

# *PLACES Site Consultants, Inc.*

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PLANNING, LANDSCAPE ARCHITECTURE, CIVIL ENGINEERING & SURVEYING

November 19, 2008

Stow Land Use Task Force  
380 Great Road  
Stow, MA 01775

Re: Site Feasibility Study  
Harvard Road Site  
Gleasondale Road Site  
Places Project No. 618

Dear Committee Members:

Thank you for this opportunity to work with you on the review of town owned properties for potential municipal uses.

PLACES Site Consultants has reviewed available information and conducted on-site inspections for the two sites located on Gleasondale Road (Route 62) and Harvard Road. The inspections were limited to visual observation – no soil testing, wetlands delineation, or other surveys were performed.

## **Harvard Road Property – Parcel 92**

This study reviewed the westerly portion of the property as the east half of the parcel has been developed as the Pompositticut School and athletic fields. The westerly portion is separated from the activity at the Pompositticut School by a wetland area. Access to this part of the site is via an access strip onto Harvard Road and it is bordered by residential lots on Harvard Road and Great Road.

NHESP- The major limitation on the use of this parcel is the presence of a Natural Heritage Endangered Species Program (NHESP) Massachusetts Priority Habitats for State-Protected Rare Species. It is unknown at this time which species this habitat polygon encompasses or the required habitat requirements. According to the NHESP website, additional permitting is required to work within the area of the polygon but it is not a total prohibition for work. It has been our experience that the presence of this polygon severely limits the potential uses of the property unless the habitat is clearly not appropriate habitat for the species of concern. (As an example, a gravel pit is not suitable habitat for salamander species but does provide nesting sites for some turtle species).

The Stow Conservation Commission does not know the species involved – NHESP typically does not want the information available to the public to protect the species. Pat Perry indicated that there are some vernal pools in the Marble Hill area but there are no recent filings which would have identified the species.

SOILS - The soil maps indicate that the access to Harvard road is extremely stony Ridgebury fine sandy loam but the rest of the site is Scarboro mucky fine sandy loam, a soil typically associated with wetlands. WETLANDS- This office did not walk this property to view the extent of the wetlands due to the other outstanding issues with the NHESP habitat.

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POTENTIAL USES- Generally the typical municipal uses such as offices, parking areas, septic systems and recreational facilities which require extensive land alterations are not viable for many of the species shown in NHESP habitat areas. A low impact use such as passive recreation or public water supply (temporary alterations) may be possible if compatible with the requirements of the particular species. This site is not identified as a DEP potential aquifer so any water supply would most likely be a deep rock well of unknown potential yield.

It is our recommendation that if the town wants to pursue the use of this site, NHESP be contacted to find out the species of concern and evaluate the site for areas with unsuitable habitat.

### **Gleasondale Road Property – Kane Site – Parcel 32-2**

The 28 acre site is bordered to the north and east by the Assabet River and to the west and south by residential lots. The site has two access points to Gleasondale Road on the west side of the site with residential lots between the access points. Both access points have site constraints which will impact the site.

ACCESS - The northern access point is lined with guardrail and has a steep grade entering the site, dropping roughly 20 feet in elevation before the site flattens out. An old three-sided foundation made of large stones acts as a retaining wall for the road. Developing an access from this location may be difficult due to the impact of fill to create a reasonable grade into the site, impacting both the abutting properties and the flood plain. While access may not be impossible with the use of retaining walls and creating compensatory flood storage areas, it may be cost prohibitive.

The southern access point is to the immediate north where Gleasondale Road curves to the west and Marlborough Street continues due south. The southern access is also lined by guardrail but only drops 3 to 4 feet in elevation before flattening out. Wetlands and flood plain isolate this access from the larger, more buildable portion of the lot. It is estimated that, using the data from Mass GIS, the length of wetland crossing would be approximately 50-75'. Under the Massachusetts Wetlands Protection Act, the Conservation Commission may allow an alteration up to 5,000 s.f., which may be sufficient for a crossing. This site may qualify as a "limited project" to gain access to a buildable upland area but would require further deed research to determine if the previous owner had created the hardship through parcel division. Field delineation of the actual edge of Bordering Vegetative Wetlands (BVW) is needed to evaluate the viability of a crossing.

The one other alternative for access is via the abutting property to the south. Parcel 34 on the Assessor's map has a house located in the rear portion of their property and if an easement could be obtained, could potentially avoid some of the wetlands and flood plain issues to gain access to the upland portion of the study site.

TOPOGRAPHY - The topography of the site is relatively flat leaving most of the property within the 100 year flood plain and potential wetlands. The ecology consists of mostly red maples and honeysuckle shrubs, with areas of sphagnum moss. The red maples are about 18 inches in diameter except for a rectangular area where they are only 2 – 3 inches. The rectangular area may have been a playing field of agricultural field at one time. In the center of the site there are wetlands, shown as potential vernal pools with standing water and signs of beaver activity (tree damage). There was also an elevated area of white pines and low bush blueberry that had possible evidence of gravel excavation in the past. The wetland

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area to the north of the site was obvious flood plain with scattered debris/trash from the previous flooding events.

**SOILS** - The soil types found on site are Windsor loamy sand and Deerfield loamy sand with ponded Freetown muck along the river. Normally sandy soils are ideal for sewage disposal systems. In this case, much of the land is in the flood plain or in the buffer zone to the BVW, limiting the horizontal area available for a sewage disposal system.

**FLOOD PLAIN , WETLANDS and RIVERFRONT**- Use of this site is limited by the extensive floodplain and wetland areas. Structures are prohibited in the Flood Plain unless it can be shown that there is a mapping error. Based on general visual observations, it does not appear that the mapping has any obvious errors. The DEP Priority Resource Map shows this site as being "Protected Open Space" which may limit its potential uses via deed restrictions or Conservation Restrictions.

The Bordering Vegetated Wetlands (BVW) wetlands are extensive and generally abut the Assabet River as well as an isolated area previously described as it impacts the site access. In addition to the wetlands, the site is contained within the Riverfront Area which is the zone 200' from the bank of the river. The Wetlands Protection Act protects the Riverfront area, but allows use of 2500 s.f. or 10% of the riverfront area, whichever is greater. For this site, it appears that the majority of the riverfront area is also BVW based on the Mass GIS maps, and therefore has no significant impact on the use of the property.

The BVW and Riverfront area would need to be field delineated prior to any use of this property as our assessment was based on the GIS maps and visual observations.

**ZONING**: The front portion of this site is zoned Residential, with the back portion zoned Recreation-Conservation. Buildings and structures are allowed within the RC zone, only as an accessory use to a recreational use and are subject to a 100' setback from the zone line, severely limiting the footprint of useable area due to the other constraints (flood plain and wetlands).

Uses in the Residential District would include residential, agricultural, bed and breakfast, child care facility. With special permits from the ZBA additional uses include schools, playgrounds, non-commercial recreation, veterinary hospitals, stables, and nursing homes and with special permits from the Planning Board duplex residences, cross-country skiing and golf courses are allowed.

Approximately 0.66 acres of contiguous non-flood plain land is located in the Residential District. This 0.66 acres of land is isolated by the 100 year flood plain which precludes a residential use as the lot would not meet the zoning requirements for a building lot. This land area is insufficient for any of the allowed uses with the exception of playgrounds, and recreational uses.

**POTENTIAL USES** - Uses requiring construction of a building, parking and septic system are not feasible due to the limited upland area with access through the flood plain. Other uses, where access during flooding events is not critical, such as recreational uses, may be possible with resolution of the access. The lateral extent of useable land will be limited by the floodplain.

The soils and proximity to the Assabet River (recharge) for this site would make this site a potential site for public water supply. The DEP Priority Resource map shows this site as being a medium yield aquifer. This office is unaware of any contamination of this site but with the proximity to the mills in Gleasondale, the historic land use should be reviewed if considered for a drinking water supply. If this site were

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pursued for a source of public drinking water, the DEP permitting process would require substantial testing to assure that drinking water quality standards could be met.

## Summary

In summary, both parcels have limited use potential due to environmental constraints. Any expansion of use on the Harvard Road site, either in conjunction with the Pompositticut School or the vacant portion of the property will need to address the NHESP habitat issues prior to any land planning for the site. Use of the Gleasondale site is limited by the wetlands and floodplain which impacts the access to buildable dry land on the interior of the site.

Please contact this office should you have any follow-up questions once you have reviewed this report. Thank you.

Very truly yours,  
PLACES Site Consultants, Inc.  
BY:

Susan C. Sullivan, P.E.  
Project Manager

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