



**Nathaniel Wixon School
901 Route 134
South Dennis, Massachusetts**

AHERA 3-YEAR RE-INSPECTION REPORT

August 2022

PREPARED FOR:

Dennis-Yarmouth Regional School District
296 Station Avenue
South Yarmouth, Massachusetts
Attention: Ms. Sandra Cashen

PREPARED BY:

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VERTEX Project No: 80960

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Introduction

The Vertex Companies, LLC (VERTEX) conducted a 3-Year Reinspection on August 3, 2022 as required by the 40 CFR 763 Asbestos Hazard Emergency Response Act (AHERA) at the Nathaniel Wixon Middle School located at 901 Route 134, South Dennis, Massachusetts. The AHERA regulation requires that each Local Education Agency (LEA) retain a certified/accredited Asbestos Inspector to conduct a re-inspection of all friable and non-friable known or assumed asbestos-containing building materials (ACBM) in each school building that they lease, own, or otherwise utilize as a school building every three years since the initial inspection. The AHERA re-inspection is to be performed by an accredited inspector at least once every three years from the time of implementation of the original management plan. In addition, the LEA is required to assign a Designated Person (DP) to oversee the management of the identified ACBMs within the school which includes but not limited to conducting Six-Month Periodic Surveillance Inspections, Annual Notifications, Training, Record Keeping, etc. as required to effectively manage the identified ACBMs in place at the school.

The initial AHERA inspection was conducted by Universal Engineering Corporation (Universal) of Boston, MA in August 1988. Based on the initial inspection Universal prepared an Asbestos Management Plan (AMP) for the Nathaniel Wixon Middle School in August 1988. The following is a list of dates and consultants that have conducted the required 3-Year Reinspections. Additionally, the following list of reinspections have been provided and maintained by the Dennis-Yarmouth (D-Y) Regional School District:

<u>Date</u>	<u>Consultant</u>
October 1991	Universal of Boston, MA
July 2000	FLI Environmental of Dedham, MA
July 2003	FLI Environmental of Dedham, MA
September 2011	FLI Environmental of Dedham, MA
June 2012(Revised 2011 Report)	FLI Environmental of Dedham, MA
May 2013	Vertex Air Quality Services, LLC, Weymouth, MA
July 2016	The Vertex Companies., Inc., Weymouth, MA
July 2019	The Vertex Companies., Inc., Weymouth, MA

The current AHERA 3-Year Re-inspection Report conducted by VERTEX is presented to the D-Y Regional School District as an addendum to the original Management Plan and should be incorporated into the school's Management Plan folder.

The D-Y Regional School District and/or Nathaniel Wixon Middle School may use the information obtained from the AHERA Re-inspection and the data compiled in the existing Management Plan to effectively manage the ACBMs present in the Nathaniel Wixon Middle School in South Dennis, Massachusetts.

SECTION 1
INSPECTION REPORT

Section 1
Inspection Report

Re-inspection Protocol

Massachusetts Department of Labor Standards (DLS) Certified Asbestos Inspector, Jessica Woltemate (AI#901049) performed the AHERA Re-inspection. The updated Management Plan was developed by Massachusetts DLS Certified Asbestos Management Planner, Jason Mohre (AP#000080). The purpose of the reinspection was to identify if the hazard potential of the ACBMs or assumed ACBMs has changed since the last inspection as well as sample and assess any suspect materials not listed in the original management plan. As required by the AHERA regulation, the reinspection survey procedures must include a visual re-inspection and reassessment of the condition of all known locations of friable and non-friable ACBMs. The visual inspection consists of touching ACBM, which was previously considered non-friable to determine whether the ACBM has become friable since last re-inspection. It should be noted that under the AHERA regulations only ACBMs is inspected, other asbestos containing materials (ACMs) may be associated with the school that do not fall under AHERA ACBM definition. Examples of materials which have been found to contain asbestos include but are not limited to exterior window caulking, window glazing, and roofing material. Prior to school renovations any suspect materials not sampled or listed within the school's AMP, must be tested prior to disturbance. Furthermore, VERTEX recommends an Asbestos Containing Materials (ACMs) Survey be conducted prior to any renovation activities to comply with the Environmental Protection Agency (EPA) Title 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs) and the Massachusetts Department of Environmental Protection Regulations. Documentation for subsequent surveys not related to AHERA should be included in the overall Management Plan.

In addition, hazard assessment of known friable materials and newly determined friable materials must be recorded and submitted to the school's Designated Person. Assessment of potential asbestos hazards is subject to each individual inspector's judgment, and as a result, hazard assessments may vary.

Furthermore, the LEA Designated Person should assume that potential asbestos-containing pipe and fitting insulation may be located behind walls and ceilings not accessible. Any renovation/demolition work that may penetrate these areas should be inspection.

All available documentation of asbestos abatement projects, which have occurred since the initial AHERA inspection should be included with the reinspection report. VERTEX was provided and reviewed the following Abatement Records maintained by the D-Y Regional School District:

Date

May 1989
August 2015
February 2017

Consultant

Universal of Boston, MA
The Vertex Companies, Inc., Weymouth, MA
The Vertex Companies, Inc., Weymouth, MA

In addition, VERTEX was provided and reviewed the maintained six-month surveillance inspections conducted since the past 3-year re-inspection. No concerns were noted upon review of the six-month surveillance inspections records.



Appendix D contains Certification Page for the Inspector and Management Planner involved with the reinspection of the school as well as a copy of the LEA's Designated Person's training.

Locations of the identified ACBMs with quantities observed, conditions assessed, homogeneous hazard assessment and changes since the previous re-inspection report are presented in Appendix A of this report.

Section 1
Inspection Report (cont.)
Bulk Sampling Methodology

Bulk samples were not collected during the current re-inspection activities in August 2022. However, VERTEX had collected and analyzed the following bulk samples of suspect homogeneous materials within the facility during an AHERA inspection conducted in April 2013. Please refer to Table 1 below for a summary of the bulk samples collected and analyzed.

Table I -Sample Locations and Results (April 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-419-01A	Plaster Skim Coat	UL, Girl's Locker Room	None Detected
B-419-01B	Plaster Skim Coat	UL, Girl's Locker Room	None Detected
B-419-01C	Plaster Skim Coat	UL, Girl's Locker Room	None Detected
B-419-01D	Plaster Skim Coat	UL, Girl's Locker Room	None Detected
B-419-01E	Plaster Skim Coat	UL, Girl's Locker Room Storage	None Detected
B-419-02A	Plaster Base Coat	UL, Girl's Locker Room	None Detected
B-419-02B	Plaster Base Coat	UL, Girl's Locker Room	None Detected
B-419-02C	Plaster Base Coat	UL, Girl's Locker Room	None Detected
B-419-02D	Plaster Base Coat	UL, Girl's Locker Room	None Detected
B-419-02E	Plaster Base Coat	UL, Girl's Locker Room Storage	None Detected
B-419-03A	Featured Ceiling Material	LL, Boiler Room	None Detected
B-419-03B	Featured Ceiling Material	LL, Boiler Room	None Detected
B-419-03C	Textured Ceiling Material	LL, Boiler Room	None Detected
B-419-04A	Drywall #1	UL, Rm. M/Guidance	None Detected
B-419-04B	Drywall #1	LL, Rm. 116 Q/T	None Detected
B-419-05A	Joint Compound #1	UL, Rm. M	None Detected
B-419-05B	Joint Compound #1	UL, Rm. 273	None Detected
B-419-05C	Joint Compound #1	UL, Rm. 274	None Detected
B-419-05D	Joint Compound #1	LL, Rm. 103	None Detected
B-419-05E	Joint Compound #1	LL, Rm. 116 Q/T	None Detected
B-419-06A	Drywall #2	UL, Boy's Locker Room	None Detected
B-419-06B	Drywall #2	UL, Boy's Locker Room	None Detected
B-419-07A	Joint Compound	UL, Boy's Locker Room	Trace (<1% Chrysotile)
B-419-07B	Joint Compound	UL, Boy's Locker Room	Trace (<1% Chrysotile)
B-419-07C	Joint Compound	UL, Boy's Locker Room	Trace (<1% Chrysotile)
B-419-08A	12" x 12" Rock Pattern Floor Tile	UL, Front Entrance	None Detected
B-419-08B	12" x 12" Rock Pattern Floor Tile	UL, Front Entrance	None Detected
B-419-09A	12" x 12" Rock Pattern Floor Tile Mastic	UL, Front Entrance	None Detected
B-419-09B	12" x 12" Rock Pattern Floor Tile Mastic	UL, Front Entrance	None Detected
B-419-10A	12" x 12" Tan Floor Tile	UL, 277-279 Corridor	None Detected
B-419-10B	12" x 12" Tan Floor Tile	LL, 102-111 Corridor	None Detected
B-419-11A	12" x 12" Tan Floor Tile Mastic	UL, 277-279 Corridor	None Detected
B-419-11B	12" x 12" Tan Floor Tile Mastic	LL, 102-111 Corridor	None Detected

Table I -Sample Locations and Results (April 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-419-12A	12" x 12" Gray Spec Floor Tile	UL, Rm. 279	2 % Chrysotile
B-419-12B	12" x 12" Gray Spec Floor Tile	LL, Storage 135	Positive Stop
B-419-13A	12" x 12" Gray Spec Floor Tile Mastic	UL, Rm. 279	None Detected
B-419-13B	12" x 12" Gray Spec Floor Tile Mastic	LL, Storage 135	None Detected
B-419-14A	12" x 12" Brown Spec Floor Tile	UL, Rm. 217	3 % Chrysotile
B-419-14B	12" x 12" Brown Spec Floor Tile	LL, Rm. 102	Positive Stop
B-419-15A	12" x 12" Brown Spec Floor Tile Mastic	UL, Rm. 217	None Detected
B-419-15B	12" x 12" Brown Spec Floor Tile Mastic	LL, Rm. 102	None Detected
B-419-16A	12" x 12" Salmon Floor Tile	UL, Boy's Room By 208	None Detected
B-419-16B	12" x 12" Salmon Floor Tile	LL, Boy's Room By 109	None Detected
B-419-17A	12" x 12" Salmon Floor Tile Mastic	UL, Boy's Room By 208	None Detected
B-419-17B	12" x 12" Salmon Floor Tile Mastic	LL, Boy's Room By 109	None Detected
B-419-18A	12" x 12" White/Blue Pattern Floor Tile	UL, Teacher's Room	None Detected
B-419-18B	12" x 12" White/Blue Pattern Floor Tile	UL, Teacher's Room	None Detected
B-419-19A	12" x 12" White/Blue Pattern Floor Tile Mastic	UL, Teacher's Room	None Detected
B-419-19B	12" x 12" White/Blue Pattern Floor Tile Mastic	UL, Teacher's Room	None Detected
B-419-20A	12" x 12" Gray (New) Floor Tile	UL, Rm. 274	None Detected
B-419-20B	12" x 12" Gray (New) Floor Tile	UL, Rm. 315	None Detected
B-419-21A	12" x 12" Gray (New) Floor Tile Mastic (Yellow)	UL, Rm. 274	None Detected
B-419-21B	12" x 12" Gray (New) Floor Tile Mastic (Yellow)	UL, Rm. 274	None Detected
B-419-22A	12" x 12" Gray (New) Floor Tile Mastic (Black)	UL, Rm. 315	None Detected
B-419-22B	12" x 12" Gray (New) Floor Tile Mastic (Black)	UL, Rm. 318	None Detected
B-419-23A	12" x 12" Mauve Floor Tile	LL, Rm. 140	None Detected
B-419-23B	12" x 12" Mauve Floor Tile	LL, Rm. 146	None Detected
B-419-24A	12" x 12" Mauve Floor Tile Mastic	LL, Rm. 140	None Detected
B-419-24B	12" x 12" Mauve Floor Tile Mastic	LL, Rm. 146	None Detected
B-419-25A	12" x 12" Off-White Black Spec Floor Tile	UL, Girl's Locker Room	None Detected
B-419-25B	12" x 12" Off-White Black Spec Floor Tile	UL, Girl's Locker Room	None Detected
B-419-26A	12" x 12" Off-White Black Spec Floor Tile Mastic	UL, Girl's Locker Room	None Detected
B-419-26B	12" x 12" Off-White Black Spec Floor Tile Mastic	UL, Girl's Locker Room	None Detected
B-419-27A	Carpet Adhesive	UL, Rm. J	None Detected
B-419-27B	Carpet Adhesive	UL, Rm. 268	None Detected
B-419-27C	Carpet Adhesive	UL, Rm. 315	None Detected
B-419-28A	Brown Covebase	UL, Corridor 266-267	None Detected
B-419-28B	Brown Covebase	LL, Corridor 102-111	None Detected
B-419-29A	Brown Covebase Adhesive	UL, Corridor 266-267	None Detected
B-419-29B	Brown Covebase Adhesive	LL, Corridor 102-111	None Detected
B-419-30A	Black Covebase	UL, Main Office, Rm. G	None Detected
B-419-30B	Black Covebase	LL, Rm. 102	None Detected
B-419-31A	Black Covebase Adhesive	UL, Main Office, Rm. G	None Detected
B-419-31B	Black Covebase Adhesive	LL, Rm. 102	None Detected

Table I -Sample Locations and Results (April 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-419-32A	Gray Covebase	UL, Rm. 217	None Detected
B-419-32B	Gray Covebase	LL, Storage 135	None Detected
B-419-33A	Gray Covebase Adhesive	UL, Rm. 217	None Detected
B-419-33B	Gray Covebase Adhesive	LL, Storage 135	None Detected
B-419-34A	Tan Covebase	UL, Rm. 224	None Detected
B-419-34B	Tan Covebase	UL, Clinic/Nurse	None Detected
B-419-35A	Tan Covebase Adhesive	UL, Rm. 224	None Detected
B-419-35B	Tan Covebase Adhesive	UL, Clinic/Nurse	None Detected
B-419-36A	Brown Residual Covebase Mastic	UL, Rm. 227/0	None Detected
B-419-36B	Brown Residual Covebase Mastic	Mezz, Former Girl's Locker Room	None Detected
B-419-37A	Dark Brown Covebase	UL, Rm. 320	None Detected
B-419-37B	Dark Brown Covebase	LL, Rm. 140	None Detected
B-419-38A	Dark Brown Covebase Adhesive	UL, Rm. 320	None Detected
B-419-38B	Dark Brown Covebase Adhesive	LL, Rm. 140	None Detected
B-419-39A	Green Duct Mastic	UL, Rm. E	None Detected
B-419-39B	Green Duct Mastic	UL, Corridor 266-267	None Detected
B-419-40A	Red Duct Mastic	UL, Corridor 266-267	4 % Chrysotile
B-419-40B	Red Duct Mastic	UL, Main Office Corridor	Positive Stop
B-419-41A	Black Felt Between CMU	Mezz, Former Girl's Locker Room/Archive	None Detected
B-419-41B	Black Felt Between CMU	Mezz, Former Girl's Locker Room/Archive	None Detected
B-419-42A	Interior Window Glazing	UL, Rm. 210	2 % Chrysotile
B-419-42B	Interior Window Glazing	LL, Rm. 115	Positive Stop
B-419-43A	Room Divider	UL, Rm. 274	None Detected
B-419-43B	Room Divider	UL, Rm. 275	None Detected
B-419-44A	Black Sink Mastic #1	UL, Rm. 315	Trace (<1% Chrysotile)
B-419-44B	Black Sink Mastic #1	LL, Rm. 140	Trace (<1% Chrysotile)
B-419-45A	Black Sink Mastic #2	UL, Rm. 217	4 % Chrysotile
B-419-45B	Black Sink Mastic #2	UL, Rm. 218	Positive Stop
B-419-46A	Black Sink Mastic #3	UL, Rm. 278	3 % Chrysotile
B-419-46B	Black Sink Mastic #3	UL, Rm. 278	Positive Stop
B-419-47A	2' x 4' Ceiling Tile (Fissure)	UL, Rm. 278	2 % Chrysotile
B-419-47B	2' x 4' Ceiling Tile (Fissure)	LL, Rm. 115	Positive Stop
B-419-48A	2' x 4' Ceiling Tile (Fissure/Dot)	UL, Rm. 268	None Detected
B-419-48B	2' x 4' Ceiling Tile (Fissure/Dot)	UL, Rm. 278	None Detected
B-419-49A	2' x 4' Ceiling Tile (Speckled/Dot)	UL, Auditorium, Gym, Cafeteria, Hall	None Detected
B-419-49B	2' x 4' Ceiling Tile (Speckled/Dot)	LL, Rm. J Office By 116	None Detected
B-419-50A	2' x 4' Ceiling Tile (Woven/Fiberglass)	LL, Rm. 102	None Detected
B-419-50B	2' x 4' Ceiling Tile (Woven/Fiberglass)	LL, Rm. 110	None Detected

Table I -Sample Locations and Results (April 2013)

Sample Number	Sample Description	Sample Location	Asbestos Content
B-419-51A	2' x 4' Ceiling Tile (Dot)	UL, Boy's Locker Room	None Detected
B-419-51B	2' x 4' Ceiling Tile (Dot)	Mezz, Former Girl's Locker Room/Archive	None Detected
B-419-52A	2' x 4' Ceiling Tile (Flat)	UL, Kitchen	None Detected
B-419-52B	2' x 4' Ceiling Tile (Flat)	UL, Kitchen	None Detected
B-419-53A	2' x 4' Ceiling Tile (Groove/Dot)	UL, Rm. 320	None Detected
B-419-53B	2' x 4' Ceiling Tile (Groove/Dot)	LL, Rm. 140	None Detected
B-419-54A	Foil Back Paper Wrap on Fiberglass Insulation	UL, Front Entrance	None Detected
B-419-54B	Foil Back Paper Wrap on Fiberglass Insulation	UL, Main Office Corridor	None Detected
B-419-54C	Foil Back Paper Wrap on Fiberglass Insulation	UL, 202-212 Corridor	None Detected
B-419-55A	Spray-on Fireproofing Insulation on Beams	LL, 102-111 Corridor	None Detected
B-419-55B	Spray-on Fireproofing Insulation on Beams	LL, 102-111 Corridor	None Detected
B-419-55C	Spray-on Fireproofing Insulation on Beams	LL, Rm. 102	None Detected
B-419-55D	Spray-on Fireproofing Insulation on Beams	LL, Rm. 109	None Detected
B-419-55E	Spray-on Fireproofing Insulation on Beams	LL, Rm. 111	None Detected
B-419-56A	Exhaust Breeching Insulation	LL, Boiler Room	None Detected
B-419-56B	Exhaust Breeching Insulation	LL, Boiler Room	None Detected
B-419-56C	Exhaust Breeching Insulation	LL, Boiler Room	None Detected

Based on sampling of homogenous suspect ACBMs identified by VERTEX within the facility, VERTEX has determined the following:

The following is a list of homogenous materials that were determined or assumed to be ASBESTOS-CONTAINING:

12" x 12" Gray Spec Floor Tile
Red Duct Mastic
Interior Window Glazing
2' x 4' Ceiling Tile (Fissure)
Flexible Duct Cloth Connectors
Pipe Fitting Insulation
Fume Hood

12" x 12" Brown Spec Floor Tile
Interior Window Glazing
Black Sink Mastic
Wood Flooring Paper
Black Countertops
Joint Compound # 2

The following is a list of materials that were found and determined to be NON-ASBESTOS-CONTAINING:

12" x 12" Rock Pattern Floor Tile	12" x 12" Rock Pattern Floor Tile Mastic
12" x 12" Tan Floor Tile	12" x 12" Tan Floor Tile Mastic
12" x 12" White/Blue Pattern Floor Tile	12" x 12" White/Blue Pattern FT Mastic
12" x 12" Gray (New) Floor Tile	12" x 12" Gray (New) FT Mastic (Yellow/Black)
12" x 12" Mauve Floor Tile	12" x 12" Mauve Floor Tile Mastic
12" x 12" Off-White Black Spec Floor Tile	12" x 12" Off-White Black Spec FT Mastic
Brown Covebase	Brown Covebase Adhesive
Black Covebase	Black Covebase Adhesive
Gray Covebase	Gray Covebase Adhesive
Tan Covebase	Tan Covebase Adhesive
Dark Brown Covebase	Dark Brown Covebase Adhesive
Brown Residual Covebase Mastic	Carpet Adhesive
Black Felt Between CMU	Green Duct Mastic
Room Divider	2' x 4' Ceiling Tile (Fissure/Dot)
2' x 4' Ceiling Tile (Speckled/Dot)	2' x 4' Ceiling Tile (Woven/Fiberglass)
2' x 4' Ceiling Tile (Dot)	2' x 4' Ceiling Tile (Flat)
2' x 4' Ceiling Tile (Groove/Dot)	Foil Back Paper Wrap on Fiberglass Insulation
Spray-on Fireproofing Insulation on Beams	Exhaust Breeching Insulation
Plaster Skim Coat	Plaster Base Coat
Drywall	Joint Compound # 1
Textured Ceiling Material	

Section 1
Inspection Report (continued)

Updated Hazard Assessment

All known locations of friable and non-friable ACBM were re-inspected to determine whether a change in the ACBM's condition has occurred since the initial AHERA inspection. From the reinspection, an asbestos hazard assessment was performed. Factors considered when assessing asbestos hazard include;

1. The friability of the material;
2. The condition of material including type, severity and extent of damage;
3. The material's potential for disturbance including accessibility and air flow;
4. The material's potential for damage.

The location, estimated quantities, condition and Homogenous Area Hazard Assessment Category for the identified ACBMs are presented in Appendix A. The following is an updated homogenous area assessment for each homogeneous area as well as new homogenous areas identified during the current reinspection.

Homogeneous Area Assessment

Homogeneous Area #1-Pipe Fitting Insulation

Classification: Thermal System Insulation

Asbestos-containing pipe fitting insulation is located at the school above the drop ceiling and assumed behind walls at the school. Please refer to Appendix A which includes the locations, quantities and conditions. Additionally, pipe fitting insulation is assumed and/or identified behind walls and hard ceiling areas. The pipe fitting insulation is friable and presents a potential for damage.

Homogeneous Area #2- 12" x 12" Brown Spec Floor Tile

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing 12"x 12" Brown Spec Floor Tile is located throughout the Upper and Lower Levels of the original section at the school. Please refer to Appendix A which includes the locations, quantities and conditions. The 12" x 12" Brown Spec Floor is non-friable, in generally good condition with the exception of a few small areas and has a potential for damage.

Section 1
Inspection Report (continued)

Homogeneous Area #3- 12" x 12" Gray Spec Floor Tile

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing 12"x 12" Gray Spec Floor Tile is located throughout the Upper and Lower Levels of the original section at the school. Please refer to Appendix A which includes the locations, quantities and conditions. The 12" x 12" Gray Spec Floor is non-friable, in generally good condition with the exception of a few small areas and has a potential for damage.

Homogeneous Area #4- 2' x 4' Ceiling Tile (Fissure)

Classification: Friable Miscellaneous ACBM

Asbestos-containing 2' x 4' Ceiling Tile (Fissure) is located throughout the Upper and Lower Levels of the original section at the school. Please refer to Appendix A which includes the locations, quantities and conditions. The 2' x 4' Ceiling Tile (Fissure) is friable has a potential for significant damage. The 2' x 4' Ceiling Tile (Fissure) is generally in good condition with the exception of several observed minor damaged areas.

Homogeneous Area #5- Black Sink Mastic

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing Black Sink Mastic is located within Rooms 217, 218 and 278 within the Upper Level of the original section at the school. The Black Sink Mastic is non-friable, in generally good condition, and presents the potential for damage due to cluttered storage of materials within the under sink cabinet areas. It should be noted that trace asbestos-containing black sink mastic is located throughout the Upper and Lower Level Addition Section Classrooms at the school. The trace asbestos-containing black sink mastic should be point counted to determine if the material is greater than 1 % asbestos in content.

Homogeneous Area #6- Interior Window Glazing

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing Interior Window Glazing is located throughout the Upper and Lower Levels of the original section at the school. Please refer to Appendix A which includes the locations, quantities and conditions. The Interior Window Glazing is non-friable and noted in poor/deteriorated condition. The Interior Window Glazing has a potential for damage and/or significant damage.

Section 1
Inspection Report (continued)

Updated Hazard Assessment

Homogeneous Area #7- Red Duct Mastic

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing Red Duct Mastic is observed on the duct work within the Main Office-Nurse Office Corridor and 266-269 Corridor above the ceiling area. Due to the location of the red duct mastic and the observed under the insulated duct work actual quantities and locations of the red duct mastic is unknown. As such, the red duct mastic may be above the ceiling areas on duct work throughout the school building.

Homogeneous Area #8- Joint Compound

Classification: Non-Friable Miscellaneous Trace ACBM

Trace asbestos-containing Joint Compound is located within the Boys Locker Room. The Drywall/Joint Compound is non-friable, in generally good condition and presents a potential for significant damage. The trace asbestos-containing joint compound should be point counted to determine if the material is greater than 1 % asbestos in content.

Homogeneous Area #9- 2' x 4' Ceiling Tile (Dot)

Classification: Non-Friable Miscellaneous Trace ACBM

Trace asbestos-containing 2' x 4' Ceiling Tiles (Dot) are located within the Boys Locker Room and Former Girls Locker Room at the school. The 2' x 4' Ceiling Tiles (Dot) is friable, in generally good condition and present a potential for significant damage. The trace asbestos-containing 2' x 4' Ceiling Tiles (Dot) should be point counted to determine if the material is greater than 1 % asbestos in content.

Homogeneous Area #10- Wood Flooring Paper

Classification: Assumed Non-Friable Miscellaneous ACBM

Assumed asbestos-containing Wood Flooring Paper not previously identified is assumed to be located under the Wood Floor within the Stage Area at the school. Based on discussions with the Designated Person, the Gym floor has been recently replaced. VERTEX was not provided documentation regarding an inspection report, bulk sampling results and/or abatement records for the removal of the Wood Floor within the Gym Area.

Section 1
Inspection Report (continued)

Updated Hazard Assessment

Homogeneous Area #12- Flexible Duct Connector Cloth

Classification: Assumed Non-Friable Miscellaneous ACBM

Assumed asbestos-containing Flexible Duct Connector Cloth is located within the Gym and Stage Room #2 (by Auditorium Lobby) at the school. The Flexible Duct Connector Cloth is assumed to asbestos-containing, non-friable, in generally good condition, and has a potential for damage.

Homogeneous Area #13- Fume Hood

Classification: Assumed Non-Friable Miscellaneous ACM

An assumed asbestos-containing Fume Hood is located within the Room 203 at the school. The Fume Hood is assumed to asbestos-containing, non-friable, in generally good condition, and has a potential for damage.

Homogeneous Area #15- Black Counter Tops (Previous HA # 3)

Classification: Non-Friable Miscellaneous ACBM

Asbestos-containing Black Counter Tops are located within Rooms 202, 203, and 204 at the school. The Black Counter Tops are non-friable, in generally good condition, and have a potential for damage.

SECTION 2

RESPONSE ACTION DETERMINATION

Section 2

Response Action Determination

The following is based on the Decision Tree for Thermal System Insulation Type ACM. The recommended response actions are determined utilizing the “decision tree” approach for Response Action Determination as outlined in EPA’s “Asbestos Hazard Emergency Response Act,” (AHERA) 40 CFR 763. Because of defined friability factors associated with surfacing and miscellaneous materials versus thermal system insulation, separate decision trees are utilized for each group of materials.

Decision Trees are used to estimate the risk associated with exposure to asbestos in a given homogeneous area, and to recommend certain response actions, which are consistent with regulatory requirements. Eight response actions are recommended for both thermal system insulation and for surfacing/miscellaneous insulation. The response section number given to each homogeneous area indicates a priority for action, the lower the number, the more serious the hazard. Most response actions call for an operations and maintenance program, assuming that this is the least burdensome method which still protects human health and environment. This does not prohibit the building owner from removal of ACM at any time, if that is the preferred response action.

Recommended response actions are based upon the material condition, disturbance, air-flow and the potential for damage. Potential response actions include the following:

1. Significantly Damaged Thermal System Insulation: **Response Action 1.** Isolate the area and restrict access to the area. ACM should be removed as soon as possible.
2. Damaged Thermal System Insulation with High Disturbance: **Response Action 2.** Continue O&M program and remove the ACM as soon as possible or reduce the potential for disturbance.
3. Damaged Thermal System Insulation with Moderate Disturbance and in the Presence of an Air Stream: **Response Action 2.** Continue with O&M Program and remove the ACM as soon as possible or reduce the potential for disturbance.
4. Damaged Thermal System Insulation with Moderate Disturbance: **Response Action 3.** Repair ACM, continue with O&M Program.
5. Damaged Thermal System Insulation with Low Disturbance and in the Presence of an Air Stream: **Response Action 4.** Repair ACM, continue with O&M Program.
6. Damaged Thermal System Insulation with Low Disturbance: **Response Action 5.** Repair ACM, continue with O&M Program.
7. Undamaged Thermal System Insulation with High Disturbance: **Response Action 6.** Continue with O&M Program and take preventative measures to reduce disturbance.
8. Undamaged Thermal System Insulation with Moderate Disturbance: **Response Action 7.** Continue with O&M Program and take preventative measure to reduce disturbance.
9. Undamaged Thermal System Insulation with Low Disturbance: **Response Action 7.** Continue with O&M Program and take preventative measure to reduce disturbance.

Section 2
Response Action Determination (continued)

The following is based on the Decision Tree for Surfacing and Miscellaneous ACM. Recommended response actions are based upon friability, material condition, disturbance, air flow and the potential for damage. Potential response actions include the following:

1. Friable Surfacing or Miscellaneous ACM with Significant Damage: **Response Action 1:** Isolate the area and restrict access to the area. Remove the ACM as soon as possible.
2. Friable Surfacing or Miscellaneous ACM with Damage and a High Disturbance: **Response Action 2:** Continue with O&M Program and remove ACM as soon as possible or reduce the potential for disturbance.
3. Friable Surfacing or Miscellaneous ACM with Damage, Moderate Disturbance and in the Presence of an Air Stream: **Response Action 2:** Continue with O&M Program and remove ACM as soon as possible or reduce the potential for disturbance.
4. Friable Surfacing or Miscellaneous ACM with Damage and Moderate Disturbance: **Response Action 3:** Continue with O&M Program and schedule removal when practical and cost-effective
5. Friable Surfacing or Miscellaneous ACM with Damage, Low Disturbance and in the Presence of an Air Stream: **Response Action 4:** Continue with O&M Program and schedule removal when practical and cost-effective
6. Friable Surfacing or Miscellaneous ACM with Damage and Low Disturbance: **Response Action 5:** Continue with O&M Program and schedule removal when practical and cost-effective
7. Friable Surfacing or Miscellaneous ACM with No Damage and High Disturbance: **Response Action 6:** Take preventative measures to reduce the disturbance.
8. Friable Surfacing or Miscellaneous ACM with No Damage and Moderate Disturbance: **Response Action 7:** Take preventative measure to reduce the disturbance.
9. Friable Surfacing or Miscellaneous ACM with No Damage and Low Disturbance: **Response Action 8:** Take preventative measure to reduce the disturbance.
10. Non-Friable Surfacing or Miscellaneous ACM: **Response Action 8:** Continue with O&M until major renovation or demolition requires removal under the EPA NESHAPS, or until hazard assessment factors change.

Section 2

Response Action Determination (continued)

Advantages and Disadvantage to Abatement Alternatives

The decision trees outlined in AHERA 40 CFR 763 are used to provide the “best” alternative for the specific conditions in each homogeneous area.

Below is a discussion of the alternative approaches to asbestos management in a building.

Long Term Operation & Maintenance Program

Advantages:

- *Low initial cost for implementation
- *Good interim plan
- *An O&M program may be implemented and carried out by in house trained personnel.

Disadvantages:

- *Asbestos remains in the building
- *Condition of the asbestos must be monitored
- *Cost of training and special work procedures may be significant
- *Effectiveness may be limited where control of the building occupants is difficult

Encapsulation

Advantages:

- *Reduces the risk of release of asbestos fibers
- *Initial cost is lower than the cost of asbestos removal
- *Asbestos-containing material may still serve its initial purpose
- *Quick temporary means of repair

Disadvantages:

- *Asbestos remains in the building and encapsulant makes removal more difficult
- *Improper encapsulation may cause the material to delaminate or pull away from substrate
- *Asbestos-containing material must have an O&M program
- *Similar preparation for asbestos removal is required for encapsulation
- *Long term cost may be greater than asbestos removal is periodic reapplication of the encapsulant is required

Section 2
Response Action Determination (continued)

Enclosure

Advantages:

- *Enclosure reduces immediate exposure
- *Initial cost of enclosure is lower than the cost of asbestos removal
- *Asbestos-containing material may still serve its initial purpose
- *Quick temporary means of repair

Disadvantages:

- *Asbestos remains in place and later removal is more difficult
- *If maintenance is required of the systems insulated with asbestos, the asbestos will be exposed
- *An O&M program will have to be implemented for the asbestos-containing material
- *Similar preparation for asbestos removal is required for enclosure

Removal

Advantages

- *Asbestos-containing material is eliminated from the building
- *There is no need for an O&M plan
- *Initial cost is great, but the future costs are eliminated

Disadvantages:

- *Reinsulation, refireproofing, or replacement of materials may be required
- *Improper removal may raise levels of airborne fibers higher than background levels
- *The initial cost of removal is very high
- *Areas of the building involved in asbestos removal may not be occupied during removal

SECTION 3

UPDATED RECOMMENDED RESPONSE ACTIONS

Section 3

Updated Recommended Response Actions

The updated recommended response actions are for all the homogenous areas found within the school. The response actions are determined utilizing the decision tree approach for Response Action Determination as described in Section 2.

Homogeneous Area #1-Pipe Fitting Insulation

Response Action 7: The pipe fitting insulation assumed behind wall and hard ceiling areas at the school have a potential for damage. The pipe fitting insulation located within the Gym Storage Area is in generally good condition and above the ceiling tile. Limit the potential for disturbance and continue the Operations and Maintenance (O&M) Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed. It should be noted that asbestos-containing pipe fitting insulation may be located above hard ceilings and/or behind walls. As such, a thorough exploratory inspection should be conducted prior to any renovations that may impact wall or ceiling areas.

Homogeneous Area #2- 12" x 12" Brown Spec Floor Tile

Response Action 8: The 12"x 12" Brown Spec Floor Tile located within the Stage Room # 1 and Room 204 display damage. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to remove and complete the response action. Recommended completion date of the work activities: February 2023.

Response Action 8: The 12"x 12" Brown Spec Floor Tile located throughout the Upper and Lower Levels of the original section are in generally good condition or covered by carpet. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #3- 12" x 12" Gray Spec Floor Tile

Response Action 8: The 12"x 12" Gray Spec Floor Tile located within the Stage Room # 1, Room 107 and Room 116/115 connector display damage. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to remove and complete the response action. Recommended completion date of the work activities: February 2023.

Response Action 8: The 12"x 12" Gray Spec Floor Tile located throughout the remainder of the Upper and Lower Levels of the original section are in generally good condition or covered by carpet. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Section 3
Updated Recommended Response Actions (Continued)

Homogeneous Area #4- 2' x 4' Ceiling Tile (Fissure)

Response Action 2: The 2' x 4' Ceiling Tile (Fissure) located within Room F, Girls Room by 208, Archive, Archive Storage B, Storage Closet Adjacent to Archive, Library Storage, Rooms 279 (Music), 208, 205, 204, and 115 display minor to moderate damage. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to remove and complete the response action. Recommended completion date of the work activities: February 2023.

Response Action 7: The 2' x 4' Ceiling Tile (Fissure) located throughout the remainder of the school is in generally good condition. A routine cleaning schedule is recommended to be implemented to clean horizontal surfaces that are below the ceiling tiles. Properly trained staff should conduct the cleaning activities utilizing HEPA-vacuums and/or wet wiping. Limit the potential for disturbance and implement an O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. An asbestos abatement contractor licensed and certified in the Commonwealth of Massachusetts must perform projects, which involve greater than 3 linear or 3 square feet of ACM. Personnel who have been trained as Associated Project Workers, which is a required 16-hour training course, may perform O&M activities, which involve less than three linear or square feet. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #5- Black Sink Mastic

Response Action 8: The Black Sink Mastic located under the sink areas within Rooms 217, 218 and 278 within the Upper Level of the original section at the school is in generally good condition and presents the potential for damage due to cluttered storage of materials within the under sink cabinet areas. It should be noted that trace asbestos-containing black sink mastic is located throughout the Upper and Lower Level Classrooms at the school. The trace asbestos-containing black sink mastic should be point counted to determine if the material is greater than 1 % asbestos in content. Discontinue under sink cabinet storage and seal doors for access for authorized personnel (i.e. plumber). Continue O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Section 3
Updated Recommended Response Actions (Continued)

Homogeneous Area #6- Interior Window Glazing

Response Action 8: The Interior Window Glazing located throughout the Upper and Lower Levels of the original section is in poor condition. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to repair and complete the response action. Recommended completion date of the work activities: February 2023.

Homogeneous Area #7- Red Duct Mastic

Response Action 8: Red Duct Mastic not previously identified was observed on the duct work within the Main Office-Nurse Office Corridor and 266-269 Corridor above the ceiling area. Due to the location of the red duct mastic and the observed under the insulated duct work actual quantities and locations of the red duct mastic is unknown. As such, the red duct mastic may be above the ceiling areas on duct work throughout the school building. Continue O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to renovation/demolition the material must be removed if it will be disturbed.

Homogeneous Area #8- Joint Compound

Response Action 8: The joint compound and contaminated drywall located within the Boys Locker Room is in generally good condition, non-friable, trace asbestos-containing and presents a potential for significant damage. Implement an O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Do not drill, sand, cut into and/or hang items on the drywall system. An asbestos abatement contractor licensed and certified in the Commonwealth of Massachusetts must perform projects, which involve greater than 3 linear or 3 square feet of ACM. Personnel who have been trained as Associated Project Workers, which is a required 16-hour training course, may perform O&M activities, which involve less than three linear or square feet. Prior to any work activities that may disturb the trace asbestos-containing joint compound, sufficient bulk samples should be collected by a certified asbestos inspector and submitted for point count analysis to determine if the material is greater than 1 % asbestos in content for proper removal and disposal activities.

Section 3
Updated Recommended Response Actions (Continued)

Homogeneous Area #9- 2' x 4' Ceiling Tile (Dot)

Response Action 8: The 2' x 4' Ceiling Tile (Dot) located within the Boys Locker Room and Former Girls Locker Room is in generally good condition, friable, trace asbestos-containing and presents a potential for significant damage. Continue O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. Prior to any work activities that may disturb the trace asbestos-containing ceiling tile, sufficient bulk samples should be collected by a certified asbestos inspector and submitted for point count analysis to determine if the material is greater than 1 % asbestos in content for proper removal and disposal activities.

Homogeneous Area #10- Wood Flooring Paper

Response Action 8: Assumed asbestos-containing Wood Flooring Paper is located under the wood floor within the Stage Area. The Wood Flooring Paper is assumed to be non-friable and covered. Continue O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. This Wood Flooring Paper is assumed to be asbestos-containing and should be tested prior to any activities that may disturb this material.

Homogeneous Area #11- Flexible Duct Connector Cloth

Response Action 8: Assumed asbestos-containing Flexible Duct Connector Cloth is located with the Gym and Stage Room # 2 (by Auditorium Lobby). The Flexible Duct Connector Cloth is assumed to be non-friable and have a potential for damage. Continue O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. The Flexible Duct Connector Cloth is assumed to be asbestos-containing and should be tested prior to any activities that may disturb this material.

Homogeneous Area #13- Fume Hood

Response Action 8: The assumed asbestos-containing Fume Hood located within Room 203 is in generally good condition, non-friable and has a potential for damage. Implement an O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. The Fume Hood is assumed to be asbestos-containing and should be tested prior to any activities that may disturb this material.

Section 3
Updated Recommended Response Actions (Continued)

Homogeneous Area #15- Black Counter Tops

Response Action 8: The Black Counter Tops located throughout within Rooms 202, 203 and 204 are in generally good condition, non-friable and have a potential for damage. Continue the O&M Program until major renovations or demolition requires the removal of this material, or until the hazard assessment factors change. An asbestos abatement contractor licensed and certified in the Commonwealth of Massachusetts must perform projects, which involve greater than 3 linear or 3 square feet of ACM. Personnel who have been trained as Associated Project Workers, which is a required 16-hour training course, may perform O&M activities, which involve less than three linear or square feet. Prior to renovation/demolition the material must be removed if it will be disturbed.

SECTION 4

RECORDKEEPING REQUIREMENTS AND RECOMMENDATIONS

Section 4

Recordkeeping Requirements and Recommendations

The AHERA regulations have very specific requirement for the maintenance of records associated with the management of asbestos in the school. The following is a list of some of the key items that the LEA Designated Person must maintain as part of the package:

- Initial AHERA inspection report and Asbestos Management Plan
- Subsequent 3-year reinspection reports.
- 6-month surveillance reports.
- Documentation for minor and major fiber release episodes. This includes abatement work performed by outside contractors as well as work performed by 16 hour trained maintenance personnel no matter how small.
- Documentation for completion of response actions (i.e. clearance testing). This should always include applicable training & licensure documentation for whomever performs the work.
- Labeling of ACBM (friable)
- Yearly notice to parents, teachers and staff.
- Training and medical exams for 16-hour trained personnel. Although training does not require renewal. Medicals are to be performed every year. In addition, 16-hour personnel should be fit tested every six months.
- Two hour awareness training for staff. Any new workers are required to receive this training at start of employment. Training should include specific review of ACBM in building their working in.

The above items are some of the key items, which need to be incorporated into the plan. The following are some recommendations are how best to maintain for easy access and review by outside parties:

- Maintain an update the three- ring binder for the school. Have a duplicated copy, one for administration office and one for the facilities office.
- Create tab sections in the binder. Each section should contain the information above. This will allow for easy review and update.
- Ensure that for every major and minor fiber release episode, that all documentation is received.
- As you updated your file, ensure the school's is updated.

Section 4

Recordkeeping Requirements and Recommendations (cont.)

In addition, it is also required that if outside contractors enter building perform work that they review areas where asbestos may be present that will be near their work. Have a log at the school for them to sign that they have read and understand. This will protect the school from liability and ensure outside contractors will not disturb asbestos. Finally, periodically review program internally and with your 16-hour persons to ensure compliance.

The 12"x 12" Brown Spec Floor Tile located within the Stage Room # 1 and Room 204 display damage. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to remove and complete the response action. Recommended completion date of the work activities: February 2023.

The 12"x 12" Gray Spec Floor Tile located within the Stage Room # 1, Room 107 and Room 116/115 connector display damage. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to remove and complete the response action. Recommended completion date of the work activities: February 2023.

The 2' x 4' Ceiling Tile (Fissure) located within Room F, Girls Room by 208, Archive, Archive Storage B, Storage Closet Adjacent to Archive, Library Storage, Rooms 279 (Music), 208, 205, 204, and 115 display minor to moderate damage. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to remove and complete the response action. Recommended completion date of the work activities: February 2023.

The Interior Window Glazing located throughout the Upper and Lower Levels of the original section is in poor condition. Retain a Massachusetts certified Asbestos Designer to prepare a Work Plan and retain an Abatement Contractor to repair and complete the response action. Recommended completion date of the work activities: February 2023.

Continue the periodic cleaning schedule. Properly trained staff (i.e. 2-Hour Asbestos Awareness) should conduct the cleaning activities utilizing HEPA-vacuums and/or wet wiping and floor tile maintenance as outlined in the recommended Operations and Maintenance procedures.

A required six-month periodic surveillance inspection should be scheduled for February 2023.

VERTEX recommends an ACMs Survey be conducted prior to any renovation activities to comply with the EPA Title 40 CFR Part 61, NESHAPs and the Massachusetts Department of Environmental Protection Regulations.

SECTION 5

ESTIMATED RESOURCES REQUIRED TO COMPLETE THE RESPONSE ACTIONS

Section 5
Estimated Resources Required to Complete the Response Actions

This section contains the estimated resources required to complete the abatement activities of the identified damaged ACBMs. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. The cost estimate below does not include abatement contactor mobilization, abatement design and/or project monitoring services.

Estimated Cost to complete the Response Actions at the Nathaniel Wixon School located in South Dennis, Massachusetts:

\$2,000.00

Cost Estimate Worksheet can be found in Appendix B.

***The estimated cost above to complete the response actions does not include the repair of the asbestos-containing interior window glazing throughout the school.**

*The estimated cost provided above does not include costs that may be associated with abatement consulting, contractor mobilization, two-hour asbestos awareness training, OSHA 16-hr Operations and Maintenance Training and/or the labor to conduct the required six-month surveillance re-inspections. Please refer below for estimated costs associated costs mentioned above:

Abatement Work Plan/Design Specification = \$500-\$2,500.00
Mobilization = \$1,500.00-\$2,500.00
Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift
Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00
2-Hour Asbestos Awareness Training= \$75/person
OSHA 16-hr Operations and Maintenance Training = \$300/person
Six-Month Periodic Surveillance Inspection = \$400/inspection

SECTION 6

ESTIMATED RESOURCES REQUIRED FOR THE ABATEMENT OF THE IDENTIFIED ACBMs

Section 6

Estimated Resources Required For Abatement of the Identified ACBMs

This section contains the estimated resources required to perform the removal of identified ACBMs, however EPA recommends the ACBMs to be managed in place if they are not damaged. Alternative abatement costs are estimated using current Abatement Contractor Estimates. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACBs, phasing of work, etc. The cost estimate below is a worst case scenario if all identified ACBMs were to be removed. The cost estimate below does not include abatement contractor mobilization, abatement design and/or project monitoring services.

Estimated Cost for the Removal of ACBMs from the Nathaniel Wixon School located in South Dennis, Massachusetts:

\$665,350.00*

Cost Estimate Worksheet can be found in Appendix C.

***The cost estimate above does not include the cost for removal of the assumed pipe fitting insulation potentially located behind walls and/or hard ceiling areas. As such, an additional budget should be noted for the assumed pipe fitting insulation potentially located behind walls is estimated at approximately \$60,000.00 in addition to the cost estimate above. The estimated cost above does not include the removal of the asbestos-containing interior window glazing throughout the school.**

**** The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACBs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:**

Abatement Work Plan/Design Specification = \$500-\$2,500.00

Mobilization = \$1,500.00-\$2,500.00

Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift

Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample

Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample

Clearance Report Preparation = \$350.00-\$800.00

SECTION 7

OPERATIONS AND MAINTENANCE

Section 7 Operations and Maintenance Program

INTRODUCTION

The DYRSD has established an overall asbestos control program that is designed to minimize exposure of all occupants of the school to asbestos fibers located at the Nathaniel Wixon School located in South Dennis, Massachusetts. This Operations and Maintenance (O&M) Plan is an integral part of the overall program. It sets guidelines for the proper in-place management of all assumed and identified asbestos-containing building materials (ACBM) located in the building.

This O&M plan contains the following sections:

- A. A description of the **duties of the LEA Designated Person (DP)**.
- B. A procedure for **notifying** workers, tenants, and other visitors where ACBM are located, and stressing the importance of avoiding disturbing the ACBM in any way.
- C. The detailed description of **O&M Activities**, including:
 - 1. **Emergency procedures** for both major and minor episodes of fiber release;
 - 2. **Periodic surveillance** of ACBM, so that any changes in the condition of ACBM can be noted, assessed, and documented; and
 - 3. Detailed descriptions of **work procedures** for both general maintenance and Asbestos Associated Project Workers, which must be used so that workers can avoid or minimize fiber release when performing activities that may disturb ACBM.
- D. A list of **records** that must be kept to document O&M and abatement activities.
- E. **Training requirements** for the DP, and custodial and maintenance staff.

In general, asbestos represents a health hazard **only** if fibers are breathed into the lungs or, in rare cases, are swallowed. Asbestos-containing materials that are non-friable (i.e. cannot be easily broken or crumbled by hand pressure) are not hazardous as long as they are intact and in good condition. Because friable materials can be easily crumbled or crushed, they are more susceptible to airborne fiber release than are non-friable materials.

It is a policy of the DYRSD that untrained employees and outside contractors **DO NOT** handle, touch or otherwise disturb any material that is asbestos or suspected of containing asbestos. A properly qualified and trained individual must handle any material that is, or may contain asbestos. Non-asbestos materials have been and may be identified by the asbestos coordinator using one or more of the following criteria: (1) lab analysis, (2) results of previous lab analysis, (3) product composition labels, (4) receipts, and so forth. At no time will any employee, student, or outside contractor assume a material to be asbestos-free. An inventory of ACBMs identified from the inspection are presented in Appendix A.

Section 7
Operations and Maintenance Program (Continued)

1. DUTIES OF THE ASBESTOS MANAGEMENT PLAN DESIGNATED PERSON

The DP oversees the implementation and management of the O&M plan. Duties of the DP include (1) notifying building staff, workers, and outside contractors where ACBM is located in the building, (2) assigning workers to tasks involving work that may disturb ACBM, (3) ensuring that abatement and O&M activities are conducted by trained qualified personnel, and (4) keeping records of all asbestos-related activities at the property.

The DP must receive training related to asbestos issues (see “Training Requirements” of this plan).

2. NOTIFICATION

The DP shall ensure that building workers, outside contractors, and tenants are notified of the location, quantity, and physical condition of identified and assumed ACBM that they might disturb. Such notification shall be accomplished by written notice, by personal communication, by posting signs at entrances to mechanical areas, and/or by labeling ACBM. By informing occupants of potential hazards in their vicinity, the notification reduces the possibility that occupants will accidentally disturb ACBM. The notification must stress that persons who disturb ACBM may accidentally release asbestos fibers into the air, and that therefore everyone must avoid disturbing ACBM. This notification will assure compliance with Occupational Health and Safety Administration (OSHA) Regulation 29 CFR Part 1926.1101, which regulates asbestos exposure as it relates to construction work (including building maintenance) and with 29 CFR 1910.1001, which regulates asbestos exposure in general industry (including normal housekeeping).

If asbestos-related construction, abatement, of O&M activities is conducted, the DP shall also notify the following persons about the presence, location, and quantity of ACBM:

- A. Employees of the building, such as maintenance and custodial personnel who will work in or adjacent to areas containing ACBM:
- B. Staff who will occupy areas containing ACBM.
- C. Prospective employers applying for or bidding for work if their employees will be expected to work in or adjacent to areas containing ACBM.
- D. Multiple employers occupying a work-site in the building, any of whose employees will be performing work within or adjacent to areas containing ACBM.

Section 7
Operations and Maintenance Program (Continued)

Before conducting any work in the building that has the potential to impact ACBM, contractors will be required to sign the Contractor's Asbestos Notification and Acknowledgment Form. In addition, all contractors and contractor's employees who work on the site will be required to notify the DP of the presence, location, and quantity of newly discovered ACBM within 24 hours (or sooner if ACBM is disturbed) of the discovery. If any building materials are discovered, the asbestos content of which is unknown, the material shall be presumed to contain asbestos, until the results of sampling and analysis prove otherwise. Appropriate sampling of the material shall be conducted by a Massachusetts Department of Labor and Work Force Development Division of Labor Standards accredited asbestos inspector and analyzed at an appropriately licensed asbestos analytical laboratory.

The DP shall ensure that all required warning signs are posted during abatement and O&M activities during which the release of asbestos fibers into the air is possible. Warning signs shall demarcate all regulated areas and shall bear the following information:

DANGER
ASBESTOS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
AUTHORIZED PERSONNEL ONLY
RESPIRATORS AND PROTECTIVE
CLOTHING ARE REQUIRED IN THIS AREA

Contractors and in-house personnel who remove ACBM within the site shall label all waste containers that contain ACBM waste in accordance with OSHA and EPA guidelines.

The Massachusetts Department of Environmental Protection (DEP) and the Massachusetts Division of Labor Standards (DLS) will be notified anytime work will impact any quantity of ACBM at the school.

The DP shall ensure that all previously installed ACBM that have been identified in the facility are labeled or identified by signs, as feasible. All ACBM that are friable and accessible, such as TSI located in mechanical areas or below suspended ceilings, will be labeled. Labels shall be attached to or posted in areas where employees, residents, and outside contractors who are likely to be exposed will clearly notice (such as at the entrance to mechanical rooms).

The labels shall bear the following information:

DANGER
CONTAINS ASBESTOS FIBERS
MAY CAUSE CANCER
CAUSES DAMAGE TO LUNGS
DO NOT BREATHE DUST
AVOID CREATING DUST

Posted signs may be used in lieu of labels to indicate the type and location of each ACMB.

Section 7
Operations and Maintenance Program (Continued)

3. OPERATIONS AND MAINTENANCE ACTIVITIES

Operations and maintenance activities include:

- A. Emergency procedures to be followed in the event of a major or minor episode of fiber release;
- B. Periodic surveillance of ACMB within at the school building;
- C. Work procedures associated with planned maintenance activities that may disturb ACMB. Only properly trained personnel under the control and direction of the DP shall conduct operations and maintenance activities.
- D. Periodic Cleaning Activities

A. Emergency Procedures for Fiber Release Episodes

Fiber release episodes are categorized as *major* (the falling or dislodging of more than 3 square feet or 3 linear feet of friable ACMB), or *minor* (the falling or dislodging of fewer than 3 square feet or 3 linear feet of friable ACMB)

PROCEDURE FOR MAJOR EPISODE

- 1. Restrict entry into the area.
- 2. Immediately contact the DP
- 3. Post sign to prevent anyone from entering the area except persons necessary to perform the response action.
- 4. Shut off or temporarily modify the air-handling system to prevent the fibers from being distributed to other areas in the building.
- 5. The DP shall contact an accredited designer of abatement to prepare an abatement plan that specifies the appropriate response actions.
- 6. The DP shall ensure that only a Massachusetts Certified Asbestos Abatement Contractor conducts the response actions.

Section 7

Operations and Maintenance Program (Continued)

PROCEDURE FOR MINOR EPISODE

1. Thoroughly saturate the debris using all wetting methods necessary.
2. Clean the area using wet wiping techniques followed by vacuuming with a specially equipped High Efficiency Particulate Air (HEPA) vacuum.
3. Place all debris and all contaminated cleaning supplies (mop heads, rags, etc.) into a leak tight container, such as a 6-mil thick polyethylene waste bag, and seal the container. Place the sealed container into a second 6-mil thick polyethylene bag. If labeled waste bags are not used, apply warning label to outside of each bag used.
4. Repair the area of damaged ACBM, as follows:
 - a. Use materials such as asbestos-free spackling, plaster, cement, or insulation; or
 - b. Seal the area with latex paint or an encapsulate; or
 - c. Immediately implement other appropriate response action.

B. Periodic Surveillance

Periodic surveillance of all known and assumed ACBM shall be conducted once every six months. The purpose of the regularly scheduled surveillance is to ensure that any ACBM that are damaged or that have deteriorated are detected in a timely manner. The DP shall use the information from the periodic surveillance in conjunction with ongoing reports from the periodic surveillance in conjunction with ongoing reports from service workers of changes in the condition of the ACBM to take corrective action.

The periodic surveillance consists of a visual inspection of all known and assumed ACBM. Periodic surveillance shall also include a visual and physical evaluation of ACBM in order to determine the degree of damage and to assess the likelihood of future fiber release. The area in the immediate vicinity shall also be examined for potential loose ACBM debris. The DP shall record the cause of the damage.

Only persons who have received at least the minimum asbestos-awareness training (see "Training Requirements", of this plan) shall conduct the periodic surveillance. The results of the surveillance shall be recorded on the periodic surveillance inspection form.

Section 7
Operations and Maintenance Program (Continued)

C. Work Procedures for General Maintenance Personnel

The following work practices shall be prohibited in all circumstances:

- Drilling holes in ACBM;
- Damaging ACBM while moving furniture or other objects;
- Sweeping of dusting floors, ceilings, moldings, or other surfaces in asbestos-contaminated environments;
- Using an ordinary vacuum to clean up asbestos-containing or asbestos contaminated debris (only vacuums equipped with a HEPA filter should be used);
- Removing potentially contaminated ventilation system filters without thoroughly wetting them; and
- Shaking potentially contaminated ventilation system filters.

D. Periodic Cleaning

The following is a general outline to be utilized for the properly trained personnel to conduct the periodic cleaning activities:

- Utilization of disposable rags to wet wipe of all non-porous horizontal surfaces followed by the use of a HEPA-equipped vacuum. Dry sweeping and/or dusting is not permitted to be used to clean the surfaces.
- The collected debris within the lined HEPA-equipped vacuum and disposal rags should be properly disposed of in a labeled asbestos-waste bag accompanied by a Waste Shipment Record for future disposal at a permitted facility that accepts asbestos waste.
- Document the Name of the individual conducting the work activities, location date and time of cleaning for proper recordkeeping. These records should be included within the AMP for the school.

Section 7
Operations and Maintenance Program (Continued)

4. RECORDKEEPING REQUIREMENTS

The building owner shall maintain the following documentation pertaining to ACBM in the facility:

- All data that are relied upon to demonstrate that suspect ACBM do not in fact contain asbestos.
- All data communicated and received that identify the locations and quantities of ACBM.
- All records associated with abatement projects and O&M activities. These documents shall be maintained during the term of ownership. They shall then be transferred to successive owners, in accordance with OSHA Regulation 1926.1101 (n).
- If the owner's employees conduct activities that may potentially cause them to be exposed to asbestos fibers, the owner shall keep the following additional records:
 - All employee exposure-monitoring records pursuant to OSHA Regulation 1926.1101(f).
 - All information relative to medical surveillance of employees pursuant to OSHA Regulation 1926.1101(m). Medical surveillance shall be required only if:
 1. Employees are required to conduct tasks that would result in their exposure to airborne concentrations of asbestos above the OSHA permissible exposure limit (PEL); or
 2. If employees conduct asbestos abatement tasks for more than 30 days per year.
- The owner shall maintain all employee-training records for one year beyond the employee's last date of employment.

5. TRAINING REQUIREMENTS

The extent of asbestos training for facility employees depends on the type of asbestos-related activities they will conduct. For most employees who will require training, a two-hour awareness course will be sufficient but necessary. For employees who are involved in activities where exposure to airborne asbestos fibers is likely, a more comprehensive 16-hour training course is necessary.

Section 7

Operations and Maintenance Program (Continued)

AWARENESS TRAINING

The curriculum shall include instruction in the following:

- The location, quantity, and physical condition of all ACBM located in the facility.
- Recognition of damage, deterioration, and delaminating of ACBM.
- The health effects associated with asbestos exposure, including the relationship between smoking and asbestos in producing lung cancer.
- Procedures to be implemented in the event of a minor or major episode of fiber release.
- The requirements for posting signs and affixing labels, and the meaning of the required legends for such signs and labels.

COMPREHENSIVE WORKER TRAINING

The curriculum shall include instruction in the following:

- All awareness training information described above.
- The nature of operations that could result in exposure to asbestos, and the importance of necessary protective controls and of procedures for minimizing exposure, including:
 - engineering controls
 - work practices,
 - respirators,
 - housekeeping procedures,
 - hygiene facilities,
 - protective clothing,
 - decontamination procedures,
 - emergency procedures,
 - waste disposal procedures and any necessary instruction in the use of these controls and procedures.

Section 7

Operations and Maintenance Program (Continued)

- The purpose, proper use, fitting instructions, and limitations of respirators.
- Medical surveillance program requirements
- The contents of the OSHA standard (1926.1101) regarding asbestos in construction.
- Hands-on-training in the use of respiratory protection, other personal protection measures, and work practices.

Detailed procedures for conducting small-scale, short duration abatement activities, as defined in Appendix A to Subpart E to EPA Regulation 40 CFR Part 763.

APPENDIX A

**LOCATIONS OF THE ASBESTOS CONTAINING BUILDING MATERIALS AND
UPDATED CONDITONS**

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section						
Front Entrance	2' x 4' Ceiling Tile (Fissure)	1200 ft ²	IC	G	Y	6
Cloak Room (Room F)	12" x 12" Brown Spec Floor Tile	300 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	300 ft ²	MD (8 ft ²)	G	Y	6
Room E (Police and Supply Room)	12" x 12" Gray Spec Floor Tile	418 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	386 ft ²	IC	G	Y	4
266/267/268 Corridor	2' x 4' Ceiling Tile (Fissure)	1400 ft ²	IC	MD (8 ft ²)	Y	4
	Red Duct Mastic (Above Ceiling) ¹	60 lf	G	G	N	5
Room 268 (Social Worker Office)	12" x 12" Brown Spec Floor Tile (Under Carpet)	400 ft ²	C	C	N	5
	Contaminated Carpet	400 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	G	G	Y	6
Room 267	12" x 12" Brown Spec Floor Tile	900 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 266	12" x 12" Brown Spec Floor Tile	900 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	IC	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 224/Server Room	12" x 12" Brown Spec Floor Tile	340 ft ²	G	MD (12 ft ²)	N	5
	2' x 4' Ceiling Tile (Fissure)	340 ft ²	G	G	Y	6
Room H (Reception)	2' x 4' Ceiling Tile (Fissure)	354 ft ²	G	G	Y	6

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Main Office Closet	12" x 12" Brown Spec Floor Tile	354 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	354 ft ²	IC	G	Y	4
Room G	12" x 12" Brown Spec Floor Tile (Under Carpet)	310 ft ²	C	C	N	5
	Contaminated Carpet	310 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	310 ft ²	G	G	Y	6
Room I (Principal)	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Principal Bath	12" x 12" Brown Spec Floor Tile	340 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	340 ft ²	G	G	N	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Room I-J Hall and Closet	12" x 12" Brown Spec Floor Tile	48 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G	G	Y	6
Room J (Dean Office) and Closet	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G	G	Y	5
	Interior Window Glazing	SU	P	P	N	5
Room M/K (Guidance Office)	2' x 4' Ceiling Tile (Fissure)	672 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Clinic (Nurse Office)	12" x 12" Brown Spec Floor Tile	636 ft ²	G	G	N	5
	12" x 12" Gray Spec Floor Tile	264 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
<i>Upper Level-Original Section (Continued)</i>						
Copy Room (in Room 273)	2' x 4' Ceiling Tile (Fissure)	144 ft ²	G	G	Y	6
Room 273	2' x 4' Ceiling Tile (Fissure)	960 ft ²	IC	G	Y	4
	Interior Window Glazing	SU	P	P	N	5
Room 274	2' x 4' Ceiling Tile (Fissure)	960 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 275	2' x 4' Ceiling Tile (Fissure)	880 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 276	2' x 4' Ceiling Tile (Fissure)	640 ft ²	IC	MD (32 ft ²)	Y	6
	Interior Window Glazing	SU	P	P	N	5
	12" x 12" Tan Floor Tile		NF*	NF*	NA	NA
Main Office Corridor (Reception-Nurse)	2' x 4' Ceiling Tile (Fissure)	1000 ft ²	IC	IC	Y	4
	Red Duct Mastic (Above Ceiling) ¹	70 lf	G	G	N	5
277-279 Corridor	2' x 4' Ceiling Tile (Fissure)	1440 ft ²	IC	MD (40 ft ²)	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 277	12" x 12" Gray Spec Floor Tile	1320 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1320 ft ²	IC	IC	Y	4
	Interior Window Glazing	SU	P	P	N	5
Room 277 Bathroom	12" x 12" Gray Spec Floor Tile	36 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Room 277 Hall	12" x 12" Gray Spec Floor Tile	60 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	G	G	Y	6
Room O (Time Out Room by 277)	12" x 12" Gray Spec Floor Tile	144 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	144 ft ²	G	G	Y	6
Room 278 (Music Room)	12" x 12" Gray Spec Floor Tile	1750 ft ²	G	MD (2 ft ²)	N	5
	2' x 4' Ceiling Tile (Fissure)	1718 ft ²	G	MD (8 ft ²)	Y	6
	Black Sink Mastic	2 Units	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 278 Bathroom	12" x 12" Gray Spec Floor Tile	96 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	96 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
278-279 Connector Room	12" x 12" Gray Spec Floor Tile	240 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	240 ft ²	G	G	Y	6
Music Storage Room	12" x 12" Gray Spec Floor Tile	120 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	G	G	Y	6
Room 279 (Music Room)	12" x 12" Gray Spec Floor Tile	1460 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1460 ft ²	MD (8 ft ²)	MD (24 ft ²)	Y	6
	Interior Window Glazing	SU	P	P	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Room 217 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	IC	G	Y	6
	Black Sink Mastic	2	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 218 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	IC	G	Y	6
	Black Sink Mastic	2	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
Teachers' Lounge	2' x 4' Ceiling Tile (Fissure)	960 ft ²	IC	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Teachers-Men's Room	12" x 12" Brown Spec Floor Tile	64 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Teachers-Women's Room	12" x 12" Brown Spec Floor Tile	56 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Janitor Closet by Boys and Girls Room	12" x 12" Gray Spec Floor Tile	48 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	IC	G	Y	4
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Girls Room by 208	2' x 4' Ceiling Tile (Fissure)	192 ft ²	MD (16 ft ²)	MD (16 ft ²)	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Room 212	12" x 12" Gray Spec Floor Tile	420 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	420 ft ²	IC	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 210	12" x 12" Gray Spec Floor Tile	900 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	IC	G	Y	4
	Interior Window Glazing	SU	P	P	N	5
Room 208	12" x 12" Gray Spec Floor Tile	900 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	MD (16 ft ²)	MD (16 ft ²)	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 206	12" x 12" Gray Spec Floor Tile	900 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Room 205	12" x 12" Gray Spec Floor Tile	900 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	MD (16 ft ²)	MD (16 ft ²)	Y	6
	Interior Window Glazing	SU			N	5
Room 204 (Science)	12" x 12" Brown Spec Floor Tile	1010 ft ²	MD (10 ft ²)	MD (10 ft ²)	N	5
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	MD (24 ft ²)	MD (24 ft ²)	Y	6
	Interior Window Glazing	SU	P	P	N	5
	Fixed Laboratory Bench Tops	150 ft ²	G	G	N	5
	Fire Blanket (Assumed)	1 Unit	G	G	N	5
Room 203 (Science)	12" x 12" Brown Spec Floor Tile	1234 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1208 ft ²	IC	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
	Fixed Laboratory Bench Tops	300 ft ²	G	G	N	5
	Fume Hood (Assumed)	1 Unit	G	G	N	5
Room 202/201	12" x 12" Brown Spec Floor Tile	1010 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
	Fire Blanket (Assumed)	1 Unit	NA	NA	N	5
201-212 Corridor	2' x 4' Ceiling Tile (Fissure)	3204 ft ²	IC	MD (8 ft ²)	Y	4
	Interior Window Glazing	SU	P	P	N	5
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Boys Locker Room	12" x 12" Brown Spec Floor Tile	60 ft ²	G	G	N	5
	12" x 12" Gray Spec Floor Tile	1080 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	IC	G	Y	6
	2' x 4' Ceiling Tile (Dot)*	954 ft ²	IC	G	Y	6
	Drywall/Joint Compound	270 ft ²	G	G	N	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Boys Locker Room Office and Closet	12" x 12" Gray Spec Floor Tile	160 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	152 ft ²	IC	G	Y	6
Boys Locker Room Office Bathroom	12" x 12" Gray Spec Floor Tile	42 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Dot)*	42 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Boys Locker Room Bathroom	12" x 12" Gray Spec Floor Tile	120 ft ²	IC	G	N	5
	2' x 4' Ceiling Tile (Fissure)	136 ft ²	IC	G	Y	4
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	N	5
Boys Locker Room Shower Room	2' x 4' Ceiling Tile (Dot)*	450 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	N	5
Stair # 1 to Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	252 ft ²	G	G	Y	6

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	16 ft ²	G	G	Y	6
	2' x 4' Ceiling Tile (Dot)*	1584 ft ²	D (16 ft ²)	D (16 ft ²)	Y	6
	Pipe Fitting Insulation (In Wall Chase Opening)	21 Units	G	G	Y	5
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Archive Storage A	12" x 12" Gray Spec Floor Tile	140 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	140 ft ²	G	G	Y	6
Archive Storage B	2' x 4' Ceiling Tile (Fissure)	180 ft ²	D (16 ft ²)	D (16 ft ²)	N	6
Archive Storage C, Bathroom and Closet	12" x 12" Gray Spec Floor Tile	200 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	140 ft ²	G	G	Y	6
	2' x 4' Ceiling Tile (Dot)*	60 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Archive Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	100 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Janitor Closet in Stair Adjacent to Archive	12" x 12" Gray Spec Floor Tile	36 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	G	G	Y	6
Storage Closet in Stair Adjacent to Archive	12" x 12" Gray Spec Floor Tile	224 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	216 ft ²	D (8 ft ²)	D (8 ft ²)	Y	4

Appendix A
3-Year AHERA Re-Inspection August 2022
Locations of the Identified Asbestos-Containing Building Materials
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Stair # 2 to Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	252 ft ²	MD (8 ft ²)	MD (8 ft ²)	Y	6
Gym Storage	12" x 12" Gray Spec Floor Tile	384 ft ²	G	G	N	5
	Pipe Fitting Insulation	21 Units	G	G	Y	5
Gym	Flexible Duct Connector Cloth	2 Units	G	G	N	5
Stage Room # 2 (By Auditorium Lobby)	12" x 12" Gray Spec Floor Tile	168 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	168 ft ²	G	G	Y	6
	Flexible Duct Connector Cloth	2 Units	G	G	N	5
Stage	Wood Flooring Paper (Assumed)	1400 ft ²	C	C	U	U
	Stage Curtains (Assumed)		G	G	N	5
Stage Room # 1 (By Main Entrance Lobby)	12" x 12" Gray and Brown Spec Floor Tile	750 ft ²	MD (2 ft ²)	MD (2 ft ²)	N	5
Auditorium/Cafeteria/Gym Corridor	2' x 4' Ceiling Tile (Fissure)	736 ft ²	G	G	Y	6
Cafeteria	12" x 12" Brown Spec Floor Tile	3800 ft ²	G	G	N	6
	Interior Window Glazing	SU	P	P	N	5
Kitchen Locker Area and Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	G	G	N	5
	12" x 12" Brown Spec Floor Tile	48 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	150 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Kitchen Pantry	2' x 4' Ceiling Tile (Fissure)	80 ft ²	G	G	Y	6

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Upper Level-Original Section (Continued)						
Cafeteria/Gym Storage Closet	12" x 12" Gray Spec Floor Tile	200 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	200 ft ²	G	MD (4 ft ²)	Y	4
Former Girls Room by 103	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Girls Locker Room	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Girls Locker Room Storage Closet	2' x 4' Ceiling Tile (Fissure)	4 ft ²	G	G	Y	6
Lower Level-Original Section						
201-101 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 102	12" x 12" Brown Spec Floor Tile	880 ft ²	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 103	12" x 12" Brown Spec Floor Tile	900 ft ²	G	MD (2 ft ²)	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 104	12" x 12" Gray Spec Floor Tile	890 ft ²	G	MD (4 ft ²)	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 105	12" x 12" Gray Spec Floor Tile	900 ft ²	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 106	12" x 12" Gray Spec Floor Tile	900 ft ²	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Lower Level-Original Section (Continued)						
Room 107	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (6 ft ²)	MD (10 ft ²)	N	5
	Interior Window Glazing	SU	P	P	N	5
206-107 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 109	12" x 12" Gray Spec Floor Tile	900 ft ²	G	MD (1 ft ²)	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 110	12" x 12" Brown Spec Floor Tile	900 ft ²	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
Room 111	12" x 12" Brown Spec Floor Tile	900 ft ²	G	G	N	5
	Interior Window Glazing	SU	P	P	N	5
210-111 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G	G	Y	6
	Interior Window Glazing	SU	P	P	N	5
Room 113	12" x 12" Brown Spec Floor Tile	224 ft ²	G	G	N	5
Women's Room by 113	2' x 4' Ceiling Tile (Fissure)	136 ft ²	G	MD (2 ft ²)	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Men's Room by 113	2' x 4' Ceiling Tile (Fissure)	8 ft ²	G	G	Y	6
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Room 115	12" x 12" Brown Spec Floor Tile	1200 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	1192 ft ²	MD (8 ft ²)	G	Y	6
	Interior Window Glazing	SU	P	P	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Lower Level-Original Section (Continued)						
Electrical Room adjacent to Room 115	12" x 12" Gray Spec Floor Tile	120 ft ²	IC	G	N	5
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	G	G	Y	4
Room 116/115 Connector Room	12" x 12" Gray Spec Floor Tile	170 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	130 ft ²	D (24 ft ²)	IC	Y	4
Room 117	Interior Window Glazing	SU	G	G	N	5
Library Offices # 1, 2 and 3	12" x 12" Gray Spec Floor Tile	544 ft ²	G	G	N	5
Library	12" x 12" Gray Spec Floor Tile (Under Carpet)	3,360 ft ²	G	G	N	5
	Contaminated Carpet		G	G	NA	5
Library Storage	12" x 12" Gray Spec Floor Tile	460 ft ²	G	G	N	5
	2' x 4' Ceiling Tile (Fissure)	460 ft ²	WD (20 ft ²)	IC	Y	6
Boys Room by Room 109	Pipe Fitting Insulation (Assumed Behind Wall)		U	U	U	5
Girls Room by Room 107	Pipe Fitting Insulation (Assumed Behind Wall)		G	G	U	5
Storage 135	12" x 12" Gray Spec Floor Tile	460 ft ²	D (16 ft ²)	IC	N	5

Appendix A 3-Year AHERA Re-Inspection August 2022 Locations of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	VERTEX 2019 Cond.	VERTEX 2022 Updated Cond.	Fri.	HAHAC #
Addition Section						
Room 140	Black Sink Mastic**	1 Unit	G	G	N	5
Room 141	Black Sink Mastic**	1 Unit	G	G	N	5
Room 142	Black Sink Mastic**	1 Unit	G	G	N	5
Room 143	Black Sink Mastic**	1 Unit	G	G	N	5
Room 144	Black Sink Mastic**	1 Unit	G	G	N	5
Room 146	Black Sink Mastic**	1 Unit	G	G	N	5
Room 315	Black Sink Mastic**	1 Unit	G	G	N	5
Room 316	Black Sink Mastic**	1 Unit	G	G	N	5
Room 317	Black Sink Mastic**	1 Unit	G	G	N	5
Room 318	Black Sink Mastic**	1 Unit	G	G	N	5
Room 319	Black Sink Mastic**	1 Unit	G	G	N	5
Room 320	Black Sink Mastic**	1 Unit	G	G	N	5
Room 321	Black Sink Mastic**	1 Unit	G	G	N	5
Room 314	Black Sink Mastic**	1 Unit	G	G	N	5
Loading Dock	2' x 4' Ceiling Tile (Fissure)	16 ft ²	G	G	N	5

Notes:

ft ² = Square Foot	Cond. = Condition	U = Unknown
lf = Linear Foot	G = Good	C = Covered
Unit = Each	MD = Minor Damage	NF = Not Found
Y = Yes	D = Damaged	NPI = Not Previously Identified
N = No	Fri. = Friable	SU = Store Front Window Units
IC = Improved Condition		WD = Water Damage

HAHAC # = Homogenous Area Hazard Assessment Category

- 1 = Damaged/Significantly Damaged Thermal System Insulation
- 2 = Damaged Friable Surfacing ACBM
- 3 = Significantly Damaged Friable Surfacing ACBM
- 4 = Damaged or Significantly Damaged Friable Miscellaneous ACBM
- 5 = ACBM with Potential for Damage
- 6 = ACBM with Potential for Significant Damage
- 7 = Any Remaining Friable ACBM or Friable Suspected ACBM
- NA = Not Applicable

Notes/Changes:

Black Sink Mastic** = Trace asbestos-containing (< 1% Asbestos)

February 2017- Damaged asbestos-containing ceiling tile was abated within Room E, Main Office Closet, Boys Locker Room, Teachers Lounge
Former Girls Locker Room, Gym Storage, Cafeteria/Gym Closet, Archive Storage B, Storage Closet in Stair Adjacent to Archive,
Main Office Corridor, 201-212 Corridor, Electrical Room, and Rooms 266, 273, 277, 217, 218, 212, 210, and 203.

APPENDIX B

ESTIMATED RESOURCES REQUIRED TO COMPLETE THE RESPONSE ACTIONS

Appendix B
3-Year AHERA Re-Inspection August 2022
Estimated Resources to Complete Response Actions
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	Recommended Response Action	Estimated Cost	Recommended Date of Completed Response Action	Date of Completed Response Action
<i>Upper Level-Original Section</i>						
266/267/268 Corridor	2' x 4' Ceiling Tile (Fissure)	8 ft ²	Remove	\$48.00	February 2023	
Room 224/Server Room	12" x 12" Brown Spec Floor Tile	12 ft ²	Remove	\$108.00	February 2023	
Room 267	Interior Window Glazing	SU	Repair		February 2023	
Room 266	Interior Window Glazing	SU	Repair		February 2023	
Room I (Principal)	Interior Window Glazing	SU	Repair		February 2023	
Room J (Dean Office) and Closet	Interior Window Glazing	SU	Repair		February 2023	
Room M/K (Guidance Office)	Interior Window Glazing	SU	Repair		February 2023	
Clinic (Nurse Office)	Interior Window Glazing	SU	Repair		February 2023	
Room 273	Interior Window Glazing	SU	Repair		February 2023	
Room 274	Interior Window Glazing	SU	Repair		February 2023	
Room 275	Interior Window Glazing	SU	Repair		February 2023	
Room 276	Interior Window Glazing	SU	Repair		February 2023	
	2' x 4' Ceiling Tile (Fissure)	32 ft ²	Remove	\$192.00	February 2023	
277-279 Corridor	Interior Window Glazing	SU	Repair		February 2023	
	2' x 4' Ceiling Tile (Fissure)	40 ft ²	Remove	\$240.00	February 2023	
Room 277	Interior Window Glazing	SU	Repair		February 2023	
Room 278 (Music Room)	Interior Window Glazing	SU	Repair		February 2023	
	12" x 12" Gray Spec Floor Tile	2 ft ²	Remove	\$18.00	February 2023	
	2' x 4' Ceiling Tile (Fissure)	8 ft ²	Remove	\$48.00	February 2023	
Room 279 (Music Room)	2' x 4' Ceiling Tile (Fissure)	24 ft ²	Remove	\$144.00	February 2023	
Room 217 (Art)	Interior Window Glazing	SU	Repair		February 2023	
Room 218 (Art)	Interior Window Glazing	SU	Repair		February 2023	

Appendix B 3-Year AHERA Re-Inspection August 2022 Estimated Resources to Complete Response Actions Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts					
Location	ACBM Description	Estimated Quantity	Recommended Response Action	Estimated Cost	Recommended Date of Completed Response Action
<i>Upper Level-Original Section</i>					
Teachers' Lounge	Interior Window Glazing	SU	Repair		February 2023
Girls Room by 208	2' x 4' Ceiling Tile (Fissure)	16 ft ²	Remove	\$96.00	February 2023
Room 212	Interior Window Glazing	SU	Repair		February 2023
Room 210	Interior Window Glazing	SU	Repair		February 2023
Room 208	2' x 4' Ceiling Tile (Fissure)	16 ft ²	Remove	\$96.00	February 2023
	Interior Window Glazing	SU	Repair		February 2023
Room 206	Interior Window Glazing	SU	Repair		February 2023
Room 205	2' x 4' Ceiling Tile (Fissure)	16 ft ²	Remove	\$96.00	February 2023
	Interior Window Glazing	SU	Repair		February 2023
Room 204 (Science)	12" x 12" Brown Spec Floor Tile	10 ft ²	Remove	\$90.00	February 2023
	2' x 4' Ceiling Tile (Fissure)	24 ft ²	Remove	\$144.00	February 2023
	Interior Window Glazing	SU	Repair		February 2023
Room 203 (Science)	Interior Window Glazing	SU	Repair		February 2023
Room 202/201	Interior Window Glazing	SU	Repair		February 2023
201-212 Corridor	Interior Window Glazing	SU	Repair		February 2023
	2' x 4' Ceiling Tile (Fissure)	8 ft ²	Remove	\$48.00	February 2023
Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Dot)*	16 ft ²	Remove	\$96.00	February 2023
Archive Storage B	2' x 4' Ceiling Tile (Fissure)	16 ft ²	Remove	\$96.00	February 2023
Storage Closet in Stair Adjacent to Archive	2' x 4' Ceiling Tile (Fissure)	8 ft ²	Remove	\$48.00	February 2023
Stage Room # 1 (By Main Entrance Lobby)	12" x 12" Gray and Brown Spec Floor Tile	2 ft ²	Remove	\$18.00	February 2023
Cafeteria	Interior Window Glazing	SU	Repair		February 2023

Appendix B 3-Year AHERA Re-Inspection August 2022 Estimated Resources to Complete Response Actions Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts						
Location	ACBM Description	Estimated Quantity	Recommended Response Action	Estimated Cost	Recommended Date of Completed Response Action	Date of Completed Response Action
Lower Level-Original Section						
Cafeteria/Gym Storage Closet	2' x 4' Ceiling Tile (Fissure)	8 ft ²	Remove	\$48.00	February 2023	
201-101 Stair	Interior Window Glazing	SU	Repair		February 2023	
Room 102	Interior Window Glazing	SU	Repair		February 2023	
Room 103	Interior Window Glazing	SU	Repair		February 2023	
Room 104	Interior Window Glazing	SU	Repair		February 2023	
Room 105	Interior Window Glazing	SU	Repair		February 2023	
Room 106	Interior Window Glazing	SU	Repair		February 2023	
Room 107	12" x 12" Gray Spec Floor Tile	6 ft ²	Repair	\$54.00	February 2023	
	Interior Window Glazing	SU	Repair		February 2023	
206-107 Stair	Interior Window Glazing	SU	Repair		February 2023	
Room 109	Interior Window Glazing	SU	Repair		February 2023	
Room 110	Interior Window Glazing	SU	Repair		February 2023	
Room 111	Interior Window Glazing	SU	Repair		February 2023	
210-111 Stair	Interior Window Glazing	SU	Repair		February 2023	
Room 115	2' x 4' Ceiling Tile (Fissure)	8 ft ²	Remove	\$48.00	February 2023	
	Interior Window Glazing	SU	Repair		February 2023	
Room 116/115 Connector Room	12" x 12" Gray Spec Floor Tile	24 ft ²	Repair	\$216.00	February 2023	
Storage 135	12" x 12" Gray Spec Floor Tile	16 ft ²	Repair	\$144.00	February 2023	

Notes:

ft² = Square Foot

lf = Linear Foot

Nathaniel Wixon School
901 Route 134, South Dennis, Massachusetts
Project #80960
Unit = Each

Estimated Resources

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* The estimated cost provided above is developed from current Abatement Contractor Unit pricing. These estimates will vary according to competitive bidding, accessibility, location, and condition of ACMs, phasing of work, etc. In addition, the costs above do not include mobilization of the Abatement Contractor, Abatement Work Plan/Design, Project Monitoring and/or Clearance Testing Services for the completion of the response actions. Please refer for below unit pricing regarding costs for the Contractor Mobilization and Clearance Testing Services:

Abatement Work Plan/Design Specification = \$500-\$2,500.00
Abatement Contactor Mobilization = \$1,500.00-\$2,500.00
Project Monitoring/Clearance Testing = \$520.00-\$600.00/per shift
Transmission Electron Microcopy (TEM) Analysis = \$75.00-\$100.00/sample
Phase Contrast Microscopy (PCM) Analysis = No Charge -\$15.00/sample
Clearance Report Preparation = \$350.00-\$800.00

**The estimated cost provided above does not include costs that may be associated with two-hour asbestos awareness training, OSHA 16-hr Operations and Maintenance Training, and/or the labor to conduct the required six-month surveillance re-inspections. Please refer below for estimated costs that may be associated with the mentioned above:

2-Hour Asbestos Awareness Training = \$75/person
OSHA 16-hr Operations and Maintenance Training = \$300/person
Six-Month Periodic Surveillance Inspection = \$400/inspection

APPENDIX C

ESTIMATED RESOURCES REQUIRED FOR THE ABATEMENT OF THE IDENTIFIED ACBMs

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section</i>			
Front Entrance	2' x 4' Ceiling Tile (Fissure)	1200 ft ²	\$7,200.00
	Interior Window Glazing	SU	
Cloak Room (Room F)	12" x 12" Brown Spec Floor Tile	300 ft ²	\$2,700.00
	2' x 4' Ceiling Tile (Fissure)	300 ft ²	\$1,800.00
Room E (Police and Supply Room)	12" x 12" Gray Spec Floor Tile	418 ft ²	\$3,762.00
	2' x 4' Ceiling Tile (Fissure)	386 ft ²	\$2,316.00
266/267/268 Corridor	2' x 4' Ceiling Tile (Fissure)	1400 ft ²	\$8,400.00
	Red Duct Mastic (Above Ceiling) ¹	60 lf	\$600.00
Room 268 (Social Worker Office)	12" x 12" Brown Spec Floor Tile (Under Carpet)	400 ft ²	\$3,600.00
	Contaminated Carpet	400 ft ²	
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	\$2,208.00
Room 267	12" x 12" Brown Spec Floor Tile	900 ft ²	\$8,100.00
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	\$2,208.00
	Interior Window Glazing	SU	
Room 266	12" x 12" Brown Spec Floor Tile	900 ft ²	\$8,100.00
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	\$2,208.00
	Interior Window Glazing	SU	
Room 224/Server Room	12" x 12" Brown Spec Floor Tile	340 ft ²	\$3,060.00
	2' x 4' Ceiling Tile (Fissure)	340 ft ²	\$2,040.00
Room H (Reception)	2' x 4' Ceiling Tile (Fissure)	354 ft ²	\$2,124.00

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Main Office Closet	12" x 12" Brown Spec Floor Tile	354 ft ²	\$3,186.00
	2' x 4' Ceiling Tile (Fissure)	354 ft ²	\$2,124.00
Room G	12" x 12" Brown Spec Floor Tile (Under Carpet)	310 ft ²	\$2,790.00
	Contaminated Carpet	310 ft ²	
	2' x 4' Ceiling Tile (Fissure)	310 ft ²	\$1,860.00
Room I (Principal)	2' x 4' Ceiling Tile (Fissure)	280 ft ²	\$1,680.00
	Interior Window Glazing	SU	
Principal Bath	12" x 12" Brown Spec Floor Tile	340 ft ²	\$3,060.00
	2' x 4' Ceiling Tile (Fissure)	340 ft ²	\$2,040.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Room I-J Hall and Closet	12" x 12" Brown Spec Floor Tile	48 ft ²	\$432.00
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	\$288.00
Room J (Dean Office) and Closet	2' x 4' Ceiling Tile (Fissure)	280 ft ²	\$1,680.00
	Interior Window Glazing	SU	
Room M/K (Guidance Office)	2' x 4' Ceiling Tile (Fissure)	672 ft ²	\$4,032.00
	Interior Window Glazing	SU	
Clinic (Nurse Office)	12" x 12" Brown Spec Floor Tile	636 ft ²	\$5,724.00
	12" x 12" Gray Spec Floor Tile	264 ft ²	\$2,376.00
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	\$5,400.00
	Interior Window Glazing	SU	

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Copy Room (in Room 273)	2' x 4' Ceiling Tile (Fissure)	144 ft ²	\$864.00
Room 273	2' x 4' Ceiling Tile (Fissure)	960 ft ²	\$5,760.00
	Interior Window Glazing	SU	
Room 274	2' x 4' Ceiling Tile (Fissure)	960 ft ²	\$5,760.00
	Interior Window Glazing	SU	
Room 275	2' x 4' Ceiling Tile (Fissure)	880 ft ²	\$5,280.00
	Interior Window Glazing	SU	
Room 276	2' x 4' Ceiling Tile (Fissure)	640 ft ²	\$3,840.00
	Interior Window Glazing	SU	
	12" x 12" Tan Floor Tile		
Main Office Corridor (Reception-Nurse)	2' x 4' Ceiling Tile (Fissure)	1000 ft ²	\$6,000.00
	Red Duct Mastic (Above Ceiling) ¹	70 lf	\$700.00
277-279 Corridor	2' x 4' Ceiling Tile (Fissure)	1440 ft ²	\$8,640.00
	Interior Window Glazing	SU	
Room 277	12" x 12" Gray Spec Floor Tile	1320 ft ²	\$11,880.00
	2' x 4' Ceiling Tile (Fissure)	1320 ft ²	\$7,920.00
	Interior Window Glazing	SU	
Room 277 Bathroom	12" x 12" Gray Spec Floor Tile	36 ft ²	\$324.00
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	\$216.00
	Pipe Fitting Insulation (Assumed Behind Wall)		

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Room 277 Hall	12" x 12" Gray Spec Floor Tile	60 ft ²	\$540.00
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	\$360.00
Room O (Time Out Room by 277)	12" x 12" Gray Spec Floor Tile	144 ft ²	\$1,296.00
	2' x 4' Ceiling Tile (Fissure)	144 ft ²	\$864.00
Room 278 (Music Room)	12" x 12" Gray Spec Floor Tile	1750 ft ²	\$15,750.00
	2' x 4' Ceiling Tile (Fissure)	1718 ft ²	\$10,308.00
	Black Sink Mastic	2 Units	\$100.00
	Interior Window Glazing	SU	
Room 278 Bathroom	12" x 12" Gray Spec Floor Tile	96 ft ²	\$864.00
	2' x 4' Ceiling Tile (Fissure)	96 ft ²	\$576.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
278-279 Connector Room	12" x 12" Gray Spec Floor Tile	240 ft ²	\$2,160.00
	2' x 4' Ceiling Tile (Fissure)	240 ft ²	\$1,440.00
Music Storage Room	12" x 12" Gray Spec Floor Tile	120 ft ²	\$1,080.00
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	\$720.00
Room 279 (Music Room)	12" x 12" Gray Spec Floor Tile	1460 ft ²	\$13,140.00
	2' x 4' Ceiling Tile (Fissure)	1460 ft ²	\$8,760.00
	Interior Window Glazing	SU	

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Room 217 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	\$11,520.00
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	\$7,680.00
	Black Sink Mastic	2	\$100.00
	Interior Window Glazing	SU	
Room 218 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	\$11,520.00
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	\$7,680.00
	Black Sink Mastic	2	\$100.00
	Interior Window Glazing	SU	
Teachers' Lounge	2' x 4' Ceiling Tile (Fissure)	960 ft ²	\$5,760.00
	Interior Window Glazing	SU	
Teachers-Men's Room	12" x 12" Brown Spec Floor Tile	64 ft ²	\$576.00
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	
	Pipe Fitting Insulation (Assumed Behind Wall)		
Teachers-Women's Room	12" x 12" Brown Spec Floor Tile	56 ft ²	\$504.00
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	\$288.00
	Pipe Fitting Insulation (Assumed Behind Wall)		

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Janitor Closet by Boys and Girls Room	12" x 12" Gray Spec Floor Tile	48 ft ²	\$432.00
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	\$288.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Girls Room by 208	2' x 4' Ceiling Tile (Fissure)	192 ft ²	\$1,152.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Room 212	12" x 12" Gray Spec Floor Tile	420 ft ²	\$3,780.00
	2' x 4' Ceiling Tile (Fissure)	420 ft ²	\$2,520.00
	Interior Window Glazing	SU	
Room 210	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	\$5,400.00
	Interior Window Glazing	SU	
Room 208	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	\$5,400.00
	Interior Window Glazing	SU	
Room 206	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	\$5,400.00
	Interior Window Glazing	SU	

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Room 205	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	\$5,400.00
	Interior Window Glazing	SU	
Room 204 (Science)	12" x 12" Brown Spec Floor Tile	1010 ft ²	\$9,090.00
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	\$6,060.00
	Interior Window Glazing	SU	
	Fixed Laboratory Bench Tops	150 ft ²	\$900.00
	Fire Blanket (Assumed)	1 Unit	
Room 203 (Science)	12" x 12" Brown Spec Floor Tile	1234 ft ²	\$11,106.00
	2' x 4' Ceiling Tile (Fissure)	1208 ft ²	\$7,248.00
	Interior Window Glazing	SU	
	Fixed Laboratory Bench Tops	300 ft ²	\$1,800.00
	Fume Hood (Assumed)	1 Unit	\$100.00
Room 202/201	12" x 12" Brown Spec Floor Tile	1010 ft ²	\$9,090.00
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	\$6,060.00
	Interior Window Glazing	SU	
	Fire Blanket (Assumed)	1 Unit	
201-212 Corridor	2' x 4' Ceiling Tile (Fissure)	3204 ft ²	\$19,224.00
	Interior Window Glazing	SU	
	Pipe Fitting Insulation (Assumed Behind Wall)		

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Boys Locker Room	12" x 12" Brown Spec Floor Tile	60 ft ²	\$540.00
	12" x 12" Gray Spec Floor Tile	1080 ft ²	\$9,720.00
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	\$360.00
	2' x 4' Ceiling Tile (Dot)*	954 ft ²	\$5,724.00
	Drywall/Joint Compound	270 ft ²	\$2,700.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Boys Locker Room Office and Closet	12" x 12" Gray Spec Floor Tile	160 ft ²	\$1,440.00
	2' x 4' Ceiling Tile (Fissure)	152 ft ²	\$912.00
Boys Locker Room Office Bathroom	12" x 12" Gray Spec Floor Tile	42 ft ²	\$378.00
	2' x 4' Ceiling Tile (Dot)*	42 ft ²	\$252.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Boys Locker Room Bathroom	12" x 12" Gray Spec Floor Tile	120 ft ²	\$1,080.00
	2' x 4' Ceiling Tile (Fissure)	136 ft ²	\$816.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Boys Locker Room Shower Room	2' x 4' Ceiling Tile (Dot)*	450 ft ²	\$2,700.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Stair # 1 to Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	252 ft ²	\$1,512.00

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	16 ft ²	\$96.00
	2' x 4' Ceiling Tile (Dot)*	1584 ft ²	\$9,504.00
	Pipe Fitting Insulation (In Wall Chase Opening)	21 Units	\$525.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Archive Storage A	12" x 12" Gray Spec Floor Tile	140 ft ²	\$1,260.00
	2' x 4' Ceiling Tile (Fissure)	140 ft ²	\$840.00
Archive Storage B	2' x 4' Ceiling Tile (Fissure)	180 ft ²	\$1,080.00
Archive Storage C, Bathroom and Closet	12" x 12" Gray Spec Floor Tile	200 ft ²	\$1,800.00
	2' x 4' Ceiling Tile (Fissure)	140 ft ²	\$840.00
	2' x 4' Ceiling Tile (Dot)*	60 ft ²	\$360.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Archive Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	\$900.00
	2' x 4' Ceiling Tile (Fissure)	100 ft ²	\$600.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Janitor Closet in Stair Adjacent to Archive	12" x 12" Gray Spec Floor Tile	36 ft ²	\$324.00
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	\$216.00
Storage Closet in Stair Adjacent to Archive	12" x 12" Gray Spec Floor Tile	224 ft ²	\$2,016.00
	2' x 4' Ceiling Tile (Fissure)	216 ft ²	\$1,296.00

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Upper Level-Original Section (Continued)</i>			
Stair # 2 to Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	252 ft ²	\$1,512.00
Gym Storage	12" x 12" Gray Spec Floor Tile	384 ft ²	\$3,456.00
	2' x 4' Ceiling Tile (Fissure)	384 ft ²	\$2,304.00
	Pipe Fitting Insulation	21 Units	\$735.00
Gym	Flexible Duct Connector Cloth	2 Units	\$200.00
Stage Room # 2 (By Auditorium Lobby)	12" x 12" Gray Spec Floor Tile	168 ft ²	\$1,512.00
	2' x 4' Ceiling Tile (Fissure)	168 ft ²	\$1,008.00
	Flexible Duct Connector Cloth	2 Units	\$200.00
Stage	Wood Flooring Paper (Assumed)	1400 ft ²	\$12,600.00
	Stage Curtains (Assumed)		
Stage Room # 1 (By Main Entrance Lobby)	12" x 12" Gray and Brown Spec Floor Tile	750 ft ²	\$6,750.00
Auditorium/Cafeteria/Gym Corridor	2' x 4' Ceiling Tile (Fissure)	736 ft ²	\$4,416.00
Cafeteria	12" x 12" Brown Spec Floor Tile	3800 ft ²	\$34,200.00
	Interior Window Glazing	SU	
Kitchen Locker Area and Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	\$900.00
	12" x 12" Brown Spec Floor Tile	48 ft ²	\$432.00
	2' x 4' Ceiling Tile (Fissure)	150 ft ²	\$900.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Kitchen Pantry	2' x 4' Ceiling Tile (Fissure)	80 ft ²	\$480.00

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
Upper Level-Original Section (Continued)			
Cafeteria/Gym Storage Closet	12" x 12" Gray Spec Floor Tile	200 ft ²	\$1,800.00
	2' x 4' Ceiling Tile (Fissure)	200 ft ²	\$1,200.00
Cafeteria/Gym Storage Closet	2' x 4' Ceiling Tile (Fissure)	40 ft ²	\$240.00
Former Girls Room by 103	Pipe Fitting Insulation (Assumed Behind Wall)		
Girls Locker Room	Pipe Fitting Insulation (Assumed Behind Wall)		
Girls Locker Room Storage Closet	2' x 4' Ceiling Tile (Fissure)	4 ft ²	\$24.00
Lower Level-Original Section			
201-101 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	\$1,680.00
	Interior Window Glazing	SU	
Room 102	12" x 12" Brown Spec Floor Tile	880 ft ²	\$7,920.00
	Interior Window Glazing	SU	
Room 103	12" x 12" Brown Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	
Room 104	12" x 12" Gray Spec Floor Tile	890 ft ²	\$8,010.00
	Interior Window Glazing	SU	
Room 105	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	
Room 106	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Lower Level-Original Section (Continued)</i>			
Room 107	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	
206-107 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	\$1,680.00
	Interior Window Glazing	SU	
Room 109	12" x 12" Gray Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	
Room 110	12" x 12" Brown Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	
Room 111	12" x 12" Brown Spec Floor Tile	900 ft ²	\$8,100.00
	Interior Window Glazing	SU	
210-111 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	\$1,680.00
	Interior Window Glazing	SU	
Room 113	12" x 12" Brown Spec Floor Tile	224 ft ²	\$2,016.00
Women's Room by 113	2' x 4' Ceiling Tile (Fissure)	136 ft ²	\$816.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Men's Room by 113	2' x 4' Ceiling Tile (Fissure)	8 ft ²	\$48.00
	Pipe Fitting Insulation (Assumed Behind Wall)		
Room 115	12" x 12" Brown Spec Floor Tile	1200 ft ²	\$10,800.00
	2' x 4' Ceiling Tile (Fissure)	1192 ft ²	\$7,152.00
	Interior Window Glazing	SU	

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Lower Level-Original Section (Continued)</i>			
Electrical Room adjacent to Room 115	12" x 12" Gray Spec Floor Tile	120 ft ²	\$1,080.00
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	\$720.00
Room 116/115 Connector Room	12" x 12" Gray Spec Floor Tile	170 ft ²	\$1,530.00
	2' x 4' Ceiling Tile (Fissure)	130 ft ²	\$780.00
Room 117	Interior Window Glazing	SU	
Library Offices # 1, 2 and 3	12" x 12" Gray Spec Floor Tile	544 ft ²	\$4,896.00
Library	12" x 12" Gray Spec Floor Tile (Under Carpet)	3,360 ft ²	\$30,240.00
	Contaminated Carpet		
Library Storage	12" x 12" Gray Spec Floor Tile	460 ft ²	\$4,140.00
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	\$720.00
Boys Room by Room 109	Pipe Fitting Insulation (Assumed Behind Wall)		
Girls Room by Room 107	Pipe Fitting Insulation (Assumed Behind Wall)		
Storage 135	12" x 12" Gray Spec Floor Tile	460 ft ²	\$4,140.00

Appendix C 3-Year AHERA Re-Inspection August 2022 Estimated Cost for the Removal of the Identified Asbestos-Containing Building Materials Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts			
Location	ACBM Description	Estimated Quantity	Estimated Costs
<i>Addition Section</i>			
Room 140	Black Sink Mastic**	1 Unit	\$50.00
Room 141	Black Sink Mastic**	1 Unit	\$50.00
Room 142	Black Sink Mastic**	1 Unit	\$50.00
Room 143	Black Sink Mastic**	1 Unit	\$50.00
Room 144	Black Sink Mastic**	1 Unit	\$50.00
Room 146	Black Sink Mastic**	1 Unit	\$50.00
Room 315	Black Sink Mastic**	1 Unit	\$50.00
Room 316	Black Sink Mastic**	1 Unit	\$50.00
Room 317	Black Sink Mastic**	1 Unit	\$50.00
Room 318	Black Sink Mastic**	1 Unit	\$50.00
Room 319	Black Sink Mastic**	1 Unit	\$50.00
Room 320	Black Sink Mastic**	1 Unit	\$50.00
Room 321	Black Sink Mastic**	1 Unit	\$50.00
Room 314	Black Sink Mastic**	1 Unit	\$50.00
Loading Dock	2' x 4' Ceiling Tile (Fissure)	16 ft ²	\$96.00

Notes:

ft² = Square Foot

lf = Linear Foot

Unit = Each

APPENDIX D
PERSONNEL CERTIFICATIONS

The Vertex Companies, LLC

ACCREDITATION PAGE

Accredited Inspector

Name: Jessica Woltemate

Accreditation Number: AI901049



Signature: _____

Date: 8/23/22

Accredited Management Planner

Name: Jason Mohre

Accreditation Number: AP000080



Signature: _____

Date: 8/23/22

APPENDIX E

DESIGNATED PERSON ASSURANCES SIGN-OFF

DESIGNATED PERSON ASSURANCES

In accordance with 40 CFR ' 763.93(i) of the Environmental Protection Agency Asbestos-Containing Material in Schools regulation, the undersigned Local Education Agency (LEA) Designated Person (DP) hereby certifies that the following general responsibilities of the LEA under 40 CFR ' 763.84 have been or will be met:

1. Ensure that the activities of any persons who perform inspections, reinspections, and periodic surveillance, develop and update management plans, and develop and implement response actions, including operations and maintenance, are carried out in accordance with Part 763, Subpart E.
2. Ensure that all custodial and maintenance employees are properly trained as required by Part 763, Subpart E and other applicable Federal and/or State regulations (e.g., the Occupational Safety and Health Administration asbestos standard for construction, the EPA worker protection rule, or applicable State regulations).
3. Ensure that workers and building occupants, or their legal guardians, are informed at least once each school year about inspections, response actions, and post-response action activities, including periodic reinspection and surveillance activities that are planned or in progress.
4. Ensure that short-term workers (e.g., telephone repair workers, utility workers, or exterminators) who may come in contact with asbestos in a school are provided information regarding the locations for Asbestos-Containing Building Materials (ACBM) and suspected ACBM assumed to be Asbestos-Containing Materials (ACM).
5. Ensure that warning labels are posted in accordance with ' 40 CFR 763.95.
6. Ensure that management plans are available for inspection and notification of such availability has been provided as specified in the management plan under ' 40 CFR 763.93(g).
7. Designate a person to ensure that requirements under ' 763.84 are properly implemented and ensure that the designated person receives adequate training to perform duties assigned under ' 763.84. Such training shall provide, as necessary, basic knowledge of: health effects of asbestos; detection, identification, and assessment of ACM; options for controlling ACBM; asbestos management programs; relevant Federal and State regulations concerning asbestos, including those in Part 763, Subpart E and those of the Occupational Safety and Health Administration, U.S. Department of Transportation and the U.S. Environmental Protection Agency.
8. Consider whether any conflict of interest may arise from the inter-relationship among accredited personnel and whether that should influence the selection of accredited personnel to perform activities under Part 763, Subpart E.

Name of Designated Person:

Designated Person's Signature:

Date:

APPENDIX F
SIX-MONTH SURVEILLANCE

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
<i>Upper Level-Original Section</i>								
Front Entrance	2' x 4' Ceiling Tile (Fissure)	1200 ft ²	G					
	Interior Window Glazing	SU	G					
Cloak Room (Room F)	12" x 12" Brown Spec Floor Tile	300 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	300 ft ²	G					
Room E (Police and Supply Room)	12" x 12" Gray Spec Floor Tile	418 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	386 ft ²	MD (8 ft ²)					
266/267/268 Corridor	2' x 4' Ceiling Tile (Fissure)	1400 ft ²	G					
	Red Duct Mastic (Above Ceiling) ¹	60 lf	C					
Room 268 (Social Worker Office)	12" x 12" Brown Spec Floor Tile (Under Carpet)	400 ft ²	G					
	Contaminated Carpet	400 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	G					
Room 267	12" x 12" Brown Spec Floor Tile	900 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	P					
	Interior Window Glazing	SU	G					
Room 266	12" x 12" Brown Spec Floor Tile	900 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	368 ft ²	P					
	Interior Window Glazing	SU	MD (12 ft ²)					
Room 224/Server Room	12" x 12" Brown Spec Floor Tile	340 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	340 ft ²	G					
Room H (Reception)	2' x 4' Ceiling Tile (Fissure)	354 ft ²	G					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
<i>Upper Level-Original Section (Continued)</i>								
Main Office Closet	12" x 12" Brown Spec Floor Tile	354 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	354 ft ²	G					
Room G	12" x 12" Brown Spec Floor Tile (Under Carpet)	310 ft ²	C					
	Contaminated Carpet	310 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	310 ft ²	G					
Room I (Principal)	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G					
	Interior Window Glazing	SU	P					
Principal Bath	12" x 12" Brown Spec Floor Tile	340 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	340 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Room I-J Hall and Closet	12" x 12" Brown Spec Floor Tile	48 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G					
Room J (Dean Office) and Closet	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G					
	Interior Window Glazing	SU	P					
Room M/K (Guidance Office)	2' x 4' Ceiling Tile (Fissure)	672 ft ²	G					
	Interior Window Glazing	SU	P					
Clinic (Nurse Office)	12" x 12" Brown Spec Floor Tile	636 ft ²	G					
	12" x 12" Gray Spec Floor Tile	264 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G					
	Interior Window Glazing	SU	P					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
<i>Upper Level-Original Section (Continued)</i>								
Copy Room (in Room 273)	2' x 4' Ceiling Tile (Fissure)	144 ft ²	G					
Room 273	2' x 4' Ceiling Tile (Fissure)	960 ft ²	G					
	Interior Window Glazing	SU	P					
Room 274	2' x 4' Ceiling Tile (Fissure)	960 ft ²	G					
	Interior Window Glazing	SU	P					
Room 275	2' x 4' Ceiling Tile (Fissure)	880 ft ²	G					
	Interior Window Glazing	SU	P					
Room 276	2' x 4' Ceiling Tile (Fissure)	640 ft ²	MD (32 ft ²)					
	Interior Window Glazing	SU	P					
	12" x 12" Tan Floor Tile		NF*					
Main Office Corridor (Reception-Nurse)	2' x 4' Ceiling Tile (Fissure)	1000 ft ²	IC					
	Red Duct Mastic (Above Ceiling) ¹	70 lf	G					
277-279 Corridor	2' x 4' Ceiling Tile (Fissure)	1440 ft ²	MD (40 ft ²)					
	Interior Window Glazing	SU	P					
Room 277	12" x 12" Gray Spec Floor Tile	1320 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	1320 ft ²	IC					
	Interior Window Glazing	SU	P					
Room 277 Bathroom	12" x 12" Gray Spec Floor Tile	36 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Room 277 Hall	12" x 12" Gray Spec Floor Tile	60 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	G	G				
Room O (Time Out Room by 277)	12" x 12" Gray Spec Floor Tile	144 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	144 ft ²	G	G				
Room 278 (Music Room)	12" x 12" Gray Spec Floor Tile	1750 ft ²	G	MD (2 ft ²)				
	2' x 4' Ceiling Tile (Fissure)	1718 ft ²	G	MD (8 ft ²)				
	Black Sink Mastic	2 Units	G	G				
	Interior Window Glazing	SU	P	P				
Room 278 Bathroom	12" x 12" Gray Spec Floor Tile	96 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	96 ft ²	G	G				
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U				
278-279 Connector Room	12" x 12" Gray Spec Floor Tile	240 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	240 ft ²	G	G				
Music Storage Room	12" x 12" Gray Spec Floor Tile	120 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	G	G				
Room 279 (Music Room)	12" x 12" Gray Spec Floor Tile	1460 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	1460 ft ²	MD (8 ft ²)	MD (24 ft ²)				
	Interior Window Glazing	SU	P	P				

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Room 217 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	IC	G				
	Black Sink Mastic	2	G	G				
	Interior Window Glazing	SU	P	P				
Room 218 (Art)	12" x 12" Brown Spec Floor Tile	1280 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	1280 ft ²	IC	G				
	Black Sink Mastic	2	G	G				
	Interior Window Glazing	SU	P	P				
Teachers' Lounge	2' x 4' Ceiling Tile (Fissure)	960 ft ²	IC	G				
	Interior Window Glazing	SU	P	P				
Teachers-Men's Room	12" x 12" Brown Spec Floor Tile	64 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G	G				
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U				
Teachers-Women's Room	12" x 12" Brown Spec Floor Tile	56 ft ²	G	G				
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G	G				
	Pipe Fitting Insulation (Assumed Behind Wall)		U	U				

AHERA Six-Month Surveillance Inspection Date: _____								
Inspector (Print Name): _____								
Inspector Signature: _____								
Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts								
Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Janitor Closet by Boys and Girls Room	12" x 12" Gray Spec Floor Tile	48 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	48 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Girls Room by 208	2' x 4' Ceiling Tile (Fissure)	192 ft ²	MD (16 ft ²)					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Room 212	12" x 12" Gray Spec Floor Tile	420 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	420 ft ²	G					
	Interior Window Glazing	SU	P					
Room 210	12" x 12" Gray Spec Floor Tile	900 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G					
	Interior Window Glazing	SU	P					
Room 208	12" x 12" Gray Spec Floor Tile	900 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	MD (16 ft ²)					
	Interior Window Glazing	SU	P					
Room 206	12" x 12" Gray Spec Floor Tile	900 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	G					
	Interior Window Glazing	SU	P					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
<i>Upper Level-Original Section (Continued)</i>								
Room 205	12" x 12" Gray Spec Floor Tile	900 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	900 ft ²	MD (16 ft ²)					
	Interior Window Glazing	SU						
Room 204 (Science)	12" x 12" Brown Spec Floor Tile	1010 ft ²	MD (10 ft ²)					
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	MD (24 ft ²)					
	Interior Window Glazing	SU	P					
	Fixed Laboratory Bench Tops	150 ft ²	G					
	Fire Blanket (Assumed)	1 Unit	G					
Room 203 (Science)	12" x 12" Brown Spec Floor Tile	1234 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	1208 ft ²	G					
	Interior Window Glazing	SU	P					
	Fixed Laboratory Bench Tops	300 ft ²	G					
	Fume Hood (Assumed)	1 Unit	G					
Room 202/201	12" x 12" Brown Spec Floor Tile	1010 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	1010 ft ²	G					
	Interior Window Glazing	SU	P					
	Fire Blanket (Assumed)	1 Unit	NA					
201-212 Corridor	2' x 4' Ceiling Tile (Fissure)	3204 ft ²	MD (8 ft ²)					
	Interior Window Glazing	SU	P					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Boys Locker Room	12" x 12" Brown Spec Floor Tile	60 ft ²	G					
	12" x 12" Gray Spec Floor Tile	1080 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	60 ft ²	G					
	2' x 4' Ceiling Tile (Dot)*	954 ft ²	G					
	Drywall/Joint Compound	270 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Boys Locker Room Office and Closet	12" x 12" Gray Spec Floor Tile	160 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	152 ft ²	G					
Boys Locker Room Office Bathroom	12" x 12" Gray Spec Floor Tile	42 ft ²	G					
	2' x 4' Ceiling Tile (Dot)*	42 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Boys Locker Room Bathroom	12" x 12" Gray Spec Floor Tile	120 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	136 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Boys Locker Room Shower Room	2' x 4' Ceiling Tile (Dot)*	450 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Stair # 1 to Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	252 ft ²	G					

AHERA Six-Month Surveillance Inspection Date: _____

Inspector (Print Name): _____

Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	16 ft ²	G					
	2' x 4' Ceiling Tile (Dot)*	1584 ft ²	D (16 ft ²)					
	Pipe Fitting Insulation (In Wall Chase Opening)	21 Units	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Archive Storage A	12" x 12" Gray Spec Floor Tile	140 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	140 ft ²	G					
Archive Storage B	2' x 4' Ceiling Tile (Fissure)	180 ft ²	D (16 ft ²)					
Archive Storage C, Bathroom and Closet	12" x 12" Gray Spec Floor Tile	200 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	140 ft ²	G					
	2' x 4' Ceiling Tile (Dot)*	60 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Archive Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	100 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Janitor Closet in Stair Adjacent to Archive	12" x 12" Gray Spec Floor Tile	36 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	36 ft ²	G					
Storage Closet in Stair Adjacent to Archive	12" x 12" Gray Spec Floor Tile	224 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	216 ft ²	D (8 ft ²)					

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Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Stair # 2 to Archive (Former Girls Locker Room)	2' x 4' Ceiling Tile (Fissure)	252 ft ²	MD (8 ft ²)					
Gym Storage	12" x 12" Gray Spec Floor Tile	384 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	384 ft ²	IC					
	Pipe Fitting Insulation	21 Units	G					
Gym	Flexible Duct Connector Cloth	2 Units	G					
Stage Room # 2 (By Auditorium Lobby)	12" x 12" Gray Spec Floor Tile	168 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	168 ft ²	G					
	Flexible Duct Connector Cloth	2 Units	G					
Stage	Wood Flooring Paper (Assumed)	1400 ft ²	C					
	Stage Curtains (Assumed)		G					
Stage Room # 1 (By Main Entrance Lobby)	12" x 12" Gray and Brown Spec Floor Tile	750 ft ²	MD (2 ft ²)					
Auditorium/Cafeteria/Gym Corridor	2' x 4' Ceiling Tile (Fissure)	736 ft ²	G					
Cafeteria	12" x 12" Brown Spec Floor Tile	3800 ft ²	G					
	Interior Window Glazing	SU	P					
Kitchen Locker Area and Bathroom	12" x 12" Gray Spec Floor Tile	100 ft ²	G					
	12" x 12" Brown Spec Floor Tile	48 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	150 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Kitchen Pantry	2' x 4' Ceiling Tile (Fissure)	80 ft ²	G					

AHERA Six-Month Surveillance Inspection Date: _____

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Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Upper Level-Original Section (Continued)								
Cafeteria/Gym Storage Closet	12" x 12" Gray Spec Floor Tile	200 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	200 ft ²	MD (4 ft ²)					
Cafeteria/Gym Storage Closet	2' x 4' Ceiling Tile (Fissure)	40 ft ²	U					
Former Girls Room by 103	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Girls Locker Room	Pipe Fitting Insulation (Assumed Behind Wall)		G					
Girls Locker Room Storage Closet	2' x 4' Ceiling Tile (Fissure)	4 ft ²	G					
Lower Level-Original Section								
201-101 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G					
	Interior Window Glazing	SU	P					
Room 102	12" x 12" Brown Spec Floor Tile	880 ft ²	G					
	Interior Window Glazing	SU	P					
Room 103	12" x 12" Brown Spec Floor Tile	900 ft ²	MD (2 ft ²)					
	Interior Window Glazing	SU	P					
Room 104	12" x 12" Gray Spec Floor Tile	890 ft ²	MD (4 ft ²)					
	Interior Window Glazing	SU	P					
Room 105	12" x 12" Gray Spec Floor Tile	900 ft ²	G					
	Interior Window Glazing	SU	P					
Room 106	12" x 12" Gray Spec Floor Tile	900 ft ²	G					
	Interior Window Glazing	SU	P					

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Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Lower Level-Original Section (Continued)								
Room 107	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (10 ft ²)					
	Interior Window Glazing	SU	P					
206-107 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G					
	Interior Window Glazing	SU	P					
Room 109	12" x 12" Gray Spec Floor Tile	900 ft ²	MD (1 ft ²)					
	Interior Window Glazing	SU	P					
Room 110	12" x 12" Brown Spec Floor Tile	900 ft ²	G					
	Interior Window Glazing	SU	P					
Room 111	12" x 12" Brown Spec Floor Tile	900 ft ²	G					
	Interior Window Glazing	SU	P					
210-111 Stair	2' x 4' Ceiling Tile (Fissure)	280 ft ²	G					
	Interior Window Glazing	SU	P					
Room 113	12" x 12" Brown Spec Floor Tile	224 ft ²	G					
Women's Room by 113	2' x 4' Ceiling Tile (Fissure)	136 ft ²	MD (2 ft ²)					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Men's Room by 113	2' x 4' Ceiling Tile (Fissure)	8 ft ²	G					
	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Room 115	12" x 12" Brown Spec Floor Tile	1200 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	1192 ft ²	G					
	Interior Window Glazing	SU	P					

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Inspector Signature: _____

Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Lower Level-Original Section (Continued)								
Electrical Room adjacent to Room 115	12" x 12" Gray Spec Floor Tile	120 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	G					
Room 116/115 Connector Room	12" x 12" Gray Spec Floor Tile	170 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	130 ft ²	IC					
Room 117	Interior Window Glazing	SU	G					
Library Offices # 1, 2 and 3	12" x 12" Gray Spec Floor Tile	544 ft ²	G					
Library	12" x 12" Gray Spec Floor Tile (Under Carpet)	3,360 ft ²	G					
	Contaminated Carpet		G					
Library Storage	12" x 12" Gray Spec Floor Tile	460 ft ²	G					
	2' x 4' Ceiling Tile (Fissure)	120 ft ²	IC					
Boys Room by Room 109	Pipe Fitting Insulation (Assumed Behind Wall)		U					
Girls Room by Room 107	Pipe Fitting Insulation (Assumed Behind Wall)		G					
Storage 135	12" x 12" Gray Spec Floor Tile	460 ft ²	IC					

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Nathaniel Wixon School - 901 Route 134, South Dennis, Massachusetts

Location	ACBM Description	Estimated Quantity	VERTEX 2022 Cond.	Feb 2023 Cond.	Aug 2023 Cond.	Feb 2024 Cond.	Aug 2024 Cond.	Feb 2025 Cond.
Addition Section								
Room 140	Black Sink Mastic**	1 Unit	G					
Room 141	Black Sink Mastic**	1 Unit	G					
Room 142	Black Sink Mastic**	1 Unit	G					
Room 143	Black Sink Mastic**	1 Unit	G					
Room 144	Black Sink Mastic**	1 Unit	G					
Room 146	Black Sink Mastic**	1 Unit	G					
Room 315	Black Sink Mastic**	1 Unit	G					
Room 316	Black Sink Mastic**	1 Unit	G					
Room 317	Black Sink Mastic**	1 Unit	G					
Room 318	Black Sink Mastic**	1 Unit	G					
Room 319	Black Sink Mastic**	1 Unit	G					
Room 320	Black Sink Mastic**	1 Unit	G					
Room 321	Black Sink Mastic**	1 Unit	G					
Room 314	Black Sink Mastic**	1 Unit	G					
Loading Dock	2' x 4' Ceiling Tile (Fissure)	16 ft ²	G					

Notes:

ft² = Square Foot

If = Linear Foot

Unit = Each

D = Damaged

WD = Water Damage

Cond. = Condition

G = Good

MD = Minor Damage

NPI = Not Previously Identified

SU = Store Front Window Units

U = Unknown

C = Covered

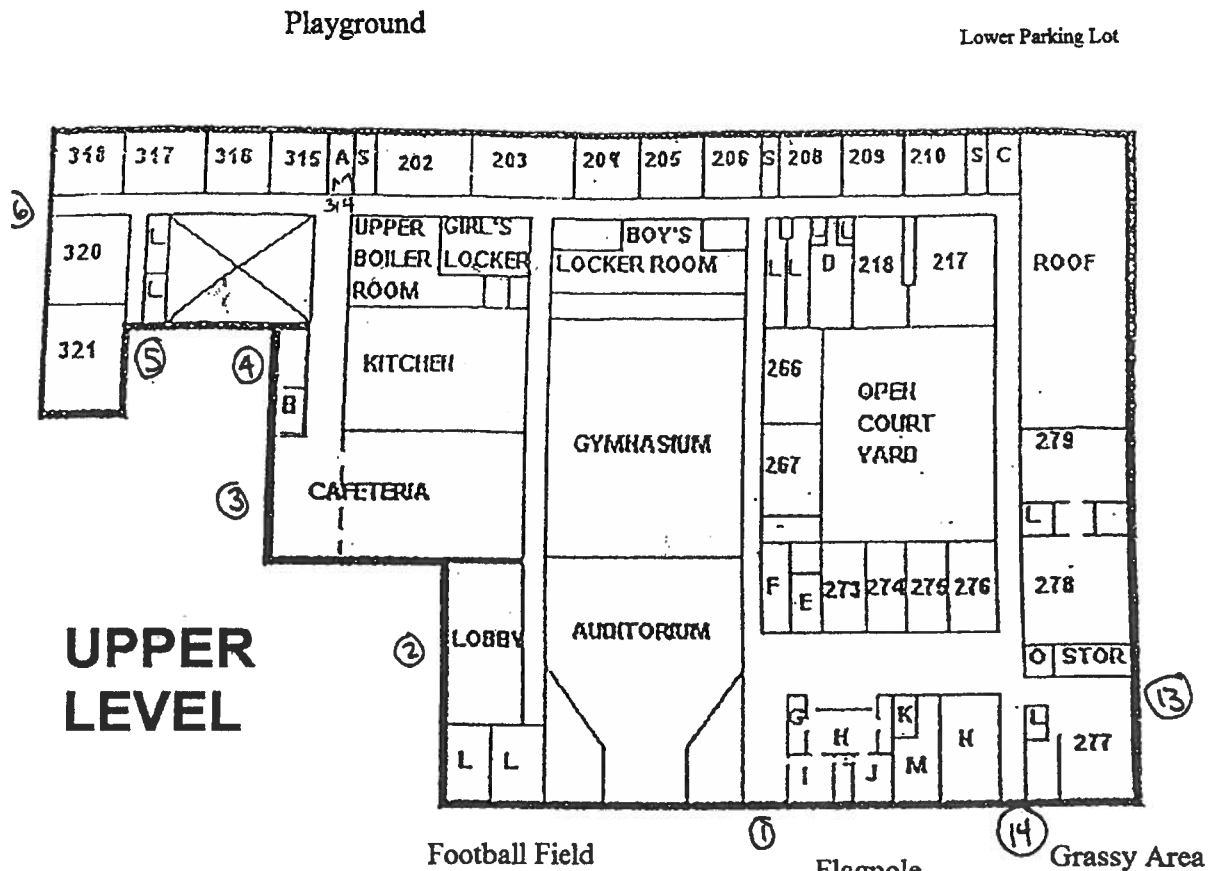
NF = Not Found

IC = Improved Condition

APPENDIX G

SCHEMATICS

Nathanial H. Wixon Middle School Floor Plan



NATHANIAL H. WIXON MIDDLE SCHOOL

