

Town of West Newbury

Request for Qualifications (RFQ) RFQ# 2023-WN-001

Architectural/Engineering Consultant Services for a Conditions Assessment for:

Dr. John C. Page Elementary School

694 Main Street West Newbury, MA 01985

Submission Due Date: 11am on Friday, May 19, 2023

Mandatory RFQ Briefing and On-Site Tour: 3:45pm on Tuesday, April 25, 2023

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Dr. John C. Page Elementary School Conditions Assessment RFQ General Information

The Study

The Town of West Newbury seeks to engage a multidisciplinary consulting firm or team to perform a Conditions Assessment Study at the Page School located at 694 Main Street in the Town of West Newbury, MA 01985, as defined in the Scope of Work in Section 5 as attached hereto.

The purpose of this study is to evaluate the existing facility conditions and to disseminate these findings to the residents of the Town to assist in determining the future of the facility. The Conditions Assessment will consist of the evaluation of the existing facility infrastructure, determination of future needs to meet building code requirements, and review of the facility's suitability for existing and future educational programming needs.

From this information, the study will inform Town of two potential options for the future. These options are:

- 1. Renovate the existing school
- 2. Initiate a public process to consider financing and building a new school

Authority

The Town of West Newbury Select Board is the Awarding Authority. The Scope of Work was prepared by a Page School Feasibility Study Working Group, in consultation with the Select Board. The Select Board has authorized the Chief Procurement Officer (CPO) to conduct the selection process as outlined in the Commonwealth of Massachusetts, Designer Selection Law, M.G.L. c. 7C §§ 44-58 and the West Newbury Designer Selection Procedures.

As delegated by the Awarding Authority, the CPO will collaborate with selected Town staff, Pentucket Regional School District (PRSD) administrators, a Select Board member, and a resident who will be members of the Page School Conditions Assessment Advisory Group. This Advisory Group will offer guidance and support regarding the selection of the Consultant that best meets the criteria in the Designer Selection Procedures in order to complete the Scope of Work specified in this RFQ.

Scope of Work

Provide architectural/engineering consultant services for a Condition Assessment Study for the Page School as described in this RFO and the detailed Scope of Work in Section 5 as attached hereto.

Study Fee

To be negotiated with chosen consultant with not-to-exceed amount of \$85,000.

Estimated Time Limit for Completion

Time is of the essence; however, quality and accuracy is of utmost importance to the success of this study. As a result, the final completed Conditions Assessment submission date shall be no later than <u>December 31, 2023.</u> The Conditions Assessment schedule shall be outlined by the Consultant in the RFQ presentation and may be modified with mutual written agreement between the Consultant and the Town. In no instance shall the contract be extended past March 1, 2024.

Request for Qualifications (RFQ) Document

The RFQ is available at no charge at <u>9am on Friday, April 7, 2023</u> by e-mail request at <u>DPWProjects@WNewbury.org</u>. A hardcopy is also available and can be requested by a consultant for pick-up inperson at the DPW Project Manager Office, located in Town Offices, Second Floor, 381 Main Street, West Newbury, MA 01985. To schedule a pick-up day and time, e-mail or call at 978-363-1100 x130.

Dr. John C. Page Elementary School Conditions Assessment RFQ General Information

Mandatory Study Briefing Conference and School Tour

All interested Consultant Firms/Teams who wish to be considered MUST be represented at a mandatory presubmission conference and school tour prior to RFQ proposal submission. This will be held at the Page School at 3:45pm on Tuesday, April 25, 2023. Failure of a representative from the Consultant Firm/Team to attend this conference will forfeit RFQ submission eligibility.

RFQ Submissions

Deadline / Due Date for hardcopy bounded packet submission:

No later than 11am on Friday, May 19, 2023

Ten (10) hardcopy packets and five (5) flash drives with the electronic files shall be submitted and be clearly marked:

"Page School Conditions Assessment RFQ"

and delivered during regular business hours to: Town of West Newbury Town Clerk Office, First Floor 381 Main Street West Newbury, MA 01985

Introduction

The Town of West Newbury (known as the "Town"), through its Select Board, is seeking qualifications from qualified registered architects (known as the "Consultant"), to provide professional architectural/engineering services for a Conditions Assessment of the Dr. John C. Page Elementary School, located at 694 Main Street, West Newbury, MA 01985.

The purpose of this Conditions Assessment is to evaluate the existing facility conditions and to disseminate these findings to the residents of the Town to assist in determining the future of the facility. This study, which shall follow the Scope of Work in Section 5 attached hereto, will consist of the evaluation of the existing facility infrastructure, determination of future needs to meet building code requirements, and review of the facility's suitability for existing and future educational programming needs.

Many costly capital improvement projects associated with the facility may be scheduled in the future which may trigger code compliance improvements on unrelated infrastructure. These trigger projects must be evaluated by the community making decisions regarding future capital projects. This information will be used to estimate and understand overall project costs associated with continued capital investments in the facility.

The Condition Assessment information will be used to prioritize two options listed below as most advantageous to least advantageous. These options are:

- 1. Renovate the existing school building
- 2. Initiate a public process to consider financing and building a new school

Background

Voters at the May 2022 Annual Town Meeting appropriated \$85,000 for a Feasibility Study/Conditions Assessment at the Page School. A previous assessment study was performed in 2009 but many changes have taken place over the past 14 years, including upgrades to the building and a major interior flood in 2018 (resulting from a burst pipe in the fire suppression/sprinkler system). The building has a long list of capital needs which is updated annually based on collaborative efforts between the Town and the Pentucket Regional School District. The Town owns the building and is responsible for the funding of capital improvements, and the Pentucket Regional School District leases and maintains the building.

Built as an orphanage and school in 1926, the Page School is located on 129 acres of Town-owned land and comprises a basement and three stories spanning approximately 90,200 square feet. The elementary school current student enrollment is 319 with a faculty of 61 teachers and staff. This masonry structure has seen many additions over the years, including a major addition in 1973, 1986 and finally again in 2013. These additions and other larger and smaller capital improvements were supported by the community in hopes to keep the school operating in a manner that maintained the growing needs of the school's programming, building and safety code requirements.

The school building is also connected to another structure which is leased by the Town to a privately-operated daycare, named the Children's Castle. <u>This structure shall also be included within this Conditions</u>
<u>Assessment study.</u>

Conditions Assessment Goals

The goal of the study is to document the current and future capital needs of the Page School facility by contracting with a Consultant with the expertise to perform the work in the Scope of Work in Section 5 attached hereto, and from their findings provide an independent architectural and engineering assessment of the existing building and overall site. The Consultant will identify deficiencies and prepare estimated costs to address these under different scenarios.

RFQ Instructions

Request for Qualifications (RFQ) Document

The RFQ is available at no charge at <u>9am on Friday, April 7, 2023</u> by e-mail request at <u>DPWProjects@WNewbury.org</u>. A hardcopy is also available and can be requested by a consultant for pick-up inperson at the DPW Project Manager's Office, located in Town Offices, Second Floor, 381 Main Street, West Newbury, MA 01985. To schedule a pick-up day and time, e-mail or call at 978-363-1100 x130.

Mandatory Pre-Submission Conference

All interested Consultant Firms/Teams who wish to be considered MUST be represented at a mandatory presubmission conference and school tour prior to the RFQ proposal submission. This <u>Mandatory Study Briefing</u> <u>Conference and School Tour</u> will be held <u>at 3:45pm on Tuesday, April 25, 2023</u> on site at the Page School located at 694 Main Street, West Newbury, MA 01985. This briefing and school tour should take no longer than two hours. Failure of a representative from the Consultant Firm/Team to attend this conference will forfeit RFQ submission eligibility.

Questions

Questions pertaining to the RFQ submission process must be requested by e-mail only. All inquiries shall be sent to DPWProjects@WNewbury.org and shall be received no later than 4pm on Friday May 12, 2023. Questions and responses received will be forwarded to all Consultants who received the RFQ.

RFQ Responses Due Date

Hardcopy and electronic files of RFQ responses shall be submitted to the Town of West Newbury, Town Clerk Office no later than 11am on Friday May 19, 2023.

Submission Requirements

Contents of RFO Submittal

To be considered for this Conditions Assessment, all consultants shall include and submit the following information with their RFQ submission packet:

- 1. Consultant / Firm Introduction: Give brief background of the firm, including history, size and staffing structure.
- 2. Project Team Introduction: List key staff who will be assigned and working on the study. Highlight the project manager and any other important staff that will be communicating with the Town, conducting and reviewing the study data collection, study preparation and final presentation.
- 3. Subcontractor Introduction: List and detail any subcontractors that may be utilized for this study, including firm name, discipline, and name of employee or employees. Include resumes that show experience similar to this study.
- 4. Consultant / Firm References: List previous Feasibility/Condition Assessment study experience similar to this study. Give project title, address, scope, contract value and completion date. Supply contact

reference information, including name, title, phone number and e-mail address. At least three references shall be furnished, but additional references are encouraged.

- 5. Describe Overall Approach: How will the consultant approach the project in an outlined manner that will address the specifics stated in the Scope of Work? A sample layout of the study structure should be included.
- 6. Schedule: Supply draft schedule of the study in chart or list form.
- 7. Designer Selection Form: Must complete and submit the Standard Designer Application Form for Municipalities and Public Agencies Not Within DSB jurisdiction. Form can be downloaded at: https://www.mass.gov/service-details/designer-selection-procedures-for-municipalities-and-public-agencies.
- 8. Financial Statement: A certified statement to support the Consultant/Firm's financial stability.
- 9. Insurance: Demonstrate ability to provide professional liability insurance of \$1,000,000.

Submittal Deadline and Required Copies

Ten (10) RFQ hardcopy bounded packets and five (5) flash drives with the electronic files <u>no later than 11am on Friday, May 19, 2023.</u> The submitted packet shall be clearly marked; "Page School Conditions Assessment RFQ" and delivered during regular business hours to: Town of West Newbury, Town Clerk Office, First Floor, 381 Main Street, West Newbury, MA 01985.

If for any unforeseen circumstances the Town Offices are closed on the submission date and time, the receipt of submission will be postponed to the next normal business day at the time posted in the RFQ.

Modifications

An applicant may correct or modify a submission by written notice received by the Town prior to the receipt deadline. Modifications must be submitted in a sealed envelope clearly labeled "Page School Conditions Assessment RFQ – Modifications." The Consultant's name and address shall also be written on the envelope delivered to: Town Clerk Office, First Floor, 381 Main Street, West Newbury, MA 01985.

After the receipt deadline, an applicant may not change any provision of the submission. Minor informalities may be waived and/or the applicant may be allowed to correct them. If there is a mistake and the intent is clearly evident on the face of the document, the mistake will be corrected to reflect the intended correct submission, and the applicant will be notified in writing by the Town; the applicant may not withdraw the submission. An applicant may withdraw a submission if a mistake is clearly evident on the face of the document, but the intended correct submission is not similarly evident.

Submission may be withdrawn prior to the time of receipt of submissions (due date), only on a written request by e-mail to the Town. This e-mail shall be sent to DPWProjects@WNewbury.org. No applicant shall withdraw a submission within a period of thirty (30) days after the date set for the receipt of submission.

All submissions, response inquires or correspondence relating to or in reference to this RFQ, and all reports, charts, displays, schedules, exhibits and other documents submitted by applicants shall become the property of the Town when received.

Selection Procedures

The Town of West Newbury Select Board has authorized the Chief Procurement Officer (CPO) of the Town to conduct the selection process with input from an Advisory Group comprised of Town staff, Pentucket Regional School District (PRSD) administrators, a Select Board member and a resident of the Town. The CPO will collaborate with the Advisory Group to rank all submitted RFQ applicants and from this ranking, select at least three (3) most qualified finalists (if possible) to interview and present their RFQ to the Advisory Group on a Zoom platform. This interview will allow the Consultant the opportunity to present their proposal to the Advisory Group in greater detail where both parties can ask and receive questions and convey additional information.

Once these final interviews commence, the Advisory Group will collaborate with the CPO and rank the finalists as first choice, second choice and third choice, if applicable. The CPO, as authorized by the Town of West Newbury's Select Board, will negotiate a fee with the first ranked Consultant and once agreed upon, will present to the Select Board for their review.

If, however, the Town and the first choice Consultant are unable to negotiate a satisfactory fee, negotiations shall be terminated by the CPO and undertaken with the remaining designers, one at a time, in the order in which they were ranked by the Advisory Group until agreement is reached. In no event shall this fee be higher than the not-to-exceed amount of \$85.000.

The Select Board will review the CPO's recommendation for Consultant and fee and if approved, a standard Town contract will be prepared by the Town with the chosen Consultant. Upon acceptance by both parties, a Notice to Proceed will follow within 15 days of agreement.

This study is subject to The Commonwealth of Massachusetts, Designer Selection Law, M.G.L. c. 7C §§ 44-58 and as a result, the Town will adhere in all means feasible to the Town's Designer Selection Procedures, most recently amended by the Select Board on November 12, 2019.

The Town reserves the right to select the Consultant it determines is most qualified based on the information submitted, to waive any formality, and to choose the Consultant determined in its sole discretion to be able to perform in the best interest of the Town.

The Town reserves the right to terminate this RFQ process (prior to the execution of the contract award) at any time if it has been determined by the Town that the best interest of the Town is not fully met.

Step 1. Submitted RFQ Rankings

The CPO and the Advisory Group will rank all submitted responses to the RFQ based on the information provided by the Consultant. The following criteria will be used to assist with the ranking:

- 1. Prior similar experience;
- 2. Past performance on public school assessment studies;
- 3. Knowledge of cost estimating and budgeting;
- 4. Financial stability of the company and capacity to perform the work in a timely manner;
- 5. Qualifications of individuals (including sub-contractors) on the project team; and
- 6. Overall quality of proposal.

Once the submitted responses are reviewed and qualifications are confirmed, the Advisory Group will collaborate with the CPO to choose at least three (3) finalists (or such lesser number as may be available) that will be invited to present their proposals. A point ranking system will be used to determine the rankings. The CPO and the Advisory Group will independently review and rank each proposal in accordance with the point system below:

1.	Prior Similar Experience	10 points maximum
2.	Past Performance	10 points maximum
3.	Cost Estimating and Budgeting	10 points maximum
4.	Financial Stability	10 points maximum
5.	Qualifications	10 points maximum
6.	Overall Quality of Proposal	10 points maximum

The maximum number of points shall be no greater than 60 points. The top ranked Consultants will be requested by the Town to present their RFQ on a Zoom platform.

Step 2a. Consultant Interviews / Presentations

The Town shall schedule interviews / presentations for the top ranked consultants within 21 days after the submission due date. The interviews / presentations shall take place within 21 days of notification and shall be no longer than 50 minutes in duration. A Zoom link will be sent by the Town to the Consultants prior to the interviews / presentations.

The interviews / presentations will be conducted by the CPO and the Advisory Group and will rank each in accordance with the point system below:

1.	Past Experience	10 points maximum
2.	Demonstrated Knowledge of Project Scope	10 points maximum
3.	Project Approach	20 points maximum
4.	Project Manager Qualifications and Experience	10 points maximum
5.	Overall Team Members Qualifications and Experience*	10 points maximum

^{*} Sub-contractors will also be included in this category.

Step 2b. Post Interviews / Presentations Reference Inquires

Once the interview has been completed, the CPO or designee may contact and conduct three reference inquiries from the list supplied by the Consultant and rank each in accordance with the point system below:

1.	Favorable Experience (add up to 5 points for each reference)	15 points maximum
2.	Negative Experience (deduct up to 10 points for each reference)	-30 points maximum

The maximum number of points for both step 2a and 2b shall not be greater than 75 points.

Award of Contract

Once the evaluation of Step 2b has been completed, the CPO will review the calculations from both Steps 2a and 2b and the Consultants will be ranked as first choice, second choice and third choice. The CPO will then contact the first choice Consultant and commence the negotiation of a scope and fee.

The fee will be a fixed project fee. **Fee structure value shall not exceed \$85,000.** The Town and the Consultant shall also agree upon a payment schedule based on a task completion percentage matrix. If an overall project fee is not agreed upon by the CPO and the Consultant, the Town will notify the Consultant about the failure of agreement and immediately commence negotiation with the second choice Consultant and so on until a final Consultant is chosen by the Town.

Once an initial fee agreement is made by the CPO and the Consultant, the CPO will make such recommendation to the Awarding Authority (Town of West Newbury Select Board) for their review and vote. The Select Board will review the CPO recommendation and vote to support the recommendation, seek additional information, or deny the recommendation.

Upon approval from the Select Board to enter into such agreement, a standard Town of West Newbury contract will be prepared for the Consultant's review and approval. Failure of the Consultant to agree upon the contract language within 21 days of receipt will void the Consultant RFQ submittal and initial fee agreement.

RFQ/Study Schedule

The following is the estimated schedule for the RFQ and the Conditions Assessment:

April 7, 2023	RFQ available at 9am
April 25, 2023	Mandatory on-site briefing and tour at 3:45pm
May 12, 2023	Last day for questions by 4pm
May 19, 2023	RFQ submissions due by 11am
Late May 2023	CPO and Advisory Group review and rank RFQ proposals
Early June 2023	Top three finalist interviews scheduled
June 2023	Finalist interviews and contract negotiations with chosen Consultant
June 2023	Select Board review and approval of recommended Consultant
Late June 2023	Execute contract and award notice to proceed

Complete Final Conditions Assessment presented at Select Board Meeting

Late December 2023

Scope of Work

PROJECT OBJECTIVE

The purpose of this Conditions Assessment is:

- To provide an independent architectural and engineering assessment of the Page School building and site
- Identify problems or defects, drawing both from the Consultant's tours/observations, but also from prior reports, studies and documentation provided by the Town
- Estimate costs to fix the deficiencies under different scenarios

METHODOLOGY

This scope of work includes the following tasks. Each task is further described in this scope including subtasks and deliverables.

- Task 1: Data Collection
- Task 2: Public Meeting Project Kickoff
- Task 3: Existing Conditions Assessment and Recommended Repairs
- Task 4: Opinions of Probable Cost
- Task 5: Conclusions
- Task 6: Public Meeting Project Results
- Task 7: Conditions Assessment Report
- Task 8: Educational Adequacy Assessment (Optional)

Information Available for this Study will Consist of:

- Review of the Page School Facilities Assessment dated Feb. 12, 2009 by Dore & Whittier Architects, and other relevant studies, reports, construction plans, correspondence, and records as available from the Town.
- A walk-through survey of the property with property management personnel to visually observe the material systems and components for the purpose of identifying physical deficiencies to the extent that they are observable or already documented.
- Feedback from Town staff, Pentucket Regional School District (PRSD) administrators and staff, West Newbury residents, and other stakeholders through regular communication, meetings, and public forums.

This Study Does not Include:

- Testing or invasive testing of the building or any system
- Testing of Exterior Lintels (this will be evaluated separately)
- Preparation of architectural or engineering plans

This Study May Include:

• Educational, Programmatic, or Space Needs Assessment. This may be performed separately by PRSD and Town staff, or it may be included with this Scope of Work as an optional Task. See Task 8 for further information.

SCOPE MODIFICATIONS

The Consultant may provide suggestions or minor changes to the scope, provided the project objectives are still met and the total fee does not exceed \$85,000. Once the project is awarded and negotiations with the Town are complete, the Consultant will prepare a final Scope of Work for review by the Town to be included in the contract documents.

TASK 1: DATA COLLECTION

1.1 Walk-Through Survey of the School with Property Management

The Consultant will perform a walk-through survey of the property with the Pentucket Facilities Director, the Town staff, and other property management personnel to visually observe and take photos of the systems and components for the purpose of identifying physical deficiencies to the extent that they are observable. This is a separate visit from the initial pre-bid conference and tour.

1.2 Review of Available Documentation

The Consultant will review available documentation to assist in understanding the subject project and identifying physical deficiencies of the building and site. <u>The goal for performing this Conditions</u>

<u>Assessment is not to start from scratch but rather build on previous assessments</u>. Of particular interest is the review of the February 2009 Page School Facilities Assessment and available documentation of renovations, repairs, maintenance, evaluations, and testing since that time.

The amount of documentation available for review is substantial. The Town has already spent time compiling a spreadsheet inventory of paper and electronic records going back to original construction. The Consultant will work with the DPW Project Manager to determine which documents noted in the inventory are relevant to review for the purpose of the Conditions Assessment. The types of documents available may include but are not limited to:

- Facilities Assessment Study of the Page School prepared by Dore & Whittier Architects, February 12, 2009 available on the West Newbury town website project page at:
 https://www.wnewbury.org/sites/g/files/vyhlif1436/f/pages/facilities_assessment_study_page_school-final_2-12-09.pdf
- Page School Records Inventory Spreadsheet
- Historical documents
- Construction drawings and specifications from renovations and additions
- Maintenance and repair documentation
- Site plans and septic plans
- Hazardous materials testing, inspections and reports
- Meeting notes from previous working groups
- Any other relevant studies, reports, design documents, specifications, construction plans, inspections, evaluations, correspondence, maintenance records, or similar documentation as available from the Town.

1.3 Feedback from Town Staff, School Staff, the Public, and Key Stakeholders

The Consultant will use feedback (verbal or written) from Town staff, PRSD staff, key stakeholders, and the public from project meetings and other correspondence as necessary to provide additional data and answer questions.

Task 1 Deliverables:

- Attendance at Walk-Through Survey
- Memorandum with a preliminary list of data sources to be used for the Study
- One (1) remote project meeting with Town staff to review data collection status
- Project meeting notes

TASK 2: PUBLIC MEETING - PROJECT KICKOFF

The first public meeting will be held in West Newbury after initial data collection to present project goals, tasks, and a projected timeline for the project. This task includes a presentation and a facilitated public meeting to receive feedback from residents.

Task 2 Deliverables:

- One (1) remote project meeting with Town staff to plan for public meeting
- Project meeting notes
- Attendance at an evening public meeting
- Presentation slides and other pertinent meeting handouts
- Meeting notes of the Public Meeting

TASK 3: EXISTING CONDITIONS ASSESSMENT AND RECOMMENDED REPAIRS

This task consists of evaluating the conditions of existing components and systems of the property and identifying deficiencies. Prepare a list of recommended repairs, with general scopes, to address present observed and documented physical deficiencies. The recommend repairs are for components or systems exhibiting patent or significant deferred maintenance requiring major repairs or replacement. Repairs or replacements that could be classified as cosmetic, decorative, part or parcel of a building renovation program, normal preventative maintenance, or that are the responsibility of tenants, are not included. This task includes, but is not limited to, assessment of the following:

3.1 Building Envelope

- Structural Analysis
- Architectural Analysis
- Roof Analysis
- Exterior Walls
- Windows
- Exterior Entrances and Doors
- Thermal Insulation

3.2 Building Interiors

- Floors
- Walls
- Ceilings
- Interior Doors and Exitways
- Other Interior Elements
- Vertical Transportation

3.3 Mechanical

- Domestic Hot Water Generation
- Cold Water Services
- Piping for Plumbing Systems
- Plumbing Fixtures
- Heat Generation
- Cooling System

- Piping for HVAC
- Temperature Controls
- Ventilation

3.4 Electrical

- Main Services and Distribution
- Emergency Power and Lighting
- Fire Protection
- Lighting Systems
- Telephone and Communications
- Technology Infrastructure
- Fire Alarm and Life Safety
- Security
- Emergency Communications

3.5 Site

- Drainage
- Septic system
- Other Utilities
- Playground and Fields
- Parking
- Site Access, Traffic Safety, Signage
- Site Lighting
- Pedestrian Accommodations

3.6 Hazardous Materials

Using documentation of current testing, control practices, and history of abatement of hazardous materials in the building and on the site, the Consultant will provide an assessment of potential remediation based on the amount and type of building repairs being recommended. Remediation recommendations should consider waste removal and environmental protections under MGL 40 Section 54, MassDEP regulations 310 CMR 7.15, and Mass Department of Labor Standards regulations 454 CMR 28.

3.7 Accessibility

- Interior Accessibility
- Egress and Ingress, including sufficiency of emergency exits
- Parking and Entrance Approach
- Accessible features for Plumbing, Electrical, and other systems

3.8 Building Codes

The consultant will work with the Town's Inspectional Services Department to evaluate current compliance with the building code, energy code, ADA/MAAB, and other applicable codes. Based on the amount and type of repairs recommended, identify what thresholds may be crossed that would trigger other compliance requirements and what the cost implications may be.

Task 3 Deliverables:

- Memorandum with preliminary tables listing areas assessed, condition, and recommended repairs
- Up to three (3) remote project meetings with Town staff to review and discuss this task

• Project meeting notes

TASK 4: OPINIONS OF PROBABLE COSTS

4.1 Costs to Remedy Observed and Known Deficiencies

Using the list of recommended repairs from the Task 3, prepare cost estimates for each item and recommend a repair time frame using the following scenarios:

Priority 1: Necessary (0-3 years)

Expenditures that require action as a result of existing or potentially unsafe conditions, building code violations, poor or deteriorated condition of a critical element or system, or a condition that if left "as is" with an extensive delay in correction, would result in or contribute to critical element or system failure or would lead to significantly escalated repair costs.

Priority 2: Recommended (4-6 years)

Deficiencies that may not warrant immediate attention, but which require repairs or replacements that should be undertaken taking precedence over routine preventative maintenance. Deferred maintenance or deficiency resulting from improper design, installation and/or quality of material or systems. Repairs that fall into the category of an ongoing maintenance/replacement problem, components or systems that have realized or exceeded their expected useful life.

Priority 3: Recommended (7+ years)

Sensible improvements to existing conditions that are not required for the basic function of the facility, but would improve overall usability and reduce long-term maintenance costs.

Priority 4: Does Not Meet Current Codes for New Construction but "Grandfathered"

No action required at this time, however if a substantial renovation or substantial building addition is performed in the future, building codes may require corrective work in addition to the work planned.

4.2 Ancillary Costs to Keeping the Page School Operational

Identify broader, ancillary costs of keeping the Page School operational such as:

- future operation and maintenance costs
- climate-change requirements
- energy costs
- fire truck and other special equipment needs driven solely or primarily by Page School

Task 4 Deliverables:

- Memorandum with preliminary tables of estimated costs
- One (1) remote project meeting with Town staff to review and discuss this task
- Project meeting notes

TASK 5: CONCLUSIONS

Summarize the findings of the previous tasks, and provide recommendations for next steps the community should take in order to keep the building in service and either bring it into compliance, or work toward bringing it into compliance, with all applicable code requirements. This section of the report is intended to function as a capital improvements program for the Page School, documenting future capital

improvements, repairs and retrofits (with costs at/above \$20,000 – which is the cost threshold to be considered a "capital" project under the West Newbury Bylaws). This section should specify whether recommended improvements, repairs and retrofits are required (for either public safety or code compliance reasons), recommended, or optional, and should set out a recommended schedule for future improvements (0-3 years; 4-6 years; 7+ years).

Task 5 Deliverables:

- Memorandum summarizing recommended improvements, repairs and retrofits
- Stand-alone capital improvement program for Page School, identifying all recommended improvements, repairs and retrofits, and the opinions of probable cost prepared for Task 4. (The scope does not include identifying funding <u>sources</u> for these improvements, just estimated <u>costs</u>).
- One (1) in-person project meeting with Town staff to review and discuss this task
- Project meeting notes

TASK 6: PUBLIC MEETING - PROJECT RESULTS

The final public meeting in West Newbury will be held after completion of Task 1 to Task 5, and Task 8 if applicable. This meeting will include a presentation summarizing the project findings, recommendations, and next steps. The meeting will also provide opportunity for public questions and comments.

Task 6 Deliverables:

- One (1) remote project meeting with Town staff to plan for public meeting
- Project meeting notes
- In-person attendance at an evening public meeting
- Presentation slides and other pertinent meeting handouts
- Meeting notes of the Public Meeting

TASK 7: CONDITIONS ASSESSMENT REPORT

Prepare a complete Conditions Assessment Report documenting findings and final results of the previous tasks. This report will build on the preliminary memos produced, feedback from Town and PRSD staff and the public, and any other additional information obtained throughout the course of the project. The Report shall include the following, at a minimum:

- 1) EXECUTIVE SUMMARY
- 2) INTRODUCTION
 - a) Overview of the Building and Site
 - b) Purpose
 - c) Methodology
- 3) EXISTING CONDITIONS ASSESSMENT AND RECOMMENDED REPAIRS
 - a) Building Envelope
 - b) Building Interior
 - c) Mechanical
 - d) Electrical
 - e) Site
 - f) Hazardous Materials

- g) Accessibility
- h) Building Codes

4) OPINIONS OF PROBABLE COSTS

- a) Costs to Remedy Observed and Known Deficiencies
- b) Ancillary Costs

5) CONCLUSION

- a) Summary of Findings
- b) Recommended Next Steps
- c) Page School Capital Improvement Program

6) APPENDICES

- a) Relevant Prior Test Results, Drawings, Studies, or other Materials
- b) Additional photo documentation as needed

Task 7 Deliverables:

- Draft Conditions Assessment Report for Town staff to review and comment
- Final Conditions Assessment Report in hard-copy bound and electronic form

TASK 8: EDUCATIONAL ADEQUACY ASSESSMENT (OPTIONAL)

The Consultant may provide a simple assessment of how the Page School is equipped to deliver the current instructional curriculum. Using input from PRSD staff and data collected in previous tasks, compare aspects of the current facility to a set of recommended standards, such as PRSD guidelines or the Massachusetts School Building Authority (MSBA) standards. This **Add/Alternate** task option will be discussed with the Consultant prior to award of contract, and if beneficial to the study, and can be completed within the project budget without compromising the other study objectives, will be added to the contracted work scope.

Task 8 Deliverables:

- Meeting with PRSD staff
- Memorandum with table comparing existing facility features to a prescribed set of standards

Town of West Newbury RFQ# 2023-WN-001

Architectural/Engineering Consultant Services for a Conditions Assessment for:

Dr. John C. Page Elementary School 694 Main Street West Newbury, MA 01985

ADDENDUM #1

Question 1:

Based on our previous similar experience, the fee amount noted in the RFP seems low, does the town have additional funds that could be allocated to increase the fee amount?

Response:

Town Meeting allocated \$85,000 for this work. The Town is seeking to get the most value for the available budget. The Town would only consider pursuing allocation of additional funding if the approved budget proves insufficient to meet the Town's objectives for this work. If this were to take place, the Town would undertake a new procurement process at that time.

ADDENDUM #2

Question/Item 2:

Notes and questions from the 4/25/23 mandatory briefing and tour.

Response:

See Attachment A.

Question/Item 3:

Unanswered at the briefing: Can you provide current school enrollment information?

Response:

319 including Pre-K.

Question/Item 4:

Unanswered at the briefing: Can you provide a recent AHERA report or any past abatement documentation?

Response:

The most recent AHERA report for the Page School (as part of the PRSD report) is from 2018 and is included in Addenda Attachment B. The process to update the AHERA reports has been started. All PRSD school locations will be reviewed, and re-inspected when school gets out this June. The old High School and Middle School will be deleted, and the New 7-12 Middle and High Schools will be exempted. Page School information will basically stay the same, unless re-inspection shows otherwise. Recently, Massachusetts has changed the regulations on 3rd party inspections, the new reports will reflect those changes. Additional available abatement records will be provided to the chosen consultant as needed.

Question/Item 5:

Unanswered at the briefing: What is the assessed value of the building, not the site as a whole.

Response:

The current assessed value of the property and all buildings is \$13,712,600. The current insured amount for the Page School building, including the gymnasium and playground, is \$38,199,960.

Question/Item 6:

Does the school provide breakfast and lunch to all students? Is food cooked on site or brought in from another location?

Response:

The school provides breakfast and lunch free of charge this year. Food is prepared on-site.

Question/Item 7:

Additional information not provided at briefing: re insulation and lateral support.

Response:

The building has no insulation but rather an air space between the exterior brick and the interior walls. The building also does not have any lateral structural support.

Question/Item 8:

After the 2018 flood how long was the building closed for?

Response:

The school was closed from January-April.

Question/Item 9:

As photos were not available during the visit, can you share an egress plan of the building and/or any schematic plans as a reference?

Response:

Yes, see attachment C for schematics.

Question/Item 10:

Can you share the sign-in list from the site briefing?

Response:

Yes, see attachment D. Please note that the attendees are the ones who signed on the document. The original chart is a listing of who had previously picked up the RFQ.

Question/Item 11:

Can you share your schedule for issuing Addenda/answering questions?

Response:

This Addendum #2 covers notes and questions from the briefing and tour, and additional questions received via email since then. Last day for questions is Friday May 12. Since the RFQ submittal deadline of May 19 is approaching, the goal going forward is to get responses back within 2 business days of questions.

Question/Item 12:

Under "Submission Requirements" on pages 7-8 of the RFP, item number 7 is a completed DSB proposal. Is the expectation that there will be sections aligned with items 1-6 and 8-9, plus an additional completed DSB proposal in section 7? Or is the DSB format requested for the entire submission?

Response:

Item number 7 under Submission Requirements is referring to submission of the standard Form Only. This is a requirement per the Town's Designer Selection Procedures. The link in the RFQ may no longer be valid, but here is an updated link: <u>Standard Designer Application Form for Municipalities and Public Agencies Not Within DSB Jurisdiction.doc (live.com)</u>. The form is also attached for reference in Attachment E.

Addendum #2 - Attachment A

April 25, 2023 RFQ # 2023-WN-001

Architectural/Engineering Consultant Services for a Conditions Assessment Dr. John C. Page Elementary School Mandatory Briefing and On-Site Tour

Present: Christine Wallace, P.E., West Newbury DPW Project Manager Angus Jennings, West Newbury Town Manager Rick Parker, West Newbury Select Board Member Rebecca Ambra, West Newbury Executive Assistant Wayne Amaral, West Newbury DPW Director Phil Cullen, Page School Facilities

From the Sign-in Sheet:
Fenton Bradley, D21 Architects
Katie Ferrier, Arrowstreet
Dale Gienapp, Gienapp Architects
Sam Lawrence, NV5
Debra Polomarenko, Drummey Rosane Anderson

Briefing (Cafeteria 3:50pm)

Christine Wallace initiated the information session and introduced the West Newbury town employees present. Attendees were informed that May 12, 2023 was the deadline to submit questions concerning the site and the deadline for all proposals was May 19, 2023. Wallace stated no photographs would be allowed on the site at that time as student programming was taking place.

Wallace and Jennings stated the goal for reviewing existing documents is to build on what has already been documented and not start from scratch. The documentation has been inventoried and put into a spreadsheet by staff.

If the Consultant sees something in the scope they would do differently, the Town welcomes those suggestions in the proposal as long as the objective and not to exceed cost are met.

The Town is looking for a technical evaluation for what investments would be required if the town were to continue renovations and if those investments would trigger additional investments to comply with state code. It was stated the Town is looking for the highest value within the budget. Jennings stated 4.2 of the scope listed the Fire Department ladder truck but a replacement cost would not be necessary.

Q: Was the 2013 addition based on the Assessment Report?

A: Yes. Slides were presented to the votes with three options. \$10Mil option with the gym and café, \$20Mil option, and the option not to complete any renovation or addition.

Q: Is the maintenance handled by the school district?

A: The building is owned by the Town and leased for \$1yr to the school district. Capital Improvements are considered \$10,000 and above. The town is responsible for capital improvements over that amount.

Q: What are the enrollment numbers?

A: The enrollment number was not given at that time as the exact number was unknown. It was stated the enrollment for the Pentucket District had decreased by roughly 700 students over the last decade. The information would be provided to the attendees in writing.

Q: Are the additional buildings on site included?

A: No, the Page School and the Children's Castle daycare are the only buildings included in the scope.

TOUR Page School

Request to share the AHERA report to determine what asbestos is left in the building.

Q: What grade levels are taught at the school? How old is the building?

A: . Pre-k through 6. The building was built in 1927. The group was informed the kitchen of the school ran on a boiler, not gas, and had been converted to hot water in 2013. Town water was piped through the front of the building and the sprinkler system was run off the water tank on the site. The whole building is wired for sprinklers. The school contains 11 air handlers.

Q: Is the school on sewer or septic?

A: Septic that was revamped in the 90's.

Q: Do either of the elevators go to the attic space?

A: One elevator goes to the 2nd floor and the other elevator goes from the 2nd to the 3rd floor. There is no elevator access to the attic space.

Q: Are all rooms wired with occupancy sensors?

A: No, only certain rooms that were part of a green initiative from 2017.

Q: Is there a folding wall divider in the 3rd floor classroom?

A: Yes, but they are not in use anymore and remain closed.

TOUR Children's Castle

Q: What is the assessed value of the building not the site as a whole.

A: The information was not available at that time and would be provided to the attendees in writing.

The attendees were informed the building did not have elevators or a ventilation system, but did have heat and air conditioning. While the school and the Children's castle were connected through the basement and a door in the art room, the buildings should be considered two separate entities as the daycare was privately run.

TOUR Exterior/Site

5:30pm

At the end of the tour after the participants had left, Jennings stated information concerning the lack of insulation and lateral support should be included in the addenda.

Addendum #2 - Attachment B

PENTUCKET REGIONAL SCHOOL DISTRICT 2018 ASBESTOS 3 YEAR REINSPECTION

Prepared by: RPF ENVIRONMENTAL, INC. Boston North Technology Park 110 Haverhill Road, Suite 354 Amesbury, MA 01913 978-388-9114 RPF Environmental, Inc. (RPF) conducted asbestos reinspection work for the Pentucket Regional School District located in West Newbury, Massachusetts on August 22, 2018 with EPA Asbestos Hazard Emergency Response Act (AHERA) requirement. The reinspection included a visual inspection of the areas known to contain asbestos-containing building materials (ACBM) and assumed ACBM, as stated in the AHERA inspection records provided to RPF for review.

In general, the ACBM inspected by RPF during this reinspection was observed to be in good to fair condition and the school should continue to manage the materials in accordance with the AHERA Management Plan and updated recommendations enclosed. However, it is important to note that RPF observed locations that have damaged ACBM present. For example, in the Sweetsir School damaged pipe fitting insulation was observed in the kitchen, mechanical room, and several classrooms behind the enclosed water heater boxes. In addition, Sweetsir School had damaged transite panels in the classroom window/heater units. The areas with damaged ACBM should be addressed as soon as feasible, and care must be used to prevent further disturbance and to avoid the creation of dust.

Buildings included in this reinspection work included Page School, Pentucket Regional Middle School and Senior High School located in West Newbury; the Bagnall School in Groveland; and the Donaghue School, and the Sweetsir School in Merrimack. Records used to conduct the reinspection included the initial AHERA survey listings provided in the 1989 initial inspection report prepared by Universal Engineering of Boston, Massachusetts and the subsequent 3-year reinspections and removal records prepared by RPF.

This reinspection report should be filed with the AHERA plans for each school building, as well as the central facilities office. Appendix A contains a listing of the ACBM reinspected during this project and the AHERA assessment and minimum recommended actions for each area of ACBM in the school. Appendix B includes management plan recommendations and updates to be used in conjunction with your original management plan for each building.

The Asbestos Program Manager (AHERA-designated person) for the school is required, pursuant to the AHERA Rule, to review this report and the appendices and to then develop a written plan to implement recommendations for management, abatement or additional testing work, as applicable.

If you have any questions or comments, or if you would like assistance with the recommendations provided herein, please do not hesitate to call me.

Sincerely,

RPF ENVIRONMENTAL, INC.

Kara Forsythe, SMS

Card of Fronthe

AHERA Compliance Manager

Enclosures:

Appendix A: ACBM Inventory

Appendix B: Management Plan Updates

Appendix C: Other General Comments & Preliminary Recommendations

Appendix D: Reinspection Accreditation
Appendix E: Methodology and Limitations

188642 PRSD 3 Yr. AHERA 082218 Rpt



CODE DESCRIPTIONS (Index sheet for use with room by room listings in this appendix)

EPA Assessment Codes:

- 1. Damaged or significantly damaged thermal systems insulation asbestos containing material (ACM)
- 2. Damaged friable surfacing ACM
- 3. Significantly damaged friable surfacing ACM
- 4. Damaged or significantly damaged friable miscellaneous ACM
- 5. ACBM with the potential for damage
- 6. ACBM with the potential for significant damage
- 7. Any remaining ACBM or friable suspected ACBM
- NF. Material is nonfriable and assessments are not required by AHERA.

Response Summary Codes: (Summary of minimum recommendations only, please reference text of report and Appendix B for additional recommendations.)

Code Description

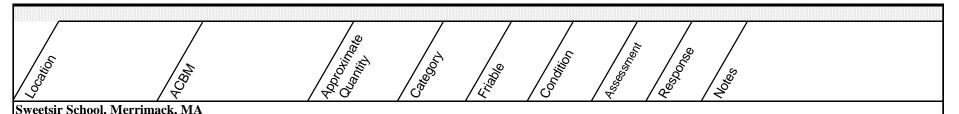
- 1. Continue to manage this ACBM under the buildings Management Plan, Operations and Maintenance (O&M) Program and AHERA. Conduct spot maintenance repairs of any minor damage present (nonfriable ACBM) or that occurs in accordance with AHERA and the School O&M Program. Complete periodic cleaning with HEPA vacuums and wet wiping in all areas with friable ACBM on a 6 month basis at a minimum.
- 2. Conduct repair, surface cleaning, encapsulation or enclosure response actions for this ACBM in accordance with AHERA. Use care to not create dust in the area and to prevent further disturbance. Continue to manage this ACBM under the buildings Management Plan, O&M Program and AHERA (See Summary Code 1). A licensed consultant design firm must prepare repair specifications (design) prior to obtaining pricing or bids for response actions by licensed asbestos contractors. Some small-scale maintenance work (<3 linear/square feet) can be completed by the School's maintenance staff if they qualify for the licensing exemption and they possess adequate training, current refresher training, and the necessary personal protective equipment and safety programs in place. It recommended that pricing for removal also be obtained as an option for consideration. Complete periodic cleaning with HEPA vacuums and wet wiping in all areas with friable ACBM on a 6 month basis at a minimum.
- 3. **Remove the ACBM and conduct surface decontamination** as recommended by accredited/licensed project designer in accordance with AHERA. Use care to not create dust in the area and to prevent further disturbance. Continue to manage any remaining ACBM under the buildings Management Plan, O&M Program and AHERA (See Summary Code 1). All assumed ACBM should be properly tested by a licensed inspection prior to abatement work or as soon as feasible, and the AHERA records updated accordingly. A licensed consultant design firm must prepare repair specifications (design) prior to obtaining pricing or bids for response actions by licensed asbestos contractors. All abatement activities must be conducted by properly accredited and licensed personnel/companies.
- 4. **Complete verification of AHERA Inspection documentation**. Licensed inspector must assume materials are ACBM or properly test additional suspect ACBM. Exterior materials, except under certain circumstances, are not covered under AHERA but still must be inspected and handled as ACBM in accordance with other State, local, and federal regulations. Licensed inspector and management planner must update ACBM listings and Management Plans as needed. Obtain architectural statements for new construction/renovation areas in accordance with AHERA. Confirm that proper numbers of samples have been collected.
- Accessible ACBM Removed. Removed material may be deleted from the ACBM listings. Abatement records should be reviewed to verify that all required records are on file at the school. RPF did not audit records for completeness or accuracy.
- 6. **Material could not be located** and may have been removed or enclosed, or it was not possible to confirm if the materials observed were in fact newer replacement materials. Verify abatement records and, if all records are obtained and complete, update the ACBM listings to reflect the abatement work. If an MNO listing is due to an inaccessible area or locked room, such areas should be inspected when feasible.

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(ojjeoo)	AGA,	Approximate Quantity ate	Togeto,	Friable	Conollion	458655men_	Response	So S
Sweetsir School, Merr	imack, MA	•		•	•			,
Directors Office and entrance	Linoleum	100 sq. ft.	Misc.	No	Fair	NF	1	Materials were observed to be cracking along the seams.
Dishwasher Room	Pipe fitting insulation	10 observed	TSI	Yes	Good	5	1	
Dishwasher Room	Linoleum	150 sq. ft.	Misc.	No	Fair	NF	1	RPF observed duct tape along the seams.
Dishwasher Room	Wall panel mastic	392 sq. ft.	Misc.	No	MNO/Fair	NF	1, 2	Several panels were delaminating and peeling back exposing the wall panel mastic. Repair by March 30, 2019.
Kitchen	Pipe fitting insulation	45 Observed	TSI	Yes	Good	NF	1	
Kitchen	Pipe fitting insulation	10 observed	TSI	Yes	Damaged	1	2 or 3	Pipe fittings were observed to have water damage or knicks present. Repair with rewettable cloth wrap. O&M cleaning all surfaces within 15' of ACBM insulation.
Kitchen	Linoleum	500 sq. ft.	Misc.	No	Fair	NF	1	One section missing along the edge. Material was also observed to be cracking along the seams. Repair by March 30, 2019.
Kitchen	Wall panel mastic	150 sq. ft.	Misc.	No	MNO	MNO	1	
Kitchen Mechanical Room	Pipe fitting insulation	12 observed	TSI	Yes	Fair	5	1	Conduct O&M cleaning all surfaces within 15' of ACBM insulation.
	Linoleum	156 square feet	Misc.	No	Good	NF	1	
Kitchen Bathroom	Linoleum	50 sq. ft.	Misc.	No	Good	NF	1	
Tool Storage	9" Floor tile and mastic	150 sq. ft.	Misc.	No	Good	NF	1	
	Wall panel mastic	150 sq. ft.	Misc.	MNO	MNO	MNO	1	
J1-3	Pipe fitting insulation	4 observed	TSI	Yes	Good	5	1	
	9" Floor tile and mastic	75 sq. ft.	Misc.	No	Good	NF	1	
See notes on last page.	,			1	1	1	-1	•

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Sweetsir School, Merrim	ack, MA							
Cafeteria	9" Floor tile and mastic	2,500 sq. ft.	Misc.	No	Fair	NF	1	Floor tiles were observed to have normal wear throughout. Replacement floor tiles present at the entrance.
Corridor outside café	9" Floor tile and mastic	500 sq. ft.	Misc.	No	Good	NF	1	Floor tiles were observed to have normal wear throughout with replacement floor tiles present.
Stage storage	Wall panel mastic	240 sq. ft.	Misc.	No	MNO/Fair	NF	1,2	One panel loose and starting to delaminate and peel back from the wall exposing the wall panel mastic.
Rear hallway off stage	Wall panel mastic	200 sq. ft.	Misc.	No	MNO	MNO	1	
Rear hallway off stage	9' Floor tile and mastic	60 sq. ft.	Misc.	No	Good	NF	1	
B-2 Hallway	Pipe fitting insulation	1 Observed	TSI	Yes	Good	5	1	
	Wall Panel Mastic	420 sq. ft.	Misc.	MNO	MNO	MNO	1	
	9" Floor tile and mastic	200 sq. ft.	Misc.	No	Good	NF	1	
Custodian #1; Fire Alarm Control Room	Pipe fitting insulation	11 observed	TSI	Yes	Good	5	1	
Room 1/2	Pipe fitting insulation	1 Observed	TSI	Yes	Damaged	1	3	Material is located behind the wood enclosed water heater areas. Materials are water damaged and exposed edges. Prioritize for removal.
	Linoleum	1 sq. ft.	Misc.	No	Fair	NF	1	One small strip of material was remaining from previous abatements in the enclosed water heater box area.
Room 3/4	Pipe fitting insulation	1 Observed	TSI	Yes	Damaged	1	3	Material is located behind the wood enclosed water heater areas. Materials are water damaged and exposed edges. Prioritize for removal.
	Linoleum	1 sq. ft.	Misc.	No	Fair	NF	1	One small strip of material was remaining from previous abatements in the enclosed water heater box area.
See notes on last page.								

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(6)He5007	AGBIN A	Approximate Quantity	Noseles Seles Outro	Friable	Sonottion	488888Men <u>t</u>	Response	
Sweetsir School, Merri	mack, MA							
Main Corridor	Wall panel mastic	3,240 sq. ft.	Misc.	No	MNO	MNO	1	
	9" Floor tile and mastic	1,600 sq. ft.	Misc.	No	Good	NF	1	
	Pipe fitting insulation	10 observed	TSI	Yes	Good	NF	1	
Storage next to nurses	9" Floor tile and mastic	200 sq. ft.	Misc.	No	Good	NF	1	
Room 6	Pipe fitting insulation	1 Observed	TSI	Yes	Damaged	1	3	Material is located behind the wood enclosed water heater areas. Materials are water damaged and exposed edges. Prioritize for removal.
	Linoleum	1 sq. ft.	Misc.	No	Fair	NF	1	One small strip of material was remaining from previous abatements in the enclosed water heater box area.
Room 7	Wall panel mastic	400 sq. ft.	Misc.	MNO	MNO	MNO	1	
Between Rooms 7/8	Pipe fitting insulation	1 Observed	TSI	Yes	Damaged	1	3	Material is located behind the wood enclosed water heater areas. Materials are water damaged and exposed edges. Prioritize for removal.
	Linoleum	1 sq. ft.	Misc.	No	Fair	NF	1	One small strip of material was remaining from previous abatements in the enclosed water heater box area.
Between Rooms 9/10	Pipe fitting insulation	1 Observed	TSI	Yes	Damaged	1	3	Material is located behind the wood enclosed water heater areas. Materials are water damaged and exposed edges. Prioritize
	Linoleum	1 sq. ft.	Misc.	No	Fair	NF	1	One small strip of material was remaining from previous abatements in the enclosed water heater box area.
See notes on last page.								

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	NO N	Aboring Open Committee of the Committee		Frieble	Condition	4ssessment	Response	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
Sweetsir School, Merrimack,	<u></u>		max	T	5 1	la .		<u> </u>
Between Rooms 11/12 Pip	pe fitting insulation	1 Observed	TSI	Yes	Damaged	1	3	Material is located behind the wood enclosed water heater areas. Materials are water damaged and exposed edges. Prioritize for removal.
Lin	noleum	1 sq. ft.	Misc.	No		NF	1	One small strip of material was remaining from previous abatements in the enclosed water heater box area.
HVAC Tunnel Pip	pe fitting insulation	unknown	TSI	MNO	MNO	MNO	1	Tunnel is inaccessible, however according to the site representative ate wrapped fittings are present on the water lines system underneath the school.
Custodian Closet Pip	pe insulation	2 lf.	TSI	Yes	Good	5	1	
Men's bath Lin	noleum	100 sq. ft.	Misc.	No	Good	NF	1,4	Materials area listed in the previous reports, however RPF recommends testing the
Women's bath Lin	noleum	100 sq. ft.	Misc.	No	Good	NF	1,4	materials prior to removal to confirm the presence of ACBM.
Room 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, Library, Cafeteria and office areas	ansite panels	1,200 sq. ft.	Misc.	No	Fair/ MNO	NF	1	Materials are located in the window heating units along the interior/exterior wall of the rooms inside the heater units. Limited visibility of the material, however the edges are rough cut and should be encapsulated or wet wiped to prevent any fibers from releasing. Repair by March 30, 2019.
Rooms 1, 2, 3, 4, 5, 6, 7, Sin 8, 9, 10, 11, 12 and teachers room	nk basin undercoat	2. sq. ft./room	Misc.	No	Good	NF	1, 4	Material is assumed, test prior to disturbance.
and	ther suspect materials are p d/or demolition a full NES ate and federal regulations.	SHAP survey mu					4	Possible inaccessible ACBM also.
See notes on last page.							I	1



Category: MISC is miscellaneous material; TSI is thermal system insulation; SURF is surfacing material. Categorized in accordance with 40 CFR Part 763.

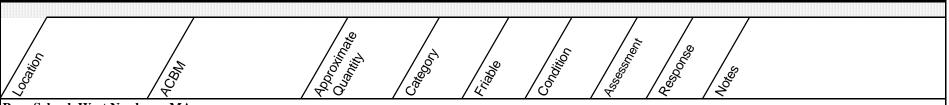
Assessment Codes based on 40 CFR Part 763: 1. Damaged or significantly damaged thermal system insulation ACM; 2. Damaged friable surfacing ACM; 3. Significantly damaged friable surfacing ACM; 4. Damaged or significantly damaged friable miscellaneous ACM; 5. ACBM with potential for damage; 6. ACBM with potential for significant damage; 7. Any remaining ACM. "NF" means nonfriable, and assessments are not required. MNO means material not observed. Please reference AHERA and the school management plan for discussion on assessment codes.

Response Codes: 1. Manage ACBM in accordance with Management Plan; 2. Conduct repairs and cleaning; 3. Conduct removal and cleaning; 4. Material suspect and requires further testing; 5. ACBM has been removed and may be removed from listings; 6. ACBM was not observed and further review is required. See further discussion and requirements in report.

Scheduling: For general O&M management of ACBM recommendations, the beginning start date was the inception of the management plan and the completion shall be until removal of all materials or sampling and analysis proved material is non-ACBM unless otherwise specified in the notes/scheduling column. O&M cleaning of surfaces in locations with friable ACBM or damaged ACBM shall start October 1, 2018 and be completed by March 30,2019. For Code 2 repairs and cleaning, work shall begin immediately (no later than September 30) and shall be completed by December 30, 2018.

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ligites 87	ACBIN TO ACBIN	Approximate Quantity Quantity	To Suppose	Frieble	Conollion	488 888 M	Response	NOW SOUTH THE PROPERTY OF THE
Page School, West Newb								
Cafeteria previously listed as Gym	Pipe fitting insulation		TSI	Yes	MNO	MNO	5	Materials were removed.
Boy's bathroom	Pipe fitting insulation		TSI	Yes	MNO	MNO	5	Materials were removed.
Custodial Storage previously listed as Girl's bathroom	Pipe fitting insulation		TSI	Yes	MNO	MNO	5	Materials were removed.
Music	Floor tiles	900 sq. ft.	Misc.	No	MNO	MNO	1	Materials have been covered over with newer flooring according to the site representative.
	Pipe fitting insulation		TSI	Yes	MNO	MNO	5,6	Fiberglass fittings were observed only and may have been removed. Removal records were not available at the time of the survey for this area.
Kitchen	Transite	36 sq. ft.	Misc.	No	Good	NF	1	
G55	9" Floor tiles and mastic	150 sq. ft.	Misc.	No	Fair	NF	1	Normal wear throughout.
	Transite	25 sq. ft.	Misc.	No	Fair	NF	1	
1st floor Corridor	Floor tiles	800 sq. ft.	Misc.	No	MNO	MNO	1,4	Materials have been covered over with newer flooring according to the site representative. Conduct confirmation testing on replacement floor tiles.
See notes on last page								

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(0)teso7	ACBM MBCAM	Approximate Quantity Quantity	Tooley Control	Friable	Conollion	488888men,	Response	No.
Page School, West New	bury, MA							
Room 145 Art	Floor tiles	900 sq. ft.	Misc.	No	MNO	MNO	1,4	Materials have been covered over with newer flooring according to the site representative. Conduct confirmation testing on replacement floor tiles.
	Pipe fitting insulation	6 observed	TSI	Yes	Good	5	1	O&M cleaning all surfaces within 15' of ACBM insulation.
Rooms 107, 112, 113, 119, 120	Sink Basin Undercoat	2 sq. ft. /room	Misc.	No	Good	NF	1,4	Material is assumed, test prior to disturbance.
Room 20	Fire Door	1 Door	Misc.	No	Good	NF	1,4	Material is assumed, test prior to disturbance.
Entry way	Flooring mastic	800 sq. ft.	Misc.	No	MNO	MNO	1	Material is under newer floor covering.
Room 31N and 31M	Flooring mastic	400 sq. ft	Misc.	No	MNO	MNO	1	Partial removal in 2018, remaining materials in 1/2 of the rooms.
2nd Floor			·			'		
Corridor Elevator to Room 216	Canvas backed linoleum with adhesive	unknown	Misc.	MNO	MNO	MNO	5	Materials were removed during the summer of 2015 by A-Best.
Outside elevator	Pipe fitting insulation	5 observed	TSI	Yes	Good	5	1	O&M cleaning all surfaces within 15' of ACBM insulation.
Throughout	Other suspect materials are and/or demolition a full NE state and federal regulation	ESHAP survey mu		-	•		4	Possible inaccessible ACBM also.
See notes on last page								



Page School, West Newbury, MA

Category: MISC is miscellaneous material; TSI is thermal system insulation; SURF is surfacing material. Categorized in accordance with 40 CFR Part 763.

Assessment Codes based on 40 CFR Part 763: 1. Damaged or significantly damaged thermal system insulation ACM; 2. Damaged friable surfacing ACM; 3. Significantly damaged friable surfacing ACM; 4. Damaged or significantly damaged friable miscellaneous ACM; 5. ACBM with potential for damage; 6. ACBM with potential for significant damage; 7. Any remaining ACM. "NF" means nonfriable, and assessments are not required. MNO means material not observed. Please reference AHERA and the school management plan for discussion on assessment codes.

Response Codes: 1. Manage ACBM in accordance with Management Plan; 2. Conduct repairs and cleaning; 3. Conduct removal and cleaning; 4. Material suspect and requires further testing; 5. ACBM has been removed and may be removed from listings; 6. ACBM was not observed and further review is required. See further discussion and requirements in report.

Scheduling: For general O&M management of ACBM recommendations, the beginning start date was the inception of the management plan and the completion shall be until removal of all materials or sampling and analysis proved material is non-ACBM unless otherwise specified in the notes/scheduling column. O&M cleaning of surfaces in locations with friable ACBM or damaged ACBM shall start. October 1, 2018 and be completed by March 30,2019. For Code 2 repairs and cleaning, work shall begin immediately (no later than September 30) and shall be completed by December 30, 2018.

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5		Approximate Cuantity ate	Š	/,9)	Joj.	488e88Mey,	Response	
(Ojteo)	ACBIN	450 50 m	Notice the second	Friable	Condition	488.08		\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
Pentucket Regiona	Middle School, West Newbury	, MA						, ,
Room 104	9" Floor tile and mastic	500 sq. ft.	Misc.	No	Good	NF	1	1/2 of room has been covered over with carpet.
Copy/Safe	9" Floor tile and mastic	100 sq. ft.	Misc.	No	Fair	NF	1	Room needs a coat of wax applied.
Room 105	9" Floor tile and mastic	100 sq. ft.	Misc.	No	MNO	MNO	1	Materials have been covered over with carpet.
Room 106	9" Floor tile and mastic	100 sq. ft.	Misc.	No	MNO	MNO	1	Materials have been covered over with carpet.
Room 107	9" Floor tile and mastic	100 sq. ft.	Misc.	No	MNO	MNO	1	Room being used for a meeting, no access.
Room 110	9" Floor tile and mastic	200 sq. ft.	Misc.	No	Good	NF	1	
Room 112	9" Floor tile and mastic	200 sq. ft.	Misc.	No	Good	NF	1	
Room 113	9" Floor tile and mastic		Misc.	MNO	MNO	MNO	1	Materials have been covered over with carpet.
Room 201	9" Floor tile and mastic	1,000 sq. ft.	Misc.	No	Fair	NF	1	Floor tiles were observed to be lifting. Repair by March 30, 2019.
Room 201A	9" Floor tile and mastic	500 sq. ft.	Misc.	No	Fair	NF	1	Area of replace tiles present.
Room 203	9" Floor tile and mastic	300 sq. ft.	Misc.	No	Good	NF	1	
Room 205	9" Floor tile and mastic		Misc.	MNO	MNO	MNO	1	Materials have been covered over with carpet.
Room 301	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Few chipped floor tiles present. Repair by March 30, 2019.
Room 302	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Normal wear. Floor tiles missing by heater with mastic exposed. Repair.
Room 303	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Recommended to obtain a chair floor mat at teachers desk to prevent further wear.
Room 304	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Recommended to obtain a chair floor mat at teachers desk to prevent further wear.
Room 305	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Recommended to obtain a chair floor mat at teachers desk to prevent further wear.
Room 307	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	One floor tile missing by heater. Repair.

(Ojle:0)	ACSM	A Positiva de Cultura	100 step	Maju.	Sonotition	4.85.85.85men	Response	SS ON
	dle School, West Newbury	, MA		-				
Room 308	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 309	9" Floor tile and mastic	100 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with carpet.
Room 310	9" Floor tile and mastic	100 sq. ft.	Misc.	No	Fair	NF	1	Floor needs a coat of wax applied.
Room 401	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 402	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 403	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 403	Chalkboard	20 sq. ft.	Misc.	No	Good	NF	1,4	Material is assumed, test prior to disturbance.
Science prep room 403-	9" Floor tile and mastic	200 sq. ft.	Misc.	No	Good	NF	1	
Science prep room 403-	Pipe fitting insulation	7 observed	TSI	Yes	Good	5	1	
Room 404	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 405	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 406	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Two floor tiles were missing with mastic exposed.
Room 509	9" Floor tile and mastic	100 sq. ft.	Misc.	No	Fair	NF	1	Floor tiles were observed to be lifting. Repair by March 30, 2019.
Room 601	9" Floor tile and mastic	850 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with carpet.
Room 605	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 608	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 609	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Few chipped and lifting floor tiles present. Repair by March 30, 2019.
Room 601	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
Room 612	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Fair	NF	1	Few chipped and lifting floor tiles present. Repair by March 30, 2019.
Room 610	9" Floor tile and mastic	850 sq. ft.	Misc.	No	Good	NF	1	
See notes on last page.			<u>'</u>	•	•		•	

(i)leo(0)	ACBIN	Approximate Quantity	Top of the second secon	John John John John John John John John	Condition	488888Mey,	A CESONISE OF THE PROPERTY OF	Se Joseph Company
Pentucket Regional	l Middle School, West Newbury	, MA						
Room 616	9" Floor tile and mastic	100 sq. ft.	Misc.	No	Good	NF	1	
Room 622	9" Floor tile and mastic	300 sq. ft.	Misc.	No	Good	NF	1	Floor tiles were lifting by toilet. Repair by March 30, 2019.
Room 624	9" Floor tile and mastic	100 sq. ft.	Misc.	No	Good	NF	1	
Room 626	9" Floor tile and mastic	100 sq. ft.	Misc.	No	Fair	NF	1	
Main corridor	Flooring mastic	1,000 sq. ft.	Misc.	MNO	MNO	MNO	1	ACBM mastic is present underneath newer floor tiles starting at Room 605 according to the site representative.
Throughout	Other suspect materials are and/or demolition a full N state and federal regulation	ESHAP survey m		4	Possible inaccessible ACBM also.			

Category: MISC is miscellaneous material; TSI is thermal system insulation; SURF is surfacing material. Categorized in accordance with 40 CFR Part 763.

Assessment Codes based on 40 CFR Part 763: 1. Damaged or significantly damaged thermal system insulation ACM; 2. Damaged friable surfacing ACM; 3. Significantly damaged friable surfacing ACM; 4. Damaged or significantly damaged friable miscellaneous ACM; 5. ACBM with potential for damage; 6. ACBM with potential for significant damage; 7. Any remaining ACM. "NF" means nonfriable, and assessments are not required. MNO means material not observed. Please reference AHERA and the school management plan for discussion on assessment codes.

Response Codes: 1. Manage ACBM in accordance with Management Plan; 2. Conduct repairs and cleaning; 3. Conduct removal and cleaning; 4. Material suspect and requires further testing; 5. ACBM has been removed and may be removed from listings; 6. ACBM was not observed and further review is required. See further discussion and requirements in report.

Scheduling: For general O&M management of ACBM recommendations, the beginning start date was the inception of the management plan and the completion shall be until removal of all materials or sampling and analysis proved material is non-ACBM unless otherwise specified in the notes/scheduling column. O&M cleaning of surfaces in locations with friable ACBM or damaged ACBM shall start. October 1, 2018 and be completed by March 30,2019. For Code 2 repairs and cleaning, work shall begin immediately (no later than September 30) and shall be completed by December 30, 2018.

(ojieso)	ACBIN	Aboroximate Quantity	Too all to the second s	Frieble 906i7	Committee	4.55.65.57.00 P. 1	Response	SO NOW
Bagnall School, Grovelan	d, MA							
Boiler Room entrance stairwell	Pipe fitting Insulation	2 Observed	TSI	Yes	Good	5	1	O&M cleaning all surfaces within 15' of ACBM insulation.
Room 1	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with newer flooring.
Room 2	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with
Room 3	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	newer flooring. Confimration testing should
Room 4	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	be conducted on floor tiles.
Room 5	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 6	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 7	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 8	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Instructional Music Room	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Electrical Room	Flooring mastic	100 sq. ft.	Misc.	MNO	MNO	MNO	1	
Speech/Language room	Flooring mastic	200 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with
Teachers work room	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	newer flooring.
Health Room	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with newer flooring.
Office	Flooring mastic	1,000 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials were removed in 2013 by Abest.
STEM room	Flooring mastic	1,000 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with
Room 12	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	newer flooring.
Room 13	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 14	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 15	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 16	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 17	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 18	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
See notes on last page.								

(ojleo _o)	ACSM	Aboroximate Quantity	Too all to	oldeirt, et e	Condition	A5588811091	Response	SS VAN
Bagnall School, Grovela	nd, MA							
Room 20	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with newer flooring.
Room 22	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with newer flooring. Confirmation testing should
Room 23	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	be performed on floor tiles.
Room 24	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 25	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 26	Flooring mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Corridor Room 15-26	Flooring mastic	1,000 sq. ft.	Misc.	MNO	MNO	MNO	1	
Corridor Café-Room 14	Flooring mastic	1,000 sq. ft.	Misc.	MNO	MNO	MNO	1	
Corridor Custodian to Room 5	Flooring mastic	1,000 sq. ft.	Misc.	MNO	MNO	MNO	1	_
Rooms 1-26	Sink Basin Undercoat	2 sq. ft/room	Misc.	No	Good	NF	1,4	Confirmation testing should be performed prior to distrubance.
Throughout	Other suspect materials at and/or demolition a full N state and federal regulation	ESHAP survey m		-	•		4	Possible inaccessible ACBM also.

Category: MISC is miscellaneous material; TSI is thermal system insulation; SURF is surfacing material. Categorized in accordance with 40 CFR Part 763.

Assessment Codes based on 40 CFR Part 763: 1. Damaged or significantly damaged thermal system insulation ACM; 2. Damaged friable surfacing ACM; 3. Significantly damaged friable surfacing ACM; 4. Damaged or significantly damaged friable miscellaneous ACM; 5. ACBM with potential for damage; 6. ACBM with potential for significant damage; 7. Any remaining ACM. "NF" means nonfriable, and assessments are not required. MNO means material not observed. Please reference AHERA and the school management plan for discussion on assessment codes.

Response Codes: 1. Manage ACBM in accordance with Management Plan; 2. Conduct repairs and cleaning; 3. Conduct removal and cleaning; 4. Material suspect and requires further testing; 5. ACBM has been removed and may be removed from listings; 6. ACBM was not observed and further review is required. See further discussion and requirements in report.

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(O)Heoo)	100 A CBM	Approximate Oueming	Too and	Pri able	Conoilion	488688711011	7 / OSO / OS	So Vivo
Donaghue School, Merr	T		1	1	1		1	
Stairwells (8)	Floor tile and mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	The stairwells have been covered over with newer flooring, however records indicate that there is assumed ACBM flooring underneath the newer finishes.
Room 18	Floor tile and mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	Materials have been covered over with
Room 17	Floor tile and mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	newer flooring/carpet.
Room 21	Floor tile and mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 22	Floor tile and mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Room 26	Floor tile and mastic	800 sq. ft.	Misc.	MNO	MNO	MNO	1	
Boiler Room Stairwell	Floor tile and mastic	100 sq. ft.	Misc.	MNO	MNO	MNO	1	
Throughout	Other suspect materials a and/or demolition a full l state and federal regulation	NESHAP survey n		-	•		4	Possible inaccessible ACBM also.

Category: MISC is miscellaneous material; TSI is thermal system insulation; SURF is surfacing material. Categorized in accordance with 40 CFR Part 763.

Assessment Codes based on 40 CFR Part 763: 1. Damaged or significantly damaged thermal system insulation ACM; 2. Damaged friable surfacing ACM; 3. Significantly damaged friable surfacing ACM; 4. Damaged or significantly damaged friable miscellaneous ACM; 5. ACBM with potential for damage; 6. ACBM with potential for significant damage; 7. Any remaining ACM. "NF" means nonfriable, and assessments are not required. MNO means material not observed. Please reference AHERA and the school management plan for discussion on assessment codes.

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Scheduling: For general O&M management of ACBM recommendations, the beginning start date was the inception of the management plan and the completion shall be until removal of all materials or sampling and analysis proved material is non-ACBM unless otherwise specified in the notes/scheduling column. O&M cleaning of surfaces in locations with friable ACBM or damaged ACBM shall start. October 1, 2018 and be completed by March 30,2019. For Code 2 repairs and cleaning, work shall begin immediately (no later than September 30) and shall be completed by December 30, 2018.

in corridors of first floor insulation I									
Crawlspace above ceiling insulation	\ \[\sum_{\varphi} \]		rimete iis			loji,	, went		
Crawlspace above ceiling insulation TSI Yes MNO MNO I Materials are in the crawlspace above the ceiling and are inaccessible and therefore assessments and condition were not feasil Art storage Pipe insulation 15 If. TSI Yes Good 5 1,4 Suspect, test prior to disturbance. O&M cleaning all surfaces within 15' of ACBM insulation. Art office 9' Floor tile with mastic 117 sq. ft. Misc. No Good NF 1 Art office Textured Surfacing 117 sq. ft. Surfacing Yes Good 5 1,4 Assumed, test prior to disturbance. O&M cleaning all surfaces within 15' of ACBM insulation. Art office Textured Surfacing 117 sq. ft. Surfacing Yes Good NF 1 Apparatus room Pipe insulation Floor tile and mastic 232 sq. ft. Misc. No Good NF 1 Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 146 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 146 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 146 Room 141, 142, 144 and Transite lab tops		\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	400 100 100 100		F.1.iab,		488.8	A 68.50	
in corridors of first floor insulation	Senior High School, Wes	<i>i</i> ·	7						
Art office 9" Floor tile with mastic 117 sq. ft. Misc. No Good NF 1 Art office Textured Surfacing 117 sq. ft. Surfacing Yes Good 5 1,4 Assumed, test prior to disturbance. Conducted O&M surface cleaning within of PACM surfacing. Room 172 9" Floor tile with mastic 1163 sq. ft. Misc. No Good NF 1 Apparatus room Pipe insulation TSI Yes MNO MNO 1 The chase is inaccessible. Room 144 prep room Floor tile and mastic 232 sq. ft. Misc. No Good NF 1 Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1			3,000 lf.	TSI	Yes	MNO	MNO	1	Materials are in the crawlspace above the ceiling and are inaccessible and therefore assessments and condition were not feasible.
Art office Textured Surfacing 117 sq. ft. Surfacing Yes Good 5 1,4 Assumed, test prior to disturbance. Conducted O&M surface cleaning within of PACM surfacing. Room 172 9" Floor tile with mastic 1163 sq. ft. Misc. No Good NF 1 Apparatus room Pipe insulation TSI Yes MNO MNO 1 The chase is inaccessible. Room 144 prep room Floor tile and mastic 232 sq. ft. Misc. No Good NF 1 Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1	Art storage	Pipe insulation	15 lf.	TSI	Yes	Good		1,4	cleaning all surfaces within 15' of ACBM
Room 172 9" Floor tile with mastic 1163 sq. ft. Misc. No Good NF 1 Apparatus room Pipe insulation TSI Yes MNO MNO 1 The chase is inaccessible. Room 144 prep room Floor tile and mastic 232 sq. ft. Misc. No Good NF 1 Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1	Art office	9" Floor tile with mastic	117 sq. ft.	Misc.	No	Good	NF	1	
Apparatus room Pipe insulation TSI Yes MNO MNO 1 The chase is inaccessible. Room 144 prep room Floor tile and mastic 232 sq. ft. Misc. No Good NF 1 Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 146. No Good NF 1	Art office	Textured Surfacing	117 sq. ft.	Surfacing	Yes	Good	5	1,4	Conducted O&M surface cleaning within 15'
Room 144 prep room Floor tile and mastic 232 sq. ft. Misc. No Good NF 1 Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1	Room 172	9" Floor tile with mastic	1163 sq. ft.	Misc.	No	Good	NF	1	
Room 144 Floor tile and mastic 902 sq. ft. Misc. No Good NF 1 Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 Room 146.	Apparatus room	Pipe insulation		TSI	Yes	MNO	MNO	1	The chase is inaccessible.
Room 145 and office Floor tile and mastic 1024 sq. ft. Misc. No Good NF 1 Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 146.	Room 144 prep room	Floor tile and mastic	232 sq. ft.	Misc.	No	Good	NF	1	
Room 146 Floor tile and mastic 950 sq ft Misc. No Good NF 1 Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 146.	Room 144	Floor tile and mastic	902 sq. ft.	Misc.	No	Good	NF	1	
Room 142 Floor tile and mastic 740 sq. ft Misc. No Good NF 1 Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 146.	Room 145 and office	Floor tile and mastic	1024 sq. ft.	Misc.	No	Good	NF	1	
Room 141, 142, 144 and Transite lab tops 100 sq. ft. Misc. No Good NF 1 146.	Room 146	Floor tile and mastic	950 sq ft	Misc.	No	Good	NF	1	
146.	Room 142	Floor tile and mastic	740 sq. ft	Misc.	No	Good	NF	1	
See notes on last page.		Transite lab tops	100 sq. ft.	Misc.	No	Good	NF	1	
	See notes on last page.								

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(0)leo(0)	ACBIN	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Topye	Friable	Condition	\sigma_{\sigma_{SS}}^{SS} \sigma_{SS}^{SS} \sigma_{SS}^{S		\(\sigma_{\sigma_{\color}}^{\sigma_{\color}}\)
✓ ✓ Senior High School, Wes	ノマ t Newbury, MA) 4 . G	70	74	70	14	14	/ <
Room 149 Custodian Storage	Light fixture paper	1 sq. ft.	Misc.	Yes	Fair	5	1,4	
Rooms 154, 156, custodian next to 156, 157,158 and 159	Floor tile	6,188 sq. ft.	Misc.	No	Fair	NF	1	Normal wear throughout. Custodian room needs a coat of wax applied and one chipped tile present, repair by March 30, 2019.
Rooms 154, 156, custodian next to 156, 157,158 and 159	Flooring mastic	6,188 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Main Corridor	Floor tile and mastic	1,200 sq. ft.	Misc.	No	Fair	NF	1	Approxialtey 200 sq. ft. of floor tile and mastic was removed in 2016 outside room 157 by A-Best. Spot replacement floor tiles present.
Music Room, Music Storage, Music Theory 169 and Music office	Floor tile	2,000 sq. ft.	Misc.	No	Good	NF	1	Prosenting of the second of th
Music Room, Music Storage, Music Theory 169 and Music office	Flooring mastic	2,000 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Stage	Floor tile and mastic	1,316 sq. ft.	Misc.	No	Good	NF	1	
Room 38, 39, 40, 41 and 42	Floor tile	5,815 sq. ft.	Misc.	No	Fair	NF	1	Normal wear throughout.
Room 38, 39, 40, 41 and 42	Flooring mastic	5,815 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Room 43, 45 and 46	Floor tile	3,489 sq. ft.	Misc.	No	Fair	NF	1	Normal wear throughout.
Room 43, 45 and 46	Flooring mastic	3,489 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Room 44	Floor tile	1,163 sq. ft.	Misc.	MNO	MNO	MNO	5	
Room 41, 42, 43, 44, 45, 46, 56, 57, 58 and 59	Transite board	200 sq. ft.	Misc.	No	Good	NF	1	
See notes on last page.								

		Approximate Quantity			/_	16	. / ,	
	AGB/W		Too Seles	Friable	Condition	488888M84	Response	
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Senior High School, West	t Newbury, MA	•						•
Room 56	Floor tile and mastic	1,302 sq. ft.	Misc.	No	Good	NF	1	
Room 57	Floor tile and mastic	695 sq. ft.	Misc.	No	Good	NF	1	
Room 58	Floor tile and mastic	1040 sq. ft.	Misc.	No	Good	NF	1	
Room 59	Floor tile and mastic	806 sq. ft.	Misc.	No	Good	NF	1	
Equipment Room	Floor tile	116 sq. ft	Misc.	No	Good	NF	1	
Equipment Room	Flooring mastic	116 sq. ft	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
C-4, C-2 and C-3	Floor tile	40 sq. ft.	Misc.	No	Good	NF	1	
C-4, C-2, and C-3	Flooring mastic	40 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Janitor's closet	Floor tile	20 sq. ft.	Misc.	No	Fair	NF	1	Lifting, water damage.
Janitor's closet	Flooring mastic	20 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Stairwells	Floor tile		Misc.	No	MNO	MNO	1	Materials have been covered over.
Stairwells	Flooring mastic		Misc.	No	MNO	MNO	1,4	Assumed, test prior to disturbance.
Guidance offices	Floor tile	1,340 sq. ft.	Misc.	No	Fair	NF	1	Normal wear throughout. Some materials are covered under carpet.
Guidance offices	Flooring mastic	1,340 sq. ft.	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Cafeteria	Floor tile	3,484 sq. ft.	Misc.	No	Fair	NF	1	Normal wear throughout. Two rows of floor tiles were removed.
Cafeteria	Flooring mastic	3,484 sq	Misc.	MNO	MNO	MNO	1,4	Assumed, test prior to disturbance.
Room 44, 45, 46 and 59	Transite board	100 sq. ft.	Misc.	No	Good	NF	1	
Main office	Transite board	100 sq. ft.	Misc.	No	Good	NF	1	
Boy's and girl's locker rooms	Transite board	500 sq. ft.	Misc.	No	Good	NF	1	
See notes on last page.	1		1	I				1

(ojleoo)	Moon Management	Aborosimalo Ouaniin, ale	Nogo _l y.	Frieble	Condition	18.80.85 Mey.	Response	\$50 QN
Senior High School, West	Newbury, MA			•	•	•		
Auditorium rear lower overhang section	Textured Ceiling materials	1,500 sq. ft.	Surfacing	Yes	Good	5	1,4	Assumed, test prior to disturbance. Conducted O&M surface cleaning within 15' of PACM surfacing.
Lobby outside auditorium	Textured Ceiling materials	1,000 sq. ft.	Surfacing	Yes	Good	5	1,4	Assumed, test prior to disturbance. Conducted O&M surface cleaning within 15' of PACM surfacing.
Lower corridor outside gym	Floor tile and mastic	1,218 sq. ft.	Misc.	Yes	Fair	NF	1	Normal wear throughout
Office equipment room gym	Floor tile and mastic	73 sq. ft.	Misc.	No	Fair	NF	1	Needs a coat of wax applied.
Equipment Storage	Floor tile and mastic	220 sq. ft.	Misc.	No	Good	NF	1	Needs a coat of wax applied.
Room 172, Room 58, 57	Sink basin undercoat	2 sq. ft. /sink	Misc.	No	Good	NF	1,4	Assumed, test prior to disturbance.
Throughout	Other suspect materials are and/or demolition a full NE state and federal regulations	SHAP survey m		-	•		4	Possible inaccessible ACBM also.

Category: MISC is miscellaneous material; TSI is thermal system insulation; SURF is surfacing material. Categorized in accordance with 40 CFR Part 763.

Assessment Codes based on 40 CFR Part 763: 1. Damaged or significantly damaged thermal system insulation ACM; 2. Damaged friable surfacing ACM; 3. Significantly damaged friable surfacing ACM; 4. Damaged or significantly damaged friable miscellaneous ACM; 5. ACBM with potential for damage; 6. ACBM with potential for significant damage; 7. Any remaining ACM. "NF" means nonfriable, and assessments are not required. MNO means material not observed. Please reference AHERA and the school management plan for discussion on assessment codes.

Response Codes: 1. Manage ACBM in accordance with Management Plan; 2. Conduct repairs and cleaning; 3. Conduct removal and cleaning; 4. Material suspect and requires further testing; 5. ACBM has been removed and may be removed from listings; 6. ACBM was not observed and further review is required. See further discussion and requirements in report.

Scheduling: For general O&M management of ACBM recommendations, the beginning start date was the inception of the management plan and the completion shall be until removal of all materials or sampling and analysis proved material is non-ACBM unless otherwise specified in the notes/scheduling column. O&M cleaning of surfaces in locations with friable ACBM or damaged ACBM shall start. October 1, 2018 and be completed by March 30,2019. For Code 2 repairs and cleaning, work shall begin immediately (no later than September 30) and shall be completed by December 30, 2018.



The following comments and recommendations should be reviewed in conjunction with the findings and discussions contained in the text of the report, attachments, the school's 1989 initial AHERA Report and Management Plan, and the federal standard 40 CFR Part 763. In particular, the existing Operations and Maintenance program should be referenced for additional work methods, minimum requirements and procedures, and safety and health.

Documentation review during the reinspection consisted of only those specific documents which list ACBM and were provided by the school for RPF to review. A full review or audit of the AHERA Plans for each building (including abatement records), other record-keeping requirements, or AHERA implementation records was not completed as part of this service. Except as otherwise noted, the reinspection work only included ACBM's identified in the inspection report provided to RPF by the school. During the reinspection and initial inspections, abatement documentation and other record-keeping items were not completely reviewed or audited for accuracy and completeness. This type of review was beyond the scope of services for the project.

A full inspection (for confirmation of previous inspection results) was also not completed during this project. In the event that other readily accessible suspect materials were observed by the inspector during the course of the reinspection (materials that may have been missed during the initial inspection or may require confirmation testing), the inspector provided preliminary notation on the reinspection reports to make the school aware that additional inspection or review may be required. Based on the RPF preliminary review of the records provided to RPF, it is RPF's opinion that the AHERA Plans may not address all of the possible ACBM present. However, in accordance with AHERA reinspection requirements, the inspector did not conduct full initial inspection during the course of the reinspection work.

Asbestos Program Manager

The school must maintain a current true and correct statement, signed by the individual designated by the school (the Asbestos Program Manager) that certifies that the general, local education agency responsibilities, as stipulated by the AHERA regulation, have been met or will be met. It is important to update this as personnel changes occur and that a copy is maintained with the current Management Plan documentation. The Asbestos Program Manager must be sure to receive and maintain adequate training and to obtain and file all necessary recordkeeping requirements pursuant to AHERA and the Management Plan, including but not limited to: training, reinspections, surveillance, O&M activity, abatement design and final reports, annual notifications, and other related asbestos management information and documentation.

Resources

Below is an estimated cost for various training and requirements of the AHERA management plan with reasonable cost assumptions over the next three years:

Task/Description	Estimated Costs
Annual 2-hour Awareness Training	\$700
O&M Initial Training - up to 5	\$1,600
O&M Refresher Training	\$750
6-month Periodic Surveillance (if outsourced and not performed by the trained in-house staff)	\$800
3-year AHERA Reinspection 2021	\$2,500
Additional Inspection, Lab Work, Updates	\$5,500

In addition, it is anticipated that some of the repair and cleaning work (small-scale and of short duration) that is recommended will be completed by in-house O&M level trained facilities staff, in accordance with the school's existing O&M Program and AHERA requirements. As such, the incremental increase in cost will likely be approximately \$1,500 for various materials and disposal.

Preliminary estimated cost ranges for abatement project design, oversight and air monitoring, clearance testing, and removal and disposal of all the known ACBM at each school building is as follows:

Sweetsir School: \$150,000 to \$350,000 Page School: \$150,000 to \$350,000

Pentucket Regional Middle School: \$250,000 to \$400,000

Bagnell School: \$50,000 to \$100,000 Donaghue School: \$50,000 to \$100,000 Senior High School: \$250,000 to \$450,000

3-Year Reinspection

The school must continue to have a reinspection completed by a licensed inspector and management planner at least once during every three-year period from the inception of the Management Plan.

6-Month Surveillance

The school must continue to have periodic surveillance of all ACBM at least every 6-months, by either an adequately trained O&M level staff member or an outside licensed inspector.

Maintenance and Custodial Staff Training

The school shall ensure that all custodial and maintenance employees are properly trained in accordance with AHERA and other applicable rules and regulations

2 Hour Awareness: All janitorial, custodial and maintenance staff shall have a minimum of 2-hour asbestos awareness training upon hiring and each year

O&M Level Training: Maintenance staff who may come in contact or who may disturb asbestos shall have a minimum of 16-hours of training upon hire and annual refresher training per State and EPA/OSHA requirements.

O&M Level Activity

The school must continue to ensure that all appropriate procedures are taken to protect building occupants for any O&M activity undertaken, including but not limited to:

- Restrict entry into the area by persons other than those necessary to perform the maintenance project, either by physically isolating the area or by scheduling.
- Post signs to prevent entry by unauthorized persons.
- Shut off or temporarily modify the air-handling system and restrict other sources of air movement.
- Use work practices or other controls, such as wet methods, protective clothing, HEPA-vacuums, mini-enclosures, and glove bags, as necessary to inhibit the spread of any released fibers.
- Clean all fixtures or other components in the immediate work area.
- Place the asbestos debris and other cleaning materials in a sealed, leak-tight container for proper disposal at a permitted site.

O&M activity is typically limited to small-scale, short duration work where the primary intent is building maintenance, repair, or renovation where the removal of ACBM is not the primary goal of the job; and, the amount of ACBM to be disturbed or repaired is less than 3 linear or 3 square feet. Larger projects or activity cannot be broken up or scheduled in groups to minimize the quantity of ACBM for the purposes of classifying work as small-scale, short duration O&M activity.

Worker Protection

The school must comply with either the OSHA Asbestos Construction Standard at 29 CFR 1926.1101 (or for public employees the Asbestos Worker Protection Rule at 40 CFR 763.120) including proper training, personal protective equipment, respiratory protection programs, medical surveillance, proper equipment and engineering controls, and other relevant work and safety requirements.

General O&M Cleaning

Cleaning should be completed through each entire room marked (or as otherwise indicated on the attached room-by-room inventory) as having damaged ACBM or friable ACBM present, as stated in AHERA, on a semi-annual basis.

- (i) HEPA-vacuum or steam-clean all carpets.
- (ii) HEPA-vacuum or wet-clean all other floors and all other horizontal surfaces.
- (iii) Dispose of all debris, filters, mop heads, and cloths in sealed, leak-tight containers

Fiber Release Episodes

In the event of the falling or dislodging of small amounts, less than 3 square or 3 linear feet of ACBM, ensure the following is completed by O&M level trained, qualified staff:

- Immediately restrict access and thoroughly saturate the debris using wet methods.
- Clean the area using appropriate O&M level methods.
- Place the asbestos debris in a sealed, leak-tight container for proper disposal
- Repair the area of damaged ACBM as applicable according to the AHERA rule.

In the event of the falling or dislodging of more than 3 square or 3 linear feet of ACBM:

- Immediately restrict entry to the area and post signs to prevent entry into the area by persons other than those necessary to perform the response action.
- Shut off or temporarily modify the air-handling system to prevent the distribution of fibers to other areas in the building.
- Contact the school's outside consultant for assistance with testing and design of the appropriate response action. Use the design plan to obtain pricing from qualified abatement contractors to complete the response action.

Other Specific ACBM Updates

Flooring and Mastic

The floor tile and mastic are present throughout the schools is nonfriable ACBM with the potential for damage. No immediate response action is required, as these materials can safely be managed in place. The materials were in good condition with some minor wear and tear observed. Care should be used not to disturb the underlying flooring (i.e. drilling or cutting holes for electrical/plumbing work). Regarding the flooring that is not covered with carpeting and/or newer 12" floor tile, care should be taken to avoid activities which will abrade the surface of the floor tile. Buffing, stripping, and other flooring maintenance activity should be completed in accordance with the most current guidelines for ACBM flooring. High speed buffing or use of abrasive pads must not be conducted on the ACBM floors. (Reference the Draft EPA Region I Guidance Document enclosed herein.)

The flooring ACBM must be managed properly in accordance with AHERA and this management plan until they are completely removed.

Flooring mastic, along with any floor tile or linoleum that is, was, or may have been assumed to be ACBM, should continue to be classified as ACBM and properly tested prior to any flooring removal work (as applicable). It should be noted that a recent EPA advisory statement recommends that flooring which was previously tested as asbestos-free be confirmed using electron microscopy prior to any removal or other activities that may results in the disturbance of the flooring.

Transite Panels and Lab Top Benches

No immediate response action is required. The ACBM is nonfriable with the potential for damage. The ACBM must be managed properly in accordance with AHERA and this management plan until they are completely removed. In the event that any renovation work or other construction, repairs or maintenance is to be completed, then the APM must review the work to determine that the ACBM will not be impacted either directly or indirectly by the work. If there exists a potential that the ACBM may be disturbed, then an accredited project designer/management planner should review the project and prepare abatement specification as required.

Wall Panel Mastic

The material is located at the Sweetsir School. No immediate response action is required. The ACBM is nonfriable with the potential for damage. The ACBM must be managed properly in accordance with AHERA and this management plan until they are completely removed. In the event that any renovation work or other construction, repairs or maintenance is to be completed, then the APM must review the work to determine that the ACBM will not be impacted either directly or indirectly by the work. If there exists a potential that the ACBM may be disturbed, then an accredited project designer/management planner should review the project and prepare abatement specification as required.

Linoleum

The material is located at the Sweetsir School. A few areas in the kitchen are lifting along the seams and should be repaired. The ACBM is nonfriable with the potential for damage. The ACBM must be managed properly in accordance with AHERA and this management plan until they are completely removed. In the event that any renovation work or other construction, repairs or maintenance is to be completed, then the APM must review the work to determine that the ACBM will not be impacted either directly or indirectly by the work. If there exists a potential that the ACBM may be disturbed, then an accredited project designer/management planner should review the project and prepare abatement specification as required.

Pipe Fitting Insulation

The insulation observed at the Senior High School, Middle School, Sweetsir School, and Page School is located above the ceilings in the majority of the areas identified; however, some of the material is below the ceiling in maintenance locations. These materials were observed to be in good condition in general and are categorized as ACBM with the potential for damage. Damaged materials observed in the Page School that are behind the wood panels and Sweetsir School kitchen are classified as damaged or significantly damaged ACBM and repairs/removal is required by licensed and trained personnel. Special care should be used when accessing areas above ceilings or within walls to avoid accidental disturbance to the ACBM insulation or any possible debris and contaminated dust.

Initial and periodic cleaning of the adjacent surfaces should be performed on an annual basis at a minimum, using wet-wiping and HEPA vacuuming.

Textured Surfacing

The textured surfacing was observed in the Senior High School. These materials are in good to fair condition in general and are classified as ACBM with the potential for damage. The materials should be managed in accordance with AHERA and this Management Plan. Special care should be used when accessing ceilings or within walls to avoid accidental disturbance to the ACBM gypsum wallboard with joint compound or plaster for any possible debris or contaminated dust.

Assumed ACBM

Based on the RPF preliminary review of the records provided to RPF, it is RPF's opinion that the AHERA Plans may not address all the possible ACBM present. For example, although not directly regulated by AHERA, various exterior suspect materials are present, as well as possible interior hidden ACBM. Based on the types and conditions of the listed assumed ACBM in this school building, it is recommended that all the assumed nonfriable ACBM be managed in-place accordance with the requirements of AHERA and the operations and maintenance program.

Assumed ACBM that does not require any immediate response actions includes the following materials:

- Sink basin undercoat in classrooms
- Building seam caulk throughout the building
- Ceramic tile mastic and grout (2 types) in bathrooms,
- Covebase, stair treads and adhesive throughout the building
- Glue Daubs
- Lab Top Tables
- Bottle Holders
- Homosote Board
- Interior Window Glaze
- Tectum Board
- Chalkboards and adhesive
- Door Caulk
- Various exterior materials.

The gypsum board with joint compound throughout the building also requires initial testing and is assumed ACBM. Care should be used not to disturb the materials during the interim including notification and facilities staff, faculty and others that may disturb the gypsum or joint compound materials.

The non-friable assumed ACBM listed above are classified under AHERA as ACBM with the potential for damage. However, it should be noted that nonfriable ACBM and nonfriable assumed ACBM can be rendered friable when, for example, they are subjected to certain forces such as cutting, grinding, sawing, sanding, drilling, high-speed buffing, and other abrasive forces. This is particularly true during demolition or removal of nonfriable ACBM.

Under normal building conditions, the assumed nonfriable ACBM does not pose an immediate hazard. The materials are in good to fair condition in general, with some minor wear and tear. Care should be taken to ensure that the chalkboards are not broken or chipped. The exterior roofing, caulking, and glazing materials should not be subjected to grinding, cutting, abrasion, or other forces which would result in the production of dust.

The assumed nonfriable ACBM must be managed properly in accordance with AHERA and this management plan until they are completely removed. In the event that any renovation work or other construction, repairs or maintenance is to be completed, then the APM must review the work to determine that the ACBM will not be impacted, either directly or indirectly. If there exists a possibility that the ACBM may be disturbed, then an accredited project designer/management planner should review the project and prepare abatement specification as required.

Testing of the interior, accessible assumed ACBM should be completed as soon as feasible by a licensed inspector and the management plan be updated accordingly by a licensed management planner.

Exterior Suspected ACBM

Exterior ACBM (in many cases) is not directly regulated by AHERA but are regulated by other State and federal regulations. Prior to any disturbance, renovation, or demolition, a licensed inspector must inspect for and sample any suspect exterior ACBM to be impacted or disturbed. If ACBM is found, a licensed project designer should prepare abatement plans as needed to facilitate work.

Warning Labels

The schools must ensure warning labels are and continue to be immediately adjacent to any friable and nonfriable ACBM, suspected ACBM, and assumed to be ACM located in routine maintenance areas (such as boiler rooms, mechanical space and maintenance areas) at each school building. The warning label must read (in print which is readily visible because of large size or bright color) as follows: CAUTION: ASBESTOS. HAZARDOUS. DO NOT DISTURB WITHOUT PROPER TRAINING AND EQUIPMENT.

Asbestos Abatement Activity

Asbestos response actions, as defined by AHERA, must be detailed in a specification (project design) prepared by a licensed asbestos abatement project designer in accordance with AHERA and State regulations. Licensed personnel/contractors must carry out the response actions. Abatement activity itself is beyond the scope of the management plan/O&M program.

New Construction, Additions and Renovated Space

For any new buildings or renovated space, obtain architectural/engineering (A/E) statements for new construction/renovation areas in accordance with AHERA, certifying that no asbestos was specified or used. In lieu of A/E statements, all newly installed buildings materials must be tested pursuant to the AHERA inspection requirements.

Prior to any renovation or demolition activity, additional inspection and testing by a licensed inspector is required to satisfy current state, EPA and OSHA requirements that may exceed the inspection requirements under AHERA and the existing inspection documentation for the school buildings.

In the event that any renovation work or other construction, repairs or maintenance is to be completed, then the APM must review the work to determine that the ACBM will not be impacted, either directly or indirectly. If there exists a potential that the ACBM may be disturbed, then an accredited project designer/management planner should review the

project and prepare abatement specification as required. Only properly accredited and licensed personnel should complete the work.

Conflict of Interest

Pursuant to the EPA AHERA requirements and industry standards, abatement contractors should be engaged for inspection, testing, lab work, design or oversight, and clearance testing services. These services must be performed by qualified, certified firms completely independent of any abatement contractors used to complete work for the school.

*Note: Also reference the 2018 Reinspection Report for additional comments and recommendations.

OSHA Asbestos Flooring Maintenance Information

OSHA ASBESTOS FLOORING MAINTENANCE SECTION

1926.1101(I)(3) Care of asbestos-containing flooring material.

1926.1101(l)(3)(i)

All vinyl and asphalt flooring material shall be maintained in accordance with this paragraph unless the building/facility owner demonstrates, pursuant to paragraph (g)(8)(i)(I) of this section that the flooring does not contain asbestos.

1926.1101(I)(3)(ii)

Sanding of flooring material is prohibited.

1926.1101(l)(3)(iii)

Stripping of finishes shall be conducted using low abrasion pads at speeds lower than 300 rpm and wet methods.

1926.1101(l)(3)(iv)

Burnishing or dry buffing may be performed only on flooring which has sufficient finish so that the pad cannot contact the flooring material.

..1926.1101(1)(4)

1926.1101(l)(4)

Waste and debris and accompanying dust in an area containing accessible thermal system insulation or surfacing ACM/PACM or visibly deteriorated ACM:

1926.1101(l)(4)(i)

shall not be dusted or swept dry, or vacuumed without using a HEPA filter;

1926.1101(l)(4)(ii)

shall be promptly cleaned up and disposed of in leak tight containers.

rage 1 of 4



OSHA Standards Interpretation and Compliance Letters 11/05/1999 - Questions regarding the cleaning of asbestos-containing floor tile.

OSHA Standard Interpretation and Compliance Letters - Table of

Contents

Interpretation : Record Type •

(I)(3)1926.1101;(k)(7)1910.1001 :Standard Number •

Questions regarding the cleaning of asbestos-containing :Subject •

.floor tile

11/05/1999 :Information Date •

November 5, 1999

William A. Onderick, President RFM Inc. 1008 Dogwood Lane West Chester, Pennsylvania 19382

Dear Mr. Onderick:

Thank you for your July 27 letter regarding the cleaning of asbestos-containing floor tile. You wish clarification of the provisions in the Occupational Safety and Health Administration (OSHA) asbestos standards which regulate this activity. Your questions and our answers are provided below.

:Question 1

Are we correct that asbestos floor tile **cleaning** activities (normal maintenance such as stripping and buffing operations) are covered under both the Asbestos General Industry Standard (§1910.1001) and the Asbestos Construction Standard (§1926.1101)?

:Answer

control methods for only Class I or II asbestos work. The fact that the asbestos PELs are not exceeded when the floor stripping uses low abrasion pads at speeds greater than 300 revolutions per minute (rpm) is not a sufficient condition to warrant the receipt of a variance permitting such use. In order to receive a variance, the employer must have implemented some means of maintaining asbestos aerosol levels in the employees' breathing zones at levels equal to or less than the levels occurring at speeds lower than 300 rpm.

:Question 4

While the Construction Standard discusses submitting alternative work procedures, the General Industry Standard does not. How does one handle an alternative work procedure regarding the General Industry Standard?

:Answer

As we noted in our reply to your third question, the Construction Asbestos Standard makes allowances for alternative control methods for only Class I or II asbestos work. Therefore, whether the stripping or buffing of asbestos-containing flooring material is covered by the Construction Asbestos Standard or the General Industry Asbestos Standard, the employer who wishes to use alternative stripping or buffing procedures must seek a permanent variance.

Thank you for your interest in occupational safety and health. We hope you find this information helpful. Please be aware that OSHA's enforcement guidance is subject to periodic review and clarification, amplification, or correction. Such guidance could also be affected by subsequent rulemaking. In the future, should you wish to verify that the guidance provided herein remains current, you may consult OSHA's website at http://www.osha.gov. If you have any further questions, please feel free to contact OSHA's Office of Health Compliance Assistance at (202) 693-2190.

Sincerely,

Richard E. Fairfax, Director Directorate of Compliance Programs

OSHA Standard Interpretation and Compliance Letters - Table of ◀
Contents

Protecting the Safety and Health of America's Workers

[Text Only]

Standard Interpretations 02/09/2000 - Use of electric floor buffer with rotating blade attachment to remove asbestos-containing mastic.

Standard Interpretations - Table of Contents

Standard Number:

1926.1101(g)(8); 1926.1101(b)

OSHA requirements are set by statute, standards and regulations. Our interpretation letters explain these requirements and how they apply to particular circumstances, but they cannot create additional employer obligations. This letter constitutes OSHA's interpretation of the requirements discussed. Note that our enforcement guidance may be affected by changes to OSHA rules. Also, from time to time we update our guidance in response to new information. To keep apprised of such developments, you can consult OSHA's website at http://www.osha.gov.

February 9, 2000

Ms. Paula K. Smith
Attorney for Utah OSHA
State of Utah
Labor Commission
Office of General Counsel
160 East 300 South, 3rd Floor
P.O. Box 146600
Salt Lake City, Utah 84114-6600

Dear Ms. Smith:

Thank you for your December 14, 1999 letter to the Occupational Safety and Health Administration's (OSHA's) Directorate of Compliance Programs (DCP). We are providing you with interpretations of the Construction Asbestos Standard, 29 CFR 1926.1101, based on the specific situation you describe pertaining to floor tile and associated mastic removal.

Scenario: You describe an employer in Utah who was using an electric floor buffer with a rotating blade attachment to remove asbestos-containing mastic without first erecting a negative pressure enclosure (NPE) in which to perform the work. The employer in this scenario had wetted the floor. Utah OSHA (UOSH) believes the floor buffer was a

United States Environmental Protection Agency National Risk Management Research Laboratory Cincinnati, OH 45268

Research and Development

EPA/600/SR-95/121

August 1995

SEPA

Project Summary

Airborne Asbestos Concentrations During Buffing, Burnishing, and Stripping of Resilient Floor Tile

John R. Kominsky, Ronald W. Freyberg, and James M. Boiano

This study was conducted to evaluate airborne asbestos concentrations during low-speed spray-buffing, ultra high-speed burnishing, and wet-stripping of asbestos-containing resilient floor tile under pre-existing and prepared levels of floor care maintenance. Airborne asbestos concentrations were measured before and during each floorcare procedure to determine the magnitude of the increase in airborne asbestos leveis during each procedure. Airborne total fiber concentrations were also measured for comparison with the Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) of 0.1 f/cm3, 8-hr. timeweighted average (TWA). Low-speed spray-buffing and wet-stripping were evaluated on pre-existing floor conditions and three levels of prepared floorcare conditions (poor, medium, and good). Ultra high-speed burnishing and wet-stripping were evaluated on two levels of prepared floor-care conditions (poor and good). All of the computed 8-hr. TWA personal sample results were below the OSHA PEL. It is noted that the floor tile in this study was of low asbestos content and in good condition, hence it is conceivable that floor tile with higher percentages of asbestos could result in higher levels of airborne asbestos during routine floor care maintenance activities. TEM analysis showed higher exposures to fibers predominantly less than 5 µm in length, whereas these shorter fibers were not counted by PCM.

This study shows that low-speed spray-buffing, ultra high-speed burnishing, and wet-stripping of asbestos-containing resilient floor tile can be sources of airborne asbestos in building air. The results suggest that multiple layers of sealant applied to the floor prior to the application of the floor finish can reduce the release of asbestos fibers during polish removal. The results of this study further support the U.S. EPA Recommended Interim Guidance for Maintenance of Asbestos-Containing Floor Coverings.

This Project Summary was developed by EPA's National Risk Management Research Laboratory, Cincinnati, OH, to announce key findings of the research project that is fully documented in a separate report of the same title (see Project Report ordering information at back).

Introduction

Three principal types of preventive maintenance are routinely performed on resilient floor tile: spray-buffing, ultra high-speed burnishing, and wet-stripping followed by refinishing. Spray-buffing is the restorative maintenance of a previously polished floor by use of a floor-polishing machine (operating at 175 to 1000 rpm) immediately after the surface has been mist-sprayed with a restorative product whereby the floor is buffed to dryness. Ultra high-speed burnishing is the buffing of a previously polished floor by using a floor polishing machine (operating at greater than 1500 rpm) without using a

restorative spray product. Wet-stripping is the removal of the finish from the floor using a chemical floor-polish stripper and a 175 rpm floor machine equipped with an appropriate strip pad. This current study was conducted to evaluate airborne asbestos concentrations during low-speed spray-buffing, ultra high-speed burnishing, and wet-stripping of asbestos-containing resilient floor tile under pre-existing and prepared levels of floor care maintenance.

Objectives

The objectives of the study were as follows:

- To determine the airborne asbestos concentrations during low-speed spray-buffing of asbestos-containing resilient floor tile in pre-existing floor condition.
- To determine airborne asbestos concentrations during polish removal from asbestos-containing resilient floor tile in pre-existing floor condition.
- To determine and compare the airborne asbestos concentrations during low-speed spray-buffing of asbestos-containing resilient floor tile in poor, medium, and good floor conditions.
- To determine and compare airborne asbestos concentrations during polish removal after low-speed spraybuffing of asbestos-containing resilient floor tile in medium and good conditions using a manual floor machine.
- To determine and compare the airborne asbestos concentrations during ultra high-speed burnishing of asbestos-containing resilient floor tile in poor and good floor conditions.
- To determine and compare the airborne asbestos concentrations during polish removal after ultra high-speed burnishing of asbestoscontaining resilient floor tile in poor and good floor conditions using an automated floor machine.
- To determine whether personal breathing zone concentrations during low-speed spray-buffing of floors in pre-existing, poor, medium, and good conditions exceed the OSHA Permissible Exposure Limit (PEL) of 0.1 f/ cm³, 8-hr. Time-Weighted Average (TWA).
- To determine whether personal breathing zone concentrations during ultra high-speed burnishing of floors in poor and good conditions exceed the OSHA PEL of 0.1 f/cm², 8-hr. TWA.
- To determine whether personal breathing zone concentrations during polish removal after low-speed spray-

- buffing of floors in pre-existing, poor, medium, and good condition exceed the OSHA PEL of 0.1 f/cm³, 8-hr. TWA.
- To determine whether personal breathing zone concentrations during polish removal after ultra high-speed burnishing of floors in poor and good conditions exceed the OSHA PEL of 0.1 f/cm³, 8-hr. TWA.

Site Description

This study was conducted in an unoccupied building located at the decommissioned Chanute Air Force Base (AFB) in Rantoul, IL. The study was conducted in a room which contained approximately 8600 ft2 of open floor space tiled with 9-inch by 9-in. resilient floor tile containing approximately 5% chrysotile asbestos. Representatives of the Chemical Specialties Manufacturers Association (CSMA) and a floor products manufacturer visually inspected the physical condition of the floor. Their inspection focused on the evenness of the floor plane and the physical condition of the tile. They concluded that the floor was acceptable for the proposed study.

Configuration for Low-speed Spray-buffing and Wetstripping Experiments

Approximately 6500 ft2 of floor space was isolated as the experimental test area. A containment shell was constructed from 2-in. by 4-in. and 2-in. by 6-in. lumber to provide five equally-dimensioned test rooms, each with approximately 1300 ft2 of floor space and 7-ft ceiling height. The containment shell was then surfaced with 6-mil polyethylene sheeting to provide airtight walls and ceilings for the five test rooms. The ceiling for each test room consisted of a single layer of polyethylene sheeting. The walls of each test room were surfaced with seven layers of polyethylene sheeting. Four high-efficiency particulate air (HEPA) filtration units were placed in the hallway outside of the five test rooms to ventilate the test rooms and reduce the airborne asbestos concentrations to background levels after each ex-

Configuration for Ultra High-Speed Burnishing and Wet-Stripping Experiments

Upon completion of the low-speed spray-buffing and wet-stripping experiments, the test area was reconfigured to accommodate the ultra high-speed burnishing and wet-stripping experiments. The test area was reconfigured to provide a

single test room of approximately 6500 ft2 of floor space and 7-ft. ceiling height. The ceiling for the test room consisted of a single layer of polyethylene sheeting. The walls were surfaced with eight layers of polyethylene sheeting. Three HEPA filtration units were placed in the hallway outside of the test room to ventilate the test room and reduce the airborne asbestos concentrations to background levels after each experiment. The units were operated during the preparation phase of each experiment but not during the actual burnishing or wet-stripping experiments. All three HEPA units discharged the air outdoors via 12-in. diameter flexible ducting. Fresh air into the test room was obtained directly from outdoors through windows.

Experimental Design

Low-Speed Spray-Buffing and Wet-Stripping

Pre-existing Conditions

Low-speed spray-buffing was first evaluated on the pre-existing floor-care condition. Pre-existing condition was the condition of the floor as it existed in the room prior to evaluating the prepared floorcare conditions. Pre-existing floor conditions consisted of an undetermined number of coats of a Carnauba-type, buffable polish on the floor tile. Low-speed spraybuffing of the pre-existing floor-care condition was evaluated five times, once in each of the five test rooms. Wet-stripping (including polish and sealant removal) was also evaluated on the pre-existing floor-care condition. Wet-stripping of the pre-existing floor-care condition was evaluated five times, once in each of the five test rooms.

Prepared Floor Care Conditions

Low-speed spray-buffing was evaluated on three levels of prepared floor-care conditions: 1) poor floor-care condition, 2) medium floor-care condition, and 3) good floor-care condition. Poor floor-care condition was defined as a floor with one coat of sealant and one coat of polish. Medium floor-care condition was defined as a floor with one coat of sealant and two coats of polish. Good floor-care condition was defined as a floor with two coats of sealant and three coats of polish. Floor-care conditions were defined in consultation with the CSMA and other representatives of floor-care products manufacturers. Each floor-care condition was evaluated five times, once in each of the five test rooms, to vield a total of 15 experiments.

Wet-stripping after low-speed spray-buffing was evaluated on two levels of floor-

dure had a statistically significant effect on airborne asbestos concentrations measured during the procedure (p=0.0128). Specifically, larger increases in airborne asbestos concentrations were observed during wet-stripping than during spray-buffing. The estimated airborne asbestos concentrations during spray-buffing and wet-stripping as a proportion of the respective baseline concentrations were calculated along with the corresponding 95% confidence interval. The average airborne asbestos concentration measured during low-speed spray-buffing was approximately 11 times greater than the average baseline concentration. The 95% confidence interval for this proportion is (2.6, 47). The lower 95% confidence limit is greater than 1, which indicates this is a statistically significant increase. The average airborne asbestos concentration measured during wet-stripping was approximately 186 times greater than baseline concentrations. The 95% confidence interval for this proportion is (44, 788). The lower 95% confidence limit is greater than 1, which indicates this is a statistically significant increase.

PCM Concentrations

Two personal breathing zone samples were collected during each experiment and analyzed by PCM. None of the individual PCM concentrations exceeded the OSHA

PEL of 0.1 f/cm³. The highest individual PCM concentration (0.023 f/cm³) was measured during wet-stripping. The 8-hr TWA concentrations associated with the measured levels were calculated by assuming zero exposure beyond that which was measured during the experiment. The 8-hr TWA concentrations ranged from 0.001 to 0.003 f/cm³ during low-speed spraybuffing and from 0.0003 to 0.003 f/cm³ during wet-stripping of floors in pre-existing condition. None of the 8-hr TWA concentrations exceeded the OSHA PEL of 0.1 f/cm³.

Although the results of the personal breathing zone samples analyzed by PCM were all below the OSHA PEL, considerably higher exposures were shown by the personal breathing zone samples analyzed by TEM. Two primary reasons explain why the TEM concentrations were considerably higher than the PCM concentrations. First, PCM cannot detect fibers thinner than 0.25 µm in width. Second, the PCM method used in this study (i.e., NIOSH 7400) does not count fibers shorter than 5 µm in length. Over 99% of the asbestos structures measured during low-speed spray-buffing and wet-stripping of floors in pre-existing condition were shorter than 5 µm in length and would therefore not be counted by the PCM method.

Caution should be exercised in extrapolating the PCM measurements collected during this study to conditions at other sites. These tile were of low asbestos content and in good condition, and no other asbestos exposure activity was assumed.

Prepared Floor Conditions

TEM Concentrations

Figure 1 illustrates the overall average (geometric mean) concentrations measured before and during low-speed spraybuffing and wet-stripping on floors in prepared floor conditions. Although the mean relative increase in airborne asbestos concentrations during low-speed spraybuffing tended to decrease as the floor care condition improved (i.e., poor condition resulted in a larger relative increase than medium, and medium condition showed a larger relative increase than good), the differences between the three levels of floor care were not statistically significant (p=0.1149). Overall, the average airborne asbestos concentration during low-speed spray-buffing was approximately 2.6 times higher than the average baseline concentration. This increase was statistically significant (p=0.0017). A 95% confidence interval for the mean airborne asbestos concentration during spray-buffing as a proportion of the baseline concentration showed that the overall mean airborne asbestos con-

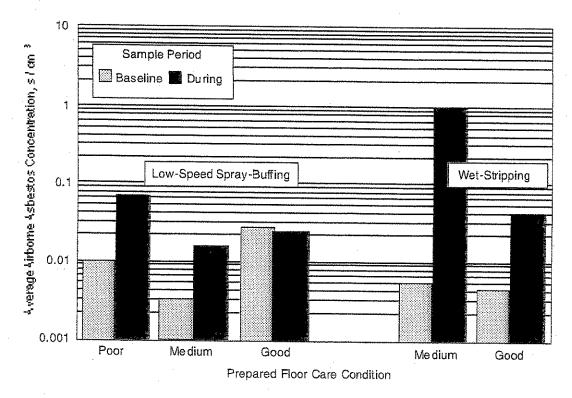


Figure 1. Average airborne asbestos concentrations during low-speed spraying of floors in prepared conditions.

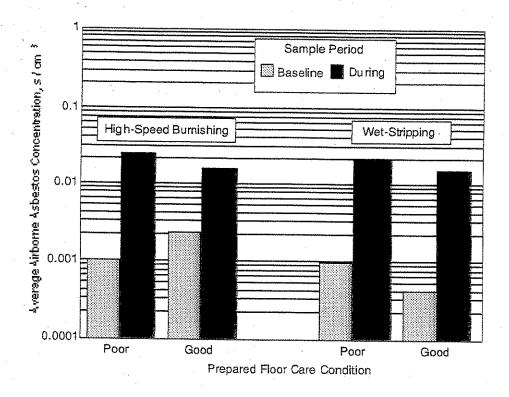


Figure 2. Average airborne asbestos concentrations measured before and during ultra high-speed burnishing and wet-stripping of floors in prepared conditions.

TWA concentrations measured during wetstripping (after ultra high-speed burnishing) exceeded the OSHA PEL of 0.1 f/cm³ for total fibers, all of the 8-hr TWA concentrations measured during ultra highspeed burnishing exceeded the OSHA PEL. These exceedances, however, were due to the excess nonasbestos-containing particulate generated during the burnishing process and not to elevated airborne asbestos particles.

Conclusions

The following are the principal conclusions reached during this study:

Larger increases in airborne asbestos concentrations were observed during wet-stripping than during low-speed spray-buffing of floors in pre-existing condition. The average airborne asbestos concentration measured during low-speed spray-buffing was approximately 11 times greater than the average baseline concentration. The average airborne asbestos concentration measured during wetstripping was approximately 186 times greater than the respective average

baseline concentration. In both cases, the increases in airborne asbestos concentrations were statistically significant.

- The average airborne asbestos concentration measured during low-speed spray-buffing of floors in the three levels of prepared floor-care conditions (poor, medium, and good) was approximately 2.6 times higher than the average baseline concentration. This increase was statistically significant.
- 3) The level of prepared floor care did not significantly affect the airborne asbestos concentrations measured during low-speed spray-buffing. Although the average increase in airborne asbestos concentrations tended to decrease as the level of floor care improved, the differences due to the three levels of floor care were not statistically significant.
- Wet-stripping of floors in medium and good condition (after low-speed spray-

buffing) resulted in statistically significant increases in airborne asbestos concentrations. The average airborne asbestos concentration measured during wet-stripping of floors in medium condition was approximately 108 times higher than the average baseline concentration, whereas the average airborne asbestos concentration measured during wet-stripping of floors in good condition was approximately 8.0 times higher than the average baseline concentration. The increase was statistically significant for both floor-care conditions.

5) A second layer of sealant appears to significantly decrease airborne asbestos levels during wet-stripping (after low-speed spray buffing). Larger increases in airborne asbestos concentrations were observed during wet-stripping of floors in medium condition than on floors in good condition. The average increase (relative to baseline measurements) in airborne asbestos concentration during wetstripping of floors in medium condiJohn R. Kominsky, Ronald W. Freyberg, and James M. Boiano are with Environmental Quality Management, Inc., Gincinnati, OH 45240 Alva Edwards is the Technical Project Officer (see below) and Thomas Sharp is the EPA Project Officer The complete report, entitled "Airborne Asbestos Concentrations During

Buffing, Burnishing, and Stripping of Resilient Floor Tile," (Order No. PB95-260212; Cost: \$27.00, subject to change) will be available only from:

National Technical Information Service 5285 Port Royal Road Springfield, VA 22161 Telephone: 703-487-4650

The EPA Technical Project Officer can be contacted at:
National Risk Management Research Laboratory
U.S. Environmental Protection Agency
Cincinnati, OH 45268

United States
Environmental Protection Agency
Technology Transfer and Support Division (CERI)
Cincinnati, OH 45268

Official Business Penalty for Private Use \$300

EPA/600/SR-95/121

BULK RATE POSTAGE & FEES PAID EPA PERMIT No. G-35 machine speeds and the release of asbestos particles from asbestos containing floor coverings. The higher the machine speed the greater the probability of asbestos fiber release.

- 5. When stripping floors becomes necessary, the machine used for stripping the finish should be equipped with the least abrasive pad as possible, a black patching the most abrasive and the white pad the least abrasive. Consult with you floor tile and floor finish product manufacturer for recommendations on whice pad to use on a particular floor covering. Incorporate the manufacturer recommendations into your floor maintenance work procedures.
- 6. Do not operate a floor machine with an abrasive pad on unwaxed or unfinishe floor containing-asbestos materials.

Finishing of Vinyl Asbestos Floor Coverings

1. Prior to applying a finish coat to a vinyl asbestos floor covering, appl 2 to 3 coats of sealer. Continue to finish the floor with a high percent solifinish.

It is an industry recommendation to apply several thin coats of a high percensolid finish to obtain a good sealing of the floor's surface, thereby minimizin the release of asbestos particles from the floor's surface.

- 2. If spray-buffing of floors is used, always operate the floor machine at th lowest rates of speed possible and equip the floor machine with the leas abrasive pad as possible. A recent USEPA study indicated that spray-buffing wit high-speed floor machines resulted in significantly higher airborne asbesto concentrations than spray-buffing with low speed machines.
- 3. When dry-burnishing of floors is used, always operate the floor machine a the lowest rate of speed possible to accomplish the task (i.e., 1200-1750 rpms) and equip the floor machine with the least abrasive pad as possible.
- 4. After stripping a floor and applying a new coat of sealer and finish, us a wet mop for routine cleaning whenever possible. When dry mopping, a petroleum-based mop treatment is not recommended for use.
- 5. During the winter months where sanding and/or salting of icy parking lot becomes necessary, it is an industry recommendation that a 16-24 ft. matting be used at the entrance way to the school building and where feasible inside the doorway. This would significantly eliminate the scuffing of floors by abrasive sanding materials brought into the building on the shoes of students. Also more frequent wet mopping and dry mopping of floors should be performed during the winter months to minimize damage to the floors.
- 6. Custodial and maintenance personnel responsible for daily VAT maintenanc should be limited to maintaining VAT floors totaling no more than 15,000-25,00 square feet per person/8-hour day, depending on conditions and othe responsibilities of the custodial and maintenance personnel.

- 1. <u>VAT</u>: Vinyl Asbestos Tile.
- 2. Non-Friable: Any Asbestos Containing Material that, when dry, cannot be crumbled, pulverized, or reduced to powder by hand pressure.
- 3. Spray Buffing or Burnishing: The act of buffing or burnishing a floor finish while using a polishing or rejuvenating liquid. This liquid is sprayed on the floor in front of the buffer or burnisher a small area at a time. The floor machine is then used to polish the floor with this liquid. As a rule, polishes only polish while rejuvenaters help fill in minute scratches while polishing. Some of these products contain cleaners to help remove sciling on lightly soiled floors. How often these procedures are performed depends on many factors, such as, floor finish, traffic, machinery used, etc.
- 4. Drv Burnishing: The act of burnishing (high speed polishing) without any polishers, rejuvenaters or cleaners. Just the burnishing machine and the proper pad. This procedure hardens the finish and brings out the shine. Burnishing is performed using what is called a high speed burnisher or buffer. Simply put, this machine is a standard floor machine with an additional set of wheels for stability. These machines operate between 1,000 and 3,000 rpm. The faster the rpm, the faster and better the job can be performed.
- 5. Wet Scrubbing: A lightly abrasive (scrub) pad or brush is used on a 175-300 rpm floor machine to remove surface wear and dirt from the floor without removing all the floor finish. The floor is scrubbed with a neutral floor cleaner and water. This liquid is then removed with a mop or preferably with a wet vacuum. After rinsing, the floor is then recoated with a compatible floor finish. The number of coats depends on the given situation and materials used.
- 6. Floor Stripping: When the floor finish has become heavily imbedded with soiling or discolored, it becomes necessary to totally remove (strip) the existing finish. This is accomplished by first applying a compatible floor finish remover or stripper. After the appropriate dwell time, the finish is liquified. The floor is then scrubbed using an abrasive pad or brush on a 175-300 rpm floor machine. The resulting liquid is then removed using a wet vacuum. These steps, in some cases, have to be repeated two or more times to assure the removal of all the existing finish. The floor is now rinsed as is appropriate with the products being used. The floor is now ready for finishing.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JMM 25 1990

OFFICE OF PESTICIDES AND TOXIC SUBSTANC

MEMORANDUM

SUBJECT: Recommended Interim Guidance for Maintenance of

Asbestos-Containing Floor Coverings

FROM: Robert C. McNally, Chief

Assistance Programs Development Branch

Environmental Assistance Division (TS-799)

TO: Interested Parties

Attached are recommended interim guidelines for stripping wax or finish coat from asbestos-containing floors in your buildings. They were developed by the U.S. Environmental Protection Agency (EPA) in consultation with asbestos control professionals and several flooring material and floor care product manufacturers to reduce any possible exposure to asbestos fibers.

In November 1989, the local NBC affiliate in Washington, D.C. produced and aired a 3-part series on the potential danger of stripping asbestos-containing floor tiles. The NBC network news carried a brief portion of the series on November 29. The series concluded that stripping excess wax or finish coat from asbestos-containing floor tiles in schools may increase the asbestos exposure of school maintenance personnel and school children.

The series has precipitated numerous telephone calls to EPA Headquarters and to the ten EPA Regional offices. Perhaps many of you have also received calls from parents, staff, custodial workers, and others.

Since its airing, EPA's Environmental Assistance Division has tried to explain more clearly what the series did and did not demonstrate. First, there is no clear evidence that the "routine" stripping activities described in the series produced significantly elevated levels of asbestos fibers. In fact, the air levels generated during routine stripping were below those which require special procedures under federal regulation. Thus,

(continued on back)



AHERA REINSPECTION REPORT OTHER GENERAL COMMENTS AND PRELIMINARY RECOMMENDATIONS

(Page 1 of 2)

Below are other general comments and recommendations to be reviewed and considered by the School for compliance with current State and Federal regulations and industry standards. The comments and recommendations should be reviewed in conjunction with the findings and discussions contained in the text of the report, attachments, and the federal standard, 40 CFR Part 763 and other applicable State and federal standards.

- The initial AHERA report should be reviewed for detailed initial inspection results, Management Plan and O&M Plan requirements, analytical data, and other related documentation. Except as otherwise noted, the reinspection work only included ACBMs identified inspection report provided to RPF by the School. During the reinspection, initial inspections, abatement documentation and other record keeping items were not completely reviewed or audited for accuracy and completeness. This type of review was beyond the scope of services for the project. Based on the RPF preliminary review of the records provided to RPF, it is RPF's opinion that the AHERA Plans may not address all of the possible ACBM present. For example, although not directly regulated by AHERA, various exterior suspect materials are present as well as possible interior hidden ACBM.
- This reinspection only included the school buildings designated in the RPF listing. If other buildings are used as school buildings in accordance with 40 CFR Part 763 and need to be reinspected, please notify our office to make necessary arrangements. This reinspection and report does not meet the requirements set forth by US EPA, OSHA, and State agencies for conducting full asbestos inspections prior to renovation or demolition.
- For any new buildings or renovated space, obtain architectural statements for new construction/renovation areas in accordance with AHERA certifying no asbestos was specified or used.
- All ACBMs must be included in the Management Plan and O&M Program until the materials are completely removed. The ACBM listings in the Reports should be reviewed and updated periodically to reflect all abatement work, any testing performed, and all O&M Program maintenance or repair activity completed. Examples of activity that must be documented include but are not limited to the following: covering area of ACBM tile with carpet or other newer flooring; installation of other new building materials certification of asbestos-free material must be obtained and filed; any sampling and testing; any spot asbestos repairs or removal work; personnel training; annual notifications; and other activities.
- Materials listed as MNO (materials not observed) should be reviewed further by the Program Manager
 to determine if in fact such materials were abated, if abatement records are on file, and/or, if the areas
 were not accessible that such materials be inspected when the areas can be accessed. ACBM assumed
 to be enclosed should continue to be documented as such for future renovations/demolition issues.
 Please note that new enclosures are a form of abatement and are subject to the requirements of AHERA
 as a response action.
- Inaccessible ACBMs are or may be present in wall, floor, ceiling, and other spaces not accessible during the inspection. Care should be used during any renovation or demolition work. If suspect materials are encountered, the materials must be properly tested by a State licensed inspector and, if in fact identified as ACBM, properly abated prior to disturbance. All contractors and other persons working in the building who may come into contact with the ACBM should be properly notified in accordance with current State and federal regulations.

OTHER GENERAL COMMENTS AND PRELIMINARY RECOMMENDATIONS

(Page 2 of 2)

- Certain types of floor maintenance activities can result in release of asbestos fibers. Proper cleaning, stripping, and finishing methods should be used as recommended by the State and U.S.E.P.A. guidelines. Depending on the condition of various non-friable ACBMs and the specific action/disturbance to the material (i.e., chipping of flooring during removal, cutting and abrasive activities, or sanding/scraping of adhesives), non-friable ACBM can be rendered friable. This is particularly true with flooring materials that are aged, thin, brittle, or have prolonged water damage.
- Flooring mastic, along with any floor tile or linoleum that is ACBM was or may have been assumed to
 be ACBM, should continue to be classified as ACBM and properly tested prior to any flooring removal
 work, as applicable. It should be noted that a recent EPA advisory statement recommends that flooring
 which was previously tested as asbestos free be confirmed using electron microscopy prior to any
 removal or other activities that may result in the disturbance of the flooring.
- All assumed ACBM should be properly tested by a licensed inspection firm, prior to abatement work
 or as soon as feasible, and the AHERA records updated accordingly. This type of testing should not
 be conducted by asbestos abatement contractors, but by a qualified licensed consulting/laboratory firm.
- In accordance with State and federal regulations, ACBM must be abated prior to disturbance due to renovation or demolition activity, or maintenance activity that will result in disturbance to the materials. This work must be properly designed in advance of the planned work and it must be implemented by properly trained, accredited, and/or licensed individuals as applicable.
- Abatement of friable and non-friable ACBM should be designed by, and monitored by, a qualified/certified consultant. Trained, licensed workers and firms should complete all abatement work. Please note that exterior building materials, such as roofing materials, were often not included in the initial inspection work and should be properly tested prior to any renovation or demolition. It is recommended that sufficient time be allowed prior to any renovation or construction work for accredited design, review, and impact study to determine abatement work that may be necessitated to facilitate renovation. It should also be determined that all suspect materials have been properly sampled in the existing reports prior to work.
- O&M level trained employees may be able to perform small scale, short duration maintenance work (<3 linear/square feet) involving asbestos if all applicable state and federal requirements are met and proper medical surveillance, safety equipment and other programs are in place. Any work in excess of 3 feet or work performed for the sole purpose of abating asbestos hazards must be design and performed by licensed personnel and companies.
- All janitorial, custodial, and maintenance staff require a minimum of 2-hour asbestos awareness
 training and maintenance staff who perform O&M work must also have another 14 hours of training.
 Annual refresher training is also required in accordance with 29 CFR Part 1926.1101 and the EPA
 Worker Protection Rule.

A general review of the AHERA Plans should be completed periodically to ensure compliance with record keeping, training, labeling of ACBM in maintenance areas and as required by OSHA, annual notifications, and other requirements. The school must also continue with their 6-month surveillance activities. Certain record keeping and notification requirements may still be required regardless of whether new construction has occurred or all ACBMs have been removed.



STATE OF NEW HAMPSHIRE

Department of Environmental Services
Asbestos Management & Control Program
ASBESTOS MANAGEMENT PLANNER

KARA L FORSYTHE



DOB: 10/19/78 Eff. Date: 11/02/17

Exp. Date: 11/01/18

AM100394

Cray a Wryld Craig A. Wright, Director Air Resources Division

STATE OF NEW HAMPSHIRE

Department of Environmental Services
Asbestos Management & Control Program
ASBESTOS INSPECTOR

KARA L FORSYTHE



DOB: 10/19/78

Eff. Date: 11/02/17 Exp. Date: 11/01/18

Cray a Wryld
Craig A. Wright, Director
Air Resources Division

AI100394





RPF ENVIRONMENTAL, INC.

320 First NH Turnpike, Northwood, NH 03261 (603) 942-5432 Class Location: Northwood, NH

This is to certify that

Kara Forsythe

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

Asbestos Inspector - Annual Refresher

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

January 2, 2018
Course Date

January 2, 2018
Examination Date

January 2, 2019 Expiration Date

<u>178311- 01- 101778</u> Certificate Number/DOB

Dennis N. Francoeur Jr., Instructor

Dennis 11 Francis 51.









RPF ENVIRONMENTAL, INC.

320 First NH Turnpike, Northwood, NH 03261 (603) 942-5432 Class Located in Northwood, NH

This is to certify that

Kara Forsythe

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

Asbestos Management Planner - Annual Refresher

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

January 15, 2018
Course Date

January 15, 2018
Examination Date

January 15, 2019 Expiration Date

188348-01 / 10-19-1978 Certificate Number/DOB

Dennis N. Francoeur Jr., Instructor







Reinspection Methods

Accessible ACBMs which were identified in the existing AHERA reports were visually reinspected in accordance with AHERA, to (a) observe whether the materials are friable, (b) observe the conditions of the ACBM and potential for disturbance, and (c) to assess the hazard potential of the ACBM. Documentation review consisted of only those specific documents which list ACBM and which were provided by the School to RPF for review. A full review or audit of the AHERA Plans for the building, including abatement records, other record keeping requirements, or AHERA implementation records was not completed as part of this service. Please note that this reinspection report is intended to comply with the federal regulation and the report should not be considered or referenced as a detailed full, initial AHERA room-by-room inspection. Please also reference the initial AHERA Inspection Report prepared for the building by RPF and subsequent update records. This reinspection does not meet the requirements for full inspections prior to renovation or demolition activity.

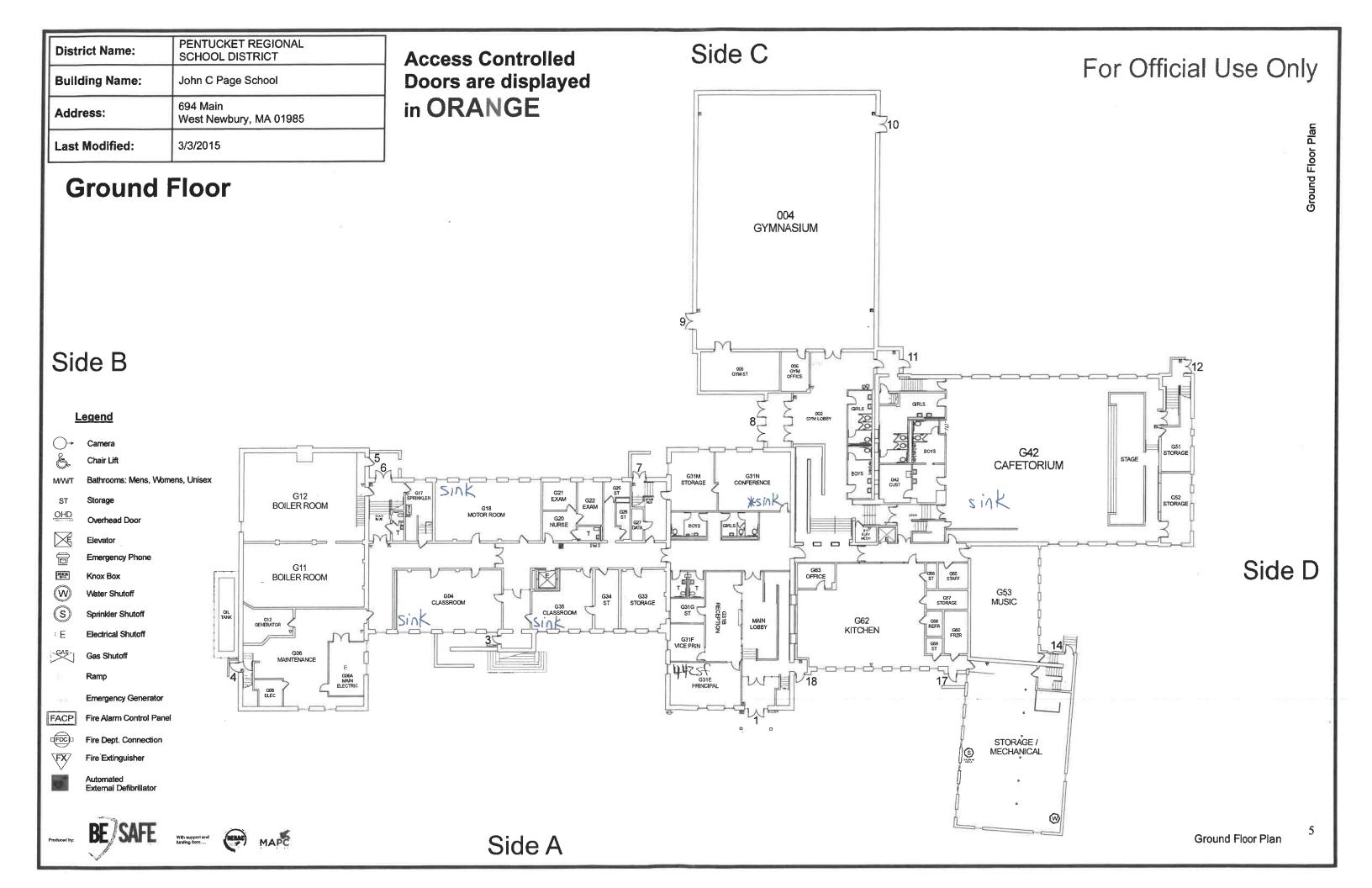
A full inspection (for confirmation of previous inspection results) was also not completed during this project. In the event that other readily accessible suspect materials were observed by the inspector during the course of the reinspections (materials that may have been missed during the initial inspection or may require confirmation testing), the inspector provide preliminary notation on the reinspection reports to make the School aware that additional inspection or review may be required. However, in accordance with the AHERA reinspection requirements, the inspector did not conduct full initial inspection during the course of the reinspection work.

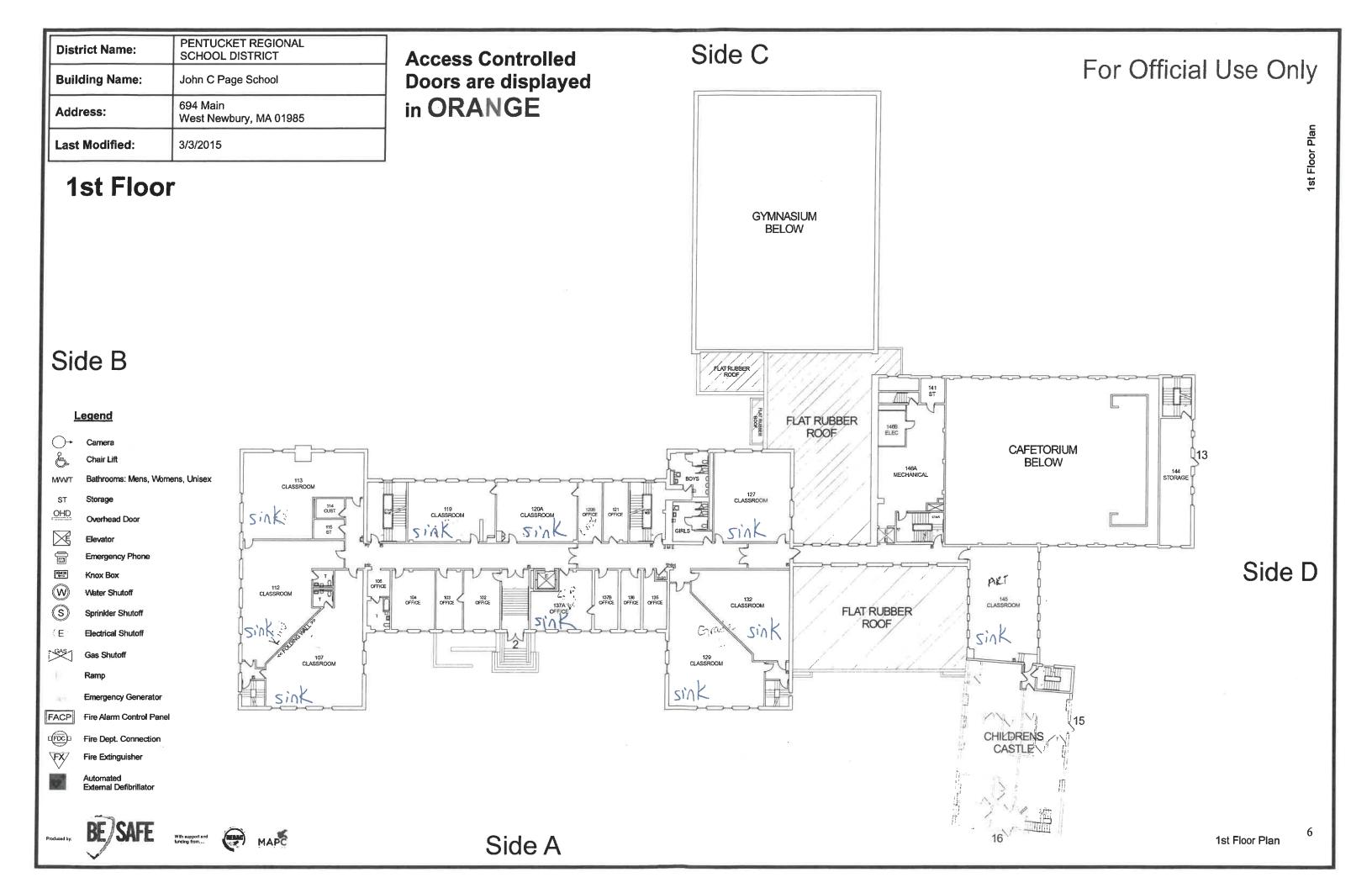
Limitations

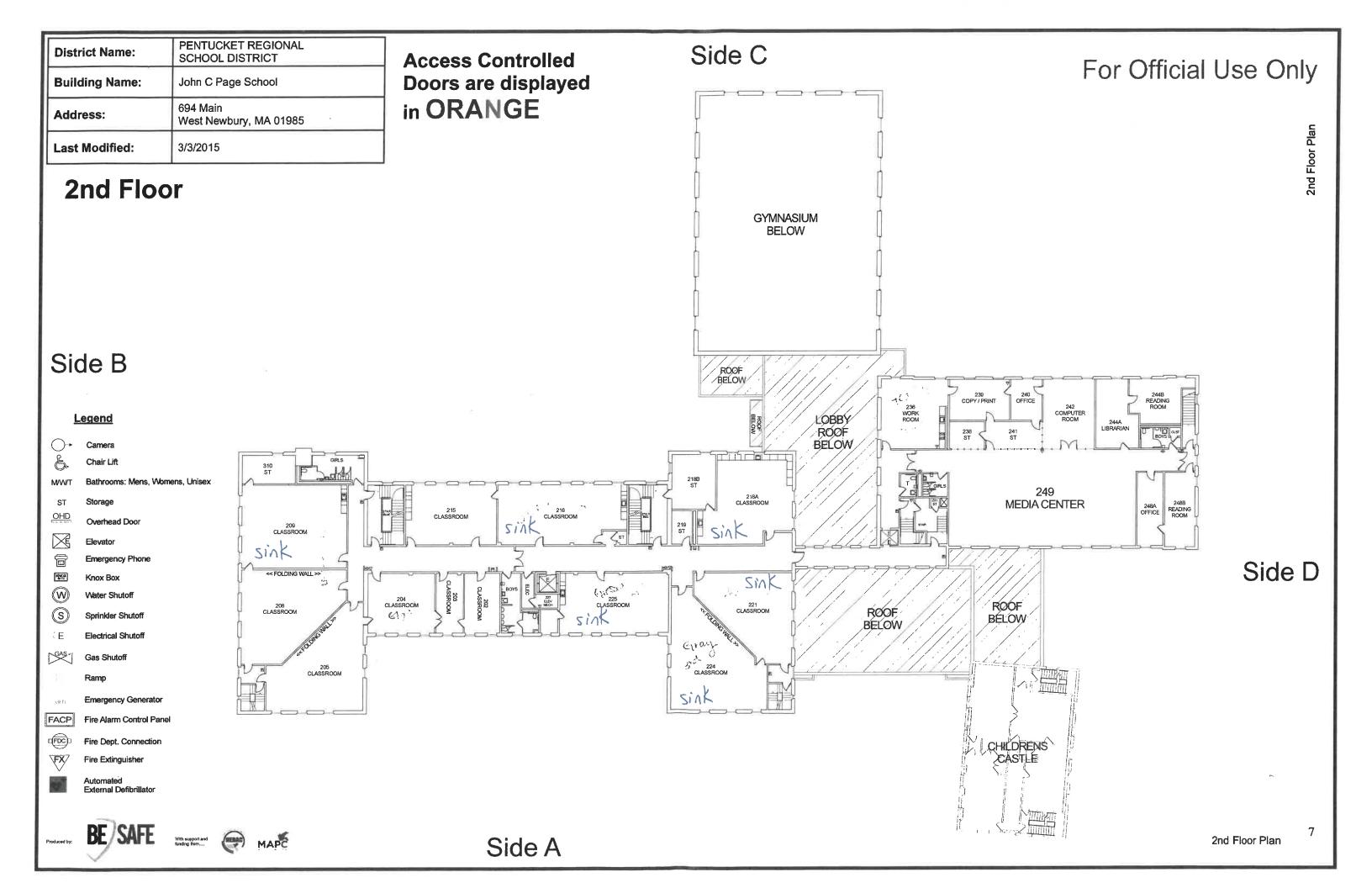
- This reinspection only included the school buildings designated in the RPF listing. If other buildings are used as school buildings in accordance with 40 CFR Part 763 and need to be reinspected, please notify our office to make necessary arrangements. This reinspection and report does not meet the requirements set forth by US EPA, OSHA, and State agencies for conducting full asbestos inspections prior to renovation or demolition.
- The observations and conclusions presented in the Report were based solely upon the services described herein, and not on scientific tasks or procedures beyond the scope of services as discussed in the proposal and text of the report. The conclusions and recommendations are based on visual observations and testing, limited as indicated in the Report, and were arrived at in accordance with generally accepted standards of industrial hygiene practice and asbestos professionals. In addition and as applicable, where sample analyses were conducted by an outside laboratory, RPF has relied upon the data provided, and has not conducted an independent evaluation of the reliability of this data.
- Observations were made of the designated accessible areas of the site as indicated in the Report. While it was the intent of RPF to conduct a survey to the degree indicated, it is important to note that not all suspect ACBM material at the site(s) were specifically assessed and visibility was limited, as indicated, due to the presence of furnishings, equipment, solid walls and solid or suspended ceilings throughout the facility. Suspect material may have been used and may be present in areas where detection and assessment is difficult until renovation and/or demolition proceeds.
- Although some assumptions may have been stated regarding the potential presence of inaccessible or hidden ACBM, a full inspection for all ACBM or a destructive inspection for possible inaccessible suspect ACBM was not conducted. This inspection did not include a hazard assessment survey or testing to determine current dust concentrations of asbestos in and around the building. The survey was limited to ACBM as indicated herein and a site assessment for other possible environmental health and safety hazards or subsurface pollution was not performed as part of the scope of this initial site inspection.

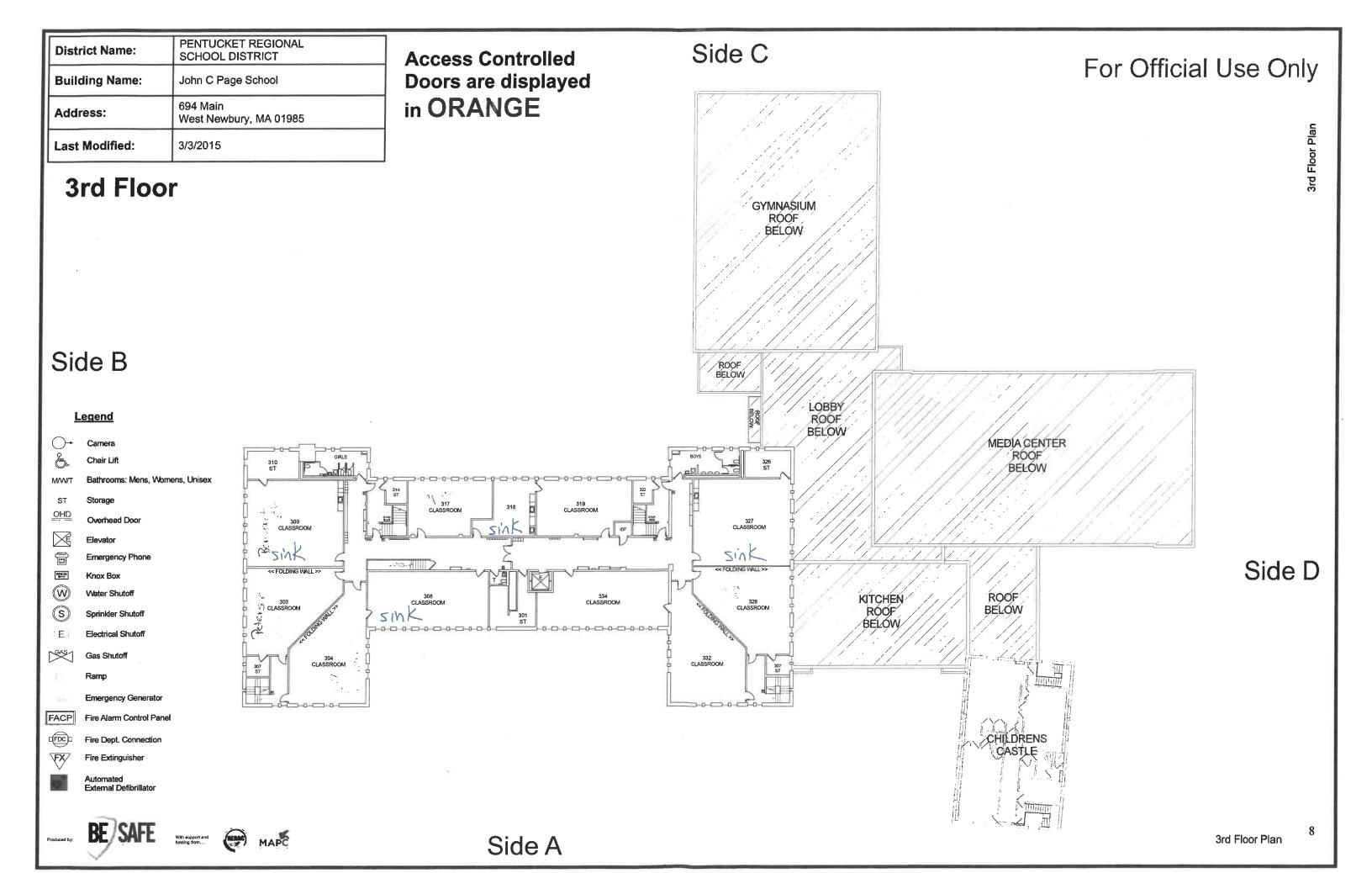
- Where access to portions of the surveyed area was unavailable or limited, RPF renders no opinion of the condition and assessment of these areas. The survey results only apply to areas specifically accessed by RPF during the site inspection.
- Interiors of mechanical equipment and other building or process equipment may also have ACBM gaskets or insulation present and were not included in this inspection. Further inspections would likely be required prior to renovation or demolition activity.
- Existing reports, drawings, and analytical results provided by the Client to RPF, as applicable, were not verified and, as such, RPF has relied upon the data provided as indicated, and has not conducted an independent evaluation of the reliability of these data.
- All hazard communication and notification requirements, as required by 40 CFR Part 763, U.S. OSHA regulation 29 CFR Part 1926, 29 CFR Part 1910, and other applicable rules and regulations, by and between the Client, general contractors, subcontractors, building occupants, employees and other affected persons were the responsibility of the Client and Client's abatement contractor and are not part of the scope of services to be provided by RPF.
- Results presented in the report area limited to the materials and conditions present at the time that the site inspection was actually performed by RPF. The applicability of the observations and recommendations presented in this report to other portions of the site were not determined as part of this scope of work. Many accidents, injuries and exposures and environmental conditions are a result of individual employee/employer actions and behaviors, which will vary from day to day, and with operations being conducted. Changes to the site that occur subsequent to the RPF inspection may result in conditions which differ from those present during the survey and presented in the findings of the report. For example, during construction changes it is possible that previously inaccessible suspect material may be encountered. As such, the contractors, employers OSHA-competent persons, and other affected staff should be advised of the possible presence of inaccessible ACBM and suspect ACBM. In the event that newly identified suspect material is encountered, please contact RPF to arrange for proper inspection, assessment and testing as applicable.
- Typically, hazardous building materials such as asbestos, lead paint, PCBs, mercury, refrigerants, hydraulic fluids and other materials may be present in buildings. The survey performed by RPF only addresses the specific items as indicated in the report. In general, it is recommended that surveys for all accessible hazardous building material be performed. Notify RPF to arrange for additional survey work as needed.

Addendum #2 - Attachment C









Addendum #2 - Attachment D

SIGNIN - CHECK IF YOU ARE ALREADY ON HERE

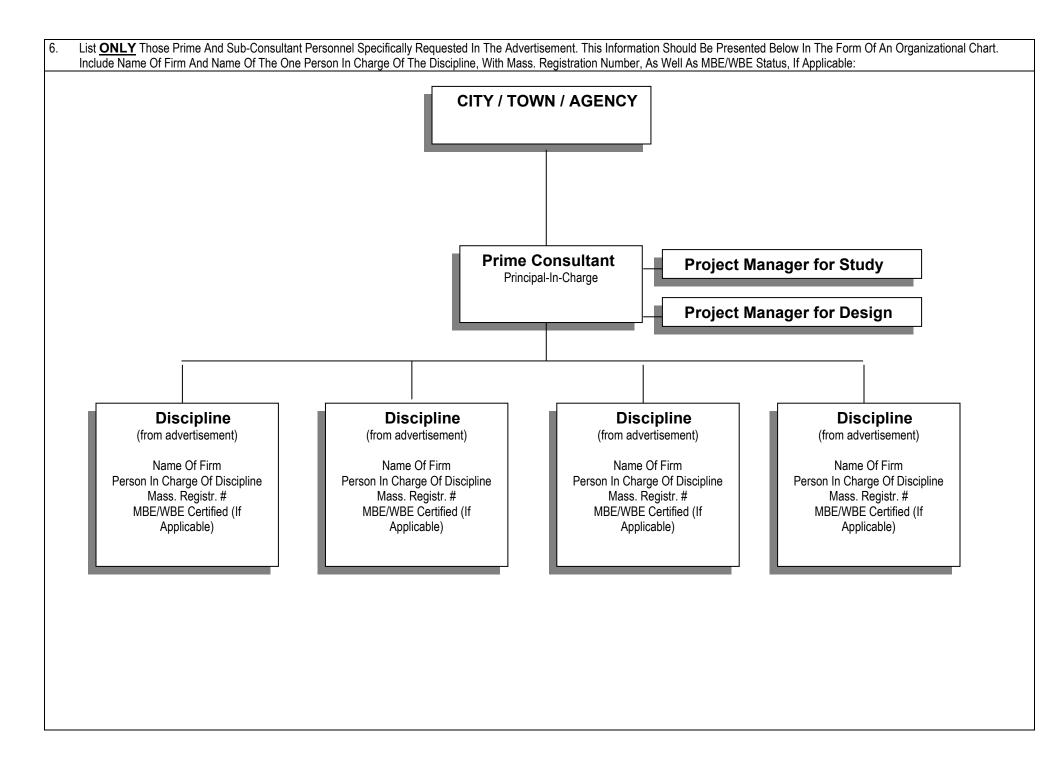
		/ (-
Last Name	First Name	Firm	Email	Phone#	City, State	Signature
Kohlbrenner	Alea	Anser Advisory	alea.kohlbrenner@anseradvisory.com			
Ferrier	Katie	Arrowstreet	Ferrier@Arrowstreet.com	617-513-4780	Boston, MA	Katre Ferr
Connors	Ryan	Ashley McGraw Architects	connors@ashleymcgraw.com	te178347977	N. Bidg (wednes	Tente Brailer
Banks	Nancy	B2Q Associates	NBanks@B2Qassociates.com		0	
Fox	Jeffrey	Bureau Veritas	jeff.fox@bureauveritas.com			
Suriel	Jessica	BWA Architecture	jsuriel@bwaboston.com			
Gessel	Dana	Construction.com	Dana.Gessel@construction.com			
Martin	Patrick	Context Architecture	pmartin@contextarc.com			
Bradley	Fenton	D21 Architects LLC	bradley@d21architects.com	6178347517	W. Sridgente	The -
Manarin	Patricia	Deltek, Inc.	PublicRecords@deltek.com		Jeste	
Dillon	Bruce	Dore & Whittier	bdillon@DoreandWhittier.com			
Polomarenko	Debra	Drummey Rosane Anderson	debrap@draws.com	617 964 1700	Walthamma	Deb Polisia
Jagaczewski	Amy	E2 Engineers	amy.jagaczewski@e2engineers.com			
Duffy	Dennis	Foley Buhl Roberts	dduffy@fbra.com			
Ragucci	Jackie	Gannett Fleming	jragucci@GFNET.com			
Therrien	Kenna	Gienapp Architects	ktherrien@gienapparchitects.com			
Dolan	Caroline	HMFH Architects	CDolan@hmfh.com			
Roznerita	Alisa	James Carr Architure & Desi	a.roznerita@jamescarrarchitect.com			
Burke	Shannon Burke	Langan	sburke@langan.com			

Last Name	First Name	Firm	Email	Phone #	City, State	Signature
Kohlbrenner	Alea	Anser Advisory	alea.kohlbrenner@anseradvisory.com			
Ferrier	Katie	Arrowstreet	Ferrier@Arrowstreet.com			
Connors	Ryan	Ashley McGraw Architects	connors@ashleymcgraw.com			
Banks	Nancy	B2Q Associates	NBanks@B2Qassociates.com			
Fox	Jeffrey	Bureau Veritas	jeff.fox@bureauveritas.com		and the second s	
Suriel	Jessica	BWA Architecture	jsuriel@bwaboston.com			
Gessel	Dana	Construction.com	Dana.Gessel@construction.com			
Martin	Patrick	Context Architecture	pmartin@contextarc.com			
Bradley	Fenton	D21 Architects LLC	bradley@d21architects.com			
Manarin	Patricia	Deltek, Inc.	PublicRecords@deltek.com			
Dillon	Bruce	Dore & Whittier	bdillon@DoreandWhittier.com			
Polomarenko	Debra	Drummey Rosane Anderson	, debrap@draws.com			
Jagaczewski	Amy	E2 Engineers	amy.jagaczewski@e2engineers.com			
Duffy	Dennis	Foley Buhl Roberts	dduffy@fbra.com			
Ragucci	Jackie	Gannett Fleming	jragucci@GFNET.com			
Therrien	Kenna Dake	Gienapp Architects	ktherrien@gienapparchitects.com	979-150-9042	Danvers x112	Al In
Gillnapp Dolan	Caroline	HMFH Architects	CDolan@hmfh.com	, , , , , , , , , , , ,	~112	January 1
Roznerita	Alisa	James Carr Architure & Desi	a.roznerita@jamescarrarchitect.com			
Burke	Shannon Burke	Langan	sburke@langan.com			

Last Name	First Name	Firm	Email	Phone #	City, State	Signature
Oondero	Jamie Machado Silvetti		jamied@machado-silvetti.com			
Katajamaki	Jenni	Machado Silvetti	JenniK@machado-silvetti.com			
Roscoe	Pamela	MVG Architects	proscoe@mvgarchitects.com	3.2041		
Parsons— Lawrence	Alexys Sam	NV5	Alexys.Parsons@nv5.com	508-808-1538	Baston, MA	farLam
eeter	Julia	Pare Corporation	jteeter@parecorp.com			
Vatchorn	Steve	Rayond Design Associates	swatchorn@rda-design.com			
Bennett	Dorreen	RGB Architects	dbennett@rgb.net			
Mullican	Gerhard Mullican	Tappe Architects	gmullican@tappe.com			
Vioreno	Kirstie	The LiRo Group	MorenoK@liro.com			
Ponsades	Dom	Thornton Tomasetti	DPonsades@ThorntonTomasetti.com			
Frey	Jessica	Tighe & Bond	JAFrey@tighebond.com			
Harwood	Mike	TRC	MHarwood@trccompanies.com			
Nguyen	Elizabeth	Vertical Access	elizabeth@vertical-access.com			

Addendum #2 - Attachment E

Commonwealth of Massachusetts 1. Project Name/Location For Which Firm Is Fili Standard Designer Application Form for Municipalities and Public		This space for use by Awarding Authority only.
Agencies not within DSB Jurisdiction (Updated July 2016)		
3a. Firm (Or Joint-Venture) - Name and Ad	dress Of Primary Office To Perform The Work:	Name Of Proposed Project Manager: For Study: (if applicable) For Design: (if applicable)
3b. Date Present and Predecessor Firms Wei	e Established:	3f. Name and Address Of Other Participating Offices Of The Prime Applicant, If Different From Item 3a Above:
3c. Federal ID #:		3g. Name and Address Of Parent Company, If Any:
3d. Name and Title Of Principal-In-Charge Of Email Address: Telephone No:	Fax No.:	3. Check Below If Your Firm Is Either: (1) SDO Certified Minority Business Enterprise (MBE) (2) SDO Certified Woman Business Enterprise (WBE) (3) SDO Certified Minority Woman Business Enterprise (M/WBE) (4) SDO Certified Service Disabled Veteran Owned Business Enterprise (SDVOBE) (5) SDO Certified Veteran Owned Business Enterprise (VBE)
		Son Only Once, By Primary Function Average Number Employed Throughout The Preceding 6 Total Number Holding Massachusetts Registrations): Licensed Site Profs.
5. Has this Joint-Venture previously worked	together?	□ No



7.	Brief Resume of ONLY those Prime Applicant and Sub-Consultant personnel requested in the A persons listed on the Organizational Chart in Question #6. Additional sheets should be provide in the format provided. By including a Firm as a Sub-Consultant, the Prime Applicant certifies the	d only	y as required for the number of Key Personnel requested in the Advertisement and they must be
a.	Name and Title Within Firm:	a.	Name and Title Within Firm:
b.	Project Assignment:	b.	Project Assignment:
C.	Name and Address Of Office In Which Individual Identified In 7a Resides: MBE WBE SDVOBE VBE	C.	Name and Address Of Office In Which Individual Identified In 7a Resides: MBE WBE SDVOBE VBE
d.	Years Experience: With This Firm: With Other Firms:	d.	Years Experience: With This Firm: With Other Firms:
e.	Education: Degree(s) /Year/Specialization	e.	Education: Degree(s) /Year/Specialization
f.	Active Registration: Year First Registered/Discipline/Mass Registration Number	f.	Active Registration: Year First Registered/Discipline/Mass Registration Number
g.	Current Work Assignments and Availability For This Project:	g.	Current Work Assignments and Availability For This Project:
h.	Other Experience and Qualifications Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):	h.	Other Experience and Qualifications Relevant To The Proposed Project: (Identify Firm By Which Employed, If Not Current Firm):

8a.	But Not More Than 5 Projects).								
a.	Project Name And Location Principal-In-Charge	b. Brief Description Of Project And Services (Include Reference To Relevant Experience)	C. Client's Name, Address And Phone Number (Include Name Of Contact Person)	d.	Completion Date (Actual Or Estimated)	e. Project Cost (In Construction Costs (Actual, Or Estimated If Not	Thousands) Fee for Work for Which Firm Was Responsible		
(1)						Completed)	recoponiciale		
(2)									
(2)									
(3)									
(4)									
(5)									

8b.	8b. List Current and Relevant Work By Sub-Consultants Which Best Illustrates Current Qualifications In The Areas Listed In The Advertisement (Up To But Not More Than 5 Projects For Each Sub-Consultant). Use Additional Sheets Only As Required For The Number Of Sub-Consultants Requested In The Advertisement.								
Sub-	-Consultant Name:			·					
a.	Project Name and Location	b.	Brief Description Of Project and	c. Client's Name, Address And Phone	d.	Completion	e. Project Cost (In	ost (In Thousands)	
	Principal-In-Charge		Services (Include Reference To Relevant Experience	Number. Include Name Of Contact Person		Date (Actual Or Estimated)	Construction Costs (Actual, Or Estimated If Not Completed)	Fee For Work For Which Firm Was/Is Responsible	
(1)									
(2)									
(3)									
(4)									
(5)									

9. Lis Co	st All Projects Wommonwealth.	thin The Past 5 Y	ears For Which Prime Applicant Has Performed	, Or Has Entered Into A Contract To Perform, Any Design Servi	ces For All Public Age	ncies Within The				
# of Total Projects:			# of Active Projects:	Total Construction Cost (In Thousands) of Active Projects (excluding studies):						
Role P, C, JV	Phases St., Sch., D.D., C.D.,A.C.*	., D.D., Project Name, Location and Principal-In-Charg		Awarding Authority (Include Contact Name and Phone Number)	Construction Costs (In Thousands) (Actual, Or Estimated If Not	Completion Date (Actual or Estimated) (R)Renovation or (N)New				
		1.								
		2.								
		3.								
		4.								
		5.								
		6.								
		7.								
		8.								
		9.								
		10.								
		11.								
		12.								
	<u> </u>									

^{*} P = Principal; C = Consultant; JV = Joint Venture; St. = Study; Sch. = Schematic; D.D. = Design Development; C.D. = Construction Documents; A.C. = Administration of Contract

10.	Use This Space To Provide Any Additional Information Or Description Of Resources Supporting The Qualifications Of Your Firm And That Of Your Sub-Consultants For The Proposed Project. If Needed, Up To Three, Double-Sided 8 ½" X 11" Supplementary Sheets Will Be Accepted. APPLICANTS ARE ENCOURAGED TO RESPOND SPECIFICALLY IN THIS SECTION TO THE AREAS OF EXPERIENCE REQUESTED IN THE ADVERTISEMENT.									
	Be Specific	- No Boiler Plate								
11.	Professional Liability Ir	nsurance:								
	Name of Company		Aggregate Amount		Policy Number		Expiration Date			
12.				essional Liability Claims (i Client(s), and an explana			and in excess of \$50,0	000 per incident? Answer		
13.	Name Of Sole Propriet	or Or Names Of All Firn	n Partners and Officers	:						
	Name a. b. c.	Title	MA Reg#	Status/Discipline	Name d. e. f	Title	MA Reg #	Status/Discipline		
14.		Names Of All Members			1.					
	Name a. b. c.	Title	MA Reg#	Status/Discipline	Name d. e. f.	Title	MA Reg #	Status/Discipline		
15.		(Stocks Or Other Owne	rship):							
	Name And Title a. b. c.	% Ownership	MA. Reg.#	Status/Discipline	Name And Title d. e. f.	% Ownership	MA. Reg.#	Status/Discipline		
16.	Section 44 of the Gene	eral Laws, or that the se	rvices required are limi	m and is a Principal or Of ted to construction manag orn to by the undersigned	ement or the preparation	n of master plans, studies		defined in Chapter 7C, ost estimates or programs.		
	Submitted by (Signature)				Printed Name and Title			Date		