

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

December 11, 2008

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

RE: **EM-CING-042-081113**- New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at Public Works Drive, East Hampton, Connecticut.

Dear Mr. Levine:

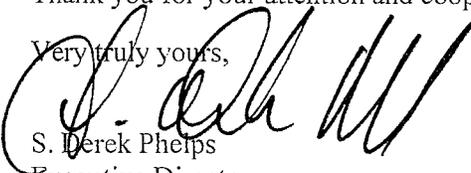
The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated November 13, 2008, 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/CDM/laf

c: The Honorable Christopher J. Goff, Chairman Town Council, Town of East Hampton
Alan H. Bergren, Town Manager, Town of East Hampton
James Carey, Zoning Enforcement Officer, Town of East Hampton
Crown Castle



EM-CING-042-081113

New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7636
Fax: (860) 513-7190

ORIGINAL

Steven L. Levine
Real Estate Consultant

HAND DELIVERED

November 13, 2008

RECEIVED
NOV 13 2008

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

CONNECTICUT
SITING COUNCIL

Re: New Cingular Wireless PCS, LLC notice of intent to modify an existing tele-communications facility located at Public Works Drive, East Hampton (owner, Crown Castle)

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. Modifications to the existing site include all or some of the following as necessary to bring the site into conformance with the plan:

- Replacement of existing panel antennas with new antennas or, installation of additional antennas of a size required to accommodate UMTS.
- 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.
- Radome enlargement for flagpole and "stick" structures to accommodate larger antennas and additional associated equipment.

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 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**

Public Works Drive, East Hampton
Former AT&T Cell Site
Site Number 5838
Docket 220

Tower Owner/Manager: Crown Castle

Equipment Configuration: Monopole

Current and/or Approved: Three Allgon 7250 Antennas @ 170 ft AGL
Six runs 1 5/8 inch coax cable
7 x 13 ft concrete pad with outdoor cabinets

Planned Modifications: Remove existing antennas
Install six Powerwave 7770 antennas (or equivalent) @ 170 ft
Install six TMA's and six diplexers @ 170 ft
Install six addition runs 1 5/8 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 10.9 % 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 be approximately 14.1 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							9.62
Cingular GSM*	170	1900 Band	4	250	0.0124	1.0000	1.24
Total							10.9%

* Per CSC records

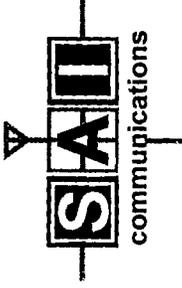
Proposed

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 *							9.62
Cingular UMTS	170	880 - 894	1	500	0.0062	0.5867	1.06
Cingular GSM*	170	1900 Band	4	427	0.0213	1.0000	2.13
Cingular GSM*	170	880 - 894	2	296	0.0074	0.5867	1.26
Total							14.1%

* Per CSC records

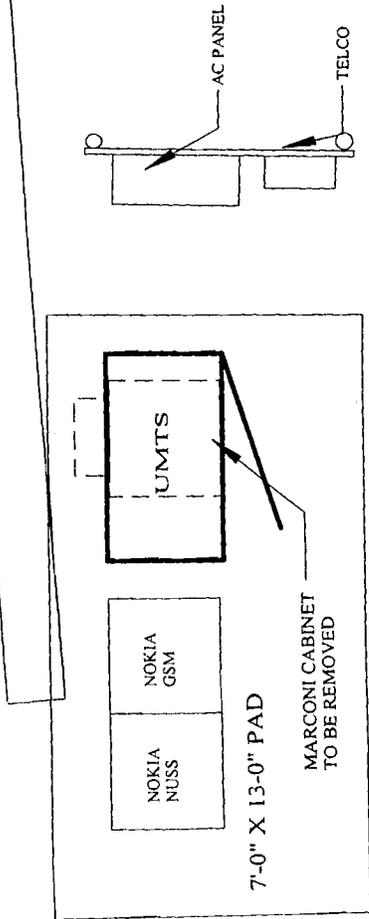
Structural information:

The attached structural analysis (B&T Engineering, 11/2008) demonstrates that the tower and foundation have sufficient structural capacity to accommodate the proposed modifications.



SITE NUMBER
5838
SITE NAME
East Hampton Central

TITLE:	EQUIPMENT PLAN
MISC. INFO:	
DWG. BY:	SGB
DATE:	07/07/08
SCALE:	N.T.S.
SHEET:	1 OF 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

November 13, 2008

Robert G. Drewry, Town Manager
Town of East Hampton
Town Hall 20 East High Street
East Hampton, CT 06424

Re: Telecommunications Facility – Public Works Drive

Dear Mr. Drewry:

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.

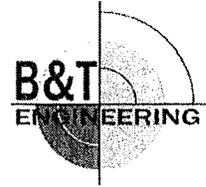
As required by Regulations of Connecticut State Agencies (“R.C.S.A.”) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular’s proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification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



November 10, 2008

Ms. Tara Brewer
Crown Castle USA Inc.
3530 Toringdon Way, Suite 300
Charlotte, NC 28277
(704) 321-3812

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

Subject: **Structural Analysis Report**

Carrier Designation: **AT&T Mobility Co-Locate**
Carrier Site Number: 5838
Carrier Site Name: East Hampton-Public works Dr.

Crown Castle Designation: **Crown Castle BU Number:** 876368
Crown Castle Site Name: Yankee Lake/East Hampton/Town
Crown Castle JDE Job Number: 111863

Engineering Firm Designation: **B&T Engineering Project Number:** 79761

Site Data: **1 Public Works Dr., East Hampton, CT, Middlesex County**
Latitude 41°-33'-53.14", Longitude -72°-32'-35.18"
180 Foot – Monopole

Dear Ms. Brewer,

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 310095, in accordance with Application 70508, 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
Note: See Table 1 and Table 2 for the proposed and existing/reserved loading.

Sufficient Capacity

The analysis has been performed in accordance with the TIA/EIA-222-F standard and the 2003 IBC; 2003 IRC (State Building Code, 2005 CT supplement), based upon a wind speed of 85 mph fastest mile.

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

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

Respectfully submitted,

Terry Carter, E.I.
Project Engineer

Chad E. Tuttle, P.E.
President



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1) INTRODUCTION

The subject tower is 180 foot tapered monopole manufactured in 2003 by Valmont.

2) ANALYSIS CRITERIA

Specific code

- TIA/EIA-222-F – 85 mph fastest mile wind speed
- 2003 IBC;2003 IRC (SBC, 2005 CT supplement) – 105 mph 3-second gust wind speed

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

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)
170	6	Powerwave	7770.00 LGP21401 LGP21901	Low Profile Platform	6	1 5/8

* SEE PAGE 40 (1) (ATTACHED)

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)
179#	9 (MLA)	--	6'x1' x0.5' Panel	Low Profile Platform	9 (MLA)	1 5/8
	6	Decibel	DB950F85E-M		6	
170**	3 (remove) 3 (r) (remove)	Allgon	7250.00	(3) Flush Mount (remove) (3) Flush Mount (r) (remove)	6 6 (r) (remove)	1 5/8
162	12	Decibel	844G45VTZASX	Low Profile Platform	12 3 (r)	1 5/8
135	5 1	Decibel	DB264-A DB420	Low Profile Platform	9	1 ¼
125	2 1	Decibel	DB230-E DB225-K			
76	1	Lucent	KS24019-L112A	Side Arm	1	½

(r)-Reserved.

*Refer to Cable Routing Drawing in Appendix B for Feedline Placement.

Analysis performed using MLA loading and not with existing loading.

** Designated Antennas, Mounts and Coax to be removed.

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)
177	12	DAPA	48000	Platform W/ Rails	--	--
167	12	DAPA	48000	Platform W/ Rails	--	--
157	12	DAPA	48000	Platform W/ Rails	--	--
147	12	DAPA	48000	Platform W/ Rails	--	--
127	1	--	Whip	--	--	--
125	--	--	--	Low Profile Platform	--	--
75	1	--	GPS	--	--	--

3) ANALYSIS PROCEDURE

Table 4 – Documents Provided

Document	Remarks	Reference	Source
Tower Manufacturing Drawings	Valmont Microflex	Crown Doc ID# 1531979	Crown OTG
Foundation Drawings	Valmont Microflex	Crown Doc ID# 2069183	Crown OTG
Geotech Report	Dr. Clarence Welti, P.E., P.C.	Crown Doc ID# 1441254	Crown OTG
Antenna Configuration	Crown CAD Package	Date: 11/06/08	Crown OTG

3.1) Analysis Method

RISA Tower (version 5.3.1.0), a commercially available analysis software package, was used to create a three-dimensional model of the tower and calculate member stresses for various dead, live, wind, and ice load cases. All loads were computed in accordance with the TIA/EIA-222-F or the local building code requirements. Selected output from the analysis is included in Appendix A.

3.2) Assumptions

1. 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-222-F.

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

4) ANALYSIS RESULTS

Table 5 – Tower Component Stresses vs. Capacity – LC1

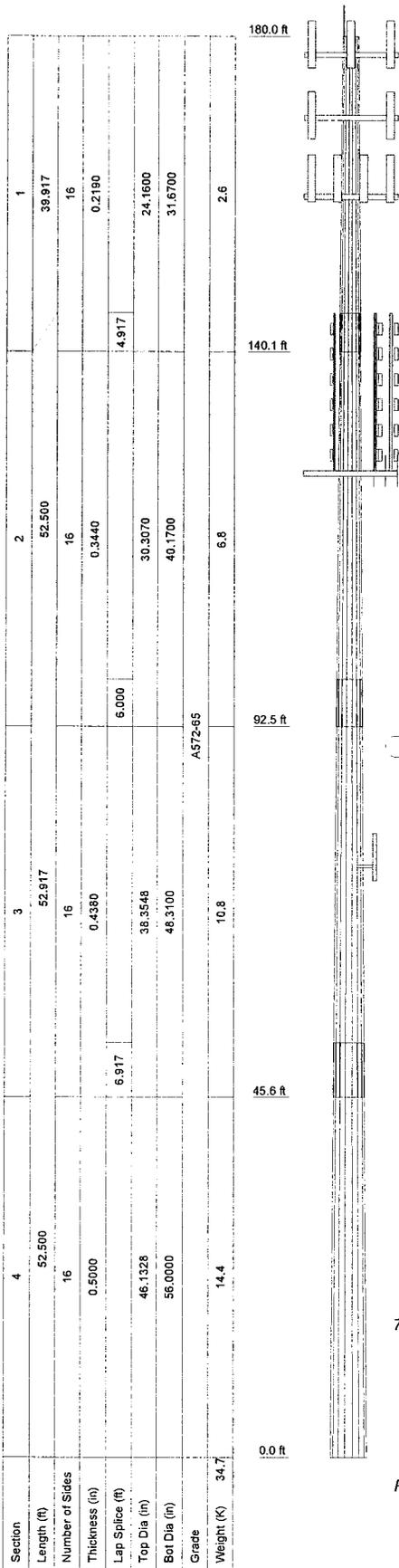
Section Capacity Table									
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	SF*P _{allow} K	% Capacity	Pass Fail	
L1	180 - 140.083	Pole	TP31.67x24.16x0.219	1	-7.190	1108.661	52.2	Pass	
L2	140.083 - 92.5	Pole	TP40.17x30.307x0.344	2	-17.092	2207.701	74.7	Pass	
L3	92.5 - 45.5833	Pole	TP48.31x38.3548x0.438	3	-29.811	3382.767	79.6	Pass	
L4	45.5833 - 0	Pole	TP56x46.1328x0.5	4	-48.552	4602.022	82.9	Pass	
							Summary		
							Pole (L4)	82.9	Pass
							RATING =	82.9	Pass
Individual Components:									
Notes:	Component	Elevation	% Capacity	Pass/Fail					
1	Base Plate	Base	63.7	Pass					
1	Anchor Rods	Base	67.2	Pass					
1	Base Foundation	Base	56.9	Pass					
Structure Rating (max from all components) =							82.9%		

*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.
- 3) The percent capacities shown above (excluding foundations) include the 1/3 increase in allowable stresses as allowed by TIA/EIA-222-F.

4.1) Recommendations

N/A



DESIGNED APPURTENANCE LOADING

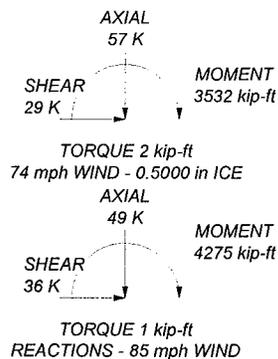
TYPE	ELEVATION	TYPE	ELEVATION
Lightning Rod (E)	180	(4) 844G45VTZASX (E)	162
(3) 6'x1' x0.5' Panel (MLA)	179	(4) 844G45VTZASX (E)	162
(3) 6'x1' x0.5' Panel (MLA)	179	Low Profile Platform (E)	160
(3) 6'x1' x0.5' Panel (MLA)	179	DB264-A (E)	135
Low Profile Platform (E)	178	DB264-A (E)	135
(2) 7770.00 (P)	170	DB264-A (E)	135
(2) 7770.00 (P)	170	DB420 (E)	135
(2) 7770.00 (P)	170	DB264-A (E)	135
(2) LGP21401 (P)	170	DB264-A (E)	135
(2) LGP21401 (P)	170	DB230-E (E)	125
(2) LGP21401 (P)	170	DB230-E (E)	125
(2) LGP21901 Diplexor (P)	170	DB225-K (E)	125
(2) LGP21901 Diplexor (P)	170	Low Profile Platform (E)	125
(2) LGP21901 Diplexor (P)	170	KS24019-L112A (E)	78
Low Profile Platform (P)	170	Side Arm (E)	75
(4) 844G45VTZASX (E)	162		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 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: 82.9%



B&T Engineering 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918)-587-4630 FAX: (918)-295-0265	Job: 79761 - Yankee Lake, CT (BU #876368)
	Project: 180' Valmont Monopole / App ID: 70508, Rev: 1
	Client: Crown Castle USA, Inc. Drawn by: Terry Carter App'd:
	Code: TIA/EIA-222-F Date: 11/10/08 Scale: NTS
Path:	Dwg No: E-1

RISATower B&T Engineering 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918)-587-4630 FAX: (918)-295-0265	Job 79761 - Yankee Lake, CT (BU #876368)	Page 1 of 11
	Project 180' Valmont Monopole / App ID: 70508, Rev: 1	Date 13:34:24 11/10/08
	Client Crown Castle USA, Inc.	Designed by Terry Carter

Tower Input Data

There is a pole section.

This tower is designed using the TIA/EIA-222-F standard.

The following design criteria apply:

Tower is located in Middlesex County, Connecticut.

Basic wind speed of 85 mph.

Nominal ice thickness of 0.5000 in.

Ice density of 56.000 pcf.

A wind speed of 74 mph is used in combination with ice.

Deflections calculated using a wind speed of 50 mph.

A non-linear (P-delta) analysis was used.

Pressures are calculated at each section.

Stress ratio used in pole design is 1.333.

Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

<ul style="list-style-type: none"> Consider Moments - Legs Consider Moments - Horizontals Consider Moments - Diagonals Use Moment Magnification √ Use Code Stress Ratios √ Use Code Safety Factors - Guys Escalate Ice Always Use Max Kz Use Special Wind Profile Include Bolts In Member Capacity Leg Bolts Are At Top Of Section √ Secondary Horizontal Braces Leg √ Use Diamond Inner Bracing (4 Sided) Add IBC .6D+W Combination 	<ul style="list-style-type: none"> Distribute Leg Loads As Uniform Assume Legs Pinned √ Assume Rigid Index Plate √ Use Clear Spans For Wind Area √ Use Clear Spans For KL/r √ Retension Guys To Initial Tension √ Bypass Mast Stability Checks √ Use Azimuth Dish Coefficients √ Project Wind Area of Appurt. √ Autocalc Torque Arm Areas SR Members Have Cut Ends √ Sort Capacity Reports By Component √ Triangulate Diamond Inner Bracing 	<ul style="list-style-type: none"> Treat Feedline Bundles As Cylinder Use ASCE 10 X-Brace Ly Rules √ Calculate Redundant Bracing Forces Ignore Redundant Members in FEA SR Leg Bolts Resist Compression √ All Leg Panels Have Same Allowable Offset Girt At Foundation √ Consider Feedline Torque Include Angle Block Shear Check <li style="text-align: center;">Poles Include Shear-Torsion Interaction Always Use Sub-Critical Flow Use Top Mounted Sockets
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Tapered Pole Section Geometry

Section	Elevation	Section Length	Splice Length	Number of Sides	Top Diameter	Bottom Diameter	Wall Thickness	Bend Radius	Pole Grade
	ft	ft	ft		in	in	in	in	
L1	180.000-140.083	39.917	4.917	16	24.1600	31.6700	0.2190	0.8760	A572-65 (65 ksi)
L2	140.083-92.500	52.500	6.000	16	30.3070	40.1700	0.3440	1.3760	A572-65 (65 ksi)
L3	92.500-45.583	52.917	6.917	16	38.3548	48.3100	0.4380	1.7520	A572-65 (65 ksi)
L4	45.583-0.000	52.500		16	46.1328	56.0000	0.5000	2.0000	A572-65 (65 ksi)

RISATower B&T Engineering 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918)-587-4630 FAX: (918)-295-0265	Job 79761 - Yankee Lake, CT (BU #876368)	Page 2 of 11
	Project 180' Valmont Monopole / App ID: 70508, Rev: 1	Date 13:34:24 11/10/08
	Client Crown Castle USA, Inc.	Designed by Terry Carter

Tapered Pole Properties

Section	Tip Dia. in	Area in ²	I in ⁴	r in	C in	I/C in ³	J in ⁴	I/Q in ²	w in	w/t
L1	24.6333	16.7254	1211.0889	8.5230	12.3216	98.2899	2440.5151	8.2698	4.3720	19.964
	32.2905	21.9720	2745.6965	11.1966	16.1517	169.9943	5532.9663	10.8640	5.8665	26.788
L2	31.8425	32.8802	3729.2179	10.6668	15.4566	241.2710	7514.9007	16.2575	5.3465	15.542
	40.9570	43.7035	8757.1655	14.1781	20.4867	427.4561	17646.9251	21.6091	7.3093	21.248
L3	40.2571	52.9781	9622.1928	13.4984	19.5609	491.9084	19390.0772	26.1949	6.7610	15.436
	49.2564	66.8877	19365.2841	17.0424	24.6381	785.9893	39023.7821	33.0725	8.7421	19.959
L4	48.3620	72.7843	19147.2032	16.2453	23.5277	813.8150	38584.3184	35.9880	8.1854	16.371
	57.0971	88.5225	34447.2058	19.7580	28.5600	1206.1347	69415.9843	43.7697	10.1490	20.298

Tower Elevation	Gusset Area (per face)	Gusset Thickness	Gusset Grade	Adjust. Factor A _f	Adjust. Factor A _r	Weight Mult.	Double Angle Stitch Bolt Spacing Diagonals	Double Angle Stitch Bolt Spacing Horizontals
ft	ft ²	in					in	in
L1 180.000-140.083				1	1	1		
L2 140.083-92.500				1	1	1		
L3 92.500-45.583				1	1	1		
L4 45.583-0.000				1	1	1		

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement	Total Number	C _A A _A	Weight
				ft		ft ² /ft	klf
1 5/8 (MLA) *	C	No	Inside Pole	178.000 - 10.000	9	No Ice 1/2" Ice	0.000 0.000
1 5/8 (E/P) *	B	No	Inside Pole	170.000 - 10.000	12	No Ice 1/2" Ice	0.000 0.000
1 5/8 (E/R) *	A	No	Inside Pole	160.000 - 10.000	15	No Ice 1/2" Ice	0.000 0.000
1 1/4 (E) *	B	No	Inside Pole	125.000 - 10.000	9	No Ice 1/2" Ice	0.000 0.000
1/2 (E)	C	No	Inside Pole	75.000 - 10.000	1	No Ice 1/2" Ice	0.000 0.000

Feed Line/Linear Appurtenances Section Areas

Tower Section	Tower Elevation	Face	A _R	A _F	C _A A _A In Face	C _A A _A Out Face	Weight
	ft		ft ²	ft ²	ft ²	ft ²	K
L1	180.000-140.083	A	0.000	0.000	0.000	0.000	0.311
		B	0.000	0.000	0.000	0.000	0.373
		C	0.000	0.000	0.000	0.000	0.355

RISATower B&T Engineering 1717 S. Boulder, Suite 300 Tulsa, OK 74119 Phone: (918)-587-4630 FAX: (918)-295-0265	Job 79761 - Yankee Lake, CT (BU #876368)	Page 3 of 11
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	Client Crown Castle USA, Inc.	Designed by Terry Carter

Tower Section	Tower Elevation ft	Face	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L2	140.083-92.500	A	0.000	0.000	0.000	0.000	0.742
		B	0.000	0.000	0.000	0.000	0.787
		C	0.000	0.000	0.000	0.000	0.445
L3	92.500-45.583	A	0.000	0.000	0.000	0.000	0.732
		B	0.000	0.000	0.000	0.000	0.864
		C	0.000	0.000	0.000	0.000	0.446
L4	45.583-0.000	A	0.000	0.000	0.000	0.000	0.555
		B	0.000	0.000	0.000	0.000	0.655
		C	0.000	0.000	0.000	0.000	0.342

Feed Line/Linear Appurtenances Section Areas - With Ice

Tower Section	Tower Elevation ft	Face or Leg	Ice Thickness in	A _R ft ²	A _F ft ²	C _A A _A In Face ft ²	C _A A _A Out Face ft ²	Weight K
L1	180.000-140.083	A	0.500	0.000	0.000	0.000	0.000	0.311
		B		0.000	0.000	0.000	0.000	0.373
		C		0.000	0.000	0.000	0.000	0.355
L2	140.083-92.500	A	0.500	0.000	0.000	0.000	0.000	0.742
		B		0.000	0.000	0.000	0.000	0.787
		C		0.000	0.000	0.000	0.000	0.445
L3	92.500-45.583	A	0.500	0.000	0.000	0.000	0.000	0.732
		B		0.000	0.000	0.000	0.000	0.864
		C		0.000	0.000	0.000	0.000	0.446
L4	45.583-0.000	A	0.500	0.000	0.000	0.000	0.000	0.555
		B		0.000	0.000	0.000	0.000	0.655
		C		0.000	0.000	0.000	0.000	0.342

Feed Line Center of Pressure

Section	Elevation ft	CP _X in	CP _Z in	CP _X Ice in	CP _Z Ice in
L1	180.000-140.083	0.0000	0.0000	0.0000	0.0000
L2	140.083-92.500	0.0000	0.0000	0.0000	0.0000
L3	92.500-45.583	0.0000	0.0000	0.0000	0.0000
L4	45.583-0.000	0.0000	0.0000	0.0000	0.0000

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K	
Lightning Rod (E)	C	From Leg	0.000	0.0000	180.000	No Ice	0.500	0.500	0.100
			0.000			1/2" Ice	0.750		
			2.000						
* (3) 6'x1' x0.5' Panel (MLA)	C	From Face	0.000	0.0000	179.000	No Ice	8.400	4.700	0.035
			0.000			1/2" Ice	8.949		
			0.000						
(3) 6'x1' x0.5' Panel (MLA)	B	From Face	0.000	0.0000	179.000	No Ice	8.400	4.700	0.035
			0.000			1/2" Ice	8.949		
			0.000						

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Job	79761 - Yankee Lake, CT (BU #876368)	Page	4 of 11
Project	180' Valmont Monopole / App ID: 70508, Rev: 1	Date	13:34:24 11/10/08
Client	Crown Castle USA, Inc.	Designed by	Terry Carter

Description	Face or Leg	Offset Type	Offsets: Horz Lateral Vert ft ft ft	Azimuth Adjustment °	Placement ft	C _A A _A Front ft ²	C _A A _A Side ft ²	Weight K	
(3) 6'x1' x0.5' Panel (MLA)	A	From Face	0.000	0.0000	179.000	No Ice	8.400	4.700	0.035
			0.000			1/2" Ice	8.949	5.147	0.082
			0.000						
			0.000						
Low Profile Platform (E)	C	None		0.0000	178.000	No Ice	21.000	21.000	1.500
						1/2" Ice	24.000	24.000	2.000
6 (2) 7770.00 (P)	C	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	5.882 6.314	2.928 3.273	0.035 0.068
	B	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	5.882 6.314	2.928 3.273	0.035 0.068
	A	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	5.882 6.314	2.928 3.273	0.035 0.068
6 (2) LGP21401 (P)	C	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	1.288 1.445	0.233 0.313	0.014 0.021
	B	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	1.288 1.445	0.233 0.313	0.014 0.021
	A	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	1.288 1.445	0.233 0.313	0.014 0.021
* 6 (2) LGP21901 Diplexor (P)	C	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	0.270 0.343	0.184 0.248	0.006 0.008
	B	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	0.270 0.343	0.184 0.248	0.006 0.008
	A	From Face	0.000 0.000 0.000	0.0000	170.000	No Ice 1/2" Ice	0.270 0.343	0.184 0.248	0.006 0.008
Low Profile Platform (P)	C	None		0.0000	170.000	No Ice 1/2" Ice	21.000 24.000	21.000 24.000	1.500 2.000
* (4) 844G45VTZASX (E)	C	From Face	0.000	0.0000	162.000	No Ice	7.000	3.967	0.015
			0.000			1/2" Ice	7.413	4.337	0.058
(4) 844G45VTZASX (E)	B	From Face	0.000	0.0000	162.000	No Ice	7.000	3.967	0.015
			0.000			1/2" Ice	7.413	4.337	0.058
(4) 844G45VTZASX (E)	A	From Face	0.000	0.0000	162.000	No Ice	7.000	3.967	0.015
			0.000			1/2" Ice	7.413	4.337	0.058
Low Profile Platform (E)	C	None		0.0000	160.000	No Ice 1/2" Ice	21.000 24.000	21.000 24.000	1.500 2.000
DB264-A (E)	C	Stand-Off Left	4.000	0.0000	135.000	No Ice	3.160	3.160	0.036
			0.000			1/2" Ice	5.688	5.688	0.047
DB264-A (E)	C	Stand-Off Left	2.000	0.0000	135.000	No Ice	3.160	3.160	0.036
			0.000			1/2" Ice	5.688	5.688	0.047
DB264-A (E)	B	Stand-Off Left	4.000	0.0000	135.000	No Ice	3.160	3.160	0.036
			0.000			1/2" Ice	5.688	5.688	0.047