

REGION 4 BOARD OF EDUCATION

Date: November 08, 2023

Special Meeting – VRHS Media Center

(To view a recording of this meeting, please visit our website www.reg4.k12.ct.us and select “Remote Meeting Recordings” under the BOARD OF EDUCATION Heading)

Attendance:	<u>Region 4 BOE</u>	<u>Administration:</u>	<u>Other:</u>
(√ = attended)	Kate Sandmann √	Brian White √	Kelly Nelli √
	Jennifer Clark	Sarah Brzozowy √	Jack Butkus √
	Lon Seidman √	Bob Grissom √	Ronald Rickey √
	Lol Fearon √		Larry Cannon √
	Alex Silva √		John Luby √
	Rick Daniels √		Andrew Davis √
	John Stack √		Alfredo Fernandez √
	Jane Cavanaugh √		Niki Waz
	Richard Strauss √		

Chair Sandmann called the special meeting to order at 6:03 p.m.

There was no R4 teacher update shared.

Superintendent White introduced the team of experts who will be presenting to the Board this evening including, The Project Management group Arcadis, with Kelly Nelli, and her team Jack Butkus and Ronald Rickey; the Environmental Engineering firm of EnviroMed including Larry Cannon President, and John Luby, Senior Project Engineer who will each provide substantial updates on what they’ve learned to date through additional testing and inspections; as well as the district’s environmental attorneys from Shipman and Goodwin, Andrew Davis and Alfredo Fernandez. Superintendent White also recognized QA&M as the firm that the Board selected on November 6th, to engage in the root cause(s) analysis investigation. Although they are unable to participate in the meeting this evening, they will be presenting to the Board, and community at an upcoming meeting.

Before our outside experts begin their presentations, Superintendent White asked Finance Director Bob Grissom to provide the Board with a few updates. Then he will turn things over to EnviroMed for their presentations; followed by the Arcadis team who will discuss their recent entry point into the project; and finally he will have Shipman and Goodwin discuss some of the work they’ve been doing to date to advise the Board, as requested at a previous Board meeting.

Mr. Grissom shared an update on the portable office containers to be placed on site at VRHS. He shared that last Wednesday, the Maintenance Supervisor delivered the site plan for review and also dropped off a few additional documents to the Deep River Building Department. This past Monday, Nov. 6, we heard that the Building Department had completed their initial review and was ready to receive our applications for a building and electrical permit along with the fees that we have been asked to pay upon submission which total \$1300 (\$970 for the building permit and \$330 for the electrical permit).

Mr. Grissom also shared an update from Monday’s meeting in which the Board approved the successful bidder of QA&M to conduct the root cause(s) analysis. At that time the Board enquired as to the details of the contract with Arcadis, and Mr. Grissom shared that they are billing on an hourly basis with a “not to exceed” cost of \$40,000.

Larry Cannon shared the results of additional testing at JWMS, done to date, by EnviroMed (see attached).

John Luby shared a presentation on his findings within the JWMS building (see attached).

Kelly Nelli and Jack Butkus shared a draft project timeline based on what is known at this time and discussed next steps (please see attached). They noted the assurance that they will receive a root cause(s) analysis report on Dec. 20th. They will then need time to review, digest, and create recommendations to bring back to the BOE in the new year, at which time the Board should have enough reliable data and information to begin making some decisions regarding a possible re-entry plan and date. Mr. Butkus noted that the administration has already taken very prudent steps so far in getting students and staff out of the building, requesting the appropriate data points, and giving that data to the firms that need it to move the re-entry of JWMS forward in a responsible manner.

Andrew Davis shared that he and Mr. Fernandez have been providing the district with legal counsel on how to best balance the desire to re-enter JWMS as quickly as possible, while also managing the potential caveats and risks involved with different approaches. They will share more with the Board in the upcoming Executive Session.

Throughout the evening, the team of experts, collectively, cautioned several times over moving too quickly to re-enter JWMS prior to having all of the necessary information to make a sound decision on how to best move forward for the good of the students, staff, and community.

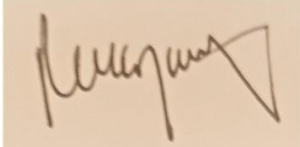
Public Comment: No comments were made.

On motion duly made and seconded, the Board unanimously VOTED to move into Executive Session at approx. 7:45 p.m., for the purpose of reviewing an attorney client privileged communication regarding mold remediation at JWMS. The Board also invited the team from Arcadis to join the Executive Session.

The Board returned from Executive Session at. 9:10 p.m.

On motion duly made and seconded, the Board unanimously VOTED to adjourn at 9:10 p.m.

Respectfully submitted,

A handwritten signature in dark ink on a light-colored rectangular background. The signature is stylized and appears to be a cursive name.

Secretary
Regional District #4 Board of Education

Mold, Humidity, Moisture, Asbestos Testing Update

Prepared for
John Winthrop Middle School

November 8, 2023

Presented by
EnviroMed Services, Inc.
470 Murdock Avenue, Meriden, CT 06450

DRAFT FOR DISCUSSION PURPOSES ONLY

John Winthrop Tape Lifting Stats

As a follow up randomized sampling was performed to determine the level of mold within the school.

On November 1st, 2nd, 3rd, and 6th EnviroMed collected a total of 509 samples.

John Winthrop Tape Lifting Stats – (Tape lists are used to determine surface mold contaminations)

- 461 samples available so far
- 48 samples still being collated
- **341 samples or 74% of samples collected throughout the school had detectable levels of mold growth**

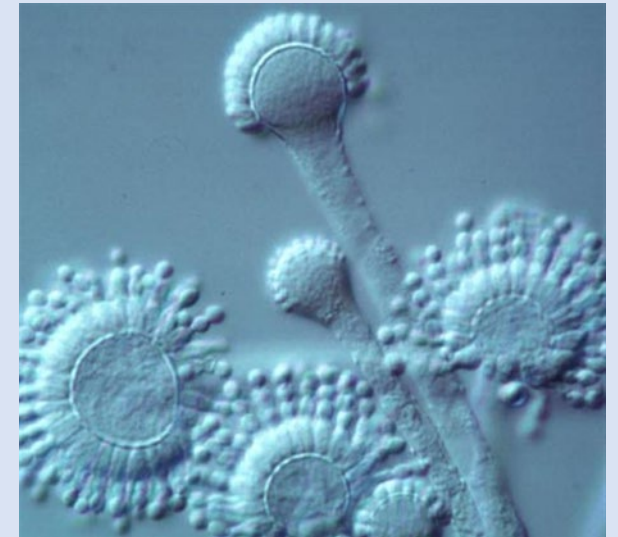
- 38 classrooms (incl. the music room and computer labs) were sampled
 - **100% of classrooms had some level of growth detected**
 - 11 classrooms had light or rare growth (29%)
 - 27 classrooms had moderate to very heavy growth (71%)

*Number Key: Mold Spores (71% Classrooms were in this range)

Moderate: 100 – 999 spores

Heavy: 1,000 – 9,999 spores

Very Heavy: > 10,000 spores



- 25 faculty offices (incl. guidance offices) were sampled
 - **88% of the offices had mold spores detected**
 - Offices 611, 512, 501 were the only offices to come back with no growth detected (12%)
 - 14 of the remaining offices have light or rare growth (56%)
 - 8 offices have moderate to very heavy growth (32%)

*Number Key: Mold Spores (71% Classrooms were in this range)

Moderate: 100 – 999 spores

Heavy: 1,000 – 9,999 spores

Very Heavy: > 10,000 spores



- **114 (25% of all samples) came back as having moderate to very heavy spore counts**

- 55 samples moderate (12%)
- 39 samples heavy (9%)
- 20 samples very heavy (4%)

*Number Key: Mold Spores (71% Classrooms were in this range)

Moderate: 100 – 999 spores

Heavy: 1,000 – 9,999 spores

Very Heavy: > 10,000 spores



Very heavy mold growth was noted from samples from:

- Music Room – Instruments
- Auxiliary Gym
- Sports Equipment and Storeroom
- Computer Room
- Auditorium Area and Chairs
- Library
- Classrooms 219 and 119

Types of Mold found on surfaces throughout the classrooms, offices, auxiliary gym, storage rooms, and auditorium included the following species:

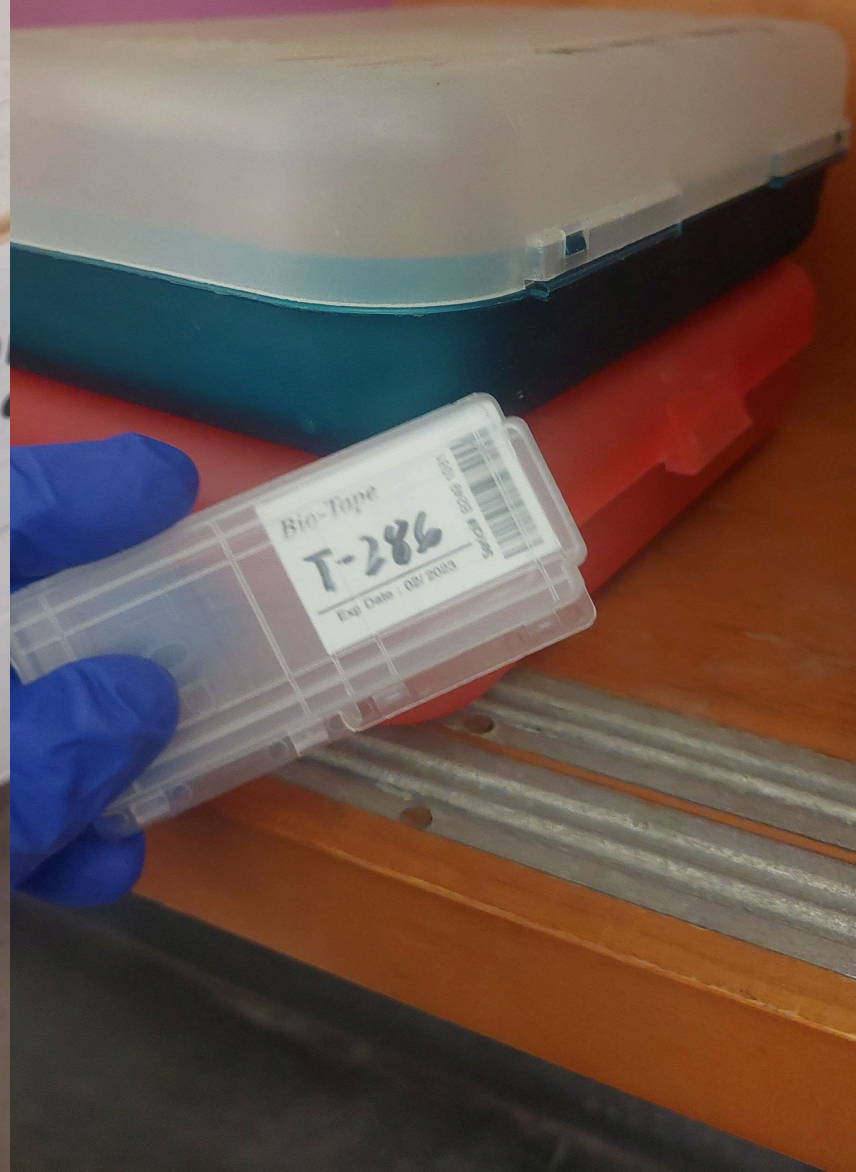
- *Aspergillus/Penicillium*
- *Cladosporium*
- *Alternaria*
- *Stachybotrys*

All of these are Molds that can cause allergic responses in sensitive individuals.

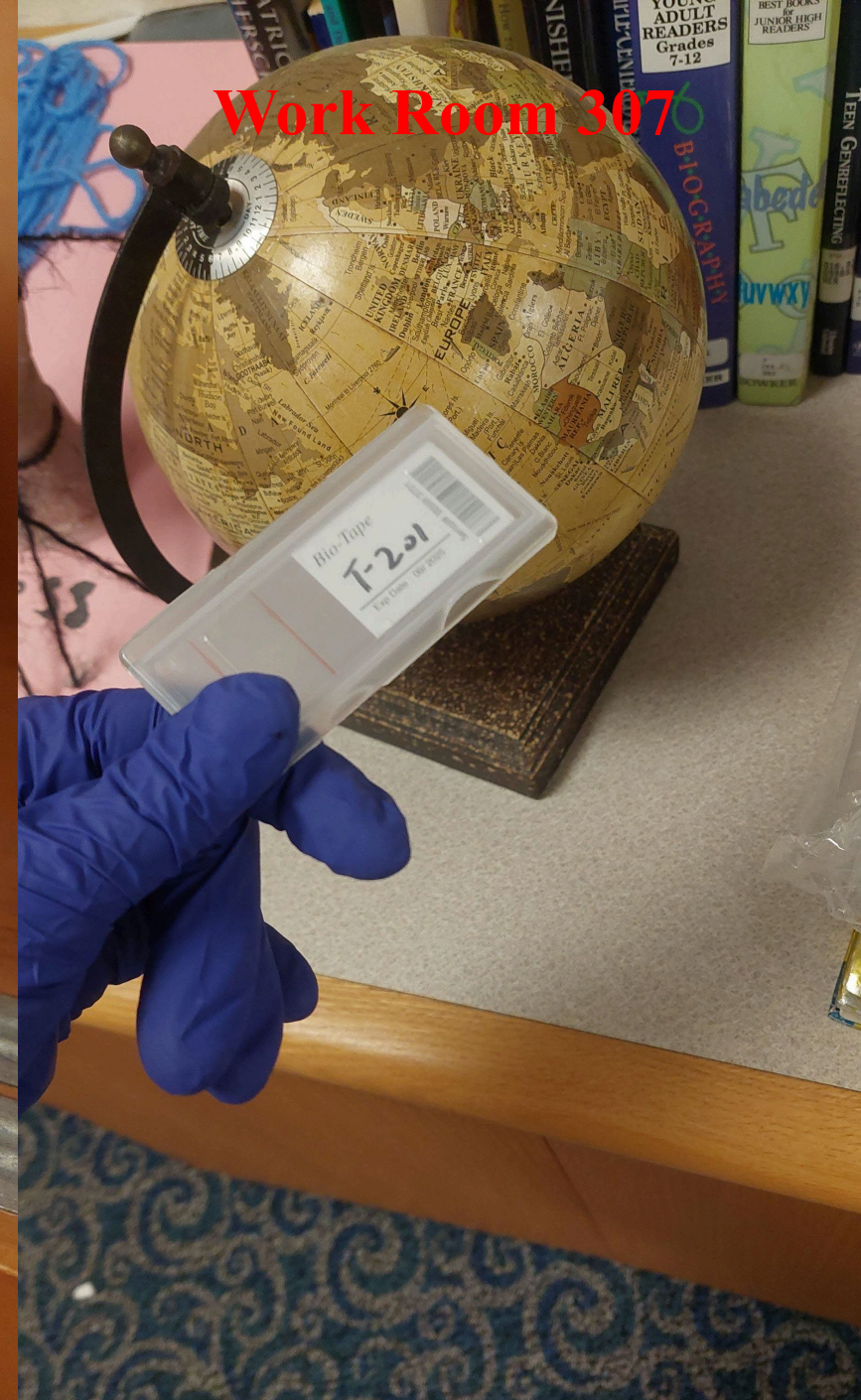
Classroom 102



Classroom 223



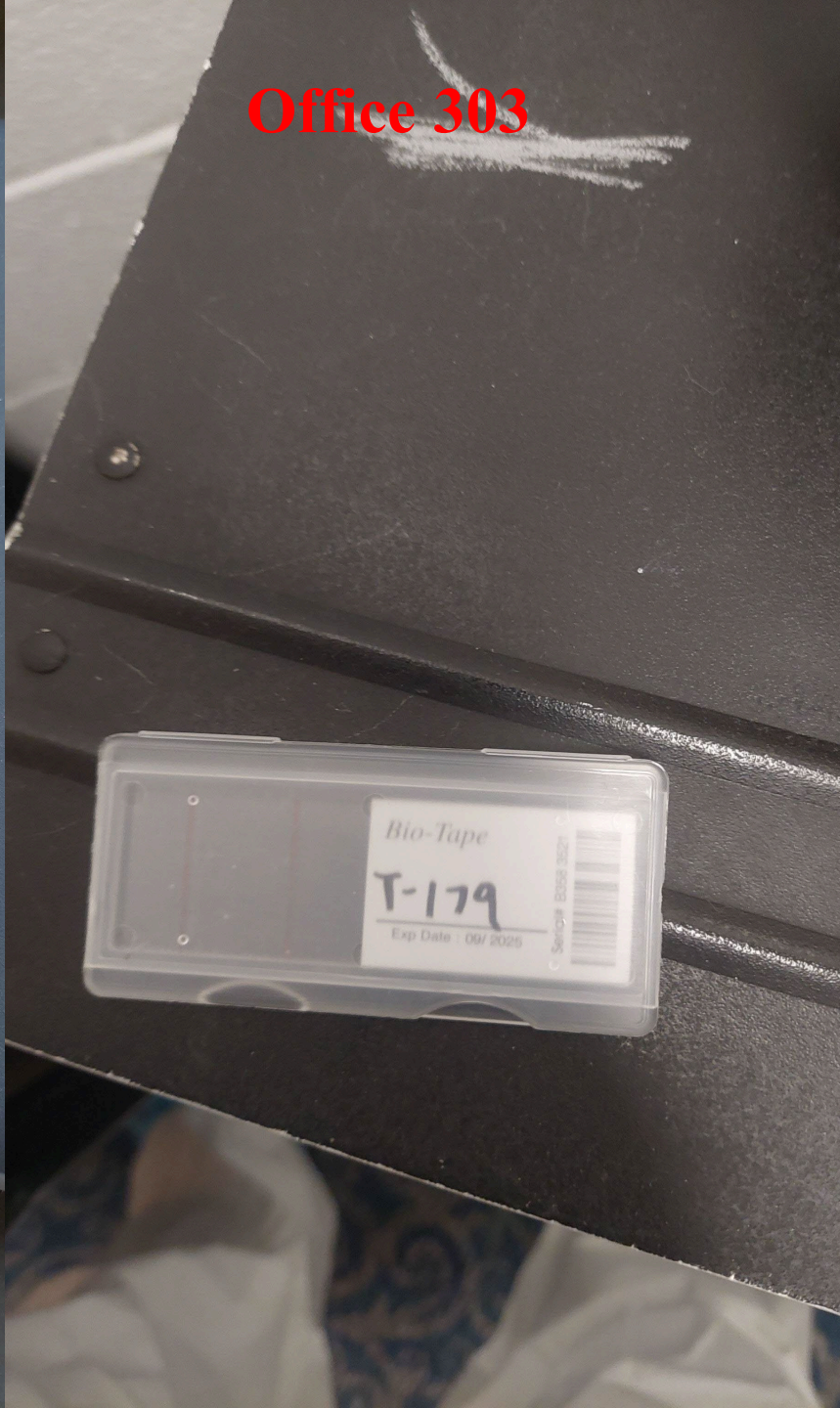
Work Room 307



Room 302 (Computer Lab)



Office 303



Storage Room 704



T5 - Room 704 - Hockey Sticks

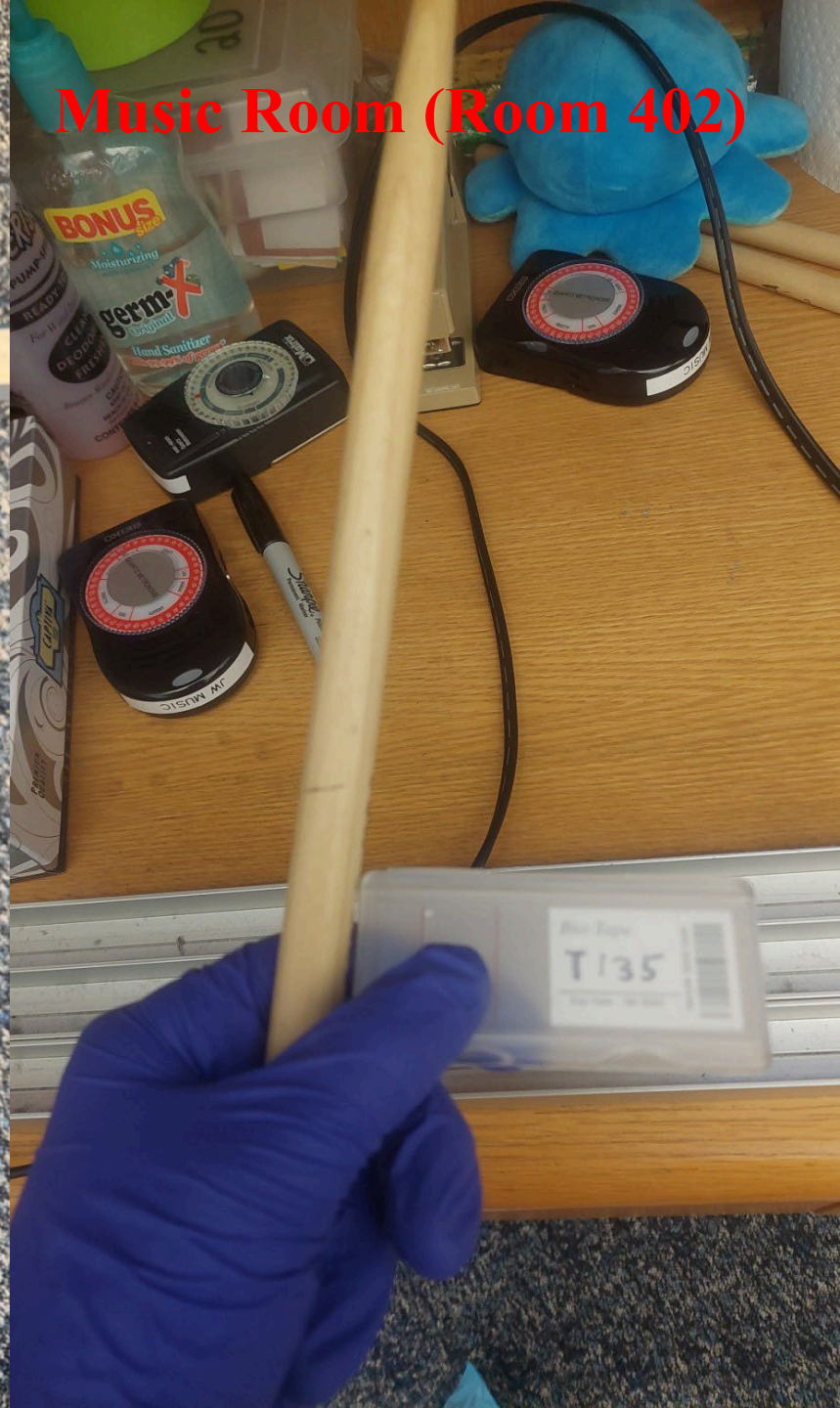
School Store (Room 700)



Music Room (Room 402)



Music Room (Room 402)



Asbestos Testing

On November 2nd and 3rd, a survey of suspect Asbestos containing materials was performed including testing of the following:

Pipe Insulation
Drywall

Joint Compound
Ceiling Tile

Adhesives
Black Tape

This testing was done to evaluate materials to be impacted by the possible need of abatement activities.

No Asbestos was found by Laboratory Analysis

Relative Humidity Survey

Environmental Engineers took 120 readings with the Ambient Condition (Indoor Air Quality) Meter inside the school in addition to 3 outdoor ambient readings for comparison

The average relative humidity for the school was 26.46%

- All but four readings were within the ASHRAE standard range for relative humidity of 20-60%
 - Outliers were rooms 816 (17.1%), 200 (19.8%), 119 (18.8%), and 106 (18.6%)
 - These outliers fall just below the ASHRAE standard range and are not of concern in relation to the mold problem
- **Overall, humidity within the school was low, meaning there is a low moisture content in the air.**
 - This suggests that the current indoor humidity is extremely low, well below the levels at the beginning of the school year when the initial testing was performed. At the beginning of the school year many of the relative humidity levels were at or above 60% which allows mold growth.

Infrared Moisture Survey

- **On November 3rd and November 6th, the entire school was inspected with an infrared camera to detect differences in temperature to indicate moisture behind the walls, floors, and ceilings.**
- **Each room had their floors, walls and ceilings inspected using the infrared camera.**
- **The areas that indicated moisture and high temperature differences were photographed on the infrared camera.**
- **During the survey, 19 locations that showed high temperature differences were photographed on the infrared camera in two modes.**
- **The set of pictures contained a regular photo that shows what the regular eye would see, coupled with a picture showing the colors of the temperature differences.**
- **Along with being photographed, the high moisture areas were delineated on a school map to show the precise locations.**

- Areas that demonstrate suspected moisture accumulation are:

Stairwell 100

Stairwell 113

Room 116

Room 125

Room 221

Room 302

Room 720

Hallway wall across from rooms 104-101

Room 115

Room 118

Room 224

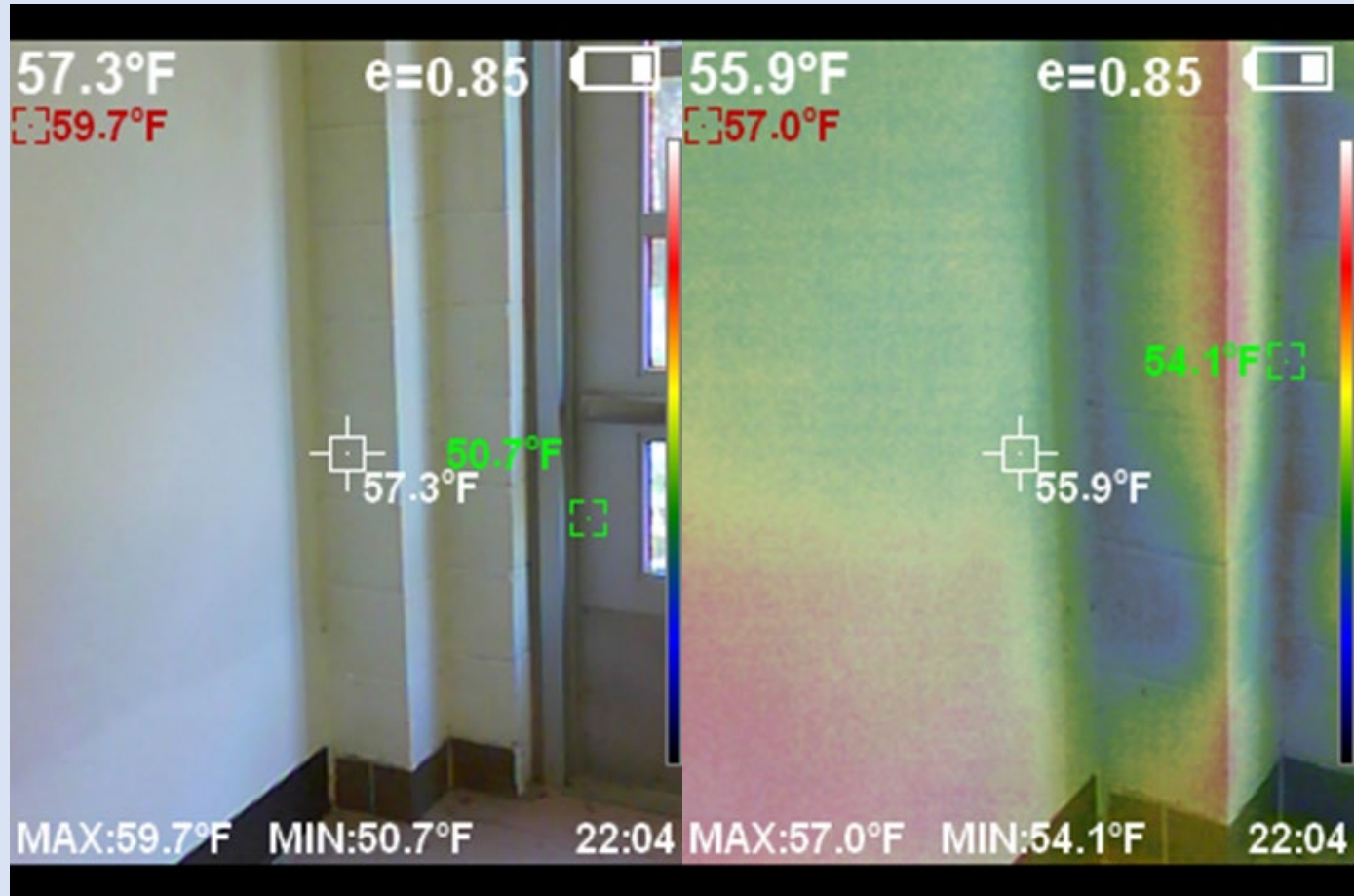
Room 203

Room 400

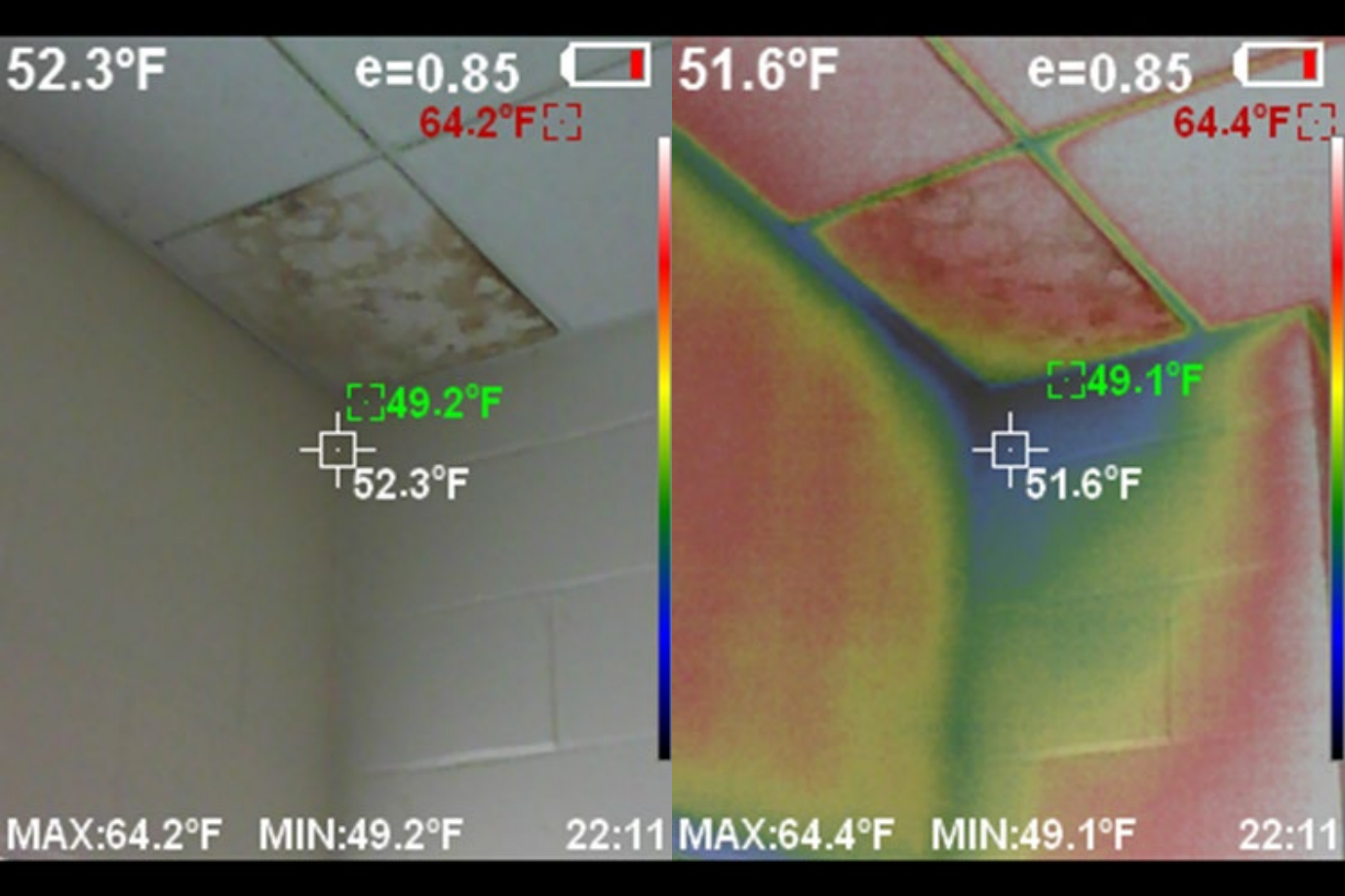
Room 823

- In the basement hallway, across rooms 104-101, the concrete wall did not show high levels of moisture during this survey.
 - Moisture accumulation has been noted in this area previously.
- Throughout the remainder of the building, abnormal temperatures and moisture levels were not detected.

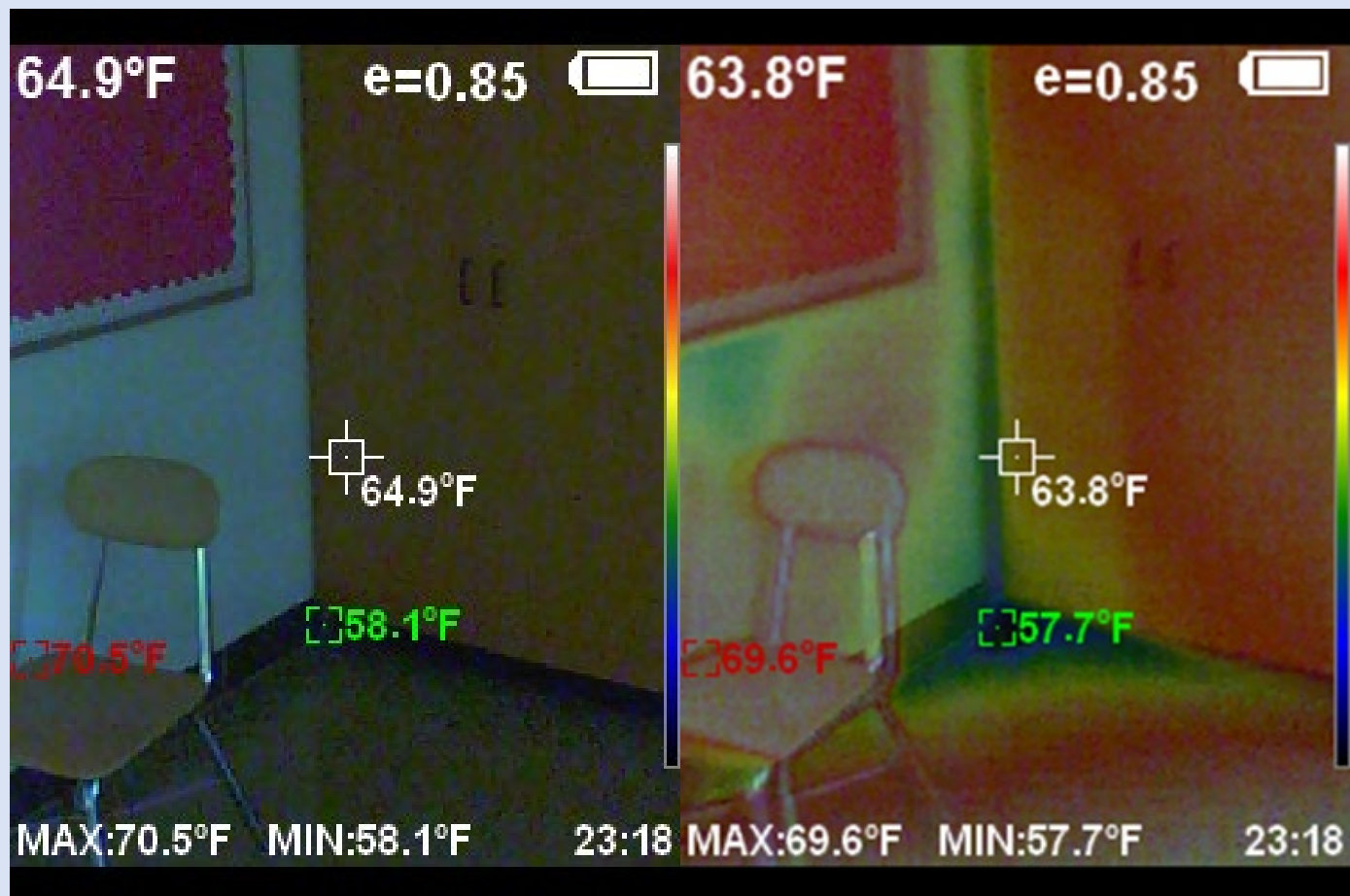
Stairwell 100



Room 104



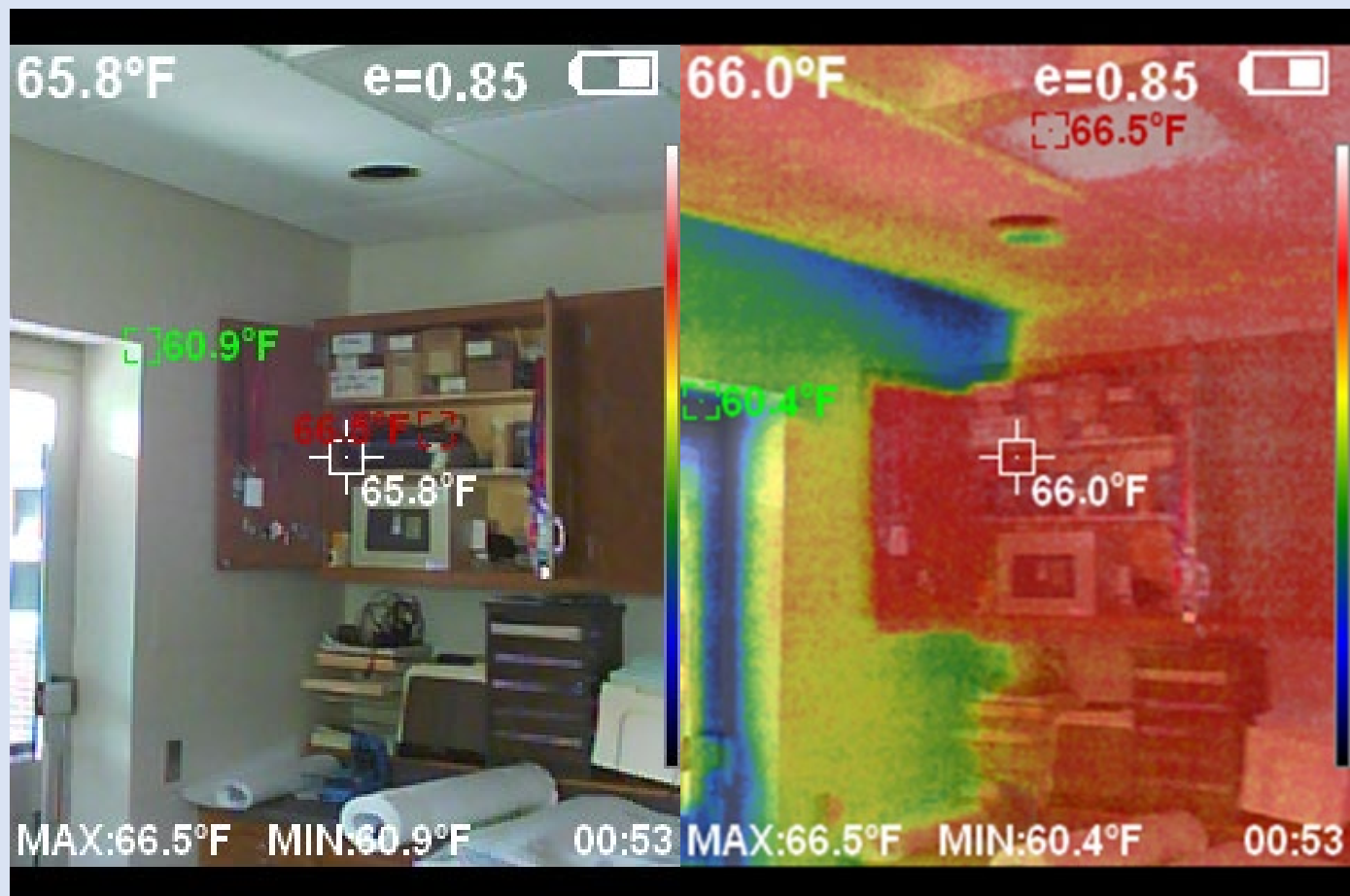
Room 116



Room 221



Room 720



Summary of Findings

- **Significant levels of Mold surface spores are found throughout classes, offices, gym, auditorium, music room and other locations.**
- **Significant levels of Mold spores have been found on almost all movable objects**, computers, sports equipment, musical instruments, desks, chairs, books, and personal items.
- **The Mold found: *Aspergillus/Penicillium*, *Cladosporium*, *Alternaria*, and *Stachybotrys* are widely known as allergens for susceptible individuals.**
- **Asbestos containing building materials were NOT found** in the locations be to mold remediated.
- **Relative humidity levels within the school where well controlled and within ASHRAE guidelines** averaging 26% relative humidity.
- **Moisture levels remain elevated in 19 school building locations** based on the infrared moisture survey. The balance of the other school locations did not indicate elevated moisture levels.

What Are We
Proposing?

Classroom Fan
Coil Units

John Winthrop
Middle School

CLEANING OF FAN COIL UNITS IN CLASSROOMS



What Are We
Proposing?

Moldy Pipe
Insulation
Removal

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Middle School

REMOVE MOLDY PIPE INSULATION ON SUPPLY & RETURN
HEATING/COOLING PIPE ON AFFECTED AREAS
THROUGHOUT SCHOOL & CEILING TILES UNDERNEATH



What Are We
Proposing?

Supply Duct
System Cleaning

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Middle School

CLEAN AND SANITIZE THE SUPPLY DIFFUSERS
REMOVE & REPLACE THE SUPPLY FLEX DUCTS
CLEAN ACCESSIBLE SUPPLY DUCTS INTERIORS



Room Cleaning

John Winthrop Middle School

What Are We
Proposing?

Roof Cleaning

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Middle School

CLEANING OF MOLD ON ROOF MEMBRANE FROM THE AREA DIRECTLY UNDER ROOFTOP AIR INTAKES



Limitations on Cleaning

John Winthrop
Middle School

- MOLD SPORES ARE PART OF THE DUST PROFILE IN THE SCHOOL AND CANNOT BE TOTALLY ELIMINATED. THERE WILL ALWAYS BE DUST/SPORE ACCUMULATIONS IN THE SCHOOL.
- MOLD SPORES ARE A RENEWABLE RESOURCE THAT ENTER THE SCHOOL WHENEVER A DOOR OR WINDOW IS OPENED AND THRU THE HVAC SYSTEM.
- YOU CAN CLEAN, BUT THE DUST/SPORES COATING WILL ALWAYS RETURN.
- WHERE YOU HAVE FOOD (CELLULOSE) AND WATER, MOLD WILL ALWAYS GROW.
- WATER INFILTRATION AND HUMIDITY LEVELS MUST BE CONTROLLED TO KEEP MOLD AT BAY. CLEANING CAN NEVER STOP.

What Remains to be Done

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Middle School

- HVAC EQUIPMENT REPLACEMENT WITH HUMIDITY CONTROL
- SUPPLY & RETURN DUCT SYSTEM WHOLESALE REPLACEMENT OR CLEANING
- ACCESS & REMOVE CONCEALED MOLDY PIPE INSULATION IN CHASES AND ABOVE FIXED CEILINGS
- HEATING/COOLING PIPE INSULATION REPLACEMENT
- SUSPENDED CEILING TILE REPLACEMENT & CLEANING
- ROOF CLEANING

[illegible]