

A. INTRODUCTION

This section addresses soil and groundwater conditions at the project site resulting from previous and existing uses of the site. A Phase I Environmental Site Assessment (ESA) was conducted by the Louis Berger Group, Inc (Berger) on behalf of the New York City School Construction Authority (SCA) for the project site in April 2005. The main objective of the Phase I ESA was to identify the presence or likely presence, use, or release of hazardous substances or petroleum products, which are defined in American Society of Testing and Materials (ASTM) Standard Practice E 1527-00 as recognized environmental conditions (RECs). In addition, other environmental issues or conditions such as radon, asbestos-containing materials (ACM), lead-based paint (LBP), and polychlorinated biphenyl (PCB) containing equipment were evaluated. The ESA included a site inspection, a review of the existing data on geology and hydrology of the area, and a review of historical maps, local agency records, and other documents to assess past and current uses of the site and adjacent areas.

The Phase I ESA for the site identified four (4) potential RECs including the presence of one closed-in-place and one in-service fuel oil USTs, and releases of petroleum and hazardous waste from surrounding properties located upgradient of the Site. The Phase I ESA also identified four (4) environmental concerns associated with the potential presence of ACM, LBP and PCB-containing equipment, and emissions from a nearby dry cleaner. Based on the results of the Phase I ESA, a Phase II Environmental Site Investigation (ESI) was conducted by Berger on behalf of the SCA in July 2005 to assess the RECs identified in the Phase I ESA. The Phase II ESI consisted of a geophysical survey and testing of subsurface soil, sub-slab vapor, indoor air and ambient air.

B. EXISTING CONDITIONS

The project site is located at 283 Adams Street in the Borough of Brooklyn, Kings County, New York. The site is located on Lot 10 of Block 140, as identified on the Brooklyn tax maps. The site comprises approximately 22,000 square feet (sf), and consists of a former New York City Court House. The former Court House is a five-story with penthouse structure with a basement. Floors one through five and the penthouse of the site building are developed with courtrooms and associated offices. The basement of the building is used for mechanical equipment. One, in-service, fuel oil underground storage tank (UST) is present at the Site.

The site is located within a commercial section of Brooklyn. The Site is located on the city block bounded to the north by Johnson Tech Place to the north, a multi-story office building to the east, the Brooklyn Marriot Hotel to the south and Adams Street to the west. The surrounding area is primarily comprised of commercial and governmental offices. The site consists of a five-story Court House, with a penthouse and basement. The on-Site structure was constructed in 1953. The area immediately surrounding the project Site consists of commercial and governmental offices.

A Phase II ESI consisting of a geophysical survey to clear soil boring locations and locate the UST, the advancement of eight (8) soil borings, collection of seven (7) soil samples, collection of six sub-slab vapor samples, and collection of nine indoor air quality samples was performed by Berger in May 2005 to assess soil, sub-slab vapor, and indoor air quality conditions at the Site. Soil samples collected from borings advanced in the vicinity of the UST were analyzed for New York State Department of Environmental Conservation (NYSDEC) Spill Technology and Remediation Series Memo #1 (STARS) volatile organic compounds (VOCs) and semivolatile organic compounds (SVOCs). The soil sample collected from borings advanced along the perimeter of the Site building were analyzed for Target Compound List (TCL) VOCs, TCL SVOCs, Target Analyte List (TAL) metals, pesticides, PCBs, and cyanide. Sub-slab vapor, indoor and ambient air samples were analyzed for VOCs via U.S. Environmental Protection Agency (USEPA) Method TO-15.

The results of the Phase II ESI indicate that soils at the Site are characterized as fill consisting of sand and gravel with brick, asphalt, and concrete. Groundwater was not encountered at a depth of 20 feet below ground surface, which was the depth the soil borings were advanced. The anticipated depth to the regional water table is approximately 50 feet below ground surface (ftbgs) and is estimated to flow northeast, towards the East River. Storm water runoff from the Site is expected to flow to catch basins located along Johnson Tech Place, Adams Street, and Jay Street.

The laboratory analytical results indicate that the subsurface soils at the site contain elevated concentrations of SVOCs and metals in excess of the applicable NYSDEC Recommended Soil Cleanup Objectives (RSCOs). The concentrations of metals in the soil samples are expected to be representative of site background conditions (e.g., fill material used to grade the site) and not the result of on-site releases.

The Phase II ESI indicates that there is one (1) 20,000 gallon UST located at the site and there was no indication of a closed-in-place UST. The information obtained during the Phase II ESI indicates that the USTs originally installed in 1953 when the building was constructed have been removed and replaced with one (1) 20,000 gallon UST in 1992.

Selected VOCs were detected in the indoor air quality samples at levels consistent with the concentrations detected in outdoor samples collected at the same time, which indicates that air quality in the site building reflects ambient air quality. Dry cleaning chemicals were not noted in the indoor air quality samples, indicating that potential emissions from the nearby dry cleaner are not impacting the site. Additionally, the results of the sub-slab vapor samples indicate that although present in detectable concentrations, the VOCs do not present the threat of vapor intrusion.

Based on the results of the Phase II ESI, Berger recommended that after construction/renovation activities, exposed soils should be capped with 24 inches of environmentally clean fill. Berger also recommended that additional documentation be obtained regarding the in-service 20,000-gallon UST and that the NYSDEC Petroleum Bulk Storage (PBS) certificate be updated.

C. THE FUTURE WITHOUT THE PROJECT

This analysis assumes that without the proposed project, the site would remain the same and would not be converted to a New York City School. Contaminated materials present at the site would remain in place.

D. PROBABLE IMPACTS OF THE PROPOSED PROJECT

The Proposed Project would not result in impacts from contaminated materials. ACM and PCB-containing equipment surveys would be performed for the existing building prior to construction/renovation, as warranted. Any ACM, suspect LBP, and PCB-containing equipment, if present, would be properly handled in accordance with all applicable Federal, State, and local regulations.

To minimize construction workers' exposure to SVOCs and metals present in soil, standard industry practices for the removal of contaminated soils would be utilized. These practices include employment of an appropriate health and safety plan (HASP), including air monitoring and personal protective equipment, as warranted. Methods to minimize dust would also be employed. Any contaminated materials removed from the Site would be properly handled and transported off-site, in accordance with all applicable local, State, and Federal regulations to a licensed and permitted disposal/recycling facility. A 24-inch layer of environmentally clean fill would be placed over any exposed areas of the Site during the final grading stage of the project. *