EXPLANATION OF SIGNIFICANT DIFFERENCE
ATLAS GRAPHICS SITE

Town of North Hempstead / Nassau County / Site No. 13-00-43B / March 2025

Prepared by the New York State Department of Environmental Conservation
Division of Environmental Remediation

1.0 INTRODUCTION

The purpose of this notice is to describe the progress of the cleanup at the *Atlas Graphics* site and to inform the public about a change in the remedy for the Site. The Atlas Graphics site is located at 567 Main Street, New Cassel Industrial Area (NCIA), Town of North Hempstead, Nassau County. On February 29, 2000, the New York State Department of Environmental Conservation issued a Record of Decision (ROD) which selected a remedy to clean up the site.

At the time of the February 2000 ROD, the potential for human exposure to volatile organic compound (VOC) contamination through the soil vapor intrusion (SVI) pathway was not yet a fully recognized concern. Subsequently, the New York State Department of Health (NYSDOH) developed and released guidance for Evaluating Soil Vapor Intrusion in the State of New York (October 2006, with updates). NYSDEC incorporated the soil vapor intrusion guidance into its guidance document, DER-10, Technical Guidance for Site Investigation and Remediation (May 2010). As a result of the new guidance, NYSDEC now requires vapor intrusion evaluations at remedial sites with VOC (and breakdown compounds) contamination and has been re-evaluating previously remediated remedial sites with VOC contamination. While the original remediation at the site was deemed successful at the time of its implementation, through subsequent SVI evaluation, the Department has determined that additional protective measures are required to bring the site into compliance with current NYSDOH and Department guidance, principally for the protection of public health of the site building occupants.

The Original Remedy is described in detail in Section 2.0 below. The changes to the original remedy are as follows:

1. Cover System:
A site cover currently exists in areas not occupied by buildings and will be maintained to allow for commercial use of the site, although land use is subject to local zoning laws. The site cover may include buildings, paved surface parking areas, sidewalks or soil where the upper one foot of exposed surface soil meets the applicable soil cleanup objectives (SCOs) for commercial use. Any fill material brought to the site must meet the requirements for the identified site use as set forth in 6 NYCRR Part 375-6.7(d).

2. Vapor Mitigation:
Any on-site buildings will be required to have a sub-slab depressurization system (SSDS), or other acceptable measures, to mitigate the migration of vapors into the building from soil. A vapor mitigation system was installed on the on-site building and has been operational since March 2023, which satisfies this requirement.

3. Engineering and Institutional Controls:
Imposition of an institutional control in the form of an Environmental Easement and a Site Management Plan, as described below, will be required.

Imposition of an institutional control in the form of an Environmental Easement for the controlled property which will:

- require the remedial party or site owner to complete and submit to the Department a periodic certification of institutional and engineering controls in accordance with 6 NYCRR Part 375-1.8(h)(3);
- allow the use and development of the controlled property for commercial use as defined by 6 NYCRR Part 375-1.8(g), although land use is subject to local zoning laws;
- restrict the use of groundwater as a source of potable or process water, without necessary water quality treatment as determined by the NYSDOH or County DOH; and
- require compliance with the Department approved Site Management Plan.

4. Site Management Plan:
A Site Management Plan is required, which includes the following:

a. an Institutional and Engineering Control Plan that identifies all use restrictions and engineering controls for the site and details the steps and media-specific requirements necessary to ensure the following institutional and/or engineering controls remain in place and effective:

Institutional Controls: The Environmental Easement discussed in Paragraph 3 above.

Engineering Controls: The Cover System as discussed in paragraph 1 and the SSDS as discussed in Paragraph 2, above.

This plan includes, but may not be limited to:

- an Excavation Work Plan which details the provisions for management of future excavations in areas of remaining contamination;
- provision should redevelopment occur to ensure no soil exceeding protection of groundwater concentrations will remain below storm water retention basin or infiltration structures;
- descriptions of the provisions of the environmental easement including any land use, and groundwater restrictions;
- a provision that should a building foundation or building slab be removed in the future, a cover system consistent with that described in Paragraph 1 above will be placed in any areas where the upper one foot of exposed surface soil exceed the applicable SCOs;
- provision for additional soil sampling and/or remediation in the event that soils beneath the slab of the building become accessible in the future;
- provisions for the management and inspection of the identified engineering controls;
- maintaining site access controls and Department notification; and
- the steps necessary for the periodic reviews and certification of the institutional and/or engineering controls.

b. a Monitoring Plan to assess the performance and effectiveness of the remedy. The plan includes, but may not be limited to:

- monitoring of soil vapor and indoor air to assess the performance and effectiveness of the remedy;
- a schedule of monitoring and frequency of submittals to the Department;

- monitoring for vapor intrusion for any occupied existing or future buildings on the site, as may be required by the Institutional and Engineering Control Plan discussed above.

c. an Operation and Maintenance (O&M) Plan to ensure continued operation, maintenance, optimization, monitoring, inspection, and reporting of any mechanical or physical components of the remedy. The plan includes, but is not limited to:
- procedures for operating and maintaining the remedy; and
- compliance inspection of the system to ensure proper O&M as well as providing the data for any necessary reporting.

This Explanation of Significant Difference (ESD) will become part of the Administrative Record for this Site. The information here is a summary of what can be found in greater detail in documents that have been placed in the following repositories:

DECinfo Locator: https://www.dec.ny.gov/data/DecDocs/130043B/

Westbury Memorial Public Library, 445 Jefferson St., Westbury, NY 11590
Phone: (516) 333-0176
Hours: 9AM-9PM M-F, 9AM-1PM Sat.

NYSDEC Region 1- Office, SUNY Stony Brook, 50 Circle Drive, Stony Brook, NY 11790-3409
Attention: Bill Fonda, Public Participation specialist
Phone: (631) 444-0350

2.0 Site Description and Original Remedy

2.1 Site History, Contamination, and Selected Remedy

Site Location:

The site is located at 567 Main Street, at the corner of Main and Swalm Streets in the New Cassel Industrial Area, Town of North Hempstead, Nassau County. The site is listed in the Registry of Inactive Hazardous Waste Disposal Sites in New York State as Site #130043B.

Site Features:

The site is approximately one acre in size and is occupied by a two-story building. The remainder of the site not within the building footprint is paved.

Current Zoning:

The site is zoned for industrial use. The surrounding parcels are currently used for a combination of commercial and industrial purposes. The nearest residential area is located approximately 100 yards north of the site (north of the Long Island railroad right of way).

Past Site Uses:

The building was built in 1950 and was initially used as a warehouse. In 1977, the property was purchased by Atlas Graphics Inc, which operated a photo engraving manufacturing operation, and used a reported

312 gallons per year of trichloroethylene (TCE) as part of its operations. In 1977, there was a documented discharge of approximately 50 gallons of TCE to an on-site cesspool located at the southwest corner of the building. The cesspool collapsed in 1978. The building was connected to the Nassau County sewer system in November of 1980, and the cesspool was abandoned.

Site Geology and Hydrogeology:

The site is underlain by the upper glacial aquifer which consists of mixed fine to coarse silty sands, with clay lenses and occasional gravel deposits. Groundwater is approximately 65 feet below ground surface (bgs) and the groundwater flow is south-southwest.

Nature and Extent of Contamination:

Prior to remediation, the Department conducted a remedial investigation (RI) to determine the nature and extent of on-site soils and groundwater contamination in March of 1999. The RI established that the site contaminants of concern (COCs) were TCE; tetrachloroethylene (PCE), acetone; benzene; 1,1-dichloroethylene (1,1-DCE); 1,1 dichloroethane (1,1-DCA); 1,1,1-trichloroethane (1,1,1-TCA) and toluene. TCE was the dominant contaminant in soils with the highest concentration of TCE, 7.6 parts per million (ppm), found between 10 and 12 feet bgs in the abandoned cesspool located near the southwest corner of the building.

Prior to remediation, groundwater was also found to be contaminated with VOCs. PCE was the dominant groundwater contaminant, with a maximum concentration of 510 parts per billion (ppb). TCE was found up to 290 ppb, and 1,1,1-TCA was found up to 100 ppb.

Components of the Original Remedy are as follows:

In February of 2000 the NYSDEC issued a ROD for Operable Unit 01 – On-site Soils and Groundwater. As described in the ROD, the remedy selected to address the contaminants of concern at the site were based on the following criteria: (1) protection of human health and the environment; (2) compliance with New York State standards, criteria and guidance; (3) short-term effectiveness; (4) long term effectiveness and permanence; (5) reduction of toxicity, mobility or volume; (6) implementability; and (7) cost effectiveness.

Potential remedial alternatives for the site were identified, screened and evaluated in the Feasibility Study (FS) report dated September 1, 1999. Based on the results of the RI and the evaluation of alternatives presented in the FS, a remedy was selected, which was summarized in the ROD as follows:

1. A remedial design program to verify the components of the conceptual design and provide the details necessary for the construction, operation and maintenance, and monitoring of the remedial program. Any uncertainties identified during the RI/FS will be resolved.

2. Installation of air sparge injection wells to introduce air into the groundwater and unsaturated soil promoting volatilization of VOC contamination.

3. Installation of vapor extraction wells to capture contaminants volatized from the groundwater and unsaturated soils.

4. Installation of activated carbon filters for treatment of volatilized contaminants prior to release to the

atmosphere.

5. Semiannual sampling of three existing groundwater monitoring wells will be conducted to monitor the effectiveness of the system. The monitoring results will be reviewed annually to determine whether additional actions are necessary. This monitoring will also provide the data necessary to determine if the system has reached its objectives and can be deactivated, and

6. Implementation of institutional controls which included the recording of deed restrictions to restrict the future use of groundwater at the site.

7. Off-site (downgradient) groundwater contamination will be addressed as a part of the overall investigation of the groundwater contamination.

3.0 CURRENT STATUS

The February 2000 ROD required Air Sparging/Soil Vapor Extraction (AS/SVE) to remediate on-site soil and groundwater contamination. Installation of this remedy was completed by the site owner under an Order on Consent in October 2000 and the AS/SVE system was operated until November 2003. In May 2004 the site owner's consultant submitted a Site Closure Report, which evaluated the effectiveness of the selected remedy and found VOC concentrations in groundwater to be much reduced. Based on these results the remediation was deemed complete.

The current Site owner (H.D.P Printing Industries Corp.) entered into an Order on Consent and Administrative Settlement with the Department dated February 12, 2021 ("Consent Order"). The Consent Order requires the submission of a Soil Vapor Intrusion (SVI) Work Plan as an initial work plan. The Consent Order provides for the submission of additional or supplemental Work Plans.

An environmental easement was executed for the site in July 2024. A site cover currently exists across the entire site and will be maintained to allow for commercial use of the site, although land use is subject to local zoning laws. A vapor mitigation system was installed on the on-site building and has been operating since March 2023.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCE

4.1 New Information

As the discovery and understanding of SVI evolved, sites were required to be evaluated for potential human exposure to site-related contamination via SVI pathway. Therefore, in 2008 five locations on the Atlas Graphics site were sampled for VOCs in soil vapor. PCE concentrations were found up to 12,200 micrograms per cubic meter (ug/m^3) and TCE concentrations up to 21,000 ug/m^3, were detected in on-site soil vapor samples. In 2010, three sub-slab, two indoor air and one ambient air sample were taken at the Atlas Graphics building. TCE concentrations up to 28 ug/m^3 were detected in indoor air exceeding the at the time guideline of 5 ug/m^3. TCE was detected in sub-slab samples in concentrations up to 31,000 ug/m^3. In a follow up March 2021 investigation, two sub-slab and two indoor air samples were taken at the site building. TCE was detected in indoor air at concentrations up to 1.9 ug/m^3. PCE and TCE were detected in sub-slab soil vapor in concentrations up to 4,200 ug/m^3 and 31,000 ug/m^3 respectively. Based on this data, the NYSDOH recommended actions be taken to mitigate potential exposures to SVI in the on-site building.

4.2 Comparison of Changes with Original Remedy

While the original soil removal and subsequent AS/SVE remedy was deemed successful, new information indicates that some VOC contamination remains at the site which has the potential to impact the indoor air quality of the on-site building. The additional remedial measures outlined in this ESD will ensure the site is protective of public health and the environment.

5.0 More Information

Access project documents online through the DECinfo Locator:
https://www.dec.ny.gov/data/DecDocs/130043B/

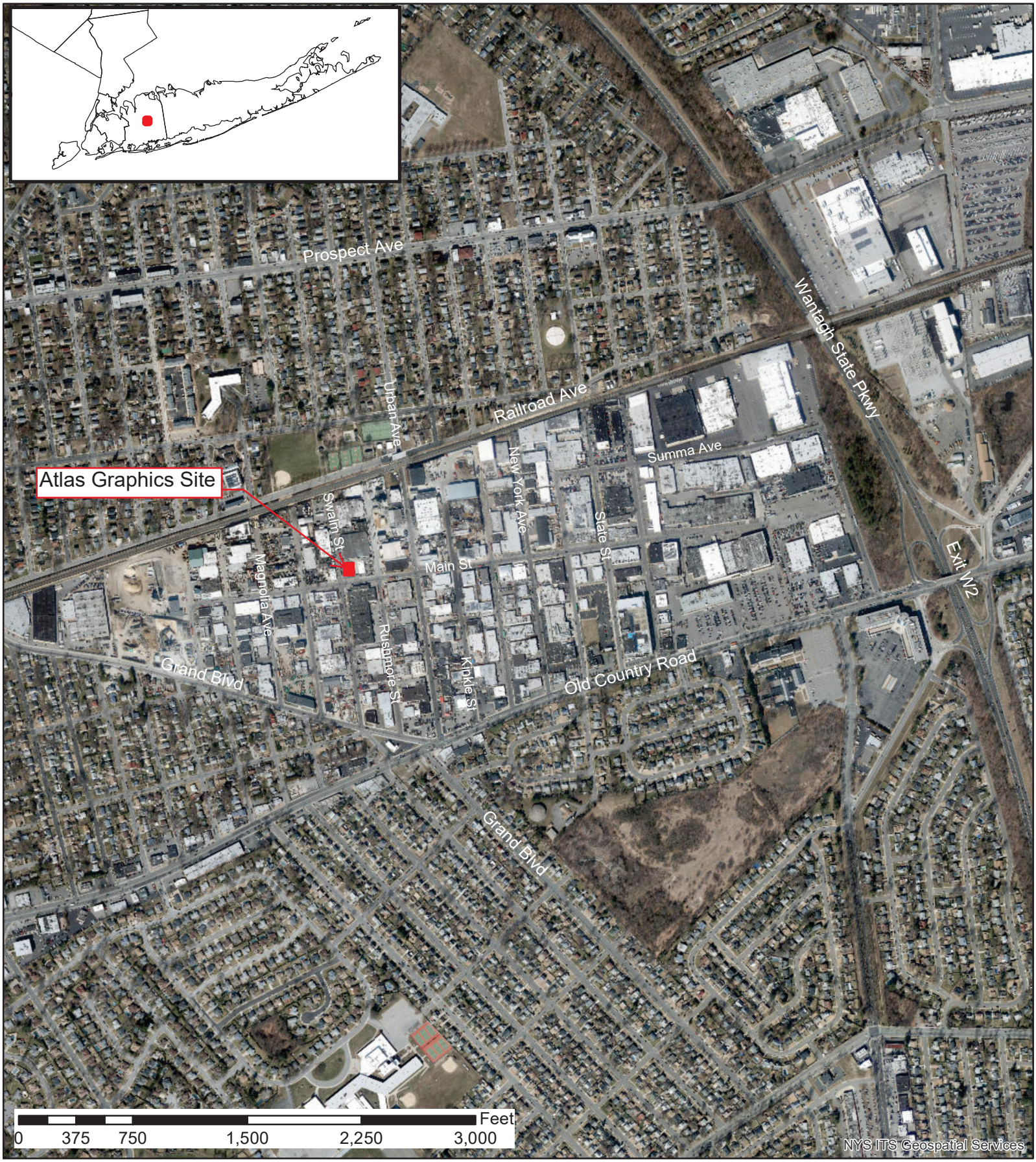
For questions regarding the remedial program please contact the DEC's project manager. For any health-related questions, please contact the DOH's project manager.

Project-Related Questions
Joseph Jones, Project Manager
NYSDEC
625 Broadway, 12th floor
Albany, NY 12233-7015
(518) 402-9613
Joseph.jones@dec.ny.gov

Project-Related Health Questions
Michele Dolan
NYSDOH
Center for Environmental Health
Corning tower, Rm 1787
Albany, NY 12237
(518) 402-7883
BEEI@health.ny.gov

DECLARATION

The selected remedy is protective of public health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.



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Atlas Graphics Site- 130043B

567 Main Street
New Cassel, NY 11500
Town of North Hempstead, Nassau County

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Figure 1- Site Location Map

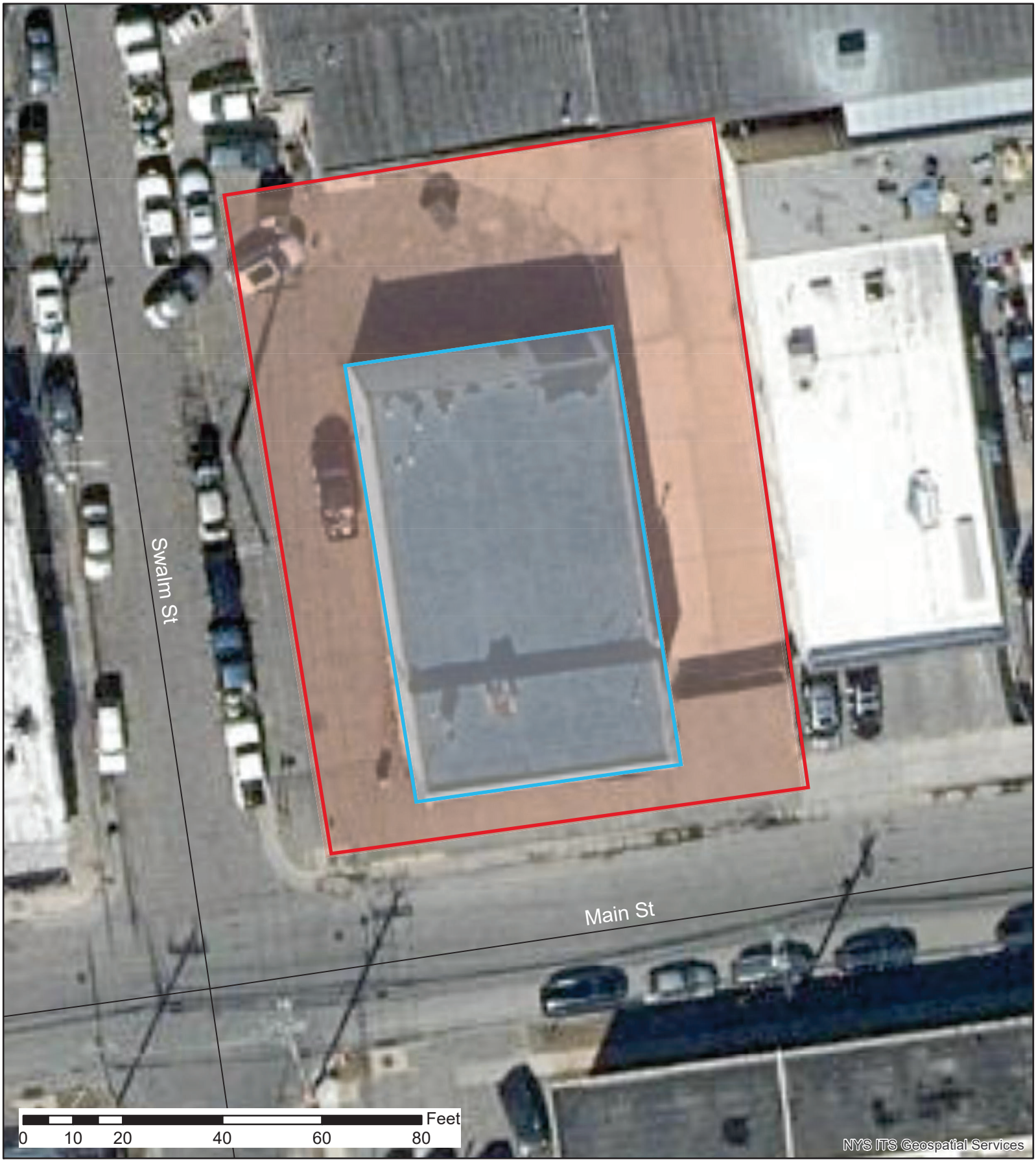

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Figure 2- Remedial Measures

9/6/2024

Legend

- Site Boundary and Extent of Site Cover System
- Extent of Soil Vapor Intrusion Mitigation System