

Daniel F. Caruso
Chairman

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

September 6, 2007

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

RE: **EM-CING-003-077-077-115-126-070726** – New Cingular Wireless PCS, LLC notice of intent to modify existing telecommunications facilities located at 36 Janowski Road, Ashford; 239 Middle Turnpike East, Manchester; 575 Hillstown Road, Manchester; 151 Waterbury Road, Prospect; and 14 Booth Hill Road, a/k/a Oxford Drive, Shelton, Connecticut.

Dear Mr. Levine:

At a public meeting held on August 29, 2007, 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 with the condition that the Shelton tower be reinforced per page 2 of the structural analysis report dated June 8, 2007 and sealed by Jason Seaverson, P.E. prior to the antenna swap and that the a signed letter from a Professional Engineer be submitted to the Council to certify that the modifications have been properly completed.

The proposed modifications are to be implemented as specified here and in your notice dated July 25, 2007, including the placement of all necessary equipment and shelters within the tower compounds. 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 existing facility sites that would not increase tower heights, extend the boundaries of the tower sites, increase noise levels at the tower site boundaries by six decibels, and increase the total radio frequencies electromagnetic radiation power densities 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. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to any of 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,


Daniel F. Caruso
Chairman

DFC/MP/cm

- c: The Honorable Robert J. Chatfield, Mayor, Town of Prospect
William J. Donovan, Zoning Enforcement Officer, Town of Prospect
The Honorable Mark A. Laretti, Mayor, City of Shelton
Richard Schultz, Planning Administrator, City of Shelton
The Honorable Ralph H. Fletcher, First Selectman, Town of Ashford
Richard Dziadus, Zoning Enforcement Officer, Town of Ashford
The Honorable Josh M. Howroyd, Mayor, Town of Manchester
Thomas R. O'Marra, Zoning Enforcement Officer, Town of Manchester
Crown Castle International
Estate of Anthony M. Botticello
Capstar Radio Operating Company
American Tower

Perrone, Michael

From: Levine, Steven [SL3764@att.com]
Sent: Friday, March 21, 2008 8:21 AM
To: Perrone, Michael
Subject: FW: 5542 Engineer Letter for tower Mods -- Shelton - Booth Hill
Attachments: 5542 Engineer Letter.pdf

Mike,

Here's the structural mod certification for Shelton – Booth Hill Road.

Thanks.

AT&T Mobility / New Cingular Wireless PCS, LLC

Steve Levine

500 Enterprise Drive, 3rd Fl., Rocky Hill, CT 06067

Real Estate Consultant

Office 860-513-7636

Mobile 203-556-1655

Fax 860-513-7190

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RECEIVED
MAR 24 2008
CONNECTICUT
SITING COUNCIL



AMERICAN TOWER™
CORPORATION

March 18, 2008

Mr. Mark Appleby
AT&T
500 Enterprise Drive
Suite 3A
Rocky Hill, CT 06467
(860) 513-7536

RECEIVED
MAR 24 2008
CONNECTICUT
SITING COUNCIL

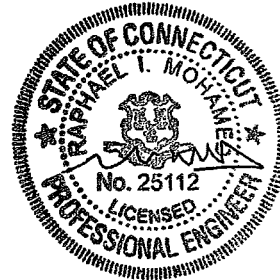
Re: STTN-Shelton-Trumbull, CT – ATC Number: 88017
Engineering Number: 40480221
Post-Modification Tower Inspection

Mr. Appleby,

The above tower was subjected to a structural analysis on June 8, 2007 by American Tower Corporation (ATC). The tower structural information was taken from a mapping by Tower Engineering Professionals (TEP #070851, dated May 30, 2007). The results of the analysis showed the diagonals in sections 3&4 as well as horizontals in section 1 to be overstressed. It was recommended that these members be reinforced or replaced. ATC prepared a modification package (Project #40480232, dated July 13, 2007) which instructs these members to be modified with plate reinforcement. These modifications were installed on February 18, 2008. ATC Engineering approves the modification installation as complete and adequate per TIA/EIA-222-F standards.

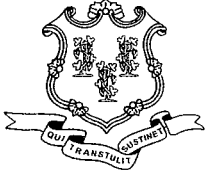
If you have any questions or require additional information, please call (919) 466-5146.

Michael Deese
Project Engineer



3/18/08

Raphael Mohamed, P.E.
Engineering Manager



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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Daniel F. Caruso
Chairman

August 1, 2007

The Honorable Mark A. Lauretti
Mayor
City of Shelton
54 Hill Street
P. O. Box 364
Shelton, CT 06484

RE: **EM-CING-003-077-077-115-126-070726** – New Cingular Wireless PCS, LLC notice of intent to modify existing telecommunications facilities located at 36 Janowski Road, Ashford; 239 Middle Turnpike East, Manchester; 575 Hillstown Road, Manchester; 151 Waterbury Road, Prospect; and 14 Booth Hill Road, a/k/a Oxford Drive, Shelton, Connecticut.

Dear Mayor Lauretti:

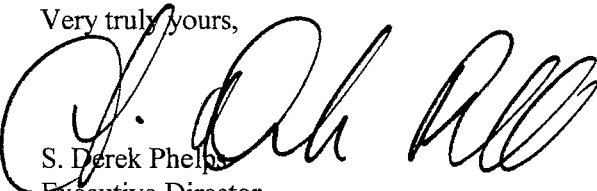
The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

The Council will consider this item at the next meeting scheduled for August 29, 2007 at 1:30 p.m. in Hearing Room Two, Ten Franklin Square, New Britain, Connecticut.

If you have any questions or comments regarding this proposal, please call me or inform the Council by August 28, 2007.

Thank you for your cooperation and consideration.

Very truly yours,



S. Derek Phelps
Executive Director

SDP/cm

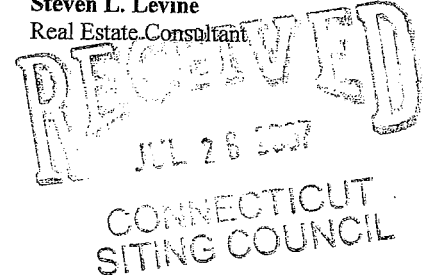
Enclosure: Notice of Intent

c: Richard Schultz, Planning Administrator, City of Shelton



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

July 25, 2007

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 5 existing tele-communications facilities located in Ashford, Manchester (2), Prospect, Shelton

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 ("Cingular") 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 each of the municipalities in which an affected cell site is locate.

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 are summary sheets detailing the planned changes, including power density calculations reflecting the change in the effect of Cingular's operations at each affected 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. In each instance, the height of the overall structure will be unaffected. Modifications to the existing sites include all or some of the following as necessary to bring each site into conformance with the plan:

- Replacement of existing panel antennas with new antennas of similar size, shape, and weight, or, installation of additional antennas of similar size, shape, and weight.
- Installation of small tower mount amplifiers ("TMA's") and/or diplexers to the platform on which the panel antennas are mounted to enhance signal reception.
- Installation of additional or larger coaxial cables as required.
- Installation of an additional equipment cabinet in existing shelters, or on existing or enlarged concrete pads.

None of these 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 other than some enlarged equipment pads as noted in the following 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 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, 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) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Steven L. Levine
Real Estate Consultant

Attachments

**CINGULAR WIRELESS
Equipment Modification**

36 Janowski Road, Ashford, CT
Site Number 1058
Exempt Modifications 12/8/99 and 8/1/02

Tower Owner/Manager: Crown Castle

Equipment configuration: Self-supporting lattice tower

Current and/or approved: Nine CSS DUO1417 antennas @ 140 ft c.l.
Nine runs 7/8 inch coax
Six TMA's @ 140 ft

Planned Modifications: Remove three existing antennas
Install three Powerwave 7770 antennas at 140 ft c.l.
Install six additional TMA's and six diplexers @ 140 ft
Install three additional runs 7/8 inch coax (total of 12)

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 16.7 % 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 20.2 % 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 *							8.24
Cingular TDMA *	140	880 - 894	16	100	0.0294	0.5867	5.00
Cingular GSM *	140	880 - 894	2	296	0.0109	0.5867	1.85
Cingular GSM *	140	1900 Band	2	427	0.0157	1.0000	1.57
Total							16.7%

* Per CSC Records

Proposed

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 *							15.23
Cingular GSM	140	880 - 894	2	296	0.0109	0.5867	1.85
Cingular GSM	140	1900 Band	2	427	0.0157	1.0000	1.57
Cingular UMTS	140	880 - 894	1	500	0.0092	0.5867	1.56
Total							20.2%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (B&T Engineering, dated 7/11/07)



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

July 25, 2007

Honorable Ralph H. Fletcher
1st Selectman, Town of Ashford
Town Office Bldg. 5 Town Hall Rd.
Ashford, CT 06278-1530

Re: Telecommunications Facility – 36 Janowski Road, Ashford

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 (“Cingular”) will be changing its equipment configuration at certain cell sites.

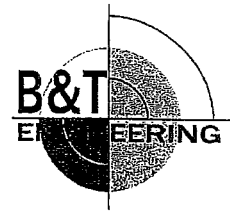
As required by Regulations of Connecticut State Agencies (“R.C.S.A.”) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular’s proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Cingular’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



July 11, 2007

Mr. Ben Goodhart
Crown Castle International
9105 Monroe Road, Suite 150
Charlotte, NC 28270
(704) 321-3845

B&T Engineering, Inc.
1717 S. Boulder, Suite 300
Tulsa, OK 74119
(918) 587-4630
ctuttle@btengineering.com

Subject: Structural Analysis Report

Carrier Designation Cingular Wireless Co-Locate
Carrier Site Number: 1058
Carrier Site Name: Ashford-Janoski Road

Crown Castle Designation Crown Castle BU Number: 876345
Crown Castle Site Name: Sky Hill
Crown Castle JDE Job Number: 88839

Engineering Firm Designation B&T Engineering Project Number: 77921

Site Data 36 Janoski Road, Ashford, CT, Windham County
Latitude 41°-57'-7.7", Longitude -72°-11'-43.9"
190 Foot – Self-Support Tower

Dear Mr. Goodhart,

B&T Engineering is pleased to submit this "Structural Analysis Report" to determine the structural integrity of the aforementioned tower. This analysis has been performed in accordance with the Crown Castle Structural 'Statement of Work' and the terms of Crown Castle Purchase Order Number 242898, in accordance with Application 45870, Revision 1.

The purpose of the analysis is to determine acceptability of the tower stress level. Based on our analysis we have determined the tower stress level for the structure and foundation, under the following load case, to be:

LC1: Existing + Reserved + Proposed Equipment

Sufficient Capacity

Note: See Table 1 and Table 2 for the proposed and existing/reserved loading.

The analysis has been performed in accordance with the TIA/EIA-222-F standard based upon a wind speed of 85 mph fastest mile.

All equipment proposed in this report shall be installed in accordance with the attached drawings for the determined available structural capacity to be effective.

We at B&T Engineering appreciate the opportunity of providing our continuing professional services to you and Crown Castle International. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

Chad E. Tuttle, P.E.
President

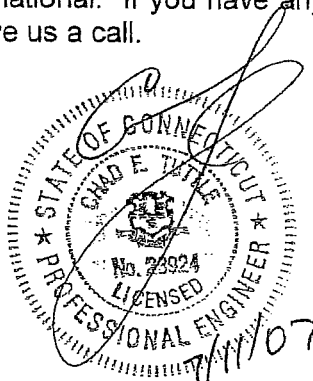


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1) INTRODUCTION

The subject structure is a 192 foot self-support lattice tower manufactured in 1996 by Rohn.

2) ANALYSIS CRITERIA

Specific code

- TIA/EIA-222-F – 85 mph fastest mile wind speed
- Connecticut State Building Code - 105 mph 3-second gust

The controlling wind loads for this analysis were derived from TIA/EIA-222-F therefore the tower was analyzed for a fastest mile wind speed of 85 mph with no ice and 74 mph with ½" of radial ice. The tower was originally designed for a 90 mph fastest mile wind speed with no ice and 78 mph with ½" of radial ice per the ANSI/EIA-222-E standard.

Table 1 – Proposed Antenna and Cable Information

Center Line Elev. (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number of Feed Lines	Feed Line Size (in)
140	6 3 6	CSS Powerwave Powerwave	DU01417-8686 7770.00 LGP13519 Diplexer	Existing	3	7/8

Table 2 – Existing and Reserved Antenna and Cable Information

Center Line Elev. (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number of Feed Lines	Feed Line Size (in)
190 [#]	6 9 (MLA)	Decibel --	DB980H90 6' x 1' Panel	(3) Sectored Frames	6 9 (MLA)	1 5/8
180	6 (r) 6 (r)	RFS	APL199016-42T2 APL869012-42T0	(3) Sectored Frames	12	1 5/8
170	9	Decibel	DB980H90	(3) Sectored Frames	9	1 5/8
160 [#]	2 1 (MLA) 2	EMS Wireless EMS Wireless --	RR90-17 RR90-1702 TMA	(1) Standoff	4 (MLA)	1 5/8
150 [#]	4 2 (MLA) 2	EMS Wireless EMS Wireless --	RR90-17 RR90-1702 TMA	(2) Standoffs	8 (MLA)	1 5/8
140 ^{**}	9 (remove) 6	CSS ADC	DU04-8670 800/1900 Full Band Masthead	(3) Sectored Frames	9	7/8

(r) – Indicates Reserved

* Refer to Base Level Drawing in Appendix B for Feedline Placement.

** Designated antennas to be removed.

Analysis performed with Existing+MLA loading for the 160 Ft and 150 Ft levels. For the 190 Ft level, only the MLA loading was used.

Table 3 – Design Antenna and Cable Information

Center Line Elev. (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount	Number of Feed Lines	Feed Line Size (in)
189	12	Decibel	DB980H90E-M	Mounting Frames	12	2 1/4
170	12	Swedcom	ALP9212	Mounting Frames	12	1 5/8
150	12	Swedcom	ALP9212	Mounting Frames	12	1 5/8
80	1	--	GPS Antenna	12' Gate Boom	1	7/8

3) ANALYSIS PROCEDURE

Table 4 – Documents Provided

Document	Remarks	Reference	Source
Tower Manufacturer Drawings	Rohn	CCI Doc ID# 1631630	CCIsites
Foundation	Rohn (Foundation & Soils Info)	CCI Doc ID# 1631622	CCIsites
Geotech Report	<i>Information Not Provided</i>		
Antenna Configuration	Configuration Change CheckList	Date: 06/27/07	CCI

3.1) Analysis Method

RISA Tower (version 5.0.2.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various dead, live, wind, and ice load cases. All loads were computed in accordance with the TIA/EIA-222-F or the local building code requirements. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1. Tower and structures were built in accordance with the manufacturer's specifications.
2. The tower and structures have been maintained in accordance with the manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
4. When applicable, transmission cables are considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222-F.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and B&T Engineering, Inc. should be allowed to review any new information to determine its effect on the structural integrity of the tower.

4) ANALYSIS RESULTS

Table 5 – Tower Component Stresses vs. Capacity – LC1

Notes	Component	Elevation (ft)	% Capacity	Pass/Fail
RISA Tower Analysis Summary:				
			Summary	
Notes:	Component	Section Elevation (ft)	% Capacity	Pass/Fail
	Leg (T10)	20 - 0	97.3	Pass
	Diagonal (T4)	140 - 120	94.9	Pass
	Top Girt (T1)	190 - 180	19.3	Pass
	Bolt Checks	--	88.9	Pass
Individual Components:				
Notes:	Component	Elevation	% Capacity	Pass/Fail
	Anchor Rods	Base	57.0	Pass
1	Base Foundation (Analysis)	Base	76.1	Pass
Structure Rating (max from all components) =				97.3%

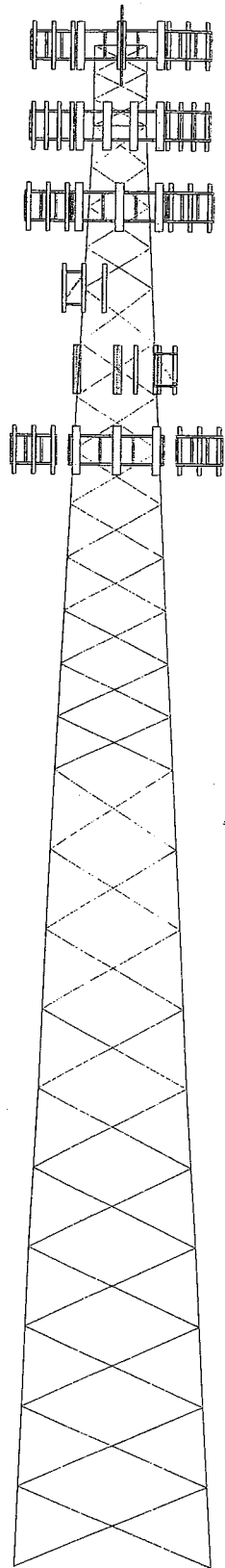
*Notes:

- 1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity listed.
- 2) Capacities up to 105% are considered acceptable based on analysis procedures used.

4.1) Recommendations

N/A

Section	T1	T2	T3	T4	T5	T6	T7	T8	T9	T10	
Legs	ROHN 3.5 STD	ROHN 3 EH	ROHN 4 EH	ROHN 5 EH	ROHN 6 EHS	ROHN 6 EH	ROHN 6 EHS	ROHN 6 EH	ROHN 6 EHS	ROHN 6 EHS	
Leg Grade					A572-50						
Diagonals	L2x2x3/16	L2 1/2x2 1/2x1/4	L3 1/2x3 1/2x1/4	L3x3x1/4	L3 1/2x3 1/2x1/4	L4x4x1/4	L4x4x5/16	L4x4x3/8	L4x4x3/8	L4x4x3/8	
Diagonal Grade					A36						
Top Chis					N.A.						
Face Width (ft)	6.58	8.54	10.51	12.74	14.83	16.92	18.88	21.13	23.05	25.06	
# Panels @ (ft)	3 @ 3.33333	4 @ 5	9 @ 6.66667					10 @ 10			
Weight (K)	0.5	0.9	1.5	2.6	2.7	3.3	4.2	4.4	5.0	27.0	



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod	190	(2) TMA (Existing)	150
(3) 6"x1" Panel (MLA)	190	(2) TMA (Existing)	150
(3) 6"x1" Panel (MLA)	190	6' Standoff (Existing)	150
(3) 6"x1" Panel (MLA)	190	6' Standoff (Existing)	150
(3) Sected Frames (Existing)	190	(2) DUO1417-8686 (Proposed)	140
(2) APL199016-42T2 (Reserved)	180	(2) DUO1417-8686 (Proposed)	140
(2) APL199016-42T2 (Reserved)	180	(2) DUO1417-8686 (Proposed)	140
(2) APL199016-42T2 (Reserved)	180	7770.00 (Proposed)	140
(2) APL869012-42T0 (Reserved)	180	7770.00 (Proposed)	140
(2) APL869012-42T0 (Reserved)	180	7770.00 (Proposed)	140
(2) APL869012-42T0 (Reserved)	180	(2) DB 800/1900 FB Masthead (Existing)	140
(3) Sected Frames (Existing)	180	(2) DB 800/1900 FB Masthead (Existing)	140
(3) DB980H90 (Existing)	170	(2) DB 800/1900 FB Masthead (Existing)	140
(3) DB980H90 (Existing)	170	(2) DB 800/1900 FB Masthead (Existing)	140
(3) DB980H90 (Existing)	170	(2) LGP 13519 Diplexor (Proposed)	140
(3) Sected Frames (Existing)	170	(2) LGP 13519 Diplexor (Proposed)	140
(3) RR90-17-02DP (Existing+MLA)	160	(2) LGP 13519 Diplexor (Proposed)	140
(2) TMA (Existing)	160	(2) LGP 13519 Diplexor (Proposed)	140
6' Standoff (Existing)	160	(3) Sected Frames (Existing)	140
(3) RR90-17-02DP (Existing+MLA)	150		
(3) RR90-17-02DP (Existing+MLA)	150		

SYMBOL LIST

MARK	SIZE	MARK	SIZE
A	L1 3/4x1 3/4x3/16		

MATERIAL STRENGTH

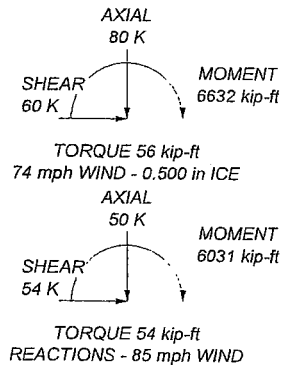
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

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. TOWER RATING: 97.3%

MAX. CORNER REACTIONS AT BASE:

DOWN: 332 K
 UPLIFT: -252 K
 SHEAR: 38 K



<p>B&T Engineering, Inc. 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918) 587-4630 FAX: (918) 295-0265</p>	Job: 77921 - Sky Hill, CT (BU# 876345)
	Project: 190' ROHN Self-Supporter / App ID 45870, Rev 1
	Client: Crown Castle International
	Code: TIA/EIA-222-F
	Path: B&T Engineering, Inc. \Projects\77921 - Sky Hill, CT (BU# 876345)\E-1.dwg
Drawn by: CT	App'd:
Date: 07/12/07	Scale: NTS
	Dwg No. E-1

**CINGULAR WIRELESS
Equipment Modification**

239 Middle Turnpike East, Manchester, CT
 Site Number 5448
 Former AT&T site
 Exempt Modification 3/25/03

Tower Owner/Manager: Town of Manchester

Equipment configuration: Monopole

Current and/or approved: Three Allgon 7250 antennas @ 144 ft c.l. (approved for 6)
 Six runs 1 5/8 inch coax
 Three outdoor cabinets on existing pad

Planned Modifications: Remove existing antennas
 Install Three Powerwave 7770 antennas at 144 ft c.l.
 Install six TMA's @ 144 ft
 Remove one outdoor cabinet
 Install one new outdoor cabinet for UMTS

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 28.8 % 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 28 % 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 *							23.56
Cingular GSM *	144	1900 Band	12	250	0.0520	1.0000	5.20
Total							28.8%

* Per CSC Records

Proposed

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 *							23.56
Cingular GSM	144	1900 Band	4	427	0.0296	1.0000	2.96
Cingular UMTS	144	880 - 894	1	500	0.0087	0.5867	1.48
Total							28.0%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (Malouf Engineering Intl, dated 7/18/07)



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

July 25, 2007

Mr. Scott Shanley, General Manager
Town of Manchester
Town Hall 41 Center St.
Manchester, CT 06045-0191

Re: Telecommunications Facility – 239 Middle Turnpike East, Manchester

Dear Mr. Shanley:

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 ("Cingular") will be changing its equipment configuration at certain cell sites.

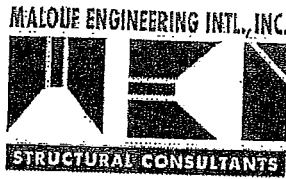
As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Cingular'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



July 18, 2007

RIGOROUS STRUCTURAL ANALYSIS

Structure:	184 ft Monopole	Unknown	
Client / Site ID:	Hudson D.G. / AT&T	Manchester Central Site #5448	
Owner / Site ID:	AT&T	54448 Manchester Central #5448	
MEI Project ID:	CT00813M-07V0		
Location:	239 Middle Turnpike East Manchester, CT 06040	Hartford County FCC # N/A	
	LAT	41-47-3.8 N	LON 72-30-42.1 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a rigorous structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure is **in conformance** with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced in the report sections.

The installation of the proposed changed condition consisting of replacement of the existing antennas with the new AT&T (3) Allgon LGP 7770 Panels + (6) LGP 21401 TMA's + (2) Ret Units onto existing (3) 4ft Standoff Mounts at Elev. 144 ft ± c.l. is structurally acceptable.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Luan Nguyen, PE
Project Engineer

Reviewed & Approved by:

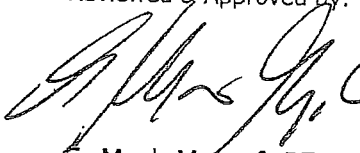

E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com



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1. INTRODUCTION & SCOPE

A rigorous structural analysis was performed by Malouf Engineering Int'l (MEI), as requested and authorized by Derek Creaser, Hudson Design Group on behalf of AT&T, to determine the acceptance of the proposed changed conditions in conformance with the ANSI/TIA-222-F Standard, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures".

The scope of this independent analysis is to determine the overall stability and the adequacy of structural members, foundations, and member connections, as available and stated. This analysis considers the structure to have been properly installed and maintained with no structural defects. Installation procedures and related loading are not within the scope of this analysis and should be performed and evaluated by a competent person of the erection contractor.

The different report sections detail the applicable information used in this evaluation, relating to the tower data, the appurtenances configuration and the wind and ice loading considered.

2. SOURCE OF DATA

The following information has been used in this evaluation as source data that accurately represent the existing structure and the related appurtenances:

	Source	Information	Reference
STRUCTURE			
Tower	Hudson D. G.	Previous Tower Analysis Report	Bay State Design Job No. 2740.003, dated 01/04/07
Foundation		Not Available	-
Material Grade	Not Available from supplied documents - Assumed based on similar structures - refer to Appendix.		
CURRENT APPURTENANCES			
	Hudson D. G.	Previous Tower Analysis Report & recent site photos	Bay State Design Job No. 2740.003, dated 01/04/07
CHANGED CONDITION			
	Hudson D. G.	Cingular RF Data sheet	Issue dated 4/27/07

Background Information:

Based on available information, the following is known regarding this structure:

DESIGNER / FABRICATOR	Unknown
DESIGN CRITERIA	TIA/EIA 222-F - 80 / 69 Mph + 0" / 1/2" Ice
PRIOR STRUCTURAL MODIFICATIONS	Modified Base plate by adding stiffeners as per Bay State Design Job No. 2740.003, dated 01/04/07. (Only limited info available)

3. ANALYSIS CRITERIA

The structural analysis performed used the following criteria:

CODE / STANDARD	IBC 2003 / ANSI/TIA-222-F-96 Standard	
LOADING CASES	<i>Full Wind:</i>	80 Mph - with No Radial Ice
	<i>Iced Case:</i>	69 Mph (fastest-mile) + 1/2" Radial Ice
	<i>Service:</i>	60 Mph
STRUCTURE CRITERIA	<i>Structure Classification:</i> Class II	
	<i>Exposure Category:</i> 'C' - <i>Topographic Category:</i> 1	

Appurtenances Configuration

The following appurtenances configuration has been considered:

Table 1: Proposed.Changed Condition Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
144	AT&T	3	Allgon LGP 7770 Panels	(3) 4ft Standoff Mounts	6	1-5/8" - (I) [Re-use existing]
		6	LGP 21401 TMA's			
		2	Ret Unit			

Table 2: Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
184		1	Omni Whip Ant.	Low Profile Platform	4	7/8" - (I)
		2	4-Elem Dipole Ant.			
		2	8-Element Dipole Ant.			
161	T-Mobile	6	RR90-17-02DP Panels	Low Profile Platform	12	1-5/8" - (I)
154	Sprint-Nextel	6	DB980-F65T4E-M Panels	Low Profile Platform	6	1-5/8" - (I)
		6	APVX86-906513-C Panels (New)		9	1-5/8"-(I/E)
124		2	YAGI Antenna	Low Profile Platform	3	1/2" - (I)
		1	Omni Whip Ant.			
53		1	GPS Antenna	Mount	1	1/2" - (I)

Notes:

1. Please note appurtenances not listed above are to be removed/not present as per data supplied.
2. (I) = internal; (E) = External; (FZ) = Within Face Zone & (OFZ) = Outside Face Zone - as per TIA-222-G.
3. The above antennas, mounts, and lines represent MEI's understanding of the appurtenances configuration. If different than above, the analysis is invalid. Please refer to Appendix 2 for EPA wind areas used in the calculations. Please contact MEI if any discrepancies are found.

4. ANALYSIS PROCEDURE

The subject structure is analyzed for feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and a computer stress analysis was performed in accordance with the TIA-222 Standard provisions and with the agreed scope of work terms and the results of this analysis are reported.

Analysis Program

The computer program used to model the structure is a rigorous Finite Element Analysis program, RISATower (ver. 5.0.2.2), a commercially available program developed by C-Concepts, WI and now maintained by RISA Technologies. The latticed structures members are modeled using beam/truss and cable members and the pole members using tubular beam elements. The structural parameters and geometry of the members are included in the model. The dead and temperature loads and the wind loads are internally calculated by the program for the different wind directions and then applied as external loads on the structure. 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 and with no deterioration to its member capacities. Refer to the related section in this report for a listing of the assumptions made.

Assumptions

This engineering study is based on the theoretical capacity of the members and is not a condition assessment of the structure. This analysis is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural stress analysis:

- 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 and with no deterioration to its member capacities ('as-new' condition).
- The tower member sizes and configuration are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated.
- The appurtenances configuration is as supplied and/or as stated in the report. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
- Some assumptions are made regarding antennas and mounts sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type & industry practice.
- The top platform, if applicable, is considered adequate to support the loading. No actual analysis of the platform itself is performed, with the analysis being limited to analyzing the pole and its foundation.
- The soil parameters are as per data supplied or as assumed and stated in the calculations. Refer to the Appendix. If no data is available, the foundation system is assumed to support the structure with its new reactions.
- All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report. All guy cable assemblies, as applicable, are assumed to develop the rated breaking strength of the wire.
- All prior structural modifications, if any, are assumed to be as per data supplied/available, and to have been properly installed and to be fully effective.

If any of the above assumptions are not valid or have been made in error, this analysis results may be invalidated, MEI should be contacted to review any contradictory information to determine its effect.

5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Table 3: Stress Analysis Results

Member Type	Maximum Stress Ratio	Controlling Location / Component	Pass/Fail	Comment
POLE SHAFT	66.70%	Elev. 166 - 133 ft	Pass	
BASE PLATE	89.1%	Base Plate Stiffeners	Pass	
ANCHOR RODS	60.9%	Bolt Tensions	Pass	
FOUNDATION	Cannot Determine		Cannot Determine	No Data available - Considered Acceptable based on max. stress

Notes:

1. The Maximum Stress Ratio is the percentage that the maximum load in the member is relative to the allowable load as determined by Code requirements.
2. Refer to the Appendix 2 for more details on the member loads.
3. A maximum stress ratio between 100% to 105% may be considered as *Acceptable* according to industry standard practice.

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 89.1%** of its support capacity (controlling component: Base Plate) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 2 for more details of the analysis results.
- Based on the stress analysis performed, the existing structure is **in conformance** with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced in the report sections.
- No data is available on the existing foundation, therefore its actual condition could not be determined. However, based on the maximum stress ratios of the pole, it can be considered as *Acceptable* for the new loading considered.
- ***The installation of the proposed changed condition*** consisting of replacement of the existing antennas with the new AT&T (3) Allgon LGP 7770 Panels + (6) LGP 21401 TMA's + (2) Ret Units onto existing (3) 4ft Standoff Mounts at Elev. 144 ft ± c.l. **is structurally acceptable.**
- This pole has limited additional support capacity for the appurtenances and loading criteria considered. Therefore, no changes to the configuration considered should be made without performing a new proper evaluation.

Rigging and temporary supports required for the erection/modification shall be determined, documented, furnished and installed by the erector/contractor accounting for the loads imposed on the structure due to the proposed construction method.

7. REPORT DISCLAIMER

The engineering services rendered by Malouf Engineering International, Inc. ("MEI") in connection with this Structural Analysis are limited to a computer analysis of the tower structure, size and capacity of its members. MEI does not analyze the fabrication, including welding and connection capacities, except as included in this Report.

The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

1. Proper alignment and plumbness.
2. Correct guy tensions, as applicable.
3. Correct bolt tightness or slip jacking of sleeved connections.
4. No significant deterioration or damage to any structural component.

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. MALOUF ENGINEERING INTERNATIONAL, INC. Assumes no obligation to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will MALOUF ENGINEERING INTERNATIONAL, INC. Have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of MALOUF ENGINEERING INTERNATIONAL, INC., if any, pursuant to this Report shall be limited to the total funds actually received by MALOUF ENGINEERING INTERNATIONAL, INC. For preparation of this Report.

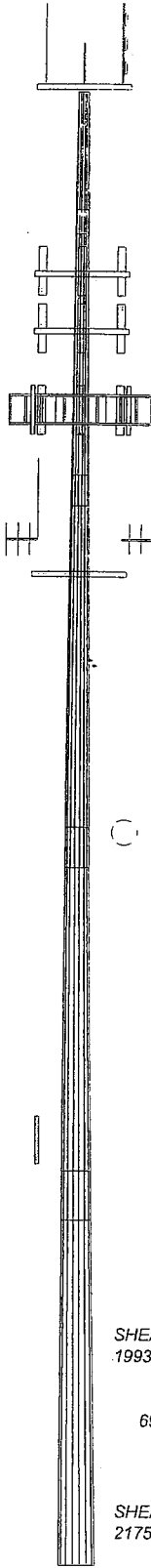
Customer has requested MALOUF ENGINEERING INTERNATIONAL, INC. To prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested MALOUF ENGINEERING INTERNATIONAL, INC. to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of MALOUF ENGINEERING INTERNATIONAL, INC., Customer has informed MALOUF ENGINEERING INTERNATIONAL, INC. that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by MALOUF ENGINEERING INTERNATIONAL, INC. and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice. MALOUF ENGINEERING INTERNATIONAL, INC. shall have the right to rely upon the accuracy of the information supplied by the customer and shall not be held responsible for the Customer's misrepresentation or omission of relevant fact whether intentional or otherwise.

Customer hereby agrees and acknowledges that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than MALOUF ENGINEERING INTERNATIONAL, INC. in connection with the implementation of services including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide MALOUF ENGINEERING INTERNATIONAL, INC. with a Certificate of Insurance naming MALOUF ENGINEERING INTERNATIONAL, INC. as additional insured.

APPENDIX 1 - TOWER DRAWING

Section	1	2	3	4	5
Length (ft)	17.38	36.36	48.89	49.05	49.14
Number of Sides	18	18	18	18	18
Thickness (in)	0.1875	0.2500	0.3750	0.4375	0.4375
Lap Splice (ft)	2.92	3.80	4.99	6.11	
Top Dia (in)	15.5000	18.3689	25.0613	34.0369	42.6744
Bot Dia (in)	19.3990	26.4007	35.8924	44.9030	53.5000
Grade			A572-65		
Weight (lb)	607.6	2173.1	5960.5	9046.6	11064.0

184.0 ft
166.6 ft
133.2 ft
88.1 ft
44.0 ft
1.0 ft



DESIGNED APPURTENANCE LOADING

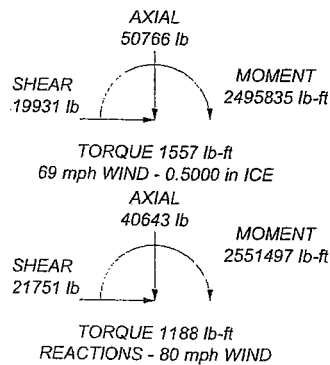
TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod (E)	185	ALLGON LGP 7770 PANELS (P)(3)<5> (ATI)	145
OMNI WHIP ANT (E)(1)<1> (E)	185	LGP 21401 TMA's (P)(6)<5> (ATI)	145
4-Elem Dipole Ant (E)(1)<1> (E)	185	RET Unit (P)(2)<5> (ATI)	145
8-Elem Dipole Ant (E)(1)<1> (E)	185	4FT STANDOFF MOUNTS (P)(3)<5> (ATI)	145
LP PLATFORM (E)(1)<1> (E)	185	YAGI ANTENNA (E)(1)<6> (E)	125
RR90-17-02DP PANELS (E)(6)<2> (T-MOBILE)	162	YAGI ANTENNA (E)(1)<6> (E)	125
LP PLATFORM (E)(1)<2> (T-MOBILE)	162	OMNI WHIP ANT (E)(1)<6> (E)	125
DB980-F65T4E-M PANELS (E)(6)<3> (SPRINT-NEXTEL)	155	LP PLATFORM (E)(1)<6> (E)	125
APVX86-906513-C PANELS (E)(6)<4> (SPRINT-NEXTEL)	155	GPS ANTENNA .MOUNT (E)(1)<7> (E)	54
LP PLATFORM (E)(1)<3> (SPRINT-NEXTEL)	155		


MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 69 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 60 mph wind.
5. TOWER RATING: 89.1%



 Malouf Engineering Int'l, Inc. 17950 Preston Road; Suite #720 Dallas, TX 75252 Phone: (972) 783-2578 FAX: (972) 783-2583	Job: 184 FT MNP, MANCHESTER CENTRAL SITE #5448 Project: CT00813M-07V0 Client: HUDSON DESIGN GROUP / AT&T Code: TIA/EIA-222-F Path: C:\MEI\Projects\07 DATAMNP\CT00813M-07V0\CT00813M-07V0.dwg	Drawn by: L.Nguyen Date: 07/18/07 Scale: NTS	App't: Scale: NTS Dwg No.: E-1
	Consulting Engineers		
	Malouf Engineering Int'l, Inc.		
	Malouf Engineering Int'l, Inc.		

**CINGULAR WIRELESS
Equipment Modification**

575 Hillstown Road, Manchester, CT
 Site Number 5321
 Former AT&T site
 Petition 633 approved 7/8/03

Tower Owner/Manager: Estate of Anthony M. Botticello

Equipment configuration: Wood Laminate Pole w/ T-Mobile Extension

Current and/or approved: Three Allgon 7250 antennas @ 70 ft c.l.
 Six runs 7/8 inch coax
 Three outdoor cabinets on existing slab

Planned Modifications: Remove existing antennas
 Install three Powerwave 7770 antennas at 70 ft c.l.
 Install six TMA's @ 70 ft
 Remove one existing outdoor cabinet
 Install one new outdoor cabinet for UMTS

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 17.0 % 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 26.3 % 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 *							9.70
Cingular GSM *	70	1900 Band	4	250	0.0734	1.0000	7.34
Total							17.0%

* Per CSC Records

Proposed

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 *							9.70
Cingular GSM	70	1900 Band	2	702	0.1030	1.0000	10.30
Cingular UMTS	70	880 - 894	1	500	0.0367	0.5867	6.25
Total							26.3%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (Malouf Engineering Intl, dated 7/19/07)



The new



at&t

Your world. Delivered.

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

July 25, 2007

Mr. Scott Shanley, General Manager
Town of Manchester
Town Hall 41 Center St.
Manchester, CT 06045-0191

Re: Telecommunications Facility – 575 Hillstown Road, Manchester

Dear Mr. Shanley:

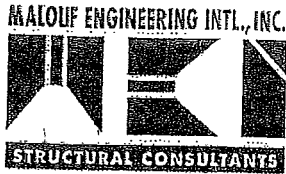
In order to accommodate technological changes, implement Uniform Mobile Telecommunications System (“UMTS”) capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC (“Cingular”) will be changing its equipment configuration at certain cell sites.

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 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 to the Siting Council fully describes Cingular’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



July 19, 2007

STRUCTURAL ANALYSIS

Structure:	70 ft Wood Pole + Future 10' Extension (80 ft total height)	E-Lam / Glulam
Client / Site ID:	Hudson D.G. / AT&T	Manchester SW Site #5321
Owner / Site ID:	AT&T	5321 Manchester SW #5321
MEI Project ID:	CT00817M-07V0	
Location:	575 Hillstown Road Manchester, CT 06040	Hartford County FCC # N/A
	LAT 41-44-48.8 N	LON 72-33-50.8 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure is **in conformance** with the IBC 2003 / ASCE 7-02 for the loading considered under the criteria listed and referenced in the report sections.

The installation of the proposed changed condition consisting of replacement of the existing antennas with the new AT&T (3) Allgon LGP 7770 Panels + (6) LGP 21401 TMA's onto existing Standoff Mounts at Elev. 68.5 ft ± c.l. **is structurally acceptable.**

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Helder Lopez, EIT
Project Engineer

Reviewed & Approved by:

E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com

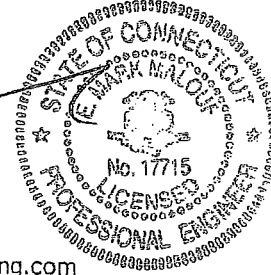


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1. INTRODUCTION & SCOPE

A structural analysis was performed by Malouf Engineering Int'l (MEI), as requested and authorized by Derek Creaser, Hudson Design Group on behalf of AT&T, to determine the acceptance of the proposed changed conditions in conformance with the IBC-2003 / ASCE 7-02 and local Building Codes.

The scope of this independent analysis is to determine the overall stability and the adequacy of structural members, foundations, and member connections, as available and stated. This analysis considers the structure to have been properly installed and maintained with no structural defects. Installation procedures and related loading are not within the scope of this analysis and should be performed and evaluated by a competent person of the erection contractor.

The different report sections detail the applicable information used in this evaluation, relating to the tower data, the appurtenances configuration and the wind and ice loading considered.

2. SOURCE OF DATA

The following information has been used in this evaluation as source data that accurately represent the existing structure and the related appurtenances:

	Source	Information	Reference
STRUCTURE			
Tower	Hudson D. G.	Previous Analysis Report	Matthew J. Young Analysis, dated 06/13/06
Foundation		Limited Information per previous analysis	Matthew J. Young Analysis
Material Grade	Matthew J. Young Analysis, dated 06/13/06 – refer to Appendix.		
CURRENT APPURTENANCES			
	Hudson D. G.	Previous Analysis Report & recent site photos	Matthew J. Young Analysis, dated 06/13/06
CHANGED CONDITION			
	Hudson D. G.	Cingular RF Data sheet	Issue dated 4/27/07

Background Information:

Based on available information, the following is known regarding this structure:

DESIGNER / FABRICATOR	E-Lam
DESIGN CRITERIA	Unknown
PRIOR STRUCTURAL MODIFICATIONS	Added 10ft Extension Pipe to accommodate T-Mobile future loading increasing pole to a total height of 80ft.

3. ANALYSIS CRITERIA

The structural analysis performed used the following criteria:

CODE / STANDARD	IBC 2003 / ASCE 7-02	
LOADING CASES	<i>Full Wind:</i>	100 Mph (3-Sec) - with No Radial Ice
	<i>Iced Case:</i>	N/A
	<i>Service:</i>	N/A
STRUCTURE CRITERIA	<i>Structure Classification:</i> Class II	
	<i>Exposure Category:</i> 'B' - <i>Topographic Category:</i> 1	

Appurtenances Configuration

The following appurtenances configuration has been considered:

Table 1: Proposed Changed Condition Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
68.5	AT&T	3	Allgon LGP 7770 Panels	(3) Standoff Mounts	6	7/8" - (E) * [Re-use existing]
		6	LGP 21401 TMA's			

Table 2: Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
77.5	T-Mobile	3	APX16PV-16PVL-E Panels Antennas (Future)	(3) 2ft Standoff Pipes on a 10ft Extension Pipe on top of existing 70ft pole (Future)	6	7/8" - (F) *
		6	TMA's			

Notes:

- * No more than 2
- Please note appurtenances not listed above are to be removed/not present as per data supplied.
- (I) = internal; (E) = External; (FZ) = Within Face Zone & (OFZ) = Outside Face Zone - as per TIA-222-G.
- The above antennas, mounts, and lines represent MEI's understanding of the appurtenances configuration. If different than above, the analysis is invalid. Please refer to Appendix 2 for EPA wind areas used in the calculations. Please contact MEI if any discrepancies are found.

4. ANALYSIS PROCEDURE

The subject structure is analyzed for feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and a computer stress analysis was performed in accordance with the IBC 2003 / ASCE 7-02 and with the agreed scope of work terms and the results of this analysis are reported.

Assumptions

This engineering study is based on the theoretical capacity of the members and is not a condition assessment of the structure. This analysis is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural stress analysis:

- 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 and with no deterioration to its member capacities ('as-new' condition).
- The tower member sizes and configuration are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated.
- The appurtenances configuration is as supplied and/or as stated in the report. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
- Some assumptions are made regarding antennas and mounts sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type & industry practice.
- The platform(s), if applicable, is considered adequate to support the loading. No actual analysis of the platform itself is performed, with the analysis being limited to analyzing the pole and its foundation.
- The soil parameters are as per data supplied or as assumed and stated in the calculations. Refer to the Appendix. If no data is available, the foundation system is assumed to support the structure with its new reactions.
- All prior structural modifications, if any, are assumed to be as per data supplied/available, and to have been properly installed and to be fully effective.

If any of the above assumptions are not valid or have been made in error, this analysis results may be invalidated, MEI should be contacted to review any contradictory information to determine its effect.

5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Table 3: Stress Analysis Results

Member Type	Maximum Stress Ratio	Controlling Location / Component	Pass/Fail	Comment
POLE MAST	45.7%	Elev. 0 ft	Pass	
FOUNDATION	62.5%	Embedment length	Pass	

Notes:

1. The Maximum Stress Ratio is the percentage that the maximum load in the member is relative to the allowable load as determined by Code requirements.
2. Refer to the Appendix 2 for more details on the member loads.
3. A maximum stress ratio between 100% to 105% may be considered as *Acceptable* according to industry standard practice.

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 62.5%** of its support capacity (controlling component: Foundation) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 2 for more details of the analysis results.
- Based on the stress analysis performed, the existing structure is **in conformance** with the IBC 2003 / ASCE 7-02 for the loading considered under the criteria listed and referenced in the report sections.
- ***The installation of the proposed changed condition consisting of replacement of the existing antennas with the new AT&T (3) Allgon LGP 7770 Panels + (6) LGP 21401 TMA's onto existing Standoff Mounts at Elev. 68.5 ft ± c.l. is structurally acceptable.***
- This pole has limited additional support capacity for the appurtenances and loading criteria considered. Therefore, no changes to the configuration considered should be made without performing a new proper evaluation.

Rigging and temporary supports required for the erection/modification shall be determined, documented, furnished and installed by the erector/contractor accounting for the loads imposed on the structure due to the proposed construction method.

7. REPORT DISCLAIMER

The engineering services rendered by Malouf Engineering International, Inc. ('MEI') in connection with this Structural Analysis are limited to a computer analysis of the tower structure, size and capacity of its members. MEI does not analyze the fabrication, including welding and connection capacities, except as included in this Report.

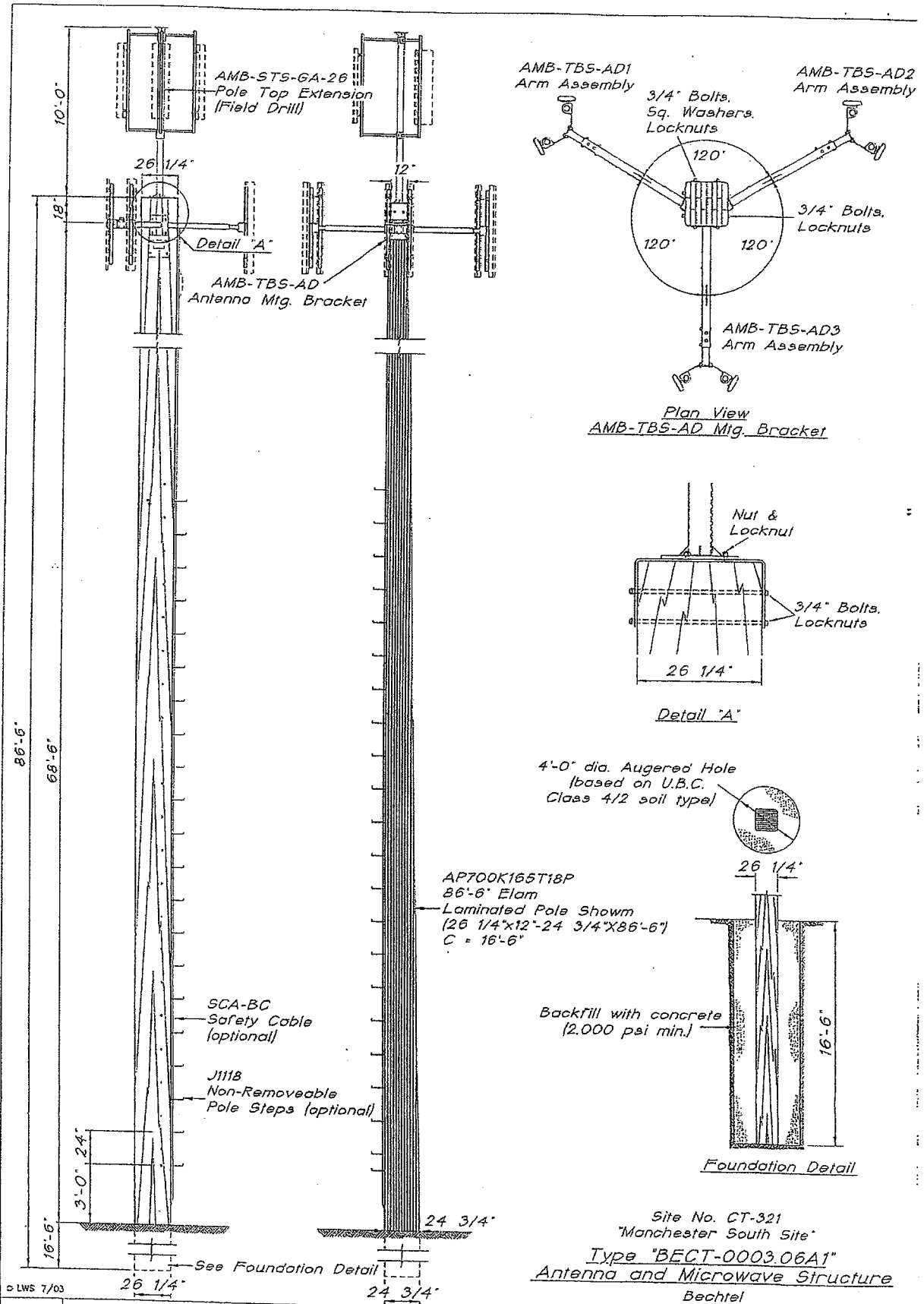
The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

1. Proper alignment and plumbness.
2. Correct guy tensions, as applicable.
3. Correct bolt tightness or slip jacking of sleeved connections.
4. No significant deterioration or damage to any structural component.

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. MALOUF ENGINEERING INTERNATIONAL, INC. Assumes no obligation to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will MALOUF ENGINEERING INTERNATIONAL, INC. Have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of MALOUF ENGINEERING INTERNATIONAL, INC., if any, pursuant to this Report shall be limited to the total funds actually received by MALOUF ENGINEERING INTERNATIONAL, INC. For preparation of this Report.

Customer has requested MALOUF ENGINEERING INTERNATIONAL, INC. To prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested MALOUF ENGINEERING INTERNATIONAL, INC. to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of MALOUF ENGINEERING INTERNATIONAL, INC., Customer has informed MALOUF ENGINEERING INTERNATIONAL, INC. that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by MALOUF ENGINEERING INTERNATIONAL, INC. and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice. MALOUF ENGINEERING INTERNATIONAL, INC. shall have the right to rely upon the accuracy of the information supplied by the customer and shall not be held responsible for the Customer's misrepresentation or omission of relevant fact whether intentional or otherwise.

Customer hereby agrees and acknowledges that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than MALOUF ENGINEERING INTERNATIONAL, INC. in connection with the implementation of services including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide MALOUF ENGINEERING INTERNATIONAL, INC. with a Certificate of Insurance naming MALOUF ENGINEERING INTERNATIONAL, INC. as additional insured.



Site No. CT-321
 "Manchester South Site"
 Type "BECT-0003.06A1"
 Antenna and Microwave Structure
 Bechtel

					Laminated Wood Systems, Inc.			
					E-LAM			
					P.O. BOX 386, SEWARD, NE 68434		1-800-949-ELAM	
					DRAWN	DATE	DWG. NO.	
					D. Policky	7-31-03	BECT-0003.06A1	
					NO.	REVISION	DATE	CK.
					1.	Changed the AMB-TBS-AS to an AMB-TBS-AD	8-15-03	
					2.	Removed Future Carriers, Added Pole Top Extension	6-9-06	
					3.		6-13-06	
ACAD DWG. FILE: BECT0306A1								

**CINGULAR WIRELESS
Equipment Modification**

151 Waterbury Rd, Prospect, CT
 Site Number 5626
 Former AT&T site
 Exempt Modification 10/7/02

Tower Owner/Manager: Capstar Radio Operating Company

Equipment configuration: Guyed Lattice Tower

Current and/or approved: Three Allgon 7250 antennas @ 140 ft c.l. (approved for 6)
 Six runs 1 ¼ inch coax

Planned Modifications: Remove all existing antennas
 Install three Powerwave 7770 antennas @ 140 ft c.l.
 Install six TMA's @ 140 ft c.l.
 Install two additional outdoor cabinets

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 4.7 % 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 7.4 %.

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 *							2.98
Cingular GSM **	148	1900 Band	2	250	0.0082	1.0000	0.82
Cingular GSM *	140	1900 Band	2	250	0.0092	1.0000	0.92
Total							4.7%

* Per CSC records. ** Space under lease, but equipment not installed.

Proposed

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 *							2.98
Cingular GSM	140	1900 Band	3	520	0.0286	1.0000	2.86
Cingular UMTS	140	880 - 894	1	500	0.0092	0.5867	1.56
Total							7.40

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (Malouf Engineering Intl, dated 7/19/07)



The new



at&t

Your world. Delivered.

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

July 25, 2007

Honorable Robert J. Chatfield
Mayor, Town of Prospect
Town Office Building 36 Center Street
Prospect, Connecticut 06712

Re: Telecommunications Facility – 151 Waterbury Road, Prospect

Dear Mayor Chatfield:

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 (“Cingular”) will be changing its equipment configuration at certain cell sites.

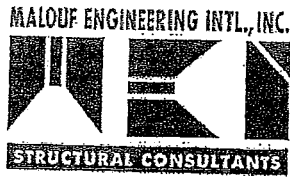
As required by Regulations of Connecticut State Agencies (“R.C.S.A.”) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular’s proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Cingular’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



July 19, 2007

RIGOROUS STRUCTURAL ANALYSIS

Structure:	195 ft Guyed	Stainless	
Client / Site ID:	Hudson D.G. / AT&T	Prospect North Site #5626	
Owner / Site ID:	AT&T	5626 Prospect North #5626	
MEI Project ID:	CT00814G-07V0		
Location:	151 Waterbury Road Prospect, CT 06712	New Haven County FCC # N/A	
	LAT	41-31-22.1 N	LON 72-59-52.1 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a rigorous structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure is **in conformance** with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced in the report sections.

The installation of the proposed changed condition consisting of replacement of the existing antennas with the new AT&T (3) Allgon LGP 7770 Panels + (6) LGP 21401 TMA's + (2) RCU/RET Units onto existing (3) Flush Mounts at Elev. 140 ft ± c.l. is structurally acceptable.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Luan Nguyen, PE
Project Engineer

Reviewed & Approved by:

E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com

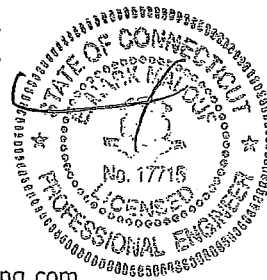


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1. INTRODUCTION & SCOPE

A rigorous structural analysis was performed by Malouf Engineering Int'l (MEI), as requested and authorized by Derek Creaser, Hudson Design Group on behalf of AT&T, to determine the acceptance of the proposed changed conditions in conformance with the ANSI/TIA-222-F Standard, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures".

The scope of this independent analysis is to determine the overall stability and the adequacy of structural members, foundations, and member connections, as available and stated. This analysis considers the structure to have been properly installed and maintained with no structural defects. Installation procedures and related loading are not within the scope of this analysis and should be performed and evaluated by a competent person of the erection contractor.

The different report sections detail the applicable information used in this evaluation, relating to the tower data, the appurtenances configuration and the wind and ice loading considered.

2. SOURCE OF DATA

The following information has been used in this evaluation as source data that accurately represent the existing structure and the related appurtenances:

	Source	Information	Reference
STRUCTURE			
Tower	Hudson D. G.	Previous Tower Analysis Report	Walker Eng. Job No. DTC-001R2; 0509-0503R2, dated 09/22/05
Foundation	Hudson D. G.	Previous Analysis Report, which only referenced the original reactions.	Walker Eng. Job No. DTC-001R2; 0509-0503R2, dated 09/22/05
Material Grade	Not Available from supplied documents - Assumed based on similar structures - refer to Appendix.		
CURRENT APPURTENANCES			
	Hudson D. G.	Previous Tower Analysis Report & recent site photos	Walker Eng. Job No. DTC-001R2; 0509-0503R2,
CHANGED CONDITION			
	Hudson D. G.	Cingular RF Data sheet	Issue dated 4/24/07

Background Information:

Based on available information, the following is known regarding this structure:

DESIGNER / FABRICATOR	Stainless
DESIGN CRITERIA	TIA/EIA 222-F - 85 / 39 Mph + 0" / 3/4" Ice
PRIOR STRUCTURAL MODIFICATIONS	None Known

3. ANALYSIS CRITERIA

The structural analysis performed used the following criteria:

CODE / STANDARD	IBC 2003 / ANSI/TIA-222-F-96 Standard	
LOADING CASES	<i>Full Wind:</i>	85 Mph (fastest-mile) - with No Radial Ice
	<i>Iced Case:</i>	50 Mph (fastest-mile) + 3/4" Radial Ice
	<i>Service:</i>	60 Mph
STRUCTURE CRITERIA	<i>Structure Classification:</i> Class II	
	<i>Exposure Category:</i> 'C' - <i>Topographic Category:</i> 1	

Appurtenances Configuration

The following appurtenances configuration has been considered:

Table 1: Proposed Changed Condition Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
140	AT&T	3	Allgon LGP 7770 Panels	(3) Flush Mounts	6	1 1/4" - FZ [Re-use existing]
		6	LGP 21401 TMA's			
		3	RET/RCU Unit (1 exist)			

Table 2: Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ants Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
159					1	1 5/8" - FZ
148	AT&T	3	Allgon 7250 Panels (Fut)	(3) Flush Mounts	6	1 1/4" - FZ
		6	LGP 21401 TMA's (Future)			
		3	RET/RCU Unit (Future)			
130	T-MOBILE	18	DR65-19-XXDPQ Panels	(3) T-Frame Mounts	18	1 5/8" - FZ
92					2	7/8" - FZ
83		1	Broken Dipole	Mount	1	1/2" - FZ

Notes:

1. Please note appurtenances not listed above are to be removed/not present as per data supplied.
2. (I) = internal; (E) = External; (FZ) = Within Face Zone & (OFZ) = Outside Face Zone - as per TIA-222-G.
3. The above antennas, mounts, and lines represent MEI's understanding of the appurtenances configuration. If different than above, the analysis is invalid. Please refer to Appendix 2 for EPA wind areas used in the calculations. Please contact MEI if any discrepancies are found.

4. ANALYSIS PROCEDURE

The subject structure is analyzed for feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and a computer stress analysis was performed in accordance with the TIA-222 Standard provisions and with the agreed scope of work terms and the results of this analysis are reported.

Analysis Program

The computer program used to model the structure is a rigorous Finite Element Analysis program, RISATower (ver. 5.0.2.2), a commercially available program developed by C-Concepts, WI and now maintained by RISA Technologies. The latticed structures members are modeled using beam/truss and cable members and the pole members using tubular beam elements. The structural parameters and geometry of the members are included in the model. The dead and temperature loads and the wind loads are internally calculated by the program for the different wind directions and then applied as external loads on the structure. 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 and with no deterioration to its member capacities. Refer to the related section in this report for a listing of the assumptions made.

Assumptions

This engineering study is based on the theoretical capacity of the members and is not a condition assessment of the structure. This analysis is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural stress analysis:

- 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 and with no deterioration to its member capacities ('as-new' condition).
- The tower member sizes and configuration are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated.
- The appurtenances configuration is as supplied and/or as stated in the report. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
- Some assumptions are made regarding antennas and mounts sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type & industry practice.
- The top platform, if applicable, is considered adequate to support the loading. No actual analysis of the platform itself is performed, with the analysis being limited to analyzing the pole and its foundation.
- The soil parameters are as per data supplied or as assumed and stated in the calculations. Refer to the Appendix. If no data is available, the foundation system is assumed to support the structure with its new reactions.
- All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report. All guy cable assemblies, as applicable, are assumed to develop the rated breaking strength of the wire.
- All prior structural modifications, if any, are assumed to be as per data supplied/available, and to have been properly installed and to be fully effective.

If any of the above assumptions are not valid or have been made in error, this analysis results may be invalidated, MEI should be contacted to review any contradictory information to determine its effect.

5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Table 3: Stress Analysis Results

Member Type	Maximum Stress Ratio	Controlling Location / Component	Pass/Fail	Comment
GUY	93.00%	Elev. 87.4583 ft	Pass	
LEG	71.80%	Elev. 25 - 0 ft	Pass	
DIAGONALS	42.70%	Elev. 150 - 125 ft	Pass	
GIRTS	43.60%	Elev. 25 - 0 ft	Pass	
BASE FOUNDATION	100.0%	Compression Force	Pass	Reactions Comparison Only.
GUY ANCHORS	85.4%	Shear Force	Pass	Reactions Comparison Only.

Notes:

1. The Maximum Stress Ratio is the percentage that the maximum load in the member is relative to the allowable load as determined by Code requirements.
2. Refer to the Appendix 2 for more details on the member loads.
3. A maximum stress ratio between 100% to 105% may be considered as *Acceptable* according to industry standard practice.

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 93.0%** of its support capacity (controlling component: Guy Wire) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 2 for more details of the analysis results.
- Based on the stress analysis performed, the existing structure is **in conformance** with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced in the report sections.
- ***The installation of the proposed changed condition consisting of replacement of the existing antennas with the new AT&T (3) Allgon LGP 7770 Panels + (6) LGP 21401 TMA's + (2) RCU/RÉT Units onto existing (3) Flush Mounts at Elev. 140 ft ± c.l. is structurally acceptable.***
- This tower is near its maximum support capacity for the appurtenances and loading criteria considered. Therefore, no changes to the configuration considered should be made without performing a new proper evaluation.

Rigging and temporary supports required for the erection/modification shall be determined, documented, furnished and installed by the erector/contractor accounting for the loads imposed on the structure due to the proposed construction method.

7. REPORT DISCLAIMER

The engineering services rendered by Malouf Engineering International, Inc. ('MEI') in connection with this Structural Analysis are limited to a computer analysis of the tower structure, size and capacity of its members. MEI does not analyze the fabrication, including welding and connection capacities, except as included in this Report.

The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

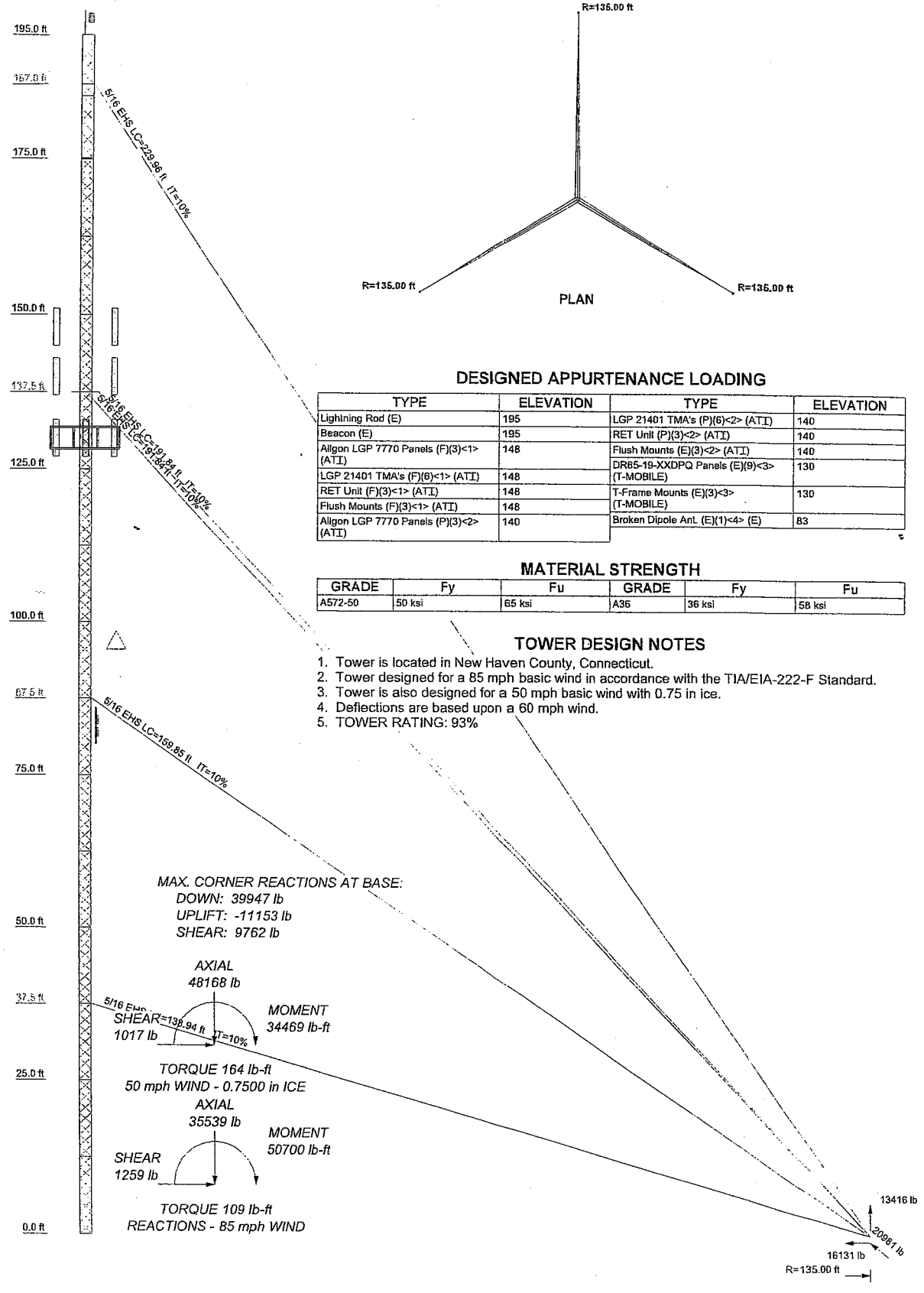
1. Proper alignment and plumbness.
2. Correct guy tensions, as applicable.
3. Correct bolt tightness or slip jacking of sleeved connections.
4. No significant deterioration or damage to any structural component.

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. MALOUF ENGINEERING INTERNATIONAL, INC. Assumes no obligation to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will MALOUF ENGINEERING INTERNATIONAL, INC. Have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of MALOUF ENGINEERING INTERNATIONAL, INC., if any, pursuant to this Report shall be limited to the total funds actually received by MALOUF ENGINEERING INTERNATIONAL, INC. For preparation of this Report.

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Customer hereby agrees and acknowledges that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than MALOUF ENGINEERING INTERNATIONAL, INC. in connection with the implementation of services including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide MALOUF ENGINEERING INTERNATIONAL, INC. with a Certificate of Insurance naming MALOUF ENGINEERING INTERNATIONAL, INC. as additional insured.

Section	T1	T2	T3	T4	T5	T6	T7	T8
Legs								
Diagonals								
Diagonal Grade								
Top Girts								
Mid Girts								
Bottom Girts								
Top Guy Pull-Outs								
Face Width (ft)								
# Panels @ (ft)								
Weight (lb)								



	Malouf Engineering Int'l, Inc.	Job: 195 FT GT, PROSPECT NORTH SITE #5626		
	17950 Preston Road; Suite #720	Project: CT00814G-07V0	Client: HUDSON DESIGN GROUP / AT&T	Drawn by: L.Nguyen
	Dallas, TX 75252	Code: TIA/EIA-222-F	Date: 07/19/07	Scale: NTS
	Phone: (972) 783-2578	FAX: (972) 783-2583	Path: C:\MEIProjects\07 DATA\TCT00814G-07V0\CT00814G-07V0-Final.dwg	Dwg No. E-1

**CINGULAR WIRELESS
Equipment Modification**

14 Booth Hill Rd (a/k/a Oxford Dr), Shelton
Site Number 5542
Former AT&T Cell Site
Exempt Mod. approved 8/15/02

Tower Owner/Manager: American Tower

Equipment configuration: Lattice Tower

Current and/or approved: Three Allgon 7250 Panel Antennas @ 144 ft c.l. (6 approved)
Six runs 1 5/8 inch coax (six runs 1 1/4 inch coax approved)

Planned Modifications: Remove all three existing antennas
Install three Powerwave 7770 antennas @ 144 ft c.l.
Install six TMA's @ 144 ft
Remove one existing outdoor cabinet from existing pad
Install one new outdoor equipment cabinet for UMTS

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 14.0 % 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 15.2 % 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 *							12.23
Cingular GSM *	144	1900 Band	4	250	0.0173	1.0000	1.73
Total							14.0%

* Per CSC records.

Proposed

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 *							12.23
Cingular GSM	144	1900 Band	2	427	0.0148	1.0000	1.48
Cingular UMTS	144	880 - 894	1	500	0.0087	0.5867	1.48
Total							15.20

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the foundation has adequate structural capacity to accommodate the proposed modifications, but that the tower itself would be overstressed. The analysis, however, presents a list of structural improvements that would eliminate the overstress condition. Cingular will have the tower strengthened per these recommendations prior to performing the proposed UMTS modifications. We respectfully request, therefore, that the Council give conditional approval for the proposed modifications.



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

July 25, 2007

Honorable Mark A. Lauretti, Mayor
Town of Shelton
Town Hall, 54 Hill Street
Shelton, CT 06484-0364

Re: Telecommunications Facility – 14 Booth Hill Road, Shelton

Dear Mayor Lauretti:

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 (“Cingular”) 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 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 to the Siting Council fully describes Cingular’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



AMERICAN TOWER

Structural Analysis Report

Structure : 200 ft AT&T TAG Tower
ATC Site Name : Shelton/Trumbull, CT
ATC Site Number : 88017
Proposed Carrier : Cingular
Carrier Site Name : Shelton / Booth Hill
Carrier Site Number : 5542
County : Fairfield
Eng. Number : 40480221
Date : June 8, 2007
Usage : 117 %

Submitted by:
Michael Deese, E.I.
Design Engineer

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112



Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 200 ft. AT&T TAG Tower located at 14 Oxford Dr, Shelton, CT 06484, Fairfield County (ATC site #88017). Tower geometry, member sizes, and foundation information was based on a mapping by Tower Engineering Professionals (TEP #070851, dated May 30, 2007).

Analysis

The tower was analyzed using Power Line Systems, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 90 mph (Fastest Mile) / 110 mph (3-Second Gust)
 Radial Ice: 77.9 mph (Fastest Mile) w/ 1/2" ice
 Code: TIA/EIA-222-F / 2003 International Building Code

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
214.5	1	8' Dipole	Platform w/ Handrails	(1) 1 5/8"	State of CT
209.5	1	14' Whip		(1) 1 5/8"	
206.5	2	8' Dish w/ Radome		(2) EW65	
200.0	-	-	Platform w/ Handrails	-	-
183.5	2	Scala AP14-850/150N	Standoff	(2) 1 5/8"	State of CT
	3	8' Omni	Side Arm	(3) 1 5/8"	
168.0	12	Decibel DB844H90E-XY	Sector Frame	(15) 1 5/8"	Nextel
155.0	9	Dapa 58000	Pipe	(9) 1 5/8"	Sprint
125.5	1	8' Dish w/ Radome	Dish	(1) EW65	State of CT
112.5	-	-	Platform w/ Handrails	-	-
75.0	-	-	Platform w/ Handrails	-	-
55.0	1	GPS Unit	Pipe	(1) 1/2"	Sprint

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
144.0	6	Powerwave 7770	Pipe	(12) 1 5/8"	Cingular
	6	Powerwave LGP-21401		N/A	

Double stack proposed coax in a 6-on-6 configuration in same location as existing.

Results

The maximum structure usage is: 117 %

Leg Forces	Original Design Reactions	Current Analysis Reactions	% Of Design
Uplift (Kips)	N/A	146.7	N/A
Axial (Kips)	N/A	194.1	N/A
Shear (Kips)	N/A	32.4	N/A

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Conclusion

Based on the analysis results, the structure does not meet the requirements per TIA/EIA-222-F and 2003 International Building Code standards.

The tower and foundation can support the existing and proposed equipment after the modifications listed below are completed:

- Replace or reinforce 2L 3" x 2.5" x 1/4" diagonals in section 3
- Replace or reinforce 2L 3" x 2.5" x 1/4" diagonals in section 4
- Replace or reinforce 2L 3" x 3" x 5/16" horizontals in section 1

If you have any questions or require additional information, please call 919-466-5146.

Standard Conditions

All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.

American Tower Corp., Project: '88017 - shelton_trumbull, ct'
Tower Version 8.10, 11:15:21 AM Thursday, June 14, 2007
Undeformed geometry displayed

