STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

Ten Franklin Square, New Britain, CT 06051

Phone: (860) 827-2935 Fax: (860) 827-2950

E-Mail: siting.council@ct.gov

Internet: ct.gov/csc

Daniel F. Caruso
Chairman

June 18, 2009

Thomas J. Regan, Esq.
Brown Rudnick LLP
CityPlace I, 185 Asylum Street
Hartford, CT 06103

RE: **EM-SPRINT-NEXTEL-080-090511** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 432 West Main Street, Meriden, Connecticut.

Dear Attorney Regan:

The Connecticut Siting Council (Council) hereby acknowledges your notice to modify this existing telecommunications facility, pursuant to Section 16-50j-73 of the Regulations of Connecticut State Agencies.

The proposed modifications are to be implemented as specified here and in your notice dated May 11, 2009, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Michael S. Rohde, Mayor, City of Meriden
Lawrence Kendzior, City Manager, City of Meriden
Dominick Caruso, City Planner, City of Meriden
Christopher B. Fisher, Esq., Cuddy & Feder LLP

STATE OF CONNECTICUT
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Daniel F. Caruso
Chairman

May 13, 2009

The Honorable Michael S. Rohde
Mayor
City of Meriden
City Hall
142 East Main Street
Room 124
Meriden, CT 06450

RE: **EM-SPRINT-NEXTEL-080-090511** – Sprint Nextel Corporation notice of intent to modify an existing telecommunications facility located at 432 West Main Street, Meriden, Connecticut.

Dear Mayor Rohde:

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 May 27, 2009.

Thank you for your cooperation and consideration.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/jb

Enclosure: Notice of Intent

c: Dominick Caruso, City Planner, City of Meriden
Lawrence Kendzior, City Manager, City of Meriden

BROWNRUDNICK

CityPlace I
185 Asylum
Street
Hartford
Connecticut
06103
tel 860.509.6500
fax 860.509.6501

THOMAS J. REGAN
Direct Dial: (860) 509-6522
tregan@brownrudnick.com

ORIGINAL

Via Hand Delivery

May 11, 2009

Daniel F. Caruso, Chairman
Connecticut Siting Council
10 Franklin Square
New Britain, CT 06051

RE: Sprint Nextel Corporation - Exempt Modification

Dear Mr. Caruso:

On behalf of Sprint Nextel Corporation enclosed for filing are an original and five (5) copies of a Notice to Make an Exempt Modification to an Existing Facility located at 432 West Main Street in Meriden.

I have also enclosed a sixth copy of the Notice which I would like to have date-stamped and returned to the courier delivering this package.

Also enclosed is a checks in the amount of $500.00 to cover the filing fee. If you have any questions, please feel free to contact me.

Very truly yours,

BROWN RUDNICK LLP

By: _____
Thomas J. Regan

TJR/bh
Enclosures

40259811 v1 - 025064/0015

BROWNRUDNICK
CityPlace I
185 Asylum
Street
Hartford
Connecticut
06103
tel 860.509.6500
fax 860.509.6501

cc/encls: via 1st Class Mail:

The Honorable Michael S. Rohde, Mayor
City of Meriden
City Hall
142 East Main Street
Meriden, CT 06450

EM-SPRINT-NEXTEL-080-090511

CONNECTICU

In re:
Sprint Nextel Corporation Notice to Make an Exempt Modification to an Existing Facility, 462 West Main Street, Meriden, Connecticut.

: EXEMPT MODIFICATION NO. _____
:
: May 11, 2009

ORIGINAL

NOTICE OF EXEMPT MODIFICATION

Pursuant to Conn. Agencies Regs. §§ 16-50j-73 and 16-50j-72(b), Sprint Nextel Corporation ("Sprint") hereby gives notice to the Connecticut Siting Council ("Council") and the City of Meriden of Sprint's intent to make an exempt modification to an existing monopole tower (the "Tower") located at 462 West Main Street in Meriden, Connecticut. Sprint plans to upgrade its existing integrated digitally enhanced ("iDen") network and install code division multiple access ("CDMA") technology at this site in order to maintain the existing level of wireless service in this area of Meriden.

Sprint's proposed modifications to this Tower are a result of the decommissioning of another telecommunication site in this area of Meriden. Specifically, Sprint's existing CDMA network serving this area of Meriden is currently located on a building the State of Connecticut ("State") plans to demolish due to environmental and health concerns. In an effort to meet the needs of the State and avoid the proliferation of telecommunication towers in this area, Sprint proposes to modify an existing telecommunication tower in order to maintain its existing level of service in this area of Meriden. Sprint also proposes to upgrade its existing iDen technology at this site. In order to accomplish its proposal Sprint plans to remove and replace 9 of its existing antennas, add GPS technology and add equipment at the base of the Tower.

Under the Council's regulations (Conn. Agencies Regs. § 16-50j-72(b)), Sprint's plans do not constitute a modification subject to the Council's review because Sprint will not change the height of the Tower, will not extend the boundaries of the compound, will not increase the noise levels at the

AN RUDNICK LLP
PLACE I
SYLUM STREET
TFORD, CT 06103
509-6500

site, and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards.

The Tower is a 100-foot monopole tower located at 462 West Main Street in Meriden, Connecticut (41° 32' 24.10"N, 72° 49' 8.47"W). The Tower is owned by AT&T Wireless. There are multiple carriers located on the Tower. Currently, Sprint has 12 antennas located on the Tower with a centerline of 80 feet. A site plan with Tower specifications is attached.

Sprint plans to remove and replace 9 of its existing antennas and add GPS technology at this site. Sprint proposes to remove and replace 3 of its antennas with 3 CDMA panel antennas and proposes to remove and replace 6 of its antennas with 6 new iDen panel antennas. The proposed antennas will have the same centerline as the existing antennas - 80 feet. Sprint also proposes to install a GPS antenna on the existing ice bridge post. To confirm the Tower can support these changes, Sprint commissioned GPD Associates to perform a structural analysis of the Tower (attached). According to the structural analysis, dated March 25, 2009, "...the design of the **tower and its foundation are sufficient** for the proposed, existing and reserved loadings ..." (Page 1, Structural Analysis Report).

In addition, Sprint plans to install 3, 1-5/8 inch coax cables. Sprint also plans to install a CDMA equipment cabinet in its existing 11-foot by 20-foot (approximately) equipment shelter. Hence, no increase in the size of the Tower site is necessary. Sprint plans to utilize the existing power and telephone wiring at the site to service its proposed equipment.

Therefore, excluding brief, minor, construction-related noise during the addition of the antennas and the installation of the equipment cabinet, Sprint's changes to the Tower will not increase noise levels at the site.

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PLACE I
ASYLUM STREET
RFORD, CT 06103
509-6500

The proposed antennas will not adversely impact the health and safety of the surrounding community or the people working on the Tower. The total radio frequency exposure measured around the Tower will be below the National Council on Radiation Protection and Measurements' ("NCRP") standard adopted by the Federal Communications Commission ("FCC"). The worst-case power density analysis measured at the base of the Tower indicates that Sprint's antennas will emit 28.99% of the NCRP's standard for maximum permissible exposure. A cumulative power density analysis indicates that together, all of the antennas on the Tower will emit 96.01% of the NCRP's standard for maximum permissible exposure. Therefore, the power density levels will be below the FCC mandated radio frequency exposure limits in all locations around the Tower, even with extremely conservative assumptions. The power density analysis is attached.

In conclusion, Sprint's proposed plan to remove and replace its antennas and add GPS antennas at this site does not constitute a modification subject to the Council's jurisdiction because Sprint will not increase the height of the Tower, will not extend the boundaries of the site, will not increase the noise levels at the site, and the total radio frequency electromagnetic radiation power density will stay within all applicable standards. *See* Conn. Agencies Regs. § 16-50j-72.

Sprint Nextel Corporation

By: _____

Thomas J. Regan
Brown Rudnick LLP
185 Asylum Street, CityPlace I
Hartford, CT 06103-3402
Email - tregan@brownrudnick.com
Phone - 860.509.6522
Fax - 860.509.6622

/N RUDNICK LLP
PLACE I
\SYLUM STREET
TFORD, CT 06103
509-6500

Certificate of Service

This is to certify that on this 11th day of May, 2009, the foregoing Notice of Exempt Modification was sent, via first class mail, to the following:

City of Meriden
Mayor Michael S. Rohde
City Hall
142 East Main Street
Meriden, CT 06450

By: _____
Thomas J. Regan

40259759 v1 - 025064/0015

/N RUDNICK LLP
PLACE I
\SYLUM STREET
TFORD, CT 06103
509-6500

PROJECT DESCRIPTION:
MINOR MODIFICATION OF EXISTING WIRELESS COMMUNICATION SYSTEM CONSISTING OF ADDITION OF EQUIPMENT CABINET(S), ANTENNAS, ADDITION OF ASSOCIATED CABLES & ADDITION OF A GPS ANTENNA. NO WATER OR SEWER IS REQUIRED. THE SITE IS UNMANNED AND NOT FOR HUMAN HABITATION.

CODE COMPLIANCE:
ALL WORK AND MATERIALS SHALL BE PERFORMED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THE LATEST EDITIONS OF THE FOLLOWING:

1. CT BUILDING CODE
2. UNIFORM BUILDING CODE
3. BUILDING OFFICIALS AND CODE ADMINISTRATORS (BOCA)
4. UNIFORM MECHANICAL CODE
5. ANSI/TIA/EIA-222-F
6. UNIFORM PLUMBING CODE
7. NATIONAL ELECTRIC CODE
8. LOCAL BUILDING CODE
9. CITY/COUNTY ORDINANCES

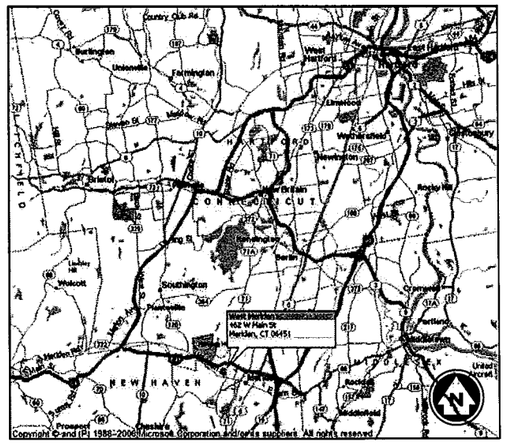
Sprint Nextel Corp.

WEST MERIDEN

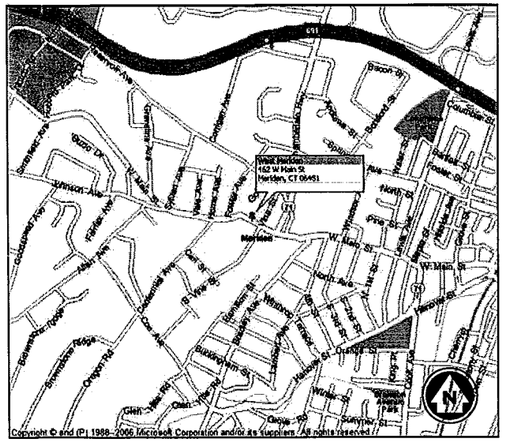
SITE NUMBER: CT4132 / CT25XC840

462 WEST MAIN STREET MERIDEN, CT 06451

DIRECTIONS:
DEPART 100 CORPORATE PLACE. TURN LEFT ONTO WEST ST AND THEN IMMEDIATELY RIGHT (EAST) ON TO RAMP. MERGE ON TO I-91. MERGE ON TO I-691 WEST VIA EXIT 18 TOWARDS MERIDEN/WATERBURY. TAKE EXIT 6 TO LEWIS AVE. TURN RIGHT ON TO LEWIS AVE FOR .7 MILES. TURN RIGHT ON TO W MAIN ST FOR .5 MILES. SITE IS LOCATED ON THE LEFT BEHIND THE HUNTER AMBULANCE BUILDING.



VICINITY MAP
N.T.S.



LOCATION MAP
N.T.S.

PROJECT INFORMATION	
SITE NAME:	WEST MERIDEN
SITE ADDRESS:	462 WEST MAIN STREET MERIDEN, CT 06451
LATITUDE: LONGITUDE:	41° 32' 24.10" N 72° 49' 08.47" W
TOWER OWNER:	AT&T WIRELESS

PROJECT DIRECTORY	
LANDLORD:	HUNTER FAMILY L.P. 462 WEST MAIN STREET MERIDEN, CT 06451

APPLICANT
SPRINT/NEXTEL CORP. 8 AIRLINE DRIVE SUITE 105 ALBANY, NY 12205 CONTACT: COLLEEN BISCEGLIA PHONE: (518) 862-6900

DIG ALERT:
CALL FOR UNDERGROUND UTILITIES PRIOR TO DIGGING:
1-800-922-4455

EMERGENCY:
CALL 911

infinigy engineering & surveying
11 HERBERT DRIVE
LATHAM, NY 12110
OFFICE #: (518) 690-0790
FAX #: (518) 690-0793
CONTACT: STEVE BLEVINS

INFINIGY PROJECT NUMBER: 234-001

PROPOSED RAD CENTER: ±80'
LATITUDE: 41° 32' 24.10" N
LONGITUDE: 72° 49' 08.47" W

DRAWING INDEX			
DRWG. #	TITLE	REV.#	DATE
T-1	TITLE SHEET	0	03/31/09
EX-1	GENERAL NOTES & LEGEND	0	03/31/09
EX-2	PARTIAL SITE LAYOUT	0	03/31/09
EX-3	TOWER ELEVATION	0	03/31/09

NEW HAVEN COUNTY, CONNECTICUT

infinigy engineering & surveying
11 Herbert Drive
Latham, NY 12110
OFFICE: (518) 690-0790
FAX: (518) 690-0793

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	SJB	03/31/09

Drawn: DJW Date: 03/31/09
Designed: DJW Date: 03/31/09
Checked: SJB Date: 03/31/09

Project Number: 234-001

Project Title:
WEST MERIDEN
CT4132 / CT25XC840
462 WEST MAIN STREET
MERIDEN, CT 06451

Prepared For: Sprint Nextel Corp.

Drawing Scale: AS NOTED
Date: 03/31/09

Drawing Title:
TITLE SHEET

Drawing Number:
T-1

GENERAL NOTES

1. ALL DIMENSIONS TO, OF, AND ON EXISTING BUILDINGS, DRAINAGE STRUCTURES, AND SITE IMPROVEMENTS SHALL BE VERIFIED IN FIELD BY CONTRACTOR WITH ALL DISCREPANCIES REPORTED TO THE ENGINEER.
2. DO NOT CHANGE SIZE NOR SPACING OF STRUCTURAL ELEMENTS.
3. DETAILS SHOWN ARE TYPICAL; SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS UNLESS OTHERWISE NOTED.
4. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY.
5. BRACE STRUCTURES UNTIL ALL STRUCTURAL ELEMENTS NEEDED FOR STABILITY ARE INSTALLED. THESE ELEMENTS ARE AS FOLLOWS: LATERAL BRACING, ANCHOR BOLTS, ETC.
6. DETERMINE EXACT LOCATION OF EXISTING UTILITIES, GROUNDS DRAINS, DRAIN PIPES, VENTS, ETC. BEFORE COMMENCING WORK.
7. INCORRECTLY FABRICATED, DAMAGED, OR OTHERWISE MISFITTING OR NONCONFORMING MATERIALS OR CONDITIONS SHALL BE REPORTED TO THE OWNER PRIOR TO REMEDIAL OR CORRECTIVE ACTION. ANY SUCH ACTION SHALL REQUIRE APPROVAL.
8. EACH CONTRACTOR SHALL COOPERATE WITH THE OWNER'S REPRESENTATIVE, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
9. IT IS THE CONTRACTOR'S RESPONSIBILITY TO EXAMINE ALL PLAN SHEETS AND SPECIFICATIONS AND COORDINATE HIS WORK WITH THE WORK OF ALL OTHER CONTRACTORS TO ENSURE THAT WORK PROGRESSION IS NOT INTERRUPTED.
10. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A NEAT AND ORDERLY SITE, YARD AND GROUNDS. REMOVE AND DISPOSE OFF SITE ALL RUBBISH, WASTE MATERIALS, LITTER, AND ALL FOREIGN SUBSTANCES. REMOVE PETRO-CHEMICAL SPILLS, STAINS AND OTHER FOREIGN DEPOSITS. RAKE GROUNDS TO A SMOOTH EVEN-TEXTURED SURFACE.
11. THE PLANS SHOW SOME KNOWN SUBSURFACE STRUCTURES, ABOVE-GROUND STRUCTURES AND/OR UTILITIES BELIEVED TO EXIST IN THE WORKING AREA, EXACT LOCATION OF WHICH MAY VARY FROM THE LOCATIONS INDICATED. IN PARTICULAR, THE CONTRACTOR IS WARNED THAT THE EXACT OR EVEN APPROXIMATE LOCATION OF SUCH PIPELINES, SUBSURFACE STRUCTURES AND/OR UTILITIES IN THE AREA MAY BE SHOWN OR MAY NOT BE SHOWN; AND IT SHALL BE HIS RESPONSIBILITY TO PROCEED WITH GREAT CARE IN EXECUTING ANY WORK. 48 HOURS BEFORE YOU DIG, DRILL OR BLAST, CALL 1-800-922-4455.
12. THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE NOTIFIED IN WRITING OF ANY CONDITIONS THAT VARY FROM THOSE SHOWN ON THE PLANS. THE CONTRACTOR'S WORK SHALL NOT VARY FROM THE PLANS WITHOUT THE EXPRESSED APPROVAL OF THE OWNER OR OWNER'S REPRESENTATIVE.
13. THE CONTRACTOR IS INSTRUCTED TO COOPERATE WITH ANY AND ALL OTHER CONTRACTORS PERFORMING WORK ON THIS JOB SITE DURING THE PERFORMANCE OF THIS CONTRACT.
14. THE CONTRACTOR SHALL RESTORE ALL PUBLIC OR PRIVATE PROPERTY DAMAGED OR REMOVED TO AT LEAST AS GOOD OF CONDITION AS BEFORE DISTURBED AS DETERMINED BY THE OWNER OR OWNER'S REPRESENTATIVE.
15. THE CONTRACTOR SHALL COMPLY WITH ALL REQUIRED PERMITS.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING, AND INCURRING THE COST OF ALL REQUIRED PERMITS, INCLUDING, BUT NOT LIMITED TO, THE BUILDING PERMIT, INSPECTIONS, CERTIFICATES, ETC.
17. THE CONTRACTOR SHALL PROTECT EXISTING PROPERTY LINE MONUMENTATION. ANY MONUMENTATION DISTURBED OR DESTROYED, AS JUDGED BY THE OWNER OR OWNER'S REPRESENTATIVE SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE UNDER THE SUPERVISION OF A LICENSED LAND SURVEYOR.
18. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER.
19. CONTRACTOR SHALL PROVIDE ALL LABOR AND MATERIALS NECESSARY FOR CONSTRUCTION, AND COORDINATE HIS WORK WITH THE WORK OF OTHERS.
20. CONSTRUCTION SHALL BE IN ACCORDANCE WITH APPLICABLE OSHA REGULATIONS, PER CONNECTICUT STATE BUILDING CODE, AND TIA/EIA-222F (1996), AND SHALL BE PERFORMED ONLY IN "GOOD WEATHER". GOOD WEATHER MEANS LITTLE OR NO WIND AND RAIN AND MINIMUM TEMPERATURE OF 40 DEGREES F. CONTACT THE ENGINEER FOR ADDITIONAL INSTRUCTIONS IF "GOOD WEATHER" CANNOT BE ACHIEVED.

STRUCTURAL STEEL NOTES

1. STRUCTURAL STEEL SHALL CONFORM TO THE AISC MANUAL OF STEEL CONSTRUCTION, NINTH EDITION, FOR THE DESIGN, FABRICATION, AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS.
2. ALL EXTERIOR STEEL WORK SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123 AND AS FOLLOWS, UNLESS OTHERWISE NOTED:
   A) GALVANIZING SHALL BE PERFORMED AFTER SHOP FABRICATION AND WELDING TO THE GREATEST EXTENT POSSIBLE.
   B) ALL DINGS, SCRAPES, MARS, AND WELDS IN THE GALVANIZED AREAS SHALL BE COATED WITH A ZINC-RICH PAINT. USE SHERWIN-WILLIAMS "ZINC CLAD IV" OR EQUIVALENT, APPLIED IN STRICT ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
   C) AFTER ZINC-RICH PAINT IS DRY, OVERCOAT WITH AN APPROPRIATE PAINT THAT IS THE SAME COLOR AS THE STRUCTURE IF DESIRED.
   D) AREAS THAT HAVE BEEN PAINTED SHOULD BE INSPECTED AND REPAIRED AS NECESSARY DURING ROUTINE MAINTENANCE OF THE STRUCTURE.
3. DO NOT PLACE HOLES THROUGH STRUCTURAL STEEL MEMBERS EXCEPT AS SHOWN AND DETAILED ON SHOP DRAWINGS.
4. CONNECTIONS SHALL BE CONSTRUCTED AS FOLLOWS:
   A) ALL WELDING SHALL BE DONE USING E70XX ELECTRODES.
   B) ALL WELDING SHALL CONFORM TO AISC AND AWS D1.1, LATEST EDITION, INCLUDING WELDER(S), QUALIFIED PROCEDURE, AND SATISFACTORY WEATHER CONDITIONS. THE WELDER(S) SHOULD BE CERTIFIED FOR THE METHODS AND POSITIONS TO BE USED, AND SHOULD HAVE EXPERIENCE WELDING GALVANIZED MATERIALS.
   C) WHERE FILLET WELD SIZES ARE NOT SHOWN, PROVIDE THE MINIMUM SIZE PER TABLE J2.4 IN THE AISC MANUAL OF STEEL CONSTRUCTION, NINTH EDITION.
   D) ALL WELDS SHALL BE INSPECTED VISUALLY AND WITH DYE PENETRATE OR MAGNETIC PARTICLE TO MEET THE ACCEPTANCE CRITERIA OF AWS D1.1, SECTION 8 (III). REPAIR ALL WELDS AS NECESSARY.
   E) INSPECTION SHALL BE PERFORMED BY A QUALIFIED WELD INSPECTOR. CERTIFICATION TO AWS, CWI, OR ACWI IS RECOMMENDED FOR VISUAL INSPECTION, AND ASNT-TC-1A LEVEL 2 OR 3 FOR DYE PENETRATE OR MAGNETIC PARTICLE WORK. WELD INSPECTION REPORT SHALL BE SUBMITTED TO ENGINEER PRIOR TO APPROVAL OF CONTRACTOR'S FINAL PAYMENT.
   F) REPAIR ALL GALVANIZED AREAS AFFECTED BY THE WELDING, BOTH INSIDE AND OUTSIDE PER NOTES 2B THROUGH 2D OF THIS DRAWING.
   G) BOLTED CONNECTIONS SHALL USE BEARING TYPE GALVANIZED A325 BOLTS (3/4" DIA.), AND SHALL HAVE A MINIMUM OF TWO BOLTS UNLESS OTHERWISE NOTED.
   H) CONNECTION DESIGN BY FABRICATOR WILL BE SUBJECT TO REVIEW AND APPROVAL OF ENGINEER.

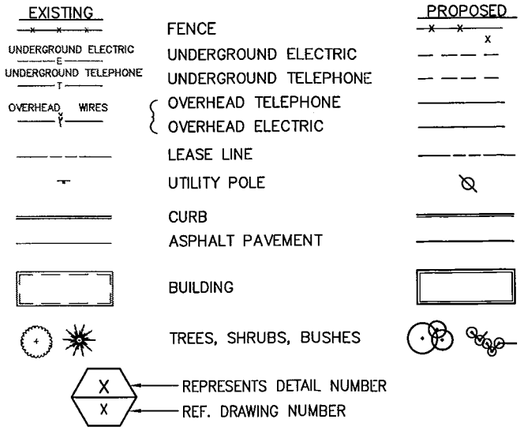
CONCRETE NOTES (IF APPLICABLE)

1. DESIGN AND CONSTRUCTION OF ALL CONCRETE ELEMENTS SHALL CONFORM TO THE LATEST EDITIONS OF THE FOLLOWING APPLICABLE CODES: ACI 301 "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS"; ACI 318, "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE";
2. MIX DESIGN SHALL BE APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO PLACING CONCRETE.
3. CONCRETE SHALL BE NORMAL WEIGHT, 6% AIR ENTRAINED (±1.5%) WITH A MAXIMUM 4" SLUMP, AND HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE NOTED.
4. MAXIMUM AGGREGATE SIZE SHALL BE 1".
5. THE FOLLOWING MATERIALS SHALL BE USED:

PORTLAND CEMENT:	ASTM C 150, TYPE I
REINFORCEMENT:	ASTM A 185
NORMAL WEIGHT AGGREGATE:	ASTM C 33
WATER:	DRINKABLE
ADMIXTURES:	NON-CHLORIDE CONTAINING

6. REINFORCING DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ACI 315.
7. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60, DEFORMED UNLESS NOTED OTHERWISE. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A 185 WELDED STEEL WIRE FABRIC UNLESS NOTED OTHERWISE. SPLICES SHALL BE CLASS "B" AND ALL HOOKS SHALL BE STANDARD, UNO.
8. THE FOLLOWING MINIMUM CONCRETE COVER SHALL BE PROVIDED FOR REINFORCING STEEL UNLESS SHOWN OTHERWISE ON DRAWINGS:
   CONCRETE CAST AGAINST EARTH.....3 IN.
   CONCRETE EXPOSED TO EARTH OR WEATHER:
   #6 AND LARGER .....2 IN.
   #5 AND SMALLER & WWF .....1 1/2 IN.
   CONCRETE NOT EXPOSED TO EARTH OR WEATHER OR NOT CAST AGAINST THE GROUND:
   SLAB AND WALL .....3/4 IN.
   BEAMS AND COLUMNS .....1 1/2 IN.
9. A CHAMFER 3/4" SHALL BE PROVIDED AT ALL EXPOSED EDGES OF CONCRETE, UNO, IN ACCORDANCE WITH ACI 301 SECTION 4.2.4.
10. INSTALLATION OF CONCRETE EXPANSION/WEDGE ANCHOR, SHALL BE PER MANUFACTURES WRITTEN RECOMMENDED PROCEDURE. THE ANCHOR BOLT, DOWEL OR ROD SHALL CONFORM TO MANUFACTURER'S RECOMMENDATION FOR EMBEDMENT DEPTH OR AS SHOWN ON THE DRAWINGS. NO REBAR SHALL BE CUT WITHOUT PRIOR ENGINEERING APPROVAL WHEN DRILLING HOLES IN CONCRETE.
11. CURING COMPOUNDS SHALL CONFORM TO ASTM C-309.
12. ADMIXTURES SHALL CONFORM TO THE APPROPRIATE ASTM STANDARD AS REFERENCED IN ACI-301.
13. DO NOT WELD OR TACKWELD REINFORCING STEEL.
14. ALL DOWELS, ANCHOR BOLTS, EMBEDDED STEEL, ELECTRICAL CONDUITS, PIPE SLEEVES, GROUNDS AND ALL OTHER EMBEDDED ITEMS AND FORMED DETAILS SHALL BE IN PLACE BEFORE START OF CONCRETE PLACEMENT.
15. LOCATE ADDITIONAL CONSTRUCTION JOINTS REQUIRED TO FACILITATE CONSTRUCTION AS ACCEPTABLE TO ENGINEER. PLACE REINFORCEMENT CONTINUOUSLY THROUGH JOINT.
16. REINFORCEMENT SHALL BE COLD BENT WHENEVER BENDING IS REQUIRED.
17. PLACE CONCRETE IN A UNIFORM MANNER TO PREVENT THE FORMATION OF COLD JOINTS AND OTHER PLANES OF WEAKNESS. VIBRATE THE CONCRETE TO FULLY EMBED REINFORCING. DO NOT USE VIBRATORS TO TRANSPORT CONCRETE THROUGH CHUTES OR FORMWORK.
18. DO NOT PLACE CONCRETE IN WATER, ICE, OR ON FROZEN GROUND.
19. DO NOT ALLOW CONCRETE SUBBASE TO FREEZE DURING CONCRETE CURING AND SETTING PERIOD, OR FOR A MINIMUM OF 14 DAYS AFTER PLACEMENT.
20. FOR COLD-WEATHER AND HOT-WEATHER CONCRETE PLACEMENT, CONFORM TO APPLICABLE ACI CODES AND RECOMMENDATIONS. IN EITHER CASE, MATERIALS CONTAINING CHLORIDE, CALCIUM, SALTS, ETC. SHALL NOT BE USED. PROTECT FRESH CONCRETE FROM WEATHER FOR 7 DAYS MINIMUM.

CIVIL LEGEND



infinigy engineering & surveying
11 Herbert Drive
Latham, NY 12110
OFFICE: (518) 690-0790
FAX: (518) 690-0793

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	SJB	03/31/09

Drawn: DJW Date: 03/31/09
Designed: DJW Date: 03/31/09
Checked: SJB Date: 03/31/09

Project Number 234-001

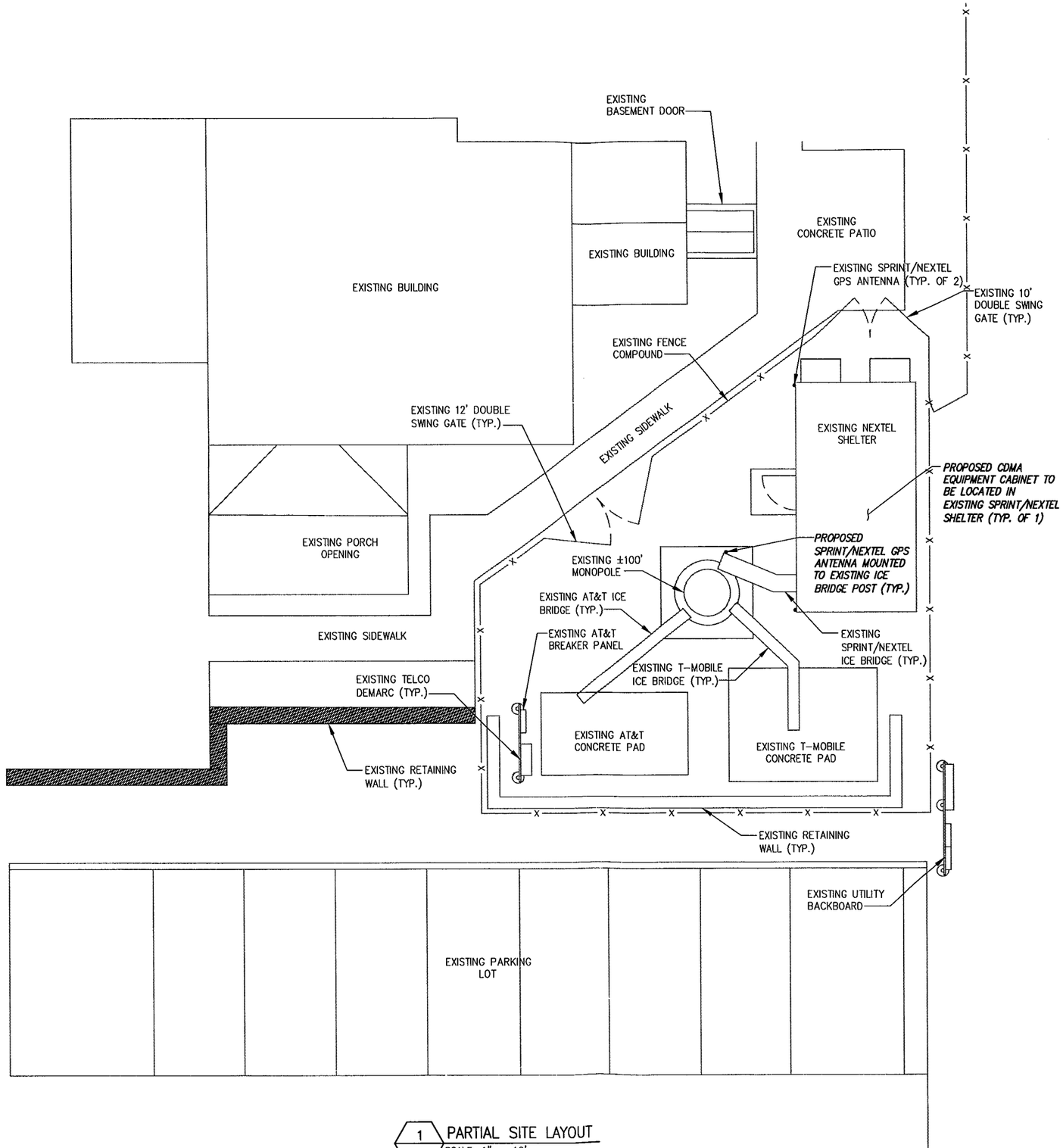
Project Title
WEST MERIDEN
CT4132 / CT25XC840
462 WEST MAIN STREET
MERIDEN, CT 06451

Prepared For
Sprint Nextel Corp.

Drawing Scale: AS NOTED
Date: 03/31/09

Drawing Title
GENERAL NOTES & LEGEND

Drawing Number
EX-1



1 PARTIAL SITE LAYOUT
SCALE: 1" = 10'

GRAPHIC SCALE
10' 0 10'
SCALE: 1" = 10'-0"

BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING ON 3/25/09, AND EXISTING DRAWINGS PREPARED BY URS CORPORATION AES, TITLED "WEST MERIDEN", DATED 12/01/07, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.

infinigy
engineering
& surveying
11 Herbert Drive
Latham, NY 12110
OFFICE: (518) 690-0790
FAX: (518) 690-0793

No.	Submittal / Revision	App'd	Date
0	ISSUED FOR REVIEW	SJB	03/31/09

Drawn: DJW Date: 03/31/09
Designed: DJW Date: 03/31/09
Checked: SJB Date: 03/31/09

Project Number
234-001

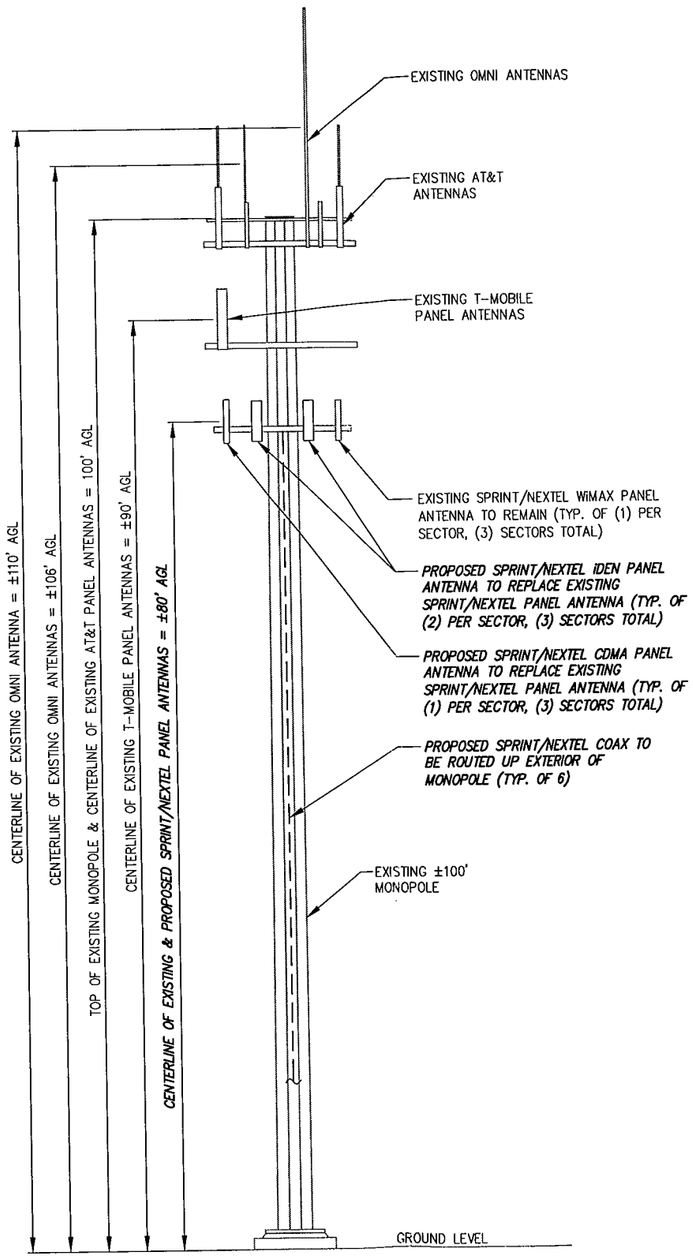
Project Title
WEST MERIDEN
CT4132 / CT25XC840
462 WEST MAIN STREET
MERIDEN, CT 06451

Prepared For
Sprint Nextel Corp.

Drawing Scale:
AS NOTED
Date:
03/31/09

Drawing Title
PARTIAL SITE LAYOUT

Drawing Number
EX-2



1 / -- MONOPOLE ELEVATION
NOT TO SCALE

BASEMAPPING PREPARED FROM A SITE WALK PERFORMED BY INFINIGY ENGINEERING ON 3/25/09, AND EXISTING DRAWINGS PREPARED BY URS CORPORATION AES, TITLED "WEST MERIDEN", DATED 12/01/07, AND DOES NOT REPRESENT AN ACTUAL FIELD SURVEY.

INFINIGY ENGINEERING HAS NOT EVALUATED THE EXISTING MONOPOLE, AND ASSUMES NO LIABILITY FOR THE STRUCTURAL INTEGRITY OF THE MONOPOLE WITH THE EXISTING OR PROPOSED LOADING. A STRUCTURAL ANALYSIS MUST BE COMPLETED PRIOR TO CONSTRUCTION.

infinigy
engineering
& surveying
11 Herbert Drive
Latham, NY 12110
OFFICE: (518) 690-0790
FAX: (518) 690-0793

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Prepared For
Sprint Nextel Corp.

Drawing Scale:
AS NOTED
Date:
03/31/09

Drawing Title
TOWER ELEVATION

Drawing Number
EX-3

at&t
Glynn Walker
AT&T Mobility
5405 Windward Pkwy
Alpharetta, GA 30004
(770) 708-6122

GPD ASSOCIATES
Kevin Clements
520 South Main St., Suite 2531
Akron, OH 44311
(330) 572-2195
kclements@gpdgroup.com

GPD# 2009261.83
March 25, 2009

STRUCTURAL ANALYSIS REPORT

AT&T DESIGNATION:	Site USID:	25975
	Site FA:	10071118
	Site Name:	MERIDEN WEST CENTRAL
NEXTEL DESIGNATION:	**Site Name:**	**Meriden**
	Site Number:	**CT25XC840/CT4132**
ANALYSIS CRITERIA:		**TIA/EIA-222-F & 2003 IBC** **85-mph with 0" ice** **74-mph with 1/2" ice**
SITE DATA:		**450-478 West Main Street, Meriden, CT 06451, New Haven County** **Latitude 41° 32' 23.604" N, Longitude 72° 49' 8.04" W** **100' Glen Martin Monopole**

Mr. Walker,

GPD is pleased to submit this Structural Analysis Report to determine the structural integrity of the aforementioned tower. The purpose of the analysis is to determine the suitability of the tower with the addition of the following proposed loading configuration:

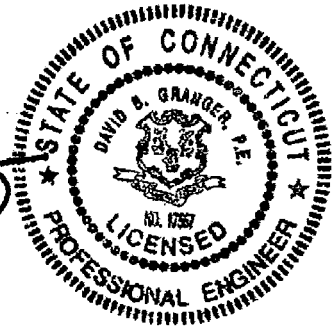
Elev. 80' (1) Andrew UMWD-09014B-XDH Antennas on an existing 15' LP Platform w/ (1) 1-5/8" internal coax
(2) Andrew HBX-6516DS-VTM Antennas on the same 15' Platform with (2) 1-5/8" internal coax

Based on our analysis we have determined the design of the **tower and its foundation are sufficient** for the proposed, existing, and reserved loadings as referenced in Appendix A.

We at GPD appreciate the opportunity of providing our continuing professional services to you and AT&T. If you have any questions please do not hesitate to call.

Respectfully submitted,

David B. Granger, P.E.
Connecticut #: 17557



SUMMARY & RESULTS

The purpose of this analysis was to verify whether the existing structure is capable of carrying the proposed loading configuration as specified by Nextel to AT&T. This report was commissioned by Mr. Glynn Walker of AT&T.

TOWER SUMMARY AND RESULTS

Member	Capacity	Results
Monopole	42.5%	Pass
Base Plate	24.0%	Pass
Anchor Rods	34.4%	Pass
Foundation	66.2%	Pass

ANALYSIS METHOD

RISA Tower (Version 5.3.0.1), a commercially available software program, was used to create a three-dimensional model of the tower and calculate primary member stresses for various dead, live, wind, and ice load cases. Selected output from the analysis is included in Appendix B. The following table details the information provided to complete this structural analysis. This analysis is solely based on this information.

DOCUMENTS PROVIDED

Document	Remarks	Source
Preliminary Tower Summary	Nextel Co-location document	Siterra
Site Lease Application	Nextel Application, dated 2/19/09	Siterra
Tower and Foundation Design	Glen Martin Engineering Inc., Site #: CT-378, dated 12/15/03	Siterra
Previous Structural Analysis	GPD Associates Job #: 2009260.73, dated 2/25/09	Siterra
Tower Mapping	GPD Associates & MTSI Northeast, dated 2/18/09	Siterra
Geotechnical Report	Tectonic Engineering Report #: 2650-CT378, dated 8/28/02	Siterra

ASSUMPTIONS

This structural analysis is based on the theoretical capacity of the members and is not a condition assessment of the monopole. This analysis is from information supplied, and therefore, its results are based on and are as accurate as that supplied data. GPD has made no independent determination, nor is it required to, of its accuracy. The following assumptions were made for this structural analysis.

1. The monopole shaft sizes and shape are considered accurate as supplied. The material grade is as per data supplied and/or as assumed and as stated in the materials section.
2. The antenna configuration is as supplied and/or as modeled in the analysis. It is assumed to be complete and accurate. All antennas, mounts, coax and waveguides are assumed to be properly installed and supported as per manufacturer requirements
3. Some assumptions are made regarding antennas and mount sizes and their projected areas based on best interpretation of data supplied and of best knowledge of antenna type and industry practice.
4. All mounts, if applicable, are considered adequate to support the loading. No actual analysis of the mount(s) is performed. This analysis is limited to analyzing the tower only.
5. The soil parameters are as per data supplied or as assumed and stated in the calculations. If no data is available, the foundation system is not verified. In the case of absent foundation data, it is the tower owner's responsibility to insure that the foundation system is adequate to support the structure with its new reactions.
6. The tower and structures have been properly maintained in accordance with TIA Standards and/or with manufacturer's specifications.
7. All welds and connections are assumed to develop at least the member capacity, unless determined otherwise and explicitly stated in this report.
8. Tower Mounted Amplifiers are assumed to be installed behind antennas.
9. All existing loading was obtained from the most recent Analysis by GPD Associates Job #: 2009260.73, dated 2/25/09, photos and the provided Preliminary Tower Summary and is assumed to be accurate.
10. All proposed coax is assumed to be internal to the monopole

If any of these assumptions are not valid or have been made in error, this analysis may be affected, and GPD Associates should be allowed to review any new information to determine its effect on the structural integrity of the tower.

DISCLAIMER OF WARRANTIES

GPD ASSOCIATES has performed a site visit to the tower to verify the member sizes or antenna/coax loading. If the existing conditions are not as represented on the tower elevation contained in this report, we should be contacted immediately to evaluate the significance of the discrepancy. This is not a condition assessment of the tower or foundation. This report does not replace a full tower inspection. The tower and foundations are assumed to have been properly fabricated, erected, maintained, in good condition, twist free, and plumb.

The engineering services rendered by GPD ASSOCIATES in connection with this Structural Analysis are limited to a computer analysis of the tower structure and theoretical capacity of its main structural members. All tower components have been assumed to only resist dead loads when no other loads are applied. No allowance was made for any damaged, bent, missing, loose, or rusted members (above and below ground). No allowance was made for loose bolts or cracked welds.

GPD ASSOCIATES does not analyze the fabrication of the structure (including welding). It is not possible to have all the very detailed information needed to perform a thorough analysis of every structural sub-component and connection of an existing tower. GPD ASSOCIATES provides a limited scope of service in that we cannot verify the adequacy of every weld, plate connection detail, etc. The purpose of this report is to assess the feasibility of adding appurtenances usually accompanied by transmission lines to the structure.

It is the owner's responsibility to determine the amount of ice accumulation, if any, that should be considered in the structural analysis.

The attached sketches are a schematic representation of the analyzed tower. If any material is fabricated from these sketches, the contractor shall be responsible for field verifying the existing conditions, proper fit, and clearance in the field. Any mentions of structural modifications are reasonable estimates and should not be used as a precise construction document. Precise modification drawings are obtainable from GPD ASSOCIATES, but are beyond the scope of this report.

Miscellaneous items such as antenna mounts, etc., have not been designed or detailed as a part of our work. We recommend that material of adequate size and strength be purchased from a reputable tower manufacturer.

GPD ASSOCIATES makes no warranties, expressed and/or implied in connection with this report and disclaims any liability arising from material, fabrication, and erection of this tower. GPD ASSOCIATES will not be responsible whatsoever for, or on account of, consequential or incidental damages sustained by any person, firm, or organization as a result of any data or conclusions contained in this report. The maximum liability of GPD ASSOCIATES pursuant to this report will be limited to the total fee received for preparation of this report.

APPENDIX A

Tower Analysis Summary Form

Tower Analysis Summary Form

General Info

Site Name	MERIDEN WEST CENTRAL
Site Number	25975
FA Number	10071118
Date of Analysis	3/25/2009
Company Performing Analysis	GPD

The information contained in this summary report is not to be used independently from the PE stamped tower analysis.

Tower Info	Description	Date
Tower Type (G, SST, MP)	MP	
Tower Height (top of steel AGL)	100'	
Tower Manufacturer	Glen Martin	12/11/2003
Tower Model	n/a	
Tower Design	Glen Martin Site #: CT-378	6/4/2003
Foundation Design	Glen Martin Site #: CT-379	12/15/2003
Geotech Report	Tectonic Engineering Report #: 2650-CT378	8/28/2002
Tower Mapping	GPD Associates & MTSI Northeast	2/18/2009
Previous Structural Analysis	GPD Job #: 2009260.73	2/25/2009
Foundation Mapping	n/a	

Design Parameters

Design Code Used	TIA/EIA-222-F
Location of Tower (County, State)	New Haven, Connecticut
Basic Wind Speed (mph)	85-fastest
Ice Thickness (in)	0.5"
Structure Classification (I, II, III)	
Exposure Category (B, C, D)	
Topographic Category (1 to 5)	

Analysis Results (% Maximum Usage)

Existing/Reserved + Future + Proposed Condition	
Tower	42.5%
Foundation	66.2%
Guy Wire	n/a

Steel Yield Strength (ksi)

Pole	65
Base Plate	50
Anchor Rods	50

Existing / Reserved Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount Height (ft)	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment Leg/Face
AT&T Mobility	102	115	1	Omni	Unknown	25' Omni Antenna		1	Unknown	pipe mounted	7	Unknown	1/2"	Internal
AT&T Mobility	100	103	3	Omni	Decibel	DB201-A		1	Unknown	13' Platform w/ rails				
AT&T Mobility	100	103	4	Yagi	Unknown	3' Yagi Antenna				on same mount				
AT&T Mobility	100	103	3	Panel	Kathrein	800-10121				on same mount	6	Unknown	1-1/4"	Internal
AT&T Mobility	100	103	6	TMA	Powerwave	LGP21401				behind antennas				
AT&T Mobility	100	100	6	Panel	Allgon	7250.03				on same mount	6	Unknown	1-1/4"	Internal
T-Mobile	86	90	3	Panel	RFS	APX16PV-16PVL-E	30/150/280	1	PiROD	13' LP Platform	12	Unknown	7/8"	Internal
T-Mobile	86	90	6	TMA	Andrew	dTMA1.9GHz	30/150/280			on same mount				
T-Mobile	86	90	3	Panel	RFS	APX16DWV-16-DWV-S-E-ACU	60/180/300			on same mount	6	LDF7-50A	1-5/8"	Internal
T-Mobile	86	90	3	TMA	RFS	ATMAA1412D-1A20	60/180/300			on same mount				
T-Mobile	86	87	1	Panel	Unknown	2' square panel				on same mount	1	Unknown	3/8"	Internal
Nextel	80	80	12	Panel	Decibel	844G65VTZASX	30/150/280	1	PiROD	15' LP Platform	12	Unknown	1-5/8"	Internal

Note: Three of the existing antennas at 80' shall be removed prior to the installation of the proposed loading and were not considered in this analysis. The existing coax shall be reused.

Proposed Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment
Nextel	80	80	1	Panel	Andrew	UMWD-09014B-XDH	320			on existing mount	3	LDF7-50A	1-5/8"	Internal
Nextel	80	80	2	Panel	Andrew	HBX-6516DS-VTM	150/260			on existing mount				

Note: Three of the existing antennas at 80' shall be removed prior to the installation of the proposed loading and were not considered in this analysis. The existing coax shall be reused.

Future Loading

Antenna								Mount			Transmission Line			
Antenna Owner	Mount	Antenna CL (ft)	Quantity	Type	Manufacturer	Model	Azimuth	Quantity	Manufacturer	Type	Quantity	Model	Size	Attachment

APPENDIX B

RISA Tower Output File

Tower Input Data

There is a pole section.
This tower is designed using the TIA/EIA-222-F standard.
The following design criteria apply:

Tower is located in New Haven County, Connecticut.
Basic wind speed of 85 mph.
Nominal ice thickness of 0.5000 in.
Ice density of 56 pcf.
A wind speed of 74 mph is used in combination with ice.
Temperature drop of 50 °F.
Deflections calculated using a wind speed of 60 mph.
A non-linear (P-delta) analysis was used.
Pressures are calculated at each section.
Stress ratio used in pole design is 1.333.
Local bending stresses due to climbing loads, feedline supports, and appurtenance mounts are not considered.

Feed Line/Linear Appurtenances - Entered As Area

Description	Face or Leg	Allow Shield	Component Type	Placement ft	Total Number		C_AA_A ft^2/ft	Weight plf
LDF6-50A(1-1/4")	C	No	Inside Pole	100.00 - 8.00	12	No Ice	0.00	0.66
						1/2" Ice	0.00	0.66
LDF4P-50A (1/2 FOAM)	C	No	Inside Pole	100.00 - 8.00	7	No Ice	0.00	0.15
						1/2" Ice	0.00	0.15
LDF7-50A(1-5/8")	B	No	Inside Pole	86.00 - 8.00	6	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82
LDF5-50A(7/8")	B	No	Inside Pole	86.00 - 8.00	12	No Ice	0.00	0.33
						1/2" Ice	0.00	0.33
LDF2-50(3/8")	B	No	Inside Pole	86.00 - 8.00	1	No Ice	0.00	0.08
						1/2" Ice	0.00	0.08
LDF7-50A(1-5/8")	A	No	Inside Pole	80.00 - 8.00	15	No Ice	0.00	0.82
						1/2" Ice	0.00	0.82

Discrete Tower Loads

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
24' Omni	A	From Centroid-Face	4.00 0.00 12.50	0.0000	102.00	No Ice 1/2" Ice	19.20 21.68	19.20 21.68	0.10 0.23
9'x4" Pipe Mount	A	From Centroid-Face	4.00 0.00 0.00	0.0000	102.00	No Ice 1/2" Ice	3.98 4.52	3.98 4.52	0.10 0.13
Valmont 13' Platform w/ Rails (GPD)	C	None		0.0000	100.00	No Ice 1/2" Ice	35.90 40.50	35.90 40.50	1.34 3.00
(2) 3' Yagi	A	From Centroid-Face	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	0.52 0.71	0.52 0.71	0.02 0.02

Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
(2) 3' Yagi	B	From Centroid-Face	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	0.52 0.71	0.52 0.71	0.02 0.02
DB201-A	A	From Centroid-Leg	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	1.10 1.98	1.10 1.98	0.03 0.03
DB201-A	B	From Centroid-Leg	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	1.10 1.98	1.10 1.98	0.03 0.03
DB201-A	C	From Centroid-Leg	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	1.10 1.98	1.10 1.98	0.03 0.03
800 10121	A	From Centroid-Face	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
800 10121	B	From Centroid-Face	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
800 10121	C	From Centroid-Face	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	5.46 5.88	3.29 3.64	0.05 0.08
(2) LGP21401	A	From Centroid-Face	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	0.00 0.00	0.23 0.31	0.01 0.02
(2) LGP21401	B	From Centroid-Face	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	0.00 0.00	0.23 0.31	0.01 0.02
(2) LGP21401	C	From Centroid-Face	4.00 0.00 3.00	0.0000	100.00	No Ice 1/2" Ice	0.00 0.00	0.23 0.31	0.01 0.02
(2) 7250.03	A	From Centroid-Face	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	4.00 4.39	1.87 2.33	0.02 0.04
(2) 7250.03	B	From Centroid-Face	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	4.00 4.39	1.87 2.33	0.02 0.04
(2) 7250.03	C	From Centroid-Face	4.00 0.00 0.00	0.0000	100.00	No Ice 1/2" Ice	4.00 4.39	1.87 2.33	0.02 0.04
PiROD 13' Low Profile Platform (Monopole)	C	None		0.0000	86.00	No Ice 1/2" Ice	15.70 20.10	15.70 20.10	1.30 1.76
APX16PV-16PVL-E	A	From Centroid-Face	4.00 -2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	6.70 7.13	2.00 2.33	0.04 0.07
APX16PV-16PVL-E	B	From Centroid-Face	4.00 -2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	6.70 7.13	2.00 2.33	0.04 0.07
APX16PV-16PVL-E	C	From Centroid-Face	4.00 -2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	6.70 7.13	2.00 2.33	0.04 0.07
(2) DTMA-1.9 GHz	A	From Centroid-Face	4.00 -2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	0.00 0.00	0.41 0.52	0.03 0.03
(2) DTMA-1.9 GHz	B	From Centroid-Face	4.00 -2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	0.00 0.00	0.41 0.52	0.03 0.03
(2) DTMA-1.9 GHz	C	From	4.00	0.0000	86.00	No Ice	0.00	0.41	0.03

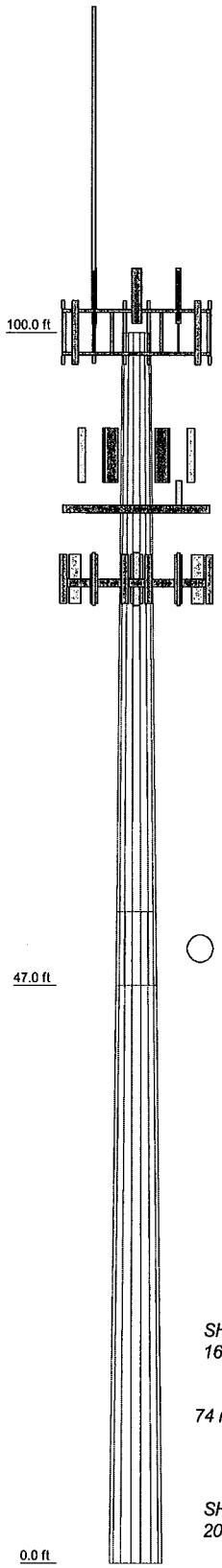
Description	Face or Leg	Offset Type	Offsets: Horz Lateral ft / Vert ft / ft	Azimuth Adjustment °	Placement ft		C_AA_A Front ft^2	C_AA_A Side ft^2	Weight K
		Centroid-Face	-2.00 4.00			1/2" Ice	0.00	0.52	0.03
APX16DWV-16DWV-S-E-A CU	A	From Centroid-Face	4.00 2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	6.70 7.13	2.00 2.33	0.04 0.07
APX16DWV-16DWV-S-E-A CU	B	From Centroid-Face	4.00 2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	6.70 7.13	2.00 2.33	0.04 0.07
APX16DWV-16DWV-S-E-A CU	C	From Centroid-Face	4.00 2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	6.70 7.13	2.00 2.33	0.04 0.07
ATMAA1412D-1A20	A	From Centroid-Face	4.00 2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	0.00 0.00	0.47 0.57	0.01 0.02
ATMAA1412D-1A20	B	From Centroid-Face	4.00 2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	0.00 0.00	0.47 0.57	0.01 0.02
ATMAA1412D-1A20	C	From Centroid-Face	4.00 2.00 4.00	0.0000	86.00	No Ice 1/2" Ice	0.00 0.00	0.47 0.57	0.01 0.02
2 sf. panel	B	From Centroid-Face	4.00 0.00 1.00	0.0000	86.00	No Ice 1/2" Ice	2.80 3.04	0.52 0.67	0.02 0.03
PiROD 15' Low Profile Platform (Monopole)	C	None		0.0000	80.00	No Ice 1/2" Ice	17.30 22.10	17.30 22.10	1.50 2.03
(3) 844G65VTZASX	A	From Centroid-Leg	4.00 0.00 0.00	30.0000	80.00	No Ice 1/2" Ice	5.83 6.23	3.97 4.34	0.02 0.05
(3) 844G65VTZASX	B	From Centroid-Leg	4.00 0.00 0.00	30.0000	80.00	No Ice 1/2" Ice	5.83 6.23	3.97 4.34	0.02 0.05
(3) 844G65VTZASX	C	From Centroid-Leg	4.00 0.00 0.00	40.0000	80.00	No Ice 1/2" Ice	5.83 6.23	3.97 4.34	0.02 0.05
UMWD-09014B-XDH	A	From Centroid-Leg	4.00 0.00 0.00	-40.0000	80.00	No Ice 1/2" Ice	3.45 3.79	2.07 2.39	0.01 0.03
HBX-6516DS-VTM	B	From Centroid-Leg	4.00 0.00 0.00	30.0000	80.00	No Ice 1/2" Ice	3.36 3.69	1.99 2.30	0.01 0.03
HBX-6516DS-VTM	C	From Centroid-Leg	4.00 0.00 0.00	20.0000	80.00	No Ice 1/2" Ice	3.36 3.69	1.99 2.30	0.01 0.03

Section Capacity Table

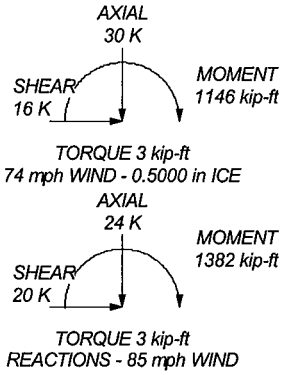
Section No.	Elevation ft	Component Type	Size	Critical Element	P K	$SF*P_{allow}$ K	% Capacity	Pass Fail
L1	100 - 47	Pole	TP40.72x28x0.3125	1	-11.67	2019.47	30.1	Pass
L2	47 - 0	Pole	TP51.37x38.655x0.375	2	-23.65	3171.35	42.5	Pass
							Summary	
						Pole (L2)	42.5	Pass
						RATING =	**42.5**	**Pass**

APPENDIX C

Tower Elevation Drawing



Section	Length (ft)	Number of Sides	Thickness (in)	Lap Splice (ft)	Top Dia (in)	Bot Dia (in)	Grade	Weight (K)
1	53.00	16	0.3125	6.00	28.0000	40.7200	A572-65	6.1
2	53.00	16	0.3750		38.6550	51.3700		9.6
								15.8



DESIGNED APPURTENANCE LOADING

TYPE	ELEVATION	TYPE	ELEVATION
24' Omni	102	APX16PV-16PVL-E	86
9'x4" Pipe Mount	102	APX16PV-16PVL-E	86
Valmont 13' Platform w/ Rails (GPD)	100	(2) DTMA-1.9 GHz	86
(2) 3' Yagi	100	(2) DTMA-1.9 GHz	86
(2) 3' Yagi	100	(2) DTMA-1.9 GHz	86
DB201-A	100	APX16DWV-16DWV-S-E-ACU	86
DB201-A	100	APX16DWV-16DWV-S-E-ACU	86
DB201-A	100	APX16DWV-16DWV-S-E-ACU	86
800 10121	100	ATMAA1412D-1A20	86
800 10121	100	ATMAA1412D-1A20	86
800 10121	100	ATMAA1412D-1A20	86
(2) LGP21401	100	2 sf. panel	86
(2) LGP21401	100	PiROD 15' Low Profile Platform (Monopole)	80
(2) LGP21401	100		
(2) 7250.03	100	(3) 844G65VTZASX	80
(2) 7250.03	100	(3) 844G65VTZASX	80
(2) 7250.03	100	(3) 844G65VTZASX	80
PiROD 13' Low Profile Platform (Monopole)	86	UMWD-09014B-XDH	80
		HBX-6516DS-VTM	80
APX16PV-16PVL-E	86	HBX-6516DS-VTM	80

MATERIAL STRENGTH

GRADE	Fy	Fu	GRADE	Fy	Fu
A572-65	65 ksi	80 ksi			

TOWER DESIGN NOTES

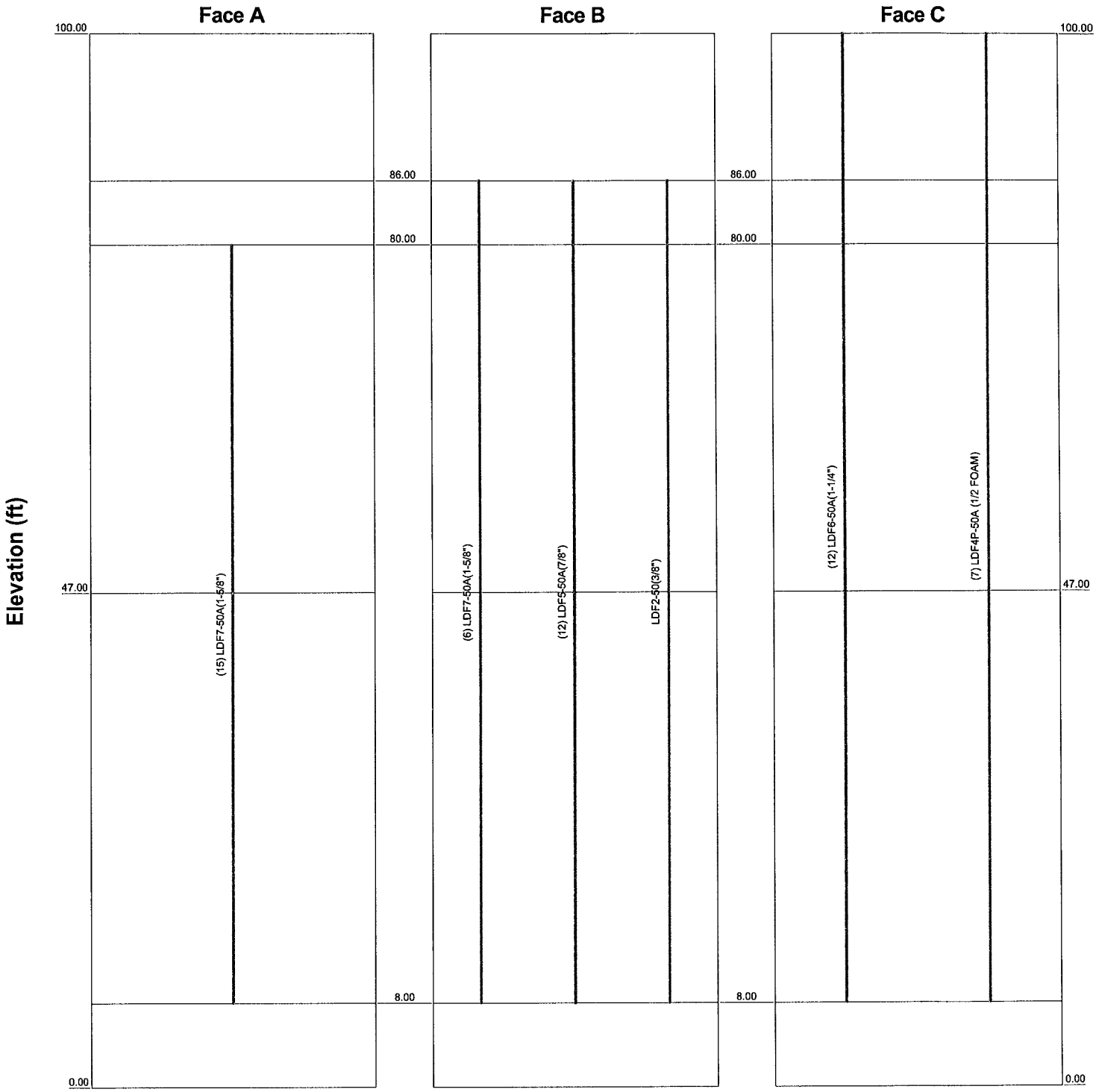
1. Tower is located in New Haven County, Connecticut.
2. Tower designed for a 85 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 74 mph basic wind with 0.50 in ice.
4. Deflections are based upon a 60 mph wind.
5. TOWER RATING: 42.5%

GPD Associates
520 South Main St. Suite 2531
Akron, OH 44311
Phone: (330) 572-2100
FAX: (330) 572-2101

Job: USID: 25975 MERIDEN WEST CENTRAL			
Project: 2009261.83			
Client: AT&T	Drawn by: ZSHEETS	App'd:	
Code: TIA/EIA-222-F	Date: 03/25/09	Scale: NTS	
Path: N:\2009\2009261\83\RISA\Meriden West.eri		Dwg No. E-1	

Feedline Distribution Chart
0' - 100'

Round Flat App In Face App Out Face Truss Leg



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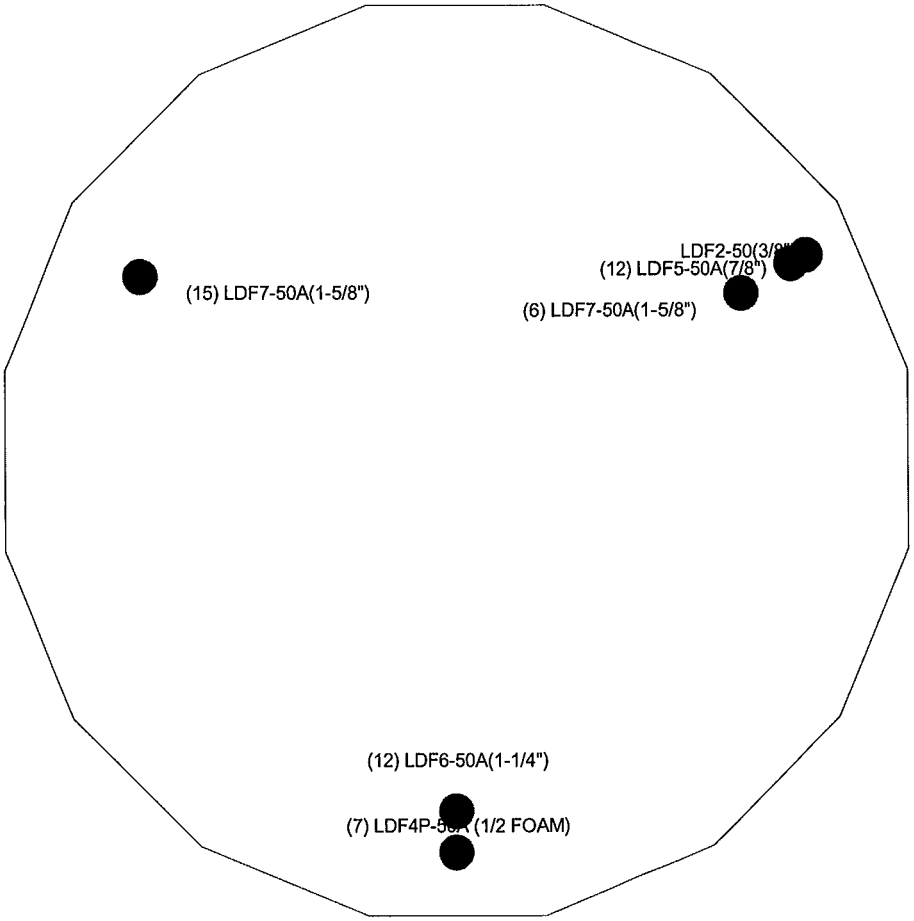
Code: TIA/EIA-222-F	Date: 03/25/09	Scale: NTS	
Path: N:\2009\2009261\83\RISA\Meriden West.eri		Dwg No. E-7	

Feedline Plan

_____ Round _____ Flat _____ App In Face _____ App Out Face



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Path: N:\2009\2009261\83\RISA\Meriden West.eri		Dwg No. E-7	

APPENDIX D

Base Plate & Anchor Rod Analysis

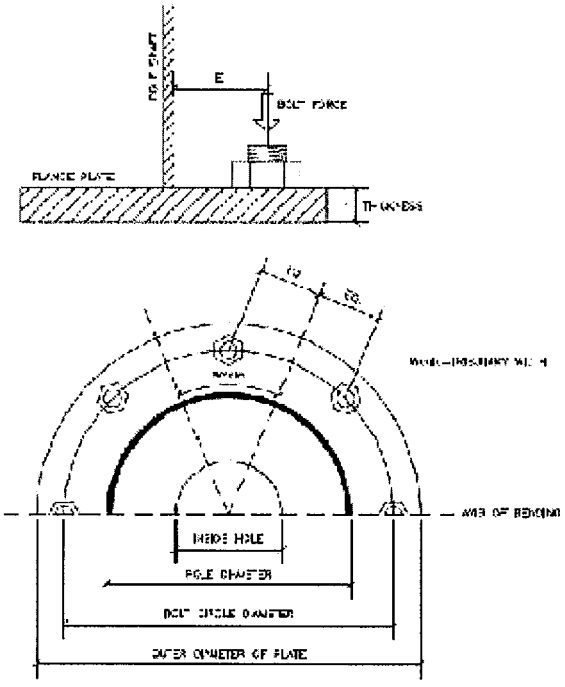
Anchor Rod and Base Plate Stresses
25975 MERIDEN WEST CENTRAL
2009261.83

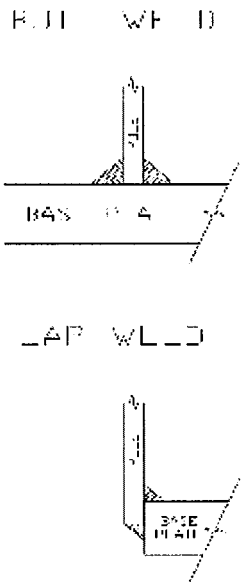
Overturning Moment =	1382.00	k*ft
Axial Force =	24.00	k
Shear Force =	20.00	k

Tower Manufacturer =	Glen Martin

Anchor Rods		
Pole Diameter =	51.37	in
Number of Rods =	20	
Type =	Upset Rod	
Rod Yield Strength (Fy) =	50	ksi
Rod Circle =	59	in
Rod Diameter =	2.5	in
Net Tensile Area =	4.00	in^2
Max Tension on Rod =	55.02	kips
Max Compression on Rod =	57.42	kips
Allow. Rod Force =	160.00	kips
Anchor Rod Capacity =	34.4%	OK

Base Plate		
Monopole Shape =	Polygonal	
# Monopole Sides =	16	
Plate Strength (Fy) =	50	ksi
Plate Thickness =	3	in
Base Weld Type =	Butt	
w_{calc} =	8.17	in
e =	2.565	in
w_{max} =	17.76	in
w =	8.17	in
S =	12.26	in^3
fb =	12.01	ksi
Fb =	50	ksi
Base Plate Capacity =	24.0%	OK





GPD Unstiffened Round Base Plate Stress (Rev F) - V1.7

APPENDIX E

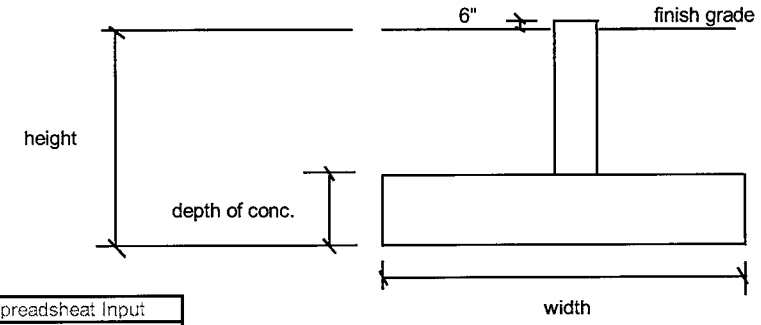
Foundation Calculations

PAD & PIER DESIGN - Monopole

USID: 25975 MERIDEN WEST CENTRAL

TOWER REACTIONS

total overturning moment =	1382	Kip-ft
total shear =	20	Kip
axial =	24	Kip
ground water table =	Below	ft



Spreadsheat Input
PCAMATS Input

PAD DIMENSIONS

width =	20	ft
height =	7.5	ft
depth of conc =	2.5	ft
γ_{soil} =	0.115	kcf
γ_{conc} =	0.150	kcf

Mr =	4719.93	k-ft
Mot =	1542	k-ft
P =	404	k
w_{wedge}	16.60	k
Allowable Bearing =	4	ksf

F.S. $_{OVERTURNING}$ = 3.0609112 ok > 1.5

F.S. $_{OVERTURNING}$ / F.S. $_{ALLOWABLE}$ = 49.0%

LOAD PERPENDICULAR TO PAD

Q_{MAX} = P/A+M/S= 2.1665
Q_{MIN} = P/A-M/S= -0.1465

width/6	M/P	
3.33	3.82	NG (width/6 < M/P), use Qmax

IF M/P>width/6

Qmax = 2.178 ksf
Qmin = 0.000 ksf

Q_{MAX}/Q_{ALL} = 54.4% OK

LOAD AT 45 DEGREES TO PAD

Q_{MAX} = P/A+M/S= 2.648375
Q_{MIN} = P/A-M/S= -0.628375

Verify max pressure in PCAMATS for this load case

Mx =	1090.359	
My =	1090.359	
e_X =	2.699	
ey =	2.699	
e_X/W =	0.135	ok (e/W < 1/6)
e_Y/W =	0.135	ok (e/W < 1/6)

IF e/W > 1/6

Q_{ALL} = 959.51 kips
Q_{MAX} = 635.28 kips
Q_{MAX}/Q_{ALL} = 66.2% OK

B_1 = 21.90 ft
L_1 = 21.90 ft

Foundation Capacity:	**66.2%**	**OK**

C Squared Systems, LLC
920 Candia Road
Manchester, NH 03109
Phone: (603) 657 9702
E-mail:
support@csquaredsystems.com

Calculated Radio Frequency Emissions

CT25XC840 / CT4132

Meriden North Central

462 West Main Street, Meriden, CT 06451

Table of Contents

List of Tables

1. Introduction

The purpose of this report is to investigate compliance with applicable FCC regulations for the addition of Sprint-Nextel CDMA antennas to the existing Sprint-Nextel iDEN antenna array on the existing tower at 462 West Main Street, Meriden, CT 06451.

These calculations assume that the antennas are operating at 100 percent capacity, that all antenna channels are transmitting simultaneously, and that the radio transmitters are operating at full power. Obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are much more conservative (higher) than the actual signal levels will be from the finished installation.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (mW/cm^2). The number of mW/cm^2 emitted is called the power density. The general population exposure limit for the cellular band is 0.567-0.593 mW/cm^2, and the general population exposure limit for the PCS/AWS band is 1.0 mW/cm^2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

The FCC general population / uncontrolled limits set the maximum exposure to which most people may be subjected. General population / uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

Higher exposure limits are permitted under the occupational / controlled exposure category, but only for persons who are exposed as a consequence of their employment and who have been made fully aware of the potential for exposure (through training), and they must be able to exercise control over their exposure. General population / uncontrolled limits are five times more stringent than the levels that are acceptable for occupational, or radio frequency trained individuals.

The FCC describes exposure to radio frequency (RF) energy in terms of percentage of maximum permissible exposure (MPE) with 100% being the maximum allowed. Rather than the FCC presenting the user specification in terms of complex power density figures over a specified surface area, this MPE measure is particularly useful, and even more so when considering that power density limits actually vary by frequency because of the different absorptive properties of the human body at different frequencies.

MPE limits are specified as time-averaged exposure limits. This means that exposure can be averaged over 30 minutes for general population / uncontrolled exposure (or 6 minutes for occupational / controlled exposure). However, for the case of exposure of the general public, time averaging is usually not applied because of uncertainties over exact exposure conditions and difficulty in controlling time of exposure. Therefore, the typical conservative approach is to assume that any RF exposure to the general public will be continuous.

Finally, it should be noted that the MPE limits adopted by the FCC for both general population / uncontrolled exposure and for occupational / controlled exposure incorporate a substantial margin of safety and have been established to be well below levels generally accepted as having the potential to cause adverse health effects.

2. FCC Guidelines for Evaluating RF Radiation Exposure Limits

In 1985, the FCC established rules to regulate radio frequency (RF) exposure from FCC licensed antenna facilities. In 1996, the FCC updated these rules, which were further amended in August 1997 by OET Bulletin 65 Edition 97-01. These new rules include limits for Maximum Permissible Exposure (MPE) for transmitters operating between 300 kHz and 100 GHz. The FCC MPE limits are based on exposure limits recommended by the National Council on Radiation Protection and Measurements (NCRP), the exposure limits developed by the Institute of Electrical and Electronics Engineers, Inc., (IEEE) and adopted by the American National Standards Institute (ANSI).

Attachment B contains excerpts from OET Bulletin 65 and defines the Maximum Exposure Limit. As shown in these excerpts, each frequency band has different exposure limits, requiring power density to be reported as a percent of Maximum Permissible Exposure (MPE) when dealing with carriers transmitting in different frequency bands.

3. RF Exposure Prediction Methods

The emission field calculation results displayed in the following figures were generated using the following formula as outlined in FCC bulletin OET 65:

$$\text{Power Density} = \left(\frac{0.64 \times EIRP}{\pi \times R^2} \right)$$

Where:

EIRP = Effective Isotropic Radiated Power

R = Radial Distance = $\sqrt{(H^2 + V^2)}$

H = Horizontal Distance from antenna

V = Vertical Distance from bottom of antenna

0.64 is the ground reflection factor

4. Calculation Results

Table 1 below outlines the power density information for the site.[1]

Carrier	Number of Trans.	Effective Radiated Power (ERP) Per Transmitter (Watts)	Antenna Height (Feet)	Operating Frequency (MHz)	Total ERP (Watts)	Power Density (mw/cm^2)	Limit	%MPE
AT&T GSM	4	787	100	1900	3148	0.1132	1.0000	11.32%
AT&T UMTS	1	500	100	880	500	0.0180	0.5867	3.06%
Hunters-Yagi 1	5	100	110	35.98	500	0.0149	0.2000	7.43%
Hunters-Yagi 2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.43%
Hunters-Yagi 3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	22.28%
Hunters Whip	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7.43%
T-Mobile	8	217	88	1935	1736	0.0806	1.0000	8.06%
Sprint Nextel Iden	12	100	80	851	1200	0.0674	0.5673	11.88%
Sprint Nextel WiMAX	3	562	80	2657	1686	0.0947	1.0000	9.47%
Sprint Nextel CDMA	4	340	80	1950	1360	0.0764	1.0000	7.64%
							Total	96.01%

Table 1: Proposed Carrier Information

[1] ERP and antenna information for Sprint-Nextel was obtained from Sprint-Nextel RF Engineering. While the CSC database shows WiMAX antennas at this location, Sprint currently has no plans to deploy WiMAX at this site. We have however retained the power density value for WiMAX in reporting the cumulative %MPE.

5. Conclusion

The above analysis verifies that emissions from the proposed site will be below the maximum power density levels as outlined by the FCC in the OET Bulletin 65 Ed. 97-01. Even when using conservative methods, the cumulative power density from the proposed transmit antennas at the existing facility is below the limits for the general public. The highest expected percent of Maximum Permissible Exposure at the base of the tower is 96.01% of the FCC limit.

As noted in the introduction, obstructions (trees, buildings etc.) that would normally attenuate the signal are not taken into account. As a result, the predicted signal levels are more conservative (higher) than the actual signal levels will be from the finished installation.

6. Statement of Certification

I certify to the best of my knowledge that the statements in this report are true and accurate. The calculations follow guidelines set forth in ANSI/IEEE Std. C95.3, ANSI/IEE Std. C95.1 and FCC OET Bulletin 65 Edition 97-01.

Tony Wells
C Squared Systems

March 31, 2009
Date

Attachment A: References

OET Bulletin 65 - Edition 97-01 - August 1997 Federal Communications Commission Office of Engineering & Technology

ANSI C95.1-1982, American National Standard Safety Levels With Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 300 kHz to 100 GHz. IEEE-SA Standards Board

IEEE Std C95.3-1991 (Reaff 1997), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields - RF and Microwave. IEEE-SA Standards Board

Attachment B: FCC Limits For Maximum Permissible Exposure (MPE)

(A) Limits for Occupational/Controlled Exposure

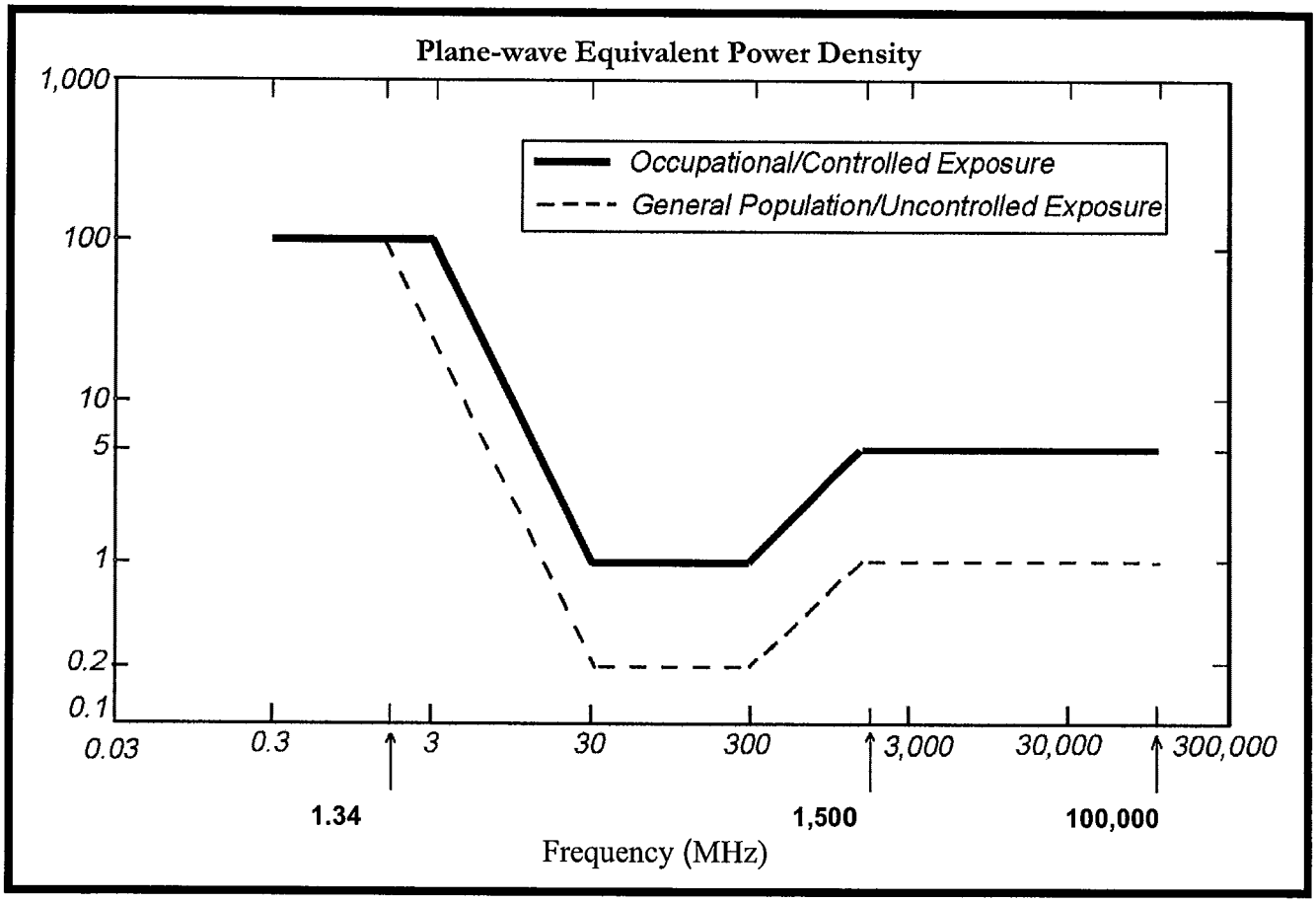
Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-3.0	614	1.63	(100)*	6
3.0-30	1842/f	4.89/f	($900/f^2$)*	6
30-300	61.4	0.163	1.0	6
300-1500	-	-	f/300	6
1500-100,000	-	-	5	6

(B) Limits for General Population/Uncontrolled Exposure

Frequency Range (MHz)	Electric Field Strength (E) (V/m)	Magnetic Field Strength (E) (A/m)	Power Density (S) (mW/cm^2)	Averaging Time $\|E\|^2$, $\|H\|^2$ or S (minutes)
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	-	-	f/1500	30
1500-100,000	-	-	1.0	30

f = frequency in MHz * Plane-wave equivalent power density

NOTE 1: Occupational/controlled limits apply in situations in which persons are exposed as a consequence of their employment provided those persons are fully aware of the potential for exposure and can exercise control over their exposure. Limits for occupational/controlled exposure also apply in situations when an individual is transient through a location where occupational/controlled limits apply provided he or she is made aware of the potential for exposure.
NOTE 2: General population/uncontrolled exposures apply in situations in which the general public may be exposed, or in which persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or can not exercise control over their exposure.



• FCC Limits for Maximum Permissible Exposure (MPE)