

STATE OF CONNECTICUT  
CONNECTICUT SITING COUNCIL

IN RE:

APPLICATION OF NEW CINGULAR WIRELESS  
PCS, LLC (AT&T) FOR A CERTIFICATE OF  
ENVIRONMENTAL COMPATIBILITY AND  
PUBLIC NEED FOR THE CONSTRUCTION,  
MAINTENANCE AND OPERATION OF A  
TELECOMMUNICATIONS TOWER FACILITY  
LOCATED AT 95 BALANCE ROCK ROAD IN THE  
TOWN OF HARTLAND, CONNECTICUT

DOCKET NO. 408

February 11, 2011

**NEW CINGULAR WIRELESS PCS, LLC ("AT&T")  
RESPONSES TO SITING COUNCIL INTERROGATORIES (SET TWO)**

Q1. Is the property listed as No. 8 in the Site Search summary owned by the DEP or DOT? Why was this site rejected by radiofrequency engineers? Please describe topographic features that may be preventing adequate coverage to the proposed service area.

A1. Pursuant to the Town records for the property listed as No. 8 in the Site Search Summary, it is owned by the State of Connecticut and is referenced as being part of the Tunxis State Forest (Assessor's Map-Block-Lot 10-05-004; property address Granville Road including 1883 acres).

AT&T's RF engineers determined that a tower facility at the garage site would not provide reliable service to meet the coverage objectives for this area. See Response No.9 and propagation map in Exhibit E of AT&T's Responses to Siting Council Interrogatories (AT&T's Exhibit No. 3). Attached in Exhibit A are terrain profiles which demonstrate that the topography would block signal from a facility at this location.

Q2. Were any locations in Massachusetts north of Route 20 considered for a telecommunication site that could provide coverage to the proposed service area?

A2. Yes, AT&T did investigate locations and existing towers in Massachusetts north of Route 20 and determined that a facility in this area would not meet the coverage objectives. Also, AT&T is currently located on the two existing telecommunications towers located in Granville, Massachusetts (North Lane and Sodom Street) that provide service outside of the area targeted for service by the proposed facility.

Q3. The coverage plot in the application of proposed coverage from Site A depicts inadequate coverage on Route 20 west of Hurricane Brook Road and west of Morrison Hill Road. Please indicate the length of these coverage gaps and what the weakest signal level would be in these locations with antennas at 190 feet, 170 feet and 150 feet above ground level. Describe call characteristics/quality at these signal levels.

A3. The approximate length of the coverage gaps and the anticipated weakest signal level along Route 20 west of Hurricane Brook Road and west of Morrison Hill Road at heights of 190, 170 and 150 feet are provided in the table below.

<b>Hurricane Brook Road (North End of Reservoir)</b>		
<b>Height AGL</b>	<b>Gap Size</b>	<b>Weakest Signal</b>
190 ft	900 feet	-99.6 dBm
170 ft	970 feet	-102.9 dBm
150 ft	1250 feet	-104.4 dBm
<b>West of Morrison Hill Road</b>		
<b>Height AGL</b>	<b>Gap Size</b>	<b>Weakest Signal</b>
190 ft	1340 feet	-90.24 dBm
170 ft	1340 feet	-90.24 dBm
150 ft	1340 feet	-90.24 dBm

For AT&T's network, reliable service is defined at -74dBm for in-building service and -82 dBm for in-vehicle service. Below these levels, placing a call may be possible, however, the service is unreliable.

Q4. In the Transcript (3:00 p.m., pp. 75-76) it was stated that coverage from Site B at 190 feet is superior to that of Site A at 190 feet. Please describe the differences in coverage.

A4. Site B is located approximately 500 feet to the northeast of Site A. (The drawing in Exhibit B shows both proposed alternative sites on the property). The ground elevation at Site B is approximately 35 feet higher than at Site A. While the difference in the antenna's "viewpoint" from the different location must be taken into account, the same size tower at Site B as proposed at Site A (190 feet above ground level) would achieve a higher overall height above the surrounding terrain and generally improved coverage over the entire area of coverage. Specifically, with respect to the coverage gap on Route 20 at the north end of the reservoir, the in-vehicle coverage gap is smaller and the minimum signal level within that gap is higher (as detailed in Response No. 3) at Site B at 190' AGL.

Because the gap is smaller and the minimum signal within the gap is higher for Site B at 190' AGL, it is more likely that calls going through this coverage gap will experience a brief degradation in call quality (audio "breaking up" or muting) rather than dropping the call altogether and having to reestablish the connection.

Q5. What antenna height would be required at Site B to get the same coverage characteristics as Site A with antennas at 190 feet?

A5. The sites are in two different locations with two different "viewpoints" of the surrounding terrain and clutter, so the two sites will never provide exactly "the same coverage", but the coverage from Site B at approximately 160 feet AGL is generally equivalent to the coverage from Site A at 190 feet AGL. However, as noted above in Response No. 4, AT&T is

seeking a height of 190' AGL for Site B to achieve a higher overall height above the surrounding terrain and generally improved coverage over the entire area of coverage from Site B.

Q6. Does the visibility analysis performed by VHB (Exhibit 7) replace the visibility analysis performed by CHA that was included in the application?

A6. The visibility analysis conducted by VHB is not intended to replace CHA's previous visual study, but rather, is focused on providing a comparative evaluation of the likely viewsheds associated with the two candidate sites currently under consideration. At the time CHA conducted its analysis, the second candidate site location had not been identified by AT&T as an option. The conclusions presented in both VHB's analysis and that of CHA regarding Site A are generally consistent.

Q7. In regards to View 14 in the VHB report, is the view actually from the Route 20 or from a turnoff? If it is a turnoff, is it marked as a scenic view? Is there a berm between the viewpoint and Route 20 that would block the view from travelers on Route 20?

A7. View 14 was taken from the Route 20 right-of-way. VHB does not recall the presence of a berm or other similar obstruction along this segment of Route 20.

Q8. In regards to View 13 in the VHB report, is there a listed viewpoint on the Falls Brook Trail or does the photo show a representative view?

A8. View 13 was taken along the Falls Brook Trail adjacent to signage indicating a nearby vista. No year-round or seasonal views of either Site A or Site B are anticipated from this area, as documented in VHB's visibility study.

Q9. Please describe the balloon fly that occurred on January 13, 2011.

A9. Due to sustained winds of over 10 mph and frequent wind gusts of well over 20 mph on the day of the Siting Council hearing in this Docket, January 13<sup>th</sup>, VHB staff was not able to maintain balloons at either site location at the proposed heights of 190 feet above ground level (AGL). The balloons were aloft for an approximate 90-minute period between 8:00 a.m. and 10:00 a.m., but failed to reach an altitude significantly above the surrounding tree canopy during that time, resulting in the balloons popping. The balloons were replaced on several occasions, but were immediately lost as a result of the high winds encountered during the float. It is important to note that VHB conducted a publicly-noticed balloon float on December 30, 2010 under favorable weather conditions that included temperatures of approximately 40 degrees Fahrenheit, sunny skies and calm winds.

Q10. Please indicate when and where the sign describing the project was installed at the site.

A10. The notice sign was installed on the west side of the driveway entrance to the subject site on December 29, 2010. The sign was relocated to a more visible location on the next day, December 30, 2010 and attached to a tree on the east side of the driveway entrance.

CERTIFICATE OF SERVICE

I hereby certify that on this day, a copy of the foregoing was submitted electronically and by overnight mail to the Connecticut Siting Council and to:

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Heike M. Krauland  
64 Balance Rock Road  
East Hartland, CT 06027  
(860) 413-9483  
heiketavin@yahoo.com

Dated: February 11, 2011

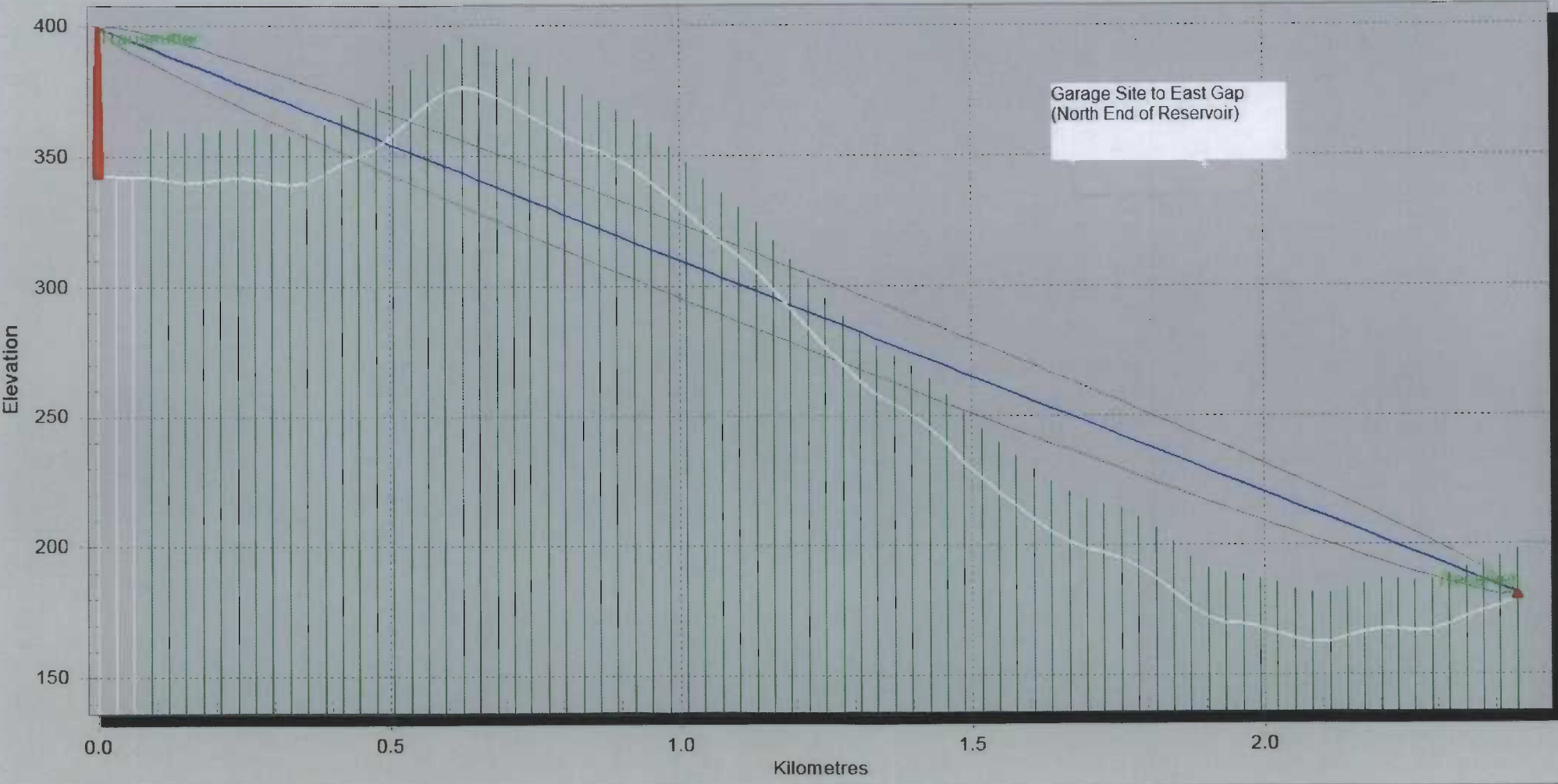
  
Lucia Chiochio

cc: Michele Briggs, AT&T  
David Vivian, SAI  
Anthony Wells, C Squared  
Scott Pollister, C Squared  
Dean Gustafson, VHB  
Michael Libertine, VHB  
Peter M. Perkins, CHA  
Christopher B. Fisher, Esq.

# **EXHIBIT A**

# Profile

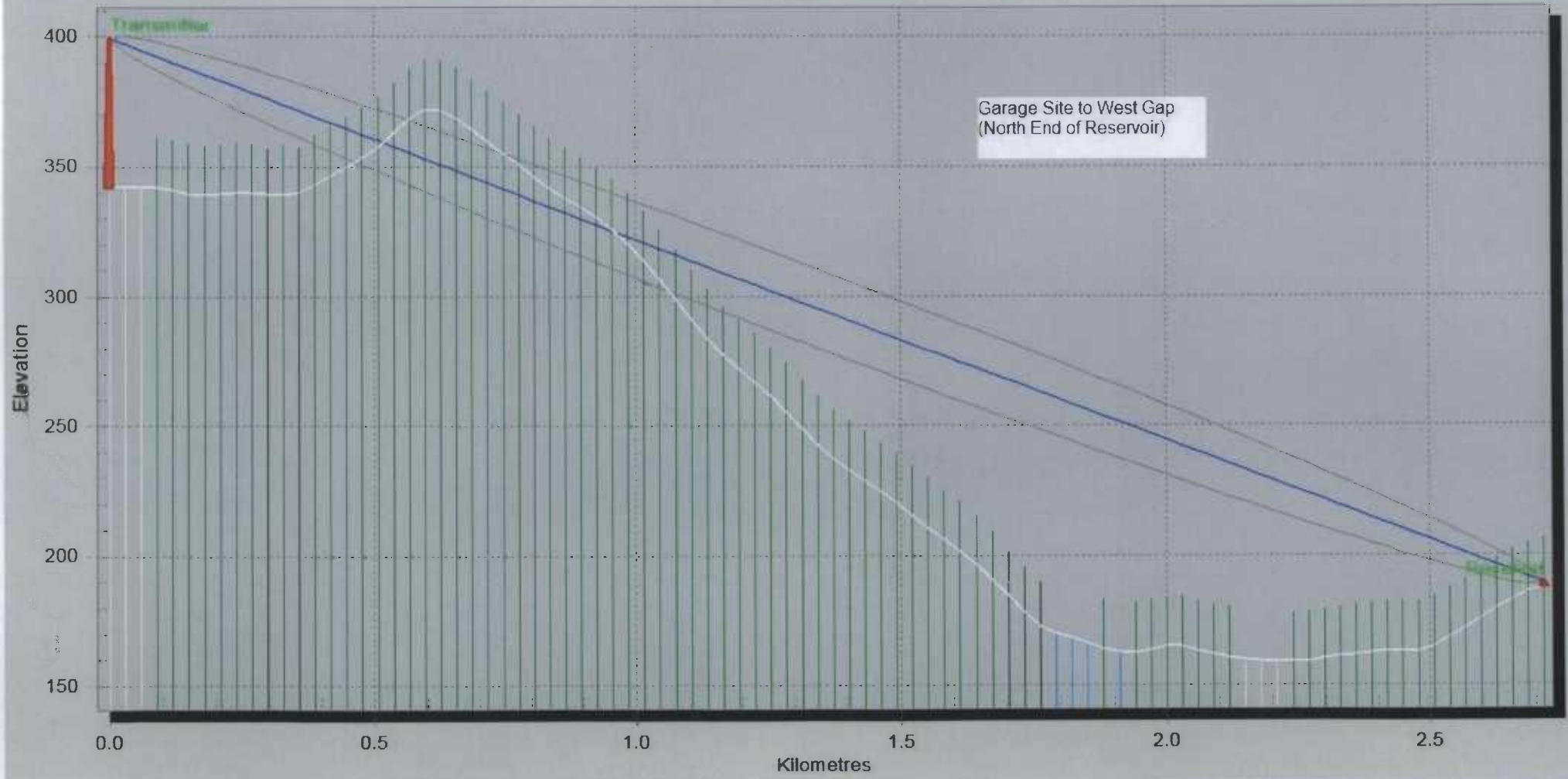
Garage Site to East Gap  
(North End of Reservoir)



7. 380.387

# Profile

3,347.696



**EXHIBIT B**



**SURVEY NOTES:**

1. THIS SURVEY HAS BEEN PREPARED PURSUANT TO THE REGULATIONS OF CONNECTICUT STATE AGENCIES SECTIONS 20-300b-1 THROUGH 20-300b-20 AND THE "STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" AS ADOPTED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS INC. ON SEPTEMBER 26, 1996. THE BOUNDARY LINES SHOWN ON THIS PLAN WERE COMPILED FROM OTHER MAPS, RECORD RESEARCH OR OTHER SOURCES OF INFORMATION. IT IS NOT TO BE CONSTRUED AS HAVING BEEN OBTAINED AS THE RESULT OF A FIELD SURVEY, AND IS SUBJECT TO SUCH CHANGE AS AN ACCURATE FIELD SURVEY MAY DISCLOSE.

TYPE OF SURVEY: COMPILATION PLAN

BOUNDARY DETERMINATION CATEGORY: NONE

CLASS OF ACCURACY: HORIZONTAL CLASS A-2  
VERTICAL CLASS V-2  
TOPOGRAPHIC CLASS T-2

2. PROPERTY LINE SHOWN HEREON ARE FROM RECORD DEEDS PLOTS AND TAX MAPS AS OVERLAIN ON ANY MONUMENTATION OR OTHER EVIDENCE THAT MAY HAVE BEEN LOCATED DURING THE TOPOGRAPHIC SURVEY. A PROPERTY SURVEY WAS NOT PERFORMED BY CHA AND AS A RESULT THE PROPERTY LINES SHOWN ARE APPROXIMATE AND DO NOT PRESENT A PROPERTY/BOUNDARY OPINION.

3. BASE MAPPING PREPARED BY CHA FROM AN OCTOBER 2009 AND DECEMBER 2010 FIELD SURVEY.

4. NORTH ORIENTATION IS TRUE NORTH BASED ON GPS OBSERVATIONS TAKEN AT THE TIME OF THE FIELD SURVEY.

5. UNDERGROUND UTILITIES, STRUCTURES AND FACILITIES, IF ANY, HAVE BEEN SHOWN FROM SURFACE LOCATIONS AND MEASUREMENTS OBTAINED FROM A FIELD SURVEY. THEREFORE THEIR LOCATIONS MUST BE CONSIDERED APPROXIMATE ONLY. THERE MAY BE OTHER UTILITIES WHICH THE EXISTENCE OF ARE NOT KNOWN. SIZE, TYPE AND LOCATION OF ALL UTILITIES AND STRUCTURES MUST BE VERIFIED BY PROPER AUTHORITIES PRIOR TO ANY AND ALL CONSTRUCTION. CALL DIG SAFE PRIOR.

6. SUBJECT TO ANY STATEMENT OF FACTS THAT AN UP-TO-DATE ABSTRACT OF TITLE WOULD DISCLOSE.

7. SUBJECT TO ALL RIGHTS, EASEMENTS, COVENANTS OR RESTRICTIONS OF RECORD.

8. LATITUDE/LONGITUDE/ELEVATIONS WERE OBTAINED UTILIZING NGS CORS BASE STATION NAMED "CTG6". LATITUDE/LONGITUDE ARE REFERENCED TO NAD83 CONNECTICUT ZONE. COORDINATES SHOWN, IF ANY, ARE EXPRESSED IN U.S. SURVEY FEET. ELEVATIONS ARE REFERENCED TO NAVD88. TOP OF STRUCTURE HEIGHT AS SHOWN, IF ANY, DETERMINED BY VERTICAL ANGLE OR BY ACTUAL LOCATION. INFORMATION SHOWN BASED ON FAA 2C CERTIFICATION ACCURACY LEVEL DEFINED AS:  
HORIZONTAL: ±50 FEET / 15 METERS  
VERTICAL: ±20 FEET / 6 METERS

9. SITE FALLS WITHIN ZONE "C" DEFINED AS AREAS OF MINIMAL FLOODING AS SHOWN ON FLOOD INSURANCE RATE MAP, TOWN OF HARTLAND, CONNECTICUT, HARTFORD COUNTY, COMMUNITY PANEL NUMBER 090146 0010 B, EFFECTIVE DATE DECEMBER 16, 1980.

**MAP REFERENCES:**

1. MAP ENTITLED "SUBDIVISION PLAN PROPERTY OWNED BY RUEDIGER J. KRAULAND & ANTONIE KRAULAND - 72 BALANCE ROCK ROAD" AS PREPARED BY HENRY C. COTTON & ASSOCIATES, DATED AUGUST 2, 2006 AND RECORDED IN THE TOWN CLERKS OFFICE AS MAP K-16.

2. TOWN OF HARTLAND CONNECTICUT "TAX MAP-SHEET 16", AS PREPARED BY FUSS & O'NEILL AND DATED OCTOBER 24, 2006.

N/F  
THOMAS H SIRMAN  
88 BALANCE ROCK RD  
EAST HARTLAND, CT 06027

16-07-035A  
ZONE: R-1  
8.6± ACRES

BENCHMARK  
NAIL IN TREF  
EL: 1095.71

PROPOSED ACCESS AND  
UTILITY EASEMENT (ALT. A)

N/F  
ANTONIE KRAULAND  
BALANCE ROCK RD  
EAST HARTLAND, CT 06027

MAILING ADDRESS:  
72 BALANCE ROCK RD  
EAST HARTLAND, CT 06027

16-07-035  
ZONE: R-1  
6.06± ACRES

BENCHMARK  
NAIL IN POLE  
EL: 1129.95

N/F  
ANTONIE KRAULAND  
72 BALANCE ROCK RD  
EAST HARTLAND, CT 06027

16-07-033  
ZONE: R-1  
6.06± ACRES

N/F  
STATE OF CONNECTICUT  
240 NORTH HOLLOW ROAD  
EAST HARTLAND, CT 06027

MAILING ADDRESS:  
450 CAPITOL AVE  
HARTLAND CT

16-07-49  
ZONE: R-1  
790± ACRES

N/F  
RING MOUNTAIN HUNT CLUB  
C/O CHARLES OSBORN  
95 BALANCE ROCK RD  
EAST HARTLAND, CT 06027

MAILING ADDRESS:  
71 ANDERSON RD  
EAST HARTLAND, CT 06027

16-07-038  
ZONE: R-1  
12.1± ACRES

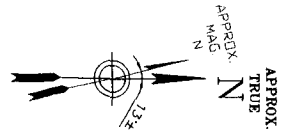
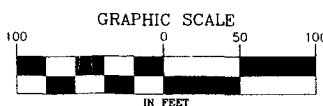
PROPOSED ACCESS AND  
UTILITY EASEMENT (ALT. B)

N/F  
STATE OF CONNECTICUT  
240 NORTH HOLLOW ROAD  
EAST HARTLAND, CT 06027

MAILING ADDRESS:  
450 CAPITOL AVE  
HARTLAND CT

16-07-49  
ZONE: R-1  
790± ACRES

1 ABUTTERS MAP  
C01 SCALE: 1" = 50' FULL SIZE  
1" = 100' 11 X 17



NEW CINGULAR WIRELESS PCS, LLC  
500 ENTERPRISE DRIVE  
ROCKY HILL, CT 06067

CHA PROJECT NO  
18301 - 1040 - 1101

NO	SUBMITAL
0	11/25/09 ISSUED CSC CERTIFICATE BY: JDM CHK: PAL APP'D: RAB
1	08/30/10 REVISED PER COMMENTS BY: PAL CHK: PAL APP'D: PAL
2	01/06/11 NEW TOWER LOCATION BY: JDM CHK: PAL APP'D: PAL

IT IS A VIOLATION OF LAW FOR ANY PERSON, UNLESS THEY ARE ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.

SITE ID:  
SR2587  
SITE NAME:  
WEST HARTLAND  
SITE ADDRESS:  
95 BALANCE ROCK ROAD  
EAST HARTLAND, CT  
06027  
HARTFORD COUNTY

SHEET TITLE  
ABUTTERS  
MAP

SHEET NUMBER  
C01