



EM-CING-083-081215

raising the bar™

New Cingular Wireless PCS, LLC
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Rocky Hill, Connecticut 06067-3900
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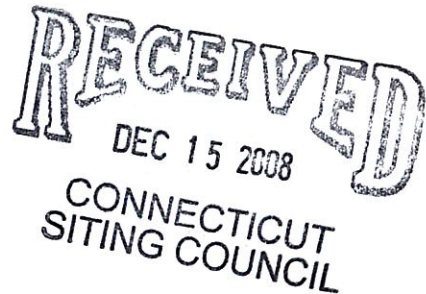
Steven L. Levine
Real Estate Consultant

ORIGINAL

HAND DELIVERED

December 15, 2008

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 tele-communications facility located at 90 Industrial Park Road, Middletown (owner, T-Mobile)

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,

A handwritten signature in blue ink, appearing to read "S. L. Levine".

Steven L. Levine
Real Estate Consultant

Attachments

**NEW CINGULAR WIRELESS
Equipment Modification**

90 Industrial Park Road, Middletown
Site Number 1044
Exempt Modifications approved 9/98 and 7/02

Tower Owner/Manager: T-Mobile

Equipment Configuration: Monopole

Current and/or Approved: Nine CSS DUO-1417-8686 panel antennas @ 173 ft AGL
Six TMA's and three diplexers @ 173 ft
Nine runs 1 5/8 inch coax cable
Equipment Shelter

Planned Modifications: Remove all existing antennas, TMA's, and diplexers
Install six Powerwave 7770 antennas (or equivalent) @ 175 ft
Install six TMA's and six diplexers @ 175 ft
Install three additional lines 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 9.5 % 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 8.3 % 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 *							3.95
AT&T TDMA *	173	880 - 894	16	100	0.0192	0.5867	3.28
AT&T GSM *	173	1900 Band	2	427	0.0103	1.0000	1.03
AT&T GSM *	173	880 - 894	2	296	0.0071	0.5867	1.21
Total							9.5%

* 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 *							3.95
AT&T UMTS	175	880 - 894	1	500	0.0059	0.5867	1.00
AT&T GSM	175	1900 Band	2	427	0.0100	1.0000	1.00
AT&T GSM	175	880 - 894	4	296	0.0139	0.5867	2.37
Total							8.3%

* Per CSC records

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed equipment modifications. (GPD Associates, 12/8/08)



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December 15, 2008

Mayor Sebastian N. Guiliano
City of Middletown
Municipal Bldg. 245 DeKoven Dr. and Court St.
Middletown, CT 06457

Re: Telecommunications Facility – 90 Industrial Park Road

Dear Mayor Guiliano:

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”) 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 AT&T’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 AT&T’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

MONOPOLE

STRUCTURAL ANALYSIS REPORT

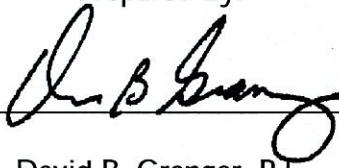
CT11057C MIDDLETOWN 1
Middletown, Connecticut
GPD Project # 2008292.65

1044
INDUSTRIAL PARK RD

New Antenna Installation
Existing 185' Monopole

For:
T-Mobile USA
Bellevue, Washington

Prepared By:



David B. Granger, P.E.
Registered Professional Engineer
Connecticut #: 17557



December 8, 2008

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1. RISA ANALYSIS PRINTOUT
2. TOWER ELEVATION DRAWING
3. ANCHOR ROD AND BASE PLATE CALCULATIONS

EXECUTIVE SUMMARY

The purpose of this analysis is to verify whether the design for the existing tower is structurally capable of carrying the new antenna and coax loads as specified by AT&T to T-Mobile, USA. This report was commissioned by Ms. Danielle Edson of T-Mobile.

The design for the existing structure meets the requirements of TIA/EIA-222-F for a fastest-mile wind speed of 85 mph with 1/2" of radial ice (w/ 25% wind load reduction) for the proposed antenna configuration. The foundation reactions, with the proposed antenna configuration, were found to be less than the capacity of the existing foundation design. Therefore, the foundation is adequate, assuming it was properly constructed according to original design.

Section Results

<u>Monopole</u>	<u>% Capacity</u>	<u>Result</u>
180' – 185'	20.6%	Pass
130' – 180'	84.7%	Pass
115' – 130'	98.9%	Pass
95' – 115'	81.4%	Pass
91' – 95'	86.1%	Pass
51' – 91'	76.8%	Pass
40' – 51'	84.5%	Pass
19' – 40'	70.0%	Pass
0' – 19'	78.4%	Pass
Base Plate	66.8%	Pass
Anchor Rods	77.1%	Pass
<u>Foundation</u>	<u>% Capacity</u>	<u>Result</u>
Tower Base	86.3%	Pass
Tower Rating:	98.9%	

TOWER DESCRIPTION

The existing 185' monopole is located in Middletown, Connecticut. It was originally designed for Omnipoint Communications by Fred A. Nudd Corporation of Ontario, New York. The original design load for the tower was for an 85 mph fastest-mile wind speed with 1/2" radial ice (w/ 25% wind load reduction) in accordance with ANSI/EIA-222-E. The tower was originally designed to hold the following:

Original Configuration

Antennas:	
Elev. 185'	(3) RR-9017-00DP & (6) FB-1580-1-PT2 Antennas on (3) Gate Booms, w/ internal coax
Elev. 173'	(12) DAPA 58000 Antennas on (3) 12' T-booms, w/ internal coax
Elev. 161'	(12) DAPA 58000 Antennas on (3) 12' T-booms, w/ internal coax
Elev. 150'	(12) DAPA 58000 Antennas on (3) 12' T-booms, w/ internal coax

The monopole has nine major sections connected by full penetration welds and slip joints. It has 12 sides and is evenly tapered from 73.81" (flat-flat) at the base to 18" (flat-flat) at the top. The structure is galvanized and has no tower lighting.

All structural information was provided by T-Mobile in the form of a previous analysis by GPD Associates (Project #: 2008194.39, dated September 25, 2008) and a geotechnical report by Dr. Clarence Welti, P.E., P.C. (dated March 27, 1998). The existing, reserved, and proposed antenna information was provided by T-Mobile, USA. This analysis and report are based solely on this information.

The base plate has been previously modified with the installation of stiffener plates to the base plate per modification drawing by All-Points Technology Corp., P.C. (Project #: CT107573, dated April 28, 2005). These modifications were assumed to have been installed and were considered in this analysis.

TOWER MATERIALS

Data on steel strength was available from the information provided. The following table details the steel strength used in the analysis.

Monopole	ASTM A36M (42 KSI Yield Strength)
Base Plate	ASTM A36 (36 KSI Yield Strength)
Anchor Rods	ASTM A36M (70 KSI Yield Strength)

TOWER LOADING

The following data shows the major loading that the tower supports. The existing, reserved, and proposed antenna information was provided by T-Mobile USA.

Existing and Future Configuration

<u>Elevation</u>	<u>Carrier</u>	<u>Antennas</u>
185'	T-Mobile	(12) EMS RR65-19-00DP Antennas, (12) S20045A1 LNA's & (1) 4' MW Dish, on a 12' LP Platform, w/ (24) 1-5/8" internal coax
175'	AT&T	(9) Sweedcom ALP 11011-N Antennas on (3) 12' T-Arms, w/ (9) 1-5/8" internal coax
165'	Pocket	(3) Kathrein 742 213 Antennas, Flush mounted, w/ (6) 1-5/8" internal coax

Proposed Configuration

<u>Elevation</u>	<u>Carrier</u>	<u>Antennas</u>
185'	T-Mobile	(12) EMS RR65-19-00DP Antennas, (12) S20045A1 LNA's & (1) 4' MW Dish, on a 12' LP Platform, w/ (25) 1-5/8" internal coax
175'	AT&T	(6) Powerwave 7770.00 Antennas, (6) Powerwave LGP21401 TMA's, & (6) Powerwave LGP21903 Diplexers, on (3) 12' T-Arms, w/ (12) 1-1/4" internal coax
165'	Pocket	(3) Kathrein 742 213 Antennas, Flush mounted, w/ (6) 1-5/8" internal coax

Note: BOLD type indicates a new appurtenance.

The purpose of this independent structural analysis review is to determine if the design for the existing tower, with the proposed configuration, is in conformance to the latest TIA/EIA-222-F standard requirements.



ANALYSIS

The purpose of this structural analysis review is to determine if the design for the existing tower, with the proposed loading, is in conformance to the latest TIA/EIA-222-F standard requirements. RISA Tower (Version v5.3.0.1), a commercially available software program, 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/TIA/EIA-222-F standard and all local building code requirements. Selected output from the analysis is included in Appendix 1.

The current requirements of TIA/EIA-222-F are for a fastest-mile wind speed of 85 mph with 1/2" of radial ice. A 25% reduction in wind load is allowed when wind and ice are applied simultaneously. TIA/EIA-222-F requires towers within Middlesex County, Connecticut be analyzed with an 85 mph wind speed.

ANALYSIS FASTEST-MILE WIND SPEED:	85 MPH
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The tower and foundations are assumed, for the purpose of this analysis, to have been properly fabricated, constructed, maintained, and to be in good condition with no structural defects. This is not a condition assessment of the tower and has been provided without the benefit of detailed tower photos, a detailed tower mapping, or a GPD Associates site visit. This analysis assumes the antennas and coax have been installed in a neat and orderly fashion. The antennas are assumed to be installed on standard mounts at 120° azimuths.

CONCLUSIONS AND RECOMMENDATIONS

Based on the computer structural analysis results, the design for the existing 185' monopole meets the requirements of TIA/EIA-222-F for a fastest-mile wind speed of 85 mph with 1/2" of radial ice (w/ 25% wind load reduction) for the proposed antenna configuration.

The foundation reactions, with the proposed antenna configuration, were found to be less than the capacity of the existing foundation design. Therefore, the foundation is adequate, assuming it was properly constructed according to original design.

Summary of Findings

Monopole	Satisfactory
Base Plate	Satisfactory
Anchor Rods	Satisfactory
Foundation	Satisfactory

Therefore, based on our analysis results, the design for the existing structure is structurally satisfactory for the proposed loading configuration.

DISCLAIMER AND WARRANTIES

GPD ASSOCIATES has not performed a site visit to the tower to verify the member sizes or antenna/coax loading. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD ASSOCIATES in connection with this Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. All tower components have been assumed to only resist dead loads when no other loads are applied. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

GPD ASSOCIATES does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD ASSOCIATES provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation, if any, that should be considered in the structural analysis.

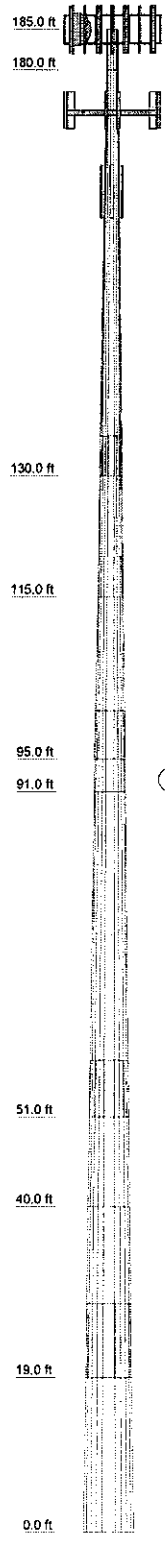
The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD ASSOCIATES but are beyond the scope of this report.

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

GPD ASSOCIATES makes no warranties, expressed and/or implied, in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD ASSOCIATES will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD ASSOCIATES pursuant to this report will be limited to the total fee received for preparation of this report.



Section	Length (ft)	Number of Slides	Thickness (in)	Lap Splice (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	5.00	12	0.1875		18.0000	18.0000		0.2
2	50.00	12	0.2500		18.0000	34.3125		3.5
3	20.00	12	0.2500	5.00	32.1612	38.6875		1.9
4	20.00	12	0.3125	6.00	38.6875	45.1875		2.9
5	10.00	12	0.3125	6.00	42.6125	45.8125	A36M-42	1.5
6	40.00	12	0.3750	7.00	45.8125	58.8750		8.5
7	18.00	12	0.3750	7.00	55.8391	61.6875		4.3
8	21.00	12	0.4375	9.00	61.6875	68.5000		6.5
9	28.00	12	0.4375		64.7054	73.8125		9.2



DESIGNED APPURTENANCE LOADING

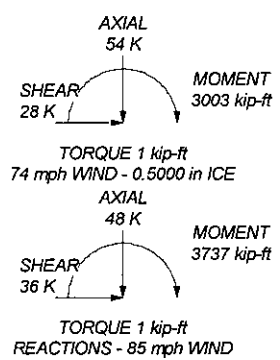
TYPE	ELEVATION	TYPE	ELEVATION
(4) RR65-19-00DP	185	(2) LGP21401	175
(4) RR65-19-00DP	185	(2) LGP21401	175
(4) RR65-19-00DP	185	(2) LGP21903 Diplexer	175
(4) S20045A 1 LNA	185	(2) LGP21903 Diplexer	175
(4) S20045A 1 LNA	185	(2) LGP21903 Diplexer	175
(4) S20045A 1 LNA	185	12 T-arms (3)	175
12 LP Platform	185	(2) 7770.00	175
4 FT DISH	185	742-213 w/Mount Pipe	165
(2) 7770.00	175	742-213 w/Mount Pipe	165
(2) 7770.00	175	742-213 w/Mount Pipe	165
(2) LGP21401	175		


MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36M-42	42 ksi	60 ksi			

TOWER DESIGN NOTES

1. Tower is located in Middlesex 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: 98.9%



 GPD Associates 520 South Main St. Suite 2531 Akron, OH 44311 Phone: (330) 572-2100 FAX: (330) 572-2101	Job: CT11057C Middletown 1
	Project: 2008292.65
	Client: T-MOBILE USA Drawn by: BJEFFERS App'd:
	Code: TIA/EIA-222-F Date: 12/08/08 Scale: NTS
	Path: G:\Telecom\200829265\RISA\Middletown 1.rvt Dwg No: E-1