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 AT 8 BARNES ROAD IN
THE TOWN OF CANAAN (FALLS VILLAGE)

DOCKET NO.409

January 26, 2011

AT&T'S RESPONSE TO SITING COUNCIL INTERROGATORIES

- Q1. Did AT&T receive return receipts for the notices sent to each abutting landowner of the host property? If not, which return receipts were not received? Did AT&T make any additional attempts to notify these landowners?
- A1. All return receipts except two were received for the notices sent to abutting landowners. Notice was unclaimed by one abutting property owner, Joan S. Ohrstrom and the post office returned the notice to one other abutting property owner, Michael D. Burke. AT&T sent another notice to these two abutting property owners via first class mail.
- Q2. Please estimate the amount of cut and fill that would be necessary to develop the proposed facility?
- A2. Approximately 8,563 cubic yards of cut and 7,854 cubic yards of fill are required to develop the proposed facility.
- Q3. Approximately how tall are the existing CL&P structures in the area? What is the distance and direction of the transmission structures from the proposed site?
- A3. The existing CL& P structures are approximately 80' tall and are located approximately 0.65 miles southeast from the proposed site. At 80' in height, compared to the proposed 150' tall facility, these structures do not have adequate elevation for providing needed service.
- Q4. Could AT&T construct a camouflaged tower, such as a monopine, at the proposed site? How much would costs increase for a camouflaged tower structure?
- A4. Yes. A camouflaged tower, such as a monopine, could be constructed at the proposed site. In general, the cost for a camouflaged tower, such as a monopine, is approximately three times the cost for a monopole type facility.

- Q5. Does the estimated cost listed on page 25 of the application include installation of antennas and radio equipment? If not, what is the estimated cost of that equipment?
- A5. The estimated cost listed on page 25 of AT&T's Application does not include the cost of AT&T's antennas or equipment. The estimated cost of AT&T's antennas and equipment is \$250,000.
- Q6. What do the "facility installation" costs listed on page 25 of the application consist of?
- A6. The facility installation costs listed on page 25 of AT&T's Application consist of the installation of the tower, antennas, equipment shelter, equipment cabinets within the equipment shelter, the ice bridge, cabling and fencing.
- Q7. Does AT&T anticipate blasting to be necessary for the construction of the proposed facility?
- A7. The presence of ledge will be confirmed upon completion of a geotechnical investigation which would be prepared as part of any Development & Management Plan for the project. If ledge is encountered, chipping is preferred to blasting. If blasting were required, an appropriate protocol would be followed in accordance with State law.
- Q8. What is the minimum signal level that AT&T designs its systems for in this area?
- A8. AT&T designs for -82 dBm in-vehicle coverage and -74 dBm in-building coverage.
- Q9. What is the existing signal strength in the area of the proposed site?
- A9. Current signal levels range significantly in the proposed service area from -110 dBm to -80 dBm due to the terrain fluctuations. This type of spotty unreliable coverage is not acceptable for users of the AT&T network. AT&T customers are often mobile, making calls from their vehicles, their places of business and their homes. In addition, many customers are now substituting cell phones for their landline phone service as their only means of voice communications. To properly serve these customers, the service must be reliable, especially since the service will be carrying their 911 calls.
- Q10. Did AT&T do any drive tests to determine signal strength in the target coverage area? If so, provide the results of these tests.
- A10. AT&T performed drive tests to determine existing coverage in the area. A plot of the drive test results is attached in Exhibit A.
- Q11. What is the frequency used in the coverage plots behind Tab 1 of the application?
- A11. The coverage plots included in Attachment 1 of AT&T's Application are based on 850 MHz.

- Q12. Would AT&T use both PCS and cellular frequencies at the proposed site? Would each frequency band have a different use in the AT&T system?
- A12. Yes. AT&T will deploy both cellular (850 MHz) and PCS (1900 MHz) frequencies at the proposed facility at the outset. At this time, there is no timetable for deployment of AT&T's 700 MHz frequencies at the site. These frequencies are all intended for use to provide services to customers. Currently, AT&T supports GSM, UMTS, HSPA and is migrating to LTE. The 850 MHz frequency band is the primary frequency currently used by AT&T in network design and deployment assessments.
- Q13. What would be the total area, in square miles, that AT&T could cover from the proposed site? At what signal strengths and at what frequencies?
- A13. The table below includes the proposed coverage area in square miles from the proposed facility.

Coverage Area (sq. mi.)				
	Cellular (850 MHz)	PCS(1900 MHz)		
In-Vehicle	28.67	19.21		
In-Building	18.58	11.99		

- Q14. What is the length of the existing AT&T coverage gaps along Route 7, Route 126 and Route 63 for both cellular and PCS frequencies?
- A14. The approximate length of the existing coverage gaps along U.S. Highway 7, Route 126 and Route 63 for 850 MHz and 1900 MHZ are shown in the table below.

Coverage Gap (miles)				
	850 MHz In-Vehicle 1900 MHz In-V			
Route 63	8.5	10.0		
Route 126	2.4	7.2		
US Hgwy 7	1.6	4.5		

- Q15. What distances on Route 7, Route 126, and Route 63 could AT&T cover from the proposed site and both cellular and PCS frequencies? Please list separately.
- A15. The approximate distance in miles that the proposed facility will provide service along U.S. Highway 7, Route 126 and Route 63 for 850 MHz and 1900 MHz are shown in the table below.

Proposed Coverage (miles)			
	850 MHz In-Vehicle	MHz In-Vehicle 1900 MHz In-Vehicle	
Route 63	3.3	2.2	
Route 126	3.6	3.2	
US Hgwy 7	1.6	1.7	

- Q16. Does AT&T have any statistics on dropped calls in the vicinity of the proposed facility? If so, what do they indicate? Does AT&T have any other indicators of substandard service in this area? If so, what do they indicate?
- A16. Dropped calls are above system wide averages and objectives and blocking/ineffective attempts are not an issue given the low capacity environment in this area of the State. That data is considered proprietary by AT&T but is not necessarily relevant in this particular Docket because this area is known as a poor coverage area by both benchmark data and customer experience which necessitates a coverage solution. In addition, in many instances, dropped calls may not be a reliable indicator of an inadequate network for reasons such as:
 - Many users become familiar with areas of poor coverage or no service and stop making calls in these areas;
 - Since mobile communication is a two-way connection, if a cell site cannot hear a mobile unit, it will not register as a failure if that link is problematic; and
 - Dropped calls are a partial indicator of quality sometimes you can hold a call but the person on the other end cannot hear you.
- Q17. Identify, by address, sites with which AT&T's antennas at the proposed site would hand off signals include type and height of structure and height of AT&T's antennas on each structure and distance and direction from the proposed tower.
- A17. The requested information regarding the hand-off sites to the proposed facility is shown in the table below.

Site Name	Existing/ Proposed	Address	Town	Туре	Distance from Proposed site (miles)	Centerline (Feet)
CT1134	Existing	38 Lower Road	North Canaan	Self-Support (lattice)	3.99 N	53
SR2412	Proposed	Hollenbeck Road	Cornwall	Monopole	4.28 SE	180
CSC Docket 360	Proposed	188 Route 7 South	Falls Village	Monopole	1.94 WSW	137

- Q18. What is the minimum height at which AT&T could achieve its coverage objectives from the proposed site?
- A18. The minimum height at which AT&T could achieve its coverage objectives from the proposed site is 130 feet AGL.
- Q19. Provide propagation maps showing what AT&T's coverage would be if its antennas were mounted 10 feet below the minimum required height.
- A19. A propagation map depicting AT&T's coverage at an antenna centerline mounting height of 120' AGL, or ten feet below the minimum required height, is attached in Exhibit B.

- Q20. Would the proposed backup generator require any fuel to be stored on site? How long would backup power last in the event of an emergency?
- A20. No, the proposed backup generator does not require an independent fuel storage system on site. AT&T's proposed backup generator is a diesel generator. The generator's fuel tank is a steel containment chamber that is lined with a bladder to contain fuel in the unlikely event of a fuel spill. AT&T will also have battery backup in its shelter to prevent the facility from experiencing a "re-boot" condition during the generator start-up delay period.
- Q21. Several of the investigated sites listed behind Tab 2 of the application state that they were "rejected by AT&T's radio frequency engineers." Does this mean a new tower at each location would not provide adequate coverage to the target coverage area? What heights did AT&T use to investigate each of these sites?
- A21. Sites that were investigated and rejected by AT&T's RF radio frequency engineers are locations where a tower facility would not provide adequate coverage or service to meet the service objectives for this area.

The properties that were investigated and ultimately rejected for RF reasons were all analyzed at a height of 195 ' AGL. Also, as noted in the Site Search Summary provided in Attachment 2 of AT&T's Application, co-location on the approved Verizon facility (Docket 360) was analyzed and determined not to meet the coverage objectives in this area. This site will be used by AT&T in the future to provide service along Route 7 to the south and west.

- Q22. What is the height of the existing private lattice tower located at 392 Under Mountain Road, listed as #5 behind Tab 2 of the application?
- A22. The lattice tower located at 392 Under Mountain Road is approximately 75' in height. It appears to be a ham radio (2-way) style tower.
- Q23. Provide a scale for the maps behind Tab 2 of the application.
- A23. For the first map included in Attachment 2 of AT&T's Application, the Site Search Summary map, the distance from the proposed site, marked as #1 in a red dot, to the site designated as #2 in the Site Search Summary (the approved Verizon tower) is approximately 2.1 miles.

For the Search Ring map included in Attachment 2 of AT&T's Application, the radius of the search ring shown is approximately 2 miles.

For the map showing the Existing Towers/Cell Sites, the distance from the proposed site, shown as a red pin, to the approved Verizon tower, indicated as #5 on the map is approximately 2.1 miles.

- Q24. What is the distance of each of the towers and existing cell sites listed behind Tab 2 of the application to the proposed site?
- A24. The approximate distance in miles of each of the towers and existing cell sites listed in Attachment 2 of AT&T's Application to the proposed site is provided in the table below.

Site Name	Owner/Operator	Address	Town	Distance from Proposed site (miles)
#1	Unknown power mount	Route 63	Falls Village	0.70 SSE
#2	Unknown (private lattice)	392 Under Mountain	Falls Village	2.41 ESE
#3	SBA	477 Route 7	Sharon	3.98 SW
#4	Lime Rock Park	Lime Rock Road	Salisbury	3.55 SW
#5	Verizon (Cellco)	188 Route 7 South	Falls Village	1.94 WSW
#6	Town of Falls Village (water tanks)	Beebe Hill Road	Falls Village	1.64 WSW
#7	CL&P (Nextel powermount - unconfirmed)	145 Beebe Hill Road	Falls Village	1.69 WSW
#8	Litchfield County Dispatch	38 Lower Road	N. Canaan	3.95 N

- Q25. What is the length of the new access road, from where it would deviate from the existing road, to the proposed site?
- A25. The proposed access road will extend from the existing road and turn towards the area where the tower facility is located at a point approximately 2,890' from Barnes Road. This section of the proposed access road is approximately 160' long.
- Q26. The nearest property boundary as listed behind Tab 4 of the application is 104 feet to the east. Is this the property boundary shared with Patricia Ann Rovezzi?
- A26. No, the nearest property boundary to the east is part of the assemblage of two parcels that constitute the proposed site (Map 5, Lot 22).

The property boundary shared with Patricia Ann Rovezzi is located approximately 180' to the east of the proposed facility.

- Q27. Would anything be done to stabilize the gravel access road in steep slope areas?
- A27. A drainage system is being proposed to protect the entire road from degradation. Road stability will be achieved by diverting water from the adjacent uphill side slopes around the roadway with rip rap lined drainage swales. Road stability will also be achieved by draining water that will fall directly on the roadway towards road side drainage swales and down slopes through a crowned or pitched road surface. In steep road sections, cross drains may be utilized

to help force the water off the road and into the road side drainage swales. Level spreaders will be used at the swale outfalls to convert the point flow into sheet flow to prevent erosion at the outfall and return the flow to its original condition. In addition to the drainage system, a 12" thick layer of crushed rock with a proper gradation will be utilized to establish a well packed and interlocked road surface.

Included in Attachment 5 of AT&T's Application are drainage calculations for the proposed access road. This report confirms that the design of all drainage improvements complies with the criteria specified in the ConnDOT Drainage Manual.

Q28. What is the total length of Route 7 from which the proposed tower would be visible year-round? What is the additional length of Route 7 from which the proposed tower would be seasonally visible?

A28. The length along Route 7 from which the proposed tower will be visible year-round is approximately 0.57 mile. The length along Route 7 from which the proposed tower will be seasonally visible is approximately 0.74 mile.

CERTIFICATE OF SERVICE

I hereby certify that on this day, a copy of the foregoing was sent electronically and the original and twenty (20) copies were sent by overnight mail to the Connecticut Siting Council.

Dated: January 26, 2011

cc:

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