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January 22, 2010

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

PROJECT NAME : Crystal Springs Golf Course & Residential Subdivision
PROJECT MUNICIPALITY : North Broadway – Haverhill
PROJECT WATERSHED : Merrimack River
EOEA NUMBER : 14525
PROJECT PROPONENT : Premier Realty Trust
DATE NOTICED IN MONITOR : December 23, 2009

Pursuant to the Massachusetts Environmental Policy Act (G. L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I determine that this project **does not require** the preparation of an Environmental Impact Report (EIR).

Project Description

According to the Environmental Notification Form (ENF), the proposed project consists of the construction of fifty single-family homes (approximately 70,473 square feet (sf) of building space) within two cluster-style housing subdivisions. The 136-acre property contains an existing 18-hole golf course with associated access roadways and cart paths, 20,527 sf of existing structures including a 10,606 sf Club House with 185 parking spaces. The project would replace the existing Club House with a new 10,000 sf Club House and a 2,000 sf maintenance facility. The new Club House would include a restaurant seating 100 persons and function facilities accommodating 200 persons. It would extend the existing City of Haverhill's sewer line for 1.64 miles from Broadway (Route 97) north along Lake Street to the property. This sewer extension would include the construction of a pump station and installation of a sewer force main across the property to service the new homes and the Club House. In addition, the proponent is proposing drainage improvements along portions of Lake Street to alleviate historic flooding problems. The proponent is proposing to reconfigure the existing 18-hole golf course in order to

provide additional space for the new subdivisions.

Jurisdiction

The project is subject to review pursuant to Sections 11.03(1)(b)(1), 11.03(1)(b)(2), 11.03(5)(b)(3)(c), 11.03(6)(b)(1)(a), and 11.03(6)(b)(2)(a) of the MEPA regulations because the project requires state permits and alters 25 or more acres of land (approximately 25.5 acres); creates five or more acres of impervious area (approximately 6.1 acres); includes the construction of new sewer mains 0.5 or more miles in length outside of the right-of-way (ROW) of existing roadways; includes the construction of a new roadway 0.25 or more miles in length; and widens a roadway or its ROW that would alter the terrain located ten or more feet from the existing roadway for 0.5 or more miles. The project will require a Sewer Connection/Extension Permit, a Waiver from the Water Supply Regulations, and a Water Distribution System Modification Permit from the Massachusetts Department of Environmental Protection (MassDEP). It should comply with the National Pollutant Discharge Elimination System (NPDES) General Permit for stormwater discharges from a construction site. On November 18, 2009, the project received an Order of Conditions from the Haverhill Conservation Commission for impacts to wetland resource area buffer zones for the proposed residences and roadways. However, the proponent will require another Order of Conditions for planned golf course improvements.

Because the project is not receiving state financial assistance, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of any required or potentially required state permits and that are likely, directly or indirectly, to cause Damage to the Environment, as defined in the MEPA regulations (in this case: wetlands, stormwater, water supply, and wastewater).

Review of the ENF

The proponent is proposing to construct two private roadways to access the two separate cluster housing developments. Back Nine Drive, with access off North Broadway near the intersection with Lake Street is proposed for 16 lots, and Front Nine Drive, serving 34 lots, would be an extension of the existing access roadway to the golf course. Based on the Institute of Traffic Engineers Land Use Code (LUC) 210 – Single Family Homes and LUC 931 – Quality Restaurant, the proposed project is estimated to generate approximately 1,290 new vehicle trips per weekday. Utilizing LUC 430 – Golf Course for 18 holes, the proponent has estimated that the project site is generating approximately 644 trips. The proponent will construct approximately 294 new parking spaces, which includes two spaces for each home and 194 spaces for the golf course facilities. The project does not require any permits from the Massachusetts Department of Transportation (MassDOT) and none of the commenters have identified any concerns with respect to project-related traffic. The proponent will construct new five-foot wide sidewalks along one side of the subdivision roadways. There is no available fixed-route bus service in the

vicinity of the project site.

According to the ENF, the City of Haverhill will supply the residences and golf course facilities with public water and wastewater service. The project is projected to consume approximately 23,430 gallons per day (gpd) of water. It is expected to generate approximately 21,300 gpd of wastewater. The project involves about 1.64 miles of water lines and gravity and pressurized sewer lines with individual grinder pumps as necessary in some instances. The proponent will improve approximately 2,200 feet of the existing water main along North Broadway by cleaning, cement lining, and/or replacement. It will also provide a water booster pump station on North Broadway. The sewer line is located within the 400-foot radius of a Zone A to a public water supply, Crystal Lake. It will require a waiver of the Water Supply Regulations. The proponent will fully comply with MassDEP's standards for water tight construction as specified within 310 CMR 22.20(B)(3)(b) within the Zone A. The proposed sewer extension and pump station have been sized to receive additional potential future wastewater flows from the surrounding area, as required by the City, and provide wastewater service to residences with failing septic systems.

The proponent states in the ENF that the quality of stormwater runoff generated by the project will be improved by the implementation of Best Management Practices. Existing site runoff is sheet flow to two intermittent streams/channels and a drainage channel along North Broadway. The project will create approximately 6.1 acres of new impervious area on the site. Under the stormwater management system proposed for the project, runoff from the proposed roadways and driveways will flow to catch basins equipped with deep sumps and hoods. Stormwater would then flow to vegetated treatment swales, two detention wet pond, and an infiltration pond. Roof runoff from the Club House will be infiltrated into the ground via a runoff recharge system that is located within the parking area. Roof runoff from the homes will be infiltrated via drywells for each home. The overall rate of water discharging from the site is expected to be less than existing peak runoff rates. The proponent and the homeowners association have committed to perform an annual inspection and maintenance program for the stormwater collection system and a once per month sweeping program of the proposed roadways and golf course parking areas. It would utilize a high efficiency vacuum sweeper in the spring and fall. If the Golf Course ceases to operate, the homeowners association would assume responsibility for the maintenance of the stormwater collection system. In its comment letter, MassDEP has requested that the proponent reconsider the replacement culvert design from the Crystal Lake irrigation pond to allow for the passage of fish and/or local wildlife, as well as avoid flooding and adverse impacts up and downstream of that crossing.

I strongly encourage the proponent to continue to evaluate opportunities for incorporating sustainable design alternatives including LID techniques in the project's 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 the filtration of stormwater on-site. Other tools include water conservation and use of pervious surfaces. 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/>.

According to the ENF, the proposed residential subdivision will include the following sustainable design elements: using natural gas warm-air furnaces with 92 percent efficiency and energy-star rated windows, doors, water heaters, and appliances and incorporating water-saving shower heads. I commend the proponent for including these energy efficient and sustainable design measures, which have the potential to significantly reduce greenhouse gas emissions associated with the project. The proponent should also consider using foam insulation to reduce the estimated natural infiltration rate (ENIR) and incorporating piping for roof-mounted solar panels to provide supplemental water heating on homes with south facing roofs.

Although the project is not subject to the MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol because I have found that it does not require the preparation of an EIR, I strongly encourage the proponent to voluntarily undertake additional measures to reduce GHG emissions associated with the project. In particular, homes such as the ones proposed for this project are often suitable for the installation of roof-top solar photovoltaic (PV) systems, which can serve to offset the project's energy usage by generating clean renewable power on site. In light of the likely continued rise in electricity prices, the continued reduction in the cost of PV, opportunities for third party PV arrays with power purchase agreements, and the numerous other tax and financial incentives available for solar projects, I urge the proponent to evaluate the feasibility of installing solar PV at this project, or to provide information to its future owners concerning the options for the future installation of solar systems.

The proponent should commit to using ultra low sulfur diesel fuel for off-road engines in construction vehicles to reduce fine particulate matter. It should also commit to recycling construction and demolition wastes.

With respect to potential water quality impacts on site and at Crystal Lake, the proponent has committed to develop a herbicide, pesticide and fertilizer management plan for the golf course. The proponent has committed to develop a watershed management plan within the watershed of Crystal Lake. The watershed management plan will be submitted to the Haverhill Conservation Commission as part of its Notice of Intent filing for its golf course improvements. No golf course drainage changes are currently proposed by the proponent. I ask that the proponent work closely with the Haverhill Conservation Commission and MassDEP during the

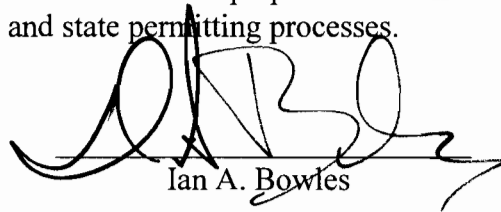
wetlands permitting process to ensure that any concerns about potential drainage changes that could impact Crystal Lake are adequately addressed. Once the proponent's final plans have been developed, it should consult with the MEPA Office to determine whether a Notice of Project Change would be required.

The proponent has proposed a 50-foot easement along the project site's shoreline of Crystal Lake to the City of Haverhill, approximately 2.1 acres. It is also proposing to provide another 15-foot wide easement to the City of Haverhill along Lake Street, approximately 0.40 acres. These easements would provide the City of Haverhill with access for a walking trail along Crystal Lake and a portion of Lake Street with links to existing City-owned properties.

Conclusion

Based on a review of the information provided by the proponent, a review of the comment letters, and after consultation with the relevant public agencies, I find that the potential impacts of this project do not warrant the preparation of an EIR. The remaining issues can be addressed during the local and state permitting processes.

January 22, 2010
Date



Ian A. Bowles

Comments received:

Seekamp Environmental Consulting, 1/8/10

Massachusetts Department of Environmental Protection/Northeast Regional Office, 1/12/10

Merrimack Valley Planning Commission, 1/15/10

Civil Design Consultants, 1/21/10

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