



The following Motions and Documents were considered by the Board Finance and Property Committee during the Open Session of its November 28, 2017 meeting:

Agenda Title: ***Envision* Phase 4 – Capital Expenditure Authorization Request, Borrowing Resolution and Order in Council**

APPROVED MOTION 1: THAT the Board Finance and Property Committee recommend that the Board of Governors approve a capital expenditure of not more than Eight Million Dollars (\$8,000,000.00) in Canadian funds to implement the fourth phase of the five-phase *Envision* energy management program.

APPROVED MOTION 2: THAT the Board Finance and Property Committee recommend that the Board of Governors:

- a) execute a Borrowing Resolution requesting approval of financing the fourth phase of the five-phase *Envision* energy management program in an amount not to exceed Eight Million Dollars (\$8,000,000.00) in Canadian funds for a term not to exceed fifteen (15) years at an interest rate of not more than five and one-half percent (5.5%); and
- b) make an application to the Minister of Advanced Education for the required approval of the Lieutenant Governor in Council.

Final Recommended Item: 6.

Agenda Title: **Central Academic Building (CAB) Main and Lower Level Renewal: Capital Expenditure Authorization Request (CEAR)**

APPROVED MOTION: THAT the Board Finance and Property Committee, acting with delegated authority of the Board of Governors, approve an expenditure of two million two hundred thousand dollars (\$2,200,000.00) in Canadian funds for the renewal of the main and lower level of the Central Academic Building (CAB).

Final Item: 7.

OUTLINE OF ISSUE

Agenda Title: **Envision Phase 4 – Capital Expenditure Authorization Request, Borrowing Resolution and Order in Council**

Motion 1: THAT the Board Finance and Property Committee recommend that the Board of Governors approve a capital expenditure of not more than Eight Million Dollars (\$8,000,000.00) in Canadian funds to implement the fourth phase of the five-phase *Envision* energy management program.

Motion 2: THAT the Board Finance and Property Committee recommend that the Board of Governors:

- a) execute a Borrowing Resolution requesting approval of financing the fourth phase of the five-phase *Envision* energy management program in an amount not to exceed Eight Million Dollars (\$8,000,000.00) in Canadian funds for a term not to exceed fifteen (15) years at an interest rate of not more than five and one-half percent (5.5%); and
- b) make an application to the Minister of Advanced Education for the required approval of the Lieutenant Governor in Council.

Item

Action Requested	<input type="checkbox"/> Approval <input checked="" type="checkbox"/> Recommendation
Proposed by	Andrew Sharman, Vice-President (Facilities and Operations)
Presenter	Andrew Sharman, Vice-President (Facilities and Operations)

Details

Responsibility	Vice-President (Facilities and Operations)		
The Purpose of the Proposal is (please be specific)	To obtain approval to proceed with the fourth of the five-phase <i>Envision</i> energy management program with the approval of a capital expenditure of not more than \$8,000,000. To secure financing to fund the implementation of the fourth phase of the five-phase <i>Envision</i> energy management program.		
The Impact of the Proposal is	Allows implementation of the fourth phase of the <i>Envision</i> energy management program to achieve energy savings. Other benefits achieved are reduced operating and maintenance costs, improved space conditions, infrastructure renewal to address deferred maintenance, reduction of greenhouse gas emissions, and support of and commitment to sustainable development.		
Replaces/Revises (eg, policies, resolutions)	N/A		
Timeline/Implementation Date	April 2018 – March 2019		
Estimated Cost and funding source	\$8,000,000 borrowed from the Alberta Capital Finance Authority with payback from the energy savings.		
	<u>Number</u>	<u>Funding Source</u>	<u>Amount</u>
		Provincial Government	\$8,000,000
		TOTAL	\$8,000,000
Next Steps (ie.: Communications Plan, Implementation plans)	N/A		
Supplementary Notes and context	To establish an upper limit for borrowing purposes, an analysis and cash flow projection was performed to determine the effect if inflationary pressures caused interest rates to rise above the 5.5% used in the		

Item No. 6

	model, with concurrent inflation/escalation on the utility rates. The 15-year amortization financial model can support interest rate increases up to 7% with 1.5% escalation in utility rates beyond 2020/2021.
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Engagement and Routing (Include meeting dates)

Participation: (parties who have seen the proposal and in what capacity)	<u>Those who have been informed:</u> Intention: Build Awareness <ul style="list-style-type: none"> • Energy Management and Sustainable Operations • Utilities • Operations and Maintenance • Planning and Project Delivery
	<u>Those who have been consulted:</u> Intention: Build Knowledge/Build Commitment <ul style="list-style-type: none"> • Energy Management and Sustainable Operations • Utilities • Operations and Maintenance • Project Planning and Delivery • Office of the Vice-President (Finance and Administration)
	<u>Those who are actively participating:</u> Intention: Build Ownership/Build Responsibility <ul style="list-style-type: none"> • Energy Management and Sustainable Operations • Operations and Maintenance • Project Planning and Delivery
Approval Route (Governance) (including meeting dates)	President's Executive Committee – Operational – November 9, 2017 Board Finance and Property Committee (recommendation) – November 28, 2017 Board of Governors (approval) – December 15, 2017
Final Approver	Board of Governors – December 15, 2017

Alignment/Compliance

Alignment with Guiding Documents	<u>Institutional Strategic Plan - For the Public Good</u> Sustain our people, our work, and the environment by attracting and stewarding the resources we need to deliver excellence to the benefit of all. 23. OBJECTIVE: Ensure that the University of Alberta's campuses, facilities, utility, and information technology infrastructure can continue to meet the needs and strategic goals of the university. i. Strategy: Secure and sustain funding to plan, operate, expand, renew, and optimize the use of campus infrastructure to meet evolving teaching and research priorities.
Compliance with Legislation, Policy and/or Procedure Relevant to the Proposal (please quote legislation and include identifying section numbers)	<u>Post-secondary Learning Act (PSLA)</u> Section 60(1) The Board of a public post-secondary institution shall (a) manage and operate the public post-secondary institution in accordance with its mandate. (b) develop, manage and operate, alone or in co-operation with any person or organization, programs, services and facilities for the educational or cultural advancement of the people of Alberta Section 72 Borrowing

72 (1) A board may borrow from any bank or treasury branch or from any other person any sum of money required to meet the expenses of the public post-secondary institution until the time the revenues for the current year are available.

(2) Any borrowings made pursuant to subsection (1) must be repaid out of and are a first charge on the revenues of the current year, and may be secured by a promissory note or notes given on behalf of the board in any manner the board may arrange.

(3) Subject to the approval of the Minister, a board may for the purposes of the public post-secondary institution, as defined in section 73, borrow by way of temporary loans from any bank or treasury branch or from any other person any sums of money on any terms that the board determines, by way of an overdraft or line of credit or by the pledging as security for the temporary loans of notes, bonds, debentures or other securities of the board pending the sale of them, or instead of selling them, or in any other manner the board determines.

Board Finance and Property Committee Terms of Reference:

3. MANDATE OF THE COMMITTEE

....the Committee shall monitor, evaluate, advise and make decisions on behalf of the Board with respect to all strategic and significant financial and property matters and policies of the University. The Committee shall also consider any other matter delegated to the Committee by the Board. Without limiting the generality of the foregoing, the Committee shall:

- f) review, recommend to the Board or approve original Capital Expenditure Authorization Requests (CEARs) or individual Supplemental CEARs as determined by the Board-approved University of Alberta Capital Expenditure Authorization Request (CEAR) Policy;

4. LIMITATIONS ON DELEGATION BY THE BOARD

The general delegation of authority by the Board to the Committee shall be limited as set out in this paragraph. Notwithstanding the general delegation of authority to the Committee set out in paragraph 3, the Board shall:

- c) approve capital expenditures as determined by the Board-approved University of Alberta Capital Expenditure Authorization Request (CEAR) Policy;

Attachments:

- 1. Briefing note (1 page)

Prepared by:

Michael Versteegen, P.Eng., Manager
Energy Management & Sustainable Operations
Email: mike.versteegen@ualberta.ca

ENVISION Phase Four Borrowing: Capital Expenditure Authorization Request (CEAR) and Borrowing Resolution

Background

The University of Alberta has been a leader in energy management since the mid-1970s. Since its inception, the Energy Management Program has resulted in an accumulated cost avoidance of \$354,000,000 and reduced greenhouse gas emissions by 2.3 million tonnes.

In 2011, the Board of Governors approved the current energy management program, Envision. This \$35 million program exists in five phases and funded through borrowing from the Alberta Capital Finance Authority with repayment achieved through reduced utility costs. To date, the first three phases have been implemented at a cost of \$19,000,000.

Preliminary audits and feasibility studies for phases four and five have identified new technologies that have potential to provide significant energy savings for the institution. They are demand-based laboratory ventilation, occupancy-based space ventilation, and energy analytics. Annual savings at the completion of the five-phase program is estimated to be in the order of \$4,300,000 and CO₂ emission reductions are anticipated to be in the order of 35,000 tonnes.

Continued implementation of the Envision program, these new technologies and opportunities are warranted to keep our energy bill as low as cost effectively feasible. Other benefits are reduced operating and maintenance costs, improved space conditions, infrastructure renewal to address deferred maintenance, reduced demand on utility plants and distribution infrastructure, and significant environmental benefits. Implementation of the Envision program further demonstrates UAlberta's on-going actions and commitment to sustainability. Actions taken to improve energy efficiency aligns with the strategic direction and contribute to city-wide, regional, provincial and national efforts to reduce the impact of greenhouse gas emissions on the global climate.

The Project

The Energy Management and Sustainable Operations is preparing to launch phase four of the Envision program. This phase will focus primarily on north campus on projects such as LED retrofits, domestic water upgrades, mechanical system upgrades, fume hood optimization, and implementation of energy usage analysis.

The estimated cost for implementation of phase four of the Envision program is projected to be \$8,000,000. Average annual energy savings from this implementation over the 15-year period is estimated in the order of \$1,020,035. Based on UAlberta Utilities' forecasts to 2020/21 and a 1.5% escalation thereafter, payback of this phase of the program will occur within a 15-year amortization period. As in the previous energy management programs, it is proposed that these projects be financed through borrowing from the Alberta Capital Finance Authority over a 15-year amortization period. Both the Capital Expenditure Authorization Request and request for borrowing require approval of the Board of Governors

BFPC – November 28, 2017
Energy Management & Sustainable Operations– Envision Year Four

Approval Level	Original CEAR or individual Supplemental CEAR Approval	Aggregate Total CEAR and Supplemental CEARs Approval
	<i>Up to and including:</i>	<i>Up to and including:</i>
Facilities and Operations Directors	\$500,000	\$750,000
Facilities and Operations Associate Vice-Presidents	\$1,000,000	\$2,000,000
Vice-President (Facilities and Operations)	\$2,000,000	\$4,000,000
BFPC	\$7,000,000	\$14,000,000
BG	Over \$7,000,000	Over \$14,000,000

Recommendation

The Board Finance Property Committee recommend that the Board of Governors continue to support the ***Envision*** program by requesting authority to borrow \$8,000,000 from the Alberta Capital Finance Authority and approve the CEAR.

Prepared by:
Mike Kohlenberg
Associate Vice-President, Utilities
Facilities and Operations
mike.kohlenberg@ualberta.ca

OUTLINE OF ISSUE
Action Item

Agenda Title: **Central Academic Building (CAB) Main and Lower Level Renewal: Capital Expenditure Authorization Request (CEAR)**

Motion: THAT the Board Finance and Property Committee, acting with delegated authority of the Board of Governors, approve an expenditure of two million two hundred thousand dollars (\$2,200,000.00) in Canadian funds for the renewal of the main and lower level of the Central Academic Building (CAB).

Item

Action Requested	<input checked="" type="checkbox"/> Approval <input type="checkbox"/> Recommendation
Proposed by	Andrew Sharman, Vice-President (Facilities and Operations)
Presenter	Andrew Sharman, Vice-President (Facilities and Operations)

Details

Responsibility	Vice-President (Facilities and Operations)		
The Purpose of the Proposal is (please be specific)	To obtain approval of a capital expenditure authorization request (CEAR) for the renewal of the main and lower level of CAB. The space will undergo a renewal that will include elements such as food services placement, seating type and positioning, occupancy layouts, improved place making and traffic patterns along with a refresh of the finishes that have reached the end of their life cycle.		
The Impact of the Proposal is	Following a detailed review of the current building condition and pedestrian flow, the space has been determined to be underutilized in terms of fit and occupancy comfort. With no significant renewal funds allocated to this area for a quite a length of time, the area is to undergo a re-development plan that will achieve numerous outcomes including bettering the student environment and experiences related to the main and lower level use.		
Replaces/Revises (e.g., policies, resolutions)	N/A		
Timeline/Implementation Date	Construction will be phased between 2018 to 2020 to minimize disruption		
Estimated Cost and funding source	CEAR Funding Information		
	<u>Number</u>	<u>Funding Source</u>	<u>Amount</u>
	18-036	VP – Facilities and Operations	\$2,200,000.00
		TOTAL	\$2,200,000.00
Next Steps (i.e.: Communications Plan, Implementation plans)			
Supplementary Notes and context	N/A		

Engagement and Routing (Include meeting dates)

Participation: (parties who have seen the proposal and in what capacity)	<u><i>Those who have been informed:</i></u>
	<ul style="list-style-type: none"> • Facilities and Operations
	<u><i>Those who have been consulted:</i></u>
	<ul style="list-style-type: none"> • University of Alberta - Facilities and Operations (Vice President, Associate Vice President) • University of Alberta – Ancillary Services • University of Alberta - Project Management Office • University of Alberta - Office of University Architect

	<u><i>Those who are actively participating:</i></u> <ul style="list-style-type: none"> Facilities and Operations
Approval Route (Governance) (including meeting dates)	Board Finance and Property Committee – November 28, 2017 (for approval)
Final Approver	Board Finance and Property Committee

Alignment/Compliance

<p>Alignment with Guiding Documents</p>	<p><u>Institutional Strategic Plan - For the Public Good</u></p> <p>Build a diverse, inclusive community of exceptional students, faculty, and staff from Alberta, Canada, and the world.</p> <p>5. OBJECTIVE: Build and strengthen trust, connection, and a sense of belonging among all members of the university community through a focus on shared values.</p> <p>i. Strategy: Support and enhance activities, initiatives, and traditions that bond alumni, students, staff, faculty, and professors emeriti to the university.</p> <p>vi. Strategy: Encourage and support institution-wide initiatives, services, and programs, such as arts and cultural activities, intramurals, student groups, volunteering, clubs, and centres, which bring students from all faculties into community with each other.</p> <p>Experience diverse and rewarding learning opportunities that inspire us, nurture our talents, expand our knowledge and skills, and enable our success.</p> <p>8. OBJECTIVE: Create and facilitate co-curricular and extracurricular learning experiences for undergraduate and graduate students that enable their self-discovery and give them the skills to use their talents, creativity, and curiosity to contribute as future citizens and leaders.</p> <p>i. Strategy: Increase the opportunities for all undergraduate and graduate students to experience the benefits of living on campus, including guaranteeing the offer of a place in residence to every first-year undergraduate student.</p> <p>Sustain our people, our work, and the environment by attracting and stewarding the resources we need to deliver excellence to the benefit of all.</p> <p>20. OBJECTIVE: Continue to build and support an integrated approach to social, economic, and environmental sustainability that incorporates teaching and learning, research, outreach, capacity building, and the operations that support them.</p> <p>ii. Strategy: Embed social, economic, and environmental sustainability into the development and care of the university's natural and built environments.</p> <p>23. OBJECTIVE: Ensure that the University of Alberta's campuses, facilities, utility, and information technology infrastructure can continue to meet the needs and strategic goals of the university.</p>
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<p>Compliance with Legislation, Policy and/or Procedure Relevant to the Proposal (please <u>quote</u> legislation and include identifying section numbers)</p>	<p><u>Post-secondary Learning Act (PSLA)</u></p> <p>Section 60(1) The Board of a public post-secondary institution shall</p> <p>(a) Manage and operate the public post-secondary institution in accordance with its mandate.</p> <p><u>BFPC Terms of Reference – Section 3:</u></p> <p>3. <u>MANDATE OF THE COMMITTEE</u></p> <p>Except as provided in paragraph 4 and the Board’s General Committee Terms of Reference, the Committee shall monitor, evaluate, advise and make decisions on behalf of the Board with respect to all strategic and significant financial and property matters and policies of the University. The Committee shall also consider any other matter delegated to the Committee by the Board.</p> <p>Without limiting the generality of the foregoing, the Committee shall:</p> <p>f) review, recommend to the Board or approve original Capital Expenditure Authorization Requests (CEARs) or individual Supplemental CEARs as determined by the Board-approved University of Alberta Capital Expenditure Authorization Request (CEAR) Policy;</p> <p><u>UAPPOL Capital Expenditure Authorization Request (CEAR) Policy</u></p>
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Attachments

1. Briefing Note (1 page)

Prepared by:

Pat Jansen

Associate Vice-President

Planning and Project Delivery

**Board Finance and Property Committee – November 28, 2017
Planning and Project Delivery
Facilities and Operations**

Central Academic Building: Capital Expenditure Authorization Request (CEAR)

Background

With the full implementation of anytime dining across campus next academic year, the common spaces in the Central Academic Building will become an even higher use space for students to congregate and eat. In anticipation of this, the space will be repurposed to create a more welcoming atmosphere.

Project

Following a detailed review of the current building condition and pedestrian flow, the space is underutilized for fit and occupancy comfort. The area will undergo a re-development plan in order to achieve numerous outcomes including bettering the student environment and experiences related to the main and lower level use.

The renewal will address food services placement, seating type and positioning, occupancy layouts, improved place making, wayfinding and traffic patterns along with a refresh of the finishes that have reached the end of their life cycle.

This project will also address major health and safety issues (asbestos, fire safety, and indoor air quality), building code and physical condition issues, as well as focusing building outcomes to reduce its carbon footprint.

As per the matrix below, overview authorization, in the form of a Capital Expenditure Authorization Request (CEAR), must be obtained for any capital project where the estimated cost is equal to or in excess of \$100,000.

Approval Level	Original CEAR or individual Supplemental CEAR Approval	Aggregate Total CEAR and Supplemental CEARs Approval
	<i>Up to and including:</i>	<i>Up to and including:</i>
Facilities and Operations Directors	\$500,000	\$750,000
Facilities and Operations Associate Vice-Presidents	\$1,000,000	\$2,000,000
Vice-President (Facilities and Operations)	\$2,000,000	\$4,000,000
BFPC	\$7,000,000	\$14,000,000
BG	Over \$7,000,000	Over \$14,000,000

BFPC – November 28, 2017

PPD Project Management Office – Central Academic Building CEAR

Recommendation

This CEAR is seeking BFPC recommendation for approval of an expenditure of \$2.2 million for the renewal of the main and lower level of CAB.

Prepared by:

Pat Jansen

Associate Vice-President, Planning and Project Delivery
Facilities and Operations

pat.jansen@ualberta.ca