

STONY BROOK SCHOOL

9 Farmers Way

Year Constructed: 2003
Year of Renovation/Addition: None
Building Type: E
Construction Type: II B
Fire sprinklers: Yes
Total Floor Area: 119,130 SF
Floors: First, Second and Third
Assessor Lot # 035 0108 0000



GENERAL:

The building is in very good condition but there are a number of items that need to be addressed. These items are primarily on the roof and in the building's plumbing, mechanical and electrical systems.

LIFE SAFETY:

HEALTH:

HAZARDOUS MATERIALS: NONE

ADA COMPLIANCE:

- 3 Trip hazard exist at the end of cross aisles in Auditorium. These need to be ground down to create a gradual transition between the floors.
- 3 Clinic toilets are not ADA accessible. Toilet paper dispensers are mounted too high.
- 3 Hallway defibrillators project more than 4 inches off wall. Lower units so they are no more than 27 inches above the floor, and add a sign on wall above.
- 4 Two Storage rooms, Storage room Next to room 255, Book Room next to room 147, and Guidance Room Kitchenette Storage are too narrow and not ADA compliant. Rearrange furniture to increase aisle widths.
- 3 In rooms 211, 213, 215, Main Office Kitchenette, Library Office and English History Office; sinks are not ADA compliant. Replace cabinet and sinks to ADA compliant units.



- 3 Girls restroom next to room 215 and next to room 137 , Pipe insulation installed on wrong sink. remove and install on ADA compliant sink.

SITE:

EXTERIORS:

- Roof is primarily a fully adhered .060 EPDM membrane system with standing seam metal roofing on gambrel roofs and dormers and is in generally good condition.



- 3 Tapered insulation around roof drains has become slightly higher than the adjacent insulation resulting in some large ponded water areas. Insulation around drains should be cut down to allow free flow of water and the roof membrane repaired.

- 3 A section of masonry has become dislodged above the lintel to a roof door. Masonry needs to be removed and reconstructed with a vertical control joint formed in line with the door jamb.



- 3 It appears that the metal fascia on the upper roof (adjacent to the ladder) did not completely cover the masonry wall below. The gap had been filled with sealant which has become dislodged. Apply an extension to the fascia, tucked behind the existing, with a continuous cleat to cover the wide joint.



- 3 Masonry including pre-cast concrete around the building has become stained from run-off from metal roofs, or from ledges where dirt has collected. Selective cleaning of the building is recommended.



INTERIORS:

- 3 Carpet pulling apart at seams in 4 locations in Room B215 (Computer Room), Library and Large Group Room. Verify if warrantee is still active.



- 3 Crack at column head and down the seam of column at the second floor atrium area. Re-tape, spackle and paint cracked areas.



- 3 Cracks in wall at window head in. Patch sheetrock and re-paint.



- 3 In Classroom B-107 vinyl floor tiles coming up below windows. Replace lifting floor tiles.

- 3 Leaks have occurred at window jamb at Rooms B203 and B204. Source of leaks appear to have been repaired. Repair and paint sheetrock.

- 3 West hallway expansion joint is failing and vinyl tiles have broken. Remove concrete over expansion joint flanges. Install new concrete level with floor and install new floor tiles.

- 3 Water damage under window in Wood Shop. Patch wall and re-paint.

- 3 Old Home Economics Room (Spanish Room) and Art Room's laminate on backsplash is pulling away. Remove backsplash behind sink and replace with solid surface material. Caulk joints.

ENERGY & WATER CONSERVATION:

MECHANICAL, ELECTRICAL, PLUMBING AND FIRE PROTECTION:
(see individual reports for detailed description).

- 4 Black steel piping at Storz connection is prone to rusting-out when not constantly filled with water. Replace piping between check valve and Storz connection.
- 2 There is no seismic joint in the sprinkler main. Provide UL listed seismic compensation joint on sprinkler main.
- 2 Sprinklers missing below soffits in Auditorium and Auditorium Lobby. Install sprinklers below soffits in rear of Auditorium and Lobby to comply with code.
- 2 No expansion compensation on hot water system. Install expansion tank of Hot Water system.
- 4 Kitchen hot water takes a long time to heat up. Rebalance hot water system to provide adequate circulation.
- 2 Combustion air for water heater is needed to be connected with the firing of the water heater, not the temperature of the hot water. Correct combustion air operation.
- 3 Pipe insulation missing from piping in Corridor @ Col. Line CA/A10. reinstall missing insulation.
- 3 Master Tempering Valve for domestic hot water leaking from excessive corrosion. Repair tempering valve unit and fix leaks to prevent future corrosion.
- 2 Electric room E-100 Panel P1E - Unused circuit breaker opening. Fill unused openings in electrical equipment.
- 2 Exposed NM cable - Principal's office - new split unit and in Wood shop dust collector room - home made unlisted cord in use. Replace with suitable wiring method per code.
- 3 Stage lighting control is outdated and in poor condition. Replace with updated system is suggested.
- 2 120V 20A receptacles in kitchen & within six feet of sinks are not GFCI protected. Install GFCI protection for 120V 20A receptacles.
- 3 Multiple lighting switching locations. Installation of programmable lighting control system is suggested.

2 It was discussed that during the cooling season that the boilers are not operated. Without reheat capabilities, interior rooms can over-cool. These zones will need to be able to reheat to satisfy ventilation and temperature control requirements. Rooms will continue to sub-cool until reheating abilities are established. The hot water supply water sensor is not properly installed and therefore not controlling the temperature correctly. Manual overrides have been installed but energy penalties persist until this is repaired. The actuator for the three-way mixing valve controlling the leaving water temperature for the hot water heating system has failed, was replaced but is frozen in position due to actuator failure. All water temperature compensation is performed at the boiler level which limits range. Recommend making necessary repairs.

3 Heating and ventilation AHU's, face and bypass damper failure. Repair dampers and vent controls.

4 The rooftop units have been known to trip freeze stats upon start up during extremes in the heating season. The controls can be programmed to maintain in-active rooftop units "air tunnel" at 50° preventing these interruptions in service. The energy recovery unit (predominantly serving the non-air conditioned classrooms) are designed to discharge a constant temperature of 72°F year-round, operating when the school is occupied. Since the temperatures of the classrooms are available through the ATC system, the discharge air temperature set point could be automatically adjustable, giving a further degree of comfort and energy efficiency. Recommend repairing units.

End suction pumps controls. With the addition of variable frequency drives to these pumps, control sequences can be modified to allow the drives to vary pump speed depending on building demand. This would replace the present bypass system and save energy.

Presently the entire building is zoned for a single schedule and individual spaces cannot be controlled to the "occupied" mode for after hours use (e.g.. the gym) without sequencing the entire building into a similar mode. There are no graphic screens for the ATC system, which would allow a more comprehensive review of the control points. Current technology ATC systems use graphics to allow visualization and ease of use. This elective upgrade is indicated. The ATC system is not supported by the emergency power system, the controls run in either the last commanded position or on full heat (fail-safe position) when the power fails in the building. As an elective option, connect the ATC systems to a standby power source.