

September 18-19, 2013

ITEM 160-2702-R0913

Repair/Replace the Heating, Ventilation, and Air Conditioning Systems for the City College Technology Building; Montana State University Billings

THAT

Consistent with the provisions of MCA 20-25-302, the Board of Regents of Higher Education authorizes Montana State University Billings to repair/replace the Heating, Ventilation, and Air Conditioning Systems for the City College Technology Building. This request authorizes \$800,000 of the City College Building Fee for use on the project.

EXPLANATION

1. This project replaces original equipment which has exceeded usable service life, including several air handlers, an air-cooled chiller, make-up air units, exhaust fans, and hot water pumps. The project also installs new higher efficiency heating systems in shop areas, significant kitchen hood upgrades, and related digital controls for all new equipment.
2. This project will be financed with a combination of State/non-State funds. The State funds have been allocated from our maintenance budget and the non-state funds from our City College Building Fee.
3. Regents Policy 940.9.3 requires student endorsement for all projects in excess of \$200,000 to be funded with student building fees. The Associated Students of MSUB support the use of the PE Building Fee for this project. (Attachment)

ATTACHMENT: ASMSUB – Senate Resolution #1

Board of Regents Policy - Physical Plant B Section 1003.7:

This authority request is for an amount greater than \$150,000, which requires the following additional justification:

Project description:

This project replaces original equipment which has exceeded usable service life, including several air handlers, an air-cooled chiller, make-up air units, exhaust fans, and hot water pumps. The project also installs new higher efficiency heating systems in shop areas, significant kitchen hood upgrades, and related digital controls for all new equipment. In regards to payback or a quantifiable energy savings which will be realized for the project, the blended nature of the project components make this task extremely difficult. For example, the chiller replacement component of the project totals over 20% of the project cost. This equipment is simply well beyond its usable service life and the refrigerant utilized in the equipment is scheduled to be obsolete in the near future. The new air-cooled chiller will be slightly more efficient than the current unit but as this is more of a mechanical replacement component than an energy upgrade component, the lack of significant energy reduction would significantly skew the overall project payback or energy savings. The same fact holds true regarding the air handler replacements which total over 35% of the total project cost.

Cost Estimate and Funding Sources:

The project costs will be approximately \$1,000,000 to replace the obsolete equipment with modern, code compliant and energy efficient equipment. The City College Building Fee will fund the non-State portion which amounts to \$800,000 and the remaining \$200,000 will be State funded as repairs within our General Maintenance Budget.

Programs Served, Enrollment Data, Projected Enrollments:

(Not applicable to this request)

Space Utilization Data:

(Not applicable to this request)

Projected use for available residual space:

(Not applicable to this request)

Projected O&M Costs and proposed funding sources:

Historic O&M costs will be substantially reduced with more efficient equipment and not having to make frequent repairs to obsolete equipment. Thermal comfort within the building will increase due to new, reliable equipment, which will be digitally controlled.