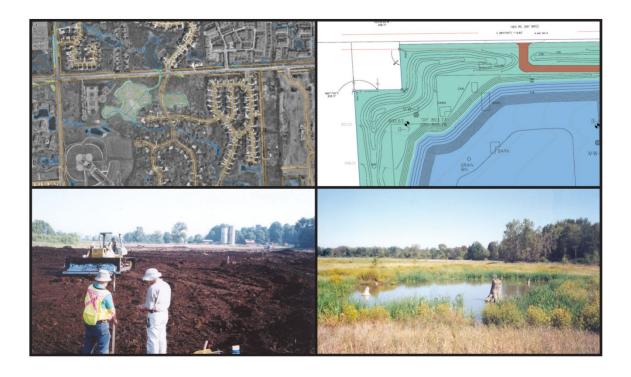
Underground Storage Tank Removal Work Plan

6021 Whittier Avenue Detroit, MI

CCSEM St. Matthew LDHA, LP

December 9, 2022

ASTI ENVIRONMENTAL





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December 9, 2022

Prepared For:

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ASTI Project No. 3-11685



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FIGURES

- Site Location Map
 Sample Location Map



1.0 INTRODUCTION

ASTI Environmental (ASTI) was retained by CCSEM St. Matthew LDHA, LP to complete an Underground Storage Tank (UST) Removal Work Plan (Work Plan) for the property located at 6021 Whittier in the City of Detroit, Wayne County, Michigan (Subject Property). This Work Plan was prepared for the benefit of CCSEM St. Matthew LDHA, LP, and ASTI acknowledges that said party may rely upon the contents and conclusions presented in this report. Reliance is provided to the Michigan State Housing Development Authority (MSHDA). The Subject Property is comprised of approximately 1.75 acres of land on a portion of one parcel with Parcel ID 21003826. A Site Location Map is provided as Figure 1.

The Work Plan was conducted in accordance with ASTI's Contract Change Order dated November 3, 2022.



2.0 Purpose, Subject Property Information and UST Information

2.1 Purpose

The Work Plan was completed to provide a plan for the removal of USTs encountered on the Subject Property during due diligence activities.

2.2 <u>Historical Uses of the Subject Property</u>

Based on the Phase I ESA research, the Subject Property was developed with a dwelling near its southeast corner before 1930. It was additionally developed as a church/school, rectory, and dwelling by 1930. Additions were made to the original building and the rectory in the 1940s, 1950s, and 1960s. The use has primarily been that of a school since the 1950s. The lots with two dwellings on the south portion were redeveloped with the current school building/activity center in 1967. The rectory was removed sometime before 1984. Since then, the site has been in its current configuration. The school was last used by Detroit Public Schools. Records indicate that a 6,000-gallon heating oil UST may have been installed on the Subject Property in 1957.

2.3 Current Uses of the Subject Property

The Subject Property is developed with two vacant school buildings. The buildings consist of a 47,494-square-foot school building and a 13,224-square-foot school building. Both buildings are primarily constructed with slab on grade concrete, wood, steel, and brick. Potable water, sewage, and stormwater services are provided to the Subject Property by the City of Detroit. Electrical and natural gas services are provided to the site by DTE Energy.

2.4 <u>UST Information</u>

ASTI completed a Phase I ESA of the Subject Property on March 25, 2022 that identified that potential USTs may be present. The Phase I ESA identified a records that a 6,000-gallon heating oil UST was installed in 1957. In addition, a potential vent pipe for a UST was observed on the adjoining church building. A geophysical survey was conducted at the Subject Property on September 15, 2022 to evaluate the Subject Property for potential USTs. The geophysical survey identified two anomalies in the survey areas. An anomaly was identified located to the southwest of the school building on Audubon Road and an anomaly



was identified between the school on Audubon Road and the northeastern church building. Fill ports were found in association with both anomaly areas identified during the geophysical survey. The potential fill ports were accessed and determined to be associated with USTs. The southern UST is estimated to be approximately 3,000 gallons in size and contained 4.5 feet of fuel oil based on information provided by a UST removal contractor. The northern UST is estimated to be approximately 10,000 gallons in size and contained 9 feet of fuel oil based on information provided by a UST removal contractor. The USTs are believed to be constructed of bare steel. The location of the USTs are shown on Figure 2 Sample Location Map.



3.0 UST REMOVAL ACTIVITIES

The following UST removal activities are anticipated to be completed.

3.1 Health and Safety Plan

As part of this task, the UST removal contractor and ASTI will prepare separate site-specific Health and Safety Plans (H&S Plan) to be used by field staff as required under 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response Act). The H&S Plan will be developed based on information provided by the client. The removal contractor and other personnel involved with the activities at the site will be required to read and sign the H&S Plan prior to commencement of field activities.

As part of the H&S Plan, all underground utilities must be identified by the Subject Property owner and this information must be provided to the removal contractor's field crew to prevent the accidental disruption of site utilities and/or any potential injuries. ASTI is not responsible for damages to subsurface utilities that were not identified or indicated by the property owner. The UST removal contractor will notify MISSDIG - Utilities Protection Service prior to conducting subsurface work.

3.2 UST Removal

As the USTs contain heating oil used for consumptive purposes to heat the buildings, the USTs are not Regulated under the Michigan Department of Licensing and Regulatory Affairs (LARA) Underground Storage Tank Regulations dated November 14, 2018 and will not be required to be registered with EGLE.

The UST removal contractor will complete the waste profile for the disposal of the materials in the USTs. The waste profile will need to be signed by a representative of the Subject Property owner.

The UST removal will be supervised and documented by a qualified ASTI scientist/geologist to ensure compliance with the LARA requirements. The contractor obtained to remove the USTs will be experienced UST removal contractor with the appropriate insurance coverage



and will manage the removal of the USTs from the Subject Property.

The UST removal contractor will begin the excavation process by first saw cutting the asphalt overtop the UST located in the paved area between the school building and the church. The southern UST will have the soil above the UST removed first. Once the saw cutting is completed, overburden soil excavated and the USTs are exposed, a hose to a vacuum truck will be inserted into the USTs to remove the liquids. Care will be taken to not pierce the UST prior to removal of liquids.

The UST removal contractor will excavate and remove the USTs utilizing an excavator. The soil above and adjacent the UST will be removed and stockpiled to allow for the UST to be removed. If no indications of impact such as discoloration, odors, or photoionization detector (PID) readings are detected, the soil excavated above and adjacent the UST will be placed back in the excavation. The UST will be removed from the excavation and placed on visqueen. Any piping accessible piping associated with the USTs will be cleaned and removed. The UST will be cut open to allow for cleaning of the interior of the USTs. All cleaning liquids and sludge will be removed from the USTs utilizing the vacuum truck. The UST's will be cleaned prior to removal from the Subject Property utilizing biodegradable detergents and a high-pressure washer. The waste removed from the USTs will be transported off-site to an approved disposal facility. Manifests will be obtained from the removal contractor for the material transported off site for disposal. The USTs will be properly removed and recycled under a bill of lading after cleaning.

Following removal of the USTs, the excavation floor and sidewalls will be inspected and evaluated with the PID to determine if there is impacted soil. Prior to sampling, the PID will be calibrated to manufacturer specifications using 100 parts per million (ppm) isobutylene calibration gas. if impacted soil is encountered, activities consisting of excavation of impacted soils will be completed. Excavation activities will be completed until the impacted soil is removed based on field observations and PID readings. Groundwater is not anticipated to be encountered based on soil borings completed by the USTs. If impacted water is observed in the UST excavation, the water will be removed with a vacuum truck prior to soil remediation excavation activities.



3.3 <u>UST Removal Clean Closure Assessment</u>

If no impacted soil is encountered, a total of two UST excavation floor soil samples will be collected from each UST excavation and submitted for laboratory analysis for benzene, toluene, ethylbenzene, and xylenes (BTEX), trimethylbenzene isomers (TMBs) and polynuclear aromatic hydrocarbons (PNAs).

If impacted soil is identified in the either UST excavation and a remedial soil excavation is completed, soil samples will be collected from the floor and sidewalls of the excavation in accordance with the EGLE Sample Strategies and Statistics Training Materials for Part 201 Cleanup Criteria Section 1.3 Verification of Remediation. The excavation(s) will be completed until concentrations of compounds are below applicable Generic Residential Cleanup Criteria (GRCC) and Residential Volatilization to Indoor Air Pathway (VIAP) Screening Levels.

3.4 Site Restoration

Once the excavation is ready for backfill, The UST removal contractor will backfill with Class II sand to match existing grade. The sand will be documented as clean or as native sand obtained from a quarry. The removal contractor will compact the excavation utilizing on-site heavy equipment. This workplan does not cover the restoration cover of topsoil, seeding, sod or pavement.



4.0 UST REMOVAL REPORT

After completion of the site activities and receipt of the excavation laboratory analytical results, a UST Removal Report will be completed documenting the activities. The UST Removal Report will include discussion of the activities, photographs, and manifests.



FIGURES

- 1
- Site Location Map Sample Location Map 2



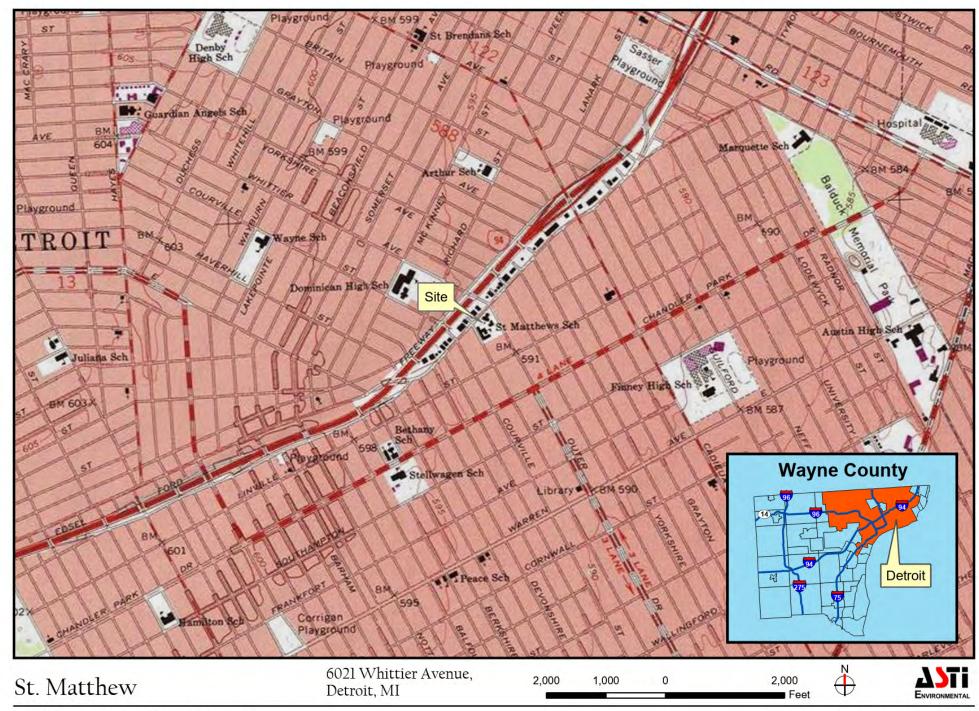


Figure 1 - Site Location Map

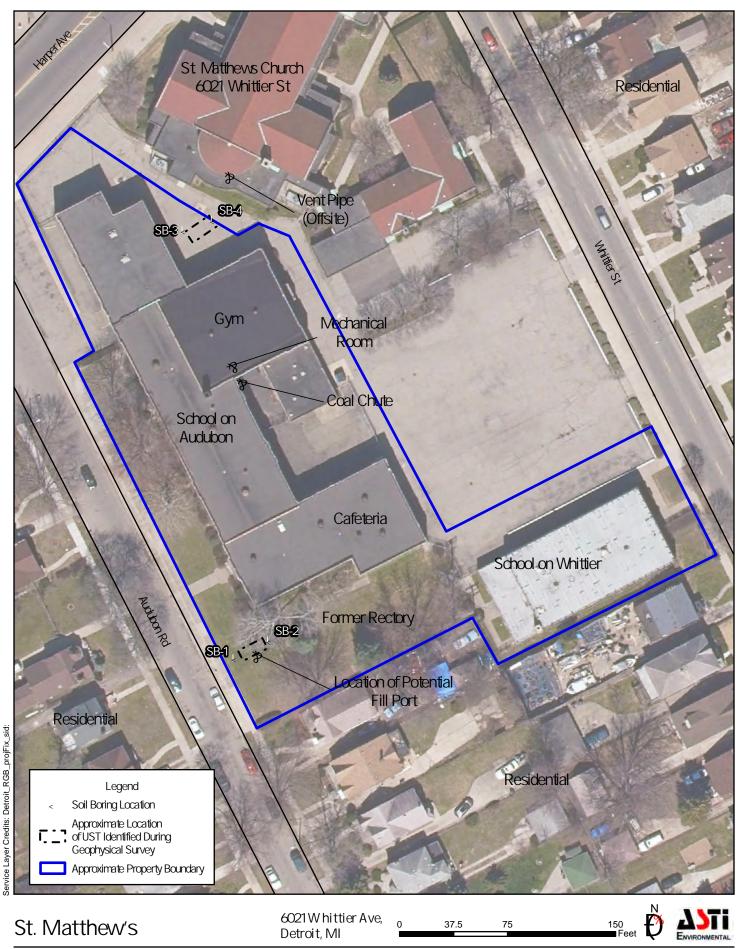


Figure 2 - Sample Location Map

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ENVIRONMENTAL INVESTIGATION, REMEDIATION, COMPLIANCE AND RESTORATION PROJECTS THROUGHOUT THE GREAT LAKES SINCE 1985.

OUR SERVICES INCLUDE:

- ASBESTOS, LEAD, MOLD, AND RADON ASSESSMENTS
- BROWNFIELD/GREYFIELD REDEVELOPMENT ASSISTANCE
- DEVELOPMENT INCENTIVES AND GRANT MANAGEMENT
- ECOLOGICAL ASSESSMENTS AND RESTORATION
- Environmental Assessments and Impact Statements
- ENVIRONMENTAL OPPORTUNITIES ASSESSMENT
- GIS MAPPING
- HAZARD MITIGATION PLANNING
- MINING AND RECLAMATION ASSISTANCE
- REMEDIATION IMPLEMENTATION, OPERATION AND MAINTENANCE
- Phase I ESA and Environmental Due Diligence Assessments
- REGULATORY COMPLIANCE AND PERMITTING
- Soil and Groundwater Assessments
- Soil and Groundwater Remediation
- STORAGE TANK COMPLIANCE AND CLOSURE
- THREATENED AND ENDANGERED SPECIES SURVEYS
- WATERSHED AND STORMWATER MANAGEMENT PROGRAMS
- WETLAND DELINEATION, PERMITTING, MITIGATION AND BANKING

