



March 6, 2008

**Email**

Bruce Young  
Land Use & Conservation Planner  
Office of Planning & Development  
City of Northampton  
210 Main Street, Rm. 11, City Hall  
Northampton, MA 01060

**RE: Vernal Pool Assessment Protocol  
Assessor's Map 25C, Parcel 012 & 017  
Northern Avenue and View Avenue  
Northampton, Massachusetts**

[LEC File #: KCI07-300.01]

Dear Mr. Young:

On behalf of the Applicant, Northern Avenue Homes, Inc., LEC Environmental Consultants, Inc., (LEC) has prepared this Vernal Pool Assessment Protocol to collect additional data on the above-referenced properties in Northampton, Massachusetts. A portion of the 5.5± acre project site is slated for development and the Applicant will conduct a comprehensive Vernal Pool Assessment in order to establish the boundary of the potentially certifiable Vernal Pools located on-site. According to the Massachusetts Geographic Information Systems (MassGIS) data layers (updated most recently in December 2007), no Certified or Potential Vernal Pools exist on the project site. However, preliminary investigations by Molly Hale, Wildlife Biologist, on August 18, 2007, have revealed the presence of fingernail clams (family Sphaeriidae, also known as Pisidiidae) and amphibious snails (from two different families: Lymnaeidae and Planorbidae) within small (dry) depressions scattered throughout the on-site Bordering Vegetated Wetland (BVW) system.

While Ms. Hale's data verifies that potentially certifiable Vernal Pools exist on-site (Vernal Pool Resource Areas protected under the City of Northampton *Wetlands Protection Ordinance*, Chapter 337), the functional limits of the potentially certifiable Vernal Pools have not yet been determined. Consequently, LEC will conduct multiple site evaluations throughout the growing season (March 15 through October 15, as referenced within the *Ordinance*) to document the presence of surface waters needed over 60 consecutive days, as required under the *Ordinance* and defined within 310 CMR 10.04 (Vernal pool habitat) of the *Massachusetts Wetlands Protection Act Regulations*. At a minimum, LEC will conduct site visits twice a week commencing on March 15<sup>th</sup> through June 1<sup>st</sup>. Site visits thereafter will be dictated by the presence of surface waters, but at a minimum, at least twice a month through October 15<sup>th</sup>. Furthermore, LEC will monitor precipitation data to ensure that rainfall during the observation period is at least 75% of the average over the last 20 years in Northampton, as required under the *Ordinance*.

In addition to documenting the presence of surface waters, LEC personnel will search the on-site BVW system for evidence of amphibian breeding activity (e.g., mated pairs, egg masses, transforming tadpoles/juveniles, etc.) and will record any amphibian chorusing. LEC will be in direct contact with the

LEC Environmental Consultants, Inc.

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Natural Heritage and Endangered Species Program (NHESP) to review reported amphibian movement in the region. If the depressions become dry during the surveying period, LEC will search for the presence of fingernail clams or amphibious air-breathing snails, the cases of caddisfly (Order: Trichoptera) larvae, or the exuvia (shed exoskeleton) of dragonflies and damselflies (Order: Odonata; Suborders: Zygoptera and Anisoptera, respectively).

LEC will establish a series of fixed photographic stations to document the presence of surface waters over the surveying period. These stations will be located by a survey crew. A combination of surveyor's tape, stick-in flags, and/or spray paint will be utilized as needed to demarcate data collection and reference points. Benchmarks will also be established at various locations within the scattered depressions within the BVW system to monitor fluctuating water levels. Depths will be recorded at each site visit. Furthermore, all identified amphibian egg masses (signs of amphibian breeding activity) will be photographed, demarcated in the field, and located with reference to previously established survey points.

As required, a Scientific Collection Permit Application is being submitted to NHESP. If the data collected indicates a certifiable Vernal Pool(s), LEC will complete a Vernal Pool Field Observation Form along with the requisite materials for submission to NHESP and the Northampton Conservation Commission.

Should you have any questions or require additional information, please do not hesitate to contact Brian Madden ([bmadden@lecenvironmental.com](mailto:bmadden@lecenvironmental.com)) at 508-746-9491 or Ann Marton ([amarton@lecenvironmental.com](mailto:amarton@lecenvironmental.com)) at 781-245-2500.

Sincerely,

**LEC Environmental Consultants, Inc.**

Brian T. Madden  
Wildlife Scientist

Ann M. Marton, President  
Director of Ecological Services

cc: NHESP  
Northern Avenue Homes, Inc.