STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

June 26, 2000

J. Brendan Sharkey, Esq.
VoiceStream Wireless Corporation
100 Filley Street
Bloomfield, CT 06002

RE: EM-VOICESTREAM-135-000609 - VoiceStream Wireless notice of intent to modify an existing telecommunications facility located at 555 Main Street in Stamford, Connecticut.

Dear Attorney Sharkey:

At a public meeting held on June 20, 2000, 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.

The proposed modifications are to be implemented as specified here and in your notice dated June 9, 2000. 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/FOC

c: Daniel P. Malloy, Mayor of Stamford

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

June 12, 2000

Honorable Dannel P. Malloy
Mayor
City of Stamford
888 Washington Boulevard
P. O. Box 10152
Stamford, CT 06904-2152

RE: EM-VOICESTREAM-135-000609 - VoiceStream Wireless notice of intent to modify an existing telecommunications facility located at 555 Main Street in Stamford, Connecticut.

Dear Mayor Malloy:

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 June 20, 2000, 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/grg

Enclosure: Notice of Intent

EM-VoiceStream-135 000609

VoiceStream WIRELESS

100 Filley Street, Bloomfield, CT 06002
(860) 692-7154 phone
(860) 692-7159 fax

RECEIVED
JUN -9 2000
CONNECTICUT SITING COUNCIL

June 9, 2000

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

Dear Chairman Gelston:

Enclosed is a Notice of Intent to Modify an Exempt Telecommunications Tower and Associated Equipment for facilities owned and operated by Southern New England Telephone ("SNET") at 555 Main Street in Stamford, Connecticut.

The proposed modification can be generally described as the addition of "cellular type" PCS antennas for VoiceStream Wireless, consisting of the replacement of three previously approved panel antennas with six new panel antennas and additional associated base station equipment. VoiceStream Wireless holds the "A Block" 1900 MHz "Wideband" PCS license for the entire State of Connecticut. The VoiceStream PCS wireless service is a voice-data system that provides paging, data and voice communications services.

The top of the proposed antennas will be at the same level as those already located on the tower which are below the top of the existing tower. No changes will be made to the structure of the tower. The base station equipment will be located at the base of the tower structure within the existing compound area.

The attached pages detail the required information for this location. As shown in the attachments, the proposed addition meets all the necessary criteria established in the Regulations of Connecticut State Agencies Section 16-50j-72 (b) (2), and is an exempt facility pursuant to Section 16-50j-73.

Please record me as the contact for VoiceStream Wireless in this matter and in all correspondence from the Council.

Thank you in advance for your cooperation.

Sincerely,

J. Brendan Sharkey, Esq.
for VoiceStream Wireless, Inc.

enclosures
cc: Daniel P. Malloy, Mayor of Stamford

VoiceStream WIRELESS

NOTICE OF EXEMPT MODIFICATION

555 Main Street
Stamford, Connecticut

Pursuant to Section 16-50i(a)(5) of the Connecticut General Statutes and Section 16-50j-72(b)(2), as amended, of the Regulations of Connecticut State Agencies, VoiceStream Wireless Corp. ("VoiceStream") hereby notifies the Connecticut Siting Council that it intends to modify an existing communications facility by adding a total of six (6) Personal Communications Services (PCS) antennas and one equipment cabinet to its existing antenna assembly and equipment already located on the facility tower. This additional antenna assembly and equipment will be owned, operated and maintained by VoiceStream. The tower is currently owned by Southern New England Telephone ("SNET") and is located at 555 Main Street in Stamford, Connecticut.

Background

The proposed modifications are at the site of a self-supporting 125-foot rooftop lattice tower owned by SNET. Associated equipment is located on the roof of the existing building. A site plan and elevation drawings are attached in Exhibit A.

The existing tower and compound currently support a total of 13 antennas: nine (9) panel antennas owned by Springwich Cellular Limited Partnership ("SNET") on a platform at the top of the tower; one (1) SNET parabolic antenna at approximately 121' 4" above the main rooftop; and three (3) panel antennas owned by VoiceStream.

Discussion

The purpose of this modification is to serve the public with Wideband PCS services while accommodating the Council's policy of encouraging co-location on existing telecommunications towers.

On April 9, 1998, the Connecticut Siting Council acknowledged a Notice to Exempt and Modify an Existing Telecommunications Facility from VoiceStream's predecessor, Omnipoint Communications, Inc., for the installation of its existing three (3) antennas and an associated equipment cabinet at the Main Street tower site. VoiceStream now proposes to remove its existing antennas and install a total of six (6) panel antennas at the same height as its current antennas – 104.5 feet above the main rooftop - to increase its capacity in downtown Stamford and along Interstate 95. The antennas are EMS Model No. RR90-17-02DP, and the equipment cabinet is the Nortel S8000 BTS unit. The equipment specifications for this installation are shown in Exhibit B.

VoiceStream and SNET have entered into a lease agreement that authorizes VoiceStream's replacement and installation of its antennas on the tower along with the associated equipment at

the base. The parties conducted a structural analysis that indicates that the tower can support the proposed replacement and additions. This structural analysis is attached as Exhibit C.

Attached as Exhibit D is a power density analysis that calculates existing and proposed non-ionizing radiation levels. The current Connecticut (and ANSI/IEEE) power density level standards for non-ionizing radiation are also shown in Exhibit D. The levels shown indicate the total power density in milliwatts per square centimeter. These levels have been calculated at both the tower base and at the site boundary and include all the existing and proposed antennas in its calculations. These calculations conform to the procedures described by FCC OST Bulletin No. 65, and the levels identified in this case are well below all applicable standards.

Conclusion

The proposed antenna replacements and additions do not constitute a "modification" of an existing facility as defined in the Connecticut General Statutes Section 16-50i(d). There will be no change to the tower height or to the boundaries of the site. The tower is structurally sufficient to support the proposed antennas with minor additional bracing. There will be no increase in noise levels at the site's boundary by six (6) decibels or more and the total radio frequency electromagnetic radiation is not at or above the standard set forth in Section 22(a)-162 of the Connecticut General Statutes. This addition will not have a substantially adverse environment effect.

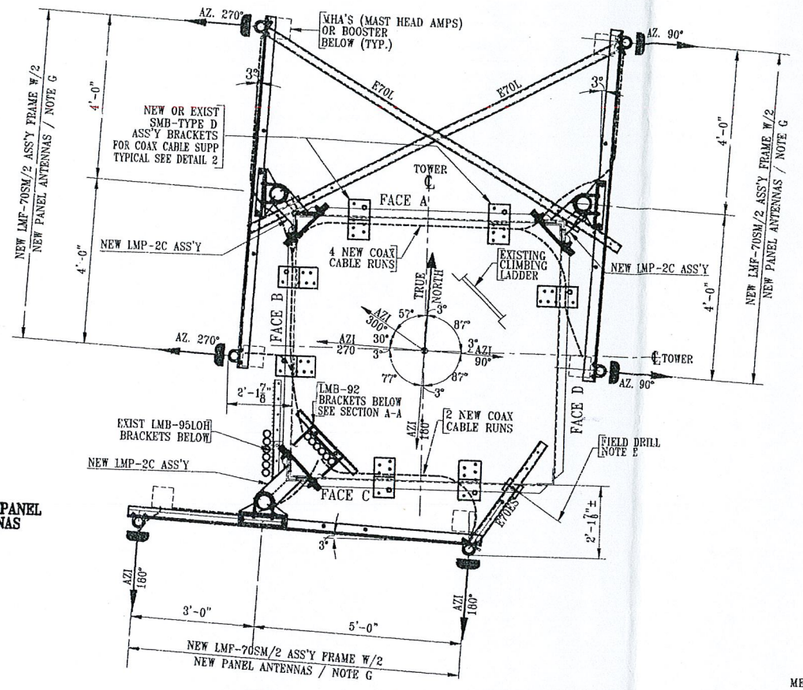
For these reasons, VoiceStream requests that the Council acknowledge that this Notice of Modification meets the Council's exemption criteria.

EXHIBIT A

1) SITE PLAN
2) ELEVATION

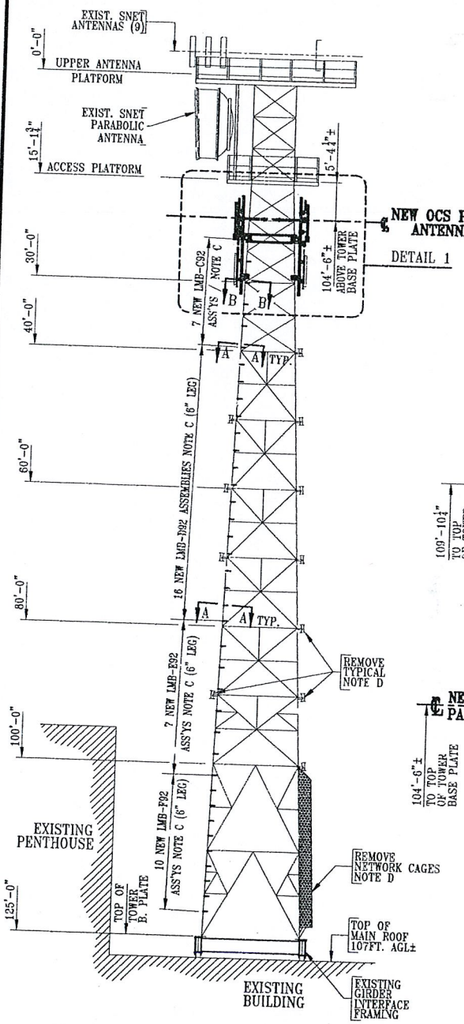
REMOVAL OF IN-SERVICE OCS ANTENNAS, CABLES, AND MOUNTS

1. BEFORE THE MOUNTS, CABLES, AND ANTENNAS SHOWN ON THIS DRAWING CAN BE INSTALLED AS SHOWN, THE CONTRACTOR MUST REMOVE THE FOLLOWING EXISTING OCS EQUIPMENT:
   3 EXISTING PANEL ANTENNAS.
   3 EXISTING LEG MOUNTED PIPES.
   6 RUNS OF EXISTING 1-1/4" COAX CABLES.
2. THE SEQUENCE, METHOD AND TIME PERIOD FOR REMOVAL OF THESE IN-SERVICE ITEMS MUST BE COORDINATED WITH OCS.



PLAN AT 104'-0" ABOVE BASE PLATE

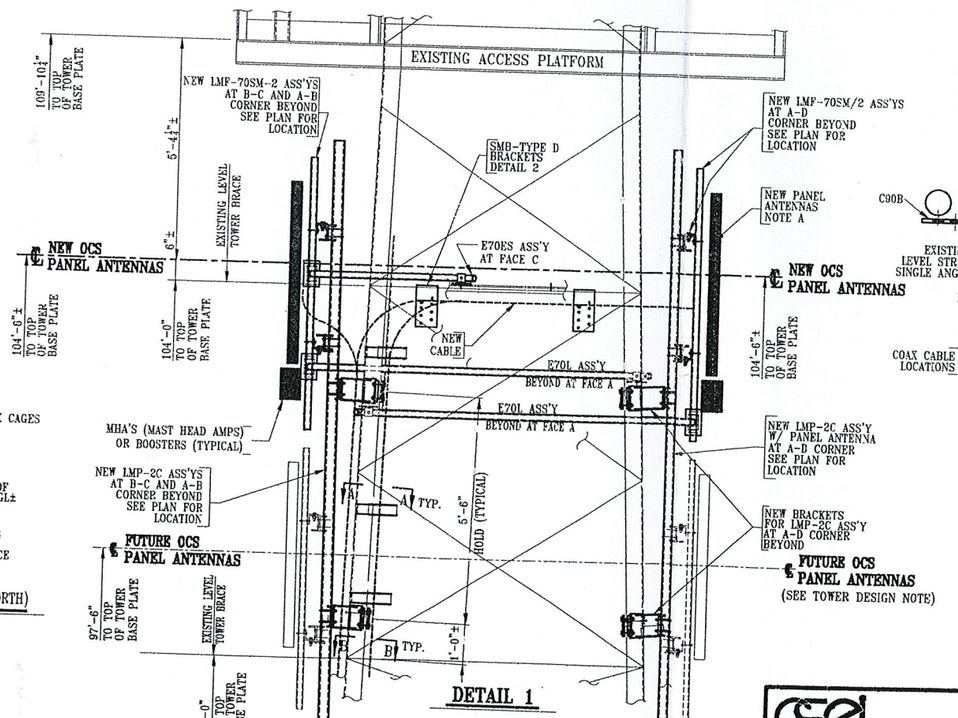
SCALE: 3/4" = 1'-0"



TOWER ELEVATION – FACE C (LOOKING NORTH)

EXISTING 125'-0" TYPE "K" TOWER

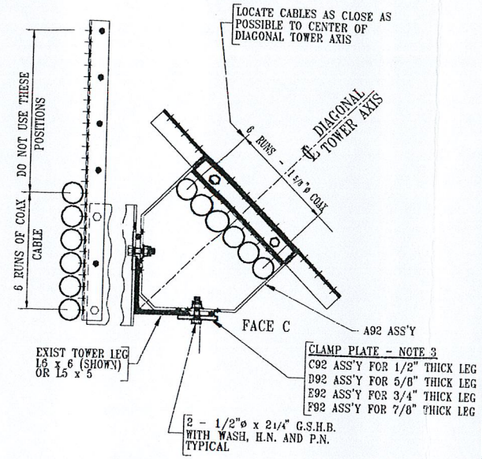
SCALE: 1/8" = 1'-0"



DETAIL 1

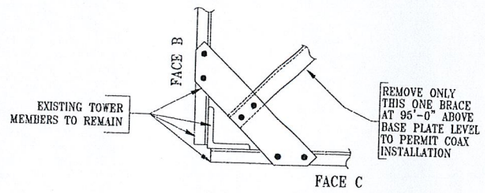
PARTIAL ELEVATION – FACE C (AS SHOWN)

SCALE: 3/4" = 1'-0"



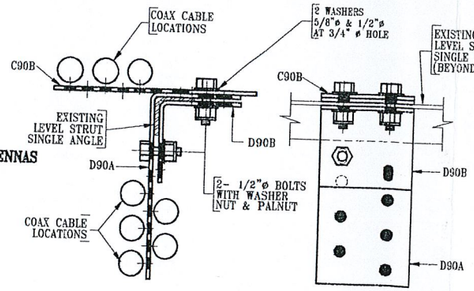
SECTION A – A

ASSEMBLY LMB-92



SECTION B – B

BRACE REMOVAL AT 95-FT LEVEL



DETAIL 2

SMB – TYPE D ASSEMBLY

PLAN NOTES

A. NEW PANEL ANTENNAS ARE TO BE EMS FR30-16-XX-DP. ANTENNAS ARE TO BE EQUIPPED WITH MHA'S OR BOOSTERS AND TWO RUNS OF 1-5/8" COAX FOR EACH ANTENNA

B. EXISTING ANTENNAS & WAVEGUIDE WHICH ARE NOT A PART OF THE PRESENT WORK ARE NOT SHOWN ON THESE DRAWINGS.

C. NEW LEG MOUNTED BRACKETS TO SUPPORT VERTICAL COAX. RUNS TO BE TYPE LMB-92. INSTALL APPROPRIATE BRACKETS CORRESPONDING TO TOWER LEG SIZE AT APPROXIMATELY 36 INCHES ON CENTER BETWEEN 104'-0" ABOVE BASE PLATE LEVEL AND EXISTING GIRDER INTERFACE FRAMING.

D. REMOVE ALL OLD WAVEGUIDE SUPPORT SPOOLS AND ASSOCIATED SUPPORT STEEL FROM FACE B&D. ALSO REMOVE BOTH NETWORK SUPPORT CAGES FROM THE BOTTOM OF TOWER.

E. FIELD DRILL ONE 11/16"ø HOLE TO SECURE E70L PIPE STRUT BRACKET TO EXIST. TOWER BRACE.

F. SEE FIELD INSTALLATION DRAWINGS LMP-2C, LMF-70SM/2, LMB-92, & SMB-90 FOR ADDITIONAL ERECTION AND INSTALLATION INFORMATION.

TOWER DESIGN INFORMATION

A STRUCTURAL ANALYSIS OF THIS 125-FT TYPE 'K' TOWER WAS PERFORMED PER TIA/EIA-222F FOR AN 85MPH BASIC WIND SPEED.

A STRUCTURAL REVIEW OF EXISTING BEAM FRAMING AT THE BUILDING ROOF WAS NOT INCLUDED IN THIS ANALYSIS.

POSSIBLE FUTURE ANTENNAS, THAT ARE INDICATED ON THIS DRAWING WITH DASHED LINES, AND THEIR CORRESPONDING COAXIAL CABLES HAVE NOT BEEN INCLUDED IN THE PRESENT STRUCTURAL ANALYSIS. A NEW STRUCTURAL ANALYSIS WILL BE NEEDED BEFORE ADDING THESE POSSIBLE FUTURE ITEMS TO THIS TOWER.

STRUCTURAL GENERAL NOTES

1. ALL NEW STRUCTURAL STEEL SHALL CONFORM WITH ASTM A-36. STRUCTURAL STEEL PIPE SHALL COMPLY WITH ASTM A-53, GRADE B WITH Fy = 36 KSI.
2. ALL NEW MATERIAL, INCLUDING FASTENERS, SHALL BE HOT DIPPED GALANIZED AFTER FABRICATION IN ACCORDANCE WITH ASTM A-123 AND A-153.
3. ALL NEW MATERIAL SHOWN ON THIS DRAWING IS INTENDED TO BE INSTALLED WITHOUT FIELD DRILLING OR CUTTING OF ANY EXISTING TOWER STEEL. FIELD DRILLING OR CUTTING OF EXISTING STEEL MAY BE DONE ONLY WITH THE PERMISSION OF THE OWNER.
4. THE SELECTION OF CONSTRUCTION MEANS AND METHODS AS WELL AS SAFETY IN ON OR ABOUT THE WORK SITE ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR(S) PERFORMING THE WORK. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.

SCHEDULE OF NEW MATERIAL REQUIRED

DESCRIPTION	PART NUMBER	QUANTITY REQUIRED
LEG MOUNTED PIPE	ASSEMBLY LMP-2C	3
LEG MOUNTED FRAME	ASSEMBLY LMF-70SM/2	3
STRUT MOUNTED BRKT'S	SMB-TYPE D BRACKETS	4
LEG MOUNTED BRACKETS	ASSEMBLY LMB-C92	7
LEG MOUNTED BRACKETS	ASSEMBLY LMB-D92	16
LEG MOUNTED BRACKETS	ASSEMBLY LMB-E92	7
LEG MOUNTED BRACKETS	ASSEMBLY LMB-F92	10

NEW MATERIAL IN ABOVE SCHEDULE IS AVAILABLE FROM:
COMMUNICATION STRUCTURES INC.
2430 HERODIAN WAY, SUITE 102
SMYRNA, GA. 30080
(770) 951-8080

ALLOW 3 WEEKS (MIN.) FOR FABRICATION AND DELIVERY.
ALL PARTS TO INCLUDE ALL NECESSARY FIELD BOLTS, U-BOLTS AND V-BOLTS.

STRUCTURAL DRAWING LIST

DWG. NO.	TITLE
S-1	TOWER ELEVATION AND PLANS

FIELD INSTALLATION DRAWINGS

LMP-2C	LEG MOUNT PIPE (4"ø) ASSEMBLY
LMF-70SM/2	LEG MOUNTED FRAME ASSEMBLY
SMB-90	STRUT MOUNTED BRACKET ASS'Y
LMB-92	LEG MOUNTED BRACKETS FOR TRANSMISSION LINE SUPPORT

STATE OF CONNECTICUT
JAMES E. BOLTZ
No. 20122
LICENSED PROFESSIONAL ENGINEER
5/30/00

Communication Structures Engineering, Inc.
2430 Herodian Way, Suite 102
Smyrna, Georgia 30080
(770) 951-8080

ARCNET ARCHITECTS, INC.
670 North Beers Street, Building 2, Holmdel, NJ 07733
Tel: 732.739.3200 Fax: 732.739.0440

Drawing Title: TOWER ELEVATION AND PLANS
Client: OCS
Project: SNET LANDLINE TOWER
Address: 555 MAIN STREET STAMFORD, CT
Search Loc: STAMFORD Site ID No: CT-11-410-A
ARCNET Project No.: A-99.506.805A
Drawn: W.E. Date: 4/24/00
Approved By: PROJ. MGR: DATE: R.F. ENGR: DATE: SAC: DATE: OWNER: DATE:
STN. 1
Revision No. Date
Drawing No. S-1

VoiceStream WIRELESS

EXHIBIT B

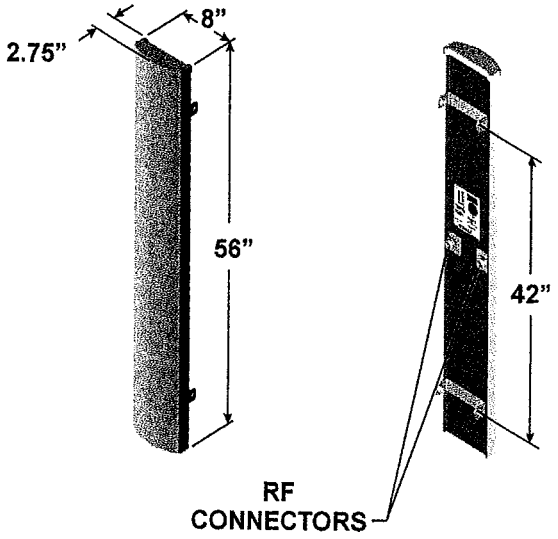
EQUIPMENT SPECIFICATIONS

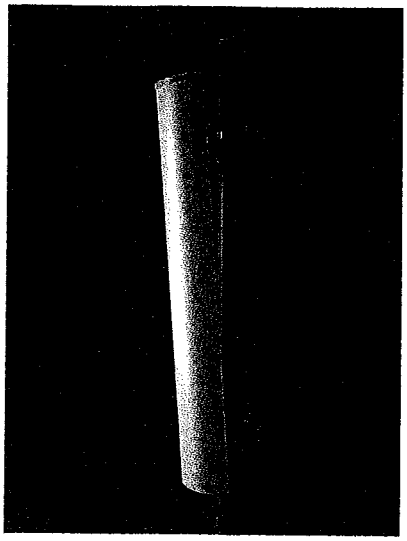
EMS WIRELESS

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)

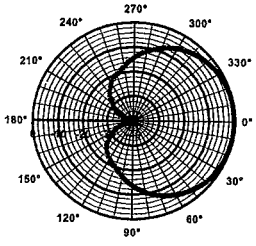
Note: Patent Pending and US Patent number 5, 757, 246.

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.

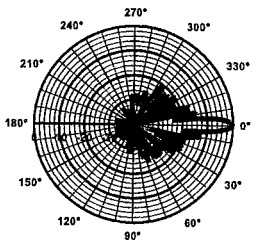
MOUNTING OPTIONS

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"

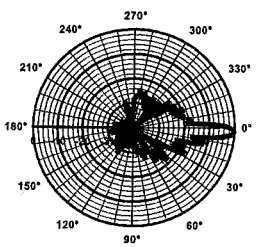
* Model number shown represents a series of products. See mounting options section for specific model number.



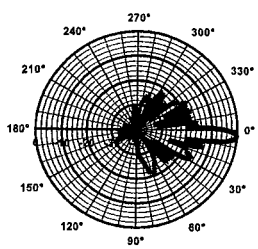
Azimuth



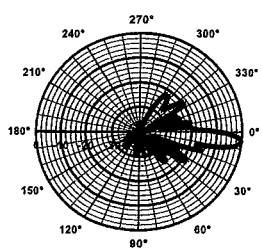
Elevation
0° Downtilt



Elevation
2° Downtilt



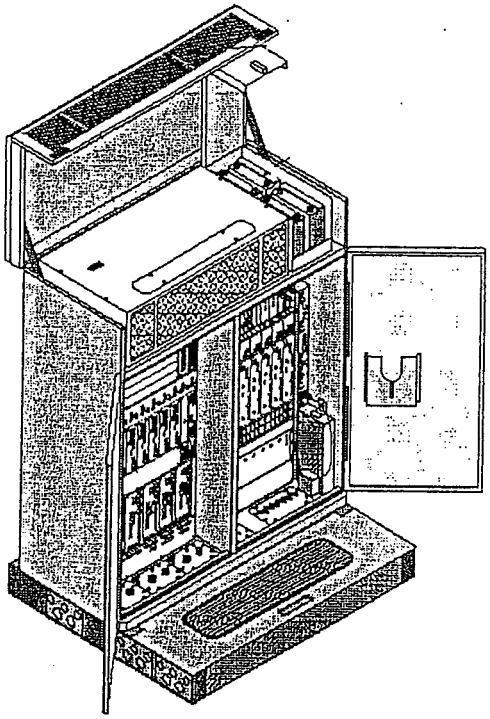
Elevation
4° Downtilt

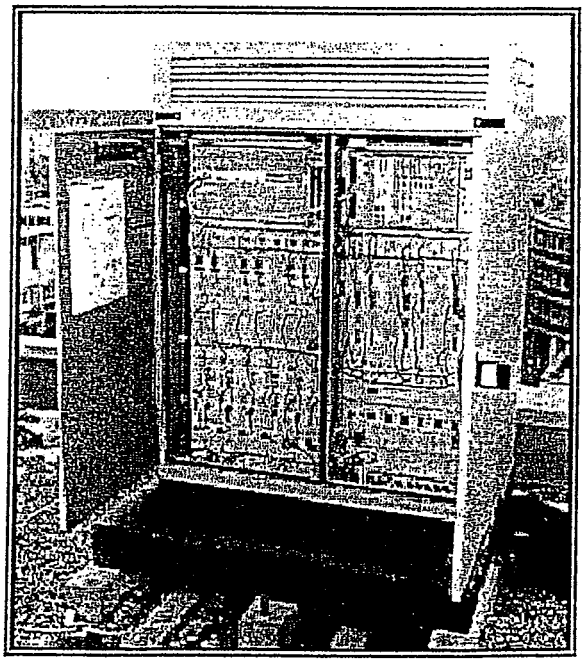


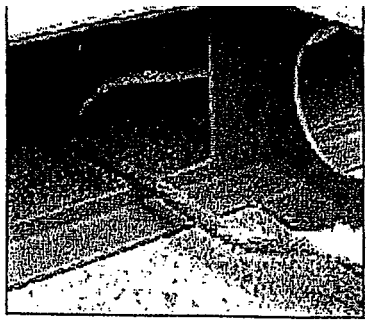
Elevation
6° Downtilt

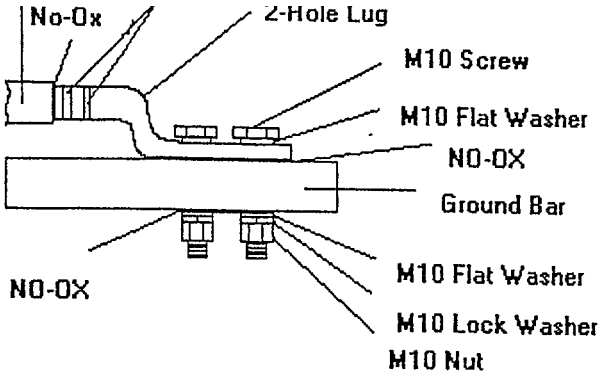
NORTEL NETWORKS™

S8000 BTS
Site Specifications









Apply a light coating of No Oxidation (NO-OX) to the ground bar area.

Dimensions, Weights & Clearances

BTS

Weight: 915 pounds
Dimensions: 53.2"W x 26"D x 63"H

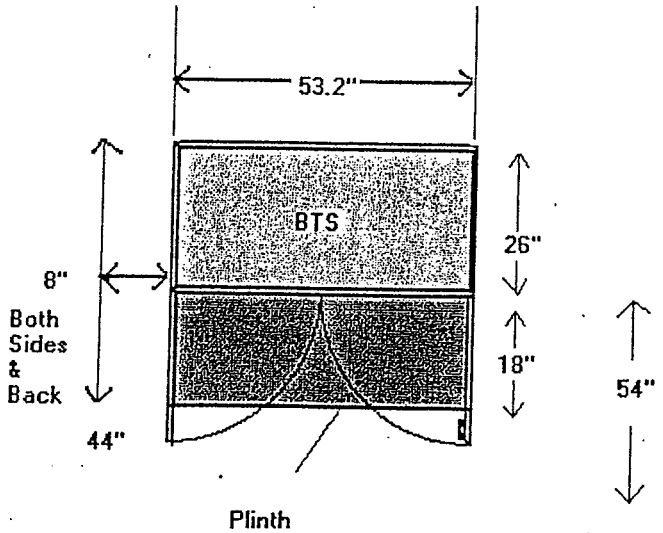
Clearances while transporting in building:
- Door Access:
  - Height: 6.6 feet
  - Width 3 feet
- Corridor Access:
  - Height: 6.6 feet
  - Width: 3.6 feet (straight), 6.6 feet (right angle)

Clearances when installed:
- Above: 28 inches for opening of hood
- Rear: 8 inches for installation of outer skin
- Sides: 8 inches for adjustment of door hinges
- Front: 54 inches to open door and technician access

Plinth

Weight:
87 pounds

Dimensions:
53.2"W x 44"D x 10.2"H



Floor Characteristics

Minimum Floor Resistance:
123 pounds/foot^2

Flatness:
¼ inch over 78 inches

Electrical Specifications

Split Single-Phase

3 wires plus ground

L1: Black 6 gauge

L2: Red 6 gauge

Neutral: White 6 gauge

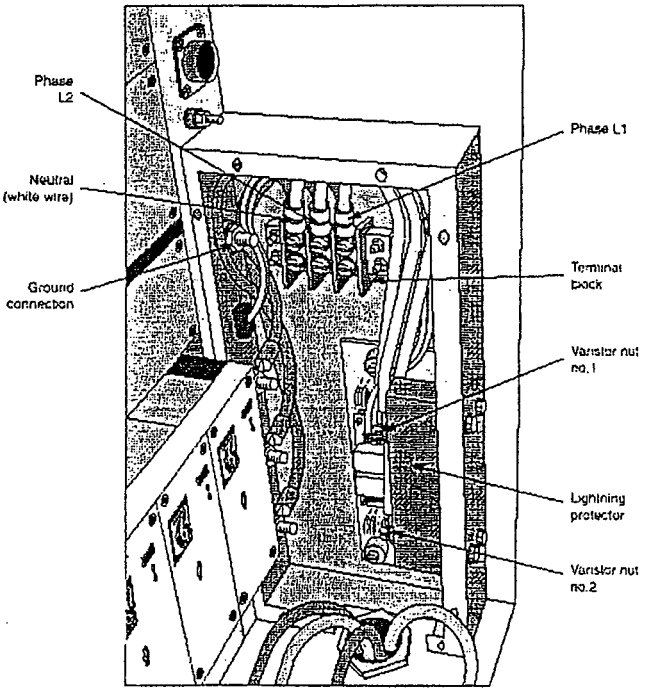
Ground: Yellow/Green 6 gauge

Maximum distance between AC box and BTS: 105 feet

187 ~ 254 VAC between L1 and L2

99 ~ 127 VAC between Neutral and L1 or L2

45 ~ 65 Hertz



AC connection to BTS located at the front, lower, right-hand side of BTS

Circuit Breaker in AC Box

Up to 4 transmitters

30 A, bipolar, C curve

5 or more transmitters

40A, bipolar, C curve

BTS to Ground connection

Minimum 2 AWG, run in most direct route as possible towards true earth, minimizing bends. No bend shall be less than 90 degrees.

VoiceStream WIRELESS

EXHIBIT C

STRUCTURAL ANALYSIS

Communication Structures Engineering, Inc.

May 11, 2000

Mr. Joe DiBemardo
ARCNET Architects, Inc.
100 Filley St.
Bloomfield, CT 06002

Re: Structural Analysis of
SNET's 125-ft. Type 'K' Tower at
555 Main Street, Stamford, CT for
Omnipoint Communications' Antenna Additions
OCS Site ID # CT-11-410A
ARCNET Proj. No. A99.506-605A

Dear Mr. Dibemardo,

Communication Structures Engineering, Inc. has completed a review of the existing SNET 125-ft. Type 'K' Tower that is located on the roof of the SNET 555 Main Street Building in Stamford, CT. In accordance with ARCNET's request, we performed a structural analysis of this tower to check its capability to support the existing tower, antenna and equipment loads as well as the new loads from Omnipoint's proposed panel antennas, antenna mounts, and transmission line additions. The steel framing which supports the tower at the building roof was not included in our review. CSEI's review considered all of the existing antennas that are presently on the tower except for the three existing Omnipoint panel antennas and six runs of cable that will be removed and replaced as part of this project. The existing abandoned waveguide supports and network protection screens, that are designated "to be removed" on CSEI's tower drawing S-1, were excluded from our analysis. The locations of the 12 new runs of Omnipoint's coaxial cable that we considered for our structural analysis are also shown on CSEI's drawing S-1. It is important that these cables be installed at the locations shown on this drawing.

CSEI's structural analysis utilized the structural loads prescribed by ANSI/TIA/EIA-222-F "Structural Standards for Antenna Supporting Structures ". The load carrying frame members of this tower were reviewed to check their compliance with the AISC 1989 ASD "Specification for Structural Steel Buildings". All of the existing tower members had maximum stress levels that were less than the allowable stresses permitted by the AISC Specification. Consequently, we have concluded that this 125-ft. Type 'K' Tower is capable of supporting the existing SNET antennas, as well as the addition of Omnipoint's six new EMS FR90-16 panel antennas with amplifiers and twelve new runs of 1-5/8" diameter coaxial cable. The new Omnipoint antennas and cables need to be installed as shown on CSEI's drawing S-1. If Omnipoint or any other carriers mount any additional equipment on this tower, this structure should be re-analyzed at that time.

I hope that this information is sufficient for your present needs. We will be happy to supply you with additional information as required.

Sincerely,

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

STATE OF CONNECTICUT JAMES E. BOLTZ No. 20122 LICENSED PROFESSIONAL ENGINEER
5/11/2000

2430 Herodian Way / Suite 102 / Atlanta, Georgia 30080

VoiceStream WIRELESS

EXHIBIT D

POWER DENSITY CALCULATIONS

100 Filley St., Bloomfield, CT 06002
Phone: (860) 692 - 7130
Fax: (860) 692 - 7159

Technical Memo

To:
From: Brian Liu (Radio Engineering Consultant)
cc: Mike Fulton
Subject: Power Density Report for CT11410A
Date: 6/9/2000

1. Introduction:
This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the proposed VoiceStream Wireless. PCS antenna installation at 555 Main Street, Stamford Connecticut. This study incorporates the most conservative considerations 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 the VSW transmitters are in the 1930-1950 MHZ frequency band.
2) The antenna cluster consists of three sectors, with 4 antennas per sector. The model number for each antenna is EMS FR-90-16-02DP
3) The antenna height is 208.7 feet Center Line.
4) The maximum combined transmit power from each sector is 2980.71 Watts Effective Isotropic Radiated Power (EiRP).
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 proposed VoiceStream Wireless PCS antenna installation are on the order of **10** to **100** times less than the FCC/ANSI/IEEE C95.1-1991 standard of 1000 microwatts per square centimeter ($\mu w/cm^2$). Details are shown in the attachment. Furthermore, the proposed antenna location for VoiceStream Wireless on SNET Facility @ 555 Main St., Stamford CT 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.

Worst Case Power Density for Antenna installation on the Existing Lattice Tower @ 555 Main Street, Stamford, CT

Region 11 - Connecticut Power Density Calculation - Worst Case			
Base Station TX output	20 W	43.01	
Number of channels	8		
Antenna Model	EMS: FR-90-16/ FV-90-16		
Antanna Gain	15.5 dBi		
Cable Size	1 5/8"		
Cable Length	155 ft		
Jumper & Connector loss	1 dB		
Cable Loss per foot	0.0116		
Total Cable Loss	1.798 dB		
Total Attenuation	2.798 dB		
Total EIRP per channel	55.71 dB	372.59	W
Total EIRP per sector	64.74 dB	2980.71	W
Ground Reflection	1.6		
Frequency	1930 MHz		
Antenna Height	208.7 ft	6361.176	cm
nsg	12.702		
Power Density (S) =	**0.015014 mW / cm^2**		
% MPE =	**1.5014%**		

Current % MPE = 15.77

** Additional % MPE contribution Omnipoint = 1.0414*

Total % MPE for all carriers = 16.8114

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

* 0.46 % submitted previously