

ATTACHMENT 4

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Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

MCM's environmental consultants and soil scientists are evaluating the proposed tower site and surrounding area. As noted, the site is already developed and disturbed and as such no permanent direct impacts to wetlands, or species habitat, are anticipated to result from the MCM tower site facility. Development of the tower site is largely in previously disturbed areas of the site and no alternative locations for the tower site were identified.

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.

C. LAND

No 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, 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 AT&T's operations at the facility would be 6.46% of the MPE standard. Attached is a copy of a Power Density Report for AT&T's facility.

F. VISIBILITY

A preliminary analysis indicates that year-round visibility of the proposed facility will be fairly limited to the immediate area of the host Property (0.25 mile or less). The two-mile radius Study Area is dominated by dense woods and rolling to steep terrain, and the majority of visibility would likely be seasonal, with most views being partially obstructed by intervening trees and other vegetation. It is anticipated that approximately 38 acres of the 8,042-acre study area will have visibility of the proposed Facility above the tree canopy year round and that approximately 264 acres (or approximately 3.2% of the study area) will experience seasonal views.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

is currently consulting with the Connecticut State Historic Preservation Office to obtain an opinion regarding the project's potential effect(s) on historic resources. No impact to historic resources is anticipated in light of the visual study conducted for this proposal and review of the prior proposal in Docket 334. MCM is also currently consulting with the CT Department of Energy and Environmental Protection Natural Diversity Data Base to obtain an opinion from this agency regarding the potential for rare, threatened or endangered species to be present in the project area. The site is currently under evaluation in accordance with the

FCC's regulations implementing the National Environmental Policy Act of 1969 ("NEPA") but it is anticipated that the project is exempt from further federal environmental assessment.

Tony Wells
 C Squared Systems
 65 Dartmouth Drive
 Auburn, NH 03032
 603-644-2800
 Tony.Wells@csquaredsystems.com



December 23, 2013

Connecticut Siting Council

Subject: New Cingular Wireless, Redding, CT

Dear Connecticut Siting Council:

C Squared Systems has been retained by New Cingular Wireless to investigate the RF Power Density at the proposed site located at 186 Black Rock Turnpike, Redding, CT.

Calculations were done in accordance with FCC OET Bulletin 65. These worst-case calculations assume that all transmitters are simultaneously operating at full power and pointing directly at the ground. The calculation point is 6 feet above ground level to model the RF power density at the head of a person standing at the base of the tower.

Location	Carrier	Antenna Centerline Height Above Ground Level (Ft.)	Operating Frequency (MHz)	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Power Density (mw/cm ²)	Limit	% FCC MPE Limit General Public/Uncontrolled
Ground Level	AT&T UMTS	150	880	2	500	0.0173	0.5867	2.96%
	AT&T UMTS	150	1900	2	500	0.0173	1.0000	1.73%
	AT&T LTE	150	734	1	500	0.0087	0.4893	1.77%
							Total	6.46%

Summary: Under worst-case assumptions, the RF Power Density at the proposed site located at 186 Black Rock Turnpike, Redding, CT will not exceed 6.46% of the FCC MPE limit for General Public/Uncontrolled Environments.

Sincerely,

Anthony Wells
 Managing Partner



Federal Aviation Administration

<< OE/AAA

Notice Criteria Tool

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

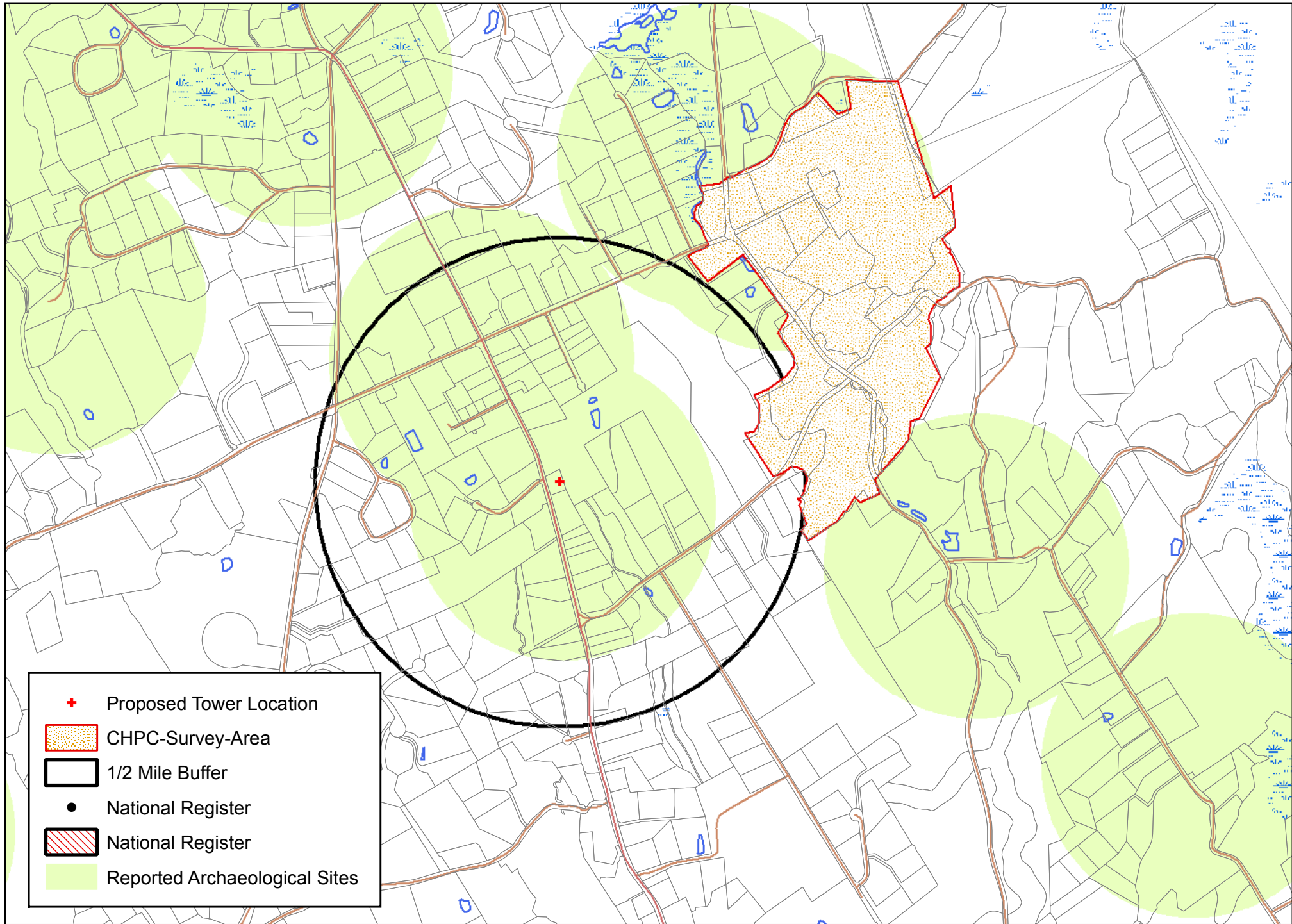
If you require additional information regarding the filing requirements for your structure, please identify and contact the appropriate FAA representative using the [Air Traffic Areas of Responsibility map](#) for Off Airport construction, or contact the [FAA Airports Region / District Office](#) for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







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

Latitude:	<input type="text" value="41"/> Deg	<input type="text" value="18"/> M	<input type="text" value="35.5"/> S	<input type="text" value="N"/> <input type="button" value="v"/>
Longitude:	<input type="text" value="73"/> Deg	<input type="text" value="20"/> M	<input type="text" value="51.5"/> S	<input type="text" value="W"/> <input type="button" value="v"/>
Horizontal Datum:	<input type="text" value="NAD83"/> <input type="button" value="v"/>			
Site Elevation (SE):	<input type="text" value="660"/> (nearest foot)			
Structure Height (AGL):	<input type="text" value="150"/> (nearest foot)			
Traverseway:	<input type="text" value="No Traverseway"/> <input type="button" value="v"/> <small>(Additional height is added to certain structures under 77.9(c))</small>			
Is structure on airport:	<input checked="" type="radio"/> No <input type="radio"/> Yes			

Results

You do not exceed Notice Criteria.

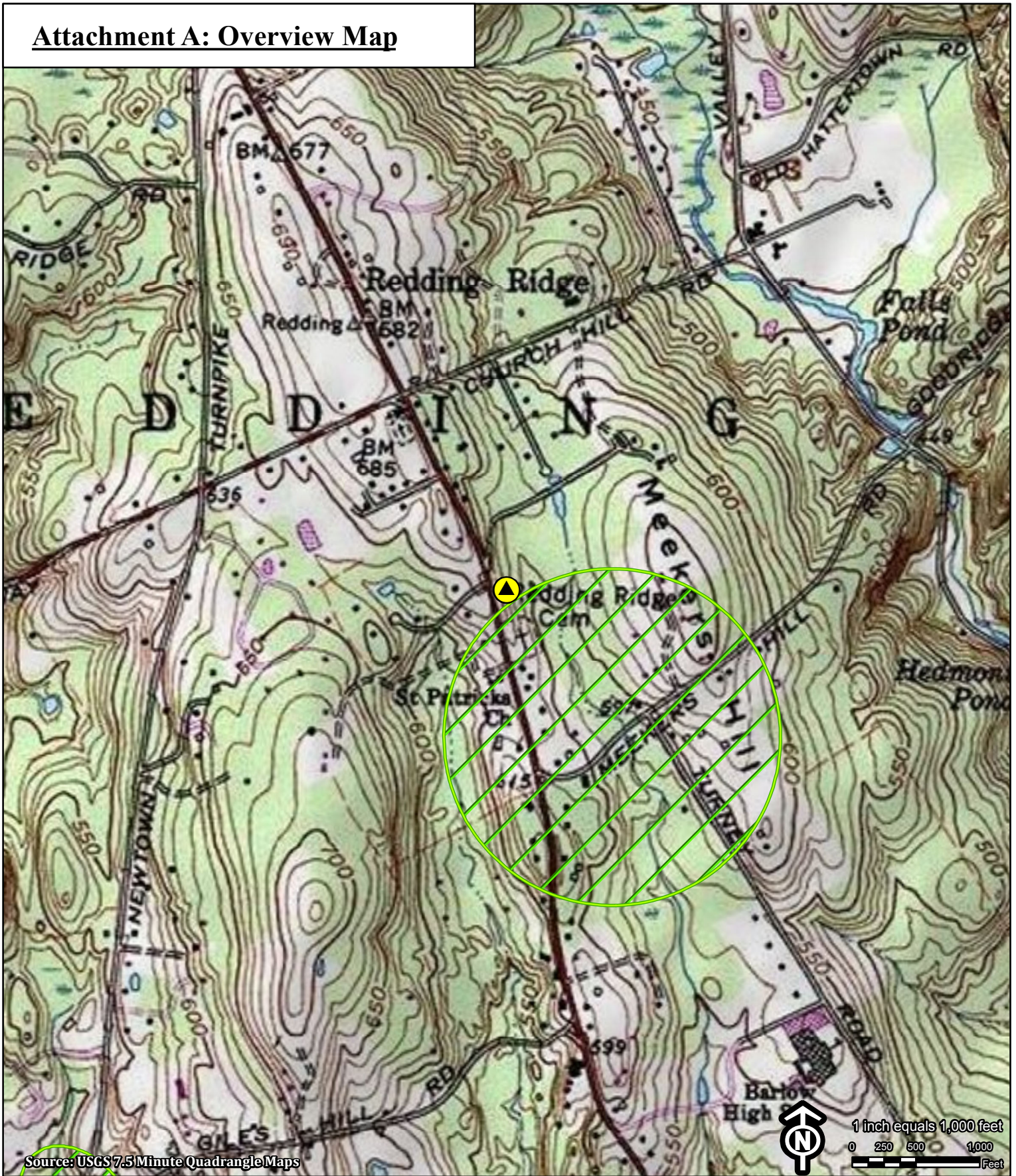


-  Proposed Tower Location
-  CHPC-Survey-Area
-  1/2 Mile Buffer
-  National Register
-  National Register
-  Reported Archaeological Sites

0 0.15 0.3 0.6
Miles





Attachment A: Overview Map



Source: USGS 7.5 Minute Quadrangle Maps

Legend

-  Proposed Tower Location
-  Natural Diversity Database Area (updated 12/13)

Proposed MCM Redding Ridge Facility 186 Black Rock Turnpike Redding, Connecticut

Monday, April 21, 2014





Message Center Management
Keep Your Sites On Us™



Natural Diversity Data Base Areas REDDING, CT

June 2013

-  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 (NDDB) 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 NDDB along with the required maps and information. More detailed instructions are provided with the request form on our website.

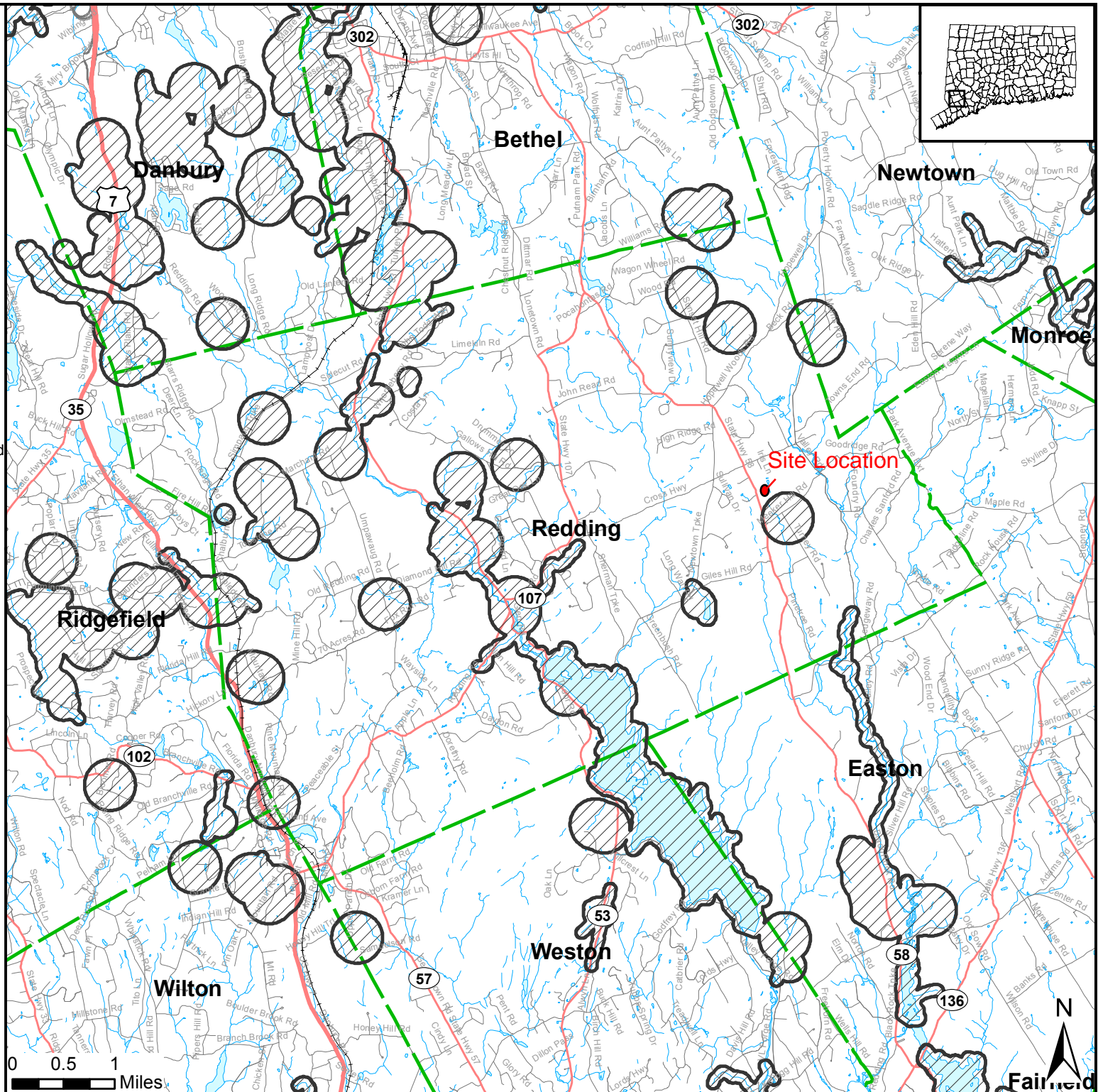
www.ct.gov/deep/nddbrequest

This file has PDF Layers. Look for the Layers tab on the left. Expand the layers and use the "eye" icons to change visibility.

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





WETLAND INVESTIGATION

May 12, 2014

**Message Center Management, Inc.
40 Woodland Street
Hartford, CT 06105**

APT Project No.: CT242312

**Re: Proposed Redding Ridge Facility – CT505
186 Black Rock Turnpike
Redding, Connecticut**

All-Points Technology Corporation, P.C. (“APT”) understands that a wireless telecommunications facility (“Facility”) is proposed by Message Center Management, Inc. (“MCM”) at 186 Black Rock Turnpike in Redding, Connecticut (“Subject Property”). At your request, Dean Gustafson, a Connecticut registered Professional Soil Scientist with APT conducted an inspection of the Subject Property on March 24, 2014 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 0.624-acre parcel developed as the Redding Fire District 1 fire station. An existing 80 foot lattice tower facility is located east of the fire station building. The area proposed for the wireless communications Facility encompasses the existing tower facility (which will be replaced) and a maintained lawn area located to the east. Access to the Facility is proposed to come off Black Rock Turnpike extending eastward over an existing paved driveway and parking area that serves the fire station. The Study Area is dominated by the fire station building and associated paved access drives/parking areas and landscaping along with upland forest to the north, a cemetery to the south and forested hillside seep wetland system to the east. The surrounding land-use consists of residential development.

One wetland area was delineated within the Study Area consisting of a hillside seep forested wetland system associated with intermittent watercourse that generally flows to the south. Please refer to the enclosed Wetland Delineation Map for the approximate location of the identified wetland resource area. Wetlands were marked with pink and blue plastic flagging tape numbered with the following sequence: WF 1 to 10 and IWC 1 to 6. General weather conditions encountered during the above-referenced inspection included mid 40° F temperatures with partly cloudy skies.

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

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

P.O. BOX 504 · 116 GRANDVIEW ROAD · CONWAY, NH 03818 · PHONE 603-496-5853 · FAX 603-447-2124

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 discussed below. The proposed Facility is under the exclusive jurisdiction of the State of Connecticut Siting Council and therefore 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.

- Town of Redding:** The Town of Redding regulates activities within wetlands and watercourses and within 100 feet of wetlands and watercourses 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 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.

Soil Description:

Soil types encountered throughout the Study Area were generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service (“NRCS”)¹. Wetland soils field identified consist of Ridgebury, Leicester, and Whitman soils. The non-wetland soils were examined along the wetland boundary and more distant upland areas during the delineation, including the proposed Facility location. They are dominated by Paxton and Montauk fine sand loams, Udorthents and Urban land. Detailed descriptions of wetland and upland soil types are provided below.

Wetland Soils:

The **Leicester** series consists of very deep, poorly drained loamy soils formed in friable till. They are nearly level or gently sloping soils in drainageways and low-lying positions on hills. Depth to bedrock is commonly more than 6 feet. Rock fragments range from 5 to 35 percent by volume to a depth of 40 inches and up to 50 percent below 40 inches. Leicester soils have a water table at or near the surface much of the year.

The **Ridgebury** series consists of very deep, somewhat poorly and poorly drained soils formed in glacial till derived mainly from granite, gneiss and schist. They are nearly level to gently sloping soils in low areas in uplands. This series includes phases that are poorly drained and the wetter part of somewhat poorly drained. A perched, fluctuating water table above the dense till saturates the solum to or near the surface for 7 to 9 months of the year.

The **Whitman** series consists of very deep, very poorly drained soils formed in glacial till derived mainly from granite, gneiss, and schist. They are nearly level or gently sloping soils in depressions and drainageways on uplands. Depth to dense till is 12 to 30 inches. Some pedons have organic horizons overlying the A horizon. They are fibric hemic or sapric material, and are up to 5 inches thick. Whitman soils are found on nearly level and gently sloping soils in depressions and in drainage ways of glacial uplands. Slopes are typically 0 to 2 percent but range up to 8 percent where wetness is due to seepage water. This soil is very poorly drained. A perched water table, or excess seepage water, is at or near the surface for about 9 months of the year.

Upland Soils:

The **Montauk** series consists of very deep, well drained soils formed in glacial till derived primarily from granitic materials. These soils are on upland till plains and moraines. Slope ranges from 0 to 35 percent. The landscape in some areas has many closed depressions, some of which are filled by perennial ponds or wet spots. The soils formed in thick moderately coarse or medium textured glacial till mantles underlain by firm sandy till. Some areas have very stony or extremely stony surfaces. The potential for runoff is low to high. Permeability is moderate or moderately rapid in the solum and slow or moderately slow in the substratum.

The **Paxton** series consists of well drained loamy soils formed in subglacial till. The soils are very deep to bedrock and moderately deep to a densic contact (known locally as hardpan). They are nearly level to steep soils on till plains, hills, and drumlins. The depth to the densic contact and material is commonly 20 to 40 inches but the range includes 18 to 40 inches. Depth to bedrock is commonly more than 6 feet. Rock fragments range from 5 to 35 percent by volume.

¹ NRCS Web Soil Survey, <http://websoilsurvey.nrcs.usda.gov/app/>, accessed on March 17, 2014.

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.

Urban land is a miscellaneous land type consisting mostly of buildings, paved roads and parking lots. Typically included with this unit are small, intermingled areas disturbed by cutting, filling, or grading such that the original soil profile can no longer be discerned.

Wetlands Discussion:

Wetland 1 Classification Summary:

Wetland 1 ² (WF 1 to 10)	System Palustrine	Subsystem	Class Forested	Subclass Broad-leaved Deciduous	Water Regime Seasonally Flooded	Special Modifier
Watercourse Type (IWC 1 to 6)	Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>	Special Aquatic Habitat (None)	Vernal Pool <input type="checkbox"/>	Other <input type="checkbox"/>

Wetland 1 Description:

Wetland 1 is a hillside seep wetland system located at the base of the fill slope east of the existing fire station development. An interior intermittent watercourse conveys surface and seasonal groundwater discharges from this wetland and surrounding uplands to the south. This wetland is located within the Hemlocks Reservoir System Watershed Area of the Aspetuck and Saugatuck Reservoirs public drinking water supply system; the Hemlocks Reservoir is located approximately 4.5 miles south of the Subject Property. An intermittent watercourse was also identified north of the Subject Property originating from a stormwater culvert outfall from Black Rock Turnpike. The south bank of the incised and eroded channel was delineated by flags IWC 1 to 6; sediment deposition was observed at the intersection of the wetland boundary and this channel near wetland flag 9.

Wetland 1 Dominant Vegetation:

Dominant Wetland Species Common Name (Latin Name)	Dominant Adjacent Upland Species Common Name (Latin Name)
Red Maple (<i>Acer rubrum</i>)	Sugar Maple (<i>Acer saccharum</i>)
Spicebush (<i>Lindera benzoin</i>)	White Ash (<i>Fraxinus americana</i>)
Japanese Barberry* (<i>Berberis thunbergii</i>)	Tulip Poplar (<i>Liriodendron tulipifera</i>)
Winged Euonymus* (<i>Euonymus alata</i>)	Multiflora Rose* (<i>Rosa multiflora</i>)
Green Ash (<i>Fraxinus pennsylvanica</i>)	Japanese Barberry* (<i>Berberis thunbergii</i>)
Tussock Sedge (<i>Carex stricta</i>)	
Skunk Cabbage (<i>Symplocarpus foetidus</i>)	

* denotes Connecticut Invasive Plants Council invasive species

² 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>.

Summary:

Based on a review of the Site Plan prepared by APT (Sheet No. SP-1, latest revision date 05/02/14), no direct impact to wetlands or watercourses is associated with the proposed Message Center Management, Inc. development. The proposed Facility is located approximately 50 feet from the nearest wetland (edge of retaining wall to wetland flag 6); erosion controls will be located approximately 45 feet from the nearest wetland, at this location.

No temporary impacts to nearby wetland or watercourse resources from construction activities are anticipated provided sedimentation and erosion controls are designed, installed and maintained during construction activities in accordance with the *2002 Connecticut Guidelines For Soil Erosion and Sediment Control*. Due to the project's location within a public water supply watershed and the potential for water quality impacts during construction, third party monitoring of erosion and sedimentation control measures following storm events of ¼ inch or greater is recommended. Short term and long term secondary impacts to the nearby wetland area are mitigated by the following facts: the proposed Facility is located within the existing developed/disturbed footprint of the fire station and lattice tower facility; minimal grading is required with the use of the proposed retaining wall; and, impacts to mature vegetation and trees are avoided. Long term secondary impacts to wetland resources possibly associated with the operation of the Facility are minimized by the fact the development is unmanned, it minimizes the creation of impervious surfaces with the use of a gravel compound, access already exists through the fire station's paved access and parking area, and minimal traffic is generated by the Facility. APT recommends that stormwater generated by the proposed development be properly handled and treated in accordance with the *2004 Connecticut Stormwater Quality Manual*. Provided these recommendations are implemented, it is APT's opinion that the proposed Message Center Management, Inc. development will not result in a likely adverse impact to wetland resources.

In addition, as no direct impact to federal wetlands is anticipated with MCM's development activities, **NO significant change in surface features** (e.g., wetland fill, deforestation or water diversion) would result in accordance with National Environmental Policy Act Categorical Exclusion checklist item 7.

If you have any questions regarding the above-referenced information, please feel free to contact me by telephone at (860) 663-1697 ext. 201 or via email at dgustafson@allpointstech.com.

Sincerely,

All-Points Technology Corporation, P.C.

Delineation Performed by:



Dean Gustafson

Professional Soil Scientist

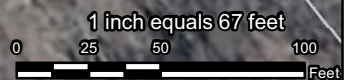
Enclosure

Wetland Delineation Map

Wetland Delineation Map



Source: 2012 CT DEEP High Resolution Orthoimagery (1-ft resolution)



- Legend**
- Approximate Tower Location
 - Intermittent Watercourse
 - APT Delineated Wetland Boundary
 - Approximate Wetland Area
 - Subject Property
 - CT DEEP Parcel (updated 8/10)

Proposed MCM Redding Ridge Facility
186 Black Rock Turnpike
Redding, Connecticut

Sunday, April 27, 2014

