TOWN OF WEYMOUTH
BOARD OF ZONING APPEALS APPLICATION

Case Number: <u>2253</u>	rown Cierk Stamp
	Date 3/16/15
Determined to be complete and may now be filed	with Town Clerk: Signature of Principal Planner or Director
PROPERTY INFORMATION - TO BE COMPLET	TED BY APPLICANT
PROJECT / PROPERTY STREET ADDRESS:	120-140 Winter St.
Assessor's Map Sheet, Block, & Lot: 29 / 375	
	Overlay District: N/A
OWNER OF RECORD (S) (print & sign): Town	of Weymouth DPW/Police Dept.
(The owner of record is the person or entity who	owns title to the property as of today's date)
Address of owner of record: 75 Middle St.,	Weymouth, MA 02189
Norfolk County Registry of Deeds Book and Page	<sub>4</sub> No. <u>4694 / 267</u>
Or registered in Land Registration Office under Co	
NAME OF APPLICANT (S) (print & sign):	Cingular Wireless PCS, LLC
Applicant's Address: 550 Cochituate Rd.,	Suites 13 & 14, Framingham, MA 01701
Contact Information: Email Kathy Gleavy	Phone 508-271-8388
Check if you are an: owner(s) lessee(s)	optionee (s)
NAME & AFFILIATION OF REPRESENTATIVE:	
Address: SAI Communications, Inc.,	125 Tremont St., Rehoboth, MA 02769
Contact Information: Email dan.bilezikian@	sai-comm.com <sub>Phone</sub> 401-368-0006
NAME OF ENGINEER AND / OR ARCHITECT:	Chappell Engineering Assoc.,LLC
	review this entire package and the Board Rules and cedures. Your signature signifies that you have read the ere to them.
I (we) hereby certify that I (we) have read the Bo the statements within my (our) application are true	ard of Zoning Appeals Rules and Regulations and that and accurate to the best of my (our) knowledge.
Dan Bilezikian	
Applicant / Petitioner - Date (sign & print)	

NATURE OF REQUEST
Application is for: × Special Permit Variance Other:
Applicable Section of Zoning Ordinance (specify Section (s) of the Zoning Ordinance from which relief is sought):  Chapter 120-106.2B(1)
The above relief and Ordinance sections will be further reviewed after a complete package is submitted This may be amended by the Planning or Building staff during the application review process after having the benefit of plan to accurately advertise the application before the Board.
PETITIONER'S DESCRIPTION AND NARRATIVE: To be completed by all Board of Appeals Applicants. Attach additional sheets as necessary.
Describe what is presently located on the property (use as much detail as possible including all uses and square footage of each use):
The property belongs to the Town of Weymouth and is currently used as headquarters for the Police Dept. and DPW. A 150' lattice tower owned by Crown Atlantic Company which is also located on the property currently supports public safety antennas as well as one commercial wireless telecom facility.
2. The applicant seeks to (describe what you want to do on the property in as much detail as possible):
This proposal includes the addition of AT&T's antennas on the tower at a centerline elevation of 110', plus a 11'5" x 16' equipment shelter and 50kW diesel generator within a 20' x 38' area leased by Crown, approximately 100' northwest of the existing tower.
<ol> <li>Such a use is permitted by the Town of Weymouth Zoning Ordinance under Article (insert Article, Section of the Zoning Ordinance which permits the proposed use of the property).</li> </ol>
Chapter 120-106.2(B)(1)
<ol> <li>Are you aware if this property has been previously granted approvals from any Town Board or Commission? If so, please list (provide dates of previous approvals, book and page numbers or any recorded decisions and copies of past decisions).</li> </ol>
Case #2297, April 20, 1995, dimensional variance to allow for construction of 150' lattice tower granted to Town of Weymouth/Board of Selectmen, Bk. 11125, Pg. 724.
5. Any other additional information as relevant to the Variance or Special Permit:

### **ZONING COMPUTATION WORKSHEET**

(To be attached with all Board of Zoning Appeals Applications)

The Zoning Computation Worksheet must be completed by the Applicant / Petitioner. All information should be measured and calculated in accordance with the Weymouth Zoning Ordinance (Section 120-51 Table 1 "Schedule District Regulations" and other applicable sections of the Zoning Ordinance). The information should be based on engineer/surveyor/architectural prepared plans and or calculations. Further guidance can also be provided by the Board's step-by-step application instructions and by contacting the Planning or Building Department while completing this section.

Data	Required	Existing	Proposed	
Use		Wireless communication structure	Same	
Lot Area / Size (Sq. Ft.)		10.09 ac.	10.09 ac.	
Dwelling Units		N/A	N/A	
Frontage (ft.)	43'	643'	N/A	
Lot Width (ft.)			No Change	
Front Yard Setback (ft.)	20'	25.3'	126.8'	
Front Yard Setback (ft.)  - corner lots	N/A	N/A	N/A	
Side Yard Setback (ft.)	10'	24.8'	213.7'	
Side Yard Setback (ft.)	10'	>24.8'	>213.7'	
Rear Yard Setback (ft.)	10'	119'	501.3'	
Height (ft.) & # of Stories	35'	151.8'	110'	
Lot Coverage	75% max	52.04%	52.07%	
Off-Street Parking Spaces			No Change	
Off-Street Loading Spaces	N/A	N/A	N/A	
Parking Setback	N/A	N/A	N/A	
Accessory Structure Setback	N/A	N/A	205.4'	
Landscaping	N/A	N/A	N/A	
Floor Area Ratio	N/A	N/A	N/A	
Signage	N/A	N/A	N/A	
Other:				

### SPECIAL PERMIT APPLICATION

To be completed for Special Permit Applications only.

### SPECIAL PERMIT FINDINGS OF FACT

In the spaces below explain how the adverse effects of the proposal will not outweigh its beneficial impacts to the Town with respect to each of the following considerations per Article XXV, Section 120-122 of the Zoning Ordinance. The Special Permit Granting Authority may approve any such application for a special permit *only* if it finds that, in its judgment, all of the following conditions are met. (Attach additional supporting documentation as necessary).

1. Is the specific site an appropriate location for such a use? Please explain.

Yes. This proposal is for collocation of a wireless telecommunications facility on an existing 150' lattice tower. One commercial carrier already occupies space on the tower.

2. Will the proposed use / structure be detrimental or adversely affect the character of the neighborhood or town? Please explain.

No. The proposed use is permitted by special permit within the zoning district. The proposed facility will be an additional component of a use already in existence at the site. Collocation on an existing tower is mandated in the Town's zoning ordinance (Chapter 120, Section 106.2 (E)(6)).

3. Is there potential for nuisance or serious hazard to vehicles or pedestrians? Please explain.

No. The facility is a passive use which is unmanned with the exception of periodic visits (once or twice a month) by service technicians. During construction of the proposed facility, it will be necessary to trench across the driveway which provides ingress/egress to the Police and Fire Departments. AT&T acknowledges that continuous access must be maintained by means of this driveway. AT&T will work closely with the Town to coordinate the timing and execution of any such work, and will ensure that adequate access is maintained at all times.

4. Will adequate and appropriate facilities, utilities and other public services be provided for the proper operation of the proposed use? Please explain.

The proposed facility is an unmanned passive use requiring no public services or utilities.

5. Will the public convenience and welfare be substantially serviced with this proposal? Please explain.

As one of the largest wireless carriers in America, AT&T is relied upon by millions of subscribers for access to wireless voice and data services. AT&T RF engineers have identified a significant gap in coverage along Winter, Middle and Washington Streets and the surrounding neighborhoods in the Town of Weymouth. Elimination of this gap requires the construction of a new wireless facility as detailed in this application. The public convenience and welfare, and especially its safety, will be substantially enhanced by the improved coverage that will result from the construction of this facility.

March 16, 2015

### **By Overnight Delivery**

Town of Weymouth **Board of Zoning Appeals** 75 Middle Street Weymouth, MA 02189

Re: Wireless Telecommunications Facility

Applicant:

New Cingular Wireless PCS, LLC by and through its Manager, AT&T Mobility

Corporation ("AT&T" or "Applicant")

Lessor:

Town of Weymouth, Massachusetts

Lessee:

Crown Atlantic Company, LLC

Site:

120-140 Winter Street, Weymouth, MA (Assessor's Map 29, Block 375, Lot 6)

(the "Site")

Facility:

Install twelve (12) panel antennas (four (4) panel antennas per sector) on an existing 150 ft. lattice tower as well as associated antenna equipment including remote radio heads, surge arrestors, coaxial and power cables, cable trays, global positioning system antennas and conduits for new network service with associated electronic equipment inside an equipment shelter plus an emergency

backup generator (the "Facility").

Relief Sought: (1) Special Permit for the modification of an existing wireless communication freestanding structure pursuant to Chapter 120-106.2(B)(1) of the Weymouth Zoning Ordinance (the "Ordinance"), Massachusetts General Laws, Ch. 40A, and

the Federal Telecommunications Act of 1996.

(2) Any other zoning relief required (All relief if and to the extent necessary, all

rights reserved under Massachusetts General Laws, Ch. 40A, the

Telecommunications Act of 1996 and otherwise)

Dear Mr. Chairman and Members of the Board of Zoning Appeals:

On behalf of AT&T, we are pleased to submit this memorandum to the Town of Weymouth Board of Zoning Appeals (the "Board")in support of AT&T's special permit application (the "Application") for the installation, operation and maintenance of the Facility on the existing tower at the Site.

### **BACKGROUND**

AT&T proposes to install twelve (12) panel antennas (four (4) panel antennas per sector) as well as associated equipment including remote radio heads, surge arrestors, and coaxial cables at a centerline elevation of 110' AGL on an existing 150' lattice tower. Cables from the tower will run underground in conduits beneath an existing access drive to an 11'6" x 16' equipment shelter housing AT&T's electronic equipment. Two global positioning system antennas will be attached to the shelter, and a 50kW emergency backup generator will be located adjacent to the shelter on the west side. The Facility is shown in detail on the plans (the "Plans") attached hereto and submitted with this Application.

### **APPLICATION PACKAGE**

Enclosed is a check for \$450.00 for the Special Permit Application Fee plus a check for \$47.05 for Gatehouse Media. In addition, enclosed are three (3) copies of the following materials:

- 1. Completed Application Form;
- 2. Copy of Application Fee checks;
- 3. Crown Castle Letter of Authorization
- 4. AT&T Letter of Authorization;
- 5. AT&T's Relevant FCC License Information:
- 6. Copies of the following plans prepared by Chappell Engineering LLC.;

SHEET	TITLE	REV. DATE
1	Title Sheet	3/2/15
2	General Notes	3/2/15
3	Property Plan	3/2/15
4	Site Plan	3/2/15
5	Elevation, Antenna Plan & GPS Detail	3/2/15
6	Antenna & Equipment Details	3/2/15
7	Shelter Elevations	3/2/15
8	Plumbing Diagram	3/2/15

- 7. Structural Analysis
- 8. Photo-simulations showing the proposed installation from various viewpoints;

- 9. Noise Study
- 10. Report of Radio Frequency Engineer and attached coverage maps, prepared by Ryan Ramos of AT&T, depicting AT&T's wireless coverage with and without the proposed PWSF, and demonstrating the need for the proposed PWSF and the coverage it will provide;
  - 11. Proposed equipment specifications.

### **NOTIFICATIONS**

AT&T understands that the Board of Zoning Appeals will post, send and arrange for publication of the required notices for the public hearing.

### **RELIEF REQUESTED**

AT&T respectfully requests that the Board grant a special permit to modify an existing wireless communication freestanding structure pursuant to Article 120-106.2(B)(1) of the Ordinance, and such other relief as deemed necessary for the installation, operation and maintenance of the Facility as provided in the Plans submitted with the Application, all rights reserved.

### **COMPLIANCE WITH CHAPTER 120, ARTICLE XXI, SECTION 106.2 OF THE ORDINANCE**

A. Purpose. The purpose of this bylaw includes minimizing adverse impacts of wireless communication facilities, satellite dishes and antennas on adjacent properties and residential neighborhoods; minimizing the overall number and height of such facilities; and promoting shared use of such facilities to reduce the need for new facilities.

AT&T submits this Application for a proposed facility to be collocated on an existing 150' tower in accordance with the purpose of the bylaw.

- B. Wireless communication equipment, as defined in ~120-6, shall be permitted in the following districts as noted below, unless specifically prohibited:
- (1) Wireless communication equipment, freestanding structure as a special permit from the Board of Zoning Appeals in Districts I-1, I-1, POP and POS.

The subject parcel is located in a Public Open Space (POS) district. AT&T proposes a modification of existing wireless communication equipment, freestanding structure by collocating twelve (12) panel antennas and ancillary equipment at a centerline elevation of 110' and installing an 11'6"x 16' equipment shelter and 50kW backup generator approximately 100 ft. northwest of the existing tower. AT&T's tower mounted equipment will be connected to the equipment shelter by fiber and power

cables running inside conduit underneath an existing paved driveway as shown on the Plans under Tab 6.

(2) Wireless communication, building mounted equipment, as an accessory use by site plan review, in Districts R-3, R-4, B-1, B-2, HT, MS, I-1, I-2, PIP, POP and POS.

Not applicable. The proposed Facility will be collocated on an existing tower.

(3) Wireless communication, indoor equipment as an accessory use permitted in Districts R-3, R-4, B-1, B-2, HT, MS, I-1, I-2, PIP, POP and POS.

Not applicable. The proposed Facility will be collocated on an existing tower.

(4) Wireless communication, accessory equipment, as an accessory use by site plan review, in Districts R-3, R-4, B-1, B-2, HT, MS, I-1, I-2, PIP, POP and POS.

Not applicable.

- C. The following information shall be supplemental to normal application criteria and submitted with each special permit and site plan review application for wireless communication equipment:
- (1) A locus plan at a scale of one inch equals 200 feet which shows all property lines, the exact location of proposed structures, streets, landscape features, residential dwellings and all buildings within 300 feet of the facility.

Please refer to the Plans submitted with this Application, located under Tab 6.

(2) A color photograph or rendition of the proposed monopole with its antenna and/or panels. For satellite dishes or residential antenna, a color photograph or rendition illustrating the dish at the proposed location is required. A rendition shall also be prepared illustrating a view of the monopole dish or antenna from the nearest street or streets.

Please refer to the photo-simulations submitted with this Application, located under Tab 8

- (3) The following information prepared by one or more professional engineers:
- (a) A description of the monopole and the technical, economic and other reasons for the proposed location, height and design.

AT&T is proposing to collocate on an existing lattice tower. Please refer to the Plans submitted with this Application, located under Tab 6.

(b) Confirmation that the monopole complies with all applicable federal and state standards.

AT&T is proposing to collocate on an existing lattice tower.

(c) A description of the capacity of the monopole, including the number and type of panels, antenna and/or transmitter receivers that it can accommodate and the basis for these calculations.

Please refer to the Structural Analysis submitted with this Application, located under Tab 8.

(4) A signed affidavit by the applicant that the proposed facility complies with, or is exempt from, applicable regulations administered by the Federal Aviation Administration (FAA), Federal Communications Commission (FCC), Massachusetts Aeronautics Commission and the Massachusetts Department of Public Health.

Please refer to the Report of Radio Frequency Engineer submitted with this Application, located under Tab 10.

(5) A signed affidavit by the applicant listing all wireless communication equipment within a one-half mile radius and the availability of space at each location.

The requirements of this provision of the Ordinance are not applicable to this Application because AT&T is not proposing a new freestanding structure. AT&T is proposing to collocate on an existing lattice tower.

- D. The following general requirements shall apply to all wireless communication equipment:
- (1) No wireless communication facility, which shall include monopoles, satellite dishes over three feet in diameter or antenna, shall be erected or installed except in compliance with the provisions of ~120-106.2B.

AT&T will comply with the provisions of ~120-106.2B

(2) Any proposed extension in the height or the replacement of a facility shall be subject to a new application for a site plan review or special permit, as applicable in ~120-106.2B.

Not applicable. AT&T is not proposing to extend the height of or to replace a facility. AT&T proposes to collocate on an existing 150' tower at a centerline elevation of 110'.

(3) The Inspector of Buildings shall review petitions for the addition of cells, antenna or panels to any lawfully permitted existing wireless communication monopole or tower and shall allow such without a new hearing, provided that such additions comply with the intent and criteria of ~120-106.2 and the conditions of approval of the special permit.

AT&T's proposal includes the addition of an equipment shelter and generator outside the originally permitted facility which may require a new special permit.

(4) Only freestanding monopoles, with associated antenna and/or panels, are allowed. Lattice-style towers and similar facilities requiring three or more legs and/or guy wires for support are not allowed.

The subject lattice-style tower already exists. AT&T proposes to collocate on an existing tower.

(5) Wireless communication monopoles and associated facilities shall be suitably screened from abutters and residential neighborhoods.

Please refer to the photo-simulations submitted with this Application, located under Tab 8.

(6) Structures shall be removed within one year of cessation of use. If applicable, annual certification demonstrating continuing compliance with the standards of the Federal Communications Commission, Federal Aviation Administration and the American National Standards Institute and required maintenance shall be filed with the Inspector of Buildings by the special permit holder.

AT&T agrees to comply with these provisions.

- E. The following design criteria shall be used when preparing plans for the siting and construction of all wireless communications facilities.
- (1) All monopoles shall be designed to be constructed at the minimum height necessary to accommodate the anticipated and future use. All monopoles shall be set back from R-1, R-2 and NCD Zoning District boundaries by a distance at least equal to two times the height of the monopole. No monopole shall be placed closer than 500 feet from another freestanding wireless communications structure.

The subject lattice tower is an existing structure.

(2) No monopole or attached accessory antenna shall exceed 120 feet in height as measured from natural ground level at the base of the pole. No monopole shall be constructed which requires guy wires. Monopoles shall not be located on buildings. Any monopole in excess of that permitted in Table 1, Schedule of District Regulations, at the end of this chapter will require a variance from the Board of Zoning Appeals.

AT&T proposes to attach antennas and associated equipment at a centerline elevation of 110' on an existing 150' lattice tower.

(3) Antenna, dishes and all other equipment located on any structure shall not exceed 10 feet above the height of the building, as defined in ~120-6.

Not applicable. AT&T is proposing to collocate on an existing tower.

(4) All wireless communication facilities shall be sited in such a manner that the view of the facility from adjacent abutters, residential neighbors and other areas of the town shall be as limited as possible. All monopoles and dishes shall be painted or otherwise colored so they will blend in with the landscape or the structure on which they are located. A different coloring scheme shall be used to blend the structure with the landscape below and above the tree or building line.

As evidenced by the photographs and photo-simulations submitted with this Application, the proposed Facility will have minimal impact on the view from abutting properties.

(5) Satellite dishes and/or antenna shall be situated on or attached to a structure in such a manner that they are screened, preferably not being visible from abutting streets. Freestanding dishes or antenna shall be located on the landscape in such a manner so as to minimize visibility from abutting streets and residences and to limit the need to remove existing vegetation. All equipment shall be colored, molded and/or installed to blend into the structure and/or the landscape.

As evidenced by the photographs and photo-simulations submitted with this Application, the proposed Facility will have minimal impact on the view from abutting properties.

(6) Wireless communication facilities shall be designed to accommodate the maximum number of users technologically practical. The intent of this requirement is to reduce the number of facilities that will be required to be located within the town.

The subject 150' lattice tower already exists.

(7) Fencing shall be provided to control access to freestanding wireless communication facilities and shall be compatible with the scenic character of the town and shall not be of razor wire.

The tower is located within a fenced compound. AT&T's proposed equipment shelter and generator will be located behind a new fence separating the DPW yard from the Fire/Police Dept. access drive as shown on the Site Plan and Property Plan included with this Application, located under Tab 6.

(8) All freestanding wireless communication structures shall have no signs except for directional signs, no trespassing signs and a required sign giving a phone number where the owner can be reached on a twenty-four-hour basis. All signs shall conform with Article XVI, Signs, of the Zoning.

AT&T's Facility will have no other signs than those required by the Ordinance or by state or federal law.

(9) No lighting of towers shall be prohibited.

No tower lighting will be required for AT&T's proposed Facility.

(10) There shall be a minimum of one parking space for each facility.

AT&T will utilize an existing 20' wide access/utility area as shown on the Site Plan (pg. Z01 of the Plans submitted with this Application, located under Tab 6).

- F. The following types of wireless communication towers and equipment are exempt from the provisions of this article:
- (1) Amateur radio tower. An "amateur radio tower" is defined as a tower used solely in accordance with the terms of amateur radio service license(s) issued by the Federal Communications Commission (FCC) to members of the family residing on the premises and not used or licensed for any commercial purpose.

Not applicable. AT&T is proposing to construct a commercial wireless communication facility.

(2) Installation of any antenna, panels or similar equipment on a lawfully permitted freestanding wireless communication tower, provided that all such additional equipment conforms to the conditions of the existing permit.

This provision is not applicable due to the addition of an equipment shelter and backup generator outside of the area covered under the original special permit.

(3) A tower erected to serve communication between farm vehicles and/or farm units incidental to use of land for farming. Except for amateur radio use as permitted in~120-106.2F(1), the use of such a tower under this exemption may not be combined with any other use.

Not applicable. AT&T is proposing to construct a commercial wireless communication facility.

(4) A tower or antenna erected for the Town of Weymouth for municipal public safety communication purpose.

Not applicable. AT&T is proposing to construct a commercial wireless communication facility

### IV. AT&T's NETWORK

AT&T has more than 120 million subscribers in the United States (including Puerto Rico and the Virgin Islands) who use the nation's fastest 4Gnetwork. AT&T is dedicated to providing customers with wireless technology designed to enrich their lives. AT&T continually raises its performance to meet and exceed customer expectations.

AT&T is licensed by the Federal Communications Commission to provide wireless phone service across the country and throughout Massachusetts, including the Town of Weymouth and surrounding communities. Wireless coverage for voice and data is provided by placement of a number of low power antenna sites within a given area. The sites are spaced so that coverage from each location overlaps with its neighboring sites. When a connection is established on a certain site, the wireless device monitors the signal from the serving site, as well as the signal of all the adjacent sites. When the wireless device receives a stronger signal from an adjacent site, it requests a transfer from the site it is currently using to the stronger site. If there is seamless coverage provided by the carrier, the connection will transfer without interruption. If there is a lack of appropriate signal strength at the transfer point, the quality of the connection will degrade and possibly drop.

### V. FEDERAL TELECOMMUNICATIONS ACT

AT&T's application is governed by the provisions of the Federal Telecommunications Act of 1996, which the United States Supreme Court has explained as follows:

Congress enacted the Telecommunications Act of 1996 (TCA)...to promote competition and higher quality in American telecommunications services and to "encourage the rapid deployment of new telecommunications technologies."... One of the means by which it sought to accomplish these goals was reduction of the impediments imposed by local governments upon the installation of facilities for wireless communications, such as antenna towers. To this end, the TCA amended the Communications Act of 1934 .... To include § 332(c)(7), which imposes specific limitations on the traditional authority of state and local governments to regulate the location, construction, and modification of such facilities, ... 47 U.S.C. § 332(c)(7). Under this provision, local governments may not "unreasonably discriminate among providers of functionally equivalent services," § 332(c)(7)(B)(i)(I), take actions that "prohibit or have the effect of prohibiting the provision of personal wireless services," § 332(c)(7)(B)(i)(II), or limit the placement of wireless facilities "on the basis of the environmental effects of radio frequency emissions," § 332(c)(7)(B)(iv). They must act on requests for authorization to locate wireless facilities "within a reasonable period of time," § 332(c)(7)(B)(ii), and each decision denying such a request must "be in writing and supported by substantial evidence contained in a written record," § 332(c)(7)(B)(iii).

*City of Rancho Palos Verdes, Cal. V. Abrams*, 544 U.S. 113, 115-116, 125 S.Ct. 1453, 1455-1456 (2005) (internal citations omitted).

The TCA was intended to provide for a pro-competitive, deregulatory national policy framework designed to accelerate rapid private sector deployment of advanced telecommunications and information technologies to all Americans. The proposed Facility will help bring advanced and improved wireless telecommunication and information technologies to Weymouth.

### VII. <u>CONCLUSION</u>

AT&T respectfully requests that the Board of Zoning Appeals grant the requested Special Permit and any other necessary zoning relief required for the proposed wireless communication facility.

Please let me know if we can provide any further information regarding this application.

Sincerely,

Dan Bilezikian

SAI Communications, Inc. for AT&T Mobility.

cc: Jessica Rincon (by email - w/ encl.)

Pat Nysten (by email - w/ encl.)

### PROJECT INFORMATION

SCOPE OF WORK:

INSTALL (12) PANEL ANTENNAS, (21) RRU'S, (6) A2 MODULES & (4) SURGE SUPPRESSORS ON AN EXISTING SELF—SUPPORT TOWER AND PROPOSED EQUIPMENT SHELTER.

SITE ADDRESS:

120 WINTER STREET WEYMOUTH, MA 02188

STRUCTURE OWNER:

TOWN OF WEYMOUTH - DPW/POLICE DEPARTMENT

75 MIDDLE STREET
EAST WEYMOUTH, MA 02189

LATITUDE: LONGITUDE: 42" 12' 3.83" 70° 57' 3.58"

ANTENNA FI FVATION: JURISDICTION:

110.0' AGL

CURRENT USE:

TOWN OF WEYMOUTH TELECOMMUNICATIONS FACILITY

PROPOSED USE:

TELECOMMUNICATIONS FACILITY

NAME OF APPLICANT:

AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

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

STRUCTURAL REPORT REFERENCE:

STRUCTURAL ANALYSIS AND REPORT ENTITLED "WEYMOUTH POLICE HEADQUARTERS" BY CROWN CASTLE, DATED 06/14/13.

### APPLICABLE BUILDING CODES AND STANDARDS

SUBCONTRACTOR'S WORK SHALL COMPLY WITH PROJECT STANDARD NOTES, SYMBOLS AND DETAILS (SEE DRAWING INDEX FOR STANDARD NOTES AND DETAILS INCLUDED WITH TYPICAL DRAWING PACKAGE).
SUBCONTRACTOR 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

BUILDING CODE: BOCA NATIONAL BUILDING CODE 1999

ELECTRICAL CODE:

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) 70 (2014)

NATIONAL ELECTRICAL CODE (NEC 2011)

AMERICAN CONCRETE INSTITUTE (ACI) 318, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), MANUAL OF STEEL CONSTRUCTION, ASD, NINTH EDITION TELECOMMUNICATIONS INDUSTRY ASSOCIATION (TIA) 222-G, STRUCTURAL STANDARD FOR

TOWER AND ANTENNA SUPPORTING STRUCTURES: TIA 607, COMMERCIAL BUILDING GROUNDING AND BONDING REQUIREMENTS FOR TELECOMMUNICATIONS

INSTITUTE FOR ELECTRICAL AND ELECTRONICS ENGINEERS (IEEE) 81, GUIDE FOR MEASURING EARTH RESISTIVITY, GROUND IMPEDANCE, AND EARTH SURFACE POTENTIALS OF A GROUND SYSTEM IEEE 1100 (1999) RECOMMENDED PRACTICE FOR POWERING AND GROUNDING OF ELECTRONIC EQUIPMENT IEEE C62.41, RECOMMENDED PRACTICES ON SURGE VOLTAGES IN LOW VOLTAGE AC POWER CIRCUITS (FOR LOCATION CATEGORY "C3" AND "HIGH SYSTEM EXPOSURE")

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.

### DRAWING INDEX

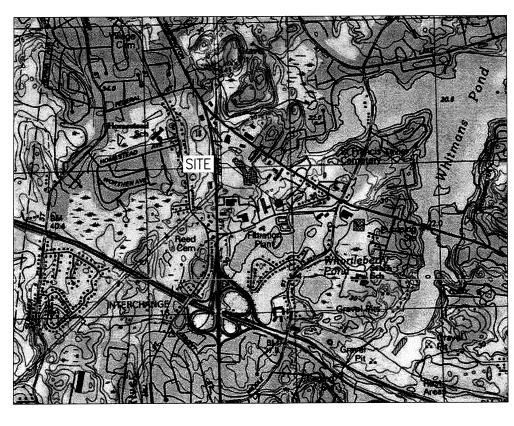
SHEET	DESCRIPTION	REV
T01	TITLE SHEET	5
G01	GENERAL NOTES	5
C01	PROPERTY PLAN	5
<b>Z</b> 01	SITE PLAN	5
<b>Z</b> 02	ELEVATION, ANTENNA PLAN & GPS DETAIL	5
Z03	ANTENNA & EQUIPMENT DETAILS	5
<b>Z</b> 04	SHELTER ELEVATIONS	5
Z05	PLUMBING DIAGRAM	5



# **EAST WEYMOUTH SITE NUMBER: 2738**

#### SCALE: 1"=1000' VICINITY MAP

FOLLOW I-90 EAST/MASS PIKE TOWARD BOSTON. TAKE EXIT 14 FOR I-95 SOUTH TOWARD SOUTH SHORE. CONTINUE ONTO US-1 NORTH. CONTINUE ONTO I-93 NORTH / US-1 NORTH. TAKE EXIT 18-7 FOR MA-3 SOUTH TOWARD CAPE COD / WASHINGTON STREET / QUINCY CENTER / TRANSIT STATION. TAKE EXIT 7 ON THE LEFT FOR MA-3 SOUTH TOWARD CAPE COD. TAKE EXIT 16A FOR MA-18 NORTH / MAIN STREET TOWARD WEYMOUTH. TURN RIGHT ONTO WINTER STREET. THE SITE IS LOCATED ON THE LEFT HAND SIDE.



### **GENERAL NOTES**

- 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.
- 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.
- CONTRACTOR SHALL VERIFY ALL PLANS AND EXISTING DIMENSIONS AND CONDITIONS ON THE JOB SITE AND SHALL IMMEDIATELY NOTIFY THE AT&T REPRESENTATIVE IN WRITING OF DISCREPANCIES BEFORE PROCEEDING WITH THE WORK OR BE RESPONSIBLE FOR SAME.

### **UNDERGROUND SERVICE ALERT**



AT LEAST 72 HOURS PRIOR TO DIGGING, THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT 1-888-DIG-SAFE

ENGINEERING ASSOCIATES, LLC Civil Structural Land Surveying

R.K. EXECUTIVE CENTRE 201 BOSTON POST ROAD WEST SUITE 101 MARLBOROUGH, MA 01752 (508) 481-7400

**EAST WEYMOUTH** SITE NO.: 2738

120 WINTER STREET

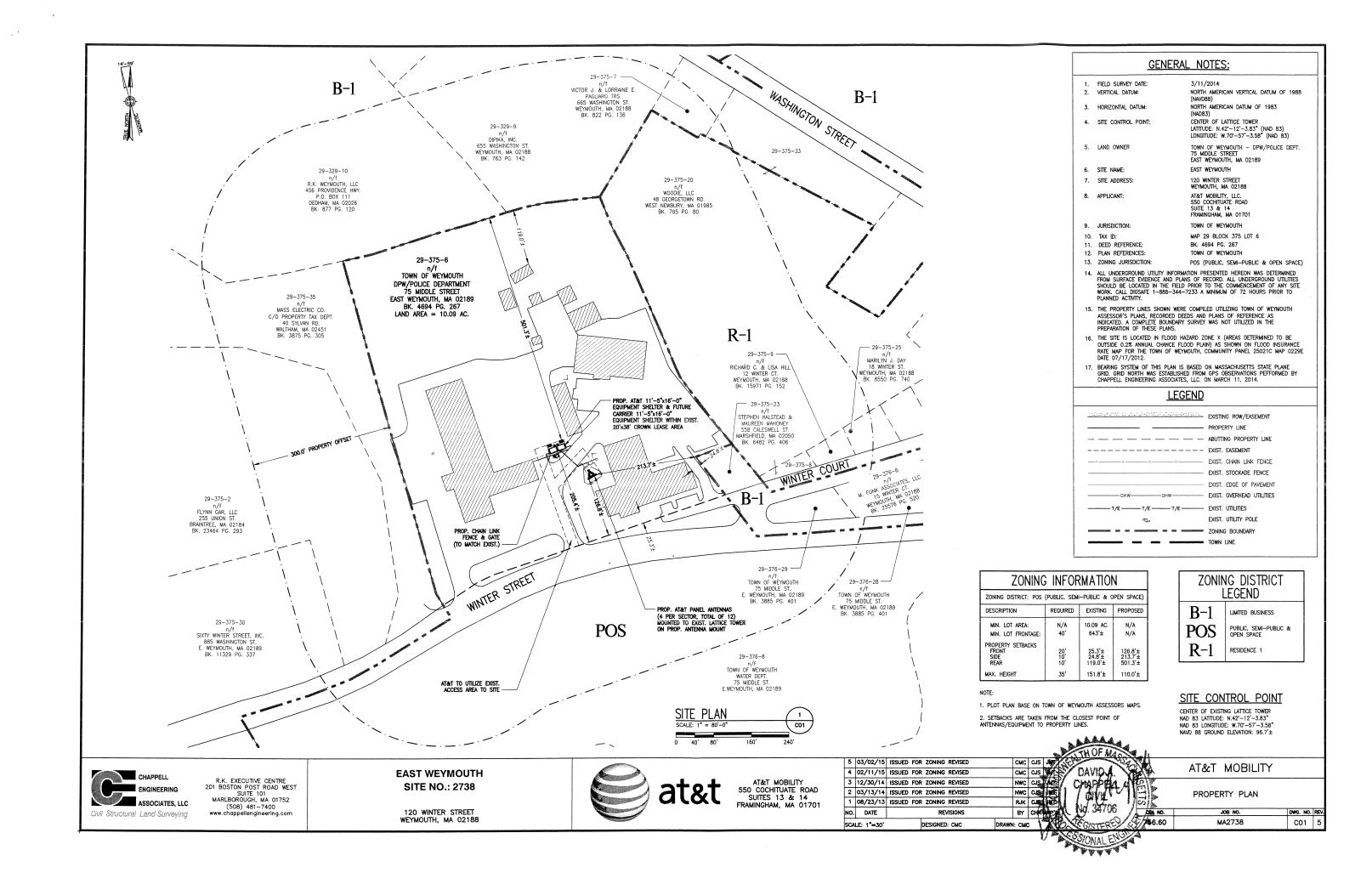


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AT&T MOBILITY TITLE SHEET

MA2738 T01 5



### **GENERAL NOTES:**

- FOR THE PURPOSE OF CONSTRUCTION DRAWINGS, THE FOLLOWING DEFINITIONS SHALL APPLY:
   CONTRACTOR SAI
   SUBCONTRACTOR GENERAL CONTRACTOR (CONSTRUCTION)
  - OEM ORIGINAL EQUIPMENT MANUFACTURER
- 2. PRIOR TO THE SUBMISSION OF BIDS, THE BIDDING SUBCONTRACTOR SHALL VISIT THE CELL SITE TO FAMILIARIZE WITH THE EXISTING CONDITIONS AND TO CONFIRM THAT THE WORK CAN BE ACCOMPLISHED AS SHOWN ON THE CONSTRUCTION DRAWINGS. ANY DISCREPANCY FOUND SHALL BE BROUGHT TO THE
- 3. ALL MATERIALS FURNISHED AND INSTALLED SHALL BE IN STRICT ACCORDANCE WITH ALL APPLICABLE CODES, REGULATIONS, AND ORDINANCES. SUBCONTRACTOR SHALL ISSUE ALL APPROPRIATE NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY REGARDING THE PERFORMANCE OF THE WORK.
- 4. ALL WORK CARRIED OUT SHALL COMPLY WITH ALL APPLICABLE MUNICIPAL AND UTILITY COMPANY SPECIFICATIONS AND LOCAL JURISDICTIONAL CODES, ORDINANCES AND APPLICABLE REGULATIONS.
- 5. 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.
- 7. THE SUBCONTRACTOR SHALL INSTALL ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS UNLESS SPECIFICALLY STATED OTHERWISE.
- 8. IF THE SPECIFIED EQUIPMENT CANNOT BE INSTALLED AS SHOWN ON THESE DRAWINGS, THE SUBCONTRACTOR SHALL PROPOSE AN ALTERNATIVE INSTALLATION FOR APPROVAL BY THE CONTRACTOR.
- 9. 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
- 10. THE SUBCONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS, PAVEMENTS, CURBS, LANDSCAPING AND STRUCTURES. ANY DAMAGED PART SHALL BE REPAIRED AT SUBCONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
- 11. SUBCONTRACTOR SHALL LEGALLY AND PROPERLY DISPOSE OF ALL SCRAP MATERIALS SUCH AS COAXIAL CABLES AND OTHER TIEMS REMOVED FROM THE EXISTING FACILITY. ANTENNAS REMOVED SHALL BE RETURNED TO THE OWNER'S DESIGNATED LOCATION.
- 12. SUBCONTRACTOR SHALL LEAVE PREMISES IN CLEAN CONDITION.
- 13. THE SUBCONTRACTOR SHALL SUPERVISE AND DIRECT THE PROJECT DESCRIBED HEREIN. THE SUBCONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES FOR COORDINATING ALL PORTIONS OF THE WORK UNDER THE CONTRACT.
- 14. SUBCONTRACTOR SHALL NOTIFY CHAPPELL 48 HOURS IN ADVANCE OF POURING CONCRETE OR BACKFILLING TRENCHES, SEALING ROOF AND WALL PENETRATIONS & POST DOWNS, FINISHING NEW WALLS OR FINAL ELECTRICAL CONNECTIONS FOR ENGINEERING REVIEW.
- 15. NOT USED.
- 16. 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.
- 17. 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.
- 18. 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 TO BE WORN TO ALERT OF ANY DANGEROUS EXPOSURE LEVELS.

### SITE WORK GENERAL NOTES:

- 1. THE SUBCONTRACTOR SHALL CONTACT UTILITY LOCATING SERVICES PRIOR TO THE START OF CONSTRUCTION
- 2. ALL EXISTING ACTIVE SEWER, WATER, GAS, ELECTRIC, AND OTHER UTILITIES WHERE ENCOUNTERED IN THE WORK, SHALL BE PROTECTED AT ALL TIMES, AND WHERE REQUIRED FOR THE PROPER EXECUTION OF THE WORK, SHALL BE RELOCATED AS DIRECTED BY ENGINEERS, EXTREME CAUTION SHOULD BE USED BY THE SUBCONTRACTOR WHEN EXCAVATING OR DRILLING PIERS AROUND OR NEAR UTILITIES. SUBCONTRACTOR SHALL PROVIDE SAFETY TRAINING FOR THE WORKING CREW. THIS WILL INCLUDE BUT NOT BE LIMITED TO A) FALL PROTECTION B) CONFINED SPACE C) ELECTRICAL SAFETY D) TRENCHING & EXCAVATION.
- 3. ALL SITE WORK SHALL BE AS INDICATED ON THE DRAWINGS AND PROJECT SPECIFICATIONS.
- 4. IF NECESSARY, RUBBISH, STUMPS, DEBRIS, STICKS, STONES AND OTHER REFUSE SHALL BE REMOVED FROM THE SITE AND DISPOSED OF LEGALLY.
- 5. THE SITE SHALL BE GRADED TO CAUSE SURFACE WATER TO FLOW AWAY FROM THE BTS EQUIPMENT AND TOWER AREAS.
- 6. NO FILL OR EMBANKMENT MATERIAL SHALL BE PLACED ON FROZEN GROUND. FROZEN MATERIALS, SNOW OR ICE SHALL NOT BE PLACED IN ANY FILL OR EMBANKMENT.
- 7. THE SUB GRADE SHALL BE COMPACTED AND BROUGHT TO A SMOOTH UNIFORM GRADE PRIOR TO FINISHED SURFACE APPLICATION.
- 8. ALL EXISTING INACTIVE SEWER, WATER, GAS, ELECTRIC AND OTHER UTILITIES, WHICH INTERFERE WITH THE EXECUTION OF THE WORK, SHALL BE REMOVED AND/OR CAPPED, PLUGGED OR OTHERWISE DISCONTINUED AT POINTS WHICH WILL NOT INTERFERE WITH THE EXECUTION OF THE WORK, SUBJECT TO THE APPROVAL OF ENGINEERING, OWNER AND/OR LOCAL UTILITIES.
- 9. THE AREAS OF THE OWNERS PROPERTY DISTURBED BY THE WORK AND NOT COVERED BY THE TOWER, EQUIPMENT OR DRIVEWAY, SHALL BE GRADED TO A UNIFORM SLOPE AND STABILIZED TO PREVENT EROSION AS SPECIFIED IN THE PROJECT
- 10. SUBCONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING SITE DURING CONSTRUCTION. EROSION CONTROL MEASURES, IF REQUIRED DURING CONSTRUCTION, SHALL BE IN CONFORMANCE WITH THE LOCAL GUIDELINES FOR EROSION AND SEDIMENT CONTROL.
- 11. THE SUBCONTRACTOR SHALL PROVIDE SITE SIGNAGE IN ACCORDANCE WITH THE AT&T SPECIFICATION FOR SITE SIGNAGE.

### CONCRETE AND REINFORCING STEEL NOTES:

- 1. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 301, ACI 318, ACI 336, ASTM A184, ASTM A185 AND THE DESIGN AND CONSTRUCTION SPECIFICATIONFOR CAST—IN—PLACE CONCRETE.
- 2. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS, UNLESS NOTED OTHERWISE. A HIGHER STRENGTH (4000 PSI) MAY BE USED. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH THE ACI 381 CODE
- 3. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
- 4. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON
- CONCRETE CAST AGAINST EARTH.......3 IN.
  CONCRETE EXPOSED TO EARTH OR WEATHER: #6 AND LARGER .. SLAB AND WALL BEAMS AND COLUMNS ..
- 5. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- 6 INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE STAINLESS STEELE OR HOT DIPPED GALVINIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
- 7. CONCRETE CYLINDER TEST IS NOT REQUIRED FOR SLAB ON GRADE WHEN CONCRETE IS LESS THAN 50 CUBIC YARDS (IBC1905.6.2.3) IN THAT EVENT THE FOLLOWING RECORDS SHALL BE PROVIDED BY THE CONCRETE SUPPLIER;

  (A) RESULTS OF CONCRETE CYLINDER TEST PERFORMED AT THE SUPPLIERS PLANT.
- (B) CERTIFICATION OF MINIMUM COMPRESSIVE STRENGTH FOR THE CONCRETE GRADE SUPPLIED. FOR GREATER THAN 50 CUBIC YARDS THE GC SHALL PERFORM THE CONCRETE CYLINDER TEST.
- 8. AS AN ALTERNATIVE TO ITEM 7. TEST CYLINDERS SHALL BE TAKEN INITIALLY AND THEREAFTER FOR EVERY 50 YARDS OF CONCRETE FROM EACH DIFFERENT BATCH PLANT.
- 9. EQUIPMENT SHALL NOT BE PLACED ON NEW PADS FOR SEVEN DAYS AFTER PAD IS POURED, UNLESS IT IS VERIFIED BY CYLINDER TESTS THAT COMPRESSIVE STRENGTH HAS BEEN ATTAINED.

### STRUCTURAL STEEL NOTES:

- 1. ALL STEEL WORK SHALL BE PAINTED OR GALVINIZED IN ACCORDANCE WITH THE DRAWINGS UNLESS OTHERWISE NOTED. STRUCTURAL STEEL SHALL BE ASIM—A—SBUNIESS OTHERWISE NOTED ON THE SITE SPECIFIC DRAWINGS. STEEL DESIGN, INSTALLATION AND BOLTING SHALL BE IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) "MANUAL
- 2. ALL WELDING SHALL BE PERFORMED USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND 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", 9TH EDITION. PAINTED SURFACES SHALL BE TOUCHED UP.
- 3. BOLTED CONNECTIONS SHALL USE BEARING TYPE ASTM A325 BOLTS  $(\frac{1}{2}, \frac{1}{9})$  AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
- 4. NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE %" DIA. ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
- 5 INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHORS SHALL BE PER MANUFACTURER'S WRITTEN RECOMMENDED 3. INSTALLATION OF CONTRETE EXPANSION/WEDGE ANOTHERS SPAIL BE FOR MAINTAFORMER'S WINTEN RECOMMENDATION FOR PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SIDHAL CONFORM TO THE MAINTAFOURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR CONTRACTOR APPROVAL WHEN DRILLING HOLES IN CONCRETE. SPECIAL INSPECTIONS, REQUIRED BY GOVERNING CODES, SHALL BE PERFORMED IN ORDER TO MAINTAIN-MANUFACTURER'S MAXIMUM ALLOWABLE LOADS. ALL EXPANSION/WEDGE ANCHORS SHALL BE STAINLESS STEEL OR HOT DIPPED GALVANIZED. EXPANSION BOLTS SHALL BE PROVIDED BY RAMSET/REDHEAD OR APPROVED EQUAL.
- 6. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR ENGINEER REVIEW & APPROVAL ON PROJECTS REQUIRING STRUCTURAL STEEL
- 7. ALL STRUCTURAL STEEL WORK SHALL BE DONE IN ACCORDANCE WITH AISC SPECIFICATIONS.

### SOIL COMPACTION NOTES FOR SLAB ON GRADE:

- 1. EXCAVATE AS REQUIRED TO REMOVE VEGETATION AND TOPSOIL TO EXPOSE NATURAL SUBGRADE AND PLACE CRUSHED STONE
- 2. COMPACTION CERTIFICATION: AN INSPECTION AND WRITTEN CERTIFICATION BY A QUALIFIED GEOTECHNICAL TECHNICIAN OR ENGINEER IS ACCEPTABLE.
- 3. AS AN ALTERNATE TO INSPECTION AND WRITTEN CERTIFICATION, THE "UNDISTURBED SOIL" BASE SHALL BE COMPATCTED WITH "COMPACTION EQUIPMENT", LISTED BELOW, TO AT LEAST 90% MODIFIED PROCTOR MAXIMUM DENSITY PER ASTM D 1557 METHOD
- 4. COMPACTED SUBBASE SHALL BE UNIFORM AND LEVELED. PROVIDE 6" MINIMUM CRUSHED STONE OR GRAVEL COMPACTED IN 3" LIFTS ABOVE COMPACTED SOIL. GRAVEL SHALL BE NATURAL OR CRUSHED WITH 100% PASSING #1 SIEVE.
- 5. AS AN ALTERNATE TO ITEMS 2 AND 3, THE SUBGRADE SOILS WITH 5 PASSES OR A MEDIUM SIZED VIBRATORY PLATE COMPACTOR (SUCH AS BOMAG BPR 30/38) OR HAND-OPERATED SINGLE DRUM VIBRATORY ROLLER (SUCH AS BOMAG BW 55E). AND SOFT AREAS THAT ARE ENCOUNTERED SHOULD BE REMOVED AND REPLACED WITH A WELL-GRADED GRANULAR FILL AND CONTRACTOR CHART ACCOUNTER. COMPACTED AS STATED ABOVE.

### COMPACTION EQUIPMENT:

1. HAND OPERATED DOUBLE DRUM, VIBRATORY ROLLER, VIBRATORY PLATE COMPACTOR OR JUMPING JACK COMPACTOR.

- 1. FIELD VERIFICATION SUBCONTRACTOR SHALL FIELD VERIFY SCOPE OF WORK, AT&T ANTENNA PLATFORM LOCATION AND ANTENNAS TO
- 2. COORDINATION OF WORK: SUBCONTRACTOR SHALL COORDINATE RF WORK AND PROCEDURES WITH CONTRACTOR
- 3. CABLE LADDER RACK: SUBCONTRACTOR SHALL FURNISH AND INSTALL CABLE LADDER RACK, CABLE TRAY, AND CONDUIT AS REQUIRED TO SUPPORT CABLES TO THE NEW BTS LOCATION.

### **ELECTRICAL INSTALLATION NOTES:**

- 1. WIRING, RACEWAY, AND SUPPORT METHODS AND MATERIALS SHALL COMPLY WITH THE REQUIREMENTS OF THE NEC AND TELCORDIA.
- 2. SUBCONTRACTOR SHALL MODIFY EXISTING CABLE TRAY SYSTEM AS REQUIRED TO SUPPORT RF AND TRANSPORT CABLING TO THE NEW BTS EQUIPMENT. SUBCONTRACTOR SHALL SUBMIT MODIFICATIONS TO
- 3. ALL CIRCUITS SHALL BE SEGREGATED AND MAINTAIN MINIMUM CABLE SEPARATION AS REQUIRED BY
- 4. CABLES SHALL NOT BE ROUTED THROUGH LADDER-STYLE CABLE TRAY RUNGS
- 5. EACH END OF EVERY POWER, GROUNDING, AND T1 CONDUCTOR AND CABLE SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, 1/2 INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). THE IDENTIFICATION METHOD SHALL CONFORM WITH NEC & OSHA, AND MATCH EXISTING INSTALLATION REQUIREMENTS.
- 6. POWER PHASE CONDUCTORS (I.E., HOTS) SHALL BE LABELED WITH COLOR-CODED INSULATION OR ELECTRICAL TAPE (3M BRAND, ½ INCH PLASTIC ELECTRICAL TAPE WITH UV PROTECTION, OR EQUAL). PHASE CONDUCTOR COLOR CODES SHALL CONFORM WITH THE NEC & OSHA AND MATCH EXISTING INSTALLATION REUIREMENTS
- 7. ALL ELECTRICAL COMPONENTS SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS. ALL EQUIPMENT SHALL BE LABELED WITH THEIR VOLTAGE RATING, PHASE CONFIGURATION, WIRE CONFIGURATION, POWER OR AMPACTY RATING, AND BRANCH CIRCUIT ID NUMBERS (I.E., PANELBOARD AND CIRCUIT ID'S).
- 8. PANELBOARDS (ID NUMBERS) AND INTERNAL CIRCUIT BREAKERS (CIRCUIT ID NUMBERS) SHALL BE CLEARLY LABELED WITH ENGRAVED LAMACOID PLASTIC LABELS.
- 9. ALL TIE WRAPS SHALL BE CUT FLUSH WITH APPROVED CUTTING TOOL TO REMOVE SHARP EXXXES
- 10. POWER, CONTROL, AND EQUIPMENT GROUND WIRING IN TUBING OR CONDUIT SHALL BE SINGLE CONDUCTOR (#34 AWG OR LARGER), 600 V, OIL RESISTANT THIN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 11. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED INDOORS SHALL BE SINGLE CONDUCTOR (#6 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2 GREEN INSULATION, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION, LISTED OR LABELED FOR THE LOCATION AND RACEWAY SYSTEM USED, UNLESS OTHERWISE SPECIFIED.
- 12. SUPPLEMENTAL EQUIPMENT GROUND WIRING LOCATED OUTDOORS, OR BELOW GRADE, SHALL BE SINGLE CONDUCTOR #3 AWG SOLID TINNED COPPER CABLE, UNLESS OTHERWISE SPECIFIED
- 13. POWER AND CONTROL WIRING, NOT IN TUBING OR CONDUIT, SHALL BE MULTI-CONDUCTOR, TYPE TC CABLE (#34 AWG OR LARGER), 600 V, OIL RESISTANT THHN OR THWN-2, CLASS B STRANDED COPPER CABLE RATED FOR 90 °C (WET AND DRY) OPERATION; WITH OUTER JACKET; LISTED OR LABELED FOR THE LOCATION USED, UNLESS OTHERWISE SPECIFIED.
- 14. ALL POWER AND GROUNDING CONNECTIONS SHALL BE CRIMP-STYLE, COMPRESSION WIRE LUGS AND WIRENUTS BY THOMAS AND BETTS (OR EQUAL). LUGS AND WIRENUTS SHALL BE RATED FOR OPERATION AT NO
- 15. RACEWAY AND CABLE TRAY SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH
- 16. NEW RACEWAY OR CABLE TRAY WILL MATCH THE EXISTING INSTALLATION WHERE POSSIBLE
- 17. ELECTRICAL METALLIC TUBING (EMT) OR RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40, OR RIGID PVC SCHEDULE 80 FOR LOCATIONS SUBJECT TO PHYSICAL DAMAGE) SHALL BE USED FOR EXPOSED
- 18. ELECTRICAL METALLIC TUBING (EMT), ELECTRICAL NONMETALLIC TUBING (ENT), OR RIGID NONMETALLIC CONDUIT (RIGID PVC, SCHEDULE 40) SHALL BE USED FOR CONCEALED INDOOR LOCATIONS.
- 19. GALVANIZED STEEL INTERMEDIATE METALLIC CONDUIT (IMC) SHALL BE USED FOR OUTDOOR LOCATIONS ABOVE GRADE
- 20. RIGID NONMETALLIC CONDUIT (I.E., RIGID PVC SCHEDULE 40 OR RIGID PVC SCHEDULE 80) SHALL BE USED UNDERGROUND; DIRECT BURIED, IN AREAS OF OCCASIONAL LIGHT VEHICLE TRAFFIC OR ENCASED IN REINFORCED CONCRETE IN AREAS OF HEAVY VEHICLE TRAFFIC.
- 21. LIQUID-TIGHT FLEXIBLE METALLIC CONDUIT (LIQUID-TITE FLEX) SHALL BE USED INDOORS AND OUTDOORS, WHERE VIBRATION OCCURS OR FLEXIBILITY IS NEEDED.
- 22. CONDUIT AND TUBING FITTINGS SHALL BE THREADED OR COMPRESSION—TYPE AND APPROVED FOR THE LOCATION USED. SETSCREW FITTINGS ARE NOT ACCEPTABLE.
- 23. CABINETS, BOXES, AND WIREWAYS SHALL BE LISTED OR LABELED FOR ELECTRICAL USE IN ACCORDANCE WITH NEMA, UL, ANSI/IEEE, AND NEC.
- 24. CABINETS, BOXES, AND WIREWAYS TO MATCH THE EXISTING INSTALLATION WHERE POSSIBLE
- DOWNWARD; SHALL BE PANDUIT TYPE E (OR EQUAL); AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R
- 26. EQUIPMENT CABINETS, TERMINAL BOXES, JUNCTION BOXES, AND PULL BOXES SHALL BE GALVANIZED OR EPOXY—COATED SHEET STEEL, SHALL MEET OR EXCEED UI. 50, AND RATED NEMA 1 (OR BETTER) INDOORS, OR NEMA 3R (OR BETTER) OUTDOORS
- 27. METAL RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL BE GALVANIZED, EPOXY-COATED, OR NON-CORRODING; SHALL MEET OR EXCEED UL 514A AND NEMA OS 1; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 28. NONMETALLIC RECEPTACLE, SWITCH, AND DEVICE BOXES SHALL MEET OR EXCEED NEMA OS 2; AND RATED NEMA 1 (OR BETTER) INDOORS, OR WEATHER PROTECTED (WP OR BETTER) OUTDOORS.
- 29. THE SUBCONTRACTOR SHALL NOTIFY AND OBTAIN NECESSARY AUTHORIZATION FROM THE CONTRACTOR BEFORE COMMENCING WORK ON THE AC POWER DISTRIBUTION PANELS. 30. THE SUBCONTRACTOR SHALL PROVIDE NECESSARY TAGGING ON THE BREAKERS, CABLES AND DISTRIBUTION PANELS IN ACCORDANCE WITH THE APPLICABLE CODES AND STANDARDS TO SAFEGUARD
- 31. ALL ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, NEC
- 32. CONDUIT ROUTINGS ARE SCHEMATIC SUBCONTRACTOR SHALL INSTALL CONDUITS SO THAT ACCESS TO EQUIPMENT IS NOT BLOCKED.

AND ALL APPLICABLE LOCAL CODES.

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**EAST WEYMOUTH SITE NO.: 2738** 

120 WINTER STREET WEYMOUTH, MA 02188



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14

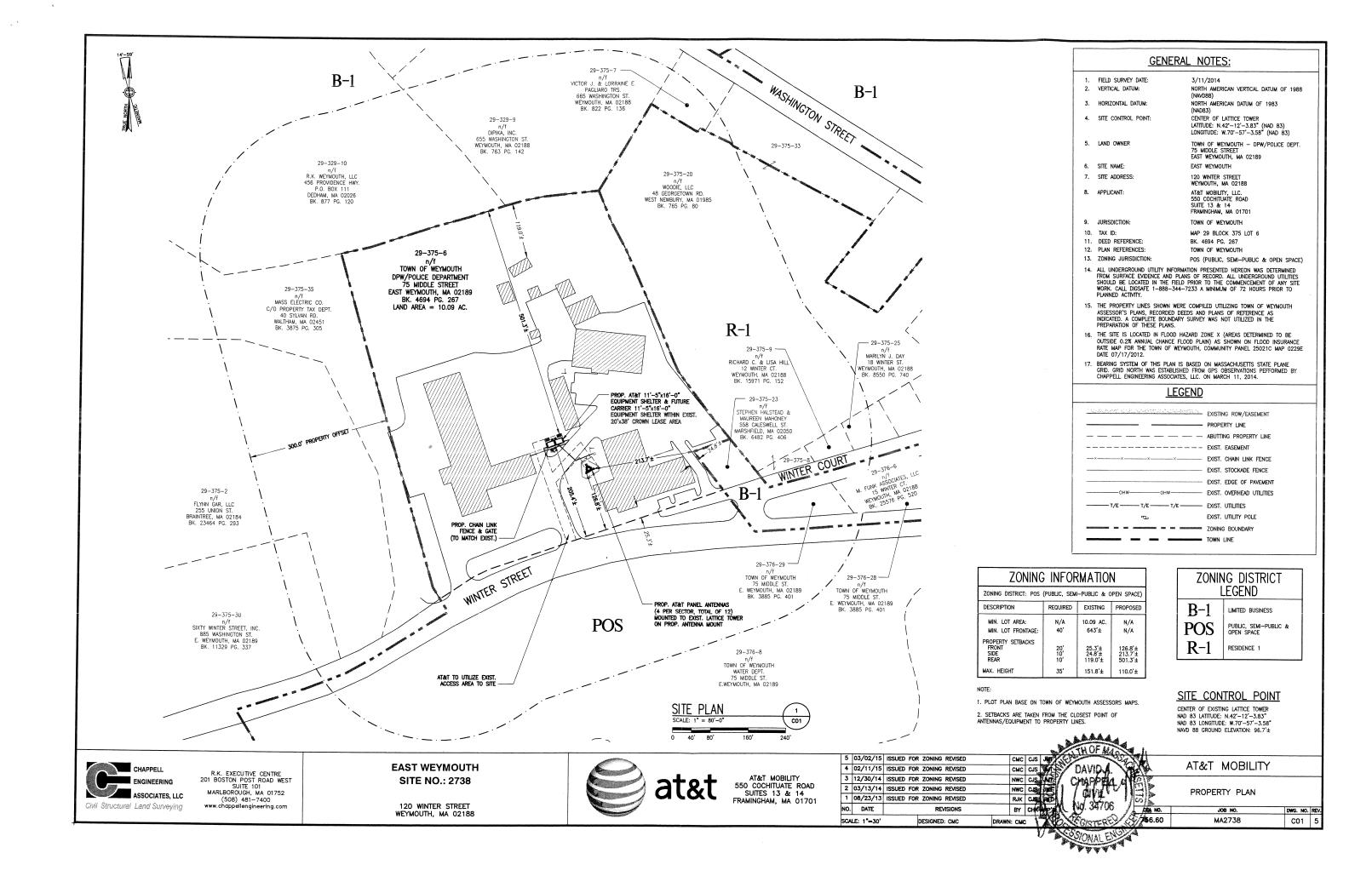
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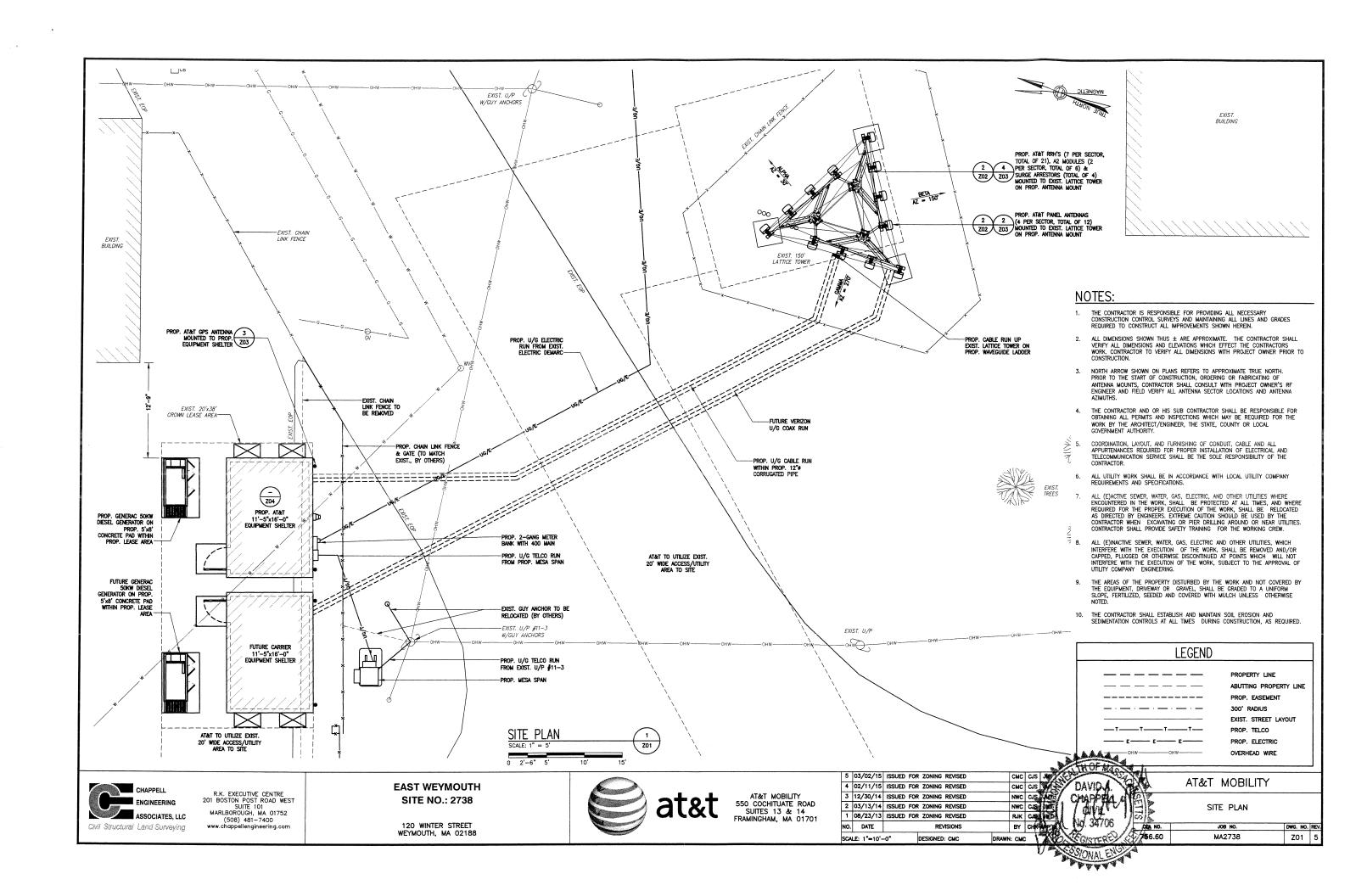
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GENERAL NOTES

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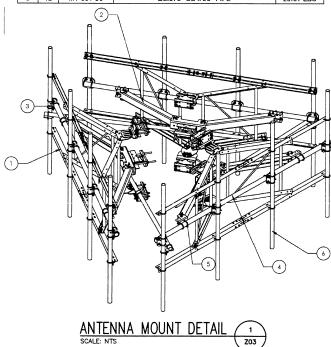




SECTOR	ANTENNA	AZIMUTH (TRUE NORTH)	RAD CENTER	COAX	TMA	MECHANICAL DOWNTILT	ELECTRICAL DOWNTILT	RRH	RET CABLES	FIBER	DC LINES	SURGE							
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IIIA	CCI HPA-65R-BUU-H8	30°	110'-0" AGL	-	-	0,	2 2	LTE RRUS 11											
IVA	CCI HPA-65R-BUU-H8	30°	110'-0" AGL	-	-	0*	2 2	LTE RRUS 11 LTE RRUS 12 LTE A2 MODULE											
IB	CCI HPA-65R-BUU-HB	150*	110'-0" AGL	-	-	0*	2 2	UMTS RRUS 11 (2X) LTE A2 MODULE		(2) TRUNK LINES (200'±)	(8) DC CABLES (200'±)								
IIB	CCI HPA-65R-BUU-H8	150*	110'-0" AGL	-	-	0*	2 2	LTE RRUS E2 LTE RRUS 32	(3) LINES (200'±)			(4) RAYCAP DC6-48-60-18-8F							
IIIB	CCI HPA-65R-BUU-H8	150*	110'-0" AGL	-	-	0*	2 2	LTE RRUS 11	, ,										
IVB	CCI HPA-65R-BUU-H8	150*	110'-0" AGL	-	-	0.	2 2	LTE RRUS 11 LTE RRUS 12 LTE A2 MODULE											
IG	CCI HPA-65R-BUU-H8	270*	110'-0" AGL	-	-	Q	2 2	UMTS RRUS 11 (2X) LTE A2 MODULE											
IIG	CCI HPA-65R-BUU-H8	270*	110'-0" AGL	-	-	0,	2 2	LTE RRUS E2 LTE RRUS 32											
IIIG	CCI HPA-65R-BUU-H8	270°	110'-0" AGL	-	-	0.	2 2	LTE RRUS 11											
IVG	CCI HPA-65R-BUU-H8	270°	110'-0" AGL	-	-	0.	2 2	LTE RRUS 11 LTE RRUS 12 LTE A2 MODULE											
	RF S	CHEDULE BASED O	N RFDS MA2738	DATED 10,	/21/2014	. CONTRACTO	r to verify f	FINAL RFDS AND CABLE	LENGTHS PRIC	OR TO CONSTRI	JCTION.								

RF SCHEDULE & B.O.M.

	PARTS LIST FOR COMMSCOPE MTC3615 MOUNT								
ITEM	QTY	PART NO.	PART DESCRIPTION	WEIGHT					
1	3	SF-QV12-B	SECTOR FRAME QUICK-V 12' FACE	417.06 LBS					
2	3	VSR-TS-B	V-STABILIZER TOWER KIT	125.35 LBS					
3	12	XP-2025	CROSSOVER PLATE, 2-3/8" OD x 2-7/8" OD	8.33 LBS					
4	3	MT-546-150	2-7/8" OD x 150" GALV PIPE	72.03 LBS					
5	12	GUB-4352	1/2" x 3 x 5-1/4" GALV U-BOLT	0.72 LBS					
6	12	MT-651-96	Ø2.375" OD x 96" PIPE	29.07 LBS					

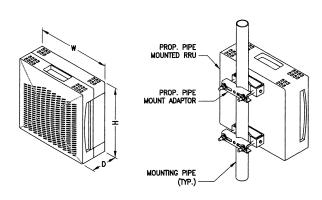


 
 CCI HPA-65R-BUU-H8 (4 PER SECTOR, TOTAL OF 12)

 DIMENSIONS (H x W x D):
 92.4\*x14.8\*x7.4\*

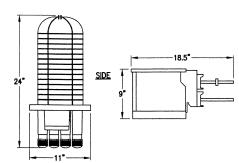
 WEIGHT (W/PRE-MOUNTED BRACKETS)
 68 LBS
 CONNECTOR: RADOME MATERIAL: RADOME COLOR: 6x⅓6 DIN FEMALE ALUMINUM LIGHT GRAY

ANTENNA DETAIL Z03

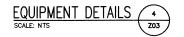


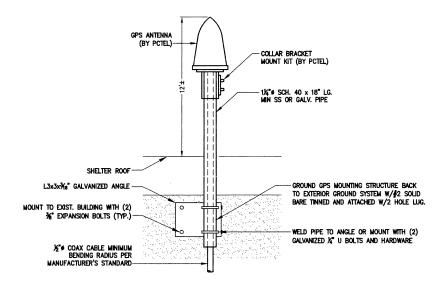
## ERICSSON RRU'S (7 PER SECTOR, TOTAL OF 21) ERICSSON A2 MODULES (2 PER SECTOR, TOTAL OF 6)

MODEL	QTY	W	Н	D	WEIGHT	POWER
RRUS-11	9	17.0"	19.7"	7.2*	51 LBS	2x40W
RRUS-12	6	18.5"	20.4"	7.5"	58 LBS	2x60W
RRUS-32	3	12.1"	26.7"	6.7"	60 LBS	4x25W
RRUS-E2	3	20.4"	20.0"	9.5"	71.5 LBS	4x25W
A2 MODULE	6	15.0"	12.8"	3.5"	16 LBS	N/A



ENVIRONMENTAL RATING: NUMBER OF RADIOS PROTECTED:





GPS MOUNTING DETAIL
SCALE: NOT TO SCALE Z03

CMC CUS

NWC CUS

RJK CJS

AT&T MOBILITY

ANTENNA & EQUIPMENT DETAILS MA2738 Z03 5



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ENGINEERING

ASSOCIATES, LLC

Civil Structural Land Surveying

**EAST WEYMOUTH SITE NO.: 2738** 

120 WINTER STREET WEYMOUTH, MA 02188



AT&T MOBILITY 550 COCHITUATE ROAD SUITES 13 & 14 FRAMINGHAM, MA 01701

4 02/11/15 ISSUED FOR ZONING REVISED 3 12/30/14 ISSUED FOR ZONING REVISED 2 03/13/14 ISSUED FOR ZONING REVISED 1 08/23/13 ISSUED FOR ZONING REVISED NO. DATE

SCALE: AS SHOWN

5 03/02/15 ISSUED FOR ZONING REVISED

REVISIONS

DESIGNED: CMC

