



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 17, 2009

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

RE: **EM-CING-023-090609** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 4 Hoffman 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 9, 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.

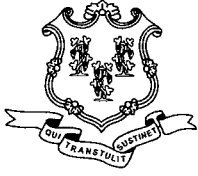
Thank you for your attention and cooperation.

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
American Tower Corporation



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Daniel F. Caruso
Chairman

June 15, 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-023-090609** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 4 Hoffman 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 June 29, 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-023-090609



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
RECEIVED
JUN - 9 2009
CONNECTICUT
SITING COUNCIL

HAND DELIVERED

June 9, 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 4 Hoffman Road, Canton (owner, American Tower)

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**

4 Hoffman Road, Canton
Site Number 1020
Docket 62; EM approved 8/02

Tower Owner/Manager: American Tower

Equipment Configuration: Monopole

Current and/or Approved: Nine CSS panel antennas @ 150 ft AGL
Six TMA's and three diplexers @ 150 ft
Nine runs 7/8 inch coax cable
Equipment shelter

Planned Modifications: Remove existing antennas, TMA's, diplexers, and coax
Install six Powerwave 7770 antennas (or equivalent) @ 150 ft
Install six TMA's and six diplexers @ 150 ft
Install 12 runs 1 5/8 inch coax

Power Density:

Worst-case calculations for existing wireless operations at the site indicate a radio frequency electromagnetic radiation power density, measured at ground level beside the tower, of approximately 12.7 % 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 12.5 % 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 *							5.73
AT&T TDMA *	154	880 - 894	16	100	0.0243	0.5867	4.13
AT&T GSM *	154	1900 Band	2	427	0.0129	1.0000	1.29
AT&T GSM *	154	880 - 894	2	296	0.0090	0.5867	1.53
Total							12.7%

* 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 *							5.73
AT&T UMTS	150	880 - 894	1	500	0.0080	0.5867	1.36
AT&T UMTS	150	1900 Band	1	500	0.0080	1.0000	0.80
AT&T GSM *	150	1900 Band	2	427	0.0136	1.0000	1.36
AT&T GSM *	150	880 - 894	4	296	0.0189	0.5867	3.23
Total							12.5%

* 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. (American Tower, 6/5/09)



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 9, 2009

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

Re: Telecommunications Facility – 4 Hoffman 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



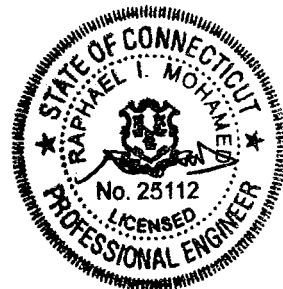
AMERICAN TOWER

Structural Analysis Report

Structure : 150 ft ITT Meyer Monopole
ATC Site Name : Cntn - Canton, CT
ATC Site Number : 302488
Proposed Carrier : AT&T Mobility
Carrier Site Name : Canton
Carrier Site Number : 1020
County : Hartford
Eng. Number : 43360323
Date : June 5, 2009*
Usage : 100%
Portholes Required : No

Submitted by:
Zachary A. Medoff, E.I.
Design Engineer

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112



6/5/09

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 150 ft ITT Meyer Monopole located at 4 Hoffmann Road, Canton, CT 06019, Hartford County (ATC site #302488). The tower was originally designed and manufactured by ITT Meyer (AT&T Spec. AT-8935, Type "B", dated April 13, 1984).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 95 mph (3-Second Gust)

Radial Ice: 50 mph (3-Second Gust) w/ 1 1/4" ice

Code: ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2008 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
150.0	1	6' Yagi	Flat Platform w/ Handrails	(1) 1/2	USA Mobility
	1	12' Omni		(12) 1 5/8	
	1	10' Dipole		(12) 7/8	Town of Canton
144.0	3	RFS APXV18-206517S-C	Flush	(6) 1 5/8	Youghioghney
135.0	3	RFS APX16PV-16PVL-E-00	Flush	(12) 1 5/8	T-Mobile
	6	CCI DTMA-1819-DD-12			
120.0	1	75" x 16.8" Panel	Side Arm	(1) 7/8	Town of Canton

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
150.0	6	Powerwave 7770.00	Platform w/ Handrails	(12) 1 1/4	AT&T Mobility
	6	Powerwave LGP21901			
	6	Powerwave LGP21401			
	6	Powerwave 7020.00 Dual Band RET			

Install proposed coax inside monopole.

Results

The maximum structure usage is: 100%

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports **may not** be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Factored Design Reactions*	Analysis Reactions	% of Design
Moment (ft-kips)	1197.0	1616.0	1836.9	114
Axial (kips)	14.9	20.1	23.6	117
Shear (kips)	13.1	17.7	18.2	103

* The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1

The structure base reactions resulting from this analysis were found to be acceptable through analysis based on geotechnical and foundation information, therefore no modification or reinforcement of the foundation will be required.

Conclusion

Based on the analysis results, the structure meets the requirements per ANSI/TIA-222-G and 2003 IBC w/ 2005 CT Supplement & 2008 CT Amendments. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.

If you have any questions or require additional information, please call 919-465-6535.

Standard Conditions

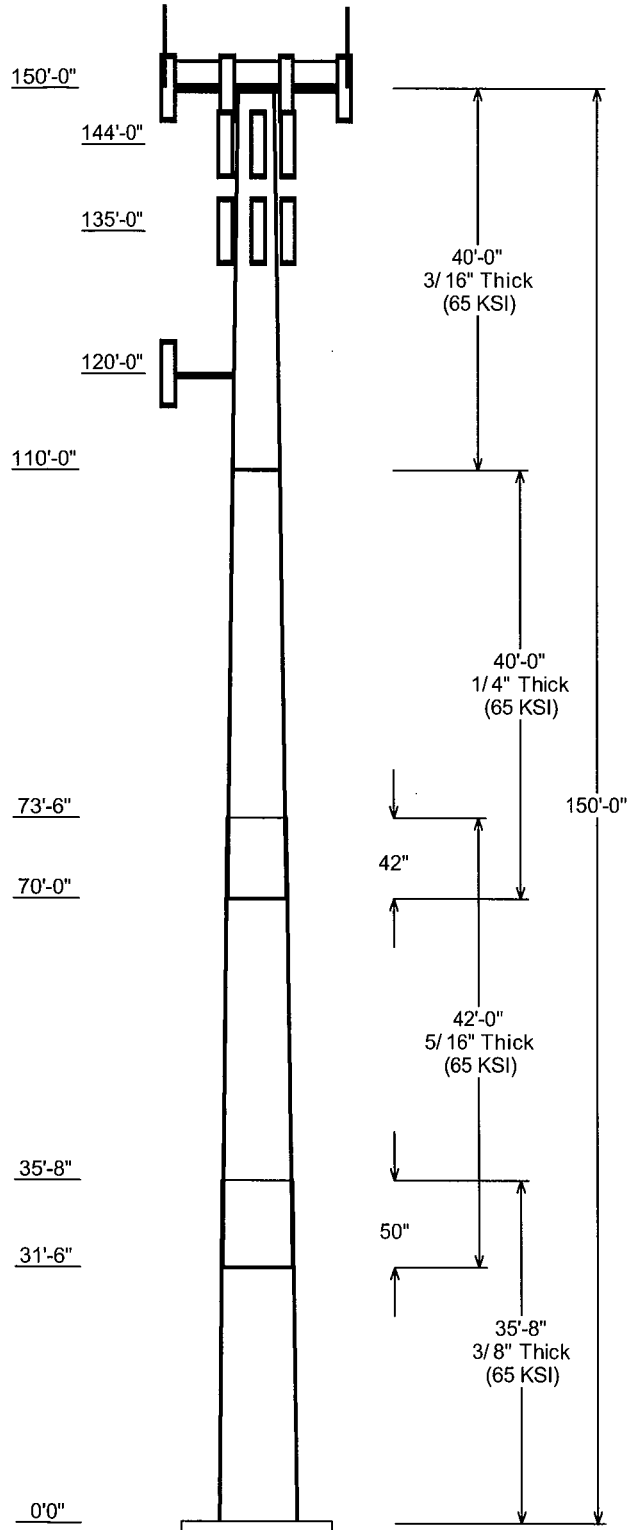
All engineering services are performed on the basis that the information used is current and correct. This information may consist of, but is not necessary limited, to:

- Information supplied by the client regarding the structure itself, the antenna and feed line loading on the structure and its components, or other relevant information.
- Information from drawings in the possession of American Tower Corporation, or generated by field inspections or measurements of the structure.

It is the responsibility of the client to ensure that the information provided to ATC Engineering Services and used in the performance of our engineering services is correct and complete. In the absence of information to the contrary, we assume that all structures were constructed in accordance with the drawings and specifications and are in an un-corroded condition and have not deteriorated; and we, therefore, assume that their capacity has not significantly changed from the "as new" condition.

All services will be performed to the codes specified by the client, and we do not imply to meet any other codes or requirements unless explicitly agreed in writing. If wind and ice loads or other relevant parameters are to be different from the minimum values recommended by the codes, the client shall specify the exact requirement. In the absence of information to the contrary, all work will be performed in accordance with the latest relevant revision of ANSI/EIA-222.

All services are performed, results obtained, and recommendations made in accordance with generally accepted engineering principles and practices. ATC Engineering Services is not responsible for the conclusions, opinions and recommendations made by others based on the information we supply.



Job Information			
Pole :	302488	Code:	ANSI/TIA-222 Rev G
Description :	150 ft ITT Meyer Type "B" Monopole	Struct Class :	II
Client :	T-Mobile	Exposure :	B
Location :	Cntn - Canton, CT	Topo :	1
Shape :	12 Sides	Base Elev (ft):	0.00
Height :	150.00 (ft)	Taper:	0.156707(in/ft)

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in)	Overlap Length (in)	Steel Taper (in/ft)	Steel Grade (ksi)
		Across Top	Flats Bottom				
1	35.667	31.79	37.38	0.375	0.000	0.156707	65
2	42.000	26.48	33.07	0.313 Slip Joint	50.000	0.156707	65
3	40.000	21.26	27.53	0.250 Slip Joint	42.000	0.156707	65
4	40.000	15.00	21.26	0.188 Butt Joint	0.000	0.156707	65

Discrete Appurtenance				
Attach Elev (ft)	Force Elev (ft)	Qty	Description	
150.000	150.000	1	6' Yagi	
150.000	150.000	6	Powerwave 7770.00	
150.000	150.000	6	Powerwave LGP21901	
150.000	150.000	6	Powerwave LGP21401	
150.000	150.000	6	Powerwave 7020.00 Dual Band	
150.000	155.000	1	10' Dipole	
150.000	156.000	1	12' Omni	
150.000	150.000	1	Flat Platform w/ Handrails	
144.000	144.000	3	RFS APXV18-206517S-C	
135.000	135.000	3	RFS APX16PV-16PVL-E-00	
135.000	135.000	6	CCI DTMA-1819-DD-12	
120.000	120.000	1	Side Arm	
120.000	120.000	1	75" x 16.8" Panel	

Linear Appurtenance			
Elev (ft) From	To	Description	Exposed To Wind
0.000	120.0	7/8" Coax	No
0.000	135.0	1 5/8" Coax	Yes
0.000	144.0	1 5/8 Coax	No
0.000	150.0	1 1/4" Coax	No
0.000	150.0	1 5/8 Coax	No
0.000	150.0	1/2" Coax	No
0.000	150.0	7/8" Coax	No

Load Cases	
1.2D + 1.6W	95.00 mph with No Ice
0.9D + 1.6W	95.00 mph with No Ice (Reduced DL)
1.2D + 1.0Di + 1.0Wi	50.00 mph with 1.25 in Radial Ice

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
1.2D + 1.6W	1836.86	18.15	23.55
0.9D + 1.6W	1701.88	16.97	17.65
1.2D + 1.0Di + 1.0Wi	580.58	4.68	53.10

Base/Flange Plate	Plate Type	Baseplate
	Pole Diameter	37.38 in
	Pole Thickness	in
	Plate Length	44 in
	Plate Thickness	2.5 in
	Plate Fy	60 ksi
	Weld Length	0.25 in
	ϕ_s Resistance	1400.64 k-in
	Applied	876.67 k-in
	Stiffeners	#

Code Rev. **G**

Date **6/5/2009**
 Engineer **ZAM**
 Site # **302488**
 Carrier **AT&T Mobility**

Moment **1836.9 k-ft**
 Axial **23.6 k**

Bolts	#	8
	Bolt Circle (R)adial / (S)quare	44 in S
	Bolt Gap	6 in
	Diameter	2.25 in
	Hole Diameter	2.625 in
	Type	#18J
	Fy	75 ksi
	Fu	100 ksi
	ϕ_s Resistance	259.82 k
	Applied	250.83 k
Reinforcement	#	0
Extra Bolts	#	0

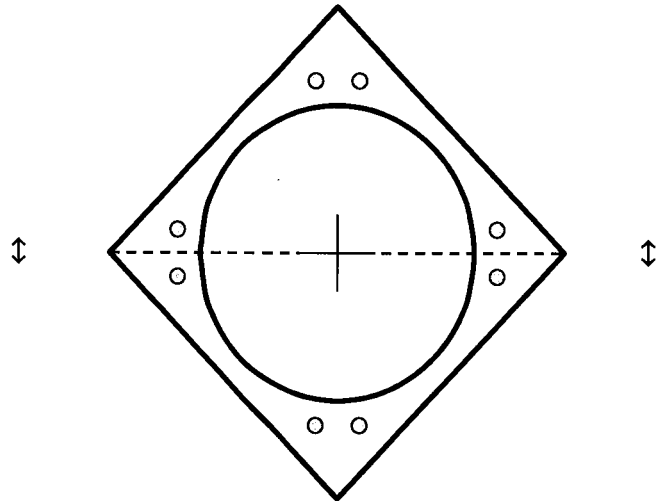


Plate Stress Ratio:
0.63 (Pass)

Bolt Stress Ratio:
0.97 (Pass)

Base/Flange Plate	Plate Type	Flange @ 110.0 ft
	Pole Diameter	21.25 in
	Pole Thickness	in
	Plate Diameter	28.5 in
	Plate Thickness	1 in
	Plate Fy	60 ksi
	Weld Length	0.25 in
	ϕ_s Resistance	75.10 k-in
	Applied	59.45 k-in
	Stiffeners	#

Code Rev. **G**

Moment **269.0 k-ft**

Axial **4.8 k**

Date **6/5/2009**

Engineer **ZAM**

Site # **302488**

Carrier **AT&T Mobility**

Required Flange Thickness:
0.89 in OK

Bolts	#	12
	Bolt Circle	25.75 in
	(R)adial / (S)quare	R
	Diameter	1 in
	Hole Diameter	1.125 in
	Type	A325
	Fy	92 ksi
	Fu	120 ksi
	ϕ_s Resistance	54.52 k
	Applied	41.36 k
Reinforcement	#	0
	#	0
Extra Bolts	#	0
	#	0

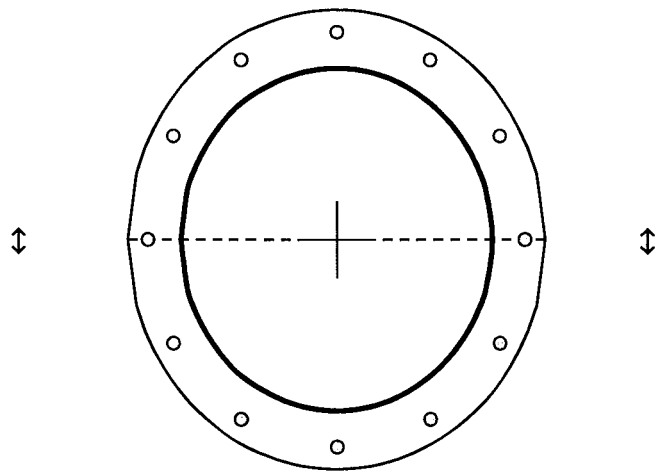


Plate Stress Ratio:
0.79 (Pass)

Bolt Stress Ratio:
0.76 (Pass)

FOUNDATION TYPE: PAD & PIER

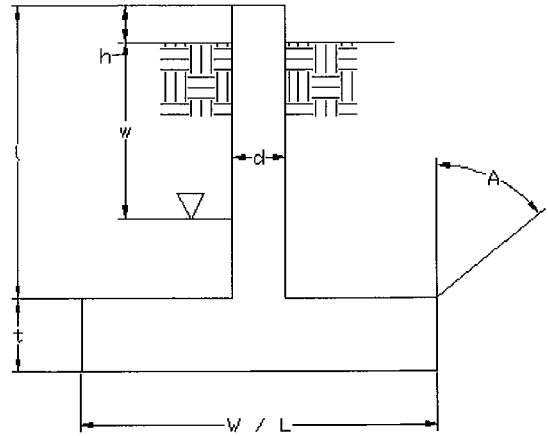
Site Name: **Cntn - Canton, CT**
 Site Number: **302488**
 Engineer: **ZAM**
 Date: **6/5/2009**

Design Loads (Factored)

O.T. Moment: **1836.86 k-ft**
 Compression: **23.55 k**
 Shear: **18.15 k**

Tower Type: **MP**
 Code Revision: **G**
 Allowable Capacity Increase (Transient Loads): **1.00**
 Pedestal Shape - (R)ound / (S)quare: **S**
 Width of Prismatic Portion of Pedestal (d): **5 ft**
 Length of Pedestal (l): **5.5 ft**
 Height of Pedestal above Ground (h): **0.5 ft**
 Length of Pad (L): **18 ft**
 Width of Pad (W): **18 ft**
 Thickness of Pad (t): **3 ft**
 Depth Below Ground Surface to Water Table (w): **10 ft**
 Unit Weight of Soil Above Water Table: **110 pcf**
 Friction Angle of Uplift (A): **30°**
 Friction Coefficient: **0.3**
 Ultimate Cohesion of Soil: **0 psf**
 Skin Friction of Soil in Uplift: **0 psf**
 Allowable Concrete Compressive Strength: **3000 psi**
 Unit Weight of Water: **62.4 pcf**
 Unit Weight of Concrete: **150 pcf**
 Ultimate Compressive Bearing Pressure: **6000 psf**

Volume of Concrete: **1109.5 ft³**
 Volume of Soil: **2058.2 ft³**
 Weight of Concrete (Buoyancy Effect Considered): **166.4 k**
 Weight of Soil (Buoyancy Effect Considered): **226.4 k**
 Weight of Soil (Buoyancy Effect, w/o Friction Angle Cone): **164.5 k**
 q_{ult} : **3881.31 psf**
 q_{net} : **3001.31 psf**
 Eccentricity: **5.62 ft** > **3.00 ft (L/6)**
Resultant is Outside Middle Third of Pad
 L-Prime: **10.15 ft**



One-Way Shear Check

Top of Concrete to Middle of Bottom Rebar Mat: **33.00 in**
 Factored Shear at Face of Pier: **261.99 k**
 ΦV_n , Concrete 1-way Shear Resistance: **702.75 k**

Mat Thickness is Acceptable

Overturning Check

Overturning Moment at Foundation Base: **1991.14 k-ft**
 Increment: **330.00 psf/ft**
 Lateral Bearing Resistance: **104.28 k**
 Overturning Moment Capacity: **3997.29 k-ft**
 Total Vertical Load: **354.43 k**

Bearing Design Load / Bearing Capacity: **0.67** | Acceptable
 O.T. Design / O.T. Capacity: **0.66** | Acceptable