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
www.ct.gov/csc

November 18, 2005

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

RE: **EM-CING-125-051108** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 70 Herb Road, Sharon, Connecticut.

Dear Mr. Levine:

At a public meeting held on November 17, 2005, 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.

The proposed modifications are to be implemented as specified here and in your notice dated November 8, 2005, 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,

Pamela B. Katz, P.E.
Chairman

PBK/laf

c: The Honorable P. Robert Moeller, First Selectman, Town of Sharon
Elizabeth H. Casey, Zoning Enforcement Officer, Town of Sharon
AllTel Communications
Thomas F. Flynn III, Nextel Communications Inc.
Christopher B. Fisher, Esq., Cuddy & Feder, LLP
Brian Benito, Bureau of Police Support - Telecommunications

G:\EM\CINGULAR\Sharon\dc111705.DOC

CSC
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November 14, 2005

The Honorable P. Robert Moeller
First Selectman
Town of Sharon
Town Hall
63 Main Street
P. O. Box 224
Sharon, CT 06069-0224

RE: **EM-CING-125-051108** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 70 Herb Road, Sharon, Connecticut.

Dear Mr. Moeller:

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.

The Council will consider this item at the next meeting scheduled for November 17, 2005 at 1.30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the council by November 17, 2005.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/ap

Enclosure: Notice of Intent

c: Elizabeth H. Casey, Zoning Enforcement Officer, Town of Sharon

EM-CING-125-051108

ORIGINAL

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

November 8, 2005

RECEIVED
NOV 0 8 2005
CONNECTICUT
SITING COUNCIL

Ms. Pam Katz, Chairman, and
Members of the Council
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Notice of Exempt Modification – Existing AllTel Communications Tower Facility at 70 Herb Road, Sharon, Connecticut

Dear Chairman Katz and Members of the Council:

New Cingular Wireless PCS, LLC ("Cingular") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower off Herb Road in Sharon, Connecticut. Please accept this letter as notification to the Council, 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 is being sent to the 1st Selectman of Sharon.

Existing Facility

The Sharon facility is located at 70 Herb Road (CT Rte 109), which lies approximately 3 miles southwest of Cornwall Bridge and 1 mile northwest of US Highway 7 in Sharon. Tower coordinates (NAD 83) are N 41° 47' 25.3" and W 73° 25' 31.4".

The facility is owned and operated by AllTel Communications ("AllTel"), c/o Faulk & Foster Real Estate, Inc., 1811 Auburn Avenue, Monroe, LA 71201.

The Sharon facility was initially approved by the Council on November 12, 1998 in Docket 185 under an application by AT&T Wireless.[1] As a condition of federal approvals for the merger between AT&T Wireless and Cingular, this AT&T installation has been divested and does not belong to Cingular. The tower and other AT&T equipment at the site are now owned and

[1] The Connecticut State Police and Cingular's predecessor Springwich Cellular Limited Partnership were also approved by the Council to co-locate at that time, but their plans were never implemented.

operated by AllTel. Cingular, therefore, must now co-locate separately on this tower to maintain coverage in the Sharon area.

The tower facility consists of a 108-foot monopine tower within a 38 ft x 38 ft compound surrounded by an 8-ft wood fence on two sides and existing equipment shelters on the other two sides. Alltel and Nextel currently operate wireless communications equipment at the facility.

Proposed Modifications

Cingular operates under licenses issued by the Federal Communications Commission ("FCC") to provide cellular and PCS mobile telephone service in Litchfield County, which includes the area to be served by Cingular's proposed installation.

Attached to this Notice are a site location map, a site plan, tower profile, and a structural analysis report that shows the tower is structurally capable of supporting the proposed Cingular telecommunications equipment.

As shown on the attached drawings and as further described below, Cingular proposes to install up to six 55"-high Powerwave 7770.00-panel antennas, or their functional equivalents, at a centerline height of 92 feet above ground level. Cingular also proposes to place its radio equipment in an existing 12 ft x 26 ft equipment building and to mount air conditioner condensing units in the existing compound at the base of the tower.

Statutory Considerations

The changes to the Sharon tower facility do not constitute a modification 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) because they will not result in any substantial adverse environmental effect.

1. The height of the overall structure will be unaffected.

2. The proposed changes will not affect the property boundaries. All new construction will take place on property leased by Alltel and within the existing fence.

3. The proposed additions will not increase the noise level at the existing facility by six decibels or more.

4. Operation of the additional antennas will not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the FCC. The "worst-case" exposure calculation in

accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at the base of the tower in relation to the operation of the proposed antenna array is as follows:

Company	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density † (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Nextel *	117	851	9	100	0.0236	0.5673	4.17
Alltel *	106	1945 - 50 1965 - 70	2	150	0.0096	1.0000	0.96
Cingular	92	880 - 894	6	296	0.0754	0.5867	12.86
Cingular	92	1930 - 1935	3	427	0.0544	1.0000	5.44
Total							**23.43%**

* Power density parameters from Siting Council records.

† Please note that the standard power density equation provided by the Council in its memo of January 22, 2001 incorporates a ground reflection factor of 2.56 (i.e., the square of 1.6) as described in FCC OET Bulletin No. 65.

As the table demonstrates, the cumulative "worst-case" exposure would be approximately 23.4 % of the ANSI/IEEE standard, as calculated for mixed frequency sites. Total power density levels resulting from Cingular's use of the tower facility would thus be within applicable standards.

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

Please feel free to call Mark Appleby at (860) 513-7536 or Christopher Fisher, Esq. at (914) 761-1300 with questions concerning this notice. Thank you for your consideration in this matter.

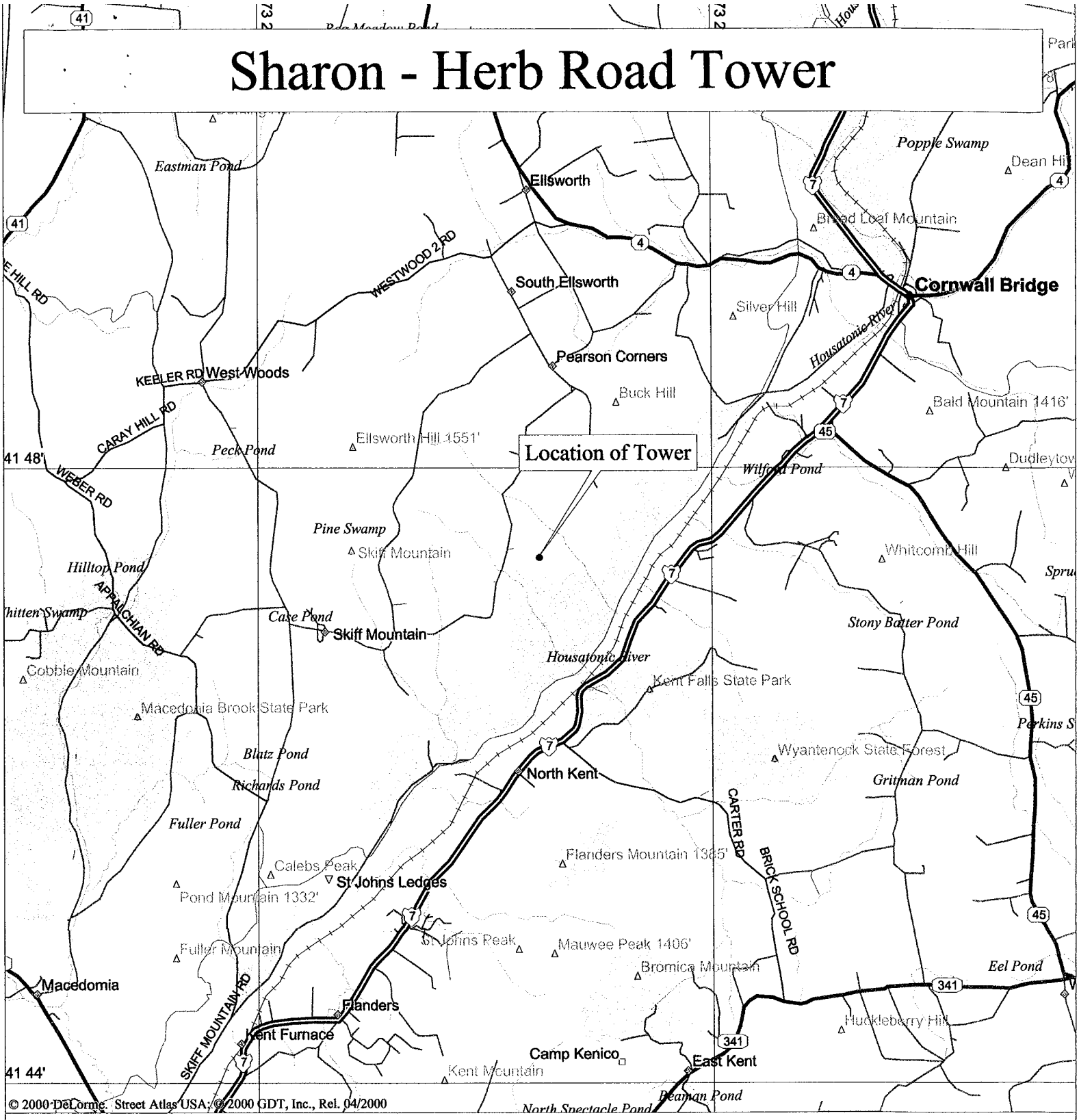
Respectfully yours,

Steven Levine
Real Estate Consultant

Enclosures

cc: Honorable P. Robert Moeller, 1st Selectman, Town of Sharon
Michele G. Briggs, Manager of Real Estate
Christopher B. Fisher, Esq.

Sharon - Herb Road Tower



Mag 13.00
Tue Nov 08 14:20 2005
Scale 1:62,500 (at center)

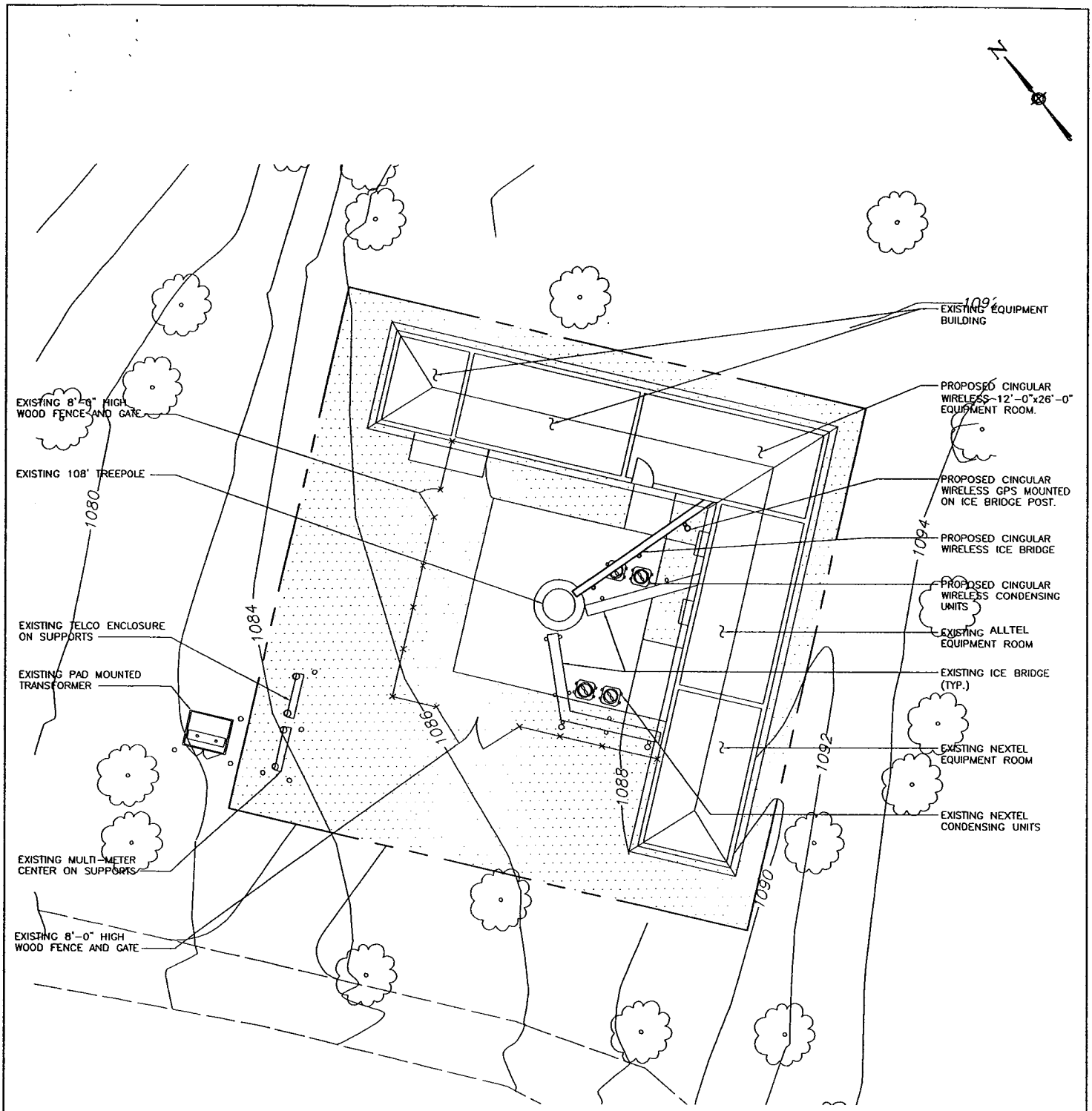
1 Miles

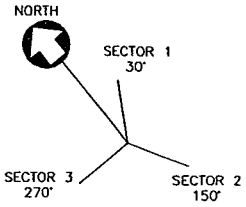
2 KM

Local Road
Major Connector
State Route
Trail
US Highway
Railroad
Point of Interest
Small Town

Summit
Geographic Feature
Park/Reservation
Locale
Cemetery
State Boundary
Land
Water

State Park/Forest
Woodland
River/Canal





ANTENNA ORIENTATION KEY

1 / L-1 **COMPOUND PLAN**
SCALE: 1" = 20'-0"

0 5 10 20 40

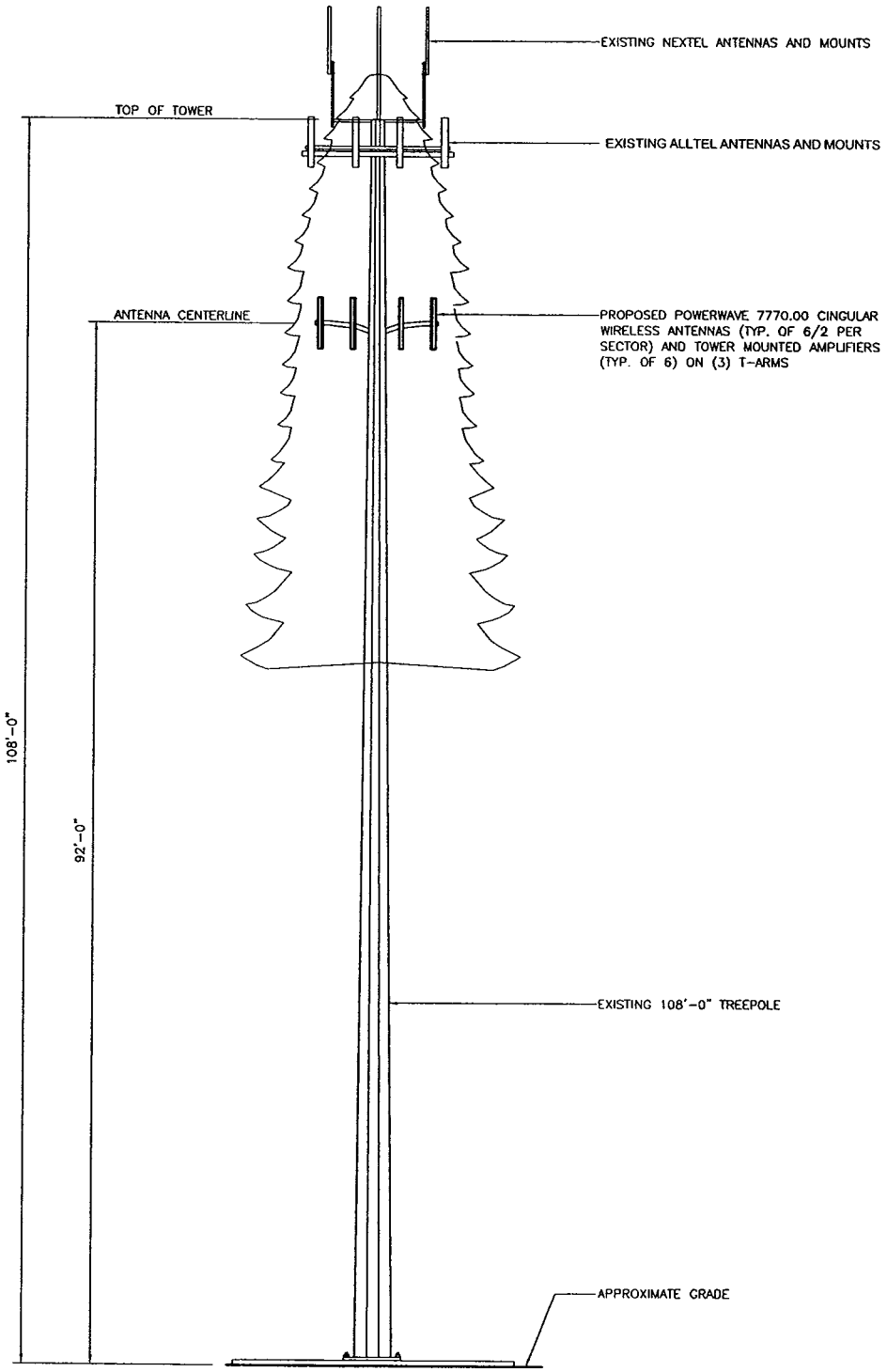
PROJECT NO. 36921760	**URS CORPORATION**	cingular WIRELESS
Designed by:	500 ENTERPRISE DRIVE	WIRELESS COMMUNICATIONS FACILITY
Drawn by: WRB	SUITE 3B	SHARON
Checked by:	ROCKY HILL, CONNECTICUT	SITE ADDRESS: 70 HERB ROAD
Approved by:	1-(860)-529-8882	SHARON, CONNECTICUT

REV.	DATE:	DESCRIPTION
2	11/08/05	REVISED
1	10/07/05	REVISED ANTENNA HEIGHT

Scale: AS NOTED | Date: 09-14-05
Job No. CW1 059 | File No.

Dwg. No. L-1

Dwg. 1 of 2



1 / L-2 **TOWER ELEVATION**
SCALE: 1/16" = 1'-0"

0 4 8 16 32

PROJECT NO. 36921760	**URS CORPORATION**	cingular WIRELESS	Dwg. No.
Designed by:	500 ENTERPRISE DRIVE	WIRELESS COMMUNICATIONS FACILITY	L-2
Drawn by: WRB	SUITE 3B	SITE ADDRESS: SHARON, 70 HERB ROAD, SHARON, CONNECTICUT	
Checked by:	ROCKY HILL, CONNECTICUT		
Approved by:	1-(860)-529-8882		

REV.	DATE:	DESCRIPTION
2	11/08/05	REVISED
1	10/07/05	REVISED ANTENNA HEIGHT

Scale: AS NOTED | Date: 09-14-05
Job No. CW1 059 | File No. | Dwg. 2 of 2

TOWER ENGINEERING PROFESSIONALS

STRUCTURAL ANALYSIS REPORT

SHARON
108-ft TREE MONOPOLE

SHARON, LITCHFIELD COUNTY, CONNECTICUT

TEP # 05884

Revision 1
Thursday, October 6, 2005

STATE OF CONNECTICUT
PETER G. JERNIGAN, JR.
00021509
LICENSED
PROFESSIONAL ENGINEER
Oct. 6, 2005

Prepared For:

CINGULAR WIRELESS
500 ENTERPRISE DRIVE, SUITE 3-A
ROCKY HILL, CT 06067-3900

1.0 ASSIGNMENT

Subject – Structural analysis of the tower

Location – 70 Herb Road, Sharon, Litchfield County, CT 06069
Latitude: N41° 47' 25"± Longitude: W073° 25' 33"±

Purpose – The objective of the analysis was to determine if the tower would meet the ANSI/TIA/EIA-222-F-1996 standard.

2.0 SCOPE OF SERVICES

1) Conduct a structural analysis of the tower
2) Prepare a report of findings and conclusions

3.0 PARTICIPATING PERSONNEL

Carrier Representative: Mr. Mark Appleby
Cingular Wireless (Cingular)
500 Enterprise Drive, Suite 3-A
Rocky Hill, CT 06067-3900
(860) 513-7536

Consulting Engineers: Mr. Pete Jernigan, P.E.
Mr. Michael L. Gardner, EI
Tower Engineering Professionals, Inc. (TEP)
3703 Junction Boulevard
Raleigh, NC 27603-5263
(919) 661-6351

4.0 BACKGROUND INFORMATION

Cingular requested that TEP conduct a structural analysis of the tower. The analysis was to determine if the tower would meet the ANSI/TIA/EIA-222-F-1996 standard with the proposed loading conditions. The structure is a 108-ft tree monopole.

TEP utilized the following information to complete the analysis:
1) Field notes recorded by TEP during the July 06, 2005 site visit
2) Previous structural analysis by TEP dated July 26, 2005, TEP no. 05605
3) Correspondence with Cingular with respect to the proposed loading

5.0 INVESTIGATION

Analyzed Antennas – See the appendix for a schedule of antennas and transmission lines considered in the analysis.

Codes and Standards – The structural analysis was performed in accordance with the ANSI/TIA/EIA-222-F-1996, Structural Standards for Steel Antenna Towers and Antenna Supporting Structures dated June 1996 and the 2003 International Building Code.

Wind Loading – Two load combinations were considered in this analysis:

1) A 110-mph 3-second gust (90-mph fastest-mile) wind was applied for stress analysis.
2) A 110-mph 3-second gust (90-mph fastest-mile) wind was applied with 1/2-in radial ice for stress analysis. Note a 25-percent reduction in wind load was considered per the TIA standard for this load combination.

Provisions of This Analysis
1) The tower and foundation were constructed according to manufacturer's requirements.
2) The tower has been maintained according to the manufacturer's specifications.
3) The structural integrity of the tower and tower components has not been compromised.
4) The antenna and coax load is as described in the appendix of this report.
5) All unused antennas, mounts, coax, hardware, and appurtenances shall be removed.
6) The information provided by Cingular was assumed accurate and complete.
7) TEP assumed ASTM A572 Grade 65 material for the pole steel, ASTM Grade 50 material for the base plate, and ASTM A615 J Grade 75 material for anchor bolts.
8) This analysis report is not a construction document.

6.0 RESULTS – It is the opinion of Tower Engineering Professionals, Inc. that:

1) The superstructure will meet the TIA standard for structural capacity.
2) TEP did not have sufficient information to perform a foundation analysis. However, since the tower superstructure has reserve capacity, it is reasonable to assume that the foundation is adequate.

7.0 RECOMMENDATIONS – TEP recommends the following:

1) If the load differs from that described in the appendix of this report, or the provisions of this analysis are found to be invalid, another structural analysis should be performed.

8.0 APPENDIX

Tower Map:

Height (ft)	Mount	Description / Model	Coax	Coax Location
112 Nextel	(3) Sidearm Mounts	(3) Omni Antennas Decibel DB806E-XT	(3) 1 1/4	Inside Pole
106.5 Alltel	(3) T-Arm Mounts	Panel Antennas (3) Allgon 7262.01 (6) Allgon 7130.16.33.00	(12) 1 5/8	Inside Pole
92 Cingular	***(3) T-Arm Mounts***	***(6) Panel Antennas Powerwave 7770.00 (6) Tower Mounted Amplifiers Powerwave LGP2140X***	***(12) 1 5/8***	***Inside Pole***

Superstructure Results:

Height AGL (ft)	Stress Ratio at Design Wind (combined bending+axial)	Shaft Deflection at Service Wind (ft)	Shaft Rotation at Service Wind (deg)
108	0.00	0.54	0.50
106.5	0.04	0.50	0.50
100	0.06	0.47	0.49
78.7	0.24	0.30	0.42
45.1	0.37	0.10	0.25
0	0.51[1]	0.00	0.00

[1] – Ratio controlled by anchor bolts

Substructure Results:

Item	Design Reactions (kip or kip-ft)	Analysis Reactions (kip or kip-ft)	Ratio
Total horizontal	Unknown	23.8	-
Total vertical	Unknown	25.1	-
Total OTM	Unknown	1,758.0	-

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

November 8, 2005

Honorable P. Robert Moeller
1st Selectman, Town of Sharon
Town Hall, 63 Main Street
Sharon, Connecticut 06069

Re: Notice of Exempt Modification – Existing AllTel Communications Tower Facility at 70 Herb Road, Sharon, Connecticut

Dear Mr. Moeller:

New Cingular Wireless PCS, LLC ("Cingular") intends to install telecommunications antennas and associated equipment at an existing multicarrier telecommunications tower at 70 Herb Road in Sharon, Connecticut.

The facility is owned and operated by AllTel Communications ("AllTel"), c/o Faulk & Foster Real Estate, Inc., 1811 Auburn Avenue, Monroe, LA 71201.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Sharon 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 attached letter fully sets forth the Cingular proposal. However, if you have any questions or require any further information on the plans for the site or the Siting Council's procedures, please contact the undersigned or Mr. Derek Phelps, Executive Director of the Connecticut Siting Council, at (860) 827-2935.

Sincerely,

Steven Levine
Real Estate Consultant

Enclosure