

#### JULIE D. KOHLER

PLEASE REPLY TO: Bridgeport

E-Mail Address: jlanger@cohenandwolf.com

March 20, 2012

#### VIA FEDERAL EXPRESS and ELECTRONIC MAIL

Ms. Linda L. Roberts Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

Re: Docket No. 425 – Message Center Management Application for a Certificate of Environmental Compatibility and Public Need for a Telecommunications Facility at 4 Dittmar Road in the town of Redding, Connecticut

Dear Ms. Roberts:

Enclosed herein please find an original and fifteen (15) copies of the following documents filed on behalf of the Applicant, T-Mobile Northeast LLC:

- (1) Exhibit List;
- (2) Witness List;
- (3) Pre-Filed Testimony of Scott Heffernan; and
- (4) Interrogatory Responses to Town of Redding from T-Mobile Northeast LLC.

Very truly yours,

Julie D. Kohler

JDK:lcc Enclosures

cc: Service List (via electronic and first class mail)

RE: MESSAGE CENTER MANAGEMENT

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION.

MAINTENANCE, AND OPERATION OF A REPLACEMENT TELECOMMUNICATIONS FACILITY LOCATED AT 4 DITTMAR ROAD.

IN THE TOWN OF REDDING, CONNECTICUT

DOCKET NO. 425

Date: March 20, 2012

#### **EXHIBIT LIST**

The Intervenor, T-Mobile Northeast LLC ("T-Mobile), will present the following exhibits at the public hearing to be held on March 27, 2012:

- 1. Propagation plots included in Attachment 1 of the Application for Certificate of Environmental Compatibility and Public Need submitted by Message Center Management, Inc. on January 6, 2012;
- 2. T-Mobile's Responses to the Council's First Set of Pre-Hearing Interrogatories, dated February 15, 2012, including all exhibits submitted therewith, already submitted to the Council;
- 3. Pre-filed testimony of Scott Heffernan, dated March 15, 2012, submitted concurrently with this Exhibit List;
- T-Mobile's responses to the Town of Redding's First Set of Interrogatories, dated March 20, 2012, submitted concurrently with this Exhibit List; and
- 5. Any other exhibits that may be obtained prior to the hearing and are relevant to the above-captioned matter.

T-Mobile respectfully reserves the right to offer additional exhibits, witnesses, testimony, and administratively noticed materials during the proceedings as necessary.

Respectfully submitted,

T-MOBILE NORTHEAST LLC

Julie D. Kohler, Esq. Cohen and Wolf, P.C.

1115 Broad Street

Bridgeport, CT 06604

Tel. (203) 368-0211

Fax (203) 394-9901

jkohler@cohenandwolf.com

#### **CERTIFICATION OF SERVICE**

I hereby certify that on this day a copy of the foregoing was delivered by Electronic Mail and regular mail, postage prepaid, to all parties and intervenors of record, as follows:

Daniel M. Laub, Esq.
Christopher B. Fisher, Esq.
Cuddy & Feder, L.L.P.
445 Hamilton Avenue, 14<sup>th</sup> Floor
White Plains, NY 10601
(Via email: dlaub@cuddyfeder.com
cfisher@cuddyfeder.com)

Brad N. Mondschein, Esq.
Pullman & Comley, LLC
90 State House Square
Hartford, CT 06103
(Via email: bmonschein@pullcom.com)

Julie D. Kohler

RE: MESSAGE CENTER MANAGEMENT

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A REPLACEMENT TELECOMMUNICATIONS FACILITY LOCATED AT 4 DITTMAR ROAD, IN THE TOWN OF REDDING, CONNECTICUT DOCKET NO. 425

Date: March 20, 2012

#### **WITNESS LIST**

The Intervenor, T-Mobile Northeast LLC ("T-Mobile"), will present the following witnesses at the public hearing to be held on March 27, 2012:

- 1. Scott Heffernan, RF Engineering Director, EnviroBusiness, Inc. ("EBI"); and
- 2. Hans Fiedler, Development Operations Manager (Connecticut and New England) for T-Mobile.

Respectfully submitted,

T-MOBILE NORTHEAST LLC

y <u>ule l</u>

Julie D. Kohler, Esq. Cohen and Wolf, P.C.

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90 State House Square
Hartford, CT 06103
(Via email: bmonschein@pullcom.com)

Julie D. Kohler

RE: MESSAGE CENTER MANAGEMENT

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A

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Date: March 15, 2012

### PRE-FILED TESTIMONY OF SCOTT HEFFERNAN

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

A1. Scott Heffernan and I am RF Engineering Director for EnviroBusiness, Inc ("EBI Consulting"), which is located in Burlington, Massachusetts.

#### Q2. What kind of services does EBI Consulting provide?

A2. EBI Consulting provides wireless design services for both commercial and government projects including, but not limited to, evaluating possible sites for telecommunications facilities, system design, and determining radio frequency ("RF") coverage, capacity and interference for proposed telecommunications facilities.

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

A3. I have a B.S. in Physics from Clark University and Certificates in Telecommunications Engineering and UNIX Programming from Northeastern University. I have over 16 years of experience in wireless engineering, which includes the design, integration, optimization and management of network build-outs for commercial wireless carriers such as Nextel, AT&T, Wireless, Cingular and Voicestream (T-Mobile's

predecessor). I have also been involved in network design for government entities such as the Department of Homeland Security, Department of the Army, Department of the Navy, and the United States Marine Corps. I have spent the last 6 years primarily as an independent contractor for T-Mobile, focusing on the design and integration of the T-Mobile wireless network.

### Q4. What services did you provide T-Mobile regarding the proposed Facility?

A4. I evaluated T-Mobile's existing network in Redding, Connecticut, specifically within the areas surrounding the telecommunications facility proposed by Message Center Management ("MCM") at 4 Dittmar Road in Redding ("Facility"). In doing so, I considered the general design of T-Mobile's network, the technical constraints in selecting certain proposed facilities, and the specific need for the Facility.

#### Q5. Please describe T-Mobile's wireless network in Connecticut.

A5. T-Mobile's predecessor entities began constructing a wireless network to provide Personal Communication Services ("PCS") in Connecticut in the mid-1990s. T-Mobile is licensed by the Federal Communications Commission to provide wireless service in the PCS (1900 MHz) and AWS (2100 MHz) frequency bands. Within these frequency bands, T-Mobile currently provides service to its customers utilizing GSM, UMTS and soon LTE technologies. Current efforts are directed to providing signals to areas without coverage and meeting demand for additional capacity within the areas already served. Each new site must be chosen to meet the need for coverage and/or capacity without creating RF interference among sites.

# Q6. What requirements does the nature of wireless technology place on T-Mobile's selection of cellular tower locations?

A6. Like all personal communications service providers, T-Mobile's wireless network is based on the principle of frequency re-use. T-Mobile must select cellular tower locations so that the towers provide sufficient signal strength overlap to allow a call to be "handed-off" between cellular tower locations without creating unnecessary duplicative coverage and frequency interference. Terrain variations may also limit the siting of cellular towers.

Technological advances in service, such as the availability of data and video services through customer handsets, are also significant factors in system development. Increased customer demand and expectations resulting from those advances drive the need for additional sites.

T-Mobile's required lower limit threshold is -84 dBm, which is expected to provide reliable in-vehicle coverage. A higher threshold level of -76 dBm is the minimum required to provide reliable in-building coverage. At levels below the -84 dBm threshold, T-Mobile's service to customers for voice and data services would experience signal degradation. See T-Mobile's responses to the Council's First Set of Interrogatories, dated February 15, 2012. In addition, levels below -84 dBm would adversely affect T-Mobile's ability to provide reliable E-911 services as mandated by the federal government.

### Q7. Please describe T-Mobile's need for the proposed Facility.

A7. The Facility would be an integral component of T-Mobile's wireless network in Redding. There is a gap in coverage in this area, specifically along Route 107 and

Route 58 (Black Rock Turnpike) and the areas surrounding the site of the proposed Facility. Please see T-Mobile's Responses to the Council's First Set of Interrogatories, dated February 15, 2012. The Facility, in conjunction with other existing and future facilities in Redding and surrounding towns, is necessary for T-Mobile to provide wireless services to people living and working in and traveling through this area of the State.

#### Q8. How did you analyze the efficacy of the proposed Facility?

A7. A8. I used propagation prediction tools to determine the potential effectiveness of the proposed Facility in meeting the identified coverage need. That analysis took into account T-Mobile's coverage objective, T-Mobile's existing on-air sites in this area of the State and the existing terrain and vegetation. The analysis confirmed that the proposed Facility would provide service to the target area and would improve service generally within this area of Redding. The Facility would provide effective service with antenna arrays located at approximately 120 feet above grade level ("AGL"). At lower heights, the coverage in this area of Redding starts to deteriorate and fall below T-Mobile's minimum required threshold of -84 dBm.

### Q9. Was T-Mobile's search for a facility based upon your analysis of need?

A9. Yes. T-Mobile's search for a facility in this area of Redding was based upon my analysis of need. T-Mobile initiated the site search in this area of Redding on or about November 15, 2007.

# Q10. <u>Has a test drive been conducted in this area regarding the proposed Facility?</u>

A10. Yes. T-Mobile continually drives its on-air sites for network analysis and propagation model tuning purposes. A wireless network is dynamic environment, subject to equipment, frequency and environmental changes. T-Mobile strives to have the most current test drive data available for any given area in its network. This allows for greater accuracy in its current network design of new facilities to ensure that each new facility is a quality edition to the network.

#### Q11. Please summarize the basis for the height of the proposed Facility.

A11. The analysis of this area of Redding confirmed that the minimum height required to cover the intended coverage objective is approximately 120 feet AGL. At lower heights, the coverage starts to deteriorate and fall below T-Mobile's minimum required threshold of -84 dBm. Accordingly, antennae located at the proposed height would allow T-Mobile to provide adequate coverage within the target coverage area. Please see T-Mobile's responses to the Council's First Set of Interrogatories, dated February 15, 2012.

# Q12. <u>Is adequate coverage in this area of Redding necessary to provide consistent and reliable 911 service?</u>

A12. Yes. If the coverage within a specific area is inadequate, then not only does routine call reliability suffer, but so does 911 / emergency call reliability.

Scott Heffernan

Sworn and subscribed to before me this 16<sup>th</sup> day of March, 2012.

Karen m Barthalonew

Notary Public My Commission expires

KAREN M. BARTHOLOMEW NOTARY PUBLIC MY COMMISSION EXPIRES APR. 30, 2005

RE: MESSAGE CENTER MANAGEMENT

APPLICATION FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE, AND OPERATION OF A

REPLACEMENT TELECOMMUNICATIONS FACILITY LOCATED AT 4 DITTMAR ROAD,

IN THE TOWN OF REDDING, CONNECTICUT

DOCKET NO. 425

Date: March 20, 2012

# INTERROGATORY RESPONSES TO TOWN OF REDDING FROM T-MOBILE NORTHEAST LLC

T-Mobile Northeast LLC ("T-Mobile") submits the following responses to the first set of Pre-Hearing Interrogatories propounded by the Town of Redding in connection with the above-captioned Application.

- TM-1. Explain whether T-Mobile customers using cell or data services in the proximity of the current guyed tower can obtain T-Mobile Services. If yes, explain why T-Mobile is planning to install an antenna in the location of the proposed tower.
- A1. T-Mobile's current level of existing wireless service in the area surrounding the proposed facility is below its minimum design threshold. In the majority of the area surrounding the proposed facility T-Mobile customers will experience very poor signal quality to no useable service at all. However, as signal degrades from surrounding facilities at differing distances due to perspective to attenuating objects, there may be varied localized spots where a T-Mobile customer may be able to receive a small amount of useable service. This level of service is typically only useable to customers outside of a vehicle or building structure. Additionally, these small pockets are not contiguous throughout the designed coverage objective and in averaging coverage over the given sample area the composite coverage throughout the targeted objective area is well below the minimum design threshold and is unreliable for T-Mobile's customers in this area. Lack of consistent coverage in this area causes routine call reliability and 911/emergency call reliability to suffer.

- TM-2. Explain why T-Mobile has not sought to locate an antennae on the current guyed tower in a previous timeframe. Explain what has caused T-Mobile to install antennae at the proposed location at this time.
- A2. T-Mobile initiated a site search in this area of Redding on or about November, 2007. The guyed tower located at 4 Dittmar Road is one of four pre-existing wireless facility locations that T-Mobile identified for review as a possible coverage solution. Please see response to TM-1 for the basis of T-Mobile's need to install a site at the proposed facility at this time.
- TM-3. Provide a list of backup electric generation equipment projected to be installed at the tower and whether T-Mobile expects to use the backup electric generation while new or replacement electric service is installed at the tower. If backup electric generation is expected to be required, provide the expected timeframe for its use.
- A3. T-Mobile intends to install a battery backup system to provide supplemental electrical power. The backup battery system will provide 12-16 hours of service. As T-Mobile is not currently installed on the existing facility, it will not need backup generation during the replacement of the current electrical service at the property.
- TM-4. When did T-Mobile first sign a lease for locating an antenna at the proposed tower? Provide a copy of the lease. Explain what caused the delay in placing antennae on the guyed tower.
- A4. T-Mobile executed a lease for the use of this facility on February 27, 2009. A copy of the Memorandum of License is attached hereto. T-Mobile regional/market network prioritizations delayed the location of its equipment at the existing facility during the 2009 and 2010 calendar years.

### Respectfully submitted,

### T-MOBILE NORTHEAST LLC

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Julie D. Kohler, Esq. Cohen and Wolf, P.C. 1115 Broad Street Bridgeport, CT 06604 Tel. (203) 368-0211 Fax (203) 394-9901

jkohler@cohenandwolf.com

#### **CERTIFICATE OF SERVICE**

I hereby certify that on this day a copy of the foregoing was delivered by Electronic Mail and First Class U.S. Mail, postage prepaid, to all parties and interveners of record, as follows:

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445 Hamilton Avenue, 14<sup>th</sup> Floor
White Plains, NY 10601
(Via email: dlaub@cuddyfeder.com
cfisher@cuddyfeder.com)

Brad N. Mondschein, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103

(Via email: bmonschein@pullcom.com)

Julie D. Kohler Esq

#### RETURN TO

Linear Title & Closing

LICENSOR: Robert Paradise

Ocean Technology Park, 1st Floor 127 John Clarke Rd.

Middletown, RI 02842

EXHIBIT D

VOL 372 PARE 0399 CTFF632A

#### MEMORANDUM OF LICENSE

Tino-NE-696ST Assessor's Parcel Number: Map 1 Parcel 10 Between Robert Paradise ("Licensor"), Message Center Management, Inc. ("Managing Agent" or "MCM") and Omnipoint Communications, Inc. ("Licensee")

A License (the "Agreement") by and between Robert Paradise, an individual ("Licensor"), Message Center Management, Inc. ("Managing Agent" or "MCM") and Omnipoint Communications, Inc., a Delaware corporation ("Licensee") was made regarding a portion of the following property:

See Attached Exhibit "A" incorporated herein for all purposes

The License is for a term of ten (10) years and will commence on the date as set forth in the License (the "Commencement Date"). Licensee shall have the right to extend this License for two (2) additional and successive five-year terms.

IN WITNESS WHEREOF, the parties hereto have respectively executed this memorandum effective as of the date of the last party to sign.

By: Printed Name: Title: Date:	Robert Paradise Owner 26 March 09	WITNESS; Sol.
MANAGING A	AGENT/MCM: Message Center Management	
By: Printed Name: Title: Date:	Maria A. Scotti Director 3/27/09	Witness: Whiley Claref. Wight
LICENSEE:	Omnipoint Communications, Inc.	
By: Printed Name:		WITNESS:
Title:	Ayo Sanderson	
Date:	Regional Development Directo:	



CTFF 632A

# [Landlord Notary block for an Individual] STATE OF COnnecticut COUNTY OF Hartford This instrument was acknowledged before me on 30600 by Robert Paradise. Dated: March 26,200 My commission expires (Use this space for notary stamp/seal) [Notary block for Landlord] [Landlord Notary block for a Corporation, Partnership ,or Limited Liability Company] STATE OF Connecticut ss. Hartford COUNTY OF Harthord This instrument was acknowledged before me on March 27, 2009 by area A. Scotti, [title] <u>Orastor</u> of said Corporation [name of entity]. [type of entity], on behalf Dated: March 27, 2009 My commission expires \_

(Use this space for notary stamp/seal)



### [Notary block for Tenant]

STATE OF MASSACHSETTS	)
STATE OF MASSACHSETTS NEW TERSE	√ ) ss.
COUNTY OF BRISTOL	′ )
MORRIS	
I certify that I know or have	e satisfactory evidence that AVO SANDERSON is the person
	rson acknowledged that he/she signed this instrument, on oath stated
	execute the instrument and acknowledged it as the
	ipoint Communications, Inc., a Delaware corporation, to be the free
	e uses and purposes-mentioned in the instrument.
	' '//
Dated: 23/09	
	1 / Will mulls
	Notary Public
•	Print Name PATRICIA IL FEMASILIA
	My commission expires ATTOMMEY AT LAW
	BIATE OF NEW PERSON
	AND THE PARTY OF T
	·
(Hea this space for notary staron land)	
(Use this space for notary stamp/seal)	

#### EXHIBIT A **Legal Description**

The Property is legally described as follows:

Site Name: MCM Dittmar Rd

Page 1 of 1

Site Number: CTFF632A

SITE ADRESS : 4 DITTMARRO, REDDING CT 06896

ALL THAT CERTAIN tract piece or parcel of land with the buildings and . improvements thereon situated in the Town of Redding, County of Fairfield, and State of Connecticut, being shown and delineated on that certain map entitled "MAP OF PROPERTY PREPARED FOR A. GEORGE PARADISE REDDING, CONN. SCALE 1" = 50 JULY 5, 1966 BY JOHN M. FARMSWORTH IAND SURVEYOR REDDING, CONN." which map is "certified substantially correct" John M. Farnsworth and is on file in the Office of the Town Clerk of the Town of Redding as Map No. 1130, EXCEPTING THEREFROM the following described portion of said premises as shown on said Map:

Beginning at a point in a stone wall marking the easterly boundary of the premises shown on said map, which point is N 4°34'49" W 177.75 ft., from the SE corner of said premises, and thence continuing along said stone wall to the intersection by another stone wall at a point S 9° 04' 20" W 170.39 ft., from the NE corner of said premises measured along said first mentioned stone wall, and thence the following courses and distances: N 85° 04' 40" E 47.80 ft., N 77° 00' 40" E 331.27 ft., S 2° 51' 30"E 33.10 ft., S 11° 29' 20" E 63.85 ft., S 8° 35' 10" W 41.73 ft., S 77° 55' 20" W 187.89 ft., S 78° 24' 30" W 234.39 ft. to the point or place of beginning.

RECEIVED FOR RECORD JULY 12 20 11 0 11:20 Am ATTEST Kathlera Whiseerskins

