



Daniel F. Caruso
Chairman

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

August 20, 2008

Steven Levine
New Cingular Wireless PCS, LLC
500 Enterprise Drive
Rocky Hill, CT 06067-3900

RE: **EM-CING-097-080708** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 201 South Main Street, Newtown, 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 July 7, 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

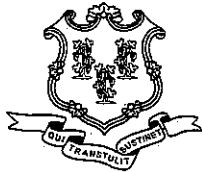
SDP/MP/cm

c: The Honorable Joseph E. Borst, First Selectman, Town of Newtown
Gary Frenette, Zoning Enforcement Officer, Town of Newtown
Hans Fiedler, T-Mobile



CONNECTICUT SITING COUNCIL

Affirmative Action / Equal Opportunity Employer



STATE OF CONNECTICUT

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Daniel F. Caruso
Chairman

July 8, 2008

The Honorable Joseph E. Borst
First Selectman
Town of Newtown
Town Hall
45 Main Street
Newtown, CT 06470

RE: **EM-CING-097-080708** – New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 201 South Main Street, Newtown, Connecticut.

Dear Mr. Borst:

The Connecticut Siting Council (Council) received this request to modify an existing telecommunications facility, pursuant to Regulations of Connecticut State Agencies Section 16-50j-72.

If you have any questions or comments regarding this proposal, please call me or inform the Council by July 22, 2008.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/cm

Enclosure: Notice of Intent

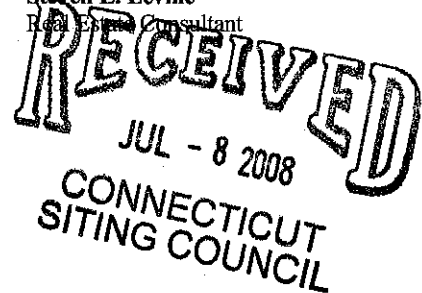
c: Gary Frenette, Zoning Enforcement Officer, Town of Newtown

EM-CING-097-080708



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

July 7, 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 201 South Main Street, Newtown (owner, T-Mobile)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("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

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**

201 South Main Street, Newtown
Site Number 5182
Former AT&T Cell Site
Exempt Modification approved 5/02

Tower Owner/Manager: T-Mobile

Equipment configuration: Monopole

Current and/or approved: Three Allgon 7250 panel antennas @ 110 ft c.l.
Six runs 1 ¼ inch coax

Planned Modifications: Remove all three existing antennas
Install three Powerwave 7770 antennas @ 110 ft c.l.
Install six TMA's @ 110 ft
Remove one existing outdoor cabinet and one concrete pad
Install new 5 x 6 ft concrete pad
Install one new outdoor equipment cabinet on the new pad

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 25.3 % 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 33.3 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							22.28
Cingular GSM *	110	1900 Band	4	250	0.0297	1.0000	2.97
Total							25.3%

* 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 *							22.28
Cingular GSM	110	880 - 894	4	296	0.0352	0.5867	6.00
Cingular GSM	110	1900 Band	2	427	0.0254	1.0000	2.54
Cingular UMTS	110	880 - 894	1	500	0.0149	0.5867	2.53
Total							33.3%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications. (Semaan Engineering, 6/25/08)



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

July 7, 2008

Honorable Joseph Borst
1st Selectman, Town of Newtown
Edmond Town Hall, 45 Main Street
Newtown, Connecticut 06470

Re: Telecommunications Facility – 201 South Main Street, Newtown

Dear Mr. Borst:

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.

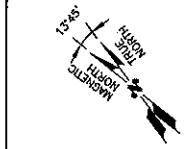
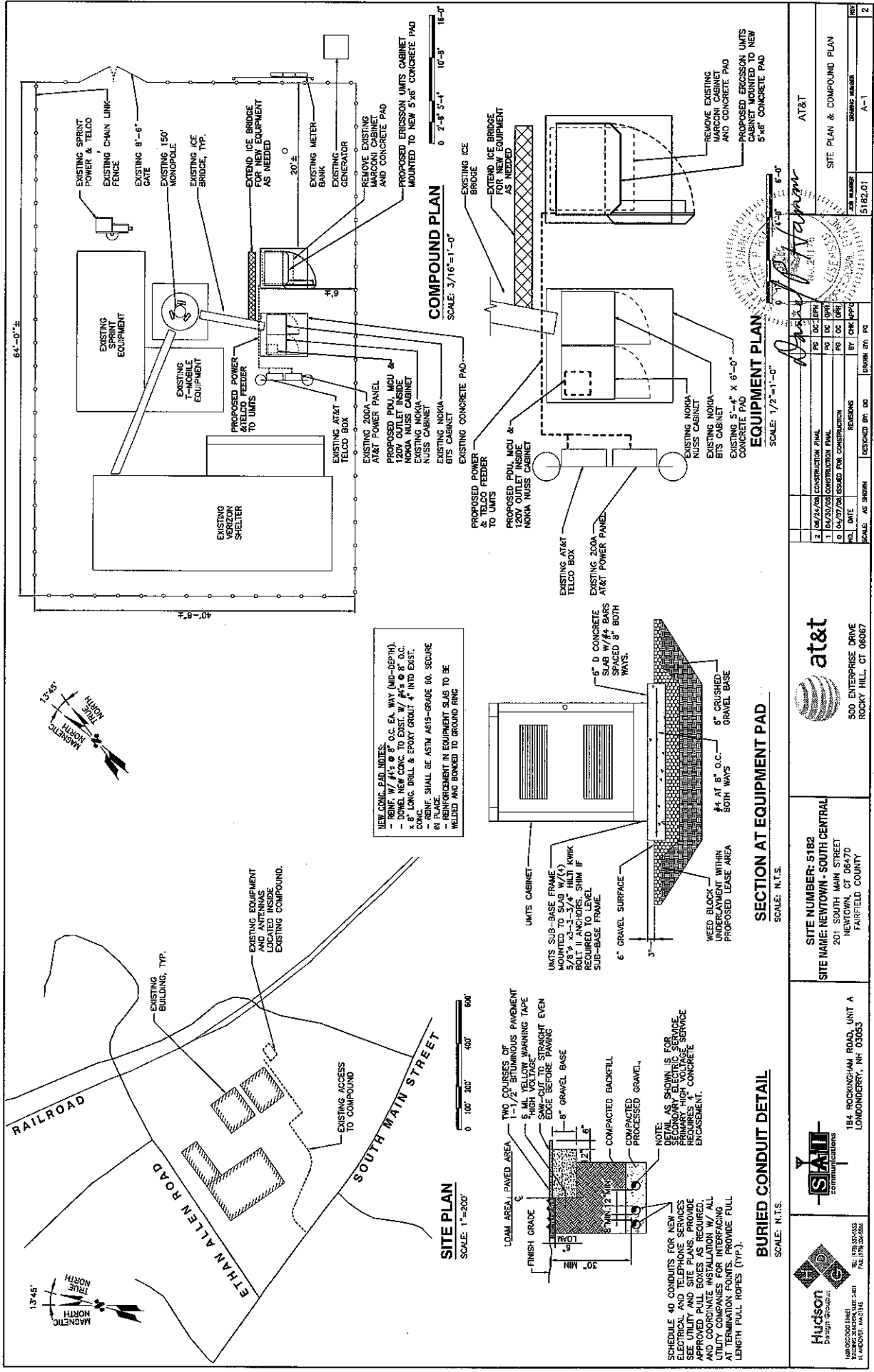
As required by Regulations of Connecticut State Agencies (“R.C.S.A.”) Section 16-50j-73, the Connecticut Siting Council has been notified of the changes and will review Cingular’s proposal. Please accept this letter as notification under Section 16-50j-73 of construction which constitutes an exempt modification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



SITE PLAN
 SCALE: 1"=200'

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

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

SECTION AT EQUIPMENT PAD
 SCALE: N.T.S.

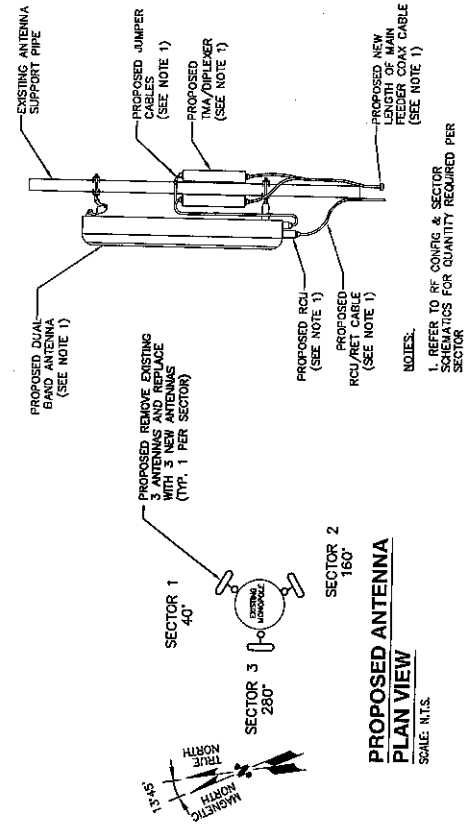
BURIED CONDUIT DETAIL
 SCALE: N.T.S.

 HUCSON Design & Construction 1440 STATE STREET, SUITE 300 NEWTON, MASSACHUSETTS 02459 TEL: (781) 553-5333 FAX: (781) 553-5356		 SIAT COMMUNICATIONS 184 ROCKINGHAM ROAD, UNIT A LONGGERRY, NH 03065		 at&t 500 ENTERPRISE DRIVE ROCKY HILL, CT 06067	
PROJECT NO: 1818 PROJECT NAME: SOUTH CENTRAL PROJECT ADDRESS: 201 SOUTH MAIN STREET CITY: NEWTOWN, CT 06470 COUNTY: FAIRFIELD COUNTY		SITE NUMBER: 5182 SITE NAME: NEWTOWN - SOUTH CENTRAL ADDRESS: 201 SOUTH MAIN STREET CITY: NEWTOWN, CT 06470 COUNTY: FAIRFIELD COUNTY		AT&T SITE PLAN & COMPOUND PLAN DATE: 5/18/01 DRAWN BY: PG CHECKED BY: DC AS SHOWN	
REVISION NO. 1 DATE 05/22/01 BY DC/PG DESCRIPTION CONSTRUCTION FINAL	REVISION NO. 2 DATE 05/22/01 BY DC/PG DESCRIPTION CONSTRUCTION FINAL	REVISION NO. 0 DATE 04/27/01 BY DC/PG DESCRIPTION ISSUED FOR CONSTRUCTION	REVISION NO. 0 DATE 04/27/01 BY DC/PG DESCRIPTION ISSUED FOR CONSTRUCTION	SHEET NO. 2 TOTAL SHEETS 2 DRAWING NUMBER 5182.01	SHEET NO. 2 TOTAL SHEETS 2 DRAWING NUMBER 5182.01

SECTOR	SECTOR NAME	ANTENNA MAKE & MODEL	ANTENNA COUNT	AZIMUTH CENTER	BOA CENTER	MECHANICAL (VERTICAL)	TMA COUNT	DIPLEXER COUNT	# OF COAX CABLES
1	ALPHA	POWERWAVE 7770	1 PROPOSED 0 EXISTING	40°	110±	0*	2 PROPOSED 0 EXISTING	0 PROPOSED 0 EXISTING	2 EXISTING 0 EXISTING
2	BETA	POWERWAVE 7770	1 PROPOSED 0 EXISTING	160°	110±	0*	2 PROPOSED 0 EXISTING	0 PROPOSED 0 EXISTING	2 EXISTING 0 EXISTING
3	GAMMA	POWERWAVE 7770	1 PROPOSED 0 EXISTING	280°	110±	0*	2 PROPOSED 0 EXISTING	0 PROPOSED 0 EXISTING	2 EXISTING 0 EXISTING

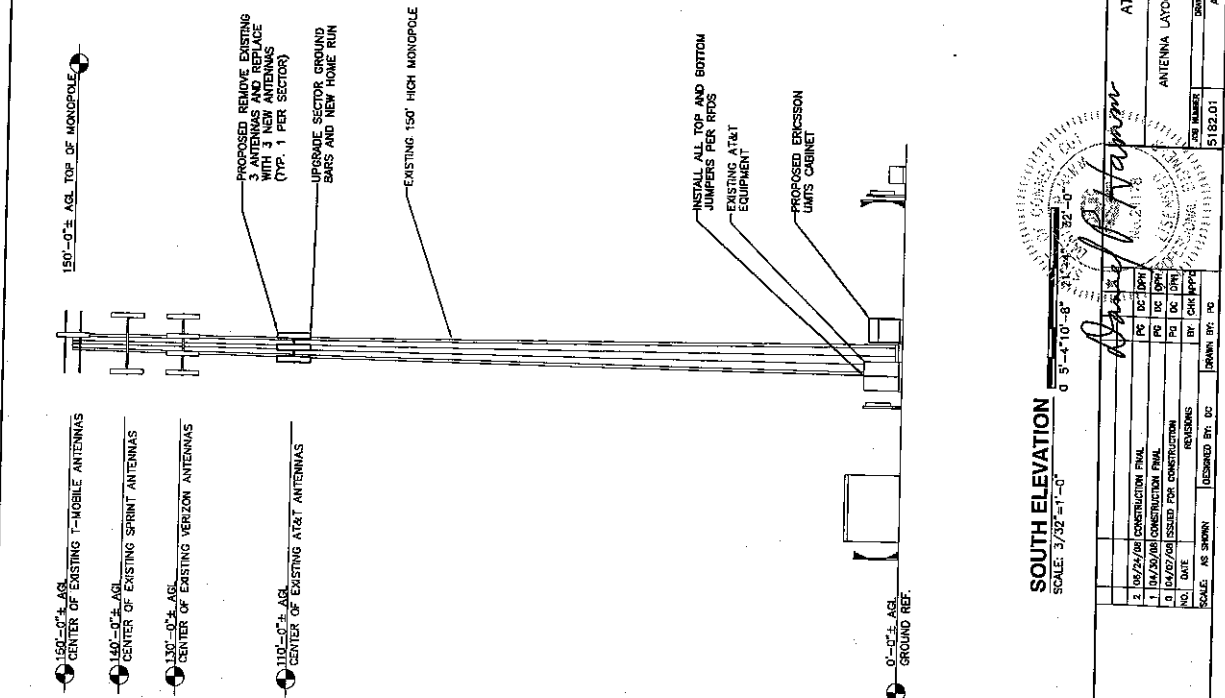
NOTE:
AN ANALYSIS FOR THE CAPACITY OF THE EXISTING STRUCTURES TO SUPPORT THE PROPOSED EQUIPMENT SHALL BE DETERMINED PRIOR TO CONSTRUCTION.

NOTE:
REFER TO THE FINAL RF DATA SHEET FOR FINAL ANTENNA SETTINGS.



PROPOSED ANTENNA PLAN VIEW
SCALE: N.T.S.

PROPOSED ANTENNA DETAIL
SCALE: N.T.S.



SOUTH ELEVATION
SCALE: 3/32"=1'-0"

Hudson
Engineering & Construction
184 ROCKWELL ROAD, UNIT A
LONDONDERRY, NH 03053
TEL: 603.532.5500
FAX: 603.532.5502

SIAT
communications

at&t

500 ENTERPRISE DRIVE
ROCKY HILL, CT 06867

SITE NUMBER: 5182
SITE NAME: NEWTOWN - SOUTH CENTRAL
201 SOUTH MAIN STREET
NEWTOWN, CT 06470
FAIRFIELD COUNTY

184 ROCKWELL ROAD, UNIT A
LONDONDERRY, NH 03053

SCALE: AS SHOWN DESIGNED BY: DC DRAWN BY: PD

REV	DATE	BY	CHK	APP
2	10/27/00	DC	DC	DC
1	10/25/00	DC	DC	DC
0	10/25/00	DC	DC	DC

REVISIONS

AT&T
ANTENNA LAYOUT AND ELEVATION

5182.01

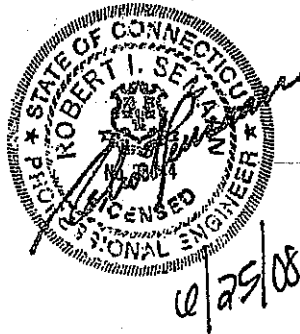
1079 N. 205th Street
Elkhorn, NE 68022
Ph: 402-289-1888
Fax: 402-289-1861

SEMAAN ENGINEERING SOLUTIONS

**150 ft PIROD Monopole
Structural Analysis**

**Prepared for:
T-Mobile USA
12920 SE 38th Street
Bellevue, WA 98006**

**Site: CT11217A
For: AT&T Wireless
Newtown, CT**



June 25, 2008

Ms. Danielle Edson
T-Mobile USA
12920 SE 38th Street
Bellevue, WA 98006

Re: Site Number CT11217A – Newtown, CT.

Dear Ms. Edson:

We have completed the structural analysis for the existing monopole, located at the above referenced site. The purpose of this analysis is to determine that the existing monopole design is in conformance with the TIA/EIA-222 Rev F standard and local building codes for the proposed antennae loads installation. Refer to the Review and Recommendations section at the end of this report for the analysis results.

Description of Structure:

The structure is a 150 ft PIROD Monopole.

Refer to PIROD drawing 151455-B dated October 17, 2000 for a detailed description of the structure.

Method of analysis:

The tower was analyzed using Semaan Engineering Solutions' software suite for communication structures. The structural analysis is performed using the SAPS finite element engine. The method is 3D, non-linear, which accounts for the second order geometric effects due to the displacements. It also treats guys as exact cable elements and therefore is ideal for guyed towers. The analysis was performed in conformance with TIA/EIA-222 Rev F and local building codes for a basic wind speed of 90 mph and 1/2" radial ice with reduced wind speed (fastest mile). This is in conformance with the IBC 2006: Section 1609.1.1, Exception (4) and Section 3108.4. Wind is applied to the structure, accessories and antennas.

Structure loading:

The following loads were used in the tower analysis:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
148.0	12	S20045A1 LNA	Low Profile Platform	(24) 1 5/8	T-Mobile
	12	RR65-19-02DP			
140.0	3	DB980H90T2EM	Low Profile platform	(9) 1 5/8	Sprint
	6	DB980F90EM			
127.0	12	DB844H90	Low Profile platform	(12) 1 5/8 (Outside)	Verizon
100.0	1	4 ft HP Dish	Dish Mount	(1) 1 5/8	T-Mobile

Proposed Loads:

Elev (ft)	Qty	Antennas	Mounts	Coax	Carrier
110.0	6	LGP 21401 TMA	(3) T-Arms	(12) 1 1/4	AT&T Wireless
	6	Powerwave 7770.00			

All new access holes shall be reinforced with welded rims that are compatible with the pole and to be sized and supplied by pole manufacturer.

All transmission lines running outside of the pole are assumed strapped tightly to the pole shaft.

Results of Analysis:

Refer to the attached Computer Summary sheets for detailed analysis results.

Structure:

The existing monopole is structurally capable of supporting the existing and proposed antennas.

The maximum structure usage is: 76.3%.

Foundation:

Pole Reactions	Original Design Reactions	Current Analysis Reactions
Moment (ft-kips)	2,347.00	2,974.95
Shear (kips)	21.90	29.01

The reactions calculated from the analysis exceed the ones indicated on the original structural design. However, upon reviewing the foundation documents, they were found to be adequate and therefore the foundation will not require modification. Calculations are attached.

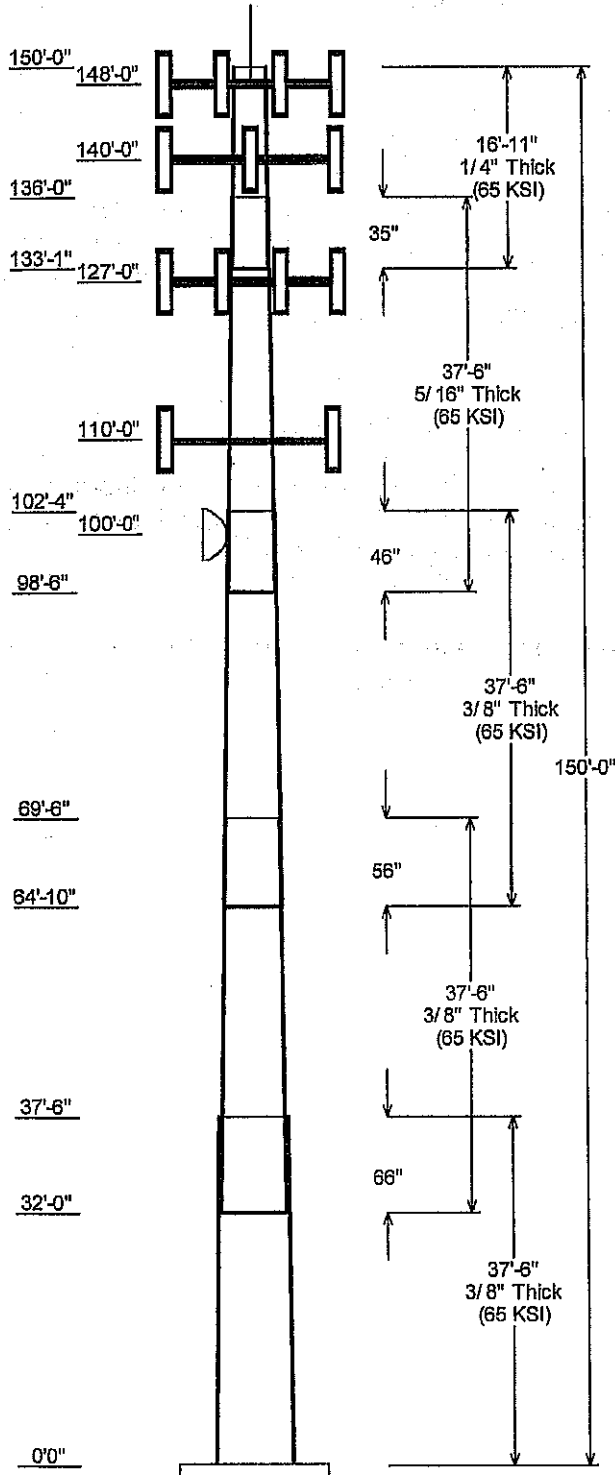
Review and Recommendations:

Based on the analysis results, the existing structure meets the requirements per the TIA/EIA-222 Rev F standards for a basic wind speed of 90 mph and 1/2" radial ice with reduced wind speed.

SEMAAN ENGINEERING SOLUTIONS

1079 N.204th Avenue
 Elkhorn, NE 68022
 Phone: 402-289-1888
 Fax: 402-289-1861

Copyright Semaan Engineering Solutions, Inc



Job Information			
Pole :	CT11217A	Code:	TIA/EIA-222 Rev F
Description :			
Client :	T-Mobile USA-WA		
Location :	Newtown, CT		
Shape :	18 Sides	Base Elev (ft):	0.00
Height :	150.00 (ft)	Taper:	0.246090(in/ft)

Sections Properties							
Shaft Section	Length (ft)	Diameter (in)		Thick Joint (in) Type	Overlap Length (in)	Taper (in/ft)	Steel Grade (ksl)
		Across Flats Top	Bottom				
1	37.500	46.897	56.125	0.375	0.000	0.246090	65
2	37.500	39.772	49.000	0.375 Slip Joint	66.000	0.246090	65
3	37.500	32.442	41.670	0.375 Slip Joint	56.000	0.246090	65
4	37.500	24.782	34.010	0.313 Slip Joint	46.000	0.246090	65
5	16.917	21.837	26.000	0.250 Slip Joint	35.000	0.246090	65

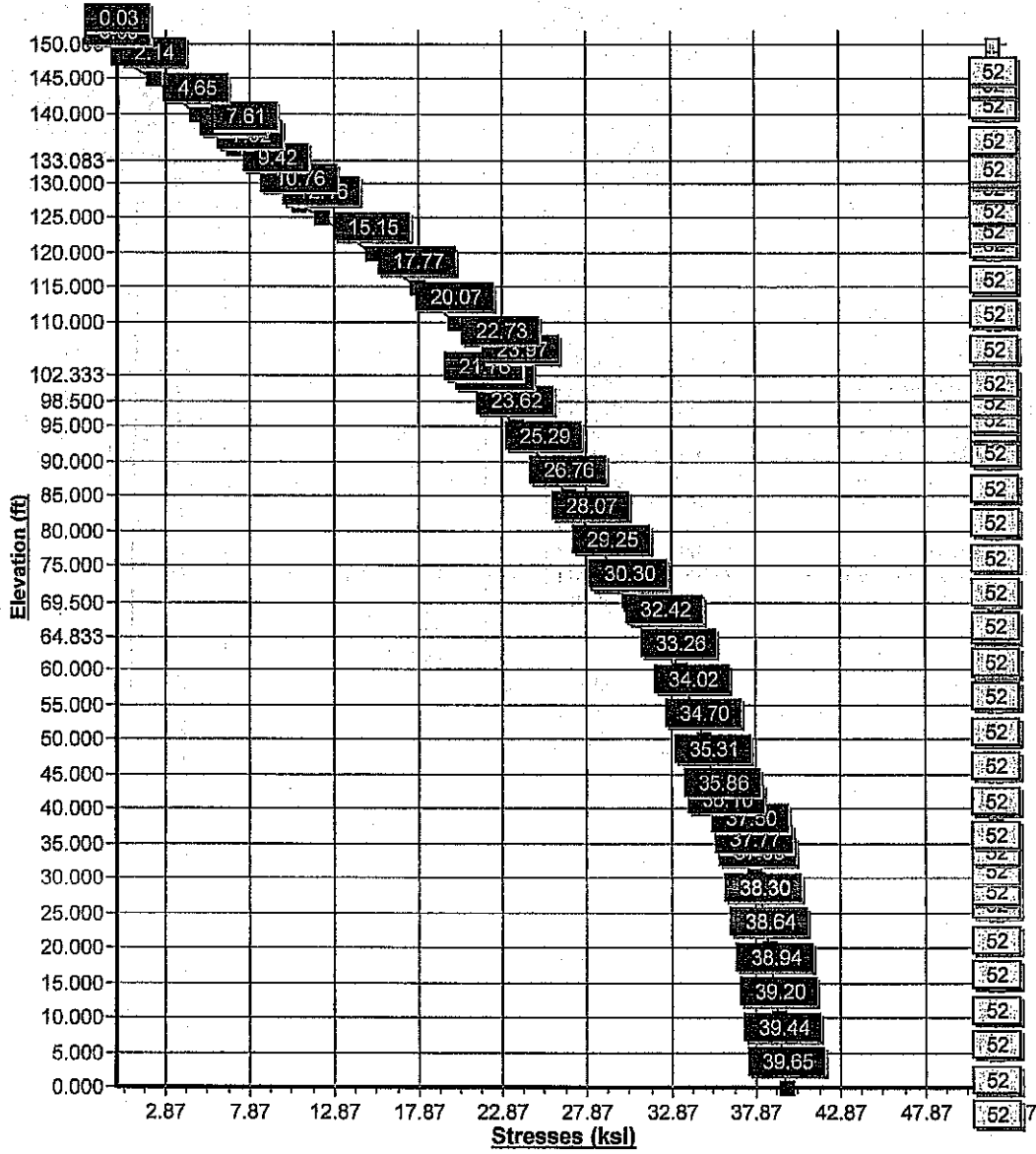
Discrete Appurtenance			
Attach Elev (ft)	Force Elev (ft)	Qty	Description
148.000	148.000	12	S20045A1 LNA
148.000	155.500	1	Lightning Rod, 15'
148.000	148.000	1	Low Profile Platform
148.000	148.000	12	RR65-19-02DP
140.000	140.000	1	Low Profile platform
140.000	140.000	3	DB980H90T2EM
140.000	140.000	6	DB980F90EM
127.000	127.000	1	Low Profile platform
127.000	127.000	12	DB844H90
110.000	110.000	3	T-Arms
110.000	110.000	6	LGP 21401 TMA
110.000	110.000	6	Powerwave 7770.00
100.000	100.000	1	4 ft HP Dish

Linear Appurtenance			
Elev (ft) From	To	Description	Exposed To Wind
0.000	100.00	1 5/8" Coax	No
0.000	110.00	1 1/4" Coax	No
0.000	127.00	1 5/8" Coax	Yes
0.000	140.00	1 5/8" Coax	No
0.000	148.00	1 5/8" Coax	No

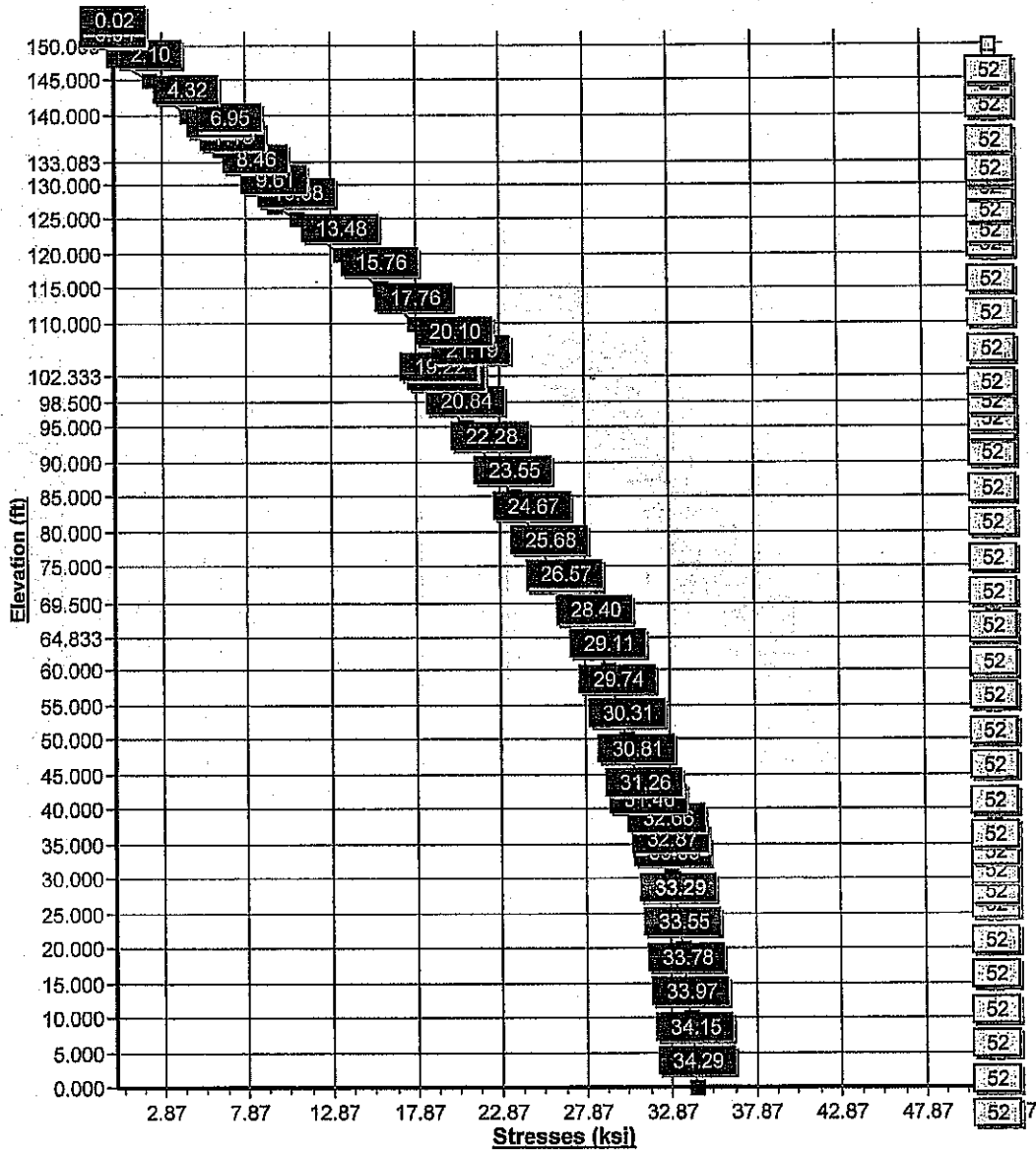
Load Cases	
No Ice	90.00 mph Wind with No Ice
Ice	77.94 mph Wind with Ice

Reactions			
Load Case	Moment (Kip-ft)	Shear (Kips)	Axial (Kips)
No Ice	2974.95	29.01	38.33
Ice	2556.42	24.43	47.89

Load Case : No Ice
Max Stress 76.3% at 0.0ft



Load Case : Ice
Max Stress 66.0% at 0.0ft



Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
 Top Dia : 21.837 (in)
 Taper : 0.246090 (in/ft)

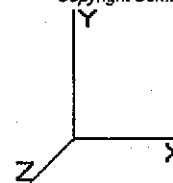
Code: TIA/EIA-222 Rev F

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6/25/2008 3:08:44 PM

Page: 1

Base Elev : 0.000 (ft)



Shaft Section Properties

Sect Num	Length (ft)	Thick (in)	Fv (ksi)	Joint Type	Slip Joint Len (in)	Weight (lb)	Bottom				Top								
							Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Dia (in)	Elev (ft)	Area (sqin)	Ix (in^4)	W/t Ratio	D/t Ratio	Taper (in/ft)
1	37.500	0.3750	65		0.00	7,766	56.12	0.000	66.35	26056.2	24.63	149.67	46.897	37.50	55.37	15140.5	20.29	125.06	0.24609
2	37.500	0.3750	65	Slip Joint	66.00	6,684	49.00	32.00	57.87	17288.5	21.28	130.67	39.772	69.50	46.89	9195.1	16.94	106.08	0.24609
3	37.500	0.3750	65	Slip Joint	56.00	5,571	41.67	64.83	49.15	10589.4	17.83	111.12	32.442	102.3	38.17	4958.4	13.49	86.61	0.24609
4	37.500	0.3125	65	Slip Joint	46.00	3,681	34.01	98.50	33.42	4795.0	17.43	108.83	24.782	136.0	24.27	1835.9	12.22	79.30	0.24609
5	16.917	0.2500	65	Slip Joint	35.00	1,081	26.00	133.0	20.43	1711.6	16.57	104.00	21.837	150.0	17.13	1008.4	13.64	87.35	0.24609
Shaft Weight						24,783													

Discrete Appurtenance Properties

Attach Elev (ft)	Description	Qty	Weight (lb)	No Ice CaAa (sf)	CaAa Factor	Weight (lb)	Ice CaAa (sf)	CaAa Factor	Distance From Face (ft)	Vert Ecc (ft)
148.00	S20045A1 LNA	12	9.92	0.762	0.74	15.03	0.953	0.74	0.000	0.000
148.00	Lightning Rod, 15'	1	35.00	1.050	1.00	126.00	5.100	1.00	0.000	7.500
148.00	Low Profile Platform	1	1600.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
148.00	RR65-19-02DP	12	23.00	6.000	0.67	52.00	6.850	0.67	0.000	0.000
140.00	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
140.00	DB980H90T2EM	3	9.00	3.280	0.73	28.00	3.850	0.73	0.000	0.000
140.00	DB980F90EM	6	9.00	3.280	0.73	28.00	3.850	0.73	0.000	0.000
127.00	Low Profile platform	1	1300.00	25.550	1.00	2100.00	27.320	1.00	0.000	0.000
127.00	DB844H90	12	14.00	3.733	0.91	40.30	4.520	0.91	0.000	0.000
110.00	T-Arms	3	242.00	8.190	0.67	301.00	11.130	0.67	0.000	0.000
110.00	LGP 21401 TMA	6	19.00	1.260	0.65	26.13	1.500	0.65	0.000	0.000
110.00	Powerwave 7770.00	6	35.00	5.882	0.73	67.63	6.533	0.73	0.000	0.000
100.00	4 ft HP Dish	1	170.00	15.860	1.00	280.00	16.520	1.00	0.000	0.000
Totals		65	6099.04			9711.52			Number of Loadings : 13	

Linear Appurtenance Properties

Elev From (ft)	Elev To (ft)	Description	No Ice Weight (lb/ft)	CaAa (sf/ft)	Ice Weight (lb/ft)	CaAa (sf/ft)	Exposed To Wind
0.00	148.00	(24) 1 5/8 Coax	24.00	0.00	24.00	0.00	N
0.00	140.00	(9) 1 5/8" Coax	9.00	0.00	9.00	0.00	N
0.00	127.00	(12) 1 5/8" Coax	12.48	0.40	30.84	0.60	Y
0.00	110.00	(12) 1 1/4" Coax	9.00	0.00	9.00	0.00	N
0.00	100.00	(1) 1 5/8" Coax	1.00	0.00	1.00	0.00	N
Total Weight			7,486.96 (lb)		9,818.68 (lb)		

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
 Top Dia : 21.837 (in)
 Taper : 0.246090 (in/ft)

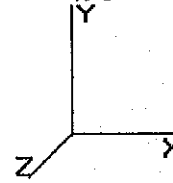
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Base Elev : 0.000 (ft)



Segment Properties (Max Len : 5 ft)

Seg Top Elev (ft)	Description	Thick (in)	Flat Dia (in)	Area (in^2)	Ix (in^4)	W/t Ratio	D/t Ratio	Fy (ksi)	Fb (ksi)	Weight (lb)
0.00		0.3750	56.125	66.354	26,056.2	24.63	149.87	65	52	0.0
5.00		0.3750	54.895	64.890	24,368.7	24.05	146.39	65	52	1,116.5
10.00		0.3750	53.664	63.425	22,755.7	23.47	143.10	65	52	1,091.6
15.00		0.3750	52.434	61.961	21,215.6	22.89	139.82	65	52	1,066.6
20.00		0.3750	51.203	60.496	19,746.5	22.31	136.54	65	52	1,041.7
25.00		0.3750	49.973	59.032	18,346.9	21.73	133.26	65	52	1,016.8
30.00		0.3750	48.742	57.567	17,015.0	21.16	129.98	65	52	991.9
32.00	Bot - Section 2	0.3750	48.250	56.981	16,500.8	20.92	128.67	65	52	389.8
35.00		0.3750	47.512	56.103	15,749.2	20.58	126.70	65	52	1,163.5
37.50	Top - Section 1	0.3750	47.647	56.263	15,884.6	20.64	127.06	65	52	955.9
40.00		0.3750	47.031	55.531	15,272.5	20.35	125.42	65	52	475.5
45.00		0.3750	45.801	54.066	14,095.7	19.77	122.14	65	52	932.3
50.00		0.3750	44.571	52.602	12,981.1	19.19	118.85	65	52	907.4
55.00		0.3750	43.340	51.137	11,926.7	18.62	115.57	65	52	882.5
60.00		0.3750	42.110	49.673	10,931.1	18.04	112.29	65	52	857.6
64.83	Bot - Section 3	0.3750	40.920	48.257	10,022.9	17.48	109.12	65	52	805.3
65.00		0.3750	40.879	48.208	9,992.5	17.46	109.01	65	52	55.2
69.50	Top - Section 2	0.3750	40.522	47.783	9,730.3	17.29	108.06	65	52	1,469.9
70.00		0.3750	40.399	47.636	9,641.1	17.23	107.73	65	52	81.2
75.00		0.3750	39.168	46.172	8,779.0	16.65	104.45	65	52	798.0
80.00		0.3750	37.938	44.708	7,969.8	16.08	101.17	65	52	773.1
85.00		0.3750	36.707	43.243	7,212.0	15.50	97.89	65	52	748.2
90.00		0.3750	35.477	41.779	6,503.8	14.92	94.61	65	52	723.3
95.00		0.3750	34.246	40.314	5,843.6	14.34	91.32	65	52	698.4
98.50	Bot - Section 4	0.3750	33.385	39.289	5,409.0	13.93	89.03	65	52	474.0
100.00		0.3750	33.016	38.850	5,229.6	13.76	88.04	65	52	369.1
102.33	Top - Section 3	0.3125	33.067	32.487	4,403.5	16.89	105.81	65	52	565.9
105.00		0.3125	32.411	31.836	4,144.1	16.52	103.71	65	52	291.8
110.00		0.3125	31.180	30.616	3,685.6	15.83	99.78	65	52	531.3
115.00		0.3125	29.950	29.395	3,262.1	15.14	95.84	65	52	510.5
120.00		0.3125	28.719	28.175	2,872.5	14.44	91.90	65	52	489.7
125.00		0.3125	27.489	26.954	2,515.1	13.75	87.96	65	52	469.0
127.00		0.3125	26.997	26.466	2,381.0	13.47	86.39	65	52	181.8
130.00		0.3125	26.258	25.734	2,188.7	13.05	84.03	65	52	266.4
133.08	Bot - Section 5	0.3125	25.500	24.981	2,002.3	12.62	81.60	65	52	266.1
135.00		0.3125	25.028	24.514	1,891.9	12.36	80.09	65	52	293.4
136.00	Top - Section 4	0.2500	25.282	19.862	1,572.4	16.07	101.13	65	52	150.9
140.00		0.2500	24.297	19.081	1,394.1	15.37	97.19	65	52	265.0
145.00		0.2500	23.067	18.105	1,190.9	14.51	92.27	65	52	316.3
148.00		0.2500	22.329	17.519	1,079.0	13.99	89.31	65	52	181.8
150.00		0.2500	21.837	17.128	1,008.4	13.64	87.35	65	52	117.9
										24,783.3

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
 Top Dia : 21.837 (in)
 Taper : 0.246090 (in/ft)

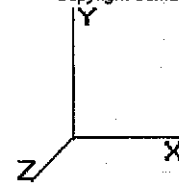
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Base Elev : 0.000 (ft)



Load Case: No Ice	90.00 mph Wind with No Ice	24 Iterations
Gust Response Factor 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)	
0.00		0.00	1.00	20.736	35.044	420.93	0.650	0.000	0.00	0.000	0.00	0.0	0.0	
5.00		0.00	1.00	20.736	35.044	411.70	0.650	0.000	5.00	23.129	15.03	526.8	0.0	1,116.5
10.00		0.00	1.00	20.736	35.044	402.48	0.650	0.000	5.00	22.616	14.70	515.2	0.0	1,091.6
15.00		0.00	1.00	20.736	35.044	393.25	0.650	0.000	5.00	22.104	14.37	503.5	0.0	1,066.6
20.00		0.00	1.00	20.736	35.044	384.02	0.650	0.000	5.00	21.591	14.03	491.8	0.0	1,041.7
25.00		0.00	1.00	20.736	35.044	374.79	0.650	0.000	5.00	21.078	13.70	480.1	0.0	1,016.8
30.00		0.00	1.00	20.736	35.044	365.56	0.650	0.000	5.00	20.566	13.37	468.5	0.0	991.9
32.00	Bot - Section 2	0.00	1.00	20.736	35.044	361.87	0.650	0.000	2.00	8.083	5.25	184.1	0.0	389.8
35.00		0.00	1.01	21.088	35.638	359.34	0.650	0.000	3.00	12.158	7.90	281.6	0.0	1,163.5
37.50	Top - Section 1	0.00	1.03	21.507	36.347	358.20	0.650	0.000	2.50	9.990	6.49	236.0	0.0	955.9
40.00		0.00	1.05	21.908	37.024	362.56	0.650	0.000	2.50	9.862	6.41	237.3	0.0	475.5
45.00		0.00	1.09	22.657	38.291	359.06	0.650	0.000	5.00	19.340	12.57	481.4	0.0	932.3
50.00		0.00	1.12	23.350	39.461	354.72	0.650	0.000	5.00	18.827	12.24	482.9	0.0	907.4
55.00		0.00	1.15	23.994	40.551	349.65	0.650	0.000	5.00	18.315	11.90	482.7	0.0	882.5
60.00		0.00	1.18	24.598	41.571	343.98	0.650	0.000	5.00	17.802	11.57	481.0	0.0	857.6
64.83	Bot - Section 3	0.00	1.21	25.149	42.502	337.98	0.650	0.000	4.83	16.721	10.87	461.9	0.0	805.3
65.00		0.00	1.21	25.167	42.533	337.76	0.650	0.000	0.17	0.578	0.38	16.0	0.0	55.2
69.50	Top - Section 2	0.00	1.23	25.653	43.354	331.77	0.650	0.000	4.50	15.403	10.01	434.1	0.0	1,469.9
70.00		0.00	1.24	25.706	43.443	337.35	0.650	0.000	0.50	1.686	1.10	47.6	0.0	81.2
75.00		0.00	1.26	26.218	44.308	330.31	0.650	0.000	5.00	16.576	10.77	477.4	0.0	798.0
80.00		0.00	1.28	26.706	45.133	322.90	0.650	0.000	5.00	16.064	10.44	471.2	0.0	773.1
85.00		0.00	1.31	27.172	45.921	315.14	0.650	0.000	5.00	15.551	10.11	464.2	0.0	748.2
90.00		0.00	1.33	27.620	46.677	307.08	0.650	0.000	5.00	15.038	9.77	456.3	0.0	723.3
95.00		0.00	1.35	28.050	47.404	298.73	0.650	0.000	5.00	14.526	9.44	447.6	0.0	698.4
98.50	Bot - Section 4	0.00	1.36	28.341	47.896	292.72	0.650	0.000	3.50	9.863	6.41	307.1	0.0	474.0
100.0	Appertunance(s)	0.00	1.37	28.464	48.104	290.11	0.650	0.000	1.50	4.228	2.75	132.2	0.0	369.1
102.3	Top - Section 3	0.00	1.38	28.652	48.422	286.01	0.650	0.000	2.33	6.485	4.22	204.1	0.0	565.9
105.0		0.00	1.39	28.863	48.779	286.78	0.650	0.000	2.67	7.275	4.73	230.7	0.0	291.8
110.0	Appertunance(s)	0.00	1.41	29.250	49.432	277.73	0.650	0.000	5.00	13.248	8.61	425.7	0.0	531.3
115.0		0.00	1.42	29.623	50.064	268.47	0.650	0.000	5.00	12.735	8.28	414.4	0.0	510.5
120.0		0.00	1.44	29.986	50.676	259.01	0.650	0.000	5.00	12.223	7.94	402.6	0.0	489.7
125.0		0.00	1.46	30.338	51.271	249.37	0.650	0.000	5.00	11.710	7.61	390.2	0.0	469.0
127.0	Appertunance(s)	0.00	1.47	30.475	51.504	245.46	0.650	0.000	2.00	4.540	2.95	152.0	0.0	181.8
130.0		0.00	1.48	30.679	51.848	239.54	0.650	0.000	3.00	6.657	4.33	224.3	0.0	266.4
133.0	Bot - Section 5	0.00	1.48	30.886	52.197	233.40	0.650	0.000	3.08	6.649	4.32	225.6	0.0	266.1
135.0		0.00	1.49	31.012	52.410	229.55	0.650	0.000	1.92	4.115	2.67	140.2	0.0	293.4
136.0	Top - Section 4	0.00	1.49	31.078	52.521	227.53	0.650	0.000	1.00	2.117	1.38	72.3	0.0	150.9
140.0	Appertunance(s)	0.00	1.51	31.336	52.958	224.01	0.650	0.000	4.00	8.263	5.37	284.4	0.0	265.0
145.0		0.00	1.52	31.652	53.491	213.74	0.650	0.000	5.00	9.868	6.41	343.1	0.0	316.3
148.0	Appertunance(s)	0.00	1.53	31.837	53.805	207.50	0.650	0.000	3.00	5.674	3.69	198.5	0.0	181.8
150.0		0.00	1.54	31.960	54.012	203.32	0.650	0.000	2.00	3.680	2.39	129.2	0.0	117.9
Totals:								150.00				13,406.0	0.0	24,783.3

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
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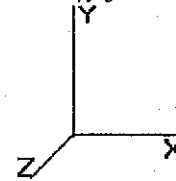
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Base Elev : 0.000 (ft)



Load Case: No Ice 90.00 mph Wind with No Ice 24 Iterations

Gust Response Factor 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
100.0	4 ft HP Dish	1	28.464	48.104	1.00	15.86	0.000	0.000	762.92	0.00	0.00	170.00
110.0	T-Arms	3	29.250	49.432	0.67	16.46	0.000	0.000	813.74	0.00	0.00	726.00
110.0	LGP 21401 TMA	6	29.250	49.432	0.65	4.91	0.000	0.000	242.91	0.00	0.00	114.00
110.0	Powerwave 7770.00	6	29.250	49.432	0.73	25.76	0.000	0.000	1,273.52	0.00	0.00	210.00
127.0	Low Profile platform	1	30.475	51.504	1.00	25.55	0.000	0.000	1,315.92	0.00	0.00	1,300.00
127.0	DB844H90	12	30.475	51.504	0.91	40.76	0.000	0.000	2,099.51	0.00	0.00	168.00
140.0	Low Profile platform	1	31.336	52.958	1.00	25.55	0.000	0.000	1,353.07	0.00	0.00	1,300.00
140.0	DB980H90T2EM	3	31.336	52.958	0.73	7.18	0.000	0.000	380.41	0.00	0.00	27.00
140.0	DB980F90EM	6	31.336	52.958	0.73	14.37	0.000	0.000	760.81	0.00	0.00	54.00
148.0	S20045A1 LNA	12	31.837	53.805	0.74	6.77	0.000	0.000	364.08	0.00	0.00	119.04
148.0	Lightning Rod, 15'	1	32.290	54.571	1.00	1.05	0.000	7.500	57.30	0.00	429.74	35.00
148.0	Low Profile Platform	1	31.837	53.805	1.00	25.55	0.000	0.000	1,374.73	0.00	0.00	1,600.00
148.0	RR65-19-02DP	12	31.837	53.805	0.67	48.24	0.000	0.000	2,595.57	0.00	0.00	276.00
									13,394.47			6,099.04

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
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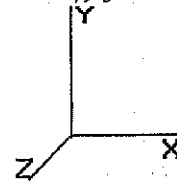
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Base Elev : 0.000 (ft)



Load Case: No Ice	90.00 mph Wind with No Ice	24 Iterations
Gust Response Factor 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	596.93	1,393.88	0.00	0.00
10.00	585.25	1,368.97	0.00	0.00
15.00	573.58	1,344.05	0.00	0.00
20.00	561.90	1,319.13	0.00	0.00
25.00	550.22	1,294.22	0.00	0.00
30.00	538.54	1,269.30	0.00	0.00
32.00	212.15	500.74	0.00	0.00
35.00	324.40	1,329.95	0.00	0.00
37.50	272.38	1,094.59	0.00	0.00
40.00	274.37	614.21	0.00	0.00
45.00	557.94	1,209.74	0.00	0.00
50.00	561.84	1,184.82	0.00	0.00
55.00	563.84	1,159.90	0.00	0.00
60.00	564.18	1,134.99	0.00	0.00
64.83	544.12	1,073.47	0.00	0.00
65.00	18.83	64.46	0.00	0.00
69.50	512.11	1,719.53	0.00	0.00
70.00	56.29	108.91	0.00	0.00
75.00	566.02	1,075.42	0.00	0.00
80.00	561.52	1,050.51	0.00	0.00
85.00	556.02	1,025.59	0.00	0.00
90.00	549.62	1,000.67	0.00	0.00
95.00	542.38	975.76	0.00	0.00
98.50	374.12	668.20	0.00	0.00
100.0	923.99	622.30	0.00	0.00
102.3	249.32	693.07	0.00	0.00
105.0	282.70	437.12	0.00	0.00
110.0	2,854.70	1,853.67	0.00	0.00
115.0	514.55	737.91	0.00	0.00
120.0	503.96	717.15	0.00	0.00
125.0	492.79	696.38	0.00	0.00
127.0	3,608.63	1,740.74	0.00	0.00
130.0	224.35	365.44	0.00	0.00
133.0	225.60	367.80	0.00	0.00
135.0	140.19	356.69	0.00	0.00
136.0	72.27	183.92	0.00	0.00
140.0	2,778.73	1,778.03	0.00	0.00
145.0	343.09	436.34	0.00	0.00
148.0	4,590.13	2,283.87	0.00	429.74
150.0	129.21	117.90	0.00	0.00
Totals:	28,952.73	38,369.31	0.00	429.74

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
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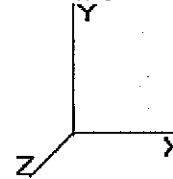
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Base Elev : 0.000 (ft)



Load Case: No Ice 90.00 mph Wind with No Ice 24 Iterations

Gust Response Factor 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Shaft Forces and Deflections

Seg Elev (ft)	Lateral FX (-) (kips)	Axial FY (-) (kips)	Lateral FZ (kips)	Moment MX (ft-kips)	Torsion MY (ft-kips)	Moment MZ (ft-kips)	X Deflect (in)	Z Deflect (in)	Total Deflect (in)	Rotation (deg)
0.00	-29.007	-38.328	0.000	0.000	0.000	-2,974.955	0.000	0.000	0.000	0.000
5.00	-28.511	-36.856	0.000	0.000	0.000	-2,829.923	-0.085	0.000	0.085	-0.158
10.00	-28.020	-35.410	0.000	0.000	0.000	-2,687.371	-0.338	0.000	0.338	-0.319
15.00	-27.535	-33.991	0.000	0.000	0.000	-2,547.272	-0.761	0.000	0.761	-0.483
20.00	-27.056	-32.598	0.000	0.000	0.000	-2,409.598	-1.357	0.000	1.357	-0.649
25.00	-26.582	-31.233	0.000	0.000	0.000	-2,274.322	-2.128	0.000	2.128	-0.818
30.00	-26.086	-29.917	0.000	0.000	0.000	-2,141.415	-3.077	0.000	3.077	-0.989
32.00	-25.910	-29.380	0.000	0.000	0.000	-2,089.244	-3.506	0.000	3.506	-1.060
35.00	-25.608	-28.013	0.000	0.000	0.000	-2,011.514	-4.207	0.000	4.207	-1.166
37.50	-25.355	-26.885	0.000	0.000	0.000	-1,947.495	-4.842	0.000	4.842	-1.255
40.00	-25.126	-26.220	0.000	0.000	0.000	-1,884.110	-5.524	0.000	5.524	-1.345
45.00	-24.613	-24.952	0.000	0.000	0.000	-1,758.481	-7.024	0.000	7.024	-1.515
50.00	-24.089	-23.711	0.000	0.000	0.000	-1,635.420	-8.703	0.000	8.703	-1.686
55.00	-23.558	-22.498	0.000	0.000	0.000	-1,514.977	-10.562	0.000	10.562	-1.859
60.00	-23.019	-21.314	0.000	0.000	0.000	-1,397.191	-12.602	0.000	12.602	-2.033
64.83	-22.466	-20.228	0.000	0.000	0.000	-1,285.934	-14.748	0.000	14.748	-2.201
65.00	-22.474	-20.131	0.000	0.000	0.000	-1,282.189	-14.825	0.000	14.825	-2.207
69.50	-21.922	-18.400	0.000	0.000	0.000	-1,181.058	-16.982	0.000	16.982	-2.365
70.00	-21.890	-18.259	0.000	0.000	0.000	-1,170.098	-17.231	0.000	17.231	-2.383
75.00	-21.328	-17.147	0.000	0.000	0.000	-1,060.647	-19.815	0.000	19.815	-2.548
80.00	-20.764	-16.065	0.000	0.000	0.000	-954.010	-22.571	0.000	22.571	-2.711
85.00	-20.201	-15.012	0.000	0.000	0.000	-850.191	-25.497	0.000	25.497	-2.872
90.00	-19.638	-13.987	0.000	0.000	0.000	-749.190	-28.590	0.000	28.590	-3.030
95.00	-19.073	-13.000	0.000	0.000	0.000	-651.000	-31.845	0.000	31.845	-3.183
98.50	-18.678	-12.330	0.000	0.000	0.000	-584.246	-34.217	0.000	34.217	-3.288
100.0	-17.731	-11.744	0.000	0.000	0.000	-556.230	-35.258	0.000	35.258	-3.333
102.3	-17.455	-11.045	0.000	0.000	0.000	-514.858	-36.903	0.000	36.903	-3.401
105.0	-17.168	-10.592	0.000	0.000	0.000	-468.312	-38.824	0.000	38.824	-3.476
110.0	-14.225	-8.884	0.000	0.000	0.000	-382.475	-42.544	0.000	42.544	-3.623
115.0	-13.682	-8.151	0.000	0.000	0.000	-311.350	-46.409	0.000	46.409	-3.756
120.0	-13.146	-7.443	0.000	0.000	0.000	-242.940	-50.407	0.000	50.407	-3.877
125.0	-12.615	-6.767	0.000	0.000	0.000	-177.209	-54.523	0.000	54.523	-3.981
127.0	-8.898	-5.275	0.000	0.000	0.000	-151.979	-56.198	0.000	56.198	-4.019
130.0	-8.652	-4.920	0.000	0.000	0.000	-125.286	-58.738	0.000	58.738	-4.068
133.0	-8.404	-4.564	0.000	0.000	0.000	-98.608	-61.379	0.000	61.379	-4.113
135.0	-8.240	-4.216	0.000	0.000	0.000	-82.501	-63.034	0.000	63.034	-4.138
136.0	-8.156	-4.034	0.000	0.000	0.000	-74.262	-63.902	0.000	63.902	-4.150
140.0	-5.257	-2.459	0.000	0.000	0.000	-41.638	-67.392	0.000	67.392	-4.185
145.0	-4.883	-2.048	0.000	0.000	0.000	-15.354	-71.790	0.000	71.790	-4.215
148.0	-0.138	-0.108	0.000	0.000	0.000	-0.275	-74.439	0.000	74.439	-4.220
150.0	-0.129	0.000	0.000	0.000	0.000	0.000	-76.205	0.000	76.205	-4.220

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
 Top Dia : 21.837 (in)
 Taper : 0.246090 (In/ft)

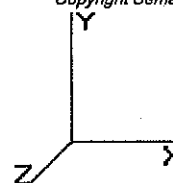
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Base Elev : 0.000 (ft)



Load Case: No Ice 90.00 mph Wind with No Ice 24 Iterations

Gust Response Factor 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio	
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.58	0.88	0.00	0.00	0.00	39.04	39.65	52.0	0.0	0.763
5.00	0.57	0.89	0.00	0.00	0.00	38.84	39.44	52.0	0.0	0.759
10.00	0.56	0.89	0.00	0.00	0.00	38.61	39.20	52.0	0.0	0.754
15.00	0.55	0.90	0.00	0.00	0.00	38.36	38.94	52.0	0.0	0.749
20.00	0.54	0.90	0.00	0.00	0.00	38.07	38.64	52.0	0.0	0.743
25.00	0.53	0.91	0.00	0.00	0.00	37.74	38.30	52.0	0.0	0.737
30.00	0.52	0.91	0.00	0.00	0.00	37.37	37.93	52.0	0.0	0.730
32.00	0.52	0.92	0.00	0.00	0.00	37.22	37.77	52.0	0.0	0.727
35.00	0.50	0.92	0.00	0.00	0.00	36.97	37.50	52.0	0.0	0.722
37.50	0.48	0.91	0.00	0.00	0.00	35.59	36.10	52.0	0.0	0.695
40.00	0.47	0.91	0.00	0.00	0.00	35.35	35.86	52.0	0.0	0.690
45.00	0.46	0.92	0.00	0.00	0.00	34.81	35.31	52.0	0.0	0.679
50.00	0.45	0.92	0.00	0.00	0.00	34.21	34.70	52.0	0.0	0.668
55.00	0.44	0.93	0.00	0.00	0.00	33.54	34.02	52.0	0.0	0.655
60.00	0.43	0.93	0.00	0.00	0.00	32.79	33.26	52.0	0.0	0.640
64.83	0.42	0.94	0.00	0.00	0.00	31.99	32.45	52.0	0.0	0.624
65.00	0.42	0.94	0.00	0.00	0.00	31.96	32.42	52.0	0.0	0.624
69.50	0.39	0.92	0.00	0.00	0.00	29.97	30.39	52.0	0.0	0.585
70.00	0.38	0.93	0.00	0.00	0.00	29.87	30.30	52.0	0.0	0.583
75.00	0.37	0.93	0.00	0.00	0.00	28.83	29.25	52.0	0.0	0.563
80.00	0.36	0.94	0.00	0.00	0.00	27.67	28.07	52.0	0.0	0.540
85.00	0.35	0.94	0.00	0.00	0.00	26.36	26.76	52.0	0.0	0.515
90.00	0.33	0.95	0.00	0.00	0.00	24.90	25.29	52.0	0.0	0.486
95.00	0.32	0.95	0.00	0.00	0.00	23.24	23.62	52.0	0.0	0.455
98.50	0.31	0.96	0.00	0.00	0.00	21.97	22.35	52.0	0.0	0.430
100.00	0.30	0.92	0.00	0.00	0.00	21.40	21.76	52.0	0.0	0.419
102.33	0.34	1.08	0.00	0.00	0.00	23.55	23.97	52.0	0.0	0.461
105.00	0.33	1.09	0.00	0.00	0.00	22.31	22.73	52.0	0.0	0.437
110.00	0.29	0.94	0.00	0.00	0.00	19.71	20.07	52.0	0.0	0.386
115.00	0.28	0.94	0.00	0.00	0.00	17.42	17.77	52.0	0.0	0.342
120.00	0.26	0.94	0.00	0.00	0.00	14.80	15.15	52.0	0.0	0.291
125.00	0.25	0.94	0.00	0.00	0.00	11.80	12.16	52.0	0.0	0.234
127.00	0.20	0.68	0.00	0.00	0.00	10.50	10.76	52.0	0.0	0.207
130.00	0.19	0.68	0.00	0.00	0.00	9.16	9.42	52.0	0.0	0.181
133.08	0.18	0.68	0.00	0.00	0.00	7.65	7.92	52.0	0.0	0.152
135.00	0.17	0.68	0.00	0.00	0.00	6.65	6.92	52.0	0.0	0.133
136.00	0.20	0.83	0.00	0.00	0.00	7.27	7.61	52.0	0.0	0.146
140.00	0.13	0.56	0.00	0.00	0.00	4.42	4.65	52.0	0.0	0.089
145.00	0.11	0.54	0.00	0.00	0.00	1.81	2.14	52.0	0.0	0.041
148.00	0.01	0.02	0.00	0.00	0.00	0.03	0.05	52.0	0.0	0.001
150.00	0.00	0.02	0.00	0.00	0.00	0.00	0.03	52.0	0.0	0.001

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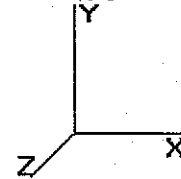
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Base Elev : 0.000 (ft)



Load Case: Ice	77.94 mph Wind with Ice	23 Iterations
Gust Response Factor	1.69	
Dead Load Factor	1.00	
Wind Load Factor	1.00	

Shaft Segment Forces

Seg Top Elev (ft)	Description	Kz	qz (psf)	qzGh (psf)	C (mph-ft)	Cf	Ice Thick (in)	Tributary (ft)	Aa (sf)	CfAa (sf)	Wind Force X (lb)	Dead Load Ice (lb)	Tot Dead Load (lb)	
0.00		0.00	1.00	15.551	26.281	364.53	0.650	0.500	0.00	0.000	0.00	0.0	0.0	
5.00		0.00	1.00	15.551	26.281	356.54	0.650	0.500	5.00	23.546	15.30	402.2	170.9	1,287.4
10.00		0.00	1.00	15.551	26.281	348.54	0.650	0.500	5.00	23.033	14.97	393.5	167.1	1,258.7
15.00		0.00	1.00	15.551	26.281	340.55	0.650	0.500	5.00	22.520	14.64	384.7	163.3	1,230.0
20.00		0.00	1.00	15.551	26.281	332.56	0.650	0.500	5.00	22.008	14.30	376.0	159.5	1,201.3
25.00		0.00	1.00	15.551	26.281	324.57	0.650	0.500	5.00	21.495	13.97	367.2	155.7	1,172.6
30.00		0.00	1.00	15.551	26.281	316.58	0.650	0.500	5.00	20.982	13.64	358.4	151.9	1,143.8
32.00	Bot - Section 2	0.00	1.00	15.551	26.281	313.38	0.650	0.500	2.00	8.249	5.36	140.9	60.2	450.0
35.00		0.00	1.01	15.815	26.727	311.19	0.650	0.500	3.00	12.408	8.07	215.6	90.3	1,253.8
37.50	Top - Section 1	0.00	1.03	16.130	27.259	310.20	0.650	0.500	2.50	10.199	6.63	180.7	74.3	1,030.2
40.00		0.00	1.05	16.430	27.766	313.98	0.650	0.500	2.50	10.071	6.55	181.8	73.3	548.8
45.00		0.00	1.09	16.992	28.717	310.95	0.650	0.500	5.00	19.757	12.84	368.8	142.9	1,075.2
50.00		0.00	1.12	17.511	29.594	307.18	0.650	0.500	5.00	19.244	12.51	370.2	139.1	1,046.5
55.00		0.00	1.15	17.995	30.411	302.80	0.650	0.500	5.00	18.731	12.18	370.3	135.3	1,017.8
60.00		0.00	1.18	18.448	31.177	297.88	0.650	0.500	5.00	18.219	11.84	369.2	131.5	989.1
64.83	Bot - Section 3	0.00	1.21	18.861	31.874	292.69	0.650	0.500	4.83	17.124	11.13	354.8	123.6	928.9
65.00		0.00	1.21	18.874	31.898	292.50	0.650	0.500	0.17	0.592	0.39	12.3	4.3	59.5
69.50	Top - Section 2	0.00	1.23	19.239	32.514	287.31	0.650	0.500	4.50	15.778	10.26	333.5	113.9	1,583.8
70.00		0.00	1.24	19.278	32.580	292.14	0.650	0.500	0.50	1.728	1.12	36.6	12.6	93.8
75.00		0.00	1.26	19.662	33.229	286.05	0.650	0.500	5.00	16.993	11.05	367.0	122.4	920.4
80.00		0.00	1.28	20.028	33.847	279.63	0.650	0.500	5.00	16.480	10.71	362.6	118.6	891.7
85.00		0.00	1.31	20.378	34.439	272.91	0.650	0.500	5.00	15.968	10.38	357.4	114.8	863.0
90.00		0.00	1.33	20.714	35.006	265.93	0.650	0.500	5.00	15.455	10.05	351.7	111.0	834.3
95.00		0.00	1.35	21.036	35.551	258.69	0.650	0.500	5.00	14.942	9.71	345.3	107.2	805.6
98.50	Bot - Section 4	0.00	1.36	21.255	35.920	253.50	0.650	0.500	3.50	10.155	6.60	237.1	73.2	547.2
100.0	Appertunance(s)	0.00	1.37	21.347	36.076	251.23	0.650	0.500	1.50	4.353	2.83	102.1	31.6	400.7
102.3	Top - Section 3	0.00	1.38	21.488	36.314	247.68	0.650	0.500	2.33	6.680	4.34	157.7	48.3	614.3
105.0		0.00	1.39	21.646	36.582	248.35	0.650	0.500	2.67	7.497	4.87	178.3	54.2	346.0
110.0	Appertunance(s)	0.00	1.41	21.936	37.072	240.52	0.650	0.500	5.00	13.665	8.88	329.3	97.8	629.0
115.0		0.00	1.42	22.216	37.545	232.50	0.650	0.500	5.00	13.152	8.55	321.0	94.0	604.5
120.0		0.00	1.44	22.488	38.005	224.30	0.650	0.500	5.00	12.639	8.22	312.2	90.2	579.9
125.0		0.00	1.46	22.752	38.451	215.95	0.650	0.500	5.00	12.127	7.88	303.1	86.4	555.3
127.0	Appertunance(s)	0.00	1.47	22.855	38.625	212.56	0.650	0.500	2.00	4.707	3.06	118.2	33.9	215.7
130.0		0.00	1.48	23.008	38.884	207.44	0.650	0.500	3.00	6.907	4.49	174.6	49.5	316.0
133.0	Bot - Section 5	0.00	1.48	23.163	39.145	202.12	0.650	0.500	3.08	6.906	4.49	175.7	49.5	315.5
135.0		0.00	1.49	23.258	39.305	198.79	0.650	0.500	1.92	4.275	2.78	109.2	30.8	324.2
136.0	Top - Section 4	0.00	1.49	23.307	39.388	197.04	0.650	0.500	1.00	2.200	1.43	56.3	15.9	166.8
140.0	Appertunance(s)	0.00	1.51	23.501	39.716	193.99	0.650	0.500	4.00	8.597	5.59	221.9	61.2	326.2
145.0		0.00	1.52	23.737	40.116	185.09	0.650	0.500	5.00	10.284	6.68	268.2	72.7	389.1
148.0	Appertunance(s)	0.00	1.53	23.877	40.352	179.70	0.650	0.500	3.00	5.924	3.85	155.4	42.3	224.1
150.0		0.00	1.54	23.968	40.507	176.07	0.650	0.500	2.00	3.847	2.50	101.3	27.6	145.5
							Totals:	150.00			10,321.9	3,602.9	28,386.2	

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
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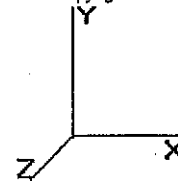
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Base Elev : 0.000 (ft)



Load Case: Ice	77.94 mph Wind with Ice	23 Iterations
Gust Response Factor 1.69		
Dead Load Factor : 1.00		
Wind Load Factor : 1.00		

Discrete Appurtenance Segment Forces

Elev (ft)	Description	Qty	qz (psf)	qzGh (psf)	CaAa Factor	Total CaAa (sf)	Horiz Ecc (ft)	Vert Ecc (ft)	Wind FX (lb)	Mom Y (lb-ft)	Mom Z (lb-ft)	Dead Load (lb)
100.0	4 ft HP Dish	1	21.347	36.076	1.00	16.52	0.000	0.000	595.97	0.00	0.00	280.00
110.0	T-Arms	3	21.936	37.072	0.67	22.37	0.000	0.000	829.34	0.00	0.00	903.00
110.0	LGP 21401 TMA	6	21.936	37.072	0.65	5.85	0.000	0.000	216.87	0.00	0.00	156.78
110.0	Powerwave 7770.00	6	21.936	37.072	0.73	28.61	0.000	0.000	1,060.78	0.00	0.00	405.78
127.0	Low Profile platform	1	22.855	38.625	1.00	27.32	0.000	0.000	1,055.24	0.00	0.00	2,100.00
127.0	DB844H90	12	22.855	38.625	0.91	49.36	0.000	0.000	1,906.48	0.00	0.00	483.60
140.0	Low Profile platform	1	23.501	39.716	1.00	27.32	0.000	0.000	1,085.04	0.00	0.00	2,100.00
140.0	DB980H90T2EM	3	23.501	39.716	0.73	8.43	0.000	0.000	334.86	0.00	0.00	84.00
140.0	DB980F90EM	6	23.501	39.716	0.73	16.86	0.000	0.000	669.73	0.00	0.00	168.00
148.0	S20045A1 LNA	12	23.877	40.352	0.74	8.46	0.000	0.000	341.48	0.00	0.00	180.36
148.0	Lightning Rod, 15'	1	24.216	40.925	1.00	5.10	0.000	7.500	208.72	0.00	1,565.40	126.00
148.0	Low Profile Platform	1	23.877	40.352	1.00	27.32	0.000	0.000	1,102.40	0.00	0.00	2,100.00
148.0	RR65-19-02DP	12	23.877	40.352	0.67	55.07	0.000	0.000	2,222.32	0.00	0.00	624.00
									11,629.24			9,711.52

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
 Top Dia : 21.837 (in)
 Taper : 0.246090 (in/ft)

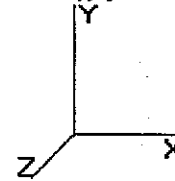
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Base Elev : 0.000 (ft)



Load Case: Ice 77.94 mph Wind with Ice 23 Iterations

Gust Response Factor 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Applied Segment Forces Summary

Seg Elev (ft)	Lateral FX (-) (lb)	Axial FY (-) (lb)	Torsion MY (lb-ft)	Moment MZ (lb-ft)
0.00	0.00	0.00	0.00	0.00
5.00	481.07	1,656.61	0.00	0.00
10.00	472.31	1,627.90	0.00	0.00
15.00	463.56	1,599.19	0.00	0.00
20.00	454.80	1,570.47	0.00	0.00
25.00	446.04	1,541.76	0.00	0.00
30.00	437.28	1,513.05	0.00	0.00
32.00	172.46	597.63	0.00	0.00
35.00	263.66	1,475.31	0.00	0.00
37.50	221.59	1,214.77	0.00	0.00
40.00	223.40	733.45	0.00	0.00
45.00	454.92	1,444.41	0.00	0.00
50.00	458.96	1,415.69	0.00	0.00
55.00	461.50	1,386.98	0.00	0.00
60.00	462.73	1,358.27	0.00	0.00
64.83	447.22	1,285.76	0.00	0.00
65.00	15.47	71.85	0.00	0.00
69.50	421.24	1,916.07	0.00	0.00
70.00	46.36	130.71	0.00	0.00
75.00	466.72	1,289.63	0.00	0.00
80.00	464.12	1,260.92	0.00	0.00
85.00	460.76	1,232.20	0.00	0.00
90.00	456.68	1,203.49	0.00	0.00
95.00	451.94	1,174.77	0.00	0.00
98.50	312.52	805.66	0.00	0.00
100.0	730.52	791.44	0.00	0.00
102.3	208.51	784.24	0.00	0.00
105.0	236.81	540.24	0.00	0.00
110.0	2,547.48	2,458.79	0.00	0.00
115.0	433.60	923.67	0.00	0.00
120.0	426.24	899.11	0.00	0.00
125.0	418.43	874.55	0.00	0.00
127.0	3,126.26	2,927.00	0.00	0.00
130.0	174.57	414.98	0.00	0.00
133.0	175.73	417.28	0.00	0.00
135.0	109.21	387.47	0.00	0.00
136.0	56.34	199.83	0.00	0.00
140.0	2,311.55	2,810.24	0.00	0.00
145.0	268.17	509.06	0.00	0.00
148.0	4,030.31	3,326.45	0.00	1,565.40
150.0	101.29	145.47	0.00	0.00
Totals:	24,372.35	47,916.37	0.00	1,565.40

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
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 Base Dia : 56.125 (in)
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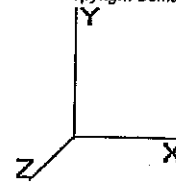
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Base Elev : 0.000 (ft)



Load Case: Ice

77.94 mph Wind with Ice

23 Iterations

Gust Response Factor 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Stresses

Seg Elev (ft)	Applied Stresses							Combined (ksi)	Allowable Stress (Fb) (ksi)	Stress Ratio
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)				
0.00	0.72	0.74	0.00	0.00	0.00	33.55	34.29	52.0	0.0	0.660
5.00	0.71	0.75	0.00	0.00	0.00	33.41	34.15	52.0	0.0	0.657
10.00	0.70	0.75	0.00	0.00	0.00	33.25	33.97	52.0	0.0	0.654
15.00	0.69	0.76	0.00	0.00	0.00	33.06	33.78	52.0	0.0	0.650
20.00	0.68	0.76	0.00	0.00	0.00	32.84	33.55	52.0	0.0	0.646
25.00	0.67	0.77	0.00	0.00	0.00	32.60	33.29	52.0	0.0	0.641
30.00	0.66	0.78	0.00	0.00	0.00	32.31	33.00	52.0	0.0	0.635
32.00	0.66	0.78	0.00	0.00	0.00	32.19	32.87	52.0	0.0	0.632
35.00	0.64	0.78	0.00	0.00	0.00	31.99	32.66	52.0	0.0	0.628
37.50	0.62	0.78	0.00	0.00	0.00	30.81	31.46	52.0	0.0	0.605
40.00	0.61	0.78	0.00	0.00	0.00	30.62	31.26	52.0	0.0	0.601
45.00	0.60	0.79	0.00	0.00	0.00	30.18	30.81	52.0	0.0	0.593
50.00	0.59	0.79	0.00	0.00	0.00	29.69	30.31	52.0	0.0	0.583
55.00	0.58	0.80	0.00	0.00	0.00	29.13	29.74	52.0	0.0	0.572
60.00	0.57	0.80	0.00	0.00	0.00	28.51	29.11	52.0	0.0	0.560
64.83	0.56	0.81	0.00	0.00	0.00	27.83	28.42	52.0	0.0	0.547
65.00	0.56	0.81	0.00	0.00	0.00	27.81	28.40	52.0	0.0	0.546
69.50	0.52	0.80	0.00	0.00	0.00	27.10	26.65	52.0	0.0	0.513
70.00	0.52	0.80	0.00	0.00	0.00	26.02	26.57	52.0	0.0	0.511
75.00	0.51	0.81	0.00	0.00	0.00	25.13	25.68	52.0	0.0	0.494
80.00	0.49	0.81	0.00	0.00	0.00	24.14	24.67	52.0	0.0	0.475
85.00	0.48	0.82	0.00	0.00	0.00	23.02	23.55	52.0	0.0	0.453
90.00	0.47	0.82	0.00	0.00	0.00	21.76	22.28	52.0	0.0	0.429
95.00	0.46	0.83	0.00	0.00	0.00	20.34	20.84	52.0	0.0	0.401
98.50	0.45	0.83	0.00	0.00	0.00	19.23	19.74	52.0	0.0	0.380
100.00	0.43	0.80	0.00	0.00	0.00	18.74	19.22	52.0	0.0	0.370
102.33	0.49	0.95	0.00	0.00	0.00	20.63	21.19	52.0	0.0	0.408
105.00	0.49	0.95	0.00	0.00	0.00	19.55	20.10	52.0	0.0	0.387
110.00	0.43	0.82	0.00	0.00	0.00	17.27	17.76	52.0	0.0	0.342
115.00	0.42	0.82	0.00	0.00	0.00	15.28	15.76	52.0	0.0	0.303
120.00	0.40	0.82	0.00	0.00	0.00	13.00	13.48	52.0	0.0	0.259
125.00	0.39	0.82	0.00	0.00	0.00	10.40	10.88	52.0	0.0	0.209
127.00	0.29	0.59	0.00	0.00	0.00	9.27	9.61	52.0	0.0	0.185
130.00	0.29	0.59	0.00	0.00	0.00	8.11	8.46	52.0	0.0	0.163
133.08	0.28	0.59	0.00	0.00	0.00	6.81	7.16	52.0	0.0	0.138
135.00	0.27	0.59	0.00	0.00	0.00	5.94	6.30	52.0	0.0	0.121
136.00	0.32	0.72	0.00	0.00	0.00	6.52	6.95	52.0	0.0	0.134
140.00	0.19	0.49	0.00	0.00	0.00	4.04	4.32	52.0	0.0	0.083
145.00	0.18	0.48	0.00	0.00	0.00	1.75	2.10	52.0	0.0	0.040
148.00	0.01	0.01	0.00	0.00	0.00	0.03	0.04	52.0	0.0	0.001
150.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	52.0	0.0	0.000

Pole : CT11217A
 Location : Newtown, CT
 Height : 150.0 (ft)
 Shape : 18 Sides
 Base Dia : 56.125 (in)
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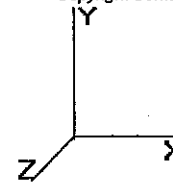
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Base Elev : 0.000 (ft)



Load Case: Ice 77.94 mph Wind with Ice 23 Iterations

Gust Response Factor 1.69
 Dead Load Factor : 1.00
 Wind Load Factor : 1.00

Calculated Stresses

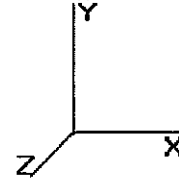
Seg Elev (ft)	Applied Stresses							Allowable Stress (Fb) (ksi)	Stress Ratio	
	Axial (Y) (ksi)	Shear (X) (ksi)	Shear (Z) (ksi)	Torsion (ksi)	Bending (X) (ksi)	Bending (Z) (ksi)	Combined (ksi)			
0.00	0.72	0.74	0.00	0.00	0.00	33.55	34.29	52.0	0.0	0.660
5.00	0.71	0.75	0.00	0.00	0.00	33.41	34.15	52.0	0.0	0.657
10.00	0.70	0.75	0.00	0.00	0.00	33.25	33.97	52.0	0.0	0.654
15.00	0.69	0.76	0.00	0.00	0.00	33.06	33.78	52.0	0.0	0.650
20.00	0.68	0.76	0.00	0.00	0.00	32.84	33.55	52.0	0.0	0.646
25.00	0.67	0.77	0.00	0.00	0.00	32.60	33.29	52.0	0.0	0.641
30.00	0.66	0.78	0.00	0.00	0.00	32.31	33.00	52.0	0.0	0.635
32.00	0.66	0.78	0.00	0.00	0.00	32.19	32.87	52.0	0.0	0.632
35.00	0.64	0.78	0.00	0.00	0.00	31.99	32.66	52.0	0.0	0.628
37.50	0.62	0.78	0.00	0.00	0.00	30.81	31.46	52.0	0.0	0.605
40.00	0.61	0.78	0.00	0.00	0.00	30.62	31.26	52.0	0.0	0.601
45.00	0.60	0.79	0.00	0.00	0.00	30.18	30.81	52.0	0.0	0.593
50.00	0.59	0.79	0.00	0.00	0.00	29.69	30.31	52.0	0.0	0.583
55.00	0.58	0.80	0.00	0.00	0.00	29.13	29.74	52.0	0.0	0.572
60.00	0.57	0.80	0.00	0.00	0.00	28.51	29.11	52.0	0.0	0.560
64.83	0.56	0.81	0.00	0.00	0.00	27.83	28.42	52.0	0.0	0.547
65.00	0.56	0.81	0.00	0.00	0.00	27.81	28.40	52.0	0.0	0.546
69.50	0.52	0.80	0.00	0.00	0.00	26.10	26.65	52.0	0.0	0.513
70.00	0.52	0.80	0.00	0.00	0.00	26.02	26.57	52.0	0.0	0.511
75.00	0.51	0.81	0.00	0.00	0.00	25.13	25.68	52.0	0.0	0.494
80.00	0.49	0.81	0.00	0.00	0.00	24.14	24.67	52.0	0.0	0.475
85.00	0.48	0.82	0.00	0.00	0.00	23.02	23.55	52.0	0.0	0.453
90.00	0.47	0.82	0.00	0.00	0.00	21.76	22.28	52.0	0.0	0.429
95.00	0.46	0.83	0.00	0.00	0.00	20.34	20.84	52.0	0.0	0.401
98.50	0.45	0.83	0.00	0.00	0.00	19.23	19.74	52.0	0.0	0.380
100.00	0.43	0.80	0.00	0.00	0.00	18.74	19.22	52.0	0.0	0.370
102.33	0.49	0.95	0.00	0.00	0.00	20.63	21.19	52.0	0.0	0.408
105.00	0.49	0.95	0.00	0.00	0.00	19.55	20.10	52.0	0.0	0.387
110.00	0.43	0.82	0.00	0.00	0.00	17.27	17.76	52.0	0.0	0.342
115.00	0.42	0.82	0.00	0.00	0.00	15.28	15.76	52.0	0.0	0.303
120.00	0.40	0.82	0.00	0.00	0.00	13.00	13.48	52.0	0.0	0.259
125.00	0.39	0.82	0.00	0.00	0.00	10.40	10.88	52.0	0.0	0.209
127.00	0.29	0.59	0.00	0.00	0.00	9.27	9.61	52.0	0.0	0.185
130.00	0.29	0.59	0.00	0.00	0.00	8.11	8.46	52.0	0.0	0.163
133.08	0.28	0.59	0.00	0.00	0.00	6.81	7.16	52.0	0.0	0.138
135.00	0.27	0.59	0.00	0.00	0.00	5.94	6.30	52.0	0.0	0.121
136.00	0.32	0.72	0.00	0.00	0.00	6.52	6.95	52.0	0.0	0.134
140.00	0.19	0.49	0.00	0.00	0.00	4.04	4.32	52.0	0.0	0.083
145.00	0.18	0.48	0.00	0.00	0.00	1.75	2.10	52.0	0.0	0.040
148.00	0.01	0.01	0.00	0.00	0.00	0.03	0.04	52.0	0.0	0.001
150.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	52.0	0.0	0.000

Pole : CT11217A
 Location : Newtown, CT
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Base Elev : 0.000 (ft)



Analysis Summary

Load Case	Reactions						Max Stresses			
	Shear FX (kips)	Shear FZ (kips)	Axial FY (kips)	Moment MX (ft-kips)	Moment MY (ft-kips)	Moment MZ (ft-kips)	Combined Stress (ksi)	Allowable Stress (ksi)	Elev (ft)	Stress Ratio
No Ice	29.0	0.00	38.33	0.00	0.00	2974.95	39.65	52.0	0.00	0.763
Ice	24.4	0.00	47.89	0.00	0.00	2556.42	34.29	52.0	0.00	0.660

POLE REACTIONS:

moment (kip-ft) =
 shear (kips) =
 min. vertical (kips) =
 max. vertical (kips) =

84.25
 1.07

FOOTING DIMENSIONS:

f_c (ksi) =
 square footing width (ft) =
 depth to bottom of footing (ft) =
 footing thickness (ft) =
 pier diameter (ft) =
 top of pier above ground (ft) =

19.89
 23.22
 86%
 0.34
 215
 0.16%

SOIL PROPERTIES:

depth to water (ft) =
 soil unit weight (pcf) =
 net allowable bearing pressure (psf)
 in excess of the minimum surrounding
 overburden pressure
 * soil wedge angle from vert (deg) =

7.00
 1355
 0.16%

WEIGHT CALCULATIONS:

2874.95 footing weight (kips) =
 29.04 pier weight (kips) =
 47.89 soil weight (kips) =
 47.89 soil wedge weight (kips) =
 water wedge weight (kips) =
 footing water weight (kips) =
 total water weight (kips) =
 4.0
 21 subtotal
 6.00
 2.00 TOTALS
 7.00 w/min. vertical
 0.5 w/max. vertical

7.02 Footing
 3.50 Footing Mu (Kip-ft/ft) =
 Footing As (in. sq. ft) =
 3.48
 10.44 Footing Phi Mu (kip-ft) =
 4111 Capacity (%) =
 0
 Y_u (kips) =
 Phi V_c (kips) =
 6083 Capacity (%) =
 67.58%
 P Shear v_u (psi) =
 P Shear v_u (psi) =
 7.00 All P Shear v_u (psi) =
 1355 Capacity (%) =

SOIL PRESSURES:

128 eccentricity (ft) =
 25 footing width / 6 =
 201 Eccentricity > Kern Distance
 48.497 resultant from toe (ft) =
 -24210 pressure length (ft) =
 2587 Toe pressure (psf) =
 0 Heel pressure (psf) =
 Allow.gross toe pressure
 403 at base of footing (psf) =
 x1.33 for wind (psf) =
 Capacity (%) =
 451
 451
 DESIGN FORCES:
 dist. To pier face (ft)
 pressure at pier face (psf) =

FOUNDATION CAPACITIES:

4741 Pier
 2.33 Pier Mu (ft-kips) =
 11063 Pier Mn (ft-kips) =
 14388 Capacity (%) =
 4.67
 67145
 2030
 3.50
 7105
 3500
 3.50
 12250
 0
 3.50
 0
 58.85
 Service moment (Kip-feet/ft) =

MOMENT CALCULATIONS:

100
 125 OTM(#-FT)
 4000 MR(#-FT)
 FS =
 30 FS=1.5 - OK
 39.08
 3164 small triangle force (plf) =
 4732 moment arm (ft) =
 moment (ft-lb/ft) =
 1.50 large triangle force (plf) =
 moment arm (ft) =
 moment (ft-lb/ft) =
 weight of footing (plf) =
 moment arm (ft) =
 moment (ft-lb/ft) =
 weight of soil (plf) =
 moment arm (ft) =
 moment (ft-lb/ft) =
 water weight (plf) =
 moment arm (ft) =
 moment (ft-lb/ft) =

* soil wedge does not work
 within the water table