

**ECO-SITE, INC. ("ECO-SITE")  
AND  
T-MOBILE NORTHEAST, LLC (T-MOBILE)**

**For a Certificate of  
Environmental Compatibility and Public Need**

**—South Glastonbury Facility—**



**ECO-SITE, INC.  
240 LEIGH FARM ROAD  
SUITE 415  
DURHAM, NC 27707**

**T-MOBILE NORTHEAST, LLC  
35 GRIFFIN ROAD  
BLOOMFIELD, CT 06002**

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2. Summary of Site Search and List of Existing Tower/Cell Sites
3. Site and Facility Description, Mapping, Drawings and FAA Determination
4. Environmental Assessment Statement Review
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8. Notice Published and Sent to Abutting Landowners; Certification of Service to Notice List of Abutting Landowners; Sample Letter sent to Abutting Property Owners
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## I. Introduction and Executive Summary

### 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, Eco-Site, Inc. ("Eco-Site") and T-Mobile Northeast, LLC, ("T-Mobile") hereby submit an application and supporting documentation (collectively, the "Applicants") for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications tower facility (the "Facility"). The Facility is proposed on a 38.5 acre parcel of land owned by Paul Cavanna (the "Parcel") with an address of 63 Woodland Street in the Town of Glastonbury. The Parcel is zoned Residential Rural and is improved with a home and out buildings and used as a farm specializing in fruits and cut your own Christmas trees. A tower is proposed to allow T-Mobile and other FCC licensed wireless carriers to provide their services in this area of Glastonbury.

### B. Executive Summary

The proposed tower Facility at 63 Woodland Street in Glastonbury is needed in order for T-Mobile to provide service in this part of the state. T-Mobile seeks to provide wireless service to a largely residential section of southern Glastonbury including residents and travelers in the area of Hopewell Road, Coldbrook Road, Woodland Street, Sunset Drive, Matson Hill Road, Bittersweet Lane, Murray Drive and other roadways and properties in the area. Expanded service in this area of Glastonbury would provide reliable service to approximately 600 residents in addition to those visiting and traveling through the area.

The facility consists of a new self-supporting monopole tower 150' in height, with a 5' lightning rod on top extending to an overall height of 155' AGL. T-Mobile would install up to nine (9) panel antennas, one (1) dish antenna and related equipment at a centerline height of 146' above grade level (AGL). The tower would be designed for future shared use of the structure by other FCC licensed wireless carriers. T-Mobile equipment cabinets would be installed on a proposed

10' x 20' concrete equipment pad within the tower compound with separate space for a proposed backup power generator.

The tower compound would consist of a 2,500 s.f area to accommodate T-Mobile's equipment and provide for future shared use of the facility by other carriers. The tower compound would be enclosed by a six (6) foot high chain link fence with an additional one (1) foot of barbed wire at the top for security purposes. Vehicle access to the facility would be provided from Woodland Street starting at the location of an old farm access gate over a gravel access drive a distance of approximately 4,100' to the proposed compound. The majority of the access drive follow the course of an existing dirt drive. Utility connections would be routed along the access easement.

The Applicants respectfully submit that the public need for a tower in this area of Glastonbury outweighs the environmental effects from the Facility as proposed. Environmental effects have been minimized by the Applicants' selection of a tower site location on a large property with large setbacks from neighboring properties. Relative to need, T-Mobile's analysis indicates that there the facility will enable T-Mobile to serve the residents and visitors to this part of the state.

### C. The Applicants

Applicant Eco-Site, Inc. is headquartered at 240 Leigh Farm Road, Suite 415 in Durham, NC 27707. Eco-Site develops/builds, owns and leases numerous communications towers in the United States. Co-Applicant T-Mobile has contracted with Eco-Site to assist in the search and development of various facilities in Connecticut including southern Glastonbury. Eco-Site has entered into a long-term ground lease with the property owner and would construct, own and operate a wireless telecommunications tower facility on the Parcel. T-Mobile's build to suit agreement with Eco-Site includes a long-term sublease obligation for use of the proposed tower facility. Eco-Site will construct, maintain and own the proposed Facility and would be the Certificate holder.

Applicant T-Mobile is a Delaware limited liability company with an office at 35 Griffin Road South Bloomfield, CT 06002. 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 of tower 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 for the Applicants:

Cuddy & Feder LLP  
445 Hamilton Avenue, 14<sup>th</sup> Floor  
White Plains, New York 10601  
Attention: Christopher B. Fisher, Esq.  
Daniel M. Laub, Esq.

A copy of all correspondence shall also be sent to:

Steve Russo  
Northeast Project Manager  
Eco-Site  
240 Leigh Farm Rd., Suite 415  
Durham, NC 27707

Mark Richard  
Engineering and Operations  
T-Mobile  
35 Griffin Road  
Bloomfield, CT 06002

#### 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 9.

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

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

Pursuant to C.G.S. § 16-50/(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 with this Application. Pursuant to C.G.S. § 16-50/(b), notice of the Applicant's intent to submit this application was published on two occasions in The Hartford Courant. The text of the published legal notice is included in Attachment 8. 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/(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 8.

**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.

Twenty-one years later, it remains clear that the federal government continues to take a strong stance and act in favor of the provision of wireless service to all Americans. Presidential Proclamation 8460 included wireless facilities within the 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.<sup>1</sup>

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<sup>1</sup> Presidential Proclamation No. 8460, 74 C.F.R. 234 (2009).

In 2009, 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”).<sup>2</sup> 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.<sup>3</sup> [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.”<sup>4</sup> 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.”<sup>5</sup>

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.<sup>6</sup> The public need for timely deployment of 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

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<sup>2</sup> Connecting America: The National Broadband Plan, Federal Communications Commission (2010), *available at* <http://www.broadband.gov/plan/>.

<sup>3</sup> *Id.* at XI.

<sup>4</sup> *Id.* at 76.

<sup>5</sup> *Id.* at 25.

<sup>6</sup> 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](http://transition.fcc.gov/Daily_Releases/Daily_Business/2011/db0407/FCC-11-51A1.pdf).

applications.<sup>7</sup> 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.<sup>8</sup>

## 2. United States Wireless Usage Statistics

Over the past thirty years, wireless communications have revolutionized the way Americans live, work and play.<sup>9</sup> 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 2016, there were an estimated 395.9 million wireless subscribers in the United States.<sup>10</sup> Wireless network data traffic was reported at 13.72 trillion megabytes in 2016, which represents a 42.2% increase from 2015.<sup>11</sup> Indeed, 2016 mobile data use is 35 times the volume of traffic in 2010.<sup>12</sup> 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.<sup>13</sup>

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<sup>7</sup> 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").

<sup>8</sup> 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>.

<sup>9</sup> See, generally, History of Wireless Communications, *available at* [http://www.ctia.org/media/industry\\_info/index.cfm/AID/10388](http://www.ctia.org/media/industry_info/index.cfm/AID/10388) (2011)

<sup>10</sup> CTIA Annual Wireless Industry Survey available at <https://www.ctia.org/industry-data/ctia-annual-wireless-industry-survey>.

<sup>11</sup> *Id.*

<sup>12</sup> See, CTIA "Wireless Snapshot 2017" available at <https://www.ctia.org/docs/default-source/default-document-library/ctia-wireless-snapshot.pdf>.

<sup>13</sup> 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.*

Today, just over half of all American households, 50.8 percent, have only a wireless phone.<sup>14</sup> Connecticut in contrast lags behind in this statistic with 31.1% wireless only households.<sup>15</sup>

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.<sup>16</sup> 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. T-Mobile and other licensed FCC wireless carriers support Text-to-911.<sup>17</sup>

Wireless access to the internet has also grown exponentially since the advent of the truly “smartphone” device. Cisco reports that in 2016 global mobile data traffic grew reached 7.2 exabytes per month at the end of 2016, up from 4.4 exabytes per month at the end of 2015.<sup>18</sup> Notably, mobile data traffic has grown 18-fold over the past 5 years.<sup>19</sup> Indeed Cisco projects that “[g]lobal mobile data traffic will increase sevenfold between 2016 and 2021” and that “[m]obile data traffic will grow at a compound annual growth rate (CAGR) of 47 percent from 2016 to 2021, reaching 49.0 exabytes per month by 2021.”<sup>20</sup>

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<sup>14</sup> 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, June 2016 - December 2016 (May 2017), available at <https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201705.pdf>.

<sup>15</sup> See Modeled estimates of the percent distribution of household telephone status for adults aged 18 and over, by state: United States, 2015 Available at [https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless\\_state\\_201608.pdf](https://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless_state_201608.pdf)

<sup>16</sup> Wireless 911 Services, FCC, available at <http://www.fcc.gov/guides/wireless-911-services>

<sup>17</sup> 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 is 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](http://www.fcc.gov/text-to-911). Text to 911 is being incorporated into Connecticut’s transition to next generation 911 capabilities. See, State of Connecticut Department of Emergency Services and Public Protection newsletter, February 2016 available at <http://www.ct.gov/despp/lib/despp/oset/newsletter.3rd.15.16.pdf>.

<sup>18</sup> Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2016-2021, March 28, 2017.

<sup>19</sup> Id.

<sup>20</sup> Id.

### 3. Public Need For A Tower For Wireless Services

T-Mobile seeks to provide wireless service to a largely residential section of southern Glastonbury including residents and travelers in the area of Hopewell Road, Coldbrook Road, Woodland Street, Sunset Drive, Matson Hill Road, Bittersweet Lane, Murray Drive and other roadways and properties in the area. Expanded service in this area of Glastonbury would provide reliable service to approximately 600 residents in addition to those visiting and traveling through the area. The Facility is needed in order for T-Mobile to provide reliable service in this part of the state. Attachment 1 includes the radio frequency engineering plots including "Current Coverage" provided by T-Mobile existing facilities in this area of the state and "Proposed Coverage" as predicted from the proposed tower site.

#### B. Statement of Benefits

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. 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 facility would allow T-Mobile and other carriers to provide these benefits to the public that are not offered by any other form of communication system.

Moreover, T-Mobile 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 tall structures in the this area of Glastonbury are either not tall enough to overcome terrain blocking or not legally available to meet the technical requirements of T-Mobile in providing reliable services. Notably, repeaters, microcell transmitters, distributed antenna systems and other types of transmitting technologies

are not a practicable or feasible means to providing reliable service to an area such as southern Glastonbury. These technologies are better suited for specifically defined areas where coverage and capacity are needed. The Applicants submit that there are no equally effective, feasible technological alternatives to a new tower for providing reliable personal wireless services in this area of Glastonbury.

#### **IV. Site Selection and Tower Sharing**

##### **A. Site Selection**

No tall structures in this area of the Town were found suitable to provide the service needed by T-Mobile. The area includes the Northern Correctional Institute which is not available as a siting location. The area is otherwise dominated by single-family residential homes and open spaces. The site search for a tower includes work undertaken by Eco-Site consulting with T-Mobile. Eco-Site investigated and evaluated four (4) potential sites. As provided in Attachment 2, of all the sites evaluated, the proposed facility location was deemed by Eco-Site and T-Mobile to best meet technical service requirements, be legally available for a tower, and otherwise minimize environmental effects to the extent practicable. After filing the technical report representatives of the Elk's Club across the street inquired if that property would be suitable for T-Mobile's purposes but review of the available locations indicated a tower of 200 feet was not adequate to provide reliable service to the target service area. Other locations evaluated, were either legally unavailable for tower siting, technically inadequate to satisfy coverage requirements in this part of the state or determined by the Applicants to have no better overall environmental effects than the Facility as proposed.

##### **B. Tower Sharing**

The proposed Facility is designed to accommodate the antennas and equipment of T-Mobile and up to three (3) additional wireless carriers.

**V. Facility Design**

The proposed tower site is located on an approximately 38.5 acre parcel located at 248 Woodland Street owned by Paul Cavanna. It is classified in the Residential Rural Zoning District and is improved with a single-family residence, garage and barn. The proposed telecommunications facility includes an approximately 10,000 s.f. lease area located in the southern section of the host parcel.

The facility consists of a new self-supporting monopole tower 150' in height, with a 5' lightning rod on top extending to an overall height of 155' AGL. T-Mobile would install up to nine (9) panel antennas, one (1) dish antenna and related equipment at a centerline height of 146' above grade level (AGL). The tower would be designed for future shared use of the structure by other FCC licensed wireless carriers. T-Mobile equipment cabinets would be installed on a proposed 10' x 20' concrete equipment pad within the tower compound with separate space for a proposed backup power generator.

The tower compound would consist of a 2,500 s.f area to accommodate T-Mobile's equipment and provide for future shared use of the facility by other carriers. The tower compound would be enclosed by a six (6) foot high chain link fence with an additional one (1) foot of barbed wire at the top for security purposes (remote location). Vehicle access to the facility would be provided from Woodland Street starting at the location of an old farm access gate over a gravel access drive a distance of approximately 4,100' to the proposed compound. Utility connections would be routed along the access easement.

Attachment 3 contains the specifications for the proposed Facility, including an abutters map, site plan, compound plan and tower elevation, sedimentation and erosion control details and other relevant details of the proposed Facility.

Included as Attachments 4 through 6 are various documents developed as part of the Applicants' due diligence including a Visibility Analysis (Attachment 5). Some of the relevant information identifies that:



- The total area of disturbance is low and few trees will need to be removed.
- 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 location of the proposed Facility is just outside of the 100 year flood zone located along the western border of the Property.
- A majority of views of the tower are limited to the upper portions of the tower from nearby locations.
- At grade conditions do not present significant changes or environmental effects.

## **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 generally between existing vegetation within a 1/2 mile of the project site. Included in Attachment 5 is a Visibility Analysis which contains view shed mapping and photo simulations of off-site views where the tower would be visible. Potential visibility was assessed within using a computer-based, predictive view shed model that was field verified. As evidenced by the photo simulations, much of this visibility is at a distance where the project will be visually subordinate to other built structures in view. 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.

B. CT DEEP, SHPO and Other State and Federal Agency Review

Various consultations and analyses for potential environmental impacts are summarized and included in Attachments 4-6. Representatives of the Applicants reviewed information and/or submitted reports and requests for review from federal and state entities. NDDDB mapping for the area includes no areas of concern but a separate review was conducted for presence of the long northern long-eared bat (NLEB). Review of available resources combined with the nature of the project indicate that while no impact to the NLEB is anticipated there is the potential for an effect to the NLEB. However, any incidental take of the NLEB, if one occurs, is not prohibited by federal rules for applicable to this proposal. The SHPO is being consulted on the proposal but no impact to historic resources is known. Review of USDA mapping indicates the tower is not located on prime farmland soils. 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 T-Mobile's operations in combination with the public safety antennas would be 0.69% of the MPE standard. A power density report is included in Attachment 6.

D. Wetlands, Drainage & Other Environmental Factors

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.

There were no wetlands identified in or immediately adjacent to the proposed access drive or facility compound. Proposed sedimentation and erosion controls will be designed, installed and maintained during construction activities in accordance with the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control which will minimize temporary impacts. 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.

#### 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.

### **VII. Consistency with the Town of Glastonbury Land Use Regulations**

Pursuant to the Siting Council's Application Guide, a narrative summary of the consistency of the project with the local municipality'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.

A. Glastonbury's Plan of Conservation and Development

The Town of Glastonbury Plan of Conservation & Development ("Plan"), effective September 23, 2007, is included in the Bulk Filing. Regarding wireless facilities, under "Town Wide Policies" the Plan promotes the "utilization of existing structures and buildings for new communication transmitting towers, with new tower facilities supported only after all other alternatives are exhausted." In the rural planning area #3, the plan advocates for multiple use towers and multi-users on single towers clustered in designated areas such as Birch Mountain to avoid extensive dispersal throughout Town. In the Village Center planning area #5 (South Glastonbury), the plan encourages limiting any new towers permitted by the CSC to a single location, strongly promoting the use of existing buildings for antennas.

It should be noted that the Plan of Conservation and Development is undergoing review and revision this year. While a the revision process is not yet complete, the interim information available to date includes a description of the former Matson Hill industrial property near to the host Property and the Town's effort to purchase and preserve the Matson Hill property as open space.

B. Glastonbury's Zoning Regulations and Zoning Classification

Section 3.21 of the Town of Glastonbury Building and Zoning Regulations briefly addresses communications tower setback requirements. Consistency of the proposed Facility with these standards is illustrated in the table below.

<b>Zoning Regulation</b>	<b>Standard or Preference</b>	<b>Proposed Facility</b>
§ 3.21	Towers, when permitted shall be setback from all abutting streets and adjacent properties not less than 1 ½ times the height of the tower.	The closest property line to the proposed tower location is 485 feet; a distance over 3 times the height of the tower.

C. Planned and Existing Land Uses

The Facility is proposed on a 177.1 acre parcel of land. Adjacent properties are generally developed as residential uses. The state's correctional facility is also a dominant use in the nearby area. Copies of the Town of Glastonbury Zoning Code, Inland Wetlands Regulations, Zoning Map and Plan of Conservation and Development are included in the Bulk Filing. No potential changes in the local land use pattern were noted in discussions with Town officials. A noticed public information meeting was held on August 1, 2017 including a digital slideshow presentation of the information included in the technical report followed by public comments and questions.

D. Glastonbury Inland Wetlands and Watercourses Regulations

The Glastonbury Inland Wetlands Regulations ("Local Wetlands Regulations") regulate certain activities conducted in "Wetlands" and "Watercourses" as defined therein. The Town establishes upland review areas for wetlands and watercourses of 150' for regulated activities. No impact to any wetlands or watercourses are anticipated as a result of the tower site construction given its location remote from any identified wetlands.

Development of the access drive and 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 Municipal Officials**

C.G.S. § 16-50/ generally 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 any application with the Siting Council. With respect to the Facility as proposed in this Application, a Technical Report was filed with the Town of Glastonbury on November 15, 2016. Subsequently representatives of the Applicants met with Town Manager Richard Johnson to provide additional details regarding the proposed facility, locations for review of visual impact, and preliminary plans for a public information session. A balloon float was requested as part of the consultation. A noticed balloon float was conducted on January 10, 2017 however the Town of Glastonbury noted its concern that not enough notice was provided in advance of the float. Before the balloon float could be rescheduled Eco-Site and T-Mobile required a pause in the consultation process to address certain leasing issues with the property owner including the route of the final access drive to the facility compound location.

Consultation activities were recommenced with the Town in June of 2017 and a second balloon float was scheduled for July 18<sup>th</sup> with a noticed public information presentation scheduled before the Town Council on August 1, 2017. The Town of Glastonbury requested that it mail notice of the meeting and balloon float to neighbors within a 500' radius which was sent on July 7, 2017 and the applicants noticed the meeting in the Hartford Courant. Attachment 7 contains correspondence with the Town of Glastonbury regarding the consultation and the Bulk Filing contains the technical report as well as the powerpoint presentation provided to the Town and presented at the August 1, 2017 public information session.

**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:

<b>Requisite Component:</b>	<b>Cost (USD)</b>
Tower & Foundation	\$100,00
Site Development	\$65,000
Utility Installation	\$20,000
<b>Subtotal Eco-Site Towers</b>	<b>\$185,000</b>
Antennas and Equipment	\$250,000
<b>Subtotal T-Mobile Cost</b>	<b>\$250,000</b>
<b>Total Estimated Costs</b>	<b>\$435,000</b>

B. Overall Scheduling

Site preparation work would commence following Siting Council approval of any Development and Management ("D&M") Plan the Siting Council may require and the issuance of a Building Permit by the Town of Glastonbury. The site preparation phase is expected to be completed in 4-6 weeks. Installation of the monopole, antennas and associated equipment is expected to take an additional 2-4 weeks. The duration of the total construction schedule is approximately 2-3 months total. Facility integration and system testing for carrier equipment is expected to require an additional 2 weeks after construction is completed.

**X. Conclusion**

This Application and the accompanying materials and documentation clearly demonstrate that a public need for a new tower in Glastonbury exists to provide reliable wireless services to the public. The Applicants respectfully submit that the public need for the proposed tower Facility

outweighs any potential environmental effects from development of the tower which are principally limited to visibility. Other environmental effects have been minimized by the Applicants' selection of a tower site location on a larger property with existing screening. The Applicants respectfully request that the Siting Council grant a Certificate of Environmental Compatibility and Public Need for the proposed new wireless telecommunications Facility in Glastonbury.

Respectfully Submitted,

By: \_\_\_\_\_

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