



# 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](mailto:siting.council@po.state.ct.us)

Web Site: [www.state.ct.us/csc/index.htm](http://www.state.ct.us/csc/index.htm)

June 10, 2003

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

RE: **EM-AT&T-038-020626** - AT&T Wireless notice of intent to modify an existing telecommunications facility located at 143-R Old Blue Hills Road, Durham, Connecticut. (Docket No. 161)

Dear Attorney Fisher:

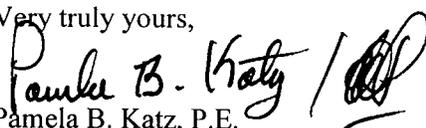
At a public meeting held on June 3, 2003, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies with the conditions that a revised structural analysis be submitted to the Council before the implementation of any antenna changes and that the Town of Durham's provisions as outlined in a letter dated May 20, 2003 and an e-mail dated March 24, 2003 are met. A copy of the Town's letter and e-mail are enclosed for your reference.

The proposed modifications are to be implemented as specified here and in your notice[s] received in our office on June 26, 2002 and additional correspondence dated June 2, 2003, and June 10, 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,

  
Pamela B. Katz, P.E.

Chairman

PBK/laf

c: Honorable Maryann P. Boord, First Selectman, Town of Durham  
Geoffrey Colegrove, Town Planner, Town of Durham  
Kenneth C. Baldwin, Robinson & Cole LLP  
Thomas J. Regan, Esq., Brown Rudnick Berlack Israels, LLP  
Thomas F. Flynn, III, Nextel Communications  
Sandy M. Carter, Verizon Wireless

**RECEIVED**  
JUN 26 2007  
CONNECTICUT  
SITING COUNCIL

**NOTICE OF INTENT TO MODIFY AN  
EXISTING TELECOMMUNICATIONS FACILITY AT  
143-R OLD BLUE HILLS ROAD, DURHAM, CONNECTICUT  
(DOCKET NO. 161)**

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 143-R Old Blue Hills Road, Durham, Connecticut (the "Old Blue Hills Road Facility") (Docket No. 161), owned by Crown Castle. AT&T Wireless and the tower owner have agreed to share the use of the Old Blue Hills Road Facility, as detailed below.

**The Old Blue Hills Road Facility**

The Old Blue Hills Road Facility consists of an approximately one hundred (100) foot monopole (the "Tower") and associated equipment currently being used for wireless communications by Sprint, Nextel, Verizon and the municipality. A chain link fence surrounds the Tower compound. The current surrounding land uses are predominantly rural residential and the site is buffered by existing natural vegetation.

**AT&T Wireless' Facility**

As shown on the enclosed plans prepared by Dewberry-Goodkind, Inc., including a site plan and tower elevation of the Old Blue Hills 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 65 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. One municipal whip will be reconfigured from its inverted position on the same municipal platform at 75 feet. As evidenced in the structural report prepared by All Points Technology Corporation, 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 Old Blue Hills 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 Nader Soliman, 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**

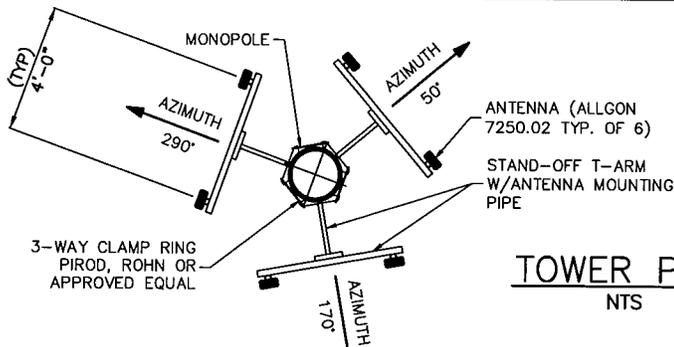
Accordingly, AT&T Wireless requests that the Connecticut Siting Council acknowledge that its proposed modification to the Old Blue Hills Road Facility meets the Council's exemption criteria.

Respectfully Submitted,

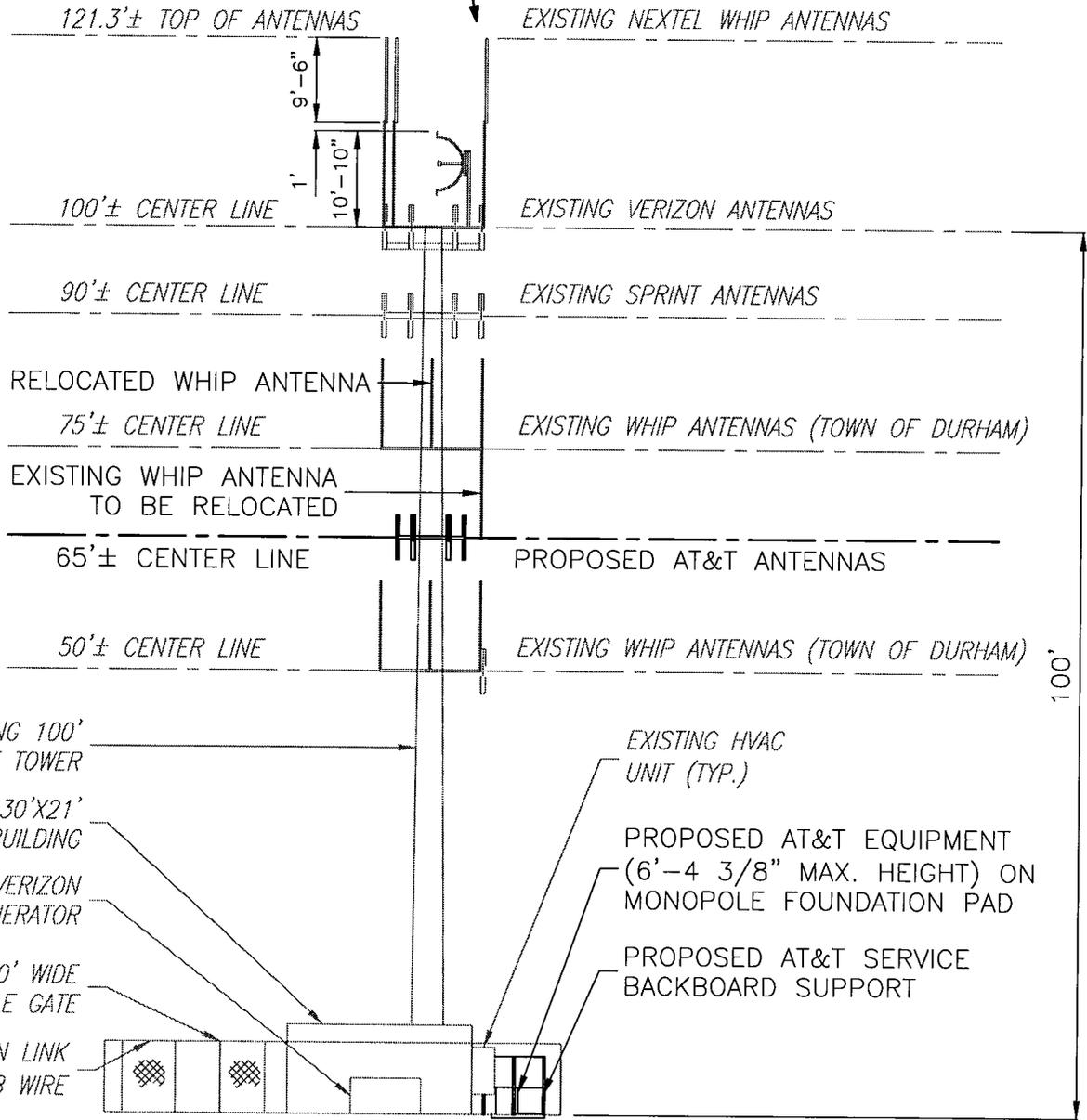


Christopher B. Fisher, Esq.  
On behalf of AT&T Wireless

cc: First Selectman, Town of Durham  
Joanne Desjardins, Pinnacle



**TOWER PLAN**  
NTS



**WEST ELEVATION**  
SCALE: 1"=20'

By: WLC  
 Plot: WCHRISTOPHE  
 Xref: ELEV.DWG  
 Layer State:  
 I:\PROJECTS\3125\15\LEASE\CT841.1-L2.DWG  
 Thu, Jun 20 2002 - 11:22:07am

**Dewberry-Goodkind, Inc.**  
A Dewberry Company  
59 Elm Street, Suite 101  
New Haven, CT 06510  
p. (203) 776-2277  
f. (203) 776-2288

Engineers  
Planners  
Surveyors



**AT&T WIRELESS PCS, LLC**  
SITE NUMBER: CT-841.1  
SITE NAME: DURHAM

**DRAWING TITLE:**

LEASING PLAN

**PROJECT INFORMATION:**

DURHAM  
CT-841.1  
143-R OLD BLUE HILLS ROAD  
DURHAM, CT 06422

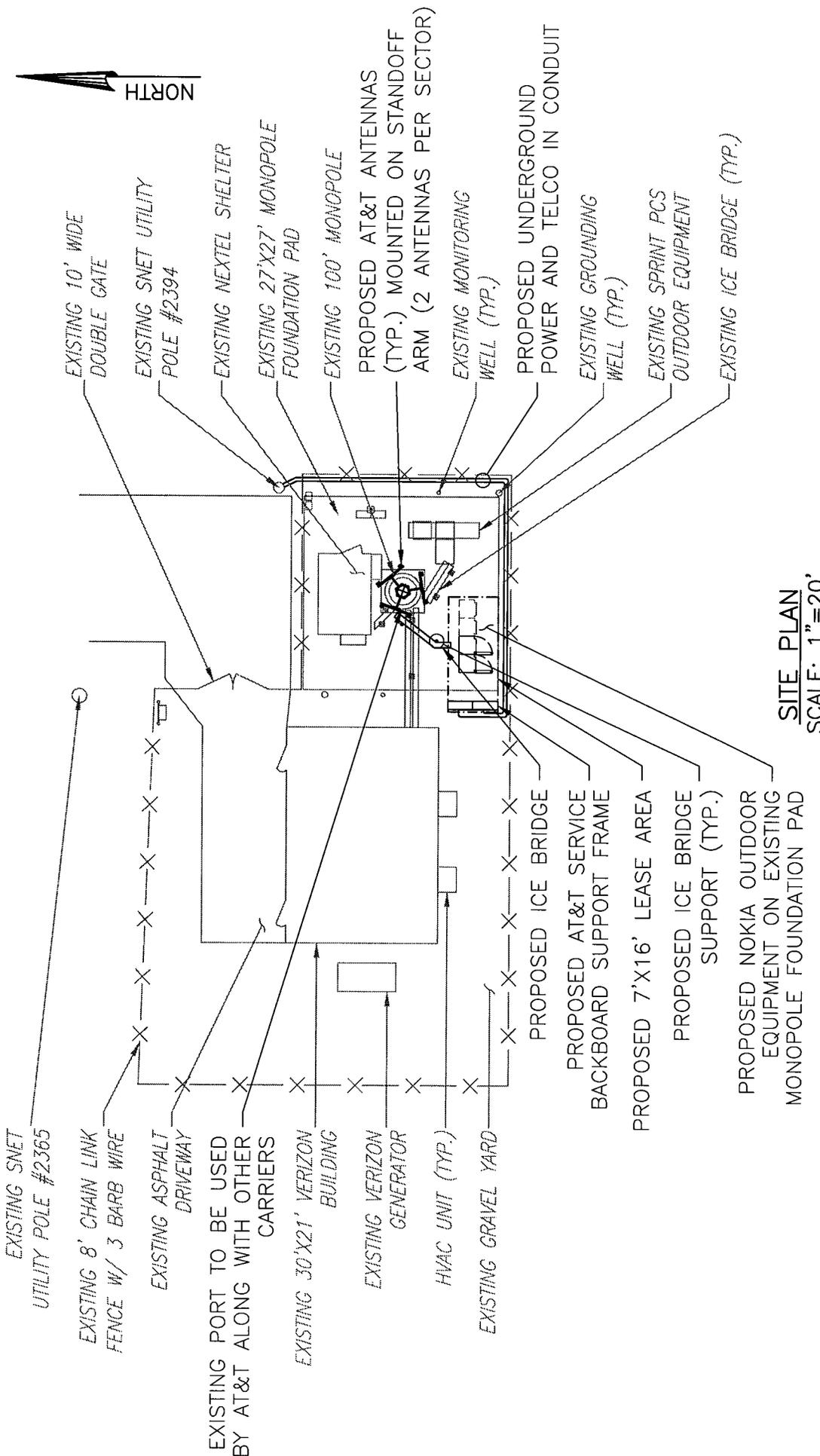
**PROPERTY OWNER:**

CROWN CASTLE  
703 HEBRON AVENUE  
GLASTONBURY, CT 06033

**DRAWING NO.**

**CT841.1-L2**

|                         |                  |
|-------------------------|------------------|
| REVISION NO. 2          | DRAWN BY: WLC    |
| DATE ISSUED: 06/20/02   | CHECKED BY: CKD  |
| SCALE: AS NOTED         | APPROVED BY: RMF |
| A/E PROJECT NO: 3125-15 |                  |



**SITE PLAN**  
SCALE: 1" = 20'



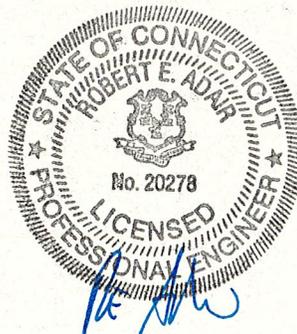
|   |  |   |   |  |
|---|--|---|---|--|
| <p><b>Drawing No.</b><br/><b>CT841.1-L1</b></p> <p>REVISION NO. 2<br/>DRAWN BY: WLC<br/>DATE ISSUED: 06/20/02<br/>CHECKED BY: CKD<br/>SCALE: AS NOTED<br/>APPROVED BY: RMF</p> <p>A/E PROJECT NO: 3125-15</p> | <p><b>DRAWING TITLE:</b><br/>LEASING PLAN</p> <p><b>PROJECT INFORMATION:</b><br/>DURHAM<br/>CT-841.1<br/>143-R OLD BLUE HILLS ROAD<br/>DURHAM, CT 06422</p> <p><b>PROPERTY OWNER:</b><br/>CROWN CASTLE<br/>703 HEBRON AVENUE<br/>GLASTONBURY, CT 06033</p> | <p><b>AT&amp;T</b></p> <p><b>AT&amp;T WIRELESS PCS, LLC</b><br/>SITE NUMBER: CT-841.1<br/>SITE NAME: DURHAM</p> | <p><b>Dewberry-Goodkind, Inc.</b><br/>A Dewberry Company<br/>59 Elm Street, Suite 101<br/>New Haven, CT 06510<br/>P: (203) 776-2277<br/>F: (203) 776-2288</p> <p>Engineers<br/>Planners<br/>Surveyors</p> |  |
|---|--|---|---|--|

**STRUCTURAL ANALYSIS REPORT  
100' VALMONT MONOPOLE TOWER  
DURHAM, CONNECTICUT**

Prepared for  
Crown Castle Atlantic

**Crown BU #806364**

May 31, 2002



APT Project #CT105560

**STRUCTURAL ANALYSIS REPORT**  
of  
**100' MONOPOLE TOWER**  
**DURHAM, CONNECTICUT**  
prepared for  
**Crown Castle Atlantic**

**EXECUTIVE SUMMARY:**

All-Points Technology Corporation, P.C. (APT) performed a structural analysis of this 100-foot monopole tower located in Durham, Connecticut. The analysis was performed for AT&T Wireless' installation of six ALP7250.03 panel antennas on a 15' platform with rails at 65'. Waveguide cables are to be twelve 7/8" cables.

Our analysis indicates the tower and foundation are capable of supporting the proposed antennas. Waveguide cables may be installed inside or banded to the outside of the pole.

**INTRODUCTION:**

A structural analysis of this communications tower was performed by All-Points Technology Corp., P.C. (APT) for Crown Castle Atlantic. The tower is located at 143 Old Blue Hills Road in Durham, Connecticut.

APT did not visit the tower site. This analysis relied on information provided by Crown Castle, which included photographs, existing antenna inventory, antennas proposed by AT&T Wireless, and Valmont design drawings.

The structure is a 100-foot, galvanized steel, two section monopole manufactured by Valmont Industries. The analysis was conducted with the following antenna inventory:

| <b>Antenna</b>                 | <b>Elev.</b> | <b>Mount</b>                      | <b>Coax.</b>     |
|--------------------------------|--------------|-----------------------------------|------------------|
| (12) ALP9212 panels            | 98'          | 15' platform with rails           | (12) 1-5/8"      |
| (4) DB809 whips, omni          | 98'          | Pipe extensions on above platform | (5) 1-5/8"       |
| 8' grid dish                   | 98'          | On above platform                 | 1-5/8"           |
| (9) DB980H90 panels            | 87'          | 15' platform with rails           | (9) 1-5/8"       |
| (3) DB809 whips                | 75'          | (2) 5' stand-offs                 | (3) 1-5/8"       |
| <b>(6) ALP7250.03 panels</b>   | <b>65'</b>   | <b>15' platform with rails</b>    | <b>(12) 7/8"</b> |
| (3) DB809 whips, yagi w/radome | 50'          | (2) 5' stand-offs                 | (4) 1-5/8"       |

**All-Points Technology Corporation, P.C.**

150 Old Westside Road  
North Conway, NH 03860  
(603) 356-5214

711 North Mountain Road  
Newington, CT 06111  
(860) 953-4444

## STRUCTURAL ANALYSIS:

### Methodology:

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

The analysis was conducted using a wind speed of 85 miles per hour and one-half inch of radial ice over the entire structure and all appurtenances. The TIA/EIA Standard requires a minimum of 85-mph wind load for Middlesex County, Connecticut.

Two analytical methods were used to evaluate the structure: a two-dimensional linear computer model developed by APT, and a P-delta analysis using CSTRAAD finite element software distributed by Digital Canal Software. The 2-D model was used to generate dead loads of the tower and all of its appurtenances, radial ice loads and the resultant wind loading. The maximum bending moments and axial loads were used to calculate combined axial and bending stresses at intervals on the monopole, which were compared to allowable stresses according to AISC and TIA/EIA.

Loads generated in the 2-D model were input into the CSTRAAD program to evaluate secondary bending moments induced during deflection of the structure under load and to independently evaluate stresses. Evaluation of secondary bending moments is required by EIA paragraph 3.1.15. Our analysis indicates that the secondary moments exceed those of the linear analysis, and therefore govern in determining the capacity of the structure.

EIA requires two loading conditions to be evaluated to determine the tower's capacity. The higher stresses resulting from the two cases is used to calculate the tower capacity:

- Case 1 = Wind Load (without ice) + Tower Dead Load (controls)
- Case 2 = **0.75** Wind Load (with ice) + Ice Load + Tower Dead Load

EIA permits a one-third increase in allowable stresses for towers less than 700-feet tall. Allowable stresses of tower members were increased by one-third in computing the load capacity values indicated herein.

---

### All-Points Technology Corporation, P.C.

150 Old Westside Road  
North Conway, NH 03860  
(603) 356-5214

711 North Mountain Road  
Newington, CT 06111  
(860) 953-4444

### ANALYSIS RESULTS:

Our analysis determined the tower will support the proposed antenna array. The following table summarizes the capacity of the tower based on combined axial and bending stresses:

| Elevation | Capacity |
|-----------|----------|
| 0'-50'    | 63%      |
| 50'-100'  | 57%      |

The capability of the existing foundation to support the proposed load was evaluated by comparing design reactions with those imposed by the proposed loading. We calculated reactions to be less than design reactions, indicating the existing foundation is adequate to support the proposed loads, provided it was designed and constructed to support original design reactions.

Base reactions imposed with the proposed antennas were calculated to be as follows:

Compression: 24.1 kips  
Total Shear: 22.0 kips  
Overturning Moment: 1533.9 ft-kips

### CONCLUSIONS AND SUGGESTIONS:

As detailed above, our analysis indicates that the existing 100' Valmont monopole tower and foundation in Durham, Connecticut are capable of supporting AT&T Wireless' proposed antenna installation.

### LIMITATIONS:

This report is based on the following:

1. Tower is properly installed and maintained.
2. All members are in new condition.
3. All required members are in place.
4. All bolts are in place and are properly tightened.
5. Tower is in plumb condition.
6. All tower members were properly designed, detailed, fabricated, and installed and have been properly maintained since erection.
7. Record drawings accurately reflect tower dimensions and height.

---

#### All-Points Technology Corporation, P.C.

150 Old Westside Road  
North Conway, NH 03860  
(603) 356-5214

711 North Mountain Road  
Newington, CT 06111  
(860) 953-4444

All-Points Technology Corporation, P.C. (APT) is not responsible for any modifications completed prior to or hereafter which APT is not or was not directly involved. Modifications include but are not limited to:

1. Adding or relocating antennas.
2. Installing antenna mounting gates or side arms.
3. Extending tower.

APT 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 the 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 APT. APT disclaims all liability for any representation, recommendation, or conclusion not expressly stated herein.

---

**All-Points Technology Corporation, P.C.**

150 Old Westside Road  
North Conway, NH 03860  
(603) 356-5214

711 North Mountain Road  
Newington, CT 06111  
(860) 953-4444





---

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

SITE ID: 907-007-841

June 11, 2002

**Prepared by AT&T Wireless Services, Inc.  
Nader Soliman RF Engineer**

## Table of Contents

|   |   |
|---|---|
| 1. INTRODUCTION .....   | 3 |
| 2. SITE DATA.....   | 3 |
| 3. RF EXPOSURE PREDICTION.....  | 3 |
| 4. FCC GUIDELINES FOR EVALUATING THE ENVIRONMENTAL EFFECTS OF RF RADIATION<br>4 |   |
| 5. COMPARISON WITH STANDARDS.....   | 4 |
| 6. CONCLUSION .....   | 4 |
| 7. FCC LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE .....                            | 5 |
| 8. EXHIBIT A .....  | 6 |
| 9. FOR FURTHER INFORMATION.....   | 7 |
| 10. REFERENCES .....  | 7 |

## 1. Introduction

This report constitutes an RF exposure analysis for the proposed AT&T Wireless antenna facility to be located at 143-R Old Blue Hills Road, Durham, CT 06422. 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: <b>Durham Central</b>            |                       |
| Number of simultaneously operating channels | <b>12</b>             |
| Type of antenna                             | <b>Allgon 7250.02</b> |
| Power per channel (Watts ERP)               | <b>250.0</b> Watts    |
| Height of antenna (feet AGL)                | <b>65.00</b> feet     |
| Antenna Aperture Length                     | <b>5</b> 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>:

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

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.

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

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>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 ( $cm^2$ ). 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.<sup>2</sup> 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 0.056561 mW/cm<sup>2</sup> which occurs at 21 feet from the antenna facility. The chart in exhibit A also shows that the power density is only 0.005468 mW/cm<sup>2</sup> 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*

| <i>Frequency</i> | <i>Public/Uncontrolled</i> | <i>Occupational/controlled</i> | <i>Maximum power density at Accessible location</i> |
|------------------|----------------------------|--------------------------------|---|
| Cellular         | .580 mW/cm <sup>2</sup>    | 2.9 mW/cm <sup>2</sup>         | 0.056561 mW/cm <sup>2</sup>                         |
| PCS              | 1 mW/cm <sup>2</sup>       | 5 mW/cm <sup>2</sup>           |   |

The maximum power density at the proposed facility represents only 18.00% of the public MPE limit for PCS frequencies.

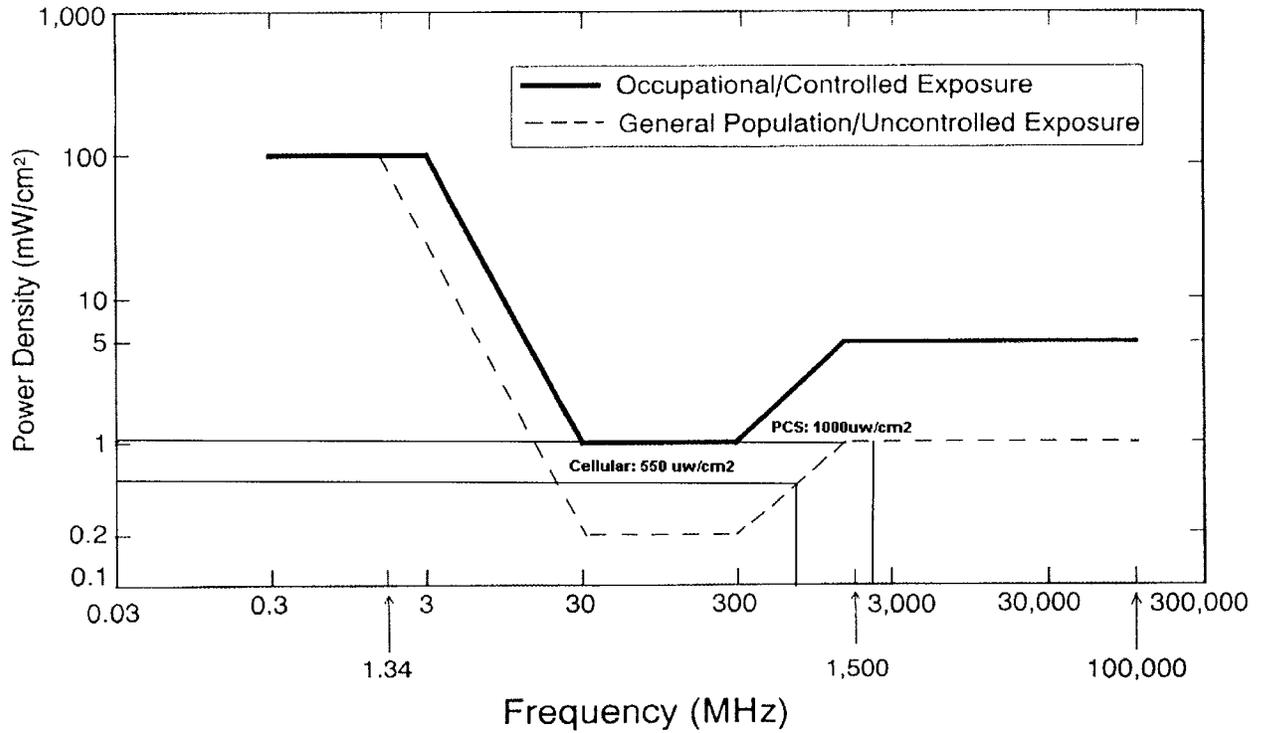
#### 6. Conclusion

This analysis show that the maximum power density in accessible areas at this location is 0.056561 mW/cm<sup>2</sup>, a level of RF energy that is well below the Maximum Permissible Exposure limit established by the FCC.

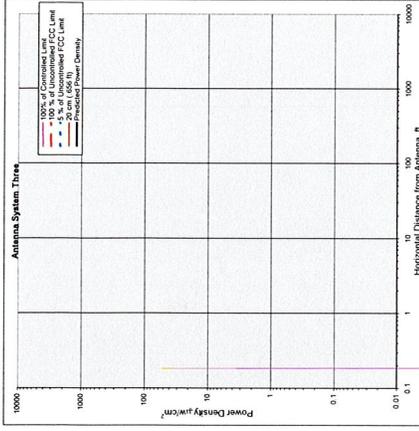
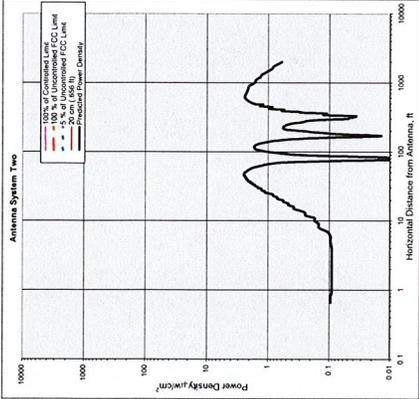
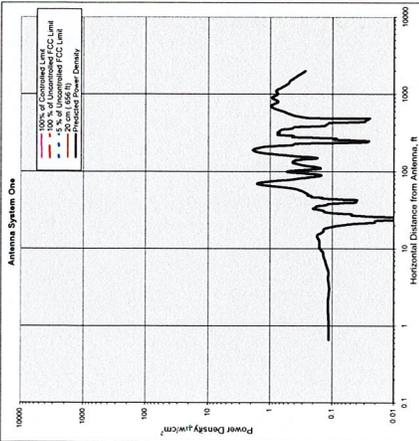
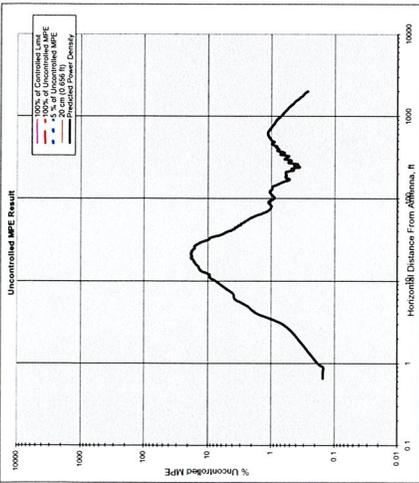
<sup>2</sup> 47 U.S. C. Section 332 ( c ) (7)(B)(iv) states that “[n]o State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the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

### 7. FCC Limits for Maximum Permissible Exposure

FCC Limits for Maximum Permissible Exposure (MPE)  
*Plane-wave Equivalent Power Density*



**8. Exhibit A**



**Number of Antenna Systems:** 7

**Meets FCC Controlled Limits for The Antenna Systems:**

**Meets FCC Uncontrolled Limits for The Antenna Systems:**

**Meets 5% of the FCC Uncontrolled Limits beyond 40 feet from the Antenna Systems:**

**No Further Maximum Permissible Exposure (MPE) Analysis Required.**

|  |                    |               |
|--|--------------------|---------------|
| Power Density  | mW/cm <sup>2</sup> | @Horiz. Dist. |
| Maximum Power Density  | 0.056561           | % of limit    |
|  | 18.00              | feet          |
|  | 21.00              | feet          |
| 5.55 times lower than the MPE limit for uncontrolled environment |                    |               |
| Composite Power (ERP)  | = 20,900.00        | Watts         |

**Site ID:** 907-007-841  
**Site Name:** Durham Central  
**Site Location:** 143-R Old Blue Hill Road  
 Durham, CT 06422

**Performed By:** Nader Soliman  
**Date:** 6/11/02

**Antenna System One**

|  |         |                |
|--|---------|----------------|
| Frequency  | units   | Value          |
| # of Channels                                    | MHz     | 1945.00        |
| Max ERP/Ch                                       | Watts   | 250.00         |
| Max Pwr/Ch Into Ant.                             | Watts   | 5.60           |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | feet    | 65.00          |
| Calculation Point (above ground or roof surface) | feet    | 0.00           |
| Antenna Model No.                                |         | Alpion 7250.02 |
| Max Ant. Gain                                    | dBd     | 16.50          |
| Down tilt  | degrees | 2.00           |
| Miscellaneous Att.                               | dB      | 0.00           |
| Height of aperture                               | feet    | 5.11           |
| Ant. H/W   | degrees | 65.00          |
| Distance to Antenna                              | feet    | 62.43          |
| WDS?   | Y/N/P   | n              |

**Ant System ONE Owner:** AT&T  
**Sector:** 3  
**Admuth:** 50/170/290

**Antenna System Two**

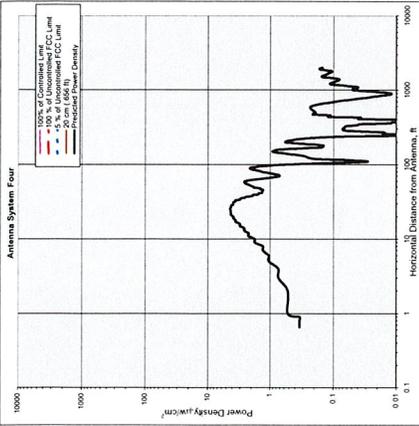
|  |         |          |
|--|---------|----------|
| Frequency  | units   | Value    |
| # of Channels                                    | MHz     | 870.00   |
| Max ERP/Ch                                       | Watts   | 250.00   |
| Max Pwr/Ch Into Ant.                             | Watts   | 18.53    |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | feet    | 100.00   |
| Calculation Point (above ground or roof surface) | feet    | 0.00     |
| Antenna Model No.                                |         | ALP942.2 |
| Max Ant. Gain                                    | dBd     | 11.30    |
| Down tilt  | degrees | 0.00     |
| Miscellaneous Att.                               | dB      | 0.00     |
| Height of aperture                               | feet    | 4.90     |
| Ant. H/W   | degrees | 33.00    |
| Distance to Antenna                              | feet    | 39.00    |
| WDS?   | Y/N/P   | n        |

**Ant System TWO Owner:** Bell Atlantic Mobile  
**Sector:** 3  
**Admuth:** 07/120/240

**Antenna System Three**

|  |         |                 |
|--|---------|-----------------|
| Frequency  | units   | Value           |
| # of Channels                                    | MHz     | 450.00          |
| Max ERP/Ch                                       | Watts   | 100.00          |
| Max Pwr/Ch Into Ant.                             | Watts   | 0.01            |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | feet    | 103.00          |
| Calculation Point (above ground or roof surface) | feet    | 0.00            |
| Antenna Model No.                                |         | Cherwell Master |
| Max Ant. Gain                                    | dBd     | 40.00           |
| Down tilt  | degrees | 0.00            |
| Miscellaneous Att.                               | dB      | 0.00            |
| Height of aperture                               | feet    | 2.00            |
| Ant. H/W   | degrees | 1.90            |
| Distance to Antenna                              | feet    | 102.00          |
| WDS?   | Y/N/P   | n               |

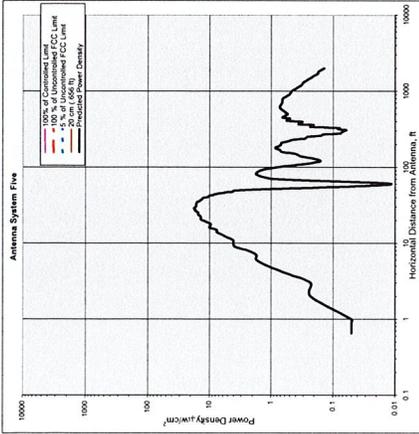
**Ant System Three Owner:** Town of Durham  
**Sector:** 1  
**Admuth:** 45



Antenna System Four

| units  | Value      |
|--|------------|
| Frequency  | 851.00     |
| # of Channels                                    | 16         |
| Max ERP/Ch                                       | 250.00     |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | 314.7      |
| Calculation Point (above ground or roof surface) | 0.00       |
| Antenna Model No.                                | DB6094E-XT |
| Max Ant Gain                                     | 9.00       |
| Down tilt  | 0.00       |
| Miscellaneous ATT.                               | 0.00       |
| Height of aperture                               | 9.00       |
| Ant IRW  | 360.00     |
| Distance to Ant <sub>horiz</sub>                 | 107.50     |
| WOST   | Y/N        |
|  | n          |

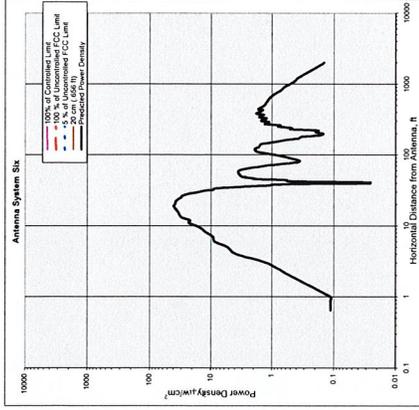
Ant System Four Owner: Nextel  
Sector: 3  
Asmtch: 01/20/240



Antenna System Five

| units  | Value  |
|--|--------|
| Frequency  | 450.00 |
| # of Channels                                    | 4      |
| Max ERP/Ch                                       | 400.00 |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | 89.55  |
| Calculation Point (above ground or roof surface) | 0.00   |
| Antenna Model No.                                | DB609  |
| Max Ant Gain                                     | 6.50   |
| Down tilt  | 0.00   |
| Miscellaneous ATT.                               | 0.00   |
| Height of aperture                               | 6.60   |
| Ant IRW  | 360.00 |
| Distance to Ant <sub>horiz</sub>                 | 71.70  |
| WOST   | Y/N    |
|  | n      |

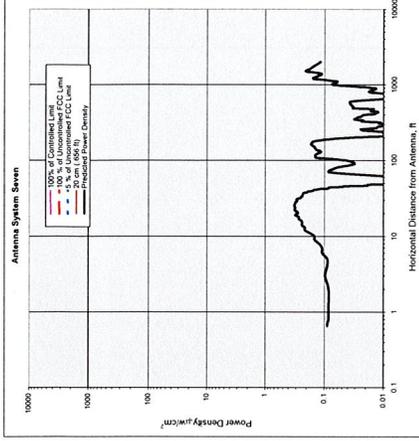
Ant System Five Owner: Town of Durham  
Sector: 2  
Asmtch: 0/180



Antenna System Six

| units  | Value  |
|--|--------|
| Frequency  | 450.00 |
| # of Channels                                    | 4      |
| Max ERP/Ch                                       | 400.00 |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | 89.55  |
| Calculation Point (above ground or roof surface) | 0.00   |
| Antenna Model No.                                | DB609  |
| Max Ant Gain                                     | 6.50   |
| Down tilt  | 0.00   |
| Miscellaneous ATT.                               | 0.00   |
| Height of aperture                               | 6.60   |
| Ant IRW  | 360.00 |
| Distance to Ant <sub>horiz</sub>                 | 467.9  |
| WOST   | Y/N    |
|  | n      |

Ant System Six Owner: Town of Durham  
Sector: 2  
Asmtch: 0/180



Antenna System Seven

| units  | Value          |
|--|----------------|
| Frequency  | 1962.50        |
| # of Channels                                    | 12             |
| Max ERP/Ch                                       | 250.00         |
| Max Pwr/Ch Into Ant. (Center of Radiator)        | 4.55           |
| Calculation Point (above ground or roof surface) | 0.00           |
| Antenna Model No.                                | DPA 4900/49010 |
| Max Ant Gain                                     | 17.40          |
| Down tilt  | 0.00           |
| Miscellaneous ATT.                               | 0.00           |
| Height of aperture                               | 17.40          |
| Ant IRW  | 60.00          |
| Distance to Ant <sub>horiz</sub>                 | 81.20          |
| WOST   | Y/N            |
|  | n              |

Ant System Seven Owner: Sprint PCS  
Sector: 3  
Asmtch: 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](mailto:rfsafety@fcc.gov)  
RF Safety Web Site: [www.fcc.gov/oet/rfsafety](http://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.

## CUDDY &amp; FEDER &amp; WORBY LLP

90 MAPLE AVENUE  
WHITE PLAINS, NEW YORK 10601-5196

(914) 761-1300

TELECOPIER (914) 761-5372/6405

www.cfwlaw.com

500 FIFTH AVENUE  
NEW YORK, NEW YORK 10110  
(212) 944-2841  
TELECOPIER (212) 944-2843

WESTAGE BUSINESS CENTER  
300 SOUTH LAKE DRIVE  
FISHKILL, NEW YORK 12524  
(845) 898-2229  
TELECOPIER (845) 898-3672

STAMFORD, CONNECTICUT  
NORWALK, CONNECTICUT

CUDDY & FEDER  
1971-1995

WILLIAM S. NULI  
DAWN M. FURNEY  
ELIZABETH BARLOW  
NATHAN T. PERASKY  
DUSTIN F. BOUTIN  
JENNIFER L. VAN DUZEN  
CHRISTOPHER L. WALKER (also CA)  
ROBERT C. WOLFE  
DAVID E. WOLFORD

— OF Counsel —

MICHAEL R. HOLLMAN  
ANDREW A. GIBSON (also CT)  
ROBERT L. OSATI (also NY)  
MAYNARD M. PALERMO  
ROBERT C. SCHNEIDER  
LOUIS R. TARTAGLIA

FRANK J. ALLEN (also CT)  
CHRISTOPHER J. BARNICO (also MD)  
THOMAS R. BRIDGES (also MD)  
THOMAS M. BUCHHEIM  
JOSEPH P. CALUGOCI  
BERNARD J. CHAIKOFF  
ROBERT J. COHEN  
CHRISTOPHER D. FISHER (also CT)  
ANTHONY D. GELBERG (also CT)  
SEAN R. H. GIBSON  
KATHLEEN GIBSON  
JACQUELINE GIBSON  
WAYNE E. GULLICK (also CT)  
CHRISTOPHER HUBERT  
MICHAEL J. KATZ (also NJ)  
JENNIFER K. KATZ (also CT)  
DANIEL F. LEVINE (also CT)  
DANNY E. LONG

July 10, 2002

VIA FACSIMILE (860) 827-2950  
Chairman Mortimer A. Golston and  
Members of the Siting Council  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

Re: EM-AT&T-038-020626, Durham, CT

Dear Chairman and Members of the Council:

Thank you for forwarding us the July 8, 2002 letter your Council received from Maryann Board the First Selectwoman of the Town of Durham which was submitted in response to AT&T's recent filing. We are writing to you on behalf of AT&T and in response thereto.

As you know, the Town of Durham is a tenant of Crown Castle's and maintains several communications antennas at various heights on the existing tower located at 143-R Old Blue Hills Road in the Town. Upon review of the First Selectwoman's letter, we understand it to have been offered primarily with respect to the Town's proprietary interests as a tenant on the tower and concomitant need to ensure safe and effective municipal and emergency communications in the Town. This as opposed to any governmental objection to AT&T's proposed shared use of the existing tower.

Upon receipt of the First Selectwoman's letter yesterday, I made several telephone calls to my client and representatives of the tower owner, Crown Castle, to discuss its contents. I was advised that during the course of AT&T's negotiations with Crown Castle for space on the tower, Crown representatives did in fact speak with Mr. Scott Wright, the Town's Communications

## CUDDY &amp; FEDER &amp; WORBY LLP

July 11, 2002

Page 2

Officer about AT&T's proposed improvements and the minor modifications to the facility which include reconfiguration of a municipal whip antenna currently mounted downward at the 75' level. While the modifications which would allow AT&T to install antennas at the 65' level were apparently approved in concept, Mr. Wright was expecting further follow up including the provision of an internodulation study that had been ordered to satisfy the Town's interference concerns. For some reason, a copy of that report was not provided to Mr. Wright in advance of AT&T's recent notice of exempt modification.

Regardless, it is my understanding that Crown representatives contacted Mr. Wright yesterday to further discuss the proposed modifications. Additionally, that a copy of the internodulation study is being provided for Mr. Wright's review and consideration. We are confident that based on the study, which was apparently prepared in early May, the Town's interference concerns associated with AT&T's facility will be satisfied.

With respect to purported inaccuracies in the filing itself, we are not aware of any and the information contained therein is based on prior filings and information obtained from the tower owner. To the extent any specific inaccuracies in the filing are identified based on follow up conversations by Crown representatives with Mr. Wright, our client will be happy to correct them. It should nevertheless be noted that all communications with the Town as they may relate to its tenancy on the tower are and should continue to be through Crown representatives given that AT&T is not the tower owner and simply another proposed tenant.

Given all of the foregoing, AT&T has no objection to the Council's tabling acknowledgement of the above referenced notice until its next meeting. In the intervening period of time, we intend to work with the Town through Crown to address any outstanding concerns they might have to ensure both the continued efficacy of the Town's emergency communications system and AT&T's ability to share use of the tower. In this regard, we note that given the current antenna configurations on this 100' tower, it is highly unlikely that AT&T would be able to share use of the tower without the inverted municipal whip being reconfigured to free up tower space at the 65' level. That in turn could necessitate the need for construction of a new tower, a result our client is seeking to avoid altogether.

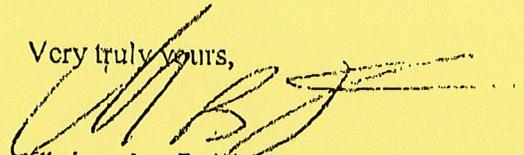
CUDDY & FEDER & WORBY LLP

July 10, 2002

Page 3

Thank you for your consideration of the foregoing.

Very truly yours,



Christopher B. Fisher

cc: Maryann P. Boord, First Selectwoman  
Molly Steiger, Crown Castle  
Joanna DesJardins, AT&T Wireless

**CUDDY & FEDER & WORBY LLP**90 MAPLE AVENUE  
WHITE PLAINS, NEW YORK 10601-5196

(914) 761-1300

TELECOPIER (914) 761-5372/6405

www.cfwlaw.com

500 FIFTH AVENUE  
NEW YORK, NEW YORK 10110  
(212) 844-2841  
TELECOPIER (212) 944-2843WESTAGE BUSINESS CENTER  
300 SOUTH LAKE DRIVE  
FISHKILL, NEW YORK 12524  
(845) 896-2228  
TELECOPIER (845) 896-3672STAMFORD, CONNECTICUT  
NORWALK, CONNECTICUT**CUDDY & FEDER**  
1971-1895WILLIAM S. NULL  
DAWN M. PORTNEY  
ELISABETH N. RADOW  
NEIL T. RIMSKY  
RUTH E. ROTH  
JENNIFER L. VAN TUYL  
CHAUNCEY L. WALKER (also CA)  
ROBERT L. WOLFE  
DAVID E. WORBYOf Counsel  
MICHAEL R. EDELMAN  
ANDREW A. GLICKSON (also CT)  
ROBERT L. OSAR (also TX)  
MARYANN M. PALERMO  
ROBERT C. SCHNEIDER  
LOUIS H. TAFFERANEIL J. ALEXANDER (also CT)  
CHARLES T. BAZYDLO (also NJ)  
THOMAS R. BEIRNE (also DC)  
THOMAS M. BLOOMER  
JOSEPH P. CARLUCCI  
KENNETH J. DUBROFF  
ROBERT FEDER  
CHRISTOPHER B. FISHER (also CT)  
ANTHONY B. GIÖFFRE III (also CT)  
SUSAN E.H. GORDON  
KAREN G. GRANIK  
JOSHUA J. GRAUER  
WAYNE E. HELLER (also CT)  
KENNETH F. JURIST  
MICHAEL L. KATZ (also NJ)  
JOSHUA E. KIMERLING (also CT)  
DANIEL F. LEARY (also CT)  
BARRY E. LONG

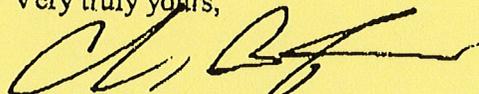
July 31, 2002

VIA FACSMILE (860) 827-2950  
Chairman Mortimer A. Gelston and  
Members of the Siting Council  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051Re: EM-AT&T-038-020626, Durham, CT

Dear Chairman and Members of the Council:

Please be advised that Crown representatives are still working with the Town of Durham Communications Officer to address his concerns with respect to the above referenced matter. As such, we respectfully request that this matter be tabled until the next agenda of the Council. Thank you for your consideration of the foregoing.

Very truly yours,



Christopher B. Fisher

cc: Maryann P. Boord, First Selectwoman  
Molly Steiger, Crown Castle  
Joanne DesJardins, AT&T Wireless

# CUDDY & FEDER & WORBY LLP

90 MAPLE AVENUE  
WHITE PLAINS, NEW YORK 10601-5196

CUDDY & FEDER  
1971-1098

(914) 761-1300  
TELECOPIER (914) 761-5372/6405  
www.cfwlaw.com

500 FIFTH AVENUE  
NEW YORK, NEW YORK 10110  
(212) 944-2841  
TELECOPIER (212) 944-2843

WESTAGE BUSINESS CENTER  
300 SOUTH LAKE DRIVE  
FISHKILL, NEW YORK 12524  
(845) 898-2229  
TELECOPIER (845) 898-3872

STAMFORD, CONNECTICUT  
NORWALK, CONNECTICUT

WILLIAM B. HULL  
DAWN M. TORRINO  
FRANZISKA MADON  
NGIL T. ROMEY  
RUTH C. ROTH  
JENNIFER J. VAN TUY  
CHANCEY L. YAMKITI (also CA)  
ROBERT L. WOLFE  
DAVID E. WORBY

OF COUNSEL  
MICHAEL D. FOLLMAN  
ANDREW A. GUICKSON (also CT)  
ROBERT L. COAR (also TX)  
MADYAN M. FAHMY  
ROBERT C. SQUILLAR  
LOUIS R. TALLERA

NEEL AGGARWAL (also CT)  
CHRISTOPHER T. BAZZANO (also NY)  
THOMAS R. BROWN (also NY)  
THOMAS A. BURKE  
JOSEPH P. CASARCI  
KENNETH J. COLEMAN  
DAVID J. COLEMAN  
DAVID J. COLEMAN  
ANTHONY J. CROTTY (also CT)  
DORIS L. H. CULLEN  
KATHLEEN J. GIBSON  
JOSHUA J. HANCOCK  
WALTER E. H. H. HANCOCK  
KENNETH L. JAMES  
MICHAEL J. JAY (also NY)  
JOSHUA T. KAPLAN (also CT)  
DANIEL P. KATZ (also CT)  
BRIAN E. KATZ

August 14, 2002

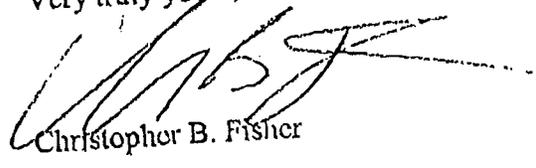
Via Facsimile  
Mr. S. Derek Phelps, Executive Director  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051

Re: AT&T Wireless PCS, LLC -- Agenda Items No. 15 & 21  
Petition No. 575 & EM-AT&T-038-020626

Dear Mr. Phelps:

We would respectfully request that the above referenced matters be tabled from tomorrow's agenda until the next meeting of the Council. At Monday's site visit on Petition No. 575, additional information was requested which AT&T's engineers and professionals are currently preparing. With respect to EM-AT&T-038-020626, Crown representatives advise us that they are still working with the Town to address reconfiguration of antennas on the tower in order to accommodate AT&T's proposed facility. Thank you for your consideration of the foregoing.

Very truly yours,



Christopher B. Fisher

cc: Robert Mercier  
Bill Kozell  
Joanne DesJardins



Crown Castle Atlantic LLC  
New England Region  
500 West Cummings Park, Suite 3300  
Woburn, MA 01801

Tel 781 729.3838  
Fax 781 729.3511  
www.crowncastle.com

9-3-02

Connecticut Siting Council  
10 Franklin Square  
New Britain, CT 06051

Dear Mortimer J. Gelston and Members of the Siting Council:

The Durham monopole was analyzed by Allpoints Technology Corp., P.C. on 5-31-02. This analysis showed that the structure had 37% remaining capacity with AT&T installed at 65'. The new proposal to install AT&T at 75' will not differ significantly in this regard and the monopole will have additional capacity even after AT&T's installation. As a standard practice, we typically do not run an engineering analysis on structures that have more than 5% remaining capacity.

Thank you for your consideration in this matter.

Sincerely,

Lincoln B. Erhardt  
Asset Management



# Town of Durham

OFFICE OF THE FIRST SELECTWOMAN

**PRIDE in the Past,  
FAITH in the future.**

July 8, 2002

**Maryann P. Boord  
First Selectwoman**

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

VIA FACSIMILE: 860-827-2950

Dear Chairman Gelston:

My Office recently received a Notice of Intent to Modify an Existing Telecommunications Facility from AT&T Wireless. This Notice of Intent concerns certain modifications that AT&T Wireless evidently would like to make to a facility located on Old Blue Hill Road in the Town of Durham.

This facility is extremely important to public safety telecommunications in the Town of Durham. As you may recall, with the cooperation of, then, Bell Atlantic Mobile, the town was able to locate several antennas on this tower when it was constructed. The excellent cooperation between the Town and Verizon continues to this day. Crown Castle, USA, the subsequent owner of the tower, has also been cooperative with town needs.

The Town of Durham has many serious concerns with the proposal as submitted by AT&T Wireless. Our Communications Coordinator has reported that the Notice by AT&T Wireless contains numerous inaccuracies as it relates to municipal use of this facility. He also reports that should the modifications be permitted as proposed, that municipal communications will be very negatively impacted. He also reports that the proposed location of the AT&T Wireless platform will significantly negatively impact the current municipal antennas located at the fifty-foot level. Additionally, he points out that the applicant proposes to relocate an existing municipal antenna invert mounted at seventy-five feet to the municipal platform at seventy-five feet. There is no existing platform at seventy-five feet. Their proposed relocation evidently does not take into account the potential problems that this relocation will create.

Perhaps what is most troubling about this application is that there was no consultation with our communications coordinator prior to the submission of the Notice of Intent. The integrity of existing municipal operations evidently was not considered. While we are not adverse to the concept of tower sharing, the negative impact that this application, as proposed, will have on municipal public safety communications is overwhelming.

We respectfully request that, based on the tremendously adverse affect on public safety communications, the Connecticut Siting Council deny this Notice of Intent for tower sharing at this facility until such time that our concerns are fully addressed.

Sincerely,

Maryann P. Boord  
First Selectwoman

MPB:DDA

cc: Scott Wright, Communications Officer





# Town of Durham

OFFICE OF THE FIRST SELECTWOMAN

*PRIDE in the Past,  
FAITH in the future.*

*Maryann P. Boord  
First Selectwoman*

May 20, 2003

Optisite  
Ms. Hollis Redding  
41 Sequin Drive  
Glastonbury, CT 06033

**RECEIVED**  
MAY 22 2003  
CONNECTICUT  
SITING COUNCIL

RE: Connecticut Siting Council EM-AT&T-038-020626

Dear Ms. Redding:

Provided that the provisions outlined by our Communications Coordinator in his e-mail of March 24, 2003 to Jim Albani, Property Specialist of Crown Atlantic, are explicitly followed without exception, we believe that our previous concerns will be adequately addressed. Please note that any changes will require the approval of our Communications Coordinator in advance. This is contingent upon our approval of the final construction plans, including the antenna mounting locations, and satisfactory arrangements for the procurement of material or services necessary to complete the work as proposed.

Please feel free to contact our Communications Coordinator, Scott Wright, with any questions regarding this issue. He can be reached at (860) 558-2163.

If you have any questions, please do not hesitate to contact me at 860 349-3625.

Sincerely,

Maryann P. Boord,  
First Selectwoman

cc: S. Wright  
S. Derek Phelps, Executive Director, Connecticut Siting Council ✓

**Subject:** Durham, CT

**From:** "Albani, Jim" <Jim.Albani@crowncastle.com>

**Date:** Mon, 19 May 2003 12:12:50 -0400

**To:** "'scott.wright@comcast.net'" <scott.wright@comcast.net>

**CC:** "Barbadora, Jeff" <Jeff.Barbadora@crowncastle.com>, "Rand, Tara" <Tara.Rand@crowncastle.com>

Scott:

As we recently discussed, please move ahead with the understanding that AT&T, through their consultant - Optisite, would like to collocate on the above referenced tower with the multicooupler work as quoted on the March 24, 2003 email. I spoke with Ms. Hollis Redding earlier this morning and she confirmed that their intentions are to move forward with the work as described on the estimate.

If you could speak with the First Selectwoman and have her send a letter relative to the resolution of the interference issue to Optisite they will use that letter with the Siting Council to collocate. The address to send the letter is as follows:

Optisite  
Ms. Hollis Redding  
41 Sequin Drive  
Glastonbury, CT 06033

Thank you for your time.

Respectfully,

Jim

Albani

Crown Atlantic

Property Specialist

Northeast Region

(781) 729-5688 office

(781) 789-7114 cell

**Subject:** cost estimates

**From:** Scott Wright <scott.wright@comcast.net>

**Date:** Mon, 24 Mar 2003 19:21:41 -0500

**To:** Jim Albiani <Jim.Albiani@crowncastle.com>

Thank you for your phone call earlier.

Attached is the document that I e-mailed to Rob regarding this project.

Our goal is to make reasonable accommodations to accommodate the wireless carrier while taking reasonable engineering steps to ensure little or no interference or loss of functionality of the existing town installation. I believe our proposal accomplishes both the Town's objectives as well as what I am sure are the carrier's objectives to obtain space and improve coverage at minimal cost, especially when considered against the alternatives. As is indicated, some of the costs indicated are list prices and I am confident that they can be reduced, in some cases considerably, with discounts available.

There is a good deal of history regarding this proposal and I am not sure how much of this history you have been made aware of. We have had to work very hard and have logged many, many hours regarding this proposal. Fortunately, we can much of this "in house" and can avoid having to turn this situation over to rather well compensated consultants.

Also potentially impacting this issue is the Siting Council recommendation for the placement of Town antennas at the top of the tower and the Nextel agreement of June 8, 1999. I have attached documents relative to this. Please note that since the time of these letters (going on 4 years ago now) that the products of choice have changed from those indicated in the documents due to new technology.

I look forward to working with you and the wireless carrier to maximize the potential of the existing site for the benefit of all involved..

If you have any questions, please feel free to contact me at 860-558-2163.

Scott Wright

## Cost Estimates

### Co-Location Proposal

Old Blue Hill Road, Durham, Connecticut

This Cost Estimate provides the estimated equipment required to allow AT&T Wireless to share 75' level with Town of Durham without loss of existing functionality and flexibility to the Town and implementing appropriate engineering to prevent interference both to and from Town equipment.

The following are cost estimates only and do not reflect installation of antennas, cables, grounding kits, or connectors nor associated equipment such as clamps, pipes, etc. Applicant to provide tower stress/load analysis, if required, and provide remedy for any deficiencies found as a result of such analysis.

#### MATERIAL

|                              |             |
|------------------------------|-------------|
| Antennas, Cables, Connectors | \$9900.00*  |
| Frequency Coordination       | \$1500.00   |
| Combiner/Multicoupler        | \$16000.00* |
| Antenna System Monitor       | \$4720.00*  |
| Total - Material             | \$32,120.00 |

#### LABOR\*\*

|  |           |
|--|-----------|
| Licensing Form Completion (approx 10 hours)          | \$1250.00 |
| Engineering, site visits, research (approx 30 hours) | \$3780.00 |
| Modifications to existing equipment                  | \$750.00  |
| On Site Representative during work (2 days)          | \$1200.00 |
| Total - Labor/Engineering                            | \$6980.00 |

#### NOTES:

(\* List prices given - substantial discounts possible)

(\*\* In consideration of large amount of time spent on this issue, and in lieu of payment of labor, a donation of equipment should be made to the Durham Local Emergency Planning Committee)

All antennas, transmission lines, and connectors must be swept and found to have less than 16db return loss. A reference copy of all tests are to be left with the Town representative.

The TX/RX 101-68-10-3-01N antenna must be mounted at the 100' level, free from nearby obstructions, and must be mounted, swept, and accepted prior to any other work that would disrupt any other existing Town antenna. If this is not possible, it will be necessary to re-engineer and provide for off-site backup at substantial additional cost.

All work to be done in accordance with tower owner requirements and must be professional, neat, and in accordance with industry standards.

Combiner/Multicoupler is to be TX/RX, specific pass frequencies to be provided. No substitutions. Transmission cable to be Andrew or Cablewave, no substitutions unless approved in advance.

Antenna mounting positions to be confirmed with Town representative prior to work initiation.

All removed Town antennas to returned to Town representative. Care is to be exercised when antennas removed to prevent damage.

Town representative to be notified 2 weeks prior to construction in order to be on site during construction. A Town representative must be on site during any work involving Town equipment, including antennas, transmission line, etc.

#### ANTICIPATED TOWER WORK INSTALL:

TX/RX 101-68-10-3-01N mounted at top as above, with 7/8" minimum transmission line to shelter, with appropriate grounding kits (top, transition to cable tray, exterior of building), cables to be secured appropriately to cable tray, cable terminated inside of building at same location as other town cables, weatherproofing to be applied in accordance with industry standards. Connectors to be installed at either end of cable. Cables to be marked as per tower site owner standards.

Decibel Products DB636 mounted at 75' level, with 7/8" minimum transmission line to shelter, with appropriate grounding kits (top, transition to cable tray, exterior of building), cables to be secured appropriately to cable tray, cable terminated inside of building at same location as other town cables, weatherproofing to be applied in accordance with industry standards. Connectors to be installed at either end of cable. Cables to be marked as per tower site owner standards.

Re-install existing Decibel Products DB633 antenna, invert mounted, at the 50' level. To share mount with existing antenna. Existing transmission line can be used.

#### REMOVE:

Existing Telewave ANT450F6 at 75' (x2)  
Associated transmission cables

CUDDY & FEDER LLP

90 MAPLE AVENUE  
WHITE PLAINS, NEW YORK 10601-5196

WILLIAM V. CUDDY  
1971-2000

NEIL J. ALEXANDER (also CT)  
CHARLES T. BAZYDLO (also NJ)  
THOMAS R. BEIRNE (also DC)  
THOMAS M. BLOOMER  
JOSEPH P. CARLUCCI  
LUCIA CHIOCCCHIO (also CT)  
ROBERT DISIENA  
KENNETH J. DUBROFF  
ROBERT FEDER  
CHRISTOPHER B. FISHER (also CT)  
ANTHONY B. GIOFFRE III (also CT)  
SUSAN E.H. GORDON  
KAREN G. GRANIK  
JOSHUA J. GRAUER  
KENNETH F. JURIST  
MICHAEL L. KATZ (also NJ)  
JOSHUA E. KIMERLING (also CT)  
DANIEL F. LEARY (also CT)  
BARRY E. LONG

(914) 761-1300  
FACSIMILE (914) 761-5372/6405  
www.cfvlaw.com

500 FIFTH AVENUE  
NEW YORK, NEW YORK 10110  
(212) 944-2841  
FACSIMILE (212) 944-2843

WESTAGE BUSINESS CENTER  
300 SOUTH LAKE DRIVE  
FISHKILL, NEW YORK 12524  
(845) 896-2229  
FACSIMILE (845) 896-3672

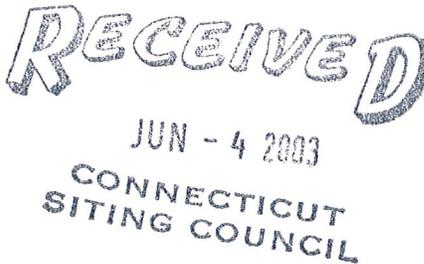
NORWALK, CONNECTICUT

WILLIAM S. NULL  
DAWN M. PORTNEY  
ELISABETH N. RADOW  
NEIL T. RIMSKY  
RUTH E. ROTH  
JONATHAN S. SAUL (also NJ)  
JENNIFER L. VAN TUYL  
CHAUNCEY L. WALKER (also CA)

Of Counsel  
ANDREW A. GLICKSON (also CT)  
ROBERT L. OSAR (also TX)  
MARYANN M. PALERMO  
ROBERT C. SCHNEIDER

June 2, 2003

VIA FACSMILIE (860) 827-2950  
Chairman Pamela Katz and  
Members of the Siting Council  
Connecticut Siting Council  
10 Franklin Square  
New Britain, Connecticut 06051



Re: EM-AT&T-038-020626, Durham, CT

Dear Chairman and Members of the Council:

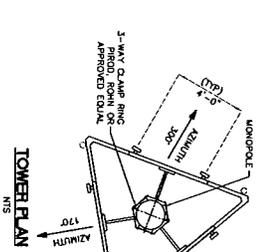
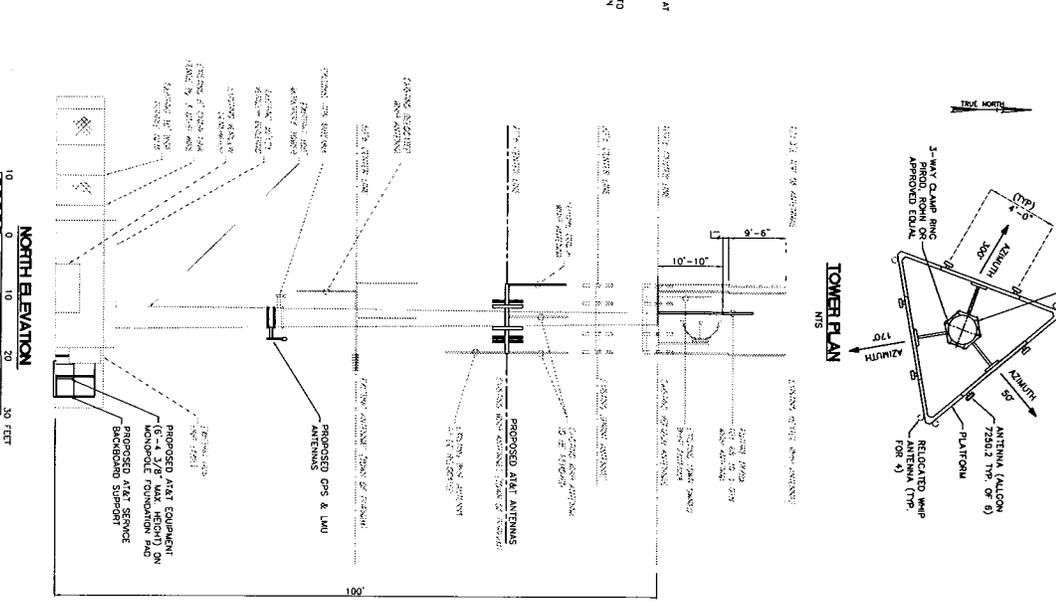
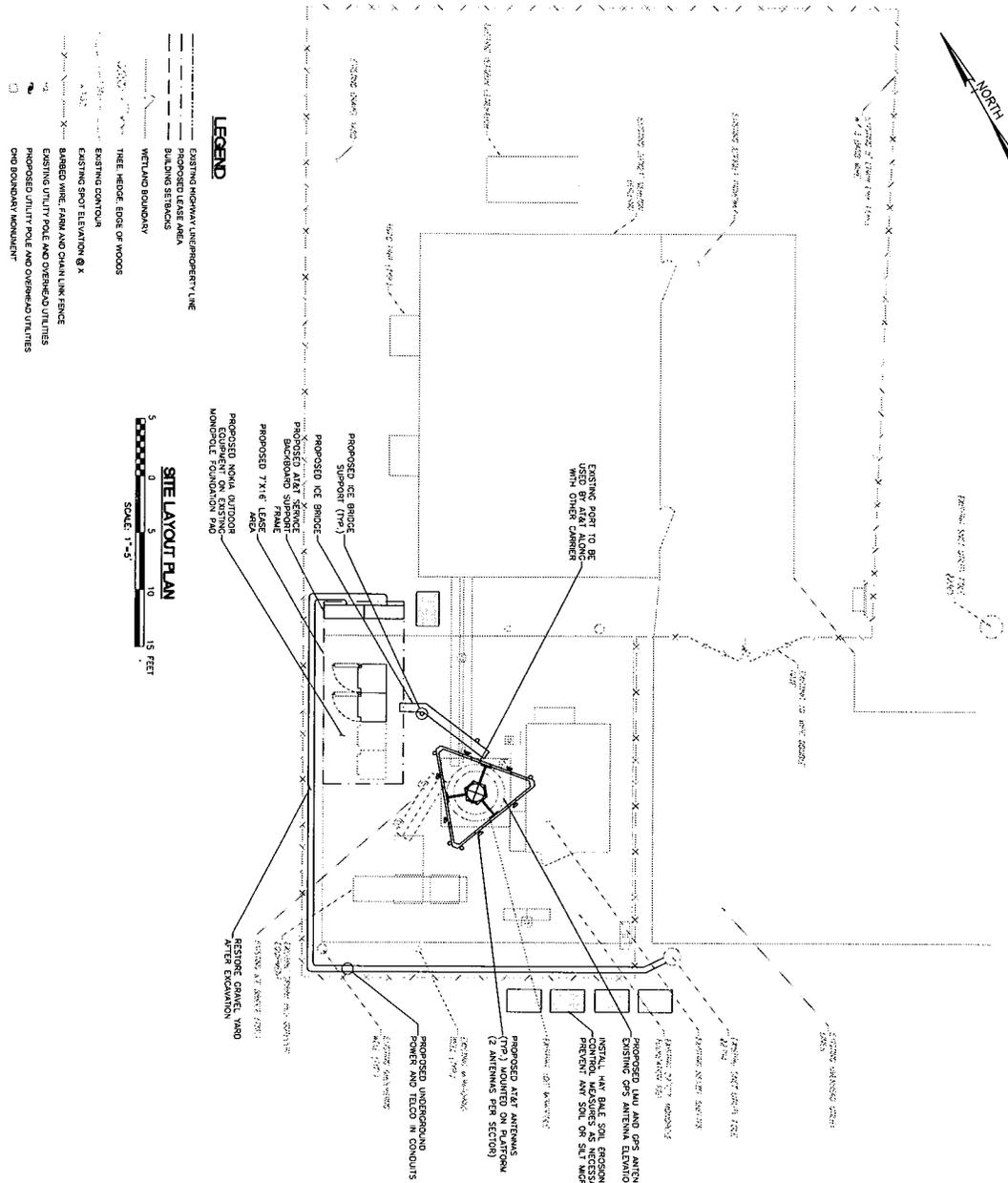
In furtherance of AT&T's filing and its understanding with Crown Communications and the Town of Durham, we enclose revised drawings to account for new antenna configurations with AT&T's antennas being installed at 75' AGL and Town whip antennas removed, relocated and consolidated. Please note that the power density report previously provided by AT&T is still applicable as a "worst case" given that all antennas involved are moving higher on the tower such that emissions would be lower than that associated with the original filing. We would respectfully request that AT&T's notice of exempt modification, as revised, be acknowledged by the Council at tomorrow's meeting with a condition that the revised structural being prepared by Crown be provided to the Council prior to implementation of the antenna changes. Thank you for your consideration and patience in the foregoing matter.

Very truly yours,

A handwritten signature in blue ink, appearing to read "Chris Fisher".

Christopher B. Fisher

Cc: Hollis Redding, Optasite



**Dewberry-Goodkind, Inc.**  
 A Division of  
 50 Elm Street, Suite 101  
 New Britain, CT 06108  
 P: (203) 776-2277  
 F: (203) 776-2288

**DURHAM**  
**SITE NO. CT-0411**  
 1428 OLD BLUE HILLS ROAD  
 DURHAM, CONNECTICUT 06822



|    |          |    |      |                    |
|----|----------|----|------|--------------------|
| NO | DATE     | BY | CHKD | DESCRIPTION        |
| 1  | 08/11/04 |    |      | ISSUED FOR PERMITS |

|    |          |    |      |                    |
|----|----------|----|------|--------------------|
| NO | DATE     | BY | CHKD | DESCRIPTION        |
| 1  | 08/11/04 |    |      | ISSUED FOR PERMITS |

**DRAWING TITLE:**  
**SITE LAYOUT PLAN & ELEVATION VIEW**

**DWG NO:** 2445  
**DRAWING NUMBER:** 907-007-0411-SEC1  
**SHEET:** 1



June 13, 2003

The Connecticut Siting Council  
Ms. Pamela B. Katz, Chairman  
10 Franklin Square  
New Britain, CT 06051

**RECEIVED**

JUN 17 2003

CONNECTICUT  
SITING COUNCIL

**Re: EM-AT&T-038-020626 Durham-Old Blue Hills Road**

Dear Ms. Katz:

At its regularly scheduled meeting of the Connecticut Siting Council, the Exempt Modification for AT&T's use of the Crown tower located at 143R Old Blue Hills Road, Durham was approved with the condition that a revised structural be submitted to the Council.

Enclosed please find a letter from Crown, dated September 3, 2002, stating that there will be no significant change to the capacity of the monopole with AT&T's installation at the 75' level instead of the 65' level.

Please feel free to call me at (860) 657-1460 x 311 with any questions or concerns. Thank you for your time.

Sincerely,

Hollis M. Redding  
Site Acquisition

Enclosure

cc: Joanne Desjardins, AT&T Wireless  
Chris Fisher, Cuddy, Feder & Worby  
Ray Vergati, Optasite, Inc.