

INSTRUCTIONS TO BIDDERS

Mail or deliver this entire completed bid package in a sealed envelope to be received no later than 2:00 P.M. on Monday, March 24, 2014.

TO: Borough of Naugatuck
Mayoral Aid's Office, 4th Floor
229 Church Street
Naugatuck, CT 06770

To be noted on the outside of the envelope:

DO NOT OPEN UNTIL 2:00 P.M. on Monday, March 24, 2014.

Project # 088-147-REHAB

Robert & Donna Marie Ligouri
20 Olive Street
Naugatuck, CT 06770

Tel: 203-455-4435

Tel: 203-455-4434

Mandatory pre-bid conference:

***Thursday, March 13, 2014, 8:00 A.M., 20 Olive Street, Naugatuck, CT
All interested Contractors are required to attend.***

Note: Contractor is to submit the entire bid package and any addendum issued. All bids must be filled in completely. It is suggested that the contractor retain a copy of the entire bid package.

All bids shall remain in effect for forty-five (45) calendar days after the receipt of bids.

CONTRACTOR'S BUSINESS NAME: _____

AN AFFIRMATIVE ACTION/ EQUAL OPPORTUNITY EMPLOYER
WBE/ SBE/ MBE & SECTION 3 DESIGNATED BUSINESSES
ARE ENCOURAGED TO APPLY

GENERAL CONDITIONS

OWNER: Robert & DonnaMarie Ligouri
ADDRESS: 20 Olive Street
Naugatuck, CT 06770

PROJECT: 088-147

1. The Contractor, unless otherwise specified, shall provide all labor, materials, tools, equipment, and related items, and pay all necessary taxes, fees, and permits necessary to complete all of his work as detailed on the attached scope of work.
2. All rehabilitation, alterations, repairs, or extensions shall be in compliance with all applicable codes of the Municipality. All electrical, heating, and plumbing work shall comply with the rules and regulations of the National, State and Local Codes. Before commencing work, contractors and/or subcontractors shall obtain all necessary permits.
3. The Contractor certifies that he has familiarized himself with the requirements of the specifications and plans and understands the extent and character of the work to be done, and inspected the premises and given his full attention to any and all areas with which he might become specifically involved. He must familiarize himself with all conditions relating to and affecting his work and bid.
4. The selected Contractor must, prior to contract signing, supply the Borough of Naugatuck and the Owner with the original certificates of insurance for general liability, auto liability, and worker's compensation, as applicable. General liability insurance shall be a broad form contractual endorsement with minimum limits of one million (\$1,000,000.00) dollars per occurrence for bodily injury and five hundred thousand (\$500,000.00) dollars per occurrence for property damage. Auto Liability insurance shall cover hired and non-hired autos in accordance with State law. Workers' Compensation Insurance shall have a minimum limit of one hundred thousand (\$100,000.00) dollars for each accident. The Contractor shall indemnify and save harmless the Owner and the Borough of Naugatuck under these policies. The contractor shall name the Borough of Naugatuck, its agents and the Owner as additional insured as their interests may appear on the General Liability Insurance.
5. The Contractor agrees that all services offered by the Municipality through L. Wagner & Associates, Inc. (hereinafter referred to as the "Consultant"), which may affect the Contractor, are offered by the Municipality in order to assist in the project implementation and the necessary program compliance. The Contractor agrees to, upon review and acceptance of such services provided, indemnify, defend, save and hold harmless the Municipality and Consultant, their officers, agents and employees from and against any and all damage, liability, loss, expense, judgment or deficiency of any nature whatsoever (including, without limitation, reasonable attorney's fees and other costs and expenses incident to any suit, action or proceeding) incurred or sustained by Municipality or consultant which shall arise out of or result from consultant's performance in good faith of services pursuant to the Professional Services Contract. The Contractor agrees that the Consultant shall not be liable to the Contractor, its heirs, successors or assigns, for any act performed within the duties and scope of employment pursuant to Professional Services Contract.

6. All materials shall be new and of acceptable quality. The property Owner shall select all colors, models, etc. All materials and work must be applied in accordance with the applicable manufacturer's latest instructions and specifications, and in accordance with Federal prohibitions against the use of lead paint. All manufacturers' warranties are to be extended to the property Owner free and clear of all liens. Unless otherwise specified, all labor, material, and workmanship provided by the Contractor shall be guaranteed by the Contractor for a one (1) year period from the date of the Certificate of Completion. This guarantee shall be in addition to and not in limitation of, in lieu of, or modify any other guarantee that is due the property Owner from any manufacturer.
7. The Contractor shall repair or replace all work, materials, and equipment which are found to be defective during construction and the guarantee period. Repair shall include all damage to surrounding work caused by the failure and/or necessary for the repair or replacement of the defect. All repairs and replacements shall be performed at no additional expense to the Owner and shall be completed promptly after the Contractor receives notice of the defect.
8. The Contractor shall take all necessary measures and precautions to protect the surroundings from damage occurring due to performance of the work. If such damage occurs it will be repaired by the Contractor at no cost to the Owner.
9. The Contractor shall dispose of all debris and remove all material resulting from his work in accordance with local and State law. The Contractor shall police and maintain a clean and safe job site daily. He shall reinstall accessories taken down and clean up all scrap around the project and remove fingerprints. All on-site maintenance relating to the performance of the work shall be the responsibility of the Contractor until the Certificate of Completion is issued. The project shall be maintained in a habitable and safe condition daily if the project is to remain occupied.
10. All work shall be neat and accurate and done in a manner in accordance with customary trade practices.
11. The Contractor shall not make any changes to the scope of work unless a change order is processed and fully executed by the property Owner and the Program.
12. The Owner may cancel this contract by _____ and not be liable to the Contractor or the Municipality. Should the Owner opt to cancel they must sign and send the attached cancellation notice, see Attachment A, to the Contractor, other wise the Owner shall issue a Notice to proceed authorizing the contractor to commence with the proposed improvements. Should the Notice to Proceed not be issued prior to 10 consecutive calendar days from the date of the expiration date of the right to cancel then the Contract will become Null and void.
13. The Contractor shall commence work under this contract prior to _____ and complete the work by _____.
14. If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner or by any employee of the Owner, or by any separate Contractor employed by the Owner, or by changes ordered in the work or by labor disputes, fire, unusual delay

in delivery of materials, transportation, adverse weather conditions not reasonably anticipatable, unavoidable casualties, or any causes beyond the Contractor's control, or by delay authorized by the Owner pending arbitration, or by any other cause which justifies the delay, the contract time shall be extended by Change Order for such reasonable time as may be agreed upon by all parties. It shall be the responsibility of the Contractor to request and document in writing such extensions within three (3) calendar days. In the event that the Contractor does not commence or pursue the work as hereinafter stated, then the Owner shall have the right to terminate this agreement and to hire a successor Contractor to perform the work. Any such termination shall be by certified mail to the address noted in this agreement, and shall be effective as of the date of mailing. Payments by the Owner in the event of termination shall be as follows:

15. The successor Contractor shall first be paid and then the terminated Contractor. Payments to the terminated Contractor shall be limited both as to those funds remaining after payment to the successor Contractor but shall not exceed the value of the work actually performed by the terminated Contractor. Further, should the total cost for work performed under this contract exceed the amount stated in this agreement due to the Contractor's termination, then the Owner shall have a cause of action against the terminated Contractor for any such additional cost.
16. If, through any cause, the Contractor shall fail to fulfill in a timely and proper manner his obligations under this Contract, or if the Contractor shall violate any of the covenants, agreements, or stipulations of this Contract, the Owner shall, thereupon, have the right to terminate this Contract by giving written notice to the Contractor of such termination and specifying the effective date of such termination. In such event, all unfinished work required by the Contractor under this Contract shall, at the option of the Owner, be completed or not.
17. The Contractor may request a maximum of _____ progress payments as work is completed in accordance with the attached specifications. The request shall be in the form of an itemized bill for that portion of work completed by the Contractor. All requests for payment shall be accompanied by a fully executed Lien Waiver, on a form provided by the Program. Final payment is contingent upon the receipt of a signature of the respective inspector for which each permit was issued. The Contractor shall be responsible for obtaining the signatures and presenting them upon final payment.
18. All claims or disputes between the Owner and Contractor arising out of or related to the work shall be resolved in accordance with Construction industry arbitration rules of the American Arbitration Association (AAA), unless the parties mutually agree otherwise. The Owner and Contractor shall submit all disputes or claims, regardless of the extent of the work's progress, to AAA. Notice of the demand for arbitration shall be filed in writing, with a copy to the other party to this Construction Agreement, and shall be made within a reasonable time after the dispute has arisen. The award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. IF the arbitrator's award is in a sum which is less than that which was offered in settlement by the Owner, the arbitrator may award costs and attorney's fees in favor of the Owner. If the award of the arbitrator is in a sum greater than that which was offered in settlement by the Contractor, the arbitrator may award costs and attorney's fees in favor of the Contractor.

It is understood and agreed by the parties hereto that neither party will institute any form of legal action, including, but not limited to, attaching the assets of the other party, unless and until it has made a good faith attempt to have the dispute resolved in accordance with the provisions of this Section. Noncompliance with the conditions precedent constitutes a waiver of the right to assert said claim.

19. Section 3 of the Housing and Urban Development Act of 1968 applies to this contract if the amount of HUD assistance exceeds \$200,000 or the contract or subcontract exceeds \$100,000. The Contractor shall, to the maximum extent feasible, provide opportunities for training and employment in connection with this contract to low income persons residing in the PMSA relevant to the project location. The Contractor must make a good faith effort to fill any job vacancies and training opportunities with low income persons residing in the PMSA relevant to the project location. Where the preceding applies, contractors must comply with the following Section 3 Clause:
 - A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1791u (Section 3). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, particularly persons who are recipients of HUD assistance for housing.
 - B. The parties to this contract agree to comply with HUD's regulations in 24 CFR part 135, which implement Section 3. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the part 135 regulations.
 - C. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference shall set for the minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking application for each of the positions; and the anticipated date the work shall begin.
 - D. The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with regulations in 24 CFR part 135, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the regulations in 24 CFR part 135. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of the regulations in 24 CFR part 135.
 - E. The Contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the Contractor is selected but before the

contract is executed, and (2) with persons other than those to whom the regulations of 24 CFR part 135 require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under 24 CFR part 135.

- F. Noncompliance with HUD's regulations in 24 CFR part 135 may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
20. The Contractor will not discriminate against any employee or applicant for employment because of race, color, creed, religion, sex, sexual preference, national origin, or mental or physical disability during the performance of this agreement. The Contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, in all employment practices such as the following: employment, upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship, without regard to their race, color, creed, religion, sex, sexual preference, national origin or mental or physical disability. This provision will be inserted in all subcontracts for work covered by this agreement.
 21. In the event of the Contractor's noncompliance with this equal opportunity clause or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further contracts in accordance with procedures authorized in Presidential Executive Order 11246, or by rule, regulations, or order of the Secretary of Labor or as provided by law.
 22. The following applies to all contracts of \$10,000.00 or more: SECTION 402 VETERANS OF THE VIETNAM ERA. AFFIRMATIVE ACTION FOR DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA. The Contractor will not discriminate against any employee or applicant for employment because he or she is a disabled veteran of the Vietnam era in regard to any position for which the employee or applicant for employment is qualified. The Contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified disabled veterans and veterans of the Vietnam era without discrimination based upon their disability or veteran status in all employment practices such as the following: employment upgrading, demotion or transfer, recruitment, advertising, layoff or termination, rates of pay or other forms of compensation and selection for training, including apprenticeship.
 23. The premises herein shall be occupied during the course of the construction work.
 24. No officer, employee or member of the Governing Body of the Borough of Naugatuck shall have any financial interest, direct or indirect, in this contract or the proceeds of this loan.
 25. The Owner and/or Borough retains the right to reject any or all bids or any part of any bid in part or in whole if deemed to be in the best interest of the Owner and/or Borough.

26. Substitutions of materials from that specified are only allowed on an approved/equal basis. The Contractor must submit written documentation of the substitute item or material for approval by the Owner and Program prior to making such substitution. Any items or material substituted by the Contractor without prior written approval of the Owner and Program will at Contractor's expense be replaced if it is determined not to be equal to the item or material specified. Any surrounding, adjoining, or dependent items affected by replacement of unequal substituted material shall also be replaced, reworked, and reinstalled at no cost to the Owner.
27. Bids shall contain prices for general categories of work and/or items as specified on the attached sheets. In the event of a discrepancy between prices listed in the specifications and those on the cost summary sheet, the prices listed on the specification for that section shall prevail. In the case of a mathematical error by the Contractor, the correct sum of the individual line items in the specifications (not in the cost summary) shall be the Contractor's bid.
28. All bids shall remain in effect for forty five (45) calendar days.
29. The Owner will supply all necessary power required by the Contractor at no additional cost to complete his work. Power shall be limited to the use of existing outlets and shall not exceed the existing capacity of the system. Power required over the capacity of the existing electrical system shall be the responsibility of the Contractor. Heating during construction shall be supplied by the owner.
30. OTHER PROVISIONS - LEAD BASED PAINT
 - A. Any and all rehabilitation work under this Agreement will comply with the requirements of the Federal Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4831) which prohibits the use of lead-based paint in residential structures constructed or rehabilitated with Federal Assistance in any form.

The construction or rehabilitation of residential structures with assistance provided under this contract is subject to the final regulations "Requirements for Notification, Evaluation and Reduction of Lead-Based Paint Hazards in Federally owned Residential Property and Housing Receiving Federal Assistance". The regulation is at 24 CFR Part 35. It implements sections 1012 and 1013 of the Residential Lead-Based Paint Hazard Reduction Act of 1992, Title X, of the Housing and Community Development Act of 1992. Sections 1012 and 1013 amend the Lead-Based Paint Poisoning Prevention Act of 1971.

Provided, however, that the Owner shall have sole responsibility for assuring that his property conforms to the Lead-Based Paint Removal Requirements and the Program shall not assume any liability whatsoever

as a result of identifying volatile levels of Lead-Based Paint or its removal except insofar as to comply with applicable environmental regulations.

PUBLIC LAW 91-695 "LEAD-BASED PAINT POISONING PREVENTION ACT" The Contractor shall adhere strictly to the provisions of the "Lead-Based Paint Poisoning Prevention Act". Specifically, the Contractor will not utilize lead-based paint as a finish or undercoat or any other use in or out of residential dwellings funded in whole and/or part by the Federal Government.

31. The specifications and drawings, if any, are complimentary. Work described in the specifications does not necessarily have to appear on the drawings, nor does work described on the drawings necessarily have to appear in the specifications. The Contractor is responsible for estimating all work whether described in the specifications, the drawings, or both. If there is a discrepancy between the drawings and the specifications, the specifications shall prevail. All work, whether described in the specifications, or the drawings is to be included in the bid summary sheet by appropriate line item. The contract will only be awarded to general Contractors bidding on ALL line items.

ATTACHMENT A

Notice of Cancellation

«Date»

You may cancel this transaction without any penalty or obligation, within three business days from the above date.

If you cancel, any property traded in, any payments made by you under the contract or sale, and any negotiable instrument executed by you will be returned within ten business days following receipt by the seller of your cancellation notice, and any security interest out of the transaction will be canceled.

If you cancel, you must make available to the seller at your residence, in substantially as good condition as when received, any goods delivered to you under this contract or sale; or you may, if you wish, comply with the instructions of the seller regarding the return shipment of the goods at the seller's expense and risk. If you do make the goods available to the seller and the seller does not pick them up within twenty days of the date of the cancellation, you may retain or dispose of the goods without any further obligation. If you fail to make the goods available to the seller, or if you agree to return the goods to the seller and fail to do so, then you remain liable for performance of all obligations under the contract.

To cancel this transaction, mail or deliver a signed and dated copy of this cancellation notice or any other written notice, or send a telegram to «Business_Name» at «Contractor_Address», «Contractor_CityStateZip», not later than midnight of «Contract_Cancel_Date».

I hereby cancel this transaction.

Signed

Date

GENERAL CONSTRUCTION NOTES

1. The Contractor shall perform the work to accommodate to the greatest extent reasonable the normal use of the premises by the Owner during the construction period. It is the Owners intention to proceed with the dwelling occupied during the entire construction project. Coordinate with the Owner in all construction operations to minimize conflict, and to facilitate the Owner usage of the dwelling, parking, and access to the building.
2. The Contractor shall maintain containment within the work area when performing lead based paint reduction activities as required, until such time as clearance is received.
3. The Contractor shall coordinate any and all short-term interruptions or shutdowns with the Owner prior to commencing.
4. The Contractor shall take every precaution to ensure the safety of the occupant(s) during all phases of construction. The Contractor shall to the greatest extent reasonable maintain a least one exit for access. Coordinate restrictions and closures with Owner.
5. The Contractor shall be responsible for protecting the dwelling and contents from weather and damage during construction. The Contractor shall be responsible for any damage caused to the building and or contents caused by lack of said protection to the dwelling or contents until completion of the contract.
6. The Contactor will be responsible for the movement of the owner's furnishings as required to facilitate the proposed work The Owner is responsible for the movement of personal items and kick-knacks.
7. The Contractor shall assume full responsibility for the protection and safekeeping of his materials and products under this Contract stored on the site. The Contractor shall move any stored products under the Contractor's control which interfere with operations of the Owner.

Project Meetings

1. The selected Contractor shall attend a contract signing meeting as scheduled by the Owner and Consultant.
2. The selected Contractor shall attend periodic job meetings during the course of construction, on site, as required.

Product and Execution

1. Workers shall be experienced and skillful in performing the work assigned to them.
2. Contractor shall verify critical dimensions, operations and functions in the field before ordering or fabricating items which must fit adjoining construction. The Contractor shall verify all existing conditions and dimensions prior to the work. Any and all discrepancies shall be reported to the Owner and Consultant prior to ordering any materials or performing the work.
3. The Contractor shall follow manufacturer's instructions for assembly, installation and product adjustment. In the event of conflicting specifications the specifications of the manufacturer shall prevail.
4. In the event unforeseen circumstances the Contractor shall notify the Owner and Consultant within 24 hours of discovery. If the work is deemed additional or extra by the Consultant then a change order will be negotiated, executed and authorized by the Contractor, Owner and Consultant prior to the commencement of the work. Any work performed prior to the execution of a change order may or may not be considered for payment.
5. The specifications do not attempt to detail every task and procedure required to perform the work in full. The Contractor shall perform the work as required to complete the work in a professional manner using customary trade practices and standard work practices.

Removal of Debris and Site Maintenance

1. The contractor shall include in their bid the cost of trash containers and the removal and lawful disposal of said debris off site.
2. The Contractor shall coordinate with the Owner for the placement of trash containers if necessary prior to the start of demolition.
3. The Contractor shall be responsible for the daily clean up and maintenance of the site. All debris, construction materials, scrap, rubbish etc. shall be placed in a trash container or dumpster on a daily basis. sidewalks, driveways and pedestrian ways shall be clean and free of debris at the end of each day.

Material Delivery, Storage and Handling

1. The Contractor shall determine and comply with manufacturer's recommendation on product handling, storage installation and protection.
2. Products shall be delivered to the job site in their manufacturers' original

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- containers, with labels intact and legible. Do not deliver materials to job site until they can be properly protected.
3. Maintain packaged materials with seals unbroken and labels intact until time of use.
 4. The Owner and or Consultant may reject materials and products which do not bear identification satisfactory to the Owner or Consultant

Submittal

The following list of submittals is for the convenience of all parties concerned it is not necessarily a complete list of all submittals required.

1. Submit the following before the start of work:
 - a. Copy of building permit.
 - b. Material submittals.
2. Submittals before Certificate of Completion and final payment.
 - a. Acceptance of work from local Building Official.
 - b. All warranty and guarantee information
 - c. Signed and notarized lien waivers from first tier subcontractors and suppliers.

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Warranties and Guarantees

1. The Contractor shall issue the Owner a written Notice of Guarantee after the date of receipt of Certificate of Completion. Submit to the Owner on letterhead in the following form:

Name of Project and date

I/We, (FIRM NAME), hereby warrant, and guarantee workmanship on labor for the renovations performed at 20 Olive Street, Naugatuck, CT as per contract signed on _____ for a period of ONE (1) YEAR from the date of the Certificate of Completion.

Signed
Dated

End of Section

MASONRY

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

1. The intent of the proposed work is to remove of existing cast in place side walk and install new.

Sidewalk

1. Remove and dispose of the existing sidewalk at the front entrance from existing cast in placed stairs to wood stairs leading to front porch.
2. Excavate as required to remove 6" of sub-base from side walk area.
3. Place 6" of compacted gravel as base beneath new walk.
4. Form out new sidewalks to match existing in with and design.
5. Install 10x10 wire reinforcing mat in sidewalk.
6. Place and float smooth 3,000 psi concrete. Contractor shall install expansion joint at either end of new walk and control joints every 5' maximum in new walk.
7. Provide broom finish perpendicular to side walk and tool edges of walk smooth.
8. Contractor shall call for inspection of form work and sub base prior to placement of concrete.
9. Remove forms once concrete has cured.
10. Provide screened loam and seed to blend new walks into existing grade.

End of Section

Cost \$ _____

CARPENTRY

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

The intent of the proposed work includes but not limited to the following:

1. Jack up the front porch to reduce slope and close gap. Excavate as required to install new support piers at front porch. Install cement cast in place concrete piers at front porch. Provide structural support at front porch. ***Note: See enclosed lead paint report for additional information.***
2. Install handrail on basement stairs.
3. Construct new basement hatchway stairs.
4. Install 12" x 12" ceiling tiles in bedroom # 009

Front Porch Repairs

1. Remove and save existing lattice work for reinstallation upon completion of work described below.
2. Jack up front porch to reduce slope and close gap on knee wall. Provide temporary supports as required until new structural supports are installed.
3. Excavate four (3) 42" deep x 10" round piers located at the front porch. Locate piers beneath corners and mid span.
4. Contractor shall schedule inspection with Building Department prior to pouring concrete.
5. Place Portland cement based concrete mix in piers and float tops smooth. Install galvanized post to pier brackets in tops of piers such as Simpson Strong Tie.
6. Install pressure 6" x 6" support posts from new piers to existing framing members.
7. Remove temporary supports and reinstall existing lattice.

Basement Handrail

1. Construct guard rail and hand rail at basement stairs.
2. Install 4"x4" post from floor to ceiling to receive guard rail. Secure post to concrete with post bracket secured to concrete slab. Install blocking if needed to secure top of post to floor joists.
3. Construct guard rail with 2" x 4" Douglas fir Install top and bottom rail and intermediate rails as per code.
4. Install 2 3/4" x 1 9/32" graspable handrail such as Crown Heritage 6042 or approved equal.
5. Secure handrail to wall framing and 4"x4" post using brass plated brackets such as Stanley bright brass handrail bracket # 571050 or approved equal. Minimum of 3 brackets.

Basement Hatchway Stairs

1. Remove and dispose of existing basement hatchway stairs.
2. Construct new basement hatchway stairs using pressure treated 2" nominal materials as follows:
 - a. Stringers 2" x 10" Datto out stringers to accept treads
 - b. Treads 2" x 12"
3. Fasten stringer to masonry using Tap-Conn fasteners or approved equal.

Ceiling Repair

1. Provide and install 12" x 12" ceiling tiles over 3/4" furring strips in second floor Bedroom # 009. **Note: ceiling tested positive for lead based paint.**
2. Install 3/4" furring strips perpendicular to existing ceiling joists. Install furring strips 12" on center.
3. Install 12" x 12" ceiling tiles such as Impressions Item # 1134, as manufactured by Armstrong or approved equal. Install ceiling tiles as per manufacturers installation instructions.
4. Install 1 5/8" cove molding around perimeter of ceiling. Apply one coat of latex primer and two coats of latex paint. Color to be white.

Cost \$ _____

ROOFING

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.
2. The Contractor shall maintain the building in a weather tight condition throughout the course of construction.

Intent

1. The intention of the proposed work is to remove and dispose of all roofing materials from the house and porches.
2. Provide and install new roofing materials including but not limited to ½” CDX sheathing, asphalt architectural strip type shingles, metal rake and drip edge leak barrier, shingle underlayment, plumbing boots, and flashings.

References

1. ASTM D 224 - Standard Specifications for Smooth Surfaces Asphalt Roll Roofing.
2. ASTM D226 - Standard Specifications for Asphalt Saturated Organic Felt used in Roofing & Waterproofing.
3. ASTM D 3018 - Standard Specification for Class A Shingles Surfaced with Mineral Granules.
4. ASTM 3161 - Standard Test Method for Wind Resistance of Asphalt Shingles (Fan Induced Method).
5. ASTM 3462 - Standard Specification for Asphalt Shingles Made from Glass felt and Surfaced with Mineral Granules.
6. ASTM 4586 - Standard Specification for Asphalt Roof Cement, Asbestos Free.
7. ASTM D4869 - Standard Specification for Asphalt – Saturated Organic Felt Shingle Underlayment used in roofing.
8. ASTM D 6757 - Standard Specifications for Inorganic Underlayment for Use with Steep Slope Roofing.

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9. ASTM E 108 - Standard Test Methods for Fire Tests of Roof Coverings.

Materials

1. Rake & Drip Edge – White aluminum rake & drip. Drip edge shall be 5” wide.
2. Underlayment - . GAF “Shingle Mate” or approved equal for strip type shingles and GAF “Roof Pro” for SBS roofing application where applicable. Underlayment shall conform to ASTM - D226, Type 1 or ASTM D4869 type 1.
3. Leak Barrier - GAF “Weather Watch” mineral surfaced leak barrier or approved equal. Material shall conform to the requirements of ASTM D 1970. Thickness to be min. 40 mils. Tensile strength MD (lbf/in) minimum 25.
4. Starter Strip Shingles shall be Pro Start eave and rake starter strip as manufactured by GAF or approved equal.
5. Laminated fiberglass – shall be GAF Timberline HD Shingles or approved equal. Shingles shall carry Underwriter's Laboratories labels, UL® 790 Class A Fire Resistance, UL® 997, Wind Resistance and ASTM D3462. Shingles shall be Class A, strip type, self-sealing.
6. Hip and ridge shingles shall be Seal – A – Ridge, ridge cap shingles as manufactured by GAF or approved equal.
7. Ridge Vent - GAF “Cobra Ridge Vent, or approved equal.
8. Fasteners - Aluminum or galvanized sharp pointed conventional roofing nails with smooth shanks, minimum 3/8” diameter head and of sufficient length to penetrate 3/4” into solid decking or penetrate through plywood sheathing. Provide 6 nails per full shingle. Staples are not acceptable.
9. Roof boots/ Flashing Vents - EPDM rubber-aluminum boots.
10. Flashing cement - trowel grade non asbestos mineral- fibered roofing mastic ASTM D-2822 Type 1 and ASTM D-4586 Type 1, equivalent to Karnak.
11. Roll flashing & Step Flashing- Aluminum 0.040” thick, mill finish.
12. Chimney flashing – step and counter flashing, lead flashing.

Shingle Removal

1. Remove and legally dispose of existing roofing materials such as but not limited to asphalt and wood shingles, roof boots, roof vents, plumbing boots, flashing materials, rake and drip edge, felt paper and fasteners from all roof sections of building. Existing skip sheathing is to remain in place.
2. Contractor shall remove only as much material as can be replaced in a single work day. If additional sections of the roof are removed then the contractor shall provide tarps or other methods of protecting the structure from water infiltration.
3. Contractor shall be responsible for any water damage to the structure and to Owner's property as a result of inadequate protection from the elements.
4. Removal work shall be done in a manner and by such means as is necessary to protect the buildings from damage; to cause minimum interruption to activities; to avoid hazard or injury to persons or property during the entire construction project.

Preparation of Roof Deck

1. Install ½" 4-ply, CDX sheathing over all roof areas including porches. Sheathing shall be installed with butt edges atop rafters. Install any required nailers and blocking as required to install new sheathing. Fasten sheathing with appropriate sized nails for rigid installation.
2. Install a minimum of two (2) courses of leak barrier along all eaves or 24" beyond heated space whichever is greater. Overlap joints a minimum of 6".
3. Install full overage of leak barrier on porches.
4. Install (36") thirty six inch wide strip of leak barrier centered in all valleys. Overlap joints a minimum of 6".
5. Install (18") eighteen inch wide strip of leak barrier along all rakes. Overlap joints a minimum of 6".
6. Install a minimum of 18" x 18" piece of leak barrier around any roof penetrations such as vent, hoods, plumbing stacks etc.
7. Install new metal rake and drip edge on all rakes and eaves. Fasten new metal edging every 8" on center using approved fasteners.
8. Install roofing underlayment over all roof decks to receive new roofing. Lap each course a minimum of 6" over lower course, and side lapping 4" at all joints.

Shingle Roofing

1. Install shingles per manufacturer's written instructions.
2. Install starter course along eaves per manufacturer's written instructions.
3. Apply six nails per full shingle. Fasten shingles at or below nailing line. Maintain six inch (6") clearance from butt end of proceeding course with any fasteners. Install shingles to meet appropriate wind zone requirements per the building code.

Valley

1. Valleys shall be constructed using a closed cut style installation.
2. Install shingles as per shingle manufacturer's written instructions.

Roof Boots

1. Remove and dispose of existing roof boots.
2. Provide and install new roof boot with aluminum base plate and soft rubber gasket.
3. Install roof boot in accordance to manufacturer's installation instructions

Flashing

1. Provide and install aluminum 5" x 7" step flashing as required at gable walls. Contractor may re-use existing flashing to greatest extent possible.
2. Provide and install aluminum roll flashing at intersection of front gable wall and front porch roof as required. Contractor may re-use existing flashing to greatest extent possible.

Chimney Repair

1. Re-point chimney from roof line to cap. Remove loose and or deteriorated cement from mortar joints.
2. Thoroughly wet mortar joints to be repointed.
3. Repoint chimney using Portland cement based mortar. Rake joints to be recessed from face of brick.
4. Re-flash existing chimney with lead step flashing and counter flashing.

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5. Install lead step flashing from shingles to beneath counter flashing.
6. Install lead roll counter flashing on 4 sides of chimney. Form counter flashing into mortar joints and repoint with Portland cement based mortar.

End of Section

Cost \$ _____

GUTTERS

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

1. The intent of the proposed work is to remove and dispose of the existing gutters and provide and install new seamless aluminum gutter at the same location(s).

Installation

1. Remove and recycle to greatest extent possible existing gutters, leaders and related materials.
2. Provide and install new seamless aluminum gutter and leaders on house, carport and garage.
3. Fasten gutters 32" on center maximum to fascia with concealed brackets.
4. Gutters shall have a minimum wall thickness of .032. Gutters shall be pitched towards downspouts.
5. Provide and install aluminum leaders, at down spout. Leader shall have a minimum wall thickness of .019. Leader pipe shall be fastened to the building every 8' using concealed brackets.
6. Provide and install concrete splash blocks at downspout if no sub surface drains exist. Connect leader drains to sub surface drains with appropriate adaptor if existing.

End of Section

Cost \$ _____

DOORS

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

1. The intent of the proposed work is to replace the existing front and rear entry doors and storm doors.

Manufacturer / Model

1. Therma-Tru Doors, 1750 Indian Woods Circle, Maumee, OH 43537, Tel: 1-800-843-7628 www.thermatru.com or approved equal.

Submittal

1. Product Data: Submit the following:
 - a. Manufacturer's specifications and other data needed to prove compliance with specified requirements.

Fiberglass Door Quality Standards

1. Door - Doors shall be 1 3/4" thick, pre-hung, in swing, smooth fiberglass doors, with 1/16" minimum thickness face panels.
2. Door Edges - Doors edges shall be machine able kiln dried pine and primed. Door bottom edge shall be moisture and decay resistant composite.
3. Lock Area - Lock area shall be reinforced with solid blocking for lockset. Doors shall be bored for 2 3/8" backset for lockset and deadbolt.
4. Door Core - Door core shall be CFC – free foamed in place polyurethane with density rate of 2.0 pcf minimum, K- factor of 0.15 for minimum thermal resistance.
5. Glazing - Factory glazed with two (2) panes of 1/8" minimum, tempered, glass with 3/8" – 1/2" airspace.
6. Frames- frames shall be milled from 5/4" kiln-dried pine, profiled with 1/2" stop. Jamb depth shall be as required individual application. Exterior brickmould shall be WM180 pattern.

7. Sills - Standard Unit doors shall have Mill Finish, Composite Adjustable Sill, with light wood cap.
8. Hinges - Hinges shall be 4"x4" x .098" Self-Aligning, Brushed Nickel finish.
9. Weather Stripping - Weather stripping shall be foam filled compression weather-stripping, Medium Reach, color Bronze.
10. Sweeps - Standard Unit Doors - Bottom Sweeps shall be Kerf Applied Single – Bulb Bottom Sweep, Color Bronze

Entry Door Installation

1. Remove and dispose of existing front and rear entry door, jamb, casings and storm door. *Note: Doors tested positive for lead paint.*
2. Frame down opening to accommodate a 6-8 door. Infill sheathing and drywall flush with adjacent surfaces.
3. Install new entry doors. Install doors plumb, level and square so as to fit tightly, operate freely and latch securely. Doors shall be installed in accordance to manufacturer's installation instructions.
4. Install spun fiberglass insulation between rough opening and door frame.
5. Re-install existing casings on interior of front and rear door. Install additional trim as required at header to cover infill.
6. Remove brick mould on exterior of doors and install A-zek square edge as casings on exterior of both doors.
7. Install Schlage lever handle locksets and deadbolts. Locksets shall be keyed alike. Provide owner with 2 keys for each lock.
8. Apply one coat of primer to bare wood and door.
9. Apply two coats of semi-gloss latex paint to casings, doors and jambs.

Location	Model #	Size	Swing
Front	Therma-Tru –S10	3-0x6-8	Right Hand
Rear	Therma-Tru-S132	2-10x6-8	Left Hand

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Interior Door Replacement

1. Remove and dispose of existing door located at kitchen to basement stairs and kitchen to first floor bathroom. Salvage existing trim for reinstallation.
Note: Doors tested positive for lead paint.
2. Provide and install pre-hung doors such as Simpson four panel Fir F-84 or approved equal. Contractor shall verify size and swing in field prior to ordering.
3. Install new doors plumb, level and square so as to fit tightly, operate freely and latch securely. Doors shall be installed in accordance to manufacturer's installation instructions.
4. Re-install existing trim on kitchen side of doors. Install primed pine casing on basement stairway side of door.

End of Section

Cost \$ _____

STORM DOORS

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

1. The intent of the proposed work is to remove and dispose of the existing storm doors and provide and install new self-storing white aluminum storm doors at the same location(s).

Submittal

1. Product Data: Submit the following:
 - a. Manufacturer's specifications and other data needed to prove compliance with specified requirements.

Manufacturer

1. Gerkin Storm Door as manufactured by Gerkin Doors & Windows, Sioux City, IA, 1-800-475-5061 Color – White
2. Tuff Core, as manufactured by Mercury Excellum Inc., 215 South Main street, East Windsor, CT 06086 1-860-292-1800. Color – White

Frame Construction, Screen, Glazing, Seals and Hardware

1. The door frame shall consist of heavy duty; foam filled extruded frame and extruded mullion, tempered glass storm panels and screen insert, Z-bar and extruded external bottom expander.
2. All extrusions shall be manufactured from aluminum. All screws shall be stainless steel with Phillips head. Z-bar to have woven pile weather stripping and contain lifetime self-lubricating hinges.
3. Extruded bottom expander shall have triple slot to accommodate vinyl weather stripping. Screen spline and glazing vinyl shall be manufactured from virgin ply vinyl plastic. Corner gussets for master frame shall be die cast material.
4. Screens shall be charcoal fiberglass rolled into aluminum frame with vinyl spline.

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5. Glazing shall be tempered 1/8" glass inserted into aluminum frame with keyed corners.
6. The head and side Z-bars shall be designed to receive a woven pile weather stripping.
7. Hardware: Life time aluminum extruded hinges. White pull handle. Door shall include all hardware as provided by manufacturer.

Locations & Installation

1. Remove and recycle to greatest extent possible existing front and side storm doors, frames and related materials.
2. Install storm doors in accordance to manufacturers printed installation instructions.
3. Install new doors plumb, level and square, so as to open freely and latch securely. Fasten to and aligned to prime door.
4. Contractor shall match existing doors for operation and swing.

Location	Door Style	Size	Swing
Front	Gerkin Model 902 with Provincial trim Tuff Core Model 133	3-0x6-8	VIF
Side	Gerkin Model 902 Tuff Core Model 8112	2-10x6-8	VIF

End of Section

Cost \$ _____

WINDOWS

General

Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

1. The intent of the proposed work is to remove and dispose of the existing windows as listed within the house. *Note: Windows tested positive for lead paint.*
2. Replace rotted sills on windows as required.

Manufacturers

- a. Harvey Building Product. Waltham, MA 1-800-598-5400 www.harveyind.com or approved equal.
- b. Mercury Excelum, East Windsor, CT 1-800-292-1802
www.mercuryexcelum.com or approved equal.

Quality Assurance

1. Manufacturer Qualifications: Minimum ten (10) years producing vinyl (PVC) windows.
2. Source Limitations: Obtain window units from one manufacturer through a single source.
3. Provide window units independently tested and found to be in compliance with ANSI/AAMA/NWWDA 101/I.S.2-97 and current A440-05 performance standards listed above.
4. Specified fenestration with the following characteristics:
 - a. U-Factor: Less than or equal to 0.30
 - b. Solar Heat Gain Coefficient: Less than or equal to 0.3
5. Code Compliance: Provide windows that are labeled in compliance with the jurisdiction having authority over the project.
6. Energy Star Rated- windows shall carry Energy Star Rating.

Vinyl Replacement Window Features

1. Provide and install replacement windows as specified below.
2. Replacement windows shall be as specified regarding size, shape, operation and features.
3. Window frames shall be nominal 0.070 inch (1.8mm) thick polyvinyl chloride (PVC) with miter cut and fusion welded corners. Contoured sash design shall be a nominal 0.070 inch (1.7mm) thickness with fusion welded corners. Color: White.
4. Glazing: Low E, 5/8 inch (22mm) nominal thickness, insulated glass units are silicone glazed with an exterior glazing bead.
5. Sash Balances: Block and tackle, complying with AAMA-902. Balance cords shall be anchored to locking terminal housings when the sash is tilted in.
6. Weather Stripping: In compliance with AAMA 701.2.
7. Screens: Half screen, with extruded aluminum frame and 18 x 16 charcoal finished fiberglass mesh screening.
8. Grills- Grills shall be 1 over 1.

Installation

1. Remove existing draperies and reinstall upon window installation as required.
2. Provide and install windows in accordance with manufacturer's installation instructions.
3. Install windows plumb, level and square so as to operate freely and latch securely.
4. Install spun fiberglass insulation within window header and under sill prior to installing window. Insulate between wooden window jambs and vinyl replacement window using spun fiberglass insulation.
5. Re-install stops and fasten with appropriately sized finish nails. Set heads below surface and fill with wood filler. Caulk around remaining window stops and along sill using Phenoseal silicone caulk or approved equal.
6. Wrap exterior window casings, sills and window stops with white aluminum coil stock.

Locations & Window Type

1. Basement # 001
 - a. Replace existing windows on B wall with new. Total of 2
 - b. Replace existing window on C wall with new. Total of 1
 - c. Replace existing windows on D wall with new. Total of 2

2. Kitchen # 002
 - a. Replace existing double hung window on B wall with new. Total of 1
Note: See enclosed lead paint report for additional information.

3. First Floor Bathroom # 003
 - a. Replace existing double hung window on C wall with new. Total of 1

4. Dining Room # 004
 - a. Replace existing double hung window on C wall with new. Total of 1
 - b. Replace existing double hung window on D wall with new. Total of 1

5. Living Room # 005
 - a. Replace existing double hung window on A wall with new. Total of 1
 - b. Replace existing double hung window on D wall with new. Total of 1

6. Foyer # 006
 - a. See Lead report.

7. Second Floor Bedroom # 008
 - a. Replace existing double hung window on B wall with new. Total of 1
 - b. Replace existing double hung window on C wall with new. Total of 1

8. Second Floor Bedroom #009
 - a. Replace existing double hung window on C wall with new. Total of 1
 - b. Replace existing double hung window on D wall with new. Total of 1

9. Second Floor Bedroom #010
 - a. Replace existing double hung window on A wall with new. Total of 1
 - b. Replace existing double hung window on D wall with new. Total of 1

10. Second Floor Bathroom #011
 - a. Replace existing double hung window on A wall with new. Total of 1
 - b. Replace existing double hung window on B wall with new. Total of 1

11. Third Floor Attic #012
 - a. Replace existing double hung window on C wall with new. Total of 1

12. Third Floor Attic #013
 - b. Replace existing double hung window on A wall with new. Total of 1

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13. Third Floor Attic #014
 - a. Replace existing double hung window on B wall with new. Total of 1

End of Section

Cost \$ _____

ELECTRICAL

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.
2. All materials shall be UL listed. All new fixtures shall be Energy Star rated.
3. Any cutting and patching necessary to complete the work described below will be the responsibility of the Contractor.
4. The use of surface mounted wire mold is prohibited unless specifically noted.

Intent

The intention of this section of the specifications is to perform the following work including but not limited to the following:

1. Convert existing kitchen outlets to GFCI outlets.
2. Add arch fault outlets in each second floor bedroom.
3. Install carbon monoxide/smoke detectors on each level and smoke detectors in each bedroom.
4. Install plate cover on open junction boxes and plate covers on outlets and switches where needed.

Outlets

1. Convert existing Kitchen counter top outlets to GFCI duplex outlets as required by code. Total of 2.
2. Install (2) two 15 amp, arch fault, grounded, duplex outlets in each second floor bedroom. New outlets shall be on their own owner circuit. Contractor to confirm location of new outlets with owner prior to installation. Total of six outlets.

Smoke & Carbon Monoxide Detectors

1. Provide and install FIRST ALERT ONELINK model: SOC501CN-3ST, or approved equal wireless smoke detector and carbon monoxide detector on each floor. Total of 4.
2. Provide and install FIRST ALERT ONELINK model: SA521CN-3ST, or

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approved equal wireless smoke detector in each bedroom. Total of 3.

Plate Covers & Junction Box Covers

1. Install plastic plate covers on outlets and switches throughout house as needed.
2. Install plate cover on open junction boxes throughout basement as needed. Plate cover shall be of the same material as junction box.

End of Section

Cost \$ _____

SECOND FLOOR BATHROOM REPAIRS

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

The intent of the proposed work shall include but not limited to the following:

1. Replace tub surround with fiberglass surround.
2. Replace shower diverter.

Surround & Diverter

1. Remove and dispose of existing surround from within bath tub area.
2. Remove and dispose of wallboard from within bathtub area from tub rim to 60" above tub rim.
3. Remove existing three handle tub valve and install tub and shower diverter such as Symmons Temptrol Model S-96-2 or approved equal. Chrome finish.
4. Install one horizontal course of ½"x3'x5' substrate such as HardiBoard within tub area at tub edge. Install any nailers or blocking as require to facilitate installation of HardiBoard. Fasten with coarse thread galvanized or stainless steel screws.
5. Install ½" moisture resistant gypsum wallboard from top of HaridiBoard to existing wallboard within tub area. Fasten with coarse thread drywall screws. Install any nailers or blocking as require to facilitate installation of wallboard. Fasten with coarse thread drywall screws.
6. Apply one coat of tape and compound to wallboard and HardiBoard within tub area to be covered by fiberglass surround.
7. Install Swan RM-58, or approved equal tub surround. Install surround as per manufacturers printed installation instructions.

End of Section

Cost \$ _____

ADD ALTERNATE - VINYL SIDING

General

1. Work in this section shall be governed by the Contract Documents. Contractor shall provide all material, labor, equipment, permits, taxes and fees necessary, as required to perform and complete the work specified herein and or as required by job conditions.

Intent

The intent of the proposed work shall include but not limited to the following:

1. Remove and dispose of existing siding. Contractor shall dispose of material as asbestos.
2. Provide and install double 4" vinyl clad board siding with all related insulation, accessories and trims.
3. Cut open existing soffit material to allow for air flow. Provide and install soffit material at overhangs.
4. Install beaded ceiling material at front porch ceiling.
5. Install break metal aluminum trim on exterior rakes, fascia, casings and exterior trim.

References

1. ASTM D 635—Standard Method for Rate of Burning of Self Supporting Plastics in a Horizontal Position
2. ASTM D 638 -- Standard Methods for Tensile Properties of Plastics.
3. ASTM D 648—Test Method for Deflection Temperature of Plastics under Flexural Load.
4. ASTM D 696—Standard Test Method for Coefficient of Linear Thermal Expansion of Plastic Between -30 degree C and 30 degrees C.
5. ASTM D 1435—Standard Practice Method for Outdoor Weathering of Plastics.
6. ASTM D 1929 – Standard Test Method for Ignition Properties of Plastics.
7. ASTM D 2843—Standard Test Method for Density of Smoke from Burning or Decomposition of Plastics.

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8. ASTM D 3679 – Standard Specification for Rigid Poly Siding.
9. ASTM D 4101 – Standard Specification for Propylene Plastic Injection and Extrusion.
10. ASTM D 4216 – Standard Specification for Rigid Poly Compounds and Related Plastic Building Product Compounds.
11. ASTM D 4226 – Standard Test Methods for Impact Resistance of PVC Building Products.
12. ASTM D 4477 – Standard Specification for Rigid Poly Soffit.
13. ASTM D 5206 -- Standard Windload Resistance Test.
14. ASTM E 84 -- Standard Test Method for Surface Burning Characteristics of Building Materials.
15. ASTM E 119 – Standard Test Methods for Fire Test of Building Construction and Materials.

Manufacturer

1. Provide one of the following manufacturers of siding or approved equal:
 - a. Fairfield, .044, double 4”, wood grain finish
 - b. Mastic, Carvedwood .044, double 4, wood grain finish
 - c. Timberlake, .044, double 4”, wood grain finish.
2. Provide one of the following manufacturers of coil stock or approved equal:
 - a. Alcoa, white aluminum coil stock .019 thickness.
3. Provide one of the following manufacturers of soffit material or approved equal:
 - a. Mastic Soffit, Pro-Tech Plus triple 4 center vent.
 - b. CertainTeed / Wolverine Soffit, Universal triple 4 center vent
4. Provide one of the following manufacturers of beaded ceiling material or approved equal:
 - a. Mastic triple 2” smooth beaded panel
5. Fan Fold Insulation
 - a. 3/8 “ Greenguard XP38, fan fold insulation.
 - b. 3/8” Dow Styrofoam, fan fold insulation.
 - c. 3/8” Polar Wrap, fan fold insulation.

Accessories

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1. Provide coordinating accessories for complete and proper installation whether specified or not.
 - a. Starter strip, aluminum
 - b. Corner posts
 - c. Under sill
 - d. F-channel
 - e. J-channel
 - f. Light blocks
 - g. Sill cock / split blocks
 - h. Dryer/vent

Fasteners

1. Provide 2" minimum galvanized or corrosion resistant nail as recommended by manufacturer of siding products for the installation of the siding, soffit and ceiling material.
2. Provide 1" – 1 1/4" color coated nails to match aluminum coil stock.

Caulking

1. Provide 100 % silicone based caulking material. Caulking material shall be color matched to the material where being applied.

Siding Removal

1. Thoroughly wet siding material before removal to minimize the occurrence of dust, and when possible, the wetted pieces must be removed intact and in large sections.
2. When working from heights, pieces of waste must be lowered to the ground, rather than dropped, also to prevent airborne asbestos fibers.
3. Dispose of existing siding in either 6 mil plastic bags that have "zip-lock" type fasteners and are sealed with duct tape, or in sealed, 55 gallon drums designed for this purpose.
4. The rules and regulations regarding asbestos waste disposal vary according to several factors, including the percentage of actual asbestos and what other chemical and/or toxic substances may be present. Local and state regulations also have some bearing on the issue.

Preparing ACM Waste For Transport

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1. Any potentially friable asbestos-containing materials must be kept wet in order to keep fibers from becoming airborne. It is in this state that they will be packaged for transport to a disposal facility
2. All asbestos-containing material (ACM) waste must be placed in approved, marked containers. Smaller amounts are contained in special sealable plastic bags; in addition to being "zipped," these bags must also be sealed with duct tape. Large amounts must be sealed inside plastic 55-gallon drums made for this purpose.
3. Any vehicle used to transport ACM waste must have identifying markings during loading and unloading, and all containers of ACM waste must be labeled with the name of the waste generator as well as the location from which it is coming.

Paperwork

1. The Contractor shall provide the owner and L. Wagner & Associates with all required asbestos waste disposal manifest.
2. A Waste Shipment Record (WSR) must be given to the operator of the disposal facility, who must then insure that the amount of waste indicated on the WSR matches the amount actually delivered. Any discrepancies are reported to the state agency (usually the Department of Environmental Quality, or DEQ) to which the initial report of the removal project was made. In addition, a copy of the WSR must be returned to the waste generator within 35 days; if not received within 45 days, the waste generator will need to file a report with the state DEQ.
3. Information regarding authorized disposal sites and regulations regarding asbestos disposal can be obtained by calling the Environmental Protection Agency Ombudsman at 1-800-368-5888.

Siding Installation

1. All products shall be installed in accordance to the latest printed installation instruction of the manufacturer
2. Remove existing siding cement siding materials as required. Contractor shall provide disposal receipts for existing siding material.
3. Build out window casings and sills using 2x3 nominal framing materials so as to extend beyond face of siding upon completion.
4. Provide and install house 3/8" backer board on all exterior wall surfaces. Cut material tight to openings.
5. Provide and install double 4" clapboard style solid vinyl siding.
6. Any item(s) that can be removed and remounted on new siding shall be removed

- and remounted. Any item(s) which cannot be removed shall be equipped with a split light block, such as water spigots. The siding contractor shall review the items with the Consultant that can and cannot be removed and remounted prior to commencing work.
7. Splice new siding around electrical conduit penetrating building.
 8. Remove blocking from within eaves to allow for air flow into roof rafters. Frame in soffits to achieve squared fascia and level return using 2” nominal Douglas Fir framing materials. **Contractor shall call for a visual inspection of the venting prior to installing vinyl soffit material.**
 9. Install soffit panels on eaves. Soffit material shall be triple 4” center vented material.
 10. Install any nailers or blocking required to facilitate the installation of vinyl beaded ceiling material on the ceiling of the front and side porch.
 11. Install 8” solid beaded ceiling panels and required trims and accessories to install ceiling panels on front porch and side porch ceilings.

Aluminum Cladding

1. Install white aluminum coil stock over the following items including but not limited to, all exterior door and window casings, rakes, fascias, returns, trims, posts, and headers.
2. Coil stock shall be formed and fashioned to follow existing design and contour of material being covered.
3. Where any piece of coil stock is wider than 8” create a false bend to minimize cupping.

Cleaning

1. The contractor shall clean siding of any handprints, smudges or other markings incurred during installation.

End of Section

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Lead Paint Information and Lead Report

1. The contractor will address all lead hazards listed in the enclosed lead report.
2. If the total cost of the project exceeds \$25,000 the contractor carrying out the work must comply with the licensing requirements established pursuant to Connecticut General Statute sections 20-474 through 20-476, and the Lead Licensure and Certification Regulations sections 20-478-1 through 20-478-2. The contractor carrying out the work must be licensed by the Connecticut Department of Public Health as a Licensed Lead Abatement Contractor. Employees carrying out the work must be certified as Lead Abatement Workers. At least one employee onsite must hold certification as a Lead Abatement Supervisor.
3. If the location of the rehabilitation project is the residence of a child under the age of six, then the contractor carrying out the work must comply with the licensing and certification requirements described in paragraph A, above. The contractor must also carry out lead abatement work, as described under the Lead Poisoning Prevention and Control Regulations section 19a-111-1 through 19a-111-11. A contractor shall not begin work until after the lead abatement work plan has been approved by the local Director of Health.
4. If the total cost of the project is under \$25,000 the contractor carrying out the work must comply with the requirements of the U.S. Environmental Protection Agency's (EPA) Renovation, Repair and Painting Rule (RRP Rule), as well as with HUD's Lead-Safe Work Practices requirements. The company or firm hired to carry out the work shall hold the credential of "EPA RRP Certified Firm." An individual representing that firm, must hold the credential of "EPA certified Renovator." Workers onsite must be trained in lead-safe work practices. (Please note: Although the HUD Lead-Safe Work Practices requirements do not apply to projects that are below \$5,000, the EPA RRP Rule does apply to projects that cost less than \$5,000. Also, the EPA and HUD lead-safe work practices 'certifications' are not equivalent to the licensure and certification requirements of the Connecticut Department of Public Health.)

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Disposal

1. The Contractor shall perform a Toxicity Characteristic Leaching Procedure test, TCLP, as pursuant to Regulations of Connecticut State Agencies Section 22a-449(c)-101(a) (1), incorporating 40 CFR 262.24.
2. The TCLP test will determine the toxicity of the material being disposed of and classify it as either bulky waste or hazardous waste.
3. The Contractor shall assume in their bid price that the TCLP test will result in the disposal of the material as bulky waste. In the event that the TCLP test determines the material to be disposed of as hazardous waste a change order will be negotiated prior to the disposal.
4. The Contractor shall provide the Owner, Town and Consultant with copies of the TCLP test results.

Clearance Testing

1. The Contractor shall hire a Licensed Lead Abatement Consultant, who employs a Certified Lead Inspector or Certified Lead Inspector Risk Assessor to carry out a re-inspection of the work area where lead hazards have been controlled or eliminated. The re-inspection and clearance sampling shall be done only after completion of the project. If visible debris remains in the work area, the project is not complete. The licensed lead consultant and certified inspector shall issue a letter of compliance when the lead remediation or lead abatement work, and dust wipe results are found to be acceptable.
2. The Contractor shall provide the owner, and town with copies of the dust wipe clearance results and the letter of compliance.

**LEAD-BASED PAINT ABATEMENT PLAN
20 OLIVE STREET
NAUGATUCK, CONNECTICUT**



050-3911 03/23/2012

PROVIDED TO
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L. WAGNER AND ASSOCIATES, INC.
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WATERBURY, CONNECTICUT 06708

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Appendices

Appendix 1: Scope of Work and Associated Floor Plans
Appendix 2: Glossary

**LEAD-BASED PAINT ABATEMENT PLAN
20 OLIVE STREET
NAUGATUCK, CONNECTICUT**

PART 1 - GENERAL

1.1 Description

- A. This section specifies abatement of defective and friction/impact surfaces identified by the lead-based paint risk assessor and the project designer contracted to perform lead-based paint consulting services.
- B. No children under six years old resided in the building at the time of the inspection. The construction project is anticipated to receive greater than \$25,000 in federal funds, requiring all lead hazards to be abated. The building is a single family residential building. All abatement work shall be performed in accordance with the lead-based paint abatement plan.
- C. Currently, there is other construction work planned at the site building. If another trade's person is invited into perform non-lead-based paint abatement work by the owner, the Lead-based paint contractor (identified "Contractor" throughout this document) shall coordinate activities with both the owner and the other trades person. The Contractor is responsible for both the safety of the occupants and other trades within or around the property while abatement activities are being performed.
- E. The project is being funded by public funds. Defective lead-based paint and lead paint hazards must be permanently abated.
- F. Following lead-based paint abatement activities, a lead-based paint clearance inspection shall be performed by a State of Connecticut licensed Lead Inspector/Risk Assessor or a representative of the local health department.
- G. All work shall be performed by a State of Connecticut Certified Lead Abatement Contractor and properly licensed and certified workers/supervisors. A certified lead abatement supervisor shall be on-site during the periods of site preparation, break-down of containment and clean-up. During all other times the licensed supervisor shall be available on the phone for immediate contact. All contract assignments and subcontractors are subject to approval by both the owner and consultant.
- H. Acceptance of the finished work performed with in the Scope of Work specified in this document is subject to approval by both the owner and consultant. The contractor shall make themselves available within twenty-four (24) hours to perform rework. All work in the Scope of Work is subject to a one-year warranty, unless the contractor extends the warranty. The warranty includes all damage relevant to the work performance and not subject to damages caused by uncontrollable factors such as occupant damage. All materials and equipment utilized in this project is to be used in accordance with the manufacturer's requirements.

1.2 Related Documents

- A. General contract documents coordinated by a combination of parties involved including but not limited to: owner, buyer, contractor, other trades, architect and governing agencies or other interested parties.

- B. Building, zoning, historical renovation Permits.
- C. Floor Plans and Drawings.
- D. Lead-Based Paint Inspection/Risk Assessment Report Dated February 15, 2014

1.3 Scope of work

- A. See the Appendix 1 for the specific Scope of Work and Bid Form.
- B. All activities specified in the Scope of Work are lead-based paint abatement activities. The contractor may not change the Scope of Work without approval from HLB Environmental, LLC, and the owner.
- C. A bid form is attached for pricing of specific line items and per unit pricing. In the case of a "change order" unit pricing will be added or deducted at the rate specified on the Bid Form.
- D. Abatement activities are specified in the Scope of Work, all applicable areas and components are identified in the associated floor plans attached to the Scope of Work.
- E. In consideration of the owner's choice and of X-Cut/Patch test failures, Alternates Scopes of Work has been developed for bidding.

1.4 Applicable Publications

- A. The publications listed below form a part of this specification to the extent referenced, it may not be all inclusive. The publications are referred to in the text by basic designation only.
- B. Code of Federal Regulations (CFR):
 - a. CFR 24 Part 35 - Lead Safe Housing Rule
 - b. CFR 29 Part 1910 - Occupational Safety and Health Standards
 - c. CFR 29 Part 1926 - Safety and Health Regulations for Construction
 - d. CFR 40 Part 745 - Lead Based Paint Poisoning Prevention in Certain Residential Structures
 - e. CFR 49 Part 172 - Hazardous Material Table, Special Provisions, Hazardous Material Communications, Emergency Response Information and Training Requirements
- C. ASTM
 - a. E2271 - 05a(2012)e1 - Standard Practice for Clearance Examinations Following Lead Abatement Activities in Dwellings and in Other Child-Occupied Facilities
 - b. Z88.6-2006 - Respiratory Protection
- D. State of Connecticut Regulations
 - a. 19a-111 - Lead Poisoning Prevention and Control Regulation
 - b. 22a-449(c) - Hazardous Waste

1.5 Definitions

- A. See Attached Glossary for Definitions applicable to the Lead-Based Paint Abatement Plan.

1.6 Contractor Qualifications

- A. The Contractor shall be a State of Connecticut Certified Lead Abatement Contractor. The Contractor shall maintain and have assigned to the project one State of Connecticut licensed and certified Lead Abatement Supervisor and all other workers must be State of Connecticut Licensed and Certified Lead Abatement Workers. All employees shall have a current

refresher training where applicable. The use of RRP trained employees is not sufficient for his project.

1.7 Submittals

- A. Current Initial or Refresher State of Connecticut Supervisor and Worker licenses and certifications.
- B. Current EPA RRP Firm Certification.
- C. Medical evaluations including current blood lead levels and respirator fit testing.
- D. Respiratory protection program as required by 29 CFR 1910.134, 29 CFR 1910.1025, and 29 CFR 1926.62
- E. Hazard Communication Program including SDS's as required by 29 CFR 1910.1200
- F. Hazardous Waste Management plan shall comply with applicable requirements of Federal, State, and local hazardous waste regulations and address.
- G. Hazardous waste daily disposal log including materials, amount and storage area.
- H. Hazardous waste manifests and approved transportation and landfill information.
- I. Employee Log including supervisor contact information.
- J. Accredited Lead in Air Sampling analysis laboratory.
- K. Copy of all relevant building permits

1.8 Occupant Protection Plan

- A. All occupants shall not be permitted in the building while lead-based paint abatement activities are on-going. Re-occupancy can occur following the completion of interior lead-based paint hazard reduction, acceptance of the final visual inspection and dust wipe sample results.

1.9 Scheduling

- A. A schedule of a work shall be provided to both the owner and consultant five (5) days prior to activities starting. The schedule must be approved and agreed upon by all parties involved. The schedule shall specify all activities to be performed in this document including site preparation, work activities and tear down. Variances to the schedule must be discussed with the owner and consultant. Variances shall be anticipated.
- B. As the building is in a residential area, all work shall be performed between the hours of 8 a.m. and 5 p.m.
- C. The contractor shall give a twenty-four (24) hour notice for any meetings with the owner and consultant necessary to complete the project. In case of emergencies, contact the owner for immediate consideration

1.10 Site Examination

- D. The contractor shall be given the opportunity to visit the site prior to bidding on the Lead-Based Paint Abatement Plan. Additionally, the contractor awarded the project shall be given the opportunity to verify the Scope of work and perform measurement. Should the site examination reveal conditions that have changed since the development of the plan or the plan and its Scope of Work cannot be performed as specified, the contractor shall immediately notify the consultant. Further discussion will ensue and a change, if necessary, will be made prior to the work being performed.

1.11 Notifications

- A. Prior to beginning a lead abatement project, the owner shall give the affected premises or dwelling unit residents a minimum of five (5) working days written notice of the date the abatement will begin. This notice shall inform the residents of their rights and responsibilities in accordance with general statutes section 19a-111 and sections 19a-111-1 through 19a-111-11 of the regulations of Connecticut State Agencies and state which surfaces or soil areas shall be abated.
- B. Following the completion of lead-based paint abatement activities, the owner shall notice the tenants with in fifteen (15) days that the abatement activities have been completed: including scope of the abatement and associated post abatement inspection results.
- C. Notification shall be in a language or format the occupants can read, including brail.

1.12 Insurance

- A. The contractor shall carry the following insurances:
 - a. Worker's Compensation
 - b. Lead Abatement (Pollution) Liability
 - c. General/Contractor's Liability
 - d. Commercial Automobile Insurance

1.13 Record Retention

- A. All records pertaining to the project shall be records be kept by the owner and stored indefinitely for the purposes of sales and lease disclosure in accordance with U.S. Housing and Urban Development (HUD) Disclosure Rule Title X Section 1018.
- B. The contractor shall retain all the records for audit for a minimum of three (3) years from the completion of the project. It is recommended that the records be kept and stored indefinitely.

1.14 US EPA Renovate, Repair and Repainting (RRP) Rule

- A. Lead-based paint abatement activities are excluded from the RRP rule.
- B. All future renovations and maintenance is subject to the RRP rule where lead-based paint exists.

1.15 Post Lead-based Paint Abatement Clearance Inspection and Testing

- A. A post lead-based paint abatement visual inspection will be performed to determine the compliance with the scope of work and the presence of any pre or post abatement dust within the containment area. Failure to comply with the lead-based paint abatement plan will result in the identified deficiency receiving corrective actions by the contractor and a re-inspection accomplished.
- B. All areas where paint removal activities occurred will be subject to XRF testing to ensure the complete removal of all lead-based paint. Removal is consider complete with readings below 1.0 mg/cm² with the XRF.
- C. Following the visual inspection, dust wipe sampling will occur to confirm the presence or absence of lead in dust. Dust wipe sampling shall occur in each room or containment area where abatement activities occurred. Additionally, in the case where areas were not subject to abatement activities within a dwelling unit an "out of work area" dust wipe will be collected on the floor within ten (10) feet of the containment area.

- D. Dust wipe samples will be collected by a State of Connecticut licensed lead inspector/risk assessor. The dust wipe result standards are as follows:
 - a. Floors: 40 ug/ft²
 - b. Window Sills: 250 ug/ft²
 - c. Window Wells: 400 ug/ft²
- E. Dust wipe samples will be collected on floors, window sills and window wells in each containment area. Review the Floor plans for variances in surfaces where dust wipe samples are to be collected
- F. All future renovations and maintenance are subject to the RRP rule where lead-based paint exists.
- G. The owner shall be responsible for the payment to the consultant for initial inspections. The contractor shall be responsible for the consultant fees and sample fees for additional inspections required as a result of failed visual or dust samples.

1.16 Post Lead-based Paint Abatement Letter of Compliance

- A. A Letter of Compliance shall be issued following the completion of the project. The Letter of Compliance shall include only those areas and surfaces specified in the lead-based paint abatement plan.

1.17 Lead-based Paint Management Plan

- A. The abatement project will result in the continued presence of lead-based paint in an intact condition, encapsulated and/or enclosed. A Lead-Based Paint Management Plan is required.

PART 2 - MATERIALS

2.1 Equipment

- A. Materials and equipment needed to complete the project, shall be available and kept on the site.
- B. Abrasive Removal Equipment: The use of powered machine for vibrating, sanding, grinding or abrasive blasting is prohibited unless equipped with local exhaust ventilation systems equipped with high efficiency particulate air (HEPA) filters.
- C. Power Washing Equipment: Shall only be used if all water and runoff can be captured.
- D. Auxiliary Generator: An auxiliary generator shall be provided with capacity to power a minimum of all necessary equipment to continue the project. The generator shall be well ventilated and not present a carbon monoxide hazard to workers.
- E. HEPA Vacuum Systems: Vacuum systems shall be suitably sized for the project, and filters shall be capable of trapping and retaining all particles as small as 0.3 micrometers at a minimum efficiency of 99.97 percent. User filters that are being replaced shall be with cone, fan, glass protector and spoon reflector nozzles.
- F. Heat Guns: Shall not exceed 700 degrees Fahrenheit at working capacity.
- G. Ladders and Scaffolding: Shall be adequate to perform task and shall be OSHA compliant including all employee safety standards.
- H. Shower Stalls shall have an adequate capacity to decontaminate all the workers present on the shift. Shall also have the capacity to catch runoff water for proper disposal.

- I. Airless Water Sprayer: An airless water sprayer capable of lightly misting surfaces to be scraped will be kept on site.
- J. General tools shall be used in a manner intended by the manufacturer.

2.2 Expendable Materials

- A. Chemical Paint Strippers: Chemical paint strippers shall not contain methylene chloride and shall be formulated to prevent stain, discoloration, or raising of the substrate materials.
- B. Chemical Paint Stripper Neutralizer: Neutralizers for paint strippers shall be compatible with the substrate and suitable for use with the chemical stripper that has been applied to the surface.
- C. Detergents and Cleaners: Detergents or cleaning agents shall not contain tri-sodium phosphate and shall have demonstrated effectiveness in lead control work using cleaning techniques specified by HUD 6780 guidelines.
- D. Polyethylene Bags: Disposable bags shall be polyethylene plastic and shall be a minimum of 0.15 mm 6 mils thick (0.1 mm 4 mils thick if double bags are used) or any other thick plastic material shown to demonstrate at least equivalent performance; and shall be capable of being made leak-tight. Leak-tight means that solids, liquids or dust cannot escape or spill out.
- E. Polyethylene Sheeting: Sheeting shall be polyethylene plastic with a minimum thickness of 0.15 mm 6 mil, or any other thick plastic material shown to demonstrate at least equivalent performance; and shall be provided in the largest sheet size reasonably accommodated by the project to minimize the number of seams. Where the project location constitutes an out of the ordinary potential for fire, or where unusual fire hazards cannot be eliminated, flame-resistant polyethylene sheets which conform to the requirements of NFPA 701 shall be provided.
- F. Tape and Adhesive Spray: Tape and adhesive shall be capable of sealing joints between polyethylene sheets and for attachment of polyethylene sheets to adjacent surfaces. After dry application, tape or adhesive shall retain adhesion when exposed to wet conditions, including amended water. Tape shall be minimum 50 mm 2 inches wide, industrial strength.
- G. Containers: When used, containers shall be leak-tight and shall be labeled in accordance with EPA, DOT and OSHA standards.

2.3 Finish Materials

- A. Finish Materials are specified in L. Wagner and Associates Construction Scope of Work for the Project at the referenced address. Refer to that document.

PART 3 - EXECUTION

3.1 Worker Protection

- A. Health monitoring - The employer shall provide medical examination and monitoring for lead abatement workers.
- B. Information to physicians - The employer shall instruct any examining physician to:
 - a. Provide the worker with a clear warning of the reproductive and other health hazards of exposure to high levels of lead.

- b. Employment physical - Health monitoring on all lead abatement workers shall include an employment medical examination by a licensed physician which shall consist of:
 - i. a work and medical history;
 - ii. blood pressure measurement;
 - iii. blood lead level and erythrocyte protoporphyrin level;
 - iv. complete blood count;
 - v. blood urea nitrogen, serum creatinine, routine urinalysis;
 - vi. other evaluations deemed necessary by the attending physician.
- C. Employer responsibility - The employer is responsible for any costs incurred as a result of the health monitoring system.
 - a. Personal protective equipment and precautions
 - i. The employer shall provide and ensure that all lead abatement workers wear work clothing and protective equipment during the lead abatement procedure. Such clothing shall include but not be limited to:
 - 1. when caustic paste is not used as a deleading agent -
 - a. coveralls or similar full body covering,
 - b. shoe covers,
 - c. gloves,
 - d. hats,
 - e. face shields, vented goggles or other eye protection equipment
 - 2. when caustic paste is used as a deleading agent -
 - a. full-body overalls impervious to caustic substances,
 - b. gloves impervious to caustic substances,
 - c. glove extenders,
 - d. face shield when workers are applying or removing any caustic substance at or above face level,
 - e. appropriate boot or shoe covers;
 - ii. Respirators must be provided by the employer and be approved by the National Institute of Occupational Safety and Health (NIOSH). Air monitoring shall be performed according to the OSHA lead in construction standard to demonstrate which form, if any, of respiratory protection is appropriate. The employer shall assume prior to air sampling that a minimum half face respirator is required for activities performed within the lead-based paint abatement plan. Workers that are not clean shaven or otherwise cannot use a half face respirator must use Powered Air Purifying Respirator (PAPR).
 - iii. The employer shall:
 - 1. maintain records on health monitoring tests required on workers for two (2) years;
 - 2. provide protective clothing in a clean and dry condition daily;
 - 3. provide for the cleaning, laundering or disposal of protective clothing or equipment;
 - 4. repair or replace protective equipment as necessary to maintain its effectiveness;
 - 5. ensure that all protective clothing is removed only in designated change areas at the completion of a work shift;

6. ensure that contaminated protective clothing which is to be cleaned, laundered or disposed of, is placed in a closed container located in the designated change area which prevents dispersion of lead outside the container;
 7. inform, in writing, any person who cleans or launders protective clothing and equipment of the potentially harmful effects of exposure to lead
 8. ensure that the containers of contaminated protective clothing and equipment required by these regulations are labeled as follows: CAUTION CLOTHING CONTAMINATED WITH LEAD. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATIONS;
 9. prohibit the removal of lead from protective clothing or equipment by blowing, shaking or any other means which disperses lead into the air.
- iv. Hygiene facilities and practices - The employer shall ensure that:
1. food or beverage is not present or consumed, smoking or chewing of tobacco is not allowed, and cosmetics are not applied in the lead abatement areas;
 2. designated change areas are equipped with separate storage facilities for equipment and protective clothing and for street clothes to prevent contamination with lead;
 3. plastic with a minimum thickness of 6 mils shall cover the walls and floor;
 4. no person shall exit the changing area to enter the work area unless they are equipped in conformance with subsection 19a -111-6(d) of the regulations of Connecticut State Agencies;
 5. no contaminated person shall exit this area unless such person has removed their protective clothing, gloves, boot or shoe covers, and respirator;
 6. a person in any way will not cause lead contamination to enter the non-work area;
 7. employees do not leave the job site wearing any clothing or equipment, worn during the work shift, that may be contaminated with lead;
 8. employees in lead abatement areas wash their hands prior to eating, drinking, smoking or applying cosmetics.

3.2 Work Area Preparation

A. Interior

- a. The tenants are responsible for packing all personal items for removal out of proposed abatement area(s). The Lead Abatement Contractor shall move the personal belongings to an easily accessible area to maintain tenant access to their belongings.
- b. The Contractor shall conduct precleaning activities including HEPA vacuuming floors and horizontal surfaces in the proposed work area.
- c. The Contractor shall remove all moveable objects from the proposed work area.

- d. The Contractor shall cover all non-moveable objects with a single layer of six-mil polyethylene sheeting.
- e. The Contractor shall cover the floors with two layers of six-mil polyethylene sheeting.
- f. The Contractor shall cover ducts, diffusers, exhausts, windows, door openings or other penetrations with a single layer of six-mil polyethylene sheeting.
- g. Entry and Egress ways shall be enclosed with 6-mil polyethylene sheeting with a slit cut down the center for passageway. A second sheet of 6-mil polyethylene sheeting shall be hung on the work side of the same door, it shall be weighted but free swinging to both cover the passageway slit and allow for entry and access.
- h. The Contractor shall post lead warning signs at all entrances to the work area.
- i. The Contractor shall establish a worker decontamination facility adjacent to the work area(s). The decontamination facility shall be equipped with warm running water, soap, and drying towels.
- j. The Contractor may elect to construct mini enclosures around the interiors of the windows or components scheduled for hazard reduction. If mini enclosures are not constructed, the entire room shall be treated as the work area and must be cleaned in accordance with this Specification.
- k. The Contractor shall install six-mil critical barriers over the interior of window openings if window will be removed from the exterior of the building.

B. Exterior

- a. Cover all shrubbery, plantings, stoops, etc. with opaque tarps, which will prevent damage or burning from the sun.
- b. Regulate the exterior work area with lead-warning tape. The lead warning tape shall extend around the perimeter of the work area creating a minimum of a ten-foot buffer zone between abatement operations and the warning tape.
- c. Post lead-abatement warning signs at conspicuous areas around the perimeter of the abatement area. Unauthorized personnel shall be prohibited from entering the abatement area.
- d. Utilize 6-mil polyethylene sheeting on the ground and/or porch floors. The sheeting shall extend a minimum of ten feet from the foundation of the building. The sheeting shall be secured to the foundation utilizing duct tape.
- e. The edges of the sheeting shall be weighted to avoid blowing or lifting.

C. Personnel Exiting Procedures

- a. Whenever personnel exit the lead controlled area, they shall not leave the work place wearing any clothing worn in the lead-controlled area. They shall perform the following procedures when exiting the lead-controlled area:
 - i. Vacuum themselves off
 - ii. Remove PPE in the decontamination room, place them in waste or appropriate storage
 - iii. Shower
 - iv. Change to clean clothes

3.3 Lead-Based Paint Abatement Procedures

A. Lead-Based Paint Removal

- a. Remove paint within the areas designated on the drawings in order to completely expose the substrate. Take all precautions necessary to minimize damage to the underlying substrate. Caustic Strippers and those containing methylene chloride shall not be used.
- b. Select paint removal processes to minimize contamination of work areas with lead-contaminated dust or other lead-contaminated debris/waste. Heat guns shall not exceed 700 degrees Fahrenheit. All mechanical stripping shall be performed with a HEPA shrouded dust capture device. All scraping whether mechanical or manual shall be performed by wet misting the surface prior to scraping. The surface should be lightly misted and not soaked. All run off water must be contained.
- c. Power Washing: All run off water must be contained and prevented from exposing the surrounding environment from lead debris.

B. Component Removal

- a. The Contractor shall adequately mist the component with water; however, not over mist as to create a slipping hazard below.
- b. Score the paint between the painted component to be removed and the component to remain.
- c. Unscrew or cut any mechanical fixtures present to minimize the disturbance of lead-based paint.
- d. Where nailed in place the component shall be removed with the necessary pry bar to remove the component as to minimize the damage to the component.
- e. Doors shall be removed from the hinges prior to removing the frame.
- f. Window sashes shall be removed from the exterior when possible with polyethylene sheeting secured on the interior of each window.
- g. Structural components such as walls must have the lead-based painted components such as siding, plaster or sheetrock removed under containment and the contained area must be properly cleaned and debris disposed of prior to demolition of the structure. Any non-lead component that can be removed safely without disturbing the containment may be removed during the abatement process by the licensed and certified lead-abatement workers.

C. Liquid Encapsulation

- a. The Contractor shall use a Liquid Encapsulation type and brand listed on the State of Connecticut list of approved liquid encapsulants. The coating of paint over the finished and dried liquid encapsulant is not included in this lead-abatement plan. Finish coat of paint shall be contracted separately.
- b. All Surface area preparation shall be performed in accordance with the manufacturer's specifications, including but not limited wet scraping loose paint chips and the feathering the edges, cleaning, deglossing of the adhered existing paint.
- c. The Contractor shall be responsible for X-cut testing and patch testing to ensure adherence of the liquid encapsulant.
 - i. Test 1: X-Cut Tape Test The X-cut Tape Test must be performed on a representative component of each group of similar architectural systems that are specified for encapsulation. A representative component is a component that is selected for testing from a group of architectural systems that share a

common painting history and must be the component within the group that appears to be in the worst condition. If the representative component fails, all components within the group also fail unless they are tested individually.

1. Surface Preparation for the X-cut Test: Surface preparation for the X-cut Test may be necessary prior to evaluating the potential success or failure of the encapsulant. The surface might have to be cleaned and made free of deteriorating paint before the X-cut tape test is performed. If the representative surface passes both the X-cut Test and Patch Test, and prior preparation was performed to make the surface pass, the same preparation must be performed on each component of the same architectural system in similar or worse condition.

a. If the removal of paint is required during surface preparation, the work must be done by a licensed lead contractor or the property owner. The performance of this part of the test must comply with all applicable regulations and work practices that are required for actual lead hazard reduction.

2. Procedure for X-Cut Tape Test:

a. The surface to be tested must be cleaned with a cleaning agent, rinsed and thoroughly dried.

b. Holding the utility knife with the blade perpendicular to the surface and using a ruler as a guide, make two (2) straight cuts in the paint film down to the substrate. These cuts must be about two (2) inches long, intersecting near the middle to form an "X". DO NOT cut into the substrate.

c. Inspect the cuts with a flashlight to establish that the paint film has been penetrated to the substrate. If not, repeat steps 1 and 2 in a different location. DO NOT attempt to deepen a previous cut.

d. Take a 3" length of tape and place the center of the tape at the intersection of the cuts.

e. Smooth the tape into place over the "X" and rub the tape firmly with the eraser end of a pencil. (Folding the top edge of the tape will assist in step #f, tape removal.)

f. After 90 seconds, remove the tape by pulling straight down with a quick smooth motion.

g. Inspect the X-cut area and the tape for any removal of paint and assign the following scores:
1= no paint removed. (PASS)

1= removal of less than 1/16" of paint on either side of the cuts. (PASS)

2 = removal of greater than 1/16" of paint on either side of the cuts or removal of paint more than 1/8" away from the cuts. (FAIL)

- h. Record the X-cut Tape Test results on the Lead Paint Surface/Substrate Assessment Form.
 - i. Mist and wet clean any dust or paint chips that may have been created.
 - j. Interpretation of Scores:
 - Elements scoring a "2" FAIL and are not eligible for encapsulation.
 - Greater than 1/16" of paint is removed on either side of the cuts.
 - Removal of paint more than 1/8" away from the cuts.
- ii. Test 2: Patch Test Patch Tests of the proposed encapsulant should be performed in each room on a representative component of each architectural system. Since the cure time for each encapsulant product varies, consult the Product Fact Sheet for the specific encapsulant to determine the suitable cure time for patch testing procedures. Some of the factors that affect cure time are temperature, relative humidity, ventilation and film thickness.
- 1. Surface Preparation for the Patch Test: Surface preparation for the Patch Test is a critical factor in evaluating the potential success or failure of the encapsulant. The surface must be clean, deglossed and free of deteriorating paint. Generally the area of the Patch Test should be prepared in the same manner as the entire component would be prepared for encapsulation. Avoid areas that require extensive preparation. The manufacturer's product literature provides specific instructions for surface preparation for patch testing.
 - 2. Location of the Patch Test: A test should be conducted on a representative component on each type of architectural system in each room. All locations of test patches must be documented on the Lead Paint Surface/Substrate Assessment Form. Where possible Patch Tests should be located in inconspicuous areas since the Patch Test area may appear raised once full encapsulation is completed.
 - 3. Size and Shape of the Patch Tests: The shape of the patch depends on the surface that is being evaluated. For liquid encapsulants on a large surface, a 6" x 6" patch is recommended. For narrow surfaces, such as door frames and window casings, approximately the same total surface area should be tested (e.g. 4" x 9" or 3" x 12"). The shape of the patch must accommodate the dimensions of the building component.
 - 4. Patch Test Procedure:
 - a. The surface to be tested must be cleaned with a cleaning agent, rinsed and THOROUGHLY dried. Apply the test patch of encapsulant.
 - b. Visually examine the patch for bubbling, cracking, cratering and any other apparent defects. Record results on the Lead Paint Surface/Substrate Assessment Form. If more than 10% of the patch

has visual defects, it FAILS the Patch Test; Do not continue.

- c. Holding the utility knife with the blade perpendicular to the surface and using a ruler as a guide, make two (2) straight cuts in the paint film down to the substrate. These cuts must be about two (2) inches long, intersecting near the middle to form an "X". DO NOT cut into the substrate.
 - d. Inspect the cuts with a flashlight to establish that the encapsulant and underlying paint film have been penetrated to the substrate. If not, repeat step 1 through 3 in a different location. DO NOT attempt to deepen a previous cut.
 - e. Take a 3" length of tape and place the center of the tape at the intersection of the cuts.
 - f. Smooth the tape into place over the "X" and rub the tape firmly with the eraser end of a pencil.
 - g. After 90 seconds, remove the tape by pulling straight down with a quick smooth motion.
 - h. Inspect the surface and tape for removal of coating from substrate and assign the following scores (NOTE: This scoring is different from that which is used for the X-cut Tape Test.)
 - 0= No paint/encapsulant removed. (PASS)
 - 1= Removal of less than 1/2" of paint/encapsulant on either side of the cuts. (PASS)
 - 2= Removal of greater than 1/2" of paint/encapsulant on either side of the cuts or removal of paint/encapsulant more than 1/8" away from the cuts. (FAIL)
 - i. Record the Patch Test results on the Lead Paint Surface/Substrate Assessment Form.
 - j. Mist and wet clean any dust or paint chips that may have been created.
5. Patch Test Results: The product patch must pass the visual examination (step 2) and the tape evaluation (step 8) with a score of "0" or "1". If the tape evaluation of the patch is rated "2", then the product cannot be used on that architectural system. Major reasons for Patch Test failure include encapsulant failure, failure of an underlying layer of paint, inadequate surface preparation, and/or improper cure time.
- a. Poor application or improper surface preparation can cause the Patch Test failure. This is usually the cause of Patch test failure when a piece of encapsulant is removed without any of the paint layers remaining attached to the back of it. If this is the case, a retest may be conducted by applying and testing a new patch in a different location after proper surface preparation.

C. Enclosure Procedures

- a. The contractor shall prepare the surface for enclosure by wet scraping and stabilizing the existing paint.
 - b. The contractor shall clearly mark on the surface in black marker or spray paint "warning: lead-based paint."
 - c. The contractor shall enclose the surface with the specified material in the Scope of Work using manufacturer's requirement.
 - d. The contractor shall ensure that the enclosure is tight and free of any future release of lead dust, including but not limited to sealing the edges with caulk, taping and joint compound and installing materials in a pattern to contain all dust from future release.
 - e. All enclosures shall be mechanically anchored to the substrate.
- D. Specialized and Final Cleaning
- a. Cleaning on a smooth surfaces will be performed with disposable paper towels and a cleaning solution such Lead Dissolve or other non-phosphate soap and water cleaning solution. Cleaning Rate of one disposable rag per ten (10) square feet.
 - b. Floor Cleaning shall be in a method similar to the as stated in the section above. However a pretreated cleaning cloth attached to a mop head such as Swifter can be used at a rate of one (1) cloth every forty (40) square feet.
 - c. Wet mopping is not advised due to containment and disposal of waste mop water.
 - d. Carpet cleaning shall be performed using a HEPA Vacuum over the surface at a rate of two (2) minutes per ten (10) square feet.
 - e. Unfixed rug cleaning shall be at a rate of one (1) minutes per ten (10) square feet on the top. The rug should be gently misted and folded over, the floor beneath cleaned as described above and the bottom of the rug HEPA vacuumed at a rate same at the top.
 - i. Perform the same cleaning method for the other side of the folded rug. Lay the rug back into place and HEPA Vacuum the top at a rate of two (2) minutes at ten (10) square feet.
 - f. All disposable cleaning material must be disposed of as hazardous lead waste or sampled and analyzed to prove otherwise.
- E. Soil Hazard reduction
- a. Abatement method and procedures are specified in the Scope of Work. All replacement soil must be sampled prior to installing. All new soil must below the threshold of 200 ppm. All lead contaminated soil must be disposed of a hazardous lead waste.
- F. Final Workmanship
- a. All workmanship shall be performed with industry standard finishings. All installation of bare wood or bare metal shall be primed and painted. All nail heads and holes shall be properly plastered, sealed, puttied to match the surrounding substrate.
 - b. All colors of paint and enclosure material shall be chosen by the contractor.
 - c. Liquid encapsulant finishes shall be white or tinted to a color not to void the manufacturer's warranty.
- G. Paint Stabilization Procedures
- a. All Surface area preparation shall be performed in accordance with the manufacturer's specifications, including but not limited wet scraping loose paint chips and the feathering the edges, cleaning, deglossing of the adhered existing paint.

- b. Paint shall be applied as specified by the manufacturer's specifications, including coverage rate, surface priming. The paint finish (i.e. eggshell) shall be appropriate to the application. Color to be chosen by the owner.

3.4 Cleanup and Disposal

- A. Cleanup: Maintain surfaces of the lead control area free of accumulations of paint chips and dust. Restrict the spread of dust and debris; keep waste from being distributed over the work area. Do not dry sweep or use compressed air to clean up the area. At the end of each shift and when the paint removal operation has been completed, clean the area of visible lead paint contamination by vacuuming with a HEPA filtered vacuum cleaner and wet mopping the area.
- B. Disposal of Hazardous Lead Waste: If the total accumulation of lead debris including paint chips, cleaning material, disposable personal protection equipment, HEPA filter, construction debris and waste water mixed with a solidifying agent is less than ten (10) cubic yards, the transfer station will accept the waste and it can be safely stored on the property under containment than the owner can transport it and dispose of the waste a general construction debris. The contractor must have the owner sign a document stating they accept the responsibility for the waste. The contractor shall safely contain the waste and secure it from access of people and weather. The contractor shall ensure proper signage identifying lead containing materials is properly attached and visual. The owner shall dispose of the waste within fourteen (14) days.
- C. Should the contractor be responsible, the contractor shall have the waste analyzed using the TCLP method to determine if it is hazardous lead waste or general construction debris. If the waste is hazardous lead waste than the following shall be adhered to in accordance with Connecticut Department of Energy and Environmental Protection (DEEP):
 - a. Requirements for Conditionally Exempt Small Quantity Generators (CESQG).
 - i. CESQGs must comply with the requirements outlined in Section 22a-449(c)-101(b) of the Regulations of Connecticut State Agencies (ECSA"). These regulations require compliance with the federal hazardous waste regulations for CESQGs (i.e. 40 CFE 261.5), and in addition impose a number of additional requirements. Briefly summarized, the CESQG rules require the following:
 1. the proper characterization of all solid wastes generated, in order to determine if they are hazardous or not
 2. the retention of any records, analyses, or other determinations made in accordance with the above requirement for at least three years from the date of off-site shipment.
 3. that all hazardous wastes generated be sent off-site to permitted hazardous waste treatment, storage or disposal facilities or "TSDFs" the use of transporters permitted by DEP for any shipments of hazardous waste sent off-site in accordance with the above requirement
 4. It should also be noted that although the use of a hazardous waste manifest is not required by the CESQG

rules, many transporters or TSDFs may require it as a general rule for all their customers, regardless of generator status. Some CESQGs may also wish to use manifests voluntarily in order to have documentation of proper disposal.

- - - E N D - - -

Appendix 1
Scope of Work and Associated Floor Plans

**Appendix 1
Lead-Based Paint Abatement Plan
20 Olive Street
Naugatuck, Connecticut
Scope of Work**

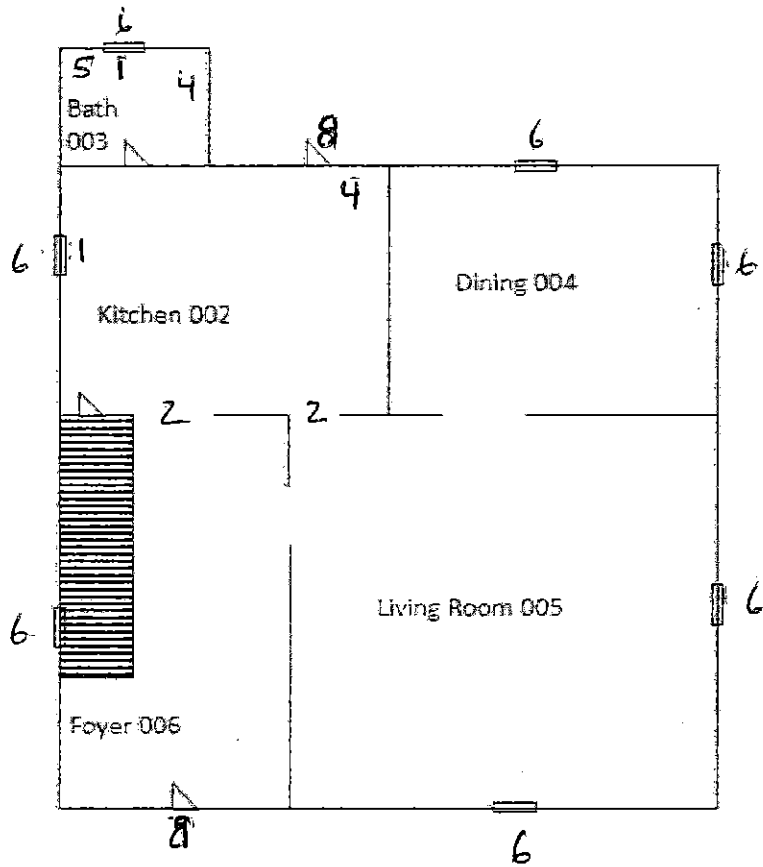
1. Work Specified Here will be performed in Accordance with the Lead-Based Paint Abatement Plan Developed for this Project.

Interiors

Item #	Component	Hazard Reduction Method
1	Window Trim	Liquid Encapsulate
2	Non Friction Door Trim	Liquid Encapsulate Both Sides
3	Interior Door Systems	Liquid Encapsulate the Casing Both Sides
4	Chair Rails (All Walls)	Liquid Encapsulate
5	Walls	Liquid Encapsulate

Exterior

6	Window Systems	Liquid Encapsulate the exterior trim unless enclosed by the Siding Alternate as Specified in the Construction Docs
7	Basement Windows Systems	Liquid Encapsulate the exterior trim unless enclosed by the Siding Alternate as Specified in the Construction Docs
8	Entry Doors	Enclose the Kick Plate with Exterior Grade Plywood unless enclosed by the Siding Alternate as Specified in the Construction Docs
9	Soffit/ Fascia	Liquid Encapsulate Unless Siding Alternate Selected as Specified in L. Wagner Scope of Work
10	Front Porch	Liquid Encapsulate the Beams, Soffit, Fascia, ½ Walls, Wall Caps, Ceiling Unless Enclosed by the Siding Alternate as Specified in the Construction Docs (Repairs to be Made to Porch Prior Abatement, See Construction Scope of Work)



Not to Scale
 Line Item 5: All Walls
 Line Item 6: C Wall Only
 Line Items 11-14: as identified on the
 Scope of Work Only: All Sides the

A



24 Mohegan Drive
 Griswold, CT 06351

20 Olive Street
 Naugatuck, Connecticut

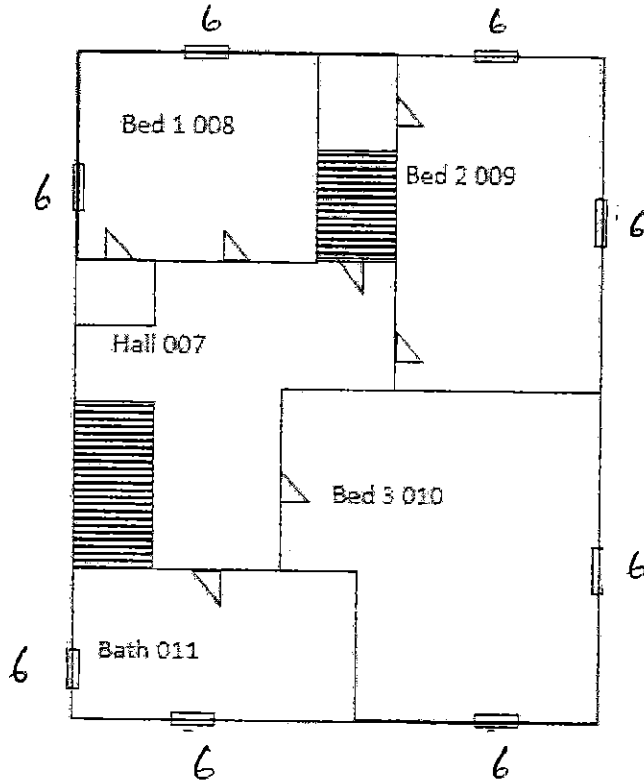
Lead-Based Paint
 February 15 2014

Floor Plan
 1 of 3

C

B

D



A

Not to Scale
Line Items 11-14: as identified on the
Scope of Work Only: All Sides the
Components Exist

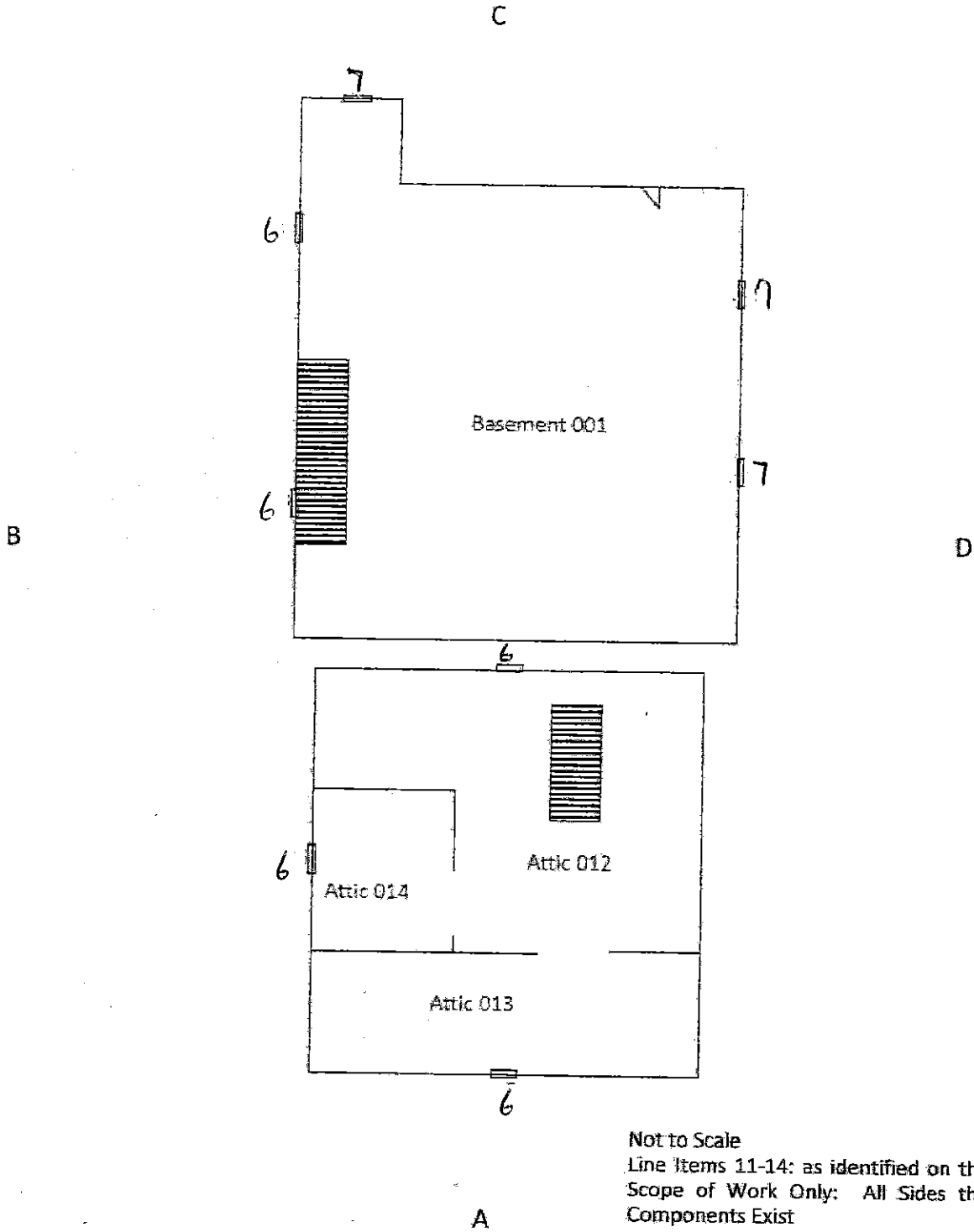


24 Mohegan Drive
Griswold, CT 06351

20 Olive Street
Naugatuck, Connecticut

Lead-Based Paint
February 15 2014

Floor Plan
2 of 3



Not to Scale
 Line Items 11-14: as identified on the
 Scope of Work Only: All Sides the
 Components Exist



24 Mohegan Drive
 Griswold, CT 06351

20 Olive Street
 Naugatuck, Connecticut

Lead-Based Paint
 February 15 2014

Floor Plan
 3 of 3

Appendix 2
Glossary

Glossary

- (1) "Abatement" means any set of measures designed to eliminate lead hazards in accordance with standards established pursuant to Sections 20-474 through 20-482 and subsections (e) and (f) of Section 19a-88 of the Connecticut General Statutes and regulations of Connecticut State Agencies sections 19a-111-1 through 19a-111-11 and 20-478-1 and 20-478-2 including, but not limited to, the encapsulation, replacement, removal, enclosure or covering of paint, plaster, soil or other material containing toxic levels of lead and all preparation, clean-up, disposal and reoccupancy clearance testing.
- (2) "Abatement area" means a room or area isolated with containment in accordance with subdivision 19a-111-4(c)(2) of the regulations of Connecticut State Agencies where lead abatement is occurring.
- (3) "Accessible surface" means any surface which is below five (5) feet in height or is exposed in such a way that a child can come in contact with the surface.
- (4) "Apparent lead concentration" (ALC) means the average of at least three displayed lead concentration readings taken using a direct reading type x-ray fluorescence analyzer.
- (5) "Approved training course" or "approved refresher training course" means a training course or a refresher training course, respectively, approved by the department pursuant to Section 20-477 of the Connecticut General Statutes.
- (6) "Atomic absorption spectrophotometer" (AAS) means an instrument which measures the lead content in parts per million (ppm) using a lead source lamp, a flame capable of measuring the absorbed energy and converting it to concentration.
- (7) "Biological monitoring" means the analysis of a person's blood and/or urine, to determine the level of lead contamination in the body.
- (8) "Certificate" means a document issued by the department indicating successful completion of an approved training course.
- (9) "Certified historic property" means any building, structure, or site which has been determined historic by the Connecticut Historical Commission. Historic properties must be included in or eligible for inclusion in the national or state registers of historic places.
- (10) "Certified industrial hygienist" means a person possessing a certificate from the American Board of Industrial Hygiene which indicates that they have specific academic credentials, five years professional experience in industrial hygiene, and have passed an examination given by the American Board of Industrial Hygiene.
- (11) "Certified lead inspector risk assessor" means any lead consultant who completes an appropriate approved training course and obtains a certificate as a lead inspector risk assessor from the department. A certified lead inspector risk assessor conducts inspections and collects and interprets information to assess the level of risk from lead hazards.
- (12) "Certified lead abatement supervisor" means any person who completes an appropriate approved training course and obtains a certificate as a lead abatement supervisor from the department. A lead abatement supervisor oversees lead abatement activities.

(13) "Certified lead abatement worker" means any person who completes an appropriate approved training course and obtains a certificate as a lead abatement worker from the department. A lead abatement worker performs lead abatement activities.

(14) "Certified lead inspector" means any lead consultant who completes an appropriate approved training course and obtains a certificate as a lead inspector from the department. A certified lead inspector conducts inspections to determine the presence of lead in paint, other surface coverings and various environmental media. The terms "lead inspector" and "inspector" mean "certified lead inspector" or "code enforcement official" as defined in subsection (20) of this section unless specifically noted otherwise.

(15) "Certified lead planner-project designer" means any lead consultant who completes an appropriate approved training course and obtains a certificate as a lead planner-project designer from the department. A certified lead planner-project designer designs lead abatement and management activities.

(16) "Chewable surface" means any projection one half (0.50) inch or greater from an interior or exterior surface up to five (5) feet in height that can be mouthed by a child. The chewable surface includes window sills, door frames, stair rails and stairs, two (2) inches back from any edge, and any other exterior and interior surface that may be readily chewed by children. Baseboards with an exposed horizontal edge may have quarter round molding applied to the top so that only vertical edges forming outside corners, if present, constitute a chewable surface.

(17) "Child" means a person under the age of six (6).

(18) "Child day care services" means a program of supplementary care in accordance with section 19a-77(a) of the Connecticut General Statutes.

(19) "Child day care center" means a program of supplementary care in accordance with section 19a-77(a)(1) of Connecticut General Statutes.

(20) "Code enforcement agency" means the local health department responsible for enforcing the public health code or the local housing agency responsible for enforcing housing code regulations or any other agency designated by the appropriate authority to enforce either the public health code or housing code regulations.

(21) "Code enforcement official" means the director of health or a person authorized by him to act on his behalf, the local housing code official or a person authorized by him to act on his behalf, or an agent of the commissioner.

(22) "Commissioner" means the commissioner of public health.

(23) "Common area" means a room or area that is accessible to all tenants in a building (e.g. hallway, boiler room).

(24) "Containment" means a process for protecting workers, residents, and the environment by controlling exposures to lead dust and debris created during abatement.

(25) "Confirmatory testing" means analysis using atomic absorption spectrophotometry (AAS), graphite furnace atomic absorption spectrophotometry (GFAAS), inductively coupled plasma atomic emission spectrophotometry (ICP-AES), or x-ray fluorescence spectrum analysis spectrometry with a 240 second spectrum analyzer test.

- (26) "Corrected lead concentration" (CLC) means the difference between the average displayed lead concentration readings (using a direct reading type x-ray fluorescence analyzer) taken on a painted surface and the average of three readings taken on a bare substrate (substrate contribution).
- (27) "Department" means the department of public health.
- (28) "Defective surface" means peeling, flaking, chalking, scaling or chipping paint; paint over crumbling, cracking or falling plaster, or plaster with holes in it; paint over a defective or deteriorating substrate; or paint that is damaged in any manner such that a child can get paint from the damaged area.
- (29) "Director" means the director of the state program for childhood lead poisoning prevention.
- (30) "Dwelling" means every building or shelter used or intended for human habitation, including exterior surfaces and all common areas thereof, and the exterior of any other structure located within the same lot, even if not used for human habitation.
- (31) "Dwelling unit" means a room or group of rooms within a dwelling arranged for use as a single household by one or more individuals living together who share living and sleeping facilities.
- (32) "Elevated blood lead level" means a blood lead concentration equal to or greater than twenty (20) micrograms per deciliter ($\mu\text{g}/\text{dl}$) or as defined by Connecticut General Statutes section 19a-111.
- (33) "Encapsulation" means resurfacing or covering surfaces, and sealing or caulking with durable materials, so as to prevent or control chalking, flaking substances containing toxic levels of lead from becoming part of house dust or accessible to children.
- (34) "Entity" means any person, partnership, firm, association, corporation, sole proprietorship or any other business concern, state or local government agency or political subdivision or authority thereof, or any religious, social or union organization, whether operated for profit or otherwise.
- (35) "Epidemiological investigation" means an examination and evaluation to determine the cause of elevated blood lead levels. An epidemiological investigation will include an inspection conducted by a lead inspector to detect lead-based paint and report of findings. This investigation must also include evaluation of other sources such as soil, dust, pottery, gasoline, toys, or occupational exposures, to determine the cause of elevated blood lead levels. The investigation may also include isotopic analysis of lead-containing items.
- (36) "Family day care home" means a program of supplementary care in accordance with section 19a-77(a)(3) of Connecticut General Statutes.
- (37) "Graphite furnace atomic absorption spectrophotometer" (GFAAS) means an instrument that functions the same as an AAS, with one exception, i.e., the flame is replaced by an electrically heated chamber, a graphite tube, into which the sample is deposited.
- (38) "Group day care home" means a program of supplementary care in accordance with section 19a-77(a)(2) of Connecticut General Statutes.
- (39) "High efficiency particulate air" (HEPA) means a type of filtering system capable of filtering out particles of 0.3 microns or greater diameter from a body of air at 99.97% efficiency or greater.
- (40) "High phosphate detergent" is detergent which contains at least five (5%) percent tri-sodium phosphate (TSP).

(41) "Inductively coupled plasma-atomic emission spectrophotometer" (ICP-AES) is an instrument which measures lead in ppm using a heat source (plasma torch) to dissociate and ionize lead atoms thereby emitting energy. This emission energy is measured and converted to concentration by the detector.

(42) "Intact surface" means a defect-free surface with no loose, peeling, chipping or flaking paint. Painted surfaces must be free from crumbling, cracking or falling plaster and must not have holes in them. Intact surfaces must not be damaged in any way such that a child can get paint from the damaged area.

(43) "Isotopic analysis" means a physicochemical method which differentiates between chemical elements having different atomic weight and electrical charge.

(44) "Lead-based" refers to paints, glazes, and other surface coverings, containing a toxic level of lead.

(45) "Lead abatement plan" means a written plan that identifies the location of intact and defective lead-based paint and describes how defective lead-based surfaces will be abated and how the environment, health, and safety will be protected. The plan also identifies the location of soil containing lead and describes sampling protocol used and abatement options.

(46) "Lead consultant" means any person who performs lead detection, risk assessment, abatement design or related services in disciplines including, but not necessarily limited to, inspector, inspector risk assessor and planner-project designer.

(47) "Lead management plan" means a written plan that describes how an intact surface with lead-based paint will be monitored to ensure that defective paint surfaces will be identified and abated.

(48) "Licensed lead abatement contractor" means any entity that contracts to perform lead hazard reduction by means of abatement including, but not limited to, the encapsulation, replacement, removal, enclosure or covering of paint, plaster, soil or other material containing toxic levels of lead and obtains a license from the department to conduct such abatement work. The contractor utilizes certified lead abatement supervisors to oversee such lead abatement activities and certified lead abatement workers to perform such abatement activities. The terms "lead abatement contractor" and "abatement contractor" mean "licensed lead abatement contractor" unless specifically noted otherwise.

(49) "Licensed lead consultant contractor" means any entity that contracts to perform lead hazard reduction consultation work utilizing an inspector, inspector risk assessor and/or planner-project designer and obtains a license from the department to conduct such consultation work. The terms "lead consultant contractor" and "consultant contractor" mean "licensed lead consultant contractor" unless specifically noted otherwise.

(50) "Owner" means any person, partnership, firm, association, corporation, sole proprietorship or any other business concern, state or local government agency or political subdivision or authority thereof, or any religious, social or union organization, whether operated for profit or otherwise, who, alone or jointly with others owns, holds, or controls the whole or any part of the deed or title to any property. No holder of an easement, mortgagee, bank or lender holding the mortgage, shall be considered an owner except when the holder of an easement, mortgagee, banker, or lender takes physical possession of the property.

(51) "Paint removal" means a strategy of abatement which entails stripping lead paint from surfaces.

(52) "Replacement" means a strategy of abatement which entails the removal of components such as windows, doors and trim that contain toxic levels of lead and installing new components which are lead free.

(53) "Secretary of Interior's Standards for Rehabilitation and Guidelines for Rehabilitating Historic Buildings" means the guidelines and methods approved by the state and federal governments for alterations to historic properties (36 CFR section 67).

(54) "State laboratory for lead and lead poisoning detection" means the laboratory established by the commissioner, for the purpose of analyzing blood specimens from persons for the presence of lead; and analyzing samples of paint, plaster, soil and other materials, within the laboratory or on site with mobile units, for toxic levels of lead.

(55) "State program" means the childhood lead poisoning prevention program established by the department.

(56) "Substrate" means the underlying surface which remains after paint is removed.

(57) "Substrate equivalent lead" (SEL) means the average of at least three displayed lead concentration readings with a direct reading type x-ray fluorescence analyzer after paint is removed from the substrate.

(58) "Target housing" means any housing constructed prior to 1978, except any zero-bedroom dwelling unit or any housing for the elderly or persons with disabilities unless a child resides or is expected to reside in such dwelling unit or housing.

(59) "Toxic level of lead" means a level of lead that:

(A) when present in paint offered for sale for use on or in a residential dwelling contains greater than 0.06 percent lead by weight as measured by atomic absorption spectrophotometry (AAS), graphite furnace atomic absorption spectrophotometry (GFAAS), inductively coupled plasma-atomic emission spectrophotometry (ICP-AES) or another accurate and precise testing method that has been approved by the commissioner, by a laboratory approved by the department for lead analysis.

(B) when present in a dried paint, plaster or other accessible surface on or in a residential dwelling contains equal to or greater than 0.50 percent lead by dry weight as measured by atomic absorption spectrophotometry (AAS), graphite furnace atomic absorption spectrophotometry (GFAAS), inductively coupled plasma-atomic emission spectrophotometry (ICP-AES) or another accurate and precise testing method that has been approved by the commissioner, by a laboratory approved by the department for lead analysis, or equal to or greater than 1.0 milligrams lead per square centimeter of surface as measured on site by an X-ray fluorescence analyzer or another accurate and precise testing method that has been approved by the commissioner.

(60) "Treatment" means any method, technique or process designed to change the physical chemical, or biological character or composition of any hazardous waste so as to render it non-hazardous, or to recover it, or to make it safer to transport, store or dispose of, or to make it amenable for recovery, storage, or volume reduction.

(61) "TSP" means tri-sodium phosphate. A TSP solution contains at least 5% TSP or its equivalent.

(62) "X-ray fluorescence analyzer (XRF)" means an analytical instrument that measures lead concentration of dried paint on surfaces or in a laboratory sample in milligrams per square centimeter (mg/cm^2) using a radioactive source within the instrument.

COMBINED LEAD-BASED PAINT INSPECTION RISK ASSESSMENT REPORT
20 OLIVE STREET
NAUGATUCK, CONNECTICUT



050-3911 03/23/2012

PROVIDED TO
PETER TESTA
L. WAGNER AND ASSOCIATES, INC.
51 LAKESIDE BLVD. EAST
WATERBURY, CONNECTICUT 06708

LEAD INSPECTOR/RISK ASSESSOR
MATTHEW BABER (LICENSE# 002193)
HLB ENVIRONMENTAL, LLC
FIRM# 002093
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OWNER
DONNA MARIE LIGOURI
20 OLIVE STREET
NAUGATUCK, CT 06770
PHONE# 203.455.4435

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- Appendix 1: XRF Report and Photos of Windows
- Appendix 2: Lead in Dust and Lead in Soil Laboratory Results (Space Provided)
- Appendix 3: Floor Plans
- Appendix 4: HLB Environmental, LLC Licenses and Certificates
- Appendix 5: Laboratory Certificate

I. Executive Summary

City of Naugatuck contracted HLB Environmental, LLC, to perform a Combined Lead-Based Paint Inspection and Risk Assessment at 20 Olive Street, Naugatuck,, Connecticut. The Combined Lead-Based Paint Inspection and Risk Assessment was performed on February 9, 2014.

The site building is a single family residence and no children under six (6) years old resided in the building at the time of the inspection.

Levels of lead in paint ≥ 1.0 mg/cm² were identified in the interior and on the exterior of the building.

The surfaces containing levels of lead in paint ≥ 1.0 mg/cm² were identified as both in an intact and defective condition at the time of the inspection. Certain surfaces contained lead-based paint on friction/impact and chewable surfaces. No further actions are required by the State of Connecticut Regulations. The project is receiving U.S. Department of Housing and Urban Development funds to either reduce lead hazards or abate the lead hazards. A lead-based paint hazard reduction plan or abatement plan is required. The owner should maintain the intact paint and enclosures in their current condition. A Lead-Based Management Plan must be developed. The Lead-Based Paint Inspection XRF Report can be found in Appendix 1.

Lead in dust wipe samples were collected by HLB Environmental, LLC. The results will be submitted under a separate cover letter.

The grounds were covered in snow at the time of the inspection. Bare soil areas must be evaluated at a later date.

For further information regarding lead-based paint and other lead hazards the owner should contact their local health department or their family doctor.

Notification to the local health department is not required based on the findings of the Combined Lead-Based Paint Inspection and Risk Assessment. Notification to the Connecticut Office of Culture and Tourism has been submitted for the site building.

The site building is considered Target Housing by the U.S. Environmental Protection Agency (EPA). The contractors performing renovation or maintenance work on the surfaces identified or assumed to contain levels of lead in paint ≥ 1.0 mg/cm² must be in compliance with the Renovation, Remodeling and Painting (RRP) rule, 40 CFR Part 745 Subpart E.

II. Background

A. Lead-Based Paint Inspector and Date of Inspection

The Combined Lead-Based Paint Inspection and Risk Assessment was conducted by Matthew Baber (State of Connecticut License #002193) of HLB Environmental, LLC, on February 9, 2014.

B. Scope of Services

HLB Environmental, LLC, is in contract to provide City of Naugatuck with a Combined Lead-Based Paint Inspection and Risk Assessment at 20 Olive Street, Naugatuck, Connecticut. The services include a comprehensive lead-based paint inspection of the interior and exterior of the building using a x-ray fluorescence (XRF) device. HLB will provide a computer generated XRF report and floor plans. HLB will collect lead dust samples and lead in soil samples. All services will be performed as stated within the agreement and the governing regulations. Outbuildings are not included in the Scope of Services.

It is important to note that when a child under six (6) years old resides in a dwelling unit, HLB is obligated to report its findings to the local health department.

C. Site Description

The site building is a single family building and was constructed prior to 1978. The building is constructed of wood. There are fourteen (14) rooms or room equivalents in the first floor unit identified as rooms 001-014. Room numbers correspond to the XRF Report and floor plans. The interiors are finished with standard construction materials for the time period. There is an unfinished basement and a partially finished attic. The building is sided with cement board shingles. The windows are wood.

The grounds were covered in snow at time of the inspection.

D. Occupancy

No children under six (6) years old resided in the building at the time of the inspection. There is no known Lead Abatement Order issued for the building.

III. Methodology

A. Comprehensive Lead-Based Paint Inspection

Lead-based paint testing is performed in accordance with Chapter 7 of the HUD guidelines and the requirements of the American Society of Testing and Materials (ASTM) standard PS 95-98, Standard Provisional Practice for Quality Systems for Conducting In Situ Measurements of Lead Content in Paint or Other Coatings Using Field-Portable X-Ray Fluorescence (XRF) Devices was performed. Lead-based paint testing was performed on a surface-by-surface testing protocol. Surface-by-surface testing includes testing combinations of all four walls and one of each like kind building component (i.e. one window sill) within a room or room equivalent. Testing combinations are determined by substrate, function and design.

Three (3) calibration check readings using a known and sealed source of lead-based paint are performed prior to the beginning of the inspection and following the completion of the inspection or every four (4) hours whichever comes first. Calibration checks are performed to determine if the XRF device is performing as intended in the HUD approved Performance Characteristic Sheet (PCS). HLB utilizes Dyasil Corp. RMD LPA-1-B XRF Device Serial# 3611. In accordance with the PCS there is no inconclusive range for any substrate.

The Lead-Based Paint XRF Report identifies the reading number associated with each test shot, the direction of the tested component in relation to the main door of the building, the surface tested, the condition of the paint, the substrate, the lead in paint concentration (measured in mg/cm²) and the reading mode in which the test shot was collected. The direction of the tested surfaces are identified on the XRF report and associated floor plans as A,B,C or D. Side "A" is associated with the front door and the remaining are in a clockwise order from the "A" position.

Lead in Paint concentrations that meet or exceed the HUD published levels of 1.0 milligrams per centimeter square (≥ 1.0 mg/cm²) are considered to be toxic. Toxic levels of lead must be either abated, interim controls put into place or managed in place depending on the condition of the paint and the presence of children under six (6) years old. The lead-based paint inspection provides enough data for a Lead Project Planner/Designer to develop a Lead-Based Paint Abatement/Hazard Reduction Plan.

B. Risk Assessment

The Risk Assessment was performed in accordance with Chapter 5 of the HUD guidelines. The Risk Assessor analyzes the presence, type, location and severity of any existing lead hazards and determines potential pathways of lead exposure to humans. The Risk Assessor will determine the condition of lead-based paint identified during XRF testing. Lead-based paint will be determined to be in an intact or defective condition. Additionally the Risk Assessor will determine if lead-based painted surfaces are present on friction impact surfaces such as doors, windows and stair treads. Chewable surfaces, including those surfaces that are within five (5) feet from the floor and protrude out from a wall at least one-half inch, will be identified.

1. Occupant Assessment

The Risk Assessor will evaluate the use patterns of the occupants residing in the dwelling unit and make observations. The Occupant Assessment is only performed when a child under six (6) years old resides in a dwelling unit. The Risk Assessor will ask a series of form questions to an adult, if present. Typically, the Risk Assessor is trying to learn the daily routine of the occupants, the presence of children, what play areas are present, the presence of pets, cleaning habits and other potential hazard pathways such as occupational exposures that might bring lead dust into the home.

The Occupant Assessment will help the Risk Assessor determine where to collect lead in dust samples within the dwelling unit and recommend interim controls when necessary.

2. Visual Assessment

The Risk Assessor will determine the condition of lead-based paint identified during XRF testing. Lead-based paint will be determined to be intact or defective condition. Additionally, the Risk Assessor will determine if lead-based paint surfaces are present on friction impact surfaces such as doors, windows and stair treads. In the case where a child with an elevated blood lead level resides in the dwelling unit chewable surfaces will be identified, including those surfaces that are within five (5) feet from the floor and protrude out from a wall at least one-half inch.

Condition of the paint is reported in the Lead-Based Paint Inspection Report under the heading paint condition. Paint will be identified with an "I" for Intact or "P" for Poor (Defective).

The Visual Assessment will identify areas where dust conditions exist, the presence of child play things and bare soil areas.

3. Lead in Dust Wipe Sampling

Based on the results of the Visual Assessment and the Occupant Assessment, the Risk Assessor will determine the likely pathways to lead dust exposure. The Risk Assessor will identify areas of accumulated dust and defective lead-based paint. The Risk Assessor will collect lead dust wipe samples from representative surfaces likely to cause an exposure. Typically, the sampled surfaces include floors and window sills.

Lead in dust sampling is performed in accordance with the requirements of ASTM Standard E-1728, Standard Practice for Field Collection of Settled Dust for Determination using Wipe Sampling Methods for by Atomic Spectrometry Techniques. Lead in dust samples are collected in a one square foot area or on an entire surface when smaller than one square foot. The minimum sample area is sixteen (16) square inches. The Risk Assessor utilizes ASTM approved sampling media to wipe the surface completely. Sampling is performed using a powder free glove to prevent cross contamination of samples. The sample is collected over the entire surface area to be sampled. The surface is wiped in a "S" pattern. The wipe is then folded and another "S" pattern is collected in the same area at 90 degrees from the first wipe pass through. The Risk Assessor intends to collect all dust present. The dust wipe samples will be collected in a laboratory supplied uncontaminated collection tubes. Two (2) blank samples are collected or one for every twenty (20) wipe samples collected whichever is greater. Blank samples are submitted to the same laboratory using similar sample collection media as the samples collected from

the site building. Lead in dust results are compared to the hazard thresholds published by HUD and the State of Connecticut Department of Health:

Floors: 40 ug/ft²
Window Sills: 250 ug/ft²

Lead in Dust samples are analyzed by Schneider Laboratories Global, Inc. located in Richmond, VA. Schneider is a State of Connecticut Accredited Laboratory: Registration # PH 0118, Expires December 31, 2013. The Laboratory operates a Varian Flame Atomic Absorption Spectrometer (FLAA) for the analysis of environmental lead. EPA SW-846-7420.

4. Lead in Soil Sampling

Lead in Soil Sampling is performed in bare soil areas in accordance with the requirements of ASTM Standard E-1727, Standard Practice for Field Collection of Soil Samples for Determination by Atomic Spectrometry Techniques. The Risk Assessor will concentrate on the driplines of the building and the play areas. The Risk Assessor will collect representative composite samples. Composite samples will include up to five (5) subsamples of soil. The soil samples will be collected in a laboratory supplied uncontaminated collection tube. Each subsample shall be collected randomly within each sample area. The Risk Assessor shall make no effort include or exclude paint chips that maybe present. Soil hazard thresholds are as follows:

400 mg/kg: Interim Controls
5000 mg/kg: Permanent Abatement

Lead in Soil samples are analyzed by Schneider Laboratories Global, Inc. located in Richmond, VA. Schneider is a State of Connecticut Accredited Laboratory: Registration # PH 0118, Expires December 31, 2013. The Laboratory operates a Varian Flame Atomic Absorption Spectrometer (FLAA) for the analysis of environmental lead. EPA SW-846 3rd Ed. Method No. 3050B/Method No. 7420.

IV. Findings

A. Comprehensive Lead-Based Paint Inspection

Levels of lead-based paint ≥ 1.0 mg/cm² were identified in the interior on various window components, door components, chair rails, walls and ceilings.

The Exterior on the front and rear porch wood porch components, entry doors, double hung windows and basement windows.

The testing is non-destructive. Therefore, no enclosures were disturbed. All painted surfaces under enclosures must be assumed to contain lead-based paint greater or equal to 1.0 mg/cm².

The XRF Lead Inspection Report identifying the results of the surfaces tested and the list of assumed surfaces can be found in Appendix 1.

B. Lead Risk Assessment

1. Occupant Assessment

No children under six (6) years old resided in the dwelling unit at the time of the Risk Assessment. No Occupant Assessment was performed.

2. Visual Assessment

Levels of lead-based paint ≥ 1.0 mg/cm² ranged from intact to defective condition in the interior and on the exterior of the building. Additionally, lead-based paint was located on friction/impact and chewable surfaces. Lead-based paint in defective condition is due to ageing. There were areas of dust accumulation throughout the building. The grounds were covered in snow.

3. Lead in Dust Wipe Sampling

Lead in dust wipe samples were collected by HLB Environmental, LLC. The results will be submitted under a separate cover letter.

4. Lead in Soil Sampling

The grounds were covered in snow at the time of the inspection. Bare soil areas must be evaluated at a later date.

V. Recommendations

A. Comprehensive Lead-Based Paint Inspection

In accordance with U.S. Department Housing and Urban Development, certain actions are required to reduce lead hazards identified in the interior and on the exterior of the building when it is in receipt of federal funds. The level of lead hazard reduction is based on the amount of funds the building receives per dwelling unit or the presence of a child under six years old. Surfaces in defective condition or on a friction/impact surface will require lead hazard reduction or abatement to comply with HUD funding and State of Connecticut requirements. Additionally when a child with an elevated blood lead level resides or has resided in the building chewable surfaces will require abatement. The following surfaces contain lead-based paint ≥ 1.0 mg/cm² in defective or on friction/impact surfaces in the interior or on the exterior of the building:

A lead-based paint abatement plan has been developed. Recommendations dealing with defective lead-based paint are detailed in the plan.

No children under six (6) years old resided in the building, no further action is required for the State of Connecticut, including notification is required to the local health department. However, if the property is receiving federal funds of between \$5,000 and \$25,000 per unit all lead hazards are to be reduced in accordance with a Lead Hazard Reduction Plan. If the property is receiving federal funds greater than \$25,000 then the identified hazards must be abated in accordance with a Lead-Based Paint Abatement Plan. At either funding amount notification to the State of Connecticut Commission of

Culture and Tourism is required to determine if the building is on the Historical Register. At any federal funding amount, post lead hazard reduction or post abatement visual inspection and quantitative lead dust wipe clearance sampling is required. Additionally, Lead-Based Paint Management Plan is required to ensure all intact lead-based paint, liquid encapsulant or rigid enclosure remain intact.

Contact your local health department for more information.

B. Lead Risk Assessment

1. Occupant Assessment

No children under six (6) years old resided in the dwelling unit at the time of the risk assessment. No Occupant Assessment was performed.

2. Visual Assessment

Based on the Visual Assessment, the owner should take the following steps:

- Clean all smooth surfaces with a non-phosphate soap and water solution using protective gloves and disposable paper towels or pretreated cleaning wipes such as swifter.
- HEPA vacuum all carpeted floors
- HEPA vacuum window wells, follow with a cleaning using a non-phosphate soap and water solution using protective gloves and disposable paper towels, HEPA vacuum a second time. Paint or put contact paper on all windows wells following HEPA vacuuming.
- Stabilize the defective interior and exterior lead-based paint using a qualified contractor.
- HEPA vacuum paint chips around exterior of the building.
- Remove shoes prior to entering the house and wash hands prior to eating.
- Contact the local health department for more information

3. Lead in Dust Wipe Sampling

Lead in dust wipe samples were collected by HLB Environmental, LLC. The results will be submitted under a separate cover letter.

4. Lead in Soil Sampling

The grounds were covered in snow at the time of the inspection. Bare soil areas must be evaluated at a later date.

VI. Regulatory Environment

A. The following Regulations and their guidelines and publications are applicable to the performance and reporting of the Lead-Based Paint Inspection and Risk Assessment:

1. CFR 24 Part 35 – Lead Safe Housing Rule
2. CFR 29 Part 1926 - Safety and Health Regulations for Construction

3. CFR 40 Part 745 – Lead Based Paint Poisoning Prevention in Certain Residential Structures
4. (ASTM) standard PS 95-98, E-1727 and E-1728
5. 19a-111 – Lead Poisoning Prevention and Control Regulation

VII. Notification and Disclosure

- A. Results of this inspection must be provided to new lessees (tenants) and prospective buyers of this property under Federal law (24 CFR part 35 and 40 CFR part 745) before they become obligated under a lease or sales contract. The complete report must be provided by the owner to prospective buyers and it must be made available to prospective tenants, and to renewing tenants if they have not been provided the information previously. The inspector's plain language summary of the report must be provided to the client (e.g., property owner or manager) when the complete report is provided. The landlord (lessor) or seller is also required to distribute an educational pamphlet approved by the U.S. Environmental Protection Agency and include the Lead Warning Statement in the leases or sales contracts to ensure that parents have the information they need to protect their children from lead-based paint hazards. Complete disclosure requires the landlord/sellers and renters/buyers (and their agents) to sign and date acknowledgement that the required information and materials were provided and received. Also, prospective buyers must be provided the opportunity to have their own lead-based paint inspection, lead hazard screen or risk assessment performed before the purchase agreement is signed; the standard period is 10 days, but this period may be changed or waived by agreement between the seller and prospective buyer. EPA regulations require the inspector to keep the inspection report for at least 3 years.
- B. When evaluation is undertaken and lead-based paint or lead-based paint hazards are found to be present, or if a presumption is made that lead-based paint or lead-based paint hazards are present the designated party shall provide a notice to occupants within 15 calendar days of the date when the designated party receives the report or makes the presumption. The notice of the evaluation shall include:
 1. A summary of the nature, dates, scope and results of the evaluation;
 2. A contact name, address and telephone number for more information, and to obtain access to the actual evaluation report; and
 3. The date of the notice.

VIII. Disclaimer

- A. HLB Environmental, LLC, has performed the Client requested tasks listed above in a thorough and professional manner consistent with commonly accepted standard industry practices, using state of the art practices and best available known technology, as of the date of the assessment. HLB Environmental, LLC, cannot guarantee and does not warrant that this Assessment has identified all adverse environmental factors and/or conditions affecting the subject property on the date of the Assessment. HLB Environmental, LLC, cannot and will not warrant that the Assessment that was requested by the client will provide a legal defense in connection with, any environmental laws, regulations and standards.

The results reported and conclusions reached by HLB Environmental, LLC, are solely for the benefit of the client. The results and opinions in this report, based solely upon the

conditions found on the property as of the date of the Assessment, will be valid only as of the date of the Assessment. HLB Environmental, LLC assumes no obligation to advise the client of any changes in any real or potential lead hazards at this residence that may or may not be later brought to our attention. Further conditions and limitations to this contracted report are included in the general terms and conditions supplied to the client with the contract for services.

Appendix 1
XRF Reports

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 02/09/14 10:29
INSPECTION FOR: Town of Naugatuck

PERFORMED AT: 20 Olive Street
Naugatuck, CT
Part 1

INSPECTION DATE: 02/09/14

INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 3611

ACTION LEVEL: 1.0 mg/cm²

OPERATOR LICENSE: 002193

True and accurate to the best of the inspector's knowledge.

SIGNED:  _____

Date: 2/9/14

Matthew Baber
HLB Environmental, LLC
24 Mohegan Drive
Griswold, CT 06351

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Inspection Date: 02/09/14 20 Olive Street
 Report Date: 2/13/2014 Naugatuck, CT
 Abatement Level: 1.0 Part 1
 Report No. 02/09/14 10:29
 Total Readings: 123 Actionable: 24
 Job Started: 02/09/14 10:29
 Job Finished: 02/09/14 12:04

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Interior Room 001 basement									
014	B	Window	Lft	frame	P	Wood	N/A	1.0	QM
013	B	Window	Lft	Sash	P	Wood	N/A	1.6	QM
017	C	Door	Lft	Lft jamb	P	Wood	N/A	4.4	QM
016	C	Door	Lft	U Rgt	P	Wood	N/A	5.8	QM
007	D	Window	Lft	frame	P	Wood	N/A	9.9	QM
Interior Room 002 Kitchen									
024	A	Chair Rail	Lft		P	Plaster	N/A	6.5	QM
027	A	Door	Lft	Lft casing	P	Plaster	N/A	7.4	QM
028	A	Door	Lft	Lft jamb	P	Plaster	N/A	7.2	QM
033	B	Window	Lft	Rgt jamb	P	Wood	N/A	7.7	QM
029	B	Window	Lft	Rgt casing	P	Plaster	N/A	7.6	QM
030	B	Window	Lft	Sill	P	Wood	N/A	8.2	QM
039	C	Door	Lft	threshold	P	Wood	N/A	1.5	QM
Interior Room 003 Bathroom									
042	A	Door	Lft	Lft casing	P	Wood	N/A	6.2	QM
043	A	Door	Lft	Lft jamb	P	Wood	N/A	5.1	QM
044	A	Door	Lft	U Rgt	P	Wood	N/A	8.1	QM
045	B	Chair Rail	Lft		P	Wood	N/A	9.6	QM
047	C	Wall	L Lft		P	Wood	N/A	8.6	QM
048	C	Window	Lft	Rgt casing	P	Wood	N/A	8.4	QM
									a lower inaccessible
Interior Room 004 Dining Rm									
070	D	Window	Lft	Rgt jamb	P	Wood	N/A	9.9	QM
068	D	Window	Lft	Sash	P	Wood	N/A	6.7	QM
069	D	Window	Lft	Well	P	Wood	N/A	9.9	QM
Interior Room 005 Living Rm									
071	A	Window	Lft	Rgt jamb	P	Wood	N/A	9.9	QM
073	A	Window	Lft	Sash	P	Wood	N/A	2.6	QM
072	A	Window	Lft	Well	P	Wood	N/A	9.9	QM

Calibration Readings

---- End of Readings ----

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Inspection Date: 02/09/14 20 Olive Street
 Report Date: 2/13/2014 Naugatuck, CT
 Abatement Level: 1.0 Part 1
 Report No. 02/09/14 10:29
 Total Readings: 123
 Job Started: 02/09/14 10:29
 Job Finished: 02/09/14 12:04

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Interior Room 001 basement									
008	1	columns	Lft		P	Wood	N/A	0.2	QM
009	1	columns	Lft		P	Brick	N/A	0.1	QM
015	B	beam	Lft		P	Wood	N/A	-0.1	QM
019	B	Wall	U Lft		P	Plaster	N/A	-0.3	QM
014	B	Window	Lft	frame	P	Wood	N/A	1.0	QM
013	B	Window	Lft	Sash	P	Wood	N/A	1.6	QM
010	B	Stairs	Lft	Stringers	P	Wood	N/A	0.1	QM
011	B	Stairs	Lft	Treads	P	Wood	N/A	0.0	QM
012	B	Stairs	Lft	Risers	P	Wood	N/A	-0.1	QM
005	C	Door	Lft	frame	P	Wood	N/A	0.1	QM
017	C	Door	Lft	Lft jamb	P	Wood	N/A	4.4	QM
004	C	Door	Lft	U Rgt	P	Wood	N/A	0.0	QM
016	C	Door	Lft	U Rgt	P	Wood	N/A	5.8	QM
018	D	Wall	U Lft		P	Plaster	N/A	-0.4	QM
006	D	Window	Lft	frame	P	Wood	N/A	0.1	QM
007	D	Window	Lft	frame	P	Wood	N/A	9.9	QM
Interior Room 002 Kitchen									
024	A	Chair Rail	Lft		P	Plaster	N/A	6.5	QM
025	A	Wall	L Lft		I	Plaster	N/A	-0.2	QM
023	A	Wall	U Lft		P	Plaster	N/A	0.2	QM
026	A	Baseboard	Lft		P	Plaster	N/A	-0.1	QM
027	A	Door	Lft	Lft casing	P	Plaster	N/A	7.4	QM
028	A	Door	Lft	Lft jamb	P	Plaster	N/A	7.4	QM
040	B	cabinet	Lft		P	Wood	N/A	-0.3	QM
041	B	cabinet	Lft		P	Wood	N/A	-0.2	QM
034	B	Wall	L Lft		I	Wood	N/A	0.1	QM
020	B	Wall	U Lft		P	Plaster	N/A	-0.1	QM
033	B	Window	Lft	Rgt jamb	P	Wood	N/A	7.7	QM
029	B	Window	Lft	Rgt casing	P	Plaster	N/A	7.6	QM
031	B	Window	Lft	Sash	P	Wood	N/A	0.1	QM
032	B	Window	Lft	Sash	P	Wood	N/A	-0.1	QM
030	B	Window	Lft	Sill	P	Wood	N/A	8.2	QM
035	C	Wall	L Lft		I	Wood	N/A	0.1	QM
021	C	Wall	U Lft		P	Plaster	N/A	0.0	QM
039	C	Door	Lft	threshold	P	Wood	N/A	1.5	QM
038	C	Door	Lft	Lft jamb	I	Wood	N/A	-0.1	QM
037	C	Door	Lft	U Rgt	I	Wood	N/A	0.0	QM
036	D	Wall	L Lft		I	Wood	N/A	-0.3	QM
022	D	Wall	U Lft		P	Plaster	N/A	-0.1	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Reading No.		Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Interior Room 003 Bathroom										
052	A	Wall		U Lft		I	Plaster	N/A	0.0	QM
042	A	Door		Lft	Lft casing	P	Wood	N/A	6.2	QM
043	A	Door		Lft	Lft jamb	P	Wood	N/A	5.1	QM
044	A	Door		Lft	U Rgt	P	Wood	N/A	8.1	QM
045	B	Chair Rail		Lft		P	Wood	N/A	9.6	QM
046	B	Wall		L Lft		P	Wood	N/A	0.1	QM
053	B	Wall		U Lft		I	Plaster	N/A	-0.2	QM
047	C	Wall		L Lft		P	Wood	N/A	8.6	QM
051	C	Wall		U Lft		I	Plaster	N/A	-0.1	QM
048	C	Window		Lft	Rgt casing	P	Wood	N/A	8.4	QM
a lower inaccessible										
050	C	Window		Lft	Sash	P	Wood	N/A	-0.1	QM
049	C	Window		Lft	Sill	P	Wood	N/A	0.2	QM
054	D	Wall		U Lft		I	Plaster	N/A	-0.1	QM
055	D	Ceiling		Lft		I	Plaster	N/A	-0.2	QM
Interior Room 004 Dining Rm										
058	A	Wall		U Lft		I	Plaster	N/A	-0.3	QM
063	B	Chair Rail		Lft		I	Wood	N/A	0.4	QM
059	B	Wall		U Lft		I	Plaster	N/A	-0.2	QM
062	B	Door		Lft	Rgt jamb	P	Wood	N/A	0.0	QM
061	B	Door		Lft	Lft casing	P	Wood	N/A	-0.1	QM
060	C	Wall		U Lft		I	Plaster	N/A	-0.2	QM
057	D	Wall		U Lft		I	Plaster	N/A	-0.1	QM
064	D	Baseboard		Lft		P	Wood	N/A	-0.1	QM
056	D	Ceiling		Lft		I	Plaster	N/A	-0.2	QM
070	D	Window		Lft	Rgt jamb	P	Wood	N/A	9.9	QM
065	D	Window		Lft	Rgt casing	P	Wood	N/A	0.0	QM
067	D	Window		Lft	Sash	P	Wood	N/A	-0.1	QM
068	D	Window		Lft	Sash	P	Wood	N/A	6.7	QM
069	D	Window		Lft	Wall	P	Wood	N/A	9.9	QM
066	D	Window		Lft	Sill	P	Wood	N/A	-0.3	QM
Interior Room 005 Living Rm										
079	A	Wall		U Lft		I	Plaster	N/A	-0.2	QM
077	A	Baseboard		Lft		P	Wood	N/A	-0.1	QM
078	A	Floor		Lft		P	Wood	N/A	-0.3	QM
071	A	Window		Lft	Rgt jamb	P	Wood	N/A	9.9	QM
075	A	Window		Lft	Rgt casing	P	Wood	N/A	-0.1	QM
073	A	Window		Lft	Sash	P	Wood	N/A	2.8	QM
072	A	Window		Lft	Wall	P	Wood	N/A	9.9	QM
074	A	Window		Lft	Sill	P	Wood	N/A	-0.1	QM
080	B	Wall		U Lft		I	Plaster	N/A	-0.1	QM
076	B	Door		Lft	Lft casing	P	Wood	N/A	0.0	QM
081	C	Wall		U Lft		I	Plaster	N/A	-0.1	QM
082	D	Wall		U Lft		I	Plaster	N/A	-0.2	QM
083	D	Ceiling		Lft		I	Plaster	N/A	0.0	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Method
Interior Room 006 Foyer									
088	A	Ceiling	Lft		I	Plaster	N/A	-0.1	QM
104	A	Door	Lft	threshold	P	Wood	N/A	0.0	QM
101	A	Door	Lft	Lft casing	P	Wood	N/A	0.1	QM
103	A	Door	Lft	Lft jamb	P	Wood	N/A	-0.1	QM
102	A	Door	Lft	U Rgt	P	Wood	N/A	-0.1	QM
105	A	Door	Lft	U Rgt	P	Wood	N/A	0.0	QM
100	B	Baseboard	Lft		P	Wood	N/A	-0.1	QM
089	B	Ceiling	Lft		I	Plaster	N/A	-0.2	QM
096	B	Window	Lft	Rgt casing	I	Wood	N/A	-0.1	QM
098	B	Window	Lft	Sash	I	Wood	N/A	0.1	QM
097	B	Window	Lft	Sill	I	Wood	N/A	0.0	QM
099	B	Stairs	Lft	Stringers	I	Wood	N/A	-0.2	QM
092	B	Stairs	Lft	Baseboard	I	Wood	N/A	-0.1	QM
090	B	Stairs	Lft	Treads	I	Wood	N/A	-0.4	QM
091	B	Stairs	Lft	Risers	I	Wood	N/A	0.2	QM
094	B	Stairs	Lft	Newel post	I	Wood	N/A	0.2	QM
093	B	Stairs	Lft	Balusters	I	Wood	N/A	-0.1	QM
095	B	Stairs	Lft	Railing cap	I	Wood	N/A	-0.1	QM
086	C	Ceiling	Lft		I	Plaster	N/A	-0.3	QM
084	D	Ceiling	Lft		I	Plaster	N/A	-0.0	QM
085	D	Ceiling	Lft		I	Plaster	N/A	-0.2	QM
087	D	Ceiling	Lft		I	Plaster	N/A	-0.3	QM
Interior Room 007 Hallway									
113	A	Wall	U Lft		P	Plaster	N/A	-0.3	QM
114	B	Wall	U Lft		P	Plaster	N/A	-0.3	QM
115	B	Ceiling	Lft		P	Plaster	N/A	-0.3	QM
111	C	Wall	U Lft		P	Plaster	N/A	-0.3	QM
109	C	Baseboard	Lft		P	Wood	N/A	0.2	QM
110	C	Floor	Lft		P	Wood	N/A	-0.1	QM
108	C	Door	Lft	Lft casing	P	Wood	N/A	-0.1	QM
107	C	Door	Lft	Lft jamb	P	Wood	N/A	-0.1	QM
106	C	Door	Lft	U Rgt	P	Wood	N/A	-0.1	QM
112	D	Wall	U Lft		P	Plaster	N/A	-0.4	QM
Interior Room 008 bed 1									
120	A	Wall	U Lft		P	Plaster	N/A	-0.1	QM
121	A	Door	Lft	Lft casing	P	Wood	N/A	-0.1	QM
122	A	Door	Lft	U Rgt	P	Wood	N/A	0.0	QM
117	B	Wall	U Lft		P	Plaster	N/A	-0.4	QM
116	B	Ceiling	Lft		P	Plaster	N/A	-0.5	QM
118	C	Wall	U Lft		P	Plaster	N/A	-0.2	QM
119	D	Wall	U Lft		P	Plaster	N/A	-0.3	QM
123	D	Baseboard	Lft		P	Wood	N/A	-0.1	QM
Calibration Readings									
001								0.9	TC
002								0.9	TC

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
003								1.0	TC

---- End of Readings ----

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 02/09/14 12:12
INSPECTION FOR: Town of Naugatuck

PERFORMED AT: 20 Olive Street
Naugatuck, CT
Part 2

INSPECTION DATE: 02/09/14

INSTRUMENT TYPE: RMD
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 3611

ACTION LEVEL: 1.0 mg/cm²

OPERATOR LICENSE: 002193

True and accurate to the best of the inspector's knowledge.

SIGNED: 

Date: 2/9/14

Matthew Baber
HLB Environmental, LLC
24 Mohegan Drive
Griswold, CT 06351

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Inspection Date: 02/09/14 20 Olive Street
 Report Date: 2/13/2014 Naugatuck, CT
 Abatement Level: 1.0 Part 2
 Report No. 02/09/14 12:12
 Total Readings: 60 Actionable: 11
 Job Started: 02/09/14 12:12
 Job Finished: 02/09/14 13:12

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Interior Room 008 bed 1									
001	B	Window	Lft	Rgt jamb	P	Wood	N/A	9.9	QM
Interior Room 009 bed 2									
013	B	Ceiling	Lft		P	Plaster	N/A	4.2	QM
005	D	Window	Lft	Sash	P	Wood	N/A	9.9	QM
006	D	Window	Lft	Well	P	Wood	N/A	2.5	QM
Interior Room 010 bed3									
024	D	Window	Lft	Well	P	Wood	N/A	9.9	QM
Interior Room 011 Bathroom									
043	A	Window	Lft	Rgt jamb	P	Wood	N/A	9.9	QM
044	A	Window	Lft	Well	P	Wood	N/A	9.9	QM
Interior Room 013 attic2									
049	A	Wall	U Lft		I	Plaster	N/A	1.0	QM
051	B	Ceiling	Lft		I	Plaster	N/A	1.6	QM
047	C	Wall	U Lft		I	Plaster	N/A	1.0	QM
048	D	Wall	U Lft		I	Plaster	N/A	2.6	QM
----- End of Readings -----									

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Inspection Date: 02/09/14 20 Olive Street
 Report Date: 2/13/2014 Naugatuck, CT
 Abatement Level: 1.0 Part 2
 Report No. 02/09/14 12:12
 Total Readings: 60
 Job Started: 02/09/14 12:12
 Job Finished: 02/09/14 13:12

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Interior Room 008 bed 1									
001	B	Window	Lft	Rgt jamb	P	Wood	N/A	9.9	QM
004	B	Window	Lft	Rgt casing	P	Wood	N/A	0.1	QM
002	B	Window	Lft	Sash	P	Wood	N/A	0.0	QM
003	B	Window	Lft	Sill	P	Wood	N/A	-0.2	QM
Interior Room 009 bed 2									
017	A	Wall	U Lft		P	Plaster	N/A	-0.2	QM
014	B	Wall	U Lft		P	Plaster	N/A	-0.3	QM
012	B	Baseboard	Lft		P	Wood	N/A	0.0	QM
013	B	Ceiling	Lft		P	Plaster	N/A	4.2	QM
009	B	Door	Lft	Lft casing	P	Wood	N/A	-0.2	QM
010	B	Door	Lft	Lft jamb	P	Wood	N/A	0.1	QM
011	B	Door	Lft	U Rgt	P	Wood	N/A	-0.3	QM
015	C	Wall	U Lft		P	Plaster	N/A	-0.2	QM
016	D	Wall	U Lft		P	Plaster	N/A	-0.3	QM
008	D	Window	Lft	Rgt casing	P	Wood	N/A	-0.3	QM
005	D	Window	Lft	Sash	P	Wood	N/A	9.9	QM
006	D	Window	Lft	Well	P	Wood	N/A	2.5	QM
007	D	Window	Lft	Sill	P	Wood	N/A	0.1	QM
Interior Room 010 bed3									
018	A	Wall	U Lft		P	Plaster	N/A	-0.3	QM
019	B	Wall	U Lft		P	Plaster	N/A	-0.1	QM
026	B	Baseboard	Lft		P	Wood	N/A	0.0	QM
027	B	Floor	Lft		P	Wood	N/A	-0.4	QM
031	B	Ceiling	Lft		I	Metal	N/A	-0.1	QM
028	B	Door	Lft	Lft casing	P	Wood	N/A	-0.1	QM
029	B	Door	Lft	Lft jamb	P	Wood	N/A	-0.1	QM
030	B	Door	Lft	U Rgt	P	Wood	N/A	0.0	QM
020	C	Wall	U Lft		P	Plaster	N/A	-0.1	QM
021	D	wall	U Lft		P	Plaster	N/A	-0.1	QM
025	D	Window	Lft	Rgt jamb	P	Wood	N/A	-0.1	QM
022	D	Window	Lft	Rgt casing	P	Wood	N/A	-0.1	QM
024	D	Window	Lft	Well	P	Wood	N/A	9.9	QM
023	D	Window	Lft	Sill	P	Wood	N/A	-0.1	QM
Interior Room 011 Bathroom									
033	A	Ceiling	Lft		I	Plaster	N/A	0.0	QM
043	A	Window	Lft	Rgt jamb	P	Wood	N/A	9.9	QM
041	A	Window	Lft	Rgt casing	P	Wood	N/A	0.3	QM
044	A	Window	Lft	Well	P	Wood	N/A	9.9	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
042	A	Window	Lft	Sill	P	Wood	N/A	0.7	QM
037	B	Baseboard	Lft		P	Wood	N/A	0.2	QM
032	B	Ceiling	Lft		I	Plaster	N/A	-0.1	QM
034	B	Ceiling	Lft		I	Plaster	N/A	-0.2	QM
035	C	Ceiling	Lft		I	Plaster	N/A	-0.3	QM
038	C	Door	Lft	Header	P	Wood	N/A	0.2	QM
039	C	Door	Lft	Lft jamb	P	Wood	N/A	0.1	QM
040	C	Door	Lft	U Rgt	P	Wood	N/A	-0.1	QM
036	D	Ceiling	Lft		I	Plaster	N/A	-0.1	QM
Interior Room 012 attic									
060	B	Wall	U Lft		P	Plaster	N/A	0.5	QM
045	C	Window	Lft	Sash	P	Wood	N/A	0.6	QM
Interior Room 013 attic2									
049	A	Wall	U Lft		I	Plaster	N/A	1.0	QM
052	A	Baseboard	Lft		P	Wood	N/A	0.1	QM
050	B	Wall	U Lft		I	Plaster	N/A	0.3	QM
051	B	Ceiling	Lft		I	Plaster	N/A	1.6	QM
047	C	Wall	U Lft		I	Plaster	N/A	1.0	QM
046	C	Door	Lft	frame	P	Wood	N/A	-0.1	QM
048	D	Wall	U Lft		I	Plaster	N/A	2.8	QM
Interior Room 014 attic2									
053	A	Wall	U Lft		P	Plaster	N/A	-0.3	QM
054	A	Ceiling	Lft		P	Plaster	N/A	-0.2	QM
058	B	Baseboard	Lft		P	WOOD	N/A	0.1	QM
055	B	Ceiling	Lft		P	Plaster	N/A	-0.3	QM
056	B	Window	Lft	Rgt casing	P	Wood	N/A	0.1	QM
059	B	Window	Lft	Sash	P	Wood	N/A	0.1	QM
057	B	Window	Lft	Sill	P	Wood	N/A	-0.2	QM
----- End of Readings -----									

LEAD PAINT INSPECTION REPORT

REPORT NUMBER: 02/09/14 13:16

INSPECTION FOR: Town of Naugatuck

PERFORMED AT: 20 Olive Street
Naugatuck, CT
Part 3

INSPECTION DATE: 02/09/14

INSTRUMENT TYPE: R M D
MODEL LPA-1
XRF TYPE ANALYZER
Serial Number: 3611

ACTION LEVEL: 1.0 mg/cm²

OPERATOR LICENSE: 002193

True and accurate to the best of the inspector's knowledge.

SIGNED: 

Date: 2/9/14

Matthew Baber
HLB Environmental, LLC
24 Mohegan Drive
Griswold, CT 06351

SUMMARY REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Inspection Date: 02/09/14 20 Olive Street
 Report Date: 2/13/2014 Naugatuck, CT
 Abatement Level: 1.0 Part 3
 Report No. 02/09/14 13:16
 Total Readings: 53 Actionable: 21
 Job Started: 02/09/14 13:16
 Job Finished: 02/09/14 15:01

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Exterior Room 001 Number Only									
029	A	beam	Lft		P	Wood	N/A	9.9	QM
031	A	soffit	Lft		P	Wood	N/A	9.9	QM
032	A	p skirt	Lft		P	Wood	N/A	9.9	QM
030	A	Ceiling	Lft		P	Wood	N/A	9.9	QM
026	A	Wall	L Lft		P	Wood	N/A	9.9	QM
024	A	Window	Lft	Rgt casing	P	Wood	N/A	9.9	QM
025	A	Window	Lft	Sill	P	Wood	N/A	9.9	QM
022	A	Door	Lft	kick plate	P	Wood	N/A	9.9	QM
023	A	Door	Lft	stop	P	Wood	N/A	9.9	QM
021	A	Door	Lft	Rgt casing	P	Wood	N/A	9.9	QM
034	B	Window	Lft	Rgt casing	P	Wood	N/A	9.9	QM
035	B	Window	Lft	Sash	P	Wood	N/A	8.5	QM
041	C	beam	Lft		P	Wood	N/A	9.9	QM
042	C	soffit	Lft		P	Wood	N/A	9.9	QM
040	C	Ceiling	Lft		P	Wood	N/A	2.9	QM
043	C	Window	Lft	Rgt casing	P	Wood	N/A	5.5	QM
044	C	Window	Lft	Sill	P	Wood	N/A	6.6	QM
039	C	Door	Lft	stop	P	Wood	N/A	9.9	QM
038	C	Door	Lft	Rgt casing	P	Wood	N/A	9.9	QM
049	D	bwindow	Lft		P	Wood	N/A	2.7	QM
047	D	Window	Lft	Rgt casing	P	Wood	N/A	2.5	QM

Calibration Readings

---- End of Readings ----

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

Inspection Date: 02/09/14 20 Olive Street
 Report Date: 2/13/2014 Naugatuck, CT
 Abatement Level: 1.0 Part 3
 Report No. 02/09/14 13:16
 Total Readings: 53
 Job Started: 02/09/14 13:16
 Job Finished: 02/09/14 15:01

Reading No.	Wall	Structure	Location	Member	Paint Cond	Substrate	Color	Lead (mg/cm ²)	Mode
Exterior Room 001 Number Only									
027	A	wall cap	Lft		P	Wood	N/A	-0.1	QM
028	A	columns	Lft		P	Wood	N/A	0.0	QM
029	A	beam	Lft		P	Wood	N/A	9.9	QM
031	A	soffit	Lft		P	Wood	N/A	9.9	QM
032	A	p skirt	Lft		P	Wood	N/A	9.9	QM
030	A	Ceiling	Lft		P	Wood	N/A	9.9	QM
026	A	Wall	L Lft		P	Wood	N/A	9.9	QM
020	A	Wall	U Lft		P	cbs	N/A	-0.5	QM
024	A	Window	Lft	Rgt casing	P	Wood	N/A	9.9	QM
025	A	Window	Lft	Sill	P	Wood	N/A	9.9	QM
022	A	Door	Lft	kick plate	P	Wood	N/A	9.9	QM
023	A	Door	Lft	step	P	Wood	N/A	9.9	QM
021	A	Door	Lft	Rgt casing	P	Wood	N/A	9.9	QM
033	B	p skirt	Lft	lattice	P	Wood	N/A	-0.1	QM
036	B	Wall	U Lft		P	cbs	N/A	-0.4	QM
034	B	Window	Lft	Rgt casing	P	Wood	N/A	9.9	QM
035	B	Window	Lft	Sash	P	Wood	N/A	8.5	QM
041	C	beam	Lft		P	Wood	N/A	9.9	QM
042	C	soffit	Lft		P	Wood	N/A	9.9	QM
045	C	bulk head	Lft		P	Steel	N/A	-0.1	QM
046	C	foundation	Lft		P	Concrete	N/A	0.0	QM
040	C	Ceiling	Lft		P	Wood	N/A	2.9	QM
037	C	Wall	U Lft		P	cbs	N/A	-0.4	QM
043	C	Window	Lft	Rgt casing	P	Wood	N/A	5.5	QM
044	C	Window	Lft	Sill	P	Wood	N/A	5.6	QM
039	C	Door	Lft	step	P	Wood	N/A	9.9	QM
038	C	Door	Lft	Rgt casing	P	Wood	N/A	9.9	QM
049	D	bwindow	Lft		P	Wood	N/A	2.7	QM
050	D	Wall	U Lft		P	cbs	N/A	-0.3	QM
047	D	Window	Lft	Rgt casing	P	Wood	N/A	2.5	QM
048	D	Window	Lft	Sill	P	Wood	N/A	0.5	QM
Interior Room 012 attic									
015	A	Door	Lft	Lft casing	P	Wood	N/A	0.1	QM
016	A	Door	Lft	U Rgt	P	Wood	N/A	0.0	QM
014	B	Stairs	Lft	Wall	P	Plaster	N/A	-0.1	QM
013	D	Stairs	Lft	Wall	P	Plaster	N/A	-0.1	QM
012	D	Stairs	Lft	Baseboard	P	Wood	N/A	-0.1	QM
010	D	Stairs	Lft	Treads	P	Wood	N/A	0.0	QM
011	D	Stairs	Lft	Risers	P	Wood	N/A	-0.1	QM

DETAILED REPORT OF LEAD PAINT INSPECTION FOR: Town of Naugatuck

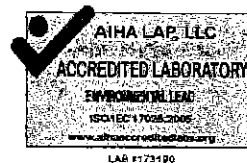
Reading No.	Wall	Structure	Location	Member	Paint			Lead (mg/cm ²)	Mode
					Cond	Substrate	Color		
Interior Room 014 attic2									
004	A	Wall	U Lft		P	Plaster	N/A	-0.3	QM
005	B	Wall	U Lft		P	Plaster	N/A	-0.3	QM
007	B	Baseboard	Lft		P	Wood	N/A	-0.1	QM
006	B	Ceiling	Lft		P	Plaster	N/A	-0.4	QM
001	B	Window	Lft	Rgt casing	P	Wood	N/A	-0.2	QM
003	B	Window	Lft	Sash	P	Wood	N/A	-0.2	QM
002	B	Window	Lft	Sill	P	Wood	N/A	-0.3	QM
008	D	Door	Lft	Header	P	Wood	N/A	-0.1	QM
009	D	Door	Lft	U Rgt	P	Wood	N/A	-0.1	QM
Calibration Readings									
017								0.9	TC
018								0.9	TC
019								0.8	TC
051								1.0	TC
052								0.9	TC
053								0.9	TC

---- End of Readings ----

Appendix 2
Laboratory Reports



Analysis for Lead Concentration in Wipe Samples



by Flame Atomic Absorption Spectroscopy
EPA SW-846-7420

Customer: HLB Environmental, LLC
24 Mohegan Drive
Griswold CT 06351

Attn: Matthew Baber

Lab Order ID: 1402909

Analysis ID: 1402909_PB

Date Received: 2/20/2014

Date Reported: 2/21/2014

Project: 20 Olive Street, Naugatuck

Sample ID	Description	Area	Analytical Sensitivity	Concentration
Lab Sample ID	Lab Notes	(ft ²)	(µg/ft ²)	(µg/ft ²)
01 1402909PBW_1	Dining room floor	1	0.62	3.8
02 1402909PBW_2	Dining room sill	0.646	0.95	42
03 1402909PBW_3	Bedroom 1 floor	1	0.62	57
04 1402909PBW_4	Bedroom 1 sill	0.646	1.9	730
05 1402909PBW_5	Finished attic floor	1	0.62	260
06 1402909PBW_6	Finished attic sill	0.521	2.4	940
07 1402909PBW_7	Blank	0	0.62 (µg/wipe)	< 2.0 (µg/wipe)

The quality control samples run with the samples in this report have passed all AIHA required specifications unless otherwise noted. This report relates only to the samples tested and may not be reproduced, except in full, without the written approval of SAI. This report may not be used by the client to claim product endorsement by AIHA or any other agency of the U.S. government. (R.L. = 5 µg/ft²)

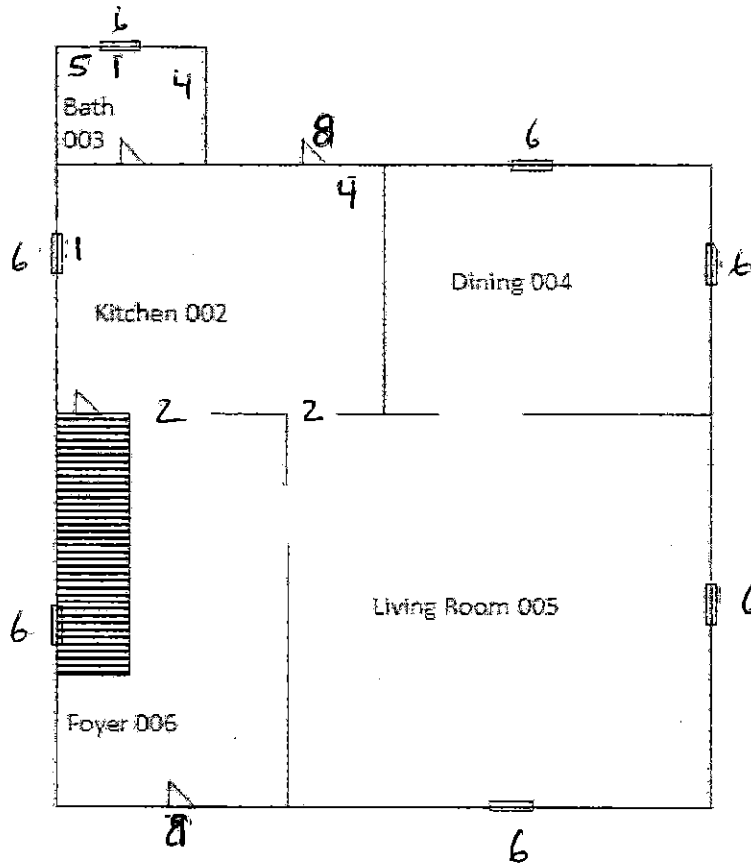
Melissa Sharps (7)

Analyst

Laboratory Director

**Appendix 3
Floor Plans**

C



B

D

A

Not to Scale

Line Item 5: All Walls

Line Item 6: C Wall Only

Line Items 11-14: as identified on the Scope of Work Only: All Sides the



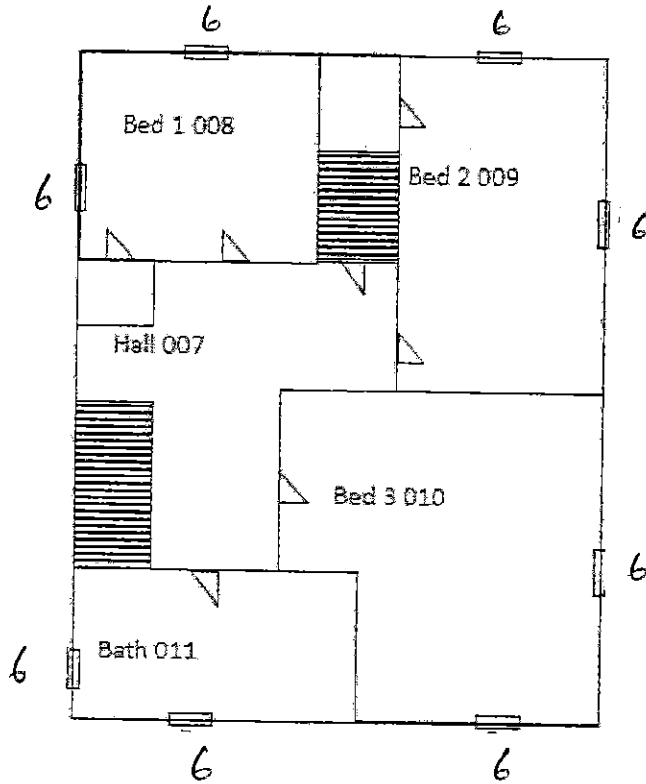
24 Mohegan Drive
Griswold, CT 06351

20 Olive Street
Naugatuck, Connecticut

Lead-Based Paint
February 15 2014

Floor Plan
1 of 3

C



B

D

A

Not to Scale
Line Items 11-14: as identified on the
Scope of Work Only: All Sides the
Components Exist

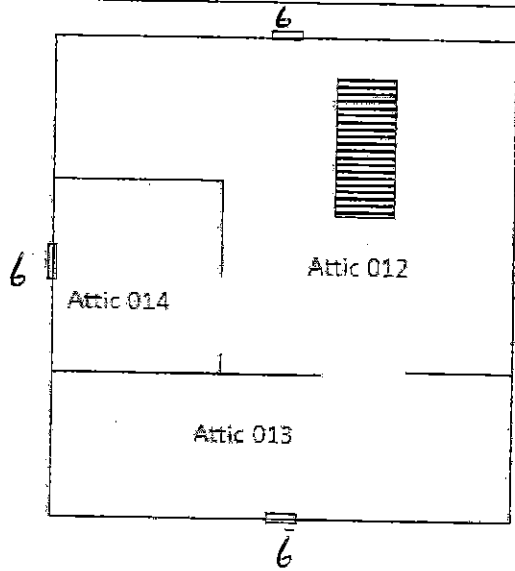
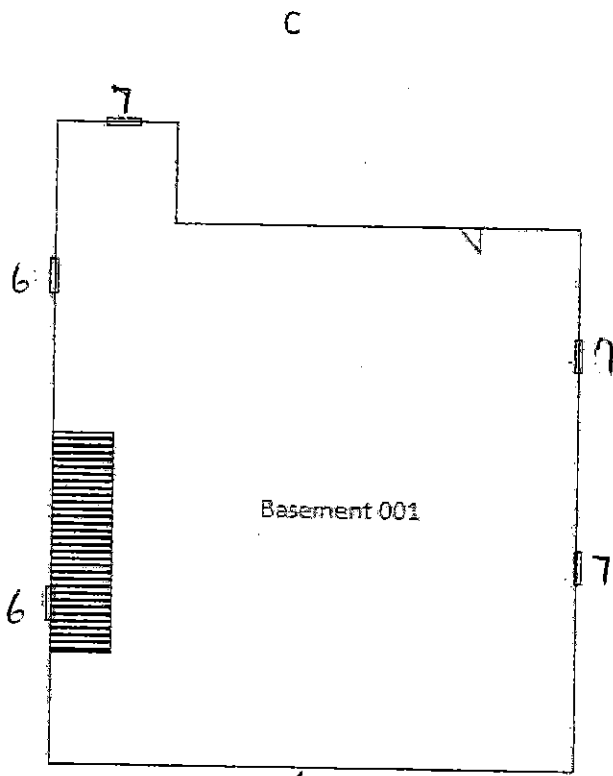


24 Mohegan Drive
Griswold, CT 06351

20 Olive Street
Naugatuck, Connecticut

Lead-Based Paint
February 15 2014

Floor Plan
2 of 3



Not to Scale
 Line Items 11-14: as identified on the
 Scope of Work Only: All Sides the
 Components Exist



24 Mohegan Drive
 Griswold, CT 06351

20 Olive Street
 Naugatuck, Connecticut

Lead-Based Paint
 February 15 2014

Floor Plan
 3 of 3

**Appendix 4
HLB Environmental
Licenses and Certificates**

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A

LEAD INSPECTOR RISK ASSESSOR

MATTHEW E. BABER

CERTIFICATION NO. 002193
CURRENT THROUGH 10/31/14
VALIDATION NO. 03-684497

Joel Muller
COMMISSIONER

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
MATTHEW E. BABER

VALIDATION NO. 03-684497
CERTIFICATION NO. 002193
CURRENT THROUGH 10/31/14
PROFESSION
LEAD INSPECTOR RISK ASSESSOR

Joel Muller
COMMISSIONER

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
MATTHEW E. BABER

VALIDATION NO. 03-684497
CERTIFICATION NO. 002193
CURRENT THROUGH 10/31/14
PROFESSION
LEAD INSPECTOR RISK ASSESSOR

Joel Muller
COMMISSIONER

INSTRUCTIONS:

1. Detach and sign each of the cards on this form.
2. Display the large card in a prominent place in your office or place of business.
3. The wallet card is for you to carry on your person. If you do not wish to carry the wallet card, place it in a secure place.
4. The employer's copy is for persons who wish to demonstrate current licensure/certification in order to retain existing contracts or proposals. The employer's work is to be presented in the employer's files and kept there as a part of your personnel file. Only one copy of this card may be supplied to you.

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

PURSUANT TO THE PROVISIONS OF THE GENERAL STATUTES OF CONNECTICUT
THE INDIVIDUAL NAMED BELOW IS CERTIFIED
BY THIS DEPARTMENT AS A

LEAD PLANNER/PROJECT DESIGNER

MATTHEW E. BABER

CERTIFICATION NO. 002146
CURRENT THROUGH 10/31/14
VALIDATION NO. 03-684504

Joel Muller
COMMISSIONER

EMPLOYER'S COPY

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
MATTHEW E. BABER

VALIDATION NO. 03-684504
CERTIFICATION NO. 002146
CURRENT THROUGH 10/31/14
PROFESSION
LEAD PLANNER/PROJECT DESIGNER

Joel Muller
COMMISSIONER

WALLET CARD

STATE OF CONNECTICUT
DEPARTMENT OF PUBLIC HEALTH

NAME
MATTHEW E. BABER

VALIDATION NO. 03-684504
CERTIFICATION NO. 002146
CURRENT THROUGH 10/31/14
PROFESSION
LEAD PLANNER/PROJECT DESIGNER

Joel Muller
COMMISSIONER

Certificate of Training

Awarded to:

MATTHEW BABER

24 MOHEGAN DRIVE, CRISWOLD, CT 06357

*Has successfully completed a 7 Hour, 1 Day
Lead Planner Project Designer Refresher*

December 4, 2013

This training course was approved and given in accordance with the
Department of Health Standards established pursuant to
Section 20-477 of the Connecticut General Statutes

Presented by:

Mystic Air Quality Consultants, Inc.

1204 North Road, Groton, CT 06340 (800) 247-7746

Certificate Number: LPPR22666

Exam Grade: 86

Exam Date: 12/04/2013

Expiration Date: 12/04/2014

Christopher J. Eident, CIH, CSP, RS

Richard Hatley
George Williamson, Training Director

Richard Hatley, Training Director

Certificate of Training

Awarded to

MATTHEW BABER

24 MOHEGAN DRIVE, CRISWOLD, CT 06357

*Has successfully completed a 7 hr, 1 day
Lead Inspector Risk Assessor Refresher*

December 6, 2013

This training course was approved and given in accordance with the
Department of Health Standards established pursuant to
Section 20-477 of the Connecticut General Statutes.

Presented by

Mystic Air Quality Consultants, Inc.

1204 North Road, Groton, CT 06340 (800) 247-7746

Certificate Number: 95CTLDRARF

Exam Grade: 100

Expiration Date: 12/06/2014

22674

Exam Date: 12/06/2013

Christopher J. Eidant, CIH, CSP, RS

Richard Hatfey
George Williamson, Training Director

Richard Hatfey, Training Director

Appendix 5
Laboratory Certificate

State of Connecticut, Department of Public Health
Approved Environmental Laboratory

THIS IS TO CERTIFY THAT THE LABORATORY DESCRIBED BELOW HAS BEEN APPROVED BY THE STATE DEPARTMENT OF PUBLIC HEALTH PURSUANT TO APPLICABLE PROVISIONS OF THE PUBLIC HEALTH CODE AND GENERAL STATUTES OF CONNECTICUT, FOR MAKING THE EXAMINATIONS, DETERMINATIONS OR TESTS SPECIFIED BELOW WHICH HAVE BEEN AUTHORIZED IN WRITING BY THAT DEPARTMENT.

SCIENTIFIC ANALYTICAL INSTITUTE

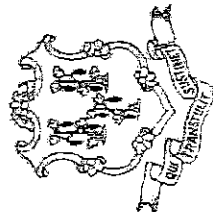
LOCATED AT 4604 DUNDAS DRIVE IN GREENSBORO, NC 27407
AND REGISTERED IN THE NAME OF NATHANIEL DURHAM
THIS CERTIFICATE IS ISSUED IN THE NAME OF SEAN FITZGERALD WHO HAS BEEN DESIGNATED
BY THE REGISTERED OWNER/AUTHORIZED AGENT TO BE IN CHARGE OF THE LABORATORY WORK COVERED BY THIS CERTIFICATE OF
APPROVAL AS FOLLOWS:

ENVIRONMENTAL HEALTH & HOUSING
LEAD IN PAINT
LEAD (PAINT) IN SOIL
LEAD IN DUST WIPES

ASBESTOS
ASBESTOS FIBERS IN AIR
ASBESTOS IN BULK MATERIALS
ASBESTOS IN DRINKING WATER

SEE COMPUTER PRINT-OUT FOR SPECIFIC TESTS APPROVED

THIS CERTIFICATE REGISTRY NUMBER DECEMBER 21, 2015 AND IS GOVERNED BY THE STATE DEPARTMENT OF PUBLIC HEALTH
DATED AT HARTFORD, CONNECTICUT, THIS 14th DAY OF JANUARY, 2014



Registration No.
PH-0386

SUZANNE BLANCALOR, MS, MPH
CHIEF, ENVIRONMENTAL HEALTH SECTION

Robert & Donna Marie Ligouri
20 Olive Street
Naugatuck, CT 06770
Project # 088-147—REHAB

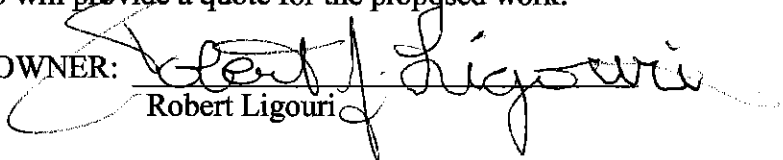
PROPERTY OWNER VERIFICATION

I, the undersigned Owner(s) acknowledge that I have fully read and understand the attached project specifications. I understand this to be the scope of work and the extent of the renovations to be performed at the property location shown below.

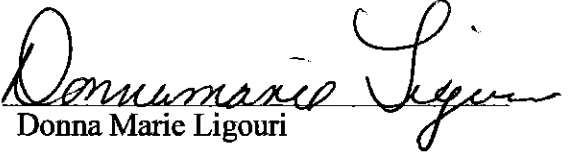
*20 Olive Street
Naugatuck, CT 06770
Project # 088-147—REHAB*

I understand that any revisions to these specifications changing the scope of work can be made only for unforeseen circumstances. This is for my protection and for providing a clear understanding to the contractor who will provide a quote for the proposed work.

DATE: 2-18-14

OWNER: 
Robert Ligouri

DATE: 2/18/14

OWNER: 
Donna Marie Ligouri

Robert & DonnaMarie Ligouri
20 Olive Street
Naugatuck, CT 06770
Project # 088-147-REHAB

COST SUMMARY PAGE

MASONRY \$ _____

CARPENTRY \$ _____

ROOFING \$ _____

GUTTERS \$ _____

DOORS \$ _____

STORM DOORS \$ _____

WINDOWS \$ _____

ELECTRICAL \$ _____

BATHROOM REPAIRS \$ _____

LEAD HAZARD REDUCTION WORK \$ _____

TOTAL BID AMOUNT \$ _____

ALTERNATES

**ADD ALTERNATE
VINYL SIDING** \$ + _____

**DEDUCT ALTERNATE
EXTERIOR LEAD ABATEMENT
MINUS SURFACES NOT BEING
ENCLOSED/ENCAPSULATED
VIA THE VINYL SIDING ALTERNATE.** \$ - _____

Robert & DonnaMarie Ligouri
20 Olive Street
Naugatuck, CT 06770
Project # 088-147-REHAB

I, the undersigned Contractor agree to provide all labor, material, permits, taxes, insurance, equipment and related fees, necessary to complete the work as specified above for the property located at:

*20 Olive Street
Naugatuck, CT 06770*

All work will be performed in accordance to applicable Codes.

Small, Minority, Women-Owned Business Concern Representation

The bidder represents and certifies as part of its bid/ offer that it –

(a) is, is not a small business concern. "Small business concern," as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding, and qualified as a small business under the criteria and size standards in 13 CFR 121.

(b) is, is not a women-owned business. "Women-owned business enterprise," as used in this provision, means a business that is at least 51 percent owned by a woman or women who are U.S. citizens and who also control and operate the business.

(c) is, is not a minority business enterprise. "Minority business enterprise," as used in this provision, means a business which is at least 51 percent owned or controlled by one or more minority group members or, in the case of a publicly owned business, at least 51 percent of its voting stock is owned by one or more minority group members, and whose management and daily operations are controlled by one or more such individuals. For the purpose of this definition, minority group members are (check the blocks applicable to you):

- | | | |
|---|--|---|
| <input type="checkbox"/> Black Americans | <input type="checkbox"/> Asian Pacific Americans | <input type="checkbox"/> Hispanic Americans |
| <input type="checkbox"/> Asian Indian Americans | <input type="checkbox"/> Native Americans | <input type="checkbox"/> Hasidic Jewish Americans |

(d) is, is not a bonafide Section 3 Company. "Section 3 company," as used in this provision, means that it meets the following definition:

1. 51% or more of the ownership of this company is owned by Section 3 residents, as defined by HUD.
2. Currently, at least 30% of the employees of the company are Section 3 residents, as defined by HUD.
3. At least 30% of the employees of the company were Section 3 residents, as defined by HUD, within three years of the date of first employment with this company.
4. I commit to subcontract at least 25% of the total value of this contract to Section 3 subcontractors, as these companies are defined above, and to provide the necessary evidence to substantiate this, prior to the award of contract.

Company Name: _____

Address: _____

Phone: _____ Fax: _____ Email: _____

FEIN or _____ Exp. _____

SSAN#: _____ Contractor License # _____ Date: _____

Date: _____ Print Name: _____

Signature: _____

Total Bid Amount: \$ _____

Amount Written: _____

(This information must be submitted in order to have your bid considered responsive)