



STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

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Web Site: www.state.ct.us/csc/index.htm

November 8, 2002

Peter W. van Wilgen
Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-031-021030** - Southwestern Bell Mobile Systems, LLC d/b/a Cingular Wireless notice of intent to modify an existing telecommunications facility located at 36 Mohawk Mountain, Cornwall, Connecticut.

Dear Mr. van Wilgen:

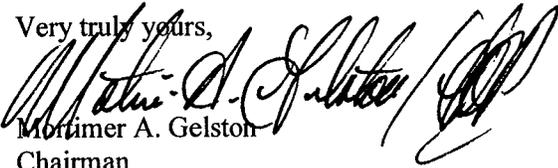
At a public meeting held on November 7, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated October 30, 2002. 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,


Mortimer A. Gelston
Chairman

MAG/laf

c: Honorable Gordon M. Ridgway, First Selectman, Town of Cornwall
Ruth Mucahy, Zoning Enforcement Officer, Town of Cornwall
Jeremy McDavitt, American Tower Corporation
Stephen J. Humes, Esq., LeBoeuf, Lamb, Greene & MacRae
Thomas F. Flynn III, Nextel Communications

EM-CING-031-021030



Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

HAND DELIVERED

October 30, 2002

RECEIVED

OCT 30 2002

CONNECTICUT
SITING COUNCIL

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: Southwestern Bell Mobile Systems, LLC notice of intent to modify an existing telecommunications facility located in Cornwall.

Dear Mr. Gelston:

In order to accommodate technological changes, implement E-911 capability and enhance system performance, Southwestern Bell Mobile Systems, LLC ("SNET" or "Cingular Wireless"; formerly SNET Mobility, LLC) plans to modify the antenna configurations at 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.

Attached is a summary of the planned changes, including power density calculations reflecting the change in the effect of Cingular'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. New panel antennas approximately the same size will replace those previously installed. Tower mount amplifiers,

Mr. Mortimer A. Gelston

October 30, 2002

Page 2

approximately 5" x 9" x 13", will be added to the platform on which the panel antennas are mounted to enhance signal reception at the cell site. In addition, the mandated provision of E-911 capability *may* require installation of one LMU ("location measurement unit"), approximately nine inches high, on either the tower, the equipment shelter, or the ice bridge. At this writing, however, it appears that the new panel antennas will serve this purpose as well. One GPS receive-only antenna will be attached to the equipment shelter at the site. None of the modifications will extend the height of the tower.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound.

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

4. Radio frequency power density will increase due to use of additional channels broadcasting at higher power. 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, 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) 513-7730 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Peter W. van Wilgen
Senior Manager - Construction

Enclosures

**CINGULAR WIRELESS
Antenna Modification**

36 Mohawk Mountain, Cornwall
Exempt Mod. approved 6/21/94

Tower Owner/Manager: American Tower Co.

Antenna configuration Antenna center line – Approx. 65 ft

Current and/or approved: 9 Swedcom ALP 110-11 panels

Planned: 9 CSS DUO4-8670 panels
6 tower mount amplifiers

Power Density:

Calculations for Cingular's current operations at the site indicate a radio frequency electromagnetic radiation power density, measured at the tower base, of approximately 27.6% of the standard adopted by the FCC. As depicted in the second table below, the total radio frequency electromagnetic radiation power density for Cingular's planned operations would be approximately 39.1%, or an additional 11.5 % of the standard.

Cingular Current

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
Cingular	65	880 - 894	19	100	0.1617	0.5867	27.6

Cingular Planned

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
Cingular TDMA	65	880 - 894	16	100	0.1362	0.5867	23.2
Cingular GSM	65	880 - 894	2	296	0.0504	0.5867	8.6
Cingular GSM	65	1930 - 1935	2	427	0.0727	1.0000	7.3
Total							39.1%

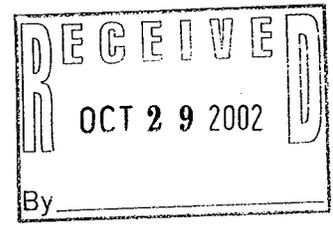
Structural information: Please see attached structural analysis. Note that this analysis was mistakenly run for 12 antennas, before and after, rather than for 9. Thus, it is a conservative study. Since the tower passes analysis with 12 antennas and 6 TMA's, it will certainly pass with the lesser load of 9 antennas and 6 TMA's.



AMERICAN TOWER

Structural Analysis Report

Structure : Existing 65ft Self Supporting Tower
Site Name : Cornwall, CT
ATC Site Number : 8809
Proposed Carrier : Cingular
County : Litchfield
Project Number : 16341
Eng. Number : 73114976 R1
Date : October 23, 2002



ATC ENGINEERING

S E R V I C E S™

11312 South Pipeline Road
 Euless, Texas 76040
 Phone: (817) 355-4100
 Fax: (817) 858-0398



Mr. Victor Rodriguez
American Tower Corporation
11312 South Pipeline Rd.
Euless, TX 76040

October 22, 2002
Revision to letter
previously dated 9/25/02

Re: Structural Review of ATC's Cornwall, CT Lattice Tower
American Tower Site No: 88009, Litchfield, CT
Located: At Mohawk Mtn. on Mattatuck Trail Rd. In Litchfield, CT
Latitude N 41° 49' 21", Longitude W 73° 17' 52"

Dear Mr. Rodriguez,

Communication Structures Engineering, Inc. (CSEI) has completed a structural review of the existing 65-ft Modified Type 'A DD' tower located at this American Tower Corporation (ATC) site known as Cornwall, CT. In accordance with ATC's request, CSEI performed an abbreviated structural analysis of this tower to check its capability to support the existing tower, antenna and equipment loads as well as the new loads from the Cingular Wireless (SNET) proposed antenna and transmission line additions. The specific loading criteria that we utilized in accordance with BOCA were those prescribed by the national standard "ANSI/TIA/EIA-222-F" "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." In accordance with this Standard the "basic wind speed" that we utilized for the analysis of this structure was the "fastest-mile velocity" of 80-mph applicable to Litchfield County, CT. The tower was also reviewed in accordance with "ANSI/TIA/EIA-222-F" for loads resulting from the combined effect of 75% wind load + 1/2-inch of radial ice loads. However, the full 80-mph basic wind load without radial ice was found to be the controlling criteria for the design of this structure. A description of the existing tower, the applicable design criteria, the structural analysis procedure, and a description of the results of CSEI's structural analysis follows.

EXISTING TOWER INFORMATION & HISTORY

The 65-ft custom designed tower at this site was originally built by AT&T in 1953 to support four KS5759 Delay Lens Antennas. This tower was a custom designed structure engineered by Rose Chulkoff & Rose Engineering. In addition to the AT&T antennas, it was designed to support a Fire Warden Cab (Fire Lookout Station) on the upper platform above the four antennas and an access stair instead of the usual climbing ladder. This tower structure has been modified several times since 1953. In 1978 & 1983 the tower was modified by Rose Chulkoff & Rose to replace the delay lens antennas with the four current 10-ft diameter parabolic antennas. AT&T added the current antennas for Nextel, Cingular and AWS. ATC purchased this tower from AT&T on 2/28/00. The Fire Warden's Cab and AT&T's four parabolic antennas are still located at the top of this tower.

CSEI utilized the original 1953 tower design, as well as later tower modification drawings to conduct our structural review of this tower. We also used the tower inventory list provided to us by ATC to determine the present tower loading & antenna configuration. Recent tower photos provided by ATC were used to confirm the current loads.

DESIGN CRITERIA

See the attached page for the applicable Design Criteria and Antenna Configuration that were used for our structural analysis.

STRUCTURAL ANALYSIS PROCEDURE

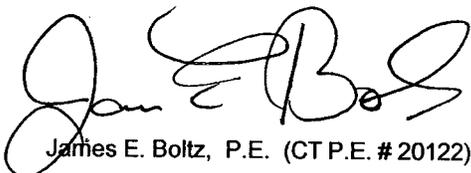
The new loads for the tower, existing equipment, and the proposed antennas & coaxial cables were calculated in accordance with the national standard "ANSI/TIA/EIA-222-F-1996". The new ANSI/TIA/EIA-222-F loads that we calculated were then compared directly with the tower design loads that were previously used to design this structure.

RESULTS OF STRUCTURAL ANALYSIS

CSEI found that the new tower & equipment loads, which were calculated using the current design standard, were less than the design loads that were previously used to design the tower at this site. We have therefore concluded that this existing tower will be capable of supporting the current loads and the proposed additions in compliance with ANSI/TIA/EIA-222-F design criteria. This tower will not require any current structural modifications or changes to support the new Cingular Wireless equipment provided that the new antenna & cable mounts are properly engineered & installed by Cingular and their engineers & contractors.

If any co-location customers add any future additional antennas or equipment to this tower, this structure should be re-analyzed at that time. CSEI would be happy to respond to any questions regarding this structural analysis.

Sincerely,


James E. Boltz, P.E. (CT P.E. # 20122)

Attachment: Design Criteria for Cornwall, CT



October 22, 2002

DESIGN CRITERIA

American Tower Site: CORNWALL, CT

ATC Site No. 88009

LOCATED: At Mohawk Mtn. on Mattatuck Trail Rd. In Litchfield, CT, Litchfield County
Latitude N 41° 49' 21" / Longitude W 73° 17' 52"

In addition to the loads from the existing tower framing and platforms the loads from the following antennas and their associated transmission lines were considered in the analysis.

ANTENNA CONFIGURATION (Used for Structural Analysis)

Existing Antennas - To be removed

- 1.) (Cingular Wireless) Twelve Swedcom ALP 11011 Panel Antennas at centerline of 65'-0" above tower base plate and twelve associated runs of 1.625 inch diameter coaxial cable.

Existing Antennas - To Remain on Tower

- 1.) (Nextel Communication) Three ASP-900 Omni Antennas at centerline of 75'-0" above tower base plate and three associated runs of 0.875 inch diameter coaxial cable.
- 2.) (Cingular Wireless) Four Decibel ALP951 Omni Antennas at approximate centerline of 75'-0" above tower base plate and four associated runs of 0.875 coaxial cable.
- 3.) (AT&T) Four 10-ft diameter Shielded Parabolic Antennas at centerline of 57'-0" above tower base plate and four associated elliptical waveguide runs.
- 4.) (AT&T Wireless Services) Six Allgon 9212N Panel Antennas at centerline of 48'-0" above tower base plate and six associated runs of 0.875 inch diameter coaxial cable.
- 5.) (AT&T Wireless Services) Two Allgon 7262.01 Panel Antennas at centerline of 48'-0" above tower base plate and four associated runs of 0.875 inch diameter coaxial cable.



Existing Equipment - To Remain on Tower

- 1.) (Fire Warden) Existing 10-ft x 10-ft x 9'-3" tall Fire Warden Cab with stair access.

New (Proposed) Antennas and Equipment- To Be Added on Tower

- 1.) Cingular Wireless (SNET) Twelve CSS / DUO4-8670 Panel Antennas at centerline of 65'-0" above tower base plate and twelve associated runs of 1.625 inch diameter coaxial cable.
- 2.) Cingular Wireless (SNET) Six ADC 850/1900 Cleargain Tower Top Amplifiers (Two per Sector)
- 3.) Cingular Wireless (SNET) Three ADC 850/1900 Diplexers (One per Sector)

Customer Antenna & Cable Mounts and Their Connections to Tower

The loads stated above include the applicable overall tower dead and wind loads from the listed customer antennas and transmission lines that were provided to CSEI. CSEI's structural analysis applies these loads at the tower truss panel points (joints where tower braces connect) that are closest to the customer equipment location. CSEI's structural analysis of this overall tower structure does not include tower stresses that could occur from improper customer equipment attachments that may locally stress individual tower braces. The attachment of the individual customer's equipment is not a part of CSEI's scope of work. CSEI assumes that these attachments, in accordance with good engineering practice, will be designed and installed to properly connect close to the tower panel points in such a manner as to not introduce significant local stresses to the existing tower bracing members. Improperly connected customer equipment can significantly stress individual tower members and consequently reduce the overall load capacity of the entire tower structure.

The design and installation of all customers' antenna & cable mounts and their proper connections to this tower are the responsibility of the individual customers and their engineers, suppliers and contractors.





Southwestern Bell Mobile Systems, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7730
Fax: (860) 513-7190

Peter W. van Wilgen
Senior Manager - Construction

October 30, 2002

Hon. Gordon M. Ridgway
1st Selectman, Town of Cornwall
Town Office, 26 Pine St.
Cornwall, CT 06753

Re: Telecommunications facility – Mohawk Mountain

Dear Mr. Ridgway:

In order to meet the requirements for improved E-911 capability and to implement a more advanced telecommunications system, Southwestern Bell Mobile Systems, LLC, a/k/a Cingular Wireless ("SBMS" or "Cingular"; formerly SNET Mobility, LLC) will be changing its antenna configuration at certain cell sites. Cingular will install panel antennas, small amplifiers and a small locator unit on the tower. 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 Cingular'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 fully describes Cingular's proposal. 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) 513-7730 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

A handwritten signature in black ink, appearing to read "Peter W. van Wilgen".

Peter W. van Wilgen
Senior Manager – Construction

Enclosure