

REMEDIAL ACTION WORK PLAN

**202 FRANKLIN STREET
OLEAN, NEW YORK 14760**

NYSDEC SITE NUMBER C905043

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Project No.: 4884S-13

Date: August 2017

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1.0 INTRODUCTION

This Remedial Action Work Plan, prepared by Day Environmental, Inc. (DAY) on behalf of Silence Dogood, LLC (the Owner), describes proposed remedial actions to be undertaken at an approximate 5.159 acre parcel located at 202 Franklin Street, City of Olean, County of Cattaraugus, New York (Site). The proposed remedial actions will be completed under the New York State (NYS) Brownfield Cleanup Program (BCP) administered by New York State Department of Environmental Conservation (NYSDEC) in accordance with Brownfield Cleanup Agreement (BCA) Index # C905043-05-14, which was executed on May 22, 2014. As outlined in the BCA, the Owner is a Volunteer with respect to the requirements of the BCP. A Project Locus Map is provided as Figure 1.

1.1 Objectives

The objectives of the work describe herein will be to:

1. Remove one approximate 8,000 gallon capacity steel underground storage tank (UST), encountered during the Remedial Investigation (RI), adjacent to the southwestern corner of the Site, to assess subsurface materials in the immediate vicinity of the UST for indications of impacts and/or other contaminants, and to remove impacted soil from the subsurface (if encountered during removal of the UST).
2. Excavate, remove, and dispose of metal waste fill material from locations near the northern property line of the Site. It is estimated that the fill material extends from the ground surface to an approximate depth of 1.5 feet (ft.) below ground surface (bgs.) and may include reworked soil containing large chunks of metal, rusted wire and bricks. A sample of this fill was collected during the RI, and submitted for analytical laboratory testing. The sample contained concentrations of arsenic, barium, cadmium, copper and lead that exceeded Commercial SCO. Therefore, this material is suspected to be a potential source of impact to Site groundwater.
3. Complete clearing and grubbing of vegetation, removal of scrap metal where encountered above ground surface, surface grading, placement of import aggregate material, etc. in preparation for further remedial actions (i.e., cover installation) and possible site development to be completed in 2018.

The work is intended to mitigate possible source areas in a timely manner, and to expedite future remedial activities. As necessary, a supplemental remedial action work plan(s) will be provided to describe the implementation of the remainder of remedy for the Site. The locations of the UST, metal waste fill material, and the area of anticipated clearing and grubbing are shown on Figure 2.

1.2 Applicable Project Standards, Criteria and Guidance

Applicable standards, criteria and guidance (SCG) values that were used for this work are outlined below:

- Appropriate SCO and other guidance as set forth in 6 NYCRR Part 375-3 Brownfield Cleanup Program dated December 14, 2006.

- Appropriate Soil Cleanup Levels (SCL) and other guidance as set forth in NYSDEC Policy CP-51/Soil Cleanup Guidance dated October 21, 2010.
- Guidelines referenced in the NYSDEC document titled *DER-10 Technical Guidance for Site Investigation and Remediation*, May 2010.
- *Permanent Closure of Petroleum Tanks* dated January 20 1987 and modified July 19, 1998 and December 3, 2003

2.0 BACKGROUND

The Site is located in an industrial-use urban area in the Northwest Quadrant district of the City of Olean, Cattaraugus County, New York, and it is within the New York State Department of State (NYS DOS) Brownfield Opportunity Area (BOA) boundaries. The Site is bound to the north by the Interstate I-86 right-of-way (ROW), to the east by an athletic field followed by a residential neighborhood, to the south by an industrial facility with a railroad ROW beyond, and to the west by a railroad ROW with industrial properties beyond. An approximate 1.83-acre portion of the Site is developed as a paved parking lot that services the industrial facility located adjacent to the south (i.e. 211 Franklin Street). The Site was used for industrial purposes since at least 1909, until about 1962 when the buildings were demolished.

The findings of a RI completed for the Site are presented in a report titled, *Remedial Investigation Alternatives Analysis Report, 202 Franklin Street, City of Olean, Cattaraugus County, New York, BCP Site Number: C905043*, dated May 2016. As part of the RI scope of work, AMEC Environment and Infrastructure, Inc. (AMEC) completed a geophysical survey over portions of the Site. The geophysical survey was conducted to evaluate the potential presence of USTs and/or other buried structures (i.e., identified as geophysical anomalies) that may have been formerly utilized at the Site, and which could represent an environmental concern.

To evaluate the source of the geophysical anomalies identified by AMEC, various test pits and/or test borings were advanced during the RI study. Test pit TP-08, which was advanced to a depth of approximately 12.0 ft. bgs to assess a geophysical anomaly identified by AMEC as anomaly M, encountered a UST between depths of about 4 ft. bgs and 10.5 ft. bgs. Test Pit TP-05, which was advanced to a depth of approximately 12.0 ft. bgs, to assess a geophysical anomaly identified by AMEC as anomaly J, encountered reworked soil containing large chunks of metal, rusted wire and bricks. [Note: Geophysical anomaly J is a generalized area where eleven distinct and relatively close areas were identified that emitted responses that were indicative larger buried metal objects (e.g., USTs or similar). As such, the eleven distinct areas (refer to Figure 2) could represent separate areas of buried material within anomaly J. Test pit TP-05 was advanced in one of the eleven areas identified in anomaly J.]

The UST encountered in TP-08 contained approximately 1 inch of clear liquid and residue that emitted an odor similar to rubbing alcohol. A sample of this material contained detectable concentrations of acetone and alcohol, and a maximum PID reading of 485.3 ppm was measured in the air space of a pipe exiting the tank. This UST is approximately 33 ft. long with an approximate 6.4 ft. diameter (indicating an approximate 8,000 gallon capacity tank), and it is oriented in a general northwest to southeast direction.

The reworked soil fill material containing large chunks of metal, rusted wire and bricks encountered in test pit TP-05 extended from the ground surface to an approximate depth of 1.5 ft. bgs. A sample of this fill was submitted for analytical laboratory testing and elevated heavy metal concentrations (i.e., exceeding Commercial SCO) of arsenic (25 ppm), barium (436 ppm), cadmium (16.3 ppm), copper (357 ppm), and lead (1,150 ppm) were detected.

The unpaved portion of the Site generally contains the following:

- The central-eastern portion of the Site contains overgrown areas of field-type vegetation (e.g., weeds, brush, saplings, etc.). In addition, the remnants of former buildings (e.g., concrete pads, and construction/demolition materials such as brick and large pieces of

scrap metal) are exposed at the ground surface, or in low mounds (i.e., in locations where test pits, completed during the RI, disturbed the surface and subsurface).

- An area covered by small to mature trees is present in the northwestern portion of the Site.
- The eastern edge of the Site, extending from Franklin street to the northeastern edge of the Site, is covered by lawn (i.e., extending from the ball-field on the adjacent property to the east), and several mature trees are located in this area.
- The area in the vicinity of the UST is covered by lawn.

3.0 SCOPE OF WORK

The site-specific Health and Safety Plan (HASP) and Quality Assurance Project Plan (QAPP), developed for the RI, will be implemented as appropriate during work activities. The Community Air Monitoring Program (CAMP), as described in the site-specific HASP, will also be implemented during excavation, and other activities that have the potential to disturb materials containing concentrations of constituents that exceed SCOs.

Prior to completing intrusive work, a utility stakeout will be requested from Dig Safely New York for identification and clearance of buried utilities located in proximity of the Site.

3.1 UST Removal

This UST removal will be conducted in accordance with provisions outlined in Section 5.5 of DER-10 and with the NYDEC guidance document, *Permanent Closure of Petroleum Tanks* dated January 20 1987 and modified July 19, 1998 and December 3, 2003, and the City of Olean requirements. If a spill is discovered during the work described below, the NYDEC BCP project manager will be notified within two hours of discovery.

3.1.1 NYSDEC Notification and UST Preparation

Within 30 days prior to the commencement of the UST removal activities, the NYSDEC Project Manager will be notified. [Note: The UST that will be removed as part of this work is not currently registered under the NYSDEC Chemical Bulk Storage (CBS) Program. Therefore prior to removal of this UST the NYSDEC Region 9 CBS Unit will be contacted to determine registration and notification requirements.] The City of Olean will also be notified, as required. A tank removal contractor retained by the Owner will open the UST, remove the residual alcohol/acetone to the extent possible, drain and flush product supply and return piping, and subsequently pump out remaining liquids from the bottom of the tank. Liquids generated during the UST preparation will be containerized in 55-gallon drums or pumped directly into a vacuum truck for characterization, treatment, or disposal at a regulated facility.

3.1.2 Tank Excavation and Removal

Following the removal of liquids remaining in the tank, the UST will be exposed using an excavator, and remaining piping will be disconnected from the UST and removed. The piping will be observed for evidence of holes, cracks, corrosion, etc. and photographed. A heavier than air inert gas such as nitrogen or dry ice will be introduced into the UST in order to displace alcohol/acetone vapors until such time as the concentration of flammable vapors are 10-20% of the Lower Explosive Limit (LEL) as indicated by CGI or an explosion meter.

Using an excavator, a sufficient quantity of soil/fill material around the perimeter of the UST will be excavated to allow the tank to be removed from the subsurface, and these soils, and soil remaining in the excavation following the removal of the UST, will be observed by a technician for evidence of alcohol/acetone impact and screened with a PID. Soil that exhibits visible or olfactory evidence (i.e., staining, chemical type odors, free product, etc.), and/or produces readings greater than 100 parts per million (ppm) in the ambient air when screened with a PID will be segregated and stockpiled on two layers of 8-mil thick poly sheeting. The impacted material will be covered with 8-mil thick poly sheeting subsequent to the completion of excavation activities associated with the tank removal.

The UST will be removed from the ground using an excavator, and observed for evidence of holes, cracks, corrosion, etc. and photographed prior to being cut open for cleaning. Liquids generated during tank cleaning activities will be containerized in 55-gallon drums or pumped directly into a vacuum truck for characterization, treatment, or disposal at a regulated facility. Once residual solids and liquids have been removed from the UST interior and containerized, the tank will be loaded onto a flatbed truck and transported off the Site by a licensed waste transporter.

3.1.3 Subsurface Examination and Sampling

Based on information collected during the RI, the first water-bearing unit at the Site is anticipated to be between approximately 14 feet and 16 feet bgs. Therefore, it is not anticipated that groundwater will be encountered in the UST excavation.

Subsequent to the removal of the UST from the subsurface, fill/soil material that comprises the excavation floor and sidewalls will be observed for evidence of impact from alcohol/acetone (e.g., alcohol/acetone odor, free product, etc.) Confirmatory sampling will be conducted in accordance with the procedures outlined in procedures outlined in Section 5.5 of DER-10. Samples of fill/soil will be collected using the excavator bucket from the excavation floor and sidewalls along transects spaced approximately 5 feet apart and subsequently screened with a PID.

If evidence of petroleum impact to fill/soil material is observed in the fill/soil sample collected, or if readings exceed 100 ppm in the ambient air above the fill/soil samples when screened with a PID, further excavation will be conducted until the impacted material has been removed, or excavation is no longer feasible (e.g. further excavation would extend past the property boundary or would expose buried utilities). Impacted fill/soil will be stockpiled on two layers of 8-mil thick poly sheeting. The impacted material will be covered with 8-mil thick poly sheeting subsequent to the completion of excavation activities associated with the tank removal.

Following removal of the UST and potentially impacted soil (if any), confirmatory soil samples will be collected at a frequency in accordance with the procedures outlined in procedures outlined in Section 5.5 of DER-10. Each sample will be tested for TCL VOCs plus TICs using USEPA Method 8260, and alcohols using modified USEPA Method 8015.

3.1.4 Backfill and Disposal

Upon completion of excavation activities, fill/soil removed to allow the extraction of the UST that does not exhibit evidence of apparent environmental impact or produce readings greater than 100 ppm in the ambient air when screened with a PID will be used to backfill the UST excavation. The remainder of the excavation will be backfilled with imported aggregate material that will conform to the requirements outlined in DER-10, Section 5.4(e).

Samples of the impacted fill/soil stockpiled at the Site (if any) will be tested for waste characterization parameters required by the disposal facility, loaded into NYCRR Part 360 permitted trucks and transported to a regulated landfill for disposal.

3.2 Metal Waste Fill Removal

The proposed removal areas located within geophysical anomaly J, are depicted on Figure 2. As shown, geophysical anomaly J is a general area, extending over approximately 6,540 square-feet,

within which eleven “distinct” magnetic anomalies are apparent. These “distinct” anomalies total approximately 2,000 square feet.

The excavation work will target the eleven distinct magnetic anomaly areas to:

- determine the specific source of each distinct anomaly;
- determine the extent of each area; and
- assess if this material warrants removal (e.g., contains material similar to that found in TP-5).

Excavation will commence within each of the eleven distinct removal areas in geophysical anomaly J, and continue until visible metal waste is removed.

3.2.1 Excavation

To the extent feasible, the topsoil in the approximate area depicted by the footprint of geophysical anomaly J (refer to Figure 1) will be stripped and stockpiled, until metal waste materials are observed. The soil/fill material observed to contain metal waste will be excavated, stockpiled on two layers of 8-mil thick poly sheeting and subsequently covered by two layers of 8-mil thick poly sheeting. Excavation of each magnetic anomaly area will continue (i.e., in both area and depth) until visual evidence of the metal waste materials is no longer apparent via visual observation, and the remaining soil produces readings less than 100 ppm in the ambient air when screened with a PID. Based on the conditions observed during the excavation of test pit TP-5 during the RI, it is estimated that each excavation within anomaly J will extend an average of 1.5 ft. bgs. Therefore, provisions for excavation shoring and managing groundwater are not necessary, and thus not included in this Remedial Action Work Plan.

3.2.2 Backfill, Waste Characterization and Disposal

Upon completion of removal activities, excavations will be backfilled with imported aggregate material that will conform to the requirements outlined in DER-10, Section 5.4(e). Topsoil that was stockpiled as described in Section 3.2.2 (i.e., that did not exhibit evidence of containing metal waste or produce readings greater than 100 ppm in the ambient air when screened with a PID) will be re-used on the Site.

Discrete samples of the stockpiled metal waste material will be submitted under chain-of-custody control to a NYSDOH Environmental Laboratory Approval Program (ELAP)-certified analytical laboratory to prepare composite samples for testing for disposal parameters required by the waste facility. Copies of the analytical laboratory test results will be included in the work reporting documents (refer to Section 3.3).

Following the receipt of analytical laboratory test results and preparation of waste manifests, the stockpiled metal waste material will be loaded into NYCRR Part 360 Permitted trucks and transported to a regulated landfill for disposal.

3.3 Site Preparation

The proposed remedy for the Site includes installation of a cover system, including the existing parking lot, hardscape, or a minimum 12 inches of clean soil or gravel over the unpaved portion of the Site. Surface preparation activities will be required in order to install the cover system, and/or to prepare for future development of the Site (e.g., construction or landscaping activities).

The following site preparation activities are proposed to be completed in conjunction with the work described above:

3.3.1 Removal of Vegetation

It is anticipated that trees, brush and field vegetation, located on the central and western portions of the Site will be cut and disposed off-site. To the extent possible, portions of the vegetation located below the ground surface (i.e., roots) will be grubbed using earth moving equipment, processed to remove as much soil as possible, and disposed of off-site.

3.3.2 Grading and Limited Removal of Construction and Demolition Materials

Subsequent to clearing vegetation in the east-central portion of the property (i.e., the area of the former buildings at the Site) larger pieces of metal protruding from the ground surface will be removed and deposited as scrap and the ground surface may be graded using earth moving equipment in preparation for the placement of imported aggregate material. Limited grading of surface materials may also be performed over other non-paved portions of the site, in conjunction with the vegetation removal work.

Construction and demolition materials(C&D) that are encountered during grading activities (e.g., concrete foundations, wires, bricks, etc.) will be removed and stockpiled for subsequent disposal off-site at a regulated C&D waste facility or sent to an approved recycling facility. Loading of the C&D stockpile into a NYCRR Part 360 Permitted trucks will be monitored to minimize loading and transport of surface/near surface soil that may have inadvertently been collected in the stockpile.

3.3.3 Import and placement of aggregate material

Imported aggregate material (i.e., currently anticipated to consist of gravel) may be placed and compacted over limited non-paved portions of the Site. The import material will conform to the requirements outlined in DER-10, Section 5.4(e).

4.0 REPORTING

Within four weeks of the receipt of analytical laboratory test results, a report will be submitted to the NYSDEC that describes the actions completed and includes pertinent information such as field observations/measurements; copies of representative photographs; diagrams depicting the approximate locations of confirmatory samples collected from the UST excavation, extent of soil removal from the UST excavation (if applicable) and the approximate extent of fill removal from the geophysical anomaly J area; disposal documentation for the UST, UST cleaning fluids, and metal waste fill material; summary tables comparing test results to applicable regulatory limits; and a summary of the findings/conclusions of the work performed.

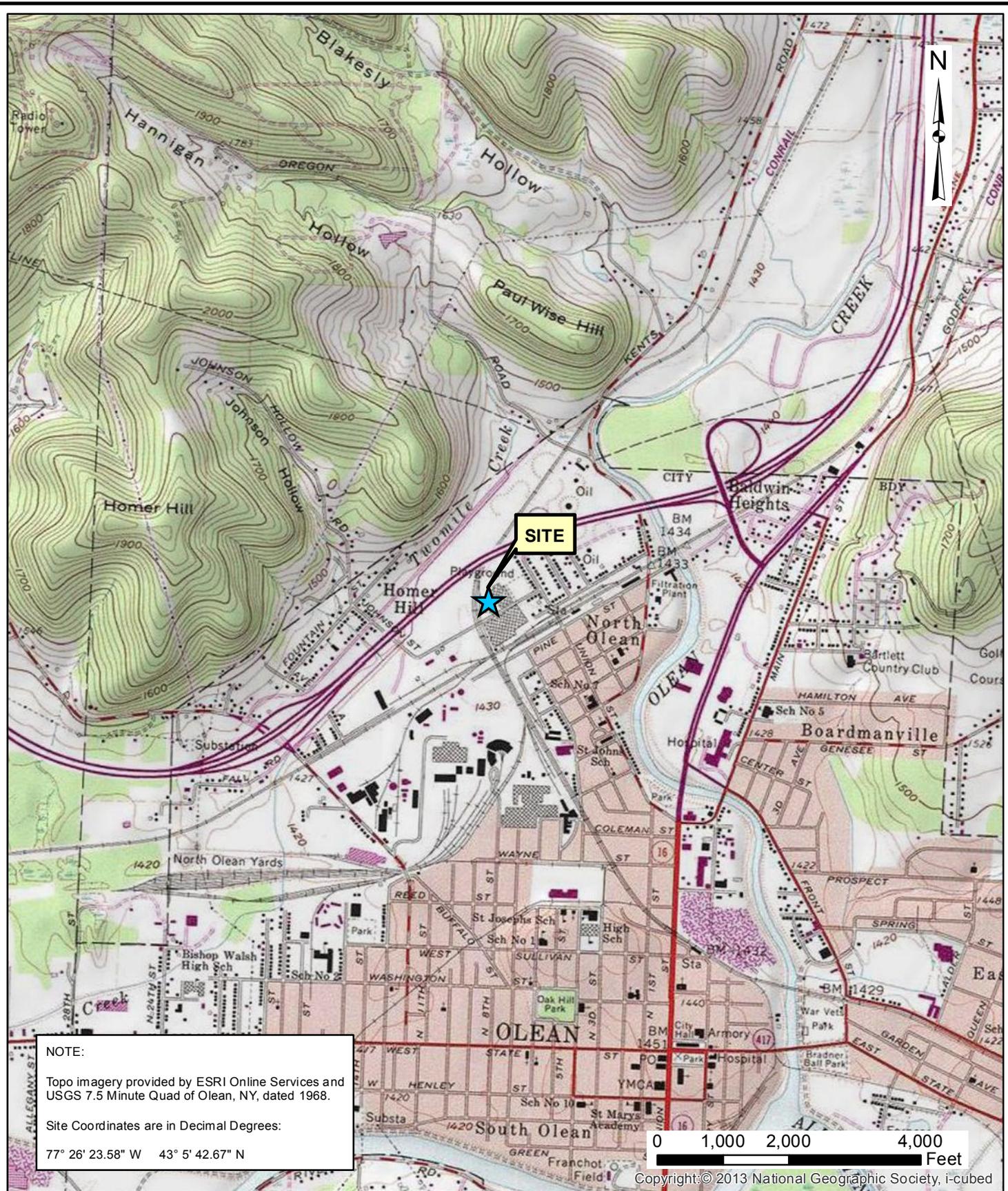
5.0 SCHEDULE

It is anticipated that the work will take approximately one week to complete. Excavation activities are tentatively planned for the months of September and October, 2017.

6.0 ACRONYMS

BCP	Brownfield Cleanup Program
bgs	Below the Ground Surface
BOA	Brownfield Opportunity Area
DAY	Day Environmental, Inc.
DER-10	NYSDEC document titled “DER-10 Technical Guidance for Site Investigation and Remediation”, May 2010
ELAP	Environmental Laboratory Approval Program
HASP	Health and Safety Plan
LEL	Lower Explosive Limit
NYSDEC	New York State Department of Environmental Conservation
NYSDOH	New York State Department of Health
NYSDOT	New York State Department of Transportation
PBS	Petroleum Bulk Storage
PID	Photoionization Detector
PPM	Parts Per Million
RI/RAA	Remedial Investigation/Remedial Alternatives Analysis
ROW	Right of Way
SCG	Standard, Criteria and Guidance
SCL	Soil Cleanup Levels
SCO	Soil Cleanup Objective
Site	211 Franklin Street, Olean, New York
SVOC	Semi-Volatile Organic Compound
TAL	Target Analyte List
TCL	Target Compound List
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tank
VOC	Volatile Organic Compound

FIGURES



NOTE:
 Topo imagery provided by ESRI Online Services and USGS 7.5 Minute Quad of Olean, NY, dated 1968.
 Site Coordinates are in Decimal Degrees:
 77° 26' 23.58" W 43° 5' 42.67" N

0 1,000 2,000 4,000
 Feet

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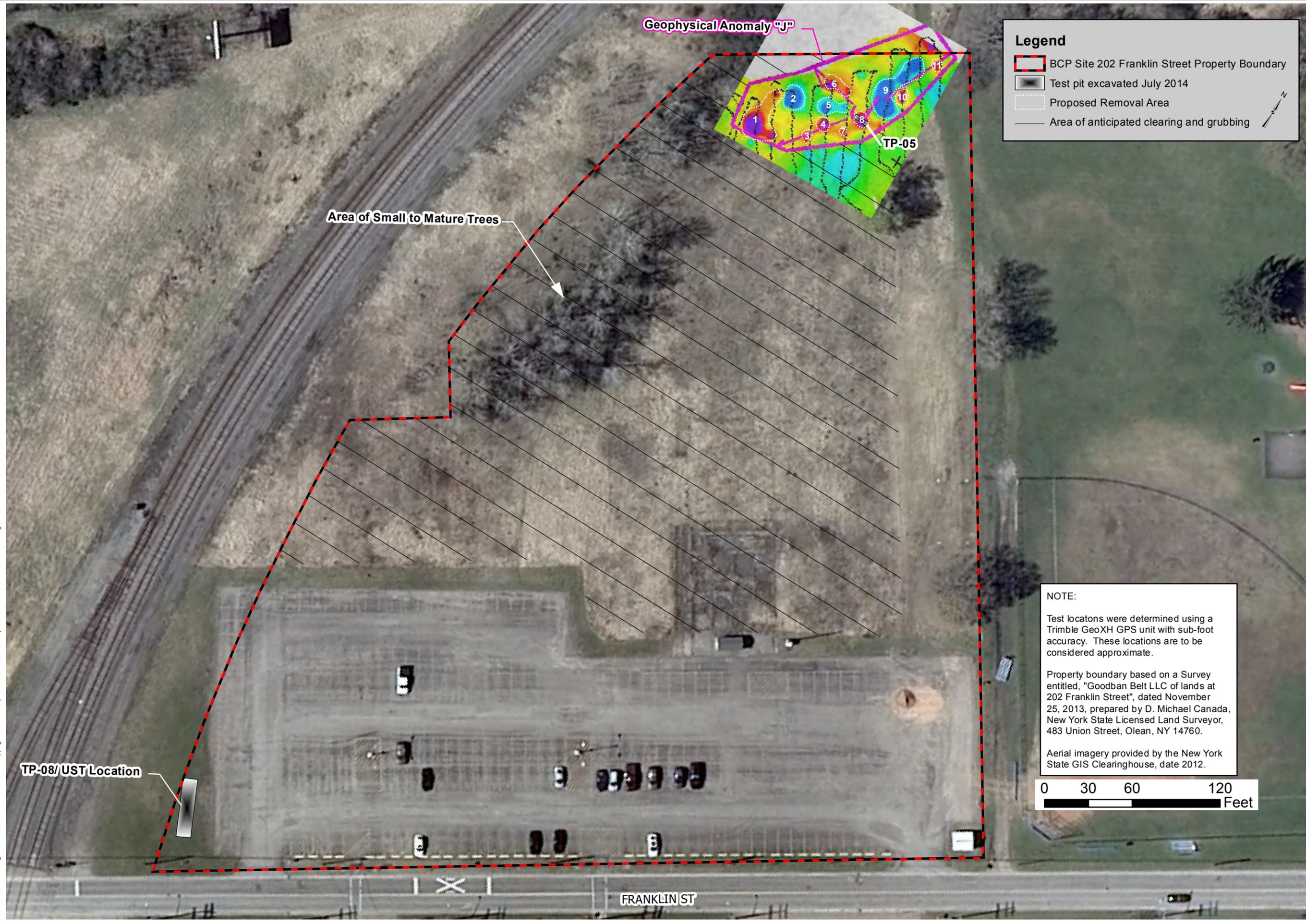
Date	5-23-2017
Drawn By	CAH
Scale	AS NOTED

day
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Project Title	202 FRANKLIN STREET OLEAN, NEW YORK
Drawing Title	BCP SITE NO. C905043 WORK PLAN Project Locus Map

Project No.	4884S-13
	FIGURE 1

Last Date Saved: 07 Aug 2017 Document Path: E:\GIS Mapping\4884S-13\Solepo202Franklin\IRM Workplan\4884S - 01_Site-Plan with clearing.mxd



Legend

- BCP Site 202 Franklin Street Property Boundary
- Test pit excavated July 2014
- Proposed Removal Area
- Area of anticipated clearing and grubbing

NOTE:

Test locations were determined using a Trimble GeoXH GPS unit with sub-foot accuracy. These locations are to be considered approximate.

Property boundary based on a Survey entitled, "Goodban Belt LLC of lands at 202 Franklin Street", dated November 25, 2013, prepared by D. Michael Canada, New York State Licensed Land Surveyor, 483 Union Street, Olean, NY 14760.

Aerial imagery provided by the New York State GIS Clearinghouse, date 2012.



DESIGNED BY	RLK	DATE	05-2017
DRAWN BY	CAH	DATE DRAWN	05-2017
SCALE	AS NOTED	DATE ISSUED	08-07-2017

day
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Project Title
 202 FRANKLIN STREET
 OLEAN, NEW YORK

BCP SITE NO. C905043 WORK PLAN
 Drawing Title

Site Plan Depicting Work Locations

Project No.
 4884S-13

FIGURE 2