

**WESTWOOD PLANNING BOARD APPLICATION FOR HEARING**

PB File # \_\_\_\_\_

Westwood, MA \_\_\_\_\_ 20\_\_\_\_

- 1. Requested Approval(s):
  
- 2. Brief Narrative of Proposal:
  
  
  
  
  
- 3. Address/Location of Property Subject to Hearing:
  
- 4. Assessor's Map and Parcel Number(s):
  
- 5. Size of Parcel:
  
- 6. Name of Applicant:
  
  
  
  
  
- 7. Applicant's Mailing Address:
  
  
  
  
  
- 8. Applicant's Telephone: (C) \_\_\_\_\_ (W) \_\_\_\_\_
  
- 9. Applicant's E-Mail Address: \_\_\_\_\_
  
  
- 10. Applicant is: Owner      Tenant      Licensee      Prospective Purchaser      Other
  
- 11. Name of Property Owner(s): \_\_\_\_\_
  
  
  
  
  
- 12. Property Owner's Mailing Address: \_\_\_\_\_
  
  
  
  
  
- 13. Deed Recorded in:
  - a. County Registry of Deeds, Book \_\_\_\_\_ Page \_\_\_\_\_
  - b. Registry District of the Land Court, Certificate Number \_\_\_\_\_  
Page \_\_\_\_\_ Book \_\_\_\_\_

14. Has any Application ever been filed with the Planning Board regarding this Property?

Yes, When?

No

15. Has the Lot been surveyed by a Registered Land Surveyor?

Yes, When?

No

The Applicant hereby requests a public hearing before the Westwood Planning Board and consents to pay for the cost of all legal advertisements required by the Zoning Bylaw and/or Planning Board Rules and Regulations, which will be billed directly to the Applicant by the newspaper at a later date. The Applicant also consents to pay for all costs required pursuant to applicable sections of the Westwood Zoning Bylaw and/or Planning Board Rules and Regulations, unless expressly waived by the Planning Board, including all project review fees, inspection fees, and costs associated transcription, in addition to all other fees, expenses and costs in connection with the Planning Board's review and evaluation of this Application.

Signed:

\_\_\_\_\_

Applicant (or Agent) Signature

\_\_\_\_\_

Printed Name of Applicant

Signed:

\_\_\_\_\_

Property Owner(s) of Record Signature(s)

\_\_\_\_\_

Printed Name(s) of Property Owner(s) of Record

Date:

\_\_\_\_\_

Payments Received: Application Fee: \$ \_\_\_\_\_

Project Review Fees: \$ \_\_\_\_\_  
(if applicable)

Inspection Fees: \$ \_\_\_\_\_  
(if applicable)

Other Fees: \$ \_\_\_\_\_  
(if applicable)

**IMPACT STATEMENT NARRATIVE**  
**for**  
**Administrative Review Environmental Impact & Design Review (EIDR)**  
**Pursuant to § 7.3 of the Westwood Zoning Bylaw**

**Impact Statement.** An explanation of how each of the environmental impact and design standards cited herein is incorporated into the design of the proposed development. Where a particular standard is not applicable a statement to that effect will suffice. An environmental impact statement prepared in accordance with state or federal regulations may be accepted as a substitute in lieu of this statement.

- 7.3.8 **Environmental Impact and Design Standards.** The following standards shall be utilized by the Planning Board to review and evaluate all applications pursuant to this Section. These standards are intended to provide a frame of reference for the Applicant in the development of their project and building plans as well as criteria for review by the Planning Board. These standards shall not be regarded as inflexible requirements. They are not intended to discourage creativity, invention and innovation. The specification of one or more particular architectural styles is not included in these standards. The standards of review outlined in this Section shall also apply to all accessory buildings, structures, freestanding signs and other site features, however related to the principal buildings or structures.
- 7.3.8.1 **Preservation of Landscape.** The landscape shall be preserved in its natural state, insofar as practicable. Tree and soil removal shall be minimized, and any grade changes shall be consistent with the general appearance of neighboring developed areas. Due regard shall be given to the attractive utilization of the natural features of the area, including trees, woods, streams and ponds. All open areas which cannot be preserved in their natural state shall be replanted as far as practicable with as many trees and plantings as previously existed.
- 7.3.8.2 **Relation of Buildings to Environment.** The proposed development shall be related harmoniously to the terrain and to the use, scale and architecture of existing buildings in the vicinity that have functional or visual relationship to the proposed building. The Planning Board may require a modification in massing so as to reduce the effect of shadows on abutting property, public open space or streets.
- 7.3.8.3 **Open Space.** All open space shall be so designed as to add to the visual amenities of the vicinity by maximizing its visibility for persons passing the site or overlooking it from nearby properties.
- 7.3.8.4 **Circulation, Traffic Impact and Alternative Means of Transportation.** With respect to vehicular and pedestrian circulation and traffic, including entrances, ramps, walkways, drives and parking, special attention shall be given to location, number and function of access points to the public streets (especially in relation to existing traffic flow, traffic controls and mass transit facilities), width of interior drives and access points, general interior circulation, separation of pedestrian and vehicular traffic, access to community facilities, the arrangement, safety and convenience of both vehicle and bicycle parking areas and the effect thereof upon the use and enjoyment of proposed buildings and structures and the neighboring properties, and the traffic impact of the proposed development on nearby public and private streets. Each proposed facility is encouraged to incorporate alternative means of transportation, including bicycle and shuttle bus, and shall make adequate provision for the convenience of vehicular and pedestrian movement within the site in which the facility is to be located, and in relation to nearby streets, property and improvements.
- 7.3.8.5 **Stormwater Drainage and Erosion Control.** Special attention shall be given to proper site surface drainage (i) so that removal of surface waters will not adversely affect neighboring properties or the public storm drainage system and (ii) so as to minimize any adverse impact upon nearby “downstream” properties. Stormwater shall be removed from all roofs, canopies and paved areas in a manner complying with the stormwater management standards adopted and as amended from time to time by the Massachusetts Department of Environmental Protection. Surface water in all paved areas shall be collected at intervals so that it will not obstruct the flow of vehicular or pedestrian traffic and will not create puddles in the paved area. Erosion and sediment controls must be implemented to prevent any negative impacts during

construction or other land disturbance activities. Permanent post-development erosion controls must be implemented and maintained where necessary.

- 7.3.8.6 **Advertising Features.** The size, location, design, color texture, lighting and materials of all permanent signs and outdoor advertising structures or features shall not detract from the use and enjoyment of proposed buildings and structures and the surrounding properties.
- 7.3.8.7 **Special Features.** Exposed storage areas, exposed machinery installations, service areas, truck loading areas, utility buildings and structures shall be subject to such setbacks, screen plantings or other screening methods as shall reasonably be required to prevent their being incongruous with the existing or contemplated environment and the surrounding properties. All towers, antennas and poles shall be sited, designed and sized to have minimal visual impact on nearby properties.
- 7.3.8.8 **Safety.** With respect to personal safety, all open and enclosed spaces shall be designed to facilitate building evacuation and maximize accessibility by fire, police and other emergency personnel and equipment. Insofar as practicable, all exterior spaces and interior public and semi-public spaces shall be designed to minimize the fear and probability of personal harm or injury by increasing the potential surveillance by neighboring residents and passersby of an accident or attempted criminal act. Traffic to and from any facility shall not cause safety hazards or increased congestion in nearby residential neighborhoods.
- 7.3.8.9 **Heritage.** With respect to the Town's heritage, removal or disruption of historic, traditional or significant uses, structures or architectural elements shall be minimized insofar as practicable, whether these exist on the site or on adjacent properties.
- 7.3.8.10 **Microclimate.** With respect to the localized climatic characteristics of a given area, any development which proposes new structures, new hard-surface ground coverage or the installation of machinery which emits heat, vapor or fumes, shall endeavor to minimize, insofar as practicable, any adverse impact on light, air and water resources or on noise and temperature levels of the immediate environment.
- 7.3.8.11 **Energy Efficiency.** To the maximum extent reasonably practicable, proposals shall utilize energy-efficient technology and renewable energy resources and shall adhere to the principles of energy-conscious design with regard to orientation, building materials, shading, landscaping and other elements. Efforts shall be made to harmonize energy-related components with the character of the building and its surroundings and to prevent adverse effects on the energy consumption of neighboring structures and on the environment.
- 7.3.8.12 **Detrimental Effects.** No proposed facility shall be detrimental to the health, safety or welfare of persons working or living in the neighborhood, or by reason of danger of fire or explosion, environmental pollution, corrosion, toxic or noxious fumes, gas, smoke, soot, dust, odors, noise or vibrations or other hazards.
- 7.3.8.13 **Nearby Properties.** Nearby properties shall be protected against detrimental uses on the site.
- 7.3.8.14 **Specific Standards for High and Washington Street.** Where the nature of the following design features is considered significant to the preservation or enhancement of the desirable visual quality and property values of a particular part of High Street or Washington Street, any new structure or alteration shall be harmoniously related to nearby pre-existing structures and the street facade in terms of color, texture, materials, scale, height, setbacks, roof and cornice lines, signs and design elements such as door and window size and location and door and window detailing, including materials for sills, lintels, frames and thresholds and any other major design elements.
- 7.3.8.15 **Air Quality.** Any use whose emissions are such as to cause it to be classified as a major new stationary source of air pollution, as defined by the Environmental Protection Agency (EPA) under the Clean Air Act, and any use required to apply to the Massachusetts Department of Environmental Protection under 310 CMR 7.00 or to EPA under Section 112 of the Clean Air Act for permission to emit asbestos, benzene, beryllium, mercury, vinyl chloride, or radionuclides shall be permitted only upon determination by the Planning Board that compliance with the requirements of those agencies is assured, and that health and safety are adequately protected.

- 7.3.8.16 **Plants and Animals.** Location and design shall not cause avoidable damage to wildlife habitats or corridors, or to any plant species listed as endangered, threatened or of special concern by the Massachusetts Natural Heritage Program, or to any tree with more than a twenty-four (24) inch trunk diameter one (1) foot above grade. An application for a MBD special permit must include documentation to the Planning Board of having consulted with the Conservation Commission and the Massachusetts Natural Heritage Program regarding these considerations, and that the proposed site either contains no such habitats or materials, or that all feasible efforts to avoid, minimize or compensate for damage have been reflected in the development proposal.
- 7.3.8.17 **Vibration.** Except for blasting and other activities within the jurisdiction of the Board of Fire Prevention Regulations, no use shall be allowed which produces vibration at or beyond the boundaries of the premises exceeding two-thirds (2/3) the frequency/amplitude limitations established by the Board of Fire Prevention Regulations at 527 CMR 13.11 (18) for three (3) minutes or more in any hour between 7:00 am and 9:00 pm or for thirty (30) seconds or more in any hour between 9:00 pm and 7:00 am.
- 7.3.8.18 **Electrical Disturbances.** No EMF emission shall be permitted which adversely affects the operation of any equipment on other properties.
- 7.3.8.19 **Historic and Archaeological Sites.** Location and design shall not cause avoidable damage or impairment to the historic or archaeological value of buildings on sites recorded on the Massachusetts Register of Historic Places. An application for a MBD special permit shall submit documentation that either the site does not contain or impact such buildings or sites, or that any potential damage or impairment has been effectively mitigated.
- 7.3.8.20 **Solid Waste.** Each development must document arrangements for satisfactory disposal of tree stumps and debris resulting from construction, and must make permanent arrangement for satisfactory on-site storage of refuse pending its removal, such storage to be screened from public view, secure from vermin, birds or other animals, and located to present minimal hazard in the event of fire and minimal threat to water quality in the event of container failure.
- 7.3.8.21 **Water Quality.** Any development subject to review pursuant to this Section which involves a use prohibited or requiring a special permit in a Water Resource Protection Overlay District pursuant to Section 9.3 may be allowed if such development is located outside of the Water Resource Protection Overlay District and if the material regulated is less than twenty (20) gallons liquid or less than one hundred fifty (150) pounds dry weight. If exceeding those limits the use shall be allowed only if the Planning Board, in its review of the application pursuant to this Section, determines that the Applicant has documented that adequate safeguards for protecting the integrity of groundwater quality have been assured. Any development subject to review pursuant to this Section which involves a use prohibited or requiring a special permit under Section 9.3 and is located within a Water Resource Protection Overlay District may be allowed if such development has been granted a special permit pursuant to the provisions of Section 9.3.

**Town of Westwood**  
**2018 Planning Board Meeting Schedule and Filing Deadlines**

Application Filing Deadline	Meeting Date
<b>Thursdays 4:30 PM</b>	<b>Tuesdays 7:00 PM, 50 Carby Street</b> (may move to other locations if needed)
12/7/2017	1/9/2018
12/28/2017	1/30/2018
1/11/2018	2/13/2018
1/25/2018	2/27/2018
2/8/2018	3/13/2018
2/15/2018	3/20/18 (Tentative, only if needed)
3/8/2018	4/10/2018
3/22/2018	Monday, 4/23/2018
4/12/2018	5/15/2018
4/26/2018	5/29/2018
5/10/2018	6/12/2018
5/24/2018	6/26/2018
6/14/2018	7/17/2018
6/28/2018	7/31/2018
7/19/2018	8/21/2018
8/2/2018	9/4/2018
8/23/2018	9/25/2018
9/6/2018	10/9/2018
9/20/2018	10/23/2018
10/4/2018	Monday, 11/5/2018
10/25/2018	11/27/2018
Tues. 11/8/2018	12/11/2018

Meeting dates, locations and times are subject to change. Please check the final agenda with the Planning Division, the Town Clerk, or on the Town's website on the homepage (scroll down to the meeting calendar) at <http://www.townhall.westwood.ma.us>

The above filing deadlines apply to applications requiring a public hearing and legal advertisement in the newspaper. ANR plans or other items not requiring a public hearing should be submitted 5-10 business days in advance of the meeting. Please contact the Town Planner to get on a meeting agenda.

*While we strive to advertise all items for the meeting date listed, incomplete applications, complex projects that require additional review time such as those needing peer review, and depending on the number of applications received, certain applications may be heard at a subsequent meeting.*

**Contacts:**

Town Planner, Abby McCabe - (781) 251-2581 or [amccabe@townhall.westwood.ma.us](mailto:amccabe@townhall.westwood.ma.us)  
 Land Use Specialist, Janice Barba - (781) 320-1366 or [jbarba@townhall.westwood.ma.us](mailto:jbarba@townhall.westwood.ma.us)

**Planning Division: Carby Street Municipal Office Building**

50 Carby Street, Westwood, MA 02090

Hours: Monday - Thursdays 8:30 AM - 4:30 PM, Fridays 8:30 AM - 1:00 PM

**PROJECT INFORMATION**

SCOPE OF WORK: UNMANNED TELECOMMUNICATION FACILITY UPGRADE (LTE 5C/6C 2018 UPGRADE)

SITE ADDRESS: 690 CANTON STREET  
WESTWOOD, MA 02090

LATITUDE: 42.201301 N, 42° 12' 4.68" N

LONGITUDE: 71.160298 W, 71° 09' 37.08" W

TYPE OF SITE: ROOF TOP, INDOOR EQUIPMENT

BUILDING HEIGHT: 55'± A.G.L

RAD CENTER: 63'± A.G.L

CURRENT USE: TELECOMMUNICATIONS FACILITY

PROPOSED USE: TELECOMMUNICATIONS FACILITY



**SITE NUMBER: MA1268**

**SITE NAME: WESTWOOD CANTON**

**PROJECT: LTE 5C/6C 2018 UPGRADE**

**DRAWING INDEX**

SHEET NO.	DESCRIPTION	REV.
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A-2	EQUIPMENT PLAN	1
A-3	ANTENNA LAYOUTS	1
A-4	ELEVATION	1
A-5	DETAILS	1
A-6	PENETRATION DETAILS	1
RF-1	RF PLUMBING DIAGRAM	1
G-1	GROUNDING DETAILS	1

**VICINITY MAP**

**DIRECTIONS TO SITE:**

HEAD NORTHEAST 495 FT TURN RIGHT TOWARD LEGGAT MCCALL CONN 295 FT TURN LEFT ONTO LEGGAT MCCALL CONN 0.1 MI CONTINUE ONTO BURR ST 446 FT TURN LEFT ONTO COCHITUATE RD 331 FT TAKE THE RAMP TO I-90 E/MASSPIKE W/SPRINGFIELD/BOSTON TOLL ROAD 0.6 MI KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR INTERSTATE 90 E/INTERSTATE 95/MASSACHUSETTS TURNPIKE/BOSTON AND MERGE ONTO I-90 E/MASSACHUSETTS TURNPIKE TOLL ROAD 6.1 MI TAKE EXIT 14 TOWARD S SHORE/N.H MAINE/I-95/MA-128 TOLL ROAD 0.5 MI KEEP LEFT TO CONTINUE TOWARD I-95 S/MA-128 S 0.2 MI KEEP RIGHT AT THE FORK, FOLLOW SIGNS FOR I-95 S/STATE ROUTE 128 S/S SHORE/CAPE COD AND MERGE ONTO I-95 S/MA-128 S - 10.4 MI TAKE EXIT 14 TOWARD EAST ST/CANTON ST - 0.2 MI AT THE TRAFFIC CIRCLE, TAKE THE 2ND EXIT ONTO CANTON ST DESTINATION WILL BE ON THE LEFT - 1.7 MI



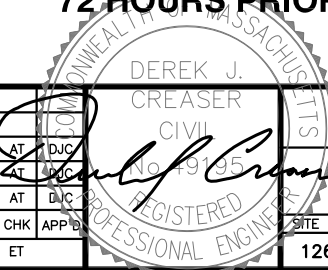
**GENERAL NOTES**

1. THIS DOCUMENT IS THE CREATION, DESIGN, PROPERTY AND COPYRIGHTED WORK OF AT&T. ANY DUPLICATION OR USE WITHOUT EXPRESS WRITTEN CONSENT IS STRICTLY PROHIBITED. DUPLICATION AND USE BY GOVERNMENT AGENCIES FOR THE PURPOSES OF CONDUCTING THEIR LAWFULLY AUTHORIZED REGULATORY AND ADMINISTRATIVE FUNCTIONS IS SPECIFICALLY ALLOWED.
2. THE FACILITY IS AN UNMANNED PRIVATE AND SECURED EQUIPMENT INSTALLATION. IT IS ONLY ACCESSED BY TRAINED TECHNICIANS FOR PERIODIC ROUTINE MAINTENANCE AND THEREFORE DOES NOT REQUIRE ANY WATER OR SANITARY SEWER SERVICE. THE FACILITY IS NOT GOVERNED BY REGULATIONS REQUIRING PUBLIC ACCESS PER ADA REQUIREMENTS.
3. CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T MOBILITY REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.
4. CONSTRUCTION DRAWINGS ARE VALID FOR SIX MONTHS AFTER ENGINEER OF RECORD'S STAMPED AND SIGNED SUBMITTAL DATE LISTED HEREIN.

**UNDERGROUND SERVICE ALERT**



**WWW.DIGSAFE.COM**  
**72 HOURS PRIOR**



**HGD HUDSON Design Group LLC**  
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

**CENTERLINE COMMUNICATIONS**  
95 RYAN DRIVE RAYNHAM, MA 02767

**SITE NUMBER: MA1268**  
**SITE NAME: WESTWOOD CANTON**  
690 CANTON STREET  
WESTWOOD, MA 02090  
NORFOLK COUNTY

**at&t**  
550 COCHITUATE ROAD FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	01/16/18	ISSUED FOR CONSTRUCTION	SG	AT	DJC
0	12/28/17	ISSUED FOR REVIEW	RB	AT	DJC
A	11/28/17	ISSUED FOR REVIEW	ET	AT	DJC

SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: ET

AT&T

TITLE SHEET  
(LTE 5C/6C)

SHEET NUMBER	DRAWING NUMBER	REV
1268.00	T-1	1

**GROUNDING NOTES**

- THE SUBCONTRACTOR SHALL REVIEW AND INSPECT THE EXISTING FACILITY GROUNDING SYSTEM AND LIGHTNING PROTECTION SYSTEM (AS DESIGNED AND INSTALLED) FOR STRICT COMPLIANCE WITH THE NEC (AS ADOPTED BY THE AHJ), THE SITE-SPECIFIC (UL, LPI, OR NFPA) LIGHTNING PROTECTION CODE, AND GENERAL COMPLIANCE WITH TELCORDIA AND TIA GROUNDING STANDARDS. THE SUBCONTRACTOR SHALL REPORT ANY VIOLATIONS OR ADVERSE FINDINGS TO THE CONTRACTOR FOR RESOLUTION.
- ALL GROUND ELECTRODE SYSTEMS (INCLUDING TELECOMMUNICATION, RADIO, LIGHTNING PROTECTION, AND AC POWER GES'S) SHALL BE BONDED TOGETHER, AT OR BELOW GRADE, BY TWO OR MORE COPPER BONDING CONDUCTORS IN ACCORDANCE WITH THE NEC.
- THE SUBCONTRACTOR SHALL PERFORM IEEE FALL-OF-POTENTIAL RESISTANCE TO EARTH TESTING (PER IEEE 1100 AND 81) FOR NEW GROUND ELECTRODE SYSTEMS. THE SUBCONTRACTOR SHALL FURNISH AND INSTALL SUPPLEMENTAL GROUND ELECTRODES AS NEEDED TO ACHIEVE A TEST RESULT OF 5 OHMS OR LESS.
- METAL RACEWAY SHALL NOT BE USED AS THE NEC REQUIRED EQUIPMENT GROUND CONDUCTOR. STRANDED COPPER CONDUCTORS WITH GREEN INSULATION, SIZED IN ACCORDANCE WITH THE NEC, SHALL BE FURNISHED AND INSTALLED WITH THE POWER CIRCUITS TO BTS EQUIPMENT.
- EACH BTS CABINET FRAME SHALL BE DIRECTLY CONNECTED TO THE MASTER GROUND BAR WITH GREEN INSULATED SUPPLEMENTAL EQUIPMENT GROUND WIRES, 6 AWG STRANDED COPPER OR LARGER FOR INDOOR BTS 2 AWG STRANDED COPPER FOR OUTDOOR BTS.
- EXOTHERMIC WELDS SHALL BE USED FOR ALL GROUNDING CONNECTIONS BELOW GRADE.
- APPROVED ANTIOXIDANT COATINGS (I.E., CONDUCTIVE GEL OR PASTE) SHALL BE USED ON ALL COMPRESSION AND BOLTED GROUND CONNECTIONS.
- ICE BRIDGE BONDING CONDUCTORS SHALL BE EXOTHERMICALLY BONDED OR BOLTED TO GROUND BAR.
- ALUMINUM CONDUCTOR OR COPPER CLAD STEEL CONDUCTOR SHALL NOT BE USED FOR GROUNDING CONNECTIONS.
- MISCELLANEOUS ELECTRICAL AND NON-ELECTRICAL METAL BOXES, FRAMES AND SUPPORTS SHALL BE BONDED TO THE GROUND RING, IN ACCORDANCE WITH THE NEC.
- METAL CONDUIT SHALL BE MADE ELECTRICALLY CONTINUOUS WITH LISTED BONDING FITTINGS OR BY BONDING ACROSS THE DISCONTINUITY WITH 6 AWS COPPER WIRE UL APPROVED GROUNDING TYPE CONDUIT CLAMPS.
- ALL NEW STRUCTURES WITH A FOUNDATION AND/OR FOOTING HAVING 20 FT. OR MORE OF 1/2 IN. OR GREATER ELECTRICALLY CONDUCTIVE REINFORCING STEEL MUST HAVE IT BONDED TO THE GROUND RING USING AN EXOTHERMIC WELD CONNECTION USING #2 AWG SOLID BARE TINNED COPPER GROUND WIRE, PER NEC 250.50

**GENERAL NOTES**

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

- ANY NEW CONCRETE NEEDED FOR THE CONSTRUCTION SHALL BE AIR-ENTRAINED AND SHALL HAVE 4000 PSI STRENGTH AT 28 DAYS. ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH ACI 318 CODE REQUIREMENTS.
- ALL STRUCTURAL STEEL WORK SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC SPECIFICATIONS. ALL STRUCTURAL STEEL SHALL BE ASTM A36 (Fy = 36 ksi) UNLESS OTHERWISE NOTED. PIPES SHALL BE ASTM A53 TYPE E (Fy = 36 ksi). ALL STEEL EXPOSED TO WEATHER SHALL BE HOT DIPPED GALVANIZED. TOUCHUP ALL SCRATCHES AND OTHER MARKS IN THE FIELD AFTER STEEL IS ERECTED USING A COMPATIBLE ZINC RICH PAINT.
- CONSTRUCTION SHALL COMPLY WITH SPECIFICATIONS AND "GENERAL CONSTRUCTION SERVICES FOR CONSTRUCTION OF AT&T SITES."
- SUBCONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS PRIOR TO COMMENCING ANY WORK. ALL DIMENSIONS OF EXISTING CONSTRUCTION SHOWN ON THE DRAWINGS MUST BE VERIFIED. SUBCONTRACTOR SHALL NOTIFY THE CONTRACTOR OF ANY DISCREPANCIES PRIOR TO ORDERING MATERIAL OR PROCEEDING WITH CONSTRUCTION.
- THE EXISTING CELL SITE IS IN FULL COMMERCIAL OPERATION. ANY CONSTRUCTION WORK BY SUBCONTRACTOR SHALL NOT DISRUPT THE EXISTING NORMAL OPERATION. ANY WORK ON EXISTING EQUIPMENT MUST BE COORDINATED WITH CONTRACTOR. ALSO, WORK SHOULD BE SCHEDULED FOR AN APPROPRIATE MAINTENANCE WINDOW USUALLY IN LOW TRAFFIC PERIODS AFTER MIDNIGHT.
- SINCE THE CELL SITE IS ACTIVE, ALL SAFETY PRECAUTIONS MUST BE TAKEN WHEN WORKING AROUND HIGH LEVELS OF ELECTROMAGNETIC RADIATION. EQUIPMENT SHOULD BE SHUTDOWN PRIOR TO PERFORMING ANY WORK THAT COULD EXPOSE THE WORKERS TO DANGER. PERSONAL RF EXPOSURE MONITORS ARE ADVISED TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.
- APPLICABLE BUILDING CODES:  
 SUBCONTRACTOR'S WORK SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES AS ADOPTED BY THE LOCAL AUTHORITY HAVING JURISDICTION (AHJ) FOR THE LOCATION. THE EDITION OF THE AHJ ADOPTED CODES AND STANDARDS IN EFFECT ON THE DATE OF CONTRACT AWARD SHALL GOVERN THE DESIGN.  
 BUILDING CODE: MA STATE BUILDING CODE 780 CMR 9TH EDITION  
 ELECTRICAL CODE: REFER TO ELECTRICAL DRAWINGS  
 LIGHTENING CODE: REFER TO ELECTRICAL DRAWINGS

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

- AMERICAN CONCRETE INSTITUTE (ACI) 318; BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE;
- AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) MANUAL OF STEEL CONSTRUCTION, ASD, FOURTEENTH EDITION;
- TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARDS FOR STEEL
- EQUIPMENT AND ANTENNA SUPPORTING STRUCTURES; REFER TO ELECTRICAL DRAWINGS FOR SPECIFIC ELECTRICAL STANDARDS.

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

**ABBREVIATIONS**

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

45 BEECHWOOD DRIVE  
NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

95 RYAN DRIVE  
RAYNHAM, MA 02767

**SITE NUMBER: MA1268**  
**SITE NAME: WESTWOOD CANTON**  
 690 CANTON STREET  
 WESTWOOD, MA 02090  
 NORFOLK COUNTY

550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	01/16/18	ISSUED FOR CONSTRUCTION	SG	AT	DJC
0	12/28/17	ISSUED FOR REVIEW	RB	AT	DJC
A	11/28/17	ISSUED FOR REVIEW	ET	AT	DJC

SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: ET

DEREK J. CREASER  
CIVIL ENGINEER  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF MASSACHUSETTS

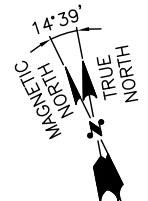
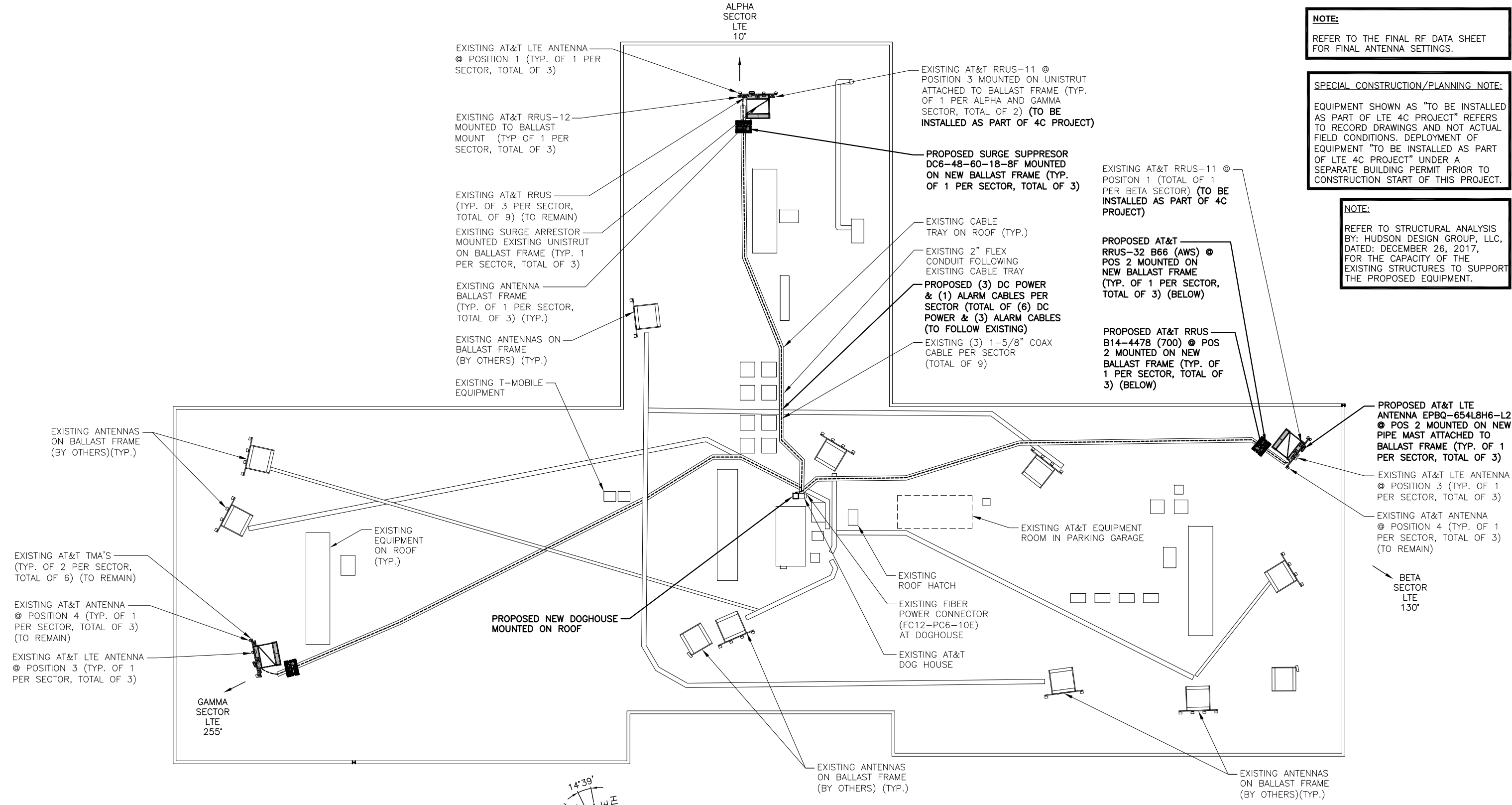
AT&T	
GENERAL NOTES (LTE 5C/6C)	
SITE NUMBER	DRAWING NUMBER
1268.00	GN-1
REV	1



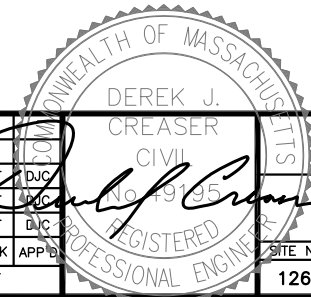
**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

**SPECIAL CONSTRUCTION/PLANNING NOTE:**  
EQUIPMENT SHOWN AS "TO BE INSTALLED AS PART OF LTE 4C PROJECT" REFERS TO RECORD DRAWINGS AND NOT ACTUAL FIELD CONDITIONS. DEPLOYMENT OF EQUIPMENT "TO BE INSTALLED AS PART OF LTE 4C PROJECT" UNDER A SEPARATE BUILDING PERMIT PRIOR TO CONSTRUCTION START OF THIS PROJECT.

**NOTE:**  
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**ROOF PLAN**  
22x34 SCALE: 1/16"=1'-0"  
11x17 SCALE: 1/32"=1'-0"



**HUDSON Design Group LLC**  
45 BEECHWOOD DRIVE  
NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553  
FAX: (978) 336-5586

**CENTERLINE COMMUNICATIONS**  
95 RYAN DRIVE  
RAYNHAM, MA 02767

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690 CANTON STREET  
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NORFOLK COUNTY

**at&t**  
550 COCHITUATE ROAD  
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SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: ET

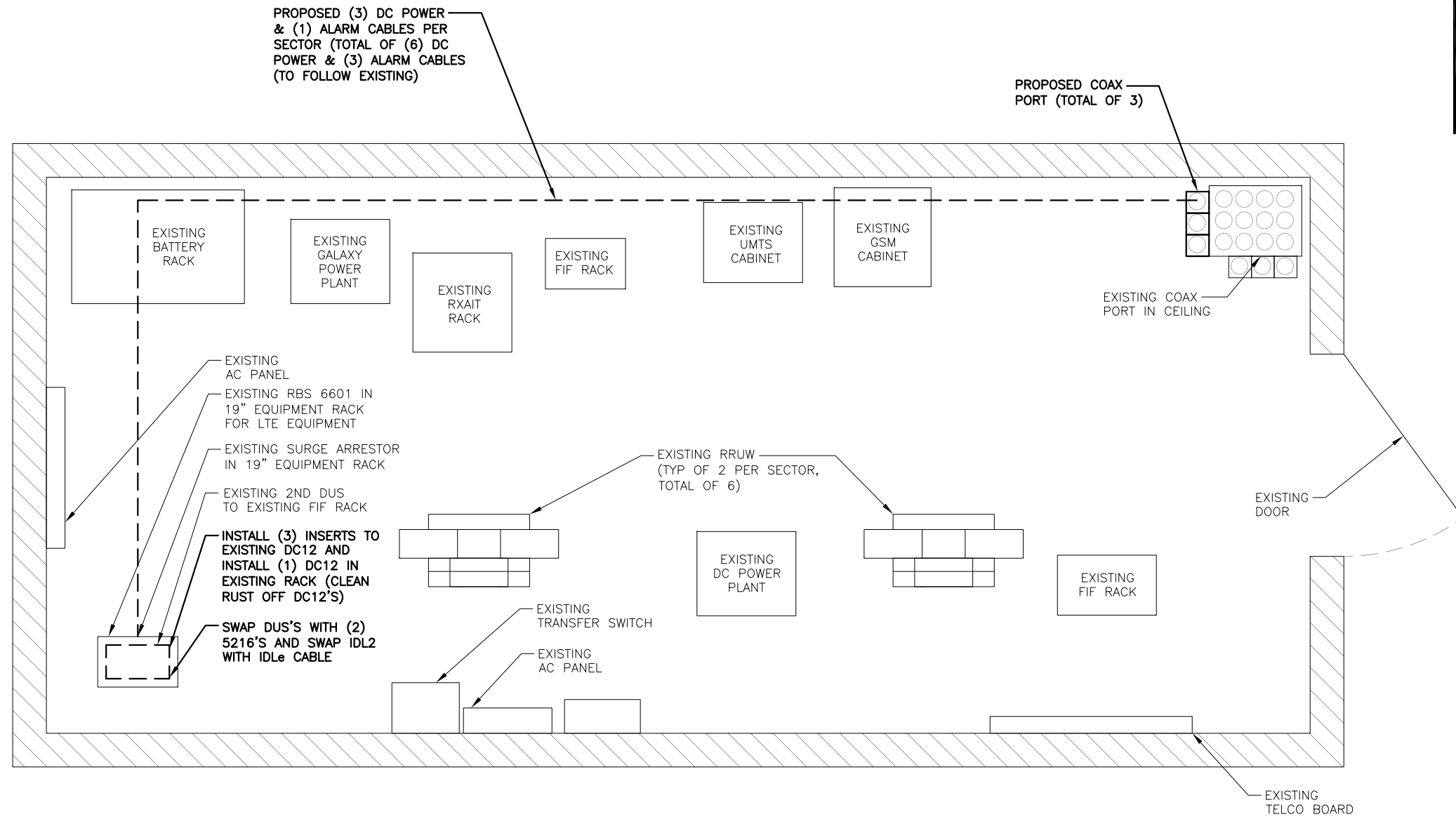
**AT&T**  
**ROOF PLAN**  
**(LTE 5C/6C)**

SITE NUMBER	DRAWING NUMBER	REV
1268.00	A-1	1

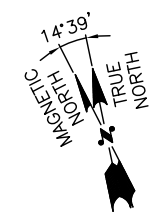
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**POWER PANEL NOTE:**  
1. INSTALL (6) 30AMP BREAKERS & (2) 25AMP BREAKERS IN INFINITY PLANT.



**EQUIPMENT PLAN**  
22x34 SCALE: 3/4"=1'-0"  
11x17 SCALE: 3/8"=1'-0"  
1  
A-2  
0 8" 1'-4" 2'-8" 4'-0"

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NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553  
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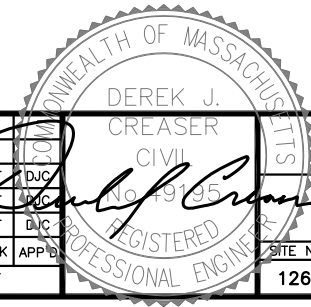
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95 RYAN DRIVE  
RAYNHAM, MA 02767

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NORFOLK COUNTY

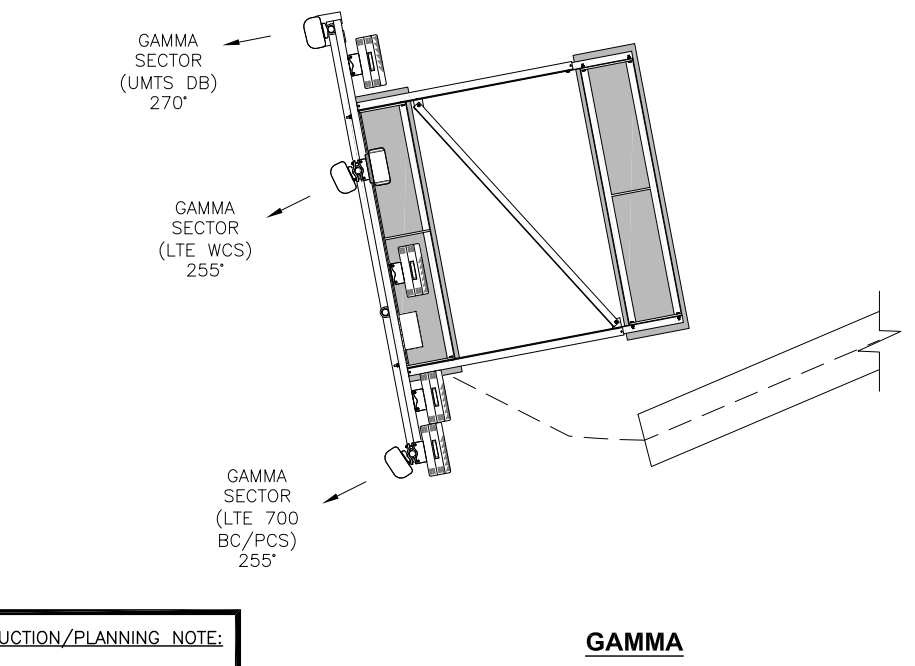
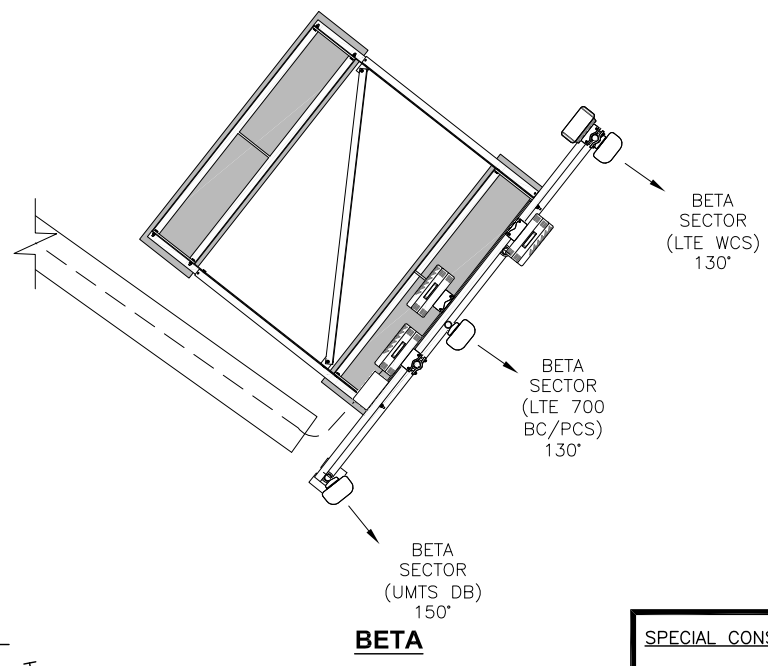
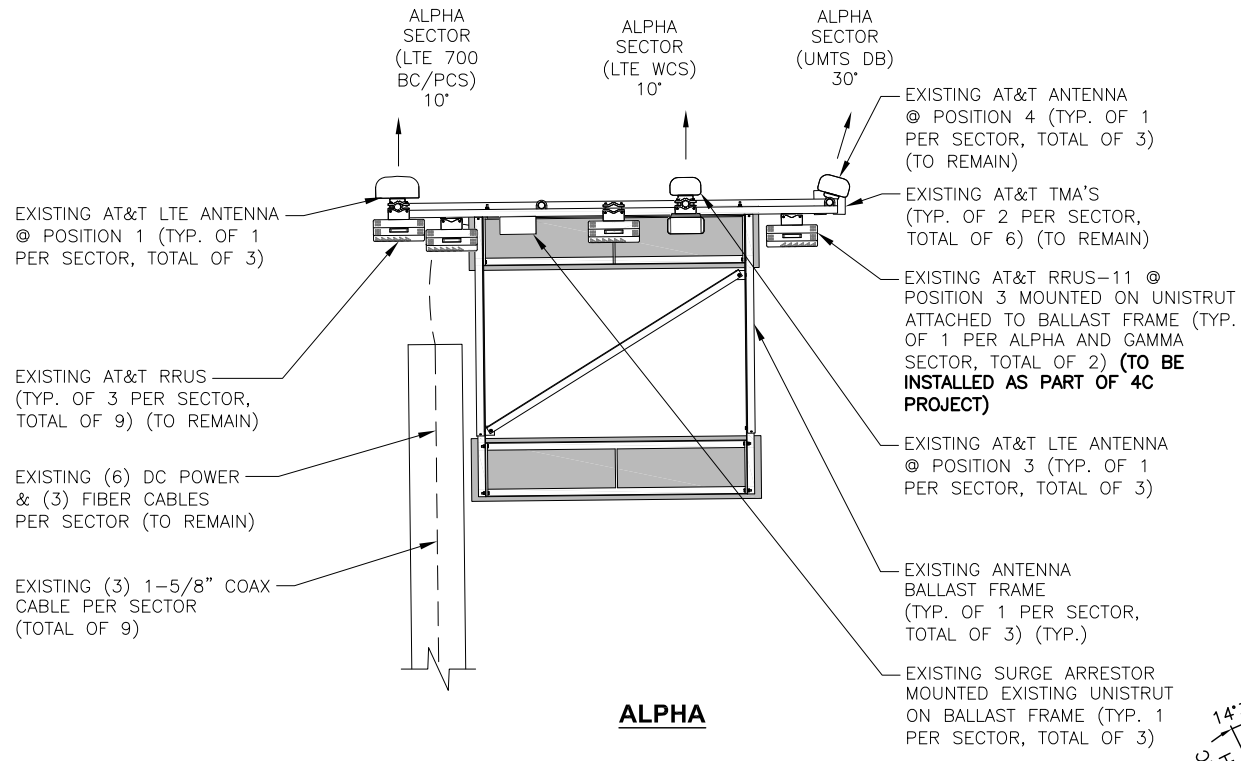
**at&t**  
550 COCHITUATE ROAD  
FRAMINGHAM, MA 01701

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SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: ET



**AT&T**  
**EQUIPMENT PLAN**  
**(LTE 5C/6C)**  
SITE NUMBER: 1268.00  
DRAWING NUMBER: A-2  
REV: 1

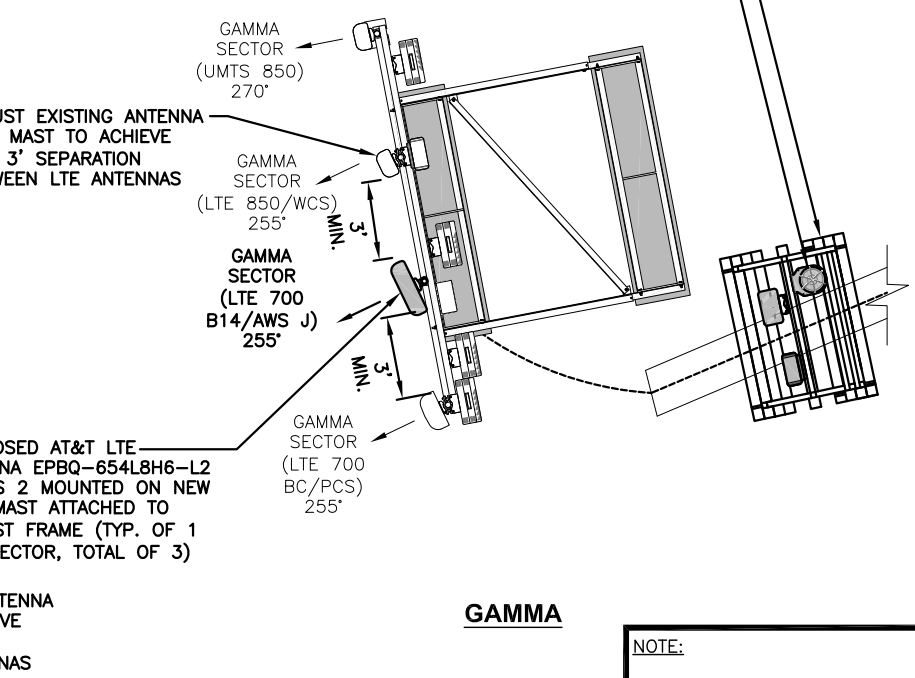
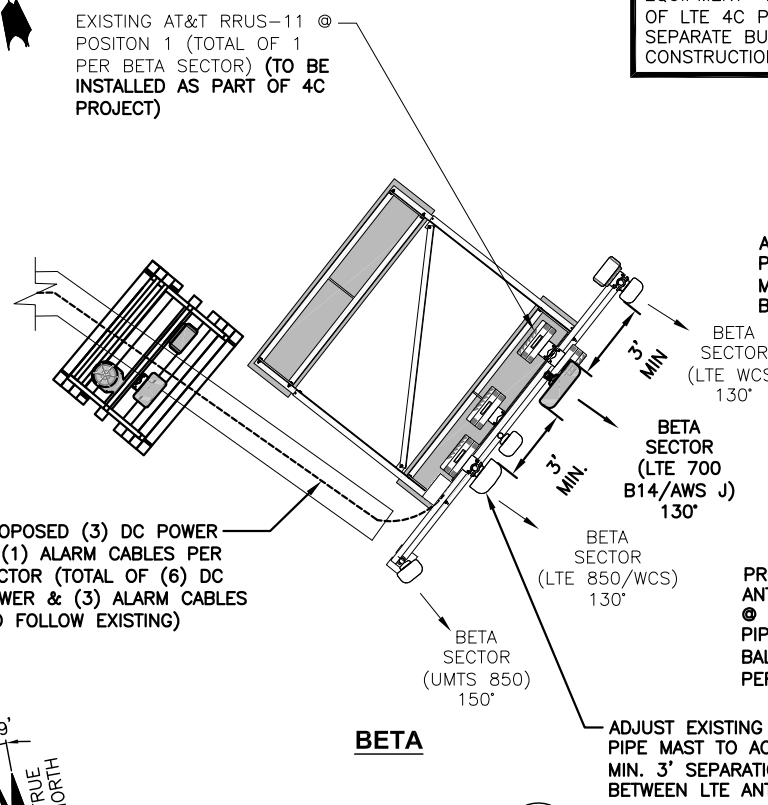
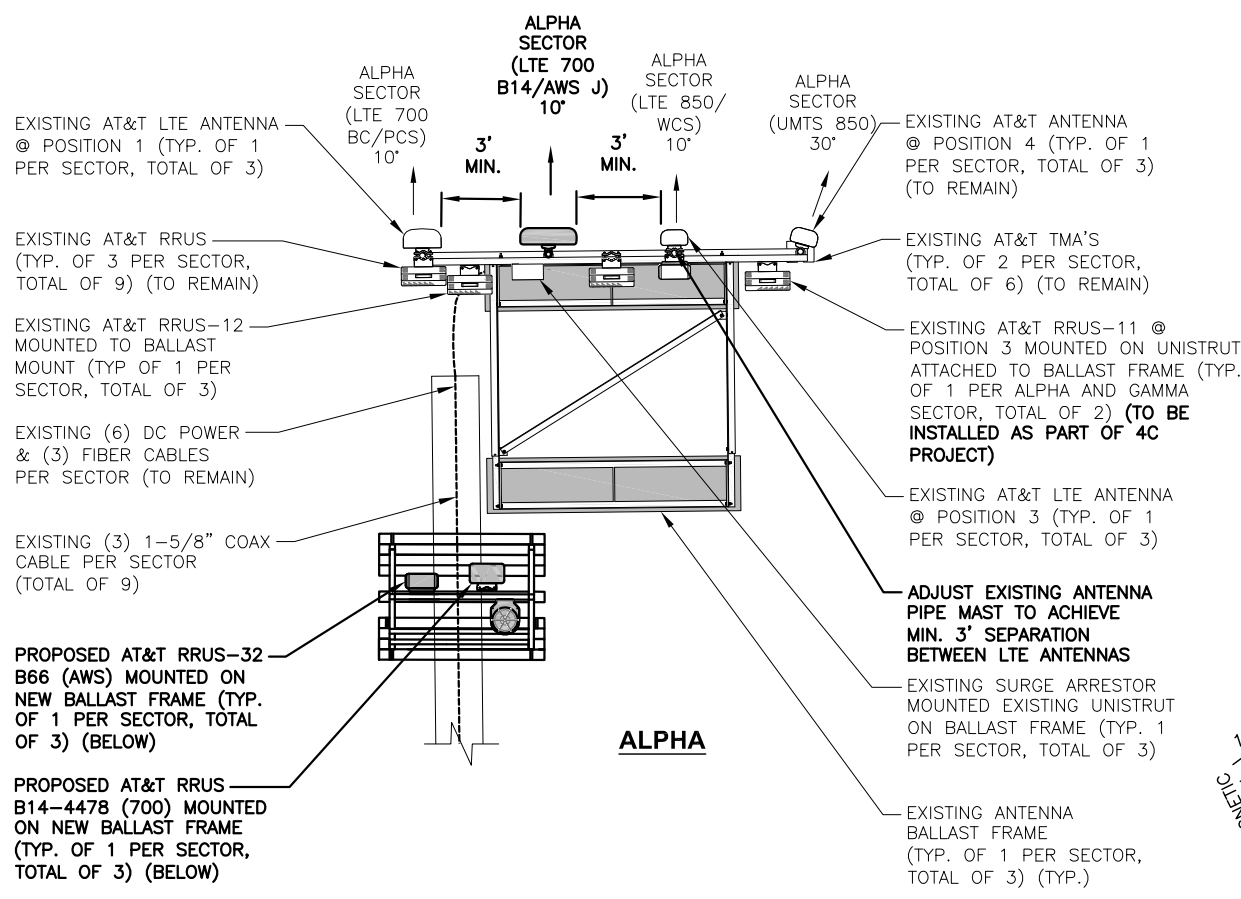


**EXISTING ANTENNA LAYOUT**  
SCALE: N.T.S.

**SPECIAL CONSTRUCTION/PLANNING NOTE:**  
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PROPOSED BALLAST FRAME (TYP. OF 1 PER SECTOR, TOTAL OF 3)

PROPOSED SURGE SUPPRESSOR DC6-48-60-18-8F MOUNTED ON NEW BALLAST FRAME (TYP. OF 1 PER SECTOR, TOTAL OF 3)



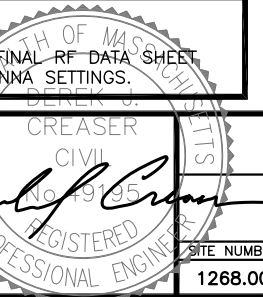
**PROPOSED ANTENNA LAYOUT**  
SCALE: N.T.S.

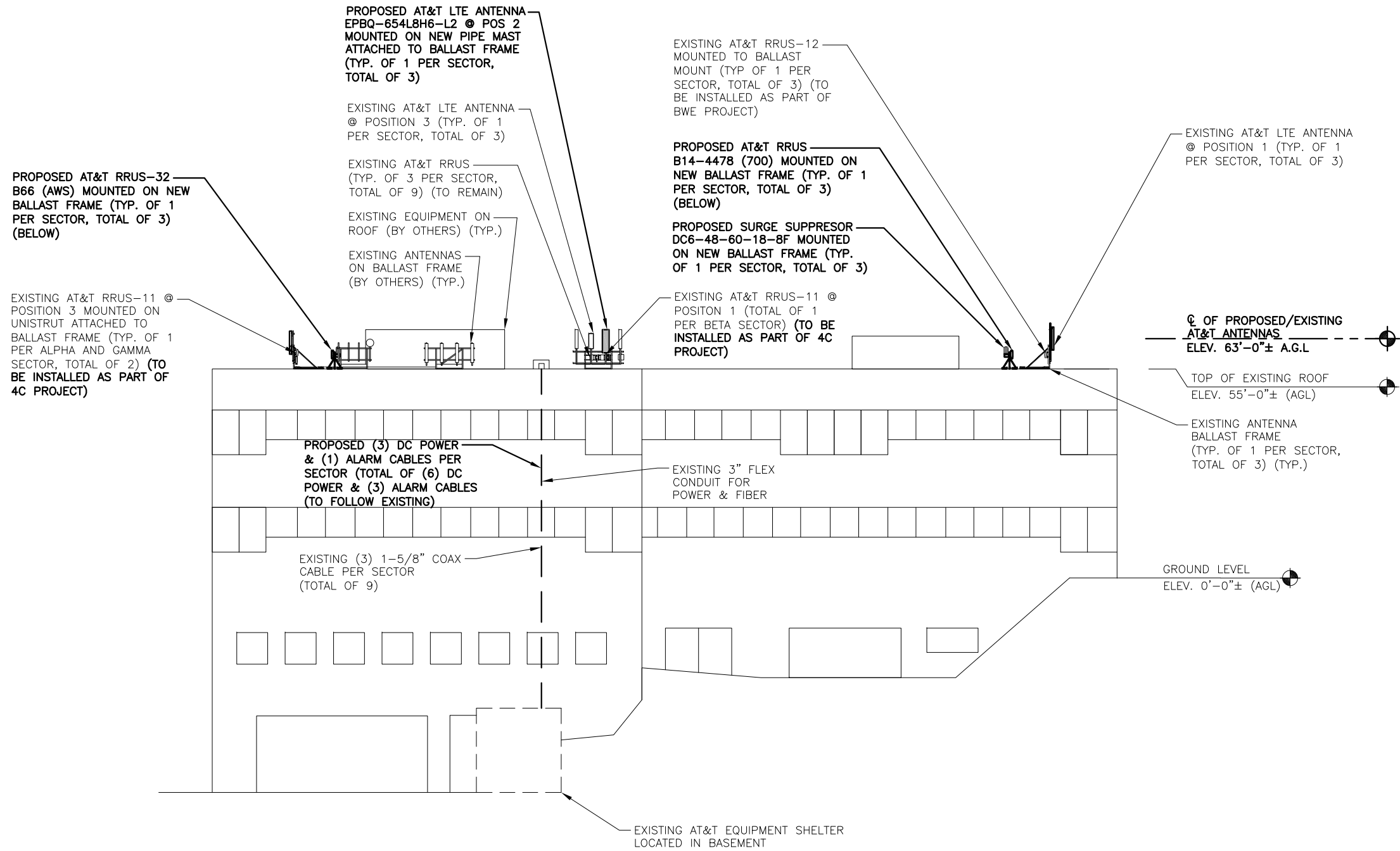
**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

**NOTE:**  
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SCALE: AS SHOWN    DESIGNED BY: AT    DRAWN BY: ET





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**ELEVATION**  
22x34 SCALE: 1/16"=1'-0"  
11x17 SCALE: 1/32"=1'-0"

1  
A-4

0 8'-0" 16'-0" 32'-0" 48'-0"

**HDG HUDSON Design Group LLC**  
45 BEECHWOOD DRIVE NORTH ANDOVER, MA 01845  
TEL: (978) 557-5553 FAX: (978) 336-5586

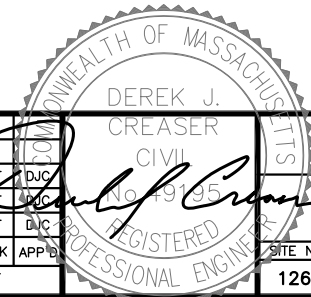
**CENTERLINE COMMUNICATIONS**  
95 RYAN DRIVE RAYNHAM, MA 02767

**SITE NUMBER: MA1268  
SITE NAME: WESTWOOD CANTON**  
690 CANTON STREET WESTWOOD, MA 02090 NORFOLK COUNTY

**at&t**  
550 COCHITUATE ROAD FRAMINGHAM, MA 01701

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SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: ET



<b>AT&amp;T</b>	
ELEVATION (LTE 5C/6C)	
SITE NUMBER	DRAWING NUMBER
1268.00	A-4
REV	1

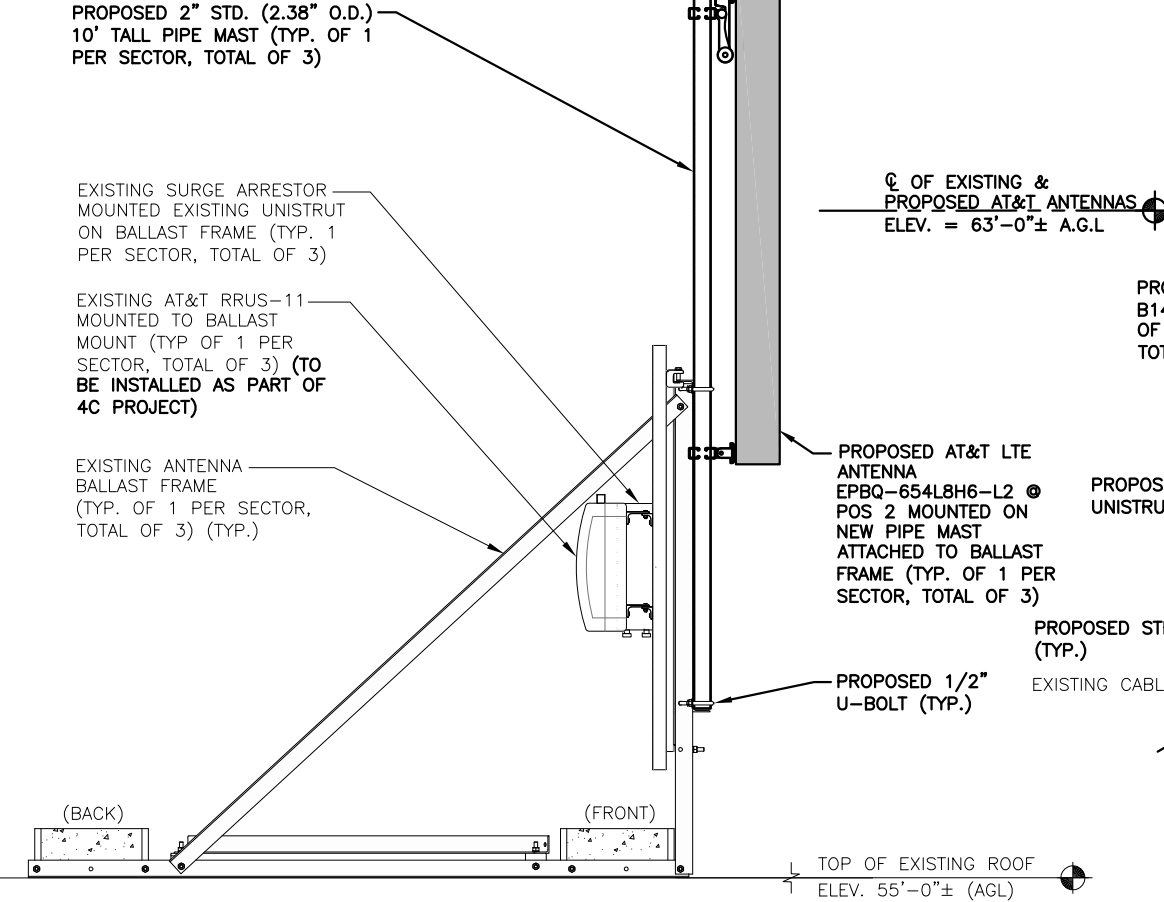
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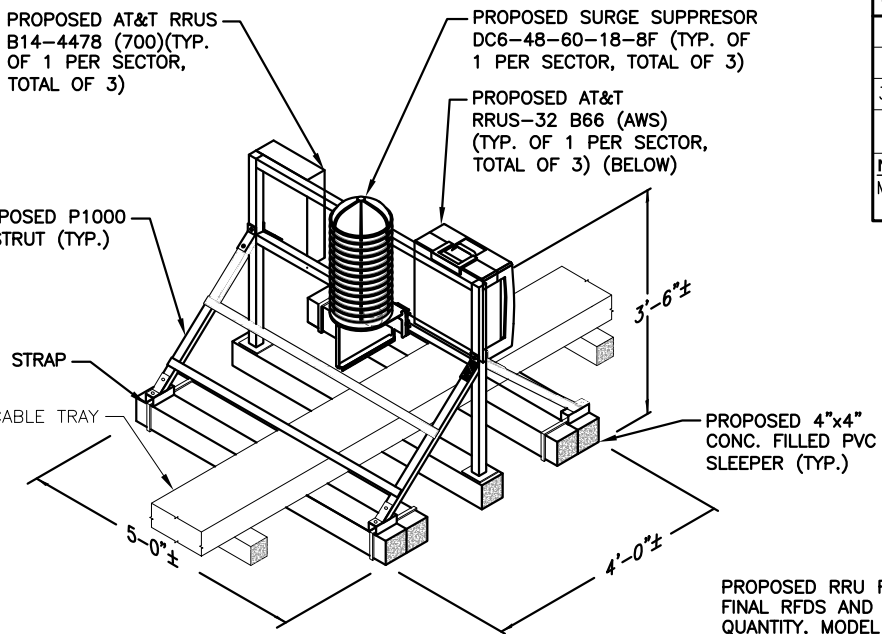
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ANTENNA SUPPORT MINIMUM BALLAST REQUIREMENTS		
SIDE	(BACK)	(FRONT)
NUMBER OF BLOCKS	16	6
SIZE OF BLOCKS	8"x8"x16" SOLID	
WEIGHT OF BLOCKS	78 LBS. /EACH	
TOTAL BALLAST WEIGHT REQUIRED	1716 LBS.	

FINAL ANTENNA SCHEDULE													
SECTOR	BAND	ANTENNA	SIZE (INCHES) (L X W X D)	RAD CENTER	AZIMUTH	TMA'S			RRU'S	SIZE (INCHES) (L X W X D)	COAX JUMPERS	FIBER JUMPERS	
ALPHA	LTE 700 BC/PCS	EXISTING	OPA-65R-LCUU-H4	48X14.4X7.3	63'-0"±	10'	-	-	EXISTING EXISTING EXISTING	RRUS-11 (700) RRUS-12 (PCS) RRUS-12 (PCS)	-	-	
	LTE 700 (B14)/AWS J	PROPOSED	EPBQ-654L8H6-L2	73X21X6.3	63'-0"±	10'	-	-	PROPOSED PROPOSED	RRUS-B14 4478 (700) RRUS-32-B66 (AWS)	15X13.2X7.4 27.2X12.1X7.0	2* 2*	1** 1**
	LTE 850/WCS	EXISTING	OPA-65R-LCUU-H4	48X14.4X7.3	63'-0"±	10'	-	-	EXISTING EXISTING	RRUS-11 (850) RRUS-32 (WCS)	-	-	-
	UMTS 850	EXISTING	800 10121	54.5X10.3X5.9	63'-0"±	30'	EXISTING	(2) LGP 21401	-	-	-	-	-
BETA	LTE 700 BC/PCS	EXISTING	OPA-65R-LCUU-H4	48X14.4X7.3	63'-0"±	130'	-	-	EXISTING EXISTING EXISTING	RRUS-11 (700) RRUS-12 (PCS) RRUS-12 (PCS)	-	-	
	LTE 700 (B14)/AWS J	PROPOSED	EPBQ-654L8H6-L2	73X21X6.3	63'-0"±	130'	-	-	PROPOSED PROPOSED	RRUS-B14 4478 (700) RRUS-32-B66 (AWS)	15X13.2X7.4 27.2X12.1X7.0	2* 2*	1** 1**
	LTE 850/WCS	EXISTING	OPA-65R-LCUU-H4	48X14.4X7.3	63'-0"±	130'	-	-	EXISTING EXISTING	RRUS-11 (850) RRUS-32 (WCS)	-	-	-
	UMTS 850	EXISTING	800 10121	54.5X10.3X5.9	63'-0"±	150'	EXISTING	(2) LGP 21401	-	-	-	-	-
GAMMA	LTE 700 BC/PCS	EXISTING	OPA-65R-LCUU-H4	48X14.4X7.3	63'-0"±	255'	-	-	EXISTING EXISTING EXISTING	RRUS-11 (700) RRUS-12 (PCS) RRUS-12 (PCS)	-	-	
	LTE 700 (B14)/AWS J	PROPOSED	EPBQ-654L8H6-L2	73X21X6.3	63'-0"±	255'	-	-	PROPOSED PROPOSED	RRUS-B14 4478 (700) RRUS-32-B66 (AWS)	15X13.2X7.4 27.2X12.1X7.0	2* 2*	1** 1**
	LTE 850/WCS	EXISTING	OPA-65R-LCUU-H4	48X14.4X7.3	63'-0"±	255'	-	-	EXISTING EXISTING	RRUS-11 (850) RRUS-32 (WCS)	-	-	-
	UMTS 850	EXISTING	800 10121	54.5X10.3X5.9	63'-0"±	270'	EXISTING	(2) LGP 21401	-	-	-	-	-



RRH/SURGE MINIMUM BALLAST REQUIREMENTS		
SIDE	(BACK)	(FRONT)
NUMBER OF BLOCKS	3	3
SIZE OF BLOCKS	4"x8"x16" SOLID	
WEIGHT OF BLOCKS	38 LBS. /EACH	
TOTAL BALLAST WEIGHT REQUIRED	114 LBS.	



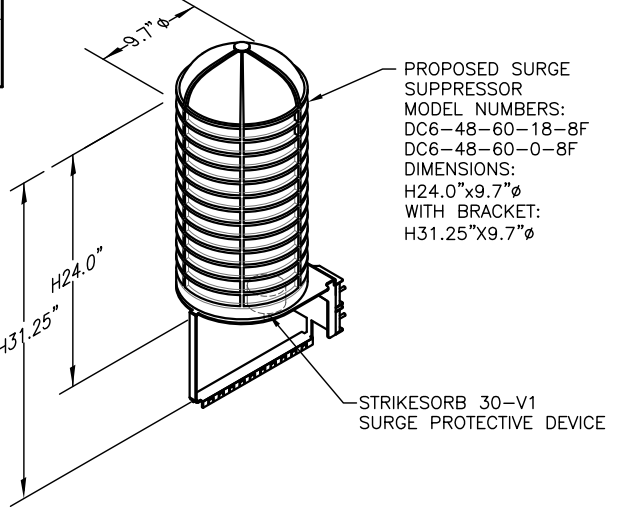
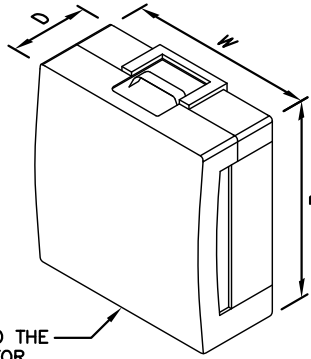
**FINAL ANTENNA CONFIGURATION TABLE** 4 A-5  
SCALE: N.T.S

RRU CHART				
QUANTITY	MODEL	L	W	D
6(E)	RRUS-11	19.7"	17.0"	7.2"
3(E)	RRUS-12	20.4"	18.5"	7.5"
3(E) 3(P)	RRUS-32	27.2"	12.1"	7.0"
3(P)	RRUS-B14	15.0"	13.2"	7.4"

**NOTE:**  
MOUNT PER MANUFACTURER'S SPECIFICATIONS

**\*COAX JUMPER NOTE:**  
COAX JUMPERS (4) FROM EACH RRU (TOTAL OF 12).

**\*\*FIBER JUMPER NOTE:**  
FIBER JUMPERS (2) FROM THE SQUID TO EACH RRU (TOTAL OF 6).



**PROPOSED AT&T ANTENNA MOUNTING DETAIL** 1 A-5  
SCALE: N.T.S

**RRH & SURGE SUPPRESSOR MOUNTING DETAIL** 2 A-5  
SCALE: N.T.S

**PROPOSED RRU DETAIL** 3 A-5  
SCALE: N.T.S

**DC SURGE SUPPRESSOR DETAIL** 5 A-5  
SCALE: N.T.S

**HUDSON Design Group LLC**  
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95 RYAN DRIVE RAYNHAM, MA 02767

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SCALE: AS SHOWN DESIGNED BY: AT DRAWN BY: ET

**DEREK J. CREASER**  
REGISTERED PROFESSIONAL ENGINEER  
No. 9195

**AT&T**  
**DETAILS**  
**(LTE 5C/6C)**  
SITE NUMBER: 1268.00 DRAWING NUMBER: A-5 REV: 1

**PACKING MATERIAL:** MIN 1-1/2 in. THICKNESS OF MIN 6 pcf MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO OPENING AS A PERMANENT FORM. PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF FLOOR OR FROM BOTH SURFACES OF WALL AS REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.

ONE 2"Ø (OR SMALLER) SCHEDULE 40 PVC PIPE TO BE CENTERED WITHIN FIRESTOP SYSTEM. A NOM. ANNULAR SPACE OF 5/16" IS REQUIRED WITHIN THE FIRESTOP SYSTEM PIPE SHALL BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL/FLOOR ASSEMBLY



**FILL, VOID OR CAVITY MATERIAL - SEALANT:** MIN 2 in. THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH THE TOP SURFACE OF FLOOR OR WITH BOTH SURFACES OF WALL.

**SPECIFIED TECHNOLOGIES INC.:**  
SPECSEAL SERIES SSS SEALANT  
OR SPECSEAL LCI SEALANT.

**UL SYSTEM NUMBER:** C-AJ-2057  
**F RATING - 2 HR.**

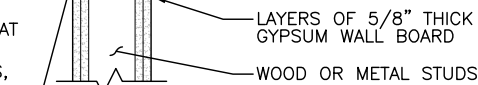
**PVC CONDUIT PENETRATION  
DETAIL IN CONCRETE OR MASONRY**

**PACKING MATERIAL:** MIN. 1 in. THICKNESS OF MIN. 3.5 pcf FIBERGLASS INSULATION SHALL BE WRAPPED AROUND THE THROUGH-PENETRANT AND SECURED TOGETHER BY MEANS OF NO. 24 AWG STEEL TIE WIRE. PACKING MATERIAL SHALL BE CENTERED AT MID-DEPTH OF OPENING AND RECESSED FROM BOTH SURFACES OF WALL ASSEMBLY REQUIRED TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL.

ONE 4"Ø OR SMALLER METALLIC PIPE OR CONDUIT TO BE CENTERED WITHIN FIRESTOP SYSTEM. PIPE SHALL BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL/FLOOR ASSEMBLY AND HAVE AN ANNULAR SPACE OF 3/4"

**FILL, VOID OR CAVITY MATERIAL - CAULK OR PUTTY:**

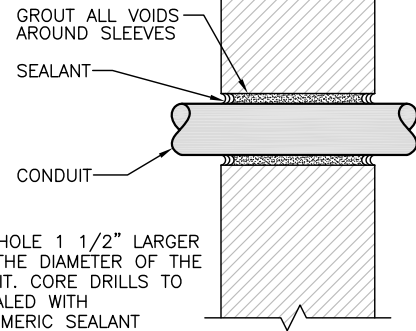
IN 2 HR FIRE RATED ASSEMBLIES MIN 3/4 in. THICKNESS FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH BOTH SURFACES OF WALL. ADDITIONAL FILL MATERIAL TO BE INSTALLED SUCH THAT A MIN 1/4 in. CROWN IS FORMED AROUND THE PENETRATING ITEM. IN 1 HR FIRE RATED ASSEMBLIES, MIN 5/8 in. THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS ON BOTH SURFACES OF WALL. ADDITIONAL FILL MATERIAL TO BE INSTALLED SUCH THAT A MIN 3/8 in. CROWN IS FORMED AROUND THE PENETRATING ITEM AND LAPPING 1 in. BEYOND THE PERIPHERY OF THE OPENING.



**UL SYSTEM NUMBER:** W-L-1029  
**F RATING - 1 & 2 HR.**

**PIPE AND CONDUIT PENETRATION  
DETAIL IN GYPSUM WALLBOARD**

**SPECIFIED TECHNOLOGIES INC.:**  
SPECSEAL SERIES SSS SEALANT,  
SPECSEAL LCI SEALANT OR  
SPECSEAL PUTTY.



**NOTE:**  
CORE HOLE 1 1/2" LARGER THAN THE DIAMETER OF THE CONDUIT. CORE DRILLS TO BE SEALED WITH ELASTOMERIC SEALANT

**PIPE AND CONDUIT PENETRATION  
DETAIL IN NON-RATED PARTITION**

FLOOR OR WALL	MIN FLOOR OR WALL THKNS. (in.)	MAX DIAM OF STEEL PIPE OR CONDUIT (in.)	MIN ANNULAR SPACE (in.)	MAX ANNULAR SPACE (in.)	MIN FILL MTL THKNS (in.)	MIN FORMING MTL THKNS (in.)	F RATING (HOURS)	T RATING (HOURS)
FLOOR	3-3/4	1-1/2	3/8	2-1/8	1	2-3/4	2	0
FLOOR	3-3/4	6	3/8	3/4	1	2-3/4	2	0
FLOOR	3-3/4	6	3/8	1	2	1-3/4	2	0
FLOOR	4-1/2	1-1/2	3/8	2-1/8	1	3-1/2	3	3/4
FLOOR	4-1/2	6	3/8	3/4	1	3-1/2	3	0
FLOOR	4-1/2	6	3/8	1	2	2-1/2	3	0
WALL	5-1/2	1-1/2	3/8	2-1/8	1	3-1/2	3	3/4
WALL	5-1/2	6	3/8	3/4	1	3-1/2	3	0
WALL	6-1/2	1-1/2	3/8	2-1/8	2	2-1/2	3	1
WALL	6-1/2	6	3/8	1	2	2-1/2	3	0

CONCRETE FLOOR OR WALL ASSEMBLY, MINIMUM 3-3/4 in. THICKNESS FLOOR/ MINIMUM 6-1/2 in. WALL

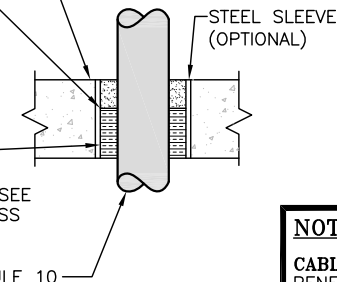
**TYPE AS OR TYPE SS:**  
MINIMUM THICKNESS OF SEALANT AS SPECIFIED IN THE TABLE ABOVE, APPLIED WITHIN THE OPENING, FLUSH WITH THE TOP SURFACE OF THE FLOOR OR BOTH SURFACES OF THE WALL.

**FORMING MATERIAL:**  
MINERAL WOOL BATT INSULATION (MINIMUM 4.0 pcf) FIRMLY PACKED INTO THE OPENING AS A PERMANENT FORM; SEE TABLE FOR MINIMUM REQUIRED THICKNESS

**METALLIC PIPE:**  
STEEL PIPE: 6"Ø (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.  
CONDUIT: 4"Ø (OR SMALLER) ELECTRICAL METALLIC TUBING (EMT) OR 6"Ø RIGID STEEL CONDUIT.

**UL SYSTEM NUMBER:** C-AJ-1020  
**F RATING - 3 HR. (FOR PIPES GREATER THAN 4")**  
**F RATING - 2 HR. (FOR PIPES LESS THAN 4")**

**PIPE AND CONDUIT PENETRATION  
DETAIL IN CONCRETE OR MASONRY**



WALL HR	MAX DIAM OF THROUGH PENETRANT in.	T RATING HR
1	2	1
1	1-1/4	1
2	2	1
2	1-1/4	1 1/2

THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED.

**THROUGH PENETRANTS:** ONE 2"Ø NONMETALLIC PIPE, CONDUIT OR RACEWAY TO BE CENTERED WITHIN THE FIRESTOP SYSTEM. A NOM ANNULAR SPACE OF 5/16 in. IS REQUIRED WITHIN THE FIRESTOP SYSTEM. PIPE, CONDUIT OR RACEWAY TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF THE FLOOR OR WALL ASSEMBLY.

**FILL, VOID OR CAVITY MATERIAL - SEALANT:** MIN 5/8 in. THICKNESS OF FILL MATERIAL APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. ADDITIONAL FILL MATERIAL TO BE INSTALLED SUCH THAT A MIN 1/4 in. THICK CROWN IS FORMED AROUND THE PENETRATING ITEM AND LAPPING 1 in. BEYOND THE PERIPHERY OF THE OPENING.

**SPECIFIED TECHNOLOGIES INC.:**  
SPECSEAL SERIES SSS SEALANT,  
SPECSEAL LCI SEALANT.

**UL SYSTEM NUMBER:** W-L-2093  
**F RATING - 1 & 2 HR.**

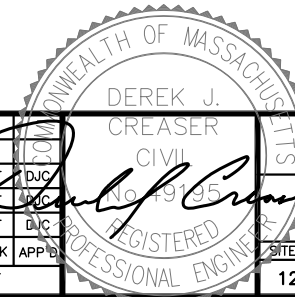
**PVC CONDUIT PENETRATION  
DETAIL IN GYPSUM WALLBOARD**

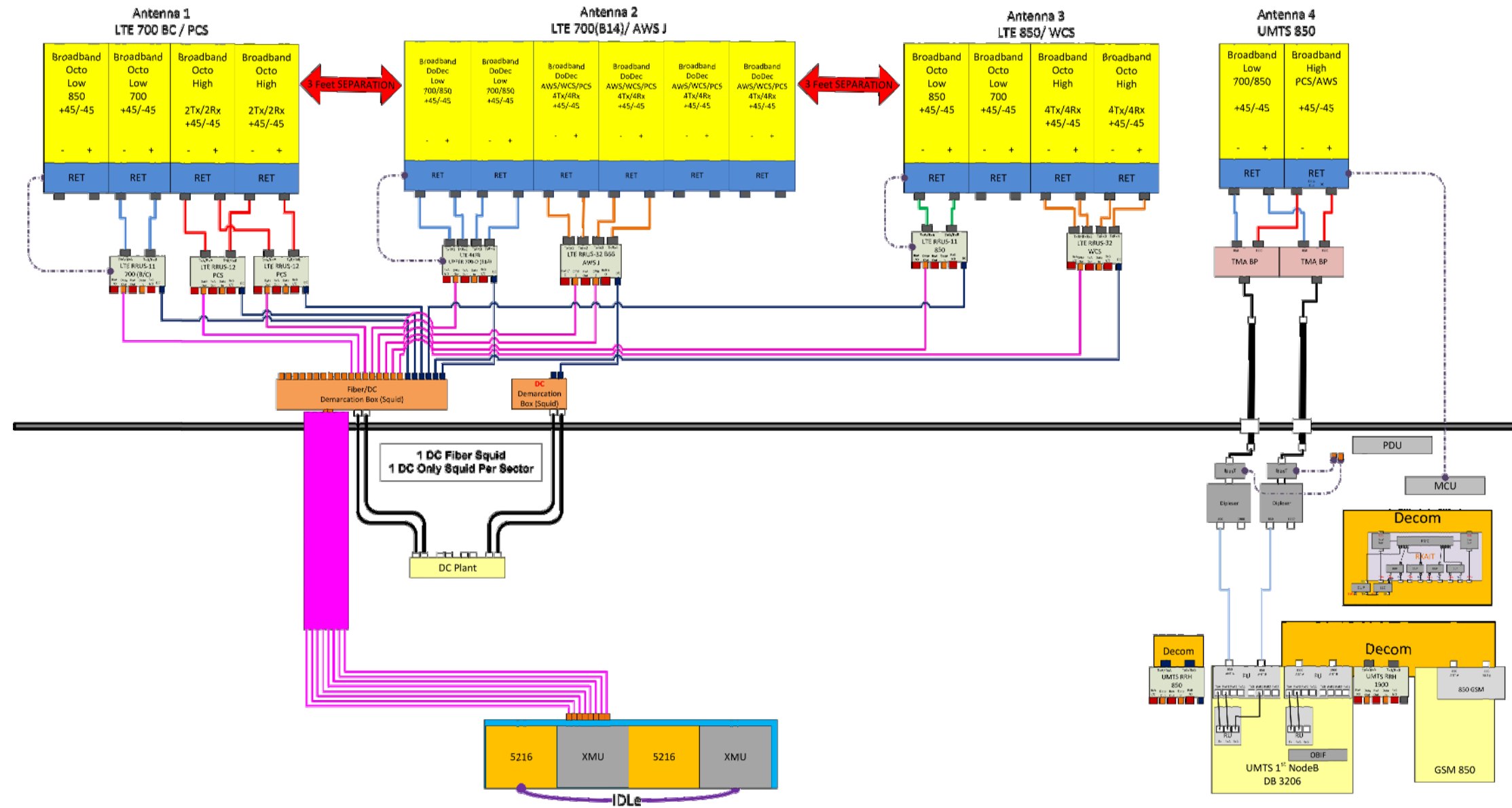
**NOTE:**

**CABLES IN VERTICAL RUNS.** CABLES INSTALLED IN VERTICAL RUNS AND PENETRATING MORE THAN ONE FLOOR, OR CABLES INSTALLED IN VERTICAL RUNS IN A SHAFT, SHALL BE TYPE CMR. FLOOR PENETRATIONS REQUIRING TYPE CMR SHALL CONTAIN ONLY CABLES SUITABLE FOR RISER OR PLENUM USE. LISTED RISER COMMUNICATIONS RACEWAYS AND LISTED PLENUM COMMUNICATIONS RACEWAYS SHALL BE PERMITTED TO BE INSTALLED IN VERTICAL RISER RUNS IN A SHAFT FROM FLOOR TO FLOOR. **ONLY TYPE CMR CABLES SHALL BE PERMITTED TO BE INSTALLED IN THESE RISERS. ONLY CMP CABLES SHALL BE PERMITTED TO BE INSTALLED IN PLENUMS.**

**METAL RACEWAYS OR FIREPROOF SHAFTS.** LISTED COMMUNICATIONS CABLES SHALL BE ENCASED IN A METAL RACEWAY OR LOCATED IN A FIREPROOF SHAFT HAVING FIRESTOPS AT EACH FLOOR.

**PENETRATION DETAILS**  
22x34 SCALE: N.T.S





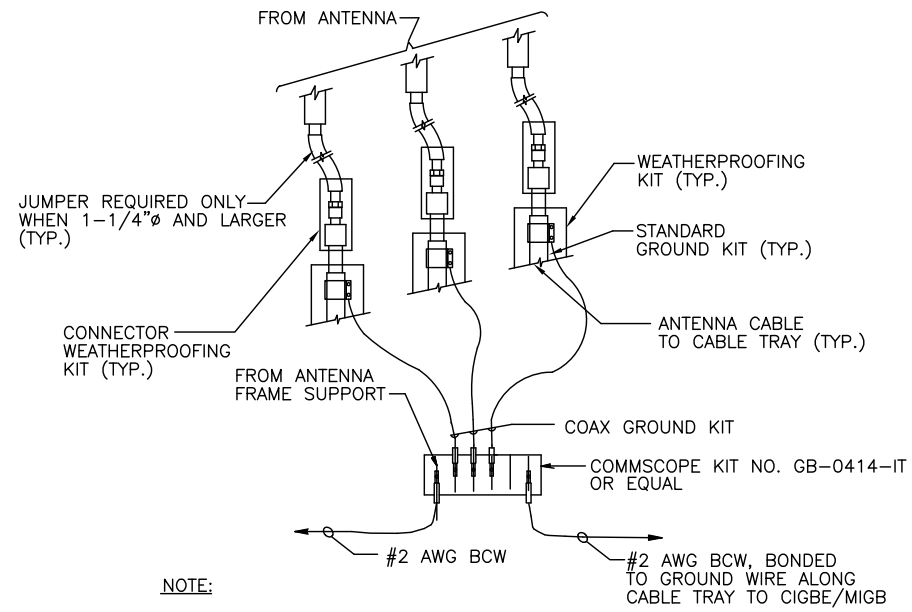
**RF PLUMBING DIAGRAM** 1  
SCALE: N.T.S. RF-1

**NOTE:**  
1. CONTRACTOR TO CONFIRM ALL PARTS.  
2. INSTALL ALL EQUIPMENT TO MANUFACTURER'S RECOMMENDATIONS

**NOTE:**  
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.

1	01/16/18	ISSUED FOR CONSTRUCTION	SG	AT	DJC
0	12/28/17	ISSUED FOR REVIEW	RB	AT	DJC
A	11/28/17	ISSUED FOR REVIEW	ET	AT	DJC
NO.	DATE	REVISIONS	BY	CHK	APP'D
SCALE: AS SHOWN		DESIGNED BY: AT	DRAWN BY: ET		

<b>AT&amp;T</b>		
<b>RF PLUMBING DIAGRAM</b> <b>(LTE 5C/6C)</b>		
<b>SITE NUMBER</b>	<b>DRAWING NUMBER</b>	<b>REV</b>
1268.00	RF-1	1



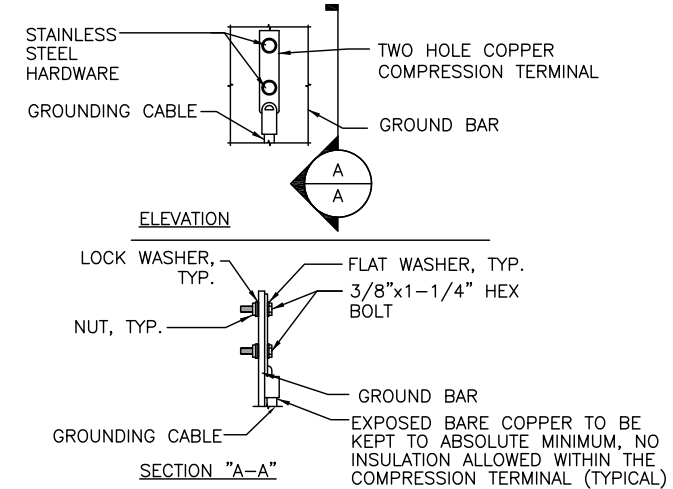
NOTE:

1. DO NOT INSTALL CABLE GROUND KIT AT A BEND AND ALWAYS DIRECT GROUND WIRE DOWN TO CIGBE.

**GROUND WIRE TO GROUND BAR CONNECTION DETAIL**

SCALE: N.T.S

1  
G-1



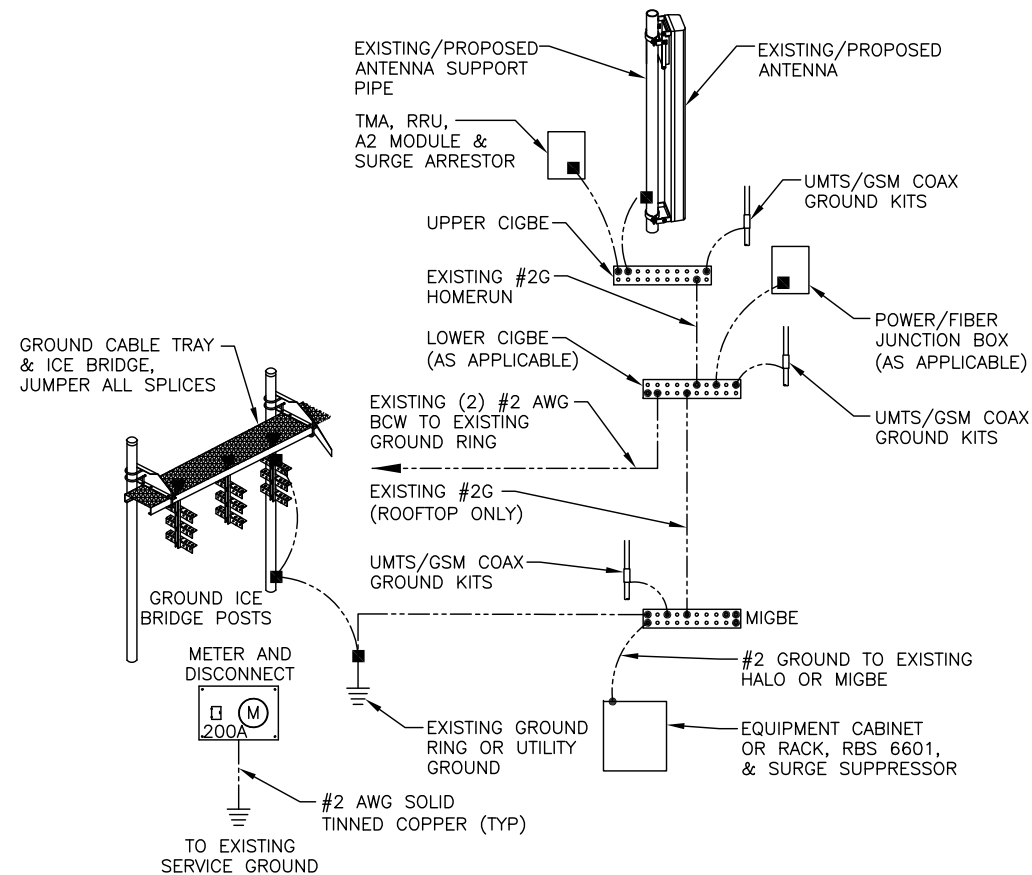
NOTE:

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

**TYPICAL GROUND BAR CONNECTION DETAIL**

SCALE: N.T.S

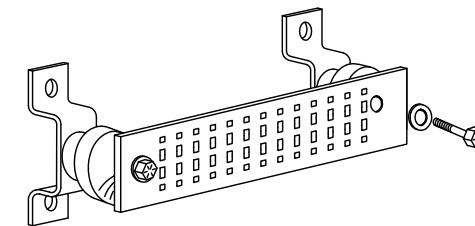
3  
G-1



**GROUNDING RISER DIAGRAM**

SCALE: N.T.S

2  
G-1



**GROUND BAR - DETAIL**

SCALE: N.T.S

4  
G-1

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

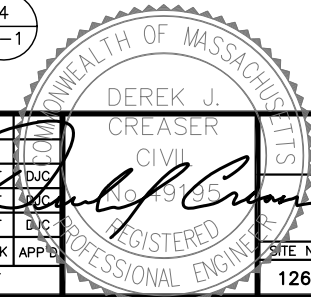
**SECTION "P" - SURGE PRODUCERS**

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

**SECTION "A" - SURGE ABSORBERS**

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

				AT&T	
				GROUNDING DETAILS (LTE 5C/6C)	
NO.	DATE	REVISIONS	BY	CHK	APP'D
1	01/16/18	ISSUED FOR CONSTRUCTION	SG	AT	DJC
0	12/28/17	ISSUED FOR REVIEW	RB	AT	DJC
A	11/28/17	ISSUED FOR REVIEW	ET	AT	DJC
SCALE: AS SHOWN			DESIGNED BY: AT	DRAWN BY: ET	
SITE NUMBER			DRAWING NUMBER		REV
1268.00			G-1		1





## Impact Statement Narrative

AT&T proposes to install three (3) additional antennas and supplementary components to the existing rooftop telecommunications facility at 690 Canton Street. Consistent with previous WCOD EIDR approvals for 690 Canton Street (in 1999, 2009, 2012, 2016, and 2017), all development, construction, and subsequent operations entailed in the proposed addition will fully meet the Environmental Impact and Design Standards, as defined in section 7.3 of the Westwood Zoning Bylaw, in the following manner:

7.3.8.1. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with preservation of the landscape arise.

7.3.8.2. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with the relation of the building to the environment arise.

7.3.8.3. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with open space arise.

7.3.8.4. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with the flow of traffic or other means of transportation arise.

7.3.8.5. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will be subject to the same utilities, processes, and standards for stormwater drainage and erosion control as the current operational antennas.

7.3.8.6. The existing rooftop telecommunications facility is designed for minimal visual impact and does not mount advertisements or signage other than required safety signage. As the proposed work is limited to modifying the existing telecommunications facility on the rooftop of the structure, no issues arise with the addition of signage or advertisements.

7.3.8.7. The existing rooftop telecommunications facility is designed for minimal visual impact and is screened and colored to blend with the fabric of the structure on which it is sited. As the proposed work is limited to modifying the existing telecommunications facility on the rooftop of the structure, no issues arise with the visual impact on nearby properties.

7.3.8.8. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will be subject to the same utilities, processes, and standards for safety and accessibility as the current operation antennas.

7.3.8.9. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with the heritage or history of the town or structure arise.

7.3.8.10. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will have a minimal adverse impact on the microclimate, if any.

7.3.8.11. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will operate with minimal impact on the utilities, processes, and standards for power and energy use as the existing antennas.

7.3.8.12. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will not be detrimental to the health, safety, or welfare of persons in the neighborhood.

7.3.8.13. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, nearby properties will perceive and experience no change in use of the site.

7.3.8.14. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas shall be harmoniously related to the appearance of the nearby pre-existing structures in the same fashion as the current operational antennas.

7.3.8.15. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will preserve the same standards for air quality as the current operational antennas.

7.3.8.16. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with wildlife or habitats arise.

7.3.8.17. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will be subject to the same utilities, processes, and standards for maintaining acceptable vibration levels as the current operational antennas.

7.3.8.18. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will be subject to the same utilities, processes, and standards for preventing electrical disturbance from EMF emission as the current operational antennas.

7.3.8.19. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, no issues with historic or archaeological sites arise.

7.3.8.20. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will be subject to the same utilities, processes, and standards for the management and disposal of solid waste as the current operational antennas.

7.3.8.21. As the proposed work is limited to modifying an existing telecommunications facility on the rooftop of the structure, the additional antennas will be subject to the same utilities, processes, and standards for protecting the integrity of the groundwater as the current operational antennas.

## WCOD EIDR Waiver Requests

AT&T proposes to install three (3) additional antennas and supplementary components to the existing rooftop telecommunications facility at 690 Canton Street. Consistent with previous WCOD EIDR approvals for 690 Canton Street (in 1999, 2009, 2012, 2016, and 2017), all development, construction, and subsequent operations entailed in the proposed addition will fully meet the Environmental Impact and Design Standards, as defined in section 7.3 of the Westwood Zoning Bylaw. AT&T requests that the following requirements for approval be waived due to the limited scope of the work on the existing facility.

7.3.7.1.1: No changes will affect landscape or vegetation surrounding the structure (antennas are rooftop-mounted).

7.3.7.1.2: No changes will affect natural features surrounding the structure (antennas are rooftop-mounted).

7.3.7.1.4: No changes will affect topography or grade (antennas are rooftop-mounted).

7.3.7.1.5: No changes will affect traffic patterns or flow (antennas are rooftop-mounted).

7.3.7.1.6: No changes will affect storm drainage or runoff (proposed antennas use the same facilities as existing antennas).

7.3.7.1.7: No changes will affect sewage or water supply (proposed antennas use the same facilities as existing antennas).

7.3.7.1.8: No changes will create need for new utilities, signage, storage, or trash disposal (proposed antennas use the same facilities as existing antennas).

7.3.7.1.9: No changes will affect natural or historic features in the course of installation or construction (antennas will be mounted on existing rooftop arrays alongside current antennas).

7.3.7.2: Changes will not require additional lighting.

7.3.7.3: No changes will affect traffic patterns or flow (antennas are rooftop-mounted).

7.3.7.4: No changes will substantially affect the appearance or profile of the structure or its telecommunications facility (antennas are rooftop-mounted; frames will hold 4 rather than 3 antennas).

9.4.6.1: Antennas are proposed for addition to an existing telecommunications facility (AT&T site previously permitted and operated under an EIDR originally granted in 1999).

9.4.6.2.4: Changes will not require additional fencing, lighting, landscaping, or signage.

9.4.6.2.5: Changes will not require clearing of any vegetation or trees.

9.4.6.2.6: Changes are limited to the existing telecommunications facility on the rooftop of the structure.

9.4.6.2.7: Antennas are proposed for addition to an existing telecommunications facility (AT&T site previously permitted and operated under an EIDR originally granted in 1999).



**LETTER OF AUTHORIZATION**

**RE: New England / 10071693 / Westwood Canton** □

**ADDRESS: 690 Canton Street, Westwood, MA 02090**

L&B CIP 690 Canton Street, owners of the above-described property, authorize New Cingular Wireless PCS, LLC ("AT&T") and/or their agent, to act as our nonexclusive agent for the sole purpose of filing and consummating any land use or building permit application(s) necessary to obtain approval of the applicable jurisdiction for AT&T's modification of the antenna site number MA1268 per plans dated January 18, 2018 T1, GN-1, A-1, A2, A3, A4, A5, A6, and RF-1 attached hereto as prepared by Hudson Design Group for the above-described property.

We understand that this application may be denied, modified or approved with conditions, and that any such conditions of approval or modifications will be the sole responsibility of the carrier and will be complied with prior to issuance of a building permit.

Signature: Jennifer Murphy as agent for  
L&B CIP 690 Canton Street

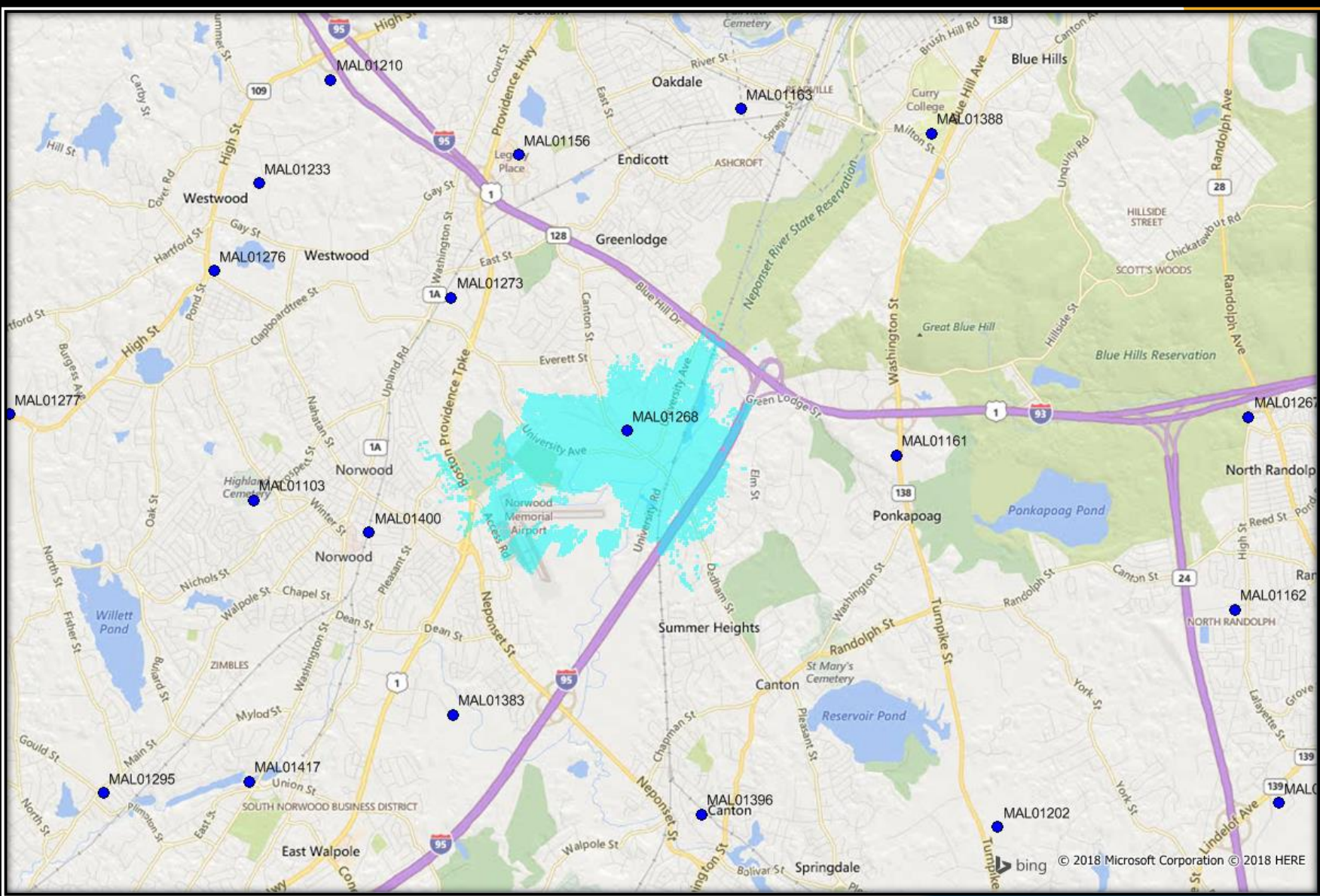
Print Name: Jennifer Murphy CC

# MAL01268 LTE Plots

- Zoning AWS Band Plots



# LTE AWS Band Coverage with Proposed MAL01268



# LTE AWS Band Coverage with Proposed & Future Planned Sites

