# NOTICE OF INTENT TO MODIFY AN EXISTING TELECOMMUNICATIONS FACILITY AT 115 BIRCH MOUNTAIN ROAD, GLASTONBURY, CONNECTICU

CONNECTICUT

Pursuant to the Public Utility Environmental Standards Act, Connected Connected Connected 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 115 Birch Mountain Road, Glastonbury, Connecticut (the "Birch Mountain Road Facility"), owned by Pinnacle Towers, Inc., (the "Tower Owner"). AT&T Wireless and the Tower Owner have agreed to share the use of the Birch Mountain Road Facility, as detailed below.

#### The Birch Mountain Road Facility

The Birch Mountain Road Facility consists of a one hundred ninety-nine (199) foot lattice tower (the "Tower"), confirmed by measurement, and associated equipment currently being used for wireless communications by VoiceStream, Sprint and others.<sup>1</sup>

#### **AT&T Wireless' Facility**

As shown on the enclosed plans prepared by ScienTel, including a site plan and tower elevation of the Birch Mountain Road 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 130 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 structural report prepared by Pinnacle Towers, Inc., 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 Birch Mountain 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 Galen Belen, RF Engineer, annexed hereto as Exhibit B, the total radio frequency

EM-AT&T-054-021004

<sup>&</sup>lt;sup>1</sup> See Emissions report annexed hereto as Exhibit B. Please note, there are three (3) dish antenna which have not been included in the emissions calculations as they are receive only antennae. <u>See</u> page 4 of annexed report.

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

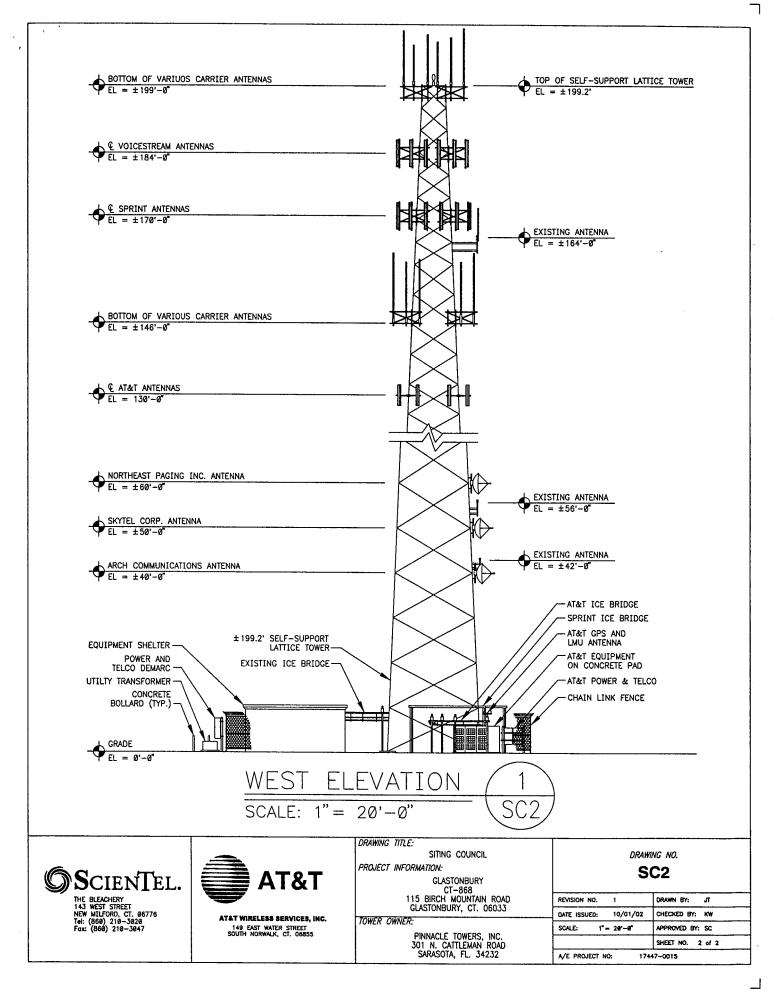
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Birch Mountain Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

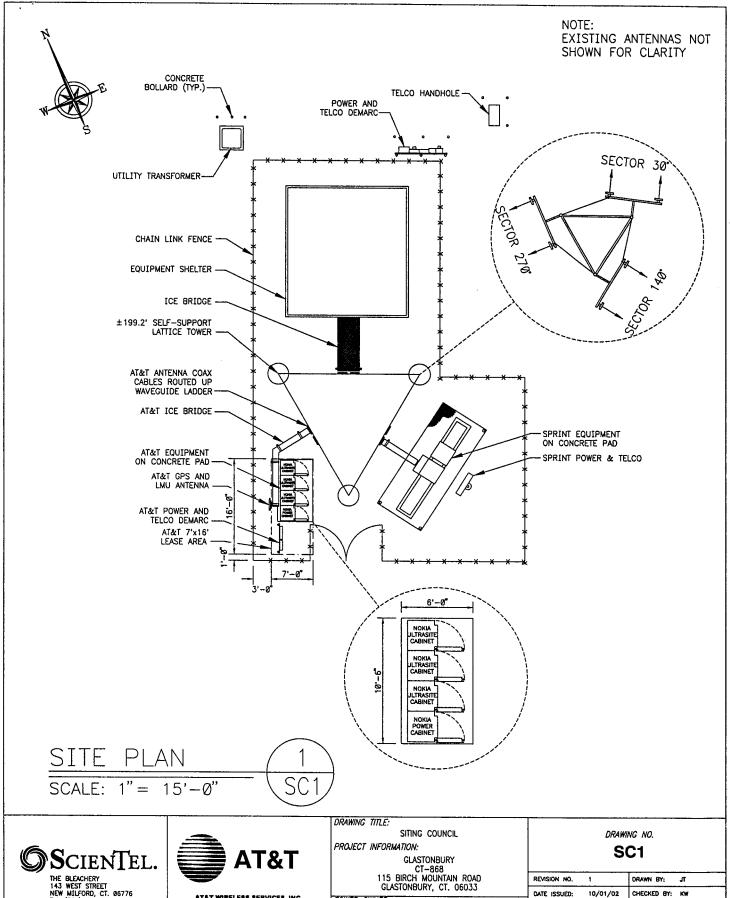
Christopher B. Fisher, Esq. On behalf of AT&T Wireless

cc: Town Manager, Town of Glastonbury

RJ Wetzel, Bechtel



<u>\_</u>





ATAT WIRELESS SERVICES, INC. 149 EAST WATER STREET SOUTH NORWALK, CT. 06855

TOWER OWNER:

PINNACLE TOWERS, INC. 301 N. CATTLEMAN ROAD SARASOTA, FL. 34232

CHECKED BY: KW 1"= 15'-6" APPROVED BY: SC 1 OF 2

SHEET NO. A/E PROJECT NO: 17447-0015

SCALE:

 $\Gamma$ 



## Structural Analysis Report

Existing 199' Model S3TL Self-Support Tower

Manufactured by Sabre Communications

Located at Glastonbury (John Tom Hill), CT

For

AT&T Wireless Services

(0425-016)

Prepared by:

Pinnacle Towers Inc. Michael T. De Boer, P.E. Senior Engineer

September 19, 2002

# Structural Analysis Report

# Existing 199' Model S3TL Self-Support Tower

# For

# AT&T Wireless Services

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CALCULATIONS	ed

#### Pinnacle Towers Inc.

0425-016 September 19, 2002

#### **INTRODUCTION**

The purpose of this analysis is to determine that the existing tower design is in conformance to the ANSI/TIA/EIA-222-F 1996 standard requirements for the exiting and proposed antenna loading. The existing tower is a 199' Model S3TL Self-Support Tower located at Glastonbury (John Tom Hill), CT. The original tower manufacturer is Sabre Communications Corp., Sioux City, IA. The analysis is being done for AT&T Wireless Services.

The self-support tower program used in the analysis was written by Weisman Consultants, Inc. This program is one of the most widely used programs in the communications industry. The wind loading used in the analysis was 85 mph with  $\frac{1}{2}$ " solid radial ice. The tower, for the purpose of this analysis, is assumed to be in good condition with no defects. Member sizes used in the analysis are based on the original tower drawings provided by Sabre Communications Corporation.

# ANTENNA LOADING INFORMATION

## EXISTING ANTENNA LOADING

One Channel Master dish antenna at 40' with (1) RG6 tx line.

One antenna at 42' with (1)  $\frac{1}{2}$ " tx line.

One dish antenna at 50' with (1) RG6 tx line.

One antenna at 56' with (1)  $\frac{1}{2}$ " tx line.

One dish antenna at 60' with (1) RG6 tx line.

One ASPA-685 antenna at 146' with (1) 1/2" tx line.

One 22' omni antenna at 146' with (1) 7/8" tx line.

One Celwave PD201-7 antenna at 147' with (1) 7/8" tx line.

One Sinclair SRL480 antenna at 147' with (1) 7/8" tx line.

One Kathrein OGB9-915N antenna at 148' with (1)  $\frac{1}{2}$ " tx line.

One Scala antenna at 164' with (1)  $\frac{1}{2}$ " tx line.

Six DB980H90E-M antennas at 170' with (6) 1 5/8" tx lines.

#### Pinnacle Towers Inc.

0425-016 September 19, 2002

#### ANTENNA LOADING INFORMATION cont.

#### EXISTING ANTENNA LOADING cont.

Six RR90-17-02DP antennas at 184' with (6) 1 5/8" tx lines. One Phelps Dodge antenna at 199' with (1)  $\frac{1}{2}$ " tx line. One ASPA711 antenna at 199' with (1)  $\frac{1}{2}$ " tx line. One Celwave antenna at 199' with (1) 7/8" tx line. One omni antenna at 199' with (1) 7/8" tx line. One Celwave antenna at 199' with (1) 7/8" tx line. One Scala OGB6-928 antenna at 199' with (1) 1 5/8" tx line.

#### <u>PROPOSED ANTENNA LOADING</u>

Six Allgon 7250 panel antennas at 130' with (12) 1 1/4" tx lines.

Note: For the purpose of this report, the transmission lines are distributed as per the original tower drawings provided by Sabre Communications Corp.

#### RESULTS

The existing 199' Model S3TL self-support tower located at Glastonbury (John Tom Hill), CT was analyzed with a 85 mph wind load and  $\frac{1}{2}$ " solid radial ice per the EIA-222-F 1996 standard. Based on this wind condition and antenna loading, this tower is structurally acceptable at this time.

The existing tower foundation was also reviewed and was found to be acceptable as well.

The allowable C.S.R. is 1.33 which takes into account the 1/3 increase for wind.

Pinnacle Towers Inc. 0425-016 September 19, 2002

#### **RECOMMENDATIONS**

The existing 199' Model S3TL self-support tower at Glastonbury (John Tom Hill), CT is structurally acceptable and requires no structural modification at this time to be into compliance with the current EIA-222-F, 1996 standard. The following should be done to maximize capacity and assure the structural integrity of the tower:

The new transmission lines should be equally distributed on all tower faces to reduce the exposed wind area.

All the dead antennas and transmission lines should be removed to allow for additional loading in the future.

If any other antennas are proposed, another structural analysis should be done to assure the structural adequacy of the tower.

#### **CONCLUSION**

The existing 199' Model S3TL self-support tower located at Glastonbury (John Tom Hill), CT is structurally acceptable based upon the EIA-222-F-1996 standard with a 85 mph wind and  $\frac{1}{2}$ " solid radial ice. No structural modifications are required at this time.

I hope this analysis satisfies your current needs. If any further questions arise, please feel free to call.

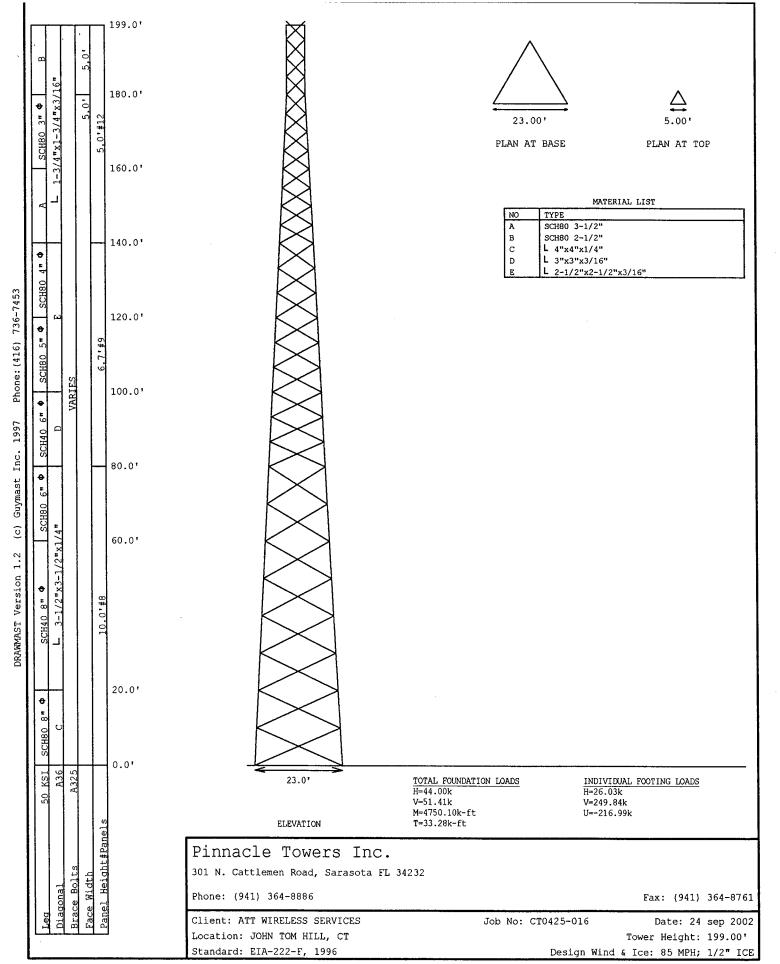
Sincerely,

PINNACLE TOWERS INC.

Michael T. De Boer, P.E.

Senior Engineer









# RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 907-007-868

September 27, 2002

Prepared by AT&T Wireless Services, Inc.
Galen Belen RF Engineer

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#### 1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 115 Birch Mountain Road, Glastonbury CT 06033. 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: Hebron North		<del></del>
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)	130 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<sup>1</sup>:

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

Where, N= Number of channels, R= distance in cm from the RC (Radiation Center) of antenna, and  $EIRP(\theta) =$  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.

$$PowerDensity = \frac{P_{in} / ch * N * 10^{3}}{2 * \pi * R * h * \alpha / 360} (mW/cm^{2})$$
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,  $\alpha$  = 3 dB beam-width of horizontal pattern.

<sup>&</sup>lt;sup>1</sup> RF exposure is measured and predicted in terms of power density in units of milliwatts (mW), a thousandth of a watt, or microwatts ( $\mu$ W), a millionth of a watt, per square centimeter (cm<sup>2</sup>). 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. 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  $0.003584 \text{ mW/cm}^2$  which occurs at 10 feet from the antenna facility. The chart in exhibit A also shows that the power density is only  $0.002919 \text{ mW/cm}^2$  at a distance of  $\frac{3}{4}$  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
Cellular	.580 mW/cm <sup>2</sup>	2.9 mW/cm <sup>2</sup>	Accessible location
PCS	1 mW/cm <sup>2</sup>	5 mW/cm <sup>2</sup>	0.003584 mW/cm <sup>2</sup>

The maximum power density at the proposed facility represents only 1.17% of the public MPE limit for all frequencies in use.

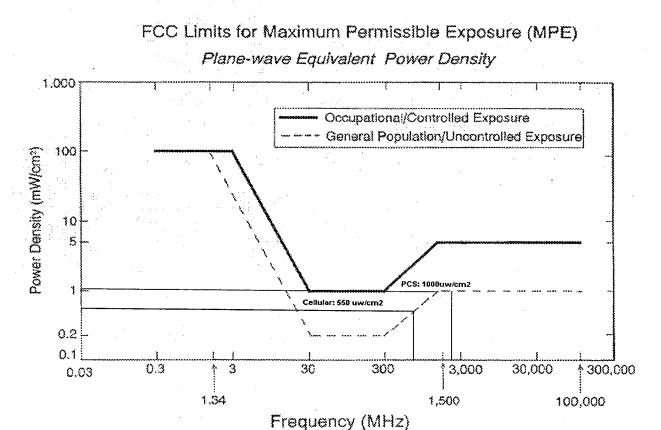
#### 6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.003584 mW/cm², a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

\* The 3 dish antennas were not included on the analysis because it is only use for receiving signals.

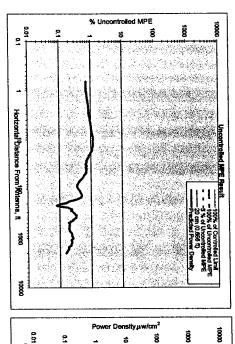
<sup>&</sup>lt;sup>2</sup> 47 U.S. C. Section 332 (c) (7)(B)(iv) states that "[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions 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

9/27/2002



Number of Antenna Systems: 1
Meets FCC Controlled Limits for The Antennas Systems. 7

0.01

2

Antenna System One

Antenna System Two

Meets FCC Uncontrolled Limits for The Antenna Systems.

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

No Further Analysis Required.

Composite Power (ERP) =		Maximum Power Density =		
17,750.00 Watts	r uncontrolled	0.003584	mW/cm <sup>2</sup>	Pow
Watts	environment	1.17	% of limit	Power Density
		10.00	ieet	@Horiz Dist.

Performed By: Galen Belen

Date: 9/27/02

Site ID: 907-007-868
Site Name: Hebron North
Site Location: 115 Birch Mountain Road
Glastonbury CT 06033

Ant System ONE Owner: AT&T Sector: 3 Azimuth: 30/140/270

WOS?	Distance to Ant <sub>bottom</sub>	Ant HBW	Height of aperture	Miscellaneous Att.	Down titt	Max Ant Gain	Antenna Model No.	roof surface)	(above ground or	Calculation Point	(Center of Radiator)	Max Pwr/Ch into Ant.	Max ERP/Ch	# of Channels	Frequency		
Y/N?	teet	degraes	feet	8	degrees	dBd				feet	feet	Watts	Watts	*	4H2	units	
3	127.45	65.00	5.11	0.00	0.00	16.30	Allgon 7250.03	0.00	0.00	0.00	130.00	5.86	250.00	12	1945.00	Value	

# of Channels
Max ERP/Ch
Max Pwr/Ch Into Ant
(Center of Radiator)
Calculation Point

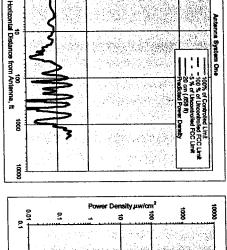
Value 1930.00 12 250.00 9.08

(above ground or roof surface)
Antenna Model No.

184.00 0.00 0.00 0.00 0.00 RR-90-17-02 14.40 0.00 0.00

Miscellaneous Att. Height of aperture Max Ant Gain Down titt

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



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8

0.01	2	Power	Density.	imorwa 8		<b>.</b>
2					144	
1 Horizontal						
Horizontal Distance from Antenna, ft	<b>2</b>					
Antenna, ft	3					100% of Contro 100 % of Uncorte 5 % of Uncorte 20 cm (.656 ft)
						Atrolled FCC Limit offed FCC Limit
1000						

Ant System Five Owner: Arch Communications Sector: 1 Azimuth: 380

WOS7	Distance to Anti-	Ant HBW	Height of aperture	Miscellaneous Att.	Down tit	Mex Ant Gain	WINDOW BUILDING	roor surface)	(above ground or	Calculation Point	(Center of Radiator)	Max PWI/Ch Into Ant	Max ERP/Ch	# or Channels	Frequency	
Y/N?	feet.	degræes	ieet	윱	degrees	dBd				ě	feet	Watts	Watts	*	AF.	SHU
5	194.00	360.00	12.00	0.00	0.00	9.00	DB809K	0.00	0.00	0.00	200.00	31.47	250.00	2	920.84	Value

Anterna System Five

WOS?	Colonics to Anti-	Walt Haw	enuluede to utilieur	Miscellaneous Att	Down tit	Max Ant Gain	Anonna Model No.	Bogung tool	(Bloove ground or	Calculation Point	Center of Radiator	Max PWI/Ch Into Ant	Max ERP/Ch	# of Channels	raquency		
Y/N?	ion di	degraes	1991	8	degrees	dBd				i de	feet	Watts	h Watts	*	AHW K	units	
3	194.00	360.00	12.00	0.00	0.00	9.00	DB809K	0.00	0.00	0.00	200.00	31.47	250.00	2	920.84	Value	

	WOS?	DISTRICTOR TO Antibottom	Ant HBW	Height of aperture	Miscellaneous Att.	Down tilt	Max Art Gain	Antenna Model No.	rooi suriace)	To Dunoug avours	Calculation Point	(Center of Radiator)	Max PW/Ch Into Ant	Max ERP/Ch	# of Channels	Frequency	
	YN3	<b>8</b>	degrees	feet	8	degraes	윮				ğ	ige.	Watts	Watts	*	AH.	units
=	,	191.00	360.00	18.00	0.00	0.00	6.00	DB264	0.00	0.00	0.00	200.00	62.80	250.00	-1	152.87	Value

Frequency
# of Charmels
Max ERPON
Max PROCH Into Ant.
(Center of Radiator)
Carcuston Pont
(above ground or
roof surbae)
Antenna Model No.
Max Ant Cent
Down 81
Height of sperture
Ant HBW
Distance to AntiUnion
Union
Miscellaneous Att.
Height of sperture
Ant HBW
Distance to AntiUnion

Watts Watts feet

Value 1890,00 12 500,00 15.45 170,00 0,00

Antenna System Three

F F

Ant System Three Owner: Sprint PCS

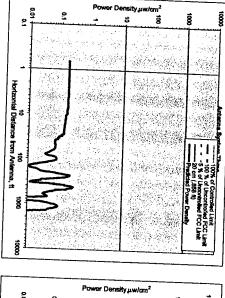
Sector: 3 Azimuth 30/150/270

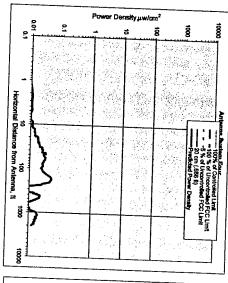
Ant System Four Owner: Ticon Tomesso Sector: 1 Azimuth: 380

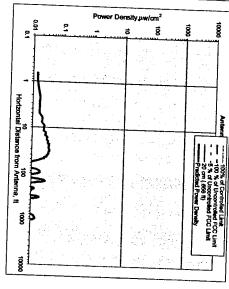
degrees
degrees
degrees
feet

0.00 DB980G90 15.10 0.00 0.00

A.	Antenna System Four	JNO
	units	Value
Frequency	4HV	152.87
# of Channels	*	-
Max ERP/Ch	Watte	250.00
Max Pwr/Ch Into And	Water	200,00
0	CHOAA	02.00
Center of Radiator)	8	200.00
Calculation Point	<b>100</b>	0.00
(above ground or		0.00
rooj suriace)		0.00
Amerina Model No.		DB264
Max Ant Gain	dBd	6.00
Down titt	degraes	0.00
Miscellaneous Att.	<b>a</b>	0.00
Height of aperture	feet	18.00
Ant HBW	degraes	360.00



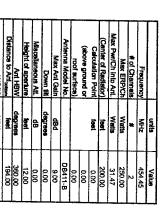




Ant System Eight Owner: US Drug Sector: 1 Azimuth: 380

	# of Channels # 1,20,000 # de Channels # 1,20,000 Max PRPICh Watts 250,000 Max PRPICh Watts 250,000 Max PRPICh Into Art. Watts 21,017 (Cember of Radilator) Intent 2,000,100 (above ground or 0,000 (above ground or 1,000 (above ground or 0,000 (above ground or 1,000 (above gro
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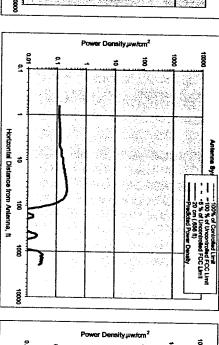
	WOS?	Distance to Ant bottom	Ant HBW	Height of aperture	Miscellaneous Att.	Down tit.	Max Ant Gain	Antenna Model No.	roof surface)	(above ground or	Calculation Point	(Center of Radiator)	Viax Pwr/Ch Into Ant.	Max ERP/Ch	# of Channels	Frequency	
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	3	194.00	360.00	12.00	0.00	0.00	9.00	D8411-B	0.00	0.00	0.00	200.00	31.47	250.00	2	454.45	10000
-											-				_		-



# of Charmes
# of Charmes
Max ERPCh
Max Mat Gain
Down at
Macellaneous At
Height of aperture
Ant High
Distance to Antiqueen

Ant System SIX Owner: SkyTel Corp.
Sector: 1
Azimuth: 380

Ant System SEVEN Owner: Arch Communications



Density µw/cm²

9

10 100 100 1000 Horizontal Distance from Antenna, ft

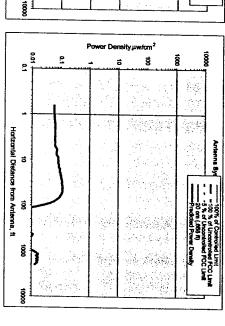
Antonna System Six

Antenna System Seven

Antenna System Eight

Watts
Watts

Value 901.23



Page 3/6

Pege 4/6

# of Channels
Max ERPICH
Max ERPICH
Max ERPICH
Max PowiCh into Ant
(Centler of Radiator)
Cabulation Point
(above ground or
nod surface)
Antenna Model No.
An 10 100 Horizontal Distance from Antenna, fi Antenna System Nine MHz MHz

Watts

Watts **6**00 **5** Max F (Cen 10 100 1000 Horizontal Distance from Antenna, ft

Antenna System Ten

Antenna System Eleven

9

2

Ant System TEN Owner: Connecticul Radio Sector: 1 Azimuth: 360

Ant System ELEVEN Owner: Federal Express
Sector: 1
Azimuth: 380

Ant System NINE Owner: Internal Revenue Sector: 1 Azimuth: 380

2	Y/N/	VSOM
	Case	unes.
158.00	feet	ance to Anthony
360.00	degrees	Am HBW
12.00	feet	eight of aperture
0.00	æ	scellaneous Att.
 0.00	degraes	Down sit
9.00	æ	Max Ant Gain
DB411-B		tenna Model No.
0.00		roof surface)
0.00		above ground or
0.00	ised.	Calculation Point
164.00	feet	mier of Radiator)
31.47	Watts	Pwr/Ch Into Ant.
250.00	Watts	Max ERP/Ch
1	**	# of Channels
463.85	ZHM	Frequency
Value	units	

WOS?	Distance to Anti-	Ant HBW	Height of aperture	Miscellaneous Att.	Down tilt.	Max Ant Gain	Antenna Model No.	roof surface)	(above ground or	Calculation Point	(Center of Radiator)	Max Pwr/Ch Into Ant.	Max ERP/Ch	# of Channels	Frequency	
Y/N7	feet.	degrees	regi.	æ	degrees	dBd				<b>7</b>	feet	Watts	Watts	*	MHz	units
,	140.75	360.00	14.50	0.00	0.00	10.00	DB810K-XC	0.00	0.00	0.00	148.00	25.00	250.00	-	859.91	Value

10000 Ŕ 10 100 Horizontal Distance from Antenna, it 100% of Controlled Limit

100% of Controlled Limit

100% of Uncontrolled FCC Limit

5 of Uncontrolled FCC Limit

20 cm (586 t)

Predicted Power Density 8 10000

10000

100% of Controlled Limit
100 % of Uncontrolled FCC Limit
5 % of Uncontrolled FCC Limit
20 cm (456 ft)

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Sector: 1
Azimuth: 380

Ant System THRTEEN Owner: Stamm Construction Sector: 1 Azimuth: 360

Ant System TWELVE Owner: Northeast Paging Sector: 1 Azimuth: 380

Art System FOLIBITETIN CHIEF THE	WOS?	Distance to Anti-	Ant HBW	Height of aperture	THE GOOD IN THE COURT
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	ם	140.00	360.00	12.00	0.00
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WOS?	Distance to Antibotom	Ant HBW	Height of aperture	Miscelleneous Att.	Down Sit	Max Ant Gain	Artienna Model No.	roor surface)	(above ground or	Calculation Point	(Center of Radiator)	Max Pwr/Ch into Ant.	Max ERP/Ch	# of Channels	Frequency	
Y/N?	feet	degrees	feet	8	degrees	œ.				ie od	TE COL	Watts	Watts	*	ZHW	units
n	140,00	360.00	12.00	0.00	0.00	9.00	DB411-B	0.00	0.00	0.00	146.00	31.47	250.00	,	450.00	Value

WOS?	Distance to Antibottom	Ant HBW	Height of aperture	Miscellaneous Att.	Down tilt	Max Ant Gain	Antenna Model No.	roof surface)	(above ground or	Calculation Point	(Center of Radiator)	Max Pwr/Ch Into Ant.	Max ERP/Ch	# of Channels	Frequency	
Y/N?	teet	degraes	iesi	d8	degrees	dBd				<b>100</b> 1	feet	Watts	Watts	*	MH.	
2	141.00	360,00	12.00	0.00	0.00	9.00	DB411-B	0.00	0.00	0.00	147.00	31.47	250.00		452.18	, , , , ,

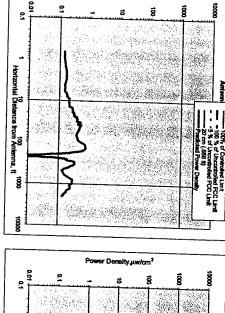
	Unitarice to Ambottom	Α.	Height of aperture	Miscellaneous Att.		Max A	Antenna Model No.	1001	(above ground or	Calculation Point	(Center of Radiator	Max Pwr/Ch Into Ant.	Max	#ofC	-		
3	VII bottom	ATT HBW	perture	All.	Down titt	Max Ant Gain	del No.	noof surface)	ound or	on Point	tadiator)	THO ANT	Max ERP/Ch	# of Channels	Frequency		
<b>4</b>	feet	degraes	Teet	සි	degrees	윮				<b>6</b>	<b>198</b>	Watts	Watts	*	¥.	unite	
	141.00	360.00	12.00	0.00	0.00	9.00	DB411-B	0.00	0.00	0.00	147.00	31.47	250.00	1	452.18	Value	
							_	_			اا	1	_			_	

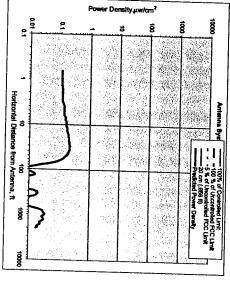
Frequency
# of Channels
Max ERPCN
Max ERPCN
Max ERPCN
Max ERPCN
Center of Radator
(Center of Radator
Control of Radator
Ant Haw
Down fill
Mecaliareous Att
Height of appart
Ant Haw
Distance to Ant<sub>Accom</sub>

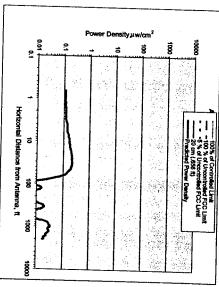
Antenna System Tweive

Antenna System Thirteen

Antenna System Fourteen







8

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Power Density \( \pu\) w/cm²

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

1000

Power Density \( \pu\) w/cm²

Power Density www.lcm

1000

Power Density www.lcm

1000

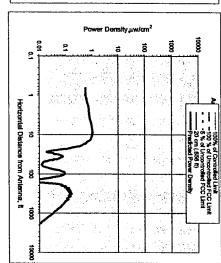
Power Density www.lcm

1000

1 1 1 1000

O,1 1 1 1000 1000

Horizontal Distance from Antama, It



Ant System FIFTEEN Owner: Unknown Sector: 1 Azimuth: 380

Ant System SIXTEEN Owner: Unknown Sector: 1 Azimuth: 360

Ant System SEVENTEEN Owner: Unknown Sector: 3 Azimuth: 380

_		_	_	_		_										
	Distance to Ant bottom	Ant HBW	Height of aperture	Miscellaneous Att.	Down III.	Max Ant Gain	Antenna Model No.	roof surface)	(above ground or	Calculation Point	(Center of Radiator)	Max Pwr/Ch Into Ant.	Max ERP/Ch	# of Channels	Frequency	
	feet.	degrees	ieet.	8	degrees	dBd				igest	ieet	Watts	Watts	#	ZHM	units
	140.00	360.00	12.00	0.00	0.00	9.00	DB411-B	0.00	0.00	0.00	146.00	25.18	200.00	_	450.00	Value

Antenna System Fifteen

Antenna System Sixteen

		_	,													
WOS?	Distance to Antibotom	Ant HBW	Height of aperture	Miscellaneous Att.	Down tilt	Max Ant Gain	Antenna Model No.	roof surface)	(above ground or	Calculation Point	(Center of Radiator)	Max Pwr/Ch Into Ant.	Max ERP/Ch	# of Channels	Frequency	
Y/N7	teet	degrees	feet	8	degrees	d₿d				<b>196</b>	net.	Watts	Watts	*	MHz	units
a	50.00	360.00	12.00	0.00	0.00	9.00	DB411-B	0.00	0.00	0.00	56.00	25.18	200.00	-1	450.00	Value

units units white with the watte watte feet feet department of degrees of the watte watte feet feet feet of the watte feet of the watte watte feet of the watte wa	feet	ioot.				dBd	Down till degrees 0.00		Height of aperture feet 12.00	Ant HBW degrees 360.00	Distance to Antibutom test 36.00	
Value  Value  450.00  1  100.00  1  12.59  42.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00  0.00	42.00	0.00	0.00	0.00	0B411-B	9.00	0.00	08	12.00	360.00	36.00	ı

#### 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:

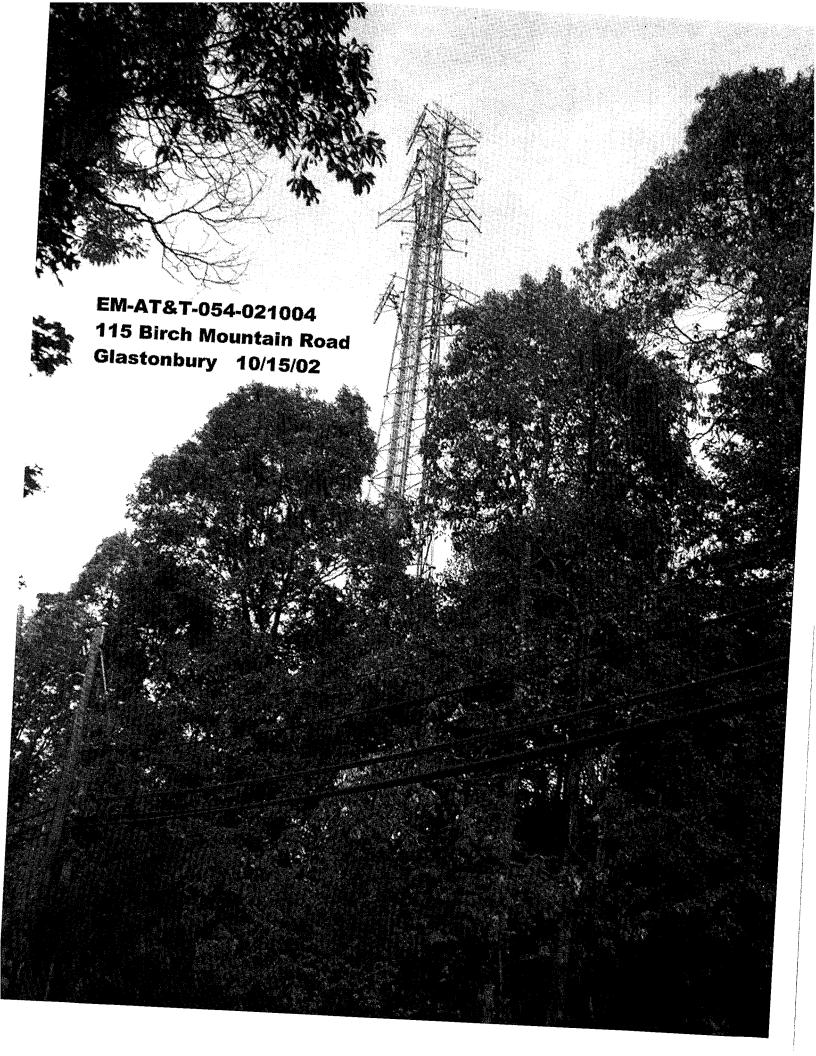
Dr. Robert Cleveland Federal Communications Commission Office of Engineering and Technology Washington, DC 20554

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.



# Connecticut Siting Council



Approved by Council	CONTRACTOR OF THE CONTRACTOR O
Date Complete:	
Site visit required?	Address 116 Brich Mountain Poad
Chaste	Glastorbury Coad
CHECKIIS	et for Exempt Modifications and Tower Sharing
1. Tower Owner RANGE	Tower Height 199 Type Solution Total Height
2. Proposed Carrier	Total Hoight
Number of antennas	
Other proposed equipment of	Type pand Height 30 Extension
Proposed size/location of equ	uipment building/cabinets:
Fence line and its	District Height 120 Extension Extension Extension Graph Pad
Other proposed in	g: pad
3. Current assistable for the second	
Argh Cuch	Height: (74 Power density %:
5. Town approved to	d carrier percentage: 213 Cumulative percentage: 34,85
date (if necessary): _	Cumulative percentage: 3485  Town application date (if necessary):
6. Structural analysis: 10 mods	10wn application date (if necessary):
	nec).
<ul> <li>7. Coordinates Latitude: 41</li> <li>8. Town(s) CEO notified of application to</li> </ul>	Siting Council? Cc to town way
The auton (C	Siting Council? (C TO town way
Site Visit Information	
9. Description of site features, surroundin	Date of visit: 10/15/02
15 ruval 150 in Calles, surroundin	g land uses, and sight lines
same immediate area; no en lears are out	gland uses, and sight lines: closing in; one of several (at beast 4) towers Par road; woods give some screening at least
	J ou reast

# Filing Documentation for Meeting 1. 2. 3. 4.

