



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@po.state.ct.us

Web Site: www.state.ct.us/csc/index.htm

July 31, 2003

Stephen J. Humes
LeBoeuf, Lamb, Greene & MacRae
Goodwin Square
225 Asylum Street
Hartford, CT 06103

RE: **EM-T-MOBILE-077-030702** - Omnipoint Communications, Inc. notice of intent to modify an existing telecommunications facility located at 205 Spencer Street, Manchester, Connecticut.

Dear Attorney Humes:

At a public meeting held on July 22, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies. Although there are no conditions attached with this approval, enclosed please find a letter from the Town of Manchester with their recommendations for your review and consideration.

The proposed modifications are to be implemented as specified here and in your notice dated July 2, 2003. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Honorable Stephen T. Cassano, Mayor, Town of Manchester
Thomas R. O'Marra, Zoning Enforcement Officer Town of Manchester
Christopher B. Fisher, Esq., Cuddy & Feder LLP



Town of Manchester

41 Center Street • P.O. Box 191
Manchester, Connecticut 06045-0191
www.ci.manchester.ct.us

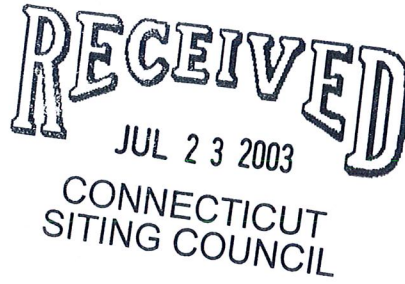
STEPHEN T. CASSANO, MAYOR
JOSH M. HOWROYD, DEPUTY MAYOR
CHRISTY SCOTT, SECRETARY

DIRECTORS
TIMOTHY H. BECKER
THOMAS P. CROCKETT
JOSEPH S. HACHEY
DAVID M. SHERIDAN
LOUIS A. SPADACCINI
KEVIN L. ZINGLER

STEVEN R. WERBNER, GENERAL MANAGER

July 21, 2003

Facsimile – 860-827-2950



S. Derek Phelps, Executive Director
State of Connecticut
Connecticut Siting Council
Ten Franklin Square
New Britain, Connecticut 06051

Re: EM-T-Mobile-077-030702 – Omnipoint Communications, Inc.
205 Spencer Street, Manchester, Connecticut

Dear Mr. Phelps:

Thank you for the opportunity to comment with regards to the subject application. As in the past with sharing arrangements, the Town of Manchester would request that all equipment cabinets be painted to match the colors of the existing cabinets. Our understanding is that the existing cabinets are required to be beige in accordance with the original approval granted by the Manchester Planning and Zoning Commission.

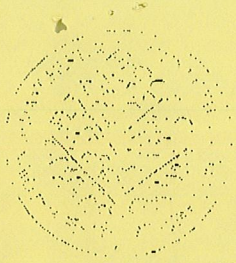
Thank you very much for your attention to this matter.

Very truly yours,

Thomas R. O'Marra
Zoning Enforcement Officer

TRO'M:ka
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Town of Manchester

41 Center Street • P.O. Box 191
Manchester, Connecticut 06045-0191
www.ci.manchester.ct.us

STEPHEN T. CASSANO, MAYOR
JOSH M. HOWROYD, DEPUTY MAYOR
CHRISTY SCOTT, SECRETARY

DIRECTORS
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THOMAS P. CROCKETT
JOSEPH S. HACHEY
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KEVIN L. ZINGLER

STEVEN R. WERBNER, GENERAL MANAGER

July 21, 2003

Facsimile – 860-827-2950

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JUL 22 2003

CONNECTICUT
SITING COUNCIL

S. Derek Phelps, Executive Director
State of Connecticut
Connecticut Siting Council
Ten Franklin Square
New Britain, Connecticut 06051

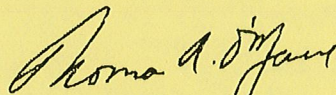
Re: EM-T-Mobile-077-030702 – Omnipoint Communications, Inc.
205 Spencer Street, Manchester, Connecticut

Dear Mr. Phelps:

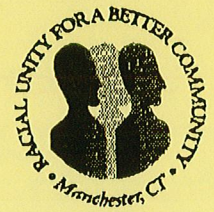
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Thank you very much for your attention to this matter.

Very truly yours,


Thomas R. O'Marra
Zoning Enforcement Officer

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STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Web Site: www.state.ct.us/csc/index.htm

July 7, 2003

Honorable Stephen T. Cassano
Mayor
Town of Manchester
Town Hall
41 Center Street
P. O. Box 191
Manchester, CT 06040-0191

RE: **EM-T-MOBILE-077-030702** – Omnipoint Communications, Inc. notice of intent to modify an existing telecommunications facility located at 205 Spencer Street, Manchester, Connecticut.

Dear Mr. Cassano:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for July 22, 2003, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/ld

Enclosure: Notice of Tower Sharing

c: Thomas R. O'Marra, Zoning Enforcement Officer, Town of Manchester

LEBOEUF, LAMB, GREENE & MACRAE
L.L.P.

A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

NEW YORK
WASHINGTON, D.C.
ALBANY
BOSTON
DENVER
HARRISBURG
HARTFORD
HOUSTON
JACKSONVILLE
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PITTSBURGH
SALT LAKE CITY
SAN FRANCISCO

GOODWIN SQUARE
225 ASYLUM STREET
HARTFORD, CT 06103
(860) 293-3500
FACSIMILE: (860) 293-3555

LONDON
(A LONDON-BASED
MULTINATIONAL PARTNERSHIP)
PARIS
BRUSSELS
JOHANNESBURG
(PTY) LTD.
MOSCOW
DIXON

WRITEF
(860)

EM-T-MOBILE-077-030702

July 2, 2003

RECEIVED

JUL - 2 2003

CONNECTICUT
SITING COUNCIL

Pamela Katz, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Notice of Exempt Modification
205 Spencer Street, Manchester, Connecticut

Dear Chairman Katz and Members of the Council:

Please be advised that LeBoeuf, Lamb, Greene & MacRae, L.L.P. represents Omnipoint Communications, Inc., a subsidiary of T-Mobile USA, Inc. (hereinafter T-Mobile) in the above-referenced matter. T-Mobile intends to add three antennas to its existing three-antenna array within the existing flagpole facility in Manchester. Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2). In accordance with R.C.S.A. § 16-50j-73, a copy of this letter is being sent to Manchester Mayor Stephen T. Cassano.

Background

T-Mobile holds the "A block" "Wideband PCS" license for the 2-GHz PCS frequencies for the greater New York City area, including the entire State of Connecticut. T-Mobile is licensed by the Federal Communications Commission (FCC) to provide PCS wireless telecommunications service in the State of Connecticut, which includes the area to be served by the proposed installation.

Discussion

The existing facility consists of a one hundred twenty-five foot (125') flagpole (see attached drawing, attached as Exhibit B) and surrounding compound. The coordinates for the site are **Lat: 41°-46'-10.75"** and **Long: 72°-34'-12.33"**. The tower is on the north side of Spencer Street, approximately one thousand feet (1,000') north of the intersection with Hillstown Road and roughly twenty-five hundred feet south of Interstate 384 in the western portion of Manchester (see site location map, attached as exhibit A). The site is located behind a large commercial plaza on property of the Kranzco Realty Trust and is accessed from that property.

T-Mobile proposes to add three (3) antennas to supplement its existing three-antenna setup, creating an antenna array with a total of six (6) antennas. The proposed configuration is a stacked cluster of three sectors with two antennas per sector mounted in a canister within the existing flagpole structure. T-Mobile currently has antennas in the flagpole at the one hundred nine foot (109') centerline above ground level ("AGL"). The new antennas would be mounted in the slot above, at the one hundred nineteen foot (119') centerline AGL. A structure elevation is shown as part of Exhibit B. The model number for the replacement antennas is EMS-RR90-17-02DP. A structural analysis and design calculations of the tower has been completed and is attached as Exhibit D. As stated in the structural analysis, the existing tower is capable of supporting the proposed T-Mobile installation. Two (2) new Nortel S8000 equipment cabinets will be installed next to an existing T-Mobile Nortel S8000 equipment cabinet. A new five foot by ten foot (5' x 10') concrete pad would be installed adjacent to the existing cabinet to accommodate these new cabinets (see drawing attached as part of Exhibit B). The existing fenced compound surrounding the flagpole will not be altered in any way by the T-Mobile installation. Utilities will be run from those currently in place.

The planned modifications to the Manchester facility fall squarely within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2).

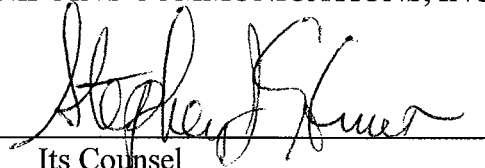
1. The proposed modification will not increase the height of T-Mobile's approved antennas on the tower and will not extend the boundaries of the existing compound area. The enclosed tower drawings confirm that the planned changes will not increase the overall height of the tower.
2. The installation of T-Mobile equipment, as reflected on the attached site plan, will not require an extension of the site boundaries.
3. The proposed modification to the facility will not increase the noise levels at the existing facility by six decibels or more. T-Mobile's equipment is self-contained and requires no additional heating, ventilation or cooling equipment.
4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the site boundary, to a level at or above the applicable standard. The "worst-case" RF power density calculations, for a point at the site boundary, are attached hereto as Exhibit E.

For the foregoing reasons, T-Mobile respectfully submits that the proposed addition of antennas and equipment at the Manchester facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Thank you for your consideration of this matter.

Respectfully submitted,

OMNIPOINT COMMUNICATIONS, INC.

By: 
Its Counsel
Stephen J. Humes

cc: Mayor Stephen T. Cassano

Exhibit A

Site Map

205 Spencer Street

Manchester, Connecticut

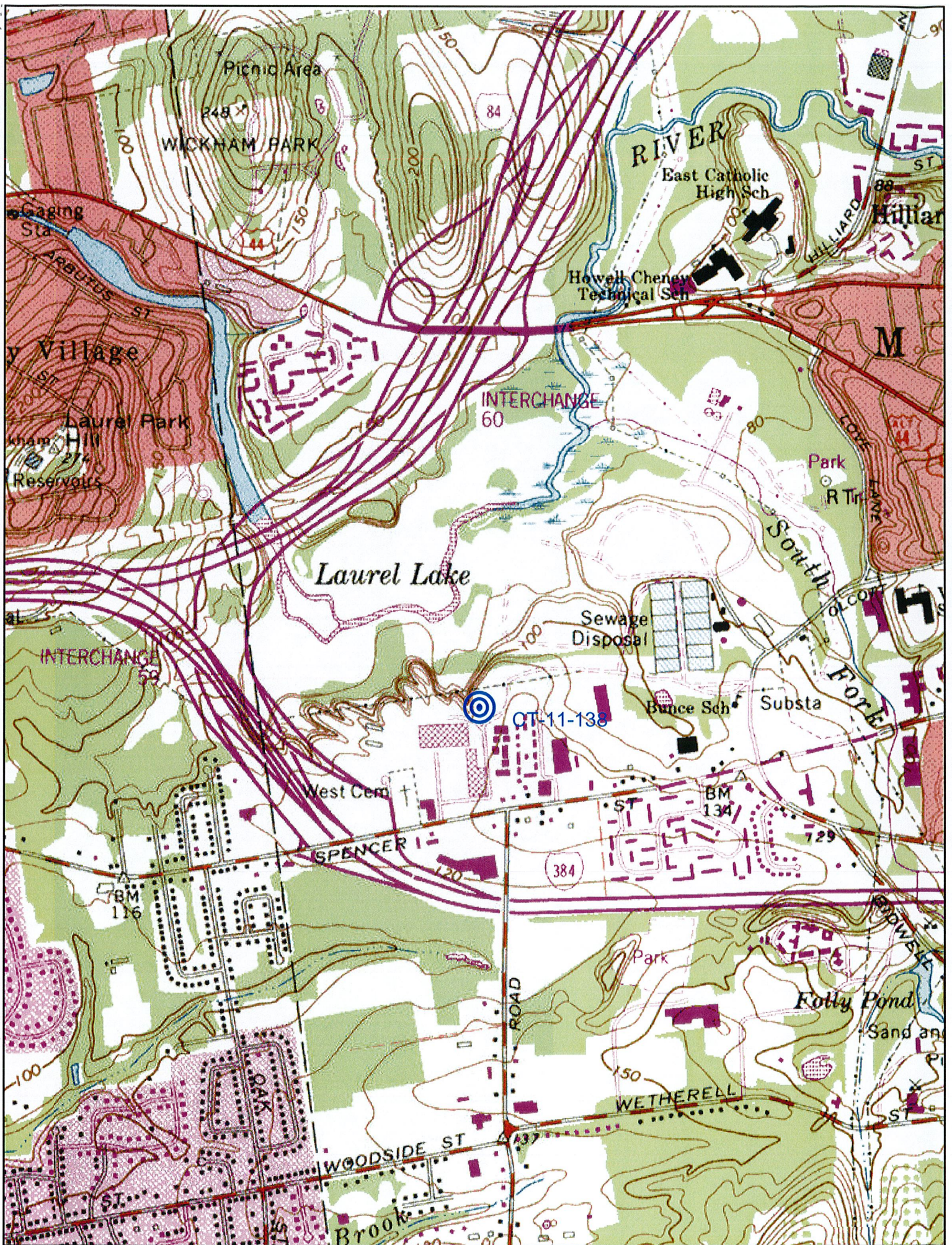
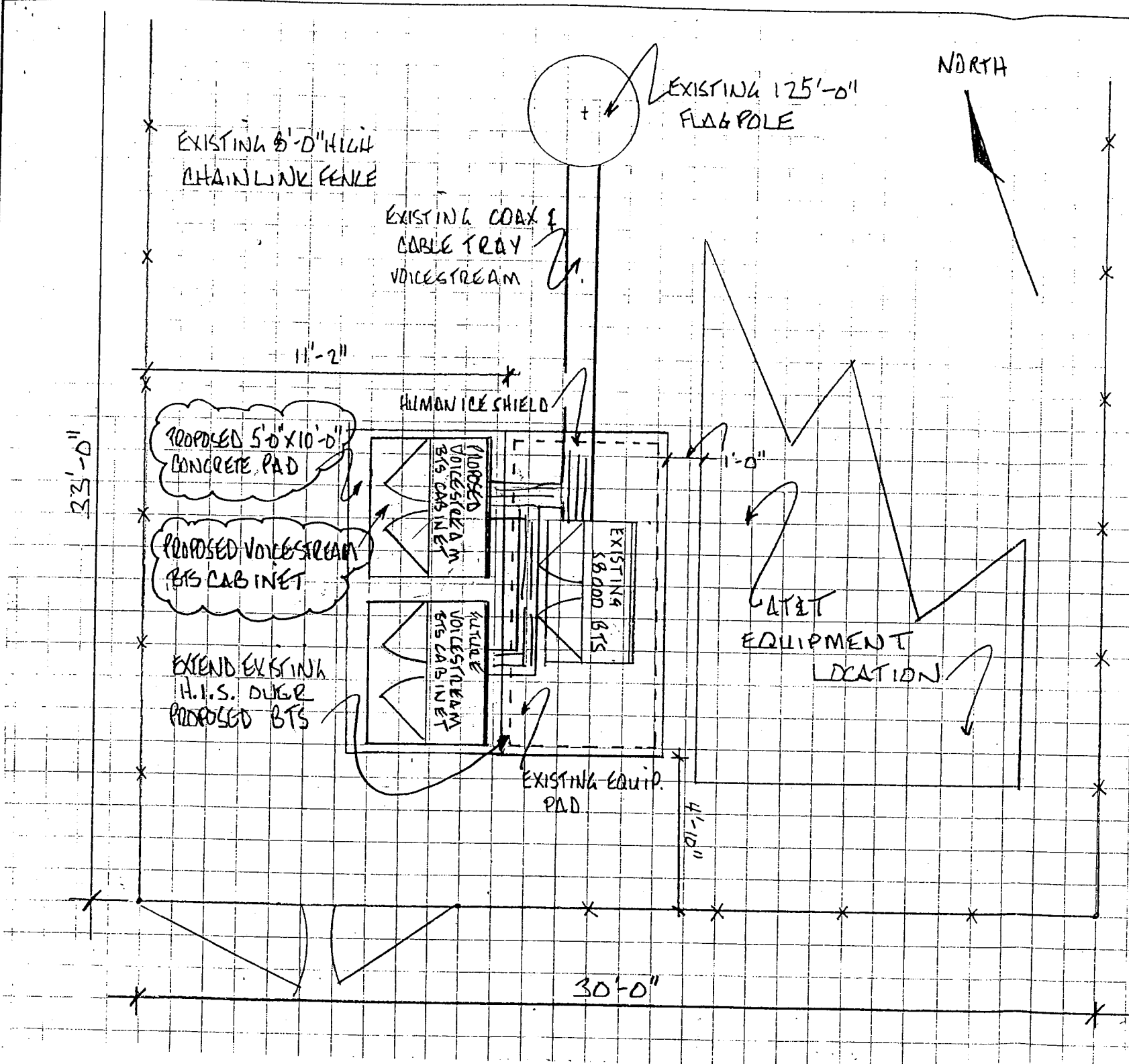
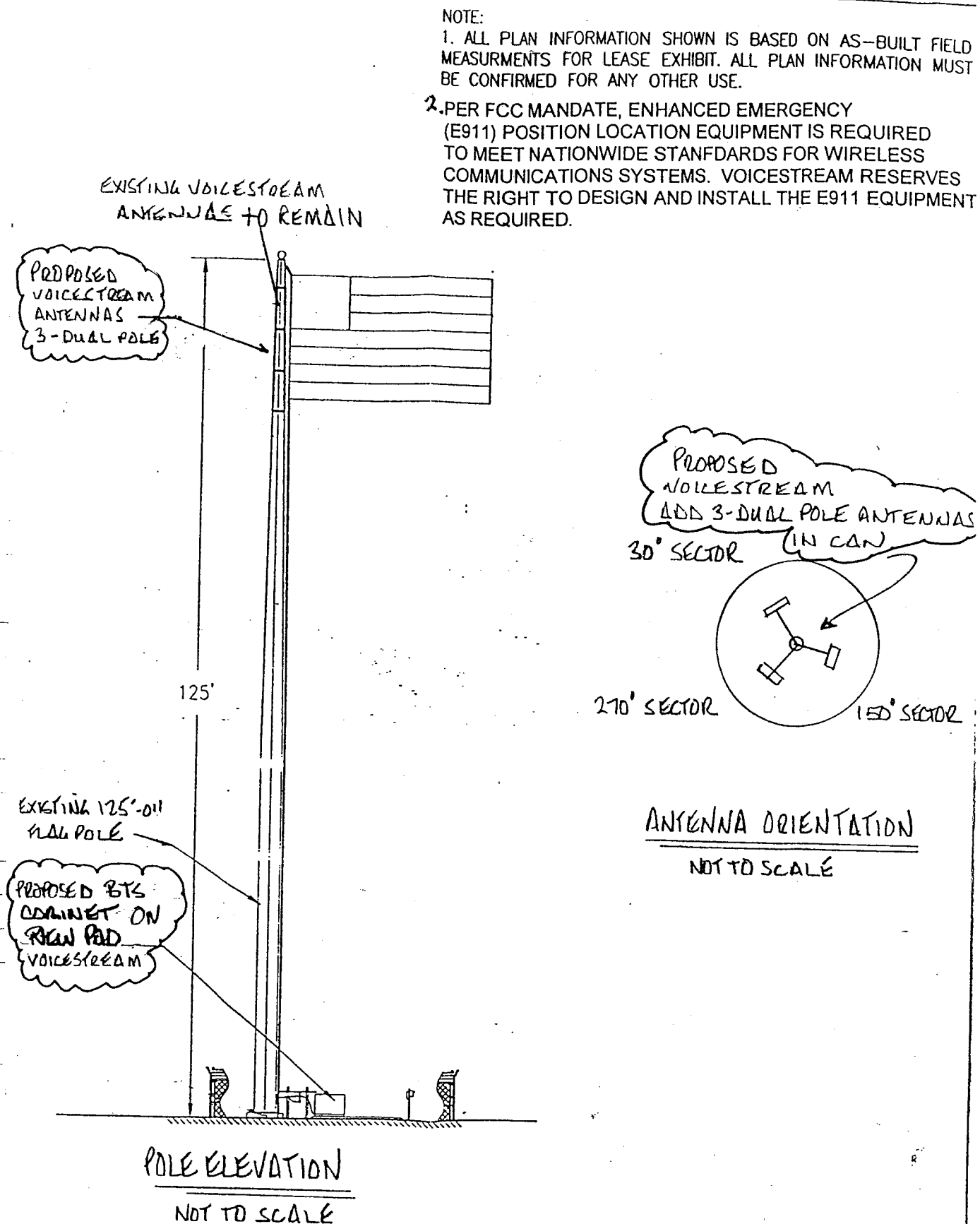


Exhibit B
Design Drawings
205 Spencer Street
Manchester, Connecticut



EQUIPMENT LAYOUT PLAN
SCALE: 1/4" = 1'-0"



NOTE:
1. ALL PLAN INFORMATION SHOWN IS BASED ON AS-BUILT FIELD MEASUREMENTS FOR LEASE EXHIBIT. ALL PLAN INFORMATION MUST BE CONFIRMED FOR ANY OTHER USE.
2. PER FCC MANDATE, ENHANCED EMERGENCY (E911) POSITION LOCATION EQUIPMENT IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. VOICESTREAM RESERVES THE RIGHT TO DESIGN AND INSTALL THE E911 EQUIPMENT AS REQUIRED.

VoiceStream
WIRELESS
50 VISION BOULEVARD
EAST PROVIDENCE, R.I. 02914
OFFICE: (401)-588-5600
FAX: (401)-588-5658

SITE: CT11138F "LEASE EXHIBIT"
SITE NAME: EAST HARTFORD / 184 & 61
ADDRESS: 205 SPENCER STREET
MANCHESTER CT

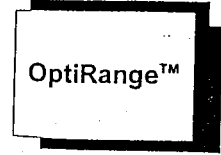
REVISIONS	DESIGNED BY:	DATE: 8-2-02
1 8-19-02	DRAWN BY: MFB	SCALE: AS NOTED
	PM: JB	L-1
	FILE:	Sheet No.

Exhibit C

Equipment Specifications

205 Spencer Street

Manchester, Connecticut

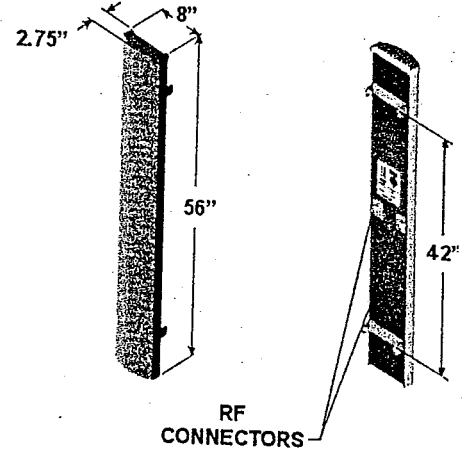


RR90-17-XXDP

DualPol® Polarization
1850 MHz - 1990 MHz

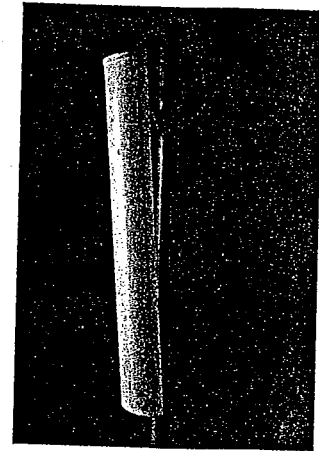
Electrical Specifications

Azimuth Beamwidth	90°
Elevation Beamwidth	6°
Gain	16.5 dBi (14.4 dBd)
Polarization	Dual Linear Slant ($\pm 45^\circ$)
Port-to-Port Isolation	≥ 30 dB
Front-to-Back Ratio	≥ 28 dB (≥ 30 dB Typ.)
Electrical Downtilt Options	0°, 2°, 4°, 6°
VSWR	1.35:1 Max
Connectors	2; 7-16 DIN (female)
Power Handling	250 Watts CW
Passive Intermodulation	≤ -150 dBc [2 x 20 W (+ 43 dBm)]
Lightning Protection	Chassis Ground



Mechanical Specifications

Dimensions (L x W x D)	56 in x 8 in x 2.75 in (142 cm x 20.3 cm x 7.0 cm)
Rated Wind Velocity	150 mph (241 km/hr)
Equivalent Flat Plate Area	3.1ft ² (.29 m ²)
Front Wind Load @ 100 mph (161 kph)	90 lbs (400 N)
Side Wind Load @ 100 mph (161 kph)	31lbs (139 N)
Weight	18 lbs (8.2 kg)

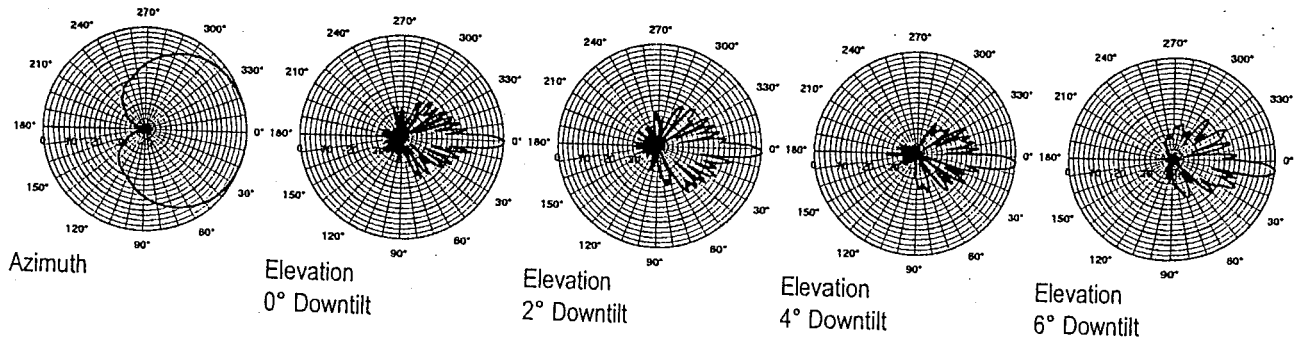


Mounting Options

MTG-P00-10, MTG-S02-10, MTG-DXX-20*, MTG-CXX-10*, MTG-C02-10, MTG-TXX-10*

Note: *Model number shown represents a series of products. See Mounting Options section for specific model number.

Patterns



Revised 04/05/02

Mobile WIRELESS INTRODUCTION

Drawing from more than 30 years in the development of highly reliable systems, EMS Wireless has applied that knowledge and experience to the needs of commercial wireless communication service providers.

EMS Wireless offers a broad selection of innovative base station antennas offering superior performance for all wireless protocols including PCS, cellular, GSM, CDMA, TDMA and IDEN among others.

Mobile WIRELESS PRODUCTS

Frequency Bands:

- PCS (1850-1990 MHz)
- Cellular (806-960 MHz)
- Dualband (806-896 and 1850-1900 MHz)
- CDMA 450 (450-470 MHz)
- GSM 900 (890-960 MHz)
- GSM 1800 (1710-1880 MHz)
- MMDS (2305-2360 MHz)

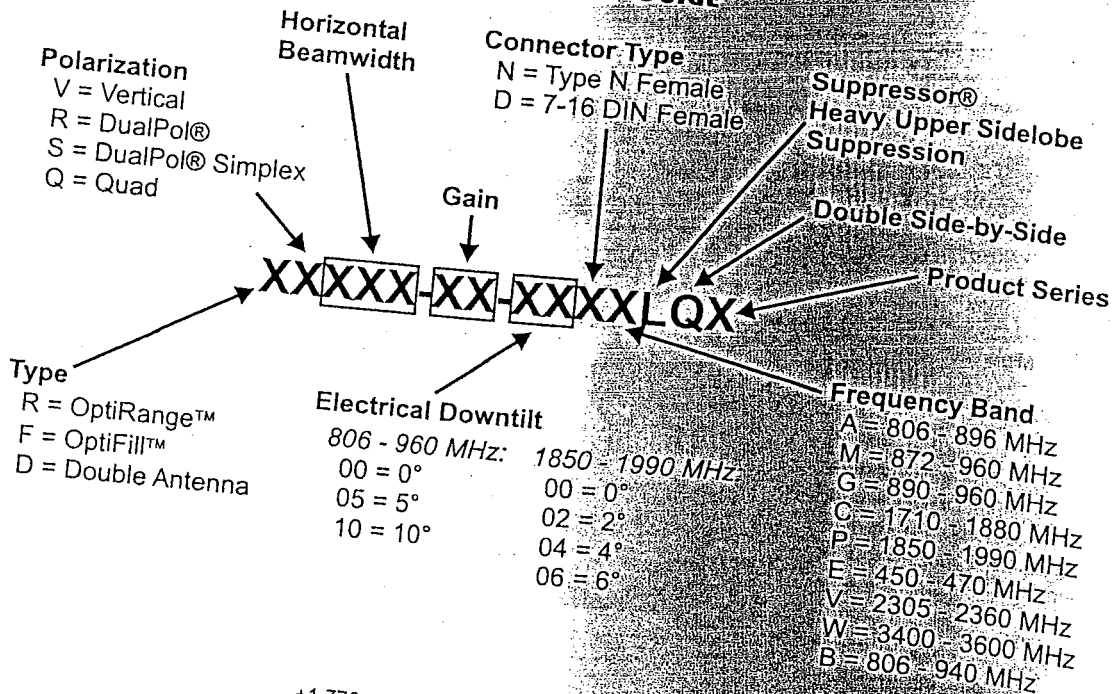
Micro AcCELLerator™ Series:

- MTRR75-17-XXXDPL (PCS)
- MTFR90-11-XXXDAL2-CMX (Cellular)

AcCELLerator™ Series:

- 16" AcCELLerator™
- 19" AcCELLerator™
- 30" AcCELLerator™
- 36" AcCELLerator™

Mobile WIRELESS STANDARD MODEL NUMBER GUIDE



3 CABINET DESCRIPTION

3.1 PHYSICAL CHARACTERISTICS

3.1.1 S8000 Outdoor BTS

3.1.1.1 BTS cabinet

Dimensions

The BTS S8000 Outdoor has the following dimensions:

- height: 160 cm (63 in.)
- width: 135 cm (52.8 in.)
- depth: 65 cm (25.6 in.)

Weight

The weight of the cabinet when empty, that is, without its battery, fan units or boards, is 164 kg (361 lb). Depending on the configuration, a fully equipped cabinet weighs approximately 480 kg (1056 lb) with ACU unit or 440 kg (968 lb) with DACS unit.

These weights do not include the plinth.

Operating temperature

To operate correctly, the BTS requires a temperature greater than -40°C (-40°F) and less than $+50^{\circ}\text{C}$ ($+122^{\circ}\text{F}$).

Consumption

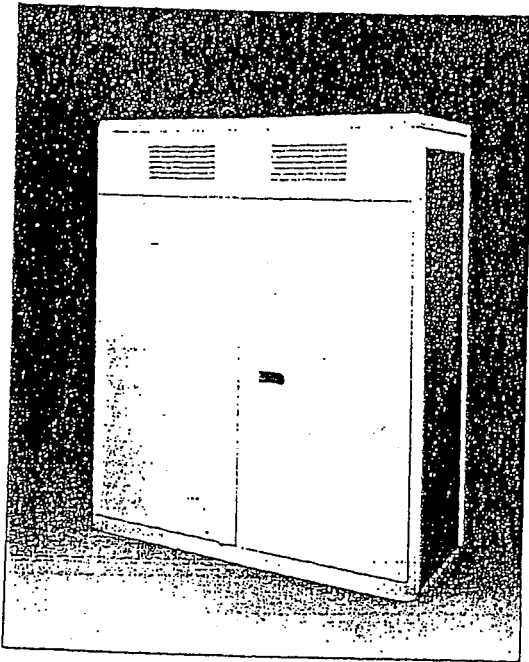
BTS input voltage:

- GSM 900/1800
 - nominal voltage contained between 220V AC and 240V AC
 - minimum voltage: $220 - 10\% = 198\text{V AC}$
 - maximum voltage: $240 + 6\% = 254\text{V AC}$
- GSM 1900 (with DACS)
 - nominal voltage: 208V AC to 240V AC
 - minimum voltage: $208 - 10\% = 187\text{V AC}$
 - maximum voltage: $240 + 6\% = 254\text{V AC}$
- GSM 1900 (with ACU and/or the power system six-rectifier type)
 - nominal voltage: 240V AC
 - minimum voltage: $240 - 10\% = 187\text{V AC}$
 - maximum voltage: $240 + 6\% = 254\text{V AC}$

NON - PREMIUM
BTS ONLY

Confidential information -- may not be copied or disclosed without permission

S8000 Outdoor Base Transceiver Station



Nortel's S8000 Outdoor Base Transceiver Station has been designed to meet the economic and performance requirements of network operators. Based on a highly integrated RF and digital design, the S8000 Outdoor Base Transceiver Station represents a major technology advancement and delivers all the benefits of a compact, modular, high quality and high performance product.

Nortel's S8000 Outdoor BTS: Radio Performance Leadership - Reduced Site Acquisition and Operating Costs

Installation

- The S8000 Outdoor Base Transceiver Station (BTS) offers compact packaging and requires minimal floor space, only .88 sq m (9.5 sq ft.). Front only access keeps total space required, including maintenance access, to only 1.8 sq m (19.4 sq ft.) per cabinet.

Transmission

- Integrated drop and insert connection to the Base Station Controller (BSC) and signaling concentration on the A-bis interface provide significant transmission cost reduction.
- Optional integrated digital microwave radio.

Maintenance

- Highly reliable technology, redundant architecture and integrated battery backup ensure high availability service.
- Front access and interconnections, as well as powerful fault detection, help reduce lifetime maintenance costs.

Industry leading performance

- New RF technology and advanced digital processing techniques provide very high receive sensitivity (-108 dBm guaranteed) and improved diversity gain (up to 6 dB). This provides higher resistance to interference, as well as, improved speech quality and cell coverage.
- Nortel's proven experience in frequency hopping, 1*3 frequency reuse, sophisticated microcellular handover algorithms and support of half-rate vocoders enables the operator to maximize use of available spectrum and deploy fewer cell sites.

Fast network deployment

- The S8000 BTS can be shipped fully equipped and tested, which provides fast network roll out to meet operator time to market requirements.

Modular and flexible configuration

- The S8000 supports eight transceivers (TRX) per cabinet in Omni and sectorized configurations. The typical one cabinet S222 configuration may be expanded up to S332 or S422 without an additional cabinet.

• Frequency range		900 MHz GSM
		900 MHz GSM extended
		1800 MHz DCS
		1900 MHz PCS
• Receive sensitivity (guaranteed)		-108 dBm
• Dimensions	Height	1600 mm / 5 ft. 3 in.
	Width	1350 mm / 4 ft. 5 in.
	Depth	650 mm / 2 ft. 1 in.
• Weight	Fully equipped	600 kg / 1300 lbs.
• Capacity		8 TRX per cabinet
		up to 3 cabinets
• Configuration	Trisectorial	up to S888
	Omnidirectional	up to O16
• Amplifier output power		30 W (± 1.5 dB)
• Power control	Static	6 steps of 2 dB
	Dynamic	15 steps of 2 dB
• Frequency hopping		RF synthesized
		baseband
• Supported vocoders		Full rate
		Enhanced full rate
		Half rate
• Encryption algorithms		A5/1 A5/2
• Power supply		230V AC 50/60 Hz
• Power back-up		Integrated battery back-up plus optional battery cabinet allows provisioning up to 8 hours back-up time.
• Operating temperature range		-40°C to +50°C
		-40°F to +122°F

For more information,
please contact your local Nortel account representative.

In the USA:
Northern Telecom
2221 Lakeside Boulevard
Richardson TX 75082
USA
Telephone: 1-800-4 NORTEL
1-800-466-7838 or (214) 684-5935 -
<http://www.nortel.com/wireless>

In Canada:
Northern Telecom
2920 Matheson Boulevard East
Mississauga ON L4W 4M7
Canada
Telephone: 1-800-4 NORTEL

In the Caribbean and Latin America:
Northern Telecom (CALA) Corporation
1500 Concord Terrace
Sunrise FL 33323
USA
Telephone: (305) 851-8400

In Asia:
Northern Telecom (Asia) Limited
151 Lorong Chuan
#02-01 New Tech Park
Singapore 1955
Telephone: (65) 287-2877

Nortel China Ltd.
34th Floor, Central Plaza
18 Harbour Road, Wanchai
Hong Kong
Telephone (852) 2585 2888

In Europe:
Nortel Limited
Stafferton Way
Maidenhead
Berkshire SL6 1AY
England
Telephone: (44) (1628) 812000

Nortel Matra Cellular
BP 50
1 place des Frères Montgolfier
78042 Guyancourt Cedex
France
Telephone (33) (1) 34 52 52 52

Nortel Europe
12-12bis rue Jean Jaurès
92807 Puteaux
France
Telephone (33) (1) 46 96 15 15

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Information subject to change. Northern
Telecom reserves the right to make
changes, without notice, in equipment
design as engineering or manufacturing
methods warrant.

NORTEL
NORTHERN TELECOM

Exhibit D

Structural Analysis

205 Spencer Street

Manchester, Connecticut



June 11, 2003

Mr. Bryan Bakis, PE
T-Mobile USA (Omnipoint Communications, Inc.)
100 Filley Street
Bloomfield, CT 06002

RE: Site CT11-138F Manchester Flag Pole
W&M #02125.50

Dear Bryan:

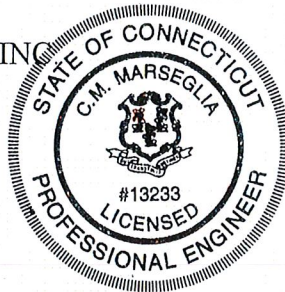
We have completed the Structural Analysis for the above mentioned project.

A review of the information provided by the monopole manufacturer has determined that the structure is capable to support three (3) additional T-Mobile antennas to be located in the canister directly below their existing antennas.

Please do not hesitate to contact me with any questions or comments.

Very truly yours,
WESTCOTT AND MAPES, INC.

Chris M. Marseglia, P.E.
Vice President, Engineering



cc: M. Egan, W&M
D. Overbey, T-Mobile
M. Walker, T-Mobile

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Exhibit E

Power Density Calculations

205 Spencer Street

Manchester, Connecticut



T-Mobile USA Inc.
100 Filley St, Bloomfield, CT 06002-1853
Phone: (860) 692-7100
Fax: (860) 692-7159

Technical Memo

To: Marie Burbank
From: Hassan Syed - Radio Frequency Engineer
cc: Jason Overbey
Subject: Power Density Report for CT11138
Date: June 24, 2003

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile PCS antenna installation on a Monopole at 205 Spencer Street, Manchester, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

- 1) The emissions from T-Mobile transmitters are in the 1935-1945 MHz frequency band.
- 2) The antenna array consists of three sectors, with 2 antennas per sector.
- 3) The model number for each antenna is EMS RR90-17-02DP.
- 4) The antenna center line height are 109 ft. 119 ft.
- 5) The maximum transmit power from any sector is 1404.07 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
- 6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
- 7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
- 8) The average ground level of the studied area does not change significantly with respect to the transmitting location

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile PCS antenna installation on a Monopole at 205 Spencer Street, Manchester, CT, is 0.02904 mW/cm². This value represents 2.904% of the Maximum Permissible Emission (MPE) standard of 1 milliwatt per square centimeter (mW/cm²) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

The combined Power Density from other carriers is 3.23%. The combined Power Density for the site is 6.134% of the M.P.E. standard.

New England Market



Connecticut

Worst Case Power Density

Site:	CT11138
Site Address:	205 Spencer Street
Town:	Manchester
Tower Height:	125 ft.
Tower Style:	Monopole
Base Station TX output	16 W
Number of channels	8
Antenna Model	EMS RR90-17-02DP
Cable Size	1 5/8 in.
Cable Length	130 ft.
Antenna Height	109.0 ft.
Ground Reflection	1.6
Frequency	1935.0 MHz
Jumper & Connector loss	1.00 dB
Antenna Gain	16.5 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	1.5080 dB
Total Attenuation	2.5080 dB
Total EIRP per Channel (In Watts)	56.03 dBm 401.16 W
Total EIRP per Sector (In Watts)	65.06 dBm 3209.30 W
nsg	13.9920
Power Density (S) =	0.066368 mW/cm ²
Voicestream Worst Case % MPE =	6.6368%

Equation Used :

$$S = \frac{(1000)(grf)^2 (Power)^{nsg10}}{4 \pi (R)^2}$$

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

Co-Location Total	
Carrier	% of Standard
Verizon	
Cingular	
Sprint PCS	
AT&T Wireless	3.2300 %
Nextel	
Total Excluding Voicestream	3.2300 %
Voicestream	6.6368
Total % MPE for Site	9.8668%

Town of Manchester

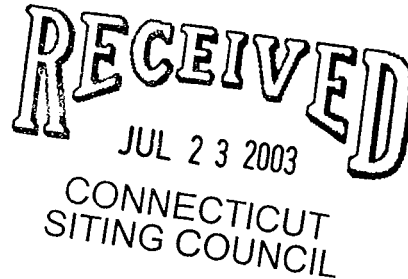
41 Center Street • P.O. Box 191
Manchester, Connecticut 06045-0191
www.ci.manchester.ct.us

STEPHEN T. CASSANO, MAYOR
JOSH M. HOWROYD, DEPUTY MAYOR
CHRISTY SCOTT, SECRETARY

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Facsimile – 860-827-2950

S. Derek Phelps, Executive Director
State of Connecticut
Connecticut Siting Council
Ten Franklin Square
New Britain, Connecticut 06051



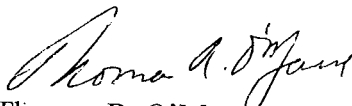
Re: EM-T-Mobile-077-030702 – Omnipoint Communications, Inc.
205 Spencer Street, Manchester, Connecticut

Dear Mr. Phelps:

Thank you for the opportunity to comment with regards to the subject application. As in the past with sharing arrangements, the Town of Manchester would request that all equipment cabinets be painted to match the colors of the existing cabinets. Our understanding is that the existing cabinets are required to be beige in accordance with the original approval granted by the Manchester Planning and Zoning Commission.

Thank you very much for your attention to this matter.

Very truly yours,


Thomas R. O'Marra
Zoning Enforcement Officer

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Town of Manchester

41 Center Street • P.O. Box 191
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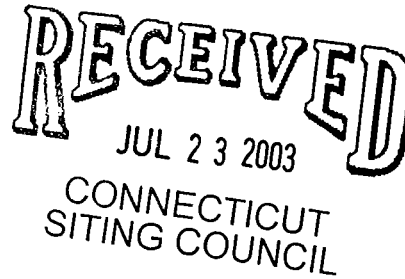
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STEVEN R. WERBNER, GENERAL MANAGER

July 21, 2003

Facsimile – 860-827-2950



S. Derek Phelps, Executive Director
State of Connecticut
Connecticut Siting Council
Ten Franklin Square
New Britain, Connecticut 06051

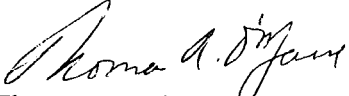
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