EM-CING-073-090127





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

Phone: (860) 513-7636 Fax: (860) 513-7190

ORIGINAL

Steven L. Levine Real Estate Consultant

HAND DELIVERED

January 27, 2009

Honorable Daniel F. Caruso, Chairman, and Members of the Connecticut Siting Council Connecticut Siting Council 10 Franklin Square New Britain, Connecticut 06051



Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 20 Mell Road, Lisbon (owner, American Tower)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

- 1. The height of the overall structure will be unaffected.
- 2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.
- 3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.
- 4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

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

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,

Steven L. Levine

Real Estate Consultant

Attachments

NEW CINGULAR WIRELESS Equipment Modification

20 Mell Road, Lisbon Site Number 2058

Docket No. 124 and Exempt Modification approved 8/02

Tower Owner/Manager:

American Tower

Equipment Configuration:

Monopole

Current and/or Approved: Nine CSS DUO-1417-8686 panel antennas @ 187ft AGL

Six TMA's and three combiners @ 187 ft

Nine runs coax cable **Equipment Shelter**

Planned Modifications:

Remove all existing equipment and coax

Install six Powerwave 7770 antennas (or equivalent) @ 187 ft

Install six TMA's and six diplexers @ 187 ft

Install twelve runs 1 5/8 inch coax

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 3.8 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm²)	Standard Limits (mW/cm²)	Percent of Limit
Other Users *							0.00
Cingular TDMA *	187	880 - 894	16	100	0.0165	0.5867	2.80
Cingular GSM*	187	1900 Band	2	427	0.0088	1.0000	0.88
Cingular GSM*	187	880 - 894	2	296	0.0061	0.5867	1.04
Total						oğ t lok old	4.7%

^{*} 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/cm²)	Percent of Limit
Other Users *							0.00
Cingular UMTS	187	880 - 894	1	500	0.0051	0.5867	0.88
Cingular GSM*	187	1900 Band	2	427	0.0088	1.0000	0.88
Cingular GSM*	187	880 - 894	4	296	0.0122	0.5867	2.08
Total							3.8%

^{*} Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower and foundation will have sufficient structural capacity to accommodate the proposed equipment modifications upon completion of tower modifications recommended on page 2 of the analysis. (American Tower, 1/21/09) American Tower is generating plans for this structural upgrade, and AT&T will implement the structural modifications as directed prior to installing the new equipment.





New Cingular Wireless PCS, LLC

500 Enterprise Drive

Rocky Hill, Connecticut 06067-3900

Phone: (860) 513-7636 Fax: (860) 513-7190

Steven L. Levine Real Estate Consultant

January 27, 2009

Thomas W. Sparkman, 1st Selectman Town of Lisbon Town Office Bldg. One Newent Rd. Lisbon, CT 06351

Re:

Telecommunications Facility - 20 Mell Road

Dear Mr. Sparkman:

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



Structural Analysis Report

Structure

: 180 ft Monopole

ATC Site Name

: Lisbon CT 3, CT

ATC Site Number

302503

Proposed Carrier

: AT&T Mobility

Carrier Site Name

: Lisbon

Carrier Site Number

302503

County

: New London

Engineering Number

: 42728421

Date

January 21, 2009

Usage

119%

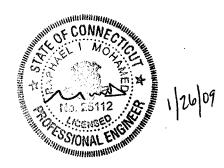
Portholes Required

No

Submitted by: Christopher L. Jolly, 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 180 ft Monopole located at 20 Mel Road, Jewett City, Connecticut, 06351, New London County (ATC Site No. 302503). The tower information was taken from a mapping by HighTower Solutions (Project No. HTS011509, dated January 13, 2009).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed:

85 mph (Fastest Mile)

Radial Ice:

74 mph (Fastest Mile) w/ 1/2" ice

Code:

TIA/EIA-222-F / 2006 IBC Section 1609.1.1, Exception (4) and Section

3108.4 / 2005 & 2008 CT Supplement

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
187.0	1	6' Omni	Flat Platform w/ Handrails	(1) 1 5/8"	USA Mobility
46.5	1	4.5' Omni	Side Arm	(1) 1/2"	
13.0	1	Channel Master Type 120	Dish	(1) RG6	USA Mobility

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax	Carrier
	6	Powerwave LGP21902			
187.0	6	Powerwave LGP21401	Flat Platform w/ Handrails		AT&T Mobility
	6	Powerwave 7770.00		(12) 1 5/8"	

Install proposed coax inside monopole.

Results

The maximum structure usage is: 119%

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports <u>may not</u> be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Current Analysis Reactions	% Of Design
Moment (ft-kips)	Unknown	2,481.1	N/A
Shear (kips)	Unknown	22.8	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 2006 IBC with 2005 & 2006 CT Supplements standards. The tower and foundation can support the existing and proposed equipment after the modifications listed below are completed.

- Reinforce tower between 0' to 140'.
- Reinforce flange at 125.3'.

If you have any questions or require additional information, please call 919-465-6545.

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:

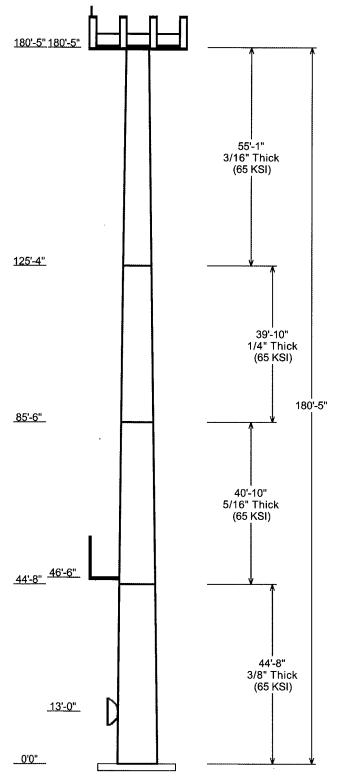
- -- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- -- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements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

Copyright Semaan Engineering Solutions, Inc.



Job Information

Pole: 302503 Code: TIA/EIA-222 Rev F

Description: 180'-5" Mapped Monopole

Client: AT&T Mobility Location: Lisbon CT 3, CT

Shape: 12 Sides Base Elev (ft): 0.00

Height: 180.42 (ft)

Taper: 0.147760(in/ft)

	Sections Properties							
Shaft Section	Length (ft)		eter (in) ss Flats Bottom	Thick (in)	Joint Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksi)
1	44.667	35.09	41.69	0.375		0.000	0.147760	65
2	40.833	29.06	35.09	0.313	Butt Joint	0.000	0.147760	65
3	39.833	23.17	29.06	0.250	Butt Joint	0.000	0.147760	65
4	55.083	15.04	23.17	0.188	Butt Joint	0.000	0.147760	65

	Discrete Appurtenance					
Attach Elev (ft)	Force Elev (ft)	Qty	Description			
180.416	189.996	1	6' Omni			
180.416	187.000	6	Powerwave LGP21902			
180.416	187.000	6	Powerwave LGP21401			
180.416	187.000	6	Powerwave 7770.00			
180.416	180.416	1	Flat Platform w/ Handrails			
46.500	46.500	1	Side Arm			
46.500	48.750	1	4.5' Omni			
13.000	13.000	1	Channel Master Type 120			

	Linear Appurtenance						
Elev							
From	То	Description	To Wind				
0.000	13.000	RG6	Yes				
0.000	46.500	1/2" Coax	No				
0.000	180.4	1 5/8" Coax	No				
0.000	180.4	1 5/8" Coax	No				

Load Cases				
No Ice	85.00 mph Wind with No Ice			
Ice	73.61 mph Wind with Ice			

Reactions					
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)		
No Ice	2330.73	21.99	20.90		
Ice	1905.90	17.44	24.95		