STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

IN RE:
APPLICATION OF NEW CINGULAR, WIRELESS PCS, LLC FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A TELECOMMUNICATIONS FACILITY AT 95 BALANCE ROCK ROAD, HARTLAND, CONNECTICUT

DOCKET NO. 408

January 26, 2011

PRE-FILED TESTIMONY OF
PETER M. PERKINS, P.E.

Q.1. Please summarize your professional background and experience.

A. I am a Project Manager and the Wireless Structural Supervisor with Clough Harbour and Associates LLP (CHA). I have over 23 years of project management and structural engineering experience over a wide array of structural systems including buildings, sign supports, antennae towers and bridges. My resume is attached which details my qualifications and experience.

Q.2 What is the purpose of your testimony?

A. The purpose of my testimony is to provide information regarding the design of AT&T's proposed wireless facility at 95 Balance Rock Road in Hartland. Specifically, I am providing information regarding the tower, equipment compound and access road design for Sites A and B as well as the proposed utility routes for each site.

Q.3 Please briefly describe the design of the Site A facility.

A. The Site A facility includes a 190' monopole tower enclosed within a 60' x 85' fenced equipment compound. The Site A facility is located in the southwest portion of the subject site, southeast of the existing building on the property. The equipment compound will be enclosed by an 8' tall fence with privacy slats.

Access to the Site A facility would be provided from Balance Rock Road along the existing paved access drive a distance of approximately 110', then along a new gravel access drive a distance of approximately 72'. Utilities to serve the facility would be provided from an existing off-site utility pole on Balance Rock Road, then along a replacement utility pole on the subject site, then underground to the equipment compound. The utility route and easement area is located to the east of the proposed facility.

The details of the Site A design are provided in Attachment 3 of AT&T's Application.

Q.3 Please briefly describe the design of the Site B facility.

A. The Site B facility includes a 190' monopole tower enclosed within a 75' x 75' fenced equipment compound. The Site B facility is located in the wooded northeast portion of the subject site, approximately 475 feet from Balance Rock Road. The equipment compound will be enclosed by an 8' tall fence with privacy slats.

Access to the Site B facility would be provided from Balance Rock Road along a new 12' wide gravel access drive a distance of approximately 475 feet. Utilities to serve the facility would be provided from a new riser pole on Balance Rock Road, then underground along the proposed access drive to the equipment compound.

The details of the Site B facility design are provided in AT&T's Response to Intervenor Sirman's Interrogatories, Exhibit D.

Q.4 Did CHA conduct a survey the subject site?

A. Yes. CHA's survey of the subject site is provided in both Attachment 3 of AT&T's Application and Exhibit D of AT&T's Response to Intervenor Sirman's Interrogatories.

Q.5 Can the utilities for the Site A facility be installed underground from the off-site utility pole on Balance Rock Road to the equipment compound?

A. Yes. For the Site A facility, the off-site utility pole on Balance Rock Road that will be used to provide utility services is the last utility pole on the road. The utility company controls the utility route from off-site utility poles to the property, and, in my experience, they typically will not cross a road underground. Installing utilities underground would involve the installation of a new pole to cross Balance Rock Road aerially, then trenching through the wetlands. Installing utilities underground in the existing driveway involves the installation of new utility poles on Balance Rock Road to route utilities aerially to the driveway, then installation of a trench up the existing driveway. There is a culvert at the beginning of the existing driveway. Therefore, the underground utilities would also need to be placed over or around the existing culvert.

Q.6 Can the proposed monopole at Site A or Site B be designed with a yield point, thereby reducing the tower setback radius?

A. Yes. However, in my opinion, a yield point is not warranted for either the Site A or Site B facility as the tower setback radius for both sites lie substantially within the subject property and tower failures are highly unlikely.

Q.7. Are there any updates to the tree removal information for Site A provided in Attachment 4 of AT&T's Application?

A. No. The tree removal information for Site A provided in Attachment 4 of AT&T's Application is accurate for the Site A location. Based on the site survey, removal of 24 trees with a diameter of 6" or larger is required for the development of the proposed Site A facility. This tree removal information is accurate for the Site A location which includes the shift of the tower approximately 110' north from the location shown in AT&T's Technical Report.

The statements above are true and accurate to the best of my knowledge.

1/26/2011
Date

Peter M. Perkins

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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Dated: January 27th, 2011

Lucia Chiocchio

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Peter M. Perkins, P.E.

Project Manager

Education
University of Connecticut, CT/B.S. Civil Engineering/1986

Professional Registration and Activities
P.E.-CT, MA, ME, NH
Notary Public-CT
National Society of Professional Engineers
American Railway Engineering & Maintenance-of-Way Assoc.
Precast/Prestressed Concrete Institute

Mr. Perkins has over 24 years of project management and structural engineering experience over a wide array of structural systems including buildings, sign supports, antennae towers and bridges. His experience encompasses survey, inspection, design, plan preparation and construction conflict resolution. He is the Senior Structural Engineer overseeing all structural projects in the New England region. Representative project experience includes:

Wireless Structural Supervisor. Manager of all structural engineering for the installation and modification of towers, antennae, shelters, and equipment cabinets installed in buildings, and on grade slabs. Sample clients and projects include:

- VoiceStream-Over 200 raw land and building mounted sites across Connecticut and western NY
- Verizon Wireless-Engineering for over 300 sites across the east coast
- Nextel-Over 200 concealed roof top sites in Florida and across the east coast
- Crown Castle- Over 300 cell tower analyses country wide
- Velocitel-Over 50 sites through the Virginia and Maryland markets
- Southeast Towers-Engineering services for new telecommunications towers in Georgia market.
- Cellular One-Over 150 cell sites for the 2005 to 2006 network build out
- JNS Enterprises-19 cell tower analyses
- Sprint PCS- Structural design related to the development of over 220 new base stations throughout Northeast and Southeastern United States
- Cingular-UMTS Project Rhode Island
- NTelos-Analysis of 12 cell towers in Virginia
- Wild Blue-12 10-meter Satellite dish installations
- MCF Communications-Design and permitting of over 15 Connecticut sites
- National Grid-Transmission tower antennae mounts
- T-Mobile-Hundreds of roof top and tower analyses across New Hampshire, Long Island, Connecticut, and Virginia

NHDOT, Spaulding Turnpike. Manager of structural engineering for the design of eight new bridges, six bridge rehabilitations, and three retaining walls. Responsible for the development of alternative studies and construction costs analysis. Responsible for constructability reviews and the coordination of stage construction across eight construction contracts.

NHDOT, Nashua-Hudson Circumferential Highway, Nashua, NH. Engineer involved with all aspects of preliminary and final design of twenty steel plate girder bridges. Structures included a 247 FT curved girder bridge in an urban interchange with Route 3A, a 172 FT span on a 55 degree skew over Route 111, Two crossings of the Merrimack river, and several bridges over local roads. Worked with project manager on developing and implementing design procedures to be followed by structural engineers. Responsible for initiating and implementing a program for the development of bridge drawings on CAD.

NHDOT, BR137/116 Kingston Road over B&M Railroad. Senior Structural Engineer for the replacement of Kingston Road over B&M Railroad. Mr. Perkins was responsible for braced excavation design to maintain the track during construction, and overseeing the design of a 60 ft, low profile, steel beam and concrete deck bridge on cantilever abutment and wingwalls.

ConnDOT, On-Call Railroad Engineering and Construction Services. Project Manager for the three-year project involving condition inspection, structural design and construction inspection of on-system and off-system bridges. Assignments included

- Condition inspection of over 200 bridges per year
- Development and maintenance of a prioritized repair program
- Detailed structural analysis of complex truss and masonry arch structures

- Engineering feasibility studies for several bridges

Mr. Perkins managed the preparation of hydraulic studies, environmental permits, geophysical studies using seismic refraction to determine depth to bedrock and dispersive wave analysis to determine bottom of foot elevations. He also provided services to the Department for scour evaluation and emergency repair plans, and construction inspection.

CP Rail CAMA Bridge at MP97.76 over Charter Brook. Lead Design Engineer for this fast track project to replace a deficient single span bridge. He designed a precast box culvert to be placed between the abutments without removing the tracks from service, maximized the use of prefabricated components to reduce construction duration, and prepared contract drawings and bid package in less than one month. The design allowed the superstructure to be removed during a short term track outage and the existing substructure was buried in place.

RIDOT, Point Street Bridge. Project Engineer responsible for rehabilitation design and plan preparation for historic 282 ft swing span truss bridge and 140 ft of approach spans, over the Providence River. Tasks included inspection, rating, and presentation of replacement/rehabilitation alternatives including the feasibility of restoring moveable operations. Mr. Perkins prepared plans for rehabilitation that would not preclude restoring moveable operations and designed a light weight flexible deck, and architectural restoration of operator's house.

Town of Pomfret, Covell Road Bridge over Mashomoquet Brook. Project Manager for the Connecticut local bridge project using Federal funds for the replacement of this rural road. The existing bridge consisted of a steel beam superstructure on stone abutments. He provided the cost effective solution of a precast, three sided culvert to replace the existing bridge. The three sided structure allowed CHA to retain the natural bottom of brook to meet Connecticut Fisheries and DEP requirements while providing a low maintenance structure for the Town. The precast elements also allowed rapid construction, minimizing the duration of road closure.

Town of Fairfield, Merritt Street Bridge over Horse Tavern Brook. Project Manager for the Connecticut local bridge project using Federal funds for the replacement of this urban local road. The existing bridge consisted of a two span concrete slab superstructure on stone abutments. Mr. Perkins provided the cost effective solution of a single span precast, three sided culvert to replace the existing bridge. The three sided structure allowed CHA to increase the hydraulic opening and retain the natural bottom of brook to satisfy DEP flood management, and Connecticut Fisheries requirements while providing a low maintenance structure for the Town. The precast elements also allowed rapid construction, minimizing the duration of road closure. Form liners were used on the parapet walls to provide an aesthetically pleasing stone look to the bridge.

Massachusetts Highway Department, Route 141 over Chicopee River. Project Manager for this corridor widening and bridge replacement project. The project site is located in a densely developed, highly traveled section of Route 141 and includes reconstruction of 1000 ft of Route 141 between two intersections and replacement of the 382 ft, four span bridge. The road will consist of widening from four-10 ft lanes to five 12 ft lanes with 5 ft shoulders. Part of the project included obtaining public input from the many local businesses along the corridor and a public awareness campaign for bridge closure times.

Borough of Naugatuck, Rubber Avenue & Rubber Avenue Extension Bridges. Project Manager for the $2 million superstructure replacement of the 40 ft Rubber Avenue Bridge and the complete off-line replacement of the 50 ft Rubber Avenue Extension Bridge. Both bridges were designed and constructed under the CT local bridge program using state funds. Mr. Perkins was responsible for the securing right-of-way, obtaining project buy-in from environmental agencies and building public support for expenditure of Town funds. He also solicited input from concerned parties, prepared display graphics, attended informational meetings, gave public presentations and responded to inquiries.