



# 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](mailto:siting.council@ct.gov)

[www.ct.gov/csc](http://www.ct.gov/csc)

May 24, 2010

Thomas F. Flynn III  
Site Development Project Manager  
Maxton Technology Inc.  
1296 Blue Hills Avenue  
Bloomfield, CT 06002

RE: **EM-CLEARWIRE-054-100507** – Clearwire Corporation notice of intent to modify an existing telecommunications facility located at 2577 Main Street, Glastonbury, Connecticut.

Dear Mr. Flynn:

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 6, 2010, 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/CDM/laf

c: The Honorable Susan Karp, Chairman Town Council, Town of Glastonbury  
Richard J. Johnson, Town Manager, Town of Glastonbury  
Kenith Leslie, Community Development Director, Town of Glastonbury  
Thomas J. Regan, Esq., Brown Rudnick LLP

May 6, 2010

S. Derek Phelps, Executive Director  
Connecticut Siting Council  
Ten Franklin Square  
New Britain, CT 06051

ORIGINAL

MAY - 7 2010

CONNECTICUT  
SITING COUNCIL

**Re: Notice of Exempt Modification  
Clearwire Corporation Notice to make an Exempt Modification to an Existing  
Facility at 2577 Main Street, Glastonbury, CT  
Clearwire Site Number CT-HFD0088**

Dear Mr. Phelps,

Pursuant to Conn. Agency Regulations Sections 16-50j-73 and 16-50j-72(b), Clearwire Corporation (Clearwire) hereby gives notice to the Connecticut Siting Council (Council) and the Town of Glastonbury, CT. of Clearwire's intent to make an exempt modification to an existing monopole tower (tower) located at , CT. Specifically, Clearwire plans to add three (3) antennas to the tower, one (1) per sector and to add three (3) microwave dishes, one (1) per sector for backhaul at the 128' AGL. Pursuant to the Council's regulations, (Conn. Agency Regulations Section 16-50j-72(b)), Clearwire's plans do not constitute a modification subject to the Council's review because Clearwire will not change the height of the tower, will not extend the boundaries of the compound, will not increase the noise levels at the site and will not increase the total radio frequency electromagnetic radiation power density at the site to levels above applicable standards. A copy of this notice has been sent to Town Manager Richard Johnson of the Town of Glastonbury, CT.

Clearwire is currently developing a 4G wireless broadband network to provide high-speed wireless data and VoIP service within the State of Connecticut. Clearwire's 4G service leverages the WiMAX technology to enable enhanced wireless data communications. In order to accomplish the upgrade at this site, Clearwire plans to add three (3) WiMAX antennas, two (2) dishes and to install additional WiMAX related electronic equipment at the base of the tower.

The tower is a 130' lattice tower located at 2577 Main Street, Glastonbury, Connecticut (Latitude 41 42 21 N Longitude 72 36 38 W). The tower is owned by Tower Co. Inc.. Currently, Nextel, Sprint, AT&T, T-Mobile, Cingular and Pocket are located on the tower, as well as a number of other public service antennas. Presently, Clearwire is not located at the site. Clearwire's base station equipment will be located on the ground next to the pole. A site plan with the tower elevations and site plan specifications is attached.

Clearwire will add three (3) antennas, one (1) to each sector, and mount two (2) microwave dishes, one (1) above each of those antennas. The center line for the microwave dishes will be 128'. Nine coaxial cables will be added to the structure, 2 per antenna and one per microwave dish. These cables will be inside the tower and bundled. To confirm that the tower

can support these changes, Clearwire commissioned Vertical Solutions Inc. to perform a structural analysis of the tower and the proposed changes. According to that structural dated February 5, 2010 and attached hereto, the structure is sufficient to support the proposed loading and will not need to be modified. The tower, with the additions and the modifications will be at less than 99.5% of its capacity.

Within the existing compound, Clearwire will install one (1) WiMAX radio and power cabinet on the existing pad at the site. The new equipment will be adjacent to the existing tower. Excluding brief, construction related noise during the addition of this equipment, the proposed changes to the tower will not increase noise levels at the site.

The addition of new WiMAX antennas and microwave dishes 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 base of the tower will be well below the National Council on Radiation Protection and Measurements' (NCRP) standard adopted by the Federal Communications Commission (FCC). The worst case power density analysis for the WiMAX antennas and dishes, measured at the base of the tower, indicates that the WiMAX antennas and dishes will emit .37% of the NCRP's standard for maximum permissible exposure. The cumulative power density analysis indicates that all the antennas on the structure will emit 39.0146% of the NCRP's standard for maximum permissible exposure. Therefore, the power density levels will be well below the FCC mandated radio frequency exposure limits in all locations around the base of the tower. The power density analysis is attached.

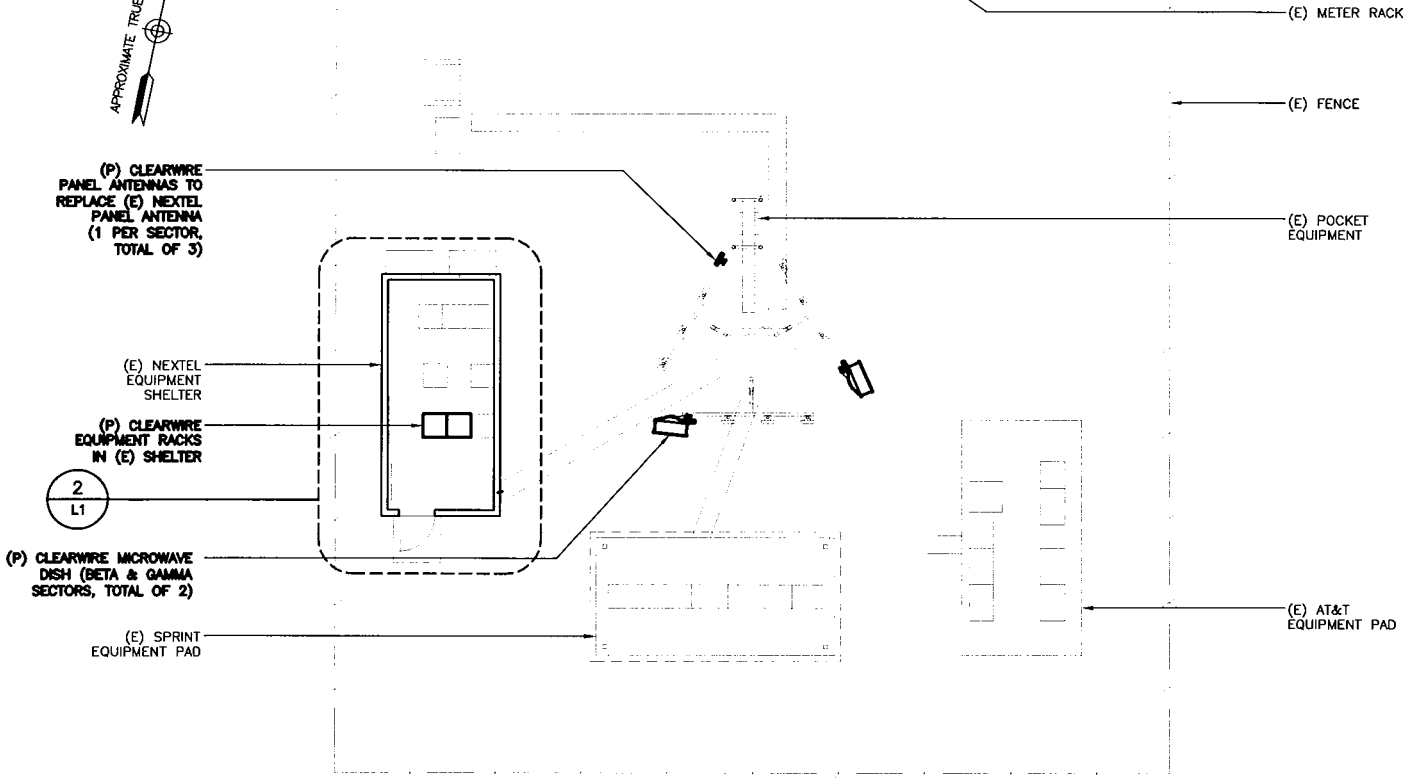
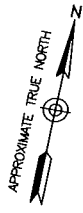
In conclusion, Clearwire's proposed plan to add three (3) WiMAX antennas, three (3) microwave dishes and the associated base station equipment does not constitute a modification subject to the Council's jurisdiction because Clearwire will not increase the height of the tower, will not extend the boundaries of the compound at the site, will not increase the noise levels at the site and the radio frequency electromagnetic radiation power density will stay within all applicable standards.

Respectfully Submitted



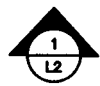
Thomas E. Flynn III  
Site Development Project Manager  
Maxton Technology Inc.  
1296 Blue Hills Avenue  
Bloomfield, CT 06002  
508-821-6974  
Tom.Flynn@maxtontech.com  
Agent for Clearwire Corporation

Cc: Town Manager Richard Johnson  
Town of Glastonbury

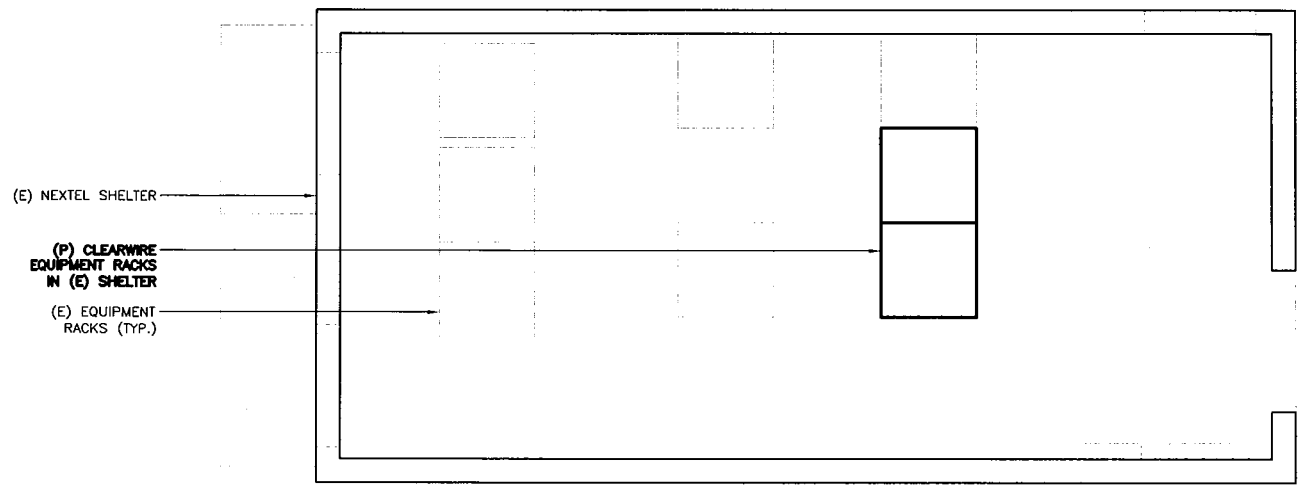
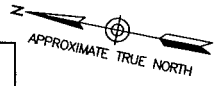


**SITE PLAN**

SCALE: N.T.S



1



**SHELTER PLAN**

SCALE: N.T.S

2

(E) EXISTING  
(P) PROPOSED

**MAXTON**  
BAY STATE DESIGN  
241 Boston Post Road West  
Marlborough, MA 01752  
Phone: 508-229-4100  
Fax: 508-485-5321

Bay State Design, Inc.  
Architects - Engineers  
241 Boston Post Road West  
Marlborough, MA 01752  
Phone: 508-229-4100  
Fax: 508-485-5321

**clearw're**  
5808 LAKE WASHINGTON BLVD.  
NE SUITE 300  
KIRKLAND, WA 98033

PROJECT LOCATION:  
GLASTONBURY  
CT-HFD0088A  
2577 MAIN STREET  
GLASTONBURY, CT 06033

APPROVED BY:

SITE TYPE:  
COPLANE

PROJECT MANAGER:  
JP

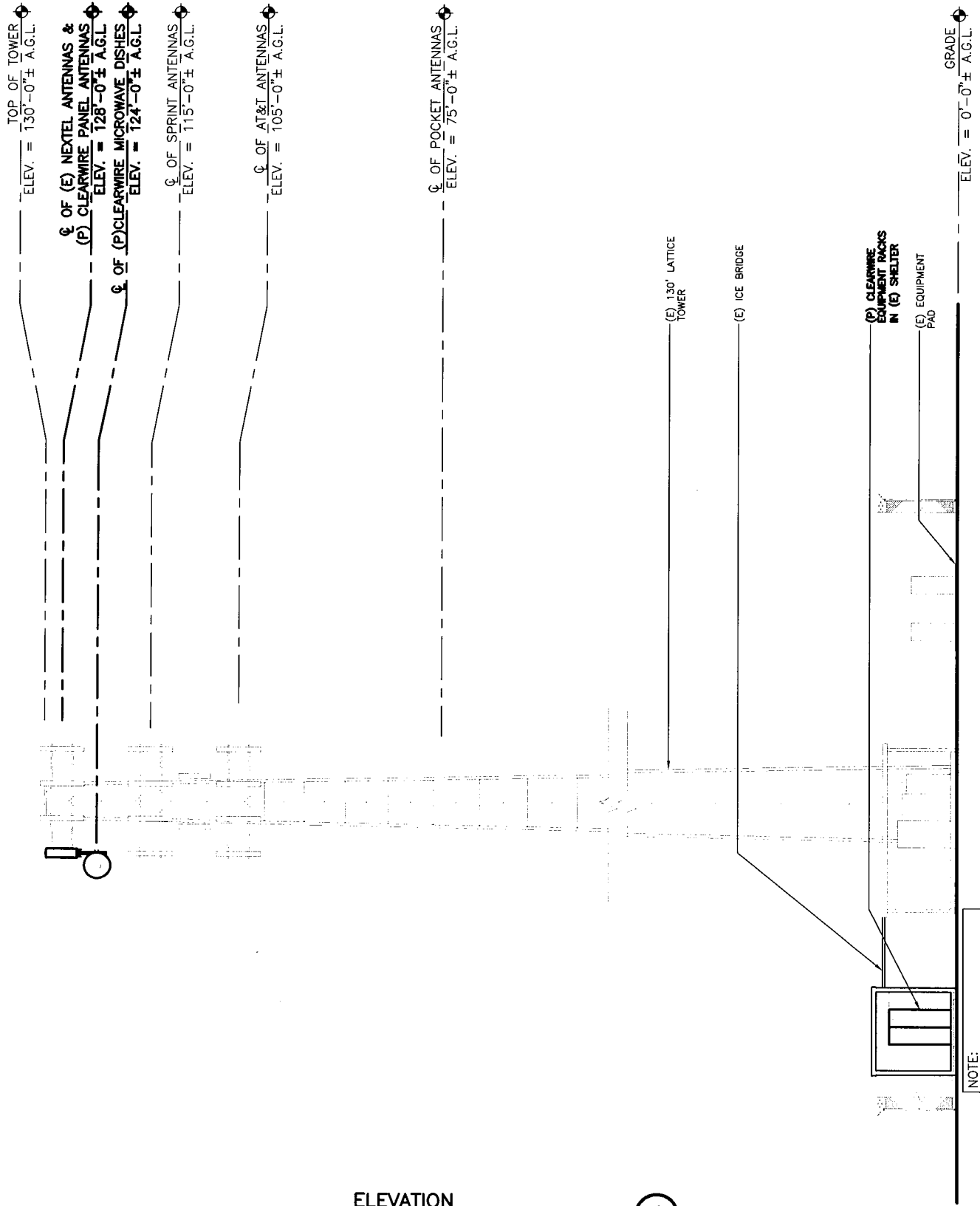
DATE:  
04/06/10

DRAWN BY:  
NS

REVISION:  
1

BSDA PROJ. #:  
2908.080

SHEET:  
**L1**



**ELEVATION**

SCALE: N.T.S.

1

(E) EXISTING  
(P) PROPOSED

**MIXTON**  
BAY STATE DESIGN

241 Boston Post Road West  
Marlborough, MA. 01752  
Phone: 508-229-4100  
Fax: 508-485-5321

Bay State Design, Inc.  
Architects • Engineers  
241 Boston Post Road West  
Marlborough, MA. 01752  
Phone: 508-229-4100  
Fax: 508-485-5321

**clearw're**

5808 LAKE WASHINGTON BLVD.  
NE SUITE 300  
KIRKLAND, WA 98033

PROJECT LOCATION:

GLASTONBURY  
CT-HFD0088A  
2577 MAIN STREET  
GLASTONBURY, CT 06033

APPROVED BY:

SITE TYPE:

COPLANE

PROJECT MANAGER:  
JP

DRAWN BY:  
NS

DATE:  
04/06/10

REVISION:  
1

BSDA PROJ. #:

2908.080

SHEET:

**L2**

April 19, 2010

Ms. Catherine Godwin  
TowerCo, LLC  
5000 Valleystone Drive  
Cary, NC 27519  
(919) 653-5737

Vertical Solutions, Inc.  
PO Box 579  
Holly Springs, NC 27540  
(888) 321-6167  
[operations@verticalsolutions-inc.com](mailto:operations@verticalsolutions-inc.com)

**Subject:**

**Rigorous Structural Analysis**

**Carrier Designation**

**Sprint-Nextel/Clearwire, Reconfiguration  
Site Number: CT-HFD0088-NCT0057  
Site Name: N/A**

**TowerCo Designation**

**Site Number: CT2002  
Site Name: Glastonbury-Main St.**

**Engineering Firm Designation**

**Vertical Solutions Project: 100191.01 Rev. 01**

**Site Data**

**2577 Main St. Glastonbury, Hartford County, CT 06033  
Latitude: N41° 42' 51.80"±; Longitude: W072° 36' 48.90"±  
Elevation: 32.8ft±, Topography Category: 1;  
130-ft Self Supporting Latticed Structure**

Dear Ms. Godwin,

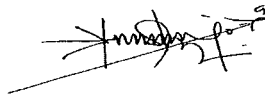
To your request, we present our structural analysis.

Our work indicates that with the proposed appurtenance configuration, the tower and foundation **will** satisfy the structural strength requirements of TIA/EIA-222-F-1996, *Structural Standards for Steel Antenna Towers and Antenna Supporting Structures* (industry standard) and the *2003 International Building Code* (local code) for:

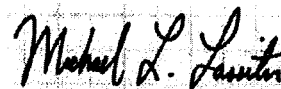
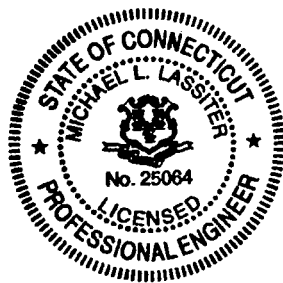
- 80-mph fastest-mile basic wind speed
- 69-mph fastest-mile basic wind speed and 1/2-in radial ice

We trust you find our work satisfactory. Please do not hesitate to call should you have any questions.

Sincerely,



Kingsley C. Igboanugo, E.I.  
Structural Engineer-In-Training



Michael L. Lassiter, S.E., P.E., C.W.I.  
Structural Engineer, Civil Engineer, Certified Weld Inspector  
& President

**Table 1: Existing, Proposed and Reserved Appurtenance Configuration**

Elevation (AGL, ft)	Carrier	Mount <sup>2</sup>	Equipment	Coax	Location <sup>3</sup>
128.0 <sup>4</sup>	Sprint Nextel	(3) Sector Frames	(9) Decibel DB844H90E-M	(9) 1 1/4	Face B
128.0	Clearwire		(3) Kathrein 840-10054 (3) RRU 26" x 14" x 9" (1) GPS Motorola Timing 2000	(6) 5/16 (1) 1/2	Face B
124.0			(2) Andrew VHLP2.5	(2) 1/2	Face B
118.5 <sup>1</sup>	Sprint Nextel	(3) Sector Frames	(12) Swedcom ALP 9212	(12) 1 5/8	Face C
108	AT&T	(3) Sector Frames	(6) Kathrein 800-10121 (12) TMA	(12) 1 1/4	Face A
100	Pocket	Standoff Mounts	(3) RFS APXV18-206517S-C	(6) 1 5/8	Face B
93	T Mobile	(3) Sector Frames	(6) EMS RR65-19-02DP	(12) 1 5/8	Face C&A
			(3) RFS APX16DWV-16DWV-S-E-ACU (3) Andrew OneBase™ Twin Dual Duplex TMA	(6) 1 5/8	Face A
55.5	--	Side Arm	(1) GPS Antenna	(1) 1/2	Face C
50.5	--	(2) Side Arms	(2) GPS Antenna	(2) 1/2	Face B

1 -- Existing (current) equipment: (6) Andrew 950F40T4E-M with (6) 1-5/8 [EPA(A) 31.0 sq ft]. Reserved (design) equipment listed above and used in analysis [EPA(A) = 64.0 sq ft]

2 - Mount size and type assumed equivalent to mounts used in original tower design

3 - See QP-P drawing for coax location.

4 - Sprint / Nextel to remove (3) Decibel DB844H90E-M and (3) 1-1/4" coax

**Table 2: Twist and Sway Limitations for Clearwire Equipment<sup>1</sup>**

Elevation (AGL, ft)	Equipment	Dish Frequency (GHz)	Deformation Limit <sup>2</sup> (deg)	Tilt (deg)	Twist (deg)	Resultant (deg)	Result
124.00	VHLP2.5	11.7	1.815	1.0957	0.0121	1.0957	O. K.

1 - See program output for supporting details.

2 - Deformation limit based on an allowable 10 dB degradation in radio frequency signal level per Annex D of TIA Standard Revision G.

**Table 3: Tower Structure Results – Percent Capacity Utilized<sup>1</sup>:**

Elevation (ft)	Legs	Result	Bracing	Result
130 to 120	21	O. K.	75	O. K.
120 to 100	86	O. K.	71	O. K.
100 to 80	<b>100</b>	<b>O. K.</b>	97 (Bolts)	O. K.
80 to 60	80	O. K.	82 (Bolts)	O. K.
60 to 40	93	O. K.	73 (Bolts)	O. K.
40 to 20	77	O. K.	73 (Bolts)	O. K.
20 to 0	85	O. K.	74 (Bolts)	O. K.

1 - Utilization of 105% or less considered acceptable. Analysis considers tower improvements installed as given in SA dated 04/23/09.

**Table 4: Foundation Results, Percent Capacity Utilized**

<b>Component</b>	<b>Design Reactions</b>	<b>Analysis Reactions</b>	<b>Percent Utilized<sup>1</sup></b>	<b>Result</b>
<b>Moment (kip-ft)</b>	1685	1680	74	O. K.
<b>Leg Shear (kip)</b>	22	13	74	O. K.
<b>Leg Uplift (kip)</b>	253	250	74	O. K.

<sup>1</sup> See attached foundation analysis.

Attachments:

- Project History
- QP-P, coax configuration
- Program input and output
- Foundation calculations

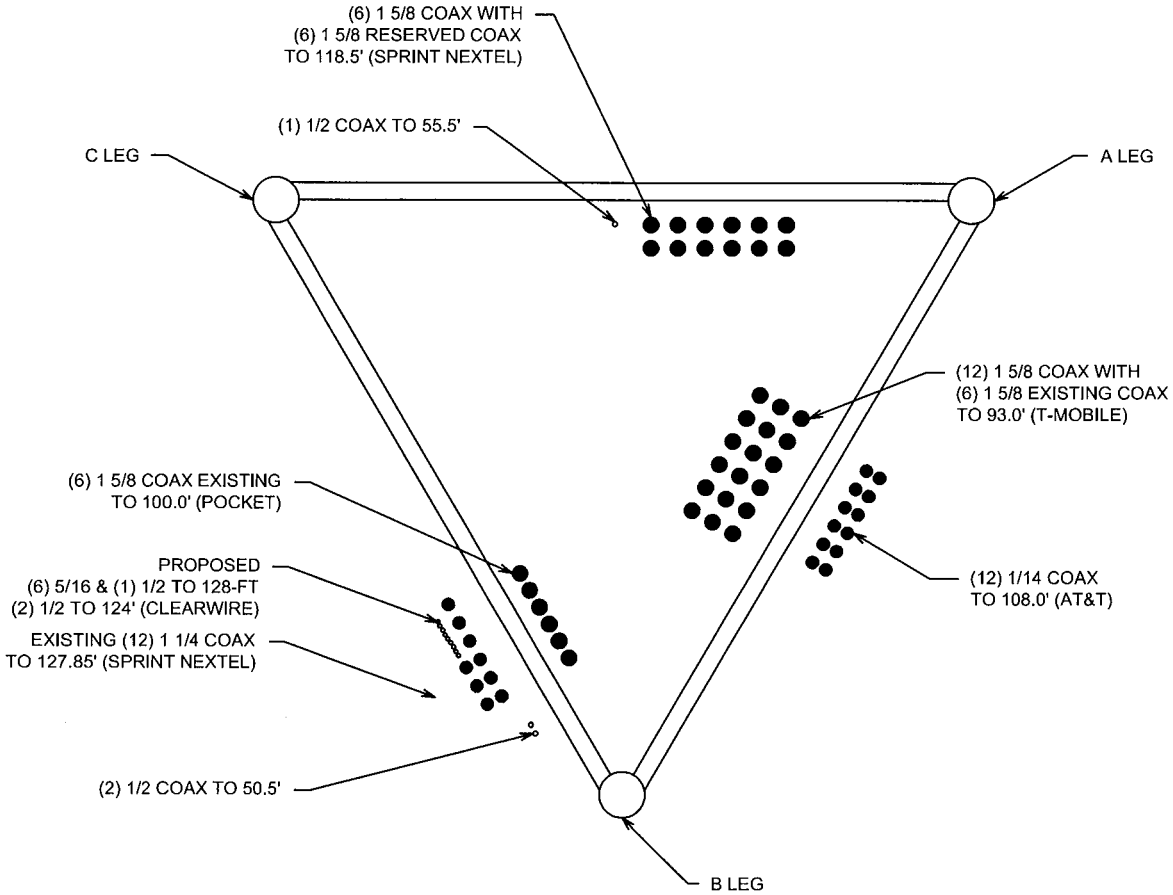




**Project History, 100191.01, Glastonbury-Main St. CT, CT2002**

File	By: / For:	Description
199910XX_TDD_CT2002.pdf	Fred A. Nudd / Nextel Communications	Tower Design Drawings
20020730_SAR_CT2002.pdf	Fred A. Nudd / Nextel Communications	Structural Analysis Report
20080129_SAR_CT2002.pdf	Semaan Engineering Solutions / Sprint	Structural Analysis Report
20081029_TED_CT2002.pdf	SiteMaster / TowerCo	Tower Elevation Drawing
20090414_CTA_CT2002.doc	T-Mobile / TowerCO	Reconfig. Application
20090414_COR_CT2002.mht	TowerCO / Vertical Solutions Inc	Correspondence, Email
20090423_SAR_CT2002.pdf	Vertical Solutions Inc/TowerCo	Structural Analysis
20090630_CTA_CT2002.doc	Pocket / TowerCO	Collo Application
20090630_COR_CT2002.mht	TowerCO / Vertical Solutions Inc	Correspondence, Email
20090701_SAR_CT2002.pdf	Vertical Solutions Inc/TowerCo	Structural Analysis
20090812_TID_CT2002.pdf	Vertical Solutions Inc/TowerCo	Tower Improvement Drawings
20100201_CTA_CT2002.doc	Clearwire / TowerCO	Collo Application
20100201_COR_CT2002.mht	TowerCO / Vertical Solutions Inc	Correspondence, Email

**Table Note:**  
 Files name format YYYYMMDD-XXX-ZZZZZZ.pdf  
 Where:  
 YYYY=year  
 MM=month  
 DD=day published/issued  
 XXX=file describer  
 ZZZZZ=TowerCo Site ID



**EXISTING & PROPOSED COAX  
CONFIGURATION PLAN**

SCALE: 3/4" = 1'

DRAWN BY:	KCI	CHECKED BY:	MLL
SHEET NUMBER:	<b>QP-P</b>		
REVISION:	0		
VS#:	100191.01		

REV	DATE
0	02/05/10

PREPARED FOR:

5000 Valleystone Dr.  
Cary, NC 27519  
Office: (919) 469-5559  
Fax: (919) 469-5530  
www.towerco.com

**TowerCo**

PROJECT NAME:

**Glastonbury-Main St.\_CT**

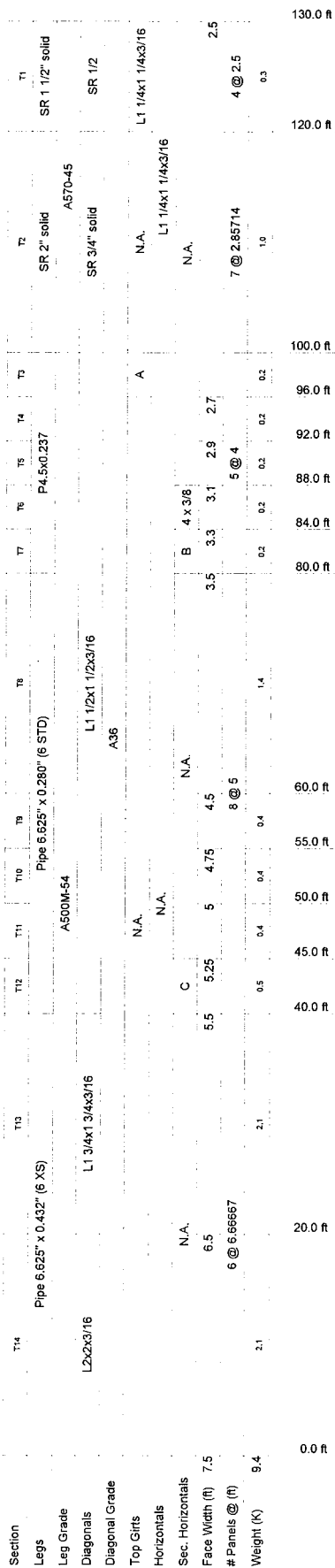
TOWERCO JOB #:

**CT2002**

PREPARED BY:

**vertical solutions**

2002 Production Drive  
Apex, NC 27539  
Office: (888) 321-6167  
Fax: (919) 321-1766  
www.verticalsolutions-inc.com



**DESIGNED APPURTENANCE LOADING**

TYPE	ELEVATION	TYPE	ELEVATION
Kathrein 800-10054 with Mount Pipe (Clearwire)	128	(4) TMA (ATT)	108
Kathrein 800-10054 with Mount Pipe (Clearwire)	128	(4) TMA (ATT)	108
Kathrein 800-10054 with Mount Pipe (Clearwire)	128	(4) TMA (ATT)	108
RRU 26" x 14" x 9" TMA (Clearwire)	128	RFS APXV18-206517S-C-A20 w/MP	100
RRU 26" x 14" x 9" TMA (Clearwire)	128	RFS APXV18-206517S-C-A20 w/MP	100
RRU 26" x 14" x 9" TMA (Clearwire)	128	RFS APXV18-206517S-C-A20 w/MP	100
RRU 26" x 14" x 9" TMA (Clearwire)	128	Standoff Mount	100
RRU 26" x 14" x 9" TMA (Clearwire)	128	Standoff Mount	100
RRU 26" x 14" x 9" TMA (Clearwire)	128	Standoff Mount	100
GPS Motorola Timing 2000 (Clearwire)	128	Standoff Mount	100
(3) DB844H90E-M (Sprint/Nextel)	127.5	PIROD 13' Lightweight T-Frame (T-Mobile)	93
(3) DB844H90E-M (Sprint/Nextel)	127.5	PIROD 13' Lightweight T-Frame (T-Mobile)	93
(3) DB844H90E-M (Sprint/Nextel)	127.5	PIROD 13' Lightweight T-Frame (T-Mobile)	93
Pirod 12' T-Frame Sector Mount (1) (Sprint/Nextel)	127.5	PIROD 13' Lightweight T-Frame (T-Mobile)	93
Pirod 12' T-Frame Sector Mount (1) (Sprint/Nextel)	127.5	(2) RR65-19-02DP5 w/Mount Pipe (T-Mobile)	93
Pirod 12' T-Frame Sector Mount (1) (Sprint/Nextel)	127.5	(2) RR65-19-02DP5 w/Mount Pipe (T-Mobile)	93
VHLP2.5 (Clearwire)	124	APX16DWW-16DWW-S-E-ACU w/ MP (T-Mobile)	93
VHLP2.5 (Clearwire)	124	APX16DWW-16DWW-S-E-ACU w/ MP (T-Mobile)	93
(4) ALP 9212-N (Sprint/Nextel)	118.5	APX16DWW-16DWW-S-E-ACU w/ MP (T-Mobile)	93
(4) ALP 9212-N (Sprint/Nextel)	118.5	APX16DWW-16DWW-S-E-ACU w/ MP (T-Mobile)	93
(4) ALP 9212-N (Sprint/Nextel)	118.5	APX16DWW-16DWW-S-E-ACU w/ MP (T-Mobile)	93
PIROD 13' Lightweight T-Frame (Sprint/Nextel)	118.5	OneBase PCS Twin Dual Duplex TMA (T-Mobile)	93
PIROD 13' Lightweight T-Frame (Sprint/Nextel)	118.5	(2) RR65-19-02DP5 w/Mount Pipe (T-Mobile)	93
PIROD 13' Lightweight T-Frame (Sprint/Nextel)	118.5	OneBase PCS Twin Dual Duplex TMA (T-Mobile)	93
PIROD 13' Lightweight T-Frame (ATT)	108	OneBase PCS Twin Dual Duplex TMA (T-Mobile)	93
PIROD 13' Lightweight T-Frame (ATT)	108	OneBase PCS Twin Dual Duplex TMA (T-Mobile)	93
PIROD 13' Lightweight T-Frame (ATI)	108	GPS_RESERVED	55.5
(2) Kathrein 800 10121 w Mount Pipe (ATT)	108	GPS_RESERVED	50.5
(2) Kathrein 800 10121 w Mount Pipe (ATT)	108	GPS_RESERVED	50.5
(2) Kathrein 800 10121 w Mount Pipe (ATT)	108		

**SYMBOL LIST**

MARK	SIZE	MARK	SIZE
A	L1 1/4x1 1/4x3/16	C	L3x3x5/16
B	L2 x 2 x 1/4		

**MATERIAL STRENGTH**

GRADE	Fy	Fu	GRADE	Fy	Fu
A570-45	45 ksi	60 ksi	A500M-54	54 ksi	70 ksi
A36	36 ksi	58 ksi			

**TOWER DESIGN NOTES**

1. Tower is located in Hartford County, Connecticut.
2. Tower designed for a 80 mph basic wind in accordance with the TIA/EIA-222-F Standard.
3. Tower is also designed for a 69 mph basic wind with 0.50 in ice.

MAX. CORN. 4  
DOWN: 2.5. TOWER RATING: 99.5%  
UPLIFT: -250 K  
SHEAR: 13 K

AXIAL  
33 K

SHEAR  
19 K

MOMENT  
1710 kip-ft

TORQUE 0 kip-ft  
69 mph WIND - 0.5000 in ICE

AXIAL  
19 K

MOMENT  
1620 kip-ft

SHEAR  
18 K

TORQUE 0 kip-ft  
REACTIONS - 80 mph WIND

	<p><b>TowerCo</b> 5000 Valley Stone Drive Cary, NC 27519 Phone: (919) 469-5559 FAX: (919) 469-5530</p>	<p>Job: <b>Glastonbury-Main St. CT</b> Project: <b>CT2002 - VS# 100191.01</b> Client: Tower Co Code: TIA/EIA-222-F Path: L:\2010.0191_Glastonbury-Main St. CT\Task 1\Models\100191.01.ctb</p>
	<p>Drawn by: kingsley Date: 04/19/10 Scale: NTS Dwg No. E-1</p>	<p>App'd: Scale: NTS Dwg No. E-1</p>



To: Maxton  
From: Frantz Pierre – Radio Frequency Engineer  
Cc: Micah Hawthorne  
Subject: Power Density Report for CT-HFD0088  
Date: May 05, 2010

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**1. Introduction:**

This report is the result of Electromagnetic Field Intensities (EMF – Power Densities) study for the Clearwire broadband antenna installation on a steel self supporting lattice tower at 2577 Main Street, Glastonbury, 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 Clearwire transmitters are in the (2496 – 2960) Frequency Band
- 2) The emissions from the Clearwire Microwave dishes are in the 18 GHz Frequency Band
- 3) The model number for Clearwire Antenna is Argus LLPX310R
- 4) The model number for the Microwave dish is Andrew VHLP2.5 with 35" Diameter.
- 5) The Clearwire Panel antenna centerline is 128 feet.
- 6) The Clearwire Microwave dish centerline is 128 feet.
- 7) The Maximum Transmit power from any Clearwire panel antenna is 251 Watts Effective Isotropic Radiated Power (EiRP) assuming 2 channels per sector.
- 8) The Maximum Transmit power from any Clearwire Microwave Dish is 346 Watts Effective Isotropic Radiated Power (EiRP) assuming 1 channel per dish.
- 9) All antennas are simultaneously transmitting and receiving 24 hours per day.
- 10) 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 used with the above information to perform the calculations.

**3: Conclusion:**

Based on the above worst case assumptions, the power density calculation from the Clearwire antenna installation on a Steele Monopole at 2577 Main Street, Glastonbury, CT is 0.003651 mW/cm<sup>2</sup>. This value represents 0.37% of the Maximum Permissible Exposure (MPE) standard of 1 milliwatt per square centimeter (mW/cm<sup>2</sup>) set forth in the FCC/ANSI/IEEE C95-1-1991. Furthermore, the proposed antenna location for Clearwire 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.

The combined Power Density from all other carriers is 38.6446 %. The combined Power Density for this site is 39.0146% of the M.P.E. standard.