

# **212 SHERIDAN STREET**

**NEW CASSEL, NEW YORK**

**SECTION 11, BLOCK 45, LOTS 76 AND 77**

---

## **Analysis of Brownfield Cleanup Alternatives**

**USEPA Community-Wide Assessment Grant**

**Cooperative Agreement No. BF-9649919 (Petroleum)**

**AKRF Project Number: 240014**

### **Prepared for:**

United States Environmental Protection Agency, Region 2  
290 Broadway, 25<sup>th</sup> Floor  
New York, NY 10007

### **On Behalf Of:**

The Town of North Hempstead Community Development Agency  
51 Orchard Street  
Roslyn Heights, New York 11577

### **Prepared by:**



AKRF, Inc.  
440 Park Avenue South, 7<sup>th</sup> Floor  
New York, New York 10016  
(212) 696-0670

---

**JUNE 2024**

**TABLE OF CONTENTS**

1.0 Introduction and Background ..... 1  
2.0 Applicability and Cleanup Standards ..... 4  
    2.1 Cleanup Oversight Responsibility ..... 4  
    2.2 Cleanup Standards for Major Contaminants..... 4  
    2.3 Laws & Regulations Applicable to the Cleanup..... 4  
3.0 Evaluation of Cleanup Alternatives..... 5  
    3.1 Cleanup Alternatives Considered ..... 5  
    3.2 Criteria for Evaluation of Cleanup Alternatives ..... 5  
        3.2.1 Effectiveness ..... 5  
        3.2.2 Implementation ..... 5  
        3.2.3 Cost ..... 6  
    3.3 Recommended Cleanup Alternatives ..... 6

**FIGURE**

Figure 1 – Site Location

## **1.0 INTRODUCTION AND BACKGROUND**

AKRF, Inc. (AKRF) was retained by The Town of North Hempstead (TONH) Community Development Agency (CDA) to prepare this Analysis of Brownfield Cleanup Alternatives (ABCA) for the property located at 212 Sheridan Street in New Cassel, NY 11590 (the “Site”). The approximately 5,900-square foot Site, which is defined on the Nassau County Tax Map Section 11, Block 45, Lots 76 and 77, is developed with a vacant one-story single-family residence with a basement, a detached wooden shed, and exterior paved and landscaped areas. Historically, the Site was undeveloped until construction of the current residence circa 1965. A map showing the location of the Site is provided as Figure 1.

This ABCA was prepared to provide a summary of alternatives that were considered for the remediation of contamination identified at the Site. Previous environmental investigations conducted at the Site under the United States Environmental Protection Agency (USEPA) Community-Wide Assessment Grant Cooperative Agreement No. BF-9649919 (Petroleum) included a Phase I Environmental Site Assessment (ESA) and a Phase II Environmental Site Investigation (ESI). The purpose of completing the alternatives analysis was to identify, evaluate, and select an appropriate remedial approach to address the contamination that was identified.

### **1.1 Site Location**

The Site is located at 212 Sheridan Street in New Cassel, NY 11590. The approximately 5,900-square foot Site, which is defined on the Nassau County Tax Map as Section 11, Block 45, Lots 76 and 77, is developed with a vacant one-story single-family residence with a basement, a detached wooden shed, and exterior paved and landscaped areas. The Site is bounded to the north, south, and east by single-family residences, and to the west by Sheridan Street, followed by single-family residences. The area surrounding the Site was primarily residential and commercial, with some educational, industrial, and recreational uses.

Based on the United States Geological Survey (USGS) 7.5-Minute Quadrangle Map for Hicksville, NY (2019) and Freeport, NY (2019), the Site is approximately 120 feet above the North American Vertical Datum of 1988 (NAVD 88), an approximation of mean sea level. Topography at the Site is generally flat, with surface topography in the surrounding area sloping gently down to the south.

Based on regional topography and the USGS Long Island Depth to Water Viewer, depth to groundwater in the vicinity of the Site is estimated to be approximately 45 to 55 feet below surface grade and is expected to flow in a southerly direction. Based on its topography, anticipated depth to groundwater, and distance from tidally influenced water bodies, there are currently no concerns associated with flooding due to climate change and/or sea level rising. Future redevelopment/rehabilitation of the Site will include appropriate engineering to address the management of stormwater and other concerns related to potential localized flooding of low-lying areas.

### **1.2 Previous Site Use(s)**

Historical documentation indicated that the Site was undeveloped until construction of the current residence circa 1965.

As documented in AKRF’s September 2020 Phase I ESA, the Site was approximately 5,900-square foot property developed with a one-story single-family residence with a basement, a detached wooden shed, and exterior paved and landscaped areas.

### **1.3 Previous Cleanups / Remediations**

No information/records indicating previous environmental cleanups or remediation activities conducted at the Site were identified.

## 1.4 Site Assessment Findings

AKRF prepared a Phase I ESA for the Site in conformance with American Society for Testing and Materials (ASTM) Practice E1527-13 in June 2022. At the time of the Phase I ESA, the Site was observed to be developed with a vacant one-story single-family residence with a basement, a detached wooden shed, and exterior paved and landscaped areas. The Phase I ESA identified recognized environmental concerns (RECs), including a suspected fill and vent piping associated with a current or former petroleum storage tank; and documentation for the installation of a cesspool without proper closure documentation. Business environmental risks (BERs) included evidence of ground disturbance and a mound of potential fill material from an unknown source in the northeastern portion of the Site; the potential for the presence of asbestos-containing material (ACM), lead-based paint (LBP), lead-containing paint (LCP), polychlorinated biphenyl (PCB)-containing material, and/or mercury-containing material in the Site buildings, historic fill material, buried structures, and/or buried demolition debris at the Site; and the potential for the presence of water damage and mold within the Site building. *De Minimis* Conditions included a small area of stained soil and the presence of apparent automotive parts (brake pads, miscellaneous plastic, etc.) in the yard on the southeastern portion of the Site; and some general refuse and building materials (broken siding, glass, wood, etc.).

Based on the findings of the Phase I ESA, AKRF prepared a Phase II ESI Work Plan to outline the scope of work to sample and analyze environmental media, with a focus on collecting soil data, and depending on field observations, groundwater data. The USEPA-approved June 2023 Phase II ESI Work Plan included a Health and Safety Plan (HASP) and a Quality Assurance Project Plan (QAPP). The field work associated with the Phase II ESI was completed on April 22 and 25, 2024, and included: completion of a geophysical survey across readily accessible areas of the Site; and the advancement of six soil borings to a maximum depth of 15 feet below surface grade with continuous sample collection and laboratory analysis of six soil samples from the soil borings. Groundwater was not encountered, and therefore, groundwater samples were not collected. Soil encountered consisted of fill material extending from surface grade to depths down to approximately 7 feet below sidewalk grade and apparent native material below. The soil sample IDs and depths are summarized in Table II.

**Table II – Soil Sample Depths**

<b>Sample Location</b>	<b>Boring Depth (feet bsg)</b>	<b>Sample Depth (feet bsg)</b>
212-SB-01	15	4 – 6
212-SB-02	15	4 – 6
212-SB-04	15	5 - 7
212-SB-05	15	3.5 – 5.5
212-SB-06	15	4 - 6

Notes:

bsg = below surface grade

NA = not applicable

Samples were placed in laboratory-supplied containers within an ice-filled cooler in accordance with USEPA protocols and transported via courier with chain-of-custody (COC) documentation to Eurofins TestAmerica Inc. (TestAmerica) of Edison, New Jersey, a New York State Department of Health (NYSDOH) Environmental Laboratory Approval Program (ELAP)-certified laboratory. Samples were analyzed for Part 375 List and Target Compound List (TCL) volatile organic compounds (VOCs) by USEPA Method 8260D, semivolatile organic compounds (SVOCs) by USEPA Method 8270E, polychlorinated biphenyls (PCBs) by USEPA Method 8082A, pesticides

by USEPA Method 8081B, herbicides by USEPA Method 8151A, metals by USEPA 6020B and 7471A, and hexavalent chromium by USEPA Method 7196A.

Analytical results from the soil samples were compared to the New York State Department of Environmental Conservation (NYSDEC) Soil Cleanup Objectives (SCOs) presented in Section 6.8 of 6 New York State Codes, Rules, and Regulations (NYCRR) Part 375. Specifically, based on the potential future use of the Site (single-family residential or mixed-use commercial/residential), the Residential Soil Cleanup Objectives (RSCOs; applicable to single-family residential) and Restricted Residential Soil Cleanup Objectives (RRSCOs; applicable to mixed-use commercial/residential), developed for the protection of public health, were used for comparison. A comparison to Unrestricted Use Soil Cleanup Objectives (UUSCOs) was also included in relation to potential soil handling/disposal requirements and to assess potential remediation scenarios. No VOCs, SVOCs, PCBs, or metals were detected at concentrations above RSCOs, RRSCOs, or UUSCOs in any of the soil samples that were analyzed.

## **1.5 Project Goals/Site Reuse Plan**

To support the revitalization of community assets, the CDA intends demolish the existing structure and redevelop the Site for single-family residential. The overall project goal is to redevelop an underutilized property for the benefit of the community in an effort to improve their future and quality of life.

## **2.0 APPLICABILITY AND CLEANUP STANDARDS**

### **2.1 Cleanup Oversight Responsibility**

As no contamination was detected at concentrations above the applicable NYSDEC SCOs for the anticipated future use of the Site (single-family residential), the cleanup and redevelopment/rehabilitation activities will not be overseen by a state regulatory agency. If evidence of tanks, petroleum contamination, or other unknown contamination is identified during redevelopment/rehabilitation activities, the appropriate state regulatory agency would be notified, and the CDA will retain a qualified environmental professional (QEP) to oversee the work to ensure that all activities are conducted in accordance with applicable federal, state, and local regulations accordingly (including applicable sampling and reporting). ACM, LBP, and other pre-demolition surveys and/or abatement will be conducted by qualified licensed professionals for the respective disciplines.

### **2.2 Cleanup Standards for Major Contaminants**

The applicable cleanup standards for the Site include the NYSDEC SCOs presented in Section 6.8 of 6 NYCRR Part 375. Specifically, based on the anticipated future use of the Site (single-family residential), the RSCOs (applicable to single-family residential) developed for the protection of public health, would be applicable to the redevelopment/rehabilitation project.

### **2.3 Laws & Regulations Applicable to the Cleanup**

Laws and regulations that are applicable to this cleanup include the Federal Small Business Liability Relief and Brownfields Revitalization Act, the Federal Davis-Bacon Act, NYSDEC environmental laws, Occupation and Health Administration (OSHA) regulations, and local North Hempstead by-laws and ordinances. Federal, state, and local laws regarding procurement of contractors to conduct the cleanup will be followed. The CDA will competitively bid and retain a QEP, in accordance with the competitive procurement provisions of 40 CFR Part 31.36. In addition, all appropriate permits and approvals (e.g., notify before you dig, state notifications/permits, soil transport/disposal approvals, etc.) will be obtained prior to the work commencing.

### **3.0 EVALUATION OF CLEANUP ALTERNATIVES**

#### **3.1 Cleanup Alternatives Considered**

To address contamination identified at the Site, three different cleanup alternatives were considered as outlined below:

- Alternative 1: No Action
- Alternative 2: ACM Abatement and Demolition of the Existing Building With Retention of Foundation
- Alternative 3: ACM Abatement and Demolition of the Existing Building and Foundation

#### **3.2 Criteria for Evaluation of Cleanup Alternatives**

##### **3.2.1 Effectiveness**

- Alternative 1: No action is not effective in that it would not allow for the renovation or redevelopment of an underutilized property for the benefit of the community.
- Alternative 2: ACM abatement and demolition of the existing building would be effective as it would remove all building contaminants and allow for future redevelopment of the Site in accordance with the Town of North Hempstead Community Development Agency's goals .
- Alternative 3: ACM abatement and demolition of the existing building would be effective as it would remove all building contaminants and allow for future redevelopment of the Site in accordance with the Town of North Hempstead Community Development Agency's goals.

##### **3.2.2 Implementation**

- Alternative 1: No action could be readily implemented by leaving the Site in its current blighted state and maintaining security (e.g., site fencing, security cameras, etc.) to prevent future vandalism and/or dumping of debris/refuse in perpetuity.
- Alternative 2: ACM abatement and demolition of the existing building could be implemented as abatement and demolition contractors are readily available to do the work. Under this alternative, the aboveground portions of the existing building would be demolished following abatement and off-site disposal of the known ACM (and any suspect ACM identified in the future) in accordance with applicable federal, state, and local regulations. This alternative would also include reinforcement of the existing building foundation to support construction of a new building using the existing building's foundation.
- Alternative 3: ACM abatement and demolition of the existing building could be readily implemented as abatement and demolition contractors are readily available to do the work; however, it would be more complicated than Alternatives 1 and 2 as the existing foundation would also be demolished. Under this alternative, the existing building would be demolished following the abatement and off-site disposal of the known ACM (and any suspect ACM identified in the future) in accordance with applicable federal, state, and local regulations. This alternative would also include characterization of soil requiring excavation and off-site disposal in accordance with the requirements of the intended destination facility(ies) to support redevelopment activities; excavation of soil to support construction of the proposed new building; demolition/removal of debris,

former foundations; and fencing; and off-site disposal of soil and demolition debris in accordance with applicable federal, state, and local regulations.

### **3.2.3 Cost**

- Alternative 1: No action would require installation and maintenance of safety features at the Site (e.g., fences, security cameras, etc.) to prevent future vandalism and/or dumping of debris/refuse in perpetuity, with costs estimated to be on the order of \$50,000; there are no cleanup costs associated with this alternative.
- Alternative 2: ACM abatement would require abatement of all known/suspected ACM, demolition of the structure, and transportation and off-site disposal of ACM and non-ACM building debris. The new building construction costs (on the existing building's foundation) are estimated to be approximately \$2,000,000, with the associated ACM cleanup (abatement) and demolition work anticipated to be approximately \$500,000. Therefore, the cleanup costs for this alternative are estimated to be approximately \$500,000 (excluding new building construction costs).
- Alternative 3: ACM abatement would require abatement of all known/suspected ACM, demolition of the structure, and transportation and off-site disposal of ACM and non-ACM building debris ; demolition of the current building; characterization of any soil requiring off-site disposal; and excavation/removal of building foundation and any soil. The new building construction costs are estimated to be approximately \$2,000,000, with the associated ACM cleanup (abatement) and demolition work anticipated to be approximately \$750,000. As the soil currently meets the unrestricted use criteria (and could be reused on-site during redevelopment), the costs associated with the disposal of soil generated during the redevelopment work are expected to be negligible (little to no excess soil for disposal is expected in this scenario). Therefore, the cleanup costs for this alternative are estimated to be approximately \$750,000 (excluding new building construction costs).

## **3.3 Recommended Cleanup Alternatives**

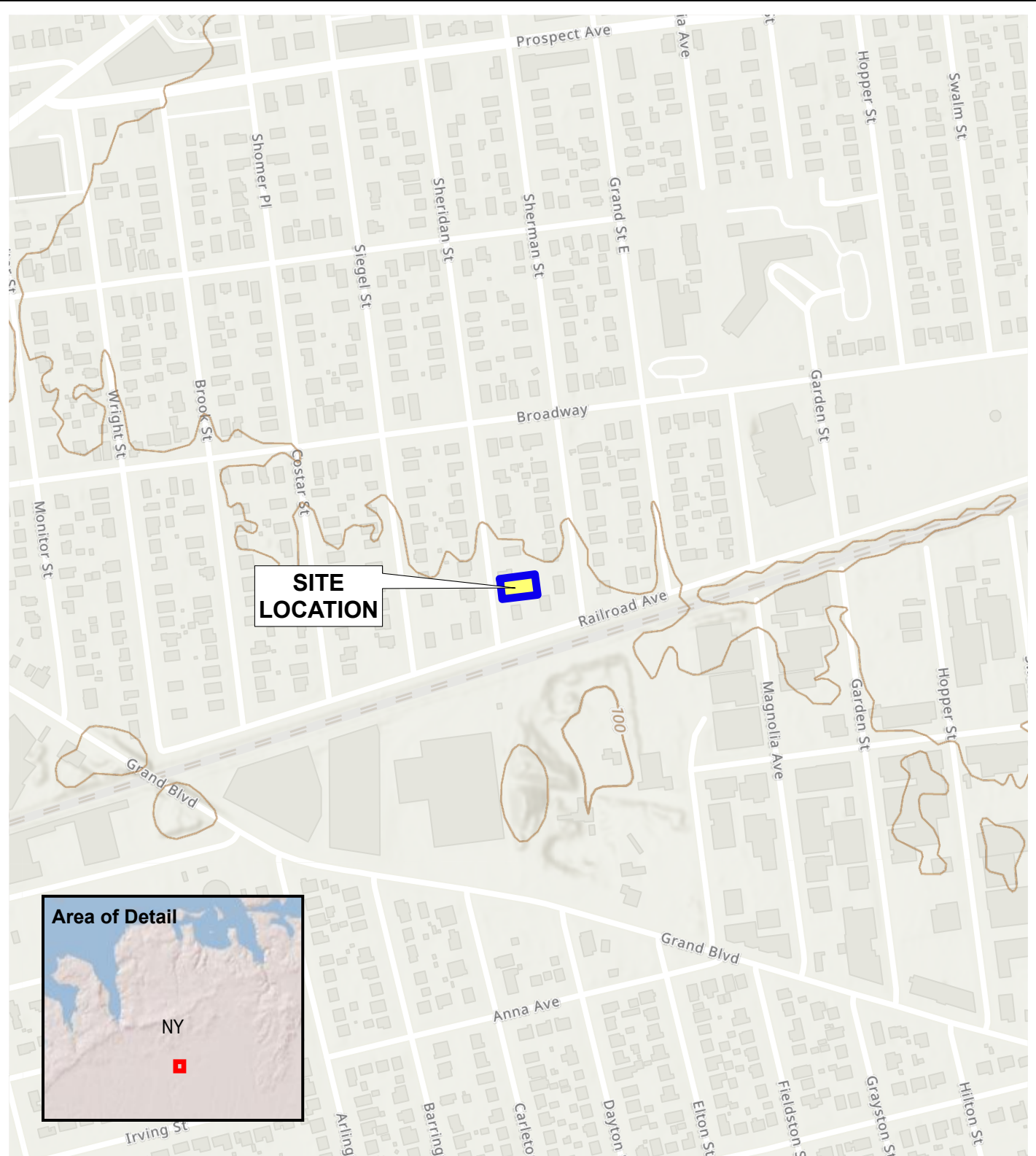
Based on an evaluation of the effectiveness, implementability, and costs associated with the three cleanup alternatives, the recommended approach is Alternative 3.

Alternative 2 remediates the Site and enables the Site to be redeveloped; however, use of the existing building foundation would limit the size and design for the future new residential building. Alternative 3 would be the most appropriate approach as it would satisfy the CDA's goal to redevelop an underutilized property with the maximum benefit for the community. As costs for Alternatives 2 and 3 are pretty comparable, Alternative 3 would be most in line with the CDA's goal.

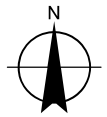


**FIGURE**

AKRF O:\Projects\240014 - NEW CASSEL EPA MULTI-PURPOSE +DOS-BOAISAR\phase II Figures 212 Sheridan St\prx5/13/2024 4:42 PM\240014 Fig 1 site location\szslus



Service Layer Credits: USGS The National Map: 3d Elevation Program, Data Refreshed January, 2024



440 Park Avenue South, New York, NY 10016

**212 Sheridan Street**  
New Cassel, New York

**SITE LOCATION**

DATE	<b>5/13/2024</b>
PROJECT NO.	<b>240014</b>
FIGURE	<b>1</b>