ATTACHMENT 4

Attachment 4

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

AT&T's environmental consultants and soil scientists have evaluated the proposed tower site, surrounding wetland and watercourses, considered impacts and identified mitigation measures. As noted in the enclosed reports, the site is characterized by a disturbed upland fill area with early successional upland forest with prior development activities bisecting wetlands on and off-site. Properties in the area contain headwater wetlands that drain to the Mianus River. No permanent direct wetland impacts will result from the AT&T tower site facility. Development of the tower site is largely in previously disturbed areas of the site, has secondary impacts to wetlands and no alternative locations for the tower site were identified. Wetland mitigation measures are proposed to include a wetland protection plan during construction and postdevelopment enhancements to disturbed wetland buffer areas. Details of the wetlands review and the proposed mitigation are included in the Wetlands Investigation prepared by APT dated July 17, 2013 and a Preliminary Wetland Impact Analysis also prepared by APT and dated October 7, 2013.

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 diesel fuel generator with secondary containment systems will comply with Connecticut Department of Energy and Environmental Protection ("CTDEEP") air standards for such facilities.

C. LAND

Some tree removal, clearing and grading will be required for the facility. 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, airconditioning 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.

E. POWER DENSITY

The cumulative worst-case calculation of power density from AT&T's operations at the facility would be 15.79% of the MPE standard. Attached is a copy of a Power Density Report for the facility.

F. VISIBILITY

The Visibility Analysis included as Attachment 5 provides an evaluation of the anticipated potential visual impact of the proposed monopine tower. The preliminary potential visibility was assessed within an approximately two (2) mile radius using a computer-based, predictive view shed model and in field reviews. Anticipated year-round visibility associated with the proposed facility would be limited to a very small highly localized geographic footprint of 20 acres within less than a quarter mile of the site extending north and south over parts of the adjacent cemetery, and some residences along West Hill Road and Akbar Road. Views are also anticipated at a few isolated open locations in the general area during leaf off/seasonal conditions. The Visibility Analysis which includes a viewshed map, photographs of existing conditions and simulations of the proposed facility from several vantage points. No schools or licensed child day care centers are located within 250' of the site. A combination of the relatively flat terrain, mature stands of trees in this part of Stamford and use of a camouflage tower design all serve to substantially minimize the visibility of the Facility and present no significant adverse visual impacts to the Westover and Roxbury neighborhoods.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The Connecticut State Historic Preservation Officer ("SHPO") has been contacted and their review of AT&T's data and conclusion that the Site will have no impact on historic or cultural resources is pending. Indeed, there is no listed historic site or district proximate to the tower and the nearest historic resource (Fort Stamford) will have no views of the Facility. Further, AT&T's consultants have determined that development of the Facility would not impact any cultural are archeological resources as set forth in the enclosed report prepared by Heritage Consultants, The Connecticut Department of Energy and Environmental LLC. Protection ("CTDEEP") has issued a letter determining that there will be no known impact on any extant populations of Federal or State Endangered, Threatened or Special Concern Species that may occur in the vicinity of the Property. As noted in the enclosed wetlands reports, additional mitigation measures will be taken during construction to minimize any impacts on any amphibians and reptiles that may use nearby wetland/vernal pool habitats. Subject to confirmation by SHPO that the project will not impact any listed or eligible historic resources,

the site is anticipated to be exempt from federal environmental assessment in accordance with the FCC's regulations implementing the National Environmental Policy Act of 1969 ("NEPA").

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					
41-05-02.2 north					
073-34-02.4 west					
Measurements (Meters)					
36.6					
36.6					
34.1					
Structure Type					
MTOWER - Monopole					

Tower Construction Notifications

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

CLOSE WINDOW)



FAA 1-A SURVEY CERTIFICATION

Site Name: Site Number: Site Address:		Stamford SR1887 560 West Hill Road Stamford, CT 06902			
Horizontal Datum:		NAD 83	X GPS survey	□ Ground survey	
Vertical Datum:		NAVD 1988 (AMSL)	X GPS survey	□ Ground survey	
Structure Type:		X Proposed Tower	□ Existing Tower	□ Roof Top	
			□ Smoke Stack	□ Other:	
Latitude:		41°-05'-02.2" N			
Longitude:		73°-34'-02.4" W			
Average Ground Elevation:		112' AMSL Elevation (in feet)			
Proposed Tower Height:		120' (AGL)			
Certification:	I certify that the latitude of 41°-05'-02.2"N and the longitude of 73°-34'-02.4"W are accurate to within +/- 20 feet horizontally, and that the site elevation of 112' AMSL is accurate to within +/- 3 feet vertically. The horizontal datum (coordinated) are in terms of the North American Datum of 1983 (NAD 83) and are expressed in degrees, minutes and seconds, to the nearest tenth of a second. The vertical datum is in terms of the North American Vertical Datum of 1988 (NAVD 88) and is determined to the nearest foot.				
Company:	Project	Clough Harbour and Associates, LLP Project number 18301-1041			
Surveyor Signature/Seal:	Willia	am S. Lucarelli L.S. 16529 No. 10020			
Date:	July 31	1, 2013			



Michael Lawton SAI Communications 260 Cedar Hill St. Marlborough, MA 01752 <u>Mike.Lawton@sai-comm.com</u>

October 18, 2013

Connecticut Siting Council

Subject: AT&T Wireless, S1887 – Stamford West Hill Road

Dear Connecticut Siting Council:

At the request of AT&T Wireless, SAI Communications has performed an assessment of the RF Power Density at the proposed site located at 560 West Hill Road, Stamford, CT.

Calculations were done in compliance with FCC OET Bulletin 65. This report provides an FCC compliance assessment based on a "worst-case" analysis that all transmitters are simultaneously operating at full power and pointing directly at the ground.

FCC OET Bulletin 65 formula:

$$S = \frac{2.56 * 1.64 * ERP}{4 * \pi * R^2}$$

Transmission Mode	Antenna Centerline AGL (ft)	Frequency (MHz)	Number of Channels	Effective Radiated Power per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm ²)	% MPE (Uncontrolled/ General Public)
AT&T UMTS	116	850	2	500.00	0.0267	0.5667	4.72%
AT&T UMTS	116	1900	2	500.00	0.0267	1	2.67%
AT&T LTE	116	700	2	500.00	0.0267	0.4667	5.73%
AT&T LTE	116	2100	2	500.00	0.0267	1	2.67%
			Total				15.79%

Conclusion: AT&T's proposed antenna installation is calculated to be within 15.79% of FCC Standard for General Public/Uncontrolled Maximum Permissible Exposure (MPE).

Sincerely,

Michael Lawton SAI Communications



WETLAND INVESTIGATION

July 17, 2013

Site Acquisitions, Inc. 500 Enterprise Drive, Suite 3A Rocky Hill, CT 06067

Attn: Tim Burks

APT Project No.: CT193990

Re: Proposed AT&T Facility 560 West Hill Road Stamford, Connecticut

Dear Mr. Burks,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by New Cingular Wireless PCS, LLC ("AT&T") at 560 West Hill Road in Stamford, Connecticut ("Subject Property"). At your request, Matthew Gustafson and Dean Gustafson, Connecticut registered Soil Scientist and Professional Soil Scientists, respectively, with APT conducted an inspection of the Subject Property on June 22, 2013 to determine the presence or absence of wetlands and watercourses within approximately 200 feet of proposed development activities ("Study Area"). The delineation methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the *Corps of Engineers Wetland Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual*: Northcentral and Northeast Region, Version 2.0 (January 2012). The results of this wetland investigation are provided below.

Site and Project Description:

The Subject Property consists of an approximately 3.2 acre parcel developed with a residence identified as 560 West Hill road in Stamford, Connecticut. The area proposed for the wireless communications facility is located in the eastern portion of the Subject Property, south of the existing gravel driveway and east of the residence. The proposed Facility location is characterized by a disturbed fill area with early successional upland forest. The surrounding land-use is dominated by residential development along with two cemeteries that adjoin the Subject Property to the east and south.

One wetland area was delineated within the Study Area consisting of a forested depressional wetland system that was likely historically bisected by the existing gravel driveway that serves the residence. Please refer to the enclosed Wetlands Delineation Map for approximate locations of the identified wetland resource areas. Wetlands were marked with pink and blue plastic flagging tape numbered with the following sequence: WF 1-01 to 1-27 (south side of property) and WF 2-01 to 2-15 (north side of property). General weather conditions encountered during the above-referenced inspection include mid 80° F temperatures with generally sunny skies.

Regulation of Wetlands:

Wetlands and watercourses are regulated by local, state and federal regulations, with each regulatory agency differing slightly in their definition and regulatory authority of resource areas, as further discussed below. The proposed Facility is under the exclusive jurisdiction of the State of Connecticut Siting Council and therefore

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

⊠ 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

exempt from local regulation, although local wetland regulations are considered by the Siting Council. If wetlands are identified on the Subject Property and direct impact is proposed, those wetlands may be considered Waters of the United States and therefore the activity may also be subject to jurisdiction by the U.S. Army Corps of Engineers ("ACOE") New England District.

City of Stamford: The City of Stamford Environmental Protection Board regulates activities within wetlands and watercourses and within 50 feet of wetlands and within 100 feet of watercourses (for those sites located within a public water supply watershed 1) through administration of the Connecticut Inland Wetlands and Watercourses Act (IWWA). State of Connecticut: Freshwater Wetlands: The IWWA requires the regulation of activities affecting or having the potential to affect wetlands under Sec. 22a-36 through 22a-45 of the Connecticut General Statutes. The IWWA is administered through local municipalities. The IWWA defines wetlands as areas of poorly drained, very poorly drained, floodplain, and alluvial soils, as delineated by a soil scientist. Watercourses are defined as bogs, swamps, or marshes, as well as lakes, ponds, rivers, streams, etc., whether natural or man-made, permanent or intermittent. Intermittent watercourse determinations are based on the presence of a defined permanent channel and bank, and two of the following characteristics: (1) evidence of scour or deposits of recent alluvium or detritus; (2) the presence of standing or flowing water for a duration longer than a particular storm incident; and (3) the presence of hydrophytic vegetation. ACOE: The U.S. Army Corps of Engineers regulates the discharge of dredged or fill material into waters of the United States under Section 404 of the Clean Water Act. Waters of the United States are navigable waters, tributaries to navigable

Act. Waters of the United States are havigable waters, tributaries to havigable waters, wetlands adjacent to those waters, and/or isolated wetlands that have a demonstrated interstate commerce connection. The ACOE Wetlands Delineation Manual defines wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the unauthorized obstruction or alteration of any navigable water of the United States. This section provides that the construction of any structure in or over any navigable water of the United States, or the accomplishment of any other work affecting the course, location, condition, or physical capacity of such waters is unlawful unless the work has been approved by the ACOE.

¹ The Subject Property is located within the Mianus River public water supply watershed; the Greenwich District Mianus Reservoir System is a source of public drinking water that is maintained and operated by the Aquarion Water Company of Connecticut.

Soil Description:

Soil types encountered throughout the Subject Property were generally inconsistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS")². The NRCS mapped the majority of the Subject Property as Timakwa and Natchaug soils, which consist of moderately deep organic wetland soils. The majority of the Subject Property, including the proposed Facility location, was found to contain disturbed upland soils classified as Udorthents, with wetland soils identified as Walpole and Scarboro soils. Detailed descriptions of wetland and upland soil types are provided below.

Wetland Soils:

The **Scarboro** series consists of very deep, very poorly drained soils on outwash plains, deltas, and terraces. They are nearly level soils in depressions. The water table is at or near the surface for 6 to 12 months of the year, and many areas are ponded for short periods. This is a mineral soil, but it has a mucky surface horizon.

The **Walpole** series consists of very deep, poorly drained sandy soils formed in water-sorted glacial outwash and stratified drift. They are nearly level to gently sloping soils in low-lying positions on terraces and plains. Walpole soils have a water table within 1' of the soil surface much of the year.

Upland Soils:

Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned.

Wetlands Discussion:

Wetland 1 ³ (WF 1-01 to 1-27 & WF 2-01 to 2-15)	System Palustrine	Subsystem	Class Forested	Subclass Broad-leaved Deciduous	Water Regime Seasonally Flooded	Special Modifier
Watercourse Type	Perennial	Intermittent	Tidal	Special Aquatic Habitat (none)	Vernal Pool	Other

Wetland 1 Classification Summary:

Wetland 1 Description:

Wetland 1 is the northern extent of a large forested depressional wetland system, which forms one of many headwater wetland tributaries that drain into the Mianus River, which is located ±0.7 mile southwest of the Subject Property. The delineated wetland boundary is generally characterized by a distinct slope break associated with fill material. A small culvert is located near the north end of the existing gravel driveway, conveying surface water flow from the north wetland area into the south wetland area. Within the interior and southern end of the wetland area identified by flags WF 1-01 to 1-27 is a diffuse intermittent watercourse that flows to the south.

² NRCS Web Soil Survey, <u>http://websoilsurvey.nrcs.usda.gov/app/</u>, accessed on June 18, 2013.

³ Cowardin, L. M., V. Carter, F. C. Golet, E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. Jamestown, ND: Northern Prairie Wildlife Research Center Online. http://www.npwrc.usgs.gov/resource/wetlands/classwet/index.htm - contents.

Wetland 1 Dominant Vegetation:

Dominant Wetland Species	Dominant Adjacent Upland Species
Common Name (Latin Name)	Common Name (Latin Name)
Red Maple (Acer rubrum)	Quaking Aspen (Populus tremuloides)
Bebb Willow (Salix bebbiana)	Red Maple (Acer rubrum)
Multiflora Rose* (<i>Rosa multiflora</i>)	Weeping Willow (Salix babylonica)
Spicebush (Lindera benzoin)	Multiflora Rose* (<i>Rosa multiflora</i>)
Winged Euonymus* (Euonymus alata)	Japanese Barberry* (<i>Berberis thunbergii</i>)
Winterberry (<i>llex verticillata</i>)	Japanese Knotweed* (<i>Polygonum cuspidatum</i>)
Northern Arrow-wood (Viburnum	Mugwort* (Artemisia vulgaris)
Sweet Pepperbush (Clethera alnifolia)	
Privet* (Ligustrum spp.)	
Virginia Creeper (Parthenosisus	
Asiatic Bittersweet* (Celastrus orbiculatus)	
Poison Ivy (Toxicodendron radicans)	
Cinnamon Fern (Osmunda cinnamomea)	
Skunk Cabbage (Symplocarpus foetidus)	
Broad-Leaf Cattail (Typha latifolia)	
Common Reed* (Phragmites australis)	
Garlic Mustard* (Alliaria petiolata)	
Jewelweed (Impatiens capensis)	

Summary:

Based on APT's understanding of the proposed AT&T development, wetlands are in close proximity to the compound. Although direct wetland impacts are currently not anticipated, APT will provide an evaluation of the project's potential wetland impacts under separate cover following review of the project's site plans when they become available.

If you have any questions regarding the above-referenced information, please feel free to contact me at (860) 984-9515 or at dgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

Dean Austapa

Digitally signed by Dean Gustafson DN: cn=Dean Gustafson, o=All-Points Technology Corp., P.C., ou=Professional Soil Scientist, email=dgustafson@allpointstech.com, c=US Date: 2013.07.17 14:59:41 -04'00'

Dean Gustafson Professional Soil Scientist

Enclosure

Wetlands Delineation Map



Tuesday, July 16, 2013

TECHNOLOGY CORPORATION

Subject Property



PRELIMINARY WETLAND IMPACT ANALYSIS

October 7, 2013

Site Acquisitions, Inc. 500 Enterprise Drive Rocky Hill, CT 06067

Attn: Tim Burks

APT Project No.: CT193843

Re: Proposed AT&T Facility 560 West Hill Road Stamford, Connecticut

Dear Mr. Burks,

All-Points Technology Corporation, P.C. ("APT") understands that a wireless telecommunications facility ("Facility") is proposed by New Cingular Wireless PCS, LLC ("AT&T") at 560 West Hill Road in Stamford, Connecticut ("subject property"). As proposed, the Facility would consist of a 120-foot tall monopole, antenna arrays and groundmounted equipment shelter located within a 4,502 square foot compound. Access to the proposed Facility would utilize the existing gravel driveway (to be improved with 3 inches of new gravel surface) along with a short extension of new 12-foot wide gravel access drive. At your request, APT has completed a preliminary assessment of impacts to wetlands located on the subject property which will be affected by proposed construction of the Facility. This evaluation is based on APT's review of site plans prepared by CHA (titled SR1887 Stamford, 560 West Hill Road, Stamford, CT, latest revision date 07/25/13) and our wetland delineation (as detailed in APT's Wetland Investigation report, dated July 17, 2013, provided previously under separate cover). The Site Access Map, Sheet No. C02 from the referenced site plans, is enclosed providing a depiction of the proposed development activities. The findings of this wetland impact assessment are presented below.

Introduction

APT soil scientists conducted an inspection of the subject property on June 22, 2013 to determine the presence or absence of wetlands and watercourses. A summary of our wetland investigation findings is provided below.

The subject property consists of an approximately 3.2 acre parcel developed with a residence that is generally centrally located on the lot. The area proposed for the wireless communications Facility is located in the northeastern portion of the subject property, south of the existing gravel driveway and northeast of the residence. The proposed Facility location is characterized by a disturbed upland fill area with early successional upland forest. One wetland area was delineated immediately adjacent to the proposed Facility location consisting of a forested depressional wetland system that was likely historically bisected by the existing gravel driveway that serves the residence. This historic disturbance resulted in wetlands being located on either side of the existing gravel driveway

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

☑ 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

in addition to encompassing the majority of the subject property surrounding the centrally located residence. A summary of the wetland characteristics is provided below.

Wetland Description

Wetland 1 is the northern extent of a large forested depressional wetland system which forms one of many headwater wetland tributaries that drain into the Mianus River, located ± 0.7 mile southwest of the subject property. The delineated wetland boundary is generally characterized by a distinct slope break associated with fill material. A small culvert is located near the north end of the existing gravel driveway, conveying surface water flow from the north wetland area into the south wetland area. This wetland may seasonally pond water that could result in support of vernal pool habitat. However, no overt use of this wetland by obligate or facultative vernal pool species for breeding was observed during the June 22nd inspection. A copy of the Wetlands Delineation Map provided in APT's Wetland Investigation report, is enclosed for reference.

Wetland Evaluation

A comprehensive evaluation of functions and values supported by Wetland 1 has not been performed. However, a summary evaluation of wetland functions and values has been completed using a qualitative evaluation methodology based on *The Highway Methodology Workbook Supplement, Wetland Functions and Values: A descriptive Approach issued by the US Army Corps of Engineers New England District, September 1999*, along with best professional judgment from over 25 years of field experience.¹

The subject property wetland is classified as "headwater wetlands" of the Mianus River due to its location in the highest reach of the watershed and association with a first order intermittent watercourse. As is typical of headwater wetlands, the wetland's principal and secondary functions include water quality (nutrient and sediment removal/retention/transformation), groundwater discharge, floodflow alteration, production export and wildlife habitat. The degree to which these functions and values are supported by the delineated portion of the wetland has been diminished as a result of the historic filling of wetlands in the area and the high level of human activity associated with residences, associated driveways and roadways located in close proximity to this wetland system. Wildlife habitat value of this wetland may be enhanced with the possible support of amphibian breeding within interior portions of this wetland system², particularly those areas located off the subject property to the south.

Wetland Impact Analysis

No permanent direct wetland impact will result from the proposed AT&T development. The proposed development area will require minimal grading within an area immediately adjacent to the wetland boundary, referred to as the wetland buffer, resulting in what are considered "secondary" impacts. However, the proposed development area is characterized by a disturbed fill area that is used as an alternate parking area for the residence, with the wetland boundary consisting of a distinct topographic break comprised of boulders and earthen fill material. Refer to the enclosed photo documentation (particularly Photo 3) depicting the character of the proposed development area and adjoining wetlands.

Due to the configuration of the subject property, the location of existing residential development, and the extent of wetlands that encumber a significant portion of the property, alternate locations of the proposed AT&T development would not result in a significant reduction in the area of secondary wetland impacts. Although a Facility could conceivably be located in the southwest portion of the subject property, such a location would still

¹ Dean Gustafson has over 25 years of experience as a soil scientist and wetland scientist working in Connecticut as well as throughout New England, New York and New Jersey.

² Amphibian breeding habitats interior to a wetland system are often referred in scientific literature to as "cryptic vernal pool" habitat.

require development in close proximity to wetlands resulting in similar secondary impacts and be closer to possible vernal pool habitat than the preferred Facility location. In addition, the access drive would have to be placed within a maintained lawn area enjoyed by the residence, the Facility would be located in the rear yard of the residence (the main area of recreation), and proximate to two abutting residences.

The secondary impacts associated with the proposed development will not result in likely adverse impact to the principal wetland functions and values. This opinion is based on the disturbed nature of this wetland feature and its close proximity to the subject property's residence and gravel driveway, which results in a relatively high level of human and diminishes the wildlife habitat function of the wetland buffer. This evaluation is also based on the fact that the area of proposed wetland buffer impact consists of a filled and disturbed area that provides less than ideal habitat to vernal pool species that could potentially use this area during the terrestrial phase of their life cycle. Short-term impacts associated with the proposed development would be minimized by the proper installation and maintenance of erosion and sedimentation controls in accordance with 2002 Connecticut Guidelines For Soil Erosion and Sediment Control. Long-term impacts are minimized by the unoccupied nature of the Facility and limited traffic generated by routine maintenance visits (approximately once per month for AT&T). Impervious surfaces associated with the proposed Facility have been minimized with the use of a relatively short and narrow (12-foot wide) gravel access road and gravel surface within the wireless telecommunications Facility compound that promotes infiltration. Site clearing and grading activities will not significantly alter the hydrology of nearby wetland areas, including possible vernal pool habitat, as existing surface water drainage patterns will not be altered by the proposed development. In addition, the proposed development will not create "decoy pools"³ that could adversely affect breeding amphibians.

Wetland mitigation is recommended to properly compensate for unavoidable secondary wetland impacts. A general summary of proposed mitigation is provided below. Additional details of the wetland mitigation plan will be included in the Development & Management Plan should the Connecticut Siting Council approve of AT&T's application.

Mitigation

In order to compensate for unavoidable indirect impact to wetland buffer, particularly in proximity to wetlands which may provide vernal pool habitat, APT recommends that, in addition to adherence to the 2002 *Connecticut Guidelines For Soil Erosion and Sediment Control* during construction, a comprehensive wetland mitigation plan be implemented that incorporates both a wetland protection plan during construction as well as post-development enhancements to disturbed wetland buffer areas. A detailed discussion of the proposed wetland mitigation plan is provided below.

Wetland Protective Measures Recommendations

As a result of the proposed development's location in close proximity to a possible sensitive wetland resource area, including one that may provide vernal pool habitat, the following protective measures are recommended to avoid unintentional impact to wetlands or mortality to vernal pool herptofauna (i.e., spotted salamander, wood frog, etc.) during construction activities.

A comprehensive erosion control plan will be developed in accordance with the 2002 Connecticut Guidelines For Soil Erosion and Sediment Control to protect nearby wetland resources during construction of the proposed

³ "decoy pools", such as water-filled ruts or improperly designed stormwater management features, are artificially created pools that may intercept adult herpetofaunal species during breeding migration, causing them to breed in pools that may not hold water long enough to successfully produce juveniles and therefore act as "sinks" that result in population declines.

Facility. Complete details of the erosion control plan will be provided in the Development & Management Plan should the Connecticut Siting Council approve of AT&T's application.

APT would serve as the Environmental Monitor for this project to ensure that wetland protection plan measures are implemented properly. The proposed wetland protection plan consists of several components: isolation of the project perimeter; periodic inspection and maintenance of isolation structures; herptofauna sweeps; education of all Contractor and sub-contractor workers prior to initiation of work on the site; protective measures; and, reporting.

1. Seasonal Monitoring

a. Should the construction of the wireless telecommunications Facility occur during the peak vernal pool migration and breeding period (March 1 to May 30), daily sweeps of the construction area will be performed to avoid potential impact to amphibians and reptiles that may be using nearby wetland/vernal pool habitat.

2. Isolation Measures

- a. The extent of the erosion control silt fencing will result in creation of a barrier that will isolate proposed construction areas from the adjacent wetland area (both on downgradient as well as upgradient sides of the development). Field conditions may require the installation of additional barrier fencing at the direction of the Environmental Monitor. The Contractor shall maintain additional supplies of barrier fencing and erosion controls on site for this purpose.
- b. Installation of conventional silt fencing, which will also serve as an isolation of the work zone from surrounding areas and is required for erosion control compliance, shall be performed by the Contractor following clearing activities and prior to any earthwork. The Environmental Monitor will inspect the work zone area prior to and following erosion control barrier installation to ensure the area is free of vernal pool herptofauna.
- c. The fencing will consist of conventional erosion control woven fabric, installed approximately six inches below surface grade to bury the bottom of the silt fence and staked at seven to ten-foot intervals using four-foot oak stakes or approved equivalent. In addition to required daily inspection by the Contractor, the fencing will be inspected for tears or breeches in the fabric following installation and at either on a weekly or biweekly inspection frequency by the Environmental Monitor throughout the duration of the construction project. If inspections are performed on a biweekly basis, such inspections will also include inspections following storm events of 0.25 inch or greater.
- d. No equipment, vehicles or construction materials shall be stored outside of barrier fencing.

3. Contractor Education:

a. The Contractor's workers shall attend an educational session held by the Environmental Monitor prior to the start of construction activities. This orientation and educational session will consist of stressing the environmental sensitive nature of the construction project due to its close proximity to wetland resources. In addition, the Contractor will be provided with photos identifying various common vernal pool herptofauna, stressing the non-aggressive nature of these species and the absence of need to destroy animals that might be encountered, how to properly

handle these species if encountered and the need to follow Protective Measures as described in Section 4 below.

b. The Contractor will be provided with cell phone and email contacts for the Environmental Monitor to immediately report any encounters with vernal pool herptofauna. Poster materials will be provided by the Environmental Monitor to the Contractor for posting on the job site to maintain worker awareness of the sensitive nature of the job site.

4. Protective Measures

- a. A thorough cover search of the construction area will be performed by the Environmental Monitor for vernal pool herptofauna prior to and following installation of silt fencing to remove any species from the work zone prior to the initiation of construction activities.
- b. Prior to the start of construction each day, the Contractor shall search the entire work area for vernal pool herptofauna.
- c. If herptofauna are found, they should be carefully grasped in both hands and placed just outside of the isolation barrier in the approximate direction they were heading.
- d. Special care shall be taken by the Contractor during early morning and evening hours so that possible basking or foraging herptofauna are not harmed by construction activities.
- e. Any stormwater management features, ruts or artificial depressions that could hold water created intentionally or unintentionally by site clearing/construction activities will be properly filled in and permanently stabilized with vegetation to avoid the creation of vernal pool "decoy pools" that could intercept amphibians moving toward the vernal pools. Stormwater management features such as rip rap apron outfalls will be carefully reviewed in the field to ensure that standing water does not endure for more than a 24-hour period to avoid creation of decoy pools and may be subject to field design changes. Any such proposed design changes will be reviewed by the design engineer to ensure stormwater management functions are maintained.
- f. Erosion control measures will be removed no later than 30 days following final site stabilization so as not to impede migration of amphibians or other wildlife.
- g. The use of herbicides and pesticides at the proposed wireless telecommunications Facility and along the proposed access drive are strictly prohibited.
- h. All refueling of vehicles will occur using secondary containment to capture any fuel spills. The Contractor will have spill kits on hand in the event of a fuel release to ensure proper and prompt cleanup.

5. Reporting

a. Biweekly inspection reports (brief narrative and applicable photos) will be submitted by the Environmental Monitor to the Connecticut Siting Council for compliance verification. Any observations of vernal pool herptofauna will be included in the reports.

This wetland protection plan is consistent with APT's recommendations of previous projects that have been approved by the Connecticut Siting Council (e.g., Docket Numbers 397, 402 and 412). With adherence to this wetland protection plan, the proposed development at the subject property will not have an adverse effect to wetland resources or on vernal pool species during construction of the Facility.

Wetland Buffer Enhancement Plantings

APT recommends that any exposed upland soils resulting from the proposed development be permanently stabilized by loam and seeding with a New England Conservation/Wildlife seed mix (New England Wetland Plants, Inc., or approved equivalent). The New England Conservation/Wildlife seed mix provides a permanent cover of grasses, forbs, wildflowers, legumes and grasses to provide both effective erosion control and enhanced wildlife habitat value. This mix is designed to be a no maintenance seeding, and it is appropriate for cut and fill slopes and disturbed areas. In addition, APT recommends that native upland shrubs (e.g., serviceberry, black chokecherry, gray dogwood, and nannyberry) be planted along the south, east and west sides of the proposed compound/access drive in areas disturbed by grading activities, typically defined by the edge of development (e.g., compound fence and edge of gravel road surface) and erosion and sedimentation controls. This buffer enhancement planting of native shrubs will provide food, shelter and nesting habitat for a variety of small animals, in particular several avian species, which will enhance the wildlife habitat value of the buffer between the proposed development and nearby wetland resource area. Additional details of the planting plan will be provided in the Development & Management Plan should the Connecticut Siting Council approve of AT&T's application.

Conclusion

Considering the project avoids direct wetland impacts, results in relatively minimal secondary impacts to existing highly degraded wetland buffer area, and with incorporation of the mitigation recommendations contained herein, it is our opinion that no likely adverse impact to wetland resource areas would occur as a result of the proposed AT&T development.

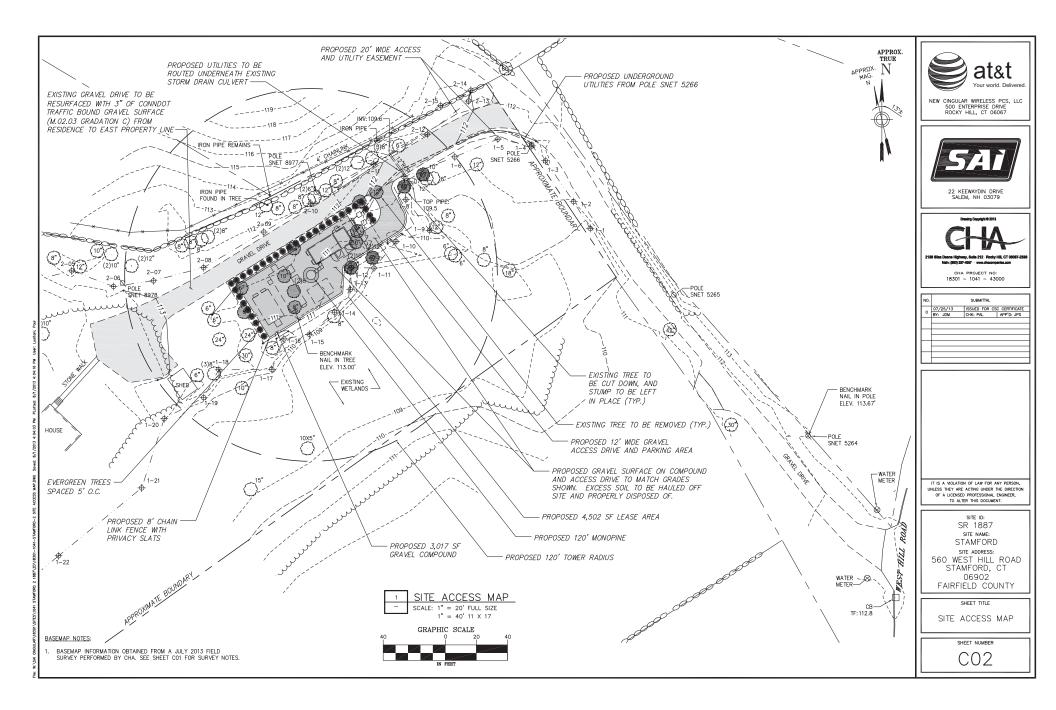
If you have any questions regarding the above-referenced information, please feel free to contact me via email at dgustafson@allpointstech.com or by phone at (860) 984-9515.

Sincerely, All-Points Technology Corporation, P.C.

Dem Austapa

Dean Gustafson Senior Wetland Scientist

Enclosures





Tuesday, July 16, 2013

TECHNOLOGY CORPORATION

Subject Property

Photo Documentation



PHOTO DOCUMENTATION AT&T Site No. SR1887 – Candidate E 560 West Hill Road, Stamford, CT June 22, 2013



Photo 1: View of the existing gravel driveway, looking southwest. Existing residence located at far end of driveway in photo.



Photo 2: View of proposed AT&T facility site location, looking south from driveway.



PHOTO DOCUMENTATION AT&T Site No. SR1887 – Candidate E 560 West Hill Road, Stamford, CT June 22, 2013



Photo 3: View of south side of proposed AT&T facility site location and fill edge/wetland boundary, looking northeast.



Photo 4: View of View of proposed AT&T facility site location, looking north. Existing driveway in background of photo beyond cars..



Connecticut Department of

ENERGY & ENVIRONMENTAL PROTECTION

July 29, 2013

Dean Gustafson All-Points Technology Corporation, P.C. 3 Saddlebrook Dr Killingworth, CT 06419 dgustafson@allpointstech.com

Project: New Telecommunications Facility, AT&T Stamford - Site No. SR1887, 560 West Hill Rd, Stamford NDDB Determination No.: 201303517

Dear Dean Gustafson,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map provided for the proposed New Telecommunications Facility, AT&T Stamford - Site No. SR1887 located at 560 West Hill Rd, Stamford, Connecticut. I have determined that the proposed activities will not impact any extant populations of Federal or State Endangered, Threatened or Special Concern Species that occur in the vicinity of this property. This determination is good for one year. Please re-submit an NDDB Request for Review if the scope of work changes or if work has not begun on this project by July 29, 2014.

Natural Diversity Data Base information includes all information regarding critical biological resources available to us at the time of the request. This information is a compilation of data collected over the years by the Department of Energy and Environmental Protection's Natural History Survey and cooperating units of DEEP, private conservation groups and the scientific community. This information is not necessarily the result of comprehensive or site-specific field investigations. Consultations with the Data Base should not be substitutes for on-site surveys required for environmental assessments. Current research projects and new contributors continue to identify additional populations of species and locations of habitats of concern, as well as, enhance existing data. Such new information is incorporated into the Data Base as it becomes available. The result of this review does not preclude the possibility that listed species may be encountered on site and that additional action may be necessary to remain in compliance with certain state permits.

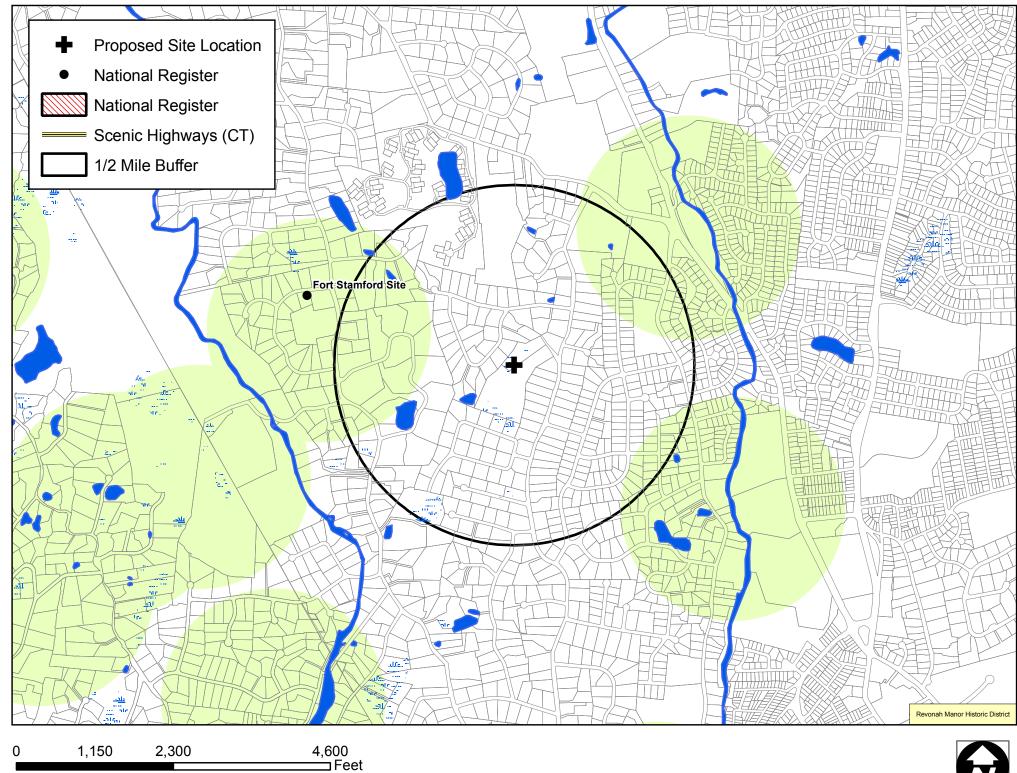
Please contact me if you have further questions at (860) 424-3592, or <u>dawn.mckay@ct.gov</u>. Thank you for consulting the Natural Diversity Data Base.

Sincerely,

Dawn M. moka

Dawn M. McKay Environmental Analyst 3

> 79 Elm Street, Hartford, CT 06106-5127 www.ct.gov/deep Affirmative Action/Equal Opportunity Employer







INTEGRATED HISTORIC PRESERVATION PLANNING

October 8, 2013

Mike Libertine All-Points Technology Corporation 3 Saddlebrook Drive Killingworth, CT 06419

RE: Preliminary Cultural Resources Assessment of a Proposed Telecommunications Tower Located at 560 West Hill Road in Stamford, Connecticut

Mr. Libertine:

Heritage Consultants, LLC, is pleased to have this opportunity to provide All-Points Technology Corporation with the following preliminary archeological assessment of a proposed telecommunications tower located at 560 West Hill Road in Stamford, Connecticut (Figure 1). The current project entailed completion of an existing conditions cultural resources summary based on the examination of GIS data obtained from the Connecticut State Historic Preservation Office, as well as historical data, aerial photographs, and topographic quadrangles maintained by Heritage Consultants, LLC. This investigation did not consider the effects of the proposed construction upon built resources, and it is based upon project location information provided to Heritage Consultants, LLC by All-Points Technology Corporation. The objectives of this study were to gather and present data regarding previously identified cultural resources situated within the vicinity of the Areas of Potential Effect and to investigate the proposed project parcel in terms of it natural and historical characteristics so that the need for completing additional cultural resources investigations could be evaluated.

As depicted in Figures 2 through 4, a well-developed network of roads existed in the project region during the mid nineteenth to early twentieth century. With the exception of West Hill Road, these figures do not show any structures or other historic features within or immediately adjacent to the proposed project area. This interpretation is confirmed by the aerial photograph from 1934 presented in Figure 5 that shows the proposed tower location as largely wooded. Changes during the mid to late twentieth century, as represented by Figures 6 through 9, consisted primarily of residential development throughout the region. The proposed tower location appears to have been situated in a wooded patch adjacent to some of this development. The current aerial photograph confirms that this characterization is still true. A review of these images suggests that the structure situated on the subject property was constructed during the late twentieth century.

Environmental characteristics frequently are used to predict the location of archeological sites. Typically distance to water, slope, and soil types are included as part of these predictive models. Favorable conditions are characterized by gently sloping, well-drained soils in close proximity to fresh water. In the case of the current project, the access road and lease area are encompassed by Adrian and Palm Soils soils. These soils are poorly drained and are subject to frequent flooding and ponding. As a result, they

Mr. Libertine October 8, 2013 Page 2

are not amenable to significant prehistoric or historic habitation because of their poor drainage. Thus, based on soil association alone, the area surrounding the proposed tower possesses little, if any, potential for containing significant archeological deposits. In addition, a review of previously recorded cultural resources on file with the Connecticut State Historic Preservation Office revealed that no archaeological sites and/or National Register of Historic Places properties have been identified within 0.8 km (0.5 mi) of the Area of Potential Effect (Figures 11 and 12). Cultural resources noted in the larger region are associated with river drainages to the east and west of the current project area.

Finally, representatives of Heritage Consultants, LLC completed a pedestrian survey of the proposed lease area and access road. The field conditions are documented in Figure 13, Photos 1 through 12. Based upon the results of the field investigation, it is clear that the area containing the proposed tower location contains substantially disturbed deposits that retained a high water content at the time of survey. Push piles and filled areas that had been artificially leveled were noted. In addition, the proposed access road is characterized by a gravel road that has been built up approximately 0.3 m (1 ft). Finally, the results of the visual inspection of the proposed project items revealed that no prehistoric or historic cultural material or cultural features were visible within the proposed project parcel. Based on this information, it is the professional opinion of Heritage Consultants, LLC that additional cultural resources investigations of the proposed telecommunications tower location are not warranted.

In summary, based on the available data and field conditions, it is unlikely that significant intact archeological deposits are situated within the proposed project items. In addition, no historic properties were previously identified within the Area of Potential Effect associated with the proposed undertaking. If you have any questions regarding this Technical Memorandum, or if we may be of additional assistance with this or any other projects you may have, please do not hesitate to call us at 860-667-3001 or email us at info@heritage-consultants.com. We are at your service.

Sincerely,

Catherine M. Labadia, M.A. President & Principal Investigator

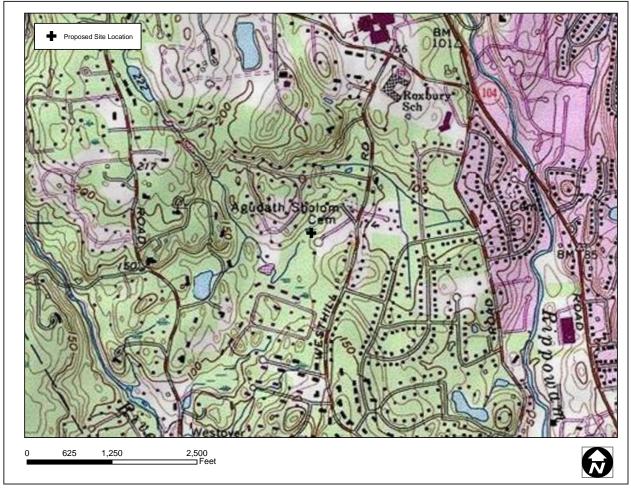


Figure 1. Excerpt from recent USGS topographic quadrangle map, depicting the proposed telecommunications tower location in Stamford, Connecticut.

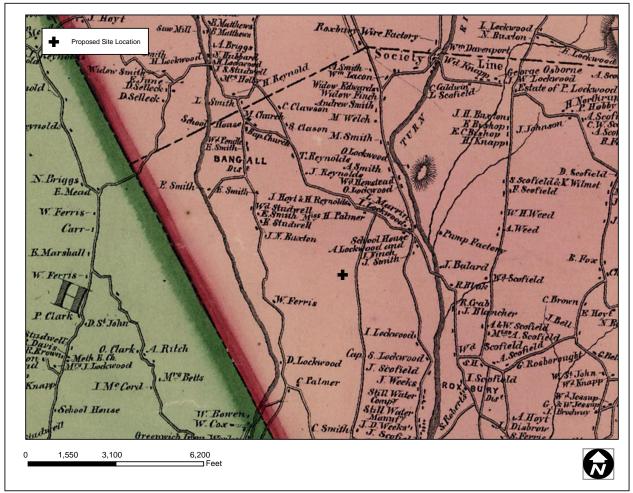


Figure 2. Excerpt from an 1856 historic map depicting the proposed telecommunications tower location in Stamford, Connecticut.

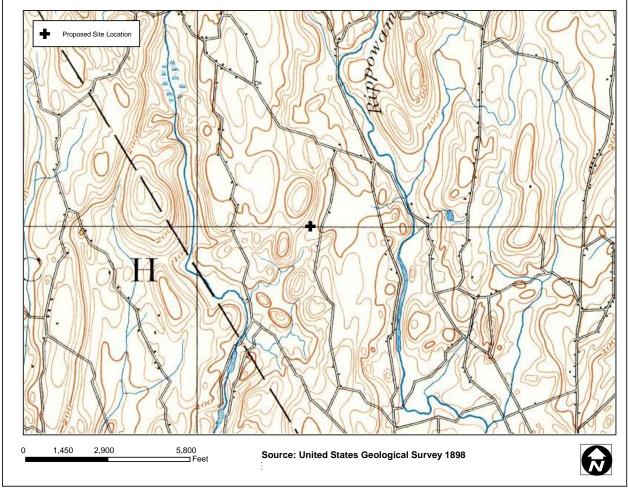


Figure 3. Excerpt from an historic 1898 topographic quadrangle depicting the proposed telecommunications tower location in Stamford, Connecticut.

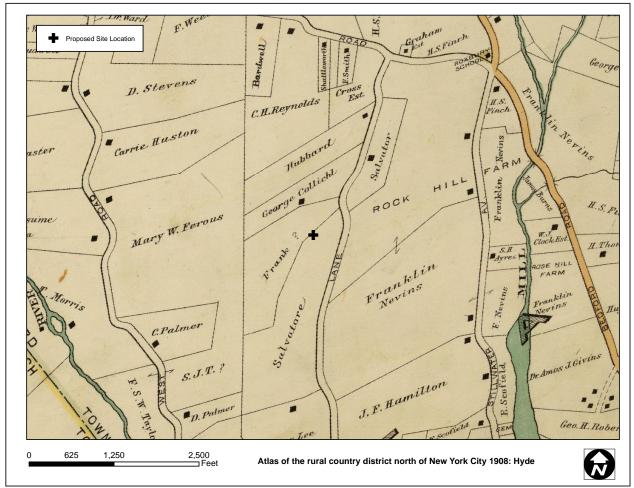


Figure 4. Excerpt from an historic 1908 map depicting the proposed telecommunications tower location in Stamford, Connecticut.

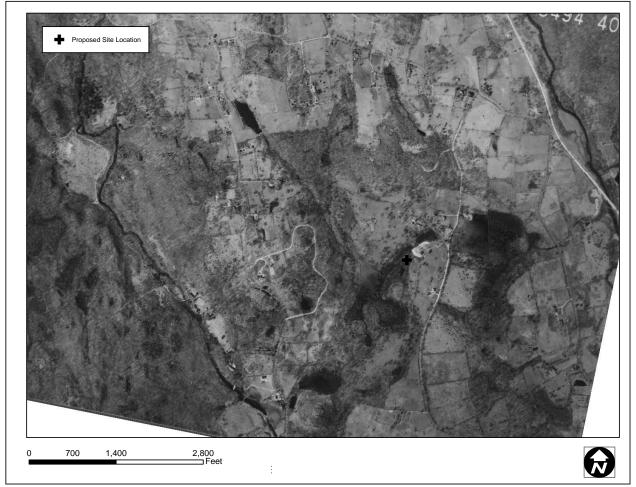


Figure 5. Excerpt from a 1934 aerial image, depicting the proposed telecommunications tower location in Stamford, Connecticut.

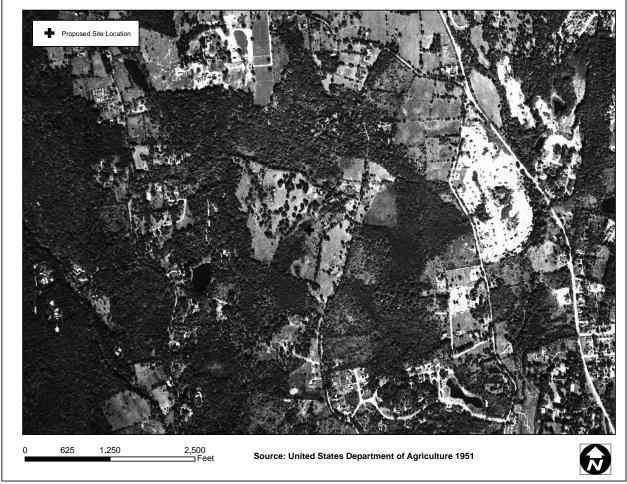


Figure 6. Excerpt from a 1951 aerial image, depicting the proposed telecommunications tower location in Stamford, Connecticut.

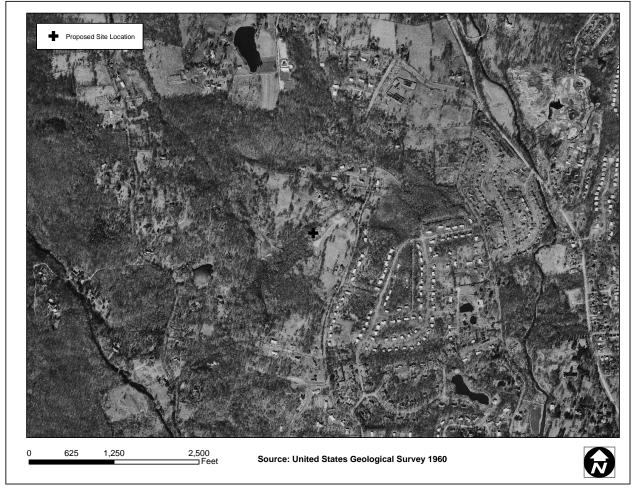


Figure 7. Excerpt from a 1960 aerial image, depicting the proposed telecommunications tower location in Stamford, Connecticut.



Figure 8. Excerpt from a 1971 aerial image, depicting the proposed telecommunications tower location in Stamford, Connecticut.



Figure 9. Excerpt from a 1990 aerial image depicting the proposed telecommunications tower location in Stamford, Connecticut.

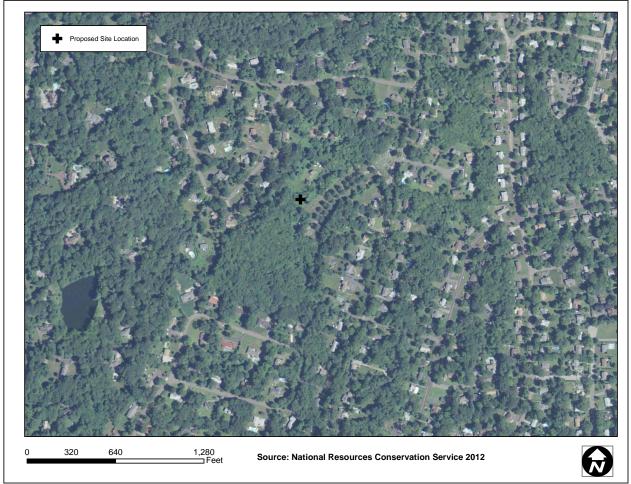


Figure 10. Excerpt from a 2012 aerial image depicting the proposed telecommunications tower location in Stamford, Connecticut.

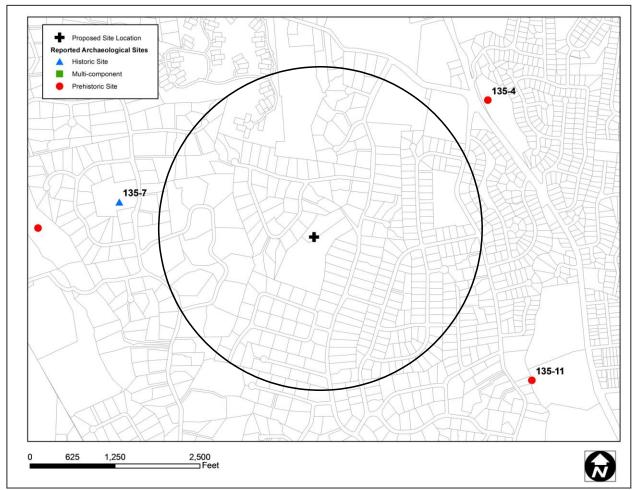


Figure 11. Digital map depicting the locations of previously recorded archaeological sites in the vicinity of the proposed telecommunications tower location in Stamford, Connecticut.

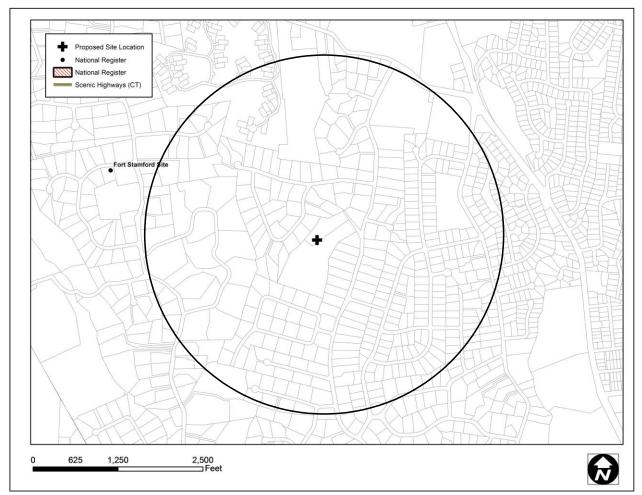


Figure 12. Digital map depicting the locations of previously recorded National Register of Historic Places properties in the vicinity of the proposed telecommunications tower location in Stamford, Connecticut.



Figure 13. Aerial view of the location of the proposed telecommunications tower in Stamford, Connecticut depicting the location and direction of each the following photographs.



Photo 1. Overview photo from the proposed tower location facing northeast.



Photo 2. Overview photo from the proposed tower location facing southeast.



Photo 3. Overview photo from the proposed tower location facing southwest.



Photo 4. Overview photo from the proposed tower location facing northwest.



Photo 5. Overview photo towards the proposed tower location facing northeast.



Photo 6. Overview photo towards the proposed tower location facing east.



Photo 7. Overview photo towards the proposed tower location facing southwest.



Photo 8. Overview photo towards the proposed lease area facing southeast.



Photo 9. Overview photo of the proposed access drive facing southeast.



Photo 10. Overview photo of the proposed lease area facing southwest.



Photo 11. Overview photo of the proposed access road facing northeast.



Photo 12. Overview photo of the proposed access road facing west.