Attachment 4

Environmental Assessment Statement

I. PHYSICAL IMPACT

A. WATER FLOW AND QUALITY

No environmental resource areas (wetlands or watercourse) were identified near the proposed facility. The construction and operation of the tower and related site improvements will have no effect on any off-site watercourses or waterbodies, and the equipment associated with the facility will discharge no pollutants to area surface or groundwater systems. Moreover, Best Management Practices to control storm water and soil erosion during construction will be implemented.

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

Some minimal clearing and grading will be necessary for an expanded compound. No new access drive is required. New plantings are proposed around the modified equipment compound area.

D. NOISE

Noise emissions from the proposed T-Mobile equipment will meet local and state emission standards. On site backup power for T-Mobile's equipment will be supplied by batteries. Construction related noise would be anticipated during facility construction, which is expected to take approximately four to six weeks. Noise emanating from existing wireless carrier equipment will also meet local and state emission standards.

E. POWER DENSITY

The cumulative worst-case calculation of power density from operations at the facility would be 36.98% of the MPE standard. Attached is a copy of a Power Density Report indicating same.

F. VISIBILITY

The potential visual impact of the proposed monopole was determined by preparation of the attached Visual Resource Evaluation Report. The potential visibility was assessed within an approximate one (1) mile radius using a computer-based, predictive view shed model and in-field visual analysis. Given relative height and surrounding terrain, the proposed replacement monopine would be visible primarily from those residences in the

immediate vicinity of the site (approximately ¼ mile radius from the site). Photo simulations of the tower site from various vantage points were prepared and are included.

II. SCENIC, NATURAL, HISTORIC & RECREATIONAL VALUES

The parcel on which the facility is located and immediate surrounding areas exhibit no scenic, natural, historic or recreational characteristics which are unique. The Connecticut State Historic Preservation Officer ("SHPO") has been contacted and determined the proposed replacement tower will have no adverse effect. The Connecticut Department of Environmental Protection ("DEP") Natural Diversity Database ("NDDB") maps for the proposed site have been reviewed and the DEP has confirmed there are no federal or state species of concern in the area that would be impacted. At this point in time, there are no known historic, State scenic, natural or recreational values that would be impacted by the proposed tower facility.

Site Number: CTFF632
Site Name: MCM Dittmar Road
Site Address: 4 Dittmar Road
Redding, CT 06896

Access distances:
Distance of access over existing driveway: 575'
Total distance of site access: 575'

Distance to Nearest Wetlands
N/A

Distance to Property Lines:
128' to the northern property boundary from the tower
366' to the southern property boundary from the tower
389' to the western property boundary from the tower
122' to the eastern property boundary from the tower
110' to the northern property boundary from the compound
288' to the southern property boundary from the compound
353' to the western property boundary from the compound
62' to the eastern property boundary from the compound

Residence Information:
There are 23 residences within 1,000' feet of the compound. The closest on site residence is 145' at 4 Dittmar Road. The closest off site residence is 216' to the southeast and is located at Map 1, Lot 7 (11 Bartram Drive).

Tree Removal Count:
7 trees 14 inches in diameter dbh or greater need to be removed to construct the tower and equipment area.
8"-10" dbh trees = 0 trees
10"-14" dbh trees = 1 tree
14" or greater dbh = 6 trees

Cut/Fill:
80 CY of cut material and 180 CY of fill material.

Clearing/Grading Necessary:
Total area of disturbance = 6,350 SF

Transportation
Land Development
Environmental
Services

VHB imagination | innovation | energy Creating results for our clients and benefits for our communities

Vanasse Hangen Brustlin, Inc.

May 12, 2011

Ref: 41562.02

Ms. Susan Chandler
Commission on Culture & Tourism
State Historic Preservation Office
One Constitution Plaza, Second Floor
Hartford, CT 06103

Re: Proposed Wireless Telecommunications Replacement Facility
CTFF632-Redding
4 Dittmar Road
Redding, Connecticut

Dear Ms. Chandler:

Vanasse Hangen Brustlin, Inc. (VHB) has been retained by HPC Development, LLC on behalf of Message Center Management (MCM) to review environmental resource information outlined in 47 CFR Ch.1 § 1.1307 sections (a) and (b) for environmental consequences pursuant to the Federal Communications Commission ("FCC or Commission") requirements for the above referenced telecommunications facility. The proposed undertaking includes the replacement of an existing tower facility located at 4 Dittmar Road in Redding, Connecticut.

MCM is proposing to construct a new 120-foot self-support lattice telecommunications tower (expandable to 140 feet above ground level [AGL]) to replace the existing 110-foot tall guyed-wire tower for the collocation of new and future wireless carrier antennas. T-Mobile is the current tenant and is proposing to collocate antennas at a centerline height of approximately ±120 feet AGL (top antenna height would be 122'-3" AGL). In addition, the existing compound area will be expanded to accommodate new ground equipment. Detailed Site Plans are attached for reference.

A NEPA Compliance report was previously completed in 2009 by Dynamic Environmental Associates, Inc. (DEA, Inc.) for the proposed tower replacement. During that time, SHPO reviewed the proposed project and issued a determination of "no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places" (letter attached). As part of our NEPA Compliance update, VHB performed an updated Cultural Resources screening. The Putnam Memorial State Park, a National Register Historic District, is located approximately 0.25-mile to the east of the proposed facility. No additional resources were identified within the half-mile Area of Potential Effect (APE). To further evaluate the potential visual effects within the Putnam Memorial State Park and surrounding area, VHB conducted a balloon float at the proposed facility location on April 7, 2011. Based on our field reconnaissance, the proposed facility will not be visible from most locations within the Putnam Memorial State Park. However, there are two locations within the Park where limited seasonal views of the existing tower and proposed tower could be visible through the trees. These views are confined to select portions of a hiking trail and an area adjacent to the Youth Group Area 3.

54 Tuttle Place
Middletown, Connecticut 06457-1847
860.632.1500 ▪ FAX 860.632.7879
email: info@vhb.com
www.vhb.com

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Bureau of Natural Resources/Wildlife Division
79 Elm Street, Sixth Floor
Hartford, CT 06106
Natural Diversity Data Base

June 27, 2011

Coreen Kelsey
Vanasse Hangen Brustlin, Inc.
54 Tuttle Pl
Middletown, CT 06457

Project: Replace existing telecommunications tower, CTFF632-Redding at 4 Dittmar Rd., Redding
Request No.: 201105418

Dear Coreen Kelsey,

I have reviewed Natural Diversity Data Base maps and files regarding the area delineated on the map you provided for the proposed Replace existing telecommunications tower, CTFF632-Redding at 4 Dittmar Rd., Redding, 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.

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 Environmental Protection's Natural History Survey and cooperating units of DEP, 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.

Please contact me if you have further questions at (860) 424-3592, or dawn.mckay@ct.gov . Thank you for consulting the Natural Diversity Data Base. Also be advised that this is a preliminary review and not a final determination. A more detailed review may be conducted as part of any subsequent environmental permit applications submitted to DEP for the proposed site.

Sincerely,

Dawn M. McKay

Dawn M. McKay
Environmental Analyst 3

Natural Diversity Data Base Areas

REDDING, CT

December 2011

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.

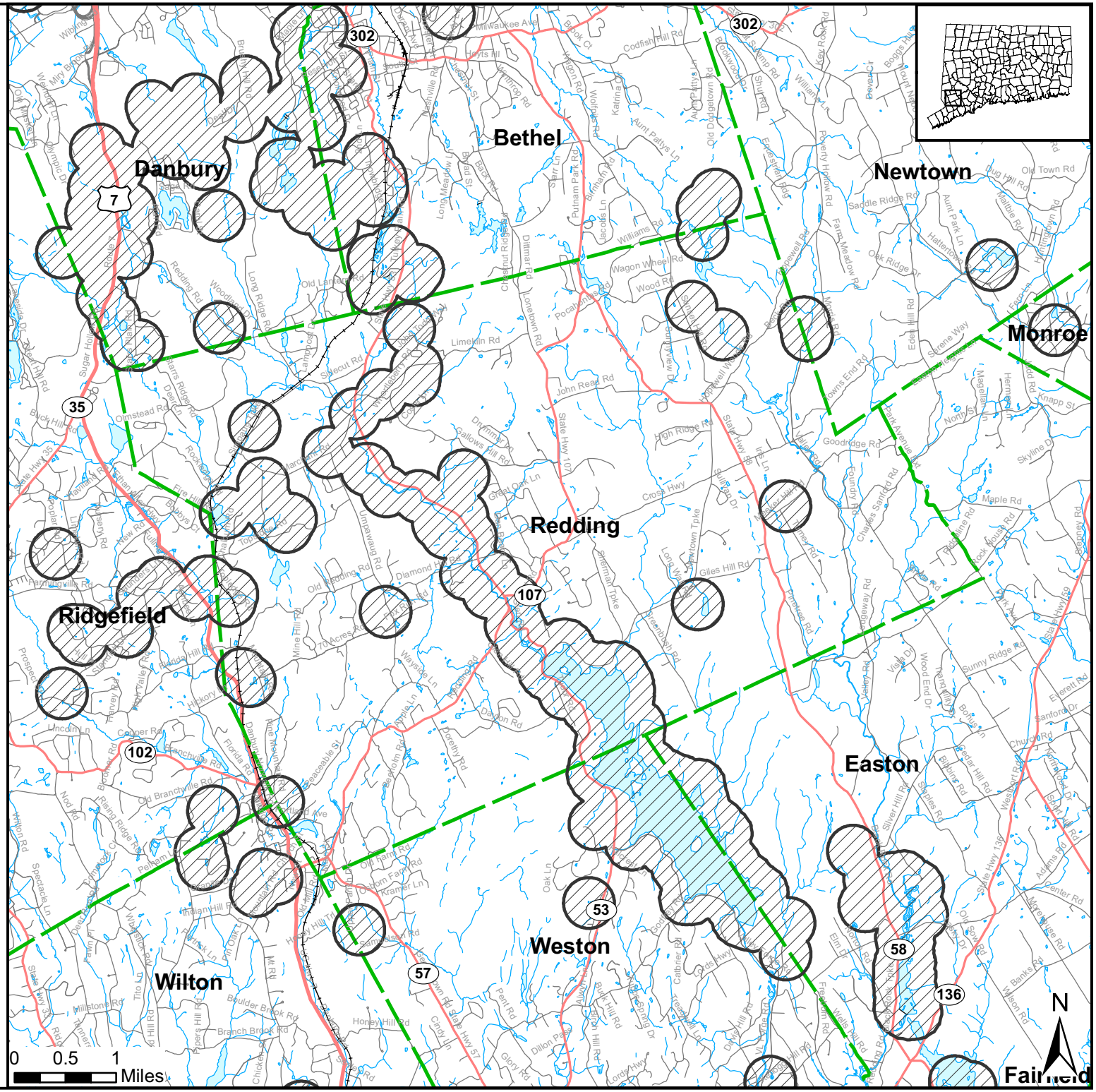
This map is intended for use as a preliminary screening tool for conducting a Natural Diversity Data Base Review Request. To use the map, locate the project boundaries and any additional affected areas. If the project is within a shaded area; or over-lapping a lake, pond or wetland that has shading; or upstream or downstream (by less than 1/2 mile) from a shaded area, the project may have 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



Connecticut Market

Worst Case Power Density

Site:	**CTFF632A**
Site Address:	**4 Dittmar Road**
Town:	**Redding**
Tower Height:	**120 ft.**
Facility Style:	**Self Support Tower**

GSM Data		UMTS Data	
Base Station TX output	20 W	**Base Station TX output**	40 W
Number of channels	6	**Number of channels**	2
Antenna Model	APX16DWV-16DWV	**Antenna Model**	APX16DWV-16DWV
Cable Size	1 5/8 in.	**Cable Size**	1 5/8 in.
Cable Length	140 ft.	**Cable Length**	140 ft.
Antenna Height	120.0 ft.	**Antenna Height**	120.0 ft.
Ground Reflection	1.6	**Ground Reflection**	1.6
Frequency	1945.0 MHz	**Frequency**	2.1 GHz
Jumper & Connector loss	4.50 dB	**Jumper & Connector loss**	1.50 dB
Antenna Gain	18.0 dBi	**Antenna Gain**	18.0 dBi
Cable Loss per foot	0.0116 dB	**Cable Loss per foot**	0.0116 dB
Total Cable Loss	1.6240 dB	**Total Cable Loss**	1.6240 dB
Total Attenuation	6.1240 dB	**Total Attenuation**	3.1240 dB
Total EIRP per Channel	54.89 dBm	**Total EIRP per Channel**	60.90 dBm
(In Watts)	308.06 W	**(In Watts)**	1229.31 W
Total EIRP per Sector	62.67 dBm	**Total EIRP per Sector**	63.91 dBm
(In Watts)	1848.34 W	**(In Watts)**	2458.61 W
nsg	11.8760	**nsg**	14.8760
Power Density (S) =	**0.031203 mW/cm^2**	**Power Density (S) =**	**0.041505 mW/cm^2**
T-Mobile Worst Case % MPE =		**7.27%**	

Equation Used :

$$S = \frac{(1000)(grf)^2(Power)*10^{(nsg/10)}}{4\pi(R)^2}$$

Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Existing Carrier Information	
Carrier	Existing MPE %
Cingular	13.95%
AT&T	9.55
Nextel	6.06

Site Total MPE %	**36.98%**

TOWAIR Determination Results

A routine check of the coordinates, heights, and structure type you provided indicates that this structure does not require registration.

*** 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

PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7902.85 MTRS (7.90289 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	41-22-22.00N	073-28-32.00W	DANBURY MUNI	FAIRFIELD DANBURY, CT	137.9	1347.8

PASS SLOPE(100:1): NO FAA REQ-RWY MORE THAN 10499 MTRS & 7890.66 MTRS (7.89069 KM) AWAY

Type	C/R	Latitude	Longitude	Name	Address	Lowest Elevation (m)	Runway Length (m)
AIRP	R	41-22-7.00N	073-28-41.00W	DANBURY MUNI	FAIRFIELD DANBURY, CT	137.9	1347.8

Your Specifications

NAD83 Coordinates

Latitude	41-20-23.4 north
Longitude	073-23-30.6 west

Measurements (Meters)

Overall Structure Height (AGL)	42.7
Support Structure Height (AGL)	42.7
Site Elevation (AMSL)	245.7

Structure Type

TOWER - Free standing or Guyed Structure used for Communications Purposes