Comments on Water Supply Well and Groundwater

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At this writing a 3-hour pumping test of the sole water supply bedrock well for the proposed project is the only data made available about the water supply for the proposed project. The estimate is for this well to be able to produce a sustained 12.5 gallons per minute. This well resides downhill from: Route 155, the existing and proposed development, the septic system leach fields, and the detention pond. These uphill land uses are all potential sources of contamination to the new well. No well water quality data has yet been provided. This well will be classified as a community well and under the jurisdiction of NH DES regulations. With that said, there are certainly important aspects that should be considered and implemented to maximize the likelihood of a continuing potable water supply to these residents.

Although the bedrock well is already drilled, it is not the best place for a water supply well on the property. Better locations are further to the south. Here there is much more undeveloped watershed area to dilute any water quality concerns as well as a larger watershed from which to obtain water.

The new bedrock well is very close to the proposed leach fields. It is highly likely that the hydraulic zone of influence of the well will go under the leach fields. Accordingly, it is important to perform better wastewater treatment prior to letting the wastewater effluent infiltrate the ground. Multiple zone septic tanks are recommended in order to do a better job of removing wastewater pollutants.

Low- to no-salt winter maintenance strategies should be employed. Highway Departments should also be contacted about lowering salt usages on Madbury Road and Route 155 near their intersections.

Lastly, the well is very near and immediately downhill from the detention pond, which then may make it challenging to infiltrate stormwater and protect well water quality.