Acton Survey & Engineering
A Division of Hancock Associates

PO Box 666, 97 Great Road, Suite 6
Acton, MA 01720
Phone: 978-263-3666 Fax: 978-635-0218
actonsurvey@actonsurvey.com

ASE 5180

August 18, 2014

Acton Conservation Commission
472 Main Street
Acton, MA 01720

Re: 107-115 Great Road
DEP 085-1159

Dear Commission Members;

This letter is in furtherance of our August 14, 2014 letter and addresses the impacts of the proposed addition to the existing wind mill structure on the Interests of the Act and Bylaw.

General

The site has gone through several construction phases over the past 15 years resulting in the removal of half buried automobile frames, lawn mower decks and other materials from a wooded wetland largely occupied by invasive species to the present site with a manmade wetland that transitions from open water, through deep and shallow marshes to a wet meadow fringe.

Runoff From Site

The "natural" wetland system extending along the north property line contains a watercourse that is influent under all but extreme storm events. There is no culvert across Great Road at the downhill end of the watercourse. The watercourse appears to be excavated.

Under unusual storm events runoff form the site and areas uphill of it "pond" at Great Road and flow north parallel to the road to a catch basin in a lawn area ant then under the Road to a wooded area on the west side of the former railroad tracks.

Public Water Supply

There are no public water supply sources in the vicinity of the proposed addition. The nearest downstream public water supply wells are those maintained by the Acton Water District located off Lawsbrook Road near the Concord Town Line, approximately 0.9 miles distant. The wells are located in the Fort Pond Brook watershed, whereas the site is locate in the Nashoba Brook watershed. The two brooks join downstream of the wells, just above Warners Pond

While the addition of roof runoff should not adversely effect the ability of the onsite wetland system to protect these water supplies, the wells are well isolated from activities occurring in East Acton.

The proposed site alterations will have no impact to public water supplies

Private Water Supply

Residences in isolated areas uphill of the site are served by private water supplies utilized for drinking water and in some cases only for irrigation of lawns. As these wells are located at considerable distances and uphill of the wetland system the system should not be expected to provide protections.

Subsurface sewage soil absorption systems are required to be offset 100 feet from private water supplies and the offset between the proposed alterations and any private wells is over 1,000 feet.

Groundwater Supply

The reduction in impervious area and the addition of recharge works will increase recharge to groundwater and decrease runoff to the wetlands allowing for the wetland system to provide additional protections for groundwater supply.

Flood Control

The proposed alterations result in a decrease in impervious surfaces and provide for recharge of roof runoff from the addition. The wetland created on the site is provided with outlet controls to provide storage for 100 year storm events resulting in no need for the natural wetland system to provide protections and the proposed alterations will not adversely impact any protections provided for flood control.

Storm Damage Prevention

The reduction in impervious surface and the addition of a recharge system for roof runoff will decrease the runoff to the wetland resource areas allowing them to provide additional protections for storm damage prevention.

Prevention of Pollution

Runoff from paved areas has the potential to carry materials that could be detrimental to the ability of a wetland resource areas to remove pollution and present standards require the installation of facilities to reduce the potential for materials being carried to wetlands.

Runoff from roofs are allowed to be discharged directly to wetlands as they are not deemed to have adverse impacts.

The substitution of roof runoff for parking lot runoff will allow the wetland resource area to provide additional protections against pollution.

Land Containing Shellfish

The site and its environs are not in proximity to a marine environment and land containing shellfish are not present.

Protection of Fisheries

Runoff from the area of the proposed alterations and the site does not discharge through a conduit or overland to waters containing fisheries except during unusual storm events, at which times the water in the ice pond,

located across Great Road/Route 2A, will be under flood conditions and the onsite wetlands should not be expected to provide any protections for fisheries.

With the reduction in impervious area and the addition of recharge systems any protections provided by the wetlands will be enhanced.

Protection of Wildlife Habitat

The on site wetland system in concert with the man made wetland at the adjacent carwash site provide a habitat for a variety of birds, insects and amphibians. Both Red Wing Blackbirds and Blue Birds are frequently observed and Muskrat travel between the wetlands occurs occasionally.

The removal of impervious pavement and the addition with roof recharge will not decrease the protections provided by the wetlands for these and other species.

Erosion Control

The tributary area to the construction site is limited and sufficient rates and flow of runoff should be expected to decrease the potential for erosion and the methodologies proposed by the plan are sufficient to provide adequate protections against erosion.

The decrease in impervious areas and recharge of roof runoff will decrease the potential for erosion after construction.

Endangered or Threatened Species

Rare or endangered species are not shown to be present in the environs of the site, according to State databases, and the proposed alterations should not be expected to lessen the protections afforded by the wetlands for any wildlife species.

Summary

The proposed alterations will result in a reduction in impervious parking lot pavements and the addition of recharge systems for roof runoff.

These alterations will increase the ability of the wetland systems to be better able to protect the several Interest of the Act and Bylaw and the project should be allowed to go forward.

We look forward to providing you with additional information or the clarification of this letter at Wednesday Public Hearing.

On behalf of our client thank you for any considerations given to this matter.

Very truly yours,

Mark T. Donohoe, PE
for: Acton Survey & Engineering

cc: Leo Bertolami
Richard A. Nylen, Esq.

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P.O. Box 666, 97 Great Rd. #6, Acton, MA 01720
Phone: (978) 263-3666 Fax: (978) 635-0218
Email: actonsurvey@actonsurvey.com