

**ADDENDUM No. 1
for
INVITATION FOR BID (IFB)**

STORRS LIBRARY WINDOW REPLACEMENT

**TOWN OF LONGMEADOW
MASSACHUSETTS**

July 6, 2018

This document serves as Addendum No.1 for the Invitation for Bid (IFB) for Storrs Library Window Replacement. This Addendum forms part of the IFB and modifies the original document. **Acknowledge the receipt of all addenda numbers issued on the BID SUBMISSION FORM.** Failure to do so may subject the bidder to disqualification.

The following changes and/or additions are to be made to the original Invitation for Bid dated June 21, 2018:

1. RESCHEDULED BID DEADLINE:

Delete reference to the bid deadline of Tuesday, July 10, 2018 at 11:00am and in its place insert the revised bid deadline of **Tuesday, July 17, 2018 at 11:00am.**

2. REVISED BID FORMS:

Revised Bid Submission Forms are supplied with Addendum No. 1. Please be sure to utilize the forms as an additional bid alternate has been added for window replacement and associated work for the Storrs Library vestibule lobby main entry.

The order with Base Bid and reorganization bid alternates is as follows:

Base Bid

Bid Alternate No. 1 = Replace round window on the west elevation

Bid Alternate No. 2 (NEW) = Vestibule lobby main entry windows. Addressed on plan page A-202, Quadrant No. 1 'Main Entry Vestibule Elevations'.

Bid Alternate No. 3 = Provide Window Shades

Bidders should also supply the completed reference forms supplied with the revised bid submission forms.

3. LIST OF THOSE THAT ATTENDED THE MANDATORY PRE-BID CONFERENCE:

The list of those that attended and registered during the mandatory pre-bid conference is supplied on the following pages.

4. NEW TECHNICAL SPECIFICATIONS, SECTION 02 08 00 - ASBESTOS ABATEMENT:

Insert with the IFB document the newly supplied specifications, Section 02 08 00 – ASBESTOS ABATEMENT .

5. REVISED TECHNICAL SPECIFICATIONS, SECTION 02 08 10 – DISTURBANCE OF LEAD, CADMIUM, AND CHROMIUM MATERIALS:

Delete reference to the Technical Specifications supplied with the original bid document for Section 02 08 10 – Lead Containing Paint. In its place insert the revised Section 02 08-10 – Disturbance of Lead Cadmium and Chromium Materials, supplied on the following pages.

6. ADDITIONAL EMSL ANALYTICAL AND ATC REPORTS:

Additional test data for interior plaster/gwb wall construction around windows is supplied on the following pages.

7. QUESTION AND RESPONSE:

QUESTION: The plans identify the removal and re-installation of the window shades while specifications appear to detail new units. Are we to remove and reinstall or provide new units?

RESPONSE: If the Bid Alternate No. 3 ('Provide Window Shades'), to provide new devices is not accepted, the contractor shall remove and reinstall the existing devices where present.

QUESTION: Can a storage container or trailer containing the new windows and construction materials be stored in the parking lot of the library during the construction process?

RESPONSE: Yes, a storage container or trailer can be stored on site located at the far back corner of the library parking lot.

8. REVISED PLANS:

Replace the plan pages supplied with the original bid document for Drawing Numbers: G-001, A-201 and A-202. In its place utilize the following Drawing Numbers supplied with this addendum:

G-001, Rev. C

A-201, Rev. C

A-202, Rev. C

REVISED BID FORMS:

Bidder shall fill in all blank spaces.
Failure to complete any portion of the " FORM FOR BID " may disqualify the bidder.

TO: Town of Longmeadow
Purchasing Department
Attn: Chad Thompson, Procurement Manager
Town of Longmeadow
735 Longmeadow Street, Suite 101
Longmeadow, MA 01106

BIDDER _____

BIDS DUE: **11:00am on Tuesday, July 17, 2018 (PER ADDENDUM NO.1)**

The undersigned certifies that the contract documents, specifications and drawings have been carefully examined, and that the site of the work has been personally inspected. The undersigned declares that the amount and nature of the work to be done is understood, and that at no time will a misunderstanding of the contract documents be pleaded.

The undersigned proposes to furnish all labor, materials, and equipment required and incidental and pay all bonds, taxes, and permits required for the carrying out of the work for the **Storrs Library Window Replacement** in accordance with the drawings and specifications prepared by Hill-Engineers, Architects, Planners, Inc. for the contract price as specified below and outlined herein and subject to the additions and deductions heretofore provided for in the specifications.

Schedule:
Substantial Completion to be obtained by November 10, 2018

The bidder acknowledges receipt of the following addenda:

1

_____.

Base Bid

The proposed contract sum for the contract is \$ _____.
(numerical)

_____ Dollars.
(written)

Alternates

Alternate #1 – Replace round window on the west elevation

Add to the contract scope of work the following transoms

Description: Remove the existing operable round window located on the west elevation of the building, second floor, and replace with a fixed window assembly. Provide curved trim on the interior and exterior for a finish appearance.

All provisions of the original contract documents apply and shall be enforced for the work.
_____ Dollars.

(cont'd.)

Alternate #2 – Main Entry Vestibule Elevation

Description: Window replacement and associated work per ‘Main Entry Vestibule Elevations’, as documented on Drawing Number A-202, Rev. C

All provisions of the original contract documents apply and shall be enforced for the work.
_____ Dollars.

Alternate #3 –Provide window shades

Description: Provide roll-up window treatment/shades for all windows. Clean, repair and paint jambs and heads resulting from removed hardware.

All provisions of the original contract documents apply and shall be enforced for the work.
_____ Dollars.

The undersigned agrees that for any extra work, the contract price shall be increased by the actual cost of the work in place plus _____ percent of the actual cost added to cover all profit and overhead for the General Contractor's work **OR** plus _____percent of the actual cost added to cover all profit and overhead for all Subcontractor’s work.

For any work deleted, the contract price shall be reduced by the actual cost of the work in place. Any adjustment for work added or deducted after the contracts have been signed will be adjusted upon instructions as outlined in the specifications.

The sub-division of the proposed contract price is as follows:

ITEM 1 The work of the Contractor, being all work other than that covered by Item 2, \$ _____.

ITEM 2 Sub-bids as follows:

<u>SUBTRADE</u>	<u>SECTIONS</u>	<u>SUB-BIDDER</u>	<u>AMOUNT</u>	<u>BONDS REQUIRED</u>
				<u>INDICATE</u>
				<u>YES/NO</u>
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____
_____	_____	_____	\$ _____	_____

TOTAL OF ITEM 2\$ _____

The undersigned agrees that each of the above-named sub-bidders will be used for the work indicated at the amount stated, unless a substitution is made.

The undersigned agrees that if he is selected as contractor, he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this general.

The undersigned agrees that if he is selected as General Contractor, he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the awarding authority, execute a contract in accordance with the terms of this general bid and furnish a Performance Bond and also a Labor and Materials and Payment Bond, each of a surety company qualified to do business under the laws of the Commonwealth of Massachusetts and satisfactory to the awarding authority and each in the sum of one hundred percent of the contract price, the premiums for which are to be paid by the general contractor and are included in the contract price.

The undersigned hereby certifies that he is able to furnish labor that can work in harmony with the Owner, A/E, and all other elements of labor employed or to be employed on the worksite. All employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and that he will comply fully with all laws and regulations applicable to awards made subject to Section 44A.

Date: _____

Name of General Bidder

(Affix corporate seal
here if Bidder is a
corporation)

By: _____
Name of Person Signing Bid

Title

Business Address

City and State Zip Code

Phone Fax

Email Address

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; and if an individual, give residential address if different from business address.

CONTRACTOR’S AFFIDAVIT- CERTIFICATE OF NON-COLLUSION

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word “person” shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of Section 29F of Chapter 29, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

Signature

Print Name of Bidder

Project Number

Business Address

Awarding Authority

Telephone Number

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the Town for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

1.FIRM NAME: _____

2.WHEN ORGANIZED: _____

3. INCORPORATED?

_____ YES

_____ NO DATE AND STATE OF INCORPORATION:_____

4. IS YOUR BUSINESS REGISTERED WITH SOMWBA FOR THE FOLLOWING WOMEN AND/OR MINORITY CATEGORIES:

MBE? _____ YES _____ NO

WBE? _____ YES _____ NO or

MWBE? _____ YES _____ NO

5.LIST ALL CONTRACTS CURRENTLY ON HAND, SHOWING CONTRACT AMOUNT AND ANTICIPATED DATE OF COMPLETION:

6.HAVE YOU EVER FAILED TO COMPLETE A CONTRACT AWARDED TO YOU?

_____ YES

_____ NO

IF YES, WHERE AND WHY?

7.HAVE YOU EVER DEFAULTED ON A CONTRACT? _____ YES _____ NO

IF YES, PROVIDE DETAILS.

8.
LIST YOUR VEHICLES/EQUIPMENT AVAILABLE FOR THIS CONTRACT:

9.
IN THE SPACES FOLLOWING, PROVIDE INFORMATION REGARDING **CONTRACTS COMPLETED BY YOUR FIRM LISTING ONLY PROJECTS OF SIMILAR NATURE TO THE PROJECT BEING BID**. A MINIMUM OF TWO (S) CONTRACTS SHALL BE LISTED. PUBLICLY BID CONTRACTS ARE PREFERRED.

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECT NAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #: (____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

PROJECTNAME: _____
OWNER: _____
CITY/STATE: _____
DOLLAR AMOUNT: \$ _____ DATE COMPLETED: _____
PUBLICLY BID? _____ YES _____ NO
TYPE OF WORK?: _____
CONTACT PERSON: _____ TELEPHONE #:(____) _____
CONTACT PERSON'S RELATION TO PROJECT?: _____
(i.e., contract manager, purchasing agent, etc.)

10.

The undersigned certifies that the information contained herein is complete and accurate and here by authorizes and requests any person, firm, or corporation to furnish any information requested by the Town in verification of the recitals comprising this statement of Bidder's qualifications and experience.

DATE: _____

BIDDER: _____

SIGNATURE: _____

PRINTED NAME: _____ TITLE: _____

(End Bid Submission Form)

**MANDATORY PRE-BID CONFERENCE
SIGN IN SHEET:**

MANDATORY PRE-BID CONFERENCE ATTENDANCE SIGN-IN SHEET


IFB: STORRS LIBRARY WINDOW REPLACEMENT

MANDATORY PRE-BID CONFERENCE: Thursday, June 28, 2018 at 10:00am

Gather at Storrs Library, 693 Longmeadow St, Longmeadow, MA

The individual picking up a bid/proposal packet is responsible for providing complete and legible information. Failure to provide complete and legible information may affect the successful delivery of any addenda that may be required to submit a successful bid/proposal.



COMPANY	COMPLETE ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
Kronenberger and Sons Restoration	175 industrial Park Rd Middletown, CT 06457	860-894- 1165	thomasL@kronenbergerSons.com

NAME/CONTACT	FAX	SIGNATURE:
Thomas Loveless		


COMPANY	COMPLETE ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
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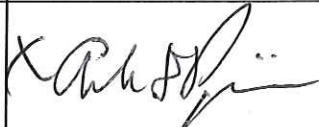
 KURTZ INCORPORATED GENERAL CONTRACTORS LESTER BUILDINGS 	Matt Le Page ASST. PROJECT MANAGER/ ESTIMATING 810 SOUTHAMPTON RD Suite 1 WESTFIELD, MA 01085 413-568-0636 EXT 107 FAX 413-568-5430 CELL 413-654-6645 www.kurtzinc.com matt@kurtzinc.com		
		FAX	SIGNATURE:
			

ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
---------	-------	---

Don Schabacker Commercial Sales Representative  VIEWED TO BE THE BEST.®	Pella® Windows & Doors 69 Ashley Avenue West Springfield, MA 01089 Cell: 413.563.0586 Fax: 413.736.3390 E-mail: dschabacker@pellasales.com professional.pella.com		
		FAX	SIGNATURE:
			

ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
---------	-------	---

Andrew Pasquini Estimator PDS ENGINEERING & CONSTRUCTION, INC. 			
		FAX	SIGNATURE:

			
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107 Old Windsor Road, Bloomfield, Connecticut 06002
 Tel: (860) 242-8586 • Fax: (860) 242-8587 • Andrew.Pasquini@pdsec.com



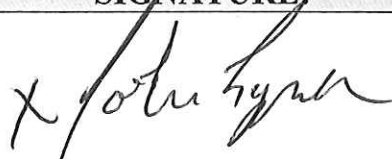

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COMPANY	COMPLETE ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
<p>ROLAND A. CIOCCA</p> <p>R.A.C. BUILDERS, INC. General Contractors Commercial • Industrial • Residential</p> <p>12 School Street P.O. Box 846 Agawam, MA 01001</p> <p>(413) 786-8401 Fax (413) 786-8988 Email: rciocca@verizon.net rciocca.rac@gmail.com</p>			
		FAX	SIGNATURE:
			
COMPANY	COMPLETE ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
 <p>John Lynch Sales / Estimator</p>			
		FAX	SIGNATURE:
<p>The Environmental Demolition Experts</p> <p>1 Powers St. Unit # 13 Lawrence, MA 01843 Office (603) 239 3005 Cell (978) 500-0113 jlynch@adepgroup.com</p>			
COMPANY	COMPLETE ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
Chandler Architectural	255 Intec State drive West Springfield	413-733-1111	hector@cap-inc.net
NAME/CONTACT		FAX	SIGNATURE:
Hector Hernandez			
COMPANY	COMPLETE ADDRESS	PHONE	E-MAIL ADDRESS (Preferred / fastest addenda method!)
NAME/CONTACT		FAX	SIGNATURE:

**NEW TECHNICAL SPECIFICATIONS
SECTION 02 08 00: ASBESTOS ABATEMENT:**

SECTION 02 08 00 – ASBESTOS ABATEMENT

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 DEFINITIONS

- A. The following definitions shall be applicable to this Section:

“Owner”: Refers to the Town of Longmeadow and their designated, authorized personnel.

“Architect”: Refers to Hill Engineers, Architects, Planners, 50 depot Street, Dalton, MA 01226 and their designated, authorized personnel.

“Consultant”: Refers to ATC Group Services LLC, 73 William Franks Drive, West Springfield, Massachusetts and their designated, authorized personnel.

“General Contractor”: Refers to the Contractor who has been awarded the overall contract for renovation and demolition work outlined by the Contract Documents.

1.3 GENERAL REQUIREMENTS/QUALIFICATIONS

- A. All Asbestos Abatement work referenced herein shall be performed by a Massachusetts licensed Asbestos Abatement Contractor in accordance with Massachusetts Department of Labor and Safety (DLS) 453 CMR 6.0 Regulations.
- B. Qualifications of Asbestos Abatement Contractor
 1. Asbestos Abatement Contractor performing the abatement work of this section ("Asbestos Abatement Contractor") shall be an Asbestos Abatement Contractor licensed to perform asbestos operations in the State of Massachusetts. Asbestos Abatement Contractor shall submit license number and proof of licensure.
 2. The Asbestos Abatement Contractor shall also provide the project name, contact person and phone number of three (3) projects which were successfully completed of similar size and scope within the last two (2) years. Each project shall have been completed in good standing and the work performed by the Asbestos Abatement Contractor for each project resulted in no work violations/citations, contract delays, contract extensions/disputes or litigation. Failure to provide this information and/or meet the approval of

these qualifications by the Owner may result in rejection of the Asbestos Abatement Contractor.

3. The Owner shall also reserve the right to research and utilized other information received from any other projects completed by the Asbestos Abatement project not provided under 1.03 B (2) above, regardless of the date completed, location or circumstances resulting from the outcome of their work. The Owner shall reserve their right to reject the Asbestos Abatement Contractor based upon this review, for any reason, if found to be in the best interest of the Owner.

NOTE: The Asbestos Abatement Contractor shall not be authorized to begin work until all credentials outlined above are reviewed and approved by the Architect.

1.4 DESCRIPTION OF WORK

- A. Laboratory data and Table 1 at the end of this section shows asbestos containing materials; design plans show areas of disturbance. All windows and sealants in the old sections of the building are assumed to contain asbestos and shall be removed, the windows in the new section did not contain asbestos. The Asbestos Abatement Contractor shall furnish all labor, materials, services, training, insurance, and equipment as needed to complete removal of asbestos-containing and asbestos-contaminated materials located as indicated below. The Asbestos Abatement Contractor shall follow all Federal, State and local ordinances, regulations and rules pertaining to asbestos, including its abatement, storage, transportation and disposal.
- B. The Asbestos Abatement Contractor shall prepare their bid based on the quantity estimates provided in this specification and related drawings. Full access to the site has been granted during the bidding process in order to observe the locations and conditions of the asbestos containing materials to be abated under this contract.
- C. The following Scope of Work and Requirements shall be applicable for asbestos abatement work. If a specific note for an abatement procedure or requirement is not mentioned herein, the Asbestos Abatement Contractor shall perform the removal of such material in accordance with local, state and federal regulations. The Asbestos Abatement Contractor shall also coordinate all work with the General Contractor.
 1. All Asbestos Abatement work shall take place in accordance with the provisions outlined herein as well as current local, state and federal regulations. No additional compensation shall be granted to the Asbestos Abatement Contractor for compliance with applicable laws when performing the abatement work at the site. This shall include any regulatory requirements that mandate additional or more restrictive containment and abatement procedures than what has been presented herein. It shall be the Asbestos Abatement Contractor's responsibility to comply with such regulations as well as any other additional requirements outlined by this Section.

2. The Asbestos Abatement Contractor shall be responsible for all demolition work required in order to access all asbestos materials for abatement. All demolition debris shall be disposed of as asbestos (unless otherwise directed by the Consultant).
3. Coordination shall exist between the abatement under this Section and the disconnection of existing electrical, plumbing or fire suppression equipment within the building by the General Contractor.
4. With regards to the non-traditional (NT) work practices from requirements on polyethylene sheeting on "impervious wall" surfaces, the Asbestos Abatement Contractor shall be required to adhere to all requirements outlined by DLS regulations governing work area set-up for asbestos abatement. The Asbestos Abatement Contractor shall take full responsibility including all costs associated with approval and/or denial of such actions (i.e. non-use of polyethylene) if determined to be non-compliant by the Consultant and/or a state or federal agency. If the variance is denied or discontinued by said parties; the Asbestos Abatement Contractor shall proceed with installation of polyethylene sheeting on such surfaces at no additional cost to the Owner.

1.5 SEQUENCING

- A. Window abatement shall be coordinated with general contractor to keep the building weathertight at all times.

1.6 SUBMITTALS

- A. In addition to items required by other sections of the Project Manual, the following submittals are required for review and approval by the Architect on/or before the Pre-Construction Meeting:
 1. Copy of Massachusetts DLS Asbestos Abatement Contractor's License.
 2. Copies of certifications, notifications and all applicable licenses.
 3. Chain-Of-Command list of all personnel on-site and emergency contact person(s).
 4. Work plan which dictates all removal procedures to be implemented and projected schedule of completion.
- B. In addition to the items required by other sections of the Project Manual, the following submittals are required for final payment:
 1. Copy of Waste Shipment Records.

1.7 CODES AND STANDARDS

- A. All work shall conform to the standards set by applicable Federal, State and local laws, regulations, ordinances, and guidelines in such form in which they exist at the time of the work on the contract, and as may be required by subsequent regulations. In addition to any detailed requirements of the Specification, the

Asbestos Abatement Contractor shall at his own cost and expense comply with all laws, ordinances, rules and regulations of Federal, State, Regional and Local Authorities regarding handling and storing of asbestos waste material. This includes all applicable OSHA regulations.

- B. All regulations and other governing agencies in their most current version are applicable throughout this project. Where there is a conflict between this Specification and the cited State, Federal, or local regulations, the more restrictive or stringent requirements shall prevail. This Section refers to many requirements found in these references, but in no way is it intended to cite or reiterate all provisions therein or elsewhere. It is the Asbestos Abatement Contractor's responsibility to know, understand, and abide by all such regulations and common practices.

1.8 FEES, PERMITS & LICENSES

- A. The Asbestos Abatement Contractor shall pay all licensing fees, royalties, and other costs necessary for the use of any copyrighted or patented product, design, invention, or process in the performance of the work specified in this section. The Asbestos Abatement Contractor shall be solely responsible for costs, damages, or losses resulting from any infringement of these patent rights or copyrights. The Asbestos Abatement Contractor shall hold the Owner, Owner's Representative/Construction Manager, Consultant and Architect harmless from any costs, damages, and losses resulting from any infringement of these patent rights or copyrights. If the Contract Specification requests the use of any product, design, invention, or process that requires a licensing, patent or royalty fee for use in the performance of the job, the Asbestos Abatement Contractor shall be responsible for the fee or royalty fee and shall disclose the existence of such rights.
- B. Asbestos Abatement Contractor shall be responsible for costs for all licensing requirements, where applicable and notification requirements and all other fees related to the Asbestos Abatement Contractors ability to perform the work in this Section.
- C. Secure all necessary permits for work under this Section, including hauling, removal, and disposal, fire, and materials usage, or any other permits required to perform the specified work. The Asbestos Abatement Contractor shall pay for all asbestos related permits.

1.9 CLEANING

- A. Maintain the work site in a neat and orderly manner at all times, so as not to interrupt or infringe upon the work of other trades. Perform all final cleaning of abatement work areas as required by this Section and Massachusetts Regulations to the approval of the Owner's Consultant. Upon completion of work in any given area, Asbestos Abatement Contractor shall remove all material and equipment associated with the work, not necessary to complete other phases of the work in that area.

- B. Comply with all requirements for final clearance and release of a work area as described in this Section and required by the Massachusetts Regulations prior to take down of polyethylene and area clean-up.

1.10 COORDINATION

- A. Extend full cooperation to Owner in all matters involving the use of Owner's facilities. At no time shall the Asbestos Abatement Contractor cause or allow to be caused conditions, which may cause risk or hazard to the general public, or conditions that might impair safe use of the facility.
- B. Coordinate the work of this section with that of all other trades as directed by the General Contractor and at the express consent of the Owner and Architect. Phasing and scheduling of this project will be subject to the approval of the Owner and Architect. The work of this Section shall be scheduled and performed so as not to impede the progress of the project as a whole. Work shall not proceed in any area without the express consent of the Owner and Architect. The Asbestos Abatement Contractor shall be available within 24 hours notice for additional work if after acceptance of the work it is found that full abatement was not achieved from the initial work effort as determined by the Owner, Architect or Consultant.
- C. Complete Asbestos activities in the phases of the final schedule agreed upon by Owner, Architect and General Contractor.

1.11 SUBSTITUTION OF MATERIALS OR METHODS

- A. Owner and Architect approval is required for all modifications to methods, procedures, and design, which may be proposed by the Asbestos Abatement Contractor. It is the intent of these documents to allow the Asbestos Abatement Contractor to present alternative methods to the abatement processes herein, for review by Owner and Architect. Any such modifications or substitutions to methods, procedures, or design shall comply with applicable regulations. Asbestos Abatement Contractor shall submit the proposed modification or substitution in accordance with the requirements of the General Conditions, and no later than fifteen (15) working days prior to planned commencement of proposed modification, for review and approval.
- B. Unless requests for modification or substitution are made in accordance with the above instructions and the instruction of the General Conditions, supported by sufficient proof of equality, Asbestos Abatement Contractor shall be required to furnish the specifically named or designed items, methods or procedures designated in this Section.
- C. If the modification or substitution necessitates changes or additional work, same shall be provided and the Asbestos Abatement Contractor shall assume the cost and the entire responsibility thereto unless performed under the approved Change Order Process.
- D. The Owner and Architect's permission to make such substitution shall not relieve the Asbestos Abatement Contractor from full responsibility for the work.

1.12 SITE SECURITY

- A. The Asbestos Abatement Contractor is responsible for performing all work under this contract without contaminating the building environment with asbestos fibers. This includes interiors of duct work, outside containment locations, machinery and equipment and any other release into unregulated spaces. The Asbestos Abatement Contractor is responsible for making right and clean-up of any such contamination if found to be present.
- B. The Asbestos Abatement Contractor will be responsible for the security of the abatement area, allowing only authorized personnel into the area, and securing assigned entrances and exits with locked doorways at the end of the work day. Signs will be posted prior to asbestos removal as required in 29 CFR 1926.1101.

1.13 PROJECT MONITOR

- A. The Owner (through the Architect) has retained ATC, as their Consultant for technical advisement and project management during the asbestos removal portion of the Project. ATC will perform on-site asbestos project monitoring services during the asbestos removal. The Asbestos Abatement Contractor shall regard ATC's direction, as authoritative and binding as provided herein, in matters outlined by this Section. However, all work shall be subject to final approval by the Architect and the Owner.
- B. ATC's licensed Project Monitor will perform monitoring of Asbestos Abatement Contractor's work practices and performance, inspection of the worksites, and air sampling and analysis for the asbestos removal project. Quality control and testing criteria has been established in these specifications, and will be strictly enforced.

1.14 TEMPORARY FACILITIES

- A. Use of Owner provided facilities is specified in Division 1 and shall be coordinated through the Owner and General Contractor.

PART 2 - PRODUCTS

2.1 MATERIALS

All materials and equipment proposed to be used on this project shall be subject to the acceptance of the Architect and Consultant. The Asbestos Abatement Contractor shall comply with local, state and federal regulations pertaining to the selection and use of materials and equipment on this project. The Asbestos Abatement Contractor shall provide a submittal on all materials and equipment to be used for review and approval by the Architect and Consultant prior to commencement of the work.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Critical Barriers: Prior to any masking and sealing operations which will make up the asbestos removal work area, windows, doors, openings, ducts, drains and vents will be masked and sealed with a minimum of one layer of six (6) mil polyethylene sheeting. Large opening to occupied areas, such as open doorways, hallways, passageways and major openings shall be sealed with permanent, solid construction materials and made air tight in accordance with DLS regulations

453 CMR 6.00. Voids in the walls and ceilings that are due to penetrations of conduits and pipes shall be sealed with fire retardant spray foam. Exposed electrical panels in work areas will be shut off when possible, and masked and sealed with a minimum of two (2) layers of six (6) mil polyethylene and duct tape.

- B. Decontamination Chambers: It is the Asbestos Abatement Contractor's responsibility to provide Decontamination Chambers consisting of an equipment room, shower and clean room for personnel involved in asbestos removal. The Chamber shall be masked and sealed with two layers of six mil polyethylene sheeting with flaps between each room. Each of the three rooms will be of a sufficient size to accommodate the Asbestos Abatement Contractor's contaminated personnel and related equipment. The rooms will be framed, masked, sealed and attached and sealed to the entry/exit ways of asbestos worksites. Adequate heat and light will be safely provided. The Asbestos Abatement Contractor shall provide a minimum of one water heater per work area decontamination chamber. Waste water will be filtered by 20 micron and 5 micron filters in series prior to discharge.

3.2 ABATEMENT PROCEDURES

- A. The following paragraphs detail the work requirements for the asbestos regulated area. Workers shall wear tyvek suits and respiratory protection for all removals. The following requirements shall be applicable for abatement of all opening sealants:
1. A work area shall be established that extends outward from the exterior side of the building or facility where the sealant removal work will occur, work area shall be large enough to encompass all areas where dust, debris or waste generated during the operation are expected to accumulate and areas where there is a reasonable possibility that airborne levels of asbestos could be elevated, as well as any area occupied by equipment.
 2. Windows, doors and other openings on the side of the building where the sealant removal work will occur shall be closed while the work is occurring and air conditioners on the same side of the building shall be turned off.
 3. Tarpaulin or plastic sheeting shall be spread on the ground under the window(s) where the sealant removal work will occur. Tarpaulin or plastic sheeting shall extend away from the edge of the building and to either side of the work area a sufficient distance to catch any debris generated by the work operation. Tarpaulin or sheeting shall be

cleaned of accumulated debris no later than the end of each work shift.

4. If the entire sash is to be removed during sealant removal work, window openings shall be sealed on the inside of the building with six-mil thickness polyethylene sheeting in a manner sufficient to prevent leakage of dust or debris to interior spaces. Where less than an entire sash is to be replaced, covering and sealing of interior surfaces of the sash that encompasses the area of the panes being worked on may be performed in lieu of sealing the entire sash.
5. Prior to commencing removal or repair of asbestos-containing glazing compound or caulk, the exterior and interior window well and sash areas shall be pre-cleaned by HEPA- vacuuming and/or wet wiping.
6. Asbestos-containing glazing compound and caulk shall be adequately wet with amended water prior to removal or repair. All pieces or particles of glazing compound and caulk shall be removed using a HEPA vacuum and/or using a wet wipe collection method.
7. The work area, including ground covers and equipment, shall be cleaned of visible debris at the end of each workday.
8. Upon completion of the removal of the asbestos-containing glazing compound and/or caulk, the sash and sill areas shall again be cleaned by HEPA-vacuuming and/or wiped with a wet sponge or cloth. Polyethylene sheeting (where used) shall be removed from the interior of the window and disposed of as asbestos waste and the window well shall be cleaned by HEPA-vacuuming and/or wet wiping.
9. All equipment utilized in the work operation shall be cleaned of visible dust and debris by HEPA-vacuuming and/or wet wiping prior to removal from the work area. Wet wipes shall be managed as ACWM.
10. The tarpaulin or plastic sheeting below the window(s) shall be cleaned of visible dust and debris by HEPA-vacuuming and/or wet wiping. Dry sweeping shall not be allowed. Ground covers that are free of visible debris and dust may be re-used or disposed as solid waste.
11. Barrier tape may be disposed as solid waste.
12. Disposable protective clothing shall be disposed as asbestos waste.
13. Wetted window sealants shall be collected and sealed into a six- mil plastic bag that is placed in a leak-tight container for disposal as asbestos waste.
14. If an entire sash is to be removed and disposed of as asbestos waste, then the adequately wetted sash shall be removed intact, wrapped in a minimum of two layers of six-mil thick polyethylene sheeting with all joints and seams sealed with duct tape.

15. At the conclusion of the work, the work site shall be inspected for paint dust or chip debris and sealants. The work area shall be re-cleaned until no such debris is found.
 16. All waste shall be labeled as asbestos waste prior to removal from the work area.
 17. Visual inspection of the work area shall be conducted by the consultant.
 18. For activities that disturb asbestos, no visible emissions shall be discharged to the outside air during the collection, processing, packaging, or transporting of any asbestos.
- B. Personal Air Sampling: Daily personal and excursion sampling will be the responsibility of the Contractor to check personal exposure levels versus respiratory protection and to check work practices. At least 25% of the workers in each shift, but not less than 2, shall be sampled. The Contractor is responsible for his own personal sampling as outlined in OSHA Regulation 1926.1101. The Contractor shall post the personal air sample results within 24 hours.
- C. Remedial Cleaning: Remedial cleaning of horizontal surfaces, ledges, and equipment will be required prior to masking and sealing operations of work areas. Cleaning will be done using HEPA vacuums and wet methods. Determinations of additional remedial cleaning will be made on the basis of hazard potential to workers and the outside environment relating to setup and masking and sealing operations (as deemed by the Consultant). Respiratory protection and protective clothing will be required for the cleaning. Prior to remedial cleaning negative air filtration units and a three stage decontamination shall be in place and running and all wall and ceiling penetrations shall be sealed with fire retardant spray foam.
- D. Decontamination Chambers: The Contractor shall construct a decontamination chamber in accordance with local, state and federal regulations governing asbestos abatement.
- E. Negative Air Filtration: The Contractor shall establish negative pressure air filtration within the work areas. The Contractor shall install, operate, and maintain a sufficient number of Negative Air Filtration Units (NAFU's) to meet the requirements of local, state and federal regulations.
- F. Removals: Removal of asbestos containing materials, unless specified otherwise, will be performed using negative air filtration techniques, wet methods, attached three stage decontamination chambers, the masking and sealing of openings, ducts and vents, full two-layer plastic containment's and the encapsulation of post removal surfaces. Removals will be as indicated and as specified herein, and will be performed in a neat and workman like manner to the limits indicated or specified. Asbestos will be consistently and thoroughly wetted with a fine spray of amended water and will be carefully removed and

immediately placed in approved and properly labeled six mil polyethylene disposal bags. Asbestos residual materials will be diligently scraped or brushed from surfaces. After brushing and scraping, surfaces will be free of visible debris and fibers and surfaces will be HEPA vacuumed clean.

- G. Visual Inspections: Work areas shall pass a visual inspection conducted by the Site Supervisor responsible for the project and the Owner's Project Monitor (i.e. Consultant). The criterion for this inspection will be the absence of visible debris in accordance with ASTM standard E1368-90. A certificate of visual inspection will be signed by the Project Monitor and the Site Supervisor after final inspection clearance. The Contractor will be responsible for the costs of visual inspection and testing required for any work which fails clearance air quality criteria.
- H. Encapsulation: A bridging encapsulant/lockdown sealant will be applied to remaining surfaces in direct contact with removal operations, polyethylene sheeting and on any porous surfaces within the work site. The chosen encapsulant must be compatible with the replacement materials and conform to the proper edition of applicable fire and electrical standards.
- I. Work Completion: Final air clearance testing or visual clearances shall be performed by the Owner's Project Monitor for all areas.

3.3 DISPOSAL

- A. Packaging: Prior to post-abatement inspection, asbestos- containing waste shall be packaged in sealed double containers and removed from the work area to a specified transportation vehicle or a designated holding area approved by the Owner. At the end of each work day the Asbestos Abatement Contractor shall remove the debris accumulated during that days work activities using procedures outlined in the Specifications. The Asbestos Abatement Contractor shall provide a daily tally of all bags removed.
- B. Temporary Storage of Waste: An area for temporary storage of asbestos waste must be approved by the Owner. Asbestos waste may only be stored in a restricted area and must be in an enclosed container which is posted and secured whenever not in use. Asbestos waste material shall be loaded into a waste transportation vehicle/dumpster and hauled away as soon as there is a sufficient quantity available for direct transportation to the approved disposal site.
- C. OSHA/EPA labeling: Asbestos warning labels having permanent adhesive and waterproof print, or being permanently printed on the container, shall be affixed to the outside of all asbestos containers, and each inside bag, except that nonfriable asbestos-containing waste that has not been and does not have a high probability of becoming, crumbled, pulverized, or reduced to powder need not be labeled. Labels will be conspicuous and legible and shall contain the following warning:

DANGER
CONTAINS ASBESTOS FIBERS
AVOID CREATING DUST
CANCER AND LUNG DISEASE HAZARD

The Asbestos Abatement Contractor is directed to properly label each waste bag in accordance with the latest NESHAP standard, Section 61.150, with the following information:

SITE OWNER'S NAME
SITE NAME

- D. DOT labeling and marking: A DOT "class 9" shipping label and DOT mark shall be applied to or be printed on each packaging of asbestos-containing materials; except for nonfriable asbestos-containing materials that did not become crumbled, pulverized, or reduced to powder; or a limited quantity of asbestos-containing material which is not being transported by air.
- E. EPA vehicle marking: Each vehicle transporting asbestos-containing waste shall be marked with asbestos danger signs during loading and unloading of the waste, in accordance with the NESHAP, 40 CFR 61.150.
- F. Asbestos waste shipment records: The Asbestos Abatement Contractor shall prepare the waste shipment records. Completed waste shipment record(s) signed by the Asbestos Abatement Contractor, all transporter(s), transferor(s), disposal and/or conversion facility(s), shall be provided to the Owner within 30 days of the time at which the asbestos-containing wastes are received at the disposal and/or conversion facility(ies), which shall be no longer than 40 days after the waste was accepted by the initial transporter. The Waste Shipment Record shall specify the designating number of bags or cubic yard(s) of asbestos waste.
- G. Depositing: Asbestos waste shall be deposited as soon as practical at a regulated waste disposal site, except for EPA "Category I" nonfriable ACM that has not become friable, nor will be or has been sanded, ground, cut, or abraded. Waste disposal sites for asbestos materials will be in accordance with 40 CFR 61.25, Waste Disposal Sites. The Contractor shall provide written evidence that the site is approved for asbestos disposal by the EPA, State and local regulatory agencies.

3.4 QUALITY CONTROL AND TESTING

- A. The Asbestos Abatement Contractor shall be responsible for achieving acceptable visual and if containments are required: final air clearance testing for ALL abatement areas as follows:
 - 1. Clearance inspection: ATC's Project Monitor shall inspect the work area and surrounding areas for clearance using visual and physical methods, prior to clearing the project for air monitoring clearance procedures.
 - 2. Post-abatement Clearance Air Monitoring: For each abatement areas, post abatement clearance air samples will be taken when a visual inspection by ATC's Project Monitor detects no visible debris, and surfaces are encapsulated and dry.

3. Phase Contrast Microscopy (PCM) clearance testing or visual clearance will be performed to confirm the completion of removal. All clearance testing shall be performed in accordance with state of Massachusetts Regulations. The work areas shall be considered complete if the following criteria is met:

Containment's cleared and samples analyzed by Phase Contrast Microscopy (PCM): Maximum airborne fiber concentration of <0.01 fibers per cubic centimeter.

Note: Should results indicate a fiber concentration greater than the clearance criteria stated above or if the visual inspection fails, the Asbestos Abatement Contractor shall reclean the entire work at no additional cost to Owner, utilizing the methods specified in this section. The Asbestos Abatement Contractor shall pay for all additional testing and inspections until the clearance level is achieved as per this Section. The cost of additional testing and inspection shall be paid by the Asbestos Abatement Contractor by subtracting the cost for analysis and inspector's time from the Contract total. This shall also include resampling of any areas where air cassettes became overloaded due to construction activities.

TABLE 1.0 SUMMARY OF ASBESTOS-CONTAINING MATERIALS TO BE ABATED		
Location	Material	Approximate Quantity
Old Wing	All Window Openings	See Plan and Attached Data

**REVISED TECHNICAL SPECIFICATIONS
SECTION 02 08 10: DISTURBANCE OF LEAD
CADMIUM, AND CHROMIUM MATERIALS**

SECTION 02 08 10

DISTURBANCE OF LEAD, CADMIUM AND CHROMIUM MATERIALS

PART 1 - GENERAL

1.1 GENERAL REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, apply to this Section.

1.2 DEFINITIONS

- A. The following definitions shall be applicable to this Section:

“Owner”: Refers to the Town of Longmeadow and their designated, authorized personnel.

"Architect": Refers to Hill Engineers, Architects, Planners, 50 depot Street, Dalton, MA 01226 and their designated, authorized personnel.

“Consultant”: Refers to ATC Group Services LLC, 73 William Franks Drive, West Springfield, Massachusetts and their designated, authorized personnel.

“General Contractor”: Refers to the Contractor who has been awarded the overall contract for renovation and demolition work outlined by the Contract Documents.

1.3 DESCRIPTION OF WORK

- A. The Contractor shall be made aware that lead, cadmium and chromium (hereinafter referred to as lead) is present within painted substrates or within building components throughout the site which will be impacted by renovation and demolition activities on this project. Laboratory data and Table 1 at the end of this section shows lead containing materials; design plans show areas of disturbance. All building coatings in the new and old wings are assumed to contain lead, cadmium and chromium.
- B. The Contractor shall be required to comply with all aspects of the Occupational Safety and Health Administration (OSHA) Regulations pertaining to lead, cadmium and chromium with regards to disturbance of these materials when performing their work.
- C. It shall be the sole responsibility of the Contractor for compliance with this Section, including all costs associated with, but not limited to:
 - 1. Compliance with OSHA 29 CFR 1926.62 Lead Regulations.
 - 2. Compliance with OSHA 29 CFR 1926.1127 Cadmium Regulations.
 - 3. Compliance with OSHA 29 CFR 1926.1126 Chromium Regulations.
 - 4. Development and implementation of a Compliance Program.
 - 5. Development and implementation of a Respiratory Program.
 - 6. Development and implementation of a Medical Monitoring Program.

Town of Longmeadow – Richard Salter Storrs Library

Window and Door Replacement

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7. Development and implementation of a Hazard Communication Program.
 8. Performance of any lead, cadmium or chromium testing required on the project.
 9. Performance of any Negative Exposure Assessments required.
 10. Providing all medical examinations required.
 11. Providing all equipment required (Including appropriate PPE)
 12. Providing all engineering controls and associated work practices.
 13. Disposing of all demolition material in accordance with local, state and federal regulations
- D. Due to the age of the building, previous painting history and survey data, the Contractor shall assume all disturbed painted surfaces to contain lead, cadmium and chromium and comply with this Section and OSHA Regulations accordingly. The Contractor, at their own discretion may elect to perform testing to confirm the presence of lead, cadmium and chromium in the building. However, all costs associated with additional testing and compliance with this Section shall be borne by the Contractor under the Base Bid.
- E. It should be noted that abatement of the paint by a MA licensed Deleading Contractor is not required for performance of the renovation and demolition work outlined under this Contract. The building is not considered a residence where children under the age of six (6) reside, therefore, abatement of lead-containing components will not be required as per Massachusetts Department of Public Health (DPH) "Child Lead Poisoning and Prevention Regulations.
- F. If the Contractor deems that removal of the lead, cadmium or chromium will be an appropriate "engineering control" for compliance with their OSHA programs, then such removal shall be performed at the Contractor's own expense in accordance with applicable requirements. No additional compensation shall be granted for any engineering control methods employed by the Contractor for compliance with this Section, OSHA or other applicable requirements. In addition, all costs associated with removal of paint to meet compliance with applicable construction standards (i.e. welding, torch cutting, grinding, etc.) shall be the responsibility of the Contractor under the Base Bid.
- G. OSHA regulates activities that disturb the lead, cadmium and chromium by the use of manual techniques. Regulated activities include but are not limited to abrasive blasting, welding, and cutting, burning on structures, manual scraping or sanding, and manual demolition of structures or components. The work practices described in this Section are intended to adequately protect the workers from exposure to lead, cadmium and chromium, provide a safe workplace, and protect the environment. However, it shall be the Contractors responsibility to comply with this Section as well as any other provisions/requirements outlined by OSHA and other applicable regulations.
- H. Materials and Equipment: The work of this Section, without limiting the generality thereof, includes the furnishing of labor, materials, tools, equipment, services and incidentals necessary to safely accomplish tasks which will disturb lead, cadmium and chromium.
- I. Approvals and Inspections: Temporary facilities, work procedures, equipment, materials, services, and agreements must fully comply with EPA, OSHA, and NIOSH recommendations, standards and guidelines, as well as any other applicable federal, state, and local regulations. Where there exists an overlap of these regulations and guidelines, the most stringent shall

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apply.

- J. Disposal: The Contractor shall dispose of demolition debris and associated materials in accordance with Part 3.06 of this Section.

1.4 SITE WORK DEFINITIONS

- A. Action Level: Action Level as defined by OSHA shall refer to employee exposure, without regard to the use of respirators, to an airborne concentration of lead, cadmium or chromium calculated as an 8-hour time-weighted average (TWA).
- B. Competent Person: Competent Person shall refer to a person who is capable of identifying existing and predictable hazards in the surroundings or working conditions and who has authorization to take prompt corrective measures to eliminate them.
- C. HEPA Filter: HEPA Filter shall refer to a filter capable of filtering out monodisperse particles of 0.3 microns or greater diameter from a body of air at 99.97 percent efficiency or greater.
- D. Lead, Cadmium and Chromium Paint: Shall refer to paint found to contain lead, cadmium and chromium in any concentration or paint assumed to contain lead, cadmium and chromium as indicated in this Section.
- E. Permissible Exposure Limit (PEL): PEL shall refer to employee exposure, without regard to the use of respirators, to an airborne concentration of lead, cadmium or chromium calculated as an 8 hour time-weighted average.

1.5 SEQUENCING

- A. Contractor shall remove paint as necessary prior to disturbances that could potentially exceed OSHA airborne levels by other trades. Window abatement shall be coordinated with general contractor to keep the building weathertight at all times.

1.6 PERMITS AND INSPECTIONS

- A. Notifications/Approvals: The Contractor shall make, in proper and timely fashion, any necessary notifications to relevant Federal, State, and local authorities and shall obtain and comply with the provisions of all permits or applications required by the work specified, as well as make all required submittals required under those auspices. The Contractor shall indemnify the Owner, their representatives and agents from, and pay for claims resulting from failure to adhere to these provisions. The costs for permits, applications, and the like, are to be assumed by the Contractor.
- B. Fees, Permits and Licenses: The Contractor shall pay licensing fees, royalties, and other costs necessary for the use of any copyrighted or patented product, design, invention, or processing the performance of the job specified in this Section. The Contractor shall be solely responsible for costs, damages or losses resulting from any infringement of these patent rights or copyrights. The Contractor shall hold the Owner and Consultant harmless from any costs,

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damages, and losses resulting from any infringement of these patent rights or copyrights. If the Specification requests the use of any product, design, invention, or process that requires a licensing fee or royalty fee for use in the performance of the job, the Contractor shall be responsible for the fee or royalty and shall disclose the existence of such rights.

- C. Contractor shall be responsible for costs for licensing requirements and notification requirements and other fees related to the ability to perform the work in this Section. The Contractor shall be responsible for securing necessary permits for work under this Section, including removal, materials usage, or any other permits required to perform the specified work.

1.7 SUBMITTALS

- A. Pre-Construction Submittals: Prior to the commencement of the required work, the Contractor shall provide the following to the Designer for approval:
 - 1. A written description detailing the means and methods to achieve compliance with the OSHA standards as well as the provisions outlined herein.
 - 2. A written description detailing the means and methods for properly disposing of all demolition debris in accordance with local, state and federal regulations.
 - 3. Worker hazardous materials training documentation
- B. Post-Construction Submittals: Final payment to the Contractor shall not be made unless the following items are submitted to the Designer for approval:
 - 1. Original Copy of Waste Disposal Manifests acknowledging disposal of any hazardous and non-hazardous waste material from the project showing delivery date, quantity, and appropriate signature of landfill's authorized representative.
 - 2. Copies of all industrial hygiene air sampling reports.
 - 3. Copies of waste disposal testing results.

1.8 QUALITY CONTROL/ASSURANCE

- A. Training Requirements: Workers who will have the potential of lead, cadmium and chromium exposure shall have proof of successfully completing a training course which covers the topics required by OSHA. Contractors are also advised that training in other areas may be required by OSHA and are responsible to ensure that all training requirements for appropriate trades and procedures are met.
- B. Specified Supervisor Qualifications: The Contractor shall specify an on-site Supervisor or Competent Person who is fully qualified in all aspects of safe work practices and procedures, and have (or will have) completed a training course within the previous year prior to the commencement of the work. The training course will cover all topics required by OSHA as well as training in relevant federal, state and local regulatory requirements, procedures and standards, supervisory techniques, and proper disposal procedures.
- C. Site Specific Written Compliance Program: The program will be evaluated to ensure the elements required by OSHA are specific to the conditions at the job site.

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- D. Respiratory Protection Program: The Contractor must provide for review a written respiratory protection program in accordance with 29 CFR 1920.103 if respiratory protection is to be worn during this project.
- E. Fit Test Records: If respiratory protection is to be worn as part of this project, records of successful respirator fit testing performed by a qualified individual within the previous 12 months, for each employee to be used on this project with the employee's name and social security number with each record.
- F. Medical Surveillance: The Contractor shall provide biological monitoring to workers who have the potential of lead, cadmium and chromium exposure. This monitoring shall be performed in accordance with OSHA. If workers are expected to exceed the action level for more than 30 days in any consecutive 12 months the Contractor shall institute a medical surveillance program in accordance with OSHA. A laboratory approved by OSHA shall conduct Blood level sampling and analysis.

1.9 CODES AND STANDARDS

- A. Work shall conform to the standards set by applicable federal, state and local laws, regulations, ordinances, and guidelines in such form in which they exist at the time of the work on the contract and as may be required by subsequent regulations.
- B. In addition to any detailed requirements of the Specification, the Contractor shall at his own cost and expense comply with all laws, ordinances, rules and regulations of federal, state, regional and local authorities regarding handling and storing of waste material.

NOTE: Regulations by the above and other governing agencies in their most current version are applicable throughout this project. Where there is a conflict between this Specification and the cited federal, state or local regulations or guidelines, the more restrictive or stringent requirements shall prevail. This Section refers to many requirements found in these references, but in no way is it intended to cite or reiterate all provisions therein or elsewhere. It is the Contractor's responsibility to know, understand, and abide by all such regulations, guidelines and common practices.

PART 2.0 - PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. The Contractor shall be responsible for providing all material and protective equipment required for performance of the work. The Contractor shall comply with all local, state and federal regulations pertaining to the selection and use of materials and equipment on this project. The Contractor shall provide a submittal on all materials and equipment to be used for review and approval by the Designer.

PART 3.0 - EXECUTION

3.1 WORKER PROTECTION

- A. Initial Determination: The Contractor shall determine, through personal exposure monitoring on the job site or through relevant documentation from other similar jobs, whether workers will be exposed to airborne lead, cadmium or chromium at or above the OSHA Action Level and Permissible Exposure Limit. If exposures at or above the action level are documented, appropriate health and safety procedures identified herein shall be followed. If levels below the action level are documented, the Contractor shall exercise an appropriate level of care to ensure that exposures above the action level do not occur. Whenever there is a chance of equipment, process, control, personnel or a new task has been initiated that may result in additional employees being exposed to lead, cadmium or chromium at or at or above the action level or may result in employees already exposed at or above the action level being exposed above the PEL, the Contractor shall conduct additional monitoring.

Note: The Contractor shall be responsible for performing a negative exposure assessment on each trade subject to the OSHA Regulation. The assessment shall take place during routine work activities, which will simulate employees, actual exposure levels to lead, cadmium and chromium. All assessments shall take place over an 8-hour time period and shall include all appropriate PPE and biological monitoring required as stated herein.

- B. Personal Hygiene Practices: Where exposures to airborne lead, cadmium and chromium above the OSHA PEL occurs or may be expected to occur, the Contractor shall enforce and follow good personal hygiene practices. These practices shall be performed until personal exposure sampling indicates that exposures are below the PEL at which time the Contractor has the option to continue or discontinue the use of personal hygiene facilities. These practices shall include but not be limited to the following:
1. No eating, drinking, smoking, or applying of cosmetics in work area. The Contractor will provide a clean space, separated from the work area, for these activities.
 2. Workers must wash upon leaving the work area. The Contractor will provide wash facilities. This wash facility will consist of, at least, running potable water, towels, and a HEPA vacuum. Upon leaving the work area, each worker will remove and dispose of work suit, wash and dry face and hands, and vacuum clothes.
 3. Disposable clothing, such as TYVEK suits, and other personal protective equipment (PPE) must be donned prior to entering work area. A clean room will be provided for workers to put on suits and other personal protective equipment and to store their street clothes. Disposable suits shall be used once, then properly discarded.
 4. A lavatory facility must be provided and located adjacent to the work area. The eating and drinking area, clean room, and the lavatory facility must be maintained in a clean and orderly fashion at all times. The Contractor will provide portable lavatories when needed and disinfect them daily.
 5. If air-monitoring data gathered by the Contractor shows that employees' exposure to airborne lead, cadmium or chromium exceeds the PEL, the following conditions apply:
 - a. Showers must be provided. Shower water must pass through at least a 5.0 micron filter before returning to the public waste system.
 - b. Workers must shower upon leaving work area.

- c. Three-stage decontamination unit must be established consisting of an Equipment Room, Shower, and Clean Room in series.

3.2 WORK AREA SET UP

- A. **Site Safety:** The Contractor is responsible for all safety at the work site. This includes, but is not limited to, electrical safety, mechanical (tool) safety, fire safety, and personnel protective safety. Safety requirements are, for the most part, common sense and sound business practice; however, the Contractor is advised that federal, state, and local regulations exist which govern safety on the work site. Therefore, in addition to the following, the Contractor is responsible for adhering to the most stringent requirements in effect.
- B. **Signage:** Prior to the preparation for work which will disturb lead, cadmium or chromium, the Contractor shall place warning signs immediately outside all entrances and exists to the area, warning that lead, cadmium and chromium work is being conducted in the vicinity. The signs shall be at least 20" x 14" and read:

**WARNING:
LEAD, CADMIUM, CHROMIUM WORK AREA
POISON
NO SMOKING, EATING OR DRINKING
ALLOWED IN THE WORK AREA**

The signs shall be in bold lettering with lettering not smaller than two inches tall. Should personal exposure monitoring results indicate that exposures are below the Action Level, then the signs will not be required.

- C. **Access to Work Areas:** It will be the Contractor's responsibility to allow only authorized personnel into the work area. Barrier tape shall be used to limit access to the exterior work area. Contractor shall maintain a bound logbook, in which any person entering or leaving the work area must sign and enter the dates and times of entry and departure. Should personal exposure results indicate the exposures are below the Action Level, then a logbook will not be required. The Contractor or competent person will not allow anyone access to the work area unless they have successfully passed an approved training program, and have been fitted and wearing a properly fitted respirator.
- D. **Dumpsters used to store hazardous waste shall be DOT approved, solid enclosed containers and locked and secured at all times.**
- E. **Containment controls (including critical barriers, protective coverings, and HEPA-filtered ventilation and decontamination facilities) may be required for renovation/demolition work. The degree of containment shall be appropriate for the anticipated levels of airborne dust. The lower the level of airborne dust, the lesser the requirements necessary to control lead, cadmium and chromium emissions at the job site.**
- F. **The Contractor shall isolate work areas for the duration of work by completely sealing off all openings in the work area. Isolation sealing shall be accomplished by constructing critical barriers where necessary around the work area perimeter. The work area shall be sealed**

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airtight to the greatest extent possible.

- G. The Contractor shall erect one or more Decontamination Facilities (if applicable) to serve each work area. The facility will consist of series of two or more connected chambers including, at a minimum, a clean room and a shower/wash room, separated by an air lock. Unless otherwise specified, the shower/wash room shall be contiguous to the work area. Non-contiguous, remote, three-chamber decontamination facilities may be substituted with the Consultant's prior written approval. Three-chamber decontamination facilities shall include an equipment room to be used for removal and temporary storage of contaminated worker clothing, equipment, and other items leaving the work area, prior to decontamination in the shower/wash room of the decontamination facility. In all cases, non-emergency access between contaminated and uncontaminated rooms or areas shall only be through the Decontamination Facility/Wash Room.
- H. Ensure that barriers and linings are effectively sealed and taped at all times, and that the Shower/Wash Room floor is completely watertight. Repair damaged barriers, and remedy defects immediately upon discovery. Visually inspect enclosures at the beginning of each work period.
- I. All renovation/demolition work areas shall remain isolated from all other trades on the project and remain inaccessible to the public. Contractor shall monitor the access to the renovation/demolition work areas. The below listed items are required to control the generation of lead, cadmium and chromium containing dust during renovation/demolition activities if worker exposure is above the PEL. The Contractor is ultimately responsible for cleaning all generated dust and debris from renovation/demolition operations and must maintain work areas free from dust generated from renovation/demolition activities.
 - 1. Signs shall be posted at all approaches to the work area warning that work involving lead is being conducted in the vicinity. Signs shall be in bold lettering not smaller than two inches tall.
 - 2. Barriers shall not be removed until the work areas are thoroughly cleaned and approved by the Consultant.

3.3 WORK PROCEDURES

- A. The Contractor shall initiate, and continue, sufficient engineering and work practice controls, as described in the Contractor's Compliance Programs, to reduce and maintain worker exposures to lead, cadmium and chromium at or below the Action Level or Permissible Exposure Limit.
- B. The following work practices are specifically required by these specifications:
 - 1. All persons except those directly involved in the work shall be excluded from the work area. Physical barriers shall be used, where necessary, to limit access to the work area for the duration of the renovation activities. (Warning signs may need to be posted in accordance with applicable regulations.)
 - 2. Provide hand washing facilities and assure that all workers thoroughly wash their hands and face upon exiting the work area. Workers shall pay careful attention to cleanse the hands and face when decontaminating (Provide hygiene facilities, including shower, as required based on initial assessment and continued monitoring.)

Disturbance of Lead, Cadmium and Chromium Materials

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Town of Longmeadow – Richard Salter Storrs Library

Window and Door Replacement

Hill Ref. No.: TOL-8-005

3. Thoroughly wet the areas to be demolished and mist the air to reduce the potential for creating airborne lead, cadmium and chromium dust.
4. All equipment used by the workers inside the work area shall be either left in the work area or thoroughly decontaminated before being removed from the area. Extra work clothing (in addition to the disposable suits supplied by the Contractor) shall be left in the clean area until the completion of work in that area. The clean area shall be cleaned of all visible debris and disposable materials daily.
5. Under no circumstances shall workers or supervisory personnel eat, drink, smoke, chew gum, or chew tobacco in the work area; to do so shall be grounds for the Engineer to stop all demolition operations. Only in the case of life threatening emergency shall workers or supervisory personnel be allowed to remove their protective respirators, if applicable, while in the work area. In this situation, respirators are to be removed for as short a duration as possible.
6. Feasible engineering controls shall be implemented by the Contractor to minimize the possibility of contamination of areas adjacent to the work area. The following activities are the minimum requirements of this section and affect the renovation/demolition performed on the project:
 - a. No torch cutting, mechanical sanding or stripping or abrasive methods of paint removal shall occur.
 - b. No renovation/demolition activities may occur which increase the workers exposure above the Action Level or Permissible Exposure Limit as described under OSHA.
7. Workers shall be informed of the components to be impacted during renovation/demolition that are identified as containing lead, cadmium and chromium.
8. Separation of Trades: Unprotected, untrained workers or trades shall not perform any related work within the same areas as demolition involving components identified as containing lead, cadmium and chromium. Other trades may not enter these areas until clean-up procedures are completed.

The following paragraphs detail specific work requirements for the lead, chromium and cadmium control, which are consistent with asbestos requirements found in Section 020800. The following requirements shall be applicable for abatement of all window sealants:

1. A work area shall be established that extends outward from the exterior side of the building or facility where the sealant removal work will occur, work area shall be large enough to encompass all areas where dust, debris or waste generated during the operation are expected to accumulate and areas where there is a reasonable possibility that airborne levels of lead, chromium and cadmium could be elevated, as well as any area occupied by equipment.
2. Windows, doors and other openings on the side of the building where the sealant removal work will occur shall be closed while the work is occurring and air conditioners on the same side of the building shall be turned off.
3. Tarpaulin or plastic sheeting shall be spread on the ground under the window(s) where the sealant removal work will occur. Tarpaulin or plastic sheeting shall extend away from the edge of the building and to either side of the work area a sufficient distance to

Disturbance of Lead, Cadmium and Chromium Materials

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catch any debris generated by the work operation. Tarpaulin or sheeting shall be cleaned of accumulated debris no later than the end of each work shift.

4. If the entire sash is to be removed during sealant removal work, window openings shall be sealed on the inside of the building with six-mil thickness polyethylene sheeting in a manner sufficient to prevent leakage of dust or debris to interior spaces. Where less than an entire sash is to be replaced, covering and sealing of interior surfaces of the sash that encompasses the area of the panes being worked on may be performed in lieu of sealing the entire sash.
5. Prior to commencing removal or repair of lead, chromium cadmium containing glazing compound or caulk, the exterior and interior window well and sash areas shall be pre-cleaned by HEPA- vacuuming and/or wet wiping.
6. Lead, chromium and cadmium containing glazing compound and caulk shall be adequately wet with amended water prior to removal or repair. All pieces or particles of glazing compound and caulk shall be removed using a HEPA vacuum and/or using a wet wipe collection method.
7. The work area, including ground covers and equipment, shall be cleaned of visible debris at the end of each workday.
8. Upon completion of the removal of the lead, chromium and cadmium containing glazing compound and/or caulk, the sash and sill areas shall again be cleaned by HEPA- vacuuming and/or wiped with a wet sponge or cloth. Polyethylene sheeting (where used) shall be removed from the interior of the window and disposed of as lead, chromium and cadmium waste and the window well shall be cleaned by HEPA-vacuuming and/or wet wiping.
9. All equipment utilized in the work operation shall be cleaned of visible dust and debris by HEPA-vacuuming and/or wet wiping prior to removal from the work area. Wet wipes shall be managed as lead, chromium and cadmium waste.
10. The tarpaulin or plastic sheeting below the window(s) shall be cleaned of visible dust and debris by HEPA-vacuuming and/or wet wiping. Dry sweeping shall not be allowed. Ground covers that are free of visible debris and dust may be re-used or disposed as solid waste.
11. Barrier tape may be disposed as solid waste.
12. Disposable protective clothing shall be disposed as lead, chromium and cadmium waste.
13. Wetted window sealants shall be collected and sealed into a six- mil plastic bag that is placed in a leak-tight container for disposal as lead, chromium and cadmium waste.
14. If an entire sash is to be removed and disposed of as lead, chromium and cadmium waste, then the adequately wetted sash shall be removed intact, wrapped in a minimum of two layers of six-mil thick polyethylene sheeting with all joints and seams sealed with duct tape.

15. At the conclusion of the work, the work site shall be inspected for paint dust or chip debris and sealants. The work area shall be re-cleaned until no such debris is found.
16. All waste shall be labeled as lead, chromium and cadmium waste prior to removal from the work area.
17. Visual inspection of the work area shall be conducted by the consultant.
18. For activities that disturb lead, chromium and cadmium, no visible emissions shall be discharged to the outside air during the collection, processing, packaging, or transporting of any asbestos.

3.4 AIR SAMPLING – CONTRACTOR

- A. Personal Exposure Monitoring: The Contractor shall perform personal exposure sampling to monitor personal exposure levels to airborne lead, cadmium and chromium. Samples shall be taken for the duration of the work shift or for eight hours, whichever is greater. Personal samples need not be taken every day after the first day if working conditions remain unchanged, but must be taken every time there is a change in the removal operation, either in terms of the location or the type of work. Sampling will be used to determine eight-hour Time-Weighted-Averages (TWA). The Contractor is responsible for personal sampling as outlined in the OSHA Standards.
- B. Frequency: Air monitoring frequency will be established in accordance with the requirements set forth the OSHA Standards.

3.5 CLEAN-UP PROCEDURES

- A. When work is in progress, the work site shall be cleaned at end of each day's activities. The building shall be secured to prevent entry by any person after termination of workday. Durable equipment, such as power and hand tools, generators, and vehicles shall be cleaned monthly.
- B. Clean-up shall also include all paint chips and/or debris existing prior to the start of the contract and as generated during construction. This shall also include any paint
- B. Equipment shall be cleaned by HEPA vacuuming. Surfaces shall be maintained as free as practicable of accumulations of dust and debris. Clean up of dust and debris shall be accomplished with a HEPA vacuum or wet methods. The debris shall be misted with water with an airless type sprayer and collected with a mop or broom.
- C. Visual Inspections: Work areas shall pass a visual inspection conducted by the Site Supervisor responsible for the project and the Owner's Project Monitor (i.e. Consultant). The criterion for this inspection will be the absence of visible debris in accordance with ASTM standard E1368-90. A certificate of visual inspection will be signed by the Project Monitor and the Site Supervisor after final inspection clearance. The Contractor will be responsible for the costs of visual inspection and testing required for any work which fails

clearance air quality criteria.

3.6 DISPOSAL OF WASTE MATERIAL

- A. General: All costs associated with proper disposal of the waste materials (whether hazardous, non-hazardous or regulated) shall be borne by the Contractor under the Base Bid. All materials, whether hazardous, non-hazardous or regulated shall be disposed of in accordance with all laws, and the provisions of this Section and any or all other applicable federal, state county or local regulations and guidelines. It shall be the sole responsibility of the Contractor to assure compliance with all laws and regulations relating to disposal.
- B. Non-Hazardous Materials: The Contractor shall contact the regional EPA, State and local authorities to determine disposal requirements for construction and demolition debris that contains lead, cadmium or chromium (non-hazardous). The Contractor shall be responsible for providing all dumpsters/containers required for collection and disposal of such material as well as disposal in an approved landfill.
- C. Hazardous Waste/Regulated Materials: All materials which are determined to be hazardous waste or regulated waste for lead, cadmium or chromium shall be disposed of by the Contractor as specified herein. The Contractor shall perform representative Toxicity Characteristic Leaching Procedure (TCLP) tests of demolition debris to ensure the material is properly profiled for disposal. This shall also include all testing required by the disposal or recycling facility. All costs associated with TCLP testing to profile the waste material shall be borne by the Contractor. If the material is found to be hazardous waste or regulated waste, the Contractor shall provide appropriate drums/containers for use. The Contractor shall properly handle and transport all hazardous waste or regulated waste material into the drums/containers provided.
- D. All TCLP sampling and analysis shall be subject to approval by the Owner. A submittal shall be provided by the Contractor which details the procedures for the sampling including the name of the sampler, methodology for sample collection, sample preparation and chain-of-custody procedures. The laboratory to be used shall be certified by the State of Massachusetts and the American Industrial Hygiene Association (AIHA).
- E. No demolition or recyclable material shall be removed from the site unless approved by the Owner. The Contractor shall provide the name of the transporter and disposal facility for each type of waste (i.e. hazardous, non-hazardous, regulated or recyclable) for review and approval by the Owner.
- F. Recyclable/Salvaged Materials (Non-Hazardous): The Contractor shall note that any demolition material deemed to be recyclable or salvageable by the Contractor may contain lead, cadmium or chromium which could result in the recycling or salvage facility rejecting acceptance regardless of the lead, cadmium or chromium content or TCLP result. The Contractor is hereby notified of this fact and shall bear all responsibilities and costs associated with acceptance and/or rejection of such materials in a C&D landfill, waste disposal facility and/or a recycling/salvage facility under their Base Bid.
- G. The following materials are considered Hazardous Waste (Lead, Cadmium or Chromium) if

Disturbance of Lead, Cadmium and Chromium Materials

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Window and Door Replacement
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they are generated in a form by themselves and shall be disposed of as such:

1. Paint chip and paint chip debris
2. Caulking and sealants
3. Painted construction debris

H. The Contractor shall be responsible for proper disposal of all materials outlined herein. In addition, all costs associated with worker protection or environmental protection requirements for such work shall be the responsibility of the Contractor.

TABLE 1.0 SUMMARY OF LEAD-CONTAINING MATERIALS TO BE ABATED		
Location	Material	Approximate Quantity
Old and New Wing	All Window Openings	See Plans and Attached Data

END OF SECTION

**ADDITIONAL EMSL ANALYTICAL AND ATC
REPORTS:**



EMSL Analytical, Inc.

307 West 38th Street New York, NY 10018

Tel/Fax: (212) 290-0051 / (212) 290-0058

<http://www.EMSL.com> / manhattanlab@emsl.com

EMSL Order: 031816377

Customer ID: ATC62

Customer PO: 11-81-0030

Project ID:

Attention: Michael Matilainen
ATC Group Services LLC
73 William Franks Drive
West Springfield, MA 01089

Phone: (413) 781-0070

Fax: (413) 781-3734

Received Date: 06/29/2018 11:43 AM

Analysis Date: 06/29/2018

Collected Date: 06/28/2018

Project: 183MM18006/ LONGMEADOW STORRS LIBRARY/ 693 LONGMEADOW ST, LONGMEADOW, MA

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
5A 031816377-0001	SW WINDOW 2ND FLOOR - OLD WING PLASTER AND SKIM COAT	Gray/White Non-Fibrous Homogeneous		30% Quartz 50% Ca Carbonate 20% Non-fibrous (Other)	None Detected
5B 031816377-0002	SW WINDOW 2ND FLOOR - OLD WING PLASTER AND SKIM COAT	Gray/White Non-Fibrous Homogeneous		20% Quartz 45% Ca Carbonate 35% Non-fibrous (Other)	None Detected
5C 031816377-0003	NW WINDOW 2ND FLOOR - OLD WING PLASTER AND SKIM COAT	Gray/White Non-Fibrous Homogeneous		30% Quartz 40% Ca Carbonate 30% Non-fibrous (Other)	None Detected
5D 031816377-0004	S WINDOW 2ND FLOOR - OLD WING PLASTER AND SKIM COAT	Gray/White Non-Fibrous Homogeneous		20% Quartz 45% Ca Carbonate 35% Non-fibrous (Other)	None Detected
5E 031816377-0005	SW WINDOW 2ND FLOOR - OLD WING PLASTER AND SKIM COAT	Gray/White Non-Fibrous Homogeneous		45% Quartz 25% Ca Carbonate 30% Non-fibrous (Other)	None Detected
5F 031816377-0006	S WINDOW 1ST FLOOR - OLD WING PLASTER AND SKIM COAT	Brown/Gray Non-Fibrous Homogeneous		54% Quartz 46% Non-fibrous (Other)	None Detected
6A 031816377-0007	SW WINDOW 2ND FLOOR - NEW WING SHEETROCK AND SPACKLE	Gray/White Non-Fibrous Homogeneous		45% Ca Carbonate 20% Gypsum 35% Non-fibrous (Other)	None Detected
6B 031816377-0008	NW WINDOW 2ND FLOOR - NEW WING SHEETROCK AND SPACKLE	Gray/White Non-Fibrous Homogeneous	5% Cellulose	45% Ca Carbonate 20% Gypsum 30% Non-fibrous (Other)	None Detected
6C 031816377-0009	SE WINDOW 2ND FLOOR - NEW WING SHEETROCK AND SPACKLE	Gray/White Non-Fibrous Homogeneous	5% Cellulose	45% Ca Carbonate 30% Gypsum 20% Non-fibrous (Other)	None Detected
6D 031816377-0010	SE WINDOW 2ND FLOOR - NEW WING SHEETROCK AND SPACKLE	White Non-Fibrous Homogeneous		67% Ca Carbonate 33% Non-fibrous (Other)	None Detected

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Initial report from: 06/29/2018 13:24:30



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EMSL Order: 031816377
Customer ID: ATC62
Customer PO: 11-81-0030
Project ID:

Attention: Michael Matilainen ATC Group Services LLC 73 William Franks Drive West Springfield, MA 01089	Phone: (413) 781-0070 Fax: (413) 781-3734 Received Date: 06/29/2018 11:43 AM Analysis Date: 06/29/2018 Collected Date: 06/28/2018
Project: 183MM18006/ LONGMEADOW STORRS LIBRARY/ 693 LONGMEADOW ST, LONGMEADOW, MA	

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
6E 031816377-0011	SE WINDOW 1ST FLOOR - NEW WING SHEETROCK AND SPACKLE	White Non-Fibrous Homogeneous		67% Ca Carbonate 33% Non-fibrous (Other)	None Detected

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EMSL Order: 031816377
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Attention: Michael Matilainen
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Received Date: 06/29/2018 11:43 AM
Analysis Date: 06/29/2018
Collected Date: 06/28/2018
Project: 183MM18006/ LONGMEADOW STORRS LIBRARY/ 693 LONGMEADOW ST, LONGMEADOW, MA

The samples in this report were submitted to EMSL for analysis by Asbestos Analysis of Bulk materials via EPA/600 (0513) Method using Polarized Light Microscopy. The reference number for these samples is the EMSL Order ID above. Please use this reference number when calling about these samples.

Report Comments:

Sample Receipt Date: 06/29/2018 Sample Receipt Time: 11:43 AM
Analysis Completed Date: 06/29/2018 Analysis Completed Time: 1:15 PM

Analyst(s):

Johnny Calixto PLM (7)

Kamel Alawawda PLM (4)

Samples Reviewed and approved by:

James Hall, Laboratory Manager
or other approved signatory

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Initial report from: 06/29/2018 13:24:30



ENVIRONMENTAL • GEOTECHNICAL
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Asbestos Bulk Sample Chain-of-Custody

73 William Franks Drive
West Springfield, MA, 01089
Tel: 413-781-0070
Fax: 413-781-3734

031816377

Project Name: Longmeadow Storrs Library

Project Address: 693 Longmeadow St. Longmeadow, MA

Project Number: 183 MM18006

Project Manager: Matilainen

Sampled By: Michael Matilainen

Date: 6/23/18 Results To: Matilainen

Analysis Type: PLM

Turnaround Time: 3 Hour Positive Stop: Yes

Special Instructions or Comments:

Field ID	Sample Description	Location	Homogeneous Material
5A	Old Wing Plaster and Skim Coat	SW Window 2nd Floor	1
5B		SW Window 2nd Floor	1
5C		NEW Window 2nd Floor	1
5D		NEW Window 2nd Floor	1
5E		SW Window 2nd Floor	1
5F		S Window 1st Floor	1
6A	New Wing Sheet Rock and Spackle	SW Window 2nd Floor	1
6B		NW Window 2nd Floor	1
6C		SE Window 2nd Floor	1
6D		SE Window 2nd Floor	1
6E		SE Window 1st Floor	1

EMSL MANHATTAN LAB
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JUN 29 11:49

Relinquished By: [Signature]

Date: 6/29/18 11:43 AM

Relinquished By: [Signature]

Date: 6/29/18

REVISED PLANS:

(End – Addendum No. 1)