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June 9, 2006

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME :Reedy Meadow Estates
PROJECT MUNICIPALITY :Groton and Pepperell
PROJECT WATERSHED :Nashua
EOEA NUMBER :13793
PROJECT PROPONENT :John J. Lorden
DATE NOTICED IN MONITOR :May 10, 2006

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62H) and Section 11.03 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

The proponent proposes to construct a 28-unit single-family residential subdivision on a former 47.6-acre gravel mining pit in Pepperell and Groton. The project includes the construction of a shared on-site Title 5 wastewater treatment system, 56 surface parking spaces, approximately 3,200 linear feet of internal roadway, and eight stormwater detention basins. The project site is located within the Petapawag Area of Critical Environmental Concern (Petapawag ACEC). The two main site drives will be located on Jersey Street in Pepperell and Nashua Road in Groton.

The project is undergoing review pursuant to Sections 11.03 (2)(b)(1) and 11.03 (11)(b) of the MEPA regulations, because the project will result in the alteration of designated significant habitat, and the project site is located within a designated Area of Critical Environmental Concern (ACEC), respectively. The proponent has proposed to extend one of Pepperell's municipal water supply mains approximately 0.4 miles to the project site, which will require a Distribution Modifications for Systems that serve more than 3,300 people (BRP WS32) from the Department of Environmental Protection (DEP). The project will also require Orders of Conditions from the Groton and Pepperell Conservation Commissions (and hence Superseding Order(s) from DEP if any local

Orders are appealed). The project must comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site of over one acre

The proponent is not seeking financial assistance from the Commonwealth for the project. MEPA jurisdiction therefore extends to those aspects of the project that are within the subject matter of required or potentially required state permits and that have the potential to produce significant Damage to the Environment. In this case, MEPA jurisdiction extends to issues of land alteration, water quality, water supply, wastewater, and rare species.

Wetlands

As illustrated in the project site plan, the project does not appear to result in the alteration of Bordering Vegetated Wetlands (BVWs), including the 100-foot wetland buffer zone. As noted in the ENF, approximately 14 acres of the project site will remain as Open Space. The proponent has committed to placing a Conservation Restriction (CR) on this portion of the project site to ensure its permanent protection. The proponent should also consider placing deed restrictions on any residential properties that will be located within 600 feet of any vernal pools, or within the 100-foot buffer zone to ensure that potential impacts to water quality from homeowner activities associated with residential lawn care are minimized.

Water Supply

The project's estimated potable water supply demand of 10,120 gallons per day (gpd) will be served by the Town of Pepperell's municipal water supply system. I expect that DEP's permitting process will require the proponent to demonstrate that the Town of Pepperell has sufficient capacity to meet the entire project's potable water supply needs.

I strongly encourage the proponent to incorporate water conservation and water use efficiency in the project design to comply with the March 1989 state plumbing code. Specifically, the proponent should employ efficient residential water conservation technologies for the project including water saving devices, low flow toilets, and low flow appliances (dishwashers, washing machines). The proponent should also consider implementing an Irrigation Management Plan (IMP) to further reduce the project's irrigation water demand. An IMP could involve the use of amended soils and compost, the planting of native and drought-tolerant species of trees, shrubs, and turf grasses, an automated water efficient irrigation system, and a water management protocol for drought conditions. I ask that the proponent consult with DEP, and refer to the Massachusetts Water Resources Commission's *Lawn and Landscape Water Conservation, An Addendum to the Water Conservation Standards for the Commonwealth of Massachusetts, October 2002*, during the final design of the proponent's IMP.

Wastewater

The proponent has proposed to construct an on-site shared wastewater treatment system in accordance with Massachusetts Title 5 regulations, to serve that portion (7,480 gpd) of the project's wastewater flows to be generated by the 17 homes to be located within the Pepperell portion of the site. These flows will be conveyed from the project site via an on-site pump station, to the Town of Pepperell's sewer system. The proponent proposes to construct a 2,200 gpd on-site shared wastewater treatment system to serve the wastewater flows (2,200 gpd) to be generated by the 10 single family houses to be located within the Groton portion of the site in accordance with Massachusetts Title 5 regulations. I note that the estimated wastewater flow for one single family house (Lot G1) will be served by a separate on-site Title 5 system. The proposed shared Title 5 wastewater treatment system will be located within a nitrogen sensitive area (Zone II Wellhead Protection Area for two of the Town of Pepperell's municipal water supply wells, and a Town of Groton municipal water supply well). Therefore, DEP will require that the proponent install a recirculation sand filter as part of the wastewater treatment system design. I anticipate that DEP's permitting process will include a rigorous review of the proponent's proposed wastewater management system.

Stormwater

As described in the ENF, the stormwater management plan for the proposed project has been designed as a closed drainage system to meet DEP's Stormwater Management Policy guidelines, and includes the use of deep sump catch batch basins, approximately eight detention basins with sediment forebays, and periodic road sweeping to service the project's stormwater flows for eventual discharge to Bordering Vegetated Wetlands (BVWs) abutting the project site.

I encourage the proponent to evaluate sustainable design alternatives such as Low Impact Development (LID) techniques in site design and stormwater management plans. LID techniques incorporate stormwater best management practices (BMPs) and can reduce impacts to land and water resources by conserving natural systems and hydrologic functions. The primary tools of LID are landscaping features and naturally vegetated areas, which encourage detention, infiltration and filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. Clustering of buildings is an example of how LID can preserve open space and minimize land disturbance. LID can also protect natural resources by incorporating wetlands, stream buffers and mature forests as project design features. For more information on LID, visit <http://www.mass.gov/envir/lid/>. Other LID resources include the national LID manual (Low Impact Development Design Strategies: An Integrated Design Approach), which can be found on the EPA website at: <http://www.epa.gov/owow/nps/lid/>.

Rare Species

According to the information provided in the ENF, the project site is located within priority and estimated habitat for the Eastern Box Turtle (*Terrapene carolina*), Spotted Turtle (*Clemmys guttata*), Blanding's Turtle (*Emydoidea blandingii*). In its comments, the Natural Heritage and Endangered Species Program (NHESP) indicated support for the proposed project, subject to the following conditions:

- placement of a Conservation Restriction (CR) on approximately 14.0 acres (29 percent) of the project site for the permanent protection of Eastern Box Turtle and Blanding's Turtle habitat;
- construction mitigation activities including the installation of erosion control fencing prior to construction, and the removal of turtles and installation of temporary turtle barriers surrounding any/all construction areas within the project site;
- installation and maintenance of permanent turtle barriers and gates throughout the project site; and
- placement of a deed restriction on Lot P7 and Lots P9-P12 to ensure protection and compliance with adjacent CR land areas.

The proponent should forward a copy of the proponent's executed and recorded CR, proposed deed restriction documentation, and relevant Condominium Association documentation to NHESP for review and comment. The proponent should clearly identify the CR land areas and the designated development areas within the project site on an appropriately scaled map. I strongly encourage the proponent to install permanent boundary markers throughout the project site that clearly identify the extent of the permanently protected CR land areas.

I also ask that the proponent forward a copy of the final project site plan identifying the designated conservation areas and development areas to the MEPA Office for the project file.

Construction Period

The proponent should consult with the Towns of Groton and Pepperell, and DEP to ensure that the proponent will meet any performance standards associated with a federal NPDES permit for all proposed project construction activities. If blasting is required for project construction, the proponent must prepare a blast design plan pursuant to the Board of Fire Protection Regulations (577 CMR 13.09). Blasting mixtures that include perchlorate have been identified as the source of contamination in many Massachusetts public water supplies and their use is prohibited.

Conclusion

Based on the information provided by the proponent and consultation with relevant public agencies, I conclude that no further MEPA review is required. The review of the ENF has served adequately to disclose potential impacts and mitigation, and to demonstrate that project impacts do not warrant the preparation of an Environmental Impact Report. The proponent can resolve any remaining issues during the permitting process.

June 9, 2006
Date



Stephen R. Pritchard, Secretary

Comments received:

05/19/06	Town of Pepperell Board of Health
05/30/06	Natural Heritage and Endangered Species Program (NHESP)
05/31/06	Town of Groton Conservation Commission
05/31/06	Department of Conservation and Recreation (DCR)
06/01/06	Department of Environmental Protection - CERO
06/01/06	Northern Middlesex Council of Governments (NMCOG)
06/02/06	Robert L. Collins, Attorney
06/05/06	Montachusett Regional Planning Council
06/05/06	David E. Ross Associates, Inc.

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