



ENGINEERING SUCCESS TOGETHER

## MEMORANDUM

Date: October 1, 2015 BETA Project No.: 5096  
To: Ben Stevens, Desheng Wang  
cc: Alan Rubenstein, Sherborn BOH  
From: Steve Smith & Phil Paradis *SPR*  
Subject: Fields at Sherborn Groundwater Contour Map

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### The Fields at Sherborn

Steve Smith, GeoHydroCycle, Inc., provides the following comments in regards to the Groundwater Contour Map by the Applicant's engineer.

Comments and recommendations are based on a copy of a Grading Plan for The Fields at Sherborn prepared by Bruce Saluk & Assoc., Inc. and dated December 8, 2014. On this plan were shown groundwater elevation contours and text blocks indicating groundwater elevations for two dates, April 15 and August 14, 2015. The text blocks were located on the plan near onsite wells. It appeared that the contours were derived from the data for the April 15<sup>th</sup> measurements.

Starting at Washington Street, the contours show a general southerly groundwater flow direction. However, the contours also show a trough in groundwater starting about 100 feet south of Washington Street and extending south another 250 feet. A trough similar to what is shown on the plan typically indicates groundwater flow to a discharge area, but no stream or river exists in the trough area.

Based on our review of the groundwater elevation data, it appears that the contour configuration indicating the trough is due to one data point, well DHT -23. The April 15<sup>th</sup> groundwater elevation for that well is 171.65, but the other nearby wells have elevations that are 4 and 5 feet higher in elevation than DHT 2-3. Also, the April 15<sup>th</sup> groundwater elevation at well STP-1 appears to be much higher than the general slope of groundwater elevations in that area would indicate.

Based on the data and our review, I recommend that the groundwater elevation contours be redrawn without groundwater elevation data from wells DHT 2-3 and STP-1.

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