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

September 26, 2002

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

RE: **EM-CING-013-041-054-060-076-093-108-020913** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Bozrah, East Haddam, Glastonbury, Guilford, Madison, New Haven, and Oxford, Connecticut.

Dear Mr. van Wilgen:

At a public meeting held on September 25, 2002, the Connecticut Siting Council (Council) acknowledged your notice to modify these existing telecommunications facilities, 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 September 13, 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 sites that would not increase tower heights, extend the boundaries of the tower site, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundaries to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. These facilities have also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on these towers.

This decision is under the exclusive jurisdiction of the Council. Any additional change to these facilities 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/DM/laf

c: See attached list.

I:\siting\em\cing\multiple\020913\dc092502.doc

List Attachment.

c: Honorable Keith J. Robbins, First Selectman, Town of Bozrah
Seymour Adelman, Planning and Zoning Chairman, Town of Bozrah
Honorable Susan D. Merrow, First Selectman, Town of East Haddam
James Ventres, Land-Use Administrator, Town of East Haddam
Richard J. Johnson, Town Manager, Town of Glastonbury
Kenith Leslie, Town Planner, Town of Glastonbury
Honorable Carl A. Balestracci, Jr., First Selectman, Town of Guilford
M. William McAvoy, Jr., Zoning Enforcement Officer
Honorable Thomas S. Scarpati, First Selectman, Town of Madison
Marilyn M. Ozols, Planning & Zoning Administrator, Town of Madison
Honorable John Destefano, Jr., Mayor, City of New Haven
Frank Gargiulo, Zoning Administrator, City of New Haven
Honorable Kathy P. Johnson, First Selectman, Town of Oxford
Dave Robinson, Planning & Zoning Chairman, Town of Oxford

MALOUF ENGINEERING INTL., INC.

STRUCTURAL CONSULTANTS

June 20, 2002
Rev. 08/23/02

Mr. Lincoln Erhard
CROWN CASTLE ATLANTIC
500 W. Cummings Park, Suite 6500
WOBURN, MA 01801

SUBJECT: *Tower Structural Re-Analysis Findings*
Existing 150 ft. Monopole Tower
CCI : GUILFORD SITE #BU806361
CINGULAR: GUILFORD CENTRAL SITE #2030
Guilford, Connecticut
***MEI* Job # 02-0339A**

Dear Mr. Erhard:

As requested, the existing tower located at the **CCI : GUILFORD SITE #BU806361**, Guilford, Connecticut, was re-analyzed in conformance with the ANSI/TIA/EIA 222-F Standard for a basic wind speed of 85 Mph with 0" ice and of 74 Mph with ½" ice. The re-analysis mainly consisted of removing the existing Cingular antennas and replacing them with (3) EMS MB96RR900200 panel antennas flush mounted at elev. 140 ft. ± (please refer to MEI Project # MEI report # 02-0339 for additional information).
The antenna configuration consisted of the following:

ELEVATION	ANTENNAS DESCRIPTION	TENANT	AZIMUTH	TRANSMISSION LINES
Ft	**PROPOSED**		Approx.	
140.	*(3) EMS MB96RR900200 Antennas + 3-Way Ring Flush Mount*	*Cingular Wireless*	*21, 146, 262°*	*(6) 1-1/4 Dia. – internal*
	Existing			
150.	(12) Allgon 7130.16 Panel Antennas + Platform w/ Rails	Verizon Wireless		(12) 1-5/8" dia. - internal

The tower information used in this analysis is based on updated application data sheet as supplied on 06/18/02 via e-mail by Lincoln Erhard, Crown Castle, and other data as per previous information available in our records. This existing tower is assumed, for the purpose of this analysis, to have been properly maintained and to be in good condition with no structural defects. The transmission lines are considered located internal to the shaft.

With the revised antenna configuration condition as stated above, the structural analysis results indicated the following:

MEMBERS	RESULTS
POLE SHAFT	Elev. 97.50' - 100.50' : Up to 4.5% Overstressed - **Acceptable** All Other Section of the tower/shaft Are Satisfactory *Maximum Stress Ratio = 104.5%*
FOUNDATION	Based on Data Supplied – **Satisfactory**
DEFLECTION	*Max. Deflection at 85.0 mph is 122.26 inches*

Based on the computer structural analysis results, the existing 150 ft. Monopole <u>does marginally meet</u> the requirements of TIA/EIA 222-F Standard for a basic wind speed of 85 Mph with 0" ice and does meet these requirements for a basic wind speed of 74 Mph with ½" ice, for the revised antenna configuration considered. The installation of the proposed Cingular Wireless antennas is structurally acceptable.

If you have any questions or need further clarification, please call.

Sincerely,

E. Mark Malouf, PE
Connecticut #17715

Attachment : Computer Printout

STATE OF CONNECTICUT · MARK MALOUF · No. 17715 · LICENSED PROFESSIONAL ENGINEER

275 W. CAMPBELL ROAD, SUITE 611 ■ RICHARDSON, TEXAS 75080-3549 ■ TEL. 972-783-2578 FAX. 972-783-2583

ext 106

CINGULAR WIRELESS
Antenna Modification

Site Address: 500 Cooks Lane, Guilford
Notice of Intent to Modify approved July 15, 1992

Tower Owner/Manager: Menuncketuck Communications Corporation

Antenna configuration Antenna center line – 152.5 ft

Current and/or approved: 9 ALP 110-11

Planned: 9 CSS DUO1417-8686-4-0 or comparable
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 5.0% 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 7.1%, or an additional 2.1% 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
SNET	152.5	880 - 894	19	100	0.0294	0.5867	5.0

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
SNET TDMA	152.5	880 - 894	16	100	0.0247	0.5867	4.2
SNET GSM	152.5	880 - 894	2	296	0.0092	0.5867	1.6
SNET GSM	152.5	1930 - 1935	2	427	0.0132	1.0000	1.3
Total							7.1%

Structural information: Please see attached.

EM-CING-013-041-054-060-076-093-
108-020913

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

September 13, 2002

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 existing telecommunications facilities located in Bozrah, East Haddam, Glastonbury, Guilford, Madison, New Haven, and Oxford.

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 each of the municipalities in which an affected cell site is located.

Attached are summary sheets detailing the planned changes, including power density calculations reflecting the change in the effect of Cingular's operations at each site. Also included is documentation of the structural sufficiency of each tower to accommodate the revised antenna configuration.

The changes to the facilities do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facilities will not be significantly changed or altered. Rather, the planned changes to the facilities 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. At almost all sites, new panel antennas approximately the same size will replace those previously installed. Tower mount amplifiers, 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 each 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 sites 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

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Notice of Intent to Modify approved July 15, 1992

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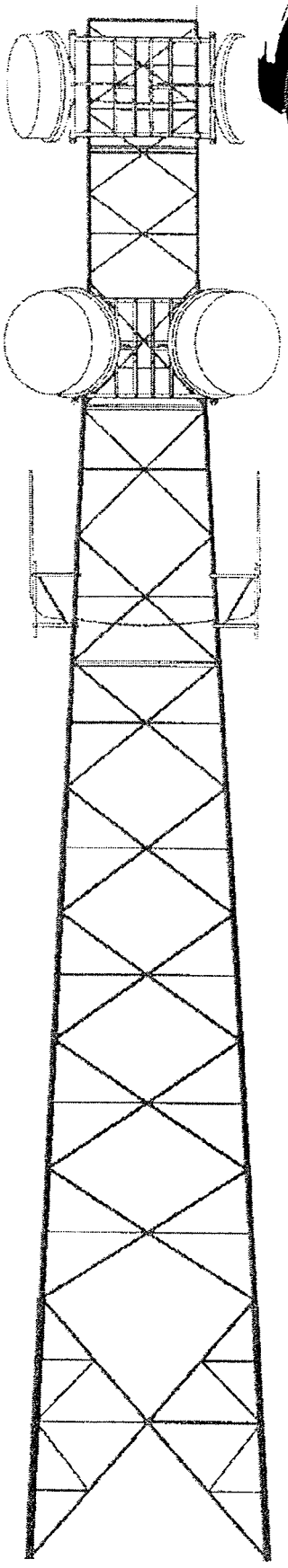
SNET GSM	152.5	880 - 894	2	296	0.0092	0.5867	1.6
SNET GSM	152.5	1930 - 1935	2	427	0.0132	1.0000	1.3
Total							**7.1%**

Structural information: Please see attached.



o2 Wireless Solutions, Inc.

SELF SUPPORTER
STRUCTURAL ANALYSIS REPORT

for

BECHTEL CORPORATION
175 CAPITAL BOULEVARD
SUITE 100
ROCKY HILL, CT 06067

August 27, 2002

SITE:
Guilford North 2018
New Haven County, CT
180' Rohn SS Tower
Project Designer: Hachem K. Domloj
o2wireless Solutions Job No. 103-3637-03

10430 Rodgers Road Houston, TX 77070 • 713.973.6904 • Fax 713.973.0205

INTRODUCTION

This report summarizes the results of the structural analysis performed on the 180' Rohn self supported tower at the Guilford North site in New Haven County, Connecticut. The tower analysis was performed using 1999 GuyMast/Mast program.

ANALYSIS CRITERIA

The tower was analyzed for the specified loads in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." This analysis derives its applied forces from EIA minimum 85 MPH basic wind speed with no ice accumulation and 74 MPH wind speed with 1/2" ice.

TOWER LOADING INFORMATION

Bechtel Corporation requested o2wireless Solutions analyze the tower to verify its structural integrity under the following antenna and transmission line loading:

ELEVATION	STATUS	DESCRIPTION	LINE
180'	EXISTING	1- 6' WHIP	1- 7/8" COAX
180'	EXISTING	4- 8' WHIPS	4- 7/8" COAX
180'	EXISTING	1- 4' WHIP	1- 7/8" COAX
180'	EXISTING	1- ANTEL BCD87077	2- 7/8" COAX
180'	EXISTING	1- ANTEL BCD87077	1- 1 ¼" COAX
180'	EXISTING	1- 15' WHIP	1- 7/8" COAX
178'	EXISTING	1- SCALA 2 BAY FM	1- 7/8" COAX
175'	EXISTING	1- 8' SOLID MW DISH/RAD	1- EW52
167'	EXISTING	1- 6' HP MW DISH	1- EW52
163'	EXISTING	1- DB809DK-Y	2- 7/8" COAX
158'	**PROPOSED**	**9- DUO1417-8686-4-0***	**9- 1 ¼" COAX**
140'	EXISTING	1- 10' WHIP	1- 7/8" COAX
139'	EXISTING	1- 20' WHIP	1- 7/8" COAX
137'	EXISTING	1- 10' WHIP	1- 7/8" COAX
135'	EXISTING	1- 6' HP MW DISH	1- EW90
132'	EXISTING	1- 8' GRID MW DISH	1- 7/8" COAX
127'	EXISTING	1- 6' SOLID MW DISH/RAD	1- EW65
126'	EXISTING	1- 6' SOLID MW DISH/RAD	1- EW65
117'	EXISTING	1- 4' SOLID MW DISH/RAD	1- 7/8" COAX
116'	EXISTING	1- 8' HP MW DISH	1- EW52
115'	EXISTING	1- 15' WHIP	1- 1 ¼" COAX
111'	EXISTING	1- 3'x 6' PARABOLIC REFL.	1- 7/8" COAX
110'	EXISTING	2- SCALA OTG9-8069	2- 1 5/8" COAX
110'	EXISTING	2- DB809T3	2- 1 5/8" COAX
105'	EXISTING	2- 2 ELEMENT YAGI	1- 1 5/8" COAX
104'	EXISTING	1- 3'x 6' PARABOLIC REFL.	1- 7/8" COAX
100'	EXISTING	1- SCALA 65151-002	1- 1 5/8" COAX
96'	EXISTING	1- SCALA 65151-002	1- 1 5/8" COAX

92'	EXISTING	1- 15' DIPOLE	1- 1 5/8" COAX
89'	EXISTING	1- 8' WHIP	1- 7/8" COAX
86'	EXISTING	1- ANTEL BCD87077	1- 7/8" COAX
82'	EXISTING	2- 3' YAGI	2- ½" COAX
73'	EXISTING	1- 3'x 6' PARABOLIC REFL.	1- ½" COAX
70'	EXISTING	1- 15' WHIP	1- 7/8" COAX
70'	EXISTING	2- 3' YAGI	1- 7/8" COAX
53'	EXISTING	1- MAXRAD MFB4400	1- 7/8" COAX

* 6 DDD TMA 1900 to accompany the antennas at level 158'.

AVAILABLE DOCUMENTS

- All tower data information, antenna types and locations were obtained from tower mapping.
- RF sheet.

RESULTS

The graphs enclosed summarize the results of the tower study and itemize the structural components, specifying member function, elevation, and size. Values for allowable and actual member loads are reported along with the corresponding allowable wind conditions. The graphs summarize the existing structural components and their corresponding applied loads.

CONCLUSIONS AND RECOMMENDATIONS:

The Guilford North tower will support the proposed loading and meet the requirements of the EIA Standard without any further modifications required. The analysis is reflected in run M3637-03 and shown in the drawing.

Information on the foundations and geotechnical report was not provided, thus, precluding any comments on their performance under the proposed loading criteria.

Thank you for this opportunity to work with you and do not hesitate to call if you should have any questions.

Respectfully submitted:

Hachem K. Domloj, EIT
Project Designer

STATE OF CONNECTICUT
V G DUVALL JR.
No. 12527
LICENSED
PROFESSIONAL ENGINEER

VG Duvall, Jr., PE
Connecticut Professional Engineer

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

September 17, 2002

Honorable Carl A. Balestracci, Jr.
First Selectman
Town Hall
31 Park Street
Guilford, Connecticut 06437-2629

Re: Telecommunications facility – Cooks Lane

Dear Mr. Balestracci:

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,

Peter W. van Wilgen
Senior Manager – Construction

Enclosure

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

September 13, 2002

Honorable Carl A. Balestracci, Jr.
First Selectman
Town of Guilford
Town Hall
31 Park Street
Guilford, CT 06437

RE: **EM-CING-013-041-054-060-076-093-108-020913** - Southwestern Bell Mobile Systems, LLC notice of intent to modify existing telecommunications facilities located in Bozrah, East Haddam, Glastonbury, Guilford, Madison, New Haven, and Oxford, Connecticut.

Dear Mr. Balestracci:

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 tentatively scheduled for September 25, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/slm

Enclosure: Notice of Intent

c: M. William McAvoy, Jr., Zoning Enforcement Officer, Town of Guilford

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Southwestern Bell Mobile Systems, LLC d/b/a Cingular Wireless

EM-CING-013-041-054-060-076-093-108-020913

[3 Polly Lane, Bozrah
126 Parker Road, East Haddam
2108 Main Street, Glastonbury
500 Cooks Lane, Guilford
864 Opening Hill Road, Madison
142 Baldwin Drive (West Rock Ridge), New Haven
55 Shelton Road, Oxford]

See Complete file under Bozrah