



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

November 4, 2008

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

RE: **EM-CING-011-081008** - New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 1021 Blue Hills Avenue, Bloomfield, 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 with the following conditions:

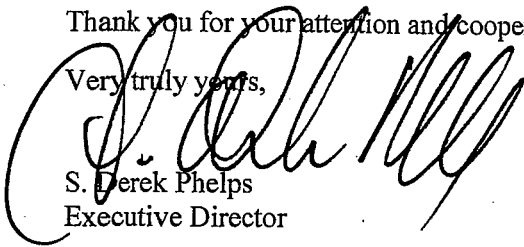
- The coax lines shall be installed as recommended in Figure 1 in the structural analysis report sealed by J. Darrin Holt, P.E.; and
- The Council is notified in writing of compliance with this condition.

The proposed modifications are to be implemented as specified here and in your notice dated October 8, 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.

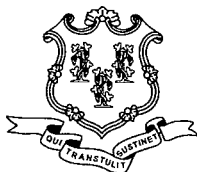
Very truly yours,

A large, stylized handwritten signature in black ink, appearing to read 'S. Derek Phelps'.

S. Derek Phelps
Executive Director

SDP/MP

- c: The Honorable Sydney Schulman, Mayor, Town of Bloomfield
- Louie Chapman, Jr., Town Manager, Town of Bloomfield
- Thomas B. Hooper, Director of Planning, Town of Bloomfield
- SBA



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Daniel F. Caruso
Chairman

October 9, 2008

The Honorable Sydney Schulman
Mayor
Town of Bloomfield
Town Hall
800 Bloomfield Avenue
P. O. Box 337
Bloomfield, CT 06002-0337

RE: **EM-CING-011-081008**- New Cingular Wireless PCS, LLC notice of intent to modify an existing telecommunications facility located at 1021 Blue Hills Avenue, Bloomfield, Connecticut.

Dear Mayor Schulman:

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 October 23, 2008.

Thank you for your cooperation and consideration.

Very truly yours,



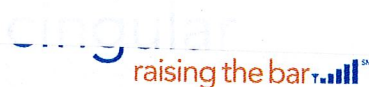
S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Thomas B. Hooper, Director of Planning, Town of Bloomfield
Louie Chapman, Jr., Town Manager, Town of Bloomfield

EM-CING-011-081008



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

Steven L. Levine
Real Estate Consultant

ORIGINAL

RECEIVED
OCT - 8 2008

CONNECTICUT
SITING COUNCIL

HAND DELIVERED

October 8, 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 1021 Blue Hills Avenue, Bloomfield
(owner, SBA)

Dear Chairman Caruso and Members of the Council:

In order to accommodate technological changes, implement Uniform Mobile Telecommunications System ("UMTS") capability, and enhance system performance in the State of Connecticut, New Cingular Wireless PCS, LLC ("AT&T") plans to modify the equipment configurations at many of its existing cell sites. Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the chief elected official of the municipality in which the affected cell site is located.

UMTS technology offers services to mobile computer and phone users anywhere in the world. Based on the Global System for Mobile (GSM) communication standard, UMTS is the planned worldwide standard for mobile users. UMTS, fully implemented, gives computer and phone users high-speed access to the Internet as they travel. They have the same capabilities even when they roam, through both terrestrial wireless and satellite transmissions.

Attached is a summary of the planned modifications, including power density calculations reflecting the change in AT&T's operations at the site. Also included is documentation of the structural sufficiency of the tower to accommodate the revised antenna configuration.

The changes to the facility do not constitute modifications as defined in Connecticut General

Statutes ("C.G.S.") Section 16-50i(d) because the general physical characteristics of the facility will not be significantly changed or altered. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected. Modifications to the existing site include all or some of the following as necessary to bring the site into conformance with the plan:

- Replacement of existing panel antennas with new antennas or, installation of additional antennas of a size required to accommodate UMTS.
- Installation of small tower mount amplifiers ("TMA's") and/or diplexers to the platform on which the panel antennas are mounted to enhance signal reception.
- Installation of additional or larger coaxial cables as required.
- Installation of an additional equipment cabinet in existing shelters, or on existing or enlarged concrete pads.
- Radome enlargement for flagpole and "stick" structures to accommodate larger antennas and additional associated equipment.

None of these modifications will extend the height of the tower.

2. The proposed changes will not extend the site boundaries. There will be no effect on the site compound other than some enlarged equipment pads as may be noted in the attachments.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more.

4. Radio frequency power density may increase due to use of one or more GSM channel for UMTS transmissions. However, the changes will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site.

For the foregoing reasons, New Cingular Wireless respectfully submits that the proposed changes at the referenced site constitute exempt modifications under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7636 with questions concerning this matter. Thank you for your consideration.

Sincerely,



Steven L. Levine
Real Estate Consultant

Attachments

**NEW CINGULAR WIRELESS
Equipment Modification**

1021 Blue Hills Avenue, Bloomfield
Site Number 1148
Exempt Modifications approved 3/98 and 8/02

Tower Owner/Manager: SBA

Equipment configuration: Self-Supporting Lattice Tower

Current and/or approved: Nine CSS panel antennas @ 97 ft c.l.
Six TMA's and six diplexers @ 97 ft
Nine runs 7/8 inch coax

Planned Modifications: Remove all existing antennas, TMA's, and diplexers
Install six Powerwave 7770 antennas @ 97 ft c.l.
Install six new TMA's and six new diplexers s @ 97 ft
Install three runs 7/8 inch coax

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 71.4 % 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 68.1 % of the standard.

Existing

Company	Centerline Ht (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm ²)	Standard Limits (mW/cm ²)	Percent of Limit
Other Users *							
Cingular TDMA *	97	880 - 894	16	100	0.0611	0.5867	53.85
Cingular GSM *	97	880 - 894	2	296	0.0226	0.5867	3.86
Cingular GSM *	97	1900 Band	2	427	0.0326	1.0000	3.26
Total							71.4%

* 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 *							53.85
Cingular GSM	97	880 - 894	4	296	0.0452	0.5867	7.71
Cingular GSM	97	1900 Band	2	427	0.0326	1.0000	3.26
Cingular UMTS	97	880 - 894	1	500	0.0191	0.5867	3.26
Total							68.1%

* Per CSC records.

Structural information:

The attached structural analysis demonstrates that the tower and foundation have adequate structural capacity to accommodate the proposed modifications (FDH Engineering, dated 5/17/06). This analysis is conservatively up-to-date in terms of tower loading, because

- there have been no additions to tower loading since the 2006 structural analysis was run;
- the 2006 structural is run with twelve lines of 1 ¼ inch coax, while the current plan is to retain the nine existing 7/8 inch lines and add three more 7/8 inch lines; and
- the former AT&T antennas and other equipment included in the 2006 structural at 110 ft AGL have since been decommissioned and removed.



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

October 8, 2008

Honorable Robert F. Burbank
1st Selectman, Town of Bloomfield
Town Office Bldg. 17 School Rd.
Bloomfield, CT 06232-1526

Re: Telecommunications Facility – 1021 Blue Hills Avenue, Bloomfield

Dear Mr. Burbank:

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 for
SBA Network Services, Inc.**

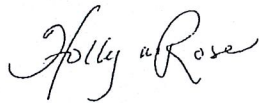
125' Self-Support Tower

**Site Name: Bloomfield
Site ID: CT01725-A**

#1148

FDH Project Number 06-05106E

Prepared By:



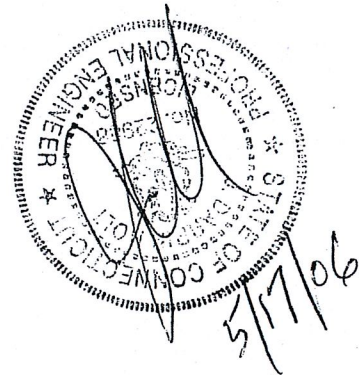
Holly Rose, EI
Senior Project Engineer

Reviewed By:



J. Darrin Holt, Ph.D, PE
President
CT PE License No. 22988

FDH Engineering, Inc.
PO Box 33037
Raleigh, NC 27636-3037
(919)-755-1012
info@fdh-inc.com



May 17, 2006

Prepared pursuant to EIA/TIA-222-F June 1996 Structural Standards for Steel Antenna Towers and Antenna Supporting Structures

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EXECUTIVE SUMMARY

At the request of SBA Network Services, FDH Engineering performed an analysis on the existing self-supporting tower located in Bloomfield, CT to determine whether the tower is structurally adequate to support both the existing and proposed loads, pursuant to the *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures, TIA/EIA-222-F*. Information pertaining to the existing antenna loading, current tower geometry, and the member sizes was obtained from Fred A. Nudd Corp. (Project No: 5566A) structural analysis report dated March 10, 1998 and SBA Network Services.

The *basic design wind speed* per *TIA/EIA-222-F* standards is 80 MPH without ice and 70MPH with ½" radial ice.

Conclusions

With the existing and proposed antennas from Cingular in place at 97 ft, the tower meets the requirements of the *TIA/EIA-222-F* standards. Furthermore, provided the foundation was designed and constructed per the dimensions and materials given in the Fred A. Nudd structural analysis report, the foundation should be adequate to support both the proposed and existing loading. For a more detailed description of the analysis of the tower, see the **Results** section of this report.

Our structural analysis has been performed assuming all information provided to FDH is accurate (i.e., the steel data, tower layout, current antenna loading, and proposed antennae loading) and that the tower was properly erected and maintained per the original design drawings.

Recommendation

To ensure the requirements of the *TIA/EIA-222-F* standards are met with the existing and proposed loading in place, we have the following recommendations:

1. The coax lines should be installed as shown in **Figure 1**.

APPURTENANCE LISTING

The proposed and existing antennas with their corresponding cables/coax lines are shown in **Table 1**. If the actual layout determined in the field deviates from this layout, FDH should be contacted to perform a revised analysis.

Table 1 – Appurtenance Loading

Existing Loading:

Antenna	Centerline Elevation (ft)	Coax and Lines ¹	Carrier	Description
1-6	125	(1) 1-1/4" (5) 7/8"	Arch, Blue Hills Fire & PD	(3) Celwave PD455 (1) Celwave PD156S (2) 20 ft. Whips (assumed)
7-12	125	(12) 1-5/8"	T-Mobile	(6) EMS RV90-17-00
13-24	120	(12) 1-1/4"	Nextel	(12) Decibel DB844H90E-XY
25-36	110	(12) 1-5/8"	AT&T	(12) Allgon 7184
37-45	97	(9) 7/8" ²	Cingular	(9) CSS DUO4-8670 (6) TMA (6) Diplexer
46-57	87	(12) 1-1/4"	Sprint	(12) Decibel 980F65T2E-M

¹ See **Figure 1** for coax location.

² Cingular will replace their existing loading. See the proposed loading below.

Proposed Loading:

Antenna	Centerline Elevation (ft)	Coax and Lines	Carrier	Description
1-6	97	(12) 1-1/4" ¹	Cingular	(6) Powerwave 7770.00 + (12) TMAs

¹ Cingular will remove the (9) existing antennas and coax and install (6) 7770.00 antennas, (12) TMAs, and (12) 1-1/4" coax.

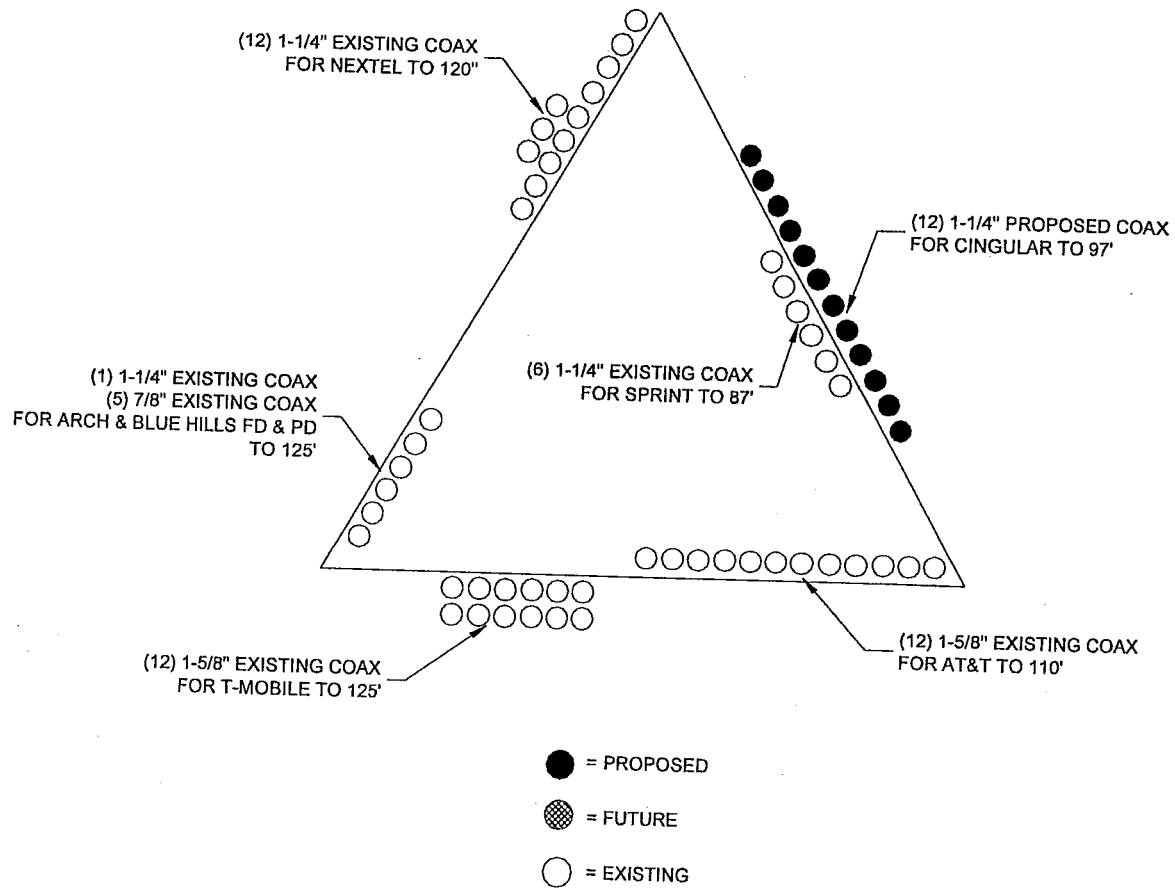


Figure 1 – Coax Layout

RESULTS

The following yield strength of steel for individual members was used for analysis:

Table 2 - Material Strength

Member Type	Yield Strength
Legs	50 ksi
Diagonals	36 ksi
Horizontals	36 ksi

Table 3 displays the summary of the ratio (as a percentage) of actual force in the member to their allowable capacities. Values greater than 100% indicate locations where the maximum force in the member exceeds its allowable capacity. *Note: Capacities up to 105% are considered acceptable.* **Table 4** displays the maximum foundation reactions for each load case.

If the assumptions outlined in this report differ from actual field conditions, FDH should be contacted to perform a revised analysis. Furthermore, as no information pertaining to the allowable twist and sway requirements for the existing or proposed appurtenances was provided, deflection and rotation were not taken into consideration when performing this analysis.

See the **Appendix** for detailed modeling information

Table 3 – Summary of Working Percentage of Structural Components

Bottom Elevation (ft)	Top Elevation (ft)	Existing and Proposed Loading Max. % Allowable Stress*		
		Legs	Diagonals	Horizontals
123	125	2%	20%	28%
120	123	6%	23%	32%
115	120	15%	40%	50%
110	115	30%	39%	---
105	110	44%	60%	---
100	105	62%	60%	---
95	100	44%	34%	---
90	95	55%	37%	---
85	90	66%	44%	---
80	85	78%	50%	---
73	80	56%	43%	---
67	73	65%	45%	---
60	67	74%	49%	---
53	60	61%	53%	---
47	53	67%	57%	---
40	47	74%	61%	---
30	40	89%	64%	---

Bottom Elevation (ft)	Top Elevation (ft)	Existing and Proposed Loading Max. % Allowable Stress*		
		Legs	Diagonals	Horizontals
20	30	99%	67%	---
10	20	66%	34%	---
0	10	72%	36%	---

*Capacities include 1/3 allowable increase for wind.

Table 4 – Maximum Base Reactions

Load Type	Direction	Computed Value
Individual Foundation	Horizontal	16 k
	Uplift	186 k
	Compression	213 k
Overturning Moment		2,169 k-ft

GENERAL COMMENTS

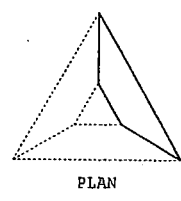
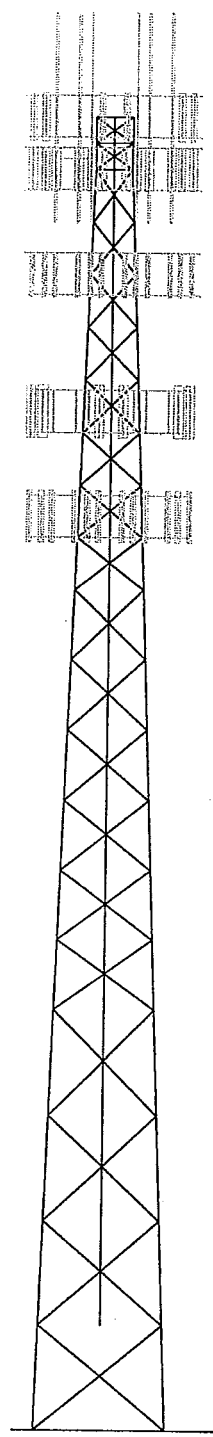
This engineering analysis is based upon the theoretical capacity of the structure. It is not a condition assessment of the tower and its foundation. It is the responsibility of SBA to verify that the tower modeled and analyzed is the correct structure. If there are substantial modifications made to the appurtenance loading provided by SBA, FDH Engineering should be notified immediately to perform a revised analysis.

LIMITATIONS

All opinions and conclusions are considered accurate to a reasonable degree of engineering certainty based upon the evidence available at the time of this report. All opinions and conclusions are subject to revision based upon receipt of new or additional/updated information. All services are provided exercising a level of care and diligence equivalent to the standard and care of our profession. No other warranty or guarantee, expressed or implied, is offered. Our services are confidential in nature and we will not release this report to any other party without the client's consent. The use of this engineering work is limited to the express purpose for which it was commissioned and it may not be reused, copied, or distributed for any other purpose without the written consent of FDH Engineering, Inc.

APPENDIX

Leg	55KSI	STD 8" Ø	STD 6" Ø	STD 5" Ø	STD 3-1/2" Ø	STD 2-1/2" Ø	125.0'
Diagonal	36KSI	A	L 3"x3"x3/16"	L 2-1/2"x2-1/2"x3/16"	L 2"x2"x3/16"	B	120.0'
Horizontal	36KSI					C	115.0'
Face Width	12.5'					B	100.0'
Panel Height # Panels		4 @ 10.0'	6 @ 6.7'	8 @ 5.0'		3.5' 3.5'	80.0'
							60.0'
							40.0'
							20.0'
							0.0'



ANTENNA LIST

NO	ELEV	ANTENNA	TX-LINE
1-12	125'	(6) RV90-17-00	(12) 1-5/8"
13-18	125'	(3) PD455 (1) PD156S (2) Whips	(1) 1-1/4" (5) 7/8"
19-30	120'	(12) DB844H0E-XY	(12) 1-1/4"
31-42	110'	(12) Alligon 7184	(12) 1-5/8"
43-48	97'	(6) 7770.00 (12) TMA's	(12) 1-1/4"
49-60	87'	(12) DB980F65T2E-M	(12) 1-1/4"

MATERIAL LIST

NO	TYPE
A	L 3-1/2"x3-1/2"x1/4"
B	L 1-1/2"x1-1/2"x3/16"
C	0.6300"x0.3130" RHS

TOTAL FOUNDATION LOADS	INDIVIDUAL FOOTING LOADS
H=27.40k	H=16.39k
V=37.88k	V=213.02k
M=2169.32k-ft	U=-186.13k
T=-5.09k-ft	

FDH

FDH Engineering, Inc.

2730 Rowland Road, Suite 100, Raleigh, NC 27615

Phone: (919) 755-1012 Fax: (919) 755-1031

Client: SBA Network Services Job No: 06-05106E Date: 17 may 2006

Location: Bloomfield, CT CT01725-A Total Height: 127.00' Tower Height: 125.00'

Standard: EIA - 222 F Design Wind & Ice: 80 MPH No Ice & 69.6 w/ 1/2"ice