



CITY OF BATTLE CREEK
NOTICE OF INVITATION FOR BIDS

IFB# 2019-050B Demolition

ISSUE DATE: April 3, 2019

BID DUE DATE: April 22, 2019, at 2:00 PM Local Time (office hours 8-12 and 1-5)
LOCATION: Purchasing Department
10 N. Division Street, Suite 214
Battle Creek, MI 49014

NOTE! City Hall now has Security on the 1st floor. Please allow extra time to get through Security when dropping off your bid.

Purchasing Contact: Christine Huff
E-mail: clhuff@battlecreekmi.gov

Technical Questions: Richard Bolek, 269-966-3382

DESCRIPTION: The City is soliciting bids for the purpose of contracting for demolitions of various buildings and their foundations in their entirety. The City will most likely award *by property*, but reserves to award as a whole. Bidders should read entire IFB or call the Purchasing Contact listed above if they have any questions **before** submitting their bids.

If you only received this first page, you may download the complete solicitation from our website at: battlecreekmi.gov. Copies of the complete Invitation for Bids document may also be obtained from the Purchasing Department, Room 214, 10 N. Division Street, Battle Creek, Michigan 49014, (269) 966-3390.

Bids must be in the actual possession of the Purchasing Department at the location indicated, on or prior to the exact time and date indicated above. Bids received by the correct time and date shall be opened and the amounts bid shall be publicly read. Late bids shall not be considered.

BIDDERS ARE STRONGLY ENCOURAGED TO CAREFULLY READ THE ENTIRE INVITATION FOR BID.

THIS BID IS OFFERED BY: _____
(Company Name)

1.0 INSTRUCTIONS TO BIDDERS

1. **BID SUBMISSION:**
 - A. Bids must be submitted in complete original form by mail or messenger to the following address:
Office of the Purchasing Agent, Room 214, City Hall, 10 N. Division Street, Battle Creek, MI 49014
 - B. Bids will be accepted at the above address until the time and date specified herein, and immediately after will be publicly opened and read aloud. The prevailing clock shall be www.time.gov.
 - C. All bids shall be tightly sealed in an opaque envelope and plainly marked with the Invitation for Bid number, due date and the bidder's name and address clearly indicated on the envelope.
 - D. Late bids will not be accepted and will be returned to the bidder.
 - E. All bids submitted in response to this invitation shall become the property of the City and be a matter of public record available for review.

2. **PREPARATION OF BIDS:**
 - A. The bid shall be legibly prepared with ink or typed.
 - B. If a unit price or extension already entered is to be altered, it shall be crossed out and initialed by the bidder with ink.
 - C. The bid shall be legally signed on the OFFER TO CONTRACT page and the complete address of the bidder given thereon.
 - D. The City is exempt from Federal Excise and State Sales Taxes, and such taxes shall not be included in bid prices

3. **SIGNATURES:** All bids, notifications, claims and statements must be signed by an individual authorized to bind the bidder.
 - (a.) CORPORATIONS: Signature of official shall be accompanied by a certified copy of the resolution of the Board of Directors authorizing the individual signing to bind the corporation.
 - (b.) PARTNERSHIPS: Signature of one partner shall be accompanied by a certified copy of the power of attorney authorizing the individual signing to bind all partners. If all partners sign bid no authorization is needed.

4. **REJECTION OR WITHDRAWAL:** Submission of additional terms, conditions or agreements with the bid document is grounds for deeming a bid nonresponsive and may result in bid rejection. The City reserves the right to reject any bids and to waive any informalities and minor irregularities defects in bids. Bids may be withdrawn in person by a bidder, or authorized representative, provided their identity is made known and a receipt is signed for the bid, but only if the withdrawal is made prior to the time set for receipt of bids. Bids are an irrevocable offer and may not be withdrawn within 90 days after opening date.

5. **AWARD:** The bid will be awarded to that responsible, responsive bidder whose bid, conforming to this solicitation, will be most advantageous to the City, price and other factors considered. Unless otherwise specified in this IFB, the City reserves the right to accept a bid in whole or in part, and to award by item or by group, whichever is deemed to be in the best interest of the City. Any bidder who is in default to the City at the time of submittal of the bid shall have his bid rejected. The City reserves the right to clarify any contractual terms with the concurrence of the Contractor; however, any substantial non-conformity in the offer, as determined by the City, shall be deemed non-responsive and the offer rejected.

In evaluating bids, Owner shall consider the qualifications of the Bidders, and where applicable, operating costs, delivery time, maintenance requirements, performance data, and guarantees of materials and equipment. In addition, the City may conduct such investigations as Owner deems necessary to assist in the evaluation of a Bid and to establish the responsibility, qualifications and financial ability of the Bidders to fulfill the contract.

6. **CONTRACT:** A response to an IFB is an offer to contract with the City based upon the terms, conditions, and specifications contained in the City's IFB. Bids do not become contracts unless and until they are executed by the City, eliminating a formal signing of a separate contract. For that reason, all of the terms and conditions of the contract are contained in the IFB, unless any of the terms and conditions are modified by an Addendum or a Contract Amendment.

7. **BID RESULTS:** A bid tabulation will be posted on the City's website and will also be on file and available for review after contract award in the Purchasing Department.

8. **CHANGES AND ADDENDA TO BID DOCUMENTS:** Each change or addendum issued in relation to this bid document will be on file in the Office of the Purchasing Agent. In addition, to the extent possible, copies will be mailed to each person registered as having received a set of bid documents. It shall be the bidder's responsibility to make inquiry as to changes or

addenda issued. All such changes or addenda shall become part of the contract and all bidders shall be bound by such addenda. Information on all changes or addenda issued will be available at the office of the City Purchasing Agent.

9. **SPECIFICATIONS:** Unless otherwise stated by the bidder, the bid will be considered as being in accordance with the City's applicable standard specifications, and any special specifications outlined in the Bid document. References to a particular trade name, manufacturer's catalogue, or model number are made for descriptive purposes to guide the bidder in interpreting the requirements of the City, and should not be construed as excluding bids. However, the City does reserve the right to specify a sole brand, with no brand substitutions allowed. The bidder, if awarded a contract, will be required to furnish the particular item referred to in the specifications or description unless departure or substitution is clearly noted and described in the bid and allowed by the IFB. The City reserves the right to determine if equipment/product being bid is an acceptable alternate. All goods shall be new unless otherwise so stated in the bid. Any unsolicited alternate bid, or any changes, insertions, or omissions to the terms and conditions, specifications, or any other requirements of this bid, may be considered non-responsive. The City reserves the right to disregard any conflicting terms and conditions submitted by the contractor and hold the contractor to the submitted bid price. Contractors are strongly encouraged to not submit anything with their bid that is not specifically requested in this solicitation.
10. **DELIVERY:** Bids shall include all charges for delivery, packing, crating, containers, etc. Prices bid will be considered as being based on F.O.B. Delivered, freight included.
11. **INTERPRETATION OF BID AND/OR CONTRACT DOCUMENTS:** All inquiries shall be made within a reasonable time prior to the date and time fixed for the bid opening in order that a written response in the form of an addendum, if required, can be processed before the bids are opened. (Inquiries received that are not made in a timely fashion may or may not be considered).
12. **CURRENCY:** Prices calculated by the bidder shall be stated in U.S. dollars.
13. **PRICING:** Prices shall be stated in units of quantity specified in the Bid Document. In case of discrepancy in computing the amount of the bid, the unit price bid will govern.
14. **NOTICE TO PROCEED/PURCHASE ORDER:** The successful bidder may not commence work under this contract until authorized to do so by the Purchasing Agent.
15. **CERTIFICATION:** By signature in the offer section of the Offer and Acceptance page, bidder certifies:
- A. The submission of the offer did not involve collusion or other anti-competitive practices.
 - B. The bidder has not given, offered to give, nor intends to give at any time hereafter, any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted offer.
 - C. The bidder hereby certifies that the individual signing the bid is an authorized agent for the bidder and has the authority to bind the bidder to the contract.
 - D. The bidder hereby certifies that the firm will abide by the COPELAND ANTI-KICKBACK ACT, Title 18, U.S.C. June 25, 1948, Section 874, Kickbacks from Public Employees.
16. **DEFINITIONS:**
- "CITY" - The City of Battle Creek.
 - "CITY UNIT" - The department of the City that intends to use the resulting contract.
 - "CONTRACTOR" - The bidder whose proposal is accepted by the City.
17. **MICHIGAN CONSTITUTIONAL REQUIREMENT:** Notwithstanding any provision in this Contract to the contrary, and in accordance with Article I, Section 26 of the Michigan Constitution as adopted by the electorate November 7, 2006, The City or its general contractors shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of this Contract. This section shall not prohibit any action that must be taken to establish or maintain eligibility for any federal program if ineligibility would result in a loss of federal funds in connection with this Contract, nor shall this section be interpreted as prohibiting bona fide qualifications based on sex that are reasonable necessary to the execution of this Contract. In the event of conflict between any term of this Contract and this section, the language of this section shall control.

2.0 GENERAL TERMS AND CONDITIONS

- 2.1 MATERIALS AND WORKMANSHIP:** Unless otherwise specified, all materials and workmanship shall be new and of the best grade of their respective kinds for the purpose.
- 2.2 NON-DISCRIMINATION CLAUSE:** The bidder agrees not to discriminate against any employee or applicant for employment, to be employed in the performance of such contract with respect to hire tenure, terms, conditions or privileges, of employment, or any matter directly or indirectly related to employment because of his or her actual or perceived race, color, religion, national origin, sex, age, height, weight, marital status, physical or mental disability, family status, sexual orientation, or gender identity. Breach of this covenant may be regarded as a material breach of the contract as provided for in Act 220 and Act 453 of the Public Acts of 1976, as amended, entitled "Michigan Handicapper's Civil Rights Act" and/or the "Michigan Elliott Larson Civil Rights Act" and/or City of Battle Creek Chapter 214 "Discrimination Prohibited" Ordinance. The bidder further agrees to require similar provisions from any subcontractors, or suppliers. The bidder agrees to comply with the Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, as supplemented in Department of Labor regulations (41 CFR, Chapter 60).
- 2.3 ASSIGNMENT OF CONTRACT:** The contractor shall assign no right or interest in this contract in whole or in part and no delegation of any duty of Contractor shall be made without prior written permission of the City.
- 2.4 INDEMNIFICATION:** The contractor shall protect, defend, and save the City, its officials, employees, departments and agents harmless from and against any claims, demands, suits, actions, or proceedings of any kind or nature, in any way resulting from negligent acts or omissions of the contractor or any of its agents, employees, boards, commissions, divisions, departments, or authorities in performing obligations under this agreement. Each party to this agreement agrees that any bond or insurance protection required by this agreement shall limit the terms of this indemnification provision. In case of any action brought against the City by reason of any such claim, suit, action or demand, upon prompt notice from the City, contractor covenants to defend such action or proceeding by counsel that is reasonably satisfactory to the City.
- 2.5 CONTRACT:** The contract shall contain the entire agreement between the City and the Contractor relating to this requirement and shall prevail over any previous contracts, proposals, negotiations, or master agreements in any form.
- 2.6 PROVISIONS REQUIRED BY LAW:** Each provision required by law to be in the contract shall be enforced as though it were included herein, and if any such provision is not inserted, the contract shall be amended to make such insertion or correction.
- 2.7 RELATIONSHIP OF PARTIES:** It is clearly understood that each party shall act in its individual capacity and not as an agent, employee, partner, joint venture, or associate of the other. An employee or agent of one party shall not be deemed or construed to be the employee or agent of the other party for any purpose. Taxes or social security payments shall not be withheld from a City payment issued hereunder; Contractor should make arrangements to directly pay such expenses, if any.
- 2.8 RIGHTS AND REMEDIES:** No provision in this contract shall be construed as a waiver by either party of any existing or future right or remedy available by law in the event of any claim, default, or breach of contract. The failure of either party to insist upon the strict performance of any term or condition of the contract or to exercise or delay the exercise of any right or remedy provided in the contract, or by law, or the acceptance of materials or services, obligations imposed by this contract or by law, shall not be deemed a waiver of any right of either party to insist upon the strict performance of the contract.
- 2.9 ADVERTISING:** Contractor shall not advertise, issue a press release or otherwise publish information concerning this RFP or contract without prior written consent of the City. The City shall not unreasonably withhold permission.
- 2.10 APPLICABLE REGULATIONS/POLICIES:** The Revised Code of the State of Michigan, the Charter of the City of Battle Creek, all City Ordinances, Rules and Regulations and Policies shall apply. It shall be the responsibility of the Proposer to be familiar and comply with said regulations/policies.
- 2.11 ROYALTIES, PATENTS, COPYRIGHTS, NOTICES AND FEES:** Contractor shall give all notices and pay all royalties and fees. Contractor shall defend all suits or claims for infringement of any patent rights and shall save the City harmless from loss on account thereof. Contractor shall comply with all laws, ordinances and codes applicable to any portion of the work. All services, information, computer program elements, reports, and other deliverables that are created under this Agreement shall be the property of the City. The Contractor shall place no restrictions on the City with regard to the distribution of any of these materials; the City shall have full, unrestricted rights to make and distribute unlimited copies of any services, information, computer programs/elements, reports, or any other deliverable. Patents for any item created under this contract shall be assigned to the City.
- 2.12 SUBCONTRACTORS:** No subcontract shall be made by the contractor with any other party for furnishing any of the services herein contracted for without the advance written approval of the City. All subcontractors shall comply with Federal and State laws and regulations that are applicable to the services covered by the subcontractor and shall include all the terms and conditions set forth herein, which shall apply with equal force to the subcontract, as if the subcontractor were the Contractor referred to herein. Contractor is responsible for contract performance whether or not subcontractors are used.
- 2.13 OTHER FEDERAL COMPLIANCE:** Where applicable (such as, but not limited to, Construction Managers) contractor shall comply with: Copeland Anti-kickback Act (18 U.S.C. 874); Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327A 330); Section 306 of the Clean Air Act (42 U.S.C. 1857 (h)); Section 508 of the Clean Water Act (33 U.S.C. 1368); Executive Order 11738, and EPA regulations (40 CFR, Part 15); and the Energy Policy and Conservation Act (Pub. L. 94A 163, 89 Stat. 871).

TERMS AND CONDITIONS CONSTRUCTION/INSTALLATION/DEMOLITION

1. **ACCIDENT PREVENTION:** The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all the damages to persons or property either on or off the site, which occur as a result of his fault or negligence in connection with the prosecution of the work. The safety provisions of applicable laws and OSHA standards shall be observed and the Contractor shall take or cause to be taken such additional safety and health measures as the city may determine to be reasonably necessary.
2. **CONFLICTS AND OMISSIONS:** The intent of the contract documents is to provide everything necessary for the proper execution of the work. In case of conflict, the work shall not proceed until a decision has been agreed upon by all parties concerned. The City's decision shall be final.
3. **WORKING CONDITIONS:** All work shall be done in accordance with all regulations governing the City Unit wherein the work is to be performed and with minimum possible interference with the proper functioning of the activities of the City Unit. Materials, tools, etc., shall be confined so as not to unduly encumber the premises.
4. **PRIOR EXAMINATION:** Contractor shall familiarize himself with local conditions affecting the job prior to submitting the bid. He shall take his own measurements and be responsible for the correctness of same. Contractor shall be held to have made such examinations and no allowances will be made in his behalf by reason of error or omission on his part. If any part of the Contractor's work depends on proper results upon existing work or the work of another contractor, the Contractor, before commencing work, shall notify the Building Official in writing of any defects that will affect the results.
5. **OTHER CONTRACTS:** The City may let other contracts in connection with the work and the Contractor shall properly connect and coordinate his work with the work of such other contractors. The City shall not be liable for any damages or increased costs occasioned by the failure of other contractors or sub-contractors to execute their work as may be anticipated by these documents.
6. **INSPECTION:** Contractor shall at all times permit and facilitate inspection of the work by the City.
7. **CHANGES:** Contractor shall make changes in the contracted work only as ordered in writing by the City. Work will be performed only based on written authorization from the City. If extra work orders are given in accordance with the provisions of this contract, such work shall be considered a part hereof and subject to each and all of its terms and requirements.
8. **GUARANTEE:** Contractor guarantees to remedy any defects due to faulty materials or workmanship, which appear in the work within one year from the date of final acceptance by the City.
9. **PROTECTION:** Contractor shall properly protect all new and existing structures from damage. Contractor shall comply with all safety rules and regulations as published by the Michigan Dept. of Labor, Bureau of Safety and Regulations.
10. **CLEAN-UP:** Contractor shall at all times keep the premises free from accumulations of waste materials or rubbish caused by his employees or work and at the completion of the work he shall remove all his waste, tools, equipment, staging and surplus materials from the structure and grounds and leave work clean and ready for use.
11. **SAFETY RULES:** Contractor shall perform all work under this contract in conformance with the State of Michigan general safety rules and regulations for the construction industry, being Act 89 of the Public Acts of 1963, as amended.
12. **TERMINATION FOR BREACH:** The City may terminate this contract for violations hereof when violations are not stopped immediately and corrected within a reasonable length of time after notification by the City. In the event of such termination, the City may complete the contracted work and the Contractor will be liable for any excess cost occasioned the City thereby and in such case the City may take possession of and use in completing the work such materials and equipment as may be on the site and necessary therefore.
13. **SUBCONTRACTORS:** Bidders should submit with the Bid all known subcontractors to be associated with their bid, including the type of work to be performed. Bidder shall notify the City of all subcontractors before work begins. All subcontractors shall be bound by all of the requirements of this contract; however, the prime contractor shall be responsible for the performance of their subcontractors.
14. **EMPLOYEES AND SUPERINTENDENCE:** Contractor shall enforce good order among his employees and shall not employ on the work site any disorderly, intemperate or unfit person or anyone not skilled in the work assigned to him. Contractor, or a competent person having authority to act for him, shall be at the worksite at all times.

SPECIAL TERMS AND CONDITIONS

1. **AWARD:** The City reserves the right to award each property to the lowest, responsive, responsible bidder for that property.
2. **ORDER OF WORK:** If the Contractor has been awarded multiple properties, the City reserves the right to prioritize the sequence in which work shall be completed.
3. **PROPER DISPOSAL OF DEBRIS:** The Contractor must provide the Building Official of Community Services with landfill dump tickets for debris from each house before payment will be made.
4. **CITY WRECKER'S LICENSE:** The Contractor must hold a Wrecker's License with the City of Battle Creek Inspection Division in order to obtain the necessary permit to begin the work. The Wrecker's License requires a performance bond and current insurance verification meeting the requirements herein.
5. **STATE LICENSE:** The State of Michigan requires that any individual or company contracting for the wrecking of a residential structure must have a Residential Builders License or Maintenance and Alteration Contractors License. If a Maintenance and Alteration Contractors license is in force, the license must specify "wrecking" as part of the license. **The bidder MUST provide evidence of the State license with the bid.**
6. **LIQUIDATED DAMAGES FOR DELAY:** If the work is not completed within the time stipulated in the contract documents, including any extensions of time for excusable delays as pre-approved by the Purchasing Agent or Building Office of Community Services, the contractor shall pay the City for the liquidated damages, and not as punishment, a rate of **\$150.00 per day for each calendar day of delay per property beyond the completion date, unless extended in writing by the City**, until the work is completed. No extra allowance will be made for holidays. The City will enforce the liquidated damages for failure to complete the work within the allotted time frame. The City shall have the right to deduct from payment due, or to become due, to the Contractor or to sue for and recover compensation or damages for non performance of this Contract at the time stipulated herein.
7. **CONTRACTOR'S OBLIGATIONS:** The contractor shall give all notices required by, and comply with, all applicable laws, ordinances and codes of federal, state and local government. All disconnections and demolition shall comply with all applicable ordinances and codes, inclusive of all written waivers. Should the contractor fail to observe the foregoing provision and do demolition work at variance with any ordinance, code or written waivers, the contractor shall correct, with no additional cost to the City.
8. **DOCUMENTATION SUBMITTAL:** The following documentation is to be submitted to the Building Official of Community Services 10 days prior to the start of all demolitions.
 - A. A copy of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 61, Subpart M form that is required to be submitted to the Michigan Department of Environmental Quality.
 - B. Written notification of when asbestos removal will commence and end. It is mandatory in order for the City to coordinate an inspection of this process at the site.
9. **MATERIAL REMOVAL:** This solicitation contains a report specifying whether or not asbestos is present in the structure being demolished. Contractor shall be a licensed asbestos abatement firm, or shall subcontract with a licensed asbestos abatement firm, in those cases where asbestos is removed. The City must be notified of all subcontractors, and receive all appropriate licenses for subcontractors, upon bid opening. Not providing this information may result in a bid being deemed non-responsive. Contractor shall be responsible for the actions of their subcontractor. Contractor is responsible for removal of structure, including all structural hazardous material removal as specified in this document, even if completed by a subcontractor.
10. **DUST CONTROL:**
 - A. The Contractor will use all means necessary, and as required by Federal and/or State and/or local laws, if applicable, to control dust on or near the work and on or near all off site areas if such dust is caused by Contractor's operations during performance of the work or if it results from the conditions in which the Contractor leaves the site.
 - B. The Contractor will use all means necessary to protect the adjacent properties before, during, and after, demolition.
 - C. In the event of damage, Contractor shall immediately make all repairs and replacements necessary, to the approval of the City of Battle Creek and at no cost to the City of Battle Creek.

- D. Contractor is responsible for conducting operations in a safe and orderly fashion and in compliance with PA 154 of 1974.
- 11. TIME OF COMPLETION:** The Contractor shall promptly begin work under this contract upon receipt of the Purchase Order, and all portions shall be completed and ready for final inspection within 45 calendar. The City may extend this completion date for contractors who are awarded many properties. Such an extension should be requested at the time of contract award. The City will approve the completion extension in writing.
- 12. EXTENSION OF TIME:**
- A. **AVOIDABLE DELAYS:** Avoidable delays in the prosecution or completion of the work shall include all delays that might have been avoided by the exercise of care, prudence, foresight or diligence on the part of the contractor.
 - B. **UNAVOIDABLE DELAYS:** Unavoidable delays in the prosecution or completion of the work under these contracts shall include all delays that are caused by an act of God, and delays that may be the result of causes beyond the control of the Contractor and that he could not have provided against by the exercise of care, prudence, foresight or diligence. Delays due to equipment failure will not be allowed for more than two (2) days per contract.
 - C. **CITY SCHEDULED DELAYS:** If the City deems it necessary, completion dates beyond 45 days may be scheduled without penalty to the Contractor.
- 13. NOTICE OF DELAYS:** Immediately upon the foreseeability or occurrence of any delay, Contractor shall notify the Community Services Department in writing of the probability of the occurrence and its cause. After the completion of the work, the Community Services Department, will assume that any delays that have occurred in its prosecution and completion have been avoidable delays, except such delays that have been requested in writing and have been approved in advance by the Community Services Department. The Contractor shall make no claims that any delay not called to the attention of the Community Services Department at the time of its occurrence has been an unavoidable delay.
- 14. THE CITY OF BATTLE CREEK'S RIGHT TO WITHHOLD CERTAIN AMOUNTS:** The City may withhold from payments to the Contractor such an amount or amounts as may be necessary to cover:
- A. Any Liquidated Damages that have accrued, due to delay;
 - B. Any actual damages assessed by MDEQ that are the direct result of contractor negligence;
 - C. Failure of the Contractor to make proper payments to a subcontractor;
 - D. Failure to provide the City with landfill tickets;
 - E. Damage to city or neighboring property caused by the Contractor and not remedied.
- 15. PENALTIES FOR TERMINATION FOR NON-PERFORMANCE:** If a Contractor has a contract terminated by the City for non-performance, the Contractor may be removed from the bidders list and debarred from bidding on future bids for an indefinite period of time, commencing on the date of the termination notice. The City may reinstate a vendor when it is in the City's best interest to do so.
- 16. MDEQ NOTIFICATION:** The Contractor shall abide by the requirement to notify the Michigan Department of Environmental Quality (MDEQ) Air Quality Division of intent to demolish. Notification must be submitted a minimum of 10 working days prior to beginning demolition. The contractor must also provide a copy of this notice to The Building Official of Community Services, 10 days prior to beginning demolition.
- 17. LAND OWNER(S) NOTIFICATION:** The demolition contractor is to notify all land owners within 100 feet of the demolition site 10 days prior to the start of all demolitions.
- A. A copy of the national Emission Standards Air Pollutants (NESHAP), 40 CFR 61, Subpart Form that is required to be submitted to the Michigan Department of Environmental Quality.
- 18. CONTRACTOR'S INSURANCE:**
- A. The Contractor shall at the time of execution of this contract, file with the City the Certificate of Insurance, which shall cover all of his insurance as required herein, including evidence of payment of premiums thereon, and the policy or policies or insurance covering said City and their officers, agents and employees. Each such policy and certificate shall be satisfactory to the City. Nothing contained in these insurance requirements is

to be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from his operations under this Contract.

- B. The contractor shall maintain insurances in force at all times during the term of this agreement at the minimum amounts and types as indicated. Sole proprietors are not required to have workers' compensation insurance.

Coverage Afforded

		<u>Limits of Liability</u>
Workers' Compensation:		\$ 100,000 or statutory limit
Commercial General Liability:	Bodily Injury	\$1,000,000 each occurrence
including XCU	Property Damage	\$1,000,000 each occurrence
	or Combined Single Limit	\$1,000,000
Automobile Liability:	Bodily Injury	\$ 300,000 each person
	Liability	\$ 500,000 each occurrence
	Property Damage	\$ 500,000
	or Combined Single Limit	\$ 500,000

The City of Battle Creek shall be listed as an additional insured on general liability coverage, and shall be provided with a Certificate of Insurance, prior to award, that reflects this additional insured status. A 30-day notice of cancellation or material change shall be provided to the City and so noted on the Certificate of Insurance. All certificates and notices shall be sent to City of Battle Creek, P.O. Box 1717, Battle Creek, Michigan 49016.

- 19. **VENDOR EVALUATION:** Experience with the City shall be taken into consideration when evaluating responsibility of the vendor.
- 20. **PAYMENT:** Payment shall be made within 30 days of submittal of a correct invoice for complete demolition of each property.
- 21. **FINES:** In the event that the City is fined by MDEQ or any other government agency solely due to the negligence of the contractor in following the rules and regulations of that government agency, the City may seek actual damages against Contractor, pursuant to all legal means of collection. In no case shall the City seek damages greater than the fine(s).
- 22. **VENUE:** Any party bringing a legal action or proceeding against any other party arising out of or relating to this Agreement or the transactions it contemplates shall bring the legal action or proceeding:
 - (i) in the United States District Court for the Western District of Michigan; or
 - (ii) in any court of the State of Michigan sitting in Calhoun County, if there is no federal subject matter jurisdiction.
- 23. **GOVERNING LAW:** This agreement shall be enforced under the laws of the State of Michigan. Contractor must comply with all applicable federal, state, county, and City laws, ordinances, and regulations. Contractor shall ensure payment of all taxes, licenses, permits, and other expenses of any nature associated with the provision of services herein. Contractor shall maintain in current status all Federal, State and Local licenses and permits required for the operation of the business conducted by the Contractor.

SPECIFICATIONS

1. The City has contracted with a qualified materials testing firm to provide hazardous material testing on buildings and supply the City with reports for the abatement of the hazardous materials. If applicable, these specifications will be included with this IFB.
2. The Contractor shall provide the City's Building Official of Community Services with landfill dump tickets for debris from each house before payment will be made.
3. Contractor shall remove all foundations, exterior walls, basement walls, and accessory structures (attached or unattached) on the property. Contractor will remove concrete slabs, driveway and approaches. Contractor will remove no structure substantially as a whole, but demolish on the premises. Contractor shall demolish masonry walls in small sections and remove structures, steel, cast iron, and heavy timber framing by individual pieces. Contractor shall remove from the structure all interior partitions, piers, chimneys, columns, piping, furnaces apparatus, debris, etc. No construction debris shall be buried onsite.
4. The basement or part basements shall be entirely cleaned out of debris, including that debris resulting from the demolition of the structures. Following the removal of debris the floor slabs and footings shall be completely removed. An Open Hole Inspection must be performed prior to any fill placed in the hole. Concrete and masonry steps or porches shall be removed.
5. Adequate protection of persons and property shall be provided at all times. Contractor shall provide fencing, or if not feasible, then a person on the ground, in addition to any worker(s) operating equipment to monitor work area, insuring work area is clear of pedestrians or dangerous situations. Execute work in such a way as to avoid hazards to persons and property, protect entrance to the use of adjacent buildings and prevent interruption of free passage to and from such adjacent building.
6. Contractor shall raze structures in conformance with all State and Local laws.
7. The contractor shall grade the site to match the elevations of the site perimeter. Continuity of these grades will be maintained throughout the site by direction of the City. Retaining walls shall be removed, at the discretion of the city. Contractor is to fill the entire area with 4 inches of top soil and plant grass seed. All roots, sticks, rocks and similar objects shall be removed from the top six inches or graded areas. The Inspection Division prior to final payment will determine adequacy of grading.
8. The contractor shall, at his own expense, secure and pay to the appropriate department of the local government, the fees or charges for all permits for water, demolition, sidewalks, sheds, removal of abandoned water taps, sealing of house connection drains, pavement cuts, and repaving of streets and sidewalks and all other building, electrical, plumbing, gas and sewer permits necessary under the local regulatory body or any of its agencies.
9. The contractor shall comply with the applicable laws and ordinances governing the disposal of materials, debris, rubbish and trash on or off the project area, and shall commit no trespass on any public or private property in any operation due to or connected with the demolition and site clearance.
10. The contractor shall be responsible for all salvageable materials of the structure for which he has received a notice to proceed, whether or not he has removed such materials from said structure.
11. Only such property may be salvaged by the contractor as the City is authorized by the laws of the State of Michigan and the ordinances of the City of Battle Creek to declare as such and to have removed from the premises, and in the event of any doubt respecting the ownership or the right of salvage of any particular property, the contractor shall request from the City a written statement with respect thereto.
12. Subject to the above, all salvage becomes the property of the contractor, but storage of such materials and equipment on the project area will not be permitted.
13. Personal property of third persons or of occupants of buildings on the site shall not become the property of the contractor.

14. The person intending to cause a demolition or an excavation shall deliver written notice of such intent to the owner of each potentially affected adjoining lot, building or structure at least one week prior to the commencement of work. The notice shall request license to enter the potentially affected lot, building or structure prior to commencement of work and at reasonable intervals during the work to inspect and preserve the lot, building or structure from damage.
15. If afforded the necessary license to enter the adjoining lot, building or structure, the person causing the demolition or excavation to be made shall at all times and at his or her own expense preserve and protect the lot, building or structure from damage or injury. If the necessary license is not afforded, it shall be the duty of the owner of the adjoining lot, building or structure to make safe his or her own property, for the prosecution of which said owner shall be granted the necessary license to enter the premises of the demolition or excavation.
16. All waste materials shall be removed in a manner that prevents injury or damage to persons, adjoining properties and public rights-of-way.
17. If the person causing a demolition or excavation to be made is not afforded license to enter an adjoining structure, that person shall immediately notify in writing both the code official and the owner of the adjoining property that the responsibility of providing support to the adjoining lot, building or structure has become the exclusive responsibility of the owner of the adjoining property.
18. Where a structure has been demolished or removed, the vacant lot shall be filled, graded and maintained in conformity to the established elevation of the street grade at curb level nearest to the point of demolition or excavation. Provision shall be made to prevent the accumulation of water or damage to any foundations on the premises or the adjoining property.
19. All service utility connections shall be discontinued and capped in accordance with the approved rules and the requirements of the authority having jurisdiction.
20. The contractor shall daily keep all public sidewalks, streets and alleys clean to the satisfaction of the City of Battle Creek. The contractor shall leave all parcels in the contract in a condition acceptable to the City of Battle Creek before final payment will be approved.
21. Contractor is responsible for the demolition of the entire structure, including all structural hazardous materials identified herein and all actions of any subcontractor(s). Removal of any materials from this site shall meet all local, State, and Federal standards and laws.

PRICE SHEET

We propose to furnish all labor, materials, equipment, tools and services required to complete the work in accordance with the specifications and conditions contained herein in consideration of the sum or sums stated below.

ITEM	ADDRESS	PRICE (NO CENTS)
1	249 Fountain., Battle Creek, MI.	\$ _____ .00
2	65 Meadowlawn., Battle Creek, MI.	\$ _____ .00
3	118 Buckley., Battle Creek, MI.	\$ _____ .00

Provide names of any and all subcontractors AND the specific work that they would do (be sure to provide copies of their licenses):

OFFER TO CONTRACT:

TO THE CITY OF BATTLE CREEK: We hereby offer and agree to furnish the materials, transportation, or service in compliance with all terms, conditions, specifications, and amendments in the Invitation for Bid and any written exceptions in the offer. We understand that the items in this Invitation to Bid, including, but not limited to, all required certificates are fully incorporated herein as a material and necessary part of the contract. The undersigned hereby states, under penalty of perjury, that all information provided is true, accurate, and complete and states that he/she has authority to submit this bid, which will result in a binding contract if accepted by the City of Battle Creek. We agree to complete the contract within 45 calendar days of the date of the purchase order. The City may extend this completion date for contractors who are awarded many properties. Such an extension should be requested at the time of contract award. The City will approve the completion extension in writing. Warranty: Contractor shall remove and replace at no additional cost to the City any defects in workmanship or materials that may be apparent or may develop within a period of one (1) year from the date of final acceptance.

We acknowledge receipt of the following addendum(s): _____.

I certify, under penalty of perjury, that I have the legal authorization to bind the firm hereunder, and that our firm is not debarred from doing business under the Federal Excluded Parties List System (epls.gov).

I, the Contractor or Contractor's legally authorized signer, further certify compliance with the City of Battle Creek Ordinance Chapter 214, Discrimination Prohibited. I further acknowledge and agree that the Contractor's violation of Chapter 214 shall be a material breach of this contract. In addition, Contractor acknowledges and agrees that it shall be liable for any costs or expenses incurred by the City in obtaining from other sources, the work and services to be rendered or performed or the goods or properties to be furnished or delivered to the City under the contract as a result of a material breach in the Contract for violations of Chapter 214.

Company Name

Address

City State Zip

Signature of Person Authorized to Sign

Printed Name

Title

For clarification of this offer, contact:

Name: _____

Phone: _____

Fax: _____

Email: _____

ACCEPTANCE OF OFFER:

The Offer is hereby accepted for the following items: _____

The Contractor is now bound to sell the materials or services listed by the attached contract and based upon the Invitation for Bid, including all terms, conditions, specification, amendments, etc. and the Contractor's Offer as accepted by the City.

This contract shall henceforth be referred to as Contract No. 2019-050B. The Contractor has been cautioned not to commence any billable work or to provide any material or service under this contract until Contractor receives purchase order and/or a notice to proceed from the City of Battle Creek Purchasing Agent.

COUNTERSIGNED:

APPROVED AS TO FORM BY:

City Manager Date

City Attorney

Witness Signature

Date: _____

ATTACHMENT A - DISADVANTAGED BUSINESS (DBE) FORM

I. YOUR FIRM'S BACKGROUND:

Is your firm an MBE (at least 51% minority ownership)? YES NO
 Is your firm a WBE (at least 51% woman ownership)? YES NO
 Are you subcontracting any part of this project? YES NO

II. SUBCONTRACTING INFORMATION: If subcontracting any part of the project, the bidder/contractor expressly agrees that:

- (1) If awarded a contract as a result of this bid, the major subcontractors used in the prosecution of the work will be those listed below, and
- (2) The following list includes all subcontractors who will perform work representing approximately five percent (5%) or more of the Total Base Bid.
- (3) The Bidder represents that the subcontractors listed below are financially responsible and are qualified to do the work required.

SUBCONTRACTOR NAME	City/State	Trade or Commodity	MBE	WBE	Approximate dollar value
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____
_____	_____	_____	Y / N	Y / N	\$ _____

III. DBE RECRUITMENT ACTIVITY LOG: List the MBE's and WBE's that were approached about being a subcontractor for this job, but who are NOT listed above as a subcontractor.

NAME OF FIRM APPROACHED, BUT NOT USED ON THIS PROJECT	City/State	Trade or Commodity	MBE	WBE	Reason not used on this project
_____	_____	_____	Y / N	Y / N	_____
_____	_____	_____	Y / N	Y / N	_____
_____	_____	_____	Y / N	Y / N	_____
_____	_____	_____	Y / N	Y / N	_____

ATTACHMENT B

HAZARDOUS MATERIAL SPECIFICATIONS



**NESHAP RENOVATION / DEMOLITION INSPECTION OF
ASBESTOS CONTAINING MATERIALS
AND OTHER HAZARDOUS WASTE MATERIALS**



FOR THE PROPERTY KNOWN AS:

249 Fountain
Battle Creek, MI 49014

Prepared for:

City of Battle Creek
10 North Division Street- Room 117
Battle Creek, MI 49017
269-966-3323

Prepared By:

Jacob Gleason and Wade Wiltse
Michigan Certification #: A-49991 & A51051
Environmental Testing & Consulting, Inc.
38900 West Huron River Drive
Romulus, Michigan 48174
(734) 955-6600
ETC Job #: 219902

3/22/19
Date of Survey

3/29/19
Date of Report

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- 2) Information about Asbestos Inspections
 - a) Sampling Procedures
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 - a) MIOSHA Construction Asbestos Requirements
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 - c) Notification Requirements
 - d) Abatement Requirements
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 - Chart B – Other Hazardous Materials Located
- 5) Inspector's Information/Certification

Appendices

Appendix A - Polarized Light Microscopy Asbestos Analysis Results

Appendix B - Site Map

Appendix C - Photographs

Appendix D - State of Michigan Notification of Intent to Renovate or Demolish

1. Introduction

City of Battle Creek contracted Environmental Testing & Consulting, Inc. (ETC) to perform a renovation/demolition inspection of the building located at 249 Fountain, Battle Creek, MI 49014. This inspection was conducted on 3/22/19.

The EPA, under the National Emission Standards for Hazardous Air Pollutants (NESHAPs) asbestos rule, requires that prior to the start of a renovation and/or demolition project, the building must be inspected for asbestos containing materials (ACM's). The purpose of this inspection was to determine the presence and quantity of friable or potentially friable ACM's. Depending on the ACM found and the condition that it is in, removal of the material may be necessary before demolition work can begin. Prior to the start of a demolition project, it is necessary that friable or potentially friable ACM's be removed.

ETC's certified inspector, Jacob Gleason and Wade Wiltse, conducted the asbestos containing building material (ACBM) inspection and identified materials suspected of containing asbestos. Jacob Gleason and Wade Wiltse's State of Michigan Asbestos Building Inspector's certification number is A-49991 & A51051.

Wherever potential asbestos materials were found, data was collected and recorded regarding quantities and observed conditions of the suspected material. As required by the Occupational Safety and Health (OSHA) and the Environmental Protection Agency (EPA), three (3) samples of each type of material were taken in different locations to determine actual asbestos content.

Included along with this report are copies of the bulk sample results, a site map showing sample locations and a copy of the State of Michigan Notification of Intent to Renovate/Demolish. This information will be necessary for the asbestos abatement contractor selected to perform asbestos abatement activities on the property. ETC has included its information on the second page.

2. Information about Asbestos Inspections

a. Sampling Procedures

Representative bulk samples of suspected ACBMs were randomly collected within each building area. The materials sampled were broken down into distinct homogenous (similar) materials. Homogenous material determination was based on the following criteria:

- Similar physical characteristics (same color and texture, etc.)
- Application (sprayed-on, troweled-on, assembly into a system etc.)
- Material function (Thermal insulation, floor tile, wallboard system etc.)

It is important to note that some companies are only taking one sample of select non-friable materials. While this procedure is allowed under the NESHAP regulation, the OSHA standard suggests a minimum of three samples of each homogeneous material. This is a better approach due the potential errors in the analytical method used.

To provide the most accurate information possible and be sure of our results, ETC chooses to take three samples of each sampled material.

Additionally, some inspection companies have taken to assuming that materials contain asbestos rather than paying for the time and expenses of sampling them. This is not in the client's best interest. If materials are being assumed to contain asbestos, the client must treat them as asbestos containing even if they are not. This can lead to significantly increased costs for the building owner.

In general, ETC only assumes materials to be asbestos when sampling them will ruin their integrity (i.e. fire doors) or when they are too dangerous to sample (i.e. live electrical lines).

b. PLM Analysis Methodology

Polarized Light Microscopy (PLM) samples were analyzed utilizing the Environmental Protection Agency's Test Methods: Methods for the determination of Asbestos in Bulk Building Materials (EPA 600/R-93/116, July 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as method references. Additional treatment and tests may be required to accurately define composition (i.e. ashing, extraction, acetone treatment, and TEM).

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, cellulose, etc.) and non-fibrous constituents. Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample.

According to NESHAP requirements, any bulk sample that has an asbestos content above 0% but below 10% should be point counted for final determination of percentage. ***Please note, the contract DID NOT include point counting as defined in NESHAP.*** Should City of Battle Creek wish to have this additional analysis conducted, ETC can send any samples in this range for point counting. However, this will require additional charges for analysis. Therefore, for any samples in the range above 0% but below 10%, these results can only be considered estimates.

c. Interpretation of Inspection Results

A material is considered by OSHA, the EPA and the State of Michigan to be asbestos-containing if at least one sample collected from the homogenous material has asbestos fibers present in a concentration greater than one percent (>1 %).

A summary of the materials sampled, asbestos content, quantities and locations can be found on the Chart A in Section 4.0 – Summary and Conclusions.

d. Other Hazardous Materials

Additionally, information showing other hazardous materials (above the household quantity limitations) found at the site is included on Chart B in Section 4.0 – Summary and Conclusions. This lists non-asbestos materials that may be hazardous, and may require special handling and disposal requirements. Items that might be in this category include things like mercury switches, florescent lighting tubes, halogen lights, Freon in refrigeration units, pesticides, herbicides, paints, solvents, etc.

However, under the Resource Conservation and Recovery Act (RCRA) that addresses hazardous wastes, there is residential household quantity exclusion. Therefore, these materials will only be listed in this chart if they are present in quantities larger than what would be expected in a normal household. For instance, if the home was a farm and had a 55 gallon drum of pesticide present, this would be listed in Chart B. On the other hand, if there were a few pesticide containers present as would be found in most homes, these materials would not be listed.

3. Regulatory Requirements

There are two main regulations that affect renovation/demolition of residential homes and asbestos materials. The MIOSHA Asbestos Construction Standard has requirements to protect the workers performing the renovation/demolition, while the EPA – NESHAP regulation has requirements that protect the general public and environment.

a. MIOSHA Construction Asbestos Regulations

The MIOSHA standard establishes a permissible exposure limit (PEL) average over an 8 hour day. This means that this is the maximum level of asbestos that workers and/or employees can be exposed to without respirator protection and protective clothing. Should air sampling during renovation or demolition activities be at or near the PEL, the employer will have to:

- Notify workers
- Provide worker training
- Post danger signs
- Establish periodic air monitoring regulated areas and decontamination facilities
- Provide respiratory protection and personnel protective clothing
- Conduct employee respiration monitoring
- Maintain/provide record keeping
- Perform medical surveillance (if employee will be exposed 30 days per year or more).

Until recently, only schools were federally mandated to conduct asbestos inspections of their buildings. However, with the passage of new MIOSHA regulations, all building owners, in this case City of Battle Creek, are now required to notify all renovation/demolition workers of the presence, location and quantity of all ACBM's within the building.

In most cases, it is more practical to have an asbestos contractor remove the ACM from the building prior to renovation/demolition than have the renovation/demolition contractor comply with all these requirements.

b. NESHAP Requirements

Prior to beginning a renovation or demolition project, NESHAP (enforced in Michigan by the Department of Environmental Quality – MDEQ) requires a full inspection of the following materials to determine their asbestos content:

- Friable Materials
- Category 1 – Non-friable Materials (Packings, gaskets, resilient floor covering, and asphalt roofing products)
- Category II – Non-friable Materials (All other non-friable materials)

In general, MDEQ, prior to renovation or demolition activities, requires any identified asbestos materials be removed that would dislodge, disturb or otherwise affect these materials. There is an exception that if a licensed supervisor will state in writing that the material will not become friable during the renovation/demolition process, it may be left in the building. However, be very careful with this exemption. MDEQ has stated that they believe that the only materials that MIGHT qualify for this exemption would be roofing felt and asphalt roofing materials. In order to use even this small exemption, the following would be required from the demolition contractor:

- A signed document from a licensed asbestos abatement supervisor that the material will not become friable
- The supervisor will have to be on-site during all renovation or demolition to insure that the material stays intact.
- The waste generated from the activity must be taken to an asbestos dump and they must be informed that the waste is mixed asbestos waste.

It is obviously very expensive and difficult to try and leave ACM within an area/building during renovation or demolition activities. If the MDEQ reviews the site and finds the material crumbled or disturbed, both the contractor and building owner may be sited up to \$27,500 per day. Therefore, ETC recommends that all ACM be removed. This is why ETC does not assume materials to be ACM.

c. Notification Requirements

When performing abatement work within the State of Michigan, notification requirements depend on the quantity of materials and the friability of the material being removed.

If removing friable material **greater than** 160 square feet and / or 260 linear feet, the contractor must provide a ten working day notification to Michigan Department of Environmental Quality (MDEQ) and a ten calendar day notification to Michigan Department of Licensing and Regulatory Affairs (LARA) – Asbestos Program. If only non-friable materials are being removed, MDEQ does not require a notification.

If removing **more than** 15 square feet but **less than** 160 square feet, or **greater than** 10 linear feet but **less than** 260 linear feet, the contractor only needs to notify LARA as stated above.

For removals of **less than** 15 square feet or **less than** 10 linear feet, no notification is required.

In conjunction with any notification to LARA, the contractor must pay a 1% fee for the project. This fee must reflect 1% of the total abatement contract amount.

d. Abatement Requirements

Any company hired to remove identified ACM must insure that all asbestos companies, supervisors, and workers are licensed by LARA. Additionally, these companies must insure that:

- The State of Michigan must be notified of the work in advance.
- An asbestos supervisor must be on-site at all times when work is occurring.
- All work must be completed within regulated work areas.
- All work must be completed utilizing asbestos work practices defined in the MIOSHA regulations.
- On-site personnel sampling be conducted during the removal activities.
- Prior to dismantling and leaving the site, the contractor must request and pass (below 0.05 f/cc) a final asbestos clearance performed by a neutral.
- Meet all other current regulations and standards.

In addition to these requirements, ETC strongly recommends that City of Battle Creek insure that they receive the following documents from the contractor prior to making final payment:

- Written/signed documentation from the supervisor if any asbestos materials are to be left in place during renovation or demolition (Not recommended)
- Copy of the asbestos abatement notification
- Copy of the personnel monitoring during the work
- Copy of the final asbestos clearance report

By requiring these documents, City of Battle Creek will substantially reduce its liability should something occur during the asbestos removal at this site.

4. Summary and Conclusions

ETC has endeavored to identify potential asbestos containing materials (ACM) that were accessible (without destructive testing) at the time of the inspection. However, other potential ACM may be buried or have been inaccessible at the time of the initial survey.

As has been evidenced on numerous other demolition and renovation projects, when tearing out or demolishing existing building surfaces, it is very common to encounter other

building materials that were not accessible during the initial testing for ACM or lead/cadmium painted surfaces. It is therefore incumbent on City of Battle Creek or its selected construction renovation contractor to refer to the chart of sampled materials consistently during the renovation process. If materials are encountered during this process that are not clearly identifiable on the initial survey chart, ETC should be called to test and verify the asbestos/lead cadmium content of these items.

ETC cannot be held responsible for materials encountered after the initial survey is completed unless we are contacted and given the opportunity to test and verify the material content. The costs associated with this additional testing are not included within the scope of this project and City of Battle Creek will incur additional charges for the additional sampling and analysis.

On the following charts, please find:

- Chart A - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. ***If additional materials are encountered that were not previously identified, the contractor is responsible for contacting ETC and having these materials tested. These additional sampling costs are not included in the scope of work or price for this survey.***

Quantities that are listed are estimates only; in general, listed quantities represent only what was visible during testing. It is likely that where ACM has been identified throughout specific floors, similar materials and quantities exist on other like floors. It is the contractors'/client's responsibility to verify all amounts of asbestos identified during any bid process, or during future renovation and/or demolition activities. Materials that are identical in both relative location and physical description to already tested materials listed in this report should always be assumed to be ACM.

- Chart B – Is a list of other hazardous materials (above RCRA household quantity levels) that will require special handling and disposal by the contractor.

Chart A – Materials Sampled and Asbestos Content

Material #	Material Description	Asbestos	Quantity	Location (Refer to map in Appendix B)
1	Plaster over Lath	No	5,444 SF	Throughout
2	Plaster over Brick Chimney	No	300 SF	Room 6
3	Duct Boot Wrap Brown	Yes	425 SF	Throughout
4	Floor Tile Gray	No	175 SF	Rooms 7,8,11
5	Mastic on 4	No	175 SF	Rooms 7,8,11
6	Linoleum White	No	300 SF	Rooms 1 and 6
7	Construction Adhesive Tan	No	100 SF	Room 6
8	Tile Mastic Tan	No	25 SF	Room 6
9	Stair Tread Brown	No	45 SF	Room 11
10	Blown in Insulation Brown	No	2,216 SF	Throughout 2 nd Floor
11	Floor Tile Brown	No	175 SF	Rooms 15,16
12	Mastic Black	No	175 SF	Rooms 15,16
13	Fiber Board	No	1,584 SF	Rooms 13-16
14	Window Rope White	No	18 Units	Throughout
15	Sink Undercoat Brown	Yes	4 SF	Room 6
16	Linoleum Yellow with Leaves	No	125 SF	Room 3
17	Subfloor Brown	No	125 SF	Room 3
18	Poured Concrete Grey	No	1,282 SF	Rooms 9,10
19	Ceiling Tile White	No	1,282 SF	Rooms 9,10
20	Stair Tread Black	No	45 SF	Room 8
21	Mastic Yellow-Green	No	45 SF	Room 8
22	Window Glaze White	No	18 Units	Exterior
23	Exterior Caulk White	No	30 SF	Exterior
24	Transite Grey	Yes	3,840 SF	Exterior
25	House Wrap Black/Brown	No	3,840 SF	Exterior
26	Asphalt Black	No	2,200 SF	Exterior

Chart B – Other Hazardous Materials Located
(Above the household quantity Limitations)

Material #	Material Description	Quantity	Location
1	TV	1	Room 14
2	Tires	2	East Exterior

5. Inspector's Information

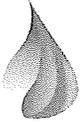
The information contained in this report is a true and accurate representation of the conditions and activities at this property at the time of the investigation, based on the professional judgment of the person(s) who conducted and reported this survey. All inspection work was completed by a Michigan certified asbestos inspector as detailed below.

Jacob Gleason Wade Wiltse

Jacob Gleason and Wade Wiltse
State of Michigan Certification #: A-49991 & A51051

APPENDIX A

POLARIZED LIGHT MICROSCOPY ASBESTOS ANALYSIS RESULT FORMS



**ENVIRONMENTAL TESTING
LABORATORIES, INC.**

38900 HURON RIVER DRIVE, SUITE 200
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 955-6604

To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 219902

Client Project: 219902

Report Date: 3/28/2019

Attention: Rick Bolek

Project Location: 249 Fountain, Battle Creek, MI 49014
Vacant Residence

Lab Sample Number	Client Sample Number	Sample Type	Completed
993218	01A	Asbestos PLM	03/28/2019
993219	01B	Asbestos PLM	03/28/2019
993220	01C	Asbestos PLM	03/28/2019
993221	01D	Asbestos PLM	03/28/2019
993222	01E	Asbestos PLM	03/28/2019
993223	01F	Asbestos PLM	03/28/2019
993224	01G	Asbestos PLM	03/28/2019
993225	02A	Asbestos PLM	03/28/2019
993226	02B	Asbestos PLM	03/28/2019
993227	02C	Asbestos PLM	03/28/2019
993228	03A	Asbestos PLM	03/28/2019
993229	03B	Asbestos PLM	03/28/2019
993230	03C	Asbestos PLM	03/28/2019
993231	04A	Asbestos PLM	03/28/2019
993232	04B	Asbestos PLM	03/28/2019
993233	05A	Asbestos PLM	03/28/2019
993234	05B	Asbestos PLM	03/28/2019

Lab Sample Number	Client Sample Number	Sample Type	Completed
993235	06A	Asbestos PLM	03/28/2019
993236	06B	Asbestos PLM	03/28/2019
993237	07A	Asbestos PLM	03/28/2019
993238	07B	Asbestos PLM	03/28/2019
993239	08A	Asbestos PLM	03/28/2019
993240	08B	Asbestos PLM	03/28/2019
993241	09A	Asbestos PLM	03/28/2019
993242	09B	Asbestos PLM	03/28/2019
993243	10A	Asbestos PLM	03/28/2019
993244	10B	Asbestos PLM	03/28/2019
993245	11A	Asbestos PLM	03/28/2019
993246	11B	Asbestos PLM	03/28/2019
993247	12A	Asbestos PLM	03/28/2019
993248	12B	Asbestos PLM	03/28/2019
993249	13A	Asbestos PLM	03/28/2019
993250	13B	Asbestos PLM	03/28/2019
993251	14A	Asbestos PLM	03/28/2019
993252	14B	Asbestos PLM	03/28/2019
993253	15A	Asbestos PLM	03/28/2019
993254	15B	Asbestos PLM	03/28/2019
993255	16A	Asbestos PLM	03/28/2019
993256	16B	Asbestos PLM	03/28/2019
993257	17A	Asbestos PLM	03/28/2019
993258	17B	Asbestos PLM	03/28/2019
993259	18A	Asbestos PLM	03/28/2019
993260	18B	Asbestos PLM	03/28/2019

Lab Sample Number	Client Sample Number	Sample Type	Completed
993261	19A	Asbestos PLM	03/28/2019
993262	19B	Asbestos PLM	03/28/2019
993263	20A	Asbestos PLM	03/28/2019
993264	20B	Asbestos PLM	03/28/2019
993265	21A	Asbestos PLM	03/28/2019
993266	21B	Asbestos PLM	03/28/2019
993267	22A	Asbestos PLM	03/28/2019
993268	22B	Asbestos PLM	03/28/2019
993269	23A	Asbestos PLM	03/28/2019
993270	23B	Asbestos PLM	03/28/2019
993271	24A	Asbestos PLM	03/28/2019
993272	24B	Asbestos PLM	03/28/2019
993273	25A	Asbestos PLM	03/28/2019
993274	25B	Asbestos PLM	03/28/2019
993275	26A	Asbestos PLM	03/28/2019
993276	26B	Asbestos PLM	03/28/2019

Reviewed by:



Quality Assurance Coordinator



NVLAP LAB CODE 201825-0

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

Location : Vacant Residence
249 Fountain, Battle Creek, MI 49014

ETC Job : 219902
Client Project : 219902
Date Collected : 03/22/2019
Date Received : 03/25/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993218 01A 1 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993218 01A 1 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993219 01B 2 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993219 01B 2 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993220 01C 3 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993220 01C 3 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Certificate of Analysis

Environmental Testing Laboratories, Inc.
38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
249 Fountain, Battle Creek, MI 49014

ETC Job : 219902
Client Project : 219902
Date Collected : 03/22/2019
Date Received : 03/25/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993221 01D 4 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993221 01D 4 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993222 01E 5 N Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993222 01E 5 N Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993222 01E 5 N Wall Layer-3 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Texture	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected

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249 Fountain, Battle Creek, MI 49014

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993223 01F 6 E Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993223 01F 6 E Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993223 01F 6 E Wall Layer-3 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Texture	White Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993224 01G 7 E Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Lath	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993224 01G 7 E Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993225 02A 6 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Brick Chimney	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993225 02A 6 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993226 02B 6 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Brick Chimney	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993226 02B 6 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993227 02C 6 W Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Plaster over Brick Chimney	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993227 02C 6 W Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Skim Coat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993228 03A 7 W Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Duct Boot Wrap	Brown Fibrous Homogenous	PLM 40% Cellulose	PLM 20% Other	PLM 40% Chrysotile
993229 03B 3 E Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019		Not Analyzed			
993230 03C 2 N Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019		Not Analyzed			
993231 04A 7 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Floor Tile	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993232 04B 11 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Floor Tile	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993233 05A 7 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Mastic on #4	Tan Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993234 05B 11 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Mastic on #4	Tan Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
993235 06A 1 N Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Linoleum	White Fibrous Homogenous	PLM 65% Cellulose	PLM 35% Other	PLM None Detected
993236 06B 1 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Linoleum	White Fibrous Homogenous	PLM 65% Cellulose	PLM 35% Other	PLM None Detected
993237 07A 6 W Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Construction Adhesive	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993238 07B 6 W Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Construction Adhesive	Tan Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993239 08A 6 E Counter Top Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Tile Mastic	Tan Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993240 08B 6 E Counter Top Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Tile Mastic	Tan Non-Fibrous Homogenous	PLM 5% Cellulose	PLM 95% Other	PLM None Detected
993241 09A 11 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Stair Tread	Brown Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
993242 09B 11 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Stair Tread	Brown Non-Fibrous Homogenous	PLM 4% Cellulose	PLM 96% Other	PLM None Detected
993243 10A 17 Center Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Blown In Insulation	Brown Fibrous Homogenous	PLM 90% Fiberglass	PLM 10% Other	PLM None Detected
993244 10B 12 Ceiling Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Blown In Insulation	Brown Fibrous Homogenous	PLM 90% Fiberglass	PLM 10% Other	PLM None Detected
993245 11A 15 E Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Floor Tile	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993246 11B 16 E Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Floor Tile	Brown Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993247 12A 15 E Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Mastic	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993248 12B 16 E Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Mastic	Black Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993249 13A 13 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Fiber Board	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993250 13B 14 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Fiber Board	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993251 14A 1 E Window Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Window Rope	White Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected

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NVLAP LAB CODE 20-024-0

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993252 14B 2 S Window Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Window Rope	White Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993253 15A 6 W Sink Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Sink Undercoat	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 95% Other	PLM 4% Chrysotile
993254 15B 6 W Sink Analyst: Jessica Dilworth Date Analyzed : 03/28/2019		Not Analyzed			
993255 16A 3 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Linoleum, with Leaves	Yellow Fibrous Homogenous	PLM 75% Cellulose	PLM 25% Other	PLM None Detected
993256 16B 3 N Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Linoleum, with Leaves	Yellow Fibrous Homogenous	PLM 75% Cellulose	PLM 25% Other	PLM None Detected
993257 17A 3 S Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Sub Floor	Brown Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected

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NVLAP LAB CODE 201624-0

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993258 17B 3 N Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Sub Floor	Brown Fibrous Homogenous	PLM 90% Cellulose	PLM 10% Other	PLM None Detected
993259 18A 9 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Poured Concrete	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993260 18B 10 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Poured Concrete	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993261 19A 9 E Ceiling Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Ceiling Tile	White Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993262 19B 10 E Ceiling Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Ceiling Tile	White Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993263 20A 8 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Stair Tread	Black Non-Fibrous Homogenous	PLM 50% Cellulose	PLM 50% Other	PLM None Detected

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Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993264 20B 8 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Stair Tread	Black Non-Fibrous Homogenous	PLM 50% Cellulose	PLM 50% Other	PLM None Detected
993265 21A 8 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Mastic	Yellow-Green Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993266 21B 8 W Floor Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Mastic	Yellow-Green Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993267 22A Ext W Window Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993268 22B Ext W Window Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Window Glaze	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993269 23A Ext W Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Exterior Caulk	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Certificate of Analysis

Environmental Testing Laboratories, Inc.
38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
249 Fountain, Battle Creek, MI 49014

ETC Job : 219902
Client Project : 219902
Date Collected : 03/22/2019
Date Received : 03/25/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993270 23B Ext E Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Exterior Caulk	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993271 24A Ext N Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Transite	Gray Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 82% Other	PLM 15% Chrysotile
993272 24B Ext S Wall Analyst: Jessica Dilworth Date Analyzed : 03/28/2019		Not Analyzed			
993273 25A Ext N Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	House Wrap 1	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993273 25A Ext N Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	House Wrap 2	Black Fibrous Homogenous	PLM 70% Cellulose	PLM 30% Other	PLM None Detected

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NVLAP LAB CODE 29-025-0

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
249 Fountain, Battle Creek, MI 49014

ETC Job : 219902
Client Project : 219902
Date Collected : 03/22/2019
Date Received : 03/25/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993274 25B Ext S Wall Layer-1 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	House Wrap 1	Brown Fibrous Homogenous	PLM 95% Cellulose	PLM 5% Other	PLM None Detected
993274 25B Ext S Wall Layer-2 Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	House Wrap 2	Black Fibrous Homogenous	PLM 70% Cellulose	PLM 30% Other	PLM None Detected
993275 26A Ext Roof W Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Asphalt	Black Non-Fibrous Homogenous	PLM 1% Cellulose PLM 6% Fiberglass	PLM 93% Other	PLM None Detected
993276 26B Ext Roof E Analyst: Jessica Dilworth Date Analyzed : 03/28/2019	Asphalt	Black Non-Fibrous Homogenous	PLM 6% Fiberglass PLM 1% Cellulose	PLM 93% Other	PLM None Detected

Lab Supervisor/Other Signatory

Analyst:

Jessica Dilworth

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples

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ENVIRONMENTAL TESTING LABORATORIES, INC

38900 HURON RIVER DRIVE
 ROMULUS, MICHIGAN 48174
 (734) 955-6600
 FAX: (734) 992-2261
 www.2etl.com

**Bulk Asbestos/Mold
 Chain of Custody**

ETL Project #: 219902

Client: <u>ETC</u>	Contact: <u>Jake Gleason</u>	Project Location/Name: <u>249 Fountain, Battle Creek, MI</u>
Address: <u>721 N Capitol Lansing, MI</u>	Phone: <u>734-486-5782</u>	Client Project #: <u>219902</u>
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		Date Sampled: <u>3/22/19</u>

Turnaround Time (TAT): RUSH (2 hrs) Same Day 24 hrs 48 hrs Standard (3-5 days) Other _____

Asbestos PLM/Mold Instructions
 (Check all that apply)

PLM EPA600/R-93/116, 1993 (Standard method) <input checked="" type="checkbox"/>	Stop at 1st Positive: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Point Counting: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> *400 Points <input type="checkbox"/> *1000 Points <input type="checkbox"/>	Clearly Mark Homogenous Group
Point Counting Criteria: <u>Please count anything under 3%</u>	*Gravimetric Reduction <input type="checkbox"/> *Nuisance Dust <input type="checkbox"/>
Mold Air <input type="checkbox"/> Mold Tape <input type="checkbox"/> Mold Bulk <input type="checkbox"/>	*Soil or Vermiculite Analysis <input type="checkbox"/>

* Additional charge and turnaround may be required

Lab ID	Sample ID	Sample Location	Material Description/Volume
01	A-G	*Please see Attach	
02	A-C		
03	A-C		
04	A-B		
	↓		
026	A-B		

Relinquished (Name/Organization): <u>Good With</u>	Date: <u>3/22/19</u>	Time: <u>11:00 AM/PM</u>
Received (Name/ETL): <u>Anna Spalle</u>	Date: <u>3-25-19</u>	Time: <u>10:20 AM/PM</u>
Stereoscopical/Sample Analysis (Name/ETL): <u>Jessica Smith</u>	Remarks:	

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF
 **RUSHES ARE NOT ACCEPTED AFTER 3:00 PM AND SAME DAYS ARE NOT ACCEPTED AFTER 2:00 PM

Asbestos Material Sampling Summary Sheet

Surfacing materials

Job #:	219902	Building:	249 Fountain, Battle Creek, MI			Date:	3/22/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #		
01	Material: Plaster over bath	F	A	1 W	wall 993218	throughout	SFB		
			B	2 W	219				
			C	3 W	220				
			D	4 W	221				
			E	5 N	222				
			F	6 E	223				
			G	7 E	224				
02	Material: Plaster Over Brick Chimney	F	A	6 W	wall 225	6	300 SF		
			B	6 W	226				
			C	6 W	227				
	Material:								

<1000 SF = 3 samples

1000 - <5000 = 5 samples

Asbestos Material Sampling Summary Sheet
 TSI (Thermal System Insulation) materials

Job #:	219902		Building:	249 Fountain, Baffle Creek, MI		Date:	3/22/19	
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #	
03	Material: Duct Boot wrap Description: Brown	F	A	W Wall 903208	throughout	425 SF		
			B	3 E 229				
			C	2 N ↓ 280				
	Material: Description:							
	Material: Description:							
	Material: Description:							
	Material: Description:							
	Material: Description:							
	Material: Description:							

3 samples with the exception of patches less than 6 LF or 6 SF, then only 1 sample

Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

Job #:	219902	Building:	249 Fountain, Battle Creek, MI	Date:	3/22/19		
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
04	Material: Floor tile Description: Gray	NF1	A	7 S	Floor 99B231	175 SF	
	Material: Mastik Description: on #4	NF2	B	8 N S	232	36	
05	Material: Mastik Description: on #4	NF2	A	9 S	233	175 SF	
	Material: on #4 Description: linden	NF1	B	11 S	234	300 SF	
06	Material: linden Description: white	NF1	A	1 N	Floor 235	100 SF	
	Material: Construction Adhesive Description: tan	NF2	B	6 S	Floor 236	25 SF	
07	Material: Construction Adhesive Description: tan	NF2	A	6 W	wall 237	45 SF	
	Material: tile mastik Description: tan	NF2	B	6 W	wall 238	2216 SF	
08	Material: tile mastik Description: tan	NF2	A	6 E	counter top 239	195 SF	
	Material: stair tread Description: Brown	NF2	B	6 E	240	36	
09	Material: stair tread Description: Brown	NF2	A	11 W	Floor 241	11	
	Material: Blown in insulation Description: Brown	NF2	B	11 W	Floor 242	6	
10	Material: Blown in insulation Description: Brown	NF2	A	19 Center	243	2nd Floor	
	Material: Floor tile Description: Brown	NF1	B	17 Ceiling	244	throughout	
11	Material: Floor tile Description: Brown	NF1	A	15 E	Floor 245	15/16	
	Material: mastik Description: Black	NF2	B	16 E	246	195 SF	
12	Material: mastik Description: Black	NF2	A	15 E	247	15/16	
	Material: Fiber Board Description:	NF1	B	16 E	248	175 SF	
13	Material: Fiber Board Description:	NF1	A	13 S	249	15/14/13/16	
		NF1	B	14 S	250	1884 SF	

Asbestos Material Sampling Summary Sheet
Miscellaneous materials

Revision date 5/7/2015

Job #:	219902		Building:	249 Fountain Bottle Creek MI		Date:	3/22/19	
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #	
14	Material: Windows Paper Description: white	NF2	A	1 E windows	903281	18 units		
15	Material: BRN sink under count Description: Brown	NF2	A	6 W sink	252	4 SF		
16	Material: linoleum Description: yellow with leafs	NF1	A	3 S floor	253			
17	Material: sub floor Description: Brown	NF1	B	3 S floor	254			
18	Material: Poured concrete Description: Grey	NF2	A	3 N	255	125 SF		
19	Material: Ceiling tile Description: white	NF2	B	3 N	256	125 SF		
20	Material: Stair tread Description: Black	NF2	A	9 W floor	257			
21	Material: mastic Description: Yellow-Green	NF2	B	10 W floor	258			
22	Material: window Glaze Description: White	NF2	A	9 E ceiling	259	1282 SF		
23	Material: ext caulk Description: white	NF2	B	10 E	260	1282 SF		
		NF1	A	8 W floor	261			
		NF1	B	8 W floor	262			
		NF1	A	8 W window	263	45 SF		
		NF1	B	8 W window	264	45 SF		
		NF1	A	ext W window	265	45 SF		
		NF2	B	ext W window	266	18 units		
		NF2	A	ext W wall	267	30 SF		
		NF2	B	ext E wall	268			
		NF2	A	ext E wall	269			
		NF2	B	ext E wall	270			

Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

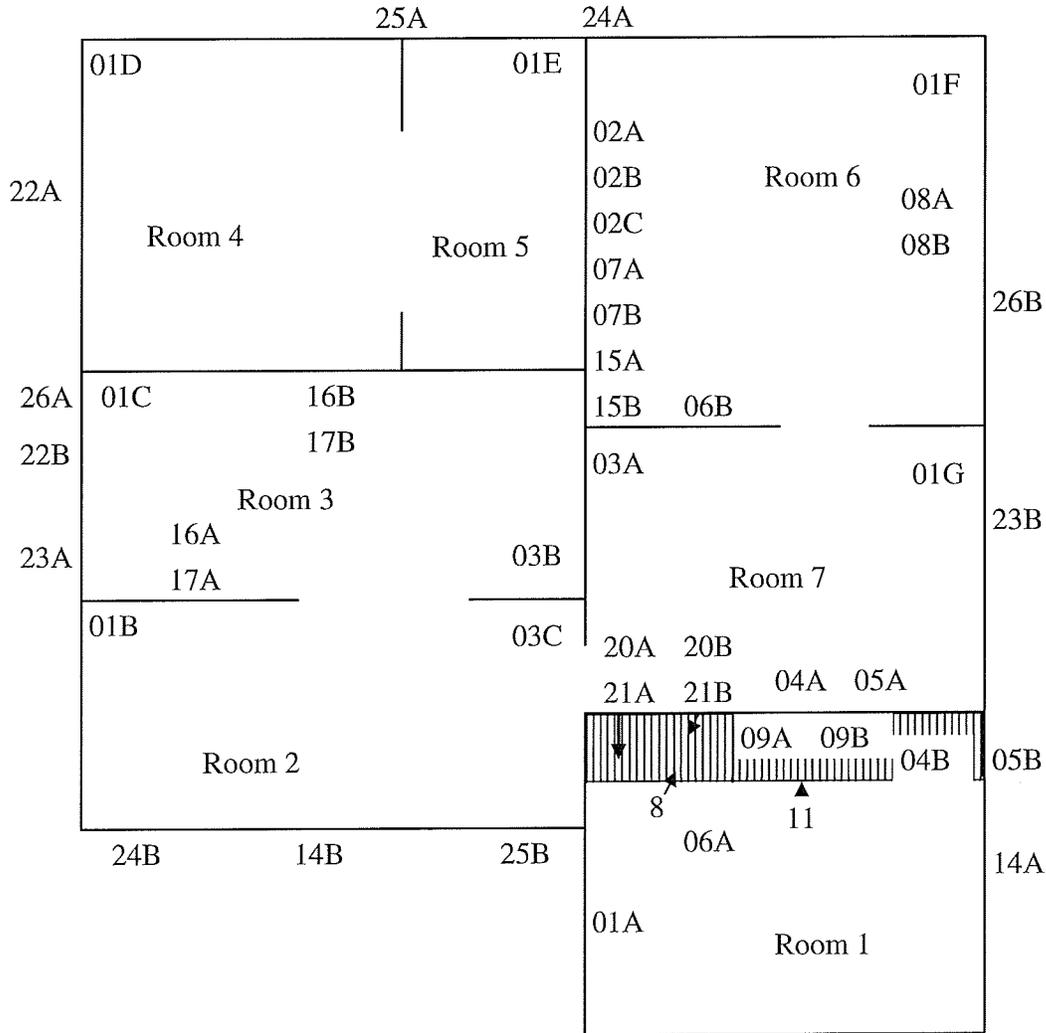
Job #:	Material Description		Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
219902	Building: 249 Fountain, Battle Creek, MI							Date: 3/22/19
24	Material: White Description: Grey	NF2	A	ext N wall	09321	ext	3800 SF	
25	Material: House W/Red Description: Black / Brown	NF2	B	ext S wall	772	ext	3800 SF	
26	Material: Black Asphalt Description: Black	NF2	A	ext N wall	773	ext	2700 SF	
27	Material: Black Asphalt Description: Black	NF2	B	ext S wall	774	ext	2700 SF	
	Material: Black Asphalt Description: Black	NF2	A	ext ROOF W	775	ext	2700 SF	
	Material: Black Asphalt Description: Black	NF2	B	ext ROOF E	776	ext	2700 SF	
	Material: Description:		A					
	Material: Description:		B					
	Material: Description:		A					
	Material: Description:		B					
	Material: Description:		A					
	Material: Description:		B					
	Material: Description:		A					
	Material: Description:		B					
	Material: Description:		A					
	Material: Description:		B					

APPENDIX B

SITE MAP

1st floor

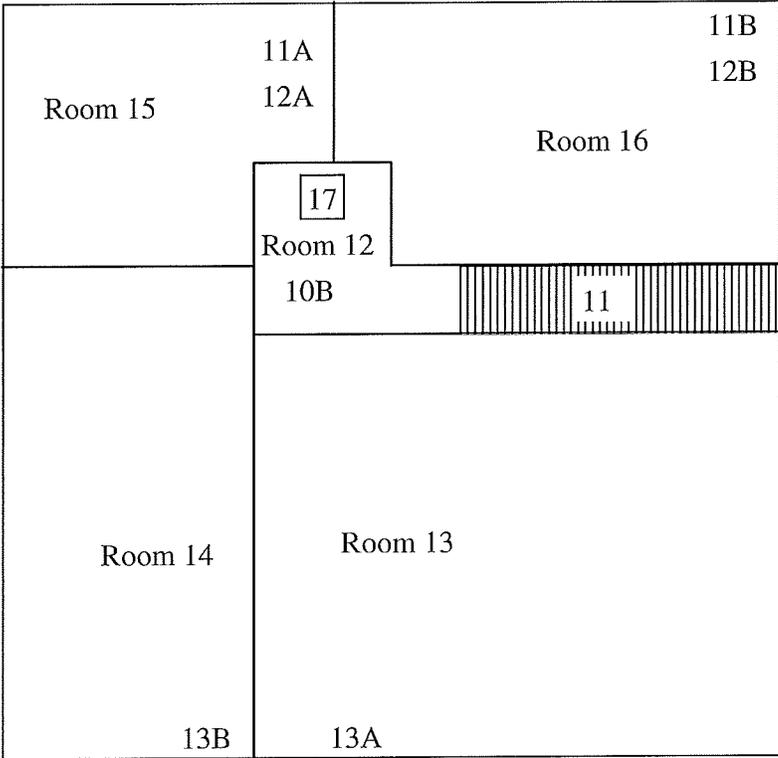
249 Fountain, Battle Creek, MI 49014



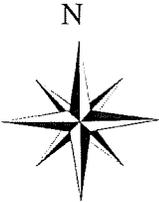
Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



City of Battle Creek
219902

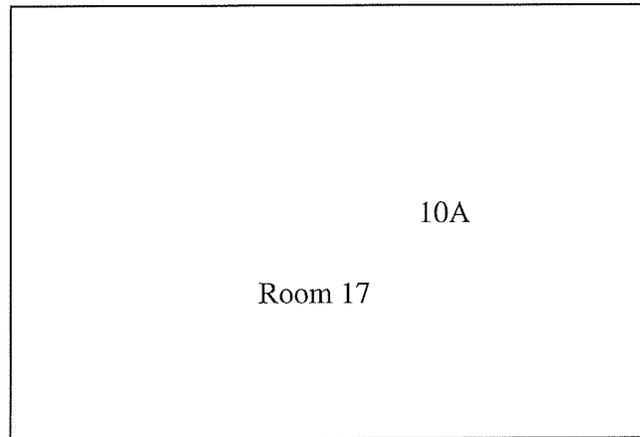


Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.

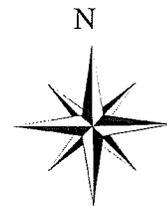


Attic

249 Fountain, Battle Creek, MI 49014



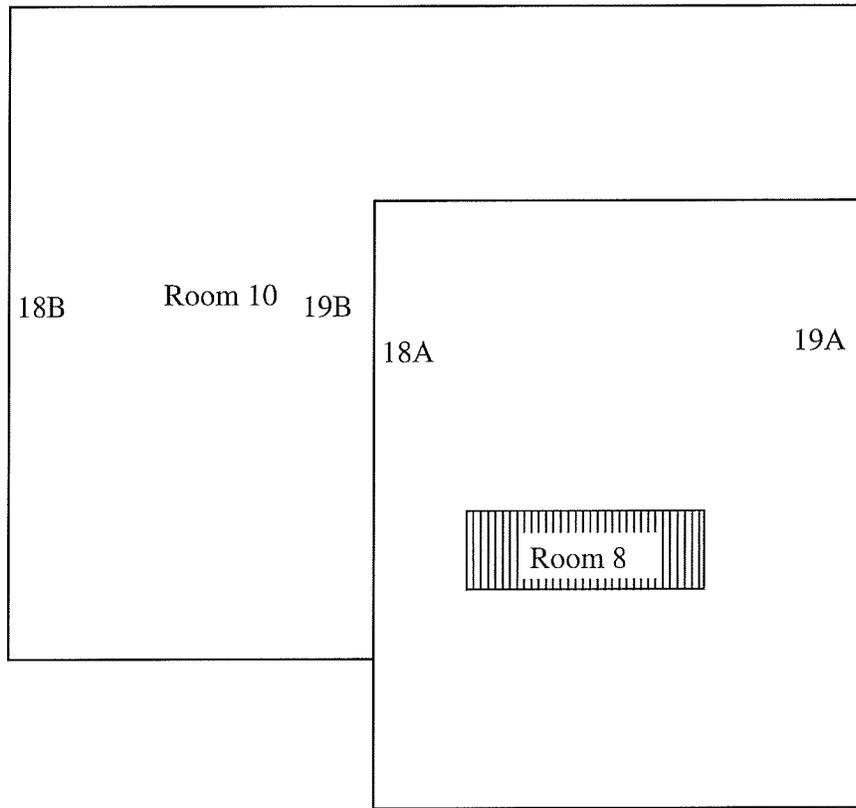
Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



City of Battle Creek
219902

Basement

249 Fountain, Battle Creek, MI 49014



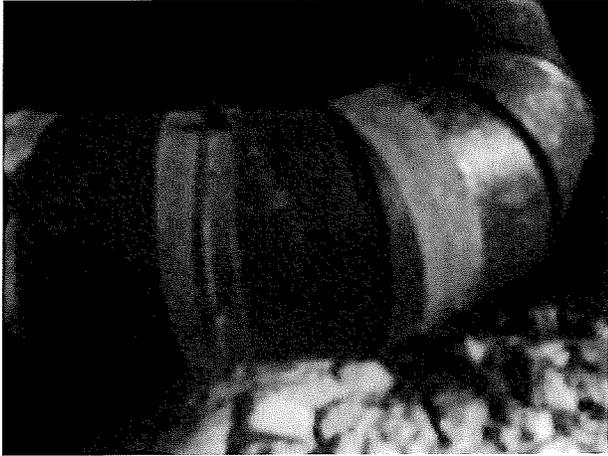
Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



City of Battle Creek
219902

APPENDIX C

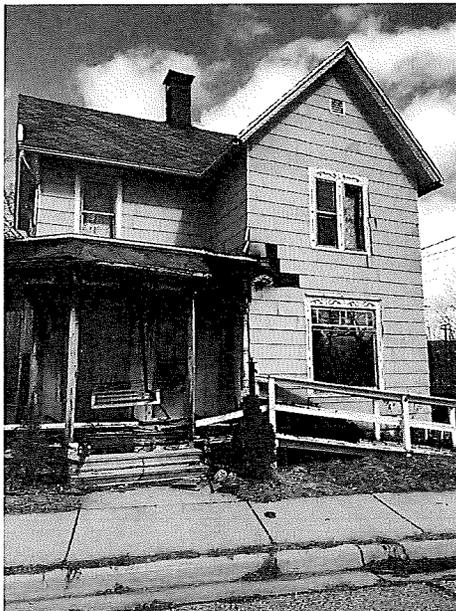
PHOTOGRAPHS



Duct Boot Wrap, brown



Sink Undercoat, brown



Transite, grey

APPENDIX D

STATE OF MICHIGAN NOTIFICATION OF INTENT TO RENOVATE OR DEMOLISH

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
(MDEQ) AIR QUALITY DIVISION
NESHAP, 40 CFR Part 61, Subpart M



MICHIGAN DEPARTMENT OF LICENSING AND
REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM,
P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

DEQ/LARA USE ONLY

Postmark Date ___/___/___ Rec'd Date ___/___/___
 Emergency Date ___/___/___ Valid No. _____
 OK Send Def Ltr. Date of Def Ltr. ___/___/___
 FOLLOW UP ___/___/___ Spoke w/ _____
 Comments: _____

 Notification No. _____ Trans No. _____

3. ABATEMENT CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

4. DEMOLITION CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

5. FACILITY OWNER: ("Facility" includes Bridges)
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

6. FACILITY DESCRIPTION:
 Facility Name: _____
 Location Address/Description: _____
 _____ If Apt. # of units: _____
 City/Twp. _____ State: _____ Zip Code: _____
 County: _____ Nearest Crossroad: _____
 Size: (sq. ft.) _____ No. of Floors: _____ Floor No.: _____
 Age: _____ Present Use: _____ Prior Use: _____
 Specific Location(s) in Facility: _____

7. DISPOSAL SITE:
 Name: _____
 Location Address: _____
 City/State/Zip: _____

8. WASTE TRANSPORTER 1:	WASTE TRANSPORTER 2:
Name: _____	_____
Address: _____	_____
City/State/Zip: _____	_____
Phone: _____	_____

9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.
 Gov't Agency Ordering Demo: _____
 Name/Title of Person Signing Order: _____

 Date of Order: _____ Date Ordered to Begin: _____

Calculate LARA Asbestos Project Fee: (1% Project Fee)
 Total Project Cost: _____ x 0.01 = _____
 Type of Contractor: _____ License No.: _____
 Licensing Authority: _____

1. NOTIFICATION:
 Date of Notification: _____
 Date of Revision(s): _____
 Notification Type: Original Revised Canceled Annual
Mark appropriate boxes: (both DEQ and LARA may apply):
DEQ (NESHAP) [260 ln. ft./160 sq. ft. or more is threshold]
 Planned Renovation – 10 working days notice
 Emergency Renovation
 Scheduled Demolition – 10 working days notice
 Intentional Burn – 10 working days notice
 Ordered Demolition
LARA (MIOSHA) [Will not accept annual notifications]
 Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 calendar days notice
 Emergency Renovation/Encapsulation

2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

	Days of the Week	Work Hours
Asb. Removal:	_____	_____
Demolition:	_____	_____
Encapsulation:	_____	_____

* Includes setup, build enclosure, asbestos removal, demobilizing, etc.
 +Include only those dates you are conducting asbestos removal/demo.
 Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

10. IS ASBESTOS PRESENT? Yes No To be removed prior to demolition

Estimate the amount of asbestos: Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (NOTE: In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be Removed	RACM to be Encapsulated	Non-friable ACM <u>not</u> removed prior to demo.		Units of Measure	
		Category I	Category II		
_____	_____	_____	_____	<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
_____	_____	_____	_____	<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
_____	_____	_____	_____	<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu.M.*

*Volume (cubic ft./meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11. PROJECT DESCRIPTION: Complete A) for Renovation (asbestos removal/encapsulation) and/or B) for Demolition:

A) RENOVATION: Mark all surfaces/types of RACM to be removed:

- Piping Fittings Boiler(s) Tanks(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Mag Block Other (describe) _____

Encapsulation (for LARA): Mark surfaces/types to be encapsulated:

- Piping Fittings Boiler(s) Tank(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Other (describe) _____

Method of removal: Describe how the asbestos will be removed from the surface (example: glove bag, scrape with hand tools, cut in sections and carefully lower, etc.): _____

B) DEMOLITION: Describe the method of demolition of facility, bridge, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: _____

12. ENGINEERING CONTROLS: Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: _____

13. UNEXPECTED ASBESTOS: Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: _____

14. PROCEDURE(S) USED TO DETECT THE PRESENCE OF ASBESTOS: A) Indicate how you determined whether or not asbestos is in the facility. If analytical sampling was used, describe method of analysis. (The determination of the presence or absence of asbestos must be made prior to submitting a renovation/demolition notification.): _____

B) Name, address, and phone number of company performing asbestos survey: _____

C) Name, accreditation number of inspector, and date of inspection: _____

15. EMERGENCY RENOVATIONS: Date/time of emergency: _____ Describe the sudden, unexpected event: _____

Explain how the event caused unsafe conditions, and/or would cause equipment damage and/or an unreasonable financial burden: _____

16. I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

Signature of Owner or Abatement Contractor *Date*

Signature of Owner or Demolition Contractor *Date*

17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)

Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. *I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.*

Signature of Building Owner or Lessee *Date*

Signature of Asbestos Abatement Contractor Representative *Date*

NOTE: It is not mandatory that a signed copy be sent to LARA unless requested. For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

18. I certify that the above information is correct:

Printed Name of Owner/Operator *Date*

Signature of Owner/Operator *Date*

MAILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine which agency requirements/regulations are applicable to your project.)

For Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), mail to address below. For more info visit: <http://www.michigan.gov/asbestos>

MIOSHA Asbestos Program
 LARA, CSHD
 P.O. Box 30671
 Lansing, MI 48909-8171

517.636.4551 (office), 517.322.1713 (fax)

For NESHAP Demolitions/Renovations, 40 CFR, Part 61, Subpart M, mail notifications to the appropriate address below (by county of subject facility): For more info visit <http://www.michigan.gov/deq> click on Air, then Asbestos NESHAP Program.

All Counties (except Wayne County)

NESHAP Asbestos Program
 DEQ, AQD
 P.O. Box 30260
 Lansing, MI 48909-7760

517.241.7463 (Office)
 517.373.7064 (Revision Line)

Wayne County Only

NESHAP Asbestos Program
 Detroit Field Office, DEQ, AQD
 Cadillac Place, Suite 2-300
 3058 West Grand Boulevard
 Detroit, MI 48202

313.456.4686 (Office)
 313.456.2558 (Revision Line)



**NESHAP RENOVATION / DEMOLITION INSPECTION OF
ASBESTOS CONTAINING MATERIALS
AND OTHER HAZARDOUS WASTE MATERIALS**



FOR THE PROPERTY KNOWN AS:

65 Meadowlawn Avenue West
Battle Creek, MI 49017

Prepared for:

City of Battle Creek
10 North Division Street-Room 117
Battle Creek, MI-49017
269-955-3323

Prepared By:

Jacob Gleason
Michigan Certification #: P-07156
Environmental Testing & Consulting, Inc.
38900 West Huron River Drive
Romulus, Michigan 48174
(734) 955-6600
ETC Job #: 218086

3/25/19
Date of Survey

3/29/19
Date of Report

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Appendices

Appendix A - Polarized Light Microscopy Asbestos Analysis Results

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Appendix D - State of Michigan Notification of Intent to Renovate or Demolish

1. Introduction

City of Battle Creek contracted Environmental Testing & Consulting, Inc. (ETC) to perform a renovation/demolition inspection of the building located at 65 Meadowlawn Avenue West, Battle Creek, MI 49017. This inspection was conducted on 3/25/19.

The EPA, under the National Emission Standards for Hazardous Air Pollutants (NESHAPs) asbestos rule, requires that prior to the start of a renovation and/or demolition project, the building must be inspected for asbestos containing materials (ACM's). The purpose of this inspection was to determine the presence and quantity of friable or potentially friable ACM's. Depending on the ACM found and the condition that it is in, removal of the material may be necessary before demolition work can begin. Prior to the start of a demolition project, it is necessary that friable or potentially friable ACM's be removed.

ETC's certified inspector, Jacob Gleason, conducted the asbestos containing building material (ACBM) inspection and identified materials suspected of containing asbestos. Jacob Gleason's State of Michigan Asbestos Building Inspector's certification number is P-07156.

Wherever potential asbestos materials were found, data was collected and recorded regarding quantities and observed conditions of the suspected material. As required by the Occupational Safety and Health (OSHA) and the Environmental Protection Agency (EPA), three (3) samples of each type of material were taken in different locations to determine actual asbestos content.

Included along with this report are copies of the bulk sample results, a site map showing sample locations and a copy of the State of Michigan Notification of Intent to Renovate/Demolish. This information will be necessary for the asbestos abatement contractor selected to perform asbestos abatement activities on the property. ETC has included its information on the second page.

2. Information about Asbestos Inspections

a. Sampling Procedures

Representative bulk samples of suspected ACBMs were randomly collected within each building area. The materials sampled were broken down into distinct homogenous (similar) materials. Homogenous material determination was based on the following criteria:

- Similar physical characteristics (same color and texture, etc.)
- Application (sprayed-on, troweled-on, assembly into a system etc.)
- Material function (Thermal insulation, floor tile, wallboard system etc.)

It is important to note that some companies are only taking one sample of select non-friable materials. While this procedure is allowed under the NESHAP regulation, the OSHA standard suggests a minimum of three samples of each homogeneous material. This is a better approach due the potential errors in the analytical method used.

To provide the most accurate information possible and be sure of our results, ETC chooses to take three samples of each sampled material.

Additionally, some inspection companies have taken to assuming that materials contain asbestos rather than paying for the time and expenses of sampling them. This is not in the client's best interest. If materials are being assumed to contain asbestos, the client must treat them as asbestos containing even if they are not. This can lead to significantly increased costs for the building owner.

In general, ETC only assumes materials to be asbestos when sampling them will ruin their integrity (i.e. fire doors) or when they are too dangerous to sample (i.e. live electrical lines).

b. PLM Analysis Methodology

Polarized Light Microscopy (PLM) samples were analyzed utilizing the Environmental Protection Agency's Test Methods: Methods for the determination of Asbestos in Bulk Building Materials (EPA 600/R-93/116, July 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as method references. Additional treatment and tests may be required to accurately define composition (i.e. ashing, extraction, acetone treatment, and TEM).

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, cellulose, etc.) and non-fibrous constituents. Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample.

According to NESHAP requirements, any bulk sample that has an asbestos content above 0% but below 10% should be point counted for final determination of percentage. **Please note, the contract DID NOT include point counting as defined in NESHAP.** Should City of Battle Creek wish to have this additional analysis conducted, ETC can send any samples in this range for point counting. However, this will require additional charges for analysis. Therefore, for any samples in the range above 0% but below 10%, these results can only be considered estimates.

c. Interpretation of Inspection Results

A material is considered by OSHA, the EPA and the State of Michigan to be asbestos-containing if at least one sample collected from the homogenous material has asbestos fibers present in a concentration greater than one percent (>1 %).

A summary of the materials sampled, asbestos content, quantities and locations can be found on the Chart A in Section 4.0 – Summary and Conclusions.

d. Other Hazardous Materials

Additionally, information showing other hazardous materials (above the household quantity limitations) found at the site is included on Chart B in Section 4.0 – Summary and Conclusions. This lists non-asbestos materials that may be hazardous, and may require special handling and disposal requirements. Items that might be in this category include things like mercury switches, florescent lighting tubes, halogen lights, Freon in refrigeration units, pesticides, herbicides, paints, solvents, etc.

However, under the Resource Conservation and Recovery Act (RCRA) that addresses hazardous wastes, there is residential household quantity exclusion. Therefore, these materials will only be listed in this chart if they are present in quantities larger than what would be expected in a normal household. For instance, if the home was a farm and had a 55 gallon drum of pesticide present, this would be listed in Chart B. On the other hand, if there were a few pesticide containers present as would be found in most homes, these materials would not be listed.

3. Regulatory Requirements

There are two main regulations that affect renovation/demolition of residential homes and asbestos materials. The MIOSHA Asbestos Construction Standard has requirements to protect the workers performing the renovation/demolition, while the EPA – NESHAP regulation has requirements that protect the general public and environment.

a. MIOSHA Construction Asbestos Regulations

The MIOSHA standard establishes a permissible exposure limit (PEL) average over an 8 hour day. This means that this is the maximum level of asbestos that workers and/or employees can be exposed to without respirator protection and protective clothing. Should air sampling during renovation or demolition activities be at or near the PEL, the employer will have to:

- Notify workers
- Provide worker training
- Post danger signs
- Establish periodic air monitoring regulated areas and decontamination facilities
- Provide respiratory protection and personnel protective clothing
- Conduct employee respiration monitoring
- Maintain/provide record keeping
- Perform medical surveillance (if employee will be exposed 30 days per year or more).

Until recently, only schools were federally mandated to conduct asbestos inspections of their buildings. However, with the passage of new MIOSHA regulations, all building owners, in this case City of Battle Creek, are now required to notify all renovation/demolition workers of the presence, location and quantity of all ACBM's within the building.

In most cases, it is more practical to have an asbestos contractor remove the ACM from the building prior to renovation/demolition than have the renovation/demolition contractor comply with all these requirements.

b. NESHAP Requirements

Prior to beginning a renovation or demolition project, NESHAP (enforced in Michigan by the Department of Environmental Quality – MDEQ) requires a full inspection of the following materials to determine their asbestos content:

- Friable Materials
- Category 1 – Non-friable Materials (Packings, gaskets, resilient floor covering, and asphalt roofing products)
- Category II – Non-friable Materials (All other non-friable materials)

In general, MDEQ, prior to renovation or demolition activities, requires any identified asbestos materials be removed that would dislodge, disturb or otherwise affect these materials. There is an exception that if a licensed supervisor will state in writing that the material will not become friable during the renovation/demolition process, it may be left in the building. However, be very careful with this exemption. MDEQ has stated that they believe that the only materials that MIGHT qualify for this exemption would be roofing felt and asphalt roofing materials. In order to use even this small exemption, the following would be required from the demolition contractor:

- A signed document from a licensed asbestos abatement supervisor that the material will not become friable
- The supervisor will have to be on-site during all renovation or demolition to insure that the material stays intact.
- The waste generated from the activity must be taken to an asbestos dump and they must be informed that the waste is mixed asbestos waste.

It is obviously very expensive and difficult to try and leave ACM within an area/building during renovation or demolition activities. If the MDEQ reviews the site and finds the material crumbled or disturbed, both the contractor and building owner may be sited up to \$27,500 per day. Therefore, ETC recommends that all ACM be removed. This is why ETC does not assume materials to be ACM.

c. Notification Requirements

When performing abatement work within the State of Michigan, notification requirements depend on the quantity of materials and the friability of the material being removed.

If removing friable material **greater than** 160 square feet and / or 260 linear feet, the contractor must provide a ten working day notification to Michigan Department of Environmental Quality (MDEQ) and a ten calendar day notification to Michigan Department of Licensing and Regulatory Affairs (LARA) – Asbestos Program. If only non-friable materials are being removed, MDEQ does not require a notification.

If removing **more than** 15 square feet but **less than** 160 square feet, or **greater than** 10 linear feet but **less than** 260 linear feet, the contractor only needs to notify LARA as stated above.

For removals of **less than** 15 square feet or **less than** 10 linear feet, no notification is required.

In conjunction with any notification to LARA, the contractor must pay a 1% fee for the project. This fee must reflect 1% of the total abatement contract amount.

d. Abatement Requirements

Any company hired to remove identified ACM must insure that all asbestos companies, supervisors, and workers are licensed by LARA. Additionally, these companies must insure that:

- The State of Michigan must be notified of the work in advance.
- An asbestos supervisor must be on-site at all times when work is occurring.
- All work must be completed within regulated work areas.
- All work must be completed utilizing asbestos work practices defined in the MIOSHA regulations.
- On-site personnel sampling be conducted during the removal activities.
- Prior to dismantling and leaving the site, the contractor must request and pass (below 0.05 f/cc) a final asbestos clearance performed by a neutral.
- Meet all other current regulations and standards.

In addition to these requirements, ETC strongly recommends that City of Battle Creek insure that they receive the following documents from the contractor prior to making final payment:

- Written/signed documentation from the supervisor if any asbestos materials are to be left in place during renovation or demolition (Not recommended)
- Copy of the asbestos abatement notification
- Copy of the personnel monitoring during the work
- Copy of the final asbestos clearance report

By requiring these documents, City of Battle Creek will substantially reduce its liability should something occur during the asbestos removal at this site.

4. Summary and Conclusions

ETC has endeavored to identify potential asbestos containing materials (ACM) that were accessible (without destructive testing) at the time of the inspection. However, other potential ACM may be buried or have been inaccessible at the time of the initial survey.

As has been evidenced on numerous other demolition and renovation projects, when tearing out or demolishing existing building surfaces, it is very common to encounter other

building materials that were not accessible during the initial testing for ACM or lead/cadmium painted surfaces. It is therefore incumbent on City of Battle Creek or its selected construction renovation contractor to refer to the chart of sampled materials consistently during the renovation process. If materials are encountered during this process that are not clearly identifiable on the initial survey chart, ETC should be called to test and verify the asbestos/lead cadmium content of these items.

ETC cannot be held responsible for materials encountered after the initial survey is completed unless we are contacted and given the opportunity to test and verify the material content. The costs associated with this additional testing are not included within the scope of this project and City of Battle Creek will incur additional charges for the additional sampling and analysis.

On the following charts, please find:

- Chart A - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. ***If additional materials are encountered that were not previously identified, the contractor is responsible for contacting ETC and having these materials tested. These additional sampling costs are not included in the scope of work or price for this survey.***

Quantities that are listed are estimates only; in general, listed quantities represent only what was visible during testing. It is likely that where ACM has been identified throughout specific floors, similar materials and quantities exist on other like floors. It is the contractors'/client's responsibility to verify all amounts of asbestos identified during any bid process, or during future renovation and/or demolition activities. Materials that are identical in both relative location and physical description to already tested materials listed in this report should always be assumed to be ACM.

- Chart B – Is a list of other hazardous materials (above RCRA household quantity levels) that will require special handling and disposal by the contractor.

Chart A – Materials Sampled and Asbestos Content

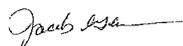
Material #	Material Description	Asbestos	Quantity	Location (Refer to map in Appendix B)
1	Plaster over Drywall	No	3,412 SF	Throughout
2	Plaster of Paris White	No	150 SF	Room 1
3	Ceiling Texture White	No	975 SF	Rooms 1,5
4	Chimney Brick Gray	No	300 SF	Room 11
5	Chimney Brick Mortar Gray	No	300 SF	Room 11
6	Fire Brick Brown	No	300 SF	Room 11
7	Stack Cement Gray	No	4 SF	Room 11
8	Poured Concrete Gray	No	500 SF	Room 10,11
9	Ceiling Tile 2x4 White	No	400 SF	Room 10
10	Drywall Tape and Mud White	No	300 SF	Room 10
11	9x9 Tile White	Yes	300 SF	Rooms 9,8
12	Mastic under 11 Black	No	300 SF	Rooms 9,8
13	Ceiling Tile White/Brown	No	300 SF	Room 8
14	Blown in Insulation Pink	No	350 SF	Room 8
15	House Wrap Brown Paper & Fiberboard	No	1,200 SF	Exterior House
16	Asphalt Shingle Tan	No	1,000 SF	Exterior Roof

Chart B – Other Hazardous Materials Located
(Above the household quantity Limitations)

Material #	Material Description	Quantity	Location
1	Screens	1	Room 10
2	Paint Cans	12	Room 6

5. Inspector's Information

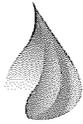
The information contained in this report is a true and accurate representation of the conditions and activities at this property at the time of the investigation, based on the professional judgment of the person(s) who conducted and reported this survey. All inspection work was completed by a Michigan certified asbestos inspector as detailed below.



Jacob Gleason
State of Michigan Certification #: P-07156

APPENDIX A

POLARIZED LIGHT MICROSCOPY ASBESTOS ANALYSIS RESULT FORMS



**ENVIRONMENTAL TESTING
LABORATORIES, INC.**

38900 HURON RIVER DRIVE, SUITE 200
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 955-6604

To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 218086

Client Project: 218086

Report Date: 3/29/2019

Attention: Rick Bolek

Project Location: 65 Meadowlawn Avenue West, Battle Creek, MI 49017
vacant house

Lab Sample Number	Client Sample Number	Sample Type	Completed
993734	01A	Asbestos PLM	03/28/2019
993735	01B	Asbestos PLM	03/28/2019
993736	01C	Asbestos PLM	03/28/2019
993737	01D	Asbestos PLM	03/28/2019
993738	01E	Asbestos PLM	03/28/2019
993739	02A	Asbestos PLM	03/28/2019
993740	02B	Asbestos PLM	03/28/2019
993741	02C	Asbestos PLM	03/28/2019
993742	03A	Asbestos PLM	03/28/2019
993743	03B	Asbestos PLM	03/28/2019
993744	03C	Asbestos PLM	03/28/2019
993745	04A	Asbestos PLM	03/28/2019
993746	04B	Asbestos PLM	03/28/2019
993747	05A	Asbestos PLM	03/28/2019
993748	05B	Asbestos PLM	03/28/2019
993749	06A	Asbestos PLM	03/28/2019
993750	06B	Asbestos PLM	03/28/2019

Lab Sample Number	Client Sample Number	Sample Type	Completed
993751	07A	Asbestos PLM	03/28/2019
993752	07B	Asbestos PLM	03/28/2019
993753	08A	Asbestos PLM	03/28/2019
993754	08B	Asbestos PLM	03/28/2019
993755	09A	Asbestos PLM	03/28/2019
993756	09B	Asbestos PLM	03/28/2019
993757	10A	Asbestos PLM	03/28/2019
993758	10B	Asbestos PLM	03/28/2019
993759	11A	Asbestos PLM	03/28/2019
993760	11B	Asbestos PLM	03/28/2019
993761	12A	Asbestos PLM	03/28/2019
993762	12B	Asbestos PLM	03/28/2019
993763	13A	Asbestos PLM	03/28/2019
993764	13B	Asbestos PLM	03/28/2019
993765	14A	Asbestos PLM	03/28/2019
993766	14B	Asbestos PLM	03/28/2019
993767	15A	Asbestos PLM	03/28/2019
993768	15B	Asbestos PLM	03/28/2019
993769	16A	Asbestos PLM	03/28/2019
993770	16B	Asbestos PLM	03/28/2019

Reviewed by:



Quality Assurance Coordinator



NVLAP LAB CODE 201025-01

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.

38900 Huron River Drive

Romulus, MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993734 01A RM 1 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster over Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993734 01A RM 1 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Skimcoat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993735 01B RM 2 N Wall Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster over Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993735 01B RM 2 N Wall Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Skimcoat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993736 01C RM 3 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster over Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993736 01C RM 3 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Skimcoat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested.



NVLAP LAB CODE 200228-09

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETC Job : 218086
Client Project : 218086
Date Collected : 03/25/2019
Date Received : 03/26/2019

Location : vacant house
65 Meadowlawn Avenue West, Battle Creek, MI 49

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993737 01D RM 5 S Wall Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster over Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993737 01D RM 5 S Wall Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Skimcoat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993738 01E RM 6 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster over Drywall	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993738 01E RM 6 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Skimcoat	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993739 02A RM 1 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected
993740 02B RM 1 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected

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NVLAP LAB CODE 201025-01

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.

38900 Huron River Drive

Romulus, MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993741 02C RM 1 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Plaster	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected
993742 03A RM 1 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Texture	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993742 03A RM 1 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Paper Backing	Brown Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected
993743 03B RM 1 N Wall Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Texture	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993743 03B RM 1 N Wall Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Paper Backing	Brown Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected

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NVLAP LAB CODE 201026-01

Certificate of Analysis

Environmental Testing Laboratories, Inc.



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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.

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Romulus,MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993744 03C RM 5 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Texture	White Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993744 03C RM 5 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Paper Backing	Brown Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected
993745 04A RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Chimney Brick	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993746 04B RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Chimney Brick	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993747 05A RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Chimney Brick Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993748 05B RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Chimney Brick Mortar	Gray Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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NVLAP LAB CODE 201025-0

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.

38900 Huron River Drive

Romulus, MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993749 06A RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Fire Brick	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993750 06B RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Fire Brick	Brown Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993751 07A RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Stack Cement	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993752 07B RM 11 on Chimney Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Stack Cement	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993753 08A RM 10 Floor Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Poured Concrete	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
993754 08B RM 11 Floor Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Poured Concrete	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected

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Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993755 09A RM 10 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Tile 2x4	White Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
993756 09B RM 10 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Tile 2x4	White Fibrous Homogenous	PLM 30% Cellulose	PLM 70% Other	PLM None Detected
993757 10A RM 10 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Drywall	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993757 10A RM 10 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Mud	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected
993757 10A RM 10 Ceiling Layer-3 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Tape	White Non-Fibrous Homogenous	PLM 15% Cellulose	PLM 85% Other	PLM None Detected

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Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993758 10B RM 10 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Drywall	White Non-Fibrous Homogenous	PLM 3% Cellulose	PLM 97% Other	PLM None Detected
993758 10B RM 10 Ceiling Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Mud	White Non-Fibrous Homogenous		PLM 100% Other	PLM None Detected
993758 10B RM 10 Ceiling Layer-3 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Tape	White Non-Fibrous Homogenous	PLM 15% Cellulose	PLM 85% Other	PLM None Detected
993759 11A RM 9 on Landing Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	9x9 Tile	White Non-Fibrous Homogenous		PLM 96% Other	PLM 4% Chrysotile
993760 11B RM 8 in Closet Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019		Not Analyzed			
993761 12A RM 9 on Landing Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Mastic Under 11	Black Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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Certificate of Analysis

Environmental Testing Laboratories, Inc.
38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETC Job : 218086
Client Project : 218086
Date Collected : 03/25/2019
Date Received : 03/26/2019

Location : vacant house
65 Meadowlawn Avenue West, Battle Creek, MI 49

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993762 12B RM 8 in Closet Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Mastic Under 11	Black Non-Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993763 13A RM 8 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Tile	White/Brown Fibrous Homogenous	PLM 25% Cellulose	PLM 75% Other	PLM None Detected
993764 13B RM 8 Ceiling Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Ceiling Tile	White/Brown Fibrous Homogenous	PLM 25% Cellulose	PLM 75% Other	PLM None Detected
993765 14A RM 8 in Attic Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Blown in Insulation	Pink Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected
993766 14B RM 8 in Attic Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Blown in Insulation	Pink Fibrous Homogenous	PLM 1% Cellulose	PLM 99% Other	PLM None Detected

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NVLAP LAB CODE 201028-01

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.

38900 Huron River Drive

Romulus, MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
993767 15A EXT House N Side Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	House Wrap Brown Paper	Brown Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
993767 15A EXT House N Side Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Fiberboard	Brown Non-Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected
993768 15B EXT House S Side Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	House Wrap Brown Paper	Brown Non-Fibrous Homogenous	PLM 10% Cellulose	PLM 90% Other	PLM None Detected
993768 15B EXT House S Side Layer-2 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Fiberboard	Brown Non-Fibrous Homogenous	PLM 20% Cellulose	PLM 80% Other	PLM None Detected
993769 16A EXT Roof N Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Asphalt Shingle	Tan Non-Fibrous Homogenous	PLM 5% Fiberglass	PLM 95% Other	PLM None Detected
993770 16B EXT Roof S Layer-1 Analyst: Kristina Ivanovic Date Analyzed : 03/28/2019	Asphalt Shingle	Tan Non-Fibrous Homogenous	PLM 5% Fiberglass	PLM 95% Other	PLM None Detected

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(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

Location : vacant house

65 Meadowlawn Avenue West, Battle Creek, MI 49

ETC Job : 218086

Client Project : 218086

Date Collected : 03/25/2019

Date Received : 03/26/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
--------	-------------	------------	-----------	---------------	------------

Lab Supervisor/Other Signatory

Analyst:

Kristina Ivanovic

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")

Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples

Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples

EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials

EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples

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ENVIRONMENTAL TESTING LABORATORIES, INC

38900 HURON RIVER DRIVE
 ROMULUS, MICHIGAN 48174
 (734) 955-6600
 FAX: (734) 992-2261
 www.2ell.com

**Bulk Asbestos/Mold
 Chain of Custody**

ETL Project #: 218086

Client: <u>ETE GROUP</u>	Contact: <u>Jake Gleason</u>	Project Location/Name: <u>65 meadowlark Butte creek, MI 49017</u>
	Phone: <u>734-486-5782</u>	
Address: <u>721 N. Capitol Lansing MI 48910</u>	Fax:	Client Project #: <u>218086</u>
E-mail: <u>Jake.gleason@2ell.com</u>		Date Sampled: <u>3/25/19</u>
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		

Turnaround Time (TAT): RUSH (2 hrs) Same Day 24 hrs 48 hrs Standard (3-5 days) Other _____

Asbestos PLM/Mold Instructions
 (Check all that apply)

PLM EPA600/R-93/116, 1993 (Standard method) <input type="checkbox"/>	Stop at 1st Positive: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No
Point Counting: Yes <input checked="" type="checkbox"/> / No <input type="checkbox"/> *400 Points <input type="checkbox"/> *1000 Points <input type="checkbox"/>	Clearly Mark Homogenous Group
Point Counting Criteria:	*Gravimetric Reduction <input type="checkbox"/> *Nuisance Dust <input type="checkbox"/>
Mold Air <input type="checkbox"/> Mold Tape <input type="checkbox"/> Mold Bulk <input type="checkbox"/>	*Soil or Vermiculite Analysis <input type="checkbox"/>

** Additional charge and turnaround may be required*

Lab ID	Sample ID	Sample Location	Material Description/Volume
	<u>01A-E</u>	<u>Please see Attached sheets</u>	
	<u>02A-L</u>		
	<u>03A-L</u>		
	<u>04A-B</u>		
	<u>05A-B</u>		
	<u>06A-B</u>		

Relinquished (Name/Organization): <u>Jake Gleason</u>	Date: <u>3/25/19</u>	Time: <u>5:00 AM/PM</u>
Received (Name/ETL): <u>Brianne Owens Bullock</u>	Date: <u>3/26/19</u>	Time: <u>10:45 AM/PM</u>
Stereoscopic/Sample Analysis (Name/ETL): <u>Katherine</u>	Date: <u>3/28/19</u>	Time: <u>1:00pm</u>

Special Instructions: Please print out anything 3/25/19

Remarks:

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF
 **RUSHES ARE NOT ACCEPTED AFTER 3:00 PM AND SAME DAYS ARE NOT ACCEPTED AFTER 2:00 PM

Page ___ of ___

Asbestos Material Sampling Summary Sheet

Surfacing materials

Revision date 5/7/2015

Job #:	Building: 65 Meadowtown Ave., B. Creek			Date: 3/25/19	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
Material no.	Material Description	Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location			
01	Material: Plaster over drywall White	F	A	Rm 1 ceiling	993734	Throughout	3,412 SF
			B	Rm 2 N wall	735		
			C	Rm 3 ceiling	736		
			D	Rm 5 S wall	737		
			E	Rm 6 ceiling	738		
02	Material: Plaster of Paris White	F	A	Rm 1 ceiling	739	1	150 SF
			B		740		
			C		741		
03	Material: Ceiling texture White	F	A	Rm 1 ceiling	742	1, 5	975 SF
			B	Rm 1 N wall	743		
			C	Rm 5 ceiling	744		

<1000 SF = 3 samples

Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

Job #:	Material no.	Material Description	Building:	Friable (F)/ Non-Friable (NF)	Sample Letter	Sample Location	Date:	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
218086			65 Meadowlark Ave, B. Creel				3/20/19			
04		Material: Chimney brick		NF	A	Rm 11 on chimney	993	11	300 SF	
05		Material: Gray		NF	B	→	745			
06		Material: Chimney ball mortar		NF	A	Rm 11 on chimney	746			
		Material: Gray Brick		NF	B	→	747			
07		Material: Brown		NF	A	Rm 11 on chimney	748	11	300 SF	
		Material: STAIR cement		NF	B	→	749			
08		Material: Gray concrete		NF	A	Rm 11 on chimney	750	11	300 SF	
		Material: Poured concrete		NF	B	→	751			
09		Material: Gray		NF	A	Rm 11 on chimney	752	11	4 SF	
		Material: Ceiling tile		NF	B	→	753			
10		Material: 2x4 white		NF	A	Rm 11 Floor	754	10, 11	500 SF	
		Material: Dry wall mud tape		NF	B	Rm 10 Ceiling	754			
11		Material: white		NF	A	→	755	10	400 SF	
		Material: 9x9 tile		NF	B	Rm 10 ceiling	756			
12		Material: White		NF	A	Rm 10 ceiling	757	10	300 SF	
		Material: Mastic Under 11		NF	B	→	758			
13		Material: Blue/Black		NF	A	Rm 9 on Landing	759			
		Material: Ceiling tile		NF	B	Rm 8 in closet	760	9.8	300 SF	
		Material: White/Brown		F	A	Rm 8 on Landing	761	8.9	300 SF	
				F	B	Rm 8 in closet	762			
					A	Rm 8 ceiling	763	8	300 SF	
					B	→	764			

Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

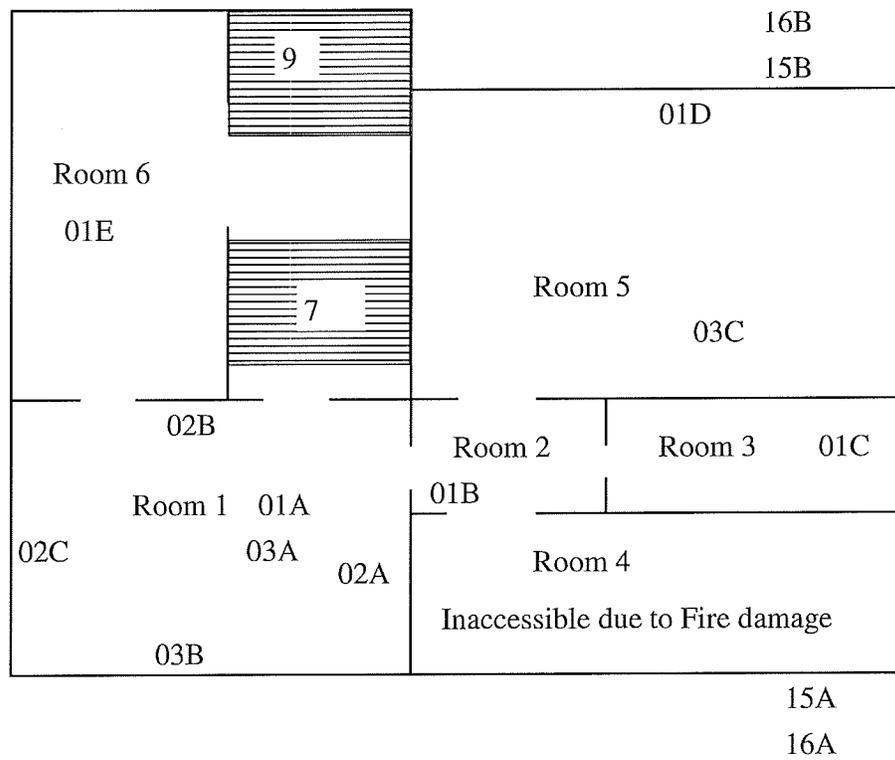
Job #:	Material Description		Friable (F) / Non-Friable (NF)	Sample Letter	Building: 65 Meadows Lane, Ave B, Creek	Date: 3/25/19	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
14	Material: Blown in Insulation		NF	A	Rm 8 in A-Hall	993	8	350 SF	
15	Material: Pink		NF	B		765			
16	Material: House wrap		NF	A	EXT House N Side	766			
17	Material: Brown paper + cardboard		NF	B	EXT House S. Side	767		1200 SF	
18	Material: Asphalt shingle		NF	A	EXT Roof N	768			
19	Material: TAN		NF	B	EXT Roof S	769		1000 SF	
20	Material: Description			A		770			
	Material: Description			B					
	Material: Description			A					
	Material: Description			B					
	Material: Description			A					
	Material: Description			B					
	Material: Description			A					
	Material: Description			B					

APPENDIX B

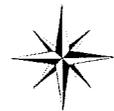
SITE MAP

1st floor

65 Meadowlawn Ave. W., Battle Creek, MI 49017



Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.

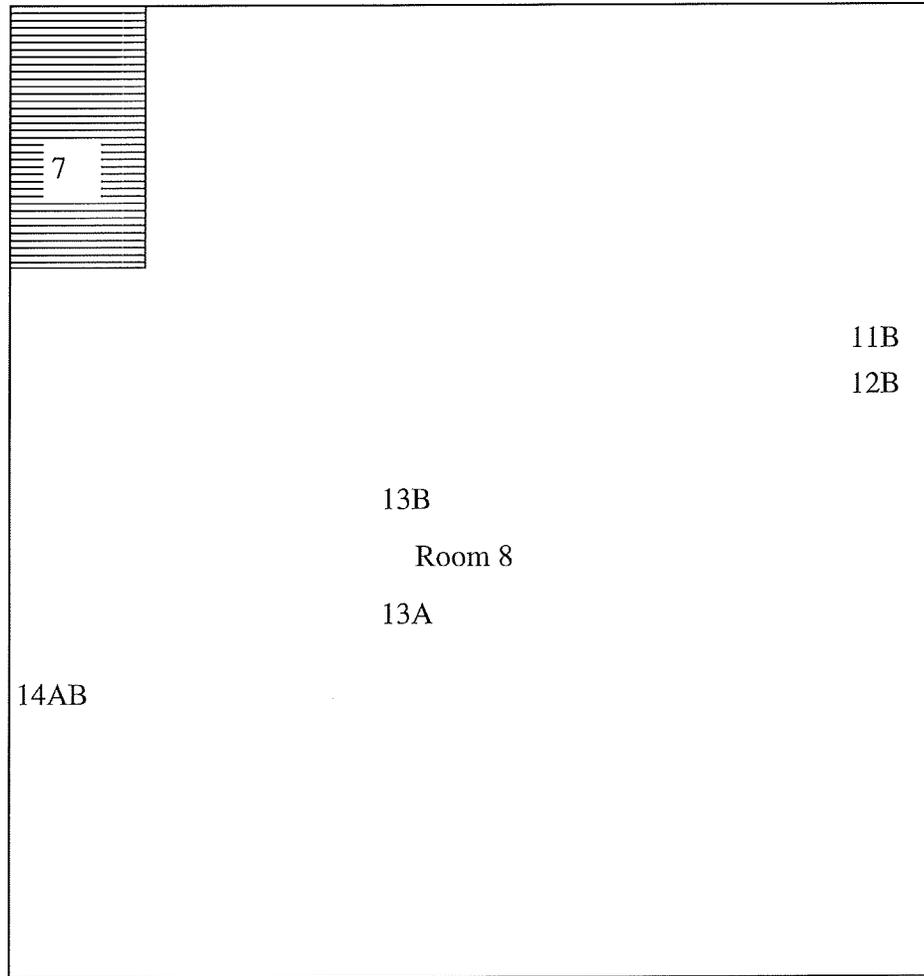


N

City of Battle Creek
218086

2nd floor

65 Meadowlawn Ave. W., Battle Creek, MI 49017



Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.

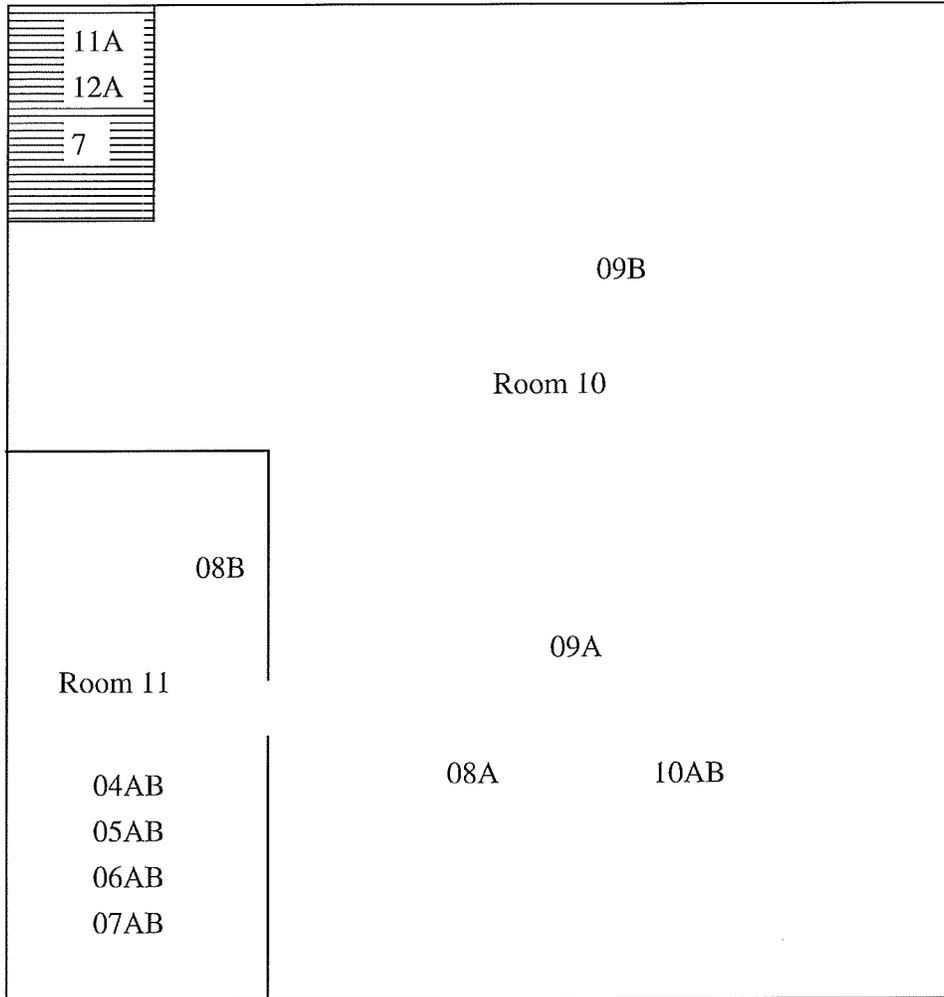


N

City of Battle Creek
218086

Basement

65 Meadowlawn Ave. W., Battle Creek, MI 49017



Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



N

City of Battle Creek
218086

APPENDIX C

PHOTOGRAPHS



9X9 Tile, white

APPENDIX D

STATE OF MICHIGAN NOTIFICATION OF INTENT TO RENOVATE OR DEMOLISH

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
(MDEQ) AIR QUALITY DIVISION
NESHAP, 40 CFR Part 61, Subpart M



MICHIGAN DEPARTMENT OF LICENSING AND
REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM,
P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

DEQ/LARA USE ONLY

Postmark Date ___/___/___ Rec'd Date ___/___/___
 Emergency Date ___/___/___ Valid No. _____
 OK Send Def Ltr. Date of Def Ltr. ___/___/___
 FOLLOW UP ___/___/___ Spoke w/ _____
 Comments: _____

 Notification No. _____ Trans No. _____

3. ABATEMENT CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

4. DEMOLITION CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

5. FACILITY OWNER: ("Facility" includes Bridges)
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

6. FACILITY DESCRIPTION:
 Facility Name: _____
 Location Address/Description: _____
 _____ If Apt. # of units: _____
 City/Twp. _____ State: _____ Zip Code: _____
 County: _____ Nearest Crossroad: _____
 Size: (sq. ft.) _____ No. of Floors: _____ Floor No.: _____
 Age: _____ Present Use: _____ Prior Use: _____
 Specific Location(s) in Facility: _____

7. DISPOSAL SITE:
 Name: _____
 Location Address: _____
 City/State/Zip: _____

8. WASTE TRANSPORTER 1:	WASTE TRANSPORTER 2:
Name: _____	_____
Address: _____	_____
City/State/Zip: _____	_____
Phone: _____	_____

9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.
 Gov't Agency Ordering Demo: _____
 Name/Title of Person Signing Order: _____

 Date of Order: _____ Date Ordered to Begin: _____

Calculate LARA Asbestos Project Fee: (1% Project Fee)
 Total Project Cost: _____ x 0.01 = _____
 Type of Contractor: _____ License No.: _____
 Licensing Authority: _____

1. NOTIFICATION:
 Date of Notification: _____
 Date of Revision(s): _____
 Notification Type: Original Revised Canceled Annual
Mark appropriate boxes: (both DEQ and LARA may apply):
 DEQ (NESHAP) [260 In. ft./160 sq. ft. or more is threshold]
 Planned Renovation – 10 working days notice
 Emergency Renovation
 Scheduled Demolition – 10 working days notice
 Intentional Burn – 10 working days notice
 Ordered Demolition
 LARA (MIOSHA) [Will not accept annual notifications]
 Demo, Reno, Encap. (>10 In. ft./15 sq. ft.) 10 calendar days notice
 Emergency Renovation/Encapsulation

2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

	Days of the Week	Work Hours
Asb. Removal:	_____	_____
Demolition:	_____	_____
Encapsulation:	_____	_____

* Includes setup, build enclosure, asbestos removal, demobilizing, etc.
 +Include only those dates you are conducting asbestos removal/demo.
 Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

10. IS ASBESTOS PRESENT? Yes No To be removed prior to demolition

Estimate the amount of asbestos: Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (NOTE: In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be Removed	RACM to be Encapsulated	Non-friable ACM <u>not</u> removed prior to demo.	
		Category I	Category II
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Units of Measure	
<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu.M.*

*Volume (cubic ft./meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11. PROJECT DESCRIPTION: Complete A) for Renovation (asbestos removal/encapsulation) and/or B) for Demolition:

A) RENOVATION: Mark all surfaces/types of RACM to be removed:

- Piping Fittings Boiler(s) Tanks(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Mag Block Other (describe) _____

Encapsulation (for LARA): Mark surfaces/types to be encapsulated:

- Piping Fittings Boiler(s) Tank(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Other (describe) _____

Method of removal: Describe how the asbestos will be removed from the surface (example: glove bag, scrape with hand tools, cut in sections and carefully lower, etc.): _____

B) DEMOLITION: Describe the method of demolition of facility, bridge, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: _____

12. ENGINEERING CONTROLS: Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: _____

13. UNEXPECTED ASBESTOS: Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: _____

14. PROCEDURE(S) USED TO DETECT THE PRESENCE OF ASBESTOS: A) Indicate how you determined whether or not asbestos is in the facility. If analytical sampling was used, describe method of analysis. (The determination of the presence or absence of asbestos must be made prior to submitting a renovation/demolition notification.): _____

B) Name, address, and phone number of company performing asbestos survey: _____

C) Name, accreditation number of inspector, and date of inspection: _____

15. EMERGENCY RENOVATIONS: Date/time of emergency: _____ Describe the sudden, unexpected event: _____

Explain how the event caused unsafe conditions, and/or would cause equipment damage and/or an unreasonable financial burden: _____

16. I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

Signature of Owner or Abatement Contractor *Date*

Signature of Owner or Demolition Contractor *Date*

17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)

Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.

Signature of Building Owner or Lessee *Date*

Signature of Asbestos Abatement Contractor Representative *Date*

NOTE: It is not mandatory that a signed copy be sent to LARA unless requested. For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

18. I certify that the above information is correct:

Printed Name of Owner/Operator *Date*

Signature of Owner/Operator *Date*

MAILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine which agency requirements/regulations are applicable to your project.)

For Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), mail to address below. For more info visit: <http://www.michigan.gov/asbestos>

MIOSHA Asbestos Program
 LARA, CSHD
 P.O. Box 30671
 Lansing, MI 48909-8171

517.636.4551 (office), 517.322.1713 (fax)

For NESHAP Demolitions/Renovations, 40 CFR, Part 61, Subpart M, mail notifications to the appropriate address below (by county of subject facility): For more info visit <http://www.michigan.gov/deq> click on Air, then Asbestos NESHAP Program.

All Counties (except Wayne County)

NESHAP Asbestos Program
 DEQ, AQD
 P.O. Box 30260
 Lansing, MI 48909-7760

517.241.7463 (Office)
 517.373.7064 (Revision Line)

Wayne County Only

NESHAP Asbestos Program
 Detroit Field Office, DEQ, AQD
 Cadillac Place, Suite 2-300
 3058 West Grand Boulevard
 Detroit, MI 48202

313.456.4686 (Office)
 313.456.2558 (Revision Line)



**NESHAP RENOVATION / DEMOLITION INSPECTION OF
ASBESTOS CONTAINING MATERIALS
AND OTHER HAZARDOUS WASTE MATERIALS**



FOR THE PROPERTY KNOWN AS:

118 Buckley Ln
Battle Creek, MI 49015

Prepared for:

City of Battle Creek
10 North Division Street- Room 117
Battle Creek, MI-49017
269-966-3323

Prepared By:

Jacob Gleason and Wade Wiltse
Michigan Certification #: A-49991 and A-51051
Environmental Testing & Consulting, Inc.
38900 West Huron River Drive
Romulus, Michigan 48174
(734) 955-6600
ETC Job #: 219978

3/22/19
Date of Survey

3/28/19
Date of Report

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Appendices

Appendix A - Polarized Light Microscopy Asbestos Analysis Results

Appendix B - Site Map

Appendix C - State of Michigan Notification of Intent to Renovate or Demolish

1. Introduction

City of Battle Creek contracted Environmental Testing & Consulting, Inc. (ETC) to perform a renovation/demolition inspection of the building located at 118 Buckley Ln, Battle Creek, MI 49015. This inspection was conducted on 3/22/19.

The EPA, under the National Emission Standards for Hazardous Air Pollutants (NESHAPs) asbestos rule, requires that prior to the start of a renovation and/or demolition project, the building must be inspected for asbestos containing materials (ACM's). The purpose of this inspection was to determine the presence and quantity of friable or potentially friable ACM's. Depending on the ACM found and the condition that it is in, removal of the material may be necessary before demolition work can begin. Prior to the start of a demolition project, it is necessary that friable or potentially friable ACM's be removed.

ETC's certified inspector, Jacob Gleason and Wade Wiltse, conducted the asbestos containing building material (ACBM) inspection and identified materials suspected of containing asbestos. Jacob Gleason and Wade Wiltse's State of Michigan Asbestos Building Inspector's certification number is A-49991 and A-51051.

Wherever potential asbestos materials were found, data was collected and recorded regarding quantities and observed conditions of the suspected material. As required by the Occupational Safety and Health (OSHA) and the Environmental Protection Agency (EPA), three (3) samples of each type of material were taken in different locations to determine actual asbestos content.

Included along with this report are copies of the bulk sample results, a site map showing sample locations and a copy of the State of Michigan Notification of Intent to Renovate/Demolish. This information will be necessary for the asbestos abatement contractor selected to perform asbestos abatement activities on the property. ETC has included its information on the second page.

2. Information about Asbestos Inspections

a. Sampling Procedures

Representative bulk samples of suspected ACBMs were randomly collected within each building area. The materials sampled were broken down into distinct homogenous (similar) materials. Homogenous material determination was based on the following criteria:

- Similar physical characteristics (same color and texture, etc.)
- Application (sprayed-on, troweled-on, assembly into a system etc.)
- Material function (Thermal insulation, floor tile, wallboard system etc.)

It is important to note that some companies are only taking one sample of select non-friable materials. While this procedure is allowed under the NESHAP regulation, the OSHA standard suggests a minimum of three samples of each homogeneous material. This is a better approach due the potential errors in the analytical method used.

To provide the most accurate information possible and be sure of our results, ETC chooses to take three samples of each sampled material.

Additionally, some inspection companies have taken to assuming that materials contain asbestos rather than paying for the time and expenses of sampling them. This is not in the client's best interest. If materials are being assumed to contain asbestos, the client must treat them as asbestos containing even if they are not. This can lead to significantly increased costs for the building owner.

In general, ETC only assumes materials to be asbestos when sampling them will ruin their integrity (i.e. fire doors) or when they are too dangerous to sample (i.e. live electrical lines).

b. PLM Analysis Methodology

Polarized Light Microscopy (PLM) samples were analyzed utilizing the Environmental Protection Agency's Test Methods: Methods for the determination of Asbestos in Bulk Building Materials (EPA 600/R-93/116, July 1993) and the McCrone Research Institute's The Asbestos Particle Atlas as method references. Additional treatment and tests may be required to accurately define composition (i.e. ashing, extraction, acetone treatment, and TEM).

Analysis was performed by using the bulk sample for visual observation and slide preparation(s) for microscopic examination and identification. The samples were analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, and actinolite/tremolite), fibrous non-asbestos constituents (mineral wool, cellulose, etc.) and non-fibrous constituents. Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample.

According to NESHAP requirements, any bulk sample that has an asbestos content above 0% but below 10% should be point counted for final determination of percentage. ***Please note, the contract DID NOT include point counting as defined in NESHAP.*** Should City of Battle Creek wish to have this additional analysis conducted, ETC can send any samples in this range for point counting. However, this will require additional charges for analysis. Therefore, for any samples in the range above 0% but below 10%, these results can only be considered estimates.

c. Interpretation of Inspection Results

A material is considered by OSHA, the EPA and the State of Michigan to be asbestos-containing if at least one sample collected from the homogenous material has asbestos fibers present in a concentration greater than one percent (>1 %).

A summary of the materials sampled, asbestos content, quantities and locations can be found on the Chart A in Section 4.0 – Summary and Conclusions.

d. Other Hazardous Materials

Additionally, information showing other hazardous materials (above the household quantity limitations) found at the site is included on Chart B in Section 4.0 – Summary and Conclusions. This lists non-asbestos materials that may be hazardous, and may require special handling and disposal requirements. Items that might be in this category include things like mercury switches, florescent lighting tubes, halogen lights, Freon in refrigeration units, pesticides, herbicides, paints, solvents, etc.

However, under the Resource Conservation and Recovery Act (RCRA) that addresses hazardous wastes, there is residential household quantity exclusion. Therefore, these materials will only be listed in this chart if they are present in quantities larger than what would be expected in a normal household. For instance, if the home was a farm and had a 55 gallon drum of pesticide present, this would be listed in Chart B. On the other hand, if there were a few pesticide containers present as would be found in most homes, these materials would not be listed.

3. Regulatory Requirements

There are two main regulations that affect renovation/demolition of residential homes and asbestos materials. The MIOSHA Asbestos Construction Standard has requirements to protect the workers performing the renovation/demolition, while the EPA – NESHAP regulation has requirements that protect the general public and environment.

a. MIOSHA Construction Asbestos Regulations

The MIOSHA standard establishes a permissible exposure limit (PEL) average over an 8 hour day. This means that this is the maximum level of asbestos that workers and/or employees can be exposed to without respirator protection and protective clothing. Should air sampling during renovation or demolition activities be at or near the PEL, the employer will have to:

- Notify workers
- Provide worker training
- Post danger signs
- Establish periodic air monitoring regulated areas and decontamination facilities
- Provide respiratory protection and personnel protective clothing
- Conduct employee respiration monitoring
- Maintain/provide record keeping
- Perform medical surveillance (if employee will be exposed 30 days per year or more).

Until recently, only schools were federally mandated to conduct asbestos inspections of their buildings. However, with the passage of new MIOSHA regulations, all building owners, in this case City of Battle Creek, are now required to notify all renovation/demolition workers of the presence, location and quantity of all ACBM's within the building.

In most cases, it is more practical to have an asbestos contractor remove the ACM from the building prior to renovation/demolition than have the renovation/demolition contractor comply with all these requirements.

b. NESHAP Requirements

Prior to beginning a renovation or demolition project, NESHAP (enforced in Michigan by the Department of Environmental Quality – MDEQ) requires a full inspection of the following materials to determine their asbestos content:

- Friable Materials
- Category 1 – Non-friable Materials (Packings, gaskets, resilient floor covering, and asphalt roofing products)
- Category II – Non-friable Materials (All other non-friable materials)

In general, MDEQ, prior to renovation or demolition activities, requires any identified asbestos materials be removed that would dislodge, disturb or otherwise affect these materials. There is an exception that if a licensed supervisor will state in writing that the material will not become friable during the renovation/demolition process, it may be left in the building. However, be very careful with this exemption. MDEQ has stated that they believe that the only materials that MIGHT qualify for this exemption would be roofing felt and asphalt roofing materials. In order to use even this small exemption, the following would be required from the demolition contractor:

- A signed document from a licensed asbestos abatement supervisor that the material will not become friable
- The supervisor will have to be on-site during all renovation or demolition to insure that the material stays intact.
- The waste generated from the activity must be taken to an asbestos dump and they must be informed that the waste is mixed asbestos waste.

It is obviously very expensive and difficult to try and leave ACM within an area/building during renovation or demolition activities. If the MDEQ reviews the site and finds the material crumbled or disturbed, both the contractor and building owner may be sited up to \$27,500 per day. Therefore, ETC recommends that all ACM be removed. This is why ETC does not assume materials to be ACM.

c. Notification Requirements

When performing abatement work within the State of Michigan, notification requirements depend on the quantity of materials and the friability of the material being removed.

If removing friable material **greater than** 160 square feet and / or 260 linear feet, the contractor must provide a ten working day notification to Michigan Department of Environmental Quality (MDEQ) and a ten calendar day notification to Michigan Department of Licensing and Regulatory Affairs (LARA) – Asbestos Program. If only non-friable materials are being removed, MDEQ does not require a notification.

If removing **more than** 15 square feet but **less than** 160 square feet, or **greater than** 10 linear feet but **less than** 260 linear feet, the contractor only needs to notify LARA as stated above.

For removals of **less than** 15 square feet or **less than** 10 linear feet, no notification is required.

In conjunction with any notification to LARA, the contractor must pay a 1% fee for the project. This fee must reflect 1% of the total abatement contract amount.

d. Abatement Requirements

Any company hired to remove identified ACM must insure that all asbestos companies, supervisors, and workers are licensed by LARA. Additionally, these companies must insure that:

- The State of Michigan must be notified of the work in advance.
- An asbestos supervisor must be on-site at all times when work is occurring.
- All work must be completed within regulated work areas.
- All work must be completed utilizing asbestos work practices defined in the MIOSHA regulations.
- On-site personnel sampling be conducted during the removal activities.
- Prior to dismantling and leaving the site, the contractor must request and pass (below 0.05 f/cc) a final asbestos clearance performed by a neutral.
- Meet all other current regulations and standards.

In addition to these requirements, ETC strongly recommends that City of Battle Creek insure that they receive the following documents from the contractor prior to making final payment:

- Written/signed documentation from the supervisor if any asbestos materials are to be left in place during renovation or demolition (Not recommended)
- Copy of the asbestos abatement notification
- Copy of the personnel monitoring during the work
- Copy of the final asbestos clearance report

By requiring these documents, City of Battle Creek will substantially reduce its liability should something occur during the asbestos removal at this site.

4. Summary and Conclusions

ETC has endeavored to identify potential asbestos containing materials (ACM) that were accessible (without destructive testing) at the time of the inspection. However, other potential ACM may be buried or have been inaccessible at the time of the initial survey.

As has been evidenced on numerous other demolition and renovation projects, when tearing out or demolishing existing building surfaces, it is very common to encounter other

building materials that were not accessible during the initial testing for ACM or lead/cadmium painted surfaces. It is therefore incumbent on City of Battle Creek or its selected construction renovation contractor to refer to the chart of sampled materials consistently during the renovation process. If materials are encountered during this process that are not clearly identifiable on the initial survey chart, ETC should be called to test and verify the asbestos/lead cadmium content of these items.

ETC cannot be held responsible for materials encountered after the initial survey is completed unless we are contacted and given the opportunity to test and verify the material content. The costs associated with this additional testing are not included within the scope of this project and City of Battle Creek will incur additional charges for the additional sampling and analysis.

On the following charts, please find:

- Chart A - Is a summary of the materials that were sampled. Materials that test positive for asbestos have been bolded to make identification easier. ***If additional materials are encountered that were not previously identified, the contractor is responsible for contacting ETC and having these materials tested. These additional sampling costs are not included in the scope of work or price for this survey.***

Quantities that are listed are estimates only; in general, listed quantities represent only what was visible during testing. It is likely that where ACM has been identified throughout specific floors, similar materials and quantities exist on other like floors. It is the contractors'/client's responsibility to verify all amounts of asbestos identified during any bid process, or during future renovation and/or demolition activities. Materials that are identical in both relative location and physical description to already tested materials listed in this report should always be assumed to be ACM.

- Chart B – Is a list of other hazardous materials (above RCRA household quantity levels) that will require special handling and disposal by the contractor.

Chart A – Materials Sampled and Asbestos Content

Material #	Material Description	Asbestos	Quantity	Location (Refer to map in Appendix B)
1	Poured Concrete Grey	No	3,600 SF	Throughout
2	Asphalt Shingle Black	No	2,692 SF	Exterior Roof
3	Asphalt Shingle Green	No	100 SF	Exterior Shed Roof
4	Fiberboard Brown	No	75 SF	Room 2

Chart B – Other Hazardous Materials Located (Above the household quantity Limitations)

Material #	Material Description	Quantity	Location
1	Misc Items (Glue, Solvents, Cleaners, Etc)	3	Room 2
2	Tires	12	Room 2 Exterior Shed

5. Inspector's Information

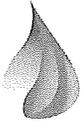
The information contained in this report is a true and accurate representation of the conditions and activities at this property at the time of the investigation, based on the professional judgment of the person(s) who conducted and reported this survey. All inspection work was completed by a Michigan certified asbestos inspector as detailed below.

Jacob Gleason *Wade Wiltse*

Jacob Gleason and Wade Wiltse
State of Michigan Certification #: A-49991 and A-51051

APPENDIX A

POLARIZED LIGHT MICROSCOPY ASBESTOS ANALYSIS RESULT FORMS



**ENVIRONMENTAL TESTING
LABORATORIES, INC.**

38900 HURON RIVER DRIVE, SUITE 200
ROMULUS, MICHIGAN 48174
(734) 955-6600
FAX: (734) 955-6604

To: Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174

ETL Job: 219978

Client Project: 219978

Report Date: 3/28/2019

Attention: Rick Bolek

Project Location: 118 Buckley Ln, Battle Creek, MI 49015
Vacant Residence

Lab Sample Number	Client Sample Number	Sample Type	Completed
992616	1A	Asbestos PLM	03/27/2019
992617	1B	Asbestos PLM	03/27/2019
992618	2A	Asbestos PLM	03/27/2019
992619	2B	Asbestos PLM	03/27/2019
992620	3A	Asbestos PLM	03/27/2019
992621	3B	Asbestos PLM	03/27/2019
992622	4A	Asbestos PLM	03/27/2019
992623	4B	Asbestos PLM	03/27/2019

Reviewed by:

Quality Assurance Coordinator



NVLAP LAB CODE 201028-01

Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
118 Buckley Ln, Battle Creek, MI 49015

ETC Job : 219978
Client Project : 219978
Date Collected : 03/22/2019
Date Received : 03/25/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
992616 1A 1 N Floor Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Poured Concrete	Gray Non-Fibrous Homogenous	PLM 2% Cellulose	PLM 98% Other	PLM None Detected
992617 1B 1 S Floor Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Poured Concrete	Gray Non-Fibrous Homogenous	PLM Trace Cellulose	PLM 100% Other	PLM None Detected
992618 2A Ext N Roof Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Asphalt Shingle	Black Non-Fibrous Homogenous	PLM Trace Cellulose PLM 2% Fiberglass	PLM 98% Other	PLM None Detected
992619 2B Ext S Roof Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Asphalt Shingle	Black Non-Fibrous Homogenous	PLM Trace Cellulose PLM 6% Fiberglass	PLM 94% Other	PLM None Detected
992620 3A Ext Shed Roof Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Asphalt Shingle	Green Non-Fibrous Homogenous	PLM Trace Cellulose	PLM 100% Other	PLM None Detected
992621 3B Ext Shed Roof Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Asphalt Shingle	Green Non-Fibrous Homogenous	PLM 12% Cellulose	PLM 88% Other	PLM None Detected

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP Item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested.



Certificate of Analysis

Environmental Testing Laboratories, Inc.



38900 Huron River Drive,
Suite 200, Romulus, Michigan 48174,
(734) 955-6600, Fax: (734) 955-6604

Polarized Light Microscopy Asbestos Analysis Report

To : Environmental Testing And Consulting Inc.
38900 Huron River Drive
Romulus, MI 48174
Location : Vacant Residence
118 Buckley Ln, Battle Creek, MI 49015

ETC Job : 219978
Client Project : 219978
Date Collected : 03/22/2019
Date Received : 03/25/2019

Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Asbestos
992622 4A 2 N Wall Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Fiber Board	Brown Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected
992623 4B 2 N Wall Analyst: Nariman Halimeh Date Analyzed : 03/27/2019	Fiber Board	Brown Fibrous Homogenous	PLM 99% Cellulose	PLM 1% Other	PLM None Detected

Lab Supervisor/Other Signatory

Analyst:

Nariman Halimeh

400 Point Count Results by EPA 600/R-93/116 PLM (denoted by "PC")
Item 198.1: PLM Methods for Identifying and Quantitating Asbestos in Bulk Samples
Item 198.6: PLM Methods for Identifying and Quantitating Asbestos in Non-Friable Organically Bound Bulk Samples
EPA 600/R-93/116: Method for Determination of Asbestos in Bulk Building Materials
EPA 600/M4-82-020: Interim Method for Determination of Asbestos in Bulk Insulation Samples

ETL, Inc. maintains liability limited to cost of analysis. This report relates only to the samples reported and may not be reproduced without written approval by ETL, Inc. Test Method EPA 600/R-93-116 & EPA 600/M4-82/020 or NYSDOH-ELAP item 198.1 and/or 198.6 was used to analyze all samples. Matrix interference and/or resolution limits (i.e. detecting asbestos in non-friable organically bound materials) may yield false results in certain circumstances. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing. Interpretation and use of test results are the responsibility of the client. ETL, Inc. is not responsible for the accuracy of the results when requested to physically separate and analyze layered samples. Any PLM results below 10% should be re-analyzed using the EPA recommended Point Count method. Any material that has greater than 1% asbestos content is considered to be an Asbestos Containing Material (ACM). These materials are regulated by both OSHA and the EPA and must be treated accordingly. Results are related to only to samples that were tested.

ENVIRONMENTAL TESTING LABORATORIES, INC

38900 HURON RIVER DRIVE
 ROMULUS, MICHIGAN 48174
 (734) 955-6600
 FAX: (734) 992-2261
 www.2etl.com

**Bulk Asbestos/Mold
 Chain of Custody**

ETL Project #: 219978

Client: <u>ETC.</u>	Contact: <u>Jake Gleason</u>	Project Location/Name: <u>118 Buckley Ln Battle Creek, MI</u>
Address: <u>721 N Capitol Lansing, MI, 48906</u>	Phone: <u>734-486-5782</u>	Client Project #: <u>219978</u>
Please Provide Results: <input checked="" type="checkbox"/> Email <input type="checkbox"/> Fax <input type="checkbox"/> Verbal <input type="checkbox"/> Other _____		Date Sampled: <u>3/22/19</u>

Turnaround Time (TAT): RUSH (2 hrs) Same Day 24 hrs 48 hrs Standard (3-5 days) Other _____

Asbestos PLM/Mold Instructions
 (Check all that apply)

PLM EPA600/R-93/116, 1993 (Standard method) <input checked="" type="checkbox"/>	Stop at 1st Positive: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Point Counting: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> *400 Points <input type="checkbox"/> *1000 Points <input type="checkbox"/>	Clearly Mark Homogenous Group
Point Counting Criteria: <u>Please count anything under 3%</u>	*Gravimetric Reduction <input type="checkbox"/> *Nuisance Dust <input type="checkbox"/>
Mold Air <input type="checkbox"/> Mold Tape <input type="checkbox"/> Mold Bulk <input type="checkbox"/>	*Soil or Vermiculite Analysis <input type="checkbox"/>

* Additional charge and turnaround may be required

Lab ID	Sample ID	Sample Location	Material Description/Volume
<u>01</u>	<u>A-B</u>	<u>Please see attached</u>	
	<u>↓</u>		
<u>04</u>	<u>A-B</u>		

Relinquished (Name/Organization): <u>Rock & Wilke</u>	Date: <u>3/22/19</u>	Time: <u>11:50</u> AM/PM
Received (Name/ETL): <u>Roxana Sepulveda</u>	<u>3-25-19</u>	<u>10:20</u> AM/PM
Stereoscopical/Sample Analysis (Name/ETL): <u>Marianne Huhich</u>		
Special Instructions:	Remarks:	

**IN ORDER TO ENSURE RESULTS BY SPECIFIED TAT, THE LAB MUST BE EMAILED/CALLED WITH THE QUANTITY OF SAMPLES TO BE SHIPPED OR DROPPED OFF
 **RUSHES ARE NOT ACCEPTED AFTER 3:00 PM AND SAME DAYS ARE NOT ACCEPTED AFTER 2:00 PM

Asbestos Material Sampling Summary Sheet

Miscellaneous materials

Revision date 5/7/2015

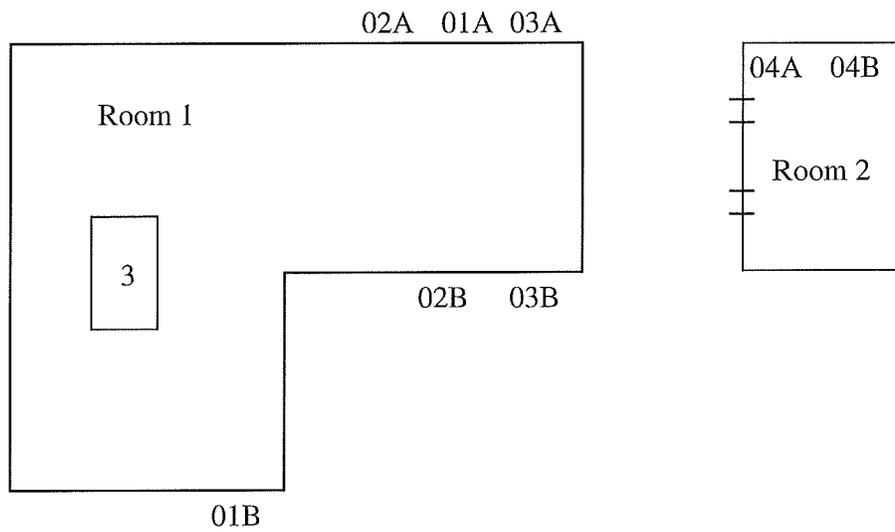
Job #:	Material Description		Friable (F) / Non-Friable (NF)	Sample Letter	Sample Location	Date:	Material Located throughout bldg (Please List all Rooms)	Quantity	Picture #
219978	Building: 118 Buckley LN, Baffle Creek, MF					3/22/19			
01	Material: Poured concrete		NF2	A	1 N floor	992	throughout	3600 SF	
	Description: Grey			B	1 S floor			SF	
02	Material: Asphalt shingle		NF1	A	ext N Roof	616	ext	2692 SF	
	Description: Black			B	ext S Roof	617	Roof	SF	
03	Material: Asphalt shingle		NF1	A	ext Steel Roof	618	ext	100 SF	
	Description: Green			B	ext Steel Roof	619	Roof shed	SF	
04	Material: Fiber Board		NF2	A	2 N wall	620	2	25 SF	
	Description: Brown			B	2 N wall	621			
	Material: Description			A		622			
	Material: Description			B		623			
	Material: Description			A					
	Material: Description			B					
	Material: Description			A					
	Material: Description			B					
	Material: Description			A					
	Material: Description			B					
	Material: Description			A					
	Material: Description			B					

APPENDIX B

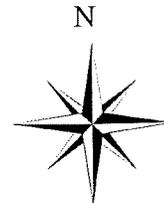
SITE MAP

1st floor

118 Buckley Ln, Battle Creek, MI 49015



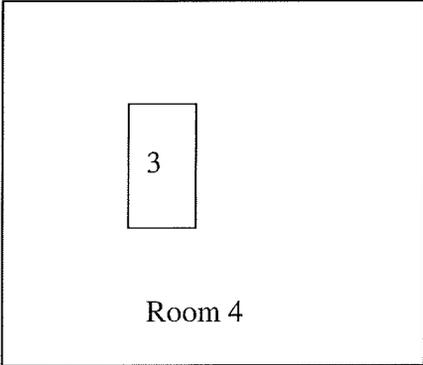
Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



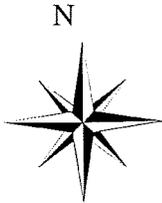
City of Battle Creek
219978

Basement

118 Buckley Ln, Battle Creek, MI 49015



Please Note: This is a rough floor plan only. All items, (doorways, Windows, etc.) may not be included in this illustration. Also, room and component sizes are not drawn to scale.



City of Battle Creek
219978

APPENDIX C

STATE OF MICHIGAN NOTIFICATION OF INTENT TO RENOVATE OR DEMOLISH

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH



MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
(MDEQ) AIR QUALITY DIVISION
NESHAP, 40 CFR Part 61, Subpart M



MICHIGAN DEPARTMENT OF LICENSING AND
REGULATORY AFFAIRS (LARA), ASBESTOS PROGRAM,
P.A. 135 OF 1986, AS AMENDED, Section 220 (1-4) or (8)

DEQ/LARA USE ONLY

Postmark Date ___/___/___ Rec'd Date ___/___/___
 Emergency Date ___/___/___ Valid No. _____
 OK Send Def Ltr. Date of Def Ltr. ___/___/___
 FOLLOW UP ___/___/___ Spoke w/ _____
 Comments: _____

 Notification No. _____ Trans No. _____

3. ABATEMENT CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

4. DEMOLITION CONTRACTOR: Internal Project #: _____
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

5. FACILITY OWNER: ("Facility" includes Bridges)
 Name: _____
 Mailing Address: _____
 City/State/Zip: _____
 E-mail: _____
 Contact: _____ Phone: _____

6. FACILITY DESCRIPTION:
 Facility Name: _____
 Location Address/Description: _____
 _____ If Apt. # of units: _____
 City/Twp. _____ State: _____ Zip Code: _____
 County: _____ Nearest Crossroad: _____
 Size: (sq. ft.) _____ No. of Floors: _____ Floor No.: _____
 Age: _____ Present Use: _____ Prior Use: _____
 Specific Location(s) in Facility: _____

7. DISPOSAL SITE:
 Name: _____
 Location Address: _____
 City/State/Zip: _____

8. WASTE TRANSPORTER 1:	WASTE TRANSPORTER 2:
Name: _____	_____
Address: _____	_____
City/State/Zip: _____	_____
Phone: _____	_____

9. ORDERED DEMOLITIONS: (See NESHAP regulations for definition of "Ordered Demolition.") A copy of the official Order must accompany this notification.
 Gov't Agency Ordering Demo: _____
 Name/Title of Person Signing Order: _____

 Date of Order: _____ Date Ordered to Begin: _____

Calculate LARA Asbestos Project Fee: (1% Project Fee)
 Total Project Cost: _____ x 0.01 = _____
 Type of Contractor: _____ License No.: _____
 Licensing Authority: _____

1. NOTIFICATION:
 Date of Notification: _____
 Date of Revision(s): _____
 Notification Type: Original Revised Canceled Annual
Mark appropriate boxes: (both DEQ and LARA may apply):
DEQ (NESHAP) [260 ln. ft./160 sq. ft. or more is threshold]
 Planned Renovation – 10 working days notice
 Emergency Renovation
 Scheduled Demolition – 10 working days notice
 Intentional Burn – 10 working days notice
 Ordered Demolition
LARA (MIOSHA) [Will not accept annual notifications]
 Demo, Reno, Encap. (>10 ln. ft./15 sq. ft.) 10 calendar days notice
 Emergency Renovation/Encapsulation

2. PROJECT SCHEDULE:

	START DATE	END DATE
* Renovation	_____	_____
+Asb. Removal	_____	_____
+Demolition:	_____	_____
Encapsulation:	_____	_____

Work Schedule: Please indicate the anticipated days of the week and work hours for the purpose of scheduling a compliance inspection.

	Days of the Week	Work Hours
Asb. Removal:	_____	_____
Demolition:	_____	_____
Encapsulation:	_____	_____

* Includes setup, build enclosure, asbestos removal, demobilizing, etc.
 +Include only those dates you are conducting asbestos removal/demo.
 Check here if this is a multi-phased project, attach a schedule showing the start/end date of each phase.

10. IS ASBESTOS PRESENT? Yes No To be removed prior to demolition

Estimate the amount of asbestos: Include RACM (Regulated Asbestos Containing Material) to be removed, encapsulated, etc. Also include the amount and type (floor tile, roofing, etc.) of non-friable Category I and/or Category II ACM that will not be removed prior to demolition. (NOTE: In a demolition, cementitious ACM cannot remain in a structure, as it is likely to become regulated in the demolition/handling process. It must be removed prior to demolition.)

RACM to be Removed	RACM to be Encapsulated	Non-friable ACM <u>not</u> removed prior to demo. Category I	Category II	Units of Measure	
_____	_____	_____	_____	<input type="checkbox"/> Ln. Ft.	<input type="checkbox"/> Ln. M.
_____	_____	_____	_____	<input type="checkbox"/> Sq. Ft.	<input type="checkbox"/> Sq. M.
_____	_____	_____	_____	<input type="checkbox"/> Cu. Ft.*	<input type="checkbox"/> Cu.M.*

*Volume (cubic ft./meters) should be used only if unable to measure by linear/square measure (example: asbestos has fallen off of surface).

NOTIFICATION OF INTENT TO RENOVATE/DEMOLISH (continued)

11. PROJECT DESCRIPTION: Complete A) for Renovation (asbestos removal/encapsulation) and/or B) for Demolition:

A) RENOVATION: Mark all surfaces/types of RACM to be removed:

- Piping Fittings Boiler(s) Tanks(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Mag Block Other (describe) _____

Encapsulation (for LARA): Mark surfaces/types to be encapsulated:

- Piping Fittings Boiler(s) Tank(s)
 Beam(s) Duct(s) Tunnel(s) Ceiling Tile(s)
 Other (describe) _____

Method of removal: Describe how the asbestos will be removed from the surface (example: glove bag, scrape with hand tools, cut in sections and carefully lower, etc.): _____

B) DEMOLITION: Describe the method of demolition of facility, bridge, etc., and indicate if complete or partial. If partial, describe which part of facility bridge, etc., will be demolished: _____

12. ENGINEERING CONTROLS: Describe work practices and engineering controls used to prevent visible emissions before, during, and after removal, and until proper disposal: _____

13. UNEXPECTED ASBESTOS: Describe the steps you intend to follow in the event that unexpected RACM is found or previously non-friable asbestos becomes friable (crumbled, pulverized, reduced to powder, etc.) and therefore regulated: _____

14. PROCEDURE(S) USED TO DETECT THE PRESENCE OF ASBESTOS: A) Indicate how you determined whether or not asbestos is in the facility. If analytical sampling was used, describe method of analysis. (The determination of the presence or absence of asbestos must be made prior to submitting a renovation/demolition notification.): _____

B) Name, address, and phone number of company performing asbestos survey: _____

C) Name, accreditation number of inspector, and date of inspection: _____

15. EMERGENCY RENOVATIONS: Date/time of emergency: _____ Describe the sudden, unexpected event: _____

Explain how the event caused unsafe conditions, and/or would cause equipment damage and/or an unreasonable financial burden: _____

16. I certify that an individual trained in the provisions of 40 CFR Part 61, Subpart M, will be on-site during the renovation and during demolition involving RACM above the threshold and/or during an ordered demolition. Evidence that this person has completed the required training will be available for inspection at the renovation or demolition site.

Signature of Owner or Abatement Contractor *Date*

Signature of Owner or Demolition Contractor *Date*

17. Signature Requirements for Projects with Negative Pressure Enclosures: (required by LARA)

Per Section 221(1)(2) of P.A. 135 of 1986, as amended, clearance air monitoring is required for any asbestos abatement project involving 10 linear feet/15 square feet or more of friable material which is performed within a negative pressure enclosure. *I (the building owner or lessee) have been advised by the contractor of my responsibility under Act 135 to have clearance air monitoring performed on this project.*

Signature of Building Owner or Lessee *Date*

Signature of Asbestos Abatement Contractor Representative *Date*

NOTE: It is not mandatory that a signed copy be sent to LARA unless requested. For affected projects, this section of the notification form must be completed, signed, and made part of your records before the project begins.

18. I certify that the above information is correct:

Printed Name of Owner/Operator *Date*

Signature of Owner/Operator *Date*

MAILING ADDRESSES/PHONE NUMBERS: (See Item 1 to determine which agency requirements/regulations are applicable to your project.)

For Public Act 135 of 1986, as amended, Section 220 (1-4) or (8), mail to address below. For more info visit: <http://www.michigan.gov/asbestos>

For NESHAP Demolitions/Renovations, 40 CFR, Part 61, Subpart M, mail notifications to the appropriate address below (by county of subject facility): For more info visit <http://www.michigan.gov/deq> click on Air, then Asbestos NESHAP Program.

All Counties (except Wayne County)

NESHAP Asbestos Program
 DEQ, AQD
 P.O. Box 30260
 Lansing, MI 48909-7760

Wayne County Only

NESHAP Asbestos Program
 Detroit Field Office, DEQ, AQD
 Cadillac Place, Suite 2-300
 3058 West Grand Boulevard
 Detroit, MI 48202

517.636.4551 (office), 517.322.1713 (fax)

517.241.7463 (Office)
 517.373.7064 (Revision Line)

313.456.4686 (Office)
 313.456.2558 (Revision Line)