



# 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](mailto:siting.council@ct.gov)

Internet: [ct.gov/csc](http://ct.gov/csc)

Daniel F. Caruso  
Chairman

February 10, 2009

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

RE: **EM-CING-003-090121** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 20 Seles 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 21, 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  
Cordless Data Transfer Inc.



EM-CING-003-090121

raising the bar™

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

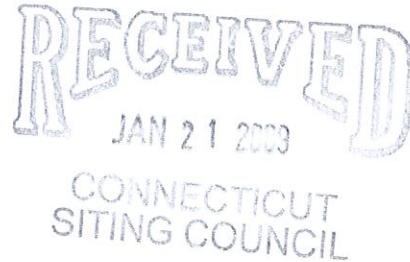
Steven L. Levine  
Real Estate Consultant

HAND DELIVERED

ORIGINAL

January 21, 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 20 Seles Rd, Ashford (owner, CDT)

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,



Steven L. Levine  
Real Estate Consultant

Attachments

**NEW CINGULAR WIRELESS  
Equipment Modification**

20 Seles Road, Ashford  
Site Number 5701  
Former AT&T cell site  
Exempt Modification approved 9/02

**Tower Owner/Manager:** CDT

**Equipment Configuration:** Guyed Lattice Tower

**Current and/or Approved:** Three Allgon 7250 panel antennas @ 140 ft AGL  
Six runs 1¼ inch coax cable  
Concrete pad with outdoor equipment cabinets

**Planned Modifications:** Remove all existing antennas  
Install gate antenna mounts @ 140 ft  
Install six Powerwave 7770 antennas (or equivalent) @ 140 ft  
Install six TMA's and six diplexers @ 140 ft  
Install six additional lines 1¼ inch coax  
Remove one outdoor cabinet  
Install one new outdoor cabinet for UMTS  
Install one new gate on compound fence

**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 13.1 % 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 13.4 % of the standard.

Note that Council records include Cingular Wireless at 157 ft AGL. The Cingular lease has been terminated, and all Cingular equipment that was installed has been decommissioned and removed.

**Existing**

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm <sup>2</sup> )	Standard Limits (mW/cm <sup>2</sup> )	Percent of Limit
Other Users *							6.52
Cingular *	157	880 - 894	19	100	0.0277	0.5867	4.72
AT&T GSM *	140	1900 Band	4	250	0.0183	1.0000	1.83
<b>Total</b>							<b>13.1%</b>

\* Per CSC records

## Proposed

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm <sup>2</sup> )	Standard Limits (mW/cm <sup>2</sup> )	Percent of Limit
Other Users *							6.52
AT&T UMTS	140	880 - 894	1	500	0.0092	0.5867	1.56
AT&T GSM	140	1900 Band	2	427	0.0157	1.0000	1.57
AT&T GSM	140	880 - 894	4	296	0.0217	0.5867	3.70
<b>Total</b>							<b>13.4%</b>

\* See Structural Information, below

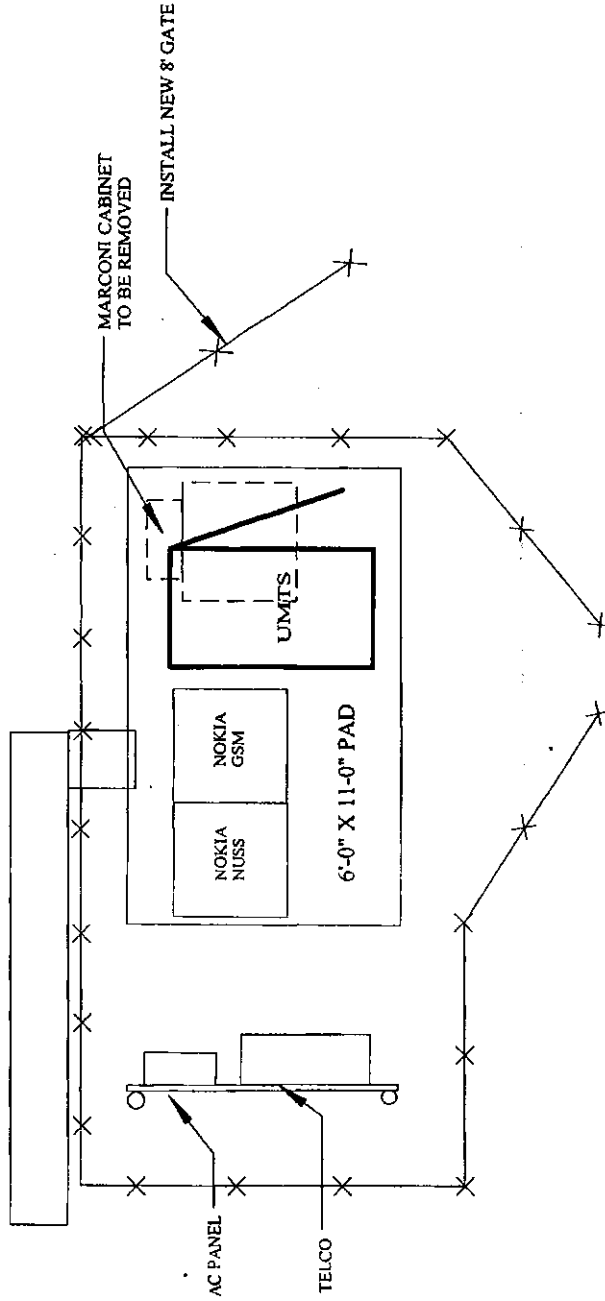
### Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed equipment modifications. (Fred A. Nudd Corporation, 1/12/09)



SITE NUMBER  
**5701**  
SITE NAME  
Ashford Southwort

TITLE:	EQUIPMENT PL
MISC. INFO:	
DWG. BY:	SGB
DATE:	07/07/08
SCALE:	N.T.S.
SHEET:	1 OF 1





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

January 21, 2009

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

Re: Telecommunications Facility – Seles 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).

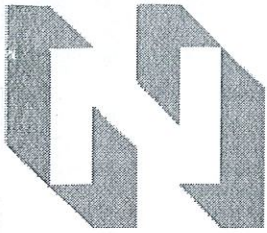
The accompanying letter to the Siting Council fully describes AT&T’s proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council’s procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director,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

Sincerely,

Steven L. Levine  
Real Estate Consultant

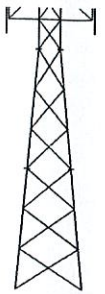
Enclosure





# FRED A. NUDD CORPORATION

1743 ROUTE 104, BOX 577  
ONTARIO, NY 14519  
(315) 524-2531 FAX (315) 524-4249  
[www.nuddtowers.com](http://www.nuddtowers.com)



January 12, 2009

Mark LeGault  
Cordless Data Transfer, Inc.

Subject: Structural Analysis of a 190 ft Guyed Tower (Lat. 41-51-48 Long. 72-10-57, 20 Seles Road, Ashford, CT 06258)

*X 5701*

Mr. LeGault,

Fred A. Nudd Corporation has completed a three-dimensional, finite element model structural analysis of the above noted guyed tower. This tower was analyzed considered appurtenance loads noted in the appurtenance loading table on the following page. The design loading criteria and strength design are per the TIA/EIA-222-F standard, which is the recommended design standard per the 2003 International Building Code (Sec. 1609 & 3108), including 2005 Connecticut Building Code Amendments and the 2008 Connecticut Supplement. Additional standards used in this analysis include the AISC Manual for Steel Construction, Allowable Stress Design, 9<sup>th</sup> Ed. and ACI 318-05, Building Code Requirements for Structural Concrete and Commentary. Tower and foundation dimensions have been taken from original design drawings by Fred A. Nudd Corporation (Drawing Number 00-6111A-1 & 98-6111-2, dated July 28, 2000 & June 19, 1998).

The purpose of this analysis is to determine the structure's ability to support new AT&T equipment installed at a rad center of 138 ft above ground level (AGL). The new equipment to be installed, which included antennas, coax, mounts and associated hardware are listed on the following page in the appurtenance loading table. All existing AT&T equipment is to be removed prior to installation of the new AT&T equipment.

Results of the analysis indicate the tower will be able to the support the design loads noted in the appurtenance loading table on the following page. Specific section design loads, capacities and stress ratios are provided on the following pages. Maximum member usage was found to be 97.7%.

The tower base foundation and anchors were analyzed using conservative soil properties and assuming that all groundwater is below the anchors. Based on this analysis, the base foundation and anchors should be capable of supporting the existing and proposed equipment

In conclusion, the tower superstructure can support the proposed AT&T equipment in addition to the existing equipment. The tower substructure should also be capable of supporting the proposed AT&T equipment in addition to the existing equipment.

We trust this report satisfies your needs. Please contact us with any questions or concerns regarding this report.

Best Regards,



Bryan Lanier, P.E., S.E.  
Fred A. Nudd Corporation

C.H. David Tan, P.E. (CT PE No. 22092)  
Senior Engineer, Morrison Hershfield



**Appurtenance Loading**

Height (ft)	Carrier	Appurtenance	Mount	Coax (in)
190	Verizon	(6) Decibel DB844H90 (6) Decibel DB948F85T2E (6) TMA (6) Diplexors	(3) 12 ft Boom / Frame	(12) 1-5/8
178	Nextel	(9) Swedcom ALP-E-9011	(3) 12 ft Boom / Frame	(9) 1-1/4
167	Sprint	(9) Decibel DB980H90	(3) 12 ft Boom / Frame	(9) 1-5/8
150	-	-	(3) 12 ft Boom / Frame	-
138	AT&T	(6) Powerwave 7770 (6) TMA (6) Diplexors	(3) 12 ft Boom / Frame	(12) 1-5/8

- *New AT&T coax is to be double-stacked on the exterior leg hanger*
- *Height measurement taken as distance from top of base foundation to center of appurtenance*

**Foundation Reaction Usage**

Design Load	Capacity (kips)	Analysis (kips)	Percentage
Base Axial	161.3	131.8	87.6
Base Shear	29.7	3.0	10.1
Anchor Uplift	52.3	49.9	95.4
Anchor Shear	61.0	57.8	94.8

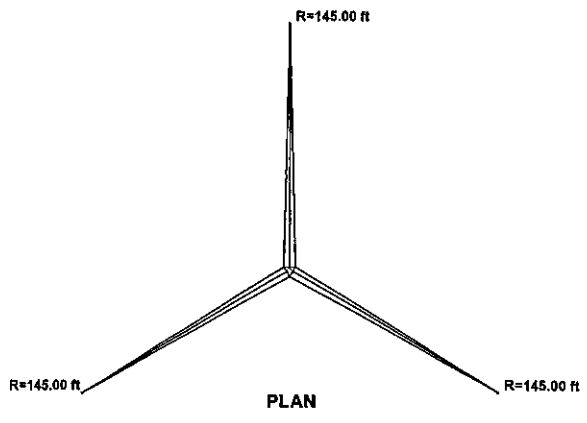
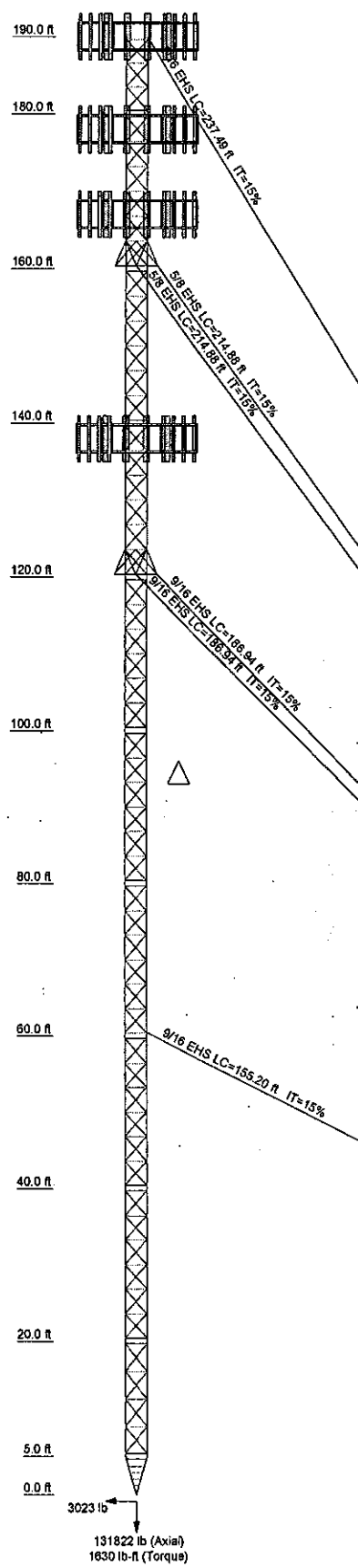
- *Percentage equal to or less than 100% denote foundation is satisfactory for loading*
- *Percentage greater than 100% indicates foundation strengthening is required*

**Maximum Member Usage**

Member	Percentage
Leg	92.7
Diagonal	77.4
Horizontal	60.0
Anchor Rod	97.7
Splice Bolts	0.0
Guys	78.6

- *Percentage equal to or less than 100% denote member stress levels are satisfactory for loading*
- *Percentage greater than 100% indicates member strengthening is required*

Section	T11	T10	T9	T8	T7	T6	T5	T4	T3	T2	T1
Legs											
Leg Grade											
Diagonals	N.A.										
Diagonal Grade	N.A.										
Top Girts											
Bottom Girts											
Horizontal											
Top Guy Pull-Offs											
Bot Guy Pull-Offs											
Face Width (ft)											
# Panels @ (ft)	B	4 @ 3.5625									
Weight (lb)	6662.2	164.3	440.3	666.2	666.2	666.2	666.2	666.2	666.2	666.2	377.0



**DESIGNED APPURTENANCE LOADING**

TYPE	ELEVATION	TYPE	ELEVATION
(2) DB844H90 (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Sprint)	167
(2) DB844H90 (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Sprint)	167
(2) DB844H90 (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Sprint)	167
PIROD 12' Universal T-Frame Sector Mount (Verizon)	190	(3) DB980H90 (Sprint)	167
PIROD 12' Universal T-Frame Sector Mount (Verizon)	190	(3) DB980H90A-M (Sprint)	167
PIROD 12' Universal T-Frame Sector Mount (Verizon)	190	(3) DB980H90A-M (Sprint)	167
PIROD 12' Universal T-Frame Sector Mount (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Empty Mount)	150
(2) DB948F85T2E-M (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Empty Mount)	150
(2) DB948F85T2E-M (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Empty Mount)	150
(2) DB948F85T2E-M (Verizon)	190	PIROD 12' Universal T-Frame Sector Mount (Empty Mount)	150
(2) TMA (Verizon)	190	(2) TMA (ATI)	138
(2) TMA (Verizon)	190	(2) TMA (ATI)	138
(2) TMA (Verizon)	190	(2) TMA (ATI)	138
(2) Diplexor (Verizon)	190	(2) Diplexor (ATI)	138
(2) Diplexor (Verizon)	190	(2) Diplexor (ATI)	138
(2) Diplexor (Verizon)	190	(2) Diplexor (ATI)	138
PIROD 12' Universal T-Frame Sector Mount (Nextel)	178	PIROD 12' Universal T-Frame Sector Mount (ATI)	138
PIROD 12' Universal T-Frame Sector Mount (Nextel)	178	PIROD 12' Universal T-Frame Sector Mount (ATI)	138
PIROD 12' Universal T-Frame Sector Mount (Nextel)	178	PIROD 12' Universal T-Frame Sector Mount (ATI)	138
(3) ALPE-9011 (Nextel)	178	(2) 7770.00 (ATI)	138
(3) ALPE-9011 (Nextel)	178	(2) 7770.00 (ATI)	138
(3) ALPE-9011 (Nextel)	178	(2) 7770.00 (ATI)	138
PIROD 12' Universal T-Frame Sector Mount (Sprint)	167	(2) 7770.00 (ATI)	138

**SYMBOL LIST**

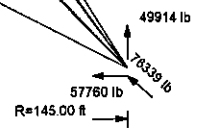
MARK	SIZE	MARK	SIZE
A	L1 1/2x1 1/2x3/16	B	6 @ 0.85

**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A500M-58	58 ksi	70 ksi	A36	36 ksi	58 ksi

**TOWER DESIGN NOTES**

1. Tower is located in Windham County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 50 mph wind.
5. Weld together tower sections have flange connections.
6. TOWER RATING: 92.7%



<b>Fred A. Nudd Corporation</b>		Job: <b>208-13286</b>	
1743 Route 104 / PO Box 577		Project: <b>Ashford, CT</b>	
Ontario, NY 14519		Client: <b>Mark LeGault</b>	Drawn by: <b>FAN</b>
Phone: (315) 524-2531		Date: <b>12/21/08</b>	App'd:
FAX: (315) 524-4249		Code: <b>TIA/EIA-222-F</b>	Scale: <b>NTS</b>
		Path:	Dwg No. <b>E-1</b>



# STATE OF CONNECTICUT

## CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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

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Internet: [ct.gov/csc](http://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-003-090121** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 20 Seles Road, Ashford, Connecticut.

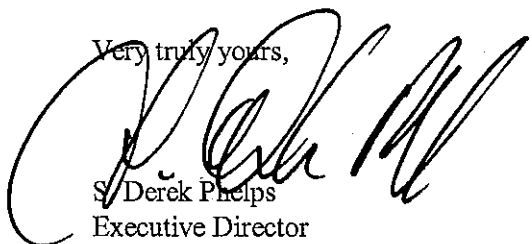
Dear Mr. Fletcher:

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