AMERICAN TOWERS, LLC (ATC)
AND
NEW CINGULAR WIRELESS PCS, LLC (AT&T)

Application to the
State of Connecticut Siting Council

For a Certificate of
Environmental Compatibility and Public Need

–REPLACEMENT FOR DOCKET 67 FACILITY–

AMERICAN TOWERS, LLC (ATC)
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I. Introduction

A. Purpose and Authority

Pursuant to Chapter 277a, § 16-50g et seq. of the Connecticut General Statutes (C.G.S.), as amended, and § 16-50j-1 et seq. of the Regulations of Connecticut State Agencies (R.C.S.A.), as amended, American Towers, LLC ("ATC") and New Cingular Wireless PCS, LLC ("AT&T") hereby submit an application and supporting documentation (collectively, the "Applicants") for a Certificate of Environmental Compatibility and Public Need ("Certificate") for the construction, maintenance and operation of a replacement telecommunications tower facility (the "Facility"). The Facility is proposed on a 7.23 acre parcel of land owned by James A. and Bonnie L. Decosta (the "Parcel") with an address of 351A Boston Post Road in the Town of East Lyme. The Parcel is currently improved with a single family residence with the remainder of the Parcel primarily wooded. The Facility will permit AT&T and other FCC licensed wireless carriers to continue to provide wireless services to thousands of residents, miles of roads and significant portions of East Lyme. The tower is proposed to replace service from an existing tower issued a Certificate by the Connecticut Siting Council in Docket 67 and which will be decommissioned because the ground lessor of the tower site will not enter into a long term lease extension.

B. Executive Summary

The proposed replacement tower facility at 351A Boston Post Road in East Lyme is needed in conjunction with other existing facilities in order for AT&T and T-Mobile to replace service in this part of the state currently provided by an existing tower facility which is slated for decommissioning (the "Docket 67 Tower"). When approved nearly 30 years ago by the Council, the Docket 67 Tower was located in a remote wooded and agricultural area of East Lyme with access off of Scott Road. A copy of the Council's findings of fact, opinion and decision and order in Docket 67 are included in Attachment 1.

Since the time of the existing tower's approval and construction in the 1980s, the property itself (approximately 240 acres) was approved for subdivision as part of a single family residential community. Homes are planned in a development now known as "The Orchards". Initial phases of The Orchards, along with community facilities for

homeowners, have been constructed including a principal entrance to the community on Route 1 at Plum Hill Road. Subsequent phases of home construction are ongoing in proximity to the Docket 67 Tower. See http://bycarrier.com/the-orchards/ for additional information regarding The Orchards development.

AT&T has discussed its desire to maintain the existing Docket 67 Tower with the developer and homeowners association for The Orchards. AT&T in fact requested The Orchards to consider any potential for relocation of the tower site internal to the 240 acre site and/or offered to implement tower design changes for the current tower site location. The Orchards, for their own purposes, have elected not to enter into a long term lease renewal for the Docket 67 Tower or consider any possible relocation or design changes for the existing facility. The Orchards' decision necessitates removal of the existing tower facility and AT&T has been advised by The Orchards' representatives that its decision will not be reversed and is unrelated to business considerations such as rent or other terms and conditions for a tower ground lease.[1] AT&T and T-Mobile both provide services to the public from the existing tower site location which is managed for AT&T by American Towers, LLC ("ATC"). Both carriers are pursuing long term replacement facilities to avoid interruptions in service and provide reliable mobile connectivity in this part of East Lyme.

The relocation site search in this Docket was conducted by ATC and AT&T based on three principal factors: 1) the need to replicate as much coverage as possible from the Docket 67 Tower to be decommissioned; 2) the inability to relocate the tower anywhere within The Orchards development which occupies most of what is shown as Pond Hill on U.S.G.S topographic maps; and 3) the significant terrain features in and around the service area for the existing Docket 67 Tower. AT&T's analysis of communications facilities within a four mile radius of the existing Docket 67 Tower indicated that these sites would not provide adequate replacement coverage to this particular area of East Lyme, were not available for AT&T siting, or were already being used by AT&T for service (e.g. AT&T sites in Flanders, Niantic, Old Lyme). Based on the location of the existing tower site in The Orchards, terrain and coverage objectives, the site search focused on two specific areas of geography in East Lyme. The first being the area around The Orchards development and the existing tower site

[1] The lease as recently extended on a short term basis expires in late 2016.

on Pond Hill and the second being higher elevations off of Ancient Highway and lands shown on the U.S.G.S topographic map as Wilson Hill. The site search itself dates back to 2014 and includes work undertaken by various tower companies and site acquisition firms not all of which was done under AT&T or ATC's direction. The tower site search also included informal municipal consultations by AT&T in the Fall of 2014.

By early 2015, two potential tower replacement sites were identified by AT&T for possible relocation of the Docket 67 Tower. One being the site proposed in this Application which was ground leased by ATC and the other being a tower site with access off of Ancient Highway, a location ground leased by a company affiliated with a separate tower company altogether and known as Ancient Highway Towers, LLC ("AHT")(see also withdrawn CSC Petition 1152 for further background). Given AT&T's interests, it negotiated with ATC and AHT separately to gain authority to present both sites as part of one comprehensive package of materials to the Town of East Lyme for formal consultation in accordance with Section 16-50/ of the Connecticut General Statutes and start of the Siting Council application process.

On June 5, 2015, AT&T filed technical reports with the Town of East Lyme for the AHT location off of Ancient Highway (referred to as "Site A") and the ATC location off of Route 1 (referred to as "Site B"). In an initial meeting with the First Selectman, AT&T was asked to evaluate another site location near Site A on Wilson Hill which was a part of a larger assemblage of properties known locally as the Gateway development to the east along I-95. AT&T discussed leasing higher elevations off of Ancient Highway (referred to generally as "Site C") with representatives of the property owner and conducted site visits in an effort to secure it as a third alternative for potential relocation of the Docket 67 Tower. On June 30th, AT&T's visual consultants conducted a balloon test at all three alternative tower site locations with advance notice to the Town of East Lyme as part of its Section 16-50/ consultations.

On July 29, 2015, the Town hosted a public information session on notice to the community at which AT&T's representatives made a presentation, answered community questions and otherwise discussed the need for a relocation tower site in East Lyme for continuity of service. At that time, AT&T also advised the Town and community that its concurrent review of Sites A, B and C pursuant to Federal Communications Commission ("FCC") environmental regulations had resulted in an adverse effect

determination by the Mohegan Nation on Site A and consultations conducted in accordance with federal laws with Tribal Historic Preservation Officers ("THPO"). AT&T accordingly advised the public that evening that Sites A and C might not be legally available for tower siting as result of federal laws and the FCC's National Environmental Policy Act ("NEPA") regulations, irrespective of Connecticut's State and/or municipal siting regulations and policies.

AT&T's environmental and historic preservation consultants subsequently concluded that the Mohegan THPO's conclusions that a tower on Wilson Hill would visually and adversely impact various ceremonial landforms meant that Sites A and C were not feasible for relocation of the existing Docket 67 Tower under the FCC's NEPA regulations. AT&T subsequently terminated its lease with AHT at Site A and ceased any further efforts at siting a tower on Wilson Hill. As of the filing of this Application, AT&T has investigated and evaluated well over thirty (30) potential sites and has not identified any other practical, feasible or legally available alternative to the tower as proposed in this Application.

The tower as proposed is a 194' AGL monopole, within an 8,400 square foot lease area in the northern corner of the Parcel at 351A Boston Post Road. The location has been generally referred to in technical consultations with the Town and in various supporting documents as part of this Application as "Site B". AT&T's antennas would be installed at the 190' level of the tower with an equipment shelter and generator in the compound. An access driveway and utilities would be extended to the facility from Boston Post Road. The Facility is unmanned with no sanitary or water services and generates on average 1 vehicle trip per month by each wireless carrier consisting of a service technician in a light duty van or truck. The tower site location is north of a single family residence on the Parcel which is owned and occupied by the ground lessor. ATC would own and operate the tower facility for use by AT&T, T-Mobile and other wireless carriers.

The Applicants respectfully submit that the public need for a replacement tower in this area of East Lyme outweighs the environmental effects from the Facility as proposed. For reference as part of the Application, visibility should be compared relative to the existing Docket 67 Tower's visibility which would be removed as part of siting a relocated Facility. Relative to need, AT&T's analysis indicates that there are several

thousand people who live in the area currently served by 3G and 4G LTE. Additionally, several miles of Route 1 and local roads, along with active recreation areas such as Pataguanset Lake, are in the existing coverage area. As proposed, the Facility will enable AT&T to replace a substantial portion of the service that will be lost in the subject area when the Docket 67 Tower is decommissioned and which tower was previously determined by the Council to have a public need.

C. The Applicants

Applicant American Towers, LLC ("ATC") is a Massachusetts corporation with offices at 10 Presidential Way, Woburn, Massachusetts. ATC owns and/or operates numerous facilities in the State of Connecticut. ATC entered into a long term lease with James A. and Bonnie L. Decosta and subsequently, a sublease with AT&T. ATC will construct, maintain and own the proposed Facility and would be the Certificate holder.

Applicant AT&T is a Delaware limited liability company with an office at 500 Enterprise Drive, Rocky Hill, Connecticut 06067. The company's member corporation is licensed by the Federal Communications Commission ("FCC") to construct and operate a personal wireless services system, which has been interpreted as a "cellular system", within the meaning of C.G.S. Section 16-50i(a)(6).

Neither company conducts any other business in the State of Connecticut other than the development and management of wireless sites and provision of personal wireless services under FCC rules and regulations. Correspondence and/or communications regarding this Application shall be addressed to the attorneys on the Application:

Cuddy & Feder, LLP
445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Attention: Christopher B. Fisher, Esq.

A copy of all correspondence shall also be sent to:

American Towers, LLC
10 Presidential Way
Woburn, Massachusetts 01801

Attention: Matthew Russell

AT&T
500 Enterprise Drive
Rocky Hill, CT 06067
Attention: Michele Briggs

D. Application Fee

Pursuant to R.C.S.A. § 16-50v-1a (b), a check made payable to the Siting Council in the amount of $1,250 accompanies this Application. Included in this Application and its accompanying attachments are reports, plans and visual materials detailing the design and location for the proposed Facility and the environmental effects associated therewith. A copy of the Siting Council's Community Antennas Television and Telecommunication Facilities Application Guide with page references from this Application is also included in Attachment 15.

E. Compliance with C.G.S. §16-50*l*(c)

Neither of the Applicants is engaged in generating electric power in the State of Connecticut. Therefore, the Facility is not subject to C.G.S. § 16-50r. Furthermore, the proposed Facility has not been identified in any annual forecast reports. Accordingly, the proposed Facility is not subject to § 16-50*l* (c).

II. Service and Notice Required by C.G.S. § 16-50*l* (b)

Pursuant to C.G.S. § 16-50*l* (b), copies of this Application have been sent by certified mail, return receipt requested, to municipal, regional, state, and federal officials. A certificate of service, along with a list of the parties served with a copy of the Application is included in Attachment 14. Pursuant to C.G.S. § 16-50*l* (b), notice of the Applicant's intent to submit this application was published on two occasions in The Day. The text of the published legal notice is included in Attachment 13. The original affidavits of publication will be provided to the Siting Council once received from the publisher. Furthermore, in compliance with C.G.S. § 16-50*l* (b), notices were sent to each person or entity appearing of record as the owner of a property which abuts the premises on which the Facility is proposed. Certification of such notice, a

sample notice letter, and the list of property owners to whom the notice was mailed are also included in Attachment 14.

III. Statements of Need and Benefits

A. Statement of Need

1. United States Policy & Law – Wireless Facilities

United States policy and laws support the growth of wireless networks. In 1996, the United States Congress recognized the important public need for high quality wireless communications service throughout the United States in part through adoption of the Telecommunications Act (the "Act"). A core purpose of the Act was to "provide for a competitive, deregulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies to all Americans." H.R. Rep. No. 104-458, at 206 (1996) (Conf. Rep.). With respect to wireless communications services, the Act expressly preserved state and/or local land use authority over wireless facilities, placed several requirements and legal limitations on the exercise of such authority, and preempted state or local regulatory oversight in the area of emissions as more fully set forth in 47 U.S.C. § 332(c)(7). In essence, Congress struck a balance between legitimate areas of state and/or local regulatory control over wireless infrastructure and the public's interest in its timely deployment to meet the public need for wireless services.

Nearly twenty years later, it remains clear that the current White House administration, The Congress and the FCC continue to take a strong stance and act in favor of the provision of wireless service to all Americans. In December 2009, President Obama issued Proclamation 8460 which included wireless facilities within his definition of the nation's critical infrastructure and declared in part:

> Critical infrastructure protection is an essential element of a resilient and secure nation. Critical infrastructure are the assets, systems, and networks, whether physical or virtual, so vital to the United States that their incapacitation or destruction would have a debilitating effect on security, national economic security, public health or safety. From water systems to computer networks, power grids to cellular phone towers, risks to critical infrastructure can result from a complex combination of

> threats and hazards, including terrorist attacks, accidents, and natural disasters.[2]

President Obama further identified the role of robust mobile broadband networks in his 2011 State of the Union address.[3] In 2009, The Congress directed the FCC to develop a national broadband plan to ensure that every American would have access to "broadband capability" whether by wire or wireless. What resulted in 2010 is a document entitled "Connecting America: The National Broadband Plan" (the "Plan").[4] Although broad in scope, the Plan's goal is undeniably clear:

> [A]dvance consumer welfare, civic participation, public safety and homeland security, community development, health care delivery, energy independence and efficiency, education, employee training, private sector investment, entrepreneurial activity, job creation and economic growth, and other national purposes.[5] [internal quotes omitted]

The Plan notes that wireless broadband access is growing rapidly with "the emergence of broad new classes of connected devices and the rollout of fourth-generation (4G) wireless technologies such as Long Term Evolution (LTE) and WiMAX."[6] A specific goal of the Plan is that "[t]he United States should lead the world in mobile innovation, with the fastest and most extensive wireless networks of any nation." [7]

In April 2011, the FCC issued a Notice of Inquiry concerning the best practices available to achieve wide-reaching broadband capabilities across the nation including better wireless access for the public.[8] The public need for timely deployment of

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[2] Presidential Proclamation No. 8460, 74 C.F.R. 234 (2009).

[3] Cong. Rec. H459 (Jan. 25, 2011), also *available at* http://www.whitehouse.gov/the-press-office/2011/01/25/ remarks-president-state-union-address. Specifically the President stressed that in order "[t]o attract new businesses to our shores, we need the fastest, most reliable ways to move people, goods, and information–from high-speed rail to high-speed Internet."

[4] Connecting America: The National Broadband Plan, Federal Communications Commission (2010), *available at* http://www.broadband.gov/plan/.

[5] Id. at XI.

[6] Id. at 76.

[7] Id. at 25.

[8] FCC 11-51: Notice of Inquiry, In the Matter of Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0407/FCC-11-51A1.pdf.

wireless infrastructure is further supported by the FCC's Declaratory Ruling interpreting § 332(c)(7)(B) of the Telecommunications Act and establishing specific time limits for decisions on land use and zoning permit applications.[9] More recently, the critical importance of timely deployment of wireless infrastructure to American safety and economy was confirmed in the Middle Class Tax Relief and Job Creation Act of 2012, which included a provision, Section 6409, that together with 2015 FCC regulations, preempts a discretionary review process for eligible modifications of existing wireless towers or base stations.[10]

2. United States Wireless Usage Statistics

Over the past thirty years, wireless communications have revolutionized the way Americans live, work and play.[11] The ability to connect with one another in a mobile environment has proven essential to the public's health, safety and welfare. As of June 2013, there were an estimated 336 million wireless subscribers in the United States.[12] Wireless network data traffic was reported at 3.2 trillion megabytes, which represents a 723% increase from 2010.[13] Other statistics provide an important sociological understanding of how critical access to wireless services has become. In 2005, 8.4% of households in the United States had cut the cord and were wireless only.[14] By December 2014, that number grew exponentially to an astonishing 44% of

[9] WT Docket No. 08-165- Declaratory Ruling on Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance ("Declaratory Ruling").

[10] Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, §6409 (2012), *available at* http://gpo.gov/fdsys/pkg/BILLS-112hr3630enr/pdf/BILLS-112hr3630enr.pdf; see also H.R. Rep. No. 112-399 at 132-33 (2012)(Conf. Rep.), *available at* http://www.gpo.gov/fdsys/pkg/CRPT-112hrpt399/pdf/CRPT-112hrt399.pdf.

[11] See, generally, History of Wireless Communications, *available at* http://www.ctia.org/media/industry_info/index.cfm/AID/10388 (2011)

[12] CTIA's Wireless Industry Indices: Semi-Annual Data Survey Results, A Comprehensive Report from CTIA Analyzing the U.S. Wireless Industry, Mid-Year 2013 Results (Semi-Annual Data Survey Results). See also, "CTIA's Annual Survey Says US Wireless Providers Handled 3.2 Trillion Megabytes of Data Traffic in 2013 for a 120 Percent Increase Over 2012" *available at* http://www.ctia.org/resource-library/press-releases/archive/ctia-annual-survey-2013.

[13] Id.

[14] CTIA Wireless Quick Facts, *available at* http://www.ctia.org/your-wireless-life/how-wireless-works/wireless-quick-facts *citing Early Release of Estimates from the National Health Interview Survey, December 2012, National Center for Health Statistics*, June 2013.

all households.[15] Connecticut in contrast lags behind in this statistic with 20.6% wireless only households.[16]

Wireless access has also provided individuals a newfound form of safety. Today, approximately 70% of *all* 9-1-1 calls made each year come from a wireless device.[17] Beginning May 15, 2014, wireless carriers in the U.S. voluntarily supported Text-to-911, a program that allows users to send text messages to emergency services as an alternative to placing a phone call. AT&T and other licensed FCC wireless carriers will support Text-to-911.[18] Parents and teens have also benefited from access to wireless service. In a 2010 study conducted by Pew Internet Research, 78% of teens responded that they felt safer when they had access to their cell phone.[19] In the same study, 98% of parents of children who owned cell phones stated that the main reason they have allowed their children access to a wireless device is for the safety and protection that these devices offer.[20]

Wireless access to the internet or "mobile broadband" has also grown exponentially since the advent of the truly "smartphone" device. Cisco reports that in 2014 global mobile data traffic grew 69 percent reaching 2.5 exabytes a month.[21] Notably, mobile data traffic in 2014 was nearly 30 times the size of the entire global internet in 2000; specifically, one exabyte of traffic traversed the global Internet in 2000 and in 2014

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[15] Stephen J. Blumberg, Ph.D., and Julian V. Luke, Division of Health Interview Statistics, National Center for Health Statistics, "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, January – June 2014", released December 12, 2014 and *available at* http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201412.pdf.

[16] *Early Release of Estimates from the National Health Interview Survey, December 2012, National Center for Health Statistics*, June 2013. See also, "Wireless Substitution: State-level Estimates From the National Health interview Survey, 2012", National Health Statistics Report, No. 70, December 18, 2013.

[17] Wireless 911 Services, FCC, *available at* http://www.fcc.gov/guides/wireless-911-services

[18] See *Text-to-911: What you need to know (FAQ) available at* http://www.cnet.com/news/text-to-911-what-you-need-to-know-faq. It should be noted that while the carriers have committed to supporting 911 texting in their service areas, text-to-911 will not be available everywhere. Emergency call centers, called PSAPs (Public Safety Answering Points), are the bodies in charge of implementing text messaging in their areas. These PSAPs are under the jurisdiction of their local states and counties, not the FCC, which governs the carriers. *See also*, *What You Need to Know About Text-to-911 available at* www.fcc.gov/text-to-911. At the time of writing there are no known areas in Connecticut that yet support Text-to-911, *see* https://transition.fcc.gov/pshs/911/Text911PSAP/Text_911_Master_PSAP_Registry.xlsx.

[19] Amanda Lenhart, *Attitudes Towards Cell Phones*, Pew Research, *available at* http://www.pewinternet.org/Reports/2010/Teens-and-Mobile-Phones/Chapter-3/Overall-assessment-of-the-role-of-cell-phones.aspx

[20] Id.

[21] Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2014-2019, February 3, 2015.

mobile networks carried nearly 30 exabytes of traffic.[22] Indeed Cisco projects that overall mobile data traffic will grow to 24.3 exabytes per month by 2019, nearly a tenfold increase over 2014; this represents a compound annual growth rate (CAGR) of 57% from 2014 to 2019.[23]

3. Public Need For A Tower For Wireless Services

The public need for a tower facility in this area of East Lyme was previously determined by the Siting Council in Docket 67 when it approved the existing Docket 67 Tower on Pond Hill. The existing facility was in fact an original 1G analog facility built by AT&T's predecessor in interest as part of initial cellular service in New London County. Over the last thirty years, cellular services have evolved to current 4G LTE standards and significant additional infrastructure built by AT&T to serve the public's current demand for mobile broadband. The technology used by AT&T at the existing Docket 67 Tower site has been periodically upgraded and is currently a critical component of its overall network service in East Lyme. The proposed replacement Facility in this Application is needed for AT&T and other FCC licensed wireless carriers to continue to provide their services. AT&T would have a significant deficiency in its 3G and 4G LTE wireless communications service in this area of East Lyme without the proposed replacement tower.

The proposed replacement Facility is in close proximity to the existing Docket 67 Tower, albeit at a lower ground elevation. The replacement Facility will provide reliable services in AT&T's network to a significant geographic area including portions of Boston Post Road, N. Bride Brook Road, Dean Road, Lovers Lane, Scott Road and other local roads in East Lyme. The Facility is needed in conjunction with other existing and future facilities in order for AT&T and T-Mobile to replace service in this part of the state and the several thousand residents in the coverage area. Attachment 1 includes the Council's findings of fact in Docket 67 and a Radio Frequency Engineering Report with coverage plots depicting the coverage loss from the "decom" site and proposed coverage from the replacement Facility in AT&T's 3G network. Additional statistics regarding the overall area, population and roadway miles of expanded coverage in the community are included in AT&T's report.

[22] Id.

[23] Id.

B. Statement of Benefits

The existing Docket 67 Tower provides AT&T coverage over a wide area of East Lyme that includes relatively dense single family residential housing, places for active outdoor recreation and miles of State and local roads. The benefits associated with the replacement tower Facility are significant and address in large measure the current population's reliance on AT&T service in the area that will be interrupted in the absence of a replacement site for the Docket 67 Tower. More broadly, wireless carriers have seen the public's demand for traditional cellular telephone services in a mobile setting develop into a requirement for anytime-anywhere wireless connectivity with critical reliance placed on the ability to send and receive, voice, text, image and video at broadband speeds. Provided that network service is available, modern devices allow for interpersonal and internet connectivity, irrespective of whether a user is mobile or stationary, which has led to an increasing percentage of the population to rely on their wireless devices as their primary form of communication for personal, business and emergency needs. The proposed replacement facility would allow AT&T and other carriers to continue to provide these benefits to the public.

Moreover, AT&T will provide "Enhanced 911" services from the Facility, as required by the Wireless Communications and Public Safety Act of 1999, Pub. L. No. 106-81, 113 Stat. 1286 (codified in relevant part at 47 U.S.C. § 222) ("911 Act"). The purpose of this federal legislation was to promote public safety through the deployment of a seamless, nationwide emergency communications infrastructure that includes wireless communications services. In enacting the 911 Act, Congress recognized that networks that provide for the rapid, efficient deployment of emergency services would enable faster delivery of emergency care with reduced fatalities and severity of injuries. With each year since passage of the 911 Act, additional anecdotal evidence supports the public safety value of improved wireless communications in aiding lost, ill, or injured individuals, such as motorists and hikers. Carriers are able to help 911 public safety dispatchers identify wireless callers' geographical locations within several hundred feet, a significant benefit to the community associated with any new wireless site.

In 2009, Connecticut became the first state in the nation to establish a statewide emergency notification system. The CT Alert ENS system utilizes the state Enhanced 911 services database to allow the Connecticut Department of Homeland Security and Connecticut State Police to provide targeted alerts to the public and local emergency

response personnel alike during life-threatening emergencies, including potential terrorist attacks, Amber Alerts and natural disasters. Pursuant to the Warning, Alert and Response Network Act, Pub. L. No. 109-437, 120 Stat. 1936 (2006) (codified at 47 U.S.C. § 332(d)(1) (WARN), the FCC has established the Personal Localized Alerting Network (PLAN). PLAN requires wireless service providers to issue text message alerts from the President of the United States, the U.S. Department of Homeland Security, the Federal Emergency Management Agency and the National Weather Service using their networks that include facilities such as the one proposed in this Application. Telecommunications facilities like the one proposed in this Application enable the public to receive e-mails and text messages from the CT Alert ENS system on their mobile devices. The ability of the public to receive targeted alerts based on their geographic location at any given time represents the next evolution in public safety, which will adapt to unanticipated conditions to save lives.

C. Technological Alternatives

The FCC licenses granted to wireless carriers operating in Connecticut authorize them to provide wireless services in this area of the state through deployment of a network of wireless transmitting sites. Existing tower sites or non-tower structures in this area of East Lyme are either not tall enough to overcome terrain blocking or located in areas that would not meet the technical requirements of AT&T in continuing to provide reliable services to the public. In addition, repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies are not a practicable or feasible means to replacing the services currently provided by the existing Docket 67 Tower. These technologies are better suited for specifically defined areas where coverage and capacity are needed, such as in commercial buildings and shopping malls, tunnels, stadiums or discrete topologies. Continuing to provide service in this area of East Lyme requires a replacement tower site that can provide service over a footprint that spans many square miles and overcomes terrain in this part of Connecticut. The Applicants submit that there are no equally effective, feasible technological alternatives to a new replacement tower for providing reliable personal wireless services in this area of East Lyme.

IV. Site Selection and Tower Sharing

A. Site Selection

In this case, the site search was focused on replacing an existing operational cell site originally built with access off of Scott Road and which must be decommissioned. AT&T currently provides reliable wireless services in this area of East Lyme, which will be interrupted when the existing 150' tower approved in Docket 67 is decommissioned. Based on the location of the existing tower site, terrain and coverage objectives, the search area focused on two areas of geography in East Lyme. The first being the area around The Orchards development and the existing tower site and the second being higher elevations off of Ancient Highway. These search areas are shown as "red" polygons on the site search map in Attachment 2.

The site search for a replacement tower dates to 2014 and includes work undertaken by various tower companies and site acquisition firms not all of which was done under AT&T or ATC's direction. The site search also includes municipal consultations by AT&T in the fall of 2014, conversations with the Town and public as part of Petition 1152 as withdrawn, and a Section 16-50/ technical consultation with the Town in the Summer of 2015. At this point in time, AT&T has investigated and evaluated over thirty (30) potential sites not all of which are in the site search areas and as listed in Attachment 2. Various additional sites have been suggested to AT&T during the Section 16-50/ municipal consultation processes which were far removed from the site search area and which have been summarily rejected by AT&T's RF engineers and not necessarily included in the catalog of sites searched by various entities and listed in Attachment 2.

As noted in the Executive Summary, one potential tower replacement site is known to be available to AT&T and which is being presented in this Application to the Siting Council. As more fully detailed in Attachment 2, any other sites were either legally unavailable for tower siting, technically inadequate to satisfy coverage requirements in this part of the state, unavailable as a result of THPO determinations and federal laws or otherwise determined by the Applicants to have comparatively greater overall environmental effects than the Facility as proposed. At this time, AT&T does not

legally control any other potential alternative for presentation to the Council as part of this Application for a Certificate.

B. Tower Sharing

The proposed Facility is designed to accommodate the antennas and equipment of four wireless carriers. The tower elevation in the Application identifies AT&T and T-Mobile as the initial carriers planning to relocate from the existing Docket 67 Tower.

V. Facility Design

The proposed tower location is on an approximately 7.23 acre parcel with an address of 351A Boston Post Road ("Parcel"). The Parcel is owned by James A. and Bonnie L. Decosta and is improved with a single family residence. The remainder of the Parcel is primarily wooded.

The proposed telecommunications facility includes an approximately 8,400 s.f lease area located in the northern corner of the Parcel. The tower is proposed as a new self-supporting monopole 194' in height. The tower site has a relative ground elevation approximately 150' lower than the ground elevation of the Docket 67 Tower. AT&T would install up to twelve (12) panel antennas and related equipment at a centerline height of 190' above grade level (AGL) on the tower. The tower is designed for shared use of the structure by T-Mobile and additional FCC licensed wireless carriers. An AT&T 11'-5" x 16' equipment shelter would be installed at the tower base on a concrete pad within the tower compound together with provisions for a fixed emergency back-up power generator.

The tower compound would consist of a 70' x 100' area to accommodate AT&T's equipment and provide for future shared use of the facility by T-Mobile and other carriers. The tower compound would be enclosed by an 8' high chain link fence. Vehicle access to the facility would be from Boston Post Road, over an existing access drive, then over a proposed gravel access drive a total distance of approximately 650' to the tower compound. Utility connections would be routed underground from existing utilities on-site and at Boston Post Road.

Attachments 3 and 4 contain the specifications for the proposed Facility, including an abutters map, existing conditions survey, site plan, compound plan and tower elevation, and other relevant details of the proposed Facility.

Included as Attachments 5 through 11 are various documents developed as part of the Applicants' due diligence including a Visibility Analysis (Attachment 8). Some of the relevant information identifies that:

- The total area of disturbance is low and modest tree clearing and grading will be needed to develop the tower site and driveway extension.
- The proposed Facility will have little to no impact on water flow or water quality and no direct impacts to any wetlands or watercourses are anticipated, the nearest wetland being off-site over 730' away.
- The proposed replacement tower is in the same residential area as the existing Docket 67 Tower.
- The viewshed and views are different due to the relatively higher ground elevation of the existing tower at the top of Pond Hill which will be removed. Views of the proposed replacement tower are primarily limited to areas east of the site with the majority of these views over 0.75 miles away.
- Post development at grade conditions will be consistent with existing Docket 67 Tower site conditions.

VI. Environmental Effects

Pursuant to C.G.S. §16-50p (a) (3) (B), the Siting Council is required to find and determine as part of the Application process any probable impact of the Facility on the natural environment, ecological balance, public health and safety, scenic, historic and recreational values, forest and parks, air and water purity, and fish and wildlife. As demonstrated in this Application, the Facility will be constructed in compliance with applicable regulations and guidelines, and best practices will be followed to ensure that construction of the proposed Facility will minimize any significant adverse environmental impact to the extent practicable.

A. Visual Assessment

The principal environmental effects associated with the Facility are visibility from the east and localized views from residential properties. Included in Attachment 8 is a Visibility Analysis which contains a view shed map and photo simulations of off-site views where the tower will be visible. As detailed in the enclosed Visibility Analysis, it is anticipated that approximately ±144 acres in the study area will have year round visibility of the proposed Facility. When leaves are off the trees, seasonal views through intervening tree trunks and branches are anticipated to occur over an additional ±851 acres. Topography, vegetation and the relative height of the tower will heavily obscure views of the tower from many locations in the study area during leaf-on conditions with the greatest visibility occurring in areas 0.5 miles of the Site. No schools or licensed day care centers are located within 250' of the site. Weather permitting, the Applicants will raise a balloon with a diameter of at least three (3) feet at the proposed site on the day of the Siting Council's first hearing session on this Application, or at a time otherwise specified by the Siting Council. Overall, it is anticipated that the proposed Facility will have a smaller view shed in comparison to the existing Docket 67 Tower which is in the same overall view shed and which will be removed as part of the project to relocate the tower site.

B. CT DEEP, SHPO, THPO, Other State and Federal Agency Comments

Various consultations and analyses for potential environmental impacts are summarized and included in Attachments 5-11. Representatives of the Applicants submitted reports and requests for review from federal and state entities including the United States Fish and Wildlife Service (USFWS), the Connecticut Department of Energy and Environmental Protection (CTDEEP) and the Connecticut State Historic Preservation Officer (SHPO). Initial consultation with the USFWS revealed two federally-listed Threatened Species may occur in the vicinity of the proposed project: northern long-eared bat (*Myotis septentrionalis*; also a state Endangered Species) and small whorled pogonia (*Isotria medeoloides*; also a state Endangered Species). CTDEEP Natural Diversity Data Base indicated in its August 24, 2015 letter that only red bat (*Lasiurus borealis*), a state Species of Special Concern, was identified on or within the vicinity of the site; no other species were identified by CTDEEP. CTDEEP recommended that tree clearing activities for construction not occur from May 1 to August 15th when red bats are active and known to occur in the area (see Attachment 9). AT&T has taken

this recommendation under advisement as part of the Siting Council Application process. Other potential impacts to avian resources were not identified by AT&T's consultants as noted in the Avian Resources Evaluation included in Attachment 10. AT&T is currently evaluating the likelihood of northern long-eared bat and small whorled pogonia occurring at the site as part of its ongoing consultation with the USFWS.

AT&T's consultant determined that the proposed undertaking would have no adverse effect upon historic or cultural resources. A review request, consistent with the requirements of Section 106 of the National Historic Preservation Act of 1966, was submitted to the SHPO on July 8, 2015 for its concurrence (see Attachment 11). The SHPO did not comment on the Section 106 consultation within 30 days. Repeated attempts in August and September resulted in no response from the agency. As outlined in the Nationwide Programmatic Agreement, this establishes a presumption that SHPO concurs with the Applicant's determination of no adverse effects on any historic resources eligible for or listed on the National Register of Historic Places. Further, no consulting THPO identified the proposed site as having adverse effect on tribal resources in this area of East Lyme. As such ATC and AT&T did not identify the Parcel or tower project as one having the potential for significant adverse effects on federal, state and local resources administered by these agencies. As required by statute, this Application is being served on state and local agencies, which may choose to comment on the Application prior to the close of the Siting Council's public hearing.

C. Power Density

In August of 1996, the FCC adopted a standard for Maximum Permissible Exposure (MPE) for RF emissions from telecommunications facilities like the one proposed in this Application. The tower site will fully comply with federal and state MPE standards. The cumulative worst-case calculation of power density from AT&T's operations in combination with the public safety antennas would be 3.42% of the MPE standard. A power density report is included in Attachment 7.

D. Wetlands, Drainage & Other At Grade Environmental Factors

The tower site is located on a residential parcel of property that is mostly wooded. The lease area and proposed areas of disturbance are located in the northern corner of the Parcel. The closest wetland to the proposed tower facility is approximately 730'+/- away. There are no on-site wetlands. No direct impacts to any wetlands or watercourses are anticipated as a result of the tower site construction. A wetland inspection is included in Attachment 6. Overall, the construction and operation of the proposed Facility will not have an impact on wetlands or water quality and drainage will be appropriately managed on-site.

The proposed Facility would be unmanned, requiring monthly maintenance visits approximately one hour long. Carriers that maintain antennas and equipment at an approved Facility monitor their facility 24 hours a day, seven days a week from a remote location. The proposed Facility does not require a water supply or wastewater utilities. No outdoor storage or solid waste receptacles will be needed. Furthermore, the proposed Facility will neither create nor emit any smoke, gas, dust, other air contaminants, noise, odors, nor vibrations other than those created by any heating and ventilation equipment or generators installed by the carriers. During power outages and weekly equipment cycling an emergency generator would be utilized with air emissions in compliance with State of Connecticut requirements.

E. National Environmental Policy Act Review

The Applicants have evaluated the project in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969, Pub. L. No. 91-190, 83 Stat. 852(codified in relevant part at 42 U.S.C. § 4321 et seq.) ("NEPA"). The Parcel was not identified as a wilderness area, wildlife preserve, National Park, National Forest, National Parkway, Scenic River, State Forest, State Designated Scenic River or State Gameland. Furthermore, according to the site survey and field investigations, no federally regulated wetlands or watercourses will be impacted by the proposed Facility. As more fully set forth in reports from AT&T's NEPA consultant included in Attachments 6, 9 and 11, the Facility is expected to be categorically exempt from the need for any further FCC review.

VII. Consistency with the Town of East Lyme's Land Use Regulations

Pursuant to the Siting Council's Application Guide, a narrative summary of the consistency of the project with the Town's zoning and wetland regulations and plan of conservation and development is included in this section. A description of the zoning classification of the site and the planned and existing uses of the proposed site location are also detailed in this section. Copies of the Town of East Lyme Zoning Code, Inland Wetlands Regulations, Zoning Map and Plan of Conservation and Development are included in the Bulk Filing.

A. East Lyme's Plan of Conservation and Development

The East Lyme Plan of Conservation & Development ("POCD") is included in the Bulk Filing. The Town's POCD does not specifically address wireless service and infrastructure. The existing Docket 67 Tower has been operational for nearly 30 years, and part of any context for the Town's POCD related to wireless facilities.

B. East Lyme's Zoning Regulations and Zoning Classification

The Town of East Lyme Zoning Regulations set forth requirements for telecommunications facilities under Section 31, which permit tower structures in all zoning districts subject to the approval of a Special Permit and Site Plan. The proposed tower Facility site is classified in the RU-40 (1 acre residential) zoning district where wireless communications facilities are a specially permitted use. A summary of the Town's Zoning Regulations and how the proposed facility meets these standards is incorporated in the Table below.

EAST LYME

Section from the Zoning Regulations	Standard or Preference	Proposed Facility
31.2.1 General Standards	Preference for use of existing tower sites. Commitment to permit future co-location on new tower sites.	The existing Docket 67 Tower must be relocated. ATC will own and operate the facility for purposes of carrier collocation.
31.2.2	Collocation Process.	N/A – Future collocations will likely be exempt modifications, tower shares or Section 6409 eligible facility

		modifications.
31.2.3	Minimum Lot Size – Underlying Zoning District.	The site is in a RU-40 one acre zoning district. The underlying lot is 7.23 acres in size.
31.2.4	Tower Height – Minimum height necessary to satisfy technical requirements.	The tower at 194' in height is as high as practical to replace coverage from the existing tower site and still be below the FAA lighting threshold. A taller tower could be justified relative to the existing coverage footprint from the existing tower site which has an approximately 110' overall higher antenna centerline AMSL.
31.2.5	1x Tower Height Setback.	The proposed tower site location does not meet this underlying zoning standard. The tower site location maximizes setbacks from on and off-site structures and is setback over 200' from such structures.
31.2.6	Tower color shall blend with surroundings.	The tower is a non-reflective galvanized monopole in a wooded area. Color treatment of the structure can be incorporated into the project as part of the Siting Council application process.
31.2.7	Tower compound landscaping shall be required.	The proposed Facility is in a wooded area where natural buffers will remain. No additional clearing or landscaping than necessary for the tower compound is proposed.
31.2.8	No tower lighting is permitted unless required by the FAA.	The 194' tower requires no FAA lighting.
31.2.9	No advertising or signage other than any required compliance signage is permitted.	The proposed Facility will incorporate compliance and other identification signs on the compound fence and building(s). No advertising is proposed.
31.2.10	Any unused tower shall be removed within 12 months and secured.	The Certificate holder will comply with the Council's standard conditions of approval and as publicly traded companies, no further security is needed to support potential removal.
31.2.11	Interference avoidance.	The FCC licensed frequencies used by AT&T and other carriers are separate and apart from others used for public

		safety, TV, radio or other services. Interference is regulated by the FCC.
31.2.12	Permit exemption for satellite dishes under 3' in diameter when ground mounted.	N/A
31.2.13	Driveway standards: a) 60,000 lb. vehicles b) Grade not to exceed 8% and c) Minimum vertical clearance of 12'	A standard gravel compacted driveway is proposed for access to the tower site location.
31.3 Siting Preferences	Preferential hierarchy: -existing approved towers -existing structures -tower farms -new towers in commercial zones -on non residential structures in residential zones -on residential structures in residential zones	This proposed tower is a relocation of an existing tower in a residential zone to another parcel in the same residential zone. There are no other towers, structures, or commercial zones in which to site a replacement facility.
31.4.1 Location Standards	Applications involving a second tower at an existing tower site.	N/A
31.4.2	Applications involving towers in commercial zones.	N/A
31.4.3	Applications involving towers in residential zones: all attempts shall be made to collocate on towers, buildings, or structures outside of residential areas with proof from a RF engineer and other evidence. Equipment structures shall meet applicable zoning regulations.	This Application includes information on the existing coverage from the existing tower in a residential area and the proposed replacement tower on another property in the same residential area along with a site search and RF justification. The at grade equipment structures comply with RU-40 requirements.
31.5.1 – 31.5.3 Placement Standards	Roof mounted facilities, existing structure facilities, residential structure mounts	N/A
31.6.1 Accessory Facilities	In residential zones, the accessory building shall be as small as possible and shall have a roofline characteristic of other buildings in the vicinity and there shall be only 1 per facility.	Equipment shelters to be used by AT&T and other carriers are as small as practical, have a flat roof and the Facility is designed for at least 4 carriers' equipment to achieve state collocation policy.

31.6.2	Buildings shall meet underlying setback requirements for the zone.	RU-40 building setbacks are a minimum of 30' from property lines. The compound is setback more than 50' from adjacent property lines.
31.6.3	Rooftop equipment	N/A
31.6.4	At grade fencing shall be at least 6' in height of materials appropriate for the zone with landscaping.	The tower compound incorporates an 8' chain link fence. No additional treatment of the fence or landscaping is proposed based on the vegetated buffer on-site.

C. Planned and Existing Land Uses

The Facility is proposed on a 7.23 acre parcel of land owned by James A. and Bonnie L. Decosta which is improved with a single family residence, with the surrounding area within ¼ mile mainly consisting of single-family residential properties in this part of East Lyme. The Orchards is an adjacent single family development which is currently undergoing construction of subsequent phases of housing.

D. East Lyme Inland Wetlands and Watercourses Regulations

The East Lyme Inland Wetlands Regulations ("Local Wetlands Regulations") regulate certain activities conducted in "Wetlands" and "Watercourses" as defined therein. The Town established upland review areas for wetlands and watercourses are not implicated in this Application. As set forth in the Wetland Investigation Report in Attachment 6 and Drawings in Attachment 4, the proposed facility is located approximately 730' from the nearest wetland. No direct impacts to any wetlands or watercourses are anticipated as a result of the tower site construction.

Additionally, the overall impervious surface associated with the Facility is low in comparison to other development such as a further subdivision of the Parcel for residential development. Storm water will be managed with Best Management Practices to be implemented during construction in accordance with the Connecticut Soil Erosion Control Guidelines, as established by the Connecticut Council of Soil and Water Conservation and DEEP (2002). Soil erosion control measures and other best management practices will be established and maintained throughout the construction of the proposed Facility. The Applicants do not anticipate an adverse impact on any

wetland or water resources as part of construction or longer term operation of the Facility and respectfully submit any indirect impacts would be less than those associated with current uses of the Parcel.

VIII. Consultation with Town Officials

Section 16-50/ of the Connecticut General Statutes requires an applicant to consult with the municipality in which a new tower facility may be located for a period of ninety days prior to filing its application with the Siting Council. With respect to the Facility as proposed in this Application, a Technical Report was filed with the Town of East Lyme on June 5, 2015. A preliminary consultation meeting was held on June 25, 2015 with First Selectman Nickerson, Town Attorney Tracy Collins, Esq., Town Planner Gary Goeschel, and others to discuss the project. A publicly noticed public information meeting was held on July 29, 2015 at which the Applicants made a presentation, answered questions from the public and solicited further information regarding the need for a replacement tower facility. A copy of correspondence with First Selectman Nickerson is included in Attachment 12. The public power point presentation prepared by the Applicants and technical reports are being bulk filed with the Application. At this time, the Town has not indicated any specific preference or suggestion related to the proposed Facility. Generally, the Town and AT&T would both prefer to simply maintain the existing Docket 67 Tower where it is today in lieu of the need for a replacement tower to be constructed.

IX. Estimated Cost and Schedule

A. Overall Estimated Cost

The total estimated cost of construction for the proposed Facility is represented in the table below:

Requisite Component:	**Cost (USD)**
Tower & Foundation	150,000
Site Development	105,000
Utility Installation	85,000
Subtotal ATC	**340,000**
Antennas and Equipment	250,000

Subtotal AT&T Cost	**250,000**
Total Estimated Costs	**590,000**

B. Overall Scheduling

Site preparation work would commence following Siting Council approval of a Development and Management ("D&M") Plan and the issuance of a Building Permit by the Town of East Lyme. The site preparation phase is expected to be completed in 6 weeks. Installation of the monopole, antennas and associated equipment is expected to take an additional 4 weeks. The duration of the total construction schedule is approximately 10 weeks. Facility integration and system testing for carrier equipment is expected to require an additional 2 weeks after construction is completed. Additionally, as part of the issuance of any Certificate for the proposed Facility, ATC and AT&T would undertake decommissioning of the existing Docket 67 Tower.

X. Conclusion

This Application and the accompanying materials and documentation clearly demonstrate that a public need for a new replacement tower in East Lyme exists to continue to provide reliable wireless services to the public. The Applicants respectfully submit that the public need for the proposed replacement tower Facility outweighs any potential environmental effects from development of the tower which are principally limited to a change in tower visibility associated with the current Docket 67 Tower in this area of East Lyme. The Applicants respectfully request that the Siting Council grant a Certificate of Environmental Compatibility and Public Need to ATC and AT&T for a new replacement wireless telecommunications Facility in East Lyme.

Respectfully Submitted,

By: _____

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Attorneys for AT&T

ATTACHMENT 1

ATTACHMENT 1

STATEMENT OF PUBLIC NEED

The proposed tower facility at 351A Boston Post Road in East Lyme is needed in conjunction with other existing facilities in order for AT&T and T-Mobile to replace service in this part of the state currently provided by an existing tower facility in the Orchards development, which is slated for decommissioning (the "Docket 67 Tower"). Attached is an AT&T Radio Frequency Engineering Report with coverage plots and statistics that note the "Coverage Loss without the Scott Road Facility" and "Proposed Coverage with the Proposed Permanent Facility" as predicted, together with existing service from adjacent sites. Additional statistics regarding the overall area, population and roadway miles of expanded and reliable service in the community are included in AT&T's report. Also included in Attachment 1 are the Council's 1986 Findings of Fact, Opinion and Decision and Order in Docket 67.

DOCKET NO. 67

AN APPLICATION OF THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN THE TOWNS OF EAST LYME AND WATERFORD, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL December 22, 1986

D E C I S I O N A N D O R D E R

Pursuant to the foregoing Opinion, the Council hereby directs that a Certificate of Environmental Compatibility and Public Need (Certificate) as provided by section 16-50k of the General Statutes of Connecticut (CGS) be issued to the Southern New England Telephone Company for the construction, operation, and maintenance of telecommunications towers and associated equipment buildings to provide cellular mobile telephone service at Scott Road, East Lyme, and the Town of Waterford landfill, Waterford.

The facilities shall be constructed, operated, and maintained as specified in the Council's record on this matter, and subject to the following conditions.

1. The towers, including antennas, shall be no taller than necessary to provide the proposed service, and in no event shall exceed
   a) 167 feet at the East Lyme site, and
   b) 167 feet at the Waterford site.
2. A fence not lower than eight feet shall surround each tower and its associated equipment building.
3. Unless necessary to comply with condition number four, below, no lights shall be installed on these towers.
4. The facilities shall be constructed in accordance with all applicable federal, state, and municipal laws and regulations.

5. The certificate holder shall submit a Development and Management Plan (D&M plan) for the tower sites pursuant to sections 16-50j-75 through section 16-50j-77 of the Regulations of State Agencies, except that irrelevant items in section 16-50j-76 need only be identified as such. The D&M plan shall provide plans for evergreen screening around the fenced perimeter of the Waterford tower site. As stated in section 16-50j-75(d), the D&M plan must be approved by the Council prior to facility construction. Any changes in the D&M plan must be approved by the Council prior to facility operation.

6. No construction activities shall take place outside the hours of 7:00 A.M. to 7:00 P.M., Monday through Saturday.

7. The applicant or its successor shall notify the Council if and when directional antennas or any equipment other than that listed in the D&M plan is added to these facilities.

8. The applicant or its successor shall permit, in accordance with representations made by it during the proceeding, public or private entities to share space on the tower, for due consideration received, or shall provide any requesting entity with specific legal, technical, environmental, or economic reasons precluding such tower sharing.

9. If the towers do not provide or permanently cease to provide cellular service following completion of construction, this Decision and Order shall be void and the towers and all associated equipment shall be dismantled and removed or reapplication for any new use shall be made to the Council before any such new use is made.

10. Unless otherwise approved by the Council, this Decision and Order shall be void if all construction authorized herein is not completed within three years of the issuance of this Decision and Order, or within three years of the completion of any appeal taken of this Decision.

11. The certificate holder shall measure and report to the Council the radio frequency power density levels at these sites in accordance with Federal Communications Commission-specified guidelines as set forth in the Office of Science and Technology Bulletin No. 65, October, 1985, within six months of completion of construction.

Pursuant to CGS section 16-50p, we hereby direct that a copy of the Decision and Order be served on each person listed below. A notice of the issuance shall be published in the New London Day and the Niantic News.

The parties to the proceeding are:

Southern New England Telephone Company (Applicant)
227 Church Street - Room 1021
New Haven, Connecticut 06506

ATTN: Peter J. Tyrrell (its representative)
Senior Attorney
(203) 771-7381

Metro Mobile CTS of Hartford, Inc. represented by:

Mr. Howard L. Slater
Byrne, Slater, Sandler,
Shulman & Rouse, P.C.
330 Main Street
Post Office Box 3216
Hartford, Connecticut 06103

Waterford Planning & Zoning Commission

represented by:

Mr. Thomas V. Wagner
Town Planner
Town of Waterford
Waterford Planning &
Zoning Commission
15 Rope Ferry Road
Waterford, Connecticut 06385-2886

GEM Cellular

represented by:

Mr. George E. Murray
GEM Cellular
1809 Parkside Drive, N.W.
Washington, D.C. 20012

C E R T I F I C A T I O N

The undersigned members of the Connecticut Siting Council hereby certify that they have heard this case or read the record thereof, and that we voted as follows:

Dated at New Britain, Connecticut, this 22th day of December, 1986.

Council Members	Vote Cast
Gloria Dibble Pond Chairperson	Yes
Commissioner John Downey Designee: Commissioner Peter Boucher	Yes
Commissioner Stanley Pac Designee: Christopher Cooper	Absent
Owen L. Clark	Yes
Mortimer A. Gelston	Yes
James G. Horsfall	Yes
Pamela B. Katz	Yes
William H. Smith	Yes
Colin C. Tait	Absent

STATE OF CONNECTICUT)
: ss. New Britain, December 22, 1986
COUNTY OF HARTFORD)

I hereby certify that the foregoing is a true and correct copy of the decision and order issued by the Connecticut Siting Council, State of Connecticut.

ATTEST:

John C. Kelly
Executive Director
Connecticut Siting Council

DOCKET NO. 67

AN APPLICATION OF THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN THE TOWNS OF EAST LYME AND WATERFORD, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL
	:	December 22, 1986

F I N D I N G S O F F A C T

1. Southern New England Telephone Cellular, Inc. (SNET), in accordance with provisions of sections 16-50g to 16-50z of the Connecticut General Statutes (CGS), applied to the Connecticut Siting Council (Council) on July 21, 1986, for a Certificate of Environmental Compatibility and Public Need (Certificate) for the construction, maintenance, and operation of telecommunications towers and associated equipment buildings in the towns of East Lyme and Waterford to provide domestic public cellular radio telecommunications service (cellular service) to the New London New England County Metropolitan Area (New London NECMA). (Record)
2. The fee as prescribed by Section 16-50v-1 of the Regulations of State Agencies (RSA) accompanied the application. (Record)
3. The Council and its staff made an inspection of the proposed East Lyme site and proposed and alternative Waterford sites on October 15, 1986. (Record)
4. Pursuant to section 16-50m of the CGS, the Council, after giving due notice thereof, held a public hearing on this application in the Waterford Town Hall, Waterford, Connecticut, beginning at 7:00 P.M. on October 15, 1986. (Record)

5. The parties to the proceeding are the applicant and those persons and organizations whose names are listed in the Decision and Order which accompanies these findings. (Record)

6. The following state agency filed written comments with the Council pursuant to Section 16-50j of the CGS: the Department of Environmental Protection. (Record)

7. The Council took administrative notice of its record in Docket 45. (Tr., p. 11)

8. The New London NECMA consists of the towns of Colchester, Lebanon, Franklin, Sprague, Lisbon, Griswold, Voluntown, North Stonington, Preston, Norwich, Bozrah, Salem, Montville, Ledyard, Stonington, Groton, Waterford, New London, East Lyme, Lyme, and Old Lyme. (SNET 1, Section IV, p. 13)

9. SNET has filed with the Federal Communications Commission (FCC) for a total of four sites in the New London NECMA. (Tr., pp. 19-20)

10. SNET received construction permits from the FCC for cellular tower sites in the towns of East Lyme and Waterford on August 1, 1986. (SNET 3, Q. 18)

11. The FCC has determined that a public need exists nationwide to improve the present mobile telephone service, due to the current system's limited capacity, long waiting lists nationally, and poor quality service, which have created congested channels and long waiting times. (SNET 1, Section IV, p. 10)

12. Cellular service consists of small overlapping broadcast regions, two to ten miles in diameter, known as cells. Each cell is served by a transmitter limited by the FCC to no more

than 100 watts effective radiated power per channel. Each cell is connected to a central switching point containing electronic apparatus uniting the cells into a system. (SNET 1, Section II, p. 2)

13. The FCC has pre-empted the state's regulation of cellular service in three major areas: technical standards, market structure, and state certification prior to federal application for a construction permit. (Docket 45, Exhibit 3, Section III, p. 4)

14. The FCC has established the technical standards for cellular service to ensure the efficient use of the allotted frequency spectrum and to ensure nationwide compatibility. (Docket 45, Exhibit 1, Section III, p. 4)

15. SNET considered and rejected the following locations in the East Lyme area as possible tower sites: the Stone Ranch Military Reservation; property owned by the Town of East Lyme north of the Boston Post Road, and the Sheffield School property owned by Yale University off of Scott Road. (SNET 1, Section VI, p. 3)

16. The Stone Ranch Military Reservation property was unavailable. The Town of East Lyme property was rejected for low elevation and resulting unacceptable coverage. The Sheffield School property was of insufficient elevation. (SNET 1, Section VI, p. 3)

17. The proposed East Lyme tower site is a leased, 100-foot by 100-foot parcel of land on a 232 acre tract of land owned by Woodrow R. Scott and Wilson P. and Clara A. Scott, approximately 1,800 feet off of Scott Road. The proposed site is within a woodlot adjacent to an apple orchard. (SNET 1, Section VI, p. 4, p. 16)

18. The proposed East Lyme site has an elevation of 353 feet above mean sea level (AMSL) and is located within a residential (R-20) zoning district. The distance to the nearest home is 1,100 feet. (SNET 1, Section VI, p. 16; SNET 2, Q. 4)

19. The proposed East Lyme tower would be a 150-foot monopole supporting a triangular antenna platform 154 feet above ground level (AGL). Whiplike, omnidirectional antennas at the corners of this platform would extend the height an additional 13 feet for a total structure height of 167 feet. (SNET 1, Section VI, p. 30)

20. A 12-foot by 26-foot, one story, equipment building would be constructed at the base of the East Lyme tower. The proposed tower and building would be surrounded by an eight-foot chain link fence. (SNET 1, Section V., p. 6, SNET, Section VI, p. 20)

21. The proposed East Lyme tower would be painted blue-gray to blend in with the background of the sky. The Federal Aviation Administration (FAA) has determined that the proposed tower would not be a hazard to air navigation, and therefore obstruction marking and lighting would not be required. (SNET 1, Section VI, p. 20, p. 30)

22. The electromagnetic radiation power densities at the base of the proposed East Lyme tower are calculated to be 0.10002 milliwatts per square centimeter, based on conservative assumptions. The American National Standards Institute (ANSI) standard for this frequency is 2.933 milliwatts per square centimeter. (SNET 1, Section IV, p. 9)

23. Access into the proposed East Lyme site would be via an existing, dirt roadway 1,300-feet in length. A 360-foot extension of this access would be constructed through the woodlot to the proposed site. (SNET 1, Section VI, p. 16)

24. SNET determined the visibility of its proposed towers by flying meteorological balloons at the heights of the proposed towers in East Lyme and Waterford. (Tr., pp. 16-17)

25. The proposed East Lyme tower would be visible from some portions of Scott Road to the west of the proposed site, and from the high point of Route 1 southwest of the intersection of Scott Road. The proposed tower would not be visible from Sunrise Trail or Legendary Road. (Tr., p. 16)

26. The proposed East Lyme tower would provide cellular coverage along Routes 1, 85, I-95, 156, 161, and I-395. Also covered would be the towns of Old Lyme, East Lyme, and Lyme; the Connecticut River; and eastern Long Island Sound. (SNET 1, Section VI, p. 1, p. 32)

27. If the proposed East Lyme tower were reduced to a height of 130 feet, 3.5 miles of coverage would be lost along Route I-95, an 0.8 mile loss would occur on Route 395, and 0.8 mile would be lost along Route 1. (Tr., p. 18)

28. SNET considered and rejected the following locations in the Waterford area as possible tower sites: the SNET microwave tower on its Washington Street, New London, office building; a private tower on Great Neck Road, Waterford; and several properties on Miner Lane. (SNET 1, Section VII, p. 3)

29. The SNET office building was of insufficient elevation and would provide unacceptable coverage. The private tower on Great Neck Road would be structurally incapable of holding the proposed antennas. Properties on Miner Lane were of insufficient elevation. (SNET 1, Section VII, p. 3)

30. The proposed Waterford site is a leased, 50-foot by 50-foot parcel of land within the 28-acre Town of Waterford landfill, and is located in a residential (R-40) zoning district on Miner Lane. (SNET 1, Section VII, p. 4, p. 13)

31. The proposed Waterford site is 94 feet AMSL. The distance to the nearest home would be 300 feet. (SNET 1, Section VII, p. 13; SNET 2, Q. 4)

32. The Town of Waterford landfill is presently used for the storage of bulky waste. The landfill has an expected life of 20 years. (SNET 2, Q. 15)

33. The proposed Waterford site is outside of any area previously used for waste burial. Decomposition gases are therefore not expected to be a problem at this proposed site. (SNET 4, Q. 2; Tr. pp. 13-14)

34. The proposed Waterford site would contain a 150-foot monopole supporting a triangular antenna platform 154 feet AGL. Whiplike antennas at the corners of this platform would extend the height an additional 13 feet for a total structure height of 167 feet. (SNET 1, Section VII, p. 27)

35. The proposed Waterford site would contain a 20-foot, 8 3/4-inch by 20-foot, 8 3/4-inch, one-story equipment building. The equipment building and tower would be surrounded by an eight-foot chain link fence. (SNET 1, Section V, p. 6)

36. The proposed Waterford tower would be painted blue-gray to blend in with the background of the sky. The FAA has determined that this proposed tower would not be a hazard to air navigation, and therefore obstruction marking and lighting are not required. (SNET 1, Section VII, p. 17; p. 27)

37. The electromagnetic radiation power densities at the base of the proposed Waterford tower are calculated to be 0.10002 milliwatts per square centimeter, based on conservative assumptions. (SNET 1, Section VII, p. 22)

38. The access into the proposed Waterford site would be via an existing roadway presently used for landfill access. A 325-foot extension of this roadway would be constructed. (SNET Section VII, p. 13)

39. The proposed Waterford tower would be 1.4 miles from the nearest portion of Harkness Memorial State Park. (SNET 2, Q. 4)

40. The proposed Waterford tower would be visible from some portions of Miner Lane, from the intersection of Route 1 and Miner Lane, and from some portions of Laurel Crest Drive. The top 50 to 60 feet of this tower would be visible from the nearest residence. (Tr., p. 15, p. 28)

41. The proposed Waterford tower would provide coverage along Routes 1, 12, 32, 85, I-95, 156, and I-395. It would also provide coverage to the towns of Waterford, New London, Groton, portions of Ledyard and Montville, eastern Long Island Sound, and Fishers Island. (SNET 1, Section VII, p. 1, p. 29)

42. If the proposed Waterford tower were reduced to a height of 130 feet, one-half mile of coverage would be lost along Route I-95, and 1.2 miles of coverage would be lost along Route 1. (Tr., p. 19)

43. The alternative Waterford site is a 125-foot by 300-foot parcel of leased land owned by Angelo and Norma Occhionero and located in a residential (R-40) zoning district. (SNET 1, Section VIII, p. 4, p. 5)

44. The alternative Waterford site is 200 feet east of Miner Lane, and is 102 feet AMSL. The distance to the nearest home would be 320 feet. (SNET 1, Section VIII, p. 5; SNET 2, Q. 4)

45. The alternative Waterford tower site would contain a 150-foot monopole. The overall height of the structure, including antennas, would be 167 feet AGL. The monopole would be painted blue-gray to blend in with the sky. A 20-foot, 8 3/4-inch by 20-foot, 8 3/4-inch equipment building would be constructed at the base of the proposed tower. (SNET 1, Section V, pp. 2-4; SNET 1, Section VIII, p. 3)

46. Access into the alternative Waterford site would be via an existing, 175-foot, dirt roadway. A 100-foot extension of this roadway would be required. (SNET 1, Section VIII, p. 5)

47. The electromagnetic radiation power densities at the base of the proposed Waterford tower are calculated to be 0.10002 milliwatts per square centimeter, based on conservative assumptions. (SNET 1, Section VIII, p. 6)

48. The visibility of the alternative Waterford tower would be similar to that of the proposed Waterford tower, except that the alternative tower would be more visible from some of the residences on Miner Lane. (Tr., pp. 15-16; p. 28)

49. The expected coverage from the alternative Waterford site would be virtually identical to that of the proposed Waterford site. The proposed Waterford site is preferred by SNET because there would be less construction involved. (SNET 1, Section VIII, p. 1; Tr., p. 14)

50. The proposed East Lyme facility construction, equipment, and improvement costs are estimated as follows:

Radio equipment,	$ 67,900;
Antenna equipment and mast,	38,000;
Power and common equipment,	126,000;
Land and building,	167,000;
Miscellaneous,	69,100;
Total	$468,000.

(SNET 1, Section VI, p. 26)

51. The proposed Waterford facility construction, equipment, and improvement costs are estimated as follows:

Radio equipment,	$ 71,100;
Antenna equipment, and mast,	38,000;
Power and common equipment,	180,000;
Land and building,	156,000;
Miscellaneous,	65,500;
Total	$510,600.

(SNET 1, Section VII, p. 23; SNET 1, Section VIII, p. 1)

52. The State Historic Preservation Officer has determined that the proposed East Lyme and proposed and alternative Waterford tower sites would have no effect on the state's historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (SNET 4, Q. 8)

53. There are no known existing or historic records of federal endangered or threatened species, or Connecticut species of special concern occurring at any of the proposed or alternative sites in this application. (SNET 2, Q. 7)

54. The proposed East Lyme and proposed and alternative Waterford sites are not classified as regulated inland wetlands. (SNET 2, Q. 6)

55. SNET would be willing to negotiate with private and public entities to share space on the proposed towers if legally, technically, economically, and environmentally feasible. (SNET 2, Q. 11)

56. Approximately 2,450 cellular radio subscribers would be expected in the New London NECMA. (SNET 2, Q. 21)

DOCKET NO. 67

AN APPLICATION OF THE SOUTHERN NEW ENGLAND TELEPHONE COMPANY FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF FACILITIES TO PROVIDE CELLULAR SERVICE IN THE TOWNS OF EAST LYME AND WATERFORD, CONNECTICUT.	:	CONNECTICUT SITING COUNCIL
	:	December 22, 1986

O P I N I O N

The Southern New England Telephone Company (SNET) applied to the Connecticut Siting Council (Council) for a certificate of environmental compatibility and public need for the construction, operation, and maintenance of telecommunication towers and associated equipment buildings in the towns of East Lyme and Waterford to provide Domestic Cellular Radio Telecommunications Service (cellular service) in the New London New England County Metropolitan Area (NECMA).

The Council visited the proposed sites and an alternative to the proposed Waterford site on October 15, 1986. A public hearing was held in Waterford on the evening of October 15, 1986. The Council took administrative notice of its record in its proceeding in Docket 45, which pertained to SNET cellular service.

The Federal Communication Commission has determined that a public need for cellular service exists. The Waterford tower will provide coverage to the towns of Waterford, New London, Groton, portions of Ledyard and Montville, eastern Long Island Sound, and Fishers Island. The East Lyme tower will provide coverage to the towns of East Lyme, Old Lyme, Lyme, and eastern Long Island Sound. The Council finds that these facilities are necessary to provide cellular service. The establishment of these facilities to provide cellular service is not contingent on future siting decisions in adjacent areas.

In its deliberations, the Council considered such potential adverse effects of the facilities as their visibility, construction impacts, and compatibility with surrounding properties.

The impact of the proposed facilities would be primarily visual. The Waterford tower at the proposed landfill site would be less visible from some of the residences on Miner Lane than the alternative tower site located on the Occhionero property. The proposed Waterford landfill site because it would involve less construction. There are no known records of rare or endangered species occurring at any of the proposed or alternative sites. The State Historic Preservation Officer has determined that the construction of towers at the sites in this application would have no effect on the State's historic, architectural, or archaeological resources. Radiation power density levels for these radio frequencies will be well below the American National Standards Institute levels.

Based on these considerations, the Council has determined that the environmental effects of either of the proposed sites is insufficient to justify denying Council approval, and that the Waterford landfill tower site is preferable to the Waterford alternative tower site. Therefore, the Council will order that a certificate of environmental compatibility and public need be issued for the construction, operation, and maintenance of the proposed Waterford landfill tower site and East Lyme tower site.

Radio Frequency Analysis Report

CT1345B
351A Boston Post Road, East Lyme, CT

April 28, 2015

C Squared Systems, LLC
65 Dartmouth Drive, A3
Auburn, NH 03032

Phone: (603) 644-2800
Fax: (603) 644-2801
Support@csquaredsystems.com

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1. Overview

C Squared Systems was retained by New Cingular Wireless PCS, LLC ("AT&T") to investigate the extent of coverage loss and service degradation that will result with the decommissioning their existing 2 Scott Road site (CT2022), herein referred to as the "Decom" site and, the extent of coverage and service that could potentially be recovered by the deployment and activation of the proposed replacement site, referred to herein as the ("Facility"). The "Facility" will be located on 351A Boston Post Road in East Lyme, and will have an overall height of 199' feet AGL.

AT&T is licensed by the FCC to provide wireless communications services throughout the State of Connecticut including the Town of East Lyme where the proposed facility would be located.

This report addresses AT&T's need for the replacement facility and confirms that there are no other suitable existing structures that could address the coverage lost in the wireless communication network. The coverage analysis completed by C Squared Systems confirms that the decommissioning AT&T's existing site (CT2022) will create a significant coverage gap and result in the overall loss of reliable service for existing AT&T customers who reside in or travel through East Lyme. The coverage analysis also shows that proposed "Facility" will enable AT&T to restore a substantial portion of the service lost in the subject area by the deployment of the replacement "Facility" on Boston Post Road. Included as attachments to this preliminary report are coverage maps detailing the existing network and the predicted coverage from the proposed "Facility".

2. Coverage Objective

AT&T's coverage objective for the proposed "Facility" is to maintain the expected level of service in East Lyme that AT&T customers residing or traveling through the area have become accustomed to. Without a comparable replacement site in place prior to the decommissioning of the 2 Scott Road site, a substantial hardship will result. The primary purpose of the proposed "Facility" is to restore as much coverage as possible, minimizing service degradation and the creation of additional coverage gaps within AT&T's network and the Town of East Lyme.

In this instance, the extent of the coverage gap to be filled is defined by the coverage that will be lost by the decommissioning of their 2 Scott Road site (CT2022).

The affected area of concern "targeted area" includes but is not limited to the following:

- Boston Post Road, N Bride Brook Road, Dean Road ;
- Lovers Lane, Scott Road;
- The surrounding residential neighborhoods in the vicinity of the roads areas described above.

The "targeted area" is presented in Attachment 1: "850 MHz UMTS Coverage with CT2022 Off-Air", and delineated as the area shaded in light green.

Table 1 below lists the coverage statistics compiled for the AT&T's 850 MHz UMTS network and the impacted area following the decommissioning of AT&T site CT2022.

	Coverage Lost from CT2022 Decommissioning	
Population:[1]	"In-Building" (≥ -74 dBm)	1,370
	"In-Vehicle" (≥ -82 dBm)	2,389
Area (mi²):	"In-Building" (≥ -74 dBm)	3.06
	"In-Vehicle" (≥ -82 dBm)	6.25
Roadway (mi):	Main:	4.18
	Secondary:	16.1
	Total:	**20.28**

Table 1: Estimated Coverage Lost Statistics

Included with this preliminary report are Attachments 1-3, which are explained below to help describe AT&T's network in and around East Lyme, and the need for the proposed replacement "Facility".

- Attachment 1: "*850 MHz UMTS Coverage with CT2022 Off-Air"* details depicts 850 MHz UMTS residual coverage remaining once the subject site has been decommissioned and the delineates the area impacted by the decommissioning of CT2022.
- Attachment 2: "*850 MHz UMTS Composite Coverage with CT1345B Site"* shows how this proposed site would fill in the resultant coverage gap left by the decommissioning of the 2 Scott Road site (CT20222) and the areas where AT&T's 850 MHz UMTS service would be restored. The resultant coverage is detailed in Table 2.
- Attachment 3: "*CT2022 vs. CT1345B Site 850 MHz UMTS Coverage"* delineates the area previously covered by CT2022 but no longer covered with the activation of the proposed Facility. As can be seen in this plot, sections of N. Bride Brook Rd, Scott Rd, Upper Pattagansett Road and Dean Rd, previously covered by the decommissioned site, will now have unreliable AT&T service.

[1] Population figures are based upon 2010 US Census Block Data

Table 2 below details the coverage statistics compiled for the AT&T's 850 MHz UMTS network with the activation of the proposed facility with an antenna centerline of 170 feet.

	Coverage Recovered by Site CT1345B	
Population Coverage:[2]	"In-Building" (≥ -74 dBm)	1,365
	"In-Vehicle" (≥ -82 dBm)	2,076
Area Covered (mi²):	"In-Building" (≥ -74 dBm)	2.21
	"In-Vehicle" (≥ -82 dBm)	4.11
Roadway Coverage (mi):	Main:	3.69
	Secondary:	13.19
	Total:	**16.88**

Table 2: Coverage – Recovered Statistics

While the proposed site will add some incremental coverage to areas of East Lyme previously without coverage and provide substantial fill-in coverage for much of the impacted area, it unfortunately will open up some gaps along Boston Post Road, N Bride Brook Road, Upper Pattagansett Road, and some of the secondary roads covered by the existing 2 Scott Road site. (These gaps are apparent in Attachment 3: *CT2022 vs. CT1345B Site 850 MHz UMTS Coverage).*

3. Conclusion

AT&T has identified a potential area of deficient coverage that will impact existing AT&T customers and affect a significant portion of East Lyme CT, including key traffic corridors through the residential areas of the Town. The proposed East Lyme replacement "Facility" will bring the needed fill-in coverage to significant portions of Route 1 (Boston Post Road), Lovers Lane, Dean Road, North Bride Brook Road, and the residential neighborhoods in the vicinity of the roads impacted by the decommissioning of AT&T's existing site CT2022.

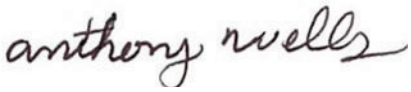
No existing structures were identified and available that would be able to satisfy the coverage requirements for this area.

As discussed in this report and depicted in the attached plots, the proposed AT&T replacement site will reinstate service for a substantial number of customers currently being served by the 2 Scott Road site in East Lyme and, maintain effective connectivity to AT&T's existing network.

[2] Population figures are based upon 2010 US Census Block Data

4. Statement of Certification

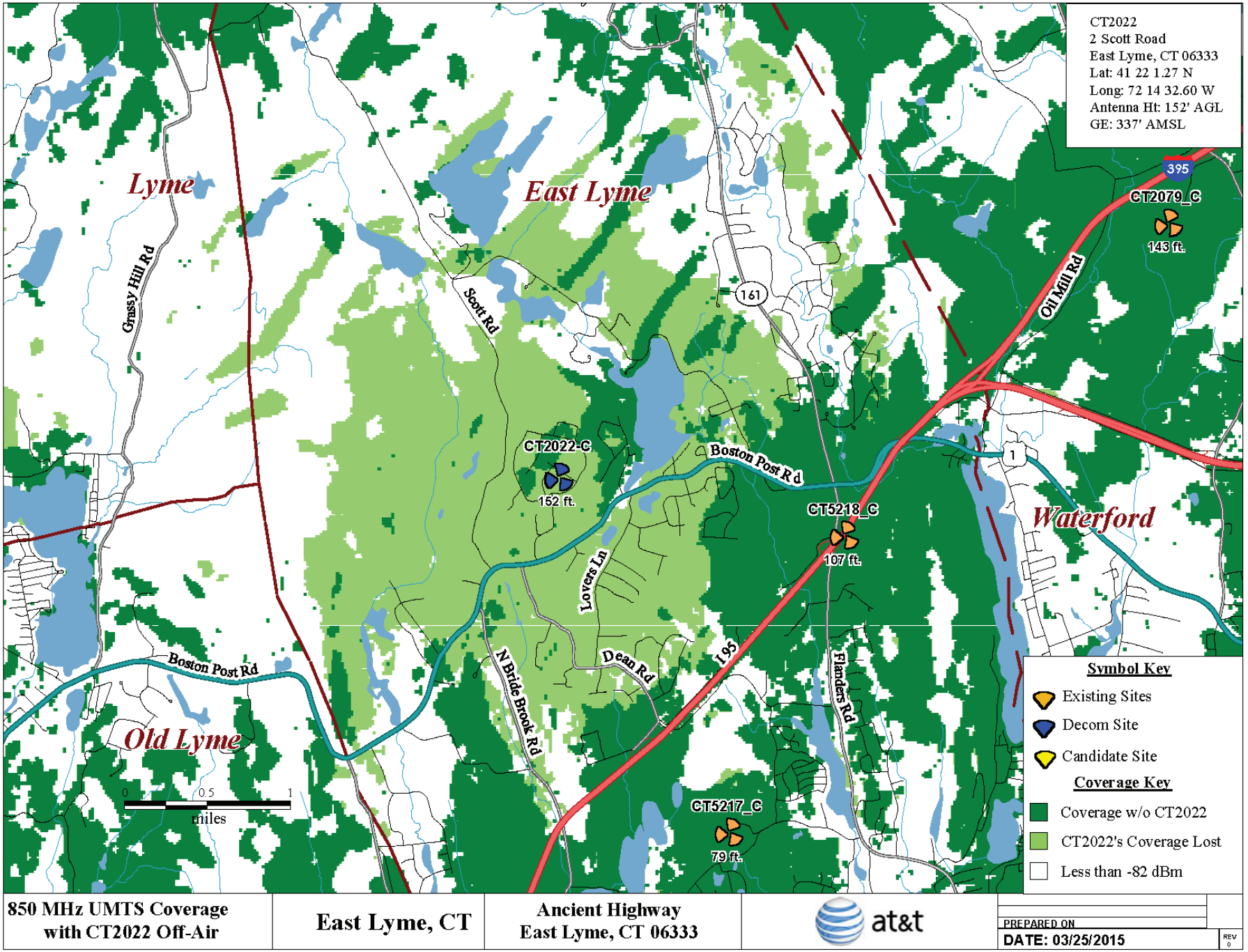
I certify to the best of my knowledge that the statements in this report are true and accurate.



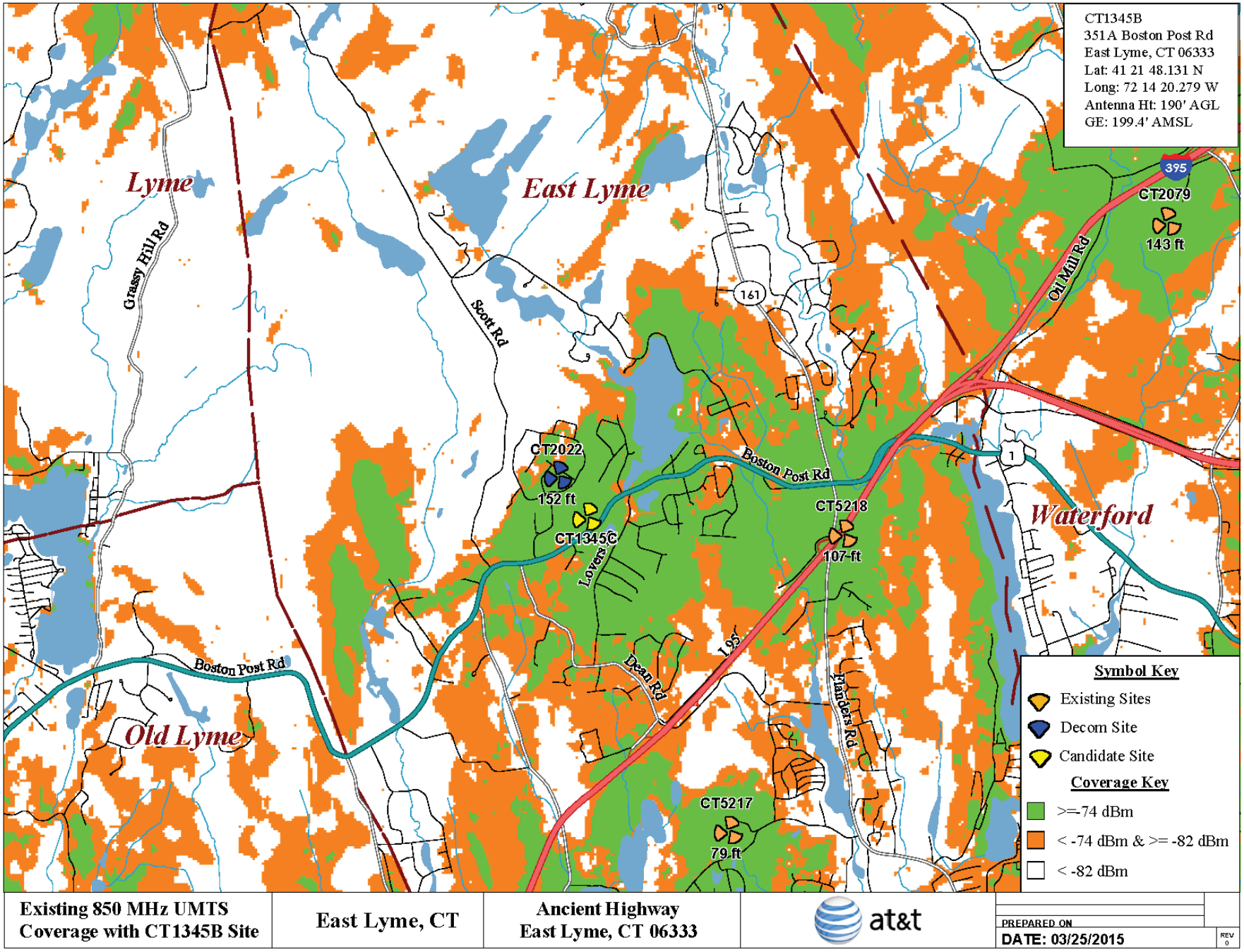
Anthony Wells
C Squared Systems, LLC

April 28, 2015
Date

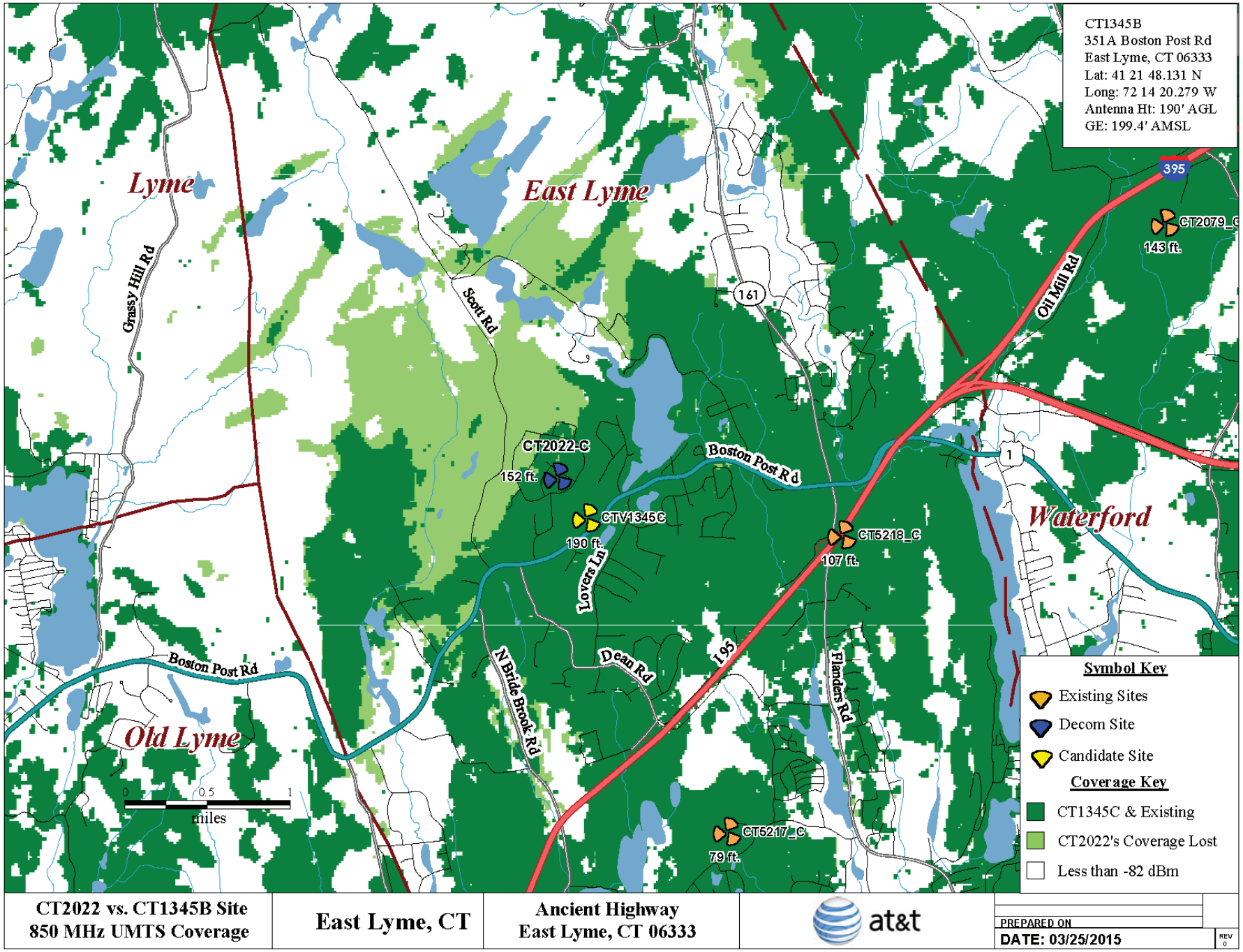
5. Attachments



Attachment 1: 850 MHz UMTS Coverage with CT2022 Off-Air



Attachment 2: 850 MHz UMTS Composite Coverage with CT1345B Site



Attachment 3: CT2022 vs. CT1345B Site 850 MHz UMTS Coverage

ATTACHMENT 2

ATTACHMENT 2

SITE SEARCH SUMMARY

A search area is developed to initiate a site selection process in an area where network service improvements are required for a specific carrier and/or carriers. The search area is a general geographic region where the installation of a wireless facility would address identified service problems while still allowing for orderly integration of a new facility into a network such as AT&T's. The technical and site selection criteria used by wireless carriers include hand-off, frequency reuse, and interference among other factors. In any site search area, site acquisition specialists seek to avoid the unnecessary proliferation of towers and to reduce the potential adverse environmental effects of a needed facility, while simultaneously seeking sites that RF engineers will qualify as being able to provide quality reliable service to the community.

Once a potential candidate is selected through the identification process, site acquisition teams review any applicable zoning ordinance or other guidance documentation. The most preferred candidates are generally considered to be existing structures that can be used. In order to be viable, a candidate must provide adequate service and be "leasable". In this case, the site search is focused on replacing an existing operational cell tower site (CSC Docket 67) which must be decommissioned.

An analysis of the communications towers and facilities within 4 miles of the search area indicated that these towers would not provide adequate coverage to the area targeted for service by the proposed Facility within this particular area of East Lyme, Connecticut or such structures are not viable for AT&T siting. Based on the location of the existing tower site, terrain and coverage objectives, the search area focused on two areas of geography in East Lyme. The first being the area around The Orchards development and the existing

tower site and the second being higher elevations off of Ancient Highway. These search areas are shown as “red” polygons on the site search map.

The site search for a replacement tower dates to 2014 and includes work undertaken by various tower companies and site acquisition firms not all of which was done under AT&T or ATC’s direction. The site search also includes preliminary municipal consultations by AT&T in the Fall of 2014. At this point in time, AT&T has investigated and evaluated over thirty (30) potential sites not all of which are in the site search areas or listed. One potential tower replacement site has been identified with the remainder of the sites evaluated either unavailable for the siting of a wireless facility or, for the reasons cited below, rejected by RF engineers for AT&T’s service requirements.

1. Address: 351B Boston Post Road
Map/Lot: 29.0/44
Owner: Perry
Deed: Vol. 863 Pg. 408
Zoning District: R40
Lot Size: Approximately 7.27 Acres
41-21-53 N 72-14-23.6 W

The property owner of this residential property was not interested.

2. Address: 405 Boston Post Road
Map/Lot: 29.0/31
Owner: Adams
Deed: Vol. 661 Pg. 7
Zoning District: R40
Lot Size: Approximately 39.74 Acres
41-21-47 N 72-14-51 W

The property owner of this residential property expressed some initial interest, but later indicated he was not interested.

3. Address: 351A Boston Post Road
Map/Lot: 29.0/45
Owner: DeCosta
Deed: Vol. 791 Pg. 198
Zoning District: R40
Lot Size: Approximately 7.23 Acres
41-21-48.1 N 72-14-20.3 W

This is the American Tower leased site which is in the Application and known as Site B as part of the municipal consultation.

4. Address: Hathaway Road
Map/Lot: 35.0/23
Owner: Mullany
Deed: Vol. 174 Pg. 1091
Zoning District: R40
Lot Size: Approximately 152.25 Acres
41-22-21 N 72-14-22 W

The property owner of this undeveloped parcel was not interested.

5. Address: Scott Road
Map/Lot: 34.0/9
Owner: Sheffield Scientific School (Yale University)
Deed: Vol. 26 Pg. 10
Zoning District: R40
Lot Size: Approximately 44.4 Acres
41-22-25 N 72-14-27 W

This location was rejected by AT&T's radio frequency engineers.

6. Address: 69 Scott Road
Map/Lot: 34.0/18
Owner: Cheng, et al
Deed: Vol. 778 Pg. 791
Zoning District: R40
Lot Size: Approximately 6.43 Acres
41-22-20 N 72-14-40.8 W

This location was rejected by AT&T's radio frequency engineers.

7. Address: 24 Sunrise Trail (Rear)
Map/Lot: 30.1/20
Owner: Gardner
Deed: Vol. 483 Pg. 323
Zoning District: R40
Lot Size: Approximately 4.17 Acres
41-21-57.7 N 72-14-18 W

The owner of this property was not interested.

8. Address: 171 Boston Post Road (Flanders Safety Center)
Map/Lot: 31.1/31
Owner: Town of East Lyme
Deed: Vol. 96 Pg. 386
Zoning District: CA
Lot Size: Approximately 61 Acres
41-22-01 N 72-12-58.8 W

This is also Site# 2 on the 4-Mile existing Tower/Structure List. Collocation on this existing lattice tower (located behind the Flanders Safety Center) was

rejected by AT&T's radio frequency engineers. Visual inspection noted this is a light duty tower as well.

9. Address: 6 Stone Ranch Road (Military Reservation)
Map/Lot: 28.1/1
Owner: State of CT
Deed: Vol. 31 Pg. 388
Zoning District: R40
Lot Size: Approximately 1026 Acres
41-21-57 N 72-16-00 W

This is also Site# 13 on the 4-Mile existing Tower/Structure List. Collocation (or 10' - 20' tower extension) on this existing 140-foot tower was rejected by the CT State Police (operators of the tower).

10. Address: 415 Boston Post Road
Map/Lot: 24.0/30
Owner: Smiths Acres LLC
Deed: Vol. 648 Pg. 705
Zoning District: R40
Lot Size: Approximately 34.45 Acres
41-21-30.4 N 72-15-01.4 W

This location was rejected by AT&T's radio frequency engineers for a permanent facility.

11. Address: 12 Scott Road
Map/Lot: 29.0/2
Owner: Smith
Deed: Vol. 209 Pg. 1093
Zoning District: R40
Lot Size: Approximately 3.26 Acres

41-21-34 N 72-15-04 W

This location was rejected by AT&T's radio frequency engineers.

12. Address: 32 - 32B Scott Road
Map/Lot: 29.0/12
Owner: Woodrow
Deed: Vol. 706 Pg. 567
Zoning District: R40
Lot Size: Approximately 34.73 Acres
41-21-53.4 N 72-15-05 W

This location was rejected by AT&T's radio frequency engineers.

13. Address: Scott Road
Map/Lot: 29.0/11
Owner: Sheffield Scientific School (Yale University)
Deed: Vol. 17 Pg. 635
Zoning District: R40
Lot Size: Approximately 33.98 Acres
41-21-49 N 72-15-06 W

This location was rejected by AT&T's radio frequency engineers.

14. Address: 405 Boston Post Road
Map/Lot: 29.0/31
Owner: Adams
Deed: Vol. 661 Pg. 7
Zoning District: R40
Lot Size: Approximately 39.74 Acres
41-21-36.4 N 72-14-56.6 W

This location was rejected by AT&T's radio frequency engineers.

15. Address: 6 Stone Ranch Road
Map/Lot: 28.1/1
Owner: State of CT
Deed: Vol. 31 Pg. 388
Zoning District: R40
Lot Size: Approximately 1026 Acres
41-21-29 N 72-15-31 W

This proposed new tower location (near the former landing strip on the Military Reservation) was rejected by AT&T's radio frequency engineers.

16. Address: 291 N. Bride Brook
Map/Lot: 24.0/95
Owner: Scott
Deed: Vol. 168 Pg. 810
Zoning District: R40
Lot Size: Approximately 53.49 Acres
41-21-16 N 72-14-56.6 W

This location was rejected by AT&T's radio frequency engineers.

17. Address: 430 Boston Post Road
Map/Lot: 24.0/93
Owner: Scott
Deed: Vol. 749 Pg. 63
Zoning District: R40
Lot Size: Approximately 18.92 Acres
41-21-24.4 N 72-14-55 W

This location was rejected by AT&T's radio frequency engineers.

18. Address: 440 Boston Post Road (Water Tank)
Map/Lot: 24.0/132
Owner: Town of East Lyme
Deed: Vol. 229 Pg. 932
Zoning District: R40
Lot Size: Approximately 0.32 Acres
41-21-14.8 N 72-15-06 W

This is also Site# 14 on the 4-Mile existing Tower/Structure List. Collocation on the existing water tank which is low in height was rejected by AT&T's radio frequency engineers.

19. Address: Marion Drive
Map/Lot: 25.0/32
Owner: Town of East Lyme
Deed: Vol. 52 Pg. 178
Zoning District: R40
Lot Size: Approximately 35.42 Acres
41-21-22 N 72-13-46 W

This town-owned parcel is designated as "Open Space" and was therefore not pursued.

20. Address: Ancient Highway
Map/Lot: 30.0/1 & 30.0/2
Owner: Drabik
Deed: Vol. 932 Pg. 840
Zoning District: R40
Lot Size: Approximately 8.65 & 4.23 Acres, respectively
41-21-36.8N 73-13-35.1 W

This is an Ancient Highway Tower which was Site A submitted to the Town as part of a technical consultation. The site was given an adverse effect determination by the Mohegan THPO.

21. Address: Ancient Highway
Map/Lot: 25.0/31
Owner: Drabik
Deed: Vol. 932 Pg. 840
Zoning District: R40
Lot Size: Approximately 20.95
41-21-25 N 72-13-31.7 W

This property was accepted by RF and is the same owner as Site A in #20 above. The site was given an adverse effect determination by the Mohegan THPO.

22. Address: 286 Flanders Road
Map/Lot: 26.0/2
Owner: Gateway Development
Deed: Vol. 813 Pg. 168
Zoning District: LI
Lot Size: Approximately 79.5
41-21-25.7N 72-13-17W

This is part of a planned development, including multi-family units, and was Site C as part of the municipal consultation. The site was given an adverse effect determination by the Mohegan THPO.

23. Address: 18 Drabik Road (Cedar Ridge Maintenance shed area)
Map/Lot: 36.1/10
Owner: Drabik
Deed: Vol. 545 Pg. 102

Zoning District: R40
Lot Size: Approximately 6.5 Acres
41-22-44.4 N 72-13-02 W

This location was rejected by AT&T's radio frequency engineers for a permanent facility.

24. Address: Drabik Road (Cedar Ridge 4th tee)
Map/Lot: 36.1/11
Owner: Drabik
Deed: Vol. 545 Pg. 102
Zoning District: R40
Lot Size: Approximately 77.2 Acres
41-22-48.5 N 72-13-15 W

This location was rejected by AT&T's radio frequency engineers for a permanent facility.

25. Address: 16 Mostowy Road
Map/Lot: 40.0/5
Owner: Town of East Lyme
Deed: Vol. 880 Pg. 599
Zoning District: SU-E
Lot Size: Approximately 301.55 Acres
41-23-27 N 72-13-36.3 W

This location was rejected by AT&T's radio frequency engineers.

26. Address: 83-89 Upper Pattagansett Road
Map/Lot: 35.2/6
Owner: Lord
Deed: Vol. 168 Pg. 703

Zoning District: R40
Lot Size: Approximately 53.8 Acres
41-22-40.7 N 72-13-30 W

This location was rejected by AT&T's radio frequency engineers.

27. Address: 29 Goldfinch Terrace
Map/Lot: 36.0/34
Owner: KSK Assoc. LLC
Deed: Vol. 808 Pg. 332
Zoning District: R40
Lot Size: Approximately 200.59 Acres
41-22-14 N 72-12-11 W

An alternative suggested by the Town, this location was rejected by AT&T's radio frequency engineers.

28. Address: 300 Flanders Road
Map/Lot: 31.3/6
Owner: Cash Home Center Inc.
Deed: Vol. 244 Pg. 12
Zoning District: CA
Lot Size: Approximately 2.48 Acres
41-21-47.5 N 72-12-39.6 W

An alternative suggested by the Town, this location was rejected by AT&T's radio frequency engineers.

29. Address: 11 Industrial Park Road
Map/Lot: 26.1/3
Owner: Herb Chambers of East Lyme, Inc.
Deed: Vol. 504 Pg. 536

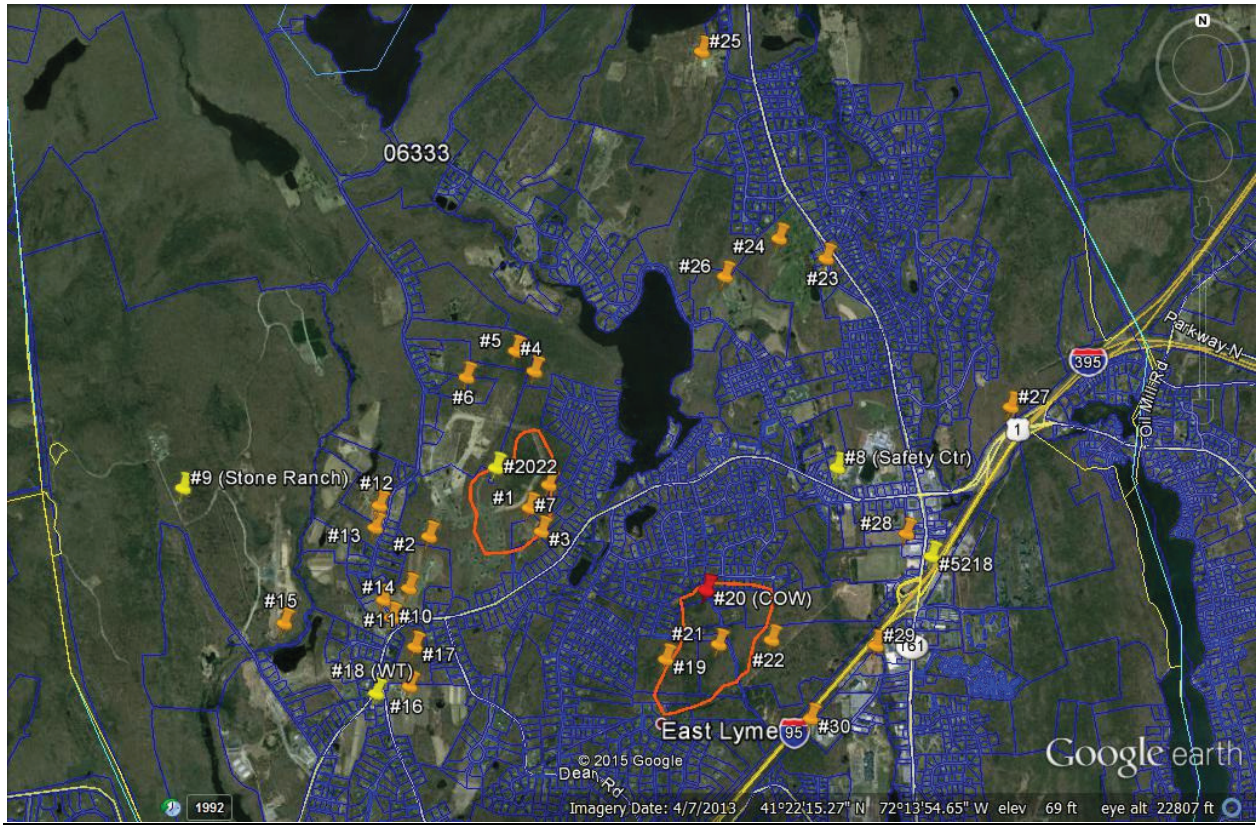
Zoning District: LI
Lot Size: Approximately 4.85 Acres
41-21-24.3 N 72-12-48 W

An alternative suggested by the Town, this location was rejected by AT&T's radio frequency engineers.

30. Address: 49 Industrial Park Road
Map/Lot: 26.0/1
Owner: MCN Partnership
Deed: Vol. 216 Pg. 250
Zoning District: CM
Lot Size: Approximately 8.4 Acres
41-21-9.3 N 72-13-6 W

An alternative suggested by the Town, this location was rejected by AT&T's radio frequency engineers.

SITE SEARCH MAP



C&F: 2850551.1

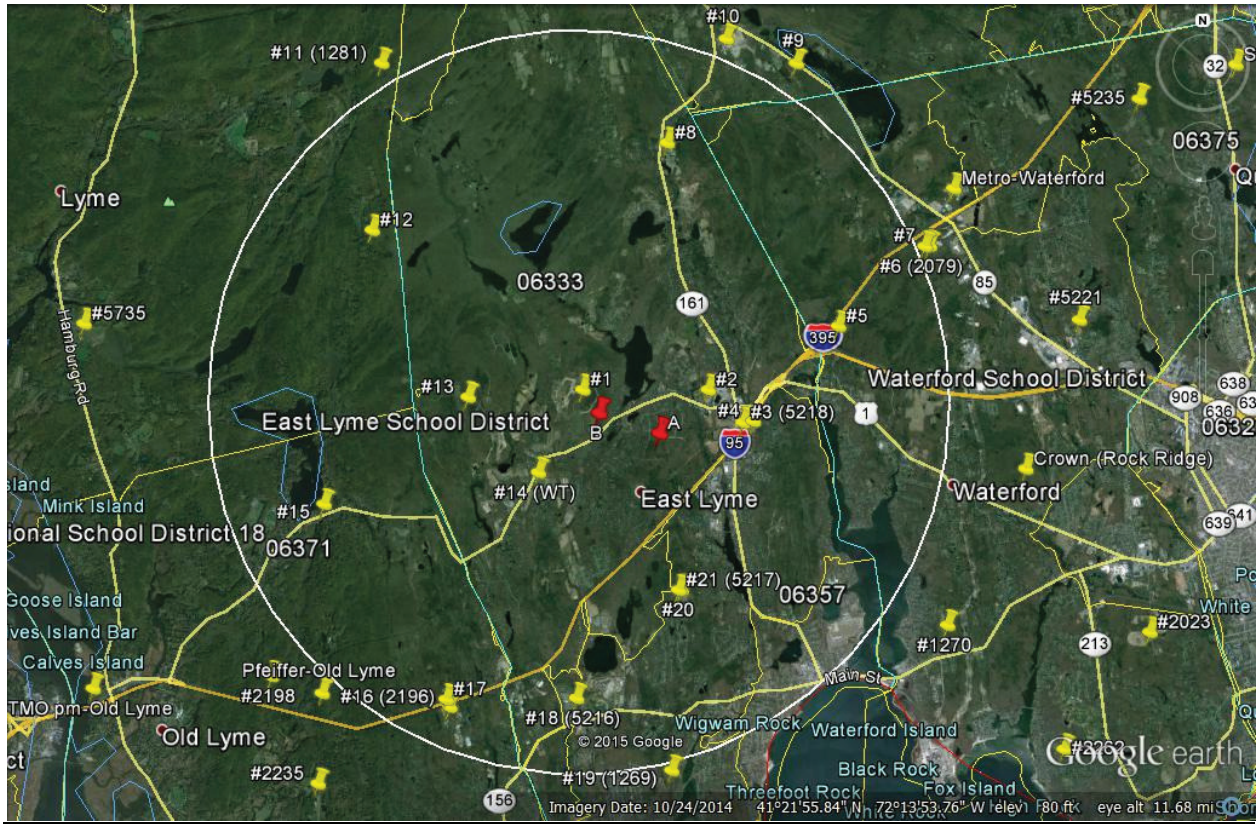
EXISTING TOWER/CELL SITE LISTING

There are 17 communications towers and power mounts; as well as 2 water tanks and 2 roof top installations located within approximately four miles of the site search area for the proposed replacement tower site in East Lyme. Each location is also shown on the following map, numbered in the order appearing on this list. Not one of the below existing facilities would provide adequate replacement coverage to the target area. Most of the structures listed below are currently being used by AT&T to provide service outside of the area targeted for service by the proposed replacement Facility.

No.	OWNER/OPERATOR	TOWER/CELL SITE LOCATION	HEIGHT/ TYPE	SOURCE	COORDINATES
1.	AMERICAN TOWER/AT&T	Scott Rd., East Lyme	150' / monopole	AT&T Site #2022 (2015 Decom)	Lat 41-22-01.3 Long 72-14-32.6
2.	Town of East Lyme	171 Boston Post Rd., East Lyme	125' (est)/ lattice	Visual	Lat 41-22-01 Long 72-12-58.8
3.	CL&P/AT&T	269 Flanders Rd., East Lyme	97' / powermount	AT&T Site #5218	Lat 41-21-42.6 Long 72-12-32.9
4.	CL&P/T-Mobile	King Arthur Dr., East Lyme	90' /powermount	CSC Database/ Visual	Lat 41-21-43.6 Long 72-12-25.2
5.	CL&P/T-Mobile	Oil Mill Rd., Waterford	82' / powermount	CSC Database	Lat 41-22-36.8 Long 72-11-21.8
6.	SBA	45 Fargo Rd., Waterford	183' / monopole	AT&T Site #2079	Lat 41-23-21.6 Long 72-10-17
7.	Town of Waterford	45R Fargo Rd., Waterford	143' / water tank	CSC Database/ Visual	Lat 41-23-22 Long 72-10-13.6
8.	Verizon	301 Chesterfield Rd., East Lyme	26' / Rooftop	CSC Database	Lat 41-24-19.7 Long 72-13-29.5
9.	American Tower	1334 Rte. 85, Montville	1089' / guyed lattice	AT&T Site #5737	Lat 41-25-3.7 Long 72-11-53.3

10.	Wireless Solutions	37618 Old R Butlertown Rd., Montville	195' / guyed lattice	AT&T Site #2055	Lat 41-25-17.8 Long 72-12-45.4
11.	AT&T	322 Beaver Brook Rd., Lyme	180' / monopole	AT&T Site #1281	Lat 41-25-4.4 Long 72-17-2.9
12.	American Tower	131 Grassy Hill Rd., Lyme	100' / lattice	CSC Database/ Visual	Lat 41-23-30 Long 72-17-10
13.	CT State Police / DPS	6 Stone Ranch Rd., East Lyme	140' / lattice	CSC Database/ Visual	Lat 41-21-57 Long 72-16-00
14.	Town of East Lyme/Sprint	440 Boston Post Rd., East Lyme	45' / water tank	Visual	Lat 41-21-14.8 Long 72-15-06
15.	Crown	189 Boston Post Rd., Old Lyme	110' / monopole	CSC Database/ Visual	Lat 41-20-57 Long 72-17-46
16.	T-Mobile	38 Hatchett's Hill Rd., Old Lyme	190' / monopole	AT&T Site #2196	Lat 41-19-3.3 Long 72-16-12
17.	Sprint	30 Short Hills Rd., Old Lyme	180' / monopole	CSC Database	Lat 41-19-7.6 Long 72-16-14.6
18.	AT&T	15 Liberty Way, East Lyme	62' / building mount	AT&T Site #5216	Lat 41-19-08 Long 72-14-37
19.	SBA	49 Brainerd Rd., East Lyme	170' / monopole	AT&T Site #1269	Lat 41-18-27.3 Long 72-13-26.1
20.	Crown	93 Roxbury Rd., East Lyme	150' / lattice	CSC Database	Lat 41-20-08 Long 72-13-20
21.	Town of East Lyme	91 Roxbury Rd., East Lyme	70' / water tank	AT&T Site #5217	Lat 41-20-8.7 Long 72-13-21.6

Existing Site Map



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ATTACHMENT 3

ATTACHMENT 3

GENERAL FACILITY DESCRIPTION

351A Boston Post Road
Map 29.0, Lot 45
East Lyme, Connecticut
Owner: James A. and Bonnie L. Decosta
7.23 Acre Parcel

The proposed tower location is on an approximately 7.23 acre parcel with an address of 351A Boston Post Road ("Parcel"). The Parcel is owned by James A. and Bonnie L. Decosta and is improved with a single family residence. The remainder of the Parcel is mostly wooded.

The proposed telecommunications facility includes an approximately 8,400 s.f lease area located in the northern corner of the Parcel. The tower is proposed as a new self-supporting monopole 194' in height. AT&T would install up to twelve (12) panel antennas and related equipment at a centerline height of 190' above grade level (AGL) on the tower. The tower would be designed for future shared use of the structure by additional FCC licensed wireless carriers. An AT&T 11'-5" x 16' equipment shelter would be installed at the tower base on a concrete pad within the tower compound together with provisions for a fixed emergency back-up power generator.

The tower compound would consist of a 70' x 100' area to accommodate AT&T's equipment and provide for future shared use of the facility by T-Mobile and other carriers. The tower compound would be enclosed by an 8' high chain link fence. Vehicle access to the facility would be from Boston Post Road, over the existing on-site access drive, then over a proposed gravel access drive a total distance of approximately 650' to the tower compound. Utility connections would be routed underground from existing utilities on-site and at Boston Post Road.

SITE AND FACILITY DESCRIPTION

I. LOCATION

A. COORDINATES: 41° 21' 48.131" N 72° 14' 20.279" W

B. GROUND ELEVATION: 199.4'± AMSL

C. USGS MAP: USGS 7.5 Quadrangle for Niantic, CT

D. SITE ADDRESS: 351A Boston Post Road, East Lyme, CT 06333

E. ZONING WITHIN ¼ MILE OF SITE: Abutting areas are zoned residential (RU-40).

II. DESCRIPTION

A. SITE SIZE: 7.23 acres
(VOL 791, PAGE 198)

B. LEASE AREA/COMPOUND AREA: 8,500SF

C. TOWER TYPE/HEIGHT: 194' AGL Monopole

D. SITE TOPOGRAPHY AND SURFACE: Proposed facility is located on a mostly wooded portion of a single family residential parcel of property.

E. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR

WATER: The proposed compound is located in the northern corner of the mostly wooded 7.23 acre Parcel of property. There are no on-site wetlands. The nearest wetland is approximately 730' from the project site.

F. LAND USE WITHIN ¼ MILE OF SITE: Single family residential.

III. FACILITIES

A. POWER COMPANY: Connecticut Light and Power

B. POWER PROXIMITY TO SITE: 650'±

C. TELEPHONE COMPANY: Frontier

D. PHONE SERVICE PROXIMITY: 650'±

E. VEHICLE ACCESS TO SITE: Proposed access to the site will be from Boston Post Road over a shared existing access drive then to a proposed gravel access drive extension to the tower compound.

F. OBSTRUCTION: None known at this time.

G. AREA OF DISTURBANCE: Some tree clearing and grading will be needed to develop the tower site and driveway, the total amount for which is less than typically associated with single family residential construction on 1 acre parcels of land.

IV. LEGAL

A. PURCHASE [ ] LEASE [X]

B. OWNER: James A. and Bonnie L. Decosta/American Tower Corporation (Tower Site Lessor)

C. ADDRESS: 351A Boston Post Road

East Lyme, CT 06333

D. DEED ON FILE AT: VOL. 791, PAGE 198

FACILITIES AND EQUIPMENT SPECIFICATION

I. TOWER SPECIFICATIONS:

A. MANUFACTURER: To be determined
B. TYPE: Self-Supporting monopole
C. HEIGHT: 194' AGL
DIMENSIONS: Approximately 5' in diameter at the base, tapering to approximately 3.5' at the top.
D. FAA TOWER LIGHTING: None required per Towair.

II. TOWER LOADING:

A. AT&T - up to 12 panel antennas
   a. Model - CCI HPA-65R-BUU-H8 or equivalent panel antenna
   b. Antenna Dimensions - approximately 92.4"H x 14.8"W x 7.4"D
   c. Position on Tower - 190' centerline AGL
   d. Transmission Lines - MFG/Model: Rosenberger WR-VG86ST-BRD (DC) (0.795") & Rosenberger FB-L98B-034 (fiber)(10 mm)
   e. Remote Radio Heads & Surge Arrestor

B. Future Carriers: T-Mobile and other future wireless carriers to be determined.

III. ENGINEERING ANALYSIS AND CERTIFICATION:

The tower will be designed in accordance with American National Standards Institute TIA/EIA-222-F and G "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003

International Building Code with 2005 Connecticut Amendment. The final foundation design would be based on soil conditions at the site. The details of the tower and foundation design will be provided as part of any final Siting Council Development & Management Plan.