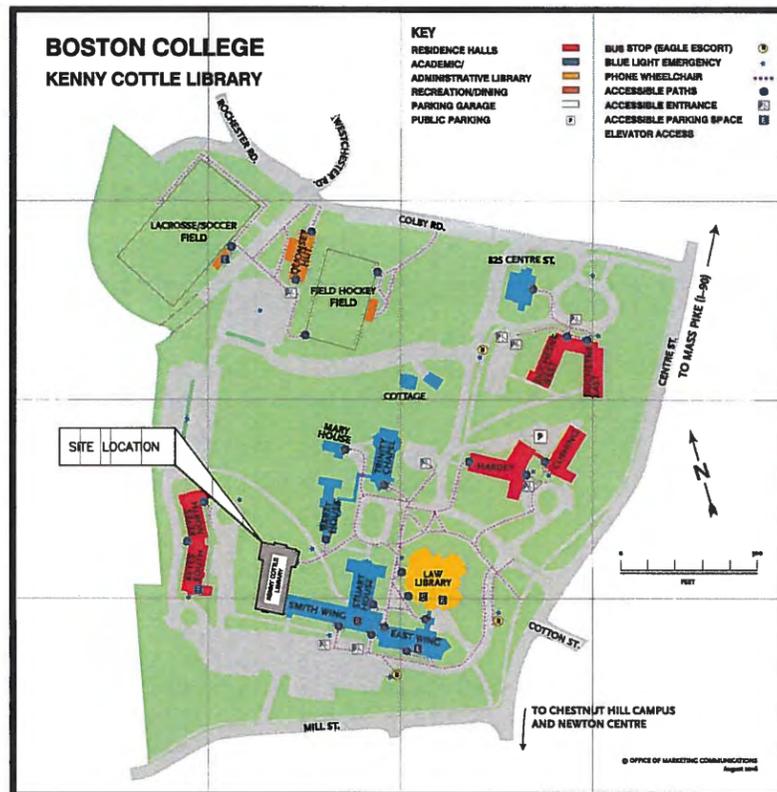
NEWTON CAMPUS
885 CENTRE ST.
NEWTON, MA 02459

SHEET TITLE

ONE-LINE DIAGRAM &
PANEL SCHEDULE

SHEET NUMBER

E-1



at&t Mobility

BOSTON COLLEGE oD.A.S. - KENNY COTTLE NEWTON CAMPUS 885 CENTRE STREET NEWTON, MA 02459



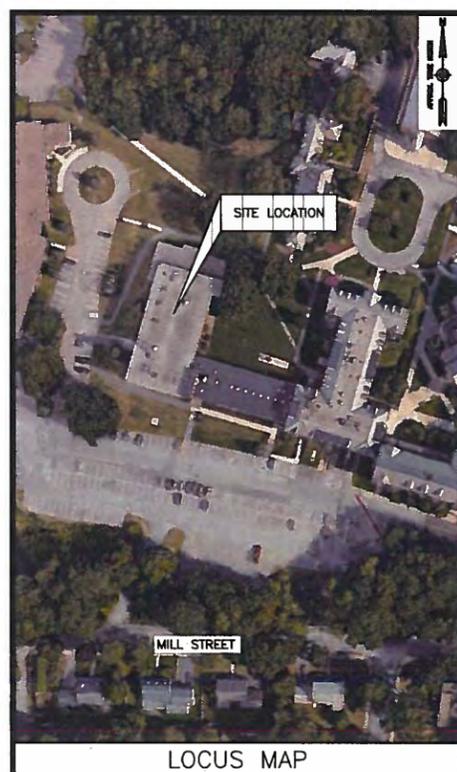
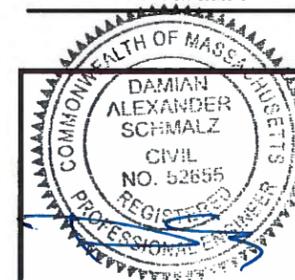
at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

**BOSTON COLLEGE
oD.A.S.-
KENNY COTTLE
LIBRARY**

CONSTRUCTION DRAWINGS

3	11/20/17	FOR CONSTRUCTION
2	08/22/17	FOR CONSTRUCTION
1	07/17/17	FOR CONSTRUCTION
0	05/01/17	FOR BC APPROVAL
B	02/02/17	FOR COMMENT
A	01/16/17	FOR COMMENT

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



LOCUS MAP

ENGINEERS
DEWBERRY
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE # (617) 695-3400
FAX # (617) 695-3310
CONTACT: DAMIAN SCHMALZ, P.E.

AT&T ANTENNA SOLUTIONS GROUP
PHONE # (617) 510-1002
CONTACT: DAVID TOWER

CONSULTANT TEAM

SITE NAME:
BOSTON COLLEGE oD.A.S. - KENNY COTTLE LIBRARY

PROPERTY OWNER:
TRUSTEES OF BOSTON COLLEGE
C/O JOS M HERLIHY GENERAL COUNSEL
90 COLLEGE ROAD
CHESTNUT HILL, MA 02467

APPLICANT/DEVELOPER:
AT&T MOBILITY
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

ELECTRIC UTILITY:
EVERSOURCE
(800) 633-3797

TELEPHONE UTILITY:
VERIZON
(800) 870-9999

CENTER OF BUILDING*:
LATITUDE: 42° 20' 31.02"
LONGITUDE: 71° 11' 41.32"
*PER GOOGLE EARTH

PROJECT SUMMARY

SITE ADDRESS:
NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

PROPERTY ID:
13021 0000

ZONING DISTRICT:
SINGLE RESIDENCE 2

PROJECT DIRECTORY

THE PROJECT WILL CONSIST OF INSTALLING TELECOMMUNICATIONS EQUIPMENT IN AN EXISTING STORAGE ROOM OF THE KENNY COTTLE LIBRARY BUILDING. PROPOSED ANTENNAS & SUPPORTING EQUIPMENT WILL BE INSTALLED ON THE ROOF & FACADE OF THE BUILDING. UTILITIES TO COME FROM SOURCES ON SITE.

PROJECT DESCRIPTION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE & ITS SITE CONDITIONS & 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 & NOT FOR HUMAN HABITATION.

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
G-1	GENERAL NOTES
C-1	PROPOSED ROOF PLAN
C-2	PROPOSED EAST & NORTH ELEVATIONS
C-3	PROPOSED WEST & SOUTH ELEVATIONS
C-4	PROPOSED PARTIAL ROOF PLAN
C-5	PROPOSED ANTENNA LAYOUT ISOMETRICS
C-6	PROPOSED 3RD & MEZZANINE FLOOR PLANS
C-7	PROPOSED EQUIPMENT ROOM PLAN & ISOMETRIC
C-8	CONSTRUCTION DETAILS-I
C-9	CONSTRUCTION DETAILS-II
C-10	CONSTRUCTION DETAILS-III
S-1	FIBERGLASS CANISTER DETAILS
E-1	ONE-LINE DIAGRAM & PANEL SCHEDULE
M-1	HVAC DETAILS

SHEET INDEX

DRAWN BY:	JG
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

FROM FRAMINGHAM TAKE I-90 E TOWARD BOSTON. TAKE EXIT 17 TOWARD NEWTON/WATERTOWN. MERGE ONTO WASHINGTON ST. TURN RIGHT ONTO CENTRE ST. TURN RIGHT ONTO MILL ST. TURN RIGHT. TURN LEFT. THE SITE WILL BE ON THE RIGHT

GENERAL CONSTRUCTION NOTES:

- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, & LOCAL CODES, & COMPLY WITH AT&T SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT "DIG SAFE 1888 DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, & ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, & SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- CONTRACTOR SHALL COORDINATE WITH BOSTON COLLEGE TO DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO BOSTON COLLEGE PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE BOSTON COLLEGE REPRESENTATIVE PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE BOSTON COLLEGE REPRESENTATIVE, & COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T CONSTRUCTION MANAGER & BOSTON COLLEGE REPRESENTATIVE.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, AT&T PROJECT CONSTRUCTION MANAGER, & BOSTON COLLEGE IMMEDIATELY.
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS & SPECIFICATIONS FOR THIS PROJECT.
- ALL ROOF WORK SHALL ABIDE BY THE REQUIREMENTS & SPECIFICATIONS SET FORTH IN THE ROOFING MANUFACTURER'S GUARANTEE.
- CONTRACTOR SHALL REMOVE ALL RUBBISH & DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH BOSTON COLLEGE & TAKE PRECAUTIONS TO MINIMIZE IMPACT & DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH AT&T WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK. AT&T SHALL PROVIDE ONE COPY OF THOSE AS-BUILT DRAWINGS TO BOSTON COLLEGE AS WELL AS AN ELECTRONIC COPY, IF AVAILABLE, OF THE CAD DRAWINGS.
- ANTENNAS & CABLES ARE TYPICALLY PROVIDED BY AT&T. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY AT&T. ALL ITEMS NOT PROVIDED BY AT&T SHALL BE PROVIDED & INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY AT&T.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY AT&T. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED, & PAID FOR, BY THE CONTRACTOR. AT&T OR ITS SUB-LICENSEES, SHALL IN ADVANCE INFORM BOSTON COLLEGE IN WRITING OF ALL APPLICATIONS TO BE FILED & SHALL PROVIDE ADVANCE NOTICE TO BOSTON COLLEGE OF ALL PUBLIC MEETINGS & HEARINGS SCHEDULED IN CONNECTION WITH SUCH APPLICATIONS.
- CONTRACTOR SHALL START UP HVAC UNITS & SYNCHRONIZE THE THERMOSTATS.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS & REQUIREMENTS AS WELL AS WITH THE INPUT & APPROVAL OF BOSTON COLLEGE.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW & APPROVAL PRIOR TO FABRICATION.
- UNLESS OTHERWISE NOTED AT&T SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS-T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY AT&T FOR INSTALLATION BY CONTRACTOR.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS & LOCATED ACCORDING TO AT&T SPECIFICATIONS, & AS SHOWN IN THESE PLANS.
- THE CONTRACTOR SHALL SUPERVISE & DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES & PROCEDURES & FOR COORDINATING ALL PORTIONS OF THE WORK UNDER & IN COMPLIANCE WITH THE CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE W/ALL APPLICABLE OSHA STANDARDS & RECOMMENDATIONS & SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE & PPM & CONSTRUCTION DEVICES SUCH AS WELDING & FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
- CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ALL INTERIOR FINISHES.
- CONTRACTOR SHALL ADHERE TO ALL BOSTON COLLEGE REQUIREMENTS FOR SAFETY & CONSTRUCTION ON CAMPUS. THESE INCLUDE BUT ARE NOT LIMITED TO CAMPUS SAFETY PROGRAM & THE BOSTON COLLEGE CONSTRUCTION SPECIFICATION REQUIREMENTS.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL ROLLED SHAPES, PLATES, & BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:
 ASTM A-992, GRADE 50 ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE.
 ASTM A-36 ALL OTHER ROLLED SHAPES, PLATES & BARS UNLESS NOTED OTHERWISE.
 ASTM A-500, GRADE B HSS SECTION (SQUARE, RECTANGULAR, ROUND)
 ASTM A-325, TYPE SC OR N ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS.
 F1554, GRADE 36 ALL ANCHORS BOLTS, UNLESS NOTED OTHERWISE.
 ASTM A-53, GRADE B STEEL PIPE
- ALL WELDING SHALL BE DONE USING E70XX ELECTRODES & WELDING SHALL CONFORM TO AISC & AWS D1.1 WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 14TH EDITION, WHERE WELD LENGTH IS NOT INDICATED, USE FULL LENGTH WELD. AT THE COMPLETION OF ALL WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA.) SUPPLIED WITH A NUT & WASHER UNDER TURNED END & SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN & DETAILED ON STRUCTURAL DRAWINGS.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
- CONCRETE EXPANSION ANCHORS & EPOXY ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. MANUFACTURER'S MINIMUM CONCRETE EDGE DISTANCE SHALL BE MAINTAINED DURING INSTALLATION.
- USE PRECAUTIONS & PROCEDURES PER AWS D1.1 WHEN WELDING GALVANIZED METALS.
- TOUCHUP ALL DAMAGED GALVANIZED STEEL WITH VERIZON WIRELESS APPROVED COLD ZINC, "GALVANOX", "DRY GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. TOUCHUP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.
- ALL PROPOSED STEEL SHALL CONFORM TO HIGH STRENGTH STEEL MATERIALS, ASTM A36 WITH A MINIMUM STRENGTH OF 36 KSI.
- ALL EXISTING BEAM & COLUMN DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR PRIOR TO FABRICATION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS & THOSE SHOWN SHALL BE REPORTED TO DEWBERRY ENGINEER IMMEDIATELY.
- CONTRACTOR TO MAKE ALL NECESSARY PRECAUTIONS & SECURE ALL PERMITS REQUIRED FOR WELDING ON THE ROOF.
- CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW & APPROVAL BY ENGINEER.
- ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123/A123M-00 HOT-DIP GALVANIZED FINISH UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, & WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED. REPAIR DAMAGED GALVANIZED COATINGS ON GALVANIZED ITEMS WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A780 & MANUFACTURER'S WRITTEN INSTRUCTIONS, PRIOR TO COMPLETION OF WORK.

GENERAL ELECTRICAL NOTES:

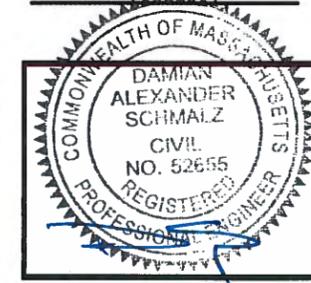
- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS & WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, & EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT & THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT & DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY & HEALTH ACT (O.S.H.A.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE & PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT & AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS & EQUIPMENT SHALL BE NEW & IN PERFECT CONDITION WHEN INSTALLED & SHALL BE OF THE BEST GRADE & OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED & APPROVED BY UNDERWRITER'S LABORATORY & SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY & ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA & NBFU.
- ALL CONDUIT INSTALLED MAY BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY & LOCAL CODES, O.S.H.A & NFPA 70E.
- CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS & PAY ALL REQUIRED FEES
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, & CIRCUITS.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- NO SHARED NEUTRAL IS ALLOWED FOR LIGHTING FIXTURES.
- ALL BUILDING WIRE #12 TO # 6 SHALL BE STRANDED COPPER TYPE THWN-THHN. CONDUCTORS #4 & LARGER SHALL BE COPPER TYPE XHHW.
- ALL CIRCUIT BREAKERS, FUSES & ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED. SEE SCHEDULES FOR RATINGS.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES
- PATCH, REPAIR & PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, M PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
- LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN &, THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS & EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH FIRESTOP DETAILS.
- WIRE & CABLE CONDUCTORS SHALL BE STRANDED COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY STATED OTHERWISE ON DRAWINGS.
- VERIFY ALL CONDUIT ROUTING W/OWNER REP. & AT&T MOBILITY C.M. NO OTHER SURFACE MOUNTED CONDUITS WILL BE ALLOWED OTHER THAN IN CHASES & ABOVE CEILINGS.
- ALL MATERIALS SHALL BE U.L. LISTED.
- CONDUIT:
 a. RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR & SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 b. ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 c. FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL & MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
 d. CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILINGS OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- COORDINATE THE ELECTRICAL SERVICE WITH BUILDING OWNER.
- GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS & FURNISH TO DISPATCH COMMUNICATIONS ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, & FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK & LEAVE WORK IN A COMPLETE & UNDAMAGED CONDITION.
- ALL WALL PENETRATIONS SHALL BE FIRE STOPPED WITH FS-ONE HIGH PERFORMANCE INTUMESCENT FIRE STOP BY HILTI OR APPROVED EQUAL. INSTALL PER MANUFACTURERS RECOMMENDATIONS.



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DRAWN BY: JG

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

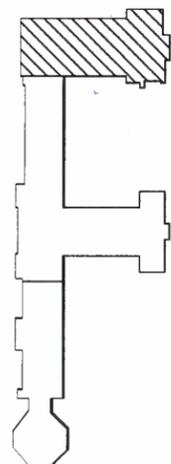
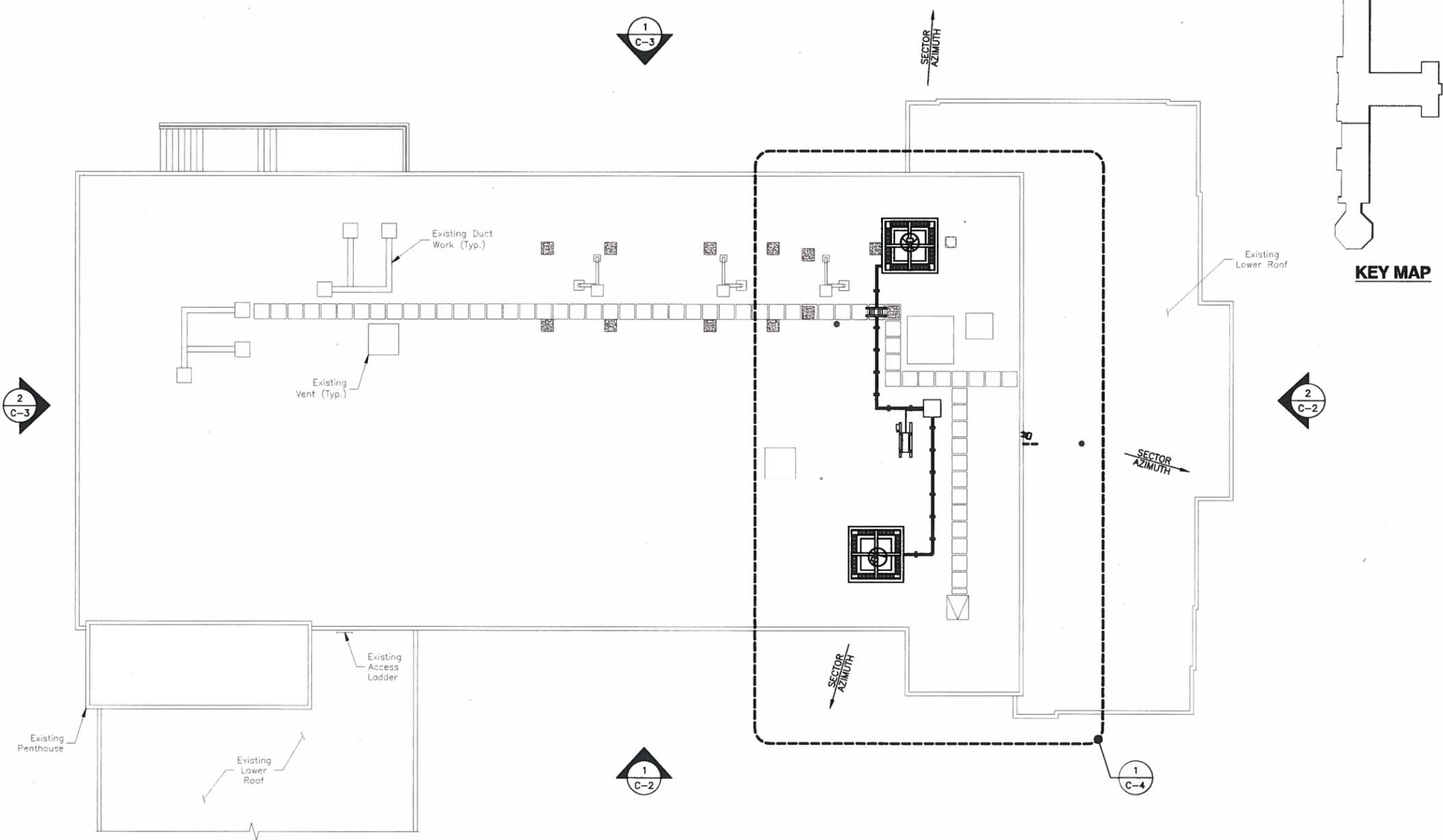
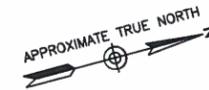
SITE ADDRESS:

NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE:

GENERAL NOTES

SHEET NUMBER:



KEY MAP

PROPOSED ROOF PLAN

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"



NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
4. PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.

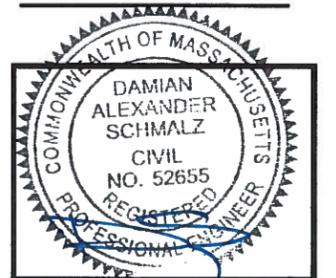
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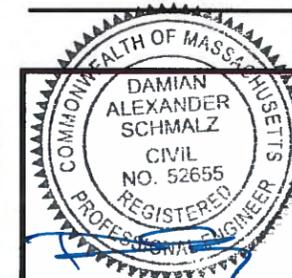
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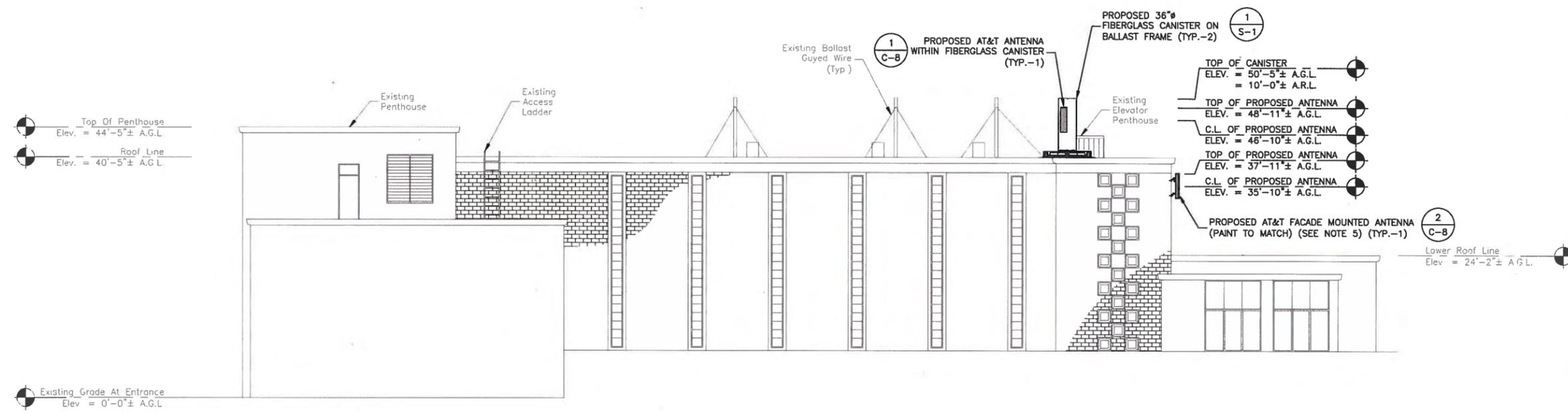
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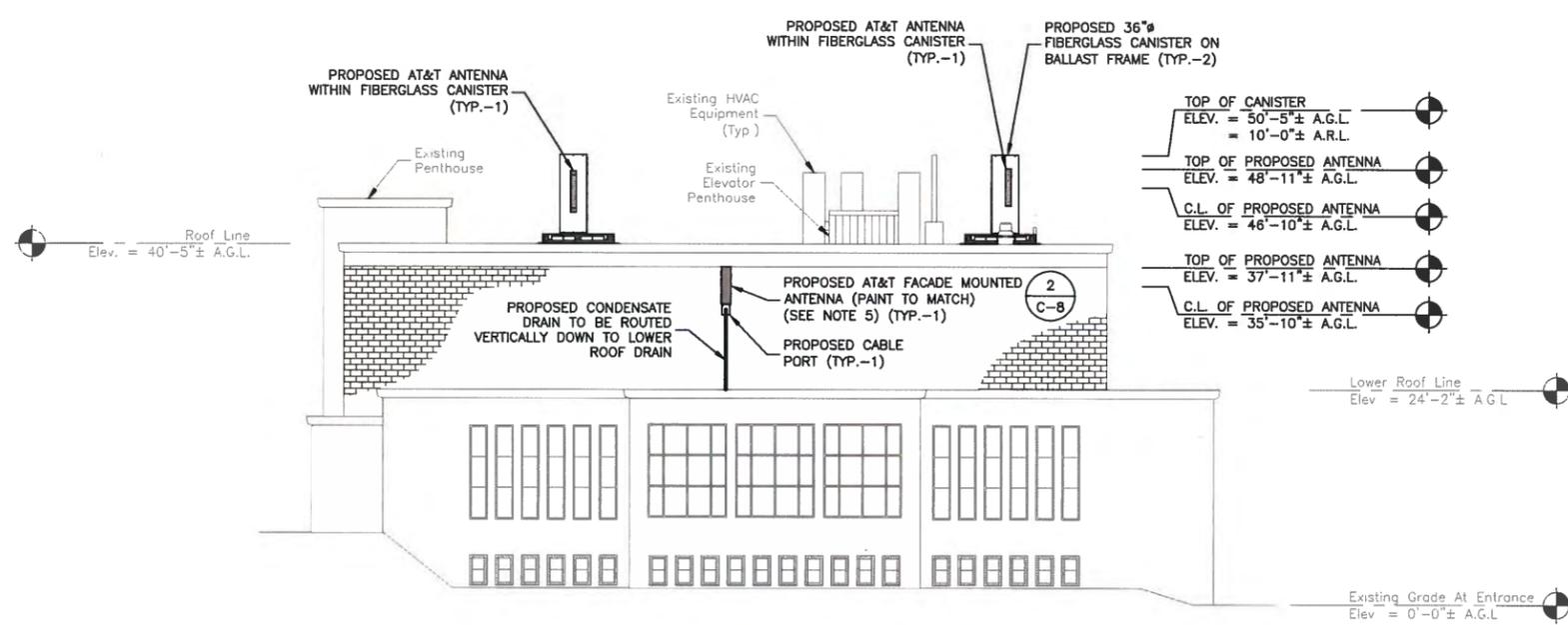
PROPOSED EAST &
NORTH ELEVATIONS

SHEET NUMBER

C-2



PROPOSED EAST ELEVATION 1
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"



PROPOSED NORTH ELEVATION 2
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"

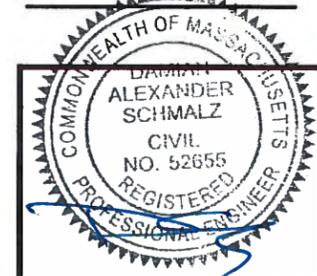


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 - ELEVATIONS ARE APPROXIMATE & BASED ON EXISTING BUILDING PLANS PROVIDED BY BOSTON COLLEGE.
 - PROPOSED FACADE MOUNTED ANTENNA TO BE LOCATED BELOW CONCRETE FINISH AT BRICK LEVEL.
 - A.G.L. = ABOVE GROUND LEVEL
A.R.L. = ABOVE ROOF LEVEL
C.L. = CENTERLINE

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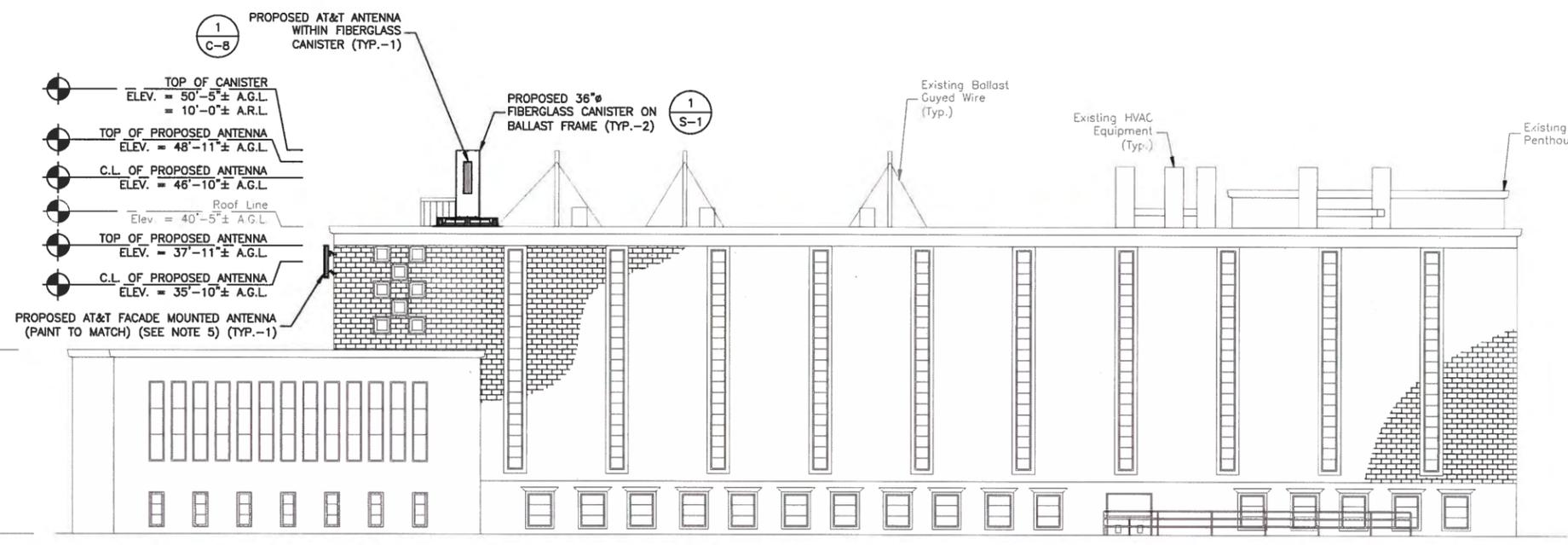
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SHEET TITLE

PROPOSED WEST &
SOUTH ELEVATIONS

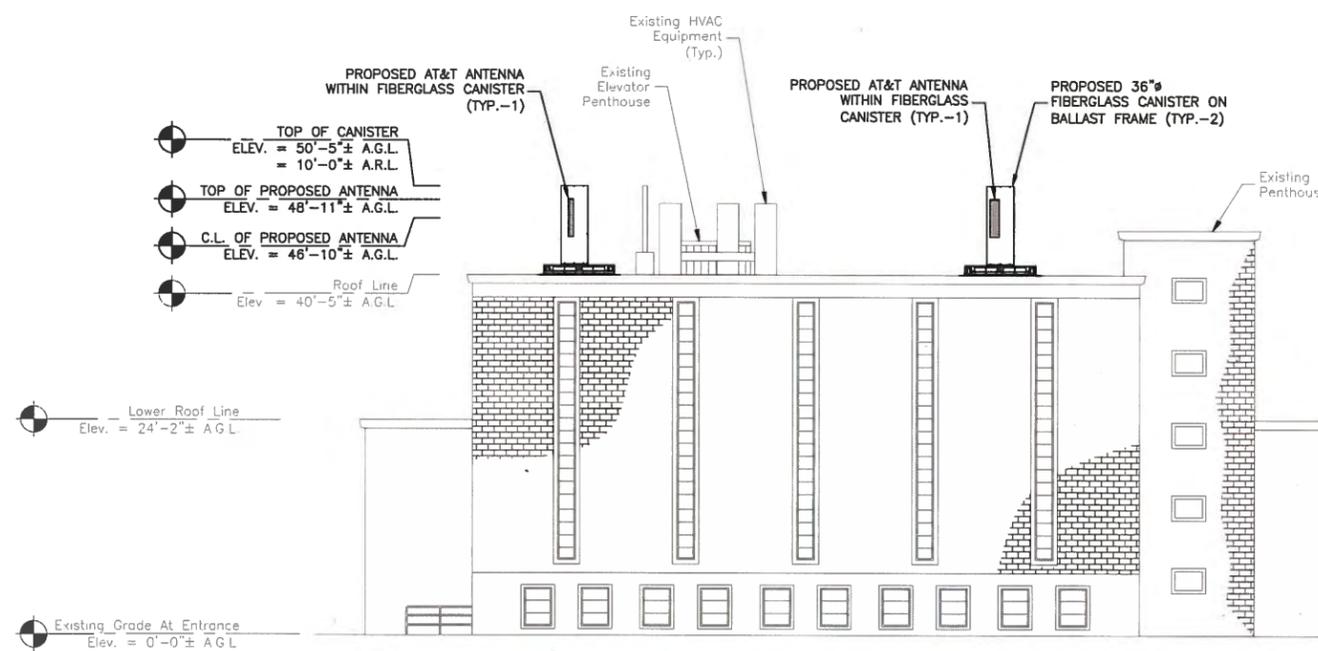
SHEET NUMBER

C-3



PROPOSED WEST ELEVATION 1

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"



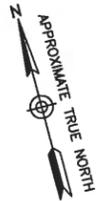
PROPOSED SOUTH ELEVATION 2

SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"



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A.R.L. = ABOVE ROOF LEVEL
C.L. = CENTERLINE



2
C-5

2
C-8



PROPOSED AT&T FACADE MOUNTED ANTENNA (PAINT TO MATCH) (TYP.-1)

43'-0" (V.I.F.) (CENTER ALONG WALL)

14'-2"

PROPOSED AT&T ANTENNA WITHIN FIBERGLASS CANISTER (TYP.-1)

1
C-8

Existing Exhaust Vent (Typ.)

Existing Elevator Penthouse

Existing Vent (Typ.)

Existing Walking Pad (Typ.)

Existing Glass Hatch (Typ.)

PROPOSED ROOF ENCLOSURE

5
C-9

PROPOSED CONDENSER ON TIMBER SLEEPERS (TYP.-1)

1
M-1

PROPOSED BALLAST MOUNT FRAME (TYP.-2)

PROPOSED 36" FIBERGLASS CANISTER ON BALLAST FRAME (TYP.-2)

1
S-1

PROPOSED WALK OVER STEP (TYP.) (SITE PRO P/N UB10-24)

PROPOSED CONDUIT ON SLEEPERS (TYP.)

4
C-8

Existing Vent Pipe (Typ.)

PROPOSED AT&T ANTENNA WITHIN FIBERGLASS CANISTER (TYP.-1)

1
C-5



10'-0"

Existing Roof Drain (Typ.)

Existing Concrete Ballast Pad (Typ.)

Existing Vent (Typ.)

PROPOSED PARTIAL ROOF PLAN

SCALE: 1/8"=1' FOR 11'x17'
1/4"=1' FOR 22'x34'



1

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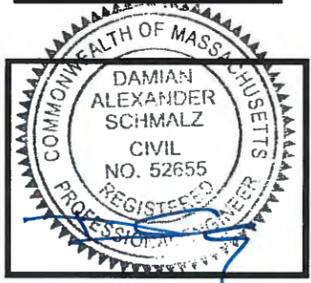
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SITE ADDRESS	

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SHEET TITLE

PROPOSED PARTIAL
ROOF PLAN

SHEET NUMBER

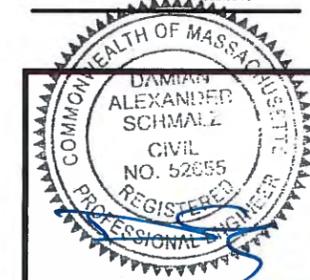
C-4

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CONSTRUCTION DRAWINGS

3	11/20/17	FOR CONSTRUCTION
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B	02/02/17	FOR COMMENT
A	01/16/17	FOR COMMENT

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



DRAWN BY:	JG
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

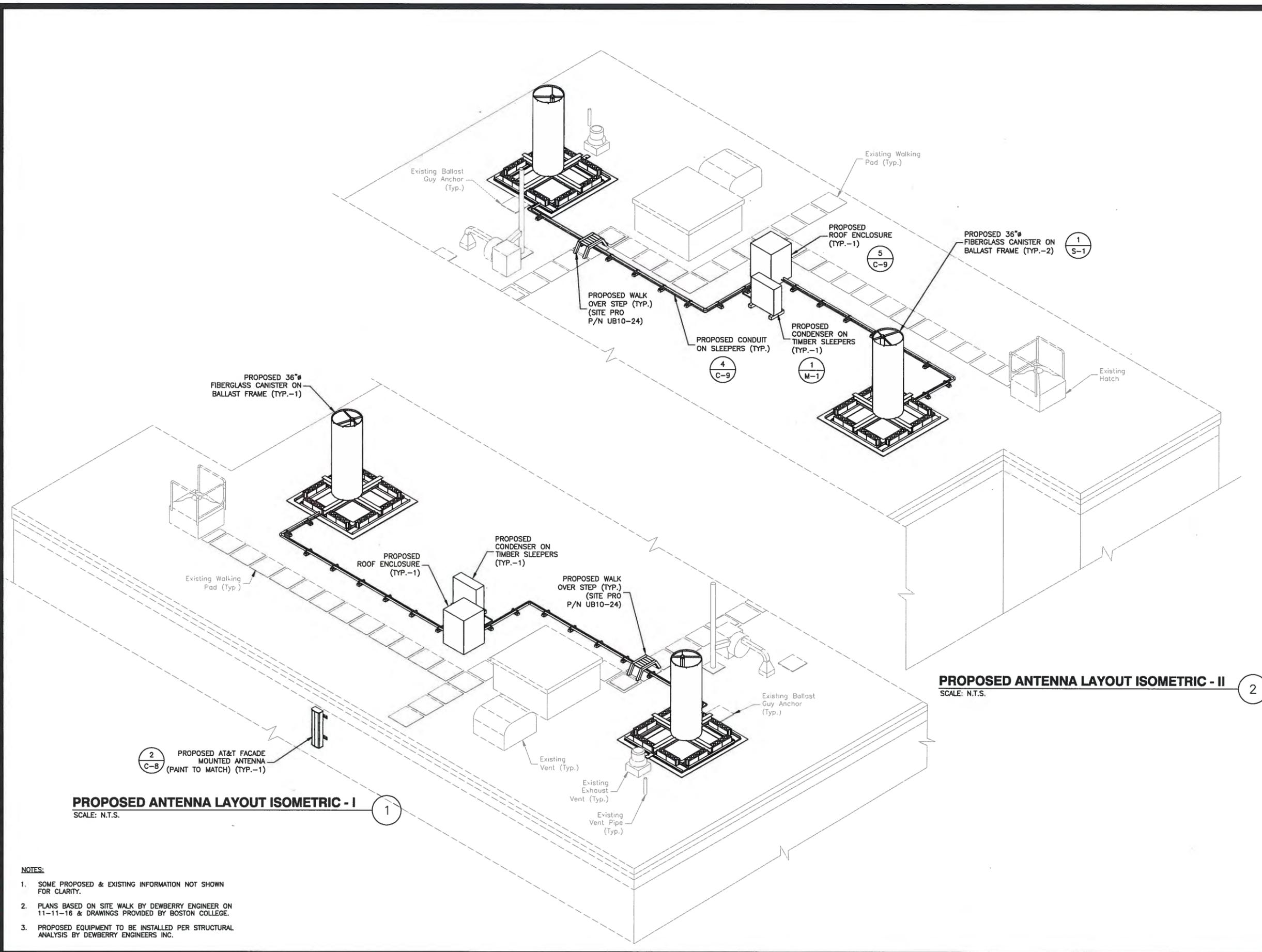
NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE

PROPOSED ANTENNA
LAYOUT ISOMETRICS

SHEET NUMBER

C-5

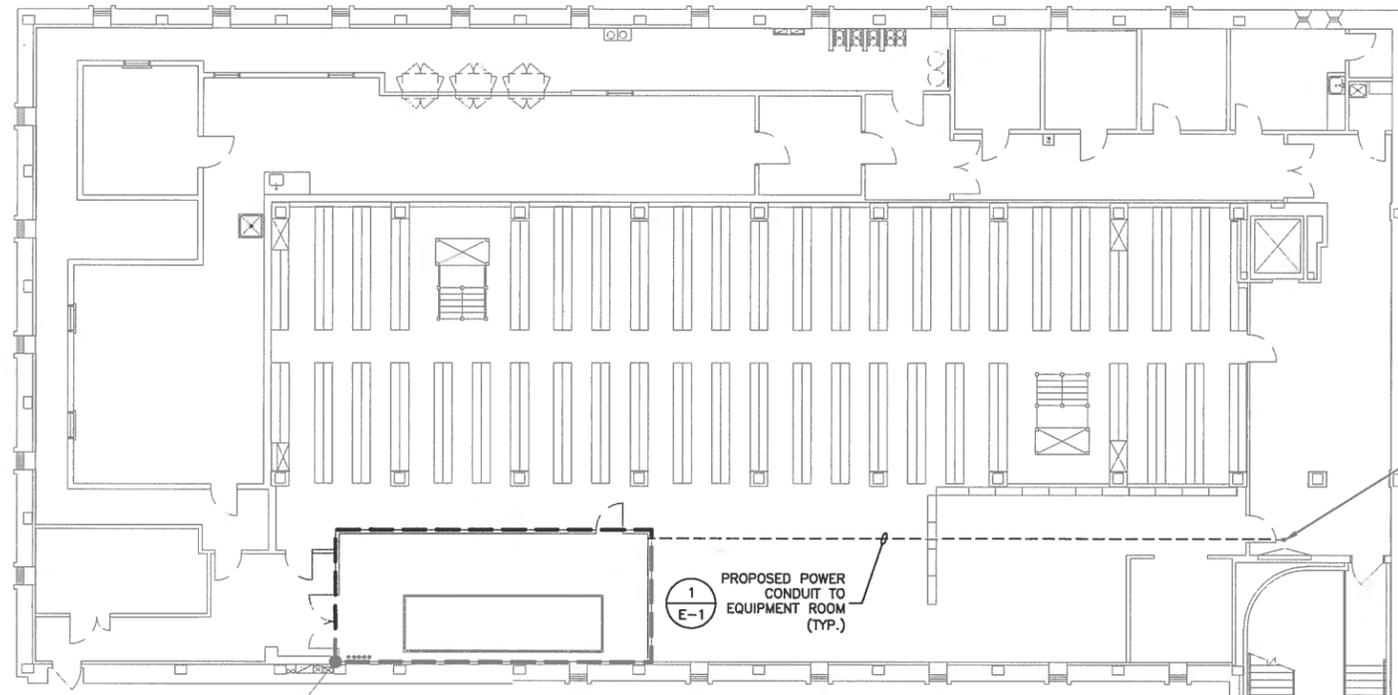


PROPOSED ANTENNA LAYOUT ISOMETRIC - I
SCALE: N.T.S.

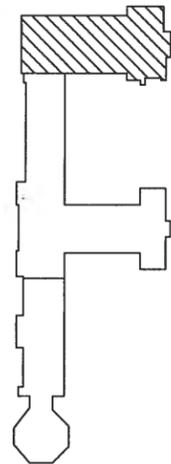
PROPOSED ANTENNA LAYOUT ISOMETRIC - II
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NOTES:

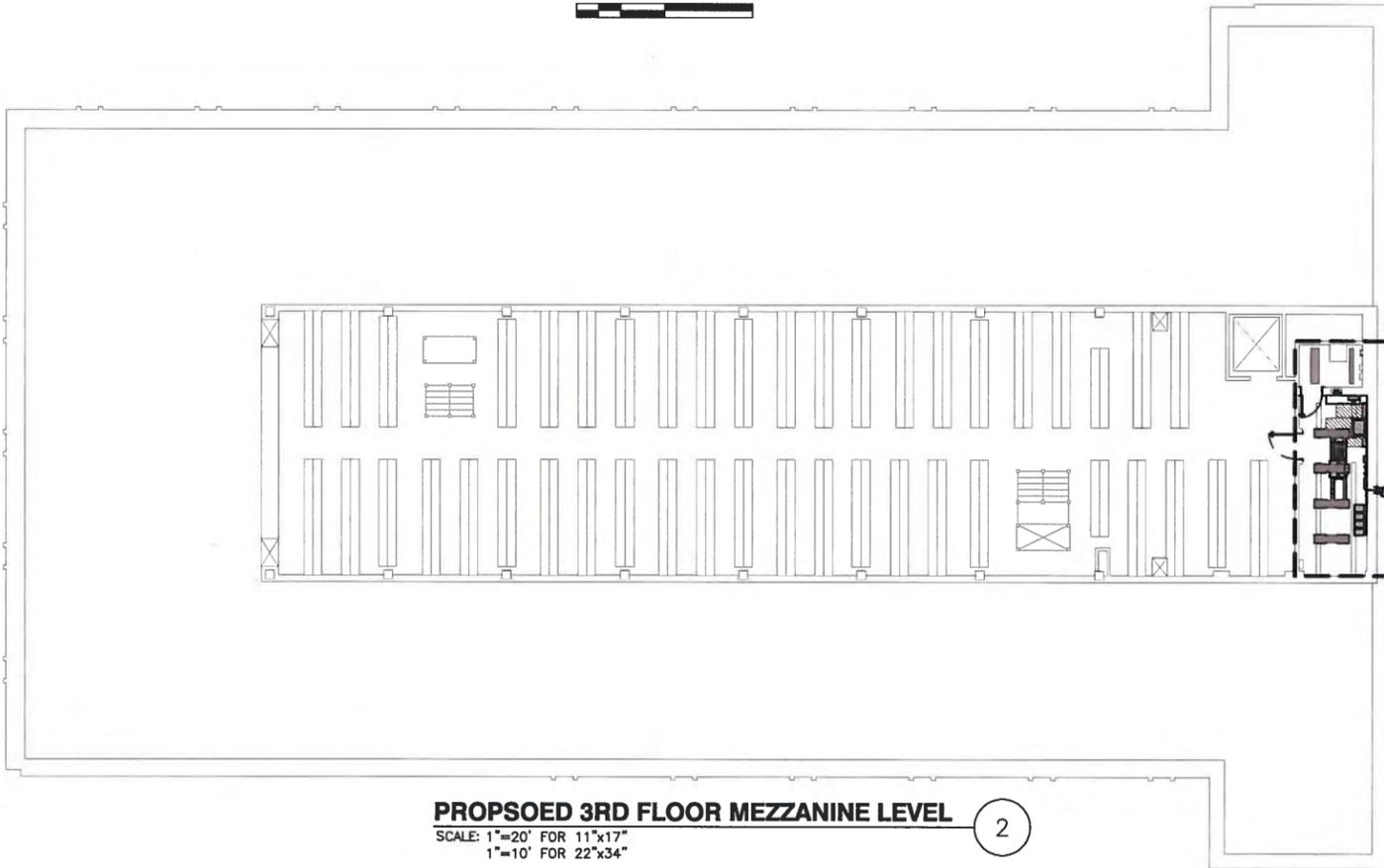
- SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
- PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
- PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.



PROPOSED 3RD FLOOR PLAN ①
 SCALE: 1"=20' FOR 11"x17"
 1"=10' FOR 22"x34"



KEY MAP



PROPOSED 3RD FLOOR MEZZANINE LEVEL ②
 SCALE: 1"=20' FOR 11"x17"
 1"=10' FOR 22"x34"



- NOTES:**
1. NORTH SHOWN AS APPROXIMATE.
 2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 4. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.

at&t
 Mobility
 550 COCHITUATE ROAD
 SUITES 13 & 14
 FRAMINGHAM, MA 01701

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REVIEWED BY:	DAS
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JOB NUMBER:	50057154
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SHEET TITLE
PROPOSED 3RD FLOOR
& MEZZANINE PLAN
 SHEET NUMBER

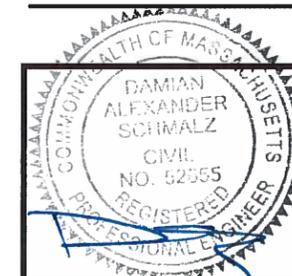
C-6

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REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

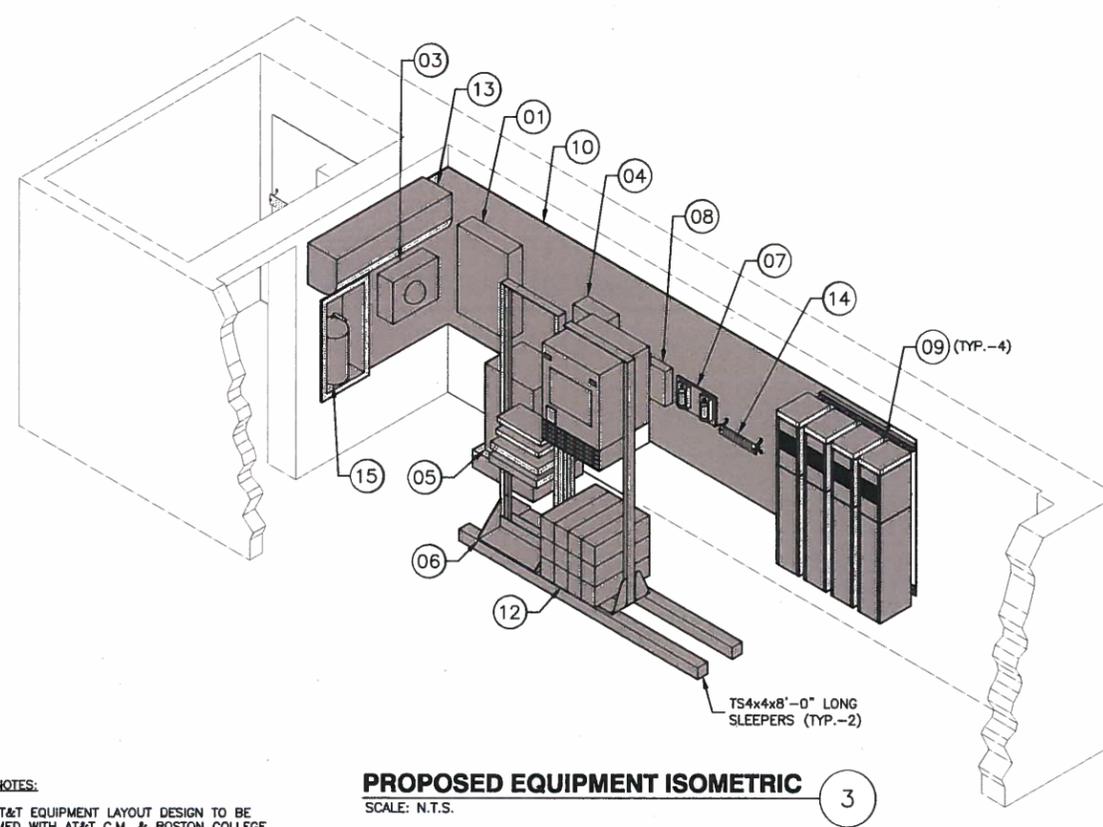
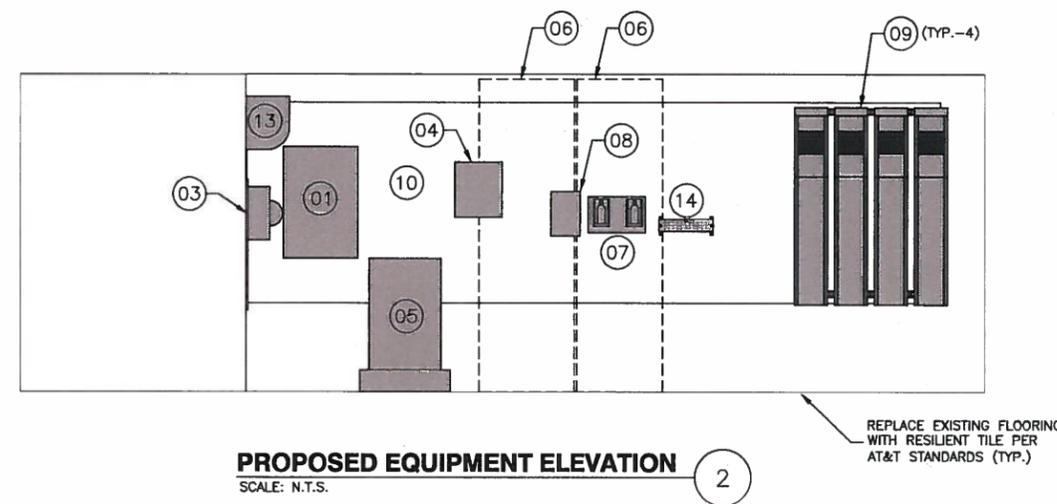
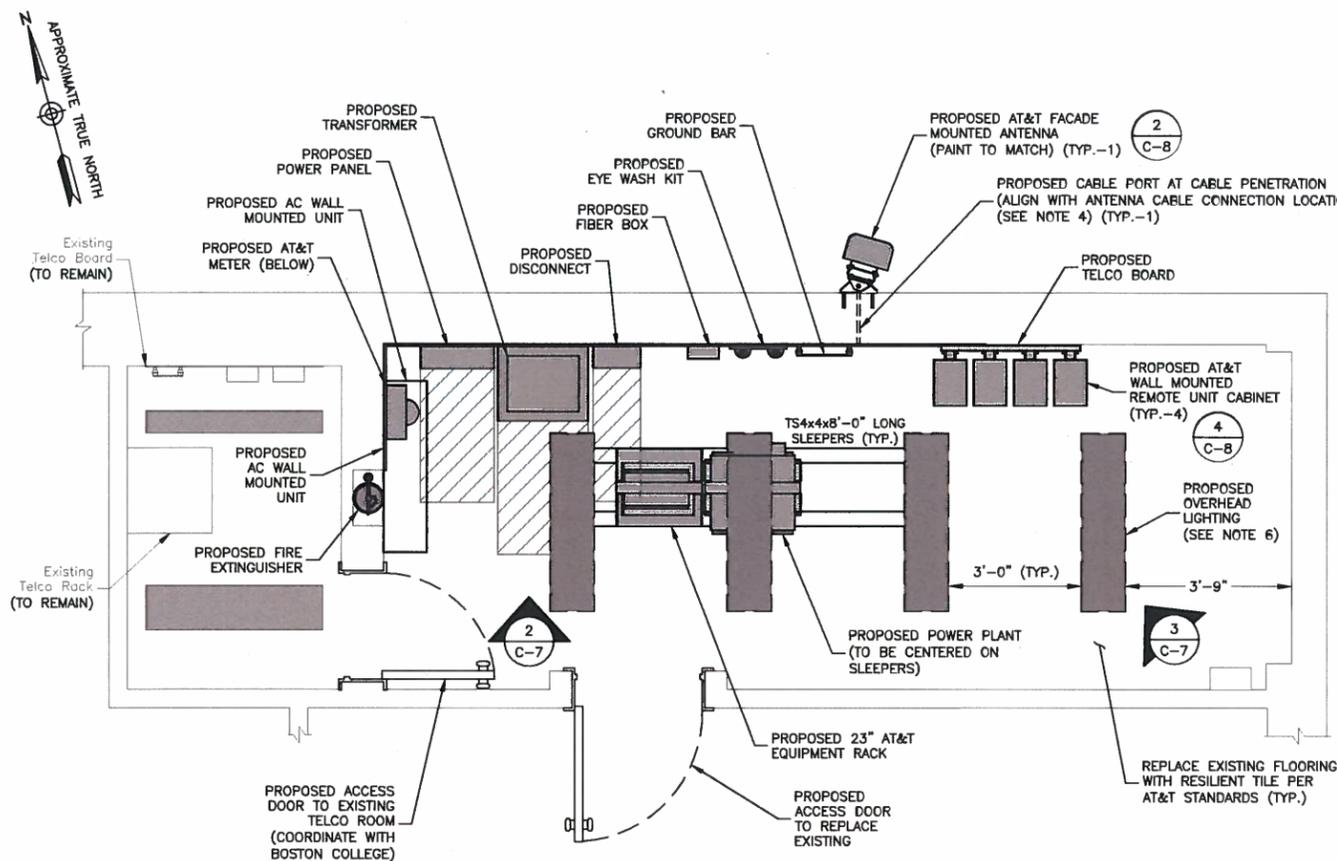
NEWTON CAMPUS
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SHEET TITLE

PROPOSED EQUIPMENT
ROOM PLAN & ISOMETRIC

SHEET NUMBER

C-7

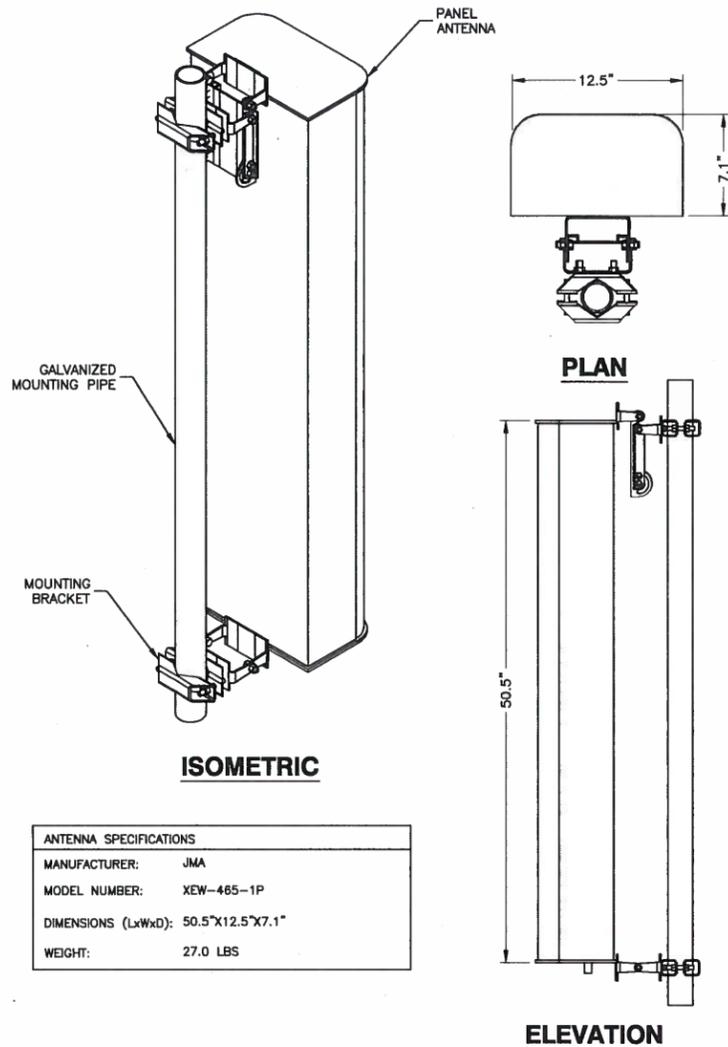


NOTE:
:-REFER TO THIS SHEET FOR BILL OF MATERIALS.
FOR RISER DIAGRAM SEE SHEET E-1.

BILL OF MATERIALS	
01	POWER PANEL "AT&T" (225A, 120/208V, 3Ø) WITH 175A MCB IN LOCKABLE NEMA TYPE 1R ENCLOSURE
02	A/C DATA SURGE PROTECTOR IN NEMA TYPE 1R ENCLOSURE
03	CHECK METER (SEE ELECTRICAL NOTES 1 & 2, SHEET E-1 FOR SPECIFICATIONS)
04	100A NON-FUSED DISCONNECT
05	45 KVA TRANSFORMER, 480V PRIMARY, 120/208V SECONDARY
06	PROPOSED 23" AT&T EQUIPMENT RACK
07	EYE WASH STATION
08	FIBER PANEL-TE 24 SC/APC RIBBON - NEQ.15566
09	CORNING 40W GX QUAD BAND REMOTE (SEE SHEET C-8)
10	4'x8' FIRE RESISTANT BACKBOARD
11	QUAD RECEPTACLE, 20A - TWO (2) HUBBELL P/N 5382W WITH P82W PLATE
12	EMERSON 721 DC PLANT WITH BATTERY UNITS
13	AC WALL MOUNTED UNIT (SEE SHEET M-1 FOR DETAILS)
14	MASTER GROUND BAR, 4"x20"x1/4" TINNED
15	FIRE EXTINGUISHER. PROVIDE SIGNAGE & MOUNT PER CODE.

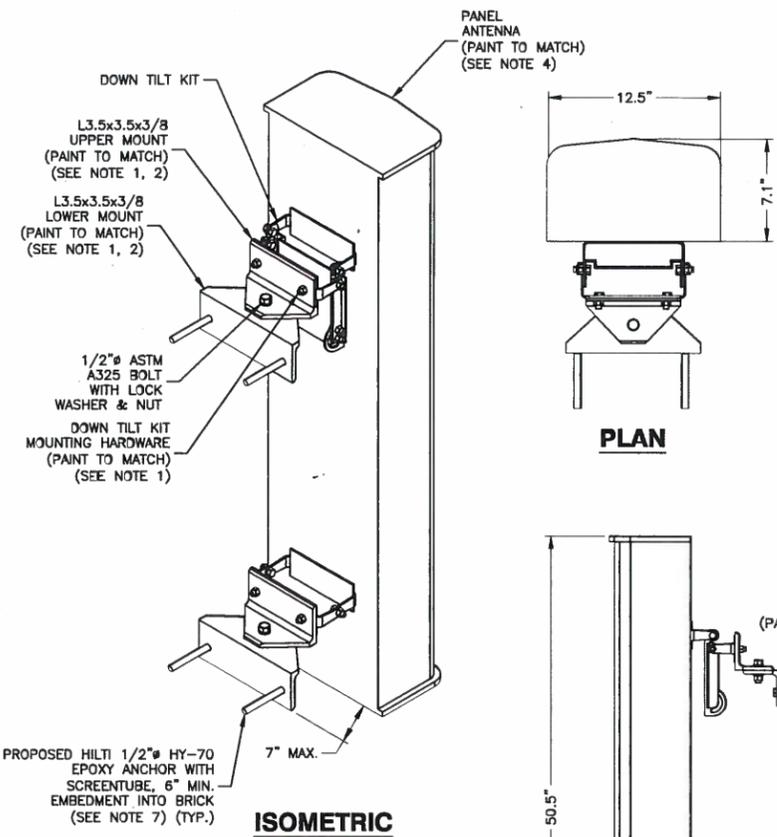
- NOTES:**
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 - UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
 - DO NOT OBSTRUCT OVERHEAD FEATURES OR ACCESS. ADJUST SIZE OR LOCATION AS NECESSARY WITH APPROVAL FROM AT&T CM & BOSTON COLLEGE REPRESENTATIVE.
 - REMOVE EXISTING LIGHTING & REPLACE WITH PROPOSED LED LIGHTING. REWIRE & REPLACE LIGHTING CONTROLS AS NECESSARY.

- EQUIPMENT NOTES:**
- FINAL AT&T EQUIPMENT LAYOUT DESIGN TO BE CONFIRMED WITH AT&T C.M. & BOSTON COLLEGE.
 - PROVIDE STRUT & PAINTED FIRE RESISTANT PLYWOOD MOUNTING BACKBOARDS AS REQUIRED.
 - PROVIDE JUNCTION BOX & PULL BOXES AS REQUIRED BY THE NEC & SITE CONDITIONS.



ANTENNA SPECIFICATIONS	
MANUFACTURER:	JMA
MODEL NUMBER:	XEW-465-1P
DIMENSIONS (LxWxD):	50.5"x12.5"x7.1"
WEIGHT:	27.0 LBS

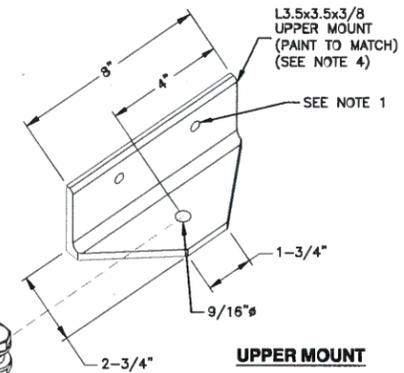
PANEL ANTENNA DETAIL
SCALE: N.T.S.



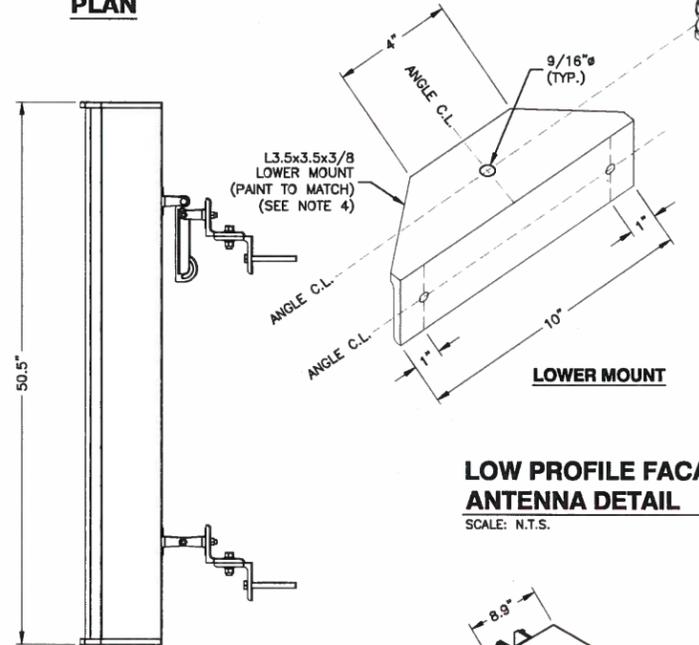
ANTENNA SPECIFICATIONS	
MANUFACTURER:	JMA
MODEL NUMBER:	XEW-465YP
DIMENSIONS (LxWxD):	50.5"x12.5"x7.1"
WEIGHT:	27.0 LBS

ELEVATION

- NOTES:**
1. VERIFY DOWNTILT MOUNTING KIT BOLT LAYOUT PRIOR TO FABRICATION OF UPPER MOUNT BRACKET.
 2. ROTATE UPPER CONNECTION TO REQUIRED AZIMUTH. SHOP VERIFY ANTENNA CAN ACHIEVE REQUIRED AZIMUTH FROM WALL FACE.
 3. WEATHER SEAL AROUND EXTERIOR WALL ATTACHMENT ANGLES WITH SILICONE SEALANT.
 4. PAINT ALL ANTENNAS, MOUNTS & ASSOCIATED EQUIPMENT TO MATCH BUILDING FACADE.
 5. ALL FEEDERS ARE TO BE NEATLY BUNDLED & PAINTED TO MATCH THE BUILDING FACADE.
 6. ALL STEEL TO BE GALVANIZED.
 7. VERIFY LOCATION OF ANY STRUCTURAL ELEMENTS PRIOR TO ANCHOR ATTACHMENT & INSTALLATION.

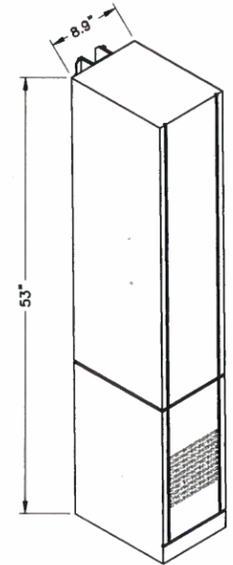


UPPER MOUNT

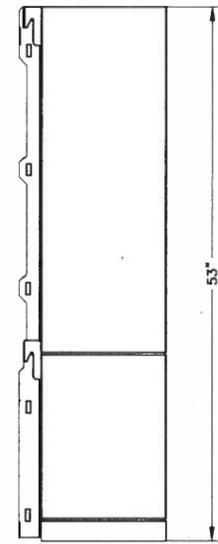


LOWER MOUNT

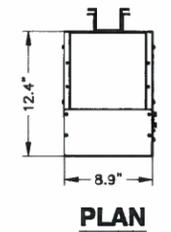
LOW PROFILE FACADE MOUNTED ANTENNA DETAIL
SCALE: N.T.S.



ISOMETRIC



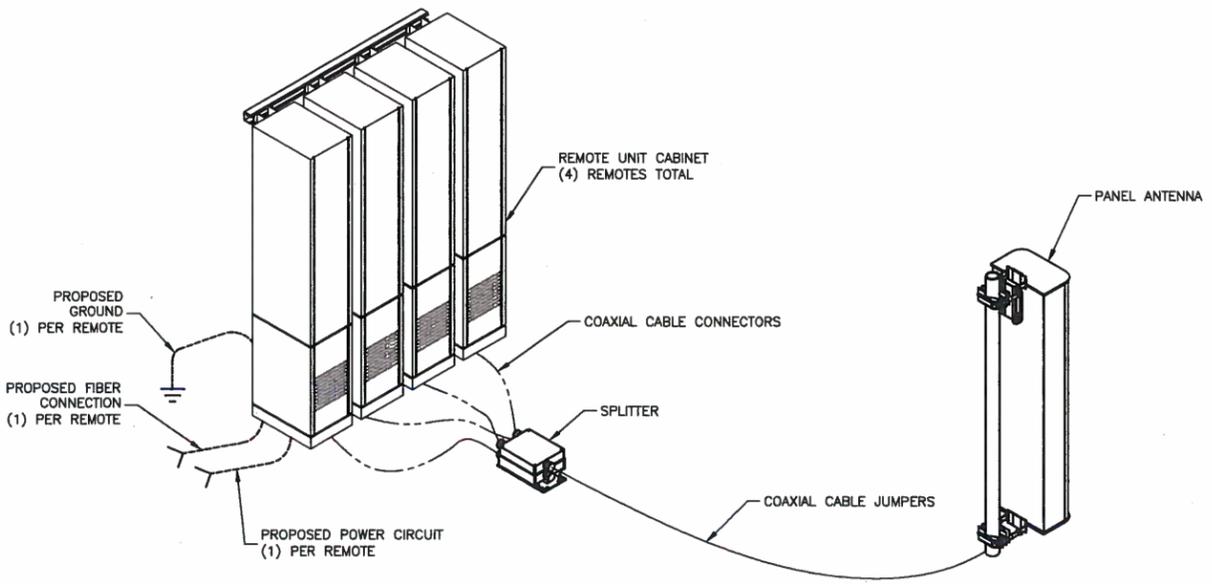
SIDE ELEVATION



PLAN

REMOTE UNIT SPECIFICATION	
MANUFACTURER:	CORNING
MODEL:	40 W GX QUAD BAN REMOTE
DIMENSIONS (HxWxD):	53"x8.9"x12.4"

REMOTE UNIT DETAIL
SCALE: N.T.S.



SECTOR ONE LINE DIAGRAM
SCALE: N.T.S.

at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

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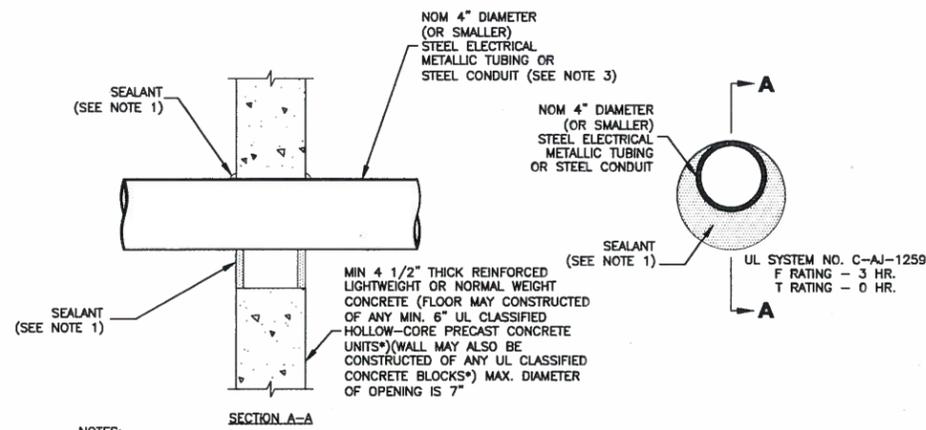
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SITE ADDRESS	

NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE

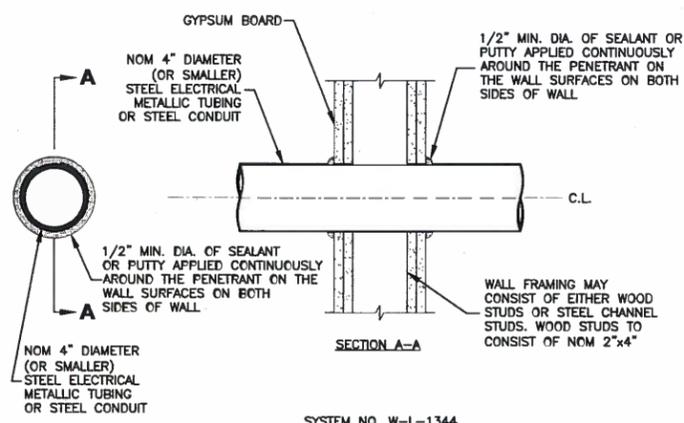
CONSTRUCTION DETAILS-1

SHEET NUMBER



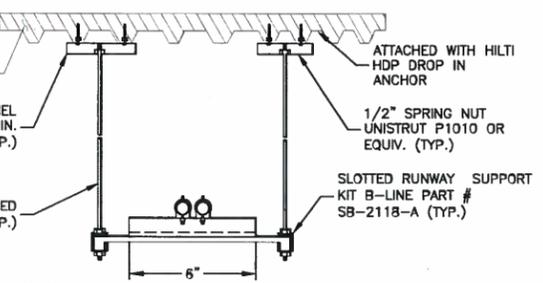
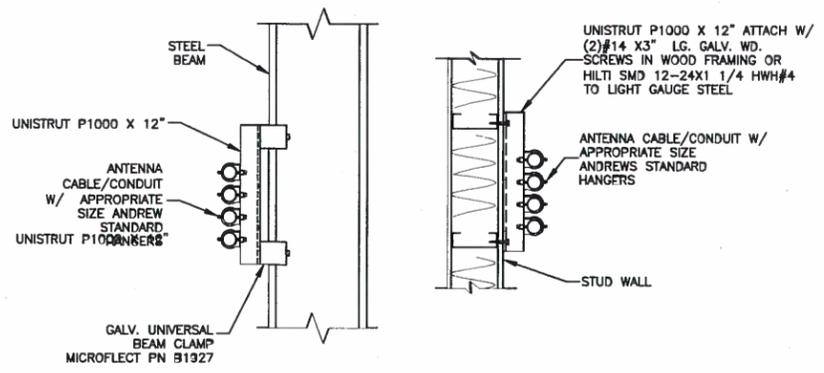
- NOTES:**
1. FILL, VOID OR CAVITY MATERIAL* - SEALANT - MIN. 1/2" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF FLOOR OR WALL. AT THE POINT CONTACT LOCATION BETWEEN PENETRATING ITEM & CONCRETE, A MIN. 1/4" THICK BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/ PENETRATING ITEM INTERFACE ON BOTH SIDES OF FLOOR OR WALL.
 2. FORMING MATERIAL - (OPTIONAL, NOT SHOWN) - MINERAL WOOL BATT PACKING MATERIAL OR POLYURETHANE BACKER ROD FRITION FITTED INTO OPENING & RECESSED FROM FLOOR OR WALL SURFACES AS REQUIRED TO ACCOMMODATE THICKNESS OF FILL MATERIAL.
 3. ONE CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE CONDUIT & THE PERIPHERY OF THE OPENING SHALL BE A MIN. OF 0" (POINT OF CONTACT) TO A MAX. OF 3". CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
- * BEARING THE UL CLASSIFICATION MARK.

CORING DETAIL
SCALE: N.T.S.



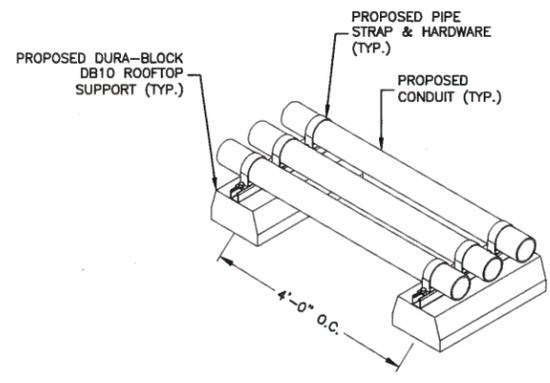
- NOTES:**
1. THE 1 & 2 HOUR FIRE RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS & MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL & PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY.
 2. 5" DIAMETER OPENING MAX.

SECTION - THROUGH PENETRATION FIRESTOP SYSTEM
SCALE: N.T.S.

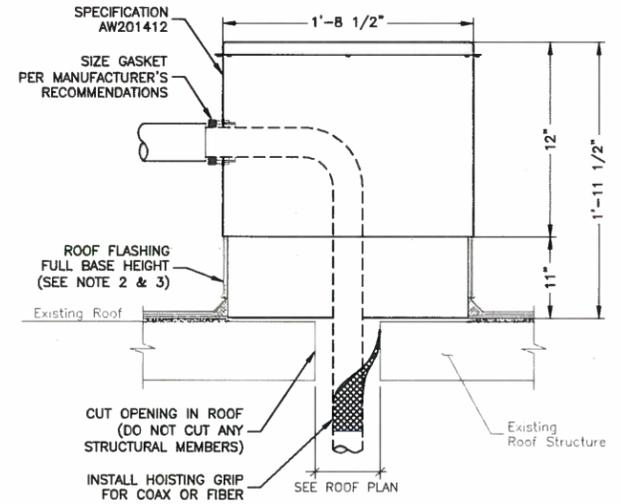


- NOTES:**
1. ALL COAX SUPPORT SPACING: 4'-0" MAX.
 2. ALL CONDUIT SUPPORT SPACING: 10'-0" MAX.
 3. CONFIRM CONDUIT ROUTING WITH BUILDING OWNER & CONSTRUCTION MANAGER PRIOR TO INSTALLATION.

CABLE/CONDUIT SUPPORT
SCALE: N.T.S.

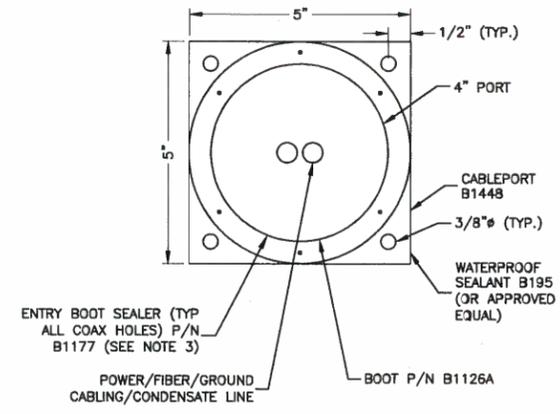


CONDUIT SLEEPER DETAIL
SCALE: N.T.S.



- NOTES:**
1. INSTALL RPW-ROOF PENETRATION HOUSINGS LLC ASSEMBLY PER MANUFACTURER'S SPECIFICATIONS BY FISKIO INC. (800) 288-6816 (IN NEW ENGLAND) (800) 994-0945 (OUTSIDE NEW ENGLAND).
 2. FLASHING & SEALANTS TO MATCH EXISTING ROOFING SYSTEM. WEATHERPROOF ALL EDGES WITH EXTERIOR GRADE SILICON.
 3. CONTRACTOR TO USE LANDLORD'S APPROVED ROOFER & SHALL NOT VOID ANY EXISTING WARRANTY. CONTRACTOR TO SEAL ALL UNUSED PORTS WITH PROPER SEALANT CAPS.
 4. NO STRUCTURAL JOISTS ARE TO BE CUT DURING INSTALLATION.

RPW-ROOF PENETRATION HOUSING
SCALE: N.T.S.



- NOTES:**
1. CONTRACTOR TO THOROUGHLY DRY AREA BEFORE CORING, INSTALLING & SEALING CABLEPORT & BOOTS.
 2. ALL PART NUMBERS ARE MICROFLECT
 3. CONTRACTOR TO FILL THE BOOT CAVITY W/ BOOT SEALER TO FORM A CONICAL SHAPE TO ALLOW WATER RUN OFF. 2 TUBES OF B1177 ARE REQUIRED FOR EACH BOOT.
 4. WATERPROOF ALL EDGES & HOLES.

B1177 SINGLE COAX PORT
SCALE: N.T.S.

550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

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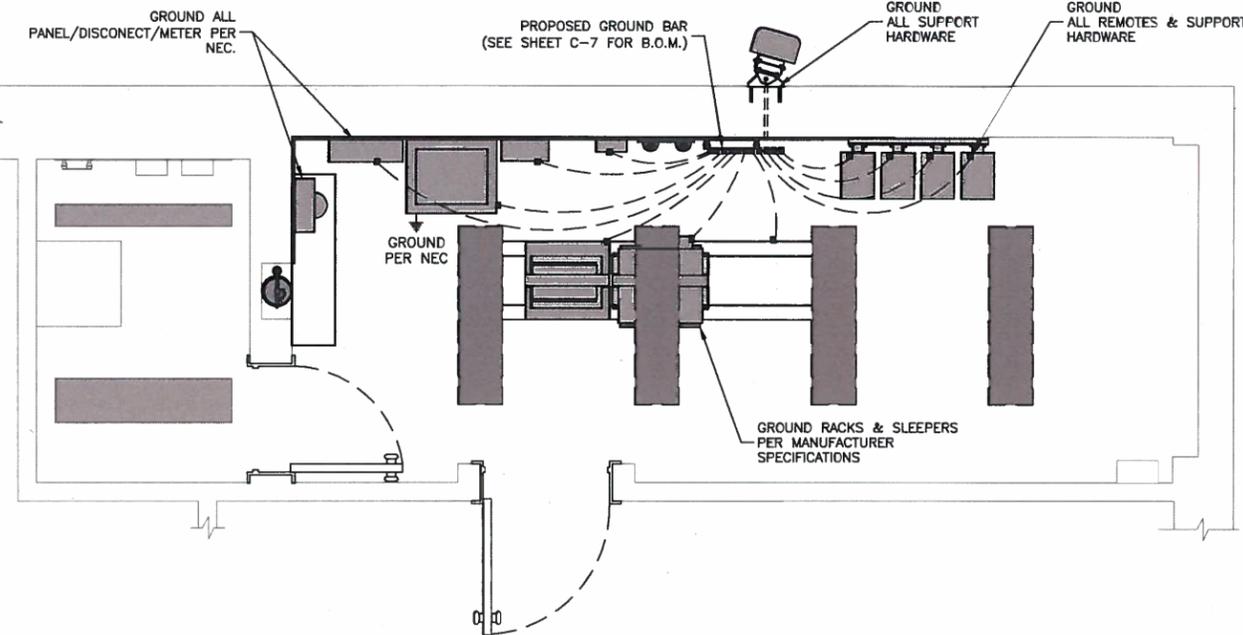
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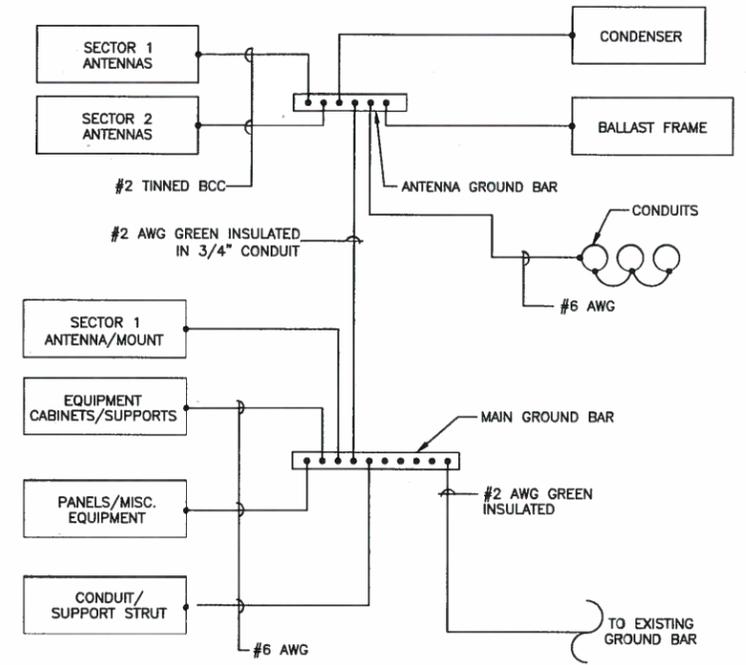
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CONSTRUCTION DETAILS-II

SHEET NUMBER

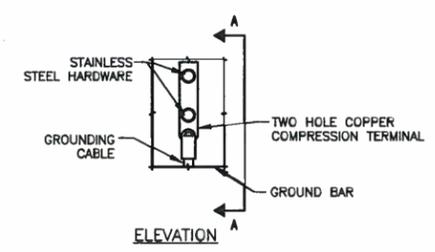
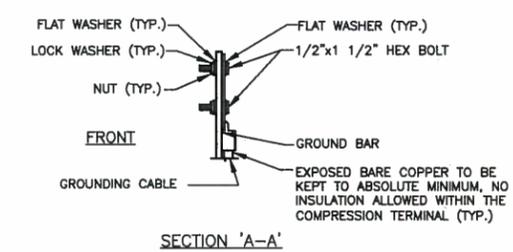


GROUNDING PLAN 1
 SCALE: 1/4"=1' FOR 11"x17"
 1/2"=1' FOR 22"x34"
 0' 1' 2' 4'



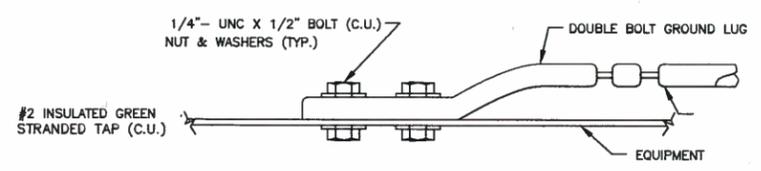
GROUNDING SCHEMATIC 2
 SCALE: N.T.S.

- NOTES:**
1. BOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR (GNP BAR).
 2. ALL CELL EQUIPMENT (BCE, BATTERY FRAME, POWER CABINETS, MISC. EQUIPMENT FRAMES, ETC.) SHALL BE GROUNDED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
 3. ALL EXPOSED METAL OBJECTS IN EQUIPMENT AREA SHALL BE BONDED & JUMPED TO MGB.
 4. GROUND ANTENNA SUPPORT PIPES WITH #2 AWG TINNED BCC DEDICATED LEAD BACK TO GROUND BAR.
 5. VERIFY EQUIPMENT GROUNDING REQUIREMENTS WITH SPECIFIC MANUFACTURERS.
 6. EXISTING GROUND RING SHALL BE TESTED TO ENSURE SUFFICIENT GROUNDING RESISTANCE CAN BE ACHIEVED. VERIFY RESULTS WITH AT&T CM & BOSTON COLLEGE.



- NOTES:**
1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED
 2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL 3
 SCALE: N.T.S.



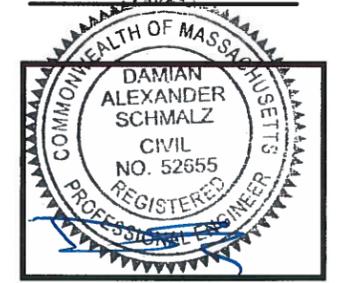
CONNECTION TO EQUIPMENT DETAIL 4
 SCALE: N.T.S.



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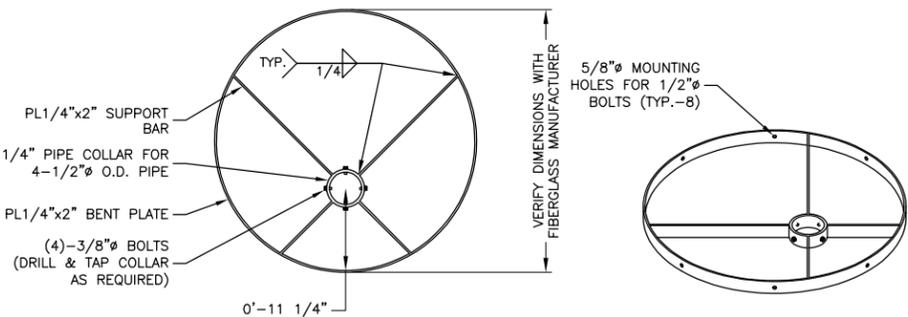
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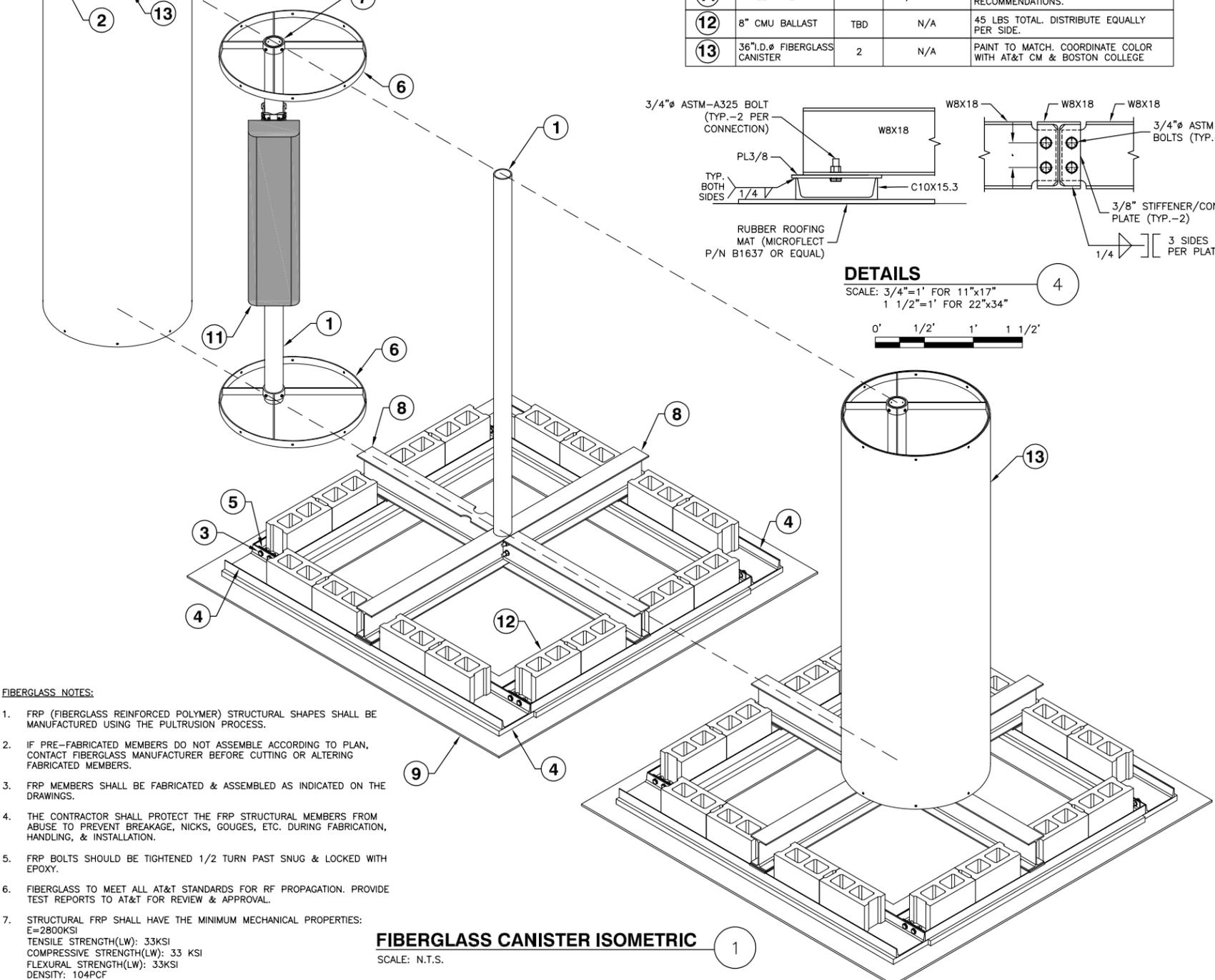
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CONSTRUCTION DETAILS—III

SHEET NUMBER

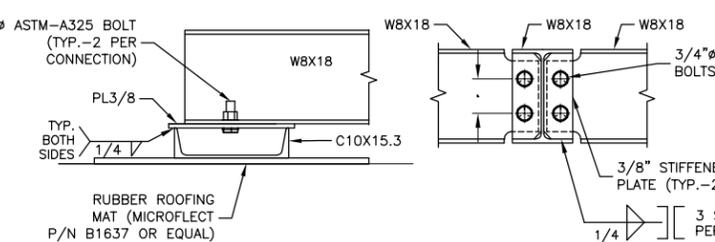


MOUNTING COLLAR DETAIL FIBERGLASS FALSE FLUE
SCALE: N.T.S.

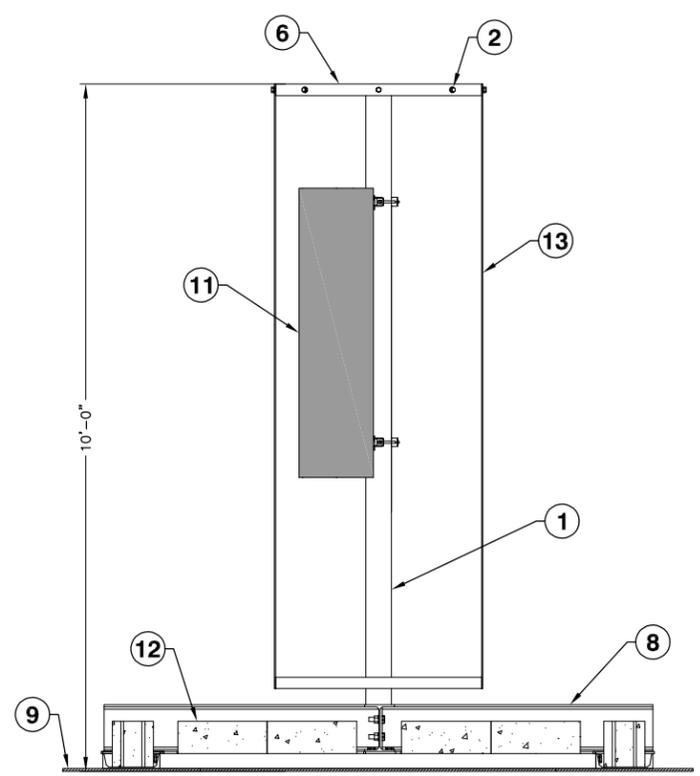


- FIBERGLASS NOTES:**
- FRP (FIBERGLASS REINFORCED POLYMER) STRUCTURAL SHAPES SHALL BE MANUFACTURED USING THE PULTRUSION PROCESS.
 - IF PRE-FABRICATED MEMBERS DO NOT ASSEMBLE ACCORDING TO PLAN, CONTACT FIBERGLASS MANUFACTURER BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
 - FRP MEMBERS SHALL BE FABRICATED & ASSEMBLED AS INDICATED ON THE DRAWINGS.
 - THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, & INSTALLATION.
 - FRP BOLTS SHOULD BE TIGHTENED 1/2 TURN PAST SNUG & LOCKED WITH EPOXY.
 - FIBERGLASS TO MEET ALL AT&T STANDARDS FOR RF PROPAGATION. PROVIDE TEST REPORTS TO AT&T FOR REVIEW & APPROVAL.
 - STRUCTURAL FRP SHALL HAVE THE MINIMUM MECHANICAL PROPERTIES:
E=2800KSI
TENSILE STRENGTH(LW): 33KSI
COMPRESSIVE STRENGTH(LW): 33 KSI
FLEXURAL STRENGTH(LW): 33KSI
DENSITY: 104PCF

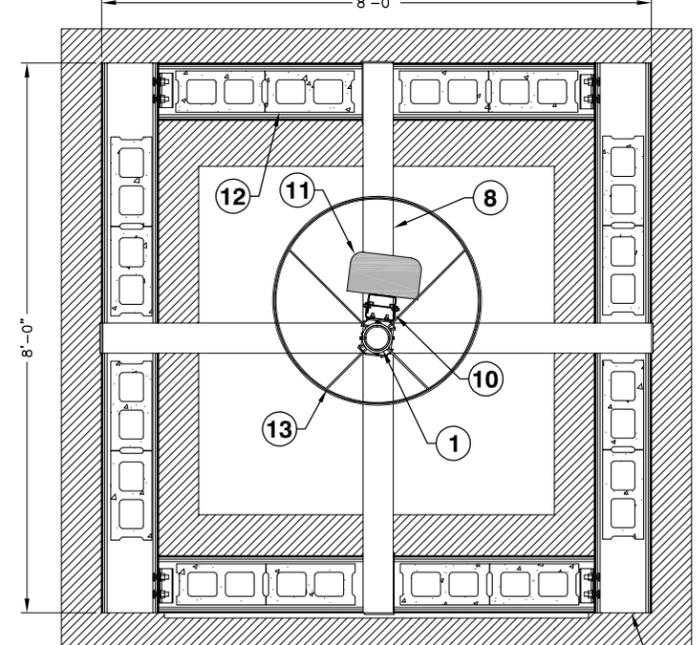
NUMBER	ITEM	QUANTITY (PER FRAME)	MANUFACTURER/ MODEL #	COMMENTS/NOTES
1	4" STD PIPE-GALV.	1	N/A	WELD TO ITEM 8
2	SELF TAPPING SCREW OR BOLT	TBD	N/A	FIBERGLASS ATTACHMENT SPECIFICATION BY FIBERGLASS MANUFACTURER.
3	3/4" ASTM A325 BOLT	TBD	N/A	SEE DETAIL 4 FOR CONNECTION DETAILS.
4	GALVANIZED C10X15.3	4	N/A	DRILL WEEP HOLES AS NEEDED.
5	GALVANIZED L2.5X2.5X1/4X6"	4	N/A	WELD TO ITEM 4 & BOLT TO ADJACENT ITEM 4.
6	1/4"x2" TALL CANISTER BRACKET	2	N/A	FINAL OUTSIDE DIMENSIONS TO BE BASED ON CANISTER MATERIAL THICKNESS.
7	5"x2" TALL STD PIPE SLEEVE-GALV.	2	N/A	WELD TO ITEM 6. DRILL & TAP (4) 3/8" BOLTS TO MOUNT TO ITEM 1.
8	GALVANIZED W8X18	3	N/A	N/A
9	RUBBER ROOFING MAT	TBD	MICROFLECT P/N B1637	INSTALL PER MANUFACTURERS RECOMMENDATIONS.
10	ANTENNA MOUNTING BRACKET	2	N/A	INSTALL PER MANUFACTURERS RECOMMENDATIONS.
11	PANEL ANTENNA	1	JMA/XEW-465YP	INSTALL PER MANUFACTURERS RECOMMENDATIONS.
12	8" CMU BALLAST	TBD	N/A	45 LBS TOTAL. DISTRIBUTE EQUALLY PER SIDE.
13	36" I.D. FIBERGLASS CANISTER	2	N/A	PAINT TO MATCH. COORDINATE COLOR WITH AT&T CM & BOSTON COLLEGE



DETAILS
SCALE: 3/4"=1' FOR 11"x17"
1 1/2"=1' FOR 22"x34"
0' 1/2' 1' 1 1/2'



ELEVATION



PLAN

FIBERGLASS CANISTER SECTION
SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"
0' 1' 2' 3'

- NOTES:**
- CONTRACTOR TO VERIFY ALL ANTENNA & DOWNTILT BRACKET DIMENSIONS PRIOR TO FABRICATION & COMMENCEMENT OF WORK.
 - ALL STEEL TO BE GALVANIZED.
 - FIBERGLASS FLUE PIPE TO BE PAINTED. COORDINATE COLOR WITH AT&T CM & BOSTON COLLEGE.
 - FIBERGLASS FLUE PIPE & CONNECTION DESIGN TO BE BY FIBERGLASS MANUFACTURER.
 - PROVIDE RUBBER ROOF PAD UNDER BALLAST MOUNT.
 - PROVIDE 45LBS OF CMU BALLAST TOTAL. DISTRIBUTE EQUALLY PER SIDE.



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KENNY COTTE
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CONSTRUCTION DRAWINGS

3	11/20/17	FOR CONSTRUCTION
2	08/22/17	FOR CONSTRUCTION
1	07/17/17	FOR CONSTRUCTION
0	05/01/17	FOR BC APPROVAL
B	02/02/17	FOR COMMENT
A	01/16/17	FOR COMMENT



DRAWN BY:	JG
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE	FIBERGLASS CANISTER DETAILS
SHEET NUMBER	

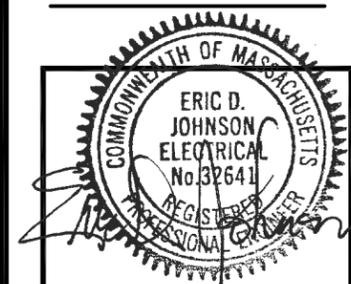
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KENNY COTTLE
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Dewberry Engineers Inc.
280 SUMMER STREET
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BOSTON, MA 02210
PHONE: 617.695.3400
FAX: 617.695.3310



DRAWN BY: JG

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

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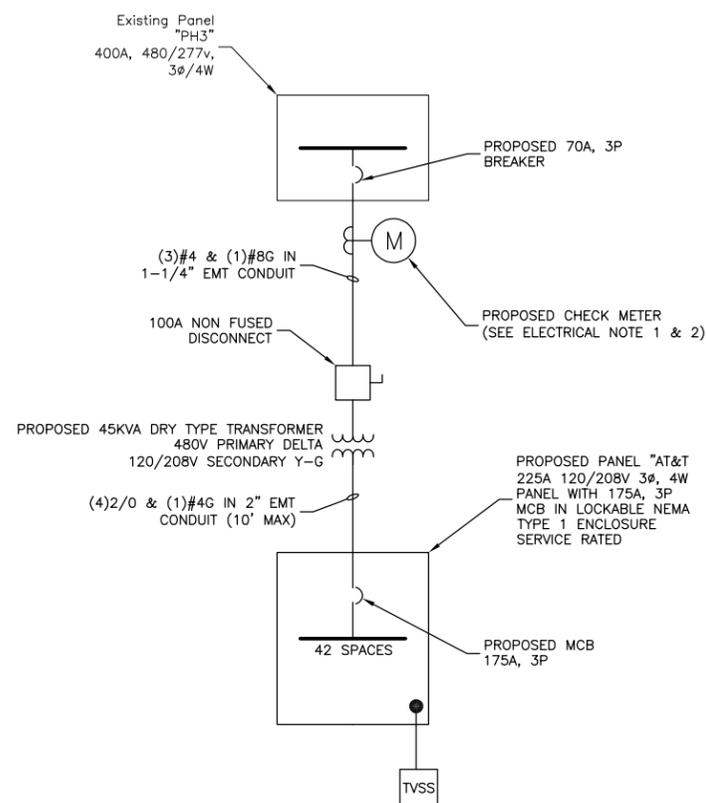
SITE ADDRESS

NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE

ONE-LINE DIAGRAM &
PANEL SCHEDULE

SHEET NUMBER



ELECTRIC ONE LINE DIAGRAM
SCALE: N.T.S.

1

ELECTRICAL NOTES:

- COORDINATE THE METER LOCATION & CONDUIT ROUTING WITH BOSTON COLLEGE PRIOR TO CONSTRUCTION.
- VERIFY METER TYPE & SPECIFICATIONS WITH BOSTON COLLEGE PRIOR TO ORDERING & INSTALLATION.
- SEE SHEET C-6 FOR EQUIPMENT LOCATIONS & APPROXIMATE CONDUIT ROUTING PATH.
- COORDINATE ANY REQUIRED POWER SHUT DOWNS WITH BOSTON COLLEGE & BUILDING PERSONNEL.
- CONTRACTOR IS TO PROVIDE DEWBERRY & BOSTON COLLEGE EQUIPMENT SPECS & SHOP DRAWING FOR APPROVAL PRIOR TO ORDERING MATERIALS.
- CONDUIT ROUTING SHOWN IS SCHEMATIC. FIELD VERIFY CONDUIT PATH & HEIGHT WITH BOSTON COLLEGE FACILITIES. DO NOT BLOCK EXISTING EQUIPMENT OR IMPEDE MAINTENANCE SPACE.
- PROVIDE PULL BOXES & EXPANSION JOINTS PER NEC REQUIREMENTS & FIELD CONDITIONS.
- ALL CORING LOCATIONS SHALL BE X-RAYED TO VERIFY NO STRUCTURAL MEMBERS ARE CUT. ALL CORES SHALL BE FIRE SEALED. TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EQUIPMENT DURING CORING/CONSTRUCTION. PROVIDE A PROTECTION PLAN TO BOSTON COLLEGE FOR REVIEW & APPROVAL PRIOR TO COMMENCEMENT OF CORING.

NEMA 1		PANEL SCHEDULE - AT&T		10,000 A.I.C.	
W/175A MAIN C/B					
CKT #	DESCRIPTION	AMP	AMP	DESCRIPTION	CKT #
1	RECTIFIER	30	30	RECTIFIER	2
3					4
5	RECTIFIER	30	30	RECTIFIER	6
7					8
9	RECTIFIER	30	30	RECTIFIER	10
11					12
13	AIR HANDLER UNIT	15	30	CONDENSER UNIT	14
15					16
17	EQUIPMENT ROOM RECEPTACLES	20	15	CONDENSATE PUMP	18
19	GFI OUTLET (AT CONDENSER UNIT)	20	20	EQUIPMENT ROOM LIGHTING	20
21	SPACE	-	-	SPACE	22
23	SPACE	-	-	SPACE	24
25	SPACE	-	-	SPACE	26
27	SPACE	-	-	SPACE	28
29	SPACE	-	-	SPACE	30
31	SPACE	-	-	SPACE	32
33	SPACE	-	-	SPACE	34
35	SPACE	-	-	SPACE	36
37	SPACE	-	-	SPACE	38
39	TVSS	60	-	SPACE	40
41				SPACE	42

PANEL SCHEDULE
SCALE: N.T.S.

2

**BOSTON COLLEGE
o.d.a.s.-
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CONSTRUCTION DRAWINGS		
3	11/20/17	FOR CONSTRUCTION
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Dewberry Engineers Inc.
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PHONE: 617.665.3400
FAX: 617.665.3310



DRAWN BY: JG
REVIEWED BY: DAS
CHECKED BY: BBR
PROJECT NUMBER: 50057113
JOB NUMBER: 50057154
SITE ADDRESS:

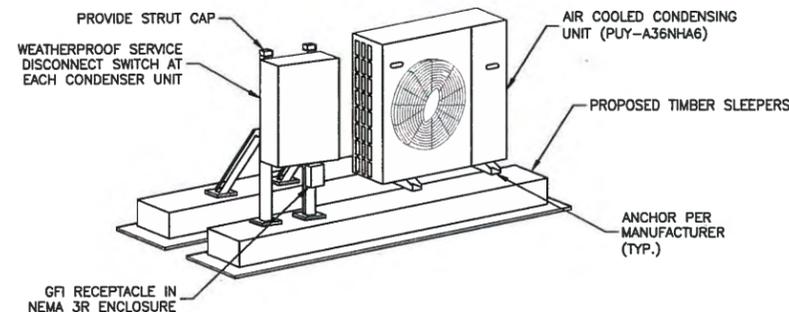
NEWTON CAMPUS
885 CENTRE STREET
NEWTON, MA 02459

SHEET TITLE

HVAC DETAILS

SHEET NUMBER

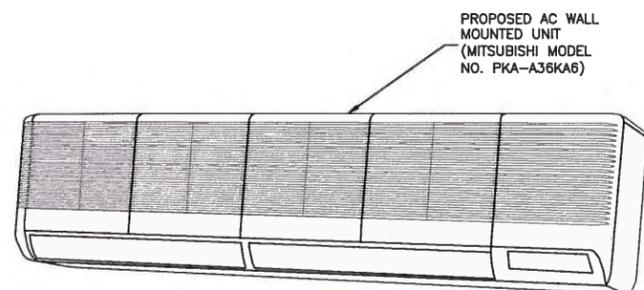
M-1



HVAC EQUIPMENT SCHEDULE

AIR HANDLER:
MANUFACTURER: MITSUBISHI ELECTRIC
NOMINAL TONS: 3
COOLING (BTU): 36,000
AIR HANDLER MODEL: PKA-A36KA6
AIR HANDLER SYMBOL: AHU-1

CONDENSER:
MANUFACTURER: MITSUBISHI ELECTRIC
NOMINAL TONS: 3
COOLING (BTU): 36,000
CONDENSER MODEL: PUY-A36NHA6
CONDENSER SYMBOL: CU-1

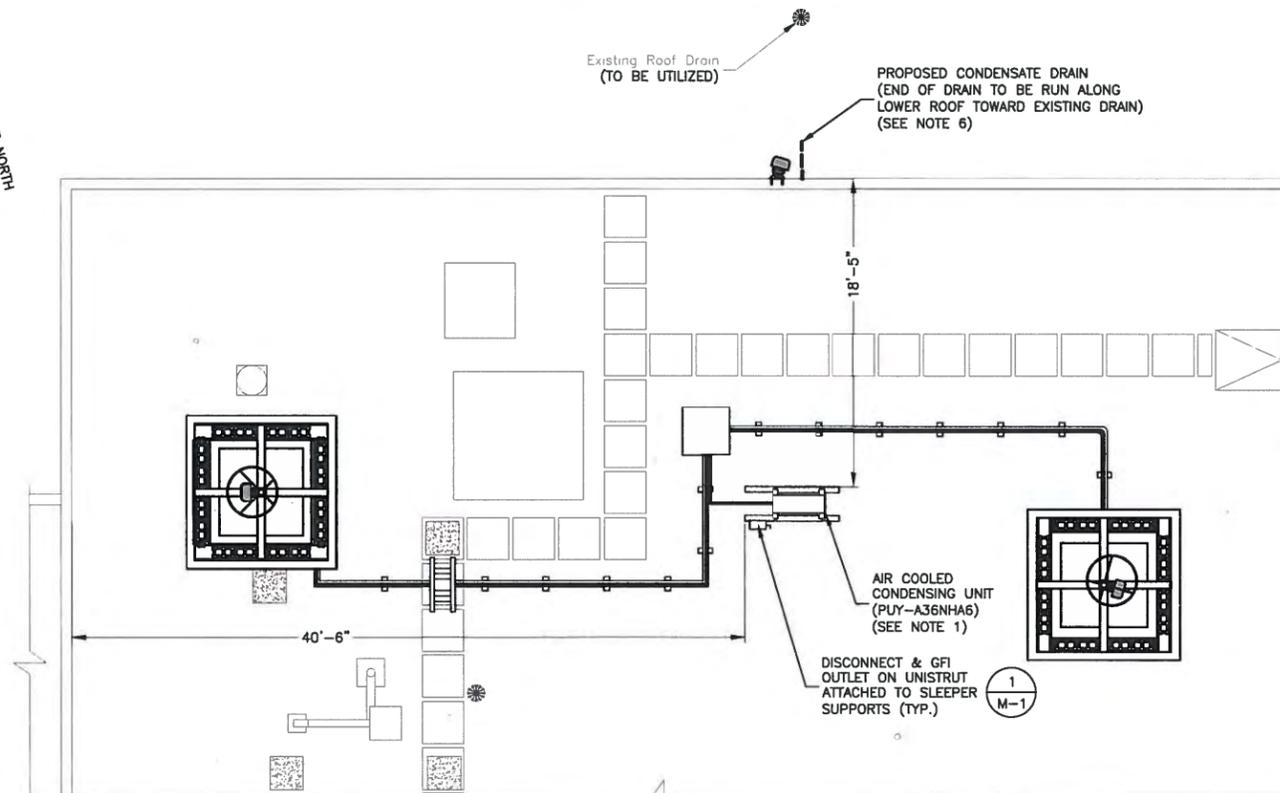


INDOOR UNIT

HVAC UNIT DETAILS

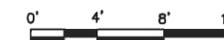
SCALE: N.T.S.

1

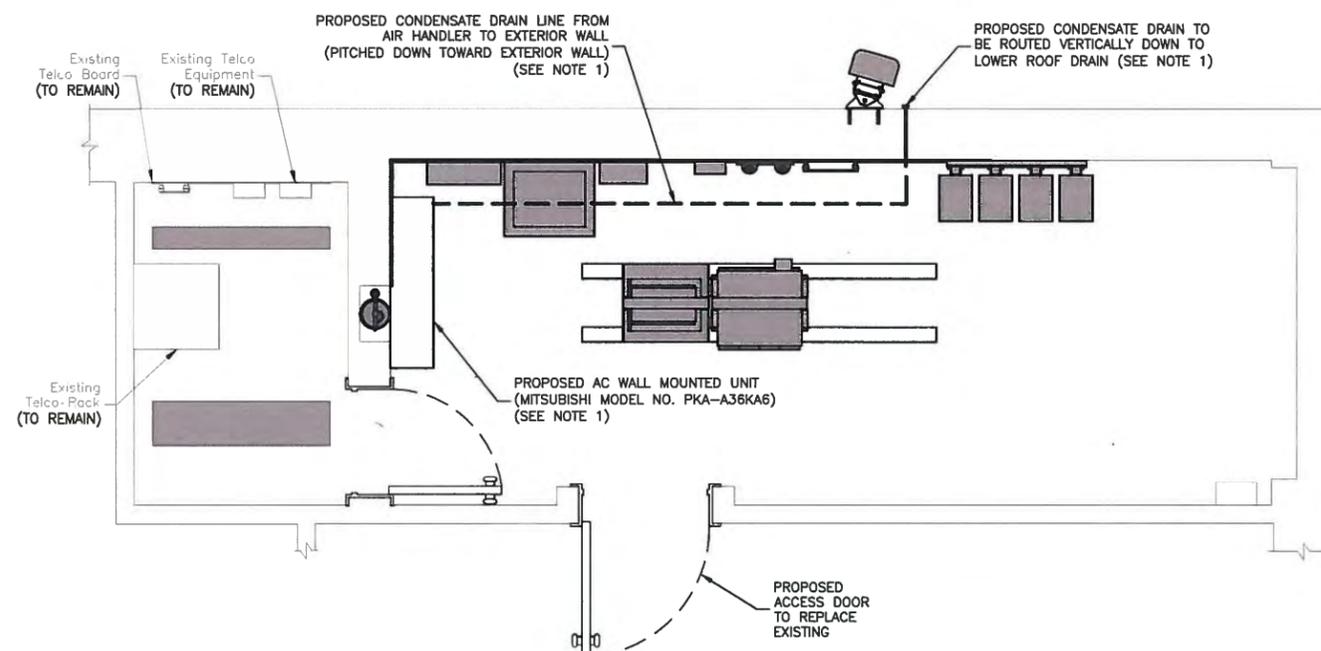


PARTIAL ROOF PLAN

SCALE: 3/32"=1' FOR 11"x17"
3/16"=1' FOR 22"x34"

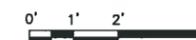


2



PROPOSED EQUIPMENT PLAN

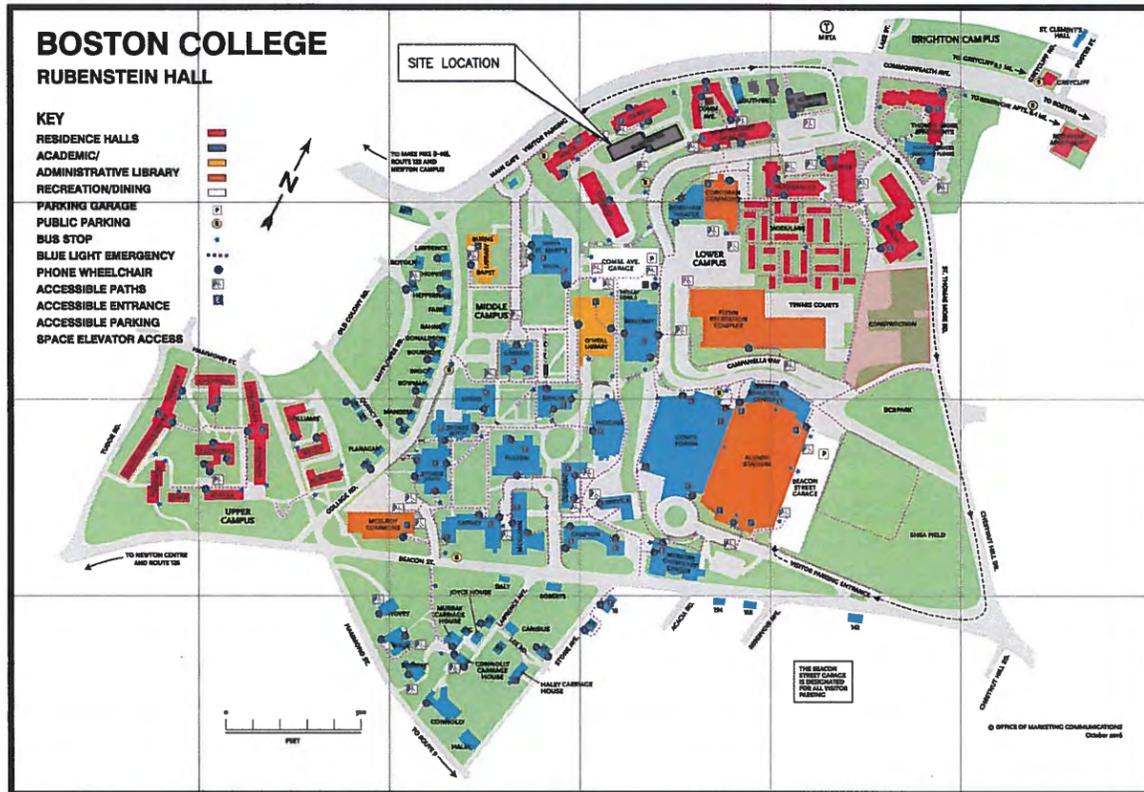
SCALE: 1/4"=1' FOR 11"x17"
1/2"=1' FOR 22"x34"



3

MECHANICAL NOTES:

- CONTRACTOR SHALL INSTALL 3/4" CWT DRAIN LINE FROM DRAIN CONNECTION OF AIR HANDLER THROUGH A SEAL TRAP (W/PLUG) TO THE EXTERIOR WALL. THERE SHALL BE NO CONDENSATE PUMP UTILIZED AND THE SYSTEM SHALL BE ALL GRAVITY DRAINED.
- DISCHARGES SHALL BE RUN (PITCHED DOWN) ALONG CEILING.
- DRAIN LINE SHALL BE RUN OVERHEAD (W/ PROPOSED AIR GAPS PER MASS PLUMBING CODE) TO BUILDING EXTERIOR.
- CONTRACTOR SHALL FURNISH/INSTALL CONDENSING UNIT, MATCHED TO AIR HANDLER. UNITS SHALL BE MOUNTED ON PRESSURE TREATED WOOD BLOCKS W/RUBBER PAD ON ROOF MOUNT INSTALLATION. UNITS TO BE INSTALLED PER MANUFACTURER SPECIFICATIONS. CONTRACTOR SHALL INSTALL 5/8" VAPOR & 3/8" LIQUID REFRIGERANT TUBING FROM AIR HANDLER TO CONDENSING UNIT - EXACT LOCATIONS INCLUDING REQUIRED WALL/CEILING PENETRATIONS (WITH PROPER SEALING) SHALL BE FIELD DETERMINED WITH OWNER APPROVAL. 1" THICK ARMAFLEX INSULATION SHALL BE INSTALLED ON LIQUID REFRIGERANT COOLING LINE.
- CONTRACTOR SHALL INSTALL THERMOSTATS, BOXES, & ASSOCIATED TO CONTROL AIR HANDLER OPERATIONS IN MAINTAINING REQUIRED AT&T MOBILITY ROOM TEMPERATURE.
- CONDENSATE LINE TO BE RUN VERTICALLY TO LOWER ROOF WITH END SECTION RUN ALONG ROOF TOWARD EXISTING DRAIN.



at&t
Mobility

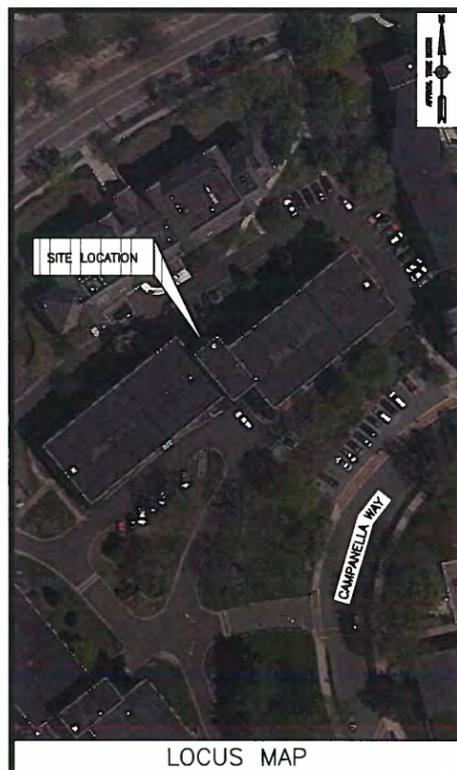
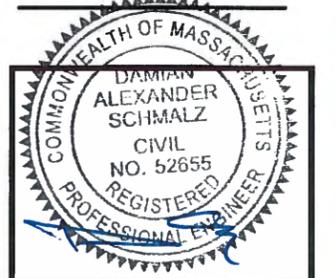
**BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL
CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467**

at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

**BOSTON COLLEGE
oD.A.S.
RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS		
4	11/20/17	FOR CONSTRUCTION
3	08/25/17	FOR CONSTRUCTION
2	07/07/17	FOR CONSTRUCTION
1	05/05/17	FOR BC APPROVAL
0	05/01/17	FOR BC APPROVAL
B	01/19/17	FOR COMMENT
A	01/16/17	FOR COMMENT

Dewberry
Dewberry Engineers Inc.
280 SUMMER STREET
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PHONE: 617.895.3400
FAX: 617.895.3310



LOCUS MAP

ENGINEER
DEWBERRY
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE # (617) 895-3400
FAX # (617) 895-3310
CONTACT: DAMIAN SCHMALZ, P.E.

AT&T ANTENNA SOLUTIONS GROUP
PHONE # (617) 510-1002
CONTACT: DAVID TOWER

CONSULTANT TEAM

SITE NAME:
BOSTON COLLEGE oD.A.S. RUBENSTEIN HALL

PROPERTY OWNER:
TRUSTEES OF BOSTON COLLEGE
C/O JOS M. HERLIHY
GENERAL COUNSEL
90 COLLEGE ROAD
CHESNUT HILL, MA 02467

APPLICANT/DEVELOPER:
AT&T MOBILITY
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

ELECTRIC UTILITY:
EVERSOURCE
(800) 633-3797

TELEPHONE UTILITY:
VERIZON
(800) 870-9999

CENTER OF BUILDING*:
LATITUDE: 42° 20' 18.48"
LONGITUDE: 71° 10' 09.50"
*PER GOOGLE EARTH

PROJECT SUMMARY

SITE ADDRESS:
CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

PROPERTY ID:
63009 0002A

ZONING DISTRICT:
SINGLE RESIDENCE 1

PROJECT DIRECTORY

THE PROJECT WILL CONSIST OF INSTALLING TELECOMMUNICATIONS EQUIPMENT ON THE MECHANICAL LEVEL OF RUBENSTEIN HALL. PROPOSED ANTENNAS WILL BE INSTALLED ON THE BUILDING FACADE. UTILITIES TO COME FROM SOURCES ON SITE.

PROJECT DESCRIPTION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE & ITS SITE CONDITIONS & 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 & NOT FOR HUMAN HABITATION.

SHEET INDEX

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
G-1	GENERAL NOTES
C-1	PROPOSED ROOF & PENTHOUSE PLANS
C-2	PARTIAL SOUTH & EAST ELEVATIONS
C-3	PARTIAL NORTH & WEST ELEVATIONS
C-4	6TH FLOOR PLAN
C-5	EQUIPMENT PLAN-MECHANICAL PENTHOUSE LEVEL
C-6	CONSTRUCTION DETAILS-I
C-7	CONSTRUCTION DETAILS-II
C-8	GROUNDING PLAN & DETAILS
E-1	ONE-LINE DIAGRAM & PANEL SCHEDULE

DRAWN BY:	MR
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1

FROM FRAMINGHAM TAKE I-90 E TOWARD BOSTON. TAKE EXIT 17 TOWARD NEWTON/WATERTOWN. MERGE ONTO WASHINGTON ST. TURN RIGHT ONTO PARK ST. TURN LEFT ONTO TREMONT ST. TURN RIGHT ONTO WAVERLEY AVE. TURN LEFT ONTO WARD ST. TURN RIGHT ONTO MANET RD. TURN LEFT AT THE 2ND CROSS ST. ONTO COMMONWEALTH AVE. TURN RIGHT. THE SITE WILL BE ON THE LEFT.

GENERAL CONSTRUCTION NOTES:

- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, & LOCAL CODES, & COMPLY WITH AT&T SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT "DIG SAFE 1888 DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, & ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, & SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- CONTRACTOR SHALL COORDINATE WITH BOSTON COLLEGE TO DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO BOSTON COLLEGE PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE BOSTON COLLEGE REPRESENTATIVE PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE BOSTON COLLEGE REPRESENTATIVE, & COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T CONSTRUCTION MANAGER & BOSTON COLLEGE REPRESENTATIVE.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, AT&T PROJECT CONSTRUCTION MANAGER, & BOSTON COLLEGE IMMEDIATELY.
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS & SPECIFICATIONS FOR THIS PROJECT.
- ALL ROOF WORK SHALL ABIDE BY THE REQUIREMENTS & SPECIFICATIONS SET FORTH IN THE ROOFING MANUFACTURER'S GUARANTEE.
- CONTRACTOR SHALL REMOVE ALL RUBBISH & DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH BOSTON COLLEGE & TAKE PRECAUTIONS TO MINIMIZE IMPACT & DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH AT&T WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK. AT&T SHALL PROVIDE ONE COPY OF THOSE AS-BUILT DRAWINGS TO BOSTON COLLEGE AS WELL AS AN ELECTRONIC COPY, IF AVAILABLE, OF THE CAD DRAWINGS.
- ANTENNAS & CABLES ARE TYPICALLY PROVIDED BY AT&T. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY AT&T. ALL ITEMS NOT PROVIDED BY AT&T SHALL BE PROVIDED & INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY AT&T.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY AT&T. ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED, & PAID FOR, BY THE CONTRACTOR. AT&T OR ITS SUB-LICENSEES, SHALL IN ADVANCE INFORM BOSTON COLLEGE IN WRITING OF ALL APPLICATIONS TO BE FILED & SHALL PROVIDE ADVANCE NOTICE TO BOSTON COLLEGE OF ALL PUBLIC MEETINGS & HEARINGS SCHEDULED IN CONNECTION WITH SUCH APPLICATIONS.
- CONTRACTOR SHALL START UP HVAC UNITS & SYNCHRONIZE THE THERMOSTATS.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS & REQUIREMENTS AS WELL AS WITH THE INPUT & APPROVAL OF BOSTON COLLEGE.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW & APPROVAL PRIOR TO FABRICATION.
- UNLESS OTHERWISE NOTED AT&T SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS-T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY AT&T FOR INSTALLATION BY CONTRACTOR.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS & LOCATED ACCORDING TO AT&T SPECIFICATIONS, & AS SHOWN IN THESE PLANS.
- THE CONTRACTOR SHALL SUPERVISE & DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES & PROCEDURES & FOR COORDINATING ALL PORTIONS OF THE WORK UNDER & IN COMPLIANCE WITH THE CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE W/ALL APPLICABLE OSHA STANDARDS & RECOMMENDATIONS & SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE & PPM & CONSTRUCTION DEVICES SUCH AS WELDING & FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
- CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ALL INTERIOR FINISHES.
- CONTRACTOR SHALL ADHERE TO ALL BOSTON COLLEGE REQUIREMENTS FOR SAFETY & CONSTRUCTION ON CAMPUS. THESE INCLUDE BUT ARE NOT LIMITED TO CAMPUS SAFETY PROGRAM & THE BOSTON COLLEGE CONSTRUCTION SPECIFICATION REQUIREMENTS.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL ROLLED SHAPES, PLATES, & BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:

ASTM A-992, GRADE 50	ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE.
ASTM A-36	ALL OTHER ROLLED SHAPES, PLATES & BARS UNLESS NOTED OTHERWISE.
ASTM A-500, GRADE B	HSS SECTION (SQUARE, RECTANGULAR, ROUND)
ASTM A-325, TYPE SC OR N	ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS.
F1554, GRADE 36	ALL ANCHORS BOLTS, UNLESS NOTED OTHERWISE.
ASTM A-53, GRADE B	STEEL PIPE
- ALL WELDING SHALL BE DONE USING E70XX ELECTRODES & WELDING SHALL CONFORM TO AISC & AWS D1.1 WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 14TH EDITION. WHERE WELD LENGTH IS NOT INDICATED, USE FULL LENGTH WELD. AT THE COMPLETION OF ALL WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA.) SUPPLIED WITH A NUT & WASHER UNDER TURNED END & SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN & DETAILED ON STRUCTURAL DRAWINGS.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
- CONCRETE EXPANSION ANCHORS & EPOXY ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. MANUFACTURER'S MINIMUM CONCRETE EDGE DISTANCE SHALL BE MAINTAINED DURING INSTALLATION.
- USE PRECAUTIONS & PROCEDURES PER AWS D1.1 WHEN WELDING GALVANIZED METALS.
- TOUCHUP ALL DAMAGED GALVANIZED STEEL WITH VERIZON WIRELESS APPROVED COLD ZINC, "GALVANOX", "DRY GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. TOUCHUP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.
- ALL PROPOSED STEEL SHALL CONFORM TO HIGH STRENGTH STEEL MATERIALS, ASTM A36 WITH A MINIMUM STRENGTH OF 36 KSI.
- ALL EXISTING BEAM & COLUMN DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR PRIOR TO FABRICATION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS & THOSE SHOWN SHALL BE REPORTED TO DEWBERRY ENGINEER IMMEDIATELY.
- CONTRACTOR TO MAKE ALL NECESSARY PRECAUTIONS & SECURE ALL PERMITS REQUIRED FOR WELDING ON THE ROOF.
- CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW & APPROVAL BY ENGINEER.
- ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123/A123M--00 HOT-DIP GALVANIZED FINISH UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, & WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED. REPAIR DAMAGED GALVANIZED COATINGS ON GALVANIZED ITEMS WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A780 & MANUFACTURER'S WRITTEN INSTRUCTIONS, PRIOR TO COMPLETION OF WORK.

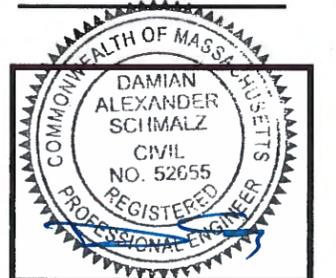
GENERAL ELECTRICAL NOTES:

- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS & WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, & EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT & THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT & DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY & HEALTH ACT (O.S.H.A.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE & PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT & AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS & EQUIPMENT SHALL BE NEW & IN PERFECT CONDITION WHEN INSTALLED & SHALL BE OF THE BEST GRADE & OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED & APPROVED BY UNDERWRITER'S LABORATORY & SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY & ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA & NBFU.
- ALL CONDUIT INSTALLED MAY BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY & LOCAL CODES, O.S.H.A & NFPA 70E.
- CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS & PAY ALL REQUIRED FEES
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, & CIRCUITS.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- NO SHARED NEUTRAL IS ALLOWED FOR LIGHTING FIXTURES.
- ALL BUILDING WIRE #12 TO # 6 SHALL BE STRANDED COPPER TYPE THWN-THHN. CONDUCTORS #4 & LARGER SHALL BE COPPER TYPE XHHW.
- ALL CIRCUIT BREAKERS, FUSES & ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED. SEE SCHEDULES FOR RATINGS.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES
- PATCH, REPAIR & PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, IN PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
- LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN &, THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS & EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH FIRESTOP DETAILS.
- WIRE & CABLE CONDUCTORS SHALL BE STRANDED COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY STATED OTHERWISE ON DRAWINGS.
- VERIFY ALL CONDUIT ROUTING W/OWNER REP. & AT&T MOBILITY C.M. NO OTHER SURFACE MOUNTED CONDUITS WILL BE ALLOWED OTHER THAN IN CHASES & ABOVE CEILINGS.
- ALL MATERIALS SHALL BE U.L. LISTED.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR & SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL & MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE. SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
 - CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILINGS OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- COORDINATE THE ELECTRICAL SERVICE WITH BUILDING OWNER.
- GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS & FURNISH TO DISPATCH COMMUNICATIONS ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, & FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK & LEAVE WORK IN A COMPLETE & UNDAMAGED CONDITION.
- ALL WALL PENETRATIONS SHALL BE FIRE STOPPED WITH FS-ONE HIGH PERFORMANCE INTUMESCENT FIRE STOP BY HILTI OR APPROVED EQUAL. INSTALL PER MANUFACTURERS RECOMMENDATIONS.



**BOSTON COLLEGE
O.D.A.S.
RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS		
4	11/20/17	FOR CONSTRUCTION
3	08/25/17	FOR CONSTRUCTION
2	07/07/17	FOR CONSTRUCTION
1	05/05/17	FOR BC APPROVAL
0	05/01/17	FOR BC APPROVAL
B	01/19/17	FOR COMMENT
A	01/16/17	FOR COMMENT



DRAWN BY: MR

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

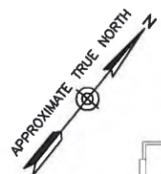
SITE ADDRESS:

CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

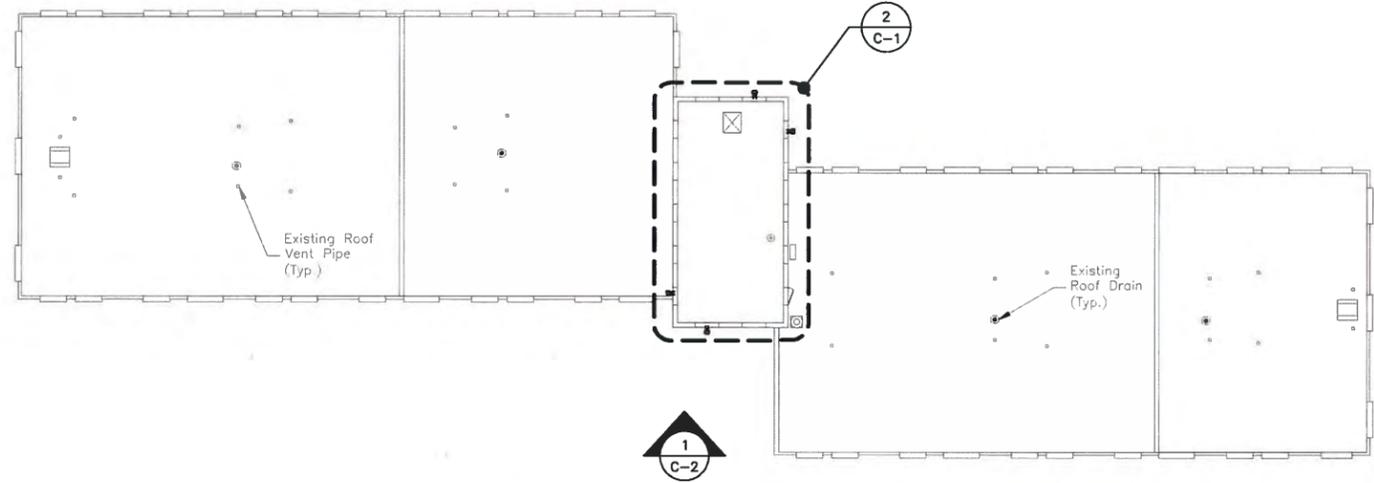
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GENERAL NOTES

SHEET NUMBER



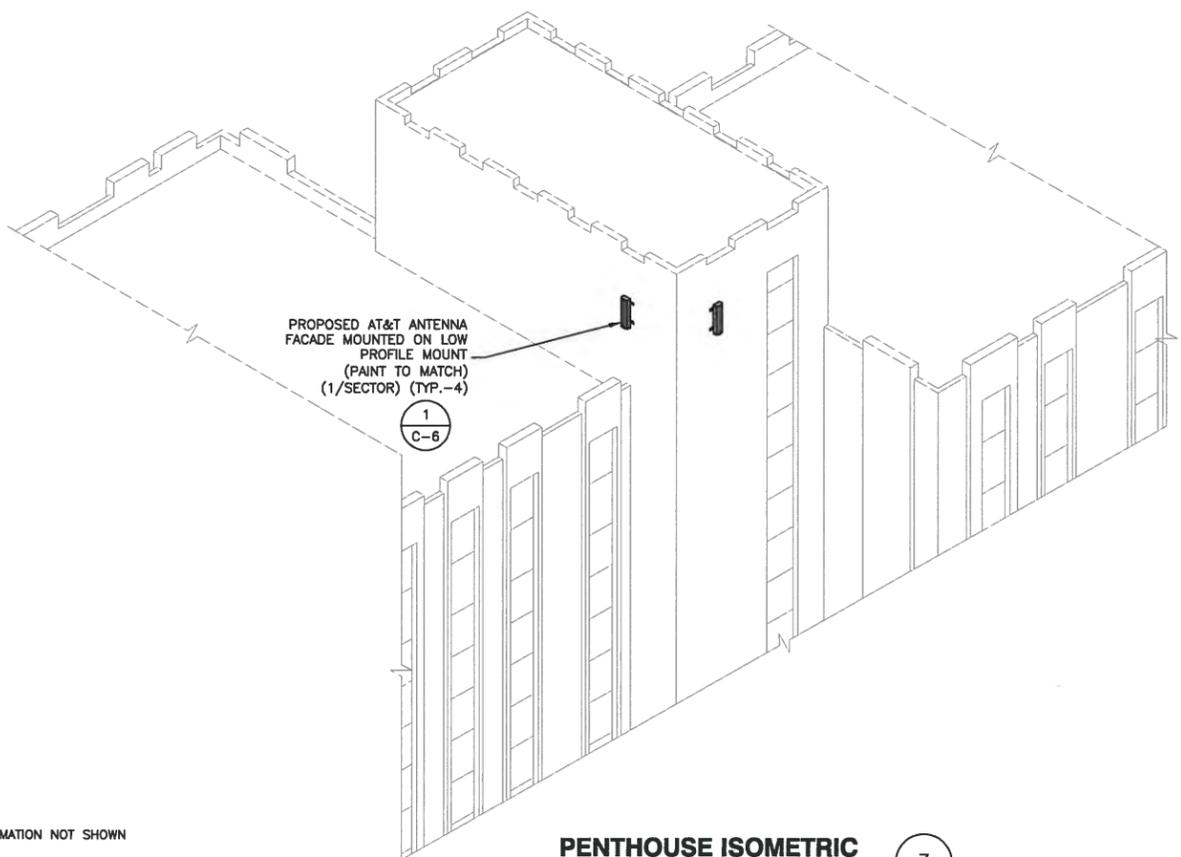
2
C-3



CAMPANELLA WAY

PROPOSED ROOF PLAN

SCALE: 1"=40' FOR 11"x17"
1"=20' FOR 22"x34"



PROPOSED AT&T ANTENNA
FACADE MOUNTED ON LOW
PROFILE MOUNT
(PAINT TO MATCH)
(1/SECTOR) (TYP.-4)

1
C-6

PENTHOUSE ISOMETRIC

SCALE: N.T.S.

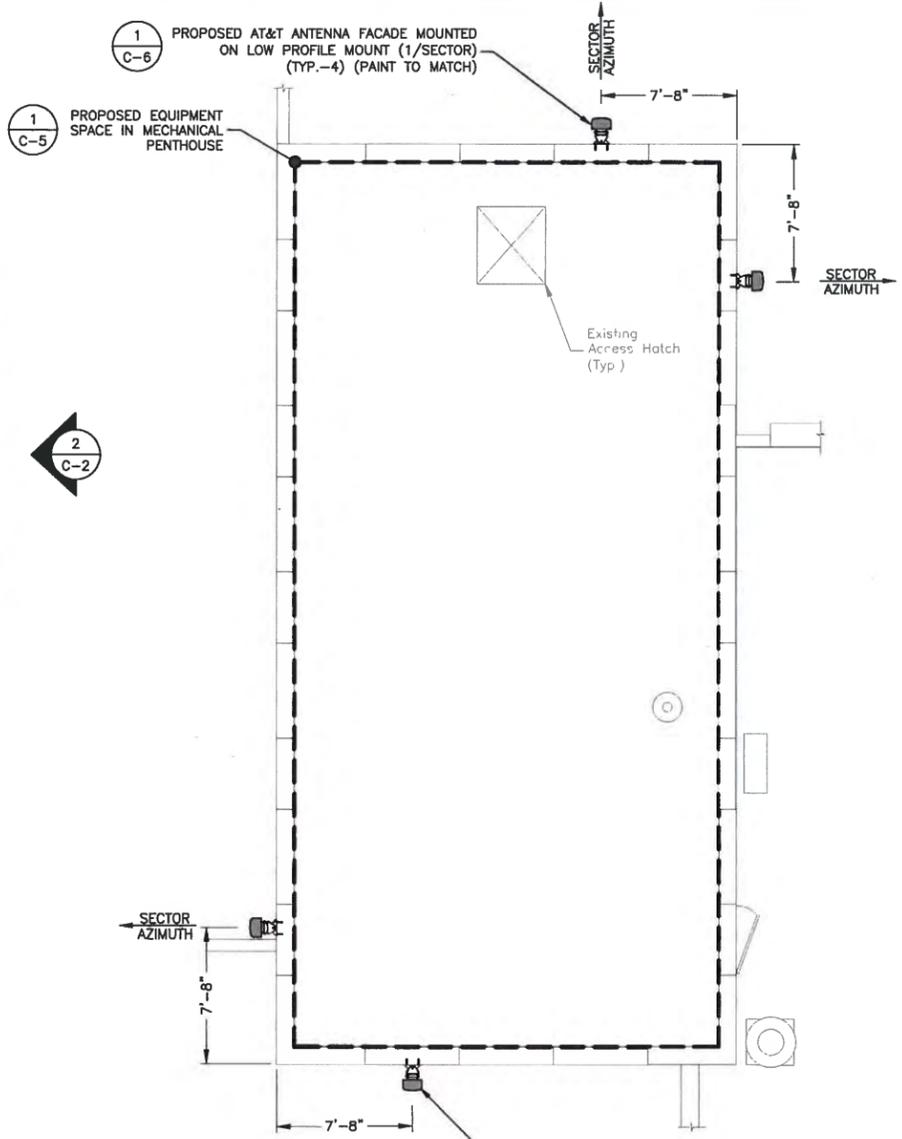
3

NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.

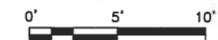
1
C-5

1
C-6



PROPOSED PENTHOUSE PLAN

SCALE: 1"=10' FOR 11"x17"
1"=5' FOR 22"x34"



at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

BOSTON COLLEGE
oD.A.S.
RUBENSTEIN HALL

CONSTRUCTION DRAWINGS

4	11/20/17	FOR CONSTRUCTION
3	08/25/17	FOR CONSTRUCTION
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B	01/19/17	FOR COMMENT
A	01/16/17	FOR COMMENT

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:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE	PROPOSED ROOF & PENTHOUSE PLANS
SHEET NUMBER	C-1

**BOSTON COLLEGE
o.d.a.s.
RUBENSTEIN HALL**

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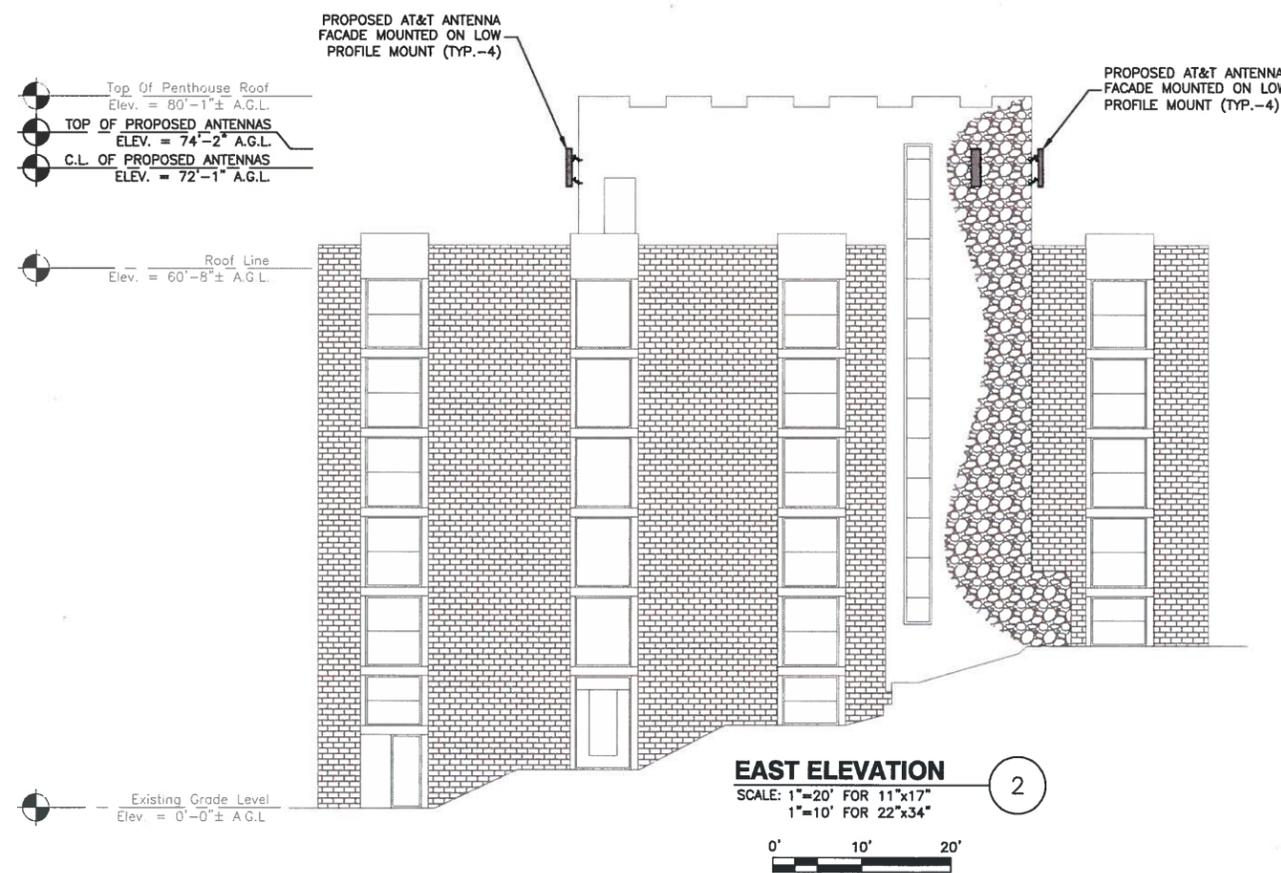
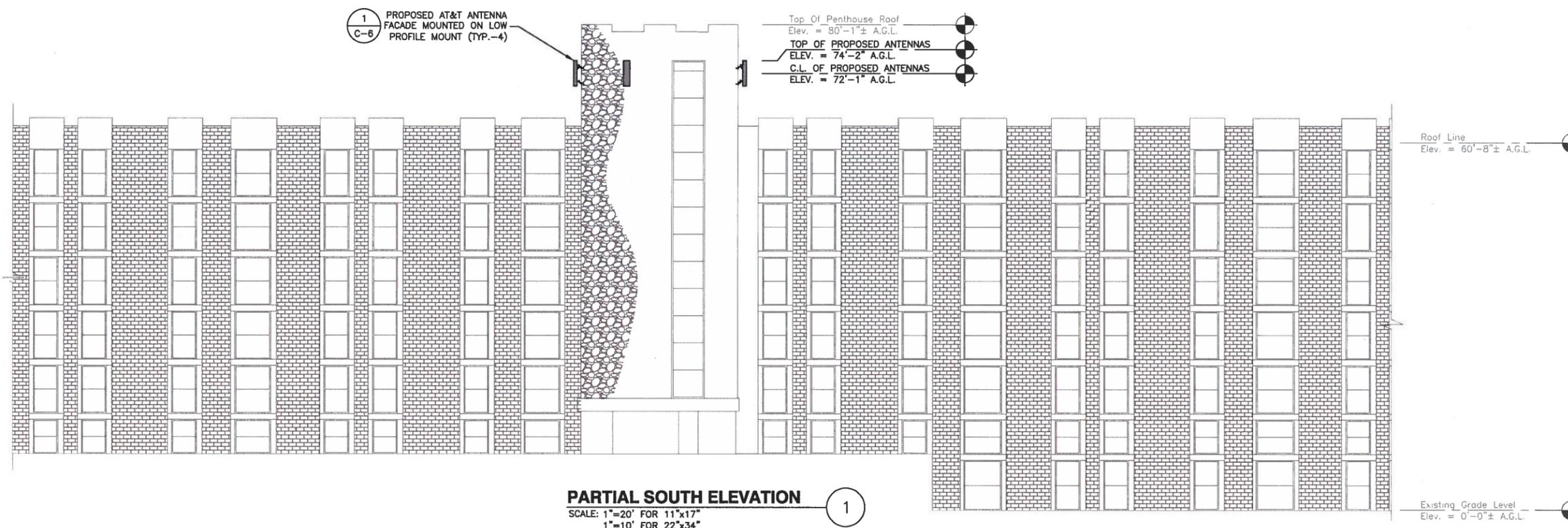
CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

PARTIAL SOUTH &
EAST ELEVATIONS

SHEET NUMBER

C-2



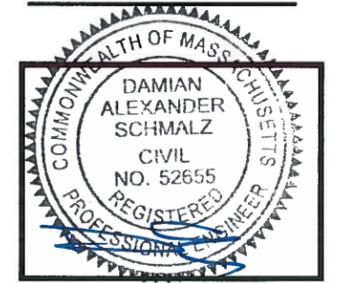
NOTES:

- SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
- PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
- PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
- ELEVATIONS ARE APPROXIMATE & BASED ON EXISTING BUILDING PLANS PROVIDED BY BOSTON COLLEGE.
- A.G.L. = ABOVE GROUND LEVEL
C.L. = CENTERLINE

**BOSTON COLLEGE
O.D.A.S.
RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS		
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3	08/25/17	FOR CONSTRUCTION
2	07/07/17	FOR CONSTRUCTION
1	05/05/17	FOR BC APPROVAL
0	05/01/17	FOR BC APPROVAL
B	01/19/17	FOR COMMENT
A	01/16/17	FOR COMMENT

Dewberry
Dewberry Engineers Inc.
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BOSTON, MA 02210
PHONE: 617.665.3400
FAX: 617.665.3310

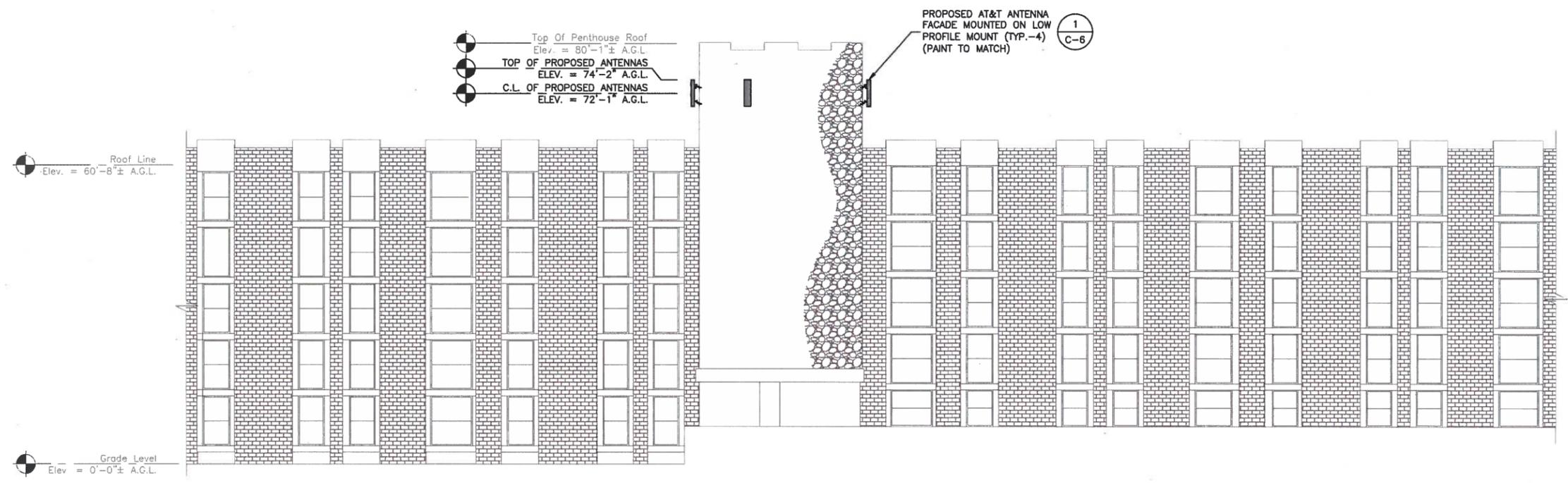


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REVIEWED BY: DAS
CHECKED BY: BBR
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JOB NUMBER: 50057154
SITE ADDRESS:

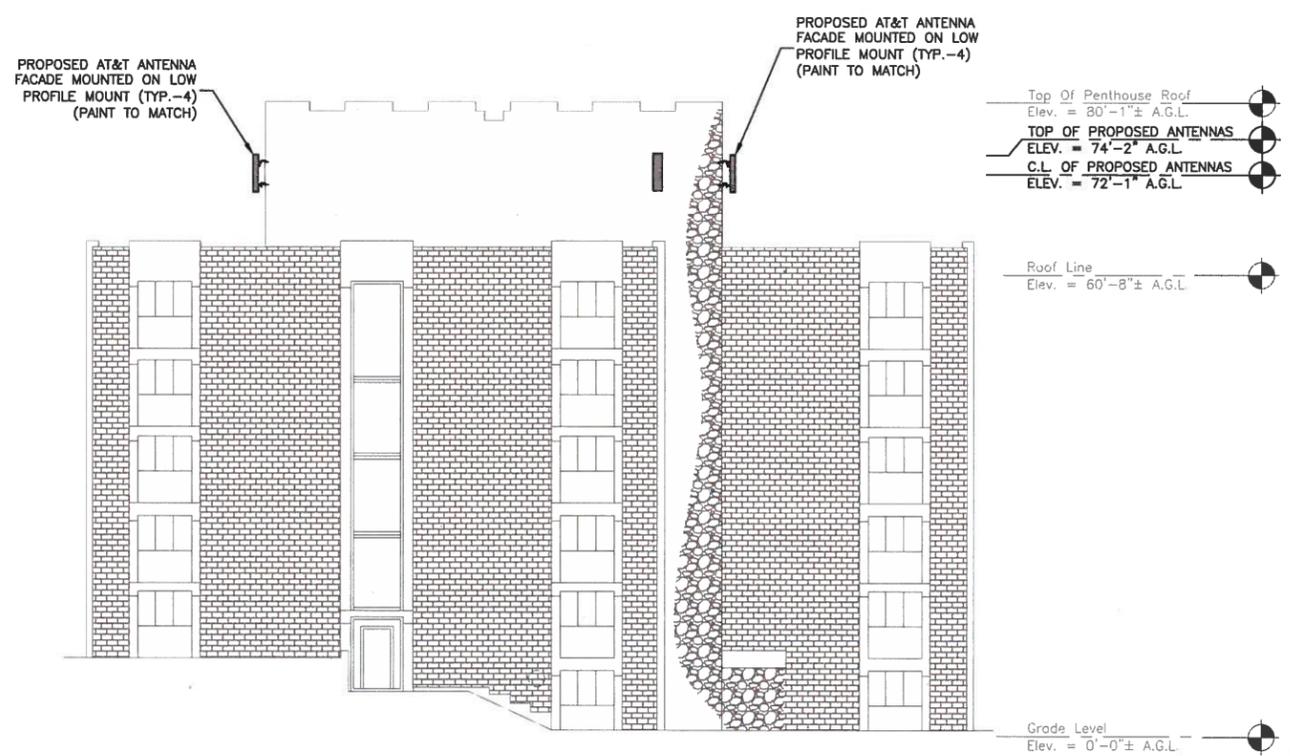
CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE
PARTIAL NORTH &
WEST ELEVATIONS
SHEET NUMBER

C-3

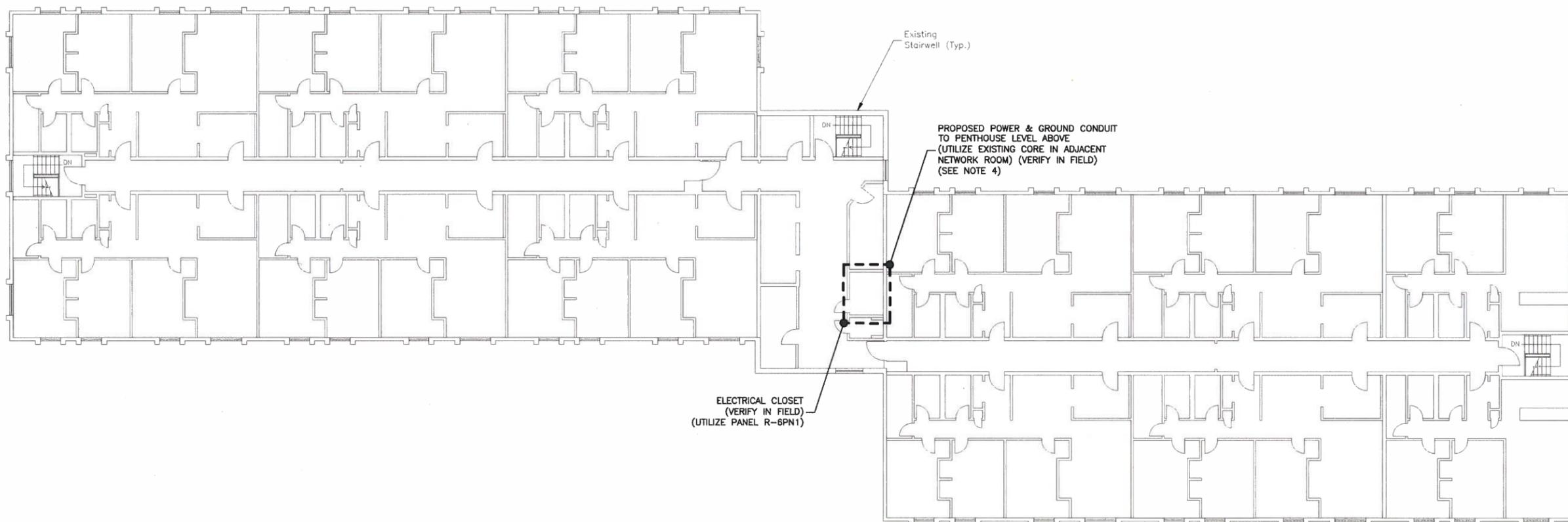
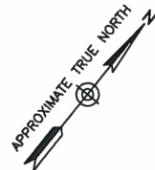


PARTIAL NORTH ELEVATION 1
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"
0' 10' 20'



WEST ELEVATION 2
SCALE: 1"=20' FOR 11"x17"
1"=10' FOR 22"x34"
0' 10' 20'

- NOTES:**
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 - PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 - PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
 - ELEVATIONS ARE APPROXIMATE & BASED ON EXISTING BUILDING PLANS PROVIDED BY BOSTON COLLEGE.
 - A.G.L. = ABOVE GROUND LEVEL
C.L. = CENTERLINE



6TH FLOOR PLAN
SCALE: N.T.S. 1

NOTES:

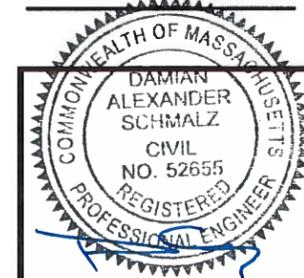
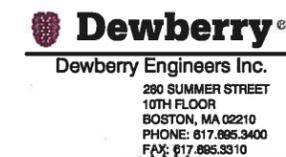
1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11/11/16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
4. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
5. ALL CONDUIT ROUTED WITHIN STAIRWELL FOOTPRINT TO BE WRAPPED IN 3M INTERIM ENDOTHERMIC MAT. INSTALL ACCORDING TO MANUFACTURER SPECIFICATIONS & REQUIREMENTS.



**BOSTON COLLEGE
oD.A.S.
RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS

4	11/20/17	FOR CONSTRUCTION
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CHECKED BY:	BBR
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JOB NUMBER:	50057154
SITE ADDRESS	

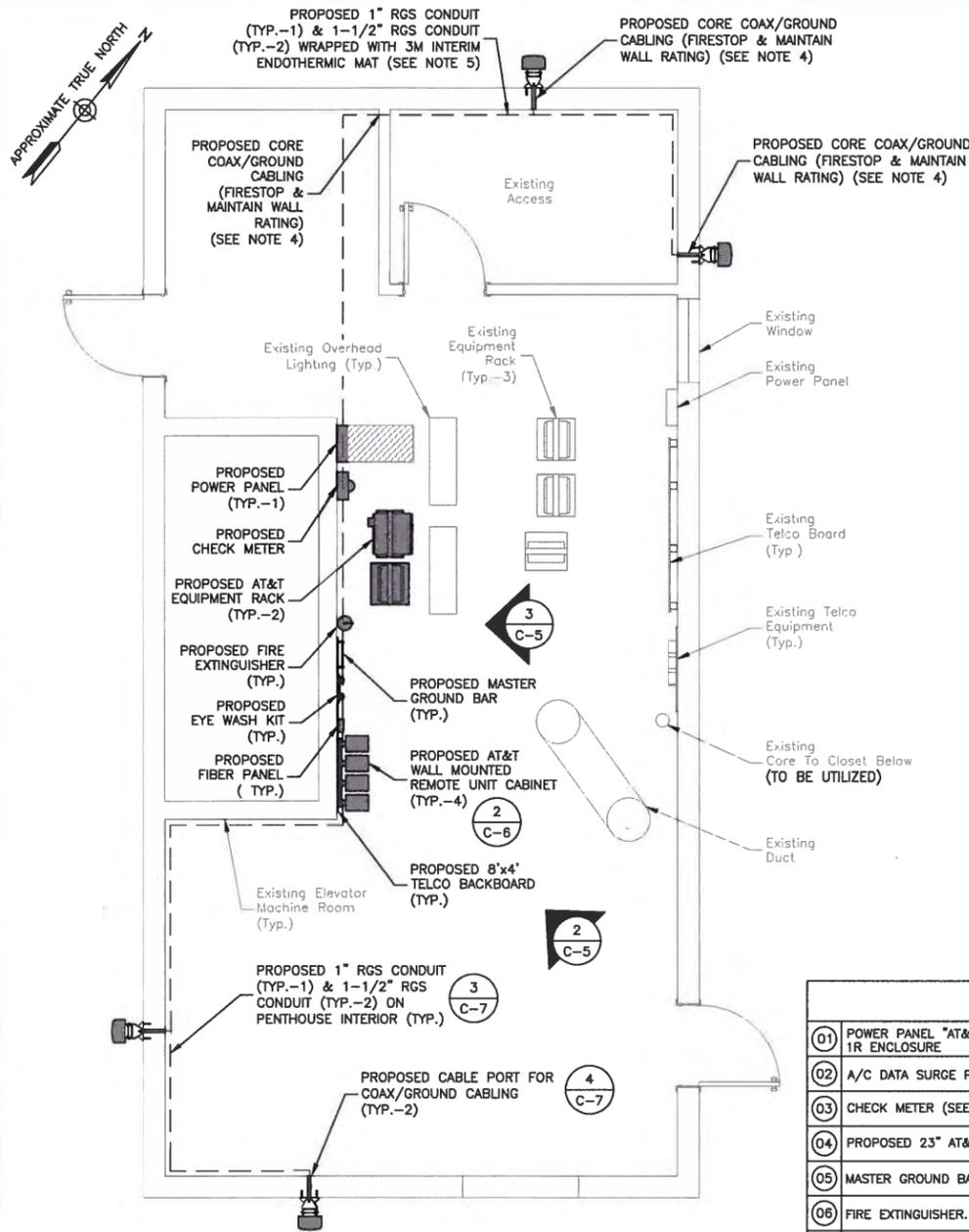
CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

6TH FLOOR PLAN

SHEET NUMBER

C-4



PROPOSED EQUIPMENT PLAN

SCALE: 1/8"=1' FOR 11"x17"
1/4"=1' FOR 22"x34"



NOTES:

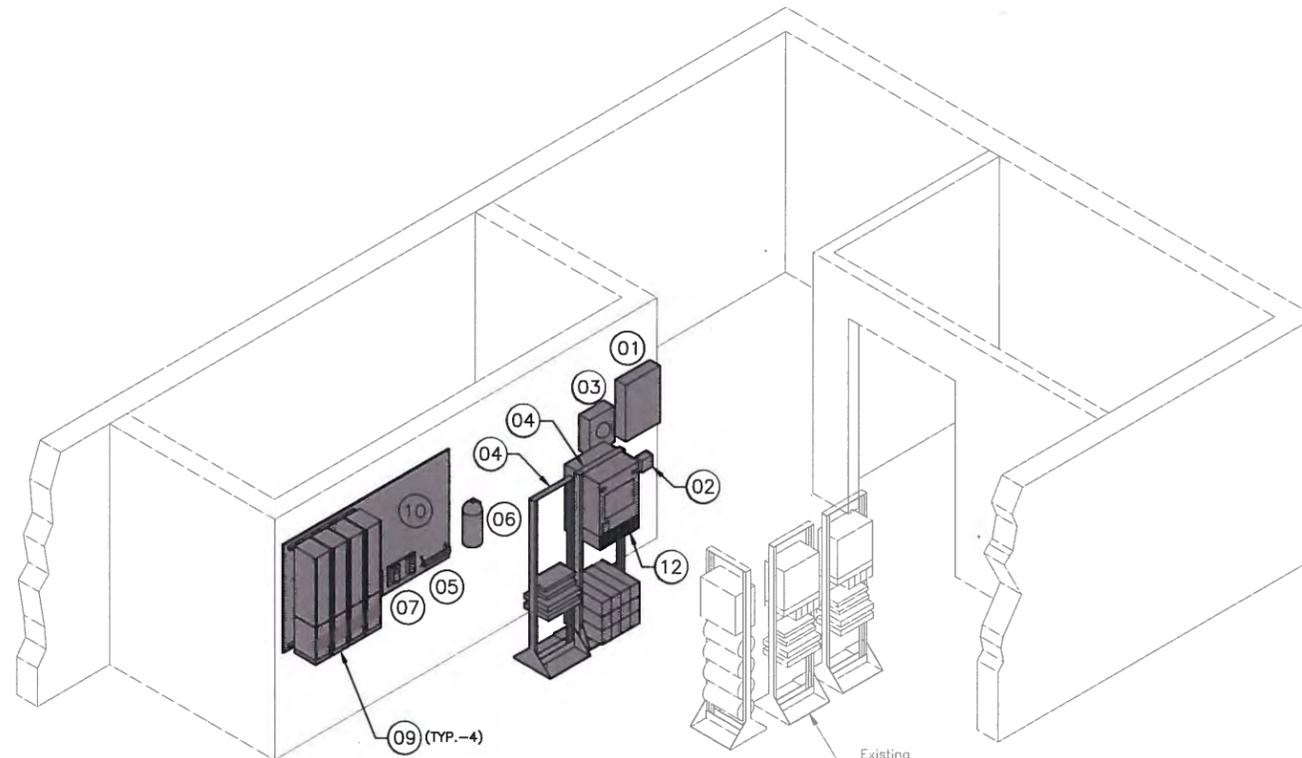
1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11/11/16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
4. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE FIRESTOPPED & WEATHERED SEALED.
5. ALL CONDUIT ROUTED WITHIN PENTHOUSE ACCESS AREA FOOTPRINT TO BE WRAPPED IN 3M INTERIM ENDOTHERMIC MAT. INSTALL ACCORDING TO MANUFACTURER SPECIFICATIONS & REQUIREMENTS.

EQUIPMENT NOTES:

1. FINAL AT&T EQUIPMENT LAYOUT DESIGN TO BE CONFIRMED WITH AT&T C.M. & BOSTON COLLEGE.
2. PROVIDE STRUT & PAINTED FIRE RESISTANT PLYWOOD MOUNTING BACKBOARDS AS REQUIRED.
3. PROVIDE JUNCTION BOX & PULL BOXES AS REQUIRED BY THE NEC & SITE CONDITIONS.

BILL OF MATERIALS	
01	POWER PANEL "AT&T" (60A, 120/208V, 3Ø) WITH 60A, 3P MCB IN LOCKABLE NEMA TYPE 1R ENCLOSURE
02	A/C DATA SURGE PROTECTOR IN NEMA TYPE 1R ENCLOSURE
03	CHECK METER (SEE ELECTRICAL NOTES 1 & 2, SHEET E-1 FOR SPECIFICATIONS)
04	PROPOSED 23" AT&T EQUIPMENT RACK
05	MASTER GROUND BAR, 4"x20"x1/4" TINNED
06	FIRE EXTINGUISHER. PROVIDE SIGNAGE & MOUNT PER CODE
07	EYE WASH STATION
08	FIBER PANEL-TE 24 SC/APC RIBBON - NEQ.15566
09	CORNING 40W GX QUAD BAND REMOTE (SEE SHEET C-6)
10	4'x8' FIRE RATED BACKBOARD
11	QUAD RECEPTACLE, 20A - TWO (2) HUBBELL P/N 5382W WITH P82W PLATE
12	EMERSON 721 DC PLANT WITH BATTERY UNITS

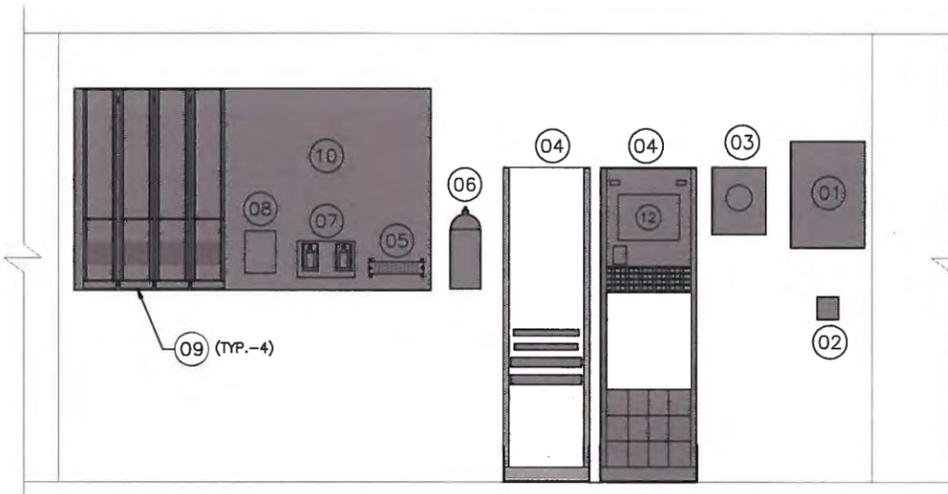
NOTE:
:-REFER TO THIS SHEET FOR BILL OF MATERIALS.
FOR RISER DIAGRAM SEE SHEET E-1.



NOTE:
1. CABLING & OVERHEAD LIGHTING NOT SHOWN FOR CLARITY.

ISOMETRIC EQUIPMENT DETAIL

SCALE: N.T.S.



PROPOSED EQUIPMENT ELEVATION

SCALE: N.T.S.

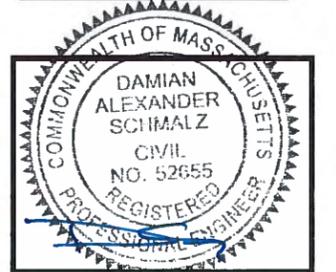
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

**BOSTON COLLEGE
oD.A.S.
RUBENSTEIN HALL**

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10TH FLOOR
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DRAWN BY:	MR
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SITE ADDRESS	

CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE	EQUIPMENT PLAN- MECHANICAL PENTHOUSE LEVEL
SHEET NUMBER	C-5

**BOSTON COLLEGE
O.D.A.S.
RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS		
4	11/20/17	FOR CONSTRUCTION
3	08/25/17	FOR CONSTRUCTION
2	07/07/17	FOR CONSTRUCTION
1	05/05/17	FOR BC APPROVAL
0	05/01/17	FOR BC APPROVAL
B	01/19/17	FOR COMMENT
A	01/16/17	FOR COMMENT

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



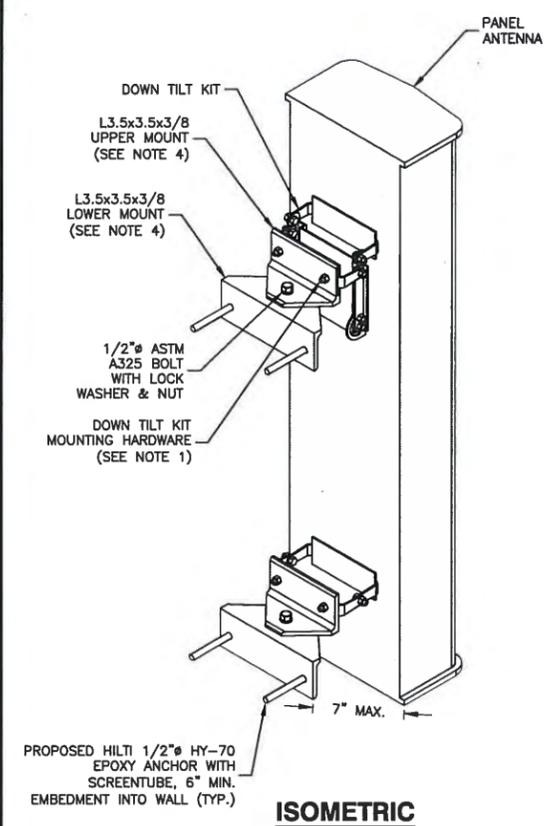
DRAWN BY:	MR
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

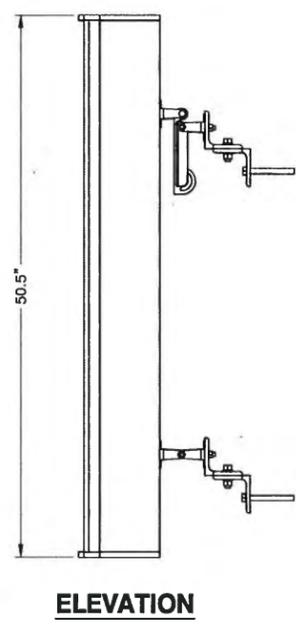
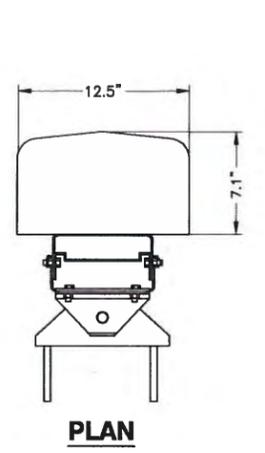
SHEET TITLE

CONSTRUCTION DETAILS-I

SHEET NUMBER

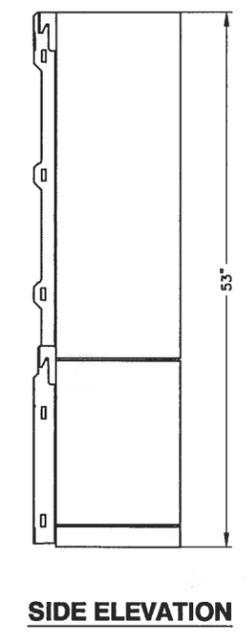
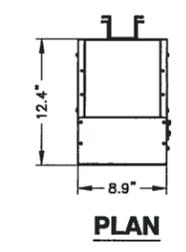
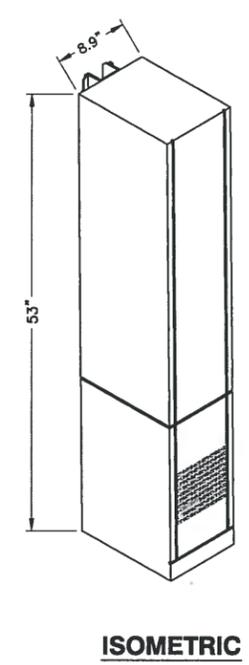
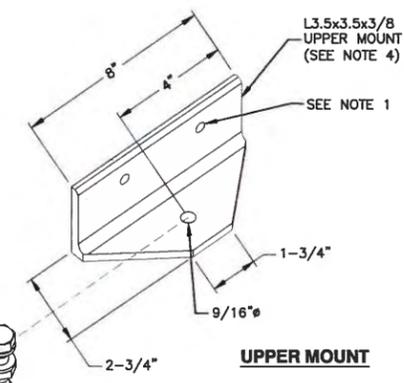


ANTENNA SPECIFICATIONS	
MANUFACTURER:	JMA
MODEL NUMBER:	XEW-485YP
DIMENSIONS (LxWxD):	50.5"x12.5"x7.1"
WEIGHT:	27.0 LBS



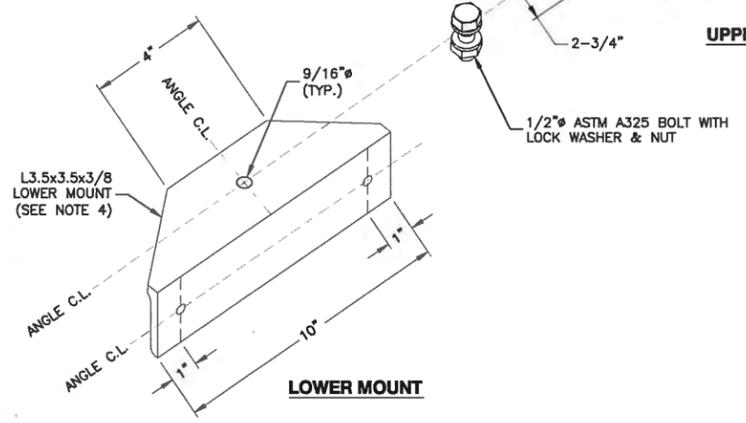
NOTES:

1. VERIFY DOWNTILT MOUNTING KIT BOLT LAYOUT PRIOR TO FABRICATION OF UPPER MOUNT BRACKET.
2. ROTATE UPPER CONNECTION TO REQUIRED AZIMUTH. SHOP VERIFY ANTENNA CAN ACHIEVE REQUIRED AZIMUTH FROM WALL FACE.
3. WEATHER SEAL AROUND EXTERIOR WALL ATTACHMENT ANGLES WITH SILICONE SEALANT.
4. PAINT ALL ANTENNAS, MOUNTS & ASSOCIATED EQUIPMENT TO MATCH BUILDING FACADE.
5. ALL FEEDERS ARE TO BE NEATLY BUNDLED & PAINTED TO MATCH THE BUILDING FACADE.
6. ALL STEEL TO BE GALVANIZED.

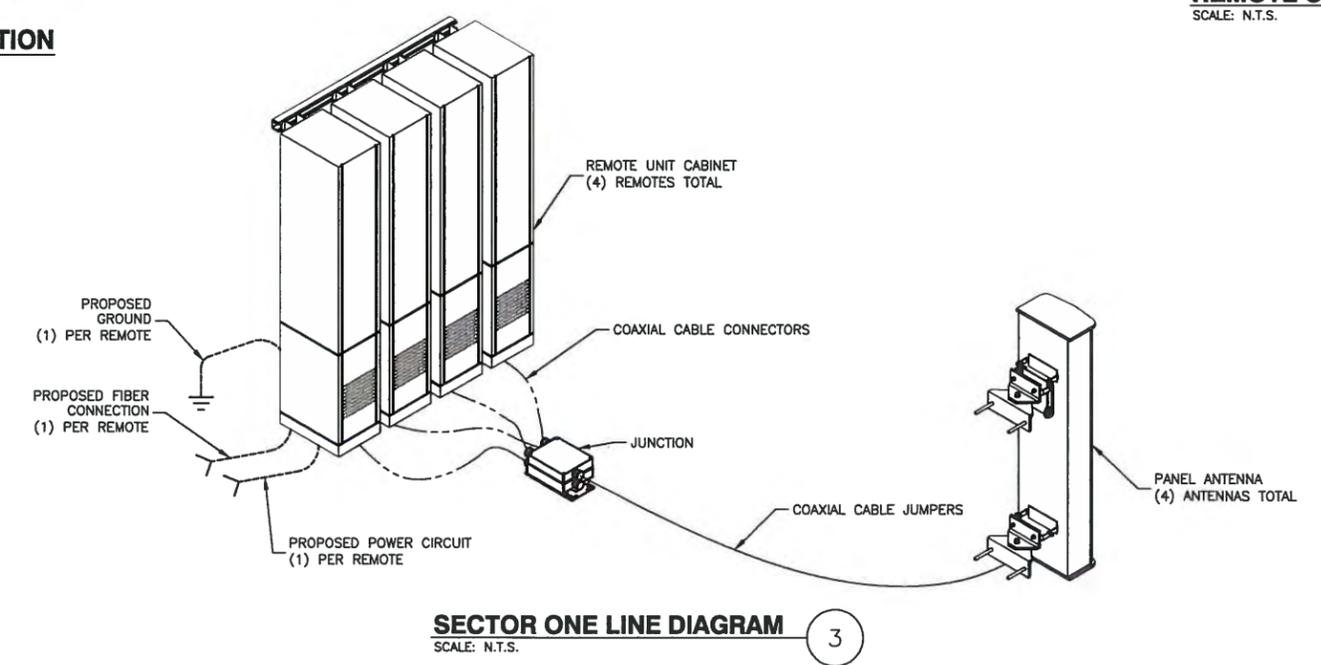


REMOTE UNIT SPECIFICATION	
MANUFACTURER:	CORNING
MODEL:	40 W GX QUAD BAN REMOTE
DIMENSIONS (HxWxD):	53"x8.9"x12.4"

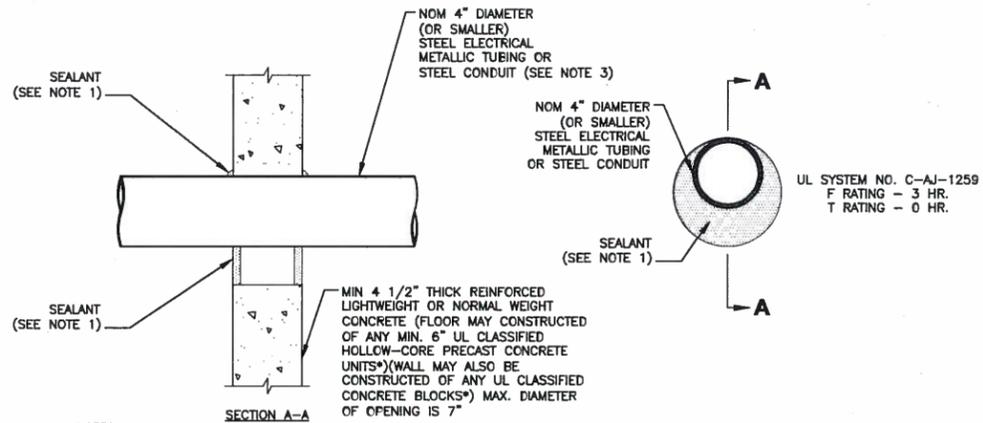
REMOTE UNIT DETAIL
SCALE: N.T.S.



LOW PROFILE FACADE MOUNTED ANTENNA DETAIL
SCALE: N.T.S.



SECTOR ONE LINE DIAGRAM
SCALE: N.T.S.



NOTES:

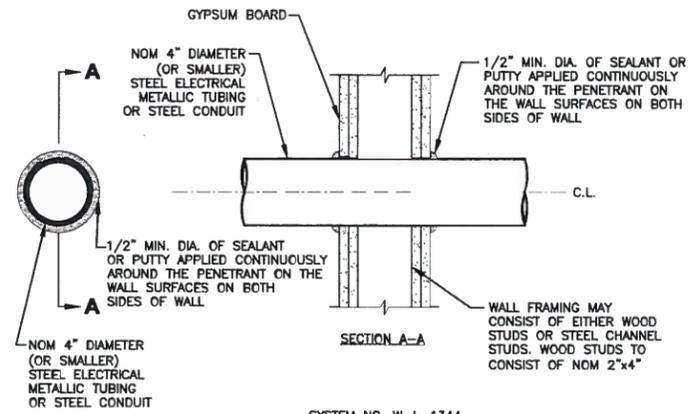
1. FILL VOID OR CAVITY MATERIAL* - SEALANT - MIN. 1/2" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF FLOOR OR WALL. AT THE POINT CONTACT LOCATION BETWEEN PENETRATING ITEM & CONCRETE, A MIN. 1/4" THICK BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/ PENETRATING ITEM INTERFACE ON BOTH SIDES OF FLOOR OR WALL.
2. FORMING MATERIAL - (OPTIONAL, NOT SHOWN) - MINERAL WOOL BATT PACKING MATERIAL OR POLYURETHANE BACKER ROD FRICTION FITTED INTO OPENING & RECESSED FROM FLOOR OR WALL SURFACES AS REQUIRED TO ACCOMMODATE THICKNESS OF FILL MATERIAL.
3. ONE CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE CONDUIT & THE PERIPHERY OF THE OPENING SHALL BE A MIN. OF 0" (POINT OF CONTACT) TO A MAX. OF 3". CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.

* BEARING THE UL CLASSIFICATION MARK.

CORING DETAIL

SCALE: N.T.S.

1



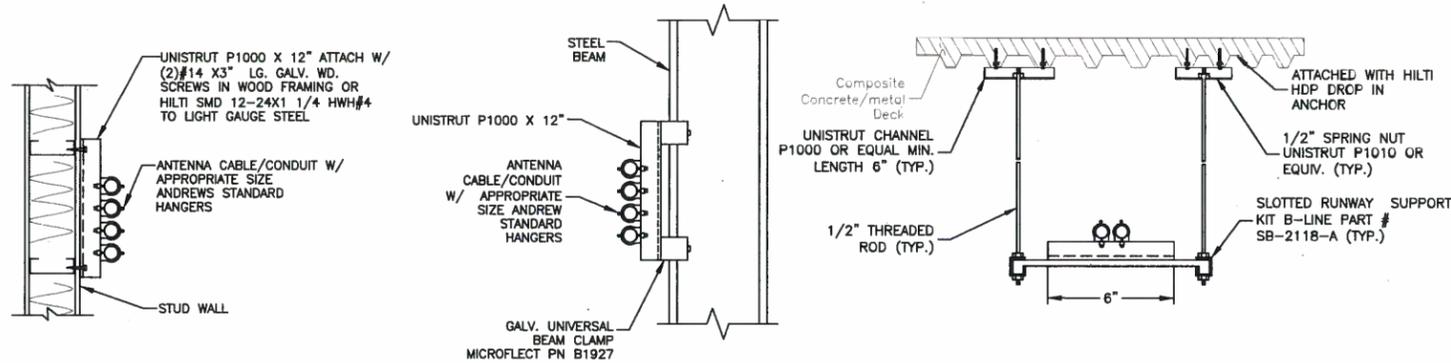
NOTES:

1. THE 1 & 2 HOUR FIRE RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS & MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL & PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY.
2. 5" DIAMETER OPENING MAX.

SECTION - THROUGH PENETRATION FIRESTOP SYSTEM

SCALE: N.T.S.

2



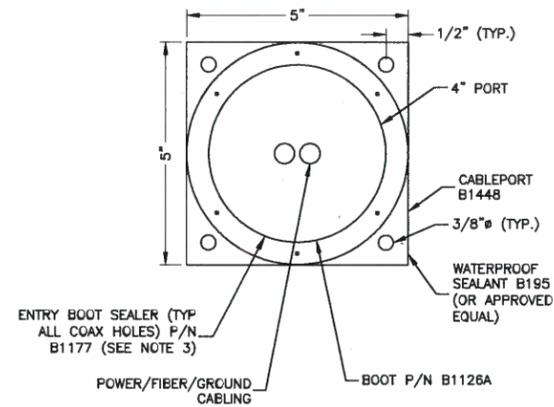
NOTES:

1. ALL COAX SUPPORT SPACING: 4'-0" MAX.
2. ALL CONDUIT SUPPORT SPACING: 10'-0" MAX.
3. CONFIRM CONDUIT ROUTING WITH BUILDING OWNER & CONSTRUCTION MANAGER PRIOR TO INSTALLATION.

CABLE/CONDUIT SUPPORT

SCALE: N.T.S.

3



NOTES:

1. CONTRACTOR TO THOROUGHLY DRY AREA BEFORE CORING, INSTALLING & SEALING CABLEPORT & BOOTS.
2. ALL PART NUMBERS ARE MICROFLECT
3. CONTRACTOR TO FILL THE BOOT CAVITY W/ BOOT SEALER TO FORM A CONICAL SHAPE TO ALLOW WATER RUN OFF. 2 TUBES OF B1177 ARE REQUIRED FOR EACH BOOT.
4. WATERPROOF ALL EDGES & HOLES.

B1177 SINGLE COAX PORT

SCALE: N.T.S.

4

550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

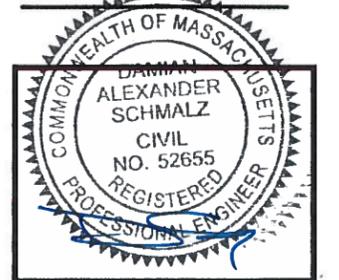
**BOSTON COLLEGE
O.D.A.S.
RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS

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Dewberry Engineers Inc.

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BOSTON, MA 02210
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DRAWN BY:	MR
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

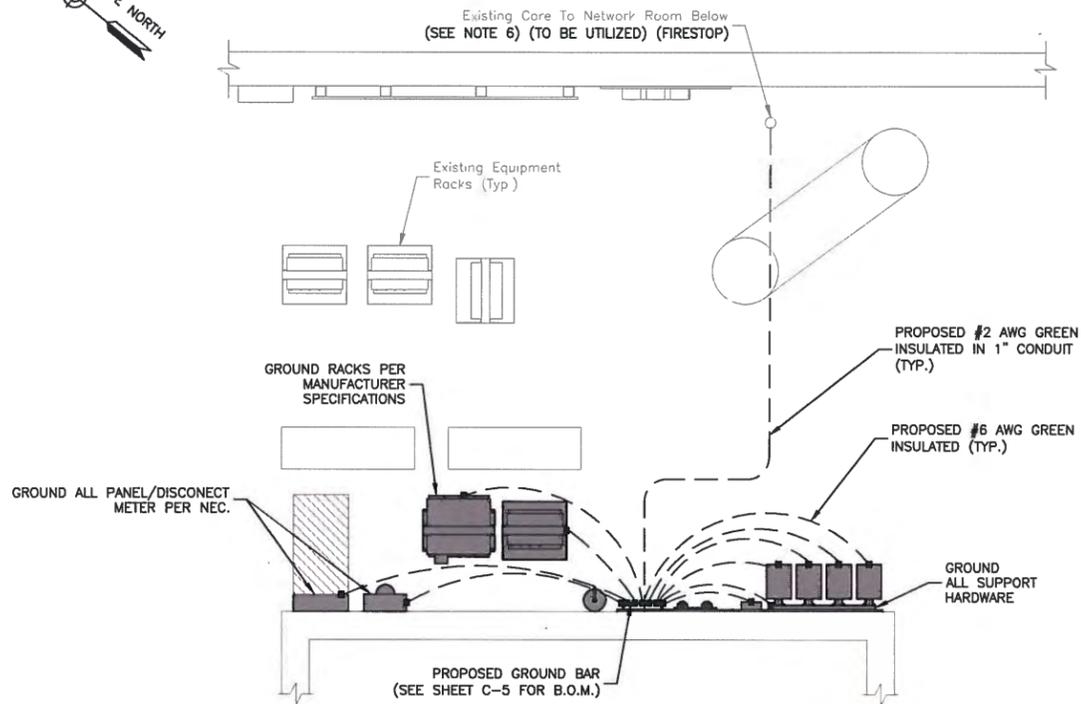
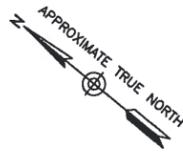
CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

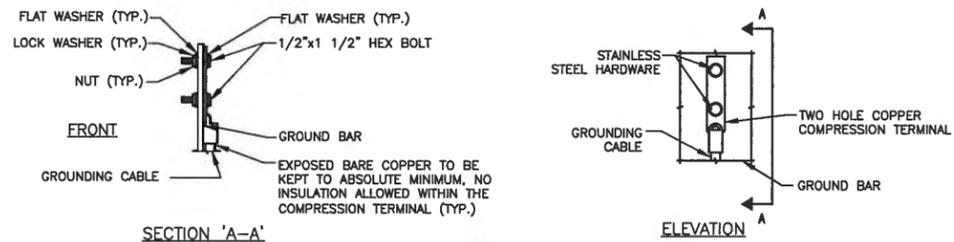
CONSTRUCTION DETAILS-II

SHEET NUMBER

C-7

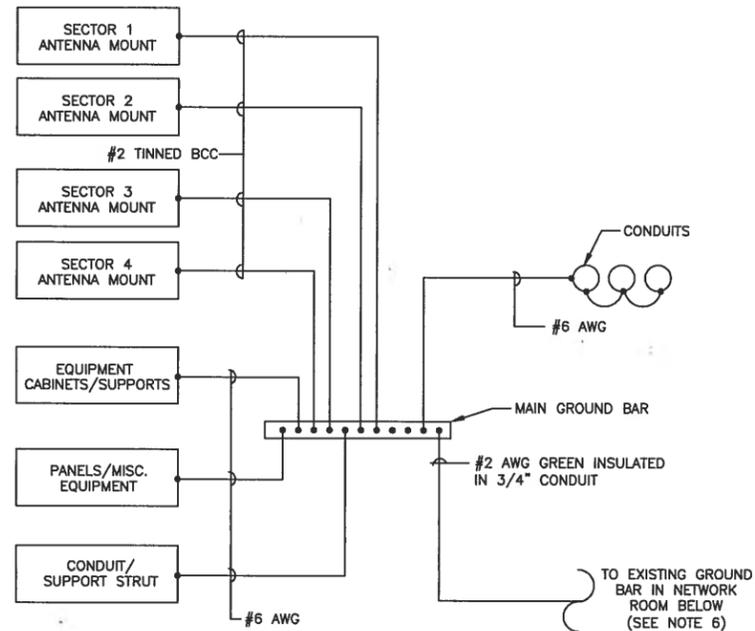


GROUNDING PLAN
 SCALE: 3/16"=1' FOR 11"x17"
 3/8"=1' FOR 22"x34"
 0' 2' 4' 6'



- NOTES:**
1. DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED
 2. OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

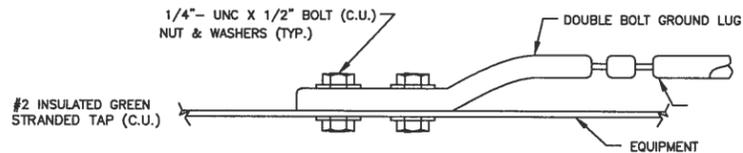
TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL
 SCALE: N.T.S.



GROUNDING SCHEMATIC
 SCALE: N.T.S.

NOTES:

1. BOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR (GNP BAR).
2. ALL CELL EQUIPMENT (BCE, BATTERY FRAME, POWER CABINETS, MISC. EQUIPMENT FRAMES, ETC.) SHALL BE GROUNDED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
3. ALL EXPOSED METAL OBJECTS IN EQUIPMENT AREA SHALL BE BONDED & JUMPED TO MGB.
4. GROUND ANTENNA SUPPORT PIPES WITH #2 AWG TINNED BCC DEDICATED LEAD BACK TO GROUND BAR.
5. VERIFY EQUIPMENT GROUNDING REQUIREMENTS WITH SPECIFIC MANUFACTURERS.
6. EXISTING GROUND RING SHALL BE TESTED TO ENSURE SUFFICIENT GROUNDING RESISTANCE CAN BE ACHIEVED. VERIFY RESULTS WITH AT&T CM & BOSTON COLLEGE.

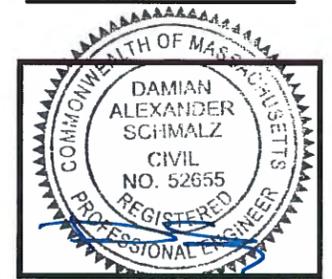
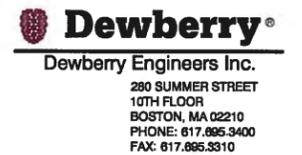


CONNECTION TO EQUIPMENT DETAIL
 SCALE: N.T.S.



**BOSTON COLLEGE
 oD.A.S.
 RUBENSTEIN HALL**

CONSTRUCTION DRAWINGS		
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A	01/16/17	FOR COMMENT



DRAWN BY:	MR
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

CHESTNUT HILL CAMPUS
 90-100 COMMONWEALTH AVENUE
 NEWTON, MA 02467

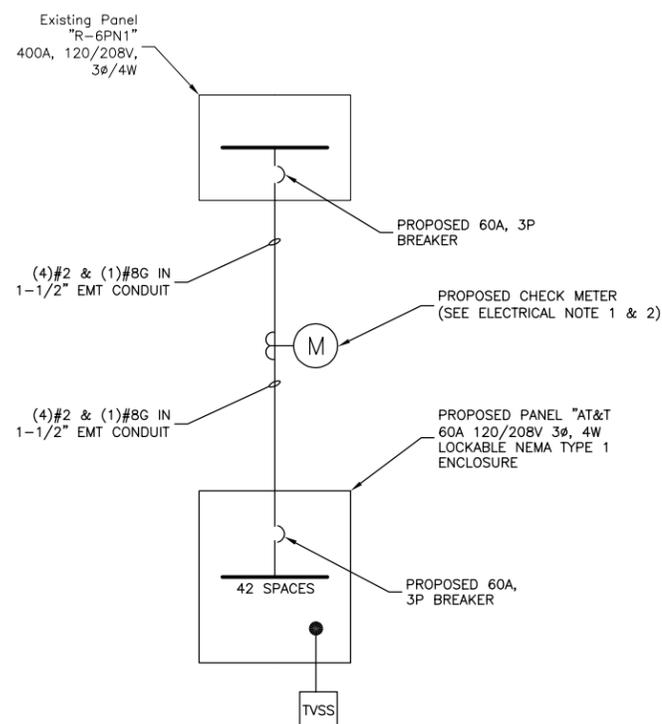
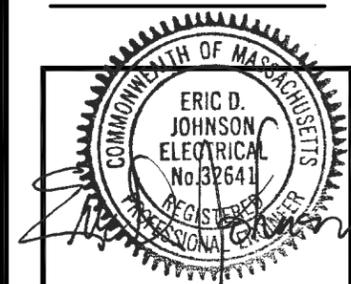
SHEET TITLE	GROUNDING PLAN & DETAILS
SHEET NUMBER	

BOSTON COLLEGE
oD.A.S.
RUBENSTEIN HALL

CONSTRUCTION DRAWINGS

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



ELECTRIC ONE LINE DIAGRAM
SCALE: N.T.S.

NEMA 1 PANEL SCHEDULE - AT&T 22,000 A.I.C.

W/60A MAIN C/B					
CKT #	DESCRIPTION	AMP	AMP	DESCRIPTION	CKT #
1	RECTIFIER	30	30	RECTIFIER	2
3					4
5	RECTIFIER	30	30	RECTIFIER	6
7					8
9	RECTIFIER	30	30	RECTIFIER	10
11					12
13	OUTLET	20	-	SPACE	14
15	SPACE	-	-	SPACE	16
17	SPACE	-	-	SPACE	18
19	SPACE	-	-	SPACE	20
21	SPACE	-	-	SPACE	22
23	SPACE	-	-	SPACE	24
25	SPACE	-	-	SPACE	26
27	SPACE	-	-	SPACE	28
29	SPACE	-	-	SPACE	30
31	SPACE	-	-	SPACE	32
33	SPACE	-	-	SPACE	34
35	SPACE	-	-	SPACE	36
37	SPACE	-	-	SPACE	38
39	TVSS	60	-	SPACE	40
41				SPACE	42

PANEL SCHEDULE
SCALE: N.T.S.

ELECTRICAL NOTES:

- COORDINATE THE METER LOCATION & CONDUIT ROUTING WITH BOSTON COLLEGE PRIOR TO CONSTRUCTION.
- VERIFY METER TYPE & SPECIFICATIONS WITH BOSTON COLLEGE PRIOR TO ORDERING & INSTALLATION.
- SEE SHEET C-4 & C-5 FOR EQUIPMENT LOCATIONS & APPROXIMATE CONDUIT ROUTING PATH.
- COORDINATE ANY REQUIRED POWER SHUT DOWNS WITH BOSTON COLLEGE & BUILDING PERSONNEL.
- CONTRACTOR IS TO PROVIDE DEWBERRY & BOSTON COLLEGE EQUIPMENT SPECS & SHOP DRAWING FOR APPROVAL PRIOR TO ORDERING MATERIALS.
- CONDUIT ROUTING SHOWN IS SCHEMATIC. FIELD VERIFY CONDUIT PATH & HEIGHT WITH BOSTON COLLEGE FACILITIES. DO NOT BLOCK EXISTING EQUIPMENT OR IMPEDE MAINTENANCE SPACE.
- PROVIDE PULL BOXES & EXPANSION JOINTS PER NEC REQUIREMENTS & FIELD CONDITIONS.
- ALL CORING LOCATIONS SHALL BE X-RAYED TO VERIFY NO STRUCTURAL MEMBERS ARE CUT. ALL CORES SHALL BE FIRE SEALED. TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EQUIPMENT DURING CORING/CONSTRUCTION. PROVIDE A PROTECTION PLAN TO BOSTON COLLEGE FOR REVIEW & APPROVAL PRIOR TO COMMENCEMENT OF CORING.

DRAWN BY: MR

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

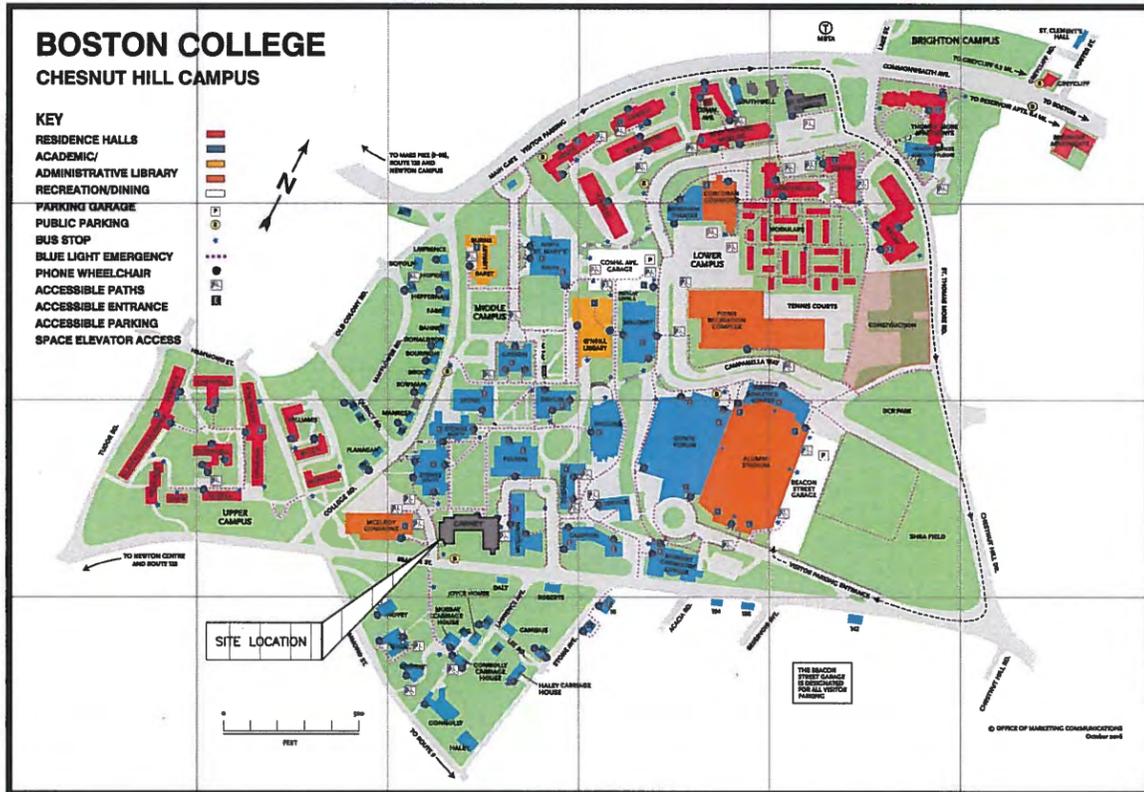
SITE ADDRESS

CHESTNUT HILL CAMPUS
90-100 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

ONE-LINE DIAGRAM &
PANEL SCHEDULE

SHEET NUMBER



**at&t
Mobility**

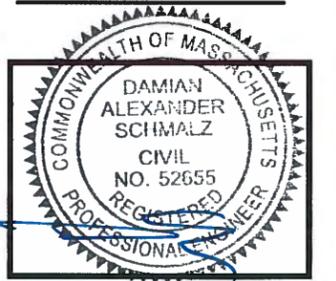
**BOSTON COLLEGE oD.A.S.
CARNEY HALL
CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467**

**at&t
Mobility**
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

**BOSTON COLLEGE
oD.A.S.
CARNEY HALL**

CONSTRUCTION DRAWINGS		
2	11/20/17	FOR CONSTRUCTION
1	08/25/17	FOR CONSTRUCTION
0	07/07/17	FOR CONSTRUCTION
A	01/16/17	FOR COMMENT

Dewberry®
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DRAWN BY: SK
REVIEWED BY: DAS
CHECKED BY: BBR
PROJECT NUMBER: 50057113
JOB NUMBER: 50057154
SITE ADDRESS:

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

TITLE SHEET

SHEET NUMBER

T-1



FROM FRAMINGHAM TAKE I-90 E TOWARD BOSTON. TAKE EXIT 17 TOWARD NEWTON/WATERTOWN. MERGE ONTO WASHINGTON STREET. TURN RIGHT ONTO PARK STREET. TURN LEFT ONTO TREMONT STREET. TURN RIGHT ONTO WAVERLY AVE. TURN LEFT ONTO WARD STREET. TURN RIGHT ONTO HAMMOND STREET. TURN LEFT ONTO BEACON STREET. THE SITE WILL BE ON THE LEFT.

ENGINEER
DEWBERRY
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
PHONE # (617) 695-3400
FAX # (617) 695-3310
CONTACT: DAMIAN SCHMALZ, P.E.

AT&T ANTENNA SOLUTIONS GROUP
PHONE # (617) 510-1002
CONTACT: DAVID TOWER

CONSULTANT TEAM

SITE NAME:
BOSTON COLLEGE oD.A.S. - CARNEY HALL

PROPERTY OWNER:
TRUSTEES OF BOSTON COLLEGE
C/O JOS M HERLIHY GENERAL COUNSEL
90 COLLEGE ROAD
CHESTNUT HILL, MA 02467

APPLICANT/DEVELOPER:
AT&T MOBILITY
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

ELECTRIC UTILITY:
EVERSOURCE
(800) 633-3797

TELEPHONE UTILITY:
VERIZON
(800) 870-9999

CENTER OF BUILDING*:
LATITUDE: 42° 20' 00.97"
LONGITUDE: 71° 10' 13.07"
*PER GOOGLE EARTH

PROJECT SUMMARY

SITE ADDRESS:
CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

PROPERTY ID:
63009 0002

ZONING DISTRICT:
SINGLE RESIDENCE 1

PROJECT DIRECTORY

THE PROJECT WILL CONSIST OF INSTALLING TELECOMMUNICATIONS EQUIPMENT IN THE MECHANICAL LEVEL OF THE CARNEY HALL BUILDING. PROPOSED ANTENNAS & SUPPORTING EQUIPMENT WILL BE INSTALLED ON THE ROOF OF THE BUILDING. UTILITIES TO COME FROM SOURCES ON SITE.

PROJECT DESCRIPTION

THIS DOCUMENT WAS DEVELOPED TO REFLECT A SPECIFIC SITE & ITS SITE CONDITIONS & 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 & NOT FOR HUMAN HABITATION.

SHT. NO.	DESCRIPTION
T-1	TITLE SHEET
G-1	GENERAL NOTES
C-1	PROPOSED ROOF PLAN
C-2	PROPOSED NORTH & EAST ELEVATIONS
C-3	PROPOSED SOUTH & WEST ELEVATIONS
C-4	PROPOSED ANTENNA PLANS & ISOMETRICS
C-5	PROPOSED MECHANICAL PENTHOUSE FLOOR PLAN
C-6	PROPOSED FOURTH FLOOR PLAN
C-7	PROPOSED EQUIPMENT AREA PLAN & ISOMETRIC
C-8	CONSTRUCTION DETAILS-I
C-9	CONSTRUCTION DETAILS-II
C-10	CONSTRUCTION DETAILS-III
S-1	FIBERGLASS CANISTER DETAILS
E-1	ONE-LINE DIAGRAM & PANEL SCHEDULE

SHEET INDEX

GENERAL CONSTRUCTION NOTES:

- ALL WORK SHALL CONFORM TO ALL CURRENT APPLICABLE FEDERAL, STATE, & LOCAL CODES, & COMPLY WITH AT&T SPECIFICATIONS.
- CONTRACTOR SHALL CONTACT "DIG SAFE 1 888 DIG SAFE" (888-344-7233) FOR IDENTIFICATION OF UNDERGROUND UTILITIES PRIOR TO START OF CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL REQUIRED INSPECTIONS.
- ALL DIMENSIONS TO, OF, & ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, & SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE OR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- CONTRACTOR SHALL BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- CONTRACTOR SHALL COORDINATE WITH BOSTON COLLEGE TO DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO BOSTON COLLEGE PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH REMEDIAL ACTION SHALL REQUIRE WRITTEN APPROVAL BY THE BOSTON COLLEGE REPRESENTATIVE PRIOR TO PROCEEDING.
- EACH CONTRACTOR SHALL COOPERATE WITH THE BOSTON COLLEGE REPRESENTATIVE, & COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- CONTRACTOR SHALL REPAIR ANY DAMAGE CAUSED BY CONSTRUCTION OF THIS PROJECT TO MATCH EXISTING PRE-CONSTRUCTION CONDITIONS TO THE SATISFACTION OF THE AT&T CONSTRUCTION MANAGER & BOSTON COLLEGE REPRESENTATIVE.
- ALL CABLE/CONDUIT ENTRY/EXIT PORTS SHALL BE WEATHERPROOFED DURING INSTALLATION USING A SILICONE SEALANT.
- WHERE EXISTING CONDITIONS DO NOT MATCH THOSE SHOWN IN THIS PLAN SET, CONTRACTOR WILL NOTIFY ENGINEER, AT&T PROJECT CONSTRUCTION MANAGER, & BOSTON COLLEGE IMMEDIATELY.
- CONTRACTOR SHALL ENSURE ALL SUBCONTRACTORS ARE PROVIDED WITH A CURRENT SET OF DRAWINGS & SPECIFICATIONS FOR THIS PROJECT.
- ALL ROOF WORK SHALL ABIDE BY THE REQUIREMENTS & SPECIFICATIONS SET FORTH IN THE ROOFING MANUFACTURER'S GUARANTEE.
- CONTRACTOR SHALL REMOVE ALL RUBBISH & DEBRIS FROM THE SITE AT THE END OF EACH DAY.
- CONTRACTOR SHALL COORDINATE WORK SCHEDULE WITH BOSTON COLLEGE & TAKE PRECAUTIONS TO MINIMIZE IMPACT & DISRUPTION OF OTHER OCCUPANTS OF THE FACILITY.
- CONTRACTOR SHALL FURNISH AT&T WITH THREE AS-BUILT SETS OF DRAWINGS UPON COMPLETION OF WORK. AT&T SHALL PROVIDE ONE COPY OF THOSE AS-BUILT DRAWINGS TO BOSTON COLLEGE AS WELL AS AN ELECTRONIC COPY, IF AVAILABLE, OF THE CAD DRAWINGS.
- ANTENNAS & CABLES ARE TYPICALLY PROVIDED BY AT&T. PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE WHAT, IF ANY, ITEMS WILL BE PROVIDED BY AT&T. ALL ITEMS NOT PROVIDED BY AT&T SHALL BE PROVIDED & INSTALLED BY THE CONTRACTOR. CONTRACTOR WILL INSTALL ALL ITEMS PROVIDED BY AT&T.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR WILL COORDINATE WITH AT&T PROJECT MANAGER TO DETERMINE IF ANY PERMITS WILL BE OBTAINED BY AT&T, ALL REQUIRED PERMITS NOT OBTAINED BY AT&T MUST BE OBTAINED & PAID FOR, BY THE CONTRACTOR. AT&T OR ITS SUB-LICENSEES, SHALL IN ADVANCE INFORM BOSTON COLLEGE IN WRITING OF ALL APPLICATIONS TO BE FILED & SHALL PROVIDE ADVANCE NOTICE TO BOSTON COLLEGE OF ALL PUBLIC MEETINGS & HEARINGS SCHEDULED IN CONNECTION WITH SUCH APPLICATIONS.
- CONTRACTOR SHALL START UP HVAC UNITS & SYNCHRONIZE THE THERMOSTATS.
- CONTRACTOR SHALL INSTALL ALL SITE SIGNAGE IN ACCORDANCE WITH AT&T SPECIFICATIONS & REQUIREMENTS AS WELL AS WITH THE INPUT & APPROVAL OF BOSTON COLLEGE.
- CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO ENGINEER FOR REVIEW & APPROVAL PRIOR TO FABRICATION.
- UNLESS OTHERWISE NOTED AT&T SHALL PROVIDE ALL REQUIRED RF MATERIAL FOR CONTRACTOR TO INSTALL, INCLUDING ANTENNAS, TMA'S, BIAS-T'S, COMBINERS, PDU, DC BLOCKS, SURGE ARRESTORS, GPS ANTENNA, GPS SURGE ARRESTOR, COAXIAL CABLE.
- PRIOR TO SUBMISSION OF BID, CONTRACTOR SHALL VERIFY ALL EQUIPMENT TO BE PROVIDED BY AT&T FOR INSTALLATION BY CONTRACTOR.
- ALL EQUIPMENT SHALL BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS & LOCATED ACCORDING TO AT&T SPECIFICATIONS, & AS SHOWN IN THESE PLANS.
- THE CONTRACTOR SHALL SUPERVISE & DIRECT THE PROJECT DESCRIBED HEREIN. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES & PROCEDURES & FOR COORDINATING ALL PORTIONS OF THE WORK UNDER & IN COMPLIANCE WITH THE CONTRACT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR SITE SAFETY INCLUDING COMPLIANCE W/ALL APPLICABLE OSHA STANDARDS & RECOMMENDATIONS & SHALL PROVIDE ALL NECESSARY SAFETY DEVICES INCLUDING PPE & PPM & CONSTRUCTION DEVICES SUCH AS WELDING & FIRE PREVENTION, TEMPORARY SHORING, SCAFFOLDING, TRENCH BOXES/SLOPING, BARRIERS, ETC.
- CONTRACTOR WILL BE RESPONSIBLE FOR THE PROTECTION OF ALL INTERIOR FINISHES.
- CONTRACTOR SHALL ADHERE TO ALL BOSTON COLLEGE REQUIREMENTS FOR SAFETY & CONSTRUCTION ON CAMPUS. THESE INCLUDE BUT ARE NOT LIMITED TO CAMPUS SAFETY PROGRAM & THE BOSTON COLLEGE CONSTRUCTION SPECIFICATION REQUIREMENTS.

STRUCTURAL STEEL NOTES:

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION & ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- STRUCTURAL STEEL ROLLED SHAPES, PLATES, & BARS SHALL CONFORM TO THE FOLLOWING ASTM DESIGNATIONS:

ASTM A-992, GRADE 50	ALL W SHAPES, UNLESS NOTED OR A992 OTHERWISE.
ASTM A-36	ALL OTHER ROLLED SHAPES, PLATES & BARS UNLESS NOTED OTHERWISE.
ASTM A-500, GRADE B	HSS SECTION (SQUARE, RECTANGULAR, ROUND)
ASTM A-325, TYPE SC OR N	ALL BOLTS FOR CONNECTING STRUCTURAL MEMBERS.
F1554, GRADE 36	ALL ANCHORS BOLTS, UNLESS NOTED OTHERWISE.
ASTM A-53, GRADE B	STEEL PIPE
- ALL WELDING SHALL BE DONE USING E70XX ELECTRODES & WELDING SHALL CONFORM TO AISC & AWS D1.1 WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 14TH EDITION, WHERE WELD LENGTH IS NOT INDICATED, USE FULL LENGTH WELD. AT THE COMPLETION OF ALL WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
- BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA.) SUPPLIED WITH A NUT & WASHER UNDER TURNED END & SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- DO NOT DRILL HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN & DETAILED ON STRUCTURAL DRAWINGS.
- NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
- CONCRETE EXPANSION ANCHORS & EPOXY ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS, SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. MANUFACTURER'S MINIMUM CONCRETE EDGE DISTANCE SHALL BE MAINTAINED DURING INSTALLATION.
- USE PRECAUTIONS & PROCEDURES PER AWS D1.1 WHEN WELDING GALVANIZED METALS.
- TOUCHUP ALL DAMAGED GALVANIZED STEEL WITH VERIZON WIRELESS APPROVED COLD ZINC, "GALVANOX", "DRY GALV", "ZINC-IT", OR APPROVED EQUIVALENT, IN ACCORDANCE WITH MANUFACTURER'S GUIDELINES. TOUCHUP DAMAGED NON GALVANIZED STEEL WITH SAME PAINT APPLIED IN SHOP OR FIELD.
- ALL PROPOSED STEEL SHALL CONFORM TO HIGH STRENGTH STEEL MATERIALS, ASTM A36 WITH A MINIMUM STRENGTH OF 36 KSI.
- ALL EXISTING BEAM & COLUMN DIMENSIONS SHALL BE FIELD VERIFY BY CONTRACTOR PRIOR TO FABRICATION. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS & THOSE SHOWN SHALL BE REPORTED TO DEWBERRY ENGINEER IMMEDIATELY.
- CONTRACTOR TO MAKE ALL NECESSARY PRECAUTIONS & SECURE ALL PERMITS REQUIRED FOR WELDING ON THE ROOF.
- CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW & APPROVAL BY ENGINEER.
- ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A123/A123M-00 HOT-DIP GALVANIZED FINISH UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, & WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED. REPAIR DAMAGED GALVANIZED COATINGS ON GALVANIZED ITEMS WITH GALVANIZED REPAIR PAINT ACCORDING TO ASTM A780 & MANUFACTURER'S WRITTEN INSTRUCTIONS, PRIOR TO COMPLETION OF WORK.

GENERAL ELECTRICAL NOTES:

- SUBMITTAL OF BID INDICATES CONTRACTOR IS COGNIZANT OF ALL JOB SITE CONDITIONS & WORK TO BE PERFORMED UNDER THIS CONTRACT.
- CONTRACTOR SHALL PERFORM ALL VERIFICATION OBSERVATION TESTS, & EXAMINATION WORK PRIOR TO THE ORDERING OF THE ELECTRICAL EQUIPMENT & THE ACTUAL CONSTRUCTION. CONTRACTOR SHALL ISSUE A WRITTEN NOTICE OF ALL FINDINGS TO THE ARCHITECT LISTING ALL MALFUNCTIONS, FAULTY EQUIPMENT & DISCREPANCIES.
- HEIGHTS SHALL BE VERIFIED WITH OWNER PRIOR TO INSTALLATION.
- THESE PLANS ARE DIAGRAMMATIC ONLY, FOLLOW AS CLOSELY AS POSSIBLE.
- EACH CONDUCTOR OF EVERY SYSTEM SHALL BE PERMANENTLY TAGGED IN EACH PANELBOARD, PULLBOX, J-BOX, SWITCH BOX, ETC., IN COMPLIANCE WITH OCCUPATIONAL SAFETY & HEALTH ACT (O.S.H.A.)
- CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, INSURANCE, EQUIPMENT, INSTALLATION, CONSTRUCTION TOOLS, TRANSPORTATION, ETC., FOR A COMPLETE & PROPERLY OPERATIVE SYSTEM ENERGIZED THROUGHOUT & AS INDICATED ON DRAWINGS, AS SPECIFIED HEREIN AND/OR AS OTHERWISE REQUIRED.
- ALL MATERIALS & EQUIPMENT SHALL BE NEW & IN PERFECT CONDITION WHEN INSTALLED & SHALL BE OF THE BEST GRADE & OF THE SAME MANUFACTURER THROUGHOUT FOR EACH CLASS OR GROUP OF EQUIPMENT. MATERIALS SHALL BE LISTED & APPROVED BY UNDERWRITER'S LABORATORY & SHALL BEAR THE INSPECTION LABEL "J" WHERE SUBJECT TO SUCH APPROVAL. MATERIALS SHALL MEET WITH APPROVAL OF THE DIVISION OF INDUSTRIAL SAFETY & ALL GOVERNING BODIES HAVING JURISDICTION. MATERIALS SHALL BE MANUFACTURED IN ACCORDANCE WITH APPLICABLE STANDARDS ESTABLISHED BY ANSI, NEMA & NBFU.
- ALL CONDUIT INSTALLED MAY BE SURFACE MOUNTED UNLESS OTHERWISE NOTED.
- CONTRACTOR SHALL CARRY OUT HIS WORK IN ACCORDANCE WITH ALL GOVERNING STATE, COUNTY & LOCAL CODES, O.S.H.A & NFPA 70E.
- CONTRACTOR SHALL SECURE ALL NECESSARY BUILDING PERMITS & PAY ALL REQUIRED FEES
- COMPLETE JOB SHALL BE GUARANTEED FOR A PERIOD OF ONE (1) YEAR AFTER THE DATE OF JOB ACCEPTANCE BY OWNER. ANY WORK, MATERIAL OR EQUIPMENT FOUND TO BE FAULTY DURING THAT PERIOD SHALL BE CORRECTED AT ONCE, UPON WRITTEN NOTIFICATION, AT THE EXPENSE OF THE CONTRACTOR.
- ALL CONDUIT ONLY (C.O.) SHALL HAVE A PULL WIRE OR ROPE.
- PROVIDE PROJECT MANAGER WITH ONE SET OF COMPLETE ELECTRICAL "AS INSTALLED" DRAWINGS AT THE COMPLETION OF THE JOB, SHOWING ACTUAL DIMENSIONS, ROUTINGS, & CIRCUITS.
- ALL BROCHURES, OPERATING MANUALS, CATALOGS, SHOP DRAWINGS, ETC. SHALL BE TURNED OVER TO OWNER AT JOB COMPLETION.
- NO SHARED NEUTRAL IS ALLOWED FOR LIGHTING FIXTURES.
- ALL BUILDING WIRE #12 TO # 6 SHALL BE STRANDED COPPER TYPE THWN-THHN. CONDUCTORS #4 & LARGER SHALL BE COPPER TYPE XHHW.
- ALL CIRCUIT BREAKERS, FUSES & ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTING RATING NOT LESS THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED. SEE SCHEDULES FOR RATINGS.
- THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES
- PATCH, REPAIR & PAINT ANY AREA THAT HAS BEEN DAMAGED IN THE COURSE OF THE ELECTRICAL WORK.
- IN DRILLING HOLES INTO CONCRETE WHETHER FOR FASTENING OR ANCHORING PURPOSES, OR PENETRATIONS THROUGH THE FLOOR FOR CONDUIT RUNS, M PIPE RUNS, ETC., IT MUST BE CLEARLY UNDERSTOOD THAT TENDONS AND/OR REINFORCING STEEL WILL NOT BE DRILLED INTO, CUT OR DAMAGED UNDER ANY CIRCUMSTANCES.
- LOCATION OF TENDONS AND/OR REINFORCING STEEL ARE NOT DEFINITELY KNOWN & THEREFORE, MUST BE SEARCHED FOR BY APPROPRIATE METHODS & EQUIPMENT VIA X-RAY OR OTHER DEVICES THAT CAN ACCURATELY LOCATE THE REINFORCING AND/OR STEEL TENDONS.
- PENETRATIONS IN FIRE RATED WALLS SHALL BE FIRE STOPPED IN ACCORDANCE WITH FIRESTOP DETAILS.
- WIRE & CABLE CONDUCTORS SHALL BE STRANDED COPPER #12 AWG MINIMUM UNLESS SPECIFICALLY STATED OTHERWISE ON DRAWINGS.
- VERIFY ALL CONDUIT ROUTING W/OWNER REP. & AT&T MOBILITY C.M. NO OTHER SURFACE MOUNTED CONDUITS WILL BE ALLOWED OTHER THAN IN CHASES & ABOVE CEILINGS.
- ALL MATERIALS SHALL BE U.L. LISTED.
- CONDUIT:
 - RIGID CONDUIT SHALL BE U.L. LABEL GALVANIZED ZINC COATED WITH ZINC INTERIOR & SHALL BE USED WHEN INSTALLED IN OR UNDER CONCRETE SLABS, IN CONTACT WITH THE EARTH, UNDER PUBLIC ROADWAYS, IN MASONRY WALLS OR EXPOSED ON BUILDING EXTERIOR. RIGID CONDUIT IN CONTACT WITH EARTH SHALL BE 1/2 LAPPED WRAPPED WITH HUNTS WRAP PROCESS NO. 3.
 - ELECTRICAL METALLIC TUBING SHALL HAVE U.L. LABEL, FITTINGS SHALL BE GLAND RING COMPRESSION TYPE. EMT SHALL BE USED ONLY FOR INTERIOR RUNS.
 - FLEXIBLE METALLIC CONDUIT SHALL HAVE U.L. LISTED LABEL & MAY BE USED WHERE PERMITTED BY CODE. FITTINGS SHALL BE "JAKE" OR "SQUEEZE" TYPE, SEAL TIGHT FLEXIBLE CONDUIT. ALL CONDUIT IN EXCESS OF SIX FEET IN LENGTH SHALL HAVE FULL SIZE GROUND WIRE.
 - CONDUIT RUNS MAY BE SURFACE MOUNTED IN CEILINGS OR WALLS UNLESS INDICATED OTHERWISE. CONDUIT INDICATED SHALL RUN PARALLEL OR AT RIGHT ANGLES TO CEILING, FLOOR OR BEAMS. VERIFY EXACT ROUTING OF ALL EXPOSED CONDUIT WITH ARCHITECT PRIOR TO INSTALLING.
- ALL ELECTRICAL EQUIPMENT SHALL BE LABELED WITH PERMANENT ENGRAVED PLASTIC LABELS.
- COORDINATE THE ELECTRICAL SERVICE WITH BUILDING OWNER.
- GROUNDING SYSTEM RESISTANCE SHALL NOT EXCEED 5 OHMS. IF THE RESISTANCE VALUE IS EXCEEDED, NOTIFY THE OWNER FOR FURTHER INSTRUCTION ON METHODS FOR REDUCING THE RESISTANCE VALUE. SUBMIT TEST REPORTS & FURNISH TO DISPATCH COMMUNICATIONS ONE COMPLETE SET OF PRINTS SHOWING "INSTALLED WORK".
- UPON COMPLETION OF WORK, CONDUCT CONTINUITY, & FALL POTENTIAL GROUNDING TESTS FOR APPROVAL. SUBMIT TEST REPORTS TO PROJECT MANAGER. CLEAN PREMISES OF ALL DEBRIS RESULTING FROM WORK & LEAVE WORK IN A COMPLETE & UNDAMAGED CONDITION.
- ALL WALL PENETRATIONS SHALL BE FIRE STOPPED WITH FS-ONE HIGH PERFORMANCE INTUMESCENT FIRE STOP BY HILTI OR APPROVED EQUAL. INSTALL PER MANUFACTURERS RECOMMENDATIONS.

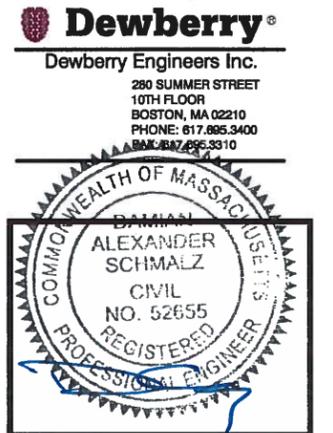


550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

BOSTON COLLEGE
oD.A.S.
CARNEY HALL

CONSTRUCTION DRAWINGS

2	11/20/17	FOR CONSTRUCTION
1	08/25/17	FOR CONSTRUCTION
0	07/07/17	FOR CONSTRUCTION
A	01/16/17	FOR COMMENT



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BOSTON, MA 02210
PHONE: 617.895.3400
FAX: 617.636.3310

ALEXANDER SCHMALZ
CIVIL
NO. 52655
REGISTERED PROFESSIONAL ENGINEER

DRAWN BY: SK

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

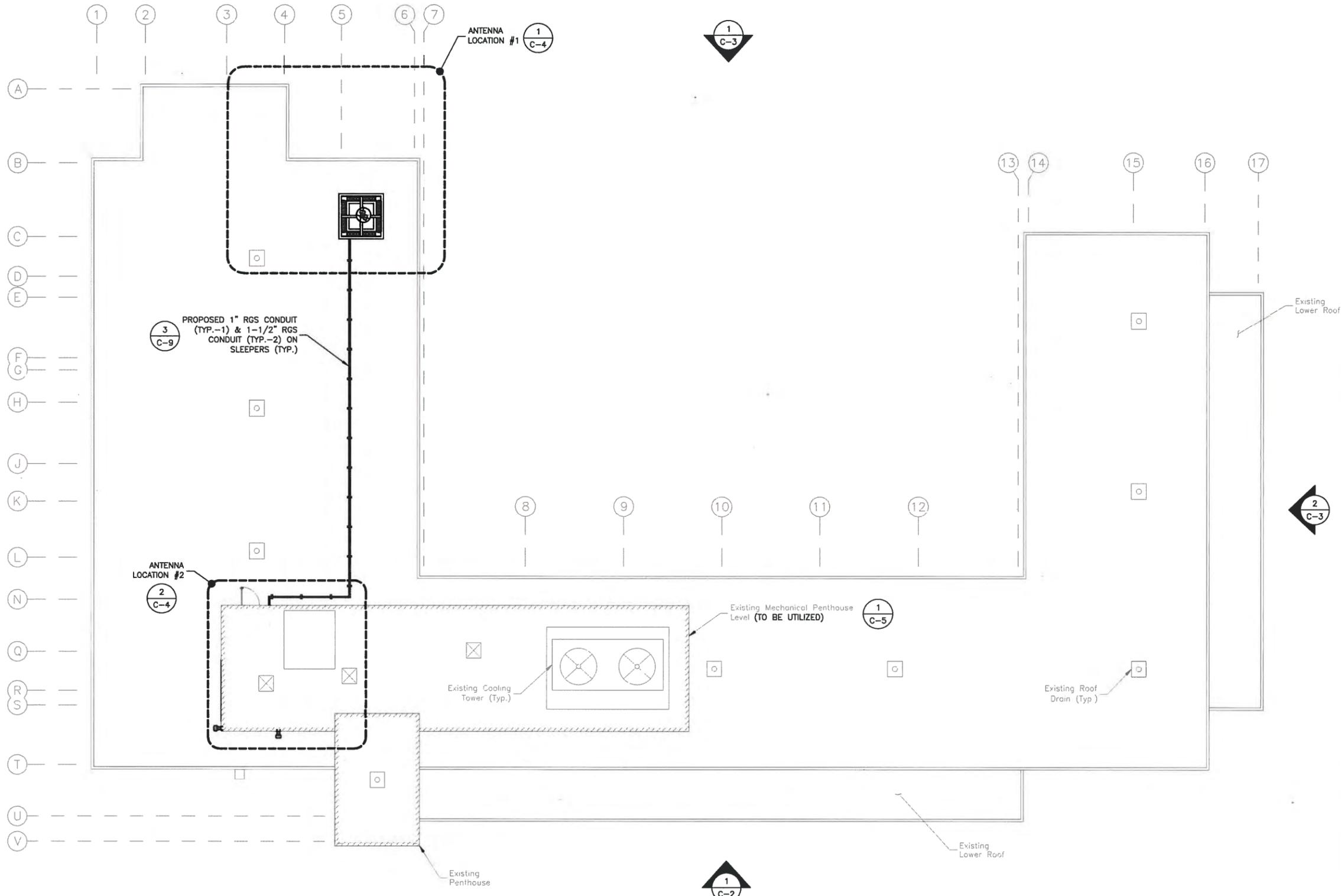
SITE ADDRESS

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

GENERAL NOTES

SHEET NUMBER



- NOTES:**
1. NORTH SHOWN AS APPROXIMATE.
 2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
 3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 4. PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.

PROPOSED ROOF PLAN

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



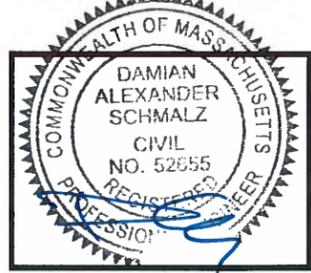
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280 SUMMER STREET
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REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
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SITE ADDRESS	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

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PROPOSED ROOF PLAN

SHEET NUMBER

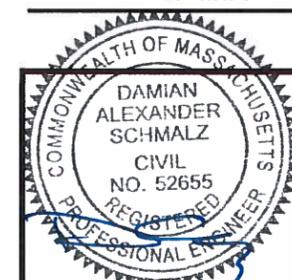
C-1

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CONSTRUCTION DRAWINGS

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A	01/16/17	FOR COMMENT

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REVIEWED BY:	DAS
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PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

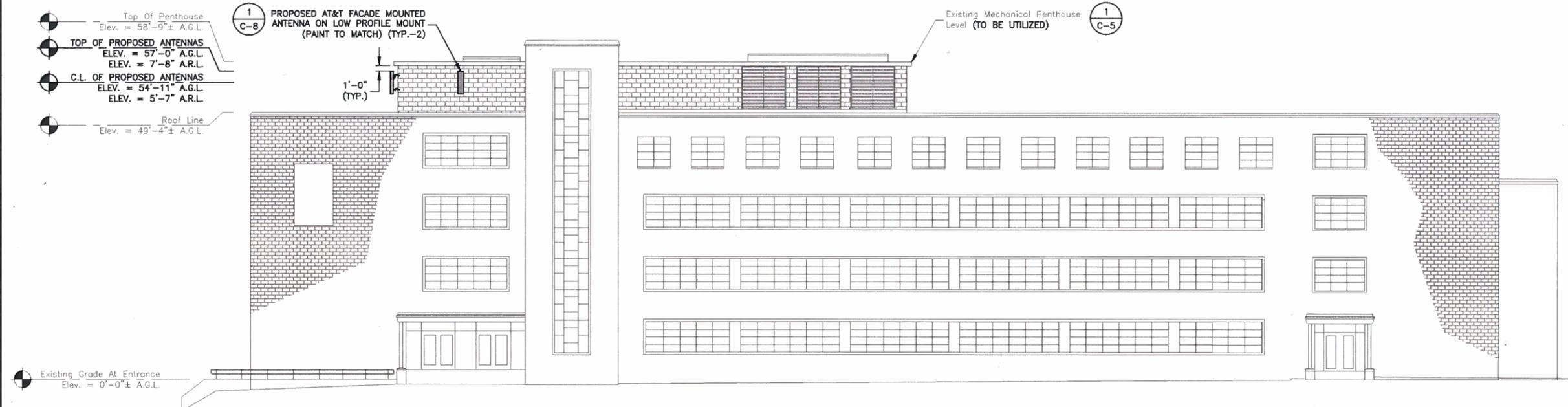
CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

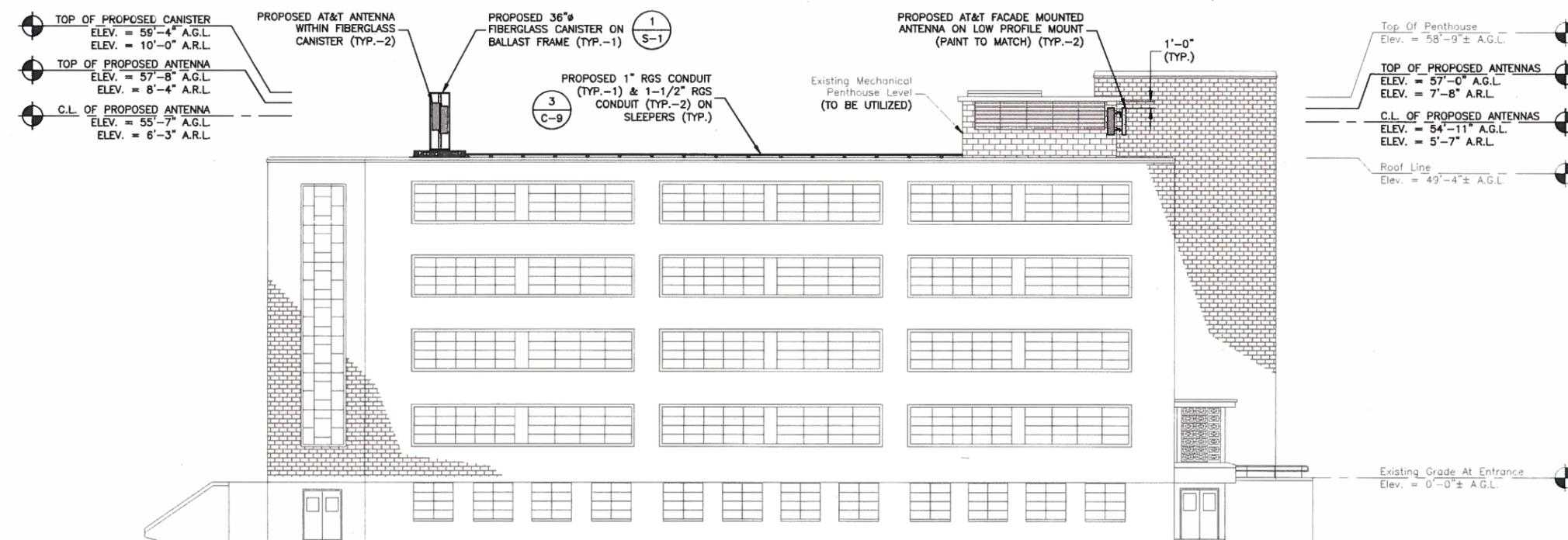
PROPOSED NORTH &
EAST ELEVATIONS

SHEET NUMBER

C-2



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



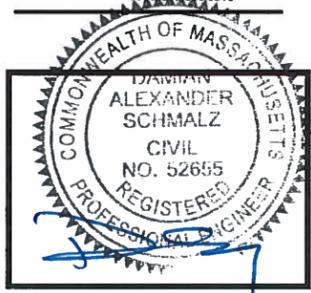
EAST ELEVATION
SCALE: 3/64"=1' FOR 11"x17"
3/32"=1' FOR 22"x34"
0' 8' 16' 24'

- NOTES:
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 - PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
 - PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
 - ELEVATIONS ARE APPROXIMATE & BASED ON EXISTING BUILDING PLANS PROVIDED BY BOSTON COLLEGE.
 - A.G.L. = ABOVE GROUND LEVEL
A.R.L. = ABOVE ROOF LEVEL
C.L. = CENTERLINE

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CONSTRUCTION DRAWINGS			
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A	01/16/17	FOR COMMENT	

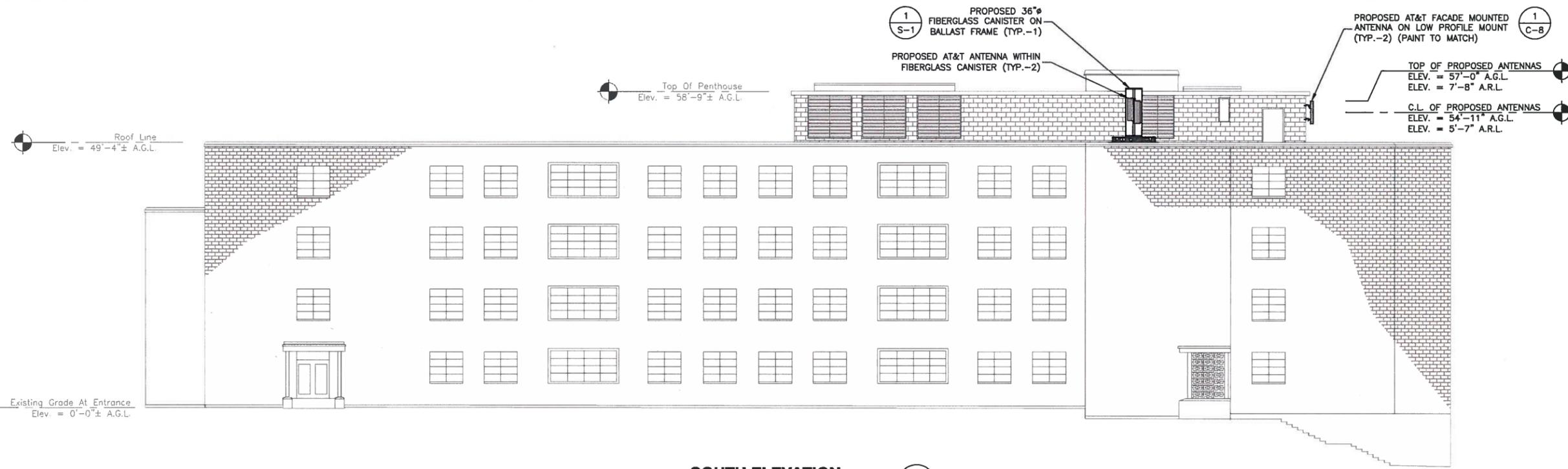
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Dewberry Engineers Inc.
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FAX: 617.665.3310



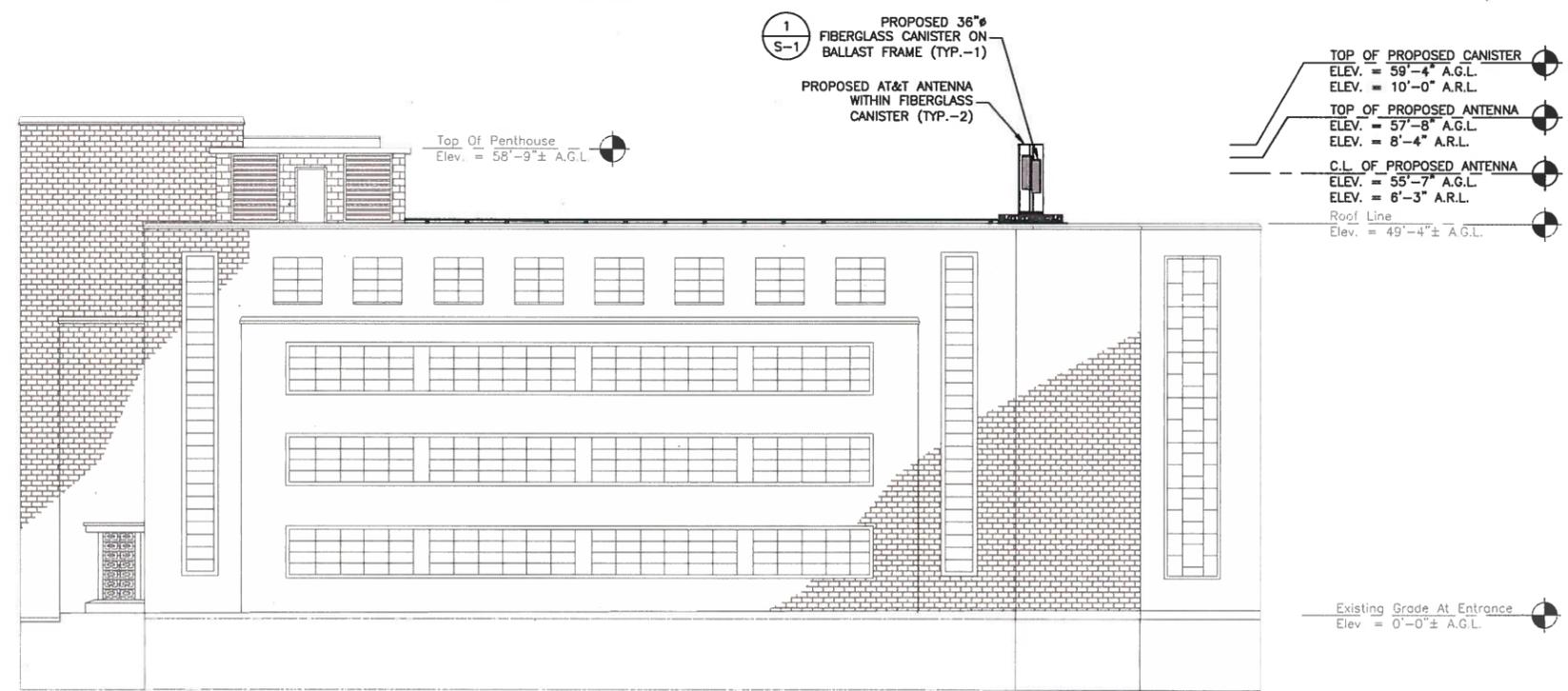
DRAWN BY:	SK
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE	PROPOSED SOUTH & WEST ELEVATIONS
SHEET NUMBER	C-3

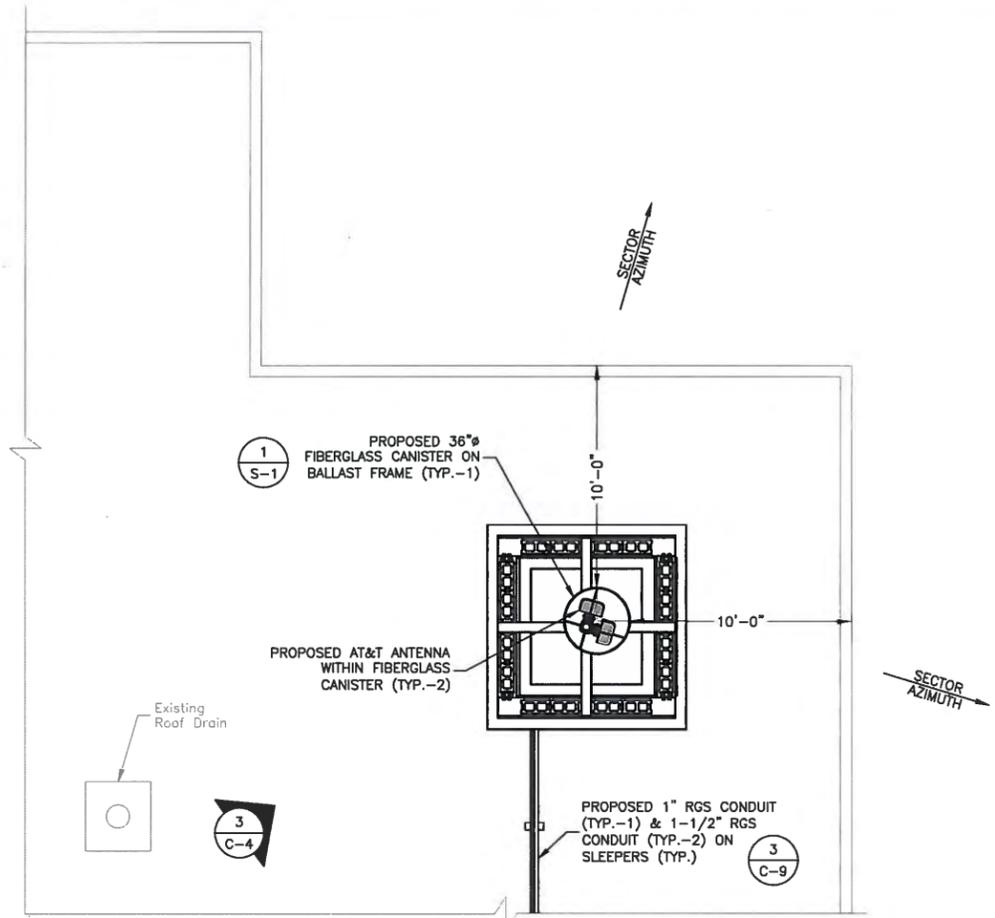


SOUTH ELEVATION
SCALE: 3/64"=1' FOR 11"x17"
3/32"=1' FOR 22"x34"
0' 8' 16' 24'



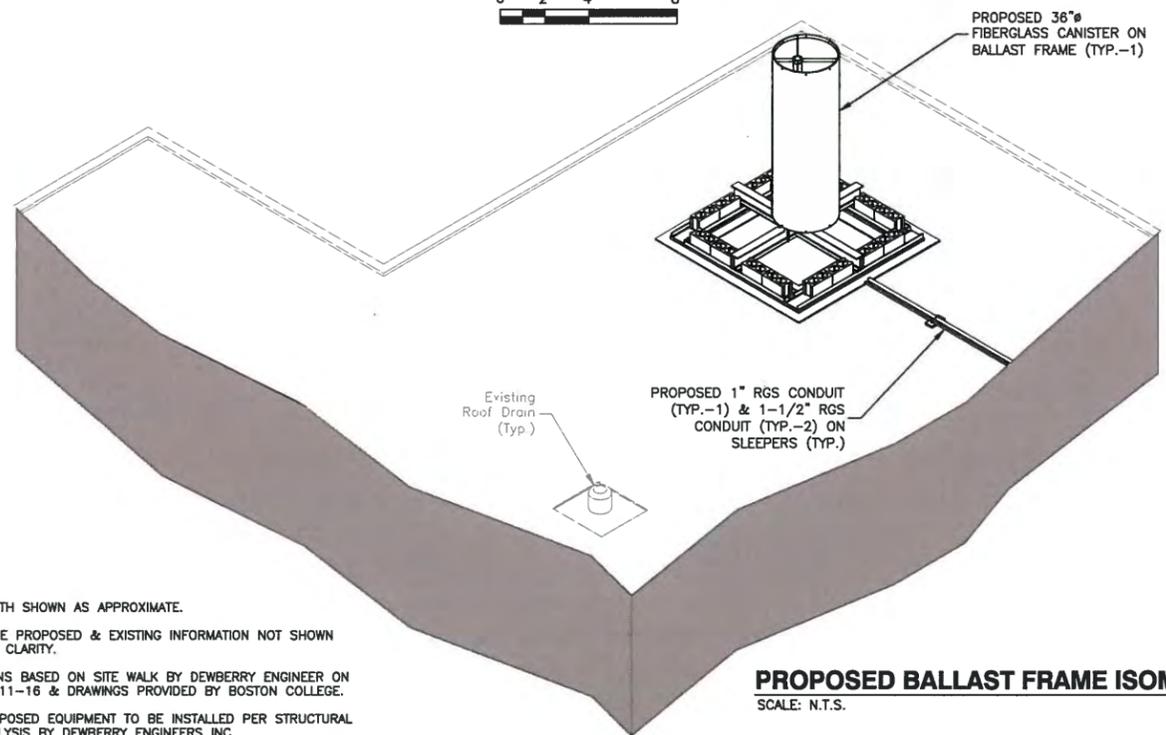
WEST ELEVATION
SCALE: 3/64"=1' FOR 11"x17"
3/32"=1' FOR 22"x34"
0' 8' 16' 24'

- NOTES:**
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 - PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
 - ELEVATIONS ARE APPROXIMATE & BASED ON EXISTING BUILDING PLANS PROVIDED BY BOSTON COLLEGE.
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A.R.L. = ABOVE ROOF LEVEL
C.L. = CENTERLINE



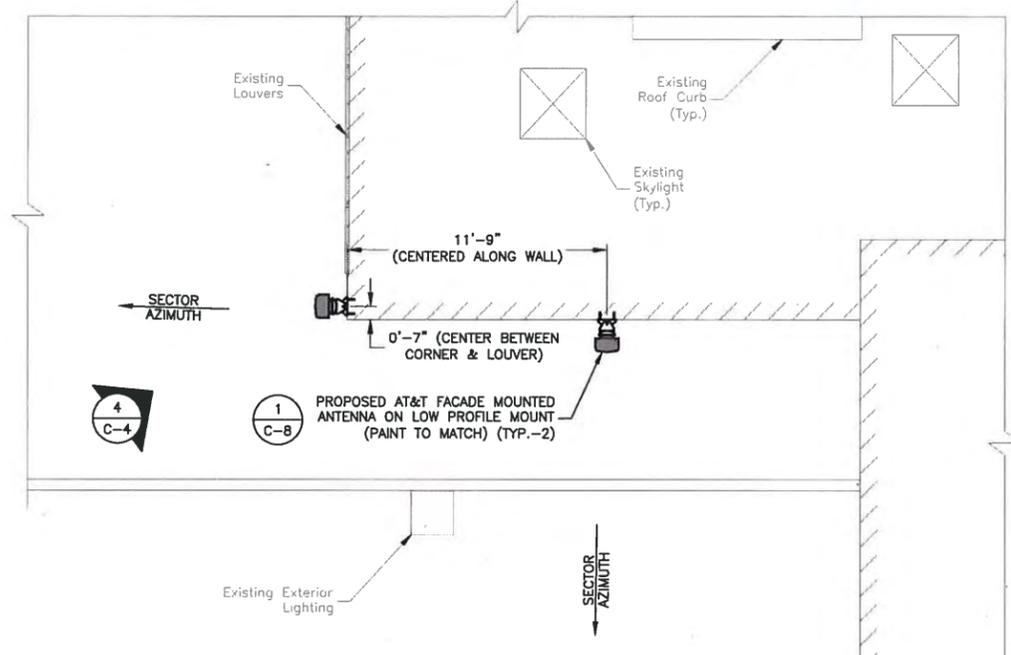
PROPOSED BALLAST FRAME PLAN (1)

SCALE: 1/8"=1' FOR 11"x17"
1/4"=1' FOR 22"x34"



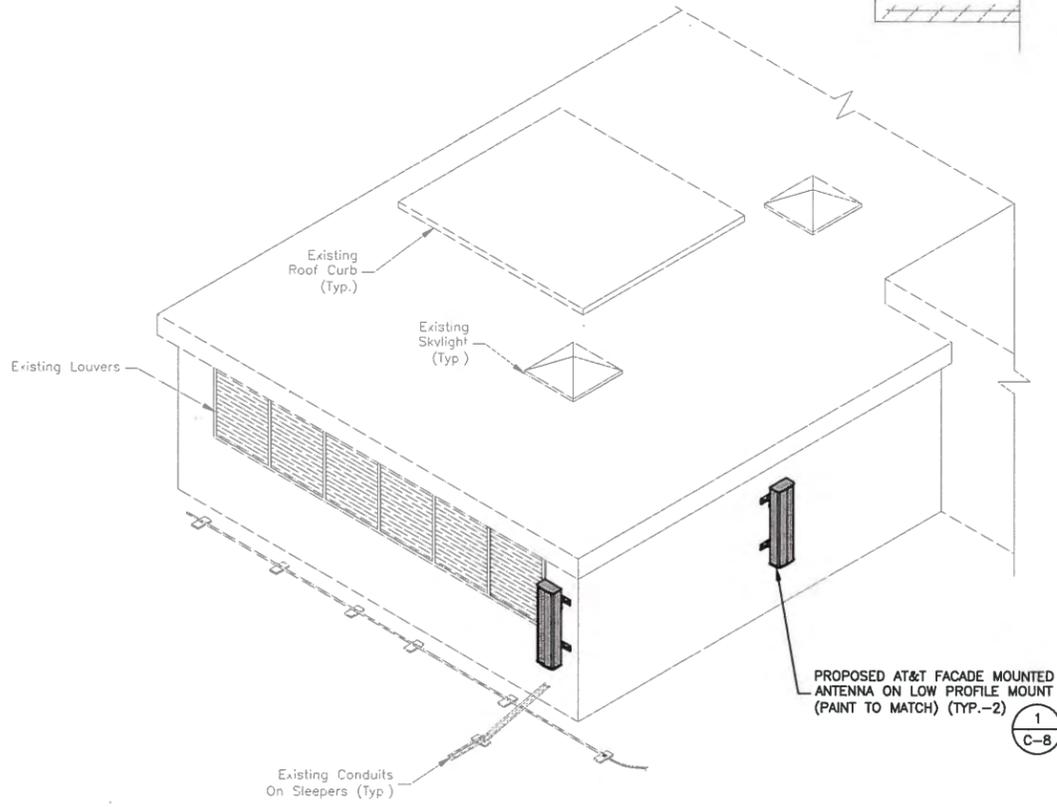
PROPOSED BALLAST FRAME ISOMETRIC (3)

SCALE: N.T.S.



PROPOSED FACADE MOUNTED ANTENNA PLAN (2)

SCALE: 1/8"=1' FOR 11"x17"
1/4"=1' FOR 22"x34"



PROPOSED FACADE MOUNTED ANTENNA ISOMETRIC (4)

SCALE: N.T.S.

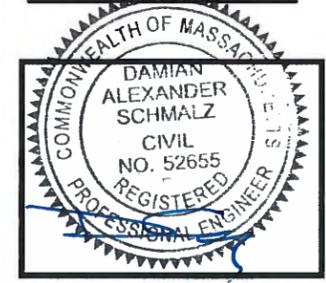
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1. NORTH SHOWN AS APPROXIMATE.
 2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
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at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

BOSTON COLLEGE
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CARNEY HALL

CONSTRUCTION DRAWINGS			
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A	01/16/17	FOR COMMENT	

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DRAWN BY:	SK
REVIEWED BY:	DAS
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SITE ADDRESS	

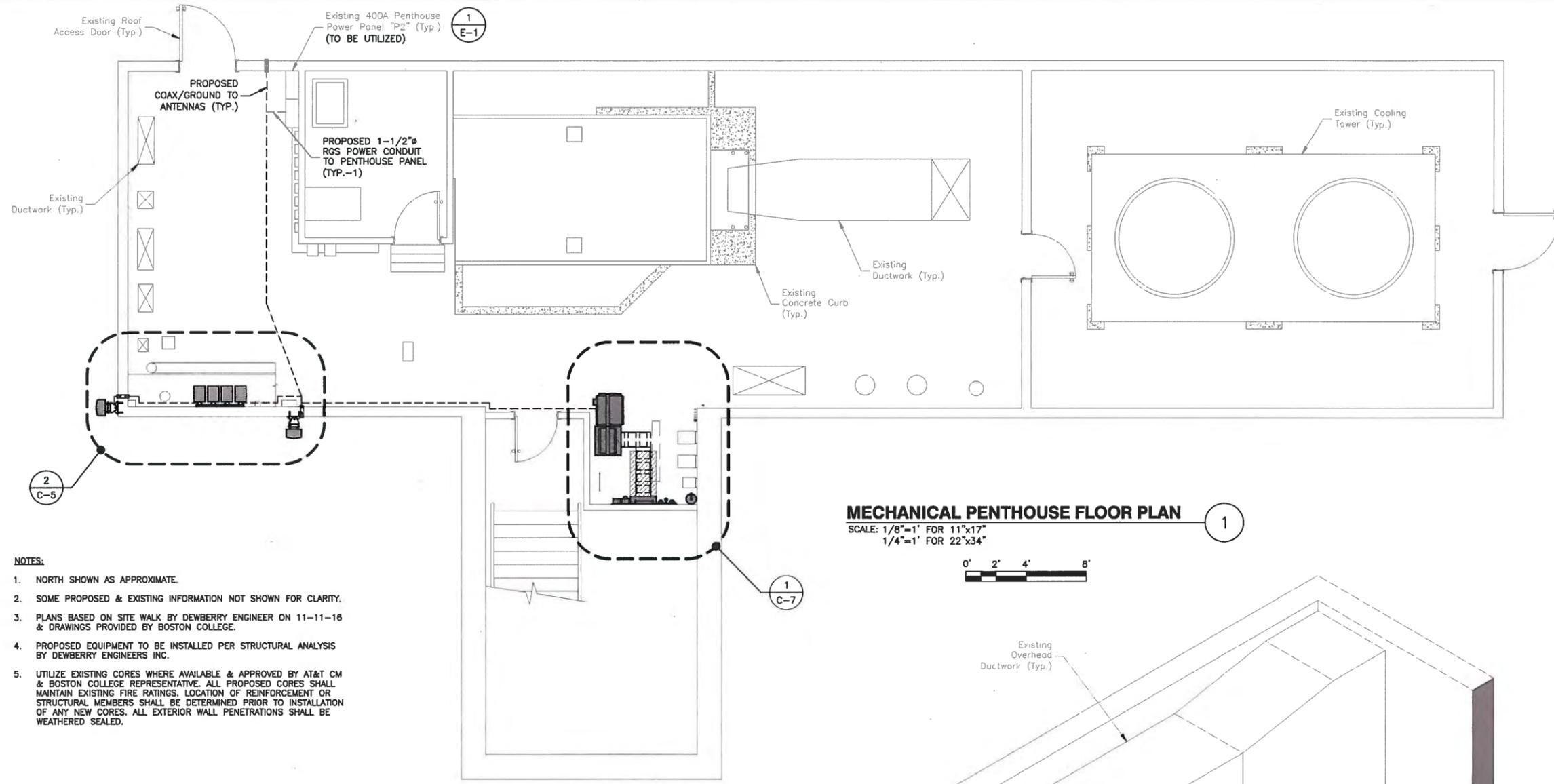
CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

PROPOSED ANTENNA PLANS & ISOMETRICS

SHEET NUMBER

C-4



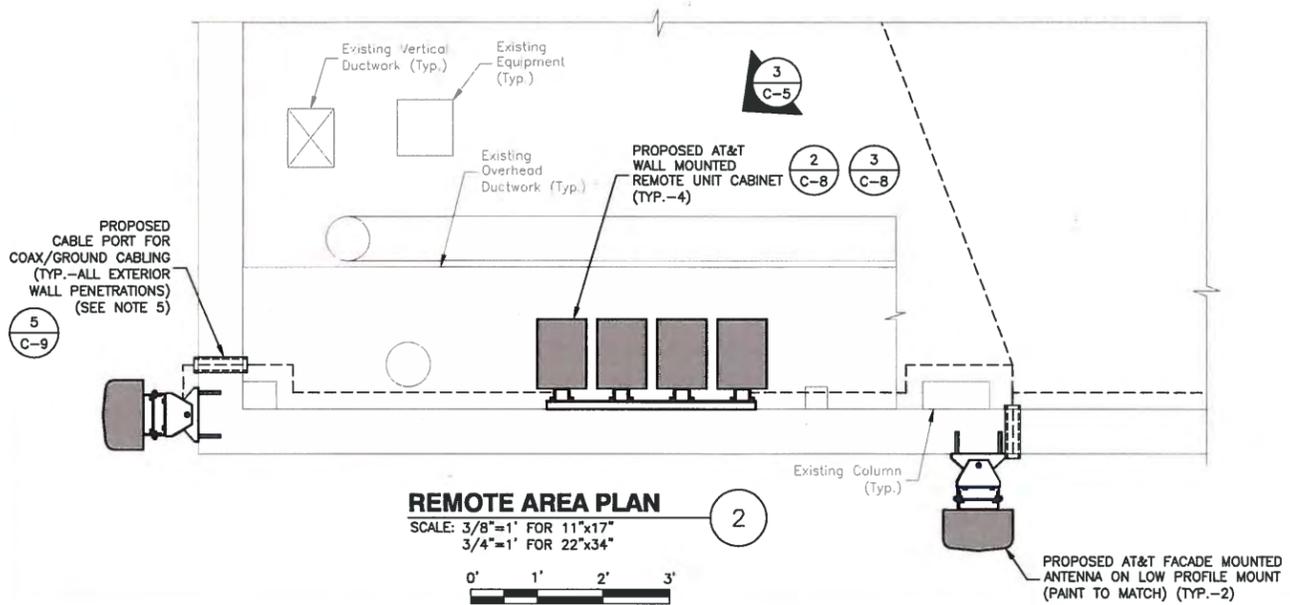
MECHANICAL PENTHOUSE FLOOR PLAN

SCALE: 1/8"=1' FOR 11"x17"
1/4"=1' FOR 22"x34"



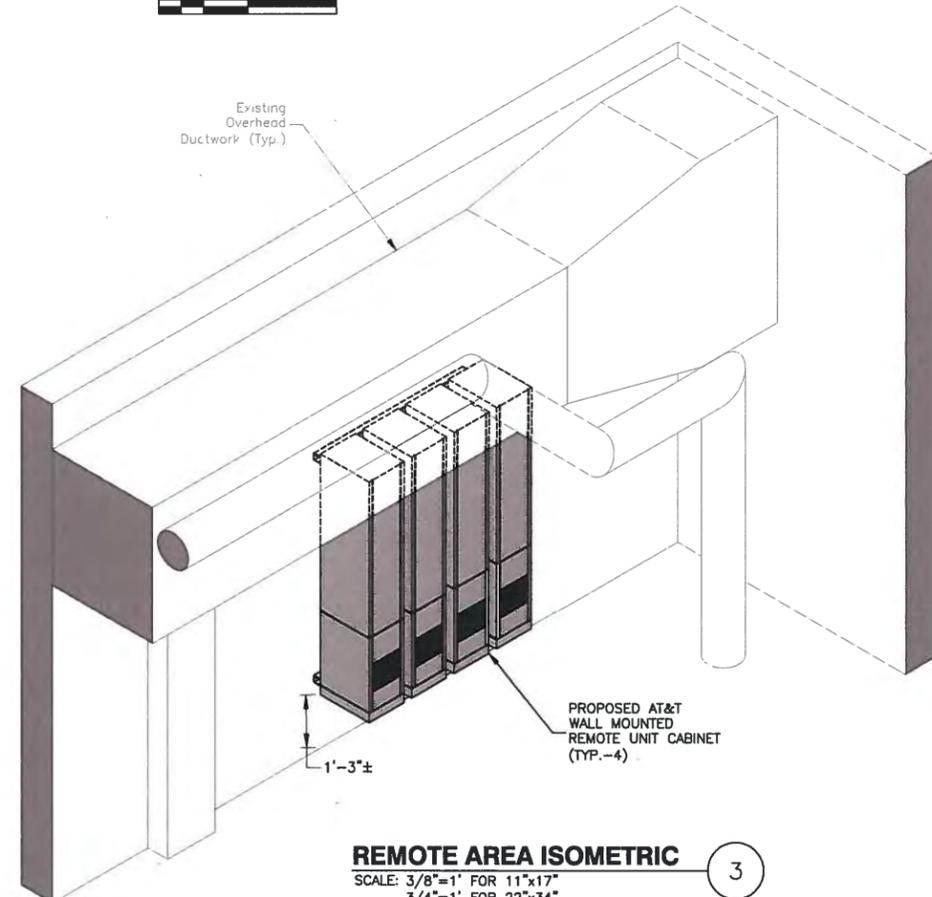
NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
4. PROPOSED EQUIPMENT TO BE INSTALLED PER STRUCTURAL ANALYSIS BY DEWBERRY ENGINEERS INC.
5. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.



REMOTE AREA PLAN

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"



REMOTE AREA ISOMETRIC

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"

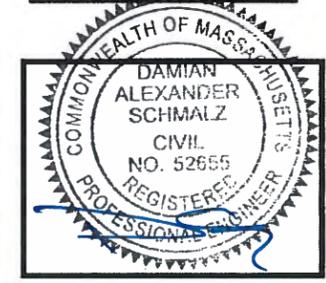


at&t
Mobility
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

BOSTON COLLEGE
o.D.A.S.
CARNEY HALL

CONSTRUCTION DRAWINGS			
2	11/20/17	FOR CONSTRUCTION	
1	08/25/17	FOR CONSTRUCTION	
0	07/07/17	FOR CONSTRUCTION	
A	01/16/17	FOR COMMENT	

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

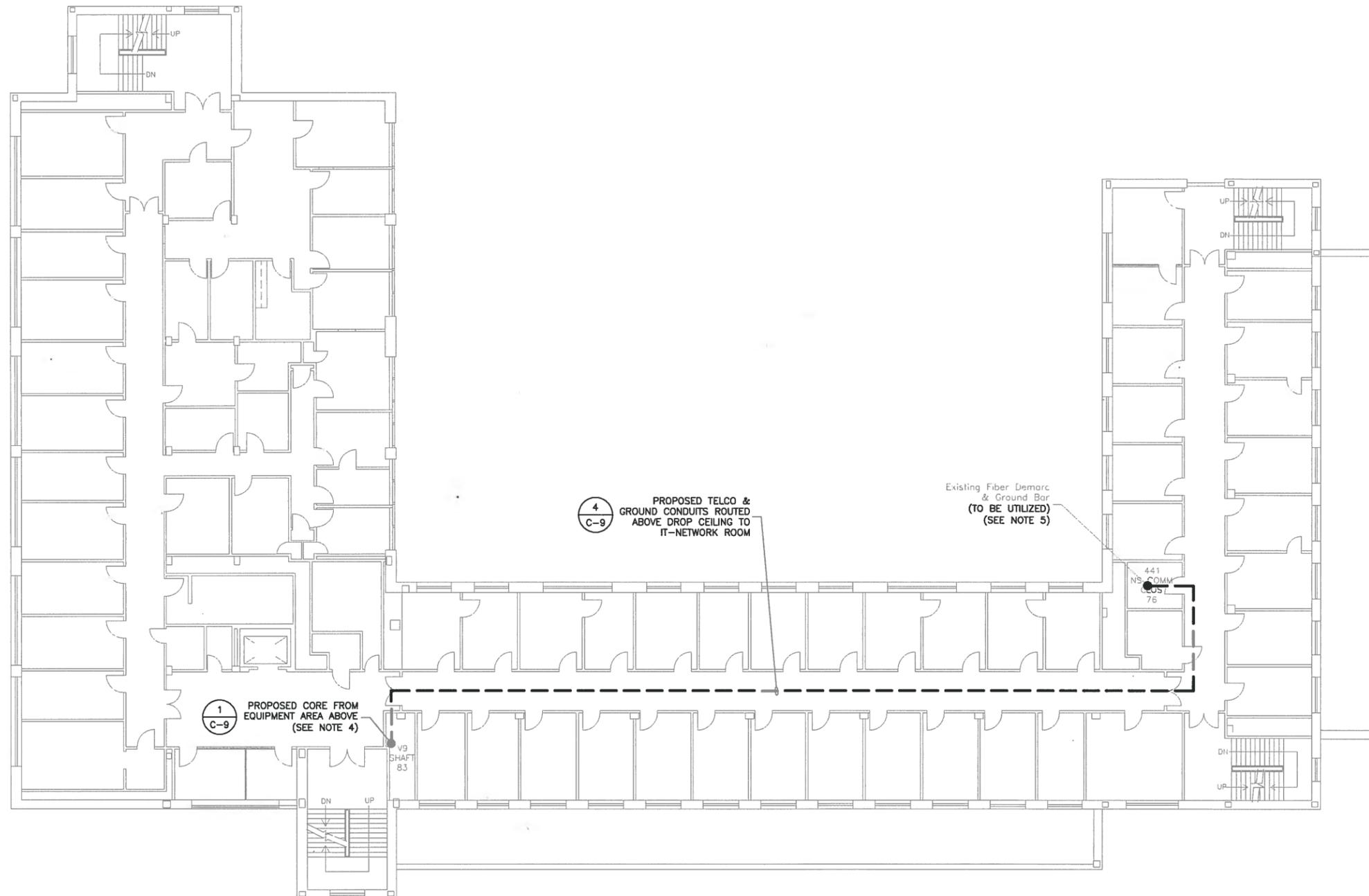


DRAWN BY:	SK
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE
**PROPOSED MECHANICAL
PENTHOUSE FLOOR PLAN**
SHEET NUMBER

C-5



NOTES:

1. NORTH SHOWN AS APPROXIMATE.
2. SOME PROPOSED & EXISTING INFORMATION NOT SHOWN FOR CLARITY.
3. PLANS BASED ON SITE WALK BY DEWBERRY ENGINEER ON 11-11-16 & DRAWINGS PROVIDED BY BOSTON COLLEGE.
4. UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
5. TEST & COORDINATE GROUND SYSTEM & CONNECTION WITH AT&T CM TO ENSURE AT&T STANDARDS ARE ACHIEVED.

PROPOSED FOURTH FLOOR PLAN

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



1

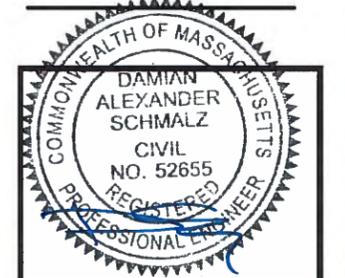
550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

**BOSTON COLLEGE
o.d.a.s.
CARNEY HALL**

CONSTRUCTION DRAWINGS

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1	08/25/17	FOR CONSTRUCTION
0	07/07/17	FOR CONSTRUCTION
A	01/16/17	FOR COMMENT

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PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

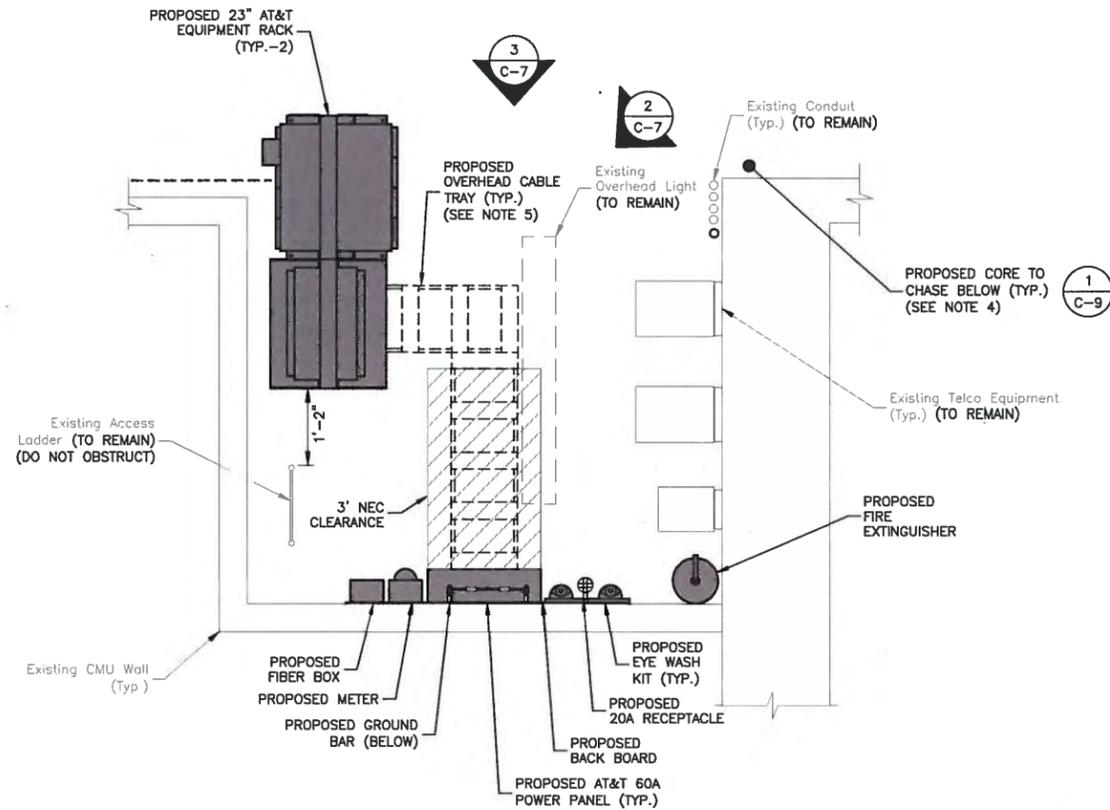
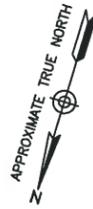
CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

PROPOSED FOURTH
FLOOR PLAN

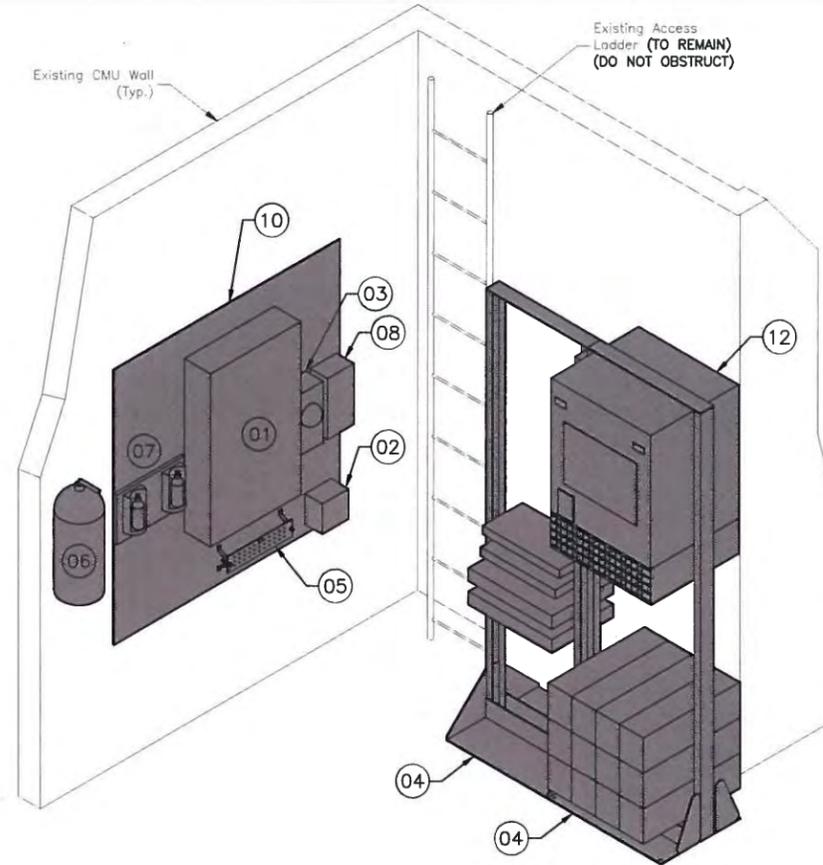
SHEET NUMBER

C-6



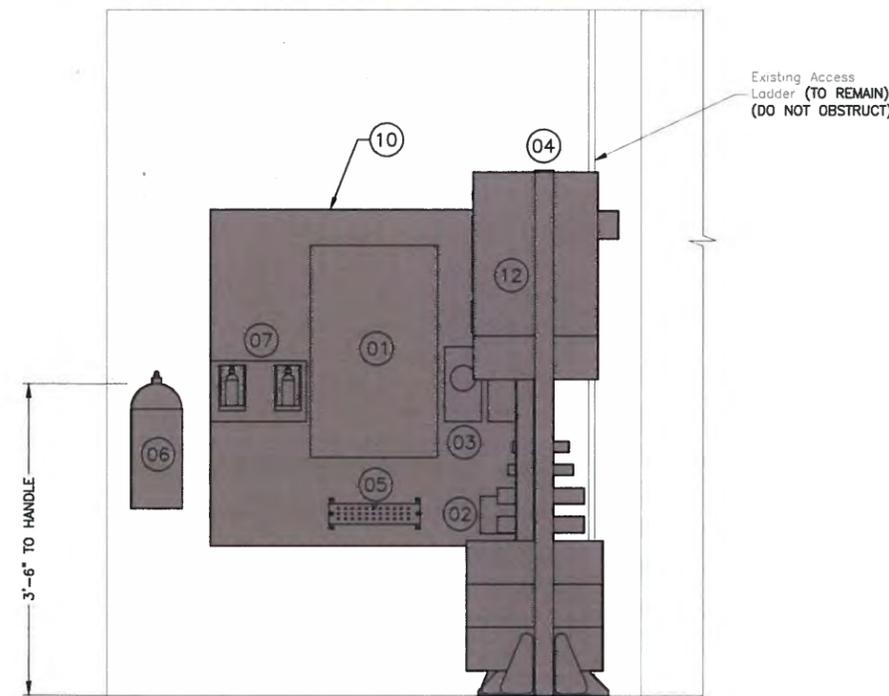
PROPOSED EQUIPMENT PLAN

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"



PROPOSED EQUIPMENT ISOMETRIC

SCALE: N.T.S.



PROPOSED EQUIPMENT ELEVATION

SCALE: N.T.S.

BILL OF MATERIALS	
01	POWER PANEL "AT&T" (60A, 120/208V, 3Ø) WITH 60A, 3P MCB IN LOCKABLE NEMA TYPE 1R ENCLOSURE
02	A/C DATA SURGE PROTECTOR IN NEMA TYPE 1R ENCLOSURE
03	CHECK METER (SEE ELECTRICAL NOTES 1 & 2, SHEET E-1 FOR SPECIFICATIONS)
04	PROPOSED 23" AT&T EQUIPMENT RACK
05	MASTER GROUND BAR, 4"x20"x1/4" TINNED
06	FIRE EXTINGUISHER. PROVIDE SIGNAGE & MOUNT PER CODE
07	EYE WASH STATION
08	FIBER PANEL-TE 24 SC/APC RIBBON - NEQ.15566
09	CORNING 40W GX QUAD BAND REMOTE (SEE SHEET C-5)
10	4'x8' FIRE RATED BACKBOARD
11	QUAD RECEPTACLE, 20A - TWO (2) HUBBELL P/N 5382W WITH P82W PLATE
12	EMERSON 721 DC PLANT WITH BATTERY UNITS

NOTES:

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- UTILIZE EXISTING CORES WHERE AVAILABLE & APPROVED BY AT&T CM & BOSTON COLLEGE REPRESENTATIVE. ALL PROPOSED CORES SHALL MAINTAIN EXISTING FIRE RATINGS. LOCATION OF REINFORCEMENT OR STRUCTURAL MEMBERS SHALL BE DETERMINED PRIOR TO INSTALLATION OF ANY NEW CORES. ALL EXTERIOR WALL PENETRATIONS SHALL BE WEATHERED SEALED.
- DO NOT OBSTRUCT OVERHEAD FEATURES OR ACCESS. ADJUST SIZE OR LOCATION AS NECESSARY WITH APPROVAL FROM AT&T CM & BOSTON COLLEGE REPRESENTATIVE.

EQUIPMENT NOTES:

- FINAL AT&T EQUIPMENT LAYOUT DESIGN TO BE CONFIRMED WITH AT&T C.M. & BOSTON COLLEGE.
- PROVIDE STRUT & PAINTED FIRE RESISTANT PLYWOOD MOUNTING BACKBOARDS AS REQUIRED.
- PROVIDE JUNCTION BOX & PULL BOXES AS REQUIRED BY THE NEC & SITE CONDITIONS.

NOTE:

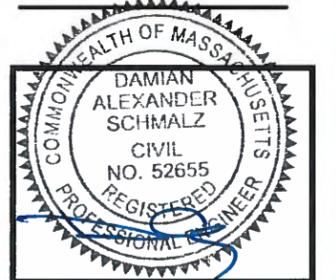
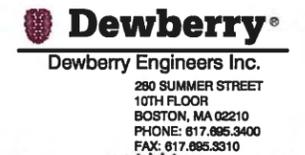
☛ :-REFER TO THIS SHEET FOR BILL OF MATERIALS.
FOR RISER DIAGRAM SEE SHEET E-1.



**BOSTON COLLEGE
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CARNEY HALL**

CONSTRUCTION DRAWINGS

NO.	DATE	DESCRIPTION
2	11/20/17	FOR CONSTRUCTION
1	08/25/17	FOR CONSTRUCTION
0	07/07/17	FOR CONSTRUCTION
A	01/16/17	FOR COMMENT



DRAWN BY:	SK
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE
**PROPOSED EQUIPMENT
AREA PLAN & ISOMETRIC**
SHEET NUMBER

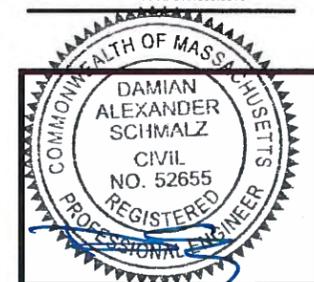
C-7

**BOSTON COLLEGE
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CONSTRUCTION DRAWINGS

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Dewberry®
Dewberry Engineers Inc.
280 SUMMER STREET
10TH FLOOR
BOSTON, MA 02210
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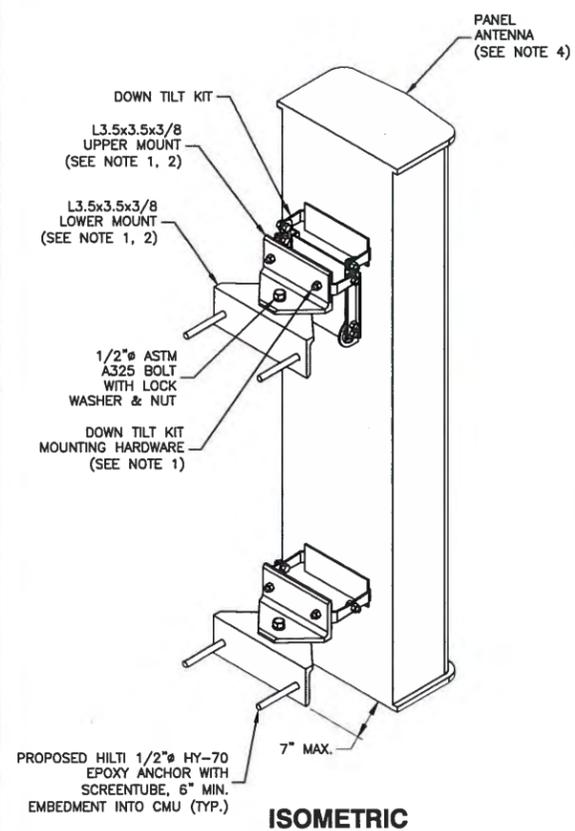
DRAWN BY:	SK
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PROJECT NUMBER:	50057113
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CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

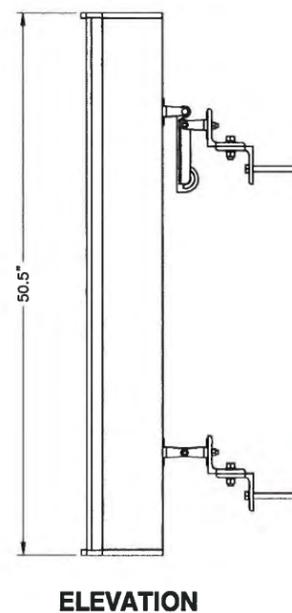
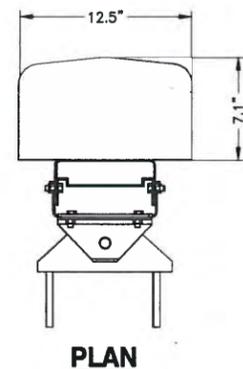
SHEET TITLE

CONSTRUCTION DETAILS-I

SHEET NUMBER

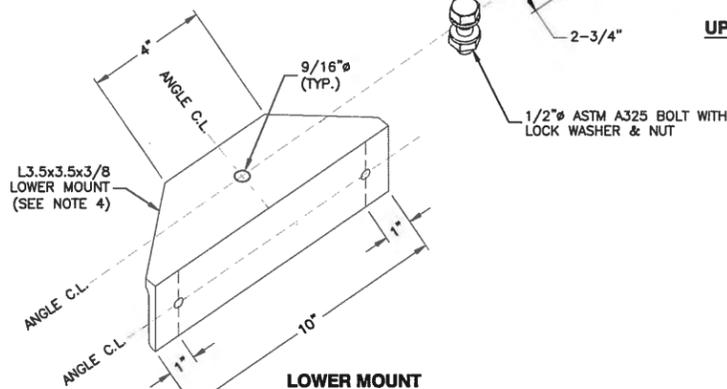
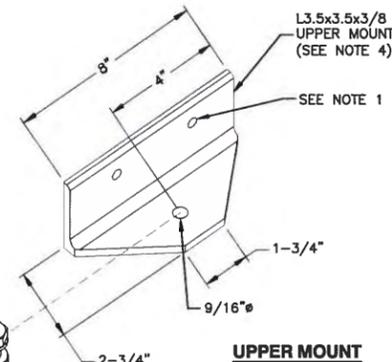


ANTENNA SPECIFICATIONS	
MANUFACTURER:	JMA
MODEL NUMBER:	XEW-485YP
DIMENSIONS (LxWxD):	50.5"x12.5"x7.1"
WEIGHT:	27.0 LBS



NOTES:

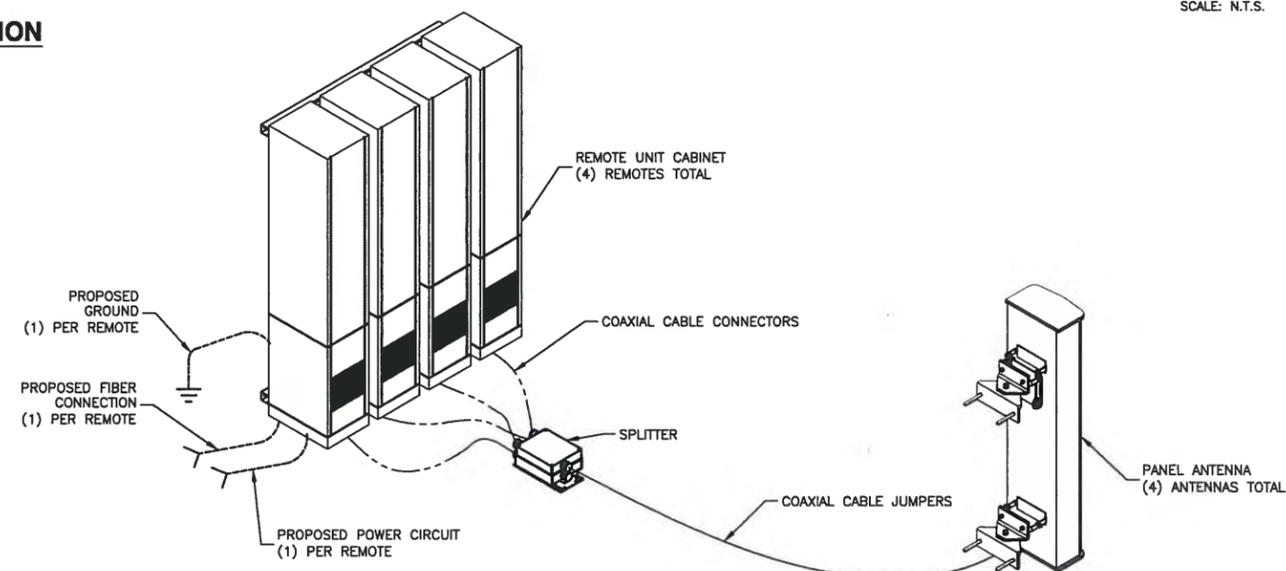
1. VERIFY DOWNTILT MOUNTING KIT BOLT LAYOUT PRIOR TO FABRICATION OF UPPER MOUNT BRACKET.
2. ROTATE UPPER CONNECTION TO REQUIRED AZIMUTH. SHOP VERIFY ANTENNA CAN ACHIEVE REQUIRED AZIMUTH FROM WALL FACE.
3. WEATHER SEAL AROUND EXTERIOR WALL ATTACHMENT ANGLES WITH SILICONE SEALANT.
4. PAINT ALL ANTENNAS, MOUNTS & ASSOCIATED EQUIPMENT TO MATCH BUILDING FACADE.
5. ALL FEEDERS ARE TO BE NEATLY BUNDLED & PAINTED TO MATCH THE BUILDING FACADE.
6. ALL STEEL TO BE GALVANIZED.



LOW PROFILE FACADE MOUNTED ANTENNA DETAIL
SCALE: N.T.S.

REMOTE UNIT SPECIFICATION	
MANUFACTURER:	CORNING
MODEL:	40 W GX QUAD BAN REMOTE
DIMENSIONS (HxWxD):	53"x8.9"x12.4"

REMOTE UNIT DETAIL
SCALE: N.T.S.

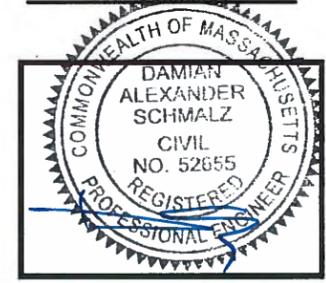


SECTOR ONE LINE DIAGRAM
SCALE: N.T.S.

**BOSTON COLLEGE
o.D.A.S.
CARNEY HALL**

CONSTRUCTION DRAWINGS			
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BOSTON, MA 02210
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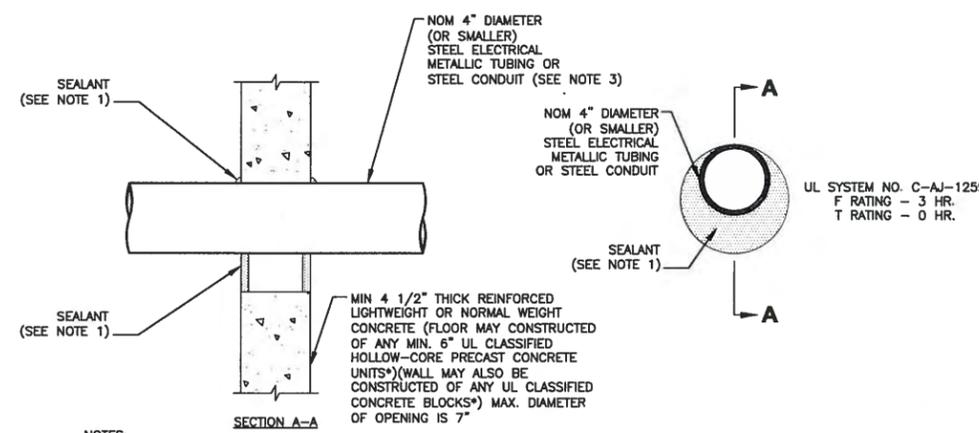
DRAWN BY:	SK
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

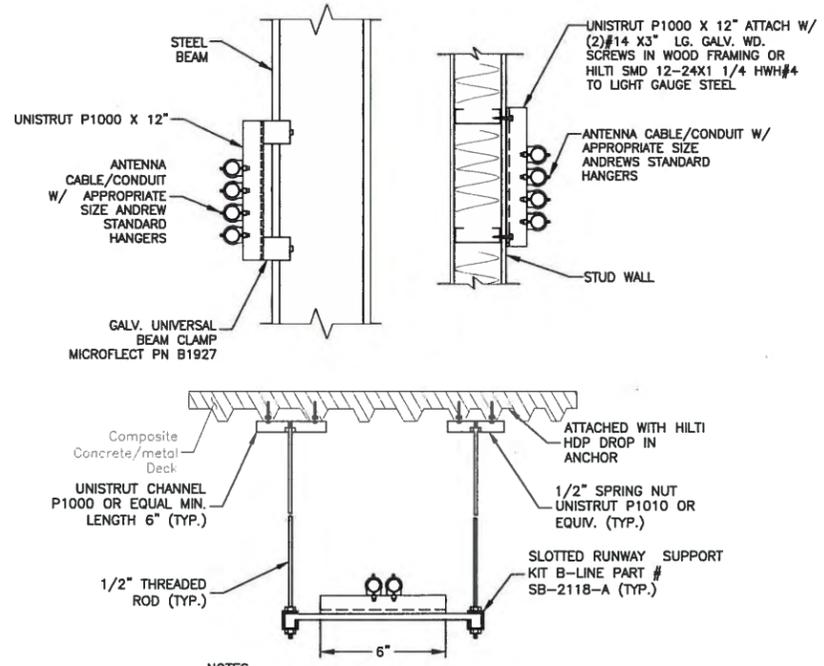
CONSTRUCTION DETAILS-II

SHEET NUMBER



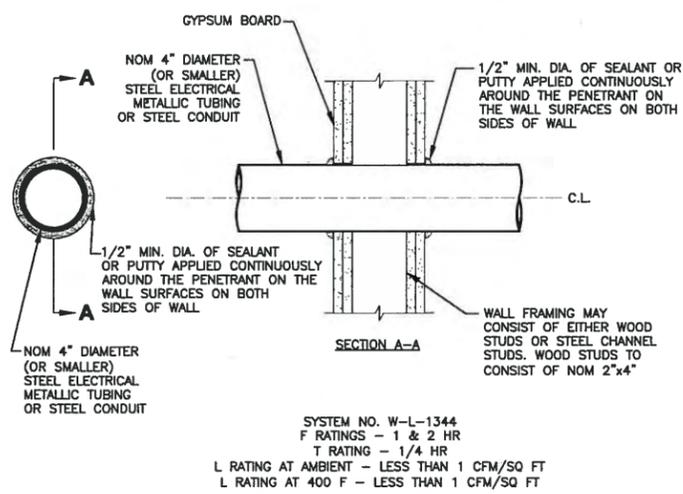
- NOTES:**
- FILL VOID OR CAVITY MATERIAL* - SEALANT - MIN. 1/2" THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTH SURFACES OF FLOOR OR WALL AT THE POINT CONTACT LOCATION BETWEEN PENETRATING ITEM & CONCRETE. A MIN. 1/4" THICK BEAD OF FILL MATERIAL SHALL BE APPLIED AT THE CONCRETE/ PENETRATING ITEM INTERFACE ON BOTH SIDES OF FLOOR OR WALL.
 - FORMING MATERIAL - (OPTIONAL, NOT SHOWN) - MINERAL WOOL BATT PACKING MATERIAL OR POLYURETHANE BACKER ROD FRITION FITTED INTO OPENING & RECESSED FROM FLOOR OR WALL SURFACES AS REQUIRED TO ACCOMMODATE THICKNESS OF FILL MATERIAL.
 - ONE CONDUIT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE CONDUIT & THE PERIPHERY OF THE OPENING SHALL BE A MIN. OF 0" (POINT OF CONTACT) TO A MAX. OF 3". CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
- * BEARING THE UL CLASSIFICATION MARK.

CORING DETAIL
SCALE: N.T.S.



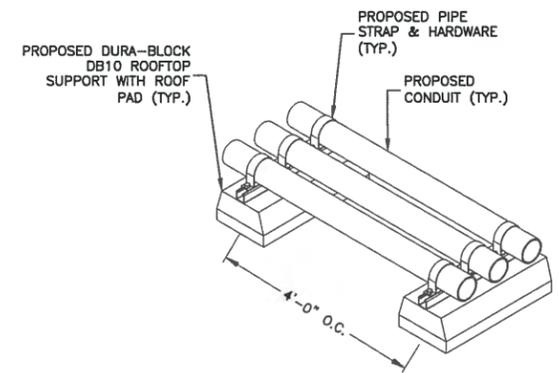
- NOTES:**
- ALL COAX SUPPORT SPACING: 4'-0" MAX.
 - ALL CONDUIT SUPPORT SPACING: 10'-0" MAX.
 - CONFIRM CONDUIT ROUTING WITH BUILDING OWNER & CONSTRUCTION MANAGER PRIOR TO INSTALLATION.

CABLE/CONDUIT SUPPORT
SCALE: N.T.S.

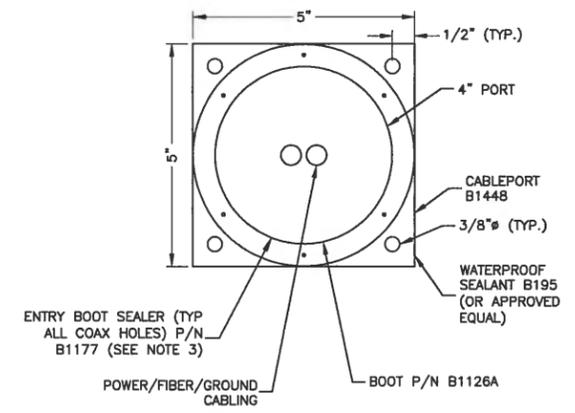


- NOTES:**
- THE 1 & 2 HOUR FIRE RATED GYPSUM WALL BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS & MANNER SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES WALL & PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY.
 - 5" DIAMETER OPENING MAX.

**SECTION - THROUGH PENETRATION
FIRESTOP SYSTEM**
SCALE: N.T.S.

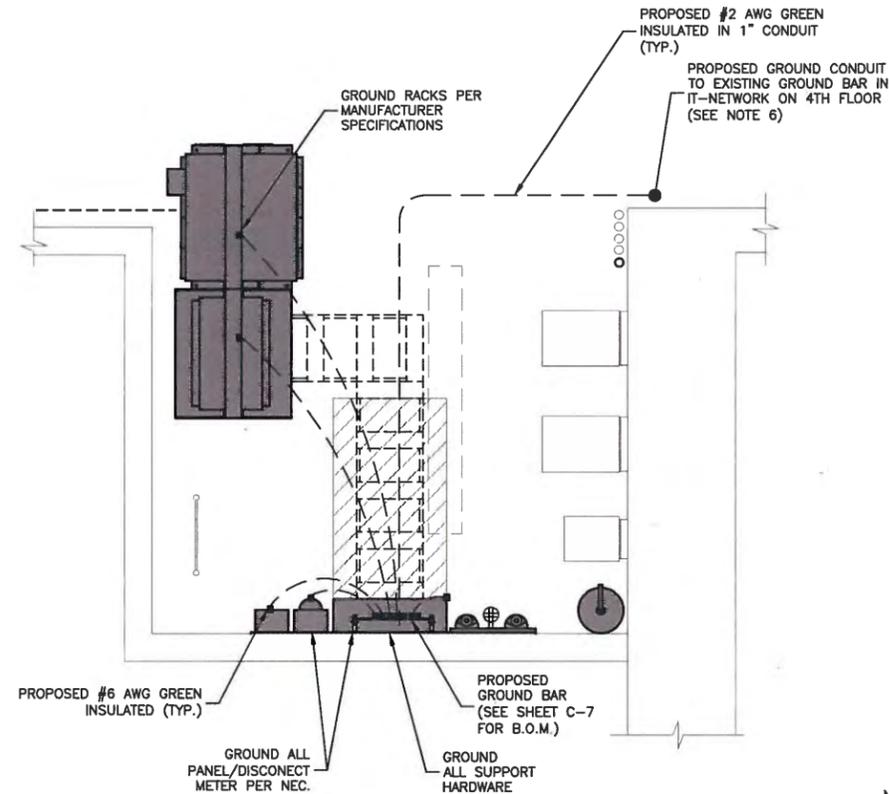


CONDUIT SLEEPER DETAIL
SCALE: N.T.S.



- NOTES:**
- CONTRACTOR TO THOROUGHLY DRY AREA BEFORE CORING, INSTALLING & SEALING CABLEPORT & BOOTS.
 - ALL PART NUMBERS ARE MICROFLECT
 - CONTRACTOR TO FILL THE BOOT CAVITY W/ BOOT SEALER TO FORM A CONICAL SHAPE TO ALLOW WATER RUN OFF. 2 TUBES OF B1177 ARE REQUIRED FOR EACH BOOT.
 - WATERPROOF ALL EDGES & HOLES.

B1177 SINGLE COAX PORT
SCALE: N.T.S.



GROUNDING PLAN

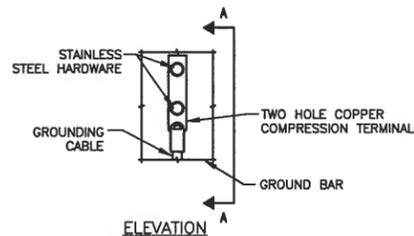
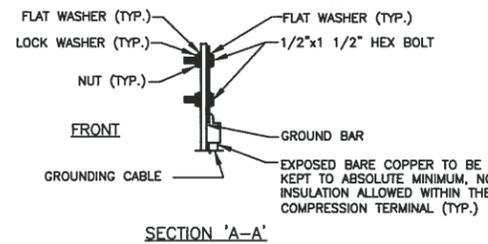
SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"



1

NOTES:

- BOND ANTENNA GROUNDING KIT CABLE TO GROUND BAR (GNP BAR).
- ALL CELL EQUIPMENT (BCE, BATTERY FRAME, POWER CABINETS, MISC. EQUIPMENT FRAMES, ETC.) SHALL BE GROUNDED IN ACCORDANCE WITH MANUFACTURER SPECIFICATIONS.
- ALL EXPOSED METAL OBJECTS IN EQUIPMENT AREA SHALL BE BONDED & JUMPED TO MGB.
- GROUND ANTENNA SUPPORT PIPES WITH #2 AWG TINNED BCC DEDICATED LEAD BACK TO GROUND BAR.
- VERIFY EQUIPMENT GROUNDING REQUIREMENTS WITH SPECIFIC MANUFACTURERS.
- EXISTING GROUND RING SHALL BE TESTED TO ENSURE SUFFICIENT GROUNDING RESISTANCE CAN BE ACHIEVED. VERIFY RESULTS WITH AT&T CM & BOSTON COLLEGE.



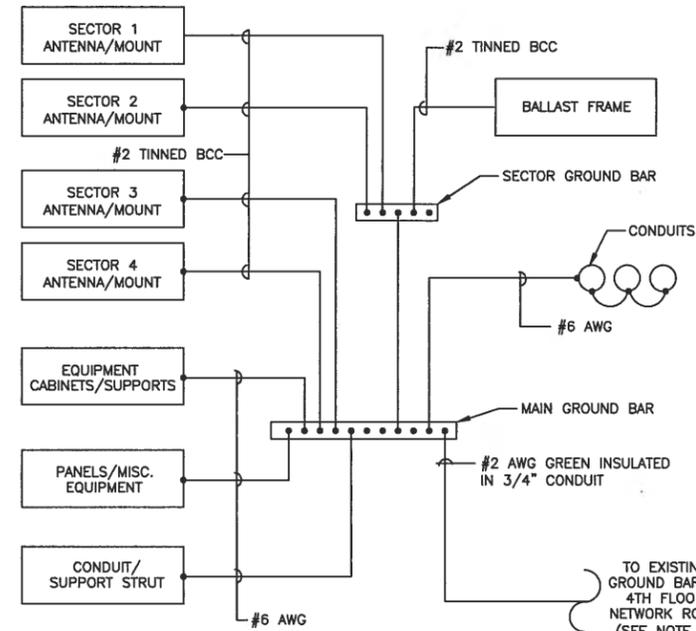
NOTES:

- DOUBLING UP OR STACKING OF CONNECTIONS IS NOT PERMITTED
- OXIDE INHIBITING COMPOUND TO BE USED AT ALL LOCATIONS.

TYPICAL GROUND BAR MECHANICAL CONNECTION DETAIL

SCALE: N.T.S.

3

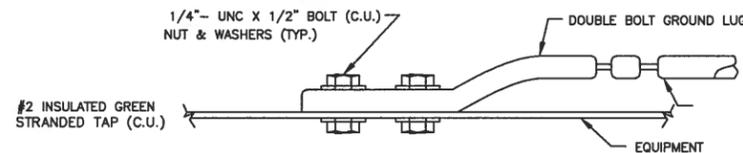


GROUNDING SCHEMATIC

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"



2



CONNECTION TO EQUIPMENT DETAIL

SCALE: N.T.S.

4



**BOSTON COLLEGE
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CARNEY HALL**

CONSTRUCTION DRAWINGS

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0	07/07/17	FOR CONSTRUCTION
A	01/16/17	FOR COMMENT



DRAWN BY:	SK
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

CONSTRUCTION DETAILS—III

SHEET NUMBER

C-10



550 COCHITUATE ROAD
SUITES 13 & 14
FRAMINGHAM, MA 01701

BOSTON COLLEGE
oD.A.S.
CARNEY HALL

CONSTRUCTION DRAWINGS

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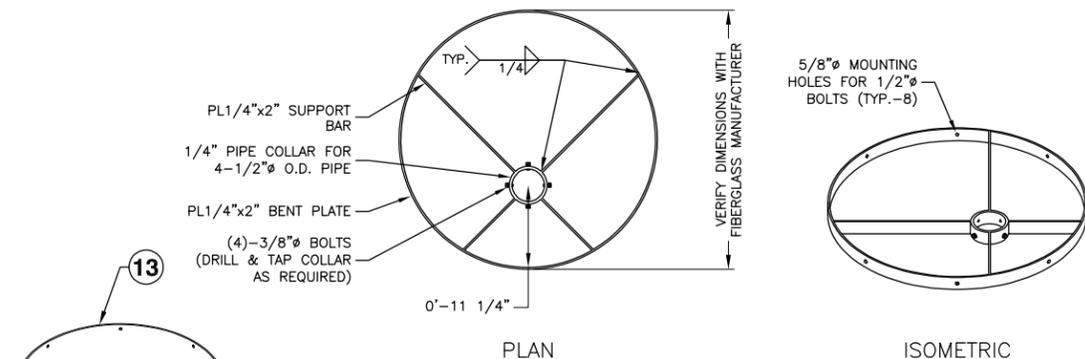
DRAWN BY:	SK
REVIEWED BY:	DAS
CHECKED BY:	BBR
PROJECT NUMBER:	50057113
JOB NUMBER:	50057154
SITE ADDRESS:	

CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE	FIBERGLASS CANISTER DETAILS
SHEET NUMBER	

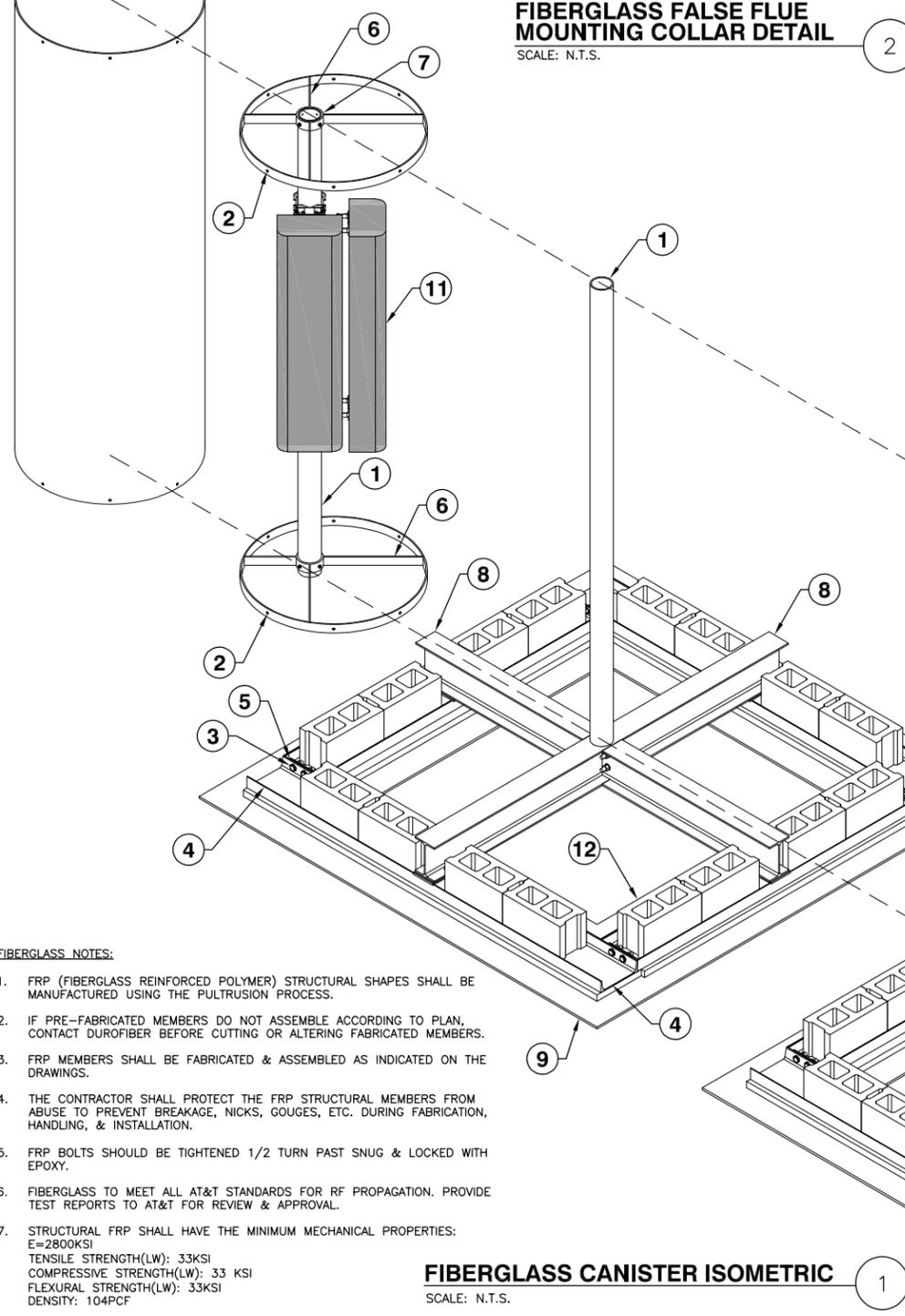
S-1

NUMBER	ITEM	QUANTITY	MANUFACTURER/ MODEL #	COMMENTS/NOTES
1	4" STD PIPE-GALV.	1	N/A	WELD TO ITEM 8.
2	SELF TAPPING SCREW OR BOLT	TBD	N/A	FIBERGLASS ATTACHMENT SPECIFICATION BY FIBERGLASS MANUFACTURER.
3	3/4" ASTM A325 BOLT	20	N/A	SEE DETAIL 3 FOR CONNECTION DETAILS.
4	GALVANIZED C10X15.3	4	N/A	DRILL WEEP HOLES AS NEEDED.
5	GALVANIZED L2.5X2.5X1/4X6"	4	N/A	WELD TO ITEM 4 & BOLT TO ADJACENT ITEM 4.
6	1/4"x2" TALL CANISTER BRACKET	2	N/A	FINAL OUTSIDE DIMENSIONS TO BE BASED ON CANISTER MATERIAL THICKNESS.
7	5"x2" TALL STD PIPE SLEEVE-GALV.	2	N/A	WELD TO ITEM 6, DRILL & TAP (4) 3/8" BOLTS TO MOUNT TO ITEM 1.
8	GALVANIZED W8X18	3	N/A	N/A
9	RUBBER ROOFING MAT	4	MICROFLECT P/N B1637	INSTALL PER MANUFACTURERS RECOMMENDATIONS.
10	ANTENNA MOUNTING BRACKET	2	N/A	INSTALL PER MANUFACTURERS RECOMMENDATIONS.
11	PANEL ANTENNA	2	JMA/XEW-465YP	INSTALL PER MANUFACTURERS RECOMMENDATIONS.
12	8" CMU BALLAST	N/A	N/A	NO BALLAST REQUIRED.
13	36" I.D. FIBERGLASS CANISTER	1	N/A	PAINT TO MATCH. COORDINATE COLOR WITH AT&T CM & BOSTON COLLEGE.



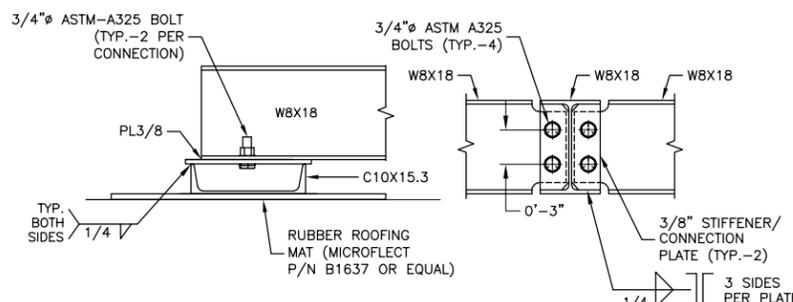
FIBERGLASS FALSE FLUE MOUNTING COLLAR DETAIL

SCALE: N.T.S.



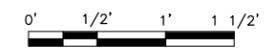
FIBERGLASS NOTES:

- FRP (FIBERGLASS REINFORCED POLYMER) STRUCTURAL SHAPES SHALL BE MANUFACTURED USING THE PULTRUSION PROCESS.
- IF PRE-FABRICATED MEMBERS DO NOT ASSEMBLE ACCORDING TO PLAN, CONTACT DUROFIBER BEFORE CUTTING OR ALTERING FABRICATED MEMBERS.
- FRP MEMBERS SHALL BE FABRICATED & ASSEMBLED AS INDICATED ON THE DRAWINGS.
- THE CONTRACTOR SHALL PROTECT THE FRP STRUCTURAL MEMBERS FROM ABUSE TO PREVENT BREAKAGE, NICKS, GOUGES, ETC. DURING FABRICATION, HANDLING, & INSTALLATION.
- FRP BOLTS SHOULD BE TIGHTENED 1/2 TURN PAST SNUG & LOCKED WITH EPOXY.
- FIBERGLASS TO MEET ALL AT&T STANDARDS FOR RF PROPAGATION. PROVIDE TEST REPORTS TO AT&T FOR REVIEW & APPROVAL.
- STRUCTURAL FRP SHALL HAVE THE MINIMUM MECHANICAL PROPERTIES:
E=2800KSI
TENSILE STRENGTH(LW): 33KSI
COMPRESSIVE STRENGTH(LW): 33 KSI
FLEXURAL STRENGTH(LW): 33KSI
DENSITY: 104PCF



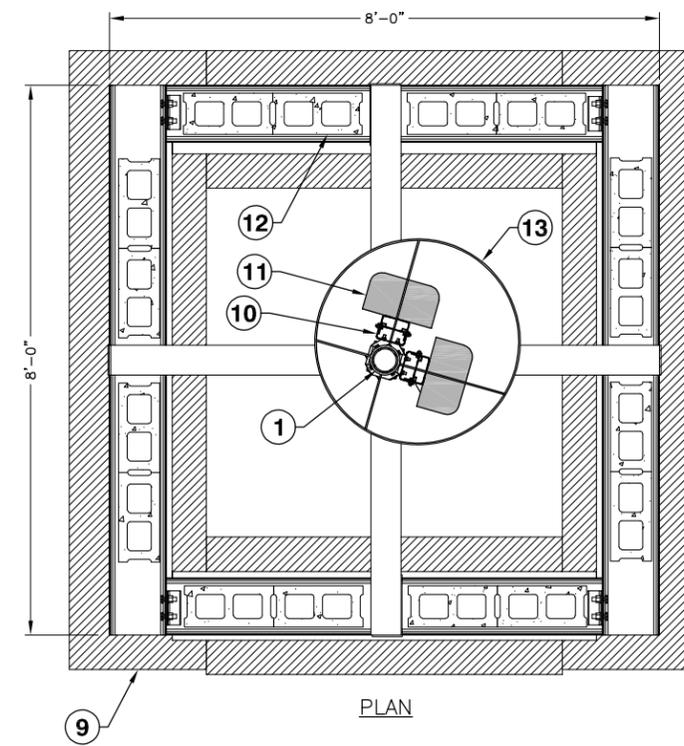
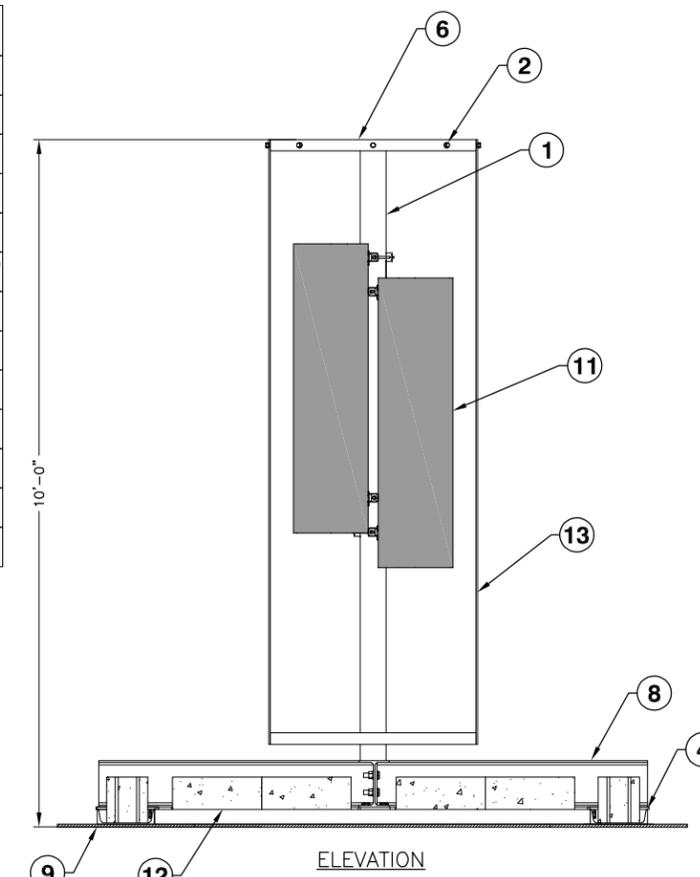
DETAILS

SCALE: 3/4"=1' FOR 11"x17"
1 1/2"=1' FOR 22"x34"



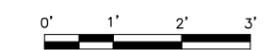
NOTES:

- CONTRACTOR TO VERIFY ALL ANTENNA & DOWNTILT BRACKET DIMENSIONS PRIOR TO FABRICATION & COMMENCEMENT OF WORK.
- ALL STEEL TO BE GALVANIZED.
- NO ADDITIONAL BALLAST REQUIRED.



FIBERGLASS CANISTER DETAILS

SCALE: 3/8"=1' FOR 11"x17"
3/4"=1' FOR 22"x34"



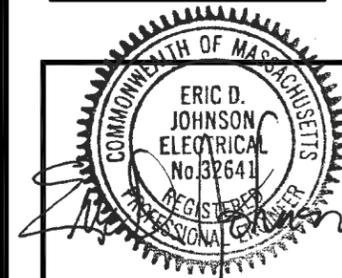
BOSTON COLLEGE
oD.A.S.
CARNEY HALL

CONSTRUCTION DRAWINGS

NO.	DATE	DESCRIPTION
2	11/20/17	FOR CONSTRUCTION
1	08/25/17	FOR CONSTRUCTION
0	07/07/17	FOR CONSTRUCTION
A	01/16/17	FOR COMMENT



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



DRAWN BY: SK

REVIEWED BY: DAS

CHECKED BY: BBR

PROJECT NUMBER: 50057113

JOB NUMBER: 50057154

SITE ADDRESS

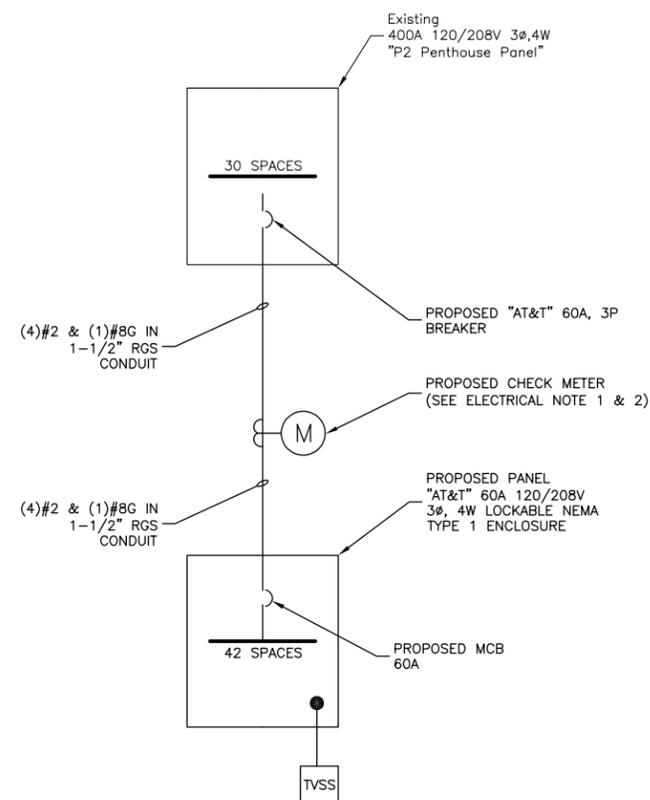
CHESTNUT HILL CAMPUS
140 COMMONWEALTH AVENUE
NEWTON, MA 02467

SHEET TITLE

ONE-LINE DIAGRAM &
PANEL SCHEDULE

SHEET NUMBER

E-1



ELECTRIC ONE LINE DIAGRAM
SCALE: N.T.S.

1

ELECTRICAL NOTES:

- COORDINATE THE METER LOCATION & CONDUIT ROUTING WITH BOSTON COLLEGE PRIOR TO CONSTRUCTION.
- VERIFY METER TYPE & SPECIFICATIONS WITH BOSTON COLLEGE PRIOR TO ORDERING & INSTALLATION.
- SEE SHEET C-5 FOR EQUIPMENT LOCATIONS & APPROXIMATE CONDUIT ROUTING PATH.
- COORDINATE ANY REQUIRED POWER SHUT DOWNS WITH BOSTON COLLEGE & BUILDING PERSONNEL.
- CONTRACTOR IS TO PROVIDE DEWBERRY & BOSTON COLLEGE EQUIPMENT SPECS & SHOP DRAWING FOR APPROVAL PRIOR TO ORDERING MATERIALS.
- CONDUIT ROUTING SHOWN IS SCHEMATIC. FIELD VERIFY CONDUIT PATH & HEIGHT WITH BOSTON COLLEGE FACILITIES. DO NOT BLOCK EXISTING EQUIPMENT OR IMPEDE MAINTENANCE SPACE.
- PROVIDE PULL BOXES & EXPANSION JOINTS PER NEC REQUIREMENTS & FIELD CONDITIONS.
- ALL CORING LOCATIONS SHALL BE X-RAYED TO VERIFY NO STRUCTURAL MEMBERS ARE CUT. ALL CORES SHALL BE FIRE SEALED. TAKE ALL NECESSARY PRECAUTIONS TO PROTECT EXISTING EQUIPMENT DURING CORING/CONSTRUCTION. PROVIDE A PROTECTION PLAN TO BOSTON COLLEGE FOR REVIEW & APPROVAL PRIOR TO COMMENCEMENT OF CORING.

NEMA 1		PANEL SCHEDULE - AT&T		22,000 A.I.C.	
W/60A MAIN C/B					
CKT #	DESCRIPTION	AMP	AMP	DESCRIPTION	CKT #
1	RECTIFIER	30	30	RECTIFIER	2
3					4
5	RECTIFIER	30	30	RECTIFIER	6
7					8
9	RECTIFIER	30	30	RECTIFIER	10
11					12
13	OUTLET	20	-	SPACE	14
15	SPACE	-	-	SPACE	16
17	SPACE	-	-	SPACE	18
19	SPACE	-	-	SPACE	20
21	SPACE	-	-	SPACE	22
23	SPACE	-	-	SPACE	24
25	SPACE	-	-	SPACE	26
27	SPACE	-	-	SPACE	28
29	SPACE	-	-	SPACE	30
31	SPACE	-	-	SPACE	32
33	SPACE	-	-	SPACE	34
35	SPACE	-	-	SPACE	36
37	SPACE	-	-	SPACE	38
39	TVSS	60	-	SPACE	40
41					42

PANEL SCHEDULE
SCALE: N.T.S.

2

City of Newton, Massachusetts

General Permit Application & Administrative Site Plan Review Application

Boston College – AT&T oDAS

Viewshed Analysis

**Prepared For:
AT&T Mobility
Site Name:
Boston College oD.A.S. Law Library
885 Centre Street
Newton, MA 02459**



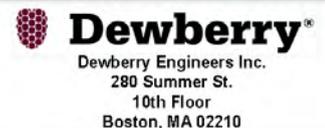
Photos taken on: 08/09/17
Simulation Based On Rev-1 Construction Drawings Dated: 08/16/17

For visual reference only. Actual visibility
is dependent upon weather conditions,
season, sunlight, and viewer location.



550 Cochituate Road
Suites 13 & 14
Framingham, MA 01701

**BOSTON COLLEGE oD.A.S.
LAW LIBRARY**
DEWBERRY NO. 50057154
(Page 1 of 9)



Dewberry Engineers Inc.
280 Summer St.
10th Floor
Boston, MA 02210



Photo 2

Photo 3

Site Location

Photo 1

Photo 4

Centre St

Cotton St



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LAW LIBRARY**
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Newton, MA 02459
(Page 2 of 9)



Actual View




**BOSTON COLLEGE O.D.A.S.
LAW LIBRARY**
Photo 1A
View Facing Northeast
(Page 3 of 9)

LAW LIBRARY
COLLEGE LAW SCHOOL



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



**BOSTON COLLEGE oD.A.S.
LAW LIBRARY**
Photo 1B
View Facing Northeast
(Page 4 of 9)



Actual View




BOSTON COLLEGE oD.A.S.
LAW LIBRARY
Photo 2A
View Facing Southeast
(Page 5 of 9)



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)




BOSTON COLLEGE O.D.A.S.
LAW LIBRARY
Photo 2B
View Facing Southeast
(Page 6 of 9)



Actual View




**BOSTON COLLEGE O.D.A.S.
LAW LIBRARY**
Photo 3A
View Facing Southwest
(Page 7 of 9)



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



at&t
Mobility

BOSTON COLLEGE oD.A.S.
LAW LIBRARY

Photo 3B
View Facing Southwest
(Page 8 of 9)

Actual View

Proposed Antennas Are Not Visible From This Location



BOSTON COLLEGE oD.A.S.
LAW LIBRARY

Photo 4

View Facing Northwest
(Page 9 of 9)



**Prepared For:
AT&T Mobility
Site Name:
Boston College oD.A.S. Kenny Cottle Library
885 Centre Street
Newton, MA 02459**



Photos taken on: 08/09/17
Simulation Based On Rev-2 Construction Drawings Dated: 08/16/17

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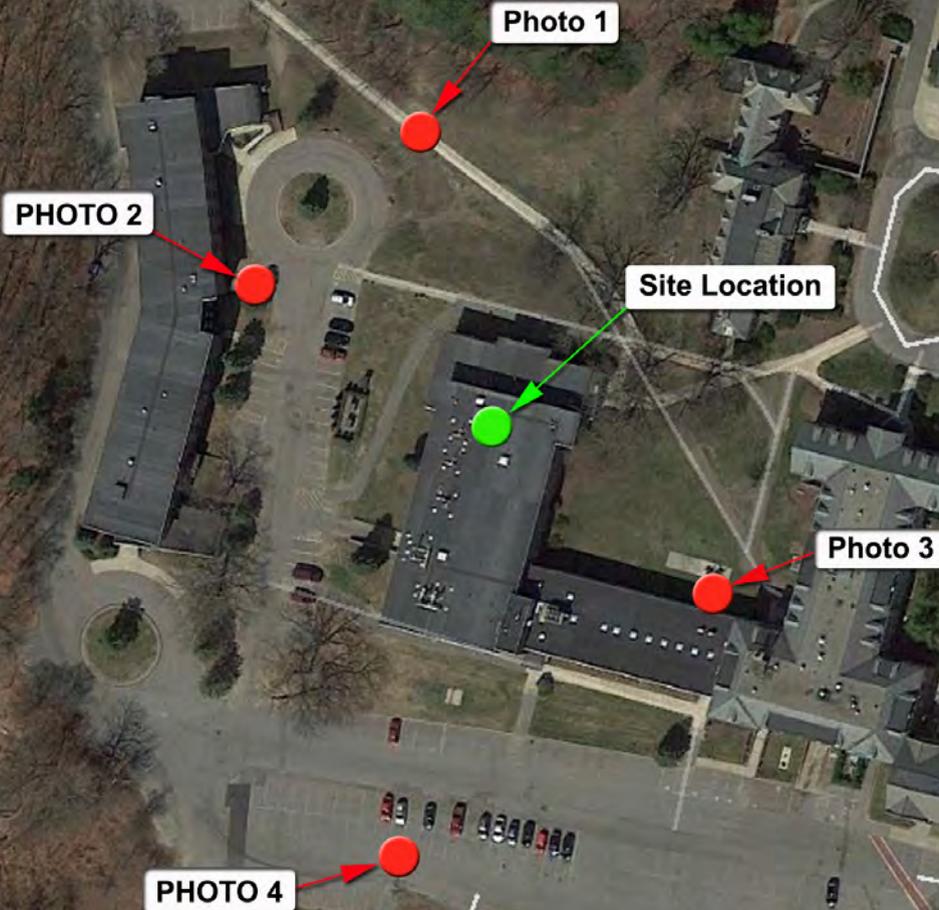
550 Cochituate Road
Suites 13 & 14
Framingham, MA 01701

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KENNY COTTLE LIBRARY**

DEWBERRY NO. 50057154
(Page 1 of 9)



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280 Summer St.
10th Floor
Boston, MA 02210




BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY
885 Centre Street
Newton, MA 02459
(Page 2 of 9)

Mill St



Actual View




BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY
Photo 1A
View Facing Southeast
(Page 3 of 9)



Proposed View

Proposed Facade Mounted Antenna
(Typ.-1) (Paint To Match)

Proposed Antenna Within Fiberglass Canister
On Proposed Ballast Frame (Typ.-2)



**BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY**
Photo 1B
View Facing Southeast
(Page 4 of 9)



Actual View




BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY
Photo 2A
View Facing Southeast
(Page 5 of 9)



Proposed View

Proposed Facade Mounted Antenna
(Typ.-1) (Paint To Match)

Proposed Antenna Within Fiberglass Canister
On Proposed Ballast Frame (Typ.-2)



**BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY**
Photo 2B
View Facing Southeast
(Page 6 of 9)



Actual View




BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY
Photo 3A
View Facing Northwest
(Page 7 of 9)

 **Dewberry**

Proposed View

Proposed Antenna Within Fiberglass Canister
On Proposed Ballast Frame (Typ.-2)



BOSTON COLLEGE oD.A.S.
KENNY COTTLE LIBRARY

Photo 3B

View Facing Northwest
(Page 8 of 9)



Proposed View

Proposed Equipment Is Not Visible
From This Location




BOSTON COLLEGE o.D.A.S.
KENNY COTTLE LIBRARY
Photo 4
View Facing North
(Page 9 of 9)

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**Prepared For:
AT&T Mobility
Site Name:
Boston College oD.A.S. Rubenstein Hall
90-100 Commonwealth Avenue
Newton, MA 02467**

Photos taken on: 08/09/17

Simulation Based On Rev-3 Construction Drawings Dated: 08/25/17

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season, sunlight, and viewer location.



**BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL**
DEWBERRY NO. 50057154
(Page 1 of 9)

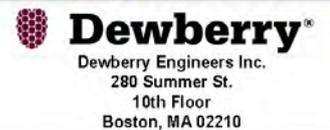




Photo 1

Site Location

Photo 2

Photo 4

Photo 3

Campanella Way



**BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL**
90-100 Commonwealth Avenue
Newton, MA 02467
(Page 2 of 9)



Actual View




BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL
Photo 1A
View Facing Southwest
(Page 3 of 9)



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



**BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL**
Photo 1B
View Facing Southwest
(Page 4 of 9)



Actual View

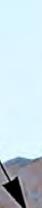



BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL
Photo 2A
View Facing East
(Page 5 of 9)



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL

Photo 2B

View Facing East
(Page 6 of 9)



Actual View




BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL
Photo 3A
View Facing Northeast
(Page 7 of 9)



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



**BOSTON COLLEGE oD.A.S.
RUBENSTEIN HALL**
Photo 3B
View Facing Northeast
(Page 8 of 9)



Actual View

Proposed Antennas Are Not Visible From This Location



BOSTON COLLEGE o.D.A.S.
RUBENSTEIN HALL

Photo 4

View Facing West
(Page 9 of 9)



**Prepared For:
AT&T Mobility
Site Name:
Boston College oD.A.S. Carney Hall
140 Commonwealth Avenue
Newton, MA 02467**



Photos taken on: 08/09/17

Simulation Based On Rev-1 Construction Drawings Dated: 08/25/17

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season, sunlight, and viewer location.



**BOSTON COLLEGE oD.A.S.
CARNEY HALL**
DEWBERRY NO. 50057154
(Page 1 of 10)



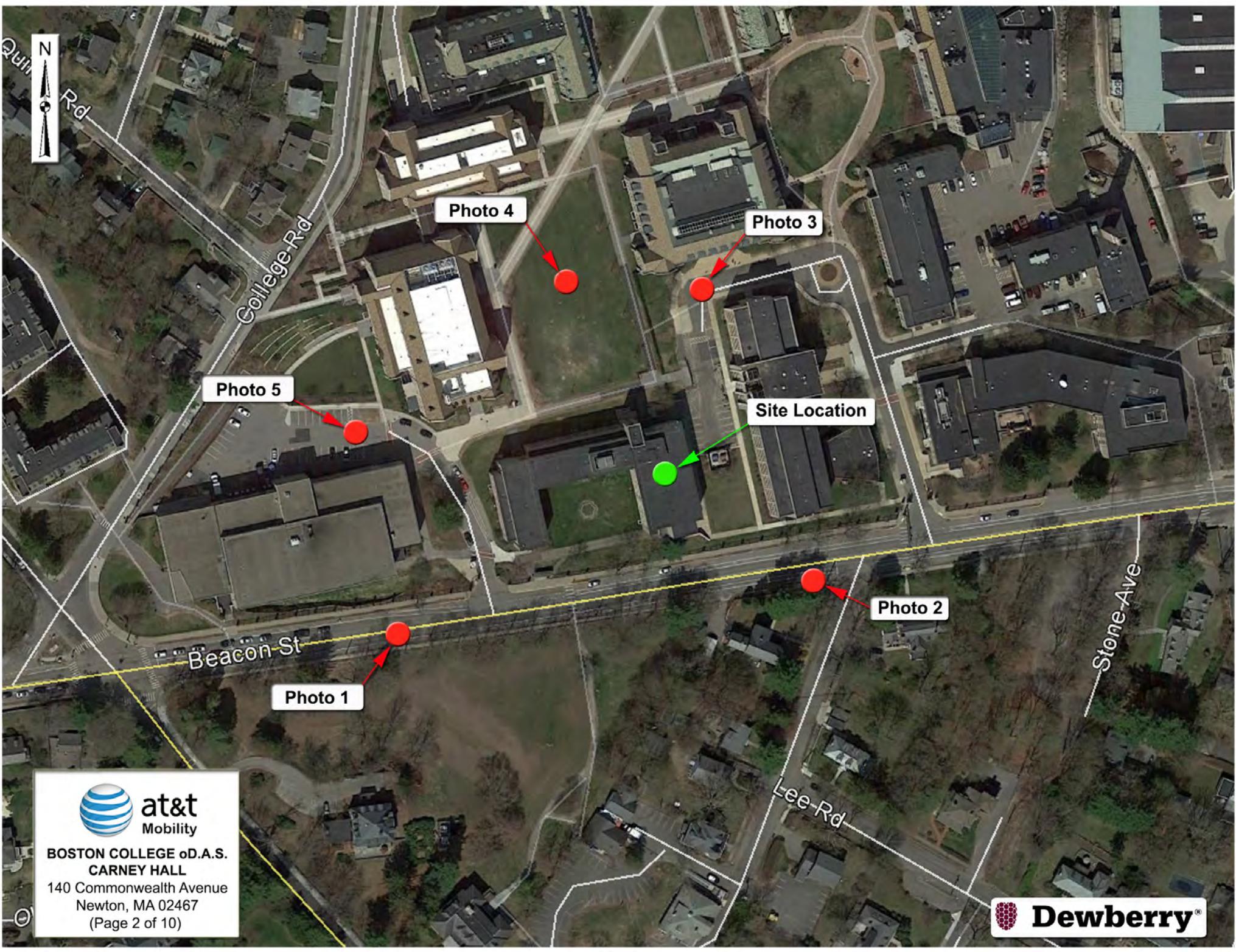


Photo 5

Photo 4

Photo 3

Site Location

Photo 2

Photo 1

Beacon St

College Rd

Lee Rd

Stone Ave



at&t
Mobility

BOSTON COLLEGE oD.A.S.
CARNEY HALL
140 Commonwealth Avenue
Newton, MA 02467
(Page 2 of 10)



Dewberry[®]

Actual View




BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 1A
View Facing Northeast
(Page 3 of 10)



Proposed View

Proposed Antenna (Typ.-2) Within
Fiberglass Canister On Proposed
Ballast Frame (Typ.-1)




BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 1B
View Facing Northeast
(Page 4 of 10)



Actual View

Proposed Equipment Is Not Visible From This Location



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Mobility

BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 2
View Facing Northwest
(Page 5 of 10)

Actual View




BOSTON COLLEGE O.D.A.S.
CARNEY HALL
Photo 3A
View Facing Southwest
(Page 6 of 10)

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Proposed View

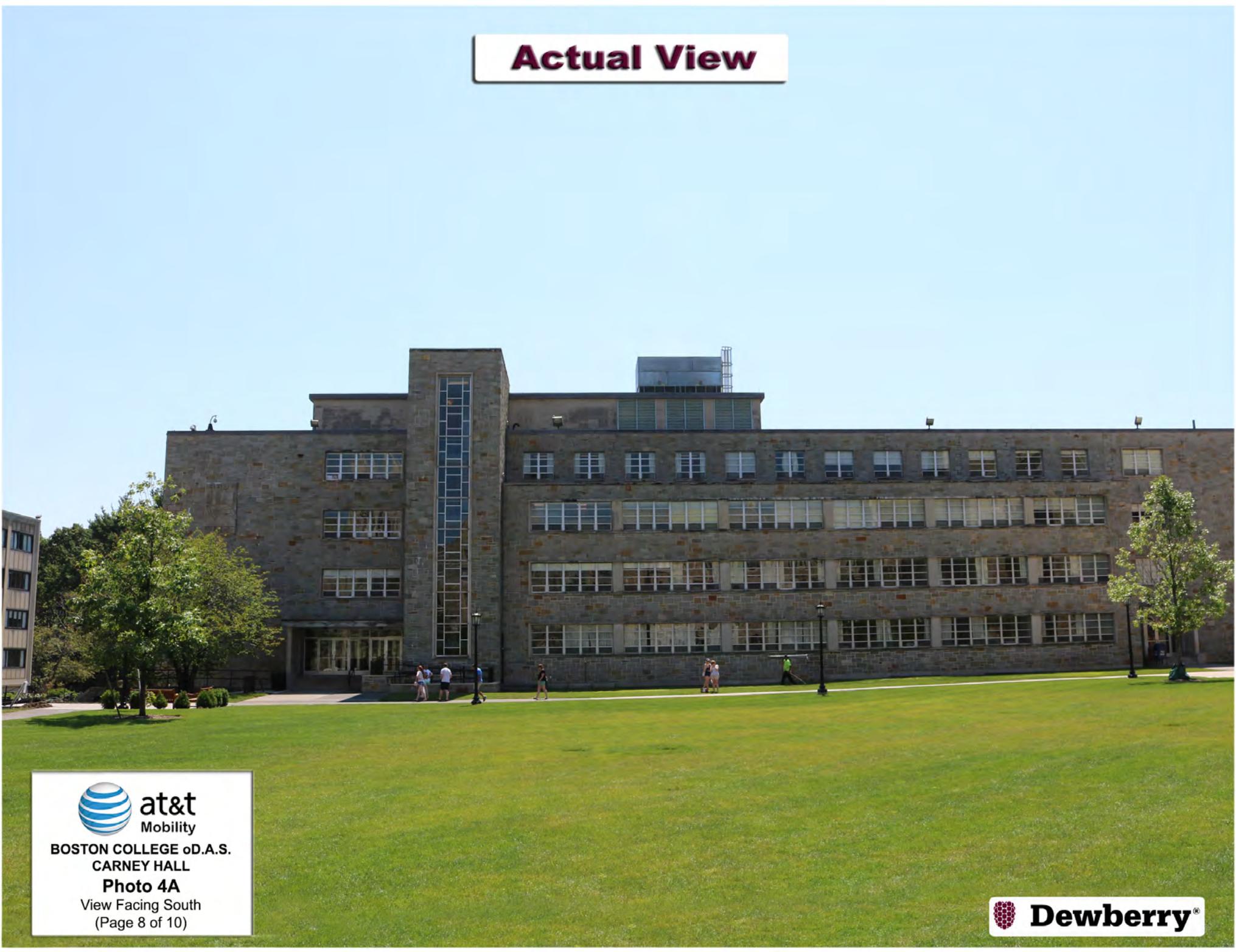
Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 3B
View Facing Southwest
(Page 7 of 10)



Actual View




BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 4A
View Facing South
(Page 8 of 10)



Proposed View

Proposed Facade Mounted
Antenna (Typ.) (Paint To Match)



BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 4B
View Facing South
(Page 9 of 10)



Actual View

Proposed Equipment Is Not Visible From This Location



at&t
Mobility

BOSTON COLLEGE oD.A.S.
CARNEY HALL
Photo 5
View Facing East
(Page 10 of 10)

