# Land Use Office P.O. Box 216 Bridgewater, Connecticut 06752

September 29, 2011

Connecticut Siting Council Ten Franklin Square New Britain, Connecticut 06051

Re: Bridgewater Wetland Enforcement Officer Opinion Proposed Telecommunications Facility Docket No. 412- Wewaka Brook Road, Bridgewater, Connecticut

#### Dear Council Members:

The purpose of this letter is to document my expert opinion on behalf of the Bridgewater Inland Wetlands and Watercourses Commission (Commission) regarding the potential environmental impacts related to the proposed telecommunications facility at the above referenced location in Bridgewater, Connecticut. I attended the April 5, 2011 Site walk with the Connecticut Siting Council members and representatives of the applicant SBA Towers III and New Cingular Wireless PCS, LLC.

My credentials as an environmental expert are based on my experience and include:

- I hold an undergraduate degree in geology form the University of New Hampshire and a master's degree in Environmental Science from the University of New Haven.
- I have 24 years of experience as an environmental consultant and hydrogeologist. Presently, I am employed as a Principal Geologist by ARCADIS, a global environmental consulting and infrastructure firm. I also serve as the operations manager of the ARCADIS Sandy Hook, Connecticut office.
- For the past 18 years I have served as the Chairman of the Roxbury Inland Wetlands Commission and I have been a Roxbury Selectman for 14 years.
- I have been deposed and have testified in court on environmental matters as an expert witness.

I have reviewed the plans and maps as outlined in the October 27, 2010 letter to the Siting Council from Mr. Robert Kelly, the former chairman of the Bridgewater Wetlands Commission.

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I agree with the factual points of the Commission's letter and urge the council to seriously consider these issues. The concerns of the Commission, as detailed in the

October 2010 letter, are summarized as follows:

- The lack of detailed engineering plans including drainage plans, construction sequences, watershed analysis, and a biological field survey.
- The turning radius needed for full length tractor trailers on a 12 foot wide gravel road are severely underestimated in the design and will cause disturbance to the wetlands at 3 of the 4 wetland crossings. Most importantly, permitting this degree of disturbance for a single event is of great concern to the Commission.
- Feasible and prudent alternatives to this plan clearly exist. For this reason, as well as the design flaws stated above, the Commission could not approve any application under its jurisdiction with the same deficiencies as this application.

The Siting Council should consider denying this application because a feasible and prudent alternative exists for the proposed plan. The alternative plan would be to design the access road to use the first 2 existing wetland crossings (bridges), then continue straight past the parking area (where the council met), and finally straight through the fields to the top of the ridge. This alternative plan would eliminate the two most critical wetland crossings, solve the turning radius issue, and locate the tower and all associated disturbances a reasonable distance from one of the largest and most pristine vernal pools in Bridgewater.

Based on over 20 years of experience reviewing plans and conducting follow up site evaluations, I can state with certainly that the current plan will result in a significant disturbance to wetlands. My opinion is summarized as follows:

- 1. Crossing # 3 would have been washed away in the 2011 storms of March 7, May 19<sup>th</sup>, and Tropical Storm Irene alone. All of that material would settle out in the pockets of shallows located in Wewaka brook downgradient of the crossing, killing aquatic wildlife, releasing tremendous amounts of nutrients into the aquatic ecosystems.
- 2. The area surrounding Crossing #4 will be rutted and disturbed because the proposed crossing design is inadequate. This will result in a change of flow and filling of critical areas of the wetland by sedimentation.
- 3. Most importantly, while the tower is not proposed to be within 50 feet of the vernal pool, potential blasting and activity associated with the construction and maintenance of the tower will disturb this pristine environment.

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The vernal pool represents a recharge system to the aquifer and is located in a headwaters area. The system also acts to purify surface and groundwater, retain surface waters (flood protection) and is a unique wildlife ecosystem. Any disturbance of hydraulic flow of the vernal pool, which is created solely by a complex bedrock hydrogeologic system, will alter and/or destroy the ecosystem of that pool. As stated in the Title and Authority of the Inland Wetlands and Watercourses Act, Sections 22a-36 through 22a-45, of the Connecticut General Statutes, wetlands and watercourse, such as the vernal pool and surrounding hydrogeologic features, "are an interrelated web of nature essential to an adequate supply of surface and underground water; to hydrological stability and control of flooding and erosion; to the recharging and purification of groundwater; and to the existence of many forms of animal, aquatic and plant life." It is simply not worth the potential destruction of a valuable resource for any project where a feasible and prudent alternative exists.

The State of Connecticut's Inland Wetland and Watercourses Act recognizes the "feasible and prudent" standard as the primary tool in protecting wetlands. As adopted from the state statues, Section 10.3 of the Bridgewater Inland Wetlands and Watercourses Regulations states: In the case of an application that received a public hearing pursuant to a finding by the Commission that the proposed activity may have a significant impact on wetlands or watercourses, a permit shall not be issued unless the Commission finds on the basis of the record that a feasible and prudent alternative does not exist. In making this finding the Commission shall consider the facts and circumstances set forth in Section 10.2. The finding and the reasons therefor shall be stated on the record in writing.

Therefore, by law, the Commission could not approve this application if the matter were within local jurisdiction because a feasible and prudent alternative does in fact exist to a plan that will disturb pristine wetlands and watercourses. Additionally, in accordance with the statute, a public hearing was held on April 5, 2011 in the Town of Bridgewater for this application. I sincerely hope that the Siting Council recognizes that law and respects the regulations that local wetland commissions follow to protect the valuable resources in their towns More importantly, this letter documents the expert opinion that this plan, if approved, will cause an irreversible and irretrievable loss of wetland and watercourse resources on the Subject Site.

Sincerely,

Russell J. Dirienzo, LEP, P.G.

Bridgewater Wetlands Enforcement Officer

c.c: Commission Members

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The above signed, Russell J. Dirienzo, being the duly appointed Wetlands Enforcement officer of the Town of Bridgewater, having been duly sworn, acknowledged the above to be true and accurate to the best of his knowledge and belief and his free act and deed.

Notary Public

My Commission Expires

My Commission Expires: Aug. 31, 2014