



SCHOOL BOARD ACTION REPORT

DATE: February 15, 2018
FROM: Dr. Larry Nyland, Superintendent
LEAD STAFF: Dr. Lester Herndon, Associate Superintendent, Facilities and Operations
206-252-0644, lherndon@seattleschools.org

For Introduction: March 21, 2018
For Action: April 4, 2018

1. TITLE

BEX IV: Resolution 2017/18-15: Acceptance of the Building Commissioning Report for the Olympic Hills Elementary School Replacement project

2. PURPOSE

This resolution accepts the building commissioning report for the Olympic Hills Elementary School Replacement project, in accordance with [WAC 392-344-165](#), as required to complete the Office of Superintendent of Public Instruction (OSPI) Form D-11 Application to Release Retainage.

3. RECOMMENDED MOTION

I move that the School Board adopt Resolution 2017/18-15, accepting the building commissioning report for the Olympic Hills Elementary School Replacement project.

4. BACKGROUND INFORMATION

a. Background

Commissioning is a systematic process of documentation and verification to demonstrate that the building mechanical systems have been installed and function properly and efficiently and can be maintained to operate and satisfy the engineer's design intent and district's operational requirements. The commissioning consultant, Engineering Economics, Inc., has satisfactorily completed the commissioning process.

The district's Capital Project Mechanical Coordinator, Mike McBee, has been involved throughout the commissioning process on the Olympic Hills Elementary School Replacement project. Mr. McBee recommends the acceptance of this effort.

The Office of Superintendent of Public Instruction (OSPI), through the School Construction Assistance Program (SCAP), provides funding assistance to school districts that are undertaking a major new construction or modernization project. The primary documents that form the basis of any agreement between OSPI and the district are the "D-form" documents. These documents, when properly completed and signed by all parties, form the official notices of agreement and intent on behalf of the district and OSPI.

As noted above, the acceptance of the commissioning report is required for the D-11 form for the release of construction retainage. Approval of this motion meets the requirements of OSPI to receive state funding assistance.

b. Alternatives

Not accepting this motion could put the district in a position subject to litigation and if state funding requirements are not met, the district will not receive state funding assistance that is available for this project. Therefore, this alternative is not recommended.

c. Research

- Office of Superintendent of Public Instruction, Form D-11 Application to Release Retainage
- Olympic Hills Elementary School Commissioning Report, Engineering Economics, Inc.

5. FISCAL IMPACT/REVENUE SOURCE

Action helps to secure approximately \$_____ million dollars in state funding assistance. This motion does not represent a specific expenditure.

Expenditure: One-time Annual Multi-Year N/A

Revenue: One-time Annual Multi-Year N/A

6. COMMUNITY ENGAGEMENT

With guidance from the District's Community Engagement tool, this action was determined to merit the following tier of community engagement:

Not applicable

Tier 1: Inform

Tier 2: Consult/Involve

Tier 3: Collaborate

The \$694.9 million Building Excellence IV (BEX IV) Capital levy was approved by more than 72 percent of Seattle voters in February 2013. It supports the district's long-range plans to upgrade and renovate aging school facilities and address enrollment growth. The process included countless hours of planning, coordinating efforts throughout the district, community engagement and feedback, extensive Seattle School Board guidance and input that lead to a unanimous Seattle School Board vote in November 2012 that approved the BEX IV projects list.

7. EQUITY ANALYSIS

This motion was not put through the process of an equity analysis. The selection of projects in the BEX IV program was designed to provide equitable access to safe school facilities across the city.

8. STUDENT BENEFIT

This project helps ensure a safe, secure learning environment for every student.

9. WHY BOARD ACTION IS NECESSARY

- Amount of contract initial value or contract amendment exceeds \$250,000 (Policy No. 6220)
- Amount of grant exceeds \$250,000 in a single fiscal year (Policy No. 6114)
- Adopting, amending, or repealing a Board policy
- Formally accepting the completion of a public works project and closing out the contract
- Legal requirement for the School Board to take action on this matter
- Board Policy No. _____, [TITLE], provides the Board shall approve this item
- Other: OSPI require Board acceptance of this report.

10. POLICY IMPLICATION

School Board approval of the commissioning report is consistent with Board Policy No. 6100, Revenues from Local, State and Federal Sources, which states “It is the policy of the Seattle School Board to pursue systematically those funding opportunities that are consistent with district priorities from federal, state and other governmental units, as well as from private and foundation sources,” and “The Board agrees to comply with all federal and state requirements that may be a condition for the receipt of federal or state funds...”.

11. BOARD COMMITTEE RECOMMENDATION

This motion was discussed at the Operations Committee meeting on March 8, 2018. The Committee reviewed the item and moved it forward to the full Board for consideration.

12. TIMELINE FOR IMPLEMENTATION

Upon approval of this motion, the D-11 Application to Release Retainage will be completed and submitted to OSPI

13. ATTACHMENTS

- Commissioning Completion Letter dated December 18, 2017, Engineering Economics, Inc.
- Commissioning Report dated February 6, 2018 (Executive Summary attached, the full report is available in the Board Office)
- Resolution 2017/18-15 (for approval)



Engineering Economics Inc

1201 Western Avenue Suite 325
Seattle, Washington 98101

Telephone: **206 622 1001**
Facsimile : 206 622 5747

Memorandum

Date: December 18, 2017

To: Ethan Bernau, SOJ -
101 Yesler Way, Suite 606 -
Seattle, Washington 98104 -

From: David Hoffman

Subject: Olympic Hills Elementary School (OHES)
Commissioning Completion
EEI Project No.: 03-14189

Dear Ethan,

The purpose of this letter is to document the completion of the building commissioning process for the OHES project. EEI developed and executed a commissioning plan, including system functional testing that began in the Spring of 2017. Testing, issue troubleshooting, tracking and resolution continued into the Summer of 2017.

The entire process was documented in a Final Commissioning Report document transmitted to Seattle Public Schools and SOJ, and dated 8/23/2017. Final resolution status for issues discovered, and details of test findings, are included in the report appendices.

At this point EEI recommends that Seattle Public Schools accept the commissioned building systems, including HVAC, lighting controls, and the building automation system.

If there are any further questions or concern please let me know.

Sincerely,

A handwritten signature in black ink that reads "David A. Hoffman".

David Hoffman, PE, CxA -

I. PROJECT DESCRIPTION

Seattle Public Schools demolished the existing Olympic Hills Elementary School (OHES) building and replaced it with a new two-story wood-frame building serving 500-650 students. The total square footage for the project is approximately 92,000. New mechanical and electrical systems include ground-source heat pumps tied via a condenser water loop to a well field adjacent to the building consisting of 80 wells each 350 feet deep. An electric boiler shares heating load equally with the well field to reduce depletion of ground thermal source energy over multiple heating seasons and allow more effective recharge during cooling mode. Electric duct heaters temper outside air, with installed bypass dampers only for possible future installation of heat recovery coils, except for commons heat recovery which was installed as part of the current project. Various exhaust fans, equipment space electric unit heaters, and a split DX unit for equipment cooling are also provided. Emergency lights are served by battery fixtures. Lighting controls are simple local wall switch relay packs with occupancy sensors for classrooms and 2/3 of hallway and common area fixtures, with zone contactors connected to the BAS for zone schedule control of 1/3 of fixtures in hallways, common areas and for control of all exterior lights. Daylight harvesting photocells will be provided where required by energy code. A portion of room receptacles will be schedule controlled on/off by the BAS.

II. EXECUTIVE SUMMARY

This Final Commissioning Report contains an overview of the Cx process and results of the Cx program for Olympic Hills Elementary School. Prominent among the Cx services provided was the witnessing of functional testing for all heating/cooling/ventilation equipment, domestic hot water and lighting control. This report was prepared, in part, to fulfill prerequisite requirements. The commissioning authority lead for this project was David Hoffman, PE, CxA whose engineering degree, registration as a licensed professional mechanical engineer in the State of Washington, and certification as a Certified Commissioning Authority by AABC Commissioning Group qualifies him to supervise the commissioning process per the Seattle Energy Code C408.1 requirements. Engineering Economics Inc has a direct contractual relationship with the building Owner (Seattle Public Schools) and does not have a conflict of interest on this project per SEC C408.1.1

A. Conclusions

Installation and operation of commissioned equipment is consistent with applicable contract documents and meets the intent of the Basis of Design and Owner's Project Requirements. EEI did not validate equipment or items described in the BoD or OPR for non-commissioned equipment.

B. Commissioning (Cx) Timeline

OPR/BoD	12/2014
Design Development Review	12/2014
Construction Document Review	5/2015 – 6/2015
Cx Specifications Submitted to A/E	12/2014
MEP Systems Start-up	1/2017 – 4/2017
Testing, Adjusting & Balancing	3/2017 - 4/2017
Functional Testing	4/2017
100% Outside Air Flush	Est 8/2017
Operator Training – Contractor Provided	4/2017 – 6/2017



**Seattle School District #1
Board Resolution**

Resolution No. 2017/18-15

A RESOLUTION of the Board of Directors of Seattle School District No. 1, King County, Seattle, Washington accepting the building commissioning report by Engineering Economics, Inc. for the Olympic Hills Elementary School Replacement project; and

WHEREAS, The Seattle School District Board of Directors has received the building commissioning report from Engineering Economics, Inc. regarding the Olympic Hills Elementary School Replacement project; and

WHEREAS, it has been determined that the building commissioning report is complete and the building is operating as the commissioning report states;

THEREFORE, BE IT RESOLVED, by the Seattle School Board of Directors, that the building commissioning report by Engineering Economics, Inc. for the Olympic Hills Elementary School Replacement project is hereby approved.

ADOPTED this 4th day of April, 2018.

Leslie Harris, President

Rick Burke, Vice-President

Jill Geary, Member-at-large

Zachary DeWolf, Member

Eden Mack, Member

Betty Patu, Member

Scott Pinkham, Member

ATTEST: _____
Dr. Larry Nyland, Superintendent
Secretary, Board of Directors
Seattle School District No. 1
King County, WA