A. INTRODUCTION

This section presents the findings of the hazardous materials assessment and identifies potential issues of concern that could pose a hazard to workers and others and/or the environment associated with the proposed action. The Proposed Project would involve the following activities with the potential for subsurface disturbance.

- Creation of a park at DeLury Square, including the installation of benches, lighting, new paving, landscaping, and potentially a fountain. Excavation for most of the construction is not expected to exceed four feet. However, if a fountain is constructed in an undetermined location on the site, excavation at that location would be up to 10 feet below grade.
- Improvements to the Pearl Street Playground, including the installation of new benches, lighting, paving, and landscaping. Excavation for the construction is not expected to exceed four feet.
- Improvements to Titanic Memorial Park, including the installation of new benches, lighting, paving, and landscaping. Excavation is not expected to exceed four feet.
- Creation of a park at Burling Slip, including the installation of benches, lighting, new paving, landscaping, and a small storage shed. Excavation is not expected to exceed four feet except for the proposed storage shed (in an as yet undetermined location), where excavation could extend to eight feet below grade.
- Streetscape improvements along Fulton Street, Nassau Street, William Street, Gold Street, Pearl Street, and John Street

A Phase I Environmental Site Assessment was undertaken for the following elements of the proposed project:

- DeLury Square: a park located on DeLury Square and bisected by a road.
- Two approximately 200-foot-long portions of sidewalk running along the eastern side of Fulton Street, between DeLury Square and Cliff Street, and between Cliff and Pearl Streets.
- Pearl Street Playground and Titanic Memorial Park, located on two adjacent blocks southeast of the intersection of Fulton and Pearl Streets.
- Burling Slip: an approximately 250-foot-long asphalt-paved area used for parking located north-adjacent to John Street.

A Phase I Environmental Site Assessment was not undertaken for the streetscape improvements, since these would generally involve the replacement in-kind of existing infrastructure and excavation is not expected to exceed four feet.

Environmental conditions resulting from previous and existing uses, both onsite and in the surrounding area, were assessed by review of *Phase I Environmental Site Assessment Report—DeLury Square* (AKRF, Inc., July 2007), *Phase I Environmental Site Assessment Report—Pearl*

Street Playground and Titanic Memorial Park (AKRF, Inc., July 2007), and Phase I Environmental Site Assessment Report—Burling Slip (AKRF, Inc., July 2007).

B. EXISTING CONDITIONS

SUBSURFACE CONDITIONS

The DeLury Square portion of the project site is located at approximately 20 feet above mean sea level. Groundwater at this location is estimated to be approximately 20 feet below grade and would be expected to flow in a generally southeasterly direction, toward the East River. Bedrock at this location is expected at approximately 60 feet below grade.

The Pearl Street Playground and Titanic Memorial Park are located at approximately 10 feet above mean sea level. Groundwater at this portion of the site is estimated to be approximately 10 feet below grade and would be expected to flow in a generally southeasterly direction, toward the East River. Bedrock at this location is expected approximately 120 feet below grade.

The Burling Slip portion of the project site is located at approximately five feet above mean sea level. Groundwater is estimated to be approximately five feet below grade and would be expected to flow in a generally southeasterly direction, toward the East River. Bedrock is expected approximately 140 feet below grade.

Actual groundwater flow may be affected by past filling activities, underground utilities, other subsurface openings, or obstructions such as basements, underground parking garages and subway lines, tidal fluctuations, and other factors beyond the scope of the study. Groundwater in Manhattan is not used as a source of drinking water.

PHASE I STUDY

The Phase I studies reviewed information sources including: SanbornTM Fire Insurance maps; environmental regulatory agency databases identifying state and/or federally listed sites; and city databases and records (Department of Buildings and Fire Department) to assist in identifying prior uses. In addition, the Phase I studies included reconnaissance of the site and surrounding neighborhood. The Phase I research indicated that the DeLury Square portion of the site was developed from prior to 1894 until approximately 1977 with an office building and part of a building used for manufacturing and storage of steamfitting supplies, and was later vacant or used as a park. The portion of the site presently composed of the Pearl Street Playground and Titanic Memorial Park was developed prior to 1894, and historically included properties such as a print shop, a building with an "oils basement," a chemical store and factory, a drug and chemical store, and a vacant lot possibly used for storage by Beekman Street Hospital. The Burling Slip portion of the site and the on-site sidewalk were never developed with buildings.

The Phase I studies identified potential historical and present sources of contamination on- and off-site, including a transformer vault, two dry cleaners, a shot factory, a print shop, drug, chemical and dye stores, and electrical substations in close proximity to DeLury Square; a print shop on the Pearl Street Playground location; a building with an "oils basement" on the Titanic Memorial Park location; two wholesale drug stores, a chemical and dye shop, a tinware factory, a chemical store and factory, Beekman Street Hospital, and an associated drug warehouse on or adjacent to the Pearl Street Playground and Titanic Memorial Park portions of the site; a dry cleaner and an electrical substation located in a potentially upgradient groundwater flow

direction to the Pearl Street Playground and Titanic Memorial Park; and a buried transformer vault and two filling stations with buried gasoline tanks adjacent to Burling Slip.

C. THE FUTURE WITHOUT THE PROPOSED PROJECT

Absent the Proposed Project, the project site will continue in its current state. Currently, there are no known significant health risks associated with the project site. Likewise, there would be no significant health risks in the future without the Proposed Project.

D. PROBABLE IMPACTS OF THE PROPOSED PROJECT

For most of the site, there is little potential for adverse impacts during construction activities resulting from the potential presence of subsurface contamination, because subsurface disturbance for the proposed improvements is anticipated to be limited. However, potential for adverse impacts exists in the Pearl Street Playground and Titanic Memorial Park portions of the site, and in other areas of the site where deeper soil disturbance is anticipated. Although excavation and construction activities could increase pathways for human exposure, impacts would be avoided by performing construction activities in accordance with the following:

- Prior to any subsurface disturbance, a subsurface investigation of soil would be performed in accordance with all applicable laws biased toward those areas where current or historical use (either on-site or off-site) indicates a greater likelihood of encountering contamination. For any soil found to contain contaminants, procedures for handling and removal of the contaminated soil would be put into effect in compliance with all applicable federal, state and local laws. These procedures would be incorporated into the project's construction documents to govern excavation and other activities that would entail subsurface disturbance.
- All activities involving disturbance of existing soils would be conducted in accordance with the HASP that would detail measures to reduce the potential for exposure (e.g., dust control) and measures to identify and manage known contamination (e.g., contaminated soil) and unexpectedly encountered contamination.
- If the Proposed Project will involve soil disturbance in areas outside the scope of the Burling Slip, DeLury Square Park, Pearl Street Playground, and Titanic Memorial Park, Environmental Site Assessments, activities will be conducted in compliance with the HASP.
- All material that needs to be disposed of (e.g., both contaminated soil and excess fill) would
 be properly handled and disposed of off-site in accordance with all applicable federal, state
 and local regulations.
- If planned construction will create the potential of disturbing on-site electrical manholes, these manholes would be assessed for the presence of asbestos-containing materials (ACMs), lead waste, and polychlorinated biphenyls (PCBs), and any such materials would be managed and disposed of in accordance with applicable federal, state and local regulations.

With the implementation of these measures, no significant adverse impacts related to hazardous materials would result from construction activities on the project site. Following construction, there would be no potential for the Proposed Project to have significant adverse impacts with respect to hazardous materials.