

Genesee County Land Bank Authority Blight Elimination Program

Request for Proposals- Environmental Abatement & Disposal of Asbestos and Hazardous Materials & Demolition and Disposal of 1801 S Saginaw St. (Former CBC Recycling Facility) in the City of Flint.

BID NUMBER: #LB: 15-009 DUE DATE: Tuesday, July 14, 2015 at 3:00 pm EST

As part of partnership between:

Genesee County Land Bank Authority (GCLBA) City of Flint Housing Urban Development (HUD)



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REQUEST FOR PROPOSALS

REQUEST FOR PROPOSALS – ENVIRONMENTAL ABATEMENT & DISPOSAL OF ASBESTOS AND HAZARDOUS MATERIALS & DEMOLITION & DISPOSAL OF COMMERCIAL STRUCTURES IN THE CITY OF FLINT & GENESEE COUNTY.

INTRODUCTION

Overview

Demolition of commercial structures is being undertaken as an approved eligible activity under the Genesee County Land Bank Authority (GCLBA) Demolition Program. GCLBA invites the submission of proposals from contractors experienced and licensed to conduct the abatement, demolition and disposal of commercial structures located in Genesee County. Funding sources for services to be provided include but are not limited to:

Community Development Block Grant

Qualified demolition contractors may submit bids for the Scope of Work defined in this RFP. Please note that, due to the potential for environmentally hazardous conditions, there are additional contractor requirements. In addition, the contractor with the winning bid will be expected to follow the Environmental Construction Management Plan (ECMP) and the Addendum to the ECMP included in Appendix 1: Scope of Work. This proposal will be scored on the evaluation criteria set forth in this RFP. The GCLBA anticipates entering a contract for the Scope of Work set forth herein.

Change Orders will not be approved for this project. When submitting pricing proposals Respondents must ensure prices quoted allow for the removal of additional materials without a change order as no changes will be accepted barring discovery additional materials whose removal requires substantial work.

Only firms/contractors that are on the GCLBA Approved Contractor lists can respond to RFP's issued by the GCLBA. Please see additional Contractor requirements due to the environmentally sensitive nature of these projects below.

If contractors will not be responding to this RFP please only return Attachment C.

Addendums to this RFP can be found at <u>www.thelandbank.org</u> under the tab *Current Bids*. Please check any updates to this proposal.



Companies with demonstrated experience in the scope of work defined in this RFP and with an interest in making their services available to GCLBA are invited to respond to this RFP. "Respondents" means the companies or individuals that submit proposals in response to this RFP. The Respondent shall be financially solvent and each of its members if a joint venture, its employees, agents or sub-consultants of any tier shall be competent to perform the services required under this RFP document. GCLBA is seeking to encourage participation by respondents who are MBE/WBE/DVBE or Section 3 business enterprises. Companies can apply to the City of Flint or self-register with U. S. Department of Housing and Urban Development (HUD) (not the Land Bank) to become an approved Section 3 contractor.

Additional Contractor Requirements:

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 and Addendum to the ECMP. Minimum qualifications include:

Contractors or approved Subcontractors must have experience, training, licensing, and insurance for working on potentially contaminated properties and excavating underground storage tanks.

A Qualified Individual(s) with experience, qualifications, and current 40-hour HAZWOPER certification.

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.

Nothing in this RFP shall be construed to create any legal obligation on the part of GCLBA or any respondents. GCLBA reserves the rights, in its sole discretion, to amend, suspend, terminate, or re-issue this RFP in whole or in part, at any stage. In no event shall GCLBA be liable to respondents for any cost or damages incurred in connection with the RFP process, including but not limited to, any and all costs of preparing a response to this RFP or any other costs incurred in reliance on this RFP. No respondent shall be entitled to repayment from GCLBA for any costs, expenses or fees related to this RFP. All supporting documentation submitted in response to this RFP will become the property of the GCLBA. Respondents may also withdraw their interest in the RFP, in writing, at any point in time as more information becomes known.



Each respondent is responsible for labeling the exterior of the sealed envelope containing the proposal response with the proposal number, proposal name, proposal due date and time and your firm's name. Late proposals will not be accepted. The proposal request number and due date for this Bid is:

PROPOSAL REQUEST NUMBER: #LB: 15-009 DUE DATE: Tuesday, July 14, 2015 @ 3:00 pm EST

All inquiries relating to this RFP should be directed in writing to Lucille James, Demolition Program Manager [**Ijames@thelandbank.org**] or to Cheryl McHallam, Grant/Compliance Manager [**cmchallam@thelandbank.org**], at Genesee County Land Bank, 452 S. Saginaw Street, 2nd Floor, Flint, Michigan 48502 or via the appropriate indicated email.

No proposal may be withdrawn for a period of thirty (30) days after submission. Proposals offering less than thirty (30) days for acceptance by the Genesee County Land Bank from the date set for opening will be considered non-responsive and will be rejected.

The GCLBA reserves the right to reject any or all proposals and to waive irregularities or informalities as may be deemed in the GCLBA's interest. It is the GCLBA's intent to award the project to the lowest responsive and responsible contractor for the proposal. The GCLBA may choose to enter into multiple contracts for the same scope of services to ensure that there is enough capacity to complete the work in a timely manner, as required by the funding sources identified.

Time of Completion

Any agreement awarded pursuant to this RFP solicitation shall be in accordance with the Scope of Work and compensation as outlined below, and, within a mutually agreed upon expedited timeframe.

Term of Contract

It is anticipated that the Respondent(s) will start work on or around August 4, 2015 depending on the readiness of the projects. Any agreement awarded pursuant to this RFP solicitation shall be for a contract period ending September 8, 2015, or until the funds are exhausted, whichever comes first. **Contractors must provide updated work schedules to the GCLBA.**



All demolition work must be completed by Tuesday, September 1, 2015 and paperwork and payment requests must be submitted to the Demolition Program Manager or Grant/Compliance Manager by Tuesday, September 8, 2015. Any incomplete payment request packet or failure of final demolition inspection by the GCLBA Demolition Inspector for any project will result in all packets being 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 30-60 day cycle upon receiving approved and complete payment request packets for each project/address and all required submittals (invoice, sworn statement, lien waivers, manifests, etc.)

Background

The GCLBA recently received monies from the City of Flint through Community Development Block Grant. This program will require all demolitions to be completed by end of October 2015. Contractors are expected to be able to handle the GCLBA's needs and be very responsive to GCLBA staff requests.

Federal Regulations

This project will comply with all codes, standards, regulations, and workers' safety rules that are administered by federal agencies (EPA, OSHA, and DOT), state agencies (MIOSHA, MDEQ, and DCH), and any other or relevant local regulations and standards that may apply.

Proposals shall be responsible for compliance with the following additional requirements:

- 1. Certification Form Note
- 2. Bid Bond
- 3. Michigan Builders or M&A –Home Wrecking License
- 4. Michigan Accredited Asbestos Building Inspector Certification for Company
- 5. Michigan Accredited Asbestos Certification for Asbestos Supervisor
- 6. Michigan Accredited Asbestos Certification for workers
- 7. OSHA 40-hour Hazardous Waste Operations Certification (HAZWOPER)
- 8. OSHA 8-hour refresher HAZWHOPER Re-certification
- Laboratory Certificate of Accreditation to ISO/IEC 17025:2005 in accordance with 40 CFR CH.1 (1-1-87 Edition), Part 763, Subpart F, Appendix A, pp.293-299.



- 10. Compliance with MIOSHA Part 602 Asbestos Standards for Construction (as amended June 5, 2013) http://www.michigan.gov/documents/CIS_WSH_part602_37719_7.pdf
- 11. OSHA 29 CRF 1926- Construction Industry Standards
- 12.29 CFR 1910.1001, 19326.1101 & 1915.1001 Procedures of Occupational Exposure to Asbestos
- 13.29 CFR 1910.1200 Hazard Communication
- 14.40 CFR Part 261- EPA Regulations
- 15. HUD Title X parts 1012-1013
- 16. Federal Labor Standards and Provisions
- 17. Equal Opportunity Clause
- 18. Section 3 Clause (See Attachment E)
- 19. HUD Contract and Subcontract Activity
- 20. Copeland Anti-kickback Act
- 21. Bidders Insurance Checklist (Attachment A)
- 22. Genesee County Labor Standards (Including Prevailing Wage & Wage Determination)
- 23. And other Regulations Referenced throughout this document and attachments

PROFESSIONAL SERVICE REQUIREMENTS

Scope of Work

GCLBA seeks sealed proposals from qualified respondents to provide the scope of services described below on residential structures located in targeted neighborhoods in the City of Flint. *See Appendix 3 – Boundaries and Maps.* Nearly all of the targeted neighborhoods contain abandoned and derelict residential/commercial structures. Applicants can respond to the proposal/ scope of services described below (*See Appendix 1 for full scope of work*):

Summary Scope of Work: The services required consist of Abatement of Asbestos & Hazardous Materials and Demolition activities that include commercial buildings as directed by the GCLBA. Contractors must have experience working on potentially contaminated properties and excavating fuel and heating oil tanks. Contractors must have OSHA 40-hour Hazardous Waste Operations Certification (HAZWOPER).

The commercial structure included in LB: 15-009 may or may not have Recognized Environmental Conditions (RECs), including but not limited to suspect environmental contamination and underground storage tanks (USTs).

Below are summaries of two separate scopes of work for this Request for Proposals. The summaries below are a summary of Appendix 1 - Scope of Work, unless otherwise stated in this RFP for this project or in contract.



Summary Scope of Work: Abatement and disposal of environmentally hazardous materials from Commercial Structures

During the contract period through September 8, 2015, GCLBA anticipates the abatement and disposal of environmentally hazardous materials from commercial structures prior to demolition of the structure(s) with all work being completed prior to September 1, 2015.

The purpose of the abatement and disposal is to properly remove environmental hazardous materials/waste concerns associated with the building, or within close proximity to the building, that may require removal and disposal, or other consideration, before a structure is renovated, demolished or deconstructed. (The complete scope of work is available in Appendix 1 and on the Land Banks website: www.thelandbank.org.)

1.0 PROJECT/SITE CONDITIONS

A. General Requirements

The work covered by this section includes the mitigation of potentially environmentally hazardous material located on selected tax-reverted residential/commercial properties owned or managed by the Genesee County Land Bank. The purpose of the mitigation is to properly dispose of environmental concerns associated with the residential/commercial properties.

B. Responsibility

It shall be the responsibility of the Contractor to review the attached specifications; the conditions, and the relative difficulty thereof, which are present and that may affect results of the environmental mitigation measures. Respondents can request access to Phase I Environmental Site Assessments and Pre-demolition surveys by emailing request to <u>ffinholm@thelandbank.org</u> AND <u>cmchallam@thelandbank.org</u>. Respondents will be invited to review information via Box.com. Change Orders will not be approved for this project. When submitting pricing proposals Respondents must ensure prices quoted allow for the removal of additional materials without a change order as no changes will be accepted barring discovery of material whose removal requires substantial work or situations for which an alternate bid and scope of work is provided within this RFP.



C. Knowledgeable Person

It shall be the Contractor's responsibility to assure that the mitigation measures and disposal of material is supervised by individuals certified and knowledgeable on the State of Michigan and local regulations in such endeavors. Such persons shall comply with the appropriate Federal, State, and local regulations that mandate work practices and shall be capable of performing the work under this contract.

D. Supplying Necessary Items

The Contractor shall be responsible for supplying all labor, material, equipment, services, insurance, bonds, and all incidentals which are necessary or required to perform the Work in accordance with applicable regulations and these specifications.

E. Liability

The Contractor shall assume full responsibility and liability for the compliance with all Federal, State, regional, and local regulations pertaining to work practices, confined spaces, hauling, disposal, and protection of workers and visitors to the site. This shall include Hazard Communication to workers and visitors of the work site (29 CFR 1926.59).

2.0 DESCRIPTION OF WORK

The Work covered by this section includes the mitigation and disposal of environmentally hazardous material/wastes located on residential/commercial properties scheduled for demolition in Genesee County, Michigan.

- A. Hazardous Materials/Waste Disposal
 - 1. Each residential/commercial building that has been identified may contain but is not limited to the presence of hazardous materials/waste including listed below:
 - Paint
 - Pesticides/Herbicides
 - Fluorescent Light Bulbs
 - Fluorescent Light Fixture Ballasts
 - Mercury Switches
 - Fuels/Solvents
 - Underground Storage Tanks



These materials shall be properly removed from the structures, packed, and disposed of by current regulations.

2. The pre-demolition inspection provided by the GCLBA will estimate the presence of each material/waste identified, the location and quantity of each material/waste.

3.0 PRE-WORK SUBMITTALS

The Contractor will submit a Work Plan to the Professional to include the following:

A. Work Plan

- Schedule and sequence of work.
- 2. Sampling and analysis protocols.
- Quality Control
- 4. Submittals
- 5. Health and Safety Plan
- 6. Health and Safety personnel and assignments
- 7. Site Specific Health and Safety procedures

B. Safety Plan

A written Health and Safety Plan (HASP) shall be submitted prior to the start of Work. The HASP must be prepared to comply with the appropriate Federal, State, and local regulations, which mandate work practices. This plan must be submitted in writing to the Demolition Program Manager prior to the start of any site work.

4.0 HAZARDOUS WASTE DISPOSAL

Lab Pack and properly dispose of hazardous waste identified during the environmental inspections. Include laboratory analysis for characterization if necessary. (55 gallon drums properly labeled shall be used for packing material). Documentation tracking waste from site to disposal is required for payment.



5.0 TECHNICAL (See Appendix 1: #5 Scope of Work for Asbestos Abatement)

A. Description

Environmentally Hazardous Material Removal and Disposal

1. It shall be the responsibility of contractor to remove and dispose of material identified in pre-demolition survey of structures as being environmentally hazardous.

B. Summary

This Section includes the following:

1. Removal and disposal of potentially environmentally hazardous material.

C. Hazardous Conditions

- Structures identified in future bid documents will have been found to contain potentially environmentally hazardous material as provided by the pre-demolition inspector. The contractor will be required to remove and dispose of such material as directed by owner/owners representative.
- 2. The pre-demolition inspection will have identified potentially environmentally hazardous material. These items may include but not be limited to the following: flammables, fuels/waste oils, thinners/paints/solvents; underground storage tanks; pesticides; mercury switches, aerosol cans, fluorescent light bulbs, etc. These items are to be removed and disposed by a licensed contractor familiar with the proper procedures. These materials are required to be characterized and placed with like materials in clearly marked 55 gallon drums and disposed of properly prior to any site demolition work.
- 3. Contractor shall supply Owner a copy of landfill and disposal receipts.
- D. Certification of Property
 - Contractor shall notify owner/owner's representative in writing when each specific listed property has been mitigated of potentially environmentally hazardous material within 24 hours of completion of said work.



- Contractor shall revise Notification of Intent to Renovate/Demolish through the One Stop Submittal website and upload pictures certifying the completion of mitigation of hazardous materials. (See Attachment E). <u>Contractor must submit a 10-day NESHAP notification for</u> <u>Asbestos Containing Materials (ACM). NO EXCEPTIONS!</u>
- 3. Contractor shall take photos documenting the removal of environmentally hazardous materials and upload to BOX.COM per the GCLBA agreement with the Michigan Department of Environmental Quality Asbestos Department (NESHAP).

6.0 USE OF WATER

- A. Water must be on site, either through a water truck provided by a contractor to water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
 - The City of Flint is no longer providing Hydrant Meter "Rental" Agreements for the use of City water. Any contractor that is illegally using the City of Flint water/fire hydrants will be debarred by the Genesee County Land Bank.
- B. Adequately Wet- As defined in 40 CFR Part 61, Subpart M, sufficiently mix or penetrate with liquid to prevent the release of particulates from the source material. Continue wetting asbestos-containing material (ACM) if visible emissions are encountered during abatement activities. When uncertainties arise, continue wetting material until uncertainties diminish.
- C. Do not create hazardous or objectionable conditions, such as ice, flooding, and pollution, when using water.

Summary Scope of Work: Demolition and Disposal of Commercial Structures

During the contract period through September 8, 2015, GCLBA anticipates the demolition and disposal of 1801 S Saginaw St. until the available funds are exhausted. Please refer to Appendix 1 for a complete Scope of Work regarding Demolition and the Environmental Construction Management Plan.

Summary Scope of Work: Environmental Construction Management Plan

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.

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

Contractors must provide updated work schedules to the GCLBA. All demolition and final-grade work for must be completed and GCLBA inspections requested by Tuesday, September 1, 2015 and paperwork and payment requests must be submitted to the Demolition Program Manager or Grant/Compliance Manager by Tuesday, September 8, 2015.

The purpose of this project is to provide demolition, waste disposal, and site protection of blighted and/or dangerous structures located in the City of Flint and Genesee County. (The complete scope of work is available in Appendix 1 and on the Land Banks website: <u>www.thelandbank.org</u>)



6/29/15

EVALUATION CRITERIA AND SCORING

The GCLBA will evaluate the qualifications received and identify the submittals that are the most responsive, responsible and offer the best service to the GCLBA. The GCLBA will consider consultant qualifications, financial viability, project references, and experience with comparable projects. Specifically, each Qualifications package will be reviewed based on the following selection criteria:

A. PROPOSAL/EVALUATION CRITERIA:

Evaluation Factors	Maximum Points
Ability to Meet Production Goals within Timelines	35
The bidder's demonstration of understanding of scope of work, readiness to proceed and availability to complete work assigned within timeframes required.	
Experience working on environmental cleanup or UST removal projects for the EPA, MDEQ, government or private entity.	5
HUD Section 3	5
Contractor provides letter from the City of Flint or Genesee County Metropolitan Planning Commission certifying them as a Section 3 Business Concern	
Local Contractor	5
Points awarded to contractors that are located in Genesee County	
Price	50
The ability to demonstrate reasonable costs in performing scope of work identified in the RFP.	



SUBMITTAL REQUIRMENTS

RFP responses must be submitted both via hard copy and electronic copy. Each respondent shall submit one (1) original, one (1) additional copy of application and one flash drive containing a PDF copy of the following documents in a clear, legible, 12 point font, and 8.5 by 11 inch format. <u>Responses not submitted via hard copy will not be considered. Respondents are advised to adhere to the Submittal Requirements.</u> <u>Failure to comply with the instructions of this RFP will be cause for rejection of submittals.</u>

Bidders may, without prejudice to himself, withdraw Bid/Tender after it has been submitted, provided the request for such withdrawal is received in writing before time set for opening. Verbal communication is not acceptable. After opening, no Bid/Tender may withdraw for period indicated.

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/herself as to all conditions affecting the execution of the work.

If Bidder has an **approved prequalification packet** on file the following documents do not need to be included with submittals:

- Evidence of Insurance/Insurance Accord (Genesee County Land Bank named as an insured)
- Michigan Builders or M&A –Home Wrecking License
- Any other State License and/or Certification that is deemed necessary

ONLY THE DOCUMENTS LISTED ABOVE DO NOT NEED TO BE SUBMITTED WITH THE PROPOSAL IF AN UPDATED APPROVED PREQUALIFICATION PACKET IS ON FILE.

If there are any changes with the documents or renewals, it is the contractor's responsibility to submit the correct documents to the GCLBA in a timely manner.

GCLBA reserves the right to seek additional information to clarify responses to this RFP. Each response must include the following:

A. Minimum Qualifications of Bidders

These documents must be submitted and acceptable before GCLBA will review the Experience and Capacity proposal:

 Evidence of Financial Stability: The bidder shall be financially stable and has the financial wherewithal to carry out the requirements of this solicitation. All respondents shall include two years of Company tax returns and a most recent financial statement provided by their accountant or a letter from their accountant stating evidence of financial stability with the proposal response. This information will assist GCLBA in determining the Respondent's financial condition. GCLBA is seeking this information to ensure that the proposer's have the financial stability and wherewithal to assure good faith performance.



- Michigan Builders or M&A –Home Wrecking License: The bidder must be licensed by the State of Michigan, as a Residential Builders and/or Maintenance & Alterations Contractors with a House Wrecking trade designation. (The person/company that is issued the License by the State of Michigan must be in entity that applies in order to be added to the prequalified list.)
- 3. Evidence of Insurance: The bidder must have Commercial General Liability with limits not less than: Premises/operations \$1,000,000 per occurrence with \$2,000,000 aggregate; Workers Compensation Statutory limits of Michigan; Employers Liability with limits \$100,000 accident/disease, \$500,000 policy limit, disease; Automobile Liability with limits not less than \$1,000,000 combined single limit each accident-Owned, hired, nonowned; for projects involving the removal and disposal of waste or storage tanks the Contractor shall maintain Pollution Liability insurance with limits no less than \$1,000,000 per loss/\$1,000,000 aggregate; and, Professional Liability with limits not less than \$1,000,000 including errors & omissions \$200,000 per occurrence \$600,000 in aggregate for Medical Malpractice. A certificate of insurance must be included with submission of qualifications. (See Attachment A for Bidder's Insurance Checklist) GCLBA must be listed as an additional insured.
- 4. <u>Current Certificate of Good Standing (Corporation) or Certificate of Existence:</u> The bidder shall provide a Certificate of Good Standing (Corporation) or Certificate of Existence (Limited Liability Company) issued by the Michigan Department of Licensing and Regulatory Affairs Corporations, Securities & Commercial Licensing Bureau. (If Respondent is a joint venture, a Certificate of Good Standing or Certificate of Existence, as applicable, must be submitted for each entity comprising the joint venture.)
- 5. <u>Experience:</u> Bidders must have a minimum of five* (5) years of proven experience providing professional licensed demolition services. **Required by the State of Michigan.*
- 6. <u>Bid, Performance and Payment Bond:</u> Bidders must have the ability to secure a Bid Bond in the amount of five (5%) of their bid amount and **a Performance Bond and Payment Bond,** if awarded, in an amount equal to one hundred percent (100%) of the total contract amount. Surety on such bonds shall be by a bona fide company authorized to do business in the State of Michigan. **Bond requirement shall be increased consistent with any contract amount increase.**
- 7. <u>Conflict of Interest Statement & Supporting Documentation:</u> The Respondent shall disclose any professional or personal financial interests that may be a conflict of interest in representing the GCLBA. In addition, all Respondents shall further disclose arrangement to derive additional compensation from various investment and reinvestment products, including financial contracts.
- 8. <u>Debarment and Suspension</u>: The Respondent certifies to the best of its knowledge and belief that it, its agents, and its subcontractor(s):
 - a. Are not presently debarred, suspended, proposed for debarment, and declared ineligible or voluntarily excluded from covered transactions by any federal department or the State.



- b. Have not within a three-year period preceding this Contract been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, MLB, or local) transaction or contract under a public transaction, as defined in 45 CFR 1185; violation of federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property.
- c. Are not presently indicted or otherwise criminally or civilly charged by a government entity (federal, State, or local) with commission of any of the offenses enumerated in subsection (b).
- d. Have not within a three-year period preceding this Contract had one or more public transactions (federal, State, or local) terminated for cause or default.
- e. Will comply with all applicable requirements of all other State or federal laws, executive orders, regulations, and polices governing this program.
- 9. Other State License and or Certification:
 - a. Hazardous Waste Operations and Emergency Response (HAZWOPER) Certification
 - b. Any other State License and/or Certification that is deemed necessary to complete the Scope of Work as described.
- **10.**<u>Capacity:</u> The bidder must have the capacity to complete number projects that is required by the GCLBA *on a weekly basis.*
 - a. Asbestos and Hazardous Material Abatement: Complete twenty (20) or more environmental mitigation and disposal projects per week.
 - b. Demolition: Complete twenty (20) or more demolition and disposal projects per week.



IMPORTANT DATES

Bids Due	Tuesday, July 14, 2015
Notice of Award	Friday, July 17, 2015
Contract Signed	On or around Tuesday, July 21, 2015
Start Work	On or around Tuesday, August 4, 2015
Work Completed	On or before Tuesday, September 1, 2015
Final Paperwork and Payment Request	On or before Tuesday, September 8, 2015

QUESTIONS

Questions regarding this RFP should be submitted in writing via email to **Ijames@thelandbank.org** or **cmchallam@thelandbank.org**.

SUBMITTAL DUE DATE

Only firms/contractors that are the on the GCLBA Approved Contractor lists can respond to RFP's issued by the GCLBA.

Responses to this RFP are due by 3:00 pm on Tuesday, July 14, 2015. Each Respondent is responsible for labeling the exterior of the sealed envelope containing the proposal response with the proposal number, proposal name, proposal due date and time, and your firm's name. Hard copies and must be delivered to:

Cheryl McHallam, Grant Compliance Manager Genesee County Land Bank Authority 452 S. Saginaw St. 2nd Floor Flint, MI 48502

Only the documents listed below do not need to be submitted with the proposal if an updated approved prequalification packet is on file.

If there are any changes with the documents or renewals, it is the contractor's responsibility to submit the correct documents to the GCLBA in a timely manner.

Evidence of Insurance/Insurance Accord – GCLBA must be listed as an insured
 Michigan Builders License or Maintenance and Alterations license with House Wrecking
 Evidence of Financial Stability*



RFP SUBMITTAL REQUIREMENTS CHECKLIST

Please provide Checklist with response to RFP

(If documentation is on file please verify dates and numbers below where required*)

(GCLBA STAFF ONLY)	Included in bid packet	On file with GCLBA	Expiration Date	Please provide the Submittal Requirements as stated. ** Some of the submittal requirements are included in the attachments. (PAGE 1)	
		Include in bid packet.		 This section provides instruction for the written portion of your proposal. It will be comprised of the following sections: Section B: Letter of Interest 	
		Include in bid packet.		Certification Form Note	
		Include in bid packet.		References (Attachment B)	
		Include in bid packet.		Description of Company	
		Include in bid packet.		Bid Bond	
		Include in bid packet.		Current_Certificate of Good Standing* (Corporation) or Certificate of Existence (Limited Liability Company) issued by the Michigan Secretary of State (If Respondent is a joint venture, a Certificate of Good Standing or Certificate of Existence, as applicable, must be submitted for each entity comprising the joint venture.)	
				Evidence of Insurance* – GCLBA must be listed as an insured	
				 Michigan Builders License or Maintenance and Alterations license with House Wrecking * Issued to: 	
				Michigan Accredited Asbestos Certification for Company	
				Michigan Accredited Asbestos Certification for Asbestos Supervisor	
				Michigan Accredited Asbestos Certification for workers	
				 OSHA 40-hour Hazardous Waste Operations Certification (HAZWOPER) 	



(GCLBA STAFF ONLY)	Included in bid packet	On file with GCLBA	Expiration Date	** Some of the submittal requirements are included in the attachments. (PAGE 2)
				Evidence of Financial Stability* - Two years tax returns (Current)
		Include in bid packet.		Conflict of Interest Statement & Supporting Documentation*
		Include in bid packet.		 Capacity & Unit Rate Pricing Bid Tab/Pricing Proposal (Attachment D)
		Include in bid packet.		 Local Hiring, HUD Section 3, if applicable (Attachment E & G) or <u>Section 3 letter from</u> the City of Flint or U. S. Department of Housing and Urban Development (HUD), MBE/WBE,DVBE (Contractor must submit documents to City of Flint or HUD and received approval letter prior to submitting proposal. Approval letter certifying contractor as a Section 3 Contractor is submitted with proposal.)
		Include in bid packet.		RFP Submittal Requirements Checklist
		Include in bid packet.		Any other State License and/or Certification that is deemed necessary
		Include in bid packet.		Received Addendum(s):

ADDITIONAL INFORMATION

ATTACHMENTS

- A GENESEE COUNTY BIDDERS INSURANCE CHECK LIST
- B LIST OF REFERENCES (3)
- C CERTIFICATION FORM NOTE
- D UNIT RATE PRICING BID TAB
- E SECTION 3 CERTIFICATION INFORMATION
- F CONFLICT OF INTEREST/NON-COLLUSION AFFIDAVIT
- G CERTIFICATION FORM OF BUSINESS ENTERPRISE
- H MEDC COMMUNITY VENTURES FLYER

APPENDICES

- 1 SCOPE OF WORK (ABATEMENT & DEMOLITION Includes ECMP)
- 2 MDEQ NESHAP PROGRAM
- 3 MAP AND BOUNDARIES OF TARGET AREAS
- 4 FEDERAL AND COUNTY REGULATIONS (PREVAILING WAGES)
- 5 SAMPLE CONTRACT



ATTACHMENTS

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ATTACHMENT A: GENESEE COUNTY BIDDER'S INSURANCE CHECKLIST

Coverages Required

- 1. Workers' Compensation
- 2. Employers Liability
- 3. General Liability 1,000,000/OCC/AGG
- 4. Professional liability
- 5. Products/Completed operations
- 6. Contractual liability
- 7. Explosion, Collapse, Subsidence
- 8. Automobile liability
 - Owned, hired, nonowned
- 9. Pollution Liability
- 10. Authoritys and Contractors Protective

Limits (Figures denote minimums)

- \$500,000 or Statutory limits of Michigan whichever is greater \$100,000 accident/disease \$500,000 policy limit, disease Including Premises/operations \$1,000,000 per occurrence with \$2,000,000 aggregate \$1,000,000 including errors & omissions \$200,000 per occurrence \$600,000 in aggregate for Medical Malpractice \$1,000,000 per occurrence with \$2,000,000 aggregate \$1,000,000 general aggregate (gen. agg.) Excess Policy with limits at least \$2,000,000 \$1,000,000 combined single limit each accident-Owned, hired, nonowned \$1,000,000 per loss/\$1,000,000 aggregate
- 11. Genesee County named as an additional insured on other than workers' compensation via endorsement. A copy of the endorsement must be included with the certificate.
- 12. Cancellation notice is to read: Should any of the above described policies be cancelled before the expiration date thereof, the issuing insurer will mail 30 days written notice to the certificate holder named to the left or 10 day notice for non-payment of premium.
- 13. The certificate must state bid number and title

A copy of the insurance certificate with the Genesee County Land Bank listed as a certificate holder is required and must be attachment to the response to this proposal.

Bidder's Statement

I understand the insurance requirements and will comply in full if awarded the contract.

Bidder

Signature



ATTACHMENT B: LIST OF REFERENCES (3) RELATED TO SCOPE OF WORK FROM THE LAST 5 YEARS

Reference #1: Company/Municipality:								
Contact Person:		Title:						
Address:								
City:	State:	Zip:						
Telephone:	Fax:							
Email:	Project Timeline (Dates):							
Type of Project:								
Budget:								
Reference #2: Company/Municipality:								
Contact Person:		Title:						
Address:								
City:	State:	Zip:						
Telephone:	Fax:							
Email:	Proj	ect Timeline (Dates):						
Type of Project:								
Budget:								
Reference #3: Company/Municipality:								
Contact Person:		Title:						
Address:								
City:	State:	Zip:						
Telephone:	Fax:							
Email:	Proj	ect Timeline (Dates):						
Type of Project:								
Budget:								

ATTACHMENT C: CERTIFICATION FORM NOTE

THIS PAGE MUST BE COMPLETED AND INCLUDED WITH THE SUBMITTAL CERTIFICATION

The undersigned hereby certifies, on behalf of the Respondent named in this Certification (the "Respondent"), that the information provided in this RFP submittal to GCLBA is accurate and complete and I am duly authorized to submit same. I hereby certify that the Respondent has reviewed this RFP in its entirety and accepts its terms and conditions.

(Name of Respondent)	
Will be responding to this RFP.	
Will not be responding to this RFP, but	ut to remain on the Genesee County Land
Bank approved contractors list. (Pleas	se return only this form)
(Signature of Authorized Representative	
(Typed Name of Authorized Representative)	
(Title)	
(Date)	
Email:	Phone:
Federal Identification Number:	License Number:
NAME OF AUTHORIZED REPRESATIVES FOR SUBCONTRA	CTORS:
(Typed Name of Subcontractor's Authorized Representativ	ve) (Title)
(Typed Name of Subcontractor's Authorized Representativ	ve) (Title)
(Typed Name of Subcontractor's Authorized Representativ	

ATTACHMENT D: UNIT RATE PRICING BID COVERSHEET & BID TAB

Company Name: _____

BID TENDER SUMMARY

	BID LIST # -LB-15-009	<u>Alternate Bid #1</u> <u>UST Removal Items</u>
BID AMOUNT	\$	\$

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

Statement of Experience

Years of Company Experience: ______

Years of Individual Experience: _____

Licenses, Certificates, Accreditations held by firm and/or employees (Provide documentation):

The qualification of assigned project staff and subcontracts, including:

- Relevant professional and educational experience (Provide documentation on attached sheet)
- Identification of specific staff individuals with experience managing demolition 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 sub-contractor?	
Sub-Contractor Service:	
Sub-Contractor Authorized Representative:	
Sub-Contractor Years of Experience:	
Sub-Contractors License or Certification:	-
Sub-Contractor's Number of employees:	
List of equipment (can attach list if need):	

Identification of landfills and disposal sites who will participate in the project:

I certify that I have the necessary equipment and staffing available in order to complete the Scope of Work outlined in this bid. I certify that I have read the Scope of Work included in this bid.

Signed this ______, ____,

(Name of Contractor/ Authorized Representative)

(Signature of Contractor /Authorized Representative)

(Contractor Address)

(Phone)

(Email)

BID/TENDER FORM #LB 15-009

SUBMITTED TO: Genesee County Land Bank 452 S. Saginaw Street Flint, Michigan 48502

FOR: Invitation to Bid #LB 15-009 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: 15-009 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: 15-009, 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 ABATEMENT AND DEMOLITION WORK

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

BID LIS	ST # - LB-15-009		Contrac	tor:					
<u>No.</u>	Parcel Number	Property Address	<u>City</u>	Zip Code	<u>Funding</u>	<u>Hazardous</u> <u>Materials Bid</u>	Asbestos Bid	<u>Demolition</u> <u>Bid</u>	Total Bid Price
1	41-18-460-002	1801 S SAGINAW ST	Flint	48503	CDBG				

*IT IS THE GENESEE COUNTY LAND BANK AUTHORITY'S POLICY AND PRACTICE TO ABATE WHAT CAN BE ABATED, EVEN IF THE STRUCTURE IS TO BE DEMOLISHED AS ASBESTOS CONTAINING. QUOTE SHOULD INCLUDE ABATEMENT AND DEMOLITION AS ASBESTOS CONTAINING.

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).

If a UST is discovered, CONTRACTOR should expect delays associated with testing, notifications, and coordination with the QEP. Delays are inherent in UST removal projects.

<u>Alt #1 - U</u>	ST Removal Items			
<u>ltem</u> <u>No.</u>	Description	<u>Units</u>	<u>Estimated</u> <u>Quantity</u>	<u>Unit Price</u>
1	Removal of UST (assume 1 - up to 4,000-gallon containing non-haz water, gasoline or diesel), mobilization, associated piping, site security, excavation, cut, clean, removal, and disposal/recycling, DISPOSAL OF CONTENTS, AND BACKFILL	EA	1	Cost per each UST <u>\$</u>
		то		

TOTAL ALT BID

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 Tuesday, August 4, 2015, contingent on the cut and plug of utilities - gas and electric; and to fully complete on or before Tuesday, September 1, 2015. All final paperwork and payment requests must be submitted to the Grant Compliance Manager by Tuesday, September 8, 2015. 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 30-60 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.

Street				
City	State	Zip Code		
Phone	Fax			
The undersigned does herel	by declare that it has the legal st	atus checked below.		
	Individual			
	Co-Partnership			
	Corporation Incorporated under t			
of				
		in this Bid Proposal are as follow		
The names and address of a <u>NAME</u>	Il persons indicated as partners <u>ADDRESS</u>	in this Bid Proposal are as follow		
NAME This Bid Proposal is submitte	ADDRESS ed in the name of:	in this Bid Proposal are as follow		
NAME This Bid Proposal is submitte (Name of Contractor)	ADDRESS ed in the name of:	in this Bid Proposal are as follow		
NAME This Bid Proposal is submitte	ADDRESS ed in the name of:	in this Bid Proposal are as follow		

EXHIBIT 1 PROPERTY LIST FOR SOIL EROSION PERMIT/WAIVER

BID LIST	BID LIST # - LB-15-009						
<u>No.</u>	Parcel Number	Property Address	<u>City</u>	Zip Code	Funding		
1	41-18-460-002	1801 S SAGINAW ST	Flint	48503	CDBG		

ATTACHMENT E: Section 3 Clause and City of Flint and the U.S. Department Housing and Urban Development (HUD) Section 3 Business Certification Program Information

To become Section 3 Certified, bidders can use either Option A or Option B, as provided below:

Option A: City of Flint Section 3 Business Certification Program - Contact City of Flint's Department of Community and Economic Development at (810) 766-7436 for information regarding their Section 3 Business Certification Program. Download the following forms from the Genesee County Land Bank's website for the City of Flint's Section 3 Certification Program.

City of Flint Section 3 Certification Program forms are as follows:

- Certification for Resident Seeking Section 3 Training and Employment
- Mott Workforce Development Contact Information Sheet
- Certification for Business Concern Seeking Section 3 Preference in Contracting and Demonstration of Capacity
- Genesee County Land Bank Section 3 Reporting form (Program requirement regardless of contractors Section 3 status, all contractors must fill out this form with payment requests)

SUBMIT THESE FORMS TO THE CITY OF FLINT DEPARTMENT OF COMMUNITY AND ECONOMIC DEVELOPMENT TO BECOME SECTION 3 CERTIFIED

Option B: U. S. Department of Housing and Urban Development (HUD) - To become a Section 3 certified business, bidders are encouraged to access HUD's website at http://portal.hud.gov/hudportal/HUD?src=/section3businessregistry.

The website allows bidders to self-register as a Section 3 business by completing an on-line "Register for Section 3 Self Certification" form. Within two weeks of completing the form, HUD will either mail or email the bidder's Section 3 Certification forms. If needed, bidders can also, contact HUD at the following address, telephone number, and email address for additional information:

U.S. Department of Housing and Urban Development Economic Opportunity Division, Region V 451 Seventh Street, SW Room 5232 Washington, DC 20410 Bruce Bailey Bruce.e.bailey@hud.gov (202)402-6249

GENESEE COUNTY LAND BANK IS ACCEPTING LETTERS FROM THE U.S. DEPARTMENT OF HOUSING AND URBAN DEVELOPMENT TO VERIFY SECTION 3 CERTIFICATION

SUBMISSION OF LOW-INCOME EMPLOYEE INFORMATION:

Bidders are required to submit the following information with their RFP regarding their low-income employees:

- a. List of low-income employees
- b. Date of hire
- c. Position

Samples of type of eligible Section 3 positions are as follows:

Construction: cement/masonry, demolition, electrical, engineering, fencing, heating, machine operation, painting, and surveying;

Administrative Management: accounting, payroll, research, bookkeeping, purchasing, and word processing;

Services: marketing, janitorial, photography, catering, landscaping, printing, computer/information, manufacturing, and transportation.

Section 3							
Maximum Income Limits Number in Heusehold Extremely Low Very-Low Income Low Income							
Number in Household	Income (30%)	(50%)	(60%)				
One Person	\$11,200	\$18,700	\$21,850				
Two Person	\$12,800	\$21,350	\$25,000				
Three Person	\$14,400	\$24,000	\$28,100				
Four Person	\$16,000	\$26,650	\$31,200				
Five Person	\$17,300	\$28,800	\$33,700				
Six Person	\$18,600	\$30,950	\$36,200				
Seven Person	\$19,850	\$33,050	\$38,700				
Eight Person	\$21,150	\$35,200	\$41,200				

SECTION 3 CLAUSE

All Section 3 covered contracts shall include the following clause (referred to as the "Section 3 Clause"):

A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, <u>12 U.S.C. 1701u</u> (section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.

B. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part 135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.

C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

D. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR Part 135.

E. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected by before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.

F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

G. With respect to work performed in connection with section 3 covered Indian housing assistance, section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e) also applies to the work to be performed under this contract. Section 7(b) requires that to the greatest extent feasible (i) preference in the award of contracts and subcontracts shall be given to Indian organizations and Indian-owned Economic Enterprises. Parties to this contract that are subject to the provisions of section 3 and section 7(b) agree to comply with section 3 to the maximum extent feasible, but not in derogation of compliance with section 7(b).

ATTACHMENT F: CONFLICT OF INTEREST / NON-COLLUSION AFFIDAVIT

State of	_:
	S.S.
County of	<u>.</u>
l,	of

(Name of Company/Firm)

And that I am authorized to make this affidavit on behalf of my firm, its owner, directors and officers. I am the person responsible in my firm for the price(s) and the amount of the bid.

I state:

- 1. This company, corporation, firm, partnership or individual has not prepared this proposal in collusion with any other provider, and the contents of this proposal as to prices, terms or conditions of said proposal have not been communicated by the undersigned nor by any employee or agent to any other person in this type of business prior to the official opening of this proposal.
- 2. No attempt has been made or will be made to induce any firm or person to refrain from bidding on this contract, or to submit a bid higher than this bid, or to submit any intentionally high or noncompetitive or other form of complementary bid.
- 3. ______, its affiliates, subsidiaries, officers, directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding on any public contract.
- 4. This company, corporation, firm, partnership or individual is fully aware that this contract is wholly or partially federally funded, and further, by submission of the bid or proposal that the individual or form certifies that there is no conflict of interest with any public official, employee, agency, commission, or committee with the GCLBA.

I state that _____

understands and

(Name of my Company/Firm)



Acknowledges that the above representations are material and important, and will be relied on by the Genesee County Land Bank Authority in awarding the contract(s) for which this bid is submitted. I understand and my firm understands that misstatements in this affidavit is and shall be treated as fraudulent concealment from the Genesee County Land Bank Authority of the true facts relating to the submission bids for this contract.

SIGNATURE SECTION

(Signature)	(Title)		
(Company Name)	(Street / P. O. Box)		
(Company Telephone Number)	(City)	(State) (Zip)	
NOTARIZATION SECTION Subscribed and sworn to before me this	Day of	, 20	
Notary Public Signature	My Con	nmission Expires:	



ATTACHMENT G: CERTIFICATION FORM OF BUSINESS ENTERPRISE

Company Name:				
Business Enterprise Status:				
Check all that apply:	MBE	WBE	SBE	
LBE	DVBE	OBE		
Ethnicity of Owner (s):				
Check all that apply:	White	Black	Hispanic	
Asian_	Nat	ive American		

I undersigned, certify the above information to be accurate and is satisfied that the above company meets the requirements for self-certification as an MBE, WBE, SBE, LBE, DVBE, and/or OBE.

Signed this ______, _____, _____,

Contractor Name (please print)

Contractor Signature

(See other side for explanation)



Explanation of Business Enterprise Status

A Minority Business Enterprise (MBE) is a business entity which is at least 51% owned by one or more minorities who are citizens or lawful permanent residents of the United States and a member of a recognized ethnic or racial group.

A Women Business Enterprise (WBE) is a business entity at least 51% owned by one or more women who are citizens or lawful permanent residents of the United States.

An Other Business Enterprise (OBE) is any business which does not otherwise qualify as a Minority or Women Business Enterprise.

A Small Business Enterprise (SBE) is an independently owned and operated business; with 50 or fewer employees and net profits of 100,000 or less.

A Local Business Enterprise (LBE) is a business entity whose principal place of business is located within the boundaries of Genesee County.

A Disabled Veteran Business Enterprise (DVBE) is a business concern certified by the administering agency as meeting all of the following: 1) a veteran of the military, naval, or air service of the United States with a service-connected disability of at least 10 percent, and who is also a resident of California, 2) one or more disabled veterans own 51% percent of the firm, 3) the management and control of the daily business operations are by one or more disabled veterans, and 4) it is a sole proprietorship corporation or partnership with its home office located in the United States and is not a subsidiary of a foreign firm.



ATTACHMENT fl - MEDC COMMUNITY VENTURES

Michigan Employers and the MEDC

....Working Together!

Here's how the wage incentive works for your full-time, permanent employees:

> Community Ventures Monthly Wage Incentive \$500 x Number of Employees

Monthly Example

\$10 x 160 hours Monthly Wages = \$1,600

\$1,600 - \$500 = \$1,100

Your Monthly Wage Cost = \$1,100

Examples of Annual Grant Awards

Grant amount your company could receive based on number of employees who are eligible for the Community Ventures program.

5 employees =	\$25,000
10 employees =	\$50,000
15 employees =	\$75,000
20 employees =	\$100,000
25 employees =	\$125,000
100 employees=	\$500,000

Community Ventures

Michigan employers and the Michigan Economic Development Corporation a unique partnership to provide jobs for structurally unemployed individuals.

Advantages for Employers

Employer Wage Incentive Under Community Ventures' guidelines, Michigan employers who agree to hire structurally unemployed people (from key target communities) in permanent, full-time positions will **receive a one-time \$5,000 wage reimbursement incentive for each employee. The grant is paid in monthly installments.**

Pre-Screened Talent Community Ventures is designed to ensure that both employers and companies are wellmatched. Community Ventures works with the local Michigan Works agencies to provide job applicants who reside in target areas. In the Flint area the target areas are Flint, Burton, Mt. Morris, and Mt. Morris Township. Michigan Works will pre-screen applicants for you to interview.

Employee Retention Services Another key component of our program is the availability of **supportive services and resources** to help individuals who are hired at your company to remain successfully employed.

Streamlined Process Our wage reimbursement process is streamlined to make it as easy as possible for employers. We require a monthly wage verification form with copies of pay stubs for each employee and an invoice on your company's letterhead.

Contact

Valerie Jemerson, Project Coordinator-Flint Community Ventures 810-233-5627, extension 140 517-488-5101 (cell) jemersonv@michigan.org



APPENDICES

- 1 SCOPE OF WORK INCLUDING ENVIRONMENTAL CONSTRUCTION PLAN
- 2 MDEQ NESHAP PROGRAM
- 3 MAP AND BOUNDARIES OF TARGET AREA
- 4 FEDERAL AND COUNTY REGULATIONS (PREVAILING WAGES)
- 5 SAMPLE CONTRACT

APPENDIX 1 – SCOPE OF WORK

APPENDIX 1A: Scope of Work Residential/Commercial Environmental Abatement & Disposal

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> APPENDIX 1B: Scope of Work/Summary of Work Demolition of Residential & Commercial Structures

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APPENDIX 1A – SCOPE OF WORK/SUMMARY OF WORK

RESIDENTIAL/COMMERCIAL ENVIRONMENTAL ABATEMENT & DISPOSAL

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SECTION 1 - SUMMARY OF WORK

RESIDENTIAL/COMMERCIAL ENVIRONMENTAL ABATEMENT AND DISPOSAL

1.0 PROJECT/SITE CONDITIONS

A. General requirements

The work covered by this section includes the abatement and disposal of asbestos and potentially environmentally hazardous material located on selected tax-reverted and/or blighted residential/commercial properties owned by Genesee County and Land Bank or other local municipality. The purpose of the abatement and disposal is to properly remove asbestos and environmental hazardous materials/waste concerns associated with the residential/commercial properties prior to the structures being demolished or rehabilitated.

B. Responsibility

It shall be the responsibility of the Contractor to review the specifications; the conditions, and the relative difficulty thereof, which are present and that may affect results of the environmental abatement measures.

C. Knowledgeable Person

It shall be the Contractor's responsibility to assure that the abatement measures and disposal of material is supervised by individuals certified and knowledgeable on the State of Michigan and local regulations in such endeavors. Such persons shall comply with the appropriate Federal, State, and local regulations that mandate work practices and shall be capable of performing the work under this contract.

D. Supplying Necessary Items

The Contractor shall be responsible for supplying all labor, material, equipment, services, insurance, bonds and all incidentals which are necessary or required to perform the Work in accordance with applicable regulations and these specifications.

E. Liability

The Contractor shall assume full responsibility and liability for the compliance with all Federal, State, regional and local regulations pertaining to work practices, confined spaces, hauling, disposal and protection of workers, visitors to the site. This shall include Hazard Communication to workers and visitors of the work site (29 CFR 1926.59).

Furnish Certificates of Insurance which specifically set forth evidence of all coverage required of the Contractor and Sub-Contractor(s) prior to commencement of work. Certificates shall be sent to the Genesee County Land Bank, 452 S. Saginaw St., Second Floor Flint, MI 48502. Furnish to the GCLBA copies of all endorsements that are subsequently issued amending coverage or limits.

2.0 DESCRIPTION OF WORK

The Work covered by this section includes the abatement and disposal of asbestos containing material and environmentally hazardous material/wastes located on residential/commercial properties scheduled for demolition or rehabilitation in the City of Flint and/or Genesee County.

SUMMARY OF WORK

- A. Hazardous Materials/Waste Disposal
 - 1) Contractors will be authorized by the GCLBA to proceed on the removal and disposal of environmentally hazardous materials from specific residential/commercial structures.
 - 2) Each residential/commercial building has been surveyed and inspected for the presence of hazardous materials/waste including but not limited to one or more of:
 - Asbestos Containing Building Materials
 - Paint (Latex/Oil Base)
 - Pesticides/Herbicides
 - Fluorescent Light Bulbs
 - Fluorescent Light Fixture Ballasts
 - Mercury Switches
 - Fuels/Solvents/Oils
 - Underground Storage Tanks
 - Aboveground Storage Tanks
 - Refrigerators/Air Conditioners/Freezers
 - ➢ Chemicals

The Contractor shall properly remove, pack, and dispose of these in accordance with all applicable current regulations.

- 3) A site specific Pre-Demolition Inspection/Hazardous Materials Survey will be prepared by others for each structure.
- 4) The Pre-Demolition Inspection/Hazardous Materials Survey will document the presence of each material/waste identified, the location and quantity of each material/waste. All materials identified during inspections have been clearly marked with fluorescent spray paint and where possible, moved to a central location that is also marked by spray paint.
- 5) A copy of the Hazardous Materials Survey and summary of identified materials will be supplied at the time Contractor is authorized to proceed with the removal and disposal of environmentally hazardous materials from specific residential/commercial structures. The survey will list the type of each material/waste identified, the location within the property, and the quantity of each material.
- 6) Following authorized to proceed and receipt of the Pre-Demolition Inspection/Hazardous Materials Survey, Contractor is encouraged to inspect the site of the proposed work. Prior to proceeding on the authorized work, Contractor may visit each of the listed sites to arrive at a clear understanding of the conditions under which the work is to be done and to make their own determination as to the amount of asbestos and/or hazardous materials to be removed from the sites. Contractor will be held responsible to have compared the premises with the hazardous materials survey, drawings, specifications, or other provided items, and to have satisfied himself as to all conditions affecting the execution of the work.
- Contractor shall remove all asbestos, hazardous materials, and other materials banned from landfill disposal, regardless of the estimated quantities provided in the Hazardous Materials Survey Report.
- 8) No payment adjustments in excess of the quantities identified in the hazardous materials survey shall be made by the GCLBA without prior written authorization. Deviations from the hazardous materials survey shall be submitted to the Demolition Program Coordinator: Genesee County Land Bank, 452 South Saginaw Street, Flint, Michigan48502, (810) 257-3088.

- 9) Contractor shall also establish and obtain prior written authorization for abatement and disposal of asbestos and hazardous materials not included in Unit Rate Schedule. Prior written authorization is required for payment of items not included in unit rate schedule.
- 10) For those sites listed on the inspection summary which contain "unknown" materials, the Contractor is required to perform characterization test(s) and properly dispose of the material in accordance with Unit Rate Schedule.
- 11) A summary of hazardous materials within each structure will also be provided in an electronic spreadsheet. Following abatement and removal, Contractor shall provide to GCLBA all actual quantities on a per unit basis. Contractor shall submit the inventory of actual quantities removed in hardcopy and electronic format. Reporting formats shall be provided by the GCLBA.
- 12) Contractor shall submit invoices on a per unit basis. Invoices formats shall be pre-approved by the GCLBA with required supporting documentation.

3.0 HAZARDOUS MATERIAL/WASTE COLLECTION AND DISPOSAL

- A. The Contractor is responsible for providing the appropriate packaging to transport the materials/wastes from each site in accordance with all applicable state and federal laws.
- B. All materials/wastes must be segregated and packaged according to the applicable hazardous class (i.e., flammables, corrosives, etc.) before leaving an individual site. Materials may be combined (lab packed) from site to site according to hazard class.
- C. The Contractor is responsible for preparing the proper shipping papers necessary to transport the materials from each individual site at the time the materials leave the site.
- D. If it is necessary for the Contractor to store the materials/wastes overnight to facilitate lab packing, the materials can only be stored at a licensed transfer, storage or disposal facility.
- E. The shipping papers will be carried at all times by the transporter when moving the materials/wastes on public roadways.
- F. The Contractor will conform to all necessary vehicles placarding when transporting materials.
- G. The Contractor will maintain a separate inventory sheet (trip log) for each property that hazardous materials/wastes are removed in accordance with the Michigan Department of Environmental Quality Operation Memo 121-3, Revised part 121 Consolidated Manifest Management Procedures. The records must indicate the property address, type and quantity of materials/waste removed. MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY HAZARDOUS WASTE, LIQUID IN DUSTRIAL WASTE, AND PCB MANIFEST REQUIREMENTS (rev October 22, 2007)

4.0 TECHNICAL

A. DESCRIPTION

Environmentally Hazardous Material Removal and Disposal

 It shall be the responsibility of Contractor to remove and dispose of material identified in the predemolition inspection/hazardous materials survey of structures as being environmentally hazardous. Contractor shall remove all asbestos, hazardous materials, and other materials banned from landfill disposal, regardless of the estimated quantities provided in the Hazardous Materials Survey Report. Adjustments shall be included in the final total quantity reported by the Contractor; however, no payment adjustments in excess of the quantities identified in the hazardous materials survey shall be made by the GCLBA without prior written authorization.

B. SUMMARY

This section includes the following:

1) Removal and disposal of potentially environmentally hazardous material.

C. SUBMITTALS

1) Upon completion of the material/waste collection and disposal the Contractor will provide a separate Inventory Sheet for each property that materials/wastes were removed. Asbestos and hazardous materials removed must be itemized for each structure on a per unit basis.

The Inventory Sheet will be supported by the following paperwork (as applicable to the individual property).

- A copy of the disposal manifest and/or shipping papers used to dispose of materials/wastes from each disposal/recycling facility.
- A copy of the CFC recovery certificate signed and certified by the licensed CFC recovery professional.
- A copy of the scrap metal receipt for AST/USTs and other metals.
- 2) Landfill records for record purposes indicating receipt and acceptance of asbestos materials by a landfill facility licensed to accept such wastes.
 - a) Contractor shall supply GCLBA with a copy of all landfill, recycling, weight tickets, disposal receipts, manifests and other documentation relating to the removal and disposal of asbestos and hazardous materials from the properties.
 - b) Landfill receipts/waste manifests must be submitted to the Land Bank within 10 days with invoice at the completion of project.
 - i. All documentation must be submitted for each property/project individually.
 - ii. Payments will not be processed without receipt of waste manifest documenting proper disposal of waste.
 - (1) Request for Payment Packet must include:
 - (a) Request for Final Payment
 - (b) Sworn Statement Must list all subcontractors
 - (c) Waivers of Lien from yourself, as well Unconditional Waiver of Lien from all subcontractors listed on Sworn Statement
 - (d) Invoice on Contractor's Letterhead
 - (e) Before and After Photographs of the site (labeled)
 - (f) If sub-contracting, you must provide proof that the sub-contractor is in compliance with the Michigan Workers' Disability Compensation Act requirements and appropriately licensed.
 - (g) NESHAP
 - (h) Air Sampling Results (for RACM)
 - (i) Field Report/Daily Log/ Inventory Sheet with supporting paperwork:
 - A copy of the disposal manifest and/or shipping papers used to dispose of materials/wastes from each disposal/recycling facility.
 - A copy of the CFC recovery certificate signed and certified by the licensed CFC recovery professional.
 - A copy of the scrap metal receipt for AST/USTs and other metals.
 - (j) Certified Payroll

D. HAZARDOUS CONDITIONS:

- 1) The Contractor will be authorized to perform work at properties identified to contain potentially environmentally hazardous material as provided by the pre-demolition inspector. The contractor will be required to remove and dispose of such materials as directed by the GCLBA.
- 2) The pre-demolition inspection will have identified potentially environmentally hazardous material. These items may include but not be limited to the following: flammables, fuels/waste oils, thinners/paints/solvents; underground storage tanks; pesticides; mercury switches, aerosol cans, fluorescent light bulbs, etc... These items are to be removed and disposed by a licensed contractor familiar with the proper procedures. These materials are required to be characterized and placed with like materials in clearly marked 55 gallon drums or other containers and disposed of properly prior to any site demolition work.
- 3) Contractor shall supply GCLBA with a copy of all landfill, recycling, weight tickets, disposal receipts, manifests and other documentation relating to the removal and disposal of asbestos and hazardous materials from the properties.

E. CERTIFICATION OF PROPERTY

1) Contractor shall notify owner/owner's representative in writing when each specific listed property has been mitigated of potentially environmentally hazardous material within 24 hours of completion of said work.

F. POLLUTION CONTROLS

 Under the authority of Section 112 of the Clean Air Act, as amended, 42 U.S. C. 1857 (C-7), the Administrator of the United States Environmental Protection Agency (EPA) promulgated National Emission Standards for Hazardous Air Pollutants on April 6, 1973, (38 F.R. 8820) Asbestos was designated a hazardous air pollutant, and standards were set for its use, and to control asbestos emissions. It was determined that one significant source of asbestos emissions was the demolition of certain buildings and structures.

Additionally, contractors are required under authority of Section 114 (a) to follow EPA personnel (or other authorized regulatory personnel) to freely enter any of your facilities or demolition sites, to review any records, inspect any demolition method, and sample or observe any omissions.

All demolition operations conducted by Contractor are to be in compliance with applicable provisions of Section 112 of the Act and 40 C.F.R. Section 61.22(d).

In addition, Section 113(c)(1) of the Act (42 U.S.C. 1857 C-8(c)(1), provides that any person who knowingly fails or refuses to comply with any such order shall be punished by a fine of not more than \$25,000 per day of violation, or by imprisonment for not more than one year, or by both.

Finally, Section 113(c)(2) of the Act (42 U.S.C. 1857 C-8(c)(2), provides that any person who knowingly makes any false statement in any report required under the Act shall be punished, upon conviction, by a fine of not more than \$10,000 or by imprisonment for not more than six months, or by both.

2) Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.

Do not create hazardous or objectionable conditions, such as ice, flooding, and pollution, when using water.

- 3) Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- 4) Clean adjacent buildings and improvements of dust, dirt and debris caused by demolition operations. Return adjacent areas to condition existing before start of demolition.
- 5) Contractor shall limit hours of operation to Monday through Friday during the hours of 7:00 a.m. to 6:00 p.m. Special hours of operation outside the normal hours must be approved by the GCLBA. Contractor shall limit noise pollution at all times to prevent objectionable conditions.

SECTION 2- ASBESTOS ABATEMENT & DISPOSAL SCOPE OF WORK

PART 1 General

1.01 SECTION INCLUDES

A.Removal and disposal requirements for asbestos containing materials (ACM). It is recommended that the contractor review and consider the recommendations reported in the Pre-Demolition Inspection/Hazardous Materials Survey when performing asbestos abatement and general building demolition activities.

1.02 REFERENCE STANDARDS

The publications listed below form a part of this Section to the extent referenced. The publications are referenced in the text by basic designation only.

- A. American Society for Testing and Materials (ASTM)
 - 1. ASTM E 736 (1986) Cohesion/Adhesion of Sprayed Fire-Resistive Materials Applied to Structural Members.
- 2. ASTM 1368 (1990) Visual Inspection of Asbestos Abatement Projects.
- B. Code of Federal Regulations (CFR)
 - 1. CFR 29 Part 1926/1910 Construction Industry Occupational Safety and Health Standards.
 - 2. CFR 40 Part 61 National Emissions Standards for Hazardous Air Pollutants.
 - 3. CFR 40 Part 260 General Regulations for Hazardous Waste Management.
 - 4. CFR 40 Part 263 Standards Applicable to Transporters of Hazardous Waste.
 - 5. CFR 40 Part 763 Asbestos.
 - 6. CFR 49 CFR 171 Department of Transportation Regulations to Stipulate Requirements for Containers and Procedure for Shipment of Hazardous Waste.
- C. National Fire Protection Association (NFPA)
 - 1. NFPA 10 (1988) Portable Fire Extinguishers.
 - 2. NFPA 70 B (1990) Recommended Practice for Electrical Equipment Maintenance.
 - 3. NFPA 90A (1989) Installation of Air Conditioning and Ventilating Systems.
 - 4. NFPA 101 (1988) Safety to Life from Fire in Buildings and Structures.
 - 5. NFPA 90A (1989) Installation of Air Conditioning and Ventilating Systems.
- D. National Institute of Occupational Safety and Health (NIOSH)
 - 1. NIOSH –01 Manual of analytical Methods
- E. State of Michigan
 - 1. P.A. Act 451, Michigan Natural Resources and Environmental Protection Act
 - 2. MIOSHA Act 154 General Industry and Construction (as amended) Safety Standards.
- F. United States Environmental Protection Agency (U.S. EPA)
 - 1. U.S. EPA SW-846, Test Methods for Evaluating Solid Waste.

1.03 MEASUREMENT

A. Removal and Disposal of ACM

The removal and disposal of ACM will be a unit rate pay item. Estimated quantities of ACM will be provided in the Pre-Demolition Inspection/Hazardous Materials Survey.

1.04 PAYMENT

A. Removal and Disposal of ACM

All acceptably completed work as required under this Section for the removal and disposal of ACM found on site will be paid as a unit rate as bid and authorized.

1.05 DEFINITIONS

A. Friable Asbestos Containing Material

As defined in 40 CFR Part 61, Subpart M, any material containing more than 1 percent asbestos as determined using the method specified in 40 CFR Part 763, Appendix A, Subpart F, Section 1, Polarized Light Microscopy, that when dry, can be crumbled, pulverized, or reduced to powder by hand pressure.

B. Nonfriable Asbestos Containing Material

As defined in 40 CFR Part 61, Subpart M, any material containing more than 1 percent asbestos as determined using the method specified in 40 CFR Part 763, Appendix A, Subpart F, Section 1, Polarized Light Microscopy, that, when dry, cannot be crumbled, pulverized or reduced to powder by hand pressure.

C. Category I Nonfriable Asbestos Containing Material

As defined in 40 CFR Part 61, Subpart M, asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in 40 CFR Part 763, Appendix A, Subpart F, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

D. Category II Nonfriable Asbestos Containing Material

As defined in 40 CFR Part 61, Subpart M, any material, except Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in Appendix A, Subpart F, 40 CFR Part 763, Section 1, Polarized Light Microscopy, that when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

E. Asbestos Regulated Work Area

An area contained and controlled where asbestos containing materials (ACM) operations are performed and isolated by physical boundaries to prevent the spread of ACM and control access to authorized persons. Containment may consist of full containment area, single or double bulkhead containment area, mini-containment area, modified containment, glove bag, or other techniques. An outdoor regulated work area is not isolated within a containment enclosure, but is otherwise secured by means of physical barriers, boundary warning tape, and signage, etc., to control access by unauthorized persons.

F. Time-Weighted Average

The Time Weighted Average (TWA) is an average of airborne concentration of fibers (longer than 5 micrometers) per cubic centimeter of air based on an 8-hour exposure duration, which represents the employee's 8-hour workday as defined in Appendix A of 29 CFR Part 1926, Section 1926.1101.

G. Amended Water

Water containing a wetting agent or surfactant with a surface tension of at least 29 dynes per square centimeter when tested in accordance with ASTM D 1331.

H. Adequately Wet

As defined in 40 CFR Part 61, Subpart M, sufficiently mix or penetrate with liquid to prevent the release of particulates from the source material. Continue wetting asbestos-containing material (ACM) if visible emissions are encountered during abatement activities. When uncertainties arise, continue wetting material until uncertainties diminish.

I. Competent Person

As defined in 29 CFR Part 1926, should be experienced in administering and supervising asbestos abatement projects. A competent person should be familiar with safe and reasonable work practices, abatement methods, protective measures for personnel, inspection of asbestos abatement work areas, evaluating the adequacy of containment barriers, placement and operation of local exhaust systems, waste containment and disposal procedures, decontamination units, and site health and safety health requirements. The designated "competent person" will be responsible for compliance with applicable local Sate, and Federal requirements and for enforcing the site-specific Health and Safety Plan (HASP).

1.07 SUBMITTALS

A. Work Plan

Before proceeding with any removal and disposal work, submit a work plan that includes the procedures proposed for the accomplishment of all specified activities. The procedures shall provide for safe conduct of the work, careful removal and disposition of asbestos-containing materials, and property protection. The procedures shall provide a detailed description of the methods and equipment to be used for each operation, and the sequence of operations. The work plan shall be based on work experience, and the guidance provided in this specification.

B. Health and Safety Plan

Submit a Health and Safety Plan (HASP) before beginning removal or disposal activities. Include in the HASP required personal protective equipment, respiratory protection, asbestos regulated work area controls, and hazard communication program. Refer to Section 00100 for other HASP requirements.

C. Qualifications

Submit adequate information to conclude the qualifications of the Contractor, on-site supervisors, workers, all subcontractors, and the independent testing laboratory performing asbestos abatement activities are properly trained in safety procedures associated with handling asbestos-containing materials. Specify the staff organization to include subcontractors used for this project. Include qualifications and certifications of the designated "competent person."

D. Air Sampling Results

Conduct fiber counting for air quality during each sampling event. Provide results within 24 hours of completion of each sampling event. Notify the GCLBA immediately if any airborne levels of asbestos fibers are encountered above levels established in the HASP. Provide a table including sampling results within 10 working days of the date of collection. Provide a signature of the authorized representative of testing laboratory.

G. Manifests

Submit waste documentation for all shipments removed from the property. Waste disposal manifests will be signed by the GCLBA-appointed representative.

1.08 REGULATORY REQUIREMENTS

A. Permits

Obtain all necessary permits and licenses for asbestos abatement activities. Provide all required preabatement notifications. Notify the State of Michigan, Michigan Department of Energy, Labor & Economic Growth, local agencies, and the GCLBA in writing at least 10 calendar days before beginning abatement activities. Where applicable, notify the Michigan Department of Environmental Quality in writing at least 10 business days before beginning abatement activities. Conduct all abatement activities in accordance with 40 CFR Part 61, Subpart M, state and local requirements to include the mandatory "Notification of Intent to Renovate/Demolish" form and other required notification documents.

B. Health and Safety Compliance

Comply with all applicable laws, ordinances, rules, regulations, whether stated or omitted from bidding documents. While conducting all handling, storing, transporting, and disposing activities for asbestos waste materials, comply with the applicable requirements of 29 CFR Part 1910, 29 CFR Part 1926, 40 CFR Part 61, Subpart A, and 40 CFR Part 61, Subpart M, NFPA 10, NFPA 70, NFPA 90A, NFPA 101. In case of a discrepancy between the requirements of this specification, applicable laws, rules, criteria, ordinances, regulations, and referenced documents vary, the most stringent requirement as determined by the GCLBA or GCLBA's Representative shall apply.

1. Air Monitoring

a.Conduct personal air sampling as defined by the previously noted regulations. Monitoring for of airborne asbestos fibers and lead dusts. Adhere to all permit and regulatory requirements for air quality.

2. Respiratory Protection Program

a.Establish and implement a respiratory protection program in accordance with 29 CFR 1926, Section 1926.1101,29 CFR Part 1910, Section 1910.134. Include medical monitoring, employee training, procedures for respirator use, respirator fit-testing, routine inspection, and storage. Select and use respirators in accordance with manufacturers' recommendations, Mine Safety and Health Administration, and the National Institute for Occupational Safety and Health requirements for use in environments containing airborne asbestos fibers.

3. Training

a.All employees working directly with asbestos-containing material and wastes must have successfully completed a course of asbestos training as specified by United States Environmental Protection Agency (EPA) requirements at 40 CFR Part 763, Subpart E, Appendix C, within 1 year prior to conducting asbestos abatement activities. Each worker must successfully complete the "Worker" course, and on-site supervisors and technical support personnel must successfully complete the "Contractor/Supervisor" course.

4. Medical Monitoring

a.Conduct medical monitoring requirements as described in 29 CFR Part 1926, Section 1926.1101 and the requirements of the Contractor's Health and Safety Plan found.

5. Personal Protective Equipment

a.Provide personnel working in asbestos environments with whole body protection as specified in Section 01110, Health, Safety, and Emergency Response. Single-use coveralls shall be disposed as asbestos-contaminated waste upon exiting from the asbestos regulated work area.

1.09 PROJECT CONDITIONS

Site summaries and Pre-Demolition Inspection/Hazardous Materials Survey will be provided to Contractor at the time Contractor is authorized to proceed with abatement and disposal.

PART 2 PRODUCTS

2.01 MATERIALS

A Wetting Agent

1. Amended Water

a. Comply with ASTM D 1331.

2. Removal Encapsulant

a.Provide a removal or penetrating encapsulant when conducting asbestos abatement activities that require a longer removal time or are subject to rapid evaporation of amended water. The removal encapsulant shall be capable of wetting the ACM and retarding fiber release during disturbance of the ACM equal to or greater than provided by amended water.

- B. Strippable Coating Provide additional incidental items necessary to complete specified activities.
- C Prefabricated Decontamination Unit(s) Provide additional incidental items necessary to complete specified activities.
- D Chemical encapsulant Provide additional incidental items necessary to complete specified activities.
- E. Chemical encasement materials Provide additional incidental items necessary to complete specified activities.
- F. Material Safety Data Sheets (for all chemicals proposed) Provide additional incidental items necessary to complete specified activities.
- G. Sheet Plastic

Provide sheet plastic as specified herein and in the largest size necessary to minimize seams. Comply with ASTM D 4397 and NFPA 701.

H. Other items

Provide additional incidental items necessary to complete specified activities.

2.02 EQUIPMENT

A. High efficiency filtered local exhaust equipment

- B. Vacuum equipment
- C. Pressure differential monitor
- D. Air monitoring equipment

Provide appropriate air monitoring equipment to evaluate concentrations of airborne asbestos fibers and comply with applicable regulations.

E. Respirators

Provide respirators as specified in Part 1.08.B.2 of this Section

F. Glove Bag

Provide glove bags that comply with 29 CFR Part 1926.

G. Duct Tape

Provide industrial grade duct tape in 2 inch and 3 inch widths, suitable for bonding sheet plastic and disposal containers specified herein.

H. Leak-Tight Containers

Provide leak-tight disposal containers and bags for asbestos-containing materials and generated wastes as specified herein. All disposal containers shall be either pre-labeled or affixed with OSHA warning label, as specified in 29 CFR Part 1926.

2.03 SOURCE QUALITY CONTROL

Encapsulants shall conform to USEPA requirements, shall contain no toxic or hazardous substances or solvent, and shall meet the following requirements:

A. Requirements and Corresponding Test Standa	rds for All Encapsulants
Requirement	Test Standard
Flame Spread – 25, Smoke Emission – 50	ASTM E 84
Combustion Toxicity	University of Pittsburg Protocol
Zero Mortality	University of Pittsburg Protocol
Life Expectancy – 20 years	ASTM C 732 (Accelerated Aging Test)
Permeability – Minimum 0.4 perms	ASTM E 96

B.Additional Requirements and Corresponding Test Standards for Bridging EncapsulantRequirementTest StandardCohesion/Adhesion Test – 50 pounds of force/footASTM E 736Fire ResistantASTM E 119Impact Resistance – Minimum 43 in/lbASTM D 2794 (Gardner Impact Test)Flexibility – no rupture or crackingASTM D 522 (Mandrel Bend Test)

C.Additional Requirements and Corresponding Test Standards for Penetrating EncapsulantRequirementTest StandardCohesion/Adhesion Test – 50 pounds of force/footASTM E 736Fire ResistantASTM E 119Impact Resistance – Minimum 43 in/lbASTM D 2794 (Gardner Impact Test)Flexibility – no rupture or crackingASTM D 522 (Mandrel Bend Test)

D.Additional Requirements and Corresponding Test Standards for Bridging EncapsulantRequirementTest StandardCohesion/Adhesion Test - 50 pounds of force/footASTM E 736Fire ResistantASTM E 119Impact Resistance - Minimum 43 in/lbASTM D 2794 (Gardner Impact Test)Flexibility - no rupture or crackingASTM D 522 (Mandrel Bend Test)

E.Additional Requirement and Corresponding Test Standards for Lock-Down EncapsulantRequirementTest StandardFire ResistantASTM E 119Bond StrengthASTM E 736

PART 3 EXECUTION

3.01 GENERAL

Remove and dispose asbestos-containing material to a licensed recycle 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 from removal operations. Coordinate any additional sampling that may be necessary with GCLBA.

A. Safety Guidelines

Personnel working inside and in the general vicinity of the cleanup area 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 asbestos regulated work area.

B. Controls

Areas where asbestos abatement activities are conducted should be adequately secured as specified herein.

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

C. Routine Cleaning

- 1. Package all loose asbestos-containing materials and debris and remove from the work area to the load-out area.
- 2. Vacuum work areas with HEPA vacuum or other high volume HEPA-filtered transfer equipment.
- 3. Inspect and maintain polyethylene and PVC in work and high traffic areas.
- 4. If air sample results exceed prescribed level, wipe clean containment and decontamination areas.

3.02 ABATEMENT PROCEDURES

A. Methods

Determine and implement the most efficient asbestos abatement method in conformance with this specification and applicable regulations. Employ proper handling procedures in accordance with 29 CFR Part 1926 and 40 CFR Part 61, Subpart M, and the requirements specified herein. Abatement techniques and items identified shall be detailed in the Work Plan including but not limited to details of construction materials, equipment, and handling procedures, and necessary safety precautions.

B. Revised Quantities

Before the Asbestos containing materials and/or contaminated debris has been removed, verify the previously submitted quantity estimates of other asbestos-containing materials and notify the GCLBA of any changes in the quantities. No payment adjustments in excess of the quantities identified in the hazardous materials survey shall be made by the GCLBA without prior written authorization.

C. Air Monitoring

Perform sampling and analysis for airborne concentration of asbestos fibers in accordance with 29 CFR Part 1926 Section 1926.1101, the air monitoring plan, and as specified herein. Collect personal air monitoring samples to represent the work activities for each shift, or a minimum of two, whichever is greater. Results of the personal samples shall be posted at the job site and made available to the GCLBA as specified herein. The Contractor shall maintain a fiber concentration inside enclosed containment regulated work area equal to or less than 0.1 f/cc expressed as an 8 hour, TWA during asbestos abatement. If fiber concentration rises above 0.1 f/cc, the Contractor will examine work procedures to determine the cause and work to implement corrective actions.

Workers shall not be exposed to an airborne fiber concentration in excess of 1.0 f/cc, as average over a sampling period of 30 minutes. If either an environmental concentration of 1.0 f/cc expressed as an 8-hour TWA or a personal excursion concentration of -1.0 f/cc expressed as a 30-minute sample occur inside the enclosed work area, stop work immediately, notify the GCLBA, and implement additional engineering controls and work practice controls to reduce airborne fiber levels below prescribed limits in the work area.

Conduct personal sampling required by 29 CFR Part 1926 Section 1926.1101, in accordance with the NIOSH Method 7400, Phase Contract Microscopy (PCM).

Per regulation, environmental and perimeter air monitoring outside of regulated containment areas shall not exceed clearance levels contained in 40 CFR part 763, subpart E, which is 0.01 f/cc or no more than background levels representing the same area before the asbestos work began.

For final clearance samples, the Contractor will conduct sampling at a sufficient velocity and time to collect a sample volume necessary to establish the limit of detection of the method used at 0.01 f/cc or background levels, whichever is higher. Background, environmental, quality assurance and final air clearance samples will be collected and analyzed according to NIOSH Method 7400 methodology.

1. Routine Air Sampling

Provide personal sampling as indicated in 29 CFR Part 1926 Section 1926.1101, state and local requirements, and in accordance with the air monitoring plan. Conduct air sampling at least once during every shift, close to the work in the containment area, outside the clean room entrance to the containment area, inside the clean room, outside the load-out unit exit, and at the exhaust discharge point of the local exhaust system.

2. Sampling After Final Clean-Up (Clearance Sampling)

Prior to conducting final air clearance monitoring, conduct a final visual inspection with the Engineer. Final clearance air monitoring shall not begin until acceptance of this final cleaning by the Engineer. Comply with the sampling and analytical methods provided in NIOSH-01 Method 7400 (PCM) with optional confirmation of results by NIOSH-01 Method 7402 (TEM).

3. Failure to Meet Air Quality Requirements

If clearance sampling results fail to meet the final clean-up requirements, reclean, resample, and reanalyze until final clean-up requirements are met. Costs associated with additional samples, cleaning, and inspections will be paid by the Contractor.

D. Additional Bulk Asbestos Sampling

Bulk asbestos sampling and polarized light microscopy analysis (PLM) has been conducted for various materials located throughout the site. During debris removal, previously unidentified potential asbestos-containing material may be encountered, requiring bulk sampling and analysis. Additional bulk sample analyses as required under this Section shall be paid by the Contractor. Perform bulk sampling as required or as specified by the GCLBA. Employ a laboratory for testing and analysis, which routinely provides analytical services acceptable to Michigan Department of Environmental Quality and EPA.

E. Asbestos Abatement

Collect and place in sealed, leak-tight containers all asbestos waste, scrap, debris, bags, containers, equipment, and asbestos contaminated personal protective equipment. Use 6-mil, double wrapped polyethylene sheets, sealed fiberboard boxes, or other approved containers. Waste within the containers must be wetted in case the container is damaged. Affix a warning label and a Department of Transportation (DOT) label on each bag. Dispose waste material at an approved, licensed asbestos landfill. For temporary storage, keep sealed impermeable containers in asbestos waste load-out unit or in a storage/transportation conveyance (dumpsters or roll-off boxes) in a manner as acceptable by the GCLBA. Procedure for hauling and disposal asbestos-containing material shall comply with 40 CFR Part 61, Subpart M, state, regional, and local standards and specifications.

F. Waste Records

Provide final completed copies of the Waste Shipment Record for shipments of all waste material as specified in 40 CFR Part 61, Subpart M, and other required state waste manifest shipment records within 10 days of project completion.

G. Final Cleaning

Abate asbestos by collecting, packing, and storing all gross contamination in accordance with all references and specifications. Once cleaning has been completed, conduct a visual pre-inspection of the cleaned area. A final air monitoring event will be performed to verify adequacy of clean-up. Re-cleaning and follow-up inspections shall be at the Contractor's expense. Upon completion of the final cleaning, conduct a final visual inspection of the cleaned area. Document the results. If the GCLBA or GCLBA's Representative determines that the abatement area does not meet final cleaning requirements, re-clean as necessary and conduct additional follow-up inspection with the GCLBA.

H. Lock Down Encapsulant

In areas where friable ACM was removed, after clean-up of gross contamination, and final visual inspection, but before removing plastic barriers, apply a post removal (lockdown) encapsulant to floor, walls, ceilings, and other surfaces in the removal area. When work was limited to glove bags only apply encapsulate to item within glove bag.

END OF SECTION

SECTION 3 – PCB CONTAINING EQUIPMENT REMOVAL

PART 1 General

- 1.01 SECTION INCLUDES
- A. Removal and disposal requirements for PCB ballasts. PCB containing light ballasts and other electrical equipment may be present at the subject property.

1.02 REFERENCE STANDARDS

The publications listed below form a part of this Section to the extent referenced. The publications are referenced in the text by basic designation only.

- A. American Petroleum Institute (API)
 - 1. APR Rp 2003, Protection Against Ignitions Arising out of Static, Lightning and Stray Currents.
 - 2. API Publ 2015, Safe Entry and Cleaning Petroleum Storage Tanks.
 - 3. API Publ 2217, Guidelines for Confined space Work in the Petroleum Industry.
 - 4. API Publ 2219, Safe Operation of Vacuum Trucks in Petroleum Service.
- B. 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.
 - 9. CFR 49 CFR 171 Department of Transportation Regulations to Stipulate Requirements for Containers and Procedure for Shipment of Hazardous Waste.
 - 10. CFR 40 CFR Part 761 Polychlorinated Biphenyls (PCB) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.
- C. 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.

- D. National Institute of Occupational Safety and Health (NIOSH)
 - 1. NIOSH 80-106 Criteria for a Recommended Standard for Working in Confined Spaces.
- E. State of Michigan
 - 1. P.A. Act 451, Michigan Natural Resources and Environmental Protection Act
 - 2. MIOSHA Act 154 General Industry and Construction (as amended) Safety Standards.
- F. United States Environmental Protection Agency (U.S. EPA)
 - 1. U.S. EPA SW-846, Test Methods for Evaluating Solid Waste.

1.03 MEASUREMENT

 A. Removal and Disposal of PCB-containing Light Ballasts and Equipment The removal and disposal of containerized PCB-containing light ballasts will be a unit rate pay item. Estimated quantities of PCB-containing Light Ballasts and Equipment are included the Pre-Demolition Inspection/Hazardous Materials Survey.

1.04 PAYMENT

- A. Removal and Disposal of PCB-containing Light Ballasts All acceptably completed work as required under this Section for the removal and disposal of containerized PCB-containing light ballasts found on site will be paid as the lump sum cost as bid.
- 1.05 SUBMITTALS
- A. Work Plan

Before proceeding with any removal and disposal work, submit a work plan that includes the procedures proposed for the accomplishment of the removal and disposal work. The procedures shall provide for safe conduct of the work; careful removal and disposition of solid materials and liquid wastes; and property protection. The procedures shall provide a detailed description of the methods and equipment to be used for each operation, and the sequence of operations. The work plan shall be based on work experience, and the guidance provided in this specification.

B. Health and Safety Plan

Before proceeding with any removal and disposal work, submit a site-specific health and safety plan (HASP) that includes the necessary precautions and safety procedures proposed for the accomplishment of the removal and disposal work. Include detailed information regarding temporary controls, including lock-out/tag-out procedures, and hazardous material handling. The HASP shall be based on applicable regulations, work experience, and the guidance provided in this specification.

- C. Copies of all analyses performed for disposal.
- D. Copies of all waste analyses or waste profile sheets.
- E. Copies of all certifications of final disposal signed by the responsible disposal facility official.
- F. Information on who sampled, analyzed, transported, and accepted all wastes encountered.
- G. Information describing the sample method, rationale, results, and chain-of-custody documentation for all testing.
- F. Copies of all disposal manifests, bills of lading, load tickets, and other transportation documentation.
- G. Notice of Acceptance

After removing and disposing drums and small containers from the project site, submit the name and location of the properly licensed disposal facility and a copy of the written agreement from the disposal facility agreeing to accept contaminated materials for disposal. This documentation shall include manifests with quantities. The documentation is due 10 days after removal from the site.

H. 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 ballasts. Provide a copy of the results of tests performed to comply with the requirements of each disposal facility.

I. Manifests

Submit a copy of the official manifest for each shipment of contaminated materials including, but not limited to, ballast contents and ballast carcasses 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 GCLBA or authorized official.

1.07 REGULATORY REQUIREMENTS

A. Statutes and Regulations

PCB-containing liquid removal, transportation, and disposal work shall be carried out in accordance with 29 CFR, Part 1910 and 1926, State of Michigan Act 64, Act 641, Act 307 and Act 136 wherever applicable. 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. Obtain all licenses, permits, certifications, receipts, etc., as required by such laws, regulations, codes, and ordinances.

B. General

All health and safety regulations relating to the removal, transportation, and disposal of ballasts available in 29 CFR, Parts 1926 and 1910 shall be complied with at all times. 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 shall be followed for storing, containing, and handling drums and small containers and for maintaining equipment for handling materials.

C. 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. Conduct and document the appropriate level of electrical lock-out/tag-out procedures.

D. Toxicity Considerations

Exercise care to minimize exposure to PCB-containing material and petroleum compounds when present during the handling of PCB-containing materials.

E. Flammability and Combustibility Considerations

Flammable and combustible vapors are likely to accumulate in 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 evacuation activities. 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.

PART 2 PRODUCTS

2.01 GENERAL

Provide incidental equipment and materials necessary to complete specified activities, including, but not limited to, provision of drums for PCB-containing ballasts, and any scaffolding, cranes, or lifting equipment necessary to reach the areas for removal.

PART 3 EXECUTION

3.01 GENERAL

Disconnect or have disconnected power from ballasts and equipment being removed. Remove and containerize all PCB-containing light ballasts and equipment and dispose of properly. 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 pay for any additional sampling that may be necessary. Removal all PCB containing equipment discovered during abatement activities. No payment adjustments in excess of the quantities identified in the hazardous materials survey shall be made by the GCLBA without prior written authorization.

A. Safety Guidelines

Personnel working inside and in the general vicinity of the cleanup area 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 ballast, as specified in API Publication 2217, AP RP 1604, and in the site-specific health and safety plans. Proper guidelines regarding safety precautions shall be required for handling all other items.

B. Control of the Work

Perform work in accordance with the requirements and specifications and take direction only from the Engineer or On-site Representative for this contract. Any other party that proposes to give direction to the contractor shall be immediately referred to Engineer or On-Site Representative. Perform control measures as specified in Section 01570.

3.02 CONTENTS VERIFICATION

A. Sampling and Analytical Testing

A Pre-Demolition Inspection/Hazardous Materials Survey will be provided for each structure. In general, the survey activities include an identification of the general location and quantity of mechanical and/or electrical equipment that may contain PCBs.

Any additional testing necessary is the responsibility of the Contractor. If necessary, the Contractor shall 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. Meet all regulatory requirements, including chain-of-custody documentation. Provide testing results to the GCLBA.

3.03 EXAMINATION

Selected contractors will be authorized to proceed on the removal and disposal of environmentally hazardous materials from specific residential/commercial structures. A site specific hazardous material survey will be prepared by others for each structure and will be provided to the contractor at the time of authorization. The Contractor is encouraged to inspect the site of the proposed work, at the time of authorization to proceed on the removal and disposal of environmentally hazardous materials from specific residential/commercial structures. Prior to proceeding on the authorized work Contractor may visit each of the listed sites to arrive at a clear understanding of the conditions under which the work is to be done and to make their own determination as to the amount of hazardous materials to be removed from the sites. Contractor will be held responsible to have compared the premises with the hazardous materials survey, drawings, specifications, or other provided items, and to have satisfied himself as to all conditions affecting the execution of the work. No payment adjustments in excess of the quantities identified in the hazardous materials survey shall be made by the GCLBA without prior written authorization.

3.05 DISPOSAL REQUIREMENTS

A. General

Materials requiring disposal shall become the property of the Contractor. Dispose light ballasts at a facility licensed to receive, clean, recycle, and dispose PCB-containing electrical equipment. Dispose all wastes 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 or completing waste profile sheets, equipment, and reports. Provide all disposal and recycle information to the GCLBA.

B. Records

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 disposal manifests, waste analyses or waste profile sheets, and certifications of final treatment/disposal signed by the responsible disposal facility official. Following contract completion, the records shall become the property of the GCLBA.

C. Hazardous/Special Waste Manifests

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 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 designated representative of the GCLBA will sign all hazardous and non-hazardous waste manifests.

Before waste transportation, all of the established pre-transport requirements shall be met. The wastes shall be transported by a certified waste hauler (i.e., the hauler 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 generator.

Provide the GCLBA with manifests, certificates, and other such evidence as may be required by local, State, and Federal 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, provide a copy of the manifest to the GCLBA.

D. Documentation of Treatment and Disposal

Dispose hazardous wastes at 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 those materials shall be furnished to the GCLBA following the delivery of those materials to the facility.

3.06 SPILLS

A. Spill Responsibility

The Contractor is responsible for cleaning up all the leaks and spills from decommissioning operations, drums, or other containers 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 GCLBA and appropriate governmental authorities of the incident. Cleanup shall be in accordance with applicable local, State, and Federal laws and regulations at no additional cost to the GCLBA.

END OF SECTION

SECTION 4 – RECYCLING OF CFCs

PART 1 GENERAL

1.1 GENERAL

- A. Contractor shall furnish all labor, material, equipment and incidentals required to remove, handle, transport and recycle residual refrigerants (assumed to be CFCs) contained in air conditioning units, refrigerators, drinking fountains, or other similar devices.
- B. Contractor shall submit to the GCLBA a copy of the applicable Contractor license for CFC removal and handling.
- C. Upon removal of CFCs from each unit, Contractor shall label each unit to indicate the refrigerant has been recovered.
- D. Contractor shall provide record documents in accordance with 40 CFR 82 verifying the removal procedures and amounts recovered.

PART 2 PRODUCTS

- 2.1 CONTAINERS AND LABELS
 - A. Cylinders for CFC removal, storage, and transportation shall be provided to the Contractor by a licensed recycling facility.
 - B. Contractor shall provide labels that indicate that the refrigerant materials have been evacuated.

PART 3 EXECUTION

3.1 GENERAL

- A. Contractor shall identify the locations of all equipment at the Site that are believed to contain refrigerants and shall disconnect all utility services.
- B. Using a method acceptable to the licensed recycling facility, Contractor shall evacuate each unit of all refrigerants and containerize the materials for recycling.
- C. Contractor shall ensure that the CFC containing units are de-pressurized and free of all refrigerants. This may be accomplished by subsequent flushing with pressurized nitrogen or another acceptable method.

- D. Contractor shall transport all cylinders containing CFCs in accordance with the applicable DOT regulations.
- E. Contractor shall record and provide to GCLBA documentation of devices evaluated, procedures used, amounts recovered and other information as required by 40 CFR 82 upon completion of removal activities.

ENDOF SECTION

SECTION 5 – ABATEMENT OF REGULATED MISCELLANEOUS MATERIALS

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 idem listed in the Unit Rate Bid Schedule.
 - B. The quantities of hazardous and/or regulated materials are provided in the Hazardous Materials Survey. Contractor will be authorized to proceed on the removal and disposal of environmentally hazardous materials from specific residential/commercial structures. A site specific hazardous material survey will be prepared by others for each structure and will be provided to the contractor at the time of authorization. The Contractor is encouraged to inspect the site of the proposed work, at the time of authorization to proceed on the removal and disposal of environmentally hazardous materials from specific residential/commercial structures. Prior to proceeding on the authorized work Contractor may visit each of the listed sites to arrive at a clear understanding of the conditions under which the work is to be done and to make their own determination as to the amount of hazardous materials to be removed from the sites. Contractor will be held responsible to have compared the premises with the hazardous materials survey, drawings, specifications, or other provided items, and to have satisfied himself as to all conditions affecting the execution of the work. No payment adjustments in excess of the quantities identified in the hazardous materials survey shall be made by the GCLBA without prior written authorization.
 - C. Contractor shall be aware that the buildings may contain lead based paint and as such the potential for exposure exists. Contractor shall handle lead based paint 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 Community Health provides for the health of workers (517) 373-3500.
 - 1. Contractor shall post any applicable State and/or Federal government regulations at the job sites in prominent locations.
 - 2. 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):
 - 1. RCRA, 1976 -Resource Conservation and Recovery Act: This federal statute regulates generation, transportation, treatment, storage or disposal of hazardous wastes nationally.

- 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.
- Toxic Substances Control Act (TSCA), 1976. This statute regulates the generation, 4. transportation, storage, and disposal of PCB wastes.
- 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.
 - Hazardous waste manifests shall be signed by the GCLBA or designated representative. 2.
- 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 includes the regulations that are most frequently encountered.

Topic

Agency and Telephone Number Small quantity hazardous waste Waste and Hazardous Materials Div., MDNRE management, including hazardous waste (517) 335-2690 in Lansing, or District Office stored in tanks Certified County Health Department Liquid industrial waste disposal (hazardous Waste and Hazardous Materials Div., MDNRE (517) 335-2690 in Lansing, or District Office and non-hazardous) Disposal of hazardous waste into municipal Contact the superintendent of your wastewater treatment plant for permission sanitary sewers Water Division, MDNRE Discharges to surface water such as through a drain pipe or wastewater discharge (517) 335-2690 in Lansing, or District Office Waste and Hazardous Materials Div., MDNRE Discharges to groundwater, including septic systems (517) 335-2690 in Lansing, or District Office Pollution Incident Prevention Plans (PIPP) Waste and Hazardous Materials Div., MDNRE (517) 335-2690 in Lansing, or District Office Hazard Communication (for chemicals in Michigan Department of Consumer and Industry the work place) Services (517) 373-1820 Burning of waste oil and other discharges to Air Quality Div., MDNRE (517) 373-7023 in the air Lansing, or District Office Registration of underground fuel storage Waste and Hazardous Materials Div., MDNRE tanks (517) 335-2690 in Lansing, or District Office Waste and Hazardous Materials Div., MDNRE Installation, Inventory, testing & other requirements for above ground and (517) 335-2690 in Lansing, or District Office underground storage tanks (for flammable and combustible) Local fire prevention regulations and codes Local fire chief or fire marshal (including chemical storage requirements) Building and outdoor storage Local government building or zoning official requirements (including setbacks)

PART 2 PRODUCTS

2.1 PACKAGING AND CONTAINERIZATION MATERIALS

- A. Packaging and containerization materials shall include but not be limited to the following:
 - 1. Lab packing requirements per licensed 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 technique

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 a licensed 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 will be 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.
 - 1. Many 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.
 - 2. 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. All containers intended for off-site recycling shall be either shrink-wrapped or placed in a secure crate to avoid accidental breakage. All 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 applicable regulations and appropriate sections of this Bid Document.
- B. Mercury switches and thermometers are present at the Site as indicated in the Hazardous Materials Survey Report, 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

- A. Oil-filled blowers, compressors, hydraulic hoists, and motors may be present at the site. The approximate locations of this oil filled equipment will be identified in the Hazardous Materials Survey Report. Contractor shall remove all oil filled equipment regardless of the estimated quantities provided in the Hazardous Materials Survey Report
- B. 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 a licensed reclamation facility.
- C. Upon removal of all free-flowing oil, equipment will be released by the GCLBA for disposition/recycling.

3.4 REMOVAL OF MISCELLANEOUS CHEMICALS, CONTAINERS, AND LIQUIDS

- A. Liquid filled containers, miscellaneous chemicals, and other hazardous materials banned from landfill disposal are present at the site. The approximate locations of these materials will be 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 a licensed reclamation/disposal facility.

3.5 TRANSPORTATION

- A. Contractor shall evaluate all materials associated with the activities to designate materials classification 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, the Contractor shall comply with any packaging requirements identified by the licensed disposal or recycling facilities used for waste disposition during this project.
- 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. The Contractor or transporter shall provide all such placards.
- E. Contractor shall submit the manifest to the GCLBA for review prior to signature by the GCLBA or designated representative and prior to removal of any material.

END OF SECTION

APPENDIX 1B: SCOPE OF WORK/SUMMARY OF WORK

DEMOLITION OF RESIDENTIAL AND COMMERICIAL STRUCTURES

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APPENDIX 1B: SCOPE OF WORK/SUMMARY OF WORK

SECTION 100 – SUMMARY OF WORK

PART 1 - GENERAL INFORMATION

1.1 DESCRIPTION

- A. This project consists of building and site demolition and disposal of buildings and basement/foundation, including backfill of the excavated area, secure all necessary permits (demolition, water/sewer cut, soil erosion and any other required by the local unit of government), and disconnect water and sewer utilities or cap wells and abandonment of septic tanks, if present, per Genesee County Health Department requirements.
- B. Asbestos and hazardous materials have been removed by others for structures identified in this bid <u>(Unless identified in Request for Proposal (RFP) or</u> deemed as an Ordered/Emergency demolition –See Section c). Contractor is responsible for removing non-friable Category I asbestos containing materials unless identified as have been previously removed. ACM ROOFING MATERIALS AND DRYWALL JOINT COMPOUND WITH <1% ACM COMPOSITE NOT ABATED FROM THIS LIST. WHERE APPLICABLE, ENSURE DEMOLITION ACTIVITIES ADHERE TO MIOSHA REGULATIONS. A licensed abatement company is not required to remove non-friable Category I asbestos containing material; however, a NESHAP Competent Person must be present on-site during the demolition/removal. The burden to conduct the requested work in accordance with all applicable laws and regulations is the responsibility of the contactor.</p>
 - i. <u>Contractor must submit 10-day NESHAP project notifications for ALL demolition projects</u> including Ordered/Emergency Demolitions. NO EXCEPTIONS!
 - ii. Contractor must follow all State and Federal laws and requirements for the removal of all Asbestos Containing materials (ACMs) friable and non-friable.
- C. Ordered Demolitions Requirements per the Asbestos NESHAP for all Ordered demolitions (commonly referred to as emergency demolitions) :
 - i. An Asbestos NESHAP trained person must be on site during the demolition
 - ii. ALL CONTRACTORS ARE REQUIRED TO HAVE A WATER TRUCK ON SITE.
 - iii. Water must be used and all debris must be kept wet at all times (except when temperatures are below freezing- then records must be kept onsite of the temperature at the beginning, middle and end of each work day)
 - iv. Wetted debris may be disposed of in bulk in lined and covered dumpsters. Signs must be posted during handling and loading of debris
 - v. All debris must be disposed of as **"friable asbestos" (RACM)** at a Type II landfill and disposal records must be kept for 2 years.
- D. Ordered Demolitions Requirements per the Asbestos MIOSHA for all Ordered demolitions (commonly referred to as emergency demolitions) :
 - Asbestos Abatement License and training is required is required for all employees on site of an Ordered/Emergency Demolition. Demolitions involving Class I or Class II ACM require a 40-hour trained competent person.

- E. Removal of non-friable/intact Class II materials requires workers to be trained 8 or more hours depending on number of Class II materials involved.
- F. There is one exception to this competent person training requirement involving flooring that is removed intact utilizing compliant work practices specified in Part 602 for these materials; 12 hours competent person training is required.
- G. Requirements of the work are contained in the Scope of Work and include cross-references to published information, which is not necessarily bound herewith.
- H. A description of the scope of work can be summarized as follows:
 - (1) Site and Building Demolition
 - (a) Locate property corners and lot lines to accurately set limits of demolition.
 Contractor will take before and after photos with date to document that they are at the right property and its current condition.
 - (b) Site and building demolition, including the removal of structures, basements, footings, landscaping and walls, cut brush and deed and/or falling trees, asphalt, bituminous and/or concrete paving, and miscellaneous debris on the site.
 - (2) Protection of Trees
 - (a) It shall be the responsibility of the Contractor to protect all trees of a diameter of 4" or greater that are located outside of five (5) feet from the structure being demolished. <u>UNLESS trees are in the way of the demolition or dead/rotten and/or are in jeopardy of falling.</u>
 - (3) Concrete Sidewalks/Drive Approach
 - (a) Access to the property for demolition work shall be limited to the driveway unless otherwise designated by the GCLBA's site manager. The Contractor shall be held responsible for the replacement of any sidewalks or approaches damaged during the project.
 - (b) Contractors shall make all efforts to protect sidewalks and approaches by using materials such as dirt, plywood, etc.
 - (c) It is the Contractors responsibility to take before and after pictures of sidewalks, drive approach and surrounding areas to document pre-existing condition. Replacement of damaged sidewalk or drive approach is not required; provided contractor's access is limited to the driveway unless otherwise approved by site manager and no further damage occurs. If contractor further damages sidewalk or approach making sidewalks and approach unsafe and/or creating trip hazards, Contractor must replace sidewalks and approach.
 - (d) Concrete, asphalt and/or gravel driveways are to be removed with the exception of the approach. Approach will be defined as the first ten feet of the driveway or from the road to the sidewalk.

- (4) Site Restoration
 - (a) Site restoration includes fill and compaction of all disturbed areas, seeding and mulch as specified in Section 200, Part 2 Products and Part 3 Execution.
 - (b) Any areas disturbed by construction activities shall be re-graded and reseeded if necessary.
- (5) Except for items indicated to remain the GCLBA/OWNER'S property, demolished materials shall be become the Contractor's property and shall be removed from the site and disposed of legally.
- I. Submittals
 - i. Landfill receipts/waste manifests must be submitted to the Land Bank within 10 days with invoice at the completion of project.
 - ii. All documentation must be submitted for each property/project individually.
 - iii. Payments will not be processed without receipt of waste manifest documenting proper disposal of waste.
 - (1) Request for Payment Packet must include:
 - (a) Request for Final Payment
 - (b) Sworn Statement
 - (c) Waivers of Lien from yourself, as well as all subcontractors listed on Sworn Statement
 - (d) Invoice on Contractor's Letterhead
 - (e) Before and After Photographs of the site (labeled and date stamped)
 - (i) Demolition (front, back left side, right side)
 - (ii) Abatement Documenting the removal of environmentally hazardous materials; uploaded to BOX.COM
 - (f) Before and after photos of sidewalks (Demolition labeled and date stamped)
 - (g) City or Township Winter-grade or Final inspection receipt as stated in contract and/or RFP
 - (h) If sub-contracting, you must provide proof that the sub-contractor is in compliance with the Michigan Workers' Disability Compensation Act requirements and appropriately licensed.
 - (i) Demolition Permit (Must be on site at start of demolition and dated prior to start of demolition)

- (j) Statement of confirmation that backfill and top soil is below MDEQ Direct Contact level and backup documentation (Lab results from soil sample for backfill and top soil) also provided prior to bring backfill and top soil on site.
- (k) Field Report/Daily Log/ Inventory Sheet with supporting paperwork:
 - (i) A copy of the disposal manifest and/or shipping papers used to dispose of materials/wastes from each disposal/recycling facility.
 - (ii) A copy of the CFC recovery certificate signed and certified by the licensed CFC recovery professional.
 - (iii) A copy of the scrap metal receipt for AST/USTs and other metals.
- (I) Seeding and Watering Report
- (m) Seed tags identifying correct seed used per specification Section 200, Part 2 -Products
- (n) Certified Payroll
- (o) Sidewalk Permit for sidewalk repair and curb removal, if applicable. (Approach removal and curb replacement only applies to properties located in the City of Flint)

1.2 WORK SCHEDULE

- A. Schedule work for most efficient operation. Coordinate with utility companies and/or local agencies to verify that shutting off and capping utility services (electrical, gas, cable, water, storm, sanitary sewer, etc.) has been completed prior to start of demolition.
- B. Immediately after contract award the General Contractor shall submit to the GCLBA for review a tentative schedule of completion dates and work plan for the above referenced work.
- C. Contractor shall notify the GCLBA's representative 72 hours in advance if a subcontractor is to be employed for the project and provide the subcontractor(s) company name, address, telephone & fax number, If not provided at time contract is signed.
- D. Furnish certificates of insurance which specifically set forth evidence of all coverage required of the contractor and subcontractor prior to commencement of work. Certificates shall be sent to the Genesee County Land Bank, 452 S. Saginaw Street, Flint, MI 48502. Furnish to the GCLBA copies of all endorsements that are subsequently issued amending coverage or limits.
- E. Completion dates are provided in the contract documents.

1.3 CONTRACTOR USES OF PREMISES

A. General: During the contract period the Contractor shall have full use of the lots occupied by the structures. The Contractor's use of the premises is limited only by the limits of the property and adjacent public right-of-ways if properly barricaded, and the access is as designated by the site manager.

- B. Used of the Site: Limit use of the premise to work in areas indicated. Confine operations to areas within contract limits.
 - (1) Driveways and Entrances: Keep driveways and entrances serving adjacent premises clear.
 - (2) Drive approaches located between the sidewalk and curb must be left as is.
 - (3) Any debris or sedimentation deposited in the road right-of-way shall be promptly removed by the Contractor at the Contractors expense. No sedimentation on the road will be allowed.
- C. Any areas disturbed by construction activities shall be re-graded and seeded if necessary.
- D. Any asphalt, fallen trees, trash, debris and/or brush must be removed from site.

1.4 ADJUSTMENTS TO BID

- A. 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 GCLBA, or environmental hazards are found, at any time prior to actual demolition, the Authority reserves the right to remove the structure from the bid; or in the event of bid award, to remove the structures(s) from the award and reduce the price by the Contractors' bid for that structure(s).
- B. GCLBA reserves the right to cancel any project(s) that has been issued on a bid or entered into a contract if GCLBA has deemed project(s) infeasible and is unable to proceed with the demolition.

1.5 USE OF CITY OF FLINT WATER

- A. Water truck must be on site at all times, provided by a contractor to water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
- B. The City of Flint is no longer providing Hydrant Meter "Rental" Agreements for the use of City water. Any contractor that is illegally using the City of Flint water/fire hydrants will be debarred by the Genesee County Land Bank.
- C. Adequately Wet- As defined in 40 CFR Part 61, Subpart M, sufficiently mix or penetrate with liquid to prevent the release of particulates from the source material. Continue wetting asbestos-containing material (ACM) if visible emissions are encountered during abatement activities. When uncertainties arise, continue wetting material until uncertainties diminish.
- D. Do not create hazardous or objectionable conditions, such as ice, flooding, and pollution, when using water.

1.6 LIQUIDATED DAMAGES.

A. CONTRACTOR and the GCLBA recognize that time is of the essence for this Contract and that GCLBA will suffer financial loss if the Work is not completed within the times specified in the Term of Contract, plus any extensions thereof allowed in accordance of Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by GCLBA if the Work is not completed on time. Accordingly, instead of requiring any such proof, GCLBA and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay GCLBA \$250.00 for each day that expires after the time specified in Notices to Proceed, as well as Term of Contract for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by GCLBA, CONTRACTOR shall pay GCLBA \$250.00 for each day that expires after the time specified in the Term of Contract for completion and readiness for final payment until the Work is completed and ready for final payment. If the work is not completed to the GCLBA's specifications, at the discretion of the GCLBA, the GCLBA will make the necessary repairs and decrease that amount from the Contractor's contracted amount.

1.7 WARRANTY.

A. In addition to any other warranties set forth elsewhere in this Contract, CONTRACTOR warrants that Work performed and materials furnished under this Contract conform to the Contract requirements and as required in the ("Contract"), and are free of any defect of equipment, material or design furnished, or workmanship performed by CONTACTOR or any of its subcontractors or suppliers of any tier. Such warranty shall continue for a period of <u>1</u> year(s) from the date of final acceptance of the Work by Owner/Relevant Parties, or for such other greater period of time as may be specified in the ("Contract"). Under this warranty, CONTRACTOR shall remedy at its own expense any such failure to conform or any such defect. In addition, CONTRACTOR shall remedy at its own expense any damage to real or personal property owned or controlled by Owner/Relevant Parties when that damage is the result of CONTRACTOR's failure to conform to CONTRACTOR requirements or of any defect in equipment, material, workmanship or design furnished by CONTRACTOR. CONTRACTOR shall also restore any work damaged in fulfilling the terms of this Article.

1.8 RE-INSPECTION FEE.

A. If the Contractor's work fails the GCLBA's inspection, the GCLBA will charge Contractor a \$75 per re-inspection fee.

END OF SECTION 100

SECTION 200- SOIL EROSION – SEDIMENTATION CONTROL

PART 1- GENERAL INFORMATION

1.1 Related Documents

A. Drawings, reports, and general provisions of the contract, including General Conditions and other Division I specifications sects apply to this section.

1.2 DESCRIPTION

A. Soil erosion permits are required for certain parcels. Contractor, at Contractor's expense, shall secure waivers and/or permits for soil erosion, demolition, utility cut/plug and/ or well/septic abandonment permits.

1.3 SCHEDUILING

A. Control measures shall be constructed by the Contractor prior to the time demolition work starts and maintained throughout the demolition and site restoration work.

PART 2 - PRODUCTS

2.1 SEED

A. 100% Dutch white clover seed inoculated with Rhizobium bacteria – Strain B. Do not mix with annual rye or other grass seed. Seed tags must be submitted with payment request.

2.2 MULCH

A. Mulch may be straw or wood fiber. **Do not leave twine from straw bales on lot, twine and other packaging must be disposed of off properly off site and is not considered mulch.**

PART 3 - EXECUTION

3.1 PERFORMANCE

- A. General:
 - (1) Even though a specified erosion control measure is not called out on the plans, the contractor shall properly control and/or prevent all erosion caused by the Contractor's demolition operation.
- B. Sediment Removal:
 - (1) The Contractor shall take such steps as are necessary to assure the retention and removal of any sediment which enters an existing storm sewer.
 - (2) If eroded material is allowed to enter a storm sewer system it shall be the Contractors responsibility to see that all catch basins and manholes are cleaned following demolition prior to receipt of final payment. Unless the Contractor can document positively to what extent an existing storm sewer system along the cleaning the system.
 - (3) All eroded materials deposited in the street gutter as a result of this work shall be removed by the Contractor promptly at the Contractor's expense.

- C. Restoration of Surface:
 - (1) Restoration is limited to backfill and compaction of disturbed areas. Final grading, seed and mulch shall be performed by the Contractor.

END OF SECTION 200

SECTION 300 – EARTHWORK

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Excavating, filling, and grading for this work includes, but is not necessarily limited to:
 - (1) Filling and backfilling to attain indicated grades

1.2 PROJECT CONDITIONS

- A. Dust Control
 - (1) Water truck must be on site at all times provided by contractor. The Contractor shall use all means necessary to control dust on and near the work and on and near all offsite borrow areas if such dust is caused by the Contractor's operations during performance of the work or if it results from the condition in which the Contractor leaves the site.
 - (2) All Surfaces shall be thoroughly moistened as required to prevent dust from being a nuisance to the public and adjacent properties
- B. Protection
 - (1) The Contractor shall use all means necessary to protect adjacent property before, during, and after demolition work.
 - (2) In the event of damage, the Contractor shall immediately make all repairs and replacement necessary to the approval of the GCLBA Site Manager/Demolition Program Manager and at no additional costs to the GCLBA.
 - ii. Safety
 - (1) The Contractor is responsible for conducting operations in a safe and orderly manner and in conformance with Michigan P.A. 154.
 - iii. Permits
 - (1) SEE SECTION 200.1.2.A

1.3 REFERENCES

- A. State of Michigan Department of Transportation (MDOT), 2012 Standard Specifications for Construction. Copies are available on the MDOT website: http://mdotwas1.mdot.state.mi.us/public/specbook/2012
- B. State of Michigan Department of Transportation Density Testing and Inspection Manual (2010), (copies available for review on MDOT website: http://www.michigan.gov/mdot/0,1607,7-151-9622_11044_39444---,00.html; copies are available for purchase from the Michigan Department of Transportation, Lansing, MI).

Part 2 - PRODUCTS

2.1 FILL MATERIAL

- A. Content of fill material up to 18 inches from the surface. All fill material except MDOT Class II Granular Material (excluding blue clay), shall be subject to the approval of the Authority/Authority's Representative.
- B. Content of fill material from the 18 inch mark up to 6 inches from the surface: Use loamy material or a sandy clay (mined from the earth and not manufactured) to allow for proper drainage on the site.
- C. For Approved fill material, notify the GCLBA Representative in advance of the intention to import material, its location and the GCLBA's name, address and telephone number.
- D. Contractor must provide Statement of confirmation that backfill and top soil is below MDEQ Direct Contact level and backup documentation (Lab results from soil sample for backfill and top soil) also provided prior to bring backfill and top soil on site.

Provide analytical data or a certification from the borrow source documenting that all off-site materials to be used as backfill or fill is uncontaminated.

The following tests shall be performed for each separate borrow source of backfill material, to verify that it is free of contamination if certification is not provided:

- (1) Volatile Organics (Method 8260);
- (2) Semi-Volatile Organics (Method 8270); and
- (3) Pesticides/PCBs (Method 8080); and
- (4) Metal tests for arsenic, barium, cadmium, copper, lead, mercury, selenium, silver and zinc matter.
- E. Any fill material obtained from off-site sources shall be free from contamination. Contractor shall provide documentation from each source of fill verifying the fill to be free of contaminants prior to bringing on site.

i. All fill material is subject to random inspection and sampling.

F. Fill materials shall be free of rocks or lumps larger than two (2) inches in greatest dimension.

- G. Pulverized building materials or debris shall not be used as fill material.
- H. Fill from off-site shall be from a commercial source or approved by the GCLBA's representative.
- I. Top Soil
 - a. Six (6) inches of screened top soil must be applied to each lot. (Topsoil must be free of asphalt, pulverized building materials and construction debris.)
 - b. Contractor must use a one (1") inch or less screen to screen top soil.
 - c. Pulverized building materials or debris shall not be used as fill material.
 - d. Topsoil shall be sourced from a clean borrow source or supplier.
 - e. Topsoil consisting of Friable Sandy Loam that can be pulverized under normal hand pressure may also be acceptable.
 - f. Topsoil consisting of Sandy Clay Loams with the lowest possible clay proportion may also be acceptable.
 - g. Conforming to ASTM D2487 Group Symbol SM.
 - h. Free of roots, rocks larger than 1/2-inch, subsoil, debris, large weeds and foreign matter (including any construction rubble, or other man- made items).
 - i. Screening: Single screened.
 - j. Acidity range (pH) of 5.5 to 7.5.
 - k. Containing minimum of 4 percent and maximum of 25 percent organic matter.
 - I. Contractor must provide Statement of confirmation that backfill and top soil is below MDEQ Direct Contact level and backup documentation (Lab results from soil sample for top soil) also provided prior to bringing top soil on site.
 - i. Provide analytical data or a certification from the borrow source documenting that all off-site materials to be used as topsoil is uncontaminated.
 - m. Top soil shall not be overly compacted.
 - n. All top soil material is subject to random inspection and sampling.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities to remain from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Provide erosion control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust adjacent properties, drives and walkways.
- C. Protect existing trees to remain.

3.2 DEWATERING

- A. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, or from flooding Project site and surrounding area.
- B. Protect subgrades from softening and damage by rain or water accumulation.

3.3 EXCAVATION

- A. Explosives: Do not use explosives.
- B. Unclassified Excavation: Excavation is unclassified and includes excavation to required subgrade elevations regardless of the character of materials and obstructions encountered.

3.4 STABILITY OF EXCAVATIONS

A. Comply with local codes, ordinances, and requirements of authorities having jurisdiction to maintain stable excavations.

3.5 APPROVAL OF SUBGRADE

- A. Notify GCLBA's representative when excavations have reached required subgrade.
- B. When GCLBA's representative determines that unforeseen unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill materials as directed.
- C. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by the GCLBA's representative.

3.6 STORAGE OF SOIL MATERIALS

- A. Stockpile materials acceptable for backfill and fill soil materials, including, acceptable borrow materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent wind-blown dust.
 - (1) Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.7 BACKFILL

- A. Backfill excavations promptly, but not before completing the following:
 - (1) Receipt of approval to proceed from local municipality building inspector.
 - (2) Acceptance of removals below finish grade.
 - (3) Removal of trash and debris from excavation.
 - (4) Removal of temporary shoring and bracing and sheeting

3.8 FILL

- A. Preparation: Remove vegetation, topsoil, debris, wet and unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placing fills.
 - (1) Plow strip, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing surface.
- B. When subgrade or existing ground surface to receive fill has a density less than that required for fill, break up ground surface to depth required, pulverized, moisture-condition or aerate soil and re-compact to require density.

C. Place fill in layers to an elevation of between 8" to 18" above adjacent undisturbed ground.

D. All fill material is subject to random inspection and sampling.

3.9 MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or back fill layer before compaction to within 2 percent of optimum moister content.
 - (1) Do not place backfill or fill material on surfaces that are muddy, frozen, or contain frost or ice.
 - (2) Remove and replace, or scarify and air-dry satisfactory soil material that is too wet to compact to specified density.

3.10 COMPACTION

A. Place backfill and fill materials in layers not more than 18 inches in loose depth. Contractor shall achieve compaction by reasonable means as determined by the Contractor. All methods of compaction shall be approved by the GCLBA's representative. Heavy equipment such as loaders, bulldozers, etc. may be used to achieve compaction if approved by the GCLBA's representative. If the compaction methods do not achieve the required compaction, then mechanical vibratory equipment shall be used.

B. Topsoil shall not be heavily compacted. Use light-weight tractor for final grading to ensure topsoil does not become compacted.

3.11 GRADING

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - (1) Provide a smooth transition between existing adjacent grades and new grades.
 - (2) Cut out soft spots, fill low spots, and trim high spots to conform to required surface tolerances.
- B. Site Grading: Slope grades to direct water to the back of the lot, in order to prevent water and debris from more easily entering storm drains. Provide a uniform finished surface grade sloped at 2% minimum and 5% maximum. Match existing grade at adjacent property lines.

3.12 SEEDING AND WATERING

- A. **Note- Seeding and Watering Report as well as seed tags required for payment
- B. 100% Dutch white clover seed applied at a rate of rate of 2 oz. of seed per 1,000 sq. ft., placed upon six (6) inches of screened topsoil. Contractor must use a one (1") inch or less screen to screen top soil. (See Part 2 Products H Top Soil for specification) Prior to planting, seed must be inoculated with the correct strain of Rhizobium bacteria (Strain B). Use a cultipacker pulled by a light-weight tractor (do not use heavy equipment on the site that would compact the

topsoil layer) to ensure seed has good contact with the soil. Plant seed ¼" deep. Mulch entire planting area to ensure proper moisture levels, removing bale string from the site.

C. Contractor must demonstrate that the site has been watered within 7 days of the seeding date sufficient to allow for seed germination. Notify the Genesee County Land Bank of the date of seeding via email to: <u>adunn@thelandbank.org</u>. Fill out Seeding and Watering Report. Contractors are encouraged to use weather forecasts to plan seeding that takes advantage of natural rainfall to germinate seed. Contractors are responsible for watering the site if there is no rainfall sufficient for germination in the 7 days after seeding.

3.13 PROTECTION

- A. All trees of a diameter of 4" or greater located outside of five (5) feet from the structure to be demolished shall be protected. If such trees are damaged, the contractor shall replace damaged tree as directed by GCLBA/GCLBA's Representative.
- B. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- C. Repair and re-establish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled or lose compaction due to subsequent construction operations or weather conditions.
 - (1) Scarify or remove and replace material to depth directed by the GCLBA's representative; reshape and re-compact at optimum moisture content to the required density.
- D. Settling: Where settling occurs during the Project correction period, remove finishing surfacing, backfill with additional approved material, compact, and reconstructing surfacing.
 - (1) Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.14 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off the GCLBAs property.
- 3.15 PAYMENT
 - A. The work of excavating, filling, and grading shall be included in the lump sum project costs. The work of grading shall include all labor, materials and equipment necessary for filling and compaction the subgrade prior to placing any improved surface. Any areas disturbed by construction activities shall be re-graded and reseeded if necessary.

END OF SECTION 00300

SECTION 400 – BUILDING DEMOLITION

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Condition and Division 1 Specifications Sections, apply to this section.

1.2 SUMMARY

- A. This Section includes the following:
 - (1) Demolition and removal of building, basements, and foundations.
 - (2) Demolition and removal of site improvements, including but not limited to retaining walls, paving and foundation landscaping. Existing trees 4" in diameter, located outside of five (5) feet from the structure shall remain and be protected during demolition.
- B. Related Sections: The following contain requirements that relate to this Section.
 - (1) Division1 Section" Soil Erosion-Sedimentation Control".
 - (2) Division 2 Section "Excavating, Filling and Grading" for soil materials, excavating, backfilling, and site grading.

1.3 DEFINITIONS

- A. Remove: Remove and legally dispose of items except those indicated to be reinstalled, salvaged or to remain the GCLBA's property.
- B. Existing to Remain: Protect items indicated to remain against damage during demolition.

1.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, or otherwise indicated to remain the GCLBA's property, demolished materials shall be become the Contractor's property and shall be removed from the site with further disposition at the Contractor's option.

1.5 SUBMITTALS

- A. General: Submit each item in this Article according to the Conditions of the Contract & Division I Specifications sections, for information only, unless otherwise indicated.
- B. Proposed dust-control measures.
- C. Proposed noise control measures.
- D. Schedule of demolition activities indicating the following:
 - (1) Detailed sequence of demolition and removal work, with starting and ending dates for each activity.
- E. Inventory of items to be removed and salvaged.

- F. Landfill records for record purposes indicating receipt and acceptance of hazardous wastes by a landfill facility licensed to accept hazardous wastes.
- G. Seeding and Watering Report
- H. Seed tags from Dutch white clover seed
- I. Sidewalk and/or curb replacement permit and certification from City or Township.

1.6 QUALITY ASSURANCE

- A. Demolition Firm Requirements: Contractor shall have successfully completed demolition work similar to that indicated for this project.
- B. Regulatory Requirements: Comply with governing EPA, state and local notification regulations before starting demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

1.7 PROJECT CONDITIONS

- A. Contractor is responsible to comply with any/all required demolition permits required by local authorities and ordinances.
- B. Buildings to be demolished will be vacated and their use discontinued before start of work.
- C. GCLBA assumes no responsibility for actual condition of the buildings to be demolished
 - (1) Conditions existing at time of inspection for bidding purpose will be maintained by GCLBA as far as practical.
- D. Storage or sale of removed items or materials on-site will not be permitted
- E. Landfill Disposal:
 - (1) Contractor shall supply GCLBA with a copy of landfill and disposal receipts.

PART 2-PRODUCTS (Not Applicable)

PART 3-EXECUTION

3.1 EXAMINATION

- A. Survey existing conditions and correlate with requirements indicated to determine extent of demolition required.
- B. Survey the condition of the buildings to determine whether removing any element might result in a structural deficiency or unplanned collapse of any portion of the structure or adjacent structures during demolition.
- C. Perform surveys as the Work progress to detect hazards resulting from demolition activities.

3.2 PREPARATION

A. Drain, purge, otherwise remove, collect, and dispose of chemicals, gases, explosives, acids, flammables, or other dangerous materials before proceeding with demolition operations.

- B. If necessary, employ a certified, licensed exterminator to treat building and to control rodents and vermin before and during demolition operations.
- C. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
 - i. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the GCLBA and authorities having jurisdiction. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- D. Conduct demolition operations to prevent inquiry to people and damage to adjacent buildings and facilities to remain. Ensure safe passage of people around demolition area.
 - i. Erect temporary protection such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction.
 - ii. Protection existing site improvements, appurtenances, and landscaping to remain.
 - iii. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.

3.3 EXPLOSIVES

A. Use of explosives will not be permitted.

3.4 POLLUTION CONTROLS

Under the authority of Section 112 of the Clean Air Act, as amended, 42 U.S. C. 1857(C-7), the Administrator of the United States Environmental Protection Agency (EPA) promulgated National Emission Standards for Hazardous Air Pollutants on April 6, 1973, (38 F.R. 8820) Asbestos was designated a hazardous air pollutant, and standards were set for its use, and to control asbestos emissions. It was determined that one significant source of asbestos emissions was the demolition of certain buildings and structures.

Additionally, contractors are required under authority of Section 114 (a) to follow EPA personnel to freely enter any of your facilities or demolition sites, to review any records, inspect any demolition method, and sample or observe any omissions.

All demolition operations conducted by the Demolition Contractor are to be in compliance with application provisions of Section 112 of the Act and 40 C.F.R. Section 61.22(d).

In addition, Section 113(c)(1) of the Act(42 U.S.C. 1857 C-8(c)(1), provides that any person who knowingly fails or refuses to comply with any such order shall be punished by a fine of not more than \$25,000 per day of violation, or by imprisonment for not more than one year, or by both.

Finally, Section 113(c)(2) of the Act (42 U.S.C. 1857 C-8(c)(2), provides that any person who knowingly makes any false statement in any report required under the Act shall be punished, upon conviction, by a fine of not more than \$10,000 or by imprisonment for not more than six months, or by both.

- A. Use water mist, temporary enclosures, and other suitable methods to limit the spread of dust and dirt. Comply with governing environmental protection regulations.
 - i. Do not create hazardous or objectionable conditions, such as ice, flooding, and pollution, when using water.
- B. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- C. Clean adjacent buildings and improvements of dust, dirt and debris caused by demolition operations. Return adjacent areas to condition existing before start of demolition.
- D. Contractor shall limit hours of operation to Monday through Friday during the hours of 7:00 a.m. to 6:00 p.m. Special hours of operation outside the normal hours must be approved by the GCLBA. Contractor shall limit noise pollution at all times to prevent objectionable conditions.

3.5 DEMOLITION

- A. Building Demolition: Demolish buildings, structures, facilities, and other debris including brush and trees or logs, and completely remove from the site. Use methods required to complete Work within limitations of governing regulations and as follows:
 - (1) Locate demolition equipment throughout the building and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.
 - (2) Dispose of demolished items and materials promptly. On-site storage or sale of removed items is prohibited.
 - (3) Small buildings may be removed intact when permitted by the GCLBA'S representative and approved by authorities having jurisdiction.
 - (4) Break up and remove concrete slabs on grade, unless otherwise shown to remain.
 - (5) Remove air-conditioning equipment without releasing refrigerants.
 - (6) Remove structural framing members to ground to avoid free fall and to prevent ground impact and dust generation.
- B. Below-Grade Construction: Demolish foundation walls and other below-grade construction, as follows:

Basement Excavation

- (1) Below grade structures foundation/basement floor shall be totally removed.
- Filling Below-Grade areas: Completely fill below-grade areas and voids resulting from demolition of buildings and pavements with soil materials according to requirements specified in Section 300 Earthwork.
- D. Damages: Promptly repair damages to adjacent facilities caused by demolition operations.

E. Special Conditions

The Contractor shall preserve all surrounding buildings and property. Contractor should note the proximity of surrounding buildings. *Any* damage to surrounding buildings or property will be repaired by the Contractor at his expense.

3.6 DISPOSAL OF DEMOLISHED MATERIALS

- A. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- B. Burning: Do not burn demolished materials.
- C. Disposal: Transport demolished materials of GCLBA's property and legally dispose of them.
- D. Contractor shall supply GCLBA with a copy of all landfill and disposal receipt. All disposal receipts and waste manifests must by supplied to the GCLBA in a timely manner to insure payment will be paid in a timely manner.

3.7 MEASUREMENT & PAYMENT

A. The work of Building Demolition shall not be paid for separately but shall be included in the lump sum of project costs.

END OF SECTION 400

AKTPEERLESS

ENVIRONMENTAL CONSTRUCTION MANAGEMENT PLAN ADDENDUM

1801 South Saginaw Street Flint, Genesee County, Michigan AKT PEERLESS PROJECT NUMBER: 9356S

June 29, 2015

AKT Peerless Environmental & Energy Services (AKT Peerless) is issuing this Addendum to the Environmental Construction Management Plan (ECMP) for Various Commercial/Residential Demolitions, Flint, Genesee County, Michigan, dated January 5, 2015. All information contained in this document shall be included in the ECMP and all applicable guidelines and procedures shall be followed.

The ECMP was developed to provide guidance to the City of Flint, the GCLBA, and Contractors for demolition and site restoration activities at properties where environmental concerns were previously identified or are encountered during demolition. The ECMP addresses the identification and management of contaminated soil, groundwater, storage tanks, asbestos, lead-based paint, and/or other regulated materials 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. The ECMP specifies methods for management of these residuals. The procedures and guidelines set forth in the 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.

The subject property is a known site of environmental contamination identified in subsurface soil and groundwater. Refer to the ECMP for proper soil and groundwater handling practices. 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 materials are separated from the general public. Dewatering operations shall not occur without oversight of the QEP and must follow the requirements of the ECMP. Contaminated soils shall be left at or near their current location below all contract required imported fill and topsoil.

SITE SUMMARY:

The subject property was developed prior to 1914 with a commercial structure and a residence. As of 1914, the commercial structure was used as a candy store. By 1916, the commercial and residential structures were razed from the subject property and the existing subject building was constructed. From 1916 to the 1980s, the subject building was used for retail and administrative purposes. In the 1960s, a commercial structure, located on the southern portion of the subject property was used for automotive repair purposes. During the 1990s, the subject building was used as a t-shirt shop. During the 2000s, the



subject building was operated by CBC Recycling for administrative purposes. Since 2012, the subject property has been unoccupied. Refer to the Phase I ESA, dated February 23, 2015, for further information regarding the subject property.

A Pre-Demolition Hazardous Materials survey was conducted at the subject property in February 2015, which identified several asbestos containing materials that must be properly removed by a licensed contractor prior to demolition in accordance with applicable state and federal regulations. In addition, several hazardous and/or regulated materials were identified that are banned from landfill disposal and must be properly removed and disposed of in accordance with applicable regulations. Refer to the Pre-Demolition HazMat Survey, dated February 25, 2015, for further information.

A Limited Phase II Investigation was conducted at the subject property based on RECs identified during the Phase I ESA. Soil and/or groundwater contamination has been identified at the subject property in excess of Michigan Department of Environmental Quality (MDEQ) Part 201 Residential and Non-Residential Generic Cleanup Criteria (GCC). Refer to the Phase II ESA, dated June 29, 2015, for further information regarding soil and groundwater sampling activities conducted and contamination identified at the subject property.

Refer to the attached table for a summary of the subject property.

CONTACT:

If Contractor is in doubt of any site conditions or proper work activities, immediately contact the Qualified Environmental Professionals (QEPs) at numbers below:

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

Stephanie Horn: 517-231-2535

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

This Addendum is hereby incorporated into the above referenced ECMP and is considered binding as though originally appearing therein.

ATTACHMENTS:

Table 1: Property Summary Table

END OF ADDENDUM



AKT Peerl Project		PID	Building Use	Phase I ESA REC Description	Potential for on-site USTs?	Phase II Recommended?	Phase II	HAZMAT Survey	Environmental Assessment with further Consultation under 24 CFR 58.3	HUD Statutory Checklist
9730s	1801 S. Saginaw Street	41-18-460-002	Commercial 2-story building	Phase I RECs: (1) former automotive repair activities on a portion of the property; (2) the southern adjoining property operated for automotive repair purposes from the 1920s through 1960s; (3) the southern adjoining property operated as a recycling storage facility from 2003 through 2010; (4) the northern adjoining property operated for auto repair purposes, train painting, and utilized an UST from at least 1914 through the 1970s; (5) the western adjoining property has been operated for automotive repair, a paint shop, oil warehouse, and/or machine shop since at least 1914.	Yes	Yes	Completed	Completed	Completed	Completed

AKTPEERLESS

ENVIRONMENTAL CONSTRUCTION MANAGEMENT PLAN

VARIOUS COMMERCIAL/RESIDENTIAL DEMOLITIONS FLINT, GENESEE COUNTY, MICHIGAN

PREPARED FORThe City of Flint
Purchases and Supplies
1101 South Saginaw Street
Room 304, 3rd Floor
Flint, Michigan 48502
and
Genesee County Land Bank Authority
452 Saginaw Street, 2nd Floor
Flint, Michigan 48502

PROJECT # 9356s

DATE January 5, 2015

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Appendix B	Environmental Summary Table
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Standard abbreviations used throughout this Environmental Construction Management Plan shall be as follows:

ACM:	Asbestos Containing Material
	AKT Peerless Environmental & Energy Services
AST:	Above Ground Storage Tank
BMP:	Best Management Practices
BTEX:	Benzene, Toluene, Ethylbenzene, & Xylene
CDBG:	Community Development Block Grant
CSWO:	Certified Storm Water Operator
ECMP:	Environmental Construction Management Plan
ESA:	Environmental Site Assessment
GCLBA:	Genesee County Land Bank Authority
GCC:	Generic Cleanup Criteria
GPR:	Ground Penetrating Radar
HASP:	Health and Safety Plan
HAZWOPER:	Hazardous Waste Operation and Emergency Response Standard
IDLH:	Immediately Dangerous to Life and Health
LBP:	Lead Based Paint
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/RESIDENTIAL DEMOLITIONS FLINT, GENESEE COUNTY, MICHIGAN AKT PEERLESS PROJECT NUMBER: 9356S

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/Residential Properties, in the City of Flint, Genesee County, Michigan.

The City of Flint and the Genesee County Land Bank Authority (GCLBA) propose to conduct general demolition activities at various commercial and residential properties in Genesee County utilizing Community Development Block Grant (CDBG) Funding.

All site work especially abatement, 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, Limited Phase II, 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 City of Flint and the GCLBA ("Owner") intend 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, including aboveground storage tanks (ASTs) and underground storage tanks (USTs), if encountered; 4) removal of brush and vegetation; 5) plug, cap, and bulk head utilities; and 6) 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 City of Flint and the GCLBA propose to demolish and restore various commercial and residential 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 most of the properties for commercial purposes, various RECs have been identified. The RECs indicated the presence or potential presence of environmental contamination on the subject property. RECs include, but are not limited to: potential industrial fill material used for grading, gasoline filling operations, potential USTs, automobile repair activities, and/or nearby sites of known and suspected environmental contamination. RECs are unique to each property and several sites have no known RECs. Refer to **Appendix B** for a summary of known RECs and environmental concerns at specific properties.

Limited Phase II investigations were conducted at nine of the commercial properties based on RECs identified during the Phase I ESAs. Soil and/or groundwater contamination has been identified 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 City of Flint, the GCLBA, and Contractors for demolition and site restoration activities at properties where environmental concerns were previously identified or are encountered during demolition. This ECMP addresses the identification and management of contaminated soil, groundwater, storage tanks, asbestos, lead-based paint, and/or other regulated materials 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 the GCLBA or 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), if necessary; 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 GCLBA or 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 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 (HASP) 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 Owner and 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 USTs 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 for the City of Flint utilizing CDBG 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 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 Bachelor's 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 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, as necessary and requested by the Program Manager.

QEP Responsibilities

The QEP's responsibilities shall include oversight of select 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.

For select properties 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

Jeff Carr: 989-482-8788

Stephanie Horn: 517-231-2535

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.

For work at sites with known or suspected contamination, or USTs; 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/or groundwater, as well as 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 HASP, 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/or groundwater contamination is 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 Limited Phase II Environmental Site Assessment (ESA). Prior to starting work, the Contractor shall be familiarized with the contaminants identified in the report for each individual site at 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 including those not identified as a *"facility"* shall proceed with caution and be conducted in accordance with applicable portions of this 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, 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:

- 1) 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.
- Non-aqueous phase liquid (free product)
- Volatile emissions as determined by a photoionization detector or equivalent field meter
- Abandoned USTs 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 GCLBA and/or 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 of protection being employed.

3.2.2 Water Monitoring

If encountered during soil excavation activities or building foundation removal 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 5.2.8). 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, if possible. Unknown material will be assumed contaminated requiring proper handing until proven otherwise.

4.0 ENVIRONMENTAL ABATEMENT AND STRUCTURE DEMOLITION

4.1 ASBESTOS CONTAINING MATERIALS (ACMS)

AKT Peerless completed an asbestos survey at each property. ACMs, if any, at each property are identified in the Pre-Demolition Hazardous Materials Surveys. As identified in the Pre-Demolition Surveys, as applicable, all ACMs should be properly removed by a licensed contractor in accordance with applicable state and federal regulations. In addition, any suspect materials discovered during the demolition are required to be assumed asbestos containing and handled appropriately in accordance with State and Federal Regulations.

For those properties at which site conditions warrant an ordered demolition of site structures and features due to structure failure, the building should be demolished as asbestos containing. The unsafe structure should be demolished under the Order Demolition provisions of the NESHAP rule 40 CFR 61.145 (a)(3).

All ACM and ordered demolition debris should be removed in accordance with the GCLBA technical specifications for demolition.

4.2 LEAD-BASED PAINT

AKT Peerless completed limited lead-based paint (LBP) testing at each of the individual properties. Select samples of major interior/exterior paint coatings were collected for laboratory analysis. Other painted surfaces should be assumed lead-based unless further sampling is performed and determined to be non-LBP. Work activities should be conducted in accordance with 29 CFR 1926.62 Lead in Construction Standard.

Several of the samples exceeded the threshold to meet the EPA definition of lead based paint of 0.5%.

The Michigan Occupational Health and Safety Administration (MIOSHA) define "Lead containing paint" as a lead content that is greater than 0.06%. For all renovation or demolition areas with lead containing paint (lead content exceeding 0.06%), AKT Peerless recommends that engineering controls be



implemented for lead painted surfaces that may be disturbed during demolition activities AKT Peerless assumes untested painted surfaces and any painted surface with lead content greater than 0.06% to be "lead containing paint."

In addition, AKT Peerless recommends that air monitoring be performed to assess lead and other heavy metal dust and fume exposure in worker breathing zones for initial assessment of lead exposure levels pursuant to 29 CFR 1926.62 (d) (2) and corresponding regulations for other heavy metals.

4.3 OTHER REGULATED MATERIALS

AKT Peerless conducted field identification of other potentially hazardous/regulated materials. Materials identified at each site are described further in the Pre-Demolition Hazardous Materials Surveys. These materials and others items banned from landfill disposal identified during the demolition should be properly removed and disposed of in accordance with applicable regulations in the attached technical specifications, as well as GCLBA specifications. Refer to **Appendix D** for technical specifications on the removal of hazardous and regulated materials.

5.0 EXCAVATION WORK PLAN

5.1 EXCAVATION WORK PLAN INTRODUCTION AND OVERVIEW

Soil and/or 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 GCLBA and 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 Contractor's 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.



5.2 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 5.2.2.

5.2.1 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.

5.2.2 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.

5.2.3 Materials Excavation and Load Out

The QEP or person under their supervision will be given the opportunity to 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 5.2.8.

Excavations that penetrate the groundwater table must be backfilled with the same material removed (if compatible with the Contract specifications) 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. Specifications for off-site transportation and removal are included in **Appendix D**.

5.2.4 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.

5.2.5 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.

5.2.6 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 wastes 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.



5.2.7 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.

5.2.8 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 excavations 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, 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 parameters 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
- PCBs
- Reactivity
- Ignitability
- pH

At minimum hydraulic hoists shall be sampled for PCBs.

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

<u>On-site wells</u>

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, if encountered, shall be abandoned in accordance with applicable regulations and with the oversight of the GCLBA and/or QEP.



5.2.9 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.

5.2.10 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 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.

5.2.11 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.

5.2.12 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.

5.2.13 Burning of Debris

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

5.2.14 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 sitespecific HASP. Residuals derived from personnel decontamination, including spent PPE, shall be managed in accordance with the requirements of Section 5.2.15 (Decontamination Residuals Management Plan).

5.2.15 Decontamination Residuals Management Plan

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 residuals. It is the Contractor's responsibility to prepare and maintain all records documenting the management of decontamination residuals.

5.3 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:

<u>Metal</u>

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 or asbestos impacted concrete and masonry shall be segregated from the recycled materials and disposed of in accordance with applicable regulations at a licensed landfill.

<u>Asphalt</u>

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.

5.4 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/or 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.

5.5 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 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.

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.

In addition to the sites known to contain USTS, if encountered during work, properly remove and dispose of ASTs/USTs, 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 removal 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.

The property at 2001 North Franklin Avenue operated as a gasoline filling station and automobile repair business from the 1930s through the 1960s. A ground penetrating radar (GPR) survey conducted in December 2014 identified one anomaly consistent with an UST to the east of the subject building.

The property at 2101 North Franklin Avenue operated as a gasoline filling station and automobile repair business from the 1930s through the 2000s. A GPR survey conducted in December 2014 identified three anomalies to the south of the building, consistent with observations of three potential fill ports during the Phase I ESA.

In addition, due to the former operations of these properties for auto repair, the potential exists for inground hydraulic hoists to be present beneath the existing floor slabs. Refer to summary in **Appendix B** and Limited Phase II ESAs for information regarding known storage tanks.

Specific information regarding USTs and potential hoists, including size and contents was not confirmed. In addition to the two aforementioned sites, for sites where USTs (i.e. fuel oil) are suspected, Contractor shall perform exploratory excavations and test pits with the direction and oversight of the QEP to identify suspect USTs. Conduct test pits, as soon as practical to identify the potential 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. In addition, upon discovery, Contractor should expect delays associated with mobilization of QEP, notification, registration, waste characterization, waste profile approval, and mobilization of subcontractors. Delays are inherent 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 or groundwater samples from the 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.

5.6 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.

5.7 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.

6.0 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; (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.



7.0 SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

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

Hiphanii R Hom

Stephanie Horn Environmental Scientist **AKT PEERLESS** phone: (989) 754-9896

Ryan T. Londrigan, CHMM Group Leader **AKT PEERLESS** phone: (989) 284-7238



APPENDIX A

CONTRACTOR DISCLOSURE STATEMENT



CONTRACTOR DISCLOSURE STATEMENT

City of Flint/Genesee County Land Bank Authority Various Commercial/Residential Demolitions Flint, Genesee County, Michigan

AKT PEERLESS PROJECT NUMBER 9356s January 2015

Certain commercial and residential 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.

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 potential industrial fill material used for grading, gasoline filling operations, potential underground storage tanks, automobile repair activities, and/or nearby sites of known and suspected environmental contamination. RECs are unique to each property.

Limited Phase II investigations were conducted at nine of the commercial properties, based on RECs identified during the Phase I ESAs. Soil and/or groundwater contamination has been identified at the subject property in excess of Michigan Department of Environmental Quality (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. At select sites the QEP shall provide independent oversight to ensure that all environmental due care obligations are being met during demolition. At select sites the QEP shall provide oversight of 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</u> required shall be paid for by the CONTRACTOR and is incidental to the Contract.

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 GCLBA and/or 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 known and 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.

As mentioned in the ECMP, ground penetrating radar surveys at 2001 and 2101 North Franklin Avenue identified the presence of anomalies consistent with buried USTs. Additional storage tanks or abandoned containers may be present at the commercial / residential properties. Specific information regarding underground tanks and hoists, including size and contents was 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, asbestos, 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, asbestos, 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

AKTPEERLESS

AKT Peerless Project #	Property Address	PID	Building Use	Phase I ESA REC Description	Potential for on-site USTs?	Phase II Recommended?	Phase II	HAZMAT Survey	Environmental Assessment with further Consultation under 24 CFR 58.3	HUD Statutory Checklist
9359s-1-17	2004 Lewis Street	41-05-355-019	Commercial- 1-story building, significantly damaged	Phase I RECs: (1) Potential industrial fill material on-site and (2) the western adjoining property opreated as a gas station/auto repair from the 1940s to the 1960s, and as a dry cleaner from the 1940s to the 1960s. Other Concerns: (1) potential use of alternative heating fuels; (2) potential former use of a drinking water well;	No	Yes	completed	Completed - ORDERED DEMO (ROOF COLLAPSING)		Completed
	2006 Lewis Street	41-05-355-018	Commercial- foundation/basement remains	and (3) potential former use of a septic system.				Completed - ORDERED DEMO (FOUNDATION)		Completed
9360s-1-17	2107 Davison Road	41-05-457-010	Commercial- foundation/basement remains	Phase I RECs: (1) Potential industrial fill material on-site; (2) the subject property was potential used for auto repair purposes from the 1930s to the 1960s; (3) the eastern adjoining property is an open LUST site; (4) the southern adjoining property operated as a gas station/auto repair from the 1930s to the 1950s, and as a dry cleaner during the 1970s; (5) the southeastern adjoining property is an open LUST site; (6) the southeestern adjoining property operated as a gas station during the 1960s and 1970s; and (7) a eastern nearby property operated as a gas station/auto repair from the 1940s to the 1960s and as a dry cleaner during the 1960s. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system.	No	Yes	completed	Completed - ORDERED DEMO (FOUNDATION)		Completed
9361s-1-17	1620 N Franklin Avenue	41-08-206-001	Commercial- significantly damaged, portions of walls remain	NO RECS NO NO NA		Completed - ORDERED DEMO (FIRE DAMAGED, SOME WALLS & FOUNDATIONS)		Completed		
9362s-1-17	2001 N Franklin Avenue	41-05-381-036	Commercial- 2-story building	hase I RECs: (1) Potential industrial fill material on-site; (2) the subject property operated as a gas station/auto repair from the 1930s to 1960s; (3) northern ioining conducted auto repair operations from 1980s to present; (4) northeastern adjoining property operated as a paint warehouse from the 1960s to 1980s; and (5) southeastern adjoining property conducted auto repair operations during the 1950s. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system. Yes com subsurface anomaly discovered				Completed - LIMITATIONS DUE TO LARGE QTY OF DEBRIS, RECOMMEND WASTE REMOVAL FOR REINSPECTION	Completed	
9363s-1-17	2101 N Franklin Avenue	41-05-379-035	Commercial- 1-story building, significantly damaged	Phase I RECs: (1) Potential industrial fill material; (2) the subject property operated as a gas station and/or auto repair shop from the 1930s to the 2000s; (3) the southern adjoining property conducted auto repair operations from the 1980s to the present; (4) a nearby property to the southeast operated as a paint warehouse from the 1960s to the 1980sarehouse; and (5) a nearby property to the south operated as a service station from the 1930s to the 1960. Other Concerns: (1) potential former use of a drinking water well and (2) potential former use of a septic system.	Yes	completed	Completed - ORDERED DEMO (ROOF COLLAPSING)		Completed	
	2802 N Franklin Avenue	41-05-257-004	Commercial- foundation/basement remains		nd No	Yes	completed	Completed - ORDERED DEMO (FOUNDATION)	Completed	Completed
	2810 N Franklin	41-05-257-034	Commercial- foundation/basement	Phase I RECs: (1) Potential industrial fill material; (2) the northwestern adjoining property operated for manufacturing purposes from the 1940s to the 1970s; and				Completed - ORDERED		Completed
9364s-1-17	Avenue 2816 N Franklin	41-05-257-033	remains Commercial- foundation/basement	(3) the northern adjoining property operated for auto repair purposes from the 1950s to the 1960s and as a dry cleaner from the 1960s to the 1980s. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system.				DEMO (FOUNDATION) Completed - ORDERED		Completed
	Avenue 2818 N Franklin		remains Commercial- 1-story building,					DEMO (FOUNDATION) Completed - STANDARD		completed
	Avenue	41-05-257-001	significantly damaged					INSPECTION		Completed
9365s-1-17	2901 N Franklin Avenue	41-05-179-044	Commercial- foundation/basement remains	operated for auto repair purposes during the 1920s; (6) the northeastern adjoining property operated as a dry cleaner from the 1960s-1980s. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system. No Yes Completed DEMO (FOUN alternative for auto repair purposes from the 1920s; (6) the northeastern adjoining property operated for auto repair purposes from the 1940s-1960s; (3) the southern adjoining property operated for auto repair purposes from the 1940s-1970s; (4) the eastern adjoining property operated as a dry cleaner from the 1960s-1980s. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system. No Yes Completed - Completed for auto repair purposes from the 1940s-1970s; (4) the eastern adjoining property operated for auto repair purposes from the 1950s-1960s and as a dry cleaner from the 1960s-1980s. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system. No Yes Completed - Completed for auto repair purposes from the 1950s-1960s and as a dry cleaner from the 1960s-1980s. Other Concerns: (1) potential industrial fill material on-site; (2) the northern adjoining property operated as a gas station during the 1960s; (3) the southern adjoining property operated for auto repair purposes during the 1950s and 1930s; (4) the southeastern adjoining property operated as a dry cleaner from the 1960s-1980s; and (6) a southern neaby property operated for auto repair purposes during the 1950s and		completed	Completed - ORDERED DEMO (FOUNDATION)		Completed	
9366s-1-17	2907 N Franklin Avenue	41-05-179-045	Commercial- significantly damaged, portions of walls remain			Completed - ORDERED DEMO (FIRE DAMAGED, COLLAPSED)		Completed		
9367s-1-17	2923 N Franklin Avenue	41-05-179-046	Commercial-foundations/ basements remain			Completed - ALL 3 STRUCTURES ORDERED DEMO (FOUNDATION)	*	Completed		
9368s-1-17	3618 N Franklin Avenue	47-32-455-001	Commercial- 1-story building	Phase I RECs: (1) Potential industrial fill material on-site and (2) a southern nearby property has operated for auto repair purposes from the 1940s to the present. Other Concerns: (1) potential use alternative heating fuels; (2) potential former use of a drinking water well; and (3) potential former use of a septic system.	No	Yes	completed	Completed - STANDARD INSPECTION		Completed
9434s-1-194	422 East Sherman	46-25-436-006	Residential	NA NA NA			Completed - Ordered Demolition (FOUNDATION)		Completed	
9435s-1-194	3747 Lorraine	41-09-232-027	Residential	NA	NA	NA	NA	Completed - Ordered Demolition (FOUNDATION)		Completed



APPENDIX C

EXAMPLE RESIDUAL TRACKING LOG

Trucking Log

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

SELECT TECHNICAL SPECIFICATIONS

HAZARDOUS CONTAMINATED MATERIAL

PART 1 GENERAL

1.1 DESCRIPTION

- A. Building components and items located within the on-site buildings may contain hazardous materials. The hazardous materials may include miscellaneous chemicals, asbestos, PCB, Freon, or mercury contaminated materials. Prior to demolition of the building structures, the hazardous materials shall be removed and disposed or recycled at a licensed waste disposal facility in accordance with all applicable local, state, and federal regulations.
- B. The removal and disposal of hazardous contaminated materials shall follow the procedures described in Section 01120 Hazardous Material Project Procedures.
- C. A pre-demolition hazardous material survey has been conducted at the subject property. The purpose of the hazardous material survey was to identify asbestos containing and other hazardous materials present at the property that may require removal, disposal, or other special consideration, before the buildings are demolished. A copy of the hazardous material survey is included in the Bidding Documents.
- D. Property soil and groundwater is know or assumed to be contaminated above published cleanup criteria. Refer to sample information, recommendations, and procedure provided in Contractor Disclosure Statement. Site specific Due Care Plan available from Engineer.
- E. The hazardous materials identified within the hazardous material survey report and other incidental hazardous materials identified during the demolition process shall be property characterized, removed and disposed/recycled by the Contractor using best methods in accordance with applicable regulations.

1.2 SUBMITTALS

The following shall be submitted in accordance with Section 01300 Submittals:

- A. Work Plan
 - 1. The Contractor shall submit a work plan including the procedures proposed for the accomplishment of removal and disposal of hazardous materials prior to proceeding with any removal and disposal work. The work plan shall provide a detailed description of the methods and equipment to be used for each operation (such as sampling, staging, etc.), health and safety plan, confined space entry, and sequence of operations.
 - 2. No work at the site, with the exception of site inspection and mobilization, shall be performed until the Work Plan is reviewed by the Engineer and the Authority's representative. Review of the work plan by the Engineer and Authority's Representative is for informational purposes only and does not constitute approval of its content. The cost of work plan preparation is incidental to the project. No adjustment for time or money will be made for resubmittals required as a result of noncompliance.

HAZARDOUS CONTAMINATED MATERIAL

B. Disposal Documents

- 1. The Contractor shall submit a report summarizing all activities stated in this section including a copy of the records of inspections and tests, as well as all analytical results for disposal of hazardous and non-hazardous contaminated materials.
- 2. The Contractor shall provide copies of all licenses, certifications, permits, agreements, manifests, chain of custody records, weigh tickets, meter recordings, delivery tickets, and receipts required or issued for the disposal of materials, the methods used, and the disposal areas and facilities. The Contractor shall also provide written evidence of the methods used, and the disposal locations and facilities. The Contractor shall also provide a copy of the results of tests performed to comply with the requirements of each disposal facility.

B. Manifests

 The Contractor shall submit a copy of the official manifest for each shipment of removed hazardous and non-hazardous contaminated materials to an approved licensed disposal facility. The Contractor shall also ensure the owner receives a copy of the manifest signed and accepted by the disposal facility. The Contractor shall ensure manifest copies are submitted to the appropriated State and Federal regulatory agency as required by regulations. All manifests shall be in accordance with the requirements of all the applicable federal, state, and local regulations. Manifests shall be signed by the Engineer or approved owner representative.

1.3 SAMPLING AND ANALYTICAL TESTING

A. All analytical testing and sampling as required under this Section to identify hazardous materials shall be performed by a National Environmental Laboratory Accreditation Program (NELAP) certified laboratory and any sample shipping costs shall be paid for by the Contractor and is incidental to the Contract. Sampling as required or as specified by the Engineer shall be performed by the Contractor or Contractor's person. It is Contractor's responsibility to submit all samples in a timely fashion to the laboratory. The Contractor shall allow five days turnaround time for results.

The sampling and testing requirements for hazardous contaminated material disposal shall be the Contractor's responsibility.

1.4 REGULATORY REQUIREMENTS

A. The Contractor shall comply with all applicable Federal, State and local regulatory requirements related to the work summarized in this Section.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION

TECHNICAL SPECIFICATION

3.1 GENERAL

For

02074 - 2 HAZARDOUS CONTAMINATED MATERIALS

ENVIRONMENTAL ABATEMENT, STRUCTURE DEMOLITION AND SITE RESTORATION

HAZARDOUS CONTAMINATED MATERIAL

A. Preparation

- 1. The Contractor shall be responsible for obtaining all required permits, including demolition and confined space entry permit.
- 2. The Contractor shall provide approved containers, vehicles, equipment, labor, labels, and manifests and other documents necessary for accomplishment of the work.
- 3. Disposal of hazardous and non-hazardous contaminated materials shall be in accordance with all governing laws including but not limited to Local, State, and Federal solid and hazardous waste laws and regulations including Resource Conservation and Recovery Act (RCRA), Michigan Act 64, Act 136, and Act 451 and other applicable regulations.

B. Safety Guidelines

- 1. All work associated with hazardous materials shall be performed at appropriate Personal Protection Level as defined by OSHA and other applicable regulations. In the event of unknown hazardous material is identified at the site, the work shall be performed in at least Level B protection as defined by OHSA.
- 2. Personnel working inside the site shall be trained and made thoroughly familiar with the safety precautions, procedures, and equipment required for controlling the potential hazards associated with this work.
- 3. Levels of worker training/certification shall be appropriate and in accordance with applicable regulations for each task performed.
- C. Control of Work
 - 1. The Contractor shall perform work in accordance with the requirements of the drawings and specifications and shall take direction only from the Engineer for this contract. Any other party that proposes to give direction to the Contractor shall be immediately referred to the Engineer or Authority.
- D. Regulatory Inspection
 - 1. The Contractor shall notify the Engineer or Authority of any inspections or audits by regulating agencies. The results of any such inspections/audits including but not limited to violations or stop work orders shall be communicated immediately to Engineer or Authority. Copies of all regulatory agency correspondence shall be provided in accordance with Section 01300 Submittals.

3.2 **PROTECTION**

TECHNICAL SPECIFICATION 02074 - 3 HAZARDOUS CONTAMINATED MATERIALS For ENVIRONMENTAL ABATEMENT, STRUCTURE DEMOLITION AND SITE RESTORATION

HAZARDOUS CONTAMINATED MATERIAL

A. Unless otherwise approved by Engineer, as part of the overall Health and Safety Plan the Contractor shall continuously monitor air quality at the site. If total organic vapor levels as measured using an OVA or HNU exceed 10 ppm and airborne dust levels as measured using real-time MiniRam exceed 10 ppm, the Contractor shall stop operations until levels are below 10 ppm for at least ten (10) minutes. In addition, the oxygen level shall be monitored if removal operation of hazardous material is in the confined space. The Contractor may use stricter standards for working under such conditions.

3.3 REMOVAL AND DISPOSAL

- A. General
 - 1. In the event that unidentified hazardous or non-hazardous contaminated material is discovered on site, the Engineer shall be notified immediately.
 - 2. The Contractor shall provide all labor, materials, equipment, transportation, packaging, sampling and testing, and incidentals required to perform removal and disposal of hazardous and non-hazardous contaminated materials.
 - 3. The hazardous and non-hazardous contaminated materials shall be handled in accordance with all applicable RCRA and Michigan regulations.
- B. Hazardous Contaminated Materials
 - 1. All hazardous contaminated materials shall be removed from the project site and disposed of or recycled at an approved licensed facility.
 - 2. The Contractor shall provide the Engineer or Authority with manifests, certificates and other such evidence as may be required by Federal, state, and local regulations, to show that waste materials of all types were properly transported to, received at and disposed of in approved disposal facilities.
 - 3. In the event that small containers, drums, or storage containers of hazardous contaminated material are discovered on site, the Contractor shall inspect if the containers and drums of hazardous materials are broken, leaked or deformed. The leaked or broken containers of hazardous materials shall be overpacked and hazardous contents shall be removed to new drums.
 - 4. Any small containers of waste shall be packaged to meet all applicable DOT requirements. Based on labeling, analytical results provided by the Engineer, and any additional testing necessary the Contractor shall categorize the drums by content and disposal compatibility.
 - 5. As necessary, the Contractor shall perform compatibility testing so compatible waste can be segregated in the interim storage area without risk of fire or explosion.

HAZARDOUS CONTAMINATED MATERIAL

3.3 DISPOSAL

A Disposal of hazardous contaminated materials shall be in accordance with all Local, State, and Federal solid and hazardous waste laws and regulations, including Resource Conservation and Recovery Act (RCRA), Michigan Act 64, Act 136, and Act 451 and conditions specified herein.

-- END OF SECTION--

OFFSITE TRANSPORTATION AND DISPOSAL

PART 1 GENERAL

1.1 WORK INCLUDED

- A. Insure that all vehicles entering and leaving the site comply with all safety requirements and licensing requirements of the local, state and federal regulations.
- B. Prepare vehicles to prevent spillage or contamination.
- C. Inspect vehicles before leaving the site.
- D. Transport equipment to and from the site.
- E. Transport liquids, sludge and other hazardous or non-hazardous materials from the site to an approved facility.

1.2 SUBMITTALS

- A. Submit the names of the disposal facilities to the ENGINEER or OWNER for review and comment at least a week before the disposal operation is conducted.
- B. Submit the transportation routes to the selected solid and liquid disposal facilities to the ENGINEER for review and comment.
- C. Submit to ENGINEER or OWNER for review and comment, a Spill Contingency Plan for transportation of solids and liquid. The Plan shall address all the potential hazards, necessary actions to follow in case of spills and emergency phone numbers enroute.
- D. Submit copies of all manifests and/or bills of lading to ENGINEER or OWNER.
- E. If necessary, submit a plan to decontaminate the vehicle wheels. These procedures could be identified in the overall decontamination plan.

1.3 PROJECT RECORD DOCUMENTATION

- A. Record weight, volume and character of material disposed.
- B. Provide documentation that measuring devices used, are certified by the appropriate state inspection agency.
- C. The CONTRACTOR shall provide to the ENGINEER or OWNER written documentation and records verifying receipt and the quantity received of each load at the disposal facility and verification of proper disposal. Copies of the actual receipt must be provided.

TECHNICAL SPECIFICATION

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OFFSITE TRANSPORTATION AND DISPOSAL

OFFSITE TRANSPORTATION AND DISPOSAL

- D. The CONTRACTOR shall prepare and maintain accurate manifests or bills of lading for each batch of the waste materials being transported and disposed of. The CONTRACTOR is responsible for obtaining the ENGINEER or the OWNER signatures on manifests for transportation and disposal purposes.
- E. All the materials shall be sampled and analyzed in accordance with the disposal requirements as directed by the ENGINEER or OWNER. The testing parameters shall be determined based on the potential for presence of the respective contaminants.

PART 2 PRODUCTS

2.1 EQUIPMENT

A. The CONTRACTOR shall provide equipment, personnel and facilities necessary to handle and load materials for transport.

PART 3 EXECUTION

3.1 GENERAL

A. Transportation and disposal of all hazardous materials shall comply with the regulations as specified in Section 01120.

3.2 LOADING AND HAULING

- A. Inspect haul vehicles for soil adhesion to wheels and under carriage. These soils shall be removed and properly handled by the CONTRACTOR before leaving site. The decontamination procedures shall be carried out at the decontamination zone.
- B. At a minimum, provide wheel wash down using high pressure water and steam. All rinse waters are to be collected for temporary storage prior to disposal. The CONTRACTOR will sample collected rinse waters to ensure proper disposal. CONTRACTOR shall be responsible for the disposal and any associated testing.
- C. No transport vehicles shall be allowed to leave the site which are leaking or spilling materials.
- D. All transport vehicles shall be in strict conformance with all the applicable federal, state and local Laws.
- E. The CONTRACTOR shall keep accurate records for the following information: Type and quantity of materials and liquids removed from the site. ENGINEER or OWNER approval is required before any liquid or material leaves the site.
- F. The CONTRACTOR shall provide the ENGINEER or OWNER with copies of the above records, all permits required, manifests, waste hauling permits, and necessary affidavit regarding the waste materials, including liquid disposal.

TECHNICAL SPECIFICATION

For

02080 - 2

OFFSITE TRANSPORTATION AND DISPOSAL

OFFSITE TRANSPORTATION AND DISPOSAL

- G. All transport vehicles shall be cleaned before filling with waste material.
- H. Prior to transportation, all of the established pretransporation requirements shall be met.
- I. Where applicable, waste shall be transported by a certified waste hauler in approved containers.

3.3 DISPOSAL

- A. All disposal shall conform to Federal, State and local government regulations.
- B. For hazardous or non-hazardous contaminated wastes the CONTRACTOR shall utilize a State of Michigan approved manifest system (such as the uniform hazardous waste manifest form (8700-22)) so that the waste can be tracked from generation to ultimate disposal. The manifest shall comply with all of the provisions of the transportation and disposal regulations. All transporters must sign the appropriate portions of the manifest and must comply with all of the provisions established in the applicable regulations. Contaminated waste manifests must be signed by the OWNER or OWNER's designee.
- C. All hazardous and non-hazardous materials shall be disposed of at an approved licensed disposal facility.
- D. Arrangements for disposal shall be performed by the CONTRACTOR.
- E. Disposal of any material at a non-licensed facility or at private property is strictly prohibited under this contract. Written approval from the ENGINEER and OWNER would be necessary prior to any deviation from this requirement.

3.4 SPILLS

A. 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 ENGINEER, Authority 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.

-- END OF SECTION--

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ECMP APPENDIX D – 1

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. <u>USTs are known to be present</u> at several demolition sites. CONTRACTOR must proceed with caution at all times.
 - a. USTs are present at 2001 North Franklin Avenue and 2101 North Franklin Avenue.
 - 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.
 - 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 inherent 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
 - 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).

- 2. 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
 - 1. 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

1. 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

- 1. 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
 - 1. 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
 - 1. 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
 - 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

3.1 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
 - 1. 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. <u>All analytical testing as required under this section shall</u> <u>be paid for by the CONTRACTOR and is incidental to the Contract</u>. 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
 - 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.

STORAGE TANK REMOVAL

3.4 TANK PREPARATION AND REMOVAL

- A. Draining of Pipes
 - 1. 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
 - 1. 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.

STORAGE TANK REMOVAL

- 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.
 - 2. 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
 - 1. 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
 - a. 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
 - 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 nonflammable 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

 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 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

STORAGE TANK REMOVAL

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
 - 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.
 - 2. 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 non-hazardous 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 OWNERappointed 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

1. 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:
 - 1. 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-ofcustody documentation for all testing
 - 8. Copies of all disposal manifests, bills-of-lading, 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.
- C. 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.
 - 2. 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):
 - 1. 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.

	Topic	Agency and Telephone Number
	Small quantity hazardous waste management, including hazardous waste stored in tanks	Waste Management Div., MDEQ-OWMRP (517) 284-6562 in Lansing, or District Office Certified County Health Department
	Liquid industrial waste disposal (hazardous and non-hazardous)	Waste Management Div., MDEQ-OWMRP (517) 284-6562 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 Resources Division, MDEQ (517) 284-5569 in Lansing, or District Office
	Discharges to groundwater, including septic systems	Water Resources Div., MDEQ (517) 284-6657 in Lansing, or District Office
	Pollution Incident Prevention Plans (PIPP)	Water Resources Div., MDEQ (517) 897-1597 in Lansing, or District Office
	Hazard Communication (for chemicals in the work place)	Michigan Department of Consumer and Industry Services (517) 373-1820
TECHNICAL SPEC	IFICATION 2	ABATEMENT OF MISC MATERIALS

For ENVIRONMENTAL ABATEMENT & DEMOLITION of COMMERCIAL STRUCTURES

REGULATED ABATEMENT OF MISCELLANEOUS MATERIALS (INCLUDING HYDRAULIC HOISTS)

Topic Burning of waste oil and other discharges to the air	Agency and Telephone Number Air Quality Div., MDEQ (517) 284-6732 in Lansing, or District Office
Registration of underground fuel storage tanks	Storage Tank Div., LARA (517) 335-7211
Installation, Inventory, testing & other requirements for above ground and underground storage tanks (for flammable and combustible)	Storage Tank Div., LARA (517) 335-7211
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)

1.2 MEASUREMENT

- 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.

TECHNICAL SPECIFICATION	3	ABATEMENT OF MISC MATERIALS
For		
ENVIRONMENTAL ABATEMENT & DEMOLITIC	ON of COMMERCIAL STRUCTURES	

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.
 - 1. 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.
 - 2. 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.

TECHNICAL SPECIFICATION	4	ABATEMENT OF MISC MATERIALS
For		
ENVIRONMENTAL ABATEMENT & DEMOLITION of	COMMERCIAL STRUCTURES	

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 inherent 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,

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--

APPENDIX 2- PART 1- MEMOS TO CONTRACTORS



NOTICE TO ALL CONTRACTORS

Representatives of the City of Flint and the Genesee County Land Bank met Tuesday, November 5, 2013 with representatives from the local landfills, MIOSHA, and MDEQ. The following notice outlines several important compliance issues that were discussed in that meeting. Please be advised that upon signing a contract with the Genesee County Land Bank, you will be considered to be in receipt of this memorandum. It will further be assumed that your organization has read and understood the outlined issues, and agreed to comply with the outlined actions to be taken in response.

1) **NOTIFICATIONS** to the State for an ordered demo must include the language "structurally unsound and in imminent danger of collapse" and must be certified by a qualified government official. Several of you have some emergency/ordered structures that you have not yet notified for. I will be preparing a new letter for you to include in your notification and contacting you each individually.

2) **LICENSING**: Per MIOSHA, <u>only contractors that are licensed under the company name can perform</u> <u>ordered demos</u>, which are to be presumed to contain friable asbestos. <u>A state issued accreditation card</u> for asbestos work is not an asbestos abatement contractors license as defined by PA 135 of 1986 <u>Asbestos Abatement Contractors Licensing Act</u>. Any contractor demolishing a structure that is presumed to be containing must follow MIOSHA regulations in the demolition process (i.e. have masks, suits, HEPA vacuums, showers, etc.) on site. For clarification and assistance with compliance, please contact Scott Thelen at MIOSHA (contact information to follow).

3) **ABATEMENT:** As far as MIOSHA is concerned, an ordered demolition qualifies as Class I abatement work as asbestos is still literally being removed from the site.

4) **SURVEYS**: Contractors must have a copy of a completed (asbestos) survey on site at all times for all demos, unless the structure is an ordered demolition and presumed to contain friable asbestos. In which case, the contractor must meet the requirements mentioned above. I would further note that all manifests associated with ordered demolitions need to clearly state "friable asbestos."

5) **TRANSITE** siding does not have to be removed for ordered demolitions; however, all NESHAP and MIOSHA regs (i.e. no visible emissions, etc. per NESHAP and posting warnings, etc. per MIOSHA regulations) must followed.

6) **WETTING**: NESHAP has guidelines and waivers regarding wetting of ordered demos in temperatures below 32 degrees (including daily temperature logs); MIOSHA however, never waives a requirement and informed us that demos will still need to be wetted for worker safety in the winter months. Mr. Thelen suggested there are some methods of compliance to avoid the hazard caused be freezing (i.e. mixing water with agents that stop it from freezing). He can be contacted for further information regarding compliance. Be aware that whatever method you use to mitigate the freezing hazard will have to remain compliant with other environmental regulations.

7) **BURNT TO THE FOUNDATION:** Structures that have been burned to the ground, and thus are "totally destroyed by fire" are NOT subject to any of the NESHAP regulations. The MDEQ does not consider them Ordered Demos and no notification is required. This means that waste generated in the demolition of structures burnt to the foundation does not have to be disposed of as RACM; however, MIOSHA still requires notification and without an asbestos survey, the structure must be presumed to be containing and is therefore subject to MIOSHA regulations while still on site.

8) **NON-FRIABLES**: *While on site*, per MIOSHA, non-friable ACMs (which are not regulated by NESHAP) must be treated as containing. However, for transportation and disposal purposes, non-friables can be disposed of as regular C & D.

9) **WASTE DISPOSAL**: Waste manifests from the contractors and the dump tickets from the landfills must match, with all friable and non-friable asbestos clearly and correctly identified on the waste manifest <u>and</u> dump ticket. Finally, contractors are required to notify landfills in advance when planning to bring Regulated Asbestos Containing Materials (RACM) for disposal.

10) **FINAL INSPECTIONS/CERTIFICATIONS:** Please note that City inspectors will not issue any final certifications for a parcel that has dead/burned trees or debris (including tires, pipes, etc) remaining. Further, each contractor is expected to take every precaution necessary to protect sidewalks during demolition. Should the concrete sidewalk be significantly damaged, the contractor will be expected to repair the damage before a final certification is issued.

Finally, please review the specifications for backfill, seed, and straw. Backfill must not contain debris such as bricks or asphalt. Topsoil, seed, and sufficient straw needs to be laid in order to receive a final certification. If a parcel does not receive a final certification on the first inspection, the contractor will need to address all identified issues and call for an additional inspection. <u>Each additional inspection will be</u> subject to an additional inspection fee as determined by the City of Flint fee schedule.

Should you have any questions or need any assistance in complying with the regulations, please contact asap:

- Jessica Magro of the Michigan Department of Environmental Quality regarding NESHAP at 517-284-6781
- Scott Thelen of Michigan Occupational Safety and Health Administration regarding MIOSHA at 517-322-5789

Be sure to contact the appropriate landfill regarding delivery of RACM for disposal prior to showing up on site.



DEMOLISH AS CONTAINING- NON-ORDERED

The following memo clarifies the distinction between and "ordered" demolition, an emergency demolition, and structures that are to be demolished as asbestos containing without either a declared ordered or emergency status. There are instances in which, for various reasons, a structure cannot be fully abated yet does not qualify as "ordered" demolition for the purposes of NESHAP (being "structurally unsound AND in imminent danger of collapse"). These structures require 10-day notifications to State regulators and should be demolished in practice as if the structures were ordered demolitions by NESHAP standards.

An ordered demolition is any demolition taking place by order of a governmental body. For example, most every demolition contracted by the City of Flint falls into this category. However, for NESHAP purposes, only structures that are "structurally unsound <u>and</u> in imminent danger of collapse" are to be notified as "Ordered." All other demolitions, regardless of whether they are to be demoed as containing or non-containing are subject to 10-day notifications and to be notified as "scheduled" demos.

Structures can be demolished as asbestos containing without being declared emergency or ordered demolitions by a governmental official (i.e. no emergency letter signed by the City or Township Building Safety Inspections office is required). When a structure that is not structurally unsound or in imminent danger of collapse is going to be demolished as asbestos containing it is subject to a 10-day notification as a scheduled demolition, as previously noted, however, special attention must be given to sections 10 and 11 of the NESHAP:

NESHAP Section 10:

- Answer "Yes" asbestos is present.
- Answer "No" to being removed prior to demolition.
- Use the (required) asbestos survey to quantify asbestos where possible. If unable to quantify, and the whole structure is being demolished as containing, then put the approximate square footage of home that will be demolished as asbestos under square feet as RACM.

NESHAP Section 11:

If you are able to fill out #11 check "other" and write in "entire structure" or the portion of the structure that will be removed as asbestos containing (i.e. it was possible to abate the main floor or a portion thereof but not possible to abate the basement or the back room. The main floor can be demoed and disposed of as non-containing but the basement or the back room will have to be demoed and disposed of as disposed of as containing friable asbestos).

It is not an option to just assume an entire structure as asbestos containing. Structures that are being demolished as containing still must be surveyed and asbestos removed where possible. In order to demolish structures as asbestos containing, a demolition contractor must have an asbestos abatement contractors' license and must also file a 10 day notice with the MIOSHA Asbestos Program. Additionally demolishing a structure must be performed with respect to the class of materials on the site (Class I or II). Surveys must be on site during the demolition process and all relevant rules and regulations governing the demolition of a structure as asbestos containing must be followed (i.e. contractor must be licensed under name of the company, all workers on site must be trained and wearing the appropriate safety gear, showers and water trucks must be on site, and there are to be NO VISIBLE EMISSIONS, etc.). The NESHAP states that any structure to be demolished must first be thoroughly inspected for the presence of asbestos. They key here is that you are dealing with houses that CANNOT BE THOROUGHLY INSPECTED FOR THE PRESENCE OF ASBESTOS for various reasons, and therefore the house (or more likely- the portion of the house- as there are always some materials that can and should be tested for i.e siding) that cannot be tested will be assumed friable asbestos and the demolition will be handled like an Ordered demo with all abatement requirements of the NESHAP (training, wetting, leaktight, properly labeled containers, proper waste disposal and the MIOSHA regulations apply).

APPENDIX 2: MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY – NESHAP PROGRAM

A. NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH – ONE STOP SUBMITTAL INSTRUCTIONS

The Department of Environmental Quality is pleased to announce the ability to submit the **Notification of Intent to Renovate/Demolish** form on-line. You will be able to submit electronically by accessing and using the Michigan Business One Stop site. We have made enhancements to help better serve you. To get started click the following link:

http://www.michigan.gov/business

If you are a new user you will need to register. This is a one-time registration for your business. Instructions with graphics are attached. For questions with navigation call the toll free # for Michigan Business One Stop Customer Assistance Center is 1.877.766.1779 (M - F, 7 am - 6 pm).

You will now see the following page.



From here you can:

- Access One Stop tutorials
- Take the One Stop tour
- Try the One Stop simulator

For new users, you will need to register for a One Stop identification and password. This process can be started by clicking on the GO button under the Start & Register section.

For registered users with a user ID and password (or after registering) you can enter your user ID and password in the provided entry fields and click the GO button under the Registered User section.

Your final step is to register your business by clicking on the GO button under the For Business section.

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Follow the instructions to register your business in One Stop. This is a onetime process that you may need your papers and documents from creating your business.

Asbestos NESHAP Program Technical Programs Unit Michigan DEQ-Air Quality Division

APPENDIX 2 PART 3



TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

			Groundwate	er Protection	Indoor Air		Ambient Air (Y) (C)				Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)		Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Acenaphthene	83329	NA	3.00E+05	8,700	1.90E+08	8.10E+07	8.10E+07	8.10E+07	1.40E+10	4.10E+07	NA
Acenaphthylene	208968	NA	5,900	ID	1.60E+06	2.20E+06	2.20E+06	2.20E+06	2.30E+09	1.60E+06	NA
Acetaldehyde (I)	75070	NA	19,000	2,600	2.20E+05	1.70E+05	1.70E+05	2.80E+05	6.00E+08	2.90E+07	1.10E+08
Acetate	71501	NA	ID	(G)	ID	ID	ID	ID	ID	ID	ID
Acetic acid	64197	NA	84,000	(G)	NLV	NLV	NLV	NLV	1.70E+10	1.30E+08	6.50E+08
Acetone (I)	67641	NA	15,000	34,000	2.9E+8 (C)	1.30E+08	1.30E+08	1.90E+08	3.90E+11	2.30E+07	1.10E+08
Acetonitrile	75058	NA	2,800	NA	4.80E+06	1.60E+06	1.60E+06	2.10E+06	4.00E+09	4.30E+06	2.20E+07
Acetophenone	98862	NA	30,000	ID	1.2E+8 (C)	4.40E+07	4.40E+07	4.40E+07	3.30E+10	4.7E+7 (C)	1.10E+06
Acrolein (I)	107028	NA	2,400	NA	410	310	310	610	1.30E+06	3.60E+06	2.30E+07
Acrylamide	79061	NA	10	200 (X)	NLV	NLV	NLV	NLV	2.40E+06	1,900	NA
Acrylic acid	79107	NA	78,000	NA	2.40E+06	1.90E+05	2.30E+05	2.30E+05	6.70E+07	3.5E+7 (DD)	1.10E+08
Acrylonitrile (I)	107131	NA	100 (M); 52	100 (M); 40	6,600	5,000	5,100	10,000	4.60E+07	16,000	8.30E+06
Alachlor	15972608	NA	52	290 (X)	NLV	NLV	NLV	NLV	ID	93,000	NA
Aldicarb	116063	NA	60	NA	NLV	NLV	NLV	NLV	ID	2.30E+05	NA
Aldicarb sulfone	1646884	NA	200 (M); 40	NA	NLV	NLV	NLV	NLV	ID	2.50E+05	NA
Aldicarb sulfoxide	1646873	NA	200(M); 80	NA	NLV	NLV	NLV	NLV	ID	2.90E+05	NA
Aldrin	309002	NA	NLL	NLL	1.30E+06	58,000	58,000	58,000	6.40E+05	1,000	NA
Aluminum (B)	7429905	6.90E+06	1,000	NA	NLV	NLV	NLV	NLV	ID	5.0E+7 (DD)	NA
Ammonia	7664417	NA	ID	(CC)	ID	ID	ID	ID	6.70E+09	ID	1.00E+07
t-Amyl methyl ether (TAME)	994058	NA	3,900	NA	58,000	3.40E+05	7.60E+05	1.80E+06	4.10E+09	2.9E+7 (C)	4.40E+05
Aniline	62533	NA	1,100	330 (M); 80	NLV	NLV	NLV	NLV	6.70E+07	3.30E+05	4.50E+06
Anthracene	120127	NA	41,000	ID	1.0E+9 (D)	1.40E+09	1.40E+09	1.40E+09	6.70E+10	2.30E+08	NA
Antimony	7440360	NA	4,300	94,000 (X)	NLV	NLV	NLV	NLV	1.30E+07	1.80E+05	NA
Arsenic	7440382	5,800	4,600	4,600	NLV	NLV	NLV	NLV	7.20E+05	7,600	NA
Asbestos (BB)	1332214	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.0E+7 (M); 68.000	ID	NA
Atrazine	1912249	NA	60	150	NLV	NLV	NLV	NLV	ID	71,000 (DD)	NA
Azobenzene	103333	NA	4,200	ID	6.10E+06	6.30E+05	6.30E+05	6.30E+05	1.00E+08	1.40E+05	NA

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

			Groundwate	er Protection	Indoor Air		Ambient	Air (Y) (C)		Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Barium (B)	7440393	75,000	1.30E+06	(G)	NLV	NLV	NLV	NLV	3.30E+08	3.70E+07	NA
Benzene (I)	71432	NA	100	4,000 (X)	1,600	13,000	34,000	79,000	3.80E+08	1.80E+05	4.00E+05
Benzidine	92875	NA	1,000 (M); 6.0	1,000 (M); 6.0	NLV	NLV	NLV	NLV	46,000	1,000 (M); 23	NA
Benzo(a)anthracene (Q)	56553	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA
Benzo(b)fluoranthene (Q)	205992	NA	NLL	NLL	ID	ID	ID	ID	ID	20,000	NA
Benzo(k)fluoranthene (Q)	207089	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2.00E+05	NA
Benzo(g,h,i)perylene	191242	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.00E+08	2.50E+06	NA
Benzo(a)pyrene (Q)	50328	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.50E+06	2,000	NA
Benzoic acid	65850	NA	6.40E+05	NA	NLV	NLV	NLV	NLV	ID	9.90E+08	NA
Benzyl alcohol	100516	NA	2.00E+05	NA	NLV	NLV	NLV	NLV	3.30E+11	3.2E+8 (C)	5.80E+06
Benzyl chloride	100447	NA	150	NA	6,300	14,000	14,000	17,000	6.20E+07	48,000	2.30E+05
Beryllium	7440417	NA	51,000	(G)	NLV	NLV	NLV	NLV	1.30E+06	4.10E+05	NA
bis(2-Chloroethoxy)ethane	112265	NA	ID	ID	NLV	NLV	NLV	NLV	ID	ID	2.70E+06
bis(2-Chloroethyl)ether (I)	111444	NA	100	100 (M); 20	8,300	3,800	3,800	3,800	9.40E+06	13,000	2.20E+06
bis(2-Ethylhexyl)phthalate	117817	NA	NLL	NLL	NLV	NLV	NLV	NLV	7.00E+08	2.80E+06	1.00E+07
Boron (B)	7440428	NA	10,000	1.4E+5 (X)	NLV	NLV	NLV	NLV	ID	4.8E+7 (DD)	NA
Bromate	15541454	NA	200	800 (X)	NLV	NLV	NLV	NLV	ID	17,000	NA
Bromobenzene (I)	108861	NA	550	NA	3.10E+05	4.50E+05	4.50E+05	4.50E+05	5.30E+08	5.40E+05	7.60E+05
Bromodichloromethane	75274	NA	1,600 (W)	ID	1,200	9,100	9,700	19,000	8.40E+07	1.10E+05	1.50E+06
Bromoform	75252	NA	1,600 (W)	ID	1.50E+05	9.00E+05	9.00E+05	9.00E+05	2.80E+09	8.20E+05	8.70E+05
Bromomethane	74839	NA	200	700	860	11,000	57,000	1.40E+05	3.30E+08	3.20E+05	2.20E+06
n-Butanol (I)	71363	NA	19,000	2.00E+05	NLV	NLV	NLV	NLV	2.30E+10	2.9E+7 (C)	8.70E+06
2-Butanone (MEK) (I)	78933	NA	2.60E+05	44,000	5.4E+7 (C)	2.90E+07	2.90E+07	3.50E+07	6.70E+10	1.2E+8 (C, DD)	2.70E+07
n-Butyl acetate	123864	NA	11,000	NA	5.6E+7 (C)	1.10E+08	2.60E+08	3.20E+08	4.70E+11	1.7E+7 (C)	1.10E+06
t-Butyl alcohol	75650	NA	78,000	NA	3.1E+8 (C)	9.70E+07	2.00E+08	2.00E+08	1.30E+11	1.2E+8 (C)	1.10E+08
Butyl benzyl phthalate	85687	NA	2.2E+6 (C)	1.2E+5 (X)	NLV	NLV	NLV	NLV	4.70E+10	3.6E+7 (C)	3.10E+05
n-Butylbenzene	104518	NA	1,600	ID	ID	ID	ID	ID	2.00E+09	2.50E+06	1.00E+07

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PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

		Groundwater Protection Indoor Air Ambient Air (Y) (C)						Contact	Csat		
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
sec-Butylbenzene	135988	NA	1,600	ID	ID	ID	ID	ID	4.00E+08	2.50E+06	1.00E+07
t-Butylbenzene (I)	98066	NA	1,600	ID	ID	ID	ID	ID	6.70E+08	2.50E+06	1.00E+07
Cadmium (B)	7440439	1,200	6,000	(G,X)	NLV	NLV	NLV	NLV	1.70E+06	5.50E+05	NA
Camphene (I)	79925	NA	ID	NA	3,700	1.50E+05	9.10E+05	2.20E+06	5.30E+09	ID	NA
Caprolactam	105602	NA	1.20E+05	NA	NLV	NLV	NLV	NLV	6.70E+08	5.3E+7 (DD)	NA
Carbaryl	63252	NA	14,000	NA	ID	ID	ID	ID	ID	2.20E+07	NA
Carbazole	86748	NA	9,400	1,100	NLV	NLV	NLV	NLV	6.20E+07	5.30E+05	NA
Carbofuran	1563662	NA	800	NA	NLV	NLV	NLV	NLV	ID	1.10E+06	NA
Carbon disulfide (I,R)	75150	NA	16,000	ID	76,000	1.30E+06	7.90E+06	1.90E+07	4.70E+10	7.2E+6 (C, DD)	2.80E+05
Carbon tetrachloride	56235	NA	100	900 (X)	190	3,500	12,000	28,000	1.30E+08	96,000	3.90E+05
Chlordane (J)	57749	NA	NLL	NLL	1.10E+07	1.20E+06	1.20E+06	1.20E+06	3.10E+07	31,000	NA
Chloride	16887006	NA	5.00E+06	(X)	NLV	NLV	NLV	NLV	ID	5.0E+5 (F)	NA
Chlorobenzene (I)	108907	NA	2,000	500	1.20E+05	7.70E+05	9.90E+05	2.10E+06	4.70E+09	4.3E+6 (C)	2.60E+05
p-Chlorobenzene sulfonic acid	98668	NA	1.50E+05	ID	ID	ID	ID	ID	ID	2.30E+08	ID
1-Chloro-1,1-difluoroethane	75683	NA	3.00E+05	NA	2.9E+6 (C)	7.90E+07	5.60E+08	1.40E+09	3.30E+12	4.7E+8 (C)	9.60E+05
Chloroethane	75003	NA	8,600	22,000 (X)	2.9E+6 (C)	3.00E+07	1.20E+08	2.80E+08	6.70E+11	2.6E+6 (C)	9.50E+05
2-Chloroethyl vinyl ether	110758	NA	ID	NA	ID	ID	ID	ID	ID	ID	1.90E+06
Chloroform	67663	NA	1,600 (W)	7,000	7,200	45,000	1.20E+05	2.70E+05	1.30E+09	1.20E+06	1.50E+06
Chloromethane (I)	74873	NA	5,200	ID	2,300	40,000	4.10E+05	1.00E+06	4.90E+09	1.6E+6 (C)	1.10E+06
4-Chloro-3-methylphenol	59507	NA	5,800	280	NLV	NLV	NLV	NLV	ID	4.50E+06	NA
beta-Chloronaphthalene	91587	NA	6.20E+05	NA	ID	ID	ID	ID	ID	5.60E+07	NA
2-Chlorophenol	95578	NA	900	360	4.30E+05	9.60E+05	9.60E+05	9.60E+05	1.20E+09	1.40E+06	1.90E+07
o-Chlorotoluene (I)	95498	NA	3,300	ID	2.70E+05	1.20E+06	2.90E+06	6.30E+06	4.70E+09	4.5E+6 (C)	5.00E+05
Chlorpyrifos	2921882	NA	17,000	1,500	130	4,600	23,000	55,000	1.30E+08	1.10E+07	NA
Chromium (III) (B,H)	16065831	18,000 (total)	1.0E+9 (D)	(G,X)	NLV	NLV	NLV	NLV	3.30E+08	7.90E+08	NA
Chromium (VI)	18540299	NA	30,000	3,300	NLV	NLV	NLV	NLV	2.60E+05	2.50E+06	NA
Chrysene (Q)	218019	NA	NLL	NLL	ID	ID	ID	ID	ID	2.00E+06	NA

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

			Groundwate	er Protection	Indoor Air		Ambient Air (Y) (C)				Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Cobalt	7440484	6,800	800	2,000	NLV	NLV	NLV	NLV	1.30E+07	2.60E+06	NA
Copper (B)	7440508	32,000	5.80E+06	(G)	NLV	NLV	NLV	NLV	1.30E+08	2.00E+07	NA
Cyanazine	21725462	NA	200	1,100 (X)	NLV	NLV	NLV	NLV	ID	14,000	NA
Cyanide (P,R)	57125	390 (total)	4,000	100	NLV	NLV	NLV	NLV	2.50E+05	12,000	NA
Cyclohexanone	108941	NA	5.20E+06	NA	17,000	1.00E+06	1.10E+07	2.70E+07	6.70E+10	1.0E+9 (C,D)	2.20E+08
Dacthal	1861321	NA	50,000	NA	NLV	NLV	NLV	NLV	ID	2.30E+06	NA
Dalapon	75990	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	1.90E+07	5.90E+07
4-4'-DDD	72548	NA	NLL	NLL	NLV	NLV	NLV	NLV	4.40E+07	95,000	NA
4-4'-DDE	72559	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.20E+07	45,000	NA
4-4'-DDT	50293	NA	NLL	NLL	NLV	NLV	NLV	NLV	3.20E+07	57,000	NA
Decabromodiphenyl ether	1163195	NA	1.40E+05	NA	1.0E+9 (D)	8.60E+07	8.60E+07	8.60E+07	2.30E+09	3.80E+06	NA
Di-n-butyl phthalate	84742	NA	9.6E+5 (C)	11,000	NLV	NLV	NLV	NLV	3.30E+09	2.7E+7 (C)	7.60E+05
Di(2-ethylhexyl) adipate	103231	NA	1.3E+7 (C)	ID	NLV	NLV	NLV	NLV	9.20E+09	1.5E+7 (C, DD)	9.60E+05
Di-n-octyl phthalate	117840	NA	1.00E+08	ID	NLV	NLV	NLV	NLV	3.10E+10	6.90E+06	1.40E+08
Diacetone alcohol (I)	123422	NA	ID	NA	NLV	NLV	NLV	NLV	1.60E+11	ID	1.10E+08
Diazinon	333415	NA	95	72	NLV	NLV	NLV	NLV	ID	12,000 (DD)	3.10E+05
Dibenzo(a,h)anthracene (Q)	53703	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	2,000	NA
Dibenzofuran	132649	NA	ID	1,700	2.00E+06	1.30E+05	1.30E+05	1.30E+05	6.70E+06	ID	NA
Dibromochloromethane	124481	NA	1,600 (W)	ID	3,900	24,000	24,000	33,000	1.30E+08	1.10E+05	6.10E+05
Dibromochloropropane	96128	NA	10 (M); 4.0	ID	220	260	260	260	5.60E+05	4,400 (C)	1,200
Dibromomethane	74953	NA	1,600	NA	ID	ID	ID	ID	ID	2.5E+6 (C)	2.00E+06
Dicamba	1918009	NA	4,400	NA	NA	NLV	NLV	NLV	ID	3.40E+06	NA
1,2-Dichlorobenzene	95501	NA	14,000	280	1.1E+7 (C)	3.90E+07	3.90E+07	5.20E+07	1.00E+11	1.9E+7 (C)	2.10E+05
1,3-Dichlorobenzene	541731	NA	170	680	26,000	79,000	79,000	1.10E+05	2.00E+08	2.0E+5 (C)	1.70E+05
1,4-Dichlorobenzene	106467	NA	1,700	360	19,000	77,000	77,000	1.10E+05	4.50E+08	4.00E+05	NA
3,3'-Dichlorobenzidine	91941	NA	2,000 (M); 28	2,000 (M); 7.4	NLV	NLV	NLV	NLV	6.50E+06	6,600	NA
Dichlorodifluoromethane	75718	NA	95,000	ID	9.00E+05	5.30E+07	5.50E+08	1.40E+09	3.30E+12	5.2E+7 (C)	1.00E+06

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Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
1,1-Dichloroethane	75343	NA	18,000	15,000	2.30E+05	2.10E+06	5.90E+06	1.40E+07	3.30E+10	2.7E+7 (C)	8.90E+05
1,2-Dichloroethane (I)	107062	NA	100	7,200 (X)	2,100	6,200	11,000	26,000	1.20E+08	91,000	1.20E+06
1,1-Dichloroethylene (I)	75354	NA	140	2,600	62	1,100	5,300	13,000	6.20E+07	2.00E+05	5.70E+05
cis-1,2-Dichloroethylene	156592	NA	1,400	12,000	22,000	1.80E+05	4.20E+05	9.90E+05	2.30E+09	2.5E+6 (C)	6.40E+05
trans-1,2-Dichloroethylene	156605	NA	2,000	30,000 (X)	23,000	2.80E+05	8.30E+05	2.00E+06	4.70E+09	3.8E+6 (C)	1.40E+06
2,6-Dichloro-4-nitroaniline	99309	NA	44,000	NA	NLV	NLV	NLV	NLV	ID	6.80E+07	NA
2,4-Dichlorophenol	120832	NA	1,500	330 (M); 220	NLV	NLV	NLV	NLV	5.10E+09	6.6E+5 (DD)	1.80E+06
2,4-Dichlorophenoxy acetic acid	94757	NA	1,400	4,400	NLV	NLV	NLV	NLV	6.70E+09	2.50E+06	NA
1,2-Dichloropropane (I)	78875	NA	100	4,600 (X)	4,000	25,000	50,000	1.10E+05	2.70E+08	1.40E+05	5.50E+05
1,3-Dichloropropene	542756	NA	170	180 (X)	1,000	18,000	68,000	1.60E+05	7.80E+08	10,000	6.20E+05
Dichlorovos	62737	NA	50 (M); 32	NA	NLV	NLV	NLV	NLV	3.30E+07	10,000	2.20E+06
Dicyclohexyl phthalate	84617	NA	ID	NA	ID	ID	ID	ID	ID	ID	NA
Dieldrin	60571	NA	NLL	NLL	1.40E+05	19,000	19,000	19,000	6.80E+05	1,100	NA
Diethyl ether	60297	NA	200	ID	2.8E+7 (C)	8.50E+07	1.50E+08	3.40E+08	8.00E+11	1.1E+8 (C)	7.40E+06
Diethyl phthalate	84662	NA	1.10E+05	2,200	NLV	NLV	NLV	NLV	3.30E+09	1.7E+8 (C)	7.40E+05
Diethylene glycol monobutyl ether	112345	NA	1,800	NA	NLV	NLV	NLV	NLV	1.30E+09	2.70E+06	1.10E+08
Diisopropyl ether	108203	NA	600	ID	6.7E+5 (C)	3.40E+05	7.60E+05	1.80E+06	4.10E+09	9.2E+5 (C)	1,300
Diisopropylamine (I)	108189	NA	110	NA	5.50E+06	6.20E+06	6.20E+06	7.30E+06	1.30E+10	1.70E+05	6.70E+06
Dimethyl phthalate	131113	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	3.30E+09	1.0E+9 (C,D)	7.90E+05
N,N-Dimethylacetamide	127195	NA	3,600	82,000 (X)	NLV	NLV	NLV	NLV	ID	5.60E+06	1.10E+08
N,N-Dimethylaniline	121697	NA	320	NA	1.70E+05	1.50E+05	1.50E+05	1.50E+05	2.60E+08	5.00E+05	8.00E+05
Dimethylformamide (I)	68122	NA	14,000	NA	NLV	NLV	NLV	NLV	2.00E+09	2.20E+07	1.10E+08
2,4-Dimethylphenol	105679	NA	7,400	7,600	NLV	NLV	NLV	NLV	4.70E+09	1.10E+07	NA
2,6-Dimethylphenol	576261	NA	330 (M); 88	NA	NLV	NLV	NLV	NLV	1.30E+08	1.40E+05	NA
3,4-Dimethylphenol	95658	NA	330 (M); 200	500	NLV	NLV	NLV	NLV	2.30E+08	3.20E+05	NA
Dimethylsulfoxide	67685	NA	4.40E+06	3.80E+06	NLV	NLV	NLV	NLV	1.30E+09	1.0E+9 (C,D)	1.80E+07
2,4-Dinitrotoluene	121142	NA	430	NA	NLV	NLV	NLV	NLV	1.60E+07	48,000	NA

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Dinoseb	88857	NA	300	200 (M); 43	NLV	NLV	NLV	NLV	2.70E+08	66,000 (DD)	1.40E+05
1,4-Dioxane (I)	123911	NA	1,700	56,000 (X)	NLV	NLV	NLV	NLV	5.70E+08	5.30E+05	9.70E+07
Diquat	85007	NA	400	400	NLV	NLV	NLV	NLV	ID	5.00E+05	NA
Diuron	330541	NA	620	NA	NLV	NLV	NLV	NLV	4.70E+08	9.70E+05	NA
Endosulfan (J)	115297	NA	NLL	NLL	ID	ID	ID	ID	ID	1.40E+06	NA
Endothall	145733	NA	NLL	NLL	NLV	NLV	NLV	NLV	2.30E+09	3.80E+06	NA
Endrin	72208	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	65,000	NA
Epichlorohydrin (I)	106898	NA	100	NA	64,000	31,000	31,000	35,000	6.70E+07	8,900	7.30E+06
Ethanol (I)	64175	NA	3.80E+07	ID	NLV	NLV	NLV	NLV	1.30E+12	1.0E+9 (C.D.DD)	1.10E+08
Ethyl acetate (I)	141786	NA	1.30E+05	NA	3.8E+7 (C)	4.90E+07	4.90E+07	9.80E+07	2.10E+11	2.0E+8 (C)	7.50E+06
Ethyl-tert-butyl ether (ETBE)	637923	NA	980	ID	5.40E+05	1.90E+06	4.50E+06	1.10E+07	2.50E+10	ID	6.50E+05
Ethylbenzene (I)	100414	NA	1,500	360	87,000	7.20E+05	1.00E+06	2.20E+06	1.00E+10	2.2E+7 (C)	1.40E+05
Ethylene dibromide	106934	NA	20 (M); 1.0	110 (X)	670	1,700	1,700	3,300	1.40E+07	92	8.90E+05
Ethylene glycol	107211	NA	3.00E+05	3.8E+6 (X)	NLV	NLV	NLV	NLV	6.70E+10	4.5E+8 (C)	1.10E+08
Ethylene glycol monobutyl ether	111762	NA	74,000	NA	7.40E+05	1.80E+07	1.50E+08	3.60E+08	8.70E+11	1.1E+8 (C)	4.10E+07
Fluoranthene	206440	NA	7.30E+05	5,500	1.0E+9 (D)	7.40E+08	7.40E+08	7.40E+08	9.30E+09	4.60E+07	NA
Fluorene	86737	NA	3.90E+05	5,300	5.80E+08	1.30E+08	1.30E+08	1.30E+08	9.30E+09	2.70E+07	NA
Fluorine (soluble fluoride) (B)	7782414	NA	40,000	ID	NLV	NLV	NLV	NLV	ID	9.0E+6 (DD)	NA
Formaldehyde	50000	NA	26,000	2,400	12,000	13,000	23,000	52,000	2.40E+08	4.10E+07	6.00E+07
Formic acid (I,U)	64186	NA	2.00E+05	ID	1.50E+06	2.10E+05	1.40E+05	1.40E+05	1.30E+08	3.2E+8 (C)	1.10E+08
1-Formylpiperidine	2591868	NA	1,600	NA	ID	ID	ID	ID	ID	2.50E+06	1.00E+07
Gentian violet	548629	NA	300	NA	NLV	NLV	NLV	NLV	ID	96,000	NA
Glyphosate	1071836	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	1.1E+7 (DD)	NA
Heptachlor	76448	NA	NLL	NLL	3.50E+05	62,000	62,000	62,000	2.40E+06	5,600	NA
Heptachlor epoxide	1024573	NA	NLL	NLL	NLV	NLV	NLV	NLV	1.20E+06	3,100	NA
n-Heptane	142825	NA	4.6E+7 (C)	NA	1.5E+6 (C)	2.10E+07	4.40E+07	1.00E+08	2.30E+11	9.9E+8 (C)	2.40E+05
Hexabromobenzene	87821	NA	5,400	ID	ID	ID	ID	ID	ID	1.10E+06	NA

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

			Groundwate	er Protection	Indoor Air		Ambient	Air (Y) (C)		Contact	Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)		Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Hexachlorobenzene (C-66)	118741	NA	1,800	350	41,000	17,000	17,000	17,000	6.80E+06	8,900	NA
Hexachlorobutadiene (C-46)	87683	NA	26,000	91	1.30E+05	1.30E+05	1.30E+05	1.30E+05	1.40E+08	1.00E+05	3.50E+05
alpha-Hexachlorocyclohexane	319846	NA	18	ID	30,000	12,000	22,000	25,000	1.70E+06	2,600	NA
beta-Hexachlorocyclohexane	319857	NA	37	ID	NLV	NLV	NLV	NLV	5.90E+06	5,400	NA
Hexachlorocyclopentadiene (C- 56)	77474	NA	3.20E+05	ID	30,000	50,000	50,000	50,000	1.30E+07	2.3E+6 (C)	7.20E+05
Hexachloroethane	67721	NA	430	1,800 (X)	40,000	5.50E+05	9.30E+05	9.30E+05	2.30E+08	2.30E+05	NA
n-Hexane	110543	NA	1.8E+5 (C)	NA	5.1E+5 (C)	3.00E+06	3.20E+06	6.20E+06	1.30E+10	9.2E+7 (C)	44,000
2-Hexanone	591786	NA	20,000	ID	9.90E+05	1.10E+06	1.10E+06	1.40E+06	2.70E+09	3.2E+7 (C)	2.50E+06
Indeno(1,2,3-cd) pyrene (Q)	193395	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	20,000	NA
Iron (B)	7439896	1.20E+07	6,000	NA	NLV	NLV	NLV	NLV	ID	1.60E+08	NA
Isobutyl alcohol (I)	78831	NA	46,000	NA	2.3E+8 (C)	7.90E+07	7.90E+07	7.90E+07	1.00E+11	7.2E+7 (C)	8.90E+06
Isophorone	78591	NA	15,000	26,000 (X)	NLV	NLV	NLV	NLV	1.20E+10	4.8E+6 (C)	2.40E+06
Isopropyl alcohol (I)	67630	NA	9,400	1.1E+6 (X)	NLV	NLV	NLV	NLV	1.50E+10	1.40E+07	1.10E+08
Isopropyl benzene	98828	NA	91,000	3,200	4.0E+5 (C)	1.70E+06	1.70E+06	2.80E+06	5.80E+09	2.5E+7 (C)	3.90E+05
Lead (B)	7439921	21,000	7.00E+05	(G,X)	NLV	NLV	NLV	NLV	1.00E+08	4.00E+05	NA
Lindane	58899	NA	20 (M); 7.0	20 (M); 1.1	ID	ID	ID	ID	ID	8,300	NA
Lithium (B)	7439932	9,800	3,400	8,800	NLV	NLV	NLV	NLV	2.30E+09	4.2E+6 (DD)	NA
Magnesium (B)	7439954	NA	8.00E+06	NA	NLV	NLV	NLV	NLV	6.70E+09	1.0E+9 (D)	NA
Manganese (B)	7439965	4.40E+05	1,000	(G,X)	NLV	NLV	NLV	NLV	3.30E+06	2.50E+07	NA
Mercury (Total) (B,Z)	Varies	130	1,700	50 (M); 1.2	48,000	52,000	52,000	52,000	2.00E+07	1.60E+05	NA
Methane	74828	NA	ID	NA	8.4E+6 ug/m3 (GG)	ID	ID	ID	ID	ID	ID
Methanol	67561	NA	74,000	1.2E+7 (C)	3.7E+7 (C)	3.10E+07	4.40E+07	9.60E+07	2.20E+11	1.1E+8 (C)	3.10E+06
Methoxychlor	72435	NA	16,000	NA	ID	ID	ID	ID	ID	1.90E+06	NA
2-Methoxyethanol (I)	109864	NA	150	NA	NLV	NLV	NLV	NLV	1.30E+09	2.30E+05	1.10E+08
2-Methyl-4-chlorophenoxyacetic acid	94746	NA	390	NA	NLV	NLV	NLV	NLV	ID	2.30E+05	NA
2-Methyl-4,6-dinitrophenol	534521	NA	830 (M); 400	NA	NLV	NLV	NLV	NLV	1.30E+08	79,000	NA
N-Methyl-morpholine (I)	109024	NA	400	NA	NLV	NLV	NLV	NLV	ID	6.10E+05	1.10E+08

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

	Groundwater Protection		Indoor Air	Ambient Air (Y) (C)		Air (Y) (C)		Contact	Csat		
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Methyl parathion	298000	NA	46	NA	NLV	NLV	NLV	NLV	ID	56,000	NA
4-Methyl-2-pentanone (MIBK) (I)	108101	NA	36,000	ID	3.7E+7 (C)	4.50E+07	4.50E+07	6.70E+07	1.40E+11	5.6E+7 (C)	2.70E+06
Methyl-tert-butyl ether (MTBE)	1634044	NA	800	1.4E+5 (X)	9.9E+6 (C)	2.50E+07	3.90E+07	8.70E+07	2.00E+11	1.50E+06	5.90E+06
Methylcyclopentane (I)	96377	NA	ID	NA	92,000	2.30E+06	8.20E+06	2.00E+07	4.70E+10	ID	3.50E+05
4,4'-Methylene-bis-2- chloroaniline (MBOCA)	101144	NA	NLL	NLL	NLV	NLV	NLV	NLV	8.40E+07	6,800	NA
Methylene chloride	75092	NA	100	30,000 (X)	45,000	2.10E+05	5.90E+05	1.40E+06	6.60E+09	1.30E+06	2.30E+06
2-Methylnaphthalene	91576	NA	57,000	4,200	2.70E+06	1.50E+06	1.50E+06	1.50E+06	6.70E+08	8.10E+06	NA
Methylphenols (J)	1319773	NA	7,400	1,000 (M); 600	NLV	NLV	NLV	NLV	6.70E+09	1.10E+07	NA
Metolachlor	51218452	NA	4,800	300	NLV	NLV	NLV	NLV	ID	1.5E+6 (C, DD)	4.40E+05
Metribuzin	21087649	NA	3,600	NA	ID	ID	ID	ID	ID	9.60E+06	NA
Mirex	2385855	NA	NLL	NLL	ID	ID	ID	ID	ID	9,600	NA
Molybdenum (B)	7439987	NA	1,500	64,000 (X)	NLV	NLV	NLV	NLV	ID	2.60E+06	NA
Naphthalene	91203	NA	35,000	730	2.50E+05	3.00E+05	3.00E+05	3.00E+05	2.00E+08	1.60E+07	NA
Nickel (B)	7440020	20,000	1.00E+05	(G)	NLV	NLV	NLV	NLV	1.30E+07	4.00E+07	NA
Nitrate (B,N)	14797558	NA	2.0E+5 (N)	ID	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrite (B,N)	14797650	NA	20,000 (N)	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Nitrobenzene (I)	98953	NA	330 (M); 68	3,600 (X)	91,000	54,000	54,000	54,000	4.70E+07	1.00E+05	4.90E+05
2-Nitrophenol	88755	NA	400	ID	NLV	NLV	NLV	NLV	ID	6.30E+05	NA
n-Nitroso-di-n-propylamine	621647	NA	330 (M); 100	NA	NLV	NLV	NLV	NLV	1.60E+06	1,200	1.50E+06
N-Nitrosodiphenylamine	86306	NA	5,400	NA	NLV	NLV	NLV	NLV	2.20E+09	1.70E+06	NA
Oxamyl	23135220	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	8.60E+06	NA
Oxo-hexyl acetate	88230357	NA	1,500	NA	ID	ID	ID	ID	5.40E+09	2.30E+06	1.00E+07
Pendimethalin	40487421	NA	1.10E+06	NA	NLV	NLV	NLV	NLV	ID	4.60E+07	NA
Pentachlorobenzene	608935	NA	29,000	9,500	ID	ID	ID	ID	ID	3.2E+5 (C)	1.90E+05
Pentachloronitrobenzene	82688	NA	37,000	NA	1.20E+05	2.30E+05	2.30E+05	2.30E+05	3.30E+08	1.70E+06	NA
Pentachlorophenol	87865	NA	22	(G,X)	NLV	NLV	NLV	NLV	1.00E+08	90,000	NA
Pentane	109660	NA	ID	NA	9.7E+5 (C)	3.70E+07	3.10E+08	5.80E+08	1.20E+12	ID	2.40E+05

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

	Groundwater Protection		Indoor Air	Ambient Air (Y) (C)				Contact	Csat		
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)		Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
2-Pentene (I)	109682	NA	ID	NA	ID	ID	ID	ID	ID	ID	2.20E+05
Phenanthrene	85018	NA	56,000	2,100	2.80E+06	1.60E+05	1.60E+05	1.60E+05	6.70E+06	1.60E+06	NA
Phenol	108952	NA	88,000	9,000	NLV	NLV	NLV	NLV	4.00E+10	4.0E+7 (C, DD)	1.20E+07
Phenytoin	57410	NA	830	4300 (X)	NLV	NLV	NLV	NLV	2.20E+08	1.00E+05	NA
Phosphorus (Total)	7723140	NA	1.30E+06	(EE)	NLV	NLV	NLV	NLV	6.70E+07	1.0E+9 (D)	NA
Phthalic acid	88993	NA	2.80E+05	NA	NLV	NLV	NLV	NLV	ID	4.3E+8 (C)	1.70E+06
Phthalic anhydride	85449	NA	3.00E+05	NA	NLV	NLV	NLV	NLV	ID	4.7E+8 (C)	1.10E+06
Picloram	1918021	NA	10,000	920	NLV	NLV	NLV	NLV	ID	1.60E+07	NA
Piperidine	110894	NA	64	NA	NLV	NLV	NLV	NLV	9.30E+09	99,000	1.20E+08
Polybrominated biphenyls (J)	67774327	NA	NLL	NLL	NLV	NLV	NLV	NLV	ID	1,200	NA
Polychlorinated biphenyls (PCBs) (J,T)	1336363	NA	NLL	NLL	3.00E+06	2.40E+05	7.90E+06	7.90E+06	5.20E+06	(T)	NA
Prometon	1610180	NA	4,900	NA	NLV	NLV	NLV	NLV	ID	5.00E+06	NA
Propachlor	1918167	NA	1,900	NA	NLV	NLV	NLV	NLV	ID	2.90E+06	NA
Propazine	139402	NA	4,000	NA	NLV	NLV	NLV	NLV	ID	6.10E+06	NA
Propionic acid	79094	NA	2.40E+05	ID	NLV	NLV	NLV	NLV	2.00E+10	3.8E+8 (C)	1.10E+08
Propyl alcohol (I)	71238	NA	28,000	NA	NLV	NLV	NLV	NLV	4.90E+10	1.3E+7 (DD)	1.10E+08
n-Propylbenzene (I)	103651	NA	1,600	ID	ID	ID	ID	ID	1.30E+09	2.50E+06	1.00E+07
Propylene glycol	57556	NA	3.00E+06	5.80E+06	NLV	NLV	NLV	NLV	4.00E+11	1.0E+9 (C,D)	1.10E+08
Pyrene	129000	NA	4.80E+05	ID	1.0E+9 (D)	6.50E+08	6.50E+08	6.50E+08	6.70E+09	2.90E+07	NA
Pyridine (I)	110861	NA	400	NA	1,100	8,200	40,000	97,000	2.30E+08	2.3E+5 (C)	37,000
Selenium (B)	7782492	410	4,000	400	NLV	NLV	NLV	NLV	1.30E+08	2.60E+06	NA
Silver (B)	7440224	1,000	4,500	100 (M); 27	NLV	NLV	NLV	NLV	6.70E+06	2.50E+06	NA
Silvex (2,4,5-TP)	93721	NA	3,600	2,200	NLV	NLV	NLV	NLV	ID	1.70E+06	NA
Simazine	122349	NA	80	340	NLV	NLV	NLV	NLV	ID	1.20E+06	NA
Sodium	17341252	NA	4.60E+06	NA	NLV	NLV	NLV	NLV	ID	1.0E+9 (D)	NA
Sodium azide	26628228	NA	1,800	1,000	ID	ID	ID	ID	ID	2.70E+06	NA
Strontium (B)	7440246	NA	92,000	4.20E+05	NLV	NLV	NLV	NLV	ID	3.30E+08	NA

TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

				er Protection	Indoor Air	Air Ambi		Ambient Air (Y) (C)			Csat
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Styrene	100425	NA	2,700	2,100 (X)	2.50E+05	9.70E+05	9.70E+05	1.40E+06	5.50E+09	4.00E+05	5.20E+05
Sulfate	14808798	NA	5.00E+06	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Tebuthiuron	34014181	NA	10,000	NA	NLV	NLV	NLV	NLV	ID	4.6E+6 (DD)	NA
2,3,7,8-Tetrabromodibenzo-p- dioxin (O)	50585416	NA	NLL	NLL	NLV	NLV	NLV	NLV	(O)	(O)	NA
1,2,4,5-Tetrachlorobenzene	95943	NA	1.50E+06	3,400 (X)	5.80E+05	2.30E+05	2.30E+05	2.30E+05	6.70E+07	7.70E+07	NA
2,3,7,8-Tetrachlorodibenzo-p- dioxin (O)	1746016	NA	NLL	NLL	NLV	NLV	NLV	NLV	71 (O)	0.09 (O)	NA
1,1,1,2-Tetrachloroethane	630206	NA	1,500	ID	6,200	36,000	54,000	1.00E+05	4.20E+08	4.8E+5 (C)	4.40E+05
1,1,2,2-Tetrachloroethane	79345	NA	170	1,600 (X)	4,300	10,000	10,000	14,000	5.40E+07	53,000	8.70E+05
Tetrachloroethylene	127184	NA	100	1,200 (X)	11,000	1.70E+05	4.80E+05	1.10E+06	2.70E+09	2.0E+5 (C)	88,000
Tetrahydrofuran	109999	NA	1,900	2.2E+5 (X)	1.30E+06	1.30E+07	6.70E+07	1.60E+08	3.90E+11	2.90E+06	1.20E+08
Tetranitromethane	509148	NA	ID	NA	500(M); 110	500 (M); 51	ID	ID	2.10E+05	ID	ID
Thallium (B)	7440280	NA	2,300	4,200 (X)	NLV	NLV	NLV	NLV	1.30E+07	35,000	NA
Toluene (I)	108883	NA	16,000	5,400	3.3E+5 (C)	2.80E+06	5.10E+06	1.20E+07	2.70E+10	5.0E+7 (C)	2.50E+05
p-Toluidine	106490	NA	660 (M); 300	NA	NLV	NLV	NLV	NLV	1.00E+08	94,000	1.20E+06
Toxaphene	8001352	NA	24,000	8,200	NLV	NLV	NLV	NLV	9.70E+06	20,000	NA
Triallate	2303175	NA	95,000	NA	ID	ID	ID	ID	ID	2.9E+6 (C)	2.50E+05
Tributylamine	102829	NA	7,800	ID	5.80E+05	6.00E+05	6.00E+05	6.00E+05	4.70E+08	7.90E+05	3.70E+06
1,2,4-Trichlorobenzene	120821	NA	4,200	5,900 (X)	9.6E+6 (C)	2.80E+07	2.80E+07	2.80E+07	2.50E+10	9.9E+5 (DD)	1.10E+06
1,1,1-Trichloroethane	71556	NA	4,000	1,800	2.50E+05	3.80E+06	1.20E+07	2.80E+07	6.70E+10	5.0E+8 (C)	4.60E+05
1,1,2-Trichloroethane	79005	NA	100	6,600 (X)	4,600	17,000	21,000	44,000	1.90E+08	1.80E+05	9.20E+05
Trichloroethylene	79016	NA	100	4,000 (X)	1,000	11,000	25,000	57,000	1.30E+08	1.1E+5 (DD)	5.00E+05
Trichlorofluoromethane	75694	NA	52,000	NA	2.8E+6 (C)	9.20E+07	6.30E+08	1.50E+09	3.80E+12	7.9E+7 (C)	5.60E+05
2,4,5-Trichlorophenol	95954	NA	39,000	NA	NLV	NLV	NLV	NLV	2.30E+10	2.30E+07	NA
2,4,6-Trichlorophenol	88062	NA	2,400	330 (M); 100	NLV	NLV	NLV	NLV	1.00E+09	7.10E+05	NA
1,2,3-Trichloropropane	96184	NA	840	NA	4,000	9,200	9,200	11,000	2.00E+07	1.3E+6 (C)	8.30E+05
1,1,2-Trichloro-1,2,2- trifluoroethane	76131	NA	9.0E+6 (C)	1,700	5.1E+6 (C)	1.80E+08	8.80E+08	2.10E+09	5.10E+12	1.0E+9 (C,D)	5.50E+05
Triethanolamine	102716	NA	74,000	NA	NLV	NLV	NLV	NLV	3.30E+09	1.10E+08	1.10E+08

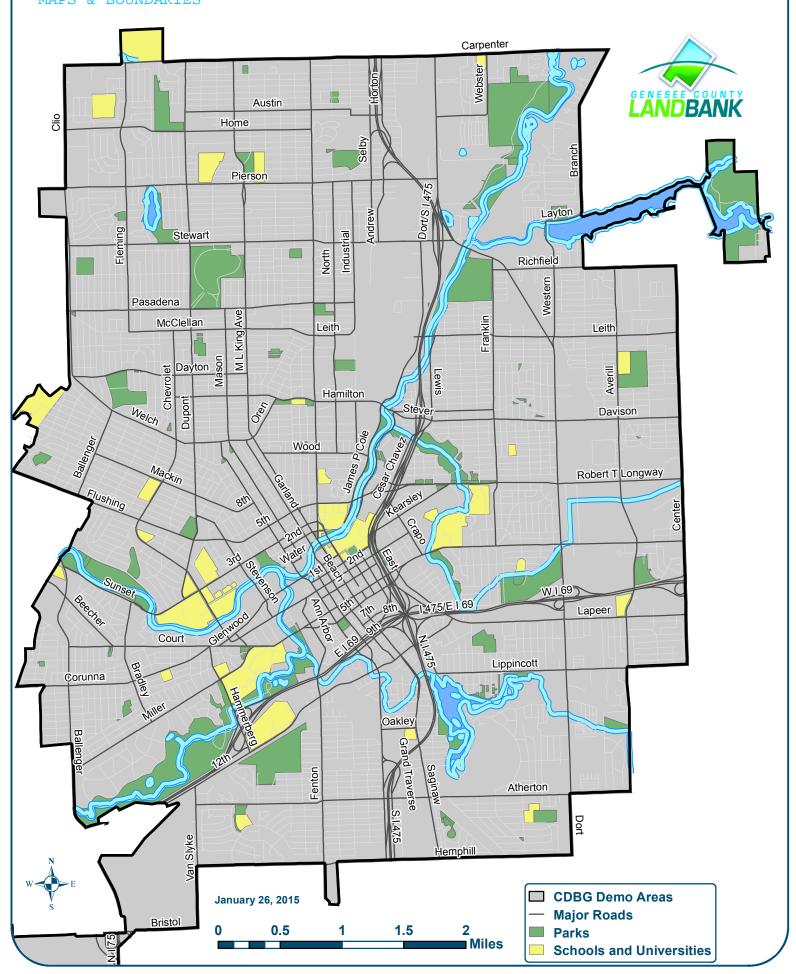
TABLE 2. SOIL: RESIDENTIAL

PART 201 GENERIC CLEANUP CRITERIA AND SCREENING LEVELS/PART 213 RISK-BASED SCREENING LEVELS

	Groundwate	er Protection	Indoor Air		Ambient	Contact	Csat				
Hazardous Substance	Chemical Abstract Service Number	Statewide Default Background Level	Residential Drinking Water Protection Criteria	Groundwater Surface Water Interface Protection Criteria	Soil Volatilization to Indoor Air Inhalation Criteria	Infinite Source Volatile Soil Inhalation Criteria (VSIC)	Finite VSIC for 5 Meter Source Thickness	Finite VSIC for 2 Meter Source Thickness	Particulate Soil Inhalation Criteria	Direct Contact Criteria	Soil Saturation Concentration Screening Levels
Triethylene glycol	112276	NA	86,000	NA	NLV	NLV	NLV	NLV	ID	3.9E+7 (C,DD)	1.10E+05
3-Trifluoromethyl-4-nitrophenol	88302	NA	1.10E+05	NA	NLV	NLV	NLV	NLV	ID	4.1E+7 (DD)	NA
Trifluralin	1582098	NA	1.90E+05	NA	ID	ID	ID	ID	ID	2.00E+06	NA
2,2,4-Trimethyl pentane	540841	NA	ID	NA	1.1E+5 (C)	5.20E+06	3.90E+07	9.60E+07	2.30E+11	ID	19,000
2,4,4-Trimethyl-2-pentene (I)	107404	NA	ID	NA	ID	ID	ID	ID	ID	ID	56,000
1,2,4-Trimethylbenzene (I)	95636	NA	2,100	570	4.3E+6 (C)	2.10E+07	5.00E+08	5.00E+08	8.20E+10	3.2E+7 (C)	1.10E+05
1,3,5-Trimethylbenzene (I)	108678	NA	1,800	1,100	2.6E+6 (C)	1.60E+07	3.80E+08	3.80E+08	8.20E+10	3.2E+7 (C)	94,000
Triphenyl phosphate	115866	NA	1.5E+6 (C)	NA	NLV	NLV	NLV	NLV	ID	3.6E+7 (C)	1.10E+05
tris(2,3-Dibromopropyl)phosphate	126727	NA	930	ID	82,000 (C)	18,000	18,000	18,000	5.90E+06	4,400	27,000
Urea	57136	NA	ID	NA	NLV	NLV	NLV	NLV	ID	ID	NA
Vanadium	7440622	NA	72,000	4.30E+05	NLV	NLV	NLV	NLV	ID	7.5E+5 (DD)	NA
Vinyl acetate (I)	108054	NA	13,000	NA	7.90E+05	1.70E+06	2.60E+06	5.80E+06	1.30E+10	5.8E+6 (C,DD)	2.40E+06
Vinyl chloride	75014	NA	40	260 (X)	270	4,200	30,000	73,000	3.50E+08	3,800	4.90E+05
White phosphorus (R)	12185103	NA	2.2	NA	NLV	NLV	NLV	NLV	ID	2,300 (DD)	NA
Xylenes (I)	1330207	NA	5,600	820	6.3E+6 (C)	4.60E+07	6.10E+07	1.30E+08	2.90E+11	4.1E+8 (C)	1.50E+05
Zinc (B)	7440666	47,000	2.40E+06	(G)	NLV	NLV	NLV	NLV	ID	1.70E+08	NA

APPENDIX 3-MAPS & BOUNDARIES

CDBG Map of Flint for Procurement



APPENDIX 4 – FEDERAL AND COUNTY REGULATIONS

- 1. Federal Labor Standard Provisions
- 2. Equal Opportunity Clause (Executive Order 11246)
- 3. Genesee County Prevailing Wage Policy

Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted by the United States of America and the following Federal Labor Standards Provisions are included in this Contract pursuant to the provisions applicable to such Federal assistance.

A. 1. (i) Minimum Wages. All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section I(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible, place where it can be easily seen by the workers.

(ii) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefor only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(2) The classification is utilized in the area by the construction industry; and

(3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where

appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs (1)(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

2. Withholding. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work, all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (i) Payrolls and basic records. Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section I(b)(2)(B) of the Davis-bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5 (a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section I(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(ii) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, DC 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR 5.5 (a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll

period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

(3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by subparagraph A.3.(ii)(b).

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under subparagraph A.3.(i) available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and Trainees.

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under 29 CFR Part 5 shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract

6. Subcontracts. The contractor or subcontractor will insert in any subcontracts the clauses contained in subparagraphs 1 through 11 of this paragraph A and such other clauses as HUD or its designee may by appropriate instructions require, and a copy of the applicable prevailing wage decision, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this paragraph.

7. Contract termination; debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act Requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

10. (i) Certification of Eligibility. By entering into this contract the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1 01 0, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration..... makes, utters or publishes any statement knowing the same to be false..... shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

11. Complaints, Proceedings, or Testimony by Employees. No laborer or mechanic to whom the wage, salary, or other labor standards provisions of this Contract are applicable shall be discharged or in any other manner discriminated against by the Contractor or any subcontractor because such employee has filed any complaint or instituted or caused to be instituted any proceeding or has testified or is about to testify in any proceeding under or relating to the labor standards applicable under this Contract to his employer.

B. Contract Work Hours and Safety Standards Act. The provisions of this paragraph B are applicable only where the amount of the prime contract exceeds \$100,000. As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

(1) Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of 40 hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of 40 hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of 40 hours without payment of the overtime wages required by the clause set forth in sub paragraph (1) of this paragraph.

(3) Withholding for unpaid wages and liquidated damages. HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contract, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph. (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

C. Health and Safety. The provisions of this paragraph C are applicable only where the amount of the prime contract exceeds \$100,000.

(1) No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

(2) The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act, <u>40 USC 3701 et seq</u>.

(3) The Contractor shall include the provisions of this paragraph in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development or the Secretary of Labor shall direct as a means of enforcing such provisions.

EQUAL OPPORTUNITY CLAUSE (EXECUTIVE ORDER 11246)

"During the performance of this contract, the contractor agrees as follows:

"(1) The contractor will not discriminate against any employee or applicant for Employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

"(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

"(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

"(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

"(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

"(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

"(7) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, That in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

GENSESEE COUNTY POLICIES PREVAILING WAGE POLICY

1. Every contract executed with the County of Genesee or with a contracting agent must contain express terms as follows:

a. That the rates of wages and fringe benefits to be paid to each class of construction mechanics by the contractor and all of his subcontractors, on the project which is the subject of the contract, shall not be less than the wage and fringe benefits currently prevailing in the County of Genesee.

b. That the contractor and all of his subcontractors shall not discriminate against any employee or applicant for employment with respect to hire, tenure, terms, conditions, or privileges of employment because of race, color, religion, national origin, ancestry, sex, or age.

2. Each contracting agent, before awarding any contract, shall determine the schedule of prevailing wages and fringe benefits for all classes of construction mechanics called for in the contract. Such wages and fringe benefits shall be those prevailing in the County of Genesee, on projects of a character similar to that being contracted, under collective agreements or understandings between bona fide organizations or construction mechanics and their employers. Such agreements and understandings, to meet the requirements of this section, shall not be controlled in any way by either an employee or employer organization. Such schedule of prevailing rates or wages and fringe benefits shall be made a part of the specifications for the work to be performed. Such schedule may be the minimum wage and fringe benefit scale for Genesee County compiled and published by the Building and Construction Trades Department of the AFL-CIO.

3. Every contractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing wage and fringe benefit rates prescribed in the contract and shall keep an accurate record showing the names and occupation of, and actual wages and benefits paid to, each construction mechanic employed by him in connection with said contract.

4. If the contractor or subcontractor is in default in the performance of the covenants set forth in paragraph 1 above, the contracting agent shall proceed to enforce said covenants, and upon the failure of the contractor or subcontractor to abide by said covenants, the contracting agent shall proceed with its remedies as provided by state and federal law.

5. Any interested party may challenge the performance of the contractor or subcontractor of the covenants of paragraph 2 above by filing a written complaint with the contracting agent. The contracting agent shall then conduct an investigation, which may include a public hearing, to determine whether it will proceed as provided in paragraph 4 above.

6. As used herein,

a. "Contracting agent" means any officer, board, commission, or organization which receives directly or indirectly monies or properties from or on behalf of the County of Genesee, including without limitation a lessee or sub-lessee of land owned by Genesee County.

b. "Contract" means any agreement, as a result of competitive Proposals or otherwise, for new construction, alteration, repair, installation, painting, decorating, completion, demolition, conditioning, reconditioning, or improvement of public buildings, works, bridges, highways or roads, which is to be performed in Genesee County and either on County of Genesee property or financed by or through the County of Genesee.

c. "Construction mechanic" means any skilled or unskilled mechanic, laborer, worker, helper, assistant, apprentice or driver, but shall not include executive, administrative, professional, office, or custodial employees, and shall not include Genesee County employees who are working pursuant to a collective bargaining agreement between said County and a bona fide labor organization.

7. Contracts which contain provisions requiring the payment of prevailing wages as determined by the United States Secretary of Labor pursuant to the Federal Davis-Bacon Act (United States Code, title 40, section 276a <u>et seq</u>.) or which contain provisions requiring the payment of prevailing wages as determined by the Department of Labor pursuant to P.A. 166 of 1965, as amended, MCL 408.551 <u>et seq</u>., or which contain minimum wage schedules which are the same as prevailing wages in the locality as determined by collective bargaining agreements or understandings between bona fide organizations or construction mechanics and their employers, are exempt from the provisions of this resolution.

8. Any lease of property owned by Genesee County shall include a provision that new construction, alteration, repair, installation, painting, decorating, completion, demolition, conditioning, reconditioning, or improvement of buildings, works, bridges, highways, or roads on such property shall be considered work on public buildings, works, bridges, highways, or roads, within the meaning or provision 6(b) of this resolution and that the lessee or any sub-lessee will be bound by the provisions of this resolution.

9. It is the intent of this Board of Commissioners that every contracting agent shall adopt the preceding paragraphs of this resolution.

10. The Genesee County Purchasing Agent, the Genesee County Controller, and the Genesee County Chief Engineer, are hereby directed to effectuate this resolution, on behalf of this Board, within their respective spheres of responsibility.

11. The Genesee County Clerk is hereby directed to forward to each Genesee County board, commission, elected official, agency, and department, a copy of this resolution and a notation of the adoption of same.

12. The previous resolution of this Board concerning payment of prevailing wages, as adopted on June 23, 1969, and as set forth as pages 337 through 339 of the compiled 1969 Proceedings of this Board, is hereby rescinded."

Resol. #79-558 Approved 10/23/79 forms2\prevwage 5/94





STATE OF MICHIGAN

Prevailing Wages PO Box 30476 Lansing, MI 48909 517-322-1825 Informational Sheet: Prevailing Wages on State Projects

REQUIREMENTS OF

THE PREVAILING WAGES ON STATE PROJECTS ACT, PUBLIC ACT 166 OF 1965

The State of Michigan determines prevailing rates pursuant to the Prevailing Wages on State Projects Act, Public Act 166 of 1965, as amended. The purpose of establishing prevailing rates is to provide minimum rates of pay that must be paid to workers on construction projects for which the state or a school district is the contracting agent and which is financed or financially supported by the state. By law, prevailing rates are compiled from the rates contained in collectively bargained agreements which cover the locations of the state projects. The official prevailing rate schedule provides an hourly rate which includes wage and fringe benefit totals for designated construction mechanic classifications. The overtime rates also include wage and fringe benefit totals. Please pay special attention to the overtime and premium pay requirements. Prevailing wage is satisfied when wages plus fringe benefits paid to a worker are equal to or greater than the required rate.

State of Michigan responsibilities under the law:

• The department establishes the prevailing rate for each classification of construction mechanic *requested by a contracting agent* prior to contracts being let out for bid on a state project.

Contracting agent responsibilities under the law:

- If a contract is not awarded or construction does not start within 90 days of the date of the issuance of rates, a redetermination of rates must be requested by the contracting agent.
- Rates for classifications needed but not provided on the Prevailing Rate Schedule, *must* be obtained *prior* to contracts being let out for bid on a state project.
- The contracting agent, by written notice to the contractor and the sureties of the contractor known to the contracting agent, may terminate the contractor's right to proceed with that part of the contract, for which less than the prevailing rates have been or will be paid, and may proceed to complete the contract by separate agreement with another contractor or otherwise, and the original contractor and his sureties shall be liable to the contracting agent for any excess costs occasioned thereby.

Contractor responsibilities under the law:

- Every contractor and subcontractor shall keep posted on the construction site, in a conspicuous place, a copy of all prevailing rates prescribed in a contract.
- Every contractor and subcontractor shall keep an accurate record showing the name and occupation of and the actual wages and benefits paid to each construction mechanic employed by him in connection including certified payroll, as used in the industry, with said contract. This record shall be available for reasonable inspection by the contracting agent or the department.
- Each contractor or subcontractor is separately liable for the payment of the prevailing rate to its employees.
- The prime contractor is responsible for advising all subcontractors of the requirement to pay the prevailing rate prior to commencement of work.
- The prime contractor is secondarily liable for payment of prevailing rates that are not paid by a subcontractor.
- A construction mechanic *shall only* be paid the apprentice rate if registered with the United States Department of Labor, Bureau of Apprenticeship and Training and the rate is included in the contract.

Enforcement:

A person who has information of an alleged prevailing wage violation on a state project may file a complaint with the State of Michigan. The department will investigate and attempt to resolve the complaint informally. During the course of an investigation, if the requested records and posting certification are not made available in compliance with Section 5 of Act 166, the investigation will be concluded and a referral to the Office of Attorney General for civil action will be made. The Office of Attorney General will pursue costs and fees associated with a lawsuit if filing is necessary to obtain records.





STATE OF MICHIGAN

Prevailing Wages PO Box 30476 Lansing, MI 48909 517-322-1825 Informational Sheet: Prevailing Wages on State Projects

General Information Regarding Fringe Benefits

Certain fringe benefits may be credited toward the payment of the Prevailing Wage Rate:

- o If a fringe benefit is paid directly to a construction mechanic
- o If a fringe benefit contribution or payment is made on behalf of a construction mechanic
- If a fringe benefit, which may be provided to a construction mechanic, is pursuant to a written contract or policy
- o If a fringe benefit is paid into a fund, for a construction mechanic

When a fringe benefit is not paid by an hourly rate, the hourly credit will be calculated based on the annual value of the fringe benefit divided by 2080 hours per year (52 weeks @ 40 hours per week).

The following is an example of the types of fringe benefits allowed and how an hourly credit is calculated:

Vacation	40 hours X \$14.00 per hour = \$560/2080 =	\$.27
Dental insurance	\$31.07 monthly premium X 12 mos. = \$372.84 /2080 =	\$.18
Vision insurance	\$5.38 monthly premium X 12 mos. = \$64.56/2080 =	\$.03
Health insurance	\$230.00 monthly premium X 12 mos. = \$2,760.00/2080 =	\$1.33
Life insurance	\$27.04 monthly premium X 12 mos. = \$324.48/2080 =	\$.16
Tuition	\$500.00 annual cost/2080 =	\$.24
Bonus	4 quarterly bonus/year x \$250 = \$1000.00/2080 =	\$.48
401k Employer Contribution	\$2000.00 total annual contribution/2080 =	\$.96
Total Hourly Credit		\$3.65

Other examples of the types of fringe benefits allowed:

- Sick pay
- Holiday pay
- Accidental Death & Dismemberment insurance premiums

The following are examples of items that **will not** be credited toward the payment of the Prevailing Wage Rate

- Legally required payments, such as:
 - Unemployment Insurance payments
 - Workers' Compensation Insurance payments
 - FICA (Social Security contributions, Medicare contributions)
- Reimbursable expenses, such as:
 - Clothing allowance or reimbursement
 - Uniform allowance or reimbursement
 - Gas allowance or reimbursement
 - Travel time or payment
 - Meals or lodging allowance or reimbursement
 - Per diem allowance or payment
- Other payments to or on behalf of a construction mechanic that are not wages or fringe benefits, such as:
 - Industry advancement funds
 - Financial or material loans



State of Michigan

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

MARTHA B. YODER

DIRECTOR

OVERTIME PROVISIONS for MICHIGAN PREVAILING WAGE RATE COMMERCIAL SCHEDULE

1. Overtime is represented as a nine character code. Each character represents a certain period of time after the first 8 hours Monday thru Friday.

	Monday thru Friday	Saturday	Sunday & Holidays	Four 10s
First 8 Hours		4		
9th Hour	1	5	8	
10th Hour	2	6		9
Over 10 hours	3	7		

Overtime for Monday thru Friday after 8 hours:

the 1st character is for time worked in the 9th hour (8.1 - 9 hours) the 2nd character is for time worked in the 10th hour (9.1 - 10 hours) the 3rd character is for time worked beyond the 10th hour (10.1 and beyond)

Overtime on Saturday:

the 4th character is for time worked in the first 8 hours on Saturday (0 - 8 hours) the 5th character is for time worked in the 9th hour on Saturday (8.1 - 9 hours) the 6th character is for time worked in the 10th hour (9.1 - 10 hours) the 7th character is for time worked beyond the 10th hour (10.01 and beyond)

Overtime on Sundays & Holidays

The 8th character is for time worked on Sunday or on a holiday

Four Ten Hour Days

The 9th character indicates if an optional 4-day 10-hour per day workweek can be worked **between Monday and** Friday without paying overtime after 8 hours worked, unless otherwise noted in the rate schedule. To utilize a 4 ten workweek, notice is required from the employer to employee prior to the start of work on the project.

- 2. Overtime Indicators Used in the Overtime Provision:
 - H means TIME AND ONE-HALF due
 - X means TIME AND ONE-HALF due after 40 HOURS worked
 - D means DOUBLE PAY due
 - Y means YES an optional 4-day 10-hour per day workweek can be worked without paying overtime after 8 hours worked
 - N means NO an optional 4-day 10-hour per day workweek *can not* be worked without paying overtime after 8 hours worked
- 3. EXAMPLES:

HHHHHHDN - This example shows that the $1\frac{1}{2}$ rate must be used for time worked after 8 hours Monday thru Friday (*characters 1 - 3*); for all hours worked on Saturday, $1\frac{1}{2}$ rate is due (*characters 4 - 7*). Work done on Sundays or holidays must be paid double time (*character 8*). The N (*character 9*) indicates that 4 ten-hour days is not an acceptable workweek at regular pay.

XXXHHHHDY - This example shows that the $1\frac{1}{2}$ rate must be used for time worked after 40 hours are worked Monday thru Friday (*characters 1-3*); for hours worked on Saturday, $1\frac{1}{2}$ rate is due (*characters 4 - 7*). Work done on Sundays or holidays must be paid double time (*character 8*). The Y (*character 9*) indicates that 4 ten-hour days <u>is</u> an acceptable alternative workweek.

LARA is an equal opportunity employer.

Auxiliary aids, services and other reasonable accommodations are available upon request to individuals with disabilities.

UNDERGROUND ENGINEERS

CLASS I

Backfiller Tamper, Backhoe, Batch Plant Operator, Clam-Shell, Concrete Paver (2 drums or larger), Conveyor Loader (Euclid type), Crane (crawler, truck type or pile driving), Dozer, Dragline, Elevating Grader, End Loader, Gradall (and similar type machine), Grader, Power Shovel, Roller (asphalt), Scraper (self propelled or tractor drawn), Side Broom Tractor (type D-4 or larger), Slope Paver, Trencher (over 8' digging capacity), Well Drilling Rig, Mechanic, Slip Form Paver, Hydro Excavator.

CLASS II

Boom Truck (power swing type boom), Crusher, Hoist, Pump (1 or more 6" discharge or larger gas or diesel powered by generator of 300 amps or more, inclusive of generator), Side Boom Tractor (smaller than type D-4 or equivalent), Tractor (pneu-tired, other than backhoe or front end loader), Trencher (8' digging capacity and smaller), Vac Truck.

CLASS III

Air Compressors (600 cfm or larger), Air Compressors (2 or more less than 600 cfm), Boom Truck (non-swinging, non-powered type boom), Concrete Breaker (self-propelled or truck mounted, includes compressor), Concrete Paver (1 drum, ½ yard or larger), Elevator (other than passenger), Maintenance Man, Mechanic Helper, Pump (2 or more 4" up to 6" discharge, gas or diesel powered, excluding submersible pump), Pumpcrete Machine (and similar equipment), Wagon Drill Machine, Welding Machine or Generator (2 or more 300 amp or larger, gas or diesel powered).

CLASS IV

Boiler, Concrete Saw (40HP or over), Curing Machine (self-propelled), Farm Tractor (w/attachment), Finishing Machine (concrete), Firemen, Hydraulic Pipe Pushing Machine, Mulching Equipment, Oiler (2 or more up to 4", exclude submersible), Pumps (2 or more up to 4" discharge if used 3 hrs or more a day-gas or diesel powered, excluding submersible pumps), Roller (other than asphalt), Stump Remover, Vibrating Compaction Equipment (6' wide or over), Trencher (service) Sweeper (Wayne type and similar equipment), Water Wagon, Extend-a-Boom Forklift.

HAZARDOUS WASTE ABATEMENT ENGINEERS

CLASS I

Backhoe, Batch Plant Operator, Clamshell, Concrete Breaker when attached to hoe, Concrete Cleaning Decontamination Machine Operator, Concrete Pump, Concrete Paver, Crusher, Dozer, Elevating Grader, Endloader, Farm Tractor (90 h.p. and higher), Gradall, Grader, Heavy Equipment Robotics Operator, Hydro Excavator, Loader, Pug Mill, Pumpcrete Machines, Pump Trucks, Roller, Scraper (self-propelled or tractor drawn), Side Boom Tractor, Slip Form Paver, Slope Paver, Trencher, Ultra High Pressure Waterjet Cutting Tool System Operator, Vactors, Vacuum Blasting Machine Operator, Vertical Lifting Hoist, Vibrating Compaction Equipment (self-propelled), and Well Drilling Rig.

CLASS II

Air Compressor, Concrete Breaker when not attached to hoe, Elevator, End Dumps, Equipment Decontamination Operator, Farm Tractor (less than 90 h.p.), Forklift, Generator, Heater, Mulcher, Pigs (Portable Reagent Storage Tanks), Power Screens, Pumps (water), Stationary Compressed Air Plant, Sweeper, Water Wagon and Welding Machine.

2015 Prevailing Wage Rates for State Funded Projects

For Informational Purposes Only Not For Use In Contract

Genesee County

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Classification Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Asbestos & Lead Abatement Laborer					
Asbestos & Lead Abatement Laborer 4 ten hour days @ straight time allowed Mo Saturday, must be consecutive calendar day		\$40.25	\$53.64	\$67.03	НННХХХХОҮ
Asbestos & Lead Abatement, Hazardous	Material Handler				
 Asbestos and Lead Abatement, Hazardous Handler	Material AS207	\$40.25	\$53.58	\$66.90	нннхххх рү
4 ten hour days @ straight time allowed Mon Saturday, must be consecutive calendar day					
Boilermaker					
Boilermaker	BO169	\$54.70	\$81.08	\$107.45	ННННННРҮ
	Apprentice Rates:				
	1st 6 months	\$40.31	\$59.49	\$78.67	
	2nd 6 months	\$41.45	\$61.21	\$80.95	
	3rd 6 months	\$42.57	\$62.88	\$83.19	
	4th 6 months	\$43.69	\$64.57	\$85.43	
	5th 6 months	\$44.81	\$66.24	\$87.67	
	6th 6 months	\$48.63	\$72.50	\$96.36	
	7th 6 months	\$49.32	\$73.01	\$96.69	
	8th 6 months	\$51.58	\$76.40	\$101.21	

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Classification Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Bricklayer					
Brick, Block, Stone, Artificial Masonry, Mark and Pointing Cleaning and Caulking Make up day allowed Comment 4 10s allowed M-F	le Masonry, BR9-12-BL Saturday make up day	\$48.04	\$62.87	\$77.70	ННННННОҮ
	Apprentice Rates:				
	0 - 749 hours	\$36.18	\$45.08	\$53.98	
	750 - 1,499 hours	\$37.66	\$47.30	\$56.94	
	1,500 - 2,249 hours	\$39.14	\$49.52	\$59.90	
	2,250 - 2,999 hours	\$40.62	\$51.74	\$62.86	
	3,000 - 3,749 hours	\$42.11	\$53.98	\$65.84	
	3,750 - 4,499 hours	\$43.59	\$56.20	\$68.80	
	4,500 - 5,249 hours	\$45.07	\$58.42	\$71.76	
	5,250 - 6,000 hours	\$46.56	\$60.65	\$74.74	
Carpenter					
Carpet and Resilient Floor Layer, (does not installation of prefabricated formica & parqu which is to be paid carpenter rate)	et flooring	\$49.21	\$70.18	\$91.14	х х н х х х х д ү
	Apprentice Rates:	\$ 04.00	\$00.71	¢ 44, 40	
	1st 6 months	\$24.23	\$32.71	\$41.18	
	2nd 6 months 3rd 6 months	\$28.25	\$38.73	\$49.22	
	4th 6 months	\$30.35 \$32.44	\$41.88 \$45.02	\$53.42 \$57.60	
	5th 6 months	\$34.54	\$48.17	\$61.80	
	6th 6 months	\$36.63	\$51.31	\$65.98	
	7th 6 months	\$38.74	\$54.48	\$70.20	
	8th 6 months	\$40.82	\$57.59	\$74.36	
Carpenter, Acoustical Ceiling Tile Erector,	Piledriver CA706F	\$42.97	\$55.13	\$67.29	ХХНННННОМ
	Apprentice Rates:				
	1st year	\$33.24	\$40.53	\$47.83	
	2nd year	\$35.67	\$44.18	\$52.69	
	3rd year	\$36.89	\$46.01	\$55.13	
	4th year	\$39.32	\$49.65	\$59.99	

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County: Genesee Date Rendered:

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Name Description		Hourly	Time and a Half	Double Time	Overtime Provi
Cement Finisher					
Cement Finisher - 4 10s allowed M-F	BR9-12-CF	\$42.56	\$55.96	\$69.35	ххнхххн
	Apprentice Rates:				
	0-749 hours	\$33.18	\$41.89	\$50.59	
	750-1499 hours	\$34.52	\$43.89	\$53.27	
	1500-2249 hours	\$35.86	\$45.91	\$55.95	
	2250-2999 hours	\$37.20	\$47.91	\$58.63	
	3000-3749 hours	\$38.54	\$49.93	\$61.31	
	3750-4499 hours	\$39.88	\$51.93	\$63.99	
Cement Mason					
Cement Mason	PL16-6	\$38.46	\$51.25	\$64.04	ннннн
straight rate unless over 40 hours worke Make up day allowed Comment Friday or Sature	day for inclement weather				
	Apprentice Rates:				
	1st year	\$29.51	\$37.82	\$46.14	
	2nd year	\$32.06	\$41.65	\$51.24	
	3rd year	\$34.62	\$45.49	\$56.36	
Drywall					
Finisher-hand finishing	PT-1052-DF	\$36.27	\$48.83	\$61.39	ххнххх
The regular weekly work schedule may					
on consecutive days, Monday thru Satur day may be scheduled for work missed of inclement weather. Make up day allowed					
day may be scheduled for work missed inclement weather.					
day may be scheduled for work missed of inclement weather.	due to holiday or	\$23.71	\$29.99	\$36.27	
day may be scheduled for work missed of inclement weather.	due to holiday or Apprentice Rates:	\$23.71 \$26.22	\$29.99 \$33.75	\$36.27 \$41.29	
day may be scheduled for work missed of inclement weather.	due to holiday or Apprentice Rates: 1st year				
day may be scheduled for work missed inclement weather.	due to holiday or Apprentice Rates: 1st year 2nd year, 1st 6 months	\$26.22	\$33.75	\$41.29	

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	I Double Time	Overtime Provisio
Electrician					
Lineman/Technician outside utilit and high voltage pipe type cable underground.		\$47.05	\$68.11	\$89.17	ННННННО
Four 10s allowed Monday-Thurso or Tuesday-Friday with Monday r	day with Friday makeup nakeup.				
	Apprentice Rates:				
	1st period	\$30.20	\$42.69	\$55.26	
	2nd period	\$32.32	\$46.02	\$59.70	
	3rd period	\$34.42	\$49.16	\$63.90	
	4th period	\$36.53	\$52.33	\$68.12	
	5th period	\$38.63	\$55.47	\$72.32	
	6th period	\$40.74	\$58.64	\$76.54	
	7th period	\$42.84	\$61.79	\$80.74	
Inside Wireman 4 10s allowed as consecutive day	ys, M-Th or T-F	IW \$54.09	\$77.49	\$100.89	ннннннс
	Apprentice Rates:				
	1st period	\$17.86	\$24.02	\$30.17	
	2nd period	\$19.92	\$27.10	\$34.29	
	3rd period	\$21.97	\$30.18	\$38.39	
	4th period	\$26.07	\$36.33	\$46.59	
	5th period	\$30.18	\$42.50	\$54.81	
	6th period	\$34.28	\$48.65	\$63.01	
Sound and Communication Insta Four 10s may be worked Monday Friday.	ller/Technician EC-948- /-Thursday or Tuesday-	SC \$39.81	\$56.16	\$72.51	нннннг
	Apprentice Rates:				
	Apprentice Rates: 1st year	\$13.23	\$18.80	\$24.36	
		\$13.23 \$16.02	\$18.80 \$22.99	\$24.36 \$29.94	
	1st year				

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provisi
Elevator Constructor					
Elevator Constructor Mechanic	EL-85	\$70.77	;	\$116.32	
Comment 4 tens allowed	M-TH				
	Apprentice Rates:				
	1st year	\$50.27		\$75.32	
	2nd year	\$54.83		\$84.44	
	3rd year	\$57.10		\$88.98	
	4th year	\$61.66		\$98.10	
Glazier					
Glazier 4 tens allowed on consecutive days	GL-826	\$43.53	\$58.26	\$72.98	нннннн
	Apprentice Rates:				
	1st 6 months	\$31.04	\$39.87	\$48.71	
	2nd 6 months	\$32.60	\$42.17	\$51.74	
	3rd 6 months	\$34.17	\$44.48	\$54.79	
	4th 6 months	\$35.73	\$46.78	\$57.82	
	5th 6 months	\$37.28	\$49.06	\$60.84	
	6th 6 months	\$38.84	\$51.35	\$63.87	
	7th 6 months	\$40.40	\$53.65	\$66.90	
	8th 6 months	\$41.97	\$55.96	\$69.95	
Heat and Frost Insulator					
Spray Insulation	AS25S	\$20.14	\$29.14		нннннн

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County: Statewide Date Rendered:

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Name Description			Straight Hourly	Time and a Half	Double Time	Overtime Provisior
Heat and Frost Insulator and Asbe	stos Worker					
Heat and Frost Insulator and Asbesto 4 ten hour work days shall be either N Thursday or Tuesday thru Friday		AS47	\$44.40	\$58.76	\$73.12	ННННННО
Make up day allowed Comment						
Friday for mi	•	M-Th 4 ten schedule				
		ce Rates:	•		• · - · ·	
	1st year		\$25.78	\$32.96	\$40.14	
	2nd year		\$29.50	\$38.11	\$46.73	
	3rd year		\$33.22	\$43.27	\$53.32	
	4th year		\$36.95	\$48.44	\$59.93	
	5th year		\$40.68	\$53.61	\$66.53	
Ironworker						
Fence, Sound Barrier & Guardrail ere Exterior Signage work Four ten hour work days may be worl Saturday.			\$34.65	\$46.65	\$58.65	X X H X X X H D
	Apprentie	ce Rates:				
	60% Leve	1	\$24.25	\$31.45	\$38.65	
	65% Leve	1	\$25.55	\$33.35	\$41.15	
	70% Leve	<u>,</u>	\$26.86	\$35.26	\$43.66	
	75% Leve	÷	\$28.15	\$37.15	\$46.15	
				* ~~ ~ -	\$48.65	
	80% Leve)	\$29.45	\$39.05	φ+0.00	
	80% Leve 85% Leve		\$29.45 \$30.75	\$39.05 \$40.95	\$51.15	
Siding, Glazing, Curtain Wall 4 tens may be worked Monday thru T time.	85% Leve	IR-25-GZ2				ХХННННОО
4 tens may be worked Monday thru T	85% Leve	IR-25-GZ2	\$30.75	\$40.95	\$51.15	ХХННННОО
4 tens may be worked Monday thru T time. Make up day allowed Comment	85% Leve	IR-25-GZ2	\$30.75	\$40.95	\$51.15	ХХННННОО
4 tens may be worked Monday thru T time. Make up day allowed Comment	85% Leve	IR-25-GZ2 ht	\$30.75	\$40.95	\$51.15	ХХННННОО
4 tens may be worked Monday thru T time. Make up day allowed Comment	85% Leve hursday @ straig Apprentic	IR-25-GZ2 ht	\$30.75 \$46.41	\$40.95 \$58.07	\$51.15 \$69.73	ХХННННОО
4 tens may be worked Monday thru T time. Make up day allowed Comment	85% Leve hursday @ straig Apprentie Level 1	IR-25-GZ2 ht	\$30.75 \$46.41 \$29.48	\$40.95 \$58.07 \$36.09	\$51.15 \$69.73 \$42.68	ХХННННОО
4 tens may be worked Monday thru T time. Make up day allowed Comment	85% Leve hursday @ straig Apprentio Level 1 Level 2	IR-25-GZ2 ht	\$30.75 \$46.41 \$29.48 \$31.59	\$40.95 \$58.07 \$36.09 \$38.83	\$51.15 \$69.73 \$42.68 \$46.05	ХХННННОО
4 tens may be worked Monday thru T time. Make up day allowed Comment	85% Leve hursday @ straig Apprentie Level 1 Level 2 Level 3	IR-25-GZ2 ht	\$30.75 \$46.41 \$29.48 \$31.59 \$33.71	\$40.95 \$58.07 \$36.09 \$38.83 \$41.58	\$51.15 \$69.73 \$42.68 \$46.05 \$49.44	ХХННННОО

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	I Double Time	Overtime Provision
Pre-engineered Metal Work	IR-25-PE-Z1	\$45.24	\$55.53	\$65.81	ХХНХХХО
Make up day allowed Comment					
4 tens allowe	d M-Th with Saturday make up day				
	Apprentice Rates:	\$22.44	0 04 50	* - -	
	1st Year	\$26.11	\$31.58	\$37.06	
	3rd 6 month period	\$28.23	\$34.46	\$40.68	
	4th 6 month period	\$30.36	\$37.35	\$44.33	
	5th 6 month period	\$32.48	\$40.21	\$47.95	
	6th 6 month period	\$34.61	\$43.99	\$53.37	
Reinforced Iron Work	IR-25-RF	\$55.36	\$82.91	\$110.45	HHDHDDD
Make up day allowed					
	Apprentice Rates:				
	Level 1	\$36.01	\$53.89	\$71.75	
	Level 2	\$38.38	\$57.43	\$76.49	
	Level 3	\$40.74	\$60.98	\$81.21	
	Level 4	\$43.28	\$64.78	\$86.29	
	Level 5	\$45.81	\$68.59	\$91.35	
	Level 6	\$48.35	\$72.39	\$96.43	
Rigging Work	IR-25-RIG	\$61.33	\$91.67	\$122.00	нннннн
	Apprentice Rates:				
	Level 1& 2	\$36.63	\$54.59	\$72.55	
	Level 3	\$39.46	\$58.84	\$78.21	
	Level 4	\$42.28	\$63.07	\$83.85	
	Level 5	\$45.11	\$67.31	\$89.51	
	Level 6	\$47.94	\$71.56	\$95.17	
Decking 4 tens may be worked Monday thru Th time. If bad weather, Friday may be a holiday celebrated on a Monday, 4 10 Tuesday thru Friday. Work in excess must be paid @ double time.	make up day. If s may be worked	\$53.29	\$79.63	\$105.96	ХХННННОО
Make up day allowed Comment					

Friday for 4 tens M-Th Saturday for 5 eights M-F

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County: Genesee Date Rendered:

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Classification Name Description		Straight Hourly	Time and a Half	l Double Time	Overtime Provision
Structural, ornamental, welder and pre-cast 4 tens may be worked Monday thru Thursda time. If bad weather, Friday may be a make holiday celebrated on a Monday, 4 10s may Tuesday thru Friday. Work in excess of 12 must be paid @ double time.	up day. If be worked	\$61.46	\$91.84	\$122.21	НННННООҮ
Make up day allowed	Apprentice Rates:				
	Levels 1 & 2	\$36.05	\$54.01	\$71.97	
	Level 3	\$38.88	\$58.26	\$77.63	
	Level 4	\$41.70	\$62.49	\$83.27	
	Level 5	\$44.53	\$66.73	\$88.93	
	Level 6	\$47.36	\$70.98	\$94.59	
	Level 7	\$50.18	\$75.20	\$100.23	
	Level 8	\$53.01	\$79.46	\$105.89	
Industrial Door erection & construction	IR-25-STR-D	\$42.02	\$62.68	\$83.33	нннннору
Make up day allowed Comment					

Friday for bad weather when 4 tens scheduled for M-Th. If holiday celebrated on M, 4 tens may be worked T-F. Work in excess of 12 hours per day must be paid @ double time.

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Laborer					
Carpenter tender, mason tender, cen plasterer tender, signal man & top ma watchman, tunnel mucker, jackhamm operator, tunnel man (concrete show bottom man (sewer work), windlass of work), demolition laborer, morter mix tool operator, pump operator (all 3" p & electric bush hammers, concrete g saw operator, crock and pipe layers (tile, except 4" drain tile around buildir inside building. Cleaning and clearing of all debris, in brushing of windows, scraping of floo surplus material from all fixtures with structure and cleaning all debris in bu construction area. The general clear sweeping, cleaning, washdown and v facility, equipment and furnishings ar loading or burning of all debris includ packaging waste material. Washing walls, partitions, ceilings, windows, b laboratory, and all fixtures and faciliti mopping, washing, waxing and polish floors or areas.	an (sewer work), her & air spade eler, car pusher) opperator (caisson er, air, electric, gas bumps and below), air as buggy, concrete (conduit & vitrified ngs), & Caisson work heluding wire brs, removal of in confines of uilding and hup, including wiping of construction hd removal and ling crates, boxes, and cleaning of athrooms, kitchens, es therein. Cleanup,	\$35.24	\$46.44	\$57.64	ХХННННОҮ
A four-ten workweek may be worked Thursday or Tuesday thru Friday.	Monday thru				
Make up day allowed Comment Saturday					
	Apprentice Rates:				
	0-1,000 work hours	\$29.64	\$38.04	\$46.44	
		4 00 7 0	¢ 00 70		
	1,001-2,000 work hours	\$30.76	\$39.72	\$48.68	
	1,001-2,000 work hours 2,001-3,000 work hours	\$30.76 \$31.88	\$39.72 \$41.40	\$48.68 \$50.92	

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Classification Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Laborer - Hazardous					
preparation and other preli removal, handling, or conta substances not requiring u equipment required by stal laborer performing work in handling, or containment o	ing work in conjunction with site LHAZ-Z7-A iminary work prior to actual ainment of hazardous waste ise of personal protective te or federal regulations; or a conjunction with the removal, of hazardous waste substances ective equipment level "D" is	\$35.24	\$49.96	\$64.68	ННННННОҮ
Make up day allowed C					
4	10s allowed M-Th or T-F; inclement weather makeup day	y Friday			
	Apprentice Rates:		• · · ·	•	
	0-1,000 work hours	\$29.64	\$41.56	\$53.48	
	1,001-2,000 work hours	\$30.76	\$43.24	\$55.72	
	2,001-3,000 work hours	\$31.88	\$44.92	\$57.96	
	3,001-4,000 work hours	\$34.12	\$48.28	\$62.44	
removal, handling, or conta substances when the use equipment levels "A", "B" o Make up day allowed Co	or "C" is required. omment	\$36.24	\$51.46	\$66.68	ННННННОҮ
4	10s allowed M-Th or T-F; inclement weather makeup day	y Friday			
	Apprentice Rates:				
	0-1,000 work hours	\$30.39	\$42.68	\$54.98	
	1,001-2,000 work hours	\$31.56	\$44.44	\$57.32	
	2,001-3,000 work hours	\$32.73	\$46.20	\$59.66	
	3,001-4,000 work hours	\$35.07	\$49.70	\$64.34	
Laborer Underground - T	unnel, Shaft & Caisson				
	l caisson laborer, dump man, LAUCT-Z2-1 nder, testing man (on gas), and	\$35.67	\$47.07	\$58.47	X X X X X X X D Y
	Apprentice Rates:				
	0-1,000 work hours	\$30.52	\$39.35	\$48.17	
	1,001-2,000 work hours	\$31.55	\$40.90	\$50.23	
	2,001-3,000 work hours	\$32.58	\$42.44	\$52.29	
	3,001-4,000 work hours	\$34.64	\$45.53	\$56.41	
	-,	÷3	+		

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Classification Name Description			Straight Hourly	Time and a Half	Double Time	Overtime Provision
Class II - Manhole, headwall, catch bricklayer tender, mortar man, mat erector, and guard rail builder		LAUCT-Z2-2	\$35.76	\$47.21	\$58.65	X X X X X X X D Y
	Apprentice	e Rates:				
	0-1,000 wo	rk hours	\$30.58	\$39.44	\$48.29	
	1,001-2,00	0 work hours	\$31.62	\$41.00	\$50.37	
	2,001-3,00	0 work hours	\$32.66	\$42.56	\$52.45	
	3,001-4,00	0 work hours	\$34.72	\$45.65	\$56.57	
hammer man and grinding man), fi bottom man, cage tender, car push concrete man, concrete form man, cement invert laborer, cement finis	ner, carrier man, concrete repair man, her, concrete shovele					
conveyor man, floor man, gasoline operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold i switch man, track man, tugger mar man, winch operator, pipe jacking i air track operator and concrete sav h.p.).	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and	0				
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold switch man, track man, tugger mar man, winch operator, pipe jacking air track operator and concrete sav	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and					
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold switch man, track man, tugger mar man, winch operator, pipe jacking air track operator and concrete sav	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40	e Rates:	\$30.66	\$39.56	\$48.45	
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold switch man, track man, tugger mar man, winch operator, pipe jacking air track operator and concrete sav	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo	e Rates:	\$30.66 \$31.70	\$39.56 \$41.12	\$48.45 \$50.53	
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold u switch man, track man, tugger mar man, winch operator, pipe jacking u air track operator and concrete sav	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 1,001-2,00	e Rates: rk hours				
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold switch man, track man, tugger mar man, winch operator, pipe jacking air track operator and concrete sav	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 1,001-2,00 2,001-3,00	e Rates: Irk hours 0 work hours	\$31.70	\$41.12	\$50.53	
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold switch man, track man, tugger mar man, winch operator, pipe jacking air track operator and concrete sav	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 1,001-2,00 2,001-3,00 3,001-4,00	e Rates: Irk hours 0 work hours 0 work hours 0 work hours n, LAUCT-Z2-4	\$31.70 \$32.74	\$41.12 \$42.68	\$50.53 \$52.61	X X X X X X X D Y
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold i switch man, track man, tugger mar man, winch operator, pipe jacking i air track operator and concrete saw h.p.).	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 1,001-2,00 2,001-3,00 3,001-4,00	e Rates: Irk hours 0 work hours 0 work hours 0 work hours n, LAUCT-Z2-4 n.	\$31.70 \$32.74 \$34.82	\$41.12 \$42.68 \$45.80	\$50.53 \$52.61 \$56.77	X X X X X X X D Y
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold i switch man, track man, tugger mar man, winch operator, pipe jacking i air track operator and concrete saw h.p.).	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 1,001-2,00 2,001-3,00 3,001-4,00 on mucker, bracer man ver and well point man	e Rates: Irk hours 0 work hours 0 work hours 0 work hours n, LAUCT-Z2-4 n. e Rates:	\$31.70 \$32.74 \$34.82	\$41.12 \$42.68 \$45.80	\$50.53 \$52.61 \$56.77	X X X X X X X D Y
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold i switch man, track man, tugger mar man, winch operator, pipe jacking i air track operator and concrete saw h.p.).	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 3,001-4,00 on mucker, bracer man ver and well point man Apprentice 0-1,000 wo	e Rates: Irk hours 0 work hours 0 work hours 0 work hours n, LAUCT-Z2-4 n. e Rates:	\$31.70 \$32.74 \$34.82 \$36.02	\$41.12 \$42.68 \$45.80 \$47.60	\$50.53 \$52.61 \$56.77 \$59.17	X X X X X X X D Y
operator, gunnite man, grout opera dinky man, inside lock tender, pea man, outside lock tender, scaffold i switch man, track man, tugger mar man, winch operator, pipe jacking i air track operator and concrete saw h.p.).	gravel operator, pump man, top signal man, n, utility man, vibrator man, wagon drill and v operator (under 40 Apprentice 0-1,000 wo 1,001-2,00 3,001-4,00 on mucker, bracer man ver and well point man Apprentice 0-1,000 wo 1,001-2,00	e Rates: urk hours 0 work hours 0 work hours 0 work hours n, LAUCT-Z2-4 n. e Rates: urk hours	\$31.70 \$32.74 \$34.82 \$36.02 \$30.78	\$41.12 \$42.68 \$45.80 \$47.60 \$39.74	\$50.53 \$52.61 \$56.77 \$59.17 \$48.69	X X X X X X X D Y

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Classification Name Description			Straight Hourly	Time and a Half	Double Time	Overtime Provision
Class V - Tunnel, shaft and caisson miner, keyboard operator, power knife operator, re or mesh man (e.g. wire mesh, steel mats, d	inforced steel	LAUCT-Z2-5	\$36.28	\$47.99	\$59.69	X X X X X X X X D Y
	Apprentice	Rates:				
	0-1,000 work	k hours	\$30.98	\$40.04	\$49.09	
	1,001-2,000	work hours	\$32.04	\$41.63	\$51.21	
	2,001-3,000	work hours	\$33.10	\$43.22	\$53.33	
	3,001-4,000	work hours	\$35.22	\$46.40	\$57.57	
Class VI - Dynamite man and powder man.		LAUCT-Z2-6	\$36.59	\$48.45	\$60.31	XXXXXXXDY
	Apprentice	Rates:				
	0-1,000 worl	k hours	\$31.21	\$40.38	\$49.55	
	1,001-2,000	work hours	\$32.28	\$41.99	\$51.69	
	2,001-3,000	work hours	\$33.36	\$43.61	\$53.85	
	3,001-4,000	work hours	\$35.51	\$46.84	\$58.15	
Class VII - Restoration laborer, seeding, so planting, cutting, mulching and topsoil gradi restoration of property such as replacing ma wood chips, planter boxes and flagstones.	ng and the	LAUCT-Z2-7	\$28.86	\$36.86	\$44.85	X X X X X X X X D Y
	Apprentice	Rates:				
	0-1,000 work	k hours	\$25.41	\$31.68	\$37.95	
	1,001-2,000	work hours	\$26.10	\$32.72	\$39.33	
	2,001-3,000	work hours	\$26.79	\$33.76	\$40.71	
	3,001-4,000	work hours	\$28.17	\$35.82	\$43.47	
Landscape Laborer						
Landscape Specialist includes air, gas, and equipment operator, skidsteer (or equivalen sprinkler installer on landscaping work whe sodding, planting, cutting, trimming, backfilli grading or maintenance of landscape project	t), lawn e seeding, ng, rough	LLAN-Z1-A	\$28.58	\$39.49	\$50.39	ХХНХХХНDҮ
Sundays paid at time & one half. Holidays time.	paid at double					

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Classification Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provisior
Skilled Landscape Laborer: sma lawn sprinkler installers' tender, n driver when seeding, sodding, pla backfilling, rough grading or main projects occurs Sundays paid at time & one half. time.	naterial mover, truck anting, cutting, trimming, taining of landscape	\$24.36	\$33.16	\$41.95	ХХНХХХНО
Marble, Mosaic, Tile and Terraz	zo Setter				
Marble, Mosaic, Tile and Terrazz M-F	o Setter - 4 10s allowed BR9-12-TL	\$41.45	\$54.28	\$67.10	ННННННО
	Apprentice Rates:				
	0-749 hours	\$32.47	\$40.80	\$49.14	
	750-1499 hours	\$33.75	\$42.72	\$51.70	
	1500-2249 hours	\$35.04	\$44.66	\$54.28	
	2250-2999 hours	\$36.32	\$46.58	\$56.84	
	3000-3749 hours	\$37.60	\$48.50	\$59.40	
	3750-4499 hours	\$38.88	\$50.42	\$61.96	
Operating Engineer					
Class C- Regular equipment oper derrick, scraper dozer, grader, fro mechanic, head grease man, cor hydro excavators	nt end loader, hoist, job	\$49.55	\$63.42	\$77.29	нннннн
Four 10 hour days may be sched or Tuesday-Friday. Work not per Monday-Thursday may be sched	formed due to weather,				
	Apprentice Rates:				
	0 - 999 hours	\$40.33	\$50.04	\$59.75	
	1,000 - 1,999 hours	\$41.71	\$52.11	\$62.51	
	2,000 - 2,999 hours	\$43.10	\$54.19	\$65.29	
	3,000 - 3,999 hours	\$44.49	\$56.28	\$68.07	
	4,000 - 4,999 hours	\$45.88	\$58.37	\$70.85	
	5,000 - 5,999 hours	\$47.26	\$60.43	\$73.61	

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Class D- Air tugger (single drum), material hoist, boiler operator, sweeping machine, winch truck, Bob Cat and similar equipment, elevators (when operated by an operating engineer), and fork truck over 20' lift Four 10 hour days may be scheduled Monday-Thursday	EN-324-BH2D	\$44.75	\$56.22	\$67.69	ННННННОҮ
or Tuesday-Friday. Work not performed due to weather, Monday-Thursday may be scheduled on Friday.					
Class E- Pump 6" or over, well points, freeze systems, boom truck (non-swinging), end dumps and laser/power screed, concrete wire saw 20 h.p. and over and brokk concrete breaker	EN-324-BH2E	\$44.15	\$55.32	\$66.49	ННННННОҮ
Four 10 hour days may be scheduled Monday-Thursday or Tuesday-Friday. Work not performed due to weather, Monday-Thursday may be scheduled on Friday.					
Class F- Air compressor, welder, generators, conveyors, pumps under 6", Grease man, and fork truck 20' or less lift	EN-324-BH2F	\$41.70	\$51.65	\$61.59	ННННННРҮ
Four 10 hour days may be scheduled Monday-Thursday or Tuesday-Friday. Work not performed due to weather, Monday-Thursday may be scheduled on Friday.					
Class G- Oiler, fireman and heater operator	EN-324-BH2G	\$40.00	\$49.10	\$58.19	ННННННРҮ
Four 10 hour days may be scheduled Monday-Thursday or Tuesday-Friday. Work not performed due to weather, Monday-Thursday may be scheduled on Friday.					
Class A- Crane w/ main Boom & Jib 220' or longer	EN-OSA	\$50.90	\$65.45	\$79.99	ННННННРҮ
Four 10 hour days may be scheduled Monday-Thursday or Tuesday-Friday. Work unabled to be performed due to weather, Monday-Thursday may be scheduled on Friday.					
Class A- Crane w/ main Boom & Jib 300' or longer	EN-OSA3	\$52.40	\$67.70	\$82.99	ННННННУ
Four 10 hour days may be scheduled Monday-Thursday or Tuesday-Friday. Work unabled to be performed due to weather, Monday-Thursday may be scheduled on Friday.					
Class A- Crane w/ main Boom & Jib 400' or longer	EN-OSA4	\$53.90	\$69.95	\$85.99	Н Н Н Н Н Н Н D Y
Four 10 hour days may be scheduled Monday-Thursday or Tuesday-Friday. Work not performed due to weather, Monday-Thursday may be scheduled on Friday.					

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<u>Classification</u> Name Descrip	tion			Straight Hourly	Time and a Half	I Double Time	Overtime Provision
Class B- Crane Ope longer, tower crane		nain boom and jib 140' or ne, whirley derrick	EN-OSB	\$50.65	\$65.07	\$79.49	ННННННО
or Tuesday-Friday.	Work unabl	duled Monday-Thursday ed to be performed due to y be scheduled on Friday.					
Operating Enginee	er - DIVER						
Diver/Wet Tender/T	ender/Rov F	Pilot/Rov Tender	GLF D	\$52.80	\$79.20	\$105.60	ННННННО
Operating Enginee	er - Marine (Construction					
Diver/Wet Tender, I	Engineer (hy	draulic dredge)	GLF-1	\$65.00	\$84.85	\$104.70	ХХНННННО
Holiday pay= \$124. Make up day allov	•	wages & fringes					
Subdivision of c	ounty	all Great Lakes, islands th	erein, & connecting	& tributary waters			
	Assistant Eng	on or over Tug Operator, gineer (hydraulic dredge), iver Tender	GLF-2	\$63.50	\$82.60	\$101.70	ХХНННННО
Holiday pay = \$120	.80 per hour	, wages & fringes					
Make up day allow	ved						
Subdivision of c	<u>ounty</u>	All Great Lakes, islands th	nerein, & connecting	& tributary waters			
Friction, Lattice Boo	m or Crane	License Certification	GLF-2B	\$64.50	\$84.10	\$103.70	ХХННННН
Holiday pay = \$123	.30						
Make up day allow	ved						
Subdivision of c	<u>ounty</u>	All Great Lakes, islands, t	herein, & connecting	3 & tributary waters			
of Crane (over 50 to	on capacity)	hineryman, Maintenance or Backhoe (115,000 lbs Loader, Dozer on Barge,	GLF-3	\$59.30	\$76.30	\$93.30	ХХНННННО
Holiday pay = \$110	.30 per hour	, wages & fringes					
Make up day allow	ved						
Subdivision of c	<u>ounty</u>	All Great Lakes, islands th	nerein, & connecting	& tributary waters			
equipment units or Tug Engineer, & Cr	more), Off R ane Mainten	chineryman/Fireman), (4 oad Trucks, Deck Hand, ance 50 ton capacity and or less, Assistant Tug	GLF-4	\$53.60	\$67.75	\$81.90	ХХНННННО
Holiday pay = \$96.0)5 per hour,	wages & fringes					
Make up day allow	wed	-					

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<u>Classification</u> Name Description			Straight Hourly	Time and a Half	Double Time	Overtime Provisio
Operating Engineer St	teel Work					
Forklift, 1 Drum Hoist		EN-324-ef	\$58.16	\$76.37	\$94.58	ннонннор
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 120' boom or	longer	EN-324-SW120	\$60.86	\$80.42	\$99.98	ннонннор
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 120' boom or	longer w/ Oiler	EN-324-SW120-O	\$61.86	\$81.92	\$101.98	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 140' boom or	longer	EN-324-SW140	\$62.04	\$82.19	\$102.34	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 140' boom or	longer W/ Oiler	EN-324-SW140-O	\$63.04	\$83.69	\$104.34	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Boom & Jib 220' or long	jer	EN-324-SW220	\$62.31	\$82.60	\$102.88	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 220' boom or	longer w/ Oiler	EN-324-SW220-O	\$63.31	\$84.10	\$104.88	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Boom & Jib 300' or long	jer	EN-324-SW300	\$63.81	\$84.85	\$105.88	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 300' boom or	longer w/ Oiler	EN-324-SW300-O	\$64.81	\$86.35	\$107.88	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Boom & Jib 400' or long	jer	EN-324-SW400	\$65.31	\$87.10	\$108.88	ннонннос
Make up day allowed		vith Friday makeup day because of ba	d weather			
Crane w/ 400' boom or	longer w/ Oiler	EN-324-SW400-O	\$66.31	\$88.60	\$110.88	ннонннос
Make up day allowed	Comment					

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<u>Classification</u> Name Description			Straight Hourly	Time and a Half	I Double Time	Overtime Provision
Crane Operator, Job Me	chanic, 3 Drum Hoist & Excavate	or EN-324-SWCO	\$60.50	\$79.88	\$99.26	ННОНННОО
Make up day allowed	Comment					
	4 10s allowed M-Th with Friday r		ad weather			
	Apprentice	Rates:				
	0-999 hours		\$47.87	\$61.43	\$75.00	
	1,000-1,999	hours	\$49.81	\$64.35	\$78.88	
	2,000-2,999	hours	\$51.74	\$67.24	\$82.74	
	3,000-3,999	hours	\$53.68	\$70.15	\$86.62	
	4,000-4,999	hours	\$55.62	\$73.07	\$90.50	
	5,000 hours		\$57.56	\$75.97	\$94.38	
Crane Operator w/ Oiler		EN-324-SWCO-O	\$61.50	\$81.38	\$101.26	ННОНННОО
Make up day allowed	Comment 4 10s allowed M-Th with Friday r	makeup day because of b	ad weather			
Compressor or Welder C	Operator	EN-324-SWCW	\$53.15	\$68.86	\$84.56	ННОНННОО
Make up day allowed	Comment 4 10s allowed M-Th with Friday r	makeup day because of b	ad weather			
Hoisting Operator, 2 Dru	m Hoist, & Rubber Tire Backhoe	EN-324-SWHO	\$59.86	\$78.92	\$97.98	ННОНННОО
Make up day allowed	Comment 4 10s allowed M-Th with Friday r	makeup day because of b	ad weather			
Oiler		EN-324-SWO	\$51.64	\$66.59	\$81.54	ННОНННОО
Make up day allowed	Comment 4 10s allowed M-Th with Friday r	makeup day because of b	ad weather			
Tower Crane & Derrick v first level	vhere work is 50' or more above	EN-324-SWTD50	\$61.59	\$81.52	\$101.44	ННОНННОО
Make up day allowed	Comment 4 10s allowed M-Th with Friday r	makeup day because of b	ad weather			
Tower Crane & Derrick 5 station is 50' or more abo	50' or more w/ Oiler where work ove first level	EN-324-SWTD50-O	\$62.59	\$83.02	\$103.44	ННОНННОО

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Classification Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Operating Engineer Undergrou	nd				
Class I Equipment	EN-324A1-UC1	\$51.74	\$66.98	\$82.22	нннннн
	Apprentice Rates:				
	0-999 hours	\$41.79	\$52.45	\$63.12	
	1,000-1,999 hours	\$43.32	\$54.75	\$66.18	
	2,000-2,999 hours	\$44.84	\$57.03	\$69.22	
	3,000-3,999 hours	\$46.36	\$59.31	\$72.26	
	4,000-4,999 hours	\$47.89	\$61.61	\$75.32	
	5,000-5,999 hours	\$49.41	\$63.89	\$78.36	
Class II Equipment	EN-324A1-UC2	\$47.01	\$59.89	\$72.76	нннннн
Class III Equipment	EN-324A1-UC3	\$46.28	\$58.79	\$71.30	НННННН
Class IV Equipment	EN-324A1-UC4	\$45.71	\$57.94	\$70.16	нннннн
Master Mechanic	EN-324A1-UMM	\$51.99	\$67.81	\$83.63	нннннр
Painter					
Painter the regular weekly work schedule ten (10) hour days on consecutive Saturday		\$34.15	\$45.58	\$57.00	ХХНХХХНД
The regular weekly work schedul on consecutive days, Monday thr day may be scheduled for work n inclement weather.	u Saturday. A make-up				
Make up day allowed					
	Apprentice Rates:				
	1st year	\$22.72	\$28.43	\$34.14	
	2nd year, 1st 6 months	\$25.01	\$31.86	\$38.72	
	2nd year, 2nd 6 months	\$27.30	\$35.30	\$43.30	
	3rd year, 1st 6 months	\$29.58	\$38.72	\$47.86	

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<u>Classification</u> Name Description			Straight Hourly	Time and a Half	Double Time	Overtime Provisio
Pipe and Manhole Rehab						
General Laborer for rehab work or no cctv work-top man, scaffold man, CC vac assistant	ormal cleaning and TV assistant, jetter-	TM247	\$27.20	\$36.70		нннннн
Tap cutter/CCTV Tech/Grout Equipm driver and operator of CCTV; groutin cutting equipment		TM247-2	\$31.70	\$43.45		нннннн
CCTV Technician/Combo Unit Opera operator of cctv unit or combo unit in normal cleaning and televising work		TM247-3	\$30.45	\$41.57		нннннн
Boiler Operator: unit driver and oper heater units and all ancillary equipme		TM247-4	\$32.20	\$44.20		нннннн
Combo Unit driver & Jetter-Vac Oper	ator	TM247-5	\$32.20	\$44.20		нннннн
Pipe Bursting & Slip-lining Equipmen	t Operator	TM247-6	\$33.20	\$45.70		нннннн
Plasterer						
Plasterer - 4 10s allowed M-F		BR9-12-PL	\$43.56	\$56.96	\$70.35	нннннн
	Apprentice	Rates:				
	0-749 hours		\$34.18	\$42.89	\$51.59	
	750-1499 ho	ours	\$35.52	\$44.89	\$54.27	
	1500-2249 h	ours	\$36.86	\$46.91	\$56.95	
	2250-2999 h	ours	\$38.20	\$48.91	\$59.63	
	3000-3749 h	ours	\$39.54	\$50.93	\$62.31	
	3750-4499 h	ours	\$40.88	\$52.93	\$64.99	
Plasterer		PL16-3	\$36.61	\$48.48	\$60.34	нннннн
i lastoror	Apprentice	Rates:				
	Apprentice 1st year	Rates:	\$28.30	\$36.01	\$43.72	
		Rates:	\$28.30 \$30.68	\$36.01 \$39.58	\$43.72 \$48.48	

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<u>Classification</u> Name Description			Straight Hourly	Time and a Half	l Double Time	Overtime Provision
Plumber & Pipefitter						
Plumber & Pipefitter		PL-370	\$51.21	\$76.44	\$101.67	нннннн
Make up day allowed						
	Apprentice I	Rates:				
	1st 6 months		\$23.82	\$35.52	\$47.21	
	2nd 6 months	5	\$25.51	\$38.05	\$50.59	
	3rd 6 months	;	\$32.21	\$48.10	\$63.99	
	4th 6 months		\$33.91	\$50.65	\$67.39	
	5th 6 months		\$35.61	\$53.20	\$70.79	
	6th 6 months		\$37.31	\$55.75	\$74.19	
	7th 6 months		\$39.00	\$58.28	\$77.57	
	8th 6 months		\$40.70	\$60.84	\$80.97	
	9th 6 months		\$42.40	\$63.38	\$84.37	
	final 6 month	s	\$44.10	\$65.94	\$87.77	
Roofer						
Commercial Roofer		RO-149-MMA	\$38.61	\$50.72	\$62.82	нннннн
Straight time is not to exceed ter forty (40) hours per week.	(10) hours per day or					
Make up day allowed						
	Apprentice I	Rates:				
	Apprentice 1		\$23.23	\$27.64	\$32.06	
	Apprentice 2		\$25.14	\$30.51	\$35.88	
	Apprentice 3		\$27.09	\$33.44	\$39.78	
	Apprentice 4		\$29.00	\$36.30	\$43.60	
	Apprentice 5		\$30.92	\$39.18	\$47.44	
	Apprentice 6		\$32.83	\$42.04	\$51.26	
Sewer Relining						
Class I-Operator of audio visual remote in-ground cutter and othe conjunction with CCTV system.		SR-I	\$42.76	\$57.75	\$72.74	нннннн

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Sheet Metal Worker					
Sheet Metal Worker 4 10s allowed as consecutive day	SHM-7-4 s, M-Th or T-F	\$49.90	\$64.16	\$78.41	нннхнннд
	Apprentice Rates:				
	1st 6 months	\$25.76	\$32.17	\$38.59	
	2nd 6 months	\$27.19	\$34.32	\$41.45	
	3rd 6 months	\$28.61	\$36.45	\$44.29	
	4th 6 months	\$30.04	\$38.59	\$47.15	
	5th 6 months	\$39.47	\$48.74	\$58.00	
	6th 6 months	\$40.90	\$50.88	\$60.86	
	7th 6 months	\$42.32	\$53.01	\$63.70	
	8th 6 months	\$43.75	\$55.16	\$66.56	
Sprinkler Fitter					
Sprinkler Fitter	SP 669	\$46.51	\$61.99	\$77.47	нннннн
Make up day allowed					
	Apprentice Rates:				
	Class 1 & 2	\$23.44	\$31.31	\$39.17	
	Class 3	\$29.35	\$37.75	\$46.15	
	Class 4	\$30.93	\$40.12	\$49.31	
	Class 5	\$35.50	\$45.47	\$55.45	
	Class 6	\$37.07	\$47.83	\$58.59	
	Class 7	\$38.65	\$50.20	\$61.75	
	Class 8	\$40.22	\$52.55	\$64.89	
	Class 9	\$41.79	\$54.91	\$68.03	
	Class 10	\$43.36	\$57.27	\$71.17	

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<u>Classification</u> Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Tile, Marble and Terrazzo Finisher					
Finisher - 4 10s allowed M-F	BR9-12-TF	\$35.10	\$45.78	\$56.46	нннннн
	Apprentice Rates:				
	0-749 hours	\$27.62	\$34.56	\$41.50	
	750-1499 hours	\$28.69	\$36.16	\$43.64	
	1500-2249 hours	\$29.76	\$37.77	\$45.78	
	2250-2999 hours	\$30.83	\$39.38	\$47.92	
	3000-3749 hours	\$31.90	\$40.98	\$50.06	
	3750-4499 hours	\$32.96	\$42.57	\$52.18	
Truck Driver					
on all trucks of 8 cubic yard capacity or l		\$41.92	\$37.85		ннннннн
trucks of 8 cubic yard capacity or over, ta trucks, transit mix and semis, euclid type double bottoms and low boys)	andem axle e equipment,				
trucks, transit mix and semis, euclid type	equipment,	\$41.30	\$38.00		нннннн
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o	equipment, ver TM-RB1A				
trucks, transit mix and semis, euclid type double bottoms and low boys)	equipment,	\$41.30	\$38.00 \$38.23		
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o on euclid type equipment	equipment, ver TM-RB1A TM-RB1B				
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o on euclid type equipment Make up day allowed	equipment, ver TM-RB1A TM-RB1B			\$54.25	ннннннн
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o on euclid type equipment Make up day allowed Underground Laborer Open Cut, Clas	equipment, ver TM-RB1A TM-RB1B s I	\$41.45	\$38.23	\$54.25	ннннннн
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o on euclid type equipment Make up day allowed Underground Laborer Open Cut, Clas	equipment, ver TM-RB1A TM-RB1B sl LAUC-Z3-1	\$41.45	\$38.23	\$54.25	ннннннн
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o on euclid type equipment Make up day allowed Underground Laborer Open Cut, Clas	equipment, ver TM-RB1A TM-RB1B s I LAUC-Z3-1 Apprentice Rates:	\$41.45	\$38.23		н н н н н н н н н н н н н н н н н н х х х х
trucks, transit mix and semis, euclid type double bottoms and low boys) of all trucks of 8 cubic yard capacity or o on euclid type equipment Make up day allowed Underground Laborer Open Cut, Clas	e equipment, ver TM-RB1A TM-RB1B s I LAUC-Z3-1 Apprentice Rates: 0-1,000 work hours	\$41.45 \$33.61 \$29.08	\$38.23 \$43.93 \$37.14	\$45.19	ннннннн

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man, well point man, marhole, headwall, seawall, breakwall, builder and lence erector. Apprentice Rates: 529.18 \$37.29 \$45.39 0-1,000 work hours \$29.18 \$37.29 \$45.39 545.39 1,001-2,000 work hours \$30.10 \$38.67 \$47.23 2,001-3,000 work hours \$31.01 \$40.04 \$49.05 3,001-4,000 work hours \$32.84 \$42.78 \$52.71 Underground Laborer Open Cut, Class II Air, gasoline and electric tool operator, vibrator operator, LAUC-Z3.3 \$33.87 \$44.32 \$54.77 \$X X X X X X X X D Y diverse pump man, tarkettle operator, bracers, rodder, pipe jacking, and bioring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man. \$29.27 \$37.42 \$45.57 Underground Laborer Open Cut, Class II Apprentice Rates: 0-1,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$31.10 \$40.92 \$20.92 0-1,000 work hours \$32.95 \$42.94 \$52.93 0-1,000 work hours \$32.95 \$42.94 \$52.93 0-1,000 work hours <	N	Classification ame Description			Straight Hourly	Time and a Half	Double Time	Overtime Provision
man, well point man, manhole, headwall, breakwall, Color Do 1 Kinet Kin	U	Inderground Laborer Open Cut, Class II						
0-1,000 work hours \$29.18 \$37.29 \$45.39 1,001-2,000 work hours \$30.10 \$38.67 \$47.23 2,001-3,000 work hours \$31.01 \$40.04 \$49.05 3,001-4,000 work hours \$32.84 \$42.78 \$52.71 Underground Laborer Open Cut, Class III Air, gasoline and electric tool operator, vibrator operator, LAUC-Z3-3 \$33.87 \$44.32 \$54.77 \$X X X X X X X X X D M Airliers, pump man, tar kettle operator, welder, pipe jacking and bjoring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man. \$29.27 \$37.42 \$45.57 Lapprentice Rates: 0-1,000 work hours \$29.27 \$37.42 \$45.57 1,001-2,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV LAUC-Z3-4 \$33.92 \$44.40 \$54.87 XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	m bi	nan, well point man, manhole, headwall and uilder, guard rail builders, headwall, seawal	l catch basin	LAUC-Z3-2	\$33.75	\$44.14	\$54.53	XXXXXXXX
1,001-2,000 work hours \$30.10 \$38.67 \$47.23 2,001-3,000 work hours \$31.01 \$40.04 \$49.05 3,001-4,000 work hours \$32.84 \$42.78 \$52.71 Underground Laborer Open Cut, Class III Air, gasoline and electric tool operator, ibrator operator, LAUC-Z3-3 \$33.87 \$44.32 \$54.77 \$XXXXXXXXD M drillers, pump man, tar kettle operator, pipe jacking and oboring man, welder, pipe jacking and boring man, welder, pipe jacking and boring man, welder, pipe jacking and boring man, and directional boring man. \$44.32 \$45.77 \$XXXXXXXXD M Apprentice Rates: 0-1,000 work hours \$29.27 \$37.42 \$45.57 1,001-2,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$31.11 \$40.18 \$49.25 1,001-2,000 work hours \$31.11 \$40.18 \$49.25 2,001-3,000 work hours \$33.92 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV Undergr			Apprentice I	Rates:				
2,001-3,000 work hours \$31.01 \$40.04 \$49.05 3,001-4,000 work hours \$32.84 \$42.78 \$52.71 Underground Laborer Open Cut, Class III Air, gasoline and electric tool operator, vibrator operator, LAUC-Z3-3 \$33.87 \$44.32 \$54.77 X X X X X X X X D M dvillers, pump man, tar kettle operator, bracers, rodder, reinforcod steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man. \$32.97 \$37.42 \$45.57 Apprentice Rates: 0-1,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$31.11 \$40.18 \$49.25 3,001-4,000 work hours \$31.11 \$40.18 \$49.25 3,001-4,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV KX X X X X X X X X X X X X X X X X X X			0-1,000 work	hours	\$29.18	\$37.29	\$45.39	
3,001-4,000 work hours\$32.84\$42.78\$52.71Underground Laborer Open Cut, Class IIAir, gasoline and electric tool operator, vibrator operator, LAUC-Z3-3 dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and oncorete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man.\$33.87\$44.32\$44.57\$X X X X X X X X D NApprentice Rates: 0-1,000 work hours\$29.27\$37.42\$45.57\$X4.54\$X4.540.1,000 work hours\$29.27\$37.42\$45.57\$X4.54\$X4.540.1,000 work hours\$30.19\$38.80\$47.41\$X4.54\$X4.540.1,000 work hours\$31.11\$40.18\$49.25\$X4.54\$X4.54\$X4.540.1,000 work hours\$32.95\$42.94\$52.93\$X5.54\$X5.550.1,000 work hours\$33.92\$44.40\$54.87\$X5.55\$X5.550.1,000 work hours\$29.21\$37.88\$45.65\$X5.550.1,000 work hours\$29.21\$33.92\$44.40\$54.87\$X5.550.1,000 work hours\$29.31\$37.88\$45.65\$X5.550.1,000 work hours\$29.31\$37.88\$45.65			1,001-2,000	work hours	\$30.10	\$38.67	\$47.23	
Underground Laborer Open Cut, Class III Air, gasoline and electric tool operator, vibrator operator, lAUC-Z3-3 drillers, pump man, tar kettle operator, bracers, rodder, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man. \$33.87 \$44.32 \$54.77 X X X X X X X X D M Apprentice Rates: 0-1,000 work hours \$29.27 \$37.42 \$45.57 1,001-2,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X D M Apprentice Rates: 0-1,000 work hours \$33.92 \$44.40 \$54.87 X X X X X X X X D M			2,001-3,000	work hours	\$31.01	\$40.04	\$49.05	
Air, gasoline and electric tool operator, vibrator operator, LAUC-Z3-3 drillers, pump man, tar kettle operator, bracers, rodder, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking 			3,001-4,000	work hours	\$32.84	\$42.78	\$52.71	
drillers, pump man, tar kettle operator, bracers, rödder, reinforced steel or mesh man (e.g. wire mesh, steel mats, dowel bars, etc.), cement finisher, welder, pipe jacking and boring man, wagon drill and air track operator and concrete saw operator (under 40 h.p.), windlass and tugger man, and directional boring man. Apprentice Rates: 0-1,000 work hours \$29.27 \$37.42 \$45.57 1,001-2,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$31.11 \$40.18 \$49.25 3,001-4,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X X D N Apprentice Rates: 0-1,000 work hours \$29.21 \$37.48 \$45.65	U	Inderground Laborer Open Cut, Class III						
0-1,000 work hours \$29.27 \$37.42 \$45.57 1,001-2,000 work hours \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$31.11 \$40.18 \$49.25 3,001-4,000 work hours \$32.95 \$42.94 \$52.93 Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X D M	di re di ai co	rillers, pump man, tar kettle operator, brace einforced steel or mesh man (e.g. wire mes owel bars, etc.), cement finisher, welder, pi nd boring man, wagon drill and air track op oncrete saw operator (under 40 h.p.), windl	ers, rodder, h, steel mats, pe jacking erator and		ψ55.07	ψ++.32	ψυτ. ΓΓ	
1,001-2,000 work hous \$30.19 \$38.80 \$47.41 2,001-3,000 work hours \$31.11 \$40.18 \$49.25 3,001-4,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X D Y Apprentice Rates: 0-1,000 work hours \$29.31 \$37.48 \$45.65			Apprentice I	Rates:				
2,001-3,000 work hours \$31.11 \$40.18 \$49.25 3,001-4,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X D N Apprentice Rates: 0-1,000 work hours \$29.31 \$37.48 \$45.65			0-1,000 work	hours	\$29.27	\$37.42	\$45.57	
3,001-4,000 work hours \$32.95 \$42.94 \$52.93 Underground Laborer Open Cut, Class IV Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X X D N Apprentice Rates: 0-1,000 work hours \$29.31 \$37.48 \$45.65			1,001-2,000	work hous	\$30.19	\$38.80	\$47.41	
Underground Laborer Open Cut, Class IV Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X X D N Apprentice Rates: 0-1,000 work hours \$29.31 \$37.48 \$45.65			2,001-3,000	work hours	\$31.11	\$40.18	\$49.25	
Trench or excavating grade man. LAUC-Z3-4 \$33.92 \$44.40 \$54.87 X X X X X X X X D N Apprentice Rates: 0-1,000 work hours \$29.31 \$37.48 \$45.65			3,001-4,000	work hours	\$32.95	\$42.94	\$52.93	
Apprentice Rates: \$29.31 \$37.48 \$45.65	U	Inderground Laborer Open Cut, Class IV						
0-1,000 work hours \$29.31 \$37.48 \$45.65	Т	rench or excavating grade man.		LAUC-Z3-4	\$33.92	\$44.40	\$54.87	XXXXXXXDY
			Apprentice I	Rates:				
1 001 2 000 work hours \$20.32 \$20.96 \$47.40			0-1,000 work	hours	\$29.31	\$37.48	\$45.65	
1,001-2,000 work hours \$30.23 \$38.86 \$47.49			1,001-2,000	work hours	\$30.23	\$38.86	\$47.49	
2,001-3,000 work hours \$31.15 \$40.24 \$49.33			2,001-3,000	work hours	\$31.15	\$40.24	\$49.33	
3,001-4,000 work hours \$33.00 \$43.02 \$53.03			3,001-4,000	work hours	\$33.00	\$43.02	\$53.03	

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Classification Name Description		Straight Hourly	Time and a Half	Double Time	Overtime Provision
Underground Laborer Open Cu	ıt, Class V				
Pipe Layer	LAUC-Z3-5	\$34.06	\$44.61	\$55.15	X X X X X X X D
	Apprentice Rates:				
	0-1,000 work hours	\$29.41	\$37.64	\$45.85	
	1,001-2,000 work hours	\$30.34	\$39.03	\$47.71	
	2,001-3,000 work hours	\$31.27	\$40.42	\$49.57	
	3,001-4,000 work hours	\$33.13	\$43.22	\$53.29	
Underground Laborer Open Co	ıt, Class VI				
Grouting man, top man assistant operations and all other operatio closed circuit television inspectio relining work and the installation pipe & appurtenances	ns in connection with n, pipe cleaning and pipe	\$31.36	\$40.56	\$49.75	X X X X X X X D
	Apprentice Rates:				
	0-1,000 work hours	\$27.39	\$34.60	\$41.81	
	1,001-2,000 work hours	\$28.18	\$35.79	\$43.39	
	2,001-3,000 work hours	\$28.98	\$36.99	\$44.99	
	3,001-4,000 work hours	\$30.57	\$39.38	\$48.17	
Underground Laborer Open Cu	Inderground Laborer Open Cut, Class VII				
Restoration laborer, seeding, soo mulching and topsoil grading and property such as replacing mail b planter boxes, flagstones etc.	the restoration of	\$28.51	\$36.28	\$44.05	X X X X X X X D
	Apprentice Rates:				
	0-1,000 work hours	\$25.25	\$31.40	\$37.53	
	1,001-2,000 work hours	\$25.90	\$32.37	\$38.83	
	2,001-3,000 work hours	\$26.56	\$33.36	\$40.15	

APPENDIX 5 – SAMPLE CONTRACT

(FUNDING SOURCE) Contract for <u>DEMOLITION AND DISPOSAL OF RESIDENTIAL/COMMERCIAL STRUCTURES</u> SERVICES — BID#: LB- (RFP NUMBER) (BID LIST NUMBER)

THIS CONTRACT made and entered into <u>(MONTH) (DAY), 2015</u>, between <u>(NAME OF BUSINESS ENTITY)</u>. hereinafter referred to as the "Contractor" conduction business at <u>(BUSINESS ADDRESS)</u>, and the Owner, GENESEE COUNTY LAND BANK (GCLBA) conducting business at 452 S. Saginaw Street – 2nd Floor, Flint, Michigan 48502, hereinafter referred to as "GCLBA".

GCLBA desires to engage the Contractor to perform the <u>(RFP NAME AND SCOPE)</u> Services in the City of Flint and Genesee County, Michigan as an independent contractor and not as an employee(s) of and for the GCLBA. This Contract is intended to define the business relationship between the two entities with regards to general demolition and disposal services undertaken for the <u>(FUNDING SOURCE) Program.</u>

REPRESENTATIVES OF GCLBA AND CONTRACTOR. Douglas K. Weiland, Executive Director of the GCLBA has the authority to act as a liaison for the administration of this contract on behalf of the GCLBA, <u>(NAME OF AUTHORIZED</u> <u>BUSINESS REPRESENTATIVE</u>), has the authority to act on behalf of the Contractor, <u>(NAME OF BUSINESS ENTITY)</u>.

AUTHORITY TO ENTER INTO A CONTRACT. The GCLBA recently received funding from the (DESCRIPTION OF FUNDING) for demolition through the (FUNDING ORGANIZATIONS).

TERM OF CONTRACT. The respective duties and obligations of the contracting parties is for a period beginning <u>(MONTH) (DAY), 2015</u>. The end date of term of service will be determined by the scope of services, but not later than <u>(MONTH) (DAY), 2015</u>, unless agree to in writing by both parties. At which time payment in full by the GCLBA will be made in full to the Contractor. **Contractors must provide updated work schedules to the GCLBA. Contractor must submit all required submittal documents as listed in Request for Proposal, Scope of Work (Attachment B) and Payment Request Packet (Attachment D).**

All demolition work must be completed and GCLBA inspections requested by (MONTH) (DAY), 2015, and payment requests must be submitted to the Demolition Program Manager by no later than (MONTH) (DAY), 2015. All final grade work must be completed and final paperwork and payment requests must be submitted to the Demolition Program Manager by (MONTH) (DAY), 2015.

LIABILITY AND WORKERS COMPENSATION INSURANCE. Commercial General Liability with limits not less than including Premises/operations \$1,000,000 per occurrence with \$2,000,000 aggregate; Workers Compensation Statutory limits of Michigan; Employers Liability with limits \$100,000 accident/disease, \$500,000 policy limit, disease; Automobile Liability with limits not less than \$1,000,000 combined single limit each accident-owned, hired, non-owned; for projects involving the removal and disposal of waste or storage tanks the Contractor shall maintain Pollution Liability insurance with limits no less than \$1,000,000 per loss/\$1,000,000 aggregate; and, Professional Liability with limits not less than \$1,000,000 including errors & omissions \$200,000 per occurrence \$600,000 in aggregate for Medical Malpractice must be carried by the Contractor during the term of contract and the GCLBA must be named as second insured on all certificates of insurance. If insurance information changes the Contractor must notify the GCLBA immediately of the change.

ORDER TO PROCEED. An Order To Proceed will be issued within 10 days of this contract execution upon receipt an original copy of Payment and Performance Bond and project work schedule.

SECTION 3. The Contractor will comply with the **Section 3 Clause** as described in **Attachment A.** By signing this contract the Contractor is providing a Statement of Assurances that they will comply with these Federal Contract Provisions and other requirements set forth in this contract.

SCOPE OF WORK. The Contractor will provide labor and/or materials for the work as outlined on the contract/estimate proposal dated (MONTH) (DAY), 2015. All demolition and <u>FINAL GRADE</u> work must be completed by (MONTH) (DAY), 2015 and payment requests must be submitted to the Demolition Program Manager by no later than (MONTH) (DAY), 2015.

FEES AND PAYMENT. The GCLBA will pay the Contractor a fixed price not to exceed-<u>(CONTRACT NUMBER &</u> <u>AMOUNT)</u> in (FUNDING SOURCE) Program funds. The GCLBA will not pay for services beyond the available in the (FUNDING SOURCE) Program or the contract amount, unless agreed to, in advance and in writing, by both parties to this Contract. Total contract amount may be reduced by GCLBA for project costs not approved or completed. Payment to Contractor will be made by the GCLBA in 30 to 60 days upon receiving approved and complete payment request packet for each project/address and all required submittals (invoice, sworn statement, lien waivers, manifests, etc.). All payments requests must include all required documents as listed in the ATTACHMENT B – Scope of Work Section 4.0, Part C and ATTACHMENT C. **EQUAL EMPLOYMENT OPPORTUNITY.** During the performance of this contract, the contractor (Contractor) agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for Employment because of race, creed, color, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, creed, color, or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, creed, color, or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining Contract or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of Paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of Sept. 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the contracting agency may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, That in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the contracting agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

RIGHTS TO INVENTIONS Made Under a Contract or Contract. Contracts or Contracts for the performance of experimental, developmental, or research work shall provide for the rights of the Federal Government and the recipient in any resulting invention in accordance with 37 CFR part 401, "Rights to Invention Made by Nonprofit Organizations and Small Business Firms. Under Government Grants, Contracts and Cooperative Contracts," and any implementing regulations issued by the awarding agency.

CLEAN AIR ACT (42 U. S.C. 7401 et seq.) and the **FEDERAL WATER POLLUTION CONTROL ACT** (33 U.S.C. 1251 et seq.), as amended. For contracts and subcontracts of amounts in excess of \$100,000 the contractor or subcontractor shall comply with all applicable standards, orders, or regulations issued pursuant to the Clean Air Act (42 U.S.C 7401 et seq.). Violations are reported to the Federal awarding agency and the Regional Agency (EPA).

BYRD ANTI-LOBBYING AMENDMENT (31 U.S.C. 1352). Contractors who apply or bid for an award of \$100,000 or more shall file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal from tier to tier up to the recipient.

DEBARMENT AND SUSPENSION (Executive Orders 12549 and 12689). No contract shall be made to parties listed on the General Services Administration's List of Parties Excluded from Federal Procurement or Non-procurement Programs in accordance with E.O.s 12549 and 12689, "Debarment and Suspension," as set forth at 24 CFR part 24. This list contains the names of parties debarred, suspended, or otherwise excluded by agencies, and contractors declared ineligible under statutory or regulatory authority other than E.O. 12549. Contractors with awards that exceed the small purchase threshold shall provide the required certification regarding its exclusion status and that of its principal employees.

FAIR HOUSING. Contractors must comply with the Fair Housing Act Title VIII of the Civil Rights Act of 1968 as amended and the Genesee County Land Bank Authority Fair Housing Policy as stated: "Equal housing opportunity for all persons, regardless of race, color, national origin, religion, age, sex, familial status, marital status, sexual

orientation or disability, is a fundamental policy of the Genesee County Land Bank Authority (GCLBA). GCLBA is committed to diligence in assuring equal housing opportunity and non-discrimination to all aspects of its housing activities. As a county governmental authority undertaking housing activities, GCLBA has an ethical as well as legal imperative to work aggressively to ensure that GCLBA housing programs comply fully with all local, state and federal fair housing laws."

INTEREST OF THE GCLBA AND LOCAL PUBLIC OFFICIALS. The undersigned certifies, to the best of his or her knowledge and belief that: no member of the governing body of the GCLBA who exercises any functions or responsibilities in connection with the administration of the Hardest Hit Fund (HHF) or Michigan Blight Elimination Grant (MBEG) Programs, no other officer or employee or public official of the GCLBA, who exercises such functions or responsibilities, and no member of the City Government of the City of Flint, shall have any interest, direct or indirect, in this Contract. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of the GCLBA.

RETENTION AND ACCESS TO RECORDS. The Contractor shall maintain for a period of five (5) years all supporting documents, financial records, statistical records and all other records pertinent to this contract. GCLBA, the State of Michigan, U.S. Department of Treasury, the Comptroller General of the United States, or any of their duly authorized representatives as well as any and all relevant governmental agencies shall have access to any books, documents, papers and records of the Contractor which are pertinent to a specific program for the purpose of making audits, examinations, excerpts, and transcriptions.

ARBITRATION CLAUSE. In the event that any dispute arises over the performance, within eighteen (18) months of the end of the contract, interpretation or application of this Contract or alleged breach of it, the matter shall be submitted to arbitration. Each of the parties shall select one person, excluding relatives, as a member for the arbitration panel. The two persons so selected shall choose a third person to chair the arbitration panel. If the two arbitrates cannot agree on a third arbitrator, the GCLBA shall select a third member from a list of persons willing to arbitrate such disputes. The three member arbitration panel shall promptly meet and hear the dispute and shall expeditiously decide the matter upon a simple majority in writing. The decision of the arbitration panel shall be binding upon the parties and shall be enforceable by any court of competent jurisdiction. The GCLBA shall have the power to disburse from funds held by it based upon the arbitrators' written decision.

LIQUIDATED DAMAGES. CONTRACTOR and the GCLBA recognize that time is of the essence for this Contract and that GCLBA will suffer financial loss if the Work is not completed within the times specified in the Term of Contract, plus any extensions thereof allowed in accordance of Contract. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by GCLBA if the Work is **not reasonably** completed on time. Accordingly, instead of requiring any such proof, GCLBA and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty), CONTRACTOR shall pay GCLBA \$250.00 for each day that expires after the time specified in Notices to Proceed, as well as, Term of Contract for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by GCLBA, CONTRACTOR shall pay GCLBA \$250.00 for each day that expires after the time specified in Notices to Proceed, as well as, Term of Contract for Substantial Completion until the Work is substantially complete. After Substantial Completion, if CONTRACTOR shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by GCLBA, CONTRACTOR shall pay GCLBA \$250.00 for each day that expires after the time specified in the Term of Contract for completion and readiness for final payment until the Work is completed and ready for final payment.

INDEMNIFICATION CONTRACTOR.

(1) CONTRACTOR shall defend, indemnify and hold harmless GCLBA, and their respective directors, officers, employees, agents, sureties and servants, from and against all damages, liabilities, claims, suits demands, judgments and awards (including attorney's fees and other expenses) on account of any damage to property or injury (including death) to persons (including any damage or injury to the property or person of any employee of contractor, other subcontractor, or which may occur or be alleged to have occurred in connection with the performance of the Work, whether or not GCLBA is alleged to be concurrently negligent; provided, however, CONTRACTOR does not assume responsibility for liability to the proportional extent it arises from the active negligence of GCLBA.

(2) In the event CONTRACTOR, or anyone under its control, utilizes any equipment, scaffolding, hoist, tools, generators or other machinery owned or leased by GCLBA, CONTRACTOR shall be liable to GCLBA for any loss or damage to property (whether owned by GCLBA, CONTRACTOR, or otherwise) or injury (including death) to any person (including employees of CONTRACTOR or any third party) which may arise from such use except only where such loss, damage or injury is due solely to the negligence of CONTRACTOR's employees in operating such equipment or machinery.

(3) CONTRACTOR shall pay for all royalties and license fees, defend all suits or claims for the infringement of any patent or other proprietary rights involved in the Work, and shall hold GCLBA harmless from any and all losses, costs, expenses (including attorney's fees, costs and expenses) on account of any CONTRACTOR designed or specified Work or portion thereof.

(4) CONTRACTOR shall defend, indemnify, and hold GCLBA and relevant parties harmless from any and all liens or claims or rights to enforce liens against the property or the improvements thereon arising out of the Work to be performed or labor or materials shall constitute waiver of this indemnity. If such lien or claim for lien shall at anytime be filed, CONTRACTOR shall refund to GCLBA all monies paid by GCLBA in discharging and/or bonding off such lien, including all attorneys' fees and costs incurred therein.

(5)In the event the ("Contract") provides for an indemnification, such provision is incorporated into this Contract and shall supplement this Article. CONTRACTOR shall assume the obligations of GCLBA and defend, indemnify and hold harmless the indemnified parties. CONTRACTOR is required to indemnify in the ("Contract") to the full extent required of GCLBA in the ("Contract") with respect to CONTRACTOR's Work or its acts and omissions. This subparagraph (5) shall

supersede subparagraph (1), above with respect to indemnity obligations towards GCLBA/relevant parties if such is inconsistent with this subparagraph.

TERMINATION. This Contract may be terminated upon mutual Contract of the parties upon 30 days notice. If the Contract is terminated, the GCLBA will pay for services completed, up to the date of the termination, deemed with the terms of this contract. If the Contract is terminated, the Contractor will provide the GCLBA all pertinent records, data and information created up to the date of the termination to which the GCLBA, under the terms of this contract, is entitled. In the event of the contractor's noncompliance with any of the clauses of this contract or with any of such rules, regulations, or orders, this contract may be immediately cancelled, terminated or suspended in whole or in part and the contractor may be placed one the debarred list and declared ineligible for further contracts with the GCLBA.

WARRANTY. In addition to any other warranties set forth elsewhere in this Contract, CONTRACTOR warrants that Work performed and materials furnished under this Contract conform to the Contract requirements and as required in the ("Contract"), and are free of any defect of equipment, material or design furnished, or workmanship performed by CONTACTOR or any of its subcontractors or suppliers of any tier. Such warranty shall continue for a period of <u>1</u> year(s) from the date of final acceptance of the Work by Owner/Relevant Parties, or for such other greater period of time as may be specified in the ("Contract"). Under this warranty, CONTRACTOR shall remedy at its own expense any such failure to conform or any such defect. In addition, CONTRACTOR shall remedy at its own expense any damage to real or personal property owned or controlled by Owner/Relevant Parties when that damage is the result of CONTRACTOR's failure to conform to CONTRACTOR requirements or of any defect in equipment, material, workmanship or design furnished by CONTRACTOR. CONTRACTOR shall also restore any work damaged in fulfilling the terms of this Article.

RE-INSPECTION FEE. If the Contractor's work fails the GCLBA's inspection, the GCLBA will charge Contractor a \$75 per re-inspection fee.

MODIFICATION OF CONTRACT. No modification of this Contract will be made except by the written addendum, signed by the Contractor and the GCLBA.

NOTICES. Any notices or modifications given under this contract will be in writing and served personally or sent by certified or registered mail. Such notice is effective upon receipt by the other party.

Notices for the OWNER/GCLBA should be sent to:	Doug Weiland, Executive Director GENESEE COUNTY LAND BANK AUTHORITY 452 S. Saginaw Street, 2 nd Floor Flint, Michigan 48502
Notices for the Contractor should be sent to:	<u>(NAME OF AUTHORIZED BUSINESS REPRESENTATIVE)</u> <u>(NAME OF BUSINESS ENTITY)</u> (ADDRESS OF BUSINESS ENTITY)
CONTRACT ENTERED INTO BY:	
GENESEE COUNTY LAND BANK AUTHORITY	(NAME OF BUSINESS ENTITY)
Douglas K. Weiland, Executive Director	(NAME OF AUTHORIZED BUSINESS REPRESENTATIVE)
Date	Date
Witnessed by:	Witnessed by:
,	Émail:
	Phone:
	Federal Identification Number:
	License Number:

ATTACHMENT A

SECTION 3 CLAUSE. All Section 3 covered contracts shall include the following clause (referred to as the "Section 3 Clause"):

- A. The work to be performed under this contract is subject to the requirements of Section3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u(section 3). The purpose of section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by section3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
- B. The parties to this contract agree to comply with HUD's regulations in 24 CFR Part135, which implement section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
- C. The contractor agrees to send to each labor organization or representative of workers with which the contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the contractor's commitments under this section 3 clause, and will post copies of the notice inconspicuous places at the work site where both employees and applicants for training and employment positions can see the notice.
- D. The notice shall describe the section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- E. The contractor agrees to include this section 3 clause in every subcontract subject to compliance with regulations in 24 CFR Part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR Part 135. The contractor will not subcontract with any subcontractor where the contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24CFR Part 135.
- F. The contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the contractor is selected by before the contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part135 require employment opportunities to be directed, were not filled to circumvent the contractor's obligations under 24 CFR part 135.
- G. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.