



MARANACOOK AREA SCHOOLS

A Caring School Community Dedicated to Excellence

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RSU #38 BOND REFERENDUM Manchester Facilities Improvement

One of the proposed projects that we want the Facilities Improvement Bond to address is the heating system at Manchester Elementary School. What follows is a brief description of the current status of the boiler and the work that would be completed through the bond.

- Noted in the Oak Point report in the 2 year priority needs mechanical/plumbing section for Manchester Elementary is the statement - "The boiler, boiler accessories, and water heater are beyond their normal service lives." Our maintenance staff has noted that it is getting more difficult to maintain and repair the boiler. If the boiler fails during the school year there will be serious financial and building use consequences that will affect students, staff, and community.
- The current heating system functions in three parts: steam, hot water, and electricity. The current boiler is oil-fired. The regulation of heat and hot water across the building is difficult to control which results in poor energy efficiency. Depending on your location in the building the room(s) could be hot or cold. Getting heat and hot water to the cold rooms results in increased temperatures in warm/hot rooms.
- As Oak Point noted in the report this is one of two schools in our district that has not received a boiler upgrade.
- The plan is to replace the oil fired boiler with an LP gas boiler that would cover the heating and hot water needs in the building. (This would mean converting all steam terminals to hot water including replacement of the oil-fired water heater with an indirect water heater.) *This would mean each room will see a change in heating unit.*
- What follows are pictures of the current boiler system.



MES-M1 Oil-Fired Steam Boiler



MES-M2 Heating Pumps



MES-M3 Oil-Fired Water Heater and Steam-to-Water Shell-and-Tube Converter

- Estimated cost for the needed work \$1,465,000.