

**Acton Survey & Engineering, Inc.**

P.O. Box 666, 97 Great Rd. #6 • Acton, MA • 01720

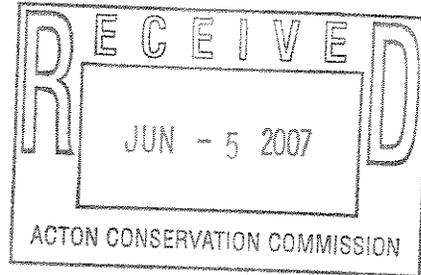
Phone: (978) 263-3666 • Fax: (978) 635-0218

Email: [actonsurvey@verizon.net](mailto:actonsurvey@verizon.net)

June 4, 2007

Acton Conservation Commission  
472 Main Street  
Acton, MA 01720

Re: Jeanson Homes, Inc.  
Lots 2C & 3 Spring Hill Road  
DEP # 085-0971  
6562



Dear Commission Members:

This letter is in response to comments by and discussions with members during our site walk last Friday.

Please accept this letter as our client's request that this matter be continued to the Commission's next regularly scheduled meeting so that we may provide you with an updated demarcation of the BVW.

Mr. Charles E. Caron has been retained to demarcate the BVW from the points indicated by the previously placed flag numbered 4 through 22 and 205 through 216. The demarcation is expected to be completed this week and this office will make every reasonable attempt to locate the flags so that the information may be submitted to the Commission in accordance with 2.1(1) of your requirements.

**HISTORY**

A similar filing was made by this office several years ago and was denied by the Commission and subsequently appealed to DEP. Due to the presence of a "species of environmental concern", the Mystic Valley Anthropoid, and the failure to make a timely appeal for the denial under the local bylaw the appeal was not pursued.

The Mystic Valley Anthropoid has since been determined to not be a species of concern and Chapter F Environmental Protection has been revised.

It is our understanding that the Acton Wetland Bylaw in effect at the time of the original filing required the applicant to show a hardship when resource areas were proposed to be altered to place a second home to be located on a property. This provision appears to be absent from the present Bylaw.

Spring Hill Road - 6562

DEP has also adopted Stream Crossing Guidelines and the Army Corp of Engineers has required replication of wetlands for all projects under their jurisdiction.

#### RIGHT OF ACCESS

During the hearings pertaining to the previous filing discussions were held concerning the applicants right to cross a wetland to obtain access to an upland area when there is an existing house on the property.

During the site walk a Commission Member spoke to a denial by the Commission would not be considered as being a taking as the house on the property represented a value and the Natural Resources Director discussed the value of the property as open space and the proximity of the site to the Spring Hill and adjacent properties owned by the Commission.

It was my impression that the Commission Members found the upland area to be developed to be aesthetically pleasing.

This office is not well suited to the determination of property rights, but our knowledge of the Wetland Protection Act and 310 CMR 10.000, Chapter F Environmental Protection and Sections 1 and 2 of your Rules and Regulations do not preclude access to an upland area across a wetland when the Interests of the Act and Purposes of the Bylaw are not adversely impacted.

The Commission recently issued an Order allowing access to an upland area under DEP file number 085-0942 for a property once in joint ownership with property directly across Taylor Road. It is our opinion the worth of that property is less than Lots 2C and 3.

#### INTERESTS OF THE ACT

Several of the Interests of the Act and the Purposes of the Bylaw appear to be the same and discussions pertaining to the Interests of the Act are meant to apply to the Purposes of the Bylaw and need not be repeated.

While the Wetland Protection Act and Regulations specify that the alterations impact on the ability of the wetlands to protect the Interests our discussions will also address the impact of the alterations on the Interests.

Spring Hill Road - 6562

Protection of public and private water supply

There are no public water supplies in the vicinity of the site or in the Spencer Brook watershed.

Private wells in the vicinity of the site are rock wells and are generally considered to be isolated from surficial deposits in their vicinity and are over 100 feet from any area being altered. The 100 foot offset is as required by Title 5 between a soil absorption system utilized for subsurface disposal for several thousand gallons of sewage per day and a private well.

As alterations within the wetlands and within 50 feet of the wetlands will be limited to that required for access to the upland and as the stormwater management works have been design to mimic existing conditions, the ability of the wetlands to dampen the flow of nutrients and toxic substances will not be diminished resulting in no decrease in the ability of the wetlands to protect existing and future water supplies

Protection of groundwater supply

Dripline recharge trenches and driveway recharge areas have been deigned to compensate for any increase runoff from impervious areas such as the homes and the driveways. As recharge occurring in the upland area will not be decreased the proposed alterations should not adversely impact groundwater supply.

The area of wetland to be altered for the crossing is to be replicated in an upland area directly adjacent to the crossing and the groundwater storage and recharge capacity of the wetland to store should not be adversely affected.

Flood control

Runoff to the wetlands will not be increased by the proposed alterations and onsite and offsite flooding will not be increased.

Flood storage is provided, to some degree, by the wetlands due to the reduction in the flow of water by vegetation and other obstructions in the wetlands and while the proposed crossing will remove some of these obstructions and has been designed to be free flowing, the extent of the vegetation and fallen trees to be removed is not substantial and will not adversely impact the ability of the wetlands to attenuate flooding impacts.

At this site the major flood control device is the existing culvert under Spring Hill Road which will not be altered. The flood storage capacity of the upstream fire pond and wetland upstream will also not be altered. No alterations are proposed that will result in the wetlands ability to decrease downstream flood crests.

**Acton Survey & Engineering, Inc.**

P.O. Box 666, 97 Great Rd. #6, Acton, MA 01720

Phone: (978) 263-3666 Fax: (978) 635-0218

Email: actonsurvey@verizon.net

Spring Hill Road - 6562

Storm damage prevention

Runoff from the site will not be increased and the capacity of the onsite wetlands to store and slow floodwaters will not be decreased. As a result proposed alterations will not result in storm damage or impair the ability to modulate possible damage.

Prevention of pollution

With the exception of the access driveway all alterations are confined to areas over 50 feet from the BVW. In addition, above ground stone walls with a recharge system and backed by native vegetation are proposed between rear yards and the 50 foot buffer to decrease the potential of backyards being expanded to be located more closely to wetlands.

The maintenance of a fifty foot naturally vegetated buffer between areas to be altered and the wetlands will insure that the nature of the upland and wetland vegetation and their abilities to remove materials being carried by runoff are not impaired.

Driveway runoff has been directed away from wetlands and to recharge facilities to increase the potential for removal of constituents.

The proposed alterations will not decrease the ability of the wetland to remove materials being carried by surface and groundwater including those resulting from the horse farm located to the south of the site.

Protection of fisheries

Neighborhood children have reported catching fish from the fire pond and the alterations for the proposed driveway directly to the south will not result in a decrease in shade on the pond and will result in the removal of Euonymus bushes near the existing driveway.

The wetland replication areas will result in no loss in wetland plants and the habitat that could possibly serve to produce foods that could be utilized by game fish elsewhere in the downstream watershed. Even without the replication areas, the production of fishery food will not be adversely impacted.

Protection of wildlife habitat

Unlike the Bylaw, wildlife impacts do not extend into the buffer zone under the Act.

There is no State-listed priority or estimated habitats of rare wildlife species and vernal pools within the Spencer Brook watershed with the exception of the area to the east of Lowell Road in Concord.

## Spring Hill Road – 6562

The alterations required for the crossing are limited to an estimated 884 square feet and should not have any adverse impact on wetland wildlife based on loss of habitat on a square foot basis. The open stream crossing should allow the passage of small wildlife and the movement of larger mammals should not be measurably inhibited by the crossing.

The branch of the onsite wetland crossed by the driveway leads to the horse farm directly to the south and wildlife movement along this corridor is probably impacted by the presence of the farm. The wetland system that extends across the site parallel to Spring Hill Road should be expected to be the more significant wildlife corridor and movements along this corridor will be uninhibited by the proposed alterations.

In general, wildlife that utilize the upland portions of the site will not be affected by the use of the site for single family homes as most of the species are well adapted to sites occupied by single family homes. This can be seen by the deer trail across the property leading to the foot bridge at the rear of the existing house.

As shown by the plan, the site contains 5.19 Acres and the applicant is willing to place a Conservation Restriction on 3.95 Acres [76 percent of the site] to insure that the habitat value of these areas is not altered.

## PURPOSE OF BYLAW

### Protection of resource areas

The site contains two intermittent streams which become confluent just prior to the manmade fire pond adjacent to Spring Hill Road. The streams, their banks and the fire pond will not be altered.

Some 2.56 Acres of bordering vegetated wetlands exist on the site of which 884 square feet, or 0.008 percent, will be required to be altered to allow the 1.60 Acre area of upland where the houses are to be located to be accessed.

The majority of bordering vegetated wetlands is well removed from the area proposed to be altered and with the exception of the small area near the crossing, all are encapsulated by the area proposed to be subject to conservation restrictions.

The site consists of 2.62 Acres of upland of which 2.31 Acres are within 100 feet of vegetated wetlands, or within the buffer zone which is considered a resource area under the Bylaw. As noted on the plan 16,102 square feet of buffer zone is to be altered on Lot 2C and 9,323 square feet is to be altered on Lot 3. The total buffer area to be altered is 25,425 square feet, or 0.58 Acres, and results in 25 percent of the site's buffer area being altered.

Spring Hill Road – 6562

The majority of the buffer area not to be altered is within the area proposed to be placed under a conservation restriction.

The altered buffer area will remain a resource area.

It is our opinion that the design of the proposed alterations, their location and the areas proposed to be restricted from future alterations provide adequate protection of the resource areas described by the Bylaw and do not adversely impact the other purposes of the Bylaw.

#### Erosion control

Sheet 3 of the Notice of Intent Plan contains a detailed Erosion and Sediment Control procedures and Sheet 2 contains details related to the described procedures. The procedures include the placement of structured facilities such as erosion barriers and described a non-structured approach to erosion control including speed of construction and limited erosion potential by not allowing runoff to concentrate and forming erosion resistant surfaces.

An application will be filed with the United States Department of Environmental Protection for a National Pollution Discharge Elimination System Permit for construction activities.

The adherence to the procedures outlined on the plan and standard good construction procedures will insure that products of erosion are not transported outside the areas proposed to be altered and that additional resource areas are not altered.

#### SHARED DRIVEWAY

The Acton Zoning Bylaw requires that Common Driveways serving more than two homes meet all requirements of the Section 3.8.1.5.

Among other things, a shoulder width of three feet will be required on both sides of the driveway, instead of the one foot proposed by the design, and as a result an additional 220 square feet of wetland will be required to be altered.

The driveway will also be required to have a minimum slope of one percent and as a result of the driveway profile being sloped across the wetland, concentrated runoff could result.

Spring Hill Road - 6562

Shared driveways serving two homes are allowed by the Zoning Bylaw and are exempt from the requirements of Section 3.8.1.5.

A twelve foot wide pavement width is proposed as it is our opinion that this width provides for the safe passage of delivery vehicles and is the width required for a Common Driveway.

A turning area for a SU-30 vehicle [fire truck] is to be located outside the buffer, the horizontal alignment and maximum grade conforms to the requirements for a Common Driveway.

Utilizing a Common Driveway with the existing house will eliminate about 900 square feet of buffer zone alteration near Spring Hill Road and eliminate the removal of Euonymus bushes in the buffer zone. Euonymus is considered an evasive species.

As suggested by a Commission Member, 6X6" PTW guide posts will be placed at 20 foot intervals along the northern side of the driveway.

We believe that the proposed shared driveway is of the minimum practical width and horizontal and vertical alignment necessary to provide access to the 1.60 Acres of upland which is shown to be capable of containing two homes and necessary infrastructure required for their construction under land use regulations in effect in the Town of Acton.

The shared driveway is to be constructed in a manner that does not restrict the flow of water.

The use of the adjacent property, once owned by the present owner of Lots 2C and 3 to gain access to the buildable upland will result in a larger area of wetland alteration and a larger area of the buffer zone being disturbed.

The shared driveway meets the requirements of 310 CMR 10.53(3)(e) and the Commission may issue an order that will contribute to protecting the Interests of the Act notwithstanding the provisions of 10.54 through 10.58 and 10.60.

#### CONSERVATION RESTRICTION

Two areas consisting of 3.17 Acres and 0.78 Acres for a total 3.95 Acres or 76 percent of the site are shown to be located in areas signified as being Conservation Restricted.

By placing a Conservation Restriction of these areas it is intended that the restrictions place on the use of resource areas as defined by the Acton Wetlands Bylaw will be reconfirmed and the possible "creep" of human activities into these areas be further prohibited.

Spring Hill Road - 6562

Our client has not formulated the extent or mechanism for the Conservation Restriction and is receptive of input from the Commission.

SUMMARY

It is our opinion that the project as proposed will have no adverse impact on the Interests of the Act or Purpose of the Bylaw and will provide the minimal practical access to an upland area suitable for the construction for two single family homes. Therefore an Order of Conditions controlling construction and maintenance of the site should be issued.

If prior to the continued public hearing the Commission should have any questions or concerns pertaining to this letter or the proposed development please inform us and we will make every reasonable attempt to provide you the necessary information.

On behalf of our client we thank you for any consideration you may give to this project.

Very truly yours,  
Mark T. Donohoe, PE

  
For:  
Acton Survey & Engineering, Inc.

cc: Jeanson Homes, Inc.  
Deanne Angel

# OXBOW ASSOCIATES

Brian O. Butler, MS

*Wetlands Delineation and Permitting • Wildlife Studies • Herpetology • Vernal Pool Ecology*

30 April, 1999

Mr. Thomas Tidman  
Acton Conservation Commission  
Town Hall  
472 Main Street  
Acton, Massachusetts 01720

Via Facsimile and Regular Mail.

Re: Notice of Intent for 8 Spring Hill Road, Acton.

Dear Mr. Tidman:

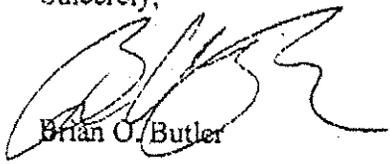
As you are aware, the project locus has been reviewed by the Natural Heritage and Endangered Species Program and their evaluation has been presented to your Commission. I wish to urge you and your commission to additionally consider the following.

In addition to impacts to actual rare species habitat, the proposed project also calls for intensive clearing and alteration of terrestrial buffer zone lying adjacent to forested wetland and an area of open canopy pond/emergent marsh which supports breeding by obligate (wood frog) and facultative (spring peeper, gray treefrog) vernal pool vertebrate species. Currently, the overall development character of the landscape surrounding this wetland complex is low density housing served by dead end access roads.

The terrestrial buffer zone is of critical importance to various of the statutory interests of the Wetlands Protection Act and the Acton Wetland Protection Bylaw. In particular, wildlife habitat (a stated statutory interest) within the wetland/upland ecotone is an acknowledged habitat feature critical to maintenance of intact ecosystems. This zone provides feeding, breeding and migratory habitat for species of waterfowl and neotropical migrant birds, amphibians and reptiles, and small and medium sized mammals.

I therefore urge your Commission to consider in this matter not only impact to rare species habitat, but also the impact upon mature woodland habitat proposed by this filing.

Sincerely,



Brian O. Butler

cc: W. Sawyer  
G. Wood