STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

March 6, 2000

Ronald C. Clark
Manager, Real Estate Operations
Nextel Communications
100 Corporate Park
Rocky Hill, CT 06067

RE: EM-NEXTEL-077-000223 - Nextel Communications notice of intent to modify an existing telecommunications facility located at 60 Adams Street in Manchester, Connecticut.

Dear Mr. Clark:

At a public meeting held on March 1, 2000, 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 February 23, 2000. 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 change 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 No. 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/jlh

c: Honorable Stephen T. Cassano, Mayor, Town of Manchester
Mike Loucy, Site Development Manager, Sprint PCS
J. Brendan Sharkey, Esq., Omnipoint Communications
Paul A. Spurlock, AT&T Wireless Services, Inc.
Sandy M. Carter, Bell Atlantic Mobile
Peter W. van Wilgen, Springwich Cellular Limited Partnership
Sam J. D'Agostino, Zoning Specialist, PageNet

ROBINSON & COLE LLP
HARTFORD • STAMFORD • GREENWICH • NEW YORK • BOSTON

LAW OFFICES

280 Trumbull Street
Hartford, CT 06103-3597
860-275-8200
Fax 860-275-8299

Kenneth C. Baldwin
860-275-8345
Internet: kbaldwin@rc.com

March 21, 2000

Via Facsimile and U.S. Mail

Mr. Joel M. Rinebold
Executive Director
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

Re: EM-NEXTEL-077-000223

Dear Mr. Rinebold:

I have confirmed with Mark Gauger, Bell Atlantic's Construction Manager that the original tower at the Manchester site has been removed, thereby eliminating the need for a show cause order from the Council.

If you have any questions please feel free to contact me.

Sincerely,

Kenneth C. Baldwin

KCB/kmd
cc: David S. Malko, P.E.
Mark Gauger

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square
New Britain, Connecticut 06051
Phone: (860) 827-2935
Fax: (860) 827-2950

March 6, 2000

Sandy M. Carter
Bell Atlantic Mobile
20 Alexander Drive
P.O. Box 5029
Wallingford, CT 06492

RE: EM-NEXTEL-077-000223 - Nextel Communications notice of intent to modify an existing telecommunications facility located at 60 Adams Street in Manchester, Connecticut.

Dear Ms. Carter:

At a public meeting held March 1, 2000, the Connecticut Siting Council (Council), ordered Bell Atlantic Mobile (BAM) and Springwich Cellular Limited Partnership (Springwich) to identify the owners of all towers located at 60 Adams Street, Manchester, Connecticut, and to show cause why the Council should not commence with enforcement for the removal of the existing 170-foot lattice tower that BAM and Springwich proposed to remove in exchange for construction of a 140-foot monopole.

This information is to be provided to the Council on or before Monday, March 20, 2000.

Failure to comply with this order or the approval issued by the Council on December 17, 1998, 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/jlh

c: Honorable Stephen T. Cassano, Mayor, City of Manchester
William B. Thornton, Manchester Sand and Gravel
Sam J. D'Agostino, Zoning Specialist, PageNet, Inc.
Peter W. van Wilgen, Springwich Cellular Limited Partnership
Ronald C. Clark, Manager, Real Estate Operations, Nextel Communications

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Ronald C. Clark
Manager Real Estate Operations

Nextel Communications
100 Corporate Place, Rocky Hill, CT 06067
860 883-2112 FAX 860 513-5444

NEXTEL

February 23, 2000

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

Re: Notice of Exempt Modification
60 Adams Street
Manchester, Connecticut

Dear Mr. Gelston:

Nextel Communications, Inc. ("Nextel") hereby notifies the Connecticut Siting Council (Council) of its intent to install antennas and related equipment at an existing telecommunications facility in Manchester. Please accept this letter as notification, pursuant to R.C.S.A. § 16-50j-73, of construction that constitutes an exempt modification pursuant to R.C.S.A. § 16-50j-72(b)(2).

The existing facility is a 140-foot monopole tower located at 60 Adams Street. Existing users include Bell Atlantic Mobile, Springwich Cellular Limited Partnership, Sprint PCS, Bell South, and Page-Net, are (or will be) located on the tower. Associated equipment is located at the base of the tower within the fenced compound. On 15 December 1999, the Council issued its most recent approval for use of this facility (EM-Sprint-077-991208).

If the Council acknowledges this exempt modification, the proposed facility will replace the Nextel facility approved by the Council on March 9, 1999 (TS-Nextel-077-990302) for shared use of a tower at 46 Adams St. This facility was not constructed.

Nextel plans to attach twelve (12) panel antennas center-lined at the 100-foot level on the tower. Nextel's radio equipment will be located in a new 10-foot by 20-foot equipment shelter located near the base of the tower, within the existing (Exhibit A).

The planned modifications to the Manchester facility fall within those activities explicitly provided for in R.C.S.A. § 16-50j-72(b)(2):

1. The proposed modification will not increase the height of the tower. On the existing 140-foot tower, Nextel's antennas will be installed with a centerline of approximately 100-feet above ground level. The tower profile included in Exhibit A depicts the planned changes will not increase the overall height of the tower. Please note: Exhibit A shows the correct antenna placement for all tenants on the tower. Previous filings had shown Page-Net's

transmit and receive antennas at the top of the tower and a recent filing had identified the Bell South antenna (currently located at 105 feet AGL) as a Page-Net antenna.

Additionally, a letter verifying the structural integrity of this tower with the existing and proposed loads as originally conceived has been included in Exhibit B. A new structural analysis has been ordered. It is anticipated that because the antennas of Nextel and Page-Net will be lower on the tower and therefore reduce the loading on the tower, that the tower will once again pass the structural analysis.

2. The installation of a new 10-foot by 20-foot equipment shelter for Nextel radio equipment, as shown in Exhibit A, will not require an extension of the existing site (leased area) boundaries.

3. The proposed modification to the facility will not increase the noise levels at the existing facility by six decibels or more. The only additional noise will be from heating, ventilation and cooling equipment associated with Nextel's equipment shelter.

4. The operation of the additional antennas will not increase the total radio frequency (RF) power density, measured at the base of the tower, to a level at or above the applicable standard. The "worst-case" RF power density calculation for a point at the base of the tower for the existing operations (inputs provided by the existing carriers) indicates a combined power density to be 35.5606% of the FCC Standard for uncontrolled environments at a mixed frequency site. Nextel's operations would add 0.0323 mW/cm^2, or 5.701% of Nextel's FCC Standard of 0.5673 mW/cm^2. Thus, the total calculated "worst case" power density for the planned combined operation at the site is 41.262% of the FCC Standard for uncontrolled environments as calculated for a mixed frequency site.

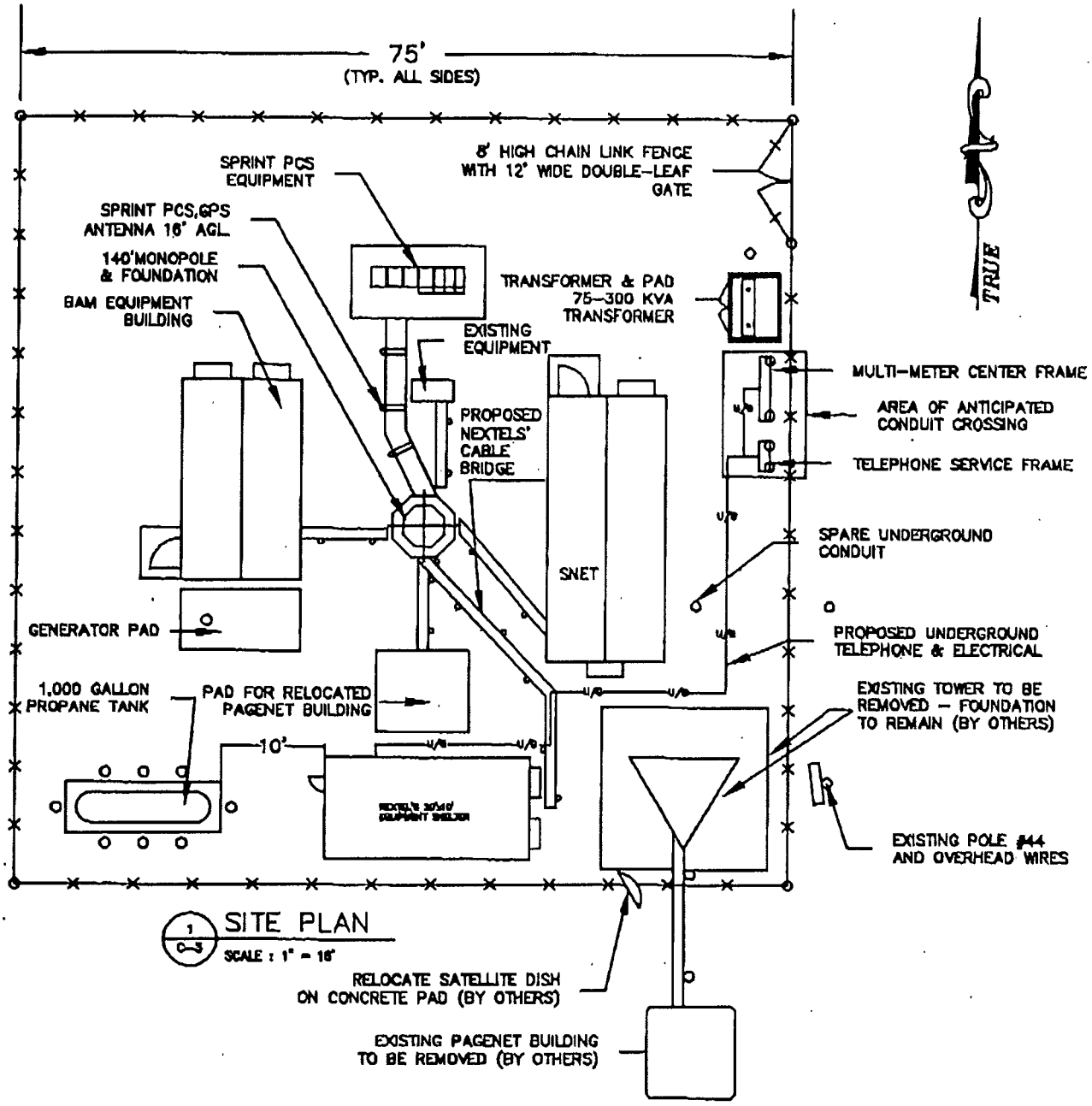
For the foregoing reasons, Nextel respectfully submits that the proposed addition of antennas and equipment at the Manchester facility constitutes an exempt modification under R.C.S.A. § 16-50j-72(b)(2).

Sincerely,

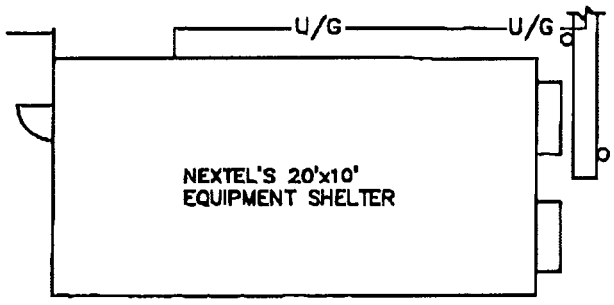
Ronald C. Clark
Manager Real Estate Operations

cc: Honorable Stephen T. Cassano, Mayor
Town of Manchester

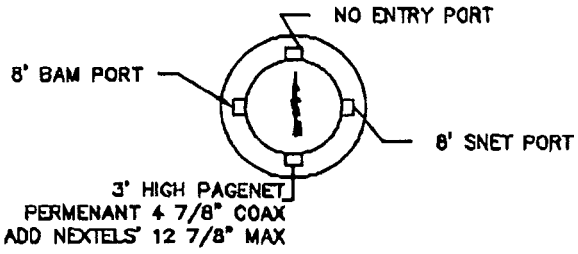
EXHIBIT A



1 C-3 SITE PLAN
SCALE : 1" = 16'



1 C-3 DETAIL @ SHELTER
SCALE : 1" = 8'



DETAIL @ PORTS
SCALE : NTS

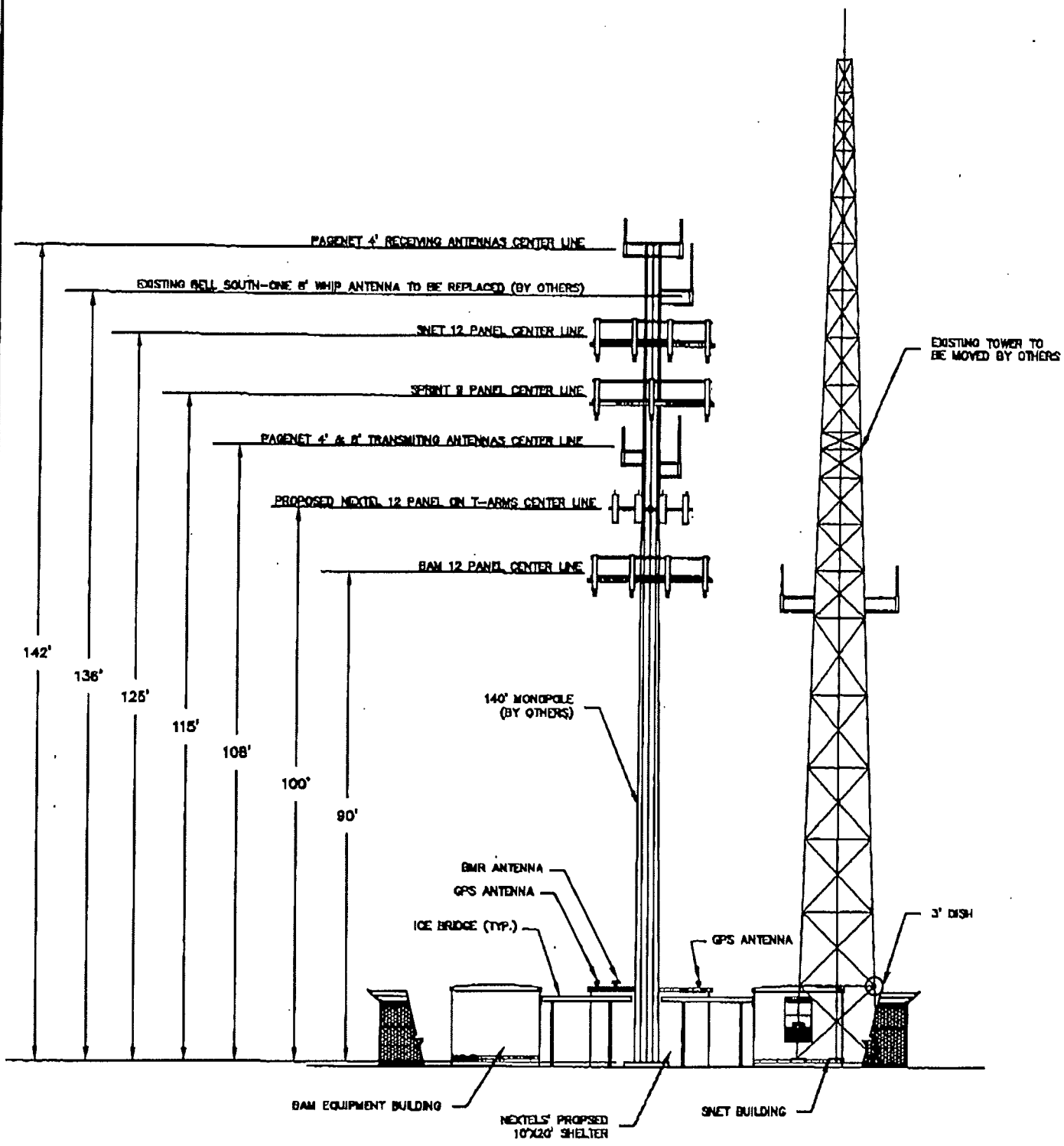
dtc

NEXTEL

NEXTEL COMMUNICATIONS SITE #CT-0055

LEASE EXHIBIT
MANCHESTER
60 ADAMS STREET
MANCHESTER, CT.

DWG. FILE: CT-0055LE1 | DTC No.: 98-403-781
DRAWN BY: GWA | DATE: 02-07-00
SCALE: AS NOTED | SHEET 1 OF 2



2/A-1 TOWER ELEVATION

SCALE : 1" = 25'

NOTE:
EXIT PORTS FOR PLATFORM @ 100' WILL BE REQUIRED

SECTOR	AZIMUTH	ANTENNA
1	0	DB844H90E-XY
2	120	DB844H90E-XY
3	240	DB844H90E-XY

dtc

NEXTEL

NEXTEL COMMUNICATIONS SITE #CT-0055

LEASE EXHIBIT
MANCHESTER
60 ADAMS STREET
MANCHESTER, CT.

DWG. FILE: CT-0055LE1
DRAWN BY: GWA
SCALE: 1"=25'

DTC No.: 98-403-781
DATE: 02-07-00
SHEET 2 OF 2

EXHIBIT B

ENGINEERED
ENDEAVORS
INCORPORATED

January 20, 2000

Nextel Communications
100 Corporate Place
Rocky Hill, CT 06067

Reference: Structure & Foundation Analysis for a 140 *ft* Monopole
EEI Job Number: 6257
Site Name: CT0055/Manchester

Dear Mr. Neller:

The existing 140 *ft* monopole, which is located in Hartford County, Connecticut on the CT0055/Manchester site, was analyzed under the proposed loading. This monopole was designed and supplied by Engineered Endeavors, Inc. and is depicted in drawing GS51376. The structure was originally designed to support three standard platforms at 125 *ft*, 115 *ft*, and 90 *ft* each loaded with (12) panel antennas in addition to three omnidirectional antennas mounted at 138 *ft*. The objective of this analysis is to determine if the monopole can structurally support the following loading and meet the requirements of the Telecommunications Industry Association/Electronics Industry Association (TIA/EIA) Standard 222-F and the Manual of Steel Construction, Allowable Stress Design. In addition, the drilled-pier foundation has been reviewed according to the provisions of the Building Code Requirements for Reinforced Concrete by the American Concrete Institute (ACI 318-95.)

This monopole is currently loaded with two PG1N 0091-001 omnidirectional antennas and one Decibel DB 586 omnidirectional antenna mounted on side arms at 138 *ft*, (12) Swedcom ALP 11011 panel antennas, nine Decibel DB 980 panel antennas, and (12) Swedcom ALP 9212 panel antennas mounted on standard platforms at 125 *ft*, 115 *ft*, and 90 *ft* respectively. The proposed loading for this structure includes (12) Decibel DB 844 panel antennas mounted on universal "t-arms" at 105 *ft*. It is assumed that this is the maximum loading that will be applied to this structure. The wind speed employed for this analysis is 80 *mph*. This wind speed meets the requirements of the TIA/EIA 222-F for Hartford County, Connecticut. For further information on structural loading, refer to the EEI analysis cover sheet and design calculations.

This monopole is structurally adequate to support the desired antennas and ancillary equipment. The maximum bending stress in the shaft (46.67 *ksi*) occurs at the bottom of the base section. The allowable strength at this point is 48.96 *ksi*. Refer to Case I of the design calculations for the full survival loading output. All other components of the structure are adequate to support the proposed loading, *e.g.*, the base plate and anchor bolts.

The original foundation design for this site was completed by Engineered Endeavors, Inc. and is depicted in drawing F4795-120. Table I gives a comparison of base loads from the original loading and base loads from the revised loading. As demonstrated, the new base loads are slightly higher than those of the original loading. The analysis of this foundation has been

conducted with the assumption that the loading described above is the maximum loading for this monopole. Anchor bolt embedment calculations are based on a minimum concrete compressive strength of 3500 *psi*. EEI should be contacted if the installed concrete strength is less than 3500 *psi*.

EEI has reviewed the capacity of this drilled pier for both lateral deflection and stability against overturning and has concluded that it is structurally adequate to support the proposed antennas and ancillary equipment. The overturning stability of the pier was found to have a factor of safety of 2.05. In addition, the deflection at the tip of the pier was found to be less than 5/8 *in*.

Table I: Foundation Base Loads

	Revised Base Loads	Design Base Loads
Moment - *ft-kips*	2063.6	1939.1
Shear – *kips*	21.0	19.7
Axial – *kips*	22.6	22.2

The deflection of the pier was examined utilizing the LPILE Plus 3.0 computer program developed by Ensoft Inc. This program yields the response (deflection, bending moment, shear) of a laterally loaded pile in non-linear soils. The soil parameters employed in this analysis have been chosen based on the standard penetration tests and soil descriptions provided in the geotechnical investigation conducted by Dr. Clarence Welti on July 2, 1998.

The arms required must be purchased with a friction-type clamp since mounting provisions were not supplied with the structure. Since no coaxial cable exit ports exist near the 105 *ft* elevation, either ports must be installed so that the cables can exit the interior of the pole or the cables must be run up the side of the structure. If the cables are to be run up the side of the monopole, EEI only requires that they be tightly strapped to the wall of the structure.

It is the responsibility of the Nextel Communications to verify that the monopole modeled and analyzed is the correct structure that exists. This report is intended for use with regard to the specific monopole discussed in general herein. Any substantial changes in mounting or loading should be brought to EEI's attention so that these conclusions may be reevaluated.

Yours truly,
Engineered Endeavors, Inc.

Jay Parr
Design Engineer

Timothy J. Gooding, P.E.
Senior Engineer