STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

August 13, 2001

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

RE: **EM-VOICESTREAM-025-010719** - VoiceStream Wireless Corporation notice of intent to modify an existing telecommunications facility located at 751 Higgins Road, Cheshire, Connecticut.

Dear Attorney Humes:

At a public meeting held on August 8, 2001, 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, with the condition that the tower platform be reinforced as specified by a Professional Engineer.

The proposed modifications are to be implemented as specified here and in your notices dated July 19, 2001, and July 26, 2001. 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.

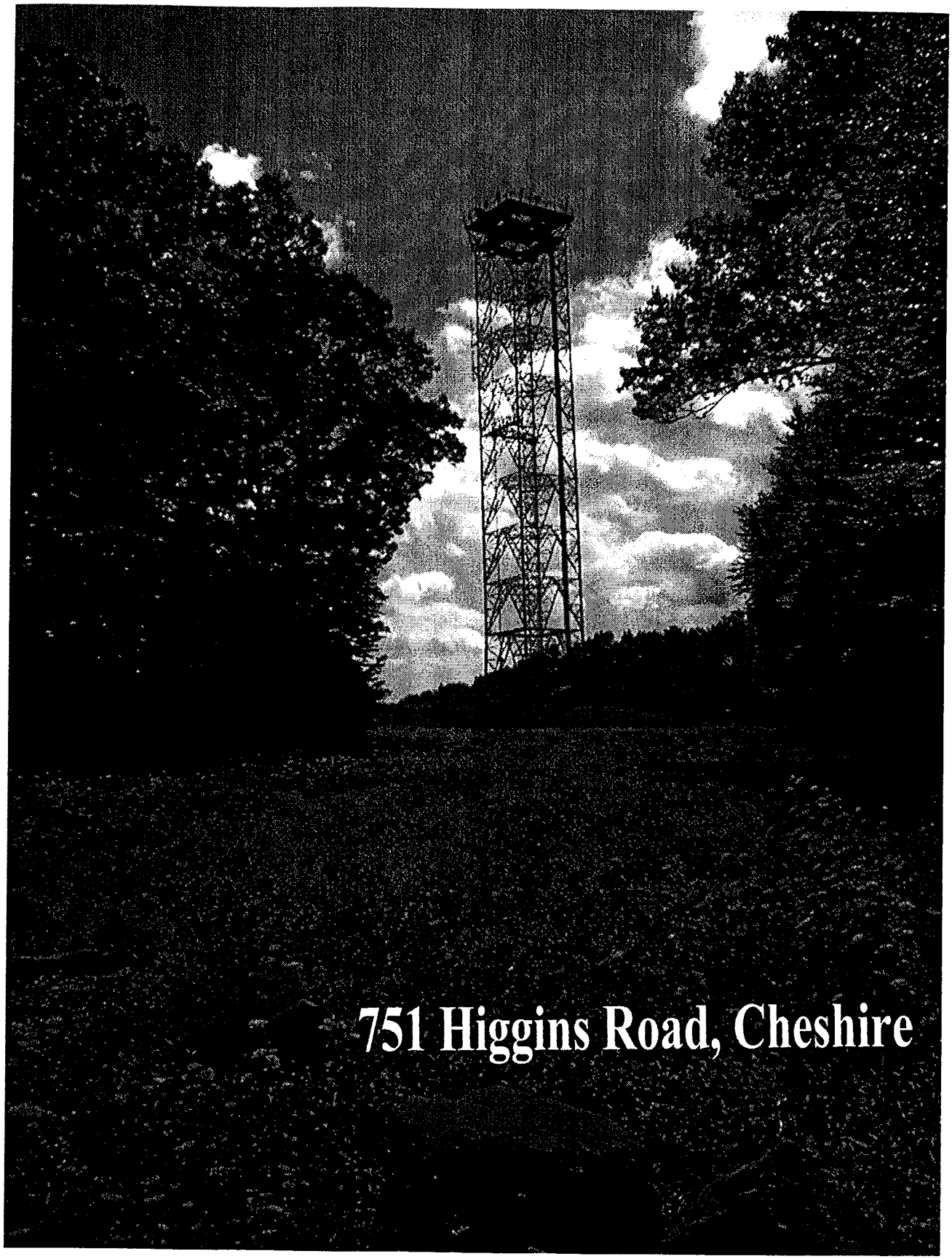
Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable Sandra R. Mouris, Council Chairman, Town of Cheshire
Richard A. Pfurr, Town Planner, Town of Cheshire
John L. Salomone, Town Manager, Town of Cheshire
Christopher B. Fisher, Esq., Cuddy & Feder & Worby LLP
Sandy M. Carter, Verizon Wireless
Michele Briggs, SNET Mobility LLC
Ronald C. Clark, Nextel Communications


751 Higgins Road, Cheshire

STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL
Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

July 23, 2001

Honorable Sandra R. Mouris
Council Chairman
Town of Cheshire
Town Hall
84 South Main Street
Cheshire, CT 06410

RE: **EM-VOICESTREAM-025-010719** - VoiceStream Wireless Corporation notice of intent to modify an existing telecommunications facility located at 751 Higgins Road, Cheshire, Connecticut.

Dear Ms. Mouris:

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 Wednesday, August 8, 2001, at 1:30 p.m. in Hearing Room Two, 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,

Joel M. Rinebold
Executive Director

JMR/RKE/laf

Enclosure: Notice of Intent

c: Richard A. Pfurr, Town Planner, Town of Cheshire
John L. Salomone, Town Manager, Town of Cheshire

EM-VoiceStream-025-010719

LeBoeuf, Lamb, Greene & MacRae
L.L.P.

A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL CORPORATIONS

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SAN FRANCISCO

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

WRITER'S DIRECT DIAL:
(860) 293-3744

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(AFFILIATED OFFICE)
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ALMATY
BEIJING

July 26, 2001

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Notice of Exempt Modification
751 Higgins Road, Cheshire, Connecticut

Dear Chairman Gelston and Members of the Council:

Please be advised that LeBoeuf, Lamb, Greene & MacRae, L.L.P. represents VoiceStream Wireless Corporation ("VoiceStream") in the above-referenced matter. Attached please find a revised version of VoiceStream's request for an order from the Connecticut Siting Council ("Council") to approve the proposed upgrade of existing equipment, currently approved for shared use by the applicant of an existing tower located at 751 Higgins Road, Cheshire, Connecticut submitted to the Council on July 19, 2001. The attached version corrects two typographical errors from the original submittal. Please excuse the incovenience.

Respectfully submitted,

VOICESTREAM WIRELESS CORPORATION

By: _____
Its Counsel
Stephen J. Humes
Diane W. Whitney

Attachments

cc: Cheshire Town Manager, John L. Salomone

LeBoeuf, Lamb, Greene & MacRae
L.L.P.

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BEIJING

July 19, 2001

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Notice of Exempt Modification
751 Higgins Road, Cheshire, Connecticut

Dear Chairman Gelston and Members of the Council:

Please be advised that LeBoeuf, Lamb, Greene & MacRae, L.L.P. represents VoiceStream Wireless Corporation ("VoiceStream") in the above-referenced matter. Pursuant to Connecticut General Statutes §16-50aa, VoiceStream hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed upgrade of existing equipment, currently approved for shared use by the applicant of an existing tower located at 751 Higgins Road, Cheshire, Connecticut. VoiceStream proposes to replace its existing antennas with eight new antennas at the same elevation on the existing tower. Two existing Nortel S2000H BTS cabinets would be removed and updated with two new Nortel S8000 BTS cabinets located on existing protective grating on the tower structure, thirty six feet, ten inches (36'-10") above the base plate (see "Exhibit A"). An existing two foot square microwave antenna will remain on the tower in the area of the existing and future antennas. 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 John L. Salomone, Cheshire Town Manager.

Background

Effective as of the May 31, 2001 merger between Deutsche Telekom AG and VoiceStream Wireless Corp., the corporate structure of VoiceStream has changed.[1] VoiceStream 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

[1]The corporate structure of VoiceStream is as follows: Omnipoint Communications, Inc. ("Omnipoint") is a 95.4% subsidiary of Omnipoint Finance, LLC (hereinafter, "OF"). OF is a wholly owned subsidiary of Omnipoint Finance Holding, LLC (hereinafter, "OFH"). OFH is a subsidiary of Omnipoint Wireless Corporation (hereinafter "VS"), which owns all of the outstanding common shares of OFH. VS is a wholly owned subsidiary of T-Mobile International AG (hereinafter "T-Mobile"). T-Mobile is a wholly owned subsidiary of Deutsche Telekom AG (American Depositary Receipts traded in U.S. on the NYSE: DT).

Connecticut. VoiceStream 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.

The tower at 751 Higgins Road is an AT&T, 225 foot "Type J" tower located on an AT&T site. The coordinates for the site are **41°-29'-14" N** and **72°-55'-47" W**. The tower and surrounding land are owned by AT&T. VoiceStream and the tower owner have agreed to mutually acceptable terms and conditions for the proposed shared use of this tower, and the tower owner has authorized VoiceStream to act on its behalf to apply for all necessary local, state and federal permits, approvals and authorizations which may be required for the proposed shared use of this facility.

The compound layout of the tower site is shown in the attached Exhibit A. Currently, the tower holds various communication antennas. Existing antennas are listed on the structural analysis, attached as Exhibit C and also shown on the elevation drawing B2 as part of Exhibit A. VoiceStream proposes to remove its current antennas at the approximate two hundred twelve (211'-10") foot centerline above the tower base plate ("ATBP"). VoiceStream proposes to replace the four existing DAPA 58210 panel antennas with eight new antennas mounted on the existing stand-off frames to the tower. The new antennas will be comprised of an antenna cluster of two sectors, with four antennas per sector at the same two hundred twelve (211'-10") foot centerline ATBP level (total of eight). The model number for each sector is EMS RR90-17-02 DP. The radio transmission equipment associated with these antennas is being updated. As stated above, two existing Nortel S2000H BTS cabinets would be removed and updated with two new Nortel S8000 BTS cabinets mounted on existing eight foot six inch (8'-6") wide network protective grating on the tower structure, thirty six feet, ten inches (36'-10") above the base plate (see "Exhibit A"). An existing two foot square microwave antenna will remain on the tower in the area of the existing and future antennas. A new ladder to the grated BTS platform would be installed along with a new guardrail on the grating. No changes will be made to the compound fence, nor will the size of the compound be affected. Exhibit B contains specifications for the proposed antennas and equipment cabinets. As mentioned in the structural analysis attached as Exhibit C, the tower will need some tower strengthening to enable the tower to support the BTS cabinets at the 37 foot level. Other than the minor reinforcement to the existing platform, the tower is deemed structurally capable of supporting VoiceStream's proposed equipment.

The planned modifications to the Cheshire 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 the tower. VoiceStream's new antennas will be installed with a centerline of approximately two hundred twelve feet (211'-10") AGL, the same height of its existing antennas. The enclosed tower drawing confirms that the planned changes will not increase the overall height of the tower.

2. The installation of VoiceStream equipment, as reflected on the attached site plan, will not require an extension of the site boundaries. VoiceStream's proposed equipment cabinets will be replacing those already existing and located entirely within the existing compound .

3. The proposed modification to the facility will not increase the noise levels at the existing facility by six decibels or more. VoiceStream's equipment is self-contained and requires no additional heating, ventilation or cooling equipment.

4. The operation of the additional antenna 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 D.

For the foregoing reasons, VoiceStream respectfully submits that the proposed addition of antennas and equipment at the Cheshire 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,

VOICESTREAM WIRELESS CORPORATION

By: _____
Its Counsel
Stephen J. Humes
Diane W. Whitney

Attachments

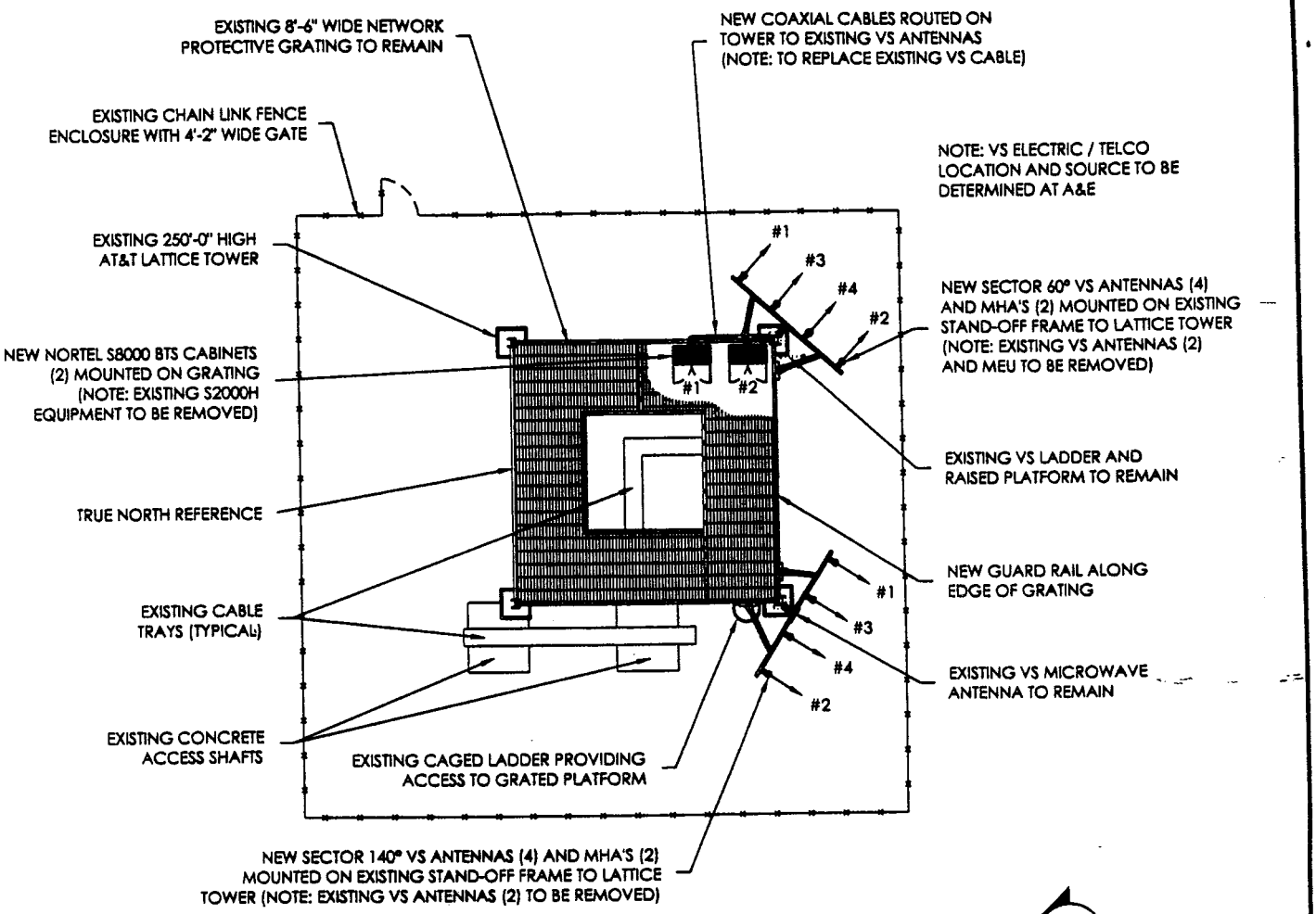
cc: Cheshire Town Manager, John L. Salomone

Exhibit A

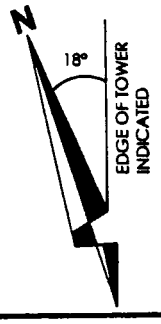
Design Drawings
Site Location
751 Higgins Road
Cheshire, Connecticut

EXHIBIT B

The location of the Premises within the Property (together with access and utilities) is more particularly described and depicted as follows:



1 / B-2



1 / B-1 SITE LAYOUT
NOT TO SCALE

NOTE:
VOICESTREAM WIRELESS USED ARCNET ARCHITECTS, INC. DRAWINGS DATED 08/09/99 TO DEVELOP THIS SITE LAYOUT.

NOTE:
THIS EXHIBIT REPRESENTS A CONCEPTUAL PLAN BASED ON THE DEVELOPMENT/LEASE AGREEMENT REQUIREMENTS. ACTUAL CONSTRUCTION DOCUMENTS MAY VARY FROM THIS EXHIBIT TO COMPLY WITH ALL APPLICABLE CODES.

VoiceStream WIRELESS
100 Filley Street, Bloomfield, CT 06002
Tel: 860-692-7100 Fax: 860-692-7159

VS Search Area: CHESHIRE
VS Site I.D. No.: CT-11-220A

Project: **AT&T CHESHIRE TOWER**
Address: 751 Higgins Road
Cheshire, CT

SAC: John LaMontagne
R.F. ENG.: Jason Overbey
CONSTR: Craig Clarkin

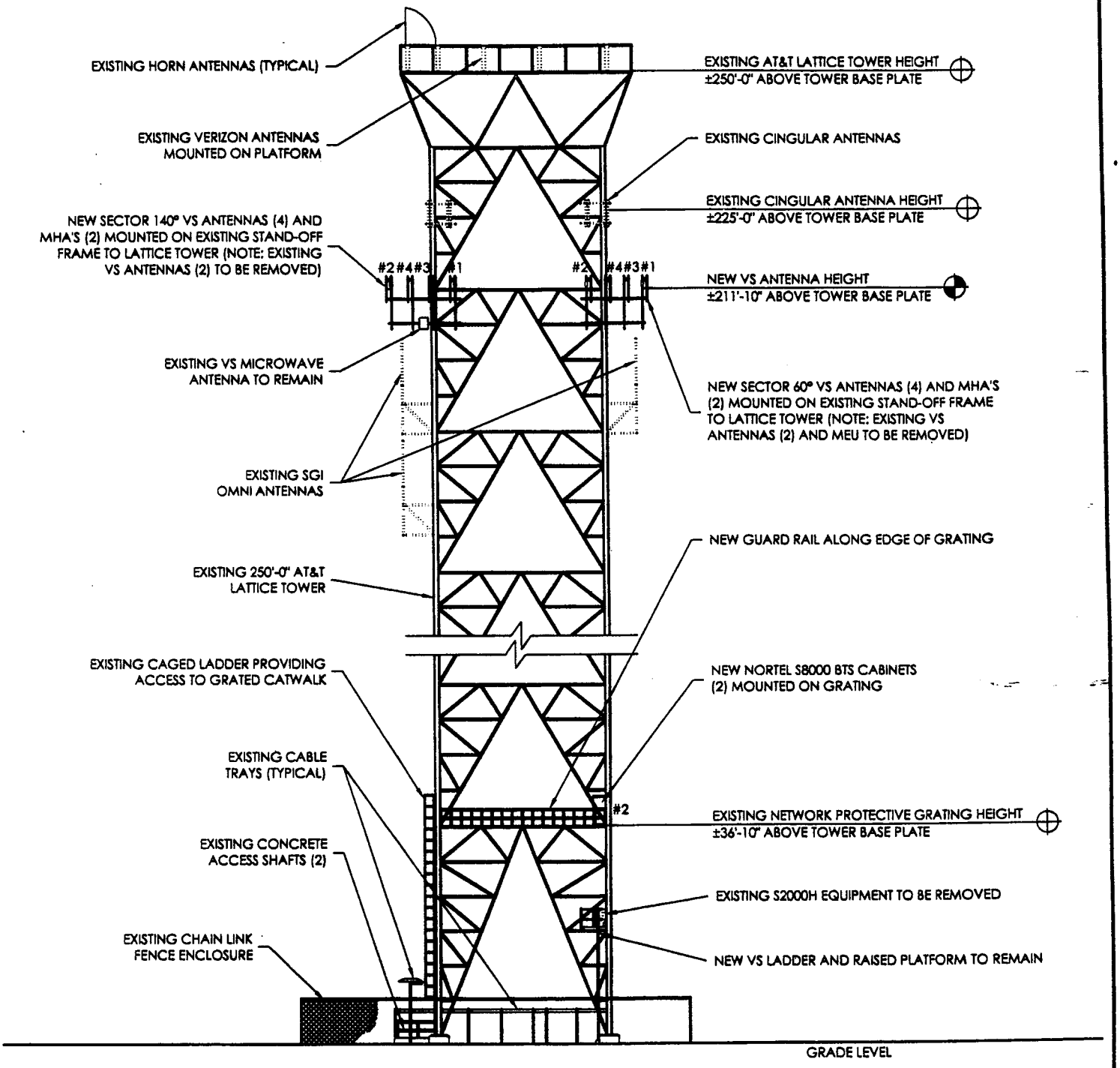
Drawing Title: SITE LAYOUT - UPGRADE

Revision:	Date:
Redesigned VS Equipment Area	04/09/01
Edited General Text	04/09/01

Drawn: DEO
Date: 02/14/01
Drawing No.: B - 1

EXHIBIT B

The location of the Premises within the Property (together with access and utilities) is more particularly described and depicted as follows:



1 / B-2 ELEVATION
NOT TO SCALE

NOTE:
VOICESTREAM WIRELESS USED ARCNET ARCHITECTS, INC. DRAWINGS DATED 08/09/99 TO DEVELOP THIS ELEVATION.

NOTE:
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Drawing Title: ELEVATION - UPGRADE

Revision:	Date:
Redesigned VS Equipment Area	04/09/01
Edited General Text	04/09/01

Drawn: DEO
Date: 02/14/01
Drawing No.: B - 2

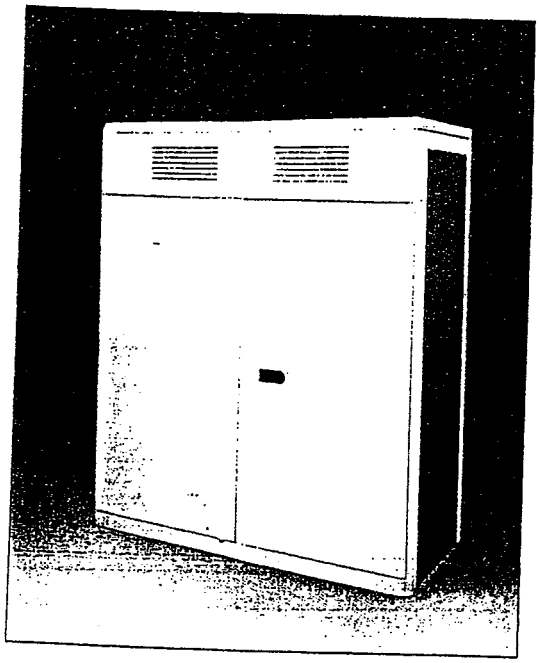
Exhibit B

Equipment Specifications
751 Higgins Road
Cheshire, Connecticut

GSM 900 / DCS 1800 / PCS 1900

NORTEL
NORTHERN TELECOM

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 sectored configurations. The typical one cabinet S222 configuration may be expanded up to S332 or S422 without an additional cabinet.

Technical Data

• 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

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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

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

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°C (+122°F).

Consumption

BTS input voltage:

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

NON - PREMIUM BTS ONLY

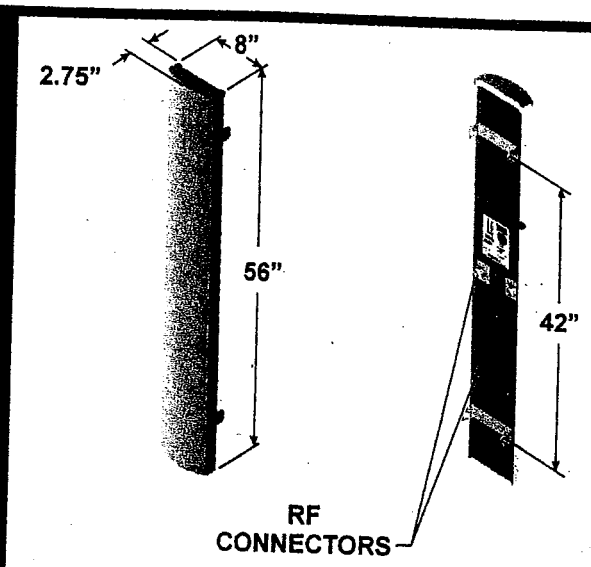
Confidential information -- may not be copied or disclosed without permission

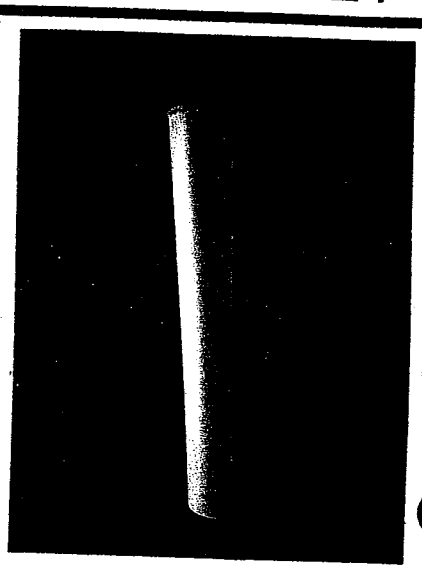
EMS WIRELESS

OptiRange™

RR90-17-XXXP

1850 MHz - 1990 MHz (P)





90° beamwidth

16.5 dBi gain

±45° DualPol™

56 inch

SPECIFICATIONS

Electrical

Azimuth Beamwidth	90°
Elevation Beamwidth	6°
Gain	16.5 dBi (14.4 dBd)
Polarization	Slant, ±45°
Port-to-Port Isolation	≥ 30 dB
Front-to-Back Ratio	≥ 25 dB (≥ 30 dB Typ.)
Electrical Downtilt Options	0°, 2°, 4°, 6°
VSWR	1.35:1 Max
Connectors	2;Type N or 7-16 DIN (female)
Power Handling	250 Watts CW
Passive Intermodulation	<-147 dBc (2 tone @ +43 dBm {20W} ea.)
Lightning Protection	Chassis Ground

Mechanical

Dimensions (L x W x D)	56in x 8in x 2.75in (142 cm x 20.3 cm x 7.0 cm)
Rated Wind Velocity	150 mph (241 km/hr)
Equivalent Flat Plate Area	3.1ft² (.29 m²)
Front Wind Load @ 100 mph (161 kph)	90 lbs (400 N)
Side Wind Load @ 100 mph (161 kph)	31 lbs (139 N)
Weight	18 lbs (8.2 kg)

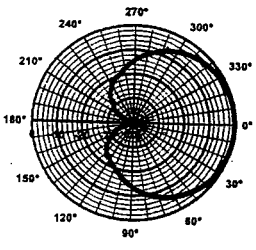
Note: Patent Pending and US Patent number 5, 757, 246.

Values and patterns are representative and variations may occur. Specifications may change without notice due to continuous product enhancements. Digitized pattern data is available from the factory or via the web site www.emswireless.com and reflect all updates.

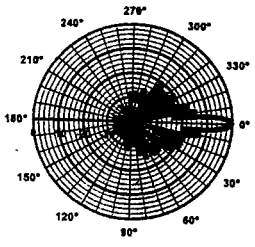
MOUNTING OPTIONS

Model Number	Description	Comments
MTG-P00-10	Standard Mount (Supplied with antenna)	Mounts to Wall or 1.5 inch to 5.0 inch O.D. Pole (3.8 cm to 12.7 cm)
MTG-S02-10	Swivel Mount	Mounting kit providing azimuth adjustment.
MTG-DXX-20*	Mechanical Downtilt Kits	0° - 10° or 0° - 15° Mechanical Downtilt
MTG-CXX-10*	Cluster Mount Kits	3 antennas 120° apart or 2 antennas 180° apart
MTG-C02-10	U-Bolt Cluster Mount Kit	3 antennas 120° apart , 4.5" O.D. pole.
MTG-TXX-10*	Steel Band Mount	Pole diameters 7.5" - 45"

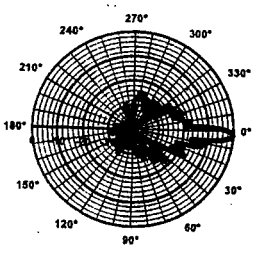
* Model number shown represents a series of products. See mounting options section for specific model number.



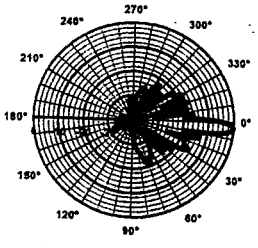
Azimuth



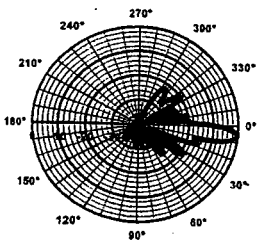
Elevation
0° Downtilt



Elevation
2° Downtilt



Elevation
4° Downtilt



Elevation
6° Downtilt

Exhibit C

Structural Analysis
751 Higgins Road
Cheshire, Connecticut

Communication Structures Engineering, Inc.

Mr. Dave Weinpahl
On Air Engineering, LLC.
100 Filley St.
Bloomfield, CT 06002

May 14, 2001

Re: Structural Analysis of
AT&T's 250-ft Modified Type 'J ' Tower at
AT&T L-4 Junction Building Site
751 Higgins Road, Cheshire, CT for
VoiceStream Wireless Antenna Additions
VoiceStream Site ID # **CT-11- 220A**

Dear Mr. Weinpahl,

Communication Structures Engineering, Inc. (CSEI) has completed a structural review of the existing AT&T's 250-ft Type 'J ' Tower that is located at this AT&T site in Cheshire, CT. In accordance with VoiceStream's request, we performed a structural analysis of this structure to check its capability to support the existing tower, antenna and equipment loads as well as the new loads from VoiceStream's proposed panel antennas, transmission lines, and equipment additions. The specific loading criteria that we utilized in accordance with BOCA were those prescribed by the national standard "ANSI/TIA/EIA-222-F-1996". The applicable "basic wind speed" that was utilized for this tower site was the 85-mph, fastest-mile velocity, specified by the above standards for the New Haven County, CT area. CSEI utilized the original engineering and fabrication drawings for the 250-ft Type 'J ' tower at this site to conduct this structural review. A CSEI engineer previously visited this site in 1998. At that time, CSEI climbed, photographed & reviewed the condition of the existing tower structure and confirmed equipment locations. Recent photos of this structure (photos taken by On Air Engineering 4/2/01) were used to confirm the most current antenna & equipment configuration for this structure. A summary of the loads considered and the results of CSEI's structural analysis follow.

ANTENNA CONFIGURATION (Used for Structural Analysis)

Existing Antennas & Cables to remain on tower

AT&T: Two KS15676 Pyramidal Horn antennas at a centerline of 258-ft AGL each with one run of WC281 waveguide.
Bell Atlantic Mobile: Twelve Swedcom ALP-E9011 Panel Antennas at 253-ft AGL with 12 runs of 1-5/8 inch coaxial cable.
SNET: Nine Panel Antennas at 253-ft & 240-ft AGL with 9 runs of 1-5/8-inch coaxial cable.
Sprint PCS: Six Decibel DB980 panel antennas at 225-ft AGL each w/ one run of 1-5/8 inch coaxial cable.
SGI Communications:
Two Andrew PG1-NOF-0091-011 Rx antennas at 199-ft AGL each w/ one run of 7/8 inch coaxial cable.
One Andrew PG1- NOF-0093-311 Tx antenna at 181-ft AGL w/ one run of 7/8 inch coaxial cable.

Existing VoiceStream Antenna, Cables & Equipment - *To be removed from tower*

Four DAPA 58210 Panel Antennas at 212-ft AGL with 6 runs of 7/8 inch coaxial cable and two runs of 1/2-inch coaxial cable.
Two Nortel S2000H BTS Cabinets & associated access platform mounted on tower at 20-ft AGL.

Existing VoiceStream Antenna, Cables & Equipment - *To remain on tower*

One 2-ft square planar array antenna (pt. to pt. microwave antenna) with one run of ½ -inch coaxial cable.

New VoiceStream Antenna, Cables & Equipment - *Additions to tower*

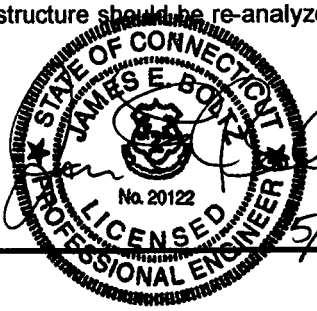
Eight EMS RR-90-17 Panel Antennas at 212-ft ATBP with 16 new runs of 1-5/8 inch coaxial cable.
Two Nortel S8000 BTS Cabinets mounted on existing platform at 37-ft AGL.

CSEI's structural analysis utilized the structural loads prescribed by "ANSI/TIA/EIA-222-F" "Structural Standards for Antenna Supporting Structures". The load carrying members of this structure were reviewed to check their compliance with the AISC 1989 ASD "Specification for Structural Steel Buildings. As a result of our structural analysis we determined that some tower strengthening is required to enable this structure to support VoiceStream's new Nortel S8000H BTS Equipment. This strengthening is needed at the existing platform at 37-ft AGL. With the exception of this platform, all of the other existing tower members had maximum stress levels that were less than the allowable stresses permitted by the AISC Specification. We therefore have concluded that after the platform at 37-ft AGL is strengthened, this existing 250-ft tower structure will be capable of supporting the loads from both the existing antennas & cables as well as the proposed VoiceStream Wireless additions, in accordance with the referenced codes. This tower structure will not require any other structural modifications to support the new VoiceStream equipment, provided that the new antennas and mounts are installed in conformance with CSEI's installation drawings, which will be prepared for this project.

If VoiceStream Wireless or any other carriers add any future equipment to this tower, this structure should be re-analyzed at that time. We hope that this information is sufficient for your present needs.
CSEI will be happy to supply you with additional information as required.

Sincerely,

James E. Boltz, P.E. (CT P.E. #20122)



2430 Herodian Way / Suite 102 / Smyrna, Georgia 30080 / (770) 951-8080 / Fax (770) 396-0056

Exhibit D

Power Density Calculations
751 Higgins Road
Cheshire, Connecticut

VoiceStream WIRELESS

VOICESTREAM WIRELESS CORPORATION
100 Filley St, Bloomfield, CT 06002-1853
Phone: (860) 692-7100
Fax: (860) 692-7159

Technical Memo

To: Karina Hansen
From: Enrique Ramos, Jr. (Radio Engineering Consultant)
cc: Mike Fulton
Subject: Power Density Report for CT-11-220A
Date: 29-Jun-01

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the Voicestream Wireless Corporation PCS antenna installation on an Existing Lattice Tower at 751 Higgins Road, Cheshire, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from several locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

1) The emissions from Voicestream Wireless transmitters are in the 1930-1950 MHz frequency band.
2) The antenna cluster consists of two sectors, with 4 antennas per sector. The model number for each antenna is EMS-RR90-17-02DP.
3) The antenna height is 212 Feet center line.
4) The maximum transmit power from each sector is 2103.78 Watts Effective Isotropic Radiated Power (EiRP) assuming 8 channels per sector.
5) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
6) 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.
7) The average ground level of the studied area does not significantly change 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 worse case assumptions, the power density calculations from the VoiceStream Wireless Corporation PCS antenna installation on an Existing Lattice Tower at 751 Higgins Road, Cheshire, CT, is 0.010269 mw/cm^2. This value represents only 1.0269% of the Maximum Permissible Emission (MPE) standard of 1000 microwatts per square centimeter (uw/cm^2) set forth in the FCC/ANSI/IEEE C95.1-1991. The combined Power Density with other carriers will be 11.3320% of the standard. Details are shown in the attachment.

Furthermore, the proposed antenna location for VoiceStream Wireless will not interfere with existing public safety telecommunications, AM band and FM band radio broadcast, TV, Police Communication, HAM Radio communications and other signals in the area.

VoiceStream Wireless corporation Proprietary

Worst Case Power Density

Region 11 - Connecticut
Power Density Calculation
Site: CT-11-220A
Site Address: 751 Higgins Road
Town: Cheshire
Pole Height: 250FT
Tower Style: Existing Lattice Tower

Base Station TX output	20	W
Number of channels	8	
Antenna Model	EMS-RR90-17-02DP	
Cable Size	1-5/8	"
Cable Length	232.0	ft
Antenna Height	212.0	ft
Ground Reflection	1.6	
Frequency	1930.00	MHz
Jumper & Connector loss	2.62	dB
Antenna Gain	16.5	dBi
Cable Loss per foot	0.0116	Loss per/ft
Total Cable Loss	2.6912	dB
Total Attenuation	5.3112	dB
Total EIRP per channel	54.20	dB
(In Watts)	262.97	W
Total EIRP per sector	63.23	dB
(In Watts)	2103.78	W
nsg	11.1888	
Power Density (S) =	**0.010269**	**mW / cm²**
% MPE =	**1.0269%**	

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

Total % MPE for Nextel=1.2334%
Total % MPE for BAM & SNET=9.0717%
Total % MPE = 11.3320%

LeBoeuf, Lamb, Greene & MacRae
L.L.P.

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July 19, 2001

Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: Notice of Exempt Modification
751 Higgins Road, Cheshire, Connecticut

Dear Chairman Gelston and Members of the Council:

Please be advised that LeBoeuf, Lamb, Greene & MacRae, L.L.P. represents VoiceStream Wireless Corporation ("VoiceStream") in the above-referenced matter. Pursuant to Connecticut General Statutes §16-50aa, VoiceStream hereby requests an order from the Connecticut Siting Council ("Council") to approve the proposed upgrade of existing equipment, currently approved for shared use by the applicant of an existing tower located at 751 Higgins Road, Cheshire, Connecticut. VoiceStream proposes to replace its existing antennas with eight new antennas at the same elevation on the existing tower. Two existing Nortel S2000H BTS cabinets would be removed and updated with two new Nortel S8000 BTS cabinets located on existing protective grating on the tower structure, thirty six feet, ten inches (36'-10") above the base plate (see "Exhibit A"). An existing two foot square microwave antenna will remain on the tower in the area of the existing and future antennas. 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 John L. Salomone, Cheshire Town Manager.

Background

Effective as of the May 31, 2001 merger between Deutsche Telekom AG and VoiceStream Wireless Corp., the corporate structure of VoiceStream has changed.[1] VoiceStream 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

[1]The corporate structure of VoiceStream is as follows: Omnipoint Communications, Inc. ("Omnipoint") is a 95.4% subsidiary of Omnipoint Finance, LLC (hereinafter, "OF"). OF is a wholly owned subsidiary of Omnipoint Finance Holding, LLC (hereinafter, "OFH"). OFH is a subsidiary of Omnipoint Wireless Corporation (hereinafter "VS"), which owns all of the outstanding common shares of OFH. VS is a wholly owned subsidiary of T-Mobile International AG (hereinafter "T-Mobile"). T-Mobile is a wholly owned subsidiary of Deutsche Telekom AG (American Depositary Receipts traded in U.S. on the NYSE: DT).

Connecticut. VoiceStream 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.

The tower at 751 Higgins Road is an AT&T, 225 foot "Type J" tower located on an AT&T site. The coordinates for the site are **41°-29'-14" N** and **72°-55'-47" W**. The tower and surrounding land are owned by AT&T. VoiceStream and the tower owner have agreed to mutually acceptable terms and conditions for the proposed shared use of this tower, and the tower owner has authorized VoiceStream to act on its behalf to apply for all necessary local, state and federal permits, approvals and authorizations which may be required for the proposed shared use of this facility.

The compound layout of the tower site is shown in the attached Exhibit A. Currently, the tower holds various communication antennas. Existing antennas are listed on the structural analysis, attached as Exhibit C and also shown on the elevation drawing B2 as part of Exhibit A. VoiceStream proposes to remove its current antennas at the approximate two hundred twelve (211'-10") foot centerline above the tower base plate ("ATBP"). VoiceStream proposes to replace the four existing DAPA 58210 panel antennas with eight new antennas mounted on the existing stand-off frames to the tower. The new antennas will be comprised of an antenna cluster of two sectors, with four antennas per sector at the same two hundred twelve (211'-10") foot centerline ATBP level (total of eight). The model number for each sector is EMS RR90-17-02 DP. The radio transmission equipment associated with these antennas is being updated. As stated above, two existing Nortel S2000H BTS cabinets would be removed and updated with two new Nortel S8000 BTS cabinets mounted on existing eight foot six inch (8'-6") wide network protective grating on the tower structure, thirty six feet, ten inches (36'-10") above the base plate (see "Exhibit A"). An existing two foot square microwave antenna will remain on the tower in the area of the existing and future antennas. A new ladder to the grated BTS platform would be installed along with a new guardrail on the grating. No changes will be made to the compound fence, nor will the size of the compound be affected. Exhibit B contains specifications for the proposed antennas and equipment cabinets. As mentioned in the structural analysis attached as Exhibit C, the tower will need some tower strengthening to enable the tower to support the BTS cabinets at the 37 foot level. Other than the minor reinforcement to the existing platform, the tower is deemed structurally capable of supporting VoiceStream's proposed equipment.

The planned modifications to the New Haven 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 the tower. VoiceStream's new antennas will be installed with a centerline of approximately two hundred twelve feet (211'-10") AGL, the same height of its existing antennas. The enclosed tower drawing confirms that the planned changes will not increase the overall height of the tower.

2. The installation of VoiceStream equipment, as reflected on the attached site plan, will not require an extension of the site boundaries. VoiceStream's proposed equipment cabinets will be replacing those already existing and located entirely within the existing compound .

3. The proposed modification to the facility will not increase the noise levels at the existing facility by six decibels or more. VoiceStream's equipment is self-contained and requires no additional heating, ventilation or cooling equipment.

4. The operation of the additional antenna 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 D.

For the foregoing reasons, VoiceStream respectfully submits that the proposed addition of antennas and equipment at the New Haven 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,

VOICESTREAM WIRELESS CORPORATION

By: _____
Its Counsel
Stephen J. Humes
Diane W. Whitney

Attachments

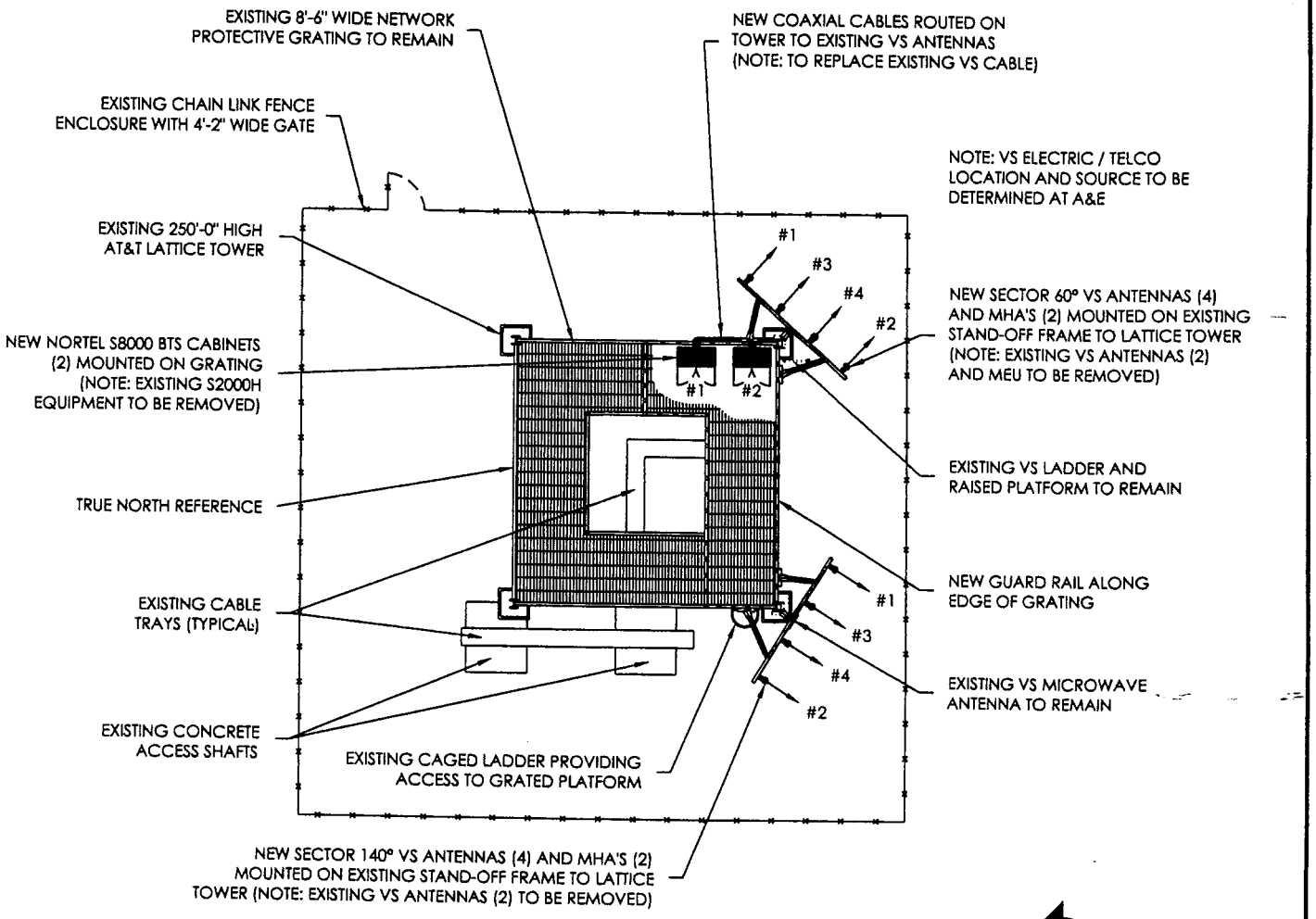
cc: Cheshire Town Manager, John L. Salomone

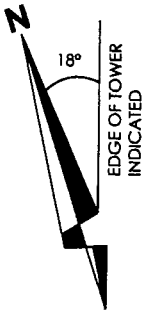
Exhibit A

Design Drawings
Site Location
751 Higgins Road
Cheshire, Connecticut

EXHIBIT B

The location of the Premises within the Property (together with access and utilities) is more particularly described and depicted as follows:





NOTE:
VOICESTREAM WIRELESS USED ARCNET ARCHITECTS, INC. DRAWINGS DATED 08/09/99 TO DEVELOP THIS SITE LAYOUT.

NOTE:
THIS EXHIBIT REPRESENTS A CONCEPTUAL PLAN BASED ON THE DEVELOPMENT/LEASE AGREEMENT REQUIREMENTS. ACTUAL CONSTRUCTION DOCUMENTS MAY VARY FROM THIS EXHIBIT TO COMPLY WITH ALL APPLICABLE CODES.

1 / B-1 SITE LAYOUT
NOT TO SCALE

VoiceStream WIRELESS
100 Filley Street, Bloomfield, CT 06002
Tel: 860-692-7100 Fax: 860-692-7159

VS Search Area:	CHESHIRE
VS Site I.D. No.:	CT-11-220A

Project: **AT&T CHESHIRE TOWER**
Address: 751 Higgins Road, Cheshire, CT

SAC:	John LaMontagne
R.F. ENG.:	Jason Overbey
CONSTR:	Craig Clarkin

Drawing Title: SITE LAYOUT - UPGRADE

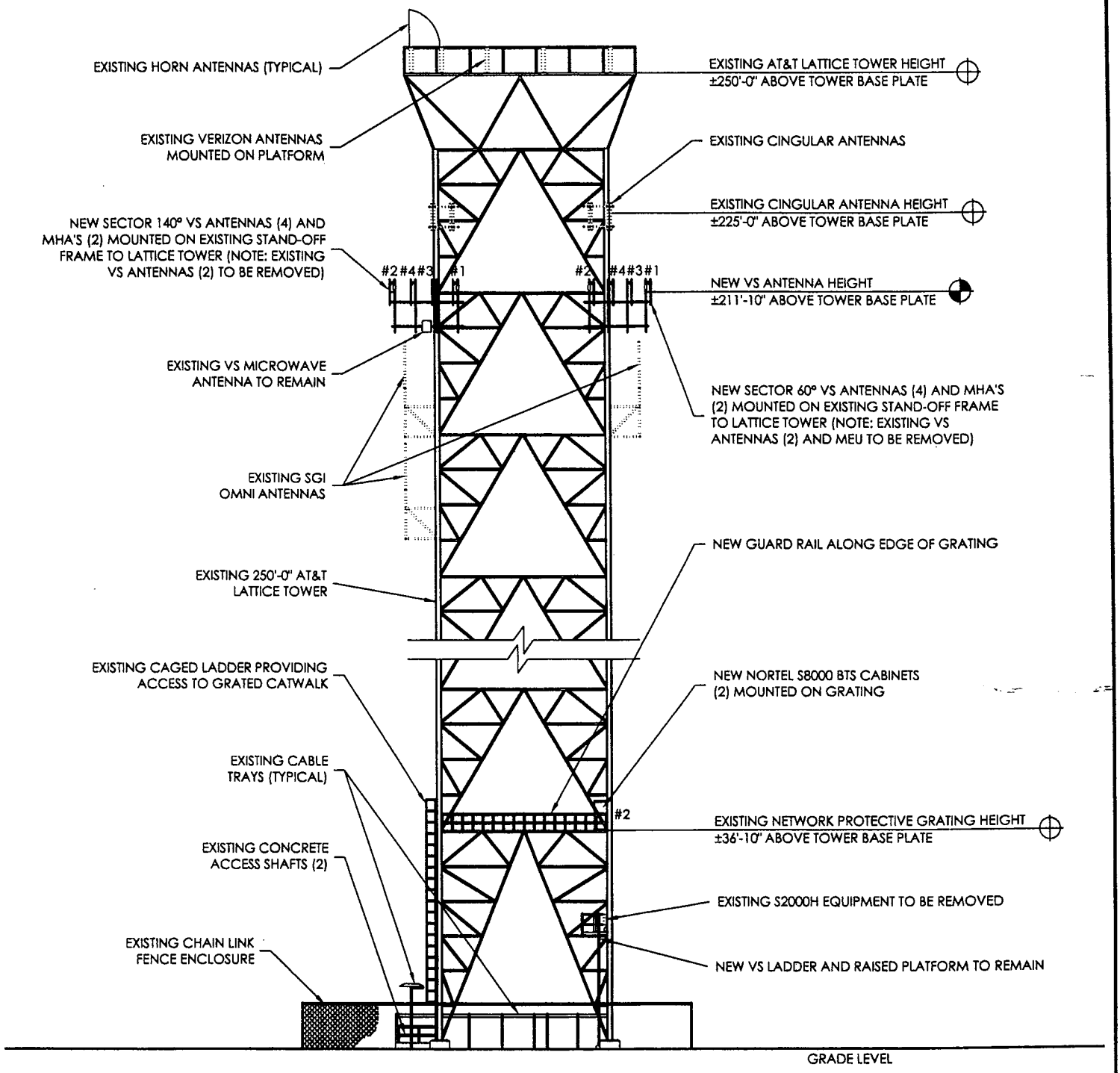
Revision:	Date:
Redesigned VS Equipment Area	04/09/01
Edited General Text	04/09/01

Drawn:	Date:
DEO	02/14/01

Drawing No.: **B - 1**

EXHIBIT B

The location of the Premises within the Property (together with access and utilities) is more particularly described and depicted as follows:



1 / B-2 ELEVATION
NOT TO SCALE

NOTE:
VOICESTREAM WIRELESS USED ARCNET ARCHITECTS, INC. DRAWINGS DATED 08/09/99 TO DEVELOP THIS ELEVATION.

NOTE:
THIS EXHIBIT REPRESENTS A CONCEPTUAL PLAN BASED ON THE DEVELOPMENT/LEASE AGREEMENT REQUIREMENTS. ACTUAL CONSTRUCTION DOCUMENTS MAY VARY FROM THIS EXHIBIT TO COMPLY WITH ALL APPLICABLE CODES.

VoiceStream WIRELESS
100 Filley Street, Bloomfield, CT 06002
Tel: 860-692-7100 Fax: 860-692-7159

VS Search Area: CHESHIRE
VS Site I.D. No.: CT-11-220A

Project: **AT&T CHESHIRE TOWER**
Address: 751 Higgins Road
Cheshire, CT

SAC: John LaMontagne
R.F. ENG.: Jason Overbey
CONSTR: Craig Clarkin

Drawing Title: ELEVATION - UPGRADE

Revision:	Date:
Redesigned VS Equipment Area	04/09/01
Edited General Text	04/09/01

Drawn: DEO
Date: 02/14/01
Drawing No.: **B - 2**

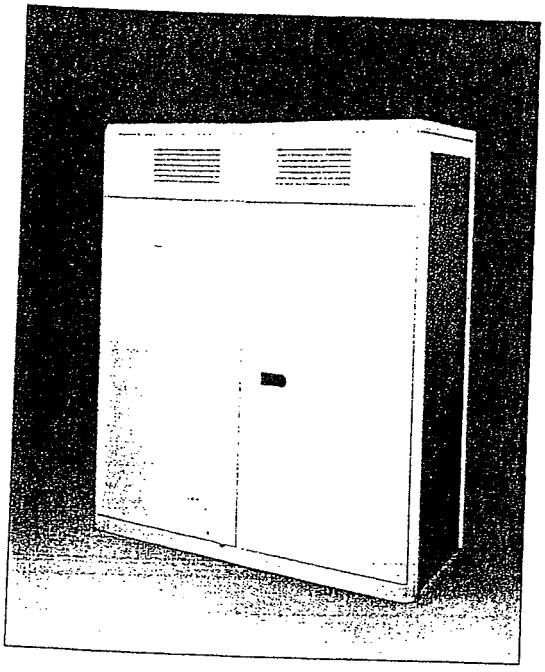
Exhibit B

Equipment Specifications
751 Higgins Road
Cheshire, Connecticut

GSM 900 / DCS 1800 / PCS 1900

NORTEL
NORTHERN TELECOM

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 sectored configurations. The typical one cabinet S222 configuration may be expanded up to S332 or S422 without an additional cabinet.

Technical Data

• 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

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Printed in France

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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

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

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°C (+122°F).

Consumption

BTS input voltage:

- GSM 900/1800
  - nominal voltage contained between 220V AC and 240V AC
  - minimum voltage: 220 – 10% = 198V AC
  - maximum voltage: 240 + 6% = 254V AC
- GSM 1900 (with DACS)
  - nominal voltage: 208V AC to 240V AC
  - minimum voltage: 208 – 10% = 187V AC
  - maximum voltage: 240 + 6% = 254V AC

NON - PREMIUM BTS ONLY

- GSM 1900 (with ACU and/or the power system six–rectifier type)
  - nominal voltage: 240V AC
  - minimum voltage: 240 – 10% = 187V AC
  - maximum voltage: 240 + 6% = 254V AC

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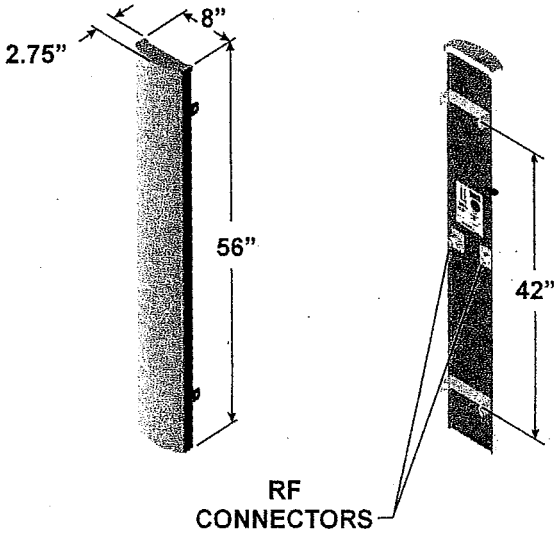
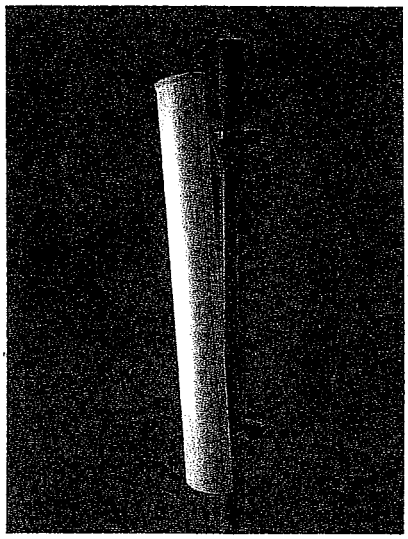
EMS WIRELESS

OptiRange™

RR90-17-XXXP

1850 MHz - 1990 MHz (P)





90° beamwidth

16.5 dBi gain

±45° DualPol™

56 inch

SPECIFICATIONS

Electrical

Azimuth Beamwidth	90°
Elevation Beamwidth	6°
Gain	16.5 dBi (14.4 dBd)
Polarization	Slant, ±45°
Port-to-Port Isolation	≥ 30 dB
Front-to-Back Ratio	≥ 25 dB (≥ 30 dB Typ.)
Electrical Downtilt Options	0°, 2°, 4°, 6°
VSWR	1.35:1 Max
Connectors	2;Type N or 7-16 DIN (female)
Power Handling	250 Watts CW
Passive Intermodulation	<-147 dBc (2 tone @ +43 dBm {20W} ea.)
Lightning Protection	Chassis Ground

Mechanical

Dimensions (L x W x D)	56in x 8in x 2.75in (142 cm x 20.3 cm x 7.0 cm)
Rated Wind Velocity	150 mph (241 km/hr)
Equivalent Flat Plate Area	3.1ft² (.29 m²)
Front Wind Load @ 100 mph (161 kph)	90 lbs (400 N)
Side Wind Load @ 100 mph (161 kph)	31 lbs (139 N)
Weight	18 lbs (8.2 kg)

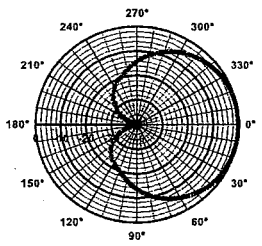
Note: Patent Pending and US Patent number 5, 757, 246.

Values and patterns are representative and variations may occur. Specifications may change without notice due to continuous product enhancements. Digitized pattern data is available from the factory or via the web site www.emswireless.com and reflect all updates.

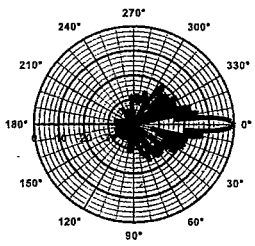
MOUNTING OPTIONS

Model Number	Description	Comments
MTG-P00-10	Standard Mount (Supplied with antenna)	Mounts to Wall or 1.5 inch to 5.0 inch O.D. Pole (3.8 cm to 12.7 cm)
MTG-S02-10	Swivel Mount	Mounting kit providing azimuth adjustment.
MTG-DXX-20*	Mechanical Downtilt Kits	0° - 10° or 0° - 15° Mechanical Downtilt
MTG-CXX-10*	Cluster Mount Kits	3 antennas 120° apart or 2 antennas 180° apart
MTG-C02-10	U-Bolt Cluster Mount Kit	3 antennas 120° apart , 4.5" O.D. pole.
MTG-TXX-10*	Steel Band Mount	Pole diameters 7.5" - 45"

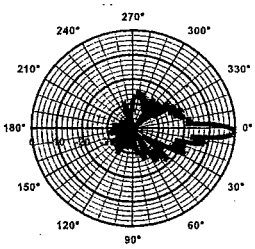
* Model number shown represents a series of products. See mounting options section for specific model number.



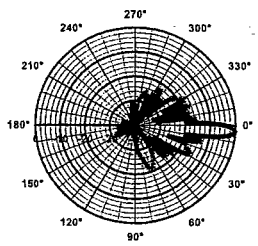
Azimuth



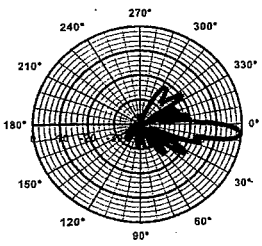
Elevation
0° Downtilt



Elevation
2° Downtilt



Elevation
4° Downtilt



Elevation
6° Downtilt

Exhibit C

Structural Analysis
751 Higgins Road
Cheshire, Connecticut

Communication Structures Engineering, Inc.

Mr. Dave Weinpahl
On Air Engineering, LLC.
100 Filley St.
Bloomfield, CT 06002

May 14, 2001

Re: Structural Analysis of
AT&T's 250-ft Modified Type 'J ' Tower at
AT&T L-4 Junction Building Site
751 Higgins Road, Cheshire, CT for
VoiceStream Wireless Antenna Additions
VoiceStream Site ID # **CT-11- 220A**

Dear Mr. Weinpahl,

Communication Structures Engineering, Inc. (CSEI) has completed a structural review of the existing AT&T's 250-ft Type 'J ' Tower that is located at this AT&T site in Cheshire, CT. In accordance with VoiceStream's request, we performed a structural analysis of this structure to check its capability to support the existing tower, antenna and equipment loads as well as the new loads from VoiceStream's proposed panel antennas, transmission lines, and equipment additions. The specific loading criteria that we utilized in accordance with BOCA were those prescribed by the national standard "ANSI/TIA/EIA-222-F-1996". The applicable "basic wind speed" that was utilized for this tower site was the 85-mph, fastest-mile velocity, specified by the above standards for the New Haven County, CT area. CSEI utilized the original engineering and fabrication drawings for the 250-ft Type 'J ' tower at this site to conduct this structural review. A CSEI engineer previously visited this site in 1998. At that time, CSEI climbed, photographed & reviewed the condition of the existing tower structure and confirmed equipment locations. Recent photos of this structure (photos taken by On Air Engineering 4/2/01) were used to confirm the most current antenna & equipment configuration for this structure. A summary of the loads considered and the results of CSEI's structural analysis follow.

ANTENNA CONFIGURATION (Used for Structural Analysis)

Existing Antennas & Cables to remain on tower

AT&T: Two KS15676 Pyramidal Horn antennas at a centerline of 258-ft AGL each with one run of WC281 waveguide.
Bell Atlantic Mobile: Twelve Swedcom ALP-E9011 Panel Antennas at 253-ft AGL with 12 runs of 1-5/8 inch coaxial cable.
SNET: Nine Panel Antennas at 253-ft & 240-ft AGL with 9 runs of 1-5/8-inch coaxial cable.
Sprint PCS: Six Decibel DB980 panel antennas at 225-ft AGL each w/ one run of 1-5/8 inch coaxial cable.
SGI Communications:
Two Andrew PG1-NOF-0091-011 Rx antennas at 199-ft AGL each w/ one run of 7/8 inch coaxial cable.
One Andrew PG1- NOF-0093-311 Tx antenna at 181-ft AGL w/ one run of 7/8 inch coaxial cable.

Existing VoiceStream Antenna, Cables & Equipment - *To be removed from tower*

Four DAPA 58210 Panel Antennas at 212-ft AGL with 6 runs of 7/8 inch coaxial cable and two runs of 1/2-inch coaxial cable.
Two Nortel S2000H BTS Cabinets & associated access platform mounted on tower at 20-ft AGL.

Existing VoiceStream Antenna, Cables & Equipment - *To remain on tower*

One 2-ft square planar array antenna (pt. to pt. microwave antenna) with one run of ½ -inch coaxial cable.

New VoiceStream Antenna, Cables & Equipment - *Additions to tower*

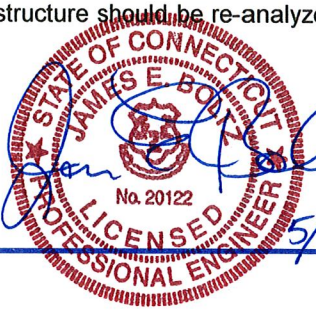
Eight EMS RR-90-17 Panel Antennas at 212-ft ATBP with 16 new runs of 1-5/8 inch coaxial cable.
Two Nortel S8000 BTS Cabinets mounted on existing platform at 37-ft AGL.

CSEI's structural analysis utilized the structural loads prescribed by "ANSI/TIA/EIA-222-F" "Structural Standards for Antenna Supporting Structures". The load carrying members of this structure were reviewed to check their compliance with the AISC 1989 ASD "Specification for Structural Steel Buildings. As a result of our structural analysis we determined that some tower strengthening is required to enable this structure to support VoiceStream's new Nortel S8000H BTS Equipment. This strengthening is needed at the existing platform at 37-ft AGL. With the exception of this platform, all of the other existing tower members had maximum stress levels that were less than the allowable stresses permitted by the AISC Specification. We therefore have concluded that after the platform at 37-ft AGL is strengthened, this existing 250-ft tower structure will be capable of supporting the loads from both the existing antennas & cables as well as the proposed VoiceStream Wireless additions, in accordance with the referenced codes. This tower structure will not require any other structural modifications to support the new VoiceStream equipment, provided that the new antennas and mounts are installed in conformance with CSEI's installation drawings, which will be prepared for this project.

If VoiceStream Wireless or any other carriers add any future equipment to this tower, this structure should be re-analyzed at that time. We hope that this information is sufficient for your present needs.
CSEI will be happy to supply you with additional information as required.

Sincerely,

James E. Boltz, P.E. (CT P.E. #20122)



5/14/2001

2430 Herodian Way / Suite 102 / Smyrna, Georgia 30080 / (770) 951-8080 / Fax (770) 396-0056

Exhibit D

Power Density Calculations
751 Higgins Road
Cheshire, Connecticut

VOICESTREAM WIRELESS CORPORATION
100 Filley St, Bloomfield, CT 06002-1853
Phone: (860) 692-7100
Fax: (860) 692-7159

Technical Memo

To: Karina Hansen
From: Enrique Ramos, Jr. (Radio Engineering Consultant)
cc: Mike Fulton
Subject: Power Density Report for CT-11-220A
Date: 29-Jun-01

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the Voicestream Wireless Corporation PCS antenna installation on an Existing Lattice Tower at 751 Higgins Road, Cheshire, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from several locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

1) The emissions from Voicestream Wireless transmitters are in the 1930-1950 MHz frequency band.
2) The antenna cluster consists of two sectors, with 4 antennas per sector. The model number for each antenna is EMS-RR90-17-02DP.
3) The antenna height is 212 Feet center line.
4) The maximum transmit power from each sector is 2103.78 Watts Effective Isotropic Radiated Power (EiRP) assuming 8 channels per sector.
5) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
6) 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.
7) The average ground level of the studied area does not significantly change 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 worse case assumptions, the power density calculations from the VoiceStream Wireless Corporation PCS antenna installation on an Existing Lattice Tower at 751 Higgins Road, Cheshire, CT, is 0.010269 mw/cm^2. This value represents only 1.0269% of the Maximum Permissible Emission (MPE) standard of 1000 microwatts per square centimeter (uw/cm^2) set forth in the FCC/ANSI/IEEE C95.1-1991. The combined Power Density with other carriers will be 11.3320% of the standard. Details are shown in the attachment.

Furthermore, the proposed antenna location for VoiceStream Wireless will not interfere with existing public safety telecommunications, AM band and FM band radio broadcast, TV, Police Communication, HAM Radio communications and other signals in the area.

VoiceStream Wireless corporation Proprietary

Worst Case Power Density

Region 11 - Connecticut
Power Density Calculation

Site: CT-11-220A
Site Address: 751 Higgins Road
Town: Cheshire
Pole Height: 250FT
Tower Style: Existing Lattice Tower

Base Station TX output	20	W
Number of channels	8	
Antenna Model	EMS-RR90-17-02DP	
Cable Size	1-5/8 "	
Cable Length	232.0	ft
Antenna Height	212.0	ft
Ground Reflection	1.6	
Frequency	1930.00	MHz
Jumper & Connector loss	2.62	dB
Antenna Gain	16.5	dBi
Cable Loss per foot	0.0116	Loss per/ft
Total Cable Loss	2.6912	dB
Total Attenuation	5.3112	dB
Total EIRP per channel	54.20	dB
(In Watts)	262.97	W
Total EIRP per sector	63.23	dB
(In Watts)	2103.78	W
nsg	11.1888	
Power Density (S) =	**0.010269**	**mW / cm^2**
% MPE =	**1.0269%**	

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

Total % MPE for Nextel=1.2334%
Total % MPE for BAM & SNET=9.0717%
Total % MPE = 11.3320%