





UNIVERSITY OF ALASKA
ANCHORAGE


Total Project Cost	\$ 5,805,588
Approval Level:	University President


FORMAL PROJECT APPROVAL REQUEST

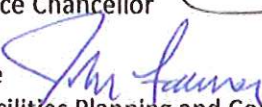
TO: Pat Gamble
President

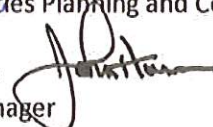
THROUGH: Kit Duke 
AVP Facilities and Land Management

THROUGH: Tom Case 
Chancellor

THROUGH: William Spindle  2 Nov 12
Vice Chancellor, Administrative Services

THROUGH: Chris Turletes  1 Nov 12
Associate Vice Chancellor

THROUGH: John Faunce 
Director, Facilities Planning and Construction

FROM: John L. Hanson 
Sr. Project Manager

DATE: October 31, 2012

SUBJECT: Project Type: DM
Project Name: UAA EM1-EM2 Mechanical Renewal
Project No.: 12-0080

Cc:



UNIVERSITY OF ALASKA
ANCHORAGE

FORMAL PROJECT APPROVAL

Name of Project: UAA Energy Modules 1 & 2 Mechanical Renewal
Project Type: DM
Location of Project: UAA Main Campus, EM1(AS 115) & EM2 (AS 116), Anchorage, Alaska
Project Number: 12-0080
Date of Request: October 31, 2012

Total Project Cost:	\$5,805,588	
Approval Required:	Full Board	
Prior Approvals:	Preliminary Administrative Approval	2/13/2012

A Formal Project Approval (FPA) is required for all Capital Projects with a Total Project Cost in excess of \$250,000.

FPA represents approval of the Project including the program justification and need, scope, the total project cost, and the funding and phasing plans for the project. Requests for formal project approval shall include a signed project agreement or facilities pre-design statement, the proposed cost and funding sources for the next phase of the project and for eventual completion of the project, and a variance report identifying any significant changes in scope, budget, schedule, deliverables or prescriptive criteria associated with a design-build project, funding plan, operating cost impact, or other cost considerations from the time the project received preliminary administrative approval. It also represents authorization to complete project development through the schematic design, targeting the approved scope and budget, unless otherwise designated by the approval authority.

Action Requested

“The Facilities and Land Management Committee recommends that the Board of Regents approve the Formal Project Approval request for the University of Alaska Anchorage Energy Modules 1 & 2 Mechanical Renewal project as presented in compliance with the approved campus master plan, and authorizes the university administration to proceed through Schematic Design not to exceed a total project cost of \$ 5,580,000. This motion is effective December 6, 2012.”

Project Abstract

The Energy Modules (EM1 & EM2) are separate buildings constructed in 1977 and provide heating and cooling services for a number of campus facilities. This project will replace the Energy Module boilers, pumps and piping systems that are over 30 years old and have been failing due to age, corrosion and fatigue. Many of these failures have occurred during the winter months when additional stresses are placed on the systems due to increased heating demands and environmental impacts. These failures further impact other systems, thus driving up the associated costs. Emergency repairs are very expensive and have a severe impact on students, faculty and staff working in the buildings served by these modules.

Variances

Emergency replacement of failed circulation pumps, leaking cooling lines, and the installation of an additional cooling well to augment the under-producing EM1 Cooling well have already been completed in order to allow the Energy Modules to continue supporting the campus while this project is being

designed and implemented. The cost of this emergency work was \$225,588 and is included in the Total Project Cost of this project.

Special Considerations

This project will be phased, dependent upon funding and to reduce the impact on the buildings supported by the two Energy Modules while the mechanical systems are taken offline to complete the renovations.

Total Project Cost and Funding Sources

Phase 1:

Funding Title	Fund Account	Amount
FY12 R&R Funding (Emergency Work)	564352-17189	\$225,588
FY12 R&R Funding	564352-17189	\$324,412
FY12 Add'l R&R Funding	564400-17189	\$90,120
FY12 DM Funding Series "Q"	514518-17055	\$50,000
FY12 DM Funding (FY13 Sales)	TBD when bonds are sold	\$1,146,242
FY13 R&R Funding	564388-17189	\$843,600
Total Phase 1 Funding		\$2,679,962

Phase 2:

FY14 DM Funding	TBD	\$3,125,626
Total Phase 2 Funding		<u>\$3,125,626</u>

Total Project Cost **\$5,805,588**

Annual Program and Facility Cost Projections

Operation and maintenance costs are expected to be reduced by new, more efficient systems and equipment. In addition, completion of this project will eliminate the need for the more costly emergency repairs that UAA have been performing when components fail.

Project Delivery Method

Design – Bid - Build

Affirmation

This project complies with Regents Policy, the campus master plan and the Project Agreement.

Supporting Documents

Project Agreement w/ One-page Project Budget
Drawings: Site Plans

Approvals

The level of approval required for FPA shall be based upon the estimated TPC as follows:

- **TPC > \$4.0 million will require approval by the board based on the recommendations of the Facilities and Land Management Committee (FLMC).**
- TPC > \$2.0 million but not more than \$4.0 million will require approval by the FLMC.
- TPC > \$1.0 million but not more than \$2.0 million will require approval by the Chair of the FLMC.
- TPC ≤ \$1.0 million will require approval by the AVP of Facilities and Land Management.



UNIVERSITY OF ALASKA
ANCHORAGE

PROJECT AGREEMENT

Name of Project: EM1 / EM 2 Mechanical Renewal
Project Type: DM
Location of Project: UAA Main Campus, EM 1 (AS 115) & EM 2 (AS 116), Anchorage, Alaska
Project Number: 12-0080
Date of Agreement: October 17, 2012

INTRODUCTION

A Project Agreement (PA) is required for all Capital Projects with a Total Project Cost anticipated to exceed \$2.5 million. For project under \$2.5 million, a project agreement should be attached to the FPA or all of the components of the PA may be incorporated into the FPA.

The PA represents a formal agreement between the affected program department(s), the MAU's chief facilities administrator, the chief academic officer, the chief financial officer, the chancellor, and the chief facilities administrator documenting a common understanding of the programmatic need, project scope, and other matters related to the project.

BODY OF THE AGREEMENT

Basis for the Project

The Energy Modules (EM1 & EM2) were constructed in 1977 and provide heating and cooling services for a number of campus facilities. This project will improve energy efficiency, reduce operating costs, and bring the facilities and associated infrastructure into compliance with current life safety and building code requirements. It will replace the Energy Module boilers, pumps and piping systems, upgrade of the building fire alarm system, replace the EM 2 turbine generator, and investigation and possible replacement of the EM wells and associated test wells and piping.

Programmatic Need

Mission Area Analysis: The UAA Strategic Plan 2017 includes the following priorities for the UAA campus:

Priority D. Strengthen the UAA Community. *To make the best of the opportunities and challenges that lie ahead, we must focus our attention on building and strengthening the UAA community as a whole. To build an institution distinguished as a diverse, engaged community of students, staff, faculty, alumni, and schools, colleges, and campuses, we will:*

D.8 - Construct and maintain plant and equipment to provide a dynamic, state-of-the-art environment for high quality teaching, research, engagement, and creative expression;

Statement of Need: As noted above, the Energy Modules (EM 1 & EM 2) were constructed in 1977 and provide heating and cooling services for a number of campus facilities. The Energy Module boilers, pumps and piping systems are over 30 years old and have been failing due to age, corrosion and fatigue. Many of these failures have occurred during the winter months when additional stresses are placed on the systems due to increased heating demands and environmental impacts. These failures further impact other systems, thus driving up the associated costs.

Strategic Importance

The project supports the mission to discover and disseminate knowledge through teaching research, engagement and creative expression. It is a high priority to build and strengthen the UAA community. To build an institution distinguished as a diverse, engage community to students, staff, faculty, alumni, and campuses, we must construct and maintain physical plant and equipment to provide state-of-the art environment for high quality teaching, research, engagement, and creative expression. It is the goal of this project to provide student, staff, and faculty the physical plant and technology necessary for them to most effectively pursue their research, education, and public service goals.

Impact Analysis

Emergency repairs are very expensive and have a severe impact on students, faculty and staff working in the building served by these modules. This project is required to protect our capital assets and provide a safe and comfortable environment for our students, staff and faculty. This project will reduce our operating cost and improve our energy efficiency.

Program Enhancements

N/A

Needs Assessment

A facility condition assessment of the energy modules is in progress to assess heating, cooling, power generation, fire alarm, lighting, and control systems. The consultant will determine current and future needs in terms of how it applies to the energy modules. The project will be phased based upon the availability for funding and to reduce the impact on the campus and buildings impacted by taking the energy modules offline to complete the renovations. The project will improve energy efficiency and reduce operating costs. The project is required to protect our capital assets and provide a safe and comfortable environment for students, staff and faculty.

Project Impact

The project will be phased to mitigate any negative impacts to facilities, educational programs, UAA activities and community events on campus.

Project Site Considerations

The project area is within the existing energy modules and utility distribution systems. No other site considerations required.

Incremental Costs

This project may be phased, dependent upon funding and to reduce the impact on the campus and the buildings impacted by taking the Energy Modules offline to complete the renovations.

Proposed Funding Plan

FY 12	Deferred Maintenance/Renewal and Replacement Funds
FY 13	Renewal and Replacement Funds
FY 14	Deferred Maintenance Funds

Annual Program and Facility Cost Projections

This project will provide a reduction in maintenance costs as well as operational costs.

Total Project Cost and Funding Sources

Phase 1:

Funding Title	Fund Account	Amount
FY12 R&R Funding (Emergency Work)	564352-17189	\$225,588
FY12 R&R Funding	564352-17189	\$324,412
FY12 Add'l R&R Funding	564400-17189	\$90,120
FY12 DM Funding FY12 Bond Sale	514518-17055	\$50,000
FY12 DM Funding	TBD when bonds sold	\$1,146,242
<u>FY13 R&R Funding</u>	<u>564388-17189</u>	<u>\$843,600</u>
Total Phase 1 Funding		\$2,679,962

Note. The amounts shown in the above accounts are the funded amounts. The current amounts will be lower based on funds expended to date for design and emergency work already accomplished.

Phase 2:

FY14 DM Funding	TBD	\$3,125,626
Total Phase 2 Funding		<u>\$3,125,626</u>
Total Project Cost		\$5,805,588

Project Schedule

DESIGN

Conceptual Design	Nov. 2012
Formal Project Approval	Dec. 2012
Schematic Design	Feb. 2013
Schematic Design Approval	April 2014
Construction Documents	May 2014

BID & AWARD - Phase 1

Advertise and Bid	Phase 1 - May 2014
Construction Contract Award	June 2014

CONSTRUCTION

Start of Construction	June 2014
Construction Complete	Aug 2014
Date of Beneficial Occupancy	Sept 2014
Warranty Period	1 Year

BID & AWARD - Phase 2

Advertise and Bid	Phase 2 – May 2015
Construction Contract Award	June 2015

CONSTRUCTION

Start of Construction	June 2015
Construction Complete	Aug 2015
Date of Beneficial Occupancy	Sept 2015
Warranty Period	1 Year

Supporting Documents

One-page Budget


UNIVERSITY OF ALASKA		
Project Name: EM 1 & EM 2 Mechanical Renewal		
MAU: Anchorage, Alaska		
Building: AS 115 & AS 116	Date:	10/17/2012
Campus: UAA	Prepared by:	J. L. Hanson
Project #: 09-0019	Acct #:	
Total GSF Affected by Project:		
PROJECT BUDGET		FPA Budget
A. Professional Services		
Advance Planning, Program Development		\$ 250,000
Consultant: Design Services		\$ 551,000
Consultant: Construction Phase Services		\$ 137,750
Consul: Extra Services (List: _____)		\$ 50,000
Site Survey		\$ 50,000
Soils Testing & Engineering		\$ 50,000
Special Inspections		\$ 75,000
Plan Review Fees / Permits		\$ 81,200
Other		
Professional Services Subtotal		\$ 1,244,950
B. Construction		
General Construction Contract(s)		\$ 3,844,216
Other Contractors (List: _____)		
Construction Contingency		\$384,422
Construction Subtotal		\$4,228,638
<i>Construction Cost per GSF</i>		<i>N/A</i>
C. Building Completion Activity		
Equipment		\$75,000
Fixtures		
Furnishings		
Signage not in construction contract		
Move-Out Costs		
Move-In Costs		
Art		
Other (Interim Space Needs or Temp Reloc. Costs)		
OIT Support		\$10,000
Maintenance Operation Support		\$40,000
Building Completion Activity Subtotal		\$125,000
D. Owner Activities & Administrative Costs		
Project PIng, Staff Support		
Project Management		\$203,000
Misc. Expenses: Advertising, Printing, Supplies, Etc.		\$4,000
Owner Activities & Administrative Costs Subtotal		\$207,000
E. Total Project Cost		\$5,805,588
<i>Total Project Cost per GSF</i>		<i>N/A</i>
F. Total Appropriation(s)		

Agreement

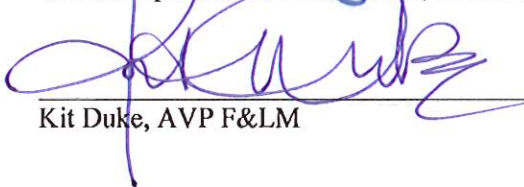
In witness whereof, the parties attest that they have made and executed this Agreement to be effective the date and year first above written.


Thomas Sternberg, Interim Director, Facilities Maintenance and Operations


John Faunce, Director, Facilities Planning & Construction

 1 Nov 12
Chris Turlentes, Associates Vice Chancellor, Facilities and Campus Services

 2 Nov 12
William Spindle, Vice Chancellor, Administrative Services

 7 Nov 12
Kit Duke, AVP F&LM

