



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

ASE 7094

June 3, 2013

Acton Conservation Commission
472 Main Street
Acton, MA 01720

Re: 45 Powder Mill Road

Dear Commission Members:

The proposed improvements at 45 Powder Mill Road consist of adding landscaped areas to provide definition to turning movements from and to Powder Mill Road, the elimination of an entrance onto Sudbury Road, a landscape peninsular extending from the building to provide definition for parking and a ramp for employee transfer of vehicle between the site and adjacent property as required by the Zoning Bylaw [6.9.1.3].

As shown by the calculations filed with the Request for Determination of Applicability, the proposed site improvements will result in a decrease in both the peak rate and volume of runoff. This is accomplished by decreasing the amount of impervious pavement by adding grass surfaces designed to increase infiltration, recharging roof runoff and the use of pervious pavement.

Water quality will also be improved by maintaining the surfaces of the site, by reducing runoff and by the provision of a filter strip along the Powder Mill Frontage.

The site is a commercial site and if a point discharge from the site exists a strict interpretation of the applicable provisions of the Massachusetts Stormwater Handbook [V1, C1 pg 2] could require that the stormwater standards applicable to a redevelopment project be met.

It is our opinion that the proposed site improvements meet the standards to the extent reasonably possible.

At present runoff from Powder Mill and Sudbury Roads is collected and discharges through a small privately owned detention basin at 50 Powder Mill Road. The stormwater collection systems in Sudbury and Powder Mill Roads were recently reconstructed and it is unknown if the degree of treatment required for a discharge to the Assabet River is provided by these facilities. A portion of the runoff from the site will by necessity be discharged to the stormwater collection facilities in Powder Mill Road.

The present design decreases the rate and volume of runoff being discharged as “sheet flow” onto the surface of Powder Mill Road. If a direct connection to the Powder Mill Road stormwater

collection system is required the on site collection of runoff would require a substantial portion of the existing pavement to be removed to allow for the necessary regarding.

The use of increase recharge to groundwater will also require removal of pavement, regrading and pretreatment to achieve removal of 44 percent total suspended solids.

It appears that the economics of the development will not allow for the extent of changes that might be required to grade and repave the parking lot.

It is our opinion that the proposed site improvements will not adversely impact any of the Interests identified by the Act and the purposes of the Acton Wetland Bylaw and a Notification of Non-Significance should be issued as requested by the filing before the Commission.

The site while under the jurisdiction of the Commission is separated from the Assabet River by Route 62 and intervening commercial developments. The development at 50 Powder Mill results in an impervious wall between the site's riverfront area and the river.

The reduction in impervious pavements on site and in Powder Mill Road along with other site improvements will reduce runoff and increase groundwater recharge resulting in:

- No loss in protections to public and private water supplies. The site is outside the IWPA of the Assabet Wells.
- Increases in groundwater supply.
- No impacts to flood control.
- Decrease the potential for storm damage, including Powder Mill Road.
- The enhancement of vehicle safety will decrease the potential for pollution.
- Increase recharge and decrease in runoff temperature will provide some protections to fisheries, including mussel beds, in the Assabet River.
- Wildlife habitats in the Assabet River will not be adversely impacted.

In summary, the proposed site improvements will have no significant adverse impacts on the Interests of the Act and Purposes of the Bylaw and as presented the project is economically viable to the proponent and will result in visual improvements to the site and serve to improve its environmental impacts.

Thank you for any considerations given to this matter.

Very truly yours,



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

cc: John Swanson