STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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

July 18, 2002

Christopher B. Fisher, Esq.
Cuddy & Feder & Worby LLP
90 Maple Avenue
White Plains, NY 10601-5196

RE: **EM-AT&T-099-020619** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 88 Parsonage Hill Road, North Branford, Connecticut.

Dear Attorney Fisher:

At a public meeting held on July 11, 2002, 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 received in our office on June 19, 2002. 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/laf

c: Honorable Joanne Wentworth, Mayor, Town of North Branford
Frank B. Connolly, Town Manager, Town of North Branford
Carol Zeeb, Town Planner, Town of North Branford
Ochenkowski Towers, LLC
Julie M. Donaldson, Esq., Hurwitz & Sagarin LLC
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae
Thomas F. Flynn III, Nextel Communications Inc.

NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 88 PARSONAGE HILL ROAD, NORTH BRANFORD, CONNECTICUT

Pursuant to the Public Utility Environmental Standards Act, Connecticut General Statutes § 16-50g et. seq. ("PUESA"), and Sections 16-50j-72(b) of the Regulations of Connecticut State Agencies adopted pursuant to the PUESA, AT&T Wireless PCS, LLC d/b/a AT&T Wireless ("AT&T Wireless") hereby notifies the Connecticut Siting Council of its intent to modify an existing facility located at 88 Parsonage Hill Road, North Branford, Connecticut (the "Parsonage Hill Road Facility"), owned by Ochenkowski Towers, LLC. AT&T Wireless and the tower owner have agreed to share the use of the Parsonage Hill Road Facility, as detailed below.

The Parsonage Hill Road Facility

The Parsonage Hill Road Facility consists of an approximately one hundred ninety-five (195) foot lattice tower (the "Tower") and associated equipment currently being used and/or leased for wireless communications use by Sprint, VoiceStream, Nextel and Motient Corp. A chain link fence surrounds the Tower compound. The current surrounding land uses are predominantly residential, however, the Tower is surrounded by wooded areas.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Natcomm, LLC, including a site plan and tower elevation of the Parsonage Hill Road Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets needed to provide personal communications services ("PCS") within the existing fenced compound. AT&T Wireless will install 6 panel antennas at approximately the 170 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located on a concrete pad within the fenced compound. As evidenced in the letter of structural integrity prepared by Central Tower, annexed hereto as Exhibit A, AT&T has confirmed that the tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

The proposed addition of AT&T Wireless' antennas and equipment to the Parsonage Hill Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas and equipment to the Tower will not result in an increase of the Tower's height nor extend the site boundaries. Further, there will be no increase in noise levels by six (6) decibels or more at the Tower site's boundary. As set forth in an Emissions Report prepared by Prabhakar K. Rughoobur, Radio Frequency Engineer, annexed hereto as

Exhibit B, the total radio frequency electromagnetic radiation power density at the Tower site's boundary will not be increased to or above the standard adopted by the Connecticut Department of Environmental Protection as set forth in Section 22a-162 of the Connecticut General Statutes and MPE limits established by the Federal Communications Commission. For all the foregoing reasons, addition of AT&T Wireless' facility to the Tower constitutes an exempt modification which will not have a substantially adverse environmental effect.

Conclusion

Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Parsonage Hill Road Facility meets the Council's exemption criteria.

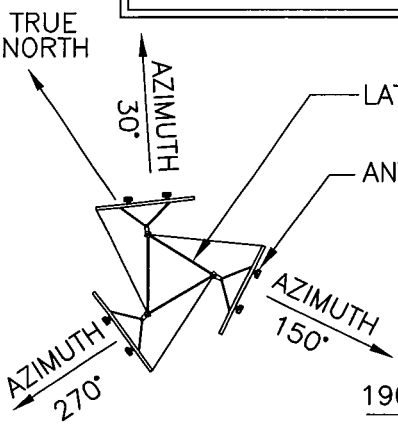
Respectfully Submitted,

Christopher B. Fisher, Esq.
On behalf of AT&T Wireless

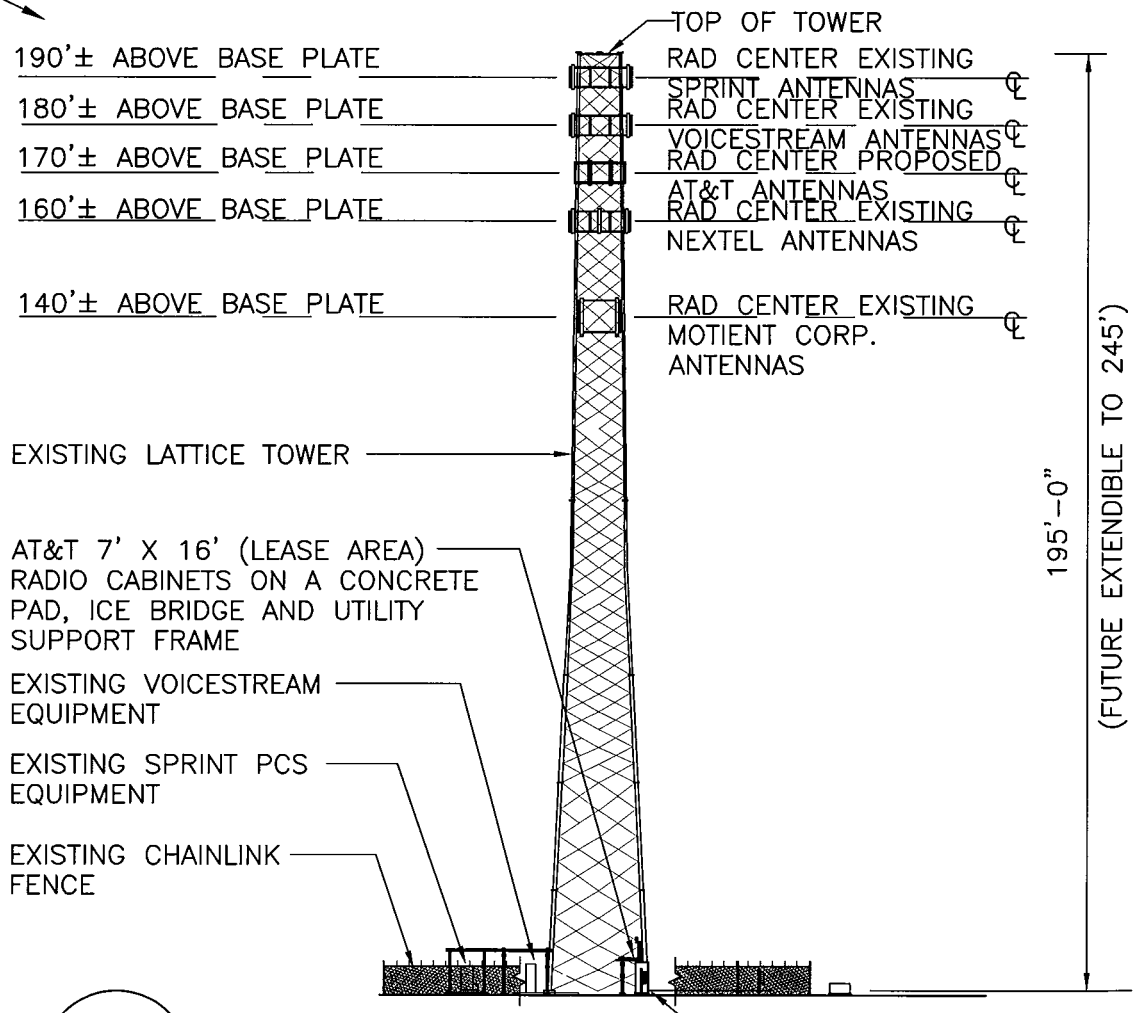
cc: Town Manager, North Branford
Joanne Desjardins, Pinnacle

LEASE EXHIBIT

THE LEASE PLAN IS DIAGRAMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION EQUIPMENT AND ANTENNA MOUNTS WITHIN THE EXISTING COMPOUND. ACTUAL LOCATION OF LEASE AREA WILL BE FINALIZED UPON COMPLETION OF DESIGN.



ANTENNA CONFIGURATION



2 **TOWER ELEVATION**

SCALE: 1" = 40'-0"

"ISSUED FOR LEASE"

Natcomm, LLC
63-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587
Consulting Engineers · Project Management
Civil · Structural · Mechanical · Electrical

AT&T
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06907

DRAWING TITLE: LEASE EXHIBIT

PROJECT INFORMATION:
NORTH BRANFORD
CT-638
88 PARSONAGE HILL RD
NORTHFORD, CT 06472

LESSOR:
OCHENKOWSKI TOWERS, LLC
88 PARSONAGE HILL RD
NORTHFORD, CT 06472

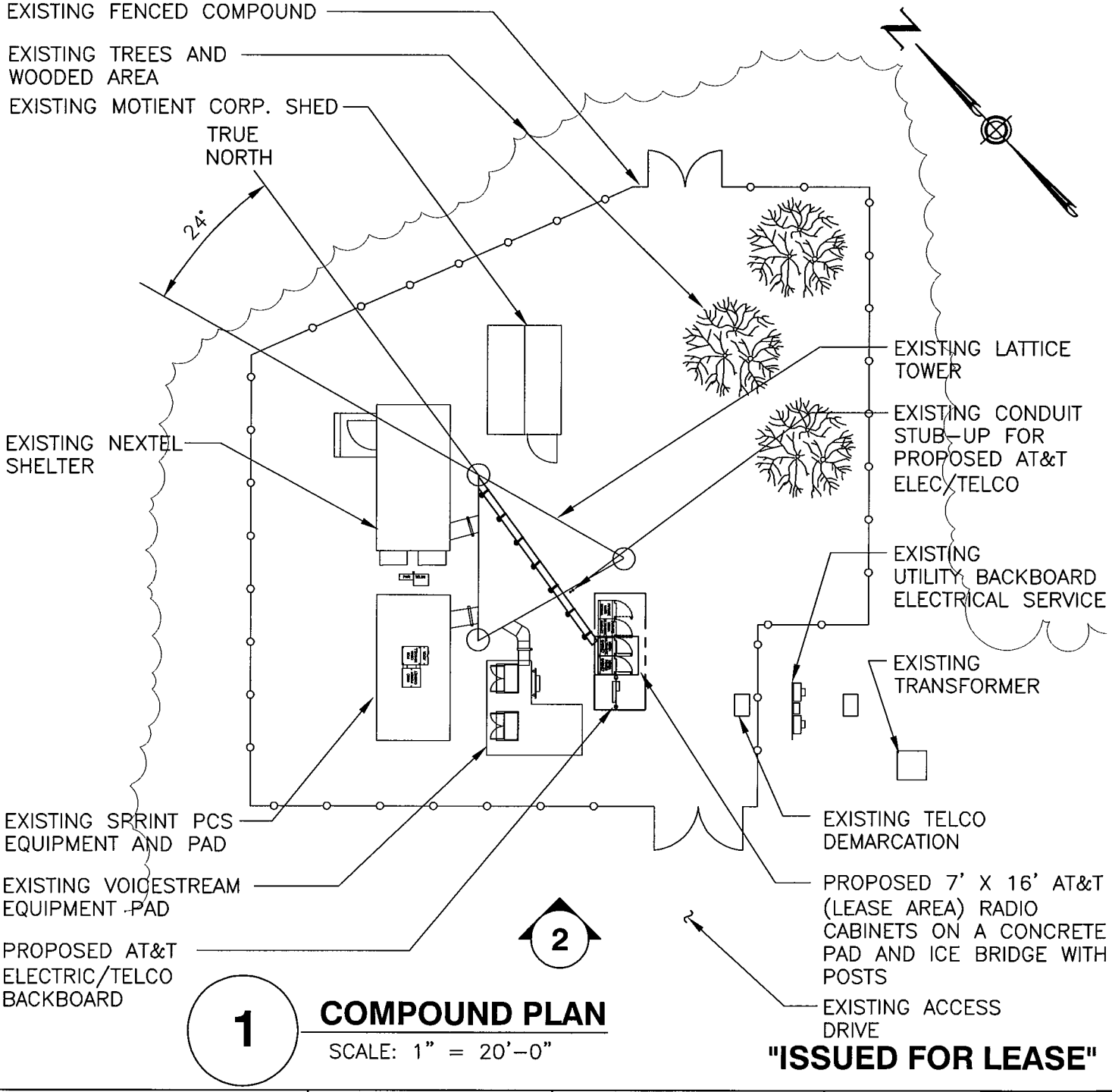
DRAWING NO.
913-008-638A-LE 2

REVISION NO. 1	DRAWN BY: P.A.M.
DATE ISSUED: 06/06/02	CHECKED BY: JJP
SCALE: AS NOTED	APPROVED BY: CFC
	SHEET NO. 2 OF 2
A/E PROJECT NO: 541A	

541ALE02.dwg 5-29-02 10:49:23 am EST

LEASE EXHIBIT

THE LEASE PLAN IS DIAGRAMATIC IN NATURE AND IS INTENDED TO PROVIDE GENERAL INFORMATION REGARDING THE LOCATION AND SIZE OF THE PROPOSED WIRELESS COMMUNICATION EQUIPMENT AND ANTENNA MOUNTS WITHIN THE EXISTING COMPOUND. ACTUAL LOCATION OF LEASE AREA WILL BE FINALIZED UPON COMPLETION OF DESIGN.



1 **COMPOUND PLAN**

SCALE: 1" = 20'-0"

"ISSUED FOR LEASE"

Natcomm, LLC
63-2 North Branford Road
Branford, Connecticut 06405
Tel. (203) 488-0580
Fax (203) 488-8587
Consulting Engineers · Project Management
Civil · Structural · Mechanical · Electrical

AT&T
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06907

DRAWING TITLE:	LEASE EXHIBIT
PROJECT INFORMATION:	NORTH BRANFORD CT-638 88 PARSONAGE HILL RD NORTHFORD, CT 06472
LESSOR:	OCHENKOWSKI TOWERS, LLC 88 PARSONAGE HILL RD NORTHFORD, CT 06472

DRAWING NO.

913-008-638A-LE1

REVISION NO. 1	DRAWN BY: P.A.M.
DATE ISSUED: 06/06/02	CHECKED BY: JJP
SCALE: AS NOTED	APPROVED BY: CFC
	SHEET NO. 1 OF 2
A/E PROJECT NO: 541A	

541ALEX1.dwg 5-20-02 1049:04 am EST

Central Tower, Inc.
2855 Hwy. 261
Newburgh, IN 47630

June 3, 2002

CENTRAL TOWER
A Dielectric Company

Jason Pintek
Natcomm LLC
63-2 North Branford Road
Branford, CT 06405

Mr. Pintek:

The structural analysis for the 195' self-supporting tower located in Northford, CT has been completed. This analysis was performed based upon the specified loading condition provided by American Towers.

The tower that was analyzed is a 195' self-supported Central Tower product. The objective of the structural analysis was to determine the feasibility of placing the specified loading on the tower at a basic wind speed of 85 mph with 1/2 ice. The following is a list of the loading studied:

A.	(9) DB980-H90	@ 190'	1-5/8" FL
B.	(6)59000X/59010X	@ 180	1-5/8" FL
C.	(12) DB844-H90	@ 160'	1-5/8" FL
D.	(2) SRL-410-C-9	@ 140'	7/8" FL
E.	(6)** Allgon 7250	@ 170'	1-5/8" FL
F.	(1)GPS Antenna	@ 75'	1/2" FL

**Proposed Addition

The results of the analysis indicate that all structural members and connections are capable of handling the proposed loading at the wind speed specified. Therefore no strengthening of the tower is required when analyzed at a basic wind speed of 85 mph with 1/2" ice. Feed lines were ran with existing v-style mount. This analysis was ran without consideration of the future addition and loading of the original design. This analysis and results are based upon the loading provided by you and all calculations and results are based on the height of 195' and not the extendable height of 245'.

If you should have any questions concerning this analysis, Central Tower job# 785r1, please feel free to give us a call.

Sincerely,

STATE OF CONNECTICUT
CHI S. LEE
NO. 19283
LICENSED
PROFESSIONAL ENGINEER

6-4-02

Matthew T. Smith
Design Engineer

RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 913-008-638

June 17, 2002

Prepared by AT&T Wireless Services, Inc.
Prabhakar K. Rughoobur, **RF Engineer**

Table of Contents

1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at *88 Parsonage Hill Rd, Northford CT.* This analysis uses site-specific engineering data to determine the predicted levels of radio frequency (RF) electromagnetic energy in the vicinity of the proposed facility and compares those levels with the Maximum Permissible Exposure (MPE) limits established by the Federal Communications Commission.

2. Site Data

Site Name: ***Northford***	
Number of simultaneously operating channels	12
Type of antenna	Allgon 7250.03
Power per channel (Watts ERP)	250.0 Watts
Height of antenna (feet AGL)	170.00 feet
Antenna Aperture Length	5 feet

3. RF Exposure Prediction

The following equations established by the FCC, in conjunction with the site data, were used to determine the levels of RF electromagnetic energy present in the vicinity of the proposed facility[1]:

$$PowerDensity = \frac{0.64 * N * EIRP(\theta)}{\pi * R^2} \ (mW/cm^2) \qquad \textit{Eq. 1-Far-field}$$

Where, ***N***= Number of channels, ***R***= distance in cm from the RC (Radiation Center) of antenna, and ***EIRP(θ)*** = The isotropic power expressed in milliwatts in the direction of prediction point. This is the correct equation for antennas which have their gain expressed in dBi, which is the usual case for the PCS bands.

$$PowerDensity = \frac{P_{in} / ch * N * 10^3}{2 * \pi * R * h * \alpha / 360} \ (mW/cm^2) \qquad \textit{Eq. 2-Near-field}$$

Where P_{in}/ch = Input power to antenna terminals in watts/ch, R = distance to center of radiation, h = aperture height in meters, α = 3 dB beam-width of horizontal pattern.

[1] RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts (μ W), a millionth of a watt, per square centimeter (cm^2). Data comparing predictive analysis with on site measurements has demonstrated that power density can be effectively predicted at given locations in the vicinity of a wireless antenna facility.

4. FCC Guidelines for Evaluating the Environmental Effects of RF Radiation

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by a Second Memorandum Opinion and Order. These new rules represent a consensus of the federal agencies responsible for the protection of public health and the environment, including the Environmental Protection Agency (EPA), the Food and Drug Administration (FDA), the National Institute for Occupational Health and Safety (NIOSH), and the Occupational Safety and Health Administration (OSHA).

Under the laws that govern the delivery of wireless communications services in the United States, as amended by the Telecommunications Act of 1996, the FCC has exclusive jurisdiction over RF emissions from personal wireless antenna facilities, which include cellular, PCS, messaging and aviation sites. [2] Pursuant to its authority under federal law, the FCC has established rules to regulate the safety of emissions from these facilities.

5. Comparison with Standards

Exhibit A shows the levels of RF electromagnetic energy as one moves away from the antenna facility. As shown in Exhibit A, the maximum power density is 0.001344 mW/cm^2 which occurs at 170 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000100 mW/cm^2 at a distance of 4 feet. Table 1 below shows the Maximum Permissible Exposure (MPE) limits established by the FCC. There are different MPE limits for public/uncontrolled and occupational/controlled environments.

Table 1: Maximum Permissible Exposure limits for RF radiation

Frequency	*Public/Uncontrolled*	*Occupational/controlled*	*Maximum power density at Accessible location*
Cellular	.580 mW/cm^2	2.9 mW/cm^2	0.001344 mW/cm^2
PCS	1 mW/cm^2	5 mW/cm^2	

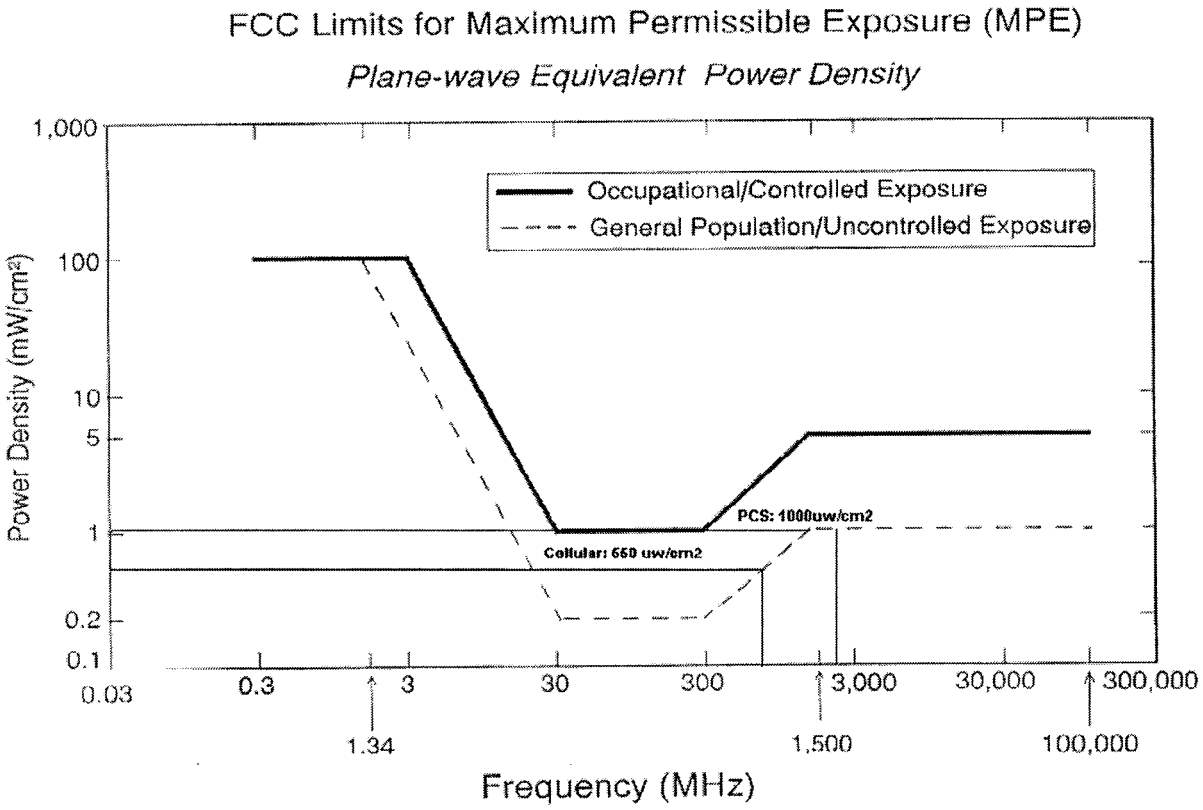
The maximum power density at the proposed facility represents only 0.21% of the public MPE limit for PCS frequencies.

6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.001344 mW/cm^2, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

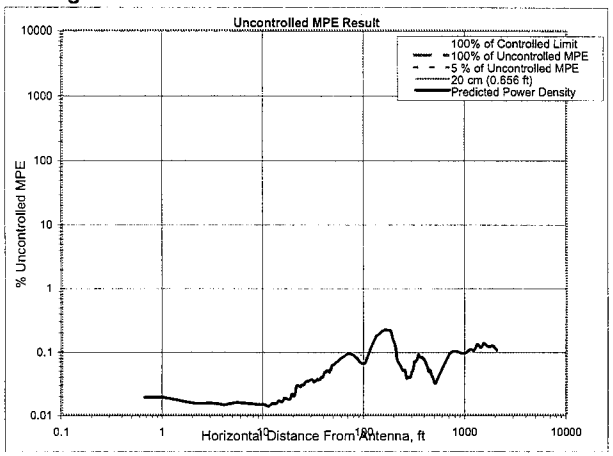
[2] 47 U.S. C. Section 332 (c) (7)(B)(iv) states that "[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."

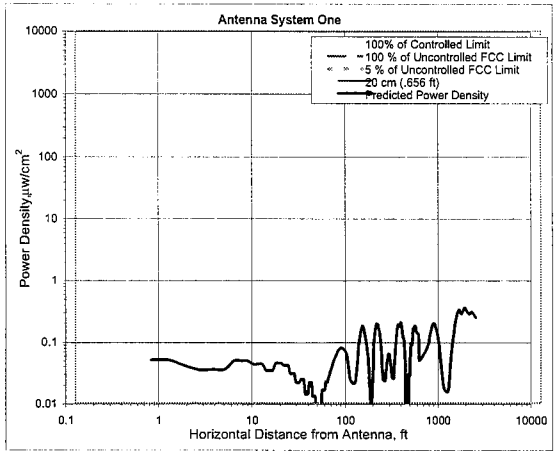
7. FCC Limits for Maximum Permissible Exposure

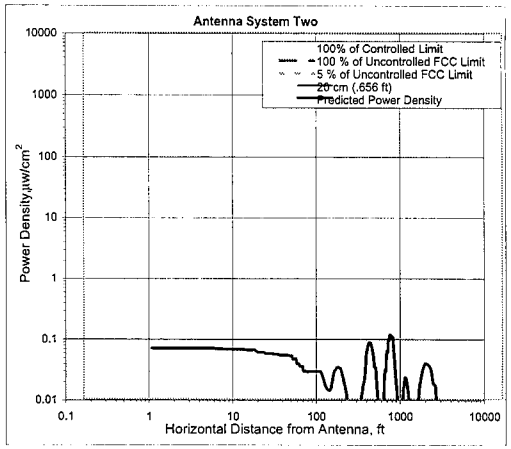


8. Exhibit A

Heading







Number of Antenna Systems: 5

Meets FCC Controlled Limits for The Antennas Systems.

Meets FCC Uncontrolled Limits for The Antenna Systems.

Meets 5% of FCC Uncontrolled Limits for The Antenna Systems.

No Further Maximum Permissible Exposure (MPE) Analysis Required.

	Power Density		@Horiz. Dist.
	mW/cm²	% of limit	feet
Maximum Power Density =	0.0013435393	0.21	170.00
469.88 times lower than the MPE limit for uncontrolled environment			
Composite Power (ERP) =	17,572.00	Watts	

Antenna System One

	units	Value
Frequency	MHz	1945.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	5.86
(Center of Radiator)	feet	170.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Allgon 7250.03
Max Ant Gain	dBd	16.30
Down tilt	degrees	2.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant_{bottom}	feet	167.45
WOS?	Y/N?	n

Antenna System Two

	units	Value
Frequency	MHz	1950.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	7.73
(Center of Radiator)	feet	190.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		DB980H90
Max Ant Gain	dBd	15.10
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.00
Ant HBW	degrees	90.00
Distance to Ant_{bottom}	feet	187.50
WOS?	Y/N?	n

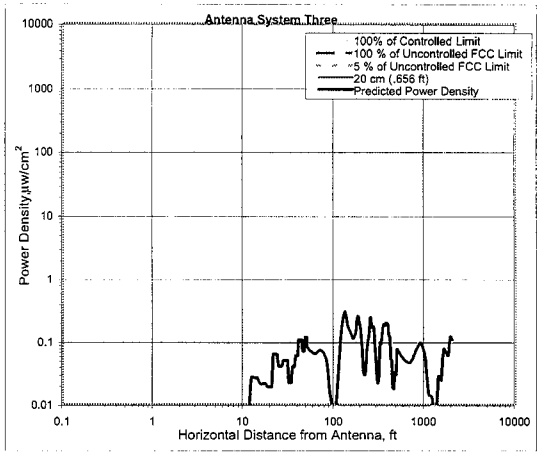
Site ID: 913-008-638
Site Name: Northford
Site Location: 88 Parsonage Hill Rd, Northford, CT 06472

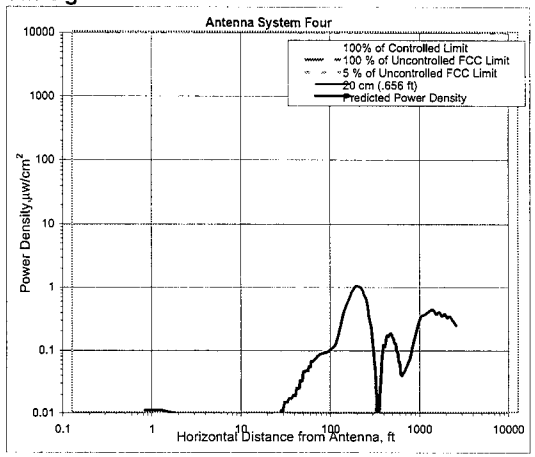
Performed By: Prabhakar K Rughoobur
Date: 6/17/02

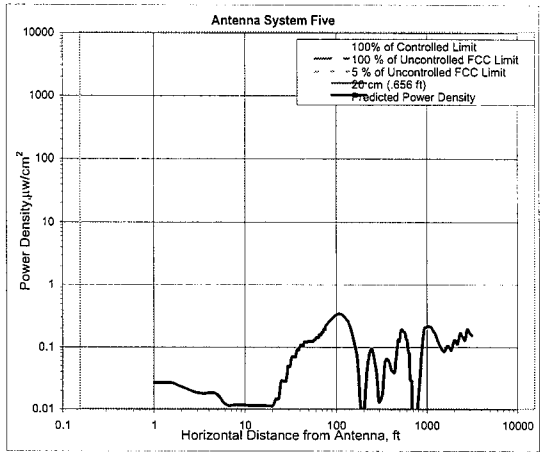
Ant System ONE Owner: AT&T
Sector: 3
Azimuth: 30/150/270

Ant System TWO Owner: Sprint
Sector: 3
Azimuth 0/145/240

Heading







Antenna System Three

	units	Value
Frequency	MHz	1936.00
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	9.08
(Center of Radiator)	feet	160.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		RR901702
Max Ant Gain	dBd	14.40
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.66
Ant HBW	degrees	90.00
Distance to Ant_{bottom}	feet	177.67
WOS?	Y/N?	n

Ant System Three Owner: Voicestream
Sector: 3
Azimuth 30/150/270

Antenna System Four

	units	Value
Frequency	MHz	851.00
# of Channels	#	16
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	15.77
(Center of Radiator)	feet	160.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		DB844H90-XY
Max Ant Gain	dBd	12.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.00
Ant HBW	degrees	90.00
Distance to Ant_{bottom}	feet	152.00
WOS?	Y/N?	n

Ant System Four Owner: Nextel
Sector: 3
Azimuth: 0/120/240

Antenna System Five

	units	Value
Frequency	MHz	855.00
# of Channels	#	12
Max ERP/Ch	Watts	381.00
Max Pwr/Ch Into Ant.	Watts	34.03
(Center of Radiator)	feet	140.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		SRL410C9R160
Max Ant Gain	dBd	10.49
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	8.58
Ant HBW	degrees	160.00
Distance to Ant_{bottom}	feet	135.71
WOS?	Y/N?	n

Ant System Five Owner: Motient
Sector: 1
Azimuth: 0

9. For Further Information

Additional information about the environmental impact of RF energy from personal wireless antenna facilities can be obtained from the Federal Communications Commission:

Dr. Robert Cleveland
Federal Communications Commission
Office of Engineering and Technology
Washington, DC 20554

RF Safety Program: 202-418-2464
Internet address: rfsafety@fcc.gov
RF Safety Web Site: www.fcc.gov/oet/rfsafety

10. References

[1] The Communications Act of 1934, as amended by the Telecommunications Act of 1996, 47 U.S.C. Section 332 (c)(7)(B)(iv).

[2] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Notice of Proposed Rulemaking, ET Docket 93-62, 8 FCC Rcd 2849 (1993).

[3] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Report and Order, ET Docket 93-62, FCC 96-326, adopted August 1, 1996. 61 Federal Register 41006 (1996).

[4] *Guidelines for Evaluating the Environmental Effects of Radio frequency Radiation*, Second Memorandum Opinion and Order, ET Docket 93-62, adopted August 25, 1997.

[5] *Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields*, OET Bulletin 65, August, 1997.

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

June 19, 2002

Honorable Joanne Wentworth
Mayor
Town of North Branford
Town Hall
1599 Foxon Road
P. O. Box 287
North Branford, CT 06471

RE: **EM-AT&T-099-020619** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 88 Parsonage Hill Road, North Branford, Connecticut.

Dear Mayor Wentworth:

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 11, 2002, 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/dsj

Enclosure: Notice of Intent

c: Carol Zeeb, Town Planner, Town of North Branford
Frank B. Connolly, Town Manager, Town of North Branford

Anthony J. Borrelli
48 Parsonage Hill Road
Northford, CT 06472
(203) 484-0160

July 11, 2002

Fax #: (860) 827-2950

To Whom It May Concern:

I understand that the Connecticut Sitting Council is in the process of approving the addition of ground equipment for telecommunications facilities on Parsonage Hill Road.

I am unable to attend the public hearing, but want to voice that I protest this project.

I believe that the towers can pose health threats. Additionally, they are located in a residential area, can decrease our property value and look largely unattractive. There are already three of these towers and an abundance of ground equipment here.

Thank you in advance for considering my protest.

Sincerely,

Anthony J. Borrelli

Anthony J. Borrelli