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

Daniel F. Caruso
Chairman

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-081-126-131-164-165-070808** – New Cingular Wireless PCS, LLC notice of intent to modify existing telecommunications facilities located at 1021 Straits Turnpike, Middlebury; 70 Platt Road, Shelton; 1394 (a/k/a 250) Meriden Waterbury Road, Southington; 404 Hayden Station Road, Windsor; and 4 (a/k/a 2) Volunteer Drive, Windsor Locks, 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 new feed lines be installed in a 4-wide by 3-deep stacked arrangement on the Middlebury tower.

The proposed modifications are to be implemented as specified here and in your notice dated August 7, 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 Steven N. Wawruck, Jr., First Selectman, Town of Windsor Locks
Alan Gannuscio, Planning & Zoning Chairman, Town of Windsor Locks
The Honorable Mark A. Lauretti, Mayor, City of Shelton
Richard Schultz, Planning Administrator, City of Shelton
The Honorable John Barry, Chairman Town Council, Town of Southington
Mary Jughes, Town Planner Town of Southington
The Honorable Donald Trinks, Mayor, Town of Windsor
Mario Zavarella, Town Planner, Town of Windsor
The Honorable Edward B. St. John, First Selectman, Town of Middlebury
William J. Stowell, Planning and Zoning Chairman, Town of Middlebury
Christine Farrell, T-Mobile
Crown Castle
Maria Scotti, Message Center Management
Michele G. Briggs, New Cingular Wireless PCS, LLC
Christopher B. Fisher, Esq., Cuddy & Feder LLP

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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

EM-CING-081-126-131-164-165-070808

HAND DELIVERED

August 7, 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 telecommunications facilities located in Middlebury, Shelton, Southington, Windsor, and Windsor Locks

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

1021 Straits Turnpike, Middlebury, CT
Site Number 1129
Exempt Mods approved 4/27/99, 8/15/02

Tower Owner/Manager: T-Mobile

Equipment configuration: Monopole

Current and/or approved: Nine DUO1417 antennas @ 189 ft c.l.
Six TMA's @ 189 ft
Nine runs 1 ¼ inch coax (approved for 1 5/8 inch coax)

Planned Modifications: Remove existing antennas and coax
Install six Powerwave 7770 antennas @ 189 ft c.l.
Remove existing 1¼ inch coax
Install twelve runs 1 5/8 inch coax
Install six diplexers @ 189 ft

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 19.9 % 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 decrease to approximately 18 % 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 *							15.23
Cingular TDMA *	189	880 - 894	16	100	0.0161	0.5867	2.75
Cingular GSM *	189	880 - 894	2	296	0.0060	0.5867	1.02
Cingular GSM *	189	1900 Band	2	427	0.0086	1.0000	0.86
Total							19.9%

* 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	189	880 - 894	2	296	0.0060	0.5867	1.02
Cingular GSM	189	1900 Band	2	427	0.0086	1.0000	0.86
Cingular UMTS	189	880 - 894	1	500	0.0050	0.5867	0.86
Total							18.0%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (All-Points Technology Corporation, dated 7/23/07)

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

July 23, 2007

Hudson Design Group, LLC
46 Beechwood Drive
North Andover, MA 01845

Attn: Derek Creaser
Re: 195' Self-Supporting Tower, Middlebury, CT
Cingular Site #1129; Straits Turnpike

Dear Derek,

All-Points Technology Corporation, P.C. (APT) evaluated the 195' self-supporting tower located at 1021 Straits Turnpike in Middlebury, Connecticut for antenna changes proposed by Cingular Wireless. APT did not visit the tower site; this evaluation also relied on information provided by others, which included a structural analysis by O2wireless Solutions dated July 24, 2002, recent tower photographs, and antenna changes proposed by Cingular Wireless.

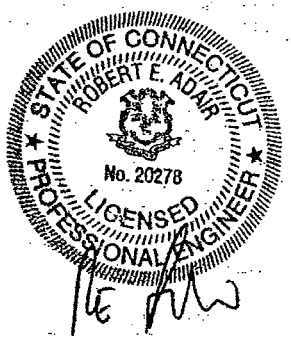
Cingular Wireless proposes to remove nine existing panel antennas (CSS DUO1417-8686) and replace them with six Powerwave 7770 panel antennas and six small LGP 13519 diplexers. Six existing tower-mounted amplifiers (TMAs) will remain in place. Nine existing 1-1/4" feed lines will be replaced with twelve 1-5/8" lines. APT recommends new feed lines be installed in a 4-wide by 3-deep stacked arrangement.

My evaluation indicates that the tower is capable of supporting Cingular's proposed antenna changes and associated appurtenances. The proposed changes represent a reduction in wind and dead loads on the structure compared to current loads, provided waveguide cables are stacked as recommended. The structural capacity of the tower will not be diminished due to Cingular's proposed changes.

Please call if you have any questions.

Sincerely,
All-Points Technology Corporation, P.C.

Robert E. Adair, P.E.
Principal



CT198370 Middlebury SA ltr 7-23-07.doc

☐ 3 SADDLEBROOK DRIVE • KILLINGWORTH, CONNECTICUT 06419 • PHONE: 860-663-1697 • FAX: 860-663-0935
☒ 150 OLD WESTSIDE ROAD • NORTH CONWAY, NEW HAMPSHIRE 03860 • PHONE/FAX: 603-356-5214

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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

August 6, 2007

Honorable Edward B. St. John
1st Selectman, Town of Middlebury
Town Hall, 1212 Whittemore Rd.
Middlebury, CT 06762-0392

Re: Telecommunications Facility – 1021 Straits Turnpike, Middlebury

Dear Mr. St. John:

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

CINGULAR WIRELESS
Equipment Modification

70 Platt Road, Shelton
Site Number 5431
Former AT&T Cell Tower
CSC Petition 608 approved 3/25/03

Tower Owner/Manager: Cingular

Equipment configuration: Monopole

Current and/or approved: Three AWS90162 Panel Antennas @ 95 ft c.l. (6 approved)
Six runs 7/8 inch coax

Planned Modifications: Remove all three existing antennas
Install three Powerwave 7770 antennas @ 95 ft c.l.
Install six TMA's and up to six diplexers @ 95 ft
Remove one existing outdoor cabinet
Install one new equipment cabinet

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 61.8 % 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 68.6 % 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 *							57.81
Cingular GSM	95	1900 Band	4	250	0.0398	1.0000	3.98
Total							61.8%

* 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 *							57.81
Cingular GSM	95	1900 Band	4	461	0.0735	1.0000	7.35
Cingular UMTS	95	880 - 894	1	500	0.0199	0.5867	3.40
Total							68.6%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (Paul J. Ford and Co., dated 7/27/07)

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

August 6, 2007

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

Re: Telecommunications Facility – 70 Platt 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

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Structural Analysis Report

PJF Project No.: **A00007-T145**

Structure: Existing 140-ft Monopole

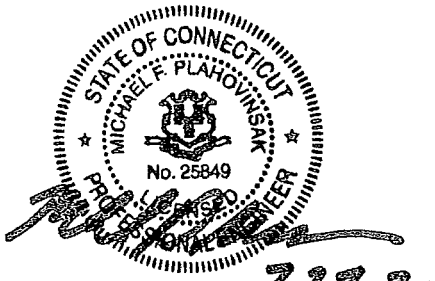
Owner: AT&T
Manufacturer: Fort Worth Tower, Inc.
Location: Fairfield Co., CT
Site Name: Shelton
Site Number: 5431

Prepared For:

Hudson Design Group, LLC

46 Beechwood Drive
North Andover, MA 01845
Attn: Derek Creaser

July 27, 2007



7.27.2007

Analyzed by:
Guy S. Allison, E.I.T. KJS
Structural Engineer
gallison@pjfweb.com

Reviewed by:
Michael F. Plahovinsak, P.E.
Registered Professional Engineer

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Executive Summary

Design Standard:

Paul J. Ford and Company has analyzed the existing monopole in accordance with the Telecommunications Industry Association Standard TIA/EIA-222-F for the following *fastest mile* design wind velocities:

85 mph Basic Wind Velocity without ice
74 mph Basic Wind Velocity with 1/2" radial ice
50 mph (Operational) Basic Wind Velocity without ice

Antenna Loads:

The existing monopole was analyzed for the following antenna loading:

Status	Elevation	Description	Coax		Owner
Existing	140'	(6) 48" x 4" x 9" Panels* + (6) 36" x 4" x 6" Panels* 14' Low Profile Platform	(12)	1 5/8" (I)	N/A
Proposed Existing	95'	*(3) Powerwave 7770 Panels w/ (6) TMA's*** *(6) Powerwave LGP13519 Diplexers* 14' Platform w/ Handrails	(6)	7/8" (I)	*Cingular*
Existing	75'	(6) 48" x 6" x 3" Panels* 14' Low Profile Platform	(6)	1 5/8" (I)	N/A

*Antenna sizes approximated from site photographs.
**Proposed antennas are to replace existing (3) panel antennas.

Note: Coax size and quantity assumed for existing carriers.

If loading is different than shown in the above table, Paul J. Ford and Company should be contacted immediately to reevaluate any conclusions stated in this report.

(I) – Coax are mounted on interior of pole, and not exposed to wind.

Results:

The existing monopole and foundation have sufficient capacity to support the new antenna loading while meeting the minimum wind requirements of this analysis.

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Project Description:

Paul J. Ford and Company has analyzed the existing monopole for Hudson Design Group, LLC to determine its capacity to support the proposed antenna re-configuration at the 95' elevation.

Pole History:

Fort Worth Tower, Inc. manufactured the monopole in 2001 per AT&T Wireless job #J030219001. The monopole was designed in accordance with the TIA/EIA-222-F Standard for an 85 mph design wind.

In 2004, Paul J. Ford and Company provided Dewberry with design drawings for a 40' extension, ref. PJF Job No. 34803-0047. The design for the extension was based on the TIA/EIA-222-F Standard for an 85 mph design wind.

Site photos indicate the proposed extension was completed prior to the current analysis.

Structural Analysis:

Our analysis was completed according to the recommendations of the TIA/EIA-222-F 1996. This standard recommends a minimum design wind velocity of 85 mph (no ice) for Fairfield County. If ice accumulation is considered, the TIA/EIA standard allows the design wind pressure reduced by 25% in conjunction with ½" radial ice. Our analysis was completed in compliance with the minimum wind requirements under the following load cases:

85 mph Basic Wind Velocity without ice
74 mph Basic Wind Velocity with 1/2" radial ice
50 mph (Operational) Basic Wind Velocity without ice

Existing & Proposed Antenna Loading:

Our analysis was completed using the following existing and proposed antenna loading:

Status	Elevation	Description	Coax		Owner
Existing	140'	(6) 48" x 4" x 9" Panels* + (6) 36" x 4" x 6" Panels* 14' Low Profile Platform	(12)	1 5/8" (I)	N/A
Proposed Existing	95'	*(3) Powerwave 7770 Panels w/ (6) TMA's*** *(6) Powerwave LGP13519 Diplexers* 14' Platform w/ Handrails	(6)	7/8" (I)	*Cingular*
Existing	75'	(6) 48" x 6" x 3" Panels* 14' Low Profile Platform	(6)	1 5/8" (I)	N/A

*Antenna sizes approximated from site photographs.
**Proposed antennas are to replace existing (3) panel antennas.

Note: Coax size and quantity assumed for existing carriers.

If loading is different than shown in the above table, Paul J. Ford and Company should be contacted immediately to reevaluate any conclusions stated in this report.

(I) – Coax are mounted on interior of pole, and not exposed to wind.

Results:

When the new antenna configuration is considered, the monopole has sufficient capacity to safely support the new loading while maintaining the minimum wind rating:

Member	Percent Capacity
Shaft #1	52.0%
Flange Plate	34.6%
Flange Bolts	38.5%
Shaft #2	54.0%
Shaft #3	64.5%
Base Plate	38.9%
Anchor Rods	78.9%

The existing monopole foundation is adequate to support the proposed antenna configuration.

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

Conclusion:

The existing monopole and foundation have adequate capacity to support the proposed loading.

If you have any questions concerning our analysis, or if we can be of further service to you, please feel free to contact us at (614) 221-6679.

Sincerely,

Paul J. Ford and Company

Guy S. Allison, E.I.T.
Structural Engineer

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street • Suite 1500 • Columbus, Ohio 43215

STANDARD CONDITIONS FOR FURNISHING OF PROFESSIONAL ENGINEERING SERVICES ON EXISTING STRUCTURES BY PAUL J. FORD AND COMPANY

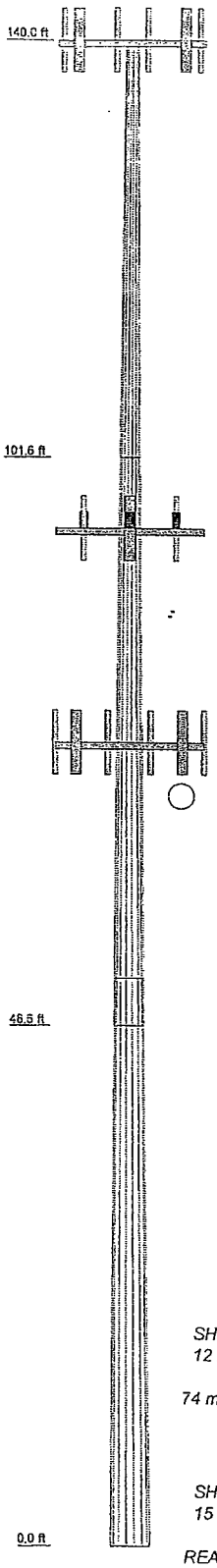
1. No allowance was made for any damaged, missing, or rusted monopole parts. The analysis of this pole assumes that no physical deterioration has occurred in any of the structural components of the pole and that all the pole members have the same capacity as the day the pole was erected.

2. It is not possible to have all of the very detailed information to perform a thorough analysis of every structural sub-component of an existing monopole. The structural analysis provided by Paul J. Ford and Company verifies the adequacy of the main structural members of the monopole. Paul J. Ford and Company provides a limited scope of service in that we cannot verify the adequacy of every weld, plate, connection detail, etc.

3. The enclosed sketches are a schematic representation of the monopole we have analyzed. If any material is fabricated from these sketches, the fabricator shall be responsible for field verifying the existing conditions and for proper fit and clearance in the field.

4. Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

Section	1	2	3
Length (ft)	38.42	53.00	53.00
Number of Sides	18	18	18
Thickness (in)	0.1875	0.3125	0.3125
Lap Splice (ft)		4.42	
Top Dia (in)	13.1610	21.8020	32.2047
Bot Dia (in)	21.8020	33.9130	44.3170
Grade	A572-65		
Weight (K)	1.3	4.9	6.8



DESIGNED APPURTENANCE LOADING

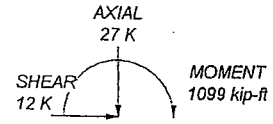
TYPE	ELEVATION	TYPE	ELEVATION
(2) 48" x 4" x 9" panel	140	(2) Powerwave LGP21401 TMA (Cingular-Proposed)	95
(2) 48" x 4" x 9" panel	140	(2) Powerwave LGP13519 Diplexer (Cingular-Proposed)	95
(2) 48" x 4" x 9" panel	140	(2) Powerwave LGP13519 Diplexer (Cingular-Proposed)	95
(2) 36" x 4" x 6" panel	140	(2) Powerwave LGP13519 Diplexer (Cingular-Proposed)	95
(2) 36" x 4" x 6" panel	140	14' Platform w/ Handrail (Cingular-Existing)	95
(2) 36" x 4" x 6" panel	140	(2) 48" x 6" x 3" panel	75
14' Low Profile Platform	140	(2) 48" x 6" x 3" panel	75
Powerwave 7770 (Cingular-Proposed)	95	(2) 48" x 6" x 3" panel	75
Powerwave 7770 (Cingular-Proposed)	95	14' Low Profile Platform	75
Powerwave 7770 (Cingular-Proposed)	95		
(2) Powerwave LGP21401 TMA (Cingular-Proposed)	95		
(2) Powerwave LGP21401 TMA (Cingular-Proposed)	95		

MATERIAL STRENGTH

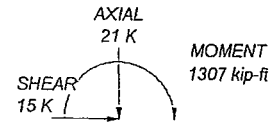
GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	60 ksi			

TOWER DESIGN NOTES

1. Tower is located in Fairfield 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: 64.5%



74 mph WIND - 0.5000 in ICE



REACTIONS - 85 mph WIND

Paul J Ford and Company
250 E. Broad Street Suite 1500
Columbus, OH 43215
Phone: 614.221.6679
FAX: 614-220-4056

Job: *100' Monopole 5431 Sheldon, Fairfield Co., CT*			
Project: *A00007-T145*			
Client: Hudson Design Group, LLC	Drawn by: Guy Allison	App'd:	
Code: TIA/EIA-222-F	Date: 07/26/07	Scale: NTS	
Path: G:\TOWER\000_Misc\00007\A00007-T145.eri		Dwg No. E-1	

CINGULAR WIRELESS
Equipment Modification

1394 (a/k/a 250) Meriden Waterbury Road, Southington, CT
Site Number 5264
Former AT&T site
Exempt Modification 2/25/02

Tower Owner/Manager: Crown Castle

Equipment configuration: 150 ft Monopole w/pipe mount

Current and/or approved: Three Allgon 7250 antennas @ 158 ft c.l.
Six runs 1 5/8 inch coax

Planned Modifications: Remove all three existing antennas
Install three Powerwave 7770 antennas @ 158 ft c.l.
Install six TMA's @ 158 ft
Existing concrete pad
Install additional 5 x 6 ft concrete pad
Install one additional outdoor cabinet on new pad

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 21.2% 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 22.8 % 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 *							19.79
Cingular GSM *	158	1900 Band	4	250	0.0144	1.0000	1.44
Total							21.2%

* Per CSC Records

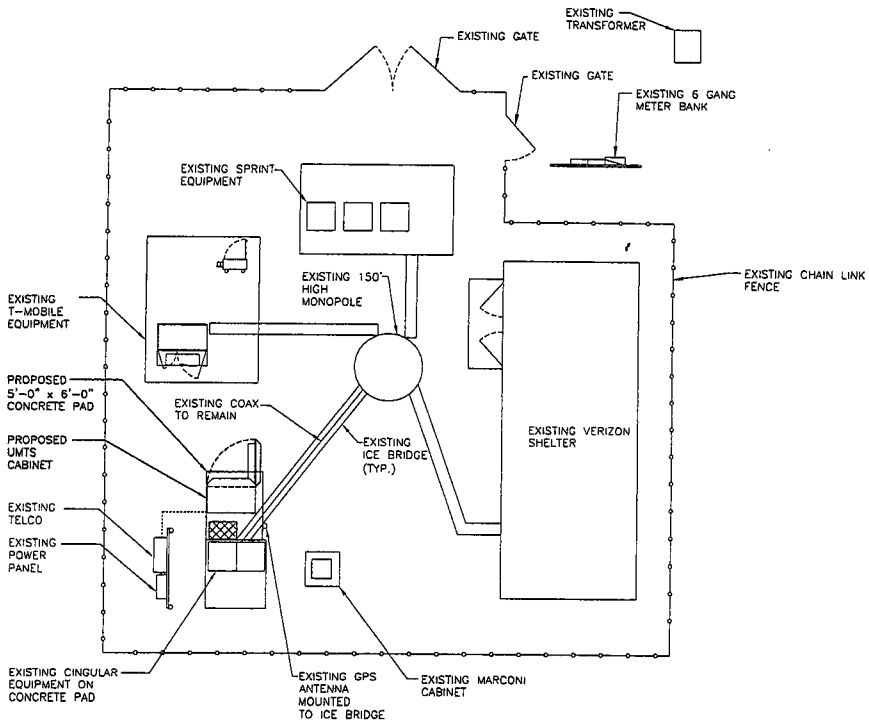
Proposed

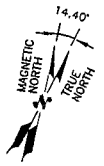
Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
Other Users *							19.79
Cingular GSM	158	1900 Band	2	625	0.0180	1.0000	1.80
Cingular UMTS	158	880 - 894	1	500	0.0072	0.5867	1.23
Total							22.8%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (B&T Engineering, dated 7/13/07)





COMPOUND PLAN
OUTDOOR UMTS

SCALE: 3/16"=1'-0"

0 2'-8" 5'-4" 10'-8" 16'-0"

Hudson Design Group LLC
46 BEECHWOOD DR. N. ANDOVER, MA 01845 TEL: (978) 557-0553 FAX: (978) 336-5586

SAI communications
184 ROCKINGHAM ROAD, UNIT A
LONDONDERRY, NH 03053

SITE NUMBER: 5264
SITE NAME: SOUTHINGTON SOUTH
250 MERIDEN WATERBURY RD.
SOUTHINGTON, CT 06479
NEW HAVEN COUNTY

cingular WIRELESS
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
1	6/25/07	CONSTRUCTION FINAL	RB	DC	DRG
0	5/21/07	ISSUED FOR CONSTRUCTION	BT	DC	DRG

SCALE: NOT SHOWN | DESIGNED BY: BT | DRAWN BY: BT

STATE OF CONNECTICUT
No. 24178
LICENSED PROFESSIONAL ENGINEER

CINGULAR WIRELESS

COMPOUND PLAN
UMTS (OUTDOOR)

JOB NUMBER	DRAWING NUMBER	REV
5264.01	C-1	1

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

August 6, 2007

John Weichsel, Town Manager
Town of Southington
Town Office Bldg., 75 Main Street
Southington, CT 06489

Re: Telecommunications Facility – 1394 Meriden Waterbury Road, Southington

Dear Mr. Weichsel:

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 13, 2007

Mr. Ben Goodhart
Crown Castle International
9105 Monroe Road, Suite 150
Charlotte, NC 28270
(704) 321-5369

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 Co-Locate
Carrier Site Number: *5264*
Carrier Site Name: *Southington South Meriden Rd*

Crown Castle Designation:

Crown Castle BU Number: *876313*
Crown Castle Site Name: *West Johnson Ave.*
Crown Castle JDE Job Number: *89442*

Engineering Firm Designation: **B&T Engineering Project Number:** ***77962***

Site Data:

1394 Route 322, Southington, CT, Hartford County
Latitude *41°-33'-51.39"*, Longitude *-72°-53'-30.7"*
162 Foot – Monopole 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 245656, in accordance with Application 45824, 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 I and Table II for the proposed and existing/reserved loading.

The analysis has been performed in accordance with the TIA/EIA 222-F standard and the Connecticut State Building Code based upon a wind speed of 80 mph fastest mile (100 mph 3-second gust).

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,

STATE OF CONNECTICUT ★ CHAD E. TUTTLE ★ No. 23924 LICENSED PROFESSIONAL ENGINEER
7/13/07

Chad E. Tuttle, P.E.
President

TABLE OF CONTENTS

1) INTRODUCTION

The subject tower is a 162 foot tapered monopole manufactured in 1998 by Summit/Paul J. Ford.

2) ANALYSIS CRITERIA

Specific code

- TIA/EIA-222-F – 80 mph fastest mile wind speed
- 2005 Connecticut State Building Code – 100 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 80 mph with no ice and 69 mph with ½" of radial ice. The tower was originally designed for a fastest mile wind speed of 90 mph with no ice and 78 mph with ½" of radial ice.

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)
158	3 6	Powerwave Powerwave	7770.00 LGP21401 TMA	Existing	Existing	--

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)
158**	**3 (remove)**	**Allgon**	**7184**	Pipe mount	6	1 5/8
148#	6 **6 (MLA)**	Decibel --	DB980H90 **6'x1' Panel**	LP Platform	6 **9 (MLA)**	1 5/8
138	6 6	Decibel	DB844H80-XY DB948F85	LP Platform	12	1 5/8
128	6 6 3 (r)	EMS Wireless Remec EMS Wireless	RR65-19-02DPL2Q S20057A1 RR65-19-02DPL2Q	LP Platform	12 6 (r)	1 5/8

(r) – Reserved.
*Refer to Cable Routing Drawing in Appendix B for Feedline Placement.
**** Designated appurtenances to be removed.**
 # Analysis performed with MLA Loading rather than existing loading.

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)
148	12	Decibel	DB980H	14' LP Platform	--	--
133	12	--	Panel Antenna (CaAa-3.5S.F)	14' LP Platform	--	--
118	12	--	Panel Antenna (CaAa-3.5S.F)	14' LP Platform	--	--
96	2	Ant Special	ASP685	(2) Clamp Shaft Arms	--	--
50	1	--	GPS Antenna	Sidearm	--	--

3) ANALYSIS PROCEDURE

Table 4 – Documents Provided

Document	Remarks	Reference	Source
Tower Manufacturer Drawings	Summit / Paul J. Ford	CCI Doc ID# 1633725	CCIsites
Foundation Drawings	Summit / Paul J. Ford	CCI Doc ID# 1633746	CCIsites
Geotech Report	VHB	CCI Doc ID# 1529744	CCIsites
Antenna Configuration	Configuration Change Check List	Date: 07/02/07	CCIsites

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 ANSI/EIA/TIA 222F or the local building code requirements. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1. This structural analysis **does not** include a grouted base plate.
2. Tower and structures were built in accordance with the manufacturer's specifications.
3. The tower and structures have been maintained in accordance with manufacturer's specifications.
4. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Tables 1 and 2 and the referenced drawings.
5. When applicable, transmission cables are considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222F.

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

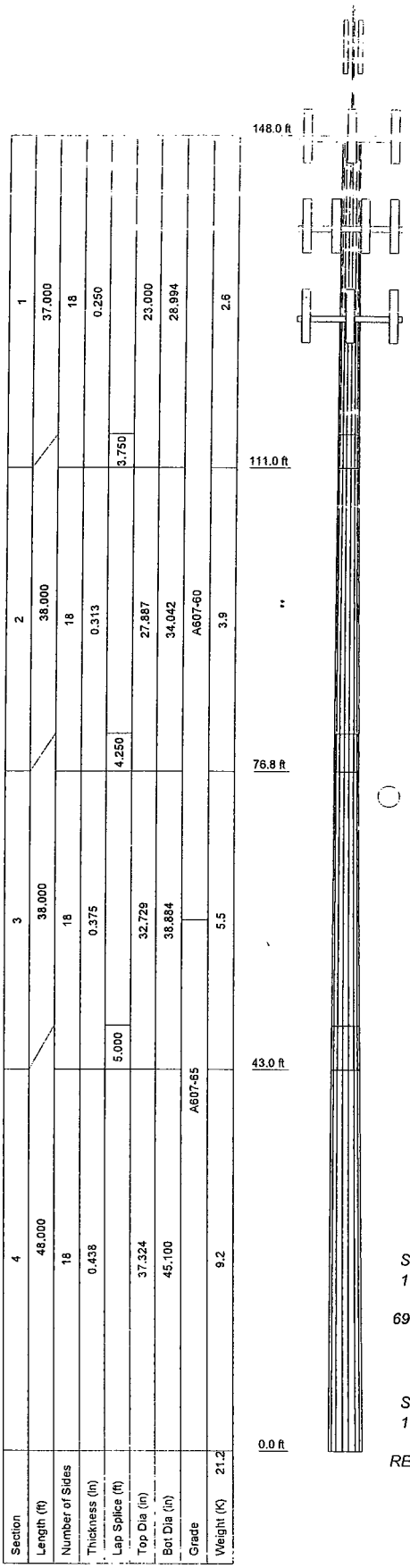
Notes	Component	Elevation (ft)	% Capacity	Pass/Fail
RISA Tower Analysis Summary:				
			Summary	
Notes:	**Component**	**Elevation (ft)**	**% Capacity**	**Pass/Fail**
	L1	148 - 111	50.8	Pass
	L2	111 - 76.75	73.0	Pass
	L3	76.75 - 43	72.3	Pass
	L4	43 - 0	73.7	Pass
Individual Components:				
Notes:	**Component**	**Elevation**	**% Capacity**	**Pass/Fail**
1	Base Plate	Base	46.0	Pass
1	Anchor Rods	Base	62.7	Pass
1	Base Foundation (Analysis)	Base	87.0	Pass
Structure Rating (max from all components) =				**87.0%**

*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	1	2	3	4
Length (ft)	37.000	38.000	38.000	48.000
Number of Sides	18	18	18	18
Thickness (in)	0.250	0.313	0.375	0.438
Lap Splice (ft)	3.750	4.250	5.000	
Top Dia (in)	23.000	27.887	32.729	37.324
Bot Dia (in)	28.994	34.042	38.884	45.100
Grade	A607-60			A607-65
Weight (K)	2.6	3.9	5.5	9.2

21.2

DESIGNED APPURTENANCE LOADING

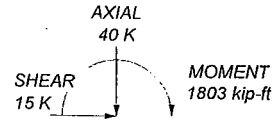
TYPE	ELEVATION	TYPE	ELEVATION
7770.00 (Proposed)	158	(2) DB844H80-XY (Existing)	138
7770.00 (Proposed)	158	(2) DB844H80-XY (Existing)	138
7770.00 (Proposed)	158	(2) DB844H80-XY (Existing)	138
(2) LGP2140X TMA (Proposed)	158	(2) DB948F85E-M (Existing)	138
(2) LGP2140X TMA (Proposed)	158	(2) DB948F85E-M (Existing)	138
(2) LGP2140X TMA (Proposed)	158	(2) DB948F85E-M (Existing)	138
Flush Mount (Existing)	158	Low Profile Platform (Existing)	138
Flush Mount (Existing)	158	(3) RR65-19-02DPL2Q (E / R)	128
Flush Mount (Existing)	158	(3) RR65-19-02DPL2Q (E / R)	128
10'6" Pipe Mount (Existing)	153	(3) RR65-19-02DPL2Q (E / R)	128
(3) 6'x1' Panel (MLA)	148	(2) S20057A1 TMA (E)	128
(3) 6'x1' Panel (MLA)	148	(2) S20057A1 TMA (E)	128
(3) 6'x1' Panel (MLA)	148	(2) S20057A1 TMA (E)	128
Low Profile Platform (Existing)	148	Low Profile Platform (Existing)	128

MATERIAL STRENGTH

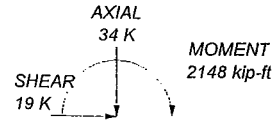
GRADE	Fy	Fu	GRADE	Fy	Fu
A607-60	60 ksi	75 ksi	A607-65	65 ksi	80 ksi

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 50 mph wind.
5. TOWER RATING: 73.7%



69 mph WIND - 0.500 in ICE



REACTIONS - 80 mph WIND

B&T Engineering, Inc.
1717 S. Boulder, Suite 300
Tulsa, OK 74119
Phone: (918) 587-4630
FAX: (918) 295-0265

Job: 77962 - West Johnson Ave, CT (BU# 876313)		
Project: 148' Summit Monopole / App ID: 45824, Rev:1		
Client: Crown Castle International	Drawn by: CT	App'd:
Code: TIA/EIA-222-F	Date: 07/16/07	Scale: NTS
Path: S:\B&T Engineering\Projects\Crown Castle\77962 - 876313 West Johnson Ave\Engineering\RISA\77962 West Johnson Ave.eri		Dwg No. E-1

CINGULAR WIRELESS
Equipment Modification

404 Hayden Station Road, Windsor, CT
Site Number 5140
Former AT&T site
Exempt Modifications 11/9/99, 2/14/02, and 3/11/03

Tower Owner/Manager: Crown Castle

Equipment configuration: Monopole with pipemount

Current and/or approved: Three Allgon 7250 antennas @ 92 ft c.l.
Six runs 1 5/8 inch coax

Planned Modifications: Remove existing antennas
Install three Powerwave 7770 antennas at 92 ft c.l.
Install six TMA's @ 92 ft

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 22.3 % 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 28.9 % 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 *							18.97
Cingular GSM *	93	1900 Band	8	100	0.0333	1.0000	3.33
Total							22.3%

* 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 *							18.97
Cingular GSM	92	1900 Band	2	742	0.0630	1.0000	6.30
Cingular UMTS	92	880 - 894	1	500	0.0212	0.5867	3.62
Total							28.9%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications. (IETS Engineering, dated 6/28/07)

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

August 6, 2007

Peter Souza, Town Manager
Town of Windsor
Town Hall 275 Broad St.
Windsor, CT 06095-0472

Re: Telecommunications Facility – 440 Hayden Station Road, Windsor

Dear Mr. Souza:

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

Date: **June 28, 2007**

Mr. Ed Carroll
Crown Castle International
9105 Monroe Road
Suite 150
Charlotte, NC 28270
(704) 321-3848

IETS, P.C.
129 Greenwich Road
Charlotte, NC 28211
(704) 522-1131 Phone
(704) 522-1280 Fax
towerdata@iets.com

Subject: Analysis Structural Report

Carrier Designation	**Cingular Co-Locate**	
	Cingular Site Number:	**5140**
	Cingular Site Name:	**Windsor-Hayden Station Road**
Crown Castle Designation	**Crown Castle BU Number:**	**876326**
	Crown Castle Site Name:	**Hayden Station**
	Crown Castle JDE Job Number	**89768**
Engineering Firm Designation	**IETS Project Number:**	**2007-70733**
Site Data	**440 Hayden Station Road, Windsor, CT, Hartford County** **Latitude 41° 53' 52.8", Longitude -72° 38' 38.4".** **96 Foot – Monopole Tower**	

Dear Mr. Carroll,

IETS 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 242896, in accordance with application 45593, revision 0.

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 I and Table II for the proposed and existing/reserved loading.

The analysis has been performed in accordance with the TIA/EIA 222-F standard and 2003 IBC based upon a wind speed of 80 mph fastest mile (100 mph 3-second gust).

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 IETS 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,

Binh Vo
Project Engineer

William A. Griswold, Jr., P.E.
Chief Engineer

STATE OF CONNECTICUT
WILLIAM A. GRISWOLD, JR.
No. 23736
LICENSED PROFESSIONAL ENGINEER

National Society of Professional Engineers®
Signatory, NSPE Licensed Member

NATIONAL ASSOCIATION OF TOWER ERECTORS

TABLE OF CONTENTS

1) INTRODUCTION

The subject tower is a 97' monopole tower manufactured by Rohn. The tower was originally designed for a 85 mph basic wind speed according to TIA/EIA-222-E.

2) ANALYSIS CRITERIA

- TIA/EIA-222-F
- 80 mph wind speed with no radial ice and a 70 mph wind speed with ½" of radial ice
- 2003 IBC
- Crown Castle provided proposed, existing, and reserved antenna and transmission line information.

Table 1 – Proposed Antenna and Cable Information

Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Mount Information	Number of Feed Lines	Feed Line Size (in)
92	3 6	Powerwave Technologies	7770 LGP21401	Existing	-	-

Refer to IETS drawing 2007-70733-01 for existing and proposed cable routing.

Table 2 – Existing and Reserved Antenna and Cable Information

Center Line Elevation (ft)	Number of Antennas	Antenna Manufacturer	Antenna Model	Number of Feed Lines	Feed Line Size (in)
92	*12 (MLA) *6 (MLA)	- LGP	72" x 12" Antenna DD 800/1950	6 (Existing) *12 (MLA)	1 5/8
85	9 *9 (MLA)	DAPA Sprint MLA	58000 Sprint MLA Antenna	6 (Existing) 3 (Reserved) *9 (MLA)	1-1/4 1 5/8 1 5/8
75	3 (Existing) 3 (Reserved)	EMS	DR65-18-DPL2Q	12 (Existing) 12 (Reserved)	7/8

*MLA loading was used in the analysis.

Table 3 – Design Antenna and Cable Information

Center Line Elevation (ft)	Number of Antennas	Antenna Model	Number of Feed Lines	Feed Line Size (in)
85	12	ALP9212	12	1 5/8
75	12	ALP9212	12	1 5/8
60	12	ALP9212	12	1 5/8

3) ANALYSIS PROCEDURE

Table 4 – Documents Provided

Document	Remarks	Reference	Source
Tower Drawings	N/A	-	CCI Sites
Foundation Drawings	Rohn	1639483 1640630	CCI Sites
Soils Report	Clough, Harbour & Associates	1530918	CCI Sites

3.1) Analysis Method

RISA Tower (version 4.7.0.2), 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 ANSI/EIA/TIA 222F or the local building code requirements. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1. This structural analysis/modification **does** include a grouted base plate.
2. All proposed and future transmission cables are installed in the locations noted on the cable routing drawing in *Appendix B*.
3. When applicable, transmission cables were considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222-F.
4. Information in the original design drawings and specifications that could not be verified by IETS personnel is assumed to be correct. For this analysis, IETS will assume conformance with the original design drawings and specifications.
5. IETS shall assume that all tower components are in sufficient condition to carry their full design capacity.
6. We have not based the adequacy of the tower on limitations for antenna twist, tilt, roll, or lateral translation.

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and IETS 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:(Monopole)				
			Summary	
Notes:	**Component**	**Elevation**	**% Capacity**	**Pass/Fail**
	L1	85 - 65	19.7	Pass
	L2	65 - 32.5	16.7	Pass
	L3	32.5 - 0	36.9	Pass
Individual Components:				
Notes:	**Component**	**Elevation**	**% Capacity**	**Pass/Fail**
1	Anchor Rods	-	53.4	Pass
1	Base Plate	-	40.7	Pass
1	Base Foundation (Compared w/ Design Loads)	-	72.5	Pass
Structure Rating (max from all components) =				**72.5%**

*Notes:

1) See additional documentation in "Appendix C – Additional Calculations" for calculations supporting the % capacity listed.
2) The percent capacities shown above (excluding foundations) include the 1/3 increase in allowable stresses as allowed by TIA/EIA-222-F.
3) Capacities up to 105% are considered acceptable based on the analysis procedures.

CINGULAR WIRELESS
Equipment Modification

4 Volunteer Road (a/k/a 2), Windsor Locks, CT
Site Number 5270
Former AT&T site
Exempt Modification

Tower Owner/Manager: Message Center Management / Town of Windsor Locks

Equipment configuration: Self-supporting lattice

Current and/or approved: Nine Allgon 7250 antennas @ 164 ft c.l.
Nine runs 1 5/8 inch coax

Planned Modifications: Remove all existing antennas
Install three Powerwave 7770 antennas at 164 ft c.l.
Install six TMA's @ 164 ft

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 41.4 % 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 36.9 % 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 *							34.64
Cingular GSM *	165	1900 Band				1.0000	6.75
Total							41.4%

* 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 *							34.64
Cingular GSM	164	1900 Band	2	427	0.0114	1.0000	1.14
Cingular UMTS	164	880 - 894	1	500	0.0067	0.5867	1.14
Total							36.9%

* Per CSC Records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (All-Points Technology Corp., dated 8/2/007)

ALL-POINTS TECHNOLOGY CORPORATION, P.C.

August 2, 2007

Hudson Design Group, LLC
46 Beechwood Drive
North Andover, MA 01845

Attn: Derek Creaser
Re: 195' Self-Supporting Tower, Windsor Locks, CT
Cingular Site #5270; Windsor Locks
Message Center Management Site #CT-318

Dear Derek,

All-Points Technology Corporation, P.C. (APT) evaluated the 180' guyed tower located at 2 Volunteer Drive in Windsor Locks, Connecticut for antenna changes proposed by Cingular Wireless. This evaluation relied on information provided by others, which included a structural analysis by PiROD, Inc. dated August 5, 2003, recent tower photographs and antenna changes proposed by Cingular Wireless. APT recently performed a condition assessment and mapping of the tower in November 2006.

Cingular Wireless proposes to remove nine existing panel antennas (Allgon 7250.02 or EMS Wireless FV90-16-02DP) and replace them with three Powerwave 7770 panel antennas and six LGP 21401 tower-mounted amplifiers. Nine existing 1- 1-5/8" lines will remain in place.

My evaluation indicates that the tower is capable of supporting Cingular's proposed antenna changes and associated appurtenances. The proposed changes represent a reduction in wind and dead loads on the structure compared to current loads. The structural capacity of the tower will not be diminished due to Cingular's proposed changes.

Please call if you have any questions.

Sincerely,
All-Points Technology Corporation, P.C.

Robert E. Adair, P.E.
Principal

STATE OF CONNECTICUT
ROBERT E. ADAIR
No. 20278
LICENSED PROFESSIONAL ENGINEER

CT198460 Windsor Locks APT SA ltr 8-2-07.doc

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☑ 150 OLD WESTSIDE ROAD • NORTH CONWAY, NEW HAMPSHIRE 03860 • PHONE/FAX: 603-356-5214

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

August 6, 2007

Honorable Steven N. Wawruck
1st Selectman, Town of Windsor Locks
Town Office Bldg. 50 Church St.
Windsor Locks, CT 06096-0412

Re: Telecommunications Facility – 4 Volunteer Drive (a/k/a 2), Windsor Locks

Dear Mr. Wawruck:

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