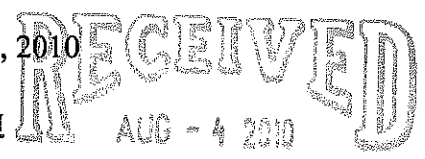


CONNECTICUT S

In re:

Request of Clear Wireless LLC for the Approval :
of the Shared Use of an Existing Tower Located :
at 287 Main Street, East Hartford, Connecticut. : August 4, 2010

TOWER SHARING APPLICATION



Clear Wireless LLC ("Clearwire") proposes herein to share an existing flagpole (the "Tower") located at 287 Main Street in East Hartford, Connecticut (the "Facility"). Pursuant to Connecticut General Statutes §16-50aa (the "Statute"), Clearwire requests a finding from the Connecticut Siting Council (the "Council") that the shared use of this Facility is technically, legally, environmentally, and economically feasible, will meet public safety concerns, will avoid the unnecessary proliferation of towers and is in the public interest. Clearwire further requests an order approving the shared use of this Facility.

The purpose of this request is to use an existing telecommunications tower to develop Clearwire's 4G wireless broadband network to provide high-speed wireless data and to develop VoIP service within the State of Connecticut and in this area of East Hartford. Therefore, this application avoids the construction of an additional tower in East Hartford.

A. The Facility

The Facility is located at a latitude of 41.7593" N and longitude of -72.6753 W. The Tower is a flag pole located on the rooftop of the building at 287 Main Street in East Hartford. T-Mobile was granted approval by the Council to replace the flagpole under Petition No. 731 in 2005. A site plan is attached.

B. Proposed Project

Clearwire will install three (3) WiMAX antennas (Model No. LLPX310R) and three (3) Remote Radio Heads (Model No. DAP) inside the existing flagpole. Clearwire also plans to

locate one (1) Andrew dish (Model No. VHLP2) on the existing vertical support of the existing rail system on the roof of the building. The proposed dish is an integral part of Clearwire's network and this installation and is therefore associated equipment pursuant to Conn. Gen. State. § 16-50i(6) and Conn. Agencies Regs. § 16-50j-2a(a). Clearwire plans to mount its antennas at a centerline of 72' 3" and its proposed dish will have a centerline of 64'. Six (6) cables, 5/16" in diameter, will run to the new WiMAX antennas (two per panel). Additionally, one (1) coax cable, 1/2" in diameter, will run to the new dish.

Within the existing compound Clearwire plans to locate its equipment on the existing concrete pad and install a new 10' by 20' chain link fence to surround the existing pad. No upgrades to the access road or parking area will be necessary.

C. Technical Feasibility

Consistent with the requirements of the Statute, it is technically feasible for Clearwire to collocate at this Facility. To analyze whether the Facility can support Clearwire's proposed modifications, Clearwire commissioned URS Corporation to perform a structural analysis of the Facility with Clearwire's proposed modifications. The structural analysis is attached. According to the Structural Analysis, dated July 26, 2010, "... the existing building has adequate structural capacity to support the proposed equipment cabinet and antenna installation..." (Structural Analysis).

D. Legal Feasibility

The Council has the authority, pursuant to the Statute, to issue an order approving the shared use of this Facility. By issuing an order approving Clearwire's use of the Facility, Clearwire will be able to proceed with obtaining a building permit for its proposed installation on the Facility. Therefore, consistent with the Statute, Clearwire's proposal is legally feasible.

E. Economic Feasibility

Clearwire is a wireless telecommunications provider licensed by the Federal Communications Commission to provide service in areas of Connecticut, including but not limited to Hartford County. Clearwire entered into a lease with South Grammar Office Complex LLC for the purpose of locating its installation at the Facility so that it may provide wireless telecommunications service to this area of East Hartford. Therefore, the shared use of this Facility is economically feasible.

F. Environmental Feasibility

Pursuant to the Statute, the proposal will be environmentally feasible for the following reasons:

- The overall impact on the Town of East Hartford will be decreased with the sharing of a single tower versus the proliferation of towers.
- The proposal will not increase the height of the Facility.
- There will be little increase in the visibility of the Facility with the addition of Clearwire's antennas, Remote Radio Heads and dishes.
- There will be no impact on any wetlands or water resources as a result of Clearwire's modifications.
- There will be no increased impact on air quality because no air pollutants will be generated during the normal operation of the Facility.
- There will only be a brief, slight increase in noise pollution while the antennas are attached and the equipment cabinet is installed.

- During construction, the proposed project will generate a small amount of traffic as workers arrive and depart and materials are delivered. Upon completion, traffic will be limited to an average of one monthly maintenance/inspection visit.

G. Public Safety Concerns / Benefits

There will be no adverse impact to the health and safety of the surrounding community or the workers at the Facility due to the addition of Clearwire's antennas to the Tower. Clearwire performed an analysis of the radio frequency fields emanating from its proposed installation to ensure compliance with the National Council on Radiation Protection and Measurements' ("NCRP") standard for maximum permissible exposure (MPE) adopted by the Federal Communications Commission ("FCC"). The analysis, dated July 27, 2010, indicates that Clearwire's antennas will emit 0.00396% of the NCRP's standard for maximum permissible exposure. A cumulative power density analysis indicates that together, all of the antennas on the Facility will emit 23.1% of the NCRP's standard for maximum permissible exposure. The power density analysis is attached. Therefore, the analysis demonstrates that the maximum level of radio-frequency energy emitted from the Facility will be well below the FCC's mandated radio frequency exposure limits.


Moreover, Clearwire expects to enhance safety in the East Hartford area by improving wireless communications for local residents and travelers. Clearwire is currently developing its 4G wireless broadband network to provide high-speed wireless data and its VoIP service within the State of Connecticut. Clearwire's 4G service leverages the WiMAX technology to enable enhanced wireless data communications. In order to provide reliable coverage to residents and travelers in this area of East Hartford and fulfill their coverage goals to comply with their FCC license, this site is a necessary part of Clearwire's network development.

Specifically, this proposal is designed to provide reliable wireless service for 1.3 miles along SR-2 and 1.3 miles along Main Street. The installation will also provide a reliable service level for surrounding commercial and residential areas.

Conclusion

For the reasons stated above, the attachment of Clearwire's antennas, remote radio heads and dishes to the Facility would meet all the requirements set forth in the Statute. This proposal is technically, legally, environmentally and economically feasible and meets all public safety concerns. Therefore, Clearwire respectfully requests that the Council approve this request for the shared use of the Facility located 287 Main Street in East Hartford, Connecticut.

Clear Wireless LLC

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 - 860.509.6501

Certificate of Service

This is to certify that on this 4th day of August, 2010, the foregoing Tower Sharing

Proposal was sent, via first class mail, to the following:

Town of East Hartford
Mayor Melody E. Currey
740 Main Street
East Hartford, CT 06108

By: 

Thomas J. Regan

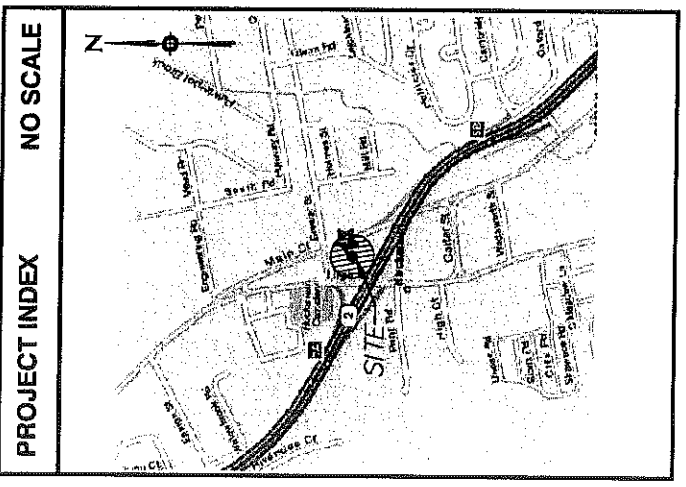
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clearw^{re}

EAST HARTFORD

CT-HFD0166

287 MAIN STREET
EAST HARTFORD, CONNECTICUT 06108



PROJECT INDEX NO SCALE

SHEET INDEX	
SHT. NO.	DESCRIPTION
T-1	TITLE SHEET - GENERAL NOTES AND LEGENDS
LE-1	SITE/ROOF PLAN
LE-2	BUILDING ELEVATION

DRIVING DIRECTIONS

FROM MAHWAH, NJ:

- TAKE I-87 EAST (I-87 SOUTH/NEW YORK STATE THRUWAY SOUTH TOWARD TAPPAN ZEE BRIDGE/NEW YORK CITY (PORTIONS TOLL)).
- TAKE EXIT 6A TOWARD RT-119/SAW MILL PKWY NORTH/ELMSFORD.
- MERGE ONTO SAW MILL PKWY N/SAW MILL RIVER PKWY N TOWARD KATONAH.
- MERGE ONTO I-884 NORTH TOWARD BREWSTER.
- MERGE ONTO I-84 EAST VIA EXIT 9E TOWARD DANBURY (CROSSING INTO CONNECTICUT).
- MERGE ONTO I-691 EAST VIA EXIT 27 TOWARD MERIDEN.
- MERGE ONTO I-81 NORTH VIA EXIT 11 ON THE LEFT TOWARD HARTFORD/SPRINGFIELD.
- MERGE ONTO CT-3 NORTH VIA EXIT 25 TOWARD GLASTONBURY.
- MERGE ONTO CT-2 WEST VIA THE EXIT ON THE LEFT TOWARD E. HARTFORD.
- TAKE THE MAIN STREET EXIT, EXIT 5A.
- TURN SLIGHT RIGHT ONTO MAIN ST. 287 MAIN STREET IS ON THE LEFT.

PROJECT INDEX	
SITE NUMBER:	CT-HFD0166
SITE NAME:	EAST HARTFORD
SITE ADDRESS:	287 MAIN STREET EAST HARTFORD, CT 06108
APPLICANT:	SPRINT NEXTEL CORP. INTERNATIONAL BLVD, SUITE 800 MAHWAH, NJ 07485
PROPERTY OWNER:	SOUTH GRAMMAR OFFICE COMPLEX LLC
JURISDICTION:	TOWN OF EAST HARTFORD
LATITUDE:	41° 44' 26.9"
LONGITUDE:	-72° 37' 48"

clearw^{re}
4400 CARILLON POINT
MIRKLAND, WA 98023

TRANSCEND WIRELESS, LLC
10 INDUSTRIAL AVENUE
MAHWAH, NJ 07430

A&E FIRM
JBS CORPORATION A&E
500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

NO.	DATE	REVISIONS	BY	CHK/APP'D
1	07/29/10	REVIEW	PJS	ICA
2	08/17/10	REVIEW	JES	PJS/ICA

NOT TO SCALE DESIGNED BY: PJS DRAWN BY: JES
A&E SEAL

EAST HARTFORD
CT-HFD0166

287 MAIN STREET
EAST HARTFORD, CT 06108

PROJECT NO.	TWG-084	DRAWING NAME	T-1	DATE	06/17/10	SHEET NO./REV	1 OF 3
	36824371						A

clearw're

4400 CARILLON POINT
KIRKLAND, WA 98033

TRANSCEND WIRELESS, LLC
10 INDUSTRIAL AVENUE
MAHWAH, NJ 07430

A/E FIRM

URS CORPORATION A/E/S

500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

NO.	DATE	REVISIONS	BY	CHECKED
07/29/10	REVIEW	BAL PUS I CA		
08/17/10	REVIEW	JES PUS I CA		

NOT TO SCALE | DESIGNED BY: PUS | DRAWN BY: JES
A/E SEAL

**EAST HARTFORD
CT-HFD0166**

**287 MAIN STREET
EAST HARTFORD, CT 06108**

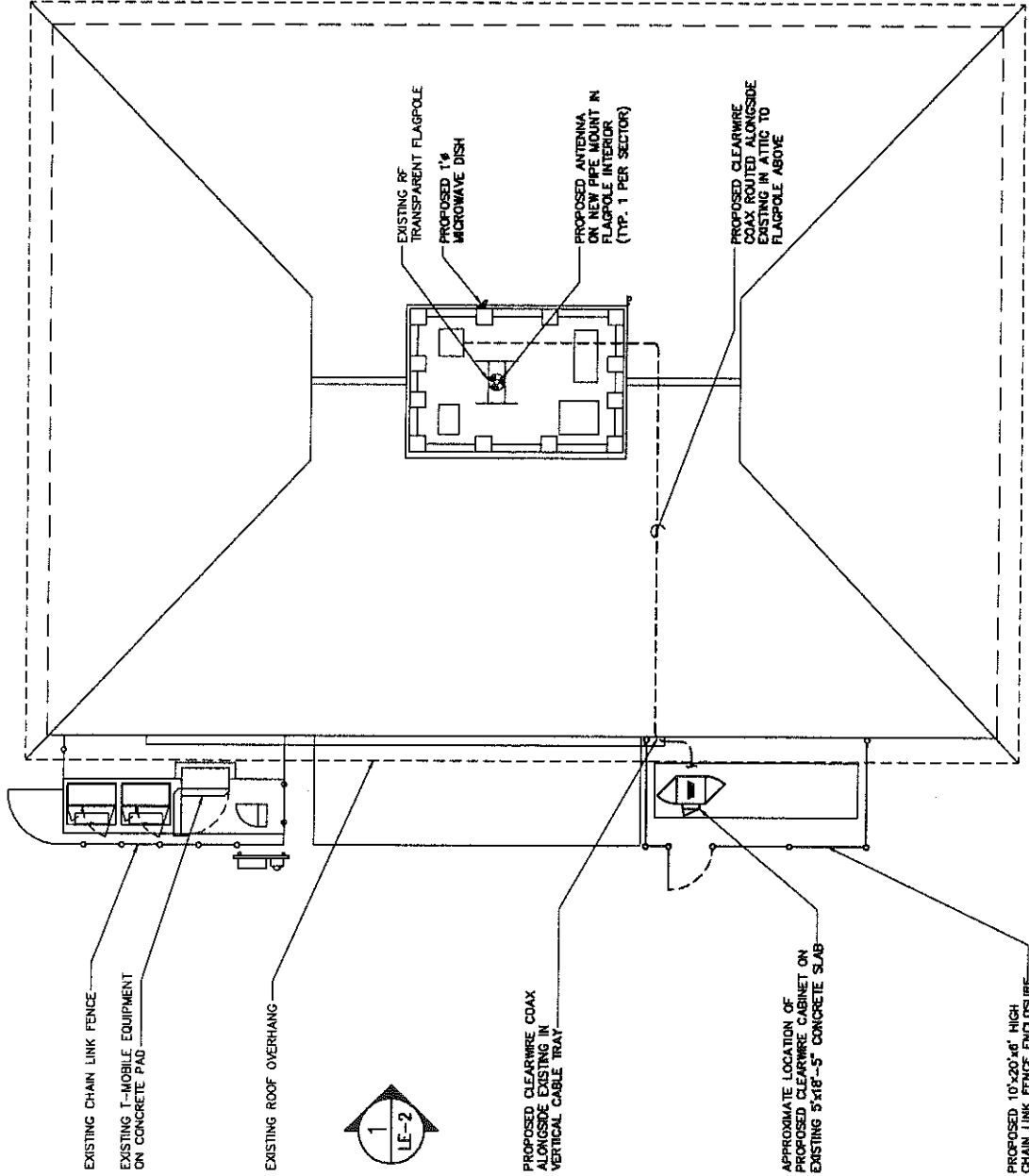
PROJECT NO.
TW-094
30824371

DRAWING NAME
LE-1

DATE
08/17/10

SHEET NO. REV
2 OF 3

A



1 SITE/ROOF PLAN
LE-1
SCALE 1" = 20'-0"

clearwire^{re}

4400 CARBON POINT
KIRKLAND, WA 98033

TRANSCEND WIRELESS, LLC
10 INDUSTRIAL AVENUE
MAHWAH, NJ 07430

A/E/F FIRM

DES COMPUTATION A/E/S

500 ENTERPRISE DRIVE, SUITE 3B
ROCKY HILL, CONNECTICUT
1-(860)-529-8882

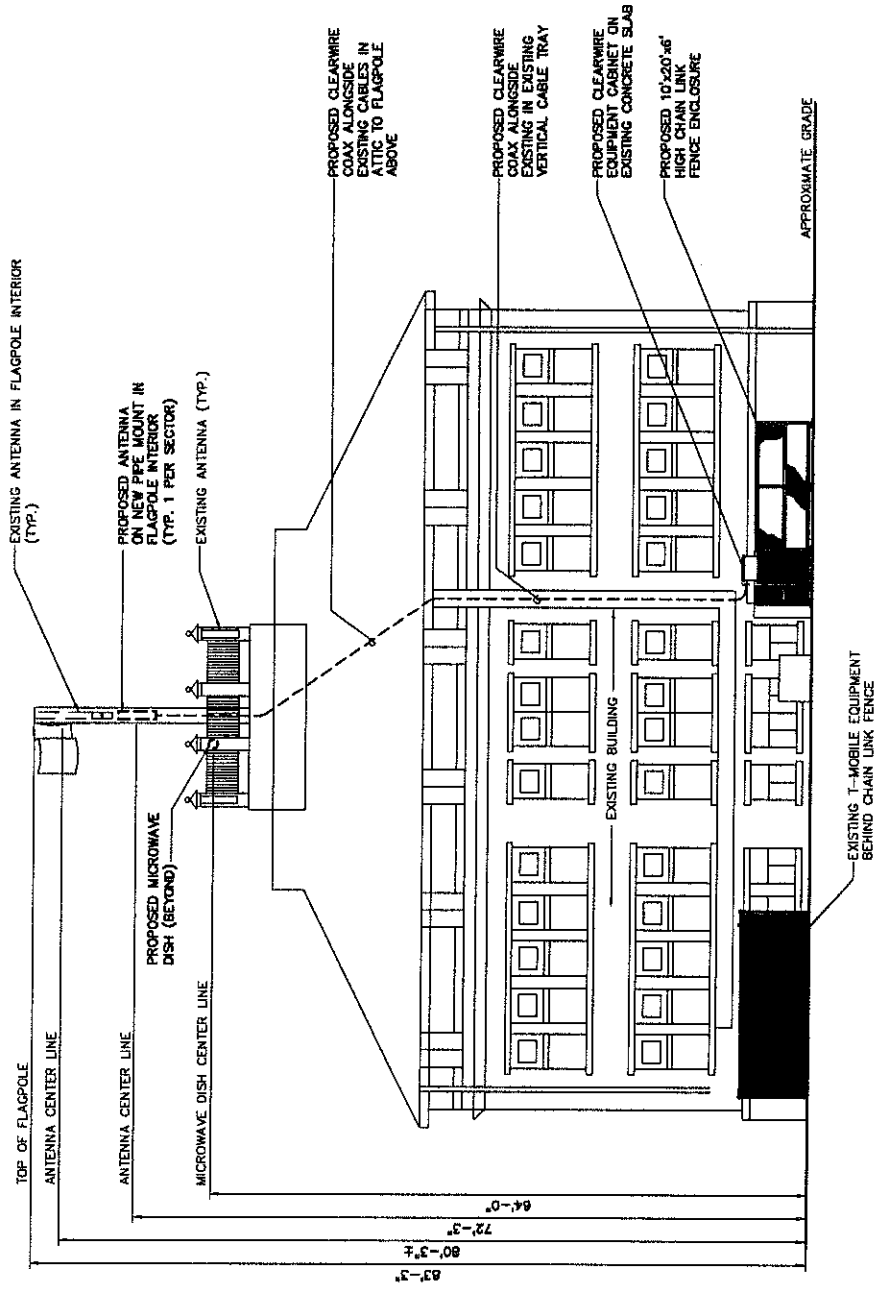
NO.	DATE	REVISIONS	BY	CHK/APPRD
1	07/29/10	REVIEW	BAL	RJS/KA
2	08/17/10	REVIEW	JES	RJS/KA
3				
4				
5				

NOT TO SCALE DESIGNED BY: JES DRAWN BY: JES
A/E SEAL

**EAST HARTFORD
CT-HFD0166**

**287 MAIN STREET
EAST HARTFORD, CT 06108**

PROJECT NO.	TWS-094
DRAWING NAME	LE-2
DATE	06/17/10
SHEET NO.	3 OF 3
REV	A



1 BUILDING ELEVATION
SCALE: 1" = 20'-0"
LE-2



July 26, 2010

Mr. Joseph Laquidara
Transcend Wireless
10 Industrial Avenue, Suite 6
Mahwah, New Jersey 07430

Reference: Proposed Clearwire Installation
Clearwire Site No.: CT-HFD0166
Site Name: East Hartford
287 Main Street, East Hartford, Connecticut
URS Project Number: TW3094 / 36924371.00094

Dear Mr. Laquidara:

URS Corporation (URS) has been retained by Transcend Wireless to assess the structural capability of the existing three story masonry building with regard to its ability to support a proposed cabinet and antenna addition.

Clearwire is proposing to install one (1) outdoor equipment cabinet, weighing 550 lbs, on an existing concrete pad at grade.

There is an existing RF transparent flagpole on the roof of the building. Clearwire is proposing to add the following inside the existing RF transparent flagpole:

- Install (3) new Argus LLPX310R panel antennas, 42.13" (H) x 11.8" (W) x 4.5" (D) (Max Wind Area = 3.45 ft², Weight = 28.66 lbs), 1 per sector inside the existing RF transparent flagpoles.
- Install (3) Samsung DAP Remote Radio Heads (16.14" (H) x 11.63" (W) x 5.29" (D) – Weight 33 lbs) 1 per sector for each panel antenna.
- Install (6) 5/16" Dia. Coax cables (2 per sector) to the new panel antennas.

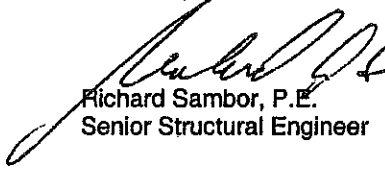
Clearwire is also proposing to add one (1) 12" Microwave dish with one (1) 1/2 inch diameter coax cable on the existing vertical support of the existing rail system on the roof of the building.

URS completed a field visit on June 10, 2010 in order to assess the site and gather information on the existing conditions. URS has reviewed the data collected, and has determined that the existing building has adequate structural capacity to support the proposed equipment cabinet and antenna installation as described above.

This assessment is based on requirements of the 2003 International Building Code and the 2005 Connecticut Supplement. Should you have any further questions, please do not hesitate to call me.

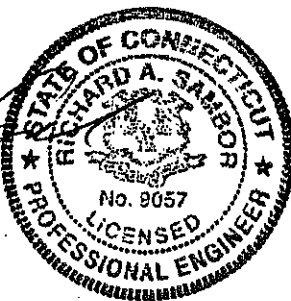
Sincerely,

URS Corporation


Richard Sambor, P.E.
Senior Structural Engineer

RS/lcf

cc: CF/File



URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067
Tel: 860.529.8882
Fax: 860.529.3991



From: Frantz Pierre – Radio Frequency Engineer
Cc: Micah Hawthorne
Subject: Power Density Report for CT-HFD0166
Date: July 27, 2010

1. Introduction:

This report is the result of Electromagnetic Field Intensities (EMF – Power Densities) study for the Clearwire broadband antenna installation on a Stealth Flag Pole at 287 Main st., East Hartford, 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 23 GHz Frequency Band
- 3) The model number for Clearwire Antenna is Argus LLPX310R
- 4) The model number for the Microwave dish is Andrew VHLP2 with 12" Diameter.
- 5) The Clearwire Panel antenna centerline is 72 feet.
- 6) The Clearwire Microwave dish centerline is 64 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 Stealth Flag Pole at 287 Main st., East Hartford, CT. is $0.0000396 \text{ mW/cm}^2$. This value represents 0.00396% 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 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 23.07 %. The combined Power Density for this site is 23.074 % of the M.P.E. standard.