



MEMORANDUM

To: Dr. Thomas Rogers
Superintendent, Syosset Central School District

From: Walden Environmental Engineering, PLLC

File: SYOS0118.2

Date: August 10th, 2018

Subject: **Groundwater Sampling Options**

At the request of the Syosset Central School District (the “District”), Walden Environmental Engineering, PLLC (Walden) has reviewed JCB Environmental, Ltd.’s (JCB’s) approach to performing groundwater sample collection at the South Grove Elementary School (the “School”), located at 60 Colony Lane in Syosset, New York. We have prepared this memorandum to present recommendations to the District for sampling going forward.

Walden contacted the New York State Office of General Services (NYS OGS) and the NYS Department of Environmental Conservation (DEC) to determine whether a State contract exists for drilling services which the District could utilize to hire a drilling contractor. Both agencies indicated that no such contract exists.

It is Walden’s understanding that JCB has attempted to perform drilling services at the School utilizing direct push methods (commonly referred to as Geoprobe) and that those attempts have failed to achieve the depths necessary to encounter the groundwater table, which is anticipated to be greater than 100 feet below grade. Rotary drill rigs are capable of drilling to greater depths than direct push units, therefore Walden recommends hiring an experienced drilling contractor with hollow stem auger or mud rotary drilling equipment to complete the work.

Walden has spoken with several local subsurface drilling companies to discuss installing wells to collect groundwater samples at the School. These contractors confirmed that drilling in the area of the School is notoriously difficult due to large boulders which are often encountered and as such, direct push methods are not appropriate to achieve the depth needed to encounter groundwater in the area.

Collecting groundwater samples from 100+ foot depths equates to time and money. Walden recommends that the District proceed with installing at least one (1) permanent monitoring well,



rather than focusing all resources on temporary well points, to allow for groundwater sample collection in the future if desired. Based on the length of the property boundary with the adjacent Syosset Landfill, Walden recommends installation of a least three (3) monitoring points, spaced no greater than 150 feet apart.

Walden has requested quotes from three (3) drilling contractors for both temporary and permanent monitoring well installations for the District's consideration. Once the quotes are in hand, we will compare the estimated cost to install permanent monitoring wells vs. temporary wells to support the District's decision on how to proceed.