



February 12, 2016

PROJECT SOIL LIMITATIONS

Sheet S1 of both sets of Preliminary Subdivision Plans is a Soils Map showing the expected soil types to be found on site as depicted on the soil maps found at the MassGIS Oliver web page or on the Soil Survey of Worcester County, Massachusetts, Southern Part issued by the Natural Resources Conservation Service in 1998.

Site soils from the Town Line in common with Westborough at the east end of this site to the wetlands at the low point of the property are typically Paxton series soils. These soils used to be informally categorized as "till".

Site soils in the southwestern corner of the site are noted as formerly having been part of a gravel pit. We observed more permeable soils in this area, having a sand or loamy sand texture rather than the sandy loam texture observed in the areas of Paxton series soil.

Elsewhere at the western end of the property the soil maps call for Chatfield-Hollis and Ridgebury series soils. The former is characterized by soils with greater incidence of ledge and boulders. We did not observe a significant number of boulders on this site and did not encounter refusal due to ledge at any of the deep observation holes we excavated. The latter is a soil similar in quality to Paxton series soils.

In March of 2015 we conducted unofficial soil tests to try to determine if the mapping referred to above was accurate and if the site would be suitable for installing individual septic systems to serve all the lots. We found that the mapping was generally accurate and judged that we would be able to get sufficient passing tests to design septic systems for each lot.

From September 8, 2015 to November 25, 2015 we were at the site on eight different occasions conducting official soil tests observed by the agent for the Grafton Board of Health. We logged deep observation holes and performed percolation tests sufficient for design of septic systems on all 39 lots.

Copies of the logs for all these tests are included in the CD-ROM disc that accompanied this filing.