

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

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

–HALL HILL ROAD 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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3. Site and Facility Description
4. Aerial Map, Topographical Map, Drawings and FAA Determination
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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 Debra Romano (the “Parcel”) with an address of 248 Hall Hill Road in the Town of Somers. The Parcel is zoned A-1 Residential is improved with a single-family residence, garage and barn with accessory hay fields. A tower is proposed to allow T-Mobile and other FCC licensed wireless carriers to provide their services in this area of Somers.

B. Executive Summary

The proposed tower Facility at 438 Hall Hill Road in Somers 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 western Somers including residents and travelers in the area of Route 186 / Hall Hill Road, Four Bridges Road, George Wood Road, Durkee Road numerous other roadways and properties in the area. Expanded

service in this area of Somers would provide reliable service to approximately 1200 residents in addition to those visiting and traveling through the area.

The facility consists of a new self-supporting monopole tower 180' in height, with a 5' lightning rod on top extending to an overall height of 185' AGL. T-Mobile would install up to nine (9) panel antennas, one (1) dish antenna and related equipment at a centerline height of 176' 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 Hall Hill Road starting at the location of an old farm access gate over a gravel access drive a distance of approximately 1,125' to the proposed compound. Utility connections would be routed along the access easement.

The Applicants respectfully submit that the public need for a tower in this area of Somers 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 western Somers. 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, 14th 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:

John McAuliffe
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 11.

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 Journal Inquirer. The text of the published legal notice is included in Attachment 10. 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 10.

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.¹

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

¹ Presidential Proclamation No. 8460, 74 C.F.R. 234 (2009).

National Broadband Plan” (the “Plan”).² 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.³ [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.”⁴ 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.”⁵

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.⁶ 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

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

³ *Id.* at XI.

⁴ *Id.* at 76.

⁵ *Id.* at 25.

⁶ 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.

decisions on land use and zoning permit applications.⁷ 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.⁸

2. United States Wireless Usage Statistics

Over the past thirty years, wireless communications have revolutionized the way Americans live, work and play.⁹ 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.¹⁰ Wireless network data traffic was reported at 13.72 trillion megabytes in 2016, which represents a 42.2% increase from 2015.¹¹ Indeed, 2016 mobile data use is 35 times the volume of traffic in 2010.¹² Other statistics provide an important sociological understanding of how critical access to wireless services has become. In

⁷ 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").

⁸ 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>.

⁹ See, generally, History of Wireless Communications, *available at* http://www.ctia.org/media/industry_info/index.cfm/AID/10388 (2011).

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

¹¹ *Id.*

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

2005, 8.4% of households in the United States had cut the cord and were wireless only.¹³ Today, just over half of all American households, 50.8 percent, have only a wireless phone.¹⁴ Connecticut in contrast lags behind in this statistic with 31.1% wireless only households.¹⁵

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.¹⁶ 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-911.¹⁷

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

¹³ 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.

¹⁴ 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>.

¹⁵ 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

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

¹⁷ 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. 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>.

at the end of 2015.¹⁸ Notably, mobile data traffic has grown 18-fold over the past 5 years.¹⁹ 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.”²⁰

3. Public Need For A Tower For Wireless Services

T-Mobile seeks to provide wireless service to a largely residential section of western Somers including residents and travelers in the area of Route 186 / Hall Hill Road, Four Bridges Road, George Wood Road, Durkee Road numerous other roadways and properties in the area. Expanded service in this area of Somers would provide reliable service to approximately 1200 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

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

¹⁹ Id.

²⁰ Id.

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 Somers 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 western Somers. 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 Somers.

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 AT&T. 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 eight (8) 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. 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 Hall Hill Road owned by Debra Romano. It is classified in the A-1 Residential 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 central eastern section of the host parcel.

The facility consists of a new self-supporting monopole tower 180' in height, with a 5' lightning rod on top extending to an overall height of 185' AGL. T-Mobile would install up to nine (9) panel antennas, one (1) dish antenna and related equipment at a centerline height of 176' 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 Hall Hill Road starting at the location of an old farm access gate over a gravel access drive a distance of approximately 1,125' 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 8 are various documents developed as part of the Applicants' due diligence including a Visibility Analysis (Attachment 7). 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 on the lot.
- 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 7 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 5-10. 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 has been consulted on the proposal but no historic resources are known in the area. 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 8.

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.

A wetland delineation was conducted and the report included as Attachment 6 indicates that 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 Somers Land Use Regulations

Pursuant to the Siting Council's Application Guide, a narrative summary of the consistency of the project with the Town of Somers' 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. Somers Plan of Conservation and Development

The Somers Plan of Conservation & Development ("POCD"), effective June 30, 2015 is included in the Bulk Filing. POCD page 56 addresses wireless service and infrastructure and notes one of its infrastructure policies is to "Seek to enhance the coverage, capacity and speed of wireless communication services." This policy is further elaborated as follows:

Wireless Communication More and more communications are happening on wireless devices and Somers should seek to enhance the coverage, capacity and speed of wireless communication services. As people may migrate away from “wired” communications in the future to wireless devices, Somers should evaluate the best ways to address this trend. Finding an appropriate balance between a rural landscape and the quality and reliability of wireless communications will be an on-going issue.

Somers POCD, page 56.

B. Somers’s Zoning Regulations and Zoning Classification

The Town of Somers Zoning Regulations set forth general requirements and preferences for wireless telecommunications facilities under Article XXII, Sections 214-117 through 214-124. Pursuant to Section 214-219, a tower above 60 feet on a residentially zoned property as here is the sixth preferred type of location. The proposed tower Facility site is classified in the A-1 zoning district where, if not for the Siting Council’s jurisdiction, communication facilities and similar uses would be regulated locally by special use permit.

Code Section	Code Provision	Proposed Facility
214-122.A	Lot size. Wireless telecommunications sites containing a freestanding tower shall have a minimum lot size equal to that required by the current Zoning Regulations at the time of application.	The lot is well above the minimum size of 40,000 sq. ft. required under zoning regulations

214-122.B	The maximum height of a tower proposed under this regulation shall be 200 feet, including the antenna and all other appurtenances.	The tower will be 180 feet in height.
214-122.C	<p>1(a) Front yard or yard along a street: a distance equal to 3/4 the height of the tower or the setback required for the underlying zone, whichever is greater.</p> <p>1(b) Side or rear yards in residential zones: 50 feet for towers less than 60 feet in height and 100 feet for towers equal to or greater than 60 feet.</p> <p>1(4) All equipment buildings/boxes or equipment areas which are each 50 square feet or greater in area shall comply with the minimum property line setbacks for a principal building in the underlying zone.</p>	The proposed facility meets the municipal setback provisions.
214-123.A	No wireless telecommunications site shall be located within 500 feet of a public or private playground or school.	No school or playground is located within 500 feet of the site.
214-123.B	No wireless telecommunications site shall be located within 200 feet of an existing residence or proposed residence with a valid building permit.	No existing residence is within 200'.
214-123.C	No tower exceeding 60 feet in height shall be located within 1,000 feet of an historic district.	There is no historic district within 1000 feet.

214-123.D	No lights shall be mounted on proposed towers unless otherwise required by the FAA. All strobe lighting shall be avoided if possible.	No lighting is proposed on the tower.
214-123.E	Towers not requiring special FAA painting or markings shall be painted a noncontrasting blue, gray or black.	The tower will be gray in color.
214-123.F	Towers may not be used to exhibit any signage or other advertising.	No signs will be mounted on the tower. Small identification signs providing contact information for the facility owner and carriers will be included at grade in the equipment compound.
214-123.G	Any proposed tower shall be designed in all respects to accommodate both the applicant's antennas and comparable antennas for at least two additional users if the tower is over 100 feet in height	Up to three additional carriers may be accommodated on the proposed tower.
214-123.H	All towers shall be a monopole design unless otherwise approved by the Commission. A monopole tower shall be designed to collapse upon itself.	The proposed tower is a monopole design.
214-123.I	The Commission may require that monopoles be of such design and treated with an architectural material so that it is camouflaged to resemble a woody tree with a single trunk and branches on its upper part.	A tree design was not selected given the height of the proposed tower and the manner in which such a design would contrast with the surrounding landscape context.

214-123.J	Each tower site must be served by a driveway meeting the Zoning Regulations and Driveway Ordinance[1] of the Town with parking for at least one vehicle.	The access drive will utilize n existing entrance and largely follow an existing drive and the compound design will allow for maintenance truck parking.
214-123.K	Antennas or equipment buildings/boxes mounted to or on buildings or structures shall to the greatest degree possible blend with the color and design of such building.	Antennas and equipment proposed will be of industry standard designs generally using neutral colors of grays and off whites.
214-123.L	No proposed wireless telecommunications site shall be designed, located or operated so as to interfere with public safety communications.	No interference is anticipated.
214-123.M	All applications for wireless telecommunications sites within the Flood Protection Zone shall comply with the standards found in Article XV of these regulations.	The site is not within the Flood Protection Zone.
214-123.N	The design of all wireless telecommunications sites shall comply with the standards promulgated by the FCC	The site will comply with FCC regulations. Once operational T-Mobile's facility will be less than 1% of the emissions permitted under Federal regulations.
214-123.O	All utilities proposed to serve a wireless telecommunications site shall be installed underground unless otherwise approved by the Commission	Utility connection is proposed underground.
214-123.P	All generators installed in conjunction with any wireless telecommunications site shall comply with all state and local noise	The final specifications of the generator are being finalized but will comply with state and

	regulations	local noise regulations.
--	-------------	--------------------------

C. Planned and Existing Land Uses

The Facility is proposed on a 38.5 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 Somers 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.

D. Somers Inland Wetlands and Watercourses Regulations

The Somers 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 100' for regulated activities. As set forth on the Wetlands review in Attachment ___ a dry ditch parallels the access drive and hedgerow which does not contain hydric soils until a short distance from the location of a small seasonal on-site pond. The lease area is located over 200 feet from this area. No impact to any wetlands or watercourses are anticipated as a result of the tower site construction.

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 Somers on March 6, 2017. Subsequently representatives of the Applicants met with Zoning Enforcement Officer Jennifer Roy and Town Engineer Jeff Bord to discuss the technical report submission and answer questions regarding the proposed site. Staff subsequently discussed the application with various boards and Town officials and it was determined that no further consultation was required but it was agreed that the final photosimulation package would be submitted to the Town prior to filing an application with the Siting Council. Attachment 9 contains correspondence with the Town of Somers in this regard.

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	\$100,00
Site Development	\$65,000
Utility Installation	\$10,000
Subtotal Eco-Site Towers	\$175,000
Antennas and Equipment	\$250,000
Subtotal T-Mobile Cost	\$250,000
Total Estimated Costs	\$425,000

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 Somers. 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 Somers 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 Somers.

Respectfully Submitted,

By: 

Daniel M. Laub, Esq.

Cuddy & Feder LLP

445 Hamilton Avenue, 14th Floor

White Plains, New York 10601

(914) 761-1300

dlaub@cudfyfeder.com

Attorneys for the Applicants

ATTACHMENT 1

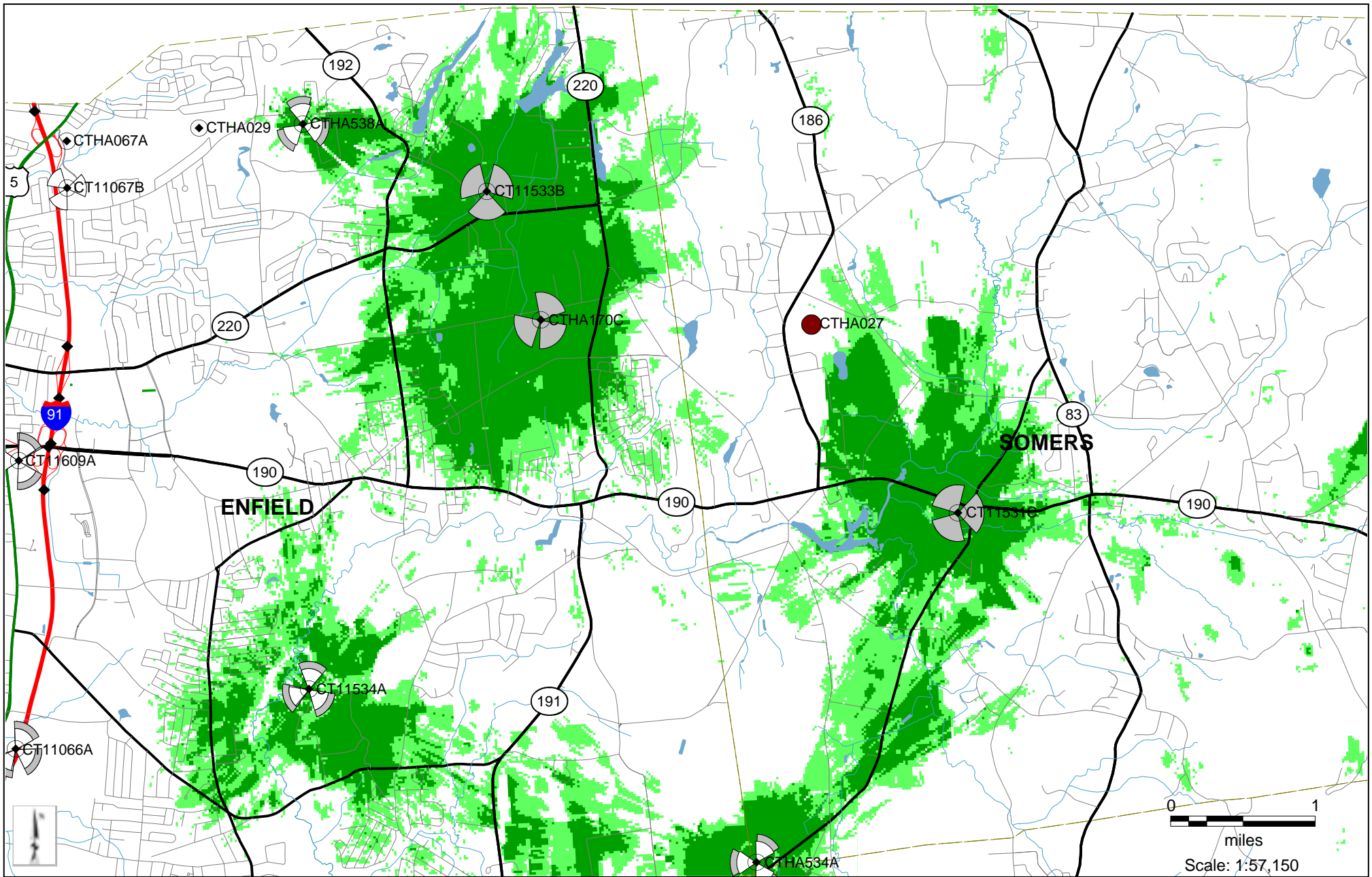
Attachment 1

Statement of Public Need

The proposed tower facility will provide reliable wireless communications services to a large portion of western Somers. The facility is needed by T-Mobile in conjunction with other existing and proposed facilities to provide reliable services to the public that is not currently provided in this part of Somers. Attached are radio frequency engineering plots depicting the "Current Coverage" provided by T-Mobile existing facilities in this area of the state and "Proposed Coverage" as predicted from the proposed tower site. T-Mobile seeks to provide wireless service to a largely residential section of western Somers including residents and travelers in the area of Route 186 / Hall Hill Road, Four Bridges Road, George Wood Road, Durkee Road numerous other roadways and properties in the area. Expanded service in this area of Somers would provide reliable service to approximately 1200 residents in addition to those visiting and traveling through the area.

Existing T-Mobile Sites Around Proposed Facility

Site ID	Address	Town	Zip	Latitude	Longitude	Facility Type	Ant Height (ft)	Distance to Primary (mi)
CTHA027	248 Hall Hill Rd	Somers	06071	42.002573	-72.484827	Monopole	175	0
CT11533B	37 Bacon Rd	Enfield	06082	42.015889	-72.5287281	Monopole	160	2.5
CTHA170C	188 Moody Road	Enfield	06082	42.002972	-72.5214722	Monopole	187	1.8
CT11534A	1 Ecology Drive	Enfield	06082	41.966	-72.5527	Monopole	140	4.2
CT11531C	400 Main St.	Somers	06071	41.983694	-72.4652765	Monopole	166	1.6
CTHA534A	196 Pioneer Hts	Somers	06071	41.9487	-72.4924	Self-Support Tower	115	3.7



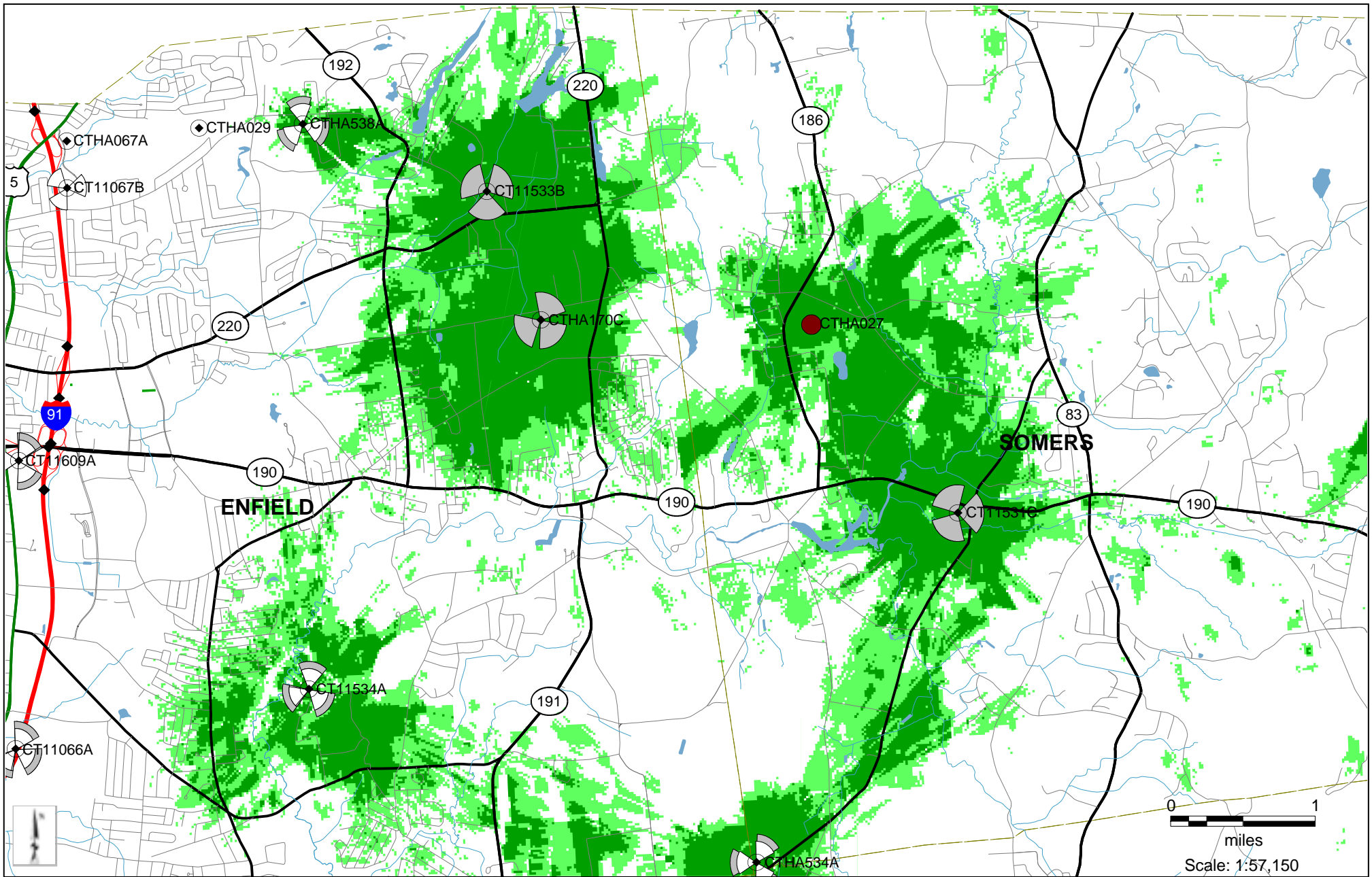
Planned Site CTHA027 at 175'AGL

Coverage Thresholds
 Dark Green-In Building Residential Coverage
 Light Green-In Building Commercial Coverage

COVERAGE	
In-Building Residential	In-Building Commercial
 -91 dB	 -97 dB





On-Air Coverage of Existing T-Mobile Sites



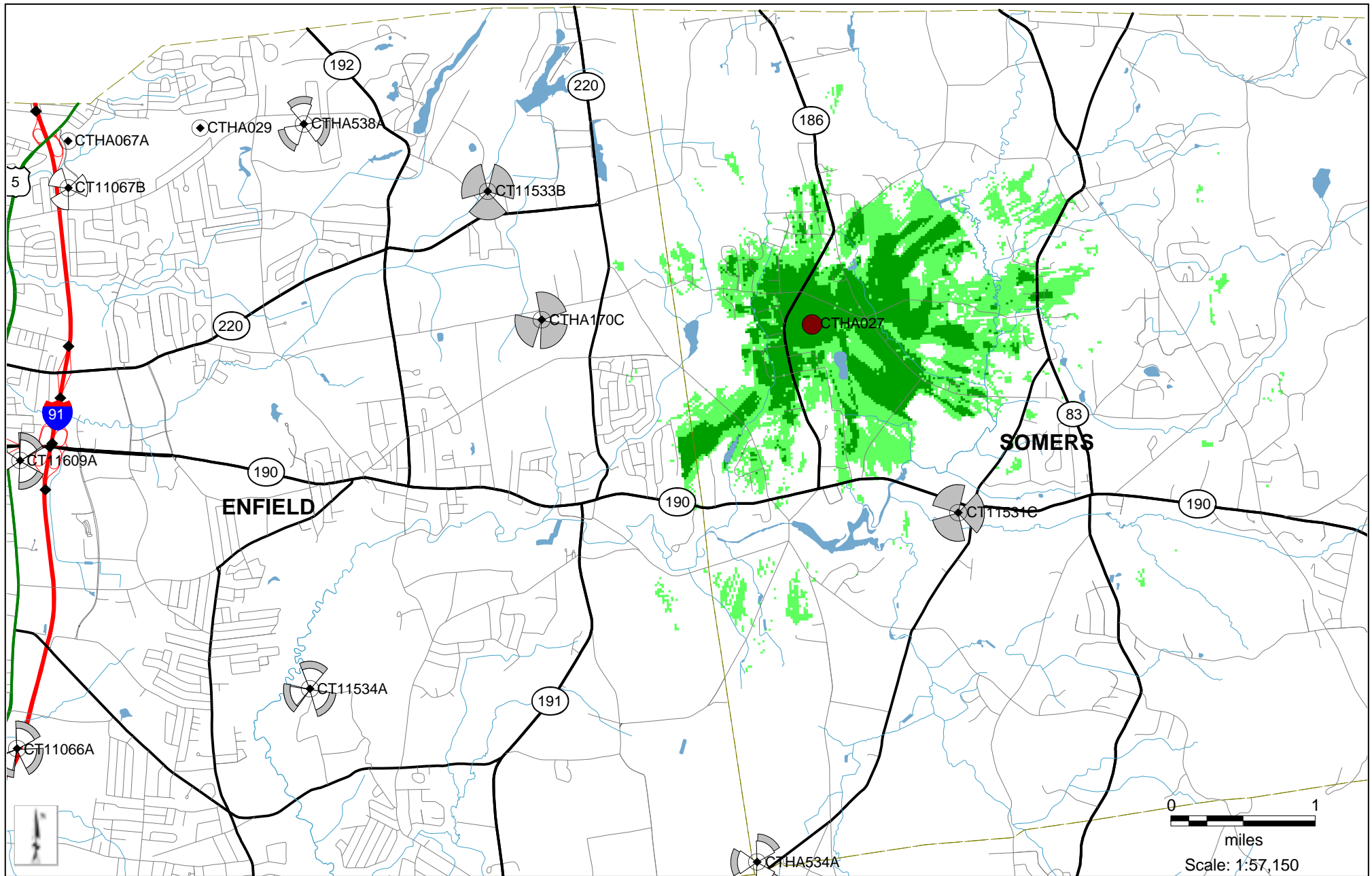
Planned Site CTHA027 at 175'AGL

Coverage Thresholds
Dark Green-In Building Residential Coverage
Light Green-In Building Commercial Coverage

COVERAGE	
In-Building Residential	In-Building Commercial
 -91 dB	 -97 dB





On-Air Coverage of Existing With Proposed Coverage
 For T-Mobile Site CTHA027 at 175' AGL



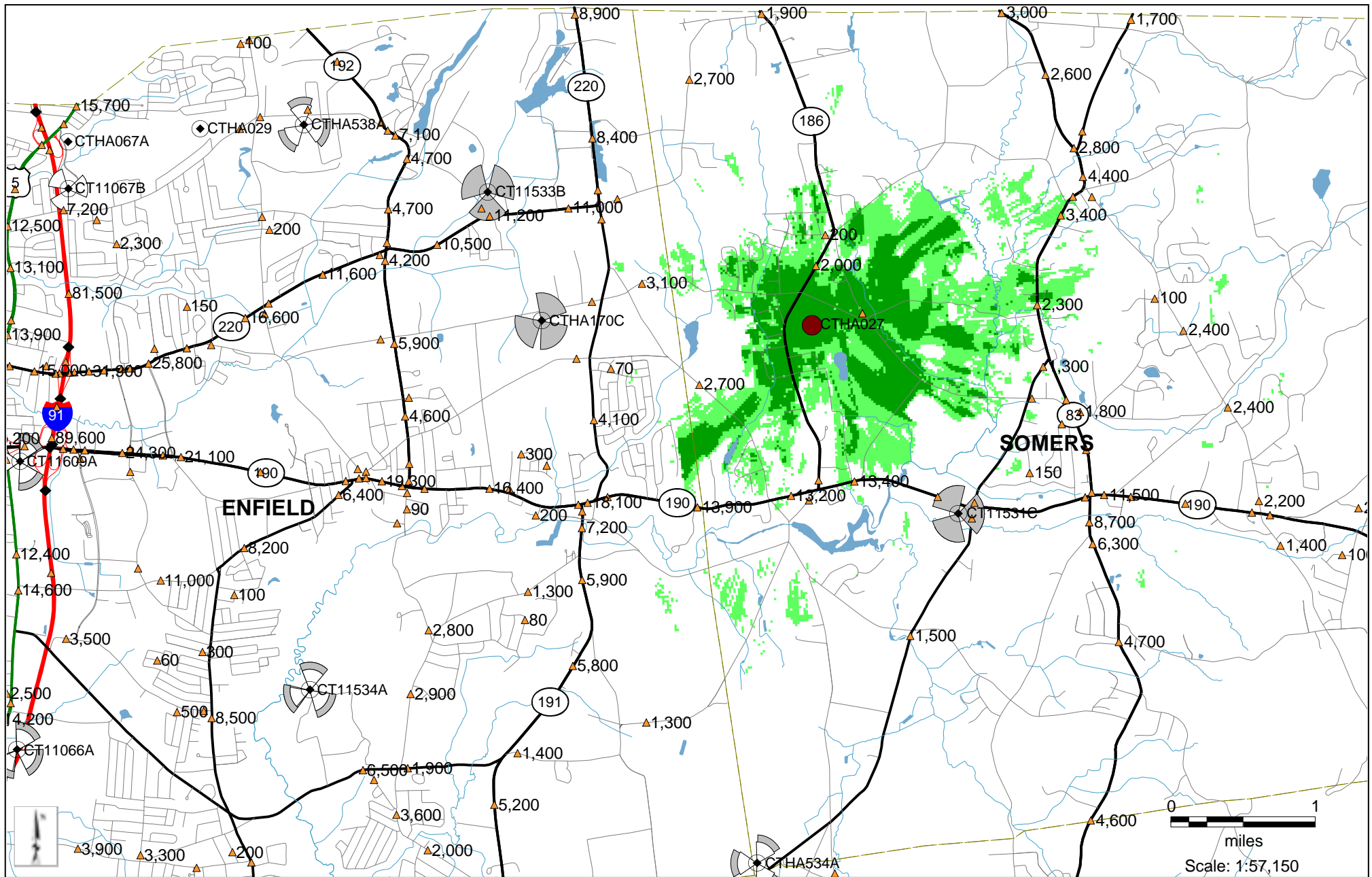
Planned Site CTHA027 at 175'AGL

Coverage Thresholds
 Dark Green-In Building Residential Coverage
 Light Green-In Building Commercial Coverage

COVERAGE	
In-Building Residential	In-Building Commercial
 -91 dB	 -97 dB



Proposed Coverage For
 T-Mobile Site CTHA027 at 175' AGL



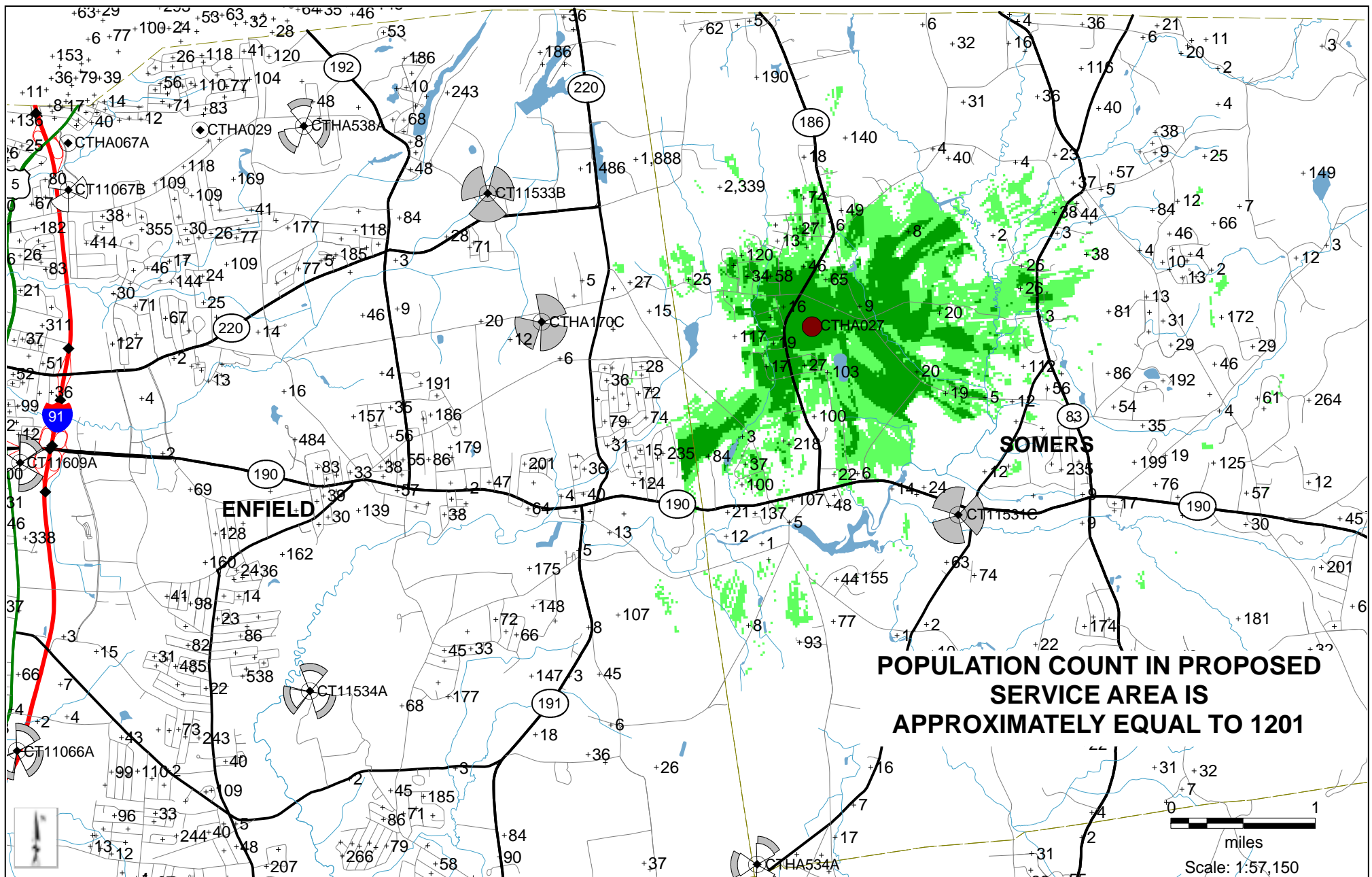
Planned Site CTHA027 at 175'AGL

Coverage Thresholds
 Dark Green-In Building Residential Coverage
 Light Green-In Building Commercial Coverage

COVERAGE
 In-Building Residential In-Building Commercial
 -91 dB -97 dB





**Proposed Coverage Traffic Counts For
 T-Mobile Site CTHA027 at 175' AGL**



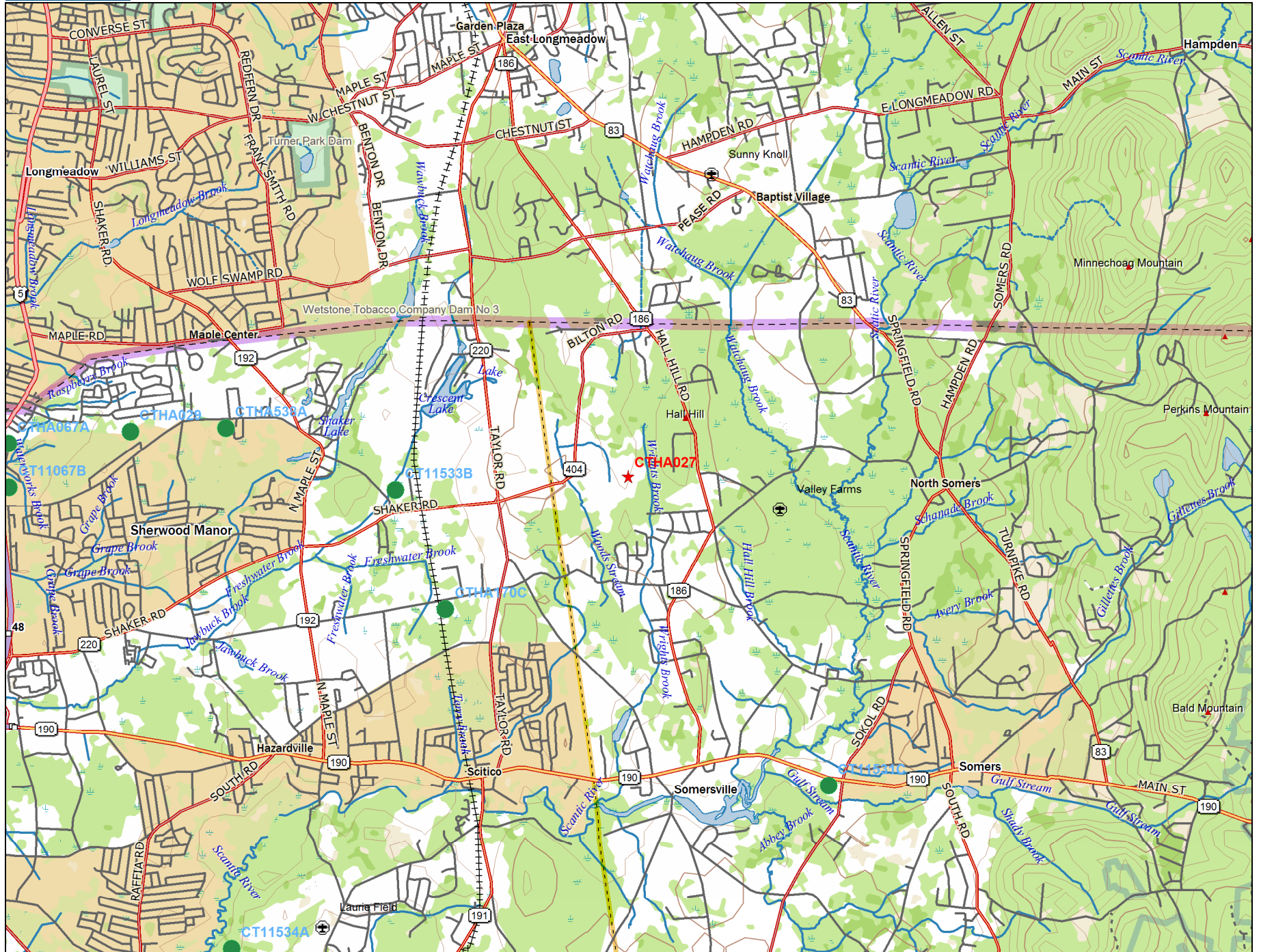
POPULATION COUNT IN PROPOSED SERVICE AREA IS APPROXIMATELY EQUAL TO 1201

Planned Site CTHA027 at 175'AGL
Coverage Thresholds
 Dark Green-In Building Residential Coverage
 Light Green-In Building Commercial Coverage

COVERAGE	
In-Building Residential	In-Building Commercial
 -91 dB	 -97 dB



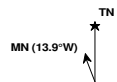
Proposed Coverage Population Counts For
 T-Mobile Site CTHA027 at 175' AGL



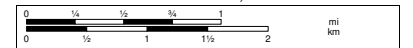
Data use subject to license.

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www.delorme.com



Scale 1 : 62,500



1" = 5,208.3 ft Data Zoom 11-6

ATTACHMENT 2

ATTACHMENT 2

Site Search Summary

In general, the wireless industry develops “site search areas” to initiate a site selection process in areas where new wireless infrastructure is required to provide reliable wireless services to the public. A site search area is a general geographical location where the installation of a new wireless facility would address identified coverage and/or capacity constraints within wireless networks. Site search areas are also developed with an overall understanding of local terrain, tree canopies and other local morphologies and development patterns. Further consideration is given by wireless network operators on how any new wireless infrastructure will integrate into a wireless network based on the unique aspects of cellular design that include consumer mobility and the reuse of frequencies licensed by the FCC throughout the network’s architecture.

In any site search area, both Eco-Site and T-Mobile seek to avoid the unnecessary proliferation of towers in accordance with Connecticut law, while at the same time ensuring the quality of service provided by any proposed site to users of its network. Once a site search area is identified, real estate professionals will review the area with particular attention to any existing tall structures above the tree line which may exist in the site search area (e.g. existing towers, water tanks, above ground transmission lines, church steeples). If present, existing structures are evaluated for the potential to construct and operate a new facility. In order to be viable, a tower site candidate must be capable of providing adequate coverage in wireless networks. In addition, all viable candidates must have a willing landowner with whom commercially reasonable lease terms may be negotiated.

As part of a site search process, real estate professionals will also typically review local zoning regulations to identify any community preferences articulated by

regulation. They will also consider other municipal sources of information in an effort to identify any other general community preferences related to tower facility siting. Overall, and based on the regulatory process set forth in state law that involves the Siting Council, Eco-Site evaluates tower site candidates and qualifies any candidates from the state's perspective, which is to balance the need for any new tower site and minimize environmental impacts where possible.

In this search area in the Town of Somers, CT, a new tower is necessary to meet T-Mobile's objective of providing reliable service to the public. The search area is in the northeast corner of Somers, CT, mainly comprising of the Northern Correctional Institute located at 287 Bilton Road. One (1) tall structure was identified near the search area; a 180' water tank owned and located at the Prison. After discussions with the owner, it was determined that the Prison was not interested in leasing space on the water tank for collocation. The terrain and topography in this area limited our search for potential locations for a new communications facility; the ground elevation significantly drops to the east of the search ring. Federal wetlands are also significant in this area, further limiting our search for a new communications facility. Eco-Site knows of no other alternatives that would better meet the State's tower siting criteria set forth in Section 16-50p of the Connecticut General Statutes.

Eco-Site identified and investigated eight (8) sites in and around the Somers site search area where the construction of a new tower might be feasible for radio frequency engineering purposes.

1. Deb Romano
248 Hall Hill Road
Somers, CT 06071

This location is the candidate site.

2. Northern Correctional Institute
287 Bilton Road
Somers, CT 06071

After reviewing available siting options at the correctional institute state officials advised the applicant's representatives that the state would not accommodate a wireless site on the premises.

3. Young
163 Bilton Road
Somers, CT 06071

T-Mobile RF rejected this candidate due to lack of coverage in the target area.

4. Shewokis
135 Bilton Road
Somers, CT 06071

Due to leasing concerns with the property owner, this candidate was removed from consideration.

5. Pratt - A
14 Bridle Path Drive

Somers, CT 06071

No ownership interest was obtained for this property. Certified mail was delivered and signed for to solicit the owner's interest in hosting a wireless site but the applicants received no response.

6. Pratt - B

White Oak Road (off)

Somers, CT 06071

No ownership interest was obtained for this property. Certified mail was delivered and signed for to solicit the owner's interest in hosting a wireless site but the applicants received no response.

7. Blake

700 Hall Hill Road

Somers, CT 06071

Due to leasing terms could not be agreed upon with the property owner and concerns regarding the actual location of a facility on the property could not be resolved.

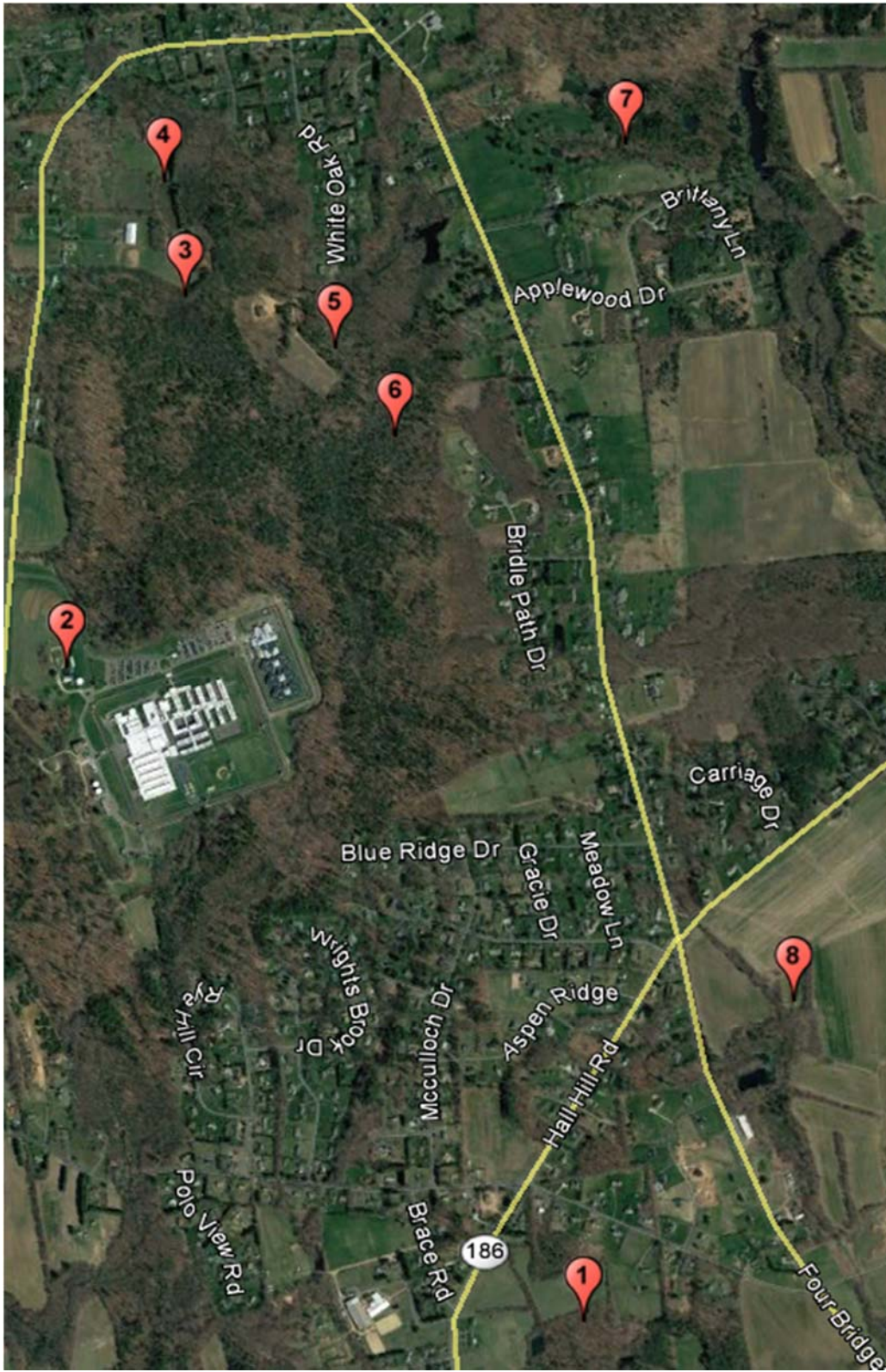
8. Oakridge Dairy

122 Watchaug Road

Somers, CT 06071

After speaking with the property owner, it was confirmed that they were not interested in leasing space for a cell tower.

Figure 1 SITE SEARCH MAP

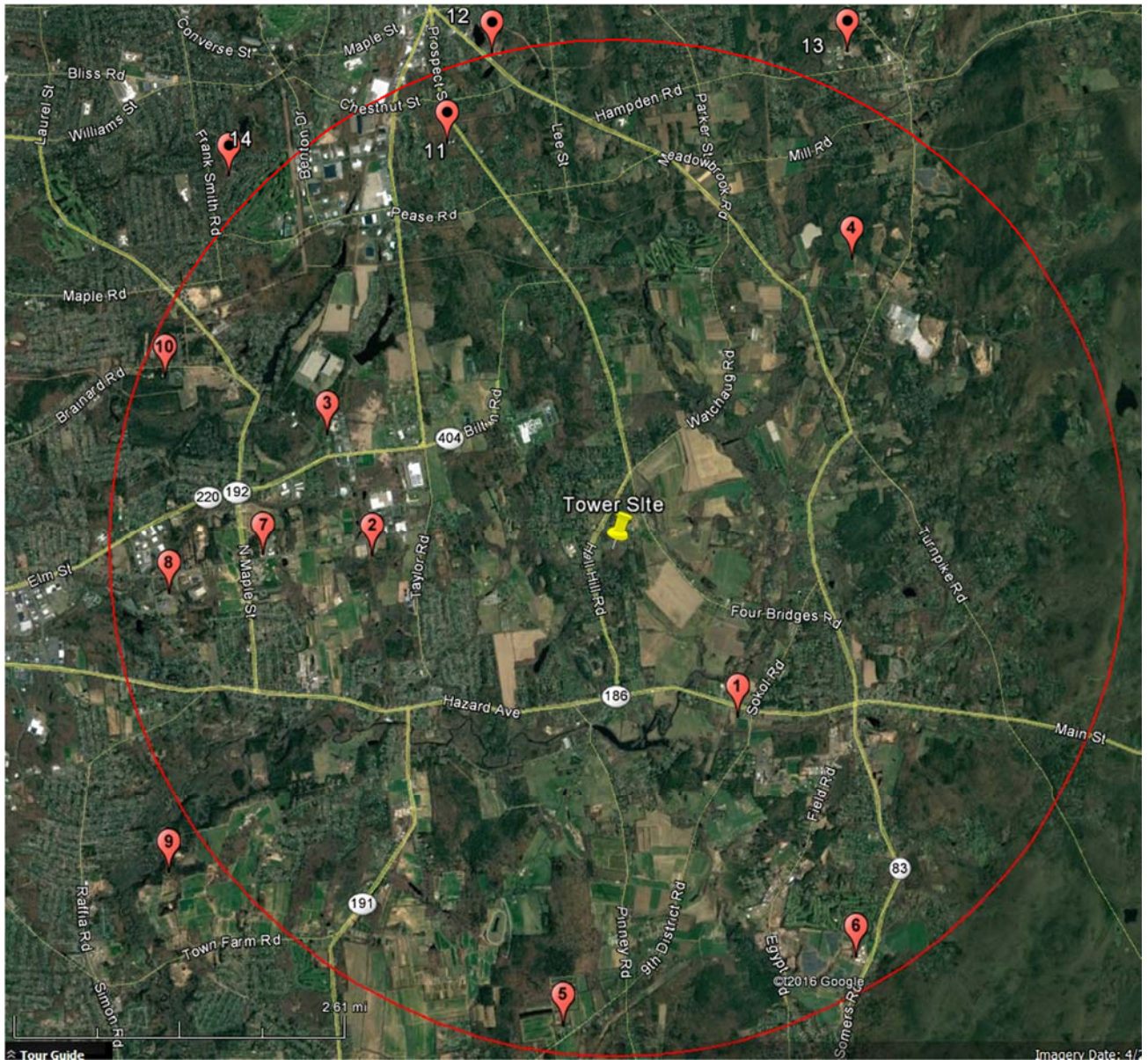


Existing Tower/Cell Site Locations

There are fourteen (14) existing or approved communications facilities within approximately 4 miles of the proposed tower located at 248 Hall Hill Rd. Somers, Connecticut. None of the existing sites, whether T-Mobile is located thereon or not, can provide reliable service to the area of Town where service is needed.

	Address	Lat	Long
1	400 Main St. Somers, CT	41.983717°	-72.465523°
2	188 Moody St. Enfield, CT	42.002008°	-72.521698°
3	37 Bacon Rd. Enfield, CT	42.015934°	-72.528737°
4	111 Stafford Rd. Hampden, MA	42.036058°	-72.447989°
5	126 Pioneer Heights Rd. Somers, CT	41.948865°	-72.492044°
6	458 South Rd. Somers, CT	41.956514°	-72.447423°
7	1 Anngina Dr. Enfield, CT	42.002120°	-72.538521°
8	293 Elm St. Enfield, CT	41.997690°	-72.552949°
9	Town Farm Rd. Enfield, CT	41.965888°	-72.552719°
10	290 Brainard Rd. Enfield, CT	42.022388°	-72.553620°
11	Prospect St. E. Longmeadow, MA	42.049217°	-72.510296°
12	150 Somers Rd. E. Longmeadow, MA	42.059631°	-72.503487°
13	28 Commercial Dr. Hampden, MA	42.059861°	-72.448687°
14	Academy Dr. Longmeadow, MA	42.045603°	-72.544131°

Figure 2: EXISTING TOWER/CELL SITE MAP



ATTACHMENT 3

Attachment 3

General Facility Description

248 Hall Hill Road, Somers, Connecticut

Tax/PIN Identification: Map 7, Lot 72

38.5 Acre Parcel

The proposed tower site is located on an approximately 38.5 acre parcel located at 248 Hall Hill Road and owned by Debra Romano. It is classified in the A-1 Residential 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 central eastern section of the host parcel.

The facility consists of a new self-supporting monopole tower 180' in height, with a 5' lightning rod on top extending to an overall height of 185' AGL. T-Mobile would install up to nine (9) panel antennas, one (1) dish antenna and related equipment at a centerline height of 176' 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 Hall Hill Road starting at the location of an old farm access gate over a gravel access drive a distance of approximately 1,125' to the proposed compound. Utility connections would be routed along the access easement.

SITE AND FACILITY DESCRIPTION

I. LOCATION

- A. COORDINATES: 42° 0' 9.34" N 72° 29' 5.99" W
- B. GROUND ELEVATION: 232'± AMSL
- C. USGS MAP: USGS 7.5 Ellington Quadrangle
- D. SITE ADDRESS: 248 Hall Hill Road, Somers, Connecticut
- E. ZONING WITHIN ¼ MILE OF SITE: Residential.

II. DESCRIPTION

- A. SITE SIZE: 38.5
- B. LEASE AREA/COMPOUND AREA: 10,000 SF/2,500 S.F.
- C. TOWER TYPE/HEIGHT: 180' AGL Monopole
- D. SITE TOPOGRAPHY AND SURFACE: Subject site is located on a large 38+ acre parcel sloping to the south with agricultural fields an existing home and barn.
- E. SURROUNDING TERRAIN, VEGETATION, WETLANDS, OR WATER: There are wetland on the southern portion of the property.
- F. LAND USE WITHIN ¼ MILE OF SITE: A mixture of residential and agricultural. A state prison complex operates to the north northeast.

Figure 5: Somers GIS Compilation Map



III. FACILITIES

A. POWER COMPANY: Eversource

B. POWER PROXIMITY TO SITE: 1,150'±

C. TELEPHONE COMPANY: TBD

D. PHONE SERVICE PROXIMITY: 1,150±¹

E. VEHICLE ACCESS TO SITE: Proposed 20' access easement to the site will be from Hall Hill Road (State Route 186), over an approximately 1,125' access drive to tower compound.

F. OBSTRUCTION: None known at this time.

G. AREA OF DISTURBANCE: Total area of disturbance is approximately 25,000 s.f.

IV. LEGAL

A. PURCHASE LEASE

B. OWNER: DEBRA ROMANO

C. ADDRESS: 248 HALL HILL ROAD

Somers, CT 06071

¹ Communication connection of the tower may at first be a direct point-to-point connection using dish "hop" depending on timing of fiber service. Ultimately it is intended that the tower will be connected by landline.

Facilities and Equipment Specification

I. TOWER SPECIFICATIONS:

- A. MANUFACTURER: To be determined

- B. TYPE: Self-Supporting monopole tower

- C. HEIGHT: 180' AGL (with 5' lightning rod extending to 185')
DIMENSIONS: Tower structure tapered/

- D. TOWER LIGHTING: None required.

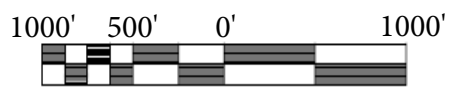
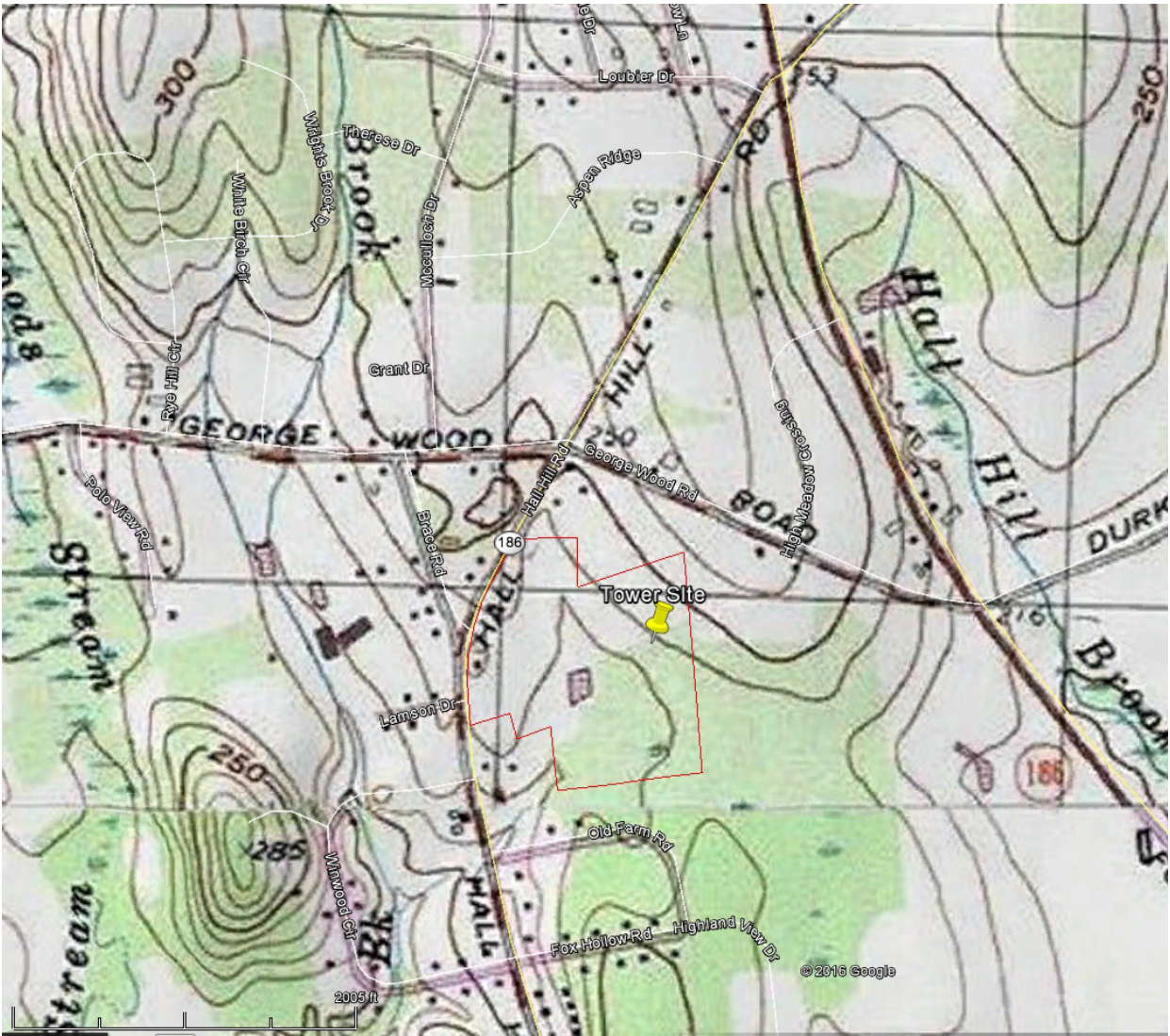
II. TOWER LOADING:

- A. T-Mobile - up to 9 panel antennas
 - a. Model - TBD
 - b. Antenna Dimensions - approximately 96"H x 12"W x 9"D
 - c. Position on Tower - 176' centerline AGL
 - d. Transmission Lines - DC, Fiber and RET lines internal to tower.
 - e. (9) Remote Radio Units behind antennas on proposed pipe mounts
 - f. (1) Microwave dish 2' diameter on proposed pipe mount

B. Future Carriers - To be determined

III. ENGINEERING ANALYSIS AND CERTIFICATION:

The tower will be designed in accordance with American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures" and the 2003 International Building Code with 2005 Connecticut Amendment. The 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 the final D&M plan.



APPROX. NORTH

Topography Exhibit

Source: Earth Point Topo Map
 Date: 01/17/2017 Rev: 0

Project: CT-0005
 Site Address: 248 Hall Hill Road
 Somers, CT 06071





TO OBTAIN LOCATION OF PARTICIPANTS UNDERGROUND FACILITIES BEFORE YOU DIG IN MASSACHUSETTS, CALL DIG SAFE SYSTEM, INC.
TOLL FREE: 1-888-344-7233 OR www.digsafe.com

MASSACHUSETTS STATUTE REQUIRES MIN OF 2 WORKING DAYS NOTICE BEFORE YOU EXCAVATE

Know what's below. Call before you dig.

Eco-Site[®]

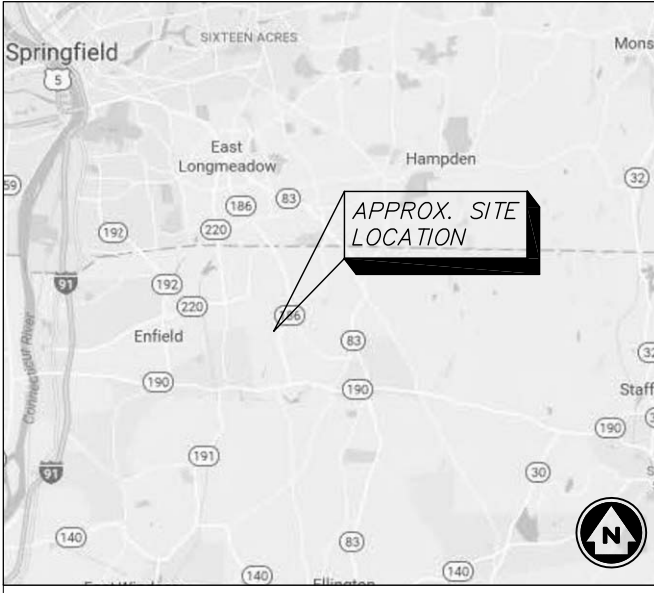
240 LEIGH FARM ROAD, SUITE 415
DURHAM, NC 27707

ECO-SITE: SOMERS CT-0005A
T-MOBILE: CTHA027

SITE ADDRESS:

248 HALL HILL ROAD
SOMERS, CT 06071
TOLLAND COUNTY

LATITUDE: 42° 0' 9.34" N
LONGITUDE: 72° 29' 5.99" W
ELEVATION: 232' AMSL
TAX/PIN #: MAP 7, LOT 72
ZONING: A-1



VICINITY MAP

1. HEAD NORTH ON I-91 N TOWARD CT-220E/ELM STREET.
2. TAKE EXIT 48 ON TO ELM STREET IN ENFIELD.
3. TURN RIGHT TO CONTINUE ON ELM STREET.
4. CONTINUE STRAIGHT ONTO MOODY ROAD.
5. MOODY ROAD BECOMES GEORGE WOOD ROAD.
6. TURN RIGHT ONTO TO BRACE ROAD
7. TURN RIGHT ONTO HALL HILL ROAD
8. SITE WILL BE ON YOUR LEFT

DRIVING DIRECTIONS

CONSTRUCTION OF TELECOMMUNICATION AND PUBLIC UTILITY FACILITY, CONSISTING OF A MONOPOLE TOWER, SPACE FOR CARRIER EQUIPMENT AND A UTILITY BACKBOARD WITHIN A FENCED COMPOUND. NO WATER OR SEWER IS REQUIRED.

PROJECT SUMMARY

DEVELOPER:
ECO-SITE
240 LEIGH FARM ROAD, SUITE 415
DURHAM, NC 27707
(919) 636-6810
ATTN:

POWER COMPANY:
EVERSOURCE
107 SELDON STREET
BERLIN MA, 06037
(800) 286-2000
ATTN: CUSTOMER SERVICE

TELEPHONE COMPANY:
TBD
(800) XXX-XXXX
ATTN: CUSTOMER SERVICE

PROPERTY OWNER:
DEBRA ROMANO
248 HALL HILL ROAD
SOMERS, CT 06071

PROJECT SUMMARY

DRWG. #	TITLE	REV.#	DATE
T1	TITLE SHEET	A	1/16/17
Z1	GENERAL NOTES & LEGEND	A	1/16/17
Z2	OVERALL SITE PLAN	A	1/16/17
Z2A	NEAREST RESIDENTIAL STRUCTURE MAP	A	1/16/17
Z2B	NEAREST MUNICIPALITY MAP	A	1/16/17
Z2C	WETLAND & WETLAND TYPE SOILS MAP	A	1/16/17
Z2D	NEAREST SCHOOL MAP	A	1/16/17
Z2E	ABUTTERS MAP	A	1/16/17
Z3	ENLARGED SITE LAYOUT	A	1/16/17
Z4	TOWER ELEVATION	A	1/16/17
Z5	CIVIL DETAILS	A	1/16/17
Z6	CIVIL DETAILS	A	1/16/17
Z7	UTILITY RACK DETAIL	A	1/16/17
Z8	T-MOBILE EQUIPMENT DETAILS	A	1/16/17
Z9	T-MOBILE EQUIPMENT DETAILS	A	1/16/17
Z10	ICE BRIDGE DETAILS	A	1/16/17
EC1	GRADING & EROSION CONTROL NOTES	A	1/16/17
EC2	GRADING PLAN	A	1/16/17
EC3	GRADING PLAN CONT'D	A	1/16/17

DRAWING INDEX

TOWN OF SOMERS:
600 MAIN STREET, PO BOX 308
SOMERS, CT 06071
(860) 763-8201

PERMIT INFORMATION

INFINIGY[®]
1033 Watervliet Shaker Road | Albany, NY 12205
Phone: 518-690-0790 | Fax: 518-690-0793
www.infinigy.com


No.	Submitted / Revision	App'd	Date
A	SUBMITTED FOR REVIEW	JDL	1/16/17

Drawn: A.D. Date: 12/22/16
Designed: A.D. Date: 12/22/16
Checked: A.D. Date: 12/22/16

Project Number: 502-000

Project Title:
SOMERS
CT-0005A
248 HALL HILL ROAD
SOMERS, CT 06071

Prepared For:



Drawing Title:
TITLE SHEET

Drawing Scale: **ZD**
Date: 12/22/16

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Drawing Number:

T1

GENERAL NOTES

- ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
- DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
- DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
- THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
- BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
- DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
- INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
- EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL FOREIGN SUBSTANCES. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
- THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL 1-800-922-4455.
- THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
- THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
- THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INCLUDING, BUT NOT LIMITED TO, THE BUILDING PERMIT, INSPECTIONS, CERTIFICATES, ETC.
- THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.
- ALL TRENCH EXCAVATION AND ANY REQUIRED SHEETING AND SHORING SHALL BE DONE IN ACCORDANCE OSHA REGULATIONS FOR CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR DEWATERING AND THE MAINTENANCE OF SURFACE DRAINAGE DURING THE COURSE OF WORK.
- ALL UTILITY WORK INVOLVING CONNECTIONS TO EXISTING SYSTEMS SHALL BE COORDINATED WITH THE OWNER OR OWNER'S REPRESENTATIVE AND THE UTILITY OWNER BEFORE EACH AND EVERY CONNECTION TO EXISTING SYSTEMS IS MADE.
- MAINTAIN FLOW FOR ALL EXISTING UTILITIES.
- ALL SITE FILL SHALL MEET SELECTED FILL STANDARDS AS DEFINED BY THE OWNER OR OWNER'S REPRESENTATIVE ON THE DRAWINGS.
- CONTRACTOR SHALL GRADE ALL AREAS ON THE SITE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE EQUIPMENT PAD AND THE TOWER.
- ALL IMPROVEMENTS TO CONFORM WITH LOCAL JURISDICTION CONSTRUCTION STANDARDS AND SPECIFICATIONS, LATEST EDITION.

STRUCTURAL STEEL NOTES

- STRUCTURAL STEEL SHALL CONFORM TO THE LATEST EDITION OF THE AISC "SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS".
- ALL INTERIOR STRUCTURAL STEEL USED SHALL BE, WHEN DELIVERED, FINISHED WITH ONE COAT FABRICATOR'S NON-LEAD, RED OXIDE PRIMER. PRIMING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE PRIMED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
- ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH SPECIFICATION ASTM A36 UNLESS OTHERWISE NOTED. GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION TO THE GREATEST EXTENT POSSIBLE. ALL DINGS, SCRAPES, MARS, AND WELDS IN THE GALVANIZED AREAS SHALL BE REPAIRED BY FIELD TOUCH-UP PRIOR TO COMPLETION OF THE WORK.
- DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON STRUCTURAL DRAWINGS.
- CONNECTIONS:
 - ALL WELDING SHALL BE DONE USING E70XX ELECTRODES AND WELDING SHALL CONFORM TO AISC AND AWS D1.1. WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC "MANUAL OF STEEL CONSTRUCTION", 9TH EDITION. AT THE COMPLETION OF WELDING, ALL DAMAGE TO GALVANIZED COATING SHALL BE REPAIRED.
 - BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED ASTM A325 BOLTS (3/4" DIA) AND SHALL HAVE MINIMUM OF TWO BOLTS UNLESS NOTED OTHERWISE.
 - NON-STRUCTURAL CONNECTIONS FOR STEEL GRATING MAY USE 5/8" DIA. GALVANIZED ASTM A 307 BOLTS UNLESS NOTED OTHERWISE.
 - CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL BY ENGINEER.

DESIGN DATA

- WIND LOADS: PER EIA/TIA G-222
ICE LOADS: 1/2" RADIAL ON ALL COMPONENTS & CABLE
SNOW LOAD: PER CT STATE BLDG. CODE.
SEISMIC LOADS: PER CT STATE BLDG CODE.

CONCRETE NOTES

- DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE";
- MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
- CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%) WITH A MAXIMUM 4" SLUMP, AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE NOTED.
- MAXIMUM AGGREGATE SIZE SHALL BE 1".
- THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 185
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	DRINKABLE
ADMIXTURES:	NON-CHLORIDE CONTAINING
- REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
- REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
- THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:

CONCRETE CAST AGAINST EARTH.....	3 IN.
CONCRETE EXPOSED TO EARTH OR WEATHER:	
#6 AND LARGER	2 IN.
#5 AND SMALLER & WWF	1 1/2 IN.
CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:	
SLAB AND WALL	3/4 IN.
BEAMS AND COLUMNS	1 1/2 IN.

- A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
- INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURERS WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
- CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
- ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
- DO NOT WELD OR TACKWELD REINFORCING STEEL.
- ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
- LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
- REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
- PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
- DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
- DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
- FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.

CIVIL LEGEND

<u>EXISTING</u>		<u>PROPOSED</u>
- - - - -	FENCE	- x - x -
- - - - - E - - - - -	UNDERGROUND ELECTRIC	- - - - -
- - - - - T - - - - -	UNDERGROUND TELEPHONE	- - - - -
O - - - - - W - - - - -	OVERHEAD TELEPHONE	- - - - -
- - - - - 250	5' OR 10' CONTOUR LINE	- - - - - 250
- - - - - 202	1' OR 2' CONTOUR LINE	- - - - - 202
- - - - - 120.5 OR 120.5 x	SPOT ELEVATION	- - - - - 120.5 OR x 120.5
- - - - -	PRIMARY PROPERTY OR R.O.W.	- - - - -
- - - - -	LEASE LINE	- - - - -
- - - - -	EASEMENT	- - - - -
- - - - -	UTILITY POLE	- - - - -
- - - - -	TELEPHONE PEDESTAL	- - - - -
- - - - -	CURB	- - - - -
- - - - -	ASPHALT PAVEMENT	- - - - -
- - - - -	BUILDING	- - - - -
- - - - -	TREES, SHRUBS, BUSHES	- - - - -
X	REPRESENTS DETAIL NUMBER	
X	REF. DRAWING NUMBER	

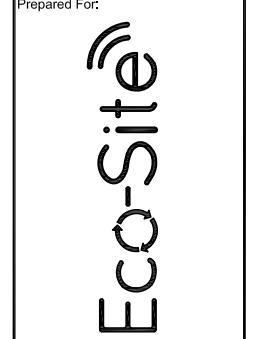
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A	SUBMITTED FOR REVIEW	JDL	1/16/17

Drawn: A.D. Date: 12/22/16
Designed: A.D. Date: 12/22/16
Checked: A.D. Date: 12/22/16

Project Number: 502-000

Project Title: SOMERS CT-0005A

248 HALL HILL ROAD
SOMERS, CT 06071



Drawing Title: GENERAL NOTES & LEGEND

Drawing Scale: ZD

Date: 12/22/16

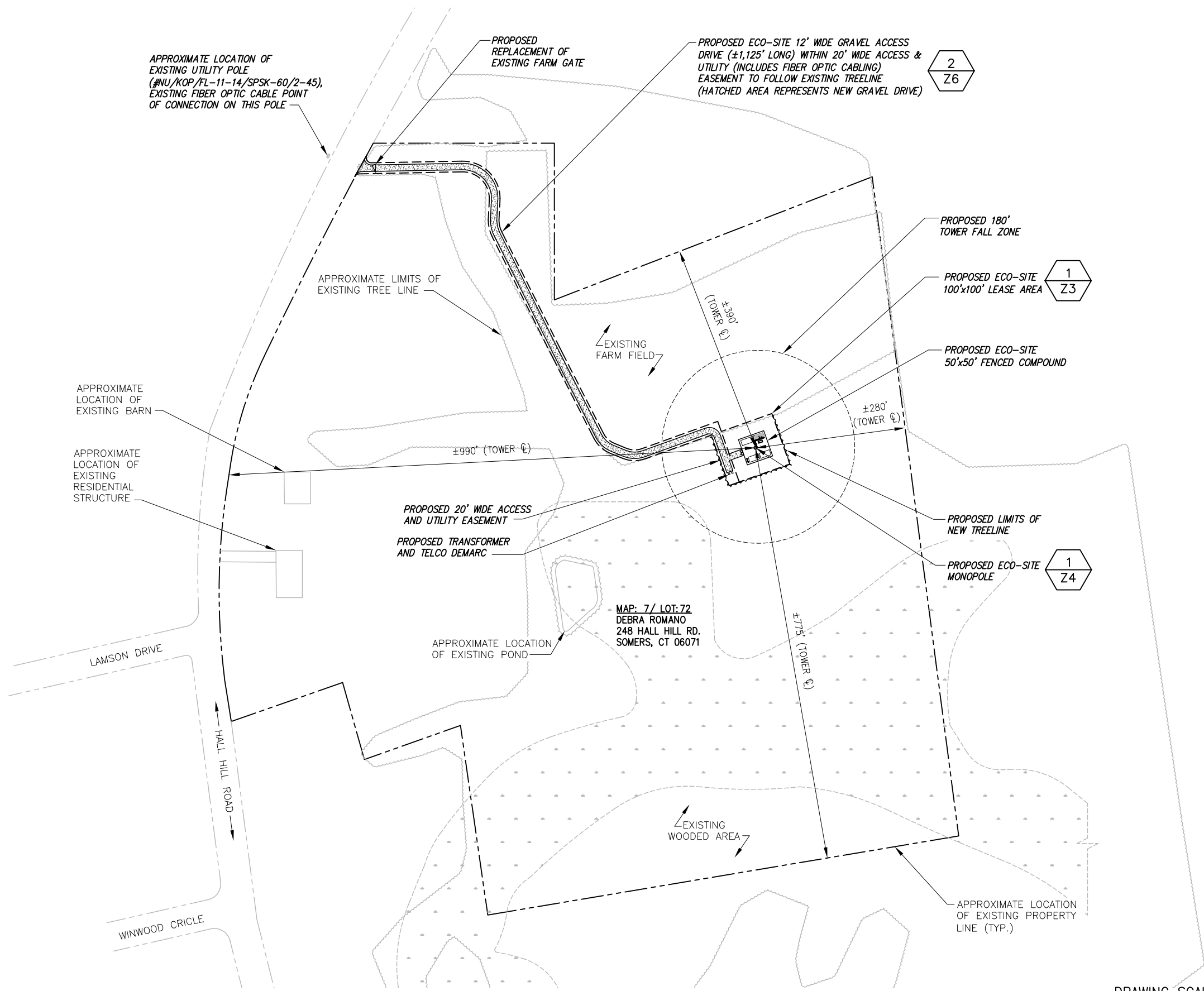
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NOTE:

- ROUTE OF UTILITY IS TO FOLLOW ACCESS EASEMENT UNLESS OTHERWISE DIRECTED BY UTILITY COMPANY.
- FINAL INSTALLATION METHOD (OVERHEAD OR UNDERGROUND) TO BE DETERMINED.

SHADED AREA REPRESENTS "INLAND WETLAND SOILS" FROM SOMERS CT GIS ONLINE DATABASE DELINEATION IN FIELD TO BE COMPLETED BY OTHERS. PER WETLAND INVESTIGATION BY OTHERS, NO WETLANDS EXIST ON THIS PARCEL.

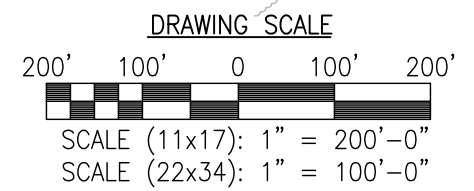


BASEMAPPING INFORMATION BASED ON INFORMATION OBTAINED FROM A SITE WALK COMPLETED BY INFINIGY ON 11/29/16 AND SITE SURVEY COMPLETED BY "CLIMAX DEVELOPMENT OF W.N.Y." TITLED: "BLUE RIDGE, SITE SURVEY".



1 OVERALL SITE PLAN
SCALE: AS NOTED

APPROX. NORTH



INFINIGY
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Phone: 518-690-0790 | Fax: 518-690-0793
www.infinigy.com

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Project Title:
SOMERS
CT-0005A
248 HALL HILL ROAD
SOMERS, CT 06071

Prepared For:
Eco-Site

Drawing Title:
OVERALL SITE PLAN

Drawing Scale:
ZD
Date:
12/22/16

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Drawing Number:
Z2



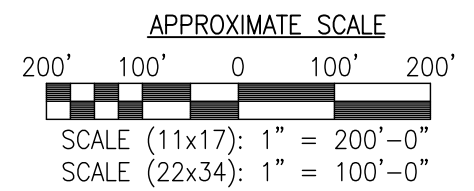
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APPROX. NORTH



1 DISTANCE TO NEAREST RESIDENTIAL STRUCTURE
 SCALE: NOT TO SCALE



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Project Title:
SOMERS
CT-0005A
 248 HALL HILL ROAD
 SOMERS, CT 06071

Prepared For:

Drawing Title:
**NEAREST RESIDENTIAL
 STRUCTURE MAP**

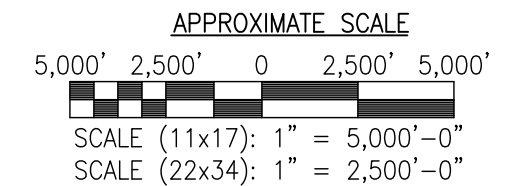
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Project Number:
502-000

Project Title:
SOMERS
CT-0005A
248 HALL HILL ROAD
SOMERS, CT 06071

Prepared For:
Eco-Site

Drawing Title:
NEAREST MUNICIPALITY
MAP

Drawing Scale:
ZD
Date:
12/22/16

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Drawing Number:
Z2B



WETLAND SOILS (SEE NOTE THIS SHEET)

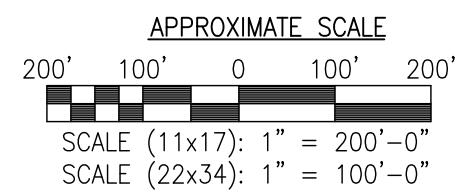
PROPOSED TOWER CENTER

SHADED AREA REPRESENTS "INLAND WETLAND SOILS" FROM SOMERS CT GIS ONLINE DATABASE DELINEATION IN FIELD TO BE COMPLETED BY OTHERS. PER WETLAND INVESTIGATION BY OTHERS, NO WETLANDS EXIST ON THIS PARCEL.



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1 WETLAND & WETLAND TYPE SOILS
NOT TO SCALE



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Designed: A.D. Date: 12/22/16
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Project Number: 502-000

Project Title:
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CT-0005A
248 HALL HILL ROAD
SOMERS, CT 06071

Prepared For:
Eco-Site

Drawing Title:
WETLANDS AND
WETLAND TYPE SOILS
MAP

Drawing Scale: **ZD**
Date: 12/22/16

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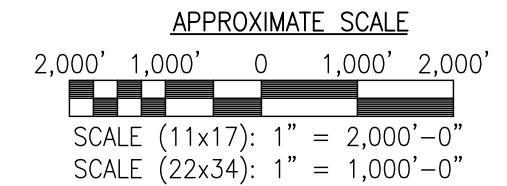


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DISTANCE TO NEAREST SCHOOL

SCALE: AS NOTED



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 502-000

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CT-0005A
 248 HALL HILL ROAD
 SOMERS, CT 06071

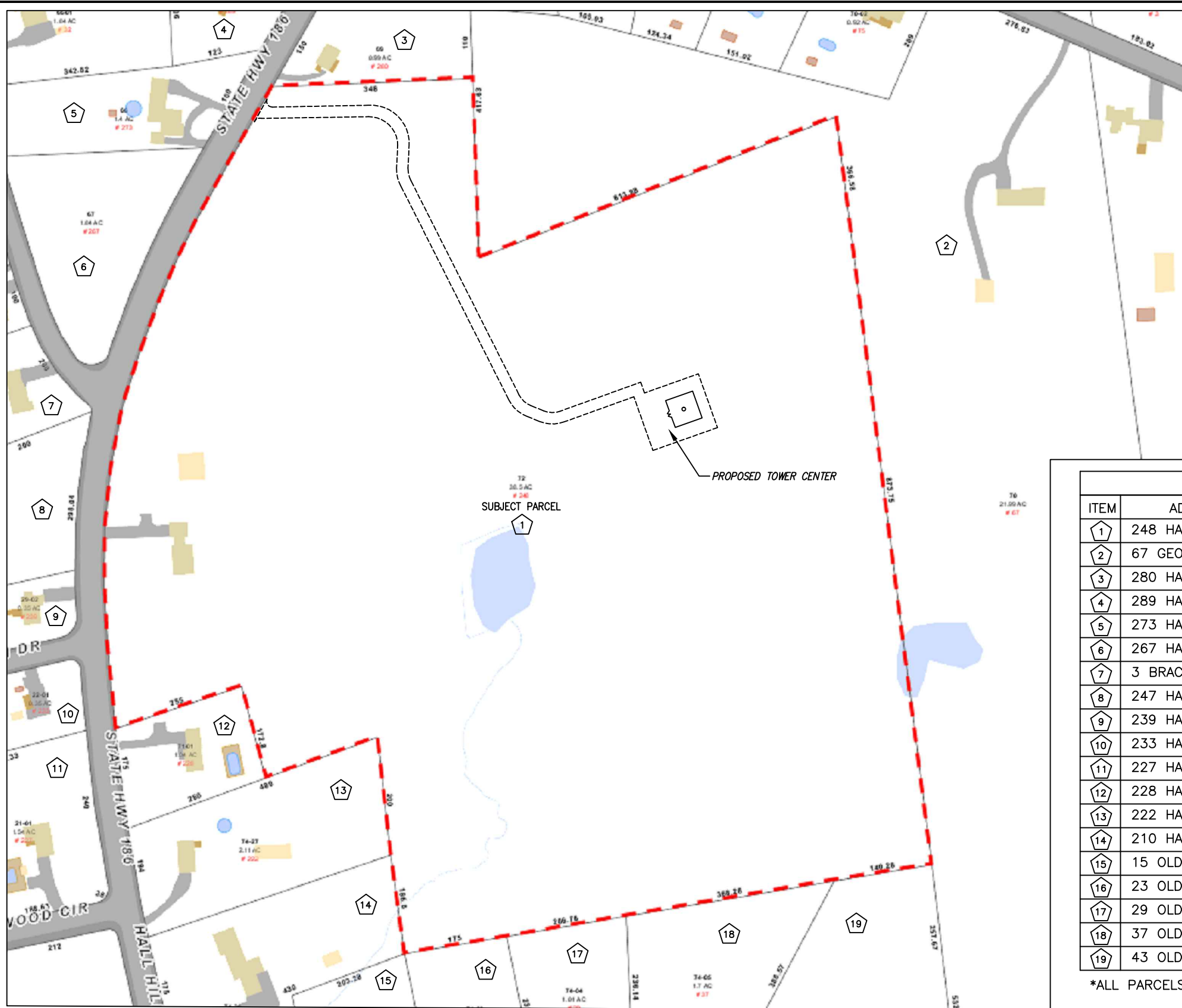
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Drawing Title:
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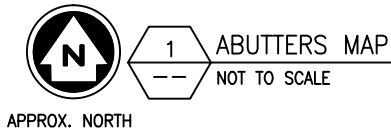
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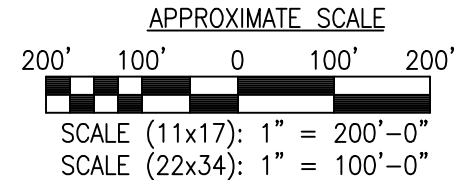


NOTE:
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ABUTTING PARCELS		
ITEM	ADDRESS	OWNER
1	248 HALL HILL ROAD	ROMANO, DEBRA
2	67 GEORGE WOOD ROAD	FLEBOTTE, BARBARA E
3	280 HALL HILL ROAD	DION, LEONARD S
4	289 HALL HILL ROAD	RICHARDSON, DONNA M & BERT C
5	273 HALL HILL ROAD	BARNETT, TODD & DIANNE
6	267 HALL HILL ROAD	LYNCH, EARL H
7	3 BRACE ROAD	ROBERTS, CHERYL A
8	247 HALL HILL ROAD	SHALLOWBROOK EQUESTRIAN CENTER TRUST
9	239 HALL HILL ROAD	CORREIRA, RICHARD T & CAROLINE A
10	233 HALL HILL ROAD	ZIMOWSKI, JOHN J
11	227 HALL HILL ROAD	SULIKOWSKI, GEORGE P & JUNE L
12	228 HALL HILL ROAD	REISSIG, ROBERT & SARA
13	222 HALL HILL ROAD	DIPINTO, RICHARD E & CHERYL T
14	210 HALL HILL ROAD	KRUZEL, CASIMIR J SUCCESSOR TRUSTEE
15	15 OLD FARM ROAD	COSTANZO, ANTHONY & DONNA
16	23 OLD FARM ROAD	SILVERMAN, CARL G & SANDRA L
17	29 OLD FARM ROAD	SILVERMAN, CARL G & SANDRA L
18	37 OLD FARM ROAD	ROBIDOUX, RAYMOND A & DENISE L
19	43 OLD FARM ROAD	NADLER, ROBERT T JR & GEROGIA K

*ALL PARCELS ARE IN SOMERS, CT 06701

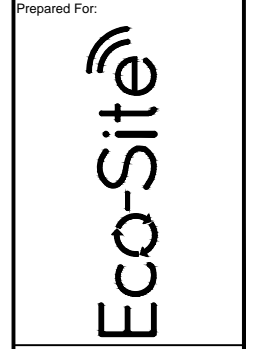


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Drawn:	AJD	Date:	12/22/16
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502-000

Project Title:
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CT-0005A

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SOMERS, CT 06071



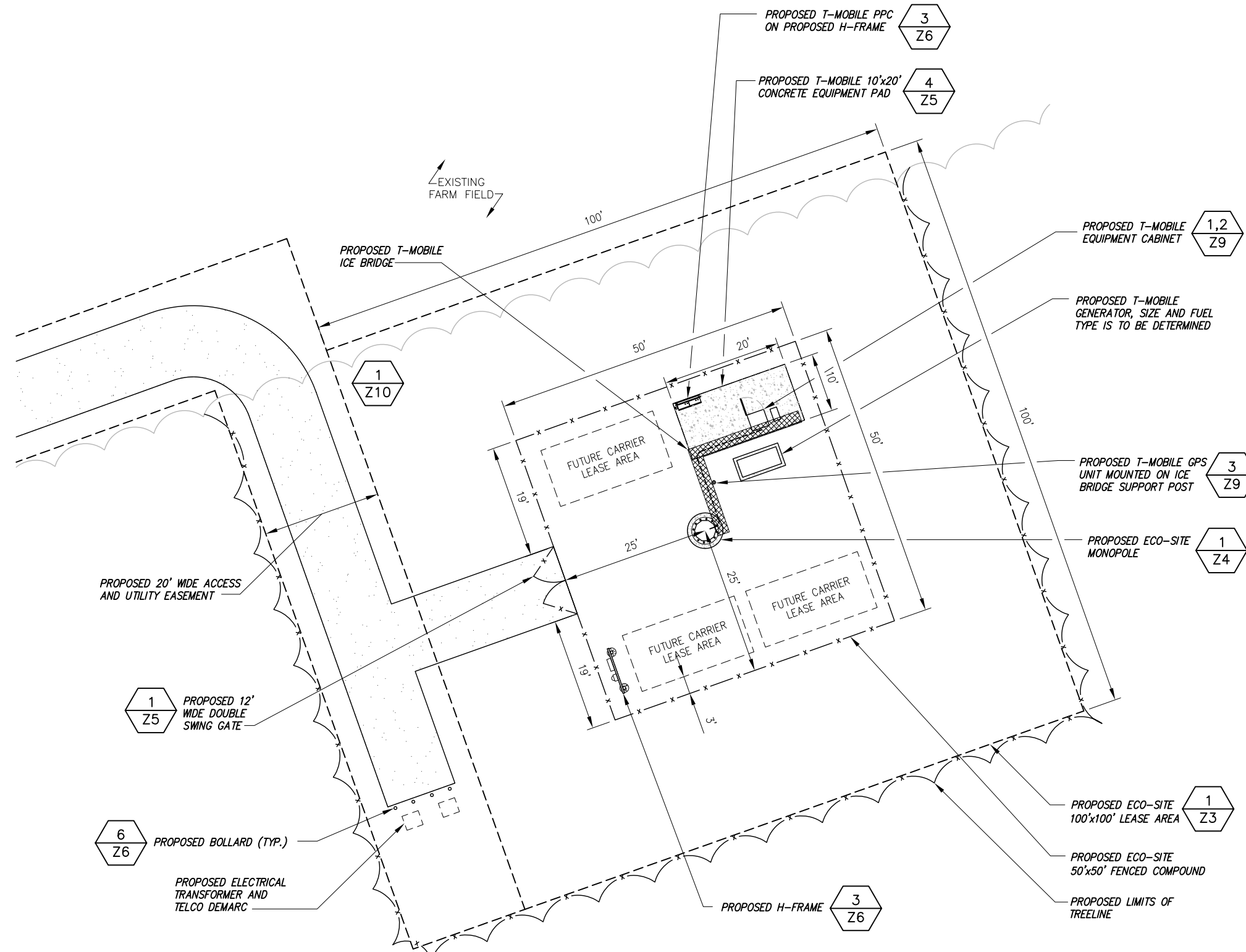
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Drawing Scale:
ZD

Date:
12/22/16

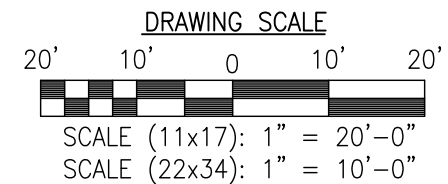
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CALLED NORTH

1 DETAILED SITE LAYOUT
SCALE: AS NOTED



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Project Title:
SOMERS
CT-0005A
248 HALL HILL ROAD
SOMERS, CT 06071

Prepared For:
Eco-Site

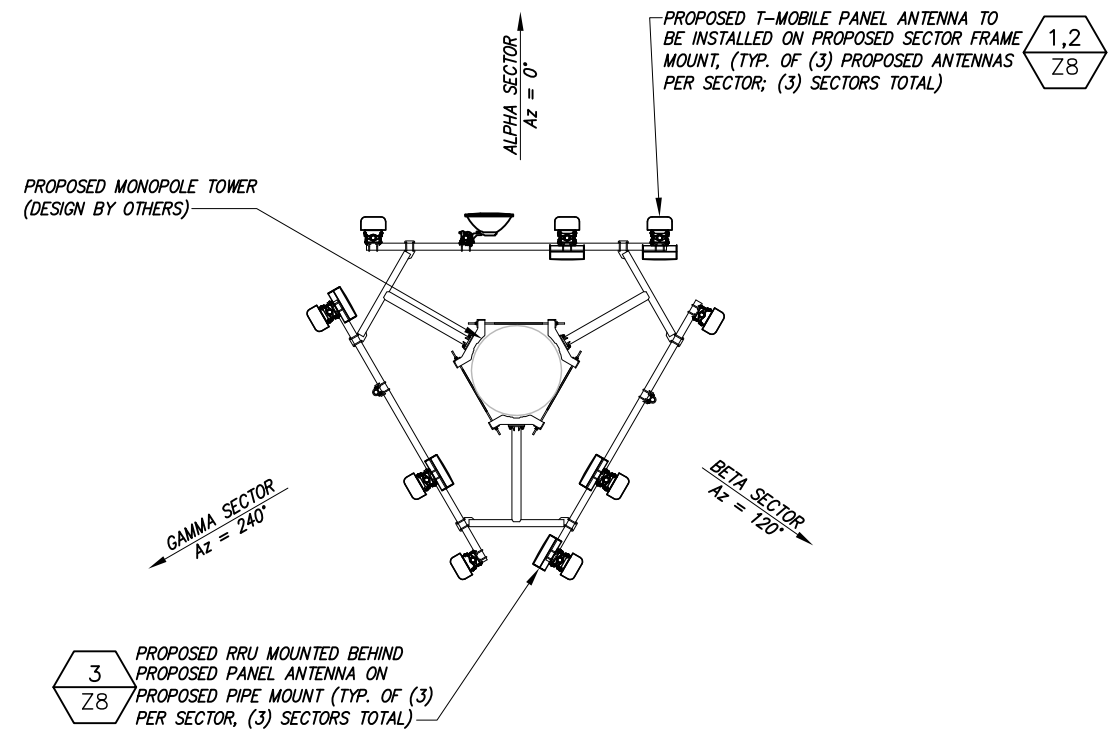
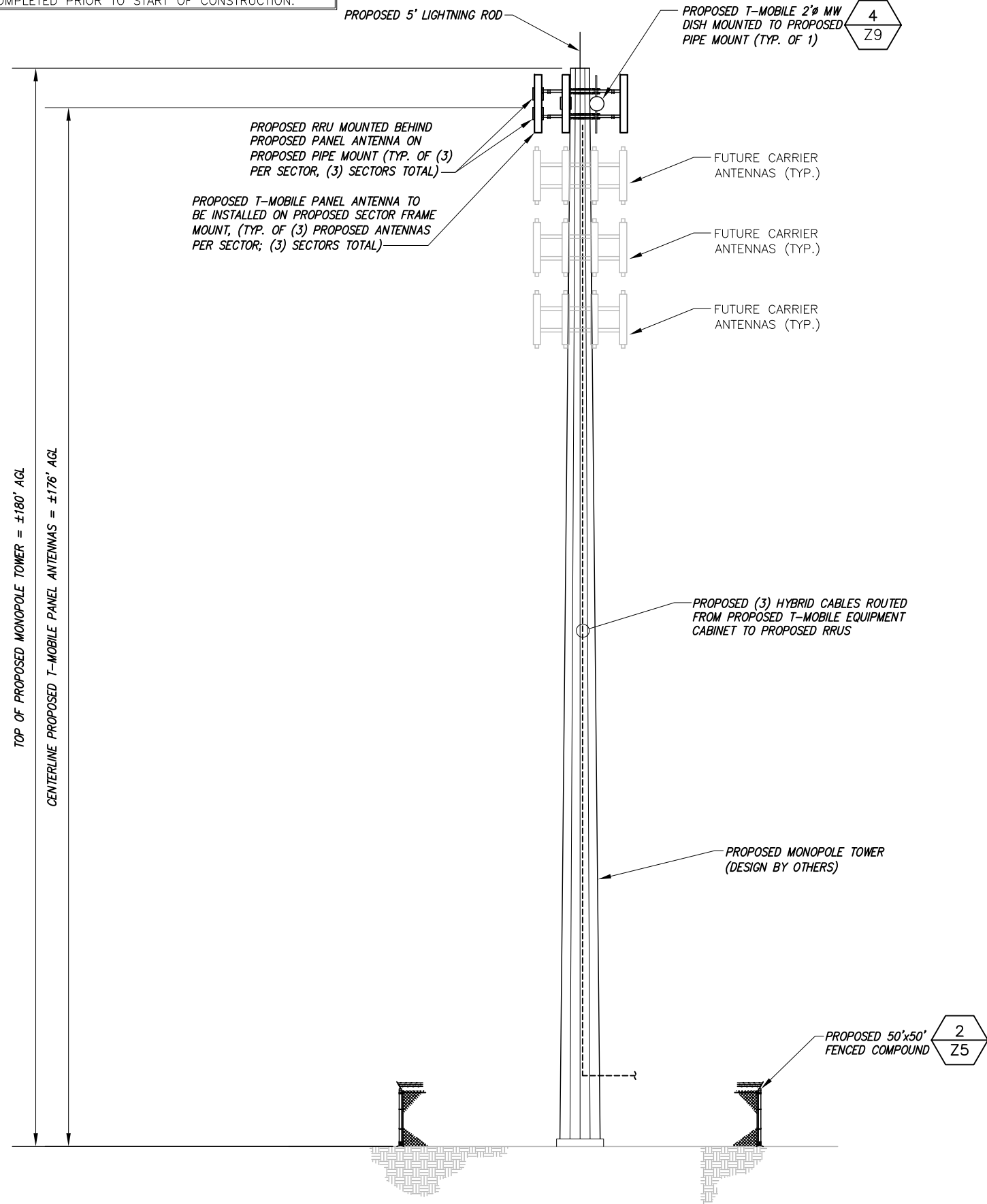
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SITE LAYOUT**

Drawing Scale:
ZD
Date:
12/22/16

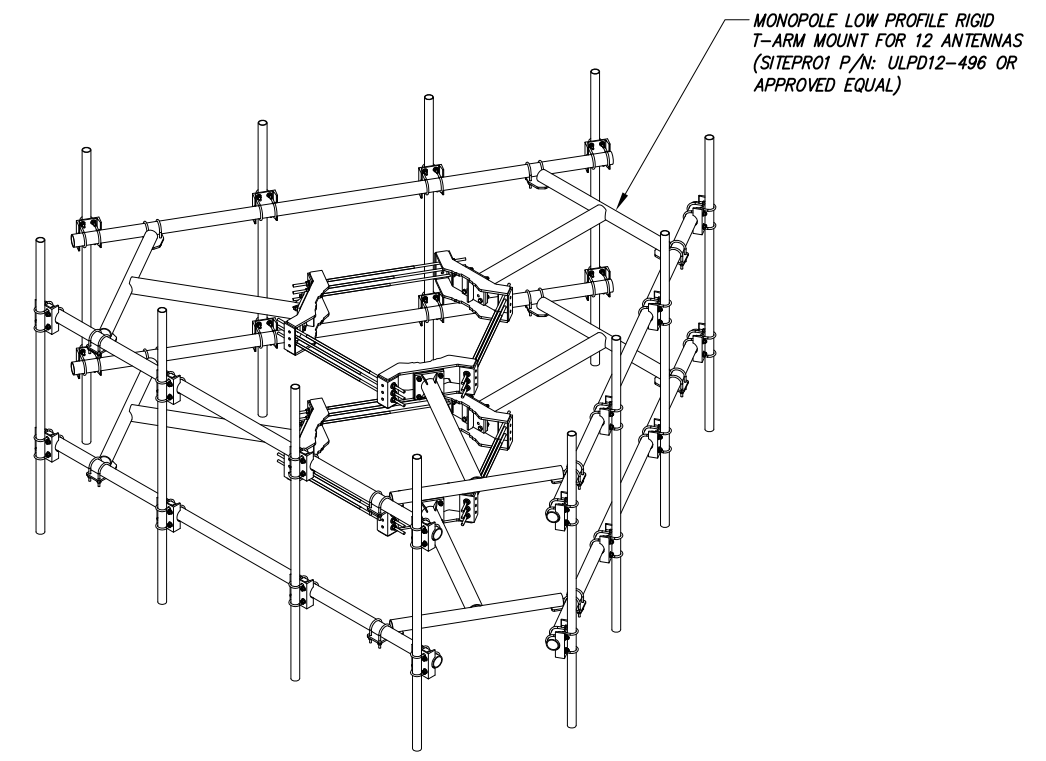
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Drawing Number:
Z3

INFINIGY ENGINEERING ASSUMES NO LIABILITY FOR THE STRUCTURAL INTEGRITY OF THE PROPOSED TOWER INSTALLATION. A STRUCTURAL ANALYSIS MUST BE COMPLETED PRIOR TO START OF CONSTRUCTION.



2 ANTENNA ORIENTATION PLAN
NOT TO SCALE



3 ANTENNA FRAME DETAIL
NOT TO SCALE

INFINIGY
1033 Watervliet Shaker Road | Albany, NY 12205
Phone: 518-690-0790 | Fax: 518-690-0793
www.infinigy.com

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A	SUBMITTED FOR REVIEW	JDL	1/16/17

Drawn: A.D. Date: 12/22/16
Designed: A.D. Date: 12/22/16
Checked: A.D. Date: 12/22/16

Project Number: 502-000

Project Title:
SOMERS
CT-0005A
248 HALL HILL ROAD
SOMERS, CT 06071

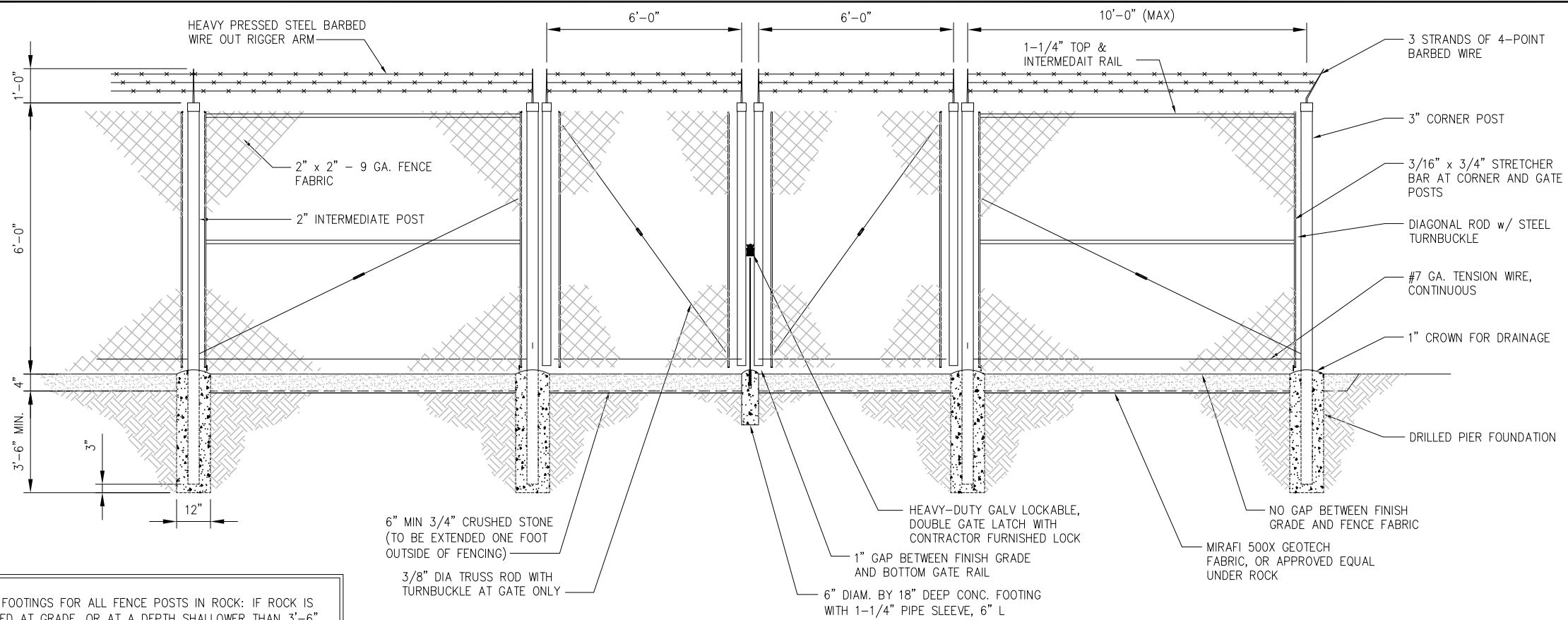
Prepared For:
Eco-Site

Drawing Title:
TOWER ELEVATION

Drawing Scale:
ZD
Date: 12/22/16

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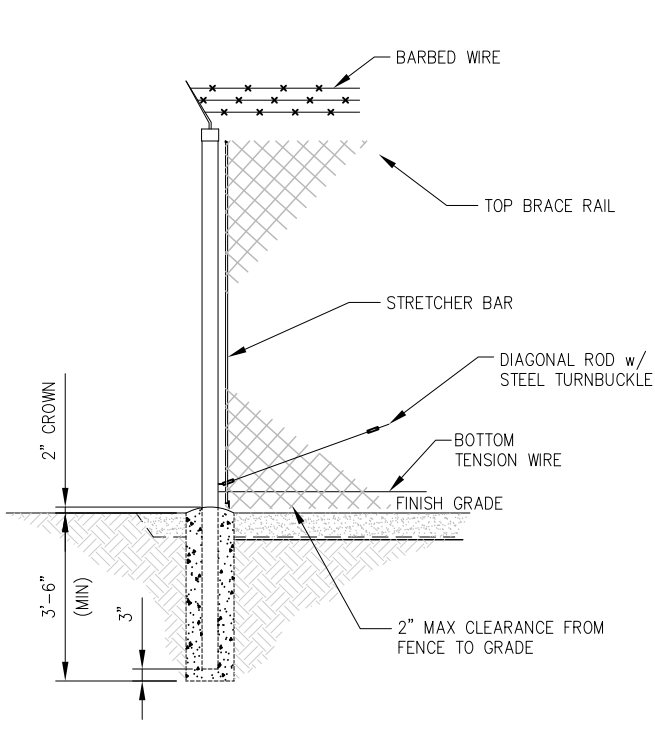
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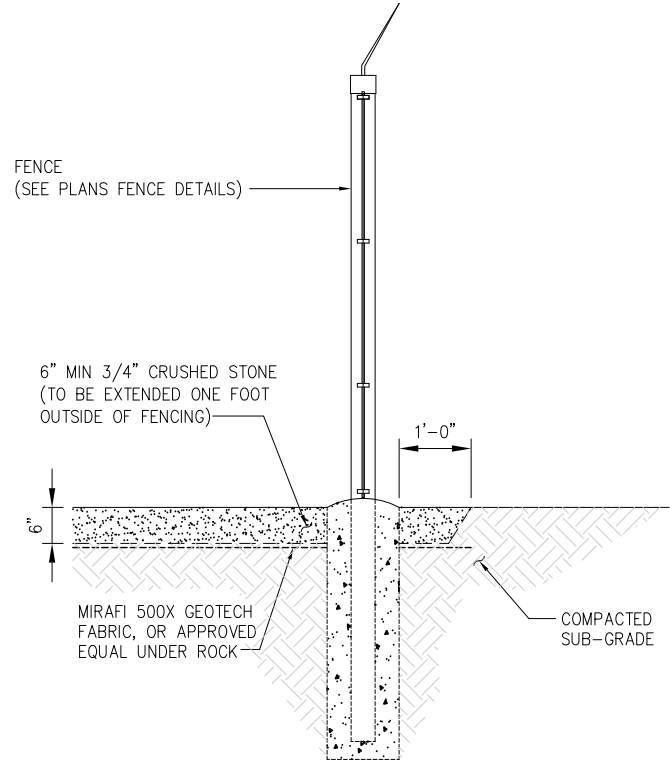
NOTE:

1. ALTERNATE FOOTINGS FOR ALL FENCE POSTS IN ROCK: IF ROCK IS ENCOUNTERED AT GRADE, OR AT A DEPTH SHALLOWER THAN 3'-6", CORE DRILL AN 8" DIA HOLE 18" INTO THE ROCK. CENTER POST IN THE HOLE AND FILL WITH CONCRETE OR GROUT. IF ROCK IS BELOW FINISH GRADE, COAT BACKFILLED SECTION OF POST WITH COAL TAR, AND BACKFILL WITH WELL-DRAINING GRAVEL.
2. ATTACH EACH GATE WITH 3 NON-LIFT-OFF TYPE, MALLEABLE IRON OR FORGING, PIN-TYPE HINGES. ASSEMBLIES SHALL ALLOW FOR 180° OF GATE TRAVEL. (THREE POINT HINGE)

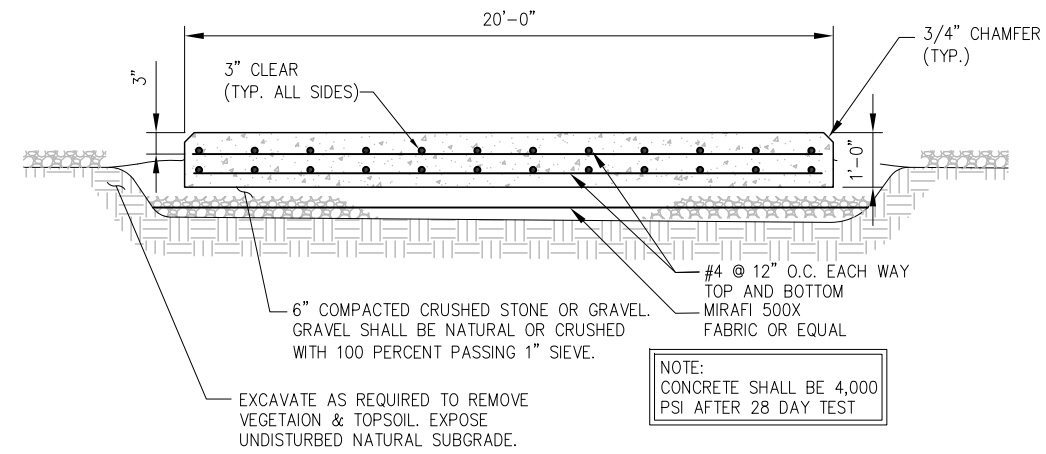
1 DOUBLE SWING ACCESS GATE DETAIL
SCALE: N.T.S.



2 CHAIN LINK FENCE DETAIL
SCALE: N.T.S.



3 SECTION THROUGH COMPOUND
SCALE: N.T.S.



4 CONCRETE SLAB DETAIL
SCALE: N.T.S.

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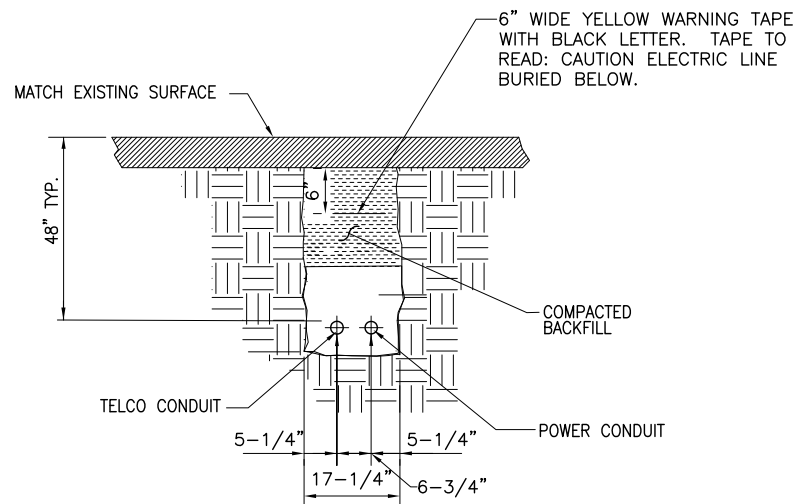
Prepared For:
Eco-Site

Drawing Title:
CIVIL DETAILS

Drawing Scale:
ZD
Date:
12/22/16

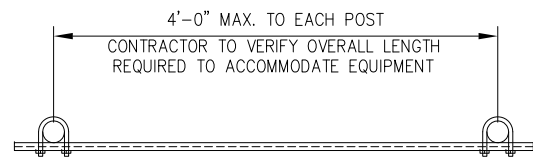
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Drawing Number:
Z5



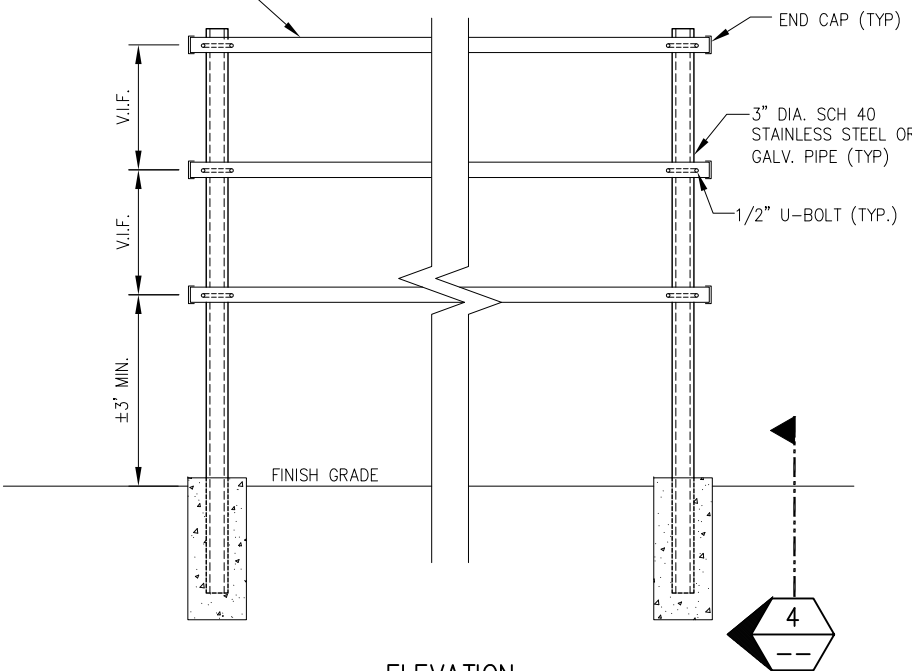
- NOTE:**
1. NUMBER AND SIZE OF CONDUITS MAY VARY. REFER TO CONSTRUCTION DRAWINGS FOR CONDUIT SIZE AND LOCATION. CONFIRM DIMENSIONS SHOWN WITH UTILITY COMPANY.
 2. CONTRACTOR TO VERIFY IN FIELD THE LOCATION, SIZE, TYPE, AND DEPTH OF ALL EXISTING UNDERGROUND UTILITIES PRIOR TO DIGGING THE SERVICE TRENCH. PROVIDE A MINIMUM OF 18" CLEARANCE BETWEEN PROPOSED UTILITIES AND EXISTING UTILITIES IN THE CASE OF UTILITY LINE CROSSINGS.

1 TYPICAL CONDUIT TRENCH DETAIL (IF REQUIRED)
--- NOT TO SCALE



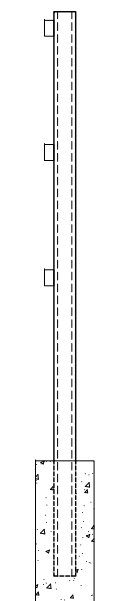
PLAN VIEW

1-1/2" GALV. SQUARE P1000 UNISTRUT RAIL (12 GA.) (TYP.) COORDINATE EXACT LOCATION IN FIELD

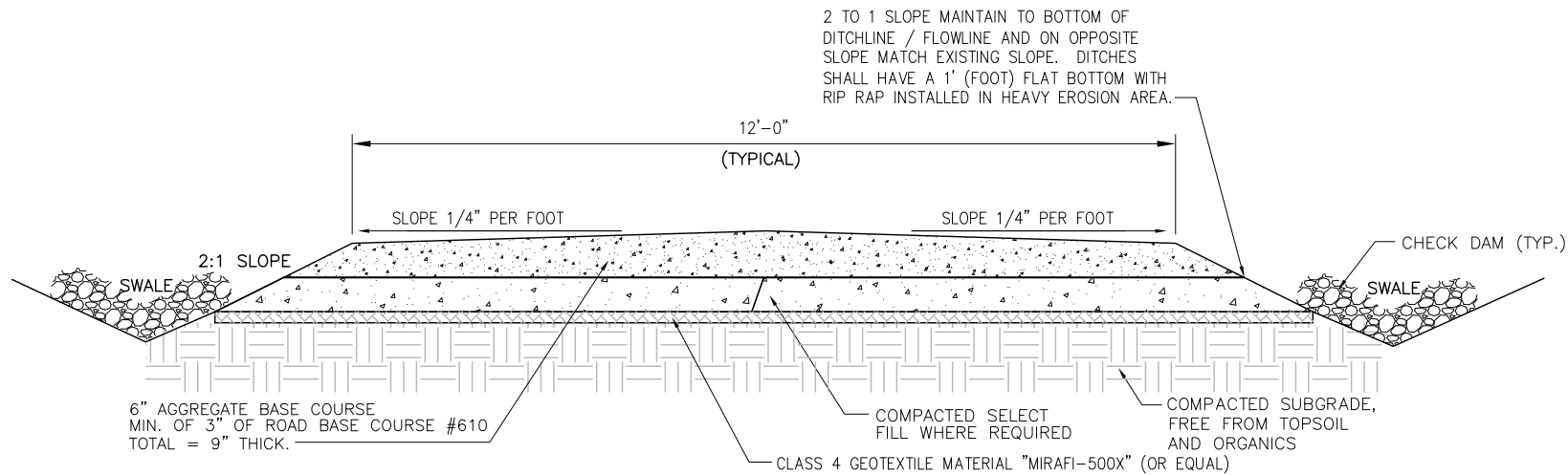


ELEVATION

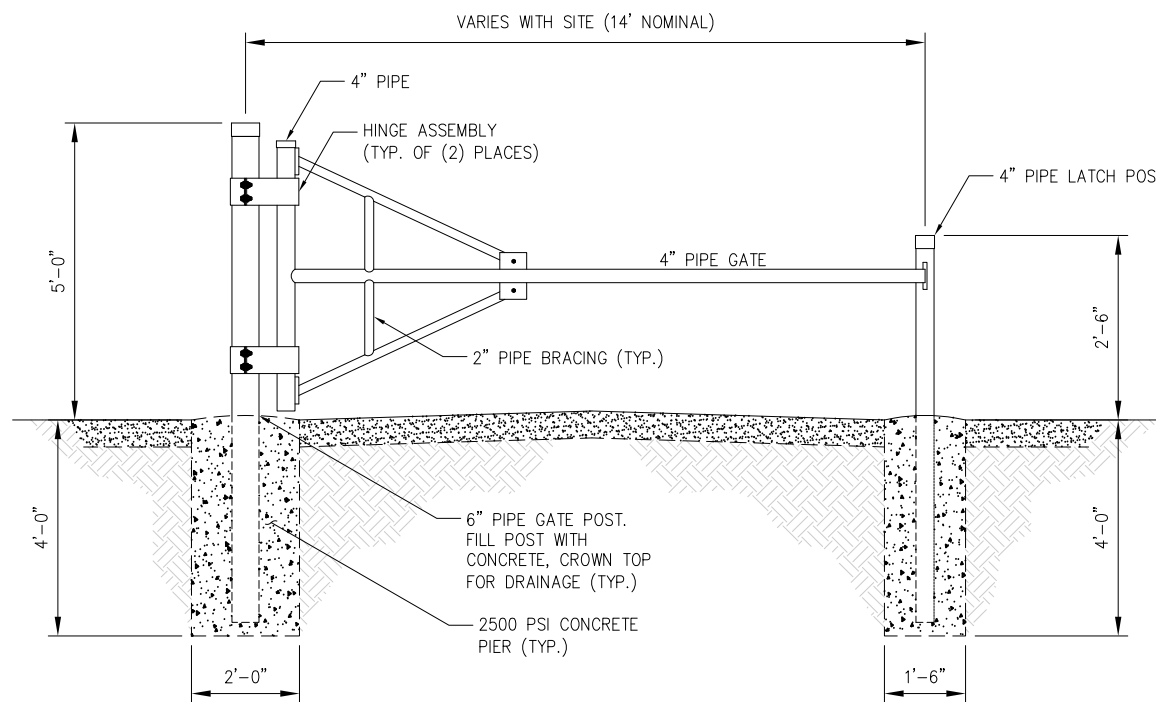
3 H-FRAME FABRICATION DETAIL
--- NOT TO SCALE



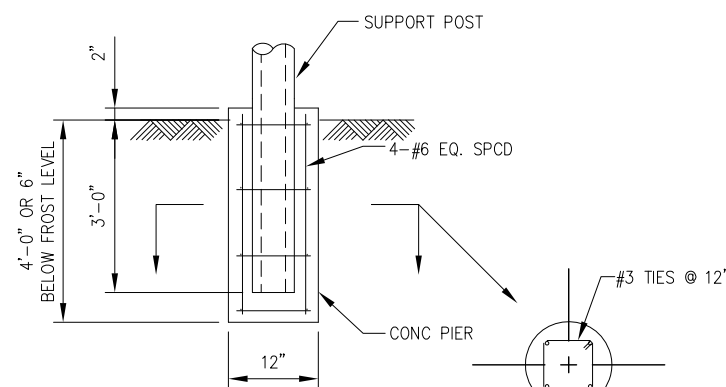
END VIEW



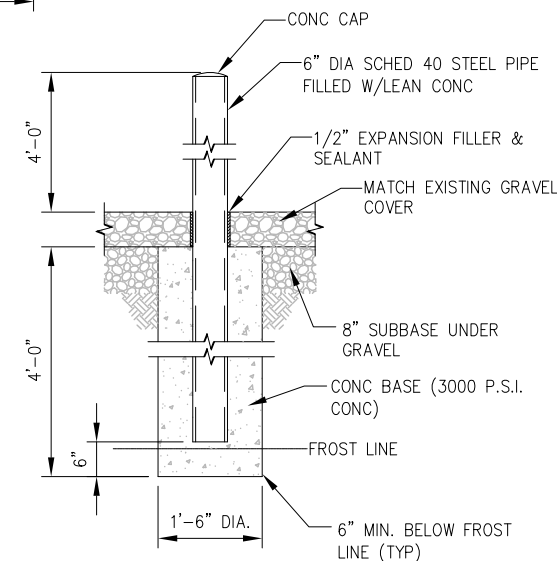
2 DRIVEWAY SECTION - CROWNED
--- NOT TO SCALE



5 ACCESS ROAD GATE
--- NOT TO SCALE



4 SUPPORT POST FOOTING
--- NOT TO SCALE



6 BOLLARD DETAIL
--- NOT TO SCALE

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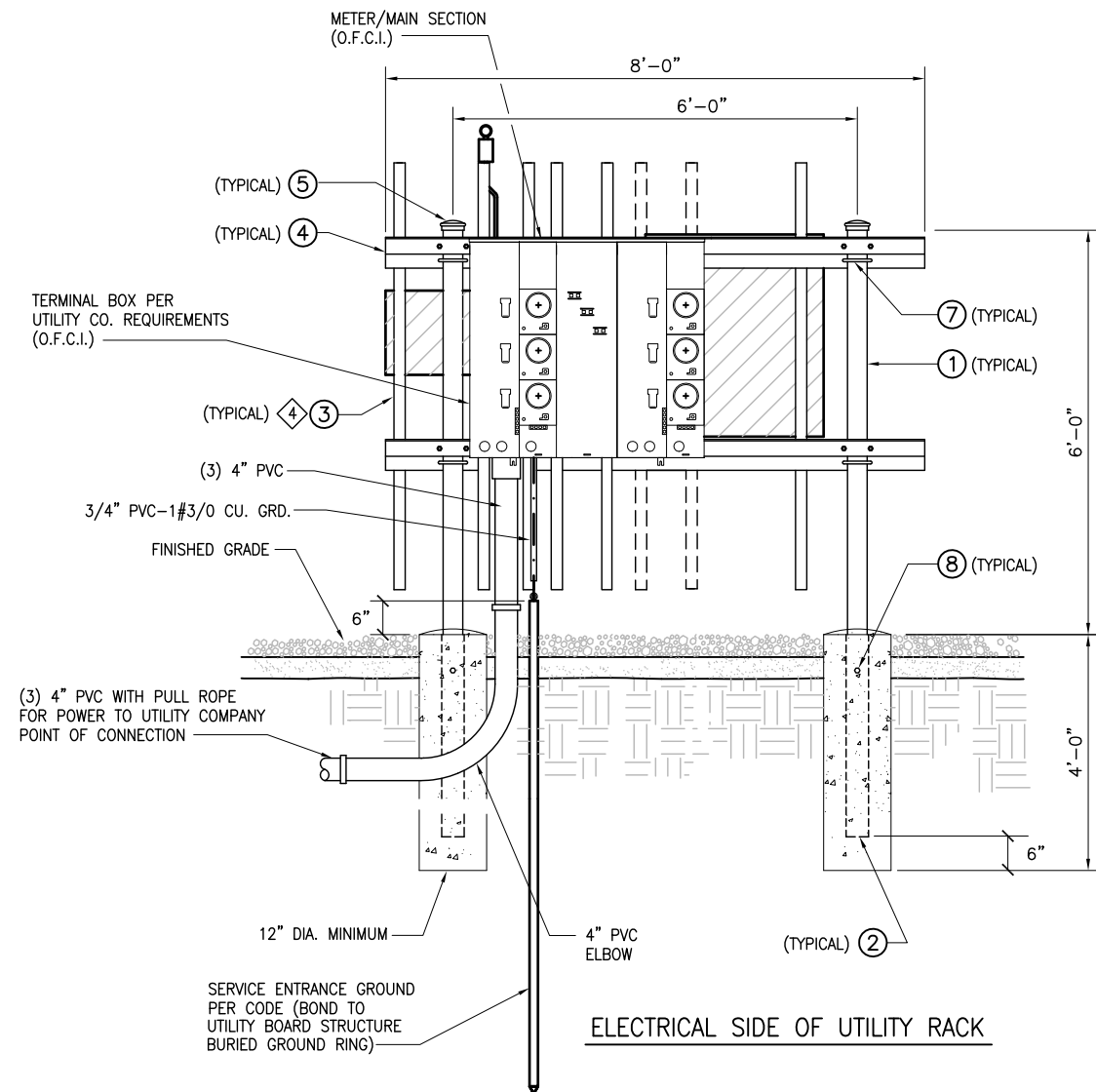
Drawing Title:
CIVIL DETAILS

Drawing Scale:
ZD

Date:
12/22/16

Drawing Number:
Z6

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PARTS LIST - O.F.C.I.		
ITEM	DESCRIPTION	QTY.
①	84" x 3.5" O.D. PIPE	2
+ ②	36" INSERT	2
③	VERTICAL MEMBER	9
④	HORIZONTAL MEMBER	4
⑤	3-1/2" O.D. PIPE CAP	2
* ⑥	3/8" ANGLE ADAPTER	38
⑦	1/2 x 3-5/8 x 5" GALV. U-BOLT ASSY.	8
⑧	1/2 x 1-1/2" GALV. BOLT ASSY.	2
* ⑨	3/8 x 3/4" GALV. BOLT ASSY.	38
* ⑩	3/8" GALV. FLAT WASHER	38

* NOT SHOWN
 + TO PREVENT CORROSION, ENSURE THAT THE PIPE SLEEVE IS COMPLETELY BELOW GROUND LEVEL AND ENCASED IN CONCRETE.

1 UTILITY RACK DETAILS
 -- NOT TO SCALE

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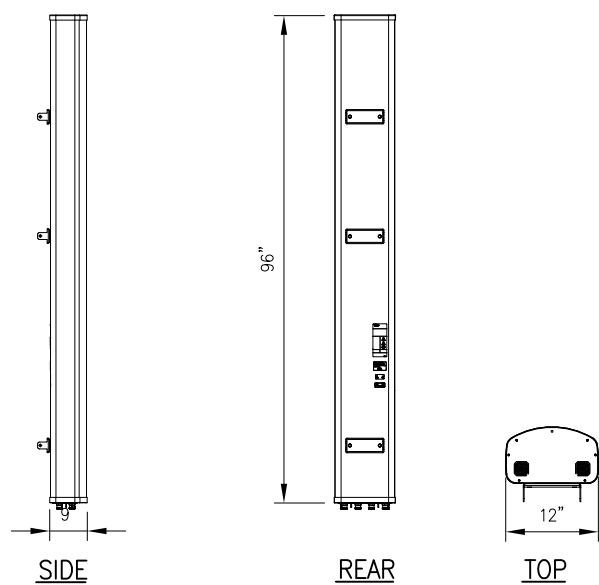
Prepared For:
Eco-Site

Drawing Title:
UTILITY RACK DETAIL

Drawing Scale:
ZD
 Date:
 12/22/16

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Drawing Number:
Z7



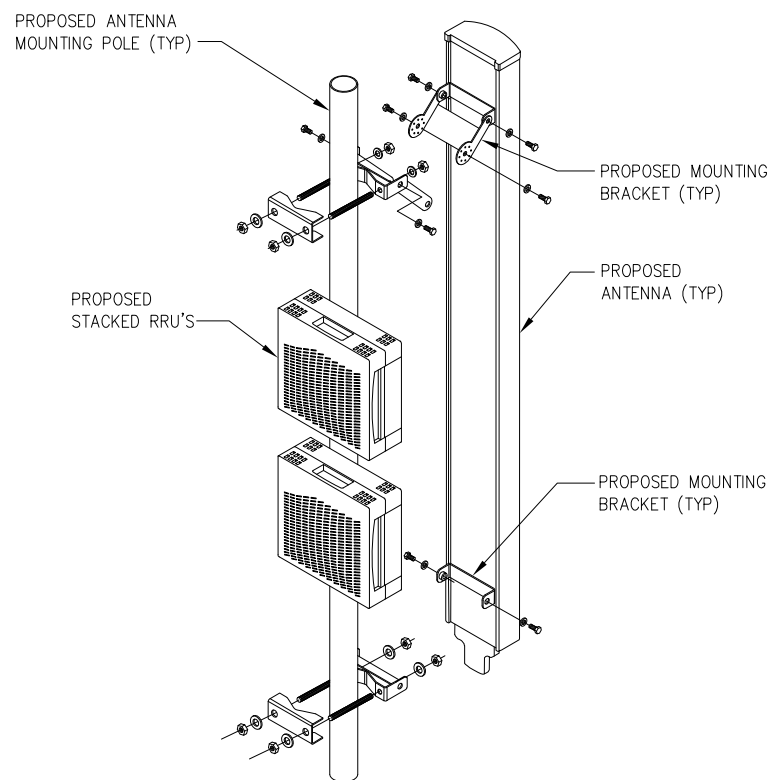
MODEL NO.:

RADOME MATERIAL:
 RADOME COLOR:
 DIMENSIONS, HxWxD:
 WEIGHT, W/
 PRE-MOUNTED BRACKETS:
 CONNECTOR:

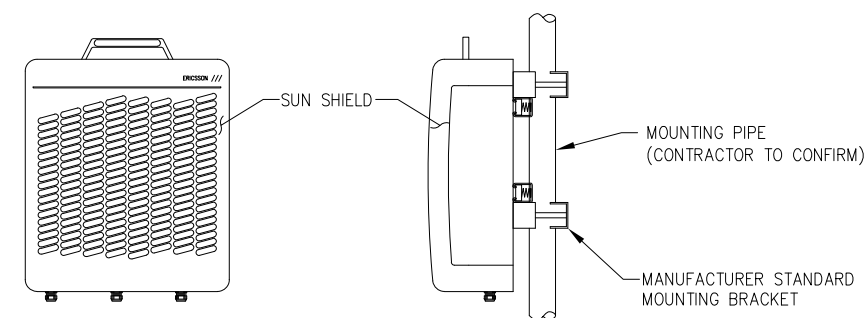
TBD

FIBERGLASS, UV RESISTANT
 LIGHT GRAY
 96"x12"x9"
 TBD
 7-16 DIN FEMALE

1 ANTENNA DETAIL
 --- NOT TO SCALE



2 MOUNTING DETAIL
 --- NOT TO SCALE

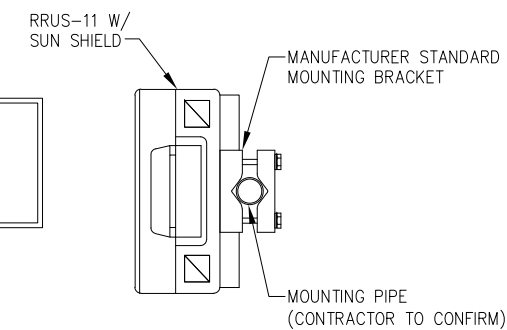


FRONT

SIDE

RRUS SPECIFICATIONS

- HXWxD, (INCHES) : 24"x24"x9"
- WEIGHT (LBS) : ±60
- COLOR : GRAY



TOP

3 ERICSSON RRUS MOUNTING DETAIL
 --- NOT TO SCALE

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Drawing Title:
**T-MOBILE
 EQUIPMENT DETAILS**

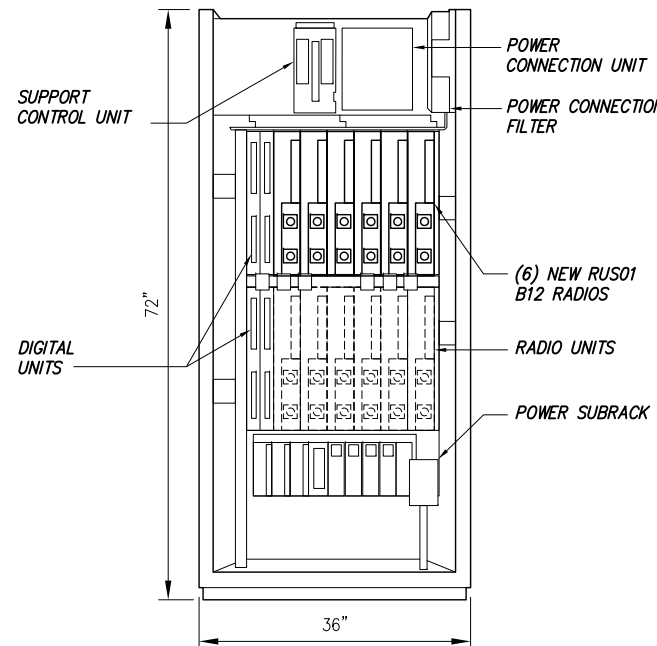
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Drawing Number:
Z8

ERICSSON – RBS 6201-ODE

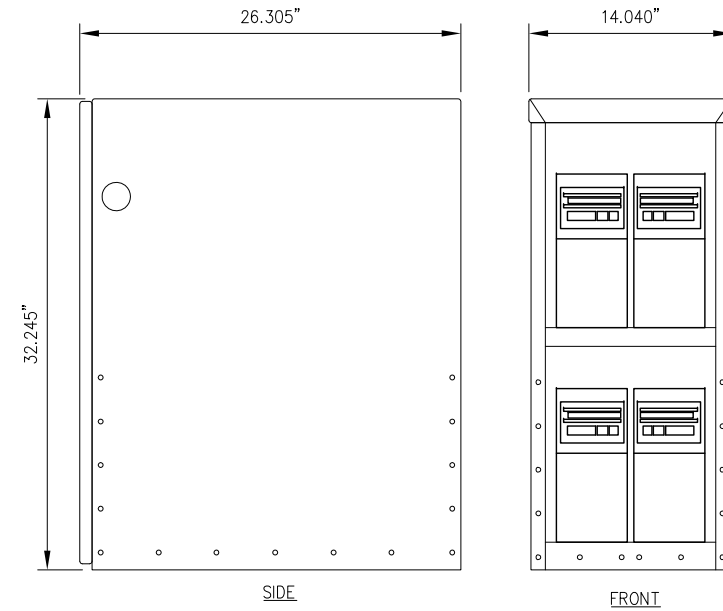
CABINET COLOR: LIGHT GRAY
 DIMENSIONS (HxWxD IN): 72x36x36 IN
 V1 WEIGHT (FULLY EQUIPPED): 715 LBS
 340 LBS (ENCLOSURE + SUPPORT)
 374 LBS (RBS 6201)
 V2 WEIGHT (FULLY EQUIPPED): 1100 LBS
 470 LBS (ENCLOSURE + CLIMATE SYSTEM + LOAD CENTER)
 630 LBS (RBS + TRANSMISSION + SUPPORT EQUIPMENT)



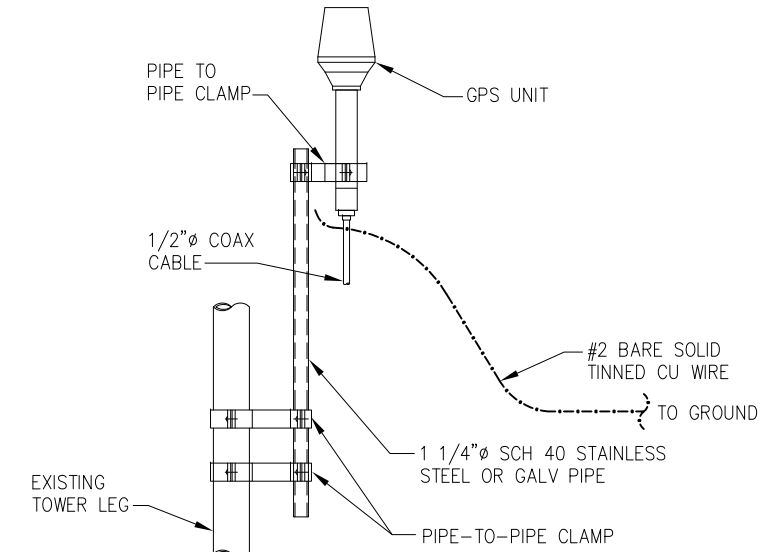
1 EQUIPMENT CABINET DETAIL
 NOT TO SCALE

PTS – PTS8003

CABINET COLOR: ALMOND POWDER COAT
 DIMENSIONS (HxWxD IN): 32.245x14.040x26.305 IN
 UNIT WEIGHT: 60LBS



2 BATTERY CABINET DETAIL
 NOT TO SCALE

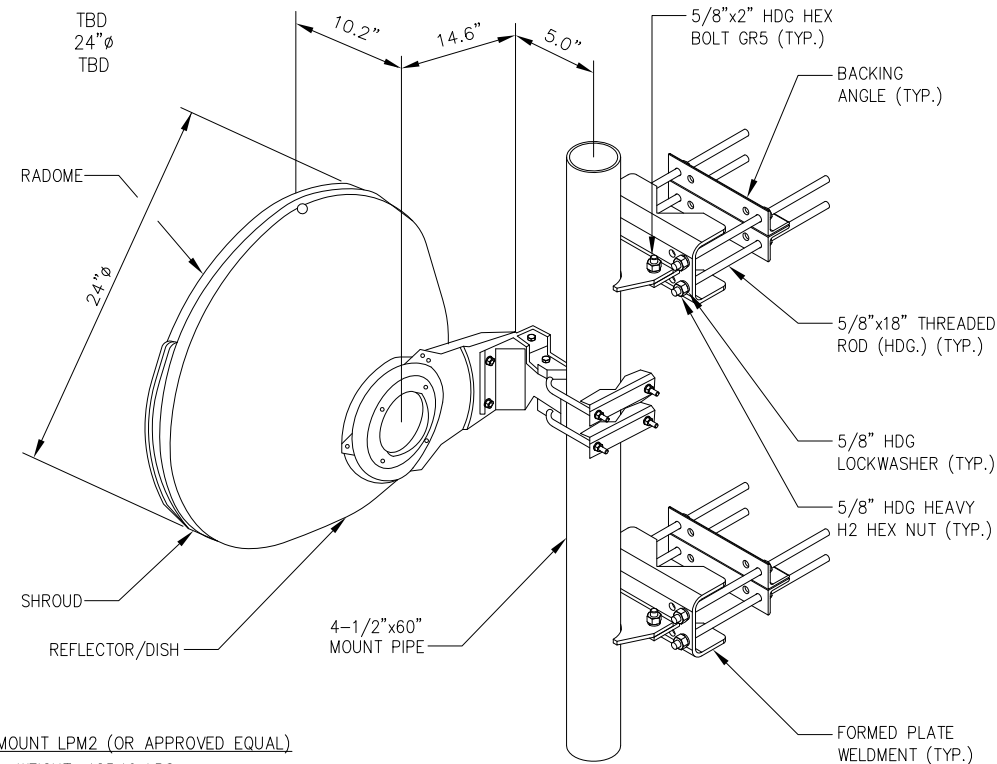


- NOTES:**
1. THE ELEVATION AND LOCATION OF THE GPS ANTENNA SHALL BE IN ACCORDANCE WITH THE FINAL RF REPORT.
 2. THE GPS ANTENNA MOUNT IS DESIGNED TO FASTEN TO A GROUND PLANE BOLTED TO A STANDARD 1-1/4" DIAMETER, SCHEDULE 40 GALVANIZED STEEL OR STAINLESS STEEL PIPE. THE PIPE MUST NOT BE THREADED AT THE ANTENNA MOUNT END. THE PIPE SHALL BE CUT TO THE REQUIRED LENGTH (MINIMUM OF 18 INCHES) USING A HAND OR ROTARY PIPE CUTTER TO ASSURE A SMOOTH AND PERPENDICULAR CUT. A HACK SAW SHALL NOT BE USED. THE CUT PIPE END SHALL BE DEBURRED AND SMOOTH IN ORDER TO SEAL AGAINST THE NEOPRENE GASKET ATTACHED TO THE ANTENNA MOUNT.
 3. IT IS CRITICAL THAT THE GPS ANTENNA IS MOUNTED SUCH THAT IT IS WITHIN 2 DEGREES OF VERTICAL AND THE BASE OF THE ANTENNA IS WITHIN 2 DEGREES OF LEVEL.
 4. DO NOT SWEEP TEST GPS ANTENNA.

3 GPS UNIT
 NOT TO SCALE

MICROWAVE DISH – MANF/MODEL #: TBD

FREQUENCY: TBD
 SIZE: 24"Ø
 WEIGHT: TBD



SITEPRO-1 MOUNT LPM2 (OR APPROVED EQUAL)
 WEIGHT: 125.16 LBS.

4 MICROWAVE DISH & PIPE MOUNT DETAILS
 NOT TO SCALE

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 SOMERS, CT 06071

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Drawing Title:

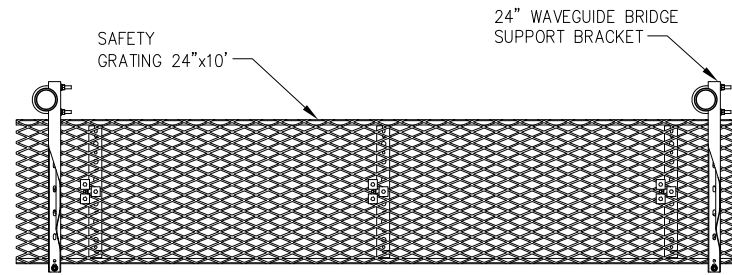
T-MOBILE
 EQUIPMENT DETAILS

Drawing Scale:

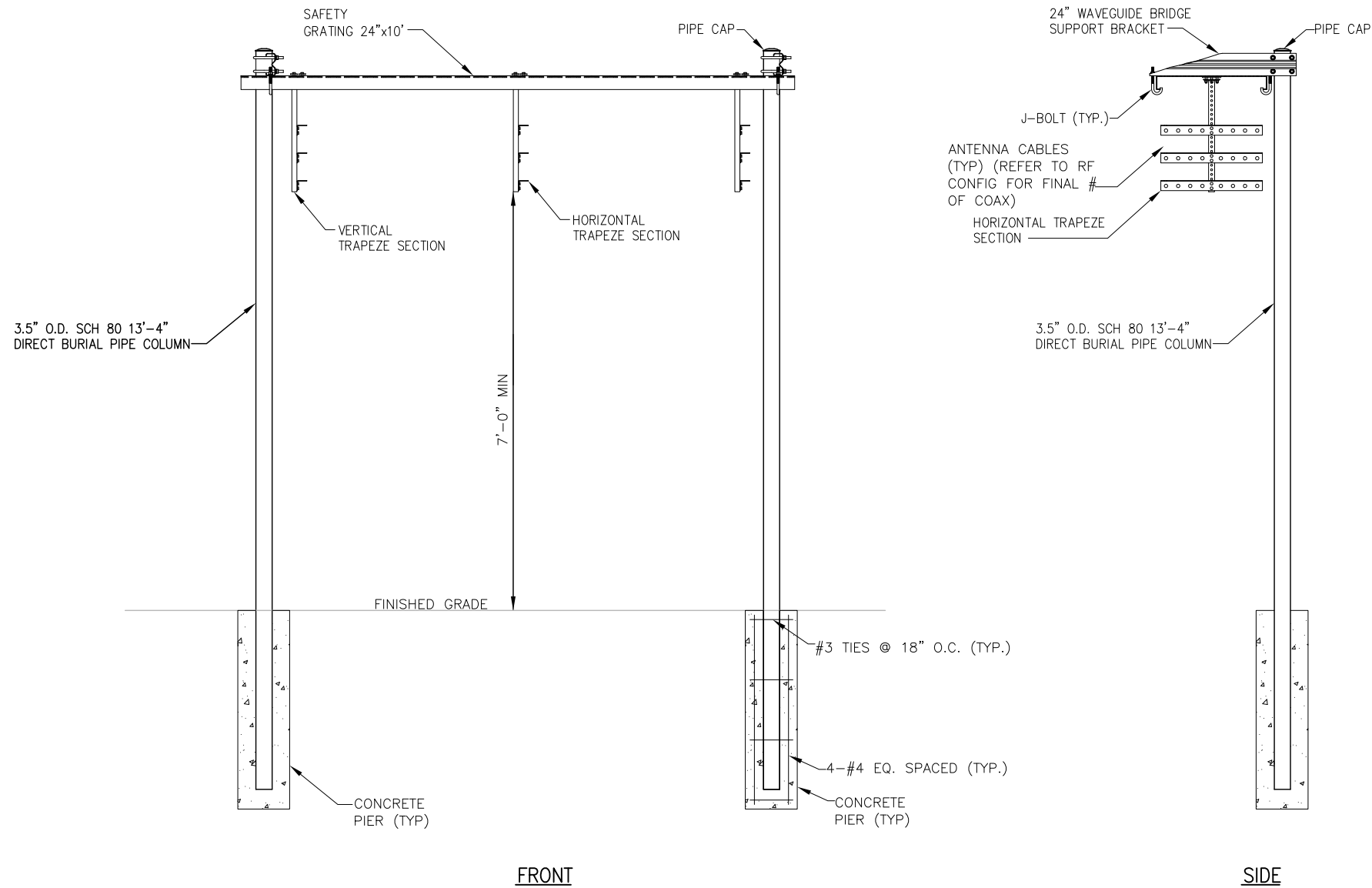
Date: 12/22/16
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Drawing Number:



TOP



NOTES:

1. USE SITE PRO 1 PARTS OR APPROVED EQUAL.
2. SUPPORT POSTS SHALL BE LOCATED ON ALTERNATING SIDES OF ICE BRIDGE, SPACED NO MORE THAN 6'-0".
3. ANY SPLICES OR CANTILEVERED SECTIONS OF THE ICE BRIDGE SHALL BE LOCATED WITHIN 2'-0" OF A SUPPORT POST.

1 WAVEGUIDE BRIDGE KIT (SITE PRO P/N: IB24D-T3)
 NOT TO SCALE

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Prepared For:

Drawing Title:
ICE BRIDGE DETAILS

Drawing Scale:
ZD
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Drawing Number:
Z10

GRADING & EXCAVATING NOTES:

- ALL EXCAVATIONS ON WHICH CONCRETE IS TO BE PLACED SHALL BE SUBSTANTIALLY HORIZONTAL ON UNDISTURBED AND UNFROZEN SOIL AND BE FREE FROM LOOSE MATERIAL AND EXCESS GROUNDWATER. DEWATERING FOR EXCESS GROUNDWATER SHALL BE PROVIDED IF REQUIRED.
- CONCRETE FOUNDATIONS SHALL NOT BE PLACED ON ORGANIC MATERIAL. IF SOUND SOIL IS NOT REACHED AT THE DESIGNATED EXCAVATION DEPTH, THE UNSATISFACTORY SOIL SHALL BE EXCAVATED TO ITS FULL DEPTH AND EITHER BE REPLACED WITH MECHANICALLY COMPACTED GRANULAR MATERIAL OR THE EXCAVATION BE FILLED WITH CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION.
- ANY EXCAVATION OVER THE REQUIRED DEPTH SHALL BE FILLED WITH EITHER MECHANICALLY COMPACTED GRANULAR MATERIAL OR CONCRETE OF THE SAME QUALITY SPECIFIED FOR THE FOUNDATION. CRUSHED STONE MAY BE USED TO STABILIZE THE BOTTOM OF THE EXCAVATION. STONE, IF USED, SHALL NOT BE USED AS COMPILING CONCRETE THICKNESS.
- AFTER COMPLETION OF THE FOUNDATION AND OTHER CONSTRUCTION BELOW GRADE, AND BEFORE BACKFILLING, ALL EXCAVATIONS SHALL BE CLEAN OF UNSUITABLE MATERIAL SUCH AS VEGETATION, TRASH, DEBRIS, AND SO FORTH.
- USE APPROVED MATERIALS CONSISTING OF EARTH, LOAM, SANDY CLAY, SAND
-BE FREE FROM CLODS OR STONES OVER 2-1/2" MAXIMUM DIMENSIONS
-BE PLACED IN 6" LAYERS AND COMPACTED TO 95% STANDARD PROCTOR EXCEPT IN GRASSED/LANDSCAPED AREAS, WHERE 90% STANDARD PROCTOR
- REMOVE ALL VEGETATION, TOPSOIL, DEBRIS, WET AND UNSATISFACTORY SOIL MATERIALS, OBSTRUCTIONS, AND DELETERIOUS MATERIALS FROM GROUND SURFACE PRIOR TO PLACING FILLS. PLOW, STRIP, OR BREAK UP SLOPED SURFACES STEEPER THAN THAN 1 VERTICAL TO 4 HORIZONTAL SO FILL MATERIAL WILL BOND WITH EXISTING SURFACE. WHEN SUBGRADE OR EXISTING GROUND SURFACE TO RECEIVE FILL HAS A DENSITY LESS THAN THAT REQUIRED FOR FILL, BREAK UP GROUND SURFACE TO DEPTH REQUIRED, PULVERIZE, MOISTURE-CONDITION OR AERATE SOIL AND RECOMPACT TO REQUIRED DENSITY.
- PROTECT EXISTING GRAVEL SURFACING AND SUBGRADE IN AREAS WHERE EQUIPMENT LOADS WILL OPERATE. USE PLANKING OR OTHER SUITABLE MATERIALS DESIGNED TO SPREAD EQUIPMENT LOADS. REPAIR DAMAGE TO EXISTING GRAVEL SURFACING OR SUBGRADE WHERE SUCH DAMAGE IS DUE TO THE CONTRACTOR'S OPERATIONS. DAMAGED GRAVEL SURFACING SHALL BE RESTORED TO MATCH THE ADJACENT UNDAMAGED GRAVEL SURFACING AND SHALL BE OF THE SAME THICKNESS.
- REPLACE EXISTING GRAVEL SURFACING ON AREAS FROM WHICH GRAVEL SURFACING IS REMOVED DURING CONSTRUCTION OPERATIONS. GRAVEL SURFACING SHALL BE REPLACED TO MATCH EXISTING ADJACENT GRAVEL SURFACING AND SHALL BE OF THE SAME THICKNESS. SURFACES OF GRAVEL SURFACING SHALL BE FREE FROM CORRUGATIONS AND WAVES. EXISTING GRAVEL SURFACING MAY BE EXCAVATED SEPARATELY AND REUSED IF INJURIOUS AMOUNTS OF EARTH, ORGANIC MATTER, OR OTHER DELETERIOUS MATERIALS ARE REMOVED PRIOR TO REUSE. FURNISH ALL ADDITIONAL GRAVEL RESURFACING MATERIAL AS REQUIRED. BEFORE GRAVEL SURFACING IS REPLACED, SUBGRADE SHALL BE GRADED TO CONFORM TO REQUIRED SUBGRADE ELEVATIONS, AND LOOSE OR DISTURBED MATERIALS SHALL BE THOROUGHLY COMPACTED. DEPRESSIONS IN THE SUBGRADE SHALL BE FILLED AND COMPACTED WITH APPROVED SELECTED MATERIAL. GRAVEL SURFACING MATERIAL MAY BE USED FOR FILLING DEPRESSIONS IN THE SUBGRADE, SUBJECT TO ENGINEER'S APPROVAL.
- DAMAGE TO EXISTING STRUCTURES AND UTILITIES RESULTING FROM CONTRACTOR'S NEGLIGENCE SHALL BE REPAIRED/REPLACED TO OWNER'S SATISFACTION AT CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH PROPERTY OWNER SO AS TO AVOID INTERRUPTIONS TO PROPERTY OWNER'S OPERATIONS.
- ENSURE POSITIVE DRAINAGE DURING AND AFTER COMPLETION OF CONSTRUCTION.
- ALL CUT AND FILL SLOPES SHALL BE MAXIMUM 2 HORIZONTAL TO 1 VERTICAL.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MONITORING SITE VEHICLE TRAFFIC AS TO NOT ALLOW VEHICLES LEAVING THE SITE TO TRACK MUD ONTO PUBLIC STREETS. THE CONTRACTOR IS RESPONSIBLE FOR CLEANING PUBLIC STREETS DUE TO MUDDY VEHICLES LEAVING THE SITE.

GENERAL EROSION & SEDIMENT CONTROL NOTES:

- THE SOIL EROSION AND SEDIMENT CONTROL MEASURES AND DETAILS AS SHOWN HEREIN AND STIPULATED WITHIN STATE STANDARDS SHALL BE FOLLOWED AND INSTALLED IN A MANNER SO AS TO MINIMIZE SEDIMENT LEAVING THE SITE.
- PRIOR TO COMMENCING LAND DISTURBANCE ACTIVITY, THE LIMITS OF LAND DISTURBANCE SHALL BE CLEARLY AND ACCURATELY DEMARCATED WITH STAKES, RIBBONS, OR OTHER APPROPRIATE MEANS.
- EROSION CONTROL DEVICES SHALL BE INSTALLED BEFORE GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
- CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY THE ENGINEER OR THE LOCAL JURISDICTION INSPECTOR. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
- THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS WITHIN 12" OF THE TOP OF THE SILT FENCE.
- FAILURE TO INSTALL, OPERATE OR MAINTAIN ALL EROSION CONTROL MEASURES WILL RESULT IN ALL CONSTRUCTION BEING STOPPED ON THE JOB SITE UNTIL SUCH MEASURES ARE CORRECTED.
- SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.
- ALL CUT AND FILL SLOPES MUST BE SURFACED ROUGHENED AND VEGETATED WITHIN SEVEN (7) DAYS OF THEIR CONSTRUCTION.
- CONTRACTOR SHALL REMOVE ALL EROSION & SEDIMENT CONTROL MEASURES AFTER COMPLETION OF CONSTRUCTION AND ESTABLISHMENT OF PERMANENT GROUND COVER.
- THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES PRIOR TO, OR CONCURRENT WITH, LAND-DISTURBING ACTIVITIES.

SEEDING GUIDELINES:

FINAL STABILIZATION OF ALL DISTURBED AREAS, UNLESS OTHERWISE NOTED, SHALL BE LOAMED AND SEEDED. LOAM SHALL BE PLACED AT A MINIMUM COMPACTED DEPTH OF 4". RECOMMENDED SEEDING DATES FOR PERMANENT VEGETATION SHALL BE BETWEEN JUNE 15 THROUGH AUGUST 1 AND SEPTEMBER 15 THROUGH OCTOBER 15. TEMPORARY VEGETATIVE MEASURES SHALL CONSIST OF AN ANNUAL OR PERENNIAL RYE GRASS WITH RECOMMENDED SEEDING DATES BEING FROM JUNE 1 THROUGH AUGUST 15 AND SEPTEMBER 30 THROUGH NOVEMBER 30.

EVALUATE PROPOSED COVER MATERIAL

BEFORE SPREADING COVER MATERIAL OVER THE DESIGNATED AREA, OBTAIN A REPRESENTATIVE SOIL SAMPLE AND SUBMIT TO A REPUTABLE SOIL TESTING LABORATORY FOR CHEMICAL AND PHYSICAL ANALYSIS. THE PRELIMINARY TEST IS NECESSARY TO DETERMINE THE REQUIRED INORGANIC AND/OR ORGANIC AMENDMENTS THAT ARE NEEDED TO ASSIST IN ESTABLISHING THE SEED MIXTURE IN AN ENVIRONMENTALLY AND ECONOMICALLY SOUND MANNER. THE RESULTS WILL GIVE THE COVER MATERIAL CHARACTERISTICS SUCH AS pH AND FERTILIZATION NEEDS. THESE RESULTS SHALL BE KEPT ON-SITE BY THE CONTRACTOR AND AVAILABLE FOR REVIEW BY THE COUNTY.

SEED BED PREPARATION

PROPOSED COVER MATERIAL SHOULD BE SPREAD EVENLY OVER THE SITE AREA IN A MINIMUM 4" LIFT VIA BULLDOZER/BUCKET LOADER. USING THE INFORMATION FROM THE SOIL ANALYSIS, CAREFULLY CALCULATE THE QUANTITIES OF LIMESTONE AND PRE-PLANT FERTILIZER NEEDED PRIOR TO APPLYING. PRE-PLANT AMENDMENTS CAN BE APPLIED WITH A BROADCAST AND/OR DROP SEEDER AND INCORPORATED WITH AN OFFSET DISK, YORK RAKE, AND/OR HAND RAKE. AFTER INCORPORATION THE PRE-PLANT SOIL AMENDMENTS, THE SEED BED SHOULD BE SMOOTH AND FIRM PRIOR TO SEEDING. THE FOLLOWING SEED MIXTURES SHALL BE USED AS NOTED:

SEED MIXTURE

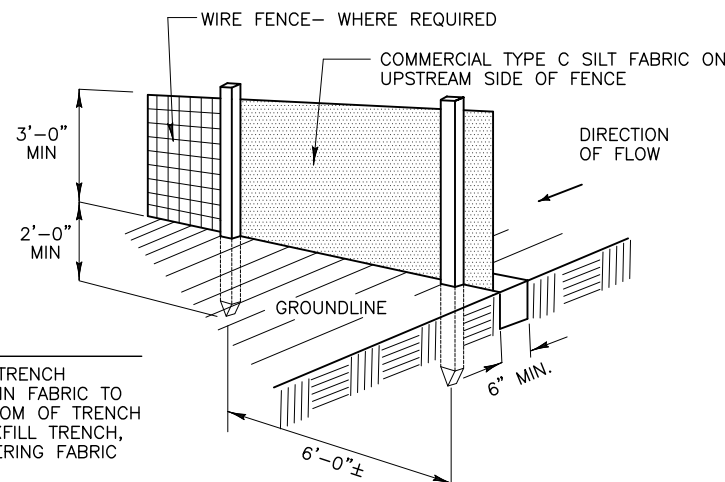
SPECIES/VARIETY	LBS/ACRE
CREEPING RED	20
FESCUE	20
KENTUCKY BLUEGRASS	5
PERENNIAL	

SEEDING TIME AND METHOD

THE PREFERRED TIME FOR SEEDING THE COOL SEASON MIXTURE IS LATE SUMMER. SOIL AND AIR TEMPERATURES ARE IDEAL FOR SEED GERMINATION AND SEEDING GROWTH. WEED COMPETITION IS REDUCED BECAUSE SEEDS OF MANY WEED SPECIES GERMINATE EARLIER IN THE GROWING SEASON. ADDITIONALLY, HERBICIDE USE IS GREATLY REDUCED. HOWEVER, SEEDING MAY BE DONE AT ANY OF THE ABOVE NOTED TIMES.

MULCHING

NEWLY SEEDED AREAS SHOULD BE MULCHED TO INSURE ADEQUATE MOISTURE FOR SUCCESSFUL TURF ESTABLISHMENT AND TO PROTECT AGAINST SURFACE MOVEMENT OF SEDIMENT-BOUND AGROCHEMICALS AND SOIL EROSION. IF MULCHING PROCEDURES ARE NOT SPECIFIED ON PLANS, APPLY GOOD QUALITY STRAW OR HAY AT A RATE OF 2 BALES/1000 SQ. FT. OTHER COMMERCIALY AVAILABLE MULCHES CAN BE USED.



- NOTE:**
- DIG TRENCH
 - LAY IN FABRIC TO BOTTOM OF TRENCH
 - BACKFILL TRENCH, COVERING FABRIC

1 SILT FENCE DETAIL
NOT TO SCALE

CONSTRUCTION NOTES FOR FABRICATED SILT FENCE

- WOVEN WIRE FENCE TO BE FASTENED SECURELY POSTS: STEEL EITHER T OR U TYPE. TO FENCE POSTS WITH WIRE TIES OR STAPLES.
- FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION. FENCE: WOVEN WIRE, 14 GA. 6" MAX. MESH OPENING.
- WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVER-LAPPED BY SIX INCHES AND FOLDED. FILTER CLOTH: FILTER X, MIRAFI 100X' STABILINKA T140N OR APPROVED EQUAL.
- MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE. PREFABRICATED UNIT: GEOFAB, ENVIROFENCE OR APPROVED EQUAL.
- ALL SILT FENCE MATERIALS MUST BE LISTED ON THE CURRENT STATES. D.O.T. QUALIFIED PRODUCTS LIST.

A	SUBMITTED FOR REVIEW	JUL	1/16/17
No.	Submittal / Revision	App'd	Date
Drawn:	A.D.	Date:	12/22/16
Designed:	A.D.	Date:	12/22/16
Checked:	A.D.	Date:	12/22/16

Project Number: 502-000

Project Title:

SOMERS
CT-0005A

248 HALL HILL ROAD
SOMERS, CT 06071

Prepared For:

Eco-Site

Drawing Title:

GRADING & EROSION CONTROL NOTES

Drawing Scale:

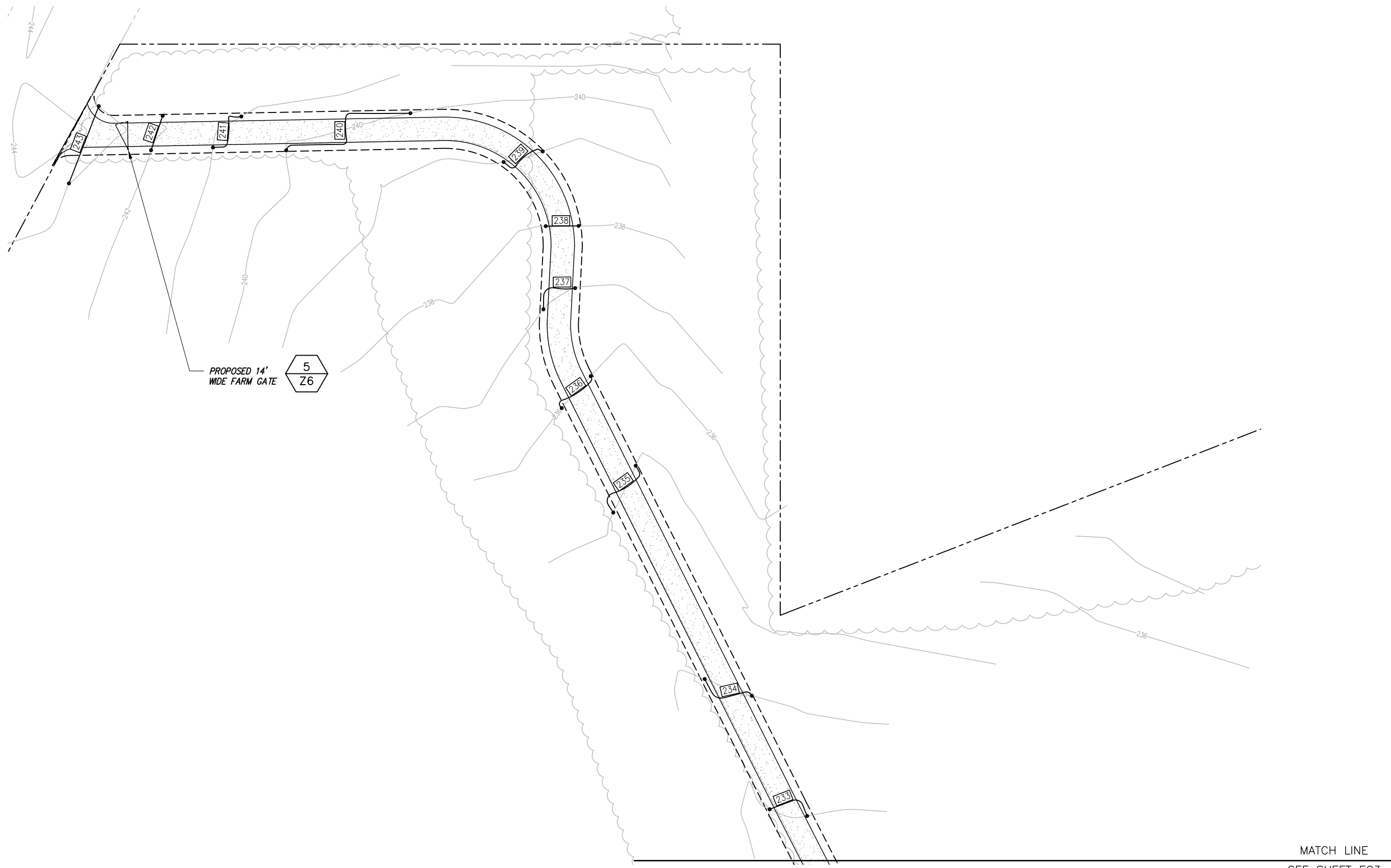
ZD

Date: 12/22/16

UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

Drawing Number:



EC1




PROPOSED 14' WIDE FARM GATE



MATCH LINE
SEE SHEET EC3



1 GRADING PLAN
 SCALE: AS NOTED
 APPROX. NORTH

DRAWING SCALE

 SCALE (11x17): 1" = 50'-0"
 SCALE (22x34): 1" = 25'-0"


INFINIGY
 1033 Watervliet Shaker Road | Albany, NY 12205
 Phone: 518-690-0790 | Fax: 518-690-0793
 www.infinigy.com

No.	Submitted / Revision	App'd	Date
A	SUBMITTED FOR REVIEW	JDL	1/16/17

Drawn: A.D. Date: 12/22/16
 Designed: A.D. Date: 12/22/16
 Checked: A.D. Date: 12/22/16

Project Number:
 502-000

Project Title:
SOMERS
CT-0005A
 248 HALL HILL ROAD
 SOMERS, CT 06071

Prepared For:


Drawing Title:
GRADING PLAN

Drawing Scale:
ZD
 Date:
 12/22/16

UNAUTHORIZED ALTERATION OR ADDITION
 TO THIS DOCUMENT IS A VIOLATION OF
 APPLICABLE STATE AND/OR LOCAL LAWS


Drawing Number:
EC2

A	SUBMITTED FOR REVIEW	JDL	1/16/17
No.	Submittal / Revision	App'd	Date

Drawn: A.D. Date: 12/22/16
 Designed: A.D. Date: 12/22/16
 Checked: A.D. Date: 12/22/16

Project Number: 502-000

Project Title:
SOMERS
CT-0005A
 248 HALL HILL ROAD
 SOMERS, CT 06071

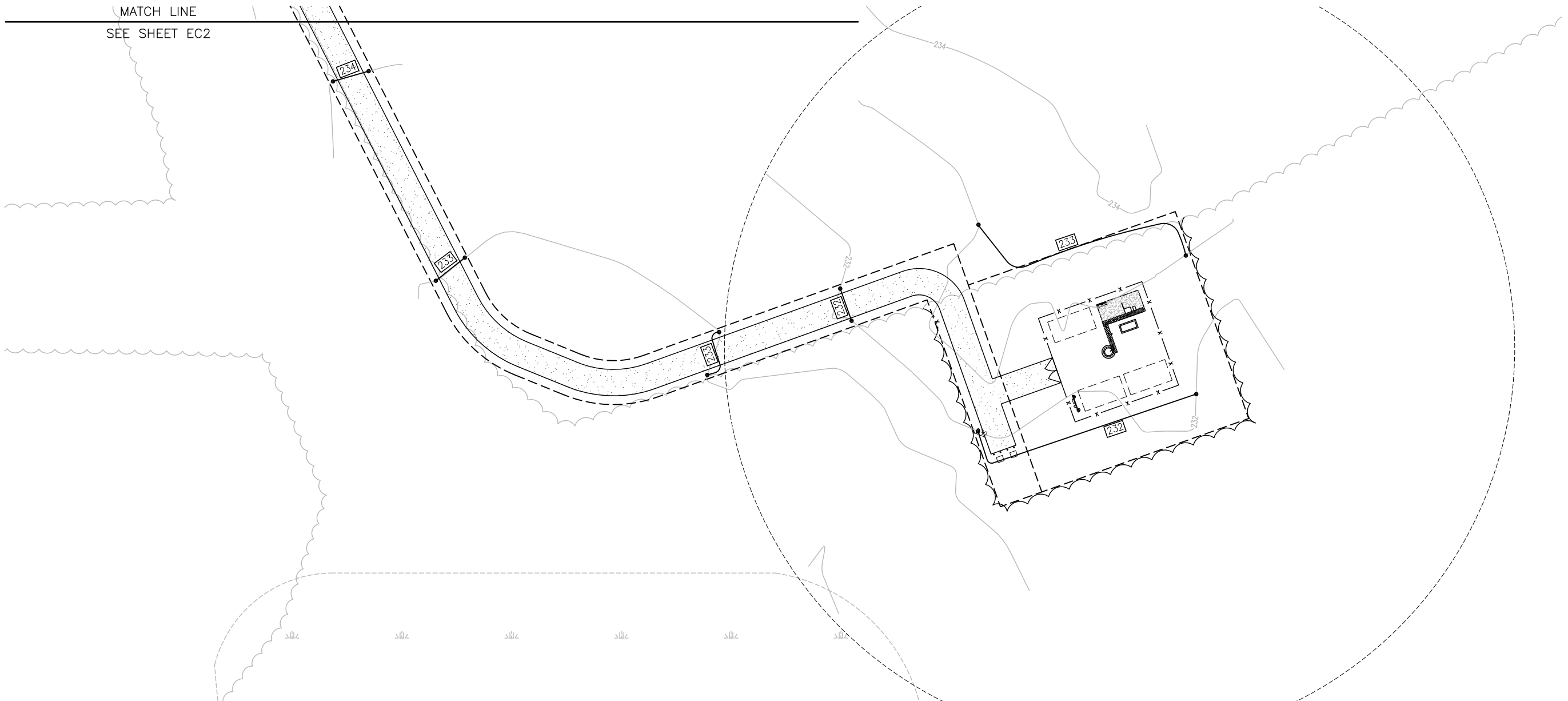
Prepared For:


Drawing Title:
GRADING PLAN


Drawing Scale:
ZD
 Date: 12/22/16


UNAUTHORIZED ALTERATION OR ADDITION TO THIS DOCUMENT IS A VIOLATION OF APPLICABLE STATE AND/OR LOCAL LAWS

Drawing Number:
EC3



MATCH LINE
 SEE SHEET EC2

 **1** GRADING PLAN
 SCALE: AS NOTED
 APPROX. NORTH

DRAWING SCALE

 SCALE (11x17): 1" = 50'-0"
 SCALE (22x34): 1" = 25'-0"

ATTACHMENT 4

INFINIGY®

FROM ZERO TO INFINIGY

FAA 1-A SURVEY CERTIFICATION

Applicant: Eco Site
240 Lehigh Farm Road; Suite 415
Durham, NC 27707

Site Name: Blue Ridge
Site Number:
Site Address: 248 Hall Hill Road
Somers, CT 06071

Horizontal Datum Source (select all that apply):

Ground Survey GPS Survey NAD 83

Vertical Datum Source (select all that apply):

Ground Survey GPS Survey NAVD 88

Structure Type (select one):

New Tower () Existing Tower () Building Water Tank
 Smokestack Other (describe):

Latitude: N 42°-00'-09.34" NAD83
Longitude: W 72°-29'-05.99" NAD83
Ground Elevation: 232 feet AMSL NAVD88

CERTIFICATION: I certify that the latitude and longitude are accurate to within +/- 20 feet horizontally and that the ground elevation is accurate to within +/- 3 feet vertically. The horizontal datum (coordinates) are expressed in terms of degrees, minutes, seconds and hundredths of seconds. The vertical datum (heights) are expressed in terms of feet.

Printed Name: Earle C. Newman, P.L.S.
Surveyor License No: 15616
Company: Climax Development of WNY, LLC
Phone: (716) 548-2894
Date: December 28, 2016



Climax Development of WNY, LLC Project No.:16-243

TOWAIR Determination Results

*** NOTICE ***

TOWAIR's findings are not definitive or binding, and we cannot guarantee that the data in TOWAIR are fully current and accurate. In some instances, TOWAIR may yield results that differ from application of the criteria set out in 47 C.F.R. Section 17.7 and 14 C.F.R. Section 77.13. A positive finding by TOWAIR recommending notification should be given considerable weight. On the other hand, a finding by TOWAIR recommending either for or against notification is not conclusive. It is the responsibility of each ASR participant to exercise due diligence to determine if it must coordinate its structure with the FAA. TOWAIR is only one tool designed to assist ASR participants in exercising this due diligence, and further investigation may be necessary to determine if FAA coordination is appropriate.

DETERMINATION Results

Structure does not require registration. There are no airports within 8 kilometers (5 miles) of the coordinates you provided.

Your Specifications

NAD83 Coordinates

Latitude	42-00-09.3 north
Longitude	072-29-06.0 west

Measurements (Meters)

Overall Structure Height (AGL)	54.9
Support Structure Height (AGL)	0
Site Elevation (AMSL)	70.7

Structure Type

MTOWER - Monopole

[Tower Construction Notifications](#)

Notify Tribes and Historic Preservation Officers of your plans to build a tower.

CLOSE WINDOW



Federal Aviation
Administration

Note: Effective 10/28/2016, the format of the FAA Determination of No Hazard to Air Navigation for Temporary Structure letter has changed. Please be sure to review all pages of the determination issued for your ASN and adhere to all conditions stated in the letter.

« OE/AAA

Notice Criteria Tool

[Notice Criteria Tool - Desk Reference Guide V_2014.2.0](#)

The requirements for filing with the Federal Aviation Administration for proposed structures vary based on a number of factors: height, proximity to an airport, location, and frequencies emitted from the structure, etc. For more details, please reference [CFR Title 14 Part 77.9](#).

You must file with the FAA at least 45 days prior to construction if:

- your structure will exceed 200ft above ground level
- your structure will be in proximity to an airport and will exceed the slope ratio
- your structure involves construction of a traverseway (i.e. highway, railroad, waterway etc...) and once adjusted upward with the appropriate vertical distance would exceed a standard of 77.9(a) or (b)
- your structure will emit frequencies, and does not meet the conditions of the [FAA Co-location Policy](#)
- your structure will be in an instrument approach area and might exceed part 77 Subpart C
- your proposed structure will be in proximity to a navigation facility and may impact the assurance of navigation signal reception
- your structure will be on an airport or heliport
- filing has been requested by the FAA

If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for On Airport construction.

The tool below will assist in applying Part 77 Notice Criteria.

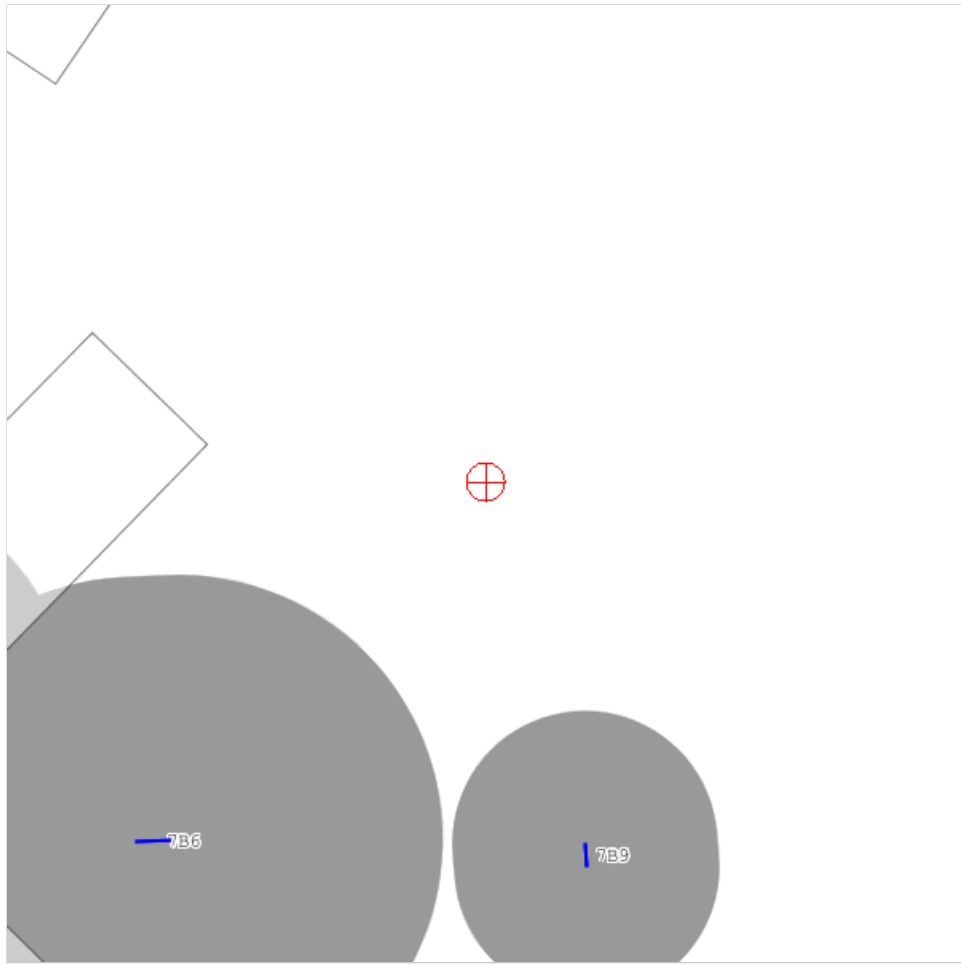
Latitude:	<input type="text" value="42"/> Deg <input type="text" value="00"/> M <input type="text" value="9.34"/> S <input type="button" value="N ▼"/>
Longitude:	<input type="text" value="72"/> Deg <input type="text" value="29"/> M <input type="text" value="5.99"/> S <input type="button" value="W ▼"/>
Horizontal Datum:	<input type="button" value="NAD83 ▼"/>
Site Elevation (SE):	<input type="text" value="232"/> (nearest foot)
Structure Height :	<input type="text" value="180"/> (nearest foot)
Traverseway:	<input type="button" value="No Traverseway ▼"/> (Additional height is added to certain structures under 77.9(c)) User can increase the default height adjustment for Traverseway, Private Roadway and Waterway
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes

Results

You exceed the following Notice Criteria:

Your proposed structure is in proximity to a navigation facility and may impact the assurance of navigation signal reception. The FAA, in accordance with 77.9, requests that you file.

The FAA requests that you file



ATTACHMENT 5

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

A wetland delineation was conducted at the site 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. No wetlands or inland waterways will be impacted by the proposed facility.

B. AIR QUALITY

Under ordinary operating conditions, the equipment that would be used at the proposed facility would emit no air pollutants of any kind. An emergency backup power generator (likely diesel) would be exercised once a week and comply with CT DEEP air emission requirements.

C. LAND

No trees will need to be removed in order to construct the compound or the new access drive. The total area of clearing and grading disturbance will be approximately 25,000 s.f. The remaining land of the lessor would remain unchanged by the construction and operation of the facility.

D. NOISE

The equipment to be in operation at the facility would not emit noise other than that provided by the operation of the installed heating, air-conditioning and ventilation system. Some construction related noise would be anticipated during facility construction, which is expected to take approximately four to six weeks. Temporary power outages could involve sound from the emergency generator which is tested weekly.

E. POWER DENSITY

The cumulative worst-case calculation of power density from T-Mobile's operations at the facility would be 0.69% of the federal MPE standard. Attached is a copy of a Radio Frequency Emissions Analysis Report for the facility.

F. VISIBILITY

Preliminary desktop analysis has identified areas where the tower site may be visible. As part of the technical consultation process and Siting Council review, additional visual analyses including field studies and photosimulations will be prepared and provided regarding overall tower site visibility.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

There are no districts included on the National Register of Historic Properties within 1/2 mile of the project area. Eco-Site is currently consulting with the CT State Historic Preservation Office to obtain confirmation that the project will have no adverse effect on any on listed or eligible historic resources. The Town of Somers Plan of Conservation and Development identifies scenic views to the east of the proposed facility which will be analyzed as part of the noted visual field studies and photosimulations.

The facility site is moderately suitable as habitat for the threatened Northern long-eared bat but representatives concluded a consultation with the U.S. Fish and Wildlife the undertaking is deemed to have no impact on this species. US Fish and Wildlife Service correspondence did identify the Northern long-eared

Bat as one (1) potential rare, threatened or endangered species to be present in the project area. Follow up correspondence has been filed with USFWS to confirm that no further action is required because the project will not disturb a known hibernaculum or removal of maternity roost trees from June 1 to July 31. Review of other resources including The CT Department of Energy and Environmental Protection Natural Diversity Data Base does not show any other State or Federal Listed Species in the project area.


III. SCHOOLS/DAY CARE CENTERS


There are no schools or day care centers located within 250' of the tower site.

Natural Diversity Data Base Areas

SOMERS, CT

June 2017

 State and Federal Listed Species & Significant Natural Communities

 Town Boundary

NOTE: This map shows general locations of State and Federal Listed Species and Significant Natural Communities. Information on listed species is collected and compiled by the Natural Diversity Data Base (NDDDB) from a number of data sources. Exact locations of species have been buffered to produce the general locations. Exact locations of species and communities occur somewhere in the shaded areas, not necessarily in the center. A new mapping format is being employed that more accurately models important riparian and aquatic areas and eliminates the need for the upstream/downstream searches required in previous versions.

This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area there may be a potential conflict with a listed species. For more information, complete a Request for Natural Diversity Data Base State Listed Species Review form (DEP-APP-007), and submit it to the NDDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

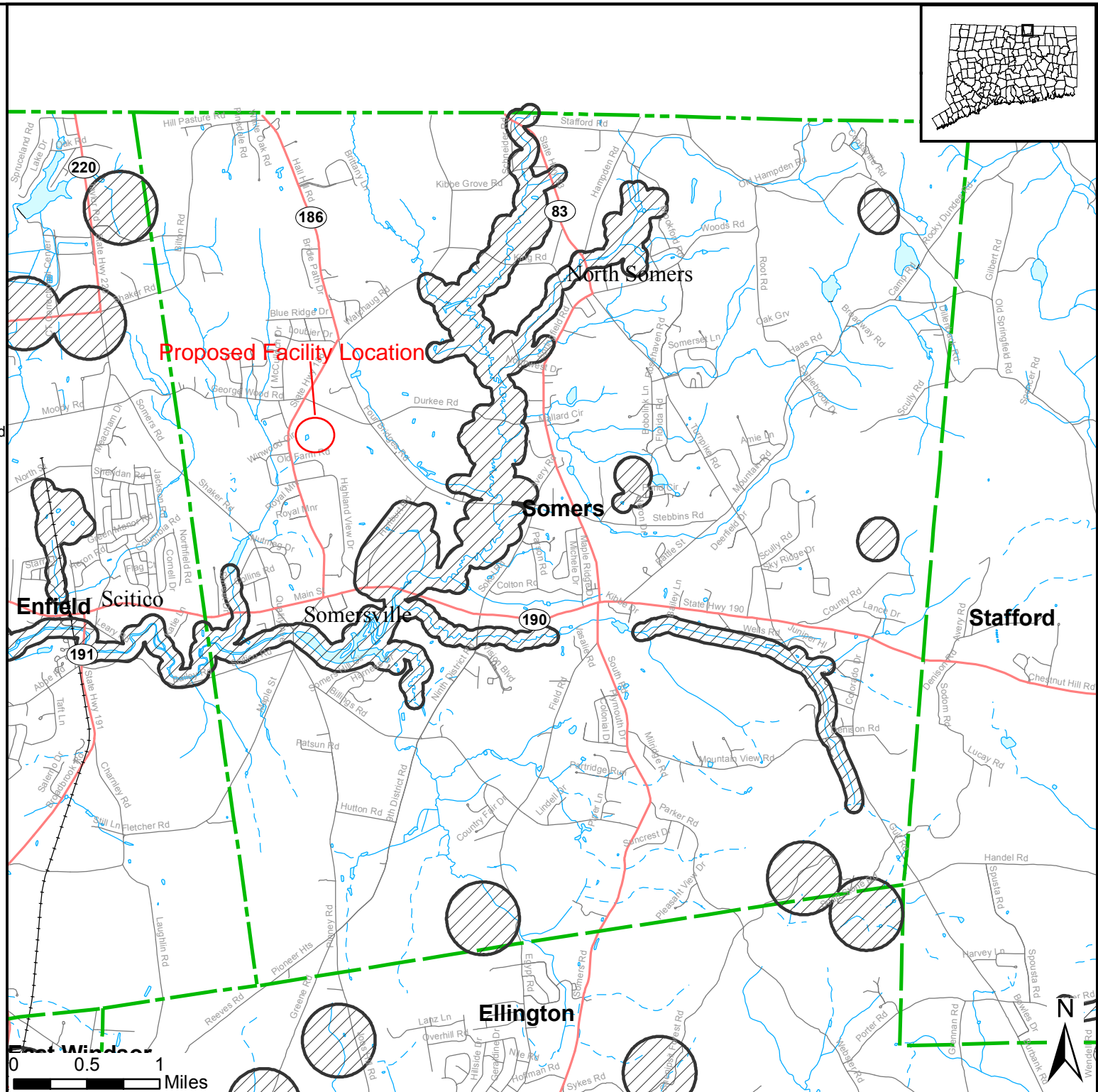
www.ct.gov/deep/nddbrequest

Use the CTECO Interactive Map Viewers at www.cteco.uconn.edu to more precisely search for and locate a site and to view aerial imagery with NDDDB Areas.

QUESTIONS: Department of Energy and Environmental Protection (DEEP)
79 Elm St., Hartford CT 06106
Phone (860) 424-3011



Connecticut Department of
Energy & Environmental Protection
Bureau of Natural Resources
Wildlife Division



NATURAL RESOURCES CHECKLIST & EXEMPTION REVIEW

Client:	Eco-Site				
Project Name/No.:	CT-0005	CBRE Project #:	TS61116613	Date:	01/21/2017
Address:	248 Hall Hill Road	City:	Somers	State:	CT
Latitude:	42° 0'9.26"N	Longitude:	72°29'5.54"W		
Date of Site Visit:	November 28, 2016	Tower Height:	180 feet		

TYPE OF UNDERTAKING	
Tower Type	<input checked="" type="radio"/> Monopole <input type="radio"/> Guyed Lattice <input type="radio"/> Compound Expansion <input type="radio"/> Self-Support Lattice <input type="radio"/> Stealth Structure <input type="radio"/> Other:
Tree Removal	Will the Undertaking involve the removal of any trees? <input checked="" type="radio"/> Yes <input type="radio"/> No
Previous Disturbance	Will the Undertaking involve the removal of any native vegetation (i.e., vegetation other than cultivated plants and lawns)? <input checked="" type="radio"/> Yes <input type="radio"/> No
Impact Area and Vicinity Description	The area of the proposed Undertaking, currently consists of wooded land and existing farmland. Land in the vicinity of the Undertaking consists of farmland, residential development and wooded land.

PROTECTED LAND REVIEW	
Wilderness Area	Will the Undertaking be located within a Designated Wilderness Area? <i>Source: National Wilderness Preservation System (NWPS); National Park Service (NPS); U.S. Forest Service (USFS); U.S. Fish and Wildlife Service (USFWS); Bureau of Land Management (BLM); http://www.wilderness.net/index.cfm?fuse=NWPS</i> <input type="radio"/> Yes <input checked="" type="radio"/> No
Wildlife Preserve	Will the Undertaking be located within a Designated Wildlife Preserve? <i>Source: National Wildlife Refuge System (NWRS; NPS; USFS; USFWS; BLM; http://www.fws.gov/refuges)</i> <input type="radio"/> Yes <input checked="" type="radio"/> No
U.S. FWS Threatened & Endangered Species Active Critical Habitat	Will the Undertaking be located with an area designed as active proposed or final habitat for threatened and endangered species? <i>Source: USFWS Critical Habitat Map; http://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77</i> <input type="radio"/> Yes <input checked="" type="radio"/> No
Wild & Scenic Rivers	Will the Undertaking be located within one mile of a National Wild and Scenic River? <i>Source: NPS; USFS; USFWS; BLM; http://www.rivers.gov</i> <input type="radio"/> Yes <input checked="" type="radio"/> No
National Scenic Trail	Will the Undertaking be located within one mile of a National Scenic Trail? <i>Source: NPS and Managing Systems and Trails Organization (MSTO); http://www.nps.gov/ncrc/programs/nts/nts_trails.html</i> <input type="radio"/> Yes <input checked="" type="radio"/> No
Comments	None

NATURAL RESOURCES CHECKLIST & EXEMPTION REVIEW

FEDERALLY-PROTECTED SPECIES EXEMPTION REVIEW			
U.S. Fish and Wildlife Service 'No Effect' Exemptions	<p>Does the USFWS Region have consultation exemptions for 'No Effect' determinations? <i>Source: CBRE received guidance from the New England USFWS Field Office, on January 22, 2016, which states that "Future Coordination with this Office Relative to New Telecommunication Facilities. We have determined that proposed projects are not likely to adversely affect any federally listed or proposed species when the following steps are taken to evaluate new telecommunication facilities:</i></p> <ul style="list-style-type: none"> • <i>If the facility will be installed within or on an existing structure, such as in a church steeple or on the roof of an existing building, no further coordination with this office is necessary. Similarly, new antennas or towers in urban and other developed areas, in which no natural vegetation will be affected, do not require further review.</i> • <i>If the above criteria cannot be met, your review of our lists of threatened and endangered species locations within Vermont, New Hampshire, Rhode Island, Connecticut and Massachusetts may confirm that no federally-listed endangered or threatened species are known to occur in the town or county where the project is proposed.</i> • <i>If a listed species is present in the town or county where the project is proposed, further review of our lists of threatened and endangered species may allow you to conclude that suitable habitat for the species will not be affected. Based on past experiences, we anticipate that there will be few, if any, projects that are likely to impact piping plovers, roseate terns, bog turtles, Jesup's milk-vetch or other such species that are found on coastal beaches, riverine habitats or in wetlands because communication towers typically are not located in these habitats.</i> <p><i>For projects that meet the above criteria, there is no need to contact this office for further project review.</i></p>		<input checked="" type="radio"/> Yes <input type="radio"/> No
	<p>Will the Undertaking have 'No Effect' on listed species? <i>Source: See table below.</i></p>		<input type="radio"/> Yes <input checked="" type="radio"/> No
FEDERALLY-LISTED SPECIES REVIEW			
<i>Source: the USFWS Information, Planning, and Conservation (IPaC) System (http://ecos.fws.gov/ipac)</i>			
Common Name	Status (Federal)	Habitat	Determination
Northern long-eared bat (NLEB)	Threatened	In the winter hibernate in caves and mines. In summer roost underneath bark, in cavities, or in crevices of both live and dead trees.	Moderately Suitable / May affect the NLEB, but any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule
FINDINGS			
U.S. Fish and Wildlife Service Consultation	Section 7 consultation is required with the USFWS In accordance with 47 CFR Part 1.1307(a)(3) of the FCC regulations		<input checked="" type="radio"/> Yes <input type="radio"/> No
<p>Comments: After review of information provided by the CT Natural Diversity Data Base, CBRE found the project to be eligible for streamlined USFWS consultation procedures for the NLEB. CBRE sent an NLEB 4(d) Rule Streamlined Consultation Form to the USFWS on December 21, 2016. Per the form, if the USFWS does not respond within 30 days from submittal of the form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. Endangered Species consultation with the USFWS can be considered complete on January 21, 2016.</p>			

NATURAL RESOURCES CHECKLIST & EXEMPTION REVIEW

STATE-PROTECTED SPECIES EXEMPTION REVIEW		
CT Natural Diversity Data Base (NDDDB) No Species Exemptions	Does the CT NDDDB have consultation exemptions for tower projects located outside of Natural Diversity Data Base (NDDDB) areas? <i>Source: CT NDDDB Request Guidance: If your project does not intersect an NDDDB Area, you do NOT need to submit the Request for Connecticut Natural Diversity Data Base (NDDDB) State Listed Species Review (DEP-APP-007).</i>	<input checked="" type="radio"/> Yes <input type="radio"/> No
	Does the Undertaking meet state consultation exemptions for a project not located within an NDDDB area? <i>Source: Somers, CT NDDDB Map</i>	<input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Not Applicable

FINDING OF EFFECT	
The Undertaking will have 'no effect' on listed resources.	<input type="radio"/>
The Undertaking 'may affect, not likely to adversely affect' listed resources.*	<input checked="" type="radio"/>
Comments: *May affect the NLEB, but any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule	

MIGRATORY BIRD REVIEW		
Tower Height	Will the proposed tower be over 450 feet in height? <i>Source: Client-provided drawings</i>	<input type="radio"/> Yes* <input checked="" type="radio"/> No
Comments: On September 27, 2013, the USFWS revised the "Guidelines for Communication Tower Design, Siting, Construction, Operation, Retrofitting, and Decommissioning. These guidelines outline voluntary federal recommendations designed to minimize the impacts of tower facilities on migratory birds protected under the Migratory Bird Treaty Act (MBTA) and the Endangered Species Act. Based upon the Undertaking design (i.e. non guyed) and height (i.e. less than 200 feet above ground level), the Undertaking meets many of the recommendations set forth in the USFWS's Revised Guidelines. As such, it is unlikely that the Undertaking would adversely impact migratory bird species protected under the MBTA and the Endangered Species Act. *FCC NEPA rules require the preparation of an Environmental Assessment for all towers over 450 feet in height.		

FLOOD ZONE AND WETLANDS REVIEW		
Flood Zone	Will the Undertaking be located within a 100-year floodplain? <i>Source: Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (www.fema.gov; Map Number 0901120007D, effective date 08/16/2006)</i>	<input type="radio"/> Yes* <input checked="" type="radio"/> No
Wetlands	Will the Undertaking be located within a wetland? <i>Source: Site Observations; USFWS National Wetlands Inventory (NWI) map; United States Department of Agriculture (USDA), Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS)</i>	<input type="radio"/> Yes* <input checked="" type="radio"/> No
*FCC NEPA rules require the preparation of an Environmental Assessment for all towers located in Flood Zones and Wetlands.		

QUALIFIED PERSONNEL			
Completed By:		Reviewed By:	
	Christopher Bond Project Manager - Biologist		Gio Del Rivero Director, Project Management

Northern Long-Eared Bat 4(d) Rule Streamlined Consultation Form

Federal agencies should use this form for the optional streamlined consultation framework for the northern long-eared bat (NLEB). This framework allows federal agencies to rely upon the U.S. Fish and Wildlife Service's (USFWS) January 5, 2016, intra-Service Programmatic Biological Opinion (BO) on the final 4(d) rule for the NLEB for section 7(a)(2) compliance by: (1) notifying the USFWS that an action agency will use the streamlined framework; (2) describing the project with sufficient detail to support the required determination; and (3) enabling the USFWS to track effects and determine if reinitiation of consultation is required per 50 CFR 402.16.

This form is not necessary if an agency determines that a proposed action will have no effect to the NLEB or if the USFWS has concurred in writing with an agency's determination that a proposed action may affect, but is not likely to adversely affect the NLEB (i.e., the standard informal consultation process). Actions that may cause prohibited incidental take require separate formal consultation. Providing this information does not address section 7(a)(2) compliance for any other listed species.

Information to Determine 4(d) Rule Compliance:

YES NO

Information to Determine 4(d) Rule Compliance:	YES	NO
1. Does the project occur wholly outside of the WNS Zone ¹ ?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Have you contacted the appropriate agency ² to determine if your project is near known hibernacula or maternity roost trees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Could the project disturb hibernating NLEBs in a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Could the project alter the entrance or interior environment of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does the project remove any trees within 0.25 miles of a known hibernaculum at any time of year?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Would the project cut or destroy known occupied maternity roost trees, or any other trees within a 150-foot radius from the maternity roost tree from June 1 through July 31.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

You are eligible to use this form if you have answered yes to question #1 **or** yes to question #2 **and** no to questions 3, 4, 5 and 6. The remainder of the form will be used by the USFWS to track our assumptions in the BO.

Agency and Applicant³ (Name, Email, Phone No.): FCC and Eco-Site c/o CBRE, Christopher Bond, WhitePlainsBiology@cbre.com, 914-597-6956

Project Name: CT-0005

Project Location (include coordinates if known): 248 Hall Hill Road, Somers, Connecticut, 06071, 42° 0'9.26"N / 72°29'5.54"W

Basic Project Description (provide narrative below or attach additional information): Raw Land-New Build, 180-foot tall Monopole communications tower within a 0.23 lease area. Forest conversion is anticipated to be approximately 0.23 acres.

¹ <http://www.fws.gov/midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

² See <http://www.fws.gov/midwest/endangered/mammals/nleb/nhisites.html>

³ If applicable - only needed for federal actions with applicants (e.g., for a permit, etc.) who are party to the consultation.

General Project Information	YES	NO
Does the project occur within 0.25 miles of a known hibernaculum?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project occur within 150 feet of a known maternity roost tree?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the project include forest conversion ⁴ ? (if yes, report acreage below)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Estimated total acres of forest conversion	~0.23-acres	
If known, estimated acres ⁵ of forest conversion from April 1 to October 31	~0.23-acres	
If known, estimated acres of forest conversion from June 1 to July 31 ⁶	~0.23-acres	
Does the project include timber harvest? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of timber harvest		
If known, estimated acres of timber harvest from April 1 to October 31		
If known, estimated acres of timber harvest from June 1 to July 31		
Does the project include prescribed fire? (if yes, report acreage below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated total acres of prescribed fire		
If known, estimated acres of prescribed fire from April 1 to October 31		
If known, estimated acres of prescribed fire from June 1 to July 31		
Does the project install new wind turbines? (if yes, report capacity in MW below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Estimated wind capacity (MW)		

Agency Determination:

By signing this form, the action agency determines that this project may affect the NLEB, but that any resulting incidental take of the NLEB is not prohibited by the final 4(d) rule.

If the USFWS does not respond within 30 days from submittal of this form, the action agency may presume that its determination is informed by the best available information and that its project responsibilities under 7(a)(2) with respect to the NLEB are fulfilled through the USFWS January 5, 2016, Programmatic BO. The action agency will update this determination annually for multi-year activities.

The action agency understands that the USFWS presumes that all activities are implemented as described herein. The action agency will promptly report any departures from the described activities to the appropriate USFWS Field Office. The action agency will provide the appropriate USFWS Field Office with the results of any surveys conducted for the NLEB. Involved parties will promptly notify the appropriate USFWS Field Office upon finding a dead, injured, or sick NLEB.

Christophe Bond

Signature: _____

Date Submitted: 12/20/2016

⁴ Any activity that temporarily or permanently removes suitable forested habitat, including, but not limited to, tree removal from development, energy production and transmission, mining, agriculture, etc. (see page 48 of the BO).

⁵ If the project removes less than 10 trees and the acreage is unknown, report the acreage as less than 0.1 acre.

⁶ If the activity includes tree clearing in June and July, also include those acreage in April to October.

Maria E. Tur
U.S. Fish and Wildlife Service
New England Field Office
70 Commercial Street, Suite 300
Concord, NH 03301

Date: 21Dec16
Wgt: 1.00 LBS

SHIPPING:
SPECIAL:
HANDLING:
TOTAL: 0.00

DV:

Svcs: ** 2DAY **
TRCK: 7146 9172 3750

ATTACHMENT 6



Christopher Bond
Project Manager
Biologist

CBRE, Inc.
Telecom Advisory Services

4 West Red Oak Lane
White Plains, New York 10604

914-597-6956 Tel
914-316-0303 Cell

Christopher.bond@cbre.com
www.cbre.com

December 13, 2016

Jonathan Terry
Airosmith Development, Inc.
125 High Rock Avenue
Saratoga Springs, NY 12866

Re: CT-0005 Wetland Delineation
248 Hall Road
Somers, Tolland County, CT 06071
CBRE Project No.: TS61116613

Mr. Terry,

A wetland delineation was conducted at the above referenced address on December 7, 2016. All areas of the proposed access and lease area were assessed for existing wetlands. There were no wetlands in or immediately adjacent to the proposed 20' access/utility easement or the lease area. As noted in the attached Wetland Delineation Site Map, a dry ditch located in a hedgerow parallels part of the access road. This ditch contains very stony, well-drained soils and does not contain wetland vegetation or hydric soils. Any water that reaches the ditch from adjacent fields flows in a southerly direction to a pond, which was completely dry at the time of the site inspection. Hydric soils were only observed a short distance upstream from the pond indicating infrequent flow events and well-drained soils.

In summary, no wetlands or inland waterways will be impacted by the access or lease area. Please do not hesitate to contact me at (914) 597-6956 or at christopher.bond@cbre.com if you have any further questions

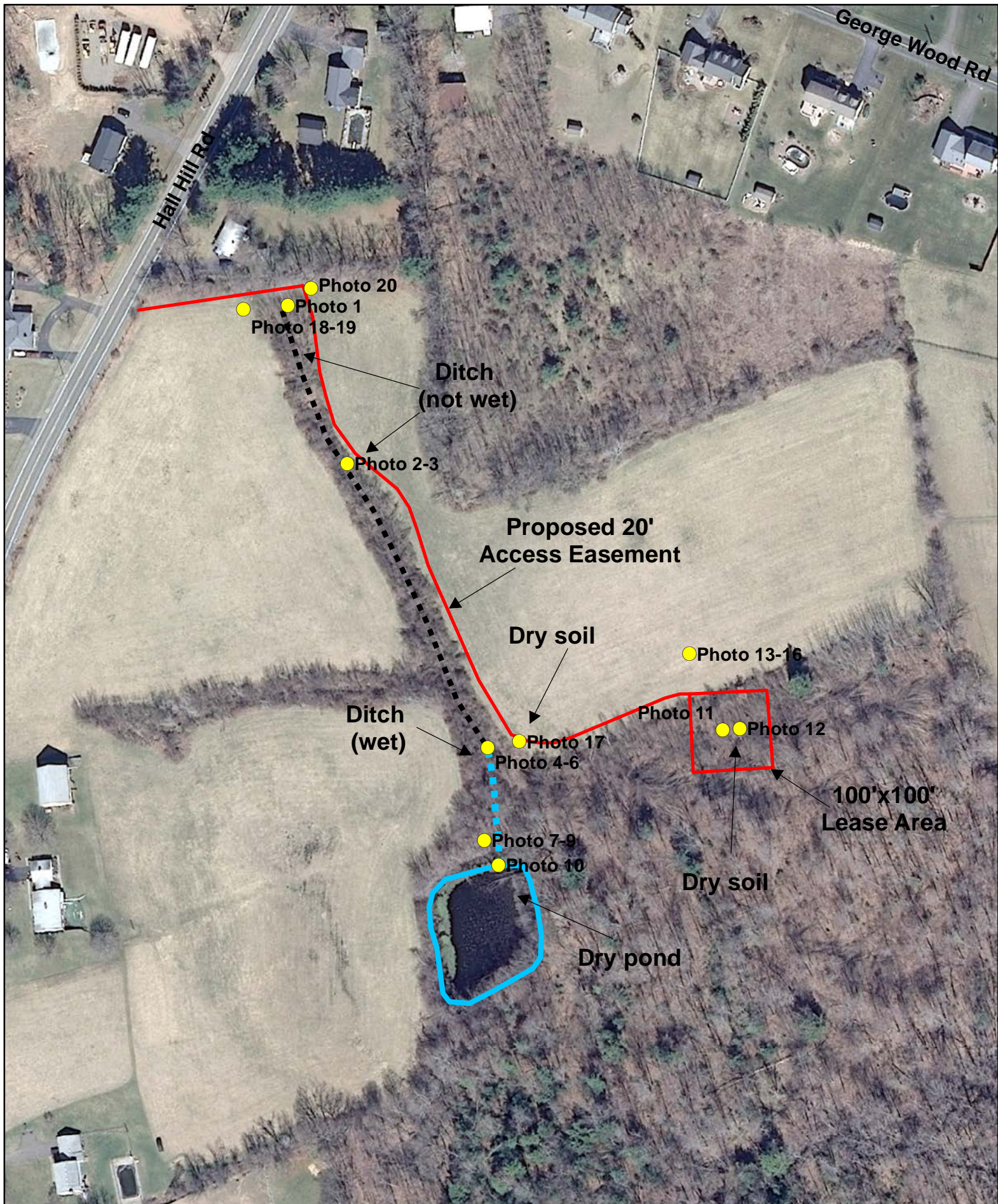
Sincerely,
CBRE, INC.

A handwritten signature in cursive script that reads 'Christopher Bond'.

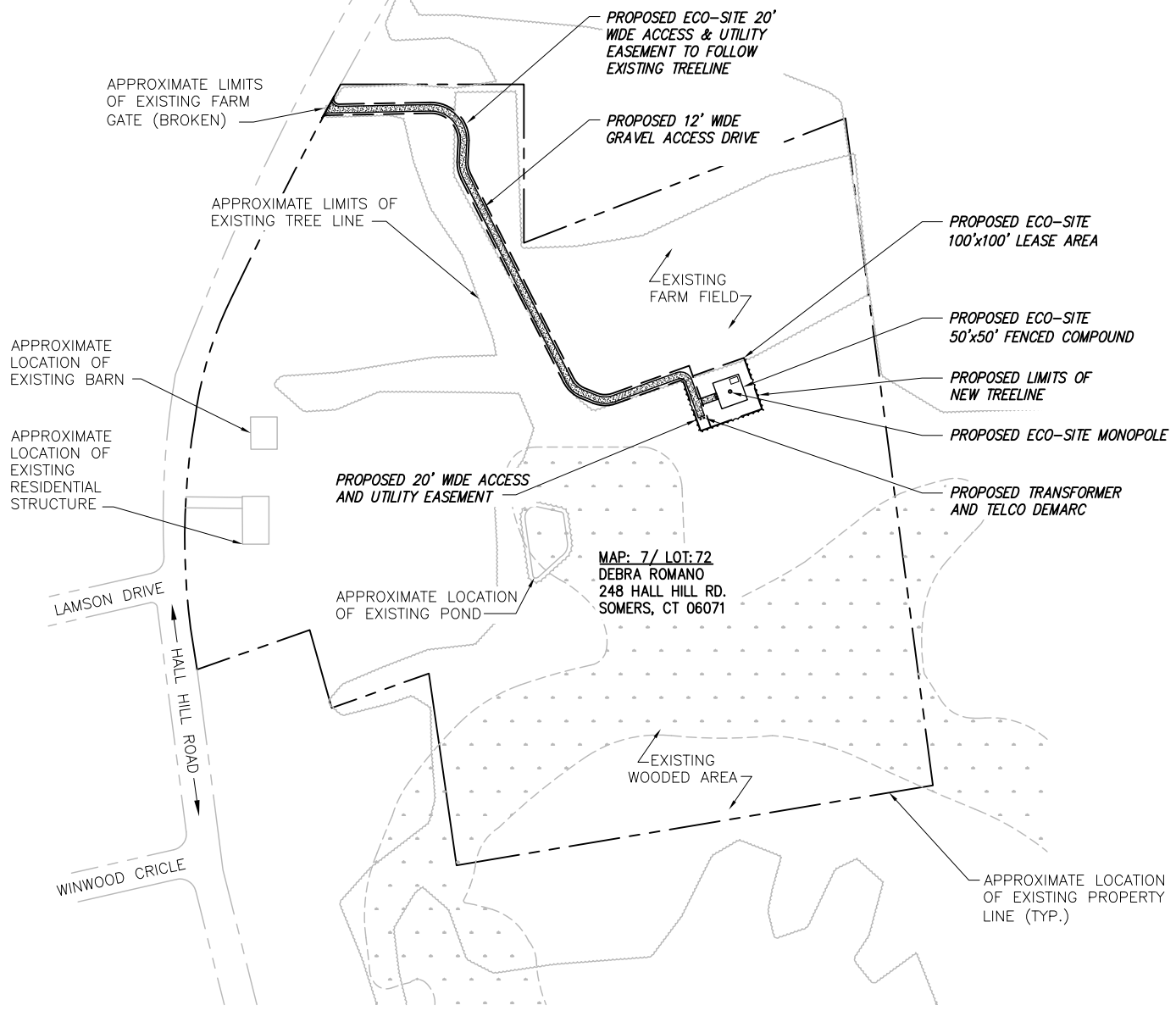
Chris Bond
Project Manager – Biologist

Attachments:

Wetland Delineation Site Map
Lease Exhibits
Resume



SHADED AREA REPRESENTS "INLAND WETLAND SOILS" FROM SOMERS CT GIS ONLINE DATABASE DELINEATION IN FIELD TO BE COMPLETED BY OTHERS.

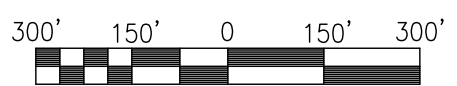


APPROX. NORTH



1 OVERALL SITE LAYOUT

SCALE: 1" = 300'



BASEMAPPING INFORMATION BASED ON INFORMATION OBTAINED FROM A SITE WALK COMPLETED BY INFINIGY ON 11/29/16.



INFINIGY
 1033 Watervliet Shaker Road | Albany, NY 12205
 Phone: 518-690-0790 | Fax: 518-690-0793
 www.infinigy.com

INFINIGY PROJECT #: 502-000

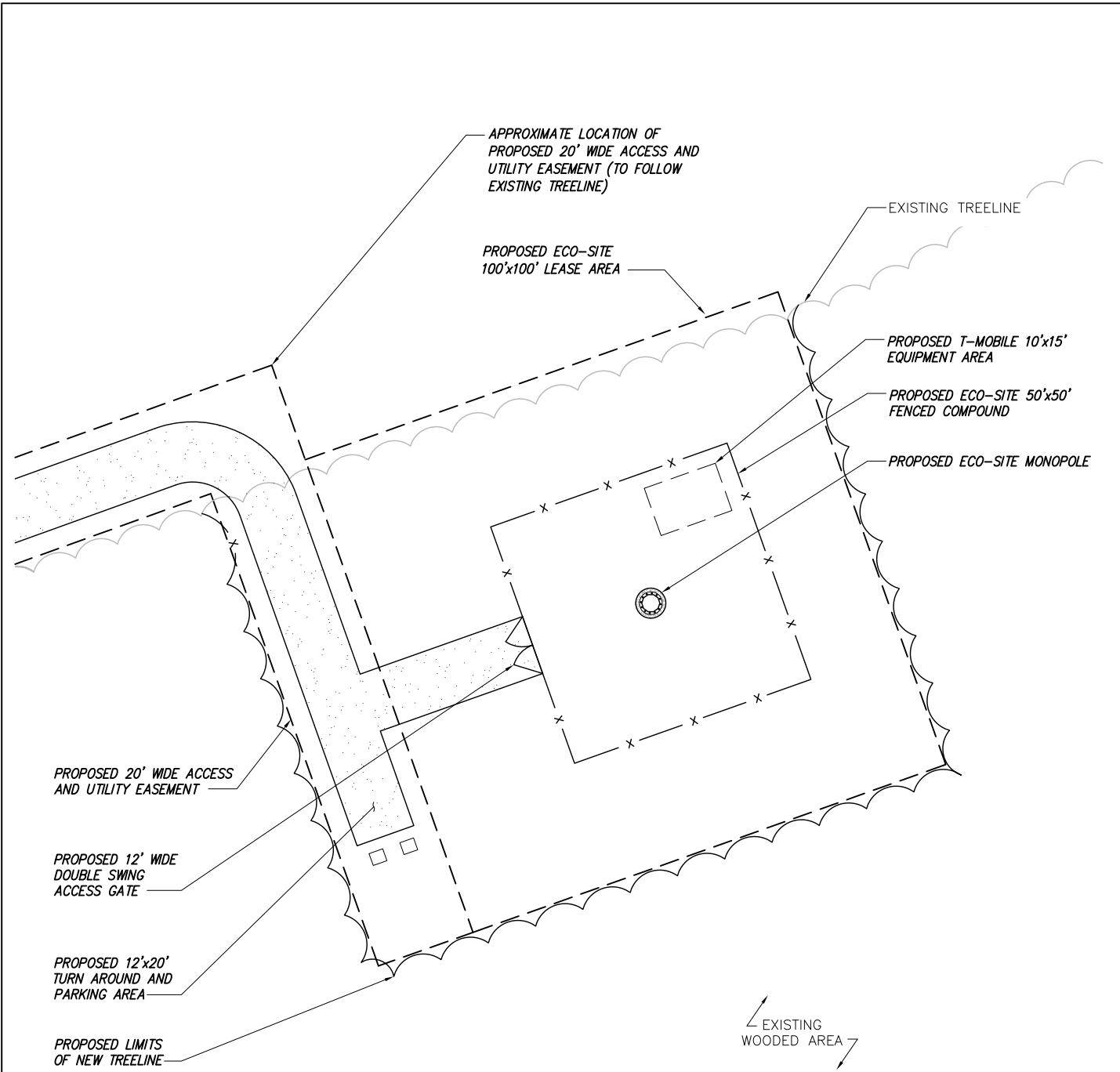
EXHIBIT A – LEASE EXHIBIT

SITE NUMBER: CT-0005A
 SITE NAME: SOMERS
 SITE ADDRESS: 248 HALL HILL ROAD
 SOMERS, CT 06071

DRAWING SCALE: AS NOTED

DATE: 12/2/16

REV: 0

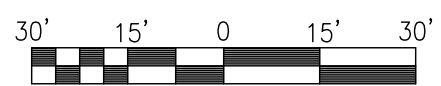


APPROX. NORTH



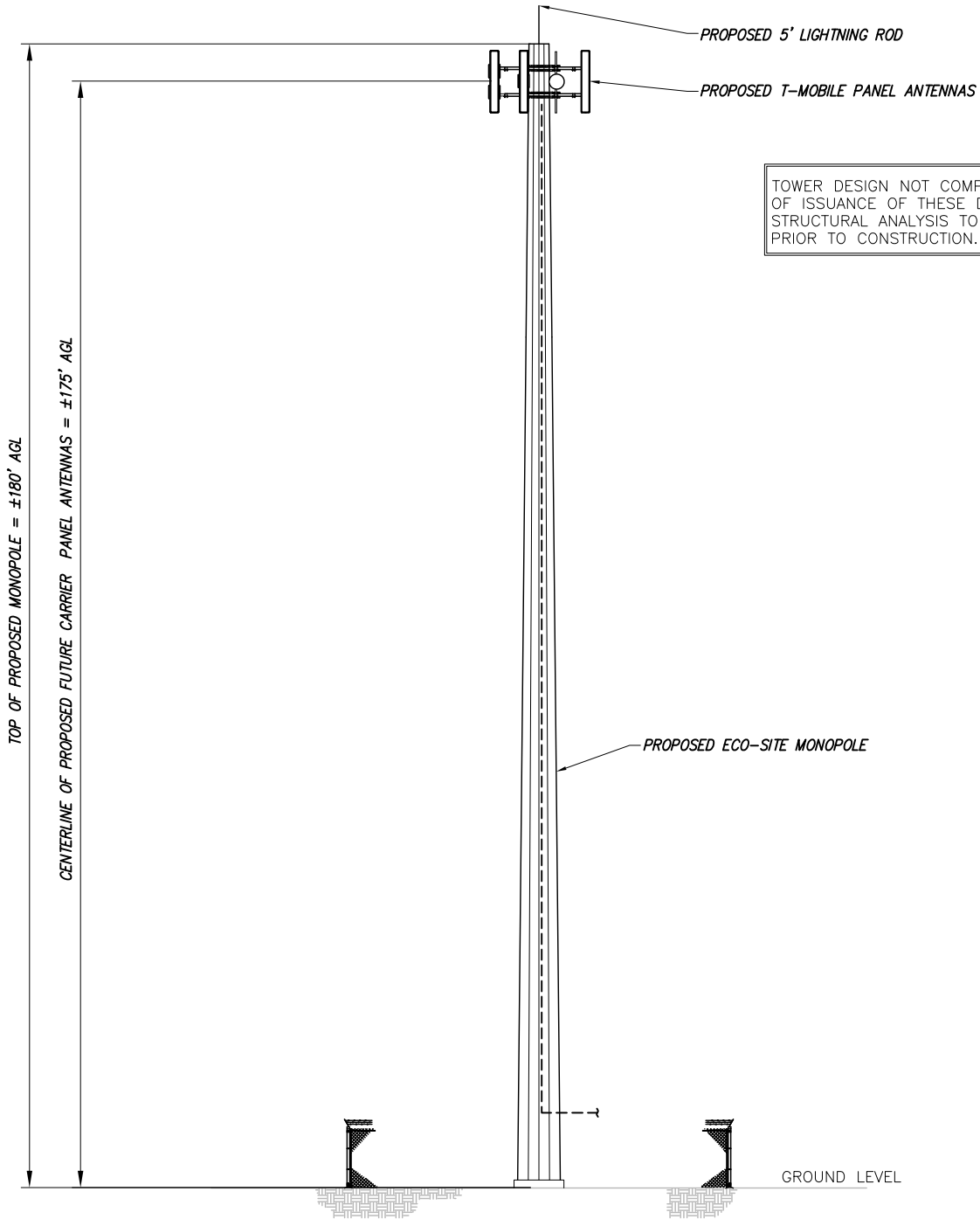
1 COMPOUND LAYOUT

SCALE: 1" = 30'



BASEMAPPING INFORMATION BASED ON INFORMATION OBTAINED FROM A SITE WALK COMPLETED BY INFINIGY ON 11/29/16.

	<p>1033 Watervliet Shaker Road Albany, NY 12205 Phone: 518-690-0790 Fax: 518-690-0793 www.infinigy.com</p> <p>INFINIGY PROJECT #: 502-000</p>	EXHIBIT A – LEASE EXHIBIT	
		SITE NUMBER: CT-0005A SITE NAME: SOMERS SITE ADDRESS: 248 HALL HILL ROAD SOMERS, CT 06071	DRAWING SCALE: AS NOTED



TOWER DESIGN NOT COMPLETED AT TIME OF ISSUANCE OF THESE DRAWINGS. STRUCTURAL ANALYSIS TO BE COMPLETED PRIOR TO CONSTRUCTION.



APPROX. NORTH



1 SITE ELEVATION

NOT TO SCALE

BASEMAPPING INFORMATION BASED ON INFORMATION OBTAINED FROM A SITE WALK COMPLETED BY INFINIGY ON 11/29/16.



1033 Watervliet Shaker Road | Albany, NY 12205
 Phone: 518-690-0790 | Fax: 518-690-0793
 www.infinigy.com

INFINIGY PROJECT #: 502-000

EXHIBIT A – LEASE EXHIBIT

SITE NUMBER: CT-0005A
 SITE NAME: SOMERS
 SITE ADDRESS: 248 HALL HILL ROAD
 SOMERS, CT 06071

DRAWING SCALE: AS NOTED

DATE: 12/2/16

REV: 0

Christopher S. Bond

Education:	M.S. Environmental Science, Sacred Heart University B.S. Traditional Biology, Sacred Heart University
Licenses/Registrations	Methodology for Delineating Wetlands, Rutgers University NYS Wetlands Forum Member, 2015
Years of Experience:	3 years

Summary of Professional Experience

Mr. Bond is a Biologist and Project Manager at CBRE, Inc. Telecom Advisory Services for over two years. He has conducted Migratory Bird Surveys, consulted on Wetland Delineations, Natural Resource and NEPA reviews for various clients within the telecommunications industry.

Mr. Bond's environmental experience extends from both his background in biology and chemistry. Specifically, Mr. Bond has conducted environmental sampling of rivers, streams and groundwater for presence of harmful chemicals and suspended solids. Mr. Bond has also conducted biological surveys for different migratory bird species and invertebrate diversity within streams and rivers. He also has experience coordinating and working with the USFWS Field Offices throughout the United States.

Mr. Bond received his Bachelor of Science at Sacred Heart University with majors in Traditional Biology. Mr. Bond also received his Master of Science in Environmental Science at the Sacred Heart University Environmental Graduate Program. While attending graduate school, he participated in Project Limulus where he conducted species surveys of horseshoe crab populations within the Long Island Sound. Mr. Bond was also a co-writer of "Estimation of Short-Term Tag-Induced Mortality in Horseshoe Crab *Limulus Polyphemus*" which was published in *Biology Faculty Publications* in 2011.

ATTACHMENT 7

Proposed Wireless Telecommunications Facility

Site Name: Eco-Site: Somers, CT-0005A
248 Hall Hill Road
Somers, CT 06071
Tolland County

VISUAL RESOURCE ASSESSMENT

Prepared for:
Infinigy
1033 Watervliet Shaker Road
Albany, NY 12205

April 27, 2017

VISUAL RESOURCE ASSESSMENT

Eco-Site seeks approval from the Connecticut Siting Council for a certificate of Environmental Compatibility and Public Need to construct a wireless telecommunications facility (the "Project") to be located on property at 248 Hall Hill Road ("host property") in the Town of Somers, Tolland County, Connecticut. To address issues of potential visual impact, Saratoga Associates, Landscape Architects, Architects, Engineers, and Planners, P.C. was retained to conduct a Visual Resource Assessment ("VRA") of the proposed Project.

The study area for this VRA extends to a two-mile radius from the project site (hereafter referred to as the "2-mile study area"). Because much of the project area is substantially wooded, detailed analysis is focused on viewpoints within a ½-mile radius ("½-mile study area").

Project Description

The Project includes the construction of a 180-foot tall monopole designed to support up to four antenna platforms with associated ground equipment to be located within a fenced enclosure at the base of the tower. The fenced area ("tower site") will be approximately 50 feet by 50 feet (2,500 square feet) located at 42° 00' 09.34"N, 72° 29' 05.99"W. The existing ground elevation in this area is approximately 233 feet above mean sea level (AMSL). Access to the tower site would be from a newly constructed 1,125± foot long, 12-foot wide gravel drive from Hall Hill Road.

Landscape Setting

The 34± acre host property is identified in Town of Somers tax records as 248 Hall Hill Road. The proposed fenced compound area and 12-foot wide access road are located entirely within this parcel. The property is approximately 50% woodland and 50% agricultural land. The host property is zoned for single and two-family residential use (A1) as defined by the Somers Town Code.

The tower site is approximately 1,000 feet east of Hall Hill Road, 925 feet south of George Wood Road and 1,050 feet north of Old Farm Road. The nearest residential structure is approximately 700 feet northeast of tower site on George Wood Road.

The topography within the two-mile study area is characterized by rolling hills ranging in elevation from 351 feet above mean sea level (amsl) at the northwest portion of the study area to 135 feet amsl at the southwest portion of the study area. A series of small streams generally flowing from north to south bisect the study area.

The two-mile study area is comprised of a relatively moderate density single family residential development, agricultural land and undeveloped woodland. A mature tree canopy occupies approximately 3,776 acres of the 8,042 acre study area (47%). Mature tree cover in generally ranges from approximately 50 to 75 feet in height.

Moderate density (1 acre) single-family development is typically clustered in planned residential subdivisions to the north, south and west the host property. Roadside single-family residential development is also found along portions of Hall Hill Road, George wood Road and Four Bridges Road. Most residential neighborhoods are well landscaped and bordered by and

deciduous and evergreen woodland. Local vegetation commonly limits views in residential areas to the immediate foreground. Longer distance vistas are common across open agricultural land to the east of the Project site.

Approximately 78 miles of public roadways are within the 2-mile study area. State Highway 186 (Hall Hill Road) adjacent to the host property and State Highway 190 (Main Street) approximately one (1) south of the tower site are the most heavily travelled roadways. Dense vegetation and intervening topography limit project views from these corridors to isolated glimpses. Residential streets including Fox Hollow Road, Highland View Drive, Old Farm Road George Wood Road border the host property. Project views from these streets are generally screened by roadside vegetation. Direct views across open agricultural land is found along extended stretches of local connector roads including Four Bridges Road and Hurlburt Street at distances greater than ½ mile.

There are no state/municipal parks, recreation areas, conservation areas, trails, scenic byways/vistas, properties listed on the National Register of Historic Places, public schools or other places of known scenic importance located within the 1/2-mile study area.

Viewshed Analysis

Viewshed mapping identifies the geographic area within which there is a relatively high probability that some portion of the proposed Project could be visible.

One viewshed overlay was prepared defining the area within which there would be no visibility of the Project due to the screening effect of intervening topography. This "bare earth" condition identifies the maximum potential geographic area within which further investigation is appropriate. A second viewshed overlay was prepared illustrating the screening effect of existing mature vegetation. The more realistic "land cover" condition identifies the geographic area where one would expect to be substantially screened by intervening forest vegetation.

Global Mapper 17.0 GIS software was used to generate viewshed areas based on publicly available topographic and land cover datasets. Topographic data was derived from the National Elevation Dataset (1/3 arc second)¹. Using Global Mapper's viewshed analysis tool, the proposed tower location and height were input and a conservative offset of six feet was applied to account for the observer's eye level. The resulting viewshed identifies grid cells with a direct line-of-sight to the tower high point (180 feet above ground level).

Within 1 miles of the tower site existing forest vegetation and built structures were manually digitized from 3-inch resolution digital ortho-photographs (2016) acquired from Connecticut Environmental Conditions Online (CTEco). For the remainder of the 2-mile study area existing forest vegetation is based on areas with 50% or greater tree canopy coverage as presented in the National Land Cover Database (NLCD) 2011 Percent Tree Canopy dataset.²

The screening effect of vegetation and built structures was incorporated by adding 50 feet in vertical height to digitized forest areas and 25 feet to building footprints. Forested areas and

¹ <http://viewer.nationalmap.gov/viewer/>

² <https://www.sciencebase.gov/catalog/item/581d598be4b0dee4cc8e4547>

building footprints were removed from the viewshed result to account for affected areas located within structures or densely wooded cover.

Based on field observation, most trees in forested portions of the study area are taller than 50 feet. This height therefore represents a conservative estimate of the efficacy of vegetative screening. It is important to note that digitized vegetation is based on interpretation of forest areas that are clearly distinguishable in the source aerial photography. As such, the potential screening value of site-specific vegetative cover such as small hedgerows, street trees and individual trees and other areas of non-forest tree cover may not be represented in the viewshed analysis.

It is noteworthy that untrained reviewers often misinterpret “bare earth” condition viewshed maps to represent wintertime, or leafless condition visibility. In fact, deciduous woodlands provide a substantial visual barrier in all seasons. Since the digitized forest cover overlay generally identifies only larger stands of woodland vegetation that is clearly distinguishable from aerial photography, the land cover viewshed map is substantially representative of both leaf-on and leaf-off seasons. The bare earth condition map is provided only to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. Such bare earth viewshed maps are generally not appropriate for public interpretation.

By themselves, the viewshed maps do not determine how much of the proposed wireless telecommunications tower would be visible above intervening landform or vegetation (e.g., 100%, 50%, 10% etc. of total tower height), but rather the geographic area within which some portion of the facility theoretically would be visible. Their primary purpose is to provide a general understanding of a project’s potential visibility and identify areas where further investigation is appropriate.

Figure 1 illustrates areas of potential project visibility at a macro scale within the 2-mile study area. Figure 2 provides a more localized assessment of potential project visibility within the 1/2-mile study area.

Based on viewshed mapping, notable Project views will occur across open agricultural land approximately 0.5 to 1 mile southeast of the Project Site in the vicinity of Four Bridges and Hurlburt Roads. Isolated glimpses of the proposed Tower are found in residential neighborhoods within 1/2 mile of the Project site along Hall Hill Road, George Wood Road and High Meadow Crossing.

Of the 8,042 acres within the 2-mile study area, a view of the proposed telecommunications tower is theoretically possible from approximately 740 acres (9.2%). Of the 502 acres within the 1/2-mile study area, a view of the proposed tower is possible from approximately 103 acres (20.5%).

Of the 78 miles of public roads within the 2-mile radius Study Area, potential project views are found along approximately 7.2 linear miles (9.2%). Of the 6.3 miles of public roads within the 1/2-mile radius study area, potential project views are found along approximately 2.1 miles (33%).

Study Area Reconnaissance

Field Observation and Photography - An experienced visual analyst drove public roads to inventory those areas where viewshed mapping identified theoretical project visibility. Photographs were taken from multiple vantage points to document the views in the direction of the Project site from representative locations where a potential Project view was identified by the land cover viewshed overlay.

Photographs were taken using a Nikon D3100 digital single lens reflex (“DSLR”) 12.2-mega pixel camera with a lens setting of approximately 50mm³ to simulate normal human eyesight relative to scale. The precise coordinates of each photo location were recorded in the field using a handheld global positioning system (GPS) unit. Prior to the field observation, the coordinates of the proposed telecommunications tower were programmed into a handheld GPS unit as a “waypoint.” The “waypoint indicator” function of the GPS (arrow pointing along a calculated bearing) was used to assist the visual analyst determine the direction of the tower site from each photo location.

Photographs were taken from the following places:

Map ID	Location	Direction	Distance to Tower (feet)	Theoretical View Indicated by Land Cover Viewshed - (See Figures 1 & 2)	Tower Visible Based on 3D Modeling*	Photo/Simulation Provided as
1	Hall Hill Road (Rte 186) at Lampson Acres	ENE	1,090	Yes	Yes	Figure 3
2	Winwood Court at Bittersweet Hill	ENE	2,020	Yes	No	Figure 4
3	Hall Hill Road (Rte 186) at Winwood Court	NE	1,280	Yes	Yes	Figure 5
4	Old Farm Road	N	1,130	Yes	No	Figure 6
5	Highland View Drive (north end)	NNW	1,870	Yes	No	Figure 7
6	Highland View Drive (south end)	NNW	4,980	Yes	No	Figure 8
7	Main Street (Rte 190)	NNW	6,120	Yes	No	Figure 9
8	Hurlburt Street at Four Bridges Road	NW	4,420	Yes	Yes	Figure 10
9	Four Bridges Road near George Wood Road	W	2,190	Yes	Seasonal**	Figure 11
10	Four Bridges Road near High Meadow	SW	2,040	Yes	Yes	Figure 12
11	High Meadow Crossing	SW	1,400	Yes	Yes	Figure 13
12	George Wood Road at High Meadow	SW	980	Yes	Yes	Figure 14
13	Hall Hill Rd (Rte 186) at George Wood Rd	SSE	1,360	Yes	Seasonal	Figure 15
14	George Wood Road near McCullough Drive	SE	1,560	Yes	Seasonal	Figure 16
15	Polo View Road	ESE	1,920	Yes	Seasonal	Figure 17
16	Hall Hill Road (Rte 186) near Brace Road	ESE	980	Yes	Yes	Figure 18
17	Somers Road	ENE	5,000	Yes	No	Figure 19
18	Shaker Road	NE	4,360	Yes	No	Figure 20

* “Tower Visible Based on 3D Modeling” differs from “Theoretical View Indicated by Land Cover Viewshed” due to the use of a highly conservative estimate of tree height in viewshed calculation (50 feet). In most cases mature woodland vegetation is significantly taller resulting in reduced project visibility.

** “Seasonal” visibility indicates photo locations where the Project may be visible through intervening deciduous vegetation during winter leaf-off season. Such views would likely be fully screened during summer leaf-on season.

Photo Simulations

To illustrate how the monopine design wireless telecommunications tower will appear, photo simulations were prepared from each photo location. Photo simulations were developed by superimposing a rendering of a three-dimensional computer model of the proposed Project into

³ A Nikon D3100 digital SLR with an 18-55millimeter (mm) zoom lens was used for all Project photography. This digital camera, similar to most digital SLR cameras, has a sensor that is approximately 1.6 times smaller than a comparable full frame 35mm film camera. Recognizing this differential, the zoom lens used was set to approximately 31mm to achieve a field-of-view comparable to a 50mm lens on a full frame 35mm camera (31mm x 1.6 = 50mm).

the base photograph taken from each corresponding visual receptor. The three-dimensional computer model was developed using *3D Studio Max Design*® software (3D Studio Max).

Simulated perspectives (camera views) were matched to the corresponding base photograph for each simulated view by replicating the precise coordinates of the field camera position (as recorded by handheld GPS) and the focal length of the camera lens used (e.g. 50mm). Precisely matching these parameters assures scale accuracy between the base photograph and the subsequent simulated view. The camera's elevation (Z) value is derived from digital elevation model (DEM) data plus the camera's height above ground level. The camera's target position was set to match the bearing of the corresponding existing condition photograph as recorded in the field. With the existing conditions photograph displayed as a "viewport background," and the viewport properties set to match the photograph's pixel dimensions, minor camera adjustments were made (horizontal and vertical positioning, and camera roll) to align the horizon in the background photograph with the corresponding features of the 3D model.

To verify the camera alignment, elements (e.g. existing buildings, utility poles, topography, vegetation, roads, etc.) visible within the photograph were identified and digitized from digital orthophotos. Each element was assigned a Z value based on DEM data and then imported to 3D Studio Max. A 3D terrain model was also created (using DEM data) to replicate the existing site topography. The digitized elements were then aligned with corresponding elements in the photograph by adjusting the camera target. If necessary, slight camera adjustments were made for accurate alignment.

A daylight system was created matching the exact date and time of each baseline photograph to assure proper shading and shadowing of modeled elements.

Once the camera alignment was verified, a to-scale 3D model of the proposed 180 foot tall wireless telecommunications tower was merged into the model space. The 3D model of a monopole style tower was constructed in sufficient detail to accurately convey visual character and reveal impacts. The scale, alignment, elevations and location of the visible elements of the proposed tower are true to the conceptual design. Post production editing (i.e., airbrush out portion of tower that falls below or behind foreground topography and vegetation) was completed using Adobe Photoshop software.

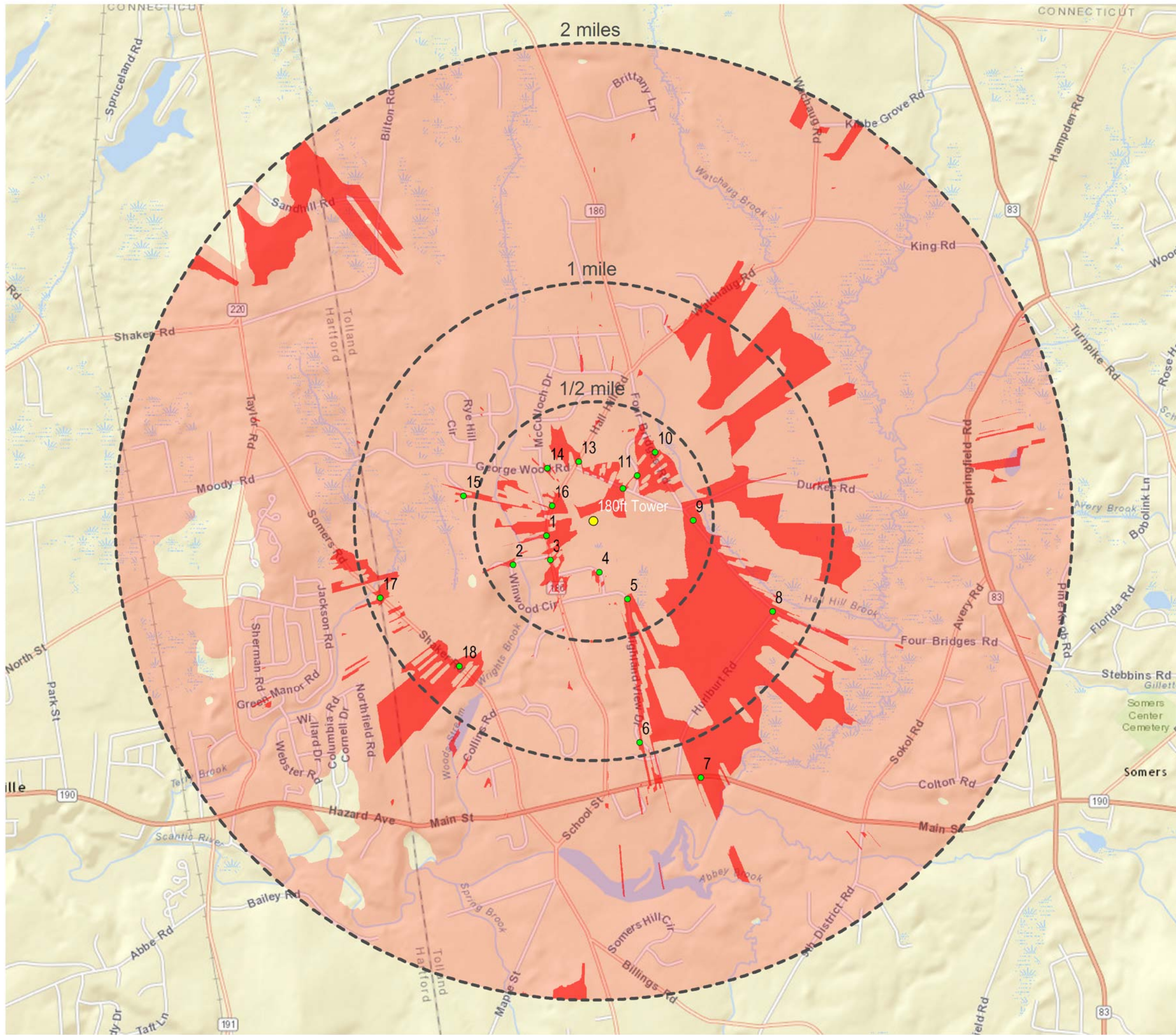
Conclusions

The study area is characterized by a gently rolling landscape with a roughly even mix of moderate density single family residential development, agricultural use and undeveloped woodland. Existing woodland vegetation screen views of the proposed Project from most vantage points. Of the 502 acres within the 1/2-mile study area, a view of the proposed telecommunications tower is likely from approximately 103 acres (20.5%). Of the 6.3 miles of public roads within the 1/2-mile radius study area, potential project views are found along approximately 2.1 miles (33%). Project views from residential streets are substantially screened in most areas by roadside vegetation.

There are no state/municipal parks, recreation areas, conservation areas, trails, scenic byways/vistas, properties listed on the National Register of Historic Places, public schools or other places of known scenic importance located within the 1/2-mile study area.

Moderate density (1 acre) single-family development is clustered in planned residential subdivisions to the north, south and west the host property. Most residential neighborhoods are well landscaped and bordered by and deciduous and evergreen woodland. Local vegetation commonly limits views in residential areas to the immediate foreground. Longer distance vistas are common across open agricultural land in the vicinity of Hurlburt and Four Bridges Roads.

Saratoga Associates estimates that the proposed telecommunications tower will be directly visible to some degree from roughly 25-35 residential structures within the ½ mile study area. This includes 8-10 residences on George Wood Road, 9-12 residences on Hall Hill Road, 1-2 residences Old Farm Road, 4-5 structures on Highland View Crossing and other isolated properties. 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.



LEGEND

- Bare Earth Viewshed Area
(Excludes existing vegetation and structures)
- Land Cover Viewshed Area
(Includes existing vegetation and structures)
- ID # Photo Location

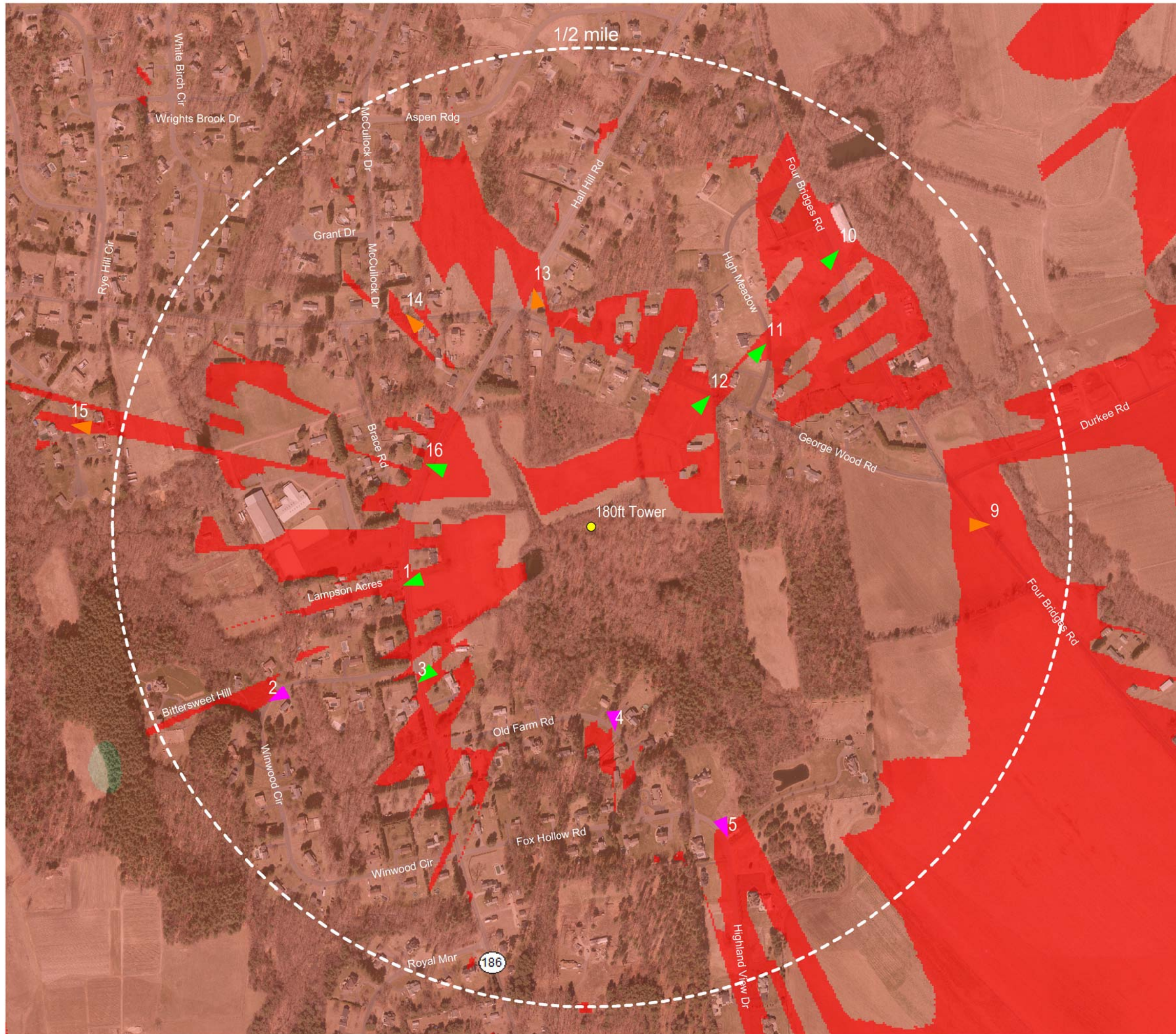
Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth" condition overlay identifies areas where the proposed telecommunications tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.



FIGURE 1
VIEWSHED MAP - 2 MILE RADIUS
Visual Resource Assessment
Proposed Telecommunications Tower



LEGEND

- Bare Earth Viewshed Area
(Excludes existing vegetation and structures)
- Land Cover Viewshed Area
(Includes existing vegetation and structures)
- Photo Location - Tower not Visible
- Photo Location - Tower Visible
- Photo Location - Tower Visible Seasonally

Note: Viewshed areas are not definitive. Viewshed mapping provides a general understanding of where the proposed project is theoretically visible based on regional topographic, forest and building cover data sources.

The "Bare Earth" condition overlay identifies areas where the proposed telecommunications tower high point may be visible without consideration of the screening effect of existing vegetation or built structures. Bare earth analysis is provided to assist experienced visual analysts identify the maximum potential geographic area within which further investigation is appropriate. This topography-only viewshed map is not representative of project visibility during winter season leaf-off conditions.

The "Land Cover" condition viewshed area includes the screening effect of intervening vegetation and buildings. Vegetated areas and buildings were manually digitized from 2016 one-foot resolution digital orthoimagery. All digitized tree cover is assumed to be 50 feet tall and all digitized buildings are assumed to be 25 feet tall.

0 ft 1000 ft 2000 ft 3000 ft 4000 ft 5000 ft 6000 ft 7000 ft

FIGURE 2
 VIEWSHED MAP - 1/2 MILE RADIUS
 Visual Resource Assessment
 Proposed Telecommunications Tower

Eco-Site[®]
 Sommers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 11:12am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 06.2" N
 72° 29' 19.8" W
 Distance: 1,090 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 3a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
 VP1 - Hall Hill Road (Rte 186) at Lampson Acres

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:12am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 06.2" N
 72° 29' 19.8" W
 Distance: 1,090 Feet
 Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 3b

Simulated Condition
 VP1 - Hall Hill Road (Rte 186) at Lampson Acres

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:16am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 59.9" N
 72° 29' 29.6" W
 Distance: 2,020 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 4a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP2 - Winwood Court at Bittersweet Hill

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 11:16am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 59.9" N
 72° 29' 29.6" W
 Distance: 2,020 Feet

Visibility: None

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Location of tower behind intervening vegetation

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 4b

Simulated Condition
VP2 - Winwood Court at Bittersweet Hill

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:19am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 59.9" N
 72° 29' 29.6" W
 Distance: 1,280 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 5a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP3 - Hall Hill Road (Rte 186) at Winwood Court

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:19am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 41° 59' 59.9" N
 72° 29' 29.6" W

Distance: 1,280 Feet

Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 5b

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition
VP3 - Hall Hill Road (Rte 186) at Winwood Court

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:21am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo: 41° 59' 58.2" N
 Location: 72° 29' 04.3" W
 Distance: 1,130 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 6a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

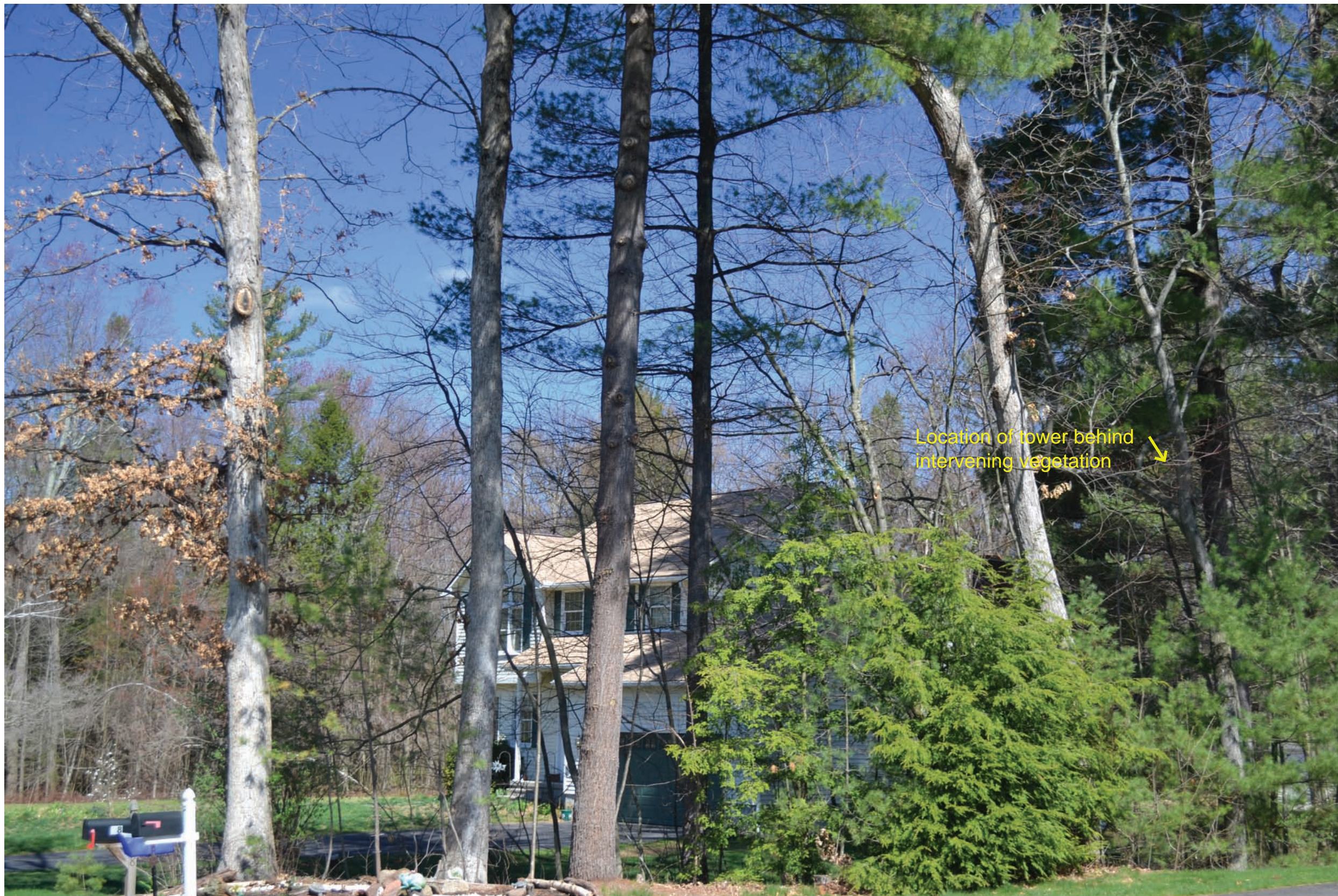
Existing Condition
VP4 - Old Farm Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site[®]

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 11:21am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 41° 59' 58.2" N
 72° 29' 04.3" W

Distance: 1,130 Feet

Visibility: None

Top of Tower
 180 feet above ground level

Antenna Centerline
 175 feet above ground level



Location of tower behind
 intervening vegetation

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 6b

Simulated Condition
VP4 - Old Farm Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 11:25am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 52.4" N
 72° 28' 56.1" W
 Distance: 1,870 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 7a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP5 - Highland View Drive (north end)

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



← Location of tower behind intervening vegetation

Photograph Information

Date: April 18, 2017
 Time: 11:25am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 52.4" N
 72° 28' 56.1" W
 Distance: 1,870 Feet

Visibility: None

Top of Tower
 180 feet above ground level

Antenna Centerline
 175 feet above ground level



Figure 7b

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition
VP5 - Highland View Drive (north end)

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:30am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 21.1" N
 72° 28' 52.7" W
 Distance: 4,420 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 8a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP6 - Highland View Drive (south end)

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:30am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 21.1" N
 72° 28' 52.7" W
 Distance: 4,420 Feet
 Visibility: None

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 8b

Simulated Condition
 VP6 - Highland View Drive (south end)

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:42am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo: 41° 59' 13.4" N
 Location: 72° 28' 34.9" W
 Distance: 6,120 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 9a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP7 - Main Street (Rte 190)

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:42am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 13.4" N
 72° 28' 34.9" W
 Distance: 6,120 Feet

Visibility: None

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Location of tower behind intervening landform

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 9b

Simulated Condition
 VP7 - Main Street (Rte 190)

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 11:51am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 49.6" N
 72° 28' 13.8" W
 Distance: 4,420 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 10a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP8 - Hurlburt Road at Four Bridges Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
Time: 11:51am
Focal Length: 50mm (film equivalent)
Camera: 14.2mp Nikon D3100

Photo Location: 41° 59' 49.6" N
72° 28' 13.8" W
Distance: 4,420 Feet

Visibility: Year Round

Top of Tower
180 feet above ground level
Antenna Centerline
175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 10b

Simulated Condition
VP8 - Hurlburt Road at Four Bridges Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
ASSOCIATES

Eco-Site[®]

Somers Site (CT009)
248 Hall Road
Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 11:55am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 09.4" N
 72° 28' 36.9" W
 Distance: 2,190 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 11a

Existing Condition
VP9 - Four Bridges Road near George Wood Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Location of tower behind intervening vegetation

Photograph Information

Date: April 18, 2017
 Time: 11:55am
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 42° 00' 09.4" N
 72° 28' 36.9" W

Distance: 2,190 Feet

Visibility: None

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 11b

Simulated Condition
 VP9 - Four Bridges Road near George Wood Road

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:03pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 24.4" N
 72° 28' 47.9" W
 Distance: 2,040 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 12a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP10 - Four Bridges Road near High Meadow Crossing

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:03pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 42° 00' 24.4" N
 72° 28' 47.9" W

Distance: 2,040 Feet

Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 12b

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition
VP10 - Four Bridges Road near High Meadow Crossing

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:06pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo: 42° 00' 19.3" N
 Location: 72° 28' 53.2" W
 Distance: 1,400 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 13a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP11 - High Meadow Crossing

SARATOGA
 ASSOCIATES

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

Eco-Site[®]

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 12:06pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 19.3" N
 72° 28' 53.2" W
 Distance: 1,400 Feet

Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 13b

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition
VP11 - High Meadow Crossing

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:09pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 16.5" N
 72° 28' 57.3" W
 Distance: 980 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 14a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP12 - George Wood Road at High Meadow Crossing

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:09pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 16.5" N
 72° 28' 57.3" W
 Distance: 980 Feet
 Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 14b

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition
VP12 - George Wood Road at High Meadow Crossing

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:12pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 22.4" N
 72° 29' 10.2" W
 Distance: 1,360 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 15a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP13 - Hall Hill Road (Rte 186) at George Wood Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:12pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 22.4" N
 72° 29' 10.2" W
 Distance: 1,360 Feet
 Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 15b

Simulated Condition
 VP13 - Hall Hill Road (Rte 186) at George Wood Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:16pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 21.0" N
 72° 29' 19.5" W
 Distance: 1,560 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 16a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP14 - George Wood Road newar McCullogh Drive

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site[®]

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 12:16pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 42° 00' 21.0" N
 72° 29' 19.5" W

Distance: 1,560 Feet

Visibility: Seasonal

Top of Tower
 180 feet above ground level

Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 16b

Simulated Condition
VP14 - George Wood Road newar McCullogh Drive

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:22pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo: 42° 00' 15.0" N
 Location: 72° 29' 44.0" W
 Distance: 1,920 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 17a

Existing Condition
 VP15 - Polo View Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 12:22pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 42° 00' 15.0" N
 72° 29' 44.0" W

Distance: 1,920 Feet

Visibility: Seasonal

Top of Tower
 180 feet above ground level

Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 17b

Simulated Condition
 VP15 - Polo View Road

SARATOGA
 ASSOCIATES

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 12:26pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 42° 00' 12.8" N
 72° 29' 18.1" W
 Distance: 980 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 18a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP16 - Hall Hill Road (Rte 186) near Brace Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:26pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100

Photo Location: 42° 00' 12.8" N
 72° 29' 18.1" W

Distance: 980 Feet

Visibility: Year Round

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 18b

Simulated Condition
 VP16 - Hall Hill Road (Rte 186) near Brace Road

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER



Photograph Information

Date: April 18, 2017
 Time: 12:57pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 52.8" N
 72° 30' 08.4" W
 Distance: 5,000 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 19a

Existing Condition
VP17 - Somers Road

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 12:57pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 52.8" N
 72° 30' 08.4" W
 Distance: 5,000 Feet
 Visibility: None

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Location of tower behind
 intervening vegetation

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Figure 19b

Simulated Condition
VP17 - Somers Road

SARATOGA
 ASSOCIATES

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Photograph Information

Date: April 18, 2017
 Time: 1:02pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 37.9" N
 72° 29' 45.4" W
 Distance: 4,360 Feet

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 20a

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Existing Condition
VP18 - Shaker Road

SARATOGA
 ASSOCIATES

Visual Resource Assessment
PROPOSED TELECOMMUNICATIONS TOWER

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT



Location of tower behind intervening vegetation

Photograph Information

Date: April 18, 2017
 Time: 1:02pm
 Focal Length: 50mm (film equivalent)
 Camera: 14.2mp Nikon D3100
 Photo Location: 41° 59' 37.9" N
 72° 29' 45.4" W
 Distance: 4,360 Feet
 Visibility: None

Top of Tower
 180 feet above ground level
 Antenna Centerline
 175 feet above ground level



Figure 20b

The above photograph is intended to be viewed 18 inches from the reader's eye when printed on 11"x17" paper.

Simulated Condition
 VP18 - Shaker Road

Visual Resource Assessment
 PROPOSED TELECOMMUNICATIONS TOWER

SARATOGA
 ASSOCIATES

Eco-Site

Somers Site (CT009)
 248 Hall Road
 Somers, CT

ATTACHMENT 8



RADIO FREQUENCY EMISSIONS ANALYSIS REPORT
EVALUATION OF HUMAN EXPOSURE POTENTIAL
TO NON-IONIZING EMISSIONS

T-Mobile Existing Facility

Site ID: CTHA027B

Romano
248 Hall Hill Road
Somers, CT 06071

February 2, 2017

EBI Project Number: 950003-003

Site Compliance Summary	
Compliance Status:	COMPLIANT
Site total MPE% of FCC general public allowable limit:	0.69 %



February 2, 2017

T-Mobile USA
Attn: Jason Overbey, RF Manager
35 Griffin Road South
Bloomfield, CT 06002

Emissions Analysis for Site: **CTHA027B – Romano**

EBI Consulting was directed to analyze the proposed T-Mobile facility located at **248 Hall Hill Road, Somers, CT**, for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01 and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The number of $\mu\text{W}/\text{cm}^2$ calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter ($\mu\text{W}/\text{cm}^2$). The general population exposure limit for the 700 MHz Band is approximately $467 \mu\text{W}/\text{cm}^2$, and the general population exposure limit for the 1900 MHz (PCS) and 2100 MHz (AWS) bands is $1000 \mu\text{W}/\text{cm}^2$. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled



exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.



CALCULATIONS

Calculations were done for the proposed T-Mobile Wireless antenna facility located at **248 Hall Hill Road, Somers, CT**, using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Since T-Mobile is proposing highly focused directional panel antennas, which project most of the emitted energy out toward the horizon, all calculations were performed assuming a lobe representing the maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was focused at the base of the tower. For this report the sample point is the top of a 6-foot person standing at the base of the tower.

For all calculations, all equipment was calculated using the following assumptions:

- 1) 2 UMTS channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 30 Watts per Channel.
- 2) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the proposed installation. These Channels have a transmit power of 60 Watts per Channel
- 3) 1 LTE channel (700 MHz Band) was considered for each sector of the proposed installation. This channel has a transmit power of 30 Watts.
- 4) All radios at the proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 5) For the following calculations the sample point was the top of a 6-foot person standing at the base of the tower. The maximum gain of the antenna per the antenna manufactures supplied specifications minus 10 dB was used in this direction. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.



- 6) The antennas used in this modeling are the **RFS APXV18-206513-C-A20** for 2100 MHz (AWS) channels and the **Commscope LNX-6515DS-VTM** for 700 MHz channels. This is based on feedback from the carrier with regards to anticipated antenna selection. The **RFS APXV18-206513-C-A20** has a maximum gain of **13 dBd** at its main lobe at 2100 MHz. The **Commscope LNX-6515DS-VTM** has a maximum gain of **14.6 dBd** at its main lobe at 700 MHz. The maximum gain of the antenna per the antenna manufactures supplied specifications, minus 10 dB, was used for all calculations. This value is a very conservative estimate as gain reductions for these particular antennas are typically much higher in this direction.
- 7) The antenna mounting height centerline of the proposed antennas is **175 feet** above ground level (AGL).
- 8) Emissions values for additional carriers were taken from the Connecticut Siting Council active database. Values in this database are provided by the individual carriers themselves.
- 9) All calculations were done with respect to uncontrolled / general public threshold limits.



T-Mobile Site Inventory and Power Data

Sector:	A	Sector:	B	Sector:	C
Antenna #:	1	Antenna #:	1	Antenna #:	1
Make / Model:	RFS APXV18-206513-C-A20	Make / Model:	RFS APXV18-206513-C-A20	Make / Model:	RFS APXV18-206513-C-A20
Gain:	13 dBd	Gain:	13 dBd	Gain:	13 dBd
Height (AGL):	175	Height (AGL):	175	Height (AGL):	175
Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)	Frequency Bands	2100 MHz (AWS)
Channel Count	4	Channel Count	4	Channel Count	4
Total TX Power(W):	180	Total TX Power(W):	180	Total TX Power(W):	180
ERP (W):	3,591.47	ERP (W):	3,591.47	ERP (W):	3,591.47
Antenna A1 MPE%	0.45	Antenna B1 MPE%	0.45	Antenna C1 MPE%	0.45
Antenna #:	2	Antenna #:	2	Antenna #:	2
Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM	Make / Model:	Commscope LNX-6515DS-VTM
Gain:	14.6 dBd	Gain:	14.6 dBd	Gain:	14.6 dBd
Height (AGL):	175	Height (AGL):	175	Height (AGL):	175
Frequency Bands	700 MHz	Frequency Bands	700 MHz	Frequency Bands	700 MHz
Channel Count	1	Channel Count	1	Channel Count	1
Total TX Power(W):	30	Total TX Power(W):	30	Total TX Power(W):	30
ERP (W):	865.21	ERP (W):	865.21	ERP (W):	865.21
Antenna A2 MPE%	0.23	Antenna B2 MPE%	0.23	Antenna C2 MPE%	0.23

Site Composite MPE%	
Carrier	MPE%
T-Mobile (Per Sector Max)	0.69 %
No Additional Carriers	NA
Site Total MPE %:	0.69 %

T-Mobile Sector A Total:	0.69 %
T-Mobile Sector B Total:	0.69 %
T-Mobile Sector C Total:	0.69 %
Site Total:	0.69 %

T-Mobile _Max Values per sector	# Channels	Watts ERP (Per Channel)	Height (feet)	Total Power Density ($\mu\text{W}/\text{cm}^2$)	Frequency (MHz)	Allowable MPE ($\mu\text{W}/\text{cm}^2$)	Calculated % MPE
T-Mobile AWS - 2100 MHz UMTS	2	598.58	175	1.51	AWS - 2100 MHz	1000	0.15%
T-Mobile AWS - 2100 MHz LTE	2	1,197.16	175	3.01	AWS - 2100 MHz	1000	0.30%
T-Mobile 700 MHz LTE	1	865.21	175	1.09	700 MHz	467	0.23%
						Total:	0.69%



Summary

All calculations performed for this analysis yielded results that were **within** the allowable limits for general public exposure to RF Emissions.

The anticipated maximum composite contributions from the T-Mobile facility as well as the site composite emissions value with regards to compliance with FCC's allowable limits for general public exposure to RF Emissions are shown here:

T-Mobile Sector	Power Density Value (%)
Sector A:	0.69 %
Sector B:	0.69 %
Sector C:	0.69 %
T-Mobile Per Sector Maximum:	0.69 %
Site Total:	0.69 %
Site Compliance Status:	COMPLIANT

The anticipated composite MPE value for this site assuming all carriers present is **0.69%** of the allowable FCC established general public limit sampled at the ground level. This is based upon values listed in the Connecticut Siting Council database for existing carrier emissions.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

A handwritten signature in black ink, appearing to read 'Scott Heffernan', is positioned above the contact information.

Scott Heffernan
RF Engineering Director
Centerline Communications, LLC
95 Ryan Drive, Suite 1
Raynham, MA 02767

ATTACHMENT 9



445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
T 914 761 1300
F 914 761 5372
cuddyfeder.com

March 6, 2017

Daniel M. Laub
dlaub@cuddyfeder.com

VIA FEDERAL EXPRESS

Lisa Pellegrini, First Selectman
Town of Somers
Town Hall
600 Main Street
Somers, CT 06071

Re: Eco-Site, Inc. & T-Mobile Northeast
Proposed Wireless Telecommunications Tower Facility
248 Hall Hill Road, Somers, Connecticut

Dear First Selectman Pellegrini:

I am writing to you on behalf of Eco-Site, Inc. ("Eco-Site") with respect to its proposal to construct a wireless communications tower facility at 248 Hall Hill Road in Somers. The purpose of our letter is to commence a formal consultation process with you and other Town of Somers officials prior to any application being filed by Eco-Site and T-Mobile Northeast ("T-Mobile") with the State of Connecticut Siting Council. Enclosed you will find a detailed Technical Report prepared by Eco-Site which includes information on T-Mobile's need for the new tower, alternatives evaluated and the environmental effects of the project as identified at this time.

Background and Wireless Services to be Provided

Eco-Site is a company that specializes in the development of tower infrastructure to serve a community's wireless communications needs and works closely with municipalities, landowners and commercial wireless carriers such as T-Mobile. This specific project is one of several that Eco-Site and T-Mobile representatives are collaborating on in an overall effort to provide reliable wireless services in Connecticut.

The growth in consumer use of mobile data and overall network demands continue to rise and requires the development of additional wireless infrastructure to reliably serve the public. With its large land area and varied terrain, identifying locations for wireless infrastructure to serve the Somers community can be challenging.

As noted in the Technical Report materials including data from T-Mobile, this proposed tower facility would provide reliable service to over 1200 residents in the area and several miles of roads. Current gaps in reliable service are notable and this proposed facility is one that will address coverage deficiencies and capacity constraints in T-Mobile's network and be available for collocation by other carriers to provide coverage and capacity in Somers.

The Tower Project

Eco-Site would own, maintain and operate the tower facility subject to any approval the Connecticut Siting Council may issue for the project. The project as currently proposed would consist of a 180' monopole structure within a fenced compound on an approximately 38.5 acre wooded parcel of land. T-Mobile would lease space for its antennas and equipment in the tower site compound. Should the Town EMS, fire or police services have a need, they could be accommodated at the tower site. The tower and fenced compound are further designed to support the antennas and equipment of other FCC licensed wireless carriers. The facility will be unmanned with no sanitary or water facilities and will generate an average of one vehicle trip per month by each carrier at the site, consisting of a service technician in a light duty van or truck.

State Siting Council - Balance Of Need With Environmental Impact

Connecticut State policy generally recognizes the need for new towers to serve the public and has designated the Connecticut Siting Council as the state agency with responsibility for reviewing and approving specific tower proposals. The Siting Council will be called on to evaluate this proposal once an application is filed with the agency. The Siting Council's focus is on balancing the need for a tower on a case-by-case basis with any significant adverse environmental impacts. Jurisdiction over any proposed cellular telecommunications facility rests exclusively with the Siting Council and would be in lieu of local zoning, wetlands and other types of municipal land use review and approvals.

Town Input & Procedural Next Steps

Eco-Site is providing the enclosed Technical Report to the Town of Somers in accordance with Section 16-50l of the Connecticut General Statutes. The statute requires consultation with a municipality in which a tower facility is proposed prior to submission of an application with the Siting Council. The purpose of the local consultation is to give the municipality in which the facility has been proposed an opportunity to provide the prospective applicant with any recommendations or preferences it may have prior to the filing of an application with the Siting Council.

Upon review of Section 16-50l(g) of the Connecticut General Statutes, you will note that municipalities also have the option of conducting a noticed public information session on any proposed cellular tower facility. State law requires any such information session to be held by the Town during the first 60 days of the 90-day period afforded to the municipalities for consultation with a prospective Siting Council applicant. As such, should Somers elect to conduct a public information meeting regarding this project, it should occur on or before May 5, 2017. For such public information sessions, our typical practice is for introductions to be made by a municipal official, have the project team make a presentation (usually a power point) and then respond to public questions moderated by a local official or agency.



In advance of any public information session, we and Eco-Site representatives would appreciate the opportunity to meet with you and the Town Zoning Officer to discuss the project in greater detail. Additionally, Eco-Site's visual consultants will be conducting a balloon float and leaf-off field review in the coming weeks and thereafter produce photosimulations and a final visual assessment that we plan on sharing with the Town as part of the technical consultation process. To the extent the Town has specific areas it would like to see photo documented as to potential visibility and this tower proposal we would like to make sure that is included and coordinated as part of the visual experts' scope of work.

In advance, we thank you for your consideration and will follow this correspondence with a call to your office to discuss next steps regarding the municipal consultation process. We look forward to meeting with you further on this project and learning more about Somers interests and any recommendations prior to filing an application with the Siting Council.

Very truly yours,

A handwritten signature in black ink, appearing to read 'Daniel Laub', is written over a horizontal line. The signature is fluid and cursive.

cc: Town of Somers Planning Commission
Town of Somers Zoning Commission
Town of Somers Conservation Commission
Kim LaFleur, Operations Manager, Town of Somers
Jennifer Roy, Land Use Technician/Zoning Officer
Eco-Site
T-Mobile
Christopher B. Fisher, Esq.

Laub, Daniel M.

From: Jennifer Roy <jroy@somersct.gov>
Sent: Monday, March 20, 2017 9:23 AM
To: Laub, Daniel M.
Cc: Jeff Bord
Subject: RE: 248 Hall Hill Road, Somers, CT

Good morning Dan,

Wednesday at 10:00am would work for us.

Jennifer

*Jennifer Roy, CZEO
Zoning Enforcement Officer/Land Use Technician
Town of Somers
Phone: 860-763-8220*

From: Laub, Daniel M. [mailto:DLaub@CUDDYFEDER.COM]
Sent: Friday, March 17, 2017 3:18 PM
To: Jennifer Roy
Cc: Jeff Bord
Subject: RE: 248 Hall Hill Road, Somers, CT

Hi Jennifer:

As a follow up to our conversation would next Wednesday at 9:30am or 10:00am work for a sit-down meeting? Thursday would also work. Please let me know.

Best regards,
Dan



Daniel M. Laub, Esq.
Associate
Cuddy & Feder LLP
445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
T 914 761 1300 | F 914 761 5372
DLaub@cuddyfeder.com
cuddyfeder.com

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From: Jennifer Roy [<mailto:jroy@somersct.gov>]
Sent: Wednesday, March 08, 2017 2:13 PM
To: Laub, Daniel M. <DLaub@CUDDYFEDER.COM>
Subject: 248 Hall Hill Road, Somers, CT

Good afternoon,

We have received your letter and information regarding the above site for proposed Wireless Telecommunications Tower Facility. I can be reached at the number below, at your convenience, to schedule a meeting with myself and Jeff Bord, Director of Land Use, Town of Somers.

Thank you,
Jennifer

*Jennifer Roy, CZEO
Zoning Enforcement Officer/Land Use Technician
Town of Somers
Phone: 860-763-8220*



445 Hamilton Avenue, 14th Floor
White Plains, New York 10601
T 914 761 1300
F 914 761 5372
cuddyfeder.com

June 29, 2017

Daniel M. Laub
dlaub@cuddyfeder.com

VIA FEDEX

Lisa Pellegrini, First Selectman
Town of Somers
Town Hall
600 Main Street
Somers, CT 06071

Re: Eco-Site, Inc. & T-Mobile Northeast
Proposed Wireless Telecommunications Tower Facility
248 Hall Hill Road, Somers, Connecticut

Dear First Selectman Pellegrini:

As a follow up to our prior correspondence and meetings with Town staff enclosed please find the final revised visual analysis report for the captioned proposed facility. As previously discussed with the Town we are providing this letter update to note that we will shortly be providing notice of the applicants' intent to file an application with the Siting Council by mail to abutting property owners as well as two times in the Journal Inquirer. Thereafter our office will file an application with the Connecticut Siting Council, likely to be the week of July 10th. A copy of the application will be provided to your office and all of the Town agencies copied on this letter.

Once filed the Siting Council will write to you notifying you of receipt of the application and requesting any municipal preferences or comments on the application. The Siting Council will also coordinate to hold a site visit, noticed balloon float and public hearing in the Town of Somers to review the application. This hearing will likely be sometime this September or October. As per our discussions with Town staff, given the comprehensive nature of the Siting Council's process no public information is required for this proposal.

In the meantime should you have any questions regarding the enclosed or anything regarding the proposal please do not hesitate to contact me. Thank you once again for your time and consideration of this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read 'D. Laub', is written over a horizontal line. The signature is fluid and cursive.

Daniel Laub

Enclosure

cc: Town of Somers Planning Commission
Town of Somers Zoning Commission
Town of Somers Conservation Commission



June 29, 2017
Page 2

Kim LaFleur, Operations Manager, Town of Somers
Jeffrey Bord, Town Engineer, Town of Somers
Jennifer Roy, Land Use Technician/Zoning Officer, Town of Somers
Eco-Site
T-Mobile
Christopher B. Fisher, Esq.

ATTACHMENT 14

ATTACHMENT 10

July 7, 2017

VIA CERTIFIED MAIL/
RETURN RECEIPT
ADDRESSEE
ADDRESS

Re: Eco-Site and T-Mobile
Wireless Telecommunications Tower Facility
248 Hall Hill Road, Somers, Connecticut

Dear _____:

We are writing to you on behalf of our clients Eco-Site and T-Mobile with respect to the above referenced matter and our clients' intent to file an application with the State of Connecticut Siting Council for approval a proposed wireless communications tower facility (the "Facility") within the Town of Somers.

State law requires that record owners of property abutting a parcel on which a facility is proposed be sent notice of an applicant's intent to file an application with the Siting Council. The Facility candidate is located at 248 Hall Hill Road in Somers, Connecticut. Included with this letter please find a Notice of this application with details of the proposed Facility.

The location, height and other features of the Facility are subject to review and potential change by the Connecticut Siting Council under the provisions of Connecticut General Statutes §16-50g et seq.

If you have any questions concerning this application, please contact the Connecticut Siting Council or the undersigned after July 14, 2017, the date which the application is expected to be on file.

Very truly yours,

Daniel M. Laub

Enclosure

NOTICE

Notice is hereby given, pursuant to Section 16-50/(b) of the Connecticut General Statutes and Section 16-50/-1(e) of the Regulations of Connecticut State Agencies of an Application to be filed with the Connecticut Siting Council (“Siting Council”) on or after July 14, 2017 by Eco-Site, Inc. (“Eco-Site”) together with T-Mobile for a certificate of environmental compatibility and public need for the construction and maintenance of a wireless telecommunications facility in Somers, Connecticut.

The proposed facility is located on a parcel of land owned by Debra Romano located at 248 Hall Hill Road in the Town of Somers and identified on the Town of Somers Assessor’s Map as Map 7 Lot 72 (the “Property”). The proposed facility is located in the central portion of the Property and is proposed at a height of 180’ above grade (“AGL”). The Property is an approximately 38.5 acre parcel which is currently used as a home with accessory hay fields. The Facility is proposed to allow commercial wireless services in western Somers. The tower, antennas and ground equipment will be located within a 2,500 s.f. fenced equipment compound area. Vehicle and utility access to the facility would be from Hall Hill Road over a 1,125’ access drive to the tower compound.

The location, height and other features of the proposed Facility are subject to review and potential change under provisions of the Connecticut General Statutes Sections 16-50g et. seq.

The Application explains the need, purpose and benefits of the facility and also describes the environmental impacts of the proposed facility. The facility will be available for co-location by other wireless carriers.

A balloon, representative of the proposed height of the facility, will be flown at the proposed site on the first day of the Siting Council public hearing on the Application, which will take place in the Town of Somers, or such other date specified by the Siting Council and a time to be determined by the Siting Council, but anticipated to be between the hours of 12pm and 5pm.

Interested parties and residents of Somers, Connecticut are invited to review the Application during normal business hours after July 14, 2017, when the application is anticipated to be filed, at the following offices:

Connecticut Siting
Council
10 Franklin Square
New Britain, CT 06051

Ann Marie Logan
Town Clerk
Town of Somers
PO Box 308
600 Main Street
Somers, CT 06071

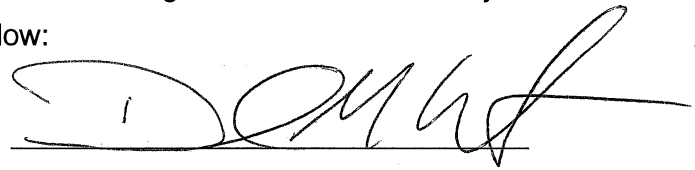
or the offices of the undersigned. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

Daniel M. Laub, Esq.
Cuddy & Feder LLP
445 Hamilton Ave, 14th Floor
White Plains, New York 10601
(914) 761-1300
Attorneys for the Applicants

CERTIFICATION OF SERVICE

I hereby certify that on the 7th day of July 2017, a copy of the foregoing notice of the intent to file an Application with the Connecticut Siting Council was sent by certified mail, return receipt requested, to the list below:

Dated: July 7, 2017



Cuddy & Feder LLP
45 Hamilton Avenue, 14th Floor
White Plains, New York 10601
Attorneys for:
New Cingular Wireless PCS, LLC (AT&T)

Romano, Debra	248 Hall Hill Road	Somers	CT	06701
Flebotte, Barbara E	67 George Wood Road	Somers	CT	06701
Dion, Leonard S	280 Hall Hill Road	Somers	CT	06701
Richardson, Donna M & Bert C	289 Hall Hill Road	Somers	CT	06701
Barnett, Todd & Dianne	273 Hall Hill Road	Somers	CT	06701
Lynch, Earl H	267 Hall Hill Road	Somers	CT	06701
Roberts, Cheryl A	3 Brace Road	Somers	CT	06701
Shallowbrook Equestrian Center Trust	247 Hall Hill Road	Somers	CT	06701
Correira, Richard T & Caroline A	239 Hall Hill Road	Somers	CT	06701
Zimowski, John J	233 Hall Hill Road	Somers	CT	06701
Sulikowski, George P & June L	227 Hall Hill Road	Somers	CT	06701
Reissig, Robert & Sara	228 Hall Hill Road	Somers	CT	06701
DiPinto, Richard E & Cheryl T	222 Hall Hill Road	Somers	CT	06701
Kruzel, Casimir J Successor Trustee	210 Hall Hill Road	Somers	CT	06701
Costanzo, Anthony & Donna	15 Old Farm Road	Somers	CT	06701
Silverman, Carl G & Sandra L	23 Old Farm Road	Somers	CT	06701
Silverman, Carl G & Sandra L	29 Old Farm Road	Somers	CT	06701
Robidoux, Raymond A & Denise L	37 Old Farm Road	Somers	CT	06701
Nadler, Robert T Jr & Gerogia K	43 Old Farm Road	Somers	CT	06701

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Name (print or type)

Jeanene Chambliss
Name (signature)

(CONTINUED ON NEXT PAGE)

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PUBLIC NOTICE

NOTICE

Notice is hereby given, pursuant to Section 16-50l(b) of the Connecticut General Statutes and Section 16-50l-1(e) of the Regulations of Connecticut State Agencies of an Application to be filed with the Connecticut Siting Council ("Siting Council") on or after July 14, 2017 by Eco-Site, Inc. ("Eco-Site") together with T-Mobile for a certificate of environmental compatibility and public need for the construction and maintenance of a wireless telecommunications facility in Somers, Connecticut.

The proposed facility is located on a parcel of land owned by Debra Romano located at 248 Hall Hill Road in the Town of Somers and identified on the Town of Somers Assessor's Map as Map 7 Lot 72 (the "Property"). The proposed facility is located in the central portion of the Property and is proposed at a height of 180' above grade ("AGL"). The Property is an approximately 38.5 acre parcel which is currently used as a home with accessory hay fields. The Facility is proposed to allow commercial wireless services in western Somers. The tower, antennas and ground equipment will be located within a 2,500 s.f. fenced equipment compound area. Vehicle and utility access to the facility would be from Hall Hill Road over a 1,125' access drive to the tower compound.

The location, height and other features of the proposed Facility are subject to review and potential change under provisions of the Connecticut General Statutes Sections 16-50g et. seq.

The Application explains the need, purpose and benefits of the facility and also describes the environmental impacts of the proposed facility. The facility will be available for co-location by other wireless carriers.

A balloon, representative of the proposed height of the facility, will be flown at the proposed site on the first day of the Siting Council public hearing on the Application, which will take place in the Town of Somers, or such other date specified by the Siting Council and a time to be determined by the Siting Council, but anticipated to be between the hours of 12pm and 5pm.

Interested parties and residents of Somers, Connecticut are invited to review the Application during normal business hours after July 14, 2017, when the application is anticipated to be filed, at the following offices:

Connecticut Siting Council	Ann Marie Logan
10 Franklin Square	Town Clerk
New Britain, CT 06051	Town of Somers
	PO Box 308
	600 Main Street
	Somers, CT 06071

or the offices of the undersigned. All inquiries should be addressed to the Connecticut Siting Council or to the undersigned.

Daniel M. Laub, Esq.
Cuddy & Feder LLP
445 Hamilton Ave, 14th Floor
White Plains, New York 10601
(914) 761-1300
Attorneys for the Applicants

ATTACHMENT 11

Application Guideline	Location in Application
(A) An Executive Summary on the first page of the application with the address, proposed height, and type of tower being proposed. A map showing the location of the proposed site should accompany the description;	I.B: Executive Summary, page 1 Attachment 3: Description and Design of Proposed Facility
(B) A brief description of the proposed facility, including the proposed locations and heights of each of the various proposed sites of the facility, including all candidates referred to in the application;	I.B: Executive Summary, page 1 V: Facility Design: page 15
(C) A statement of the purpose for which the application is made;	I.A: Purpose and Authority, page 1
(D) A statement describing the statutory authority for such application;	I.A: Purpose and Authority, page 1
(E) The exact legal name of each person seeking the authorization or relief and the address or principle place of business of each such person. If any applicant is a corporation, trust, or other organized group, it shall also give the state under the laws of which it was created or organized;	I.C: The Applicants, page 2
(F) The name, title, address, and telephone number of the attorney or other person to whom correspondence or communications in regard to the application are to be addressed. Notice, orders, and other papers may be served upon the person so named, and such service shall be deemed to be service upon the applicant;	I.C: The Applicant, page 2
(G) A statement of the need for the proposed facility with as much specific information as is practicable to demonstrate the need including a description of the proposed system and how the proposed facility would eliminate or alleviate any existing deficiency or limitation;	III.A: Statement of Need, page 4 Attachment 1: Statement of Need with Report
(H) A statement of the benefits expected from the proposed facility with as much specific information as is practicable;	III.B: Statement of Benefits, page 8
(I) A description of the proposed facility at the proposed prime and alternative sites including: <ol style="list-style-type: none"> (1) Height of the tower and its associated antennas including a maximum "not to exceed height" for the facility, which may be higher than the height proposed by the Applicant; (2) Access roads and utility services; (3) Special design features; (4) Type, size, and number of transmitters and receivers, as well as the signal frequency and conservative worst-case and estimated operational level approximation of electro magnetic radiofrequency power density levels (facility using FCC Office of Engineering and Technology Bulletin 65, August 1997) at the base of the tower base, site compound boundary where persons are likely to be exposed to 	I.B. Executive Summary, pages 1 V: Facility Design, page 15 Attachment 3: Description and Design of Proposed Facility Attachment 5: Environmental Assessment VI.C: Power Density, page 17 Attachment 1: Statement of Need with Report

Application Guideline	Location in Application
<p>maximum power densities from the facility;</p> <p>(5) A map showing any fixed facilities with which the proposed facility would interact;</p> <p>(6) The coverage signal strength, and integration of the proposed facility with any adjacent fixed facility, to be accompanied by multi-colored propagation maps of red, green and yellow (exact colors may differ depending on computer modeling used, but a legend is required to explain each color used) showing interfaces with any adjacent service areas, including a map scale and north arrows; and</p> <p>(7) For cellular systems, a forecast of when maximum capability would be reached for the proposed facility and for facilities that would be integrated with the proposed facility.</p>	<p>Attachment 1: Statement of Need with Report</p>
<p>(J) A description of the named sites, including :</p> <p>(1) The most recent U.S.G.S. topographic quadrangle map (scale 1 inch = 2000 feet) marked to show the site of the facility and any significant changes within a one mile radius of the site;</p> <p>(2) A map (scale not less than 1 inch = 200 feet) of the lot or tract on which the facility is proposed to be located showing the acreage and dimensions of such site, the name and location of adjoining public roads or the nearest public road, and the names of abutting owners and the portions of their lands abutting the site;</p> <p>(3) A site plan (scale not less than 1 inch = 40 feet) showing the proposed facility, set back radius, existing and proposed contour elevations, 100 year flood zones, waterways, and all associated equipment and structures on the site;</p> <p>(4) Where relevant, a terrain profile showing the proposed facility and access road with existing and proposed grades; and</p> <p>(5) The most recent aerial photograph (scale not less than 1 inch = 1000 feet) showing the proposed site, access roads, and all abutting properties.</p>	<p>Attachment 3: Description and Design of Proposed Facility</p> <p>Attachments 7: Visual Analysis Report</p>
<p>(K) A statement explaining mitigation measures for the proposed facility including:</p> <p>(1) Construction techniques designed to specifically minimize adverse effects on natural areas and sensitive areas;</p> <p>(2) Special design features made specifically to avoid or minimize adverse effects on natural areas and sensitive areas, including but not limited to a yield point, if applicable;</p> <p>(3) Establishment of vegetation proposed near residential, recreation, and scenic areas; and</p> <p>(4) Methods for preservation of vegetation for wildlife habitat and screening; and</p>	<p>Attachment 3: Description and Design of Proposed Facility</p> <p>Attachment 5: Environmental Assessment</p> <p>VI: Environmental Compatibility, page 17</p> <p>Attachment 7: Visual Analysis Report</p>

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<p>(5) Other environmental concerns identified by the applicant, the Council, or any public agency, including but not limit to, where applicable: Coastal Consistency Analysis, Connecticut Heritage Areas, Ridgeline Protection Zones, DOT Scenic Lands, State Parks and Forests, Agricultural Lands, Wild and Scenic Rivers, Protected Rivers, Endangered, Threatened or Special Concern Species</p>	
<p>(L) A description of the proposed site and any alternative sites, including the zoning classification, planned land uses and surrounding areas;</p>	<p>VII: Consistency with Land Use Regulations, page 14</p>
<p>(M) A description of the scenic, natural, historic, and recreational characteristics of the proposed sites and any alternative sites and surrounding areas including but not limited to officially designated nearby hiking trails, nature preserves and scenic roads;</p>	<p>VI: Environmental Compatibility, page 17 Attachment 7: Visual Analysis Report</p>
<p>(N) Visibility Analyses of the proposed site area and any alternative site areas including, but not limited to:</p> <ul style="list-style-type: none"> (1) A viewshed analysis consisting of a two-mile radius from visually impacted areas such as residential developments, recreational areas, and historic sites; (2) Photographic documentation; (3) Balloon float photographs; (4) Photographic simulations in "leaf-on" and "leaf-off" conditions, where possible, and; (5) If proposed in close proximity to a shoreline, including lakes and rivers, photographic documentation from open waters, where possible. <p>(N-a) An affidavit for each balloon float conducted at the proposed site and any alternative sites including the date, time and demonstrated height.</p>	<p>Attachment 7: Visual Analysis Report VI.A. Visual Assessment, page 17</p>
<p>(O) A list describing the type and height of all existing and proposed towers and facilities within a four mile radius within the site search area, or within any other area from which use of the proposed towers might be feasible from a location standpoint for purposes of the application;</p>	<p>Attachment 2: Existing Facilities List</p>
<p>(P) A description of efforts to share existing towers, including but not limited to installations on electric transmission poles, or to consolidate telecommunications antennas of public and private services onto the proposed facility including efforts to offer tower space, where feasible, at no charge for space for municipal antennas;</p>	<p>I.B: Executive Summary IV.A: Site Selection IV.B: Tower Sharing V: Facility Design, p. 15 Attachment 2: Site Search Summary</p>

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(Q) A description of the technological alternatives and a statement containing justification for the proposed facility;	III.C: Technological Alternatives, page 9 Attachment 1: Statement of Need with Radio Frequency Report
(R) A description of rejected sites with a U.S.G.S. topographic quadrangle map (scale 1 inch = 2,000 feet) marked to show the location of rejected sites;	IV.A: Site Selection, page 10 Attachment 2: Site Search Summary
(S) A detailed description and justification for the site(s) selected, including a description of siting criteria and the narrowing process by which other possible sites were considered and eliminated, including, but not limited to, environmental effects, cost differential, coverage lost or gained, potential interference with other facilities, and signal loss due to geographical features compared to the proposed site(s);	IV.A: Site Selection, page 10 Attachment 2: Site Search Summary
(T) A statement describing hazards to human health, if any, with such supporting data including signal frequency, power density and references to regulatory standards;	VI: Environmental Compatibility, page 17
(U) A statement of estimated costs for site acquisition, construction, and equipment for a facility at the various proposed sites of the facility, including all candidates referred to in the application;	IX.A: Overall Estimated Cost, page 20
(V) A schedule showing the proposed program of site acquisition, construction, completion, operation and relocation or removal of existing facilities for the named sites;	IX.B: Overall Scheduling, page 20
(W) A statement indicating that, weather permitting, the applicant will raise a balloon with a diameter of at least three feet, at the sites of the various proposed sites of the facility, including all candidates referred to in the application, on the day of the Council's first hearing session on the application or at a time otherwise specified by the Council. For the convenience of the public, this event shall be publicly noticed at least 30 days prior to the hearing on the application as scheduled by the Council; An affidavit of the balloon float conducted on the day of the first hearing session including the date, time, demonstrated height and weather condition shall be filed with the Council as soon as is practicable; and	VI. A: Visual Assessment, page 17
(X) Such information as any department or agency of the state exercising environmental controls may, by regulation, require including: 1. A listing of any Federal, State, regional, district, and	VI: Environmental Compatibility, page 18

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<p>municipal agencies, including but not limited to the Federal Aviation Administration; Federal Communications Commission; State Historic Preservation Officer; State Department of Environmental Protection; and local conservation, inland wetland, and planning and zoning commissions with which reviews were conducted concerning the facility, including a copy of any agency position or decision with respect to the facility; and</p> <p>2. The most recent conservation, inland wetland, zoning, and plan of development documents of the municipality, including a description of the zoning classification of the site and surrounding areas, and a narrative summary of the consistency of the project with the Town's regulations and plans.</p>	<p>VII: Consistency with Municipal Land Use Regulations, page</p> <p>Bulk Filing</p>
<p>(Y) Description of proposed site clearing for access road and compound including type of vegetation scheduled for removal and quantity of trees greater than six inches diameter at breast height and involvement with wetlands;</p>	<p>V: Facility Design, page 15</p> <p>Attachment 3</p>
<p>(Z) Such information as the applicant may consider relevant.</p>	