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
www.ct.gov/csc

July 24, 2009

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

RE: **EM-CING-023-090626** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 540 Cherry Brook Road, Canton, Connecticut.

Dear Mr. Levine:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated June 26, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

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 this facility 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,

S/ Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Richard J. Barlow, First Selectman, Town of Canton
Robert H. Skinner, Chief Administrative Officer, Town of Canton
Neil Pade, Town Planner, Town of Canton
SBA

G:\EM\CINGULAR\Canton\dc072209CherryBrookRd.DOC

CSC
CONNECTICUT SITING COUNCIL

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

July 2, 2009

The Honorable Richard J. Barlow
First Selectman
Town of Canton
4 Market Street
P. O. Box 168
Collinsville, CT 06022-0168

RE: **EM-CING-023-090626** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 540 Cherry Brook Road, Canton, Connecticut.

Dear Mr. Barlow:

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.

If you have any questions or comments regarding this proposal, please call me or inform the Council by July 16, 2009.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Neil Pade, Town Planner, Town of Canton
Robert H. Skinner, Chief Administrative Officer, Town of Canton

EM-CING-023-090626

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

ORIGINAL

HAND DELIVERED

June 26, 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 tele-communications facility located at 540 Cherry Brook Road, Canton (owner, SBA)

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

540 Cherry Brook Road
Site Number 5853
Former AT&T Site
Exempt Modification approved 8/02

Tower Owner/Manager: SBA

Equipment Configuration: Monopole

Current and/or Approved: Six Allgon panel antennas @ 140 ft AGL
Six runs 1 ¼ inch coax cable
Concrete pad with outdoor cabinets

Planned Modifications: Remove existing antennas
Install low-profile platform @ 140 ft
Install six Powerwave 7770 antennas (or equivalent) @ 140 ft
Install six TMA's and six diplexers @ 140 ft
Install six additional runs 1 ¼ inch coax
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 23.6 % 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 24 % 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 *							16.24
AT&T GSM *	140	1900 Band	16	250	0.0734	1.0000	7.34
Total							23.6%

* Per CSC records

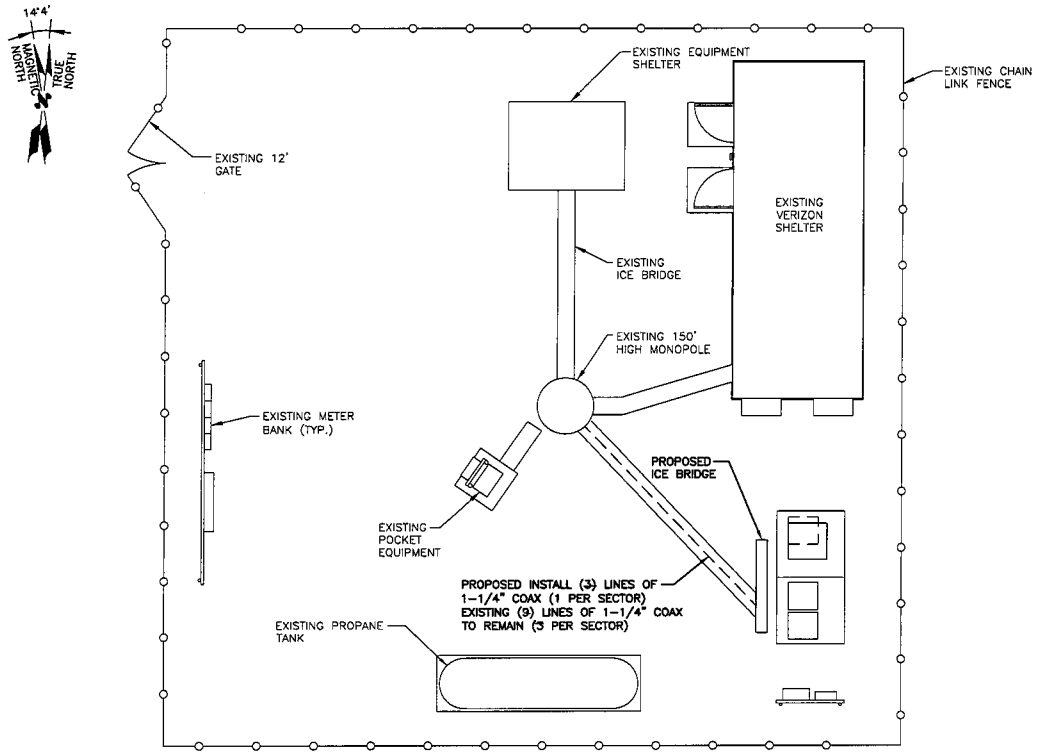
Proposed

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 *							16.24
AT&T UMTS	140	880 - 894	1	500	0.0092	0.5867	1.56
AT&T UMTS	140	1900 Band	1	500	0.0092	1.0000	0.92
AT&T GSM	140	1900 Band	2	427	0.0157	1.0000	1.57
AT&T GSM	140	880 - 894	4	296	0.0217	0.5867	3.70
Total							24.0%

* Per CSC records

Structural information:

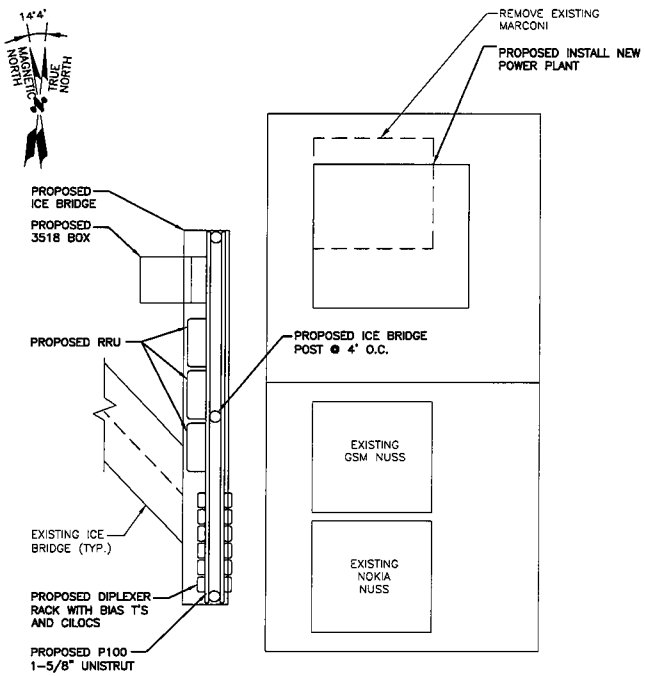
The attached structural analysis demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed equipment modifications. (Vertical Structures, 6/24/09)



COMPOUND PLAN

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

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



EQUIPMENT PLAN

SCALE: 1/2"=1'-0"

0 8" 1'-4" 2'-8" 5'-4"

Hudson Design Group LLC
1600 OSGOOD STREET
BUILDING 20 NORTH, SUITE 2-101
N. ANDOVER, MA 01845
TEL: (978) 557-5553
FAX: (978) 336-5586

SAI communications
22 KEEWAYDIN DRIVE
SALEM, NH 03079

SITE NUMBER: 5853
SITE NAME: CANTON
540 CHERRY BROOK ROAD
CANTON, CT 06059
LITCHFIELD COUNTY

at&t
500 ENTERPRISE DRIVE, SUITE 3A
ROCKY HILL, CT 06067

NO.	DATE	REVISIONS	BY	CHK	APP'D
0	05/27/09	ISSUED FOR CONSTRUCTION	DB	DC	DPH

SCALE: AS SHOWN | DESIGNED BY: DC | DRAWN BY: DB

STATE OF CONNECTICUT
DANIEL P. HAMM
No. 21175
LICENSED PROFESSIONAL ENGINEER

AT&T

SITE PLAN & COMPOUND PLAN

JOB NUMBER	DRAWING NUMBER	REV
5853.01	A-1	0

cingular
raising the bar

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

June 26, 2009

Honorable Richard J. Barlow
1st Selectman, Town of Canton
Town Hall 4 Market St.
Canton, CT 06022

Re: Telecommunications Facility – 540 Cherry Brook Road

Dear Mr. Barlow:

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

VERTICAL STRUCTURES, INC.

June 24, 2009

Mr. Mark Luther
SBA Network Services
723 Highland Avenue
Clarks Green, PA 18411
(570) 561-3200

#5853

Subject:

Structural Analysis Report
AT&T Mobility Change-Out
SBA Site Name: Canton 2, CT
SBA Site Number: CT-01500-02
150' Nudd MJ-140 Monopole Tower
Vertical Structures Job Number: 2009-007-014

Dear Mr. Luther,

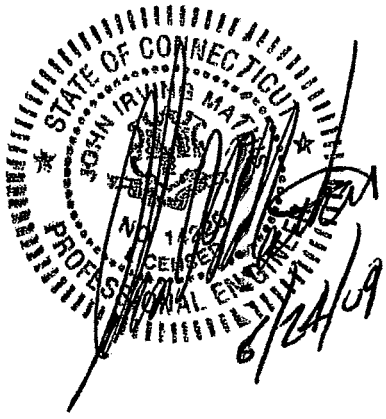
Vertical Structures is pleased to provide you with the results of the structural analysis performed on the 150' tall monopole tower at the Canton 2 site in Canton, Connecticut. The purpose of the analysis was to determine the suitability of the tower upon replacing three (3) existing and three (3) reserved Allgon 7250 panel antennas mounted at 138' with six (6) proposed Powerwave 7770.00 panel antennas, six (6) proposed Powerwave LGP2140X tower mounted amplifiers, and six (6) proposed Powerwave LGP 21903 diplexers for AT&T Mobility when combined with the existing and reserved equipment on the structure. This analysis has been performed in accordance with the TIA/EIA-222-F standard and local code requirements based upon an 80 MPH basic "fastest mile" wind speed, equivalent to a 95 MPH basic "3-second gust" wind speed per Equation 16-34.

Based on our analysis we have determined the tower superstructure and foundation are sufficient for the proposed loading.

Vertical Structures appreciates the opportunity to provide this report and our continuing professional services. If you have any questions or need further assistance on this or any other projects please give us a call.

Respectfully submitted,

Jordan Kays
Project Engineer



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INTRODUCTION

The subject tower is located in Canton Center, Connecticut. The 150' tall Nudd MJ-140 monopole tower was designed and manufactured in 2000 for SBA. The tower consists of three (3) 18-sided tapered polygonal sections joined via slip joint connections and one (1) pipe section joined via a bolted flange connection. The tower is founded on a 30' square by 4' thick mat bearing 6' below grade. The tower was reworked in 2009 to accommodate additional loading.

ANALYSIS CRITERIA

The Canton 2 monopole tower was analyzed in accordance with the current EIA-222-F publication, "Structural Standards for Steel Antenna Towers and Antenna Supporting Structures." The proposed, existing, and reserved antennas, lines, and mounts considered in this analysis are listed in Table 1. Applied forces in this study were derived from an 80 MPH basic "fastest mile" wind speed with no ice and a reduced 69 MPH basic "fastest mile" wind speed with a 1/2" of radial ice accumulation. The tower was originally designed for an 80 MPH basic "fastest mile" wind speed with no ice and a reduced 69 MPH basic "fastest mile" wind speed with a 1/2" of radial ice accumulation. The original design loads are listed in Table 2. The EIA minimum basic wind speed for Hartford County, Connecticut is 80 MPH. All cables are assumed to be routed up the interior of the pole.

Table 1 – Proposed, Existing, and Reserved Loads

Mount Elevation	Carrier Name	Status	Antennas	Mounts	Feedlines
150'	Verizon Wireless	Existing	(6) Antel LPA-80080/6CF Panels	(1) Nudd 14' L.P. Platform	(12) 1 5/8" Coax
			(6) Antel LPA-185080/12CF Panels		
	NCVFD	Existing	(1) Celwave PD220 Omni		(2) 1 5/8" Coax
			(1) Celwave TD1142 Omni		
138'	**AT&T Mobility**	**Remove**	**(3) Allgon 7250 Panels**	**(3) 2' Sidearms**	
		Existing			(6) 1 5/8" Coax
		Proposed	**(6) Powerwave 7770.00 Panels**	**(1) 14' L.P. Platform**	**(6) 1 5/8" Coax**
			(6) Powerwave LGP2140X TMAs		
			(6) Powerwave LGP21903 Diplexers		
		Reserved	(3) Decibel 978QNB120E-M		(3) 1/2" Coax
129'	Pocket Communications	Existing	(3) Kathrein 742-213 Panels	(3) Mount Pipes	(6) 1 5/8" Coax
92'		Existing	(1) 4' Yagi	(1) Mount Pipe	(1) 1/2" Coax

Table 2 – Original Design Loads

Mount Elevation	Carrier Name	Status	Antennas	Mounts	Feedlines
150'		Design	(12) Decibel DB896 Panels (1) Celwave PD220 Omni (1) Celwave TD1142 Omni	14' L.P. Platform	(14) 1 5/8" Coax
141'		Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 1 5/8" Coax
130'		Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 1 5/8" Coax
120'		Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 1 5/8" Coax
110'		Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 1 5/8" Coax
100'		Design	(12) Decibel DB896 Panels	14' L.P. Platform	(12) 1 5/8" Coax
90'		Design	(1) MYA 4505		(1) 1 5/8" Coax

ANALYSIS PROCEDURE

Table 3 – Resources Utilized

Resource	Remarks
Proposed Loads	SBA E-mail
Existing Loads	Vertical Structures Job No. 2007-007-027
Tower Drawings	Nudd Drawing No. 00-7221-1
Foundation Drawings	Nudd Drawing No. 00-7221-1
Geotechnical Report	Jaworski Geotech Project No. 99336G
Rework Drawings	Vertical Structures Job No. 2008-007-029

Analysis Methods

RISA Tower (Version 5.3), 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 or the local building code requirements. Selected output from the analysis is included in Appendix A.

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 manufacturer's specifications.
3. The configuration of antennas, transmission cables, mounts and other appurtenances are as specified in Table 1 and any referenced drawings.
4. When applicable, transmission cables are considered to be structural components for calculating wind loads, as allowed by TIA/EIA-222-F.

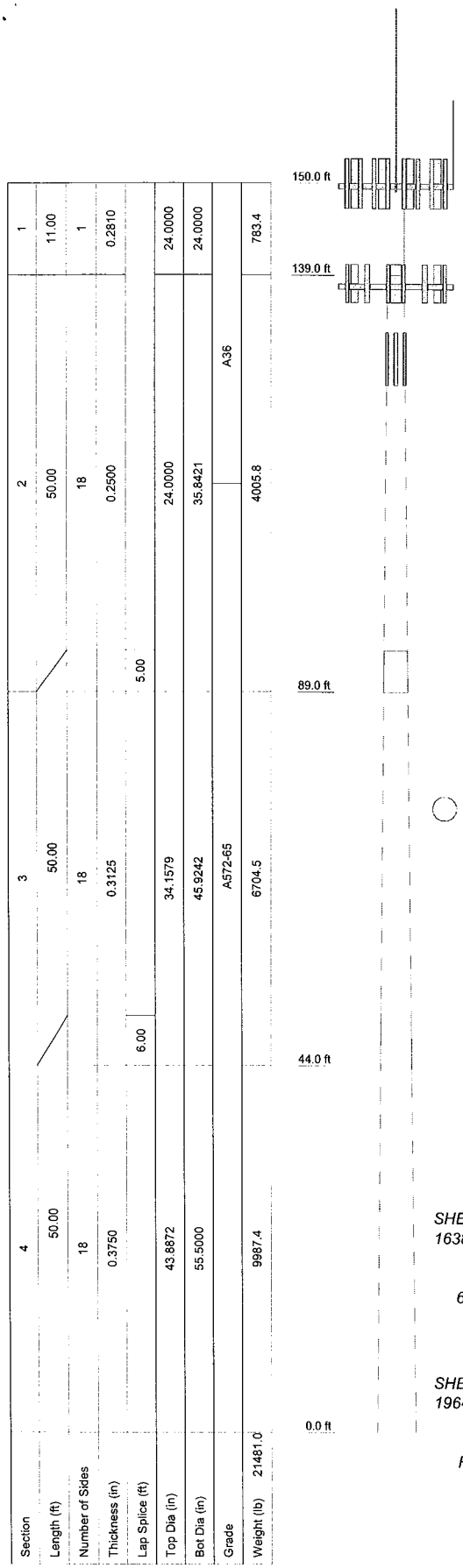
If any of these assumptions are not valid or have been made in error, this analysis may be affected, and Vertical Structures should be allowed to review any new information to determine its effect on the structural integrity of the tower.

ANALYSIS RESULTS

The Canton 2 tower superstructure is found to be adequate for the intended loading at the wind and ice conditions considered. Calculated foundation reactions are within the allowable limits based on the geotechnical information provided. Table 4 summarizes the condition of the tower. Capacities up to 100% are considered acceptable based on the analysis procedures used.

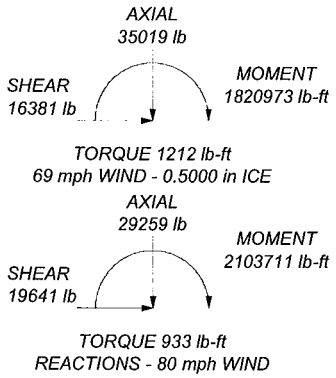
Table 4 – Tower Component Capacities

Section Number	Elevation	Percent Capacity Used		
		Pole	Flange Plate	Splice Bolts
1	150' – 139'	18.4	61.1	51.1
2	139' – 89'	56.6	-	-
3	89' – 44'	59.0	-	-
4	44' – 0'	55.2	-	-
Anchor Bolts – Tension		53.3		
Base Plate, Gussets, & Welds		71.7		
Foundation – Moment		33.0		



Section	1	2	3	4
Length (ft)	11.00	50.00	50.00	50.00
Number of Sides	1	18	18	18
Thickness (in)	0.2810	0.2500	0.3125	0.3750
Lap Splice (ft)				
Top Dia (in)	24.0000	24.0000	34.1579	43.8872
Bot Dia (in)	24.0000	35.8421	45.9242	55.5000
Grade	A36	A36	A572-65	A572-65
Weight (lb)	783.4	4005.8	6704.5	9987.4

Total Weight: 21481.0



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
Nudd 14' Low Profile Platform (VSI)	150	(2) 7770.00 w/ mount pipe (ATT Mobility)	138
(2) LPA-80080/6CF w/ Mount Pipe	150	(2) 7770.00 w/ mount pipe (ATT Mobility)	138
(2) LPA-80080/6CF w/ Mount Pipe	150	(2) Powerwave LGP2140X TMA (ATT Mobility)	138
(2) LPA-80080/6CF w/ Mount Pipe	150	(2) Powerwave LGP2140X TMA (ATT Mobility)	138
(2) LPA-185080/12CF w/Mount Pipe	150	(2) Powerwave LGP2140X TMA (ATT Mobility)	138
(2) LPA-185080/12CF w/Mount Pipe	150	(2) LGP21903 Diplexer (ATT Mobility)	138
(2) LPA-185080/12CF w/Mount Pipe	150	(2) LGP21903 Diplexer (ATT Mobility)	138
TD1142	150	742 213 w/ Mount Pipe	129
PD220	150	742 213 w/ Mount Pipe	129
Nudd 14' Low Profile Platform (VSI) (ATT Mobility)	138	742 213 w/ Mount Pipe	129
978QNB120E-M w/Mount Pipe (ATT Mobility)	138	4'x4" Pipe Mount	92
978QNB120E-M w/Mount Pipe (ATT Mobility)	138	4' Yagi	92
978QNB120E-M w/Mount Pipe (ATT Mobility)	138		
(2) 7770.00 w/ mount pipe (ATT Mobility)	138		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A36	36 ksi	58 ksi	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 50 mph wind.
5. TOWER RATING: 59%

Vertical Structures, Inc.
309 Spangler Drive, Suite E
Richmond, KY 40475
Phone: (859) 624-8360
FAX: (859) 624-8369

Job:	*Canton 2, CT (CT-01500-02)*		
Project:	*Vertical Structures Job No. 2009-007-014*		
Client: SBA	Drawn by: Jordan Kays	App'd:	
Code: TIA/EIA-222-F	Date: 06/24/09	Scale: NTS	
Path:		Dwg No. E-1	