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

November 4, 2003

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

RE: **EM-AT&T-151-031022** - AT&T Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at Farmdale Drive, Waterbury, Connecticut.

Dear Attorney Fisher:

At a public meeting held on October 29, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

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

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

Thank you for your attention and cooperation.

Very truly yours,

PBK/RKE

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: Mayor Michael J. Jarjura, Mayor, City of Waterbury
Vincent Viggiano, Zoning Enforcement Officer, City of Waterbury
Eric Rabon, Spectrasite Communications
Michele G. Briggs, Southwestern Bell Mobile Systems
Sandy M. Carter, Verizon Wireless

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EM-AT&T-151-031022

NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT FARMDALE DRIVE, WATERBURY, 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 Farmdale Drive, Waterbury, Connecticut (the "Farmdale Drive Facility"), owned by Spectrasite. AT&T Wireless and Spectrasite have agreed to share the use of the Farmdale Drive Facility, as detailed below.

The Farmdale Drive Facility

The Farmdale Drive Facility consists of an approximately one hundred fifty (150) foot guyed monopole (the "Tower") and associated equipment currently being used for wireless communications by Arch Paging, Cingular and Verizon. A chain link fence surrounds the Tower compound.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by Tectonic Engineering & Surveying Consultants, P.C, including a site compound plan, tower elevation and antenna mounting plan of the Farmdale Drive Facility, AT&T Wireless proposes shared use of the Facility by placing antennas on the Tower and equipment cabinets at grade needed to provide personal communications services ("PCS"). AT&T Wireless will install 6 panel antennas at approximately the 145 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 existing fenced compound. As evidenced in the structural analysis prepared by Spectrasite, annexed hereto as Exhibit A, the tower is structurally capable of supporting the addition of AT&T Wireless' antennas.

AT&T Wireless' Facility Constitutes An Exempt Modification

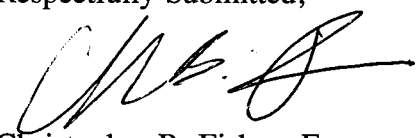
The proposed addition of AT&T Wireless' antennas and equipment to the Farmdale Road Facility constitutes an exempt "modification" of an existing facility as defined in Connecticut General Statutes Section 16-50i(d) and Council regulations promulgated pursuant thereto. Addition of AT&T Wireless' antennas 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 Kumar Rughoobur, RF 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

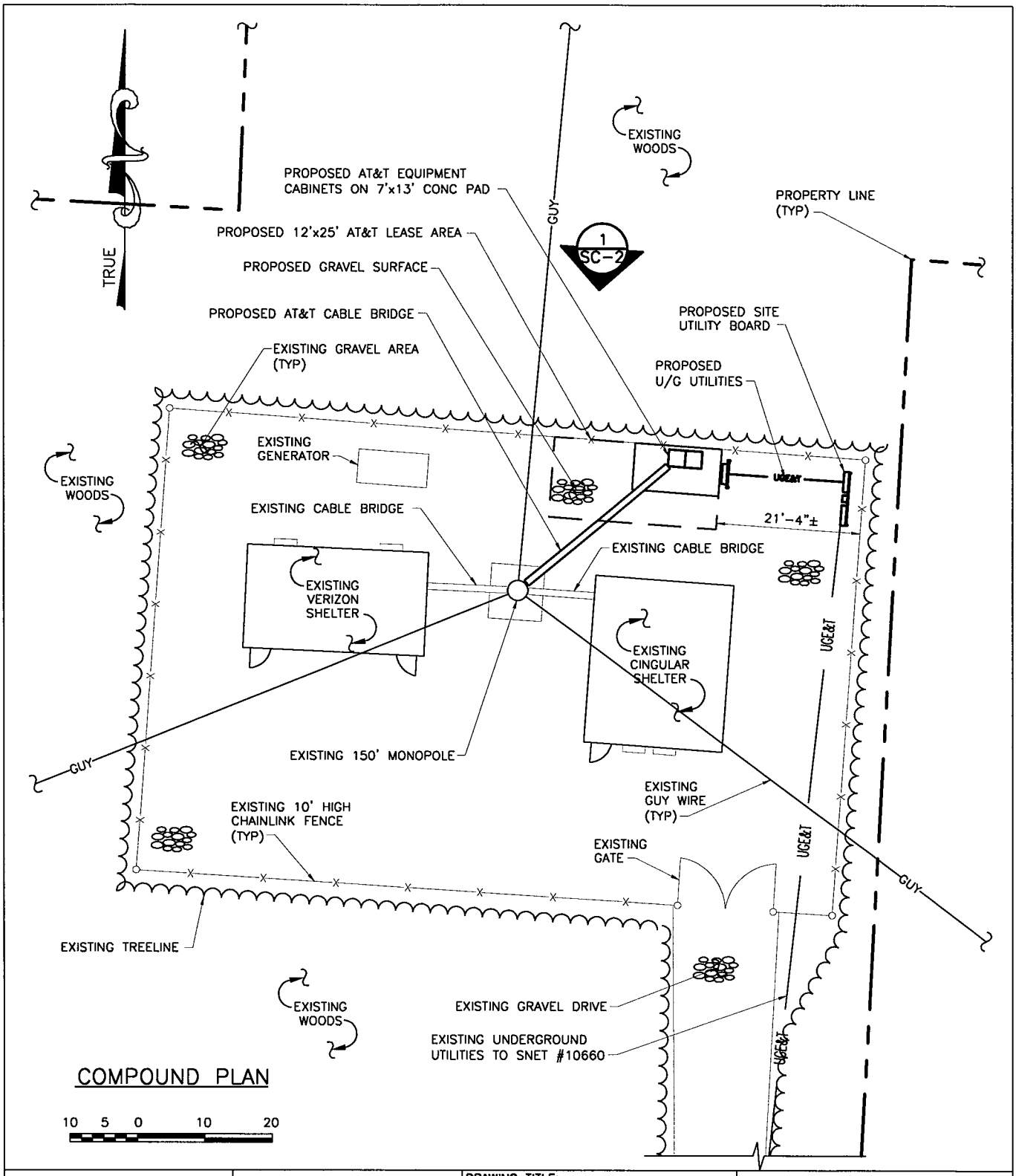
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Farmdale Drive Facility meets the Council's exemption criteria.

Respectfully Submitted,



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

cc: Mayor Michael J. Jarjura, City of Waterbury
Harold Hewitt, Bechtel
Bryan Lazuka, Optasite



TECTONIC

TECTONIC Engineering & Surveying Consultants P.C.
1344 Silas Deane Hwy, Suite 500
Rocky Hill, CT 06067
Phone: (860) 563-2341
Fax: (860) 257-4882
www.tectonicengineering.com

AT&T

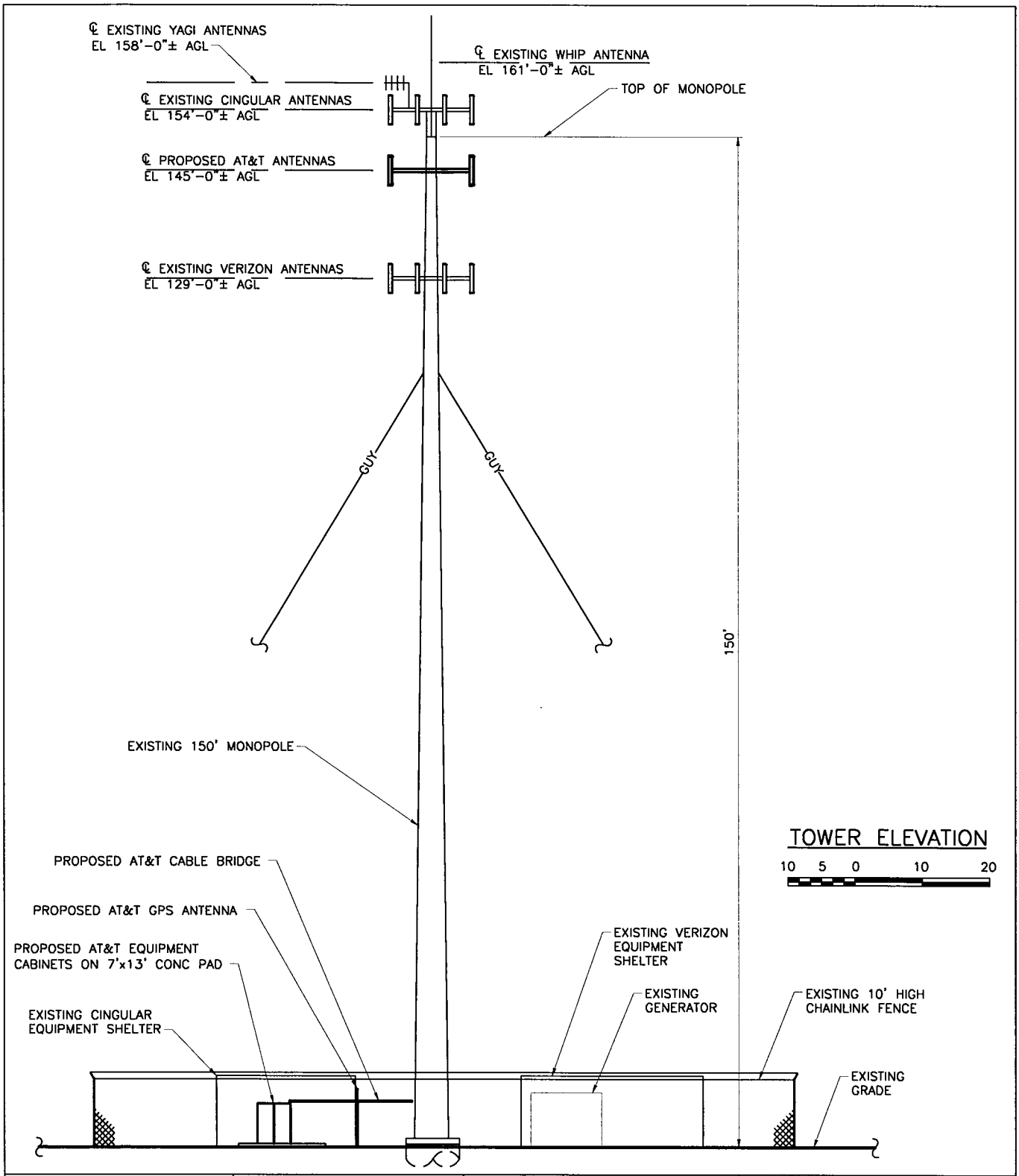
AT&T WIRELESS PCS, LLC.
12 OMEGA DRIVE, SECOND FLOOR
STAMFORD, CT 06902

DRAWING TITLE:
COMPOUND PLAN
SITE NO. CT-622

PROJECT INFORMATION:
WOLCOTT
FARMDALE DRIVE
WATERBURY, CT 06708

DRAWING NO.
SC-1

REVISION NO. A	DRAWN BY: WRB
DATE: 10/10/03	CHECKED BY: THH
SCALE: AS SHOWN	APPROVED BY: JFL
ISSUED FOR APPROVAL	SHEET NO. 1 of 3
WORK ORDER #: 2650.CT622	



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AT&T

AT&T WIRELESS PCS, LLC.
12 OMEGA DRIVE, SECOND FLOOR
STAMFORD, CT 06902

DRAWING TITLE:
TOWER ELEVATION
SITE NO. CT-622

PROJECT INFORMATION:
WOLCOTT
FARMDALE DRIVE
WATERBURY, CT 06708

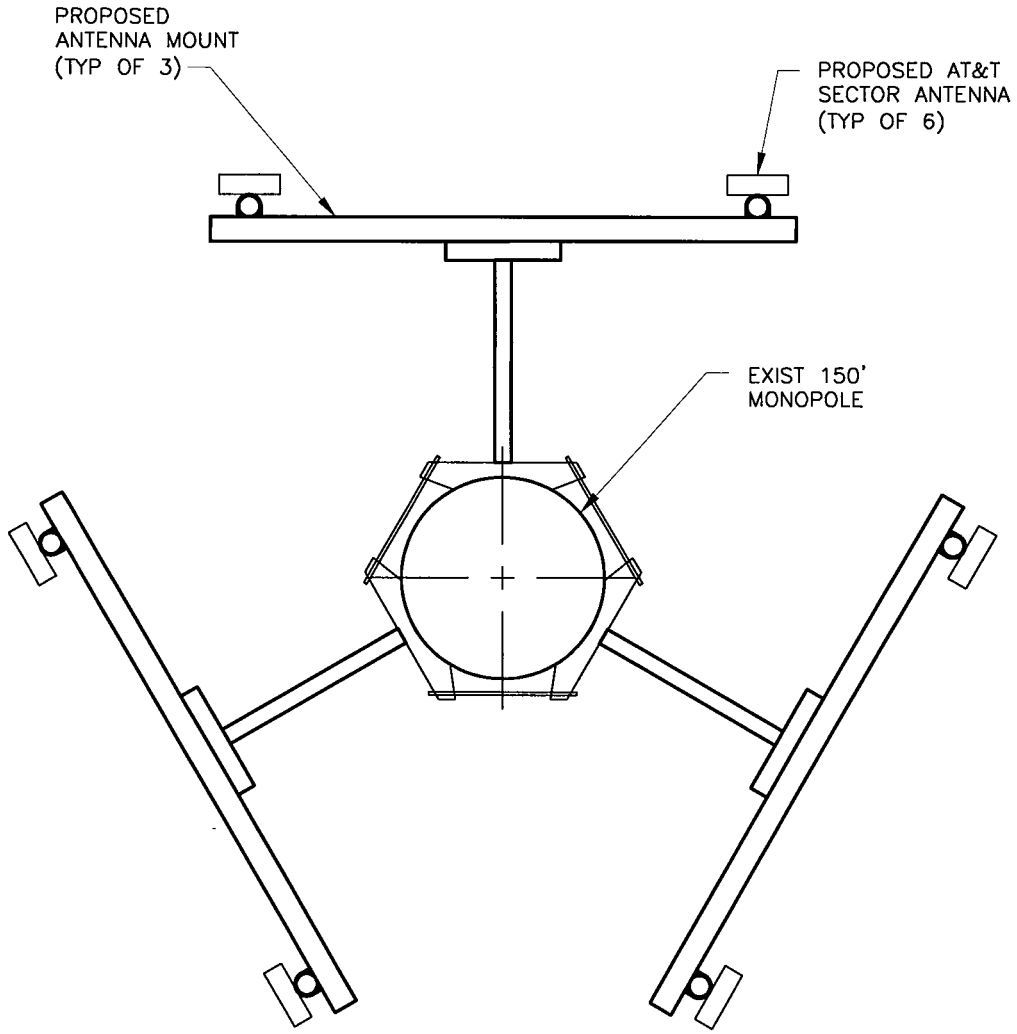
DRAWING NO.
SC-2

REVISION NO. A	DRAWN BY: WRB
DATE: 10/10/03	CHECKED BY: THH
SCALE: AS SHOWN	APPROVED BY: JFL
ISSUED FOR APPROVAL	SHEET NO. 2 of 3
WORK ORDER #: 2650.CT622	

GENERAL NOTES:

1. PROPOSED AT&T LEASE AREA IS APPROXIMATELY 300 SQ FT.
2. AZIMUTHS OF PROPOSED ANTENNAS TO BE VERIFIED BY RF ENGINEER.
3. SOURCE AND ROUTING OF ELEC & TELCO SERVICES TO BE DETERMINED BY A LICENCED P.E.
4. LATITUDE 41.5707°
   LONGITUDE 73.0176°
   NAD 83

N
TRUE



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AT&T

AT&T WIRELESS PCS, LLC.
12 OMEGA DRIVE, SECOND FLOOR
STAMFORD, CT 06902

DRAWING TITLE:
ANTENNA MNTG PLAN
SITE NO. CT-622

PROJECT INFORMATION:
WOLCOTT
FARMDALE DRIVE
WATERBURY, CT 06708

DRAWING NO.
SC-3

REVISION NO. A	DRAWN BY: WRB
DATE: 10/10/03	CHECKED BY: THH
SCALE: AS SHOWN	APPROVED BY: JFL
ISSUED FOR APPROVAL	SHEET NO. 3 of 3
WORK ORDER #: 2650.CT622	

AT+T CT-622

SpectraSite

CT-0012
09/17/2003

Structural Analysis Summary	
Tower Site	**CT-0012 Waterbury**
Address	Farmdale Drive Waterbury, CT 06708
Tower Height & Type	**150.0 ft ITT Meyer Guyed Monopole**
Building Code	ANSI/TIA/EIA-222-F (1996) **85 mph (New Haven County) w/ ¾" radial ice** 1996 BOCA National Building Code **85 mph w/ ¾" radial ice**

Tower Information	
Tower Geometry	Tower Mapping completed by Smith Cullum, Acquisition Number CT-0012, dated 06/07/2001. Guy Design by AT&T, Drawing Number H847-596, dated 05/1994.
Foundation	Girard & Co. Engineers Drawing Number 38926, dated 07/10/1984. Anchor Design by AT&T, Drawing Number H847-596, dated 05/1994.
Geotechnical	Not Available

Results Summary*	
Tower Structure	***Adequate***
Guy Wires	***Adequate***
Splice Bolts	***Adequate***
Splice Plate	***Adequate***
Anchor Bolts	***Adequate***
Base Plate	***Adequate***
Base Foundation	***Adequate***
Anchors	***Adequate***

** See following pages for detailed analysis results.*

STATE OF CONNECTICUT
STEPHEN YEO
No. 23270
LICENSED
PROFESSIONAL ENGINEER

SEP 18 2003

Analysis prepared by:
Bryan Lanier, E.I.
Engineering Associate
Contact (919) 466-5777
with any questions.

Stephen Yeo, P.E.
Structural Design Manager
I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Connecticut.

SpectraSite Communications Inc.
www.spectrasite.com
100 Regency Forest Drive, Suite 400 • Cary, NC 27511 • Tel 919.468.0112 • Fax 919.468.8522

RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

913-008-622

October 15, 2003

Prepared by AT&T Wireless PCS, LLC
Prabhakar Kumar 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 *Farmdale Dr, Waterbury, 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: ***Waterbury NorthEast***	
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)	145 feet
Antenna Aperture Length	5.11 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. 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 0.010698 mW/cm^2 which occurs at 420 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000509 mW/cm^2 at a distance of 4 feet. Table 1 below shows the Maximu m 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

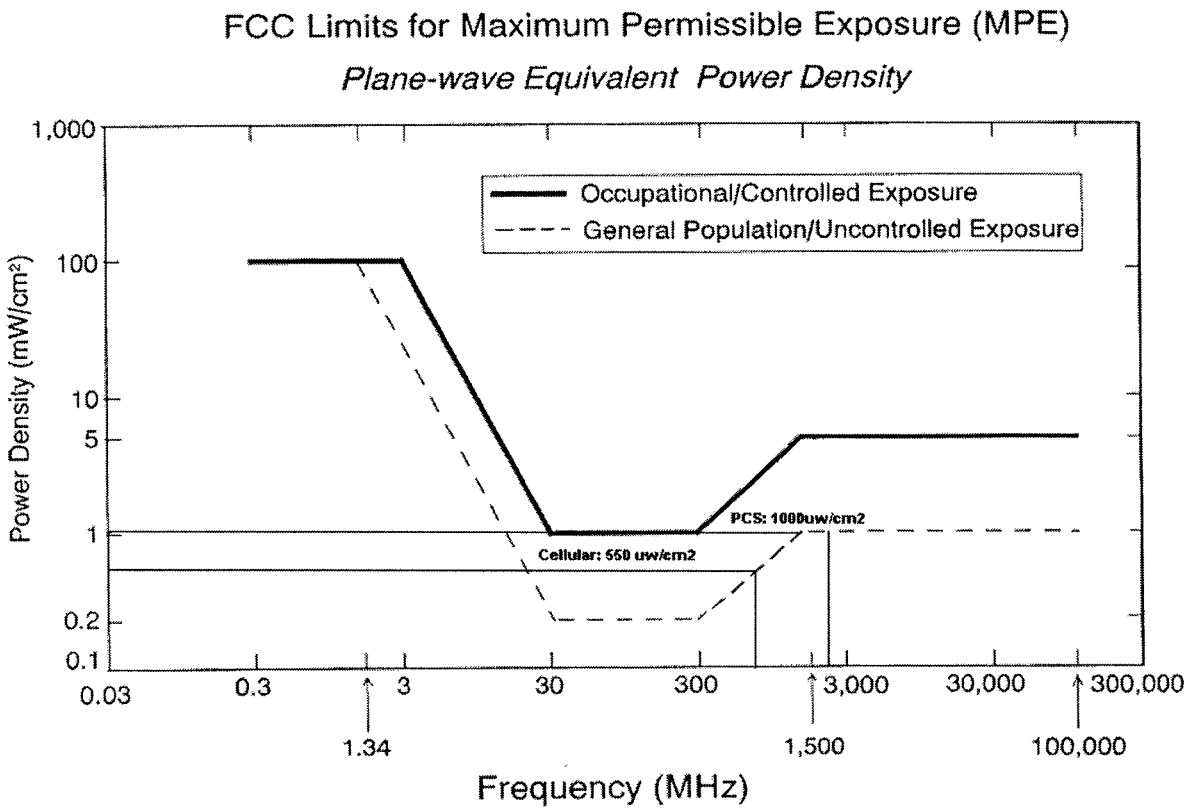
Frequency	***Public/Uncontrolled***	***Occupational/controlled***	***Maximum power density at Accessible location***
Cellular	.580 mW/cm^2	2.9 mW/cm^2	0.010698 mW/cm^2
PCS	1 mW/cm^2	5.0 mW/cm^2	

From the attached calculations, it is seen that the total exposure for this site will be 1.85% of MPE for uncontrolled (general public) exposure. The Generic Yagi antenna at 158 feet on the pole is a receive system used by Arch Wireless and hence is excluded from the MPE Calculations.

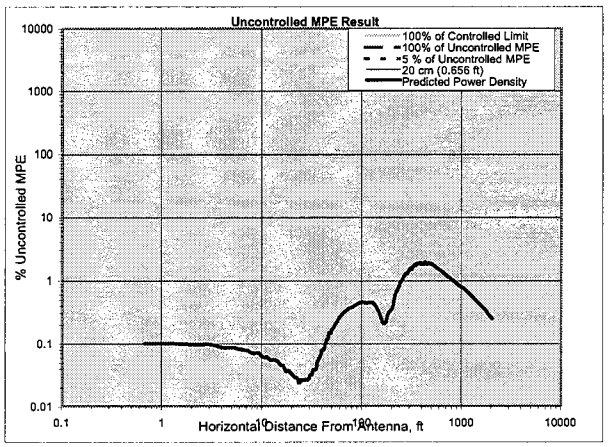
5. Conclusion

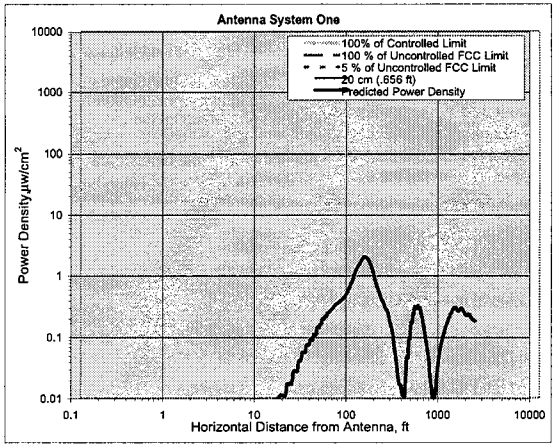
This analysis shows that the maximum power density in accessible areas at this location will be 1.85 % of MPE, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

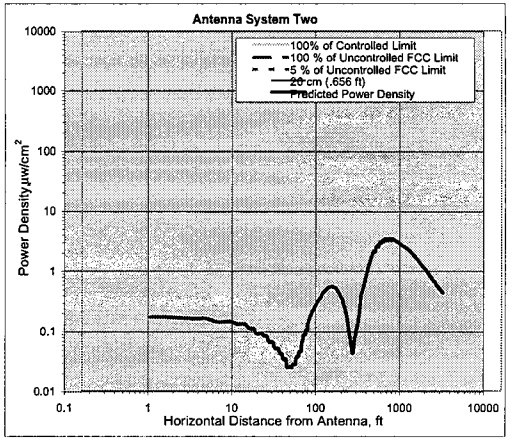
6. FCC Limits for Maximum Permissible Exposure



7. Exhibit A







Number of Antenna Systems: 4

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 Analysis Required.

	Power Density		@Horiz. Dist.
	mW/cm^2	% of limit	feet
Maximum Power Density =	0.010698	1.85	420.00
54.14 times lower than the MPE limit for uncontrolled environment			
Composite Power (ERP) =	17,490.00 Watts		

Antenna System One

	units	Value
Frequency	MHz	931.19
# of Channels	#	1
Max ERP/Ch	Watts	1990.00
Max Pwr/Ch Into Ant.	Watts	250.53
(Center of Radiator)	feet	161.00
Calculation Point	feet	6.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Decibel DB589T3-Y
Max Ant Gain	dBd	9.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	9.17
Ant HBW	degrees	360.00
Distance to Ant_{bottom}	feet	150.42
WOS?	Y/N?	n

Antenna System Two

	units	Value
Frequency	MHz	880.00
# of Channels	#	20
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	30.06
(Center of Radiator)	feet	154.00
Calculation Point	feet	6.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		CSS DUO2-8670
Max Ant Gain	dBd	9.20
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	2.00
Ant HBW	degrees	86.00
Distance to Ant_{bottom}	feet	147.00
WOS?	Y/N?	n

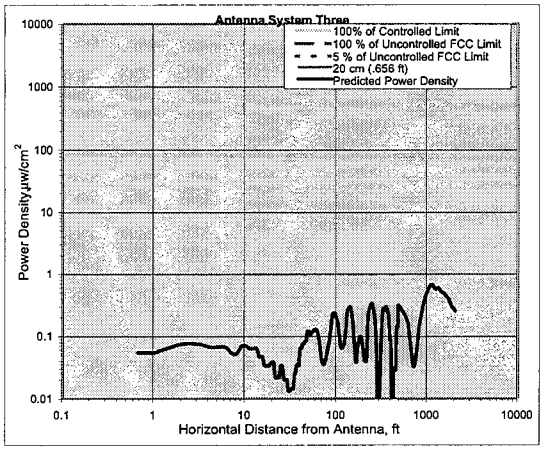
Site ID: 913-008-622
Site Name: Waterbury NorthEast
Site Location: Farmdale Dr
Waterbury, CT

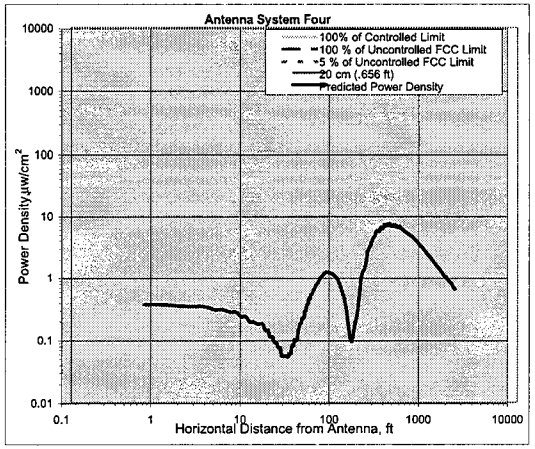
Performed By: Prabhakar K Rughoobur

Date: 10/15/03

Ant System ONE Owner: Arch Paging
Sector: 1
Azimuth: Omni

Ant System TWO Owner: Cingular
Sector: 3
Azimuth 30/150/270





Antenna System Three

	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	145.00
Calculation Point	feet	6.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Allgon 7250.03
Max Ant Gain	dBd	16.30
Down tilt	degrees	3.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant_{bottom}	feet	136.45
WOS?	Y/N?	n

Ant System Three Owner: AT&T
Sector: 3
Azimuth 60/140/270

Antenna System Four

	units	Value
Frequency	MHz	860.00
# of Channels	#	30
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	31.47
(Center of Radiator)	feet	129.00
Calculation Point	feet	6.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		Allgon 7130.14.05
Max Ant Gain	dBd	9.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	2.23
Ant HBW	degrees	95.00
Distance to Ant_{bottom}	feet	121.88
WOS?	Y/N?	n

Ant System Four Owner: Verizon
Sector: 3
Azimuth: 30/150/270

8. 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

9. 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.