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

November 25, 2008

Jennifer Young Gaudet
T-Mobile USA, Inc.
35 Griffin Road S
Bloomfield, CT 06002

RE: **EM-T-MOBILE-162-081031** – Omnipoint Communications, Inc. a.k.a. T-Mobile notice of intent to modify an existing telecommunication facility located at 15 Oakdale Avenue, Winchester, Connecticut.

Dear Ms. Gaudet:

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

- The base plate is reinforced per the attached drawings of the structural analysis report dated October 8, 2008 and sealed by Raphael Mohamed, P.E. prior to the antenna installation;
- A post-construction tower rating of not more than 100 percent is achieved; and
- A signed letter from a Professional Engineer duly licensed in the State of Connecticut shall be submitted to the Council to certify that the reinforcements have been properly completed and a post-construction tower rating of not more than 100 percent has been achieved.

The proposed modifications are to be implemented as specified here and in your notice dated October 29, 2008, including the placement of all necessary equipment and shelters within the tower compound. The modifications are in compliance with the exception criteria in Section 16-50j-72 (b) of the Regulations of Connecticut State Agencies as changes to an existing facility site that would not increase tower height, extend the boundaries of the tower site, increase noise levels at the tower site boundary by six decibels, and increase the total radio frequencies electromagnetic radiation power density measured at the tower site boundary to or above the standard adopted by the State Department of Environmental Protection pursuant to General Statutes § 22a-162. This facility has also been carefully modeled to ensure that radio frequency emissions are conservatively below State and federal standards applicable to the frequencies now used on this tower.

This decision is under the exclusive jurisdiction of the Council. Please be advised that the validity of this action shall expire one year from the date of this letter. Any additional change to this facility will require explicit notice to this agency pursuant to Regulations of Connecticut State Agencies Section 16-50j-73. Such notice shall include all relevant information regarding the proposed change with cumulative worst-case modeling of radio frequency exposure at the closest point of uncontrolled access to the tower base, consistent with Federal Communications Commission, Office of Engineering and Technology, Bulletin 65. Any deviation from this format may result in the Council implementing enforcement proceedings pursuant to

General Statutes § 16-50u including, without limitation, imposition of expenses resulting from such failure and of civil penalties in an amount not less than one thousand dollars per day for each day of construction or operation in material violation.

Thank you for your attention and cooperation.

Very truly yours,

S. Derek Phelps
Executive Director

SDP/MP/laf

c: The Honorable Kenneth J. Fracasso, Mayor, Town of Winchester
Keith Robbins, Town Manager, Town of Winchester
Anthony Cannavo, Planning and Zoning Chairman, Town of Winchester
American Tower Corporation

EM-T-MOBILE-162-081031

VIA OVERNIGHT DELIVERY

October 29, 2008

Connecticut Siting Council
10 Franklin Square
New Britain, Connecticut 06051
Attn: Mr. S. Derek Phelps, Executive Director

Re: Omnipoint Communications, Inc. (T-Mobile) – exempt modification
Oakdale Avenue, Winchester, Connecticut

Dear Mr. Phelps:

This letter and attachments are submitted on behalf of Omnipoint Communications, Inc. (also referred to herein as "T-Mobile"). T-Mobile plans to install antennas and related equipment at the American Tower Corp. site off of Oakdale Avenue in Winchester (coordinates 41°55'18" N, -73°03'02" W). Please accept this letter and attachments as notification, pursuant to R.C.S.A. Section 16-50j-73, of construction which constitutes an exempt modification pursuant to R.C.S.A. Section 16-50j-72(b)(2). In compliance with R.C.S.A. Section 16-50j-73, a copy of this letter and attachments is being sent to the Mayor of Winchester.

T-Mobile will install nine antennas at the 166' level of the tower. The antennas will be installed, three per sector, on T-arms; one TMA will be mounted behind two of the antennas in each sector. T-Mobile's equipment cabinets will be placed on a concrete pad near the base of the tower. Attached are a compound plan and elevation depicting the planned changes. Also attached are a structural analysis and associated reinforcement modification plan, which will be implemented at the time of construction to achieve structural sufficiency for T-Mobile's installation.

The changes to the facility 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. Rather, the planned changes to the facility fall squarely within those activities explicitly provided for in R.C.S.A. Section 16-50j-72(b)(2).

1. The height of the overall structure will be unaffected. The top of the tower extends to approximately 180'; T-Mobile's proposed antennas will be located with a center line of 166' AGL.

T-Mobile USA, Inc.
Office: (860) 692-7100
Fax: (860) 692-7159
35 Griffin Rd S
Bloomfield, CT 06002

2. The addition of T-Mobile's equipment will not require any extension of the site boundaries. All equipment will be located within the existing fenced compound.

3. The proposed changes will not increase the noise level at the existing facility by six decibels or more. The incremental effect of the additional cabinets will be negligible.

4. The changes to the facility will not increase the calculated "worst case" power density for the combined operations at the site to a level at or above the applicable standard for uncontrolled environments as calculated for a mixed frequency site. As indicated on the attached power density calculation, T-Mobile's operations at the site will result in a power density of 1.6353%; the combined site operations will result in a total power density of 27.765%.

Please feel free to call me at (860) 798-7454 with questions concerning this matter. Thank you for your consideration.

Respectfully yours,

Jennifer Young Gaudet

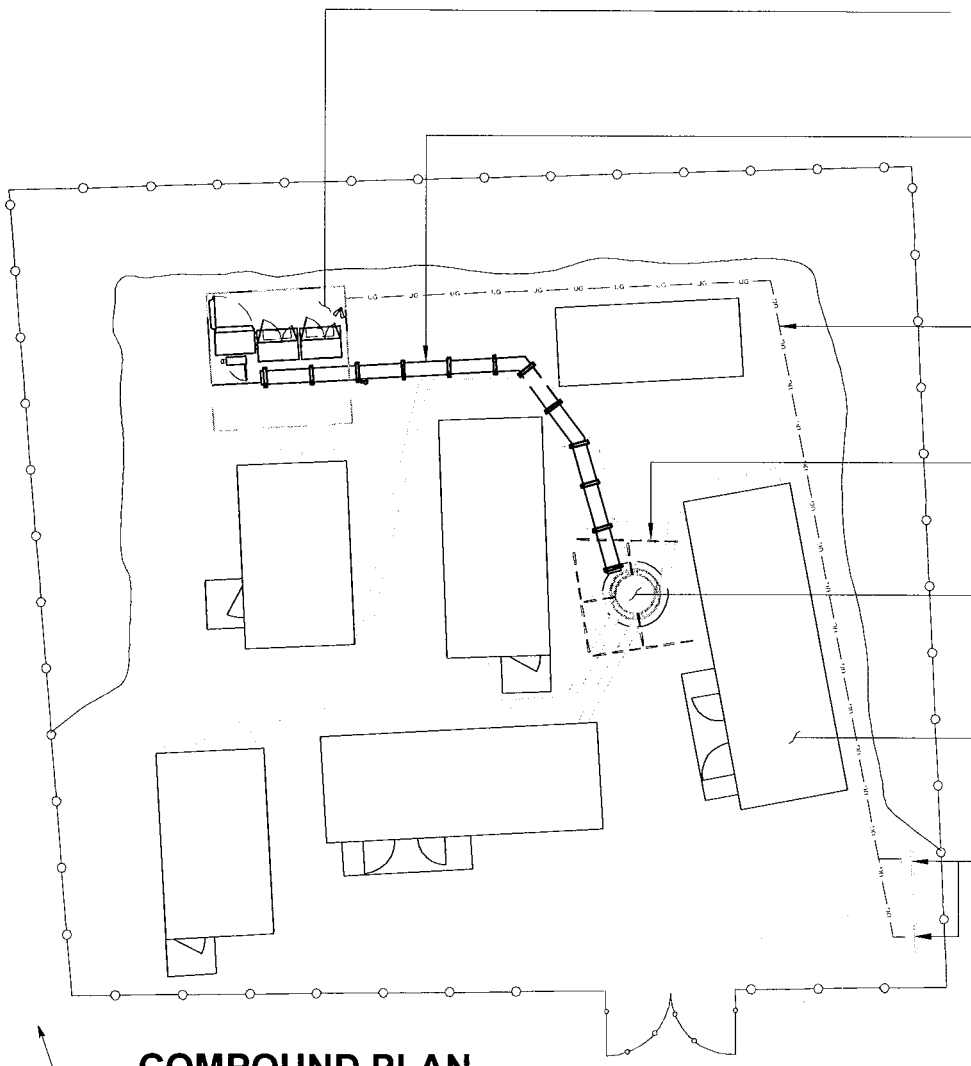
Jennifer Young Gaudet

cc: Kenneth J. Fracasso, Mayor, Town of Winchester
William P. and Richard D. Stow (underlying property owners)
Attachments

ALL-POINTS TECHNOLOGY CORPORATION, P.C.	APT FILING NUMBER: CT-255T-160		T-Mobile	T-MOBILE SITE NUMBER
3 SADDLEBROOK DRIVE KILLINGWORTH, CT. 06419 PHONE: (860)-663-1697 FAX: (860)-663-0935 www.allpointstech.com	LE-1		35 GRIFFIN ROAD BLOOMFIELD, CT 06002 OFFICE: (860)-692-7100	CTNH403A
	SCALE: AS NOTED	DRAWN BY: AAJ		WINCHESTER ATC 108 OAKDALE AVENUE WINCHESTER, CT 06098
	DATE: 09/10/08	CHECKED BY: SMC		

NOTE:
PER FCC MANDATE, ENHANCED EMERGENCY (E911) SERVICE IS REQUIRED TO MEET NATIONWIDE STANDARDS FOR WIRELESS COMMUNICATIONS SYSTEMS. OMNIPOINT COMMUNICATIONS INC. IMPLEMENTATION REQUIRES DEPLOYMENT OF EQUIPMENT AND ANTENNAS GENERALLY DEPICTED ON THIS PLAN, ATTACHED TO OR MOUNTED IN CLOSE PROXIMITY TO THE BTS RADIO CABINETS. OMNIPOINT COMMUNICATIONS INC. RESERVES THE RIGHT TO MAKE REASONABLE MODIFICATIONS TO E911 EQUIPMENT AND LOCATION AS TECHNOLOGY EVOLVES TO MEET REQUIRED SPECIFICATIONS.
ALL EQUIPMENT LOCATIONS ARE APPROXIMATE AND ARE SUBJECT TO APPROVAL BY OMNIPOINT COMMUNICATIONS INC. STRUCTURAL & RF ENGINEERS.
LOCATIONS OF POWER & TELEPHONE FACILITIES ARE SUBJECT TO APPROVAL BY UTILITY COMPANIES.

REV1: 10/20/08: LEASE AREA SIZE: SMC
REV2: 10/21/08: GENERAL COMMENTS: SMC
REV3: 10/28/08: CHANGE ADDRESS: SMC
REV4: 10/29/08: STR'L UPDATE: SMC



PROPOSED T-MOBILE 225 SF (15'x15') LEASE AREA W/ CABINETS, UTILITY CENTER, SERVICE LIGHT, ON PROPOSED CONCRETE SLAB

PROPOSED T-MOBILE HORIZONTAL CABLE TRAY TO EXISTING ACCESS PORT W/ GPS AND GSM ANTENNAS ON 8' MAST

PROPOSED UNDERGROUND ELECTRICAL AND TELCO SERVICE FROM EXISTING METER CENTER TO PROPOSED EQUIPMENT AREA

PROPOSED T-MOBILE ALPHA, BETA, AND GAMMA ANTENNAs (9 TOTAL) & 2 TMAs/SECTOR (6 TOTAL) MOUNTED ON STANDOFF CROSS ARMS

EXISTING 180'± AGL MONOPOLE

EXISTING CARRIER EQUIPMENT (TYP.)

EXISTING MULTIMETER CENTER AND TELCO DEMARC ON SERVICE BACKBOARD

N TRUE

COMPOUND PLAN

SCALE : 1" = 20'-0"

ALL-POINTS TECHNOLOGY CORPORATION, P.C.	APT FILING NUMBER: CT-255T-160		T-Mobile	T-MOBILE SITE NUMBER
3 SADDLEBROOK DRIVE KILLINGWORTH, CT. 06419 PHONE: (860)-663-1697 FAX: (860)-663-0935 www.allpointstech.com	LE-2		35 GRIFFIN ROAD BLOOMFIELD, CT 06002 OFFICE: (860)-692-7100	CTNH403A
	SCALE: AS NOTED	DRAWN BY: AAJ		WINCHESTER ATC 108 OAKDALE AVENUE WINCHESTER, CT 06098
	DATE: 09/10/08	CHECKED BY: SMC		

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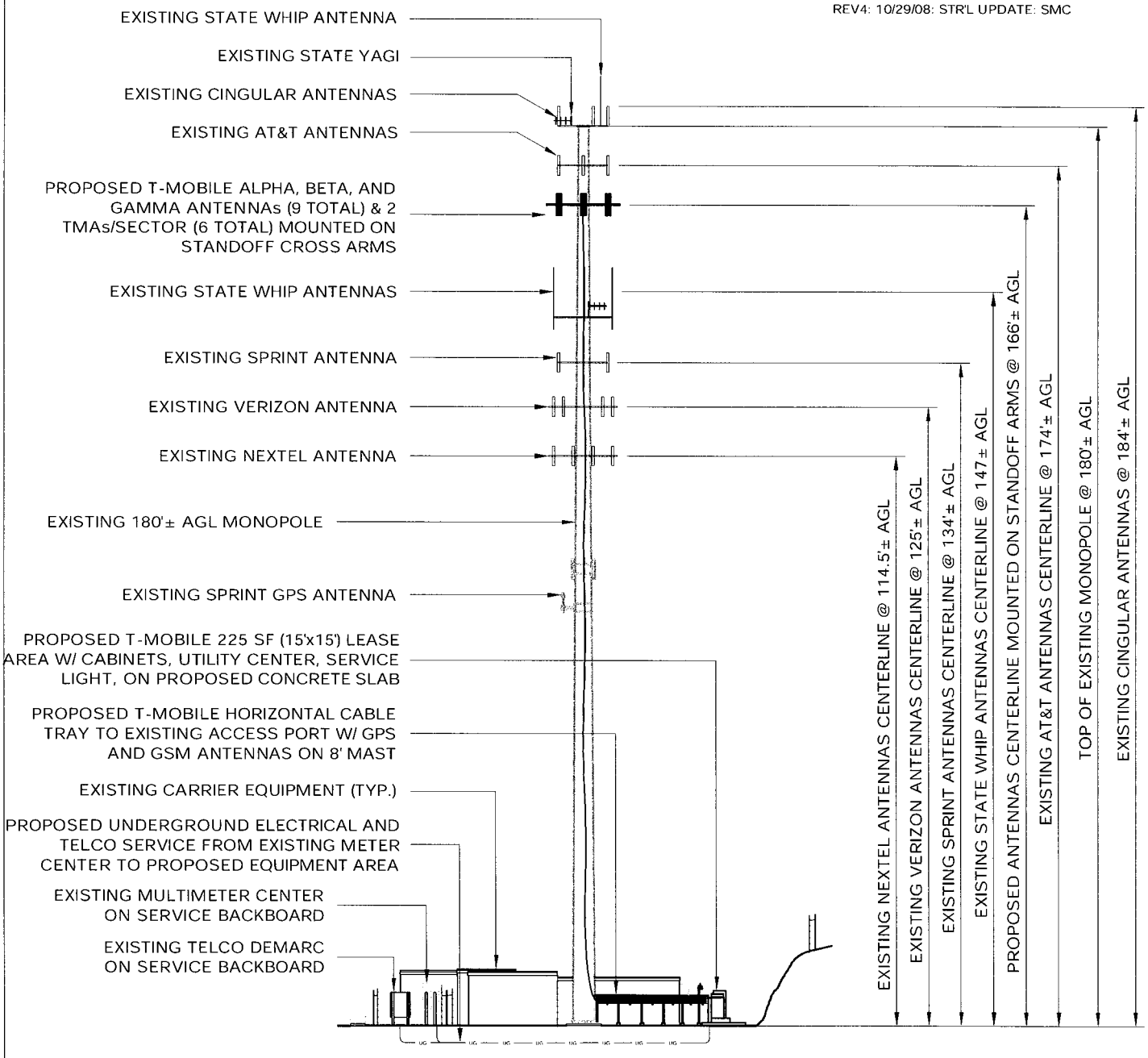


EASTERN ELEVATION

SCALE : 1" = 30'-0"

AMERICAN TOWER

Structural Analysis Report

Structure	:	**180 ft EEI Monopole**
ATC Site Name	:	**Winchester CT 3, CT**
ATC Site Number	:	**302506**
Proposed Carrier	:	**T-Mobile**
Carrier Site Name	:	**Litchfield 6**
Carrier Site Number	:	**CTNH403A**
County	:	**Litchfield**
Eng. Number	:	**42523421**
Date	:	**October 8, 2008***
Usage	:	**97% (Pole Shaft), 104% (Base Plate)**
Portholes Required	:	**No**

Submitted by:
Zachary A. Medoff, E.I.
Design Engineer

American Tower Engineering Services
400 Regency Forest Drive
Cary, NC 27518
Phone: 919-468-0112

10-9-08

Introduction

The purpose of this report is to summarize results of the structural analysis performed on the 180 ft EEI Monopole located at 15 Oakdale Avenue, Winsted, CT 06098, Litchfield County (ATC site #302506). The tower was originally designed and manufactured by EEI (Job #7676, dated August 21, 2000).

Analysis

The tower was analyzed using Semaan Engineering Solutions, Inc., Software. The analysis assumes that the tower is in good, undamaged, and non-corroded condition.

Basic Wind Speed: 90 mph (3-Second Gust)
Radial Ice: 40 mph (3-Second Gust) w/ 1 1/4" ice
Code: ANSI/TIA-222-G / 2003 IBC w/ 2005 CT Supplement & 2008 CT Amendments

Antenna Loads

The following antenna loads were used in the tower analysis.

Existing Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
184.0	12	CSS DUO4-8670	Flat Low Profile Platform	(12) 1 5/8	AT&T Mobility
180.0	1	Yagi		(1) 1 5/8	CT Police Dept.
	1	10' Omni		(1) 7/8	USA Mobility
174.0	4	Antel LPD-7905/4	Flat Low Profile Platform	(12) 1 5/8	Alltel
	4	Nokia CS72993.07			
	2	Decibel 731DG85V1EXM			
142.0	1	56" Dipole	Side Arms	(1) 1/2	CT Police Dept.
	2	10' Omni		(4) 1 5/8	
134.0	9	Andrew DB980H90E-M	Flat Platform w/ Handrails	(9) 1 5/8	Sprint Nextel
125.0	2	Antel LPA-80063/6CF	Round Low Profile Platform	(12) 1 5/8	Verizon
	4	Antel LPA-80080/6CF			
	4	Decibel DB950F85E-M			
	2	Decibel DB950F65E-M			
114.5	12	Decibel DB844H90E-XY	Round Low Profile Platform	(12) 1 1/4	Sprint Nextel
46.5	1	Nokia CS72187.01	Pipe	(1) 1/2	AT&T Mobility

Proposed Antennas

Elev. (ft)	Qty	Antennas	Mount	Coax (in)	Carrier
166.0	6	CCI DTMA-1819-DD-12	T-Arms	-	T-Mobile
	9	RFS APX16PV-16PVL-E-00		(18) 1 5/8	

Install proposed coax on outside of monopole.

Results

The maximum structure usage is: 104% (Acceptable overstress)

Additional exit and/or entry ports may be required to accommodate the running of the proposed lines to the proposed antennas. These additional ports **may not** be installed without installation drawings providing the location, size and welding requirements of each port.

To ensure compliance with all conditions of this structural analysis, port installation drawings shall be provided by American Tower's Engineering Department under a subsequent project.

Pole Reactions	Original Design Reactions	Factored Design Reactions*	Current Analysis Reactions	% Of Design
Moment (ft-kips)	3,377.9	4560.2	4,027.2	88
Shear (kips)	28.4	38.3	33.3	87

*** The design reactions are factored by 1.35 per ANSI/TIA-222-G, Sec. 15.5.1**

The structure base reactions resulting from this analysis are acceptable when compared to the reactions shown on the original structure drawings, therefore no modification or reinforcement of the foundation will be required.

Conclusion

Based on the analysis results, the structure meets the requirements per ANSI/TIA-222-G and 2003 IBC with 2005 CT Supplement & 2008 CT Amendments. The tower and foundation can support the existing and proposed antennas with the TX line distribution as described in this report.

If you have any questions or require additional information, please call 919-465-6535.

AMERICAN TOWER CORPORATION

400 REGENCY FOREST DRIVE
CARY, NORTH CAROLINA 27518
PHONE: (919) 468-0112 / FAX: (919) 466-5040

302506 - WINCHESTER CT 3, CT

180 FT. EEI MONOPOLE BASE PLATE REINFORCING

PROJECT DESCRIPTION:

"THE MODIFICATIONS PRESENTED ON THESE DRAWINGS ARE BASED ON THE RECOMMENDATIONS OUTLINED IN THE STRUCTURAL ANALYSIS COMPLETED UNDER ENGINEERING PROJECT NUMBER 42523421 DATED 10/23/08. SATISFACTORY COMPLETION OF THE WORK INDICATED ON THESE DRAWINGS WILL RESULT IN THE STRUCTURE MEETING THE REQUIREMENTS OF THE SPECIFICATIONS UNDER WHICH THE STRUCTURAL WAS COMPLETED."

AS-BUILT SIGN-OFF

DESCRIPTION	SIGNATURE	DATE
CONTRACTOR NAME		
CONTRACTOR REPRESENTATIVE (PRINT NAME)		
CONTRACTOR REPRESENTATIVE SIGNATURE		
REDEVELOPMENT P.M. (PRINT NAME)		
REDEVELOPMENT P.M. SIGNATURE		

PROJECT SUMMARY

ATC PROJECT NUMBER: 42523432

CUSTOMER: T-MOBILE

CUSTOMER SITE NUMBER: CTNH403A

CUSTOMER SITE NAME: LITCHFIELD 6

SITE ADDRESS: 15 OAKDALE AVENUE
WINSTED, CT 06098

DATE: 10/24/08

REVISION: 0

STATE OF CONNECTICUT
RAPHAEL I. MOHAMMED

10/28/08

I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the state of Connecticut.

DRAWING INDEX

DRAWING NUMBER	DRAWING TITLE	REVISION
BOM	BILL OF MATERIALS (1 PAGE)	0
CTGN	CT GENERAL NOTES	0
A-1	BASE PLATE STIFFENER INSTALLATION	0
ST8615	STIFFENER	0

AMERICAN TOWER
CORPORATION
400 REGENCY FOREST DRIVE
CARY, NORTH CAROLINA 27518
PHONE: (919) 468-0112 / FAX: (919) 466-5040

302506 - WINCHESTER CT 3, CT

PROJECT SUMMARY

ATC PROJECT NUMBER	CUSTOMER	CUSTOMER SITE NUMBER	CUSTOMER SITE NAME	SITE ADDRESS	DATE	REV
42523432	T-MOBILE	CTNH403A	LITCHFIELD 6	15 OAKDALE AVENUE WINSTED, CT 06098	10/24/08	0

BILL OF MATERIALS

QUANTITY REQUIRED	QUANTITY SHIPPED	PART NUMBER	DESCRIPTION	LENGTH	DRAWING NUMBER	WEIGHT (lbs)	COMMENTS
16	16	ST6615	PL 3/4" X 6"	1'-3"	A-1, ST6615	195	

TOTAL WEIGHT = 195 lbs

GENERAL

1. ALL METHODS, MATERIALS AND WORKMANSHIP SHALL FOLLOW THE DICTATES OF GOOD CONSTRUCTION PRACTICE.
2. ALL WORK INDICATED ON THESE DRAWINGS SHALL BE PERFORMED BY QUALIFIED CONTRACTORS EXPERIENCED IN TOWER AND FOUNDATION CONSTRUCTION.
3. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF RECORD IMMEDIATELY OF ANY INSTALLATION INTERFERENCES. ALL NEW WORK SHALL ACCOMMODATE EXISTING CONDITIONS. DETAILS NOT SPECIFICALLY SHOWN ON THE DRAWINGS SHALL FOLLOW SIMILAR DETAILS FOR THIS JOB.
4. ANY SUBSTITUTIONS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS, AND SHOULD BE SIMILAR TO THOSE SHOWN. ALL SUBSTITUTIONS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
5. ANY MANUFACTURED DESIGN ELEMENTS MUST CONFORM TO THE REQUIREMENTS OF THESE NOTES AND SPECIFICATIONS AND SHOULD BE SIMILAR TO THOSE SHOWN. THESE DESIGN ELEMENTS MUST BE STAMPED BY AN ENGINEER PROFESSIONALLY REGISTERED IN THE STATE OF THE PROJECT, AND SUBMITTED TO THE ENGINEER OF RECORD FOR APPROVAL PRIOR TO FABRICATION.
6. ALL WORK SHALL BE DONE IN ACCORDANCE WITH LOCAL CODES AND OSHA SAFETY REGULATIONS.
7. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND EXECUTION OF ALL MISCELLANEOUS SHORING, BRACING, TEMPORARY SUPPORTS, ETC. NECESSARY TO PROVIDE A COMPLETE AND STABLE STRUCTURE AS SHOWN ON THESE DRAWINGS.
8. CONTRACTOR'S PROPOSED INSTALLATION SHALL NOT INTERFERE, NOR DENY ACCESS TO, ANY EXISTING OPERATIONAL AND SAFETY EQUIPMENT.
9. FIELD CUT EDGES, EXCEPT DRILLED HOLES, SHALL BE GROUND SMOOTH.
10. ALL FIELD CUT SURFACES SHALL BE REPAIRED WITH ZRC GALVITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS REQUIREMENTS.

APPLICABLE CODES AND STANDARDS

1. ANSI/TIA/EIA: STRUCTURAL STANDARDS FOR ANTENNA SUPPORTING STRUCTURES AND ANTENNAS, 222-G EDITION.
2. 2003 INTERNATIONAL BUILDING CODE WITH 2005 CONNECTICUT SUPPLEMENTS & 2008 CONNECTICUT AMENDMENTS.
3. ACI 318: AMERICAN CONCRETE INSTITUTE, BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, 318-99.
4. CRSI: CONCRETE REINFORCING STEEL INSTITUTE, MANUAL OF STANDARD PRACTICE, LATEST EDITION.
5. AISC: AMERICAN INSTITUTE OF STEEL CONSTRUCTION, MANUAL OF STEEL CONSTRUCTION, LATEST EDITION.
6. AWS: AMERICAN WELDING SOCIETY D1.1, STRUCTURAL WELDING CODE, LATEST EDITION.

STRUCTURAL STEEL

1. ALL DETAILING, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE AISC SPECIFICATIONS, LATEST EDITION.
2. ALL EXPOSED STRUCTURAL STEEL MEMBERS SHALL BE HOT-DIPPED GALVANIZED AFTER FABRICATION PER ASTM A123. EXPOSED STEEL HARDWARE AND ANCHOR BOLTS SHALL BE GALVANIZED PER ASTM A153 OR B695.
3. ALL U-BOLTS SHALL BE ASTM A307 OR EQUIVALENT, WITH LOCKING DEVICE, UNLESS NOTED OTHERWISE.

WELDING

1. ALL WELDING TO BE PERFORMED BY AWS CERTIFIED WELDERS AND CONDUCTED IN ACCORDANCE WITH THE LATEST EDITION OF THE AWS WELDING CODE D1.1.
2. ALL ELECTRODES TO BE LOW HYDROGEN, MATCHING FILLER METAL, PER AWS D1.1, U.N.O.
3. MINIMUM WELD SIZE TO BE 0.1875 INCH FILLET WELDS, UNLESS NOTED OTHERWISE.
4. PRIOR TO FIELD WELDING GALVANIZED MATERIAL, CONTRACTOR SHALL GRIND OFF GALVANIZING 1/2" BEYOND ALL FIELD WELD SURFACES. AFTER WELD AND WELD INSPECTION IS COMPLETE, REPAIR ALL GROUND AND WELDED SURFACES WITH ZRC GALVITE COLD GALVANIZING COMPOUND PER ASTM A780 AND MANUFACTURERS REQUIREMENTS.

PAINT

1. AS REQUIRED, CLEAN AND PAINT PROPOSED STEEL ACCORDING TO FAA ADVISORY CIRCULAR AC 70/7460-1K.

BOLT TIGHTENING PROCEDURE

1. TIGHTEN FLANGE BOLTS BY AISC - "TURN OF THE NUT" METHOD, USING THE CHART BELOW:

BOLT LENGTHS UP TO AND INCLUDING FOUR DIA.

1/2"	BOLTS UP TO AND INCLUDING 2.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
5/8"	BOLTS UP TO AND INCLUDING 3.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
3/4"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
7/8"	BOLTS UP TO AND INCLUDING 3.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1"	BOLTS UP TO AND INCLUDING 4.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS UP TO AND INCLUDING 4.5 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS UP TO AND INCLUDING 5.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS UP TO AND INCLUDING 6.0 INCH LENGTH	+1/3 TURN BEYOND SNUG TIGHT

BOLT LENGTHS OVER FOUR DIA. BUT NOT EXCEEDING 8 DIA.

1/2"	BOLTS 2.75 TO 4.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
5/8"	BOLTS 3.25 TO 5.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
3/4"	BOLTS 4.25 TO 6.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
7/8"	BOLTS 3.75 TO 7.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1"	BOLTS 4.25 TO 8.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/8"	BOLTS 4.75 TO 9.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/4"	BOLTS 5.25 TO 10.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT
1-1/2"	BOLTS 6.25 TO 12.0 INCH LENGTH	+1/2 TURN BEYOND SNUG TIGHT

2. SPLICE BOLTS SUBJECT TO DIRECT TENSION SHALL BE INSTALLED AND TIGHTENED AS PER SECTION 8(d)(1) OF THE AISC SPECIFICATION FOR STRUCTURAL JOINTS USING A325 OR A490 BOLTS, LOCATED IN THE AISC MANUAL OF STEEL CONSTRUCTION. THE INSTALLATION PROCEDURE IS PARAPHRASED AS FOLLOWS:

   "FASTENERS SHALL BE INSTALLED IN PROPERLY ALIGNED HOLES AND TIGHTENED BY ONE OF THE METHODS DESCRIBED IN SUBSECTION 8(d)(1) THROUGH 8(d)(4).

   8(d)(1) TURN-OF-THE-NUT TIGHTENING.
   BOLTS SHALL BE INSTALLED IN ALL HOLES OF THE CONNECTION AND BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8 (c), UNTIL ALL THE BOLTS ARE SIMULTANEOUSLY SNUG TIGHT AND THE CONNECTION IS FULLY COMPACTED. FOLLOWING THIS INITIAL OPERATION ALL BOLTS IN THE CONNECTION SHALL BE TIGHTENED FURTHER BY THE APPLICABLE AMOUNT OF ROTATION SPECIFIED ABOVE. DURING THE TIGHTENING OPERATION THERE SHALL BE NO ROTATION OF THE PART NOT TURNED BY THE WRENCH. TIGHTENING SHALL PROGRESS SYSTEMATICALLY.
3. ALL OTHER BOLTED CONNECTIONS SHALL BE BROUGHT TO A SNUG TIGHT CONDITION AS DEFINED IN SECTION 8 (c) OF THE SPECIFICATION.

SPECIAL INSPECTION

1. A QUALIFIED INDEPENDENT TESTING LABORATORY, EMPLOYED BY THE OWNER, SHALL PERFORM INSPECTION AND TESTING IN ACCORDANCE WITH IBC 2003, SECTION 1704 AS REQUIRED BY PROJECT SPECIFICATIONS FOR THE FOLLOWING CONSTRUCTION WORK:
   a) STRUCTURAL WELDING
   b) HIGH STRENGTH BOLTS
2. THE INSPECTION AGENCY SHALL SUBMIT INSPECTION AND TEST REPORTS TO THE BUILDING DEPARTMENT, THE ENGINEER OF RECORD, AND THE OWNER IN ACCORDANCE WITH IBC 2003, SECTION 1704. UNLESS THE FABRICATOR IS APPROVED BY THE BUILDING OFFICIAL TO PERFORM SUCH WORK WITHOUT THE SPECIAL INSPECTIONS.

AMERICAN TOWER
STRUCTURAL ENGINEERING
400 REGENCY FOREST DRIVE
CARY, NORTH CAROLINA 27518
PHONE: (919) 468-0112
FAX: (919) 468-3040
NYSE AMT

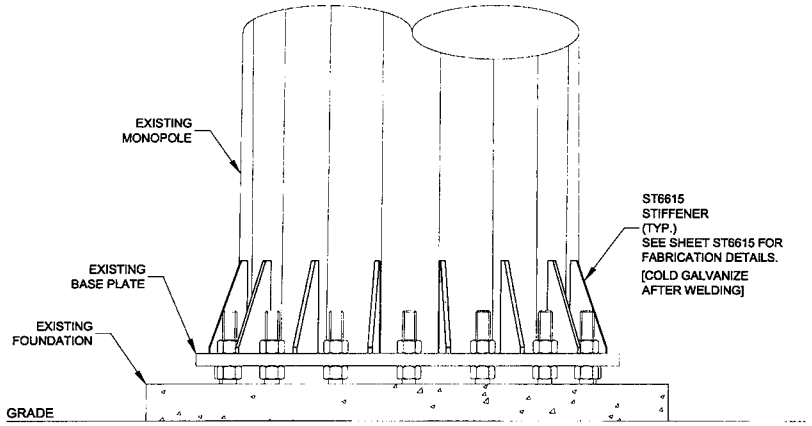
REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	DMB	06/30/08
1			
2			

SITE NUMBER:
VARIOUS
SITE NAME:
VARIOUS
SITE ADDRESS:
VARIOUS

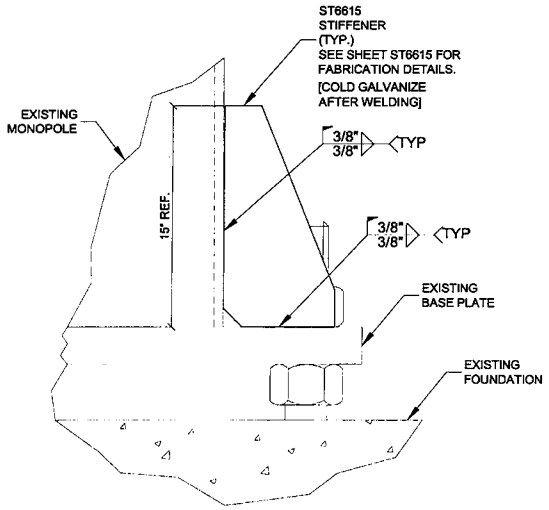
DRAWN BY:	DMB
CHECKED BY:	BKL
DATE DRAWN:	06/30/08
ATC JOB NO:	VARIOUS

SHEET TITLE:
CT GENERAL NOTES

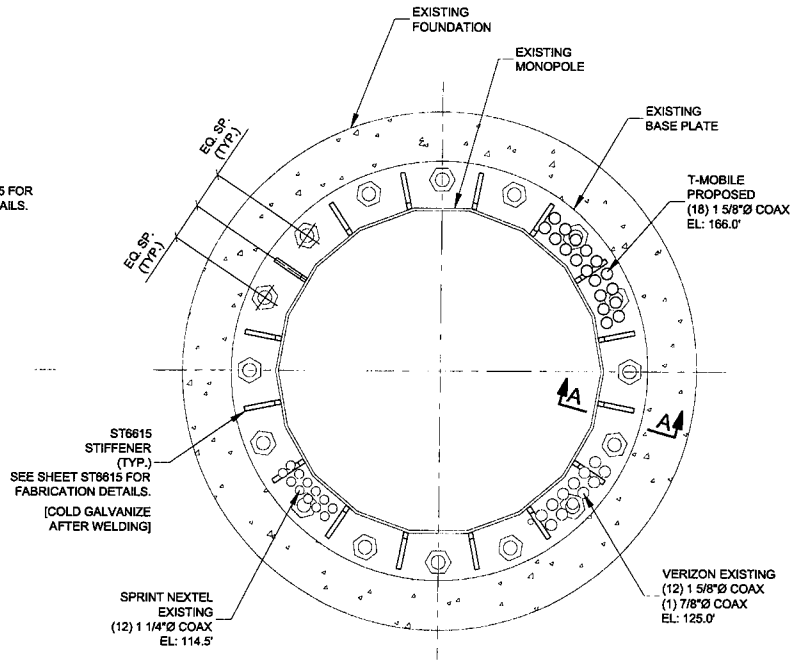
SHEET NUMBER: CTGN
REV. #: 0



ELEVATION VIEW
BASE PLATE STIFFENER INSTALLATION



SECTION "A-A"
TYPICAL STIFFENER WELD



PLAN VIEW
BASE PLATE STIFFENER INSTALLATION

AMERICAN TOWER
STRUCTURAL ENGINEERING
400 REGENCY FOREST DRIVE
CARY, NORTH CAROLINA 27518
PHONE: (919) 468-0112
FAX: (919) 468-5040
NYSE AMT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JMB	10/24/08

SITE NUMBER:
302506

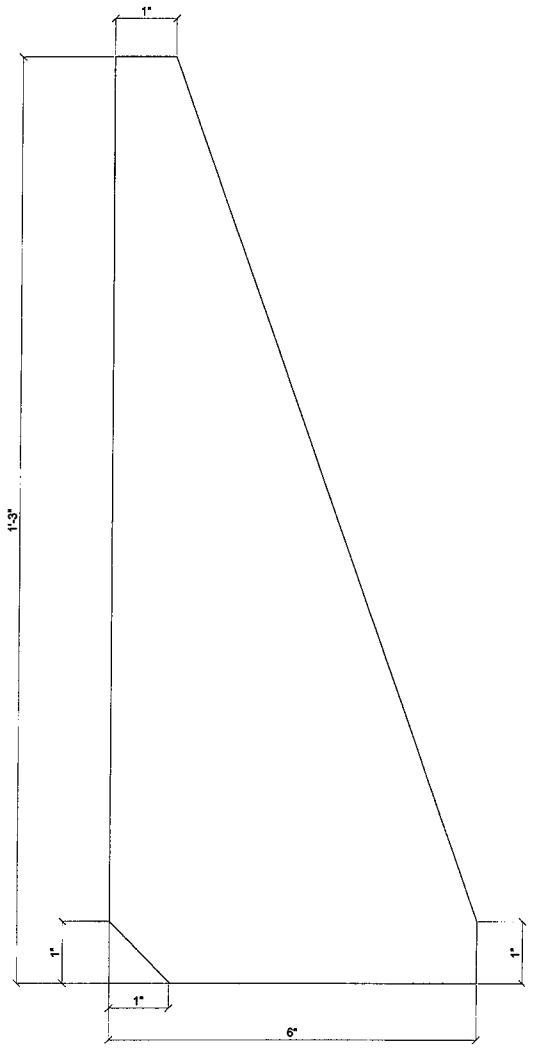
SITE NAME:
WINCHESTER CT 3
CONNECTICUT

SITE ADDRESS:
15 OAKDALE AVENUE
WINSTED, CT 06098

DRAWN BY:	JMB
CHECKED BY:	BKC
DATE DRAWN:	10/24/08
ATC JOB NO:	42523432

SHEET TITLE:
BASE PLATE STIFFENER INSTALLATION

SHEET NUMBER:	REV. #
A-1	0



ST6615

MK	QTY	DESCRIPTION	LENGTH	REMARKS	REV	WT
ST6615	ONE	PL 3/4" X 6"	1'-3"			11.6#

TOTAL WEIGHT: 12.2#
HOLES: N/A
MATERIAL: A572 GR. 50
FINISH: GALVANIZE

AMERICAN TOWER
STRUCTURAL ENGINEERING
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NYSE AMT

REV.	DESCRIPTION	BY	DATE
0	FIRST ISSUE	JMB	10/24/08

SITE NUMBER:
VARIOUS
SITE NAME:
VARIOUS
SITE ADDRESS:
VARIOUS

DRAWN BY:	JMB
CHECKED BY:	BKC
DATE DRAWN:	10/24/08
ATC JOB NO:	VARIOUS

SHEET TITLE:
STIFFENER

SHEET NUMBER:	REV. #
ST6615	0

T-Mobile

T-Mobile USA Inc.
100 Filley St, Bloomfield, CT 06002-1853
Phone: (860) 692-7100
Fax: (860) 692-7159

Technical Memo

To: Jennifer Gaudet
From: Scott Heffernan - Radio Frequency Engineer
cc: Jason Overbey
Subject: Power Density Report for CTNH403A
Date: October 29, 2008

1. Introduction:

This report is the result of an Electromagnetic Field Intensities (EMF - Power Densities) study for the T-Mobile PCS antenna installation on a Monopole at 15 Oakdale Ave, Winchester, CT. This study incorporates the most conservative consideration for determining the practical combined worst case power density levels that would be theoretically encountered from locations surrounding the transmitting location.

2. Discussion:

The following assumptions were used in the calculations:

1) The emissions from T-Mobile transmitters are in the 1935-1985 MHz frequency band.
2) The antenna array consists of three sectors, with 3 antennas per sector.
3) The model number for each antenna is APX16PV-16PVL-E.
4) The antenna center line height is 166 ft.
5) The maximum transmit power from any sector is 1908.23 Watts Effective Radiated Power (EiRP) assuming 8 channels per sector.
6) All the antennas are simultaneously transmitting and receiving, 24 hours a day.
7) Power levels emitting from the antennas are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.
8) The average ground level of the studied area does not change significantly with respect to the transmitting location

Equations given in "FCC OET Bulletin 65, Edition 97-01" were then used with the above information to perform the calculations.

3. Conclusion:

Based on the above worst case assumptions, the power density calculation from the T-Mobile PCS antenna installation on a Monopole at 15 Oakdale Ave, Winchester, CT, is 0.01635 mW/cm^2. This value represents 1.635% of the Maximum Permissible Exposure (MPE) standard of 1 milliwatt per square centimeter (mW/cm^2) set forth in the FCC/ANSI/IEEE C95.1-1991. Furthermore, the proposed antenna location for T-Mobile will not interfere with existing public safety communications, AM or FM radio broadcasts, TV, Police Communications, HAM Radio communications or any other signals in the area.

Total Site MPE %:	27.765%

New England Market

Worst Case Power Density

Site:	**CTNH403A**
Site Address:	**15 Oakdale Ave**
Town:	**Winchester**
Tower Height:	**180 ft.**
Tower Style:	**Monopole**
Base Station TX output	25 W
Number of channels	8
Antenna Model	APX16PV-16PVL-E
Cable Size	1 5/8
Cable Length	190 ft.
Antenna Height	166.0 ft.
Ground Reflection	1.6
Frequency	1945.0 MHz
Jumper & Connector loss	4.50 dB
Antenna Gain	16.5 dBi
Cable Loss per foot	0.0116 dB
Total Cable Loss	2.2040 dB
Total Attenuation	6.7040 dB
Total EIRP per Channel	53.78 dBm
(In Watts)	238.53 W
Total EIRP per Sector	62.81 dBm
(In Watts)	1908.23 W
nsg	9.7960
Power Density (S) =	**0.016353 mW/cm^2**
T-Mobile Worst Case % MPE =	**1.6353%**

Equation Used :

$$S = \frac{(1000)(grf)^2(Power)*10^{(nsg/10)}}{4\pi(R)^2}$$

Office of Engineering and Technology (OET) Bulletin 65, Edition 97-01, August 1997

Additional Carrier Information (% MPE)	
AT&T (TDMA)	2.90%
AT&T GSM (Cellular)	1.07%
AT&T GSM (PCS)	0.91%
Alltel (AT&T)	1.86%
CT State Police	5.25%
AT&T (PCS)	0.48%
Sprint (PCS)	7.97%
Verizon Wireless (PCS)	1.38%
Nextel (SMR)	4.31%
Total % MPE for Site	**27.765%**