

**STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL**

RE: APPLICATION BY T-MOBILE  
NORTHEAST, LLC FOR A  
CERTIFICATE OF ENVIRONMENTAL  
COMPATIBILITY AND PUBLIC NEED  
FOR A TELECOMMUNICATIONS FACILITY  
AT 15 ORCHARD PARK ROAD IN THE TOWN  
OF MADISON, CONNECTICUT

DOCKET NO. 390

Date: December 29, 2009

**PRE-FILED TESTIMONY OF MICHAEL LIBERTINE**

**Q1. Please state your name and profession.**

A1. Michael Libertine. I am the Director of Environmental Services employed by Vanasse Hangen Brustlin, Inc. ("VHB"). VHB is located at 54 Tuttle Place in Middletown, Connecticut. My responsibilities at VHB include managing and overseeing the environmental science and engineering projects, including telecommunications projects, undertaken by VHB's Middletown office.

**Q2. What kind of services does VHB provide?**

A2. Among many other services, VHB provides a full array of services for the permitting of telecommunications facilities, including visual impact analyses, wetlands compliance and environmental assessments under the National Environmental Policy Act of 1969 ("NEPA").

**Q3. Please summarize your professional background in telecommunications.**

A3. I have a B.S. in natural resources management from the University of Connecticut and a B.A. in marketing from Stonehill College. I am also a licensed

Environmental Professional in Connecticut. I have served as the project manager for more than 1,600 environmental site assessments and field investigations for property transfers in Connecticut, Rhode Island, New Hampshire, Massachusetts, New Jersey, New York, Florida and Canada.

My background in telecommunications includes eighteen years of consulting in the environmental field. The scope of my consulting services includes visual resource analyses, environmental assessments for NEPA compliance, site screenings, land use evaluations, wetland assessments, vegetative surveys and noise analyses. I have assisted in the permitting of over 500 telecommunications projects in New England over the past eleven years. My responsibilities include the coordination and oversight of site screenings and environmental assessments in accordance with the NEPA, visual impact analyses and regulatory permitting support.

**Q4. What services did VHB provide T-Mobile regarding the proposed Facility?**

A4. T-Mobile retained VHB to perform a Visual Resource Evaluation ("Evaluation") and provide a Visual Resource Evaluation Report ("VRE Report"), a wetlands compliance analysis and a coastal consistency analysis for the proposed telecommunications facility at 15 Orchard Park Road, Madison, Connecticut (the "Facility"). I oversaw the Evaluation and the VRE Report for the proposed Facility.

**Q5. Please describe the process for conducting the Visual Resource Evaluation.**

A5. The Evaluation consists of a predictive computer model and in-field analysis. The predictive computer model assesses the potential visibility of the Facility within a

two mile radius ("Study Area"), including private property and/or otherwise inaccessible areas for field verification. The in-field analysis consists of a "balloon float" and drive through reconnaissance of the Study Area. This in-field investigation allows VHB to obtain location and height representations, back-check the initial predictive computer model results and assess the visibility of the proposed Facility from areas accessible to the public. VHB assesses the results of the predictive computer model and the in-field analysis and incorporates these results into the final viewshed map. In this case, VHB had the opportunity to review in-field conditions via balloon floats on three separate occasions: July 7, July 11 and December 14, 2009. The completed VRE Report and viewshed map are included in Exhibit M of the Application.

**Q6. Please describe how VHB prepared the preliminary view shed analysis for the VRE Report.**

A6. VHB uses a computer modeling tool called ERSI's ArcView® Spatial Analyst, to calculate the areas within the Study Area where the Facility would be visible. This software is based upon data such as the height of the Facility, the Facility's ground elevation, the surrounding topography and existing vegetation. VHB first incorporates data to construct a digital forest layer, which is derived from information produced by the University of Connecticut Center for Land Use Education and Research. During the initial analysis, VHB omits the tree canopy so the only visual constraint is topography. This initial analysis provides a reference point useful in determining seasonal visibility fluctuations. Subsequent to the initial analysis, VHB adds the existing vegetation data. VHB also includes an additional data layer, obtained from the Connecticut State Department of Environmental Protection, depicting significant resource areas such as

State forests and parks, recreational facilities, registered historic sites, open space lands and other sensitive visual receptors. VHB depicts on the view shed map any state-or locally-designated scenic roads and Connecticut blue-blazed hiking trails that exist in the Study Area.

**Q7. Please describe how VHB conducted the initial balloon float.**

A7. On July 7, 2009, VHB raised and maintained a four-foot diameter helium filled weather balloon at the location of the proposed Facility at a height of 100 feet to conduct the initial in-field analysis. After stabilizing the balloon, VHB traveled the local public thoroughfares within the Study Area to verify the computer generated viewshed map and inventory areas of visibility. In conducting the drive-by reconnaissance, VHB focused its evaluation on nearby residential areas and other potential sensitive visual receptors. While the balloon was aloft, VHB took photographs from a variety of locations, settings and vantage points to assist in evaluating where the balloon was visible. VHB also recorded the latitude and longitude of each photograph using a handheld global positioning system (GPS) receiver unit. The photographs were taken using a NIKON D-80 digital camera body and NIKON eighteen to 135 millimeter lens. VHB set the lens to fifty millimeters, which most accurately represents the unaided human eye.

**Q8. How did VHB select the locations for the photographs during the in-field investigation?**

A8. VHB selected several of the photograph locations using a preliminary version of the viewshed map to identify areas adjacent to public roads within the Study Area from

where the proposed Facility might be visible. VHB selected other locations based on in-field observations made during the time of the balloon float.

**Q9. When did VHB conduct additional balloon floats?**

A9. Subsequent to the balloon float on July 7, 2009, VHB conducted a second balloon float on July 11, 2009 (from 8 a.m. to 12 p.m.) at the request of the Town. The Town issued a public notice of the second balloon float so that those interested in the proposed Facility could attend and obtain information. The public notice is appended hereto as Attachment A. VHB also conducted a balloon float on December 14, 2009, to assess further the potential visual impact of the proposed Facility on the surrounding area during "leaf-off" conditions. These subsequent balloon floats were conducted in the same manner as the initial balloon float on July 7, 2009.

**Q10. Please describe the estimated visibility of the proposed Facility.**

A10. The areas from which the Facility would be at least partially visible year round comprise approximately 712 acres of the 8,042 acre study area. Approximately 97 percent of the 712 acres consists of open water on the Long Island Sound to the south and/or the Cedar Island, East River and Neck River Tidal Marshes. Aside from these open water areas, some select areas near the Facility may have year round visibility including portions of Route 1 and Stony Lane. Visibility from these select areas would be intermittent at best and would not be in the direct line of motorists traveling these

routes. It is unlikely that the Facility will be visible from the Rockledge Drive vista, Tuxis Pond or Tuxis Island.

Overall, the Facility will be partially visible year round to only four residences within the Study Area, which includes one residence on Route 1 and three on Stony Lane. Areas of seasonal visibility comprise of approximately fifty-nine additional acres and are limited to the general vicinity of the Property, which is within .35 miles or less. There are eleven additional residences along Route 1, Stony Lane and Johnson Lane that may have limited seasonal views of the Facility from select portions of those properties.

**Q11. Please describe any features of the Property that would reduce any potential visual impact of the proposed Facility.**

A11. Existing topography and mature vegetation would reduce the potential visual impacts of the proposed Facility from the surrounding areas. The Facility is set back approximately 1,500 feet from Mungertown Road with excellent screening from mature trees. Ultimately, the majority of views would be confined to the immediate vicinity of the Facility because of the relatively low height of the tower, the existing mature vegetation, and the tower's placement on somewhat lower ground elevation than that of the surrounding area.

**Q12. Will the proposed Facility have any visual impact on any sensitive visual receptors such as scenic, historic or recreational sites, hiking trails or parks?**

A12. No, the proposed Facility would not have any visual impact on any properties designated as open space or any other sensitive visual receptors such as historic,

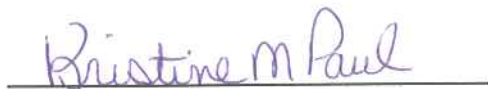
recreational sites, hiking trails or parks. This determination includes the Madison Green Historic District, which VHB confirmed at the request of the Town. On January 9, 2009, the State Historical Preservation Office issued a letter of no impact, which is attached to the Application as Exhibit N.

The only property in the vicinity of the Facility listed on the National Register of Historic Places is the Shelley House located at 248 Boston Post Road. There are three properties listed on the State Register, which are located at 228, 273 and 370 Boston Post Road. The Facility would not be visible from these properties.

The Town requested that T-Mobile consider views from other properties along Boston Post Road which might have historical significance. VHB determined that 22 other properties along Boston Post Road might have some historical significance. None of these properties are listed on the National or State Registers. Of these properties, one property, located at 321 Boston Post Road, would have year round partial views of the Facility and two additional properties, 324 and 340 Boston Post Road, could have partial seasonal views of the Facility.

  
Michael Libertine

Sworn and subscribed to before me this  
29<sup>th</sup> day of December, 2009.



*Notary Public*

*My Commission expires*

**KRISTINE M. PAUL**  
**NOTARY PUBLIC**  
MY COMMISSION EXPIRES JAN. 31, 2014