



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@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

March 9, 2009

Steven L. Levine
Real Estate Consultant
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-003-090120** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 353 Pumpkin Hill Road, Ashford, Connecticut.

Dear Mr. Levine:

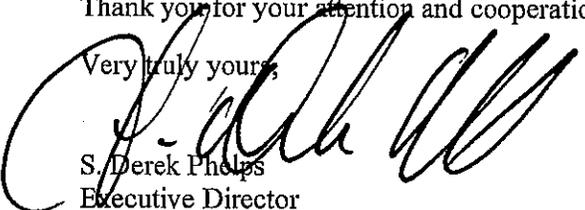
The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated January 19, 2009, including the placement of all necessary equipment and shelters within the tower compound. 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. Please be advised that the validity of this action shall expire one year from the date of this letter. 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,


S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Ralph H. Fletcher, First Selectman, Town of Ashford
Richard Dziadus, Zoning Enforcement Officer, Town of Ashford
Charter Communications

ORIGINAL

EM-CING-003-090120



New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

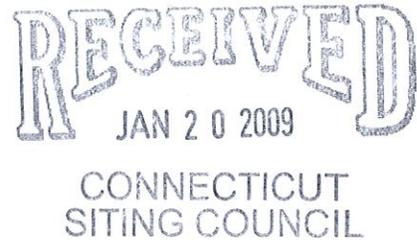
Steven L. Levine
Real Estate Consultant

HAND DELIVERED

ORIGINAL

January 19, 2009

Honorable Daniel F. Caruso, Chairman,
and Members of the Connecticut Siting Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051



Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing tele-communications facility located at 353 Pumpkin Hill Rd, Ashford (owner, Charter Communications)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall

squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected.
2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.
3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, New Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

A handwritten signature in blue ink, appearing to read 'SL Levine', is written over the typed name.

Steven L. Levine
Real Estate Consultant

Attachments

**NEW CINGULAR WIRELESS
Equipment Modification**

353 Pumpkin Hill Road, Ashford
Site Number 1068
Exempt Modification approved 4/90

Tower Owner/Manager: Charter Communications

Equipment Configuration: Guyed Lattice Tower

Current and/or Approved: Six whip antennas @ 204 ft AGL (per CSC database)
Six runs coax cable
Equipment Shelter

Planned Modifications: Remove all existing antennas and coax
Install six Powerwave 7770 antennas (or equivalent) @ 225 ft
Install six TMA's and six diplexers @ 225 ft
Install twelve lines 1 5/8 inch coax

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 15.4 % of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density following proposed modifications would be approximately 5 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							2.31
AT&T TDMA *	204	880 - 894			0.0765	0.5867	13.04
Total							15.4%

* Per CSC records

Proposed

Company	Centerline H (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							2.31
AT&T UMTS	225	880 - 894	1	500	0.0036	0.5867	0.61
AT&T GSM	225	1900 Band	2	427	0.0061	1.0000	0.61
AT&T GSM	225	880 - 894	4	296	0.0084	0.5867	1.43
Total							5.0%

* Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower has adequate structural capacity to accommodate the proposed modifications. (All-Points Technology Corp., 1/15/09)



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Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

Steven L. Levine
Real Estate Consultant

January 19, 2009

Ralph H. Fletcher, 1st Selectman
Town of Ashford
Town Office Bldg. 5 Town Hall Road
Ashford, CT 06278

Re: Telecommunications Facility – Pumpkin Hill Road

Dear Mr. Fletcher:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") will be changing its equipment configuration at certain cell sites.

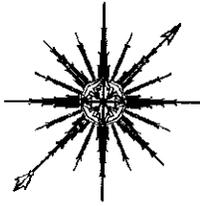
As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review AT&T's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes AT&T's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine
Real Estate Consultant

Enclosure



ALL-POINTS TECHNOLOGY CORPORATION, P.C.

**STRUCTURAL ANALYSIS REPORT
300' GUYED TOWER
ASHFORD, CONNECTICUT**

Prepared for
Hudson Design Group, LLC

AT&T Site #1068

January 15, 2009



APT Project #CT198760

□ 3 SADDLEBROOK DRIVE · KILLINGWORTH, CT 06419 · PHONE 860-663-1697 · FAX 860-663-0935

⊗ P.O. BOX 1491 · NORTH CONWAY, NH 03860 · PHONE 603-496-5853 · FAX 603-356-5214

STRUCTURAL ANALYSIS REPORT
of
300' GUYED TOWER
ASHFORD, CONNECTICUT
prepared for
Hudson Design Group, LLC

EXECUTIVE SUMMARY:

All-Points Technology Corporation, P.C. (APT) performed a condition assessment and structural analysis of this 300-foot guyed tower. The analysis was performed for AT&T Mobility's proposed replacement of their existing three omnidirectional antennas currently installed at 226' with six Powerwave 7770 panel antennas, six LGP21401 tower-mounted amplifiers (TMAs), six LGP21901 diplexers, and six Powerwave 7020 remote control units (RETs).

Our analysis indicates the tower and foundation meet the requirements of the Connecticut State Building Code and EIA/TIA-222 with the proposed antenna changes.

Guy anchors could not be evaluated, as information on their design or construction were not available to APT.

INTRODUCTION:

A condition assessment and structural analysis was performed on the above-mentioned communications tower by APT for Hudson Design Group, LLC. The tower is located at 353 Pumpkin Hill Road in Ashford, Connecticut.

APT visited the tower site on December 16, 2008 to record information regarding physical and dimensional properties of the structure and its appurtenances. Robert O. Parrott climbed the structure in its entirety to compile data necessary to perform the structural analysis.

The structure is a 300-foot painted steel guyed tower of unknown manufacturer. The tower is guyed at six levels and utilizes torque arm guy attachments at the top three guy levels.

The analysis was performed in accordance with EIA/TIA-222-F using the following antenna inventory (proposed antenna changes shown in **bold text**):

Antenna	Elev.	Mount	Coax.
Beacon	300'	Top plate	1" conduit
Lightning rod	300'	Top plate	N.A.
16' omnidirectional whip	300'	Leg	1-5/8"
8' yagi	270'	Leg	1/2"
8' grid dish	270'	(2) 10' x 2" horiz.	1/2"
12' yagi	260'	12' x 3-1/2" pipe on leg	1/2"
6' grid dish	257'	(2) 9' x 2" horiz.	1/2"
12' yagi	248'	12' x 3-1/2" pipe on leg	1/2"
(6) DB844H90; (6) DB948F85 panels	240'	(3) 12' sector mounts	(12) 1-5/8"
(6) 7770, (6) TMAs, (6) diplexers, (6) RETs¹	225'	(3) 12' sector mounts	(12) 1-5/8"
(2) 10' bedspring yagis	208'-218'	(3) 8' x 2-3/8" horiz.	1/2"
6' yagi	210'	Leg	1/2"
(3) 12' omnidirectional whips	195'-207'	(3) 6' sidearms	(3) 7/8"
6' omnidirectional whip	190'-196'	6' sidearm	1-1/4"
6' omnidirectional whip	186'-192'	6' sidearm	1/2"
12' omnidirectional whip	170'-182'	4' sidearm	7/8"
12' single dipole	180'	Leg	1/2"
6' grid dish	164'	2' sidearm	1/2"
6' yagi	157'	Leg	1/2"
6' yagi	154'	Leg	3/8"
(2) Obstruction lights	150'	Conduit across face	1" conduit
6' grid dish	150'	2' sidearm	1/2"
10' yagi	118'	Leg	1/2"
6' yagi	113'	(2) 10' x 2" horiz..	1/2"
6' grid dish	110'	2' sidearm	1/2"
(2) 10' bedspring yagis	94'-104'	(2) 4' x 2-3/8" horiz.	3/8"
GPS	84'	18" standoff	1/2"
(2) anemometers	64'	6' x 2" horiz.	1/8"

¹ Currently three 12' omnidirectional whips installed on 6' sidearms.

CONDITION ASSESSMENT:

- **General Observations:** The tower, a painted steel structure, appeared to be in good condition. No signs of movement or overstress of the tower were observed.

All-Points Technology Corporation

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 Killingworth, CT 06419
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- **Legs:** Leg members range from 2.5" standard to 2.5" extra-strong pipe and were assumed to be comprised of 50 ksi steel, typical for this type of structure. Leg members appeared to be in good condition.
- **Bracing:** Diagonal bracing members are 1-1/4" tube steel. Bracing and connections were visually observed to the maximum extent practicable. No defects were noted.
- **Antenna Connections:** Antenna mounting hardware was in good condition, with corrosion resistant hardware and galvanized members prevalent.
- **Splice Connections:** Observed splice bolts and connections were in good condition.
- **Guy Cables and Hardware:** Guy cables appeared to be in good condition. Torque arms and attachment hardware were in good condition.

STRUCTURAL ANALYSIS:

Methodology:

The structural analysis was done in accordance with TIA/EIA-222, Revision F (TIA), 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 an 85 mph fastest mile wind speed (equivalent to 105 mph 3-second gust) and one-half inch of radial ice over the structure and associated appurtenances. The TIA Standard requires a basic wind speed of 85 miles per hour for Windham County, Connecticut.

Two loading conditions were evaluated in accordance with TIA/EIA-222-F to determine tower capacity. The more demanding of the two cases is used to calculate tower capacity:

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

The TIA/EIA standard 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 when computing the tower capacity values shown below.

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Analysis Results:

Analysis of the tower was conducted in accordance with the criteria outlined herein with antenna changes as previously described. The following table summarizes the results of the analysis based on stresses of individual leg and bracing members:

Elevation	Leg Capacity	Bracing Capacity
280'-300'	30%	28%
260'-280'	48%	25%
240'-260'	49%	27%
220'-240'	75%	32%
200'-220'	76%	23%
180'-200'	65%	46%
160'-180'	96%	55%
140'-160'	81%	20%
120'-140'	73%	51%
100'-120'	82%	37%
80'-100'	82%	47%
60'-80'	64%	36%
40'-60'	81%	51%
20'-40'	95%	53%
0'-20'	93%	55%

Splice Bolts:

Our calculations indicate all connection bolts are adequately sized.

Guy Cables:

Our calculations indicate all existing guys meet the required safety factor.

Base Foundation and Guy Anchors:

Evaluation of the existing guy anchors and base foundation was not performed, as information on their design or construction was not available to APT. Base reactions imposed with the antenna changes were calculated as follows:

<u>Location</u>	<u>Vertical</u>	<u>Horizontal</u>
Base:	131.8 kips	2.8 kips
Guy Anchor:	-43.8 kips	-86.2 kips

All-Points Technology Corporation

CONCLUSIONS AND RECOMMENDATIONS:

Our structural analysis indicates that the 300-foot guyed tower located at 353 Pumpkin Hill Road in Ashford, Connecticut meets the requirements of the Connecticut State Building Code with AT&T Mobility's proposed antenna changes.

Guy anchors could not be evaluated, as information on their design or construction was not available to APT.

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.

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

1. Replacing or strengthening bracing members.
2. Reinforcing vertical members in any manner.
3. Adding or relocating torque arms or guys.
4. Installing antenna mounting gates or side arms.

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 is contrary to that which is contained herein, or you are aware of any defects arising from the original design, material, fabrication and 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

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Appendix A

Tower Schematic



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

January 23, 2009

The Honorable Ralph H. Fletcher
First Selectman
Town of Ashford
Knowlton Memorial Town Hall
5 Town Hall Road
Ashford, CT 06278

RE: **EM-CING-003-090120** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 353 Pumpkin Hill Road, Ashford, Connecticut.

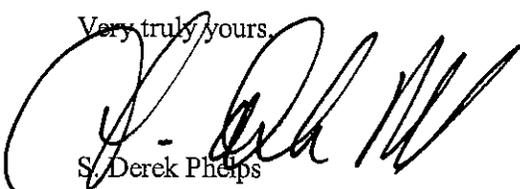
Dear Mr. Fletcher:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by February 6, 2009.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Richard Dziadus, Zoning Enforcement Officer, Town of Ashford