

Form 1. Individual Project Proposal Descriptions and Justification

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Project Title: Boiler Work

Program Area: School Facilities

Project Description: This project is aimed at refurbishing the main heating system at Ledyard High School—a low pressure steam heating system including (2) 200HP Cleaver Brooks boilers, original to the 1963/1964 construction of the original building. Both boilers were re-tubed in 2015; a refractory rebuild was completed on Boiler 1, as well as the replacement of the oil preheater on that same boiler. A chemical treatment plan was introduced at this location, also a water softener to limit scaling on tubes, in an effort to extend the life of these repairs. Conversion to #2 fuel will take place along with oil tank replacement. Highest priority work in the near-term include refractory rebuild on Boiler 2 and steam traps repairs in the service tunnels of the school.

Evaluation Category: DF/IOE

Planning Context:

Several emergency boiler repairs have been done in years past on district boilers, especially LHS. This work is an attempt to make more systematic and permanent repairs in conjunction with the introduction of a chemical treatment plan at LHS.

In previous years, budgetary estimates were obtained for replacement of the boilers, however the \$1M estimates yielded paybacks of nearly a century. In order for replacement to make fiduciary sense, the system would need to move away from steam to a hot water system; however, such a changeover would require significant remodeling to the building, adding to cost.

Schedule: Currently assessing options and pricing for introduction of the water softener; additional work to be done during months with no heating load.

Coordination: This project is not dependent on other Capital projects.

Previous Town Meeting Action: No previous Town action has taken place on this project, except to address emergency repairs from Capital Non-Recurring.

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Project Priority: (Note: The highest priority does not have to occur in the nearest year, and priorities do not necessarily follow in chronological order. It may be that your most important project may not be needed or be ready for action until three years from now.

 H priority within department/program area

 M risk of deferral

Estimated Cost: \$

2020: \$22,500; 2021: \$7500; 2022: \$7500

Basis of Cost Estimate: Check one of the following. If you want to provide more detail on the estimate, do so with a narrative after indicating the type of estimate.

 Cost of comparable facility or equipment

 Rule of thumb indicator, unit costs

 From the cost estimate from engineer, architect, or vendor

 From bids received

 X Preliminary estimate, (e.g. no other basis for estimate, guesstimate)

Alternative Financing: None
