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

September 11, 2002

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

RE: **TS-AT&T-052-020624** - AT&T Wireless request for an order to approve tower sharing at an existing telecommunications facility located at 319-321 New Britain Avenue, Farmington, Connecticut.

Dear Attorney Fisher:

At a public meeting held September 5, 2002, the Connecticut Siting Council (Council) ruled that the shared use of this existing tower site is technically, legally, environmentally, and economically feasible and meets public safety concerns, and therefore, in compliance with General Statutes § 16-50aa, the Council has ordered the shared use of this facility to avoid the unnecessary proliferation of tower structures. 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 may require an explicit request to this agency pursuant to General Statutes § 16-50aa or notice pursuant to Regulations of Connecticut State Agencies Section 16-50j-73, as applicable. Such request or notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point 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.

This decision applies only to this request for tower sharing and is not applicable to any other request or construction.

The proposed shared use is to be implemented as specified in your letter dated June 21, 2002.

Thank you for your attention and cooperation.

Very truly yours,

Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Arline B. Whitaker, Chairman Town Council, Town of Farmington
Jeffrey Ollendorf, Town Planner, Town of Farmington
Michael J. Whalen, Chief of Police, Town of Farmington
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels LLP
Kenneth J. Pocius,Esq., Carmody and Torrance
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae

TS-AT&T-052-020624

CUDDY & FEDER

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Of Counsel
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ROBERT L. OSAR (also TX)
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LOUIS R. TAFFERA

June 21, 2002

VIA FEDERAL EXPRESS

Hon. Mortimer Gelston, Chairman and Members
of the Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Tower Sharing Request by AT&T Wireless
Farmington Municipal Tower Facility at
319-321 New Britain Avenue, Farmington, Connecticut

Hon. Mortimer Gelston, Chairman and Members of the Siting Council:

Pursuant to Connecticut General Statutes (C.G.S.) § 16-50aa, AT&T Wireless PCS LLC, by and through its agent AT&T Wireless Services, Inc., ("AT&T") hereby requests an order from the Connecticut Siting Council (the "Council") to approve the proposed shared use of a municipal communications tower, currently under construction, located at 319-321 New Britain Avenue in the Town of Farmington (the "New Britain Avenue Tower Facility"), owned by the Town of Farmington. See signed authorization and application consent annexed hereto as Exhibit A.

The New Britain Avenue Tower Facility

The New Britain Avenue Tower Facility consists of an approximately one hundred ninety (190) foot monopole (the "Tower") and associated equipment, which is currently under construction and will be used for wireless communications by Sprint, VoiceStream and the municipality. The facility is located on town owned property and is part of the Farmington Municipal complex including the Town Hall, Police Department, Library and High School.

AT&T Wireless' Facility

As shown on the enclosed plans prepared by URS Corporation, including a site plan and tower elevation of the New Britain Avenue Facility, AT&T Wireless proposes shared use of the Facility to provide FCC licensed services. AT&T Wireless will install 6 panel antennas at approximately the 150 foot level of the Tower and associated equipment cabinets (2 proposed, 2 future, each 76"H x 30" W x 30" D) located in the existing equipment building.

Connecticut General Statutes § 16-50aa provides that, upon written request for shared use approval, an order approving such use shall be issued, "if the council finds that the proposed shared use of the facility is technically, legally, environmentally and economically feasible and meets public safety concerns." (C.G.S. § 16-50aa(c)(1).) Further, upon approval of such shared use, it is exclusive and no local zoning or land use approvals are required C.G.S. § 16-50x. Shared use of the New Britain Avenue Tower Facility satisfies the approval criteria set forth in C.G.S. § 16-50aa as follows:

A. Technical Feasibility As evidenced in the structural report prepared by URS Corporation, annexed hereto as Exhibit B, AT&T has confirmed that the tower is structurally capable of supporting the addition of AT&T Wireless' antennas. The proposed shared use of this tower is therefore technically feasible.

B. Legal Feasibility Pursuant to C.G.S. § 16-50aa, the Council has been authorized to issue an order approving shared use of the existing New Britain Avenue Tower Facility. (C.G.S. § 16-50aa(c)(1)). Under the authority vested in the Council by C.G.S. § 16-50aa, an order by the Council approving the shared use of a tower would permit the Applicant to obtain a building permit for the proposed installation.

C. Environmental Feasibility The proposed shared use would have a minimal environmental effect, for the following reasons:

1. The proposed installation would have a de minimis visual impact, and would not cause any significant change or alteration in the physical or environmental characteristics of the existing facility;

2. The proposed installation by AT&T Wireless would not increase the height of the tower nor extend the site boundaries;

3. The proposed installation would not increase the noise levels at the existing facility boundaries by six decibels or more;

4. Operation of AT&T Wireless' antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. The "worst case" exposure calculated for the operation of this facility for all carriers, would be approximately 2.3% of the standard. See Cumulative Emissions Compliance Report dated June 17, 2002, prepared By Nader Soliman, RF Engineer, annexed hereto as Exhibit C;

5. The proposed shared use of the New Britain Avenue Tower Facility would not require any water or sanitary facilities, or generate air emissions or discharges to water bodies. Further, the installation will not generate any traffic other than for periodic maintenance visits.

D. Economic Feasibility As evidenced in Exhibit A annexed hereto, the Applicant and the tower owner have entered into a mutual agreement to share use of the New Britain Avenue Tower Facility on terms agreeable to both parties. The proposed tower sharing is therefore economically feasible.

E. Public Safety As stated above and evidenced in the Cumulative Emissions Compliance Report annexed hereto as Exhibit C, the operation of AT&T Wireless' antennas at this site would not exceed the total radio frequency electromagnetic radiation power density level adopted by the FCC and Connecticut Department of Health. Further, the addition of AT&T Wireless' telecommunications service in the Farmington area through shared use of the New Britain Avenue Tower Facility is expected to enhance the safety and welfare of local residents and travelers through the area resulting in an improvement to public safety in this area of Farmington.

Conclusion

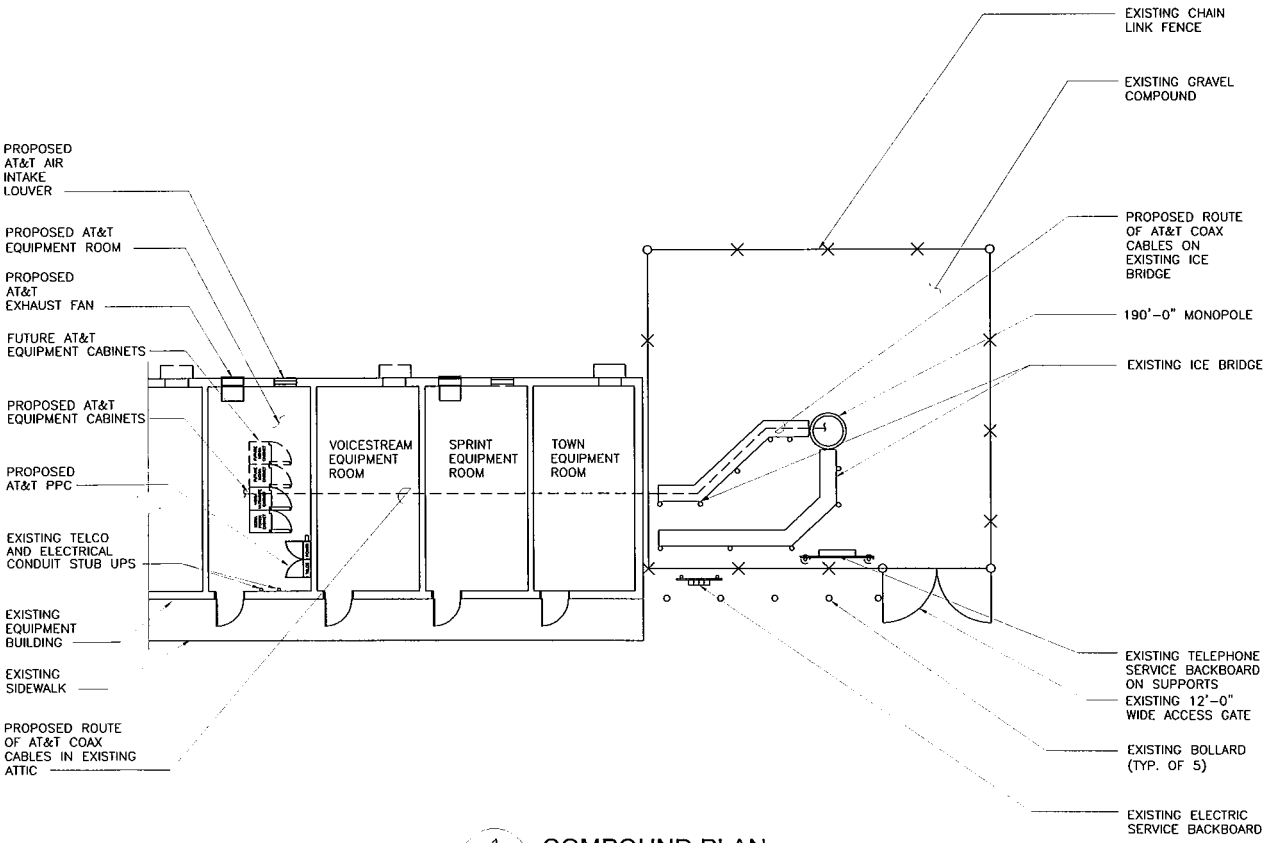
As delineated above, the proposed shared use of the New Britain Avenue Tower Facility satisfies the criteria set forth in C.G.S. § 16-50aa, and advances the General Assembly's and the Siting Council's goal of preventing the proliferation of towers in the State of Connecticut.

AT&T Wireless therefore requests the Siting Council issue an order approving the proposed shared use of the New Britain Avenue Tower Facility.

Respectfully submitted,

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

cc: Kathleen A. Eagen, Farmington Town Manager
RJ Wetzel, Bechtel



1 / SC-1 COMPOUND PLAN

SCALE: 1" = 20'-0"

0 5 10 20 40

LATITUDE: 41.74983 (NAD 83)

LONGITUDE: 72.87270 (NAD 83)

URS

URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882

URS JOB NO.: F302224.20

AT&T

AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06902

DRAWING TITLE: COMPOUND PLAN

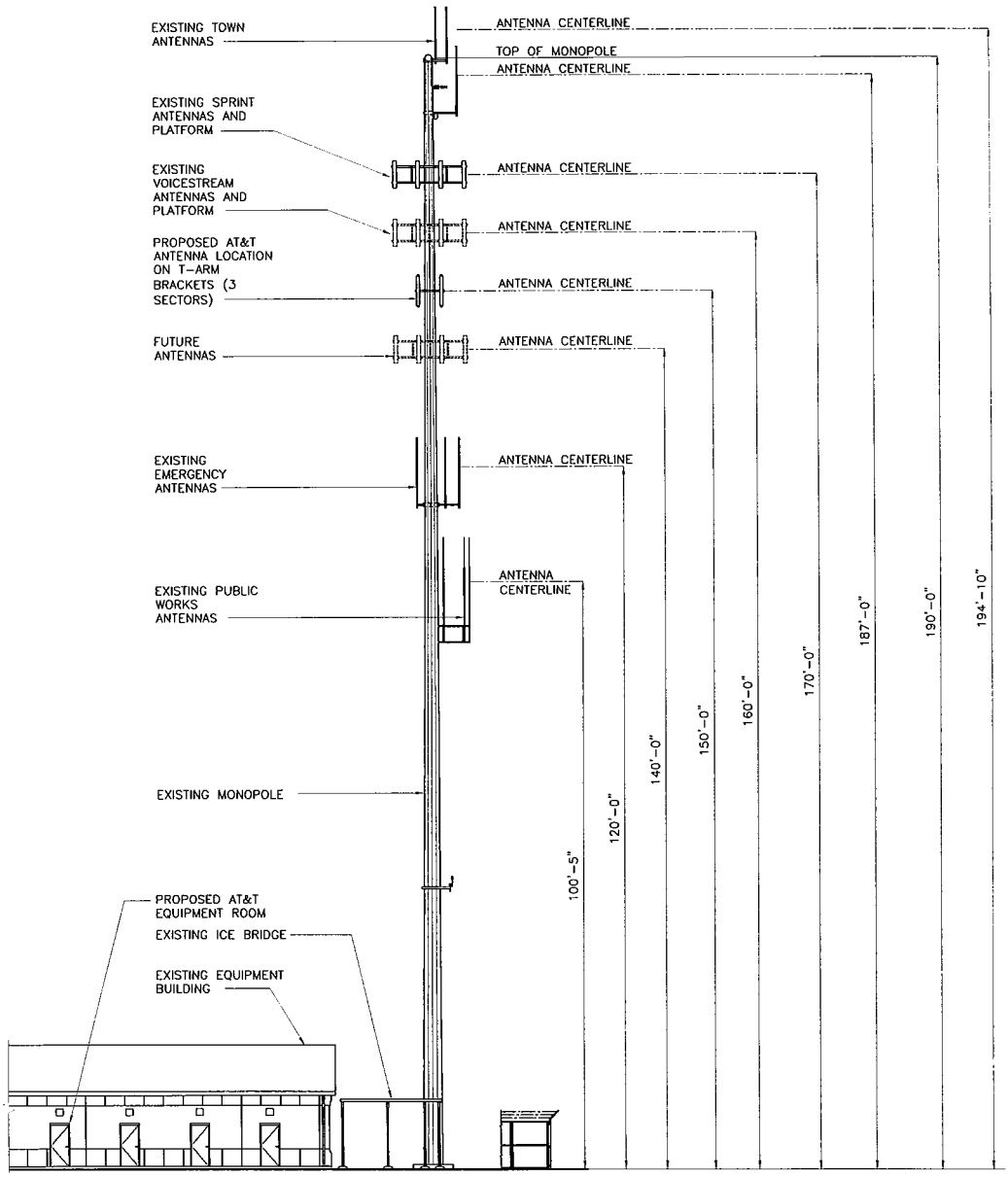
PROJECT INFORMATION:
FARMINGTON POLICE TOWER
24445-3CO-404-SC1-0
NEW BRITIAN AVENUE
FARMINGTON, CONNECTICUT

PROPERTY OWNER:
TOWN OF FARMINTON
1 MONTEITH DRIVE
FARMINGTON, CT 06032-1053

SCALE:	AS NOTED	DRAWN BY:	VJB
DATE ISSUED:	02/22/02	CHECKED BY:	JCF
		APPROVED BY:	

ISSUED FOR SITING COUNCIL

JOB NO.	SITE NO.	DRAWING NUMBER	REV.
24445	3CO-404	SC-1	0



1 / SC-2 TOWER ELEVATION

SCALE: 1" = 30'-0"

0 5 15 30 60

LATITUDE: 41.74983 (NAD 83)
LONGITUDE: 72.87270 (NAD 83)

URS
URS CORPORATION-AES
795 BROOK STREET, BLDG 5
ROCKY HILL, CT. 06067
1-(860)-529-8882
URS JOB NO.: F302224.20

AT&T
AT&T WIRELESS PCS LLC
12 OMEGA DRIVE
STAMFORD, CONNECTICUT 06902

DRAWING TITLE: TOWER ELEVATION

PROJECT INFORMATION:
FARMINGTON POLICE TOWER
24445-3CO-404-SC2-0
NEW BRITIAN AVENUE
FARMINGTON, CONNECTICUT

PROPERTY OWNER:
TOWN OF FARMINGTON
1 MONTEITH DRIVE
FARMINGTON, CT 06032-1053

SCALE:	AS NOTED	DRAWN BY:	VJB
DATE ISSUED:	02/22/02	CHECKED BY:	JCF
		APPROVED BY:	

ISSUED FOR SITING COUNCIL

JOB NO.	SITE NO.	DRAWING NUMBER	REV.
24445	3CO-404	SC-2	0

AUTHORIZATION AND APPLICATION CONSENT

The undersigned (the "Property Owner") is the owner of real property located at 319-321 New Britain Avenue, Farmington, State of Connecticut (the "Property"), which the Property Owner proposes to lease to **AT&T Wireless Services, Inc.**, a Delaware corporation, **d/b/a AT&T Wireless Services**, its Agent (AWS).

The Property Owner hereby authorizes AWS, its employees, representatives and agents and consultants to enter upon the Property and conduct such tests (including RF drive tests) as AWS may deem necessary or appropriate for the purpose of determining the suitability of the Tower and related facilities at the Property for the installation of a telecommunications antenna facility; and to secure any application, including but not limited to building permit, FAA or other approval necessary to ensure AWS' ability to use the Tower and related facilities at the Property. I understand that any such application may be denied, modified or approved with conditions and that such conditions or modifications, subject to the Property Owner's approval, must be complied with prior to issuance of any building permits. I further understand that AWS will assume any and all costs and fees associated with processing said applications and permits.

AWS agrees to hold the Property Owner harmless from any claims, damages or losses, including costs and reasonable attorneys' fees, arising from the activities of AWS pursuant to this Consent.

It is understood by both the Property Owner and AWS that this consent by Property Owner does not constitute a commitment by Property Owner to lease or otherwise convey rights to the Property to AWS, and that such a conveyance may be accomplished by the execution of a further agreement by both parties.

Dated this 6 day of June, 2002.

PROPERTY OWNER: Town of Farmington

Kathleen A Eagen
(Signature of Property Owner's Representative)

Kathleen A Eagen
(Printed Name of Property Owner's Representative)

Town Manager
(Title of Property Owner's Representative, if any)

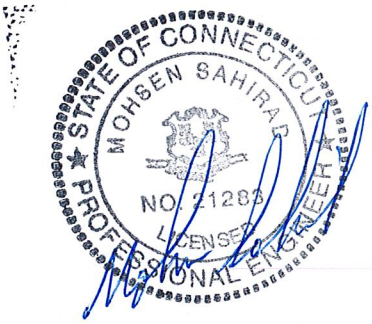
DETAILED STRUCTURAL ANALYSIS AND EVALUATION OF 190' EXISTING MONOPOLE FOR NEW ANTENNA ARRANGEMENT

Farmington Police Department
New Britain Avenue
Farmington, Connecticut
AT&T Site No.: CT- 404

prepared for

AT&T

AT&T WIRELESS PCS
12 OMEGA DRIVE, 2ND FLOOR
STAMFORD, CT 06902
TEL. 203-602-7029



prepared by

URS

URS CORPORATION
795 BROOK STREET, BUILDING 5
ROCKY HILL, CT 06067
TEL. 860-529-8882

F300002224.20

March 13, 2002

Introduction:

A structural analysis of this 190' communications monopole was performed by URS Corporation AES (URS) for AT&T Wireless. The monopole is located on New Britain Avenue in Farmington, Connecticut.

The structure is self-supporting and was manufactured by Pirod Inc. drawing no. 157375-B approved November 7, 2001 including its foundation.

This analysis was conducted to evaluate twist (rotation), sway (deflection), and stress on the monopole. The analysis was also used to find the effect of the forces to the foundation resulting from the antenna arrangement listed below.

The antenna inventory obtained:		Antenna Centerline Elevation
(2) TDF7220 and (1) 4' Grid dish with 5' arms and (3) 7/8" coax cable within the monopole	Existing	@ 190' elevation
(1) TDF6711 and (1) TDF6712 with 5' arms and (2) 1/2" coax cable within the monopole	Existing	@ 185' elevation
(1) TDD7260 and (1) 4' Grid dish with 5' arms and (2) 7/8" coax cable within the monopole	Existing	@ 180' elevation
(12) DB980F90E-M antenna with low profile platform and (12) 1-5/8" coax cable within the monopole	Sprint	@ 170' elevation
(12) RR90-17-XXXP antenna with low profile platform and (24) 1-5/8" coax cable within the monopole	Voicestream	@ 160' elevation
(6) Allgon 7250.03 antenna with (3) T-Arm and (12) 1-5/8" coax cable within the monopole	AT&T (Proposed)	@ 150' elevation
(12) DAPA 48000 antenna with low profile platform and (12) 1-5/8" coax cable within the monopole	Future	@ 140' elevation
(3) TDD7260 with 5' arms and (3) 1/2" coax cable within the monopole	Existing	@ 113' elevation
(3) TDB6400 with 5' arms and (3) 1/2" coax cable within the monopole	Existing	@ 90' elevation

Note:
1. **This analysis is based on the assumption that all carrier antenna cables are to be placed within the monopole unless otherwise noted. Porthole may be required. Installation of porthole shall be done per manufacturer suggestion.**
2. **Physical verification may be required to ensure that adequate space is available inside the monopole.**

Structural Analysis:

Methodology:

The structural analysis was done in accordance with TIA/EIA-222-F June 1996, Structural Standard for Steel Antenna Towers and Antenna Supporting Structures, the American Institute of Steel Construction (AISC) and the Manual of Steel Construction; Allowable Stress Design (ASD).

The analysis was conducted using ERI Tower 2.0. Two load conditions were evaluated as shown below which were compared to allowable stresses according to AISC and TIA/EIA. The two load combinations were investigated in ERI Tower 2.0 to determine the stress, sway and rotation.

Load Condition 1 = 85 mph Wind Load (without ice) + Tower Dead Load
Load Condition 2 = 0.75 Wind Load (with ice) + Ice Load + Tower Dead Load

The TIA/EIA standard permits one-third increase in allowable stresses for towers and monopoles less than 700 feet tall. For purposes of this analysis, allowable stresses of the monopole members were increased by one-third in computing the load capacity.

Evaluation of Monopole:

Combined axial and bending stresses on the monopole structure were evaluated to compare with allowable stresses in accordance with AISC. In all cases, calculated stresses under the proposed loading were less than allowable stresses.

Analysis Results:

Our analysis determined that the monopole will support the proposed new antenna arrangements under the analysis criteria outlined on the previous page. No further analysis was conducted on the foundation since our results were below the original design.

Our analysis for the proposed new antenna arrangement and load condition is provided in Appendix A.

Limitations/Assumptions:

This report is based on the following:

1. Tower inventory as listed in this report.
2. Tower is properly installed and maintained.
3. All members were as specified in the original design Documents and are in good condition.
4. All required members are in place.
5. All bolts are in place and are properly tightened.
6. Tower is in plumb condition.
7. All members are galvanized.
8. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
9. Foundations were properly constructed to support original design loads as specified in the original design Documents.
10. All co-axial cable is installed within the monopole, except as noted.

URS is not responsible for any modifications completed prior to or hereafter, which URS is not or was not directly involved. Modifications include but are not limited to:

1. Adding or relocating antennas and platform

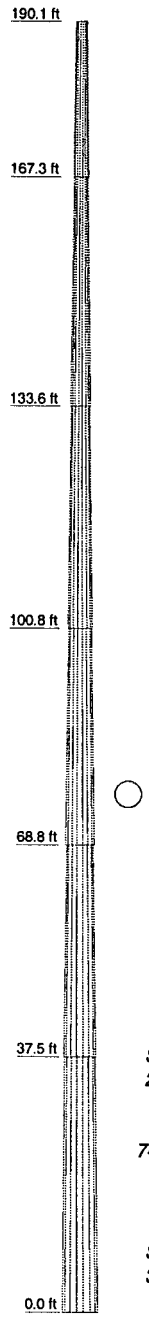
URS hereby states that this document represents the entire report and that it assumes no liability for any factual changes that may occur after the date of this report. All representations, recommendations, and conclusions are based upon information contained and set forth herein. If you are aware of any information which conflicts with that which is contained herein, or you are aware of any defects arising from original design, material, fabrication, or erection deficiencies, you should disregard this report and immediately contact URS. URS disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

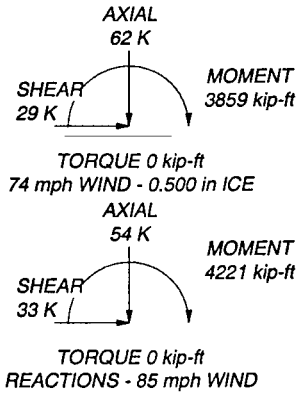
APPENDIX A

Calculations

Size	TP62.938x53.563x0.375	TP56.125x46.75x0.375	TP49.063x39.688x0.375	TP41.75x32.375x0.375	TP34.063x24.688x0.313	TP26x19.563x0.25
Weight (K)	8.8	7.8	6.7	5.6	3.7	1.6

34.0





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
(2) TDF7220	190	Low profile platform	160
23-ARM CLAMP-ON (5')	190	RR90-17-XXXP	160
N-PIPE 2"x50"	190	Allgon 7250.03	150
4' Grid Dish	190	(3) T-Arm	150
(2) Yagi	185	(12) DAPA 48000	140
23-ARM CLAMP-ON (2')	185	Low profile platform	140
N-PIPE 2"x50"	185	(3) TDD7260	113
23-ARM CLAMP-ON (5')	180	23-ARM CLAMP-ON (5')	113
N-PIPE 2"x50"	180	N-PIPE 2"x50"	113
TDD7260	180	(3) TDB6400	90
4' Grid Dish	180	23-ARM CLAMP-ON (5')	90
DB980F90E-M	170	N-PIPE 2"x50"	90
Low profile platform	170		

TOWER DESIGN NOTES

1. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
2. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
3. Deflections are based upon a 50 mph wind.
4. Connections use galvanized A325 bolts, nuts and locking
5. devices. Installation per TIA/EIA-222-F and AISC Specifications.
6. Tower members are "hot dipped" galvanized in accordance
7. with ASTM A123 and ASTM A153 Standards.
8. TOWER RATING: 92.7%

URS CORPORATION
795 Brook Street, Building 5
Rocky Hill, Connecticut 06067
Phone: (860) 529-8882
FAX: (860) 529-5566

Job: ***Farmington Police Department***			
Project: ***F300002224.20 /F12***			
Client: AT&T	Drawn by: Robert M. Niemied	App'd:	
Code: TIA/EIA-222-F	Date: 03/13/02	Scale: NT	
Path: P:\Telecom\F12\Farmington.eri		Dwg No. E-	

RF Exposure Analysis for Proposed AT&T Wireless Antenna Facility

SITE ID: 907-007-404

June 17, 2002

Prepared by AT&T Wireless Services, Inc.
Nader Soliman **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 *319-321 New Britain Ave, Farmington CT 06032.* 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: ***Farmington Police Tower***	
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)	150.00 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 0.006187 mW/cm^2 which occurs at 33 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.000439 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	0.006187 mW/cm^2
PCS	1 mW/cm^2	5 mW/cm^2	

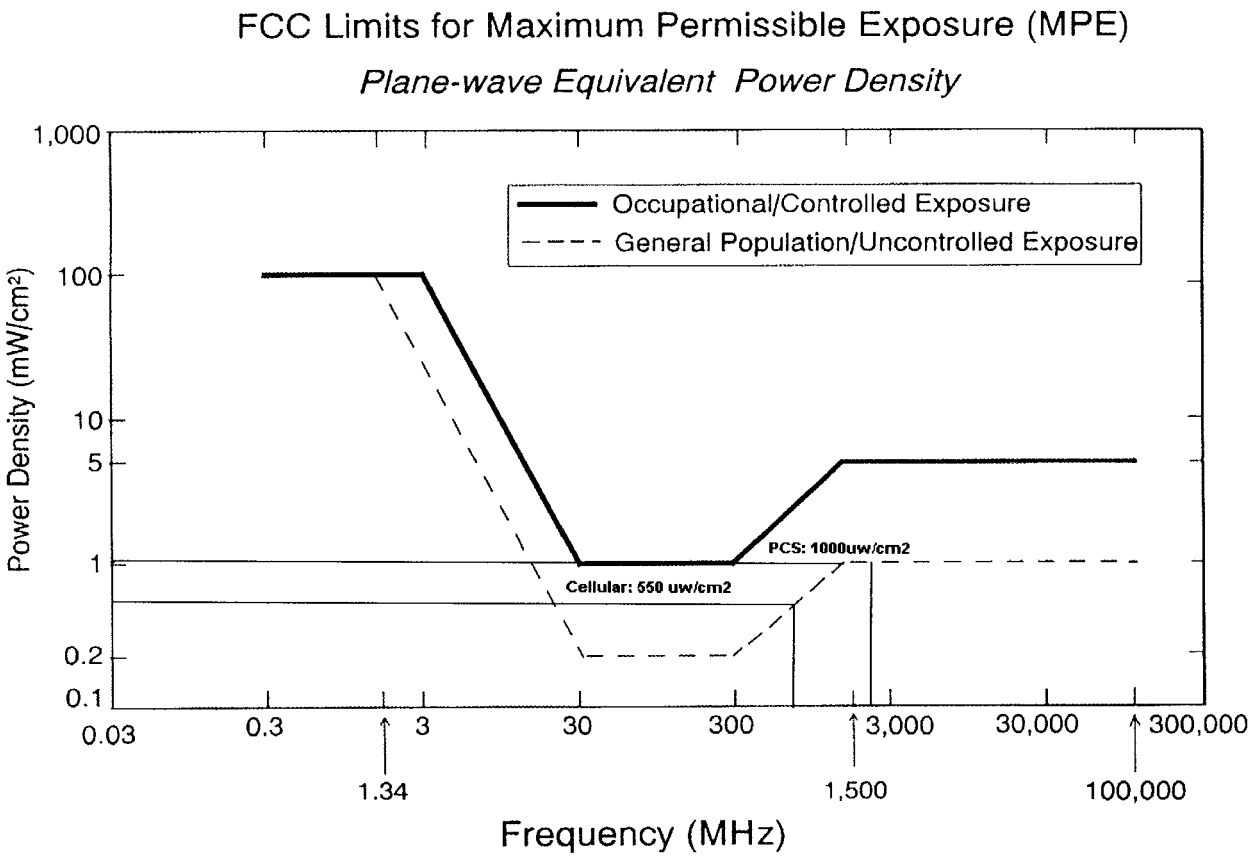
The maximum power density at the proposed facility represents only 2.34% of the public MPE limit for PCS frequencies.

6. Conclusion

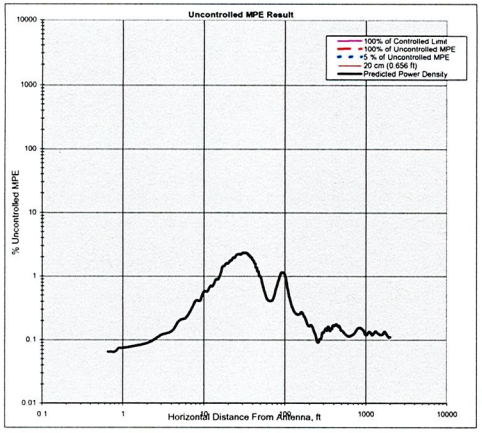
This analysis show that the maximum power density in accessible areas at this location is 0.006187 mW/cm^2, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

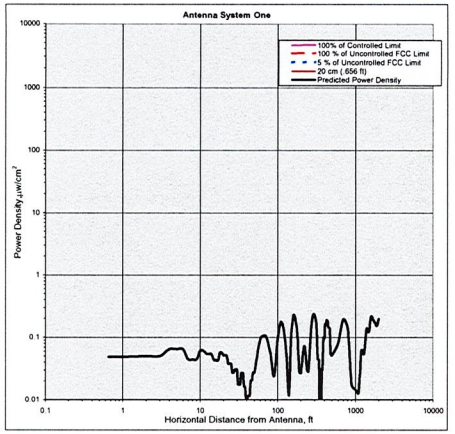
[2] 47 U.S. C. Section 332 (c) (7)(B)(iv) states that "[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that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

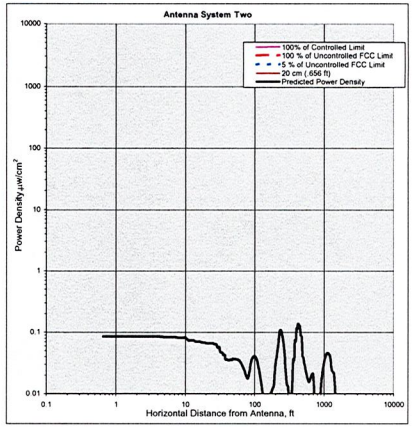
7. FCC Limits for Maximum Permissible Exposure

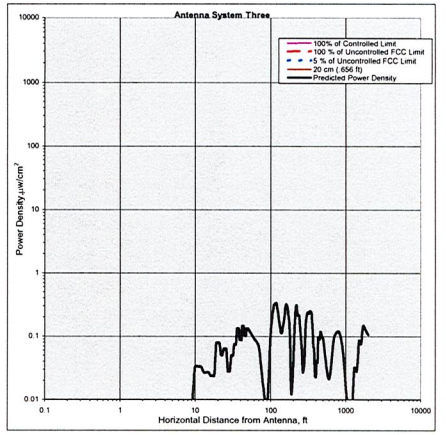


8. Exhibit A









Number of Antenna Systems: 7

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/cm^2	% of limit	feet
Maximum Power Density =	0.006187	2.34	33.00
42.69 times lower than the MPE limit for uncontrolled environment			
Composite Power (ERP) =	14,200.00 Watts		

Site ID: 907-07-404
Site Name: Farmington Police Tower
Site Location: 319-321 New Britain Ave
Farmington CT 06032

Performed By: Nader Soliman
Date: 6/17/02

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	150.00
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	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	5.11
Ant HBW	degrees	65.00
Distance to Ant_{bottom}	feet	147.45
WOS?	Y/N?	n

Ant System ONE Owner: AT&T
Sector: 3
Azimuth: 120/220/340

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	170.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		DB980G90E-M
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	167.50
WOS?	Y/N?	n

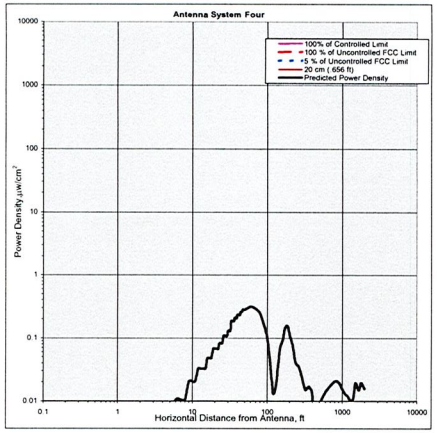
Ant System TWO Owner: Sprint
Sector: 3
Azimuth 0/120/140

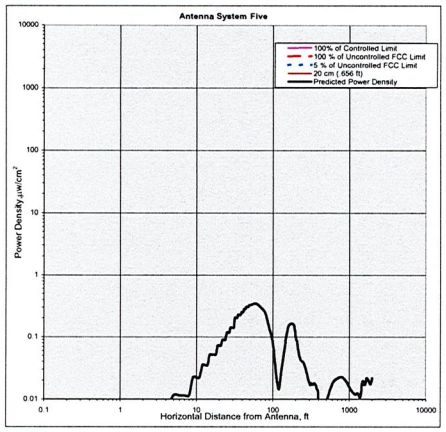
Antenna System Three

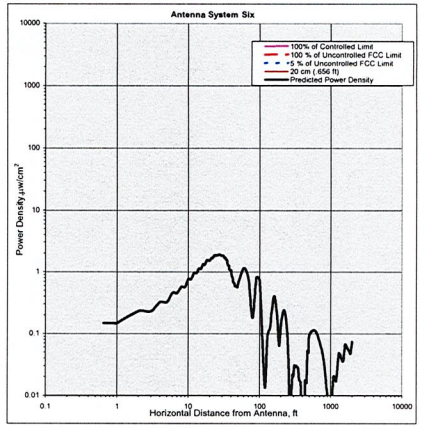
	units	Value
Frequency	MHz	1865.20
# of Channels	#	12
Max ERP/Ch	Watts	250.00
Max Pwr/Ch Into Ant.	Watts	9.08
(Center of Radiator)	feet	160.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		RR901702
Max Ant Gain	dBd	14.40
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	4.66
Ant HBW	degrees	90.00
Distance to Ant_{bottom}	feet	157.67
WOS?	Y/N?	n

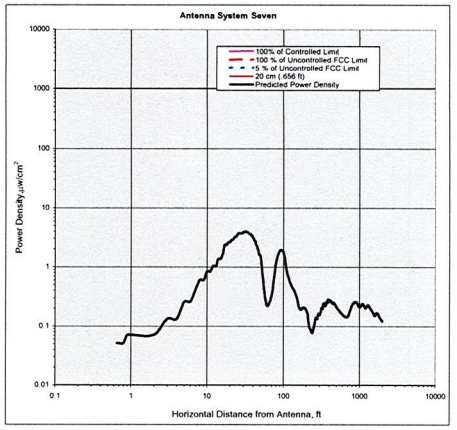
Ant System Three Owner: Voicstream
Sector: 3
Azimuth 0/120/240

0









Antenna System Four

	units	Value
Frequency	MHz	810.24
# of Channels	#	2
Max ERP/Ch	Watts	300.00
Max Pwr/Ch Into Ant.	Watts	53.35
(Center of Radiator)	feet	194.83
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		ASP950
Max Ant Gain	dBd	7.50
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	7.50
Ant HBW	degrees	360.00
Distance to Ant_{bottom}	feet	191.08
WOS?	Y/N?	n

Ant System Four Owner: Town
Sector: 2
Azimuth: 90/180

Antenna System Five

	units	Value
Frequency	MHz	810.24
# of Channels	#	2
Max ERP/Ch	Watts	300.00
Max Pwr/Ch Into Ant.	Watts	53.35
(Center of Radiator)	feet	187.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		ASP950
Max Ant Gain	dBd	7.50
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	7.50
Ant HBW	degrees	360.00
Distance to Ant_{bottom}	feet	183.25
WOS?	Y/N?	n

Ant System Five Owner: Town
Sector: 1
Azimuth: 360

Antenna System Six

	units	Value
Frequency	MHz	933.18
# of Channels	#	4
Max ERP/Ch	Watts	500.00
Max Pwr/Ch Into Ant.	Watts	62.95
(Center of Radiator)	feet	120.00
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		DB809-XT
Max Ant Gain	dBd	9.00
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	12.20
Ant HBW	degrees	360.00
Distance to Ant_{bottom}	feet	113.90
WOS?	Y/N?	n

Ant System SIX Owner: Emergency
Sector: 3
Azimuth: 0/120/240

Antenna System Seven

	units	Value
Frequency	MHz	153.24
# of Channels	#	4
Max ERP/Ch	Watts	500.00
Max Pwr/Ch Into Ant.	Watts	88.91
(Center of Radiator)	feet	100.40
Calculation Point	feet	0.00
(above ground or		0.00
roof surface)		0.00
Antenna Model No.		ASP950
Max Ant Gain	dBd	7.50
Down tilt	degrees	0.00
Miscellaneous Att.	dB	0.00
Height of aperture	feet	7.50
Ant HBW	degrees	360.00
Distance to Ant_{bottom}	feet	96.65
WOS?	Y/N?	n

Ant System SEVEN Owner: Public Works
Sector: 3
Azimuth: 0/120/240

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.