

Town of Thompson Inland Wetlands Commission 815 Riverside Drive North Grosvenordale, CT 06255 860-923-1852 (Office) 860-923-9897 (Fax)

May 29, 2012

Robin Stein, Chairman Connecticut Siting Council 10 Franklin Square New Britain, CT 06051

RE: Comments on Docket No. 424, Interstate Reliability Project Relating to Wetland/Watercourse Issues in Thompson

Dear Mr. Stein

I am the Inland Wetlands Agent for the town of Thompson. The credentials for my statements attached to this letter include 32 years employment with the Connecticut Department of Environmental Protection (currently CT DEEP) as an environmental analyst in the Water Resources Division involved with the licensing and enforcement of water resource laws and regulation. Additionally I was the project coordinator for the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control and have many years of experience of inspecting and making recommendations on erosion and sediment controls.

The attached comments are provided in my capacity as the Thompson Wetland Agent for the Thompson Inland Wetlands Commission. For the purposes of clarity for the color photographs and electronic distribution I am emailing an electronic copy of this letter and its attachment to Christina Walshm the Siting Council's technical Analyst.

Please feel free if you have any questions regarding these comments.

Sincerely

Marla Butts Thompson Wetlands Agent

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Attachment: Comments on CL&P Interstate Reliability Project, Connecticut Siting Council Docket No. 424



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Comments on CL&P Interstate Reliability Project Connecticut Siting Council Docket No. 424 By Marla Butts, Thompson Wetlands Agent May 29, 2012

On April 13, 2012 I inspected most of the alignment for the proposed CLP Interstate Reliability Project located in the Town of Thompson in the presence of Marsha Wellman from Northeast Utilities and Christopher Fritz from Burns & McDonnell. The purpose of the inspection was to identify environmental conditions or problems that could result in unnecessary wetland and watercourse impacts not only during construction but also during post construction maintenance operations. The inspection began at Quaddick Town Farm Road easterly to the Rhode Island border and then back to Quaddick Town Farm Road southwesterly to the deadwood swamp on the Wyndham Land Trust property where further passage was prevented by standing water.

Observations

<u>Overall</u> - I was advised that construction access would use the existing access road, regrading and importing a gravel base where needed, installing temporary culverts and in standing water areas using construction matting. Improvements to the existing access road would be of sufficient design to allow for the passage construction traffic, including the very long trailers needed to carry tower structure materials.

There are 2 basic environmental concerns that affect wetlands and watercourses. First there are several stretches of access road that are steep and are currently severely eroded. During construction waterbars across the access roadway is likely to cause difficulty for vehicles bringing in materials. A combination of road pitch, crowning, roadside ditches with stone check dams and temporary sediment traps or the use of movable tubular mesh filter socks to direct flows off the access road is indicated.

From the tree clearing activities there will be large amounts of slash or woodchips. The 2002 Connecticut Guidelines for Soil Erosion and Sediment Control ("Guidelines") only references using wood chips for temporary slope protection. The Guidelines have no reference on the use wood chips berms, tubular mesh filter socks (see photograph below) or wattles.



Recommendation: CL&P should be required to investigate and develop sediment and erosion control measures which make use of the tree clearing waste as a sediment barrier and a water diversion device. In keeping with the Guidelines, such measures would need a definition, purpose, applicability, planning considerations, specification for materials and installation and maintenance. Specific specification and details should be provided for the installation and maintenance of tubular mesh filter socks as temporary water diversions, sediment barriers and temporary movable water bars (see Guidelines pages 5-7-9, 5-11-4 and 5-7-6, respectively for guidance).

The second area of environmental concern involves the methodology of crossing the flooded wetlands located on the Whyndam Land Trust. The proposed method on construction road access is to place construction matting repeatedly until dry access is obtained. The problem with this approach is that the soils underlaying the flooded wetlands are deep organics. As mats are placed they will sink in the muck, compressing the subsoils and/or squeezing the soils out into the remaining wetlands resulting in a mud wave rising up on each side of the access road, which mud wave would be difficult to remediate.

Recommendation: CL&P should investigate the construction of a floating access road that utilizes road stabilization geotextile and geogrid designed to disburse and better distribute roadway loads thereby minimizing subsoil displacement and facilitating removal of the access roadway once construction is complete. In areas where the foundation soils consist of flooded organic soils (which are too weak to support a road or structure) a soils engineer with experience in the design and use of road stabilization geotextiles should be required to design the access road and the appropriate underlying geotextile and geogrid and restoration requirements.

<u>Site Specific Concerns</u> The following are site specific concerns noted during the field walk. The alignment from Elmwood Hill Road to the Rhode Island border (about 5,500 feet in length) has an access road that has been severely eroded at a number of locations. Problems were observed as follows:

 At or about Station 1895+57, where a temporary culvert is proposed, erosion in the roadway indicates an intermittent water flow runs down the access road before exiting into wetlands north of the alignment. (see IMG_0222 & IMG_0223) *Recommendation:* Post-construction stormwater management needs to be designed here to prevent a repeat of access road erosion.



IMG_0223 Taken facing southwest on access roadway water flow entering roadway near central portion of picture. Note proposed temporary culvert is proposed for central portion of photo and water seen flowing in road infiltrates into ground before IMG_0222.



access roadway. Note water flow exists roadway near central portion of photo. Station 1898 is in background.
2) At or about Station1898+, where a temporary culvert is proposed, water flowing onto the access road and was flowing down for a distance to a low point in the road (see IMG_0224 below).

and was flowing down for a distance to a low point in the road (see IMG_0224 below). **Recommendation:** If contributing drainage area is less than 100 acres, CL&P should put in a permanent culvert where the watercourse first enters into the road or provide a permanent diversion channel to carry the water to the low point in the road with a temporary culvert at the low point and permanent ford for post construction use.



IMG_0224 Taken facing southwest at a low point in the access road showing conditions caused by a watercourse flowing down the access road.

Between existing Stations 1905 to 1910 the access roadway contains some very steep and highly eroded sections. Traversing this area with a 4-wheel drive truck was difficult. *Recommendation:* Stormwater runoff diversion structures are needed for both during and post construction times.

4) At or about Station 1912+50, cross culvert is almost completely blocked resulting in overtopping of road (see IMG_0225 below). *Recommendation:* As a permanent culvert, armoring of the access road with stone to facilitate overtopping of the road without erosion should be required.



IMG_0225 Taken facing northeast at Station 1912+50 showing recent repair of access road in foreground apparently from road overtopping at blocked cross culvert. Note erosion from access road drains into wetlands/watercourses.

- 5) Between Stations 1912+50 and 1935+00 the access roadway is steep with some erosion. *Recommendation:* Require use of temporary waterbars and/or diversions in and along roadway to minimize the concentration of stormwater runoff flows and deflect runoff to non-wetland areas.
- 6) Between Stations 1945 and 1950± the access road drain to a wetlands that crosses the alignment just before the Rhode Island border (see IMG_0226 and IMG_0227 below). No significant siltation of the wetlands was noted at this time. *Recommendation:* Require use of temporary waterbars and/or diversions in and along roadway to minimize the concentration of stormwater runoff flows and deflect runoff to non-wetland areas.



IMG_0226 Taken facing northeast at Station 1940+ showing eroded steep access road and condition of access road as it approaches wetlands near the Rhode Island border.



IMG_0227 Taken facing southwest at Station 1946<u>+</u> showing eroded steep access road that drains towards wetlands near Rhode Island border.