#### STATE OF CONNECTICUT

#### CONNECTICUT SITING COUNCIL

#### IN RE:

APPLICATION OF CELLCO PARTNERSHIP D/B/A VERIZON WIRELESS FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED TO RELOCATE AN EXISTING WIRELESS TELECOMMUNICATIONS FACILITY AT 139 NORTH MAIN STREET, WEST HARTFORD, CONNECTICUT DOCKET NO. 434

March 28, 2013

### AT&T'S RESPONSES TO CONNECTICUT SITING COUNCIL INTERROGATORIES

- Q1. Which frequencies are New Cingular Wireless PCS, LLC (AT&T) licensed to utilize in Hartford County?
- A1. In Hartford County, AT&T's licenses include:
  850 b Transmit: 880-895MHz; Receive: 835-850 MHz
  1900 A3 Transmit 1930-1935MHz; Receive 1850-1855MHz;
  1900 D Transmit 1945-1950MHz; Receive 1865-1870MHz
  1900 E Transmit 1965-1970MHz; Receive 1885-1890MHz
  750B Transmit 704-710MHz; Receive 734-740MHz
  750C Transmit 710-716 MHz; Receive 740-746MHZ
- Q2. What is the signal strength for which AT&T designs its system? For in-vehicle coverage? For in-building coverage?
- A2. AT&T's design criteria for reliable in-building coverage is -74 dBm and AT&T's design criteria for reliable in-vehicle coverage is -82 dBm.
- Q3. Provide AT&T's existing antenna height(s) at The Gallaudet Hall facility.
- A3. The centerline height of AT&T's existing facility at The Gallaudet Hall is approximately 76' above grade level (AGL).
- Q4. Provide an existing coverage plot with AT&T's existing facility at Gallaudet Hall.
- A4. A plot depicting existing coverage of AT&T's facility at The Gallaudet Hall with an antenna centerline height of approximately 76' AGL is provided in Attachment 1. Please

- note that all of the plots provided include the existing site name, CTU1173 and the relocated site name CT2592S at ASD.
- Q5. Provide an existing coverage plot without the existing facility at Gallaudet Hall or the proposed clock tower. In other words, provide an existing coverage plot to illustrate the coverage gaps that would result from having no AT&T facility at American School for the Deaf (ASD).
- A5. The plot included in Attachment 2 illustrates the coverage gaps that would result with no AT&T facility at the ASD. As shown in the attached plot, without a facility at the ASD, gaps in reliable service would result along North Main Street and the surrounding area. (Please note that all of the plots provided include the existing site name, CTU1173 and the relocated site name CT2592S at ASD.)
- Q6. Provide the lengths of the coverage gaps on key streets that would result from no AT&T facility at ASD.
- A6. With no AT&T facility at ASD, a gap approximately 0.8 mile in length would result along North Main Street and a gap approximately 0.6 mile in length would result along Trout Brook Drive the two main roads in the area. As shown in the coverage plot included in Attachment 2, the signal strength in this area without a facility at the ASD would be in the -92dBM range, which is not adequate for reliable in-vehicle or in-building service.
- Q7. Provide a plot of existing and proposed (i.e. the relocated facility at ASD) coverage.
- A7. Included in Attachment 3 is a plot depicting existing coverage and coverage from AT&T's relocated facility at ASD at an antenna centerline height of approximately 44.5 AGL. (Please note that all of the plots provided include the existing site name, CTU1173 and the relocated site name CT2592S at ASD.)
- Q8. Provide the distance and direction from the proposed relocated tower site to the existing AT&T sites that the proposed relocated facility would interact with. Also include the addresses, tower heights, antenna heights, and tower types (e.g. monopole).
- A8. Please see the table below for the requested information regarding AT&T's hand-off sites to the proposed relocated ASD site.

SITE				19	
NAME	ADDRESS	STRUCTURE	HEIGHT (FT)	DIRECTION	DISTANCE
	139 NORTH MAIN				
CT2592S	STREET	STEALTH	44.6	Proposed	0
	345 NORTH MAIN			-	
CTU1195	STREET	ROOFTOP	87	North	0.9 miles
	29 SOUTH MAIN				
CTU5843	STREET	ROOFTOP	90	South-east	0.8 miles

- Q9. Would there be handoff issues without a facility at ASD? Explain.
- A9. Yes. As shown in the plot included in Attachment 2, a coverage gap would result without a facility at ASD. This plot also shows that the gap is too large to allow reliable handoff between AT&T's existing sites to the north (CTU1195) and south (CTU5843) of ASD. (Please note that all of the plots provided include the existing site name, CTU1173 and the relocated site name CT2592S at ASD.)
- Q10. Provide the numerical data for column three of the following matrix.

A10.

	2	Proposed clock tower facility statistics
Population Coverage (persons)	At in-building signal strength or higher	288
Population Coverage (persons)	At in-vehicle signal strength or higher	915
Area Covered (square miles)	At in-vehicle signal strength or higher	0.25
Area Covered (square miles)	At in-building signal strength or higher	0.11
Roadway Coverage (miles)	Main Roads	1.4
Roadway Coverage (miles)	Secondary Roads	4
Roadway Coverage (miles)	Total Roads (i.e. main + secondary)	5.4

- Q11. What is the minimum antenna centerline height required to meet AT&T's coverage objectives?
- A11. The minimum antenna centerline height to adequately meet AT&T's coverage objectives at the relocated site is approximately 60' AGL.
- Q12. Could AT&T fit all of its antennas at one height or would two different antenna heights be needed?
- A12. AT&T's antennas can be accommodated at one mounting height in the relocated facility.

- Q13. Would AT&T utilize the same backup generator as Cellco Partnership d/b/a Verizon Wireless?
- A13. There is insufficient space in the proposed AT&T equipment room for AT&T to install its own separate source of backup power. AT&T prefers a permanent source of generating capacity and cannot utilize Verizon's typical backup power sources that are part of its shelter. Thus, Verizon is exploring development of a shared generator and AT&T would consider its use on appropriate terms and conditions agreeable to the parties.
- Q14. If AT&T is providing its own backup power, what would be the fuel source for AT&T's backup generator? How many hours of run time would the generator have based on its fuel tank capacity? Has AT&T considered using a fuel cell as a backup power source for the proposed facility? Explain.
- A14. Please see response A13 above regarding backup power for AT&T's facility. With respect to a fuel cell as a backup power source, as set forth in the Siting Council's Feasibility Study in Docket 432 (Feasibility study of backup power requirements for telecommunications towers and antennas pursuant to Public Act 12-148), the type of backup power chosen for use at a facility is determined by facility constraints (such as space, weight restrictions, lease arrangements, zoning codes), environmental limitations and liabilities, capital and operating/maintenance costs, network functionality and fuel availability. Given the significant costs associated with fuel cells, they are not considered a viable option as a backup power source at this time.

It should also be noted that AT&T incorporates battery backup power into all of its cell site deployments, which provide an average of four to eight hours of power.

- Q15. Would AT&T's proposed relocated facility comply with E911 requirements?
- A15. Yes.

### **CERTIFICATE OF SERVICE**

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

Sandy Carter, Regulatory Manager Verizon Wireless 99 East River Drive East Hartford, CT 06108

Kenneth C. Baldwin, Esq. Robinson & Cole LLP 280 Trumbull Street Hartford, CT 06103-3597 (860) 275-8200

Dated: March 28, 2013

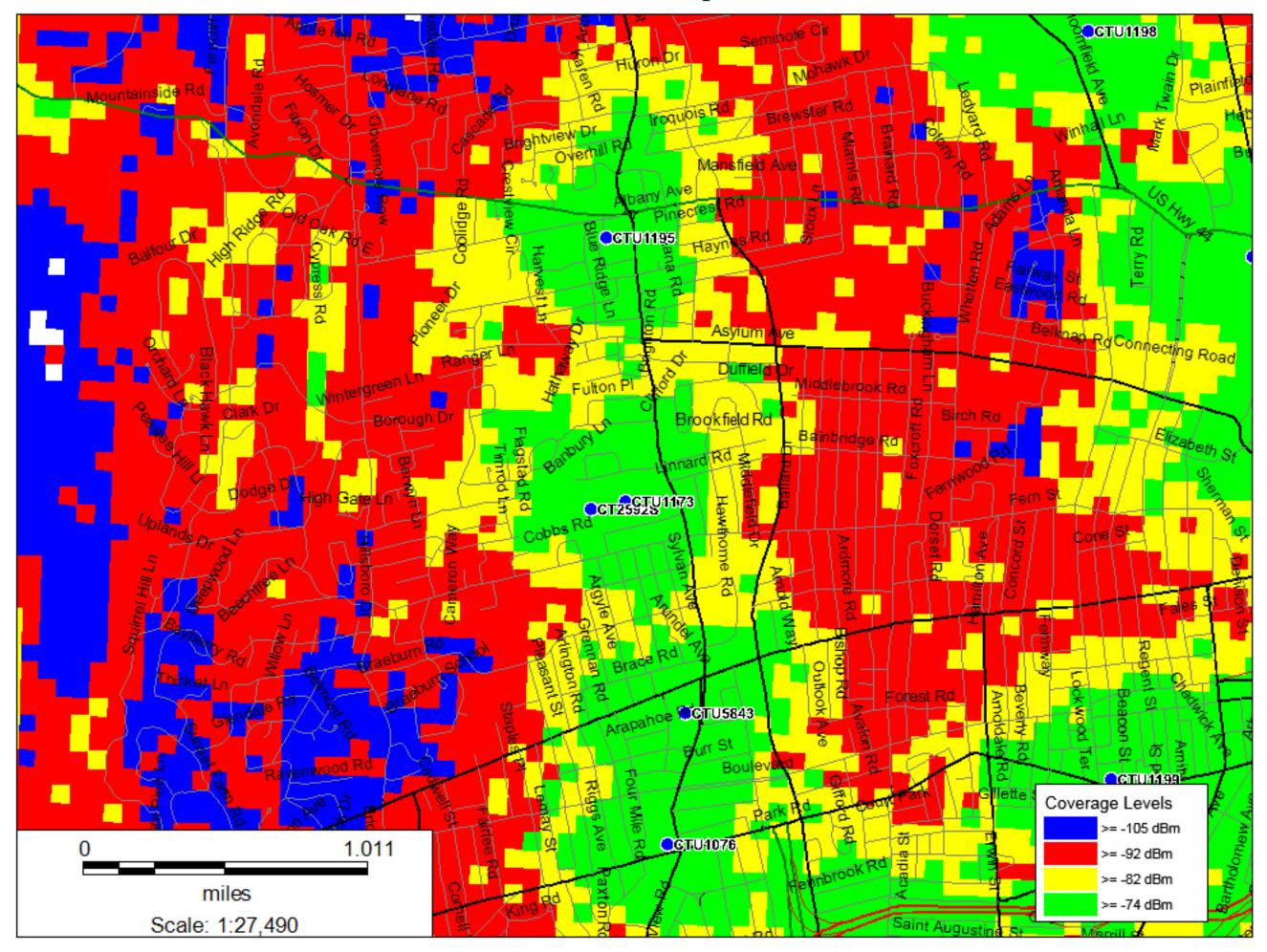
Lucia Chiocchio

cc:

Michele Briggs, AT&T David Osuch, SAI

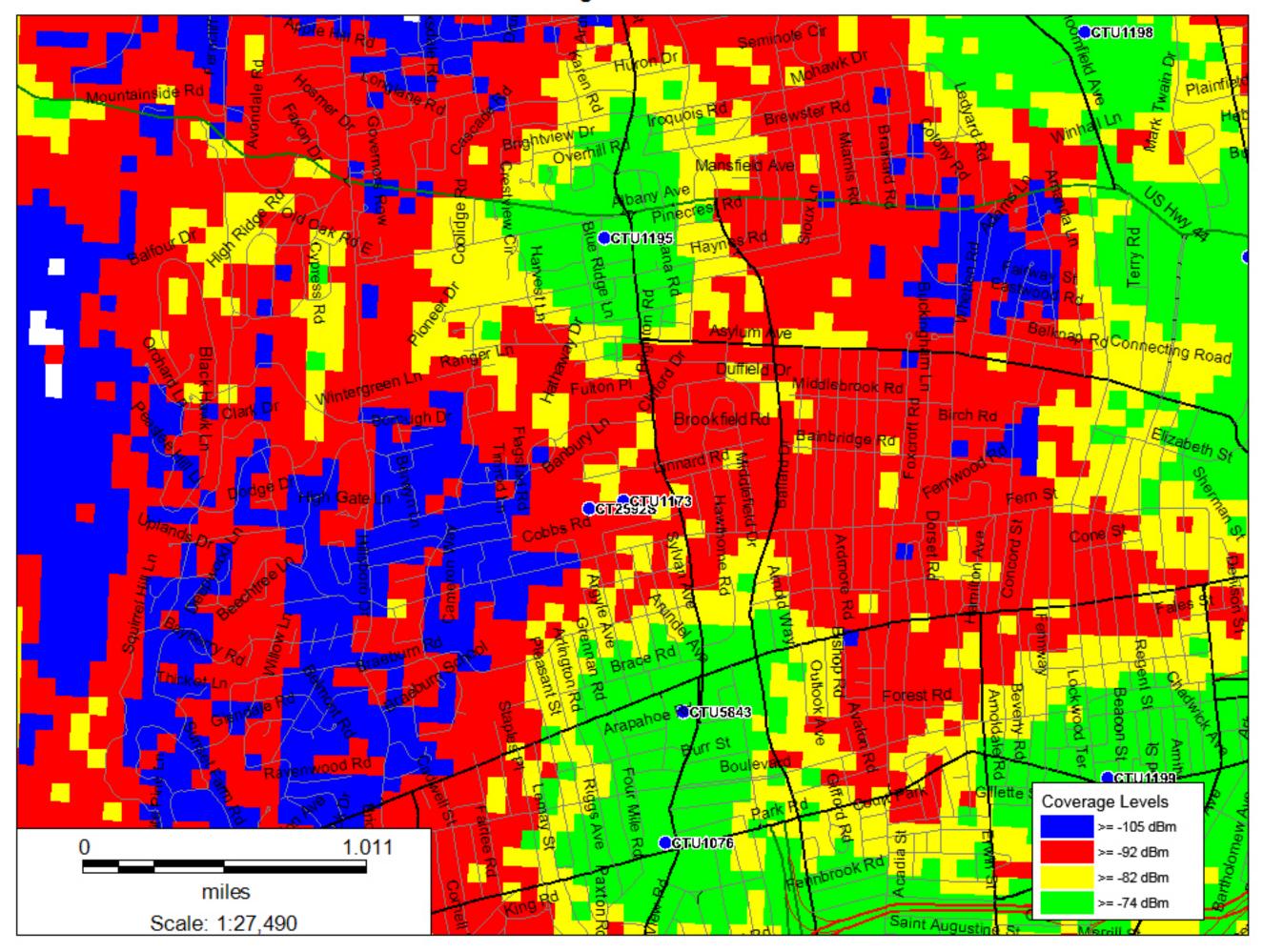
# ATTACHMENT 1

### **Current Coverage**



# ATTACHMENT 2

## Coverage Without A Site At ASD



# ATTACHMENT 3

## **Proposed Coverage**

