Sadat Associates Inc.

Project History

Geotechnical and Site Investigation

Project Name

Trenton Early Childhood Center

Client

New Jersey Schools Construction Corporation

Services Provided

- Geotechnical Investigation
- Preliminary Assessment
- Site Investigation
- Geophysical Survey
- Preliminary Assessment/ Geophysical Survey/Site Investigation Report



Project Description

The site, located in the City of Trenton at the intersection of Pennington and Titus avenues and North Warren Street, is just over than 2-1/2 acres and is currently vacant. The Site is partially paved with areas of asphalt and concrete in relatively poor condition. Previous operations conducted at the Site include a laundry facility circa 1908, a gasoline filling station from about 1927 to 1955, and unknown uses from 1955 through 1970 when the Site became vacant.

SAI was hired to conduct a Geotechnical Investigation, Preliminary Assessment, Geophysical Survey and Site Investigation at the site to evaluate the subsurface conditions from a geotechnical perspective, determine the presence of any underground storage tanks, and to determine if contamination was present from previous site activities. NJSCC is planning to purchase the site from the City for construction of the Early Childhood Center.

Approach

SAI performed field investigations to determine the geotechnical characteristics of subsurface strata. Soil samples collected from the field were tested at Princeton Geotechnical & Materials Services, LLC, an in-house geotechnical laboratory, to determine the soil strength parameters. Based on the laboratory analyses and field observations, a geotechnical report was prepared with recommendations for the building foundation, floor slab, earthwork, excavation, earth pressure parameters, etc.

SAI also performed a Preliminary Assessment to identify any potential areas of concern at the site. A geophysical survey was conducted to determine if any underground storage tanks (USTs) were present at the site in association with the site's historical uses. A 1,000-callon UST was located on the site. A test pit investigation was conducted to classify soil onsite, determine if contamination was present, and to verify the results of the geophysical survey. Soil sample analytical results showed that no contamination was present above soil cleanup criteria, however elevated PID readings were observed in several areas, indicating the presence of volatile organic compounds.

SAI submitted a Preliminary Assessment/Geophysical Survey/Site Investigation Report recommending natural attenuation at the site because of the site's proposed future use.

