

KETCHIKAN GATEWAY BOROUGH SCHOOL DISTRICT
AGENDA STATEMENT

No. 7 e.

MEETING OF June 28, 2023

Item Title:

CONSENT CALENDAR:

Reviewed by:

Motion to approve Amendments to the MOA	<input checked="" type="checkbox"/> Superintendent
between KGBSD and the Borough for the High	<input checked="" type="checkbox"/> Finance
School Boiler Replacement.	<input checked="" type="checkbox"/> Maintenance

SUBMITTED BY Daniel Schuler, Business Manager, 907 247 2116

SUBMITTED FOR APPROVAL: Michael Robbins, Superintendent

SUMMARY STATEMENT:

The MOA between KGBSD and the Borough for the High School Boiler Replacement requires amendment for two additions of work related to Kayhi Boilers.

ISSUE: In accordance with Alaska Statute and Borough code related to school construction projects, capital improvement projects and/or major building repairs on school facilities are conducted in close collaboration and mutual agreement between Ketchikan Gateway Borough School District and Ketchikan Gateway Borough with defined roles and responsibilities. Projects in excess of \$50,000 are funded by the Ketchikan Gateway Borough and must be dually approved. The Borough approved the amendments at their regular meeting of June 19, 2023.

BACKGROUND: This Memorandum of Agreement outlines the terms under which the Borough agrees to authorize the School District to manage all aspects of the High School Boiler Replacement project for which the School District is designated as having primary responsibility. The amendments approved by the Borough are the following additions of work:

1. Warranty Replacement of Two Weil-McLain Series 88 Boilers. (\$110,000)

In April 2023, multiple failures were identified in two of the Weil-McLain Series 88 boilers at Ketchikan High School, units first installed in 2021 under the 2020 MOA. Each Series 88 unit has six intermediate and two end modules: boiler 2a experienced (4) cracked sections, and boiler 2b experienced (3) cracked sections. Between the two boilers, there are insufficient sections to swap modules and create a single operating boiler. Per the correspondence from design engineers RESPEC, the apparent flaw was a manufacturer's casting error: conditions did not indicate failure due to thermal shock, and the firing rates on both boilers were within the manufacturer's specifications. The warranty terms cover replacement of the units themselves while transportation of the replacement units and labor to install the replacement units are costs borne by the owner.

The district has received a quote for materials totaling \$67,945.86 FOB Seattle and labor costs estimated at approximately \$28,326.26, for a total estimated cost of \$96,272.12. Staff recommends building in additional funds to cover the cost for shipping and handling expenses from Seattle to Ketchikan, as well as a small contingency. No appropriation is required at this time. Staff anticipates approving an expenditure in the amount of \$110,000 to cover all expenses. KGBSD recently executed a contract with Schmolck Mechanical, Inc. to install replacement boilers for boiler 1 with a pair of Weil MacLain Series 88s (boilers 1a and 1b), which were ordered approximately two months ago. Boilers 2a and 2b replaced a second 30-year-old boiler that had surpassed its useful life. KGBSD intends to execute a change order to Schmolck's installation contract to remove existing boilers

2a and 2b and install 1a and 1b in their place. Replacement units for 2a and 2b would then be installed to replace boiler 1 under Schmolck's main contract. The MOA amendment reflects additional expenses for the Change Order and to order new units, with some credit for the items still under warranty.

KGBSD examined replacing only the failed modules: the timeline of 18-24 weeks for replacement was the same as replacing the units in their entirety. Given the lack of fidelity for the units in situ, it is preferable to replace these units in their entirety.

Time is of the essence: these units will be delivered in September at the earliest, and should be installed in advance of the winter.

Weil-McLain is the leading North American hydronic comfort heating systems for residential, commercial and institutional buildings, since 1881. The previous Weil-McLain boilers lasted the District over 30 years with minimal issue.

2. Phase 2: Continuation of High School Boiler Replacement (\$355,000)

In 1993, during the remodel and construction of Ketchikan High School, three Series 94 boilers were installed. Boilers 1 and 2 are 15-Section boilers designed to heat the building. Boiler 3 is a 15-Section boiler and was originally designed to offset the heating demand of Mike Smithers Swimming pool. In 2019 and 2020 there were casting failures in Boilers 1 and 2, which were repaired, but then casting failures in other sections occurred. In 2020, the Phase 1 plan to replace Boiler 2 with two smaller more efficient Weil-McLain-Series 88 heating plants (replacement of boilers 2a and 2b) was implemented, and construction was completed in the winter of 2020/21. With a very successful proof of concept completed, Phase 2 (Boilers 1a and 1) will show an even better fuel savings, relegating Boiler 3 to emergency standby status. Confidence is high that this will give Kayhi 30 plus years of service life to its new heat generation system. Schmolck Mechanical, Inc. was awarded a contract in February totaling \$354,235 for replacement of Boiler 3. The boiler has an approximate lead time of 6-8 months. Installation is expected to occur this fall.

RECOMMENDATION:

Approval of amending the MOA between KGBSD and the Borough for the High School Boiler Replacement.

EXHIBITS ATTACHED

- None

RECOMMENDED ACTION (If not approved in the Consent Calendar)

"I move that the Board of Education approve the amendments to the MOA between KGBSD and the Borough for the High School Boiler Replacement."