

# **Analysis of Brownfields Cleanup Alternatives**

## **Junior's Truck Stop**

**5627 Niagara Falls Blvd,  
City of Niagara Falls, NY**

Prepared by BRS, Inc. for Niagara County



**Niagara County**  
Center for Economic Development

April 2023

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- A. Site Location Map
- B. Summary of Public Comments and Responses



## 1 INTRODUCTION & BACKGROUND

The 1.4-acre property is located at 5627 Niagara Falls Boulevard (hereafter referred to as “the Site”), and is owned by the City of Niagara Falls. The Site was formerly occupied by Junior’s Truck Stop, with a filling station present on-Site from at least 1985 to 2016.

Niagara County has contracted Brownfield Redevelopment Solutions, Inc. (BRS), to prepare this Analysis of Brownfields Cleanup Alternatives (ABCA) in support of the EPA grant funding. The purpose of the ABCA is to:

- Identify reasonable brownfields cleanup alternatives considered for addressing the contamination identified at the site;
- Analyze the various factors influencing the selection of a preferred cleanup method, including effectiveness, implementability, costs, and sustainability;
- Select the preferred cleanup method, based on the analyses performed; and
- Provide community outreach and solicit public participation and comment on the remedial selection process prior to the final decision.

The County in coordination with the City of Niagara Falls will promote and facilitate community involvement with the environmental cleanup and site redevelopment project with the activities itemized below.

- Perform targeted outreach to notify communities of the availability of this ABCA.
- Provide an opportunity for members of the public to comment on the ABCA in a public meeting. Additional details regarding the public notification process are presented in a *Community Participation Plan* for the site.
- Prepare written responses to the comments received and document any changes made to the cleanup plans and to the ABCA as a result of the comments.

A Brownfields Cleanup Decision Memo will be prepared at the end of the public comment process, which will describe the cleanup options selected for the site. The ABCA and the Decision Memo will be included with the Administrative Record. The Administrative Record repository is available at the County Office, 6311 Inducon Corporate Drive, Sanborn, New York 14132.

The expected outcome of the project is remediation of soil and abatement of asbestos in order to facilitate redevelopment of the Site.

### 1.1 Site Description and Previous Uses

The Site is an irregular shaped parcel, approximately 1.42 acres in size, and is located south of Niagara Falls Boulevard, between 56th Street and 59th Street. The Site is currently developed with a two-story 14,690 square foot (sqft) vacant motel and restaurant located on the western portion of the Site, which was constructed in 1958 (“Building 1”), and a two-



story 2,560 sqft vacant convenience store along with associated canopies located on the eastern portion of the Site, which was constructed in 1985 ("Building 2").

Junior's Truck Stop included two (2) fuel canopies, seven (7) pump islands, and eight (8) dispensers surrounding Building 2. In addition, the Site contained five (5) diesel and gasoline underground storage tanks ("UST") which were previously located south of Building 2.

## 1.2 Surrounding Land Use

The Site is within a densely developed urban area serviced by the public water and sewer systems. Niagara Falls Boulevard is located to the north, Henry Street to the east and south, and 56th Street to the west. Land uses immediately adjacent to the Site include commercial uses, retail, and the Republic Services Pine Avenue Landfill to the north.

## 1.3 Project Goal (Reuse Plan)

The City of Niagara Falls is the current owner of the Site and is looking to redevelop it to be used for job training purposes for local residents by a nonprofit organization.

Based on previous investigations and removal actions conducted at the Site the remaining environmental concerns at the Site include remediation of soil with currently exceeds New York State Department of Environmental Conservation (NYSDEC) soil cleanup levels for volatile organic compounds (VOCs), and abatement of asbestos containing materials identified in Building 2.

The goal is to obtain closure of NYSDEC Spill No. 1808353 and to prepare Site Building 2 for building redevelopment. At a minimum, the remedy shall mitigate all significant threats to public health and the environment presented by the contamination.

## 1.4 Summary of Environmental Conditions

Between 2018 and 2019, LaBella Associates, DPC ("LaBella") completed a Phase II Environmental Site Assessment ("ESA") at the Site to assess recognized environmental conditions ("RECs") identified in the Phase I ESA prepared by Labella in 2018. The Phase I ESA findings identified a New York State (NYS) Department of Environmental Conservation (DEC) petroleum bulk storage (PBS) listing (#9-383902) at the Site for one closed UST, and five in service USTs. Other findings included a former filling station approximately 75' west of the Site from at least 1930 to 1955; several NYSDEC spill listings registered at the intersection of Niagara Falls Blvd and 56th Street which would have been near the filling station; and the potential for slab by-product to have been used beneath the parking lot base.

In summary, the Phase II ESA identified the following environmental concerns at the Site:

- During UST removal work, petroleum contamination was identified and a New York State Department of Environmental Conservation (NYSDEC) spill case (#1808353) was opened. The UST area was over-excavated to attempt to address contamination,



however, post excavation subsurface soil samples identified a total of three soil samples with volatile organic compounds (VOCs) exceedances compared to New York State Department of Environmental Conservation (NYSDEC) soil cleanup levels.

- Asbestos containing materials were identified in several samples from Site Building 2.

## 1.5 Physical Setting

The Site topography is generally flat. Soils at the subject site are identified as urban land. The parent material for soils at the subject site consist of surface covered by pavement, concrete, buildings and other structures underlain by disturbed and natural soil material. No wetlands or water bodies are present at the Site.

## 1.6 Exposure Pathways

In order for contaminants from a site to pose a human health or environmental risk, one or more completed exposure pathways must link the contaminant to a receptor (human or ecological). A completed exposure pathway consists of four elements:

- A source and mechanism of substance release;
- A transport medium;
- A point of potential human or ecological contact with the substance (“exposure point”); and
- An “exposure route”, such as dermal contact, ingestion, etc.

Preliminary evaluation indicates the following potentially completed exposure pathways related to the site in its current condition (i.e., pre-remediation):

1. **Direct contact with Soil.** Soil might be handled, inhaled or ingested by occasional on-site construction workers or trespassers. This exposure pathway will be mitigated immediately by implementation of the proposed cleanup activities, which includes excavation and offsite disposal of certain contaminated soils. Residual risk related to this pathway will be eliminated with engineering and institutional controls.
2. **Direct contact with surface water.** There is no surface water at the Site.
3. **Direct Contact with, or Ingestion of, Groundwater.** There are no current or anticipated future uses of onsite groundwater.

## 2 APPLICABLE LAWS AND CLEANUP STANDARDS

The applicable statutes, regulations and guidance of the State of New York and NYSDEC will be referenced to provide the Standards, Criteria and Guidance (SCGs) for the project. NYSDEC regulations for site remediation are codified at 6 NYCRR § 375 et. seq.



The remedy must conform to promulgated standards and criteria that are directly applicable or that are relevant and appropriate. The standards, criteria, and guidance's that will be, or will likely be, directly applicable to the Site's remediation include those listed below.

- 12 NYCRR Part 56 - Asbestos
- NYSDEC guidance document "CP-51: Soil Cleanup Guidance Policy", dated October 2010 (CP-51)

All contaminated material will be properly excavated and disposed of off-site, and the remaining native soil will be analyzed to ensure compliance with the NYSDEC CP-51 SCLs. Backfill materials will meet NYSDEC requirements for backfill at remediation sites. All asbestos containing materials will be removed from the building and the third party air monitoring firm will be responsible for asbestos clearance testing as per Code Rule 56.

The effective implementation of the NYSDEC regulations will be managed by a qualified environmental professional, to be retained by the City of Niagara Falls.

For any soil disturbing activities a Community Air Monitoring Plan (CAMP) will be developed in accordance with New York State Department of Health (NYSDOH).

### 3 EVALUATION OF CLEANUP ALTERNATIVES

This section identifies various reasonable remediation alternatives that were considered in response to the environmental contamination issues at the site. The following potential remedial alternatives were considered:

- Alternative No. 1) No Action
- Alternative No. 2) Engineering and Institutional Controls, Abatement of Asbestos
- Alternative No. 3) Removal of Contaminated Soil, Abatement of Asbestos

The following evaluation criteria were considered in comparing the remedial alternatives.

- A. Effectiveness in providing compliance with NYSDEC regulations and increased protectiveness to public health and the environment;
- B. Implementability of the considered alternative;
- C. Cost of the considered alternative; and
- D. Sustainability and resilience considerations.

#### 3.1 Alternative No. 1 - No Action

If no environmental cleanup remedy were performed at this site:

- The site would remain out of compliance with NYSDEC's regulations; and
- The intended reuse of the site for job training purposes for local residents by a nonprofit organization would not be possible. Currently, the property is vacant and underutilized due to the encountered contamination.



### 3.1.1 Effectiveness

The “no action” alternative is not effective in that it does not provide for compliance with NYSDEC regulations and it fails to provide for the beneficial reuse of the Site.

### 3.1.2 Sustainability and Resilience

The “no action” approach would not meet project remediation goals because the contamination would remain in place, untreated, and without a barrier. As such, the “no action” approach would present a continuing risk to the public. Based on this, evaluation of the approach with regards to other sustainability criteria is not relevant.

### 3.1.3 Implementability

The “no action” alternative is technically feasible, although the presence of untreated soil would not be in compliance with NYSDEC regulations

### 3.1.4 Operation and Maintenance

Because there is no remedy implemented, there would also be no operation and maintenance requirements at the site.

### 3.1.5 Institutional Controls

As no action is taking place under this alternative, no institutional controls are proposed.

### 3.1.6 Cost

There would be no costs associated with this alternative.

## 3.2 Alternative No. 2 – Engineering and Institutional Controls, Abatement of Asbestos

Under this alternative, the remedial action will include engineering and institutional controls (cap and deed notice). Proposed capping remedies will default to two feet of clean fill soil cap with a visual barrier between clean fill and impacted materials. Materials to be excavated as part of the site grading and redevelopment, estimated at 22,990 tons, will be characterized and disposed of at an appropriate facility.

This would be followed by recording of a deed notice and virtual groundwater classification exemption area (CEA) as Institutional Controls. This combination of remedies will prevent exposure to residual site contaminants. Further details of the remediation plan would include:

- Remediation of shallow soil contamination via excavation to make room for the emplacement of the soil cap.
- An engineered soil cap will be designed and installed site-wide to provide a barrier to the contaminants in site soils. Permeable materials would include imported clean soil and landscape material.
- Community Air Monitoring Plan (CAMP) will be developed.



- Restore site with topsoil and seed and/or asphalt as appropriate.
- Excavated soils will be sampled and characterized in accordance with the requirements of the designated disposal facility. The tasks will also include the emplacement of clean backfill.
- The ongoing protectiveness of the engineering controls will be ensured by development of, and adherence to, an Operation and Maintenance Plan. Ongoing operation and maintenance of the cap will be performed.
- The Institutional Controls will consist of a deed notice attached to the deed in perpetuity. The deed notice will provide notice of the contaminants and the concentrations that were left in place, and controlled by the cap.

Selection of this alternative will result, upon completion, in restricted future use of the site.

### 3.2.1 Effectiveness

The Institutional and Engineering Controls approach does not physically remove all site soil contaminants. However, this alternative would effectively achieve project remediation goals by:

- Disruption of the pathway of contaminated soils to the outside environment;
- Achieving the applicable remediation standards and technical and administrative compliance with the NYSDEC site remediation regulations;

### 3.2.2 Sustainability and Resilience

This criterion evaluates the degree to which the remedial alternative may reduce greenhouse gas discharges, reduce energy use, employ alternative energy sources, reduce volume of wastewater to be disposed, reduce volume of materials to be taken to a landfill, and/or allow for the reuse or recycling of materials during cleanup is considered, where applicable.

This alternative limits the excavation of site soil and transport by truck to offsite disposal facilities, thereby reducing the fossil fuel energy use, and associated greenhouse gas discharges associated with that task.

### 3.2.3 Implementability

Cap placement as a type of remedy is a widely used and accepted practice for remediating impacted contaminated soils.

The City and/or its consultant will retain a contractor that is licensed, qualified, and OSHA-certified to perform work on hazardous materials sites.

### 3.2.4 Operation and Maintenance

Operation and Maintenance on the installed soil cap should include the following:



- Routine inspections;
- Vegetation maintenance (grass mowing and weed control); and
- Written O&M Plan that includes a discussion including but, not limited to; soil cover maintenance, reporting, maintenance agreement, a utility plan should future utilities or building be proposed at the Site, and fence maintenance (if applicable).

### 3.2.5 Institutional Controls

This alternative will require the following Institutional Controls:

- A Deed Notice would be required because contaminants expected to remain below the soil cap.

### 3.2.6 Cost

The costs for completing remediation under this approach were estimated using the following elements and assumptions:

- 1) Retain environmental engineering firm;
- 2) Project and Grant Management tasks, including public notification;
- 3) Prepare project specifications and bid documents;
- 4) Conduct procurement process;
- 5) Abatement of Asbestos Containing Materials;
- 6) Procurement and testing of clean fill cap materials;
- 7) Installation of engineered cap;
- 8) Site restoration, including vegetative cover;
- 9) Prepare Deed Notice;
- 10) Prepare Final Engineering Report (FER) and other regulatory reporting requirements;
- 11) Prepare Quality Assurance, and Health and Safety deliverables.

The estimated cost for this cleanup alternative is \$101,190.00.

### 3.3 Alternative No. 3 – Removal of Contaminated Soil, Abatement of Asbestos

Under this alternative, the remedial action excavation is planned to occur at the two hotspot areas within the previous excavation area from the removal of Tank #s 2 through #5. Material excavated from the Site will be screened for possible petroleum contamination and segregated into piles for either re-use as backfill or proper disposal. The clean recycled concrete aggregate (RCA) that was used to backfill the original excavation will be removed to access the bottom of the excavation and staged for reuse/backfill for the excavation.



Selection of this alternative is expected to result, upon completion, in unrestricted future use of the site. No engineered cap would be installed, as no contaminated materials would remain on site.

### **3.3.1 Effectiveness**

This alternative would be immediately effective by removal of the contaminant source. The remedial action should result in unrestricted use of the site.

### **3.3.2 Sustainability and Resilience**

The site-wide remediation alternative compares unfavorably to Alternative 2 (described in Section 3.2) with regard to sustainability metrics. The approach would result in increased energy use, greenhouse gas emissions, and landfill disposal volume.

This approach compares favorably to Alternatives 1 and 2 in resilience metrics, such as the continuing protectiveness of the remedy in light of reasonably foreseeable changing climate conditions and allows for no restrictions on future land use. This alternative would be ideal in that there would be unrestricted use of the site and no cap maintenance.

### **3.3.3 Implementability**

This alternative is feasible and implementable. This approach will involve the work elements described in Section 3.2, with the exception of the emplacement of a clean soil cap and deed notice. In addition all excavated areas will be backfilled with clean material.

### **3.3.4 Operation and Maintenance**

This approach, upon successful implementation, would allow for unrestricted use of the site. No ongoing operation and maintenance of remedial systems would be required.

### **3.3.5 Institutional Controls**

This approach, upon successful implementation, would provide for the removal of all contaminated soil from the site. No Deed Notice is required.

### **3.3.6 Cost**

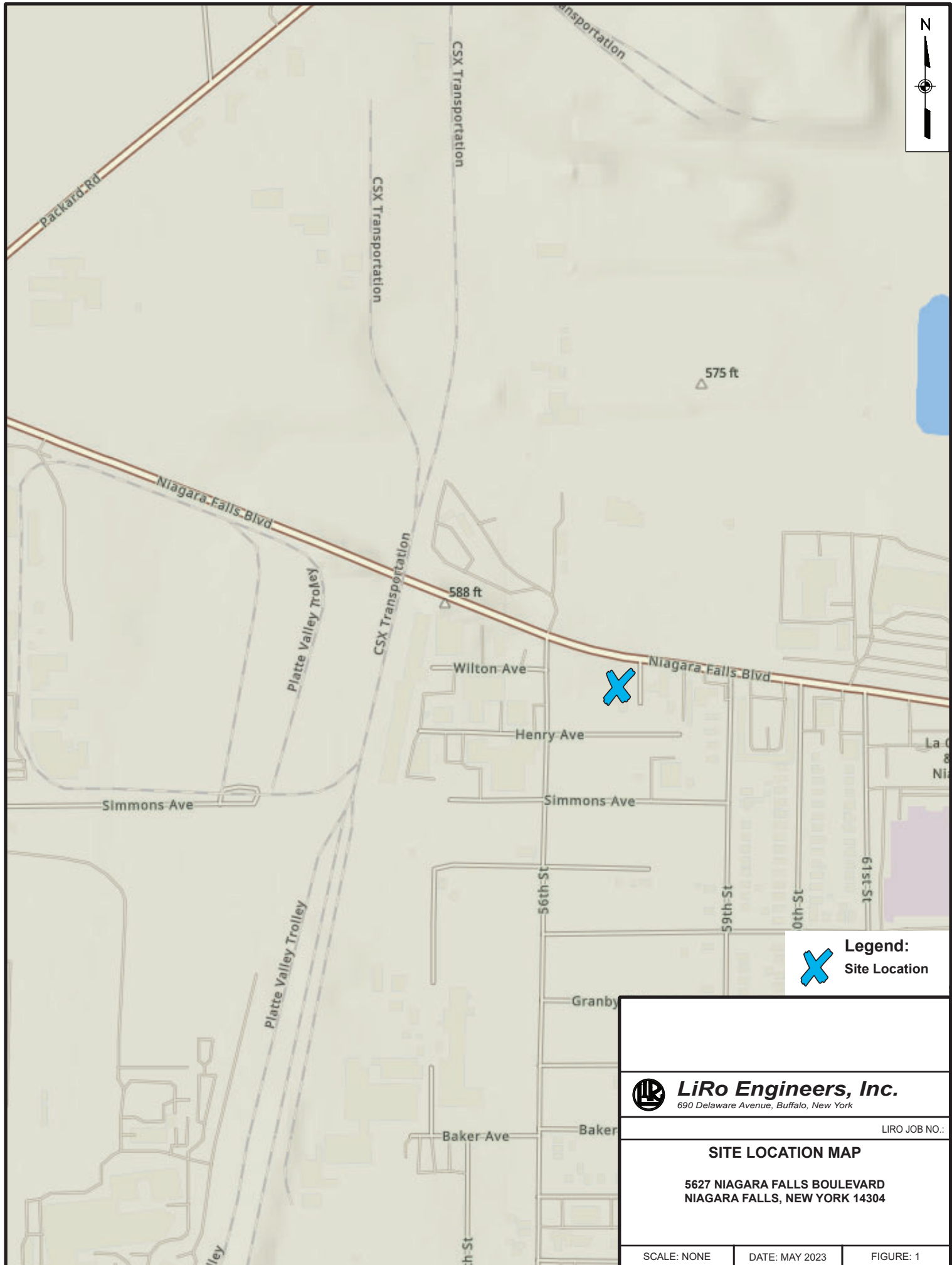
Total project costs for this alternative are estimated at \$114,030.00.

## **3.4 Preferred Alternative**

The preferred alternative is Alternative No. 3 – “Removal of Contaminated Soil, Abatement of Asbestos”. Soil excavation is a proven method, easily and quickly implementable, environmentally effective, and cost-effective. Excavation equipment is readily available. Soil excavation and emplacement of clean fill material is accepted by the NYSDEC as a remedy for soil contamination.



**Attachment A**  
**Site Location Maps**



 **Legend:**  
Site Location

 **LiRo Engineers, Inc.**  
690 Delaware Avenue, Buffalo, New York

LIRO JOB NO.:

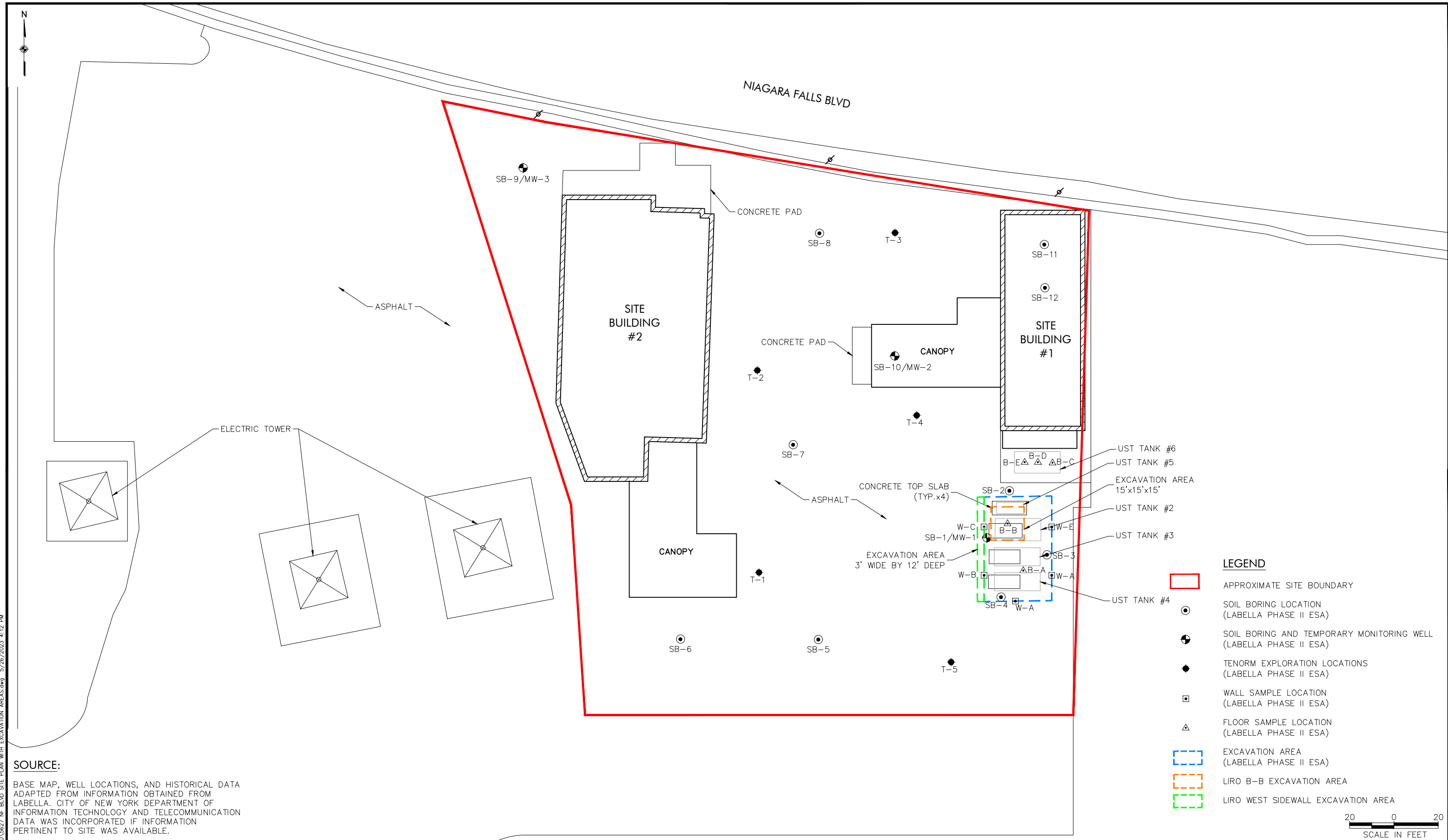
**SITE LOCATION MAP**

**5627 NIAGARA FALLS BOULEVARD  
NIAGARA FALLS, NEW YORK 14304**

SCALE: NONE

DATE: MAY 2023

FIGURE: 1



**SOURCE:**  
 BASE MAP, WELL LOCATIONS, AND HISTORICAL DATA ADAPTED FROM INFORMATION OBTAINED FROM LABELLA, CITY OF NEW YORK DEPARTMENT OF INFORMATION TECHNOLOGY AND TELECOMMUNICATION DATA WAS INCORPORATED IF INFORMATION PERTINENT TO SITE WAS AVAILABLE.

**WARNING**  
 IT IS A VIOLATION OF SECTION 7209, SUBDIVISION 2, OF THE NEW YORK STATE EDUCATION LAW FOR ANY PERSON, OTHER THAN THOSE WHOSE SEAL APPEARS ON THIS DRAWING, TO ALTER IN ANY WAY AN ITEM ON THIS DRAWING. IF AN ITEM IS ALTERED, THE ALTERING ENGINEER SHALL AFFIX TO THE ITEM HIS SEAL AND THE NOTATION "ALTERED BY" FOLLOWED BY HIS SIGNATURE AND THE DATE OF SUCH ALTERATION, AND A SPECIFIC DESCRIPTION OF THE ALTERATION.

NO.	DATE	DESCRIPTION
REVISIONS		

**LiRo Engineers, Inc.**  
 890 Delaware Ave.  
 Buffalo, New York

PROJ. ENG.:	CLIENT:	 <b>Office of General Services</b> DESIGN & CONSTRUCTION
DESIGNED BY:		
CHECKED BY:		
DRAWN BY:	DATE: MAY 2023	

JOB TITLE AND LOCATION: 5627 NIAGARA FALLS BOULEVARD NIAGARA FALLS, NEW YORK 14304	LIRO JOB NO.: SHEET 3 OF 3 FIGURE NO. 3
DRAWING TITLE: SITE PLAN WITH EXCAVATION AREAS	

L:\5627 Niagara Falls Blvd - MCI\CAD\5627 NF Blvd SITE PLAN WITH EXCAVATION AREAS.dwg 5/26/2023 4:12 PM

**ATTACHMENT B**  
**Summary of Public Comments and Responses**

In accordance with the U.S. Environmental Protection Agency's community involvement requirements, the Niagara Falls City Council solicited comments from the public regarding the draft Analysis of Brownfields Cleanup Alternatives (ABCA) documents for Junior's Truck Stop at 5627 Niagara Falls Blvd, City of Niagara Falls, New York.

The draft ABCAs were available for public review at the Niagara County office. The public was notified that the ABCA were available for public review and the project was publicly presented at the City Council meeting on April 5, 2023.

The public comment period closed May 5, 2023. Niagara County has received no comments from the public that require revisions to the ABCA.

