## ADDENDUM #1 Genesee County Land Bank Authority Blight Elimination Program

### Request for Proposals- Environmental Abatement & Demolition and Disposal of Commercial Structures in the City of Flint & Genesee County

**#LB 14-014** July 3, 2014

The following information is to be incorporated into the bidding and contract documents for the above referenced project.

- 1. **Instruction to Contractors:** PLEASE READ THE ENTIRE REQUEST FOR PROPOSALS (RFP) PACKET AND RESPOND TO THE SPECIFICATION/SCOPE OF WORK IDENTIFIED.
- Environmental Construction Management Plan (ECMP): Certain commercial properties where demolition is to occur are known or suspected to be contaminated, including the possible presence of storage tanks.

An ECMP was prepared to provide guidance to Contractors for the management of contaminated soil, sediments, storm water and groundwater (if encountered) at the subject property. The ECMP describes the recommended policies and procedures meant to ensure that human health and the environment is protected, soil/groundwater is properly managed, and due care responsibilities for the subject property is met during the demolition and restoration activities.

The ECMP requires specific work practices and handling of all soil and liquids during demolition activities. The Contractor will be required to coordinate all work and follow the direction of the GCLB's Qualified Environmental Professional (AKT Peerless). Contractor is responsible for all waste characterization with oversight and direction of AKT Peerless.

The ECMP includes an environmental summary of suspected site conditions and a Contractor Disclosure Statement, which must be signed by Contractor prior to site work.

3. Qualified Environmental Professional: The Owner has retained AKT Peerless as the Qualified Environmental Professional (QEP) for the project. The QEP shall answer Contractor questions and provide independent oversight to ensure that all environmental due care obligations are being met during demolition. The QEP shall provide oversight of all invasive demolition activities including, but not limited to work with subsurface infrastructure, foundation removal, opening monitoring wells or sewers, handling of existing soil, sediments or groundwater, and storage tank removal activities.

The QEP must be made aware and provided the opportunity to conduct independent oversight/ observation during all soil disturbance and subsurface demolition/construction/excavation activities to ensure proper material handling, disposal, and site restoration protocols are followed.

AKT Peerless contacts: Mr. Ryan Londrigan or Ms. Stephanie Horn: 989-754-9896

- 4. Contractor Qualifications: Contractors and workers must possess proper experience, training, and licensing to perform site activities. All subsurface work including excavation, work with subsurface infrastructure, handling of existing soil, sediments or groundwater, removal of storage tanks, or any other site activity with the reasonable potential for exposure must be conducted by currently trained individuals as defined in the ECMP. Minimum qualifications include:
  - a. Contractors or approved Subcontractors must have experience, training, licensing, and insurance for working on potentially contaminated properties and excavating underground storage tanks.

- b. A Qualified Individual(s) with experience, qualifications, and current 40-hour HAZWOPER certification.
- c. Pollution Liability insurance for projects involving the removal and disposal of waste or storage tanks. Contractor shall maintain limits no less than \$1,000,000 per loss/\$1,000,000 aggregate.
- 5. **Bid Form:** The Bid/Tender Form has been revised and is attached.

#### Attachments:

- 1. Environmental Construction Management Plan
- 2. Bid/Tender Form

Each bidder must acknowledge receipt of this addendum on RFP SUBMITTAL REQUIREMENTS CHECKLIST.

\*\*END OF ADDENDUM #1\*\*

Prepared by: Genesee County Land Bank 452 S. Saginaw St., Second Floor Flint, MI 48502

# Attachment 1 Environmental Construction Management Plan



# ENVIRONMENTAL CONSTRUCTION MANAGEMENT PLAN

VARIOUS COMMERCIAL DEMOLITIONS
GENESEE COUNTY, MICHIGAN

prepared for

GENESEE COUNTY LAND BANK AUTHORITY
452 SOUTH SAGINAW STREET, SECOND FLOOR
Flint Michigan 48502

AKT PEERLESS PROJECT No. 4892s
JULY 2, 2014



#### **TABLE OF CONTENTS**

1.0	INTRODUCTION AND DESCRIPTION OF WORK				
	1.1	INTRO	INTRODUCTION		
		1.1.1	Proposed Work	1	
		1.1.2	Purpose	2	
		1.1.3	Conflicts, Ambiguity, or Discrepancy	2	
		1.1.4	General Work Sequence	3	
	1.2	CONSTRUCTION MANAGEMENT ROLES, QUALIFICATIONS, AND TRAINI			
		1.2.1	Program Manager / Property Owner	3	
		1.2.2	Construction Manager	4	
		1.2.3	Qualified Environmental Professional	4	
		1.2.4	Contractor(s)	5	
	2.0	HEALT	H & SAFETY, CONTINGENCY PLAN, AND WORK PLAN	6	
3.0	SITE MONITORING AND IDENTIFICATION OF IMPACTS				
	3.1	SITE MONITORING INTRODUCTION			
	3.2	3.2 IDENTIFYING IMPACTED MEDIA OR ABANDONED CONTAINERS			
		3.2.1	Air Monitoring	9	
		3.2.2	Water Monitoring		
		3.2.3	Soil and Solids Monitoring	10	
4.0	EXCAVATION WORK PLAN				
	4.1	EXCAVATION WORK PLAN INTRODUCTION AND OVERVIEW 1			
	4.2	SOIL MANAGEMENT			
		4.2.1	Soil Screening Methods	11	
		4.2.2	Stockpile Methods	12	
		4.2.3	Materials Excavation and Load Out	12	
		4.2.4	Vehicle Track-Out Prevention Plan	13	
		4.2.5	Materials Transport Off-Site	14	
		4.2.6	Materials Disposal Off-Site	14	
		4.2.7	Materials Reuse On-Site	15	
		4.2.8	Fluids Management	15	
		4.2.9	Backfill from Off-Site Sources		
			Storm Water Pollution Prevention		
		4.2.11	Odor Control Plan	19	



### **TABLE OF CONTENTS** (continued)

		4.2.12 Dust Control Plan
		4.2.13 Burning of Debris
		4.2.14 Heavy Equipment Decontamination Plan
		4.2.15 Decontamination Residuals Management Plan 20
	4.3	CONSTRUCTION DEBRIS MANAGEMENT20
	4.4	CONTINGENCY / DISCOVERY PLAN
	4.5	STORAGE TANK AND HYDRAULIC HOIST REMOVAL22
	4.6	SITE CONTROL
	4.7	RECORD KEEPING24
5.0	ON-S	SITE HAZARDOUS SUBSTANCE USE AND FUELING24
6.0	SIGN	ATURES OF ENVIRONMENTAL PROFESSIONALS24
<u>APPE</u>	NDICES	<u>3</u>
Appe	ndix A.	
Appe	ndix B .	Environmental Summary Table
Appe	ndix C .	Example Residual Tracking Log
Appe	ndix D.	Technical Specification
		Storage Tank Removal
		Regulated Abatement of Miscellaneous Materials



Standard abbreviations used throughout this Environmental Construction Management Plan shall be as follows:

AKT Peerless: AKT Peerless Environmental & Energy Services

AST: Above Ground Storage Tank
BMP: Best Management Practices

BTEX: Benzene, Toluene, Ethylbenzene, & Xylene

CSWO: Certified Storm Water Operator

ECMP: Environmental Construction Management Plan

ESA: Environmental Site Assessment

GCC: Generic Cleanup Criteria

GCLBA: Genesee County Land Bank Authority

HASP: Health and Safety Plan

HAZWOPER: Hazardous Waste Operation and Emergency Response Standard

IDLH: Immediately Dangerous to Life and Health

MBEG Michigan Blight Elimination Grant

MDEQ: Michigan Department of Environmental Quality MIOSHA: Michigan Occupational Safety and Health Act

NIOSH: National Institute for Occupational Safety and Health NREPA: Natural Resources and Environmental Protection Act

OSHA: Occupational Safety and Health Administration

PCB: Polychlorinated Biphenyls
PPE: Personal Protective Equipment

PPM: Parts Per Million

QEP: Qualified Environmental Professional (AKT Peerless)

RCRA: Resource Conservation & Recovery Act
REC: Recognized Environmental Condition
SESC: Soil Erosion and Sedimentation Control

SHSO: Site Health and Safety Officer
SVOC: Semi-Volatile Organic Compound

TCLP: Toxicity Characteristic Leaching Procedure

UST: Underground Storage Tank
VOC: Volatile Organic Compound



#### **ENVIRONMENTAL CONSTRUCTION MANAGEMENT PLAN**

## VARIOUS COMMERCIAL DEMOLITIONS GENESEE COUNTY, MICHIGAN

**AKT PEERLESS PROJECT NUMBER 4892s** 

#### 1.0 INTRODUCTION AND DESCRIPTION OF WORK

#### 1.1 INTRODUCTION

AKT Peerless Environmental & Energy Services (AKT Peerless) has prepared this Environmental Construction Management Plan (ECMP) for demolition activities at Various Commercial Properties, in Genesee County, Michigan.

The Genesee County Land Bank Authority (GCLBA) proposes to conduct general demolition activities at various commercial properties in Genesee County utilizing Michigan Blight Elimination Grant (MBEG) Funding.

All site work especially excavation and subsurface work associated shall comply with this ECMP.

This document comprises the due care management plan for the project. A Contractor's Disclosure Statement summarizing the subject property environmental demolition and construction requirements is provided in **Appendix A**. Any and all contractors conducting site work and subsurface activities at the subject property will be required to sign a copy of this disclosure prior to starting work.

Refer to the summary table in **Appendix B** for a description of each property ("the subject property"). Additional details regarding known site conditions, recognized environmental concerns (RECs), and known hazardous substances can be found in the individual reports (Phase I, Phase II, Ground Penetrating Radar, and/or Pre-demolition Hazardous Material Survey) prepared for each property. These reports are available upon request and will be provided to the winning bidder for each property.

#### 1.1.1 Proposed Work

The GCLBA intends to conduct general demolition activities at each property. The specific scope of work for each site is described in the Request for Proposals and Contract Documents.

The tasks that will be conducted during the demolition activities will include some or all of the following:

1) abatement and disposal of asbestos and hazardous materials/waste; 2) demolition of site features and subject buildings; 3) removal of abandoned containers and underground storage tanks (USTS), if encountered; 4) removal of brush and vegetation; 5) plug, cap, and bulk head utilities; 4) site restoration including grading and compaction of imported fill materials and seeding.

Additional activities may be pursued and the associated due care management responsibilities evaluated as they are identified. No structures are proposed to be constructed at the properties.



#### 1.1.2 Purpose

The GCLBA proposes to demolish and restore various commercial properties as green space. A Request for Proposals and Contract Documents was prepared and released for each property.

Environmental investigations have been completed at each property. Based on the former operation of the properties for commercial purposes various RECs have been identified. The RECs indicate the presence or potential presence of environmental contamination on the subject property. RECs include, but are not limited former site operations, dry cleaning, gasoline filling operations, potential underground storage tanks, and/or nearby sites of known environmental contamination. RECs are unique to each commercial property and several sites have no known RECs. Refer to **Appendix B** for a summary of known RECs and environmental concerns at specific properties.

Soil and groundwater contamination may be present at the subject property in excess of Michigan Department of Environmental Quality (MDEQ) Part 201 Residential and Non-Residential Generic Cleanup Criteria (GCC).

This ECMP was developed to provide guidance to the GCLBA and Contractors for demolition and site restoration activities at commercial properties where environmental concerns were previously identified or are encountered during demolition. This ECMP addresses the identification and management of contaminated soil, groundwater, and storage tanks at the subject property. The recommended policies and procedures are meant to ensure that human health and the environment is protected, soil/groundwater is properly managed, and due care responsibilities for the subject property is met during demolition activities.

A variety of residuals (soil, groundwater, debris, etc.) could potentially be generated during demolition. This ECMP specifies methods for management of these residuals. The procedures and guidelines set forth in this ECMP were developed to ensure that residuals generated during the course of demolition will be managed in a manner that: (1) conforms to Federal, State, and local solid waste and environmental response laws; (2) protects workers and the general public from unacceptable exposure to the residuals; and (3) reduces the potential for exacerbation of environmental conditions of the properties.

When in doubt of any site conditions or work activities, immediately contact AKT Peerless. Contacts are listed in Section 1.2.3.

The intent of this ECMP is to require that all residuals generated from demolition activities on the subject property be managed either via: (1) redistribution on the property in a manner that is compliant with the Owner's due care responsibilities and in accordance with direction from the Qualified Environmental Professional (QEP); or (2) removal from the property to an appropriately licensed, approved disposal facility.

Environmental Best Management Practices (BMPs) will be used on this project where applicable and appropriate, unless otherwise determined by the QEP.

#### 1.1.3 Conflicts, Ambiguity, or Discrepancy

Before undertaking each part of the work, Contractor shall carefully study and compare the ECMP and the Contract Documents and check and verify pertinent information is shown and described.



If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity or discrepancy within the ECMP or Contract Documents or between the ECMP and Contract Documents and/or any provision of any such Law or Regulation applicable to the performance of the work or of any such standard, specification, manual or code or of any instruction of any supplier; Contractor shall report it to the GCLBA and AKT Peerless in writing at once, and Contractor shall not proceed with the Work affected thereby (except in an emergency) until an amendment or supplement to the ECMP or Contract Documents has been issued.

For any inconsistency between the Contract Specifications and the ECMP, it should be anticipated that the more conservative instruction for protection of human health, safety, and the environment will be adopted.

#### 1.1.4 **General Work Sequence**

Conduct work in stages, coordinate schedule and operations with Owner and QEP:

- 1. Prepare and submit a Work Plan and Health and Safety Plan in accordance with Specifications.
- 2. Conduct a pre-demolition conference call or meeting with Owner and QEP.
- 3. Submit all notifications and obtain all permits.
- 4. Verify all utility and miscellaneous piping locations. Verify all disconnects.
- 5. Coordinate and notify QEP of on-site work activities.
- 6. Conduct all necessary waste characterization and obtain all necessary approvals.
- 7. Remove all regulated asbestos, hazardous materials, and other materials banned from landfill disposal.
- 8. Liquids accumulated in building components, piping, site features, the sub grade areas or excavations shall be removed prior to demolition of buildings.
- 9. Conduct test pits or exploratory work for known or suspected underground storage tanks or hoists with oversight of QEP.
- 10. Proceed with remaining demolition/removals.
- 11. Conduct backfill and site restoration.
- 12. Schedule final inspection and obtain approval.
- 13. Submit all documents, manifests, and other completion information to Owner and QEP.

#### 1.2 CONSTRUCTION MANAGEMENT ROLES, QUALIFICATIONS, AND TRAINING

For the purposes of this ECMP, the roles and responsibilities for environmental due care planning and management activities are as follows.

#### 1.2.1 Program Manager / Property Owner

The subject property is currently owned by the GCLBA. The GCLBA is the Program Manager implementing the demolition activities utilizing MBEG funds.

The GCLBA has designated personnel responsible for the management of the demolition activities and oversight of the environmental management roles described in the following sections.



#### 1.2.2 Construction Manager

The Construction Manager is the appointed representative in charge of the oversight of all construction / demolition activities at the subject property. This representative is also identified as the Demolition Program Manager in the Contract Documents.

The **GCLBA** is the Construction Manager for the project.

#### 1.2.3 Qualified Environmental Professional

The QEP is the qualified individual retained by the Program Manager/Property Owner to ensure that all environmental due care obligations are being met during demolition. In this context, the QEP is a person that: 1) has experience in the management and implementation of environmental construction management plans; 2) has experience in the identification and management of environmental contamination and hazardous materials; 3) has a Bachelors degree or higher in engineering, geology, or other science-related discipline, or has demonstrated sufficient ability through past performance; and 4) possesses current 40-hour certification under the Hazardous Waste Operation and Emergency Response Standard (HAZWOPER), (Michigan Occupational Safety and Health Act (MIOSHA) -STD-1216 and 29 CFR 1910.120).

**AKT Peerless** is the QEP retained for the project.

The QEP must be made aware and provided the opportunity to conduct independent oversight/observation during all soil disturbance and subsurface excavation activities to ensure proper material handling, disposal, and site restoration protocols are followed.

#### **QEP Responsibilities**

The QEP's responsibilities shall include general oversight of demolition activities to assess and verify consistency of the activities with the GCLBA's "due care" obligations under Section 20107a of Part 201 and as specified in this ECMP.

#### This will include:

- 1) Assist Contractors with questions and development of proper work practices to complete the proposed scope of work.
- 2) Oversight, as necessary, of the Contractor's invasive construction activities and field screening of excavated soils that result there from.
- 3) Completion of ambient air monitoring (independent from Contractor), if necessary, in the vicinity of open excavations to assess the potential for exposure.
- 4) Providing direction, as necessary, to the Contactor regarding materials and methods for stockpiling of contaminated soils, fill materials and other residuals that must be temporarily stored on the property during work.
- 5) Coordination and monitoring, of redistribution of soils/fill materials on the property (if necessary).
- 6) Visual monitoring of ambient air, as necessary, to verify that particulate emissions from the site are appropriately minimized through dust suppression techniques implemented by the Contractor.



- 7) Visual monitoring, as necessary, of the effectiveness of soil erosion and sedimentation control (SESC) measures and vehicle track-out measures to prevent public nuisance.
- 8) Review and approval for waste profiles and manifests.
- 9) Oversight and approval of waste characterization sampling.
- 10) Oversight of test pits and exploratory excavations for USTs.
- 11) Oversight, registrations, MDEQ coordination, and sample collection associated with removal of storage tanks.

#### **QEP Contacts**

If Contractor is in doubt of any site conditions or proper work activities, immediately contact the QEP at numbers below:

Ryan Londrigan (Project Manager): 989-284-7238

Stephanie Horn: 517-231-2535

Jon Hirschenberger: 989-928-1417

AKT Peerless Office Saginaw, MI: 989-754-9896

#### 1.2.4 Contractor(s)

The Contractors are those companies designated by the Owner and/or the Construction Manager that have responsibility for the implementation for specific work activities. These work activities will be identified by the Owner and the Construction Manager. The Contractor is responsible for the procedures described in this ECMP for each designated activity.

The Contractor must have a Qualified Individual on-site during all work activities. In this context, the "Contractor Qualified Individual" is a person that: 1) is responsible to the employer; 2) has the authority to commit contractor resources and direct on-site personnel; 3) has at least 5 years of experience in the management and implementation of environmental construction activities and plans; 4) has at least 5 years' experience in the identification and management of environmental contamination and hazardous materials; 5) has at least 5 years' experience conducting construction activities and/or environmental cleanup at contaminated properties; 6) has demonstrated sufficient ability to supervise construction activities on contaminated properties through past performance; and 7) possesses current 40-hour certification under the HAZWOPER, MIOSHA-STD-1216 and 29 CFR 1910.120.

All subsurface work including penetrating or disturbing the existing surfaces, work with subsurface infrastructure, opening monitoring wells or sewers, handling of existing soil, sediments or groundwater, or any other site activity with the reasonable potential for exposure must be conducted by trained individuals with the oversight of the Contractor Qualified Individual.

All work with known hazardous substances, including stained soil, impacted soil and groundwater, and removal of USTs must be conducted by trained individuals with the currently certified HAZWOPER personnel, (MIOSHA-STD-1216 and 29 CFR 1910.120).

Documentation of the above qualifications for on-site workers must be provided to the Construction Manager/QEP in advance of any on-site activity.



The Contractor and associated parties performing work are completely responsible for compliance with this ECMP, the project Health and Safety Plan, the safe performance of all intrusive work, the structural integrity of excavations, proper disposal of fluids, control of runoff, and for damage to off-site properties and protected site features.

#### Qualifications and Insurance

The Contractor or approved subcontractor shall have Pollution Liability insurance for projects involving the removal and disposal of waste or storage tanks. Contractor shall maintain limits no less than \$1,000,000 per loss/\$1,000,000 aggregate. Coverage is for losses caused by pollution conditions that arise from the operations of the Contractor described under the scope of services of the Contract including:

- a) Bodily injury, sickness, disease, mental anguish or shock sustained by any person, including death.
- b) Property damage, including physical injury to or destruction of tangible property including the resulting loss of use thereof, cleanup costs, and the loss of use of tangible property that has not been physically injured or destroyed.
- c) Defense including costs, charges and expenses incurred in the investigation, adjustment or defense of claims for such compensatory damages.
- d) Non-owned Disposal Site coverage for specified sites if Contractor is disposing of waste.
- e) Coverage shall not include exclusion from asbestos, mold or microbial matter. The definition of pollution conditions will include asbestos, mold or microbial matter.
- f) Coverage shall include transportation of waste and materials.
- g) Coverage shall include non-owned disposal sites.
- h) Coverage shall include a provision for additional insured status with primary and noncontributory status and waiver of subrogation in favor of Owner.

Coverage shall apply to sudden and non-sudden pollution conditions including the discharge, dispersal, release or escape of smoke, vapors, soot, fumes, acids, alkalis, toxic chemicals, liquids' or gases, waste materials or other irritants, contaminants or pollutants into or upon land, the atmosphere or any watercourse or body of water, provided such conditions are not naturally present in the environment in the concentration or amounts discovered, unless such natural condition(s) are released or dispersed as a result of the performance of Covered Operations.

#### 2.0 HEALTH & SAFETY, CONTINGENCY PLAN, AND WORK PLAN

Certain commercial properties where demolition is to occur are known or suspected to be contaminated and therefore, constitutes a site of environmental contamination. Soil and groundwater contamination may be present at the subject property in excess of MDEQ Part 201 Residential and Non-Residential GCC defining the property as a "facility" under Part 201 of 1994 Michigan P.A. 451, as amended.

If applicable a comprehensive list of environmental contaminants, which have been detected at the subject property are presented in the property specific Phase II Environmental Site Assessment (ESA), Baseline Environmental Site Assessment or Due Care Plan. Prior to starting work, the Contractor shall be familiarized with the contaminants identified in the report for the subject property.

A Phase I ESA has been completed at each property. RECS, if any, at each property are identified in the Phase I ESA. Sites with RECs are more likely to have environmental contamination; however, site work at all properties shall proceed with caution and be conducted in accordance with the ECMP.



Due to the presence of known or suspected environmental contamination, the Contractor shall take all necessary precautions as required by laws, regulations and the contract documents for protection of the Contractor's personnel, as well as the adjacent properties. Such regulations shall include, but not be limited to, the following:

- 1. Federal Occupational Health and Safety Act (OSHA), including the OSHA HAZWOPER standard (29 CFR 1910.120)
- 2. MIOSHA, as amended
- 3. Michigan Worker Right-to-Know Act

The Contractor shall protect all persons on the subject property or on adjacent properties that may be impacted by the Contractor's work.

#### Health and Safety Plan (HASP)

It is the Contractor's responsibility to develop a site-specific, HASP for all Contractor personnel. This HASP shall be specific to the site and address the potential hazards associated with the Contractor's scope of work. The Contractor HASP shall acknowledge the information provided in this ECMP, as well as environmental reports prepared for each property. The Contractor shall take all necessary precautions to assure that Contractor's personnel and Subcontractor's personnel under the Contractor's jurisdiction observe and abide by all applicable safety regulations while performing the work. The HASP must be provided to the GCLBA and AKT Peerless in advance of commencing work activities. The GCLBA and AKT Peerless may elect to review and comment on the HASP. The Contractor shall incorporate the comments or provide further clarification to resolve the comments.

#### Spill / Emergency Contingency Plan

The Contractor and the Contractor's Site Health & Safety Officer (SHSO) are responsible for emergency response notification(s) in the event that an emergency occurs during demolition. Emergencies may include injury to personnel, fire, explosion, or an environmental material spill or release.

The Contractor is responsible for cleaning up all the leaks, spills from containers and other items on site or off site that occur, whether due to the Contractor's negligence or not. Immediate containment actions shall be taken as necessary to minimize the effect of any spill or leak. The Contractor shall notify the GCLBA, AKT Peerless, and appropriate governmental authorities of the incident. Cleanup shall be in accordance with applicable Federal, State, and local laws, as well as regulations at no additional cost to the GCLBA. Submit to GCLBA for review and comment, a Spill Contingency Plan for handling and transportation of solids, liquids, and hazardous materials.

The Plan shall address all the potential hazards, necessary actions to follow in case of spills, evacuation plan and emergency phone numbers. The emergency response plan can be included as part of the HASP.

As appropriate, the fire department and other emergency response group must be notified immediately by telephone regarding the emergency. A list of emergency contact telephone numbers must be posted prominently at the subject property (e.g., Contractor office trailer) and made readily available to all personnel at all times.

Additional, post-incident response assistance may also be obtained from other sources, as directed by the GCLBA and AKT Peerless.



#### Work Plan

Prior to proceeding with the work, the Contractor shall submit a work plan to the GCLBA, which includes the means, methods and procedures proposed for the accomplishment of all specified activities. The means, methods and procedures shall provide for safe conduct of the work; careful removal and disposition of soils, liquids, and solid materials and wastes; and protection of property that is to remain undisturbed.

The procedures shall provide a detailed description of the methods and equipment to be used for each operation, and the sequence of operations. The name and location of disposal facilities for all removed materials shall be submitted in the Work Plan.

Include detailed sequence of work with starting and ending dates for each activity. Provide clear description of work means and methods, proposed protection of public, protection of adjacent properties, adjacent structures/public right-of-way, proposed temporary shoring, and barriers.

Provide a mechanism for coordination of any shutoff, capping, and continuation of utility services required. The procedures shall provide for safe conduct of the work, property protection, and protection of the site features to remain. The procedures shall provide a detailed description of the methods and equipment to be used for each operation, protection methods, and the sequence of operations. This includes drawings or reports that indicate the measures proposed for protecting individuals and property, for environmental protection, dust control and, noise control, as well as indicate proposed locations and construction of barriers.

Provide a map depicting notable locations including, but not limited to staging areas, temporary office, utility connection, fencing, gates, street closures, stockpiles, sequence of work, and barriers.

Specify the staff organization including subcontractors for the project. Include qualifications and certifications of the designated "Contractor Qualified Individual."

The work plan shall be based on Contractor work experience, and the guidance provided in the Contract Documents and this ECMP.

#### 3.0 SITE MONITORING AND IDENTIFICATION OF IMPACTS

#### 3.1 SITE MONITORING INTRODUCTION

Monitoring of the work environment will be conducted to:

- Identify environmental exposure conditions that are immediately dangerous to life or health (IDLH)
- 2) Evaluate the potential for exposure to hazardous substances by workers
- 3) Identify impacted media, storage tanks, or abandoned containers

During excavation activities, daily monitoring information will be maintained in the Daily Field Reports. The logs will be maintained by the Contractor SHSO and provided to the Construction Manager. These logs will describe the work being performed at the subject property and describe any new procedures established for performing work. In addition, these logs will list the types of monitoring equipment being used, how and when this equipment was calibrated, monitoring results, the level of personal protective equipment (PPE) being used, and complete descriptions of all injuries, accidents, physical complaints, and unusual occurrences.



For properties with known or suspected environmental contamination, all existing soil and groundwater, is assumed to be contaminated.

#### 3.2 IDENTIFYING IMPACTED MEDIA OR ABANDONED CONTAINERS

Contractors bidding project must have experience working on projects requiring environmental clean-up or REC mitigation. Required experience is described in the Contract Documents.

Various contaminant types and environmental concerns may be encountered at the properties. This ECMP relies on the basis that for properties with known or suspected environmental contamination, all existing soil, fill materials, and groundwater are assumed to be contaminated. Additional caution shall be implemented for sites with known environmental contamination or where environmental contamination is encountered.

Environmental contamination shall be identified based on the following:

- Previous environmental investigations which document environmental impact at the property;
- Visual/odor impacts; petroleum, solvents, oil, tar, staining, sheens, metallic or unnatural debris, unnatural color, slag, coal, etc.
- Nonaqueous phase liquid
- Volatile emissions as determined by a photoionization detector or equivalent field meter
- Abandoned underground storage tanks or piping associated with petroleum or hazardous substances
- Any confirmatory laboratory analysis conducted by the Contractor or QEP
- Any determination by the QEP

Where environmental contamination is known or identified, in addition to following the conditions of this ECMP, Contractors will be required to have applicable training as described in Section 1.2.4.

Abandoned containers must be addressed and removed in accordance with the Contract Documents and this ECMP.

When in doubt of any site conditions or work activities, immediately contact the QEP.

#### 3.2.1 Air Monitoring

During demolition and soil excavation activities, the Contractor shall evaluate the presence of airborne chemicals of concern through appropriate National Institute for Occupational Safety and Health (NIOSH) approved methods. The Contractor will monitor the working area and the area downwind from site activities in areas of known or suspected contamination as defined in the Contractor's HASP. Information gathered will be used to ensure the adequacy of the levels of protection being employed at each area requiring environmental evaluation and may be used as a basis for upgrading or downgrading the levels of protection. Required levels of PPE should be determined by the Contractor SHSO, based on known site conditions and work activities. The QEP may provide independent monitoring to verify the appropriateness of work being performed and levels off protection being employed.



#### 3.2.2 Water Monitoring

If encountered during soil excavation activities and if required to complete the proposed scope of work, dewatering activities will be performed by the Contractor or a qualified subcontractor with specialized expertise in this area and qualified individuals as defined in Section 1.2.4. Required levels of PPE should be determined by the Contractor SHSO.

Monitoring will include physical observations and collection of water samples for field screening and laboratory analysis. Laboratory analytical results will dictate water handling and disposal options. (Refer to Fluids Management in Section 4.2.8). Adverse conditions (i.e. sheen, odors, product accumulation, or any other physical evidence of contamination) observed by the Contractor will be communicated to the QEP. Additional monitoring and/or characterization may be necessary as specific conditions are identified. The QEP will advise the Contractor of additional requirements, which may include media monitoring or sampling activities.

#### 3.2.3 Soil and Solids Monitoring

All subsurface work will be performed by the Contractor or a qualified subcontractor with specialized expertise in this area and qualified individuals as defined in Section 1.2.4. Required levels of PPE should be determined by the Contractor SHSO.

Visual or field instrument soil screening will be performed by the Contractor's Qualified Individual and independently by the QEP during all excavations into known or potentially contaminated material. Soil screening will be performed regardless of when the invasive work is done and will include all excavation and invasive work performed on the subject property, such as footing removal and utility work.

Soil must be returned to the subsurface of the property. Unknown material will be assumed contaminated requiring proper handing until proven otherwise.

### 4.0 EXCAVATION WORK PLAN

#### 4.1 EXCAVATION WORK PLAN INTRODUCTION AND OVERVIEW

Soil and groundwater contamination is assumed to be located throughout the properties with known or suspected environmental conditions. All subsurface soil and groundwater must be handled in accordance with the ECMP unless sampling is conducted that demonstrates that the protocols are no longer necessary in accordance with the applicable provisions and requirements of Part 201 of the Natural Resources and Environmental Protection Act (NREPA).

The QEP must be made aware and provided the opportunity to conduct independent oversight/observation during all soil disturbance and subsurface demolition/construction/excavation activities to ensure proper material handling, disposal, and site restoration protocols are followed.

The contractor must employ qualified individuals to complete and provide oversight during all demolition/excavation activities that involves subsurface work, soil removal or handing, and groundwater or storm water removal and handling to ensure that the proper protocols are being followed. The QEP and Contractor qualified individuals are defined in Section 1.2.

Short-term dewatering is permitted, provided the water is contained until characterization can be performed and the water is managed and disposed in accordance with all applicable local, state, and



federal laws. Dewatering, testing, and disposal is considered incidental to Contractors work.

Subsurface construction/excavation work activities cannot result in a new release, exacerbation of existing contamination, or any other violation of laws and regulation. In addition, precautions must be taken to ensure contaminated soil is separated from the general public (i.e., people not associated with the operations of the subject property).

Groundwater resources shall not be developed for the purpose of obtaining potable water. The property is presently served by municipal water and there is no reasonable basis to assume a potable or irrigation well will be installed on the property.

#### 4.2 SOIL MANAGEMENT

The following subsections are intended to discuss and document required due care actions for the purpose of mitigating unacceptable exposures and exacerbation of existing contamination and site conditions.

This section includes work tasks required for management of soils generated during demolition activities. Soils, debris, and residual materials generated from all demolition activities on the property shall be managed in accordance with this ECMP.

Soils and fill materials that are excavated during demolition will be preferably returned to the property to the extent that such reuse: 1) is acceptable with the Contract documents, 2) does not negatively impact the final work product, 3) does not exacerbate environmental contamination on the property, 4) does not create an unacceptable risk of exposure to environmental contaminants, or 5) does not otherwise pose a concern to human health and the environment.

Soils and fill materials that cannot be reused on the property as a result of these restrictions, or due to construction considerations (i.e., cut/fill volumes, non-constructability, timing, etc.), will be removed from the property for disposal at an appropriately licensed facility. Temporary stockpiling of soils on the property may be necessary prior to re-use on the property and/or off-site disposal. Stockpiling will be conducted in accordance with the guidance in Section 4.2.2.

#### 4.2.1 Soil Screening Methods

At sites with known or suspected environmental concerns, all existing soil and fill materials are assumed to be contaminated. Field screening methods are proposed to assist in identifying impacted materials. Soil screening and monitoring is described in Section 3.2.3.

If off-site disposal is required, material samples will be collected and analyzed by the Contractor to determine the proper disposition of any soils or solid material removed from the property prior to disposal at a licensed facility.

Characterization for off-site disposal shall be dictated by the receiving facility, but will likely require the following minimum laboratory analytical:

- Toxicity Characteristics Leaching Procedure (TCLP) 8 metals
- TCLP Volatile Organic Compounds (VOCs)
- TCLP Semi -Volatile Organic Compounds (SVOCs)
- Polychlorinated Biphenyls (PCBs)



- Paint Filter
- pH

Additional waste characterization laboratory analytical methods may be recommended by the QEP based on the specific residual material encountered and the requirements of the anticipated licensed disposal facility to gain disposal acceptance. Copies of all relevant documentation associated with such testing shall be submitted to the Owner and QEP.

#### 4.2.2 Stockpile Methods

If soil stockpiling is necessary as a temporary soil management strategy, the Contractor shall stockpile excess soils, and cover the materials with plastic sheeting that has been approved by the QEP. Soil stockpiles will be placed on a visqueen or comparable liner (minimum of 6 mil in thickness) and continuously encircled with a berm and/or silt fence. Residual soil will only be stockpiled at locations on the subject property approved in advance by the QEP. Stockpiled soil for reuse will not be mixed with other materials.

Precipitation shall not be permitted to accumulate with stockpiled soil. Contaminated soil/materials shall be contained and covered at all times. This shall be accomplished by accumulation in appropriate containers or by construction of containment. The Contractor shall be responsible for maintenance of plastic sheeting as necessary to prevent contact of potentially contaminated materials with precipitation or surface run-off, which may require the use of a surrounding earthen berm beneath the lower plastic sheeting. If berms are used, the berms shall be contiguous with the base and an impermeable membrane used to cover the berm base. Silt fence shall be provided at the perimeter of stockpiled materials, if necessary to prevent erosion of stockpiled soils. Hay bales and inlet protection fabric will be used as needed near catch basins, surface waters and other discharge points. Stockpiles will be kept covered at all times with appropriately anchored tarps. Stockpiles will be routinely inspected, and damaged tarp covers will be promptly replaced. Stockpiles will be inspected at a minimum of once each week and after every storm event.

Appropriate containers include drums, roll-off bins, trailers, or other containers that are intended to contain contaminated materials.

If intended for off-site disposal, materials shall be removed from the subject property as frequently as required so that the volume or quantity of debris in the stockpile areas does not disrupt work activities or create a nuisance or hazard.

#### 4.2.3 Materials Excavation and Load Out

If necessary, the QEP or person under their supervision will oversee all invasive work and the excavation and load-out of all excavated material. The Contractors are solely responsible for safe execution of all invasive and other work performed under this plan. The presence of utilities and easements on the subject property will be investigated by the Contractor.

Precautions must be taken to ensure that impacted soils are protected from rainfall and storm water. Should subsurface soil become exposed, through excavation, appropriate action must be taken to prevent leaching of contaminants due to storm water. Actions could include: (1) promptly returning impacted soil to the excavation and restoring the surface cover, (2) removing the impacted soil to a proper disposal facility, and backfilling with clean fill material, (3) covering impacted material with plastic sheeting, and/or (4) placement of impacted soil beneath a berm or paved areas.



Soil must be handled in a manner that prevents erosion and runoff to a surface water or beyond the property boundary. Soil erosion and sedimentation control plans shall be followed for site work activities. Erosion controls (silt fencing or other barriers) must be utilized around the perimeter of work areas and around any areas where excavated soil is stockpiled or mounded.

Promptly fill excavations, below grade areas or voids to ensure water does not collect within the area. If excavations remain open and groundwater or storm water accumulates in the excavation, all water must be handled as described in the Fluids Management Plan described in Section 4.2.8.

Excavations that penetrate the groundwater table must be backfilled with the same material removed (if compatible with the Contract specs) or backfilled with clean fill material.

Loaded vehicles leaving the site will be appropriately lined, securely covered with a tarp, manifested, and placarded in accordance with appropriate Federal, State, and local requirements.

The Contractor must maintain a log of all demolition residuals leaving the subject property. This log will be used to verify proper disposal and receipt of all manifests. The QEP may maintain an independent log of residuals. An example residual tracking log is included in **Appendix C**.

The Contractor will be responsible for identifying and securing all egress points, haul roads, and preventing debris track out and exacerbation.

#### 4.2.4 Vehicle Track-Out Prevention Plan

The Contractor will be responsible for ensuring that all outbound trucks will be free of debris before leaving the subject property. Locations where vehicles enter or exit the subject property shall be inspected daily for evidence of off-site soil tracking. The Contractor is responsible for ensuring that all egress points for truck and equipment transport from the subject property are clean of dirt and other materials derived from the subject property during intrusive excavation activities. Cleaning of the adjacent streets will be performed by the Contractor as needed to maintain a clean condition with respect to site-derived materials.

The Contractor shall take measures to consistently prevent vehicular track-out of materials from the site to the adjacent public thoroughfares. Such measures may include, but are not limited to:

- 1. Mechanical removal of track-out materials from paved roadways.
- 2. Construction of gravel approaches or temporary wheel washes at egress locations from the work area and washing of vehicle tires prior to leaving the work area.

All equipment and vehicles, including tires, must be clean of soil before exiting the site. Vehicle and equipment cleaning stations will be located near each entrance to the site. Vehicles and equipment will be cleaned of dirt using brushes and/or pressure washing. All soil and wash water from cleaning stations will contained and remain on site in accordance with the requirements of the ECMP. Following characterization and approval from the City of Flint, water can be discharged to the sanitary sewer system or will be manifested and transported for disposal at an approved licensed waste treatment facility.

When track-out onto thoroughfares occurs, the Contractor will as soon as practical contain and remove the residual material that was carried off-site, but no later than the end of the day. Track-out material



recovered from off-site will be returned to the site and managed consistent with the other soil at the subject property, as approved by the QEP.

It is the Contractor's responsibility to document the track-out mitigation activities, including the dates and times that control and cleanup activities are conducted. It is also the Contractor's responsibility to conduct other necessary remedial activities, including training of Contractor and subcontractor personnel, to prevent the re-occurrence of track-out in the future.

#### 4.2.5 Materials Transport Off-Site

All transportation of materials will be performed by licensed transporters in accordance with appropriate Federal, State, and local regulations. Transporters will be appropriately licensed and trucks properly placarded.

Egress points for truck and equipment transport from the subject property will be kept clean of dirt and other materials during site remediation and development. Where possible, queuing of trucks will be performed on-site in order to minimize off-site disturbance.

The Contractor shall keep accurate records for the type and quantity of materials and liquids removed from the site. QEP's approval is required before any liquid, soil, or potentially contaminated material leaves the site. The Contractor shall prepare and maintain accurate manifests or bills of lading for each batch of the waste materials being transported and disposed. The Contractor is responsible for obtaining the Owner or designee signatures on manifests for transportation and disposal purposes.

The Contractor is responsible for cleaning up all the leaks, spills from containers and other items on site or off site that occur, whether due to the Contractor's negligence or not. Immediate containment actions shall be taken as necessary to minimize the effect of any spill or leak. The Contractor shall notify the Construction Manager, QEP and appropriate governmental authorities of the incident. Cleanup shall be in accordance with applicable Federal, State, and local laws and regulations at no additional cost to the Owner or Owner Representative.

#### 4.2.6 Materials Disposal Off-Site

Contractor is responsible for all necessary permits, licenses, waste characterization, coordination of waste profiles and manifests, submittal of all notices, notifications, and associated fees. Coordinate all work with QEP.

All soil and residual materials excavated and removed from the site will be treated as contaminated and regulated material and will be transported and disposed in accordance with all Federal, State, and local regulations. Contaminated residual materials shall be disposed at licensed approved landfill.

Off-site disposal locations for excavated soils will be identified prior to disposal. This will include estimated quantities and a breakdown by class of disposal facility, if appropriate (i.e. hazardous waste disposal facility, solid waste landfill). The Contractor shall be responsible for obtaining necessary approvals from the disposal facilities, consistent with all applicable regulations. The off-site facilities will be approved by the QEP prior to disposal of any materials.

The Contractor will obtain approval from the QEP for disposal of residual waste, including completion of waste characterization analyses as may be required. Subsequent to landfill approval, the Contractor shall prepare all documentation required to document transportation of residual waste from the site,



(i.e. bills of lading or load tickets for Type II disposal, Uniform Hazardous Waste Manifests) for review and approval of the QEP. The property owner or designated representative must sign Uniform Hazardous Waste Manifests.

The subject property Owner (GCLBA) will be identified as the generator of the material. The Contractor shall provide documentation to the Construction Manager and QEP regarding disposal or treatment of all soils removed from the site. Documentation will include records of disposal or treatment facility, the quantity of materials transported, and the quantity of materials treated or disposed.

Contaminated residual waste that do not exhibit the characteristics of hazardous waste (i.e., ignitability, corrosivity, reactivity, or TCLP toxicity) shall be disposed at an approved, licensed Type II landfill. Contaminated residual soils or materials that are characteristically hazardous shall be disposed in an approved, licensed hazardous waste facility. The Contractor shall employ only transporters that are licensed by the State of Michigan to transport hazardous material from the subject property.

Based on known site conditions, characteristically hazardous materials are not expected to be encountered in the course of the work.

#### 4.2.7 Materials Reuse On-Site

On-site management of residual material is the preferred method for this project, although may not be feasible due to site conditions. Contaminated soil that is acceptable for re-use on-site and can be appropriately managed within the soil budget will be replaced on the subject property beneath the cover soil layer.

Soils to be redistributed on the subject property will be managed as directed by the QEP, so as to assure that soils are placed in a manner that does not exacerbate contamination conditions.

Excess soils that are generated during demolition activities shall be stockpiled on the subject property by the Contractor and subsequently characterized by the Contractor to facilitate off-site disposal. Excess soils are not anticipated based on the scope of work proposed.

#### 4.2.8 Fluids Management

This section includes management of aqueous (i.e., water based) wastes generated during the course of demolition. Aqueous wastes are assumed to include waters derived from dewatering liquids, storm water accumulated in excavation, vehicle wash, infrastructure abandonment, and decontamination of personnel or equipment. Techniques for management of other aqueous waste materials will be established by the QEP on a case-by-case basis.

Based on the scope of work proposed dewatering of excavation is not expected to be necessary. All fluid management and disposal is considered incidental to the contract.

Contractor shall properly containerize and remove in accordance with applicable regulations liquids accumulated in building components, site features, and sub grade areas. Examples of accumulated liquids include but are not limited to chilled water systems, boiler or steam systems, hydraulic piping, elevator systems, suspected glycol/hot water floor heat system at 1402 S. Saginaw, and water accumulated in basements or subgrade area.



All liquids to be removed from the site, including excavation dewatering, will be handled, transported and disposed in accordance with applicable Federal, State, and local regulations.

It is permissible to leave encountered groundwater in place if compatible with the Contract Specifications. In the event that dewatering of excavations is required, or the containment and management of other groundwaters or surface waters at the site is necessary to facilitate the completion of demolition activities, the Contractor will use the following procedures.

Groundwater derived from dewatering activities on the subject property shall not be discharged to a sanitary sewer without the proper analytical testing, prior written consent of the QEP and after obtaining the requisite permits for the selected discharge. For sites with known or suspected impact ground waters shall not be discharge to a storm sewer, surface water or to the ground surface on the property.

In the event that the Contractor determines the volume of fluids requiring management on-site is excessive (e.g., high water table conditions, excessive precipitation), the Contractor will notify the Construction Manager and the QEP immediately. Alternate management methods, including obtaining permits for direct discharge to the municipal sanitary sewer as appropriate, will be explored and obtained as necessary to manage the fluids in accordance with all Federal, State and local regulations.

Contractor is responsible for all necessary permits, licenses, waste characterization, coordination of waste profiles and manifests, submittal of all notices, notifications, and associated fees. Coordinate all work with QEP.

#### **Liquid Characterization**

Characterization of the fluids will be conducted prior to disposal, at the completion of dewatering activities, or more frequently as dictated by the accumulated volume of water and the need to dispose of it in a timely manner to appropriately manage residuals, storage volume and work space at the subject property. Characterization will be conducted by the Contractor with oversight by the QEP.

Characterization for disposal to the municipal sewer will typically require the following minimum laboratory analytical:

- Metals (arsenic, cadmium, chromium, copper, silver, lead, mercury, nickel, zinc, Chromium VI)
- Amenable Cyanide
- PCBs
- Benzene, Toluene, Ethylbenzene, & Xylene (BTEX)
- BOD5
- Total Suspended Solids
- Oil & Grease
- Ammonia
- Phosphorus
- pH

General characterization activates for off-site disposal at a licensed wastewater treatment facility shall be dictated by the receiving facility but will likely require the following minimum laboratory analytical:

- 8 Resource Conservation and Recovery Act (RCRA) Metals
- VOCs, SVOCs



- PBCs
- Reactivity
- Ignitability
- pH

At minimum hydraulic hoists shall be samples for PBCs.

Additional analytical characterization methods may be recommended depending on the nature of the material.

#### On-site wells

With the exception of permitted environmental monitoring or dewatering wells, water wells shall not be installed on the subject property. Groundwater shall not be utilized for demolition/construction purposes or potable water.

On-site water wells shall be abandoned in accordance with applicable regulations and with the oversight of the QEP. Note that two environmental monitoring wells are known to be present at 3306 Flushing Road.

#### 4.2.9 Backfill from Off-Site Sources

All backfill materials proposed for import onto the subject property will be approved by the Construction Manager and the QEP in advance and will be in compliance with provisions in this ECMP and Contract Documents prior to receipt at the site.

The Contractor will be required to provide certification that imported materials are clean for each material brought to the subject property. Material from industrial sites, spill sites, or other environmental remediation sites or potentially contaminated sites will not be imported to the site. Solid waste will not be imported onto the subject property.

Importation of fill material is prohibited until the fill materials have been characterized and deemed appropriate for use on site. Minimum requirements for soil fill shall include the following:

- Geotechnical and constructability standards as specified within the Contract Specifications
- Written certification that the material is from a "clean" source
- Laboratory analytical data, if available

Additional analytical characterization methods may be required depending on the nature of the material and history of the source site.

Trucks entering the subject property with imported soils will be securely covered with covers. Imported soils will be stockpiled separately from excavated materials and covered to prevent dust releases.

#### 4.2.10 Storm Water Pollution Prevention

Where applicable depending on the nature and location of the Contractor's activities, as well as the acreage of the development property, the Contractor shall obtain a Soil Erosion and Sedimentation Control (SESC) permit. All work shall be performed in compliance with the SESC permit and with all applicable rules and regulations as established by the State of Michigan and the local regulating agency (Genesee County) in conjunction with the SESC Act (Act 347 P.A. of 1972) and the Storm Water Permit-



By-Rule for Construction Activities (R 323.2190 of Act 245 of 1929 as amended) and Act 203 of 1993.

The Contractor is responsible for obtaining the SESC permit from the local agency with jurisdiction for regulating soil erosion and sedimentation. A copy of the SESC permit shall be submitted to the Construction Manager prior to initiation of the Contractor's work.

All SESC controls shall be installed and activities performed according to the practices outlined in the Contract Specifications and the Guidebook of Best Management Practices for Michigan Watersheds, Michigan Department of Natural Resources, Surface Water Quality Division. The Contractor shall provide and maintain temporary soil erosion and sedimentation control measures as required by permit. Controls shall be maintained during working and non-working hours as required by weather. Silt or solids retention at control structures shall be removed following demolition and managed consistent with the other soils at the subject property.

Barriers and hay bale checks will be installed and inspected by the Contractor's MDEQ Certified Storm Water Operator (CSWO) in accordance with Part 31, Water Resources Protection and Part 91, SESC, of the NREPA, 1994 PA 451 as amended. Inspections will be conducted at least once a week and within 24-hours after every storm event. At a minimum, silt fencing and/or hay bales will be installed around the entire perimeter of the earth disturbance area.

Fabric sediment trap bags will be installed in all catch basins on and adjacent to the subject property. The traps will be inspected by the CSWO in accordance with the SESC and BMP. Accumulated sediment will be removed on a frequency necessary to the keep the control device working properly and not impeding storm water surface run-off flow. The recovered sediment will be managed consistent with the other soil at the subject property as described in this plan.

Erosion and sediment control measures shall be inspected to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether erosion control measures are effective in preventing significant impacts to receiving waters.

Results of inspections will be recorded in a logbook by the CSWO and maintained at the subject property and available for inspection by the QEP, MDEQ, and local regulating agency. All necessary repairs shall be made immediately.

Accumulated sediments will be removed as required to keep the barrier and hay bale check functional. All undercutting or erosion of the silt fence toe anchor shall be repaired immediately with appropriate backfill materials. Manufacturer's recommendations will be followed for replacing silt fencing damaged due to weathering.

The Contractor shall take such steps as are necessary to assure the retention and removal of any sediment, which enters a drainage system along the demolition route before said system discharges into a river, pond, or lake. If eroded material is allowed to enter a storm sewer system, it shall be the Contractor's responsibility to see that all catch basins and manholes are cleaned following demolition.

The Contractor shall also be responsible for maintaining all temporary on-site roadways in a passable condition until demolition is completed.



#### 4.2.11 Odor Control Plan

Nuisance odors emanating from demolition/excavation activities at the site will be controlled and/or abated to ensure that emission are not leaving the subject property. This odor control section provides a general guidance for controlling emissions of nuisance odors off-site. It is the Contractor's responsibility to monitor and control nuisance odors throughout the duration of demolition activities.

Specific odor control methods to be used on a routine basis will include monitoring and/or expeditious removal of the odor source material from the subject property. If nuisance odors are identified at the subject property boundary, or if odor complaints are received, work will be halted and the source of odors will be identified and corrected. Work will not resume until all nuisance odors have been abated. Implementation of all odor controls, including the halt of work, is the responsibility of the Contractor.

All necessary means will be employed to prevent on- and off-site nuisances.

#### 4.2.12 Dust Control Plan

It is the Contractor's responsibility to suppress the generation of dust during the completion of demolition/earth work activities. The following describes minimum elements of a dust suppression plan that addresses dust management during invasive on-site work.

- (a) Dust suppression will be achieved through the use of a dedicated on-site water truck. The truck will be equipped with a water cannon capable of spraying water directly onto off-road areas including haul roads, excavations, and stockpiles.
- (b) Reducing free-fall drop distance from equipment during stockpiling of residuals.
- (c) Gravel may be used on roadways to provide a clean and dust-free road surface.
- (d) On-site roads will be limited in total area to minimize the area required for water truck sprinkling.
- (e) Limiting the speed of all vehicles on the property to 10 miles per hour.

The Contractor shall apply water and/or dust palliatives as required to eliminate visible dust emissions from the site. Dust generation will be kept to a minimum by implementing control measures when dust is first observed. Application of water shall be the preferred dust palliative for the site. In the event that application of water proves ineffective, dust palliatives shall be approved by the QEP. Appropriate dust palliatives shall include:

- (a) Calcium chloride, in accordance with MDOT 9.22.08A.
- (b) Organic, nonpetroleum products (e.g., lignin derivatives, vegetable oils, and sugar beet extract) and synthetic polymer derivatives.

If necessary, ambient air monitoring may be conducted by the Contractor (at their own expense) at the perimeter of the subject property to demonstrate that no unacceptable exposures result from emissions of dust from intrusive site work activities.

#### 4.2.13 Burning of Debris

Burning of waste, vegetative, or other combustible matter is prohibited.



#### 4.2.14 Heavy Equipment Decontamination Plan

If contaminated soil and/or fill are encountered during work, excavation equipment, and other vehicles may be contaminated during site activities in areas of contamination or exclusion zones. Equipment used for invasive activities is to be decontaminated by the Contractor prior to removal of the equipment from the subject property. All equipment and vehicles, including tires, must be free of soil before exiting the subject property. The Contractor shall complete decontamination in a manner to reduce the quantity of residuals generated from decontamination procedures to the extent practicable.

The Contractor SHSO will establish equipment and vehicle decontamination stations within contaminant reduction zones that should be located near each invasive work zone or demolition traffic egress for the subject property. Alternately, decontamination of equipment shall be completed in an unpaved area of the subject property that overlies existing contamination, as approved by the QEP, where neither clean fill nor pavement has been installed.

If necessary, decontamination of personnel shall be completed in accordance with the Contractor's site-specific HASP. Residuals derived from personnel decontamination, including spent PPE, shall be managed in accordance with the requirements of Section 4.2.15 (Decontamination Residuals Management Plan).

#### 4.2.15 <u>Decontamination Residuals Management Plan</u>

This section includes management and disposal of PPE and other associated solid decontamination residuals. Single use PPE and solid decontamination residuals that may be generated during project activities will be managed as Type II waste material. Solid decontamination residuals managed pursuant to this specification section shall be managed via disposal in the approved Type II landfill where residual soils and debris are managed.

Single use PPE includes used protective suits or related outerwear, gloves, boot covers, used cartridges for air purifying respirators and similar equipment that is used to reduce exposure of workers to contaminants and is not amenable to cleaning and reuse.

PPE and related decontamination residuals shall be accumulated in drums, roll-off bins, trailers, or other containers that are intended to contain environmentally impacted materials. Containers shall be covered in a manner, which will preclude accumulation of precipitation. Decontamination residuals may be stockpiled and co-managed with soils or demolition debris, with approval from the QEP.

Decontamination residuals shall be removed from the subject property as frequently as required so that the volume or quantity of stockpiled residuals does not disrupt demolition activities or create a nuisance or hazard. Decontamination residuals shall be disposed at licensed approved Type II landfill. Decontamination residuals shall be managed through transportation and disposal under landfill acceptance received for non-hazardous solids. Management and documentation requirements associated with management of non-hazardous soils shall apply to decontamination residuals. It is the Contractor's responsibility to prepare and maintain all records documenting the management of decontamination residuals.

#### 4.3 CONSTRUCTION DEBRIS MANAGEMENT

This specification section includes stockpiling, management and disposal of construction/demolition debris or other materials that are generated during demolition and not elsewhere specified. It is



anticipated that construction debris at the subject property will primarily be comprised of concrete and demolition debris from demolition activities. Construction debris could also include residuals from the demolition of subsurface utilities, vegetation, and other materials that cannot be recycled on-site.

Construction debris as used herein shall be defined to include all materials derived from structural demolition, removal of paved surfaces, as well as excess excavated manmade and naturally-occurring materials, including excavated utilities, foundations and/or concrete slabs, asphalt, ash, cinders, metal or wood piles, concrete or masonry rubble, rubbish, unsuitable expansive soils, cobbles, boulders, roots, stumps, and other organic matter or vegetative materials. The presence of limited quantities of the above materials in soil does not cause the soil to constitute construction debris.

The Contractor shall submit, for the QEP's and Construction Manager's review and approval, a listing of any proposed disposal or recycling facilities to which the Contractor proposes to use for disposal of construction debris derived from the subject property.

Construction debris shall be removed from the subject property as frequently as required so that the volume or quantity of debris in the stockpile areas does not disrupt work activities or create a nuisance or hazard.

Construction debris shall be disposed at licensed off-site facilities. The Contractor shall be responsible for obtaining necessary approvals from the disposal facilities, consistent with all applicable regulations. If necessary, the Contractor (with oversight from the QEP) shall collect representative samples of construction debris to facilitate landfill/recycling acceptance.

The Contractor shall prepare all paperwork required for disposal of construction debris. Such paperwork shall include waste characterizations required by the landfill operator(s) and any waste manifests that may be required. The Owner or designee will sign manifests as required.

The following is a generalized summary of construction debris management:

#### Metal

Recycle as appropriate in accordance with applicable regulations. Segregate metal from potentially impacted materials, liquids, and soil at sites with known or suspected environmental contamination.

#### **Concrete and Masonry**

Recycle as appropriate in accordance with applicable regulations. Segregate material from potentially impacted materials and soil at sites with known or suspected environmental contamination. Screening may be necessary to segregate concrete debris and soil. All oil impacted concrete and masonry shall be segregated from the recycled materials and disposed of in accordance with applicable regulations at a licensed landfill.

#### **Asphalt**

Recycle as appropriate in accordance with applicable regulations. All oil impacted asphalt shall be segregated from the recycled materials and disposed of in accordance with applicable regulations at a licensed landfill.

#### **Building Debris and Trash**

Dispose at approved licensed landfill.



#### Vegetation and Organic Matter

Recycle or dispose at approved facility. Root balls and stumps must be free of soil or segregated from the recycled materials and disposed of in accordance with applicable regulations at licensed landfill from sites with known or suspected environmental contamination.

Contaminated construction debris shall be disposed at an approved, licensed landfill. Other requirements for the handling and management of contaminated construction debris shall be conducted consistent with the practices described for contaminated soils in this ECMP.

#### 4.4 CONTINGENCY / DISCOVERY PLAN

Any buried abandoned containers (i.e. USTs, drums, pipelines, etc.), unanticipated void spaces, infrastructure, or historical artifacts that are discovered during demolition must be appropriately handled, characterized and removed if appropriate. Upon discovery of conditions Contractor should notify the Construction Manager and QEP. Any abandoned containers or historical artifacts that are discovered should not be disturbed and any activities that could result in damage to buried containers or historical artifacts ceased. Demolition activities should not resume until the abandoned container(s) or historical artifacts are properly assessed and removed, if necessary.

If other previously unidentified conditions or potential contamination sources are encountered during subsurface excavations, excavation activities at that location will be suspended until the situation is evaluated and sufficient equipment is mobilized to address the condition. If necessary, sampling will be performed on product, sediment and surrounding soils, etc. by the QEP, as necessary to determine the nature of the material and proper disposal and/or environmental management method in accordance with the Property Owner's due care requirements and obligations.

#### 4.5 STORAGE TANK AND HYDRAULIC HOIST REMOVAL

Contractor shall provide all labor, equipment, supplies, materials, and incidentals to conduct the removal and proper disposal of all above ground storage tanks (ASTs), USTs, hydraulic hoists, or similar vessels known or discovered at the subject property. Unknown storage tanks are assumed to contain non-hazardous water, solids, and/or recyclable petroleum product. Hydraulic hoists are assumed to contain non-hazardous oil and/or water with PCB content less than 50 parts per million (ppm). Contract Change Order will be considered for hazardous waste or PCBs above 50 ppm.

Several ASTs containing various automobile fluids are known to be present at 1402 South Saginaw Street. Refer to summary in **Appendix B** and pre-demolition hazardous material surveys for information regarding known storage tanks.

#### Qualifications and Insurance

The Contractor or approved subcontractor must utilize workers with 40-hour HAZWOPER training and be licensed and insured to complete storage tank work as described in Section 1.2.4.

#### General Scope of Work

Detail the proposed means and methods in the site specific work plan and HASP.

If encountered during work, properly remove and dispose of aboveground and underground storage tanks, and hydraulic hoists in accordance with applicable regulations. Refer to Technical Specification included in **Appendix D** for detailed methodology.



The attached specification scope of work is designed to provide remove and permanent closure of the tank systems at the subject property to comply with due care requirements and prepare the site for future use. Contract Change Order will be considered for storage tanks that cannot be removed and are required to be closed in place.

Presence of underground tanks and hoists, including size and contents not confirmed. For sites where USTs or hoists are suspected, Contractor shall perform exploratory excavations and test pits with the direction and oversight of the QEP to identify suspect USTs and hoists. Conduct test pits as soon as practical to identify the presence of on-site storage tanks.

Notify QEP 48 hours in advance of any storage tank work.

Upon discovery, it may be necessary for the QEP to notify and register the storage tank with the MDEQ. Upon discovery, Contractor should expect delays associated with mobilization of QEP, notification, registration, waste characterization, waste profile approval, and mobilization of subcontractors. Delays are inherient to storage tank removal projects. Contractor will not be compensated for delays or demobilization due to storage tank discovery/removal.

Allow and provide for inspection of work area by QEP. Allow and provide for inspection of excavation by QEP, prior to backfill. Assist QEP as necessary with collection of soil samples from floor of excavation.

Contractor will be responsible for all waste characterization sampling with oversight and approval of QEP. Contractor is responsible for all laboratory analytical fees. For bidding purposes contents should be assumed to be non-hazardous. QEP has the right to reject or require Contractor to redo any work or sampling conducted without the QEP present.

The tanks and piping shall be emptied of all fill materials, liquids, and sludge and purged of all vapors prior to cutting, movement, and/or transport. Piping shall be emptied of all liquid and sludge, purged and capped, and removed from the ground. Storage tank piping must be removed in its entirety. Any associated concrete anchors, vault, or tunnels shall be removed as part of the work.

Backfill UST and other excavations with approved material and compact, meeting the requirements of specifications.

#### 4.6 SITE CONTROL

Precautions to prevent the reasonably foreseeable acts or omissions of a third party will be implemented. Contractors will be required to keep unauthorized persons off the subject property during the demolition activities. Actions could include: (1) post "no trespassing" signs, and/or (2) maintain fencing to prohibit the public from entering the subject property. Open excavations will be fenced to prevent access by unauthorized personnel. Subcontractors will not be brought onto the property without notification to the Construction Manager, oversight of the authorized Contractor and completion of Contractor Disclosure Statement by subcontractor.

Personnel working inside and in the general vicinity of the work shall be trained and made thoroughly familiar with the safety precautions, procedures, and equipment required for controlling the potential hazards associated with this work. Site visitors must sign in with the Contractor SHSO/Site Log Book and shall be provided a safety briefing prior to access to the vicinity of work.



#### 4.7 RECORD KEEPING

The Contractor shall maintain necessary records to demonstrate that all inspections, testing, material disposal, and other requirements as described in the preceding sections was performed in accordance with this ECMP and all applicable Federal, State, and local regulations.

At the conclusion of disposal activities, the Contractor shall provide a compilation of all disposal documentation to the Construction Manager. Documentation will, at a minimum, include records of all disposal facility, the type of materials disposed, the quantity of materials transported (e.g., manifests), and the quantity of materials disposed (e.g., weigh scale tickets), quantities of materials reused on-site, quantities of imported materials/backfill, permits, licenses, and regulatory inspections and correspondence. The Contractor will also be responsible for maintaining copies of all documentation for a minimum of three years after the completion of demolition activities.

#### 5.0 ON-SITE HAZARDOUS SUBSTANCE USE AND FUELING

Hazardous substances and petroleum products will not be stored on the subject property in quantities considered significant without controls. This includes the proper storage of fuel tanks for refueling equipment on the subject property. If possible, fueling and maintenance activities should be conducted beyond the property boundary. If the contractor requires refueling or maintenance activities during demolition, the following will need to be coordinated with the QEP prior to refueling or maintenance activities: (1) a designated area needs to be established, and (2) construction of temporary engineering controls (lined bermed fueling pad), and/or (3) other established means necessary to differentiate a new release from the existing contamination.

#### 6.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

The following individuals contributed to the completion of this Environmental Construction Management Plan.

tephanie R Horn

**Environmental Scientist** 

**AKT PEERLESS** 

phone: (989) 754-9896

**Group Leader** 

**AKT PEERLESS** 

phone: (989) 284-7238



#### **APPENDIX A**

**CONTRACTOR DISCLOSURE STATEMENT** 



### **CONTRACTOR DISCLOSURE STATEMENT**

# Genesee County Land Bank Authority Various Commercial Demolitions Genesee County, Michigan

## AKT PEERLESS PROJECT NUMBER 4892s July 2014

Certain commercial properties where demolition is to occur are known or suspected to be contaminated.

Environmental investigations have been completed at each property. At minimum, a Phase I Environmental Site Assessment (ESA) has been completed at each property. Based on the former operation of the properties for commercial purposes recognized environmental concerns (RECs) have been identified at several properties. The RECs indicate the presence or potential presence of environmental contamination on the subject property.

Site with RECs are more likely to have environmental contamination; however, site work at all properties shall proceed with caution and be conducted in accordance with the Environmental Construction Management Plan (ECMP). RECs include, but are not limited to former site operations, dry cleaning, gasoline filling operations, potential underground storage tanks (USTs), and/or nearby sites of known environmental contamination. RECs are unique to each commercial property.

Soil and groundwater contamination may be present at the subject property in excess of MDEQ Part 201 Residential and Non-Residential Generic Cleanup Criteria (GCC). All soil and groundwater is assumed to be contaminated throughout the properties with known or suspected environmental contamination.

Due to the presence of known or suspected environmental contamination, the Contractor shall take all necessary precautions as required by laws, regulations and the contract documents for protection of the Contractor's personnel, as well as the adjacent properties.

The Owner has retained AKT Peerless as the Qualified Environmental Professional (QEP) for the project. The QEP shall provide independent oversight to ensure that all environmental due care obligations are being met during demolition. The QEP shall provide oversight of all invasive demolition activities including but not limited to work with subsurface infrastructure, foundation removal, opening monitoring wells or sewers, handling of existing soil, sediments or groundwater, and storage tank removal activities.

The QEP must be made aware and provided the opportunity to conduct independent oversight/observation during all soil disturbance and subsurface demolition/construction/excavation activities to ensure proper material handling, disposal, and site restoration protocols are followed.

An ECMP was prepared to provide guidance to the subject property Owner and the Contractors for the management of contaminated soil, sediments, storm water and groundwater (if encountered) at



the subject property. The ECMP describes the recommended policies and procedures meant to ensure that human health and the environment is protected, soil/groundwater is properly managed, and due care responsibilities for the subject property is met during the demolition and restoration activities.

The ECMP requires that all soil and liquid residuals generated from demolition activities on the subject property be managed either via: (1) redistribution on the property in a manner that is compliant with the Owner's due care responsibilities and in accordance with direction from the QEP; or (2) removal from the property to an appropriately licensed, approved disposal facility approved by the QEP.

As part of the property owner's due care obligations, the following measures will be followed during site activities:

Subsurface work activities cannot result in a new release, exacerbation of existing contamination, or any other violation of laws and regulation. In addition, precautions must be taken to ensure contaminated soil is separated from the general public (i.e., people not associated with the operations of the subject property).

**Groundwater resources shall not be developed for construction purposes or for obtaining potable water.** The property is presently served by municipal water and there is no reasonable basis to assume a potable or irrigation well will be installed on the property.

All demolition work is to be conducted utilizing safe work practices for disturbing lead and other heavy metals. All appropriate engineering controls must be implemented for work on surfaces containing or coated with lead or other heavy metals that may be cut with a torch, welded, sawed, otherwise cut, or otherwise disturbed. Contractor is responsible for all worker protection and monitoring. Contractor shall not cause or contribute to any contamination on the subject property as a result of their work.

**Contractor is responsible for all necessary waste characterization.** Collect samples to the extent required by the approved off-site disposal facility receiving the material. <u>All analytical testing and fees required shall be paid for by the CONTRACTOR and is incidental to the Contract.</u>

CONTRACTOR is responsible for all necessary permits, licenses, coordination of waste profiles and manifests, submittal of all notices, notifications, and associated fees. A USEPA Waste Generator's Identification number for the site may be required due to the nature of the materials to be disposed. Work with the QEP to obtain this or other generator identification numbers. The QEP will prepare the paperwork and pay fees associated with the USEPA Generator Identification number.

For hazardous and non-hazardous contaminated liquid waste, utilize a State of Michigan approved manifest system in conformance with the requirements identified in 40 CFR Part 262, 40 CFR Part 263 and 40 CFR Part 761.

Contractor is responsible to conduct all air monitoring necessary to demonstrate compliance with worker and public safety protection and applicable laws and regulations. The QEP may elect to conduct verification air sampling, independent of the Contractor.



Due to the potential presence of contaminants at concentrations, which exceed Part 201 cleanup criteria and screening levels, excavation on the property should be restricted except for authorized licensed, trained and insured Contractors.

All excavation activities will be conducted under a Health and Safety Plan (HASP). Any contractors working with materials containing potentially hazardous substances shall prepare a HASP, which will include, at a minimum, emergency contact numbers, hospital locations, personal protective equipment (i.e., gloves, boots, coveralls, etc.), monitoring, and decontamination procedures. HASPs prepared for this work should be read and signed by all workers assigned to the project.

Precautions must be taken to ensure that impacted soils are not exacerbated and are separated from the public. Should subsurface soil become exposed, through excavation, utility installation, etc., appropriate action must be taken to prevent an unacceptable risk to the public health. Actions could include: (1) promptly returning impacted soil to the excavation, (2) removing the impacted soil to a proper disposal facility, and backfilling with clean fill material, (3) covering exposed soil with tarps or clean fill material, (4) properly managing soil through the use of erosion controls, etc. to prevent contaminated soil runoff, (5) implementation of a dust management plan, and/or (6) prevent track-off of soils to public right of ways and roadways.

Due to the presence of contamination, procedures must be developed to protect against fugitive dust and trackout. Plans should include specific measures necessary to ensure impacted soil does not leave the site during construction activities. Additionally, plans should outline procedures for ensuring that large piles of soil are limited to protect against the generation of dust.

Precautions must be taken to ensure that impacted soils are protected from rainfall and storm water. Should subsurface soil become exposed, through excavation, grading, etc., appropriate action must be taken to prevent a leaching of contaminants due to storm water. Actions could include: (1) promptly returning impacted soil to the excavation, (2) removing the impacted soil to a proper disposal facility, and backfilling with clean fill material, (3) covering exposed soil with clean fill material, (4) covering impacted material with plastic sheeting, and/or (5) placement of impacted soil beneath a berm or paved areas.

Soil must be handled in a manner that prevents erosion and runoff to a surface water or beyond the property boundary. Soil erosion and sedimentation control plans shall be followed for construction activities. Erosion controls (silt fencing or other barriers) must be utilized: (1) around the perimeter of the work and (2) around any areas where excavated soil is stockpiled or mounded. Additionally, as previously discussed above, stockpiled and mounded soil should be minimized at the subject property.

All soil that is not re-used on site will be disposed of at an approved landfill. In no instance is soil to be transported off-site other than to an appropriate Type II landfill.

Barricade and maintain open excavations when excavations cannot be promptly backfilled.

Promptly fill excavations, below grade areas or voids to ensure water does not collect within the area. If excavations remain open and groundwater accumulates in the excavation, all groundwater must be handled as described in the following paragraph. If surface water from precipitation accumulates in below grade areas, the water must be handled as described below and treated as if it is contaminated.



Analytical testing may be conducted to confirm the presence of contamination within accumulated water. If contamination is present in accumulated surface water at concentrations exceeding groundwater surface water interface criteria, any such surface water must be handled in accordance with protocols described in the following paragraph. If contamination is below groundwater surface water interface criteria, it may be discharged as acceptable to local, state, and federal regulations. Characterization must be conducted prior to each potential discharge event.

Groundwater pumping for the purposes of dewatering excavations in impacted areas must be conducted in accordance with applicable rules and regulations. It is permissible to leave encountered groundwater in place. However, if dewatering will occur water must be properly disposed of in accordance with applicable rules and regulations. It is not permissible to pump groundwater, accumulated rainwater, or surface water to storm or sanitary sewers without proper permits and monitoring required by the local municipality and the MDEQ. It is also not permissible to pump groundwater onto the ground surface of the subject property or into a surface water body. Groundwater that accumulates in excavations must be contained (i.e. frac tank, or diked areas) until it can be pumped to a treatment facility or groundwater may also be pumped to the municipal Waste Water Treatment Plant provided that appropriate characterization is conducted and disposal is approved by the Water Treatment Plant. Groundwater and impacted surface water is not to be discharged from the property in any manner other than described herein or as approved by local, state, federal authorities and the QEP assigned to the project.

A groundwater surface water interface (pond, wetland, ditch) shall not be created on the subject property without proper characterization.

Hazardous substances and petroleum products will not be stored on the subject property in quantities considered significant without controls. This includes storage of fuel tanks for use in refueling equipment being utilized on the subject property. Fueling and maintenance activities should be conducted beyond the property boundary. If the contractor requires refueling or maintenance activities during construction the following will need to be coordinated with the property owner: (1) a designated area needs to be established, and (2) construction of temporary engineering controls, and/or other means needs to be established to differentiate a new release from the existing contamination prior to refueling or maintenance activities.

**Importation of fill material other than clean backfill is prohibited.** Importation of fill material from another property is prohibited until the fill materials have been characterized, certified in writing by Contractor, and deemed appropriate for use on site.

Any buried abandoned containers (i.e. USTs, drums, pipelines, etc.) that are discovered during construction must be appropriately characterized and removed. Any abandoned containers that are discovered should not be disturbed and any activities that could result in damage to buried containers ceased. Construction activities should not resume until the abandoned container(s) are properly assessed and removed.

**Storage tanks or abandoned containers may be present at the property.** Presence of underground tanks and hoists, including size and contents not confirmed. For sites where USTs or hoists are suspected, Contractor shall perform exploratory excavations and test pits with the direction and



oversight of the QEP to identify suspect USTs and hoists. Conduct test pits as soon as practical to identify the presence of on-site storage tanks. Notify QEP 48 hours in advance of any storage tank work.

**Precautions to prevent the reasonably foreseeable acts or omissions of a third party will be implemented.** Contractors will be required to keep unauthorized persons off the subject property during the construction activities. Actions could include: (1) post "no trespassing" signs, and/or (2) maintain fencing to prohibit the public from entering the subject property. Site visitors must be provided a safety briefing prior to access to work areas. Open excavations will be fenced to prevent access by unauthorized personnel.

Subcontractors will not be brought onto the property without oversight of the authorized contractor and completion of this disclosure statement.

Concrete debris, and equipment impacted with oil or other contamination should be handled and disposed in accordance with applicable regulations. At sites with known or suspected environmental contamination, soil shall be segregated from recyclable materials and left on-site. Concrete impacted with oil staining, or is mixed with contaminated soil cannot be recycled and must be disposed appropriately in accordance with applicable laws and regulations. Contractor shall use proper work practices including screening, grapples, etc. as may be necessary to segregate soil from recyclable debris.

Contractors and workers must possess proper experience, training, and licensing to perform site activities. All subsurface work including excavation, work with subsurface infrastructure, handling of existing soil, sediments or groundwater, removal of storage tanks or any other site activity with the reasonable potential for exposure must be conducted by currently trained individuals as defined in the ECMP.

We have read, understand, and will conduct site work in accordance with this Disclosure Statement and the Environmental Construction Management Plan.

Name and Title		
Signature		
Company		
Date		



## **APPENDIX B**

**ENVIRONMENTAL SUMMARY TABLE** 



## MBEG Environmental Report Summary Table Genesee County, Michigan

	PID	Property Adddress	MREG Area	Building Use	Env.	REC description	Potential for On-Site Storage Tanks	Environmental Report Summary
1	1427200011	4521 CLIO RD	Northwestern	Service Station	Yes	Phase I RECs: (1) Former Filling Station with 3 pump islands;  (2) potential for former auto repair activities;  (3) automobile repair activities on eastern adj. property; and  (4) former gasoline filling stations on northern and northeastern adj. properties.  Phase II: (1) GPR survey across entire property NO USTS IDENTIFIED, UST cavity identified;  (2) Contaminated soil above drinking water, groundwater surface water interface, direct contact, indoor air and soil saturation criteria;  (3) Contaminated groundwater above drinking water and groundwater surface water interface criteria.	X	Phase I ESA - 06/26/2009 Phase II ESA - 02/18/2010
2	1427576021	4045 CLIO RD	Northwestern	Commercial Bldg.	Yes	Phase I RECs: (1) Former drycleaning business (1950-2000) north of property, unknown site conditions;  (2) Leaking UST site 571-feet southeast of property, unknown site conditions;  (3) Known contamination at site 172-feet north of property, unknown site conditions;  Other Concerns: (1) Three former gasoline filling stations on nearby properties to the south.		Phase I ESA - 11/26/2013
3	1427576022	4049 CLIO RD	Northwestern	Commercial Bldg.	Yes	Phase I RECs: (1) Former drycleaning business (1950-2000) 73-feet north of property, unknown site conditions; (2) Leaking UST site 571-feet southeast of property, unknown site conditions; (3) Known contamination at site 172-feet north of property, unknown site conditions; Other Concerns: (1) Unknown piping on southeast portion of lot. (2) Three former gasoline filling stations on nearby properties to the south.		Phase I ESA - 11/26/2013
4	1427576023	4057 CLIO RD	Northwestern	Commercial Bldg.	Yes	Phase I RECs: (1) Former drycleaning business (1950-2000), unknown site conditions; (2) Leaking UST site 571-feet southeast of property, unknown site conditions; (3) Known contamination at site 172-feet north of property, unknown site conditions; Other Concerns: (1) Three former gasoline filling stations on nearby properties to the south. (2) Interior floor drain with unknown discharge point.	х	Phase I ESA 11/26/2013
6	4002106028	2817 CLIO RD	Northern - Downtown River Corridor	Home & Suburban Realty	Yes	Phase I RECs: (1) Site of contamination, conditions unknown, 677-feet to the north; (2) Drycleaning business adj. to the southeast. Other Concerns: (1) Former gasoline filling station to southeast;		Phase I ESA 01/30/2014
7	4002106032	3001 CLIO RD	Northern - Downtown River Corridor	Angelo's Coney Drive-Thru	Yes	Phase I RECs: (1) Site of contamination, conditions unknown, 535-feet to the north; (2) Drycleaning business 301-feet to the southeast; Other Concerns: (1) Former gasoline filling station to southeast;		Phase I ESA 01/30/2014
8	4002151022	2523 CLIO RD	Northern - Downtown River Corridor	Allied Adjsuters and Appraisers	Yes	Phase I RECs: (1) Potential for fuel oil UST, based on observation of heating unit and unknown fuels.	х	Phase I ESA 01/30/2014
9	4010204037	3306 FLUSHING RD	Northern - Downtown River Corridor	Faithful Auto Sales		Phase I RECs: (1) Two potential monitoring wells on-site, reasons unknown, potential groundwater contamination. Other Concerns: (1) Gasoline filling station to southeast.		Phase I ESA - 01/30/2014
10	4011301021	2768 FLUSHING RD	Northern - Downtown River Corridor	Gerald P Berner, MD Inc.	Yes	Phase I RECs: <b>No RECs identified during the Phase I ESA.</b> Other Concerns: (1) Former gasoline filling stations to the south and west.		Phase I ESA 03/17/2014
11	4011301022	2764 FLUSHING RD	Northern - Downtown River Corridor	Auto Brokers LLC World Capital	Yes	Phase I RECs: <b>No RECs identified during the Phase I ESA.</b> Other Concerns: (1) Former gasoline filling stations to the south and west.		Phase I ESA 03/17/2014

Page 1 of 2 07/02/2014



## MBEG Environmental Report Summary Table Genesee County, Michigan

					Env.		Potential for On-Site	
	PID	Property Adddress	MBEG Area	Building Use		REC description	Storage Tanks	Environmental Report Summary
12	4012256017	1110 M L KING AVE	Northern - Downtown River Corridor	Commercial/Indust rial Bldg.	Yes	Phase I RECs: (1) Potential for USTs on southern adjoining property based on historical use as a gasoline filling station.  Other Concerns: (1) Historical use as a printing company;  (2) Former residential structure (1937-1970), potential demolition debris and/or fill.		Phase I ESA - 11/26/2013
13	4013354007	2009 CORUNNA RD	Northern - Downtown River Corridor	Commercial Bldg.	Yes	Phase I RECs: <b>No RECs identified during the Phase I ESA.</b> Other Concerns: (1) Historical use as K & S Variety & Cleaners, and Harris Lumber and Coal Co.	х	Phase I ESA - 01/20/2014
14	4023202002	2541 CORUNNA RD	Northern - Downtown River Corridor	Mechanical Remodeling and Repair	Yes	Phase I RECs: (1) Potential for fuel oil UST, based on observation of boiler system and unknown fuels.  (2) Former gasoline filling station and known leaking UST site on west adjoining property.	Х	Phase I ESA - 01/30/2014
15	4024431018	3206 FENTON RD	Southwestern	Genesee Baptist Assn.	Yes	Phase I RECs: No RECs identified during the Phase I ESA.  Other Concerns: (1) Leaking UST sites to the south and southeast;  (2) Virginia's Cleaners operated on the property from 1958-1968 with the potential for on-site drycleaning activities.  (3) Potential for fuel oil UST.	х	Phase I ESA 06/24/2014
16	4118360031	1220 S GRAND TRAVERSE	Northern - Downtown River Corridor	Residential Apartments	Yes	Phase I RECs: (1) Potential for fuel oil UST, based on observation of heating unit and unknown fuels.	х	Phase I ESA 01/20/2014
17	4118405009	1402 S SAGINAW ST	Southwestern	Ross Oil Change	Yes	Phase I RECs: (1) Use of property for automotive service (oil change) and wash facility from 1980s, including the use of several ASTs, drums, service pits, and floor drains.  (a) observed standing oil and water in basement (b) observed oil stained concrete (c) ASTs - Oils: two 560-gallon; five 300-gallon; two 275-gallon; Used Oil: one 500-gallon used oil; Antifreeze: one 275-gallon; Used Antifreeze: one 500-gallon; two 1,500-gallon; (d) Oil Hose Units: eight 20-gallon  ***contractor responsible for waste characterization***  (2) Potential use of unknown fill materails for backfill (3) Automotive repair facility on east adjoining property since 1960s. (4) Dry cleaning facility on south adjoining property from 1950s-1970s (5) Nearby proerty to south operated as gasoline filling station and auto sales with five USTs from 1920s through 1960s  Other Concerns: (1) Potential for fuel oil UST; (2) Potential for glycol/hot water floor heating system in car wash area.	x	Phase I ESA 11/12/2012 EPA Emergency Response Letter 02/12/2013
19	4118452017	1646 S SAGINAW ST	Southwestern	City Service Appliances	Yes	Phase I RECs: No RECs identified during the Phase I ESA. Other Concerns: (1) Potential fill material on-site from former residential demolitions in 1930s.		Phase I ESA 11/26/2013
20	4118455015	211 W TWELFTH ST	Southwestern	Residental Property	Yes	Phase I RECs: (1) Former automobile repair and collision service.	х	Phase I ESA 11/26/2013
21	4119159031	2605 FENTON ROAD	Southwestern	Terri's Lounge	Yes	Phase I RECs: (1) Former gasoline filling station with the potential for USTs on-site; (2) Former automotive repair facility.  Other Concerns: (1) Former gasoline filling station on northwest adjoining property.  Geophysical Survey: (1) Did not identify USTs around the building; however, due to additions to the structure over time, the potential exists that USTs may be located beneath the existing building structure.	x	Phase I ESA 01/15/2014 Fire Incident Report 07/05/2010 Nuisance Violation Report 08/17/2012 Limited Geophysical Survey 07/02/2014
	4012282048 4012282058	1013 Chippewa 1025 Chippewa		Retail / Candy store Butcher shop	Yes	Phase I RECs: <b>No RECs identified during the Phase I ESA.</b> Other Concerns: (1) Potential fill material on-site from former residential demolitions in 1930s.  (2) Two drums in basement of 1013 Chippewa with unknown contents.		Phase I ESA 06/16/2014
وعا	.012202030	TACA CHIPPEWA	•	Saturd Shop	1	1	i	1

Page 2 of 2 07/02/2014



## **APPENDIX C**

**EXAMPLE RESIDUAL TRACKING LOG** 

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Job ID#	
Project	
Address	
Supervisor	

Date Shipped	Contractor # / Manifest #	Weight Ticket #	Transporter	Destination	Truck / Container ID #	Material Description	Net Weight Pounds	Gross Tons / Yards
		_						
		_						



## **APPENDIX D**

## **TECHNICAL SPECIFICATIONS**

STORAGE TANK REMOVAL
REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

#### STORAGE TANK REMOVAL

## 1. PART 1 GENERAL

- 1.1 Section includes specific information for sites with known or suspected storage tanks containing or formerly containing hazardous substances or petroleum product.
  - A. Removal and disposal of and aboveground storage tanks (ASTs) or underground storage tanks (USTs) identified at the property.
    - 1. USTs are <u>suspected</u> at several demolition sites. CONTRACTOR must proceed with caution at all times.
      - a. No waste characterization sampling of the UST contents has been conducted. CONTRACTOR will be responsible for all waste characterization sampling. For bidding purposes the UST contents should be assumed to be non-hazardous.
    - 2. Piping should be assumed to contain non-hazardous liquids, which must be containerized and removed as part of work. Associated UST piping must be removed in its entirety.
    - 3. AST are known to be present at various demolition sites.
      - a. Several ASTs are present at 1402 South Saginaw Street, Flint.
      - b. No waste characterization sampling of the AST contents has been conducted. CONTRACTOR will be responsible for all waste characterization sampling.
  - B. The scope of work within this specification is designed to remove and provide permanent closure of the tank systems at the subject property to comply with due care requirements and prepare the site for future sale and occupancy.
  - C. The tanks and piping shall be emptied of all fill materials, liquids, and sludge and purged of all vapors prior to cutting, movement, and/or transport.
  - D. Piping shall be emptied of all liquid and sludge, purged and capped, and removed from the ground. Storage tank piping must be removed in its entirety.
  - E. CONTRACTOR will coordinate the disconnection of all applicable site utilities prior to removal/closure activities.
  - F. CONTRACTOR shall perform exploratory excavations and test pits with the direction and oversight of the OWNER'S Qualified Environmental Professional (QEP) to identify suspect USTs. Conduct test pits as soon as practical to identify the presence of on-site storage tanks.
  - G. Notify QEP 48 hours in advance of any storage tank work.

- H. Upon discovery, it may be necessary for the QEP to notify and register the storage tank with the MDEQ.
- I. Upon discovery, CONTRACTOR should expect delays associated with mobilization of QEP, notification, registration, waste characterization, waste profile approval, and mobilization of subcontractors. Delays are inherient to storage tank removal projects. CONTRACTOR will not be compensated for delays or demobilization due to storage tank discovery/removal.
- J. Allow and provide for inspection of work area by QEP. Allow and provide for inspection of excavation by QEP, prior to backfill. Assist QEP as necessary with collection of soil samples from floor of excavation.
- K. Backfill UST and other excavations with approved material and compact, meeting the requirements of specifications.
- L. Storage tanks and piping will be removed following the guidelines of the Michigan Department of State Police Codes for the "Storage of Flammable and Combustible Liquids" and the American Petroleum Institute's (API's) "Removal and Disposal of Used Underground Petroleum Storage Tanks API Recommended Practice 1604."
- M. A licensed and insured contractor must complete the work.
- N. Any associated concrete anchors, vault, or tunnels shall be removed as part of the work.

#### 1.2 RELATED SECTIONS

A. Contract Documents - Excavation and Backfill Procedures

### 1.3 REFERENCE STANDARDS

- A. All work in this Section must be conducted in accordance will each of the applicable referenced publications. The publications are referenced in the text by basic designation only.
- B. American Petroleum Institute (API)
  - 1. API RP 1604, Removal and Disposal of Used Underground Petroleum Storage Tanks.
  - 2. API Publ 1628, Guide to Assessment and Remediation of Underground Petroleum Releases.
  - 3. APR Rp 2003, Protection Against Ignitions Arising out of Static, Lightning and Stray Currents.
  - 4. API Publ 2015, Safe Entry and Cleaning Petroleum Storage Tanks.
  - 5. API Publ 2015A, A Guide for Controlling the Lead Hazard Associated with Tank Entry and Cleaning.

- 6. API Publ 2202, Guidelines for Protecting Against Lead Hazard When Dismantling and Disposing of Steel from Tanks that have Contained Leaded Gasoline.
- 7. API Publ 2217, Guidelines for Confined space Work in the Petroleum Industry.
- 8. API Publ 2219, Safe Operation of Vacuum Trucks in Petroleum Service.

## C. Code of Federal Regulations (CFR)

- 1. CFR 29 CFR 1910.146 OSHA Permit Required Confined Spaces.
- 2. CFR 29 CFR 1926/1910 Construction Industry Occupational Safety and Health Standards.
- 3. CFR 40 CFR 260 General Regulations for Hazardous Waste Management.
- 4. CFR 40 CFR Part 261 Identification and Listing of Hazardous Waste.
- 5. CFR 40 CFR Part 262 Standards Applicable to Generators of Hazardous Waste.
- 6. CFR 40 CFR Part 263 Standards Applicable to Transporters of Hazardous Waste.
- 7. CFR 40 CFR Part 264 Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
- 8. CFR 40 CFR Part 265 Interim Status Standards for owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities.
- CFR 40 CFR Part 280 Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks (UST).
- 10. CFR 49 CFR 171 Department of Transportation Regulations to Stipulate Requirements for Containers and Procedure for Shipment of Hazardous Waste.
- 11. CFR 40 CFR Part 761 Polychlorinated Biphenyls (PCB) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

## D. National Fire Protection Association (NFPA)

- 1. NFPA 30 (1990) Flammable and Combustible Liquids Code.
- 2. NFPA 70 B (1990) Recommended Practice for Electrical Equipment Maintenance.
- 3. NFPA 325M (1991) Fire Hazard Properties of Flammable Liquids, Gases, and Volatile Solids.
- 4. NFPA 327 (1987) Standard Procedures for Cleaning or Safeguarding Small Tanks and Containers.
- 5. NFPA 329 (1992) Recommended Practice for Handling Underground Releases of Flammable and Combustible Liquids.

## E. National Institute of Occupational Safety and Health (NIOSH)

1. NIOSH 80-106 Criteria for a Recommended Standard for Working in Confined Spaces.

## F. State of Michigan

1. UST closure activities will be conducted in compliance with all applicable sections of the Michigan Department of Natural Resources and

- Environmental Protection Act 451 of 1994 Part 211 "Underground Storage Tank Regulations" (as amended).
- P.A. Act 451, Michigan Natural Resources and Environmental Protection Act
- 3. MIOSHA Act 154 General Industry and Construction (as amended) Safety Standards.

## G. United States Environmental Protection Agency

1. U.S. EPA SW-846, Test Methods for Evaluating Solid Waste.

### 1.4 SUBMITTALS

## A. Tanks and Associated Piping

After removing and disposing tank, piping, and tank supports from the
project site, submit the name and location of the properly licensed
disposal or recycling facility or facilities if necessary, and a copy of the
written agreement from the facility(s) agreeing to accept the materials.
This documentation shall include manifests with quantities agreed by
the QEP or OWNER. The documentation is due 10 days after removal
from the site.

## B. Disposal Documents

 Provide copies of all licenses, certificates, permits, agreements, manifests, chain of custody records, weigh tickets, meter recordings, delivery tickets, and receipts required or issued for material disposal. Provide a list of the equipment used, the methods used, and the disposal areas and facilities used for disposing tanks, contents, and associated piping. Provide a copy of the results of tests performed to comply with the requirements of each disposal facility.

## C. Manifests

 Submit a copy of the official manifest for each shipment of contaminated materials including, but not limited to, surface runoff, tank, drum contents, expended cleaning liquids, structural components, tanks and piping, drums and cans evidencing delivery of the material to the approved licensed disposal facility. All manifests shall be in accordance with the requirements of 40 CFR, Part 262, 40 CFR, Part 761, Section 23 and State and local regulations. Manifests shall be signed by the OWNER or QEP.

## 1.5 REGULATORY REQUIREMENTS

## A. Notifications

1. Work with QEP to provide all necessary notifications for UST removal, including those required under Michigan Public Act 451, Part 211.

### B. Statutes and Regulations

1. Tank removal work shall be carried out in accordance with the requirements identified in applicable parts of 49 CFR, and amended DOT regulations, 29 CFR Parts 1910 and 1926 and 40 CFR Part 280 as well as the applicable local and State of Michigan regulations. Hazardous material shall be transported in accordance with 40 CFR Part 263 to disposal facilities that operate in accordance with 40 CFR Part 264 and 40 CFR Part 265. All licenses, permits, certifications, receipts, etc., shall be obtained as required by such laws, regulations, codes, and ordinances.

### C. General

 Comply with all health and safety regulations relating to the removal, transportation, and disposal of tanks contained in 29 CFR Parts 1926 and 1910 at all times. Follow all pertinent regulations, such as 29 CFR Parts 1910 and 1926 and 40 CFR 260, 261, 262, 263, 264, 761 and applicable state and local regulations while storing, containing, and handling small containers for maintaining equipment for handling materials.

## D. Protection of Employees and Visitors

 Address the work in a manner such that its employees and site visitors will not be subjected to hazardous and unsafe conditions. Comply with all safety precautions, as required by 29 CFR Parts 1926 and 1910 and NFPA 329.

### E. Toxicity Considerations

 Exercise care to minimize exposure to volatile organics, lead, asbestoscontaining material, and toxic metals when present during the handling of used tanks or drums. Refer to API Publication 1604, Paragraph 1.3 for recommended health precautions for tanks.

## F. Flammability and Combustibility Considerations

1. Flammable and combustible vapors are likely to accumulate in tank work areas. Exercise caution by observing the following precautions: (a) eliminate all potential sources of ignition within the area; (b) present the discharge of static electricity during venting of flammable and combustible vapors; and (c) prevent the accumulation of vapors at ground level. Refer to API Publication 2015, 2015A and Recommended Practice 2003 for precautionary measures to follow during vapor-freeing procedures. All open flame and spark-producing equipment is to be shut down and all electrical equipment must be explosion proof in compliance with NFPA 70B Class I, Division I, Group D or otherwise approved for use in potentially explosive atmospheres.

## 2. PART 2 PRODUCTS

1. Not Used

#### 3. PART 3 EXECUTION

## 3.1 GENERAL

- A. Remove all liquid and solid material contained within the tanks. Properly clean all contaminants from the tanks in accordance with Federal, State, and local regulations.
- B. Remove and dispose all tanks, tank contents, piping and piping contents at an approved recycle or disposal facility. Obtain all required permits and approval documents. Provide approved containers, vehicles, equipment, labor, signs, placards, labels, manifests, and other documents necessary for accomplishing the work including materials necessary for spill cleanup for material from removal operations. Coordinate and conduct any additional sampling that may be necessary. CONTRACTOR responsible for all laboratory analytical fees.

## C. Safety Guidelines

1. Personnel working inside and in the general vicinity of AST removal or the UST excavation shall be trained and made thoroughly familiar with the safety precautions, procedures, and equipment required for controlling the potential hazards associated with this work. Personnel shall use proper protection and safety equipment during work in and around the tanks as specified in API Publication 2217, AP RP 1604, and in their health and safety plans. Proper guidelines regarding safety precautions shall be required for handling all other items.

#### D. Control of the Work

 Perform work in accordance with the requirements and specifications and take direction only from the QEP or Project Representative for this contract. Any other party that proposes to give direction to the contractor shall be immediately referred to QEP.

### 3.2 CONTENTS VERIFICATION

A. Collect samples to the extent required by the approved off-site disposal facility receiving the material. All analytical testing as required under this section shall be paid for by the CONTRACTOR and is incidental to the Contract. The analysis shall require a 5 working day completion time from the date of sample receipt at the laboratory. Meet all regulatory requirements, including manifesting.

## 3.3 EXAMINATION

A. Collect samples of tank contents, only if and to the extent such testing is required by the approved disposal facility for the material to be disposed.

Perform all testing as described in Subpart 3.02.A. All documentation regarding

the sampling and analysis such as sample locations, rationale, chain-of-custody, test results, etc., shall be maintained by the CONTRACTOR. A copy of all such test reports shall be furnished to the QEP prior to removal of tank contents.

## 3.4 TANK PREPARATION AND REMOVAL

## A. Draining of Pipes

 During removal of tank contents for disposal, drain or blow down piping product into tank or other acceptable receptacle, being careful to avoid any spillage. Cap the inlet end of the piping connected to the tank after emptying the piping product into the tank.

### B. Removal of Tank and Piping Contents

- 1. Remove any existing water, fuel, other fluids, solids, and residues from existing tanks and pipes in a safe and proper manor. Minimize the threat of releasing flammable, hazardous, toxic, or otherwise harmful substances to the atmosphere, land surface, waterways, or any other portion of the environment.
- 2. Remove and dispose tank and piping contents before excavating or otherwise disturbing the tanks. Remove liquids, solids, and residues by using explosion-proof pumps and excavation equipment. For liquids or pumpable solids, pump motors and suction hoses must be bonded to tank or otherwise grounded to prevent electrostatic ignition hazards. It may be necessary to use a hand pump to remove the last few inches of liquid from the bottom of a tank. If a vacuum truck is used for removal of liquids or residues, the area of operation for the vacuum truck must be vapor-free. The truck shall be located upwind from tank and outside the path of probable vapor travel. The vacuum pump exhaust gases shall be discharged through a hose of adequate size and length downwind of the truck and tank area. See API Publication 2219 for vacuum truck operation and safety practices.
- 3. Steam and/or detergent solvent solutions may be used to aid in cleaning provided they are disposed as tank contents and do not introduce hazardous substances. Residues on the interior of tank and associated piping shall be removed to the degree of cleanliness required by applicable regulations and the requirements of tank and piping disposal facilities.
- 4. Conduct all removal activities in compliance with the U.S. Clean Air and Clean Water Acts.
- 5. Describe the proposed cleaning method in the project work plan.

## C. Fixture Removal

 Remove all above ground product pipelines and fill pipes, gauge pipes, valve boxes, and other tank fixtures. Remove the drop tube, except when planned to be used in the vapor removal process. Cap all product and non-product lines, except the vent line. Existing vent lines shall remain connected until a tank is purged. Where vent lines do not exist, the Contractor shall provide alternate venting. Temporarily plug all other tank openings so that all vapors will exit through a vent or educator lines during the vapor removal process. Remove vent lines when the tank is removed from the ground.

## D. Purging

1. If toxic and flammable vapors are found in the tanks and drums, the vapors shall be purged in accordance with API RP 1604 with the exceptions (1) do not fill with water and (2) if using dry ice, use a minimum of 3 pounds per 100 gallons of tank volume. The tank atmosphere shall be continually monitored for combustible vapors.

## E. Tank Removal

After a tank has been freed of vapors but before it is removed from its original position, plug or cap all access holes. One plug is to have a minimum 1/8-inch vent hole to prevent the tank from being subject to excessive differential pressure caused by temperature changes. Position tanks with this vent plug on top of the tank during subsequent transport and storage or until they are punctured preparatory to disposal. The cleaned tanks shall be crushed and disposed at an approved licensed facility.

### F. Interior Cleaning

- Clean tank interiors using a high pressure, low volume water spray or steam cleaner until all loose scale and residue are visibly removed.
   Collect all contaminated water resulting from cleaning operations.
   Dispose product, sludge, and rinse water at the approved facility.
- Cleaning shall be done using specially designed tank cleaning equipment which allows tanks to be cleaned without requiring personnel to enter the tanks or, if less specialized equipment is used, tanks shall be partially dissected to overcome confined space entry hazards by removing the end walls. In either case, the cutting operation shall be accomplished using non-sparking or non-heat producing equipment. The USTs shall be placed in appropriately designed, diked areas or placed on grates with special containment areas to prevent spillage of rinse water on the ground surface.

## 3.5 DISPOSAL REQUIREMENTS

#### A. General

 Materials requiring removal shall become the property of the CONTRACTOR. Dispose removed tanks, pumps, and associated piping at a properly licensed disposal facility. Waste disposal shall be in accordance with all local, State, and Federal solid and liquid waste laws and regulations, including those for hazardous waste, when applicable, as well as the Resource Conservation and Recovery Act (RCRA), and conditions specified herein. These services shall include all necessary personnel, labor, transportation, packaging, manifesting, completing waste profile sheets, equipment, and reports. 2. Liquids removed from tanks shall be recycled to the greatest degree practicable. Maintain all disposal and recycle information and provide copies to the QEP.

## B. Tank and Piping Disposal

## 1. Regulatory Prerequisites

 Before disposal of used tank and piping, current Federal, State, and local regulations shall be checked to determine the special procedures or preparations that are required.

## 2. Gas Check

a. Before a tank is removed from the site, the tank atmosphere shall be checked with a combustible gas indicator to ensure that it does not exceed 20 percent of the lower explosive limit (LEL). If the atmosphere exceeds the limit, vapors must be evacuated until explosive limits are below 20 percent LEL. The CONTRACTOR shall verify that its gas testing equipment is properly calibrated and is reading correctly. Tests of oxygen concentrations shall be made to assist in verifying accuracy.

## 3. Puncturing and Cutting

a. After vapors have been evacuated from the tank and tank interiors and exteriors have been cleaned, render the tanks useless for future use as a storage tank by puncturing, cutting, or drilling numerous holes in all sections of the tank. The puncturing and cutting methods proposed for use shall be described in the work plan. Provisions for maintaining non-flammable and non-explosive atmosphere inside a tank and in the work area shall be included in the work plan.

## 4. Timeliness

a. Remove tanks from the site as promptly as possible after cleaning and evacuating vapors, preferably on the day of removal of a tank from the excavation. If a tank remains at the site overnight or longer, additional vapors may be released from any liquid absorbed in the tank walls or residues remaining in the tank. Until each tank is purposely punctured, the tank shall be positioned with the 1/8-inch vent hole located at the uppermost point on the tank.

## 5. Transporting

 Secure tanks on a truck for transportation to the disposal or recycle facility. A clean tank may be cut apart on the site as necessary due to field conditions; when the entire tank cannot be placed directly on a truck due to site access limitations.
 Transport tanks in accordance with all applicable local, State, and Federal regulations.

### C. Waste Material Disposal

1. Remove and dispose all waste materials from the project site at a properly licensed facility. Tank liquids, fuels, residues, and cleaning liquids shall be transported off-site to properly licensed disposal

For

facilities. Consult 40 CFR 761 for regulations on removal and disposal of hazardous residues that may be present. Consult 29 CFR Parts 1910 and 1926 for safety precautions while handling chemicals, 49 CFR Part 171 through 178 and the other DOT regulations (HM181 standards) for shipment of hazardous materials. Only properly licensed industrial liquid waste transporters will transport liquids and residues to disposal facilities.

## D. Records

- 1. Maintain disposal and recycle records for all waste determinations, including (1) appropriate results of analyses performed, (2) sample locations, (3) substances detected, (4) time of collection, and (5) other pertinent data as required by 40 CFR Part 280, Section 74 and 40 CFR Part 262 Subpart D. Record and make available information regarding method of transportation, method of treatment, method of disposal, quantities of waste, the names and addresses of each transporter, and the disposal or reclamation facility. Prepare and maintain copies and originals of the following documents:
  - a. Disposal manifests.
  - b. Waste analyses or waste profile sheets.
  - c. Certifications of final treatment/disposal signed by the responsible disposal facility official.
- 2. Following contract completion, the records shall become the property of the OWNER.

## E. Hazardous/Special Waste Manifests

- 1. U.S. EPA waste generator's identification number for the site may be required due to the nature of the materials to be disposed. Work with the generator (OWNER) and the QEP to obtain this or other generator identification numbers. For hazardous and non-hazardous contaminated liquid waste, utilize a State of Michigan approved manifest system in conformance with the requirements identified in 40 CFR Part 262, 40 CFR Part 263 and 40 CFR Part 761.
- The manifests shall comply with all of the provisions of the transportation and disposal regulations. Prepare manifests for each load and obtain the appropriate identification numbers and signatures. The OWNER-appointed representative will sign all hazardous and nonhazardous waste manifests on behalf of the OWNER.
- 3. Before waste transportation, all of the established pre-transport requirements shall be met. The wastes shall be transported by a certified waste transporter (i.e., the transporter must have an appropriate State waste identification number) in approved containers. All transporters must sign the appropriate portions of the manifest and must comply with all of the provisions established in the applicable regulations. Hazardous waste manifests must be signed by the OWNER-appointed representative.
- 4. Provide the QEP with manifests, certificates, and other such evidence as may be required by Federal, State, and local regulations, to

demonstrate that waste materials of all types were properly transported to, received at, and disposed at approved disposal facilities. After delivery of the load, a copy of the manifest shall be provided to the QEP.

## F. Documentation of Treatment and Disposal

 Hazardous wastes shall be taken to an approved treatment, storage, or disposal facility. The disposal facility will maintain U.S. EPA or appropriate State permits and waste treatment identification numbers and will comply with all of the provisions of the disposal regulations. Documentation of acceptance of special waste by a facility legally permitted to treat or dispose of those materials shall be furnished to the QEP following the delivery of those materials to the facility.

#### 3.6 SPILLS

## A. Spill Responsibility

 The CONTRACTOR is responsible for cleaning up all the leaks and spills from drums, small containers, or other items that occur because of the CONTRACTOR'S negligence. Immediate containment actions shall be taken as necessary to minimize the effect to natural surroundings. Notify the QEP, OWNER and appropriate governmental authorities of the incident. Cleanup shall be in accordance with applicable Federal, State, and local laws and regulations and spill plan at no additional cost to the OWNER or QEP.

## 3.7 TANK DISPOSAL REPORT

- A. Provide, as applicable, the following information within 14 days of completion of the project:
  - A cover letter signed by a responsible company official certifying that all services involved have been performed in accordance with the terms and conditions of this contract.
  - 2. A narrative report briefly describing the tasks conducted, including:
    - a. Conditions of the material before storage.
    - b. Any visible evidence of leaks or stained soils.
    - c. Results of vapor monitoring readings.
    - d. Actions taken including quantities of materials treated or removed.
  - 3. Copies of analytical information for all analyses performed for disposal.
  - 4. Copies of all waste analyses or waste profile sheets.
  - 5. Copies of all certifications of final disposal signed by the responsible disposal facility official.
  - 6. Information describing sample collection, sample analysis, and waste transportation.
  - 7. Information describing the sample method and rationale and chain-of-custody documentation for all testing

8. Copies of all disposal manifests, bills-of-laiding, load tickets, and other transportation documentation.

## 3.8 Backfilling the Excavation

A. After UST removal, the QEP may elect to collect and analyze verification samples from the UST excavations. Backfilling will proceed upon orders from the QEP. Contractor will backfill the UST excavation in accordance with the Contract Specifications.

**END OF SECTION** 

## REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

## **PART 1 GENERAL**

#### 1.1 GENERAL

- A. CONTRACTOR shall furnish all labor, material, equipment, packaging, sampling, and testing, and incidentals required to remove/abate, transport and dispose/recycle all substances regulated under Federal, State and local statutes and land ban restrictions. These substances may include but are not limited to:
  - 1. Chemical Fire Extinguishers
  - 2. Mercury Devices (i.e., switches, thermostats, vapor lamps).
  - 3. Non-hazardous Liquids and Equipment / Fuel Oil
  - 4. Regulated Batteries
  - 5. Non-PCB Liquid Cooled Electrical Equipment
  - 6. Hydraulic Oil Filled Equipment Including Automotive Hoists
  - 7. Hazardous Chemicals or Waste
- B. Estimated quantities of hazardous and/or regulated materials are provided in the Bidding Documents and/or Hazardous Materials Survey.
- CONTRACTOR shall be aware that the buildings may contain lead based paint and as such the potential for exposure exists. CONTRACTOR should assume painted surfaces are lead containing and handle as such in accordance with all federal, state, and local regulations.
- D. The Michigan Occupational Safety and Health Administration (MIOSHA) provides protection and regulations for the safety and health of workers. The Department of Labor and Regulatory Affairs (MDLARA) provides for the safety of workers. The Department of Community Health provides for the health of workers.
  - 1. CONTRACTOR shall post any applicable State and/or Federal government regulations at the job sites in prominent locations.
  - CONTRACTOR shall be responsible for training their workers in safe work practices and in proper removal methods when coming in contact with hazardous materials.
- E. Applicable Regulations (include but are not limited to):
  - RCRA, 1976 -Resource Conservation and Recovery Act: This federal statute regulates generation, transportation, treatment, storage or disposal of hazardous wastes nationally.

## REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

- 2. Part 111, Act 451, 1994 -Michigan's Hazardous Waste Management Act: This statute regulates generation, transportation, treatment, storage and disposal of hazardous wastes in Michigan.
- 3. Part 121, Act 451, 1994 -Liquid Industrial Waste Act: This statute regulates the transportation of liquid industrial wastes in Michigan. This includes non-hazardous liquids and hazardous liquids, which are not subject to management under RCRA or Part 111, Act 451, 1994.
- 4. Toxic Substances Control Act (TSCA), 1976. This statute regulates the generation, transportation, storage, and disposal of PCB wastes.
- 5. The list provided in Section 01410 includes the regulations that are most frequently encountered.
- F. To use an off-site hazardous waste disposal facility, the CONTRACTOR must use the Uniform Hazardous Waste Manifest (shipping paper).
  - 1. Hazardous wastes may not be disposed of in sanitary landfills used for solid waste.
  - 2. Hazardous waste manifests shall be signed by the OWNER, the OWNER'S Qualified Environmental Professional (QEP), or designated representative.
- G. Federal, State and local laws and regulations may apply to the storage, handling, and disposal of hazardous materials and wastes generated at the Site. The list below provides topics and associated state or local agency responsible. Section 01410 cites the regulations that are most frequently applicable.

that are most frequently applicable.	
<u>Topic</u>	Agency and Telephone Number
Small quantity hazardous waste management, including hazardous waste	Resource Management Div., MDEQ (517) 373-9875 in Lansing, or District Office
stored in tanks	Certified County Health Department
Liquid industrial waste disposal (hazardous and non-hazardous)	Resource Management Div., MDEQ (517) 373-9875 in Lansing, or District Office
Disposal of hazardous waste into municipal sanitary sewers	Contact the superintendent of your wastewater treatment plant for permission
Discharges to surface water such as through a drain pipe or wastewater discharge	Water Division, MDEQ (517) 335-2690 in Lansing, or District Office
Discharges to groundwater, including septic systems	Water Resource Div., MDEQ (517) 241-1135 in Lansing, or District Office
Pollution Incident Prevention Plans (PIPP)	Resource Management Div., MDEQ (517) 335-2690 in Lansing, or District Office
Hazard Communication (for chemicals in the work place)	Michigan Department of Consumer and Industry Services (517) 373-1820

**TECHNICAL SPECIFICATION** 

For

ABATEMENT OF MISC MATERIALS

# REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

<u>i opic</u>	Agency and Telephone Number
Burning of waste oil and other discharges to the air	Air Quality Div., MDEQ (517) 373-7023 in Lansing, or District Office
Registration of underground fuel storage tanks	Remediation Div., MDEQ (517) 335-7211 in Lansing, or District Office
Installation, Inventory, testing & other requirements for above ground and underground storage tanks (for flammable and combustible)	Remediation Div., MDEQ (517) 335-7211 in Lansing, or District Office
Local fire prevention regulations and codes (including chemical storage requirements)	Local fire chief or fire marshal
Building and outdoor storage	Local government building or zoning official requirements (including setbacks)

Agency and Telephone Number

#### 1.2 MEASUREMENT

Tonic

- A. Removal and Disposal of Miscellaneous Materials
  - 1. The removal and disposal of miscellaneous materials will be a lump sum pay item, consequently no measurements for payment will be conducted.
  - 2. Estimated quantities of miscellaneous materials are included in the Pre-Demolition Hazardous Materials Survey Report.

### **PART 2 PRODUCTS**

## 2.1 PACKAGING AND CONTAINERIZATION OF MATERIALS

- A. Packaging and containerization materials shall include but not be limited to the following:
  - 1. Lab packing requirements per approved disposal or recycling facility.
  - 2. Fiberboard barrels
  - 3. DOT-approved removable head drums; roll-off boxes or equivalent
  - 4. Drum labels and marking which conform to 29 CFR 1926.58 K and all other Federal, State and local regulations
  - 5. Spill prevention countermeasure materials and control products consistent with 49 CFR 173 and CONTRACTOR approved SPCC plan.
  - 6. Sampling equipment and containers consistent with standard sampling techniques.

## REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

#### **PART 3 EXECUTION**

#### 3.1 REMOVAL OF CHEMICAL FIRE EXTINGUISHERS

- A. Chemical fire extinguishers may be present at the Site. CONTRACTOR shall be responsible for the removal, proper handling, and disposal of all chemical fire extinguishers.
- B. CONTRACTOR shall properly collect, label and stage all chemical fire extinguishers throughout the Site. All chemical fire extinguishers shall be recycled or disposed at an approved facility. Chemical fire extinguishers shall be transported in a manner that minimizes the potential for discharge.

## 3.2 REMOVAL OF MERCURY DEVICES

- A. High intensity discharge lamps and fluorescent light bulbs that may contain mercury are present either in fixtures or stored in bulk. The approximate locations of these lamps/bulbs are identified in the Hazardous Materials Survey Report. CONTRACTOR shall remove all lamps/bulbs regardless of the estimated quantities provided in the Hazardous Materials Survey Report.
  - Light fixtures and/or associated components may be suitable for recycling or resale.
     CONTRACTOR is encouraged to account for recycling or resale of such fixtures in its bid, if feasible.
  - CONTRACTOR shall be responsible for the removal of all regulated lamps and bulbs from the associated lighting fixtures. All lamps and bulbs shall be carefully removed from the fixtures and placed in appropriate sized containers equipped with dividers.
  - 3. Containers intended for off-site recycling shall be either shrink-wrapped or placed in a secure crate to avoid accidental breakage. Containers shall be labeled as hazardous waste in accordance with applicable MDOT regulations.
  - 4. CONTRACTOR must use all precautions when handling lamps to avoid accidental breakage. Should accidental breakage of lamps occur, then the lamp debris shall be collected and placed in segregated reinforced drums or similar containers pending disposal.
  - 5. Light ballasts containing PCBs shall be managed in accordance with Section 13282 of this Bid Document.
- B. CONTRACTOR shall be responsible for the removal, transport and recycling or disposal of all mercury containing devices.

## 3.3 REMOVAL OF NON-HAZARDOUS EQUIPMENT OIL INCLUDING HYDRAULIC HOISTS

A. CONTRACTOR will be responsible for all waste characterization sampling.

# REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

- B. CONTRACTOR shall remove all oil filled equipment regardless of the estimated quantities provided in the Hazardous Materials Survey Report.
- C. Associated piping must be emptied and removed in its entirety.
- D. Notify QEP 48 hours in advance of oil filled equipment work.
- E. If a hydraulic hoist is discovered during work, CONTRACTOR should expect delays associated with mobilization of QEP, waste characterization, waste profile approval, and mobilization of subcontractors. Delays are inherient to oil filled equipment removal projects. CONTRACTOR will not be compensated for delays or demobilization due to discovery/removal activities.
- F. CONTRACTOR shall drain all free flowing oil from each oil-filled unit. All oil shall be drained into appropriate storage containers, consolidated, and staged on-site with appropriate labeling pending transport and disposition to an approved reclamation facility.
- G. Upon removal of all free-flowing oil, equipment will be released by QEP for disposition.
- H. Remove below grade hoists in accordance with work practices and excavation procedures outlined in the ECMP.
- I. A licensed and insured contractor must complete the work.

## 3.4 REMOVAL OF MISCELLANEOUS CHEMICALS, CONTAINERS, AND LIQUIDS

- A. Numerous liquid filled containers, miscellaneous chemicals, and other hazardous materials banned from landfill disposal may be present at the site. The approximate locations of these materials are identified in the Hazardous Materials Survey Report. CONTRACTOR shall remove all liquid filled containers, miscellaneous chemicals, and other hazardous materials banned from landfill disposal, regardless of the estimated quantities provided in the Hazardous Materials Survey Report
- B. CONTRACTOR shall remove all liquid filled containers, miscellaneous chemicals, and other hazardous materials banned from landfill disposal. All materials shall be staged on-site with appropriate labeling pending transport and disposition to an QEP-approved reclamation/disposal facility.
- C. Upon removal of all free-flowing oil, equipment will be released by the OWNER or QEP for disposition.

## 3.5 TRANSPORTATION

- A. CONTRACTOR shall evaluate all materials associated with demolition activities to designate material classifications for transportation purposes.
- B. CONTRACTOR shall package all hazardous materials for transportation and storage in accordance with 49 CFR 172.101 and applicable sections of 49 CFR 173. In addition,

For

# REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

CONTRACTOR shall comply with any packaging requirements identified by the approved disposal or recycling facilities used for waste disposition.

- C. CONTRACTOR shall label and mark all hazardous materials packaged and temporarily staged for subsequent off-site transport. Hazardous materials that have been specifically prepared for off-site transport shall be labeled in accordance with 40 CFR 172.101 and 49 CFR 173 Subparts D and E. CONTRACTOR shall provide all labels.
- D. CONTRACTOR shall ensure that the transporter has applied all appropriate placards to the transport vehicle according to the requirements outlined in 49 CFR 172.101 and 49 CFR Subpart F and all applicable MDOT/DOT regulations. CONTRACTOR or transporter shall provide all such placards.
- E. CONTRACTOR shall submit the manifest to the QEP for review prior to signature by the OWNER, QEP, or designated representative and prior to removal of any material-

-- END OF SECTION--

Attachment 2
Bid/Tender Form

## ATTACHMENT D: UNIT RATE PRICING BID COVERSHEET & BID TAB

<b>Company Nam</b>	ne:			
BID TENDER S	UMMARY			
	BID LIST # -	BID LIST # -	Alternate Bid #1	Alternate Bid #2
	LB-14-014-1 (MBEG)	LB-14-014-2 (MBEG)	UST Removal Items	Lump Sum Removal Items
BID AMOUNT	\$	\$	\$	\$
quantities are fo	or bidding purposes on led. CONTRACTOR resp	it rates, backfill estimato ly. Final payment will b onsible for waste chara	e based on actual qua	
<u>Statement or i</u>	<u> Experience</u>			
Years of Comp	any Experience:			
Years of Individ	dual Experience:			
Licenses, Certi	ficates, Accreditation	s held by firm and/or	employees (Provide	documentation):
The qualificati	on of assigned proje	ct staff and subcontra	acts, including:	
<ul><li>Relevant</li><li>sheet)</li></ul>	nt professional and e	ducational experience	e (Provide document	ation on attached
• Identifi	cation of specific sta	ff individuals with exp	erience managing de	emolition projects:

Provide three (3) examples of projects that are similar in nature to projects described in the RFP.
Demonstrate experience working on environmental cleanup or UST removal projects for the EPA, MDEQ, government or private entity.
Demonstration of Capacity
Can Contractor complete abatement, demolition and disposal within the time frame identified in this Request for Proposal?
Does Contractor or Subcontractor poses experience, qualified individual(s), training, and pollution liability insurance required in the Request for Proposal?
Number of employees:
List of equipment (can attach list if need):

Subcontractor			
Will you be using a su	ıb-contractor?	<u> </u>	
Sub-Contractor Service	ce:		
Sub-Contractor Author	orized Representative:		
Sub-Contractor Years	of Experience:		
	nber of employees:		
Identification of land	fills and disposal sites who	will participate in the project:	
I certify that I have the	necessary equipment and staff	fing available in order to complete the	Scope of
Work outlined in this b	id. I certify that I have read the	Scope of Work included in this bid.	
Signed this	day of		
		_	
(Name of Contractor/ A	Authorized Representative)		
(Signature of Contracto	or /Authorized Representative)	_	
(Contractor Address)			
(Phone)		(Email)	

## BID/TENDER FORM #LB 14-014

SUBMITTED TO: Genesee County Land Bank

452 S. Saginaw Street Flint, Michigan 48502

FOR: Invitation to Bid #LB 14-014 Demolition and Disposal of Commercial Structures in the City of Flint & Genesee County:

DATE:	
NAME OF BIDDER:	
ADDRESS	
TELEPHONE:	

TO: Genesee County Land Bank Authority (hereinafter called "GCLBA")

#### Gentlemen:

The Bidder, in compliance with your invitation for bids for the demolition and disposal of Commercial Structures having examined Bid #LB: 14-014 prepared by the Genesee County Land Bank, and other related documents and being familiar with site of proposed work, and with all conditions surrounding demolition of the listed property including availability of materials and labor, hereby propose to furnish all labor, materials, tools, equipment, machinery, equipment rental, transportation, superintendence, perform all work, provide all services, and to perform all work in accordance with Bid #LB: 14-014, within time set forth herein, at prices stated below. These prices are to cover all expenses incurred in performing work required under Scope of Work, of which this Bid/Tender is a part.

Successful bidder agrees to provide performance and payment bonds written by surety acceptable to GCLBA; made in favor of GCLBA as obligee.

The Bidder recognizes that the GCLBA may award the bid packages separately and not as a total contract.

## **UNIT PRICE FOR DEMOLITION WORK**

Removal and disposal of structures including foundation, basement walls, floors and footings and installation of sidewalk as specified in the contract.

BID LIST # - LB-1	4-014-1		Contractor:								
Parcel Number	Address	<u>Dir</u>	<u>Street</u>	<u>CITY</u>	<u>ZIP</u>	Funding	<u>Note</u>	<u>Hazardous</u> <u>Materials Bid</u>	<u>Asbestos Bid</u>	<u>Demolition Bid</u>	<u>Total Bid Price</u>
1427576-021	4045		CLIO ROAD	FLINT	48504	MBEG					
1427576-022	4049		CLIO ROAD	FLINT	48504	MBEG					
1427576-023	4057		CLIO ROAD	FLINT	48504	MBEG				Total Bid Brica	
Total Bid Price									\$		

BID LIST # - LB-1	<u> 14-014-2</u>		Contractor:								
Parcel Number	Address	<u>Dir</u>	Street	CITY	<u>ZIP</u>	Funding	Note	Hazardous Materials Bid	Asbestos Bid	Demolition Bid	Total Bid Price
4012282058	1025		CHIPPEWA ST	FLINT	48503	MBEG	DEMOLISH AS ASBESTOS CONTAINING	N/A	N/A		
4012282048	1013		CHIPPEWA ST	FLINT	48503	MBEG	DEMOLISH AS ASBESTOS CONTAINING	N/A	N/A		
4012256017	1110		M L KING AVE	FLINT	48503	MBEG					
Total Bid Price:									\$	•	

For sites with known or suspected abandoned storage tanks, as part of the general demolition fee contractor must provide labor, equipment, and materials to conduct test pitting/exploratory excavation to identify, characterize, and gain access to abandoned tanks at direction of Qualified Environmental Professional (QEP).

## Alternate Bid #1 - UST Removal Items

Alt #1 -	UST Removal Items	Contractor:						
Item No.	<u>Description</u>	<u>Units</u>	Estimated Quantity	<u>Unit</u> <u>Price</u>	<u>Proposal Price</u>			
1.	Removal of USTs (assume 2 - up to 4,000-gallon each containing non-haz water, gasoline or diesel), mobilization, equipment, associated piping, site security, excavation, cut, clean, removal, and disposal/recycling	EA	2	Cost per each UST	Put cost for 2 USTs here:			
2.	Petroleum or Non-hazardous waste disposal (Liquid). Provide disposal minimum including transportation & price per gallon.	Mobe/ Minimum Charge	# of gallons included in Minimum	Cost per each additional gallon	Put cost for 2,000 gallons or minimum here (whichever is larger):			
3.	Bulk Non-hazardous soil disposal, includes excavate and transport. (most likely removal from UST interior if found filled with sand.)	Mobe/ Minimum Charge	# of tons included in Minimum	Cost per each additional ton	Put cost for 10 tons or minimum here (whichever is larger):  \$			
4.	Petroleum or non-hazardous sludge and solids from UST. Provide price per drum.	EA	2	\$	Put cost for 2 Drums here:			
5.	Backfill (In accordance with Contact Specifications, Compacted)	Cubic Yard	50	Cost per each additional yard	Put cost for 50 yards here:			
	Total of All Proposal Prices				\$			

Alternate Bid #2 - Lump Sum Abandoned Container Removal Item

Alt #2 –	Heating Oil UST Removal Item	Contractor:			
<u>Item</u> <u>No.</u>	<u>Description</u>	<u>Units</u>	Estimated Quantity	<u>Unit</u> <u>Price</u>	<u>Proposal Price</u>
1.	Lump Sum Cost for removal of 500-gallon heating oil UST or less, containing non-haz water or heating oil. Cost includes mobilization, equipment, removal of associated piping, site security, excavation, disposal/recycling, disposal of contents and compacted backfill.	EA	1	Cost per each UST	Put cost for 1 UST here:
2.	Lump Sum Cost for removal of 1 hydraulic hoist, containing non-haz water or oil (<50 ppm PCBs). Cost includes mobilization, equipment, removal of associated piping, excavation, disposal/recycling, disposal of contents and compacted backfill.	EA	1	Cost per each Hoist	Put cost for 1 hoist here:
	Total Proposed Price				\$

CONTRACTOR should note that the unit rates, backfill estimates, and estimated quantities are for bidding purposes only. Final payment will be based on actual quantities removed/installed. CONTRACTOR responsible for waste characterization with oversight of QEP.

GCLBA may omit any and all work items from the contract.

Conversion rate for backfill shall be 1.5 tons per 1 cubic yard.

Bidder Name:
Bidder, if awarded a Contract, hereby agrees to commence work under this contract on or around July 16, 2014, contingent on the cut and plug of utilities - gas and electric; and to fully complete on or before Friday, August 29, 2014. All final paperwork and payment requests must be submitted to the Demolition Program Manager by Friday, September 5, 2014. Any incomplete payment request packets or if final demolition inspection is failed by the GCLBA Demolition Inspection, all packets will be rejected and returned to the contractor for correction.
Once packet includes all of the required documentation contractor can resubmit to the GCLBA for processing. When payment packets have been approved and include all required documentation, payment request will be submitted for processing. Payment to Contractor is made by the GCLBA on a net 30 day cycle <u>upon receiving approved and complete</u> payment request packet for each project/address and all required submittals (invoice, sworn statement, lien waivers, manifests, etc.).
Bidder understands that the GCLBA reserves right to reject any or all Bid/Tenders and to waive any informalities or irregularities herein.
In the event a structure or structures itemized on this bid is destroyed or substantially destroyed by fire or other calamity beyond its present condition as determined by the Land Bank, or environmental hazards are found, at any time prior to actual demolition, the GCLBA reserves the right to remove the structure from the bid; or in the event of bid award, to remove the structure(s) from the award and reduce the price by the Contractor's bid for that structure(s).
Upon notice of acceptance of this Bid/Tender, bidder will execute Contract Agreement and deliver properly executed insurance certificates, Performance and Payment Bonds to GCLBA within 10 days.
Bidder acknowledges receipt of following addenda:
If awarded a contract, bidder's surety will be (name of Surety Company).

## **CERTIFICATION OF SITE VISIT**

Before submitting a proposal, each Bidder shall inspect the site of the proposed work to arrive at a clear understanding of the conditions under which the work is to be done. He will be held responsible for having compared the premises with the drawings and specifications, and to have satisfied himself as to all conditions affecting the execution of the work.

No allowance or extra compensation concerning any matter or thing about which the Bidder might have fully informed himself will be allowed. Additional quantities will not be compensated without the GCLBA's prior approval.

## ADDRESS, LEGAL STATUS, AND SIGNATURE OF BIDDER

The undersigned does hereby designate the address, given below, as the legal address to which all notices, directions, or other communications may be served or mailed.

P.O. Box (if applicable)		
Street		
City	State	Zip Code
Phone	Fax	
The undersigned does hereby decla	re that it has the lega	l status checked below.
	Individual	
	_ Co-Partnership	
	_ Corporation Incorp	orated under the laws and State
of		
NAME	<u>ADDRESS</u>	
This Bid Proposal is submitted in the	e name of:	
(Name of Contractor)	<del></del>	
Ву		
Title		
Signed and sealed thisDay	of	20
INSTRUCTIONS: Submit this form <b>END OF SECTION</b>	to GCLBA.	

# EXHIBIT 1 PROPERTY LIST FOR SOIL EROSION PERMIT/WAIVER

BID LIST # - LB	<u>-14-014-1</u>		Contractor:	_	_	_	-
<u>Parcel</u> <u>Number</u>	Address	<u>Dir</u>	<u>Street</u>	<u>CITY</u>	<u>ZIP</u>	Funding	<u>Note</u>
1427576021	4045		CLIO ROAD	FLINT	48504	MBEG	
1427576022	4049		CLIO ROAD	FLINT	48504	MBEG	
1427576023	4057		CLIO ROAD	FLINT	48504	MBEG	

BID LIST # - LB	<u>-14-014-2</u>		Contractor:	Contractor:					
<u>Parcel</u> <u>Number</u>	Address	<u>Dir</u>	<u>Street</u>	<u>CITY</u>	<u>ZIP</u>	Funding	<u>Note</u>		
4012282058	1025		CHIPPEWA ST	FLINT	48503	MBEG	DEMOLISH AS ASBESTOS CONTAINING		
4012282048	1013		CHIPPEWA ST	FLINT	48503	MBEG	DEMOLISH AS ASBESTOS CONTAINING		
4012256017	1110		M L KING AVE	FLINT	48503	MBEG			