

**SCOPE OF SERVICES, 11/03/2016**

**DEMOLITION OF RESIDENTIAL STRUCTURES, GROUP # 11.1.16 C (19 HHF 3 Properties)**

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## SECTION I: INTRODUCTION

*FOCUS ON WHAT MATTERS TO DETROIT AND DETROITERS.*

*TREAT EVERY STREET AS IF YOU LIVED THERE.*

As directed by the City of Detroit or its authorized agencies (hereafter, "Owner"), this scope of services includes Hazardous / Regulated Materials Abatement and Demolition activities for residential structures within the City of Detroit. The purpose of this work is to improve the neighborhoods in a lasting and meaningful way and, thereby, improve the quality of life for Detroiters.

These protocols seek to efficiently eliminate vacant, blighted, and hazardous structures in the City of Detroit, while protecting the health of community residents, workers, and natural resources. All Demolition Projects are to be conducted with the following specifications and performance requirements. The Owner will identify structures for demolition, assemble structures via RFP, and solicit services to Contractors on a routine basis.

The Owner reserves the right to revise these protocols over time to maximize efficiency and minimize associated hazards and disturbances.

## SECTION II: CONTRACTUAL REQUIREMENTS

- A. In the case of a discrepancy between the requirements of this Scope of Services and any applicable laws, regulations, ordinances, rules, or protocols, the most stringent requirements must apply. In the case of any discrepancy between this Scope of Services and the executed contract for the abatement and demolition work, the most stringent requirements must apply.
- B. Contractors must comply with all Federal, State, local, and administrative requirements which will ensure that all work is performed and carried out in a safe and timely manner. It is the responsibility of the Contractor to provide and maintain all qualified personnel, equipment, materials and other resources necessary to perform activities identified in this Scope of Service. The contractor will:
  1. Designate a Project Manager or designated representative who will serve as the Contractor's contact person and has final authority for the Contractor on all matters relating to the contract.
  2. Maintain current, accurate, and complete records in compliance with all applicable Federal, State, local, and administrative requirements. All files must be immediately available for review and inspection by the Owner, its authorized representative, or any funding agency. All records under this Scope of Services will become the property of the Owner, and the

Contractor must maintain copies of all records for a period of four (4) years from the date of the last payment under a particular contract.

3. Contractors must obtain all necessary permits to perform the work specified in this Scope of Services, and the Contractor must assume responsibility for any fees/costs associated with such permits. This includes, but is not limited to, the Demolition Permit, Hydrant Permit (if not using a water truck), and Sidewalk Repair Permit (if necessary). Contractors will maintain copies of all permits associated with a particular site at the work site, and Contractors must present copies of all permits to the Owner, its authorized representative, or any other enforcement agency/department upon request.
  4. In accordance with the most current version of DBA Policy 2016-3, the Contractor must use the designated reporting software (Salesforce) to accurately and timely report on anticipated and completed activities covered under this Scope of Services.
  5. Contractor must coordinate with the Owner or its authorized representative on matters relating to project requirements, completion, and actions that require immediate attention or which impact the results or quality of the work to be performed.
  6. Contractor must ensure appropriate operational control of abatement and demolition activities, including all necessary quality control measures to ensure satisfactory completion of all activities. This includes creation and maintenance of all documentation associated with abatement and demolition activities which may be required by the Owner, its authorized representative, or other regulatory body.
- C. Contractor is responsible for any and all work performed by a sub-contractor employed to perform any aspect of this Scope of Services. The Contractor may not charge more than 10% on top of the amount invoiced by any sub-contractor.
- D. Compensation is based on the approved prices and costs submitted in response to the Request for Proposals, satisfactory completion of work, and the submission of a properly executed, correct, and completed request for payment form with all necessary and contractually required supporting documentation. Completion dates are provided in the contract documents.
- E. The Contractor is responsible for the accuracy of the work performed and is required to make all necessary revisions or corrections resulting from errors and/or omissions on the part of the Contractor without additional compensation. Acceptance of the work by the Owner or its authorized representative will not relieve the Contractor of the responsibility for subsequent correction of any such errors and/or omissions. The Owner or its authorized representative reserves the right to clarify this Scope of Services as needed, and the Contractor must abide by any clarification to the Scope of Services.
- F. The Contractor must take before and after pictures of sidewalks, curbs, drive approach(s), neighboring residences and/or structures, and all surrounding areas (including sidewalks and curbs on adjacent properties) to document existing conditions.

- G. The Owner or its authorized representative may monitor the site during all phases of demolition to ensure that all protocols included under this Scope of Services are followed. At its discretion, the Owner or its authorized representative may stop all work at a particular job site(s) or all work under a particular contract if the Contractor or its sub-contractor fails to perform in accordance with the Scope of Services.
- H. Contractors are required under the authority of Section 114(a) of the Clean Air Act to allow EPA personnel to freely enter any assigned or awarded facilities or demolition sites, to review any records, inspect any demolition method, and observe or sample any emissions.
- I. While engaged in field operations, Contractor and authorized sub-contractors represent the City of Detroit in Blight Remediation Efforts and are required to maintain a professional and friendly demeanor at all times when interacting with the public.
  - 1. When approached by a citizen, Contractor's staff must make every effort to factually answer any question or address any concern in a professional and courteous manner. If staff does not know the answer to a question, they are to politely refer the party to the 844-DET-DEMO Call Center for assistance. If the concerned individual is not satisfied with the Contractor's staff's factual reply, they are also to be referred to the Call Center for further assistance.
- J. The Contractor must secure a performance bond in an amount equal to one hundred percent (100%) of the total contract amount. Bonds must be issued by a bona fide company authorized to do business in the State of Michigan and which complies with State regulations. The Contractor must also furnish certificates of insurance which specifically set forth evidence of all coverage required of the Contractor and any sub-contractor. Likewise, all endorsements that are subsequently issued amending coverage or limits must be immediately submitted to the owner as instructed.
- K. As instructed and prior to the commencement of work, the Contractor must have an Executed Contract and a Notice to Proceed. Commencement of work prior to an Executed Contract and Notice to Proceed shall disqualify the Contractor from reimbursement for any costs incurred.

<b>SECTION III: SITE PREPARATION</b>
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**Part 1: Notification and Safety**

- A. Demolition must be executed in an orderly and careful manner and must not involve undue hazards to the general public or unnecessary risks to the workers.
- B. During the course of all work on the site, all demolition contractors and authorized sub-contractors must wear appropriate safety equipment, including hard hats and Owner-approved 844-DET-DEMO vests on the outside of clothing to designate work as city-authorized demolition.

- C. Conduct demolition operations and remove debris to ensure minimum interference with roads, streets, walks, and other adjacent properties. Ensure safe passage of people around demolition area and minimize exposure to dust and flying debris. The contractor must adhere to the Michigan Manual for Uniform Traffic Control Devices for all vehicular and pedestrian detours around their construction zone. The Detroit Building Code references the type of fences, barricades and other protective structures required for demolition.
1. Erect temporary protection such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction. When required, fences and barriers should be a minimum of four feet high.
  2. The barricades must extend no further than four feet from the inside of the street curb.
  3. In cases where scaffolding or other physical barricade is constructed due to proximity of demolition to nearby structures or pedestrians, utilize tarps, canopies, or other physical barrier to limit the spread of dust.
  4. There must be no storage of debris or equipment on the street at any time.
  5. Do not close or obstruct streets or walks without permission from the Owner and the City of Detroit Department of Public Works, City Engineering Division. Applicable ROW Permits are to be obtained from the DPW/CED Permits Office. Provide alternate routes around closed or obstructed traffic ways if required by governing regulations.
- D. The Contractor must protect sidewalks from damage. At the Contractor's expense, the Contractor must replace the entirety of any sidewalk flags which were cracked, heaved, or otherwise damaged during the project. The Contractor must replace sidewalks in accordance with specifications of the jurisdiction with authority (City of Detroit, Wayne County, or State of Michigan). The Contractor is responsible for securing all necessary permits and/or approvals and is responsible for all costs associated with such permits and/or approvals. The Contractor must provide dated photographic evidence (pre- and post-demolition) of a sidewalk damaged prior to mobilization to the site in order to waive the replacement requirement. If the entire street is demolished and there are no connecting sidewalks, then no replacement is required.
- E. The Contractor must perform all work in a manner to ensure maintenance of fences, warning signs, lights and danger signals intended for the protection of life and property, along all adjacent streets and walks. Signs must be posted during all phases of demolition to prevent trespassing.
- F. Prohibit heat sources, flames, ignition sources, and smoking within or near adjacent properties.
- G. Securely affix the Owner-provided yellow demolition poster no less than two (2) weeks before commencement of demolition and replace as necessary when damaged or missing. Contractor must ensure that the poster is affixed to the front side of the structure facing the primary street named in the site address. Contractor must ensure that the poster is plainly visible from the street. Contractors must take dated photographs of the poster affixed to the structure.

- H. Distribute Owner-provided public health and safety instructions (door hangers) to adjacent properties and conduct door-to-door notification at least 72 hours prior to start of demolition activities.

## **Part 2: Utilities and Existing Site Improvements**

- A. Schedule work for most efficient operation. Coordinate with DTE (through the DBA representative) and any other utility company/agency to verify that services (electrical, gas, cable, etc.) have been cut prior to the start of demolition.
- B. The Contractor is authorized to disconnect water service to all residential properties. The Contractor must disconnect water service in accordance with the following procedures:
  - a. Locate the stopbox and/or curbstop (valve) for the water service;
  - b. Turn off the curbstop (valve);
  - c. Dig up the service line on the customer side of the curbstop, cut the line and allow the residual water to drain;
  - d. Verify that there is a complete (no leak) shut-off on the curbstop;
  - e. Crimp and tie-off the service line OR crimp the end of the lead or copper line, fold the end as flat as possible, and wrap the folded end with wire;
  - f. Backfill the excavated area around the service line.
- C. The Contractor will meet with representatives of utility service facilities and Inspectors to review work site operations prior to mobilization for demolition in the event that demolition would likely have an adverse impact on existing systems, property, or persons prior to commencement of operations.
- D. In the event of any damage to or discovery of any damage to a live utility line on or around the subject site, then the Contractor must immediately notify the respective utility company and the Owner or its authorized representative. After notification of the utility company and the Owner or authorized representative, the Contractor must use caution tape to close off the area around the damaged utility line and demobilize to a safe distance away from the damaged line. The Contractor must remain on site until the utility company arrives, and the Contractor must keep contact with the utility company in order to know when the hazard has been resolved and demolition activities may resume. The Contractor must be responsible for any costs or fees associated with the repair/replacement of any damaged live utility lines which resulted from the Contractor's demolition operations.
- E. The Contractor must protect all structures, conduits, wires, pipes, sewers and drains that are to remain in place from damage. The contractor will work with utility officials to ensure that all sewer lines connected to structures cleared are appropriately and securely capped; such lines do not have to be capped at the main. A concrete bulkhead must be placed in all existing sewers encountered on the property unless waived by the Owner or its authorized representative.

- F. Any of the existing surface drainage or drainage structures and improvements will not be obstructed or impaired in any manner.
- G. Protect existing site improvements, appurtenances, and landscaping on adjacent or surrounding properties.
- H. Trees will not be disturbed by the Contractor unless disturbance or removal is absolutely necessary to clear the parcel. If questions arise as to what comprises a tree, determination is to be made by the Owner or its authorized representative. Unless otherwise determined unsafe by the Owner or its authorized representative, Contractor must protect from damage all trees 6" or more in diameter which are located 10' or more from the structure targeted for demolition. If such trees are damaged as a result of the demolition work, Contractor must replace the tree at its expense. Contractor must remove any dead tree or any other tree determined to be unsafe by the Owner or its authorized representative. Prior to bid, Contractor must survey the site and/or review all available documentation to determine if a tree will hinder or impede demolition. The Owner or its authorized representative will not receive, review, or approve any change order for tree removal if the condition or location of the tree was ascertainable prior to bid.
- I. Contractor must provide and maintain suitable and sanitary toilet facilities for all persons employed on the site and remove those facilities from the site upon completion or as directed by the Owner or its authorized representative on extended projects. Any soil and material contaminated by the temporary toilet facilities must be removed and replaced, at Contractor's cost, with fresh, clean material and the site must be left in a clean, sanitary condition.

### **Part 3: Hazardous or Regulated Materials (Pre-Abatement)**

- A. The Owner or its authorized representative will provide a copy of the site-specific Hazardous/Regulated Materials Survey and Inspection Report at the time of the Request for Proposals. The survey will comply with NESHAP standard subpart M, Sec 61.145 (a) to thoroughly inspect the facility for the presence of asbestos containing materials (ACM), including Category I and Category II non-friable ACM. The survey will list (at a minimum) the type of each material/waste present, the location of the material within the property, the quantity of each material, and recommendations for specific disposal protocol (if applicable).
- B. Prior to proceeding with the authorized work, the Contractor must visit each site to arrive at a clear understanding of the conditions under which the work is to be done and to confirm the amount of hazardous/regulated materials to be removed from the sites. Contractor will be held responsible to have compared the premises with the Hazardous/Regulated Materials Survey, drawings, specifications, or other provided items, and to report any discrepancies affecting the execution of the work. No payment adjustments in excess of the quantities identified in the Hazardous/Regulated Materials Survey must be made by the Owner without prior written authorization. The Contractor may request a Pre-Abatement Site Review with the assigned Environmental Consultant which prepared the Hazardous/Regulated Materials Survey and Inspection Report. The Owner must assume responsibility for any costs/fees associated with one (1) Pre-Abatement Site Review. The Contractor must assume responsibility for any costs/fees associated with any additional Pre-Abatement Site Review.
- C. Prior to proceeding with the removal and disposal work, Contractor must prepare a work plan, including the means, methods, and procedures proposed for removal and disposal of all hazardous/regulated material. The Contractor must also prepare a contract-specific health and safety plan (HASP) that includes the necessary precautions and safety procedures for the removal and disposal work at the specific addresses indicated in the Hazardous/Regulated Materials Survey or Owner-approved change order. The HASP must include detailed information regarding temporary controls, including lock-out/tag-out procedures, and hazardous/regulated material handling. The HASP must be based on applicable regulations, work experience, and the guidance provided in the Hazardous/Regulated Materials Survey. The Contractor must maintain the contract-specific HASP onsite during the abatement and demolition work, and the Contractor must make the HASP available to the Owner or its authorized representative upon request.
- D. For planned demolitions, Contractor must properly remove and dispose of all hazardous/regulated materials identified in the hazardous/regulated materials survey prior to demolition. This includes materials that are present in excess of typical household quantities and materials which pose a hazard for explosion or combustion. Unless otherwise specified in the hazardous/regulated materials survey, de minimus or typical household quantities of hazardous/regulated materials do not require removal prior to demolition. According to the above standards, the following hazardous/regulated (including, but not limited to) materials must be properly removed and disposed of: gasoline; oil; solvents;

aerosol cans; under- and above-ground storage tanks; pesticides/insecticides; unlabeled containers; PCB-containing materials; CFC-containing materials; batteries; CRTs/TV screens/monitors; exit signs; flashing molds; leaded glass; solvents; paint cans; security alarms; security systems; solid waste; fluorescent light tubes; mercury-containing equipment and other hazardous/regulated materials.

- E. In case of a discrepancy between the requirements of this specification and any applicable laws, rules, criteria, ordinances, regulations, and referenced documents, the most stringent requirement as determined by the Owner or Owner's authorized representative must apply.
- F. Personnel working inside the site must be trained as required and must be thoroughly familiar with the safety precautions, procedures, and equipment required for controlling the potential hazards associated with this work. Work associated with hazardous/regulated materials must be performed at appropriate Personal Protection Level as defined by MIOSHA. At no time may any worker be exposed to lead in excess of the permissible exposure limit (PEL) of 50 micrograms per cubic meter of air (ug/m3).
- G. Contractor must obtain all required permits. The Contractor must provide approved containers, vehicles, equipment, signs, placards, labels, labor, manifests, and other documents necessary for accomplishment of work.
- H. Upon request, Contractor must provide the Owner with 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 as may be required by Federal, State, and local regulations, to show that hazardous/regulated materials of all types were properly transported, received, and disposed of in appropriate disposal facilities.
- I. The Contractor must ensure that the appropriate project notification (Notification of Intent to Renovate/Demolish), as required by the MDEQ and the MIOSHA Asbestos Program, is submitted at least 10 working days in advance of asbestos abatement activities or within 24 hours of demolition, as applicable. Contractors must submit complete notifications to the MDEQ using the online reporting platform. Contractors must review the Hazardous/Regulated Materials Survey in preparation of the notification. If the information on the notification changes, the Contractor must be responsible to ensure that the revisions to the notification are submitted to the appropriate agency in a timely manner.

#### **Part 4: Abatement of Asbestos-Containing and Other Hazardous/Regulated Materials**

- A. The Hazardous/Regulated Materials Survey and Inspection Report will indicate the presence, location and quantity of asbestos-containing and other hazardous/regulated materials. Contractor is responsible for comparing the property with the Hazardous/Regulated Materials Survey and Inspection Report, and to report any discrepancies affecting the start of the work. The Owner must make no payment adjustments for the abatement of materials in excess of the materials and quantities identified in the Hazardous/Regulated Materials Survey without prior written authorization by the Owner. Any request by a Contractor for an adjustment in payment for the abatement of

additional materials or quantities must be accompanied by a revised Hazardous/Regulated Materials Survey and Inspection Report by a qualified Environmental Consultant which explicitly identifies and samples and analyzes (as necessary) the additional materials or quantities in accordance with all applicable laws, regulations, and protocols. Any request by a Contractor for an adjustment in payment for the abatement of additional materials or quantities must conform to the Contractor's Item Cost Sheet. Contractors are not authorized to Point Count materials for the purposes of eliminating those materials from abatement without a revision to the required notification and an Owner-approved adjustment to the cost of abatement based upon the Contractor's Item Cost Sheet. Contractor must not proceed with the abatement of any additional materials or quantities until the Owner has approved the adjustment in payment.

- B. Contractor must be required to furnish all labor, materials, employee training, services, insurance and equipment necessary to carry out the removal and disposal of regulated asbestos-containing materials (RACM) and debris in the areas that will be described in the Hazardous/Regulated Materials Survey.
- C. Upon request, Contractor must provide verification that the on-site supervisors, workers, all sub-contractors, and the independent testing laboratory performing any aspect of the asbestos abatement activities are properly trained in safety procedures associated with handling regulated asbestos-containing materials (RACM). Contractor must be able to specify the use of any licensed asbestos abatement sub-contractors used for the project.
- D. The Contractor must comply with all applicable laws, ordinances, rules, regulations, whether stated or omitted from bidding documents, including, but not limited to the following:
  - 1. US EPA, 40 CFR Part 61, Subpart M-National Emission Standards for Hazardous Air Pollutants;
  - 2. OSHA, 29 CFR Part 1926.1101/MIOSHA Part 602-Asbestos in Construction Standard;
  - 3. Michigan Public Act 154 of 1974 -"Michigan Occupational Safety and Health Act";
  - 4. Michigan Public Act 135 of 1986- "Asbestos Abatement Contractors Licensing Act";
  - 5. Michigan Public Act 440 of 1988- "Asbestos Workers Accreditation Act";
  - 6. US DOT, 49 CFR Parts 171 and 172-Hazardous Materials Regulations.
- E. Removal and disposal of hazardous/regulated materials must be performed in accordance with all Local, State, and Federal solid and hazardous/regulated waste laws and regulations, including Resource Conservation and Recovery Act (RCRA).
- F. All tires must be cut in half or quartered and disposed of with demolition debris, or transported for proper off-site disposal or recycling.
- G. Contractor must perform sampling and analysis for airborne concentration of asbestos fibers in accordance with 29 CFR Part 1926.1101. Contractors must 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 must be posted at the job site and made available to the Owner. The Contractor must maintain a fiber concentration inside enclosed containment regulated work area equal to or less than 0.1 f/cc expressed as an 8 hour, Time Weighted Average (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.

- H. Areas where asbestos abatement activities are conducted must be appropriately restricted. The contractor must provide for the safety of all persons having access to the work area to ensure that any person having access to the work area has any required asbestos training.
- I. Upon completion of all abatement activities at a particular site and for every site covered under this Scope of Services, Contractor must be responsible for contacting the Environmental Consultant which performed the Hazardous/Regulated Materials Survey and Inspection. Contractor must request a Post-Abatement Survey of the site by the Environmental Consultant to verify that all safely accessible hazardous/regulated materials have been removed from the site. Contractor must not proceed with demolition until the Environmental Consultant provides a written statement which verifies that all safely accessible hazardous/regulated materials have been removed from the site. The Owner must assume responsibility for any costs/fees associated with one (1) Post-Abatement Survey. The Contractor must assume responsibility for any costs/fees associated with any additional Post-Abatement Survey.
- J. Contractor must be responsible for a post-abatement (clearance) air monitoring which must be completed by an independent third party contractor. The post-abatement air monitoring must comply with Michigan Public Act 135, Section 338.3221.
- K. Contractor must dispose of all asbestos-containing waste materials (ACWM) at a Type II landfill. Contractors must ensure that all written words on the executed manifests are legible. Contractors must keep on file and maintain executed manifests for a period of no less than four years. Contractors must submit the executed manifests with the Request for Payment packet.
- L. Contractor must monitor debris generated from the demolition. If a Contractor discovers any previously unidentified presumed or suspect asbestos-containing materials during the course of demolition, then the Contractor must immediately stop all work on the site and contact the Environmental Consultant which performed the Survey and Inspection. The Contractor must not resume demolition until the Environmental Consultant has inspected and sampled and analyzed (as necessary) the additional materials and the Contractor has filed the revised notification (as necessary). The contractor must commence demolition activities within 5 business days of the work in I. and J. above being completed.

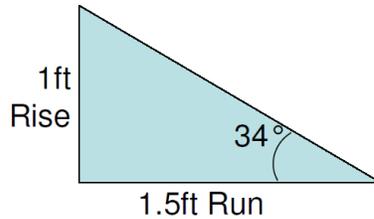
## SECTION IV: DEMOLITION

### Part 1: Execution

- A. Ensure that equipment and crews have mobilized to the correct site. Review all existing documentation to ensure that demolition activities target the correct site. If any questions arise as to whether or not the site is correct, the Contractor must immediately contact the Owner or its authorized representative for clarification and hold all demolition activities until clarification is received. Contractor must assume responsibility for all costs associated with the demolition of an incorrect structure.
- B. Conduct demolition operations to prevent injury to community, residents and workers, and damage to adjacent buildings and facilities.
- C. Remove structural framing members to ground to avoid free fall and to prevent ground impact and dust generation. Claw bucket excavators are required in the City of Detroit for demolition activities.
- D. Break up, remove, and dispose of concrete slabs on grade, unless otherwise directed by the Owner or its authorized representative.
- E. Completely remove all buildings, structures, facilities, and other debris including brush and fallen trees or logs from the property. This includes all subsurface structures that may be present, including basement exterior walls, basement walls, basement, foundations, footings, and slab-on-grade. Concrete, asphalt and/or gravel driveways or other paved areas are to be removed. Sidewalks must remain in place.
- F. Use of explosives is not permitted.
- G. Intentional burning of wood, debris or existing structures is not permitted
- H. The work area is limited to a site's property boundaries. At no time is an adjacent or surrounding property to be used as any part of the demolition (stockpiling, traversing, etc). Creation of a nuisance at the work-site is prohibited.
- I. The Contractor must only cross sidewalks that are necessary for demolition. Contractor must protect sidewalks from damage. At the Contractor's expense, the Contractor must replace the entirety of any sidewalk flags which were cracked, heaved, or otherwise damaged during the project. The Contractor must replace sidewalks in accordance with the specifications of the jurisdiction with authority (City of Detroit, Wayne County, or State of Michigan). The Contractor is responsible for securing all necessary permits and/or approvals and is responsible for all costs associated with such permits and/or approvals. The Contractor must provide dated (pre- and post-demolition) photographic evidence of a sidewalk damaged prior to mobilization to the site in order to waive the replacement requirement. If the entire street is demolished and there are no connecting sidewalks, then no replacement is required.

- J. No existing surfacing of streets or curbs must be removed or damaged and all streets must be kept open and clear of debris and litter. At the Contractor's expense, the Contractor must replace any portion of street or curb damaged during the project. The Contractor must replace streets or curbs in accordance with the specifications of the jurisdiction with authority (City of Detroit, Wayne County, or State of Michigan). The Contractor is responsible for securing all necessary permits and/or approvals, including any costs associated with such permits and/or approvals. The Contractor must provide dated (pre- and post-demolition) photographic evidence of a street or curb damaged prior to mobilization to the site in order to waive the replacement requirement.
- K. Prevent surface water and subsurface or ground water from entering excavations, from ponding on prepared subgrades, or from flooding the project site and surrounding area. If the Owner or its authorized representative determines that flooding creates a public safety hazard, then the Contractor must pump out the site or sites at the Contractor's expense.
- L. Protect sub-grades from softening and damage by rain or water accumulation. If sub-grades softened or damaged the contractor must repair and or replace sub-grades at the contractor's expense.
- M. From the commencement of the work until the final completion of the work, the Contractor must ensure that no building or structure is left in a precarious or dangerous condition that may cause direct harm to nearby residents at any time.
- N. Unless a lead inspection confirms that no lead-based paint is present in a structure, Contractor must perform daily sampling and analysis for airborne concentrations of lead dust in accordance with 29 CFR 1926.62 / MIOSHA, Part 603. Sampling is only required during structure demolition, and Contractor may discontinue sampling during load-out of debris. At no time may any worker be exposed to lead in excess of the permissible exposure limit (PEL) of 50 micrograms per cubic meter of air (ug/m3).
- O. Contractor must preserve all surrounding buildings and property. Contractor should note the proximity of surrounding buildings. Contractor must promptly repair damages to adjacent facilities caused by demolition operations. Any damage to surrounding buildings or property will be repaired at the Contractor's expense. Through dated photographs, Contractor must thoroughly document any damage to any adjacent structure or property which existed prior to mobilization for demolition. Failure to document pre-existing damage will carry with it the assumption that the damage was caused by the Contractor during the demolition process.
- P. Only backhoes, excavators, dozers, crawlers, dumpers, compactors or other gas or diesel-fueled equipment which is compliant with 40 CFR 89; 40 CFR 1039 and 40 CFR1068 must be used on declared Ozone Action Days. Contractors are encouraged to enroll in the EPA's *EnviroFlash* system to receive six-day Air Quality Index (AQI) forecasts to anticipate Ozone Action Days and adjust demolition schedules as necessary.

- Q. All demolition activities using gas or diesel-fueled machinery must comply with Detroit City Code, Sections 55-4-101 through 55-4-104 regarding the prohibition of idling for commercial vehicles. Do not direct vehicle or equipment exhaust toward adjacent properties.
- R. Any open hole in excess of 3' in depth left unattended is to be extended or partially filled to create a slope no less than 10' in width on one of the four sides that would allow any person or animal falling into the hole to escape by climbing up a reasonably scalable slope.
- a. The maximum allowable slope must be 34 degrees, as commonly illustrated below.



- i.
- ii. Stated differently, the maximum rise over run must be 1/1.5 or the H:V ratio must be 1.5:1.
- b. Slope must be created out of clean site material free of debris to allow a clear and unobstructed path out of the depression, and must be compacted adequately to allow foot traffic.
- S. At any time during the demolition process when an open hole and/ or debris pile must be left unattended, a 4' tall perimeter safety barrier fence must be erected and maintained around the entire circumference of the hole and/or any debris pile.
- a. Safety Barrier must be 4' high and must be constructed of orange high-density polyethylene material with 1.75" X 1.75" mesh equal to Tenax Guardian Warning Barrier.
- b. Safety Barrier Fence must be installed using commercially available wooden or metal stakes.
- c. Safety Barrier Fence stakes must be installed in solid ground approximately three feet away from the corners of the open hole or debris pile and driven to a depth of 24" below grade with a minimum of 4' remaining above ground.
- d. Safety Barrier Fence spans in excess of 20' must have an interstitial stake, spaced equally between corner stakes.
- e. Securely attach the Safety Barrier Fence to each stake using heavy duty cable ties at no less than 4 locations, spaced evenly along the length of the stake.
- f. Mend individual pieces of Safety Barrier Fence using cable ties at each row of mesh.
- g. Finished installation must yield a taught, secure enclosure with no noticeable sagging.

## **Part 2: Dust Suppression**

- A. Contractor must thoroughly wet the structure(s) prior to commencing demolition work.
- B. Contractor must use all means necessary to control dust on and near the work, and on and near all off-site 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. The Contractor should use water mist or fog nozzles, temporary enclosures, and other suitable methods outlined in SECTION III to prevent the spread of dust and dirt during all demolition activities.
- C. The demolition contractor should keep all building components adequately wet during all phases of demolition and debris removal to prevent the release of particulates into the air and to minimize the spread of dust. This must include the application of water during knockdown and load-out of both building materials and hard fill materials, also referred to as "wet-wet" demolition.
- D. Water must envelope the point of impact to maximize dust control. Wetting may include the use of a cherry picker or bucket lift to insure proper wetting of higher elevation surfaces prior to and during demolition and/or in cases when the structure is unsafe to enter prior to demolition.
- E. Contractor is responsible for procurement of consistent water source such as a hydrant or water trucks for the duration of demolition activities. Contractor must obtain all necessary permits and/or approvals for the use of hydrants during demolition operations, and Contractor must assume all responsibility for the payment of any fees/costs associated with such permits and/or approvals. Upon completion of the work, all temporary water lines installed by the Contractor must be removed by the Contractor.
- F. Contractor must use misting nozzles or utilize erosion control measures to prevent erosion or displacement of soils, the discharge of soil-bearing water runoff, or the settling of airborne dust onto adjacent properties, drives and walkways. At the Contractor's expense, Contractor must clean settled dust off adjacent properties, driveways, sidewalks, and streets. Contractors must not create hazardous or objectionable conditions such as ice, flooding, and pollution when using water.
- G. The Contractor or designated representative is responsible for monitoring the dust generated from all the demolition activities at the site and for the implementation of the dust suppression measures. The intent is to minimize the possibility of impacting neighbors with an excessive fugitive dust plume that crosses the site property lines. If a complaint is received by any of the Contractor's staff concerning fugitive dust emissions, the process causing the concern must be halted immediately until the issue is investigated and a satisfactory resolution can be implemented.
- H. The frequency of applying water may be reduced if precipitation occurs or if soil is frozen or snow conditions are present, provided that excessive fugitive emissions are not observed. Demolition activity in temperatures below freezing which create excessive fugitive dust will employ a mixture of water and/or other suppressant agents approved by the Owner prior to use. Alternative dust

suppressant agents and procedures for their application must be in compliance with the February 2014 "MDEQ Guidelines for Selecting Dust Suppressants to Control Dust and Prevent Soil Erosion".

- I. During high wind weather conditions (i.e. above 25 mph) the contractors must limit the work to those demolition activities that generate the lesser amount of fugitive dust, avoiding or minimizing knockdown and earthwork activities.

<b>SECTION V: DEMOLITION WASTE AND DEBRIS REMOVAL</b>
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- A. Clearance of sites includes the proper removal and disposal of all materials and debris in compliance with federal, state, local, and administrative requirements, as required. Contractors must provide for erosion control and other incidentals necessary to satisfactorily complete the removal and disposal of all materials and debris.
- B. All debris must go to a licensed Type II sanitary landfill, unless otherwise approved by the Owner. Copies of the landfill receipts for every load removed from the project site must be maintained for each day and made available for inspection as requested and provided with invoice.
- C. Demolished materials must become the Contractor's property and must be removed from the site and disposed of legally. On-site storage or sale of removed items is prohibited. Contractors must not store debris or equipment on the street at any time.
- D. Load-out of demolition debris must be completed within the seven (7) calendar days after knockdown. Contractor must keep materials adequately wet.
- E. All excess material (e.g., demolition rubbish, debris) and equipment (e.g., barricades, scaffolds etc.) used by the Contractor must be promptly removed from the premises when no longer required for completion of the Work.
- F. Demolition materials and debris must be kept wet and covered during transport to eliminate dust and prevent the release of particulates into the air. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- G. Parking of roll-off bins and dump trucks is strictly prohibited in front of occupied houses and/or buildings during debris removal.
- H. The Contractor must cover all dumpsters after placement of debris therein and must ensure that all dumpsters remain covered when not in use. Full dumpsters must be immediately removed from the site and transported to the selected disposal site.
- I. The Contractor must be responsible for obtaining approval for transportation and disposal of waste in compliance with applicable Federal, State, and local laws, regulations, and protocols.
- J. Copies of the landfill receipts for every load removed from the project site must be maintained for each day and made available for inspection as requested and submitted with the invoice. All

generated materials and waste manifests must be furnished to the Owner or its authorized representative upon request and at the time of invoice.

- K. Clean adjacent buildings, driveways, and improvements of dust, dirt and debris caused by demolition operations at the Contractor's expense. Return adjacent areas to condition existing before start of demolition.
- L. Any debris or sedimentation deposited in the road right-of-way must be promptly removed by the Contractor at the Contractor's expense. No sedimentation on the road will be allowed.

<b>SECTION VI: SITE FINISHING</b>
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**Part 1: Earthwork and Backfill Management**

- A. All holes or voids which result from the demolition and removal of any structure on site must be backfilled to 12" below the surrounding grade level and compacted with clean backfill per the following requirements:
  - 1. After open hole approval and prior to backfill, Contractors must rake any residual hard fill (See "i." below) on the site into the open hole. Contractors may not rake residual hard fill into any excavation higher than three (3') feet below grade. Contractors may not use residual hard fill which is larger than 8" in diameter. Contractors may not rake any residual hard fill with stains or painted surfaces into the open hole. Contractors must properly remove and dispose of any hard fill with any stains or painted surfaces.
    - i. "Hard fill" means rock, concrete, brick, block, or masonry that qualifies as inert material that is no larger than eight (8") inches in diameter.
    - ii. "Inert Material" means any materials as defined in Section 11504(2) of the Michigan Natural Resources and Environmental Protection Act, Public Act 451, or 1994, being MCL 324.11504(2).
  - 2. All fill material must consist of soil with less than 35% clay content. Contractor must comply with all applicable City ordinances and Program standards. Acceptable soil types include crumbling yellow clay or sandy loam. No blue clay or gray clay must be used for backfill material.
  - 3. Manufactured fill from DBA-approved sources may be used as fill material.
  - 4. Contractors may not crush and reuse any materials which have painted surfaces, mastics, or oil stains. Contractors must properly remove and dispose of any materials with painted surfaces, mastics, or oil stains at a licensed Type II landfill.
- B. See Section VI., Part 4., for further backfill requirements.
- C. Documentation must be provided to the Owner or its authorized representative as to the origin and environmental condition of backfill materials. Appropriate documentation described in the DBA

Guidance for Backfill Material Evaluation and Testing, dated December 18, 2014, must consist of certification letters; material transportation logs, load tickets, manifests, etc. that track quantity, date and origin; and/or a written report detailing the known history and/or current environmental condition of a soil stockpile being proposed for use by the Owner. As described in the DBA Guidance for Backfill Material Evaluation and Testing, there are three acceptable types of backfill material origination:

1. Category 1 - Residential Construction Sites; Residential Landscape Yard Sites
  2. Category 2 - Virgin (Native) Commercial Borrow and Sand/Gravel Pit Sites
  3. Category 3 - Non-residential: Commercial, Utility, Road, and Construction Sites; Commercial Landscape Sites, and Agricultural Sites.
- D. Category 1 and 2 materials proposed to be relocated for backfill by the Contractor do not require chemical testing for Backfill Materials to be relocated from Category 1 or 2 Type sources. Further, Backfill Material relocated from Category 1 or 2 sources will be considered acceptable as backfill material at demolition sites provided that the following conditions are met:
1. Category 1 Sites - A written certification from the Contractor to the Detroit Land Bank Authority or the City of Detroit, whichever is the contract holder, identifying the site of origin.
  2. Category 2 Sites - A written certification from the contractor. The written certification must include the following affirmative statements:
    - i. The origin of the backfill material and address location;
    - ii. No evidence of known or suspected sources of environmental contamination that may have impacted the proposed backfill materials;
    - iii. The backfill materials are from a native soil source and are homogeneous in nature and general composition;
    - iv. The backfill materials are free from debris, large rocks, concrete, or other conditions which would make the material unsuitable for use as backfill;
    - v. The materials meet the backfill specifications established by the Demolition Program.

Approval and relocation of Category 1 and 2 type backfill materials are conditioned upon submittal of the information described above. Notification must be provided to DBA or its designated Backfill Program Manager in advance of backfill.

For Category 1 type backfill materials, the Contractor will be notified immediately of approval by the designated backfill program manager. Contractor is required to submit weekly Backfill Material tracking logs showing source and end use locations, quantities, dates as described in Section IX, Part 2 (C), and Backfill Material Deliverables.

For Category 2 type backfill materials, DBA or its designated Backfill Program Manager will review the information provided within 24 hours or less of the request, and either approve the backfill materials for use at DBA sites, request additional information, or deny the proposed backfill material source. Upon approval, DBA or its designated Backfill Program Manager will issue a notice of approval to the

Contractor, and the Contractor is required to submit weekly Backfill Material tracking logs showing source and end use locations, quantities, dates as described in Section IX, Part 2 (C), and Backfill Material Deliverables.

- E. Category 3 materials proposed to be relocated for backfill by the Contractor must be evaluated by a qualified Environmental Professional (EP) at the Contractor’s expense. The evaluation must adhere to the following Small Scale and Large Scale Backfill Soil Volume Sampling Requirements:

1. Small Scale Backfill Soil Volumes (up to 10,000 cubic yards)

For Category 3 Sites with volumes up to 10,000 cubic yards, three (3) discrete soil samples are required with additional composite samples as volumes increase from 2,000 cubic yards to 10,000 cubic yards. For each additional 2,000 cubic yards, 4 samples (one per 500 cubic yards) may be composted, representing one (1) additional sample for laboratory analysis. See table below for a summary of the samples required for backfill materials up to 10,000 cubic yards.

Soil Volume (Cubic Yards)	No. of Discrete Soil Samples Required	No. of Composite Samples allowed for each additional 2,000 cubic yards	Total No. Samples required for Laboratory Analysis
2,000	3	0	3
4,000	3	1	4
6,000	3	2	5
8,000	3	3	6
10,000	3	4	7

All samples should be submitted for laboratory analysis as described below (see Sample Methodology and Laboratory Analysis below B and C). Prepare a complete deliverable package as described Section IX, Part 2 (A and B), Backfill Material Deliverables.

2. Large Scale Backfill Soil Volumes (10,000 cubic yards or more)

For Category 3 Sites with volumes greater than 10,000 cubic yards, seven discrete soil samples are required with additional composite samples as volumes increase from 10,000 cubic yards. For each additional 10,000 cubic yards, 5 samples (one per 2,000 cubic yards) must be collected and may be composted, representing one (1) additional sample for laboratory analysis for each additional 10,000 cubic yards of backfill material. See table below for a summary of the samples required for backfill volumes greater than 10,000 cubic yards.

Soil Volume (Cubic Yards)	No. of Discrete Soil Samples Required	No. of Composite Samples allowed for each additional 10,000 cubic yards	Total No. Samples required for Laboratory Analysis
20,000	7	5 samples composted into 1	8

30,000	7	10 samples composited into 2	9
40,000	7	15 samples composited into 3	10
50,000	7	20 samples composited into 4	11
60,000	7	25 samples composited into 5	12
70,000	7	30 samples composited into 6	13
80,000	7	35 samples composited into 7	14
90,000	7	40 samples composited into 8	15
100,000	7	45 samples composited into 9	16

All samples should be submitted for laboratory analysis as described below (see Sample Methodology and Laboratory Analysis below B and C). Prepare a complete deliverable package as described Section IX, Part 2 (A and B), Backfill Material Deliverables.

3. Independent Evaluations

As an alternative to the above sampling strategies for large backfill sources, the Contractor’s qualified Environmental Professional may propose an independent evaluation of the proposed backfill material and gain approval for an alternate sampling plan from DBA prior to sampling and testing. Sampling frequency, methodology, and strategy must be detailed and designed to demonstrate that the proposed backfill materials meet Michigan Department of Environmental Quality (MDEQ) Part 201 Cleanup Criteria for Residential Use. After work plan review and approval by DBA or its designated Backfill Program Manager, the Contractor’s Environmental Professional will be required to implement the work plan and prepare a complete deliverable package as described in Section IX, Part 2 (A and B), Backfill Material Deliverables.

Upon receipt of complete information, DBA or its designated Backfill Program Manager will review the information provided within 48 hours or less of the request, and either approve the backfill materials for use at City of Detroit sites, request additional information, or deny the proposed backfill material source.

Upon approval, DBA or its designated Backfill Program Manager will issue a notice of approval to the Contractor. In addition, the Contractor must submit weekly backfill tracking logs electronically showing end use locations, quantities, dates, etc. as described in Section IX, Part 2 (C), Backfill Material Deliverables.

4. Employment of an Environmental Professional (EP) and Sampling Methodology

Contractor is required to use Environmental Professionals (EP) to perform soil sampling to ensure that DBA’s guidance is strictly followed, including proper sampling techniques, sample preservation and preparation methods, and handling. DBA reserves the right to reject any sampling and testing data that does not strictly adhere to proper sampling methodology and laboratory analysis best industry practices. Soil sampling methodology is most often contingent

upon physical characteristics of the medium to be sampled, in most cases, simple hand tools will suffice. The EP must adhere to best industry practices for sample collection, preservation, container packaging/shipment, and chain of custody requirements.

5. Analytical Parameters and Methods

For each discrete soil sample collected, Contractors are required to adhere to the following laboratory analytical parameters and methods:

- i. Volatile organic compounds (EPA Method 8260) – Note: No backfill with detectable concentrations of volatile organic compounds are allowed in the imported fill materials.
  - ii. Semi-volatile organic compounds (EPA Method 8270)
  - iii. Polychlorinated biphenyls (EPA Method 8082)
  - iv. Michigan metals (arsenic, barium, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc) (EPA Methods 6020, 7470/7471)
  - v. Chloride (add for road construction projects or soils located beneath parking lots only) (EPA Method 9056)
  - vi. Herbicides and pesticides (add for agricultural or commercial landscape yard property) (EPA Method 8081/8082)
- F. The Owner reserves the right to reject backfill materials if deliverables are not completed properly and in the entirety, as described in Section IX., Part 2., Backfill Material Deliverables.
- G. No material will be transported to backfill sites prior to Owner’s written approval, except from Category 1 sites. Furthermore, the Owner or its authorized representative reserves the right to perform periodic backfill soil testing at demolition locations. The Contractor must assist in testing of the soil as determined by the Owner or its authorized representative to include the use of the Contractor’s equipment and at the Contractor’s expense. In the event this backfill testing shows that the material does not meet specifications and/or is contaminated above a Part 201 residential standard, the Contractor will be required to remove all backfilled materials within forty-eight (48) hours, and supply acceptable backfill with test results from an accredited laboratory prior to backfilling. Contractor must assume responsibility for all costs associated with testing and removal of the unacceptable material and the replacement with acceptable material.
- H. The Owner reserves the right to refuse any approved backfill material for any breach of policy or specifications and/or any violation of applicable laws and regulations.
- I. The Contractor must follow any requirements by the Owner or its authorized representative to upload, enter, or download any information regarding backfill materials into an online or computer database. Failure to do so must result in denial of the use of such backfill materials by the Owner or its authorized representative.

## **Part 2: Stockpiling**

- A. All stockpiling locations (i.e., stockyards, staging areas) must be determined acceptable by the Owner and authorized representatives. Any location not deemed appropriate is at contractor's sole risk and may result in denial of material for use as backfill.
- B. Authorized agents or representatives of the Owner must be granted reasonable access to inspect the stockpile location and activity conducted thereon.
- C. Prior to proceeding with stockpiling, the contractor must submit and implement an approved dust control and monitoring plan to address all sources of fugitive emissions from the site. Dust control measures must be in accordance with City of Detroit BSEED Environmental Affairs Dust Control policy. Contractor must obtain any required permits or approvals to stockpile materials, and Contractor must assume responsibility for any and all costs/fees associated with any required permit.

The plan must include the following information for each proposed stockpile site:

- 1. The means, methods and procedures, including appropriate engineering controls and misting operations to be utilized to control total suspended particulate (TSP) dust and must limit potential fugitive dust emissions offsite.
  - 2. Soil erosion controls in accordance with Wayne County guidelines.
  - 3. Wet sweeping of public roads, when significant track-out onto adjacent public roadways at frequency necessary to prevent dust emissions.
  - 4. Stockpile soil materials away from edge of excavations.
  - 5. Protect soils from freezing temperatures and frost.
  - 6. When water sprayers are used to prevent fugitive dust emissions, Contractors are responsible for procurement of consistent water source such as a hydrant permit or water trucks for duration of stockpile use. The Contractor must pay costs for installation and removal of any temporary connections including necessary safety devices and controls. Use of water must not result in or create hazardous or objectionable conditions.
  - 7. Measures and procedures to prevent track out of soil that may result in a dust problem. When necessary, vehicles must be thoroughly washed prior to leaving the Site.
- D. Prior approval must be obtained to transport soil to stockpile site on residential streets.
  - E. No contaminated soil may be stored at any time.
  - F. Contractor must be required to remedy any damages to the surrounding properties if control measures fail as a result of stockpile operations.

### **Part 3: Execution of Excavation and Backfill**

- A. Contractors must 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.
- B. Contractors must protect existing trees that are to remain on the site. Do not stockpile heavy materials or heavy equipment within drip line of remaining trees whenever possible.
- C. Contractor must comply with local codes, ordinances, and requirements of authorities having jurisdiction to maintain stable excavations. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by backfilling operations.
- D. Contractor must backfill all Open Holes within fourteen (14) calendar days after Open Hole approval, unless otherwise permitted. If open hole must be left overnight or unattended, Contractor must comply with 29 CFR 1926 Subpart M regarding fall protection.
- E. Contractor must remove vegetation, topsoil, debris, trash, wet, and unsatisfactory soil materials, obstructions, and deleterious materials from all disturbed ground surfaces prior to open hole inspection and placement of fills. Dispose of in manner satisfactory to the Owner and local governing agencies.
- F. Contractor must prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding project site and surrounding areas. If flooding occurs and creates a public safety hazard, then the Contractor must pump out the site or sites at the Contractor's expense.
- G. Contractors must place backfill and fill materials in layers not more than 18 inches in loose depth, using appropriate methods of compaction.
- H. When performing backfilling operations during periods of prolonged wet or dry conditions, Contractors must provide adequate measures for surface drainage or ground water and moisture control of the soils (i.e. wetting or drying, scarify and disking) so as to place and compact the soil within the moisture content range of a few percentage points of its optimum water content.
- I. Contractors must dispose of water pumped out of excavations onsite and must not discharged any water into the municipal storm drainage system or to surface waters.

### **Part 4: Grading**

#### Winter Grade

- A. When weather conditions are such that the contractor cannot complete the site finalization as it pertains to the Scope of Service - Final Grade below, the Owner or Owner Representative will announce and allow for sites be brought to "winter grade: status until such time as directed by the DLBA / DBA to bring the site to final grade in accordance with the Scope of Service below.

- B. For a site to be in winter grade status
  - 1. all the work in the Scope of Service under Section II, Section III, Section IV, Section V, and Section VI Parts 1, 2, and 3 must be completed.
  - 2. After demolition, the lot must be graded uniformly to conform to the grade of the adjoining properties. The leveling of the lot surface must be done in a way to prevent excessive runoff into the abutting street, alley, or property or cause pooling in the lot area and must provide a smooth transition between existing adjacent grades and new grades.
- C. Winter Grades must be completed within 45 days of the winter grade status being released by the Owner or the Owner Representative

#### Final Grade

- A. Site restoration includes application of clean soil (as specified and defined in “B.” below) and grading all disturbed areas. After demolition, the lot must be graded uniformly to conform to the grade of the adjoining properties. The leveling of the lot surface must be done in a way to prevent excessive runoff into the abutting street, alley, or property or cause pooling in the lot area and must provide a smooth transition between existing adjacent grades and new grades.
- B. Contractor must apply twelve inches (12”) of clean soil to the open hole or void on top of the approved backfill (See Parts 1 and 2 above). Contractor must apply sufficient clean soil to any other disturbed or excavated areas (such as removed driveways or other paved surfaces) so that the disturbed/excavated areas are level with the surrounding grade. Clean soil must be lightly compacted using light-weight equipment so as to prevent heavy compaction. Clean soil must meet the following specifications:
  - 1. Clean soil must be free of pulverized building materials and construction debris.
  - 2. Clean soil must have an organic content of no more than 20 percent.
  - 3. Topsoil, crumbling yellow clay, sand, or loam qualify as clean soil.
  - 4. Upon request, provide analytical data or a certification from the borrow source documenting that all off-site materials to be used as clean dirt is uncontaminated.
- C. Contractor must cut out soft spots, fill low spots, and trim high spots to conform to the grade of the surrounding area. At the completion of the work, the premises must be raked clean with a Final Grade.
- D. Contractor must repair and re-establish grades to that of the surrounding area(s) where completed or partially completed surfaces become eroded, rutted, settled, or lose compaction due to subsequent construction operations or weather conditions.
- E. Contractor must restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

- F. Contractor must re-grade and/or fix any locations where the grade is found to be non-compliant with the Scope of Services. Contractor must assume responsibility for all costs associated with re-grading and/or fixing non-compliant grades. The Owner or its authorized representative may waive this requirement if the Contractor can provide evidence that the non-compliant grade was the result of actions outside the control of the Contractor.

**Part 5: Seeding and Watering (Final Grades Only)**

- A. Contractor must seed the entirety of each lot with a "NO MOW" Lawn seed comprised of 100% Dutch white clover seed and must apply the seed in accordance with the manufacturer's specifications. The Owner or its authorized representative must approve any other proposed contractor grass seed to ensure specifications are met prior to use.
- B. Contractor must mulch the entire seeding area using straw to ensure proper moisture levels, removing bale string from the site.
- C. 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.
- D. Contractor must re-grade and re-seed any areas disturbed by construction activities as necessary. The transition between the disturbed areas and the undisturbed areas will be graded to minimize abrupt slope change and possible erosion.
- E. After load-out, Contractors must sweep clear and wash down sidewalks and streets.
- F. At the Contractor's expense, Contractor must replace and/or fix any locations where the seed fails germinate. The Owner or its authorized representative may waive this requirement if the Contractor can provide evidence that the failure of the seed to germinate was the result of actions outside the control of the Contractor.

**Part 6: Sidewalk Repair**

- I. Contractors must protect sidewalks from damage. At the Contractor's expense, the Contractor must replace the entirety of any sidewalk flags which were cracked, heaved, or otherwise damaged during the project. The Contractor must replace sidewalks in accordance with the specifications of the jurisdiction with authority (City of Detroit, Wayne County, or State of Michigan). The Contractor is responsible for securing all necessary permits and/or approvals and is responsible for all costs associated with such permits and/or approvals. The Contractor must provide dated (pre- and post-demolition) photographic evidence of a sidewalk damaged prior to mobilization to the site in order to waive the replacement requirement. If the entire street is demolished and there are no connecting sidewalks, then no replacement is required.

**SECTION VII: INSPECTIONS**

- A. All requests for inspections must be made at least twenty-four (24) hours prior to the date of the requested inspection. The following inspections are required for every non-emergency demolition:

INSPECTION #	DESCRIPTION	REQUIRED FOR EMERGENCY DEMOLITION	AGENCY
1	Open Hole	YES	BSEED
2	Backfill, Final Grade	YES	BSEED

- B. Contractor must submit Open Hole and Final Grade requests via e-mail to [bseddemo@detroitmi.gov](mailto:bseddemo@detroitmi.gov) with "cc:" to [inspections@detroitlandbank.org](mailto:inspections@detroitlandbank.org).
- C. The Owner or its authorized representative may monitor the site during all phases of demolition and backfilling including examination of the type of backfill material used, and to ensure that all enumerated demolition protocols are followed.
- D. 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 emissions.

**SECTION VIII: TIMELINE**

- A. Standard Demolition
1. File notifications with the MDEQ no later than 5 business days after receiving a notice to proceed from the Owner. It is the Contractor responsibility to notify the Owner or its authorized representative within 24 hours if the site is not accessible.
  2. Complete excavation and loading of debris within seven (7) calendar days after knockdown.
  3. Backfill open holes within fourteen (14) calendar days after Open Hole approval
  4. Complete all demolition activities including clean-up and site finishing within 30 days from the date of demolition.
- B. Ordered / Emergency Demolition
1. Must begin work within 24 hours of receipt of Notice to Proceed from the Owner.

2. Complete excavation and loading of debris within forty-eight (48) hours of knockdown.
  3. Complete backfill within five (5) calendar days after Open Hole approval.
  4. Complete all demolition activities including clean-up and site finishing within seven (7) calendar days.
- C. If unforeseen circumstances arise or work must be performed outside of the Contractors usual workweek, modifications to schedules may be requested and written approval must be received in writing from the Owner or its authorized representative.

<b>SECTION IX: SUBMITTALS</b>
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**Part 1: Notifications**

- A. Contractors must coordinate demolition and clearance activities, ensuring that all approvals and permits are in place prior to the start of work. As required, notify appropriate State or local agencies of structures containing asbestos and notify the Owner or its authorized representative of identification of other suspected hazardous materials or contaminants.
- B. At least 10 days prior to the start of any planned demolition activities, the Contractor must file an electronic notification of Intent to Renovate/Demolish with the Michigan Department of Environmental Quality via the State online platform, with copies to the Michigan Occupational Health Division, Asbestos Program and the Owner or its authorized representative. For Emergency Ordered Demolitions, the Contractor must file an electronic notification of Intent to Renovate/Demolish with the Michigan Department of Environmental Quality within twenty-four (24) hours of commencement of demolition.

**Part 2: Backfill Material Deliverables**

- A. Contractors seeking review and approval to use Category 3 backfill materials must provide the following, to Owner before relocating Category 3 Backfill Materials to an excavation site:
  1. Address of the proposed source material.
  2. Volume of proposed source material.
  3. Source and composition of backfill material (e.g., sand, gravel, etc.).
  4. A scaled site map or Google Earth type aerial photograph depicting key property features, including, adjacent roads, and sample locations in relation to the area of soil proposed for relocation.
  5. Photographs representative of soil backfill piles proposed for relocation, or soil boring logs of proposed soil backfill excavation area.
  6. Description of Sampling Methodology

7. Required analytical data, including laboratory QA/QC, from a National Environmental Laboratory Accreditation Program (NELAP) accredited laboratory with proper chain of custody documentation.
  8. Provide tabulated data as compared to MDEQ Part 201 Residential Cleanup Criteria.
- B. Contractors seeking review and approval of Category 3 backfill materials must also provide the following certification statements and insurance requirements from an Environmental Professional (EP) as part of any Request for approval to use Category 3 Backfill Material submitted to Owner:
1. On behalf of **NAME OF CONTRACTOR, NAME OF CONSULTANT** has completed its evaluation of approximately **XXXX** cubic yards of stockpiled backfill materials located at **SITE ADDRESS**. Based on the analytical results, these soils are not contaminated above MDEQ Part 201 Residential Cleanup Criteria. Furthermore, in **NAME OF CONSULTANT** professional opinion, the materials are suitable for relocation to City of Detroit residential and/or commercial demolition sites to backfill basement excavations.
  2. **CONSULTANT** understands that the Detroit Building Authority relies upon the overall completeness, accuracy, and conclusions in this report and hereby provides reliance on the contents and conclusions presented in the report. No information has been deleted, omitted, or changed that would otherwise have caused the Detroit Building Authority to reach a different conclusion.

For Contractors that propose an alternate sampling plan which deviates from the prescribed methodologies described herein, Contractors Consultants must also provide the following:

1. A copy of **NAME OF CONSULTANTS** professional errors and omissions liability insurance in the amount of no less than \$1M per occurrence and \$2M aggregate which identifies the Detroit Building Authority located at 1301 Third Street, Suite 328, Detroit, Michigan 48226, as a certificate holder.

For all backfill material categories, contractor is required to submit weekly Backfill Material tracking logs showing source and end use locations, quantities, and dates. The weekly tracking logs must be submitted to the authorized representative's document repository at [DLBAsoilbackfill@aktpeerless.com](mailto:DLBAsoilbackfill@aktpeerless.com) and uploaded to the designated electronic platform.

### **Part 3: Request for Payment**

- A. All documentation must be submitted on organization's letterhead.
- B. Invoicing must follow the format and/or template provided by either the City of Detroit or the Detroit Land Bank Authority, whichever is the contract holder.
- C. Unless otherwise directed by the Owner, Request for Payment Packet must include:

1. A cover letter identifying individual billing by property address for each property included in this payment request.
2. Schedule of Values and Sworn Statement for each property address.
3. Conditional or Unconditional waivers of lien from yourself, as well as all Subcontractors listed on sworn statement.
4. Building Permit
5. Notification of Intent to Renovate/Demolish
6. Final grade inspection receipt
7. Documentation of abatement activities and waste disposal in compliance with Environmental Inspection Report or authorized change orders.
  - i. Authorization to re-occupy previously abated area
  - ii. Post-abatement Verification Statement
  - iii. Asbestos quantity sheet
  - iv. Michigan Department of Natural Resources Air Quality Division / Waste Management Record
  - v. A copy of the disposal manifest and/or shipping papers used to dispose of materials/wastes from each disposal/recycling facility with load description and time stamps.
  - vi. When applicable, a copy of the CFC recovery certificate signed and certified by the licensed CFC recovery professional.
  - vii. When applicable, a copy of the scrap metal receipt for AST/USTs and other metals.
8. Documentation of origin of backfill and topsoil sources, and certification or analytical data where appropriate, verifying material is uncontaminated.
9. Documentation that any Subcontractors are in compliance with the Michigan Workers' Disability Compensation Act requirements and appropriately licensed.
10. Seeding and Watering Report
11. Seed tags identifying correct seed used per specification
12. Before and after dated photographs of the site (labeled)
13. Contractor Attestation Form

<b>SECTION X: ADJUSTMENTS TO BID</b>
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- A. In the event a structure or structures itemized on this bid is/are destroyed or substantially destroyed by fire or other calamity beyond its present condition as determined by the Owner, or environmental hazards or concerns are found, at any time prior to actual demolition, the Owner 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 Contractors' bid for that structure(s).
- B. If unforeseen circumstances arise or work must be performed outside of the Contractors usual workweek, modifications to schedules may be requested and written approval must be received in writing from the Owner or its authorized representative.
- C. The Owner reserves the right to revise these protocols over time to maximize efficiency and minimize demolition-associated hazards.

## SECTION XI: DEFINITIONS

**ADEQUATELY WET** – Sprayed, misted, mixed, or penetrated with liquid to an extent that suppresses the release of visible emissions and particulate matter.

**ASBESTOS CONTAINING MATERIAL (ACM)** – Friable (i.e., easily crumbled or reduced to particles) asbestos-containing material or Class I non-friable asbestos-containing material.

**ASBESTOS ABATEMENT ACTIVITIES** – Any activity that involves the removal or renovation of friable asbestos-containing material by an asbestos-removal professional

**AUTHORIZED REPRESENTATIVE** – An additional party granted specific ability to speak or act on behalf of the Owner.

**BACKFILL** – Material with which Open Holes must be filled to Final Grade Level and that has been previously approved for use according to Specifications.

**BULLETINS** – Any additional Contract provisions, changes, revisions or clarifications of the Contract Documents issued in writing to prospective proposers prior to the receipt of the proposals.

**CATEGORY I NON-FRIABLE ACM** – Asbestos-containing packings, gaskets, resilient floor covering, and asphalt roofing products containing more than 1 percent asbestos as determined using the method specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy

**CATEGORY II NON-FRIABLE ACM** – Any material, excluding Category I nonfriable ACM, containing more than 1 percent asbestos as determined using the methods specified in appendix E, subpart E, 40 CFR part 763, section 1, Polarized Light Microscopy that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.

**CHANGE ORDERS** – Any material change to the overall scope of the Contract and which requires prior approval by the City of Detroit. Example: changes in Contract price, which may result from changes in Scope of Work requirements.

**CLASS B LICENSE** – Unrestricted wrecking Contractor's license authorizing the holder thereof to wreck non-concrete or steel frame structures less than or equal to three (3) stories or thirty-five (35) feet in height.

**COMPLETE WORK** – Contractor's compliance with all licensing, permit, safety, and environmental requirements as well as site clearance, demolition of all buildings to include exterior walls, basement walls, basement foundations, footings, and slab-on-grade, appurtenances, contiguous buildings, fences, concrete walks, drives, transportation of debris, and backfilling and finishing the site surface with a Final Grade.

**CONTRACT or CONTRACT DOCUMENTS** – All directions, requirements, standards, terms and conditions of performance as specified in this RFP in addition to any additional Contract provisions, changes, revisions or clarifications authorized by the Director or the Director's designee.

**CONTRACTOR** – The individual or legal entity contracting with the City of Detroit for performance of the prescribed Work.

**DISHING** – The sloping of the side walls of the Open Hole so a person could walk out of the depression

**DRAWINGS or CONTRACT DRAWINGS** – Those drawings specifically entitled, dated and listed in this RFP, the Contract or any Bulletin.

**EMERGENCY DEMOLITION** – The demolition of any building of such questionable structural integrity that it is deemed to be in imminent danger of collapse as determined by a Detroit City Building Official.

**EMERGENCY DESIGNATED STRUCTURES** – Any building declared an Emergency that is awarded to a Contractor for demolition in accordance with these Specifications.

**EXTRA WORK** – Work other than that expressly stated or implied in the Contract Documents at the time of execution of the Contract.

**FINAL GRADE** – Removing all excess material, rubbish, and debris from the premises, and leveling the surface of the lot to conform to the grade of the abutting properties. The leveling of the lot surface must prevent excessive liquid run off into the abutting street, alley or adjacent properties and must not cause pooling.

**FOUNDATION** – All parts of a demolished structure still existing in the ground after Knockdown and Load-out, including but not limited, to basement walls, basement foundations, footings and slab on grade foundations.

**FUGITIVE DUST** – All particulate matter caused by demolition activities and that is suspended in the air and could spread to nearby areas.

**HAZARDOUS/REGULATED MATERIALS** – Any materials designated by the Hazardous/Regulated Materials Survey as necessary for removal from property prior to beginning demolition activities. Includes Michigan Fire Prevention Code, Public Act 207 of 1941, and Title 48 CFR, Part 171.8, Part 172.101, 40 CFR 26.13, and 49 CFR 171.8.

**HAZARDOUS/REGULATED MATERIALS SURVEY** – Survey of a property to be demolished that is conducted by a third party and that defines the quantity, types, and locations of any materials to be removed from the property prior to beginning any demolition activities.

**KNOCKDOWN** – Physical demolition of the structure and placement of all debris into the basement area or in a single pile within the footprint of the former structure.

**LOAD-OUT or LOAD-OUT PHASE** – The wetting down and removal of demolition debris from the demolition site after Knockdown, occurring prior to the removal of the Foundation.

**NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)** – Air quality standards issued under the Clean Air Act for emissions standards set by the United States Environmental Protection Agency (EPA) for an air pollutant not covered by The National Ambient Air Quality Standards (NAAQS) that may cause an increase in fatalities or in serious, irreversible, or incapacitating illness.

**NOTICE** – Written notice or documentation.

**OPEN HOLE** – A depression in the earth resulting from excavation and removal of all demolition debris and the Foundation of the structure after Knockdown.

**OWNER** – As used in these specifications "Owner" refers to the contracting entity, either the City of Detroit or it's agencies and does not necessarily imply ownership of the real property.

**PAYMENT BOND** – Bond secured by the Contractor that assures payment as required by law to all persons supplying labor and material in the execution of the Work provided for in the Contract.

**PERFORMANCE BOND** – Bond executed in connection with a Contract to secure fulfillment of all the Contractor's Contractual obligations.

**PERSONAL PROTECTION LEVEL** – Designated levels of skin, eye, and respiratory protection required for hazardous materials workers and as defined by MIOSHA.

**PERMIT** – Official certificate that authorizes performance of a specified activity (i.e., construction, repair, demolition), issued by the approving authority with proper jurisdiction.

**QUALIFIED BIDDER** – A party that may be considered by City of Detroit for approval to conduct demolition.

**REGULATED ASBESTOS CONTAINING MATERIALS (RACM)** – All of following: (a) friable asbestos material, (b) Category I nonfriable ACM that has become friable, (c) Category I nonfriable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II nonfriable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.

**REQUEST FOR PAYMENT** – Invoice submitted by the Contractor for Work performed under the Contract according to the specifications outlined in Section IX, Part 2.

**RESPONSIBLE PROPOSER** – A Contractor possessing the demonstrated judgment, skill, ability, capacity, experience and integrity, requisite and necessary to perform the Work to standards and in the specified time, without regard to competing Contract commitments.

**RESPONSIVE PROPOSAL** – A proposal that conforms, in all-material aspects, to the terms, conditions, specifications and requirements of the solicitation.

**SCOPE OF WORK** – Encompasses all Contract performance requirements expressly stated or implied that are required to be furnished and completed by the Contractor in order to properly satisfy all Contract terms and conditions, except "Extra Work" as defined herein.

**SITE** – The area bounded by the perimeter of the address supplied in the Contract or Notice to Proceed in which the Contractor has agreed to confine its operations. In special cases this may include other adjacent areas as designated by the Owner or Authorized Representative.

**SPECIFICATIONS** – Any and all directions, requirements, standards, terms and conditions of performance as specified in this RFP and other Contract Documents.

**SUBCONTRACTOR** – A person, firm, corporation, or party other than the Contractor or its employees that Contracts with the Contractor to furnish labor; labor and materials; or labor and equipment at the site, but must not include any party who furnishes only materials or equipment. All subcontractors must be approved in advance by the City of Detroit.

**SURETY BOND** – As referred to in this document; includes a Performance and Payment Bond as defined above and must satisfy the requirements of 24 CFR 85.36(h)(1) -(3).

**TOXIC MATERIALS** – means any of 77 toxic substances and 63 flammable substances under the accident prevention provision of Section 112(r) of the Clean Air Act (CAA) and listed in Title 40, Part 68 of the Code of Federal Regulations (CFR); that in sufficient concentration, alone or in combination, poses a severe threat of gross damage to or destruction of the health, safety, or welfare of human, animal, or desirable plant life, or of the environment. Also see, Michigan Fire Prevention Code, Michigan Public Act 207 of 1941. It is important to note that Toxic Materials are a subset of Hazardous Materials consequently regulations concerning such substances are thoroughly addressed at the State and Federal Levels.

**TYPE II LANDFILL** – A municipal solid waste landfill.

**UTILITIES** – All public or private utility companies such as DTE Energy, the Detroit Water and Sewerage Department, or the Detroit Public Lighting Department.

**UNBALANCED PROPOSAL** – A Proposal offer that contains a substantial variation in price to the extent that it affects the proposal process by giving the Proposer an advantage or benefit not allowed other Proposers.

**WET-WET** – The application of water to structure and debris during all phases of Knockdown and Load-Out.

**WORK** – The explicit and implicit Contract Requirements as defined in the Scope of Services.

## SECTION XII: REFERENCES

The Contractor must comply with all applicable laws, ordinances, rules, regulations, whether stated or omitted from bidding documents, including, but not limited to the following:

1. US EPA, 40 CFR Part 61, Subpart M: "National Emission Standards for Hazardous Air Pollutants"
2. OSHA, 29 CFR Part 1926.1101/MIOSHA Part 602: "Asbestos in Construction Standard"
3. Michigan Public Act 154 of 1974: "Michigan Occupational Safety and Health Act"
4. Michigan Public Act 135 of 1986: "Asbestos Abatement Contractors Licensing Act"
5. Michigan Public Act 440 of 1988: "Asbestos Workers Accreditation Act"
6. US DOT, 49 CFR Parts 171 and 172: "Hazardous Materials Regulations"
7. US EPA, "Clean Air Act" Section 114 A
8. US EPA, NESHAP standard subpart M, Sec 61.145 (a): "Standard for Demolition and Renovation"
9. US EPA, 40 CFR 89: "Control of Emissions from New and In-Use Non-Road Compression Ignitions"
10. US EPA, 40 CFR 1039: "Control of Emissions from New and In-Use Non-Road Compression Ignitions"
11. US EPA, 40 CFR 1068: "General Compliance Provisions For Highway, Stationary, And Non-Road Programs"
12. Detroit City Code, Sections 55-4-101 through 55-4-104: "Traffic and Motor Vehicles"
13. MDEQ, Natural Resources and Environmental Protection Act, Part 201: "Environmental Remediation: Generic Cleanup Criteria for Unrestricted Residential Use"
14. OSHA, 29 CFR 1926 Subpart M: "Fall Protection".

**SECTION XIII: PROPERTY INFORMATION**

**Listing of properties covered under this Scope of Services:**

Address	ZIP Code	RFP Group	Asbestos Survey Report URL
9207 Mendota	48204	11.1.16C	<a href="https://drive.google.com/open?id=0B_nCCfwhyhCMZkZ5eTVRYkd0RWs">https://drive.google.com/open?id=0B_nCCfwhyhCMZkZ5eTVRYkd0RWs</a>
7393 Rosemont	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B9yggHpdZlfmSnJMaJTUHI4Nk0/view?usp=sharing">https://drive.google.com/file/d/0B9yggHpdZlfmSnJMaJTUHI4Nk0/view?usp=sharing</a>
11700 Kentucky	48204	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBieddXRhUHBzbkJGNm8">https://drive.google.com/open?id=0B6iD1quSBieddXRhUHBzbkJGNm8</a>
11624 Kentucky	48204	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedTTFVYVFLbG05cck">https://drive.google.com/open?id=0B6iD1quSBiedTTFVYVFLbG05cck</a>
9370 Marlowe	48227	11.1.16C	<a href="https://drive.google.com/file/d/0B_nCCfwhyhCMSC1WU2ZldkNtEHM/view?usp=sharing">https://drive.google.com/file/d/0B_nCCfwhyhCMSC1WU2ZldkNtEHM/view?usp=sharing</a>
8060 Robson	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B_nCCfwhyhCMWXozWERvRI8zXzQ/view">https://drive.google.com/file/d/0B_nCCfwhyhCMWXozWERvRI8zXzQ/view</a>
8589 Terry	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B_nCCfwhyhCMTndISUtnZ3c3MTA/view?usp=sharing">https://drive.google.com/file/d/0B_nCCfwhyhCMTndISUtnZ3c3MTA/view?usp=sharing</a>
8312 Lauder	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B_nCCfwhyhCMU25UQmZiQmF3QTQ/view?usp=sharing">https://drive.google.com/file/d/0B_nCCfwhyhCMU25UQmZiQmF3QTQ/view?usp=sharing</a>
8291 Marlowe	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B_nCCfwhyhCMSFIKtlpWdGVCNTA/view?usp=sharing">https://drive.google.com/file/d/0B_nCCfwhyhCMSFIKtlpWdGVCNTA/view?usp=sharing</a>
9359 Decatur	48227	11.1.16C	<a href="https://drive.google.com/file/d/0B_nCCfwhyhCMAUZKTXFPTOIQajg/view?usp=sharing">https://drive.google.com/file/d/0B_nCCfwhyhCMAUZKTXFPTOIQajg/view?usp=sharing</a>
6730 Longacre	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B56ygPYLInHCbjFIVnUwTVUyeEE/view?usp=sharing">https://drive.google.com/file/d/0B56ygPYLInHCbjFIVnUwTVUyeEE/view?usp=sharing</a>
7730 St Marys	48228	11.1.16C	<a href="https://drive.google.com/file/d/0B9yggHpdZlfmTWhuRWZ6ZHBTxc/view?usp=sharing">https://drive.google.com/file/d/0B9yggHpdZlfmTWhuRWZ6ZHBTxc/view?usp=sharing</a>
8890 Ward	48228	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedOXZwZmlwdVNsYIE">https://drive.google.com/open?id=0B6iD1quSBiedOXZwZmlwdVNsYIE</a>
9150 Sorrento	48228	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedY1VHSUxMcC1UQms">https://drive.google.com/open?id=0B6iD1quSBiedY1VHSUxMcC1UQms</a>
12261 Griggs	48238	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedEJveHIBRF9YeTA">https://drive.google.com/open?id=0B6iD1quSBiedEJveHIBRF9YeTA</a>
9331 Appoline	48227	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedMEd4eFFTT2FzNIU">https://drive.google.com/open?id=0B6iD1quSBiedMEd4eFFTT2FzNIU</a>
11676 Wisconsin	48204	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedS09nN0dGdzZOWWc">https://drive.google.com/open?id=0B6iD1quSBiedS09nN0dGdzZOWWc</a>
12611 Wyoming	48238	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedVy1Da3hJZDFqODQ">https://drive.google.com/open?id=0B6iD1quSBiedVy1Da3hJZDFqODQ</a>
12561 Pinehurst	48238	11.1.16C	<a href="https://drive.google.com/open?id=0B6iD1quSBiedb0RWNmxycU5jYWs">https://drive.google.com/open?id=0B6iD1quSBiedb0RWNmxycU5jYWs</a>