

EASTHAMPTON PUBLIC SCHOOLS

*Easthampton High School
White Brook Middle School
Center Elementary School
Maple Elementary School
Pepin Elementary School*

**EASTHAMPTON
MASSACHUSETTS**



COVID COMMISSIONING SUPPORT

September 23, 2020

EASTHAMPTON PUBLIC SCHOOLS
COVID Commissioning Support
Table of Contents

Executive Summary 1
East Hampton High School Summary..... 4
White Brook Middle School Summary 4
Maple, Center & Pepin Elementary School Summary 4
APPENDICES 5
APPENDIX A – Building Walkthrough Questionnaires 6

Executive Summary

Colliers Project Leaders (CPL) was hired by Easthampton Public Schools to perform a review of the ventilation systems in five (5) schools for the School District in regard to the current COVID pandemic. The following schools were included in the scope of work:

- Easthampton High School located at 70 Williston Avenue
- White Brook Middle School located at 200 Park Street
- Center Elementary School located at 9 School Street
- Maple Elementary School located at 7 Chapel Street
- Pepin Elementary School located at 4 Park Street

CPL conducted brief interviews with school operational personnel knowledgeable in school operations, HVAC, and control systems and performed walkthroughs of each school with facilities personnel to review and develop an overall assessment of the ventilation-related systems and the equipment operation procedures in place. CPL will provide a report with recommendations, including opportunities to expand outside air quantities with a plan to prepare for in-person classes in the fall of 2020. The recommendations are based on the current guidance recommended by the Massachusetts Department of Elementary and Secondary Education (DESE) dates June 25, 2020 (the most current release at the time of the walkthrough) and recommendations from ASHRAE in their August 20, 2020 update of *Guidance for the Re-Opening of Schools*.

Findings and recommendations from the walkthrough that should be addressed prior to opening of the school buildings are listed below. Some items, such as the MERV-13 filters or in-room HEPA filtration units, have unusually long lead times due to high demand and are unlikely to arrive before school opens. They should be installed as soon as they are received. In general, the school facilities were well maintained and cared for and while there were some items identified that require repair, it was well below what was expected based on some of the ages of the schools. Building walkthrough questionnaires can also be found in Appendix A of this report.

General Recommendations

1. Commission building mechanical systems for full occupancy.
2. All inoperable ventilation systems (exhaust fans, air handling units, unit ventilators, and associated controls) should be inspected and repaired. This could be accomplished from either utilizing the School's facilities operational staff or engaging the controls or service contractor.
3. Operate all ventilation systems at full capacity for one (1) week prior to the reopening of school buildings.
4. Review locations of supply and return diffusers in buildings. Look at ventilation effectiveness and whether short-circuiting is occurring. This happens frequently when supply and return diffusers are too close to each other. Discuss the possibility of moving them farther apart if this is occurring. If supplies and returns are ducted using flex duct and the room has a suspended ceiling, relocating can be performed more easily.
5. At a minimum, where temperature allows and no other means of ventilation is available, operable windows should be opened to allow for some minimum level of fresh air exchange into occupied spaces.
6. Develop a system for building users to notify the facilities department if the building needs to be open longer than usual so that the fan schedule can be altered for that day.
7. Window air conditioning units should be adjusted to maximize fresh air intake into the system. Air conditioner blower fans should be set on low speed and pointed away from room occupants to the extent possible.
8. Ceiling fans should be adjusted so that fins are rotating in a direction that draws air up toward the ceiling rather than down onto occupants.
9. Window fans should be turned to exhaust air out of the window in the direction of the outdoors. Ensure that fans are not blowing out of windows directly into walking paths or areas where individuals may congregate.

10. Window fans that blow air into a room or free-standing fans that only serve to circulate existing air around a room should not be used.
11. Clean all outside air intake louvers, and clean and disinfect coils. (ASHRAE)

Easthampton High School

1. Adjust all DDC fan schedules on the BMS to align with the building occupancy schedule and program a new flushing ventilation sequence starting two (2) hours before building occupancy and one (1) hour post occupancy. (ASHRAE)
2. Adjust all DDC exhaust fan schedules on the BMS that serve bathrooms, locker rooms, and the cafeteria to 24/7 operation. (ASHRAE)
3. Air handling unit outside air dampers and airflows should be increased where possible to provide additional fresh air into the building. (DESE). Program a new DDC sequence for the RTUs, AHU and HV units varying the amount of outdoor air % dependent on OA temperature during occupancy and flushing.
4. Disable all DDC sequences for DCV (Demand Control Ventilation CO2), Morning warmup, NTFC (Night Time Free Cooling) & space motion control for all RTUs, AHU and HV units. (ASHRAE)
5. Upgrade air filters in all RTUs, AHU and HV units to a minimum MERV-13. (ASHRAE). For classroom fan coil units make an assessment on the existing filter frames and filter configurations to see if they can be upgraded to a MERV-13 rating where possible.
6. Disable the DDC heat recovery wheel operation for HRU-1, 2 & 3 and program the unit for 100% OA and exhaust dependent on OA temperatures. (ASHRAE) The ERV unit shall operate as originally programmed.
7. A certified testing & balancing contractor should be engaged to take supply, return and exhaust airflow measurements to understand total air distribution throughout the building.
8. All RTUs, AHU and HV units can provide 100% outside air to the building however, as the weather gets colder and the outside air dampers automatically close to prevent freezing the coils, the school will have to monitor the amount of outside air and air changes. If the air change rate falls below 4, the District should consider adding in-room HEPA filters to maintain an effective rate of 4 ACH. (ASHRAE)
9. Add dedicated exhaust fans to the rooms identified as COVID Isolation rooms, and when the rooms are occupied, maintain them at a pressure less than the adjacent hallway. As an alternative to adding exhaust, in-room air cleaner(s) with HEPA filters may be used with a recommended target of 4 air changes per hour through the filter(s). (ASHRAE)

White Brook Middle School

1. Adjust and modify the equipment schedules for all the RTUs and HV units to allow the units to start 2 hours prior to school beginning and run for at least 1 hour after all school activities have been completed. (ASHRAE)
2. Modify and adjust all exhaust fans that serve bathrooms, locker rooms, and the cafeteria to 24/7 operation. (ASHRAE)
3. Upgrade air filters for all RTUs and HV units to MERV-13. (ASHRAE) Review and inspect all filter frames - decide what kind of filter thickness and type the school will be using if they upgrade to a higher-rated filter. All filter frames will need to be inspected and replace or fix all bent, broken, misshapen frames to prevent air from by-passing the filter. Once fans are running continuously, provide increased particle capture by increasing air filtering capacity through repair/upgrades to current system, where needed. This includes filter frames, filter configuration, and filter rating (ASHRAE recommends striving for filters with a MERV-13 rating where possible).
4. Inspect all RTUs and HV units and repair supply and return fans along with outdoor air dampers to maximize the ventilation to the spaces. (DESE) Test and repair all the RTU space thermostat control panels located in

the spaces so that the outside air dampers can be manually adjusted to allow maximum (and controlled) ventilation to the classrooms.

5. A certified testing & balancing contractor should be engaged to take supply, return and exhaust airflow measurements to understand total air distribution throughout the building.
6. Add dedicated exhaust fans to the rooms identified as COVID Isolation rooms, and when the rooms are occupied, maintain them at a pressure less than the adjacent hallway. As an alternative to adding exhaust, in-room air cleaner(s) with HEPA filters may be used with a recommended target of 4 air changes per hour through the filter(s). (ASHRAE)

Center Elementary School

1. Adjust and modify the equipment operation for the classroom unit fan ventilators to allow all units to start 2 hours prior to school beginning and run for at least 1 hour after all school activities have been completed. (ASHRAE)
2. Modify and adjust exhaust fans that serve bathrooms to 24/7 operation. (ASHRAE) A certified testing & balancing contractor should be engaged to take exhaust airflow measurements.
3. Add dedicated exhaust fans to the rooms identified as COVID Isolation rooms, and when the rooms are occupied, maintain them at a pressure less than the adjacent hallway. (ASHRAE)
4. Inspect all classroom unit fan ventilators with minimal OA dampers and repair dampers to allow for ventilation to the spaces.
5. For classroom fan ventilators, make an assessment on the existing filter frames and filter configurations to see if they can be upgraded to a MERV-13 rating where possible.

Maple Elementary School

1. Modify and adjust exhaust fans that serve bathrooms to 24/7 operation. (ASHRAE) A certified testing & balancing contractor should be engaged to take exhaust airflow measurements.
2. Add dedicated exhaust fans to the rooms identified as COVID Isolation rooms, and when the rooms are occupied, maintain them at a pressure less than the adjacent hallway. (ASHRAE)
3. For classroom fan ventilators, make an assessment on the existing filter frames and filter configurations to see if they can be upgraded to a MERV-13 rating where possible.

Pepin Elementary School

1. Adjust and modify the equipment operation for the classroom unit fan ventilators and HV units to allow all units to start 2 hours prior to school beginning and run for at least 1 hour after all school activities have been completed. (ASHRAE)
2. Modify and adjust exhaust fans that serve bathrooms to 24/7 operation. (ASHRAE) A certified testing & balancing contractor should be engaged to take exhaust airflow measurements.
3. Add dedicated exhaust fans to the rooms identified as COVID Isolation rooms, and when the rooms are occupied, maintain them at a pressure less than the adjacent hallway. (ASHRAE)
4. Inspect all classroom unit fan ventilators with minimal OA dampers and repair dampers to allow for ventilation to the spaces.
5. For classroom fan ventilators, make an assessment on the existing filter frames and filter configurations to see if they can be upgraded to a MERV-13 rating where possible.

East Hampton High School Summary

The High School was built in 2013. The high school is comprised of (RTUs, AHU, ERVs, HVs & MAU) providing fresh air into the spaces. It was noted that all air filters used in these units were just recently replaced by the facilities staff with MERV-14. Ventilation systems are consistent with school design of the period and generally includes classroom unit ventilators to bring in fresh outside air combined with roof mounted general exhaust fans to minimize recirculated air. Some classrooms also have a mix of hot water perimeter radiation supported by general exhaust, air handling units, and/or operable windows. Colliers also recommends that all classroom fan coil unit filters be upgraded from MERV-8 to a MERV-13 rating where possible.

As the weather gets colder and the outside air dampers on the units automatically close to prevent freezing the coils, the school will have to monitor the amount of outside air and air changes to the spaces. If the air change rate falls below 4, the District should consider adding in-room HEPA filters to maintain an effective rate of 4 ACH. (ASHRAE). Also, since the classroom unit ventilators are currently using MERV 8 filters, without outside air they are not contributing to the COVID risk reduction efforts (according to ASHRAE).

Building exhaust fans were checked on the DDC system and all units were operational. They are all currently scheduled to operate 24/7.

Colliers recommends that the school makes all the DDC system adjustments and modifications as noted above.

See the building walkthrough questionnaire in Appendix A for more details.

White Brook Middle School Summary

The Middle school was built in 1973, with general maintenance occurring over time. There are a total (15) heating & cooling single zone rooftop units that are all original to the building serving various spaces in the building and it was reported that (4) RTUs are nonfunctioning. There are also (4) gym heating ventilating units that are newer. Colliers recommends that all these units be inspected, and repairs made on outdoor air dampers to maximize the ventilation to the spaces. It was also noted that all filters used in these units have MERV-8 ratings and should be upgraded to MERV-13.

Colliers recommends that all roof exhaust fans be inspected, and repairs made to make them all operational. A certified testing & balancing contractor should also be engaged to take exhaust and rooftop unit airflow measurements to understand total air distribution throughout the building.

Colliers recommends that the school makes all the system adjustments and modifications as noted above.

See the building walkthrough questionnaire in Appendix A for more details.

Maple, Center & Pepin Elementary School Summary

Maple and Center Elementary Schools were built around (1902 – 1908). Pepin elementary school was built sometime during the 1920's. All three elementary schools have steam and HW unit fan ventilators in the classrooms with minimal outdoor air dampers however, they need to be inspected and repairs made to make them operational. Fan ventilator outdoor air dampers should also be fixed to allow for ventilation to the spaces however, all these classrooms do have operable windows with screens. Colliers recommends that all exhaust fans be inspected, and repairs made to make them all operational and a certified testing & balancing contractor should also be engaged to take exhaust airflow measurements.

Colliers recommends that the school makes all the system adjustments and modifications as noted above.

See the building walkthrough questionnaire in Appendix A for more details.

APPENDICES

APPENDIX A – Building Walkthrough Questionnaires

High School - Walkthrough Questionnaire

Building Automation System

1. What type is the building control system?
CTC DDC control system. The building which was built in 2013
2. Is there a time scheduling function for the HVAC equipment?
Yes
3. Are the toilet exhaust fans on the system?
Yes
4. Do the ventilation unit, fancoil, AHU, etc. have OA ducted with dampers?
Yes all RTUs, AHUs and HV units.
If so, can the dampers be controlled remotely to allow increased outside air amounts for flush outs?
Yes, they can be controlled from the DDC system
5. Is there a system in place to notify the facilities department of extended hours operations if the building needs to be open longer so that the ventilation unit schedules can be altered?
Yes, Staff will fill out a building request form for occupied hours for the HVAC system
6. Are there any local controls? Do the teachers and staff have access? Is it possible to lock-out the room-level controls so teachers and staff can't make changes?
No / No / Yes on the DDC system
7. If the HVAC system has DDC is there a DCV sequence? Morning warmup? NTFC?
Yes / Yes / Yes

HVAC Equipment

1. Is there a ventilation system? Are there toilet exhaust fans? Are they functioning?
Yes / Yes, roof exhaust fans / Yes, but need to verify exhaust airflows.
2. Are there any energy recovery type units?
Yes (3) HRUs with wheel and (1) plate HR unit
3. What is the building HVAC system? How many units, type, etc.?
Total (5) RTUs and (1) AHU and (4) HV units all with 100% economizer. (1) MAU for kitchen and (4) HRUs with fan coil units for the classrooms.
4. What level of air filtration is currently installed for the ventilation units?
Merv 8 + Merv 14
5. Are there any window air conditioning units? Do they have outside air dampers in them?
No
6. Are there any ceiling fans? How are they controlled? Are they reversible and can they draw air upwards?
Yes in Gym / Local control / Yes

7. Are there any window fans or free-standing fans? (which way are they blowing)?
No
8. Does the building have operable windows?
Yes, but they do not utilize

Air Balancing

1. Is there a recent air balancing report or airflow readings to understand total air distribution throughout the building?
Only recent balance report from construction phase
2. Is there a ducted return air system for the HVAC units?
Yes, for all the RTUs, AHUs and HV units

Nurses Office – if applicable

1. Is the nurse's office on an HVAC system? Is it connected to the BMS?
Yes / Yes
2. Does the space have an exhaust fan? Is it negatively pressurized?
There is an exhaust grille in ceiling for the Nurses office area, need to verify exhaust airflow
3. Is there an identified isolation room?
Yes, can possibly redesign the adjacent room 107 next to the Nurses office as an isolation room
 - a. Does the isolation room have an exhaust fan?
No
 - b. Is the room negatively pressurized?
No / the area will need a new exhaust fan installed

General

1. Is there a maintenance program to inspect and maintain the HVAC system?
Yes, In-house maintenance operational staff

White Brook Middle School - Walkthrough Questionnaire

Building Automation System

1. What type is the building control system?
Pneumatic system with local control. RTUs have local thermostat control panels located in the spaces. The building which was built around 1973.
2. Is there a time scheduling function for the HVAC equipment?
No – RTUs have manual control.
3. Are the toilet exhaust fans on the system?
No – local control only
4. Do the ventilation unit, fancoil, AHU, etc. have OA ducted with dampers?
Yes RTUs have OA
If so, can the dampers be controlled remotely to allow increased outside air amounts for flush outs?
Possibly the RTU control panels can adjust OA dampers but they need to be verified
5. Is there a system in place to notify the facilities department of extended hours operations if the building needs to be open longer so that the ventilation unit schedules can be altered?
No
6. Are there any local controls? Do the teachers and staff have access? Is it possible to lock-out the room-level controls so teachers and staff can't make changes?
Yes / Yes / RTU space thermostat control panels have locking covers in the spaces
7. If the HVAC system has DDC is there a DCV sequence? Morning warmup? NTFC?
No

HVAC Equipment

1. Is there a ventilation system? Are there toilet exhaust fans? Are they functioning?
Yes / Yes, roof exhaust fans / Yes, but need to verify exhaust airflows.
2. Are there any energy recovery type units?
No
3. What is the building HVAC system? How many units, type, etc.?
Total (15) RTUs with (4) RTUs nonfunctioning. Units have 100% economizer but need to be verified. Perimeter HW radiation and (4) Gym HV units also has 100% economizer & Kitchen hood exhaust fan
4. What level of air filtration is currently installed for the ventilation units?
Merv 8
5. Are there any window air conditioning units? Do they have outside air dampers in them?
No, because windows are sliding type

6. Are there any ceiling fans? How are they controlled? Are they reversible and can they draw air upwards?
No
7. Are there any window fans or free-standing fans? (which way are they blowing)?
Some floor fans
8. Does the building have operable windows?
Basically no operable windows for the building, Only a few are operable and facilities staff is currently installing window screens

Air Balancing

1. Is there a recent air balancing report or airflow readings to understand total air distribution throughout the building?
No recent balance report
2. Is there a ducted return air system for the HVAC units?
Yes for all the RTUs and HV units

Nurses Office – if applicable

1. Is the nurse's office on an HVAC system? Is it connected to the BMS?
yes / No
2. Does the space have an exhaust fan? Is it negatively pressurized?
There is an exhaust grille in ceiling for the Nurses office only, need to verify exhaust airflow
3. Is there an identified isolation room?
Yes, can possibly redesign the adjacent space next to the Nurses office as an isolation room
 - a. Does the isolation room have an exhaust fan?
No
 - b. Is the room negatively pressurized?
No / the area will need a new exhaust fan installed

General

1. Is there a maintenance program to inspect and maintain the HVAC system?
Yes, In-house maintenance operational staff

Center Elementary School - Walkthrough Questionnaire

Building Automation System

1. What type is the building control system?
None. Only (1) local electric thermostat located in hallway for HW boiler operation. The building which was built same time as Maple Elementary (1902 – 1908)
2. Is there a time scheduling function for the HVAC equipment?
No
3. Are the toilet exhaust fans on the system?
No – local control only
4. Do the ventilation unit, fancoil, AHU, etc. have OA ducted with dampers?
There are HW unit fan ventilators in each classroom with minimal OA dampers
If so, can the dampers be controlled remotely to allow increased outside air amounts for flush outs?
No
5. Is there a system in place to notify the facilities department of extended hours operations if the building needs to be open longer so that the ventilation unit schedules can be altered?
No
6. Are there any local controls? Do the teachers and staff have access? Is it possible to lock-out the room-level controls so teachers and staff can't make changes?
No
7. If the HVAC system has DDC is there a DCV sequence? Morning warmup? NTFC?
No

HVAC Equipment

1. Is there a ventilation system? Are there toilet exhaust fans? Are they functioning?
No / Yes / Yes. Toilet exhaust fans have local control, need to verify exhaust airflow.
2. Are there any energy recovery type units?
No
3. What is the building HVAC system? How many units, type, etc.?
None, only has HW unit fan ventilators and radiation
4. What level of air filtration is currently installed for the ventilation units?
None
5. Are there any window air conditioning units? Do they have outside air dampers in them?
Yes / No
6. Are there any ceiling fans? How are they controlled? Are they reversible and can they draw air upwards?

No

7. Are there any window fans or free-standing fans? (which way are they blowing)?

Yes

8. Does the building have operable windows?

Yes, has operable windows and facilities staff is currently installing window screens

Air Balancing

1. Is there a recent air balancing report or airflow readings to understand total air distribution throughout the building?

No recent balance report

2. Is there a ducted return air system for the HVAC units?

No

Nurses Office – if applicable

1. Is the nurse's office on an HVAC system? Is it connected to the BMS?

No / No

2. Does the space have an exhaust fan? Is it negatively pressurized?

Wall exhaust fan with local control

3. Is there an identified isolation room?

Yes, can possibly make the room next to the Nurses office an isolation room

- a. Does the isolation room have an exhaust fan?

No there are no exhaust fans only operable windows

- b. Is the room negatively pressurized?

No / the area will need a new exhaust fan installed

General

1. Is there a maintenance program to inspect and maintain the HVAC system?

Yes, In-house maintenance operational staff

Maple Elementary School - Walkthrough Questionnaire

Building Automation System

1. What type is the building control system?
*None. Only (1) local electric thermostat located in hallway for steam boiler operation.
Original to the building which was built (1902 – 1908)*
2. Is there a time scheduling function for the HVAC equipment?
No
3. Are the toilet exhaust fans on the system?
No – local control only
4. Do the ventilation unit, fancoil, AHU, etc. have OA ducted with dampers?
There are steam unit fan ventilators in each classroom with minimal OA dampers
If so, can the dampers be controlled remotely to allow increased outside air amounts for flush outs?
No
5. Is there a system in place to notify the facilities department of extended hours operations if the building needs to be open longer so that the ventilation unit schedules can be altered?
No
6. Are there any local controls? Do the teachers and staff have access? Is it possible to lock-out the room-level controls so teachers and staff can't make changes?
No
7. If the HVAC system has DDC is there a DCV sequence? Morning warmup? NTFC?
No

HVAC Equipment

1. Is there a ventilation system? Are there toilet exhaust fans? Are they functioning?
No / Yes / Yes. Toilet exhaust fan has local control, need to verify exhaust airflow.
2. Are there any energy recovery type units?
No
3. What is the building HVAC system? How many units, type, etc.?
None, only has Steam unit fan ventilators and radiation
4. What level of air filtration is currently installed for the ventilation units?
None
5. Are there any window air conditioning units? Do they have outside air dampers in them?
Yes / No
6. Are there any ceiling fans? How are they controlled? Are they reversible and can they draw air upwards?

No

7. Are there any window fans or free-standing fans? (which way are they blowing)?

Yes

8. Does the building have operable windows?

Yes, has operable windows and facilities staff is currently installing window screens

Air Balancing

1. Is there a recent air balancing report or airflow readings to understand total air distribution throughout the building?

No recent balance report

2. Is there a ducted return air system for the HVAC units?

No

Nurses Office – if applicable

1. Is the nurse's office on an HVAC system? Is it connected to the BMS?

No / No

2. Does the space have an exhaust fan? Is it negatively pressurized?

No / No

3. Is there an identified isolation room?

Yes, can possibly make the copy room next to the Nurses office an isolation room

- a. Does the isolation room have an exhaust fan?

No there are no exhaust fans only operable windows

- b. Is the room negatively pressurized?

No / the area will need a new exhaust fan installed

General

1. Is there a maintenance program to inspect and maintain the HVAC system?

Yes, In-house maintenance operational staff

Pepin Elementary School - Walkthrough Questionnaire

Building Automation System

1. What type is the building control system?
None. Only local pneumatic controls. Building was built (1920's)
2. Is there a time scheduling function for the HVAC equipment?
No
3. Are the toilet exhaust fans on the system?
No – local control only
4. Do the ventilation unit, fancoil, AHU, etc. have OA ducted with dampers?
There are HW unit fan ventilators in each classroom with minimal OA dampers and 100% OA heating HV units for corridors
If so, can the dampers be controlled remotely to allow increased outside air amounts for flush outs?
No not for the unit ventilators
5. Is there a system in place to notify the facilities department of extended hours operations if the building needs to be open longer so that the ventilation unit schedules can be altered?
No
6. Are there any local controls? Do the teachers and staff have access? Is it possible to lock-out the room-level controls so teachers and staff can't make changes?
No
7. If the HVAC system has DDC is there a DCV sequence? Morning warmup? NTFC?
No

HVAC Equipment

1. Is there a ventilation system? Are there toilet exhaust fans? Are they functioning?
Yes, HV heating units for corridors / Yes, roof exhaust fans and local wall fans / Yes, all toilet exhaust fan have local control, need to verify exhaust airflows.
2. Are there any energy recovery type units?
No
3. What is the building HVAC system? How many units, type, etc.?
(3) 100% OA HV units for each floor serving corridors
4. What level of air filtration is currently installed for the ventilation units?
Merv 8
5. Are there any window air conditioning units? Do they have outside air dampers in them?
Yes / No

6. Are there any ceiling fans? How are they controlled? Are they reversible and can they draw air upwards?
Yes, in Cafetorium / local wall control / No
7. Are there any window fans or free-standing fans? (which way are they blowing)?
Yes
8. Does the building have operable windows?
Yes, has operable windows and facilities staff is currently installing window screens

Air Balancing

1. Is there a recent air balancing report or airflow readings to understand total air distribution throughout the building?
No recent balance report
2. Is there a ducted return air system for the HVAC units?
No

Nurses Office – if applicable

1. Is the nurse's office on an HVAC system? Is it connected to the BMS?
No / No
2. Does the space have an exhaust fan? Is it negatively pressurized?
No / No
3. Is there an identified isolation room?
Yes, can possibly reconfigure Nurses office to make an isolation room
 - a. Does the isolation room have an exhaust fan?
No there are no exhaust fans only operable windows
 - b. Is the room negatively pressurized?
No / the area will need a new exhaust fan installed

General

1. Is there a maintenance program to inspect and maintain the HVAC system?
Yes, In-house maintenance operational staff