efi global

BOSTON NORTH

June 11, 2024

Rick Underwood
Director of Operations & Maintenance
Lowell Public Schools
155 Merrimack Street, 4th Floor
Lowell, Massachusetts 01852

via email: runderwood@lowell.k12.ma.us

RE: AHERA 3-Year Reinspection
Laura Lee Therapeutic Day School
235 Powell Street
Lowell, Massachusetts
EFI Project No. 014.07795

Dear Rick:

EFI Global Inc. (EFI) is pleased to present this AHERA 3-Year Reinspection Report prepared for the Laura Lee Therapeutic Day School located at 235 Powell Street, Lowell, Massachusetts (Site). The reinspection site visit was conducted on April 18, 2024, and the corresponding report was completed in accordance with the United States Environmental Protection Agency (USEPA) Asbestos Hazard Emergency Response Act (AHERA) regulations (40 CFR 763) and Massachusetts Department of Labor Standards "Requirements for Schools Subject to AHERA" regulations (454 CMR 28.13).

EFI relied upon previous 3-Year Inspection and Management Plan Update report from 2014 prepared by Cardo ATC, and 2017 and 2020 reinspection's prepared by EFI Global Inc. The original AHERA Management Plan and other subsequent records were not made available at the school or at the administrative office for review. EFI relied upon the 2020 table of identified ACM along with visual assessment and bulk sampling of new materials for this reinspection. The school's Management Plan and records should be located and kept on file at the school and the administrative offices.

EFI is pleased to provide environmental consulting services to Lowell Public Schools. This report should be kept on file with the school's AHERA records. If you have any questions regarding the contents of this report, or need additional information, please contact either of the undersigned at (800) 659-1202. Thank you for the opportunity to serve your environmental needs.

Sincerely,
EFI Global, Inc.

Michael McCarter
Senior Project Manager
MA Asbestos Inspector # AI 001825

John Vaz
Senior Project Manager
MA Asbestos Management Planner #AP 900524

AHERA 3-YEAR REINSPECTION

FOR:

LAURA LEE THERAPEUTIC DAY SCHOOL
235 POWELL STEET
LOWELL, MASSACHUSETTS

PREPARED BY:

efi global
BOSTON NORTH

155 WEST STREET, SUITE 6
WILMINGTON, MASSACHUSETTS 01887

EFI PROJECT NUMBER 014.07795

June 11, 2024

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INTRODUCTION

EFI Global, Inc. (EFI) was retained by Lowell Public Schools to perform a 3-Year AHERA Reinspection in accordance with United States Environmental Protection (USEPA) Asbestos Hazard Emergency Response Act (AHERA) asbestos regulations (40 CFR 763) and Massachusetts Department of Labor Standards "Requirements for Schools Subject to AHERA" regulations (454 CMR 28.13). These regulations, commonly known as the "Asbestos in Schools Rule," require under 40 CFR 763.80 and 454 CMR 28.13(2)(b)(1) that local education agencies (LEAs) must conduct a reinspection at least once every three years of all friable and nonfriable known or assumed asbestos-containing materials (ACMs). The reinspection includes all previously known and assumed ACMs, as well as any additional suspect ACM not previously included, as required by 40 CFR 763.80 and 454 CMR 28.13 in each school building leased, owned, or otherwise used as a school building. A school building is defined in 454 CMR 28.02 as including each of the following:

- Any structure suitable for use as a classroom, including a school facility such as a library, school eating facility, or facility used in the preparation of food
- Any gymnasium or other facility which is specially designed for athletic or recreational activities for an academic course in physical education
- Any other facility used for the instruction or housing of students or for the administration of educational or research programs
- Any maintenance, storage, or utility facility, including any hallway, essential to the operation of any facility described as a school building above
- Any portico or covered exterior hallway or walkway
- Any exterior portion of a mechanical system used to condition interior space.

EFI conducted a 3-year AHERA reinspection at the Laura Lee Therapeutic Day School, which involved determining the condition and hazard potential of previously known and assumed ACMs, and additional confirmed and assumed ACMs observed during the 2024 reinspection. The 3-year reinspection was conducted on April 18, 2024, by Michael McCarter, an EPA accredited and Massachusetts Department of Labor Standards (MADLS) licensed Asbestos Inspector, (license number AI-001825). EFI relied upon the 2020 3-year reinspection table of identified ACM along with visual assessment and bulk sampling of new materials for this reinspection. The original AHERA Management Plan and other subsequent records were not made available at the school or at the administrative offices for review. The recommended response actions were prepared by MADLS-licensed Asbestos Management Planner John Vaz (AP-900524).

A summary of known and assumed ACM within the Laura Lee Therapeutic Day School is presented in the AHERA Summary Table in **Attachment A**. Site Plans showing buildings and locations referenced in this report are presented in **Attachment B.**

The Designated Person for the Lowell Public Schools is Rick Underwood. Rick's contact information is:

Rick Underwood
Director of Operations & Maintenance
Lowell Public Schools
155 Merrimack Street, 4th Floor
Lowell, Massachusetts 01852
978-674-4328
runderwood@lowell.k12.ma.us

AHERA 3-YEAR REINSPECTION

A. AHERA Records Review

As part of this 3-year reinspection, EFI reviewed available AHERA records for the school, in accordance with the AHERA regulation and 454 CMR 28.13(5)(f). A summary of records reviewed is provided in the table below.

Review of AHERA Documentation Laura Lee Therapeutic Day School 235 Powell Street, Lowell, Massachusetts		
Document/Record	**Present?**	**Comment**
Asbestos Management Plan (on hand at school and available for review)	No	No records available at the school or administrative offices for review. The Cardo ATC 2014 3-Year Reinspection and Updated Management Plan is posted on the school's web site. EFI also relied upon in-house records from the 2017 and 2020 reinspection's.
Designated Person (Rick Underwood) Training Records	No	No records available at the school or administrative offices for review. Designated Person should receive formal designated person training or review the Designated Person Self Study Guide (available at https://www.epa.gov/sites/default/files/2015-01/documents/dp_study_guide_0.pdf).
Custodial Personnel 2-hour Awareness Training Records	No	No records available at the school or administrative offices for review.
Annual Parental Notification Records	No	No records available at the school or administrative offices for review. Annual notification letters should be sent or posted on the school's web site, and copies kept on file with the AHERA records.
Abatement/Response Action Records (includes abatement, special cleaning activities & small-scale short duration (SSSD) activities and associated monitoring reports and work plans)	No	No records available at the school or administrative offices for review.
Designated Person True and Correct Statement	No	No records available at the school or administrative offices for review.
6-month Surveillance Inspection Records	No	No records available at the school or administrative offices for review.
Previous 3-Year Reinspection Records	No	No records available at the school or administrative offices for review.
Asbestos Labels present (required in routine maintenance areas)	No	No labels observed. Labels should be placed immediately adjacent to ACM present in routine maintenance areas (i.e., boiler rooms, utility closets, etc.)

B. ACM Application Types

ACMs are divided into the following application types:

Thermal system insulation (TSI): Insulation applied to mechanical, heating, and cooling systems such as pipes, boilers, flue breechings, ducts, tanks and fittings.

Surfacing Materials: Material that is spray-applied or trowel-applied to walls, ceilings or structural components (i.e., plasters, acoustical finishes and fireproofing).

Miscellaneous Materials: All other asbestos materials, including but not limited to floor tiles and mastic, ceiling tiles, vinyl cove base and mastic, gypsum board and joint compound, and asbestos-cement board, etc.

C. ACM Assessment Criteria

The assessment is divided into two categories - the physical assessment and the hazard potential assessment.

Physical Assessment

The physical assessment is divided into the following seven categories and describes the material condition at the time of the inspection:

Physical Condition #1 - Damaged or significantly damaged thermal system ACM.
Physical Condition #2 - Damaged friable surfacing ACM.
Physical Condition #3 - Significantly damaged friable surfacing ACM.
Physical Condition #4 - Damaged or significantly damaged miscellaneous ACM.
Physical Condition #5 - ACM with potential for damage.
Physical Condition #6 - ACM with potential for significant damage.
Physical Condition #7 - Any remaining friable ACM or friable suspected ACM.

Hazard Assessment

The hazard assessment is a combination of the physical assessment combined with the potential for disturbance (i.e., physical contact, vibration air movement) as follows:

Hazard Rank #1 – Good condition/Low potential for disturbance
Hazard Rank #2 – Good condition/ Moderate potential for disturbance
Hazard Rank #3 – Good condition/ High potential for disturbance
Hazard Rank #4 – Damaged condition/Low potential for disturbance
Hazard Rank #5 – Damaged condition/Moderate potential for disturbance
Hazard Rank #6 – Damaged condition/High potential for disturbance
Hazard Rank #7 – Significantly damaged condition

The following is the Assessment Criteria used during the inspection:

1. Homogeneous Areas (An area of surfacing material, thermal system insulation material, or miscellaneous material that is uniform in size, color and texture and was applied at approximately the same time) were quantified by location and assessed by condition. Materials are listed as friable or non-friable. Note: friable materials are materials that can be crushed and pulverized to dust by hand pressure. A general condition description for suspect materials used in this inspection is as follows:

    a. Damaged Surfacing ACM: That material which has deterioration, delamination, water damage, lacks cohesion, is blistered, crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over more than 1% but less than 10 % of the total surface area if the damage is evenly distributed or less than 25%, if the damage is localized in one area of the homogeneous area.

    b. Significantly Damaged ACM: That material which has deterioration, delamination, water damage, lacks cohesion, is blistered, crumbling, gouged, marred heavily, abraded, or in any way has lost its structural integrity over at least 10% of the surface area if the damage is evenly distributed or at least 25% if the damaged is localized.

    c. Good Condition ACM: ACM with no visible damage or deterioration in less than one percent of the material and/or coverings.

    d. ACM with potential for damage: Pertains to circumstances in which:

        i. Friable ACM is in an area regularly used by building occupants, including maintenance workers, currently in intact (good) condition.

        ii. There are indications that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated or delaminated due to factors such as vibration, air erosion, water damage, changes in building use, changes in O&M practices, changes in occupancy or recurrent damage.

Note: All ACM in good condition is still considered to have a potential for damage, and in certain instances, has the potential for significant damage.

    e. ACM with potential for significant damage: Pertains to circumstances in which:

        i. Friable ACM is in an area regularly used by building occupants, including maintenance personnel.

        ii. Indications show that there is a reasonable likelihood that the material or its covering will become damaged, deteriorated, or delaminated due to factors such as vibration, air erosion, water damage, changes in building use, changes in O&M practices, changes in occupancy or re-occurring damage.

        iii. The material is subject to major or continuing disturbance, due to factors including, but not limited to, accessibility or under certain circumstances, vibration or air erosion.

D. Response Actions – General Recommendations

Specific response actions for each known and assumed ACM located at the Laura Lee Therapeutic Day School are in **Attachment A**. The following are general recommendations for response actions associated with managing ACMs at the school.

1. Damaged materials in the school should be repaired, if feasible, or removed to maintain compliance with the AHERA regulation. Damaged ACMs of any quantity listed in the report should be repaired or removed by a Massachusetts licensed Asbestos Contractor following all applicable regulations, in accordance with a work plan design, and final clearance air testing performed in accordance with the AHERA regulations. It is the policy of the Lowell Public Schools to use licensed Asbestos Contractors for all response action work.

2. The AHERA regulation states that the response actions chosen for other than small scale/short duration repairs (less than 3 square or linear feet), must be designed and conducted by persons accredited to design and conduct response actions. MADLS Regulation 454 CMR 28.00 requires the services of licensed Project Designers who meet the requirements set forth in 454 CMR 28.00, as well as Massachusetts licensed Asbestos Contractors.

3. Damaged ACMs that involve small scale/short duration repairs can only be conducted by 16-hour asbestos-trained personnel or by a licensed Asbestos Contractor. EFI understands that small scale/ short duration projects will not be performed by in house personnel, and that all work will be conducted by an outside licensed Asbestos Contractor.

4. Each known and assumed ACM should be monitored for any changes in condition during the six-month periodic surveillance, or more frequently.

5. If known or suspect ACMs are to be impacted by planned renovation or demolition activities, the ACM must be removed by a Massachusetts licensed Asbestos Contractor. Note that AHERA inspections do not meet the EPA NESHAP and Commonwealth of Massachusetts Department of Environmental Protection (MADEP) requirements for a comprehensive pre-renovation or demolition survey. Prior to any planned renovation or demolition project, all renovation/demolition areas must be thoroughly surveyed to meet the requirements of EPA NESHAP and MADEP 310 CMR 7.15(4) Survey Requirements. LEA Designated Persons should make sure that pre-renovation/demolition surveys are performed in each instance that ACM may be disturbed.

E. AHERA Licensing & Training Documentation

The AHERA 3-year Reinspection report for the Laura Lee Therapeutic Day School was performed by the following individuals who have received appropriate training and who are MADLS licensed personnel:

Michael McCarter
Senior Project Manager
MA Asbestos Inspector # AI 001825

John Vaz
Senior Project Manager
MA Asbestos Management Planner #AP 900524

F. Asbestos Bulk Sampling

Asbestos bulk sampling of suspect ACM was performed for various suspect ACMs not previously identified as ACM in portions of the building included in the AHERA program. The bulk sampling was performed by USEPA-accredited, and MADLS licensed Asbestos Inspector Michael McCarter. A total of 60 bulk samples of suspect ACMs were collected and transported under chain of custody protocol to EMSL Analytical, Inc., of Woburn, Massachusetts, a Massachusetts-licensed laboratory. EMSL is accredited by the National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos fiber analysis, which is administered by the National Institute of Standards and Testing (NIST).

Samples were analyzed with a standard 3-day turnaround time using polarized light microscopy (PLM) in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116. The PLM/DS analytical method is modeled after 40 CFR Part 763, Subpart F, Attachment A: "Interim Method for the Determination of Asbestos in Bulk Insulation Samples." MADEP asbestos regulations define an ACM as any material containing greater than or equal to one percent asbestos. The findings of this report are based upon observations of accessible materials and the analysis of representative bulk samples collected. **Attachment C** contains site plans indicating locations of samples collected and analyzed as part of this reinspection. A copy of the asbestos laboratory reports is presented in **Attachment D**.

Bulk samples representing individual homogenous areas of suspect ACM, (materials that are determined to be uniform in color and texture and installed in the same construction period) were collected in a randomly distributed manner, in accordance with the EPA sampling protocol outlined in 40 CFR 763.

The following suspect ACMs sampled by EFI during the 2024 reinspection were reported by EMSL as containing no detectable concentration of asbestos:

Summary of Non-ACMs per 2024 3-Year Reinspection

Material Description	Location(s) Sampled
Plaster ceiling on wire mesh	Basement - Hall at North Side, Basement – Hall at West Area, Basement – Center, Basement – Hall at West Side, Basement – Girls Room
Gray HVAC duct sealant	Basement – North Hall Area, Basement – Center
Fiberboard wall panels	Basement - West Hall Area
HVAC duct flange gasket	Basement - Center
HVAC flex connector	Basement - Center
Horsehair plaster base coat on wood lath	1st Floor – Hall at North Stair, 1st Floor – Main Entrance, 1st Floor – South Stair, 1st Floor – Classroom 32nd Floor Office, 2nd Floor Classroom 4, Attic
Horsehair plaster finish coat	1st Floor – Hall at North Stair, 1st Floor – Main Entrance, 1st Floor – South Stair, 1st Floor – Classroom 3, 2nd Floor-Office, 2nd Floor-Classroom 4, Attic
2’ x 4’ fissured ceiling tile	1st Floor – Restroom, 2nd Floor - Office
Vinyl cove base adhesive	1st Floor - Restroom
12” x 12” white floor tile	1st Floor - Restroom
12” x 12” white floor tile mastic, yellow	1st Floor - Restroom

Material Description	Location(s) Sampled
Gypsum board	1st Floor – Restroom, 2nd Floor - Teachers Room
Joint compound	1st Floor – Restroom, 2nd Floor - Teachers Room
Tan sheet flooring	1st Floor – Principals Office
Tan sheet flooring mastic, yellow	1st Floor – Principals Office
Carpet adhesive on wood, yellow	1st Floor – Classroom 2
Stainless steel sink undercoating	1st Floor – Hall, 2nd Floor - Hall
Exterior door frame caulk, black	Exterior – Front, Exterior – Left Side
Exterior window frame caulk, black	Exterior – Front, Exterior – Left Side

G. ACM Hazard Assessment & Recommended Response Actions

Accessible locations were inspected and assessed to determine the presence and condition of known and assumed ACM. A Summary Table of known and assumed ACMs present at the school, the physical assessments and the recommended response action for each ACM, is presented in **Attachment A.** It should be noted that EFI did not conduct destructive evaluations of the school building to identify suspect ACM. Per USEPA NESHAP and MADEP asbestos regulations, a thorough "path of construction" survey should be conducted prior to any renovation or repair activities that may impact suspect ACM, regardless of the date of installation.

H. Cost Estimate and Schedule for Recommended Response Actions

The confirmed and assumed ACMs outlined in the summary table in **Attachment A** that were in good condition at the time of the reinspection must be maintained in place in accordance with the Operations and Maintenance Plan. Estimated costs associated with managing known and assumed ACMs at the school are summarized below.

Cost Estimate of AHERA Considerations Laura Lee Therapeutic Day School 235 Powell Street, Lowell, Massachusetts	
Training Costs	
Item	**Approximate Cost**
2-hour asbestos awareness training (New Hires, within 60 days of hire)	$500/person
Designated Person Training	$250
Maintenance Costs	
Item	**Approximate Cost**
Asbestos labeling (Place/maintain labels adjacent to ACM in routine maintenance areas)	$500
6-month surveillance inspections (Per schedule below)	$500/event
3-year reinspection (Per schedule below)	$2,000
Response Action Costs	
Item	**Approximate Cost**
No Recommended Response Actions	-

A proposed schedule of events between this 3-Year reinspection and the 2027 3-Year reinspection is provided for your use:

Schedule of AHERA-Related Actions Laura Lee Therapeutic Day School 235 Powell Street, Lowell, Massachusetts	
Event	**Completion Date**
Annual Parental Notification Letter	September 1, 2024
6 Month Surveillance Inspection	October 18, 2024
6 Month Surveillance Inspection	April 18, 2025
Annual Parental Notification Letter	September 1, 2025
6 Month Surveillance Inspection	October 18, 2025
6 Month Surveillance Inspection	April 18, 2026
Annual Parental Notification Letter	September 1, 2026
6 Month Surveillance Inspection	October 18, 2026
3 Year Reinspection	April 18, 2027

ATTACHMENT A

AHERA SUMMARY TABLE

AHERA 3 Year Re-Inspection Summary Table
Laura Lee Therapeutic Day School
Summary Table of Identified and Assumed Asbestos-Containing Building Materials
235 Powell Street, Lowell, MA
Date of Inspection: 4/18/2024

Material Description	Location	Quantity	Friability (F/NF)	Sample Results	Assessment Category	Condition	Response Actions/ Notes	Recommended Completion Date
Gray Duct Sealant	Boiler Room	30 LF	NF	Positive per Management Plan records. No bulk sampling data available for review. Sampled in 2024. No asbestos detected	-	-		
Exterior asbestos cement shingles (material added per 2024 inspection)	Exterior	7,000 SF	NF	15% Chrysotile	5	Good condition overall with minor cracking. Shingles are intact.	Manage in place in accordance with the Asbestos O&M Program	

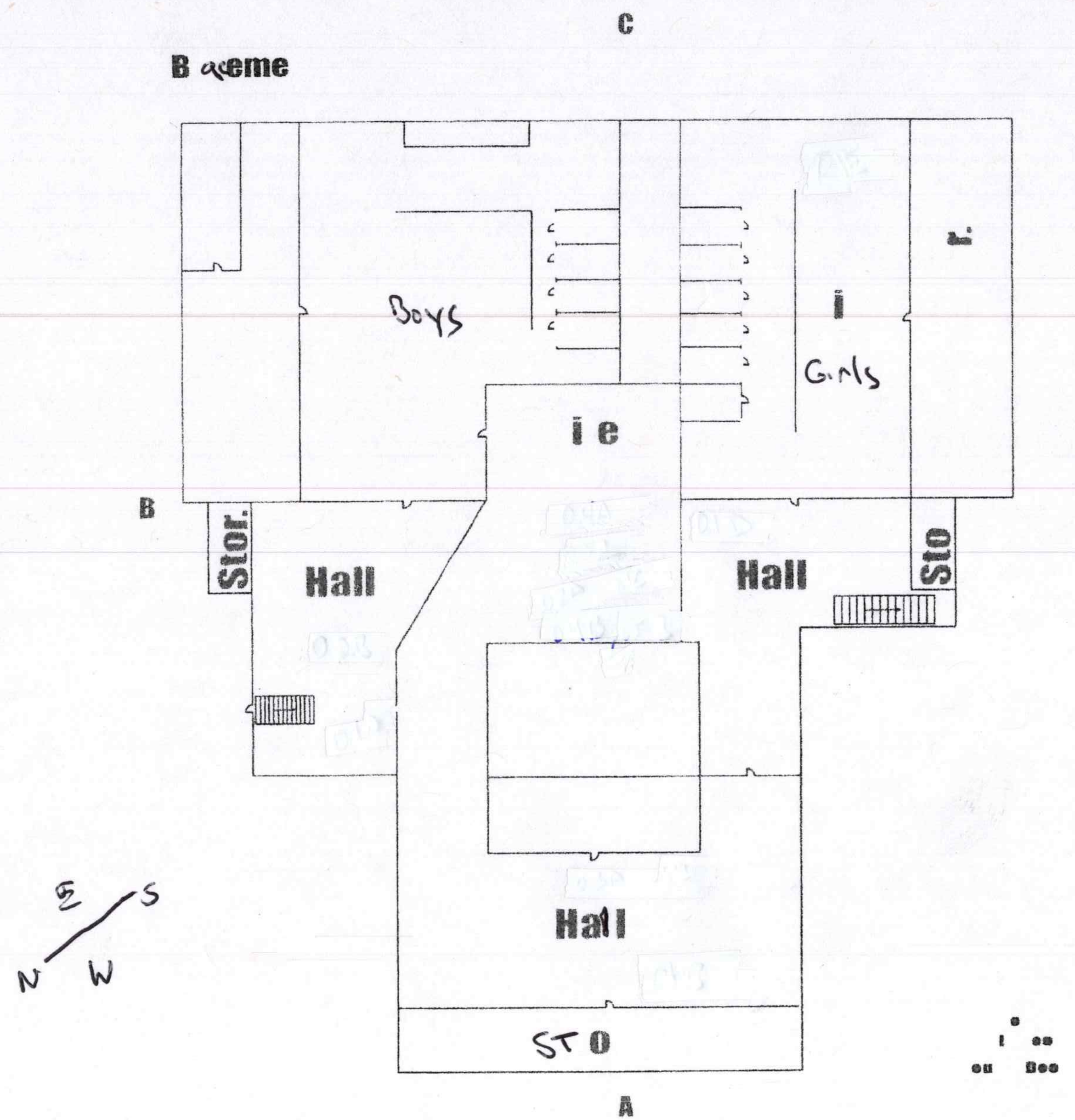
LF = Linear Feet

SF = Square Feet

Physical Assessment Category
1 – Damaged or Significantly Damaged Thermal System ACM
2 – Damaged Friable Surfacing ACM
3 – Significantly Damaged Surfacing ACM
4 – Damaged or Significantly Damaged Friable Miscellaneous ACM
5 – ACM with Potential for Damage
6 – ACM with Potential for Significant Damage
7 – Any Remaining friable ACM or friable suspect ACM

ATTACHMENT B

SITE PLANS



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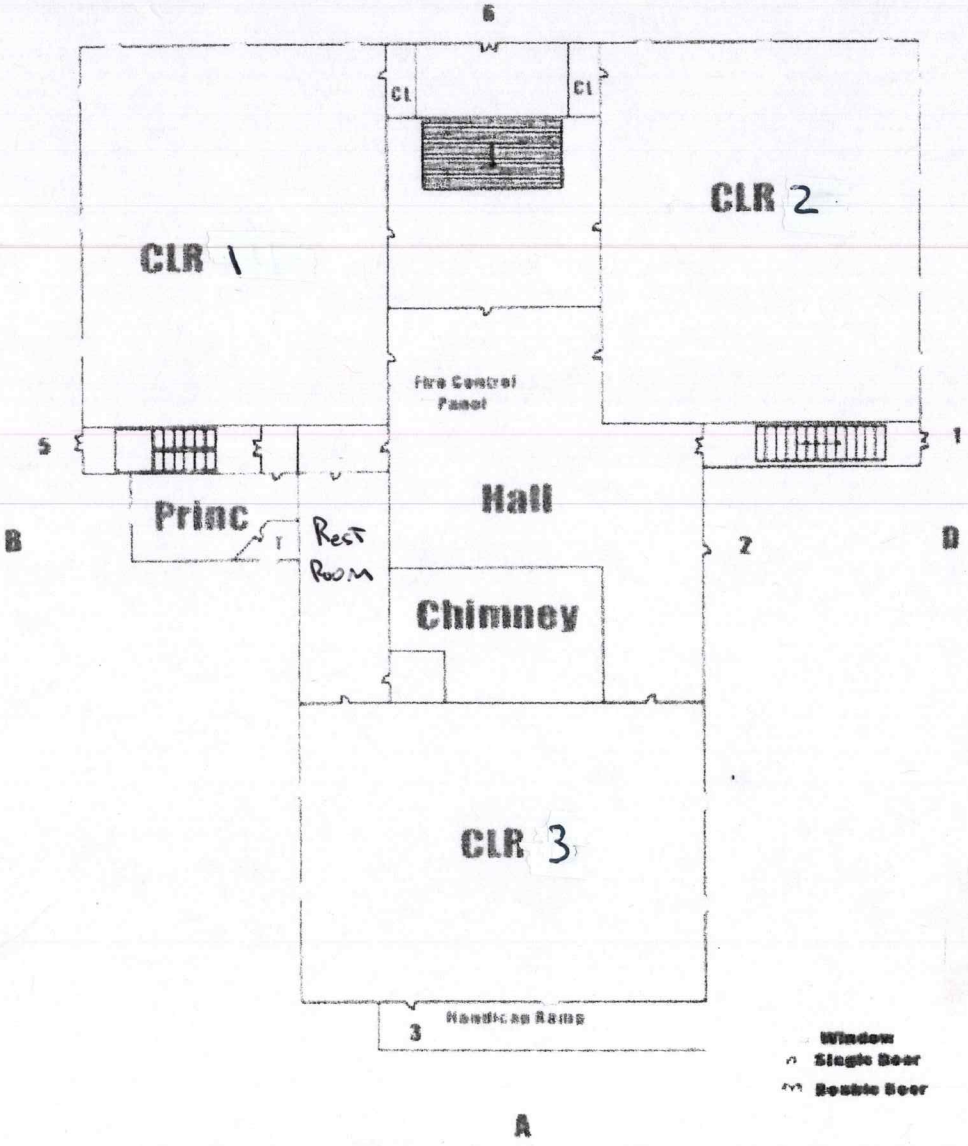
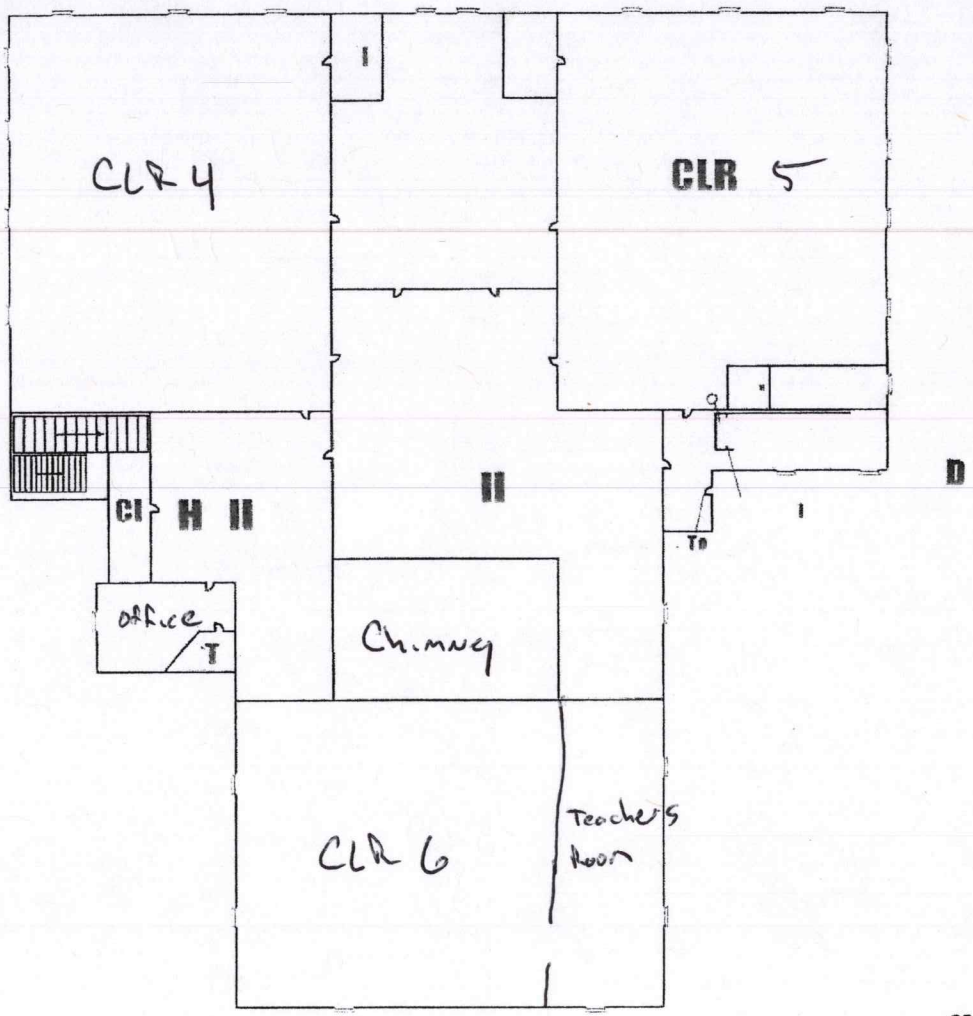
Lowell Alternative School (Laura Lee)

First Floor



Second Floor



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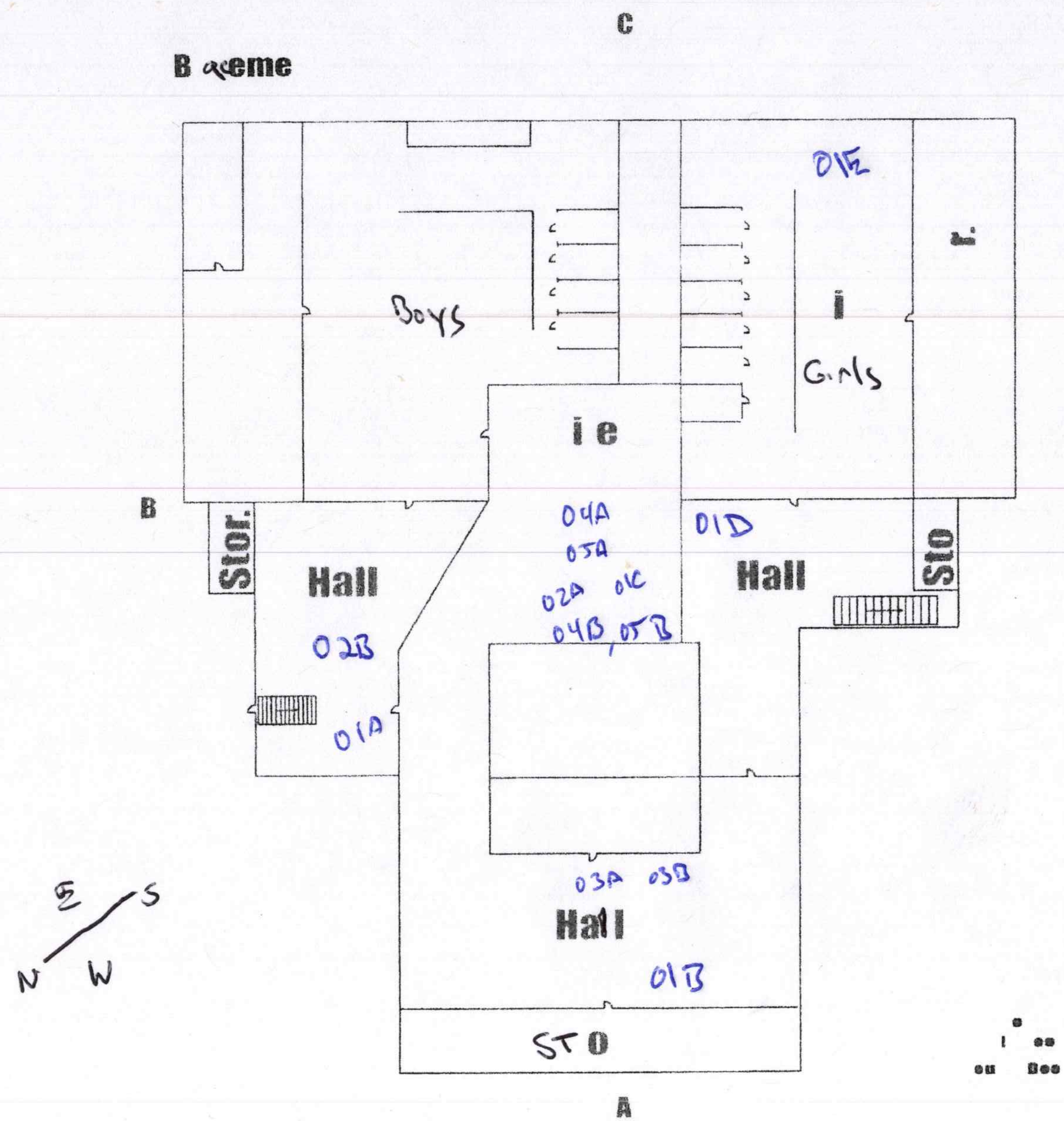
ATTACHMENT C

2024 REINSPECTION ASBESTOS BULK SAMPLE LOCATION PLANS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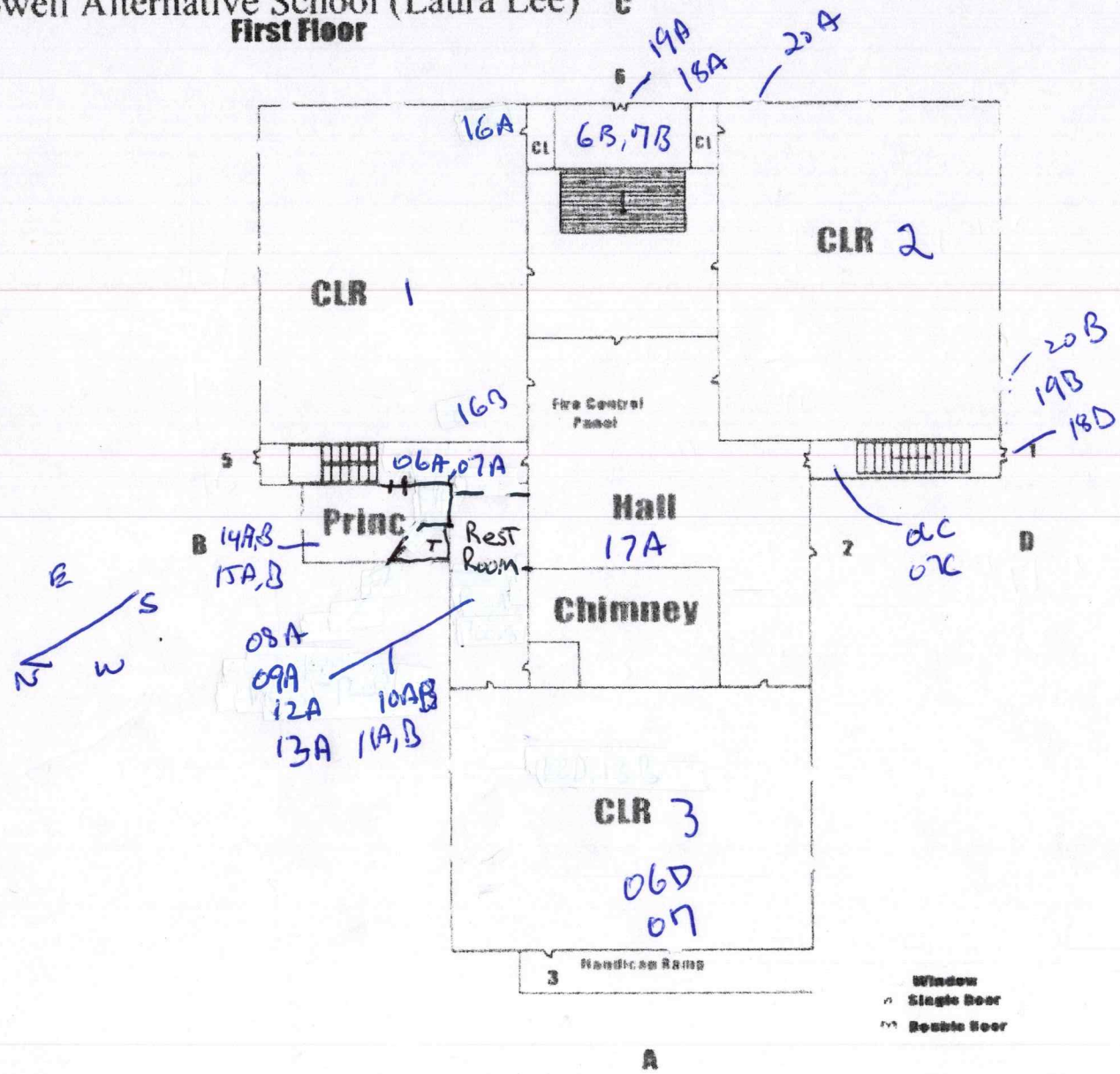
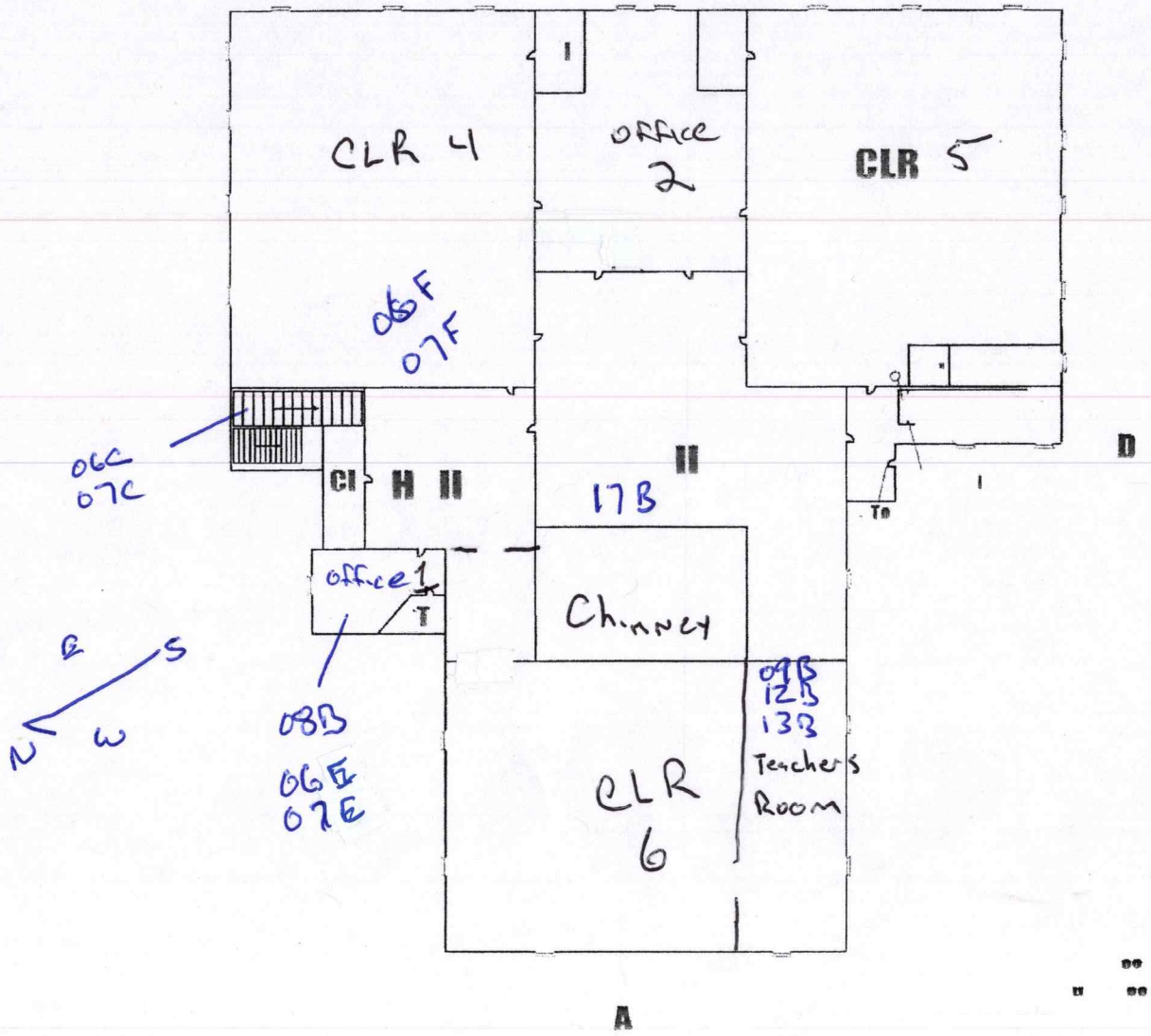
Lowell Alternative School (Laura Lee)

First Floor



Second Floor



Attic

ATTACHMENT D

2024 REINSPECTION ASBESTOS BULK SAMPLE REPORTS

EMSL Analytical, Inc.

5 Constitution Way, Unit A Woburn, MA 01801

Tel/Fax: (781) 933-8411 / (781) 933-8412

http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132402253
Customer ID:	EAFI66
Customer PO:	
Project ID:	

Attention:	Michael McCarter	**Phone:**	(978) 688-3736
	EFI Global, Inc.	**Fax:**	(978) 688-5494
	155 West Street	**Received Date:**	04/18/2024 11:25 AM
	Suite 6	**Analysis Date:**	04/25/2024
	Wilmington, MA 01887	**Collected Date:**	04/18/2024
Project:	014.07795 - Laura Lee Theraputic School		

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
01A *132402253-0001*	Basement - Hall North Side - Plaster Ceiling on Wire Mesh	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
01B *132402253-0002*	Basement - West Hall Area - Plaster Ceiling on Wire Mesh	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
01C *132402253-0003*	Basement - Center - Plaster Ceiling on Wire Mesh	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
01D *132402253-0004*	Basement - South Hall Area - Plaster Ceiling on Wire Mesh	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
01E *132402253-0005*	Basement - Girls Room - Plaster Ceiling on Wire Mesh	White Fibrous Homogeneous	2% Hair	98% Non-fibrous (Other)	None Detected
02A *132402253-0006*	Basement - North Hall Area - Gray HVAC Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
02B *132402253-0007*	Basement - Center - Gray HVAC Duct Sealant	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
03A *132402253-0008*	Basement - West Hall Area - Fiberboard Wall Panels	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
03B *132402253-0009*	Basement - West Hall Area - Fiberboard Wall Panels	Tan Fibrous Homogeneous	95% Cellulose	5% Non-fibrous (Other)	None Detected
04A *132402253-0010*	Basement - Center - HVAC Duct Flange Gasket	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
04B *132402253-0011*	Basement - Center - HVAC Duct Flange Gasket	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
05A *132402253-0012*	Basement - Center - HVAC Flex Connector	White Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
05B *132402253-0013*	Basement - Center - HVAC Flex Connector	White Fibrous Homogeneous	10% Glass	90% Non-fibrous (Other)	None Detected
06A *132402253-0014*	1st Floor - Hall at North Stair - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
06B *132402253-0015*	1st Floor - Main Entrance - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 14:29:28

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132402253
Customer ID: EAFI66
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
06C *132402253-0016*	1st Floor - South Stair - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
06D *132402253-0017*	1st Floor - Classroom 3 - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
06E *132402253-0018*	2nd Floor - Office - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
06F *132402253-0019*	2nd Floor - Classroom 4 - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
06G *132402253-0020*	Attic - Attic - Horse Hair Plaster Base Coat on Wood Lathe	White Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
07A *132402253-0021*	1st Floor - Hall at North Stair - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07B *132402253-0022*	1st Floor - Main Entrance - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07C *132402253-0023*	1st Floor - South Stair - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07D *132402253-0024*	1st Floor - Classroom 3 - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07E *132402253-0025*	2nd Floor - Office - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07F *132402253-0026*	2nd Floor - Classroom 4 - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
07G *132402253-0027*	Attic - Attic - Horse Hair Plaster Finish Coat on Wood Lathe	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
08A *132402253-0028*	1st Floor - Restroom - 2x4 Fissured CG Tile	Gray Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
08B *132402253-0029*	2nd Floor - Office - 2x4 Fissured CG Tile	Gray Fibrous Homogeneous	50% Cellulose 30% Min. Wool	20% Non-fibrous (Other)	None Detected
09A *132402253-0030*	1st Floor - Restroom - Vinyl Cove Base Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
09B *132402253-0031*	2nd Floor - Teachers Room - Vinyl Cove Base Adhesive	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 14:29:28

EMSL Analytical, Inc.
5 Constitution Way, Unit A Woburn, MA 01801
Tel/Fax: (781) 933-8411 / (781) 933-8412
http://www.EMSL.com / bostonlab@emsl.com

EMSL Order: 132402253
Customer ID: EAFI66
Customer PO:
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
10A *132402253-0032*	1st Floor - Restroom - 12x12 White Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10B *132402253-0033*	1st Floor - Restroom - 12x12 White Floor Tile	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11A *132402253-0034*	1st Floor - Restroom - 12x12 White Floor Tile - Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B *132402253-0035*	1st Floor - Restroom - 12x12 White Floor Tile - Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A *132402253-0036*	1st Floor - Restroom - Gypsum Board	Tan/White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
12B *132402253-0037*	2nd Floor - Teachers Room - Gypsum Board	Tan/White Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
13A *132402253-0038*	1st Floor - Restroom - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B *132402253-0039*	2nd Floor - Teachers Room - Joint Compound	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A *132402253-0040*	1st Floor - Principal - Tan Sheet Flooring	Brown/White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
14B *132402253-0041*	1st Floor - Principal - Tan Sheet Flooring	Brown/White Fibrous Homogeneous	40% Cellulose	60% Non-fibrous (Other)	None Detected
15A *132402253-0042*	1st Floor - Principal - Tan Sheet Flooring, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B *132402253-0043*	1st Floor - Principal - Tan Sheet Flooring, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A *132402253-0044*	1st Floor - Classroom 1 - Carpet Adhesive on Wood, Yellow	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B *132402253-0045*	1st Floor - Classroom 1 - Carpet Adhesive on Wood, Yellow	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17A *132402253-0046*	1st Floor - Hall - Stainless Steel Sink Undercoating	Gray Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
17B *132402253-0047*	2nd Floor - Hall - Stainless Steel Sink Undercoating	Gray Non-Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
18A *132402253-0048*	Exterior - Front - Exterior Cement Shingles	Gray Fibrous Homogeneous		85% Non-fibrous (Other)	**15% Chrysotile**
18B *132402253-0049*	Exterior - Left Side - Exterior Cement Shingles				**Positive Stop (Not Analyzed)**
19A *132402253-0050*	Exterior - Front - Exterior Door Frame Caulk, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 04/25/2024 14:29:28

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http://www.EMSL.com / bostonlab@emsl.com

EMSL Order:	132402253
Customer ID:	EAFI66
Customer PO:	
Project ID:	

Test Report: Asbestos Analysis of Bulk Materials via AHERA Method 40CFR 763 Subpart E Appendix E supplemented with EPA 600/R-93/116 using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
19B *132402253-0051*	Exterior - Left Side - Exterior Door Frame Caulk, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20A *132402253-0052*	Exterior - Front - Exterior Window Frame Caulk, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
20B *132402253-0053*	Exterior - Left Side - Exterior Window Frame Caulk, Black	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s)
Kevin Pine (52)

Steve Grise, Laboratory Manager
or Other Approved Signatory

Initial report from: 04/25/2024 14:29:28

OrderID: 132402253

132402253

efi global

BOSTON NORTH
155 West Street | Suite 6 | Wilmington, MA 01887 | PHONE 978.688.3736 | FAX 978.688.5494 | FREE 800.659.1202

BULK SAMPLE CHAIN OF CUSTODY FORM

Report to (Inspector Name):	Michael McCarter	**Bill To:**	Accounts Payable
Company:	EFI Global, Inc.	**Address:**	Same
Address:	155 West Street	**City, State, Zip:**	Same
	Suite 6	**Telephone:**	800-659-1202
City, State, Zip:	Wilmington, MA 01887	**Email:**	US-EFIGlobal-BostonEnviroPC@efiglobal.com
Inspector Cell:	978-604-7662		
Project Information			
Project No./ Description:	014.07795 Laura Lee Therapeutic School		
Email Report to:	Michael.mccarter@efiglobal.com;		
Alternate:			
Requested Turnaround Time:			
☐ RUSH (6hr)	☐ 1 day (24hr)	☐ 2 day (48hr)	☐ 3 day (72hr)	☒ 5 day
Media and Methodology			
Type of Analysis:	EPA Method 600/R-93/116	**Check for Positive Stop:**	X
Notes:		**Date Collected:**	4-18-24

Sample ID	Type of Material	Location
01A	Plaster Ceiling on Wire Mesh	Basement - Hall North side
01B	↓	- West Hall Area
01C		- Center
01D		- South Hall Area
01E	↓	- Girls Room
02A	Gray Hush Duct Sealant	Basement - North Hall Area
02B	↓	↓ - Center
03A	Fiber Board wall panels	Basement - West Hall Area
03B	↓	↓ - ↓

Total Number of Samples Submitted: 53

Samplers Name: Michael McCarter Samplers Signature [signature]

Relinquished By (Client): [signature] Date: 4-18-24 Time:

Received By (Lab): [signature] Date: 4/18/24 Time:

REC'D EMSL-BOSTON APR 18 2024

OrderID: 132402253

132402253

efi global

BOSTON NORTH
155 West Street | Suite 6 | Wilmington, MA 01887 | PHONE 978.688.3736 | FAX 978.688.5494 | FREE 800.659.1202

Sample ID	Type of Material	Location
04A	HVAC Duct flange gasket	Basement - Center
04B	↓	-
04C	Hose duct connector	-
04D	↓	-
06A	Horse Hair Plaster Base coat on wood lath	1st floor - Hall @ North Stair
06B	↓	- Main Entrance
06C		- South Stair
06D		- Class Room 3
06E		2nd floor - office
06F		- Class Room 4
06G		Attic - Attic
07A	Horsehair plaster finish coat on wood lath	1st floor - Hall @ North Stair
07B	↓	- Main Entrance
07C		- South Stair
07D		- Class Room 3
07E		2nd floor - office
07F		- Class Room 4
07G	↓	Attic - Attic
08A	2x4 fissured ceiling tile	1st floor - Rest Room
08B	↓	2nd floor - office
09A	Vinyl cove base adhesive	1st floor - Rest Room
09B	↓	2nd floor - Teacher's Room
10A	12x12 white floor tile -	1st floor - Rest Room
10B	↓ -	-
10C	- mastic	-
10D	- ↓	-

Project Number/Description 04.07795
Lauren Lee Bergeron

Page 2 of 3

REC'D EMSL-BOSTON APR 18 2024

OrderID: 132402253

132402253

efi global

BOSTON NORTH
155 West Street | Suite 6 | Wilmington, MA 01887 | PHONE 978.688.3736 | FAX 978.688.5494 | FREE 800.659.1202

Sample ID	Type of Material	Location
12A	Gypsum Board	1st floor - Restroom
12B	↓	2nd floor - Teachers Room
13A	Joint Compound	1st floor - Restroom
13B	↓	2nd floor - Teachers Room
14A	TAN Sheet flooring	1st floor - Principal
14B	↓	-
15A	, MASTIC, Yellow	-
15B	↓	- ↓
16A	Carpet Adhesive on wood, Yellow	1st floor - Classroom 1
16B	↓	↓ - ↓
17A	Stainless steel sink undercoating,	1st floor Hall
17B	↓	2nd floor - Hall
18A	Exterior Cement shingles	Exterior - Front
18B		↓ - left side
19A	Exterior Door Frame caulk, Black	- front
19B	↓	- left side
20A	Exterior windows frame caulk, Black	- front
20B	↓	↓ - left side

Project Number/Description 044.07795
Laura Lee Therapeutic

Page 3 of 3

REC'D EMSL-BOSTON APR 18 2024

ATTACHMENT E

LICENSES AND TRAINING CERTIFICATES OF ASBESTOS INSPECTOR & MANAGEMENT PLANNER

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Michael Flanagan
Director

ASBESTOS INSPECTOR

MICHAEL MCCARTER

Eff.Date: 09/11/2023
Exp.Date: 09/10/2024
AI001825

Member C.O.N.E.S.

24

This is to certify that

Michael L McCarter

7 Millstone Road, Windham, NH 03087

MA DLS Asbestos Inspector License# AI001825

has completed requisite training by Video Conference, and has passed an examination for reaccreditation as:

Asbestos Inspector Refresher

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

Course Location

Zoom Video Conference

Institute for Environmental Education 16 Upton Drive Wilmington, MA 01887

April 21, 2023
Course Dates

23-4804-106-219102
Certificate Number

April 21, 2023
Examination Date

April 21, 2024
Expiration Date

Training Director

16 Upton Drive, Wilmington, MA 01887 Telephone 978.658.5272 www.ieetrains.com

INSTITUTE FOR ENVIRONMENTAL EDUCATION

THE COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT
DEPARTMENT OF LABOR STANDARDS

Michael Flanagan
Director

ASBESTOS MANAGEMENT PLANNER

john vaz
Eff.Date: 05/03/2024
Exp.Date: 05/03/2025
AP900524

Member C.O.N.E.S.

25

This is to certify that

John A. Vaz

14 Johnson Terrace, Rockland, MA 02370

has completed the requisite training, and has passed an examination for accreditation as:

Asbestos Management Planner

pursuant to Title II of the Toxic Substance Control Act, 15 U.S.C. 2646

Course Location
Institute for Environmental Education
16 Upton Drive Wilmington, MA 01887

March 14-15, 2024
Course Dates

March 15, 2024
Examination Date

24-5258-103-233848
Certificate Number

March 15, 2025
Expiration Date

Training Director