CUDDY & FEDER LLP

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June 26, 2008

VIA FACSIMILE & FIRST CLASS MAIL
S. Derek Phelps
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, Connecticut 06051

Re: **EM-CING-086-080618** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 57 Cook Road, Montville, Connecticut.

Dear Mr. Phelps:

On behalf of our client, New Cingular Wireless PCS, LLC ("AT&T"), thank you for taking the time to speak with me this morning regarding the existing tower at 57 Cook Road in Montville and this new information regarding the structural capacity of the tower. In light of that information, we are withdrawing this matter without prejudice to refiling at a later date. I have asked AT&T to work with your office and the tower owner and other users of the tower in the interim so that the facts can be gamered regarding the tower and determine what if any actions our client will need to undertake. We look forward to working with you in this regard.

Very truly yours,

Christopher B. Fisher

cc: Michele Briggs
Steve Levine

The new

EM-CING-086-080618

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

HAND DELIVERED

ORIGINAL

June 18, 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 57 Cook Road, Montville (owner, Wireless Solutions)

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 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 Cingular'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 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 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 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 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

CINGULAR WIRELESS
Equipment Modification

57 Cook Road, Montville
Site Number 2171
Exempt Modifications approved 4/98 and d8/02

Tower Owner/Manager: Wireless Solutions

Equipment configuration: Guyed Lattice Tower

Current and/or approved:
Nine CSS panel antennas @ 177 ft c.l.
Six TMA's and three diplexers @ 177 ft
Nine runs 1 1/4 inch coax

Planned Modifications:
Remove three existing antennas
Install three new Powerwave 7770 antennas @ 177 ft c.l.
Remove three existing diplexers
Install six new Powerwave diplexers s @ 177 ft
Install three additional runs 1 1/4 inch coax (total of 12)

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 24 % 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 23 % 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 *							18.76
Cingular TDMA *	177	880 - 894	16	100	0.0184	0.5867	3.13
Cingular GSM *	177	880 - 894	2	296	0.0068	0.5867	1.16
Cingular GSM *	177	1900 Band	2	427	0.0098	1.0000	0.98
Total							24.0%

* 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 *							18.76
Cingular GSM	177	880 - 894	4	296	0.0136	0.5867	2.32
Cingular GSM	177	1900 Band	2	427	0.0098	1.0000	0.98
Cingular UMTS	177	880 - 894	1	500	0.0057	0.5867	0.98
Total							23.0%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower will be overstressed by 17.5 % with inclusion of Cingular's proposed equipment modifications. (Malouf Engineering Intl., dated 6/12/08) Although we do not yet have a plan for tower modifications that will remedy the overstress conditions, we are aware that there is already a structural issue with this tower following submission of T-Mobile's recent notice of exempt modification. We have submitted this Notice at the present time because we feel it is in the best interests of all parties for the Council to be aware of other carrier's plans for this tower. By taking all proposed equipment changes into account, an omnibus solution may be developed rather than approaching this in a piecemeal manner.

Cingular will not proceed with the proposed equipment modifications until the tower has sufficient structural capacity to bear all present and planned equipment. We therefore respectfully request a conditional approval for the proposed equipment modifications.

Note that the Malouf analysis correctly accounts for the T-Mobile equipment at 190 ft on the tower. The Malouf analysis, however, exhibits several differences with the T-Mobile analysis ("BSD"), including:

(1) The BSD analysis does not account for all of Cingular's existing equipment. It does not account for Cingular's six TMA's .

(2) Tower height – 190 ft v. 192.77 ft (Extension of tower is 12.77 ft as per data in Walker Engineering report)

(3) Tube Steel - Diagonals and horizontals were considered as 42 ksi while Malouf used 36 ksi (as per Walker Eng.)

(4) T-Mobile @ 188ft – their Sector Frame Mounts were not considered in the BSD report

(5) Sprint PCS future loading is not considered in BSD while it is in Malouf's

(6) No Bolt calculations included in the BSD while they are in Malouf's & actually some control capacity

(7) All Sector Mounts weights included in BSD were very low – they used 50 lbs per sector mount

(8) The transmission lines layout is different – Malouf used available data & photos to derive its data.

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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 18, 2008

Honorable Joseph W. Jaskiewicz
1st Selectman, Town of Montville
Town Hall 310 Norwich-New London Tpke.
Uncasville, CT 06382

Re: Telecommunications Facility – 57 Cook Road, Montville

Dear Mr. Jaskiewicz:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("Cingular") will be changing its equipment configuration at certain cell sites.

As required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular's proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2).

The accompanying letter to the Siting Council fully describes Cingular's proposal for the referenced cell site. However, if you have any questions or require any further information on our plans or the Siting Council's procedures, please call me at (860) 513-7636 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Steven L. Levine
Real Estate Consultant

Enclosure

Structural Analysis Report

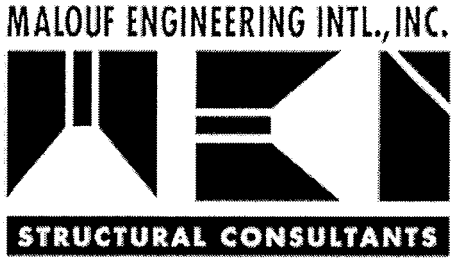
AT&T Uncasville #2171

Owner: Wireless Solutions

57 Cook Road, Montville, CT 06382

June 12, 2008

MEI PROJECT ID: CT01171G-08V0



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MALOUF ENGINEERING INTL., INC.

STRUCTURAL CONSULTANTS

June 12, 2008

STRUCTURAL ANALYSIS

Structure/Make/Model:	192.75ft **Guyed Tower**		Rohn / #80	
Client/Site Name/#:	**Hudson D.G. / AT&T**		**Uncasville Site**	**#2171**
Owner/Site Name/#:	**Wireless Solutions**			
MEI Project ID:	**CT01171G-08V0**			
Location:	57 Cook Rd Montville, CT 06382		New London County FCC #N/A	
	LAT	41-28-30.0 N	LON	72-06-18.1 W

EXECUTIVE SUMMARY:

Malouf Engineering Int'l (MEI), as requested, has performed a structural analysis of the above mentioned structure to assess the impact of the changed condition as noted in Table 1.

Based on the stress analysis performed, the existing structure **is NOT in conformance** with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced in the report sections - *tower rated at 117.5%*.

The installation of the proposed changed condition *of the AT&T's replacing (3) existing AT&T panels with new (3) LGP Allgon 7770 Panels, (6) Powerwave LGP 21901 Diplexers, (3) Powerwave 7020 RET's, (3) Powerwave 1001983 Cilocs onto existing mounts at Elev. 177 ft c.l fed with, in addition to existing lines, new (3) 1-1/4" dia. coax Lines* ***is NOT structurally acceptable***.
The tower will require structural modifications to the diagonals- 2 to 3 sections – in order to properly support the proposed loading considered.

MEI appreciates the opportunity of providing our continuing professional services to you. If you have any questions or need further assistance on this or any other projects please contact us.

Respectfully submitted,

MALOUF ENGINEERING INT'L, INC.

Analysis performed by:

Krishna Manda, PE
Project Engineer

Reviewed & Approved by:

STATE OF CONNECTICUT
E. MARK MALOUF
No. 17715
LICENSED PROFESSIONAL ENGINEER

E. Mark Malouf, PE
Connecticut #17715
972-783-2578 ext. 106
mmalouf@maloufengineering.com

TABLE OF CONTENTS

1. INTRODUCTION & SCOPE

A rigorous structural analysis was performed by Malouf Engineering Int'l (MEI), as requested and authorized by Derek Creaser, of Hudson Design Group, on behalf of AT&T, to determine the acceptance of the proposed changed conditions in conformance with the ANSI/TIA-222-F Standard, *"Structural Standards for Steel Antenna Towers and Antenna Supporting Structures"*.

The scope of this independent analysis is to determine the overall stability and the adequacy of structural members, foundations, and member connections, as available and stated. This analysis considers the structure to have been properly installed and maintained with no structural defects. Installation procedures and related loading are not with the scope of this analysis and should be performed and evaluated by a competent person of the erection contractor.

The different report sections detail the applicable information used in this evaluation, relating to the tower data, the appurtenances configuration and the wind and ice loading considered.

2. SOURCE OF DATA

The following information has been used in this evaluation as source data that accurately represent the existing structure and the related appurtenances:

	Source	Information	Reference
STRUCTURE			
Tower	Hudson D.G. / Mr. Derek Creaser	Tower Mapping Report by CSB Comm. / Previous Structural Analysis	Inspection Dated 8/19/02 / Walker Engr. report Dated 08/19/2002
Foundation	-	No Data Available – only original design reactions	From prev. analysis report by Walker Engr.
Material Grade	Available from supplied documents noted above – refer to Appendix.		
CURRENT APPURTENANCES			
	Hudson D.G. / Mr. Derek Creaser	Mapping Report/ Recent Photos	CSB Comm. LLC Dated 03/05/2007
CHANGED CONDITION			
	Hudson D.G. / Mr. Derek Creaser	AT&T RF Data Sheet	AT&T RF Data Sheet Version 2008-01 Dated 03/08/2008

Background Information:

Based on available information, the following is known regarding this structure:

DESIGNER / FABRICATOR	Rohn / #80
DESIGN CRITERIA	TIA/EIA 222- E– 90/78 MPH + 0" / 1/2" Ice
PRIOR STRUCTURAL MODIFICATIONS	12.77ft Extension of Tower by others

3. ANALYSIS CRITERIA

The structural analysis performed used the following criteria:

CODE / STANDARD	ANSI/TIA-222-F-96 Standard	
LOADING CASES	*Full Wind*:	85 Mph (fastest-mile) - with No Radial Ice
	Iced Case:	73.61 Mph (fastest-mile) + 0.5" Radial Ice
	Service:	50 Mph

Appurtenances Configuration

The following appurtenances configuration has been considered:

Table 1: Proposed Changed Condition Appurtenances

Elev (ft)	Tenant	Ant Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
177	AT&T	3	Powerwave 7770 Panels	[existing mounts]	3	1-1/4" / FZ
		6	Powerwave LGP 21901 Diplexers			
		3	Powerwave 7020 RET's			
		3	Powerwave 1001983 CILOCs			

Table 2: Current and Reserved/Future Appurtenances

Elev (ft)	Tenant	Ant Qty	Appurtenance Model / Description	Mount Description	Lines Qty	Line size & Location
190	T-Mobile	3	RFS APX16PV-16PVL-X	(3) 12ft Sector mounts	12	1-5/8" / FZ
		12	Remex G20057A1 TMA's			
177	AT&T	6	CSS DUO 1417-8686-4 Panels	(3) 15ft Sector mounts	9	1-1/4" / FZ
		1	Telewave 450-470 Whip		1	7/8" / FZ
		1	Pagenet Omni		1	7/8" / FZ
		6	ADC/CG 1900W850 TMA			
167	Verizon Wireless	6	DB948F85T2E-M Panels	(3) 13ft Sector mounts	6	1-5/8" / FZ
		6	ALP 9212-N Panels		6	1-5/8" / FZ
		2	Antenex FG 4605 Whip's		2	7/8"/ FZ
150	Sprint	12	DB980H90E-M Panels	(3) 15ft Sector mounts	12	1-5/8"/ FZ
		1	Cush Craft Dipole		1	1-1/4"/ FZ
140	Nextel	12	DB844H90E-XY Panels	(3) 15ft Sector mounts	12	1-1/4"/ FZ
		1	Antenex FG4607 Omni		1	7/8" / FZ
122		1	DB450 Dipole (4-Elem.)	3' Stand-off mount	1	1-1/4"/ FZ
110		2	Celwave PD220-3E	(2) 4' Stand-off mounts	2	1-5/8"/ FZ
107		1	Phelps Dodge Folded Dipole		1	1-1/4"/ FZ

Notes:

1. *Please note appurtenances not listed above are to be removed/not present as per data supplied.*
2. (I) = internal; (E) = External; (FZ) = Within Face Zone & (OFZ) = Outside Face Zone - as per TIA-222.
3. The above antennas, mounts, and lines represent MEI's understanding of the appurtenances configuration. If different than above, the analysis is invalid. Please refer to Appendix 2 for EPA wind areas used in the calculations. Please contact MEI if any discrepancies are found.
4. AT&T replacing existing (1) panel antenna/sector with proposed panels and adding (3) 1-1/4" dia. Coaxes. Re-using existing (3) 1 1/4" dia. coaxes

4. ANALYSIS PROCEDURE

The subject structure is analyzed for feasibility of the installation of the proposed changed condition previously noted. The data records furnished were reviewed and a computer stress analysis was performed in accordance with the TIA-222 Standard provisions and with the agreed scope of work terms and the results of this analysis are reported.

Analysis Program

The computer program used to model the structure is a rigorous Finite Element Analysis program, RISATower (ver. 5.1.2.0), a commercially available program developed by C-Concepts, WI and now maintained by RISA Technologies. The latticed structures members are modeled using beam/truss and cable members and the pole members using tubular beam elements. The structural parameters and geometry of the members are included in the model. The dead and temperature loads and the wind loads are internally calculated by the program for the different wind directions and then applied as external loads on the structure.

Assumptions

This engineering study is based on the theoretical capacity of the members and is not a condition assessment of the structure. This analysis is based on information supplied, and therefore, its results are based on and as accurate as that supplied data. MEI has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural stress analysis:

- This existing tower is assumed, for the purpose of this analysis, to have been properly maintained and to be in good condition with no structural defects and with no deterioration to its member capacities ('as-new' condition).
- The tower member sizes and configuration are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated.
- The appurtenances configuration is as supplied and/or as stated in the report. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements.
- Some assumptions are made regarding antennas and mounts sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type & industry practice.
- Mounts/Platforms are considered adequate to support the loading. No actual analysis of the platform/mount itself is performed, with the analysis being limited to analyzing the structure.
- The soil parameters are as per data supplied or as assumed and stated in the calculations. Refer to the Appendix. If no data is available, the foundation system is assumed to support the structure with its new reactions.
- All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report. All guy cable assemblies, as applicable, are assumed to develop the rated breaking strength of the wire.
- All prior structural modifications, if any, are assumed to be as per data supplied/available, and to have been properly installed and to be fully effective.

If any of the above assumptions are not valid or have been made in error, these analysis results may be invalided. MEI should be contacted to review any contradictory information to determine its effect.

5. ANALYSIS RESULTS

The results of the structural stress analysis based on data available and with the previous listed criteria, indicated the following:

Table 3: Stress Analysis Results

Member Type	Maximum Stress Ratio	Controlling Elev. (ft) / Component	Pass/Fail	Comment
LEGS	97.9%40 -	20	**Pass**	
DIAGONALS	**117.5%**	**60 - 80**	**Fail**	Bolt Shear
	106.8%	80 - 100	**Fail**	Member Bearing
GIRTS	44.0%80 -	60	**Pass**	
GUY WIRES	77.0%102		**Pass**	
BASE FOUNDATION	86.1%	Reaction Comparison	**Pass**	Design Reactions from Walker Engr report.
GUY ANCHORS	84.5%	Reaction Comparison	**Pass**	Design Reactions from Walker Engr report.

Notes:

1. The Maximum Stress Ratio is the percentage that the maximum load in the member is relative to the allowable load as determined by Code requirements.
2. Refer to the Appendix 2 for more details on the member loads.
3. A maximum stress ratio between 100% and 105% may be considered as *Acceptable* according to industry standard practice.

6. FINDINGS & RECOMMENDATIONS

- Based on the rigorous stress analysis results, the subject structure is **rated at 117.5%** of its support capacity (controlling component: Diagonals) with the proposed changed condition considered. Please refer to Table 3 and to Appendix 2 for more details of the analysis results.

- Based on the stress analysis performed, the existing structure **is NOT in conformance** with the ANSI/TIA **222-F** Standard for the loading considered under the criteria listed and referenced in the report sections.

- ***The installation of the proposed changed condition*** *of the AT&T's replacing (3) existing AT&T panels with new (3) LGP Allgon 7770 Panels, (6) Powerwave LGP 21901 Diplexers, (3) Powerwave 7020 RET's, (3) Powerwave 1001983 Cilocs onto existing mounts at Elev. 177 ft c.l fed with, in addition to existing lines, new (3) 1-1/4" dia. coax Lines* ***is NOT structurally acceptable***.

- This tower is above its maximum support capacity for the appurtenances and loading criteria considered.

- Based on the analysis results and possible modification investigation, this structure would require the following estimated modifications in order to meet the previously noted requirements with the proposed changed condition:

  1. Modify diagonal members by adding double lacing or replacing.
  2. Re-evaluate foundation after strengthening.

- The preliminary structural modification cost can be approximately estimated to vary between $12,000 to $17,000 which would include design, labor and materials.

Modification Design is Not within the scope of this report. The tower reinforcement design and detailing can be performed by MEI under a new consulting agreement.

7. REPORT DISCLAIMER

The engineering services rendered by **M**alouf **E**ngineering **I**nternational, Inc. *('MEI') in connection with this Structural Analysis are limited to a computer analysis of the tower structure, size and capacity of its members. MEI does not analyze the fabrication, including welding and connection capacities, except as included in this Report.*

The analysis performed and the conclusions contained herein are based on the assumption that the tower has been properly installed and maintained, including, but not limited to the following:

1. Proper alignment and plumbness.
2. Correct guy tensions, as applicable.
3. Correct bolt tightness or slip jacking of sleeved connections.
4. No significant deterioration or damage to any structural component.

Furthermore, the information and conclusions contained in this Report were determined by application of the current "state-of-the-art" engineering and analysis procedures and formulae. MALOUF ENGINEERING INTERNATIONAL,I NC. Assumes no obligation to revise any of the information or conclusions contained in this Report in the event that such engineering and analysis procedures and formulae are hereafter modified or revised. In addition, under no circumstances will MALOUF ENGINEERING INTERNATIONAL, INC. Have any obligation or responsibility whatsoever for or on account of consequential or incidental damages sustained by any person, firm or organization as a result of any information or conclusions contained in the Report, and the maximum liability of MALOUF ENGINEERING INTERNATIONAL, INC., if any, pursuant to this Report shall be limited to the total funds actually received by MALOUF ENGINEERING INTERNATIONAL, INC. For preparation of this Report.

Customer has requested MALOUF ENGINEERING INTERNATIONAL, INC. To prepare and submit to Customer an engineering analysis with respect to the Subject Tower and has further requested MALOUF ENGINEERING INTERNATIONAL, INC. to make appropriate recommendations regarding suggested structural modifications and changes to the Subject Tower. In making such request of MALOUF ENGINEERING INTERNATIONAL, INC., Customer has informed MALOUF ENGINEERING INTERNATIONAL, INC. that Customer will make a determination as to whether or not to implement any of the changes or modifications which may be suggested by MALOUF ENGINEERING INTERNATIONAL, INC. and that Customer will have any such changes or modifications made by riggers, erectors and other subcontractors of Customer's choice. MALOUF ENGINEERING INTERNATIONAL, INC. shall have the right to rely upon the accuracy of the information supplied by the customer and shall not be held responsible for the Customer's misrepresentation or omission of relevant fact whether intentional or otherwise.

Customer hereby agrees and acknowledges that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability whatsoever to Customer or to others for any work or services performed by any persons other than MALOUF ENGINEERING INTERNATIONAL, INC. in connection with the implementation of services including but not limited to any services rendered for Customer or for others by riggers, erectors or other subcontractors. Customer acknowledges and agrees that any riggers, erectors or subcontractors retained or employed by Customer shall be solely responsible to Customer and to others for the quality of work performed by them and that MALOUF ENGINEERING INTERNATIONAL, INC. shall have no liability or responsibility whatsoever as a result of any negligence or breach of contract by any such rigger, erector or subcontractor and that Customer and rigger, erector, or subcontractor will provide MALOUF ENGINEERING INTERNATIONAL, INC. with a Certificate of Insurance naming MALOUF ENGINEERING INTERNATIONAL, INC. as additional insured.

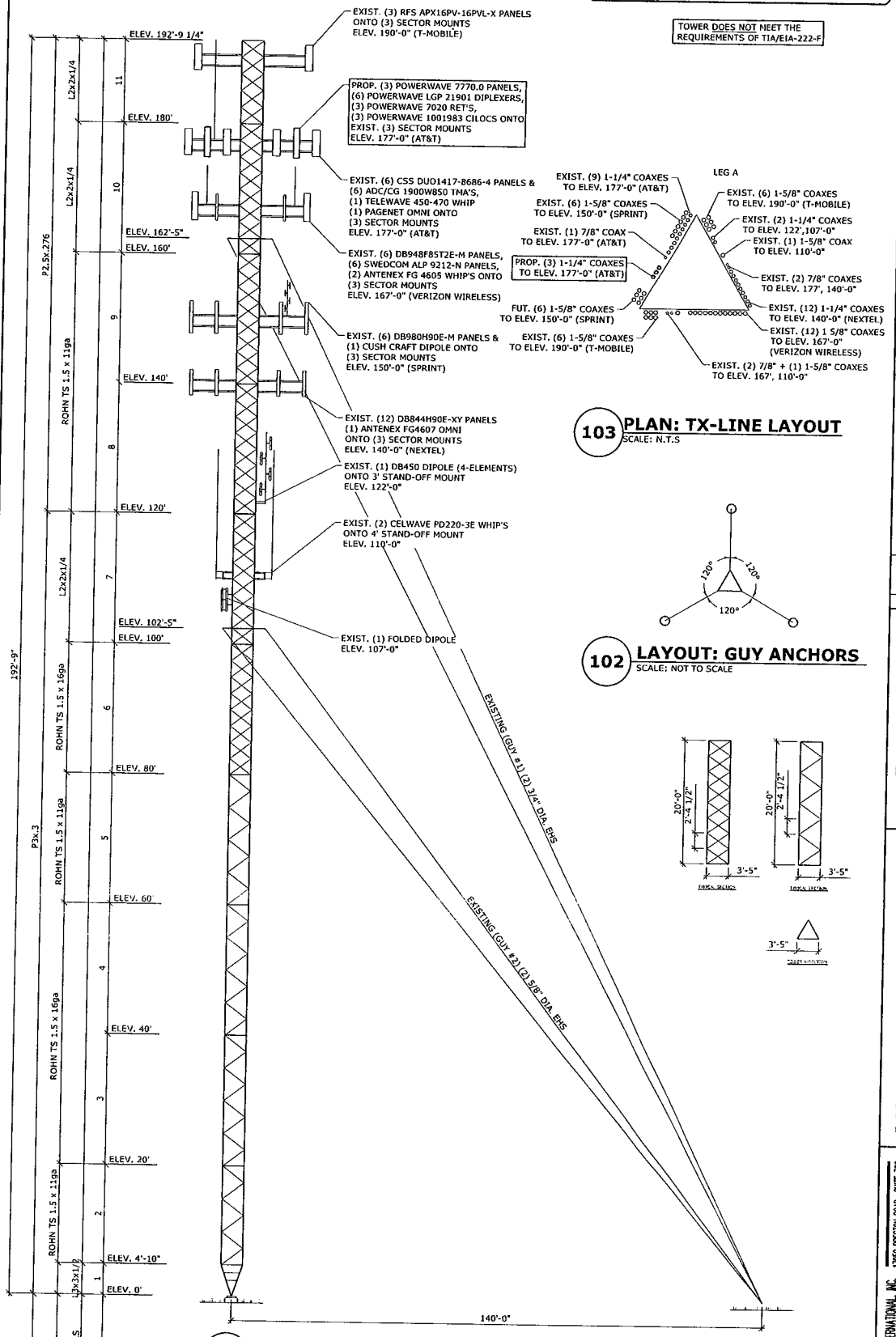
APPENDIX 1 - TOWER DRAWING

ELEVATION (FT.)	SECTION NUMBER	LEG BOLTS (QTY./DIA.)	DIAG. BOLTS (QTY./DIA.)
0-4.8	1	-	(1) 0.5"
4.8-20.0	2	(4) 0.875"	(1) 0.5"
20.0-100.0	3-6	(4) 0.75"	(1) 0.5"
100.0-120.0	7	(4) 0.75"	(2) 0.625"
120.0-160.0	8-9	(4) 0.75"	(1) 0.5"
160.0-192.8	10-11	(4) 0.75"	(2) 0.625"

NOTE: ALL BOLTS A325N UNLESS NOTED WITH *

TOWER HT. & TYPE:	192.77' GUYED TOWER
SITE NAME:	UNCASVILLE SITE #2171
LOCATION:	MONTVILLE, CT 06382
MANUF. / MODEL:	UNR-ROHN / #80
ORIGINAL DESIGN CRITERIA:	TIA/EIA-222-E-90/ 77.9 MPH + 0/ 1/2" ICE
ANALYSIS CRITERIA:	ANSI/TIA-222-F-85/ 73.6 MPH + 0/ 1/2" ICE

TOWER DOES NOT MEET THE REQUIREMENTS OF TIA/EIA-222-F



101 ELEV: 192.77' GUYED TOWER
SCALE: 1" = 15'-0"

103 PLAN: TX-LINE LAYOUT
SCALE: N.T.S

102 LAYOUT: GUY ANCHORS
SCALE: NOT TO SCALE

NO.	DATE	REVISIONS	DRAWN	CHK'D	APP'D
1	06/17/08	REVISED ANT. QUANTITY @ 190FT	KM	KM	MM
0	06/12/08	ISSUED WITH ANALYSIS REPORT	KM	KM	MM

HUDSON DESIGN GROUP/ AT&T
TOWER ELEVATION AND SECTION

MEI PROJECT ID	SHEET NUMBER	REV.
CT01171G-08V0	S01	1

at&t

UNCASVILLE SITE
SITE #2171
57 COOK ROAD
MONTVILLE, CT 06382

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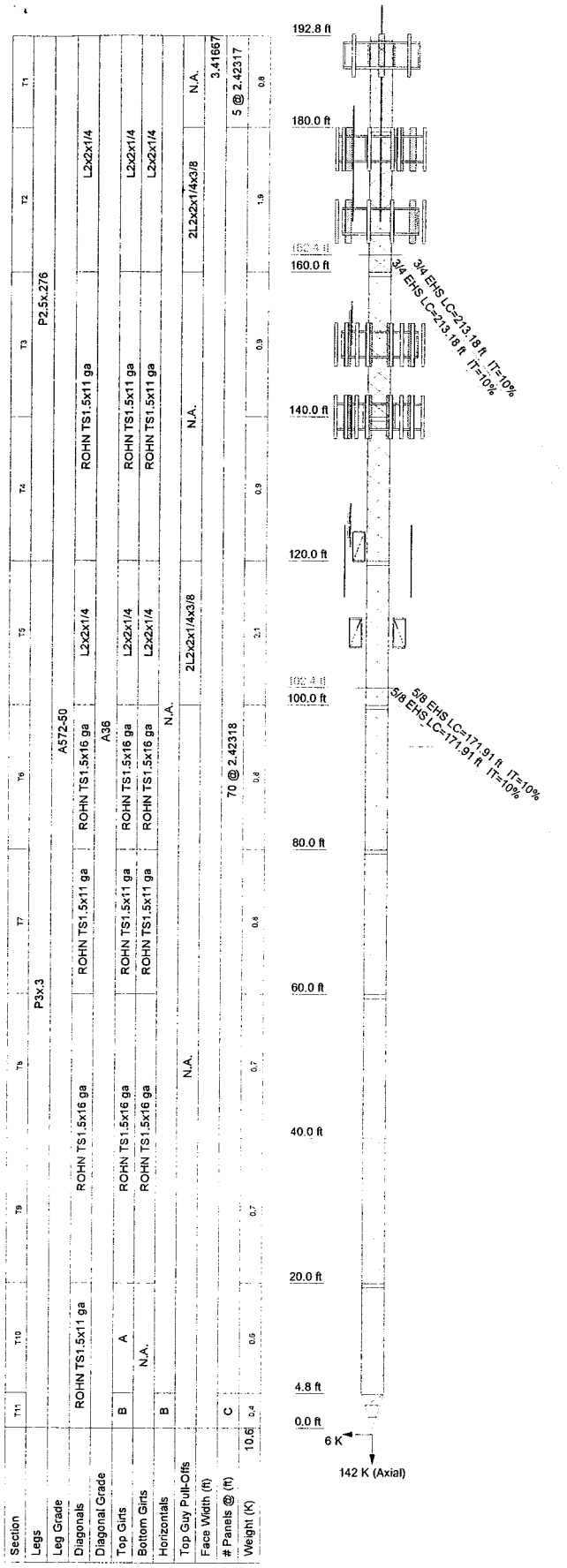
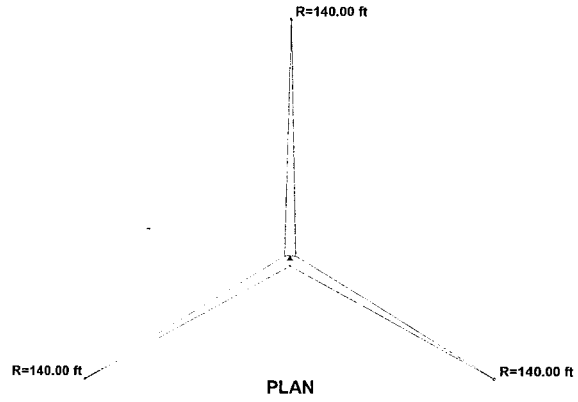
www.maloufengineering.com

APPENDIX 2 - ANALYSIS PRINTOUT & GRAPHICS





DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
APX16PV-16PVL-X (T-Mobile/Existing)	190	Powerwave 1001983 CiLoc (ATT/Proposed)	177
APX16PV-16PVL-X (T-Mobile/Existing)	190	Telewave 450-470 Omni (ATT/Existing)	177
APX16PV-16PVL-X (T-Mobile/Existing)	190	Pagenet Omni (ATT/Existing)	177
		15ft Sector mounts (3) (ATT/Existing)	177
(4) G20057A1 TMA's (T-Mobile/Existing)	190	(2) DB948F85T2E-M (VzW/Existing)	167
		(2) DB948F85T2E-M (VzW/Existing)	167
(4) G20057A1 TMA's (T-Mobile/Existing)	190	(2) DB948F85T2E-M (VzW/Existing)	167
(4) G20057A1 TMA's (T-Mobile/Existing)	190	(2) ALP 9212-N (VzW/Existing)	167
		(2) ALP 9212-N (VzW/Existing)	167
12ft Sector mounts (3) (Existing)	190	(2) ALP 9212-N (VzW/Existing)	167
(2) DUO1417-8686 (ATT/Existing)	177	Antenex FG-4605 Omni (VzW/Existing)	167
(2) DUO1417-8686 (ATT/Existing)	177		
(2) DUO1417-8686 (ATT/Existing)	177	Antenex FG-4605 Omni (VzW/Existing)	167
(2) ADC/CG 1900W850 TMA (ATT/Existing)	177	13ft Sector mounts (3) (VzW/Existing)	167
(2) ADC/CG 1900W850 TMA (ATT/Existing)	177	(4) DB980H90E-M (Sprint/Exist./Res.)	150
		(4) DB980H90E-M (Sprint/Exist./Res.)	150
(2) ADC/CG 1900W850 TMA (ATT/Existing)	177	(4) DB980H90E-M (Sprint/Exist./Res.)	150
		Cush Craft Dipole (Sprint/Existing)	150
7770.00 (ATT/Proposed)	177	15ft Sector mounts (3) (Sprint/Existing)	150
7770.00 (ATT/Proposed)	177		
7770.00 (ATT/Proposed)	177	(4) DB844H90E-XY (Nextel/Existing)	140
(2) LG21401 Diplexers (ATT/Proposed)	177	(4) DB844H90E-XY (Nextel/Existing)	140
		(4) DB844H90E-XY (Nextel/Existing)	140
(2) LG21401 Diplexers (ATT/Proposed)	177	Antenex FG-4607 Omni (Nextel/Existing)	140
(2) LG21401 Diplexers (ATT/Proposed)	177	15ft Sector mounts (3) (Nextel/Existing)	140
7020 RET (ATT/Proposed)	177	DB450 (Existing)	122
7020 RET (ATT/Proposed)	177	3' Side-Arm mount (Existing)	122
7020 RET (ATT/Proposed)	177	PD220 (Existing)	110
Powerwave 1001983 CiLoc (ATT/Proposed)	177	4' Side-Arm mount (Existing)	110
		PD220 (Existing)	110
Powerwave 1001983 CiLoc (ATT/Proposed)	177	4' Side-Arm mount (Existing)	110
		Folded Dipole (Existing)	107

SYMBOL LIST

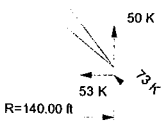
MARK	SIZE	MARK	SIZE
A	ROHN TS1.5x11 ga	C	3 @ 1.54167
B	L3x3x1/2		

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-50	50 ksi	65 ksi	A36	36 ksi	58 ksi

TOWER DESIGN NOTES

1. Tower is located in New London 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: 117.5%



Malouf Engineering Int'l Inc.
17950 Preston Road, Suite #720
Dallas, Texas 75252-5635
Phone: (972) 783-2578
FAX: (972) 783-2583

Job: 192.75' GT, Uncasville Site# 2171			
Project: CT01171G-08V0			
Client: Hudson Design Group/ AT&T	Drawn by: MM	App'd:	
Code: TIA/EIA-222-F	Date: 06/12/08	Scale: NTS	
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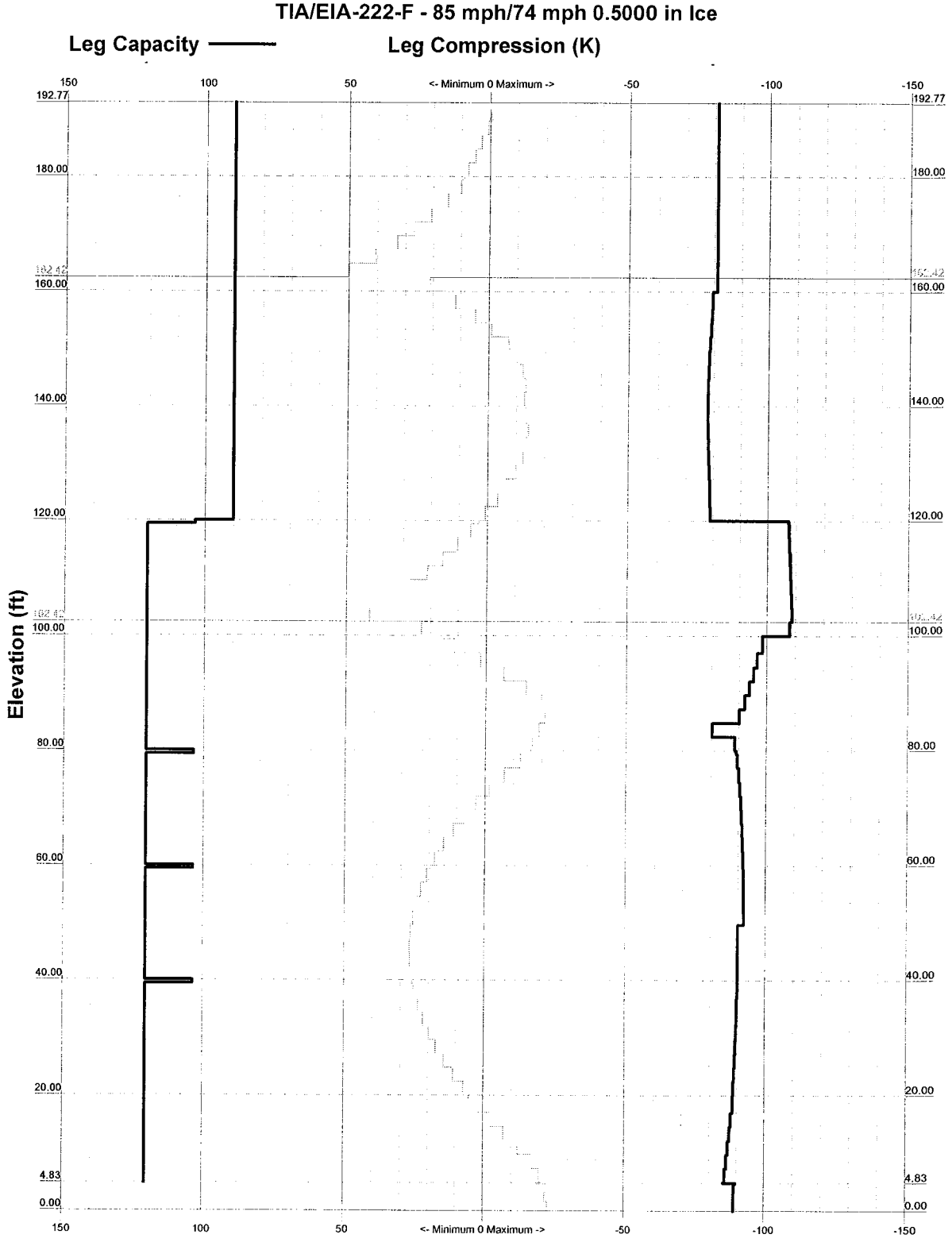

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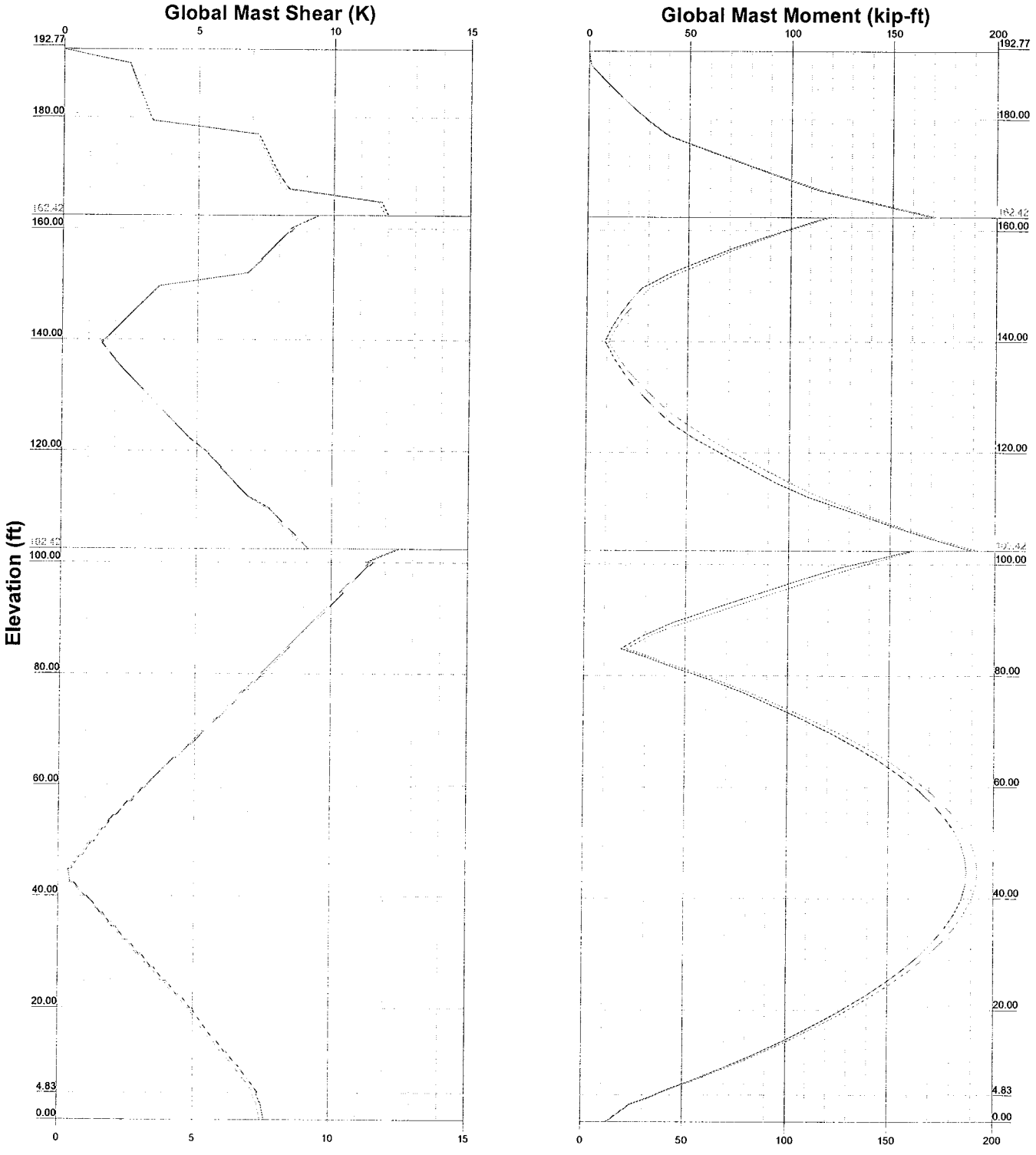
Code: TIA/EIA-222-F	Date: 06/12/08	Scale: NTS	
Path: E:\Work\ME\2008\CT01171G-08V0-HUDS-Uncasville\2-Working Data\Risa\CT01171G-08V0.ec		Dwg No. E-3	

TIA/EIA-222-F - 85 mph/74 mph 0.5000 in Ice

Vx Vz

Maximum Values

Mx Mz



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Project: CT01171G-08V0			
Client: Hudson Design Group/ AT&T	Drawn by: MM	App'd:	
Code: TIA/EIA-222-F	Date: 06/12/08	Scale: NTS	
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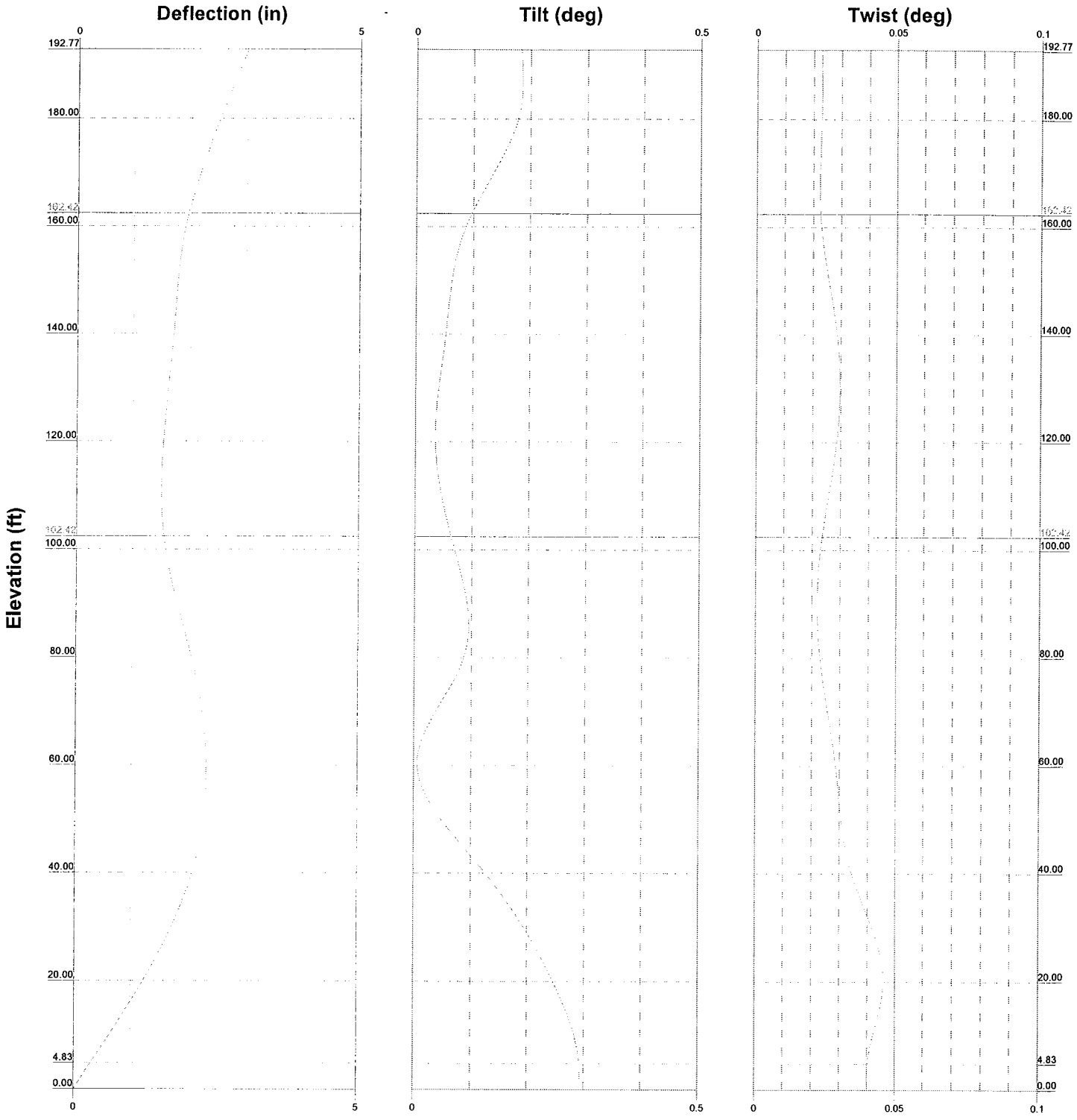
TIA/EIA-222-F - Service - 50 mph **Maximum Values**



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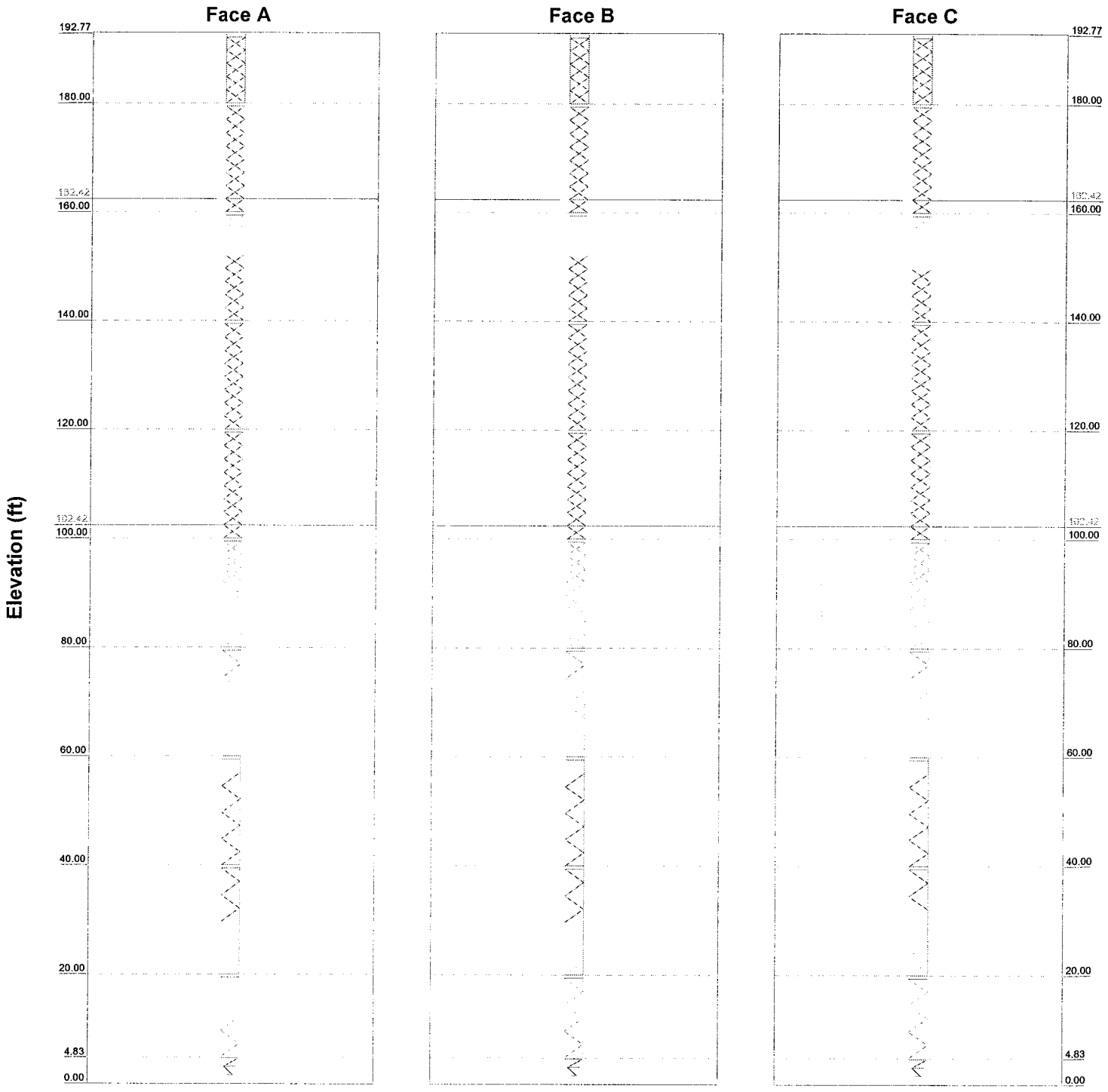
Job:	***192.75' GT, Uncasville Site# 2171***		
Project:	***CT01171G-08V0***		
Client:	Hudson Design Group/ AT&T	Drawn by: MM	App'd:
Code:	TIA/EIA-222-F	Date: 06/12/08	Scale: NTS
Path:	E:\Work\MEI\2008\CT01171G-08V0-HUDS-Uncasville\2-Working Data\Risa\CT01171G-08V0.eri		Dwg No. E-5

Stress Distribution Chart
0' - 192'9-1/4"

> 100% | 90%-100% | 75%-90% | 50%-75% | < 50% Overstress



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Job: 192.75' GT, Uncasville Site# 2171			
Project: CT01171G-08V0			
Client: Hudson Design Group/ AT&T	Drawn by: MM	App'd:	
Code: TIA/EIA-222-F	Date: 06/12/08	Scale: NTS	
Path: E:\Work\MEI\2008\CT01171G-08V0-HUDS-Uncasville\2-Working Data\Risa\CT01171G-08V0.ei		Dwg No. E-8	

RISATower	Job	Page
	192.75' GT, Uncasville Site# 2171	1 of 10
Malouf Engineering Int'l Inc. 17950 Preston Road, Suite #720 Dallas, Texas 75252-5635 Phone: (972) 783-2578 FAX: (972) 783-2583	**Project** CT01171G-08V0	**Date** 21:18:43 06/12/08
	Client Hudson Design Group/ AT&T	**Designed by** MM

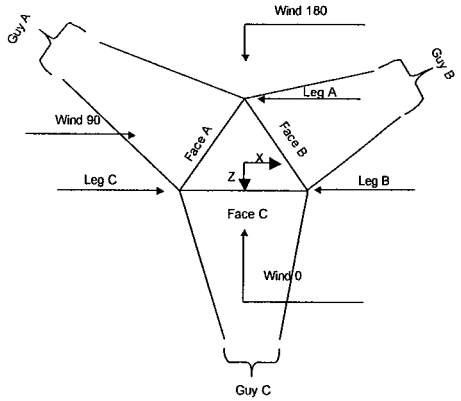
Tower Input Data

The main tower is a 3x guyed tower with an overall height of 192.77 ft above the ground line.
The base of the tower is set at an elevation of 0.00 ft above the ground line.
The face width of the tower is 3.42 ft at the top and tapered at the base.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Tower is located in New London County, Connecticut.
Basic wind speed of 85 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 74 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 50 mph.
Pressures are calculated at each section.
Safety factor used in guy design is 2.
Stress ratio used in tower member design is 1.333.
Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Options

Consider Moments - Legs	√ Distribute Leg Loads As Uniform	√ Treat Feedline Bundles As Cylinder
Consider Moments - Horizontals	Assume Legs Pinned	Use ASCE 10 X-Brace Ly Rules
Consider Moments - Diagonals	√ Assume Rigid Index Plate	√ Calculate Redundant Bracing Forces
Use Moment Magnification	√ Use Clear Spans For Wind Area	Ignore Redundant Members in FEA
√ Use Code Stress Ratios	√ Use Clear Spans For KL/r	√ SR Leg Bolts Resist Compression
√ Use Code Safety Factors - Guys	√ Retension Guys To Initial Tension	√ All Leg Panels Have Same Allowable
Escalate Ice	Bypass Mast Stability Checks	Offset Girt At Foundation
Always Use Max Kz	√ Use Azimuth Dish Coefficients	Consider Feedline Torque
Use Special Wind Profile	√ Project Wind Area of Appurt.	Include Angle Block Shear Check
√ Include Bolts In Member Capacity	√ Autocalc Torque Arm Areas	Poles
Leg Bolts Are At Top Of Section	√ SR Members Have Cut Ends	√ Include Shear-Torsion Interaction
√ Secondary Horizontal Braces Leg	√ Sort Capacity Reports By Component	Always Use Sub-Critical Flow
Use Diamond Inner Bracing (4 Sided)	Triangulate Diamond Inner Bracing	Use Top Mounted Sockets
Add IBC .6D+W Combination		



Face Guyed

Tower Section Geometry

Tower Section	Tower Elevation ft	Assembly Database	Description	Section Width ft	Number of Sections	Section Length ft
T1	192.77-180.00			3.42	1	12.77
T2	180.00-160.00			3.42	1	20.00
T3	160.00-140.00			3.42	1	20.00
T4	140.00-120.00			3.42	1	20.00
T5	120.00-100.00			3.42	1	20.00
T6	100.00-80.00			3.42	1	20.00
T7	80.00-60.00			3.42	1	20.00
T8	60.00-40.00			3.42	1	20.00
T9	40.00-20.00			3.42	1	20.00
T10	20.00-4.83			3.42	1	15.17
T11	4.83-0.00			3.42	1	4.83

Tower Section Geometry *(cont'd)*

Tower Section	Tower Elevation ft	Diagonal Spacing ft	Bracing Type	Has K Brace End Panels	Has Horizontals	Top Girt Offset in	Bottom Girt Offset in
T1	192.77-180.00	2.42	X Brace	No	No	7.8500	0.0000
T2	180.00-160.00	2.42	X Brace	No	No	7.3750	0.0000
T3	160.00-140.00	2.42	CX Brace	No	No	7.3750	0.0000
T4	140.00-120.00	2.42	CX Brace	No	No	7.3750	0.0000
T5	120.00-100.00	2.42	X Brace	No	No	7.3750	0.0000
T6	100.00-80.00	2.42	CX Brace	No	No	7.3750	0.0000
T7	80.00-60.00	2.42	K Brace Left	No	No	7.3750	0.0000
T8	60.00-40.00	2.42	K Brace Left	No	No	7.3750	0.0000
T9	40.00-20.00	2.42	K Brace Left	No	No	7.3750	0.0000
T10	20.00-4.83	2.42	K Brace Left	No	No	6.5313	1.0000
T11	4.83-0.00	1.54	K Brace Left	No	Yes	1.5000	1.0000

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T1 192.77-180.00	Pipe	P2.5x.276	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T2 180.00-160.00	Pipe	P2.5x.276	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T3 160.00-140.00	Pipe	P2.5x.276	A572-50 (50 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T4 140.00-120.00	Pipe	P2.5x.276	A572-50 (50 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T5 120.00-100.00	Pipe	P3x.3	A572-50 (50 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T6 100.00-80.00	Pipe	P3x.3	A572-50 (50 ksi)	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)
T7 80.00-60.00	Pipe	P3x.3	A572-50 (50 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T8 60.00-40.00	Pipe	P3x.3	A572-50 (50 ksi)	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)

Tower Elevation ft	Leg Type	Leg Size	Leg Grade	Diagonal Type	Diagonal Size	Diagonal Grade
T9 40.00-20.00	Pipe	P3x.3	A572-50 (50 ksi)	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)
T10 20.00-4.83	Pipe	P3x.3	A572-50 (50 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T11 4.83-0.00	Pipe	P3x.3	A572-50 (50 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Top Girt Type	Top Girt Size	Top Girt Grade	Bottom Girt Type	Bottom Girt Size	Bottom Girt Grade
T1 192.77-180.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T2 180.00-160.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T3 160.00-140.00	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T4 140.00-120.00	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T5 120.00-100.00	Equal Angle	L2x2x1/4	A36 (36 ksi)	Equal Angle	L2x2x1/4	A36 (36 ksi)
T6 100.00-80.00	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)
T7 80.00-60.00	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)
T8 60.00-40.00	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)
T9 40.00-20.00	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)	Pipe	ROHN TS1.5x16 ga	A36 (36 ksi)
T10 20.00-4.83	Pipe	ROHN TS1.5x11 ga	A36 (36 ksi)	Pipe		A36 (36 ksi)
T11 4.83-0.00	Equal Angle	L3x3x1/2	A36 (36 ksi)	Pipe		A36 (36 ksi)

Tower Section Geometry *(cont'd)*

Tower Elevation ft	Leg Connection Type	Leg		Diagonal		Top Girt		Bottom Girt		Mid Girt		Long Horizontal		Short Horizontal	
		Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.	Bolt Size in	No.
T1 192.77-180.00	Flange	0.7500 A325N	4	0.6250 A325N	2	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0
T2 180.00-160.00	Flange	0.7500 A325N	4	0.6250 A325N	2	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T3 160.00-140.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T4 140.00-120.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T5 120.00-100.00	Flange	0.7500 A325N	4	0.6250 A325N	2	0.6250 A325N	2	0.6250 A325N	2	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T6 100.00-80.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T7 80.00-60.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0

Tower Elevation ft	Leg Connection Type	Leg Bolt Size in	Leg No.	Diagonal Bolt Size in	Diagonal No.	Top Girt Bolt Size in	Top Girt No.	Bottom Girt Bolt Size in	Bottom Girt No.	Mid Girt Bolt Size in	Mid Girt No.	Long Horizontal Bolt Size in	Long Horizontal No.	Short Horizontal Bolt Size in	Short Horizontal No.
T8 60.00-40.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.6250 A325N	0
T9 40.00-20.00	Flange	0.7500 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0
T10 20.00-4.83	Flange	0.8750 A325N	4	0.5000 A325N	1	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0
T11 4.83-0.00	Flange	0.0000 A325N	0	0.5000 A325N	1	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0	0.0000 A325N	0

Guy Data

Guy Elevation ft	Guy Grade		Guy Size	Initial Tension K	%	Guy Modulus ksi	Guy Weight plf	L_u ft	Anchor Radius ft	Anchor Azimuth Adj. °	Anchor Elevation ft	End Fitting Efficiency %
162.423	EHS	A	3/4	5.83	10%	25000	1.155	213.03	140.00	0.0000	0.00	100%
		B	3/4	5.83	10%	25000	1.155	213.03	140.00	0.0000	0.00	100%
		C	3/4	5.83	10%	25000	1.155	213.03	140.00	0.0000	0.00	100%
102.423	EHS	A	5/8	4.24	10%	25000	0.813	171.79	140.00	0.0000	0.00	100%
		B	5/8	4.24	10%	25000	0.813	171.79	140.00	0.0000	0.00	100%
		C	5/8	4.24	10%	25000	0.813	171.79	140.00	0.0000	0.00	100%

Guy Data *(cont'd)*

Guy Elevation ft	Mount Type	Torque-Arm Spread ft	Torque-Arm Leg Angle °	Torque-Arm Style	Torque-Arm Grade	Torque-Arm Type	Torque-Arm Size
162.423	Torque Arm	6.83	0.0000	Channel	A36 (36 ksi)	Channel	C15x33.9
102.423	Torque Arm	6.83	0.0000	Channel	A36 (36 ksi)	Channel	C15x33.9

Guy Data *(cont'd)*

Guy Elevation ft	Diagonal Grade	Diagonal Type	Upper Diagonal Size	Lower Diagonal Size	Is Strap.	Pull-Off Grade	Pull-Off Type	Pull-Off Size
162.42	A572-50 (50 ksi)	Solid Round			Yes	A36 (36 ksi)	Double Equal Angle	2L2x2x1/4x3/8
102.42	A572-50 (50 ksi)	Solid Round			Yes	A36 (36 ksi)	Double Equal Angle	2L2x2x1/4x3/8

Feed Line/Linear Appurtenances - Entered As Round Or Flat

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number	Number Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1 1/4 (AT&T/Exist./Prop.)	A	Yes	Ar (CfAe)	177.00 - 0.00	12	12	0.9500	1.5500		0.66
7/8 (Existing)	A	Yes	Ar (CfAe)	177.00 - 0.00	1	1	1.3900	1.1100		0.54

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number	Number Per Row	Clear Spacing in	Width or Diameter in	Perimeter in	Weight plf
1 1/4 (Sprint/Existing)	A	Yes	Ar (CfAe)	150.00 - 0.00	2	1	0.9500	1.5500		0.66
1 5/8 (Sprint/Existing)	A	Yes	Ar (CfAe)	150.00 - 0.00	6	6	0.5200	0.0000		1.04
1 5/8 (Sprint/Reserved)	A	Yes	Ar (CfAe)	150.00 - 0.00	6	3	0.5200	1.9800		1.04
1 5/8 (T-Mobile/Existing)	B	Yes	Ar (CfAe)	190.00 - 0.00	6	3	0.5200	1.9800		1.04
7/8 (Existing)	B	Yes	Ar (CfAe)	177.00 - 0.00	1	1	1.3900	1.1100		0.54
1 1/4 (Nextel/Existing)	B	Yes	Ar (CfAe)	140.00 - 0.00	12	12	0.9500	1.5500		0.66
7/8 (Existing)	B	Yes	Ar (CfAe)	140.00 - 0.00	1	1	1.3900	1.1100		0.54
1 1/4 (Existing)	B	Yes	Ar (CfAe)	122.00 - 0.00	1	1	0.9500	1.5500		0.66
1 5/8 (Existing)	B	Yes	Ar (CfAe)	110.00 - 0.00	1	1	0.5200	1.9800		1.04
1 1/4 (Existing)	B	Yes	Ar (CfAe)	107.00 - 0.00	1	1	0.9500	1.5500		0.66
1 5/8 (T-Mobile/Existing)	C	Yes	Ar (CfAe)	190.00 - 0.00	6	3	0.5200	1.9800		1.04
1 5/8 (VzW/Existing)	C	Yes	Ar (CfAe)	167.00 - 0.00	12	12	0.5200	1.9800		1.04
7/8 (VzW/Existing)	C	Yes	Ar (CfAe)	167.00 - 0.00	2	2	1.3900	1.1100		0.54
1 5/8 (Existing)	C	Yes	Ar (CfAe)	110.00 - 0.00	1	1	0.5200	1.9800		1.04

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
APX16PV-16PVL-X	A	From Leg	3.00	0.0000	190.00	No Ice	6.70	2.84	0.04
(T-Mobile/Existing)			0.00			1/2" Ice	7.13	3.17	0.08
			0.00						
APX16PV-16PVL-X	B	From Leg	3.00	0.0000	190.00	No Ice	6.70	2.84	0.04
(T-Mobile/Existing)			0.00			1/2" Ice	7.13	3.17	0.08
			0.00						
APX16PV-16PVL-X	C	From Leg	3.00	0.0000	190.00	No Ice	6.70	2.84	0.04
(T-Mobile/Existing)			0.00			1/2" Ice	7.13	3.17	0.08
			0.00						
(4) G20057A1 TMA's	A	From Leg	3.00	0.0000	190.00	No Ice	0.96	0.48	0.02
(T-Mobile/Existing)			0.00			1/2" Ice	1.18	0.66	0.02
			0.00						
(4) G20057A1 TMA's	B	From Leg	3.00	0.0000	190.00	No Ice	0.96	0.48	0.02
(T-Mobile/Existing)			0.00			1/2" Ice	1.18	0.66	0.02
			0.00						
(4) G20057A1 TMA's	C	From Leg	3.00	0.0000	190.00	No Ice	0.96	0.48	0.02
(T-Mobile/Existing)			0.00			1/2" Ice	1.18	0.66	0.02
			0.00						
12ft Sector mounts (3)	C	None		0.0000	190.00	No Ice	42.00	42.00	1.50
(Existing)						1/2" Ice	54.60	54.60	2.25
(2) DUO1417-8686	A	From Leg	3.00	0.0000	177.00	No Ice	6.53	4.20	0.02

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(AT&T/Existing)			0.00			1/2" Ice	6.94	4.57	0.06
			0.00						
(2) DUO1417-8686	B	From Leg	3.00	0.0000	177.00	No Ice	6.53	4.20	0.02
(AT&T/Existing)			0.00			1/2" Ice	6.94	4.57	0.06
			0.00						
(2) DUO1417-8686	C	From Leg	3.00	0.0000	177.00	No Ice	6.53	4.20	0.02
(AT&T/Existing)			0.00			1/2" Ice	6.94	4.57	0.06
			0.00						
(2) ADC/CG 1900W850	A	From Leg	3.00	0.0000	177.00	No Ice	0.96	0.48	0.02
TMA			0.00			1/2" Ice	1.18	0.66	0.02
(AT&T/Existing)			0.00						
(2) ADC/CG 1900W850	B	From Leg	3.00	0.0000	177.00	No Ice	0.96	0.48	0.02
TMA			0.00			1/2" Ice	1.18	0.66	0.02
(AT&T/Existing)			0.00						
(2) ADC/CG 1900W850	C	From Leg	3.00	0.0000	177.00	No Ice	0.96	0.48	0.02
TMA			0.00			1/2" Ice	1.18	0.66	0.02
(AT&T/Existing)			0.00						
7770.00	A	From Leg	3.00	0.0000	177.00	No Ice	5.88	2.93	0.04
(AT&T/Proposed)			3.00			1/2" Ice	6.31	3.27	0.07
			0.00						
7770.00	B	From Leg	3.00	0.0000	177.00	No Ice	5.88	2.93	0.04
(AT&T/Proposed)			3.00			1/2" Ice	6.31	3.27	0.07
			0.00						
7770.00	C	From Leg	3.00	0.0000	177.00	No Ice	5.88	2.93	0.04
(AT&T/Proposed)			3.00			1/2" Ice	6.31	3.27	0.07
			0.00						
(2) LG21401 Diplexers	A	From Leg	3.00	0.0000	177.00	No Ice	1.10	0.31	0.01
(AT&T/Proposed)			0.00			1/2" Ice	1.71	0.48	0.02
			0.00						
(2) LG21401 Diplexers	B	From Leg	3.00	0.0000	177.00	No Ice	1.10	0.31	0.01
(AT&T/Proposed)			0.00			1/2" Ice	1.71	0.48	0.02
			0.00						
(2) LG21401 Diplexers	C	From Leg	3.00	0.0000	177.00	No Ice	1.10	0.31	0.01
(AT&T/Proposed)			0.00			1/2" Ice	1.71	0.48	0.02
			0.00						
7020 RET	A	From Leg	3.00	0.0000	177.00	No Ice	0.40	0.20	0.00
(AT&T/Proposed)			0.00			1/2" Ice	0.54	0.31	0.00
			0.00						
7020 RET	B	From Leg	3.00	0.0000	177.00	No Ice	0.40	0.20	0.00
(AT&T/Proposed)			0.00			1/2" Ice	0.54	0.31	0.00
			0.00						
7020 RET	C	From Leg	3.00	0.0000	177.00	No Ice	0.40	0.20	0.00
(AT&T/Proposed)			0.00			1/2" Ice	0.54	0.31	0.00
			0.00						
Powerwave 1001983 CiLoc	A	From Leg	3.00	0.0000	177.00	No Ice	0.07	0.11	0.00
(AT&T/Proposed)			0.00			1/2" Ice	0.13	0.19	0.00
			0.00						
Powerwave 1001983 CiLoc	B	From Leg	3.00	0.0000	177.00	No Ice	0.07	0.11	0.00
(AT&T/Proposed)			0.00			1/2" Ice	0.13	0.19	0.00
			0.00						
Powerwave 1001983 CiLoc	C	From Leg	3.00	0.0000	177.00	No Ice	0.07	0.11	0.00
(AT&T/Proposed)			0.00			1/2" Ice	0.13	0.19	0.00
			0.00						
Telewave 450-470 Omni	A	From Leg	3.00	0.0000	177.00	No Ice	3.56	3.56	0.03
(AT&T/Existing)			0.00			1/2" Ice	5.09	5.09	0.06
			10.00						
Pagenet Omni	C	From Leg	3.00	0.0000	177.00	No Ice	2.00	2.00	0.01

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft	Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(AT&T/Existing)			0.00	3.00			1/2" Ice	3.00	3.00	0.02
15ft Sector mounts (3) (AT&T/Existing)	C	None			0.0000	177.00	No Ice	48.00	48.00	1.65
							1/2" Ice	63.84	63.84	2.15
(2) DB948F85T2E-M (VzW/Existing)	A	From Leg	3.00	0.00	0.0000	167.00	No Ice	1.92	3.26	0.01
							1/2" Ice	2.22	3.62	0.03
(2) DB948F85T2E-M (VzW/Existing)	B	From Leg	3.00	0.00	0.0000	167.00	No Ice	1.92	3.26	0.01
							1/2" Ice	2.22	3.62	0.03
(2) DB948F85T2E-M (VzW/Existing)	C	From Leg	3.00	0.00	0.0000	167.00	No Ice	1.92	3.26	0.01
							1/2" Ice	2.22	3.62	0.03
(2) ALP 9212-N (VzW/Existing)	A	From Leg	3.00	0.00	0.0000	167.00	No Ice	5.78	5.78	0.02
							1/2" Ice	6.20	6.20	0.06
(2) ALP 9212-N (VzW/Existing)	B	From Leg	3.00	0.00	0.0000	167.00	No Ice	5.78	5.78	0.02
							1/2" Ice	6.20	6.20	0.06
(2) ALP 9212-N (VzW/Existing)	C	From Leg	3.00	0.00	0.0000	167.00	No Ice	5.78	5.78	0.02
							1/2" Ice	6.20	6.20	0.06
Antenex FG-4605 Omni (VzW/Existing)	A	From Leg	3.00	0.00	0.0000	167.00	No Ice	2.12	2.12	0.03
							1/2" Ice	3.04	3.04	0.05
Antenex FG-4605 Omni (VzW/Existing)	C	From Leg	3.00	0.00	0.0000	167.00	No Ice	2.12	2.12	0.03
							1/2" Ice	3.04	3.04	0.05
13ft Sector mounts (3) (VzW/Existing)	C	None			0.0000	167.00	No Ice	45.00	45.00	1.50
							1/2" Ice	58.50	58.50	2.25
(4) DB980H90E-M (Sprint/Exist./Res.)	A	From Leg	3.00	0.00	0.0000	150.00	No Ice	3.80	2.19	0.01
							1/2" Ice	4.18	2.56	0.03
(4) DB980H90E-M (Sprint/Exist./Res.)	B	From Leg	3.00	0.00	0.0000	150.00	No Ice	3.80	2.19	0.01
							1/2" Ice	4.18	2.56	0.03
(4) DB980H90E-M (Sprint/Exist./Res.)	C	From Leg	3.00	0.00	0.0000	150.00	No Ice	3.80	2.19	0.01
							1/2" Ice	4.18	2.56	0.03
Cush Craft Dipole (Sprint/Existing)	C	From Leg	3.00	0.00	0.0000	150.00	No Ice	3.15	3.15	0.03
							1/2" Ice	5.67	5.67	0.04
15ft Sector mounts (3) (Sprint/Existing)	C	None			0.0000	150.00	No Ice	48.00	48.00	1.65
							1/2" Ice	63.84	63.84	2.15
(4) DB844H90E-XY (Nextel/Existing)	A	From Leg	3.00	0.00	0.0000	140.00	No Ice	2.87	3.73	0.01
							1/2" Ice	3.18	4.10	0.04
(4) DB844H90E-XY (Nextel/Existing)	B	From Leg	3.00	0.00	0.0000	140.00	No Ice	2.87	3.73	0.01
							1/2" Ice	3.18	4.10	0.04
(4) DB844H90E-XY (Nextel/Existing)	C	From Leg	3.00	0.00	0.0000	140.00	No Ice	2.87	3.73	0.01
							1/2" Ice	3.18	4.10	0.04
Antenex FG-4607 Omni (Nextel/Existing)	C	From Leg	3.00	0.00	0.0000	140.00	No Ice	1.90	1.90	0.03
							1/2" Ice	2.73	2.73	0.04
15ft Sector mounts (3)	C	None			0.0000	140.00	No Ice	48.00	48.00	1.65

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(Nextel/Existing)						1/2" Ice	63.84	63.84	2.15
DB450	C	From Leg	3.00	0.0000	122.00	No Ice	3.15	3.15	0.03
(Existing)			0.00			1/2" Ice	5.67	5.67	0.04
			3.00						
3' Side-Arm mount	C	From Leg	1.50	0.0000	122.00	No Ice	1.25	2.50	0.15
(Existing)			0.00			1/2" Ice	2.25	3.25	0.23
			0.00						
PD220	B	From Leg	4.00	0.0000	110.00	No Ice	3.56	3.56	0.02
(Existing)			0.00			1/2" Ice	7.13	7.13	0.05
			10.00						
4' Side-Arm mount	B	From Leg	2.00	0.0000	110.00	No Ice	1.50	3.25	0.19
(Existing)			0.00			1/2" Ice	2.50	4.25	0.28
			0.00						
PD220	C	From Leg	4.00	0.0000	110.00	No Ice	3.56	3.56	0.02
(Existing)			0.00			1/2" Ice	7.13	7.13	0.05
			10.00						
4' Side-Arm mount	C	From Leg	2.00	0.0000	110.00	No Ice	1.50	3.25	0.19
(Existing)			0.00			1/2" Ice	2.50	4.25	0.28
			0.00						
Folded Dipole	A	From Leg	1.00	0.0000	107.00	No Ice	1.75	1.75	0.01
(Existing)			0.00			1/2" Ice	2.63	2.63	0.01
			3.00						

Maximum Tower Deflections - Service Wind

Section No.	Elevation ft	Horz. Deflection in	Gov. Load Comb.	Tilt °	Twist °
T1	192.77 - 180	3.012	37	0.1858	0.0232
T2	180 - 160	2.517	37	0.1788	0.0232
T3	160 - 140	1.904	33	0.0866	0.0234
T4	140 - 120	1.705	31	0.0529	0.0290
T5	120 - 100	1.535	31	0.0328	0.0267
T6	100 - 80	1.581	27	0.0667	0.0203
T7	80 - 60	2.043	27	0.0887	0.0238
T8	60 - 40	2.313	27	0.0067	0.0268
T9	40 - 20	2.075	27	0.1288	0.0371
T10	20 - 4.83333	1.221	27	0.2467	0.0469
T11	4.83333 - 0	0.305	27	0.2937	0.0397

Critical Deflections and Radius of Curvature - Service Wind

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
190.00	APX16PV-16PVL-X	37	2.903	0.1870	0.0232	111798
177.00	(2) DUO1417-8686	37	2.405	0.1690	0.0231	25717
167.00	(2) DB948F85T2E-M	37	2.073	0.1196	0.0227	10923
162.42	Guy	33	1.955	0.0967	0.0230	8759
150.00	(4) DB980H90E-M	33	1.769	0.0630	0.0263	22830
140.00	(4) DB844H90E-XY	31	1.705	0.0529	0.0290	31397

Elevation ft	Appurtenance	Gov. Load Comb.	Deflection in	Tilt °	Twist °	Radius of Curvature ft
122.00	DB450	31	1.549	0.0335	0.0274	25304
110.00	PD220	27	1.502	0.0391	0.0228	10680
107.00	Folded Dipole	27	1.512	0.0452	0.0218	9326
102.42	Guy	27	1.550	0.0589	0.0206	7872

Section Capacity Table

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
T1	192.77 - 180	Leg	P2.5x.276	1	-9.34	81.02	11.5	Pass
T2	180 - 160	Leg	P2.5x.276	42	-56.71	81.02	70.0	Pass
T3	160 - 140	Leg	P2.5x.276	99	-55.44	79.47	69.8	Pass
T4	140 - 120	Leg	P2.5x.276	154	-50.12	78.90	63.5	Pass
T5	120 - 100	Leg	P3x.3	211	-89.47	108.79	82.2	Pass
T6	100 - 80	Leg	P3x.3	268	-85.94	98.36	87.4	Pass
T7	80 - 60	Leg	P3x.3	325	-81.14	91.78	88.4	Pass
T8	60 - 40	Leg	P3x.3	358	-88.02	89.97	97.8	Pass
T9	40 - 20	Leg	P3x.3	391	-88.04	89.94	97.9	Pass
T10	20 - 4.83333	Leg	P3x.3	424	-75.00	88.48	84.8	Pass
T11	4.83333 - 0	Leg	P3x.3	449	-58.14	88.87	65.4	Pass
T1	192.77 - 180	Diagonal	L2x2x1/4	10	-1.50	20.65	7.2 8.7 (b)	Pass
T2	180 - 160	Diagonal	L2x2x1/4	50	-6.19	20.65	30.0 36.0 (b)	Pass
T3	160 - 140	Diagonal	ROHN TS1.5x11 ga	149	-4.36	9.39	46.4 79.3 (b)	Pass
T4	140 - 120	Diagonal	ROHN TS1.5x11 ga	168	-2.68	9.39	28.6 48.8 (b)	Pass
T5	120 - 100	Diagonal	L2x2x1/4	223	-7.85	20.74	37.8 45.7 (b)	Pass
T6	100 - 80	Diagonal	ROHN TS1.5x16 ga	322	-5.23	4.97	105.3 106.8 (b)	Fail X
T7	80 - 60	Diagonal	ROHN TS1.5x11 ga	356	-6.46	9.53	67.8 117.5 (b)	Fail X
T8	60 - 40	Diagonal	ROHN TS1.5x16 ga	389	-2.67	4.97	53.7	Pass
T9	40 - 20	Diagonal	ROHN TS1.5x16 ga	400	-3.98	4.97	80.2 82.7 (b)	Pass
T10	20 - 4.83333	Diagonal	ROHN TS1.5x11 ga	433	-5.48	9.53	57.5 104.9 (b)	Fail X
T11	4.83333 - 0	Diagonal	ROHN TS1.5x11 ga	457	-2.73	12.90	21.2 49.8 (b)	Pass
T11	4.83333 - 0	Horizontal	L3x3x1/2	454	1.30	79.18	1.6	Pass
T1	192.77 - 180	Top Girt	L2x2x1/4	5	-0.17	16.03	1.1	Pass
T2	180 - 160	Top Girt	L2x2x1/4	45	-0.09	16.03	0.5 0.7 (b)	Pass
T3	160 - 140	Top Girt	ROHN TS1.5x11 ga	102	1.64	14.98	10.9 29.8 (b)	Pass
T4	140 - 120	Top Girt	ROHN TS1.5x11 ga	159	0.58	14.98	3.9 10.5 (b)	Pass
T5	120 - 100	Top Girt	L2x2x1/4	216	0.71	21.76	3.3 4.1 (b)	Pass
T6	100 - 80	Top Girt	ROHN TS1.5x16 ga	271	1.13	7.57	15.0 25.3 (b)	Pass
T7	80 - 60	Top Girt	ROHN TS1.5x11 ga	329	-2.08	10.91	19.1 44.0 (b)	Pass
T8	60 - 40	Top Girt	ROHN TS1.5x16 ga	362	0.54	7.57	7.1 11.9 (b)	Pass
T9	40 - 20	Top Girt	ROHN TS1.5x16 ga	396	0.44	7.57	5.8	Pass

RISATower	Job: 192.75' GT, Uncasville Site# 2171	Page: 10 of 10
Malouf Engineering Int'l Inc. 17950 Preston Road, Suite #720 Dallas, Texas 75252-5635 Phone: (972) 783-2578 FAX: (972) 783-2583	Project: CT01171G-08V0	Date: 21:18:43 06/12/08
	Client: Hudson Design Group/ AT&T	Designed by: MM

Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
T10	20 - 4.83333	Top Girt	ROHN TS1.5x11 ga	427	1.12	14.98	9.7 (b) 7.5	Pass
T11	4.83333 - 0	Top Girt	L3x3x1/2	451	13.44	79.18	20.4 (b) 17.0	Pass
T1	192.77 - 180	Bottom Girt	L2x2x1/4	9	-0.62	16.03	3.8	Pass
T2	180 - 160	Bottom Girt	L2x2x1/4	47	2.20	21.76	10.1	Pass
T3	160 - 140	Bottom Girt	ROHN TS1.5x11 ga	104	0.54	14.98	12.8 (b) 3.6	Pass
T4	140 - 120	Bottom Girt	ROHN TS1.5x11 ga	162	0.86	14.98	9.8 (b) 5.7	Pass
T5	120 - 100	Bottom Girt	L2x2x1/4	217	2.17	21.76	15.6 (b) 10.0	Pass
T6	100 - 80	Bottom Girt	ROHN TS1.5x16 ga	276	0.87	7.57	12.6 (b) 11.5	Pass
T7	80 - 60	Bottom Girt	ROHN TS1.5x11 ga	332	0.93	14.98	19.3 (b) 6.2	Pass
T8	60 - 40	Bottom Girt	ROHN TS1.5x16 ga	364	0.26	7.57	17.0 (b) 3.4	Pass
T9	40 - 20	Bottom Girt	ROHN TS1.5x16 ga	397	-0.54	5.63	5.7 (b) 9.5	Pass
T2	180 - 160	Guy A@162.423	3/4	478	21.75	29.15	14.5 (b) 74.6	Pass
T5	120 - 100	Guy A@102.423	5/8	493	16.29	21.20	76.8	Pass
T2	180 - 160	Guy B@162.423	3/4	473	21.71	29.15	74.5	Pass
T5	120 - 100	Guy B@102.423	5/8	488	16.32	21.20	77.0	Pass
T2	180 - 160	Guy C@162.423	3/4	466	21.62	29.15	74.2	Pass
T5	120 - 100	Guy C@102.423	5/8	481	16.33	21.20	77.0	Pass
T2	180 - 160	Top Guy Pull-Off@162.423	2L2x2x1/4x3/8	471	-10.89	32.58	33.4	Pass
T5	120 - 100	Top Guy Pull-Off@102.423	2L2x2x1/4x3/8	485	13.85	43.63	39.6 (b) 31.7	Pass
T2	180 - 160	Torque Arm Top@162.423	C15x33.9	469	-6.55	147.21	40.3 (b) 60.1	Pass
T5	120 - 100	Torque Arm Top@102.423	C15x33.9	483	-7.48	148.62	35.6	Pass

Summary		
Leg (T9)	97.9	Pass
Diagonal (T7)	117.5	Fail X
Horizontal (T11)	1.6	Pass
Top Girt (T7)	44.0	Pass
Bottom Girt (T6)	19.3	Pass
Guy A (T5)	76.8	Pass
Guy B (T5)	77.0	Pass
Guy C (T5)	77.0	Pass
Top Guy Pull-Off (T5)	40.3	Pass
Torque Arm Top (T2)	60.1	Pass
Bolt Checks	117.5	Fail X
RATING =	**117.5**	**Fail X**