Agenda

**Board of Regents**

Facilities and Land Management Committee

Thursday, June 7, 2012, \*3:00 p.m. – 5:00 p.m.

Room 106 Lee Gorsuch Commons

University of Alaska Anchorage

Anchorage, Alaska

*\*Times for meetings are subject to modifications within the June 7-8, 2012 timeframe.*

**Committee Members:**

Carl Marrs, Committee Chair Timothy Brady

Kirk Wickersham, Committee Vice Chair Mary K. Hughes

Dale Anderson Patricia Jacobson, Chair

**I.** **Call to Order**

**II. Adoption of Agenda**

 **MOTION**

**"The Facilities and Land Management Committee adopts the agenda as presented.**

I. Call to Order

**II. Adoption of Agenda**

**III. Full Board Consent Agenda**

* 1. **Formal Project Approval for the University of Alaska Anchorage MAC Housing Renewal**
1. **Schematic Design Approval for the University of Alaska Fairbanks Critical Electrical Distribution Renewal Phase 2**
2. **Approval of the University of Alaska Anchorage Campus Master Plan Amendment for the Engineering Parking Garage**
3. **Schematic Design Approval for the University of Alaska Anchorage Engineering and Industry Building Project**
4. **Schematic Design Approval for the University of Alaska Fairbanks Engineering Building Project**
5. **Schematic Design Approval for the University of Alaska Anchorage Matanuska-Susitna Valley Center for Arts and Learning**

**IV. New Business**

**A. Amended Formal Project Approval for the University of Alaska Fairbanks P3 Housing and Dining Development**

**V. Ongoing Issues**

**A. UAF College of Rural and Community Development and Community and Technical College Master Plans Second Reading**

**B. UAA Seawolf Sports Arena Status Report**

**C. UAF Life Sciences Facility Status Report**

**D. UAF Combined Heat and Power Plant Replacement Status Report**

**E. UAF Infrastructure Updates**

**F. Construction Manager at Risk Project Delivery Method**

**G. Deferred Maintenance Spending Report**

**H. Approvals by the Chair of the Facilities and Land Management Committee and the Chief Finance Officer**

**I. Construction in Progress**

**J. IT Report**

**VI. Future Agenda Items**

VII. Adjourn

**This motion is effective June 7, 2012."**

**III. Full Board Consent Agenda**

A. Formal Project Approval for the University of Alaska Anchorage MAC Housing Renewal Reference 17

The President recommends that:

**MOTION**

**“The Facilities and Land Management Committee recommends that the Board of Regents approve the Formal Project Approval request for the University of Alaska Anchorage MAC Housing Renewal as presented in compliance with the campus master plan, and authorizes the university administration to proceed through Schematic Design not to exceed a total project cost of $12,132,000. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.042, Formal Project Approval (FPA) represents approval of the project including the program justification and need, scope, the Total Project Cost (TPC), and funding plan for the project. It also represents authorization to complete the development of the project through the schematic design, targeting the approved scope and budget, unless otherwise designated by the approval authority.

An FPA is required for all projects with an estimated TPC in excess of $2.5 million in order for that project’s inclusion of construction funding to be included in the university’s capital budget request, unless otherwise approved by the board.

The level of approval required shall be based upon TPC as follows:

**TPC > $4 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**

RATIONALE AND RECOMMENDATION

MAC Housing was built in 1985, consists of 6 buildings, and provides approximately 300 beds in an apartment style setting. The buildings are now over 25 years old and are ready for major renewal work. While the housing auxiliary takes care of maintenance, repair, and minor renewal with auxiliary funds, major renewal projects are beyond the reach of the auxiliary operating budget and fund balance. This project is for major renewal work.

The replacement value for the 6 MAC buildings is $40.62M in 2011. Based on the investment of $12.13 million UAA needs for renovation, the building has a Facility Condition Index of 29.9%. This FCI is within acceptable bounds for making that investment.

Project Scope

Renewal of exterior materials including: roof, siding, and stairwells; interior fixtures and finishes and equipment including kitchen equipment, millwork, flooring, plumbing, and lighting; bathroom millwork, flooring plumbing, and lighting; upgrades to the electrical and IT services; and replacement building systems including boilers and supporting mechanical equipment; all of which have reached the end of their useful lives. The work will be accomplished in phases to minimize the number of apartments that are off-line at one time, while completing the project as quickly as possible.

Phase 1 will address life safety issues and the mechanical equipment for all 6 buildings. This work will consist of the stairwells, the roofs, and the boilers and supporting mechanical equipment. With these items taken care of, the following phases will consist primarily of interior work; this will enable the remaining work to be implemented throughout the year and mitigate issues across the complex.

Variance Report

The work to be implemented in Phase 1 has changed due to the project funding being spread over a number of fiscal years. Originally the MAC 1 building and the boiler system were to be Phase 1; however, addressing the areas of largest concern across all of the MAC buildings, before failure occurs, is a more effective approach to this project. The modified scope of Phase 1 work will cover the stairwells, the roofs, and the boiler system.

Additionally in Phase 1, UAA plans to mock-up the consultant proposed materials and fixtures in 4-6 apartments and allow the space to be occupied by students. This will test the proposed materials and fixtures prior to applying the specifications across all 80 apartments.

In the preliminary administrative approval, of September 29, 2011, the project was described to include Phase 1A, which consisted of fire panel upgrades and new sprinkler system in MAC 6. This work has been removed from the MAC Housing Renewal scope and is currently being performed under the approved project 07-0021-6.

Proposed Total Project Cost and Funding Source(s)

Phase 1 (FY12 Series Q DM Bonds) $ 3,177,000

 (FY12 DM & R&R Capital) $ 600,000

 (FY13 Capital Budget) $ 655,000

Phase 2 FY14 Capital Budget) $ 3,000,000

Phase 3 (FY15 Capital Budget) $ 3,000,000

Phase 4 (FY16 Capital Budget) $ 1,700,000

**Total Project Cost $12,132,000**

Estimated Annual Maintenance and Operating Costs (O&M)

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

Consultant(s)

Bezek Durst Seiser, Architects

MBA Engineering, Mechanical and Electrical

Enterprise Engineering, Civil

Reid Middleton, Structural

EHS Alaska, Hazardous Materials

RIM Design, Interior Design

Estimations, Inc., Cost Estimating

Other Cost Considerations

This project will be phased, to minimize the financial impact on Housing by reducing the number of apartments that are off-line at any given time. Once the major life safety and building envelope issues are addressed, the interior work will be performed, focusing on completing a building at a time until all 6 buildings are complete.

Plan for Renovation and Reallocation of Existing Space Vacated by Occupants of this Project (Previously called Backfill)

This project renews existing space for continued use as currently allocated.

Schedule for Completion

DESIGN

Conceptual Design May 2012

Formal Project Approval June 2012

Schematic Design July 2012

Schematic Design Approval September 2012

Construction Documents November 2012

BID & AWARD CMAR

Advertise and Bid July 2012

Construction Contract Award August 2012

CONSTRUCTION

Start of Construction January 2013

Date of Beneficial Occupancy August 2016

Procurement Method for Construction

Construction Management at Risk is the preferred method of procuring a contractor. There will be benefits to maintaining the same contractor throughout the project implementation as the work is very repetitive; the process will be more efficient as the project progresses; there will be only one invitation to bid opposed to six and the contractor can participate in the design and project scheduling process.

Affirmation

This project complies with Regents’ Policy, the campus master plan, and amends the project agreement.

Supporting Documents

Budget

B. Schematic Design Approval for the University of Alaska Fairbanks Critical Electrical Distribution Renewal Phase 2 Reference 18

The President recommends that:

**MOTION**

**“The Facilities and Land Management Committee recommends the Board of Regents approve the Schematic Design Approval request for the University of Alaska Fairbanks Critical Electrical Distribution Renewal Phase 2 as presented in compliance with the campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved Total Project Cost budget of $26.25 million, and to proceed with project construction not to exceed a Total Project Cost of $14,325,000. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.043, Schematic Design Approval (SDA) represents approval of the location of the facility, its relationship to other facilities, the functional relationship of interior areas, the basic design including construction materials, mechanical, electrical, technology infrastructure, and telecommunications systems, and any other changes to the project since Formal Project Approval.

Unless otherwise designated by the approval authority or a Material Change in the project is subsequently identified, SDA also represents approval of the proposed cost of the next phase(s) of the project and authorization to complete the Construction Documents process, to bid and award a contract within the approved budget, and to proceed to completion of project construction.

For the Schematic Design Approval, since a Material Change in the project has been identified, such change will be subject to the approval process described below.

**TPC > $4 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**

RATIONALE AND RECOMENDATION

Background

Major deficiencies of the UAF electrical distribution system were identified in a report prepared by PDC Inc. Engineers in 2001. The report was commissioned in response to the near catastrophic power plant failure experienced in December, 1998. In response to the recommendations, UAF has incrementally proceeded towards addressing the deficiencies in the high voltage electrical distribution system. The primary features of the overall improvement program are to:

1. Upgrade the connection to Golden Valley Electric Association (GVEA).
2. Replace aged components of the existing system that are over 40 years old.
3. Increase system voltage to increase overall electric distribution capacity.
4. Relocate the campus switchgear outside of the Atkinson Combined Heat and Power facility to avoid a failure due to a steam leak (as was experienced in 1998).

In order to address all of these problems, the report recommended that UAF move the campus distribution function out of the power plant and onto a new switchboard that is separate, but near the power plant. It was also recommended to increase the distribution voltage from 4,160v to 12,470v. The recommended changes would create increased reliability and capacity of the electrical distribution system.

The following projects have been completed as phases towards the overall goals of the Critical Electrical Distribution Renewal objectives.

|  |  |  |  |
| --- | --- | --- | --- |
| Project Name | TPC | Scope | Status |
| GVEA Tie Substation | $ 1,773,000 | Replace 40-year old substation that connects to GVEA. | Complete 2005 |
| **Phase 1A** Critical Electrical Distribution Renewal  | $ 5,187,000 | Construct utilidors that will connect proposed new switchgear building to campus distribution system. | Complete 2010 |
| **Phase 1B**Critical Electrical Distribution Renewal  | $10,000,000 | Extend utilidors, construct new switchgear building and purchase major equipment. | Complete 2011 |
| **Phase 1C**Critical Electrical Distribution Renewal  | $13,500,000 | Purchase additional major equipment, install major equipment and controls, commission and energize two feeders. | Completion October 2012 |

The Critical Electrical Distribution Renewal project has always been envisioned as a multi-phase project. After Phase 1C is completed the major central infrastructure and new switchgear building will be in place which will allow the systematic conversion of the campus distribution feeders to the new distribution voltage and replacement of the 45-year old components in the system.

**Project Scope**

Phase 2 will continue the work started in the previous phases to provide a functional medium voltage distribution system for UAF. This phase of the project will consist of the following elements that will be performed throughout the UAF campus:

* Replace old building transformers (approximately 50% of the existing transformers will need replacement).
* Replace old high voltage cable (approximately 35% of the existing cables will need to be replaced). The cables are in the existing underground utilidor system.
* Install 5 new underground vaults to house new high voltage switches.
* Modify new building transformers for new distribution voltage of 12,470v.
* Correct code deficiencies in the building electrical service for 8 buildings. This is required to complete the conversion to the new distribution voltage.
* Install an alternate connection to GVEA to the new switchgear building. This connection could be used to supply most of the power needs of campus if there were an emergency and the UAF/GVEA substation was not operational.
* Install an alternate feed from the Atkinson Combined Heat and Power Plant to the campus switchgear building to provide increased reliability.

Accomplishing the above scope of the project will occur in two phases due to funding availability. Any temporary power provisions that may be needed if conversions of the buildings cannot be done in a short outage will be included. Although there will be some inconvenience to building occupants, a work plan will be developed to minimize these impacts.

The new distribution system will be installed in a looped configuration which will provide a level of reliability that is significantly better than the current radial configuration. If a problem is encountered on a feeder it can be isolated while keeping the majority of the buildings on that feeder in service. The current system limits the ability to isolate problems in feeders.

Variance Report

The TPC has increased $2,000,000 from $24,250,000 to $26,250,000 (an 8.3% increase) since the Formal Project Approval was granted. This increase can be attributed to the following items:

* An additional connection to GVEA is needed to provide increased reliability for the campus.
* Additional cost for electrical equipment and cabling. Inflation for these items is outpacing earlier estimates.
* Additional cost for converting existing building electrical services to the new system. Many of the existing buildings have indoor substations and the distribution transformer standard is an outdoor installation. This requires additional work on the secondary wiring for these buildings that was not anticipated.

Proposed Total Project Cost and Funding Source(s)

Funding Source Account Amount

FY 12 DM Bonds

FY12 Series Q Bond 514499-50216 $ 3,750,000

FY13 Series Bond Sale TBD $ 6,250,000

FY13 Capital DM & R&R Funds TBD $ 4,325,000

FY14 Capital DM Funds (Future Request) TBD $ 11,925,000

**Total Project Cost $ 26,250,000**

Estimated Annual Maintenance and Operating Costs (O&M)

O&M costs for the medium voltage distribution system are expected to decrease as a result of this project.

Consultant(s)

PDC, Inc. was selected in accordance with Board of Regents’ Policy in Phase 1A to design all phases of the project.

Other Cost Considerations

None

Plan for Renovation and Reallocation of Existing Space Vacated by Occupants of this Project (Previously called Backfill)

N/A

Procurement Method for Construction

Kiewit Building Group was selected as the Construction Manager at Risk (CMAR) for all phases of the project. UAF intends to continue with CMAR to best take advantage of phased funding. The CMAR method has minimized delays to date from phased funding. Construction has been continuous with no breaks for Phase 1A, 1B and 1C. There has also been approximately $500,000 in savings from earlier phases that has returned to UAF. The CMAR will be competitively bidding subcontracts.

Schedule for Completion

DESIGN

Conceptual Design January 2012

Formal Project Approval February 2012

Schematic Design March 2012

Schematic Design ApprovalJune 2012

Design Development July 2012

Construction Documents September 2012

BID & AWARD

Advertise and Bid New Subcontracts September 2012

Construction Contract Award October 2012

CONSTRUCTION

Start of Construction October 2012

Date of Substantial Completion September 2014

Date of Beneficial Occupancy September 2014

Affirmation

This project complies with Regents’ Policy and the campus master plan.

Supporting Documents

One Page Budget

Link to [Schematic Design Drawings](http://fs8.fs.uaf.edu/uter/BoR%20SDA%20UTER2/UTER2_SDA_dwgs.pdf)

C**.** Approval of the University of Alaska Anchorage Campus Master Plan Amendment for the Engineering Parking Garage Reference 19

The President recommends that:

**MOTION**

**“The Facilities and Land Management Committee recommends that the Board of Regents approve the University of Alaska Anchorage Campus Master Plan Amendment for the Engineering Parking Garage as presented. This amendment will be incorporated in the existing 2004 Campus Master Plan. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.030.C.3, a campus plan may be revised or amended from time to time. An amendment to accommodate a proposed specific capital project shall be considered and approved by the board prior to consideration of the proposed capital project.

RATIONALE AND RECOMMENDATION

Background

Since the UAA campus master plan was drafted in 2003, adopted in 2004, and amended in 2009 a number of significant changes regarding the UA Engineering program have been made. This amendment will address changes needed to proceed with project development for the parking associated with the Engineering and Industry Building project.

Supporting Documents

UAA School of Engineering Parking Garage Master Plan Amendment

D. Schematic Design Approval for the University of Alaska Anchorage Engineering and Industry Building Project Reference 20

The President recommends that:

**MOTION**

 **“The Facilities and Land Management Committee recommends that the Board of Regents approve the Schematic Design Approval request for the University of Alaska Anchorage Engineering and Industry Building Project as presented in compliance with the campus master plan, and authorizes the University administration to complete construction bid documents to bid and award a contract within the approved Total Project Cost budget of $123,200,000, and to proceed with project construction not to exceed a Total Project Cost $62.6 million. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.043, Schematic Design Approval (SDA) represents approval of the location of the facility, its relationship to other facilities, the functional relationship of interior areas, the basic design including construction materials, mechanical, electrical, technology infrastructure, and telecommunications systems, and any other changes to the project since Formal Project Approval.

Unless otherwise designated by the approval authority or a Material Change in the project is subsequently identified, SDA also represents approval of the proposed cost of the next phase(s) of the project and authorization to complete the Construction Documents process, to bid and award a contract within the approved budget, and to proceed to completion of project construction.

For the Schematic Design Approval, if there has been no Material Change in the project since the Formal Project Approval, approval levels shall be as follows:

**TPC > $4 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**

RATIONALE AND RECOMENDATION

UAA engineering is experiencing dramatic growth in its enrollments with a near doubling of the entire program in the past five years now at nearly 1,000 students. New baccalaureate engineering and related associate and certificate programs were created to meet industry demand and have been one of the driving forces for the enrollment increases. The existing engineering building was built in the early 1980s and is currently undersized. The site selected for the new Engineering and Industry Building is directly south of the bookstore and will eventually connect with the new Health Sciences Building across Providence Drive and the spine connection to the existing engineering building.

The UAA School of Engineering has just over 40,000 gsf available has made an additional 14,000 gsf available beginning in the fall 2009 semester in leased and temporary space on and around the campus.

The UAA Master Plan approved by the Board of Regents in June 2004 called for additional space to meet the needs of the engineering program as it was configured at that time. A more recent study conducted by Ira Fink & Associates confirmed the need for additional space to meet the existing programmatic need for the engineering space at both UAA and UAF. This additional space would be comprised of classrooms, instructional laboratories, educational labs or shops and office space to accommodate graduating students to meet the high demand for engineers in Alaska.

This project will accommodate existing program requirements and allow for the consolidation of engineering programs currently being taught elsewhere on and off campus.

Project Scope

The project consists of three major components: 1) construction of the new four story, 75,000 gsf Engineering and Industry Building located on Providence Drive, in the UAA South Parking lot; 2) renovation of the existing three story, 40,000 gsf School of Engineering Building; and 3) construction of a multi-story structured parking facility with approximately 500 parking spaces. Sub-components of the parking structure include construction of a temporary parking lot to accommodate displaced parking during construction and Mallard Drive realignment.

1. ENGINEERING AND INDUSTRY BUILDING

The Engineering and Industry Building will be designed to accommodate the first phase of the School of Engineering expansion. At four stories, the building will be similar to the Health Sciences Building in height and scale due to the change in topography across Providence Drive. The southwest corner of the Engineering and Industry Building will incorporate a future connection for a pedestrian bridge across Providence Drive, linking the Engineering and Industry Building to the Health Sciences District. Phase II of construction will occur to the north of the Phase I building and will allow an enclosed connection to the campus spine circulation network. Outdoor areas will be integral to the building design, serving both as amenities for students, faculty and staff and as functional spaces for project work display and storage areas.

The first floor includes the lobby, teaching labs and building support spaces include storage, mechanical and electrical rooms. A double height project work area provides connecting crane access for the structures testing and properties of materials labs, and allows outdoor access for the service yard and deliveries. Additional mechanical teaching labs, e-learning classrooms, and a student commons are located on the second floor. The third floor consists of environmental, computer system and electrical teaching labs, as well as a faculty office suite. An HVAC teaching lab, computational lab and faculty office suite are located on the fourth floor. In order to display the building’s mechanical systems, the boiler room and fan rooms are also located on the fourth floor in high visible locations along the main corridor.

Engineering on Display

The influence of the School of Engineering on the UAA campus, in industry, and as an economic driver in Alaska will be illustrated in the Engineering and Industry Building. Elements of the design may include:

* Building systems and materials express architecturally to highlight the engineering of the building itself and creative use of engineered materials in conventional and unconventional ways.
* Interactive displays, both active and passive, that integrate civil, structural, mechanical and/or electrical engineering design, as well as exhibits that celebrate UAA engineering achievements.
* Corridors and other public areas incorporating interior glazing for visual connections to engineering laboratories and student project work areas. Views into unique laboratory spaces may serve to stimulate interest in engineering for students or visitors.

In addition to the above elements, a double façade at the south elevation of the building provides a unique opportunity for engineering on display in the building. The configuration of the façade structure may take advantage of the southern exposure to potentially increase the efficiency of the building envelope and allow possible reductions in systems and operations. Possible solar energy systems to be integrated may include photovoltaic, hydronic heating, thermal mass and innovative materials. Additionally the interstitial space between facades may be considered a vertical lab for teaching and research, integrating faculty, students and industry. Monitoring of systems performance and testing of engineers system components in the extreme climate conditions are likely within the double façade. With a transparent outer curtain wall façade, the south elevation will be a highly visible display of engineering to the campus and to the community.

1. EXISTING ENGINEERING BUILDING

In conjunction with construction of the Engineering and Industry Building, the existing engineering building will be upgraded and fully renovated to complete the first phase of the School of Engineering expansion. The three-story building was originally designed in 1980 as a classroom and office building, and has been modified over the last thirty years to accommodate various academic programs mostly recently the School of Engineering. Engineering labs, classrooms and offices will be relocated to the new Engineering and Industry Building, and existing spaces are intended to be renovated for the functions below.

The lobby with an enclosed computational lab will be located in the first floor. The remainder of the floor will be dedicated to lab support spaces including the machine shop, wood shop, milling and lathing shop, composite materials lab, reverse engineering lab, and materials storage. Outdoor access to the service yard will be through two existing sets of double doors located on the east side of the building. The second floor will consist of classrooms, open student computational labs and student success and faculty office suite. The dean’s suite, faculty offices, computational labs and geomatics labs will be located on the third floor.

1. PARKING STRUCTURE

This 500 space parking structure will be constructed of post-tensioned concrete beams and a concrete slab. The structure is four levels of parking with the option of having a roof system that is accessible to faculty and students for research. Each level will have 42” barrier at perimeter for building safety. This will also provide, or work in coordination with, headlight screening required by local authorities. The east façade, facing UAA Drive, will include a decorative screening element/art project ensuring the garage is visually appealing. Remaining façades will include vertical anodized aluminum elements similar to the east façade for safety and aesthetic reasons.

Each floor of the parking structure including the roof will be serviced by one elevator and two stairs. This will meet access and code exiting requirements. A bridge will be developed for pedestrian connection to the existing School of Engineering Building, and thus, to the existing pedestrian spine and campus.

1. TEMPORARY PARKING LOT

The temporary parking lot will provide parking to replace the stalls displaced in the South Campus Parking Lot by the construction of the new School of Engineering Building. The temporary lot will accommodate approximately 239 stalls. A university shuttle bus station and a Pay-n-Park station will be provided. The project site for the temporary parking lot is located at the southeast corner of the Providence Drive Lake Otis Parkway intersection, on Tract 1, U-med Professional Park Subdivision. The lot will be rezoned from B-3 SL to Public Lands and Institutions (PLI). Tract 1 contains 7.162 acres and includes a 45 foot Public Use Easement along the east side. The condition of the parcel prior to UAA acquisition included an existing storm sewer and sanitary sewer lines run diagonally across the site and along the south property line. The diagonal run of sanitary sewer line has been abandoned in-place. Access roads with curb, gutter, and sidewalks exist within easements along the east and south property lines. The south third of the site was cleared and appears to have been used as a construction staging area. A thick swath of trees, along the west and north property, screens the site from Lake Otis Parkway and Providence Drive.

Temporary parking may not be required if the parking structure can be completed early.

Variance Report

The Alaska State Legislature appropriated $58,600,000 in FY13 for the UAA Engineering and Industry Building project. This amount represents approximately half of the funding required for the project. The UAA plan for this initial funding is to complete the design for all facilities, construct the parking structure, and begin site work for the new building.

UAA plans to issue a request for proposal for a Construction Manager at Risk (CMAR) contractor for preconstruction services, and the construction of the new building and renovation of the existing building. UAA plans to construct the parking structure with design-bid-build method.

Proposed Total Project Cost and Funding Source(s)

Funding Source Account Amount

FY 11 UAA/SW Engineering Planning 80101-564337 $ 140,000

FY 11 UAA Engineering Planning 17172-564341 $ 3,860,000

FY 13 Capital Budget $ 58,600,000

FY 14 Capital Budget Request $ 60,600,000

**Total $123,200,000**

Estimated Annual Maintenance and Operation Costs (O&M)

M&A $ 1,293,640 / Year

Custodial $ 103,000 / Year

Grounds $ 310,800 / Year

Administration $ 310,800 / Year

Utilities $ 1,154,400 / Year

**Total $ 3,172,640 / Year**

Consultant(s)

Architect: Livingston Slone, Inc.

Associate Architect: Ayers/Saint/Gross

Laboratory Design: Research Facility Design

Mechanical/Electrical Engineering: AMC Engineers

Civil Engineering: Livingston Slone, Inc.

Structural Engineering: Reid Middleton Engineers

Geotechnical Engineering: Dowl, LLC

Landscape Architect: Corvis Design, Inc.

Cost Estimating: Estimations, Inc.

Other Cost Considerations

The cost estimate for the schematic design is currently under review. The cost of the current scope of the project will be reduced to bring the total project cost down to the amount of $123,200,000 as approved in the amended Formal Project Approval by the Board of Regents on September 23, 2011. Items to be considered include, but are not limited to: 1) eliminate the roof and reduce the size of the parking garage; 2) seeking road upgrade funding for Mallard Drive realignment; 3) defer replacement of the exterior siding, curtain wall of the atria, elevator refurbishment and installation of the smoke management system in the atrium of the existing building; and 4) identify and eliminate LEED items with no/minimal cost benefit.

Plan for Renovation and Reallocation of Existing Space Vacated by Occupants of this Project (Previously called Backfill Plan)

This space currently does not exist on campus. Some relief in the engineering building would occur as labs are reconfigured and multi-purposed. Equipment is insufficient for the program needs and will need to be purchased. The existing building will be partially reconfigured after the completion of the new building to allow existing spaces to be vacated for renovation.

Schedule for Completion

DESIGN

Conceptual Design August 2011

Formal Project Approval September 2011

Schematic Design April 2012

Schematic Design Approval (As Presented)June 2012

Design Development December 2012

Construction Documents Structured Parking December 2012

 New Building January 2013

 Existing Building Renovation February 2013

BID & AWARD

Advertise and Bid Structured Parking December 2012

 New Building January 2013

 Existing Building Renovation February 2013

Construction Contract Award Structured Parking February 2012

 New Building March 2013

 Existing Building Renovation March 2015

CONSTRUCTION

Start of Construction Structured Parking March 2013

 New Building April 2013

 Existing Building Renovation April 2015

Date of Beneficial Occupancy Structured Parking December 2013

 New Building July 2015

 Existing Building Renovation July 2016

Procurement Method for Construction

New Building Construction: Construction Manager at Risk

Existing Building Renovation: Construction Manager at Risk

Parking Structure: Design-Bid-Build

Temporary Parking Lot: Design-Bid-Build (if required)

Affirmation

This project complies with Regents’ Policy, the campus master plan, and the project agreement.

Supporting Documents

Project Budget

Rendering – UAA Engineering and Industry Building

Project Drawings

E.Schematic Design Approval for the University of Alaska Fairbanks Engineering Building Project Reference 21

The President recommends that:

**MOTION**

**“The Facilities and Land Management Committee recommends that the Board of Regents approve the Schematic Design Approval request for the University of Alaska Fairbanks Engineering Building Project as presented in compliance with the campus master plan, and authorizes the university administration to complete construction bid documents to bid and award a contract within the approved Total Project Cost budget of $108.6 million, and to proceed with project construction not to exceed a Total Project Cost of $50.3 million****. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.043, Schematic Design Approval (SDA) represents approval of the location of the facility, its relationship to other facilities, the functional relationship of interior areas, the basic design including construction materials, mechanical, electrical, technology infrastructure, and telecommunications systems, and any other changes to the project since Formal Project Approval.

Unless otherwise designated by the approval authority or a Material Change in the project is subsequently identified, SDA also represents approval of the proposed cost of the next phase(s) of the project and authorization to complete the Construction Documents process, to bid and award a contract within the approved budget, and to proceed to completion of project construction.

For the Schematic Design Approval, if there has been no Material Change in the project since the Formal Project Approval, approval levels shall be as follows:

**TPC > $4 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**

RATIONALE AND RECOMMENDATION

Background

The University of Alaska Fairbanks, responding to the 100 percent increase in student enrollment and graduation of baccalaureate trained engineers called for in the University of Alaska Statewide Engineering Expansion Initiative, is proposing a new UAF Engineering Facility at the Fairbanks campus. The proposed new UAF Engineering Facility responds to the initiative to graduate more engineering students, enhances the student experience for engineering students and other students campus-wide with a visible and interactive learning environment, integrates UAF’s successful engineering research and graduate programs, and addresses critical classroom needs. The proposed facility of 116,900 gross square feet (gsf) is ideally situated adjacent to the existing Duckering Building, which currently houses the College of Engineering and Mines (CEM), and provides the opportunity to complete Cornerstone Plaza with an attractive and functional focal point at the far side of the Fairbanks campus. The proposed new facility will have five floors blending with surrounding buildings while standing out as a new and exciting campus destination. The proposed new facility maintains full connectivity to the existing Duckering Building and programs and connects to the nearby Bunnell Building. The proposed new facility plan will provide approximately 23,000 gsf of renovation to portions of the Duckering Building to provide a functional connection with the proposed new building and to allow efficient use to better serve the needs of the engineering program.

The Fairbanks campus is the home of the College of Engineering and Mines (CEM) and the Institute of Northern Engineering (INE). CEM and INE are currently housed in the Duckering Building on the Fairbanks campus, the main facility that supports the engineering programs at UAF. The Duckering Building supports engineering education and research throughout the state of Alaska. The Duckering Building, as documented by the UA Engineering Plan 2010, is too small and the facilities cannot fully support the needs of modern engineering education and research.

Through efficient use of the facilities in the existing Duckering Building, the project will magnify the benefit provided by the available funds to support the greatest number of students. A partially upgraded Duckering Building is an integral component of the proposed solution; the proposed facility includes approximately 23,000 gsf of renovation in the existing Duckering Building. The proposed UAF Engineering Facility provides a new addition of 116,900 gross square feet (gsf) to be located between the Duckering Building and the Bunnell Building. The new facility will incorporate the strengths of the existing building and the successful existing UAF engineering program. The proposed solution is to selectively upgrade portions of the existing building. Portions that currently adequately house their programs will remain in their current configuration. Some of these spaces are not ideal, but they do provide an effective learning and/or research environment. The new UAF Engineering Facility design provides an efficient solution to the space and functional deficits recognized in the existing Duckering Building.

The new facility will support the University of Alaska Fairbanks in its role to graduate more engineering students. The new facility creates an environment that enhances interaction among the students, professors and researchers. The modern building improves indoor environment and building systems and student success and retention are enhanced through:

* a visible and interactive learning environment (engineering on display).
* day lighting of common, learning, and research spaces.
* improved air quality.
* student interaction and learning spaces in common areas.
* integrated engineering research and instruction.

Programming and Site Selection

UAF has completed programming for the College of Engineering and Mines (CEM) and the site selection process. ECI Hyer/NBBJ, through a series of work sessions with numerous UAF representatives, have identified CEM departmental program needs from the ground up. These needs have been evaluated with the UA Engineering Plan 2010 (UAEP2010) space need projections and refined to a final space need just under the UAEP2010 target value. Additional program needs that were not in the UAEP2010 report have been included to arrive at a total space need for the new facility.

The approved site is located between the Duckering and Bunnell Buildings. The site offers many desirable features, the foremost of which are connectivity with Duckering (current location of CEM) and a commanding presence on the Fairbanks campus Cornerstone Plaza. The site carrying capacity of this site meets the ongoing current space needs of CEM and the UAF campus.

Project Scope

The scope of this project is to develop and construct a new UAF Engineering Facility on the Fairbanks campus. The project includes architectural and engineering professional services for identifying the program needs of the College of Engineering and Mines (CEM), incorporating UAF Facilities Services building requirements, selecting the new building site, designing and engineering the new structure, providing connection to existing infrastructure and responding to the overall university plan for engineering programs.

This project balances many University of Alaska goals and needs. The project provides the means to meet the UA Engineering initiative to graduate more engineers, meets the space requirements set out in the UA Engineering Plan 2010 and balances the Fairbanks campus and CEM needs for program consolidation. The proposed new building and functional connection to the existing Duckering Building provide the space required to meet the initiative mandate by meeting the projected space needs goals set out in the UAEP2010 while recognizing and providing for shell space to accommodate CEM programs and campus classroom needs identified after the UAEP2010 was completed. Project site selection has resulted in a proposed new building that maximizes the use of the site and aligns with ongoing current CEM and campus needs. The project approval request includes state capital supported new building finished space and functional connection along with UAF bond supported new building shell space.

The proposed expansion of the College of Engineering and Mines (CEM) is conceived as an addition to the Duckering Building (current location of CEM) and provides state-of-the-art teaching and learning spaces for the college in support of the campus master plan vision for greater program and campus integration. The integration of teaching and research is a primary goal of the university.

The new CEM building, with the functional connection to the Duckering Building, will establish a campus precedent for connectivity between buildings. By exercising innovative campus planning and building design, the new engineering facility will enhance the campus experience and pedestrian circulation while specifically unifying building functions and exterior architecture. This new building will create “neighborhood” spaces on lower campus for collaboration and interaction that integrate research, teaching, and student life through the interconnection of mixed-use buildings presenting a new unified face for the College of Engineering and Mines to Cornerstone Plaza, the university and the engineering world beyond.

Energy

The building design will incorporate leading technology in energy conservation and usage: thermal envelope, special glass and arctic construction. These items will be explored and evaluated during the design process. The design team will create a virtual model of the building using building information modeling (BIM) software. The BIM model will be used to analyze the building performance during the design process. Energy analysis, daylight harvesting and other energy saving ideas will be explored and evaluated during the design process. Real time data is provided to aid in value-based decision making. The building systems will be explored and evaluated for display in select locations as a teaching tool for students.

Mechanical

The mechanical systems will be designed to create a safe and healthy learning and research environment. Special consideration will be given to incorporating energy saving devices where feasible. Systems will be designed to be safe, comfortable and efficient, using proven techniques and modern technology. Mechanical system designs will focus on logical equipment placement, ease of operation and accessibility for both preventative and corrective maintenance.

The new facility central hydronic heating and cooling systems will receive their energy from the central Fairbanks campus low pressure steam and chilled water systems through an existing utilidor. A new branch connection point (blister) will be added to the existing utilidor located to the west of the new building. A new utilidor branch will extend from the new blister to the east and tie into the new facility’s mechanical room. The heat exchanger will be located in the mechanical room.

Mechanical systems will include centralized heating, ventilating and air conditioning systems, plumbing, fire protection and building automation systems. Specialty mechanical laboratory ventilation and plumbing systems will be provided where appropriate. The design will be based on standard quality commercial grade components and both custom and packaged systems.

The facility HVAC loads will be mechanically cooled using chilled water (glycol mixture) from the UAF central plant during cooling season when economizer cooling is not practical.

Electrical

Throughout the new facility power and light will be distributed to create a safe and healthy learning and research environment. Lighting will be designed to be efficient and effective. It is likely that there will be many renovations in the existing Duckering Building—some minor in nature and others more significant. The electrical infrastructure will be designed to be flexible and adaptable to accommodate these renovations.

From a power perspective, the power density will be quite high in some areas and more like an office space or standard classroom space in many others. The main challenge that presents itself is these power dense areas can be moved to a space that was originally less power dense. Therefore, the power distribution system will be designed with ample capacity and flexibility to accommodate moving these power dense areas without causing disruptions in other areas of the building.

Typically, in lab spaces, there is a large quantity of receptacle devices and power connections to accommodate the laboratory equipment power needs. Labs also require a strong communication infrastructure and high telecommunication jack count to support the program requirements of the facility. The electrical design will provide power and communications support of the owner furnished equipment and the equipment and systems specified by other divisions.

The communications and other electrical systems will be designed to take advantage of the most current technology with an eye for future advancements.

Variance Report

No variance. Formal Project Approval was granted by the Board of Regents in September 2011.

Proposed Total Project Cost and Funding Source(s)

FY11 State of Alaska Capital Appropriation $ 4,000,000

FY13 State of Alaska Capital Appropriation $ 46,300,000

FY14 State of Alaska Capital Appropriation (future request) $ 48,300,000

UAF Bond Funds (FY14 authorization) $ 10,000,000

**Total Project Funding $ 108,600,000**

Estimated Annual Maintenance and Operating Costs (O&M)

M&O cost including M&R rates are escalated to FY15

Utilities $ 871,100

Custodial $ 277,400

Trash/Grounds $ 95,200

M&R (1.5% Facility Value) $ 1,440,000

**Total O&M $ 2,683,700**

R&R rates are formula-based on the age and value of the facility. It is expected the R&R cost will be funded through a future capital appropriation from the state. For the UAF Engineering Facility the average R&R funding request over a ten year period is:

R&R 10-year annual average $294,000

Consultant(s)

ECI/Hyer Architecture and Interiors of Anchorage teamed with NBBJ of Seattle are the core consultant team to provide professional services. Sub-consultants include Shannon and Wilson and PDC (Fairbanks), AMC Mechanical/Electrical, Corvus Landscape Design and HMS Cost Estimating.

Other Cost Considerations

None

Plan for Renovation and Reallocation of Existing Space Vacated by Occupants of this Project (Previously called Backfill Plan)

This project provides program space for engineering through the construction of new space and the renovation and reallocation of some of the existing space within the Duckering Building as identified in UAEP2010. Future renovation will be completed as deferred maintenance work is accomplished.

Schedule for Completion

DESIGN

Conceptual Design September 2011

Formal Project Approval September 2011

Schematic Design March 2012

Schematic Design ApprovalJune 2012

Construction Documents April 2013

CONSTRUCTION

CMAR Phase I Construction April 2013

CMAR Phase II (FY14 funded) Construction July 2013

Date of Beneficial Occupancy New Building November 2014

Duckering Functional Connection Phase III November 2014

Date of Beneficial Occupancy Functional Connection August 2015

Procurement Method for Construction

Construction Manager at Risk (CMAR) method of construction contracting is planned for moving this project past the schematic design phase and into construction. CMAR offers value by including a selected contractor early in the process at a time when builder experience, innovation, and methodology can be incorporated into the design at a fundamental level.

Affirmation

This project complies with Regents’ Policy and the campus master plan*.*

Supporting Documents

One Page Budget

Concept Renderings

Site Plan

Design Drawings

F.Schematic Design Approval for the University of Alaska Anchorage Matanuska- Susitna Valley Center for Arts and Learning Reference 22

The President recommends that:

**MOTION**

**“The Facilities and Land Management Committee recommends that the Board of Regents approve the Schematic Design Approval request for the University of Alaska Anchorage Matanuska-Susitna Valley Center for Arts and Learning as presented in compliance with the campus master plan, and authorizes the University administration to complete construction bid documents to bid and award a contract within the approved budget, and to proceed to completion of project construction not to exceed a Total Project Cost of $20,000,000. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.043, Schematic Design Approval (SDA) represents approval of the location of the facility, its relationship to other facilities, the functional relationship of interior areas, the basic design including construction materials, mechanical, electrical, technology infrastructure, and telecommunications systems, and any other changes to the project since Formal Project Approval.

Unless otherwise designated by the approval authority or a Material Change in the project is subsequently identified, SDA also represents approval of the proposed cost of the next phase(s) of the project and authorization to complete the Construction Documents process, to bid and award a contract within the approved budget, and to proceed to completion of project construction.

For the Schematic Design Approval, if there has been no Material Change in the project since the Formal Project Approval, approval levels shall be as follows:

**TPC > $4 million will require approval by the Board based on recommendations from the Facilities and Land Management Committee (F&LMC).**

RATIONALE AND RECOMENDATION

Background

The Matanuska-Susitna College has demonstrated a need for large space for lecture series and classes, a student life program, an expanded music and theater program, performances, convocations and community partnered events. The existing facilities do not adequately meet the current needs of the campus. The Valley Center for Arts and Learning will address both the campus needs and university goals and fulfill the public square mission of the campus.

The MSC campus is currently limited to gatherings of 120 people in the cafeteria, which itself is not ideally suited for lectures, presentations or guest speakers. The campus has needs to address larger groups of faculty, staff and students for orientation, training and lectures. The new center will address the needs of campus and goals addressed in the academic master plan, the strategic plan and facilities master plan.

Project Scope

The project will design and construct a new facility that will address the stated needs of the campus. The building will be a separate facility adjacent to the Frank and Sara Machetanz Building. The building will provide display areas, gathering/study spaces and a theater with seating for 500 people for lectures, public gatherings and conferences.

Variance Report

The project siting, as shown in the approved 2010 Mat-Su Campus Master Plan, showed the new building perpendicular to the northeast end of Frank and Sara Machetanz Building and spanning an existing valley. The project team recognized during initial design efforts that the cost of spanning the valley with the new building was prohibitive and rotated the building 90 degrees to place it roughly in line with Frank and Sara Machetanz Building. In that location, one side of the building was supported on solid ground and only a portion of the opposite side of the building required structural build-out. The structural build-out of the basement area was to provide additional program space in the building. This revised alignment was depicted in the formal project approval request, approved by the Board of Regents in November 2011. Unfortunately, as the design progressed to schematic design, the updated cost estimate again demonstrated that even the reduced amount of additional structural build-out could not be accommodated within the approved budget. In order to reduce costs sufficiently to allow the project to stay within the budget and still meet the programmatic needs of the facility, the building was shifted to the northwest into the existing parking lot in order to avoid additional structural build-out. The current building siting is shown in the supporting documents. The impact on existing parking will be addressed in a separate project being developed to address overall increased campus parking needs. A campus master plan amendment will be prepared in conjunction with the parking project development. To accommodate the time for design changes, the expected occupancy has shifted from July 2014 to December 2014.

Proposed Total Project Cost and Funding Source(s)

FY11 GO Bond **$20,000,000**

Estimated Annual Maintenance and Operating Costs (O&M)

Maintenance and Repair $210,000

Custodial $ 20,979

Grounds $ 16,317

Administration $ 16,317

Utilities $ 60,606

**Total** **$324,219**

Consultant(s)

Kumin and Associates, Inc.

Other Cost Considerations

None

Plan for Renovation and Reallocation of Existing Space Vacated by Occupants of this Project (Previously called Backfill)

None

Schedule for Completion

DESIGN

Conceptual Design August 2011

Formal Project Approval November, 2011

Schematic Design May 2012

Schematic Design ApprovalJune 2012

Construction Documents November 2012

BID & AWARD

Advertise and Bid November 2012

Construction Contract Award January 2013

CONSTRUCTION

Start of Construction May 2013

Date of Beneficial Occupancy December 2014

Procurement Method for Construction

Design -Bid - Build

Affirmation

This project complies with Regents’ Policy, the campus master plan and the project agreement*.*

Supporting Document

Proposed Project Budget

Project Drawings

**IV. New Business**

A.Amended Formal Project Approval for the University of Alaska Fairbanks P3 Housing and Dining Development Reference 23

The President recommends that:

**MOTION**

**“The Facilities and Land Management Committee approves the Amended Formal Project Approval request for the University of Alaska Fairbanks P3 Housing and Dining Development as presented in compliance with the campus master plan, and authorizes the University administration to proceed through Schematic Design not to exceed a total project cost of $2.5 million. This motion is effective June 7, 2012.”**

POLICY CITATION

In accordance with Regents’ Policy 05.12.042, Formal Project Approval (FPA) represents approval of the Project including the program justification and need, scope, the Total Project Cost (TPC), and funding plan for the project. It also represents authorization to complete the development of the project through the schematic design, targeting the approved scope and budget, unless otherwise designated by the approval authority.

An FPA is required for all projects with an estimated TPC in excess of $2.5 million in order for that project’s inclusion of construction funding to be included in the university’s capital budget request, unless otherwise approved by the Board.

The level of approval required shall be based upon TPC as follows:

**TPC > $2 million but ≤ $4 million will require approval by the F&LMC.**

RATIONALE AND RECOMMENDATION

Background

Formal Project Approval of $850,000 for the Campus Wide Housing and Dining project was received at the June 2011 board meeting. Since initial approval, the university has worked through an RFP and design competition to choose a preferred developer for the Public Private Partnership (P3) process. Since February 2012, the university and the developer have worked as a partnership to further develop the project scope and the P3 contracts. The unique method of the P3 process has allowed the university to work closely with the developer, the design architect and engineers, and the contractor from the beginning of design, allowing UAF to finalize the scope that is within the funding limitations in four months.

The funding approved under the initial FPA has brought UAF this far. Additional funding is required to take the project from final scoping and preliminary project cost estimates to the point of bond sale in December 2012.

Project Scope

The project will build approximately 325 beds in four dormitory buildings and 34,000 square feet of additional dining space adjacent to the Wood Center. It is desired to complete the dining portion and as much as possible of the housing portion of the project by August 2014. In order to meet such an aggressive construction schedule, the project will be constructed in two phases. The first phase, consisting of the dining addition, and a 90-bed dormitory, will be constructed between April 2013 and August 2014. The second phase, consisting of the remainder of the housing, will begin construction approximately in the spring of 2014. Current renderings of the dining and housing facilities will be available at the board meeting for viewing and discussion.

Variance Report

UAF requests an amendment to the original June 2011 FPA approval of $850,000 to a revised total of $2,500,000. This revised amount will allow UAF to proceed with contract negotiations, continue design through 25% construction documents, obtain a maximum project budget commitment from the developer, and complete bonding of the project.

Proposed Total Project Cost and Funding Source(s)

Project cost to reach the point at which bonds for the project are issued is $2,500,000. This portion of the project will be funded through the housing auxiliary fund balance. Once bonding occurs, these expenditures will be rolled into the bond issuance and the auxiliary fund balance will be reimbursed. The partnership entity is the bond holder and UAF will lease the facility from the non-profit entity.

Based on the original proposal, the total project cost will be in range of $75M to $82M. The first phase project will be sized at a level for which UAF can pay the lease payment with existing auxiliary revenue capacity and additional dorm rents. Every effort will be made to get both the dining addition and the 90-bed dorm in phase 1, however the dining facility is the highest priority. The second phase of the project will require subsidy and UAF anticipates requesting an FY14 state operating increment for a portion of the lease payments for phase 2. A FY14 capital appropriation request to lower the lease is also an option.

Estimated Annual Maintenance and Operating Costs (O&M)

To Be Determined

Consultant(s)

Developer – Lorig Associates, LLC

Financing Partner – National Development Council

Architect – Perkins + Will

Engineering – Design Alaska

General Contractor – Ghemm Company, Inc

Other Cost Considerations

Residence Life programs will be operated and funded by UAF as they are for all on-campus housing.

Plan for Renovation and Reallocation of Existing Space Vacated by Occupants of this Project (Previously called Backfill Plan)

The renovation and reallocation plan for this new housing and dining project will be coordinated with the renovation and reallocation plan being developed for lower campus by the building of the new Life Sciences Facility building on West Ridge. With much of the Bunnell Building and all of Lola Tilly Commons being vacated at essentially the same time, there is an opportunity to create sensible adjacencies of programs and student life activities.

Schedule for Completion

DESIGN

Program Completion May–June 2012

Formal Project Approval June 2011

Schematic Design July 2012

Amended Formal Project Approval June 2012

Maximum Project Budget November 2012

BOR Approval of Legal Documents November 2012

Completion of Legal Documents November 2012

Complete Bond Sale December 2012

Schematic Design ApprovalDecember 2012

Construction Contract Award January 2013

CONSTRUCTION

Start of Construction May 2012

Date of Beneficial Occupancy August 2013

Procurement Method for Construction

Bond sale through the Public Private Partnership.

Affirmation

This project complies with Regents’ Policy, the campus master plan, and the project agreement.

Supporting Documents

One Page Budget

**V. Ongoing Issues**

A. UAF College of Rural and Community Development and Community and Technical College Master Plans Second Reading

Background

In accordance with Regents’ Policy 05.12.030, UAF is updating the 2006 College of Rural and Community Development (CRCD) Master Plans for the Bristol Bay, Northwest, Kuskokwim, Interior Aleutians, and Chukchi campuses and the UAF Community and Technical College (CTC) to meet the requirements to update plans on a 5 to 7 year cycle.

Status of Master Plan Update Efforts

The final drafts of the Master Plan Updates 2012, were presented for first reading at the April 12-13, 2012 Board of Regents meeting. To allow adequate review time by the board, Chancellor Rogers will be requesting any comments from the regents at the June 2012 meeting.

The final version of the Master Plan Updates 2012 addressing regent comments will be presented to the Board of Regents for adoption at its September 27-28, 2012 meeting.

PDF versions of the documents are available at the following link:

<http://webshare.alaska.edu/2012MasterPlan/>

CRCD and CTC Master Plan Updates 2011-2012 Milestones

* Appointment of steering committees for each campus March 2011
* Contract with consultants March 2011
* Initial visits to campuses May-August 2011
* Consultants prepare first draft versions, review

 with users August- October 2011

* Consultants complete final draft of master plans November 2011
* Internal review by CRCD and Chancellor’s Staff November-December 2011
* Consultants correct master plans per review comments January 2012
* BoR Information Item; CRCD Master Plan Update February 16-17, 2012
* Consultants submit final draft of master plans

 to DD&C February 3, 2012

* DDC reviews and forwards correction items to

 consultants February 10, 2012

* Consultant to produce bound sets of final drafts;

 forward to owner February 29, 2012

* CRCD Final Draft of master plans to Chancellor/ CFO March 5, 2012
* Presentation of final draft CRCD Master Plan

 Updates to BoR April 12-13, 2012

* Presentation of final draft CRCD Master Plan

 Updates to BoR June 7-8, 2012

* DDC forwards regents comments to Consultants, NLT June 12, 2012
* Consultants revise master plans, forward final versions

 to owner July 17, 2012

* BoR Meeting-Presentation for Approval September 27-28, 2012

B. UAA Seawolf Sports Arena Status Report

The Municipality of Anchorage Urban Design Commission (UDC) approved the final landscape plan for the UAA Seawolf Sports Arena in April. The UDC will require UAA to finalize the shared parking agreement with Providence Hospital prior to final plan approval. UAA is currently coordinating with UA Land Management and Providence Hospital to finalize this agreement.

Clearing and grubbing of entire site is nearly complete. Preliminary flow rates on cooling well #1 have been positive and authorization was given to begin drilling well #2 (reinjection).

The University of Alaska Anchorage initiated an early Phase I package for installation of footings, foundation, site utilities, and structural steel for the new Seawolf Sports Arena based upon significant cost savings and the realistic expectation of a summer of 2014 completion schedule. Reconciliation and preliminary budget alignment for phase I is complete and a construction contract for phase I has been awarded.

The project team continues to work on the final building design. The cost estimate for the 65% design came in significantly over budget. The Design Team and the CMAR contractor have reconciled the estimate and worked with the Project Team to modify the design to reduce cost without loss of program support or ability to generate revenue to cover operating costs. Projected O&M Costs have actually reduced as a result of the reduction and/or deletion of some of the system components included in the original design. The Phase 2 construction package will include several additive alternates that will be incorporated into the project as construction progresses and construction contingency funds can be utilized. The positive results of this collaborative effort would not have been possible without the participation of the CMAR contractor during the design process.

The current schedule for completion is:

Planning & Design: August 2008 – Summer 2012

Construction, Ph 1: May 2012 – July 2014

Construction, Ph 2: October 2012 – July 2014

Occupancy: August 2014

C. UAF Life Sciences Facility Status Report

Background

The Life Sciences Facility will provide multiuse teaching and research labs, classrooms, and office space for life science research and academic purposes. The research portion will provide nearly 60,000 gsf of lab and lab support space for biology research. The teaching portion will provide 40,000 gsf of academic classroom and lab space for biology and wildlife degree programs. The Life Sciences Facility project also includes expansion of utilities to West Ridge and a research greenhouse replacement.

Total Project Cost and Funding Source(s)

Revised Funding Sources:

Funding for the project has been provided from the State of Alaska FY11 General Obligation Bonds and from UA Revenue Bonds. Under a previous Project Change Approval granted by the Chair of the FL&M Committee, UAF and State of Alaska operating funds were added to the project to allow the existing BiRD and State Virology Lab buildings to connect to the new gravity line that was installed under the Life Sciences project.

State of Alaska FY11 General Obligation Bond $88,000,000

UA General Revenue Bond $20,600,000

State of Alaska $53,000

UAF FY11 Operating Funds $250,000

**Total $108,903,000**

The funding from the various projects associated with the Life Sciences Facility breaks down as follows:

Life Sciences Facility Construction (Revised SDA June 2012) $88,578,000

Utilities Steam Expansion to West Ridge (Revised SDA June 2012) $15,000,000

West Ridge Greenhouse (SDA June 2010) $5,325,000

**Revised Total $108,903,000**

Variance since Last Report to Board of Regents

During project development, UAF held back on bidding certain scopes of work of the Life Sciences Facility project to ensure the main building, greenhouse, and steam expansion projects could be bid and awarded. The scope reductions included work previously approved by the Board of Regents: completion of a chilled water plant and associated chilled water distribution system. It was anticipated these scopes could be completed based on available funds once all bids were received. Since UAF has enjoyed lower construction cost on the projects associated with the Life Sciences Facility, there are unexpended portions of the construction budgets (specifically unused contingency funds from Life Sciences Facility and the steam expansion projects) that UAF will utilize to complete remaining scopes of work described in the formal project approval.

Under the previous approvals granted by the Board of Regents, UAF identified a scope of work to construct a central chilled water plant for West Ridge within the Life Sciences Facility. The scope included construction of a low-energy centralized steam absorption chilled water plant and distribution of the chilled water to buildings surrounding and including the Life Sciences Facility. Distribution of centralized chilled water will eliminate large electrical consumption on West Ridge, reducing utility cost to the university. Though the benefit will be felt in multiple buildings on West Ridge, distribution of the chilled water system is a requirement for the large steam chiller being installed in the Life Sciences Facility. The chiller is sized to handle at least four Life Sciences Facility sized buildings and to provide any chilled water to the building, it must have at least a 50 percent load on it during the summer to operate.

Currently, the Life Sciences Facility construction contract includes a large steam absorption chiller and distribution piping up to the existing utilidor that serves the surrounding buildings on West Ridge as well as space for a second future chiller. To complete the original scope of work noted in the formal project approval, UAF has completed concept design of the chilled water distribution system to the buildings surrounding the Life Sciences Facility (Museum of the North, BiRD, State Virology, Irving 1 and Irving 2). Utilizing unpledged contingency funds from the Life Sciences Facility noted above, UAF proposes to complete the design and negotiate with the current Construction Manager at Risk (CMAR) for the Life Sciences Facility to complete the installation. UAF feels it can achieve the best value for the work through the CMAR because of the very low margins for overhead and profit, advanced scheduling and installation with existing crews on-site, and no cost for additional direct project oversight.

The chilled water piping work must proceed immediately to ensure the distribution system is ready for the chiller commissioning in May 2013. Utilizing Life Sciences Facility contingency funds to complete the work does expose the project to some risk of needing additional funds to complete the project. The university feels the risk is manageable within the Life Sciences Facility total project cost. If additional funding is needed, UAF will request a project change to shift unused contingency from the steam expansion project to the main Life Sciences Facility project. UAF will not exceed the overall total authority of $108,600,000 given by the board during Formal Project Approval.

Schedule for Completion

DESIGN

Conceptual Design Complete

Formal Project Approval February 2010

Schematic Design February-September 2010

Schematic Design Approval November 2010

Design Development November 2010-April 2011

Construction Documents April-December 2011

CONTRACTOR SELECTION

Advertise and Bid November 2010

Selection Construction Contract December 2010

CONSTRUCTION

Start of Construction April 2011

Date of Substantial Completion May 2013

Date of Beneficial Occupancy May 2013

D. UAF Combined Heat and Power Plant Replacement Status Report

Project Update

The consulting team of Stanley Consultants and SLR, Inc. has been advancing work toward the major deliverables of a preliminary design, cost estimate and air permit application. The preliminary design and cost estimate are scheduled for submittal at the end of June 2012 and the air permit could be submitted as early as September 2012. The intermediate milestones that have been met are:

* Approval by ADEC of an air monitoring site near old University Park Elementary just southeast of the new power plant.
* Plant size optimization analysis.
* Order of magnitude cost review.
* Review of permitting schedule.

The cost estimate will be the basis of funding request for FY14. It is anticipated that funding will be requested over at least two years.

Background

At the direction of the vice chancellor for administrative services, a working group was established in early 2010 to re-evaluate the 2006 recommendations and consider new options. The circumstances and economics for coal, natural gas, and other alternative fuels have changed since 2006, and it is prudent to revisit the plan in light of current conditions.

The 2006 Utilities Development Plan (UDP) consultant, GLHN, was hired to evaluate multiple options at a high level order of magnitude, and then to perform a detailed evaluation of two or three viable options. The process included solicitation of input from industry, public, and the campus. Ten alternatives were evaluated and were narrowed to two options: a coal/biomass boiler and a natural gas turbine with heat recovery.

A detailed evaluation which included an independent peer review was completed and a recommendation for a solid fuel (biomass/coal) Circulating Fluidized Bed Boiler was forwarded to Chancellor Rogers for approval. A major concern for evaluating natural gas options is to determine when adequate quantities may be available in Fairbanks and what the price may be. Another factor will be evaluating the risk associated with long-term price volatility. The risk of permitting a coal/biomass facility is also being evaluated.

The result of this work group was a recommendation that prepares UAF to efficiently and reliably heat and power the UAF campus for the next 40 years. Chancellor Rogers approved the recommendation for a solid fuel (coal/biomass) Circulating Fluidized Bed Boiler.

FY12 Funding and Construction Plans

The FY12 R&R appropriation contains three items related to UAF utilities:

* Critical Electrical Distribution Renewal Phase 1C

Connects GVEA and UAF generators - $8.5M plus $5.25M bond funding

* Atkinson Heating Plant Critical Utilities Revitalization

Three critical items - $0.9M plus $1.0M bond funding

* Atkinson Heating Plant Boiler and Turbine Replacement

Design and permitting for $180.0-$200.0M project - $3.0M

The Atkinson Heating Plant Critical Utilities Revitalization project will upgrade needed items even if the new boilers and turbine are installed. Many components of the existing plant will be needed for redundancy in order to provide reliable power, heat and other utilities to the UAF campus.

Highlights since Last Report to Board of Regents

* Water Treatment Plant Aeration Basin replacement contract is 100% complete.
* Replacement of a few select tubes in Boilers 1 and 2 is 50% complete. Inspection found additional tubes needing repair. There is concern that boiler tubes are becoming brittle.
* The bid for the replacement of the de-aerator tank, feed water heater and key high pressure valves is expected in May 2012. The work will be completed by November 1, 2012 and will require a campus steam shutdown (two days) to install key valves.

E. UAF Infrastructure Updates

West Ridge Steam Capacity Expansion (aka the Utilidor Project)

Construction on the final 90% of the utilidor started April 20, 2012. Construction is on schedule to complete 2,400 ft. of new utilidor and install 5,400 ft. of steam and water piping. The project is very visible near the Student Recreation Center. Traffic disruptions will be minimal. Two lanes of traffic on Tanana Loop will be routed to a temporary bypass while the utilidor is installed under the road. Completion of this project will provide adequate steam capacity for the Life Sciences Facility.

UAF Utilities Wasteline Repairs - South Chandalar

This project addresses the highest priority in a multi-year effort to replace aging and failing sanitary wastelines on the UAF campus. The project constructs a main sewer waste line serving the central lower campus core at Wood Center. The project will eliminate leaking from broken wood stave and separated steel pipe in the main campus area. In addition, the project will replace the Wood Center lift station with a gravity sewer main, and will replace service line connections to several affected buildings.

UAF Utilities Wasteline Repairs - Relining

This project addresses a high priority listed in the UAF Campus-wide Sewer Assessment report. The project employs a relining technology to construct, in-place, long term upgrades to sewer waste lines serving several campus student housing buildings. The project relines broken wood stave and separated steel pipe in three campus locations; Hess Village, Garden Apartments and Lower Dorms.

F. Construction Manager at Risk Project Delivery Method

 Reference 24

The Construction Manager at Risk (CMAR) project delivery method procures the construction team through a partially bid, partially negotiated process for acquiring the construction contract. One of the values of this process is involving the construction contractor in the design process as one means to value engineer a project design as it is being developed, rather than after it is bid and over budget. CMAR is being utilized by UAA and UAF. Active projects that are using this method include the UAF Life Sciences Facility project, the Critical Electrical project (all phases), and the UAA Seawolf Sports Arena. Future projects that plan to utilize this method include the UAA and UAF engineering buildings and the UAA MAC Housing R&R project, which has multiple phases. Previously completed projects include UAF Arctic Health phase 2, UAA Integrated Science Building and UAA Health Science Building.

This delivery method is considered most effective when used to complete large projects with complex phasing or schedule demands, unique or complex scope, and/or sufficient size to warrant contractor involvement during the design phase.

In response to regent and administration concerns about determining whether the university achieves best value for the investment made using this delivery method, the facilities and procurement units cooperated to develop standard contract documents to be used system-wide, and to investigate and adopt best management practices as advisable. These new documents and management practices were first utilized for the UAF Life Sciences Facility project and recently for the UAA Seawolf Sports Arena. An interim version of the new contract documents was used for the UAF Arctic Health and UAA Health Sciences Building projects.

The report included in the reference tab evaluates the initial effectiveness of the final contract documents and the improved management practices adopted, and provides a summary statement from the initial third-party evaluation recently completed for the Life Sciences project. Further evaluation can be provided as the Life Sciences Facility and UAA Seawolf Sports Arena projects progress to completion.

G. Deferred Maintenance Spending Report Reference 25

An updated report on the progress of spending for the Deferred Maintenance and Renewal appropriations for FY07-FY12 is available in Reference 25.

H. Approvals by the Chair of the Facilities and Land Management Committee and the Chief Finance Officer

Regents’ Policy 05.12.042 delegates Formal Project Approval to the Chair of the FLMC under certain conditions. Projects granted FPA by the Chair are reported in this section. Based on that policy, the following projects were given FPA by the Chair.

UAA Engineering Accreditation Upgrades, (12-0077) TPC $1.1M on 3/10/12.

Regents’ Policy 05.12.043 delegates Schematic Design Approval to the Chief Finance Officer under certain conditions. Projects that are phased as a part of the FLMC FPA approval and receive SDA for each phase under the limits for approval as delegated to the Chief Finance Officer are reported in this section. The following projects were given SDA at the CFO level:

UAA Engineering Accreditation Upgrades Phase 1, (12-0077-1) TPC for Phase 1 $343K (TPC $1.1M for all phases) on 3/23/12.

UAA Engineering Accreditation Upgrades Phase 2 (12-0077-2) TPC for Phase 2 $742K (TPC $1.1M for all phases) on 4/20/12.

UAF Harper Hall Renovations Phase 2 Reroof (2012023 HARF) TPC $2.0M on 3/8/12.

UAF Utility Main Waste Line Repairs South Chandalar (2010182 UTLRC) TPC $1.9M on 4/17/12.

UAS Auke Way Corridor Improvements Phase 2 (2006-28) TPC $4.3M on 3/22/12.

Regents’ Policy 05.12.047 delegates Project Change Approval to the Chief Finance Officer under certain conditions. Projects granted PCA by the CFO are reported in this section. Based on that policy, the following project was given PCA by the CFO:

UAA Allied Health Sciences, Phase 1 – 2nd Floor Remodel

(11-0110) TPC $4.6M (TPC increase of $192,724) on 2/10/12.

I. Construction in ProgressReference 26

Kit Duke, AVP Facilities and Land Management, and campus facilities representatives will answer questions regarding the status report on active construction projects approved by the Board of Regents. This is an information and discussion item; no action is required.

J. IT Report

Karl Kowalski, Chief Technology Officer will update the committee on the eText Pilot Program, FCC Universal Service Fund, AK Broadband Taskforce and IT security.

**VI. Future Agenda Items**

**VII. Adjourn**