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@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

May 10, 2002

Michele G. Briggs
Manager of Real Estate
SNET Mobility LLC
500 Enterprise Drive, 3rd Floor
Rocky Hill, CT 06067

RE: **EM-CING-084-020422** - SNET Mobility, LLC notice of intent to modify an existing telecommunications facility located at 10 Bona Street, Milford, Connecticut.

Dear Ms. Briggs:

At a public meeting held on May 7, 2002, the Connecticut Siting Council (Council) acknowledged 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 April 22, 2002. 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. 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,

Mortimer A. Gelston
Chairman

MAG/RKE/laf

c: Honorable James L. Richetelli, Jr., Mayor, City of Milford
Wade Pierce, City Planner, City of Milford
Integrated Mobile Services, LLC
Sandy M. Carter, Verizon Wireless

SNET Mobility, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7700
Fax: (860) 513-7190

Michele G. Briggs
Manager of Real Estate

April 22, 2002

Mr. Mortimer A. Gelston, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051

Re: SNET Mobility, LLC notice of intent to modify an existing telecommunications facility located at 10 Bona Street, Milford, Connecticut.

Dear Mr. Gelston:

On November 7, 2001, the Connecticut Siting Council approved an application by SNET Mobility, LLC ("SNET") to install antennas and equipment at a planned wireless telecommunications tower facility located at 10 Bona Street in Milford, Connecticut. The Bona Street facility is owned and operated by Integrated Mobile Services, LLC ("IMS"), with offices at 63-3 North Branford Road, Branford, CT 06405. IMS leases the land from Joseph N. Clemente of Milford.

The monopole tower has now been constructed, and the SNET installation became operational on March 4, 2004.

It very recently came to the attention of SNET's Real Estate Group that several changes to the approved plan were made during construction of the Bona Street tower facility. First, in response to a ruling from the Federal Aviation Agency, IMS actually constructed the monopole to a *lower* height of 133 feet above ground level instead of 151 feet as originally planned. Additionally, due to rapidly evolving telecommunications technology, SNET installed as part of its new statewide GSM overlay a different model of antenna than was approved in TS-CING-084-011019. Lastly, SNET placed some additional small pieces of telecommunications equipment on the tower for the GSM project.

Please accept this letter as notification to the Connecticut Siting Council, 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 is being sent to the Mayor of the Town of Milford.

We ask the Council's pardon for submitting this Notice of Exempt Modification after-the-fact, and submit that the delay came about in good faith due to an unusual set of circumstances. As the following discussion will relate, the changes have not adversely affected public health or safety, or the environment. SNET recognizes its duty, however, to correct the record concerning the Bona Street facility in Milford in as timely a manner as possible.

Enclosed with this notice are revised power density calculations, a revised tower profile, and a structural analysis demonstrating continued regulatory compliance and site safety under SNET's revised equipment configuration.

Equipment Substitution and Additions

Under TS-CING-084-011019, SNET was approved to install up to twelve Decibel Products Model DB846H80 antennas, approximately 72 inches in height, on a triangular antenna platform with the center of radiation at 147 feet above ground level ("AGL"). This equipment was to operate 19 channels at 100 Watts ERP and 880-894 MHz.

SNET has actually built the Bona Street cell site under a revised plan to install:

- Up to 12 dual band DUO4-8670 panel antennas (4-ft high; CSS Antenna Co.) at a centerline height of 133 feet AGL.
- Up to 6 ADC Inc. tower mount amplifiers on the same platform as the antennas. These units enhance reception of incoming signals and have no effect on power density. They are in the form of metal boxes measuring approximately 5" x 9" x 13" and weigh approximately 26 pounds apiece.
- One LMU ("location measurement unit"; for emergency 911 locating) either on the tower at a yet-undetermined height or on the equipment building. This unit is of insignificant size (9 inches high) and weight (9 ounces).
- One GPS antenna on the equipment building. This antenna is receive-only.

With this "GSM" configuration, SNET will broadcast up to:

- 16 channels, 100 Watts ERP, 880 - 894 MHz;
- 2 channels, 296 Watts ERP, 880 - 894 MHz;
- 2 channels, 427 Watts ERP, 1930 - 1935 MHz.

The changes to the Bona Street tower facility in Milford do not constitute a modification 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) because they will not result in any substantial adverse environmental effect.

1. The height of the overall structure has not been increased. Rather, tower height has been *reduced* by 18 feet. (This Notice does not act as a surrender of IMS's local and Council approvals for a 151 foot tower at the Bona Street site in Milford. It merely concerns what has been done up to the present time, without bearing upon what IMS and the FAA may decide in the future.)

2. The changes did not affect the property boundaries. All construction was performed within the approved fence.

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

4. Radio frequency power density, however, has increase owing to combination of lower antenna height and the use of additional channels broadcasting at higher power. Nonetheless, the SNET installation still does not increase the total radio frequency electromagnetic radiation power density, measured at the tower base, to or above the standard adopted by the State of Connecticut and the FCC. A comparison of before and after "worst-case" exposure calculations in accordance with FCC OET Bulletin No. 65 (1997) for a point of interest at the base of the tower follows:

Installation per TS-CING-084-011019:

Company	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density † (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
SNET	147	880-894	19	100	0.0316	0.5867	5.4
Verizon	Future						
Total							5.4 %

† Please note that the standard power density equation provided by the Council in its memo of January 22, 2001 incorporates a ground reflection factor of 2.56 (i.e., the square of 1.6) as described in FCC OET Bulletin No. 65.

With lower antenna height and GSM installation:

Company	Centerline Height (feet)	Frequency (MHz)	Number of Channels	Power Per Channel (Watts)	Power Density (mW/cm^2)	Standard Limits (mW/cm^2)	Percent of Limit
SNET TDMA	133	880 - 894	16	100	0.0325	0.5867	5.5
SNET GSM	133	880 - 894	2	296	0.0120	0.5867	2.1
SNET GSM	133	1929 - 1935	2	427	0.0174	1.0000	1.7
Verizon	Future						
Total							9.3%

As the tables demonstrate, the "worst-case" exposure calculation increased by 3.9 % of the ANSI/IEEE standard to 9.3 %, as calculated for mixed frequency sites. Power density levels from SNET's revised use of the tower facility remain well within applicable ANSI/IEEE standards following the design and equipment changes.

For the foregoing reasons, SNET respectfully submits that design changes implemented at the Milford site during construction constitute an exempt modification under R.C.S.A. Section 16-50j-72(b)(2).

Please feel free to call me at (860) 513-7700 with questions concerning this application. Thank you for your consideration in this matter.

Sincerely,

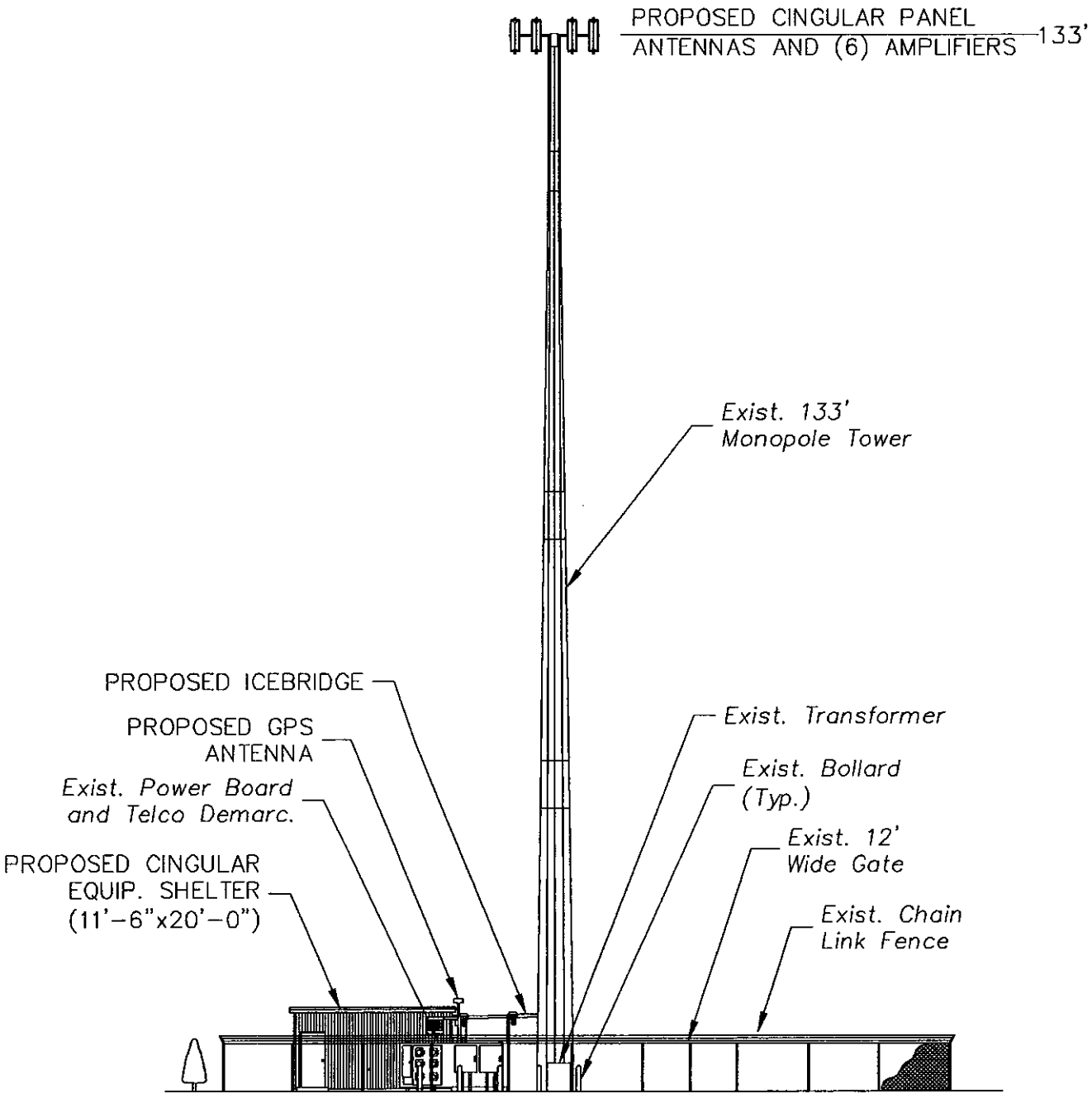
Michele G. Briggs

Michele G. Briggs
Manager of Real Estate

Enclosures

cc: Honorable Frederick L. Lisman, Mayor

RAD. CENTER: 133 FT. (AGL)



SOUTH ELEVATION VIEW

REVISED 4/17/02

DESIGN EXHIBIT

NORTH

SITE NAME: INTEGRATED - MILFORD

ADDRESS: 10 BONA STREET
MILFORD, CT 06460

DRAWN: AMC | CHECKED: GMP | SCALE: 1"=20'

THIS DRAWING AND ALL DATA CONTAINED HEREIN IS FOR INFORMATIONAL PURPOSES ONLY. NOT INTENDED FOR DESIGN OR CONSTRUCTION USE. ALL DATA SHOULD BE VERIFIED

MGI #: 15364
TASK #: 1218
DATE: 9/17/01

Maguire Group Inc.
Architects Engineers Planners
One Court Street
New Britain, Connecticut 06051

cingular WIRELESS

SUMMIT MANUFACTURING, LLC

225 KIWANIS BOULEVARD, WEST HAZLETON, PA 18201
PHONE: (888) 847-6537 FAX: (888) 460-6885
VISIT US AT WWW.SUMMITMFG.COM

PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street, Suite 500, Columbus, Ohio 43215
(614) 221-6679 Fax: (614) 448-4105 www.PJFweb.com

JOB DATA			
Page 1 of 2		Job No.	29201-1210
By	AB	Design No.	SUMMIT #16109-R4
Chk'd By	MFP	Date	
		Rev. No. 1	Rev. Date 12-03-2001
Pole	133'-FT MONOPOLE		
Site	CT-0020, IWS-MILFORD, FAIRFIELD CO., CT		
Owner	NATCOMM		
Ref. No.			
Design	85 MPH / 74 MPH + 1/2" RADIAL ICE ACCORDING TO TIA/EIA-222-F 1996		

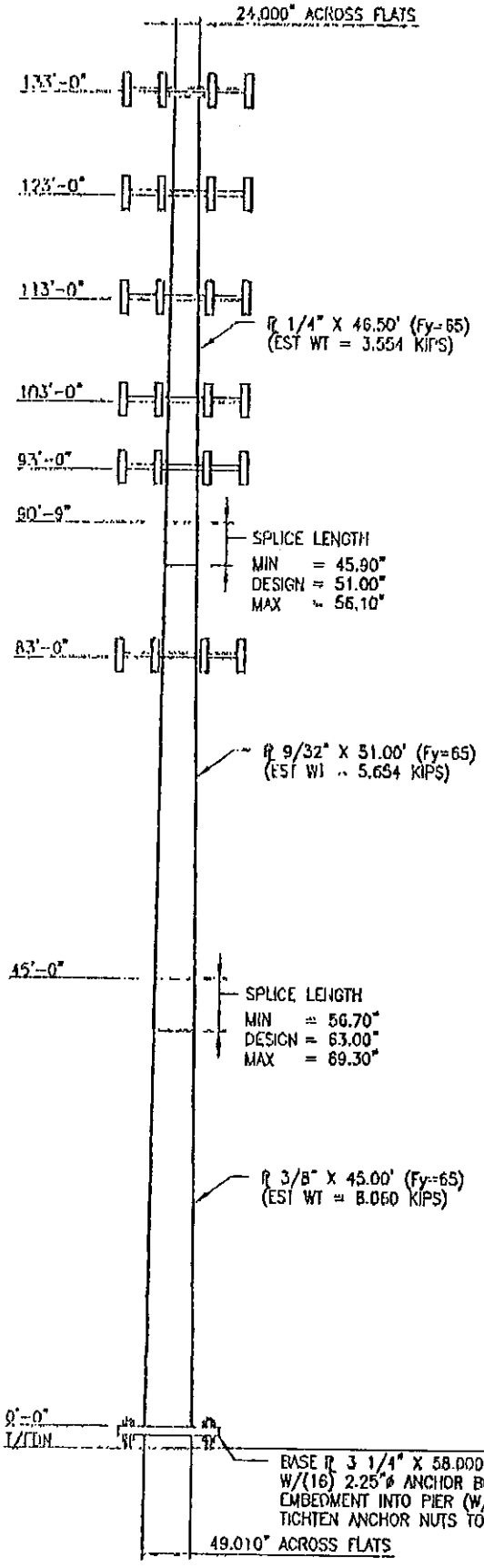
LOAD CASES		
CASE 1	85 MPH WITH NO ICE	DESIGN WIND
CASE 2	74 MPH WITH 1/2" RADIAL ICE	REDUCED WIND WITH ICE
CASE 3	50 MPH WITH NO ICE	OPERATIONAL WIND

POLE SPECIFICATIONS	
Pole Shape Type:	18-SIDED POLYGON
Taper:	0.196034 IN/FT
Shaft Steel:	ASTM A607 GRADE 65
Base PL Steel:	ASTM A572 GRADE 55 (55 KSI)
Anchor Bolts:	2 1/4"ø x 8'-0" LONG #18J ASTM A615 GRADE 75

ANTENNA LIST

No.	Elev.	Description
-	TOP	5/8" LIGHTNING ROD
1-12	TOP	(12) DB896H PANEL
-	TOP	14' LOW PROFILE PLATFORM
13-24	123.00	(12) DAPA 48000 PCS PANEL
-	123.00	14' CLAMP-ON LOW PROFILE PLATFORM
25-36	113.00	(12) DAPA 48000 PCS PANEL
-	113.00	14' CLAMP-ON LOW PROFILE PLATFORM
37-48	103.00	(12) DAPA 48000 PCS PANEL
-	103.00	14' CLAMP-ON LOW PROFILE PLATFORM
49-60	93.00	(12) DAPA 48000 PCS PANEL
-	93.00	14' CLAMP-ON LOW PROFILE PLATFORM
61-72	83.00	(12) DAPA 48000 PCS PANEL
-	83.00	14' CLAMP-ON LOW PROFILE PLATFORM

STEP BOLTS FULL HEIGHT.
ANTENNA FEED LINES RUN INSIDE OF POLE.



Elevation	85 MPH WIND		50 MPH WIND	
	Lateral Deflection (Inches)	Rotation (sway) (degrees)	Lateral Deflection (Inches)	Rotation (sway) (degrees)
TOP	84.9	5.143	29.3	1.779

SHAFT SECTION DATA

Shaft Section	Section Length (feet)	Plate Thickness (in.)	Lap Splice (in.)	Diameter Across Flats (inches) @ Top	Diameter Across Flats (inches) @ Bottom
1	46.50	0.2500	51.00	24.000	33.116
2	51.00	0.2813	63.00	31.782	41.780
3	45.00	0.3750		40.188	49.010

NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

BASE REACTIONS FOR FOUNDATION DESIGN

MOMENT =	3400 ft-kips
SHEAR =	32 kips
AXIAL =	31 kips

STATE OF CONNECTICUT
KEVIN P. DAUMAN
No. 17801
LICENSED
PROFESSIONAL ENGINEER

12-3-20

SUMMIT MANUFACTURING, LLC
225 KIWANIS BOULEVARD, WEST HAZLETON, PA 18201
PHONE: (888) 847-6537 FAX: (888) 460-6885
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PAUL J. FORD AND COMPANY
STRUCTURAL ENGINEERS
250 East Broad Street, Suite 500, Columbus, Ohio 43215
(614) 221-6679 Fax: (614) 448-4105 www.PJFweb.com

NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

2. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 (GRADE 60) EXCEPT THAT PIER TIES MAY BE ASTM A-615 (GRADE 40).

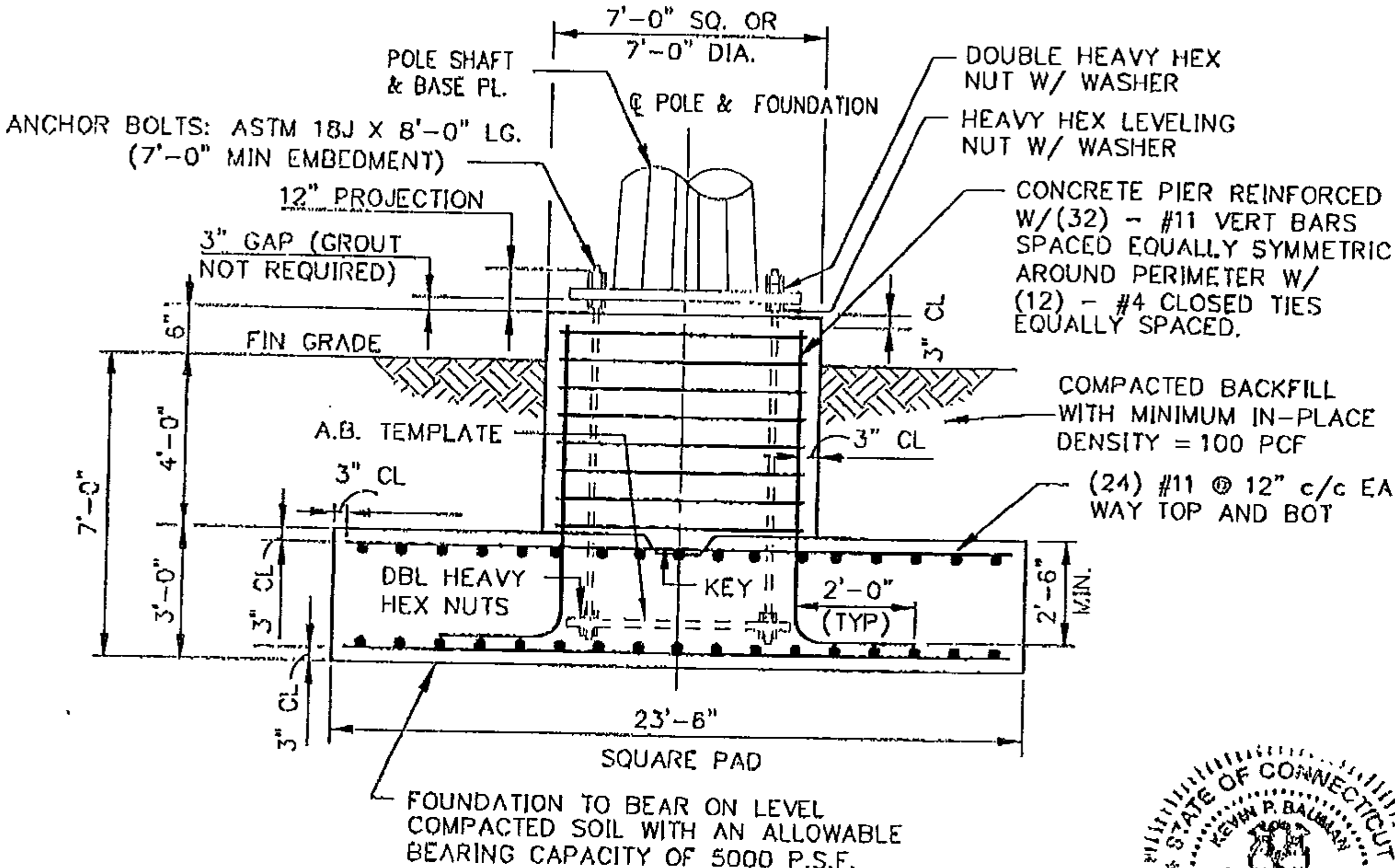
3. SEE PJF #29201-1210, PAGE 1, DATED 12-03-2001 FOR ANCHOR BOLT QUANTITY, SIZE, LENGTH, AND BOLT CIRCLE.

4. CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.

JOB DATA			
Page 1 of 1		Job No.	29201-1210
By	CTL	Design No.	SUMMIT #16109
Chk'd By	MFP	Date	
		Rev. No. 2	Rev. Date 12-10-2001
Pole	133-FT MONOPOLE		
Site	CT-0020, IWS-MILFORD, NEW HAVEN CO., CT		
Owner	NATCOMM		
Ref. No			
Design	85 MPH / 74 MPH + 1/2" RADIAL ICE ACCORDING TO TIA/EIA-222-F 1996		

FOUNDATION SPECIFICATIONS	
Volume Concrete Required:	70 CUBIC YARDS
Soils Report:	CRISCUOLO & SHEPARD ASSOCIATES INC. 2001-927 09-06-2001

DESIGN CRITERIA	
Moment:	3400 FT-KIPS
Shear:	32 KIPS
Axial:	31 KIPS


7'-0" SQ. OR
7'-0" DIA.
POLE SHAFT
& BASE PL.
℄ POLE & FOUNDATION
DOUBLE HEAVY HEX
NUT W/ WASHER
HEAVY HEX LEVELING
NUT W/ WASHER
ANCHOR BOLTS: ASTM 18J X 8'-0" LG.
(7'-0" MIN EMBEDMENT)
12" PROJECTION
3" GAP (GROUT
NOT REQUIRED)
CONCRETE PIER REINFORCED
W/(32) - #11 VERT BARS
SPACED EQUALLY SYMMETRIC
AROUND PERIMETER W/
(12) - #4 CLOSED TIES
EQUALLY SPACED.
6"
3" CL
FIN GRADE
COMPACTED BACKFILL
WITH MINIMUM IN-PLACE
DENSITY = 100 PCF
A.B. TEMPLATE
3" CL
4'-0"
7'-0"
3" CL
(24) #11 @ 12" c/c EA
WAY TOP AND BOT
3'-0"
3" CL
DBL HEAVY
HEX NUTS
KEY
2'-0"
(TYP)
2'-6"
MIN.
3" CL
23'-6"
SQUARE PAD
FOUNDATION TO BEAR ON LEVEL
COMPACTED SOIL WITH AN ALLOWABLE
BEARING CAPACITY OF 5000 P.S.F.

STATE OF CONNECTICUT · KEVIN P. BAUMAN · No. 17801 · LICENSED · PROFESSIONAL ENGINEER

12-10-2001

PAD AND PIER FOUNDATION

NATCOMM, LLC

Consulting Engineers

April 9, 2002

Mr. Steve Levine
Cingular Wireless
500 Enterprise Drive, 3rd Floor
Rocky Hill, CT 06067

Re: *Cingular,*
10 Bona St.,
Milford, CT 06460

Natcomm Project No. 903D

Dear Mr. Levine,

We have reviewed the proposed Cingular antenna installation at the above referenced site. The purpose of the review is to determine the adequacy of an existing 133 ft. monopole to support the proposed antennas. The review considered the effects of wind load, dead load, ice load and seismic forces in accordance with TIA/EIA-222-F and Connecticut State Building Code. Structural design documents prepared by PAUL J. FORD AND COMPANY structural engineers - SUMMIT MANUFACTURAL, LLC job #29201-1210 dated December 3, 2000 were used as reference material along with tower loading information furnished by Cingular Wireless.

The proposed antenna loading is as follows:

- Cingular: Twelve (12) CSS DUO4-8670 & Six (6) dual band tower top amplifiers mounted on 14' low profile platform at an elevation of 133 ft.

The future antenna loading is as follows:

- Future carrier: Twelve (12) DAPA 48000 PCS mounted on a 14 ft. low profile platform at an elevation of 123 ft.
- Future carrier: Twelve (12) DAPA 48000 PCS mounted on a 14 ft. low profile platform at an elevation of 113 ft.
- Future carrier: Twelve (12) DAPA 48000 PCS mounted on a 14 ft. low profile platform at an elevation of 103 ft.

Based on the information provided, the existing structure meets all the requirements of the TIA/EIA-222-F standards for a basic wind speed of 85mph with ½ inch radial ice.

In conclusion, the existing 133 ft. monopole is adequate to support the proposed Cingular antennas.

If there are any questions regarding this matter, please feel free to call.

Regards,

Carlo F. Centore, P.E.
Senior Project Manger

STATE OF CONNECTICUT
CARLO F. CENTORE
No. 16694
LICENSED
PROFESSIONAL ENGINEER

(203) 488-0580 • Fax (203) 488-8587 • www.natcommllc.com 63-2 North Branford Rd. Branford, CT 06405

SNET Mobility, LLC
500 Enterprise Drive
Rocky Hill, Connecticut 06067-3900
Phone: (860) 513-7700
Fax: (860) 513-7190

Michele G. Briggs
Manager of Real Estate

April 22, 2002

Honorable Frederick L. Lisman, Mayor
Parson's Complex
70 West River St.
Milford, Connecticut 06460

Re: SNET Mobility, LLC notice of intent to modify an existing telecommunications facility located at 10 Bona Street, Milford, Connecticut.

Dear Mayor Lisman:

On November 7, 2001, the Connecticut Siting Council approved an application by SNET Mobility, LLC ("SNET") to install antennas and equipment at a planned wireless telecommunications tower facility located at 10 Bona Street in Milford, Connecticut. The Bona Street facility is owned and operated by Integrated Mobile Services, LLC ("IMS"), with offices at 63-3 North Branford Road, Branford, CT 06405. IMS leases the land from Joseph N. Clemente of Milford.

Several changes to the approved plan were made by IMS and SNET during the construction phase. First, owing to concerns of the Federal Aviation Agency, the monopole tower was actually constructed to a height of 133 feet above ground level instead of 151 feet as originally planned. Additionally, due to rapidly evolving telecommunications technology, SNET installed a different model of antenna than was approved in EM-SNET/NEXTEL-078-020226. Lastly, SNET placed some additional small pieces of telecommunications equipment on the tower.

A Notice of Exempt Modification has been filed with the Connecticut Siting Council as required by Regulations of Connecticut State Agencies ("R.C.S.A.") Section 16-50j-73. Please accept this letter as notification to the Town of Milford 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 fully describes SNET's proposal. 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) 513-7700 or Mr. Derek Phelps, Executive Director, Connecticut Siting Council at (860) 827-2935.

Sincerely,

Michele G. Briggs

Michele G. Briggs
Manager of Real Estate

Enclosure

SUMMIT MANUFACTURING, LLC
335 KIWANIS BOULEVARD, WEST HAZLETON, PA 18201
PHONE. (888) 847-6537 FAX: (888) 460-6885
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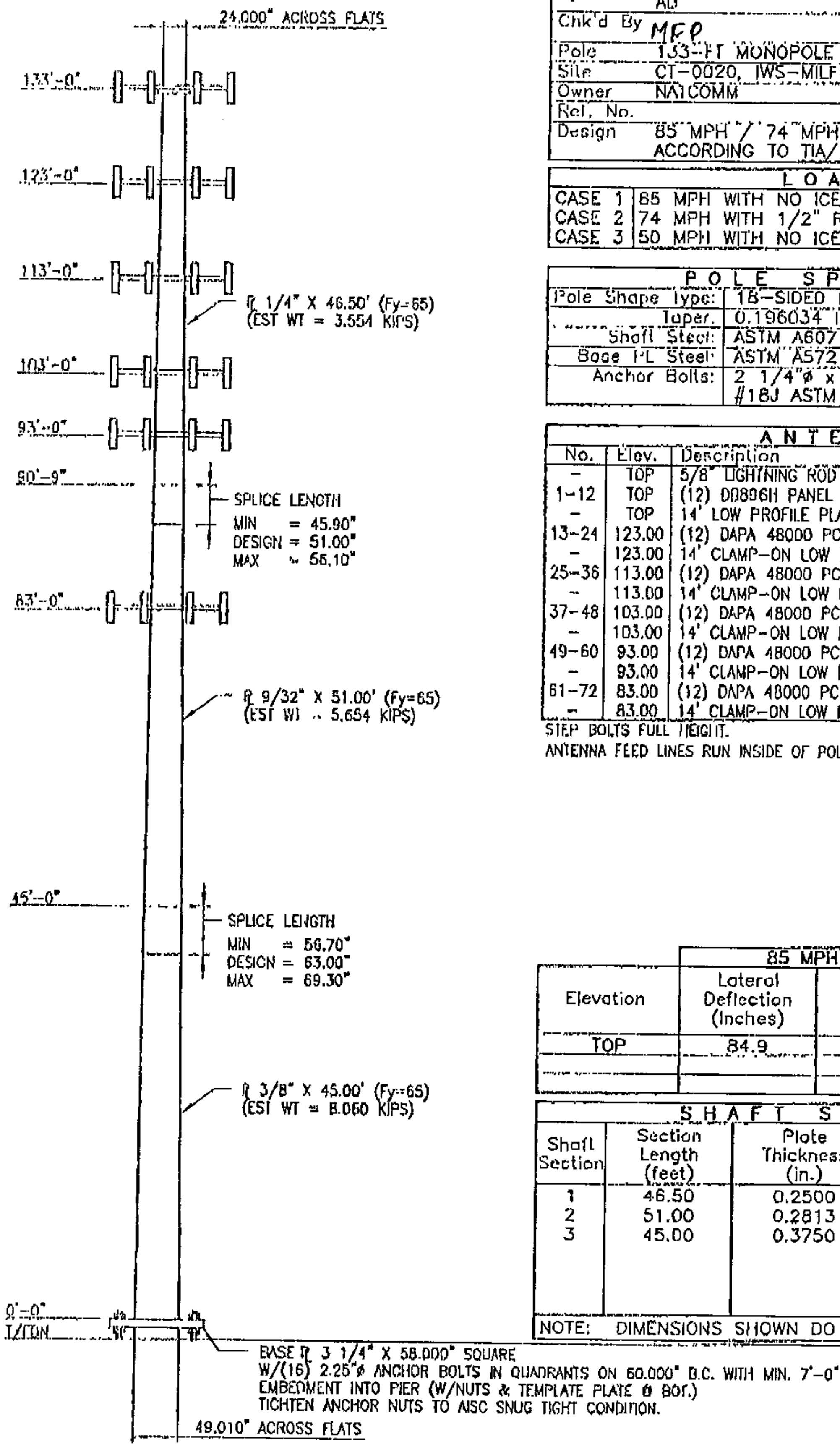

JOB DATA			
Page 1 of 2		Job No.	29201-1210
By	AD	Design No.	SUMMIT #16109-R4
Chk'd By	MFP	Date	
		Rev. No. 1	Rev. Date 12-03-2001
Pole	133-FT MONOPOLE		
Site	CT-0020, IWS-MILFORD, FAIRFIELD CO., CT		
Owner	NATCOMM		
Ref. No.			
Design	85 MPH / 74 MPH + 1/2" RADIAL ICE ACCORDING TO TIA/EIA-222-F 1996		

LOAD CASES		
CASE 1	85 MPH WITH NO ICE	DESIGN WIND
CASE 2	74 MPH WITH 1/2" RADIAL ICE	REDUCED WIND WITH ICE
CASE 3	50 MPH WITH NO ICE	OPERATIONAL WIND

POLE SPECIFICATIONS	
Pole Shape Type:	18-SIDED POLYGON
Taper:	0.196034 IN/FT
Shaft Steel:	ASTM A607 GRADE 65
Base PL Steel:	ASTM A572 GRADE 55 (55 KSI)
Anchor Bolts:	2 1/4"ø x 8'-0" LONG #18J ASTM A615 GRADE 75

ANTENNA LIST

No.	Elev.	Description
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1-12	TOP	(12) DB896H PANEL
-	TOP	14' LOW PROFILE PLATFORM
13-24	123.00	(12) DAPA 48000 PCS PANEL
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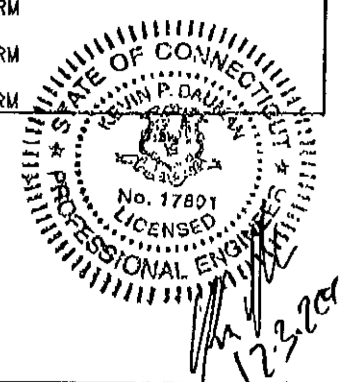
-	103.00	14' CLAMP-ON LOW PROFILE PLATFORM
49-60	93.00	(12) DAPA 48000 PCS PANEL
-	93.00	14' CLAMP-ON LOW PROFILE PLATFORM
61-72	83.00	(12) DAPA 48000 PCS PANEL
-	83.00	14' CLAMP-ON LOW PROFILE PLATFORM

STEP BOLTS FULL HEIGHT.
ANTENNA FEED LINES RUN INSIDE OF POLE.



Elevation	85 MPH WIND Lateral Deflection (Inches)	85 MPH WIND Rotation (sway) (degrees)	50 MPH WIND Lateral Deflection (Inches)	50 MPH WIND Rotation (sway) (degrees)
TOP	84.9	5.143	29.3	1.779

SHAFT SECTION DATA

Shaft Section	Section Length (feet)	Plate Thickness (in.)	Lap Splice (in.)	Diameter Across Flats (inches) @ Top	Diameter Across Flats (inches) @ Bottom
1	46.50	0.2500		24.000	33.116
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3	45.00	0.3750	63.00	40.188	49.010

NOTE: DIMENSIONS SHOWN DO NOT INCLUDE GALVANIZING TOLERANCES

BASE REACTIONS FOR FOUNDATION DESIGN

MOMENT = 3400 ft-kips
SHEAR = 32 kips
AXIAL = 31 kips

SUMMIT MANUFACTURING, LLC
225 KIWANIS BOULEVARD, WEST HAZLETON, PA 18201
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PAUL J. FORD AND COMPANY
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250 East Broad Street, Suite 500, Columbus, Ohio 43215
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NOTES:

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI AT 28 DAYS.

2. REINFORCING STEEL SHALL CONFORM TO THE REQUIREMENTS OF ASTM A-615 (GRADE 60) EXCEPT THAT PIER TIES MAY BE ASTM A-615 (GRADE 40).

3. SEE PJF #29201-1210, PAGE 1, DATED 12-03-2001 FOR ANCHOR BOLT QUANTITY, SIZE, LENGTH, AND BOLT CIRCLE.

4. CONTRACTOR SHALL READ THE GEOTECHNICAL REPORT AND CONSULT THE GEOTECHNICAL ENGINEER AS NECESSARY PRIOR TO CONSTRUCTION.

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		Rev. No. 2	Rev. Date 12-10-2001
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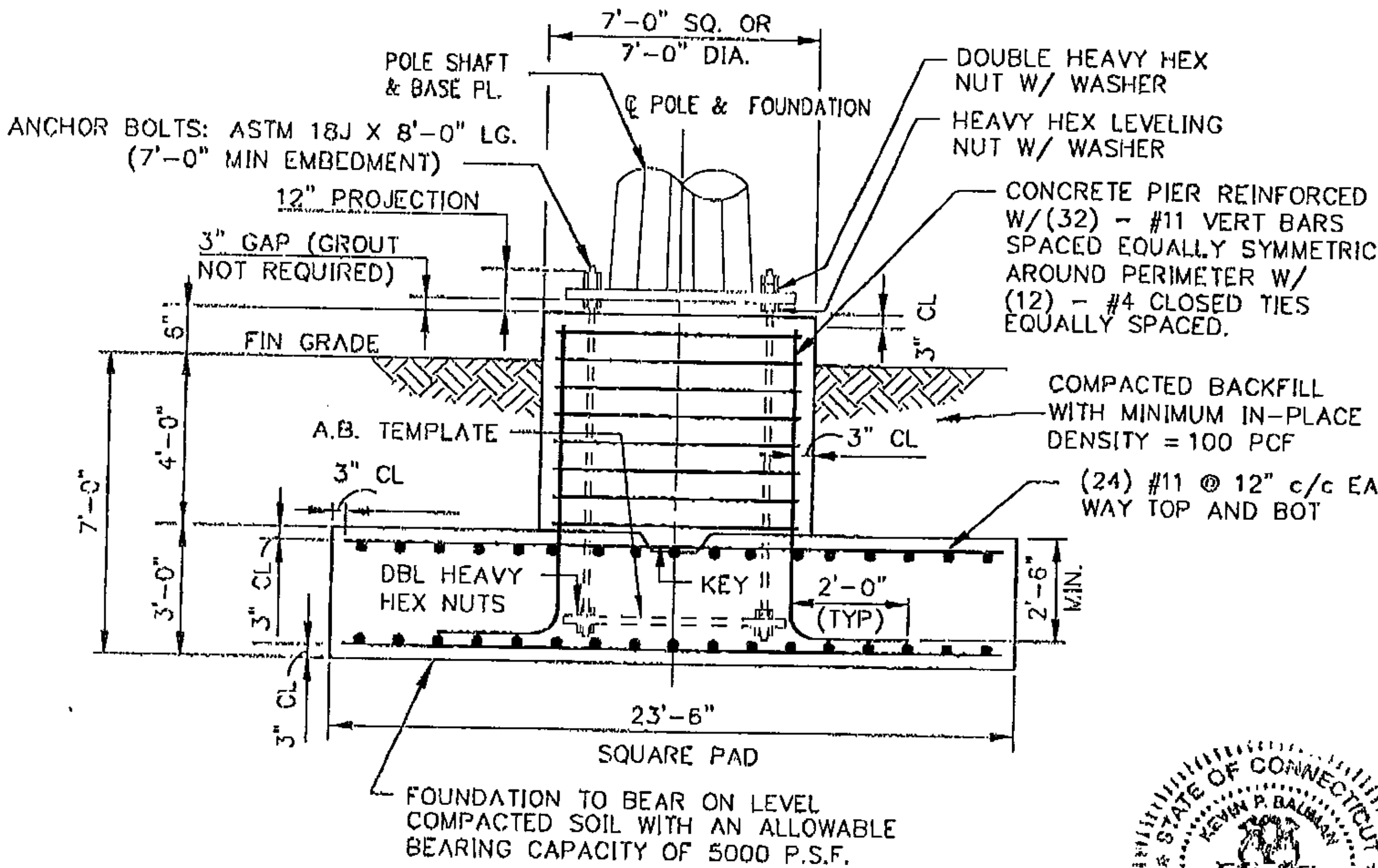
Site	CT-0020, IWS-MILFORD, NEW HAVEN CO., CT		
Owner	NATCOMM		
Ref. No			
Design	85 MPH / 74 MPH + 1/2" RADIAL ICE ACCORDING TO TIA/EIA-222-F 1996		

FOUDATION SPECIFICATIONS	
Volume Concrete Required:	70 CUBIC YARDS
Soils Report:	CRISCUOLO & SHEPARD ASSOCIATES INC. 2001-927 09-06-2001

DESIGN CRITERIA	
Moment:	3400 FT-KIPS
Shear:	32 KIPS
Axial:	31 KIPS


7'-0" SQ. OR
7'-0" DIA.
POLE SHAFT & BASE PL.
℄ POLE & FOUNDATION
DOUBLE HEAVY HEX NUT W/ WASHER
HEAVY HEX LEVELING NUT W/ WASHER
ANCHOR BOLTS: ASTM 18J X 8'-0" LG. (7'-0" MIN EMBEDMENT)
12" PROJECTION
3" GAP (GROUT NOT REQUIRED)
CONCRETE PIER REINFORCED W/(32) - #11 VERT BARS SPACED EQUALLY SYMMETRIC AROUND PERIMETER W/ (12) - #4 CLOSED TIES EQUALLY SPACED.
5"
FIN GRADE
3" CL
COMPACTED BACKFILL WITH MINIMUM IN-PLACE DENSITY = 100 PCF
A.B. TEMPLATE
3" CL
4'-0"
7'-0"
3" CL
(24) #11 @ 12" c/c EA WAY TOP AND BOT
3'-0"
3" CL
DBL HEAVY HEX NUTS
KEY
2'-0" (TYP)
2'-6" MIN.
3" CL
23'-6"
SQUARE PAD
FOUNDATION TO BEAR ON LEVEL COMPACTED SOIL WITH AN ALLOWABLE BEARING CAPACITY OF 5000 P.S.F.

STATE OF CONNECTICUT KEVIN P. BAUMAN No. 17891 LICENSED PROFESSIONAL ENGINEER 12-10-2001

PAD AND PIER FOUNDATION

SPREAD FOOTING FOR POLES PROGRAM BY PAUL J. FORD and COMPANY

JOB NO. 292011210 DATE 12-10-2001 PAGE 1

133-FT MONOPOLE

INPUT: SPREAD FOOTING (PAD and PIER) FOR POLES

POLE LOADS: POLE WEIGHT = 31.00 kips (pole,antenna,ice,mounts,etc.)
OVERTURNING MOMENT = 3400.00 ft-k (at the top of the pier)
TOTAL HORIZONTAL = 32.00 kips (at the top of the pier)
DESIGN SAFETY FACTOR AGAINST OVERTURNING = 1.50

CONCRETE: CONCRETE STRENGTH = 3000 psi at 28 days
REINFORCING STEEL STRENGTH = 60000 psi (ASTM A615 grade 60)

SOIL: WATER TABLE BELOW BOTTOM OF FOOTING
SOIL WT = 100 pcf (dry)
ALLOWABLE SOIL BEARING = 5000 psf

FOOTING SIZE: WIDTH = 23.5 ft LENGTH = 23.5 ft
THICKNESS = 3.00 ft DEPTH = 7.00 ft to bottom
PIERS = 7.00 ft square PIER 0.5 ft above grade
CONCRETE WEIGHT = 150 pcf

OUTPUT: SPREAD FOOTING (PAD and PIER) FOR POLES

VOLUME OF CONCRETE = 1877 ft^3 (69.53 cubic yards)

WEIGHT OF POLE =====> 31.00 kips
WEIGHT OF CONCRETE => 281.59 kips (1877 x 0.150)
WEIGHT OF SOIL =====> 201.30 kips (2013 x 0.100)
TOTAL WEIGHT = 513.89 kips

OVERTURNING MOMENT = 3400.00 ft-k + (32.00 k x 7.50 ft) = 3640 ft-kips
RESISTING MOMENT = 513.89 k x (23.50 ft / 2) = 6038 ft-kips

SAFETY FACTOR = Mresist / O.T.M. = 6038 / 3640 = 1.66 > 1.50 O.K.

ULTIMATE OVERTURNING MOMENT = 3640 ft-k x 1.50 = 5460 ft-kips
ULTIMATE NET SOIL BEARING PRESSURE = 12257 psf

GROSS SOIL BEARING = 3124 psf (includes soil overburden)
SOIL OVERBURDEN = 700 psf (soil overburden)
NET SOIL BEARING = 2424 psf < 5000 psf O.K.

BENDING MOMENT IN PIER = 3400 ft-k +(32.00 k x 4.50 ft) = 3544 ft-kips
AREA OF REINF STEEL REQUIRED IN THE PIER = 46.37 sq in (32 no. 11 bars)
(.5 % = 35.28 sq in)

BENDING MOMENT IN FOOTING = 3564 ft-kips
FOOTING REINFORCING = 1.46 in^2/ft = 27 no. 10 bars @ 10.46 in. o.c.
(.18 % = 0.78 in^2/ft)

BENDING SHEAR IN THE FOOTING = 418.80 kips
ALLOWABLE BENDING SHEAR = 636.25 kips O.K.

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.00.0006 Mon Dec 3, 2001 - 11:34:10 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29201-1210 Design No: Summit #16109-R4 Engineer : AB
Description : 133-FT Monopole - CT-0020, IWS-MILFORD, FAIRFIELD CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : Natcomm Client: Summit Manufacturing, LLC (
Status..... : Final Design Revision: 1 Rev. Date : 12/03/2001

S U M M A R Y O F A N A L Y S I S R E S U L T S

Pole Height.....: 133.00 ft
Top Diameter.....: 24.000 in
Bottom Diameter.....: 49.010 in
Pole Shape.....: 18-Sided Polygon
Splice Joint Type.....: Taper shaft - Slip Joint
Shaft Taper.....: 0.196034 (in/ft)
Shaft Steel Weight.....: 17.268 kips
Force Coeff(Cf) used....: 0.6500

POLE SHAFT PROPERTIES:

Shaft Section Number	Section Length (ft)	Wall Thickness [t] (in)	Steel Yield [Fy] (ksi)	Top Diameter [Dt] (in)	Bottom Diameter [Db] (in)	Slip Joint Overlap (in)
1.	46.500	0.25000	65	24.000	33.116	51.00
2.	51.000	0.28125	65	31.782	41.780	63.00
3.	45.000	0.37500	65	40.188	49.010	

POLE SHAFT SECTION MAXIMUM FORCES AND MOMENTS:

Shaft Section Number	Wind Load No.	Wind Speed (mph)	Radial Ice (in)	At Base of Section: Sect. Elev. (ft)	Axial Load (kips)	Horiz. Shear (kips)	Bending Moment (ft-kips)	Max. Ratio Actual/ Allowable [Ftot/Fb]
1.	1	85.0	0.00	90.75	13.462	18.004	457.690	0.5400
2.	1	85.0	0.00	45.00	21.217	23.932	1497.191	0.9696
3.	1	85.0	0.00	0.00	29.116	27.298	2666.891	0.8960
>> MAXIMUM BASE REACTIONS :					29.116	27.298	2666.891 <<	

POLE DEFLECTION AND ROTATION AT TOP AND AT HIGHEST MICROWAVE DISH ELEVATION:

Wind Load No.	Wind Speed (mph)	Radial Ice (in)	Location	Elev (ft)	Deflection (in)	Rotation (deg)	Max. Allowable Rotation Limit (deg)
1.	85.0	0.00	Top	133.00	84.872	5.143	
2.	73.6	0.50	Top	133.00	71.199	4.328	
3.	50.0	0.00	Top	133.00	29.321	1.779	

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Owner..... : Natcomm
Status..... : Final Design Client: Summit Manufacturing, LLC (
Revision: 1 Rev. Date : 12/03/2001

Pole Height : 133 ft
Pole Shape : 18-Sided Polygon
Pole Type : Taper shaft - Slip Joint
Pole Taper : 0.196034 (in/ft)

INPUT TUBE PROPERTIES:

Tube Sect No.	Top / Splice Elev (ft)	Bot Tube Elev (ft)	Tube Length (ft)	Wall Thick [t] (in)	Steel [Fy] (ksi)	Top Diam [Dt] (in)	Bot Diam [Db] (in)	Slip Joint Overlap (in)
1.	133.00	86.50	46.500	0.25000	65	24.000	33.116	51.00
2.	90.75	39.75	51.000	0.28125	65	31.782	41.780	63.00
3.	45.00	0.00	45.000	0.37500	65	40.188	49.010	

TUBE SECTION PROPERTIES:

Tube Sect No.	Section Weight (kips)	Location	Elev (ft)	Diam. Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	Diam/ Thick [D/t] Ratio	Area (in^2)	Ix (in^4)
1	3.554	@Top	133.0	24.000	0.2500	15.16	96.00	18.84	1342.6
		@Splice	90.8	32.282		21.01	129.13	25.42	3293.9
		@Bot	86.5	33.116		21.59	132.46	26.08	3557.7
2	5.654	@Top	90.8	31.782	0.2813	18.16	113.00	28.12	3524.4
		@Splice	45.0	40.751		23.79	144.89	36.13	7472.8
		@Bot	39.8	41.780		24.43	148.55	37.04	8057.5
3	8.060	@Top	45.0	40.188	0.3750	17.13	107.17	47.39	9487.2
		@Bot	0.0	49.010		21.28	130.69	57.89	17293.5

Total Shaft Steel Weight = 17.268 kips

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Segment Properties:

Tube Segmt No.	Segment Feature Location	Segment Elev. (ft)	Diam. Across Flats (in)	Wall Thick [t] (in)	[W/t] Ratio	(@ Max Segment = 5 ft) Diam/ Thick [D/t] Ratio	Area (in^2)	Ix (in^4)
1.	top	133.000	24.000	0.25000	15.16	96.00	18.84	1342.6
2.	<arm [1]>	133.000	24.000	0.25000	15.16	96.00	18.84	1342.6
3.	<arm [2]>	133.000	24.000	0.25000	15.16	96.00	18.84	1342.6
4.	<arm [3]>	133.000	24.000	0.25000	15.16	96.00	18.84	1342.6
5.		130.000	24.588	0.25000	15.58	98.35	19.31	1444.9
6.		125.000	25.568	0.25000	16.27	102.27	20.09	1626.5
7.	<arm [4]>	123.000	25.960	0.25000	16.55	103.84	20.40	1703.3
8.	<arm [5]>	123.000	25.960	0.25000	16.55	103.84	20.40	1703.3
9.		120.000	26.548	0.25000	16.96	106.19	20.87	1822.8
10.		115.000	27.529	0.25000	17.65	110.11	21.64	2034.3
11.	<arm [6]>	113.000	27.921	0.25000	17.93	111.68	21.96	2123.3
12.	<arm [7]>	113.000	27.921	0.25000	17.93	111.68	21.96	2123.3
13.		110.000	28.509	0.25000	18.34	114.04	22.42	2261.6
14.		105.000	29.489	0.25000	19.04	117.96	23.20	2505.2
15.	<arm [8]>	103.000	29.881	0.25000	19.31	119.52	23.51	2607.3
16.	<arm [9]>	103.000	29.881	0.25000	19.31	119.52	23.51	2607.3
17.		100.000	30.469	0.25000	19.73	121.88	23.98	2765.6
18.		95.000	31.449	0.25000	20.42	125.80	24.76	3043.6
19.	<arm [10]>	93.000	31.841	0.25000	20.69	127.37	25.07	3159.7
20.	<arm [11]>	93.000	31.841	0.25000	20.69	127.37	25.07	3159.7
21.	top sec(2)	90.750	32.282	0.25000	21.01	129.13	25.42	3293.9
22.		90.000	31.929	0.28125	18.25	113.53	28.25	3574.0
23.	bot sec(1)	86.500	32.616	0.28125	18.68	115.97	28.86	3811.5
24.		85.000	32.910	0.28125	18.87	117.01	29.13	3916.4
25.	<arm [12]>	83.000	33.302	0.28125	19.11	118.41	29.48	4059.3
26.	<arm [13]>	83.000	33.302	0.28125	19.11	118.41	29.48	4059.3
27.		80.000	33.890	0.28125	19.48	120.50	30.00	4280.1
28.		75.000	34.870	0.28125	20.10	123.98	30.88	4665.5
29.		70.000	35.850	0.28125	20.71	127.47	31.75	5073.5
30.		65.000	36.830	0.28125	21.33	130.95	32.63	5504.6
31.		60.000	37.810	0.28125	21.94	134.44	33.50	5959.4
32.		55.000	38.791	0.28125	22.56	137.92	34.38	6438.6
33.		50.000	39.771	0.28125	23.17	141.41	35.25	6942.9
34.	top sec(3)	45.000	40.751	0.28125	23.79	144.89	36.13	7472.8
35.		40.000	41.169	0.37500	17.59	109.78	48.55	10205.2
36.	bot sec(2)	39.750	41.218	0.37500	17.62	109.91	48.61	10242.0
37.		35.000	42.149	0.37500	18.06	112.40	49.72	10958.6
38.		30.000	43.129	0.37500	18.52	115.01	50.89	11748.2
39.		25.000	44.109	0.37500	18.98	117.62	52.05	12574.8
40.		20.000	45.089	0.37500	19.44	120.24	53.22	13439.4
41.		15.000	46.069	0.37500	19.90	122.85	54.39	14342.6
42.		10.000	47.050	0.37500	20.36	125.47	55.55	15285.5
43.		5.000	48.030	0.37500	20.82	128.08	56.72	16268.8
44.	base	0.000	49.010	0.37500	21.28	130.69	57.89	17293.5

Total Number of Antennas / Arms = 13

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Description : 133-FT Monopole - CT-0020, IWS-MILFORD, FAIRFIELD CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : Natcomm Client: Summit Manufacturing, LLC (
Status..... : Final Design Revision: 1 Rev. Date : 12/03/2001

ANTENNA AND ARM PROPERTIES AND LOAD DATA:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Ant Arm No.	Arm Mount. Elev. (ft)	Load Applic. Elev. (ft)	Arm Length (ft)	Ice Load Case	Antenna Area [CaAa] (sf)	Antenna Force [qzGhCaAa] (lbs)	Antenna Weight (lbs)
[1]	133.000	136.000	2.0000	No Ice:	0.63	29.51	75.00
Description: 5/8" Lightning Rod							
		[Gh] 1.69	[Kz] 1.499	No Ice:	[qz] (psf) 27.720	[qz] [Gh] (psf) 46.847	
[2]	133.000	133.000	0.0000	No Ice:	73.62	3427.00	264.00
Description: (12) DB896H Panel							
		[Gh] 1.69	[Kz] 1.489	No Ice:	[qz] (psf) 27.544	[qz] [Gh] (psf) 46.550	
[3]	133.000	133.000	2.0000	No Ice:	21.19	986.39	1300.00
Description: 14' Low Profile Platform							
		[Gh] 1.69	[Kz] 1.489	No Ice:	[qz] (psf) 27.544	[qz] [Gh] (psf) 46.550	
[4]	123.000	123.000	0.0000	No Ice:	37.75	1718.45	216.00
Description: (12) DAPA 48000 PCS Panel							
		[Gh] 1.69	[Kz] 1.456	No Ice:	[qz] (psf) 26.936	[qz] [Gh] (psf) 45.522	
[5]	123.000	123.000	2.0000	No Ice:	23.08	1050.64	1835.00
Description: 14' Clamp-on Low Profile Platform							
		[Gh] 1.69	[Kz] 1.456	No Ice:	[qz] (psf) 26.936	[qz] [Gh] (psf) 45.522	
[6]	113.000	113.000	0.0000	No Ice:	37.75	1677.31	216.00
Description: (12) DAPA 48000 PCS Panel							
		[Gh] 1.69	[Kz] 1.421	No Ice:	[qz] (psf) 26.291	[qz] [Gh] (psf) 44.432	
[7]	113.000	113.000	2.0000	No Ice:	23.08	1025.49	1835.00
Description: 14' Clamp-on Low Profile Platform							
		[Gh] 1.69	[Kz] 1.421	No Ice:	[qz] (psf) 26.291	[qz] [Gh] (psf) 44.432	
[8]	103.000	103.000	0.0000	No Ice:	37.75	1633.49	216.00
Description: (12) DAPA 48000 PCS Panel							
		[Gh] 1.69	[Kz] 1.384	No Ice:	[qz] (psf) 25.604	[qz] [Gh] (psf) 43.271	
[9]	103.000	103.000	2.0000	No Ice:	23.08	998.70	1835.00
Description: 14' Clamp-on Low Profile Platform							
					[qz]	[qz] [Gh]	

		[Gh] 1.69	[Kz] 1.384		[qz] (psf) 25.604	[qz] [Gh] (psf) 43.271	
[10]	93.000	93.000	0.0000	No Ice:	37.75	1586.52	216.00
	Description: (12) DAPA 48000 PCS Panel						
		[Gh] 1.69	[Kz] 1.345	No Ice:	[qz] (psf) 24.868	[qz] [Gh] (psf) 42.027	
[11]	93.000	93.000	2.0000	No Ice:	23.08	969.98	1835.00
	Description: 14' Clamp-on Low Profile Platform						
		[Gh] 1.69	[Kz] 1.345	No Ice:	[qz] (psf) 24.868	[qz] [Gh] (psf) 42.027	
[12]	83.000	83.000	0.0000	No Ice:	37.75	1535.78	216.00
	Description: (12) DAPA 48000 PCS Panel						
		[Gh] 1.69	[Kz] 1.302	No Ice:	[qz] (psf) 24.073	[qz] [Gh] (psf) 40.683	
[13]	83.000	83.000	2.0000	No Ice:	23.08	938.96	1835.00
	Description: 14' Clamp-on Low Profile Platform						
		[Gh] 1.69	[Kz] 1.302	No Ice:	[qz] (psf) 24.073	[qz] [Gh] (psf) 40.683	

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Owner..... : Natcomm Client: Summit Manufacturing, LLC (
Status..... : Final Design Revision: 1 Rev. Date : 12/03/2001

POLE SHAFT LOADS:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Design Loads per TIA/EIA-222-F Standard; Gust Factor ....., Gh = 1.69
Pole DL Overload Factor = 1
Per TIA/EIA Table 1: Note 3: For all cross sectional shapes, Force Coefficient [Cf] need not exceed 1.2 for any value of C. (Where C=sqrt(Kz)*V*D.)

Top of Segment Elev. (ft)	Expos Coeff [Kz]	Veloc Press [qz] (psf)	Pole Veloc Coeff [C]	Force Coeff [Cf]	Projected Area Shaft Segment [Ae] (sf)	[Cf Ae] (sf)	Segment Wind Force (lbs)	Shaft Segment Weight (lbs)
133.000	1.489	27.54	207.46	0.650	0.000	0.000	0.00	0.00
133.000	1.489	27.54	207.46	0.650	0.000	0.000	0.00	0.00
133.000	1.489	27.54	207.46	0.650	0.000	0.000	0.00	0.00
130.000	1.480	27.37	211.85	0.650	2.008	1.305	60.76	64.39
125.000	1.463	27.06	219.06	0.650	6.123	3.980	184.45	196.35
123.000	1.456	26.94	221.91	0.650	10.531	6.845	314.45	337.83
123.000	1.456	26.94	221.91	0.650	2.155	1.401	63.92	69.15
120.000	1.446	26.75	226.14	0.650	2.172	1.411	64.25	69.68
115.000	1.429	26.42	233.06	0.650	6.613	4.298	194.74	212.22
113.000	1.421	26.29	235.79	0.650	11.348	7.376	330.99	364.29
113.000	1.421	26.29	235.79	0.650	2.319	1.507	67.13	74.45
110.000	1.411	26.09	239.84	0.650	2.335	1.518	67.43	74.98
105.000	1.392	25.75	246.44	0.650	7.103	4.617	204.08	228.10
103.000	1.384	25.60	249.03	0.650	12.165	7.907	345.87	390.76
103.000	1.384	25.60	249.03	0.650	2.482	1.613	70.00	79.74
100.000	1.373	25.39	252.86	0.650	2.498	1.624	70.27	80.27
95.000	1.353	25.02	259.09	0.650	7.593	4.935	212.36	243.98
93.000	1.345	24.87	261.52	0.650	12.981	8.438	358.89	417.22
93.000	1.345	24.87	261.52	0.650	2.645	1.719	72.48	85.03
90.750	1.335	24.69	264.22	0.650	2.662	1.730	72.71	85.56
90.000	1.332	24.64	261.02	0.650	5.357	3.482	145.61	544.56
86.500	1.317	24.36	265.12	0.650	2.669	1.735	72.23	96.43
85.000	1.310	24.24	266.85	0.650	8.105	5.268	217.87	292.86
83.000	1.302	24.07	269.11	0.650	5.485	3.565	146.28	198.22
83.000	1.302	24.07	269.11	0.650	2.767	1.799	73.42	100.00
80.000	1.288	23.82	272.42	0.650	2.783	1.809	73.60	100.60
75.000	1.264	23.39	277.73	0.650	8.448	5.491	221.84	305.37
70.000	1.240	22.93	282.74	0.650	14.407	9.364	372.86	520.85
65.000	1.214	22.45	287.41	0.650	14.815	9.630	376.14	535.74
60.000	1.186	21.94	291.70	0.650	15.223	9.895	378.64	550.62
55.000	1.157	21.40	295.57	0.650	15.632	10.161	380.27	565.51
50.000	1.126	20.83	298.94	0.650	16.040	10.426	380.94	580.40
45.000	1.093	20.21	301.73	0.650	16.449	10.692	380.52	595.28
40.000	1.057	19.54	299.74	0.650	16.834	10.942	378.34	1262.89
39.750	1.055	19.51	299.82	0.650	14.450	9.393	315.25	695.83
35.000	1.017	18.81	301.07	0.650	2.581	1.677	55.30	124.28
30.000	1.000	18.50	305.50	0.650	17.439	11.336	366.03	839.97
25.000	1.000	18.50	312.44	0.650	17.848	11.601	363.25	859.81
20.000	1.000	18.50	319.38	0.650	18.256	11.867	370.93	879.66
15.000	1.000	18.50	326.33	0.650	18.665	12.132	379.23	899.51
10.000	1.000	18.50	333.27	0.650	19.073	12.398	387.52	919.36
5.000	1.000	18.50	340.21	0.650	19.481	12.663	395.82	939.21
1.000	1.000	18.50	345.77	0.650	19.890	12.928	404.12	959.06
					16.206	10.534	329.27	781.54
				Summation TOTAL =			9720.05	17221.55

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.00.0006 Mon Dec 3, 2001 - 11:34:10 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29201-1210 Design No: Summit #16109-R4 Engineer : AB
Description : 133-FT Monopole - CT-0020, IWS-MILFORD, FAIRFIELD CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : Natcomm Client: Summit Manufacturing, LLC (
Status..... : Final Design Revision: 1 Rev. Date : 12/03/2001

POLE SHAFT SEGMENTS -- AXIAL AND SHEAR FORCES:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Tube Segment No.	Segment Elevation (ft)	Axial Load (kips)	Cumulative Axial Load (kips)	Horiz. Shear (kips)	Cumulative Horiz. Shear (kips)
1.	133.000	0.000	0.000	0.000	0.000
2.	133.000	0.075	0.075	0.030	0.030
3.	133.000	0.264	0.339	3.427	3.457
4.	133.000	1.364	1.703	1.047	4.504
5.	130.000	0.196	1.900	0.184	4.688
6.	125.000	0.338	2.238	0.314	5.003
7.	123.000	0.285	2.523	1.782	6.785
8.	123.000	1.905	4.427	1.115	7.900
9.	120.000	0.212	4.640	0.195	8.095
10.	115.000	0.364	5.004	0.331	8.426
11.	113.000	0.290	5.294	1.744	10.170
12.	113.000	1.910	7.204	1.093	11.263
13.	110.000	0.228	7.432	0.204	11.467
14.	105.000	0.391	7.823	0.346	11.813
15.	103.000	0.296	8.119	1.703	13.516
16.	103.000	1.915	10.034	1.069	14.585
17.	100.000	0.244	10.278	0.212	14.798
18.	95.000	0.417	10.695	0.359	15.157
19.	93.000	0.301	10.996	1.659	16.816
20.	93.000	1.921	12.917	1.043	17.858
21.	90.750	0.545	13.462	0.146	18.004
22.	90.000	0.096	13.558	0.072	18.076
23.	86.500	0.293	13.851	0.218	18.294
24.	85.000	0.198	14.049	0.146	18.440
25.	83.000	0.316	14.365	1.609	20.049
26.	83.000	1.936	16.301	1.013	21.062
27.	80.000	0.305	16.606	0.222	21.284
28.	75.000	0.521	17.127	0.373	21.657
29.	70.000	0.536	17.663	0.376	22.033
30.	65.000	0.551	18.213	0.379	22.412
31.	60.000	0.566	18.779	0.380	22.792
32.	55.000	0.580	19.359	0.381	23.173
33.	50.000	0.595	19.954	0.381	23.553
34.	45.000	1.263	21.217	0.378	23.932
35.	40.000	0.696	21.913	0.315	24.247
36.	39.750	0.124	22.037	0.055	24.302
37.	35.000	0.840	22.877	0.366	24.668
38.	30.000	0.860	23.737	0.363	25.031
39.	25.000	0.880	24.617	0.371	25.402
40.	20.000	0.900	25.516	0.379	25.782
41.	15.000	0.919	26.436	0.388	26.169
42.	10.000	0.939	27.375	0.396	26.565
43.	5.000	0.959	28.334	0.404	26.969
44.	1.000	0.782	29.116	0.329	27.298
Base	0.000		29.116		27.298

----------(END LOAD CASE 1 -- AXIAL AND SHEAR FORCE)----------

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.00.0006 Mon Dec 3, 2001 - 11:34:10 am
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Job No.....: 29201-1210 Design No: Summit #16109-R4 Engineer : AB
Description : 133-FT Monopole - CT-0020, IWS-MILFORD, FAIRFIELD CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : Natcomm Client: Summit Manufacturing, LLC (
Status..... : Final Design Revision: 1 Rev. Date : 12/03/2001

POLE SHAFT SEGMENTS -- MOMENTS and DEFLECTIONS:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph

Segmnt Elev (ft)	MOMENTS (ft-kips) From Ant/ Arm	From Shaft Wind	From P-Delta Effects	Total Moment	DEFLECTIONS (inch) No P-Delta Effects	Total W/ P-Delta Effects	Total Rotation (deg)
133.00	0.089	0.000	0.000	0.089	81.209	84.872	5.143
133.00	0.089	0.000	0.000	0.089	81.209	84.872	5.143
133.00	0.089	0.000	0.000	0.089	81.209	84.872	5.143
130.00	13.417	0.366	0.031	0.119	80.178	83.792	5.143
125.00	35.632	2.218	0.508	14.291	77.084	80.553	5.138
123.00	44.518	3.401	1.420	39.270	71.942	75.169	5.114
123.00	44.518	3.401	1.621	49.539	70.917	74.095	5.099
120.00	66.154	5.658	1.846	49.764	69.894	73.025	5.099
115.00	102.214	10.730	3.046	74.858	66.835	69.822	5.068
113.00	116.638	13.224	5.154	118.097	61.787	64.535	4.998
113.00	116.638	13.224	5.591	135.453	60.785	63.486	4.963
110.00	146.382	17.472	6.051	139.913	59.790	62.444	4.963
105.00	195.956	25.922	7.936	171.790	56.822	59.336	4.903
103.00	215.786	29.788	11.151	233.029	51.966	54.251	4.782
103.00	215.786	29.788	11.806	257.380	51.007	53.247	4.728
100.00	253.427	36.115	12.477	258.051	50.059	52.255	4.728
95.00	316.162	48.084	14.963	304.505	47.242	49.305	4.638
93.00	341.255	53.376	19.124	383.370	42.675	44.524	4.470
93.00	341.255	53.376	19.960	414.592	41.779	43.586	4.397
90.75	375.238	59.670	20.806	415.437	40.897	42.663	4.397
90.00	386.566	61.845	22.781	457.690	39.150	40.835	4.310
86.50	439.428	72.558	23.792	472.203	38.290	39.934	4.281
85.00	462.083	77.416	26.818	538.803	35.750	37.277	4.145
83.00	492.290	84.163	28.819	568.318	34.098	35.549	4.084
83.00	492.290	84.163	29.822	606.276	33.279	34.692	4.000
80.00	545.025	94.836	30.826	607.280	32.477	33.853	4.000
75.00	632.916	114.109	34.211	674.072	30.109	31.377	3.869
70.00	720.807	135.252	39.726	786.751	26.343	27.440	3.637
65.00	808.698	158.282	45.050	901.109	22.817	23.755	3.390
60.00	896.589	183.208	50.145	1017.125	19.542	20.335	3.132
55.00	984.481	210.038	54.974	1134.772	16.530	17.192	2.865
50.00	1072.372	238.772	59.503	1254.022	13.787	14.332	2.591
45.00	1160.263	269.406	63.697	1374.841	11.322	11.763	2.312
40.00	1248.154	301.915	67.523	1497.191	9.138	9.489	2.028
39.75	1252.548	303.582	70.601	1620.669	7.486	7.770	1.798
35.00	1336.045	336.255	71.114	1627.244	7.216	7.489	1.786
30.00	1423.936	372.429	74.398	1746.698	5.520	5.727	1.571
25.00	1511.827	410.433	77.351	1873.716	4.050	4.200	1.344
20.00	1599.719	450.309	79.938	2002.198	2.809	2.910	1.118
15.00	1687.610	492.097	82.126	2132.153	1.794	1.858	0.891
10.00	1775.501	535.840	83.883	2263.590	1.007	1.043	0.666
5.00	1863.392	581.578	85.179	2396.520	0.447	0.462	0.443
0.00	1951.283	629.353	85.980	2530.950	0.111	0.115	0.220
			86.254	2666.891	0.000	0.000	0.000

---------(END LOAD CASE 1 -- MOMENTS AND DEFLECTIONS)----------

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.00.0006 Mon Dec 3, 2001 - 11:34:10 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29201-1210 Design No: Summit #16109-R4 Engineer : AB
Description : 133-FT Monopole - CT-0020, IWS-MILFORD, FAIRFIELD CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : Natcomm
Status..... : Final Design Client: Summit Manufacturing, LLC (
Revision: 1 Rev. Date : 12/03/2001

POLE SHAFT SEGMENTS -- ACTUAL Vs. ALLOWABLE STRESSES:

LOAD CASE 1: BASIC WIND VELOCITY = 85.00 mph
Note: Per TIA/EIA Sec. 3.1.1.1: Allow a 1/3 stress increase for poles under 700 feet in height. The allowable stresses shown include the factor of 1.333

Segment Elev (ft)	ACTUAL STRESSES Bending [fb] (ksi)	Axial [fa] (ksi)	Torsion [ft] (ksi)	Shear [fv] (ksi)	Combined [Ftot] (ksi)	Allow. Stress [Fb] (ksi)	Actual/ Allowable [Ftot/Fb] Ratio
133.00	0.010	0.000	0.000	0.000	0.010	52.00	0.0002
133.00	0.010	0.004	0.003	0.003	0.017	52.00	0.0003
133.00	0.010	0.018	0.185	0.366	0.954	52.00	0.0183
133.00	0.013	0.090	0.289	0.477	1.330	52.00	0.0256
130.00	1.482	0.098	0.275	0.484	2.056	52.00	0.0395
125.00	3.761	0.111	0.254	0.497	4.085	52.00	0.0786
123.00	4.600	0.124	0.331	0.664	5.028	52.00	0.0967
123.00	4.621	0.217	0.425	0.773	5.264	52.00	0.1012
120.00	6.642	0.222	0.407	0.774	7.163	52.00	0.1377
115.00	9.736	0.231	0.378	0.777	10.166	52.00	0.1955
113.00	10.852	0.241	0.443	0.924	11.343	52.00	0.2181
113.00	10.889	0.328	0.523	1.024	11.532	52.00	0.2218
110.00	13.194	0.331	0.502	1.020	13.780	52.00	0.2650
105.00	16.712	0.337	0.469	1.016	17.242	52.00	0.3316
103.00	17.971	0.345	0.526	1.147	18.544	52.00	0.3566
103.00	18.018	0.427	0.593	1.238	18.716	52.00	0.3599
100.00	20.439	0.429	0.571	1.231	21.100	52.00	0.4058
95.00	24.135	0.432	0.535	1.222	24.755	52.00	0.4761
93.00	25.454	0.439	0.585	1.339	26.106	52.00	0.5020
93.00	25.506	0.515	0.643	1.422	26.266	52.00	0.5051
90.75	27.329	0.530	0.626	1.413	28.082	52.00	0.5400
90.00	25.702	0.480	0.570	1.277	26.377	52.00	0.5072
86.50	28.091	0.480	0.546	1.265	28.742	52.00	0.5527
85.00	29.095	0.482	0.536	1.263	29.742	52.00	0.5720
83.00	30.303	0.487	0.575	1.357	30.972	52.00	0.5956
83.00	30.353	0.553	0.621	1.426	31.109	52.00	0.5982
80.00	32.518	0.554	0.599	1.416	33.255	52.00	0.6395
75.00	35.825	0.555	0.566	1.400	36.539	52.00	0.7027
70.00	38.794	0.556	0.535	1.385	39.490	52.00	0.7594
65.00	41.462	0.558	0.507	1.371	42.146	52.00	0.8105
60.00	43.865	0.561	0.481	1.358	44.539	52.00	0.8565
55.00	46.030	0.563	0.456	1.345	46.697	52.00	0.8980
50.00	47.982	0.566	0.434	1.333	48.644	52.00	0.9355
45.00	49.743	0.587	0.413	1.322	50.420	52.00	0.9696
40.00	39.833	0.451	0.305	0.996	40.347	52.00	0.7759
39.75	39.898	0.453	0.304	0.998	40.414	52.00	0.7772
35.00	40.930	0.460	0.291	0.990	41.450	52.00	0.7971
30.00	41.908	0.466	0.278	0.982	42.431	52.00	0.8160
25.00	42.789	0.473	0.265	0.974	43.315	52.00	0.8330
20.00	43.583	0.479	0.254	0.967	44.113	52.00	0.8483
15.00	44.298	0.486	0.243	0.960	44.832	52.00	0.8622
10.00	44.942	0.493	0.233	0.954	45.482	52.00	0.8746
5.00	45.524	0.500	0.224	0.949	46.068	52.00	0.8859
0.00	46.048	0.503	0.215	0.941	46.594	52.00	0.8960

(END LOAD CASE 1 -- ACTUAL VS. ALLOWABLE STRESSES)

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.00.0006 Mon Dec 3, 2001 - 11:34:10 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29201-1210 Design No: Summit #16109-R4 Engineer : AB
Description : 133-FT Monopole - CT-0020, IWS-MILFORD, FAIRFIELD CO., CT
Design..... : 85 MPH / 74 MPH + 1/2" RADIAL ICE
Owner..... : Natcomm
Status..... : Final Design Client: Summit Manufacturing, LLC (
Revision: 1 Rev. Date : 12/03/2001

M O N O P O L E B A S E P L A T E D E S I G N D E T A I L S

Shaft Shape .....:	18 Sided Polygon	Stress Increase ...:	1.333 Factor
Base Dia, DF ....:	49.010 Inches	Base Plate Shape ..:	Square
PT-to-PT, DP ....:	49.766 Inches		
Min Bolt Circle .:	56.016 Inches	Use Bolt Circle ...:	60.000 Inches

Base Reactions :	DESIGN	USER
Moment .....:	2666.89 Ft-Kips	2666.89 Ft-Kips
Axial Load .....:	29.12 Kips	29.12 Kips

Anchor Bolt Details :	DESIGN	USER
Number of Bolts .....:	12	16
Bolt Diameter .....:	2.250 Inches	2.250 Inches
Bolt Type .....:	#18J ASTM A615	#18J ASTM A615
Y-Distance .....:	6	9
Mom. of Inertia .....:	4706.69 In^4	7200.00 In^4
Bolt Tension, T .....:	190.44 Kips	133.34 Kips
Allowable Tension ...:	194.81 Kips	194.81 Kips
Bolt Compression, C .:	192.86 Kips	135.16 Kips

Base Plate Details :	DESIGN	USER
Plate Moment, MPL ...:	2026.81 In-Kips	2970.91 In-Kips
Bend Plane, W .....:	26.19 Inches	33.01 Inches
Plate Thickness, t ..:	2.906 Inches	3.250 Inches
Plate Width .....:	53.175 Inches	58.000 Inches
Plate Steel .....:	ASTM A572 GRADE 55 (55 KSI)	ASTM A572 GRADE 55 (55 KSI)
Gross Weight .....:	2330.20 Lbs	3100.40 Lbs
Net Weight .....:	1726.70 Lbs	2409.20 Lbs
Allowable Stress ....:	54.99 Ksi	54.99 Ksi
Actual Stress .....:	54.99 Ksi	51.12 Ksi
Act./Allow Ratio ....:	1.00	0.93

B A S E P L A T E D E S I G N S U M M A R Y

USE FOLLOWING SPECIFICATIONS:

Plate Thickness .....:	3.250 Inches	Number of Bolts ..:	16
Plate Width/Diameter :	58.000 Inches (Square)	Bolt Circle .....:	60.00 Inches
Plate Weight .....:	3,100 Kips	Bolt Diameter ....:	2.25 Inches
		Bolt Type .....:	#18J ASTM A615

PJF_Pole (tm) - Monopole Design Program
Windows Version 3.00.0006 Wed Oct 3, 2001 - 10:44:08 am
(c) 1993 to 2000 PAUL J. FORD AND COMPANY, Columbus, Ohio

Job No.....: 29201-1210 Design No: Summit #16109 Engineer : MFP
Description : 150-Ft Monopole - CT-0020, IWS-MILFORD, NEW HAVEN CO., CT
Design..... : 85 mph / 74 mph + 1/2" radial ice
Owner..... : Natcomm
Status..... : Final Design Client: Summit Manufacturing, LLC (
Revision: Rev. Date :

S U M M A R Y O F C U R R E N T C A I S S O N D E S I G N

Diameter (ft) .....:	7.00	Compression (kips):	31.00	Friction S.F .....:	2.00
Min. Depth (ft) ...:	25.00	Horizontal (kips) :	32.00	Lateral S.F .....:	2.00
Depth Used (ft) ...:	25.00	Uplift (kips) ....:	0.00	Concrete S.F .....:	1.30
Rebar Area (in^2) .:	37.44	Moment (Ft-kips) .:	3400.0	Concrete F'c (psi) :	3000.0
Rebar Used .....:	(24)#11	Full Cohesion (ft):	21.00	Steel Cover (in) ..:	4.00
Water at (ft) .....:	99.00	Rock at (ft) .....:	99.00		

SOIL PROFILE :

Soil Layer	Layer Thickness (ft)	Unit Weight (pcf)	Ult. Skin Friction (psf)	Allowable Friction Bearing (psf)	Angle- Phi (deg)	Passive Coeff.- KP	Cohesion (c) (psf)
1	3.00	100.00	0.00	0.00	0.00	1.000	0.00
2	30.00	100.00	405.00	2500.00	30.00	3.000	0.00

LATERAL / MOMENT CAPACITY (CHECK) :	Min Design	Actual Design
Caisson Diameter (ft) .....:	7.00	7.00
Height Above Grade (ft) .....:	0.50	0.50
Depth Below Grade (ft) .....:	25.00	25.00
Concrete Volume (CY) .....:	36.35	36.35
Applied Moment From Loads (Working), Mwork(Ft-kip):	3995.20	3995.20
Resisting Moment From Soil (Ult), Mult(Ft-kip) ...:	9174.14	9174.14
Moment S.F. (Mult / Mwork) .....:	2.30	2.30
Applied Horizontal Load (Working), Hwork (Kips) ..:	32.00	32.00
Horizontal Soil Resistance (Ultimate), Hult (Kips):	66.84	66.84
Horizontal S.F. (Hult / Hwork) .....:	2.09	2.09
Center of Rotation (from grade) (ft) .....:	18.10	18.10
Inflection Point (Max Design Moment Location (ft) :	5.50	5.50
Maximum Factored Design Moment for Reinf. (Ft-kip):	5366.70	5366.70
Area Steel Required From Loads (in^2) .....:	31.80	31.80
ACI Minimum Steel (0.5%) (in^2) .....:	27.71	27.71
Area Reinf. Steel Provided (in^2) .....:	37.44	37.44

UPLIFT CAPACITY CHECK :		
Actual Uplift on Caisson (Kips) .....:	0.00	0.00
Allowable Uplift Capacity (Kips) .....:	215.73	215.73

COMPRESSION CAPACITY CHECK :		
Actual Compression on Caisson (Kips) .....:	31.00	31.00
Total Compression (Includes Concrete Wt.) (Kips) .:	81.99	81.99
Allowable Compression Capacity (Kips) .....:	194.18	194.18

CAISSON DESIGN:
USE: 7.00 ft Diameter X 25.50 ft Long (Concrete Volume = 36.35 CY)
Reinf: (24)#11 Vert, w/Closed Ties: (12)#5 @6.0", remaining ties @18.0" (ASTM A615)

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@po.state.ct.us
Web Site: www.state.ct.us/csc/index.htm

April 24, 2002

Honorable James L. Richetelli, Jr.
Mayor
City of Milford
Parsons Complex
70 West River Street
Milford, CT 06460-3364

RE: **EM-CING-084-020422** – SNET Mobility, LLC notice of intent to modify an existing telecommunications facility located at 10 Bona Street, Milford, Connecticut.

Dear Mayor Richetelli:

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.

The Council will consider this item at the next meeting scheduled for May 7, 2002, at 1:30 p.m. in Hearing Room One, Ten Franklin Square, New Britain, Connecticut.

Please call me or inform the Council if you have any questions or comments regarding this proposal.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/esc

Enclosure: Notice of Intent

c: Wade Pierce, City Planner, City of Milford

Connecticut Siting Council

Approved by Council_____
Date Complete: _____
Site visit required? yes

File I.D. EM-ACING-084-020422
Address 10 Bona Street
Milford
Prev. ref. TS-CING-084-011019a

Checklist for Exempt Modifications and Tower Sharing

1. Tower Owner IMS Tower Height 133 Type M Total Height_____
2. Proposed Carrier SNET/CING
   Number of antennas 12 + Type_____ Height_____ Extension_____
   Other proposed equipment on tower: 6 amplifiers, 1 LMU, 1 GPS antenna on eqpmt shed
   Proposed size/location of equipment building/cabinets: ~~on~~ eqpmt shed blt
   Proposed site clearing/grading: _____
   Fence line modification: _____
   Other proposed items: _____
3. Current carriers: Orig apl / current apl

Current carriers	Height	Power density %
Orig apl		5.39
current apl		9.33

4. Power density calculation: Proposed carrier percentage: _____ Cumulative percentage: 9.33
5. Town approval date (if necessary): 8/7/01 Town application date (if necessary): _____
6. Structural analysis: no mods necs.
7. Coordinates Latitude: 41-13-16.9 Longitude: 73-04-40.2 Elevation: _____
8. Town(s) CEO notified of application to Siting Council? cc to Mayor

Site Visit Information Date of visit: 4/29/02

9. Description of site features, surrounding land uses, and sight lines:
~~site in corner of GA Pacific lumber yard; other indus nearby; Rt 25 ext/rsdnt~~ site in small indus area off Rt 1; I-95 near site to no.; vicinity is heavily dvlpd cmcl

Issues:

- Orig apvl for 12 DB846H80 antennas @ 147' AGL on 150' tower & 11½' x 20' eqpmt shelter/but tower only blt to 133' due to FAA ruling
- SNET installed different antennas from apvl - antenna array is:

Filing Documentation for Meeting

1. 12 DUØ4-8670 antennas @ 133' AGL & 6 ADC amplifiers at same level - no RD effect, & 1 LMU & 1 GPS antenna on eqpmt bldg
2.
3.
4.

IMS - 203/488-0580 Carlo F. Santori

see reverse

Natcomm, L.L.C.

Consulting Engineers

Natcomm L.L.C. Project #

63-2 North Branford Road
Branford, Connecticut 06405
(203) 488-0580
Fax (203) 488-8587

RECEIVED
MAY - 7 2002
CONNECTICUT
SITING COUNCIL

Date

To: DAVE MARTIN

Re: MILFORD RANA SWEET

Attn.:

Tel. No. Fax 860 827-2950

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REMARKS:

COPY TO:

Regards,

NATCOMM, L.C.

JOHN P. ALLEN
AIRSPACE CONSULTANTS, INC.
P.O. BOX 1008
FERNANDINA BEACH, FL 32035-1008*

JOHN P. ALLEN
MARY C. LOWE

TELEPHONE (904) 261-6523
FAX (904) 277-3651

November 9, 2001

Mr. Jim Powers
New England Regional Office/ANE-520
12 New England Executive Park
Burlington, Massachusetts 01803

Dear Jim:

The purpose of this letter is to revise an aeronautical evaluation currently undor review by your office on behalf of Integrated Wireless Services, LLC and their proposed antenna tower located near Milford, CT. FAA Aeronautical Study No. 01-ANE-0880-OE.

Please make the following revisions:

Height of Structure

Site Elevation:	71	NO CHANGE	71 feet AMSL
Requested Height:	151	REVISED	139 feet AGL
Overall Height:	222	REVISED	210 feet AMSL

If there are any questions, please do not hesitate to call. Thank you for your cooperation in this matter.

Sincerely,

John P. Allen

cc: Ray Lemley
Jennifer Coombs

*SHIPPING ONLY 905 S 8th STREET, FERNANDINA BEACH, FL 32034

Federal Aviation Administration
NEW ENGLAND REGION, ANE-520
12 NEW ENGLAND EXECUTIVE PARK
BURLINGTON, MA 01803

AERONAUTICAL STUDY
No: 01-ANE-0880-OE

ISSUED DATE: 11/09/01

RAY LEMLEY
INTEGRATED WIRELESS SERVICES, LLC
63-3 NORTH BRANFORD RD.
BRANFORD, CT 06405

** DETERMINATION OF NO HAZARD TO AIR NAVIGATION **

The Federal Aviation Administration has completed an aeronautical study under the provisions of 49 U.S.C., Section 44718 and, if applicable, Title 14 of the Code of Federal Regulations, part 77, concerning:

Description: ANTENNA TOWER (STRUCTURE ONLY)

Location: MILFORD CT
Latitude: 41-13-12.30 NAD 83
Longitude: 073-04-38.60
Heights: 139 feet above ground level (AGL)
210 feet above mean sea level (AMSL)

This aeronautical study revealed that the structure does not exceed obstruction standards and would not be a hazard to air navigation provided the following condition(s), if any, is(are) met:

Based on this evaluation, marking and lighting are not necessary for aviation safety. However, if marking and/or lighting are accomplished on a voluntary basis, we recommend it be installed and maintained in accordance with FAA Advisory Circular 70/7460-1K Change 1.

This determination expires on 05/09/03 unless:

(a) extended, revised or terminated by the issuing office or
(b) the construction is subject to the licensing authority of the Federal Communications Commission (FCC) and an application for a construction permit has been filed, as required by the FCC, within 6 months of the date of this determination. In such case the determination expires on the date prescribed by the FCC for completion of construction or on the date the FCC denies the application.

NOTE: REQUEST FOR EXTENSION OF THE EFFECTIVE PERIOD OF THIS DETERMINATION MUST BE POSTMARKED OR DELIVERED TO THIS OFFICE AT LEAST 15 DAYS PRIOR TO THE EXPIRATION DATE.

This determination is based, in part, on the foregoing description which includes specific coordinates, heights, frequency(ies) and power. Any changes in coordinates, heights, frequency(ies) or use of greater power will void this determination. Any future construction or alteration,

including increase in heights, power, or the addition of other transmitters, requires separate notice to the FAA.

This determination does include temporary construction equipment such as cranes, derricks, etc., which may be used during actual construction of the structure. However, this equipment shall not exceed the overall heights as indicated above. Equipment which has a height greater than the studied structure requires separate notice to the FAA.

This determination concerns the effect of this structure on the safe and efficient use of navigable airspace by aircraft and does not relieve the sponsor of compliance responsibilities relating to any law, ordinance, or regulation of any Federal, State, or local government body.

A copy of this determination will be forwarded to the Federal Communications Commission if the structure is subject to their licensing authority.

If we can be of further assistance, please contact our office at 781-238-7520. On any future correspondence concerning this matter, please refer to Aeronautical Study Number 01-ANE-0880-OE.

James A Powers

James A. Powers
Specialist, AIRSPACE BRANCH (DNE)

EM-CING-084-020422
10 Bona Street
Milford 04/29/02